



# **MILLENNIUM ENGINEERING, INC.**

*Land Surveyors and Civil Engineers*

## **STORMWATER MANAGEMENT REPORT**

FOR THE

**ROCKY HILL MBTA COMMUNITY**

AT

**ELM STREET  
AMESBURY, MA**

PREPARED FOR:

**DALE DEVELOPMENT, LLC.**

**360 WASHINGTON STREET  
RYE, NH**



DATE: AUGUST 11, 2025  
REVISED: DECEMBER 5, 2025

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Rocky Hill MBTA Community Amesbury, MA

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## **I. Introduction**

## Introduction

The approximately 85-acre Site is located within the City of Amesbury and comprises six parcels (collectively referred to as the “Site” herein):

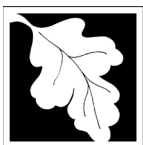
- Lot 13, owned by True Homestead Limited Partnership I (10.5 acres);
- Lot 20, owned by True Homestead Limited Partnership III (25.52 acres);
- Lot 12, owned by True Homestead Limited Partnership IV (12.79 acres);
- Lot 3, owned by True Homestead Limited Partnership IV (0.32 acres);
- Lot 15, owned by Stanley O. Bean and Alice Bean, 287 Elm Street Realty Trust (15 acres); and
- Lot 4, owned by Stanley O. Bean Revocable Trust (0.11 acres).

The Property includes approximately 40.8 acres of upland area. Bordering Vegetated Wetlands (BVW) are in the southeast, southwest and north-central portions of the Site. There is also an Isolated Vegetated Wetland (IVW) in the central portion of the Site. A perennial stream runs near the southern property line and through a portion of the southern part of the Site. A second perennial stream is located along the southwestern border but does not enter the Site. Portions of both streams have been confirmed as intermittent. Riverfront area (RFA) associated with these perennial streams is located on the Site. Elevations on the site range from 68’ to the north end down to 42’ along the back of the perennial stream along the southern parcel boundary.

The project will consist of the construction of a new residential site road with associated parking and pedestrian walkways. The project will include the construction of 375 residential units with a mix of building types from single-family dwellings to 29-unit multi-unit dwelling. The proposed stormwater management system that includes catch basins, water quality units, infiltration basins, constructed stormwater wetlands and stormwater detention basins. The catch basins and water quality units will remove suspended solids prior to discharging to the infiltration areas. The infiltration areas will provide stormwater recharge to the groundwater, water quality treatment and mitigate peak runoff rates so the post-development runoff rates will be less than or equal to the pre-development rates. Constructed stormwater wetlands will provide water quality treatment and peak runoff rate attenuation. Some of the treatment trains will require a stormwater detention basin to control the peak runoff rate.



## **II. Stormwater Management Checklist**



# Checklist for Stormwater Report

## A. Introduction

**Important:** When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A Stormwater Report must be submitted with the Notice of Intent permit application to document compliance with the Stormwater Management Standards. The following checklist is NOT a substitute for the Stormwater Report (which should provide more substantive and detailed information) but is offered here as a tool to help the applicant organize their Stormwater Management documentation for their Report and for the reviewer to assess this information in a consistent format. As noted in the Checklist, the Stormwater Report must contain the engineering computations and supporting information set forth in Volume 3 of the [Massachusetts Stormwater Handbook](#). The Stormwater Report must be prepared and certified by a Registered Professional Engineer (RPE) licensed in the Commonwealth.

The Stormwater Report must include:

- The Stormwater Checklist completed and stamped by a Registered Professional Engineer (see page 2) that certifies that the Stormwater Report contains all required submittals.<sup>1</sup> This Checklist is to be used as the cover for the completed Stormwater Report.
- Applicant/Project Name
- Project Address
- Name of Firm and Registered Professional Engineer that prepared the Report
- Long-Term Pollution Prevention Plan required by Standards 4-6
- Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan required by Standard 8<sup>2</sup>
- Operation and Maintenance Plan required by Standard 9

In addition to all plans and supporting information, the Stormwater Report must include a brief narrative describing stormwater management practices, including environmentally sensitive site design and LID techniques, along with a diagram depicting runoff through the proposed BMP treatment train. Plans are required to show existing and proposed conditions, identify all wetland resource areas, NRCS soil types, critical areas, Land Uses with Higher Potential Pollutant Loads (LUHPPL), and any areas on the site where infiltration rate is greater than 2.4 inches per hour. The Plans shall identify the drainage areas for both existing and proposed conditions at a scale that enables verification of supporting calculations.

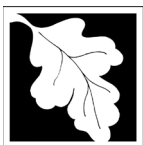
As noted in the Checklist, the Stormwater Management Report shall document compliance with each of the Stormwater Management Standards as provided in the Massachusetts Stormwater Handbook. The soils evaluation and calculations shall be done using the methodologies set forth in Volume 3 of the Massachusetts Stormwater Handbook.

To ensure that the Stormwater Report is complete, applicants are required to fill in the Stormwater Report Checklist by checking the box to indicate that the specified information has been included in the Stormwater Report. If any of the information specified in the checklist has not been submitted, the applicant must provide an explanation. The completed Stormwater Report Checklist and Certification

<sup>1</sup> The Stormwater Report may also include the Illicit Discharge Compliance Statement required by Standard 10. If not included in the Stormwater Report, the Illicit Discharge Compliance Statement must be submitted prior to the discharge of stormwater runoff to the post-construction best management practices.

<sup>2</sup> For some complex projects, it may not be possible to include the Construction Period Erosion and Sedimentation Control Plan in the Stormwater Report. In that event, the issuing authority has the discretion to issue an Order of Conditions that approves the project and includes a condition requiring the proponent to submit the Construction Period Erosion and Sedimentation Control Plan before commencing any land disturbance activity on the site.

## B. Stormwater Checklist and Certification



# Checklist for Stormwater Report

The following checklist is intended to serve as a guide for applicants as to the elements that ordinarily need to be addressed in a complete Stormwater Report. The checklist is also intended to provide conservation commissions and other reviewing authorities with a summary of the components necessary for a comprehensive Stormwater Report that addresses the ten Stormwater Standards.

*Note:* Because stormwater requirements vary from project to project, it is possible that a complete Stormwater Report may not include information on some of the subjects specified in the Checklist. If it is determined that a specific item does not apply to the project under review, please note that the item is not applicable (N.A.) and provide the reasons for that determination.

A complete checklist must include the Certification set forth below signed by the Registered Professional Engineer who prepared the Stormwater Report.

## Registered Professional Engineer's Certification

I have reviewed the Stormwater Report, including the soil evaluation, computations, Long-term Pollution Prevention Plan, the Construction Period Erosion and Sedimentation Control Plan (if included), the Long-term Post-Construction Operation and Maintenance Plan, the Illicit Discharge Compliance Statement (if included) and the plans showing the stormwater management system, and have determined that they have been prepared in accordance with the requirements of the Stormwater Management Standards as further elaborated by the Massachusetts Stormwater Handbook. I have also determined that the information presented in the Stormwater Checklist is accurate and that the information presented in the Stormwater Report accurately reflects conditions at the site as of the date of this permit application.

Registered Professional Engineer Block and Signature

Signature and Date

## Checklist

**Project Type:** Is the application for new development, redevelopment, or a mix of new and redevelopment?

- ☒ New development
- ☐ Redevelopment
- ☐ Mix of New Development and Redevelopment

## Checklist (continued)



# Checklist for Stormwater Report

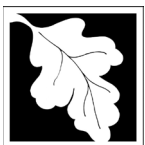
**LID Measures:** Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- ☐ No disturbance to any Wetland Resource Areas
- ☐ Site Design Practices (e.g. clustered development, reduced frontage setbacks)
- ☐ Reduced Impervious Area (Redevelopment Only)
- ☒ Minimizing disturbance to existing trees and shrubs
- ☐ LID Site Design Credit Requested:
  - ☐ Credit 1
  - ☐ Credit 2
  - ☐ Credit 3
- ☐ Use of “country drainage” versus curb and gutter conveyance and pipe
- ☐ Bioretention Cells (includes Rain Gardens)
- ☒ Constructed Stormwater Wetlands (includes Gravel Wetlands designs)
- ☐ Treebox Filter
- ☐ Water Quality Swale
- ☐ Grass Channel
- ☐ Green Roof
- ☒ Other (describe): Contech CDS

## Standard 1: No New Untreated Discharges

- ☒ No new untreated discharges
- ☒ Outlets have been designed so there is no erosion or scour to wetlands and waters of the Commonwealth
- ☒ Supporting calculations specified in Volume 3 of the Massachusetts Stormwater Handbook included.

## Checklist (continued)



# Checklist for Stormwater Report

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## Standard 2: Peak Rate Attenuation

- ☐ Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.
- ☐ Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
- ☒ Calculations provided to show that post-development peak discharge rates do not exceed pre-development rates for the 2-year and 10-year 24-hour storms. If evaluation shows that off-site flooding increases during the 100-year 24-hour storm, calculations are also provided to show that post-development peak discharge rates do not exceed pre-development rates for the 100-year 24-hour storm.

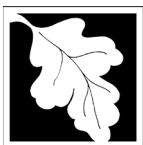
## Standard 3: Recharge

- ☒ Soil Analysis provided.
- ☒ Required Recharge Volume calculation provided.
- ☐ Required Recharge volume reduced through use of the LID site Design Credits.
- ☒ Sizing the infiltration, BMPs is based on the following method: Check the method used.
  - ☒ Static
  - ☐ Simple Dynamic
  - ☐ Dynamic Field<sup>1</sup>
- ☐ Runoff from all impervious areas at the site discharging to the infiltration BMP.
- ☒ Runoff from all impervious areas at the site is *not* discharging to the infiltration BMP and calculations are provided showing that the drainage area contributing runoff to the infiltration BMPs is sufficient to generate the required recharge volume.
- ☐ Recharge BMPs have been sized to infiltrate the Required Recharge Volume.
- ☒ Recharge BMPs have been sized to infiltrate the Required Recharge Volume *only* to the maximum extent practicable for the following reason:
  - ☒ Site is comprised solely of C and D soils and/or bedrock at the land surface
  - ☐ M.G.L. c. 21E sites pursuant to 310 CMR 40.0000
  - ☐ Solid Waste Landfill pursuant to 310 CMR 19.000
  - ☐ Project is otherwise subject to Stormwater Management Standards only to the maximum extent practicable.
- ☒ Calculations showing that the infiltration BMPs will drain in 72 hours are provided.
- ☐ Property includes a M.G.L. c. 21E site or a solid waste landfill and a mounding analysis is included.

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<sup>1</sup> 80% TSS removal is required prior to discharge to infiltration BMP if Dynamic Field method is used.

## Checklist (continued)



# Checklist for Stormwater Report

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## Standard 3: Recharge (continued)

- ☐ The infiltration BMP is used to attenuate peak flows during storms greater than or equal to the 10-year 24-hour storm and separation to seasonal high groundwater is less than 4 feet and a mounding analysis is provided.
- ☐ Documentation is provided showing that infiltration BMPs do not adversely impact nearby wetland resource areas.

## Standard 4: Water Quality

The Long-Term Pollution Prevention Plan typically includes the following:

- Good housekeeping practices;
  - Provisions for storing materials and waste products inside or under cover;
  - Vehicle washing controls;
  - Requirements for routine inspections and maintenance of stormwater BMPs;
  - Spill prevention and response plans;
  - Provisions for maintenance of lawns, gardens, and other landscaped areas;
  - Requirements for storage and use of fertilizers, herbicides, and pesticides;
  - Pet waste management provisions;
  - Provisions for operation and management of septic systems;
  - Provisions for solid waste management;
  - Snow disposal and plowing plans relative to Wetland Resource Areas;
  - Winter Road Salt and/or Sand Use and Storage restrictions;
  - Street sweeping schedules;
  - Provisions for prevention of illicit discharges to the stormwater management system;
  - Documentation that Stormwater BMPs are designed to provide for shutdown and containment in the event of a spill or discharges to or near critical areas or from LUHPPL;
  - Training for staff or personnel involved with implementing Long-Term Pollution Prevention Plan;
  - List of Emergency contacts for implementing Long-Term Pollution Prevention Plan.
- ☒ A Long-Term Pollution Prevention Plan is attached to Stormwater Report and is included as an attachment to the Wetlands Notice of Intent.
  - ☒ Treatment BMPs subject to the 44% TSS removal pretreatment requirement and the one inch rule for calculating the water quality volume are included, and discharge:
    - ☐ is within the Zone II or Interim Wellhead Protection Area
    - ☐ is near or to other critical areas
    - ☒ is within soils with a rapid infiltration rate (greater than 2.4 inches per hour)
    - ☐ involves runoff from land uses with higher potential pollutant loads.
  - ☐ The Required Water Quality Volume is reduced through use of the LID site Design Credits.
  - ☒ Calculations documenting that the treatment train meets the 80% TSS removal requirement and, if applicable, the 44% TSS removal pretreatment requirement, are provided.

## Checklist (continued)



# Checklist for Stormwater Report

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## Standard 4: Water Quality (continued)

- ☒ The BMP is sized (and calculations provided) based on:
  - ☒ The ½" or 1" Water Quality Volume or
  - ☐ The equivalent flow rate associated with the Water Quality Volume and documentation is provided showing that the BMP treats the required water quality volume.
- ☐ The applicant proposes to use proprietary BMPs, and documentation supporting use of proprietary BMP and proposed TSS removal rate is provided. This documentation may be in the form of the propriety BMP checklist found in Volume 2, Chapter 4 of the Massachusetts Stormwater Handbook and submitting copies of the TARP Report, STEP Report, and/or other third party studies verifying performance of the proprietary BMPs.
- ☐ A TMDL exists that indicates a need to reduce pollutants other than TSS and documentation showing that the BMPs selected are consistent with the TMDL is provided.

## Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)

- ☐ The NPDES Multi-Sector General Permit covers the land use and the Stormwater Pollution Prevention Plan (SWPPP) has been included with the Stormwater Report.
- ☐ The NPDES Multi-Sector General Permit covers the land use and the SWPPP will be submitted **prior to** the discharge of stormwater to the post-construction stormwater BMPs.
- ☒ The NPDES Multi-Sector General Permit does **not** cover the land use.
- ☐ LUHPPLs are located at the site and industry specific source control and pollution prevention measures have been proposed to reduce or eliminate the exposure of LUHPPLs to rain, snow, snow melt and runoff, and been included in the long term Pollution Prevention Plan.
- ☐ All exposure has been eliminated.
- ☐ All exposure has **not** been eliminated and all BMPs selected are on MassDEP LUHPPL list.
- ☐ The LUHPPL has the potential to generate runoff with moderate to higher concentrations of oil and grease (e.g. all parking lots with >1000 vehicle trips per day) and the treatment train includes an oil grit separator, a filtering bioretention area, a sand filter or equivalent.

## Standard 6: Critical Areas

- ☐ The discharge is near or to a critical area and the treatment train includes only BMPs that MassDEP has approved for stormwater discharges to or near that particular class of critical area.
- ☐ Critical areas and BMPs are identified in the Stormwater Report.

## Checklist (continued)



# Checklist for Stormwater Report

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## Standard 7: Redevelopments and Other Projects Subject to the Standards only to the maximum extent practicable

- ☐ The project is subject to the Stormwater Management Standards only to the maximum Extent Practicable as a:
  - ☐ Limited Project
  - ☐ Small Residential Projects: 5-9 single family houses or 5-9 units in a multi-family development provided there is no discharge that may potentially affect a critical area.
  - ☐ Small Residential Projects: 2-4 single family houses or 2-4 units in a multi-family development with a discharge to a critical area
  - ☐ Marina and/or boatyard provided the hull painting, service and maintenance areas are protected from exposure to rain, snow, snow melt and runoff
  - ☐ Bike Path and/or Foot Path
  - ☐ Redevelopment Project
  - ☐ Redevelopment portion of mix of new and redevelopment.
- ☐ Certain standards are not fully met (Standard No. 1, 8, 9, and 10 must always be fully met) and an explanation of why these standards are not met is contained in the Stormwater Report.
- ☐ The project involves redevelopment and a description of all measures that have been taken to improve existing conditions is provided in the Stormwater Report. The redevelopment checklist found in Volume 2 Chapter 3 of the Massachusetts Stormwater Handbook may be used to document that the proposed stormwater management system (a) complies with Standards 2, 3 and the pretreatment and structural BMP requirements of Standards 4-6 to the maximum extent practicable and (b) improves existing conditions.

## Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control

A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan must include the following information:

- Narrative;
  - Construction Period Operation and Maintenance Plan;
  - Names of Persons or Entity Responsible for Plan Compliance;
  - Construction Period Pollution Prevention Measures;
  - Erosion and Sedimentation Control Plan Drawings;
  - Detail drawings and specifications for erosion control BMPs, including sizing calculations;
  - Vegetation Planning;
  - Site Development Plan;
  - Construction Sequencing Plan;
  - Sequencing of Erosion and Sedimentation Controls;
  - Operation and Maintenance of Erosion and Sedimentation Controls;
  - Inspection Schedule;
  - Maintenance Schedule;
  - Inspection and Maintenance Log Form.
- ☒ A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan containing the information set forth above has been included in the Stormwater Report.

## Checklist (continued)





# Checklist for Stormwater Report

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## Standard 8: Construction Period Pollution Prevention and Erosion and Sedimentation Control (continued)

- ☐ The project is highly complex and information is included in the Stormwater Report that explains why it is not possible to submit the Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan with the application. A Construction Period Pollution Prevention and Erosion and Sedimentation Control has **not** been included in the Stormwater Report but will be submitted **before** land disturbance begins.
- ☐ The project is **not** covered by a NPDES Construction General Permit.
- ☐ The project is covered by a NPDES Construction General Permit and a copy of the SWPPP is in the Stormwater Report.
- ☒ The project is covered by a NPDES Construction General Permit but no SWPPP been submitted. The SWPPP will be submitted BEFORE land disturbance begins.

## Standard 9: Operation and Maintenance Plan

- ☒ The Post Construction Operation and Maintenance Plan is included in the Stormwater Report and includes the following information:
  - ☒ Name of the stormwater management system owners;
  - ☒ Party responsible for operation and maintenance;
  - ☒ Schedule for implementation of routine and non-routine maintenance tasks;
  - ☒ Plan showing the location of all stormwater BMPs maintenance access areas;
  - ☐ Description and delineation of public safety features;
  - ☐ Estimated operation and maintenance budget; and
  - ☒ Operation and Maintenance Log Form.
- ☐ The responsible party is **not** the owner of the parcel where the BMP is located and the Stormwater Report includes the following submissions:
  - ☐ A copy of the legal instrument (deed, homeowner's association, utility trust or other legal entity) that establishes the terms of and legal responsibility for the operation and maintenance of the project site stormwater BMPs;
  - ☐ A plan and easement deed that allows site access for the legal entity to operate and maintain BMP functions.

## Standard 10: Prohibition of Illicit Discharges

- ☒ The Long-Term Pollution Prevention Plan includes measures to prevent illicit discharges;
- ☒ An Illicit Discharge Compliance Statement is attached;
- ☐ NO Illicit Discharge Compliance Statement is attached but will be submitted **prior to** the discharge of any stormwater to post-construction BMPs.

### **III. Hydrologic Analysis**

#### *Existing Site Characteristics*

In general, the property is irregular in shape and fronts Elm Street and bounded by Route 495 to the north and Route 95 to the east. We have limited our drainage analysis area to the upland area where the site will be disturbed and developed. Most of the development area is currently undeveloped with a mix of woodlands and mowed hay fields. See the accompanying plan for a more detailed description of the existing site conditions and topography.

The lot consists of eight soil groups: Woodbridge fine sandy loam, 300B (Hydrologic soil group C/D); Scantic silt loam, 16A (Hydrologic soil group C/D); Ridgebury and Leicester fine sandy loams, 7i5B (Hydrologic soil group D); Charton-Roack outcrop-Hollis, 711B (Hydrologic Soil Group A); Windsor loamy-sand (Hydrologic soil group A); Deerfield loamy fine sand, 256A (Hydrologic soil group A);

Numerous test pits and soil probes were performed onsite throughout 2024. The probes indicated C/D soils being present on the north side of the site and A soils on the south side of the development area confirming the NRCS soil map. See Appendix E for the NRCS soil map. The probes were performed to a depth of 36 inches with the intent of confirming the hydrologic drainage class with full depth test pits to be performed for the detailed drainage design.

#### *Proposed Site Features*

The Applicant proposes to construct 375 residential units with the associated roadways, parking and walks for access. The project additionally provides recreational amenities including pool and pickleball courts. Access to the property will be from Elm Street. The development area will impact about 33 acres of land.

In order to address stormwater management regulations, catch basins, water quality units, and infiltration areas are proposed to treat, store, and infiltrate runoff.

### **WATERSHED ANALYSIS AND METHODOLOGY**

The stormwater runoff management system was analyzed using the storm events of the 2-year, 10-year, 25-year, and 100-year frequency. The analysis was performed using HydroCAD, version 10.00. Using USDA NRCS TR-20 and TR-55 methods of estimating runoff, the program uses the measured characteristics of the site and computes runoff produced by simulated rainfall events. The results are then used to design runoff control structures.

Existing drainage area boundaries were developed using an onsite topographic survey performed by GM2 associates used for the Order of Resource Delineation for the development area.

Proposed site development drainage area boundaries were developed from proposed grades and ground cover designed to minimize site storm water management structure requirements.

Hydrologic soil groups and curve numbers were estimated for existing and proposed developed conditions using available NRCS Soil Maps, current vegetation, and terrain.

## **DRAINAGE ANALYSIS**

The purpose of the drainage analysis is two-fold. The first is to analyze and quantify the pre-development runoff flows through the site. The second purpose is to evaluate the impact of the proposed development on drainage patterns and flows, both within and outside the site, and to design a stormwater management system to adequately convey post-development runoff.

The design of the stormwater management system has the following goals:

- 1.) Minimize or eliminate erosion and sedimentation during construction as well as after development.
- 2.) To ensure that post-development flows do not have an adverse effect on downstream drainage structures and landowners.
- 3.) To design a stormwater and treatment system which will carry the surface runoff and satisfy goals one and two.

To determine the hydrological effect of the proposed development on the watershed, the existing conditions must first be analyzed.

## **WATERSHED DESCRIPTION: EXISTING CONDITIONS**

Depending on the soil classification, type of ground cover present and the direction of the flow of runoff, the existing site is divided into two major watershed areas. One watershed "E1" includes a 12-acre area on the northern side of the property that is directed to the adjacent wetlands that flow to the perennial stream northwest of the development. The second watershed areas "E3A" and "E3B" includes 22 acres of land directed to the wetlands to the south that flow into the perennial stream south of the development area. This watershed has been divided into two design points. One is that areas that flow to the upstream portion of the watershed prior to the existing culverts within the perennial stream and the other is downstream of the perennial stream. There is a third watershed area "E2" with 5 acres of land that flows into an isolated wetland. This drainage area eventually flows to design point E3. See the attached watershed plans for the watershed area boundaries and the pre-development time of concentration flow paths.

## **WATERSHED ANALYSIS: EXISTING CONDITIONS**

The existing conditions were modeled using the tabular hydrograph method with a Type III synthetic storm distribution for the 2, 10, and 100-year storm recurrence intervals. Runoff hydrographs were produced to estimate existing peak discharge.

Flows for the three storm simulations are as follows:

Existing (Pre-development) Peak Runoff Rates (c.f.s.)

| Subcatchment | Size    | 2 Yr  | 10 Yr | 100 Yr |
|--------------|---------|-------|-------|--------|
|              | (Acres) | Storm | Storm | Storm  |
| DP 1         | 12.05   | 0.13  | 3.11  | 28.17  |
| DP 2         | 4.77    | 3.45  | 8.60  | 23.34  |
| DP 3A        | 11.22   | 0.00  | 0.06  | 5.49   |
| DP 3B        | 11.00   | 1.45  | 9.40  | 40.67  |

The pre-development drainage calculations can be found in Appendix A.

## **WATERSHED DESCRIPTION: POST-DEVELOPMENT CONDITIONS**

To determine the post development runoff, new watersheds, runoff curve numbers and times of concentration were generated reflecting the changes in the topography and surface cover. The post-development watersheds are shown on the attached plans (Watersheds and HydroCad Data, sheet 2 of 2).

The proposed watershed areas are broken into multiple sub-catchment areas and directed to stormwater mitigation areas to provide recharge to groundwater, water quality treatment and peak rate mitigation. Sub-catchment areas P1A – P1AA are directed to various stormwater management areas and ultimately drain to design point 1. Two infiltration basins and one subsurface infiltration area are proposed to provide stormwater mitigation for this design point. Sub-catchment areas P2A - P2AA are directed to design point 2. Three subsurface infiltration areas are proposed to provide stormwater mitigation for this design point. Sub-catchment areas P3A – P3WWW and P2E- P2I and P2X are directed to design point 3. Four constructed stormwater wetlands, three infiltration basins, three subsurface infiltration areas, and two subsurface detention areas are proposed to provide stormwater mitigation for this design point.

## **WATERSHED ANALYSIS: POST-DEVELOPMENT CONDITIONS**

The proposed developed conditions were modeled using the tabular hydrograph method with a Type III synthetic storm distribution for the 2, 10, and 100-year storm recurrence intervals. Runoff hydrographs were produced to estimate the post-development peak discharge rates. The model uses the Northeast Regional Climate Center Precipitation Data for the 2-year, 10-year and 100-year 24-hour storm events. This correlates to 3.10" for the 2-year, 4.83" for the 10-year and 8.94" for the 100-year storm event. As the design is refined the pond sizes will most likely be reduced in size with the current design taking the most conservative approach. The provided mitigation reduces the runoff rates for Design Points 1, 2, and 3 for the 2-, 10-, and 100-year storm events.

Flows for the three storm simulations are as follows:

Post-Developed Peak Runoff Rates (c.f.s.)

| <b>Subcatchment</b> | <b>Size</b>    | <b>2 Yr</b>  | <b>10 Yr</b> | <b>100 Yr</b> |
|---------------------|----------------|--------------|--------------|---------------|
|                     | <b>(Acres)</b> | <b>Storm</b> | <b>Storm</b> | <b>Storm</b>  |
| DP 1                | 8.75           | 0.04         | 2.98         | 27.72         |
| DP 2                | 3.23           | 1.46         | 7.16         | 21.18         |
| DP 3A               | 15.80          | 0.02         | 0.06         | 3.61          |
| DP 3B               | 10.47          | 1.25         | 9.25         | 34.16         |

Given the reduction of rainfall intensities for all storm events the proposed project complies with standard 2.

The post-development drainage calculations can be found in Appendix B.

#### **IV. Stormwater Recharge Calculations**

## Stormwater Recharge Calculations

Calculations were performed to ensure that the proposed project will comply with the groundwater recharge requirements of the Mass DEP Stormwater Management Standards. The required recharge volume was calculated as follows:

The Required Recharge Volume equals a depth of runoff corresponding to the soil type times the impervious areas located on site.

$R_v = F \times \text{Impervious area}$  Where:

$R_v$  = Required Recharge Volume, expressed in cubic feet

$F$  = Target Depth Factor associated with each Hydrologic Soil

Group Impervious Area = pavement and rooftop area on site

For the proposed project:

Required Recharge volume,  $R_v$  (C soil) =  $F \times \text{impervious area}$   
= 0.25 in \* 346,302 s.f.  
= 7,215 c.f.

$R_v$  (A soil) =  $F \times \text{impervious area}$   
= 0.60 in \* 381,585  
= 19,079 c.f.

**Total Required Recharge Volume = 26,294 c.f.**

**Total Recharge provided**

Inf. Basin 1 = 6,011 c.f.  
Inf. Basin 2 = 12,993 c.f.  
Inf. Basin 3 = 16,654 c.f.  
Inf. Basin 4 = 6,015 c.f.  
Inf. Basin 5= 11,936 c.f.  
Inf. Basin 6= 1,469 c.f.  
Sub. Inf. 1a= 479 c.f.  
Sub, Inf. 1b =2,788 c.f.  
Sub. Inf. 2 = 5,009 c.f.  
Sub. Inf. 3 = 4,704 c.f.  
Sub. Inf. 4 = 4,835 c.f.  
Sub. Inf. 5= 1,699 c.f.  
Sub. Inf. 6= 1,612 c.f.  
Sub. Inf. 7= 1,176 c.f.  
Sub. Inf. 7= 1,394 c.f.

**Total Recharge provided = 78,734 c.f.**

The project exceeds the requirements and will fully comply with Standard 3.



## **V. TSS Removal Calculations**

INSTRUCTIONS:

Non-automated: Mar. 4, 2008

1. Sheet is nonautomated. Print sheet and complete using hand calculations. Column A and B: See MassDEP Structural BMP Table
2. The calculations must be completed using the Column Headings specified in Chart and Not the Excel Column Headings
3. To complete Chart Column D, multiple Column B value within Row x Column C value within Row
4. To complete Chart Column E value, subtract Column D value within Row from Column C within Row
5. Total TSS Removal = Sum All Values in Column D

Location: Pretreatment Inf. Basin 1

TSS Removal  
Calculation  
Worksheet

| A<br>BMP <sup>1</sup> | B<br>TSS Removal<br>Rate <sup>1</sup> | C<br>Starting TSS<br>Load* | D<br>Amount<br>Removed (B*C) | E<br>Remaining<br>Load (C-D) |
|-----------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
| Deep Sump Catch Basin | 0.25                                  | 1.00                       | 0.25                         | 0.75                         |
| Contech CDS           | 0.80                                  | 0.75                       | 0.60                         | 0.15                         |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |

Total TSS Removal =

85%

Separate Form Needs to be Completed for Each Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E) which enters the BMP

INSTRUCTIONS:

Non-automated: Mar. 4, 2008

1. Sheet is nonautomated. Print sheet and complete using hand calculations. Column A and B: See MassDEP Structural BMP Table
2. The calculations must be completed using the Column Headings specified in Chart and Not the Excel Column Headings
3. To complete Chart Column D, multiple Column B value within Row x Column C value within Row
4. To complete Chart Column E value, subtract Column D value within Row from Column C within Row
5. Total TSS Removal = Sum All Values in Column D

Location: Pretreatment Inf. Basin 2

TSS Removal  
Calculation  
Worksheet

| A<br>BMP <sup>1</sup> | B<br>TSS Removal<br>Rate <sup>1</sup> | C<br>Starting TSS<br>Load* | D<br>Amount<br>Removed (B*C) | E<br>Remaining<br>Load (C-D) |
|-----------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
| Deep Sump Catch Basin | 0.25                                  | 1.00                       | 0.25                         | 0.75                         |
| Contech CDS           | 0.80                                  | 0.75                       | 0.60                         | 0.15                         |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |

Total TSS Removal =

85%

Separate Form Needs to be Completed for Each Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E) which enters the BMP

INSTRUCTIONS:

Non-automated: Mar. 4, 2008

1. Sheet is nonautomated. Print sheet and complete using hand calculations. Column A and B: See MassDEP Structural BMP Table
2. The calculations must be completed using the Column Headings specified in Chart and Not the Excel Column Headings
3. To complete Chart Column D, multiple Column B value within Row x Column C value within Row
4. To complete Chart Column E value, subtract Column D value within Row from Column C within Row
5. Total TSS Removal = Sum All Values in Column D

Location: Pretreatment Inf. Basin 3

TSS Removal  
Calculation  
Worksheet

| A<br>BMP <sup>1</sup> | B<br>TSS Removal<br>Rate <sup>1</sup> | C<br>Starting TSS<br>Load* | D<br>Amount<br>Removed (B*C) | E<br>Remaining<br>Load (C-D) |
|-----------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
| Deep Sump Catch Basin | 0.25                                  | 1.00                       | 0.25                         | 0.75                         |
| Contech CDS           | 0.80                                  | 0.75                       | 0.60                         | 0.15                         |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |

Total TSS Removal =

85%

Separate Form Needs to be Completed for Each Outlet or BMP Train

Project: M244407

Prepared By: JTM

Date: 8/11/2025

\*Equals remaining load from previous BMP (E) which enters the BMP

INSTRUCTIONS:

Non-automated: Mar. 4, 2008

1. Sheet is nonautomated. Print sheet and complete using hand calculations. Column A and B: See MassDEP Structural BMP Table
2. The calculations must be completed using the Column Headings specified in Chart and Not the Excel Column Headings
3. To complete Chart Column D, multiple Column B value within Row x Column C value within Row
4. To complete Chart Column E value, subtract Column D value within Row from Column C within Row
5. Total TSS Removal = Sum All Values in Column D

Location: Pretreatment Inf. Basin 4

**TSS Removal  
Calculation  
Worksheet**

| A<br>BMP <sup>1</sup> | B<br>TSS Removal<br>Rate <sup>1</sup> | C<br>Starting TSS<br>Load* | D<br>Amount<br>Removed (B*C) | E<br>Remaining<br>Load (C-D) |
|-----------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
| Deep Sump Catch Basin | 0.25                                  | 1.00                       | 0.25                         | 0.75                         |
| Contech CDS           | 0.80                                  | 0.75                       | 0.60                         | 0.15                         |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |

**Total TSS Removal =**

85%

Separate Form Needs to be Completed for Each Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E) which enters the BMP

INSTRUCTIONS:

Non-automated: Mar. 4, 2008

1. Sheet is nonautomated. Print sheet and complete using hand calculations. Column A and B: See MassDEP Structural BMP Table
2. The calculations must be completed using the Column Headings specified in Chart and Not the Excel Column Headings
3. To complete Chart Column D, multiple Column B value within Row x Column C value within Row
4. To complete Chart Column E value, subtract Column D value within Row from Column C within Row
5. Total TSS Removal = Sum All Values in Column D

Location: Pretreatment Sub. Inf. 1A

TSS Removal  
Calculation  
Worksheet

| A<br>BMP <sup>1</sup> | B<br>TSS Removal<br>Rate <sup>1</sup> | C<br>Starting TSS<br>Load* | D<br>Amount<br>Removed (B*C) | E<br>Remaining<br>Load (C-D) |
|-----------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
| Deep Sump Catch Basin | 0.25                                  | 1.00                       | 0.25                         | 0.75                         |
| Contech CDS           | 0.80                                  | 0.75                       | 0.60                         | 0.15                         |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |

Total TSS Removal =

85%

Separate Form Needs to be Completed for Each Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 12/5/2025

\*Equals remaining load from previous BMP (E) which enters the BMP

INSTRUCTIONS:

Non-automated: Mar. 4, 2008

1. Sheet is nonautomated. Print sheet and complete using hand calculations. Column A and B: See MassDEP Structural BMP Table
2. The calculations must be completed using the Column Headings specified in Chart and Not the Excel Column Headings
3. To complete Chart Column D, multiple Column B value within Row x Column C value within Row
4. To complete Chart Column E value, subtract Column D value within Row from Column C within Row
5. Total TSS Removal = Sum All Values in Column D

Location: Pretreatment Sub. Inf. 1B

**TSS Removal  
Calculation  
Worksheet**

| A<br>BMP <sup>1</sup> | B<br>TSS Removal<br>Rate <sup>1</sup> | C<br>Starting TSS<br>Load* | D<br>Amount<br>Removed (B*C) | E<br>Remaining<br>Load (C-D) |
|-----------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
| Deep Sump Catch Basin | 0.25                                  | 1.00                       | 0.25                         | 0.75                         |
| Contech CDS           | 0.80                                  | 0.75                       | 0.60                         | 0.15                         |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |

**Total TSS Removal =**

85%

Separate Form Needs to be Completed for Each Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 12/5/2025

\*Equals remaining load from previous BMP (E) which enters the BMP

INSTRUCTIONS:

Non-automated: Mar. 4, 2008

1. Sheet is nonautomated. Print sheet and complete using hand calculations. Column A and B: See MassDEP Structural BMP Table
2. The calculations must be completed using the Column Headings specified in Chart and Not the Excel Column Headings
3. To complete Chart Column D, multiple Column B value within Row x Column C value within Row
4. To complete Chart Column E value, subtract Column D value within Row from Column C within Row
5. Total TSS Removal = Sum All Values in Column D

Location: Pretreatment Sub. Inf. 2

**TSS Removal  
Calculation  
Worksheet**

| A<br>BMP <sup>1</sup> | B<br>TSS Removal<br>Rate <sup>1</sup> | C<br>Starting TSS<br>Load* | D<br>Amount<br>Removed (B*C) | E<br>Remaining<br>Load (C-D) |
|-----------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
| Deep Sump Catch Basin | 0.25                                  | 1.00                       | 0.25                         | 0.75                         |
| Contech CDS           | 0.80                                  | 0.75                       | 0.60                         | 0.15                         |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |

**Total TSS Removal =**

85%

Separate Form Needs to be Completed for Each Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E) which enters the BMP



INSTRUCTIONS:

Non-automated: Mar. 4, 2008

1. Sheet is nonautomated. Print sheet and complete using hand calculations. Column A and B: See MassDEP Structural BMP Table
2. The calculations must be completed using the Column Headings specified in Chart and Not the Excel Column Headings
3. To complete Chart Column D, multiple Column B value within Row x Column C value within Row
4. To complete Chart Column E value, subtract Column D value within Row from Column C within Row
5. Total TSS Removal = Sum All Values in Column D

Location: Pretreatment Sub. Inf. 3

**TSS Removal  
Calculation  
Worksheet**

| A<br>BMP <sup>1</sup> | B<br>TSS Removal<br>Rate <sup>1</sup> | C<br>Starting TSS<br>Load* | D<br>Amount<br>Removed (B*C) | E<br>Remaining<br>Load (C-D) |
|-----------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
| Deep Sump Catch Basin | 0.25                                  | 1.00                       | 0.25                         | 0.75                         |
| Contech CDS           | 0.80                                  | 0.75                       | 0.60                         | 0.15                         |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |

**Total TSS Removal =**

85%

Separate Form Needs to be Completed for Each Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E) which enters the BMP

INSTRUCTIONS:

Non-automated: Mar. 4, 2008

1. Sheet is nonautomated. Print sheet and complete using hand calculations. Column A and B: See MassDEP Structural BMP Table
2. The calculations must be completed using the Column Headings specified in Chart and Not the Excel Column Headings
3. To complete Chart Column D, multiple Column B value within Row x Column C value within Row
4. To complete Chart Column E value, subtract Column D value within Row from Column C within Row
5. Total TSS Removal = Sum All Values in Column D

Location: Pretreatment Sub. Inf. 8

**TSS Removal  
Calculation  
Worksheet**

| A<br>BMP <sup>1</sup> | B<br>TSS Removal<br>Rate <sup>1</sup> | C<br>Starting TSS<br>Load* | D<br>Amount<br>Removed (B*C) | E<br>Remaining<br>Load (C-D) |
|-----------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
| Deep Sump Catch Basin | 0.25                                  | 1.00                       | 0.25                         | 0.75                         |
| Contech CDS           | 0.80                                  | 0.75                       | 0.60                         | 0.15                         |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |
|                       |                                       |                            |                              |                              |

**Total TSS Removal =**

85%

Separate Form Needs to be Completed for Each Outlet or BMP Train

Project: M244407

Prepared By: JTM

Date: 12/5/2025

\*Equals remaining load from previous BMP (E) which enters the BMP

## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: Constructed Wetland 1

| TSS Removal<br>Calculation Worksheet | B                                 | C                                | D                     | E                       | F                       |
|--------------------------------------|-----------------------------------|----------------------------------|-----------------------|-------------------------|-------------------------|
|                                      | BMP <sup>1</sup>                  | TSS Removal<br>Rate <sup>1</sup> | Starting TSS<br>Load* | Amount<br>Removed (C*D) | Remaining<br>Load (D-E) |
|                                      | Constructed Stormwater<br>Wetland | 0.80                             | 1.00                  | 0.80                    | 0.20                    |
|                                      |                                   | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                   | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                   | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                   | 0.00                             | 0.20                  | 0.00                    | 0.20                    |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E)  
which enters the BMP

## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: 

| TSS Removal<br>Calculation Worksheet | B                                 | C                                | D                     | E                       | F                       |
|--------------------------------------|-----------------------------------|----------------------------------|-----------------------|-------------------------|-------------------------|
|                                      | BMP <sup>1</sup>                  | TSS Removal<br>Rate <sup>1</sup> | Starting TSS<br>Load* | Amount<br>Removed (C*D) | Remaining<br>Load (D-E) |
|                                      | Constructed Stormwater<br>Wetland | 0.80                             | 1.00                  | 0.80                    | 0.20                    |
|                                      |                                   | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                   | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                   | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                   | 0.00                             | 0.20                  | 0.00                    | 0.20                    |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project:

Prepared By:

Date:

\*Equals remaining load from previous BMP (E)  
which enters the BMP

## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: Constructed Wetland 3

| TSS Removal<br>Calculation Worksheet | B                                 | C                                | D                     | E                       | F                       |
|--------------------------------------|-----------------------------------|----------------------------------|-----------------------|-------------------------|-------------------------|
|                                      | BMP <sup>1</sup>                  | TSS Removal<br>Rate <sup>1</sup> | Starting TSS<br>Load* | Amount<br>Removed (C*D) | Remaining<br>Load (D-E) |
|                                      | Constructed Stormwater<br>Wetland | 0.80                             | 1.00                  | 0.80                    | 0.20                    |
|                                      |                                   | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                   | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                   | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                   | 0.00                             | 0.20                  | 0.00                    | 0.20                    |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E)  
which enters the BMP

## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: Infiltration Basin 1

| TSS Removal<br>Calculation Worksheet | B<br>BMP <sup>1</sup> | C<br>TSS Removal<br>Rate <sup>1</sup> | D<br>Starting TSS<br>Load* | E<br>Amount<br>Removed (C*D) | F<br>Remaining<br>Load (D-E) |
|--------------------------------------|-----------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
|                                      | Infiltration Basin    | 0.80                                  | 1.00                       | 0.80                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E)  
which enters the BMP

## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: Infiltration Basin 2

| TSS Removal<br>Calculation Worksheet | B<br>BMP <sup>1</sup> | C<br>TSS Removal<br>Rate <sup>1</sup> | D<br>Starting TSS<br>Load* | E<br>Amount<br>Removed (C*D) | F<br>Remaining<br>Load (D-E) |
|--------------------------------------|-----------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
|                                      | Infiltration Basin    | 0.80                                  | 1.00                       | 0.80                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E)  
which enters the BMP

## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: Infiltration Basin 3

| TSS Removal<br>Calculation Worksheet | B<br>BMP <sup>1</sup> | C<br>TSS Removal<br>Rate <sup>1</sup> | D<br>Starting TSS<br>Load* | E<br>Amount<br>Removed (C*D) | F<br>Remaining<br>Load (D-E) |
|--------------------------------------|-----------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
|                                      | Infiltration Basin    | 0.80                                  | 1.00                       | 0.80                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E)  
which enters the BMP



## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: Infiltration Basin 4

| TSS Removal<br>Calculation Worksheet | B<br>BMP <sup>1</sup> | C<br>TSS Removal<br>Rate <sup>1</sup> | D<br>Starting TSS<br>Load* | E<br>Amount<br>Removed (C*D) | F<br>Remaining<br>Load (D-E) |
|--------------------------------------|-----------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
|                                      | Infiltration Basin    | 0.80                                  | 1.00                       | 0.80                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E)  
which enters the BMP

## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: Infiltration Basin 5

| TSS Removal<br>Calculation Worksheet | B<br>BMP <sup>1</sup> | C<br>TSS Removal<br>Rate <sup>1</sup> | D<br>Starting TSS<br>Load* | E<br>Amount<br>Removed (C*D) | F<br>Remaining<br>Load (D-E) |
|--------------------------------------|-----------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
|                                      | Infiltration Basin    | 0.80                                  | 1.00                       | 0.80                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E)  
which enters the BMP

## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: Infiltration Basin 6

| TSS Removal<br>Calculation Worksheet | B<br>BMP <sup>1</sup> | C<br>TSS Removal<br>Rate <sup>1</sup> | D<br>Starting TSS<br>Load* | E<br>Amount<br>Removed (C*D) | F<br>Remaining<br>Load (D-E) |
|--------------------------------------|-----------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
|                                      | Infiltration Basin    | 0.80                                  | 1.00                       | 0.80                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                       | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 12/5/2025

\*Equals remaining load from previous BMP (E)  
which enters the BMP

## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: Sub. Inf. 1A

| TSS Removal<br>Calculation Worksheet | B                                    | C                                | D                     | E                       | F                       |
|--------------------------------------|--------------------------------------|----------------------------------|-----------------------|-------------------------|-------------------------|
|                                      | BMP <sup>1</sup>                     | TSS Removal<br>Rate <sup>1</sup> | Starting TSS<br>Load* | Amount<br>Removed (C*D) | Remaining<br>Load (D-E) |
|                                      | Subsurface Infiltration<br>Structure | 0.80                             | 1.00                  | 0.80                    | 0.20                    |
|                                      |                                      | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                      | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                      | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                      | 0.00                             | 0.20                  | 0.00                    | 0.20                    |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 12/5/2025

\*Equals remaining load from previous BMP (E)  
which enters the BMP

## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: Sub. Inf. 1B

| TSS Removal<br>Calculation Worksheet | B<br>BMP <sup>1</sup>                | C<br>TSS Removal<br>Rate <sup>1</sup> | D<br>Starting TSS<br>Load* | E<br>Amount<br>Removed (C*D) | F<br>Remaining<br>Load (D-E) |
|--------------------------------------|--------------------------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
|                                      | Subsurface Infiltration<br>Structure | 0.80                                  | 1.00                       | 0.80                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 12/5/2025

\*Equals remaining load from previous BMP (E)  
which enters the BMP

## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: Sub. Inf. 2

| TSS Removal<br>Calculation Worksheet | B<br>BMP <sup>1</sup>                | C<br>TSS Removal<br>Rate <sup>1</sup> | D<br>Starting TSS<br>Load* | E<br>Amount<br>Removed (C*D) | F<br>Remaining<br>Load (D-E) |
|--------------------------------------|--------------------------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
|                                      | Subsurface Infiltration<br>Structure | 0.80                                  | 1.00                       | 0.80                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E)  
which enters the BMP

## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: Sub. Inf. 3

| TSS Removal<br>Calculation Worksheet | B                                    | C                                | D                     | E                       | F                       |
|--------------------------------------|--------------------------------------|----------------------------------|-----------------------|-------------------------|-------------------------|
|                                      | BMP <sup>1</sup>                     | TSS Removal<br>Rate <sup>1</sup> | Starting TSS<br>Load* | Amount<br>Removed (C*D) | Remaining<br>Load (D-E) |
|                                      | Subsurface Infiltration<br>Structure | 0.80                             | 1.00                  | 0.80                    | 0.20                    |
|                                      |                                      | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                      | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                      | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                      | 0.00                             | 0.20                  | 0.00                    | 0.20                    |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E)  
which enters the BMP

## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: Sub. Inf. 4

| TSS Removal<br>Calculation Worksheet | B<br>BMP <sup>1</sup>                | C<br>TSS Removal<br>Rate <sup>1</sup> | D<br>Starting TSS<br>Load* | E<br>Amount<br>Removed (C*D) | F<br>Remaining<br>Load (D-E) |
|--------------------------------------|--------------------------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
|                                      | Subsurface Infiltration<br>Structure | 0.80                                  | 1.00                       | 0.80                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E)  
which enters the BMP



## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: Sub. Inf. 5

| TSS Removal<br>Calculation Worksheet | B                                    | C                                | D                     | E                       | F                       |
|--------------------------------------|--------------------------------------|----------------------------------|-----------------------|-------------------------|-------------------------|
|                                      | BMP <sup>1</sup>                     | TSS Removal<br>Rate <sup>1</sup> | Starting TSS<br>Load* | Amount<br>Removed (C*D) | Remaining<br>Load (D-E) |
|                                      | Subsurface Infiltration<br>Structure | 0.80                             | 1.00                  | 0.80                    | 0.20                    |
|                                      |                                      | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                      | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                      | 0.00                             | 0.20                  | 0.00                    | 0.20                    |
|                                      |                                      | 0.00                             | 0.20                  | 0.00                    | 0.20                    |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E)  
which enters the BMP

## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: Sub. Inf. 7

| TSS Removal<br>Calculation Worksheet | B<br>BMP <sup>1</sup>                | C<br>TSS Removal<br>Rate <sup>1</sup> | D<br>Starting TSS<br>Load* | E<br>Amount<br>Removed (C*D) | F<br>Remaining<br>Load (D-E) |
|--------------------------------------|--------------------------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
|                                      | Subsurface Infiltration<br>Structure | 0.80                                  | 1.00                       | 0.80                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 8/11/2025

\*Equals remaining load from previous BMP (E)  
which enters the BMP

## INSTRUCTIONS:

1. In BMP Column, click on Blue Cell to Activate Drop Down Menu
2. Select BMP from Drop Down Menu
3. After BMP is selected, TSS Removal and other Columns are automatically completed.

Version 1, Automated: Mar. 4, 2008

Location: Sub. Inf. 8

| TSS Removal<br>Calculation Worksheet | B<br>BMP <sup>1</sup>                | C<br>TSS Removal<br>Rate <sup>1</sup> | D<br>Starting TSS<br>Load* | E<br>Amount<br>Removed (C*D) | F<br>Remaining<br>Load (D-E) |
|--------------------------------------|--------------------------------------|---------------------------------------|----------------------------|------------------------------|------------------------------|
|                                      | Subsurface Infiltration<br>Structure | 0.80                                  | 1.00                       | 0.80                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |
|                                      |                                      | 0.00                                  | 0.20                       | 0.00                         | 0.20                         |

Total TSS Removal =

80%

Separate Form Needs to  
be Completed for Each  
Outlet or BMP Train

Project: M244407  
Prepared By: JTM  
Date: 12/5/2025

\*Equals remaining load from previous BMP (E)  
which enters the BMP

## **VI. Water Quality Calculations**

## Water Quality Calculations

The Massachusetts DEP requires water quality calculations based on 1/2 inch of runoff for the total impervious area associated with the proposed development. The following calculation identifies the water quality volume required.

### Constructed Wetland 1

Total Impervious Area = 17,609 s.f.

$17,609 \text{ s.f.} \times 1" / 12 \text{ (to convert to ft)} = 1,467 \text{ c.f. of runoff to be treated for water quality.}$

The Remaining required WQV is obtained through the CDS unit (see supporting documents)

### Inf. Basin 1

Total Impervious Area = 49,222 s.f.

$49,222 \text{ s.f.} \times 1" / 12 \text{ (to convert to ft)} = 4,102 \text{ c.f. of runoff to be treated for water quality.}$

Volume of the Rain garden below the lowest outlet = 6,011 c.f.

### Sub. Inf. 1a

Total Impervious Area = 5,015 s.f.

$5,015 \text{ s.f.} \times 1" / 12 \text{ (to convert to ft)} = 418 \text{ c.f. of runoff to be treated for water quality.}$

Volume of the Rain garden below the lowest outlet = 479 c.f.

### Sub. Inf. 1b

Total Impervious Area = 40,511 s.f.

$40,511 \text{ s.f.} \times 1" / 12 \text{ (to convert to ft)} = 3,376 \text{ c.f. of runoff to be treated for water quality.}$

Volume of the Rain garden below the lowest outlet = 2,788 c.f. A CDS unit is also used to achieve the WQV.

### Sub. Inf. 2

Total Impervious Area = 47,350 s.f.

$47,350 \text{ s.f.} \times 1" / 12 \text{ (to convert to ft)} = 3,946 \text{ c.f. of runoff to be treated for water quality.}$

Volume of the Rain garden below the lowest outlet = 5,009 c.f.

Sub. Inf. 3

Total Impervious Area = 10,542 s.f.

$10,542 \text{ s.f.} \times 1" / 12 \text{ (to convert to ft)} = 879 \text{ c.f. of runoff to be treated for water quality.}$

Volume of the Rain garden below the lowest outlet = 4,704 c.f.

Inf. Basin 2

Total Impervious Area = 25,700 s.f.

$25,700 \text{ s.f.} \times 1" / 12 \text{ (to convert to ft)} = 2,142 \text{ c.f. of runoff to be treated for water quality.}$

Volume of the Rain garden below the lowest outlet = 12,381 c.f.

Inf. Basin 3

Total Impervious Area = 33,454 s.f.

$33,454 \text{ s.f.} \times 1" / 12 \text{ (to convert to ft)} = 2,788 \text{ c.f. of runoff to be treated for water quality.}$

Volume of the Rain garden below the lowest outlet = 16,654 c.f.

Inf. Basin 4

Total Impervious Area = 20,386 s.f.

$20,386 \text{ s.f.} \times 1" / 12 \text{ (to convert to ft)} = 1,699 \text{ c.f. of runoff to be treated for water quality.}$

Volume of the Rain garden below the lowest outlet = 6,015 c.f.

Inf. Basin 5

Total Impervious Area = 54,362 s.f.

$54,362 \text{ s.f.} \times 1/2" / 12 \text{ (to convert to ft)} = 2,265 \text{ c.f. of runoff to be treated for water quality.}$

Volume of the Rain garden below the lowest outlet = 11,936 c.f.

Sub. Inf. 4

Total Impervious Area = 16,683 s.f.

$16,683 \text{ s.f.} \times 1/2" / 12 \text{ (to convert to ft)} = 695 \text{ c.f. of runoff to be treated for water quality.}$

Total Impervious Area = 10,411 s.f.

$10,411 \text{ s.f.} \times 1" / 12 \text{ (to convert to ft)} = 868 \text{ c.f. of runoff to be treated for water quality.}$

Total WQV = 4,835 c.f.

Volume of the Rain garden below the lowest outlet = 1,699 c.f.

#### Constructed Wetland 2

Total Impervious Area = 18,949 s.f.

$18,949 \text{ s.f.} \times \frac{1}{2} / 12$  (to convert to ft) = 790 c.f. of runoff to be treated for water quality.

Total Impervious Area = 8,843 s.f.

$8,843 \text{ s.f.} \times \frac{1}{12}$  (to convert to ft) = 737 c.f. of runoff to be treated for water quality.

Total WQV = 1,527 c.f.

The Remaining required WQV is obtained through the CDS unit (see supporting documents)

#### Sub. Inf. 5

Total Impervious Area = 13,329 s.f.

$13,329 \text{ s.f.} \times \frac{1}{2} / 12$  (to convert to ft) = 556 c.f. of runoff to be treated for water quality.

Volume of the Rain garden below the lowest outlet = 1,699 c.f.

#### Sub. Inf. 7

Total Impervious Area = 8,581 s.f.

$8,581 \text{ s.f.} \times \frac{1}{2} / 12$  (to convert to ft) = 358 c.f. of runoff to be treated for water quality.

Volume of the Rain garden below the lowest outlet = 1,178 c.f.

#### Sub. Det. 1 / Constructed Wetland 3

Total Impervious Area = 41,904 s.f.

$41,904 \text{ s.f.} \times \frac{1}{2} / 12$  (to convert to ft) = 1,746 c.f. of runoff to be treated for water quality.

The Remaining required WQV is obtained through the CDS unit (see supporting documents)

#### Sub. Det. 2

Total Impervious Area = 28,793 s.f.

$28,793 \text{ s.f.} \times \frac{1}{2} / 12$  (to convert to ft) = 1,200 c.f. of runoff to be treated for water quality.

The Remaining required WQV is obtained through the CDS unit (see supporting documents)

#### Inf. Basin 6 / Constructed Wetland 4

Total Impervious Area = 22,259 s.f.

$22,259 \text{ s.f.} \times \frac{1}{2}'' / 12 \text{ (to convert to ft)} = 928 \text{ c.f. of runoff to be treated for water quality.}$

Volume of the Rain garden below the lowest outlet = 1,469 c.f.

Sub. Inf. 8

Total Impervious Area = 6,016 s.f.

$6,016 \text{ s.f.} \times \frac{1}{2}'' / 12 \text{ (to convert to ft)} = 502 \text{ c.f. of runoff to be treated for water quality.}$

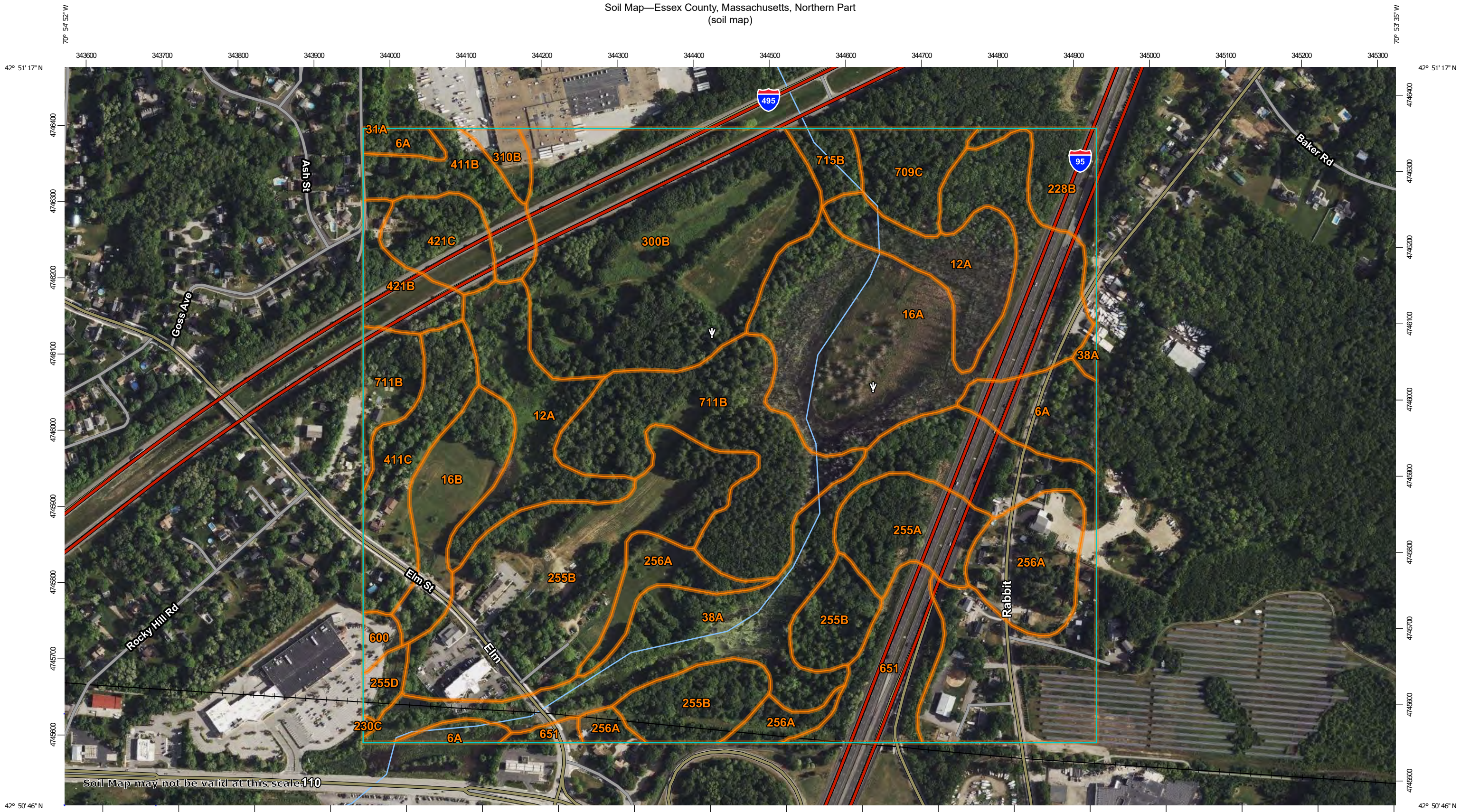
Volume of the Rain garden below the lowest outlet = 1,394 c.f.



## **VII. Soils Analysis**



Soil Map—Essex County, Massachusetts, Northern Part  
(soil map)



Map Scale: 1:4,720 if printed on B landscape (17" x 11") sheet.  
0 50 100 200 300 Meters  
0 200 400 800 1200 Feet  
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84



Natural Resources  
Conservation Service

Web Soil Survey  
National Cooperative Soil Survey



# Soil Map—Essex County, Massachusetts, Northern Part (soil map)

## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

### Special Point Features



Blowout



Borrow Pit



Clay Spot



Closed Depression



Gravel Pit



Gravelly Spot



Landfill



Lava Flow



Marsh or swamp



Mine or Quarry



Miscellaneous Water



Perennial Water



Rock Outcrop



Saline Spot



Sandy Spot



Severely Eroded Spot



Sinkhole



Slide or Slip



Sodic Spot



Spoil Area



Stony Spot



Very Stony Spot



Wet Spot



Other



Special Line Features

### Water Features



Streams and Canals

### Transportation



Rails



Interstate Highways



US Routes



Major Roads



Local Roads

### Background



Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service

Web Soil Survey URL:

Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Essex County, Massachusetts, Northern Part  
Survey Area Data: Version 20, Aug 27, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 22, 2022—Jun 5, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

| Map Unit Symbol | Map Unit Name                                               | Acres in AOI | Percent of AOI |
|-----------------|-------------------------------------------------------------|--------------|----------------|
| 6A              | Scarboro mucky fine sandy loam, 0 to 3 percent slopes       | 5.7          | 2.9%           |
| 12A             | Maybid silt loam, 0 to 3 percent slopes                     | 13.4         | 6.9%           |
| 16A             | Scantic silt loam, 0 to 3 percent slopes                    | 22.6         | 11.7%          |
| 16B             | Scantic silt loam, 3 to 8 percent slopes                    | 5.7          | 3.0%           |
| 31A             | Walpole sandy loam, 0 to 3 percent slopes                   | 0.0          | 0.0%           |
| 38A             | Pipestone loamy sand, 0 to 3 percent slopes                 | 28.8         | 14.9%          |
| 228B            | Buxton silt loam, 3 to 8 percent slopes                     | 3.6          | 1.9%           |
| 230C            | Unadilla very fine sandy loam, 8 to 15 percent slopes       | 0.1          | 0.0%           |
| 255A            | Windsor loamy sand, 0 to 3 percent slopes                   | 5.4          | 2.8%           |
| 255B            | Windsor loamy sand, 3 to 8 percent slopes                   | 24.3         | 12.6%          |
| 255D            | Windsor loamy sand, 15 to 25 percent slopes                 | 1.0          | 0.5%           |
| 256A            | Deerfield loamy fine sand, 0 to 3 percent slopes            | 10.1         | 5.2%           |
| 300B            | Montauk fine sandy loam, 3 to 8 percent slopes              | 25.9         | 13.4%          |
| 310B            | Woodbridge fine sandy loam, 3 to 8 percent slopes           | 1.1          | 0.6%           |
| 411B            | Sutton fine sandy loam, 0 to 8 percent slopes, very stony   | 4.4          | 2.3%           |
| 411C            | Sutton fine sandy loam, 8 to 15 percent slopes, very stony  | 6.3          | 3.2%           |
| 421B            | Canton fine sandy loam, 0 to 8 percent slopes, very stony   | 3.0          | 1.6%           |
| 421C            | Canton fine sandy loam, 8 to 15 percent slopes, very stony  | 3.6          | 1.9%           |
| 600             | Pits, gravel                                                | 0.7          | 0.4%           |
| 651             | Udorthents, smoothed                                        | 6.2          | 3.2%           |
| 709C            | Buxton-Rock outcrop complex, 8 to 15 percent slopes         | 3.7          | 1.9%           |
| 711B            | Charlton-Rock outcrop-Hollis complex, 3 to 8 percent slopes | 15.7         | 8.2%           |

| Map Unit Symbol                    | Map Unit Name                                                                    | Acres in AOI | Percent of AOI |
|------------------------------------|----------------------------------------------------------------------------------|--------------|----------------|
| 715B                               | Ridgebury and Leicester fine sandy loams, 3 to 8 percent slopes, extremely stony | 1.6          | 0.8%           |
| <b>Totals for Area of Interest</b> |                                                                                  | <b>192.9</b> | <b>100.0%</b>  |

## Essex County, Massachusetts, Northern Part

### 12A—Maybid silt loam, 0 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* vjhj

*Elevation:* 0 to 130 feet

*Mean annual precipitation:* 45 to 54 inches

*Mean annual air temperature:* 43 to 54 degrees F

*Frost-free period:* 145 to 240 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Maybid and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Maybid

##### Setting

*Landform:* Depressions, depressions

*Landform position (two-dimensional):* Toeslope

*Landform position (three-dimensional):* Dip

*Down-slope shape:* Concave

*Across-slope shape:* Concave

*Parent material:* Soft silty and clayey glaciolacustrine deposits  
and/or firm silty marine deposits

##### Typical profile

*H1 - 0 to 7 inches:* silt loam

*H2 - 7 to 19 inches:* silty clay

*H3 - 19 to 60 inches:* silty clay

##### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Very poorly drained

*Capacity of the most limiting layer to transmit water (Ksat):* Very low  
to moderately high (0.00 to 0.20 in/hr)

*Depth to water table:* About 0 inches

*Frequency of flooding:* None

*Frequency of ponding:* Frequent

*Available water supply, 0 to 60 inches:* Moderate (about 8.8  
inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 6w

*Hydrologic Soil Group:* C/D

*Ecological site:* F144AY020MA - Very Wet Coastal Lake Plain

*Hydric soil rating:* Yes

### Minor Components

#### Scantic

*Percent of map unit:* 12 percent

*Landform:* Depressions

*Hydric soil rating:* Yes

#### Swansea

*Percent of map unit:* 3 percent

*Landform:* Bogs

*Hydric soil rating:* Yes

## Data Source Information

Soil Survey Area: Essex County, Massachusetts, Northern Part

Survey Area Data: Version 20, Aug 27, 2024

## Essex County, Massachusetts, Northern Part

### 711B—Charlton-Rock outcrop-Hollis complex, 3 to 8 percent slopes

#### Map Unit Setting

*National map unit symbol:* vj6y

*Elevation:* 0 to 260 feet

*Mean annual precipitation:* 45 to 54 inches

*Mean annual air temperature:* 43 to 54 degrees F

*Frost-free period:* 125 to 240 days

*Farmland classification:* Not prime farmland

#### Map Unit Composition

*Charlton and similar soils:* 60 percent

*Rock outcrop:* 16 percent

*Hollis and similar soils:* 15 percent

*Minor components:* 9 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Charlton

##### Setting

*Landform:* Hills, ridges

*Landform position (two-dimensional):* Backslope, footslope

*Landform position (three-dimensional):* Side slope, base slope

*Down-slope shape:* Convex

*Across-slope shape:* Convex

*Parent material:* Friable coarse-loamy eolian deposits over friable coarse-loamy basal till derived from granite and gneiss

##### Typical profile

*H1 - 0 to 4 inches:* fine sandy loam

*H2 - 4 to 28 inches:* gravelly fine sandy loam

*H3 - 28 to 60 inches:* gravelly fine sandy loam

##### Properties and qualities

*Slope:* 3 to 8 percent

*Surface area covered with cobbles, stones or boulders:* 1.6 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Well drained

*Capacity of the most limiting layer to transmit water*

*(Ksat):* Moderately high to high (0.60 to 6.00 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Available water supply, 0 to 60 inches:* Moderate (about 7.5 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified



*Land capability classification (nonirrigated):* 6s  
*Hydrologic Soil Group:* A  
*Ecological site:* F144AY034CT - Well Drained Till Uplands  
*Hydric soil rating:* No

### **Description of Rock Outcrop**

#### **Setting**

*Parent material:* Granite and gneiss

#### **Properties and qualities**

*Slope:* 3 to 8 percent  
*Depth to restrictive feature:* 0 inches to lithic bedrock

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8s  
*Hydric soil rating:* Unranked

### **Description of Hollis**

#### **Setting**

*Landform:* Ridges, hills  
*Landform position (two-dimensional):* Backslope, footslope  
*Landform position (three-dimensional):* Side slope, base slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Parent material:* Shallow, friable loamy basal till derived from  
granite and gneiss over granite and gneiss

#### **Typical profile**

*O - 0 to 1 inches:* muck  
*H2 - 1 to 6 inches:* fine sandy loam  
*H3 - 6 to 17 inches:* gravelly fine sandy loam  
*H4 - 17 to 20 inches:* unweathered bedrock

#### **Properties and qualities**

*Slope:* 3 to 8 percent  
*Depth to restrictive feature:* 10 to 60 inches to lithic bedrock  
*Drainage class:* Somewhat excessively drained  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low  
(0.00 to 0.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Available water supply, 0 to 60 inches:* Very low (about 2.1 inches)

#### **Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 3e  
*Hydrologic Soil Group:* D  
*Ecological site:* F144AY033MA - Shallow Dry Till Uplands  
*Hydric soil rating:* No

### **Minor Components**

#### **Woodbridge**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

#### **Ridgebury**

*Percent of map unit:* 4 percent

*Landform:* Depressions

*Hydric soil rating:* Yes

## **Data Source Information**

Soil Survey Area: Essex County, Massachusetts, Northern Part

Survey Area Data: Version 20, Aug 27, 2024

## Essex County, Massachusetts, Northern Part

### 256A—Deerfield loamy fine sand, 0 to 3 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2xfg8

*Elevation:* 0 to 1,100 feet

*Mean annual precipitation:* 36 to 71 inches

*Mean annual air temperature:* 39 to 55 degrees F

*Frost-free period:* 145 to 240 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Deerfield and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Deerfield

##### Setting

*Landform:* Outwash terraces, outwash deltas, outwash plains, kame terraces

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Concave, convex, linear

*Across-slope shape:* Convex, linear, concave

*Parent material:* Sandy outwash derived from granite, gneiss, and/or quartzite

##### Typical profile

*Ap - 0 to 9 inches:* loamy fine sand

*Bw - 9 to 25 inches:* loamy fine sand

*BC - 25 to 33 inches:* fine sand

*Cg - 33 to 60 inches:* sand

##### Properties and qualities

*Slope:* 0 to 3 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Moderately well drained

*Runoff class:* Negligible

*Capacity of the most limiting layer to transmit water*

*(Ksat):* Moderately high to very high (1.42 to 99.90 in/hr)

*Depth to water table:* About 15 to 37 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Maximum salinity:* Nonsaline (0.0 to 1.9 mmhos/cm)

*Sodium adsorption ratio, maximum:* 11.0

*Available water supply, 0 to 60 inches:* Moderate (about 6.5 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 2w  
*Hydrologic Soil Group:* A  
*Ecological site:* F144AY027MA - Moist Sandy Outwash  
*Hydric soil rating:* No

### Minor Components

#### Windsor

*Percent of map unit:* 7 percent  
*Landform:* Outwash terraces, kame terraces, outwash deltas,  
outwash plains  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Concave, convex, linear  
*Across-slope shape:* Convex, linear, concave  
*Hydric soil rating:* No

#### Wareham

*Percent of map unit:* 5 percent  
*Landform:* Drainageways, depressions  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

#### Sudbury

*Percent of map unit:* 2 percent  
*Landform:* Outwash plains, kame terraces, outwash deltas,  
outwash terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Concave, convex, linear  
*Across-slope shape:* Convex, linear, concave  
*Hydric soil rating:* No

#### Ninigret

*Percent of map unit:* 1 percent  
*Landform:* Kame terraces, outwash plains, outwash terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Convex, concave  
*Hydric soil rating:* No

## Data Source Information

Soil Survey Area: Essex County, Massachusetts, Northern Part  
Survey Area Data: Version 20, Aug 27, 2024

## Essex County, Massachusetts, Northern Part

### 255B—Windsor loamy sand, 3 to 8 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2svkf

*Elevation:* 0 to 1,210 feet

*Mean annual precipitation:* 36 to 71 inches

*Mean annual air temperature:* 39 to 55 degrees F

*Frost-free period:* 140 to 250 days

*Farmland classification:* Farmland of statewide importance

#### Map Unit Composition

*Windsor and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Windsor

##### Setting

*Landform:* Outwash terraces

*Landform position (three-dimensional):* Tread

*Down-slope shape:* Linear

*Across-slope shape:* Linear

*Parent material:* Loose sandy glaciofluvial deposits derived from granite and/or schist and/or gneiss

##### Typical profile

*Oe - 0 to 1 inches:* moderately decomposed plant material

*A - 1 to 3 inches:* loamy sand

*Bw - 3 to 25 inches:* loamy sand

*C - 25 to 65 inches:* sand

##### Properties and qualities

*Slope:* 3 to 8 percent

*Depth to restrictive feature:* More than 80 inches

*Drainage class:* Excessively drained

*Runoff class:* Negligible

*Capacity of the most limiting layer to transmit water*

*(Ksat):* Moderately high to very high (1.42 to 99.90 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

*Available water supply, 0 to 60 inches:* Low (about 4.5 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 2s

*Hydrologic Soil Group:* A

*Ecological site:* F145XY008MA - Dry Outwash  
*Hydric soil rating:* No

### **Minor Components**

#### **Hinckley**

*Percent of map unit:* 10 percent  
*Landform:* Eskers  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex  
*Across-slope shape:* Convex  
*Ecological site:* F145XY008MA - Dry Outwash  
*Hydric soil rating:* No

#### **Deerfield, loamy sand**

*Percent of map unit:* 5 percent  
*Landform:* Terraces  
*Landform position (three-dimensional):* Tread  
*Down-slope shape:* Linear  
*Across-slope shape:* Linear  
*Ecological site:* F144AY027MA - Moist Sandy Outwash  
*Hydric soil rating:* No

## **Data Source Information**

Soil Survey Area: Essex County, Massachusetts, Northern Part  
Survey Area Data: Version 20, Aug 27, 2024

## Essex County, Massachusetts, Northern Part

### 300B—Montauk fine sandy loam, 3 to 8 percent slopes

#### Map Unit Setting

*National map unit symbol:* 2tyrh

*Elevation:* 0 to 1,030 feet

*Mean annual precipitation:* 36 to 71 inches

*Mean annual air temperature:* 39 to 55 degrees F

*Frost-free period:* 140 to 240 days

*Farmland classification:* All areas are prime farmland

#### Map Unit Composition

*Montauk and similar soils:* 85 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

#### Description of Montauk

##### Setting

*Landform:* Recessional moraines, ground moraines, hills, drumlins

*Landform position (two-dimensional):* Summit, shoulder, backslope

*Landform position (three-dimensional):* Side slope, crest

*Down-slope shape:* Convex, linear

*Across-slope shape:* Convex

*Parent material:* Coarse-loamy over sandy lodgment till derived from gneiss, granite, and/or schist

##### Typical profile

*Ap - 0 to 4 inches:* fine sandy loam

*Bw1 - 4 to 26 inches:* fine sandy loam

*Bw2 - 26 to 34 inches:* sandy loam

*2Cd - 34 to 72 inches:* gravelly loamy sand

##### Properties and qualities

*Slope:* 3 to 8 percent

*Depth to restrictive feature:* 20 to 39 inches to densic material

*Drainage class:* Well drained

*Runoff class:* Low

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately high (0.00 to 1.42 in/hr)

*Depth to water table:* About 18 to 37 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Maximum salinity:* Nonsaline (0.0 to 1.9 mmhos/cm)

*Available water supply, 0 to 60 inches:* Low (about 5.2 inches)

##### Interpretive groups

*Land capability classification (irrigated):* None specified

*Land capability classification (nonirrigated):* 2s

*Hydrologic Soil Group:* C

*Ecological site:* F144AY007CT - Well Drained Dense Till Uplands  
*Hydric soil rating:* No

### Minor Components

#### Scituate

*Percent of map unit:* 6 percent  
*Landform:* Ground moraines, hills, drumlins  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Side slope, crest  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Canton

*Percent of map unit:* 5 percent  
*Landform:* Hills  
*Landform position (two-dimensional):* Summit, shoulder, backslope  
*Landform position (three-dimensional):* Side slope, crest  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Convex  
*Hydric soil rating:* No

#### Ridgebury

*Percent of map unit:* 4 percent  
*Landform:* Depressions, ground moraines, hills, drainageways  
*Landform position (two-dimensional):* Footslope, toeslope  
*Landform position (three-dimensional):* Head slope, base slope  
*Down-slope shape:* Concave  
*Across-slope shape:* Concave  
*Hydric soil rating:* Yes

## Data Source Information

Soil Survey Area: Essex County, Massachusetts, Northern Part  
Survey Area Data: Version 20, Aug 27, 2024



**TP-1A**  
283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024      Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland      Landform: Outwash plain and ground moraine      Position on landscape: Tread/ flat

Slope aspect: Level      Slope (%): 00 – 05%      Slope complexity: Simple      Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet      Drainage way: 50<sup>+</sup> feet      Drinking water well: 100<sup>+</sup> feet      Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet      Public water supply reservoir: 400<sup>+</sup> feet      Tributary to reservoir: 200<sup>+</sup> feet

**SOIL PROFILE ► TP-1A**

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                   |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 11"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                 |
| 11" → 20"                         | B <sub>w</sub>      | Loamy Fine<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                   |
| 20" → 72"                         | 2C                  | Loamy Fine<br>Sand        | 2.5Y 6/2<br>light brownish<br>gray     | 31"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; redoxomorphic features observed at 31"; apparent water observed at 63"; no bedrock refusal at test hole depth. |

Depth to bedrock: > 72"      Seasonal High Groundwater Table: 31"      Apparent water table: 63"

# TP-1B

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-1B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                   |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                 |
| 09" → 23"                         | B <sub>w</sub>      | Loamy Fine<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                   |
| 23" → 71"                         | 2C                  | Loamy Fine<br>Sand        | 2.5Y 6/2<br>light brownish<br>gray     | 25"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; redoxomorphic features observed at 25"; apparent water observed at 62"; no bedrock refusal at test hole depth. |

Depth to bedrock: > 71"

Seasonal High Groundwater Table: 25"

Apparent water table: 62"

# TP-1C

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-1C

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                     |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 11"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                   |
| 11" → 21"                         | B <sub>w</sub>      | Loamy Fine<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                     |
| 21" → 68"                         | 2C                  | Loamy Fine<br>Sand        | 2.5Y 6/2<br>light brownish<br>gray     | 27"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; ; redoximorphic features observed at 27"; apparent water observed at 60"; no bedrock refusal at test hole depth. |

Depth to bedrock: > 68"

Seasonal High Groundwater Table: 27"

Apparent water table: 60"

# TP-2A

283 Elm Street, Amesbury, Massachusetts

Date: October 12, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-2A

| Depth below<br>land surface<br>(inches) | Soil<br>Horizon/<br>Layer | Soil Texture<br>(USDA/ NRCS) | Soil Color<br>(Munsell) | Redoxomorphic<br>Features/<br>ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state,<br>roots, horizon boundary, clasts, stratification, artifacts, restrictive<br>features, etc. |
|-----------------------------------------|---------------------------|------------------------------|-------------------------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                         |                           |                              |                         |                                      | BEDROCK REFUSAL AT 17"                                                                                                                                             |
|                                         |                           |                              |                         |                                      |                                                                                                                                                                    |
|                                         |                           |                              |                         |                                      |                                                                                                                                                                    |

Depth to bedrock: 17" Seasonal High Groundwater Table: \_\_\_\_ Apparent water table: \_\_\_\_

# TP-2B

283 Elm Street, Amesbury, Massachusetts

Date: October 12, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-2B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                 |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 11"                         | A                   | Sandy Loam fine           | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                               |
| 11" → 21"                         | B <sub>w</sub>      | Loamy Fine Sand           | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                 |
| 21" → 68"                         | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | 38"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; ; redoximorphic features observed at 38"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 68" Seasonal High Groundwater Table: 38" Apparent water table: \_\_\_\_

# TP-2C

283 Elm Street, Amesbury, Massachusetts

Date: October 12, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-2C

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                 |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 11"                         | A                   | Sandy Loam fine           | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                               |
| 11" → 22"                         | B <sub>w</sub>      | Loamy Fine Sand           | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                 |
| 22" → 58"                         | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | 36"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; ; redoximorphic features observed at 36"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 58" Seasonal High Groundwater Table: 36" Apparent water table: \_\_\_\_

# TP-3A

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-3A

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                               |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 12"                         | A                   | Sandy Loam fine           | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                             |
| 12" → 20"                         | B <sub>w</sub>      | Loamy Fine Sand           | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                               |
| 20" → 75"                         | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | 60"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; redoxomorphic features observed at 60"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 75" Seasonal High Groundwater Table: 60" Apparent water table: \_\_\_

# TP-3B

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-3B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                               |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                             |
| 10" → 19"                         | B <sub>w</sub>      | Loamy Fine<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                               |
| 19" → 80"                         | 2C                  | Loamy Fine<br>Sand        | 2.5Y 6/2<br>light brownish<br>gray     | 58"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; redoximorphic features observed at 58"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 80" Seasonal High Groundwater Table: 58" Apparent water table: \_\_\_



# TP-3C

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-3C

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                               |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                             |
| 09" → 20"                         | B <sub>w</sub>      | Loamy Fine<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                               |
| 20" → 70"                         | 2C                  | Loamy Fine<br>Sand        | 2.5Y 6/2<br>light brownish<br>gray     | 51"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; redoxomorphic features observed at 51"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 70" Seasonal High Groundwater Table: 51" Apparent water table: \_\_\_

# TP-4A

283 Elm Street, Amesbury, Massachusetts

Date: October 12, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-4A

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)             | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                               |
|-----------------------------------|---------------------|---------------------------|----------------------------------|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam fine           | 10YR 3/2 very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                             |
| 10" → 26"                         | B <sub>w</sub>      | Sandy Loam Sand           | 10YR 5/4 yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                               |
| 26" → 70"                         | 2C                  | Sandy Loam                | 2.5Y 5/3 light olive brown       | 28"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; redoxomorphic features observed at 28"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 70" Seasonal High Groundwater Table: 28" Apparent water table: \_\_\_

# TP-4B

283 Elm Street, Amesbury, Massachusetts

Date: October 12, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-4B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 12"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 12" → 27"                         | B <sub>w</sub>      | Sandy Loam<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 27" → 67"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | 30"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 30"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: >67" Seasonal High Groundwater Table: 30" Apparent water table: \_\_\_

# TP-4C

283 Elm Street, Amesbury, Massachusetts

Date: October 12, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-4C

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 10" → 24"                         | B <sub>w</sub>      | Sandy Loam<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 24" → 65"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | 28"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 28"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: >65" Seasonal High Groundwater Table: 28" Apparent water table: \_\_\_

# TP-4D

283 Elm Street, Amesbury, Massachusetts

Date: October 12, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-4D

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 08"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 08" → 24"                         | B <sub>w</sub>      | Sandy Loam<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 24" → 69"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | 30"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 30"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: >69" Seasonal High Groundwater Table: 30" Apparent water table: \_\_\_

# TP-4D

283 Elm Street, Amesbury, Massachusetts

Date: October 12, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-4D

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 08"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 08" → 24"                         | B <sub>w</sub>      | Sandy Loam<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 24" → 69"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | 30"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 30"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: >69" Seasonal High Groundwater Table: 30" Apparent water table: \_\_\_

# TP-5A

## 283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024      Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland      Landform: Outwash plain and ground moraine      Position on landscape: Tread/ flat

Slope aspect: Level      Slope (%): 00 – 05%      Slope complexity: Simple      Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet      Drainage way: 50<sup>+</sup> feet      Drinking water well: 100<sup>+</sup> feet      Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet      Public water supply reservoir: 400<sup>+</sup> feet      Tributary to reservoir: 200<sup>+</sup> feet

### SOIL PROFILE ► TP-5A

| Depth below land surface (inches)  | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|------------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 08"                          | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 08" → 19"                          | B <sub>w</sub>      | Sandy Loam<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 19" → 23"<br><br>BEDROCK<br>AT 23" | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 23"      Seasonal High Groundwater Table:           Apparent water table:

# TP-5D

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-5D

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 06"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 06" → 16"                         | B <sub>w</sub>      | Sandy Loam<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 16" → 24"<br>BEDROCK<br>AT 24"    | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 24" Seasonal High Groundwater Table:      Apparent water table:



# TP-6A

## 283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024      Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland      Landform: Outwash plain and ground moraine      Position on landscape: Tread/ flat

Slope aspect: Level      Slope (%): 00 – 05%      Slope complexity: Simple      Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet      Drainage way: 50<sup>+</sup> feet      Drinking water well: 100<sup>+</sup> feet      Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet      Public water supply reservoir: 400<sup>+</sup> feet      Tributary to reservoir: 200<sup>+</sup> feet

### SOIL PROFILE ► TP-6A

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 06"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 06" → 09"                         | B <sub>w</sub>      | Sandy Loam<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 09" → 36"<br>BEDROCK<br>AT 36"    | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 36"      Seasonal High Groundwater Table:           Apparent water table:

# TP-6B

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-6B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 06"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 06" → 11"                         | B <sub>w</sub>      | Sandy Loam<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 11" → 24"<br>BEDROCK<br>AT 24"    | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 24" Seasonal High Groundwater Table:      Apparent water table:

# TP-7A

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-7A

| Depth below land surface (inches)  | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                     |
|------------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                          | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                   |
| 06" → 13"<br><br>BEDROCK<br>AT 13" | B <sub>w</sub>      | Sandy Loam<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts; no redoxomorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 13" Seasonal High Groundwater Table:      Apparent water table:

# TP-7B

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-7B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 07"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 07" → 18"                         | B <sub>w</sub>      | Sandy Loam<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 18" → 31"<br>BEDROCK<br>AT 31"    | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 31" Seasonal High Groundwater Table:      Apparent water table:

# TP-7C

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-7C

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 10" → 16"                         | B <sub>w</sub>      | Sandy Loam<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 16" → 30"<br>BEDROCK<br>AT 31"    | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 31" Seasonal High Groundwater Table:      Apparent water table:

# TP-8A

283 Elm Street, Amesbury, Massachusetts

Date: October 12, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-8A

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                     |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 06"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                   |
| 06" → 15"                         | B <sub>w</sub>      | Sandy Loam<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |
|                                   |                     |                           |                                        |                                | BEDROCK AT 15"                                                                                                                                                                                                                                   |

Depth to bedrock: 15" Seasonal High Groundwater Table: \_\_\_\_ Apparent water table: \_\_\_\_

# TP-8B

283 Elm Street, Amesbury, Massachusetts

Date: October 12, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-8B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                     |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 06"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                   |
| 06" → 12"                         | B <sub>w</sub>      | Sandy Loam<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |
|                                   |                     |                           |                                        |                                | BEDROCK AT 12"                                                                                                                                                                                                                                   |

Depth to bedrock: 12" Seasonal High Groundwater Table: \_\_\_\_ Apparent water table: \_\_\_\_

# TP-8C

283 Elm Street, Amesbury, Massachusetts

Date: October 12, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-8C

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 09" → 14"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 14" → 23"<br>BEDROCK AT 23"       | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 23" Seasonal High Groundwater Table:      Apparent water table:



# TP-9A

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-9A

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 09" → 17"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 17" → 67"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | 36"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 36"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: >67"

Seasonal High Groundwater Table: 36"

Apparent water table: \_\_\_

# TP-9B

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-9B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 08"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 08" → 15"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 15" → 65"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | 35"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 35"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: >65" Seasonal High Groundwater Table: 35" Apparent water table: \_\_\_

# TP-9C

## 283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024      Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland      Landform: Outwash plain and ground moraine      Position on landscape: Tread/ flat

Slope aspect: Level      Slope (%): 00 – 05%      Slope complexity: Simple      Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet      Drainage way: 50<sup>+</sup> feet      Drinking water well: 100<sup>+</sup> feet      Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet      Public water supply reservoir: 400<sup>+</sup> feet      Tributary to reservoir: 200<sup>+</sup> feet

### SOIL PROFILE ► TP-9C

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 09" → 16"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 16" → 69"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 38"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 38"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: >69"      Seasonal High Groundwater Table: 38"      Apparent water table:

# TP-9D

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-9D

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 09" → 17"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 17" → 63"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | 33"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 33"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: >63"

Seasonal High Groundwater Table: 33"

Apparent water table: \_\_\_

# TP-10A

## 283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024      Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland      Landform: Outwash plain and ground moraine      Position on landscape: Tread/ flat

Slope aspect: Level      Slope (%): 00 – 05%      Slope complexity: Simple      Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet      Drainage way: 50<sup>+</sup> feet      Drinking water well: 100<sup>+</sup> feet      Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet      Public water supply reservoir: 400<sup>+</sup> feet      Tributary to reservoir: 200<sup>+</sup> feet

### SOIL PROFILE ► TP-10A

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 06"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 06" → 14"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 14" → 23"<br>BEDROCK AT 23"       | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 23"      Seasonal High Groundwater Table:           Apparent water table:

# TP-10B

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-10B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 08"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 08" → 18"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 18" → 31"<br>BEDROCK AT 31"       | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 31" Seasonal High Groundwater Table:      Apparent water table:

# TP-10C

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-10C

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 07"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 07" → 16"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 16" → 35"<br>BEDROCK AT 35"       | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 35" Seasonal High Groundwater Table:      Apparent water table:

# TP-10D

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-10D

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 05"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 05" → 13"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 13" → 22"<br>BEDROCK<br>AT 22"    | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 22" Seasonal High Groundwater Table:      Apparent water table:



# TP-11A

## 283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024      Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland      Landform: Outwash plain and ground moraine      Position on landscape: Tread/ flat

Slope aspect: Level      Slope (%): 00 – 05%      Slope complexity: Simple      Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet      Drainage way: 50<sup>+</sup> feet      Drinking water well: 100<sup>+</sup> feet      Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet      Public water supply reservoir: 400<sup>+</sup> feet      Tributary to reservoir: 200<sup>+</sup> feet

### SOIL PROFILE ► TP-11A

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 09" → 18"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 18" → 72"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 30"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 30"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 72"      Seasonal High Groundwater Table: 30"      Apparent water table:

# TP-11B

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-11B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 11"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 11" → 19"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 19" → 74"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | 30"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 30"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 74" Seasonal High Groundwater Table: 30" Apparent water table: \_\_\_

# TP-11C

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-11C

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 10" → 20"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 20" → 72"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 29"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 29"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 72" Seasonal High Groundwater Table: 29" Apparent water table: \_\_\_

# TP-11D

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-11D

| Depth below land surface (inches)  | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                |
|------------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 08"                          | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                              |
| 08" → 12"                          | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                |
| 12" → 34"<br><br>BEDROCK<br>AT 34" | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: 34" Seasonal High Groundwater Table:     Apparent water table:

# TP-12A

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-12A

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 09" → 18"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 18" → 27"<br>BEDROCK<br>AT 27"    | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 27" Seasonal High Groundwater Table:      Apparent water table:

# TP-12B

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-12B

| Depth below land surface (inches)  | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|------------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 05"                          | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 09" → 14"                          | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 18" → 20"<br><br>BEDROCK<br>AT 20" | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 20" Seasonal High Groundwater Table:     Apparent water table:

# TP-12D

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-12D

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 07"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 07" → 18"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 18" → 38"<br>BEDROCK<br>AT 38"    | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 38" Seasonal High Groundwater Table:     Apparent water table:

# TP-13A

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-13A

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                 |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 08"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                               |
| 08" → 18"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                 |
| 18" → 69"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | 35"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 35"; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: > 69"

Seasonal High Groundwater Table: 35"

Apparent water table: \_\_\_



# TP-13B

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-13B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                 |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 06"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                               |
| 06" → 14"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                 |
| 14" → 67"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive<br>brown       | 37"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 37"; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: > 67"

Seasonal High Groundwater Table: 37"

Apparent water table: \_\_\_

# TP-13C

283 Elm Street, Amesbury, Massachusetts

Date: October 11, 2024 Weather: Clear, 45°-50° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-13C

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                 |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 06"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                               |
| 06" → 18"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                 |
| 18" → 69"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 35"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 35"; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: > 69"

Seasonal High Groundwater Table: 35"

Apparent water table:

# TP-L1

283 Elm Street, Amesbury, Massachusetts

Date: January 13, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L1

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 09" → 21"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 21" → 35"<br>Bedrock at 35"       | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 35" Seasonal High Groundwater Table: \_\_\_\_ Apparent water table: \_\_\_\_

# TP-L2

283 Elm Street, Amesbury, Massachusetts

Date: January 13, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L2

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 11"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 11" → 16"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 16" → 40"<br><br>Bedrock at 35"   | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 15-25% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 40" Seasonal High Groundwater Table:      Apparent water table:

# TP-L3

283 Elm Street, Amesbury, Massachusetts

Date: January 13, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L3

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 11"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 11" → 18"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 18" → 24"<br>Bedrock at 24"       | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 15-25% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 40" Seasonal High Groundwater Table: \_\_\_\_ Apparent water table: \_\_\_\_

# TP-L4

283 Elm Street, Amesbury, Massachusetts

Date: January 13, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L4

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 09" → 18"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 18" → 24"<br>Bedrock at 24"       | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 24" Seasonal High Groundwater Table: \_\_\_\_ Apparent water table: \_\_\_\_

# TP-L5

283 Elm Street, Amesbury, Massachusetts

Date: January 13, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L5

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 09" → 18"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 18" → 24"<br>Bedrock at 32"       | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 32" Seasonal High Groundwater Table: \_\_\_\_ Apparent water table: \_\_\_\_

# TP-L6

283 Elm Street, Amesbury, Massachusetts

Date: January 13, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L6

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 08"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 08" → 18"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 18" → 59"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 39"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 39"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 59"

Seasonal High Groundwater Table: 39"

Apparent water table:



# TP-L7

283 Elm Street, Amesbury, Massachusetts

Date: January 13, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L7

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 07"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 07" → 17"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 17" → 59"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 28"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 28"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 59" Seasonal High Groundwater Table: 28" Apparent water table: \_\_\_

# TP-L8

283 Elm Street, Amesbury, Massachusetts

Date: January 13, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L8

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 05"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 05" → 15"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 15" → 59"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 24"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 24"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 59"

Seasonal High Groundwater Table: 24"

Apparent water table:

# TP-L9

283 Elm Street, Amesbury, Massachusetts

Date: January 13, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L9

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 10" → 18"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 18" → 40"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 28"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 28"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 40"

Seasonal High Groundwater Table: 28"

Apparent water table:

# TP-L10

283 Elm Street, Amesbury, Massachusetts

Date: January 13, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L10

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                     |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                   |
| 10" → 16"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                     |
| 18" → 33"<br><br>Bedrock at 33"   | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 28"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 28"; no apparent water observed; bedrock refusal at 33". |

Depth to bedrock: 33" Seasonal High Groundwater Table: 28" Apparent water table:

# TP-L11

283 Elm Street, Amesbury, Massachusetts

Date: January 13, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L11

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 10" → 20"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 20" → 57"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 31"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 31"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 57" Seasonal High Groundwater Table: 31" Apparent water table: \_\_\_

# TP-L12

283 Elm Street, Amesbury, Massachusetts

Date: January 14, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L12

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 09" → 19"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 19" → 63"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 36"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 36"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 63"

Seasonal High Groundwater Table: 36"

Apparent water table:

# TP-L13

283 Elm Street, Amesbury, Massachusetts

Date: January 14, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L13

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 11"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 11" → 24"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 24" → 60"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 38"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 38"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 60"

Seasonal High Groundwater Table: 38"

Apparent water table:

# TP-L14

283 Elm Street, Amesbury, Massachusetts

Date: January 14, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L14

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 09" → 18"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 18" → 51"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 40"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 40"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 51"

Seasonal High Groundwater Table: 40"

Apparent water table:



# TP-L15

283 Elm Street, Amesbury, Massachusetts

Date: January 14, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L15

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 10" → 19"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 19" → 61"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 35"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 35"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 61"

Seasonal High Groundwater Table: 35"

Apparent water table:

# TP-L16

283 Elm Street, Amesbury, Massachusetts

Date: January 14, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L16

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                 |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                               |
| 10" → 20"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                 |
| 19" → 43"<br><br>Bedrock at 43"   | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 32"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 32"; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 43" Seasonal High Groundwater Table: 32" Apparent water table:

# TP-L17

283 Elm Street, Amesbury, Massachusetts

Date: January 14, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L17

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 05"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 05" → 15"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 15" → 60"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 42"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 42"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 60"

Seasonal High Groundwater Table: 42"

Apparent water table:

# TP-L18

283 Elm Street, Amesbury, Massachusetts

Date: January 14, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L18

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 05"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 05" → 13"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 13" → 22"<br><br>Bedrock at 22"   | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 22" Seasonal High Groundwater Table: \_\_\_\_ Apparent water table: \_\_\_\_

# TP-L19

283 Elm Street, Amesbury, Massachusetts

Date: January 14, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L19

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                 |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                               |
| 10" → 19"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                 |
| 19" → 43"<br><br>Bedrock at 43"   | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 36"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 36"; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 43" Seasonal High Groundwater Table: 36" Apparent water table:

# TP-L20

283 Elm Street, Amesbury, Massachusetts

Date: January 14, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L20

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 09" → 16"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 16" → 60"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 32"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 32"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 60"

Seasonal High Groundwater Table: 32"

Apparent water table:

# TP-L21

283 Elm Street, Amesbury, Massachusetts

Date: January 14, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L21

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 08"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                           |
| 08" → 16"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                             |
| 16" → 22"<br><br>Bedrock at 22"   | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | none observed                  | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; no redoximorphic features observed; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 22" Seasonal High Groundwater Table:      Apparent water table:

# TP-L22

283 Elm Street, Amesbury, Massachusetts

Date: January 14, 2025 Weather: Clear, 25°-38° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 05% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L22

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                                                  |
| 10" → 21"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                                                                                                                                                                                                                                    |
| 21" → 53"                         | 2C                  | Sandy Loam                | 2.5Y 5/3<br>light olive brown       | 36"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 10-15% sub-angular to sub-rounded gravel and 05-10% sub-rounded to angular cobble content of mixed lithology; redoximorphic features observed at 36"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 53"

Seasonal High Groundwater Table: 36"

Apparent water table:



# TP-14B

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet  
Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-14B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                        |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 15"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                   |
| 15" → 28"                         | B <sub>C</sub>      | Loamy Fine Sand           | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                            |
| 28" → 68"                         | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | 48"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; unstable; single grained/ structureless; non-cohesive; mixed medium-to-coarse grained mineral content; stratified; dry matrix; non-sticky; non-plastic; approximately 02% rounded to subrounded gravel and cobble content of mixed lithology; seasonal high-water table observed at 48"; no apparent water observed; no bedrock encountered. |

Depth to bedrock: > 68" Seasonal High Groundwater Table: 48" Apparent water table: > 68"

# TP-14C

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet  
 Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-14C

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                        |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 16"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                   |
| 16" → 27"                         | B <sub>C</sub>      | Loamy Fine Sand           | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                            |
| 27" → 64"                         | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | 50"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; unstable; single grained/ structureless; non-cohesive; mixed medium-to-coarse grained mineral content; stratified; dry matrix; non-sticky; non-plastic; approximately 02% rounded to subrounded gravel and cobble content of mixed lithology; seasonal high-water table observed at 50": no apparent water observed; no bedrock encountered. |

Depth to bedrock: > 64" Seasonal High Groundwater Table: 50" Apparent water table: > 64"

# TP-15

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet  
 Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► TP-15

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                        |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                   |
| 10" → 27"                         | B <sub>C</sub>      | Loamy Fine<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                            |
| 27" → 69"                         | 2C                  | Loamy Fine<br>Sand        | 2.5Y 6/2<br>light brownish<br>gray     | 33"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; unstable; single grained/ structureless; non-cohesive; mixed medium-to-coarse grained mineral content; stratified; dry matrix; non-sticky; non-plastic; approximately 02% rounded to subrounded gravel and cobble content of mixed lithology; seasonal high-water table observed at 33": no apparent water observed; no bedrock encountered. |

Depth to bedrock: > 69" Seasonal High Groundwater Table: 33" Apparent water table: > 69"



# TP-16A

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet  
 Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-16A

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 05"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                               |
| 05" → 20"                         | B <sub>C</sub>      | Loamy Fine Sand           | 10YR 5/4<br>yellowish brown         | none observed                  | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                        |
| 20" → 78"                         | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | none observed                  | Loose; unstable; single grained/ structureless; non-cohesive; mixed medium-to-coarse grained mineral content; stratified; dry matrix; non-sticky; non-plastic; approximately 02% rounded to subrounded gravel and cobble content of mixed lithology; no seasonal high-water table observed: no apparent water observed; no bedrock encountered. |

Depth to bedrock: > 78" Seasonal High Groundwater Table: > 78" Apparent water table: > 78"

# TP-16B

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet  
Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-16B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 07"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                               |
| 07" → 22"                         | B <sub>C</sub>      | Loamy Fine Sand           | 10YR 5/4<br>yellowish brown         | none observed                  | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                        |
| 22" → 60"                         | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | none observed                  | Loose; unstable; single grained/ structureless; non-cohesive; mixed medium-to-coarse grained mineral content; stratified; dry matrix; non-sticky; non-plastic; approximately 02% rounded to subrounded gravel and cobble content of mixed lithology; no seasonal high-water table observed: no apparent water observed; no bedrock encountered. |

Depth to bedrock: > 60" Seasonal High Groundwater Table: > 60" Apparent water table: > 60"



# TP-17

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet  
 Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► TP-17

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                 |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                            |
| 09" → 20"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                     |
| 20" → 61"                         | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | 34"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; ; redoximorphic features observed at 36"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 61" Seasonal High Groundwater Table: 34" Apparent water table: > 61"

# TP-18A

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet  
 Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► TP-18A

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 04"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                                                                                               |
| 04" → 13"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                                                                                        |
| 13" → 42"<br><br>R @ 42"          | 2C                  | Sandy Loam                | 2.5Y 6/2<br>light brownish gray     | 35"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; tight in-situ; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 05% sub-angular to sub-rounded gravel content of mixed lithology; redoximorphic features observed at 35"; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 42" Seasonal High Groundwater Table: 35" Apparent water table: > 42"



# TP-18B

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet  
 Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-18B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 07"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                                                                                               |
| 07" → 28"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                                                                                        |
| 28" → 38"<br><br>R @ 38"          | 2C                  | Sandy Loam                | 2.5Y 6/2<br>light brownish gray     | 38"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; tight in-situ; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 05% sub-angular to sub-rounded gravel content of mixed lithology; redoximorphic features observed at 38"; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 38" Seasonal High Groundwater Table: 38" Apparent water table: > 38"



# TP-18C

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025      Weather: Clear, 75°-80° F, still and dry.  
Landscape: Upland      Landform: Outwash plain and ground moraine      Position on landscape: Tread/ flat  
Slope aspect: Level      Slope (%): 00 – 02%      Slope complexity: Simple      Land Cover: Forest and meadow grass  
Property line: 10<sup>+</sup> feet      Drainage way: 50<sup>+</sup> feet      Drinking water well: 100<sup>+</sup> feet      Abutting septic system: 50<sup>+</sup> feet  
Wetlands: 50<sup>+</sup> feet      Public water supply reservoir: 400<sup>+</sup> feet      Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-18C

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 05"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                                                                                               |
| 05" → 22"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                                                                                        |
| 22" → 35"<br><br>R @ 35"          | 2C                  | Sandy Loam                | 2.5Y 6/2<br>light brownish gray     | 33"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; tight in-situ; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 05% sub-angular to sub-rounded gravel content of mixed lithology; redoximorphic features observed at 33"; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: 35"      Seasonal High Groundwater Table: 33"      Apparent water table: > 35"

# TP-19A

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet  
 Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-19A

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                       |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 06"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                                                                                                  |
| 05" → 22"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                                                                                           |
| 22" → 47"                         | 2C                  | Sandy Loam                | 2.5Y 6/2<br>light brownish<br>gray     | 39"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; tight in-situ; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 05% sub-angular to sub-rounded gravel content of mixed lithology; redoximorphic features observed at 39"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: >47" Seasonal High Groundwater Table: 39" Apparent water table: > 47"

# TP-19A

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet  
 Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-19A

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                       |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 06"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                                                                                                  |
| 06" → 22"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                                                                                           |
| 22" → 47"                         | 2C                  | Sandy Loam                | 2.5Y 6/2<br>light brownish gray     | 39"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; tight in-situ; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 05% sub-angular to sub-rounded gravel content of mixed lithology; redoximorphic features observed at 39"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: >47" Seasonal High Groundwater Table: 39" Apparent water table: > 47"



# TP-19B

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet  
 Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-19B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                    |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 06"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                                                                                               |
| 06" → 21"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                                                                                        |
| 21" → 47"                         | 2C                  | Sandy Loam                | 2.5Y 6/2<br>light brownish gray     | 37"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; tight in-situ; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 05% sub-angular to sub-rounded gravel content of mixed lithology; redoximorphic features observed at 37"; no apparent water observed; bedrock refusal at test hole depth. |

Depth to bedrock: >47" Seasonal High Groundwater Table: 37" Apparent water table: ≥ 47"

# TP-20A

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet  
 Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► TP-20A

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                       |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 04"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                                                                                                  |
| 04" → 18"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                                                                                           |
| 18" → 49"                         | 2C                  | Sandy Loam                | 2.5Y 6/2<br>light brownish gray     | 39"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; tight in-situ; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 05% sub-angular to sub-rounded gravel content of mixed lithology; redoximorphic features observed at 39"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: >49" Seasonal High Groundwater Table: 39" Apparent water table: >49"



# TP-20B

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet  
 Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-20B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                       |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 06"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                                                                                                  |
| 06" → 25"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                                                                                           |
| 25" → 48"                         | 2C                  | Sandy Loam                | 2.5Y 6/2<br>light brownish gray     | 40"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; tight in-situ; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 15% sub-angular to sub-rounded gravel content of mixed lithology; redoximorphic features observed at 40"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: >48" Seasonal High Groundwater Table: 40" Apparent water table: >48"

# TP-20C

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet  
 Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► TP-20C

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                       |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 06"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                                                                                                  |
| 06" → 19"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                                                                                           |
| 19" → 40"                         | 2C                  | Sandy Loam                | 2.5Y 6/2<br>light brownish gray     | 31"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; tight in-situ; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 15% sub-angular to sub-rounded gravel content of mixed lithology; redoximorphic features observed at 31"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 40" Seasonal High Groundwater Table: 31" Apparent water table: > 40"

# TP-21A

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet  
 Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-21A

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                       |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 08"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                                                                                                  |
| 08" → 17"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish<br>brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                                                                                           |
| 17" → 41"                         | 2C                  | Sandy Loam                | 2.5Y 6/2<br>light brownish<br>gray     | 23"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; tight in-situ; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 15% sub-angular to sub-rounded gravel content of mixed lithology; redoximorphic features observed at 23"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: >41" Seasonal High Groundwater Table: 23" Apparent water table: >41"



# TP-21B

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025      Weather: Clear, 75°-80° F, still and dry.  
Landscape: Upland      Landform: Outwash plain and ground moraine      Position on landscape: Tread/ flat  
Slope aspect: Level      Slope (%): 00 – 02%      Slope complexity: Simple      Land Cover: Forest and meadow grass  
Property line: 10+ feet      Drainage way: 50+ feet      Drinking water well: 100+ feet      Abutting septic system: 50+ feet  
Wetlands: 50+ feet      Public water supply reservoir: 400+ feet      Tributary to reservoir: 200+ feet

## SOIL PROFILE ► TP-21B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                       |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 06"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                                                                                                  |
| 06" → 20"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                                                                                           |
| 20" → 43"                         | 2C                  | Sandy Loam                | 2.5Y 6/2<br>light brownish gray     | 30"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; tight in-situ; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 15% sub-angular to sub-rounded gravel content of mixed lithology; redoximorphic features observed at 30"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 43"      Seasonal High Groundwater Table: 30"      Apparent water table: > 43"

# TP-21C

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet  
 Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► TP-21C

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                       |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 05"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                                                                                                  |
| 05" → 21"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                                                                                           |
| 21" → 40"                         | 2C                  | Sandy Loam                | 2.5Y 6/2<br>light brownish gray     | 29"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; tight in-situ; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 15% sub-angular to sub-rounded gravel content of mixed lithology; redoximorphic features observed at 29"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 40" Seasonal High Groundwater Table: 29" Apparent water table: > 40"

# TP-22A

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet  
 Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-22A

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                       |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 08"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                                                                                                  |
| 08" → 21"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                                                                                           |
| 21" → 39"                         | 2C                  | Sandy Loam                | 2.5Y 6/2<br>light brownish gray     | 29"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; tight in-situ; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 15% sub-angular to sub-rounded gravel content of mixed lithology; redoximorphic features observed at 29"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 39" Seasonal High Groundwater Table: 29" Apparent water table: > 39"

# TP-22B

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet  
 Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► TP-22B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                       |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 07"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                                                                                                  |
| 07" → 20"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                                                                                           |
| 21" → 45"                         | 2C                  | Sandy Loam                | 2.5Y 6/2<br>light brownish gray     | 30"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; tight in-situ; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 15% sub-angular to sub-rounded gravel content of mixed lithology; redoximorphic features observed at 30"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 45" Seasonal High Groundwater Table: 30" Apparent water table: > 45"



# TP-22C

283 Elm Street, Amesbury, Massachusetts

Date: July 28, 2025 Weather: Clear, 75°-80° F, still and dry.  
Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet  
Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► TP-22C

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                                                                                                       |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 05"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                                                                                                  |
| 05" → 16"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                                                                                           |
| 16" → 40"                         | 2C                  | Sandy Loam                | 2.5Y 6/2<br>light brownish gray     | 33"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Friable to firm; moderately compact matrix; tight in-situ; massive to subangular platy structure of moderate grade; mixed fine-to-medium grained mineral content; crudely stratified; dry matrix; non-sticky; non-plastic; well graded; approximately 15% sub-angular to sub-rounded gravel content of mixed lithology; redoximorphic features observed at 33"; no apparent water observed; no bedrock refusal at test hole depth. |

Depth to bedrock: > 40" Seasonal High Groundwater Table: 33" Apparent water table: > 40"

# P24-1 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-1

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                              |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00'' → 08''                       | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                            |
| 08'' → 17''                       | B <sub>w</sub>      | Loamy Fine<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                              |
| 17'' → 36''                       | 2C                  | Loamy Fine<br>Sand        | 2.5Y 6/2<br>light brownish<br>gray     | none observed                  | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; no observed apparent water or seasonal high- water table. |

# P24-2 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-2

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                              |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 07"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                            |
| 07" → 15"                         | B <sub>w</sub>      | Loamy Fine<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                              |
| 15" → 36"                         | 2C                  | Loamy Fine<br>Sand        | 2.5Y 6/2<br>light brownish<br>gray     | none observed                  | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; no observed apparent water or seasonal high- water table. |

# P24-3 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet

Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► P24-3

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                              |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 07"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                            |
| 07" → 15"                         | B <sub>w</sub>      | Loamy Fine<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                              |
| 15" → 36"                         | 2C                  | Loamy Fine<br>Sand        | 2.5Y 6/2<br>light brownish<br>gray     | none observed                  | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; no observed apparent water or seasonal high- water table. |



# P24-4 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet

Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► P24-4

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                              |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 07"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                            |
| 07" → 14"                         | B <sub>w</sub>      | Loamy Fine<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                              |
| 14" → 33"                         | 2C                  | Loamy Fine<br>Sand        | 2.5Y 6/2<br>light brownish<br>gray     | none observed                  | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; no observed apparent water or seasonal high- water table. |

# P24-5 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet

Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► P24-5

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                              |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 05"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                            |
| 05" → 16"                         | B <sub>w</sub>      | Loamy Fine Sand           | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                              |
| 16" → 36"                         | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | none observed                  | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; no observed apparent water or seasonal high- water table. |

# P24-6 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-6

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                              |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 08"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                            |
| 08" → 14"                         | B <sub>w</sub>      | Loamy Fine<br>Sand        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                              |
| 14" → 36"                         | 2C                  | Loamy Fine<br>Sand        | 2.5Y 6/2<br>light brownish<br>gray     | none observed                  | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; no observed apparent water or seasonal high- water table. |

# P24-7 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-7

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                              |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00'' → 07''                       | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                            |
| 07'' → 15''                       | B <sub>w</sub>      | Loamy Fine Sand           | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                              |
| 15'' → 36''                       | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | none observed                  | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; no observed apparent water or seasonal high- water table. |



# P24-8 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-8

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                              |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                            |
| 10" → 21"                         | B <sub>w</sub>      | Loamy Fine Sand           | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                              |
| 21" → 36"                         | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | none observed                  | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; no observed apparent water or seasonal high- water table. |

# P24-9 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-9

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                              |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00'' → 08''                       | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                            |
| 08'' → 20''                       | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                              |
| 20'' → 36''                       | 2C                  | Loamy Fine<br>Sand        | 2.5Y 6/2<br>light brownish<br>gray     | none observed                  | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; no observed apparent water or seasonal high- water table. |

# P24-10 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.  
 Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat  
 Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass  
 Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet  
 Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► P24-10

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                              |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 14"                         | A <sub>p</sub>      | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                            |
| 14" → 24"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                              |
| 24" → 36"                         | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | none observed                  | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; no observed apparent water or seasonal high- water table. |

# P24-11 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-11

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                              |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A <sub>p</sub>      | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                            |
| 10" → 20"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                              |
| 20" → 36"                         | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | none observed                  | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; no observed apparent water or seasonal high- water table. |



# P24-12 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-12

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                              |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00'' → 11''                       | A <sub>p</sub>      | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                            |
| 11'' → 18''                       | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                              |
| 18'' → 36''                       | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | none observed                  | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; no observed apparent water or seasonal high- water table. |

# P24-13 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-13

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                              |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 15"                         | A <sub>p</sub>      | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                            |
| 15" → 19"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                              |
| 19" → 35"                         | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | none observed                  | Loose; single grained/structureless; non-cohesive; mixed medium to mostly fine-grained clean sand content; dry matrix; non-sticky; non-plastic; free of clasts; no observed apparent water or seasonal high- water table. |

# P24-14 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-14

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                   |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 11"                         | A <sub>p</sub>      | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                 |
| 15" → 19"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                   |
| 19" → 35"                         | 2C                  | Sandy Loam<br>fine        | 2.5Y 5/4<br>light olive brown       | none observed                  | Loose; structureless; non-cohesive; mixed medium to fine-grained mineral content; tight in-situ; dry matrix; non-sticky; non-plastic; gritty matrix; no observed apparent water or seasonal high- water table. |

# P24-15 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-15

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                   |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 08"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                 |
| 08" → 14"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                   |
| 14" → 36"                         | 2C                  | Sandy Loam<br>fine        | 2.5Y 5/4<br>light olive brown       | none observed                  | Loose; structureless; non-cohesive; mixed medium to fine-grained mineral content; tight in-situ; dry matrix; non-sticky; non-plastic; gritty matrix; no observed apparent water or seasonal high- water table. |



# P24-16 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet

Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► P24-16

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                   |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                 |
| 09" → 13"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                   |
| 13" → 36"                         | 2C                  | Sandy Loam<br>fine        | 2.5Y 5/4<br>light olive brown       | none observed                  | Loose; structureless; non-cohesive; mixed medium to fine-grained mineral content; tight in-situ; dry matrix; non-sticky; non-plastic; gritty matrix; no observed apparent water or seasonal high- water table. |

# P24-17 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet

Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► P24-17

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                   |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 07"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                 |
| 07" → 16"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                   |
| 16" → 36"                         | 2C                  | Sandy Loam<br>fine        | 2.5Y 5/4<br>light olive<br>brown       | none observed                  | Loose; structureless; non-cohesive; mixed medium to fine-grained mineral content; tight in-situ; dry matrix; non-sticky; non-plastic; gritty matrix; no observed apparent water or seasonal high- water table. |

# P24-18 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024

Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland

Landform: Outwash plain and ground moraine

Position on landscape: Tread/ flat

Slope aspect: Level

Slope (%): 00 – 02%

Slope complexity: Simple

Land Cover: Forest and meadow grass

Property line: 10+ feet

Drainage way: 50+ feet

Drinking water well: 100+ feet

Abutting septic system: 50+ feet

Wetlands: 50+ feet

Public water supply reservoir: 400+ feet

Tributary to reservoir: 200+ feet

## SOIL PROFILE ► P24-18

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                   |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                 |
| 10" → 22"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                   |
| 22" → 36"                         | 2C                  | Sandy Loam<br>fine        | 2.5Y 5/6<br>light olive<br>brown       | none observed                  | Loose; structureless; non-cohesive; mixed medium to fine-grained mineral content; tight in-situ; dry matrix; non-sticky; non-plastic; gritty matrix; no observed apparent water or seasonal high- water table. |

# P24-19 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-19

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                   |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                 |
| 09" → 16"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                   |
| 16" → 36"                         | 2C                  | Sandy Loam<br>fine        | 2.5Y 5/6<br>light olive<br>brown       | none observed                  | Loose; structureless; non-cohesive; mixed medium to fine-grained mineral content; tight in-situ; dry matrix; non-sticky; non-plastic; gritty matrix; no observed apparent water or seasonal high- water table. |



# P24-20 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet

Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► P24-20

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                   |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 11"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                 |
| 11" → 18"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                   |
| 18" → 36"                         | 2C                  | Sandy Loam<br>fine        | 2.5Y 5/6<br>light olive brown       | none observed                  | Loose; structureless; non-cohesive; mixed medium to fine-grained mineral content; tight in-situ; dry matrix; non-sticky; non-plastic; gritty matrix; no observed apparent water or seasonal high- water table. |

# P24-21 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F. still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet

Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► P24-21

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                   |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 06"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                 |
| 06" → 17"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                   |
| 17" → 36"                         | 2C                  | Sandy Loam<br>fine        | 2.5Y 5/6<br>light olive brown       | none observed                  | Loose; structureless; non-cohesive; mixed medium to fine-grained mineral content; tight in-situ; dry matrix; non-sticky; non-plastic; gritty matrix; no observed apparent water or seasonal high- water table. |

# P24-22 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10+ feet Drainage way: 50+ feet Drinking water well: 100+ feet Abutting septic system: 50+ feet

Wetlands: 50+ feet Public water supply reservoir: 400+ feet Tributary to reservoir: 200+ feet

## SOIL PROFILE ► P24-22

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                   |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 05"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                 |
| 05" → 17"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                   |
| 17" → 36"                         | 2C                  | Sandy Loam<br>fine        | 2.5Y 5/6<br>light olive brown       | none observed                  | Loose; structureless; non-cohesive; mixed medium to fine-grained mineral content; tight in-situ; dry matrix; non-sticky; non-plastic; gritty matrix; no observed apparent water or seasonal high- water table. |

# P24-23 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-23

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                   |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 05"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                 |
| 05" → 16"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                   |
| 16" → 36"                         | 2C                  | Sandy Loam<br>fine        | 2.5Y 5/4<br>light olive brown       | none observed                  | Loose; structureless; non-cohesive; mixed medium to fine-grained mineral content; tight in-situ; dry matrix; non-sticky; non-plastic; gritty matrix; no observed apparent water or seasonal high- water table. |



# P24-24 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-24

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                   |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 08"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                 |
| 08" → 13"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                   |
| 13" → 36"                         | 2C                  | Sandy Loam<br>fine        | 2.5Y 5/4<br>light olive<br>brown       | none observed                  | Loose; structureless; non-cohesive; mixed medium to fine-grained mineral content; tight in-situ; dry matrix; non-sticky; non-plastic; gritty matrix; no observed apparent water or seasonal high- water table. |

# P24-25 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-25

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                   |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 09"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                 |
| 09" → 14"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                   |
| 14" → 36"                         | 2C                  | Sandy Loam<br>fine        | 2.5Y 5/4<br>light olive brown       | none observed                  | Loose; structureless; non-cohesive; mixed medium to fine-grained mineral content; tight in-situ; dry matrix; non-sticky; non-plastic; gritty matrix; no observed apparent water or seasonal high- water table. |

# P24-26 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-26

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                   |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                 |
| 10" → 16"                         | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                   |
| 16" → 36"                         | 2C                  | Sandy Loam<br>fine        | 2.5Y 5/4<br>light olive brown       | none observed                  | Loose; structureless; non-cohesive; mixed medium to fine-grained mineral content; tight in-situ; dry matrix; non-sticky; non-plastic; gritty matrix; no observed apparent water or seasonal high- water table. |



# P24-27 PROBE

283 Elm Street, Amesbury, Massachusetts

Date: October 04, 2024 Weather: Clear, 65°-70° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► P24-27

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                   | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                   |
|-----------------------------------|---------------------|---------------------------|----------------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00'' → 09''                       | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark<br>grayish brown | none observed                  | Friable; somewhat cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                                                 |
| 09'' → 15''                       | B <sub>w</sub>      | Sandy Loam<br>fine        | 10YR 5/4<br>yellowish<br>brown         | none observed                  | Friable; weak-grade, non-cohesive; mixed medium to mostly fine-grained mineral content; dry matrix; non-sticky; non-plastic; free of clasts.                                                                   |
| 15'' → 36''                       | 2C                  | Sandy Loam<br>fine        | 2.5Y 5/4<br>light olive<br>brown       | none observed                  | Loose; structureless; non-cohesive; mixed medium to fine-grained mineral content; tight in-situ; dry matrix; non-sticky; non-plastic; gritty matrix; no observed apparent water or seasonal high- water table. |



# TP-A

283 Elm Street, Amesbury, Massachusetts

Date: October 16, 2025 Weather: Clear, 55°-60° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-A

| Depth below<br>land surface<br>(inches) | Soil<br>Horizon/<br>Layer | Soil Texture<br>(USDA/ NRCS) | Soil Color<br>(Munsell) | Redoxomorphic<br>Features/<br>ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state,<br>roots, horizon boundary, clasts, stratification, artifacts, restrictive<br>features, etc. |
|-----------------------------------------|---------------------------|------------------------------|-------------------------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 18"                               |                           |                              |                         |                                      | Bedrock refusal at 18"                                                                                                                                             |
|                                         |                           |                              |                         |                                      |                                                                                                                                                                    |
|                                         |                           |                              |                         |                                      |                                                                                                                                                                    |

Depth to bedrock: 18" Seasonal High Groundwater Table: \_\_\_\_ Apparent water table: \_\_\_\_

# TP-B

283 Elm Street, Amesbury, Massachusetts

Date: October 16, 2025 Weather: Clear, 55°-60° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-B

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell) | Redoxomorphic Features/ ESHGWT | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc. |
|-----------------------------------|---------------------|---------------------------|----------------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 36"                         |                     |                           |                      |                                | Bedrock refusal at 36"                                                                                                                                       |
|                                   |                     |                           |                      |                                |                                                                                                                                                              |
|                                   |                     |                           |                      |                                |                                                                                                                                                              |

Depth to bedrock: 36" Seasonal High Groundwater Table: \_\_\_\_ Apparent water table: \_\_\_\_

# TP-C

283 Elm Street, Amesbury, Massachusetts

Date: October 16, 2025 Weather: Clear, 55°-60° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-C

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                           |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                      |
| 10" → 18"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                               |
| 18" → 72"                         | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | 34"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; unstable; single grained/ structureless; non-cohesive; mixed medium-to-coarse grained mineral content; stratified; dry matrix; non-sticky; non-plastic; approximately 02-05% rounded to subrounded gravel and cobble content of mixed lithology; seasonal high-water table observed at 34": no apparent water observed; no bedrock encountered. |

Depth to bedrock: > 72" Seasonal High Groundwater Table: 34" Apparent water table:

# TP-D

283 Elm Street, Amesbury, Massachusetts

Date: October 16, 2025 Weather: Clear, 55°-60° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-D

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                           |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 12"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                      |
| 12" → 27"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                               |
| 27" → 60"                         | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | 35"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; unstable; single grained/ structureless; non-cohesive; mixed medium-to-coarse grained mineral content; stratified; dry matrix; non-sticky; non-plastic; approximately 02-05% rounded to subrounded gravel and cobble content of mixed lithology; seasonal high-water table observed at 35": no apparent water observed; no bedrock encountered. |

Depth to bedrock: > 60" Seasonal High Groundwater Table: 35" Apparent water table:

# TP-E

283 Elm Street, Amesbury, Massachusetts

Date: October 16, 2025 Weather: Clear, 55°-60° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-E

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                           |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 11"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                      |
| 11" → 22"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                               |
| 22" → 60"                         | 2C                  | Loamy Fine Sand           | 2.5Y 6/2<br>light brownish gray     | 32"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; unstable; single grained/ structureless; non-cohesive; mixed medium-to-coarse grained mineral content; stratified; dry matrix; non-sticky; non-plastic; approximately 02-05% rounded to subrounded gravel and cobble content of mixed lithology; seasonal high-water table observed at 32": no apparent water observed; no bedrock encountered. |

Depth to bedrock: > 60" Seasonal High Groundwater Table: 32" Apparent water table:

# TP-F

283 Elm Street, Amesbury, Massachusetts

Date: October 16, 2025 Weather: Clear, 55°-60° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-F

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                               |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                          |
| 10" → 19"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                   |
| 19" → 69"                         | 2C                  | Loamy Sand                | 2.5Y 6/2<br>light brownish gray     | 34"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; unstable; single grained/ structureless; non-cohesive; mixed medium-to-coarse grained mineral content; stratified; dry matrix; non-sticky; non-plastic; approximately 02-05% rounded to subrounded gravel and cobble content of mixed lithology; seasonal high-water table observed at 34": apparent water observed at 53"; no bedrock encountered. |

Depth to bedrock: > 69" Seasonal High Groundwater Table: 34" Apparent water table: 53"

# TP-G

283 Elm Street, Amesbury, Massachusetts

Date: October 16, 2025 Weather: Clear, 55°-60° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-G

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                               |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 12"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                          |
| 12" → 23"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                   |
| 23" → 68"                         | 2C                  | Loamy Sand                | 2.5Y 6/2<br>light brownish gray     | 35"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; unstable; single grained/ structureless; non-cohesive; mixed medium-to-coarse grained mineral content; stratified; dry matrix; non-sticky; non-plastic; approximately 02-05% rounded to subrounded gravel and cobble content of mixed lithology; seasonal high-water table observed at 35": apparent water observed at 59"; no bedrock encountered. |

Depth to bedrock: > 68" Seasonal High Groundwater Table: 35" Apparent water table: 59"

# TP-H

283 Elm Street, Amesbury, Massachusetts

Date: October 16, 2025 Weather: Clear, 55°-60° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-H

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                               |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 15"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                          |
| 15" → 22"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                   |
| 22" → 65"                         | 2C                  | Loamy Sand                | 2.5Y 6/2<br>light brownish gray     | 34"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; unstable; single grained/ structureless; non-cohesive; mixed medium-to-coarse grained mineral content; stratified; dry matrix; non-sticky; non-plastic; approximately 02-05% rounded to subrounded gravel and cobble content of mixed lithology; seasonal high-water table observed at 34": apparent water observed at 48"; no bedrock encountered. |

Depth to bedrock: > 65" Seasonal High Groundwater Table: 34" Apparent water table: 48"



# TP-I

283 Elm Street, Amesbury, Massachusetts

Date: October 16, 2025 Weather: Clear, 55°-60° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-I

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                           |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 12"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                      |
| 12" → 24"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                               |
| 24" → 74"                         | 2C                  | Loamy Sand                | 2.5Y 6/2<br>light brownish gray     | 42"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; unstable; single grained/ structureless; non-cohesive; mixed medium-to-coarse grained mineral content; stratified; dry matrix; non-sticky; non-plastic; approximately 02-05% rounded to subrounded gravel and cobble content of mixed lithology; seasonal high-water table observed at 42": no apparent water observed; no bedrock encountered. |

Depth to bedrock: > 74" Seasonal High Groundwater Table: 42" Apparent water table:

# TP-J

283 Elm Street, Amesbury, Massachusetts

Date: October 16, 2025 Weather: Clear, 55°-60° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-J

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                               |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 13"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                          |
| 13" → 24"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                   |
| 24" → 65"                         | 2C                  | Loamy Sand                | 2.5Y 6/2<br>light brownish gray     | 36"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; unstable; single grained/ structureless; non-cohesive; mixed medium-to-coarse grained mineral content; stratified; dry matrix; non-sticky; non-plastic; approximately 02-05% rounded to subrounded gravel and cobble content of mixed lithology; seasonal high-water table observed at 36"; apparent water observed at 60"; no bedrock encountered. |

Depth to bedrock: > 65" Seasonal High Groundwater Table: 36" Apparent water table: 60"

# TP-K

283 Elm Street, Amesbury, Massachusetts

Date: October 16, 2025 Weather: Clear, 55°-60° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-K

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                               |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 10"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                          |
| 10" → 19"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                   |
| 19" → 69"                         | 2C                  | Loamy Sand                | 2.5Y 6/2<br>light brownish gray     | 40"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; unstable; single grained/ structureless; non-cohesive; mixed medium-to-coarse grained mineral content; stratified; dry matrix; non-sticky; non-plastic; approximately 02-05% rounded to subrounded gravel and cobble content of mixed lithology; seasonal high-water table observed at 40"; apparent water observed at 60"; no bedrock encountered. |

Depth to bedrock: > 69" Seasonal High Groundwater Table: 40" Apparent water table: 60"

# TP-L

283 Elm Street, Amesbury, Massachusetts

Date: October 16, 2025 Weather: Clear, 55°-60° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

## SOIL PROFILE ► TP-L

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                               |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 15"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                          |
| 15" → 24"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                   |
| 24" → 75"                         | 2C                  | Loamy Sand                | 2.5Y 6/2<br>light brownish gray     | 43"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; unstable; single grained/ structureless; non-cohesive; mixed medium-to-coarse grained mineral content; stratified; dry matrix; non-sticky; non-plastic; approximately 02-05% rounded to subrounded gravel and cobble content of mixed lithology; seasonal high-water table observed at 43"; apparent water observed at 66"; no bedrock encountered. |

Depth to bedrock: >75" Seasonal High Groundwater Table: 43" Apparent water table: 66"

# TP-M

283 Elm Street, Amesbury, Massachusetts

Date: October 16, 2025 Weather: Clear, 55°-60° F, still and dry.

Landscape: Upland Landform: Outwash plain and ground moraine Position on landscape: Tread/ flat

Slope aspect: Level Slope (%): 00 – 02% Slope complexity: Simple Land Cover: Forest and meadow grass

Property line: 10<sup>+</sup> feet Drainage way: 50<sup>+</sup> feet Drinking water well: 100<sup>+</sup> feet Abutting septic system: 50<sup>+</sup> feet

Wetlands: 50<sup>+</sup> feet Public water supply reservoir: 400<sup>+</sup> feet Tributary to reservoir: 200<sup>+</sup> feet

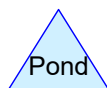
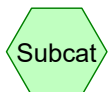
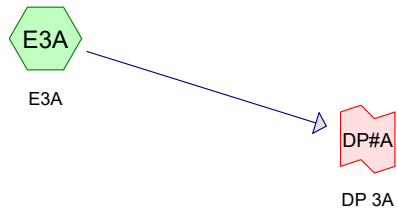
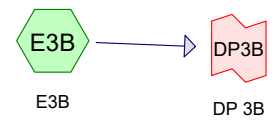
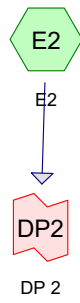
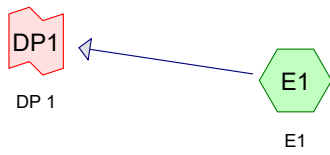
## SOIL PROFILE ► TP-M

| Depth below land surface (inches) | Soil Horizon/ Layer | Soil Texture (USDA/ NRCS) | Soil Color (Munsell)                | Redoxomorphic Features/ ESHGWT          | Consistence, grade, size, structure, grain size, soil moisture state, roots, horizon boundary, clasts, stratification, artifacts, restrictive features, etc.                                                                                                                                                                                               |
|-----------------------------------|---------------------|---------------------------|-------------------------------------|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 00" → 13"                         | A                   | Sandy Loam<br>fine        | 10YR 3/2<br>very dark grayish brown | none observed                           | Very friable; moderate-grade fine-to-medium sub-angular granular structure; slightly cohesive; fine grained mineral content; dry matrix; non-sticky; non-plastic; many shrub and tree roots; free of clasts; clear wavy boundary.                                                                                                                          |
| 13" → 24"                         | B <sub>w</sub>      | Sandy Loam                | 10YR 5/4<br>yellowish brown         | none observed                           | Very friable; weak-grade, fine, granular to sub-angular blocky structure; non-cohesive matrix; mixed medium to fine-grained mineral content; dry matrix; non-sticky; non-plastic; few tree roots; diffuse wavy boundary.                                                                                                                                   |
| 24" → 77"                         | 2C                  | Loamy Sand                | 2.5Y 6/2<br>light brownish gray     | 43"<br>(m,3,p)<br>5YR 5/8<br>Gley 1 7/N | Loose; unstable; single grained/ structureless; non-cohesive; mixed medium-to-coarse grained mineral content; stratified; dry matrix; non-sticky; non-plastic; approximately 02-05% rounded to subrounded gravel and cobble content of mixed lithology; seasonal high-water table observed at 46"; apparent water observed at 75"; no bedrock encountered. |

Depth to bedrock: >77" Seasonal High Groundwater Table: 46" Apparent water table: 75"

## **IIX. Appendix**

**a. Existing Conditions HydroCAD Report**





## **RH Exist 8-11-25**

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### **Project Notes**

Rainfall events imported from "Atlas-14-Rain.txt" for 440 MA Essex

Rainfall events imported from "Atlas-14-Rain.txt" for 440 MA Essex

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**Rainfall Events Listing (selected events)**

| Event# | Event<br>Name | Storm Type     | Curve | Mode    | Duration<br>(hours) | B/B | Depth<br>(inches) | AMC |
|--------|---------------|----------------|-------|---------|---------------------|-----|-------------------|-----|
| 1      | 2-Year        | Type III 24-hr |       | Default | 24.00               | 1   | 3.15              | 2   |
| 2      | 10-Year       | Type III 24-hr |       | Default | 24.00               | 1   | 4.83              | 2   |
| 3      | 100-Year      | Type III 24-hr |       | Default | 24.00               | 1   | 8.94              | 2   |

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**Area Listing (all nodes)**

| Area<br>(acres) | CN        | Description<br>(subcatchment-numbers)        |
|-----------------|-----------|----------------------------------------------|
| 7.443           | 39        | >75% Grass cover, Good, HSG A (E1, E3A, E3B) |
| 10.254          | 74        | >75% Grass cover, Good, HSG C (E1, E2, E3B)  |
| 0.104           | 96        | Gravel surface, HSG A (E3A)                  |
| 0.003           | 98        | Paved parking, HSG A (E3A)                   |
| 0.102           | 98        | Unconnected roofs, HSG A (E3A)               |
| 15.500          | 30        | Woods, Good, HSG A (E1, E3A, E3B)            |
| 3.371           | 70        | Woods, Good, HSG C (E1, E2)                  |
| 2.272           | 72        | Woods/grass comb., Good, HSG C (E3B)         |
| <b>39.049</b>   | <b>50</b> | <b>TOTAL AREA</b>                            |

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**Soil Listing (all nodes)**

| Area<br>(acres) | Soil<br>Group | Subcatchment<br>Numbers |
|-----------------|---------------|-------------------------|
| 23.153          | HSG A         | E1, E3A, E3B            |
| 0.000           | HSG B         |                         |
| 15.897          | HSG C         | E1, E2, E3B             |
| 0.000           | HSG D         |                         |
| 0.000           | Other         |                         |
| <b>39.049</b>   |               | <b>TOTAL AREA</b>       |

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**Ground Covers (all nodes)**

| HSG-A<br>(acres) | HSG-B<br>(acres) | HSG-C<br>(acres) | HSG-D<br>(acres) | Other<br>(acres) | Total<br>(acres) | Ground<br>Cover         | Subcatchment<br>Numbers |
|------------------|------------------|------------------|------------------|------------------|------------------|-------------------------|-------------------------|
| 7.443            | 0.000            | 10.254           | 0.000            | 0.000            | 17.697           | >75% Grass cover, Good  | E1, E2,<br>E3A,<br>E3B  |
| 0.104            | 0.000            | 0.000            | 0.000            | 0.000            | 0.104            | Gravel surface          | E3A                     |
| 0.003            | 0.000            | 0.000            | 0.000            | 0.000            | 0.003            | Paved parking           | E3A                     |
| 0.102            | 0.000            | 0.000            | 0.000            | 0.000            | 0.102            | Unconnected roofs       | E3A                     |
| 15.500           | 0.000            | 3.371            | 0.000            | 0.000            | 18.871           | Woods, Good             | E1, E2,<br>E3A,<br>E3B  |
| 0.000            | 0.000            | 2.272            | 0.000            | 0.000            | 2.272            | Woods/grass comb., Good | E3B                     |
| <b>23.153</b>    | <b>0.000</b>     | <b>15.897</b>    | <b>0.000</b>     | <b>0.000</b>     | <b>39.049</b>    | <b>TOTAL AREA</b>       |                         |

**RH Exist 8-11-25**

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*Type III 24-hr 2-Year Rainfall=3.15"*

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment E1: E1**

Runoff Area=524,797 sf 0.00% Impervious Runoff Depth>0.06"  
Flow Length=238' Tc=11.3 min CN=48 Runoff=0.13 cfs 0.061 af

**Subcatchment E2: E2**

Runoff Area=207,938 sf 0.00% Impervious Runoff Depth>0.81"  
Flow Length=504' Tc=14.9 min CN=72 Runoff=3.45 cfs 0.323 af

**Subcatchment E3A: E3A**

Runoff Area=489,064 sf 0.94% Impervious Runoff Depth=0.00"  
Flow Length=394' Slope=0.0200 '/' Tc=20.6 min CN=34 Runoff=0.00 cfs 0.000 af

**Subcatchment E3B: E3B**

Runoff Area=479,181 sf 0.00% Impervious Runoff Depth>0.25"  
Flow Length=350' Tc=9.7 min CN=57 Runoff=1.45 cfs 0.228 af

**Link DP#A: DP 3A**

Inflow=0.00 cfs 0.000 af  
Primary=0.00 cfs 0.000 af

**Link DP1: DP 1**

Inflow=0.13 cfs 0.061 af  
Primary=0.13 cfs 0.061 af

**Link DP2: DP 2**

Inflow=3.45 cfs 0.323 af  
Primary=3.45 cfs 0.323 af

**Link DP3B: DP 3B**

Inflow=1.45 cfs 0.228 af  
Primary=1.45 cfs 0.228 af

**Total Runoff Area = 39.049 ac Runoff Volume = 0.612 af Average Runoff Depth = 0.19"**  
**99.73% Pervious = 38.944 ac 0.27% Impervious = 0.106 ac**

**Summary for Subcatchment E1: E1**

Runoff = 0.13 cfs @ 14.73 hrs, Volume= 0.061 af, Depth> 0.06"  
 Routed to Link DP1 : DP 1

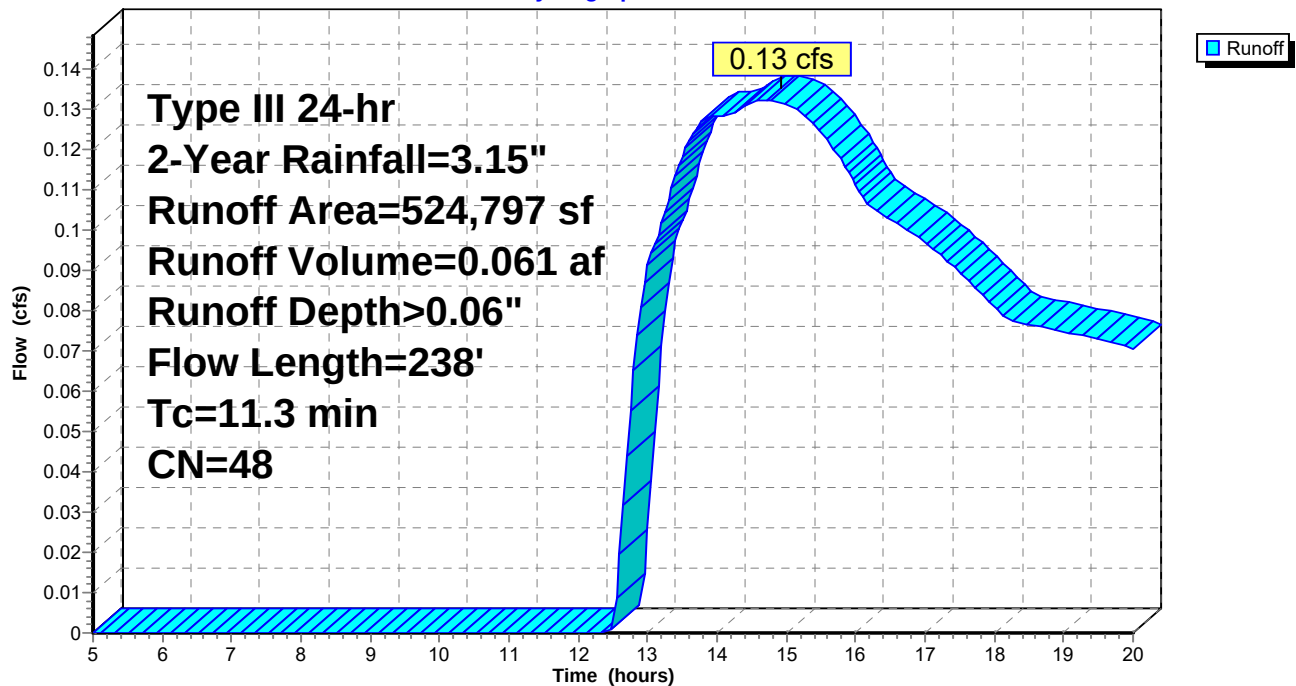
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 139,246   | 74 | >75% Grass cover, Good, HSG C |
| 52,270    | 70 | Woods, Good, HSG C            |
| 125,150   | 39 | >75% Grass cover, Good, HSG A |
| 208,131   | 30 | Woods, Good, HSG A            |
| 524,797   | 48 | Weighted Average              |
| 524,797   |    | 100.00% Pervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                      |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------|
| 8.7      | 50            | 0.0500        | 0.10              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10" |
| 2.6      | 188           | 0.0600        | 1.22              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps        |
| 11.3     | 238           | Total         |                   |                |                                                                  |

**Subcatchment E1: E1**

Hydrograph



### Summary for Subcatchment E2: E2

Runoff = 3.45 cfs @ 12.23 hrs, Volume= 0.323 af, Depth> 0.81"  
Routed to Link DP2 : DP 2

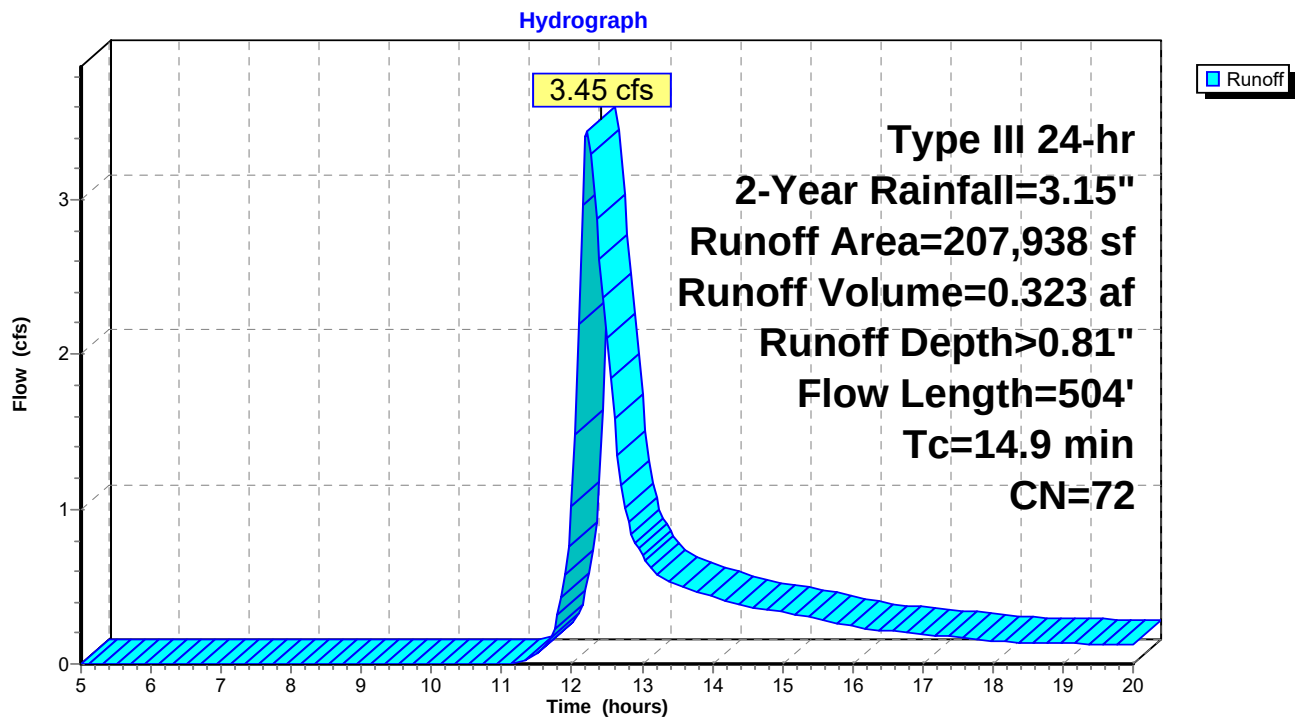
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 113,380   | 74 | >75% Grass cover, Good, HSG C |
| 94,558    | 70 | Woods, Good, HSG C            |
| 207,938   | 72 | Weighted Average              |
| 207,938   |    | 100.00% Pervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                          |
|----------|---------------|---------------|-------------------|----------------|----------------------------------------------------------------------|
| 5.7      | 50            | 0.0200        | 0.15              |                | <b>Sheet Flow,</b><br>Grass: Short n= 0.150 P2= 3.10"                |
| 2.0      | 147           | 0.0300        | 1.21              |                | <b>Shallow Concentrated Flow,</b><br>Short Grass Pasture Kv= 7.0 fps |
| 7.2      | 307           | 0.0200        | 0.71              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps            |
| 14.9     | 504           | Total         |                   |                |                                                                      |

### Subcatchment E2: E2





### Summary for Subcatchment E3A: E3A

Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"  
 Routed to Link DP#A : DP 3A

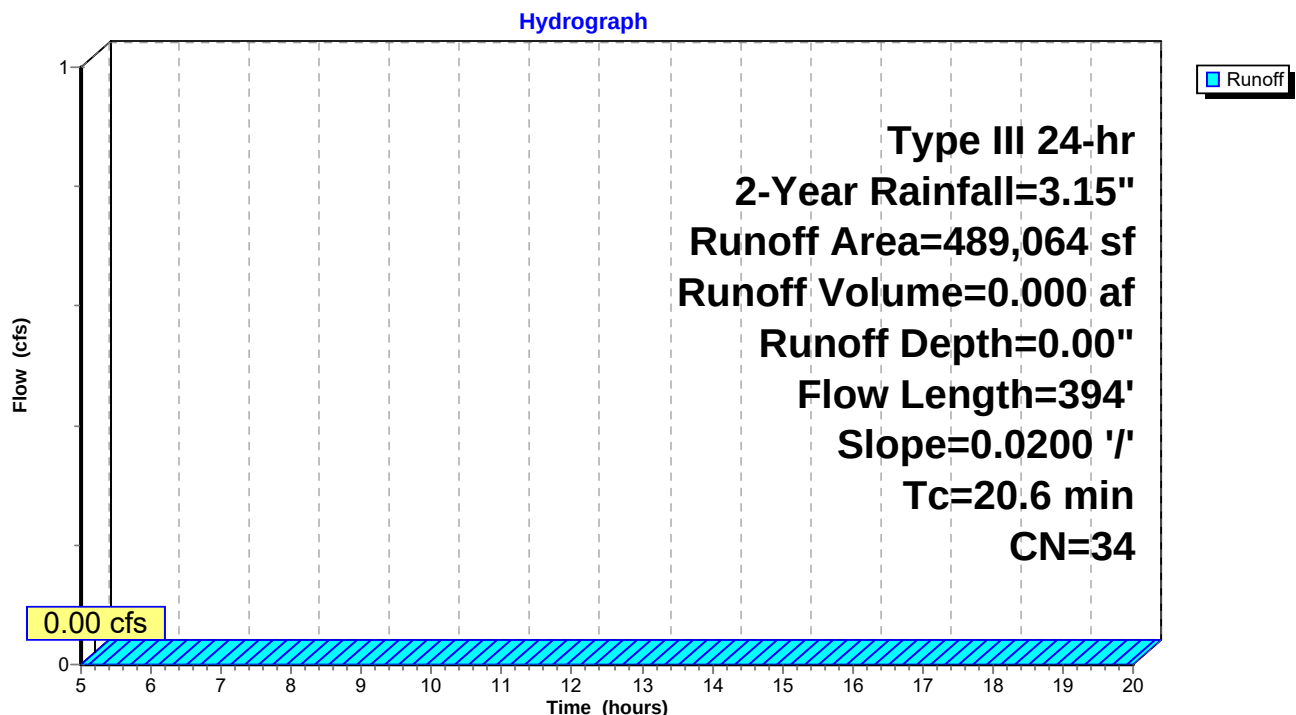
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 309,786   | 30 | Woods, Good, HSG A            |
| 4,538     | 96 | Gravel surface, HSG A         |
| 4,447     | 98 | Unconnected roofs, HSG A      |
| 149       | 98 | Paved parking, HSG A          |
| 170,144   | 39 | >75% Grass cover, Good, HSG A |
| 489,064   | 34 | Weighted Average              |
| 484,468   |    | 99.06% Pervious Area          |
| 4,596     |    | 0.94% Impervious Area         |
| 4,447     |    | 96.76% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                      |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------|
| 12.5     | 50            | 0.0200        | 0.07              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10" |
| 8.1      | 344           | 0.0200        | 0.71              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps        |
| 20.6     | 394           | Total         |                   |                |                                                                  |

### Subcatchment E3A: E3A



### Summary for Subcatchment E3B: E3B

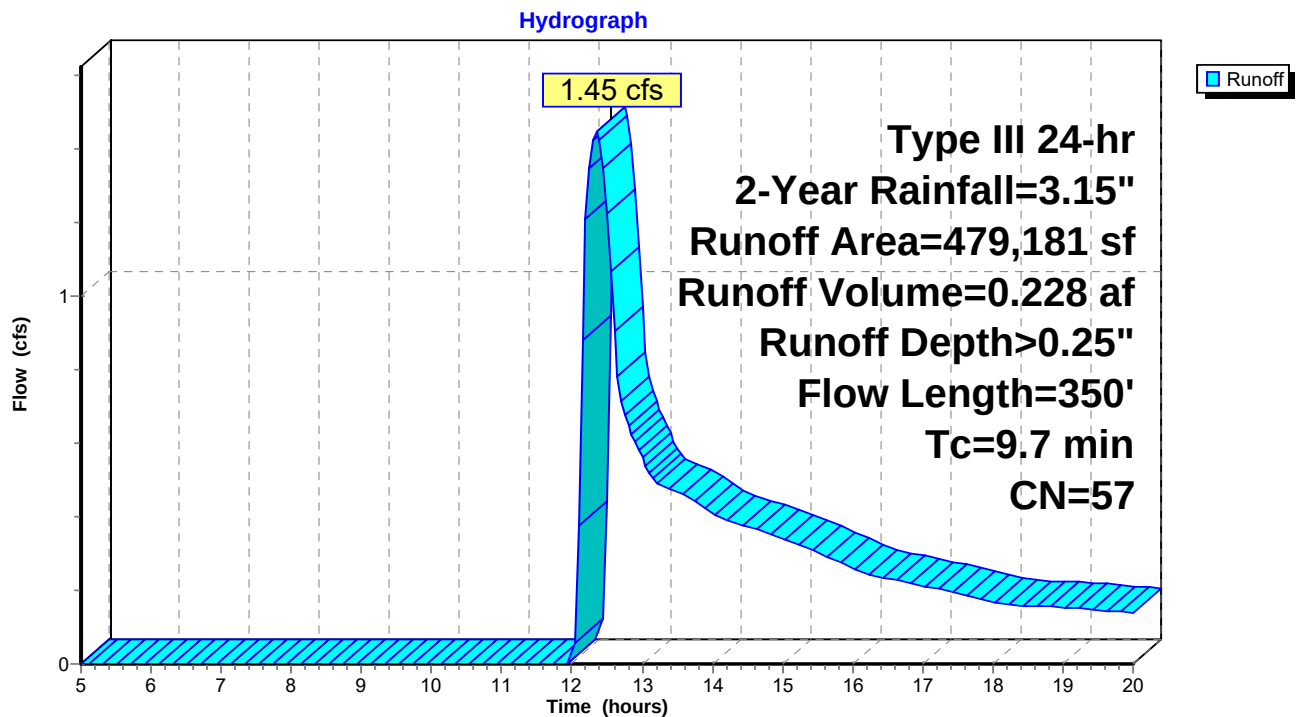
Runoff = 1.45 cfs @ 12.35 hrs, Volume= 0.228 af, Depth> 0.25"  
Routed to Link DP3B : DP 3B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                    |
|-----------|----|--------------------------------|
| 194,048   | 74 | >75% Grass cover, Good, HSG C  |
| 98,953    | 72 | Woods/grass comb., Good, HSG C |
| 157,270   | 30 | Woods, Good, HSG A             |
| 28,910    | 39 | >75% Grass cover, Good, HSG A  |
| 479,181   | 57 | Weighted Average               |
| 479,181   |    | 100.00% Pervious Area          |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                        |
|----------|---------------|---------------|-------------------|----------------|----------------------------------------------------|
| 3.9      | 50            | 0.0400        | 0.22              |                | Sheet Flow,<br>Range n= 0.130 P2= 3.10"            |
| 5.8      | 300           | 0.0300        | 0.87              |                | Shallow Concentrated Flow,<br>Woodland Kv= 5.0 fps |
| 9.7      | 350           | Total         |                   |                |                                                    |

### Subcatchment E3B: E3B



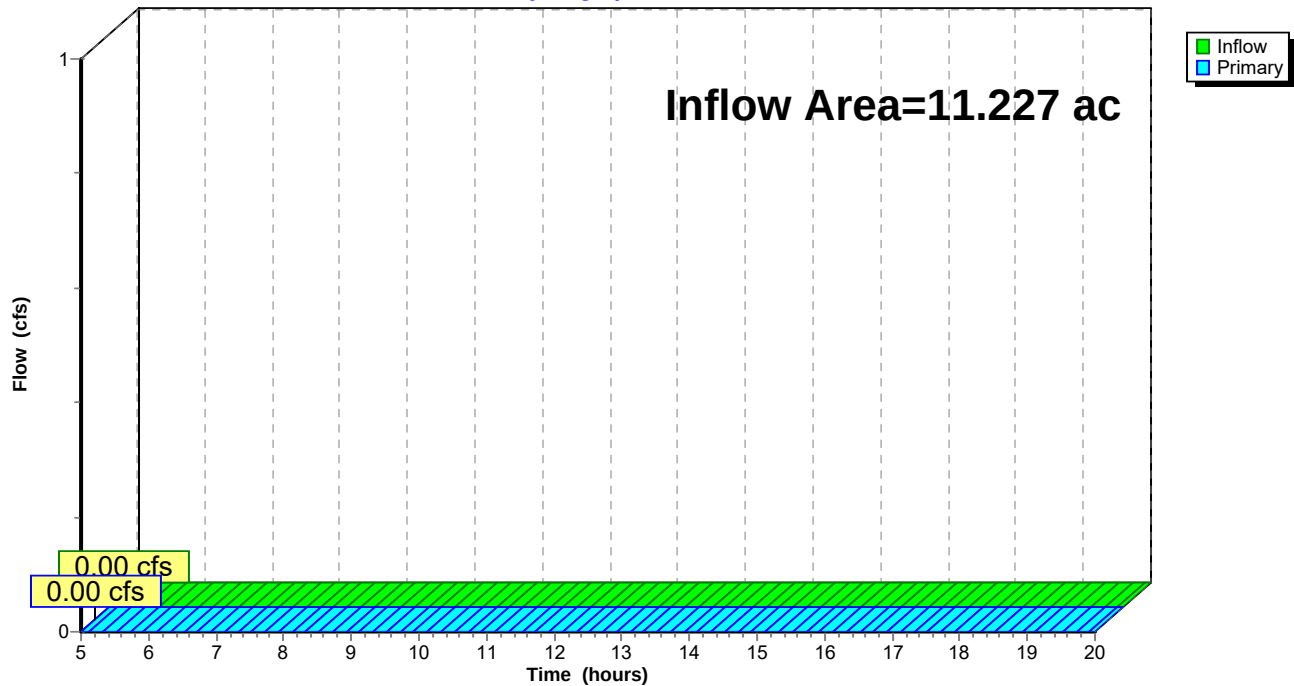
### Summary for Link DP#A: DP 3A

Inflow Area = 11.227 ac, 0.94% Impervious, Inflow Depth = 0.00" for 2-Year event  
 Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

### Link DP#A: DP 3A

#### Hydrograph

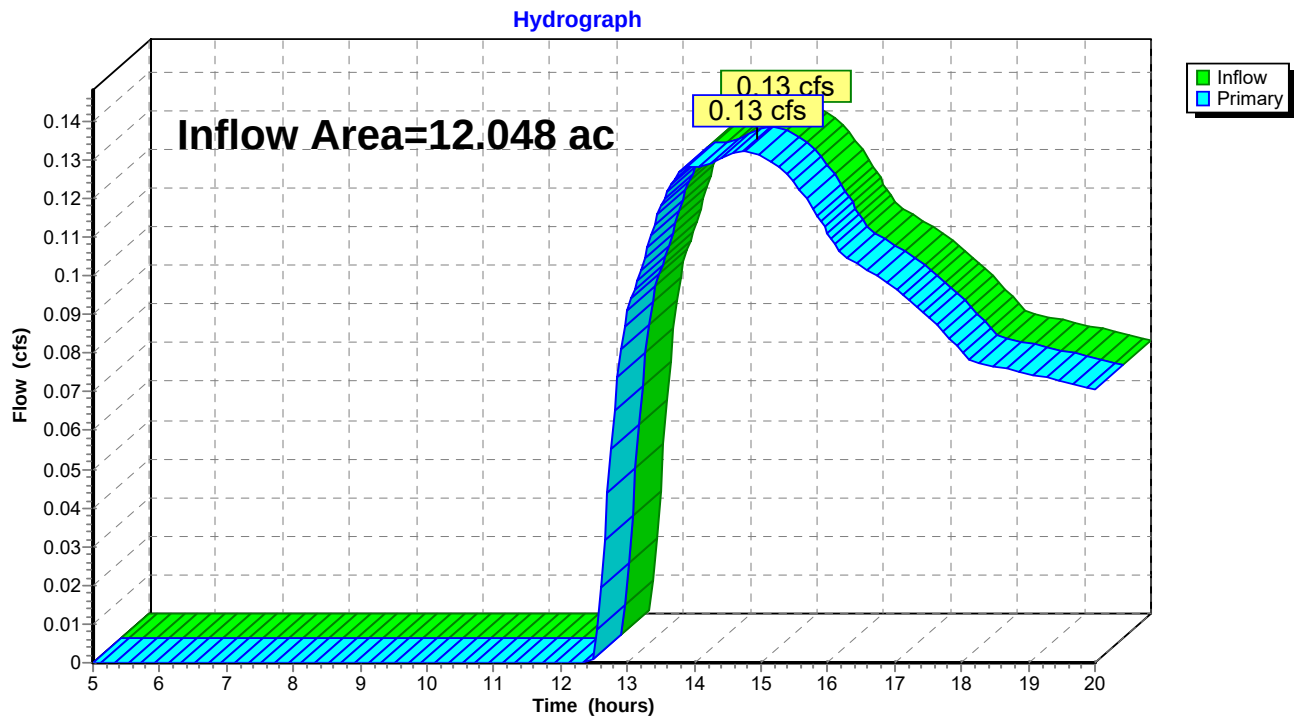


### Summary for Link DP1: DP 1

Inflow Area = 12.048 ac, 0.00% Impervious, Inflow Depth > 0.06" for 2-Year event  
 Inflow = 0.13 cfs @ 14.73 hrs, Volume= 0.061 af  
 Primary = 0.13 cfs @ 14.73 hrs, Volume= 0.061 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

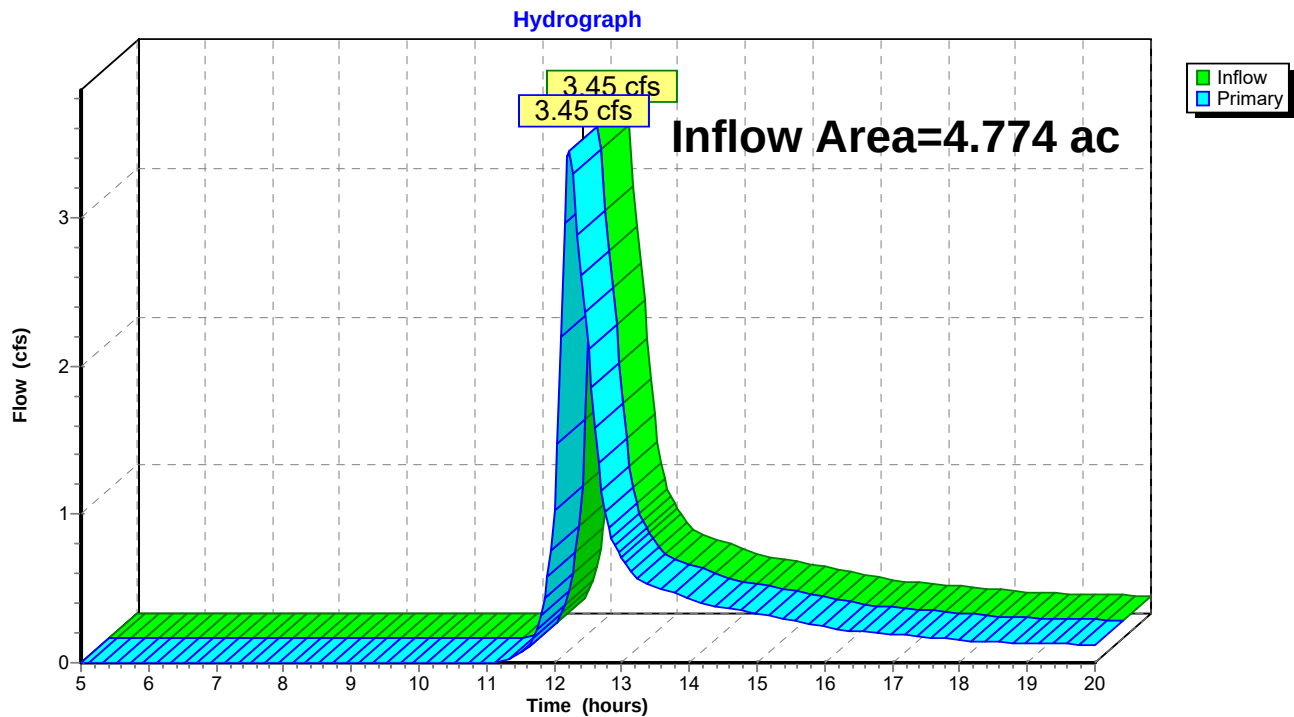
### Link DP1: DP 1



**Summary for Link DP2: DP 2**

Inflow Area = 4.774 ac, 0.00% Impervious, Inflow Depth > 0.81" for 2-Year event  
Inflow = 3.45 cfs @ 12.23 hrs, Volume= 0.323 af  
Primary = 3.45 cfs @ 12.23 hrs, Volume= 0.323 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Link DP2: DP 2**

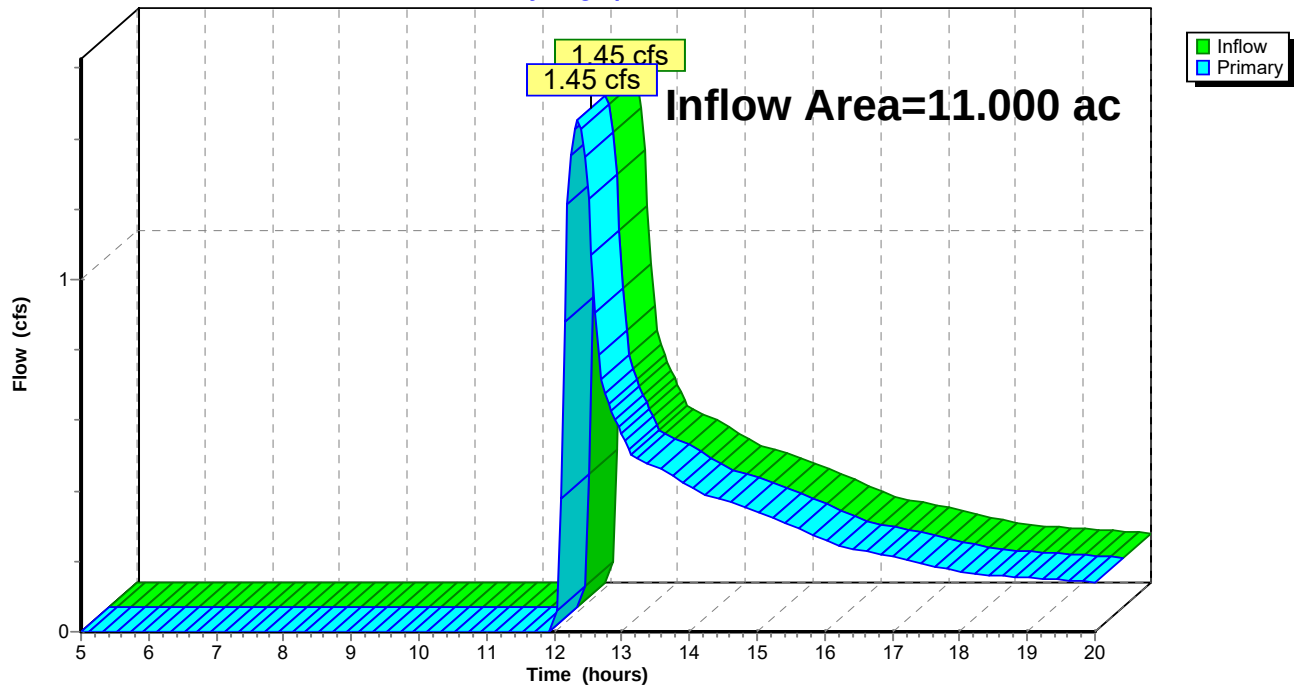
### Summary for Link DP3B: DP 3B

Inflow Area = 11.000 ac, 0.00% Impervious, Inflow Depth > 0.25" for 2-Year event  
 Inflow = 1.45 cfs @ 12.35 hrs, Volume= 0.228 af  
 Primary = 1.45 cfs @ 12.35 hrs, Volume= 0.228 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

### Link DP3B: DP 3B

Hydrograph



Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

|                              |                                                                                                                                            |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Subcatchment E1: E1</b>   | Runoff Area=524,797 sf 0.00% Impervious Runoff Depth>0.45"<br>Flow Length=238' Tc=11.3 min CN=48 Runoff=3.11 cfs 0.452 af                  |
| <b>Subcatchment E2: E2</b>   | Runoff Area=207,938 sf 0.00% Impervious Runoff Depth>1.90"<br>Flow Length=504' Tc=14.9 min CN=72 Runoff=8.60 cfs 0.756 af                  |
| <b>Subcatchment E3A: E3A</b> | Runoff Area=489,064 sf 0.94% Impervious Runoff Depth>0.03"<br>Flow Length=394' Slope=0.0200 '/' Tc=20.6 min CN=34 Runoff=0.06 cfs 0.024 af |
| <b>Subcatchment E3B: E3B</b> | Runoff Area=479,181 sf 0.00% Impervious Runoff Depth>0.91"<br>Flow Length=350' Tc=9.7 min CN=57 Runoff=9.40 cfs 0.830 af                   |
| <b>Link DP#A: DP 3A</b>      | Inflow=0.06 cfs 0.024 af<br>Primary=0.06 cfs 0.024 af                                                                                      |
| <b>Link DP1: DP 1</b>        | Inflow=3.11 cfs 0.452 af<br>Primary=3.11 cfs 0.452 af                                                                                      |
| <b>Link DP2: DP 2</b>        | Inflow=8.60 cfs 0.756 af<br>Primary=8.60 cfs 0.756 af                                                                                      |
| <b>Link DP3B: DP 3B</b>      | Inflow=9.40 cfs 0.830 af<br>Primary=9.40 cfs 0.830 af                                                                                      |

**Total Runoff Area = 39.049 ac Runoff Volume = 2.063 af Average Runoff Depth = 0.63"**  
**99.73% Pervious = 38.944 ac 0.27% Impervious = 0.106 ac**

**Summary for Subcatchment E1: E1**

Runoff = 3.11 cfs @ 12.32 hrs, Volume= 0.452 af, Depth> 0.45"  
 Routed to Link DP1 : DP 1

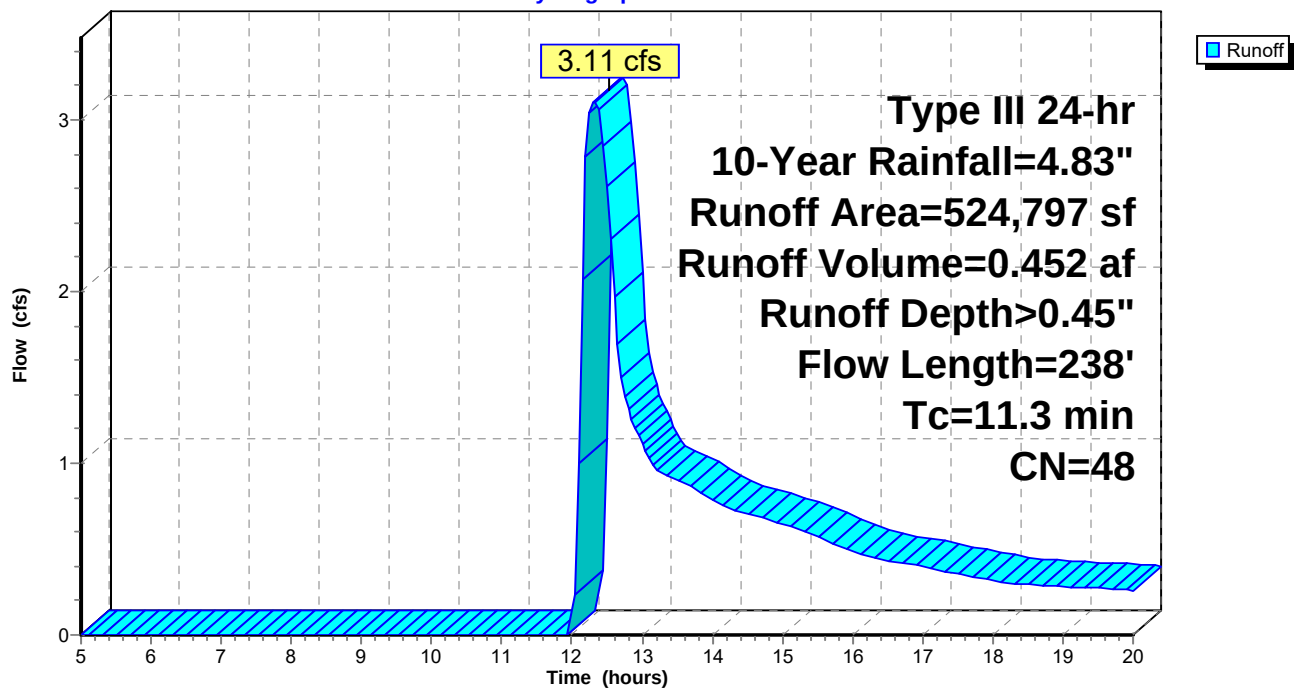
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 139,246   | 74 | >75% Grass cover, Good, HSG C |
| 52,270    | 70 | Woods, Good, HSG C            |
| 125,150   | 39 | >75% Grass cover, Good, HSG A |
| 208,131   | 30 | Woods, Good, HSG A            |
| 524,797   | 48 | Weighted Average              |
| 524,797   |    | 100.00% Pervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                      |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------|
| 8.7      | 50            | 0.0500        | 0.10              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10" |
| 2.6      | 188           | 0.0600        | 1.22              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps        |
| 11.3     | 238           | Total         |                   |                |                                                                  |

**Subcatchment E1: E1**

Hydrograph





### Summary for Subcatchment E2: E2

Runoff = 8.60 cfs @ 12.21 hrs, Volume= 0.756 af, Depth> 1.90"  
Routed to Link DP2 : DP 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

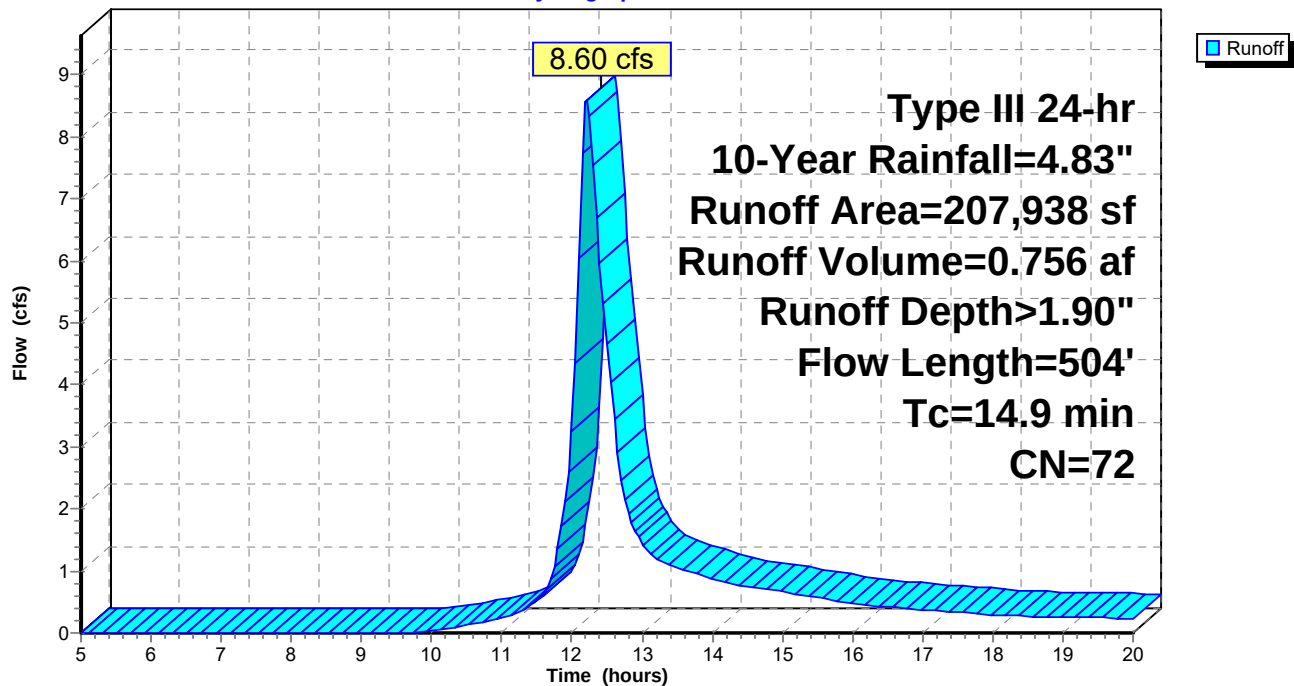
| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 113,380   | 74 | >75% Grass cover, Good, HSG C |
| 94,558    | 70 | Woods, Good, HSG C            |
| 207,938   | 72 | Weighted Average              |
| 207,938   |    | 100.00% Pervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                          |
|----------|---------------|---------------|-------------------|----------------|----------------------------------------------------------------------|
| 5.7      | 50            | 0.0200        | 0.15              |                | <b>Sheet Flow,</b><br>Grass: Short n= 0.150 P2= 3.10"                |
| 2.0      | 147           | 0.0300        | 1.21              |                | <b>Shallow Concentrated Flow,</b><br>Short Grass Pasture Kv= 7.0 fps |
| 7.2      | 307           | 0.0200        | 0.71              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps            |
| 14.9     | 504           | Total         |                   |                |                                                                      |

### Subcatchment E2: E2

Hydrograph



### Summary for Subcatchment E3A: E3A

Runoff = 0.06 cfs @ 16.99 hrs, Volume= 0.024 af, Depth> 0.03"  
Routed to Link DP#A : DP 3A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

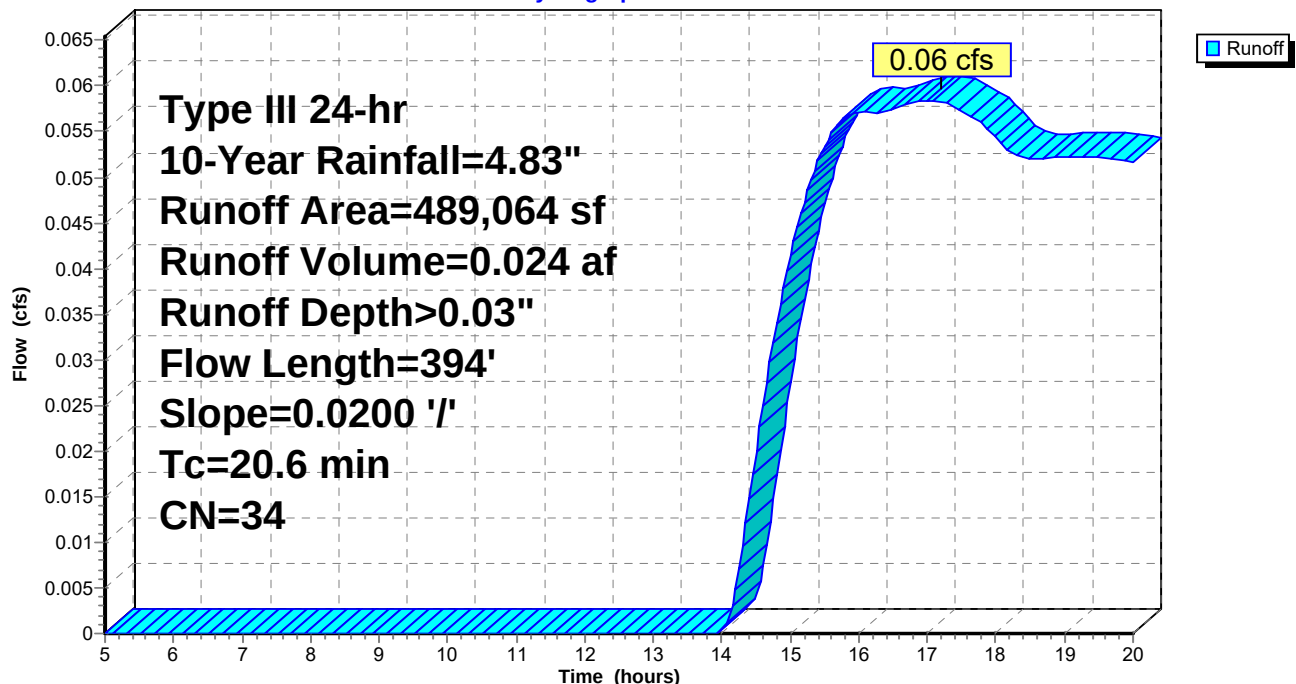
| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 309,786   | 30 | Woods, Good, HSG A            |
| 4,538     | 96 | Gravel surface, HSG A         |
| 4,447     | 98 | Unconnected roofs, HSG A      |
| 149       | 98 | Paved parking, HSG A          |
| 170,144   | 39 | >75% Grass cover, Good, HSG A |
| 489,064   | 34 | Weighted Average              |
| 484,468   |    | 99.06% Pervious Area          |
| 4,596     |    | 0.94% Impervious Area         |
| 4,447     |    | 96.76% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                      |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------|
| 12.5     | 50            | 0.0200        | 0.07              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10" |
| 8.1      | 344           | 0.0200        | 0.71              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps        |
| 20.6     | 394           | Total         |                   |                |                                                                  |

### Subcatchment E3A: E3A

Hydrograph



### Summary for Subcatchment E3B: E3B

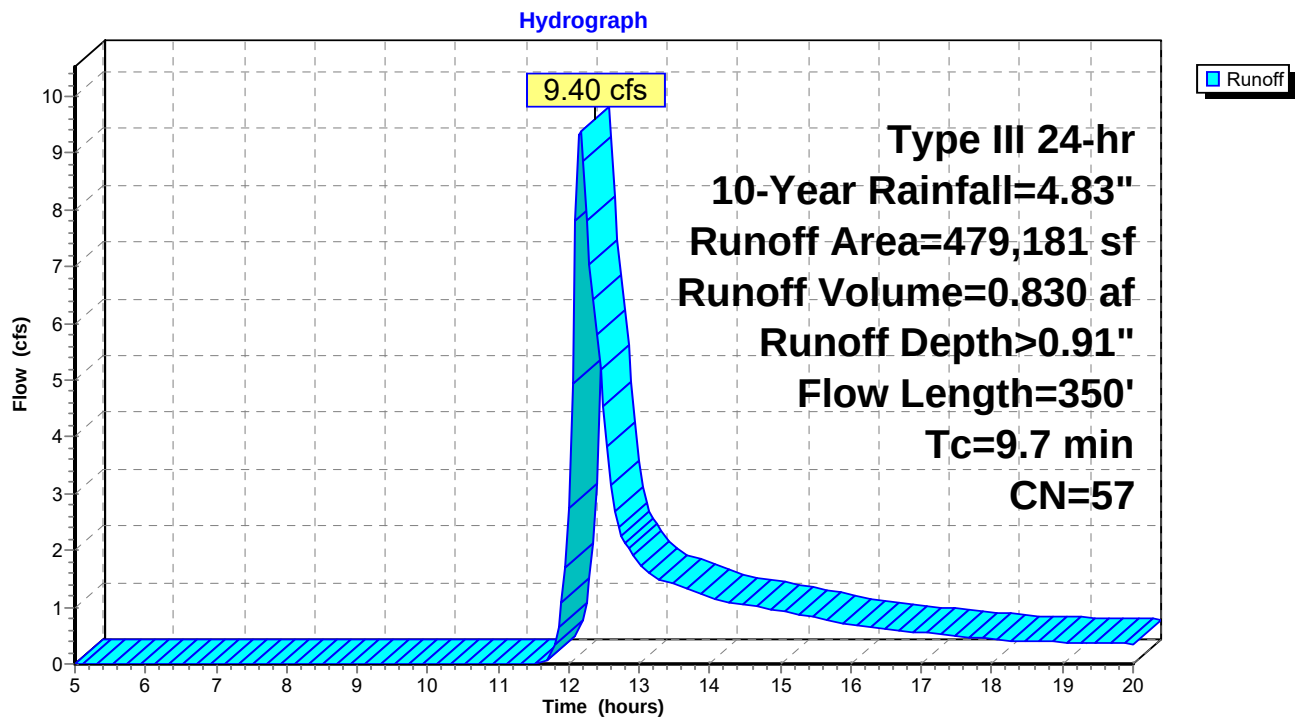
Runoff = 9.40 cfs @ 12.16 hrs, Volume= 0.830 af, Depth> 0.91"  
Routed to Link DP3B : DP 3B

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                    |
|-----------|----|--------------------------------|
| 194,048   | 74 | >75% Grass cover, Good, HSG C  |
| 98,953    | 72 | Woods/grass comb., Good, HSG C |
| 157,270   | 30 | Woods, Good, HSG A             |
| 28,910    | 39 | >75% Grass cover, Good, HSG A  |
| 479,181   | 57 | Weighted Average               |
| 479,181   |    | 100.00% Pervious Area          |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                        |
|----------|---------------|---------------|-------------------|----------------|----------------------------------------------------|
| 3.9      | 50            | 0.0400        | 0.22              |                | Sheet Flow,<br>Range n= 0.130 P2= 3.10"            |
| 5.8      | 300           | 0.0300        | 0.87              |                | Shallow Concentrated Flow,<br>Woodland Kv= 5.0 fps |
| 9.7      | 350           | Total         |                   |                |                                                    |

### Subcatchment E3B: E3B



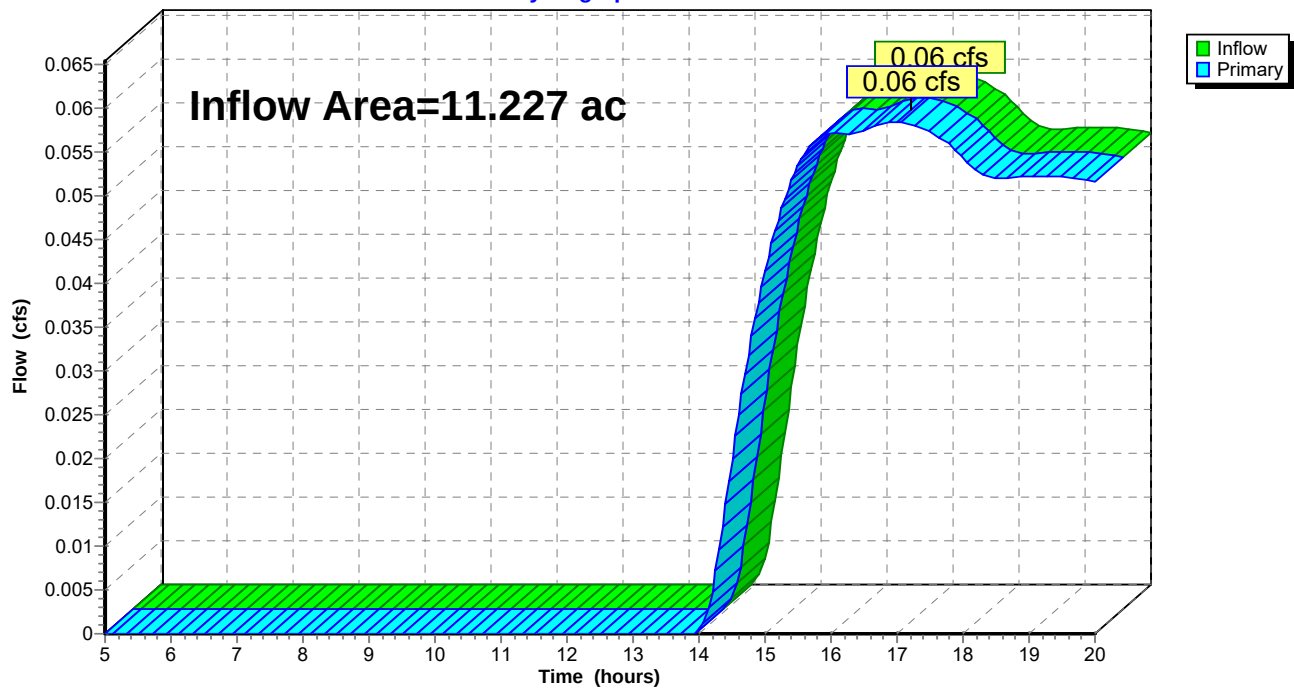
**Summary for Link DP#A: DP 3A**

Inflow Area = 11.227 ac, 0.94% Impervious, Inflow Depth > 0.03" for 10-Year event  
Inflow = 0.06 cfs @ 16.99 hrs, Volume= 0.024 af  
Primary = 0.06 cfs @ 16.99 hrs, Volume= 0.024 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Link DP#A: DP 3A**

Hydrograph

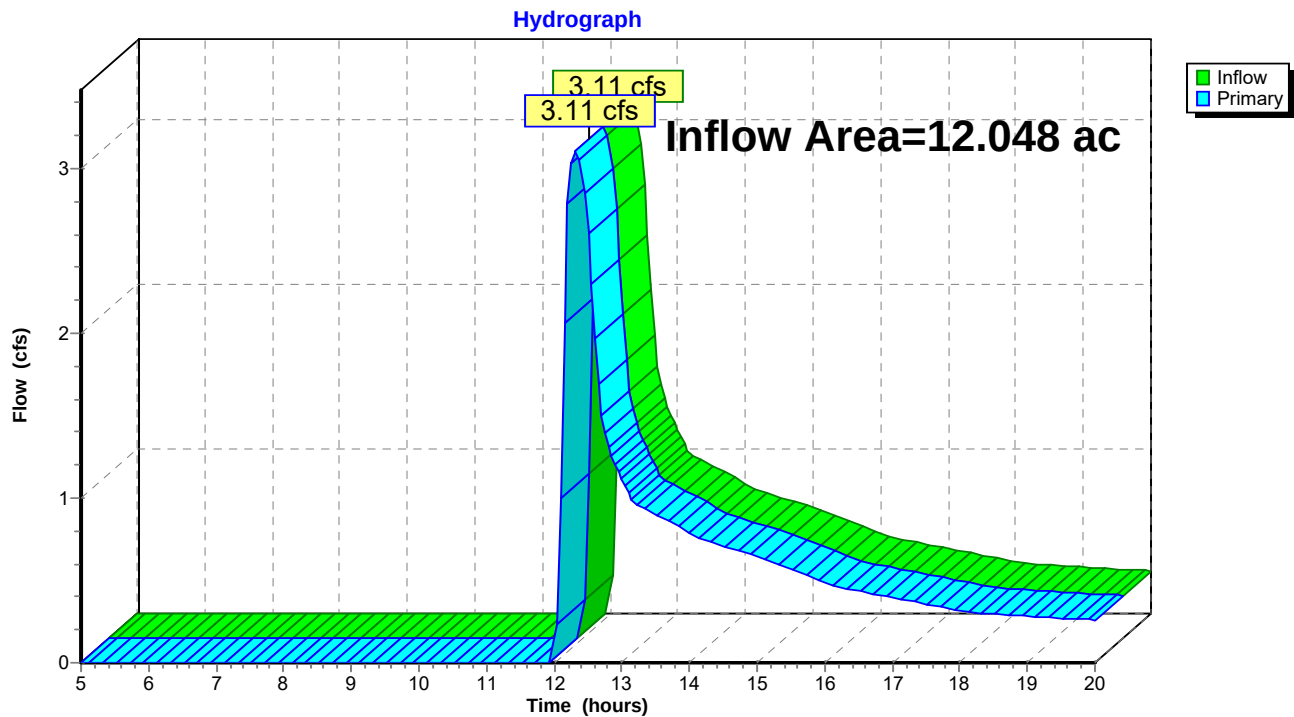


### Summary for Link DP1: DP 1

Inflow Area = 12.048 ac, 0.00% Impervious, Inflow Depth > 0.45" for 10-Year event  
 Inflow = 3.11 cfs @ 12.32 hrs, Volume= 0.452 af  
 Primary = 3.11 cfs @ 12.32 hrs, Volume= 0.452 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

### Link DP1: DP 1

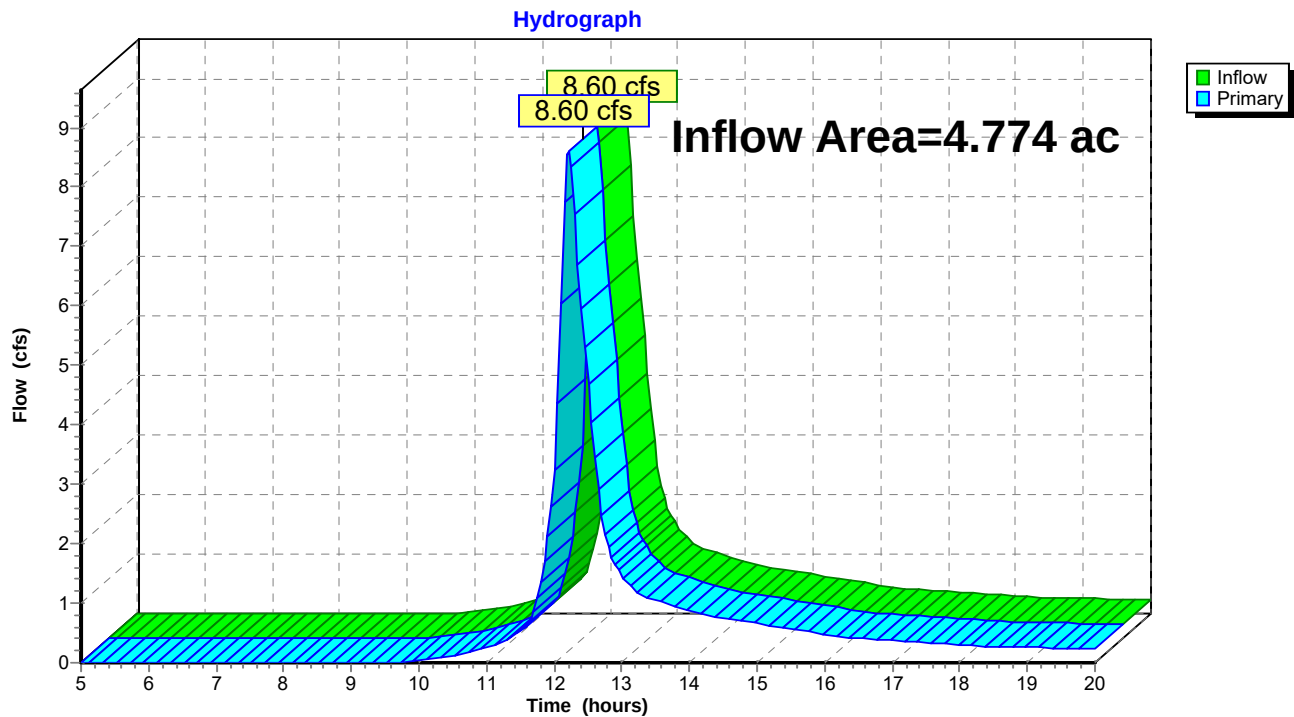


### Summary for Link DP2: DP 2

Inflow Area = 4.774 ac, 0.00% Impervious, Inflow Depth > 1.90" for 10-Year event  
 Inflow = 8.60 cfs @ 12.21 hrs, Volume= 0.756 af  
 Primary = 8.60 cfs @ 12.21 hrs, Volume= 0.756 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

### Link DP2: DP 2



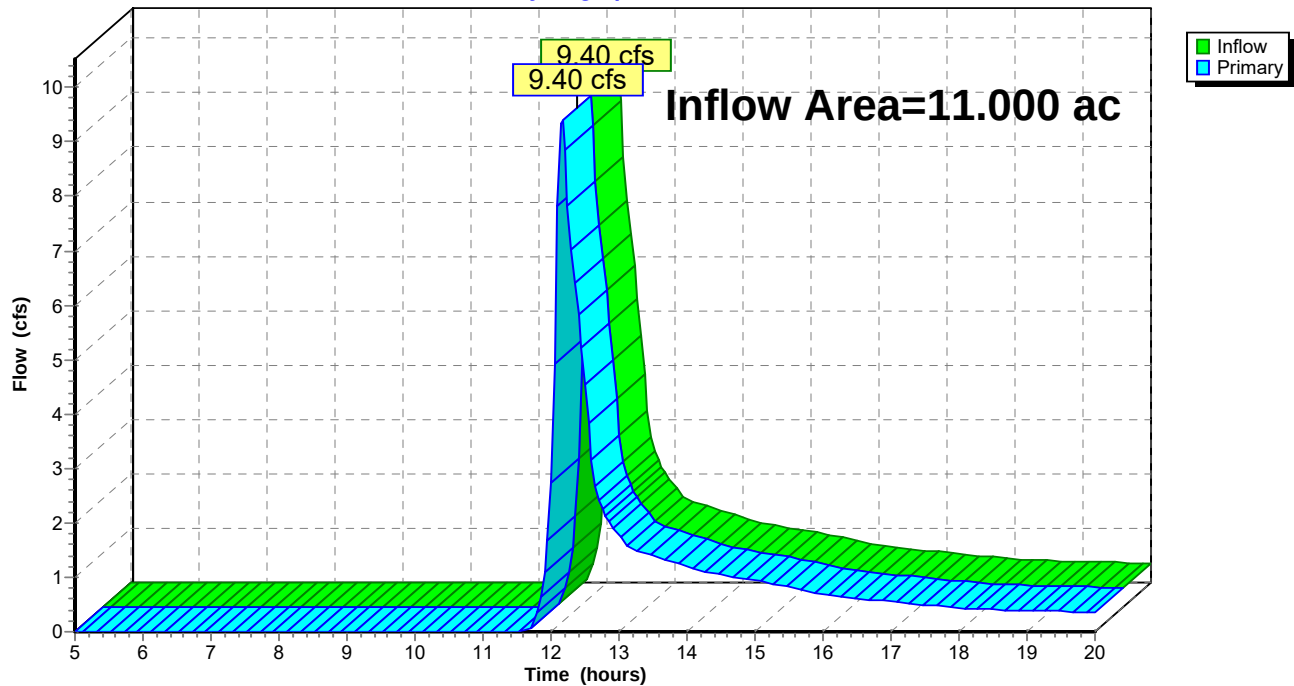
### Summary for Link DP3B: DP 3B

Inflow Area = 11.000 ac, 0.00% Impervious, Inflow Depth > 0.91" for 10-Year event  
 Inflow = 9.40 cfs @ 12.16 hrs, Volume= 0.830 af  
 Primary = 9.40 cfs @ 12.16 hrs, Volume= 0.830 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

### Link DP3B: DP 3B

#### Hydrograph



**RH Exist 8-11-25***Type III 24-hr 100-Year Rainfall=8.94"*

Prepared by Millennium Engineering, Inc

Printed 8/12/2025

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Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

**Subcatchment E1: E1**

Runoff Area=524,797 sf 0.00% Impervious Runoff Depth>2.36"  
Flow Length=238' Tc=11.3 min CN=48 Runoff=28.17 cfs 2.369 af

**Subcatchment E2: E2**

Runoff Area=207,938 sf 0.00% Impervious Runoff Depth>5.16"  
Flow Length=504' Tc=14.9 min CN=72 Runoff=23.34 cfs 2.054 af

**Subcatchment E3A: E3A**

Runoff Area=489,064 sf 0.94% Impervious Runoff Depth>0.89"  
Flow Length=394' Slope=0.0200 '/' Tc=20.6 min CN=34 Runoff=5.40 cfs 0.837 af

**Subcatchment E3B: E3B**

Runoff Area=479,181 sf 0.00% Impervious Runoff Depth>3.39"  
Flow Length=350' Tc=9.7 min CN=57 Runoff=40.67 cfs 3.110 af

**Link DP#A: DP 3A**

Inflow=5.40 cfs 0.837 af  
Primary=5.40 cfs 0.837 af

**Link DP1: DP 1**

Inflow=28.17 cfs 2.369 af  
Primary=28.17 cfs 2.369 af

**Link DP2: DP 2**

Inflow=23.34 cfs 2.054 af  
Primary=23.34 cfs 2.054 af

**Link DP3B: DP 3B**

Inflow=40.67 cfs 3.110 af  
Primary=40.67 cfs 3.110 af

**Total Runoff Area = 39.049 ac Runoff Volume = 8.370 af Average Runoff Depth = 2.57"**  
**99.73% Pervious = 38.944 ac 0.27% Impervious = 0.106 ac**



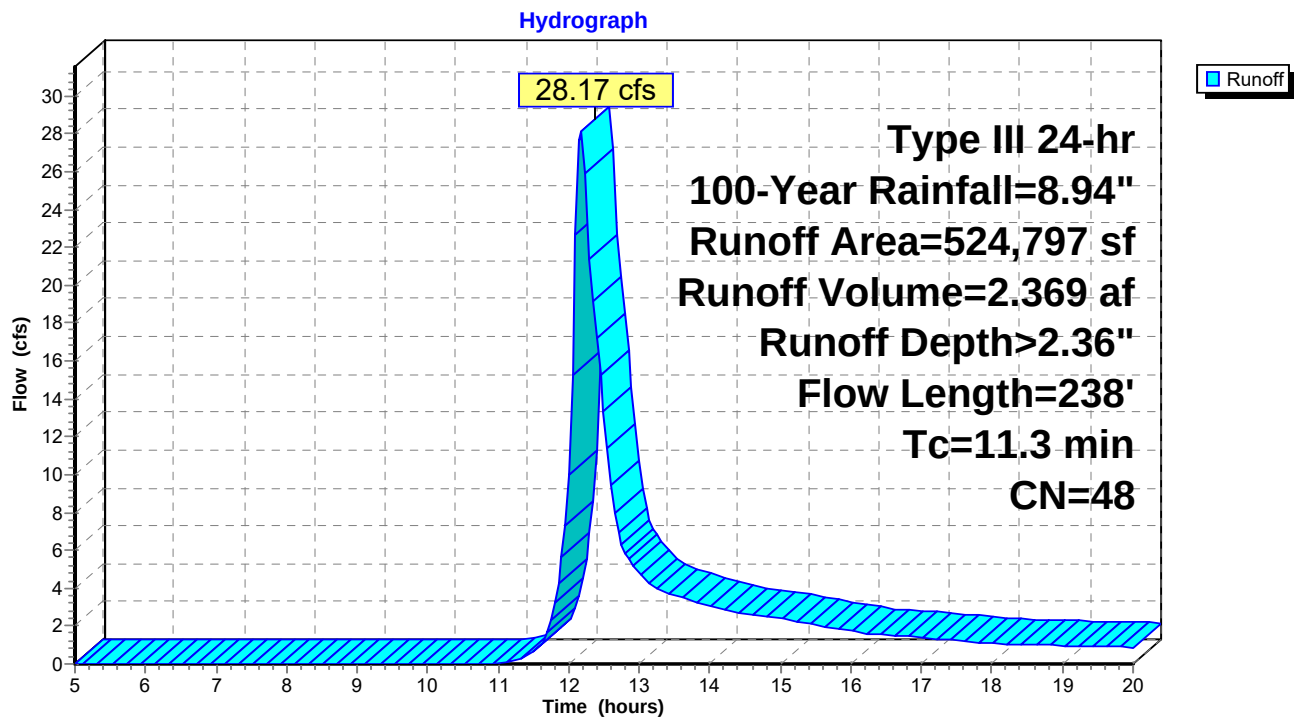
**Summary for Subcatchment E1: E1**

Runoff = 28.17 cfs @ 12.17 hrs, Volume= 2.369 af, Depth> 2.36"  
 Routed to Link DP1 : DP 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 139,246   | 74 | >75% Grass cover, Good, HSG C |
| 52,270    | 70 | Woods, Good, HSG C            |
| 125,150   | 39 | >75% Grass cover, Good, HSG A |
| 208,131   | 30 | Woods, Good, HSG A            |
| 524,797   | 48 | Weighted Average              |
| 524,797   |    | 100.00% Pervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                      |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------|
| 8.7      | 50            | 0.0500        | 0.10              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10" |
| 2.6      | 188           | 0.0600        | 1.22              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps        |
| 11.3     | 238           | Total         |                   |                |                                                                  |

**Subcatchment E1: E1**

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Type III 24-hr 100-Year Rainfall=8.94"

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**Summary for Subcatchment E2: E2**

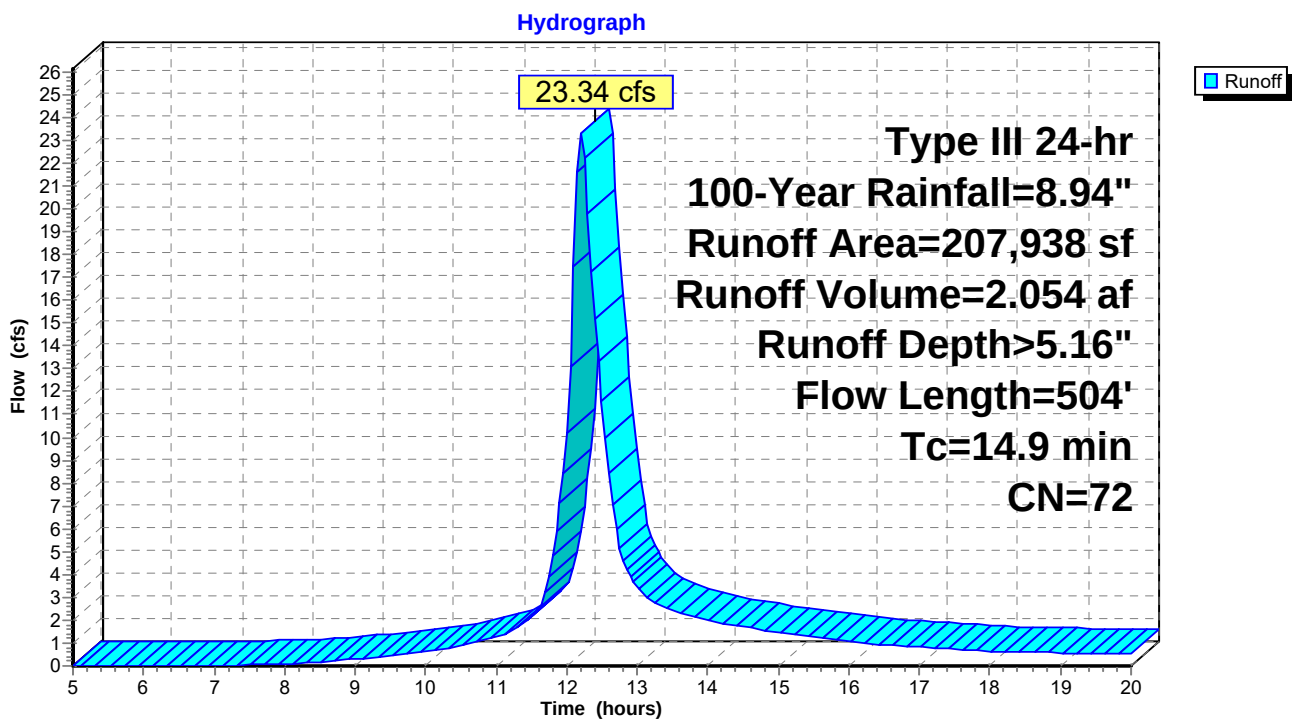
Runoff = 23.34 cfs @ 12.21 hrs, Volume= 2.054 af, Depth> 5.16"  
Routed to Link DP2 : DP 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 113,380   | 74 | >75% Grass cover, Good, HSG C |
| 94,558    | 70 | Woods, Good, HSG C            |
| 207,938   | 72 | Weighted Average              |
| 207,938   |    | 100.00% Pervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                          |
|----------|---------------|---------------|-------------------|----------------|----------------------------------------------------------------------|
| 5.7      | 50            | 0.0200        | 0.15              |                | <b>Sheet Flow,</b><br>Grass: Short n= 0.150 P2= 3.10"                |
| 2.0      | 147           | 0.0300        | 1.21              |                | <b>Shallow Concentrated Flow,</b><br>Short Grass Pasture Kv= 7.0 fps |
| 7.2      | 307           | 0.0200        | 0.71              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps            |
| 14.9     | 504           | Total         |                   |                |                                                                      |

**Subcatchment E2: E2**

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Type III 24-hr 100-Year Rainfall=8.94"

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**Summary for Subcatchment E3A: E3A**

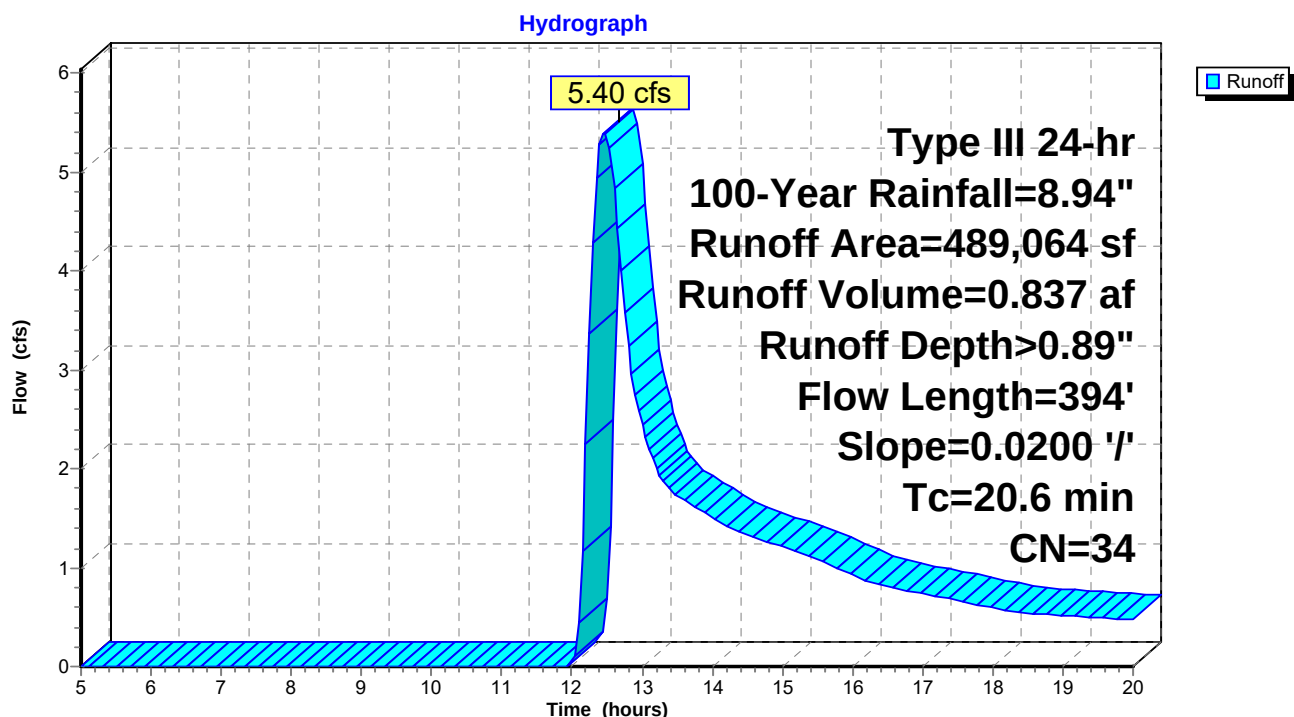
Runoff = 5.40 cfs @ 12.46 hrs, Volume= 0.837 af, Depth> 0.89"  
Routed to Link DP#A : DP 3A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 309,786   | 30 | Woods, Good, HSG A            |
| 4,538     | 96 | Gravel surface, HSG A         |
| 4,447     | 98 | Unconnected roofs, HSG A      |
| 149       | 98 | Paved parking, HSG A          |
| 170,144   | 39 | >75% Grass cover, Good, HSG A |
| 489,064   | 34 | Weighted Average              |
| 484,468   |    | 99.06% Pervious Area          |
| 4,596     |    | 0.94% Impervious Area         |
| 4,447     |    | 96.76% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                      |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------|
| 12.5     | 50            | 0.0200        | 0.07              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10" |
| 8.1      | 344           | 0.0200        | 0.71              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps        |
| 20.6     | 394           | Total         |                   |                |                                                                  |

**Subcatchment E3A: E3A**

**Summary for Subcatchment E3B: E3B**

Runoff = 40.67 cfs @ 12.15 hrs, Volume= 3.110 af, Depth> 3.39"  
 Routed to Link DP3B : DP 3B

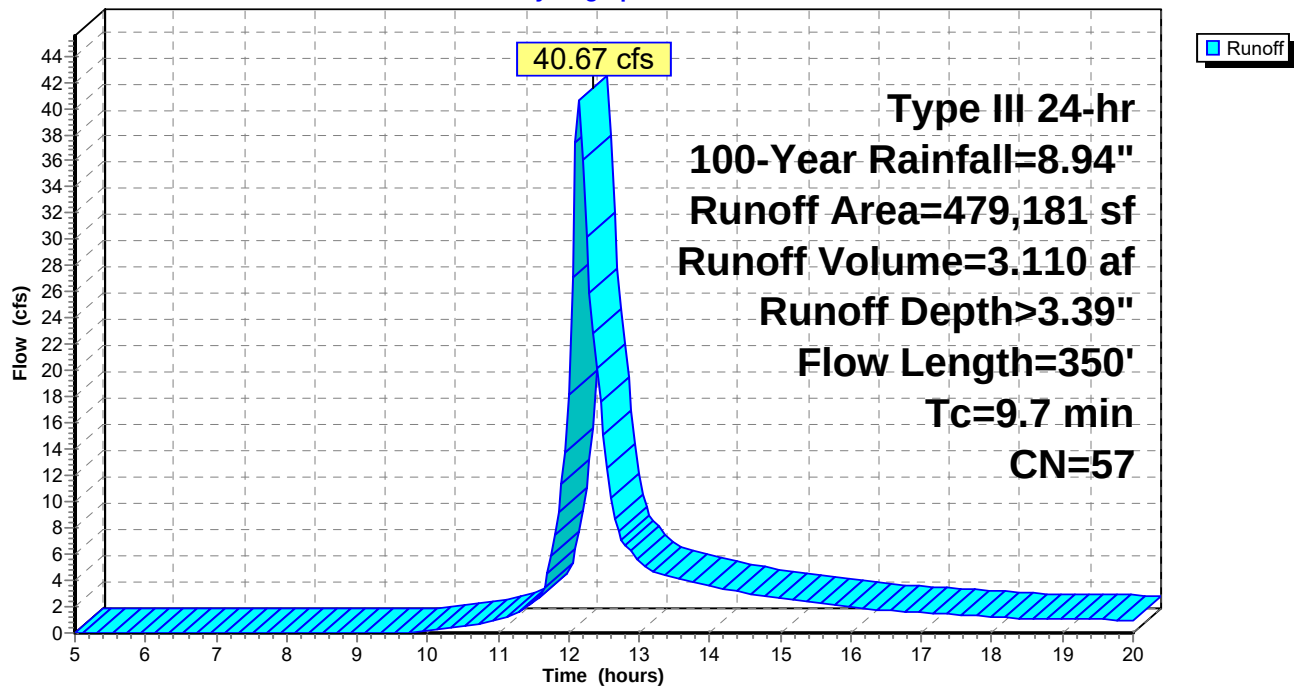
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                    |
|-----------|----|--------------------------------|
| 194,048   | 74 | >75% Grass cover, Good, HSG C  |
| 98,953    | 72 | Woods/grass comb., Good, HSG C |
| 157,270   | 30 | Woods, Good, HSG A             |
| 28,910    | 39 | >75% Grass cover, Good, HSG A  |
| 479,181   | 57 | Weighted Average               |
| 479,181   |    | 100.00% Pervious Area          |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                        |
|----------|---------------|---------------|-------------------|----------------|----------------------------------------------------|
| 3.9      | 50            | 0.0400        | 0.22              |                | Sheet Flow,<br>Range n= 0.130 P2= 3.10"            |
| 5.8      | 300           | 0.0300        | 0.87              |                | Shallow Concentrated Flow,<br>Woodland Kv= 5.0 fps |
| 9.7      | 350           | Total         |                   |                |                                                    |

**Subcatchment E3B: E3B**

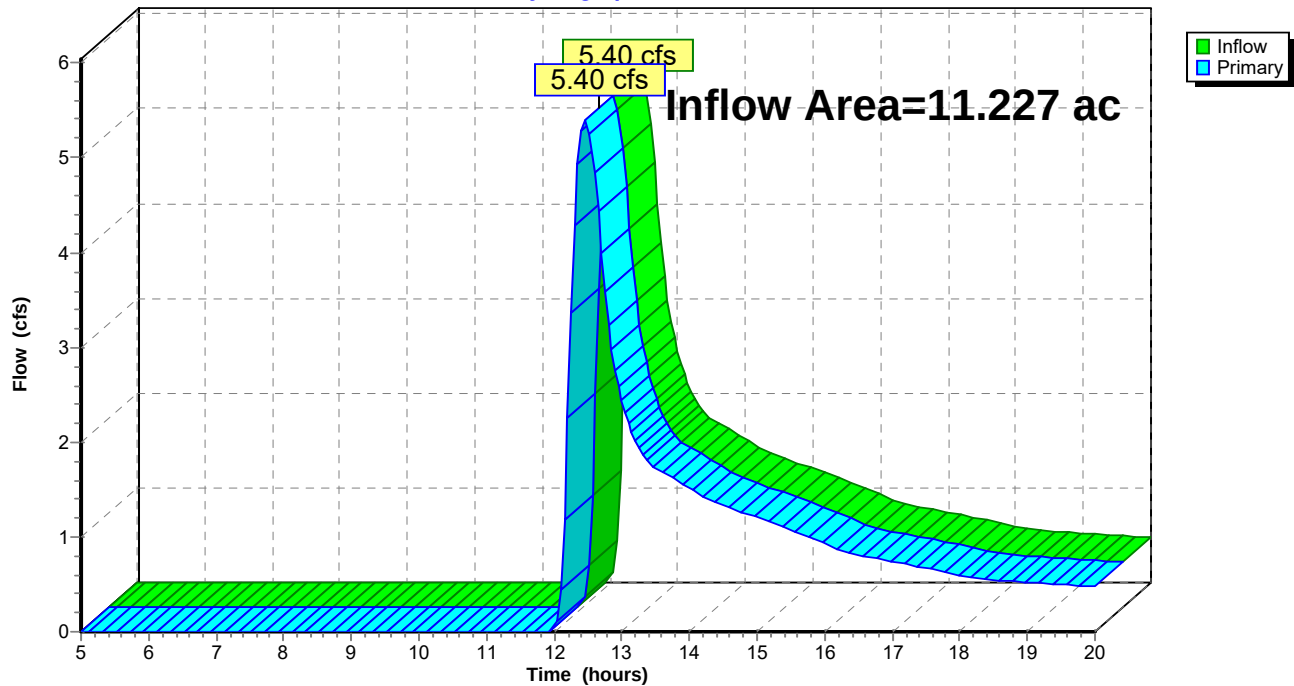
Hydrograph



**Summary for Link DP#A: DP 3A**

Inflow Area = 11.227 ac, 0.94% Impervious, Inflow Depth > 0.89" for 100-Year event  
Inflow = 5.40 cfs @ 12.46 hrs, Volume= 0.837 af  
Primary = 5.40 cfs @ 12.46 hrs, Volume= 0.837 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

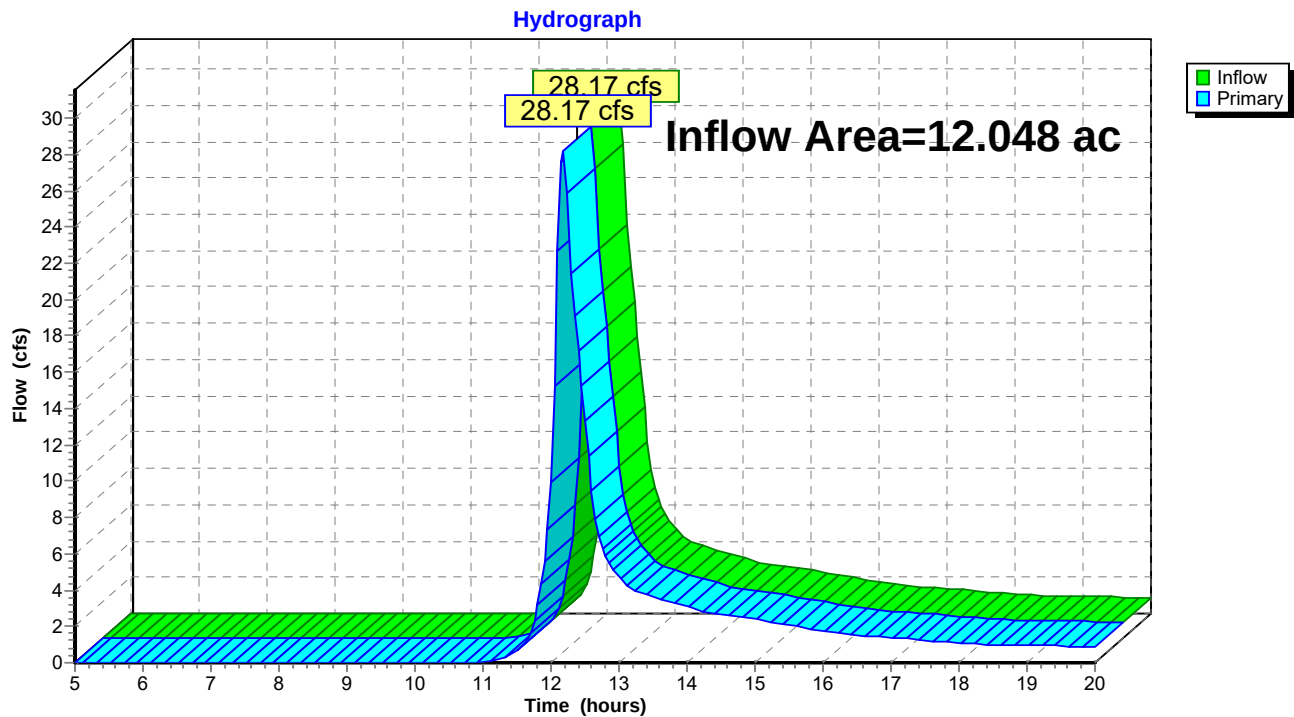
**Link DP#A: DP 3A****Hydrograph**

### Summary for Link DP1: DP 1

Inflow Area = 12.048 ac, 0.00% Impervious, Inflow Depth > 2.36" for 100-Year event  
 Inflow = 28.17 cfs @ 12.17 hrs, Volume= 2.369 af  
 Primary = 28.17 cfs @ 12.17 hrs, Volume= 2.369 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

### Link DP1: DP 1

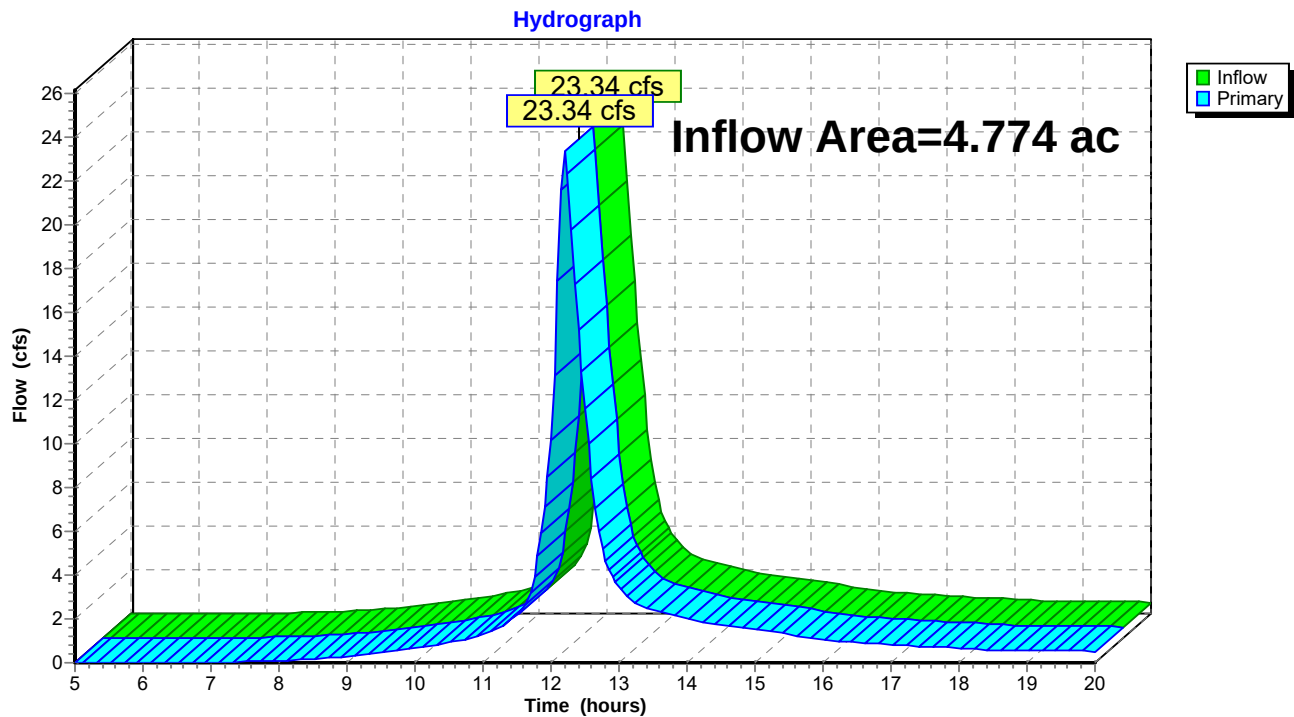


## Summary for Link DP2: DP 2

Inflow Area = 4.774 ac, 0.00% Impervious, Inflow Depth > 5.16" for 100-Year event  
 Inflow = 23.34 cfs @ 12.21 hrs, Volume= 2.054 af  
 Primary = 23.34 cfs @ 12.21 hrs, Volume= 2.054 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

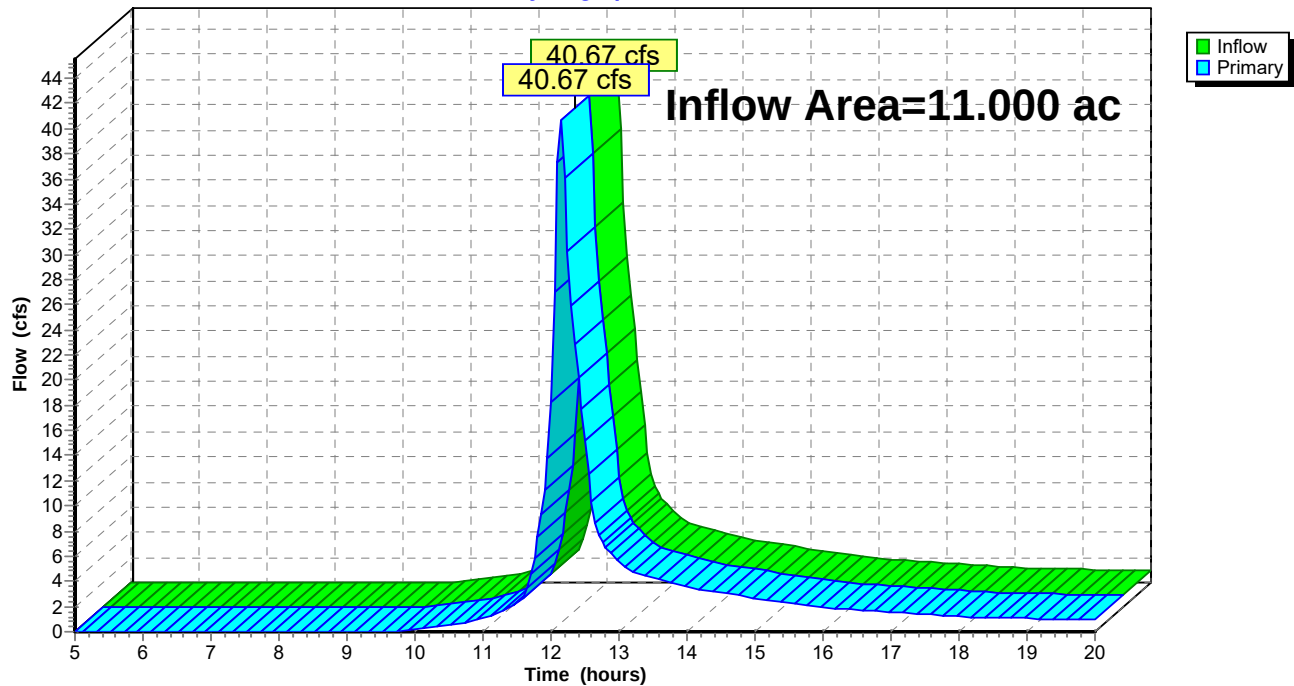
### Link DP2: DP 2



**Summary for Link DP3B: DP 3B**

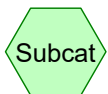
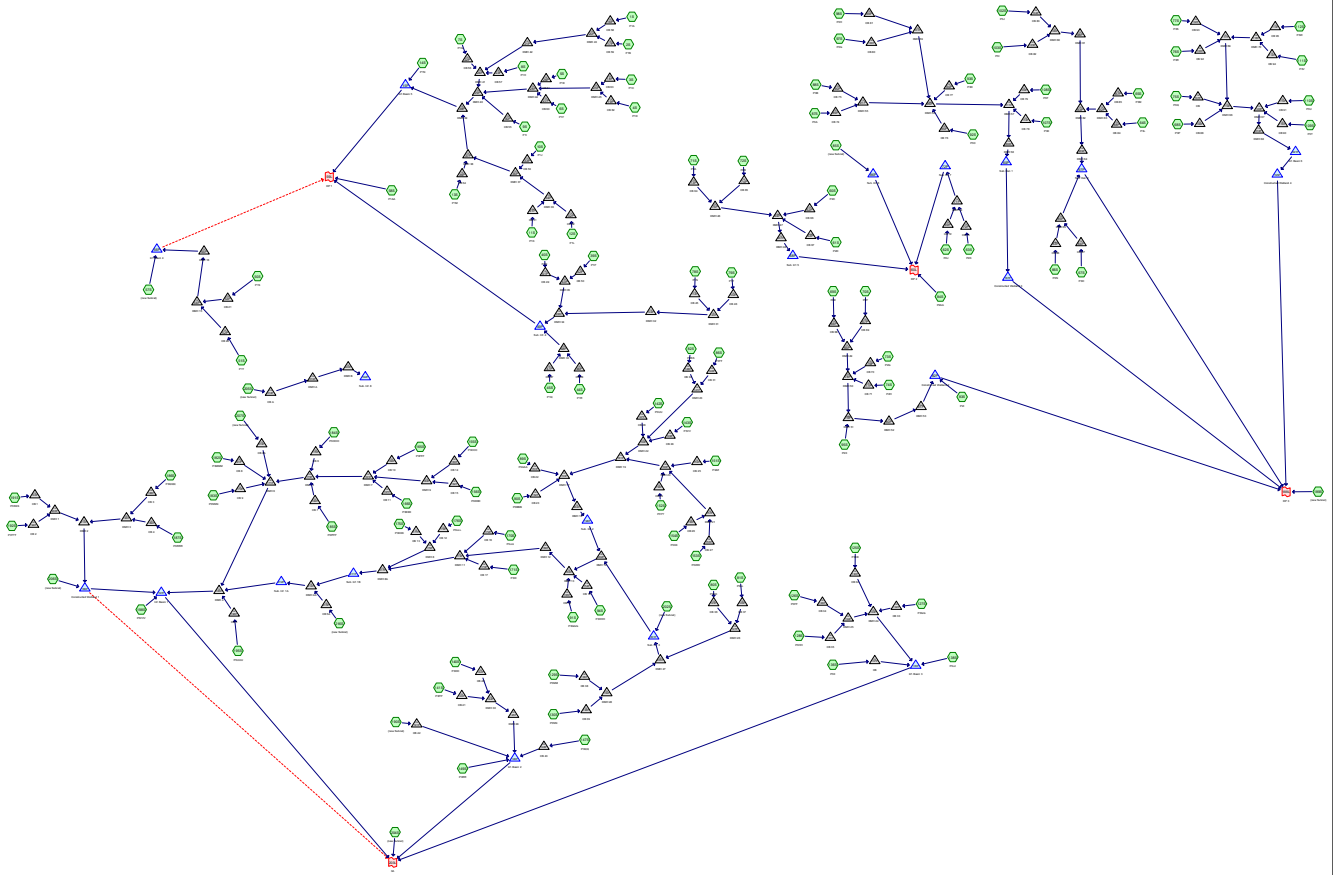
Inflow Area = 11.000 ac, 0.00% Impervious, Inflow Depth > 3.39" for 100-Year event  
Inflow = 40.67 cfs @ 12.15 hrs, Volume= 3.110 af  
Primary = 40.67 cfs @ 12.15 hrs, Volume= 3.110 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Link DP3B: DP 3B****Hydrograph**



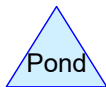
**b. Proposed Conditions HydroCAD Report**



Subcat



Reach



Pond



Link

### Routing Diagram for RH Post 1-2-26

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**Area Listing (all nodes)**

| Area<br>(acres) | CN        | Description<br>(subcatchment-numbers)                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9.854           | 39        | >75% Grass cover, Good, HSG A (44S, 45S, 50S, 51S, 57S, 58S, 73S, 74S, 78S, 79S, 80S, 81S, 82S, 83S, 84S, 86S, 89S, 90S, 91S, 94S, 125S, 126S, 127S, 128S, 129S, 130S, 136S, 138S, 140S, 141S, 142S, 143S, 147S, 149S, 151S, 152S, 153S, 154S, 155S, 156S, 165S, 166S, 170S, 171S, 175S, 176S, 182S, 183S, 184S, 185S, 186S, 187S, 189S, 190S, 191S, 192S, 195S, 198S, 202S, 204S, 205S, 206S, 207S, 216S) |
| 5.952           | 74        | >75% Grass cover, Good, HSG C (1S, 2S, 3S, 4S, 5S, 6S, 8S, 9S, 11S, 12S, 13S, 14S, 39S, 44S, 45S, 58S, 60S, 61S, 62S, 63S, 64S, 65S, 66S, 67S, 68S, 69S, 71S, 72S, 73S, 75S, 76S, 77S, 78S, 79S, 83S, 84S, 85S, 86S, 87S, 88S, 92S, 93S, 97S, 98S, 102S, 103S, 107S, 108S, 109S, 110S, 111S, 112S, 189S)                                                                                                   |
| 5.215           | 98        | Paved parking, HSG A (44S, 45S, 50S, 51S, 73S, 74S, 78S, 79S, 80S, 81S, 82S, 83S, 86S, 89S, 90S, 91S, 94S, 125S, 126S, 127S, 128S, 129S, 130S, 136S, 140S, 141S, 142S, 143S, 147S, 151S, 152S, 153S, 154S, 155S, 156S, 165S, 166S, 170S, 171S, 175S, 176S, 182S, 183S, 184S, 185S, 186S, 187S, 190S, 191S, 192S, 195S, 205S, 207S, 216S)                                                                   |
| 5.270           | 98        | Paved parking, HSG C (1S, 2S, 3S, 4S, 5S, 6S, 7S, 8S, 9S, 10S, 11S, 12S, 13S, 39S, 40S, 44S, 45S, 60S, 61S, 62S, 63S, 64S, 65S, 66S, 67S, 68S, 69S, 70S, 71S, 72S, 73S, 75S, 76S, 77S, 78S, 79S, 83S, 87S, 88S, 92S, 93S, 95S, 97S, 98S, 102S, 103S, 107S, 108S, 109S, 110S, 111S, 112S)                                                                                                                   |
| 0.280           | 39        | Pervious Pavement (58S)                                                                                                                                                                                                                                                                                                                                                                                    |
| 0.127           | 98        | Roofs, HSG C (85S)                                                                                                                                                                                                                                                                                                                                                                                         |
| 0.159           | 98        | Unconnected pavement, HSG A (58S, 84S, 189S, 202S, 204S)                                                                                                                                                                                                                                                                                                                                                   |
| 0.165           | 98        | Unconnected pavement, HSG C (44S, 84S, 85S, 189S)                                                                                                                                                                                                                                                                                                                                                          |
| 3.407           | 98        | Unconnected roofs, HSG A (44S, 45S, 50S, 57S, 58S, 73S, 74S, 80S, 81S, 82S, 83S, 84S, 86S, 90S, 91S, 94S, 125S, 126S, 128S, 129S, 130S, 136S, 138S, 140S, 141S, 147S, 149S, 153S, 154S, 155S, 156S, 166S, 170S, 171S, 175S, 176S, 182S, 183S, 184S, 185S, 187S, 189S, 190S, 195S, 202S, 204S, 205S, 207S, 216S)                                                                                            |
| 2.385           | 98        | Unconnected roofs, HSG C (1S, 2S, 3S, 5S, 6S, 8S, 11S, 12S, 13S, 14S, 39S, 45S, 58S, 60S, 62S, 63S, 65S, 66S, 67S, 69S, 71S, 73S, 75S, 76S, 77S, 78S, 79S, 84S, 86S, 88S, 92S, 93S, 97S, 98S, 102S, 103S, 107S, 108S, 110S, 111S, 127S, 189S)                                                                                                                                                              |
| 5.071           | 30        | Woods, Good, HSG A (57S, 58S, 186S, 189S, 191S, 204S, 207S)                                                                                                                                                                                                                                                                                                                                                |
| 1.957           | 70        | Woods, Good, HSG C (58S, 84S, 189S)                                                                                                                                                                                                                                                                                                                                                                        |
| <b>39.842</b>   | <b>69</b> | <b>TOTAL AREA</b>                                                                                                                                                                                                                                                                                                                                                                                          |

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**Ground Covers (all nodes)**

| HSG-A<br>(acres) | HSG-B<br>(acres) | HSG-C<br>(acres) | HSG-D<br>(acres) | Other<br>(acres) | Total<br>(acres) | Ground<br>Cover        | Subcatchment<br>Numbers                                                                                                                                                                                                                                                                                                                                                                  |
|------------------|------------------|------------------|------------------|------------------|------------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 9.854            | 0.000            | 5.952            | 0.000            | 0.000            | 15.806           | >75% Grass cover, Good | 1S, 2S,<br>3S, 4S,<br>5S, 6S,<br>8S, 9S,<br>11S,<br>12S,<br>13S,<br>14S,<br>39S,<br>44S,<br>45S,<br>50S,<br>51S,<br>57S,<br>58S,<br>60S,<br>61S,<br>62S,<br>63S,<br>64S,<br>65S,<br>66S,<br>67S,<br>68S,<br>69S,<br>71S,<br>72S,<br>73S,<br>74S,<br>75S,<br>76S,<br>77S,<br>78S,<br>79S,<br>80S,<br>81S,<br>82S,<br>83S,<br>84S,<br>85S,<br>86S,<br>87S,<br>88S,<br>89S,<br>90S,<br>91S, |

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**Ground Covers (all nodes) (continued)**

| HSG-A<br>(acres) | HSG-B<br>(acres) | HSG-C<br>(acres) | HSG-D<br>(acres) | Other<br>(acres) | Total<br>(acres) | Ground<br>Cover | Subcatchment<br>Numbers                                                                                                                                                                                                                                                                                                                                                                      |
|------------------|------------------|------------------|------------------|------------------|------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5.215            | 0.000            | 5.270            | 0.000            | 0.000            | 10.485           | Paved parking   | 1S, 2S,<br>3S, 4S,<br>5S, 6S,<br>7S, 8S,<br>9S, 10S,<br>11S,<br>12S,<br>13S,<br>39S,<br>40S,<br>44S,<br>45S,<br>50S,<br>51S,<br>60S,<br>61S,<br>62S,<br>63S,<br>64S,<br>65S,<br>66S,<br>67S,<br>68S,<br>69S,<br>70S,<br>71S,<br>72S,<br>73S,<br>74S,<br>75S,<br>76S,<br>77S,<br>78S,<br>79S,<br>80S,<br>81S,<br>82S,<br>83S,<br>86S,<br>87S,<br>88S,<br>89S,<br>90S,<br>91S,<br>92S,<br>93S, |

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**Ground Covers (all nodes) (continued)**

| HSG-A<br>(acres) | HSG-B<br>(acres) | HSG-C<br>(acres) | HSG-D<br>(acres) | Other<br>(acres) | Total<br>(acres) | Ground<br>Cover      | Subcatchment<br>Numbers                                                                                                                                                                                                                                                                                       |
|------------------|------------------|------------------|------------------|------------------|------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0.000            | 0.000            | 0.000            | 0.000            | 0.280            | 0.280            | Pervious Pavement    | 58S                                                                                                                                                                                                                                                                                                           |
| 0.000            | 0.000            | 0.127            | 0.000            | 0.000            | 0.127            | Roofs                | 85S                                                                                                                                                                                                                                                                                                           |
| 0.159            | 0.000            | 0.165            | 0.000            | 0.000            | 0.324            | Unconnected pavement | 44S,<br>58S,<br>84S,<br>85S,<br>189S,<br>202S,<br>204S                                                                                                                                                                                                                                                        |
| 3.407            | 0.000            | 2.385            | 0.000            | 0.000            | 5.792            | Unconnected roofs    | 1S, 2S,<br>3S, 5S,<br>6S, 8S,<br>11S,<br>12S,<br>13S,<br>14S,<br>39S,<br>44S,<br>45S,<br>50S,<br>57S,<br>58S,<br>60S,<br>62S,<br>63S,<br>65S,<br>66S,<br>67S,<br>69S,<br>71S,<br>73S,<br>74S,<br>75S,<br>76S,<br>77S,<br>78S,<br>79S,<br>80S,<br>81S,<br>82S,<br>83S,<br>84S,<br>86S,<br>88S,<br>90S,<br>91S, |

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**Ground Covers (all nodes) (continued)**

| HSG-A<br>(acres) | HSG-B<br>(acres) | HSG-C<br>(acres) | HSG-D<br>(acres) | Other<br>(acres) | Total<br>(acres) | Ground<br>Cover   | Subcatchment<br>Numbers                                          |
|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|------------------------------------------------------------------|
| 5.071            | 0.000            | 1.957            | 0.000            | 0.000            | 7.028            | Woods, Good       | 57S,<br>58S,<br>84S,<br>186S,<br>189S,<br>191S,<br>204S,<br>207S |
| <b>23.706</b>    | <b>0.000</b>     | <b>15.857</b>    | <b>0.000</b>     | <b>0.280</b>     | <b>39.842</b>    | <b>TOTAL AREA</b> |                                                                  |

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

|                             |                                                                                                                    |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Subcatchment1S: P1A</b>  | Runoff Area=7,501 sf 96.61% Impervious Runoff Depth>2.64"<br>Tc=6.0 min CN=97 Runoff=0.51 cfs 0.038 af             |
| <b>Subcatchment2S: P1B</b>  | Runoff Area=16,584 sf 74.19% Impervious Runoff Depth>2.17"<br>Tc=6.0 min CN=92 Runoff=0.98 cfs 0.069 af            |
| <b>Subcatchment3S: P1C</b>  | Runoff Area=6,087 sf 64.30% Impervious Runoff Depth>1.91"<br>Tc=6.0 min CN=89 Runoff=0.32 cfs 0.022 af             |
| <b>Subcatchment4S: P1D</b>  | Runoff Area=2,767 sf 81.50% Impervious Runoff Depth>2.36"<br>Tc=6.0 min CN=94 Runoff=0.17 cfs 0.012 af             |
| <b>Subcatchment5S: P1E</b>  | Runoff Area=11,538 sf 66.20% Impervious Runoff Depth>1.99"<br>Tc=6.0 min CN=90 Runoff=0.64 cfs 0.044 af            |
| <b>Subcatchment6S: P1F</b>  | Runoff Area=4,817 sf 71.39% Impervious Runoff Depth>2.08"<br>Tc=6.0 min CN=91 Runoff=0.28 cfs 0.019 af             |
| <b>Subcatchment7S: P1G</b>  | Runoff Area=5,511 sf 100.00% Impervious Runoff Depth>2.73"<br>Tc=6.0 min CN=98 Runoff=0.38 cfs 0.029 af            |
| <b>Subcatchment8S: P1H</b>  | Runoff Area=13,713 sf 81.38% Impervious Runoff Depth>2.36"<br>Tc=6.0 min CN=94 Runoff=0.86 cfs 0.062 af            |
| <b>Subcatchment9S: P1I</b>  | Runoff Area=3,616 sf 78.43% Impervious Runoff Depth>2.26"<br>Tc=6.0 min CN=93 Runoff=0.22 cfs 0.016 af             |
| <b>Subcatchment10S: P1J</b> | Runoff Area=1,937 sf 100.00% Impervious Runoff Depth>2.73"<br>Tc=6.0 min CN=98 Runoff=0.13 cfs 0.010 af            |
| <b>Subcatchment11S: P1K</b> | Runoff Area=1,936 sf 96.85% Impervious Runoff Depth>2.64"<br>Tc=6.0 min CN=97 Runoff=0.13 cfs 0.010 af             |
| <b>Subcatchment12S: P1L</b> | Runoff Area=9,821 sf 78.85% Impervious Runoff Depth>2.26"<br>Tc=6.0 min CN=93 Runoff=0.60 cfs 0.043 af             |
| <b>Subcatchment13S: P1M</b> | Runoff Area=8,699 sf 94.53% Impervious Runoff Depth>2.64"<br>Tc=6.0 min CN=97 Runoff=0.59 cfs 0.044 af             |
| <b>Subcatchment14S: P1N</b> | Runoff Area=14,865 sf 3.94% Impervious Runoff Depth>0.92"<br>Tc=6.0 min UI Adjusted CN=74 Runoff=0.37 cfs 0.026 af |
| <b>Subcatchment39S: P1P</b> | Runoff Area=7,939 sf 66.96% Impervious Runoff Depth>1.99"<br>Tc=6.0 min CN=90 Runoff=0.44 cfs 0.030 af             |
| <b>Subcatchment40S: P1O</b> | Runoff Area=978 sf 100.00% Impervious Runoff Depth>2.73"<br>Tc=6.0 min CN=98 Runoff=0.07 cfs 0.005 af              |



**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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*Type III 24-hr 2-Year Rainfall=3.15"*

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| <b>Subcatchment44S: P1R</b>          | Runoff Area=15,334 sf 70.58% Impervious Runoff Depth>1.46"<br>Tc=6.0 min CN=83 Runoff=0.63 cfs 0.043 af                               |
| <b>Subcatchment45S: P1Q</b>          | Runoff Area=5,247 sf 97.54% Impervious Runoff Depth>2.64"<br>Tc=6.0 min CN=97 Runoff=0.35 cfs 0.027 af                                |
| <b>Subcatchment50S: P1S</b>          | Runoff Area=22,872 sf 65.45% Impervious Runoff Depth>1.14"<br>Tc=6.0 min CN=78 Runoff=0.73 cfs 0.050 af                               |
| <b>Subcatchment51S: P1T</b>          | Runoff Area=13,963 sf 29.26% Impervious Runoff Depth>0.22"<br>Tc=6.0 min CN=56 Runoff=0.04 cfs 0.006 af                               |
| <b>Subcatchment57S: (new Subcat)</b> | Runoff Area=23,511 sf 5.60% Impervious Runoff Depth=0.00"<br>Flow Length=87' Tc=13.0 min UI Adjusted CN=39 Runoff=0.00 cfs 0.000 af   |
| <b>Subcatchment58S: P1AA</b>         | Runoff Area=217,595 sf 2.56% Impervious Runoff Depth>0.02"<br>Flow Length=111' Tc=11.7 min UI Adjusted CN=45 Runoff=0.02 cfs 0.010 af |
| <b>Subcatchment60S: P2C</b>          | Runoff Area=6,486 sf 73.97% Impervious Runoff Depth>2.17"<br>Tc=6.0 min CN=92 Runoff=0.38 cfs 0.027 af                                |
| <b>Subcatchment61S: P2D</b>          | Runoff Area=1,464 sf 87.02% Impervious Runoff Depth>2.45"<br>Tc=6.0 min CN=95 Runoff=0.09 cfs 0.007 af                                |
| <b>Subcatchment62S: P2J</b>          | Runoff Area=10,675 sf 72.86% Impervious Runoff Depth>2.08"<br>Tc=6.0 min CN=91 Runoff=0.61 cfs 0.043 af                               |
| <b>Subcatchment63S: P2K</b>          | Runoff Area=6,698 sf 76.98% Impervious Runoff Depth>2.17"<br>Tc=6.0 min CN=92 Runoff=0.40 cfs 0.028 af                                |
| <b>Subcatchment64S: P3L</b>          | Runoff Area=2,885 sf 66.55% Impervious Runoff Depth>1.99"<br>Tc=6.0 min CN=90 Runoff=0.16 cfs 0.011 af                                |
| <b>Subcatchment65S: P3M</b>          | Runoff Area=5,397 sf 69.69% Impervious Runoff Depth>2.08"<br>Tc=6.0 min CN=91 Runoff=0.31 cfs 0.021 af                                |
| <b>Subcatchment66S: P3N</b>          | Runoff Area=7,748 sf 72.79% Impervious Runoff Depth>2.08"<br>Tc=6.0 min CN=91 Runoff=0.44 cfs 0.031 af                                |
| <b>Subcatchment67S: P3O</b>          | Runoff Area=8,254 sf 78.29% Impervious Runoff Depth>2.26"<br>Tc=6.0 min CN=93 Runoff=0.50 cfs 0.036 af                                |
| <b>Subcatchment68S: P3P</b>          | Runoff Area=4,070 sf 80.29% Impervious Runoff Depth>2.26"<br>Tc=6.0 min CN=93 Runoff=0.25 cfs 0.018 af                                |
| <b>Subcatchment69S: P2E</b>          | Runoff Area=7,088 sf 82.69% Impervious Runoff Depth>2.36"<br>Tc=6.0 min CN=94 Runoff=0.45 cfs 0.032 af                                |
| <b>Subcatchment70S: P2F</b>          | Runoff Area=3,932 sf 100.00% Impervious Runoff Depth>2.73"<br>Tc=6.0 min CN=98 Runoff=0.27 cfs 0.021 af                               |
| <b>Subcatchment71S: P2A</b>          | Runoff Area=10,978 sf 65.83% Impervious Runoff Depth>1.99"<br>Tc=6.0 min CN=90 Runoff=0.61 cfs 0.042 af                               |

|                                      |                                                                                                                                     |
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| <b>Subcatchment72S: P2B</b>          | Runoff Area=7,563 sf 65.05% Impervious Runoff Depth>1.99"<br>Tc=6.0 min CN=90 Runoff=0.42 cfs 0.029 af                              |
| <b>Subcatchment73S: P2G</b>          | Runoff Area=8,223 sf 71.07% Impervious Runoff Depth>2.08"<br>Tc=6.0 min CN=91 Runoff=0.47 cfs 0.033 af                              |
| <b>Subcatchment74S: P2H</b>          | Runoff Area=4,268 sf 95.31% Impervious Runoff Depth>2.45"<br>Tc=6.0 min CN=95 Runoff=0.28 cfs 0.020 af                              |
| <b>Subcatchment75S: P3Q</b>          | Runoff Area=10,219 sf 64.37% Impervious Runoff Depth>1.91"<br>Tc=6.0 min CN=89 Runoff=0.54 cfs 0.037 af                             |
| <b>Subcatchment76S: P3R</b>          | Runoff Area=13,649 sf 76.83% Impervious Runoff Depth>2.17"<br>Tc=6.0 min CN=92 Runoff=0.81 cfs 0.057 af                             |
| <b>Subcatchment77S: P3S</b>          | Runoff Area=7,757 sf 69.60% Impervious Runoff Depth>2.08"<br>Tc=6.0 min CN=91 Runoff=0.44 cfs 0.031 af                              |
| <b>Subcatchment78S: P1S</b>          | Runoff Area=12,630 sf 58.56% Impervious Runoff Depth>1.67"<br>Tc=6.0 min CN=86 Runoff=0.60 cfs 0.040 af                             |
| <b>Subcatchment79S: P1T</b>          | Runoff Area=11,982 sf 72.42% Impervious Runoff Depth>2.08"<br>Tc=6.0 min CN=91 Runoff=0.69 cfs 0.048 af                             |
| <b>Subcatchment80S: P3KK</b>         | Runoff Area=8,557 sf 76.76% Impervious Runoff Depth>1.53"<br>Tc=6.0 min CN=84 Runoff=0.37 cfs 0.025 af                              |
| <b>Subcatchment81S: P3LL</b>         | Runoff Area=9,785 sf 79.18% Impervious Runoff Depth>1.67"<br>Tc=6.0 min CN=86 Runoff=0.46 cfs 0.031 af                              |
| <b>Subcatchment82S: P3SS</b>         | Runoff Area=12,880 sf 67.55% Impervious Runoff Depth>1.20"<br>Tc=6.0 min CN=79 Runoff=0.44 cfs 0.029 af                             |
| <b>Subcatchment83S: P2I</b>          | Runoff Area=13,847 sf 51.48% Impervious Runoff Depth>1.20"<br>Tc=6.0 min CN=79 Runoff=0.47 cfs 0.032 af                             |
| <b>Subcatchment84S: P2AA</b>         | Runoff Area=71,125 sf 7.37% Impervious Runoff Depth>0.81"<br>Flow Length=201' Tc=8.4 min UI Adjusted CN=72 Runoff=1.42 cfs 0.111 af |
| <b>Subcatchment85S: (new Subcat)</b> | Runoff Area=25,650 sf 36.87% Impervious Runoff Depth>1.46"<br>Tc=6.0 min CN=83 Runoff=1.06 cfs 0.071 af                             |
| <b>Subcatchment86S: P3TT</b>         | Runoff Area=13,926 sf 63.97% Impervious Runoff Depth>1.14"<br>Tc=6.0 min CN=78 Runoff=0.45 cfs 0.030 af                             |
| <b>Subcatchment87S: P3A</b>          | Runoff Area=2,273 sf 80.20% Impervious Runoff Depth>2.26"<br>Tc=6.0 min CN=93 Runoff=0.14 cfs 0.010 af                              |
| <b>Subcatchment88S: P3B</b>          | Runoff Area=4,538 sf 76.91% Impervious Runoff Depth>2.17"<br>Tc=6.0 min CN=92 Runoff=0.27 cfs 0.019 af                              |

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| <b>Subcatchment89S: P3AAA</b> | Runoff Area=6,945 sf 74.64% Impervious Runoff Depth>1.46"<br>Tc=6.0 min CN=83 Runoff=0.29 cfs 0.019 af  |
| <b>Subcatchment90S: P3BBB</b> | Runoff Area=9,141 sf 67.61% Impervious Runoff Depth>1.20"<br>Tc=6.0 min CN=79 Runoff=0.31 cfs 0.021 af  |
| <b>Subcatchment91S: P3GGG</b> | Runoff Area=9,122 sf 66.66% Impervious Runoff Depth>1.14"<br>Tc=6.0 min CN=78 Runoff=0.29 cfs 0.020 af  |
| <b>Subcatchment92S: P3C</b>   | Runoff Area=6,128 sf 70.69% Impervious Runoff Depth>2.08"<br>Tc=6.0 min CN=91 Runoff=0.35 cfs 0.024 af  |
| <b>Subcatchment93S: P3D</b>   | Runoff Area=8,893 sf 71.21% Impervious Runoff Depth>2.08"<br>Tc=6.0 min CN=91 Runoff=0.51 cfs 0.035 af  |
| <b>Subcatchment94S: P3HHH</b> | Runoff Area=9,026 sf 76.76% Impervious Runoff Depth>1.53"<br>Tc=6.0 min CN=84 Runoff=0.39 cfs 0.026 af  |
| <b>Subcatchment95S: P2X</b>   | Runoff Area=6,460 sf 100.00% Impervious Runoff Depth>2.73"<br>Tc=6.0 min CN=98 Runoff=0.44 cfs 0.034 af |
| <b>Subcatchment97S: P3G</b>   | Runoff Area=16,665 sf 73.17% Impervious Runoff Depth>2.17"<br>Tc=6.0 min CN=92 Runoff=0.99 cfs 0.069 af |
| <b>Subcatchment98S: P3H</b>   | Runoff Area=11,218 sf 68.08% Impervious Runoff Depth>1.99"<br>Tc=6.0 min CN=90 Runoff=0.62 cfs 0.043 af |
| <b>Subcatchment102S: P3J</b>  | Runoff Area=14,925 sf 64.21% Impervious Runoff Depth>1.91"<br>Tc=6.0 min CN=89 Runoff=0.80 cfs 0.055 af |
| <b>Subcatchment103S: P3I</b>  | Runoff Area=21,963 sf 74.80% Impervious Runoff Depth>2.17"<br>Tc=6.0 min CN=92 Runoff=1.30 cfs 0.091 af |
| <b>Subcatchment107S: P3E</b>  | Runoff Area=17,242 sf 64.26% Impervious Runoff Depth>1.91"<br>Tc=6.0 min CN=89 Runoff=0.92 cfs 0.063 af |
| <b>Subcatchment108S: P3F</b>  | Runoff Area=19,891 sf 64.44% Impervious Runoff Depth>1.91"<br>Tc=6.0 min CN=89 Runoff=1.06 cfs 0.073 af |
| <b>Subcatchment109S: P3T</b>  | Runoff Area=11,178 sf 83.40% Impervious Runoff Depth>2.36"<br>Tc=6.0 min CN=94 Runoff=0.70 cfs 0.050 af |
| <b>Subcatchment110S: P3U</b>  | Runoff Area=14,474 sf 76.35% Impervious Runoff Depth>2.17"<br>Tc=6.0 min CN=92 Runoff=0.86 cfs 0.060 af |
| <b>Subcatchment111S: P3V</b>  | Runoff Area=14,345 sf 82.49% Impervious Runoff Depth>2.36"<br>Tc=6.0 min CN=94 Runoff=0.90 cfs 0.065 af |
| <b>Subcatchment112S: P3W</b>  | Runoff Area=8,601 sf 91.64% Impervious Runoff Depth>2.55"<br>Tc=6.0 min CN=96 Runoff=0.57 cfs 0.042 af  |
| <b>Subcatchment125S: P3EE</b> | Runoff Area=23,054 sf 81.18% Impervious Runoff Depth>1.75"<br>Tc=6.0 min CN=87 Runoff=1.14 cfs 0.077 af |

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|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Subcatchment126S: P3FF</b>                                     | Runoff Area=17,312 sf 70.10% Impervious Runoff Depth>1.26"<br>Tc=6.0 min CN=80 Runoff=0.62 cfs 0.042 af            |
| <b>Subcatchment127S: P3GG</b>                                     | Runoff Area=16,395 sf 53.54% Impervious Runoff Depth>0.77"<br>Tc=6.0 min CN=71 Runoff=0.33 cfs 0.024 af            |
| <b>Subcatchment128S: P3HH</b>                                     | Runoff Area=15,226 sf 63.87% Impervious Runoff Depth>1.08"<br>Tc=6.0 min CN=77 Runoff=0.46 cfs 0.031 af            |
| <b>Subcatchment129S: P3MM</b>                                     | Runoff Area=7,841 sf 66.23% Impervious Runoff Depth>1.14"<br>Tc=6.0 min CN=78 Runoff=0.25 cfs 0.017 af             |
| <b>Subcatchment130S: P3NN</b>                                     | Runoff Area=6,295 sf 72.58% Impervious Runoff Depth>1.39"<br>Tc=6.0 min CN=82 Runoff=0.25 cfs 0.017 af             |
| <b>Subcatchment136S: P3II</b>                                     | Runoff Area=10,900 sf 80.29% Impervious Runoff Depth>1.67"<br>Tc=6.0 min CN=86 Runoff=0.52 cfs 0.035 af            |
| <b>Subcatchment138S: P3JJ</b><br>Flow Length=50' Slope=0.0100 '/' | Runoff Area=14,214 sf 6.96% Impervious Runoff Depth>0.00"<br>Tc=7.5 min UI Adjusted CN=41 Runoff=0.00 cfs 0.000 af |
| <b>Subcatchment140S: P3OO</b>                                     | Runoff Area=17,829 sf 65.98% Impervious Runoff Depth>1.14"<br>Tc=6.0 min CN=78 Runoff=0.57 cfs 0.039 af            |
| <b>Subcatchment141S: P3PP</b>                                     | Runoff Area=25,131 sf 66.17% Impervious Runoff Depth>1.14"<br>Tc=6.0 min CN=78 Runoff=0.80 cfs 0.055 af            |
| <b>Subcatchment142S: P3UU</b>                                     | Runoff Area=3,331 sf 72.53% Impervious Runoff Depth>1.39"<br>Tc=6.0 min CN=82 Runoff=0.13 cfs 0.009 af             |
| <b>Subcatchment143S: P3VV</b>                                     | Runoff Area=3,461 sf 73.82% Impervious Runoff Depth>1.46"<br>Tc=6.0 min CN=83 Runoff=0.14 cfs 0.010 af             |
| <b>Subcatchment147S: P3QQ</b>                                     | Runoff Area=8,544 sf 80.21% Impervious Runoff Depth>1.67"<br>Tc=6.0 min CN=86 Runoff=0.40 cfs 0.027 af             |
| <b>Subcatchment149S: P3RR</b><br>Flow Length=50' Slope=0.0100 '/' | Runoff Area=7,953 sf 10.10% Impervious Runoff Depth>0.00"<br>Tc=7.5 min UI Adjusted CN=42 Runoff=0.00 cfs 0.000 af |
| <b>Subcatchment151S: P3ZZ</b>                                     | Runoff Area=6,359 sf 79.60% Impervious Runoff Depth>1.67"<br>Tc=6.0 min CN=86 Runoff=0.30 cfs 0.020 af             |
| <b>Subcatchment152S: P3YY</b>                                     | Runoff Area=5,089 sf 70.43% Impervious Runoff Depth>1.32"<br>Tc=6.0 min CN=81 Runoff=0.19 cfs 0.013 af             |
| <b>Subcatchment153S: P3WW</b>                                     | Runoff Area=9,574 sf 74.64% Impervious Runoff Depth>1.46"<br>Tc=6.0 min CN=83 Runoff=0.40 cfs 0.027 af             |
| <b>Subcatchment154S: P3XX</b>                                     | Runoff Area=4,702 sf 90.07% Impervious Runoff Depth>2.17"<br>Tc=6.0 min CN=92 Runoff=0.28 cfs 0.020 af             |

**RH Post 1-2-26**

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|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Subcatchment155S: P3CCC</b>        | Runoff Area=13,537 sf 63.37% Impervious Runoff Depth>1.02"<br>Tc=6.0 min CN=76 Runoff=0.39 cfs 0.026 af                               |
| <b>Subcatchment156S: P3DDD</b>        | Runoff Area=17,001 sf 63.16% Impervious Runoff Depth>1.02"<br>Tc=6.0 min CN=76 Runoff=0.48 cfs 0.033 af                               |
| <b>Subcatchment165S: P3FFF</b>        | Runoff Area=10,066 sf 30.05% Impervious Runoff Depth>0.25"<br>Tc=6.0 min CN=57 Runoff=0.03 cfs 0.005 af                               |
| <b>Subcatchment166S: P3EEE</b>        | Runoff Area=9,100 sf 65.78% Impervious Runoff Depth>1.14"<br>Tc=6.0 min CN=78 Runoff=0.29 cfs 0.020 af                                |
| <b>Subcatchment170S: P3JJJ</b>        | Runoff Area=13,803 sf 75.85% Impervious Runoff Depth>1.53"<br>Tc=6.0 min CN=84 Runoff=0.60 cfs 0.040 af                               |
| <b>Subcatchment171S: P3III</b>        | Runoff Area=5,653 sf 71.18% Impervious Runoff Depth>1.32"<br>Tc=6.0 min CN=81 Runoff=0.21 cfs 0.014 af                                |
| <b>Subcatchment175S: P3KKK</b>        | Runoff Area=13,904 sf 64.43% Impervious Runoff Depth>1.08"<br>Tc=6.0 min CN=77 Runoff=0.42 cfs 0.029 af                               |
| <b>Subcatchment176S: P3LLL</b>        | Runoff Area=6,640 sf 60.77% Impervious Runoff Depth>0.97"<br>Tc=6.0 min CN=75 Runoff=0.18 cfs 0.012 af                                |
| <b>Subcatchment182S: P3MMM</b>        | Runoff Area=5,111 sf 57.03% Impervious Runoff Depth>0.86"<br>Tc=6.0 min CN=73 Runoff=0.12 cfs 0.008 af                                |
| <b>Subcatchment183S: P3NNN</b>        | Runoff Area=9,871 sf 61.54% Impervious Runoff Depth>0.97"<br>Tc=6.0 min CN=75 Runoff=0.26 cfs 0.018 af                                |
| <b>Subcatchment184S: P3OOO</b>        | Runoff Area=8,647 sf 57.72% Impervious Runoff Depth>0.86"<br>Tc=6.0 min CN=73 Runoff=0.20 cfs 0.014 af                                |
| <b>Subcatchment185S: P3PPP</b>        | Runoff Area=4,572 sf 75.17% Impervious Runoff Depth>1.46"<br>Tc=6.0 min CN=83 Runoff=0.19 cfs 0.013 af                                |
| <b>Subcatchment186S: P3QQQ</b>        | Runoff Area=6,874 sf 54.66% Impervious Runoff Depth>0.72"<br>Tc=6.0 min CN=70 Runoff=0.13 cfs 0.009 af                                |
| <b>Subcatchment187S: P3RRR</b>        | Runoff Area=12,294 sf 69.07% Impervious Runoff Depth>1.26"<br>Tc=6.0 min CN=80 Runoff=0.44 cfs 0.030 af                               |
| <b>Subcatchment189S: (new Subcat)</b> | Runoff Area=179,843 sf 4.59% Impervious Runoff Depth>0.15"<br>Flow Length=322' Tc=20.8 min UI Adjusted CN=53 Runoff=0.20 cfs 0.051 af |
| <b>Subcatchment190S: (new Subcat)</b> | Runoff Area=12,078 sf 85.87% Impervious Runoff Depth>1.99"<br>Tc=6.0 min CN=90 Runoff=0.67 cfs 0.046 af                               |
| <b>Subcatchment191S: P3SSS</b>        | Runoff Area=7,482 sf 31.70% Impervious Runoff Depth>0.15"<br>Tc=6.0 min CN=53 Runoff=0.01 cfs 0.002 af                                |
| <b>Subcatchment192S: P3TTT</b>        | Runoff Area=4,075 sf 74.38% Impervious Runoff Depth>1.46"<br>Tc=6.0 min CN=83 Runoff=0.17 cfs 0.011 af                                |

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| <b>Subcatchment195S: P3UUU</b>        | Runoff Area=14,624 sf 80.22% Impervious Runoff Depth>1.67"<br>Tc=6.0 min CN=86 Runoff=0.69 cfs 0.047 af                                        |
| <b>Subcatchment198S: P3VVV</b>        | Runoff Area=12,434 sf 0.00% Impervious Runoff Depth=0.00"<br>Tc=6.0 min CN=39 Runoff=0.00 cfs 0.000 af                                         |
| <b>Subcatchment202S: (new Subcat)</b> | Runoff Area=26,038 sf 46.07% Impervious Runoff Depth>0.55"<br>Tc=6.0 min CN=66 Runoff=0.34 cfs 0.027 af                                        |
| <b>Subcatchment204S: (new Subcat)</b> | Runoff Area=149,084 sf 3.60% Impervious Runoff Depth=0.00"<br>Flow Length=135' Tc=8.1 min UI Adjusted CN=36 Runoff=0.00 cfs 0.000 af           |
| <b>Subcatchment205S: (new Subcat)</b> | Runoff Area=9,322 sf 64.54% Impervious Runoff Depth>1.08"<br>Tc=6.0 min CN=77 Runoff=0.28 cfs 0.019 af                                         |
| <b>Subcatchment206S: (new Subcat)</b> | Runoff Area=15,098 sf 0.00% Impervious Runoff Depth=0.00"<br>Tc=6.0 min CN=39 Runoff=0.00 cfs 0.000 af                                         |
| <b>Subcatchment207S: (new Subcat)</b> | Runoff Area=21,068 sf 16.33% Impervious Runoff Depth=0.00"<br>Flow Length=156' Tc=15.7 min UI Adjusted CN=39 Runoff=0.00 cfs 0.000 af          |
| <b>Subcatchment216S: (new Subcat)</b> | Runoff Area=6,486 sf 77.32% Impervious Runoff Depth>1.60"<br>Tc=6.0 min CN=85 Runoff=0.29 cfs 0.020 af                                         |
| <b>Pond 15P: Inf. Basin 5</b>         | Peak Elev=58.75' Storage=11,957 cf Inflow=6.18 cfs 0.443 af<br>Discarded=0.24 cfs 0.203 af Primary=0.00 cfs 0.000 af Outflow=0.24 cfs 0.203 af |
| <b>Pond 16P: CB 58</b>                | Peak Elev=62.53' Inflow=0.51 cfs 0.038 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.51 cfs 0.038 af                          |
| <b>Pond 17P: CB 59</b>                | Peak Elev=62.74' Inflow=0.98 cfs 0.069 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' Outflow=0.98 cfs 0.069 af                          |
| <b>Pond 18P: CB 63</b>                | Peak Elev=64.22' Inflow=0.32 cfs 0.022 af<br>12.0" Round Culvert n=0.013 L=13.0' S=0.0077 ' Outflow=0.32 cfs 0.022 af                          |
| <b>Pond 19P: CB 62</b>                | Peak Elev=64.12' Inflow=0.17 cfs 0.012 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.17 cfs 0.012 af                          |
| <b>Pond 20P: DMH 43</b>               | Peak Elev=62.70' Inflow=1.49 cfs 0.107 af<br>12.0" Round Culvert n=0.013 L=66.0' S=0.0050 ' Outflow=1.49 cfs 0.107 af                          |
| <b>Pond 21P: DMH 42</b>               | Peak Elev=62.26' Inflow=1.49 cfs 0.107 af<br>12.0" Round Culvert n=0.013 L=71.0' S=0.0052 ' Outflow=1.49 cfs 0.107 af                          |
| <b>Pond 22P: CB 56</b>                | Peak Elev=61.56' Inflow=0.38 cfs 0.029 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=0.38 cfs 0.029 af                          |
| <b>Pond 23P: CB 57</b>                | Peak Elev=61.78' Inflow=0.86 cfs 0.062 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=0.86 cfs 0.062 af                          |

|                         |                                                                                                                        |
|-------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>Pond 24P: DMH 41</b> | Peak Elev=61.88' Inflow=2.73 cfs 0.197 af<br>18.0" Round Culvert n=0.013 L=55.0' S=0.0322 ' Outflow=2.73 cfs 0.197 af  |
| <b>Pond 25P: DMH 45</b> | Peak Elev=64.08' Inflow=0.50 cfs 0.035 af<br>12.0" Round Culvert n=0.013 L=148.0' S=0.0100 ' Outflow=0.50 cfs 0.035 af |
| <b>Pond 26P: CB 61</b>  | Peak Elev=62.80' Inflow=0.64 cfs 0.044 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' Outflow=0.64 cfs 0.044 af  |
| <b>Pond 27P: CB 60</b>  | Peak Elev=62.61' Inflow=0.28 cfs 0.019 af<br>12.0" Round Culvert n=0.013 L=13.0' S=0.0077 ' Outflow=0.28 cfs 0.019 af  |
| <b>Pond 28P: DMH 44</b> | Peak Elev=62.83' Inflow=1.41 cfs 0.098 af<br>12.0" Round Culvert n=0.013 L=85.0' S=0.0338 ' Outflow=1.41 cfs 0.098 af  |
| <b>Pond 29P: DMH 40</b> | Peak Elev=60.15' Inflow=4.36 cfs 0.311 af<br>24.0" Round Culvert n=0.013 L=25.0' S=0.0120 ' Outflow=4.36 cfs 0.311 af  |
| <b>Pond 30P: CB 55</b>  | Peak Elev=60.49' Inflow=0.22 cfs 0.016 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0667 ' Outflow=0.22 cfs 0.016 af  |
| <b>Pond 31P: CB 51</b>  | Peak Elev=60.50' Inflow=0.13 cfs 0.010 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.13 cfs 0.010 af  |
| <b>Pond 32P: CB 52</b>  | Peak Elev=60.77' Inflow=0.60 cfs 0.043 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.60 cfs 0.043 af  |
| <b>Pond 33P: CB 53</b>  | Peak Elev=60.96' Inflow=0.13 cfs 0.010 af<br>12.0" Round Culvert n=0.013 L=9.0' S=0.1111 ' Outflow=0.13 cfs 0.010 af   |
| <b>Pond 34P: DMH 36</b> | Peak Elev=60.62' Inflow=0.73 cfs 0.052 af<br>12.0" Round Culvert n=0.013 L=67.0' S=0.0051 ' Outflow=0.73 cfs 0.052 af  |
| <b>Pond 35P: DMH 37</b> | Peak Elev=60.24' Inflow=0.86 cfs 0.062 af<br>12.0" Round Culvert n=0.013 L=52.0' S=0.0050 ' Outflow=0.86 cfs 0.062 af  |
| <b>Pond 36P: CB 54</b>  | Peak Elev=60.64' Inflow=0.59 cfs 0.044 af<br>12.0" Round Culvert n=0.013 L=7.0' S=0.1143 ' Outflow=0.59 cfs 0.044 af   |
| <b>Pond 37P: DMH 38</b> | Peak Elev=60.07' Inflow=1.45 cfs 0.106 af<br>12.0" Round Culvert n=0.013 L=94.0' S=0.0050 ' Outflow=1.45 cfs 0.106 af  |
| <b>Pond 38P: DMH 39</b> | Peak Elev=59.93' Inflow=5.81 cfs 0.417 af<br>24.0" Round Culvert n=0.013 L=68.0' S=0.0254 ' Outflow=5.81 cfs 0.417 af  |
| <b>Pond 41P: CB 49</b>  | Peak Elev=58.64' Inflow=0.07 cfs 0.005 af<br>12.0" Round Culvert n=0.013 L=8.0' S=0.0125 ' Outflow=0.07 cfs 0.005 af   |
| <b>Pond 42P: CB 50</b>  | Peak Elev=58.89' Inflow=0.44 cfs 0.030 af<br>12.0" Round Culvert n=0.013 L=8.0' S=0.0125 ' Outflow=0.44 cfs 0.030 af   |
| <b>Pond 43P: DMH 35</b> | Peak Elev=58.70' Inflow=0.51 cfs 0.035 af<br>12.0" Round Culvert n=0.013 L=87.0' S=0.0414 ' Outflow=0.51 cfs 0.035 af  |

|                               |                                                                                                                                               |
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| <b>Pond 46P: CB 48</b>        | Peak Elev=55.29' Inflow=0.63 cfs 0.043 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.63 cfs 0.043 af                         |
| <b>Pond 47P: CB 47</b>        | Peak Elev=55.15' Inflow=0.35 cfs 0.027 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.35 cfs 0.027 af                         |
| <b>Pond 48P: DMH 33</b>       | Peak Elev=55.21' Inflow=0.99 cfs 0.069 af<br>12.0" Round Culvert n=0.013 L=5.0' S=0.0200 ' Outflow=0.99 cfs 0.069 af                          |
| <b>Pond 49P: Sub. Inf. 4</b>  | Peak Elev=56.04' Storage=0.113 af Inflow=2.78 cfs 0.193 af<br>Discarded=0.12 cfs 0.096 af Primary=0.02 cfs 0.003 af Outflow=0.14 cfs 0.098 af |
| <b>Pond 52P: CB 20</b>        | Peak Elev=51.20' Inflow=0.04 cfs 0.006 af<br>12.0" Round Culvert n=0.013 L=22.0' S=0.0091 ' Outflow=0.04 cfs 0.006 af                         |
| <b>Pond 53P: CB 21</b>        | Peak Elev=51.60' Inflow=0.73 cfs 0.050 af<br>12.0" Round Culvert n=0.013 L=24.0' S=0.0083 ' Outflow=0.73 cfs 0.050 af                         |
| <b>Pond 54P: DMH 15</b>       | Peak Elev=51.32' Inflow=0.75 cfs 0.056 af<br>12.0" Round Culvert n=0.013 L=104.0' S=0.0050 ' Outflow=0.75 cfs 0.056 af                        |
| <b>Pond 55P: DMH 16</b>       | Peak Elev=50.72' Inflow=0.75 cfs 0.056 af<br>12.0" Round Culvert n=0.013 L=35.0' S=0.0051 ' Outflow=0.75 cfs 0.056 af                         |
| <b>Pond 56P: Inf. Basin 4</b> | Peak Elev=50.33' Storage=400 cf Inflow=0.75 cfs 0.056 af<br>Discarded=0.31 cfs 0.056 af Secondary=0.00 cfs 0.000 af Outflow=0.31 cfs 0.056 af |
| <b>Pond 60P: Sub. Det. 1</b>  | Peak Elev=61.80' Storage=0.116 af Inflow=4.86 cfs 0.336 af<br>Outflow=3.84 cfs 0.251 af                                                       |
| <b>Pond 61P: CB 8</b>         | Peak Elev=50.59' Inflow=0.12 cfs 0.008 af<br>12.0" Round Culvert n=0.013 L=28.0' S=0.0500 ' Outflow=0.12 cfs 0.008 af                         |
| <b>Pond 62P: CB 66</b>        | Peak Elev=60.85' Inflow=0.38 cfs 0.027 af<br>12.0" Round Culvert n=0.013 L=20.0' S=0.0100 ' Outflow=0.38 cfs 0.027 af                         |
| <b>Pond 63P: CB 67</b>        | Peak Elev=60.77' Inflow=0.09 cfs 0.007 af<br>12.0" Round Culvert n=0.013 L=14.0' S=0.0214 ' Outflow=0.09 cfs 0.007 af                         |
| <b>Pond 64P: DMH 47</b>       | Peak Elev=60.88' Inflow=1.50 cfs 0.105 af<br>12.0" Round Culvert n=0.013 L=25.0' S=0.0080 ' Outflow=1.50 cfs 0.105 af                         |
| <b>Pond 65P: DMH 49</b>       | Peak Elev=59.19' Inflow=0.72 cfs 0.052 af<br>12.0" Round Culvert n=0.013 L=59.0' S=0.0119 ' Outflow=0.72 cfs 0.052 af                         |
| <b>Pond 66P: CB 68</b>        | Peak Elev=59.30' Inflow=0.45 cfs 0.032 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.45 cfs 0.032 af                         |
| <b>Pond 67P: CB 69</b>        | Peak Elev=59.20' Inflow=0.27 cfs 0.021 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.27 cfs 0.021 af                         |



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| <b>Pond 68P: Sub. Inf. 5</b>           | Peak Elev=60.92' Storage=0.041 af Inflow=1.50 cfs 0.105 af<br>Discarded=0.07 cfs 0.054 af Primary=0.54 cfs 0.022 af Outflow=0.60 cfs 0.076 af |
| <b>Pond 69P: CB 72</b>                 | Peak Elev=61.95' Inflow=0.61 cfs 0.043 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0600 '/' Outflow=0.61 cfs 0.043 af                       |
| <b>Pond 70P: CB 73</b>                 | Peak Elev=61.85' Inflow=0.40 cfs 0.028 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0600 '/' Outflow=0.40 cfs 0.028 af                       |
| <b>Pond 71P: DMH 54</b>                | Peak Elev=61.42' Inflow=1.01 cfs 0.070 af<br>12.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=1.01 cfs 0.070 af                        |
| <b>Pond 72P: Sub. Inf. 7</b>           | Peak Elev=61.68' Storage=0.030 af Inflow=1.01 cfs 0.070 af<br>Discarded=0.06 cfs 0.046 af Primary=0.18 cfs 0.009 af Outflow=0.24 cfs 0.055 af |
| <b>Pond 73P: CB 64</b>                 | Peak Elev=61.55' Inflow=0.61 cfs 0.042 af<br>12.0" Round Culvert n=0.013 L=25.0' S=0.0080 '/' Outflow=0.61 cfs 0.042 af                       |
| <b>Pond 74P: CB 65</b>                 | Peak Elev=61.46' Inflow=0.42 cfs 0.029 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0133 '/' Outflow=0.42 cfs 0.029 af                       |
| <b>Pond 75P: DMH 46</b>                | Peak Elev=61.42' Inflow=1.03 cfs 0.071 af<br>12.0" Round Culvert n=0.013 L=118.0' S=0.0051 '/' Outflow=1.03 cfs 0.071 af                      |
| <b>Pond 76P: CB 70</b>                 | Peak Elev=58.59' Inflow=0.47 cfs 0.033 af<br>12.0" Round Culvert n=0.013 L=20.0' S=0.0100 '/' Outflow=0.47 cfs 0.033 af                       |
| <b>Pond 77P: CB 71</b>                 | Peak Elev=58.49' Inflow=0.28 cfs 0.020 af<br>12.0" Round Culvert n=0.013 L=20.0' S=0.0100 '/' Outflow=0.28 cfs 0.020 af                       |
| <b>Pond 78P: DMH 50</b>                | Peak Elev=58.54' Inflow=1.46 cfs 0.105 af<br>18.0" Round Culvert n=0.013 L=25.0' S=0.0080 '/' Outflow=1.46 cfs 0.105 af                       |
| <b>Pond 79P: DMH 51</b>                | Peak Elev=58.34' Inflow=1.91 cfs 0.139 af<br>18.0" Round Culvert n=0.013 L=148.0' S=0.0047 '/' Outflow=1.91 cfs 0.139 af                      |
| <b>Pond 80P: DMH 52</b>                | Peak Elev=57.54' Inflow=1.91 cfs 0.139 af<br>18.0" Round Culvert n=0.013 L=104.0' S=0.0052 '/' Outflow=1.91 cfs 0.139 af                      |
| <b>Pond 81P: DMH 53</b>                | Peak Elev=56.89' Inflow=1.91 cfs 0.139 af<br>18.0" Round Culvert n=0.013 L=60.0' S=0.0195 '/' Outflow=1.91 cfs 0.139 af                       |
| <b>Pond 82P: Constructed Wetland 2</b> | Peak Elev=56.51' Storage=3,756 cf Inflow=2.37 cfs 0.171 af<br>Outflow=0.65 cfs 0.109 af                                                       |
| <b>Pond 83P: CB 86</b>                 | Peak Elev=58.38' Inflow=0.44 cfs 0.031 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0227 '/' Outflow=0.44 cfs 0.031 af                       |
| <b>Pond 84P: CB 87</b>                 | Peak Elev=58.40' Inflow=0.50 cfs 0.036 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0227 '/' Outflow=0.50 cfs 0.036 af                       |
| <b>Pond 85P: DMH 65</b>                | Peak Elev=58.26' Inflow=0.95 cfs 0.067 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.95 cfs 0.067 af                       |

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| <b>Pond 86P: Sub. Inf. 6</b> | Peak Elev=62.52' Storage=0.037 af Inflow=1.06 cfs 0.071 af<br>Discarded=0.07 cfs 0.047 af Primary=0.00 cfs 0.000 af Outflow=0.07 cfs 0.048 af |
| <b>Pond 87P: CB 85</b>       | Peak Elev=62.32' Inflow=0.31 cfs 0.021 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.31 cfs 0.021 af                       |
| <b>Pond 88P: CB 84</b>       | Peak Elev=62.22' Inflow=0.16 cfs 0.011 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.16 cfs 0.011 af                       |
| <b>Pond 89P: CB 74</b>       | Peak Elev=64.71' Inflow=0.14 cfs 0.010 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.14 cfs 0.010 af                       |
| <b>Pond 90P: CB 75</b>       | Peak Elev=64.80' Inflow=0.27 cfs 0.019 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.27 cfs 0.019 af                       |
| <b>Pond 91P: DMH 55</b>      | Peak Elev=64.66' Inflow=0.41 cfs 0.029 af<br>12.0" Round Culvert n=0.013 L=108.0' S=0.0204 '/' Outflow=0.41 cfs 0.029 af                      |
| <b>Pond 92P: DMH 63</b>      | Peak Elev=62.19' Inflow=0.47 cfs 0.033 af<br>12.0" Round Culvert n=0.013 L=120.0' S=0.0292 '/' Outflow=0.47 cfs 0.033 af                      |
| <b>Pond 93P: DMH 62</b>      | Peak Elev=59.05' Inflow=2.57 cfs 0.178 af<br>18.0" Round Culvert n=0.013 L=84.0' S=0.0065 '/' Outflow=2.57 cfs 0.178 af                       |
| <b>Pond 94P: CB 77</b>       | Peak Elev=63.08' Inflow=0.51 cfs 0.035 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.51 cfs 0.035 af                       |
| <b>Pond 95P: CB 76</b>       | Peak Elev=63.00' Inflow=0.35 cfs 0.024 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.35 cfs 0.024 af                       |
| <b>Pond 96P: DMH 56</b>      | Peak Elev=62.91' Inflow=2.88 cfs 0.201 af<br>18.0" Round Culvert n=0.013 L=134.0' S=0.0067 '/' Outflow=2.88 cfs 0.201 af                      |
| <b>Pond 97P: Sub. Det. 2</b> | Peak Elev=60.34' Storage=0.214 af Inflow=3.51 cfs 0.245 af<br>Outflow=0.04 cfs 0.031 af                                                       |
| <b>Pond 98P: DMH 61</b>      | Peak Elev=60.56' Inflow=2.10 cfs 0.146 af<br>18.0" Round Culvert n=0.013 L=136.0' S=0.0110 '/' Outflow=2.10 cfs 0.146 af                      |
| <b>Pond 99P: CB 81</b>       | Peak Elev=63.47' Inflow=0.62 cfs 0.043 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.62 cfs 0.043 af                       |
| <b>Pond 100P: CB 80</b>      | Peak Elev=63.62' Inflow=0.99 cfs 0.069 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.99 cfs 0.069 af                       |
| <b>Pond 101P: DMH 59</b>     | Peak Elev=63.45' Inflow=1.61 cfs 0.112 af<br>18.0" Round Culvert n=0.013 L=136.0' S=0.0051 '/' Outflow=1.61 cfs 0.112 af                      |
| <b>Pond 102P: CB 93</b>      | Peak Elev=61.80' Inflow=0.44 cfs 0.031 af<br>12.0" Round Culvert n=0.013 L=27.0' S=0.0056 '/' Outflow=0.44 cfs 0.031 af                       |

**Pond 103P: CB 92**

Peak Elev=61.97' Inflow=0.81 cfs 0.057 af  
12.0" Round Culvert n=0.013 L=27.0' S=0.0056 '/' Outflow=0.81 cfs 0.057 af

**Pond 104P: CB 83**

Peak Elev=61.55' Inflow=0.80 cfs 0.055 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.80 cfs 0.055 af

**Pond 105P: CB 82**

Peak Elev=61.75' Inflow=1.30 cfs 0.091 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=1.30 cfs 0.091 af

**Pond 106P: DMH 60**

Peak Elev=61.56' Inflow=2.10 cfs 0.146 af  
18.0" Round Culvert n=0.013 L=110.0' S=0.0082 '/' Outflow=2.10 cfs 0.146 af

**Pond 107P: CB**

Peak Elev=60.42' Inflow=0.54 cfs 0.037 af  
12.0" Round Culvert n=0.013 L=10.0' S=0.1000 '/' Outflow=0.54 cfs 0.037 af

**Pond 108P: CB 88**

Peak Elev=60.28' Inflow=0.25 cfs 0.018 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0909 '/' Outflow=0.25 cfs 0.018 af

**Pond 109P: CB 79**

Peak Elev=62.07' Inflow=1.06 cfs 0.073 af  
12.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=1.06 cfs 0.073 af

**Pond 110P: CB 78**

Peak Elev=61.96' Inflow=0.92 cfs 0.063 af  
15.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=0.92 cfs 0.063 af

**Pond 111P: DMH 57**

Peak Elev=62.13' Inflow=4.86 cfs 0.336 af  
24.0" Round Culvert n=0.013 L=74.0' S=0.0054 '/' Outflow=4.86 cfs 0.336 af

**Pond 112P: CB 45**

Peak Elev=58.06' Inflow=0.60 cfs 0.040 af  
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.60 cfs 0.040 af

**Pond 113P: CB 95**

Peak Elev=60.46' Inflow=0.57 cfs 0.042 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.57 cfs 0.042 af

**Pond 114P: CB 94**

Peak Elev=60.60' Inflow=0.90 cfs 0.065 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.90 cfs 0.065 af

**Pond 115P: CB 91**

Peak Elev=59.77' Inflow=0.86 cfs 0.060 af  
12.0" Round Culvert n=0.013 L=12.0' S=0.0833 '/' Outflow=0.86 cfs 0.060 af

**Pond 116P: CB 90**

Peak Elev=59.71' Inflow=0.70 cfs 0.050 af  
12.0" Round Culvert n=0.013 L=14.0' S=0.0714 '/' Outflow=0.70 cfs 0.050 af

**Pond 117P: DMH 69**

Peak Elev=60.16' Inflow=2.73 cfs 0.194 af  
18.0" Round Culvert n=0.013 L=140.0' S=0.0050 '/' Outflow=2.73 cfs 0.194 af

**Pond 118P: DMH 70**

Peak Elev=60.58' Inflow=1.47 cfs 0.107 af  
12.0" Round Culvert n=0.013 L=87.0' S=0.0051 '/' Outflow=1.47 cfs 0.107 af

**Pond 119P: DMH 66**

Peak Elev=59.52' Inflow=3.52 cfs 0.249 af  
18.0" Round Culvert n=0.013 L=102.0' S=0.0050 '/' Outflow=3.52 cfs 0.249 af

**Pond 120P: DMH 67**

Peak Elev=58.96' Inflow=5.08 cfs 0.360 af  
24.0" Round Culvert n=0.013 L=40.0' S=0.0213 '/' Outflow=5.08 cfs 0.360 af

|                                |                                                                                                                                               |
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| <b>Pond 122P: CB 46</b>        | Peak Elev=58.11' Inflow=0.69 cfs 0.048 af<br>12.0" Round Culvert n=0.013 L=16.0' S=0.0063 '/' Outflow=0.69 cfs 0.048 af                       |
| <b>Pond 123P: DMH 31</b>       | Peak Elev=57.97' Inflow=1.28 cfs 0.088 af<br>18.0" Round Culvert n=0.013 L=78.0' S=0.0100 '/' Outflow=1.28 cfs 0.088 af                       |
| <b>Pond 124P: DMH 32</b>       | Peak Elev=57.15' Inflow=1.28 cfs 0.088 af<br>18.0" Round Culvert n=0.013 L=75.0' S=0.0249 '/' Outflow=1.28 cfs 0.088 af                       |
| <b>Pond 125P: CB 36</b>        | Peak Elev=54.82' Inflow=0.37 cfs 0.025 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=0.37 cfs 0.025 af                       |
| <b>Pond 126P: CB 37</b>        | Peak Elev=54.86' Inflow=0.46 cfs 0.031 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=0.46 cfs 0.031 af                       |
| <b>Pond 127P: DMH 26</b>       | Peak Elev=54.78' Inflow=0.83 cfs 0.056 af<br>12.0" Round Culvert n=0.013 L=84.0' S=0.0173 '/' Outflow=0.83 cfs 0.056 af                       |
| <b>Pond 128P: CB 30</b>        | Peak Elev=56.29' Inflow=0.44 cfs 0.029 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.44 cfs 0.029 af                       |
| <b>Pond 129P: CB 34</b>        | Peak Elev=54.34' Inflow=0.62 cfs 0.042 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.62 cfs 0.042 af                       |
| <b>Pond 130P: CB 32</b>        | Peak Elev=54.66' Inflow=1.14 cfs 0.077 af<br>12.0" Round Culvert n=0.013 L=16.0' S=0.0256 '/' Outflow=1.14 cfs 0.077 af                       |
| <b>Pond 131P: CB 35</b>        | Peak Elev=54.27' Inflow=0.46 cfs 0.031 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.46 cfs 0.031 af                       |
| <b>Pond 132P: CB 33</b>        | Peak Elev=54.05' Inflow=0.33 cfs 0.024 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.33 cfs 0.024 af                       |
| <b>Pond 133P: DMH 24</b>       | Peak Elev=54.43' Inflow=2.54 cfs 0.174 af<br>18.0" Round Culvert n=0.013 L=112.0' S=0.0050 '/' Outflow=2.54 cfs 0.174 af                      |
| <b>Pond 134P: DMH 25</b>       | Peak Elev=54.40' Inflow=1.08 cfs 0.073 af<br>12.0" Round Culvert n=0.013 L=20.0' S=0.0050 '/' Outflow=1.08 cfs 0.073 af                       |
| <b>Pond 135P: Inf. Basin 3</b> | Peak Elev=53.87' Storage=2,373 cf Inflow=3.06 cfs 0.209 af<br>Discarded=0.88 cfs 0.209 af Primary=0.00 cfs 0.000 af Outflow=0.88 cfs 0.209 af |
| <b>Pond 136P: CB 38</b>        | Peak Elev=53.79' Inflow=0.25 cfs 0.017 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.25 cfs 0.017 af                       |
| <b>Pond 137P: CB</b>           | Peak Elev=53.91' Inflow=0.52 cfs 0.035 af<br>12.0" Round Culvert n=0.013 L=70.0' S=0.0071 '/' Outflow=0.52 cfs 0.035 af                       |
| <b>Pond 138P: CB 39</b>        | Peak Elev=53.78' Inflow=0.25 cfs 0.017 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.25 cfs 0.017 af                       |

**Pond 139P: DMH 28**

Peak Elev=53.72' Inflow=0.50 cfs 0.034 af  
12.0" Round Culvert n=0.013 L=99.0' S=0.0051 ' Outflow=0.50 cfs 0.034 af

**Pond 140P: CB 31**

Peak Elev=56.31' Inflow=0.45 cfs 0.030 af  
12.0" Round Culvert n=0.013 L=19.0' S=0.0053 ' Outflow=0.45 cfs 0.030 af

**Pond 141P: DMH 23**

Peak Elev=56.25' Inflow=0.88 cfs 0.060 af  
12.0" Round Culvert n=0.013 L=142.0' S=0.0116 ' Outflow=0.88 cfs 0.060 af

**Pond 142P: CB 40**

Peak Elev=50.98' Inflow=0.57 cfs 0.039 af  
12.0" Round Culvert n=0.013 L=7.0' S=0.0143 ' Outflow=0.57 cfs 0.039 af

**Pond 143P: CB 41**

Peak Elev=51.08' Inflow=0.80 cfs 0.055 af  
12.0" Round Culvert n=0.013 L=7.0' S=0.0143 ' Outflow=0.80 cfs 0.055 af

**Pond 144P: DMH 30**

Peak Elev=51.08' Inflow=1.37 cfs 0.093 af  
12.0" Round Culvert n=0.013 L=73.0' S=0.0051 ' Outflow=1.37 cfs 0.093 af

**Pond 145P: DMH 29**

Peak Elev=50.46' Inflow=1.37 cfs 0.093 af  
18.0" Round Culvert n=0.013 L=95.0' S=0.0091 ' Outflow=1.37 cfs 0.093 af

**Pond 146P: Inf. Basin 2**

Peak Elev=49.73' Storage=1,793 cf Inflow=2.45 cfs 0.167 af  
Discarded=0.72 cfs 0.167 af Primary=0.00 cfs 0.000 af Outflow=0.72 cfs 0.167 af

**Pond 147P: CB 28**

Peak Elev=54.41' Inflow=0.13 cfs 0.009 af  
12.0" Round Culvert n=0.013 L=27.0' S=0.0056 ' Outflow=0.13 cfs 0.009 af

**Pond 148P: CB 43**

Peak Elev=52.36' Inflow=0.40 cfs 0.027 af  
12.0" Round Culvert n=0.013 L=68.0' S=0.0441 ' Outflow=0.40 cfs 0.027 af

**Pond 149P: CB 29**

Peak Elev=54.41' Inflow=0.14 cfs 0.010 af  
12.0" Round Culvert n=0.013 L=19.0' S=0.0079 ' Outflow=0.14 cfs 0.010 af

**Pond 150P: DMH 22**

Peak Elev=54.59' Inflow=1.15 cfs 0.078 af  
12.0" Round Culvert n=0.013 L=50.0' S=0.0144 ' Outflow=1.15 cfs 0.078 af

**Pond 151P: CB 22**

Peak Elev=52.62' Inflow=0.29 cfs 0.019 af  
12.0" Round Culvert n=0.013 L=28.0' S=0.0054 ' Outflow=0.29 cfs 0.019 af

**Pond 152P: CB 23**

Peak Elev=52.62' Inflow=0.31 cfs 0.021 af  
12.0" Round Culvert n=0.013 L=19.0' S=0.0079 ' Outflow=0.31 cfs 0.021 af

**Pond 153P: DMH 17**

Peak Elev=52.99' Inflow=2.92 cfs 0.198 af  
18.0" Round Culvert n=0.013 L=94.0' S=0.0053 ' Outflow=2.92 cfs 0.198 af

**Pond 154P: CB 18**

Peak Elev=53.61' Inflow=0.39 cfs 0.026 af  
12.0" Round Culvert n=0.013 L=8.0' S=0.0125 ' Outflow=0.39 cfs 0.026 af

**Pond 155P: CB 27**

Peak Elev=54.97' Inflow=0.40 cfs 0.027 af  
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=0.40 cfs 0.027 af

**Pond 156P: CB 26**

Peak Elev=54.90' Inflow=0.28 cfs 0.020 af  
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=0.28 cfs 0.020 af

|                          |                                                                                                                          |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------|
| <b>Pond 157P: DMH 21</b> | Peak Elev=54.87' Inflow=0.67 cfs 0.046 af<br>12.0" Round Culvert n=0.013 L=86.0' S=0.0105 '/' Outflow=0.67 cfs 0.046 af  |
| <b>Pond 158P: CB 24</b>  | Peak Elev=53.85' Inflow=0.19 cfs 0.013 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.19 cfs 0.013 af  |
| <b>Pond 159P: CB 25</b>  | Peak Elev=53.92' Inflow=0.30 cfs 0.020 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.30 cfs 0.020 af  |
| <b>Pond 160P: DMH 20</b> | Peak Elev=54.10' Inflow=1.17 cfs 0.079 af<br>12.0" Round Culvert n=0.013 L=33.0' S=0.0052 '/' Outflow=1.17 cfs 0.079 af  |
| <b>Pond 161P: DMH 19</b> | Peak Elev=53.93' Inflow=2.32 cfs 0.158 af<br>18.0" Round Culvert n=0.013 L=100.0' S=0.0098 '/' Outflow=2.32 cfs 0.158 af |
| <b>Pond 162P: CB 15</b>  | Peak Elev=51.43' Inflow=0.48 cfs 0.033 af<br>12.0" Round Culvert n=0.013 L=14.0' S=0.0143 '/' Outflow=0.48 cfs 0.033 af  |
| <b>Pond 163P: CB 14</b>  | Peak Elev=51.43' Inflow=0.39 cfs 0.026 af<br>12.0" Round Culvert n=0.013 L=22.0' S=0.0050 '/' Outflow=0.39 cfs 0.026 af  |
| <b>Pond 165P: CB 19</b>  | Peak Elev=53.56' Inflow=0.29 cfs 0.020 af<br>12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=0.29 cfs 0.020 af   |
| <b>Pond 166P: DMH 13</b> | Peak Elev=52.66' Inflow=0.68 cfs 0.046 af<br>12.0" Round Culvert n=0.013 L=92.0' S=0.0050 '/' Outflow=0.68 cfs 0.046 af  |
| <b>Pond 167P: CB 11</b>  | Peak Elev=51.09' Inflow=0.29 cfs 0.020 af<br>12.0" Round Culvert n=0.013 L=19.0' S=0.0105 '/' Outflow=0.29 cfs 0.020 af  |
| <b>Pond 168P: CB 10</b>  | Peak Elev=50.88' Inflow=0.03 cfs 0.005 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0182 '/' Outflow=0.03 cfs 0.005 af  |
| <b>Pond 169P: DMH 12</b> | Peak Elev=52.09' Inflow=0.68 cfs 0.046 af<br>12.0" Round Culvert n=0.013 L=107.0' S=0.0050 '/' Outflow=0.68 cfs 0.046 af |
| <b>Pond 170P: CB 9</b>   | Peak Elev=50.68' Inflow=0.26 cfs 0.018 af<br>12.0" Round Culvert n=0.013 L=21.0' S=0.0667 '/' Outflow=0.26 cfs 0.018 af  |
| <b>Pond 171P: DMH 6</b>  | Peak Elev=49.53' Inflow=1.96 cfs 0.138 af<br>18.0" Round Culvert n=0.013 L=130.0' S=0.0073 '/' Outflow=1.96 cfs 0.138 af |
| <b>Pond 172P: CB 16</b>  | Peak Elev=52.36' Inflow=0.60 cfs 0.040 af<br>12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=0.60 cfs 0.040 af   |
| <b>Pond 173P: CB 17</b>  | Peak Elev=52.16' Inflow=0.21 cfs 0.014 af<br>12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=0.21 cfs 0.014 af   |
| <b>Pond 174P: DMH 11</b> | Peak Elev=51.59' Inflow=1.49 cfs 0.101 af<br>18.0" Round Culvert n=0.013 L=22.0' S=0.0118 '/' Outflow=1.49 cfs 0.101 af  |

|                                         |                                                                                                                                               |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pond 175P: DMH 5</b>                 | Peak Elev=50.33' Inflow=1.57 cfs 0.111 af<br>12.0" Round Culvert n=0.013 L=103.0' S=0.0050 ' Outflow=1.57 cfs 0.111 af                        |
| <b>Pond 176P: CB 6</b>                  | Peak Elev=50.07' Inflow=0.20 cfs 0.014 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0133 ' Outflow=0.20 cfs 0.014 af                         |
| <b>Pond 177P: CB 13</b>                 | Peak Elev=51.63' Inflow=0.42 cfs 0.029 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.42 cfs 0.029 af                         |
| <b>Pond 178P: CB 12</b>                 | Peak Elev=51.49' Inflow=0.18 cfs 0.012 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.18 cfs 0.012 af                         |
| <b>Pond 179P: DMH 8</b>                 | Peak Elev=51.52' Inflow=0.60 cfs 0.041 af<br>12.0" Round Culvert n=0.013 L=70.0' S=0.0050 ' Outflow=0.60 cfs 0.041 af                         |
| <b>Pond 180P: DMH 9</b>                 | Peak Elev=51.34' Inflow=0.87 cfs 0.060 af<br>18.0" Round Culvert n=0.013 L=49.0' S=0.0051 ' Outflow=0.87 cfs 0.060 af                         |
| <b>Pond 181P: DMH 7</b>                 | Peak Elev=51.16' Inflow=1.18 cfs 0.084 af<br>12.0" Round Culvert n=0.013 L=174.0' S=0.0050 ' Outflow=1.18 cfs 0.084 af                        |
| <b>Pond 182P: CB 7</b>                  | Peak Elev=50.06' Inflow=0.19 cfs 0.013 af<br>12.0" Round Culvert n=0.013 L=25.0' S=0.0080 ' Outflow=0.19 cfs 0.013 af                         |
| <b>Pond 185P: DMH 4</b>                 | Peak Elev=48.52' Inflow=2.65 cfs 0.185 af<br>24.0" Round Culvert n=0.013 L=36.0' S=0.0208 ' Outflow=2.65 cfs 0.185 af                         |
| <b>Pond 186P: Constructed Wetland 1</b> | Peak Elev=46.99' Storage=1,712 cf Inflow=0.74 cfs 0.053 af<br>Primary=0.00 cfs 0.000 af Secondary=0.02 cfs 0.014 af Outflow=0.02 cfs 0.014 af |
| <b>Pond 187P: Constructed Wetland 3</b> | Peak Elev=56.97' Storage=5,800 cf Inflow=3.84 cfs 0.251 af<br>Outflow=0.52 cfs 0.123 af                                                       |
| <b>Pond 188P: CB 3</b>                  | Peak Elev=48.20' Inflow=0.13 cfs 0.009 af<br>12.0" Round Culvert n=0.013 L=30.0' S=0.0167 ' Outflow=0.13 cfs 0.009 af                         |
| <b>Pond 189P: CB 4</b>                  | Peak Elev=48.37' Inflow=0.44 cfs 0.030 af<br>12.0" Round Culvert n=0.013 L=19.0' S=0.0263 ' Outflow=0.44 cfs 0.030 af                         |
| <b>Pond 190P: DMH 3</b>                 | Peak Elev=47.83' Inflow=0.57 cfs 0.039 af<br>12.0" Round Culvert n=0.013 L=32.0' S=0.0334 ' Outflow=0.57 cfs 0.039 af                         |
| <b>Pond 191P: CB 42</b>                 | Peak Elev=50.97' Inflow=0.67 cfs 0.046 af<br>12.0" Round Culvert n=0.013 L=194.0' S=0.0077 ' Outflow=0.67 cfs 0.046 af                        |
| <b>Pond 192P: Sub. Inf. 8</b>           | Peak Elev=50.46' Storage=0.001 af Inflow=0.28 cfs 0.019 af<br>Outflow=0.19 cfs 0.019 af                                                       |
| <b>Pond 193P: CB 1</b>                  | Peak Elev=46.90' Inflow=0.01 cfs 0.002 af<br>12.0" Round Culvert n=0.013 L=25.0' S=0.0052 ' Outflow=0.01 cfs 0.002 af                         |
| <b>Pond 194P: CB 2</b>                  | Peak Elev=47.05' Inflow=0.17 cfs 0.011 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' Outflow=0.17 cfs 0.011 af                         |

|                                         |                                                                                                                                               |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pond 195P: Constructed Wetland 4</b> | Peak Elev=56.26' Storage=7,011 cf Inflow=2.26 cfs 0.226 af<br>Outflow=0.34 cfs 0.100 af                                                       |
| <b>Pond 196P: CB 5</b>                  | Peak Elev=48.51' Inflow=0.69 cfs 0.047 af<br>12.0" Round Culvert n=0.013 L=27.0' S=0.0059 '/' Outflow=0.69 cfs 0.047 af                       |
| <b>Pond 197P: Inf. Basin 1</b>          | Peak Elev=46.75' Storage=1,222 cf Inflow=2.65 cfs 0.185 af<br>Discarded=1.13 cfs 0.185 af Primary=0.00 cfs 0.000 af Outflow=1.13 cfs 0.185 af |
| <b>Pond 198P: Sub. Inf. 2</b>           | Peak Elev=51.62' Storage=0.028 af Inflow=2.92 cfs 0.198 af<br>Discarded=1.29 cfs 0.198 af Primary=0.00 cfs 0.000 af Outflow=1.29 cfs 0.198 af |
| <b>Pond 200P: DMH 1</b>                 | Peak Elev=46.90' Inflow=0.17 cfs 0.014 af<br>12.0" Round Culvert n=0.013 L=65.0' S=0.0051 '/' Outflow=0.17 cfs 0.014 af                       |
| <b>Pond 201P: Sub. Inf. 3</b>           | Peak Elev=52.37' Storage=0.012 af Inflow=1.67 cfs 0.117 af<br>Discarded=0.90 cfs 0.117 af Primary=0.00 cfs 0.000 af Outflow=0.90 cfs 0.117 af |
| <b>Pond 202P: DMH 14</b>                | Peak Elev=52.65' Inflow=0.00 cfs 0.000 af<br>18.0" Round Culvert n=0.013 L=89.0' S=0.0055 '/' Outflow=0.00 cfs 0.000 af                       |
| <b>Pond 204P: DMH 18</b>                | Peak Elev=52.42' Inflow=2.92 cfs 0.198 af<br>18.0" Round Culvert n=0.013 L=5.0' S=-0.0900 '/' Outflow=2.92 cfs 0.198 af                       |
| <b>Pond 205P: DMH 27</b>                | Peak Elev=53.47' Inflow=1.33 cfs 0.090 af<br>12.0" Round Culvert n=0.013 L=16.0' S=0.0063 '/' Outflow=1.33 cfs 0.090 af                       |
| <b>Pond 206P: DMH 34</b>                | Peak Elev=55.19' Inflow=1.79 cfs 0.124 af<br>18.0" Round Culvert n=0.013 L=5.0' S=-0.1800 '/' Outflow=1.79 cfs 0.124 af                       |
| <b>Pond 207P: DMH 48</b>                | Peak Elev=60.70' Inflow=1.50 cfs 0.105 af<br>12.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=1.50 cfs 0.105 af                        |
| <b>Pond 208P: DMH 58</b>                | Peak Elev=61.78' Inflow=4.86 cfs 0.336 af<br>24.0" Round Culvert n=0.013 L=5.0' S=0.0100 '/' Outflow=4.86 cfs 0.336 af                        |
| <b>Pond 209P: DMH 64</b>                | Peak Elev=58.56' Inflow=2.57 cfs 0.178 af<br>18.0" Round Culvert n=0.013 L=5.0' S=0.0100 '/' Outflow=2.57 cfs 0.178 af                        |
| <b>Pond 210P: DMH 68</b>                | Peak Elev=58.96' Inflow=5.08 cfs 0.360 af<br>24.0" Round Culvert n=0.013 L=11.0' S=0.0727 '/' Outflow=5.08 cfs 0.360 af                       |
| <b>Pond 211P: Sub. Inf. 1B</b>          | Peak Elev=50.78' Storage=0.028 af Inflow=2.09 cfs 0.142 af<br>Discarded=0.67 cfs 0.142 af Primary=0.00 cfs 0.000 af Outflow=0.67 cfs 0.142 af |
| <b>Pond 212P: Sub. Inf. 1A</b>          | Peak Elev=47.52' Storage=0.000 af Inflow=0.29 cfs 0.020 af<br>Discarded=0.29 cfs 0.020 af Primary=0.00 cfs 0.000 af Outflow=0.29 cfs 0.020 af |
| <b>Pond 213P: DMH 2</b>                 | Peak Elev=46.80' Inflow=0.74 cfs 0.053 af<br>12.0" Round Culvert n=0.013 L=54.0' S=0.0052 '/' Outflow=0.74 cfs 0.053 af                       |



**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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*Type III 24-hr 2-Year Rainfall=3.15"*

Printed 1/7/2026

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**Pond 214P: DMH 4A**

Peak Elev=48.37' Inflow=0.29 cfs 0.020 af  
 18.0" Round Culvert n=0.013 L=3.0' S=0.0333 '/' Outflow=0.29 cfs 0.020 af

**Pond 215P: CB 5A**

Peak Elev=48.70' Inflow=0.29 cfs 0.020 af  
 12.0" Round Culvert n=0.013 L=13.0' S=0.0154 '/' Outflow=0.29 cfs 0.020 af

**Pond 216P: CB 8A**

Peak Elev=49.63' Inflow=0.00 cfs 0.000 af  
 12.0" Round Culvert n=0.013 L=63.0' S=0.0100 '/' Outflow=0.00 cfs 0.000 af

**Pond 217P: DMH 8A**

Peak Elev=51.41' Inflow=2.09 cfs 0.142 af  
 18.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=2.09 cfs 0.142 af

**Pond 218P: CB A**

Peak Elev=52.16' Inflow=0.28 cfs 0.019 af  
 12.0" Round Culvert n=0.013 L=105.0' S=0.0050 '/' Outflow=0.28 cfs 0.019 af

**Pond 219P: DMH A**

Peak Elev=51.57' Inflow=0.28 cfs 0.019 af  
 12.0" Round Culvert n=0.013 L=60.0' S=0.0057 '/' Outflow=0.28 cfs 0.019 af

**Pond 220P: DMH B**

Peak Elev=51.20' Inflow=0.28 cfs 0.019 af  
 12.0" Round Culvert n=0.013 L=3.0' S=0.0167 '/' Outflow=0.28 cfs 0.019 af

**Pond 221P: Inf. Basin 6**

Peak Elev=57.51' Storage=5,086 cf Inflow=5.08 cfs 0.360 af  
 Discarded=0.15 cfs 0.099 af Primary=2.26 cfs 0.226 af Outflow=2.41 cfs 0.325 af

**Link 59L: DP 1**

Inflow=0.04 cfs 0.013 af  
 Primary=0.04 cfs 0.013 af

**Link 60L: DP 2**

Inflow=1.46 cfs 0.143 af  
 Primary=1.46 cfs 0.143 af

**Link 188L: DP 3**

Inflow=1.25 cfs 0.414 af  
 Primary=1.25 cfs 0.414 af

**Link 203L: 3A**

Inflow=0.02 cfs 0.014 af  
 Primary=0.02 cfs 0.014 af

**Total Runoff Area = 39.842 ac Runoff Volume = 3.333 af Average Runoff Depth = 1.00"**  
**58.01% Pervious = 23.114 ac 41.99% Impervious = 16.728 ac**

### Summary for Subcatchment 1S: P1A

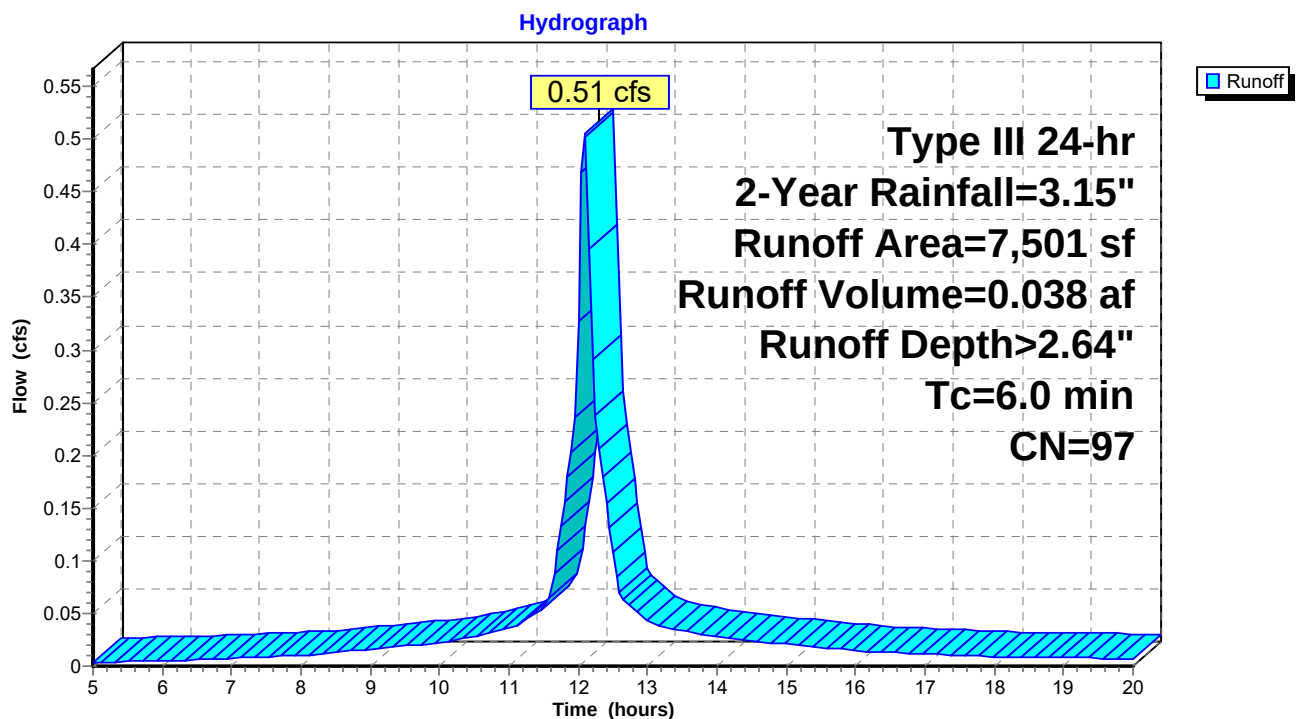
Runoff = 0.51 cfs @ 12.09 hrs, Volume= 0.038 af, Depth> 2.64"  
Routed to Pond 16P : CB 58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 254       | 74 | >75% Grass cover, Good, HSG C |
| 1,384     | 98 | Unconnected roofs, HSG C      |
| 5,863     | 98 | Paved parking, HSG C          |
| 7,501     | 97 | Weighted Average              |
| 254       |    | 3.39% Pervious Area           |
| 7,247     |    | 96.61% Impervious Area        |
| 1,384     |    | 19.10% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 1S: P1A



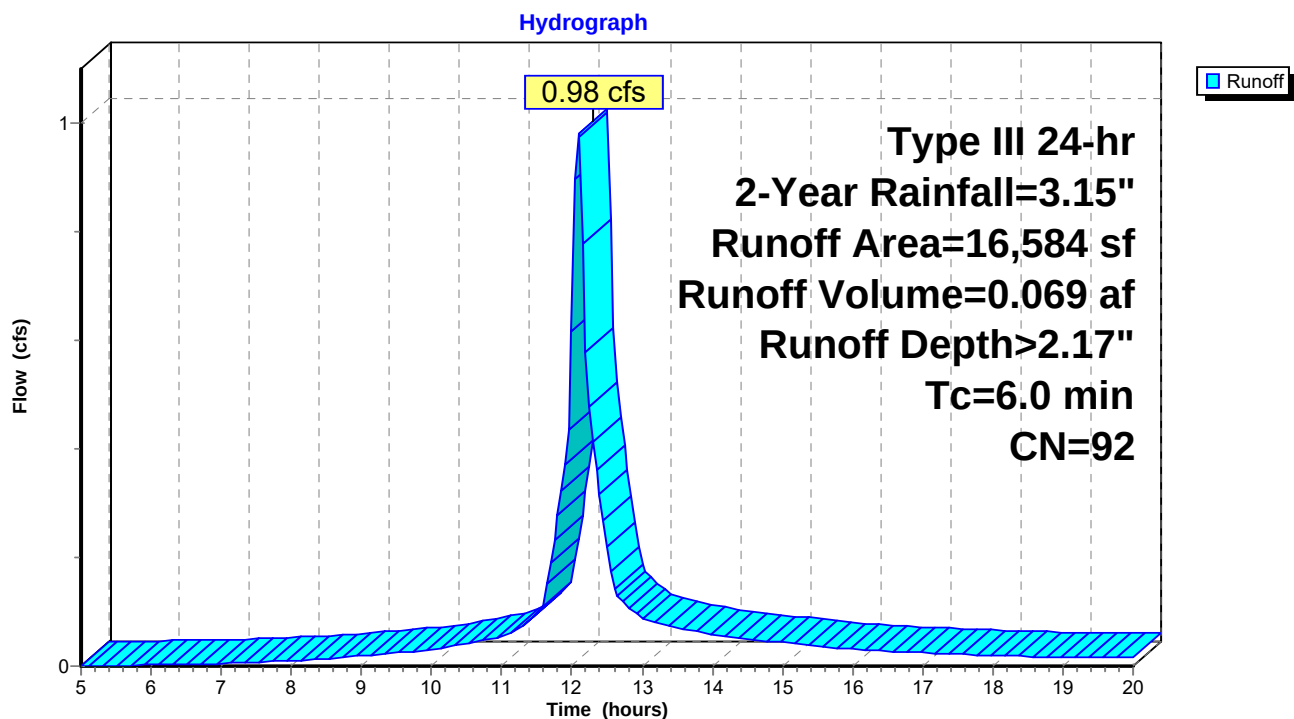
**Summary for Subcatchment 2S: P1B**

Runoff = 0.98 cfs @ 12.09 hrs, Volume= 0.069 af, Depth> 2.17"  
 Routed to Pond 17P : CB 59

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,226     | 98 | Unconnected roofs, HSG C      |
| 4,280     | 74 | >75% Grass cover, Good, HSG C |
| 7,078     | 98 | Paved parking, HSG C          |
| 16,584    | 92 | Weighted Average              |
| 4,280     |    | 25.81% Pervious Area          |
| 12,304    |    | 74.19% Impervious Area        |
| 5,226     |    | 42.47% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 2S: P1B**

### Summary for Subcatchment 3S: P1C

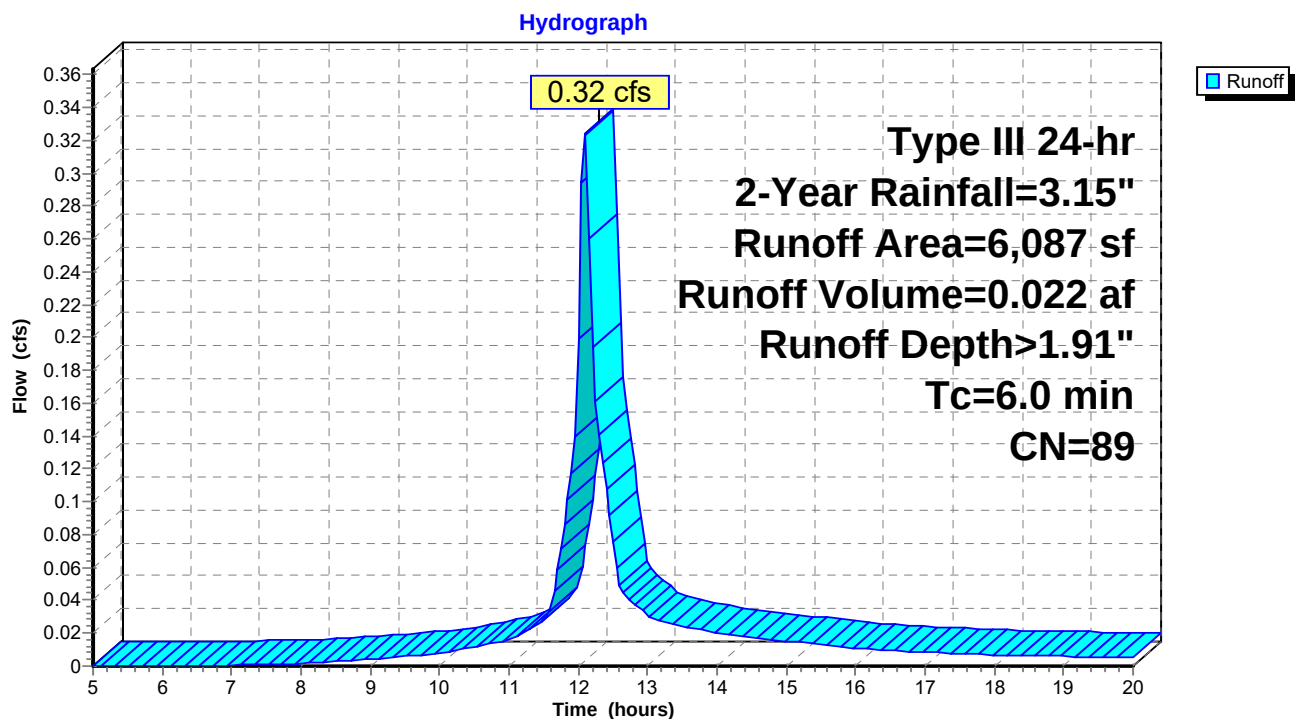
Runoff = 0.32 cfs @ 12.09 hrs, Volume= 0.022 af, Depth> 1.91"  
Routed to Pond 18P : CB 63

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,616     | 98 | Unconnected roofs, HSG C      |
| 2,173     | 74 | >75% Grass cover, Good, HSG C |
| 2,298     | 98 | Paved parking, HSG C          |
| 6,087     | 89 | Weighted Average              |
| 2,173     |    | 35.70% Pervious Area          |
| 3,914     |    | 64.30% Impervious Area        |
| 1,616     |    | 41.29% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 3S: P1C



### Summary for Subcatchment 4S: P1D

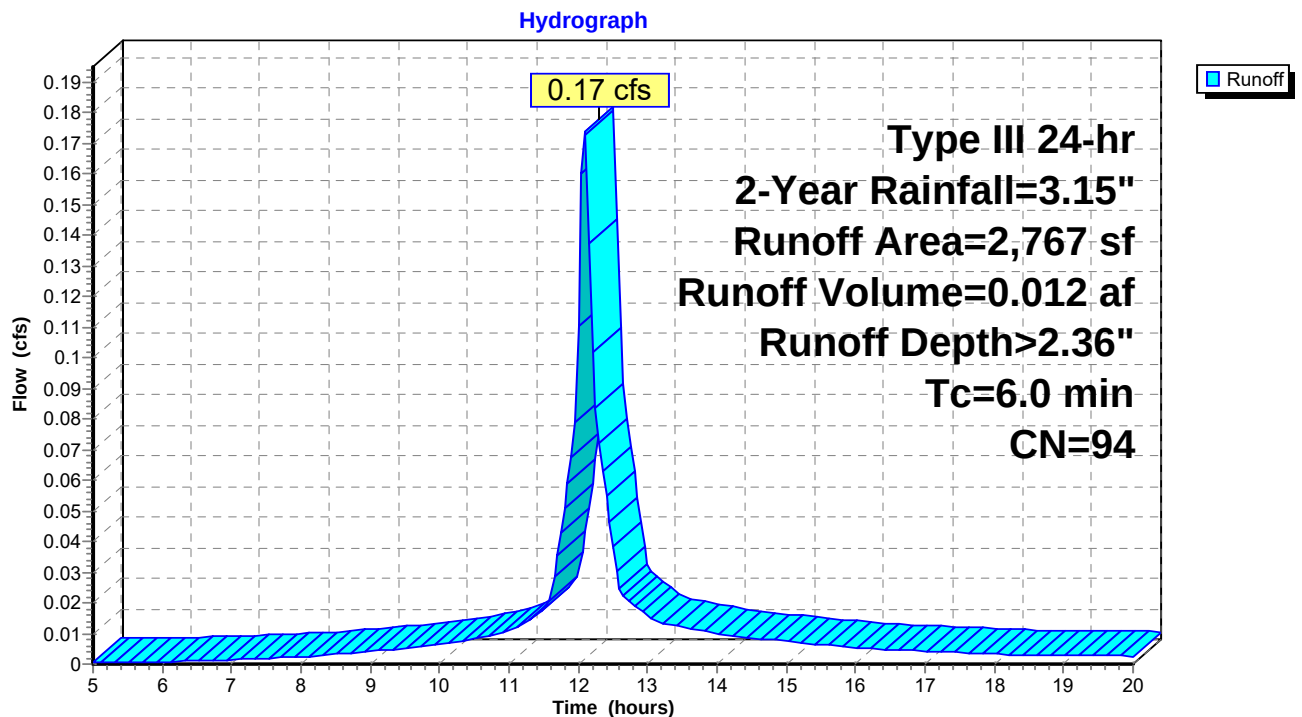
Runoff = 0.17 cfs @ 12.09 hrs, Volume= 0.012 af, Depth> 2.36"  
Routed to Pond 19P : CB 62

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 512       | 74 | >75% Grass cover, Good, HSG C |
| 2,255     | 98 | Paved parking, HSG C          |
| 2,767     | 94 | Weighted Average              |
| 512       |    | 18.50% Pervious Area          |
| 2,255     |    | 81.50% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 4S: P1D



### Summary for Subcatchment 5S: P1E

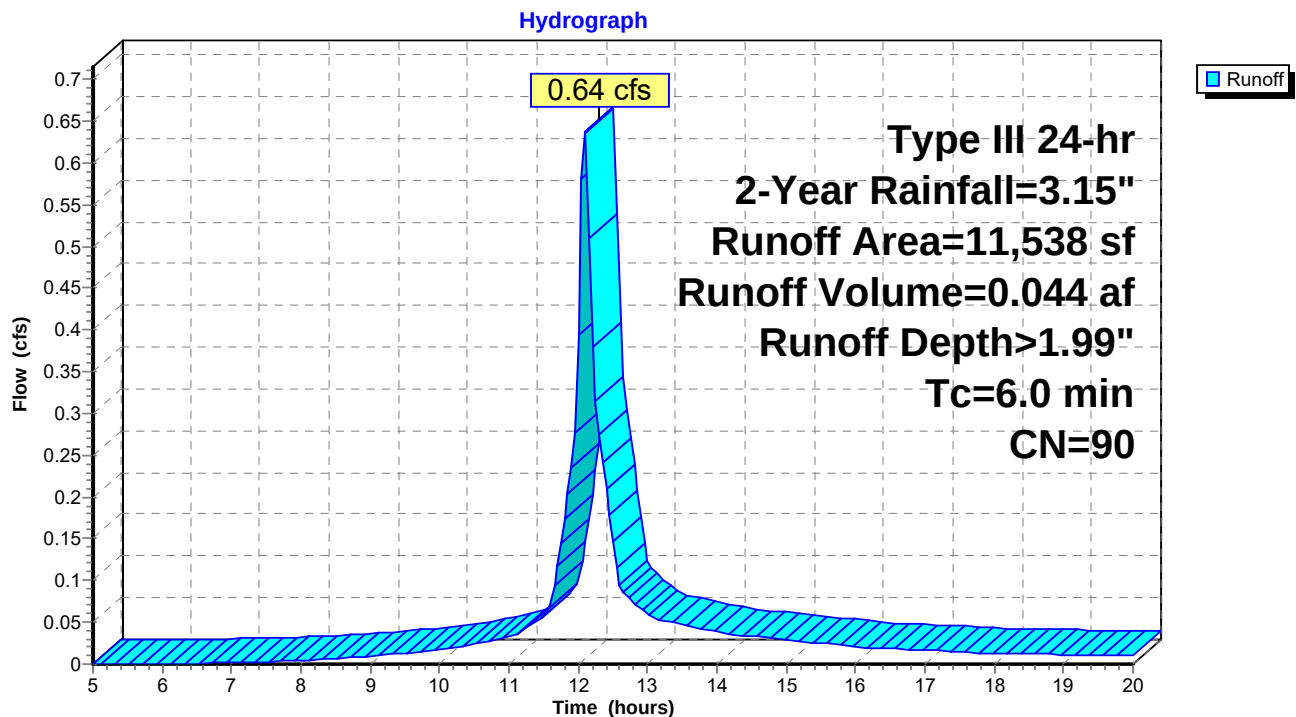
Runoff = 0.64 cfs @ 12.09 hrs, Volume= 0.044 af, Depth> 1.99"  
Routed to Pond 26P : CB 61

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,900     | 74 | >75% Grass cover, Good, HSG C |
| 3,976     | 98 | Unconnected roofs, HSG C      |
| 3,662     | 98 | Paved parking, HSG C          |
| 11,538    | 90 | Weighted Average              |
| 3,900     |    | 33.80% Pervious Area          |
| 7,638     |    | 66.20% Impervious Area        |
| 3,976     |    | 52.06% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 5S: P1E



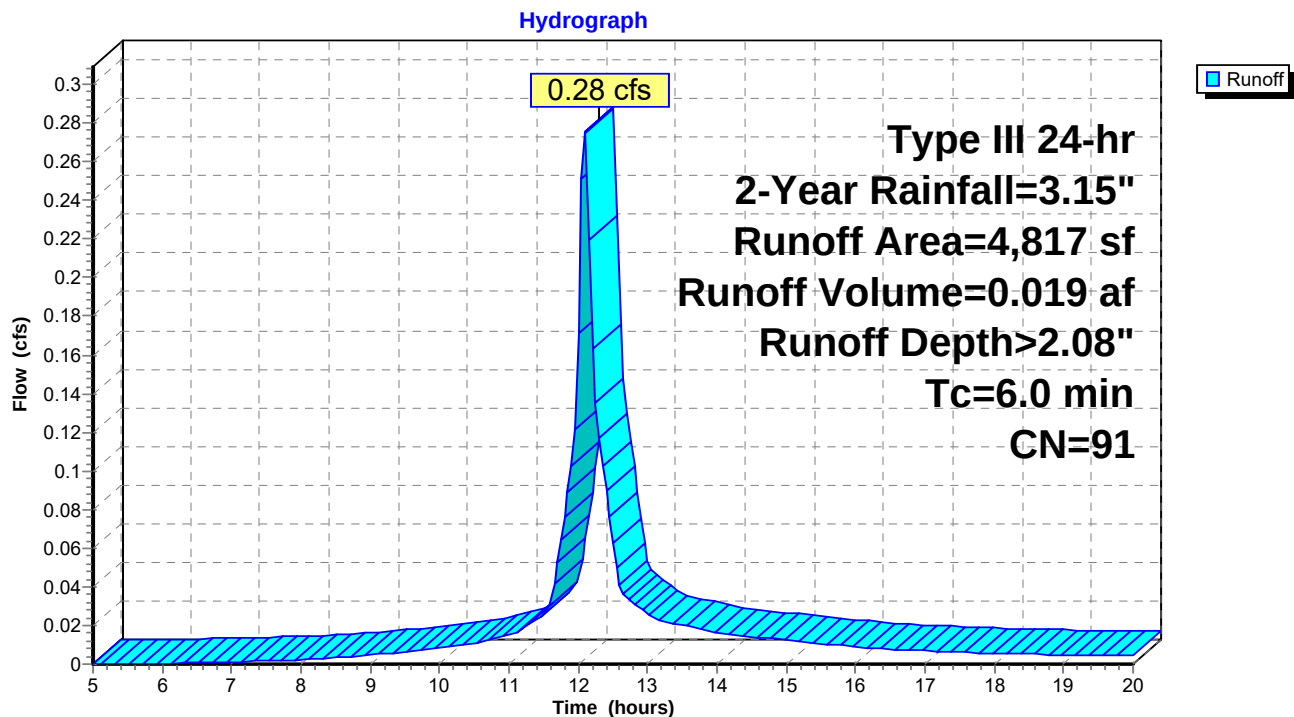
**Summary for Subcatchment 6S: P1F**

Runoff = 0.28 cfs @ 12.09 hrs, Volume= 0.019 af, Depth> 2.08"  
 Routed to Pond 27P : CB 60

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,378     | 74 | >75% Grass cover, Good, HSG C |
| 429       | 98 | Unconnected roofs, HSG C      |
| 3,010     | 98 | Paved parking, HSG C          |
| 4,817     | 91 | Weighted Average              |
| 1,378     |    | 28.61% Pervious Area          |
| 3,439     |    | 71.39% Impervious Area        |
| 429       |    | 12.47% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 6S: P1F**

### Summary for Subcatchment 7S: P1G

Runoff = 0.38 cfs @ 12.09 hrs, Volume= 0.029 af, Depth> 2.73"  
Routed to Pond 22P : CB 56

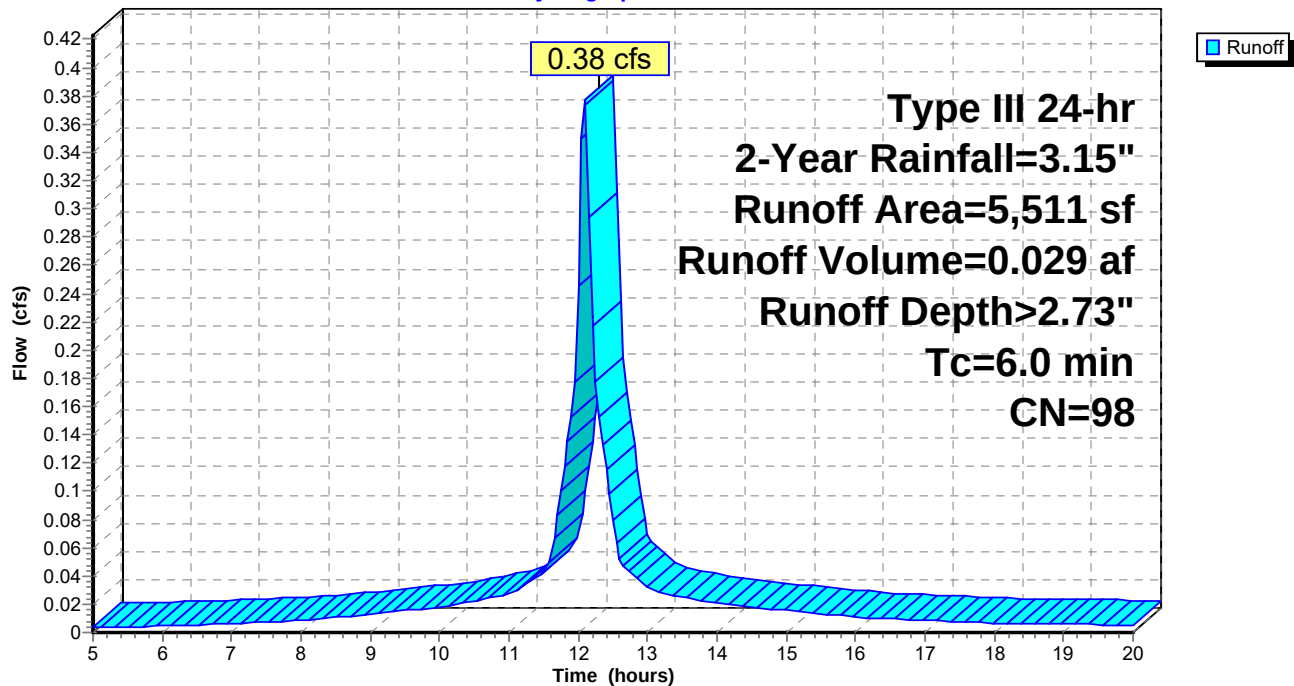
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description             |
|-----------|----|-------------------------|
| 5,511     | 98 | Paved parking, HSG C    |
| 5,511     |    | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 7S: P1G

Hydrograph





### Summary for Subcatchment 8S: P1H

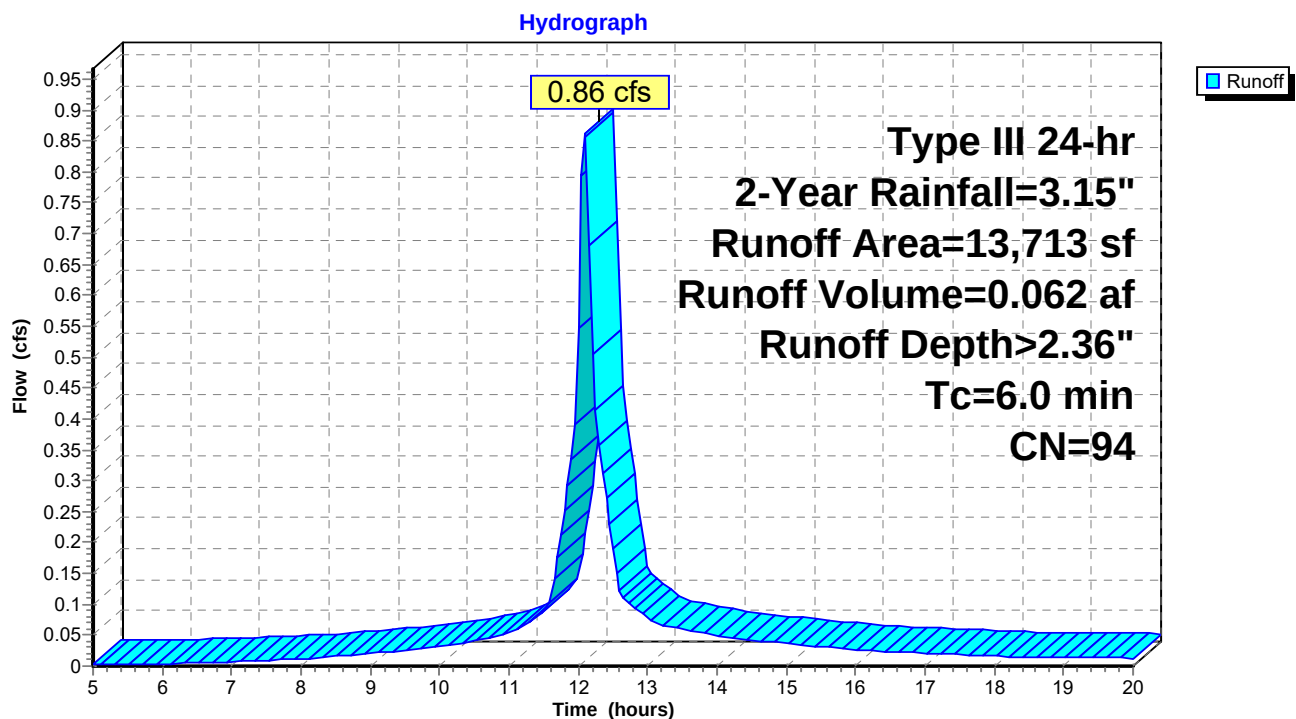
Runoff = 0.86 cfs @ 12.09 hrs, Volume= 0.062 af, Depth> 2.36"  
Routed to Pond 23P : CB 57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,554     | 74 | >75% Grass cover, Good, HSG C |
| 5,795     | 98 | Unconnected roofs, HSG C      |
| 5,364     | 98 | Paved parking, HSG C          |
| 13,713    | 94 | Weighted Average              |
| 2,554     |    | 18.62% Pervious Area          |
| 11,159    |    | 81.38% Impervious Area        |
| 5,795     |    | 51.93% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 8S: P1H



**RH Post 1-2-26**

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Type III 24-hr 2-Year Rainfall=3.15"

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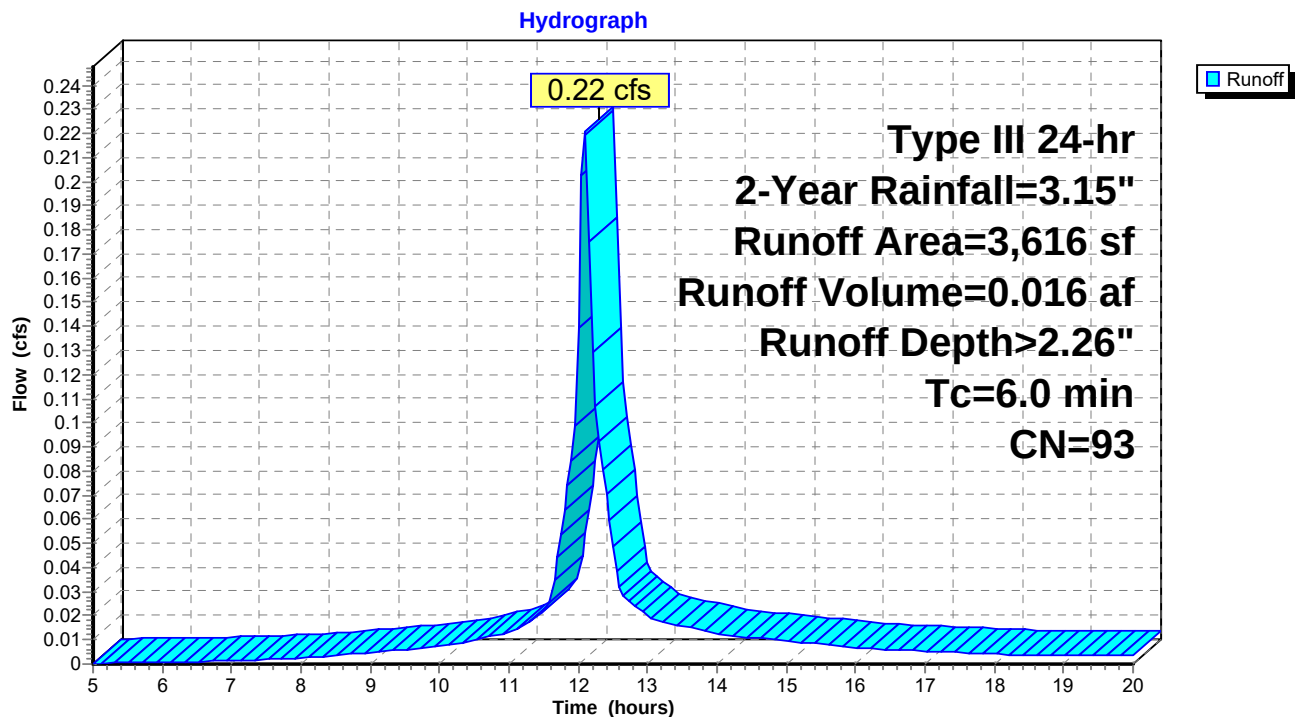
**Summary for Subcatchment 9S: P1I**

Runoff = 0.22 cfs @ 12.09 hrs, Volume= 0.016 af, Depth> 2.26"  
Routed to Pond 30P : CB 55

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 780       | 74 | >75% Grass cover, Good, HSG C |
| 2,836     | 98 | Paved parking, HSG C          |
| 3,616     | 93 | Weighted Average              |
| 780       |    | 21.57% Pervious Area          |
| 2,836     |    | 78.43% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 9S: P1I**

### Summary for Subcatchment 10S: P1J

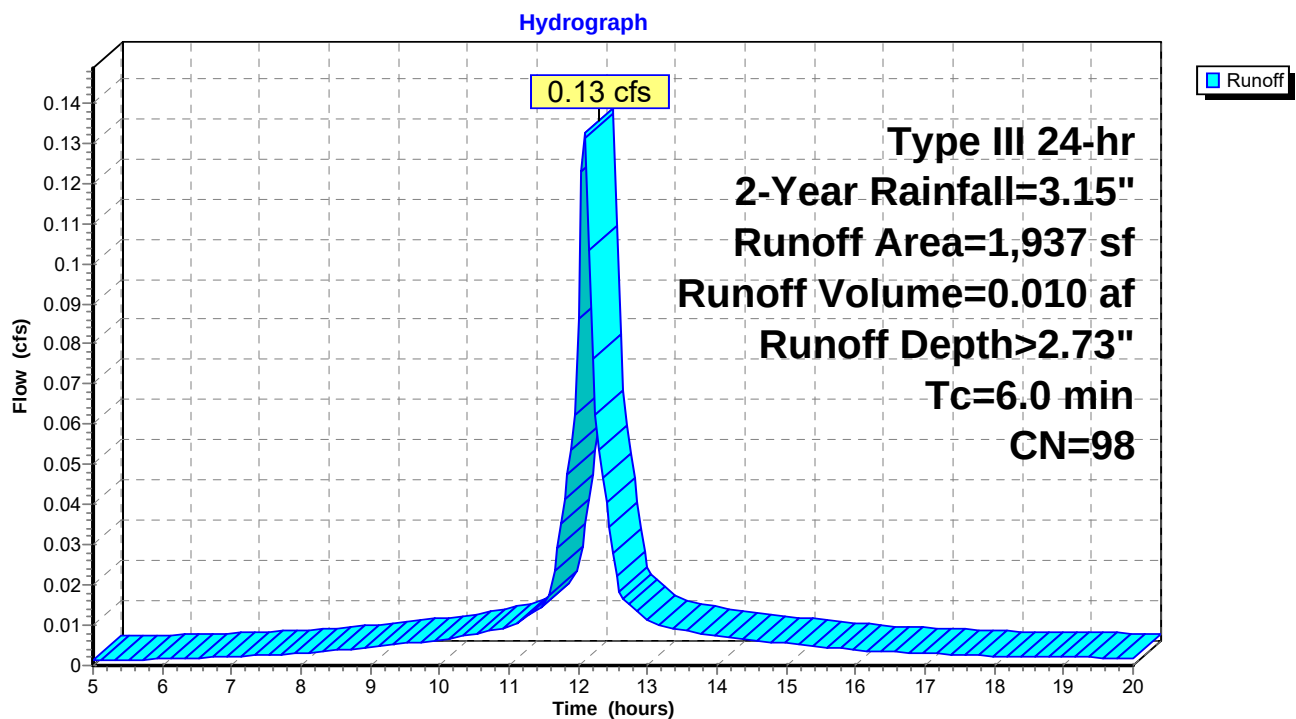
Runoff = 0.13 cfs @ 12.09 hrs, Volume= 0.010 af, Depth> 2.73"  
Routed to Pond 33P : CB 53

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description             |
|-----------|----|-------------------------|
| 1,937     | 98 | Paved parking, HSG C    |
| 1,937     |    | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 10S: P1J



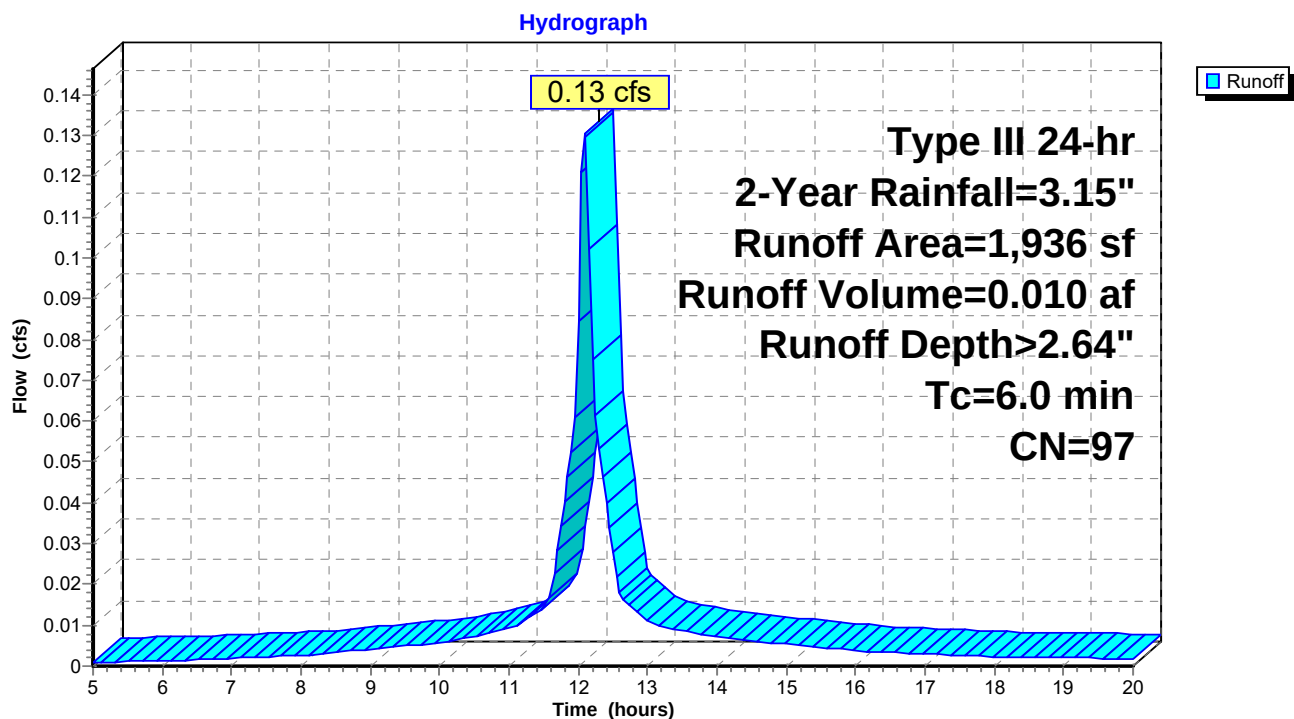
**Summary for Subcatchment 11S: P1K**

Runoff = 0.13 cfs @ 12.09 hrs, Volume= 0.010 af, Depth> 2.64"  
 Routed to Pond 31P : CB 51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 61        | 74 | >75% Grass cover, Good, HSG C |
| 354       | 98 | Unconnected roofs, HSG C      |
| 1,521     | 98 | Paved parking, HSG C          |
| 1,936     | 97 | Weighted Average              |
| 61        |    | 3.15% Pervious Area           |
| 1,875     |    | 96.85% Impervious Area        |
| 354       |    | 18.88% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 11S: P1K**

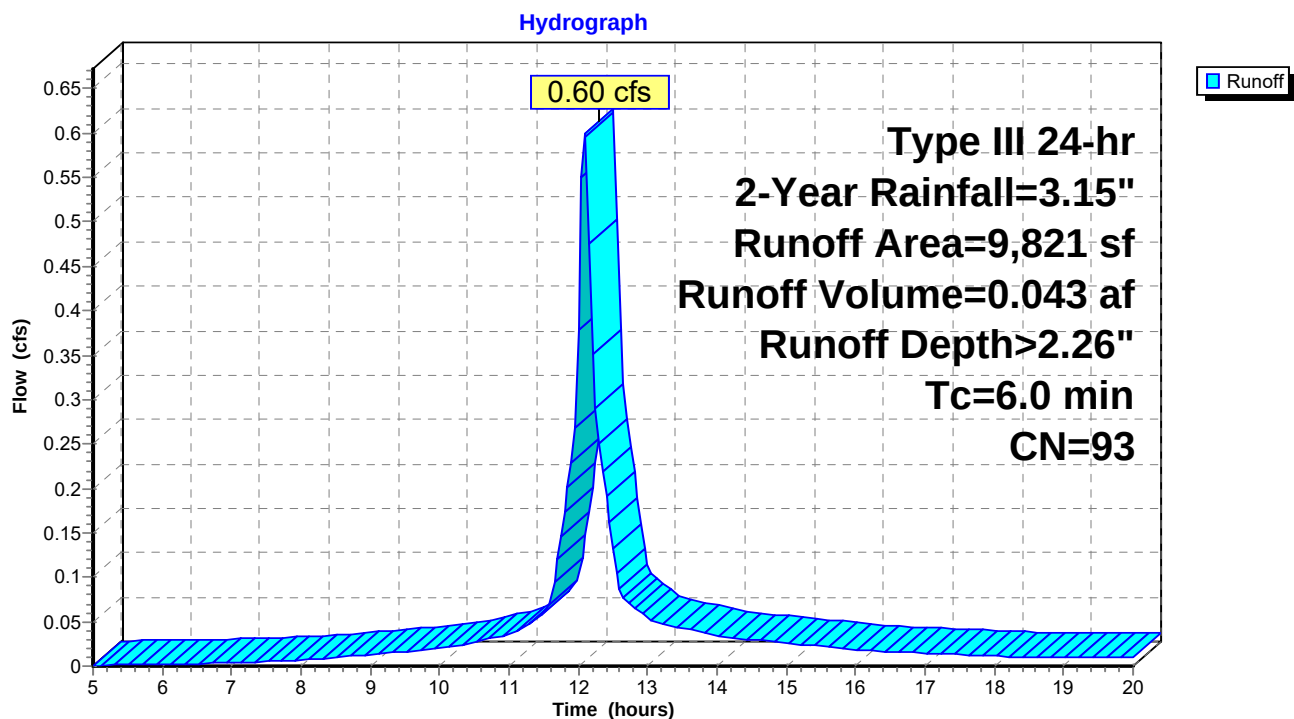
**Summary for Subcatchment 12S: P1L**

Runoff = 0.60 cfs @ 12.09 hrs, Volume= 0.043 af, Depth> 2.26"  
 Routed to Pond 32P : CB 52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,077     | 74 | >75% Grass cover, Good, HSG C |
| 2,390     | 98 | Unconnected roofs, HSG C      |
| 5,354     | 98 | Paved parking, HSG C          |
| 9,821     | 93 | Weighted Average              |
| 2,077     |    | 21.15% Pervious Area          |
| 7,744     |    | 78.85% Impervious Area        |
| 2,390     |    | 30.86% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 12S: P1L**

### Summary for Subcatchment 13S: P1M

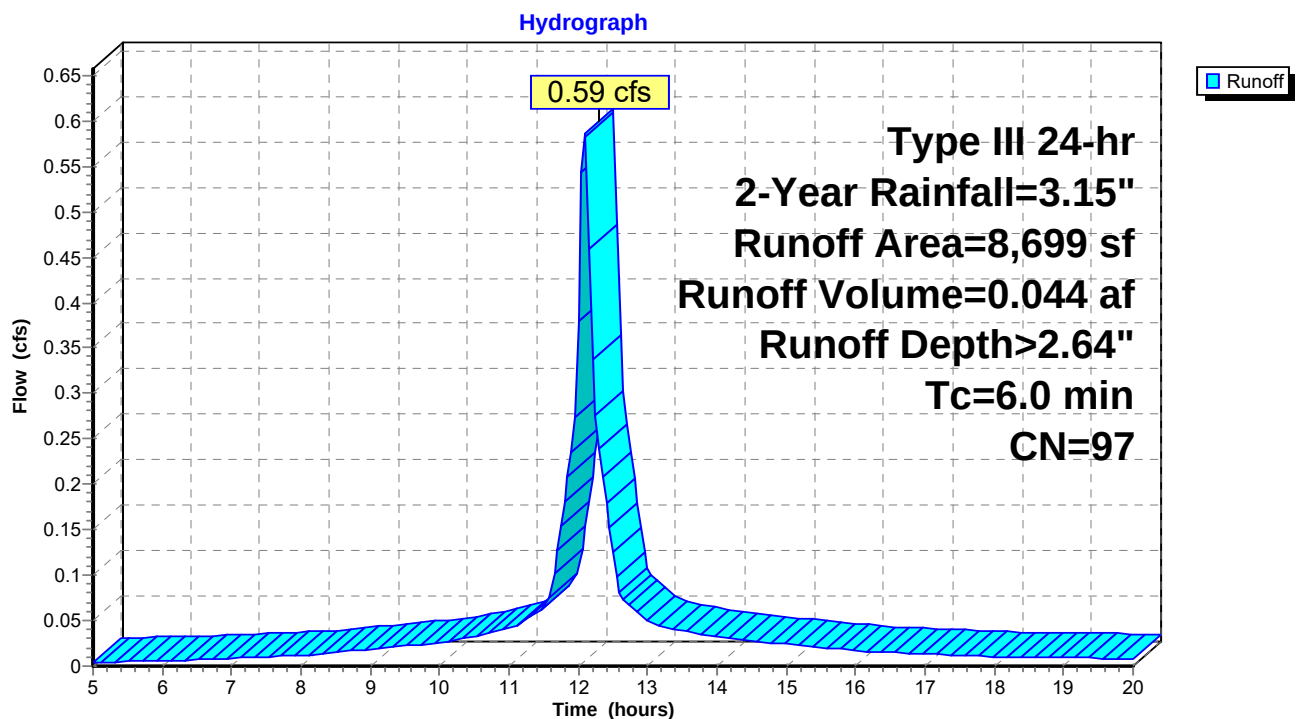
Runoff = 0.59 cfs @ 12.09 hrs, Volume= 0.044 af, Depth> 2.64"  
Routed to Pond 36P : CB 54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 476       | 74 | >75% Grass cover, Good, HSG C |
| 569       | 98 | Unconnected roofs, HSG C      |
| 7,654     | 98 | Paved parking, HSG C          |
| 8,699     | 97 | Weighted Average              |
| 476       |    | 5.47% Pervious Area           |
| 8,223     |    | 94.53% Impervious Area        |
| 569       |    | 6.92% Unconnected             |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 13S: P1M



**RH Post 1-2-26**

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Type III 24-hr 2-Year Rainfall=3.15"

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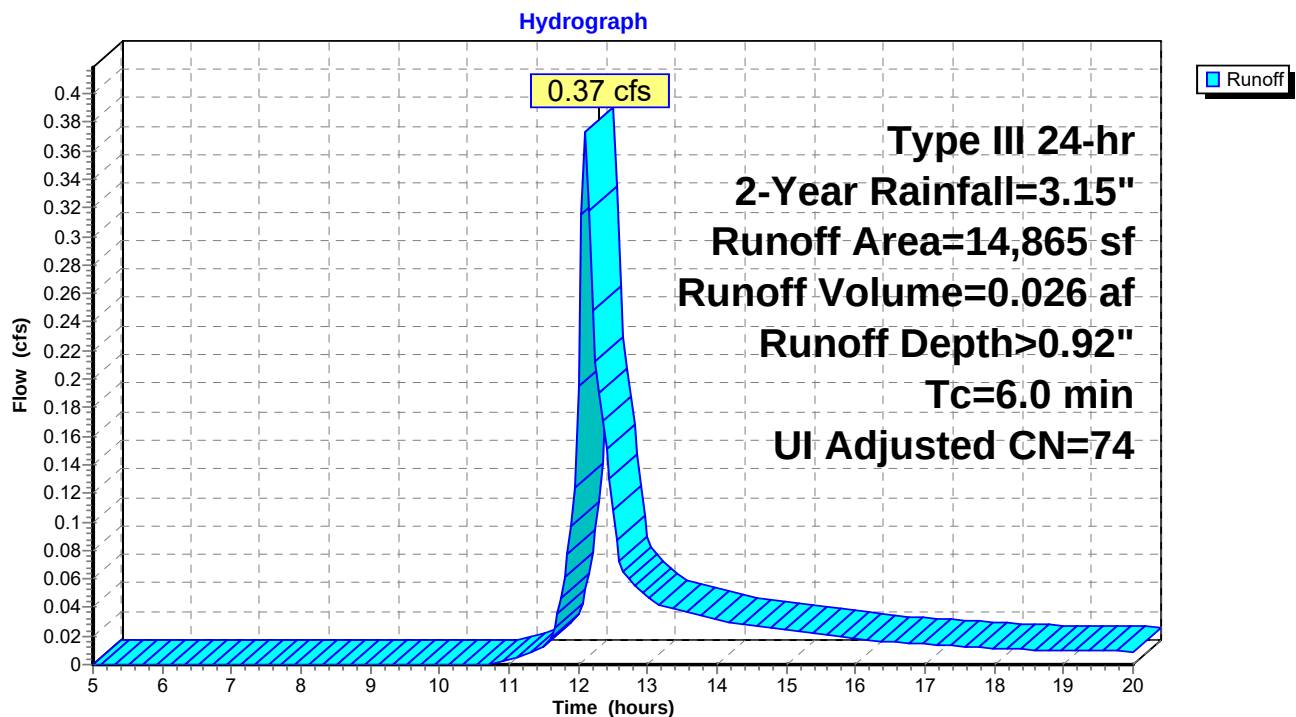
**Summary for Subcatchment 14S: P1N**

Runoff = 0.37 cfs @ 12.10 hrs, Volume= 0.026 af, Depth> 0.92"  
Routed to Pond 15P : Inf. Basin 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 586       | 98 |     | Unconnected roofs, HSG C      |
| 14,279    | 74 |     | >75% Grass cover, Good, HSG C |
| 14,865    | 75 | 74  | Weighted Average, UI Adjusted |
| 14,279    |    |     | 96.06% Pervious Area          |
| 586       |    |     | 3.94% Impervious Area         |
| 586       |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 14S: P1N**

### Summary for Subcatchment 39S: P1P

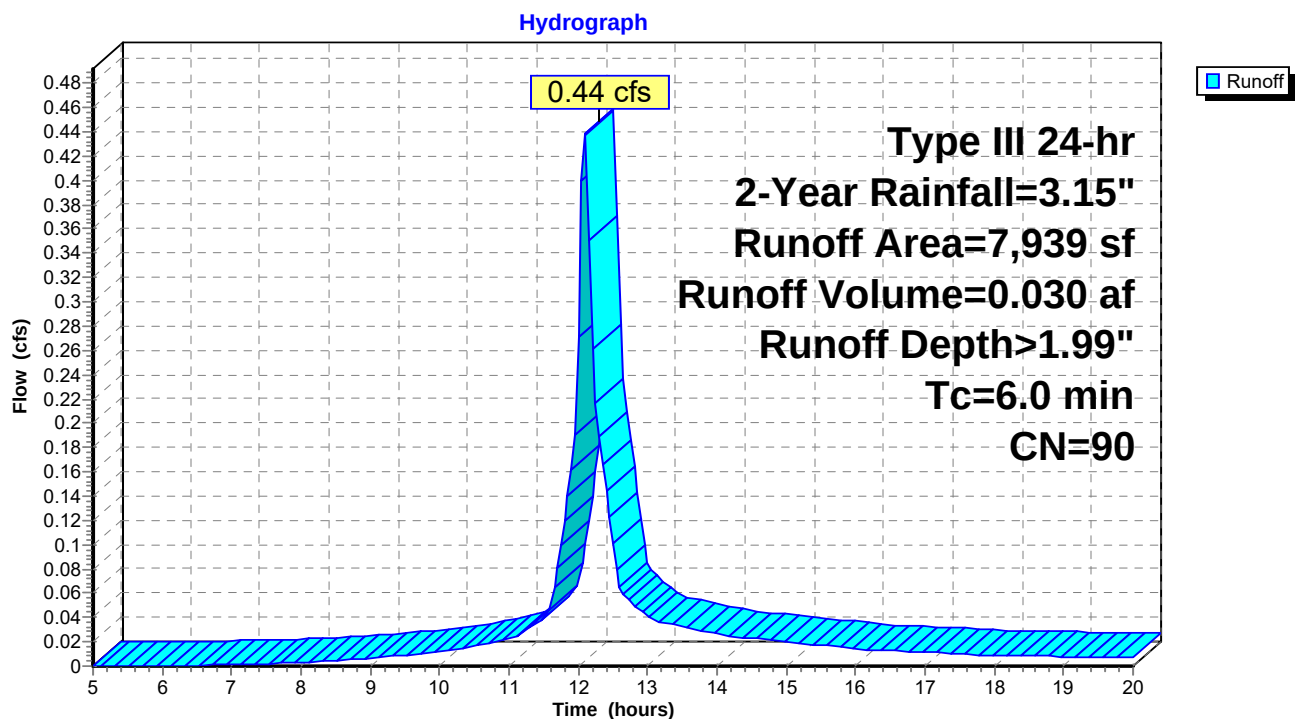
Runoff = 0.44 cfs @ 12.09 hrs, Volume= 0.030 af, Depth> 1.99"  
Routed to Pond 42P : CB 50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,926     | 98 | Unconnected roofs, HSG C      |
| 2,623     | 74 | >75% Grass cover, Good, HSG C |
| 3,390     | 98 | Paved parking, HSG C          |
| 7,939     | 90 | Weighted Average              |
| 2,623     |    | 33.04% Pervious Area          |
| 5,316     |    | 66.96% Impervious Area        |
| 1,926     |    | 36.23% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 39S: P1P





**Summary for Subcatchment 40S: P10**

Runoff = 0.07 cfs @ 12.09 hrs, Volume= 0.005 af, Depth> 2.73"  
 Routed to Pond 41P : CB 49

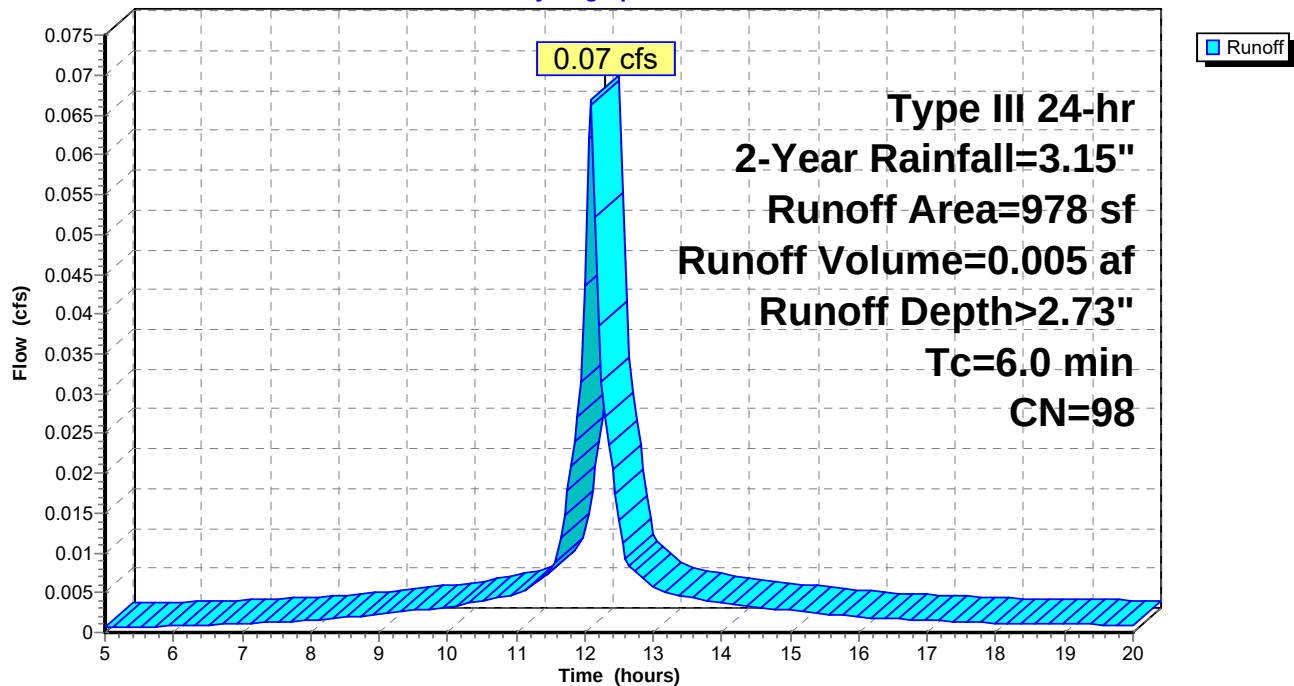
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description             |
|-----------|----|-------------------------|
| 978       | 98 | Paved parking, HSG C    |
| 978       |    | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 40S: P10**

Hydrograph



### Summary for Subcatchment 44S: P1R

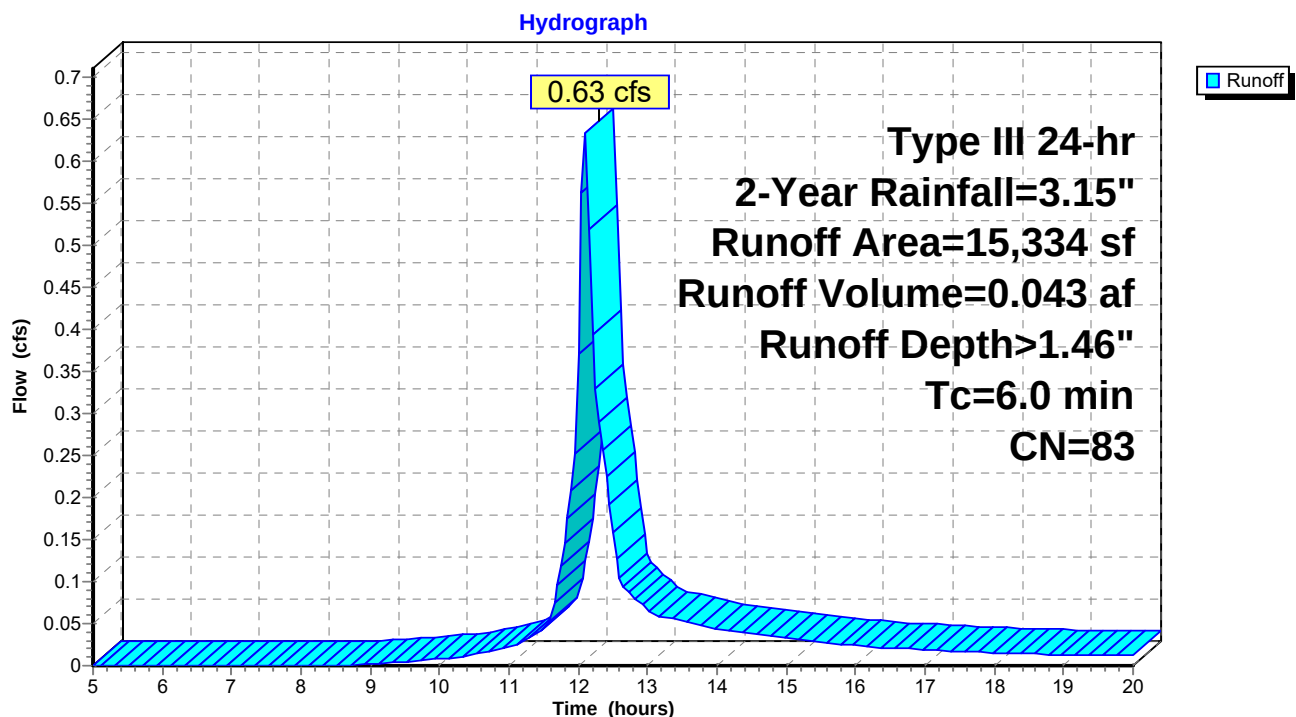
Runoff = 0.63 cfs @ 12.09 hrs, Volume= 0.043 af, Depth> 1.46"  
Routed to Pond 46P : CB 48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 704       | 98 | Unconnected pavement, HSG C   |
| 1,196     | 74 | >75% Grass cover, Good, HSG C |
| 955       | 98 | Paved parking, HSG C          |
| 2,884     | 98 | Unconnected roofs, HSG A      |
| 3,316     | 39 | >75% Grass cover, Good, HSG A |
| 6,279     | 98 | Paved parking, HSG A          |
| 15,334    | 83 | Weighted Average              |
| 4,512     |    | 29.42% Pervious Area          |
| 10,822    |    | 70.58% Impervious Area        |
| 3,588     |    | 33.15% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 44S: P1R



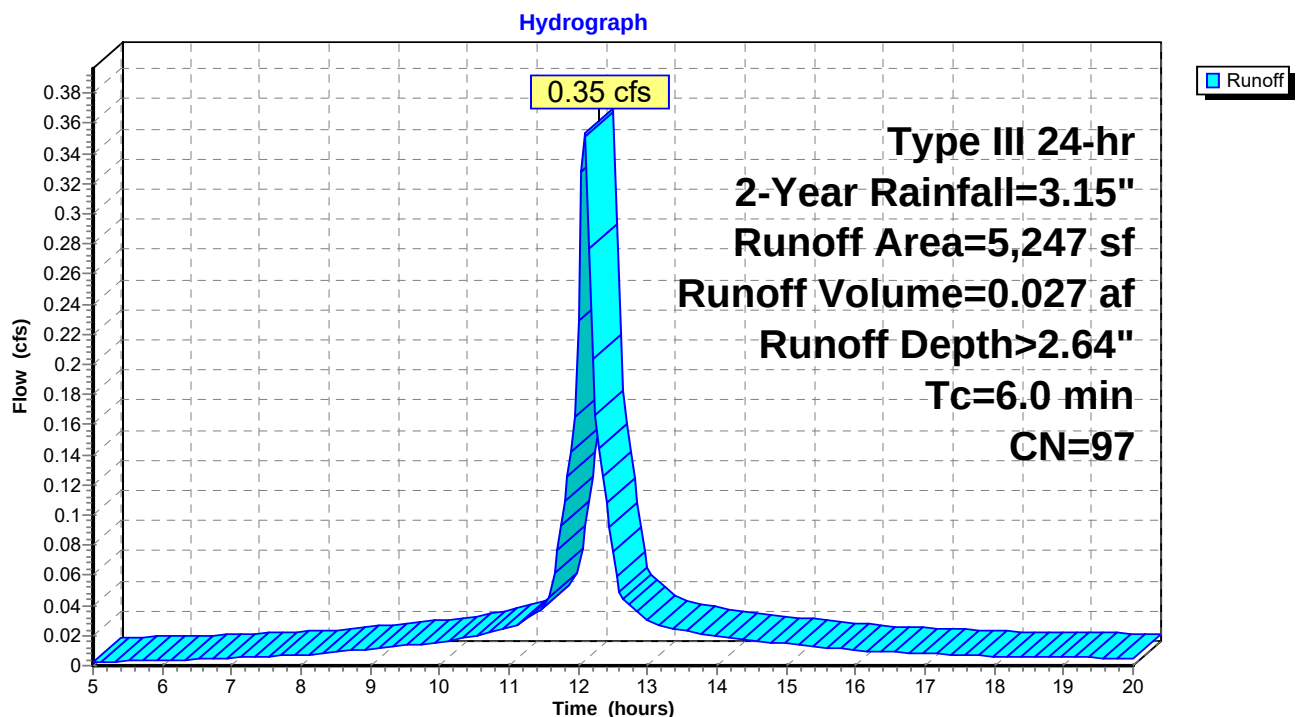
**Summary for Subcatchment 45S: P1Q**

Runoff = 0.35 cfs @ 12.09 hrs, Volume= 0.027 af, Depth> 2.64"  
 Routed to Pond 47P : CB 47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 49        | 74 | >75% Grass cover, Good, HSG C |
| 49        | 98 | Unconnected roofs, HSG C      |
| 1,120     | 98 | Paved parking, HSG C          |
| 80        | 39 | >75% Grass cover, Good, HSG A |
| 442       | 98 | Unconnected roofs, HSG A      |
| 3,507     | 98 | Paved parking, HSG A          |
| 5,247     | 97 | Weighted Average              |
| 129       |    | 2.46% Pervious Area           |
| 5,118     |    | 97.54% Impervious Area        |
| 491       |    | 9.59% Unconnected             |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 45S: P1Q**

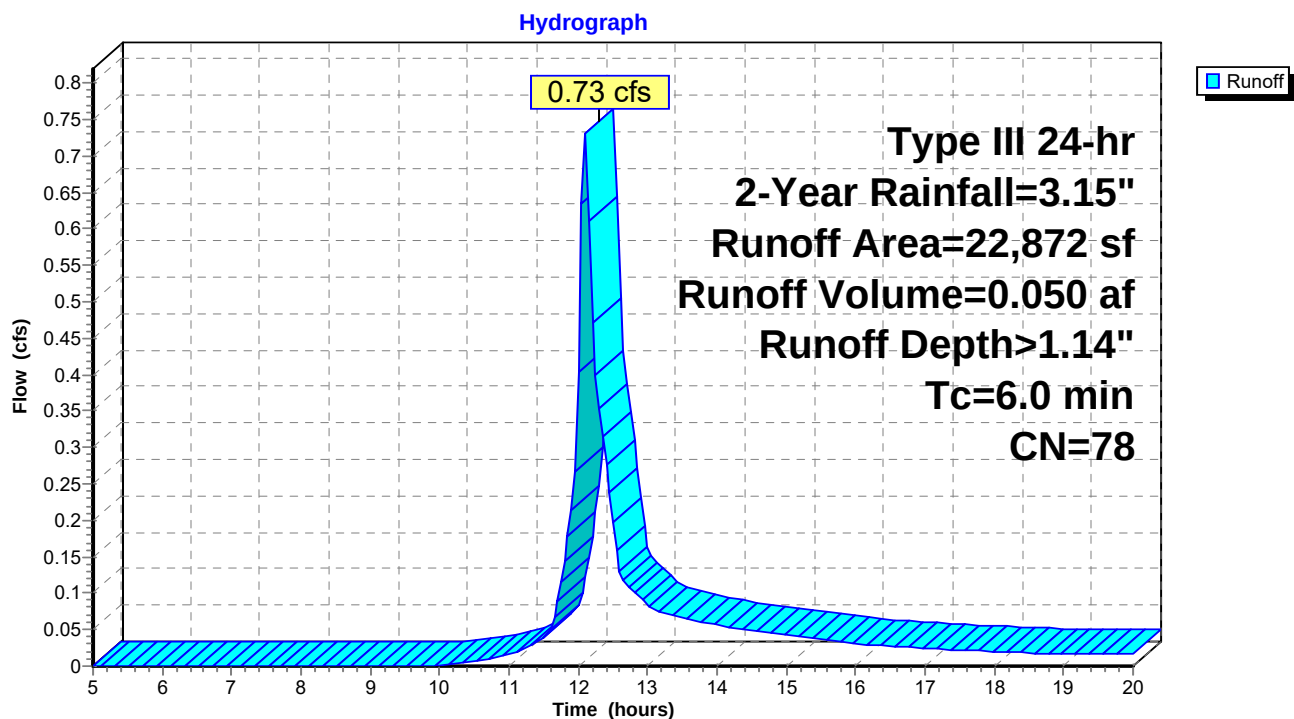
**Summary for Subcatchment 50S: P1S**

Runoff = 0.73 cfs @ 12.10 hrs, Volume= 0.050 af, Depth> 1.14"  
 Routed to Pond 53P : CB 21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 6,743     | 98 | Unconnected roofs, HSG A      |
| 7,903     | 39 | >75% Grass cover, Good, HSG A |
| 8,226     | 98 | Paved parking, HSG A          |
| 22,872    | 78 | Weighted Average              |
| 7,903     |    | 34.55% Pervious Area          |
| 14,969    |    | 65.45% Impervious Area        |
| 6,743     |    | 45.05% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 50S: P1S**

### Summary for Subcatchment 51S: P1T

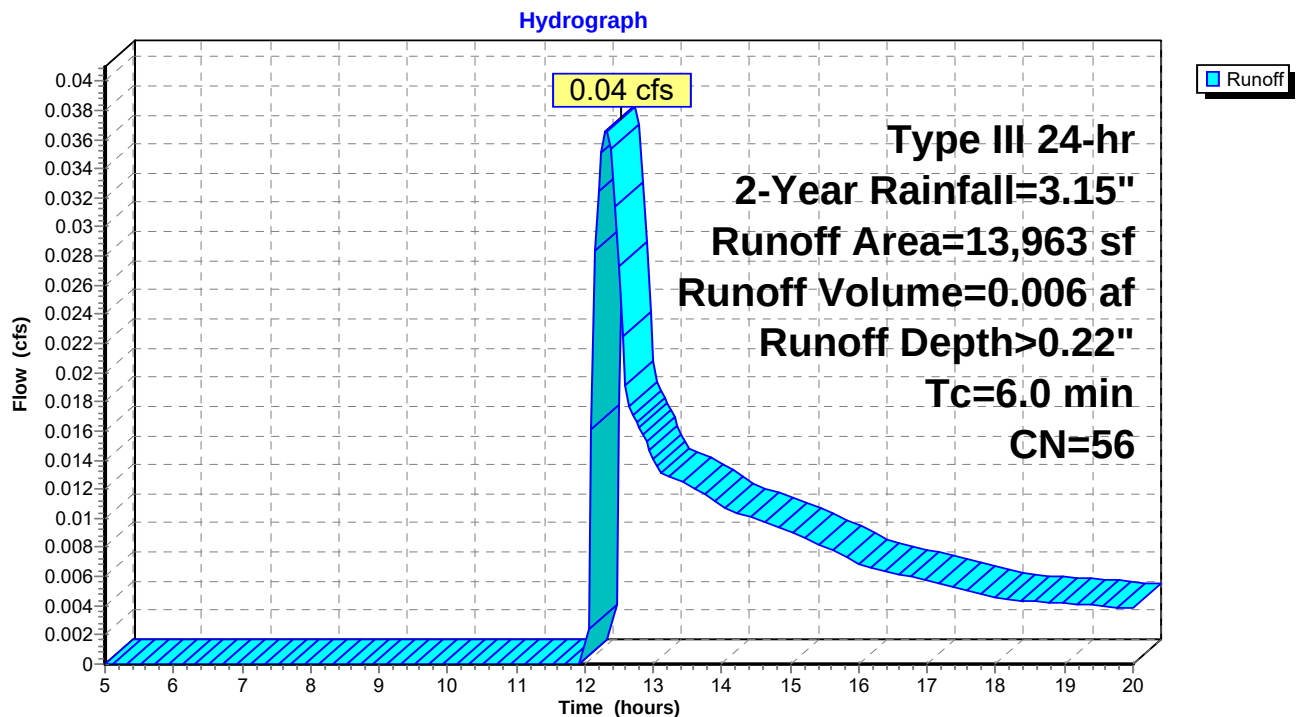
Runoff = 0.04 cfs @ 12.32 hrs, Volume= 0.006 af, Depth> 0.22"  
Routed to Pond 52P : CB 20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 9,878     | 39 | >75% Grass cover, Good, HSG A |
| 4,085     | 98 | Paved parking, HSG A          |
| 13,963    | 56 | Weighted Average              |
| 9,878     |    | 70.74% Pervious Area          |
| 4,085     |    | 29.26% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 51S: P1T



### Summary for Subcatchment 57S: (new Subcat)

Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"  
Routed to Pond 56P : Inf. Basin 4

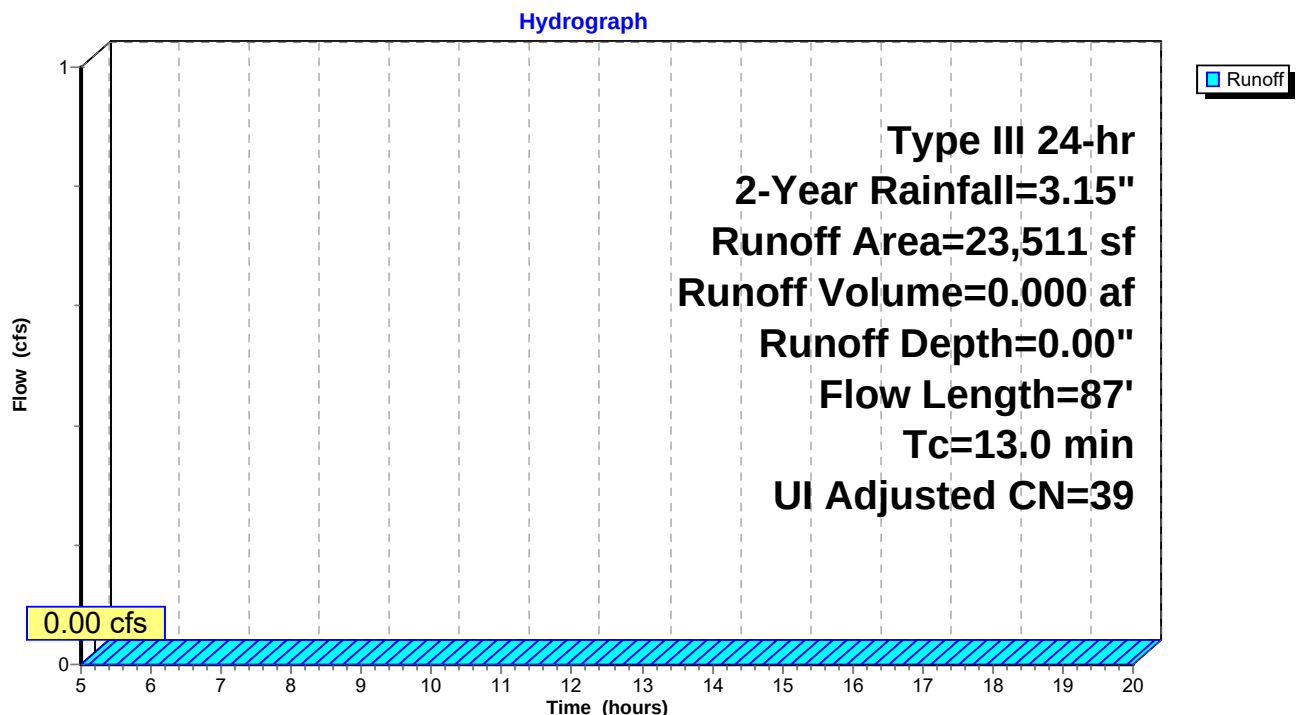
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 1,317     | 98 |     | Unconnected roofs, HSG A      |
| 4,111     | 30 |     | Woods, Good, HSG A            |
| 18,083    | 39 |     | >75% Grass cover, Good, HSG A |
| 23,511    | 41 | 39  | Weighted Average, UI Adjusted |
| 22,194    |    |     | 94.40% Pervious Area          |
| 1,317     |    |     | 5.60% Impervious Area         |
| 1,317     |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                          |
|----------|---------------|---------------|-------------------|----------------|----------------------------------------------------------------------|
| 12.5     | 50            | 0.0200        | 0.07              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10"     |
| 0.5      | 37            | 0.0300        | 1.21              |                | <b>Shallow Concentrated Flow,</b><br>Short Grass Pasture Kv= 7.0 fps |
| 13.0     | 87            | Total         |                   |                |                                                                      |

### Subcatchment 57S: (new Subcat)



**Summary for Subcatchment 58S: P1AA**

Runoff = 0.02 cfs @ 15.57 hrs, Volume= 0.010 af, Depth> 0.02"  
 Routed to Link 59L : DP 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

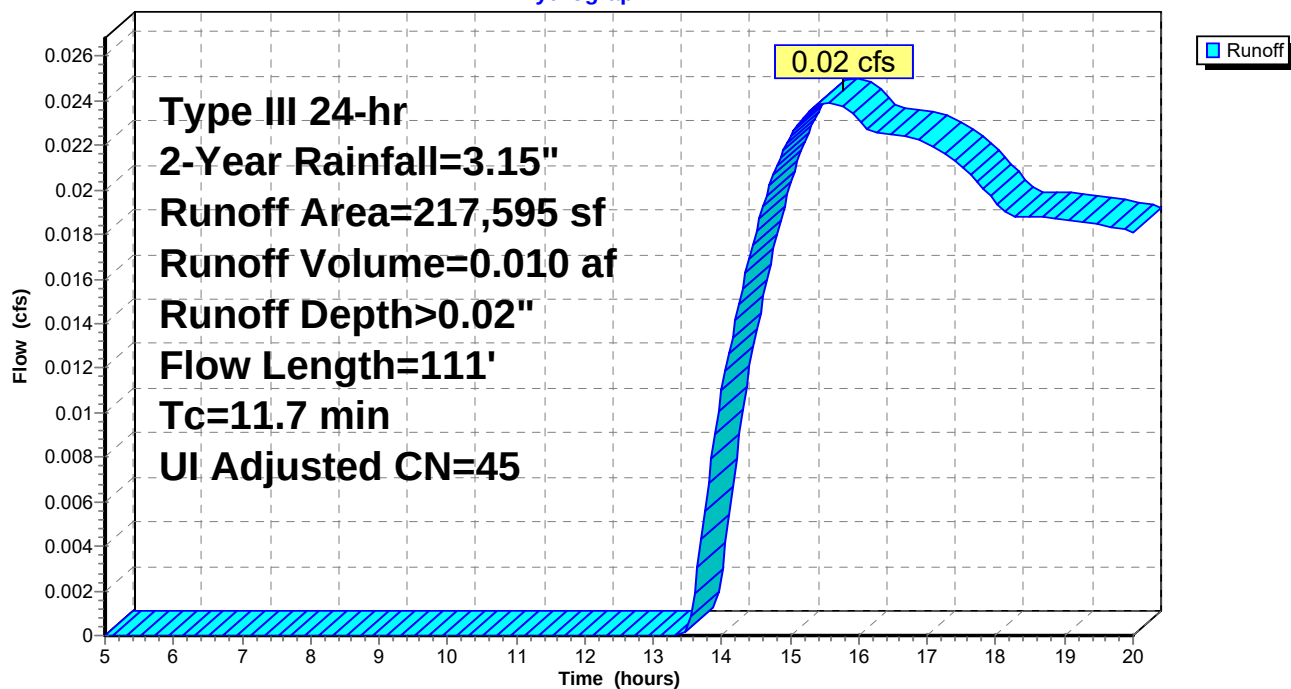
| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 1,776     | 98 |     | Unconnected roofs, HSG C      |
| 20,134    | 70 |     | Woods, Good, HSG C            |
| 38,005    | 74 |     | >75% Grass cover, Good, HSG C |
| 3,034     | 98 |     | Unconnected roofs, HSG A      |
| * 12,179  | 39 |     | Pervious Pavement             |
| 84,195    | 30 |     | Woods, Good, HSG A            |
| 57,506    | 39 |     | >75% Grass cover, Good, HSG A |
| 766       | 98 |     | Unconnected pavement, HSG A   |
| 217,595   | 46 | 45  | Weighted Average, UI Adjusted |
| 212,019   |    |     | 97.44% Pervious Area          |
| 5,576     |    |     | 2.56% Impervious Area         |
| 5,576     |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                      |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------|
| 10.7     | 50            | 0.0300        | 0.08              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10" |
| 1.0      | 61            | 0.0400        | 1.00              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps        |
| 11.7     | 111           | Total         |                   |                |                                                                  |

## Subcatchment 58S: P1AA

Hydrograph





### Summary for Subcatchment 60S: P2C

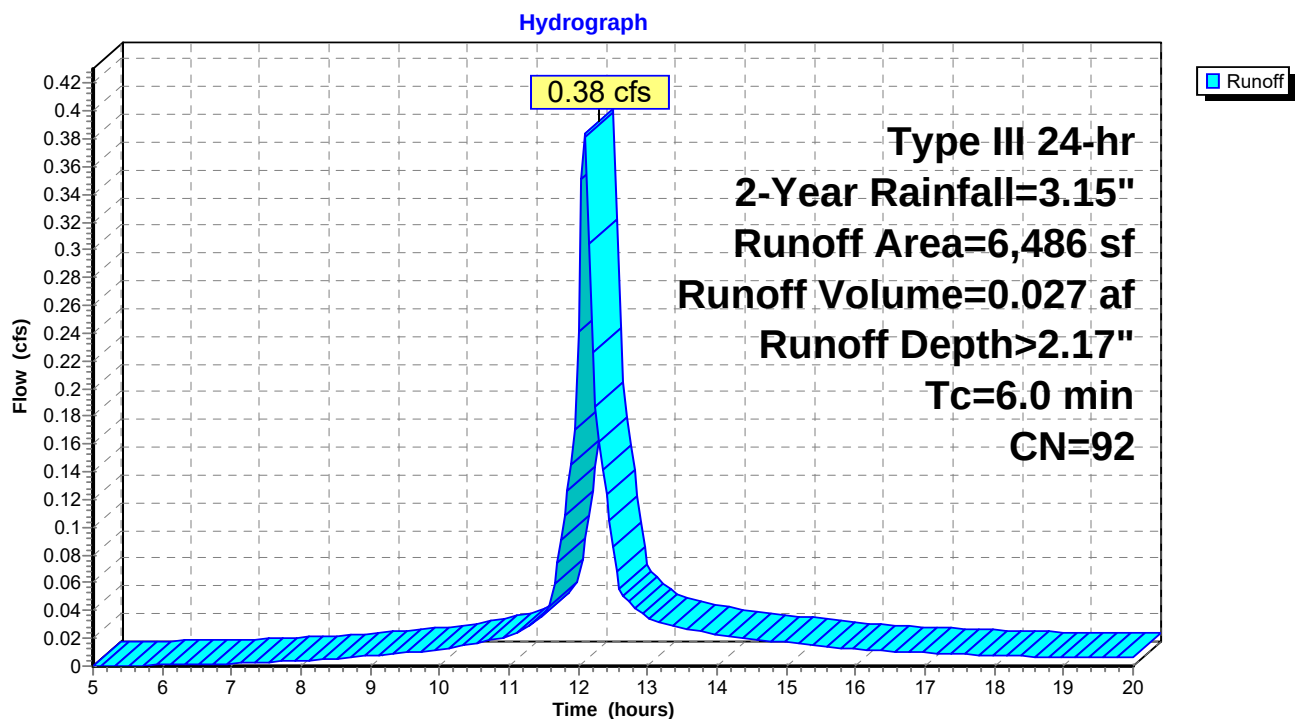
Runoff = 0.38 cfs @ 12.09 hrs, Volume= 0.027 af, Depth> 2.17"  
Routed to Pond 62P : CB 66

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,086     | 98 | Unconnected roofs, HSG C      |
| 1,688     | 74 | >75% Grass cover, Good, HSG C |
| 2,712     | 98 | Paved parking, HSG C          |
| 6,486     | 92 | Weighted Average              |
| 1,688     |    | 26.03% Pervious Area          |
| 4,798     |    | 73.97% Impervious Area        |
| 2,086     |    | 43.48% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 60S: P2C



### Summary for Subcatchment 61S: P2D

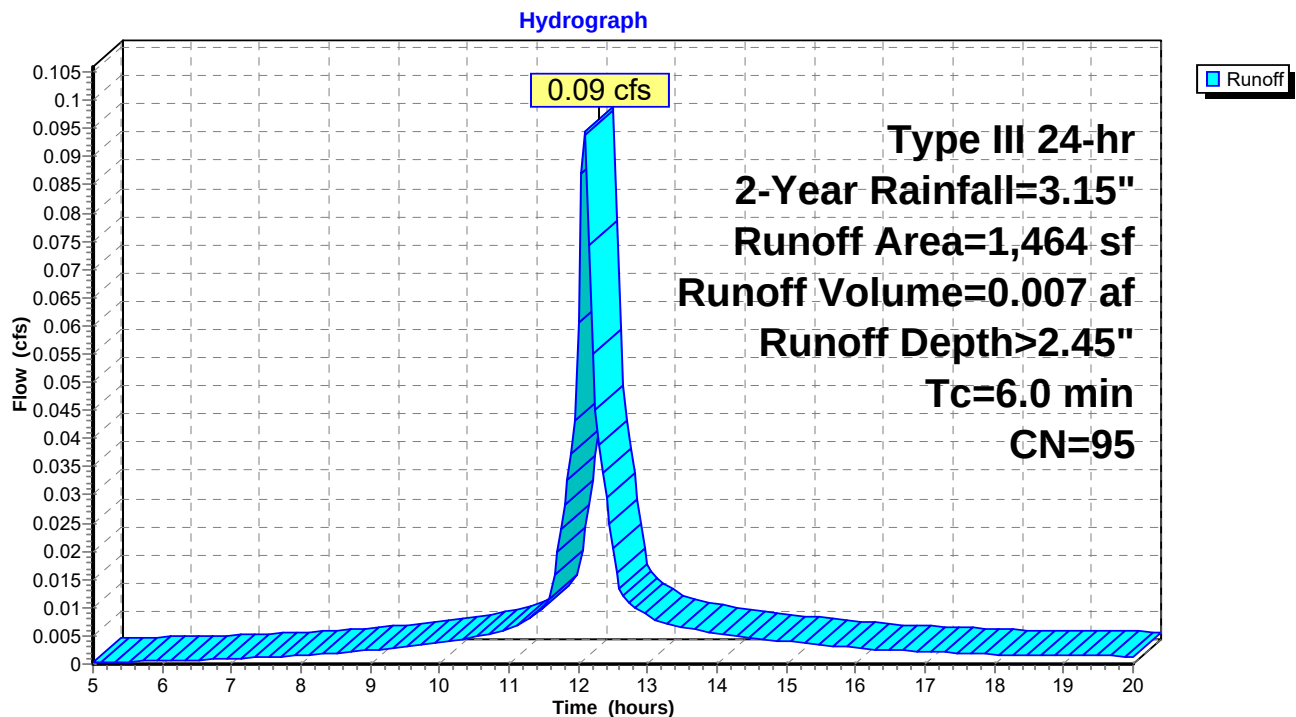
Runoff = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af, Depth> 2.45"  
Routed to Pond 63P : CB 67

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 190       | 74 | >75% Grass cover, Good, HSG C |
| 1,274     | 98 | Paved parking, HSG C          |
| 1,464     | 95 | Weighted Average              |
| 190       |    | 12.98% Pervious Area          |
| 1,274     |    | 87.02% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 61S: P2D



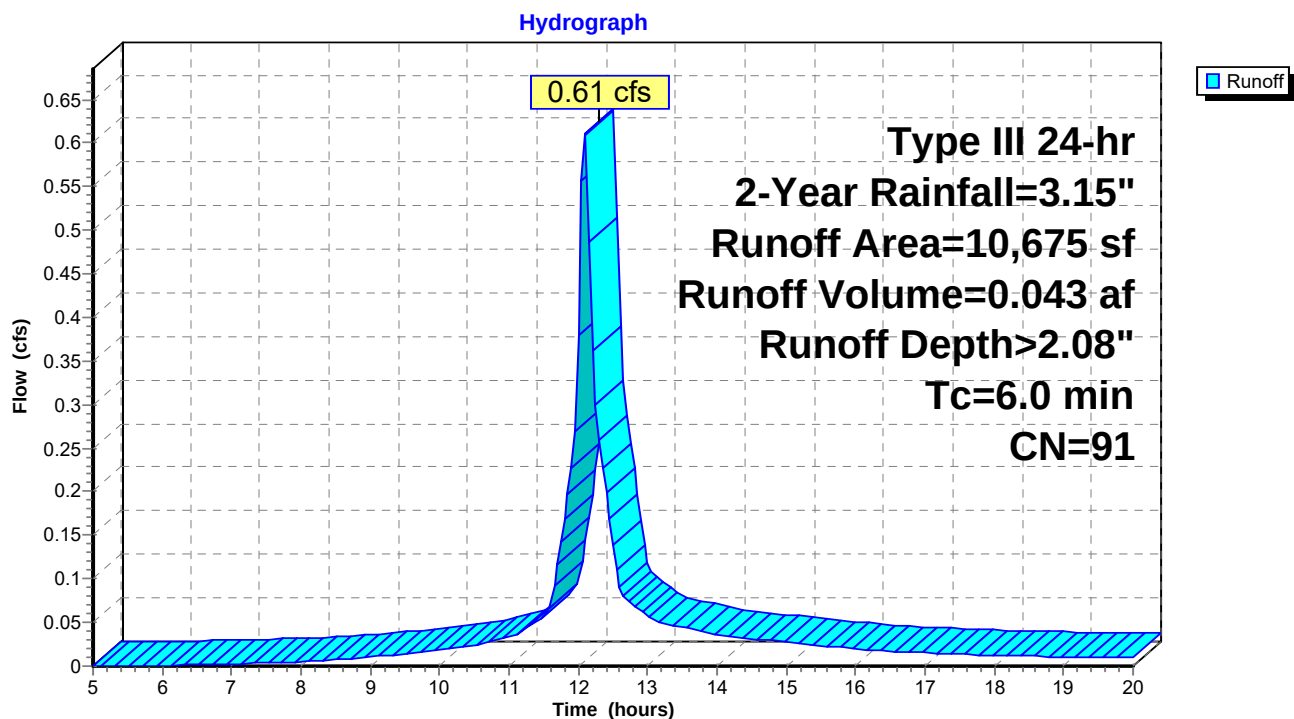
**Summary for Subcatchment 62S: P2J**

Runoff = 0.61 cfs @ 12.09 hrs, Volume= 0.043 af, Depth> 2.08"  
 Routed to Pond 69P : CB 72

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,207     | 98 | Unconnected roofs, HSG C      |
| 2,897     | 74 | >75% Grass cover, Good, HSG C |
| 4,571     | 98 | Paved parking, HSG C          |
| 10,675    | 91 | Weighted Average              |
| 2,897     |    | 27.14% Pervious Area          |
| 7,778     |    | 72.86% Impervious Area        |
| 3,207     |    | 41.23% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 62S: P2J**

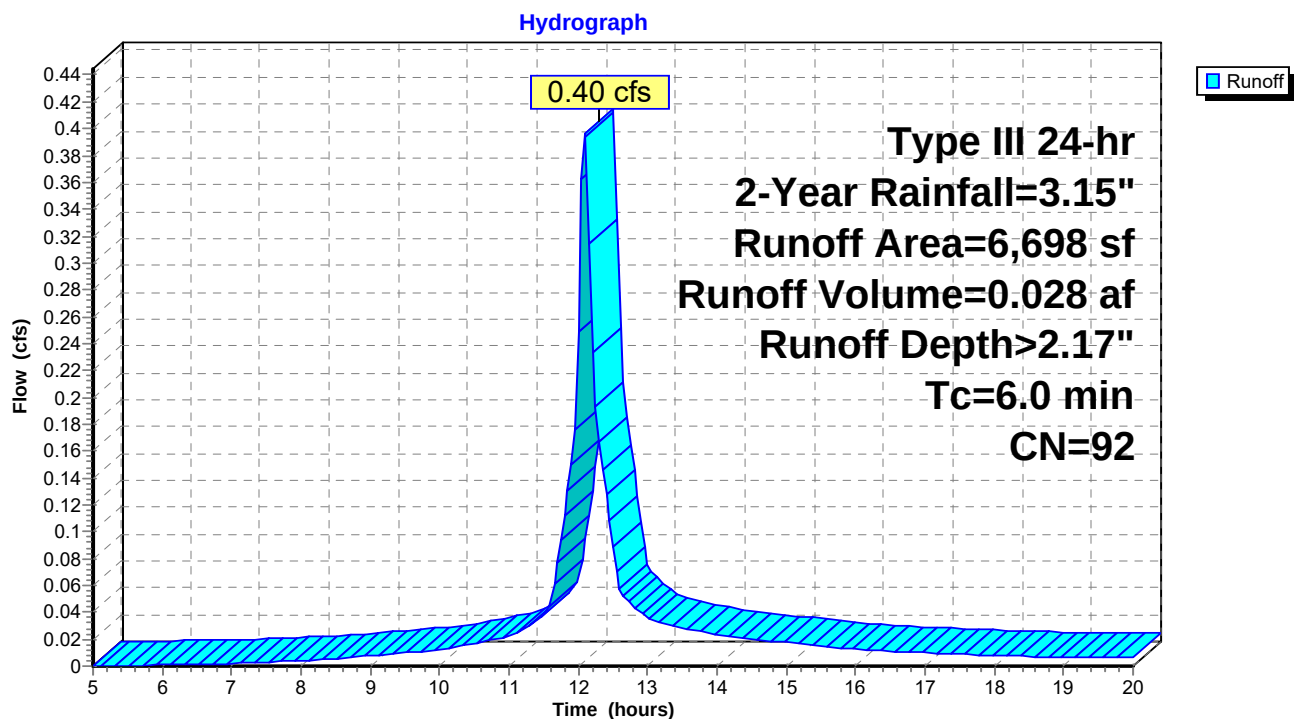
**Summary for Subcatchment 63S: P2K**

Runoff = 0.40 cfs @ 12.09 hrs, Volume= 0.028 af, Depth> 2.17"  
 Routed to Pond 70P : CB 73

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,542     | 74 | >75% Grass cover, Good, HSG C |
| 1,151     | 98 | Unconnected roofs, HSG C      |
| 4,005     | 98 | Paved parking, HSG C          |
| 6,698     | 92 | Weighted Average              |
| 1,542     |    | 23.02% Pervious Area          |
| 5,156     |    | 76.98% Impervious Area        |
| 1,151     |    | 22.32% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 63S: P2K**

**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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Type III 24-hr 2-Year Rainfall=3.15"

Printed 1/7/2026

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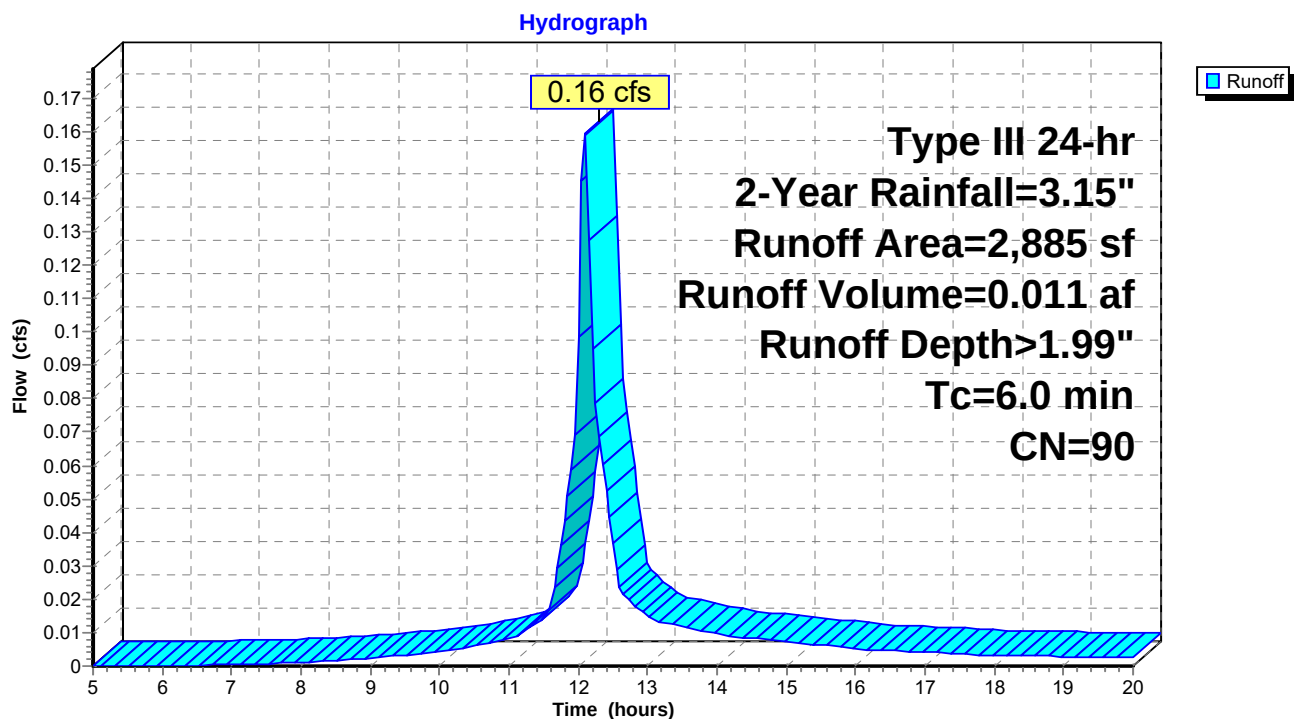
**Summary for Subcatchment 64S: P3L**

Runoff = 0.16 cfs @ 12.09 hrs, Volume= 0.011 af, Depth> 1.99"  
Routed to Pond 88P : CB 84

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 965       | 74 | >75% Grass cover, Good, HSG C |
| 1,920     | 98 | Paved parking, HSG C          |
| 2,885     | 90 | Weighted Average              |
| 965       |    | 33.45% Pervious Area          |
| 1,920     |    | 66.55% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 64S: P3L**

### Summary for Subcatchment 65S: P3M

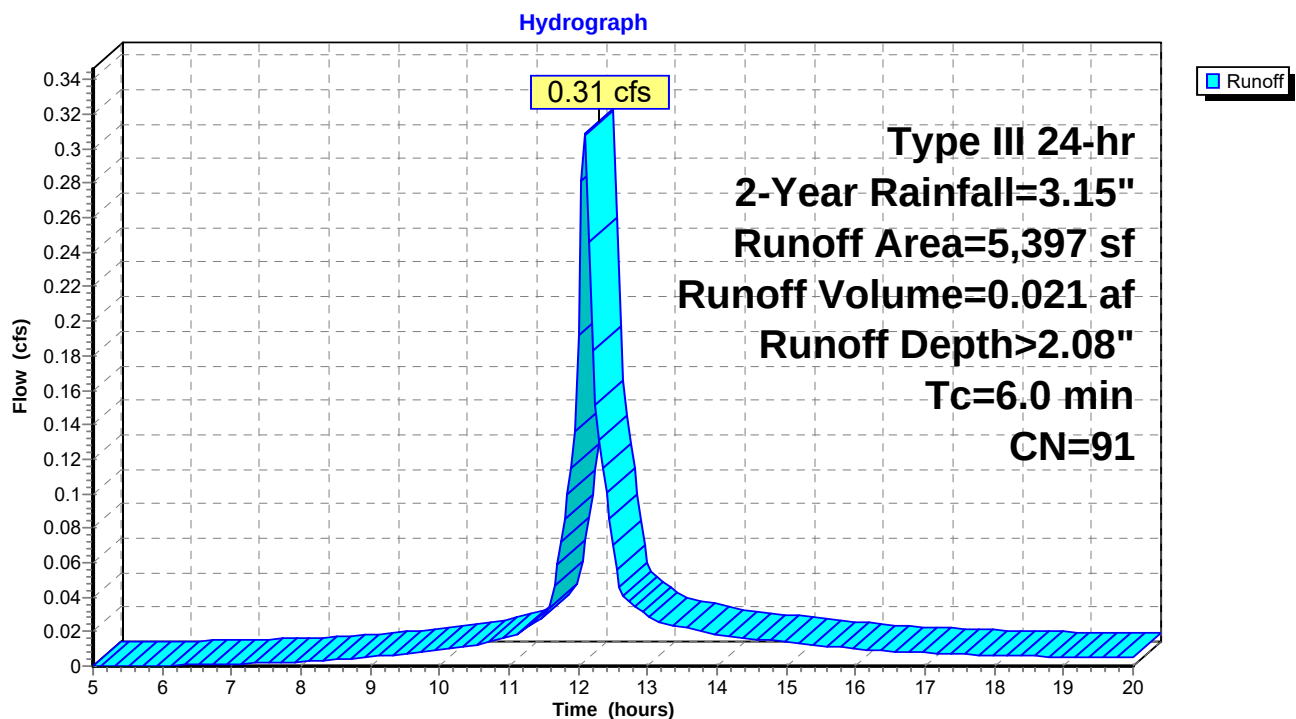
Runoff = 0.31 cfs @ 12.09 hrs, Volume= 0.021 af, Depth> 2.08"  
Routed to Pond 87P : CB 85

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,636     | 74 | >75% Grass cover, Good, HSG C |
| 1,756     | 98 | Unconnected roofs, HSG C      |
| 2,005     | 98 | Paved parking, HSG C          |
| 5,397     | 91 | Weighted Average              |
| 1,636     |    | 30.31% Pervious Area          |
| 3,761     |    | 69.69% Impervious Area        |
| 1,756     |    | 46.69% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 65S: P3M



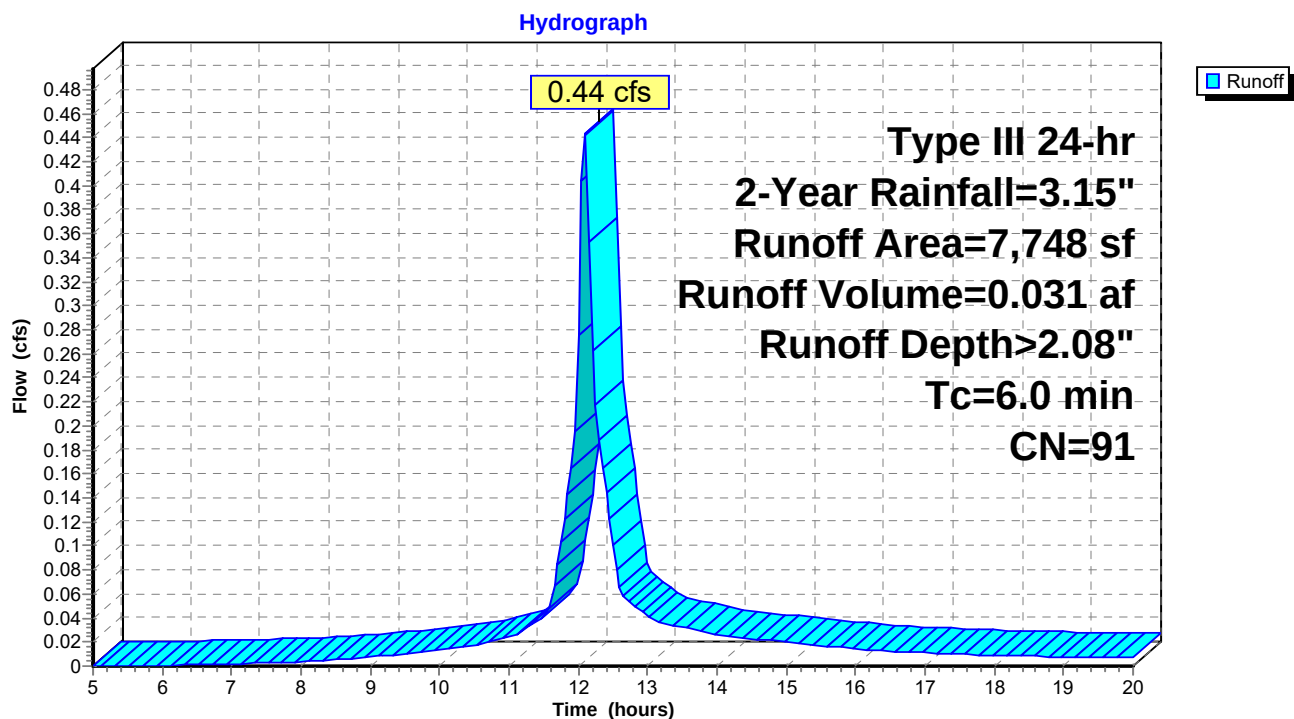
**Summary for Subcatchment 66S: P3N**

Runoff = 0.44 cfs @ 12.09 hrs, Volume= 0.031 af, Depth> 2.08"  
 Routed to Pond 83P : CB 86

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,108     | 74 | >75% Grass cover, Good, HSG C |
| 1,824     | 98 | Unconnected roofs, HSG C      |
| 3,816     | 98 | Paved parking, HSG C          |
| 7,748     | 91 | Weighted Average              |
| 2,108     |    | 27.21% Pervious Area          |
| 5,640     |    | 72.79% Impervious Area        |
| 1,824     |    | 32.34% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 66S: P3N**

### Summary for Subcatchment 67S: P3O

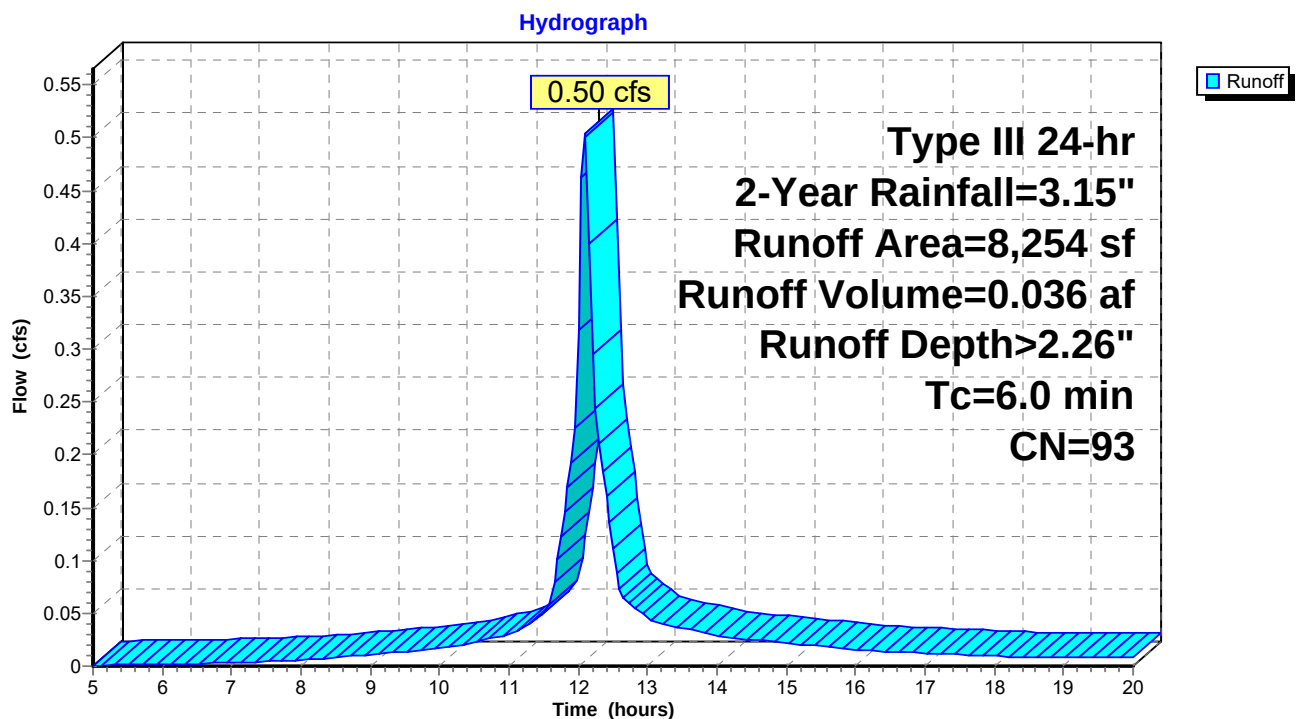
Runoff = 0.50 cfs @ 12.09 hrs, Volume= 0.036 af, Depth> 2.26"  
Routed to Pond 84P : CB 87

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,792     | 74 | >75% Grass cover, Good, HSG C |
| 2,605     | 98 | Unconnected roofs, HSG C      |
| 3,857     | 98 | Paved parking, HSG C          |
| 8,254     | 93 | Weighted Average              |
| 1,792     |    | 21.71% Pervious Area          |
| 6,462     |    | 78.29% Impervious Area        |
| 2,605     |    | 40.31% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 67S: P3O





### Summary for Subcatchment 68S: P3P

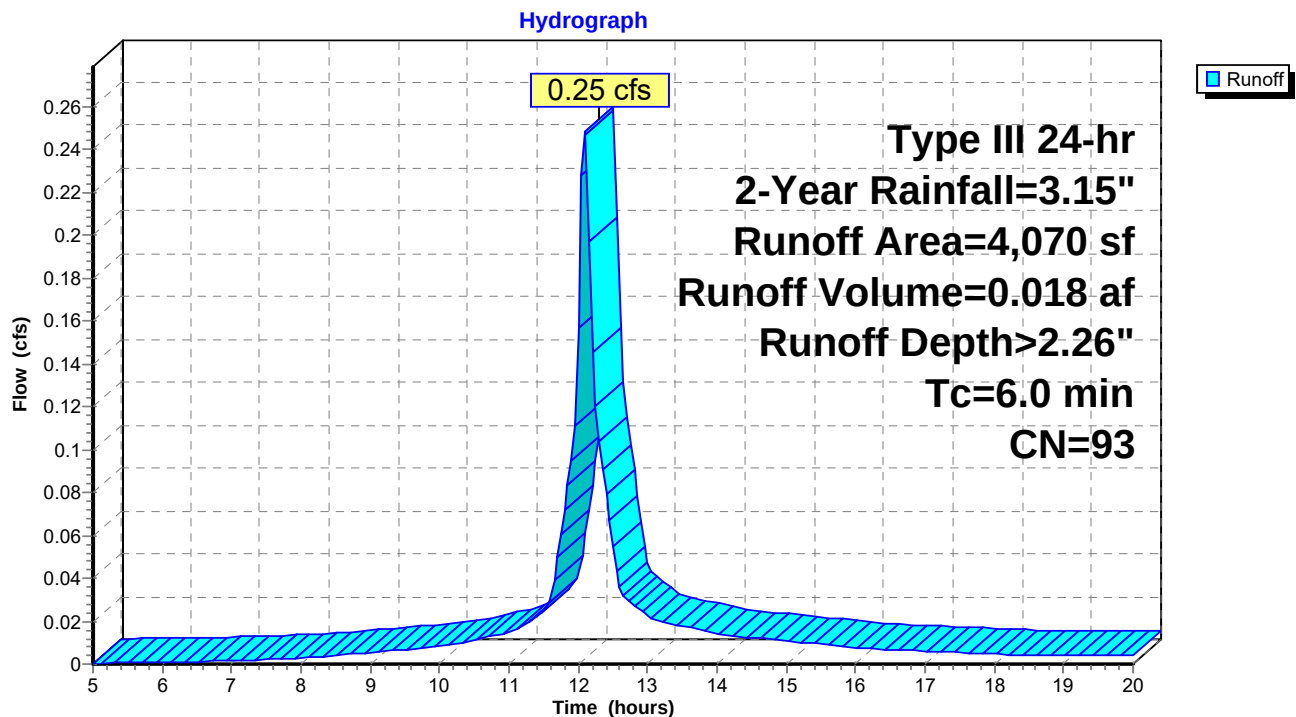
Runoff = 0.25 cfs @ 12.09 hrs, Volume= 0.018 af, Depth> 2.26"  
Routed to Pond 108P : CB 88

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 802       | 74 | >75% Grass cover, Good, HSG C |
| 3,268     | 98 | Paved parking, HSG C          |
| 4,070     | 93 | Weighted Average              |
| 802       |    | 19.71% Pervious Area          |
| 3,268     |    | 80.29% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 68S: P3P



### Summary for Subcatchment 69S: P2E

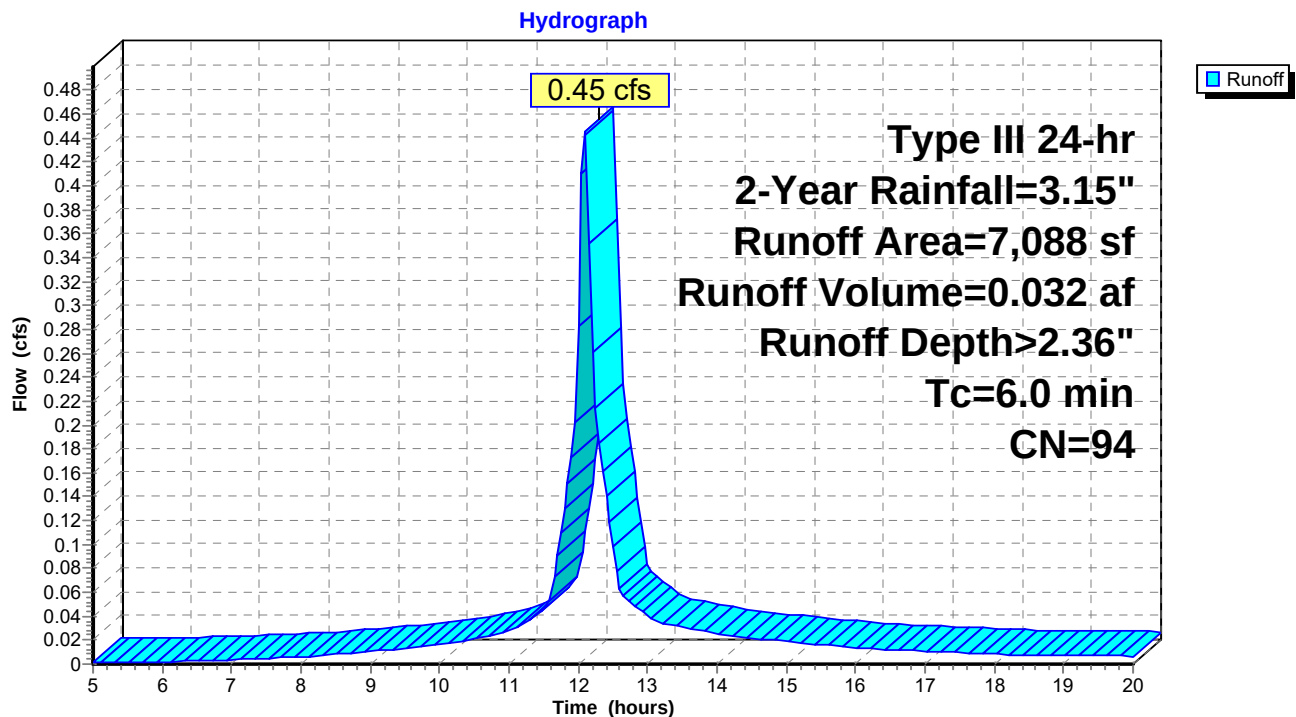
Runoff = 0.45 cfs @ 12.09 hrs, Volume= 0.032 af, Depth> 2.36"  
Routed to Pond 66P : CB 68

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,227     | 74 | >75% Grass cover, Good, HSG C |
| 1,596     | 98 | Unconnected roofs, HSG C      |
| 4,265     | 98 | Paved parking, HSG C          |
| 7,088     | 94 | Weighted Average              |
| 1,227     |    | 17.31% Pervious Area          |
| 5,861     |    | 82.69% Impervious Area        |
| 1,596     |    | 27.23% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 69S: P2E



### Summary for Subcatchment 70S: P2F

Runoff = 0.27 cfs @ 12.09 hrs, Volume= 0.021 af, Depth> 2.73"  
Routed to Pond 67P : CB 69

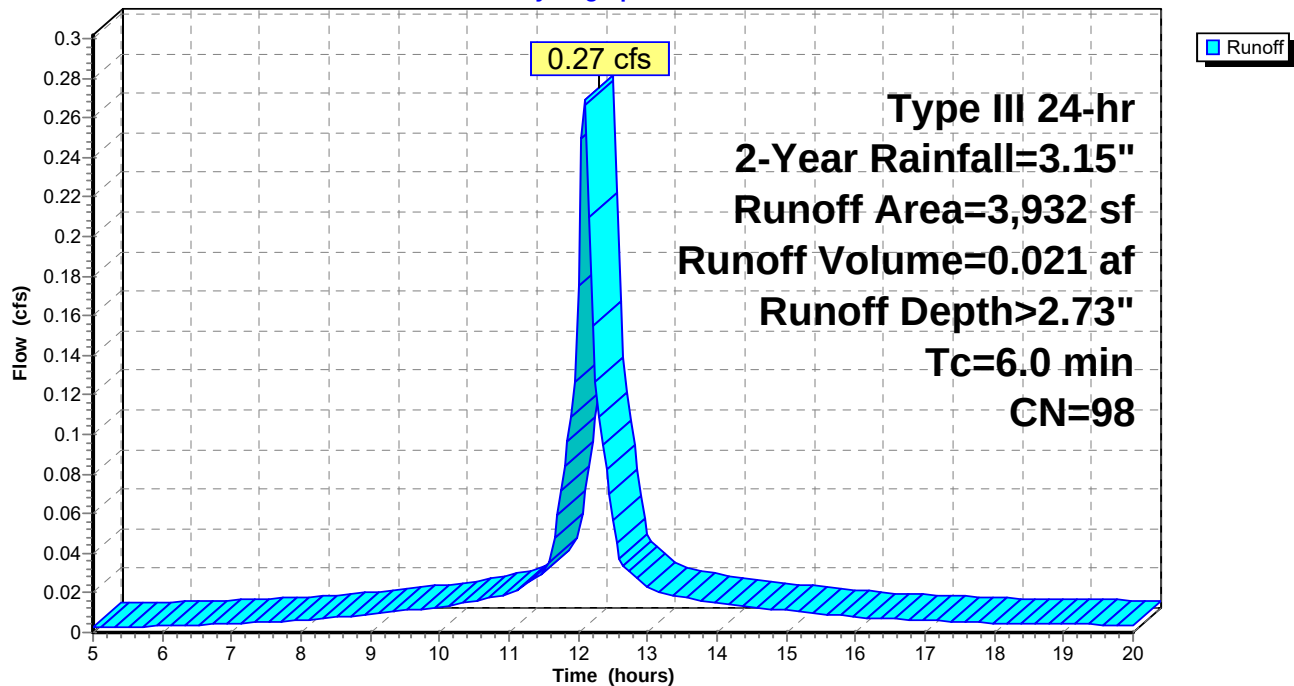
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description             |
|-----------|----|-------------------------|
| 3,932     | 98 | Paved parking, HSG C    |
| 3,932     |    | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 70S: P2F

Hydrograph



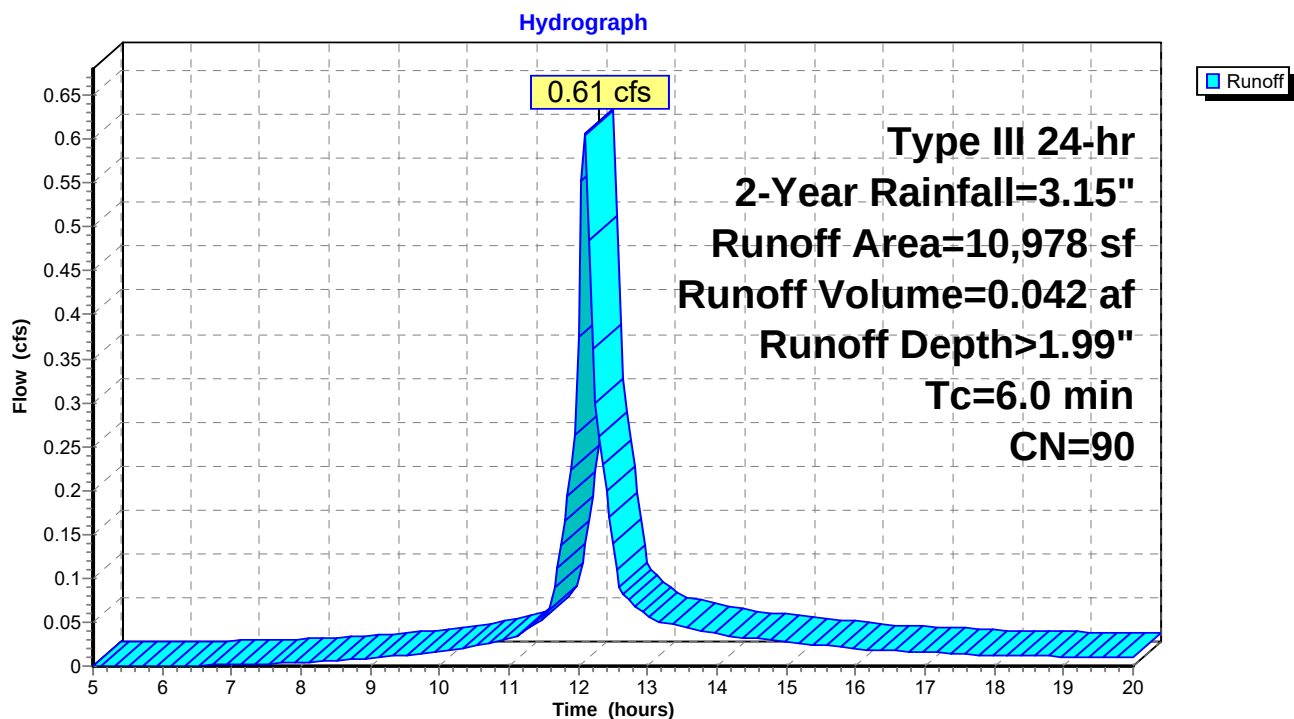
**Summary for Subcatchment 71S: P2A**

Runoff = 0.61 cfs @ 12.09 hrs, Volume= 0.042 af, Depth> 1.99"  
 Routed to Pond 73P : CB 64

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,800     | 98 | Unconnected roofs, HSG C      |
| 3,751     | 74 | >75% Grass cover, Good, HSG C |
| 4,427     | 98 | Paved parking, HSG C          |
| 10,978    | 90 | Weighted Average              |
| 3,751     |    | 34.17% Pervious Area          |
| 7,227     |    | 65.83% Impervious Area        |
| 2,800     |    | 38.74% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 71S: P2A**

### Summary for Subcatchment 72S: P2B

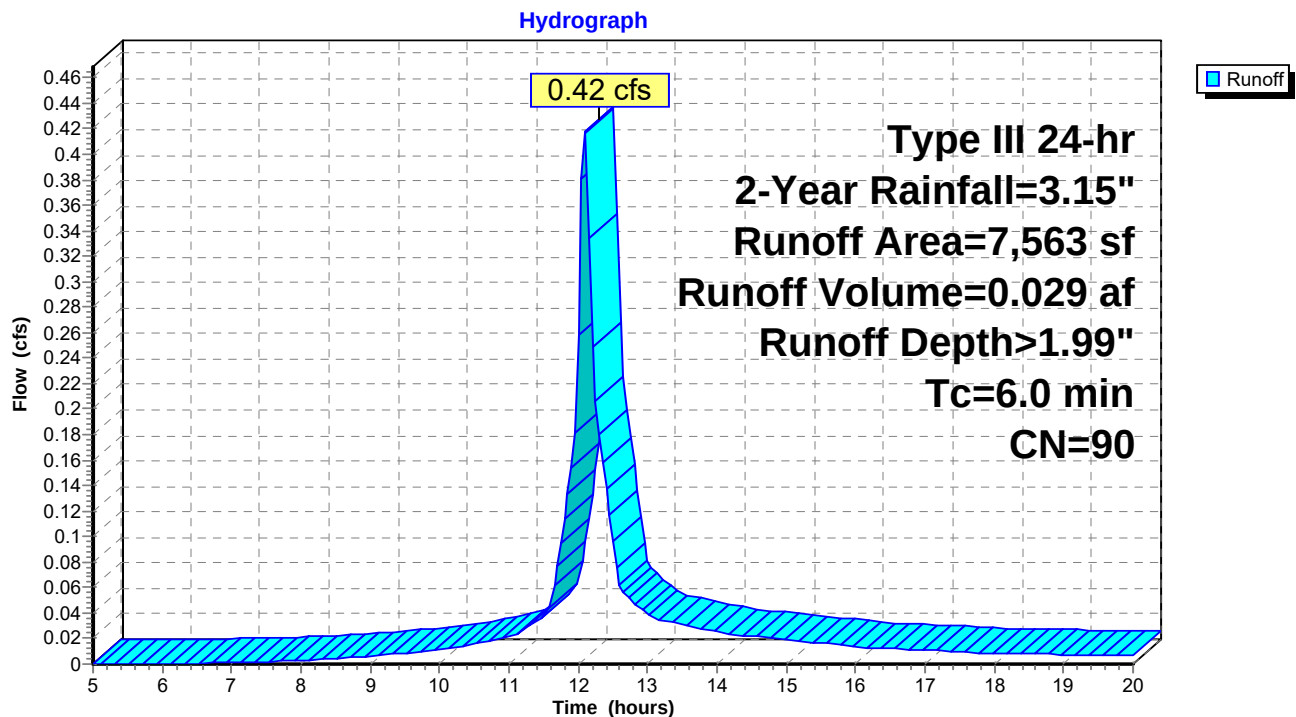
Runoff = 0.42 cfs @ 12.09 hrs, Volume= 0.029 af, Depth> 1.99"  
Routed to Pond 74P : CB 65

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,643     | 74 | >75% Grass cover, Good, HSG C |
| 4,920     | 98 | Paved parking, HSG C          |
| 7,563     | 90 | Weighted Average              |
| 2,643     |    | 34.95% Pervious Area          |
| 4,920     |    | 65.05% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 72S: P2B



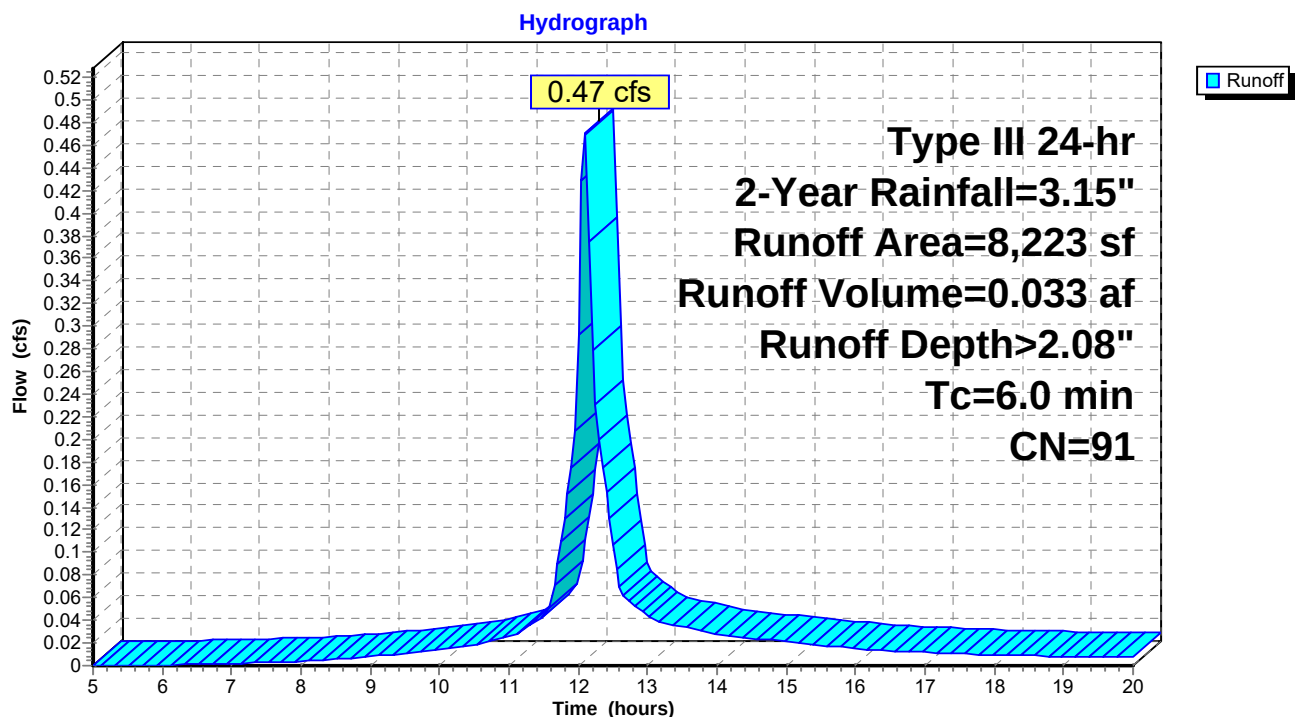
**Summary for Subcatchment 73S: P2G**

Runoff = 0.47 cfs @ 12.09 hrs, Volume= 0.033 af, Depth> 2.08"  
 Routed to Pond 76P : CB 70

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,345     | 74 | >75% Grass cover, Good, HSG C |
| 1,348     | 98 | Unconnected roofs, HSG C      |
| 122       | 98 | Unconnected roofs, HSG A      |
| 34        | 39 | >75% Grass cover, Good, HSG A |
| 673       | 98 | Paved parking, HSG A          |
| 3,701     | 98 | Paved parking, HSG C          |
| 8,223     | 91 | Weighted Average              |
| 2,379     |    | 28.93% Pervious Area          |
| 5,844     |    | 71.07% Impervious Area        |
| 1,470     |    | 25.15% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 73S: P2G**

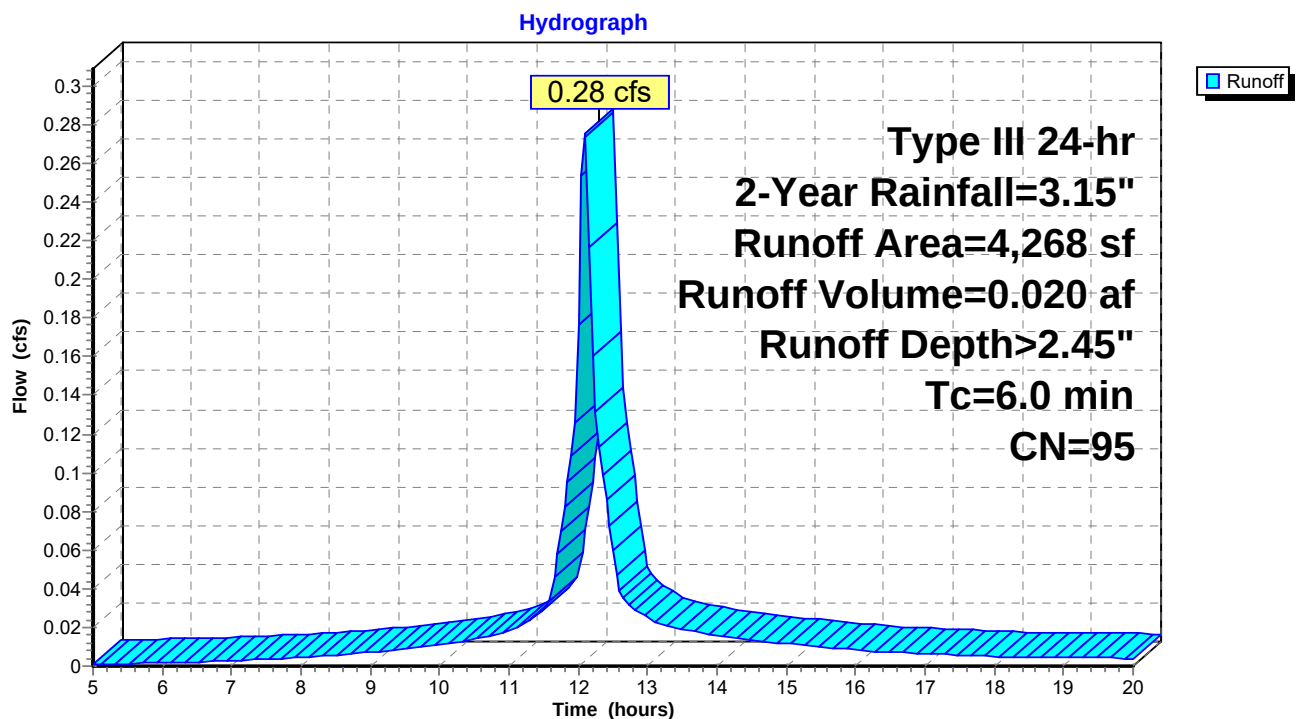
**Summary for Subcatchment 74S: P2H**

Runoff = 0.28 cfs @ 12.09 hrs, Volume= 0.020 af, Depth> 2.45"  
 Routed to Pond 77P : CB 71

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 200       | 39 | >75% Grass cover, Good, HSG A |
| 610       | 98 | Unconnected roofs, HSG A      |
| 3,458     | 98 | Paved parking, HSG A          |
| 4,268     | 95 | Weighted Average              |
| 200       |    | 4.69% Pervious Area           |
| 4,068     |    | 95.31% Impervious Area        |
| 610       |    | 15.00% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 74S: P2H**

### Summary for Subcatchment 75S: P3Q

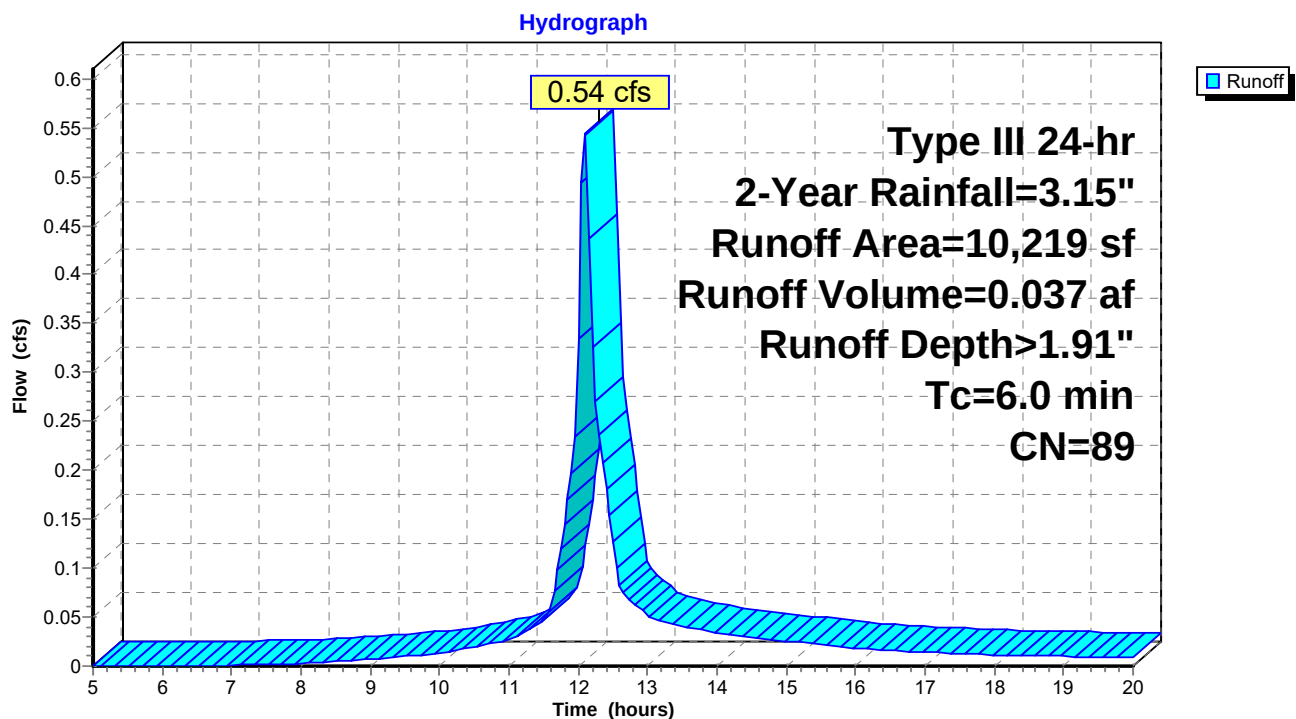
Runoff = 0.54 cfs @ 12.09 hrs, Volume= 0.037 af, Depth> 1.91"  
Routed to Pond 107P : CB

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,641     | 74 | >75% Grass cover, Good, HSG C |
| 1,994     | 98 | Unconnected roofs, HSG C      |
| 4,584     | 98 | Paved parking, HSG C          |
| 10,219    | 89 | Weighted Average              |
| 3,641     |    | 35.63% Pervious Area          |
| 6,578     |    | 64.37% Impervious Area        |
| 1,994     |    | 30.31% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 75S: P3Q





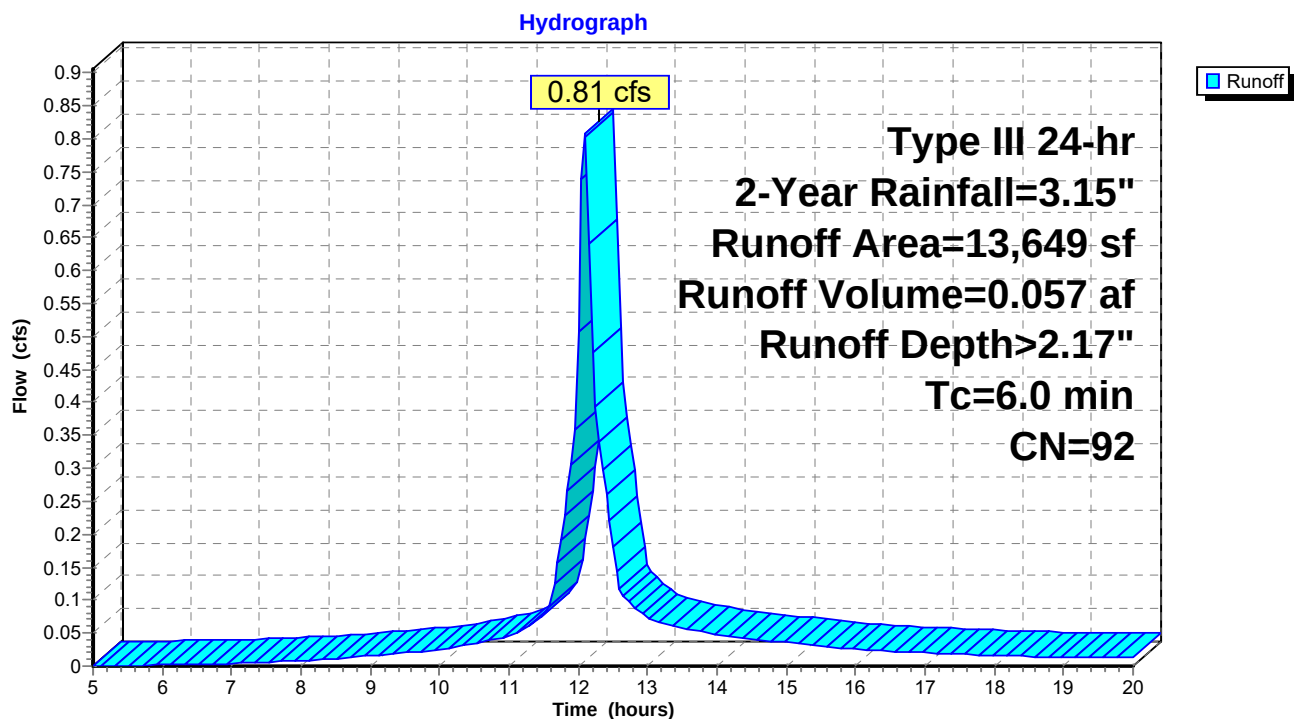
**Summary for Subcatchment 76S: P3R**

Runoff = 0.81 cfs @ 12.09 hrs, Volume= 0.057 af, Depth> 2.17"  
 Routed to Pond 103P : CB 92

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,162     | 74 | >75% Grass cover, Good, HSG C |
| 4,063     | 98 | Unconnected roofs, HSG C      |
| 6,424     | 98 | Paved parking, HSG C          |
| 13,649    | 92 | Weighted Average              |
| 3,162     |    | 23.17% Pervious Area          |
| 10,487    |    | 76.83% Impervious Area        |
| 4,063     |    | 38.74% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 76S: P3R**

### Summary for Subcatchment 77S: P3S

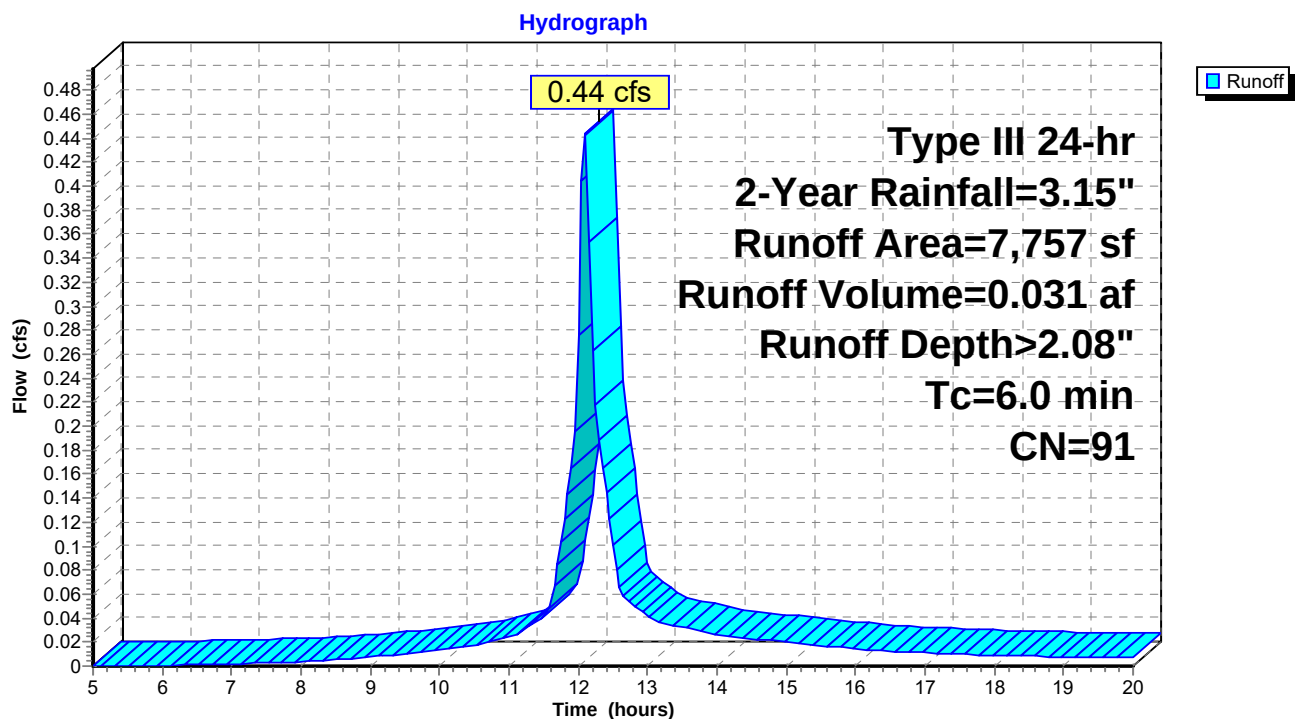
Runoff = 0.44 cfs @ 12.09 hrs, Volume= 0.031 af, Depth> 2.08"  
Routed to Pond 102P : CB 93

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,358     | 74 | >75% Grass cover, Good, HSG C |
| 702       | 98 | Unconnected roofs, HSG C      |
| 4,697     | 98 | Paved parking, HSG C          |
| 7,757     | 91 | Weighted Average              |
| 2,358     |    | 30.40% Pervious Area          |
| 5,399     |    | 69.60% Impervious Area        |
| 702       |    | 13.00% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 77S: P3S



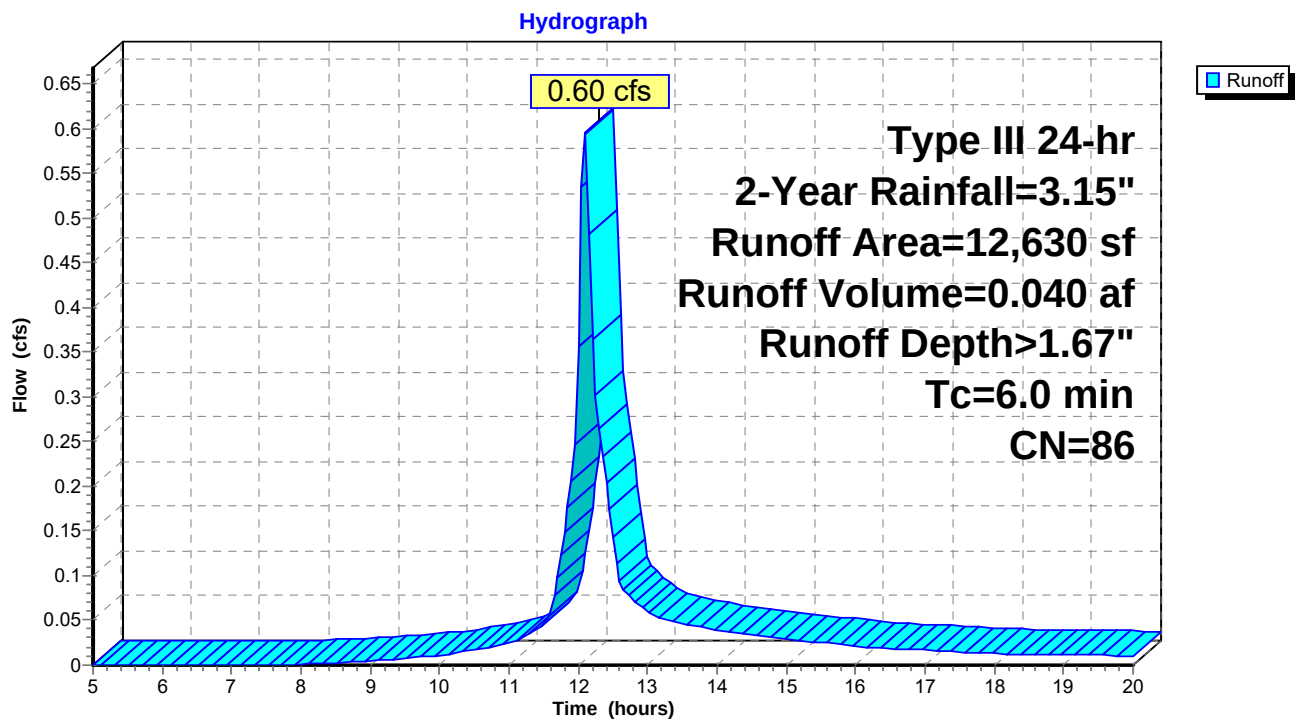
**Summary for Subcatchment 78S: P1S**

Runoff = 0.60 cfs @ 12.09 hrs, Volume= 0.040 af, Depth> 1.67"  
 Routed to Pond 112P : CB 45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,541     | 74 | >75% Grass cover, Good, HSG C |
| 2,275     | 98 | Unconnected roofs, HSG C      |
| 693       | 39 | >75% Grass cover, Good, HSG A |
| 412       | 98 | Paved parking, HSG A          |
| 4,709     | 98 | Paved parking, HSG C          |
| 12,630    | 86 | Weighted Average              |
| 5,234     |    | 41.44% Pervious Area          |
| 7,396     |    | 58.56% Impervious Area        |
| 2,275     |    | 30.76% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 78S: P1S**

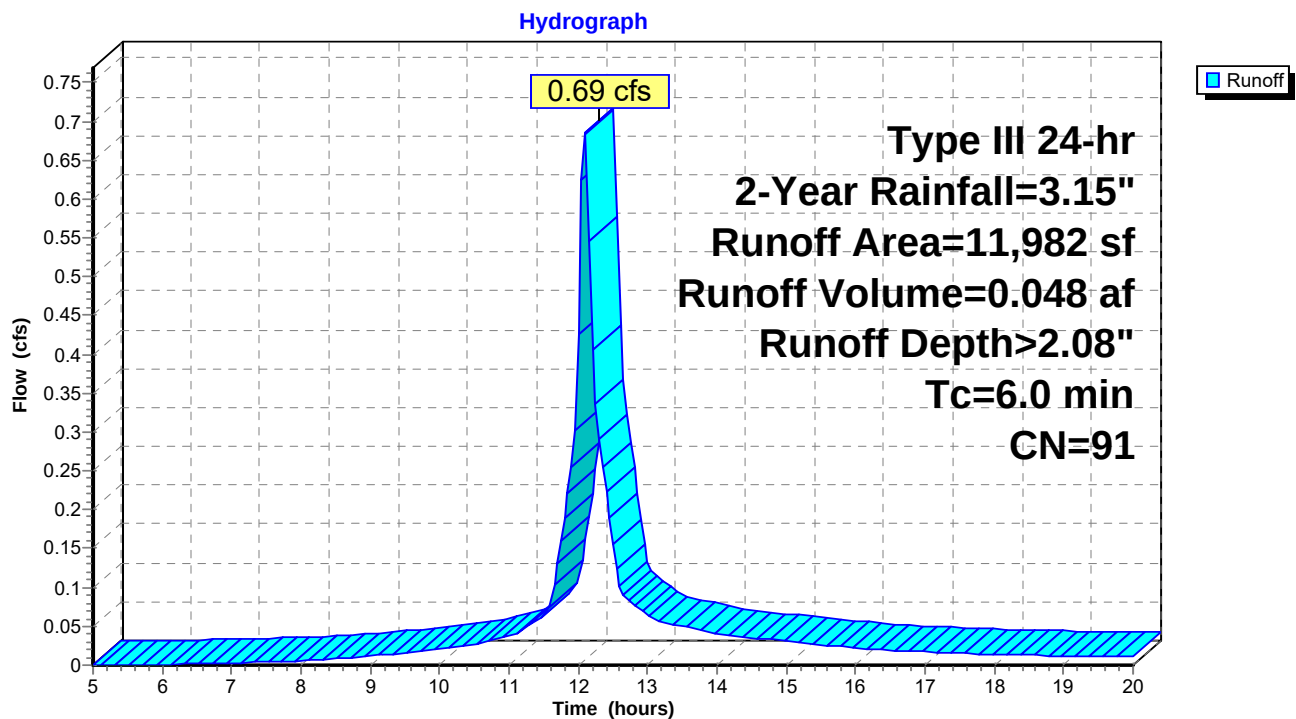
**Summary for Subcatchment 79S: P1T**

Runoff = 0.69 cfs @ 12.09 hrs, Volume= 0.048 af, Depth> 2.08"  
 Routed to Pond 122P : CB 46

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,187     | 74 | >75% Grass cover, Good, HSG C |
| 2,930     | 98 | Unconnected roofs, HSG C      |
| 118       | 39 | >75% Grass cover, Good, HSG A |
| 214       | 98 | Paved parking, HSG A          |
| 5,533     | 98 | Paved parking, HSG C          |
| 11,982    | 91 | Weighted Average              |
| 3,305     |    | 27.58% Pervious Area          |
| 8,677     |    | 72.42% Impervious Area        |
| 2,930     |    | 33.77% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 79S: P1T**

### Summary for Subcatchment 80S: P3KK

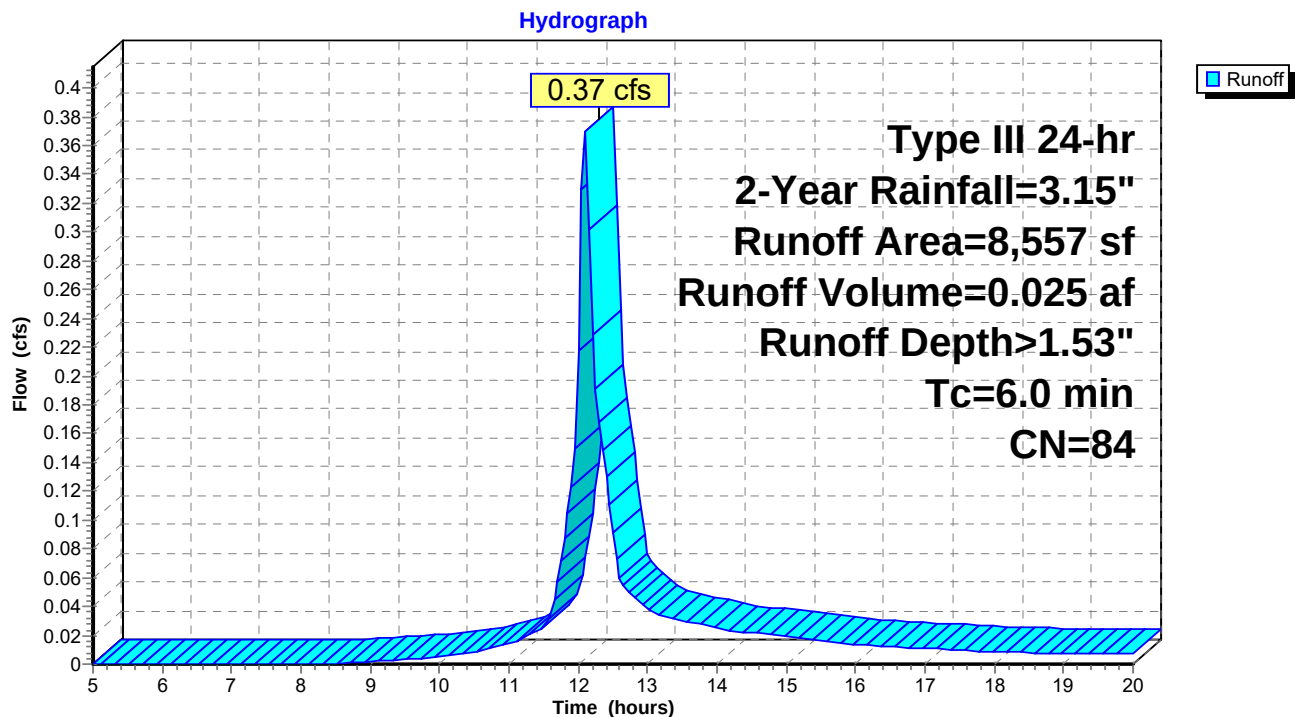
Runoff = 0.37 cfs @ 12.09 hrs, Volume= 0.025 af, Depth> 1.53"  
Routed to Pond 125P : CB 36

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,989     | 39 | >75% Grass cover, Good, HSG A |
| 4,268     | 98 | Unconnected roofs, HSG A      |
| 2,300     | 98 | Paved parking, HSG A          |
| 8,557     | 84 | Weighted Average              |
| 1,989     |    | 23.24% Pervious Area          |
| 6,568     |    | 76.76% Impervious Area        |
| 4,268     |    | 64.98% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 80S: P3KK



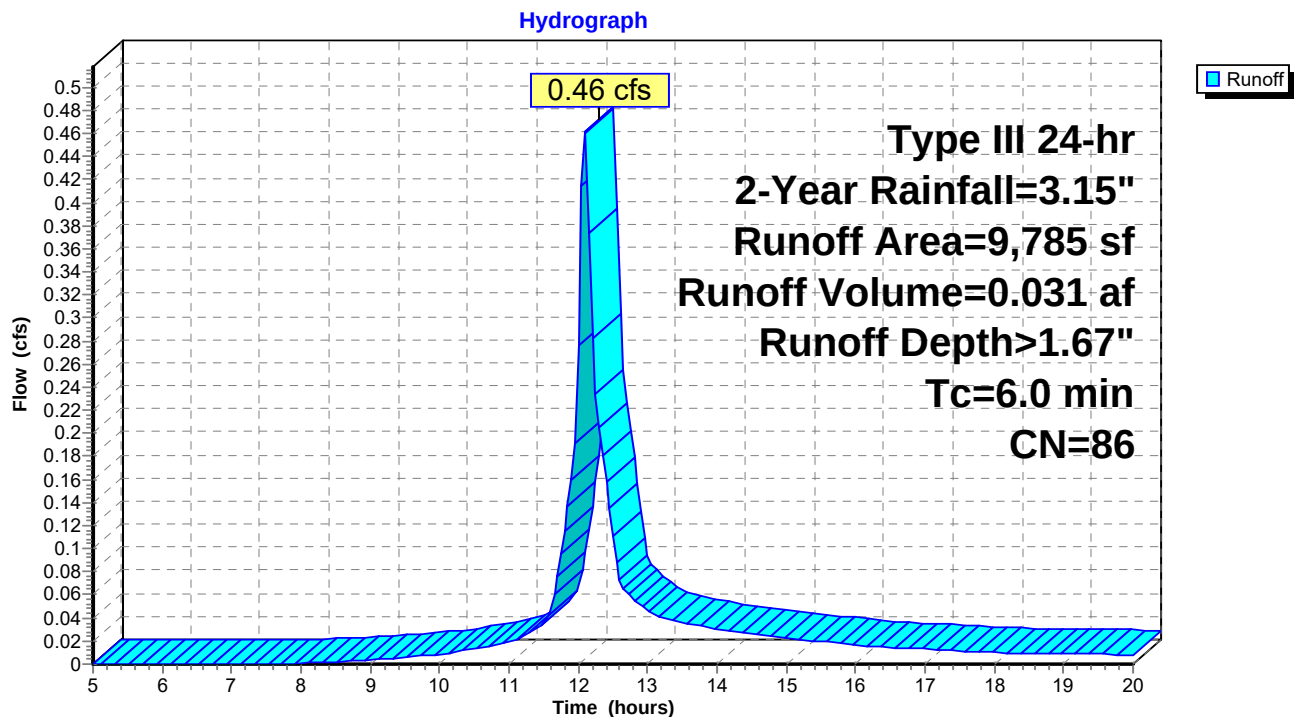
**Summary for Subcatchment 81S: P3LL**

Runoff = 0.46 cfs @ 12.09 hrs, Volume= 0.031 af, Depth> 1.67"  
 Routed to Pond 126P : CB 37

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,037     | 39 | >75% Grass cover, Good, HSG A |
| 4,991     | 98 | Unconnected roofs, HSG A      |
| 2,757     | 98 | Paved parking, HSG A          |
| 9,785     | 86 | Weighted Average              |
| 2,037     |    | 20.82% Pervious Area          |
| 7,748     |    | 79.18% Impervious Area        |
| 4,991     |    | 64.42% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 81S: P3LL**

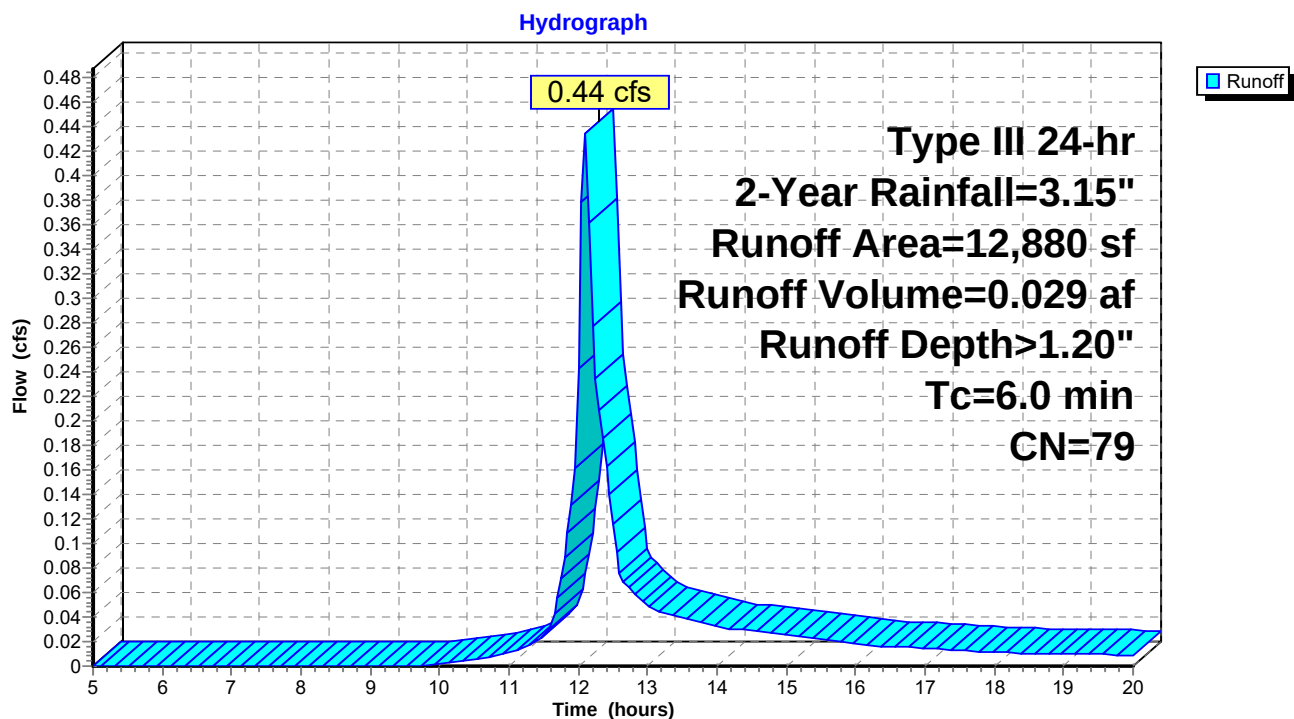
**Summary for Subcatchment 82S: P3SS**

Runoff = 0.44 cfs @ 12.10 hrs, Volume= 0.029 af, Depth> 1.20"  
 Routed to Pond 128P : CB 30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,180     | 39 | >75% Grass cover, Good, HSG A |
| 3,055     | 98 | Unconnected roofs, HSG A      |
| 5,645     | 98 | Paved parking, HSG A          |
| 12,880    | 79 | Weighted Average              |
| 4,180     |    | 32.45% Pervious Area          |
| 8,700     |    | 67.55% Impervious Area        |
| 3,055     |    | 35.11% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 82S: P3SS**

### Summary for Subcatchment 83S: P2I

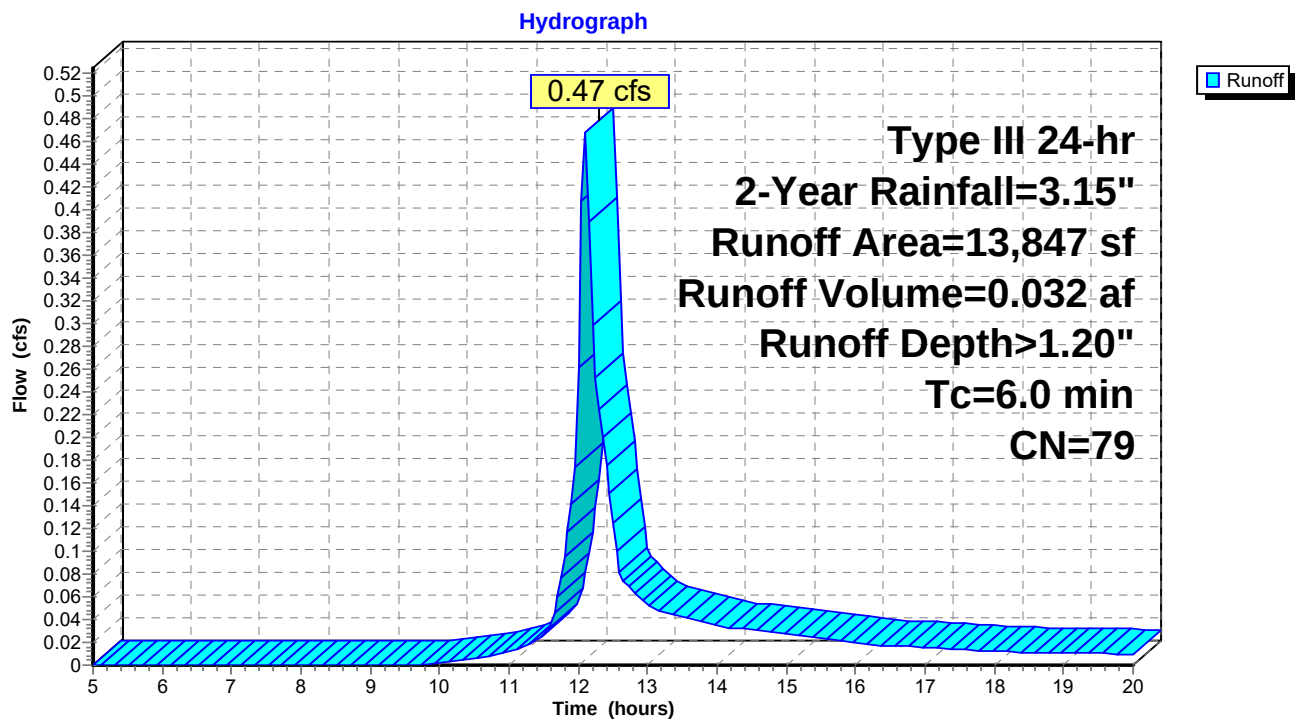
Runoff = 0.47 cfs @ 12.10 hrs, Volume= 0.032 af, Depth> 1.20"  
Routed to Pond 82P : Constructed Wetland 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,861     | 39 | >75% Grass cover, Good, HSG A |
| 1,821     | 98 | Unconnected roofs, HSG A      |
| 3,857     | 74 | >75% Grass cover, Good, HSG C |
| 597       | 98 | Paved parking, HSG C          |
| 4,711     | 98 | Paved parking, HSG A          |
| 13,847    | 79 | Weighted Average              |
| 6,718     |    | 48.52% Pervious Area          |
| 7,129     |    | 51.48% Impervious Area        |
| 1,821     |    | 25.54% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 83S: P2I





**Summary for Subcatchment 84S: P2AA**

Runoff = 1.42 cfs @ 12.14 hrs, Volume= 0.111 af, Depth> 0.81"  
 Routed to Link 60L : DP 2

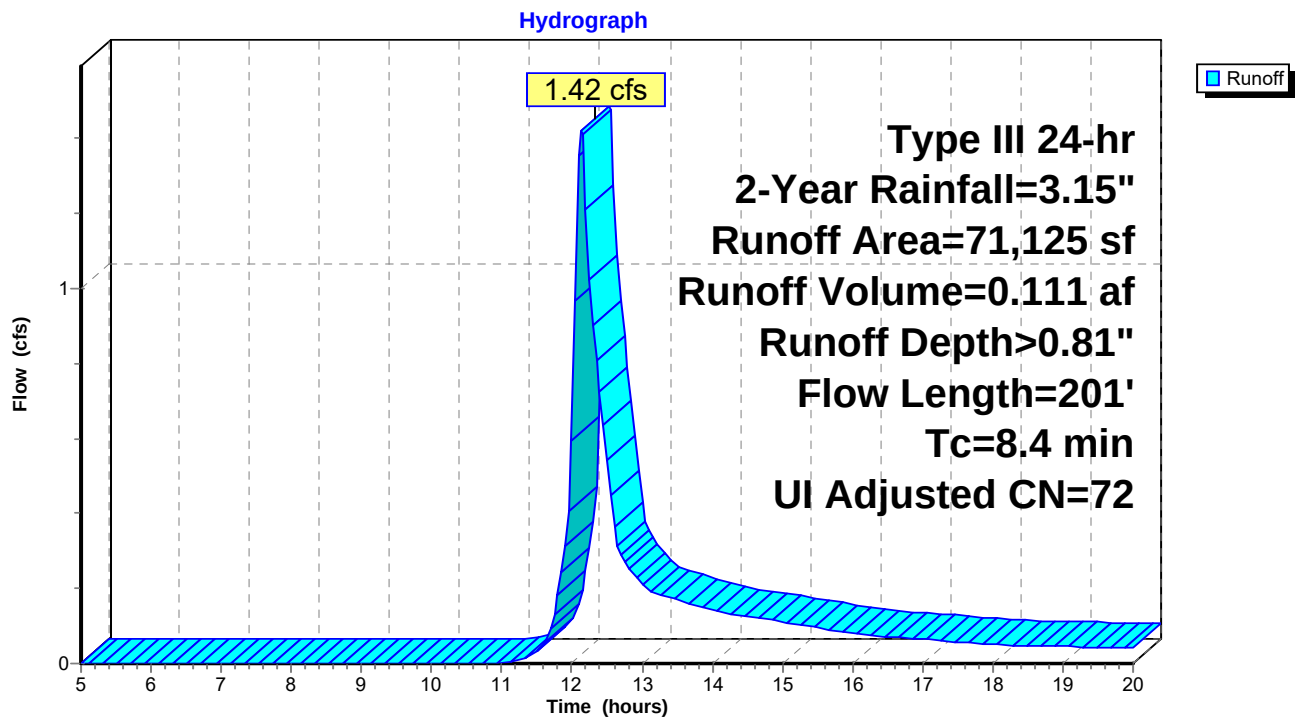
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 2,224     | 98 |     | Unconnected roofs, HSG C      |
| 1,231     | 98 |     | Unconnected pavement, HSG C   |
| 37,322    | 70 |     | Woods, Good, HSG C            |
| 27,161    | 74 |     | >75% Grass cover, Good, HSG C |
| 242       | 98 |     | Unconnected pavement, HSG A   |
| 1,399     | 39 |     | >75% Grass cover, Good, HSG A |
| 1,546     | 98 |     | Unconnected roofs, HSG A      |
| 71,125    | 73 | 72  | Weighted Average, UI Adjusted |
| 65,882    |    |     | 92.63% Pervious Area          |
| 5,243     |    |     | 7.37% Impervious Area         |
| 5,243     |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                          |
|----------|---------------|---------------|-------------------|----------------|----------------------------------------------------------------------|
| 5.7      | 50            | 0.0200        | 0.15              |                | <b>Sheet Flow,</b><br>Grass: Short n= 0.150 P2= 3.10"                |
| 1.4      | 68            | 0.0140        | 0.83              |                | <b>Shallow Concentrated Flow,</b><br>Short Grass Pasture Kv= 7.0 fps |
| 0.4      | 57            | 0.1200        | 2.42              |                | <b>Shallow Concentrated Flow,</b><br>Short Grass Pasture Kv= 7.0 fps |
| 0.9      | 26            | 0.0100        | 0.50              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps            |
| 8.4      | 201           | Total         |                   |                |                                                                      |

**Subcatchment 84S: P2AA**



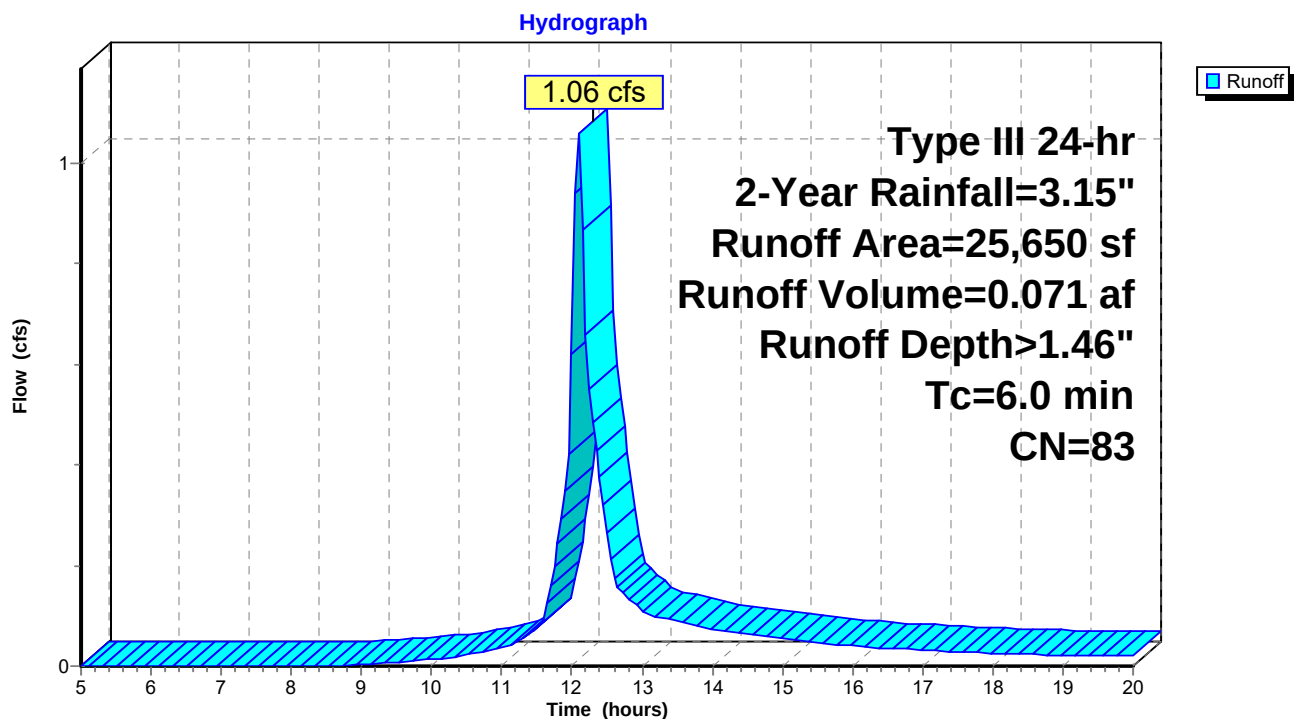
**Summary for Subcatchment 85S: (new Subcat)**

Runoff = 1.06 cfs @ 12.09 hrs, Volume= 0.071 af, Depth> 1.46"  
 Routed to Pond 86P : Sub. Inf. 6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,553     | 98 | Roofs, HSG C                  |
| 3,904     | 98 | Unconnected pavement, HSG C   |
| 16,193    | 74 | >75% Grass cover, Good, HSG C |
| 25,650    | 83 | Weighted Average              |
| 16,193    |    | 63.13% Pervious Area          |
| 9,457     |    | 36.87% Impervious Area        |
| 3,904     |    | 41.28% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 85S: (new Subcat)**

### Summary for Subcatchment 86S: P3TT

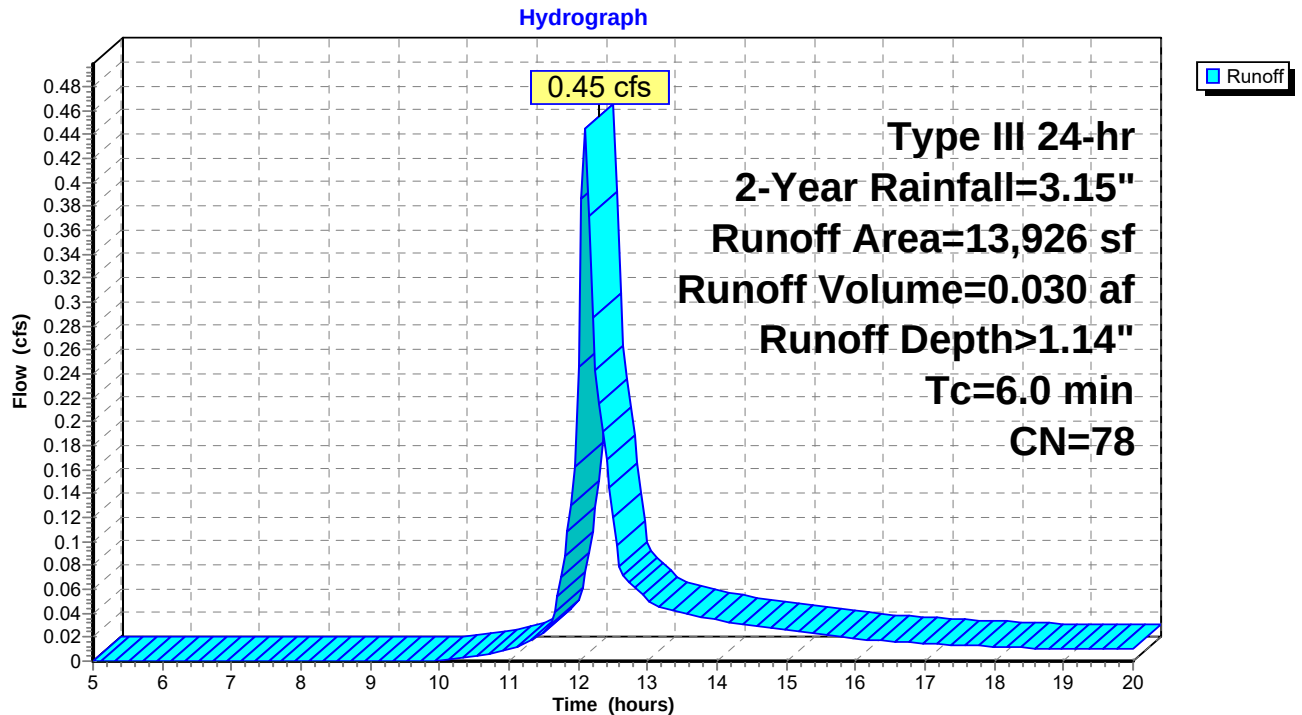
Runoff = 0.45 cfs @ 12.10 hrs, Volume= 0.030 af, Depth> 1.14"  
Routed to Pond 140P : CB 31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 956       | 98 | Unconnected roofs, HSG C      |
| 672       | 74 | >75% Grass cover, Good, HSG C |
| 4,346     | 39 | >75% Grass cover, Good, HSG A |
| 1,468     | 98 | Unconnected roofs, HSG A      |
| 6,484     | 98 | Paved parking, HSG A          |
| 13,926    | 78 | Weighted Average              |
| 5,018     |    | 36.03% Pervious Area          |
| 8,908     |    | 63.97% Impervious Area        |
| 2,424     |    | 27.21% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 86S: P3TT



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Type III 24-hr 2-Year Rainfall=3.15"

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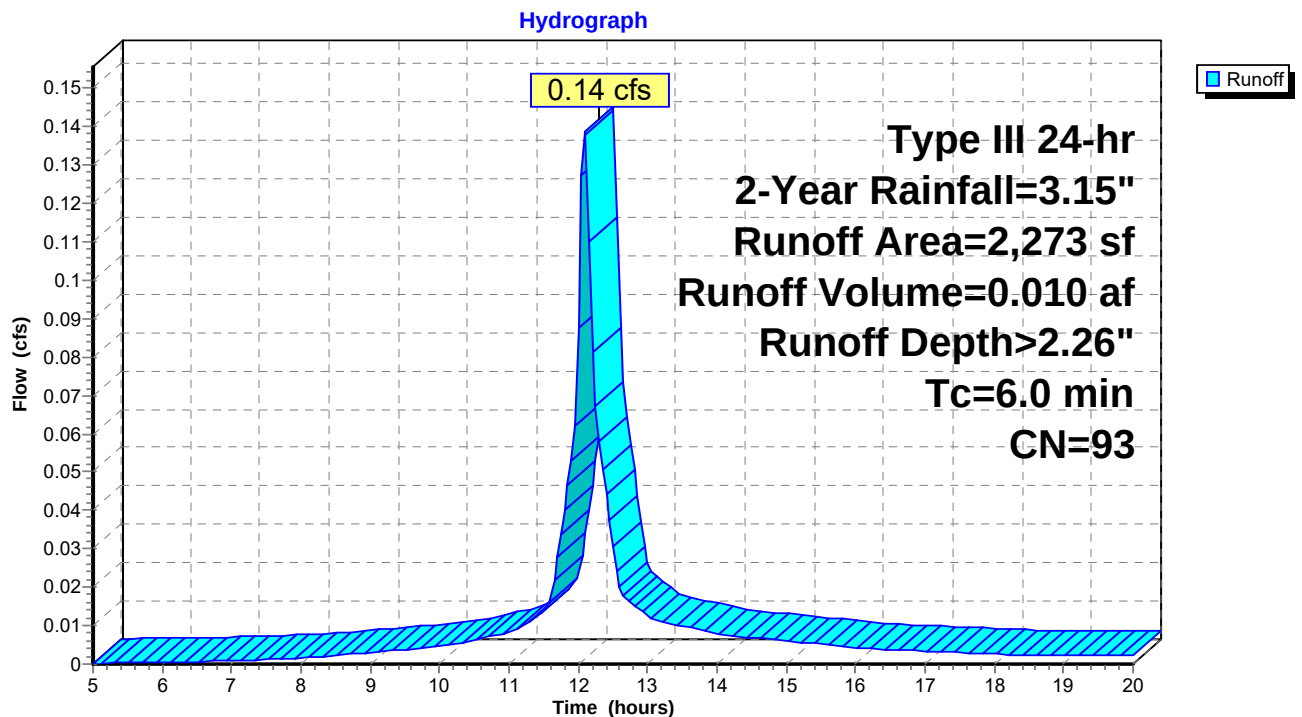
**Summary for Subcatchment 87S: P3A**

Runoff = 0.14 cfs @ 12.09 hrs, Volume= 0.010 af, Depth> 2.26"  
Routed to Pond 89P : CB 74

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 450       | 74 | >75% Grass cover, Good, HSG C |
| 1,823     | 98 | Paved parking, HSG C          |
| 2,273     | 93 | Weighted Average              |
| 450       |    | 19.80% Pervious Area          |
| 1,823     |    | 80.20% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 87S: P3A**

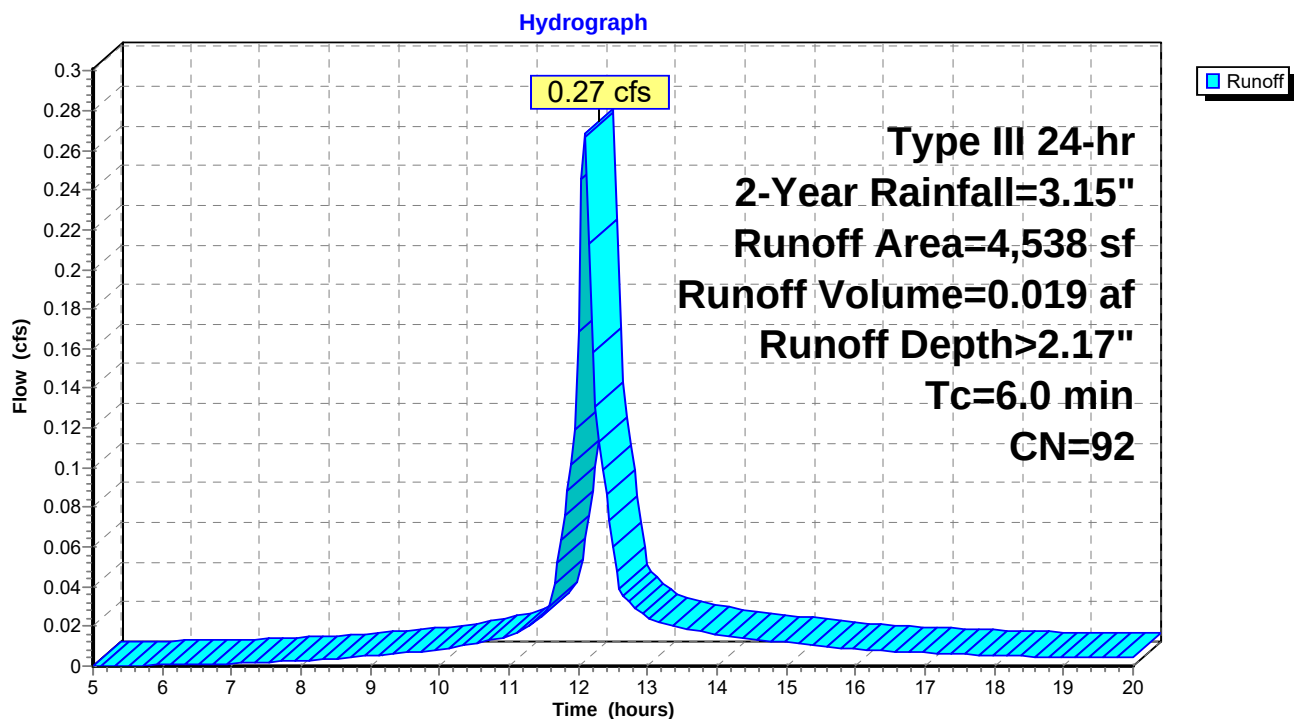
**Summary for Subcatchment 88S: P3B**

Runoff = 0.27 cfs @ 12.09 hrs, Volume= 0.019 af, Depth> 2.17"  
 Routed to Pond 90P : CB 75

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,048     | 74 | >75% Grass cover, Good, HSG C |
| 1,562     | 98 | Unconnected roofs, HSG C      |
| 1,928     | 98 | Paved parking, HSG C          |
| 4,538     | 92 | Weighted Average              |
| 1,048     |    | 23.09% Pervious Area          |
| 3,490     |    | 76.91% Impervious Area        |
| 1,562     |    | 44.76% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 88S: P3B**

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Type III 24-hr 2-Year Rainfall=3.15"

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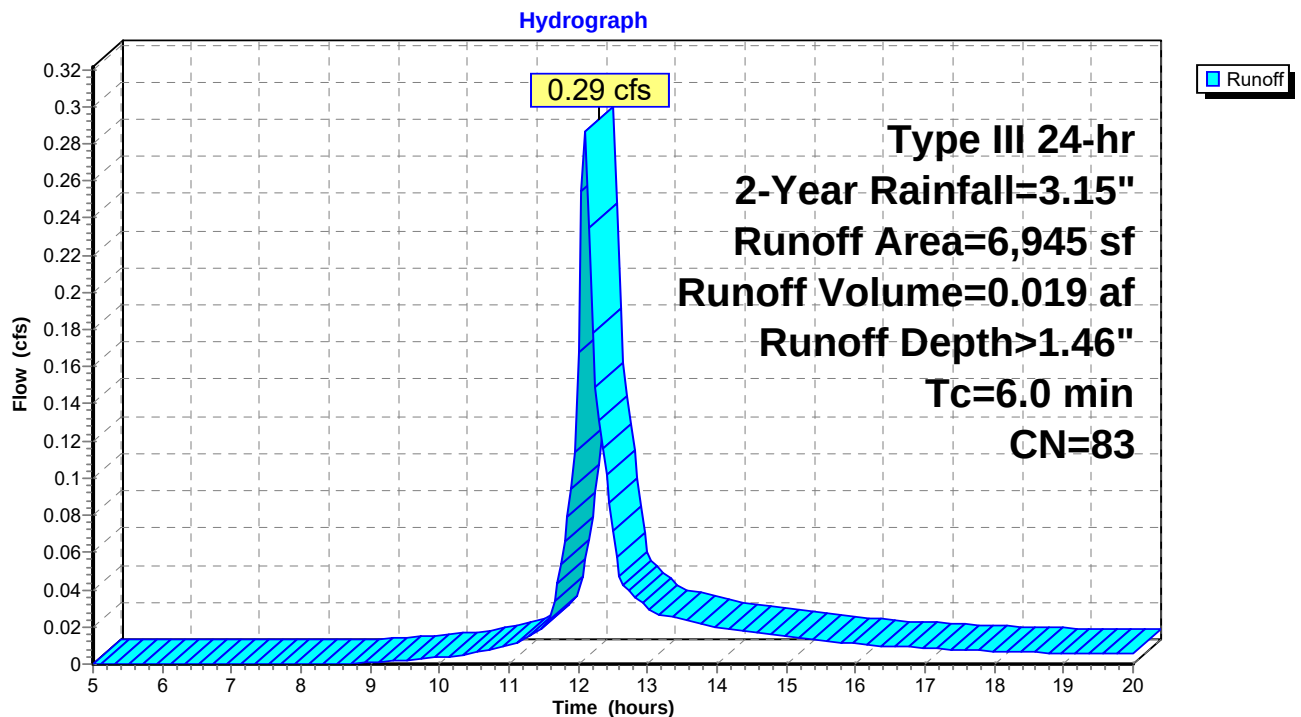
**Summary for Subcatchment 89S: P3AAA**

Runoff = 0.29 cfs @ 12.09 hrs, Volume= 0.019 af, Depth> 1.46"  
Routed to Pond 151P : CB 22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,761     | 39 | >75% Grass cover, Good, HSG A |
| 5,184     | 98 | Paved parking, HSG A          |
| 6,945     | 83 | Weighted Average              |
| 1,761     |    | 25.36% Pervious Area          |
| 5,184     |    | 74.64% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 89S: P3AAA**

### Summary for Subcatchment 90S: P3BBB

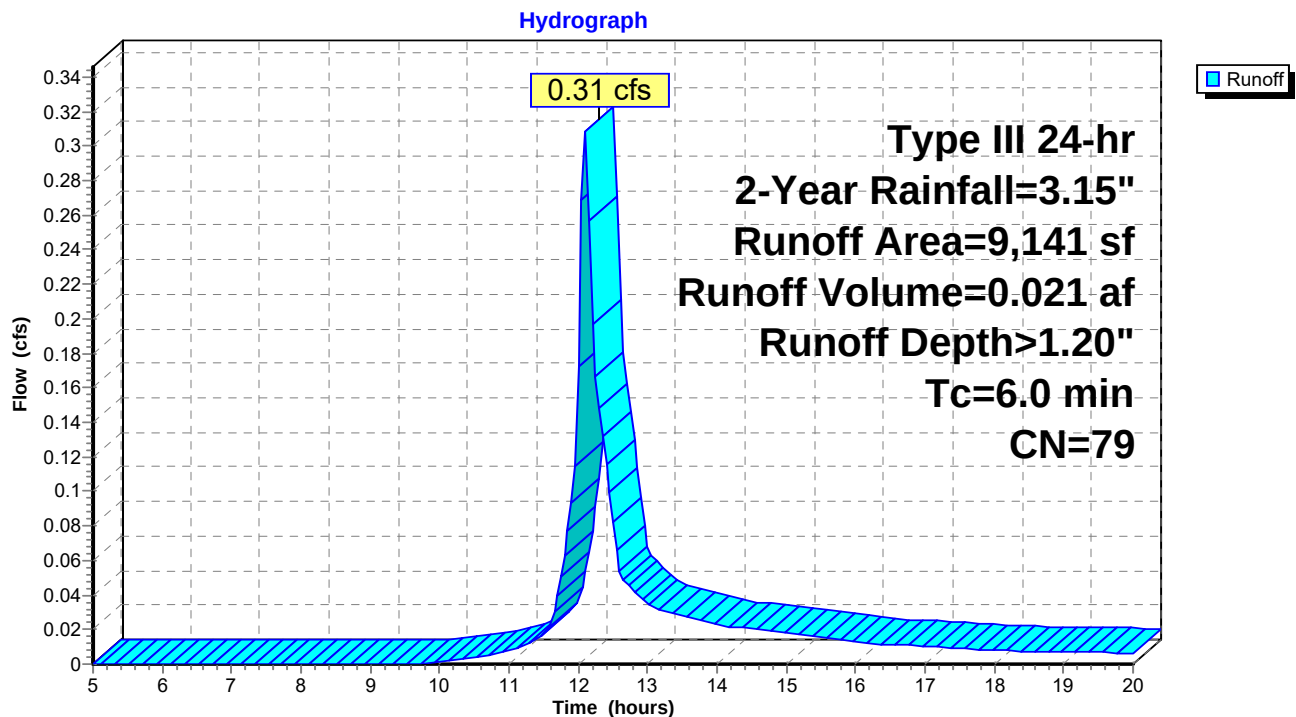
Runoff = 0.31 cfs @ 12.10 hrs, Volume= 0.021 af, Depth> 1.20"  
Routed to Pond 152P : CB 23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,961     | 39 | >75% Grass cover, Good, HSG A |
| 2,084     | 98 | Unconnected roofs, HSG A      |
| 4,096     | 98 | Paved parking, HSG A          |
| 9,141     | 79 | Weighted Average              |
| 2,961     |    | 32.39% Pervious Area          |
| 6,180     |    | 67.61% Impervious Area        |
| 2,084     |    | 33.72% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 90S: P3BBB





### Summary for Subcatchment 91S: P3GGG

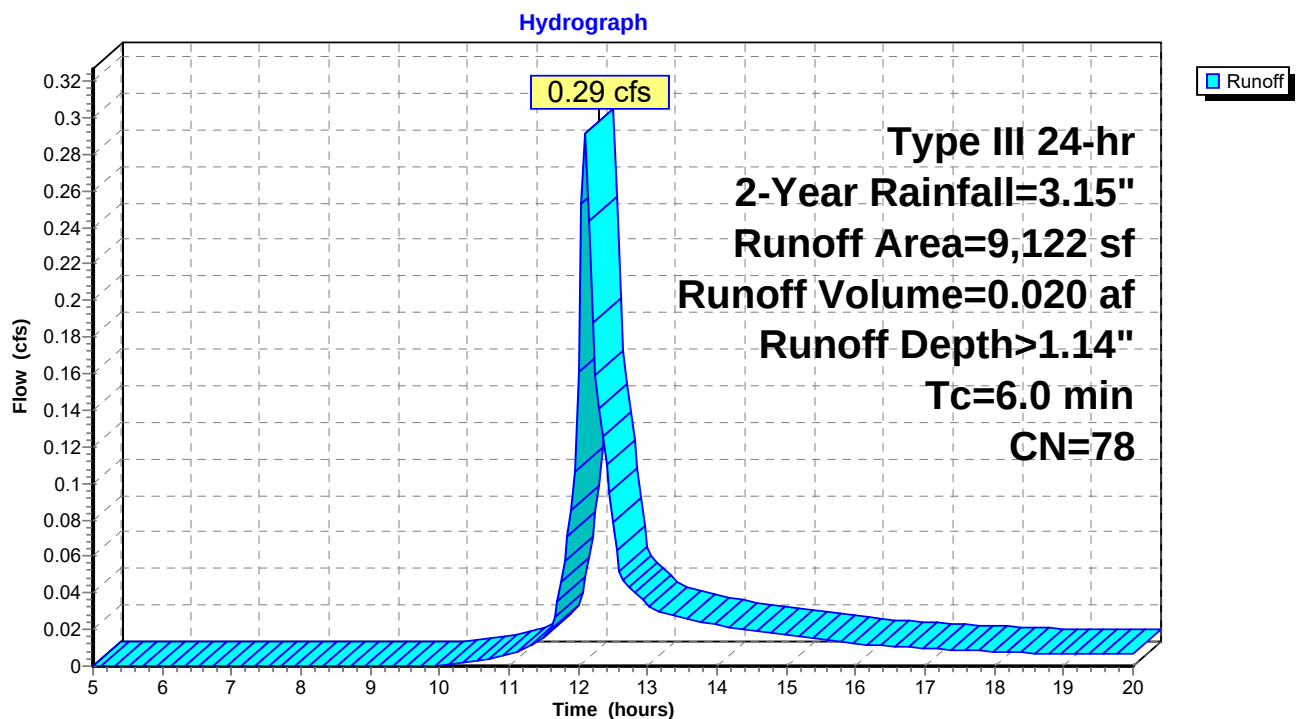
Runoff = 0.29 cfs @ 12.10 hrs, Volume= 0.020 af, Depth> 1.14"  
Routed to Pond 165P : CB 19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,041     | 39 | >75% Grass cover, Good, HSG A |
| 3,271     | 98 | Unconnected roofs, HSG A      |
| 2,810     | 98 | Paved parking, HSG A          |
| 9,122     | 78 | Weighted Average              |
| 3,041     |    | 33.34% Pervious Area          |
| 6,081     |    | 66.66% Impervious Area        |
| 3,271     |    | 53.79% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 91S: P3GGG



### Summary for Subcatchment 92S: P3C

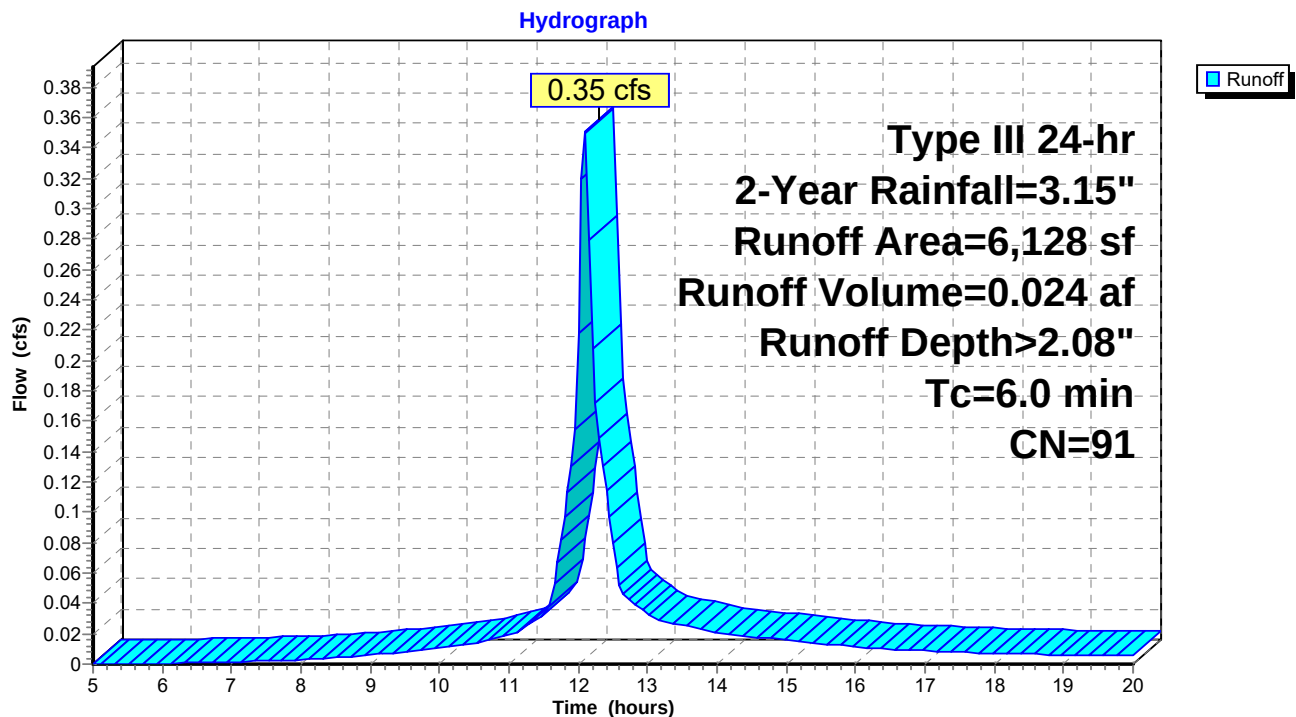
Runoff = 0.35 cfs @ 12.09 hrs, Volume= 0.024 af, Depth> 2.08"  
Routed to Pond 95P : CB 76

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,796     | 74 | >75% Grass cover, Good, HSG C |
| 348       | 98 | Unconnected roofs, HSG C      |
| 3,984     | 98 | Paved parking, HSG C          |
| 6,128     | 91 | Weighted Average              |
| 1,796     |    | 29.31% Pervious Area          |
| 4,332     |    | 70.69% Impervious Area        |
| 348       |    | 8.03% Unconnected             |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 92S: P3C



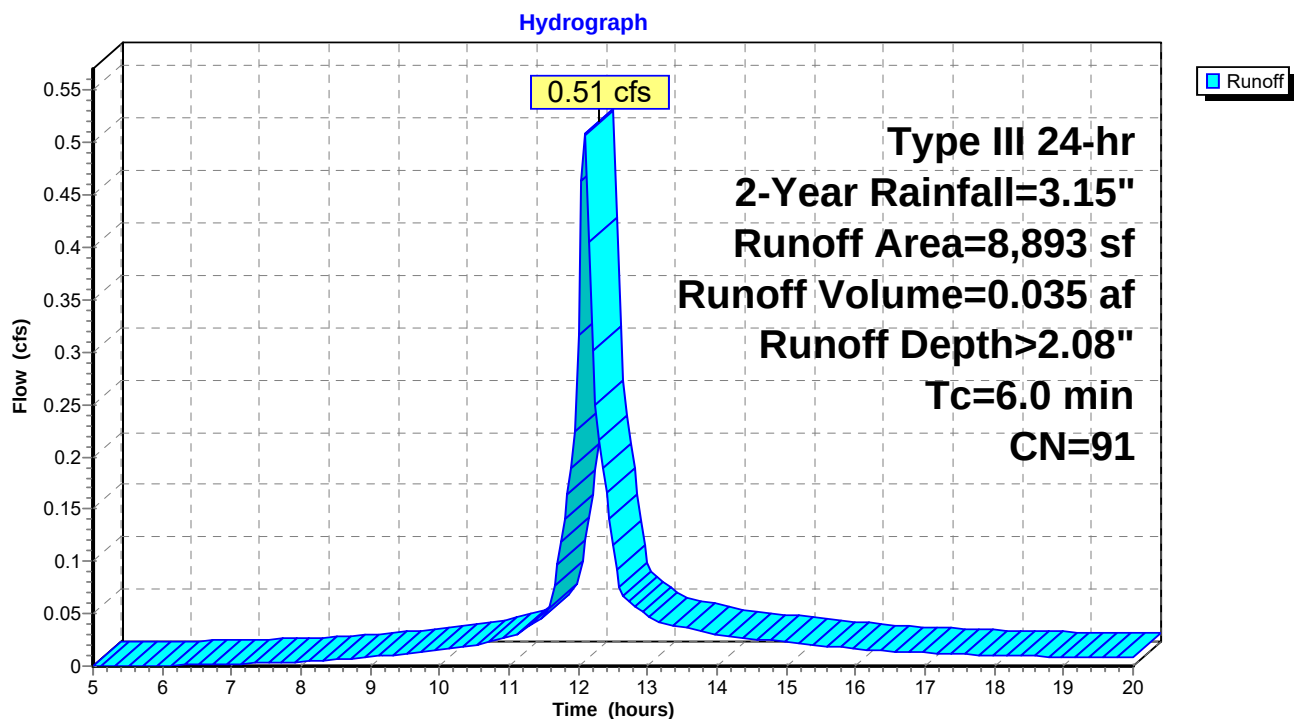
**Summary for Subcatchment 93S: P3D**

Runoff = 0.51 cfs @ 12.09 hrs, Volume= 0.035 af, Depth> 2.08"  
 Routed to Pond 94P : CB 77

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,560     | 74 | >75% Grass cover, Good, HSG C |
| 1,771     | 98 | Unconnected roofs, HSG C      |
| 4,562     | 98 | Paved parking, HSG C          |
| 8,893     | 91 | Weighted Average              |
| 2,560     |    | 28.79% Pervious Area          |
| 6,333     |    | 71.21% Impervious Area        |
| 1,771     |    | 27.96% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 93S: P3D**

### Summary for Subcatchment 94S: P3HHH

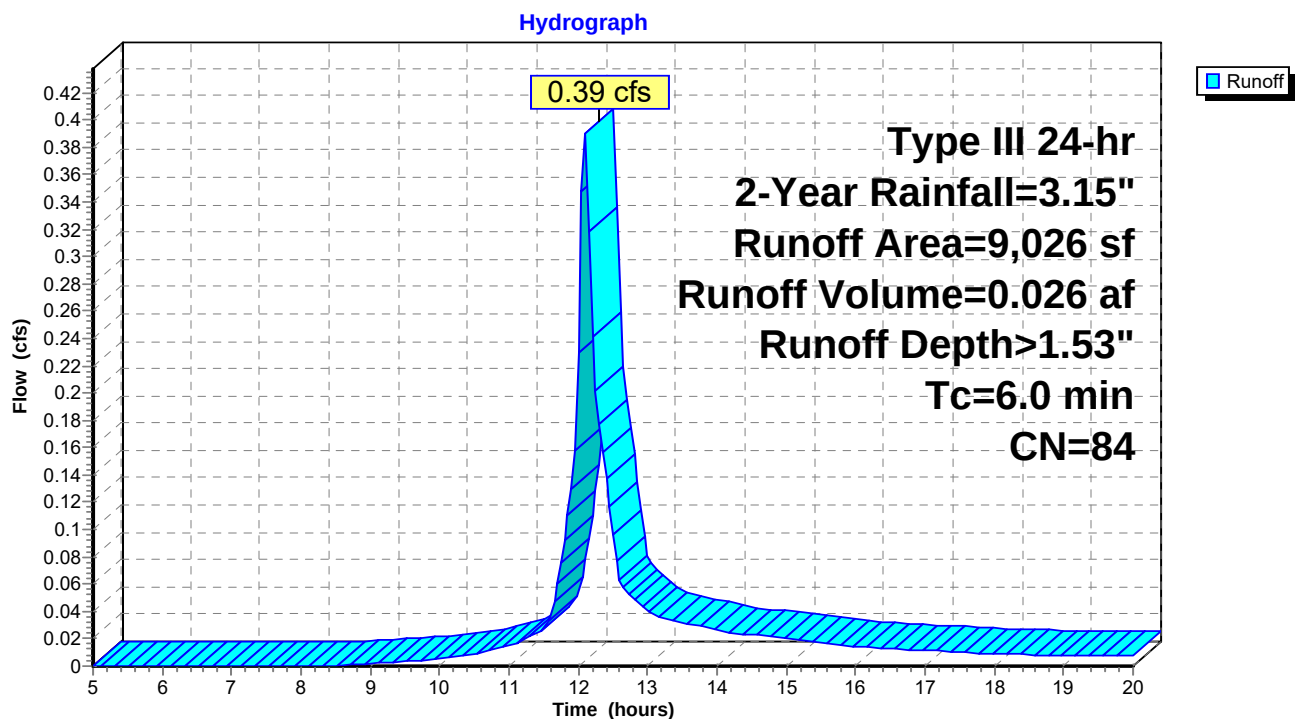
Runoff = 0.39 cfs @ 12.09 hrs, Volume= 0.026 af, Depth> 1.53"  
Routed to Pond 154P : CB 18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,098     | 39 | >75% Grass cover, Good, HSG A |
| 3,837     | 98 | Unconnected roofs, HSG A      |
| 3,091     | 98 | Paved parking, HSG A          |
| 9,026     | 84 | Weighted Average              |
| 2,098     |    | 23.24% Pervious Area          |
| 6,928     |    | 76.76% Impervious Area        |
| 3,837     |    | 55.38% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 94S: P3HHH



**Summary for Subcatchment 95S: P2X**

Runoff = 0.44 cfs @ 12.09 hrs, Volume= 0.034 af, Depth> 2.73"  
 Routed to Pond 79P : DMH 51

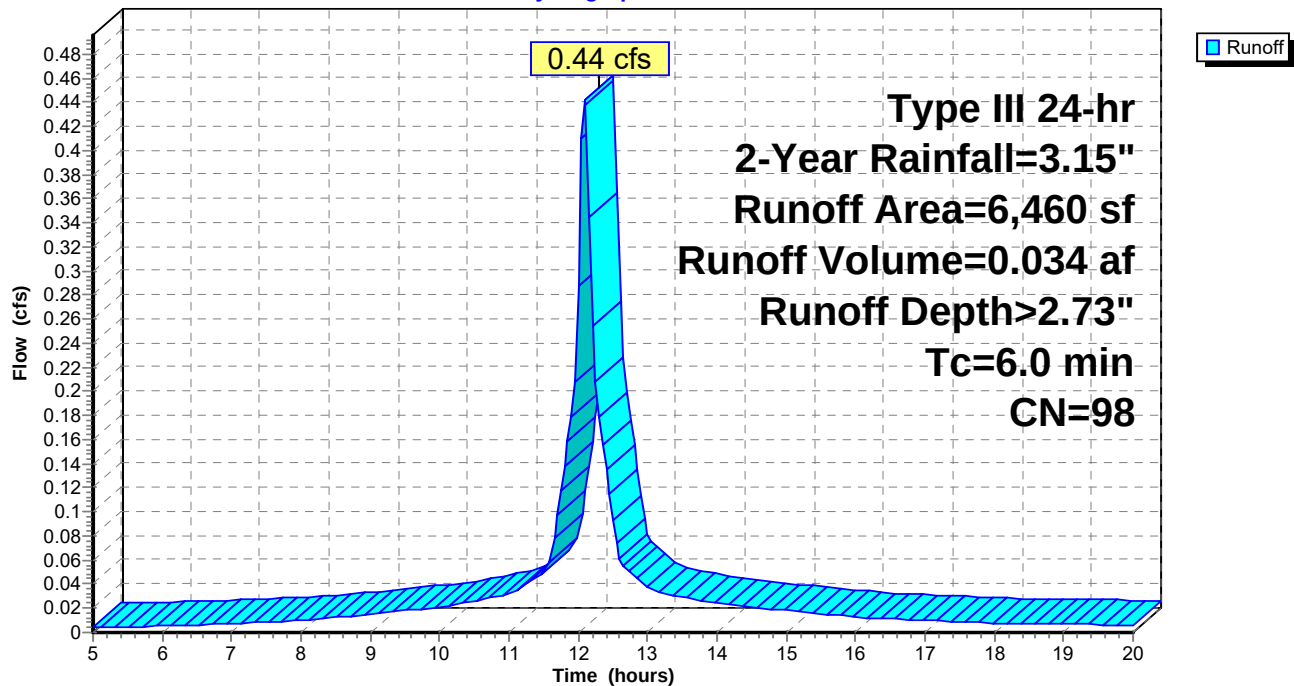
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description             |
|-----------|----|-------------------------|
| 6,460     | 98 | Paved parking, HSG C    |
| 6,460     |    | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 95S: P2X**

Hydrograph



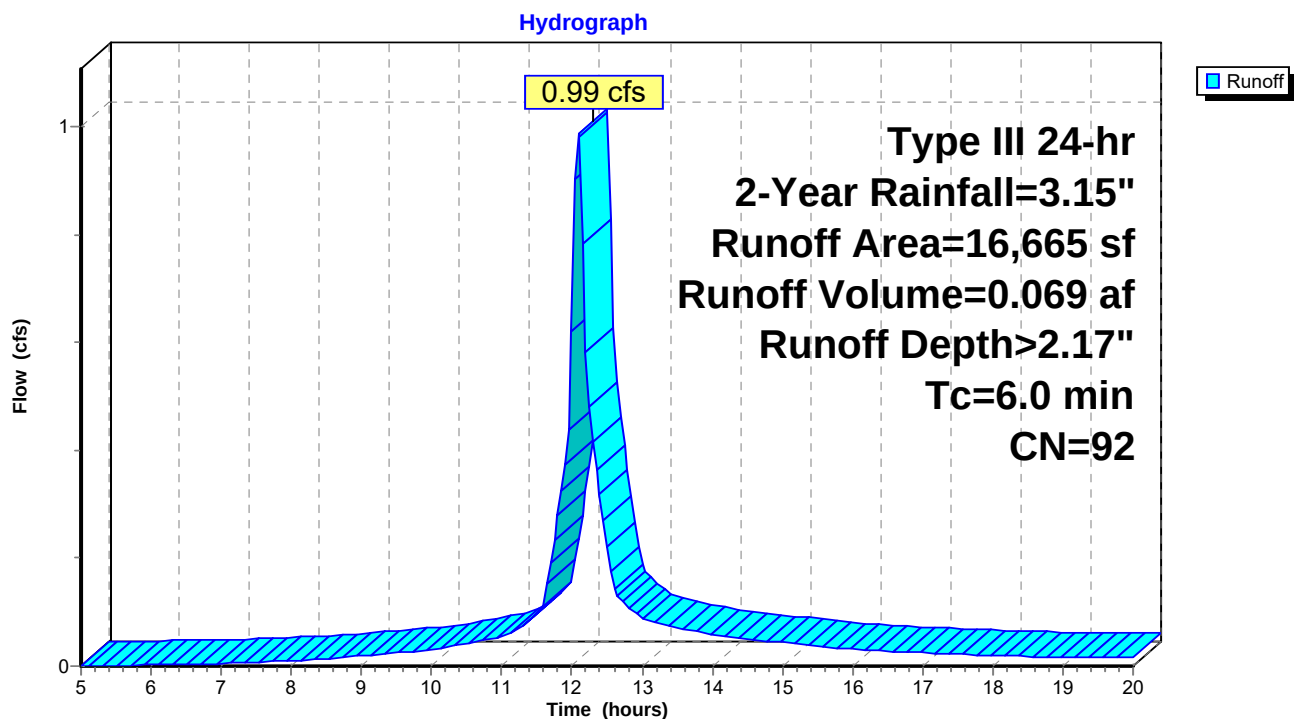
**Summary for Subcatchment 97S: P3G**

Runoff = 0.99 cfs @ 12.09 hrs, Volume= 0.069 af, Depth> 2.17"  
 Routed to Pond 100P : CB 80

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,471     | 74 | >75% Grass cover, Good, HSG C |
| 3,720     | 98 | Unconnected roofs, HSG C      |
| 8,474     | 98 | Paved parking, HSG C          |
| 16,665    | 92 | Weighted Average              |
| 4,471     |    | 26.83% Pervious Area          |
| 12,194    |    | 73.17% Impervious Area        |
| 3,720     |    | 30.51% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 97S: P3G**

### Summary for Subcatchment 98S: P3H

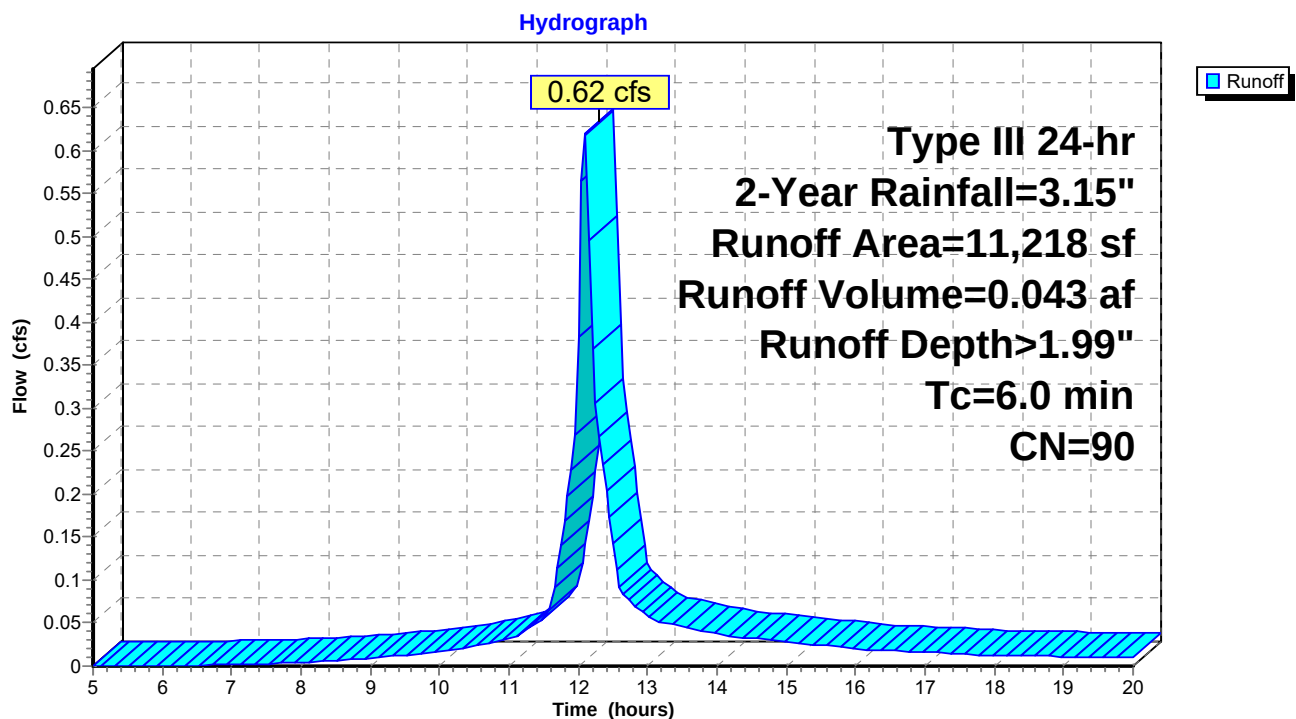
Runoff = 0.62 cfs @ 12.09 hrs, Volume= 0.043 af, Depth> 1.99"  
Routed to Pond 99P : CB 81

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,581     | 74 | >75% Grass cover, Good, HSG C |
| 2,279     | 98 | Unconnected roofs, HSG C      |
| 5,358     | 98 | Paved parking, HSG C          |
| 11,218    | 90 | Weighted Average              |
| 3,581     |    | 31.92% Pervious Area          |
| 7,637     |    | 68.08% Impervious Area        |
| 2,279     |    | 29.84% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 98S: P3H



### Summary for Subcatchment 102S: P3J

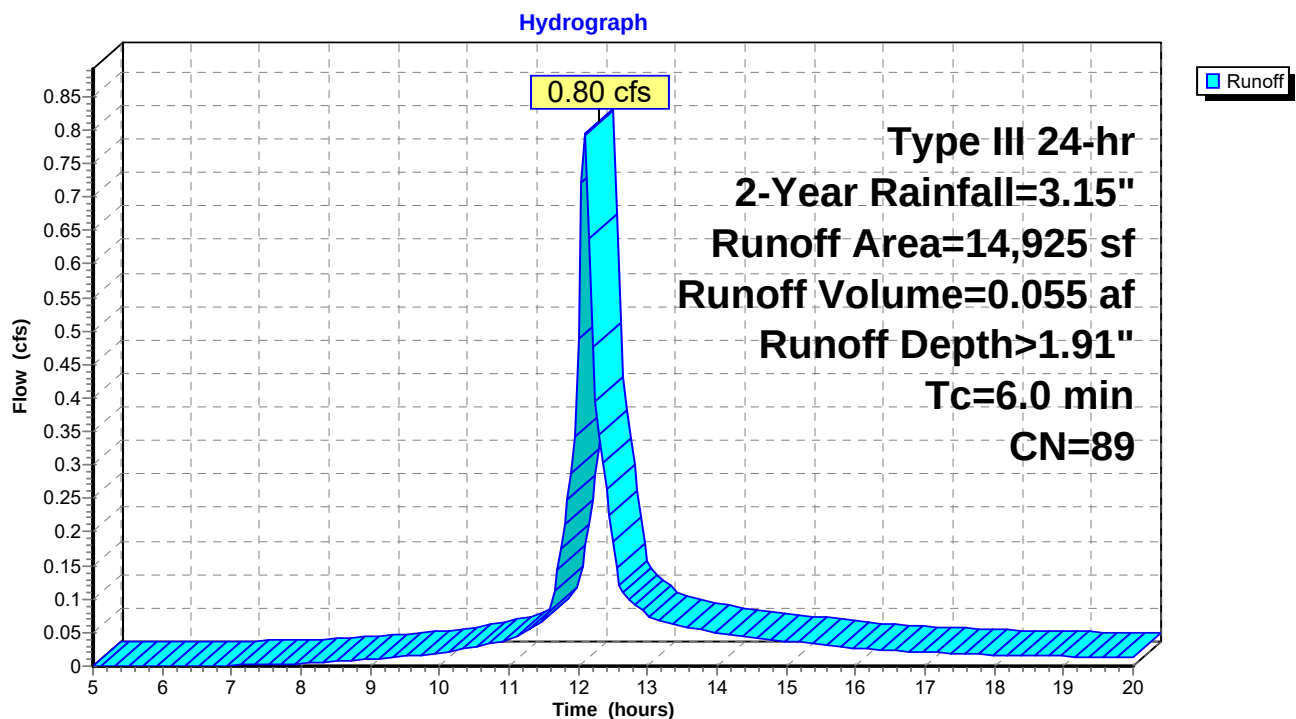
Runoff = 0.80 cfs @ 12.09 hrs, Volume= 0.055 af, Depth> 1.91"  
Routed to Pond 104P : CB 83

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,342     | 74 | >75% Grass cover, Good, HSG C |
| 2,771     | 98 | Unconnected roofs, HSG C      |
| 6,812     | 98 | Paved parking, HSG C          |
| 14,925    | 89 | Weighted Average              |
| 5,342     |    | 35.79% Pervious Area          |
| 9,583     |    | 64.21% Impervious Area        |
| 2,771     |    | 28.92% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 102S: P3J





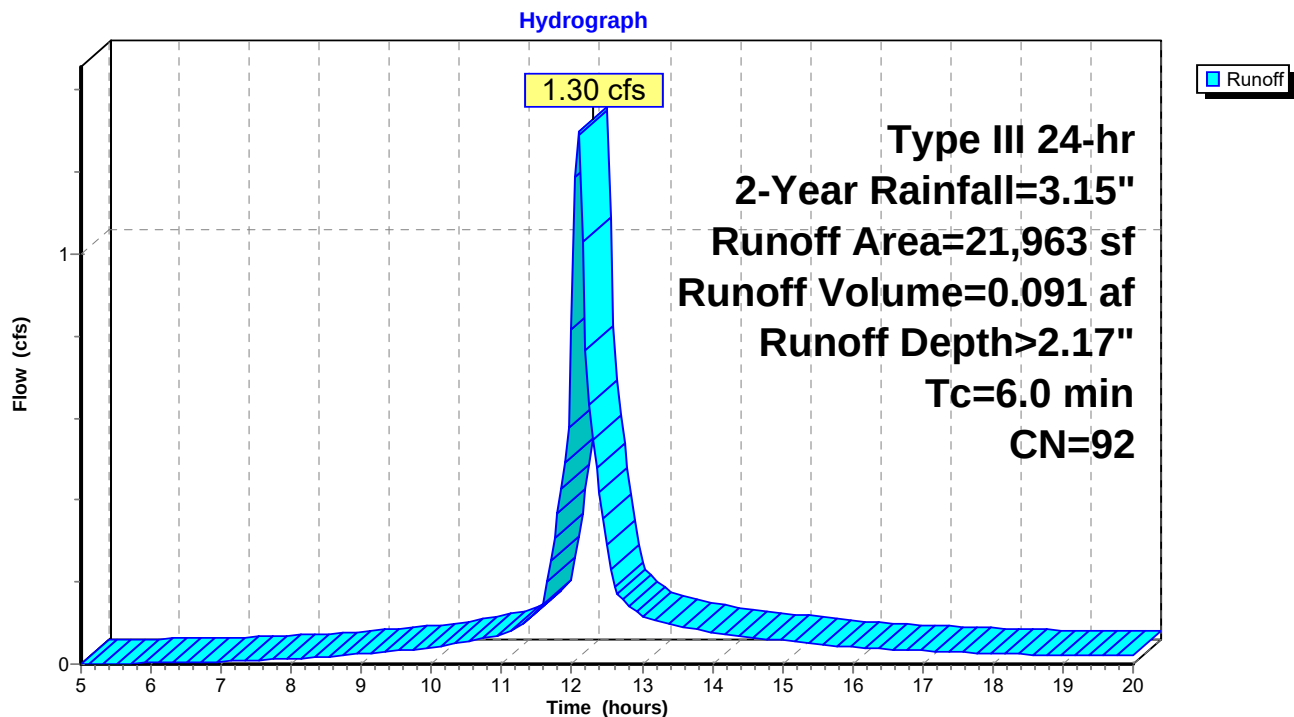
**Summary for Subcatchment 103S: P3I**

Runoff = 1.30 cfs @ 12.09 hrs, Volume= 0.091 af, Depth> 2.17"  
 Routed to Pond 105P : CB 82

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,534     | 74 | >75% Grass cover, Good, HSG C |
| 6,057     | 98 | Unconnected roofs, HSG C      |
| 10,372    | 98 | Paved parking, HSG C          |
| 21,963    | 92 | Weighted Average              |
| 5,534     |    | 25.20% Pervious Area          |
| 16,429    |    | 74.80% Impervious Area        |
| 6,057     |    | 36.87% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 103S: P3I**

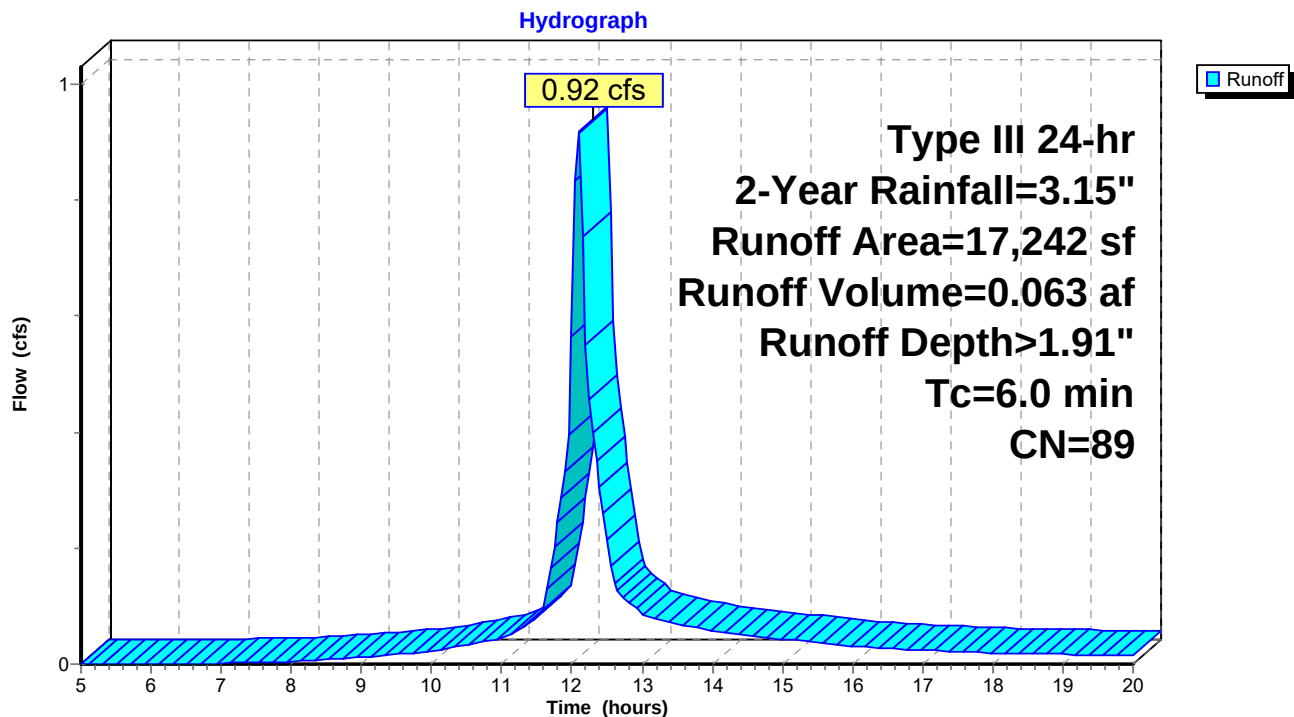
**Summary for Subcatchment 107S: P3E**

Runoff = 0.92 cfs @ 12.09 hrs, Volume= 0.063 af, Depth> 1.91"  
 Routed to Pond 110P : CB 78

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 6,163     | 74 | >75% Grass cover, Good, HSG C |
| 2,724     | 98 | Unconnected roofs, HSG C      |
| 8,355     | 98 | Paved parking, HSG C          |
| 17,242    | 89 | Weighted Average              |
| 6,163     |    | 35.74% Pervious Area          |
| 11,079    |    | 64.26% Impervious Area        |
| 2,724     |    | 24.59% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 107S: P3E**

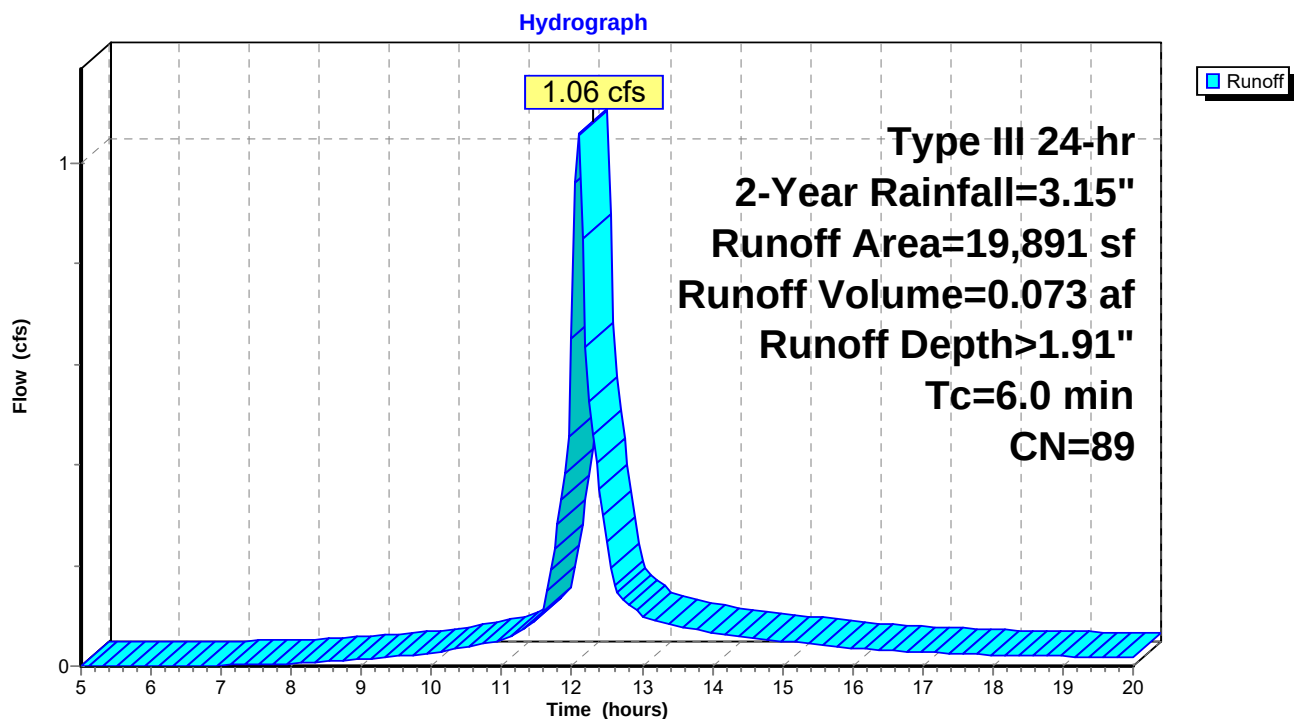
**Summary for Subcatchment 108S: P3F**

Runoff = 1.06 cfs @ 12.09 hrs, Volume= 0.073 af, Depth> 1.91"  
 Routed to Pond 109P : CB 79

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 7,073     | 74 | >75% Grass cover, Good, HSG C |
| 5,397     | 98 | Unconnected roofs, HSG C      |
| 7,421     | 98 | Paved parking, HSG C          |
| 19,891    | 89 | Weighted Average              |
| 7,073     |    | 35.56% Pervious Area          |
| 12,818    |    | 64.44% Impervious Area        |
| 5,397     |    | 42.10% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 108S: P3F**

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Type III 24-hr 2-Year Rainfall=3.15"

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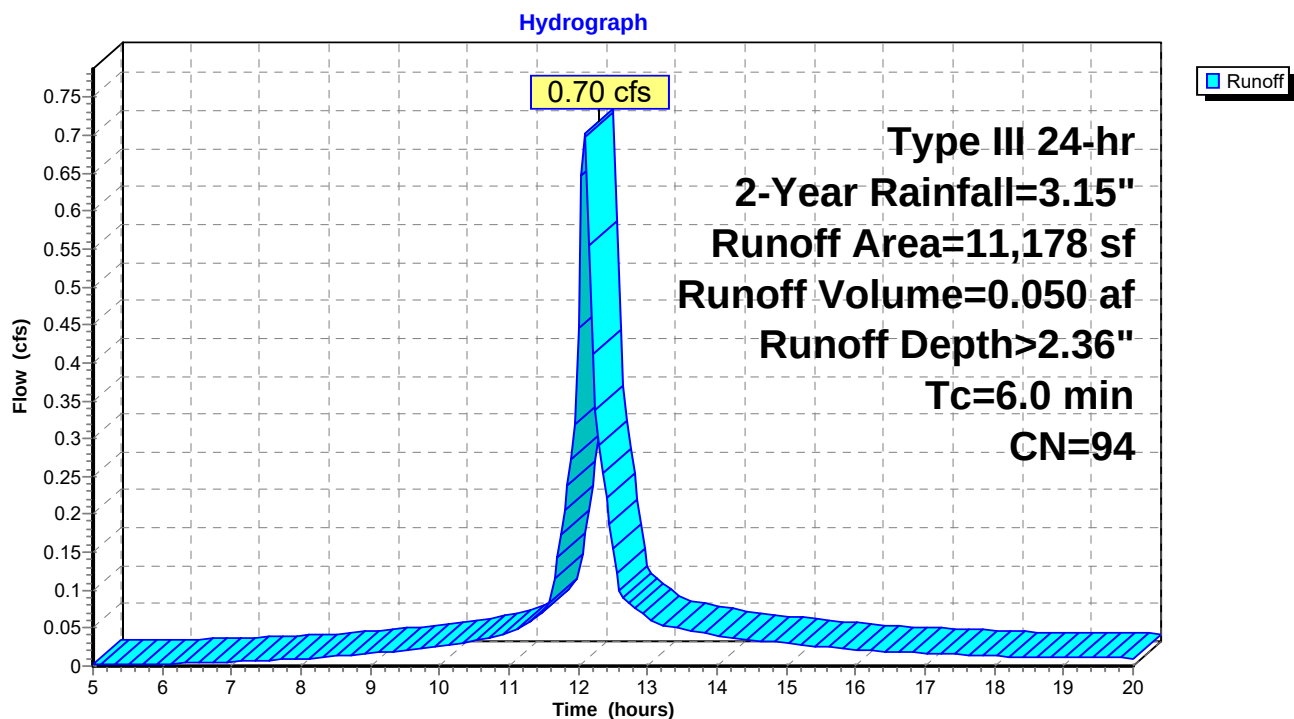
**Summary for Subcatchment 109S: P3T**

Runoff = 0.70 cfs @ 12.09 hrs, Volume= 0.050 af, Depth> 2.36"  
Routed to Pond 116P : CB 90

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,856     | 74 | >75% Grass cover, Good, HSG C |
| 9,322     | 98 | Paved parking, HSG C          |
| 11,178    | 94 | Weighted Average              |
| 1,856     |    | 16.60% Pervious Area          |
| 9,322     |    | 83.40% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 109S: P3T**

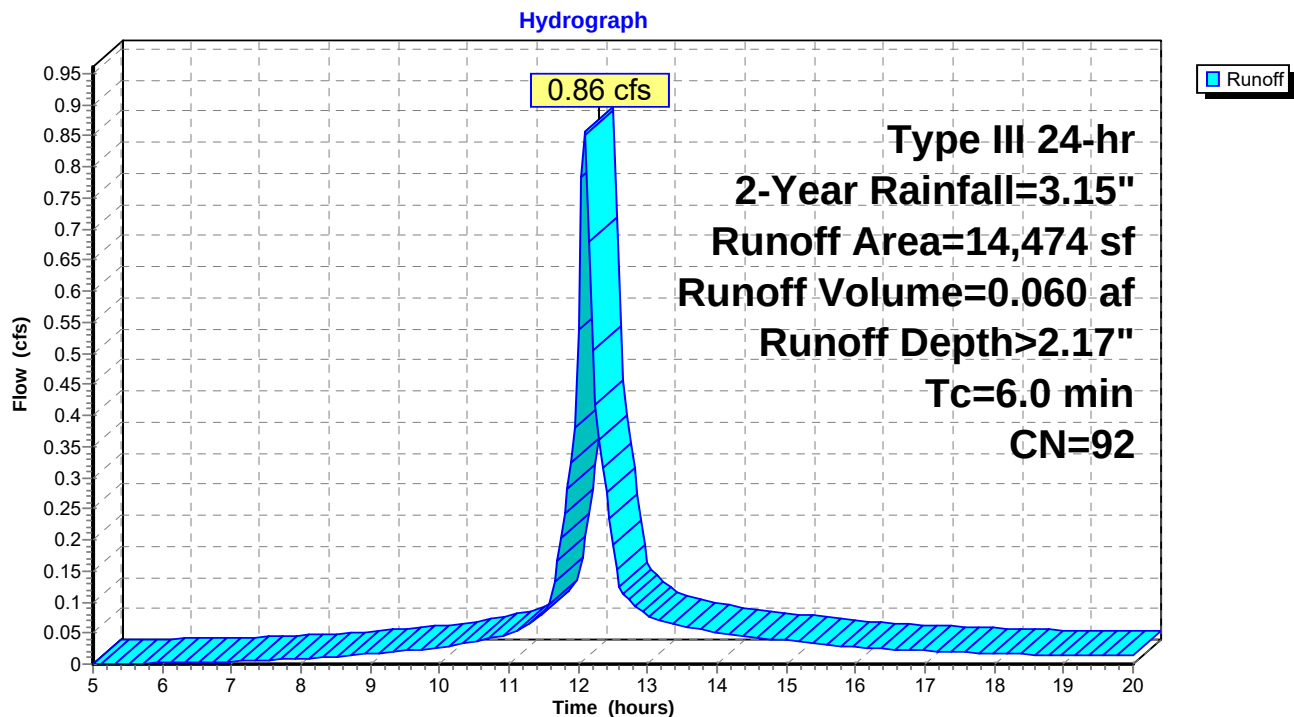
**Summary for Subcatchment 110S: P3U**

Runoff = 0.86 cfs @ 12.09 hrs, Volume= 0.060 af, Depth> 2.17"  
 Routed to Pond 115P : CB 91

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,423     | 74 | >75% Grass cover, Good, HSG C |
| 6,099     | 98 | Unconnected roofs, HSG C      |
| 4,952     | 98 | Paved parking, HSG C          |
| 14,474    | 92 | Weighted Average              |
| 3,423     |    | 23.65% Pervious Area          |
| 11,051    |    | 76.35% Impervious Area        |
| 6,099     |    | 55.19% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 110S: P3U**

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Type III 24-hr 2-Year Rainfall=3.15"

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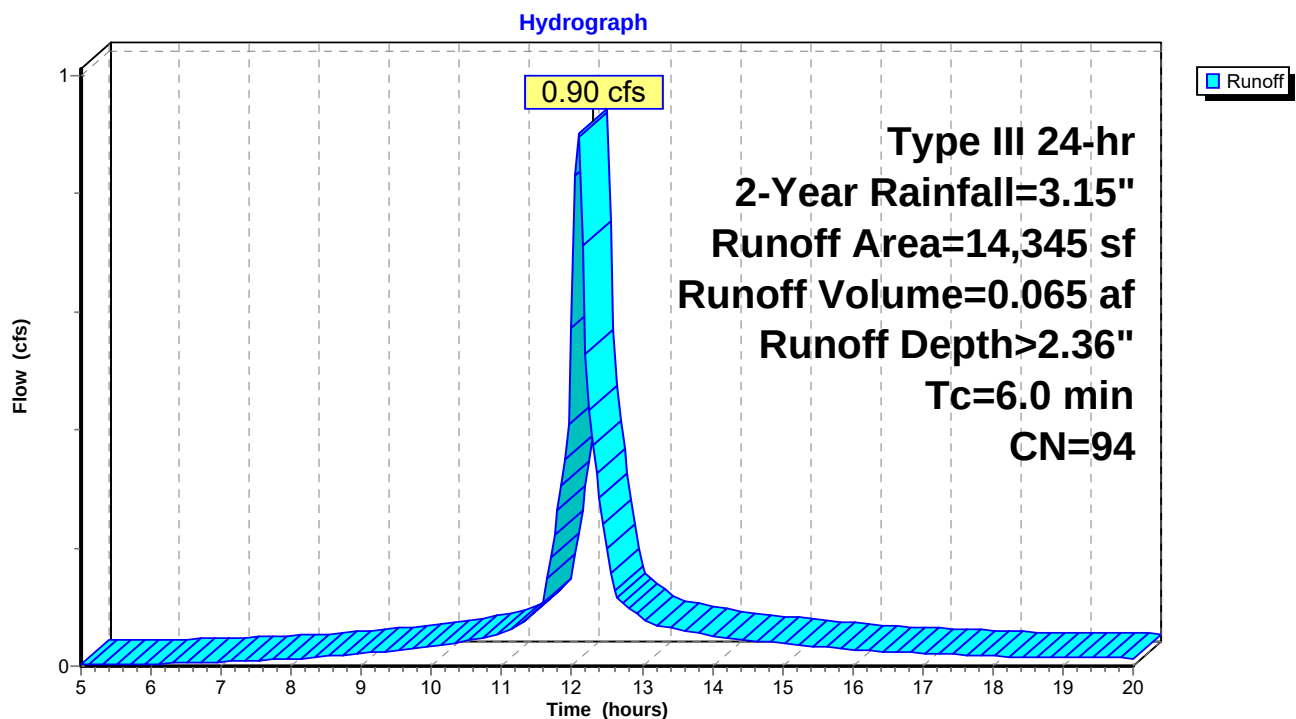
**Summary for Subcatchment 111S: P3V**

Runoff = 0.90 cfs @ 12.09 hrs, Volume= 0.065 af, Depth> 2.36"  
Routed to Pond 114P : CB 94

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,512     | 74 | >75% Grass cover, Good, HSG C |
| 5,977     | 98 | Unconnected roofs, HSG C      |
| 5,856     | 98 | Paved parking, HSG C          |
| 14,345    | 94 | Weighted Average              |
| 2,512     |    | 17.51% Pervious Area          |
| 11,833    |    | 82.49% Impervious Area        |
| 5,977     |    | 50.51% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 111S: P3V**

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Type III 24-hr 2-Year Rainfall=3.15"

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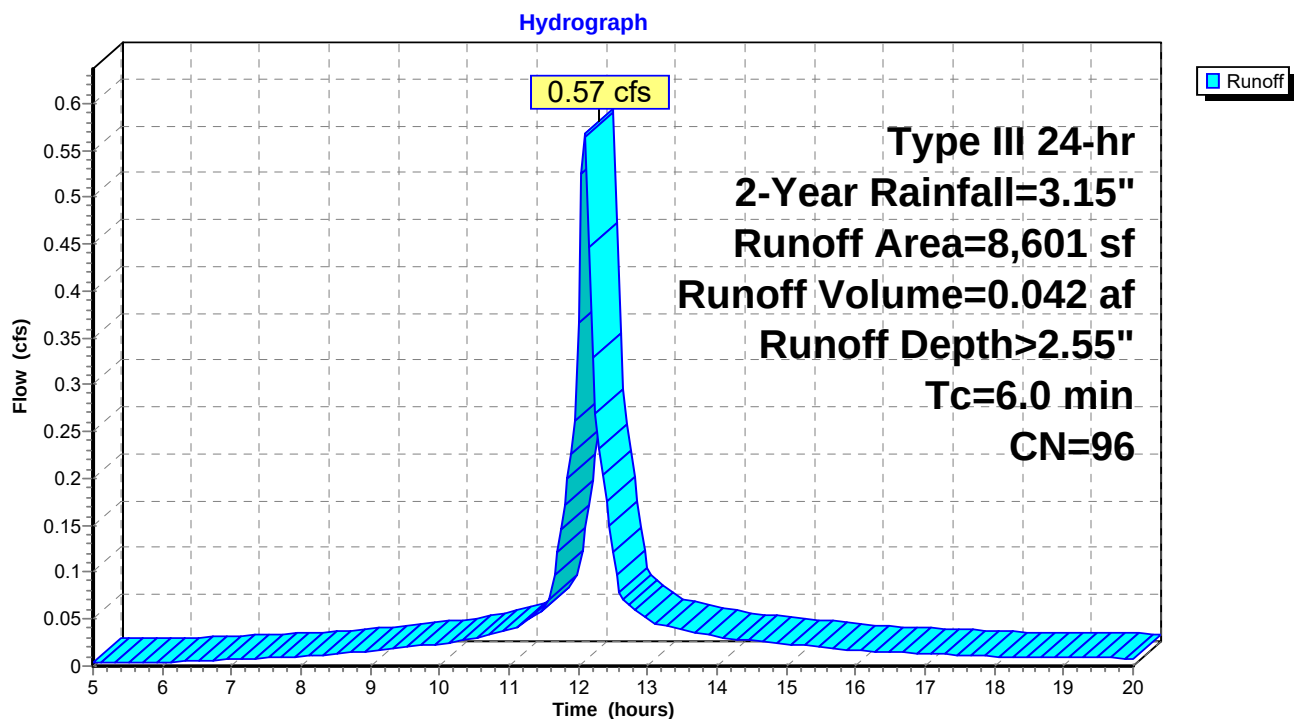
**Summary for Subcatchment 112S: P3W**

Runoff = 0.57 cfs @ 12.09 hrs, Volume= 0.042 af, Depth> 2.55"  
Routed to Pond 113P : CB 95

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 719       | 74 | >75% Grass cover, Good, HSG C |
| 7,882     | 98 | Paved parking, HSG C          |
| 8,601     | 96 | Weighted Average              |
| 719       |    | 8.36% Pervious Area           |
| 7,882     |    | 91.64% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 112S: P3W**

### Summary for Subcatchment 125S: P3EE

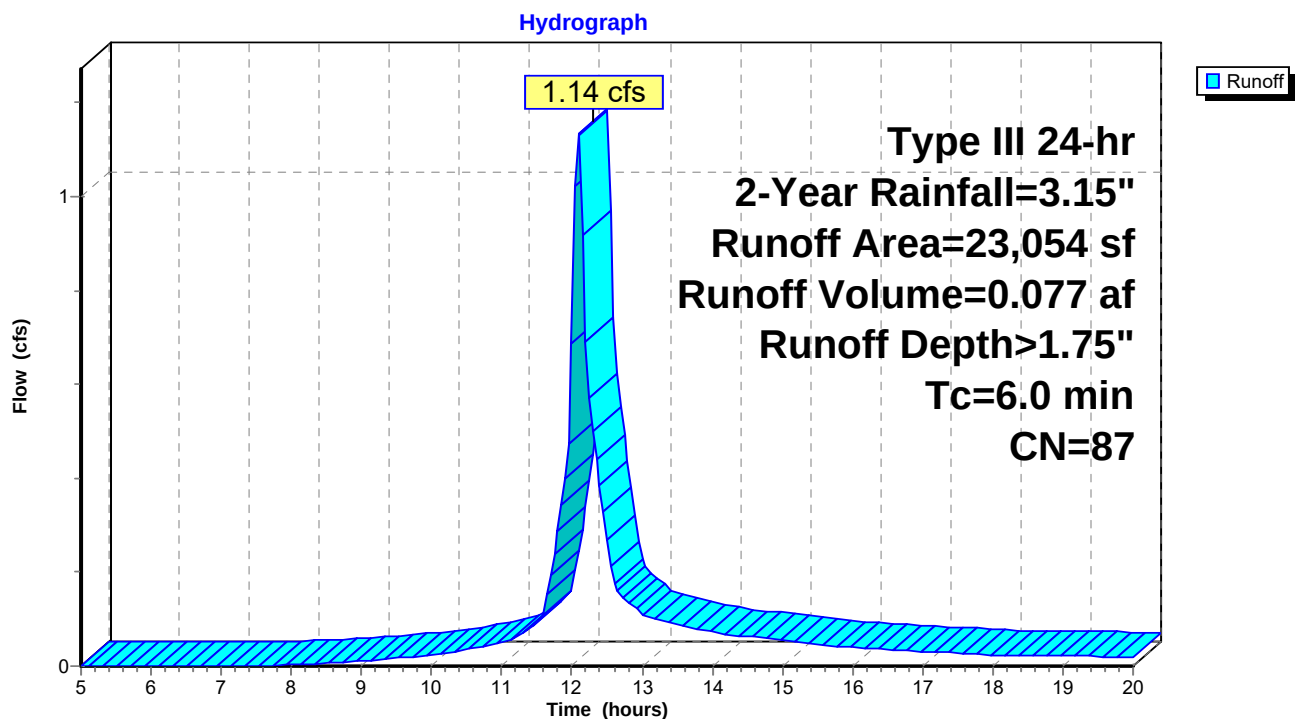
Runoff = 1.14 cfs @ 12.09 hrs, Volume= 0.077 af, Depth> 1.75"  
Routed to Pond 130P : CB 32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,338     | 39 | >75% Grass cover, Good, HSG A |
| 8,274     | 98 | Unconnected roofs, HSG A      |
| 10,442    | 98 | Paved parking, HSG A          |
| 23,054    | 87 | Weighted Average              |
| 4,338     |    | 18.82% Pervious Area          |
| 18,716    |    | 81.18% Impervious Area        |
| 8,274     |    | 44.21% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 125S: P3EE





### Summary for Subcatchment 126S: P3FF

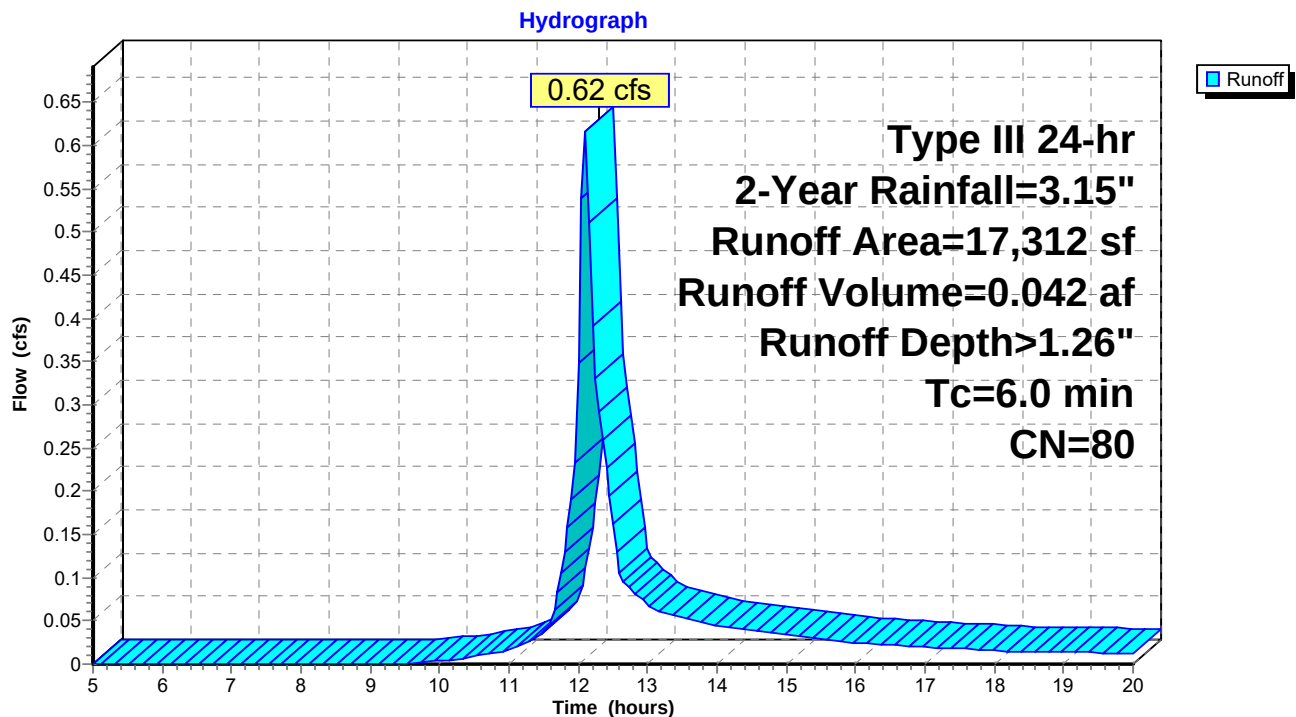
Runoff = 0.62 cfs @ 12.10 hrs, Volume= 0.042 af, Depth> 1.26"  
Routed to Pond 129P : CB 34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,177     | 39 | >75% Grass cover, Good, HSG A |
| 4,336     | 98 | Unconnected roofs, HSG A      |
| 7,799     | 98 | Paved parking, HSG A          |
| 17,312    | 80 | Weighted Average              |
| 5,177     |    | 29.90% Pervious Area          |
| 12,135    |    | 70.10% Impervious Area        |
| 4,336     |    | 35.73% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 126S: P3FF



### Summary for Subcatchment 127S: P3GG

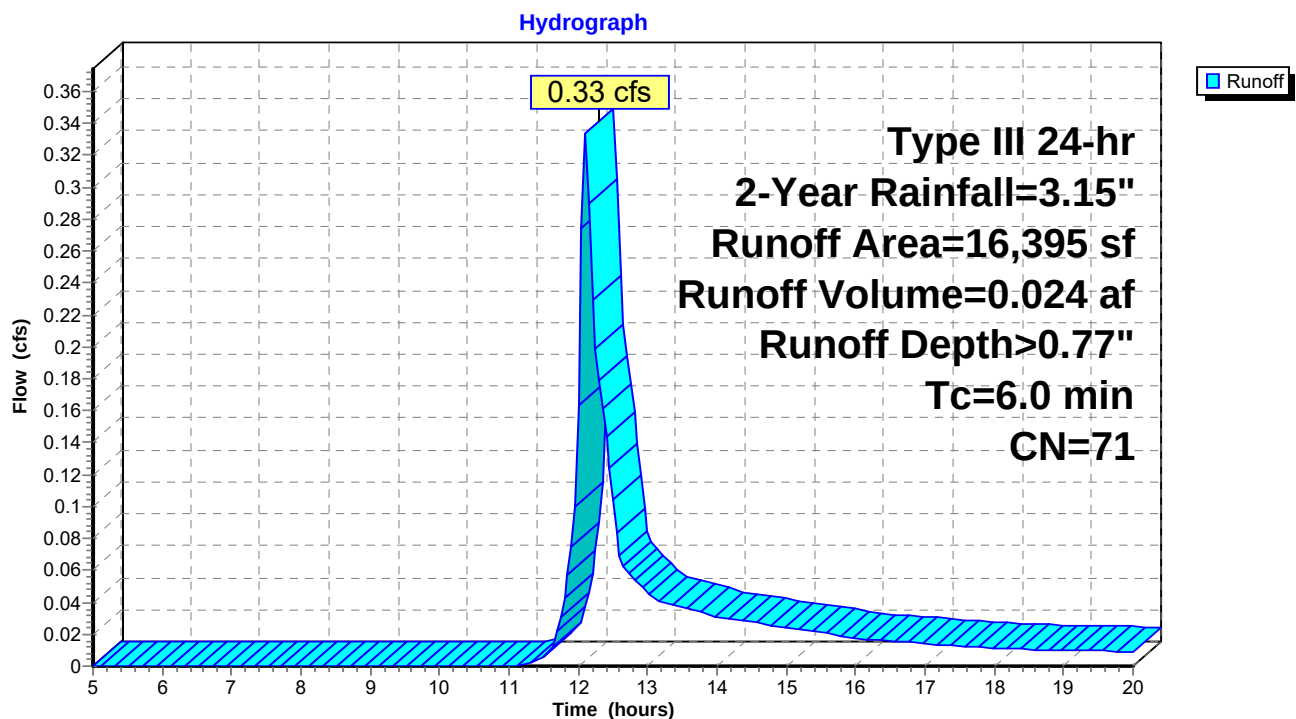
Runoff = 0.33 cfs @ 12.10 hrs, Volume= 0.024 af, Depth> 0.77"  
Routed to Pond 132P : CB 33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 7,617     | 39 | >75% Grass cover, Good, HSG A |
| 3,071     | 98 | Unconnected roofs, HSG C      |
| 5,707     | 98 | Paved parking, HSG A          |
| 16,395    | 71 | Weighted Average              |
| 7,617     |    | 46.46% Pervious Area          |
| 8,778     |    | 53.54% Impervious Area        |
| 3,071     |    | 34.99% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 127S: P3GG



### Summary for Subcatchment 128S: P3HH

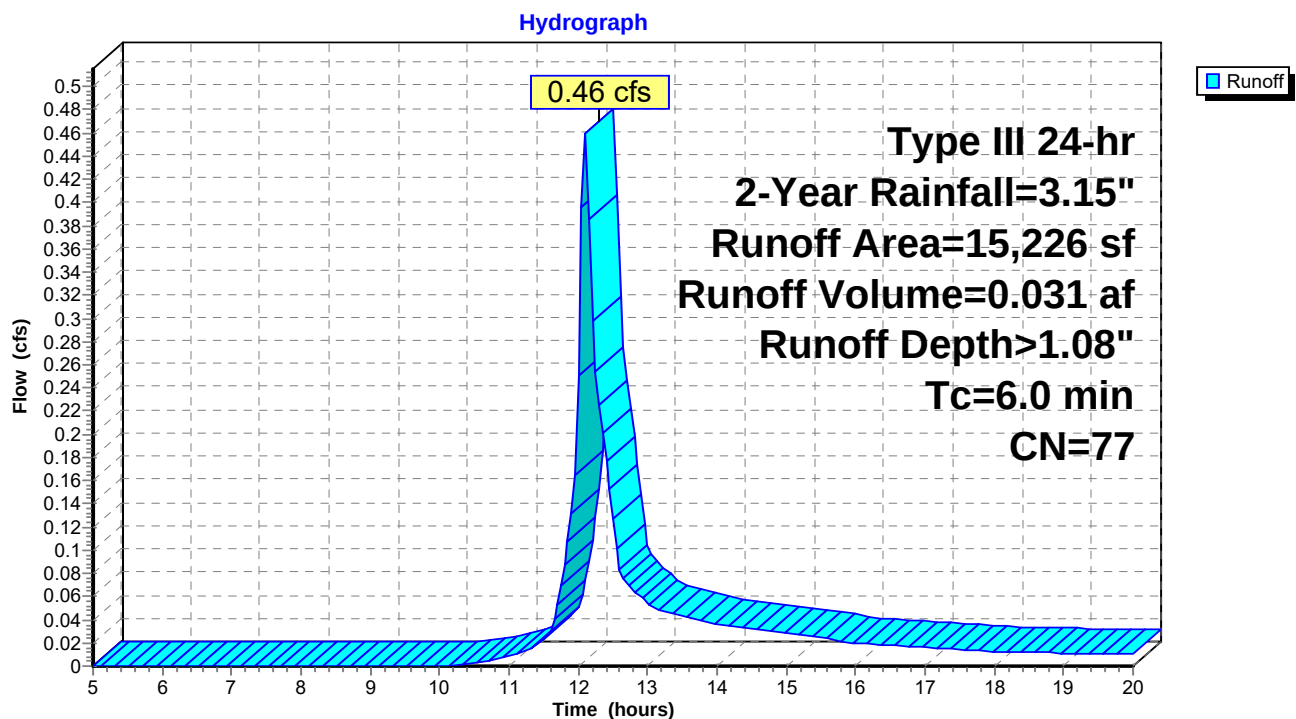
Runoff = 0.46 cfs @ 12.10 hrs, Volume= 0.031 af, Depth> 1.08"  
Routed to Pond 131P : CB 35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,501     | 39 | >75% Grass cover, Good, HSG A |
| 4,901     | 98 | Unconnected roofs, HSG A      |
| 4,824     | 98 | Paved parking, HSG A          |
| 15,226    | 77 | Weighted Average              |
| 5,501     |    | 36.13% Pervious Area          |
| 9,725     |    | 63.87% Impervious Area        |
| 4,901     |    | 50.40% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 128S: P3HH



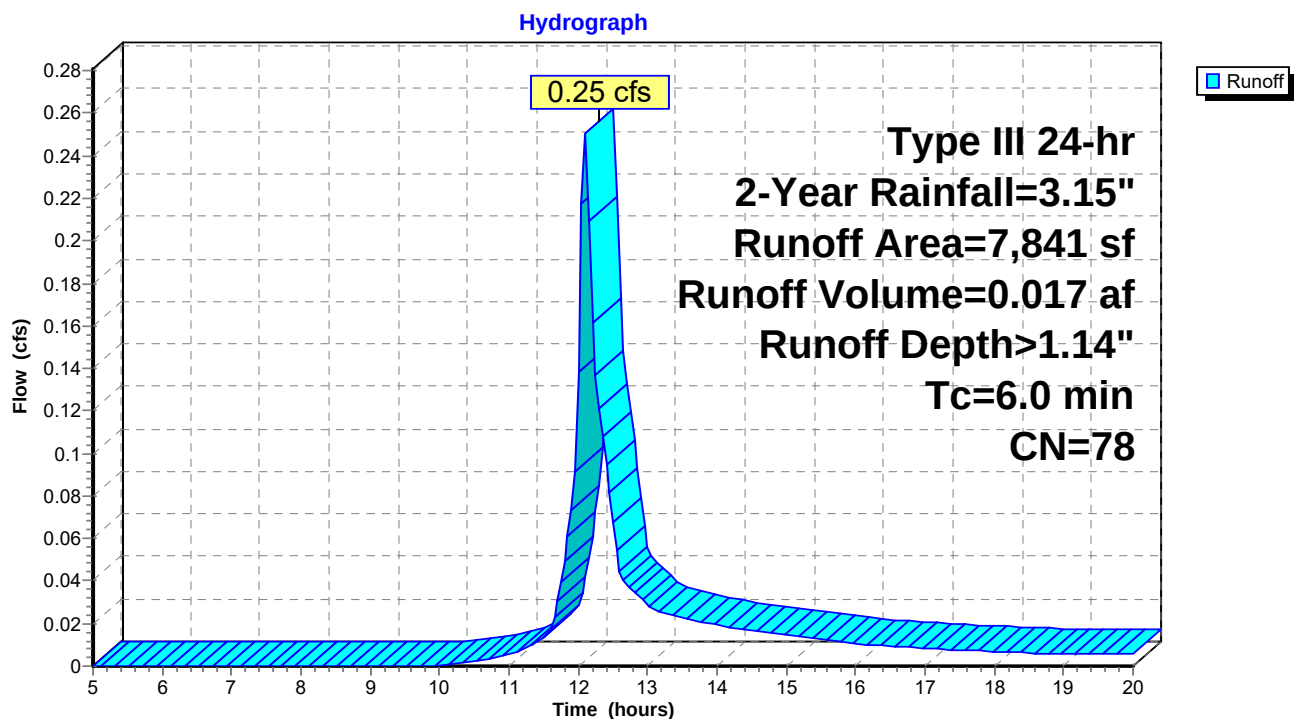
**Summary for Subcatchment 129S: P3MM**

Runoff = 0.25 cfs @ 12.10 hrs, Volume= 0.017 af, Depth> 1.14"  
 Routed to Pond 136P : CB 38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,648     | 39 | >75% Grass cover, Good, HSG A |
| 2,583     | 98 | Unconnected roofs, HSG A      |
| 2,610     | 98 | Paved parking, HSG A          |
| 7,841     | 78 | Weighted Average              |
| 2,648     |    | 33.77% Pervious Area          |
| 5,193     |    | 66.23% Impervious Area        |
| 2,583     |    | 49.74% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 129S: P3MM**

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Type III 24-hr 2-Year Rainfall=3.15"

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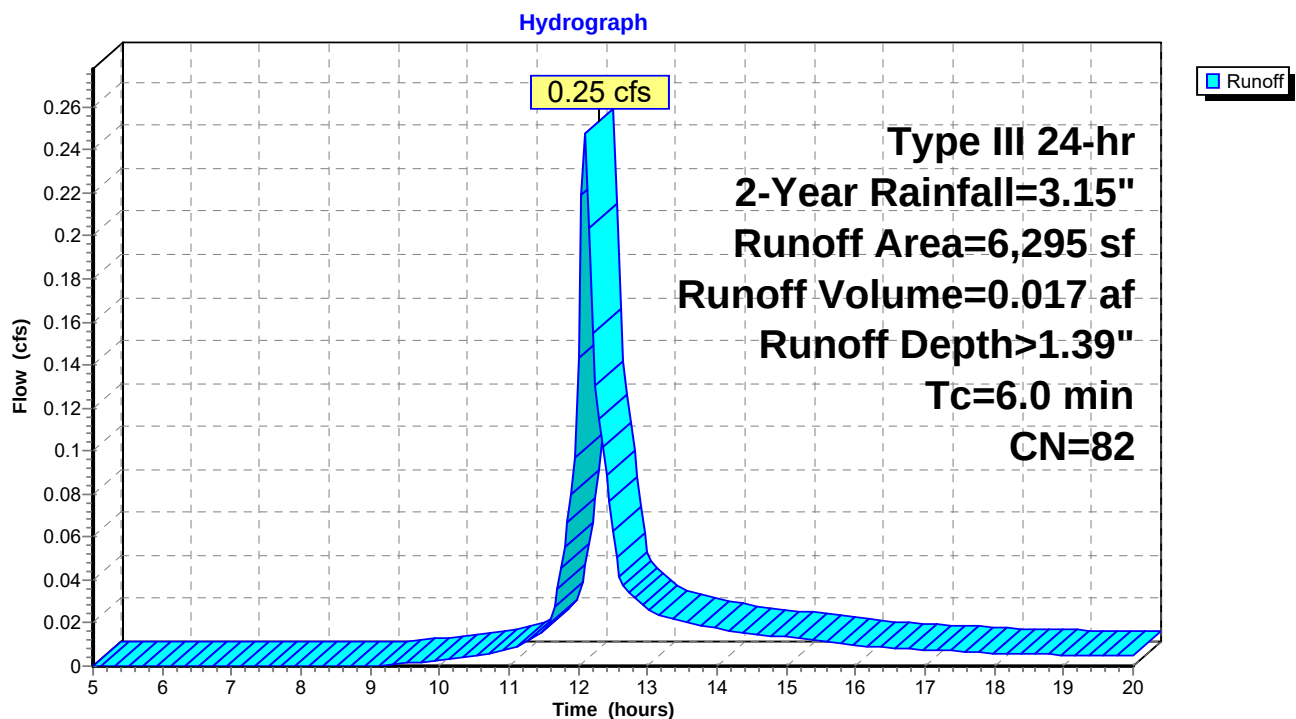
**Summary for Subcatchment 130S: P3NN**

Runoff = 0.25 cfs @ 12.09 hrs, Volume= 0.017 af, Depth> 1.39"  
Routed to Pond 138P : CB 39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,726     | 39 | >75% Grass cover, Good, HSG A |
| 1,686     | 98 | Unconnected roofs, HSG A      |
| 2,883     | 98 | Paved parking, HSG A          |
| 6,295     | 82 | Weighted Average              |
| 1,726     |    | 27.42% Pervious Area          |
| 4,569     |    | 72.58% Impervious Area        |
| 1,686     |    | 36.90% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 130S: P3NN**

### Summary for Subcatchment 136S: P3II

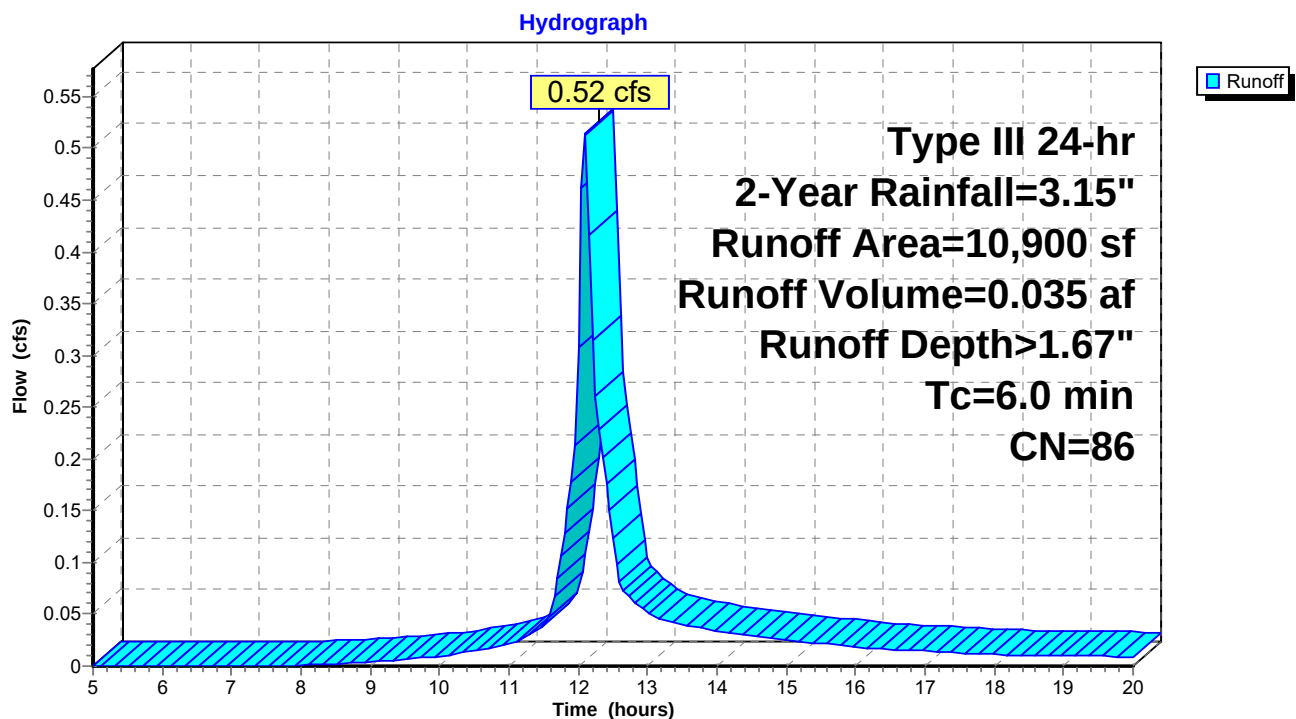
Runoff = 0.52 cfs @ 12.09 hrs, Volume= 0.035 af, Depth> 1.67"  
Routed to Pond 137P : CB

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,148     | 39 | >75% Grass cover, Good, HSG A |
| 4,052     | 98 | Unconnected roofs, HSG A      |
| 4,700     | 98 | Paved parking, HSG A          |
| 10,900    | 86 | Weighted Average              |
| 2,148     |    | 19.71% Pervious Area          |
| 8,752     |    | 80.29% Impervious Area        |
| 4,052     |    | 46.30% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 136S: P3II



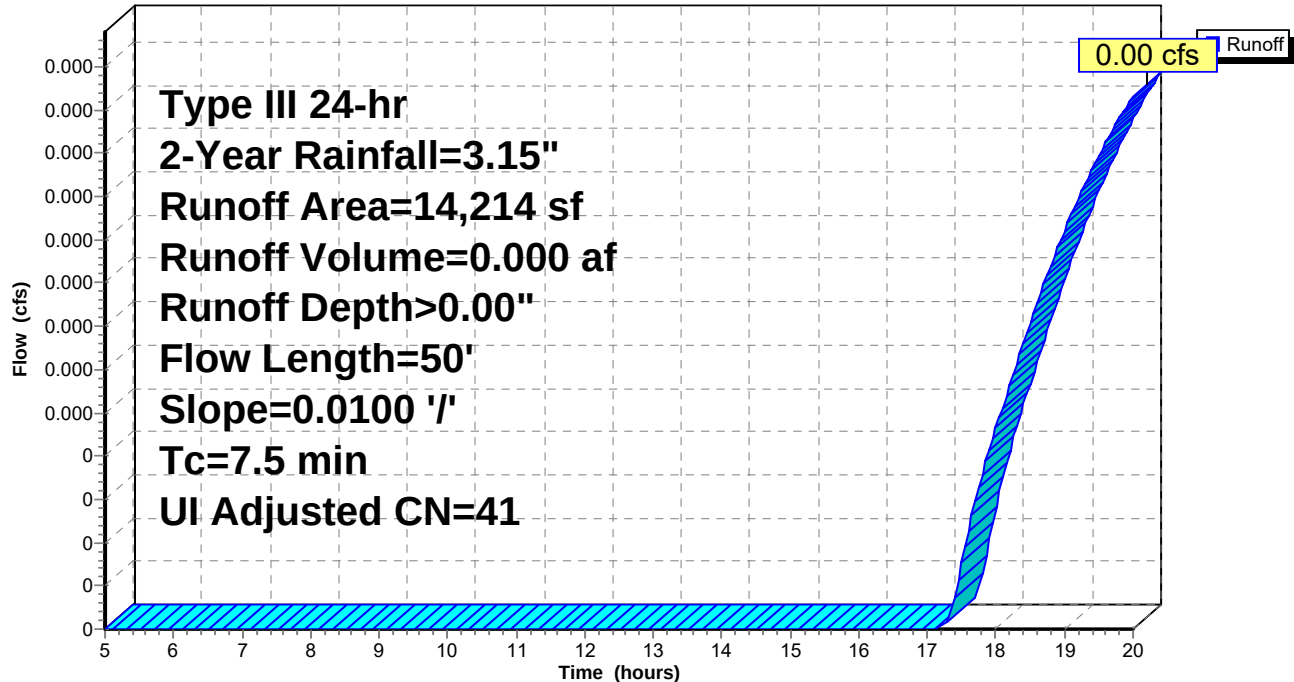
**Summary for Subcatchment 138S: P3JJ**

Runoff = 0.00 cfs @ 20.00 hrs, Volume= 0.000 af, Depth> 0.00"  
 Routed to Pond 135P : Inf. Basin 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 989       | 98 |     | Unconnected roofs, HSG A      |
| 13,225    | 39 |     | >75% Grass cover, Good, HSG A |
| 14,214    | 43 | 41  | Weighted Average, UI Adjusted |
| 13,225    |    |     | 93.04% Pervious Area          |
| 989       |    |     | 6.96% Impervious Area         |
| 989       |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                    |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------|
| 7.5      | 50            | 0.0100        | 0.11              |                | Sheet Flow,<br>Grass: Short n= 0.150 P2= 3.10" |

**Subcatchment 138S: P3JJ****Hydrograph**

### Summary for Subcatchment 140S: P300

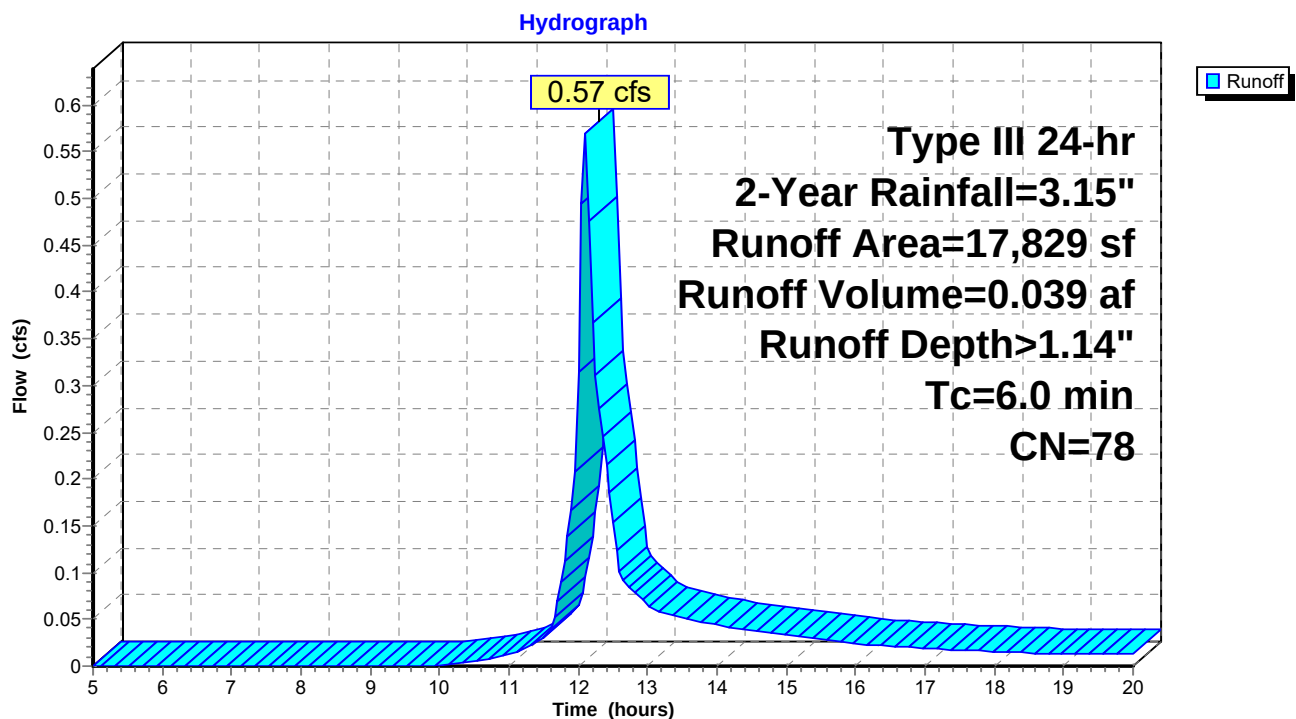
Runoff = 0.57 cfs @ 12.10 hrs, Volume= 0.039 af, Depth> 1.14"  
Routed to Pond 142P : CB 40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 6,065     | 39 | >75% Grass cover, Good, HSG A |
| 5,813     | 98 | Unconnected roofs, HSG A      |
| 5,951     | 98 | Paved parking, HSG A          |
| 17,829    | 78 | Weighted Average              |
| 6,065     |    | 34.02% Pervious Area          |
| 11,764    |    | 65.98% Impervious Area        |
| 5,813     |    | 49.41% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 140S: P300





### Summary for Subcatchment 141S: P3PP

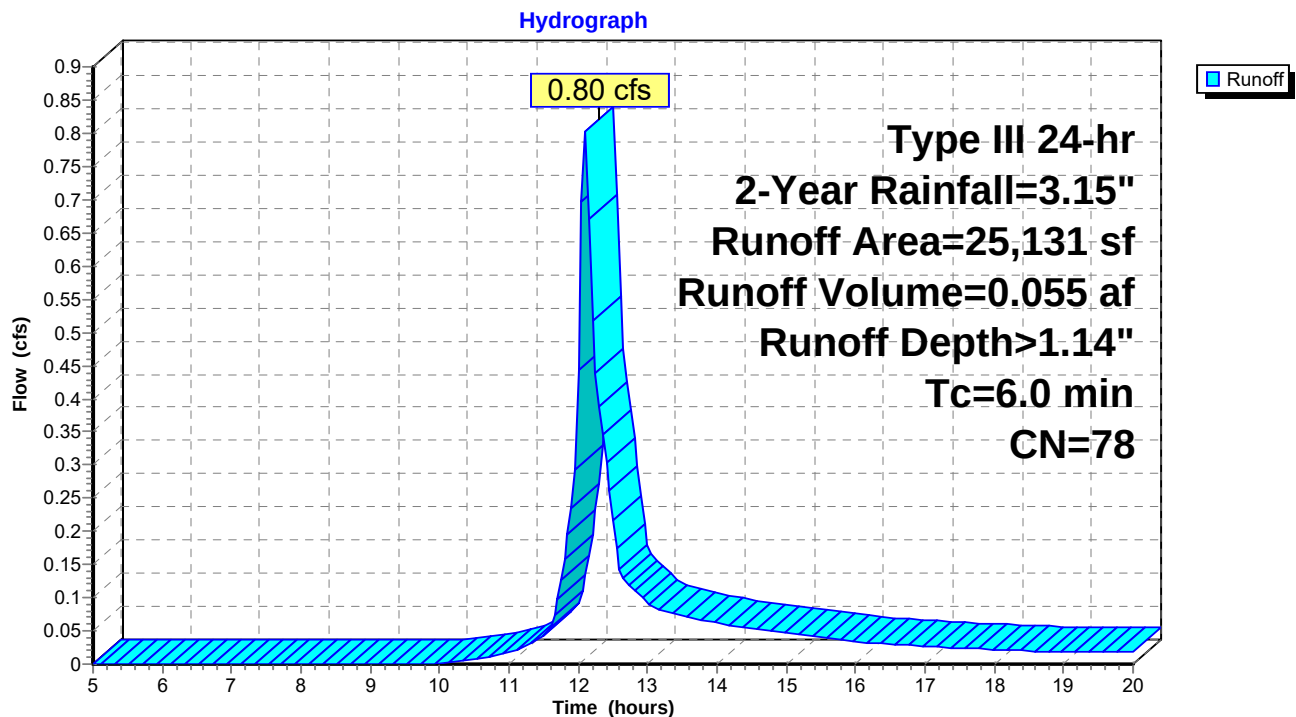
Runoff = 0.80 cfs @ 12.10 hrs, Volume= 0.055 af, Depth> 1.14"  
Routed to Pond 143P : CB 41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 8,502     | 39 | >75% Grass cover, Good, HSG A |
| 8,019     | 98 | Unconnected roofs, HSG A      |
| 8,610     | 98 | Paved parking, HSG A          |
| 25,131    | 78 | Weighted Average              |
| 8,502     |    | 33.83% Pervious Area          |
| 16,629    |    | 66.17% Impervious Area        |
| 8,019     |    | 48.22% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 141S: P3PP



### Summary for Subcatchment 142S: P3UU

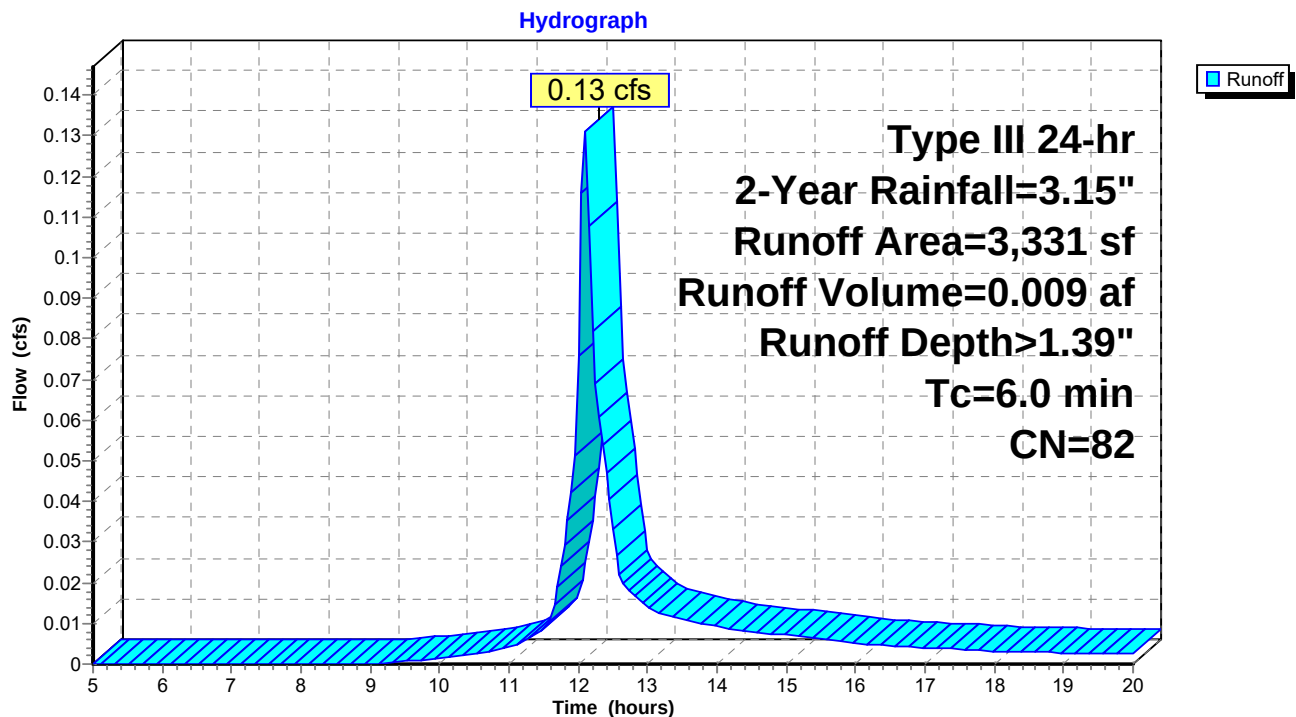
Runoff = 0.13 cfs @ 12.09 hrs, Volume= 0.009 af, Depth> 1.39"  
Routed to Pond 147P : CB 28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 915       | 39 | >75% Grass cover, Good, HSG A |
| 2,416     | 98 | Paved parking, HSG A          |
| 3,331     | 82 | Weighted Average              |
| 915       |    | 27.47% Pervious Area          |
| 2,416     |    | 72.53% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 142S: P3UU



**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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Type III 24-hr 2-Year Rainfall=3.15"

Printed 1/7/2026

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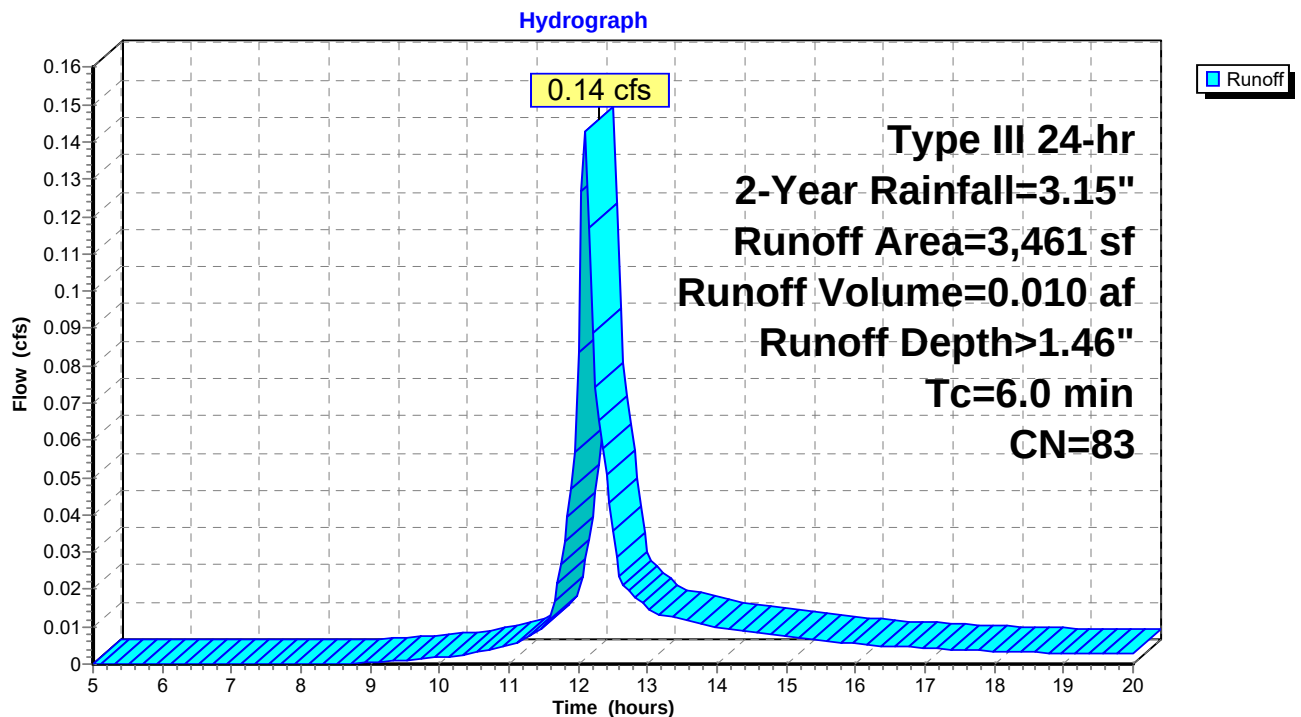
**Summary for Subcatchment 143S: P3VV**

Runoff = 0.14 cfs @ 12.09 hrs, Volume= 0.010 af, Depth> 1.46"  
Routed to Pond 149P : CB 29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 906       | 39 | >75% Grass cover, Good, HSG A |
| 2,555     | 98 | Paved parking, HSG A          |
| 3,461     | 83 | Weighted Average              |
| 906       |    | 26.18% Pervious Area          |
| 2,555     |    | 73.82% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 143S: P3VV**

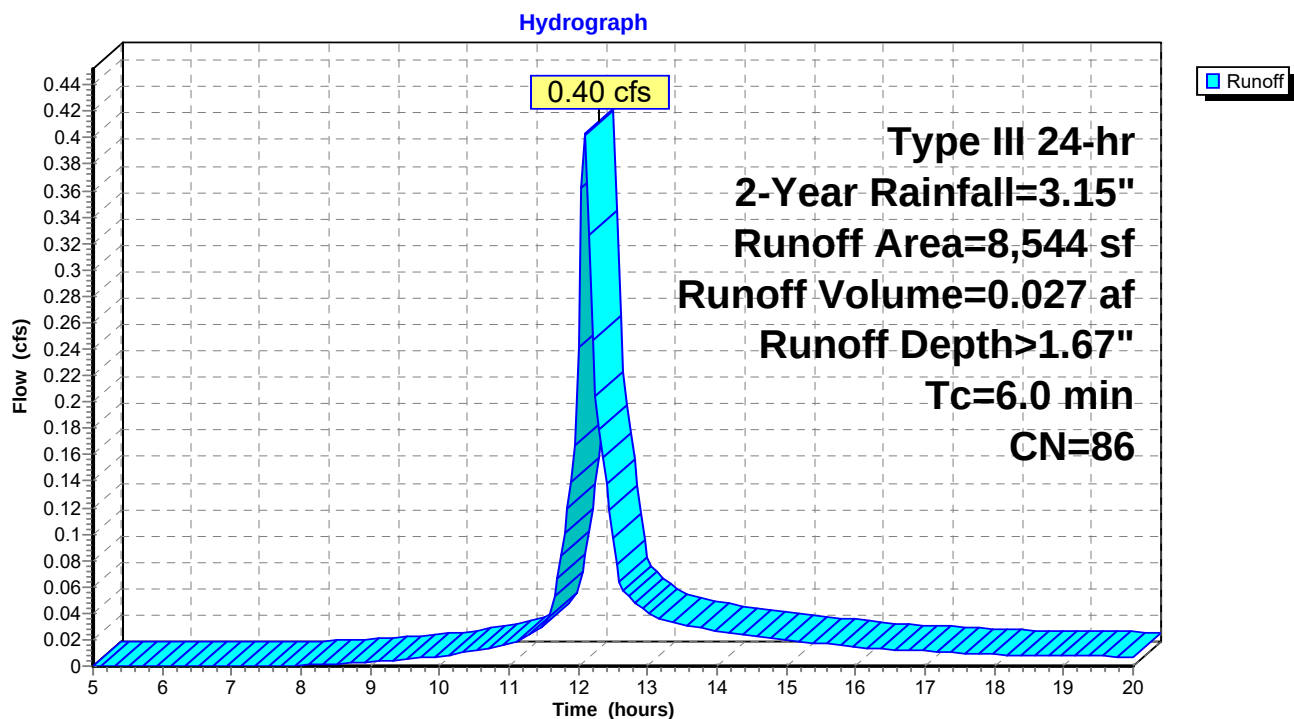
**Summary for Subcatchment 147S: P3QQ**

Runoff = 0.40 cfs @ 12.09 hrs, Volume= 0.027 af, Depth> 1.67"  
 Routed to Pond 148P : CB 43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,691     | 39 | >75% Grass cover, Good, HSG A |
| 2,319     | 98 | Unconnected roofs, HSG A      |
| 4,534     | 98 | Paved parking, HSG A          |
| 8,544     | 86 | Weighted Average              |
| 1,691     |    | 19.79% Pervious Area          |
| 6,853     |    | 80.21% Impervious Area        |
| 2,319     |    | 33.84% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 147S: P3QQ**

### Summary for Subcatchment 149S: P3RR

Runoff = 0.00 cfs @ 20.00 hrs, Volume= 0.000 af, Depth> 0.00"  
Routed to Pond 146P : Inf. Basin 2

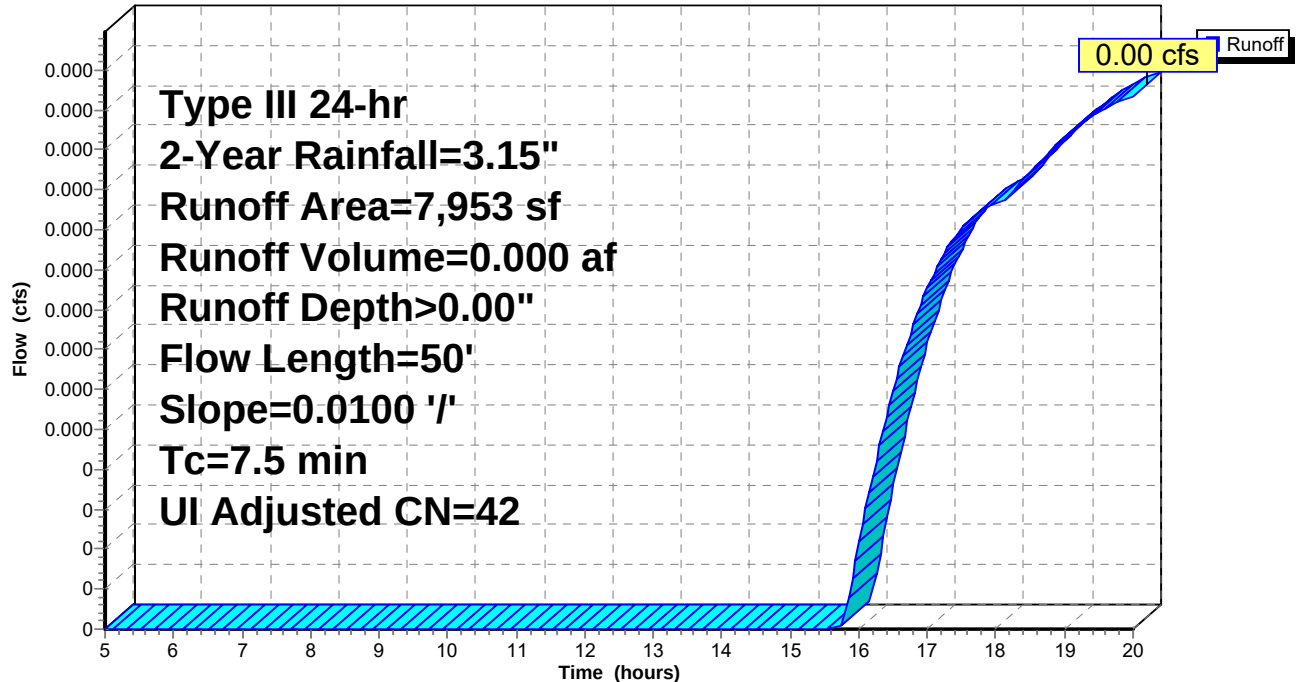
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 803       | 98 |     | Unconnected roofs, HSG A      |
| 7,150     | 39 |     | >75% Grass cover, Good, HSG A |
| 7,953     | 45 | 42  | Weighted Average, UI Adjusted |
| 7,150     |    |     | 89.90% Pervious Area          |
| 803       |    |     | 10.10% Impervious Area        |
| 803       |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                    |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------|
| 7.5      | 50            | 0.0100        | 0.11              |                | Sheet Flow,<br>Grass: Short n= 0.150 P2= 3.10" |

### Subcatchment 149S: P3RR

Hydrograph



### Summary for Subcatchment 151S: P3ZZ

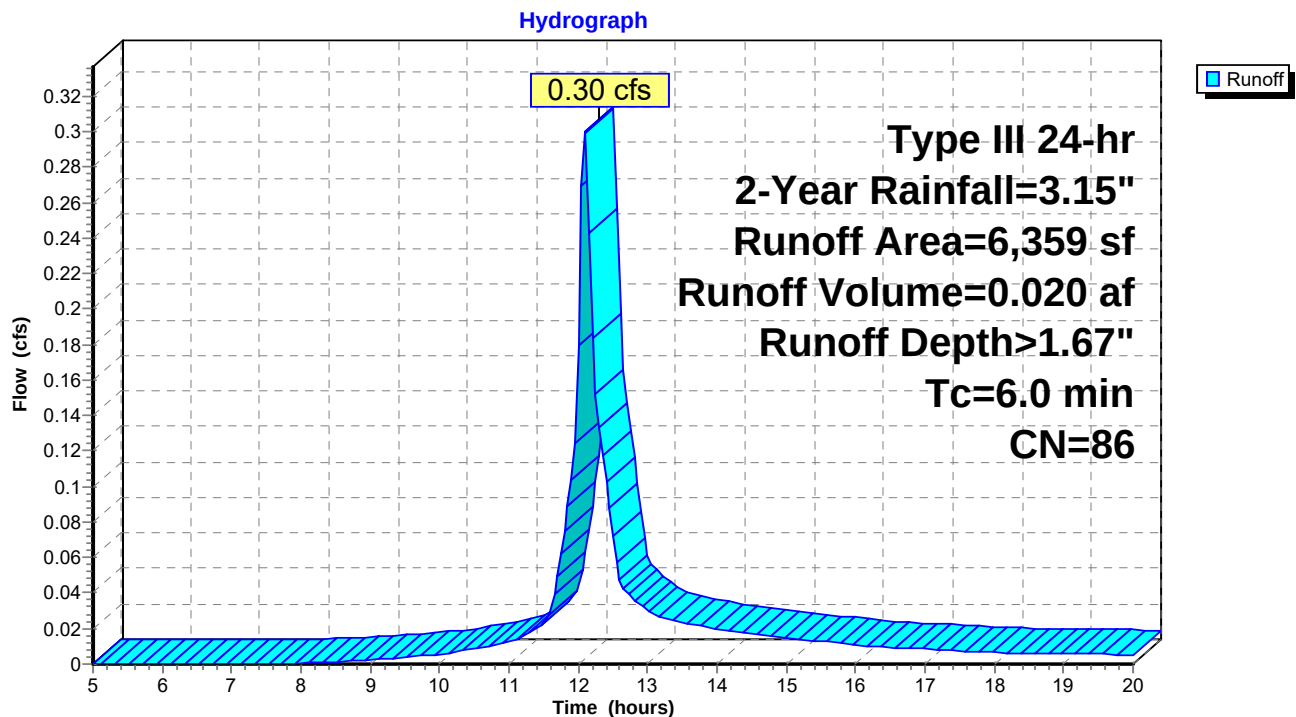
Runoff = 0.30 cfs @ 12.09 hrs, Volume= 0.020 af, Depth> 1.67"  
Routed to Pond 159P : CB 25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,297     | 39 | >75% Grass cover, Good, HSG A |
| 5,062     | 98 | Paved parking, HSG A          |
| 6,359     | 86 | Weighted Average              |
| 1,297     |    | 20.40% Pervious Area          |
| 5,062     |    | 79.60% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 151S: P3ZZ



### Summary for Subcatchment 152S: P3YY

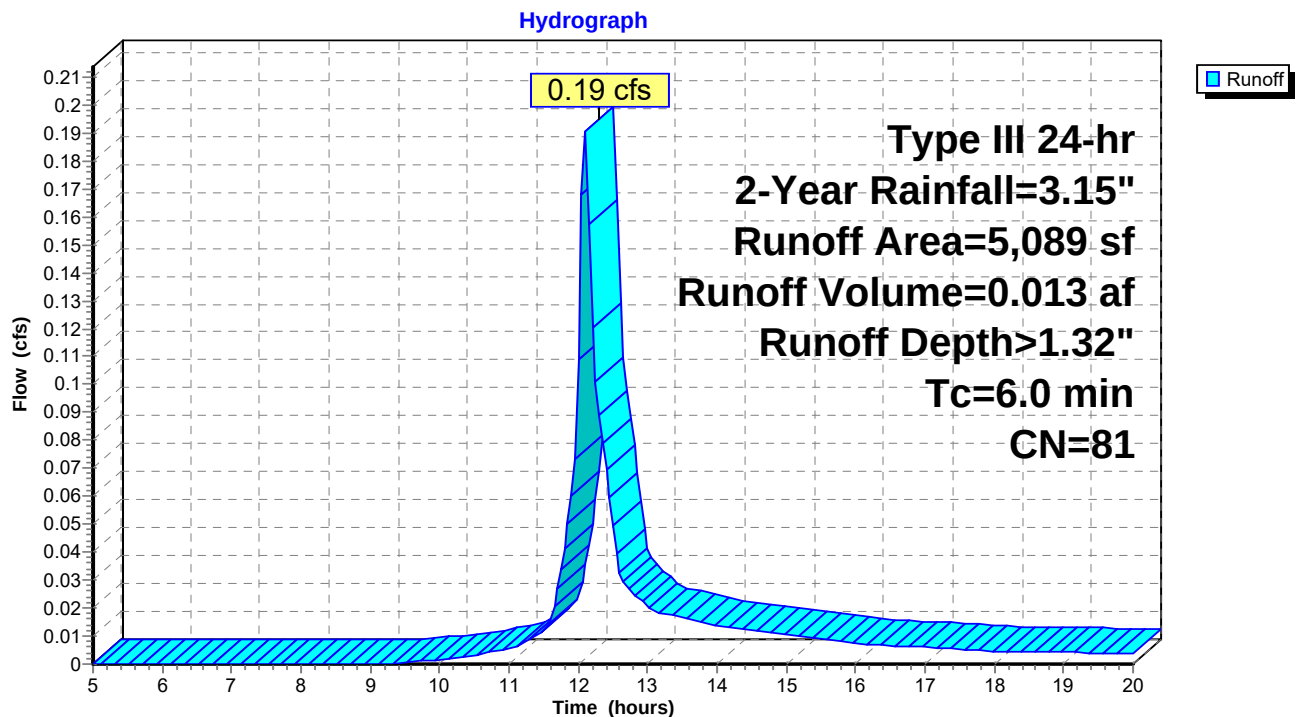
Runoff = 0.19 cfs @ 12.10 hrs, Volume= 0.013 af, Depth> 1.32"  
Routed to Pond 158P : CB 24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,505     | 39 | >75% Grass cover, Good, HSG A |
| 3,584     | 98 | Paved parking, HSG A          |
| 5,089     | 81 | Weighted Average              |
| 1,505     |    | 29.57% Pervious Area          |
| 3,584     |    | 70.43% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 152S: P3YY



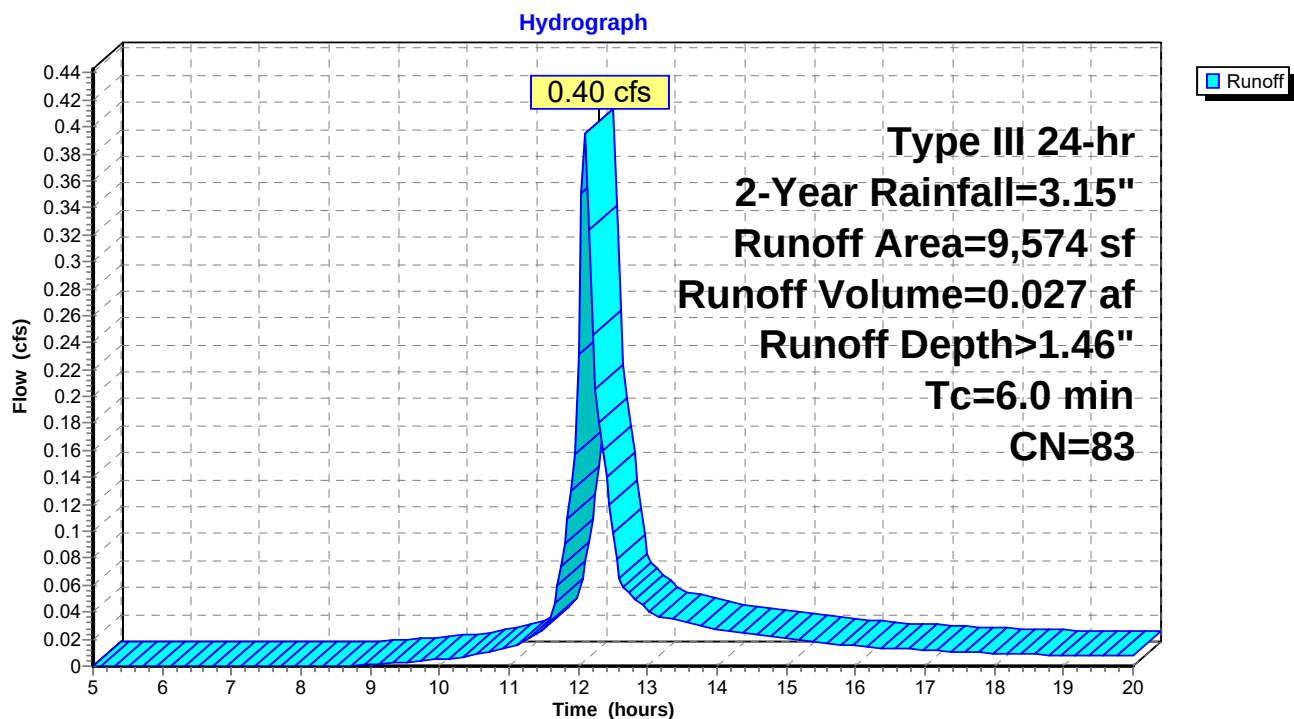
**Summary for Subcatchment 153S: P3WW**

Runoff = 0.40 cfs @ 12.09 hrs, Volume= 0.027 af, Depth> 1.46"  
 Routed to Pond 155P : CB 27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,428     | 39 | >75% Grass cover, Good, HSG A |
| 2,576     | 98 | Unconnected roofs, HSG A      |
| 4,570     | 98 | Paved parking, HSG A          |
| 9,574     | 83 | Weighted Average              |
| 2,428     |    | 25.36% Pervious Area          |
| 7,146     |    | 74.64% Impervious Area        |
| 2,576     |    | 36.05% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 153S: P3WW**



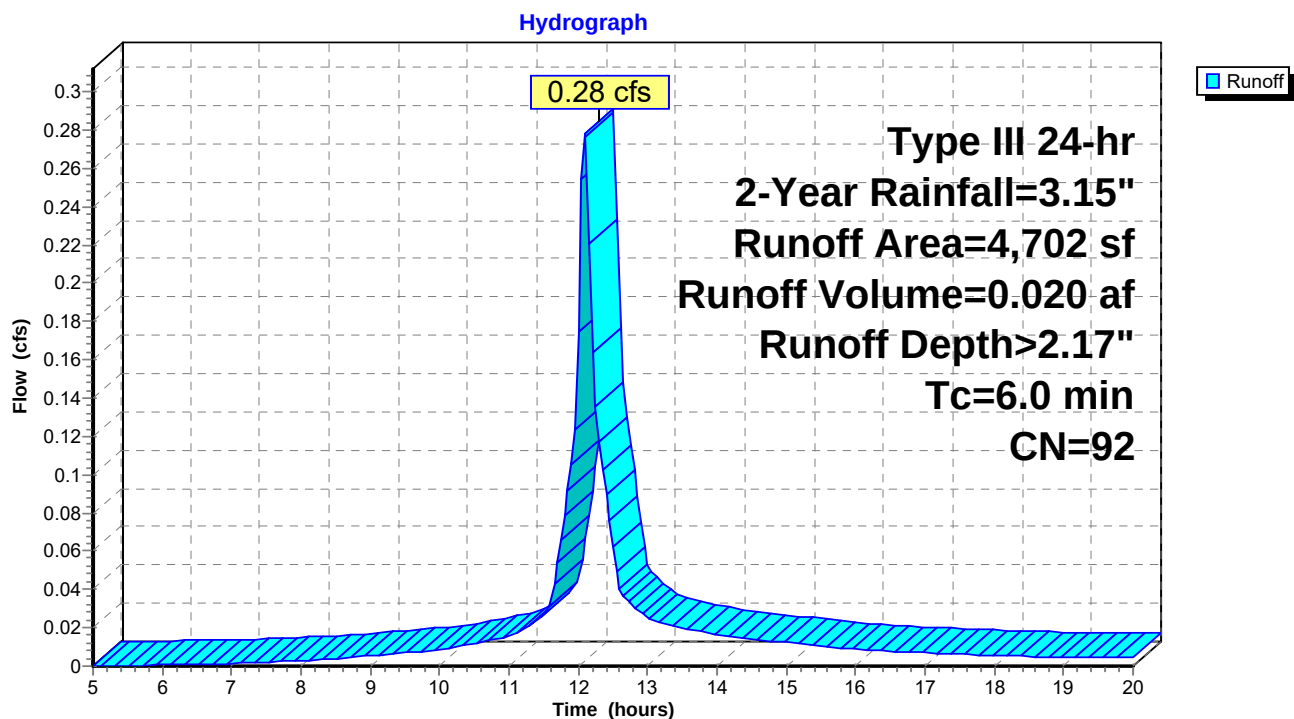
**Summary for Subcatchment 154S: P3XX**

Runoff = 0.28 cfs @ 12.09 hrs, Volume= 0.020 af, Depth> 2.17"  
 Routed to Pond 156P : CB 26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 467       | 39 | >75% Grass cover, Good, HSG A |
| 2,369     | 98 | Unconnected roofs, HSG A      |
| 1,866     | 98 | Paved parking, HSG A          |
| 4,702     | 92 | Weighted Average              |
| 467       |    | 9.93% Pervious Area           |
| 4,235     |    | 90.07% Impervious Area        |
| 2,369     |    | 55.94% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 154S: P3XX**

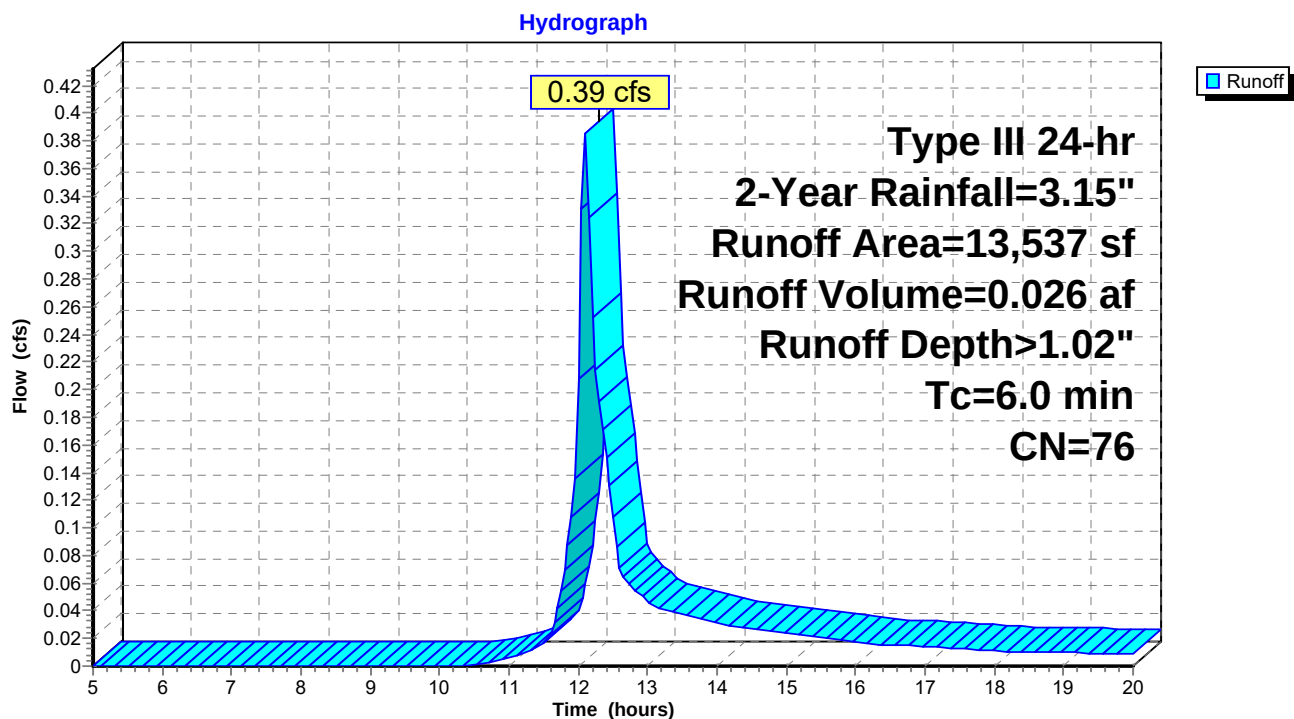
**Summary for Subcatchment 155S: P3CCC**

Runoff = 0.39 cfs @ 12.10 hrs, Volume= 0.026 af, Depth> 1.02"  
 Routed to Pond 163P : CB 14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,959     | 39 | >75% Grass cover, Good, HSG A |
| 1,047     | 98 | Unconnected roofs, HSG A      |
| 7,531     | 98 | Paved parking, HSG A          |
| 13,537    | 76 | Weighted Average              |
| 4,959     |    | 36.63% Pervious Area          |
| 8,578     |    | 63.37% Impervious Area        |
| 1,047     |    | 12.21% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 155S: P3CCC**

### Summary for Subcatchment 156S: P3DDD

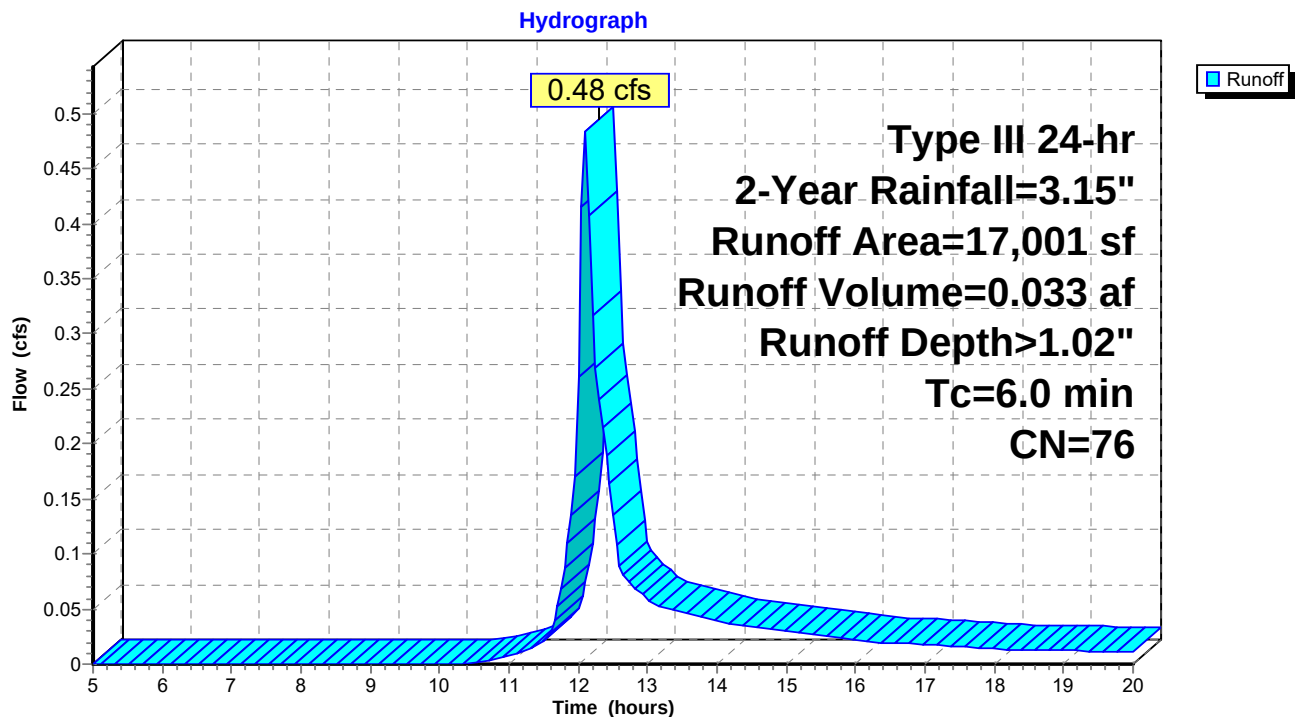
Runoff = 0.48 cfs @ 12.10 hrs, Volume= 0.033 af, Depth> 1.02"  
Routed to Pond 162P : CB 15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 6,264     | 39 | >75% Grass cover, Good, HSG A |
| 3,815     | 98 | Unconnected roofs, HSG A      |
| 6,922     | 98 | Paved parking, HSG A          |
| 17,001    | 76 | Weighted Average              |
| 6,264     |    | 36.84% Pervious Area          |
| 10,737    |    | 63.16% Impervious Area        |
| 3,815     |    | 35.53% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 156S: P3DDD



### Summary for Subcatchment 165S: P3FFF

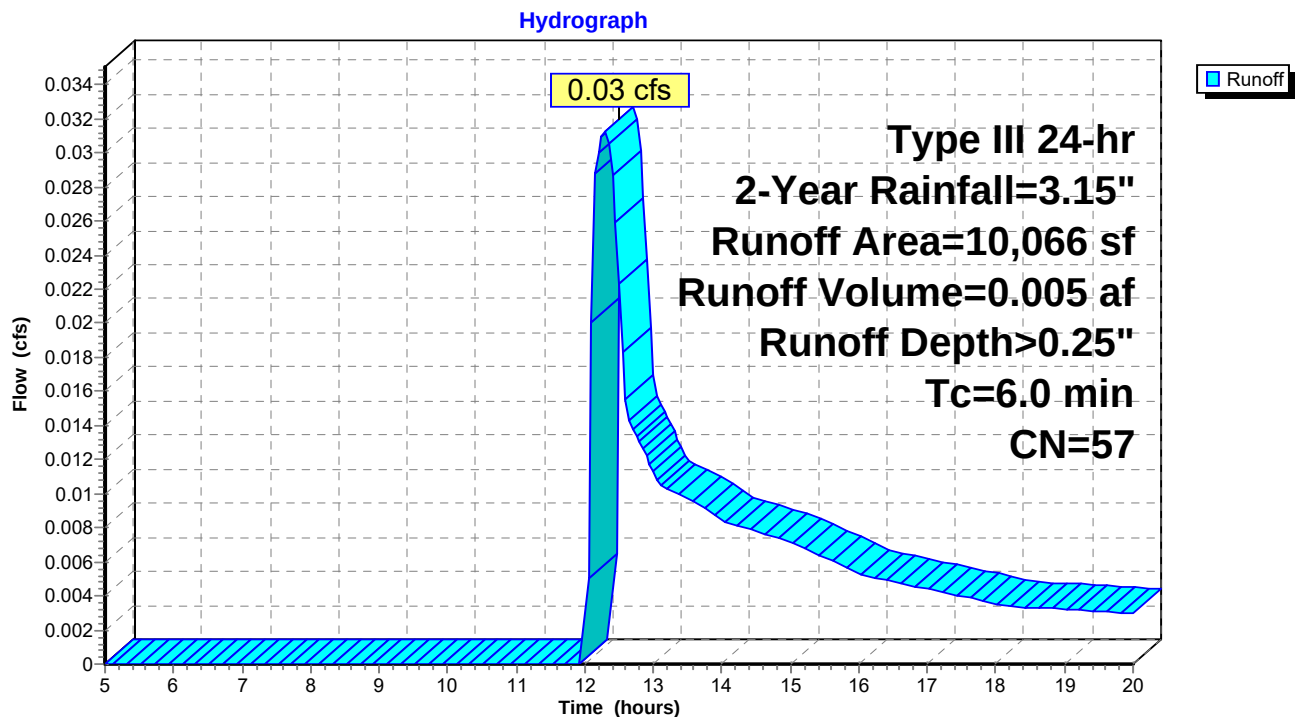
Runoff = 0.03 cfs @ 12.29 hrs, Volume= 0.005 af, Depth> 0.25"  
Routed to Pond 168P : CB 10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 7,041     | 39 | >75% Grass cover, Good, HSG A |
| 3,025     | 98 | Paved parking, HSG A          |
| 10,066    | 57 | Weighted Average              |
| 7,041     |    | 69.95% Pervious Area          |
| 3,025     |    | 30.05% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 165S: P3FFF



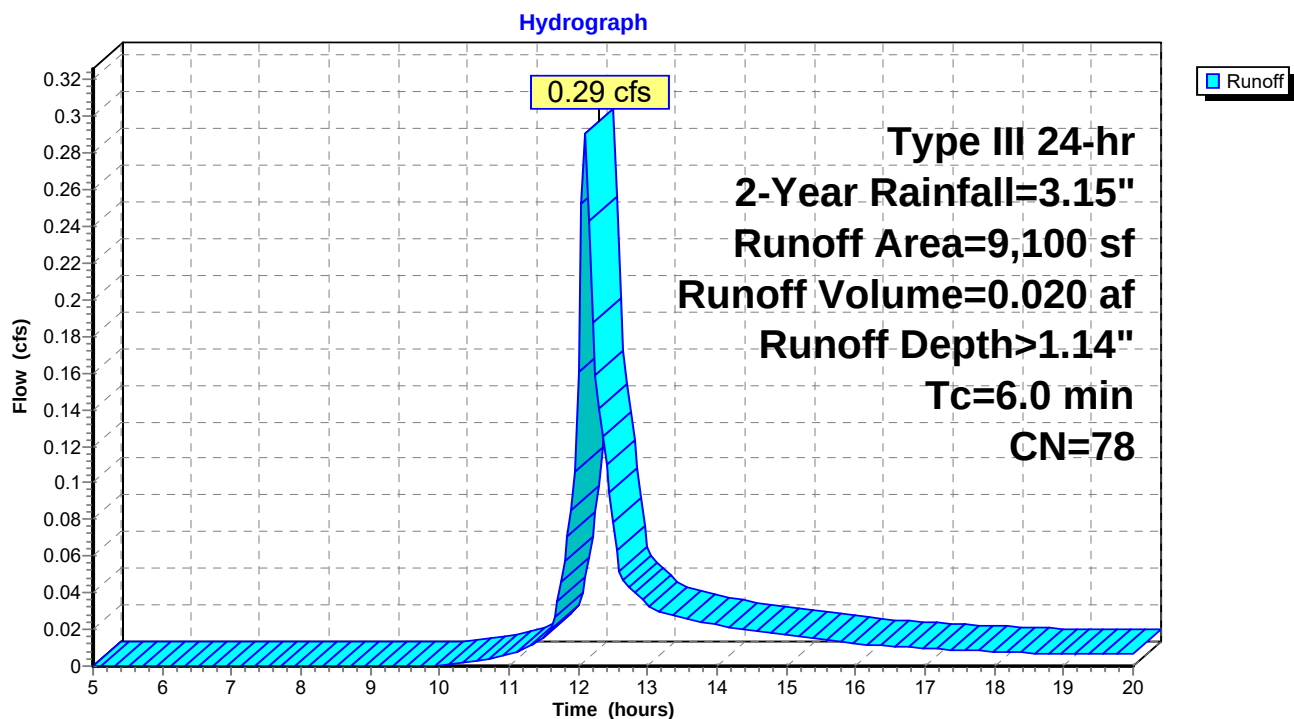
**Summary for Subcatchment 166S: P3EEE**

Runoff = 0.29 cfs @ 12.10 hrs, Volume= 0.020 af, Depth> 1.14"  
 Routed to Pond 167P : CB 11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,114     | 39 | >75% Grass cover, Good, HSG A |
| 3,120     | 98 | Paved parking, HSG A          |
| 2,866     | 98 | Unconnected roofs, HSG A      |
| 9,100     | 78 | Weighted Average              |
| 3,114     |    | 34.22% Pervious Area          |
| 5,986     |    | 65.78% Impervious Area        |
| 2,866     |    | 47.88% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 166S: P3EEE**

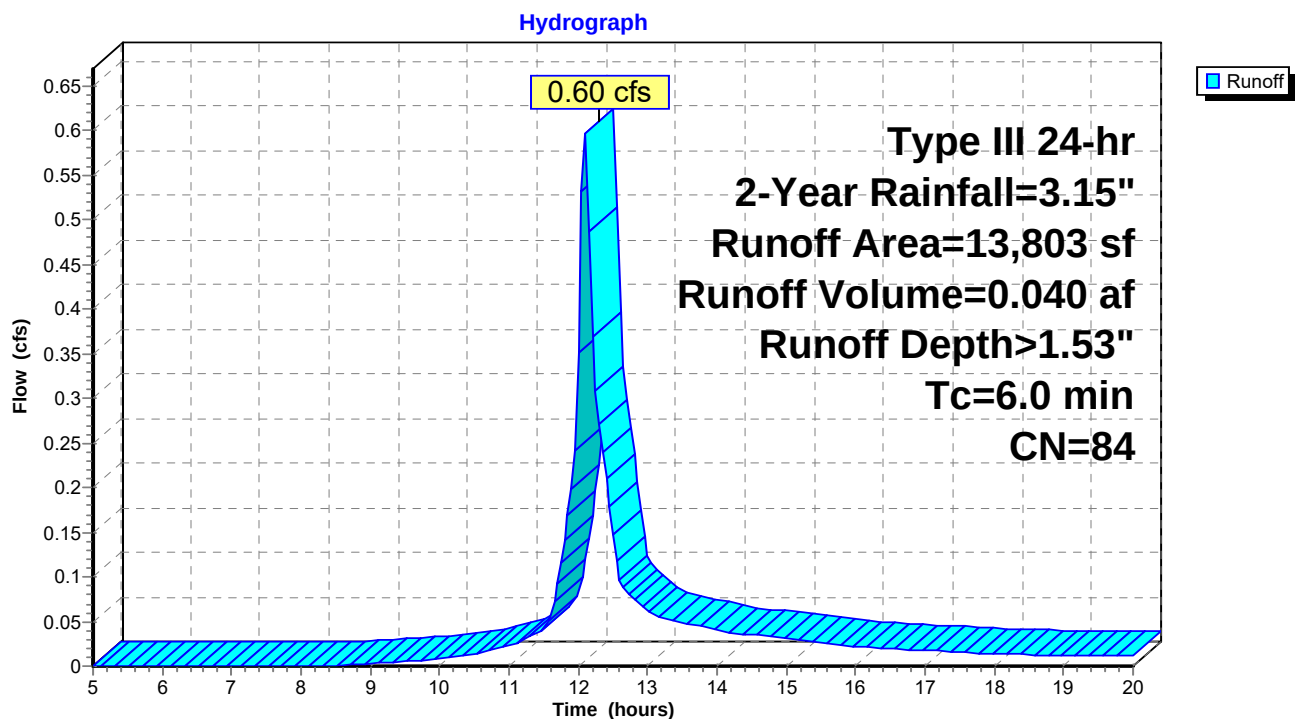
**Summary for Subcatchment 170S: P3JJJ**

Runoff = 0.60 cfs @ 12.09 hrs, Volume= 0.040 af, Depth> 1.53"  
 Routed to Pond 172P : CB 16

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,334     | 39 | >75% Grass cover, Good, HSG A |
| 6,476     | 98 | Unconnected roofs, HSG A      |
| 3,993     | 98 | Paved parking, HSG A          |
| 13,803    | 84 | Weighted Average              |
| 3,334     |    | 24.15% Pervious Area          |
| 10,469    |    | 75.85% Impervious Area        |
| 6,476     |    | 61.86% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 170S: P3JJJ**

### Summary for Subcatchment 171S: P3III

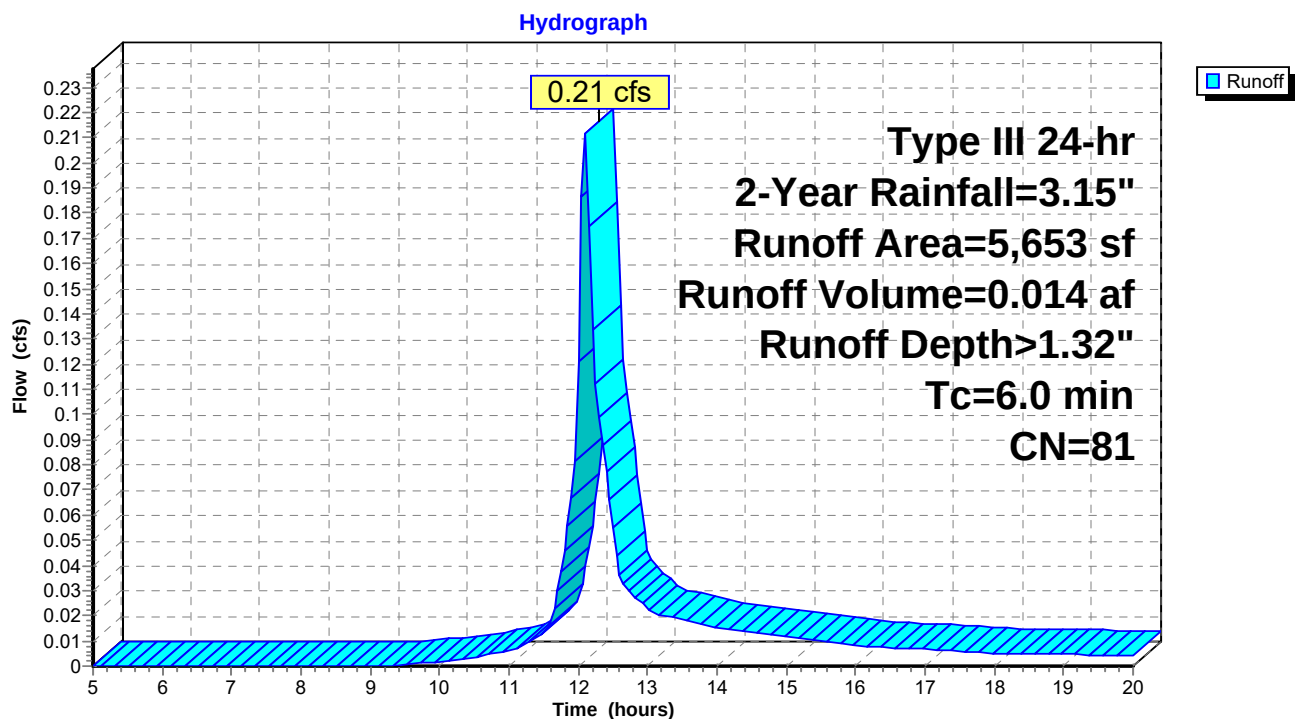
Runoff = 0.21 cfs @ 12.10 hrs, Volume= 0.014 af, Depth> 1.32"  
Routed to Pond 173P : CB 17

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,629     | 39 | >75% Grass cover, Good, HSG A |
| 1,823     | 98 | Unconnected roofs, HSG A      |
| 2,201     | 98 | Paved parking, HSG A          |
| 5,653     | 81 | Weighted Average              |
| 1,629     |    | 28.82% Pervious Area          |
| 4,024     |    | 71.18% Impervious Area        |
| 1,823     |    | 45.30% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 171S: P3III



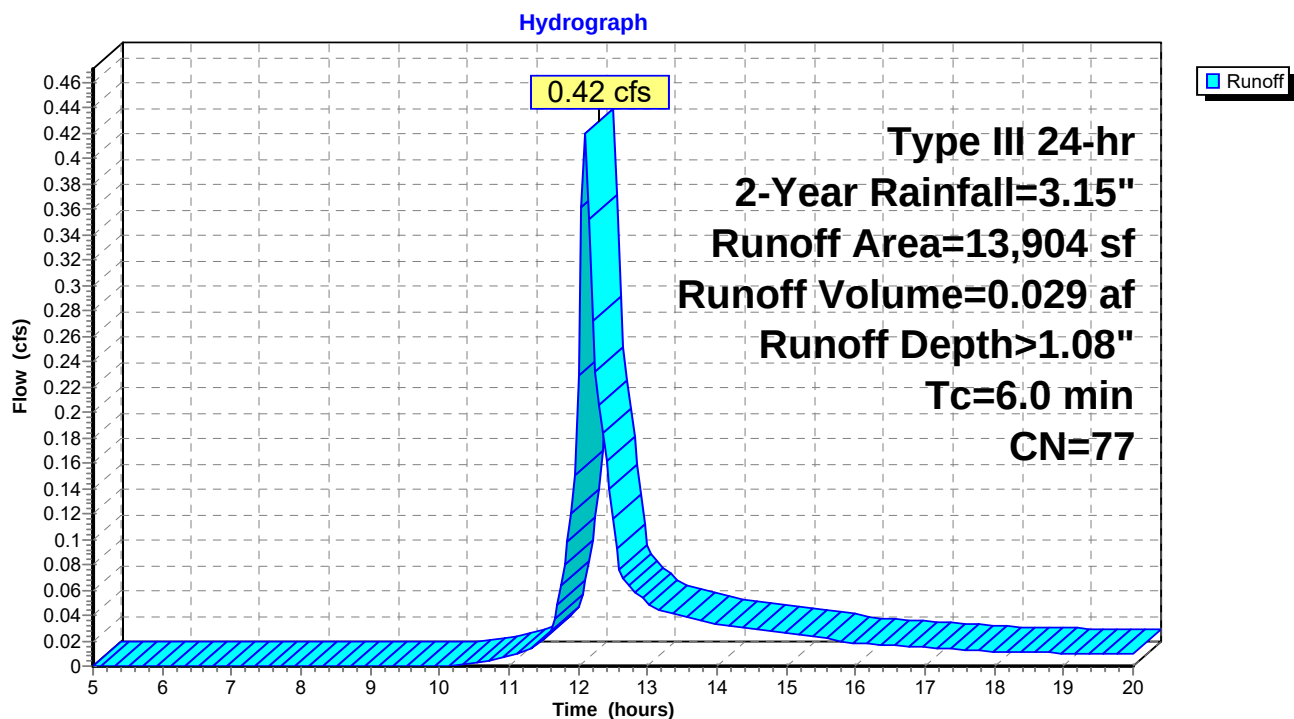
**Summary for Subcatchment 175S: P3KKK**

Runoff = 0.42 cfs @ 12.10 hrs, Volume= 0.029 af, Depth> 1.08"  
 Routed to Pond 177P : CB 13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,945     | 39 | >75% Grass cover, Good, HSG A |
| 3,545     | 98 | Unconnected roofs, HSG A      |
| 5,414     | 98 | Paved parking, HSG A          |
| 13,904    | 77 | Weighted Average              |
| 4,945     |    | 35.57% Pervious Area          |
| 8,959     |    | 64.43% Impervious Area        |
| 3,545     |    | 39.57% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 175S: P3KKK**



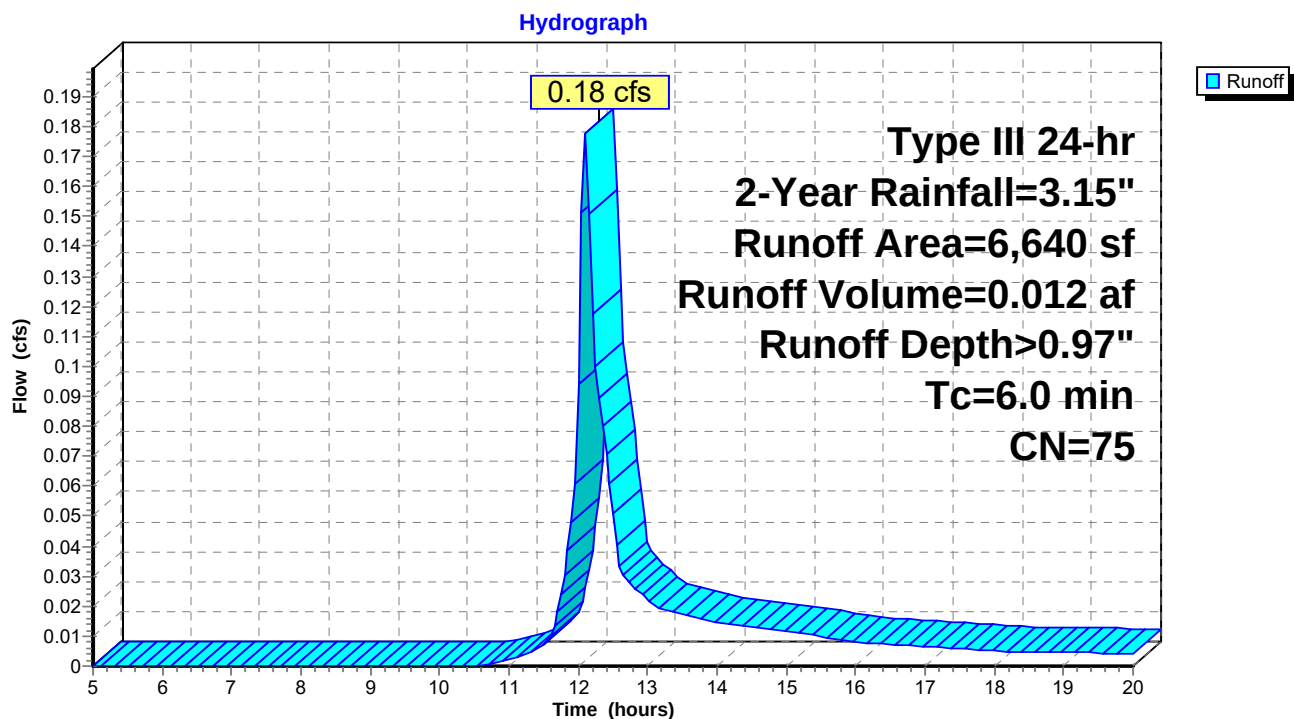
**Summary for Subcatchment 176S: P3LLL**

Runoff = 0.18 cfs @ 12.10 hrs, Volume= 0.012 af, Depth> 0.97"  
 Routed to Pond 178P : CB 12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,605     | 39 | >75% Grass cover, Good, HSG A |
| 958       | 98 | Unconnected roofs, HSG A      |
| 3,077     | 98 | Paved parking, HSG A          |
| 6,640     | 75 | Weighted Average              |
| 2,605     |    | 39.23% Pervious Area          |
| 4,035     |    | 60.77% Impervious Area        |
| 958       |    | 23.74% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 176S: P3LLL**

**Summary for Subcatchment 182S: P3MMM**

Runoff = 0.12 cfs @ 12.10 hrs, Volume= 0.008 af, Depth> 0.86"  
 Routed to Pond 61P : CB 8

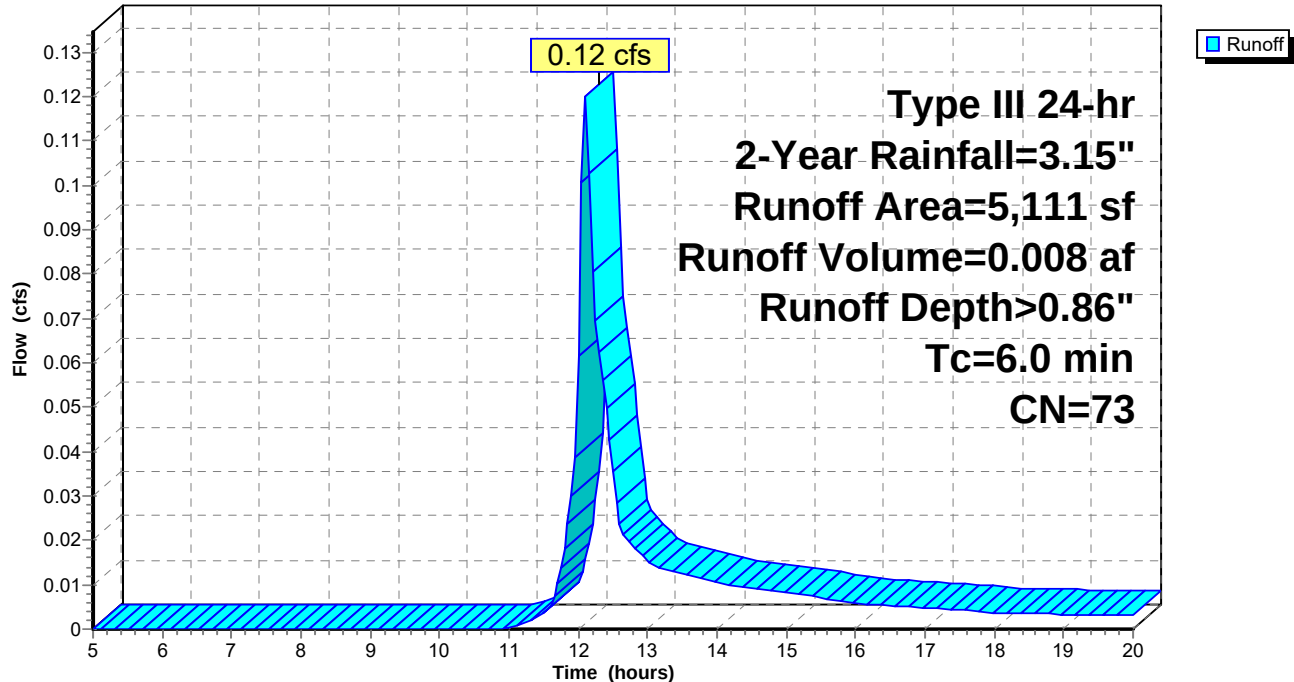
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,196     | 39 | >75% Grass cover, Good, HSG A |
| 413       | 98 | Unconnected roofs, HSG A      |
| 2,502     | 98 | Paved parking, HSG A          |
| 5,111     | 73 | Weighted Average              |
| 2,196     |    | 42.97% Pervious Area          |
| 2,915     |    | 57.03% Impervious Area        |
| 413       |    | 14.17% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 182S: P3MMM**

Hydrograph



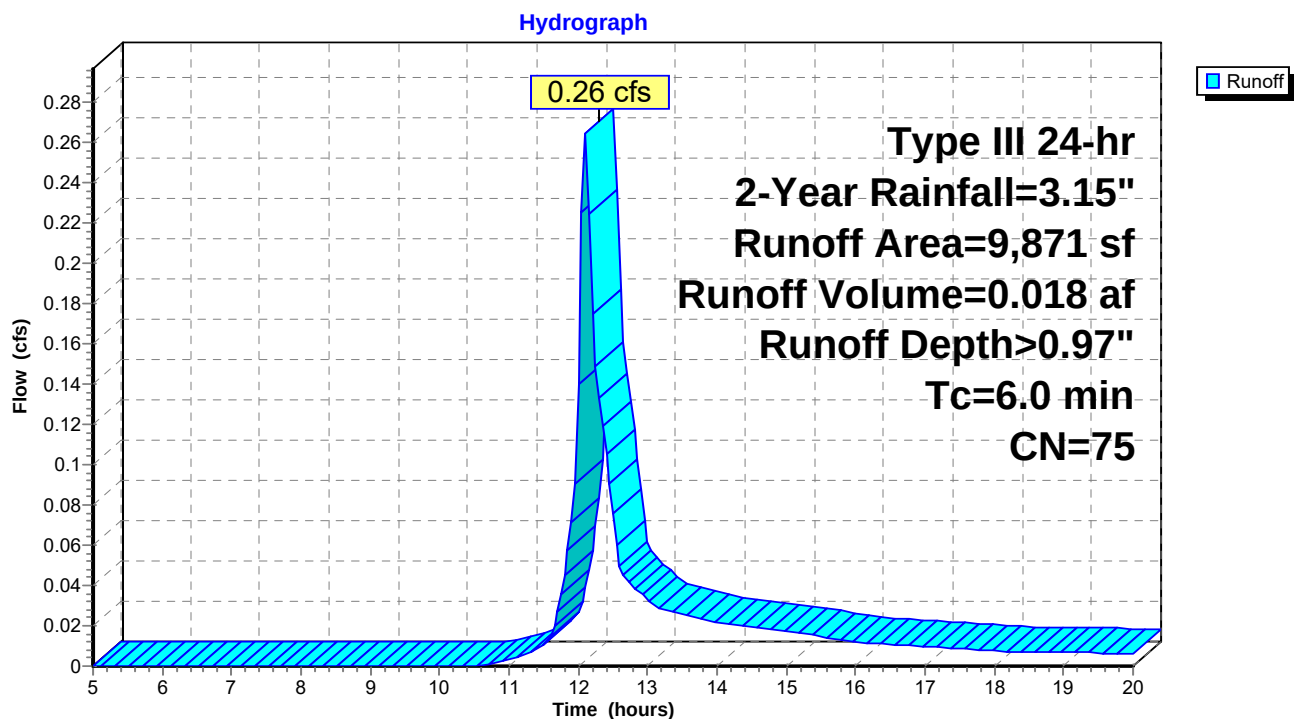
**Summary for Subcatchment 183S: P3NNN**

Runoff = 0.26 cfs @ 12.10 hrs, Volume= 0.018 af, Depth> 0.97"  
 Routed to Pond 170P : CB 9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,796     | 39 | >75% Grass cover, Good, HSG A |
| 2,443     | 98 | Unconnected roofs, HSG A      |
| 3,632     | 98 | Paved parking, HSG A          |
| 9,871     | 75 | Weighted Average              |
| 3,796     |    | 38.46% Pervious Area          |
| 6,075     |    | 61.54% Impervious Area        |
| 2,443     |    | 40.21% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 183S: P3NNN**

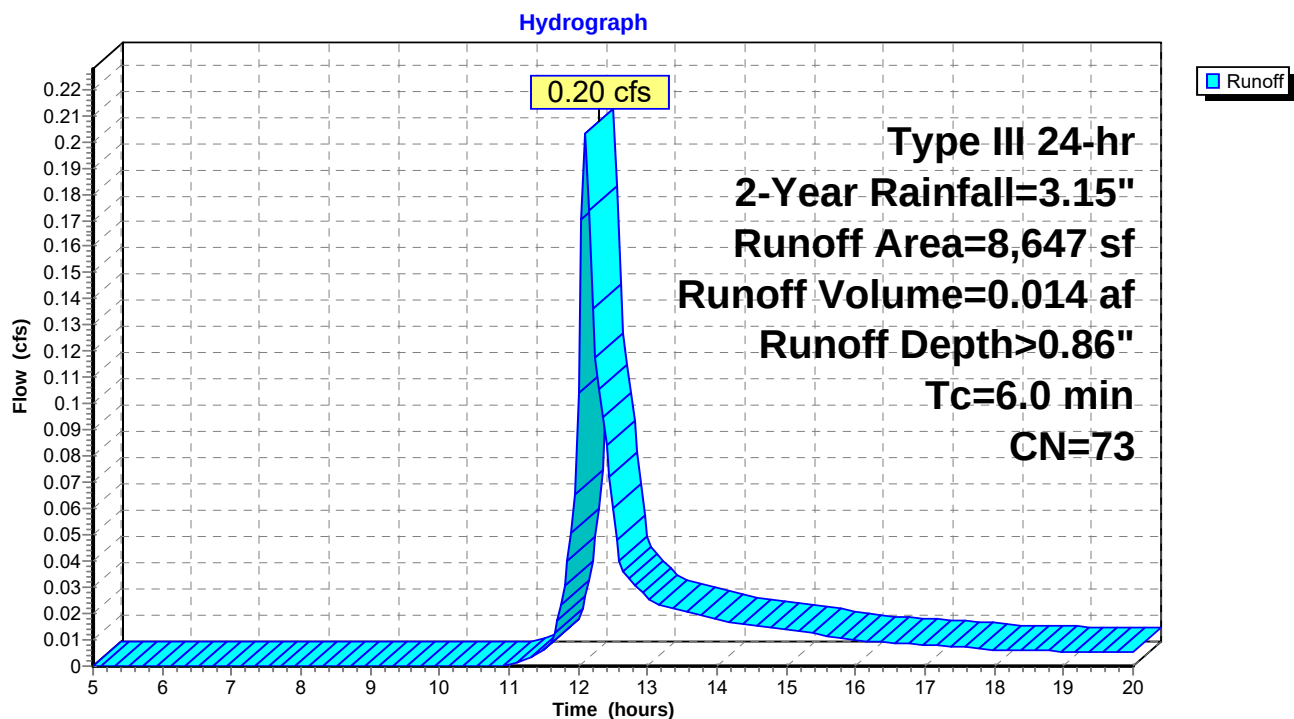
**Summary for Subcatchment 184S: P3000**

Runoff = 0.20 cfs @ 12.10 hrs, Volume= 0.014 af, Depth> 0.86"  
 Routed to Pond 176P : CB 6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,656     | 39 | >75% Grass cover, Good, HSG A |
| 1,177     | 98 | Unconnected roofs, HSG A      |
| 3,814     | 98 | Paved parking, HSG A          |
| 8,647     | 73 | Weighted Average              |
| 3,656     |    | 42.28% Pervious Area          |
| 4,991     |    | 57.72% Impervious Area        |
| 1,177     |    | 23.58% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 184S: P3000**

**Summary for Subcatchment 185S: P3PPP**

Runoff = 0.19 cfs @ 12.09 hrs, Volume= 0.013 af, Depth> 1.46"  
 Routed to Pond 182P : CB 7

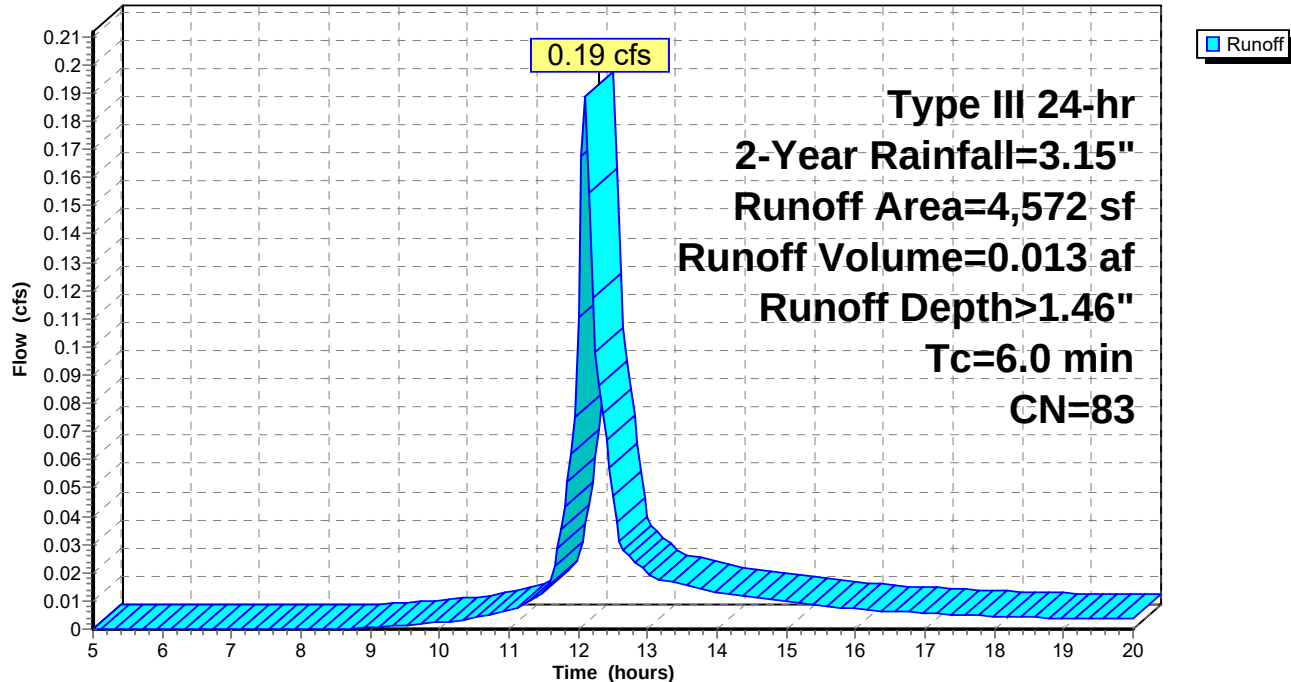
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,135     | 39 | >75% Grass cover, Good, HSG A |
| 1,267     | 98 | Unconnected roofs, HSG A      |
| 2,170     | 98 | Paved parking, HSG A          |
| 4,572     | 83 | Weighted Average              |
| 1,135     |    | 24.83% Pervious Area          |
| 3,437     |    | 75.17% Impervious Area        |
| 1,267     |    | 36.86% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 185S: P3PPP**

Hydrograph



### Summary for Subcatchment 186S: P3QQQ

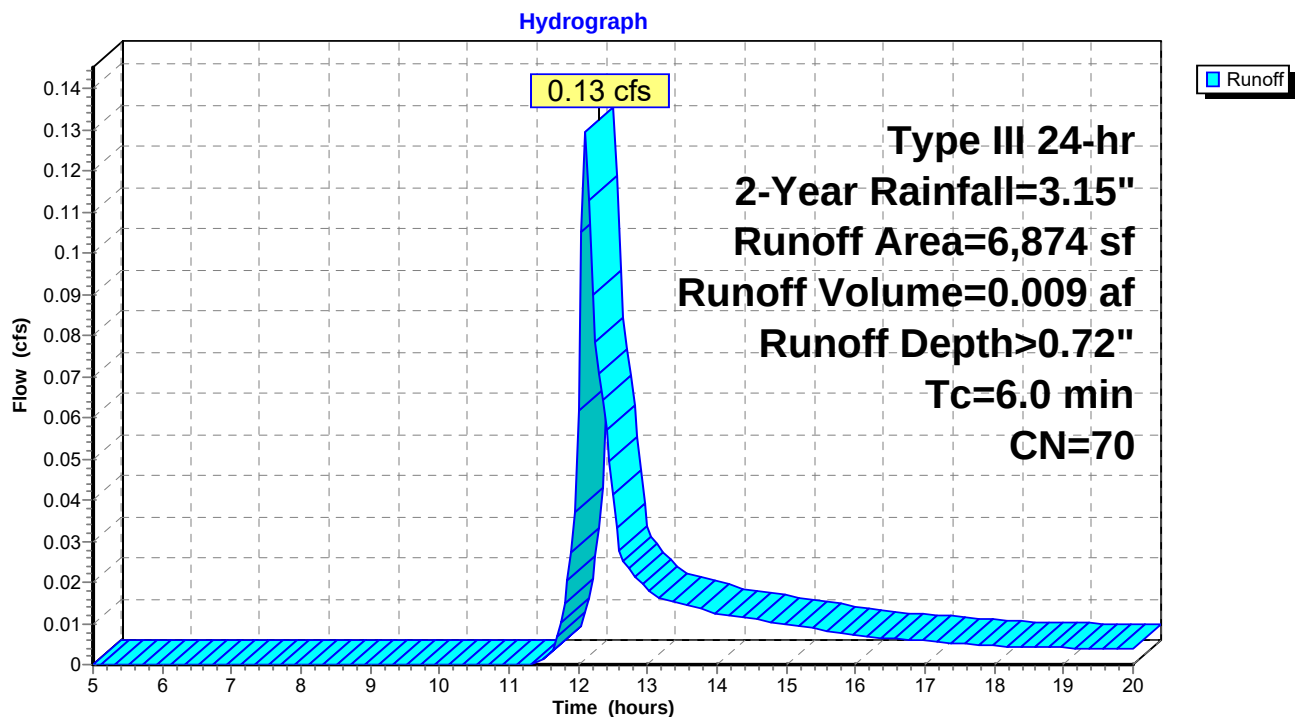
Runoff = 0.13 cfs @ 12.10 hrs, Volume= 0.009 af, Depth> 0.72"  
Routed to Pond 188P : CB 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,125     | 39 | >75% Grass cover, Good, HSG A |
| 992       | 30 | Woods, Good, HSG A            |
| 3,757     | 98 | Paved parking, HSG A          |
| 6,874     | 70 | Weighted Average              |
| 3,117     |    | 45.34% Pervious Area          |
| 3,757     |    | 54.66% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 186S: P3QQQ



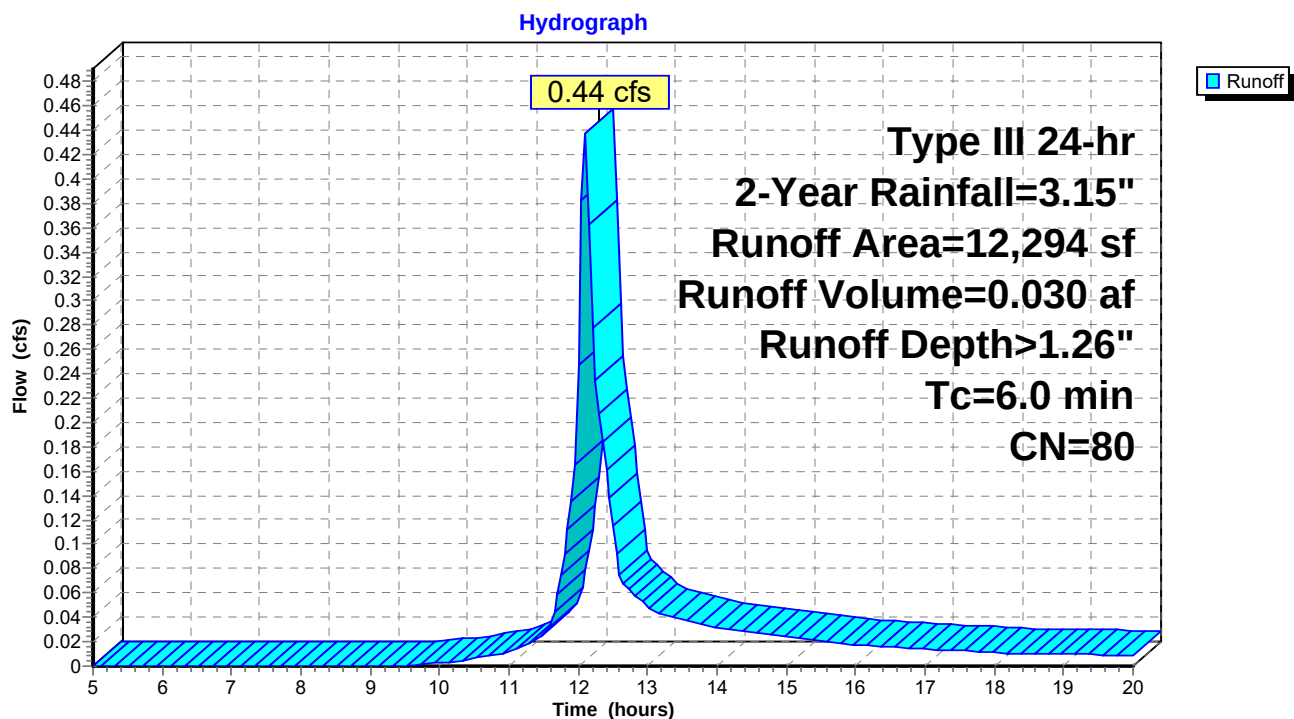
**Summary for Subcatchment 187S: P3RRR**

Runoff = 0.44 cfs @ 12.10 hrs, Volume= 0.030 af, Depth> 1.26"  
 Routed to Pond 189P : CB 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,803     | 39 | >75% Grass cover, Good, HSG A |
| 2,556     | 98 | Unconnected roofs, HSG A      |
| 5,935     | 98 | Paved parking, HSG A          |
| 12,294    | 80 | Weighted Average              |
| 3,803     |    | 30.93% Pervious Area          |
| 8,491     |    | 69.07% Impervious Area        |
| 2,556     |    | 30.10% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 187S: P3RRR**

**Summary for Subcatchment 189S: (new Subcat)**

Runoff = 0.20 cfs @ 12.62 hrs, Volume= 0.051 af, Depth> 0.15"  
 Routed to Link 188L : DP 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

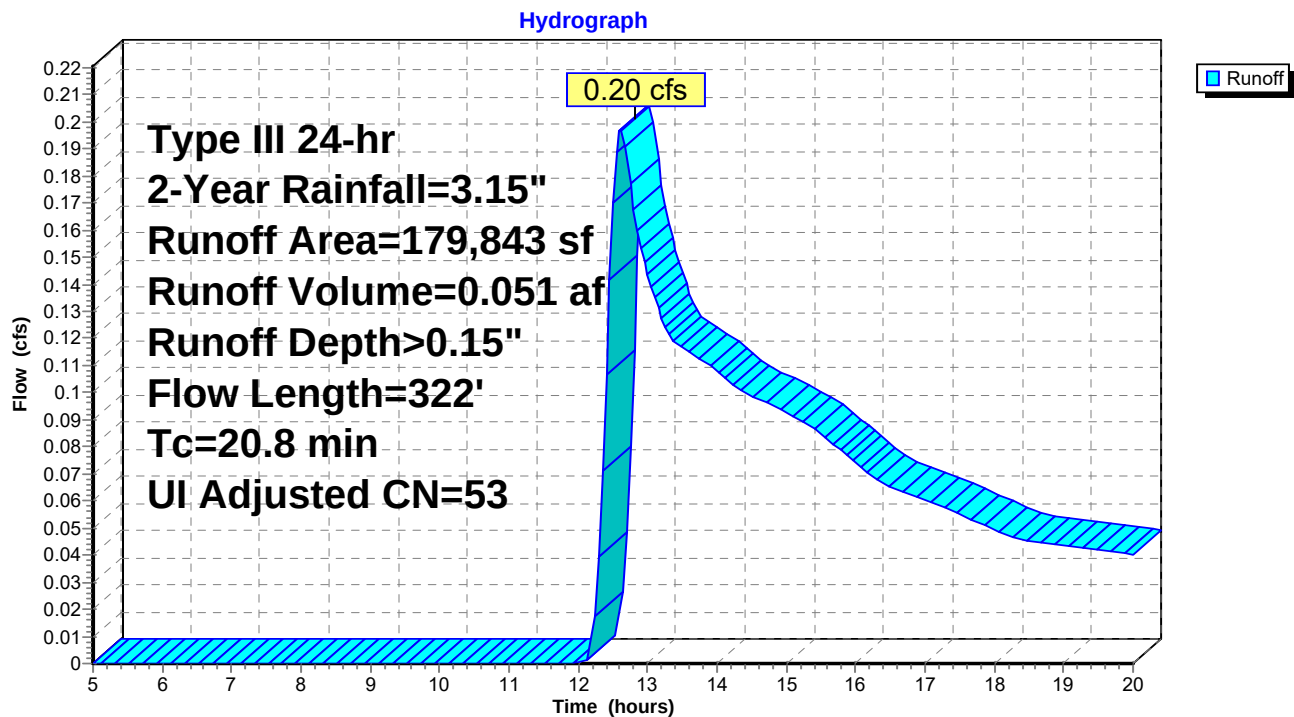
| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 39,228    | 30 |     | Woods, Good, HSG A            |
| 27,809    | 70 |     | Woods, Good, HSG C            |
| 2,509     | 98 |     | Unconnected roofs, HSG C      |
| 1,351     | 98 |     | Unconnected pavement, HSG C   |
| 3,066     | 98 |     | Unconnected roofs, HSG A      |
| 1,335     | 98 |     | Unconnected pavement, HSG A   |
| 49,779    | 74 |     | >75% Grass cover, Good, HSG C |
| 54,766    | 39 |     | >75% Grass cover, Good, HSG A |
| 179,843   | 54 | 53  | Weighted Average, UI Adjusted |
| 171,582   |    |     | 95.41% Pervious Area          |
| 8,261     |    |     | 4.59% Impervious Area         |
| 8,261     |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                      |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------|
| 16.5     | 50            | 0.0100        | 0.05              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10" |
| 4.3      | 272           | 0.0450        | 1.06              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps        |
| 20.8     | 322           | Total         |                   |                |                                                                  |



## Subcatchment 189S: (new Subcat)



### Summary for Subcatchment 190S: (new Subcat)

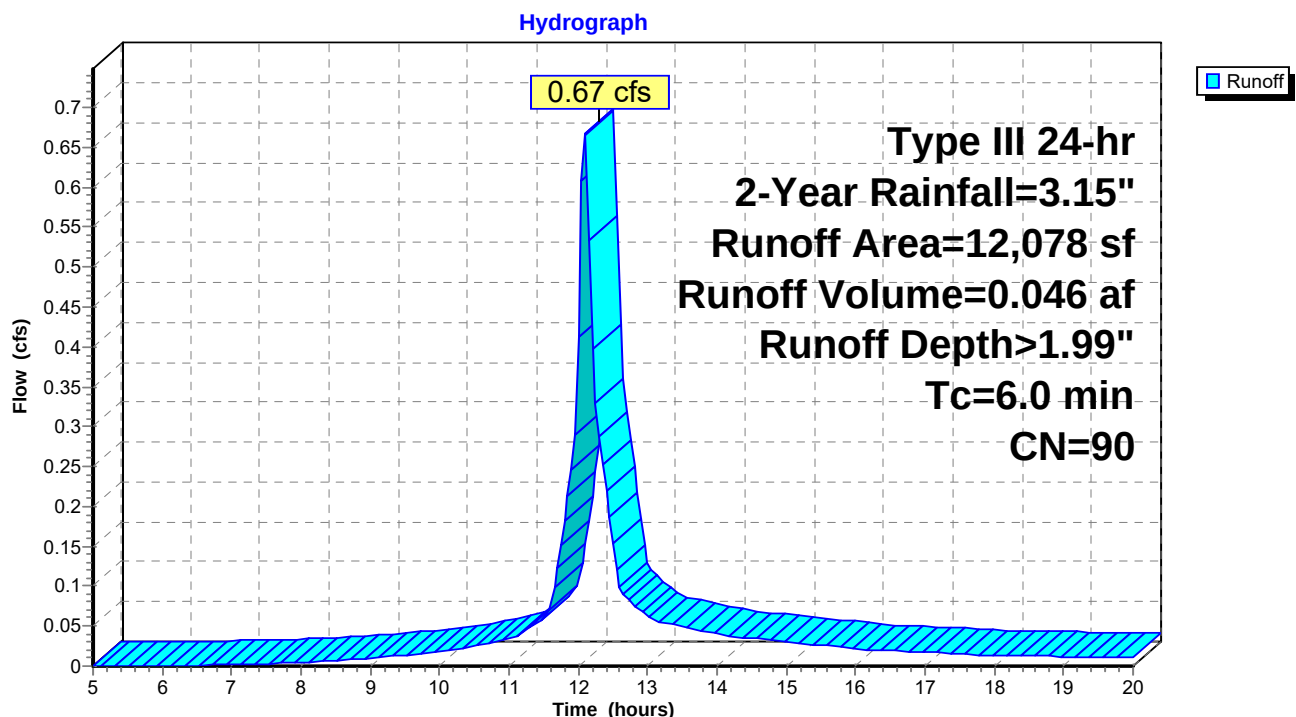
Runoff = 0.67 cfs @ 12.09 hrs, Volume= 0.046 af, Depth> 1.99"  
Routed to Pond 191P : CB 42

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,763     | 98 | Unconnected roofs, HSG A      |
| 1,707     | 39 | >75% Grass cover, Good, HSG A |
| 6,608     | 98 | Paved parking, HSG A          |
| 12,078    | 90 | Weighted Average              |
| 1,707     |    | 14.13% Pervious Area          |
| 10,371    |    | 85.87% Impervious Area        |
| 3,763     |    | 36.28% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 190S: (new Subcat)



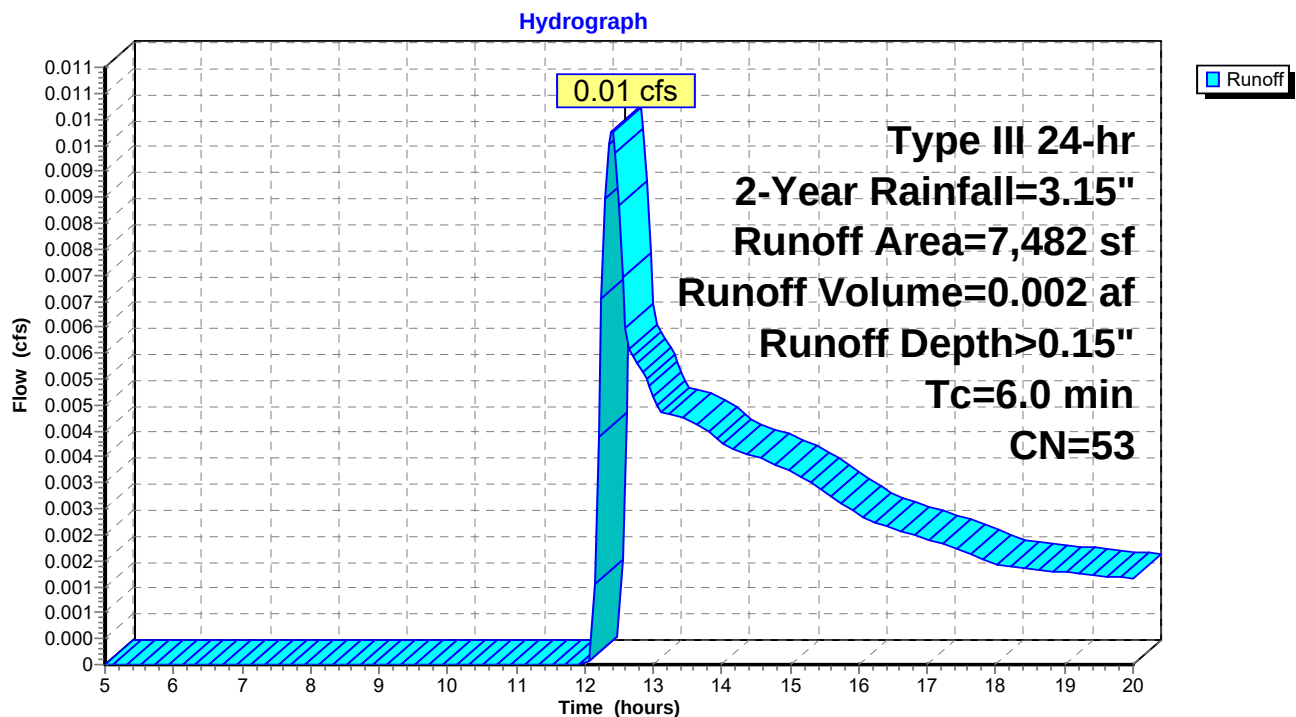
**Summary for Subcatchment 191S: P3SSS**

Runoff = 0.01 cfs @ 12.39 hrs, Volume= 0.002 af, Depth> 0.15"  
 Routed to Pond 193P : CB 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,068     | 39 | >75% Grass cover, Good, HSG A |
| 4,042     | 30 | Woods, Good, HSG A            |
| 2,372     | 98 | Paved parking, HSG A          |
| 7,482     | 53 | Weighted Average              |
| 5,110     |    | 68.30% Pervious Area          |
| 2,372     |    | 31.70% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 191S: P3SSS**

### Summary for Subcatchment 192S: P3TTT

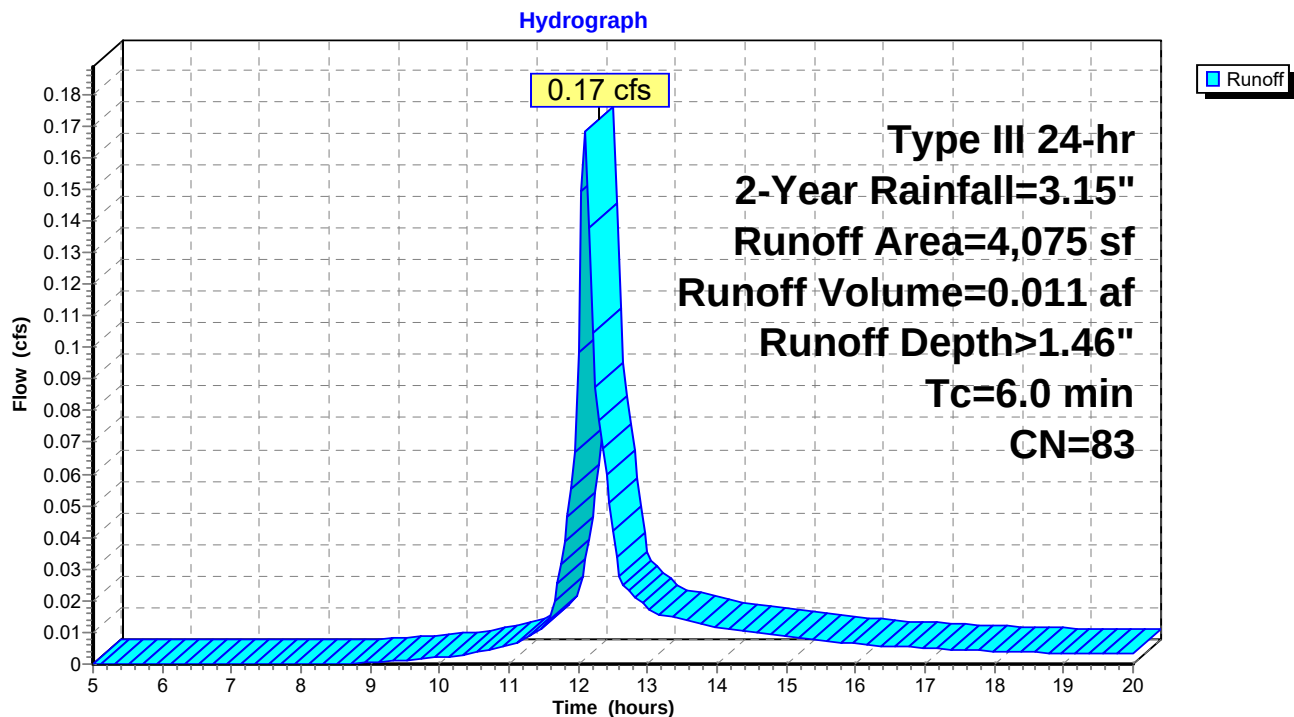
Runoff = 0.17 cfs @ 12.09 hrs, Volume= 0.011 af, Depth> 1.46"  
Routed to Pond 194P : CB 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,044     | 39 | >75% Grass cover, Good, HSG A |
| 3,031     | 98 | Paved parking, HSG A          |
| 4,075     | 83 | Weighted Average              |
| 1,044     |    | 25.62% Pervious Area          |
| 3,031     |    | 74.38% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 192S: P3TTT



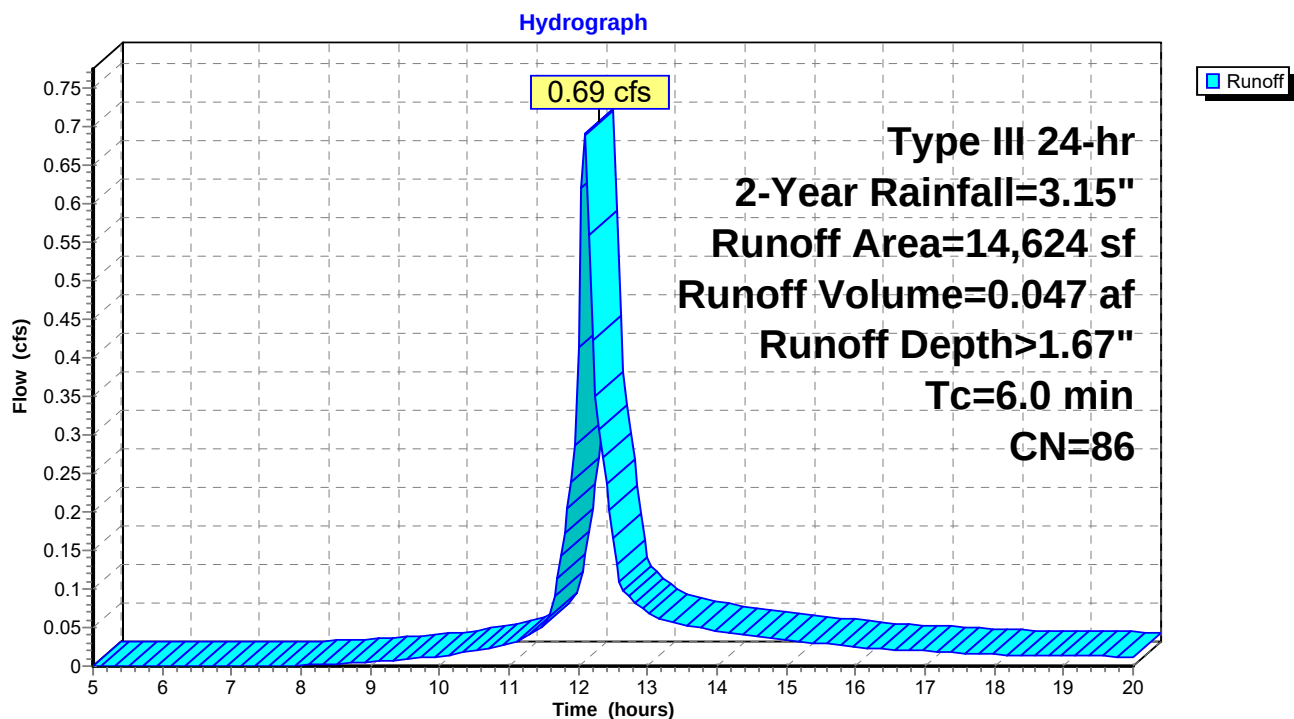
**Summary for Subcatchment 195S: P3UUU**

Runoff = 0.69 cfs @ 12.09 hrs, Volume= 0.047 af, Depth> 1.67"  
 Routed to Pond 196P : CB 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,892     | 39 | >75% Grass cover, Good, HSG A |
| 4,558     | 98 | Unconnected roofs, HSG A      |
| 7,174     | 98 | Paved parking, HSG A          |
| 14,624    | 86 | Weighted Average              |
| 2,892     |    | 19.78% Pervious Area          |
| 11,732    |    | 80.22% Impervious Area        |
| 4,558     |    | 38.85% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 195S: P3UUU**

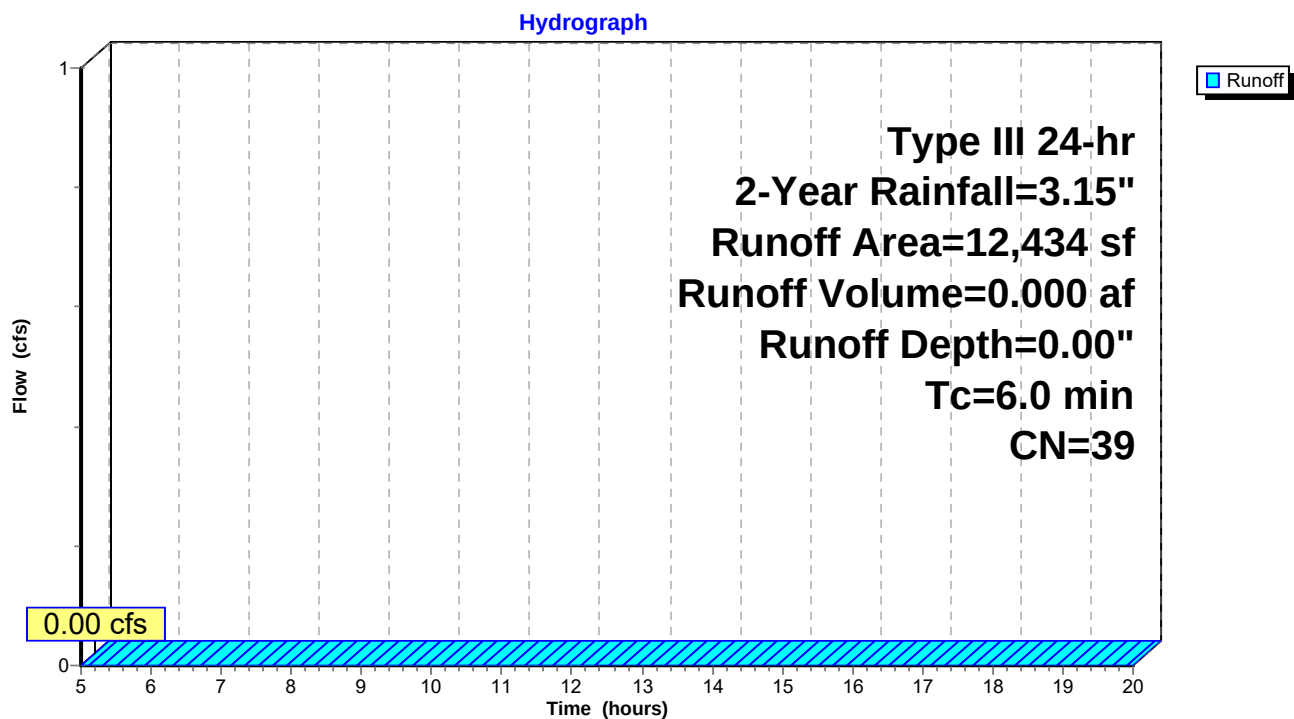
**Summary for Subcatchment 198S: P3VVV**

Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"  
 Routed to Pond 197P : Inf. Basin 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 12,434    | 39 | >75% Grass cover, Good, HSG A |
| 12,434    |    | 100.00% Pervious Area         |

| Tc<br>(min) | Length<br>(feet) | Slope<br>(ft/ft) | Velocity<br>(ft/sec) | Capacity<br>(cfs) | Description   |
|-------------|------------------|------------------|----------------------|-------------------|---------------|
| 6.0         |                  |                  |                      |                   | Direct Entry, |

**Subcatchment 198S: P3VVV**

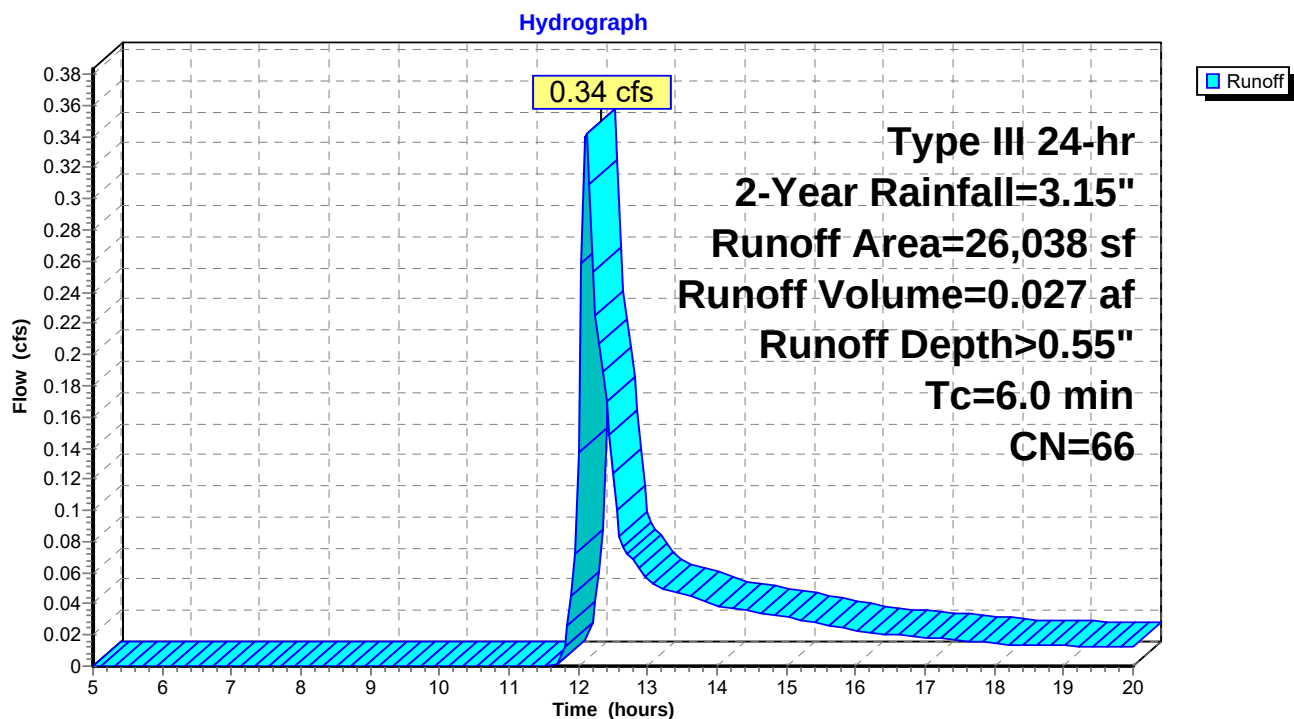
**Summary for Subcatchment 202S: (new Subcat)**

Runoff = 0.34 cfs @ 12.11 hrs, Volume= 0.027 af, Depth> 0.55"  
 Routed to Pond 201P : Sub. Inf. 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 9,091     | 98 | Unconnected roofs, HSG A      |
| 2,905     | 98 | Unconnected pavement, HSG A   |
| 14,042    | 39 | >75% Grass cover, Good, HSG A |
| 26,038    | 66 | Weighted Average              |
| 14,042    |    | 53.93% Pervious Area          |
| 11,996    |    | 46.07% Impervious Area        |
| 11,996    |    | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 202S: (new Subcat)**

### Summary for Subcatchment 204S: (new Subcat)

Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"  
Routed to Link 203L : 3A

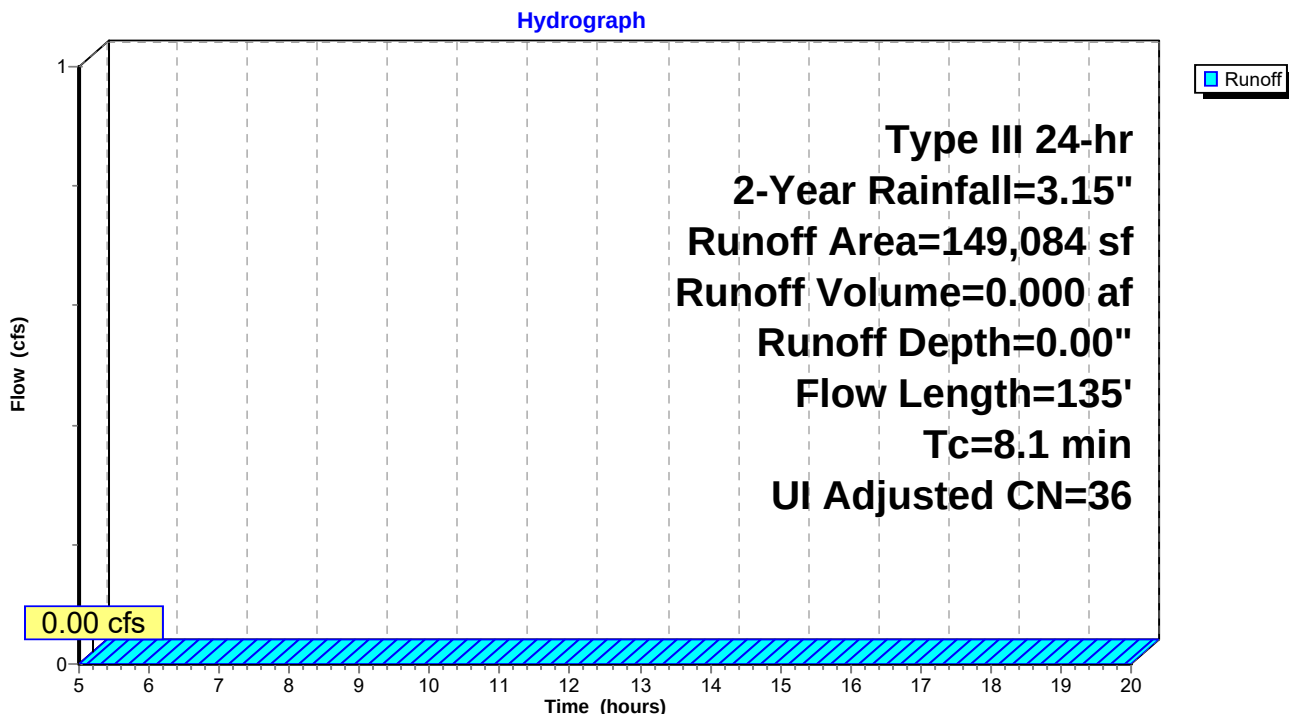
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 72,013    | 30 |     | Woods, Good, HSG A            |
| 71,711    | 39 |     | >75% Grass cover, Good, HSG A |
| 3,689     | 98 |     | Unconnected roofs, HSG A      |
| 1,671     | 98 |     | Unconnected pavement, HSG A   |
| 149,084   | 37 | 36  | Weighted Average, UI Adjusted |
| 143,724   |    |     | 96.40% Pervious Area          |
| 5,360     |    |     | 3.60% Impervious Area         |
| 5,360     |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                          |
|----------|---------------|---------------|-------------------|----------------|----------------------------------------------------------------------|
| 7.5      | 50            | 0.0100        | 0.11              |                | <b>Sheet Flow,</b><br>Grass: Short n= 0.150 P2= 3.10"                |
| 0.6      | 85            | 0.1200        | 2.42              |                | <b>Shallow Concentrated Flow,</b><br>Short Grass Pasture Kv= 7.0 fps |
| 8.1      | 135           | Total         |                   |                |                                                                      |

### Subcatchment 204S: (new Subcat)





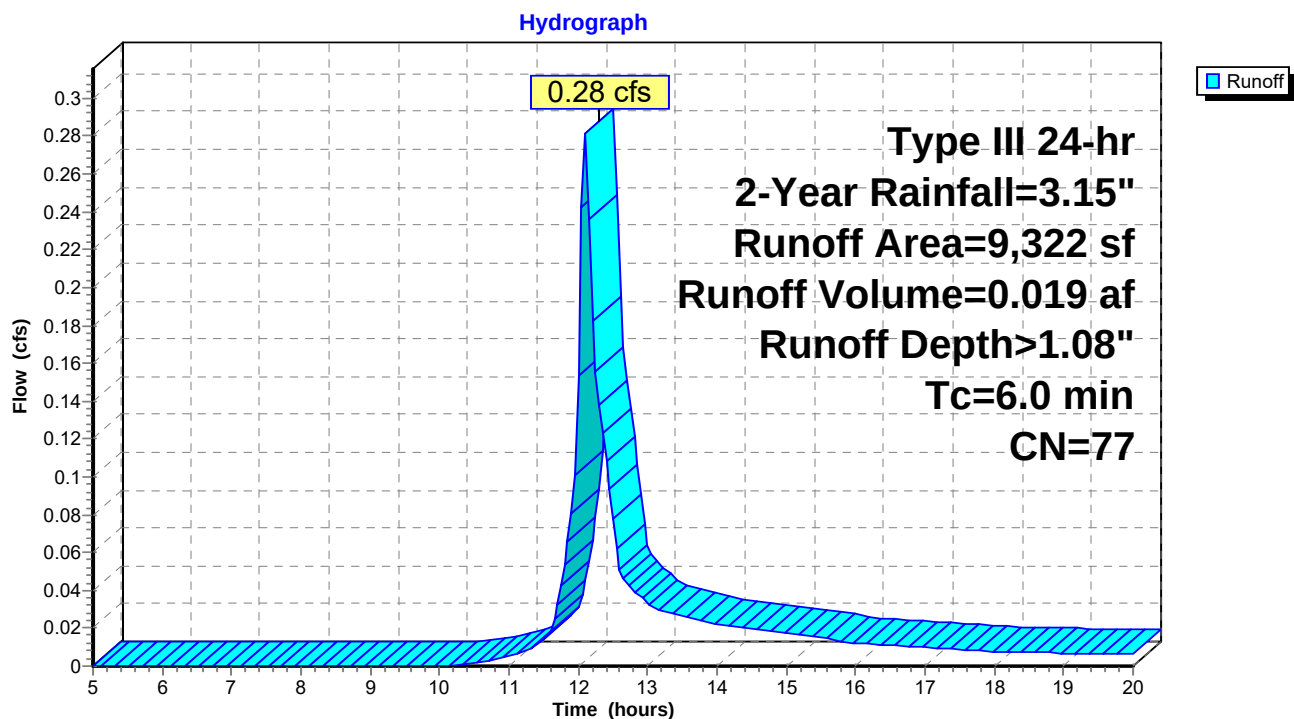
**Summary for Subcatchment 205S: (new Subcat)**

Runoff = 0.28 cfs @ 12.10 hrs, Volume= 0.019 af, Depth> 1.08"  
 Routed to Pond 218P : CB A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,257     | 98 | Paved parking, HSG A          |
| 1,759     | 98 | Unconnected roofs, HSG A      |
| 3,306     | 39 | >75% Grass cover, Good, HSG A |
| 9,322     | 77 | Weighted Average              |
| 3,306     |    | 35.46% Pervious Area          |
| 6,016     |    | 64.54% Impervious Area        |
| 1,759     |    | 29.24% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 205S: (new Subcat)**

### Summary for Subcatchment 206S: (new Subcat)

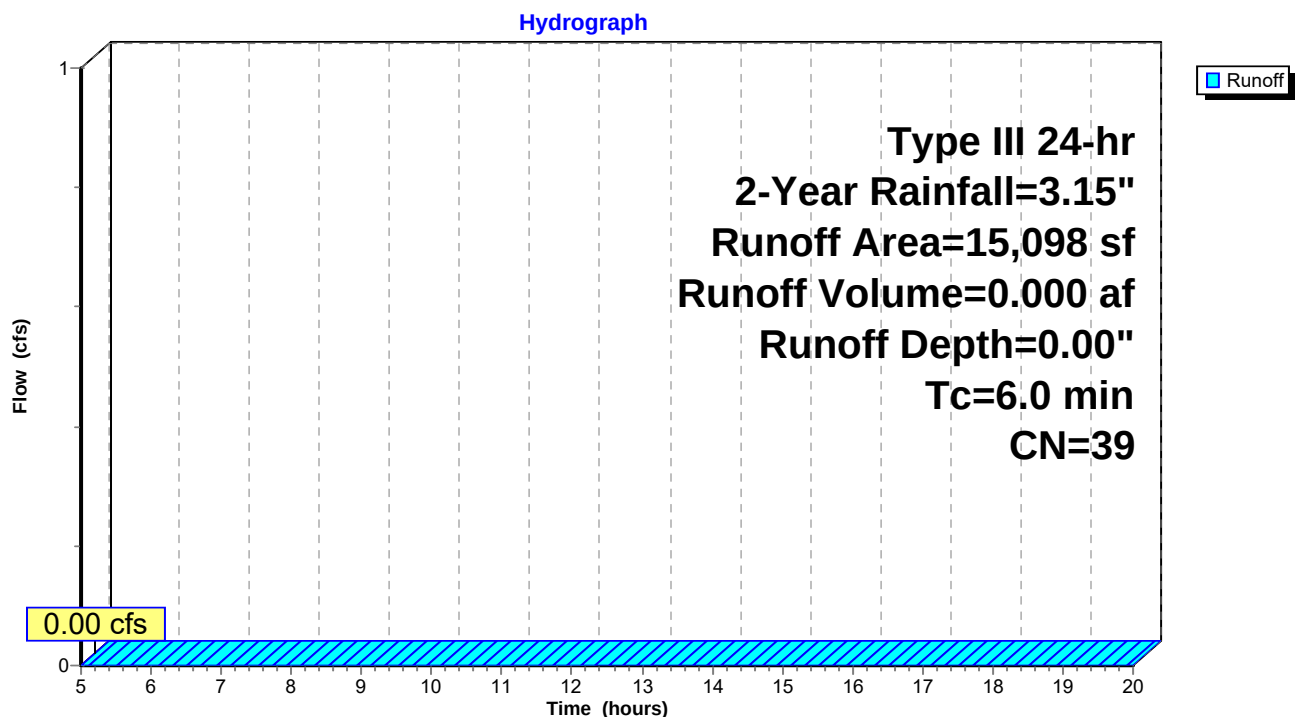
Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"  
 Routed to Pond 186P : Constructed Wetland 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 15,098    | 39 | >75% Grass cover, Good, HSG A |
| 15,098    |    | 100.00% Pervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 206S: (new Subcat)



**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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Type III 24-hr 2-Year Rainfall=3.15"

Printed 1/7/2026

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**Summary for Subcatchment 207S: (new Subcat)**

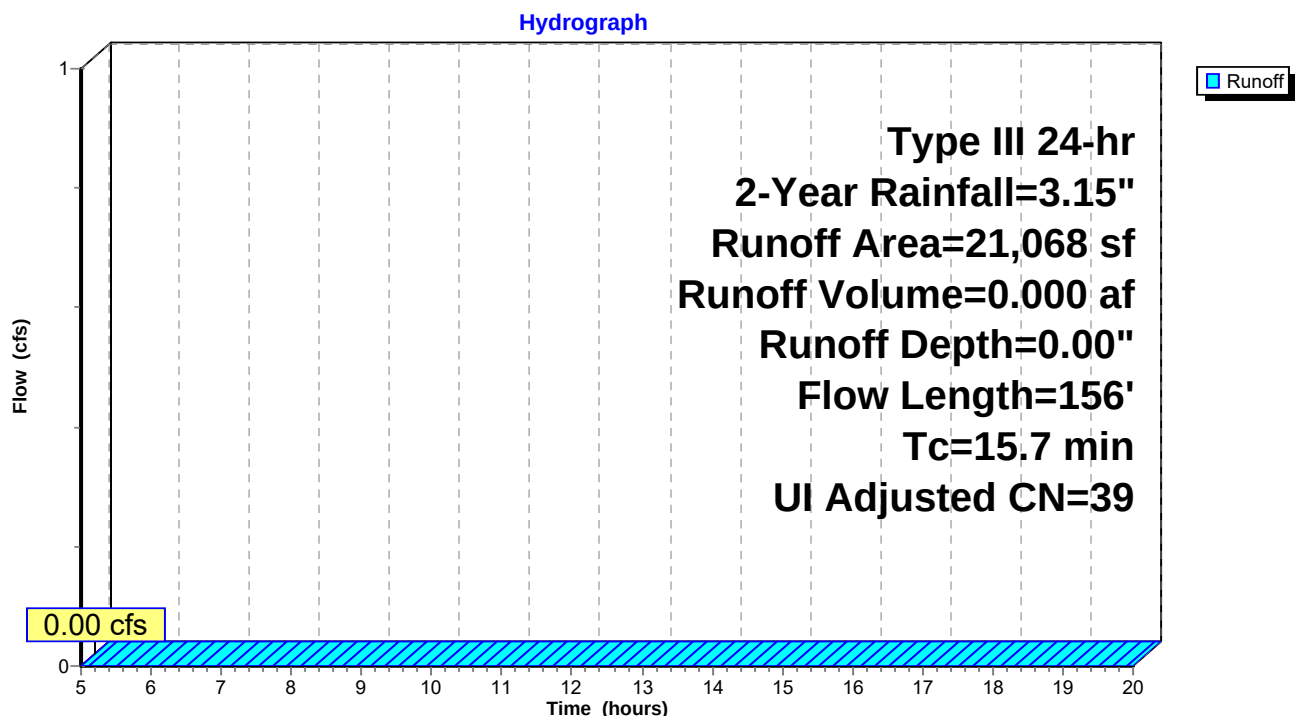
Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"  
 Routed to Pond 216P : CB 8A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 1,937     | 98 |     | Unconnected roofs, HSG A      |
| 1,504     | 98 |     | Paved parking, HSG A          |
| 16,314    | 30 |     | Woods, Good, HSG A            |
| 1,313     | 39 |     | >75% Grass cover, Good, HSG A |
| 21,068    | 42 | 39  | Weighted Average, UI Adjusted |
| 17,627    |    |     | 83.67% Pervious Area          |
| 3,441     |    |     | 16.33% Impervious Area        |
| 1,937     |    |     | 56.29% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                      |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------|
| 11.5     | 50            | 0.0250        | 0.07              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10" |
| 4.2      | 106           | 0.0070        | 0.42              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps        |
| 15.7     | 156           | Total         |                   |                |                                                                  |

**Subcatchment 207S: (new Subcat)**

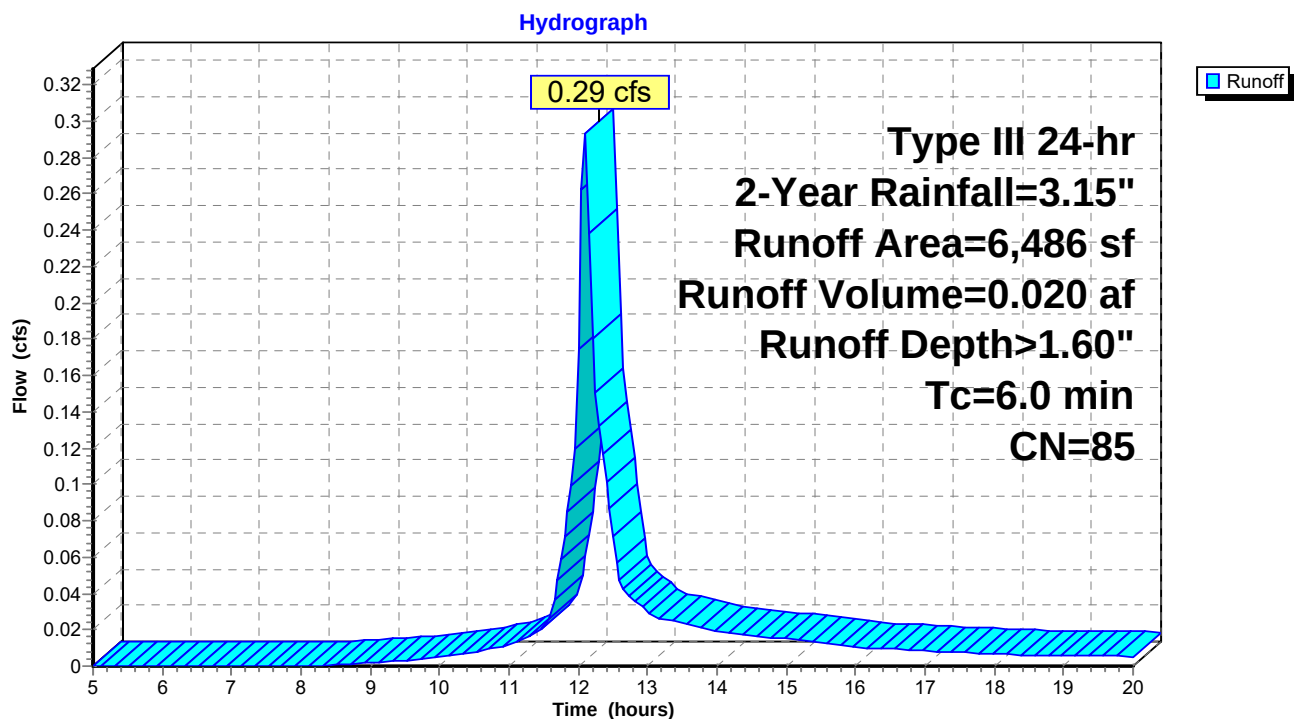
**Summary for Subcatchment 216S: (new Subcat)**

Runoff = 0.29 cfs @ 12.09 hrs, Volume= 0.020 af, Depth> 1.60"  
 Routed to Pond 215P : CB 5A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 2-Year Rainfall=3.15"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,069     | 98 | Paved parking, HSG A          |
| 1,946     | 98 | Unconnected roofs, HSG A      |
| 1,471     | 39 | >75% Grass cover, Good, HSG A |
| 6,486     | 85 | Weighted Average              |
| 1,471     |    | 22.68% Pervious Area          |
| 5,015     |    | 77.32% Impervious Area        |
| 1,946     |    | 38.80% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 216S: (new Subcat)**

### Summary for Pond 15P: Inf. Basin 5

Inflow Area = 2.511 ac, 70.09% Impervious, Inflow Depth > 2.12" for 2-Year event  
 Inflow = 6.18 cfs @ 12.09 hrs, Volume= 0.443 af  
 Outflow = 0.24 cfs @ 15.49 hrs, Volume= 0.203 af, Atten= 96%, Lag= 203.9 min  
 Discarded = 0.24 cfs @ 15.49 hrs, Volume= 0.203 af  
 Primary = 0.00 cfs @ 15.49 hrs, Volume= 0.000 af  
 Routed to Link 59L : DP 1

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.75' @ 15.49 hrs Surf.Area= 7,683 sf Storage= 11,957 cf

Plug-Flow detention time= 198.1 min calculated for 0.203 af (46% of inflow)  
 Center-of-Mass det. time= 106.1 min ( 868.6 - 762.4 )

| Volume              | Invert               | Avail.Storage             | Storage Description                                        |
|---------------------|----------------------|---------------------------|------------------------------------------------------------|
| #1                  | 57.00'               | 31,893 cf                 | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet)                                  |
| 57.00               | 5,984                | 0                         | 0                                                          |
| 58.00               | 6,929                | 6,457                     | 6,457                                                      |
| 59.00               | 7,931                | 7,430                     | 13,887                                                     |
| 60.00               | 8,989                | 8,460                     | 22,347                                                     |
| 61.00               | 10,104               | 9,547                     | 31,893                                                     |

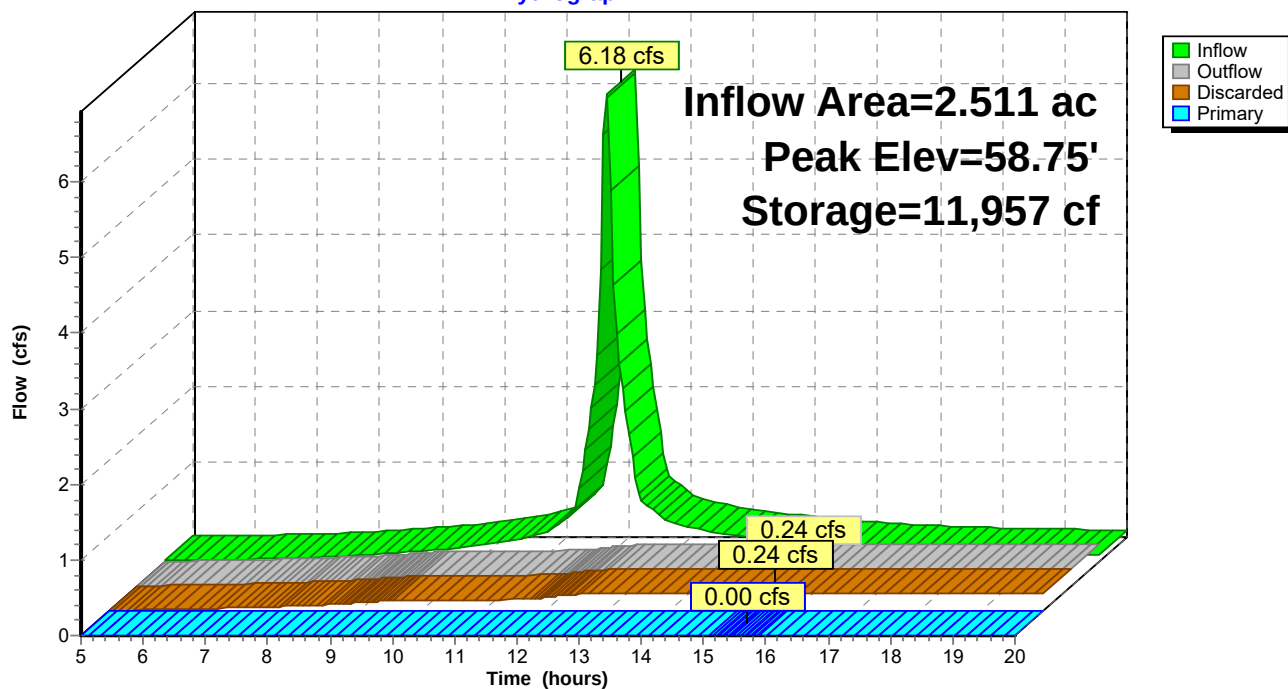
| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 57.00' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 52.00'                                                                                                              |
| #2     | Primary   | 57.00' | <b>18.0" Round Culvert</b><br>L= 67.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.00' / 52.50' S= 0.0672 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |
| #3     | Device 2  | 58.75' | <b>4.0" Vert. Orifice/Grate X 2.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                             |
| #4     | Device 2  | 59.80' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                          |

**Discarded OutFlow** Max=0.24 cfs @ 15.49 hrs HW=58.75' (Free Discharge)  
 ↳ **1=Exfiltration** ( Controls 0.24 cfs)

**Primary OutFlow** Max=0.00 cfs @ 15.49 hrs HW=58.75' (Free Discharge)  
 ↳ **2=Culvert** (Passes 0.00 cfs of 6.73 cfs potential flow)  
 ↳ **3=Orifice/Grate** (Orifice Controls 0.00 cfs @ 0.18 fps)  
 ↳ **4=Orifice/Grate** ( Controls 0.00 cfs)

**Pond 15P: Inf. Basin 5**

Hydrograph



### Summary for Pond 16P: CB 58

Inflow Area = 0.172 ac, 96.61% Impervious, Inflow Depth > 2.64" for 2-Year event  
 Inflow = 0.51 cfs @ 12.09 hrs, Volume= 0.038 af  
 Outflow = 0.51 cfs @ 12.09 hrs, Volume= 0.038 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.51 cfs @ 12.09 hrs, Volume= 0.038 af  
 Routed to Pond 20P : DMH 43

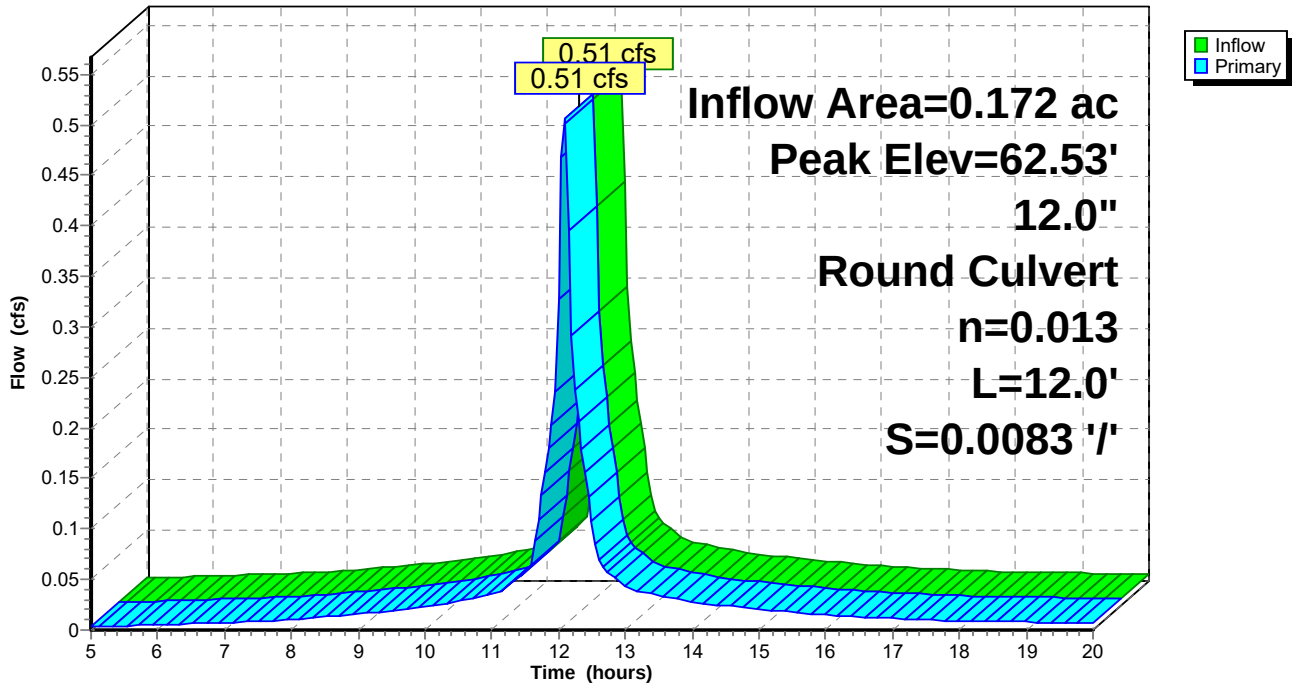
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.53' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.10' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.10' / 62.00' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.49 cfs @ 12.09 hrs HW=62.52' (Free Discharge)  
 1=Culvert (Barrel Controls 0.49 cfs @ 2.31 fps)

### Pond 16P: CB 58

Hydrograph



**Summary for Pond 17P: CB 59**

Inflow Area = 0.381 ac, 74.19% Impervious, Inflow Depth > 2.17" for 2-Year event  
 Inflow = 0.98 cfs @ 12.09 hrs, Volume= 0.069 af  
 Outflow = 0.98 cfs @ 12.09 hrs, Volume= 0.069 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.98 cfs @ 12.09 hrs, Volume= 0.069 af  
 Routed to Pond 20P : DMH 43

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 62.74' @ 12.09 hrs

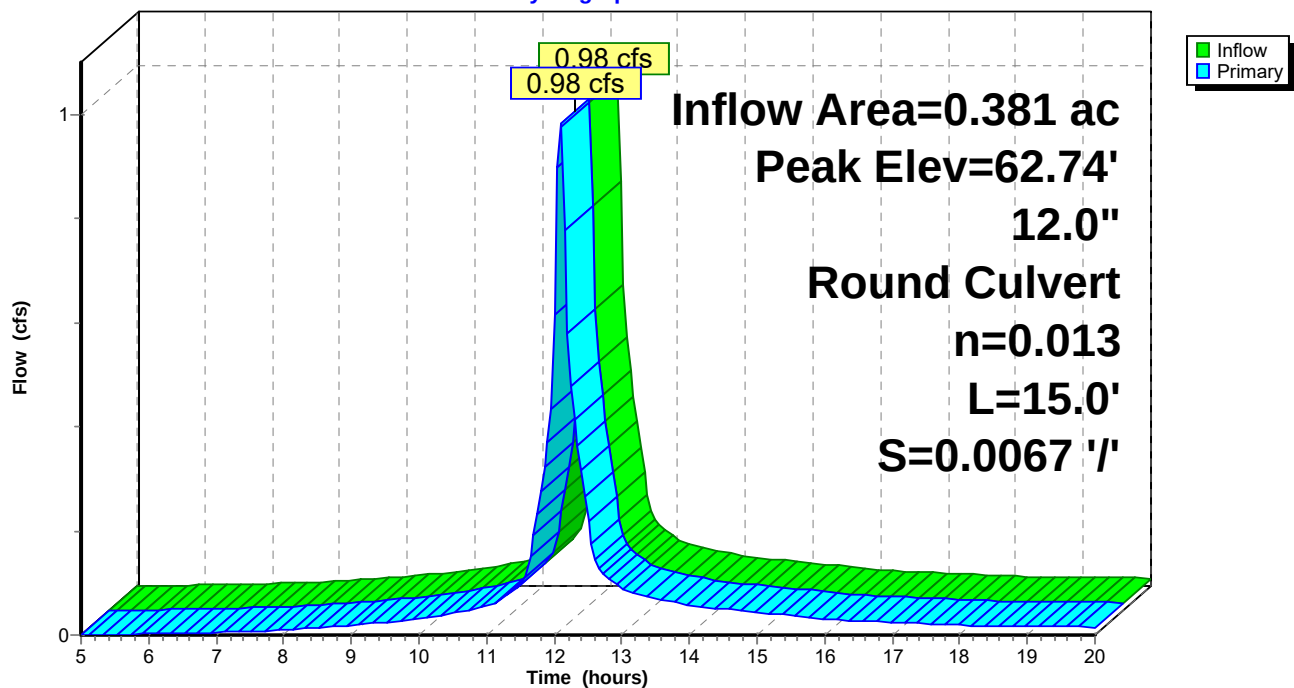
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.10' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.10' / 62.00' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.96 cfs @ 12.09 hrs HW=62.73' (Free Discharge)

1=Culvert (Barrel Controls 0.96 cfs @ 2.63 fps)

**Pond 17P: CB 59**

Hydrograph





## Summary for Pond 18P: CB 63

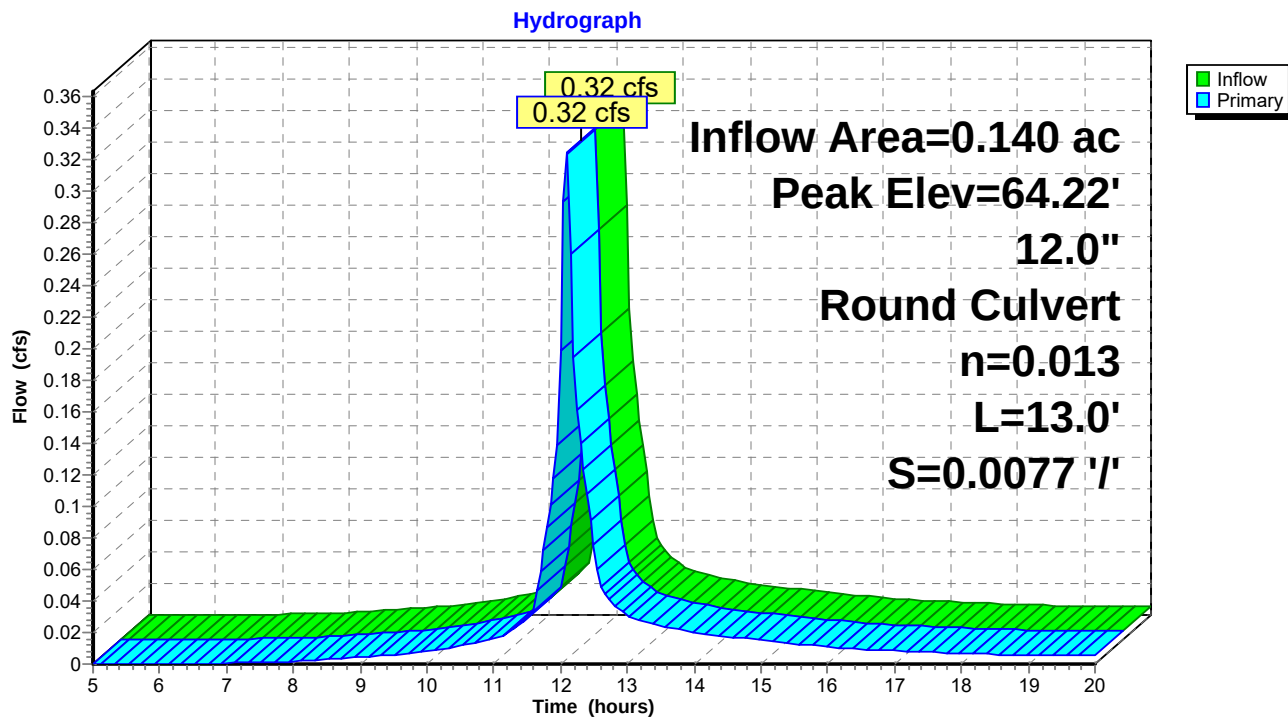
Inflow Area = 0.140 ac, 64.30% Impervious, Inflow Depth > 1.91" for 2-Year event  
 Inflow = 0.32 cfs @ 12.09 hrs, Volume= 0.022 af  
 Outflow = 0.32 cfs @ 12.09 hrs, Volume= 0.022 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.32 cfs @ 12.09 hrs, Volume= 0.022 af  
 Routed to Pond 25P : DMH 45

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 64.22' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 63.88' | <b>12.0" Round Culvert</b><br>L= 13.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 63.88' / 63.78' S= 0.0077 ' / ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.32 cfs @ 12.09 hrs HW=64.21' (Free Discharge)  
 1=Culvert (Barrel Controls 0.32 cfs @ 2.08 fps)

## Pond 18P: CB 63



### Summary for Pond 19P: CB 62

Inflow Area = 0.064 ac, 81.50% Impervious, Inflow Depth > 2.36" for 2-Year event  
 Inflow = 0.17 cfs @ 12.09 hrs, Volume= 0.012 af  
 Outflow = 0.17 cfs @ 12.09 hrs, Volume= 0.012 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.17 cfs @ 12.09 hrs, Volume= 0.012 af  
 Routed to Pond 25P : DMH 45

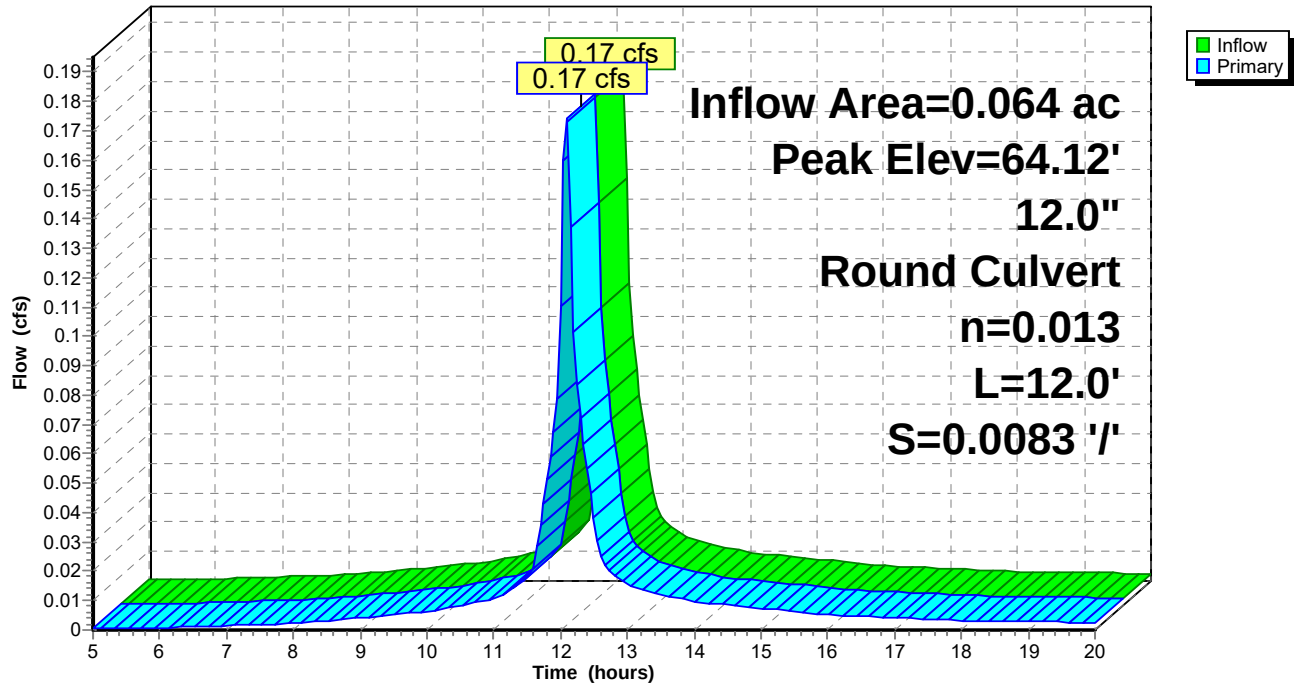
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.12' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 63.88' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 63.88' / 63.78' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.17 cfs @ 12.09 hrs HW=64.11' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.17 cfs @ 1.83 fps)

### Pond 19P: CB 62

#### Hydrograph



**Summary for Pond 20P: DMH 43**

Inflow Area = 0.553 ac, 81.18% Impervious, Inflow Depth > 2.32" for 2-Year event  
 Inflow = 1.49 cfs @ 12.09 hrs, Volume= 0.107 af  
 Outflow = 1.49 cfs @ 12.09 hrs, Volume= 0.107 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.49 cfs @ 12.09 hrs, Volume= 0.107 af  
 Routed to Pond 21P : DMH 42

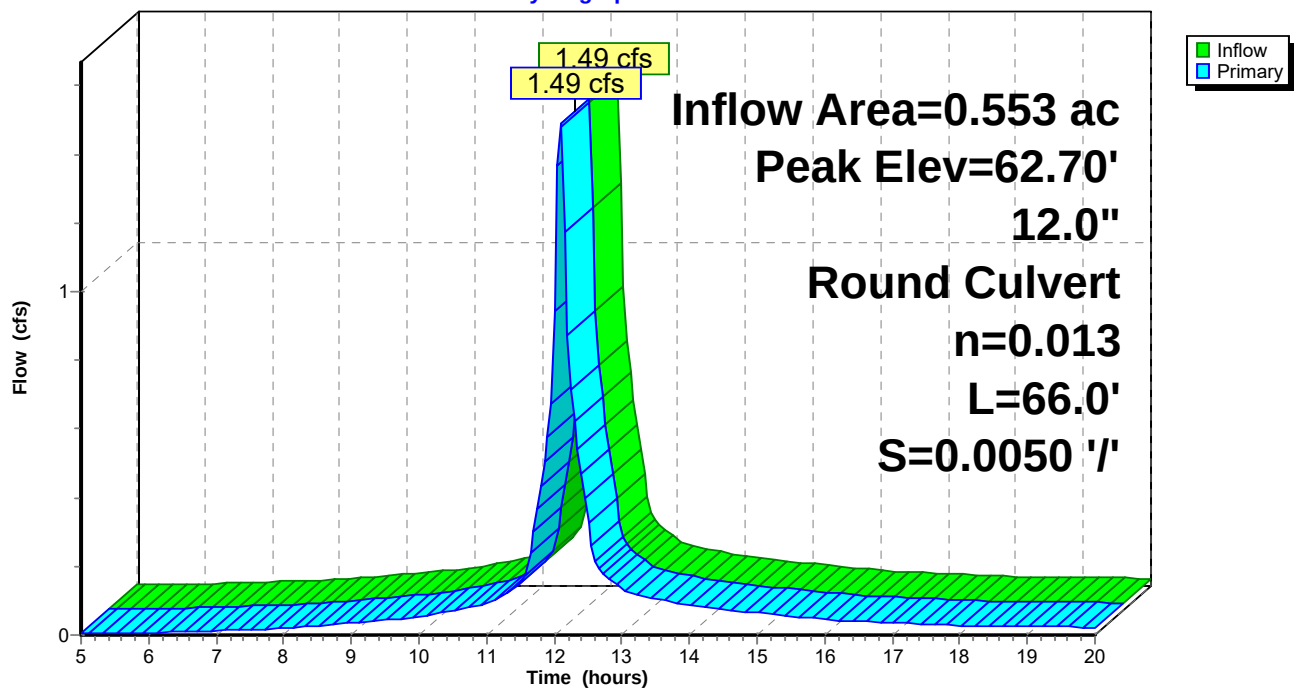
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 62.70' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.90' | <b>12.0" Round Culvert</b><br>L= 66.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.90' / 61.57' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.45 cfs @ 12.09 hrs HW=62.69' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 1.45 cfs @ 3.02 fps)

**Pond 20P: DMH 43****Hydrograph**

### Summary for Pond 21P: DMH 42

Inflow Area = 0.553 ac, 81.18% Impervious, Inflow Depth > 2.32" for 2-Year event  
 Inflow = 1.49 cfs @ 12.09 hrs, Volume= 0.107 af  
 Outflow = 1.49 cfs @ 12.09 hrs, Volume= 0.107 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.49 cfs @ 12.09 hrs, Volume= 0.107 af  
 Routed to Pond 24P : DMH 41

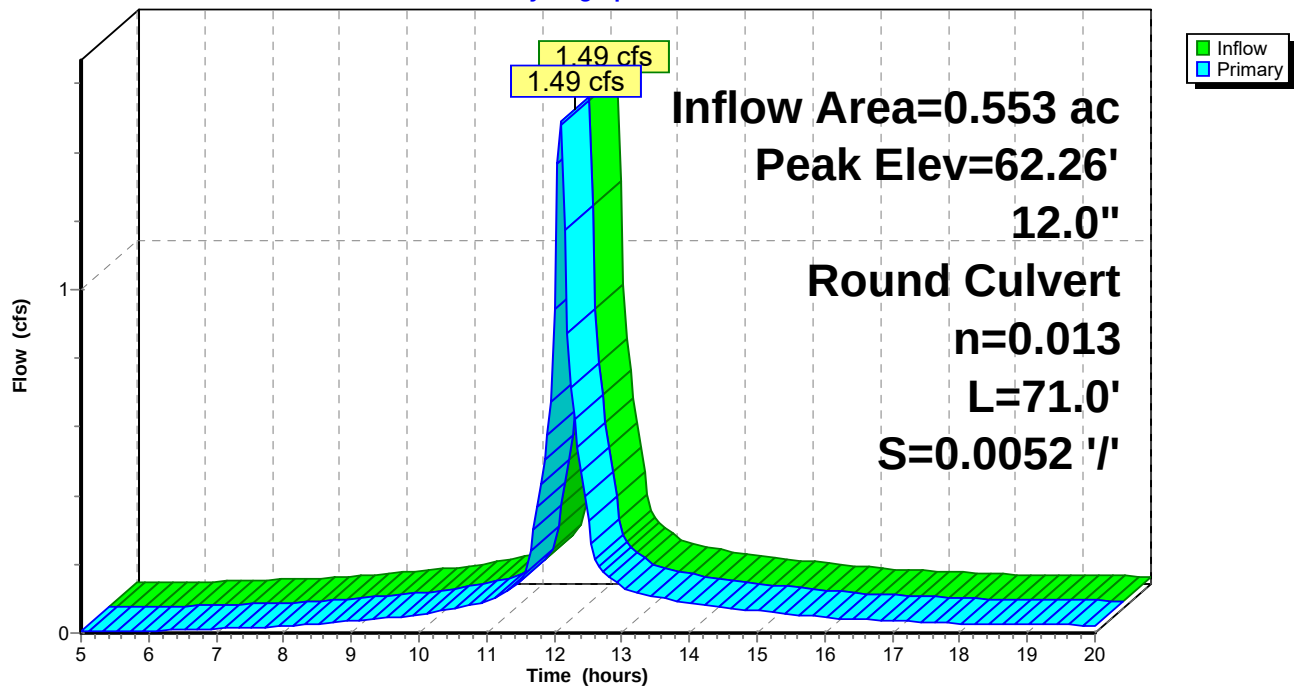
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.26' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.47' | <b>12.0" Round Culvert</b><br>L= 71.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.47' / 61.10' S= 0.0052 ' S= 0.0052 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.45 cfs @ 12.09 hrs HW=62.25' (Free Discharge)  
 1=Culvert (Barrel Controls 1.45 cfs @ 3.06 fps)

### Pond 21P: DMH 42

Hydrograph



### Summary for Pond 22P: CB 56

Inflow Area = 0.127 ac, 100.00% Impervious, Inflow Depth > 2.73" for 2-Year event  
 Inflow = 0.38 cfs @ 12.09 hrs, Volume= 0.029 af  
 Outflow = 0.38 cfs @ 12.09 hrs, Volume= 0.029 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.38 cfs @ 12.09 hrs, Volume= 0.029 af  
 Routed to Pond 24P : DMH 41

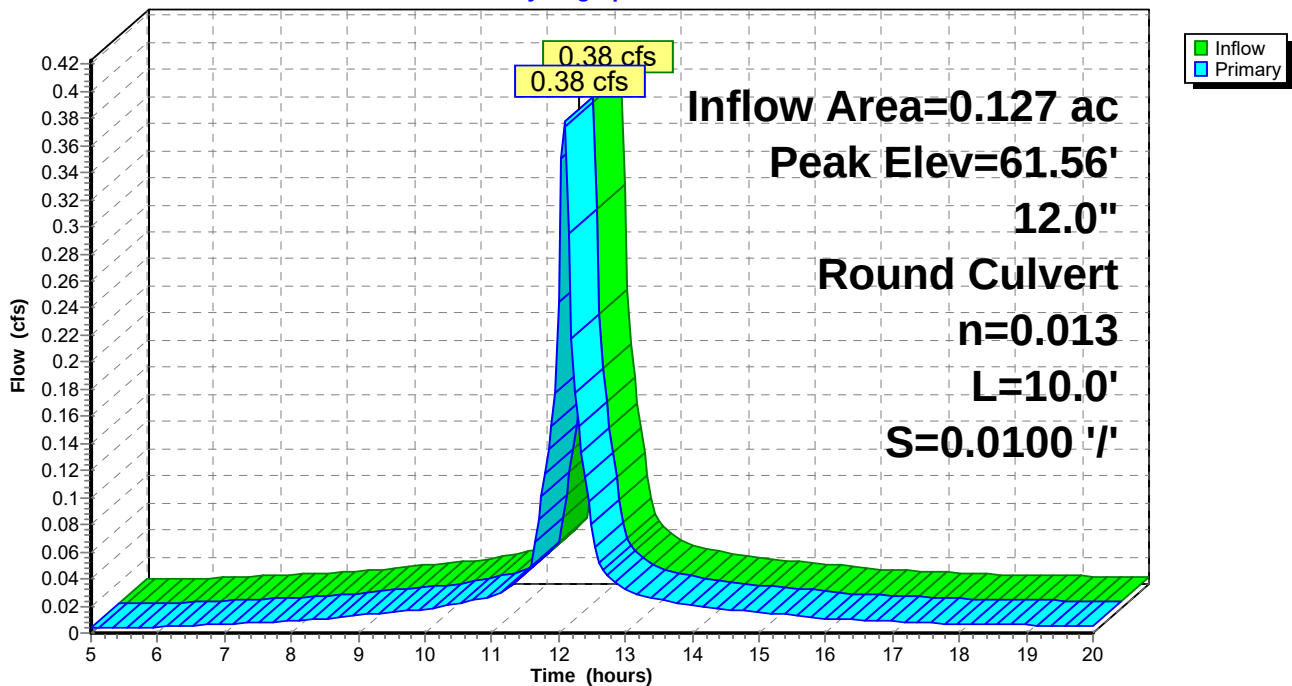
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.56' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.20' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.20' / 61.10' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.37 cfs @ 12.09 hrs HW=61.55' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.37 cfs @ 2.20 fps)

### Pond 22P: CB 56

Hydrograph



### Summary for Pond 23P: CB 57

Inflow Area = 0.315 ac, 81.38% Impervious, Inflow Depth > 2.36" for 2-Year event  
 Inflow = 0.86 cfs @ 12.09 hrs, Volume= 0.062 af  
 Outflow = 0.86 cfs @ 12.09 hrs, Volume= 0.062 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.86 cfs @ 12.09 hrs, Volume= 0.062 af  
 Routed to Pond 24P : DMH 41

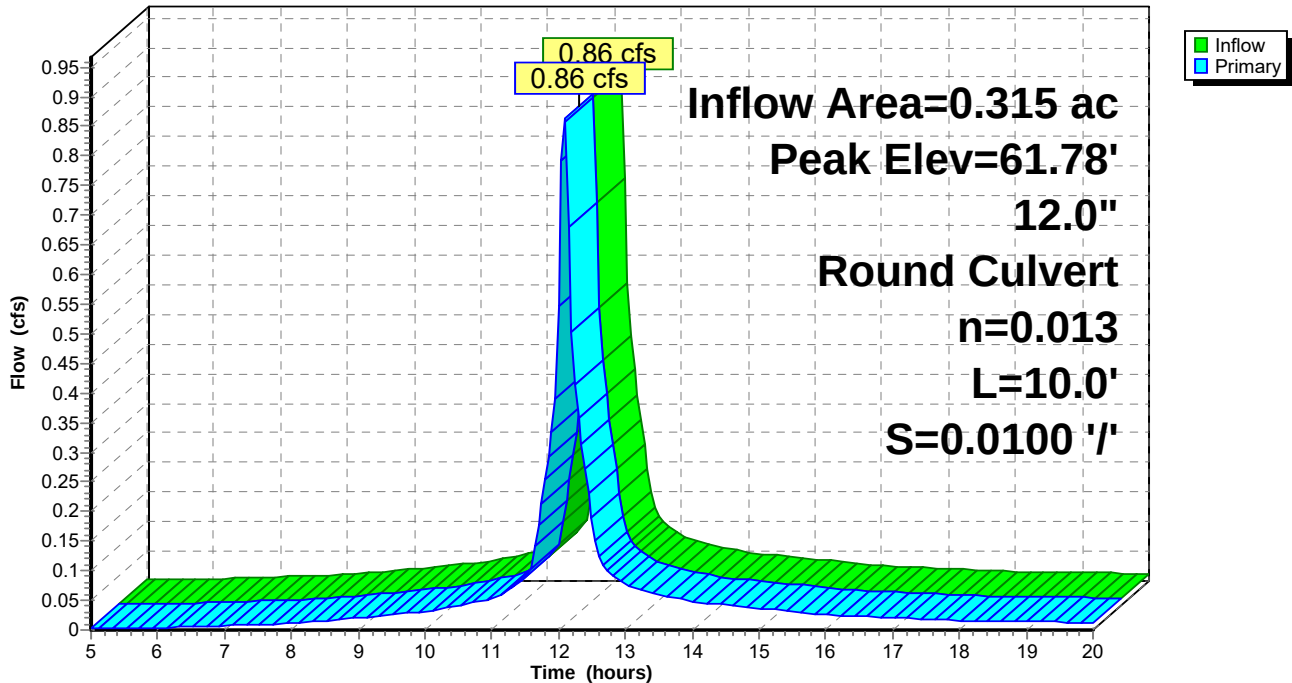
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.78' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.20' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.20' / 61.10' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.84 cfs @ 12.09 hrs HW=61.77' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.84 cfs @ 2.63 fps)

### Pond 23P: CB 57

Hydrograph



### Summary for Pond 24P: DMH 41

Inflow Area = 0.994 ac, 83.63% Impervious, Inflow Depth > 2.38" for 2-Year event  
 Inflow = 2.73 cfs @ 12.09 hrs, Volume= 0.197 af  
 Outflow = 2.73 cfs @ 12.09 hrs, Volume= 0.197 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.73 cfs @ 12.09 hrs, Volume= 0.197 af  
 Routed to Pond 29P : DMH 40

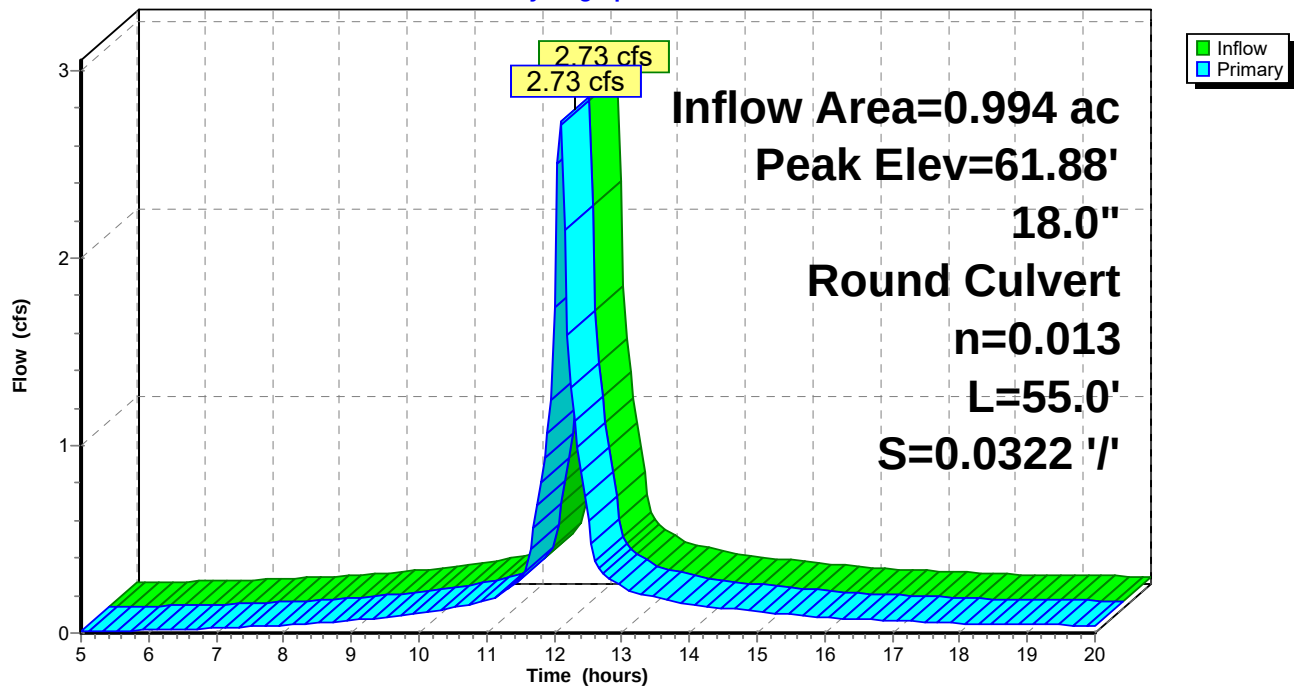
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.88' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.00' | <b>18.0" Round Culvert</b><br>L= 55.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.00' / 59.23' S= 0.0322 ' S= 0.0322 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.66 cfs @ 12.09 hrs HW=61.87' (Free Discharge)  
 1=Culvert (Inlet Controls 2.66 cfs @ 2.51 fps)

### Pond 24P: DMH 41

Hydrograph



**Summary for Pond 25P: DMH 45**

Inflow Area = 0.203 ac, 69.67% Impervious, Inflow Depth > 2.05" for 2-Year event  
 Inflow = 0.50 cfs @ 12.09 hrs, Volume= 0.035 af  
 Outflow = 0.50 cfs @ 12.09 hrs, Volume= 0.035 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.50 cfs @ 12.09 hrs, Volume= 0.035 af  
 Routed to Pond 28P : DMH 44

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 64.08' @ 12.09 hrs

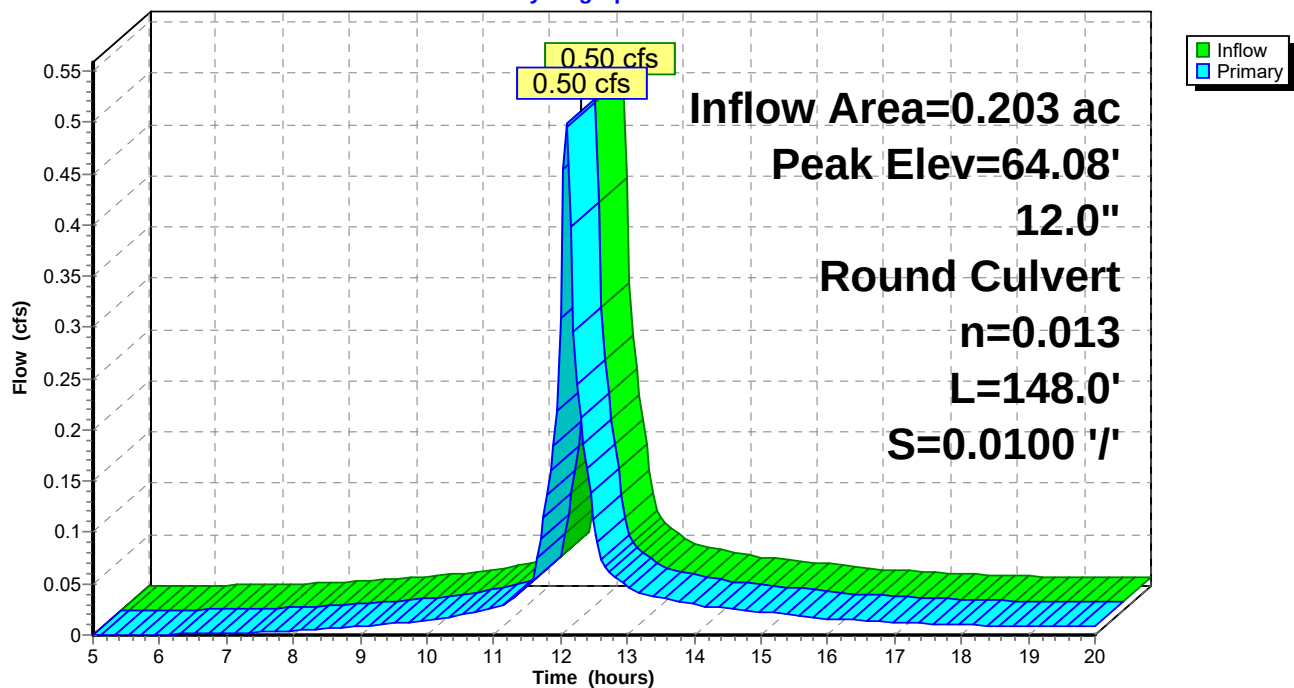
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 63.68' | <b>12.0" Round Culvert</b><br>L= 148.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 63.68' / 62.20' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.49 cfs @ 12.09 hrs HW=64.07' (Free Discharge)

↑**1=Culvert** (Inlet Controls 0.49 cfs @ 1.69 fps)

**Pond 25P: DMH 45**

Hydrograph





### Summary for Pond 26P: CB 61

Inflow Area = 0.265 ac, 66.20% Impervious, Inflow Depth > 1.99" for 2-Year event  
 Inflow = 0.64 cfs @ 12.09 hrs, Volume= 0.044 af  
 Outflow = 0.64 cfs @ 12.09 hrs, Volume= 0.044 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.64 cfs @ 12.09 hrs, Volume= 0.044 af  
 Routed to Pond 28P : DMH 44

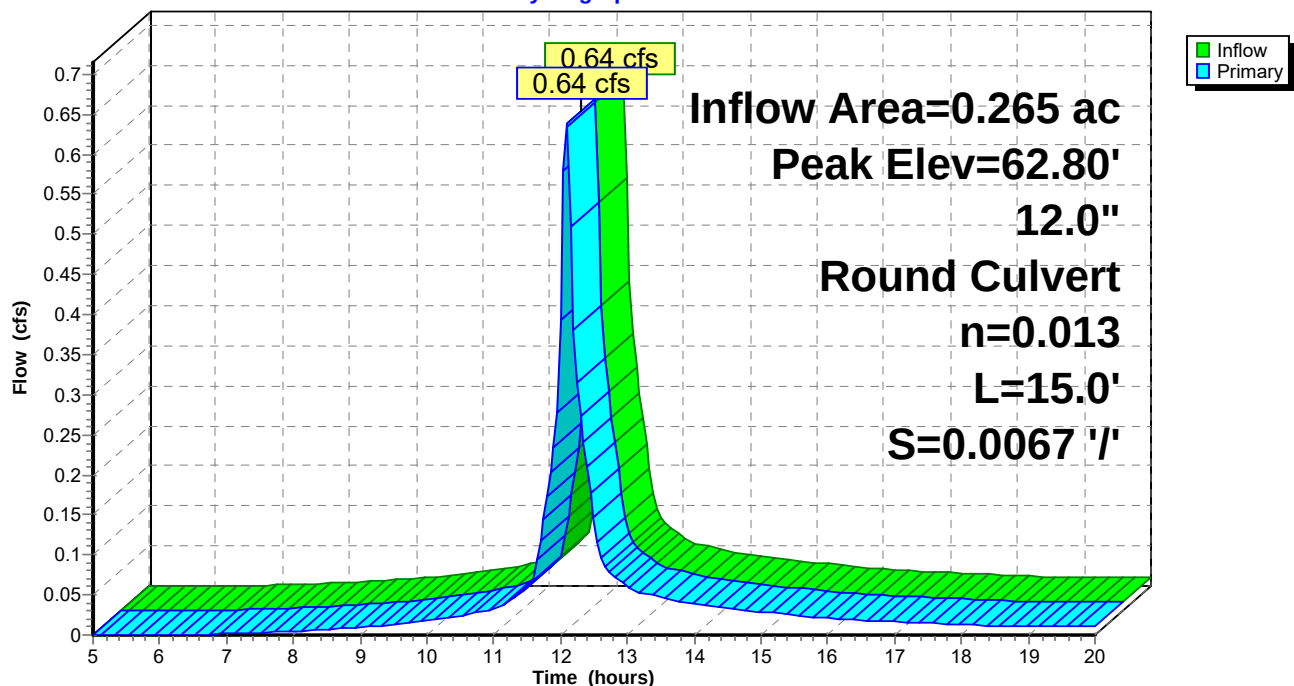
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.80' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.30' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.30' / 62.20' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.62 cfs @ 12.09 hrs HW=62.79' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.62 cfs @ 2.38 fps)

### Pond 26P: CB 61

Hydrograph



## Summary for Pond 27P: CB 60

Inflow Area = 0.111 ac, 71.39% Impervious, Inflow Depth > 2.08" for 2-Year event  
 Inflow = 0.28 cfs @ 12.09 hrs, Volume= 0.019 af  
 Outflow = 0.28 cfs @ 12.09 hrs, Volume= 0.019 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.28 cfs @ 12.09 hrs, Volume= 0.019 af  
 Routed to Pond 28P : DMH 44

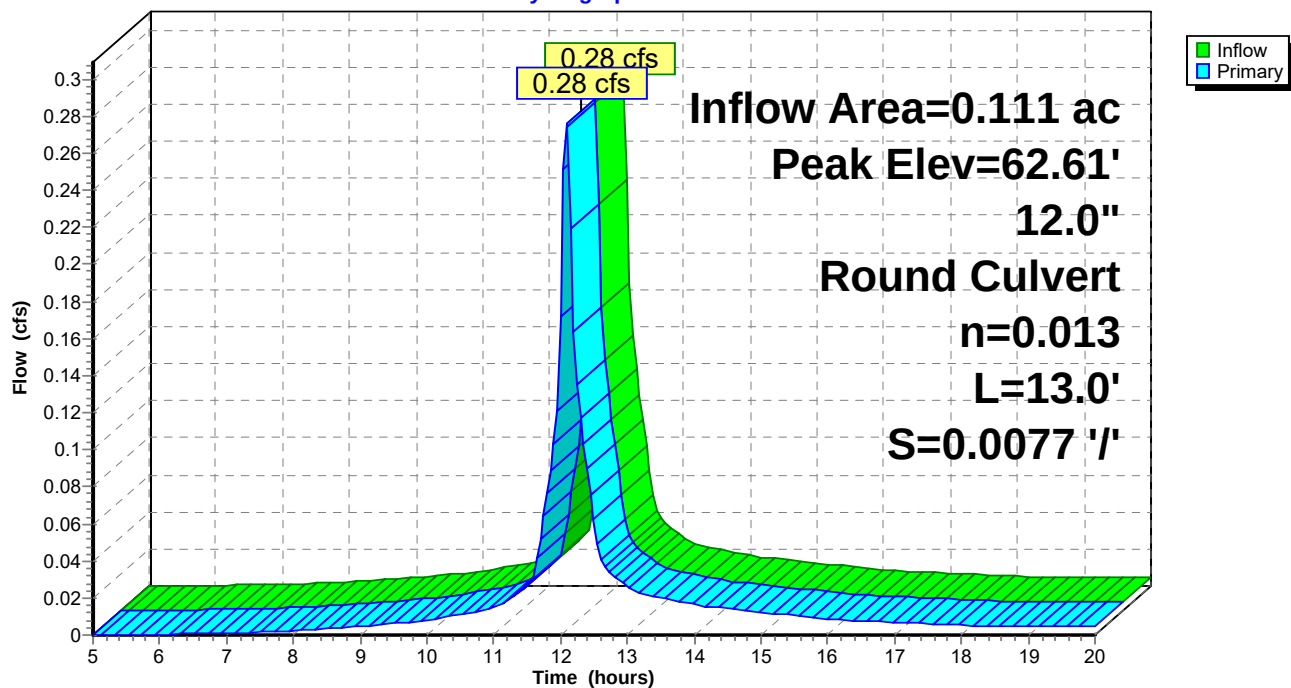
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 62.61' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.30' | <b>12.0" Round Culvert</b><br>L= 13.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.30' / 62.20' S= 0.0077 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.27 cfs @ 12.09 hrs HW=62.60' (Free Discharge)  
 1=Culvert (Barrel Controls 0.27 cfs @ 2.00 fps)

### Pond 27P: CB 60

## Hydrograph



### Summary for Pond 28P: DMH 44

Inflow Area = 0.579 ac, 68.41% Impervious, Inflow Depth > 2.03" for 2-Year event  
 Inflow = 1.41 cfs @ 12.09 hrs, Volume= 0.098 af  
 Outflow = 1.41 cfs @ 12.09 hrs, Volume= 0.098 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.41 cfs @ 12.09 hrs, Volume= 0.098 af  
 Routed to Pond 29P : DMH 40

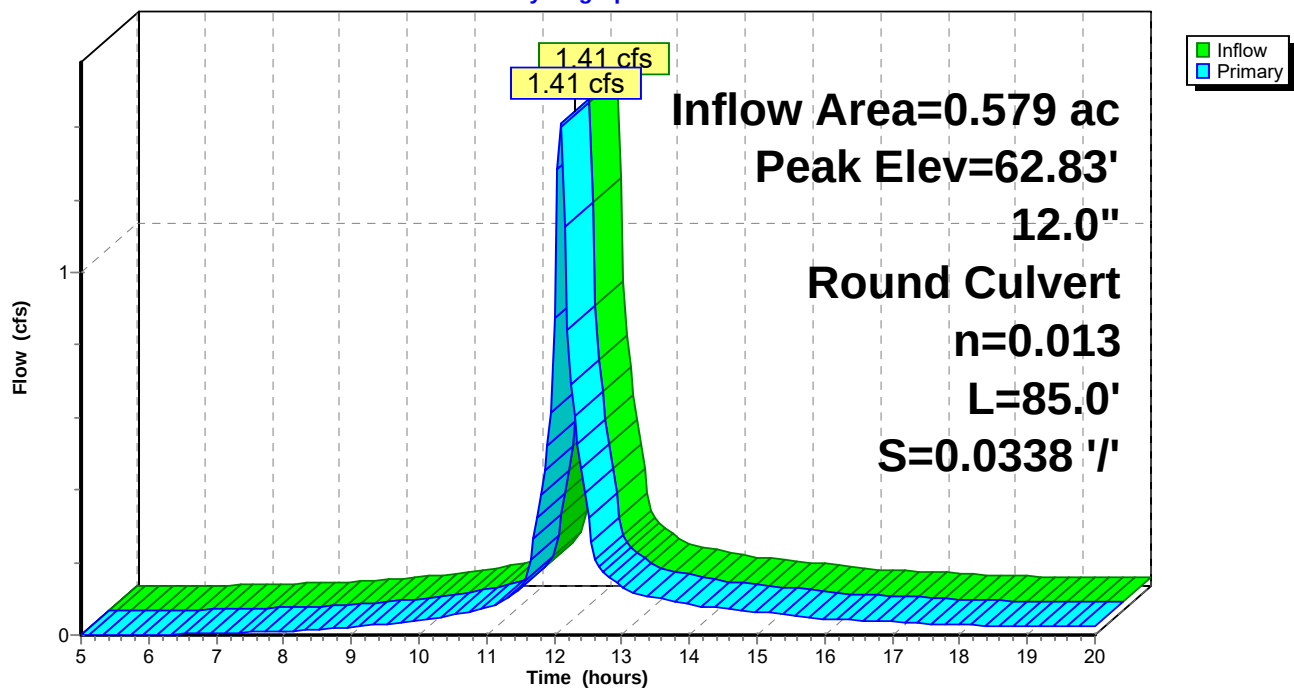
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.83' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.10' | <b>12.0" Round Culvert</b><br>L= 85.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.10' / 59.23' S= 0.0338 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.38 cfs @ 12.09 hrs HW=62.82' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 1.38 cfs @ 2.28 fps)

### Pond 28P: DMH 44

Hydrograph



**Summary for Pond 29P: DMH 40**

Inflow Area = 1.656 ac, 78.05% Impervious, Inflow Depth > 2.25" for 2-Year event  
 Inflow = 4.36 cfs @ 12.09 hrs, Volume= 0.311 af  
 Outflow = 4.36 cfs @ 12.09 hrs, Volume= 0.311 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.36 cfs @ 12.09 hrs, Volume= 0.311 af  
 Routed to Pond 38P : DMH 39

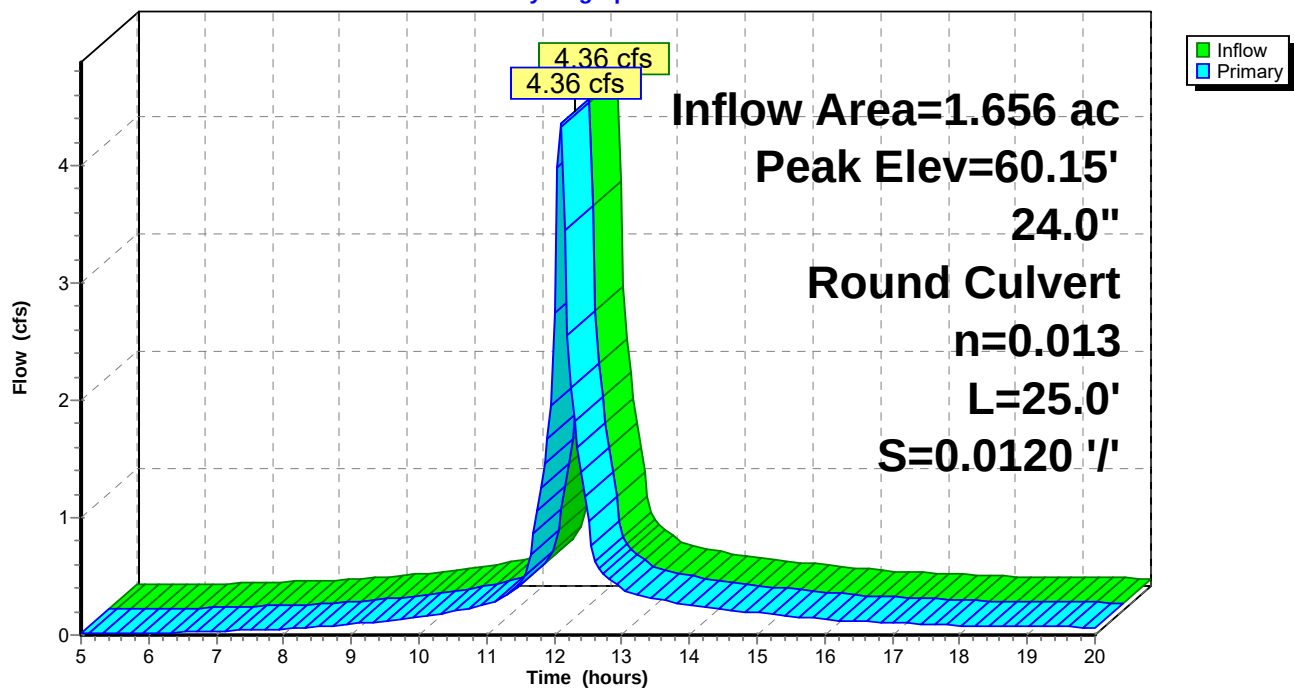
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.15' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.13' | <b>24.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.13' / 58.83' S= 0.0120 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=4.26 cfs @ 12.09 hrs HW=60.14' (Free Discharge)

1=Culvert (Barrel Controls 4.26 cfs @ 3.92 fps)

**Pond 29P: DMH 40****Hydrograph**

**Summary for Pond 30P: CB 55**

Inflow Area = 0.083 ac, 78.43% Impervious, Inflow Depth > 2.26" for 2-Year event  
 Inflow = 0.22 cfs @ 12.09 hrs, Volume= 0.016 af  
 Outflow = 0.22 cfs @ 12.09 hrs, Volume= 0.016 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.22 cfs @ 12.09 hrs, Volume= 0.016 af  
 Routed to Pond 29P : DMH 40

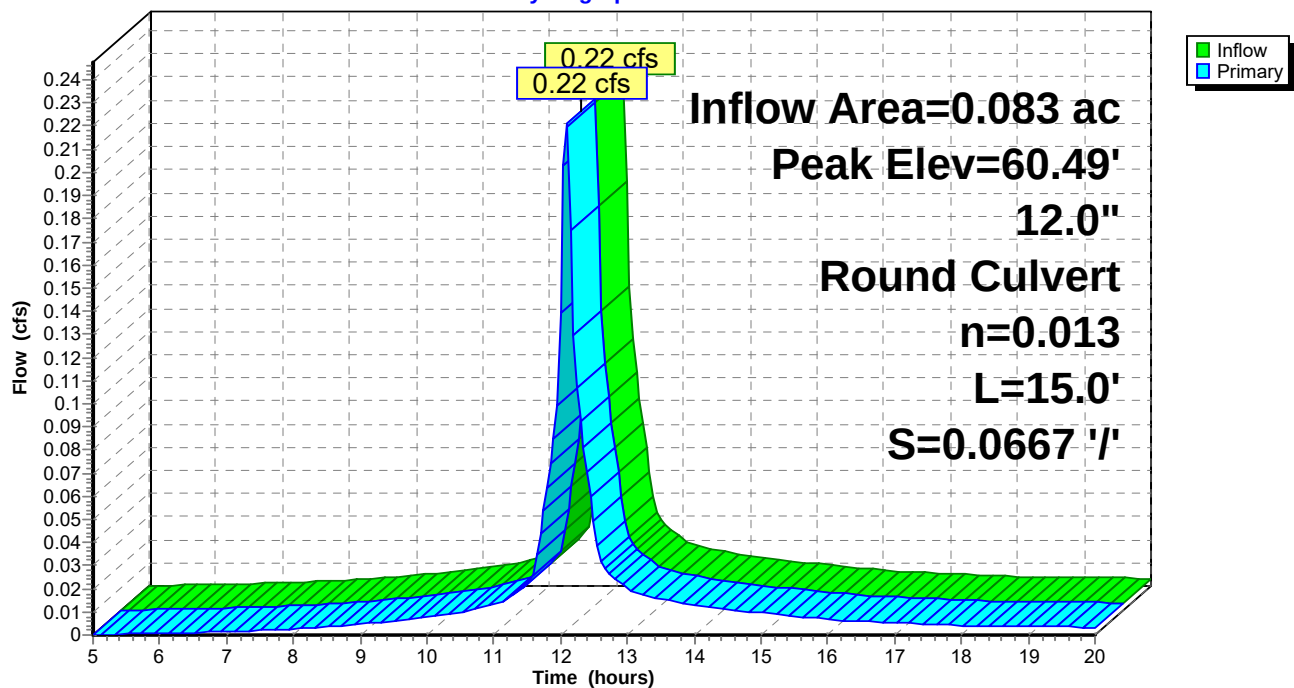
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.49' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.23' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.23' / 59.23' S= 0.0667 ' S= 0.0667 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.22 cfs @ 12.09 hrs HW=60.49' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.22 cfs @ 1.36 fps)

**Pond 30P: CB 55**

Hydrograph



### Summary for Pond 31P: CB 51

Inflow Area = 0.044 ac, 96.85% Impervious, Inflow Depth > 2.64" for 2-Year event  
 Inflow = 0.13 cfs @ 12.09 hrs, Volume= 0.010 af  
 Outflow = 0.13 cfs @ 12.09 hrs, Volume= 0.010 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.13 cfs @ 12.09 hrs, Volume= 0.010 af  
 Routed to Pond 34P : DMH 36

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.50' @ 12.09 hrs

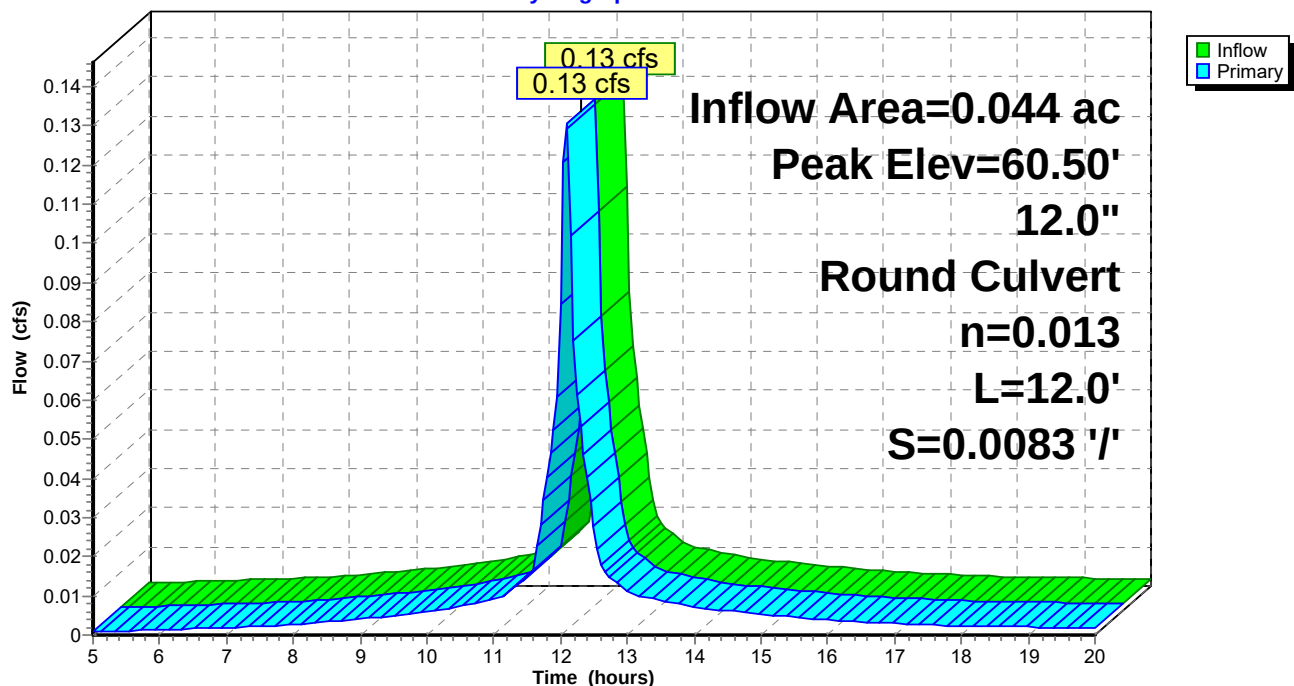
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.30' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.30' / 60.20' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.13 cfs @ 12.09 hrs HW=60.50' (Free Discharge)

1=Culvert (Barrel Controls 0.13 cfs @ 1.71 fps)

### Pond 31P: CB 51

Hydrograph



**Summary for Pond 32P: CB 52**

Inflow Area = 0.225 ac, 78.85% Impervious, Inflow Depth > 2.26" for 2-Year event  
 Inflow = 0.60 cfs @ 12.09 hrs, Volume= 0.043 af  
 Outflow = 0.60 cfs @ 12.09 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.60 cfs @ 12.09 hrs, Volume= 0.043 af  
 Routed to Pond 34P : DMH 36

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.77' @ 12.09 hrs

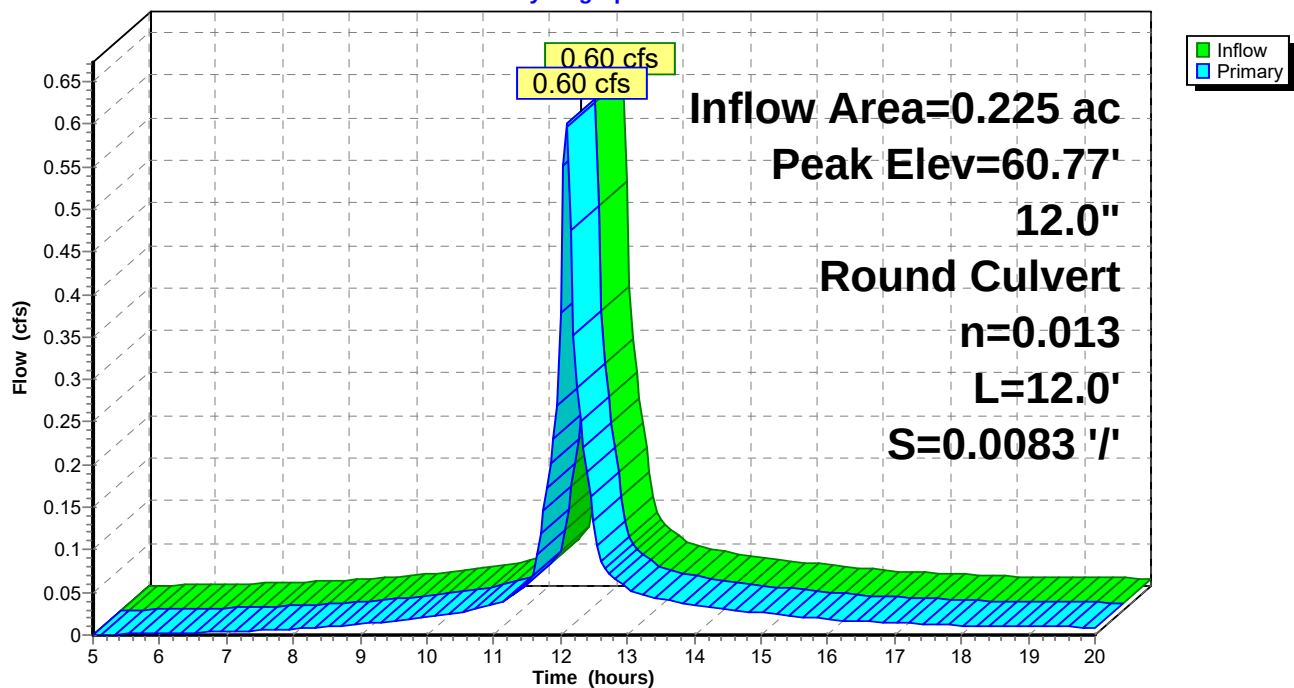
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.30' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.30' / 60.20' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.59 cfs @ 12.09 hrs HW=60.77' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 0.59 cfs @ 2.40 fps)

**Pond 32P: CB 52**

Hydrograph



### Summary for Pond 33P: CB 53

Inflow Area = 0.044 ac, 100.00% Impervious, Inflow Depth > 2.73" for 2-Year event  
 Inflow = 0.13 cfs @ 12.09 hrs, Volume= 0.010 af  
 Outflow = 0.13 cfs @ 12.09 hrs, Volume= 0.010 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.13 cfs @ 12.09 hrs, Volume= 0.010 af  
 Routed to Pond 35P : DMH 37

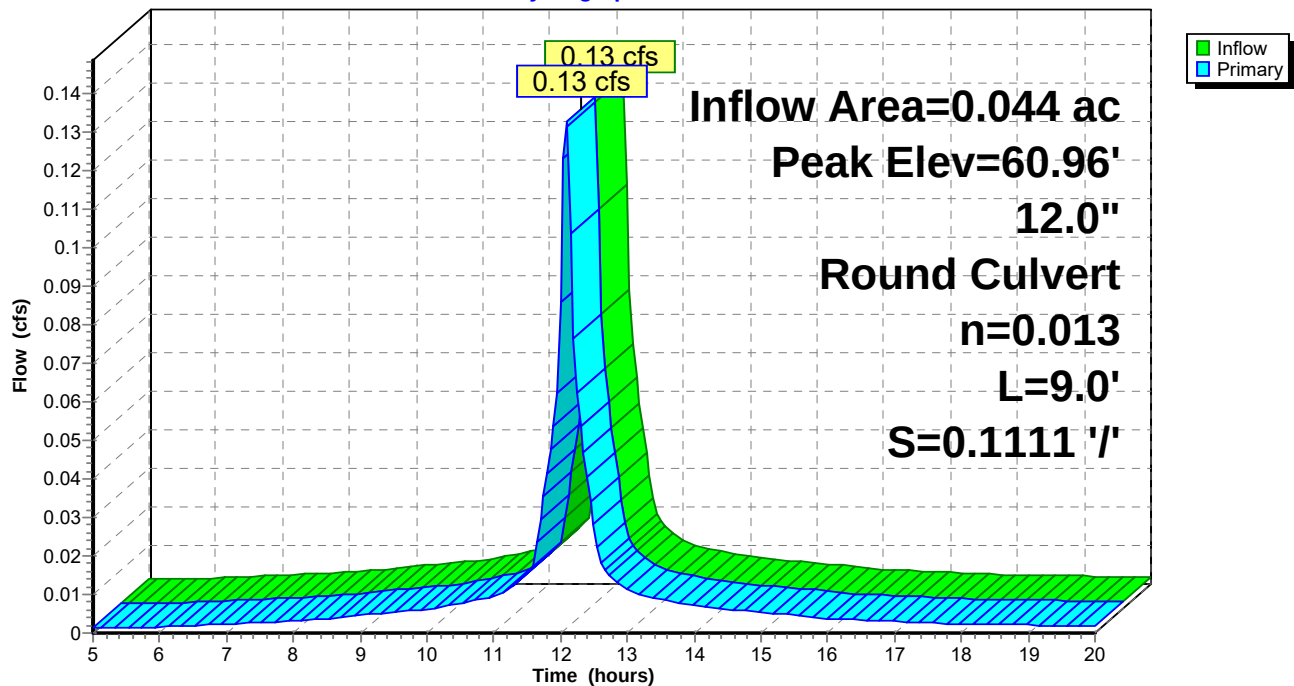
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.96' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.76' | <b>12.0" Round Culvert</b><br>L= 9.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.76' / 59.76' S= 0.1111 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.13 cfs @ 12.09 hrs HW=60.96' (Free Discharge)  
 1=Culvert (Inlet Controls 0.13 cfs @ 1.19 fps)

### Pond 33P: CB 53

Hydrograph





### Summary for Pond 34P: DMH 36

Inflow Area = 0.270 ac, 81.82% Impervious, Inflow Depth > 2.33" for 2-Year event  
 Inflow = 0.73 cfs @ 12.09 hrs, Volume= 0.052 af  
 Outflow = 0.73 cfs @ 12.09 hrs, Volume= 0.052 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.73 cfs @ 12.09 hrs, Volume= 0.052 af  
 Routed to Pond 35P : DMH 37

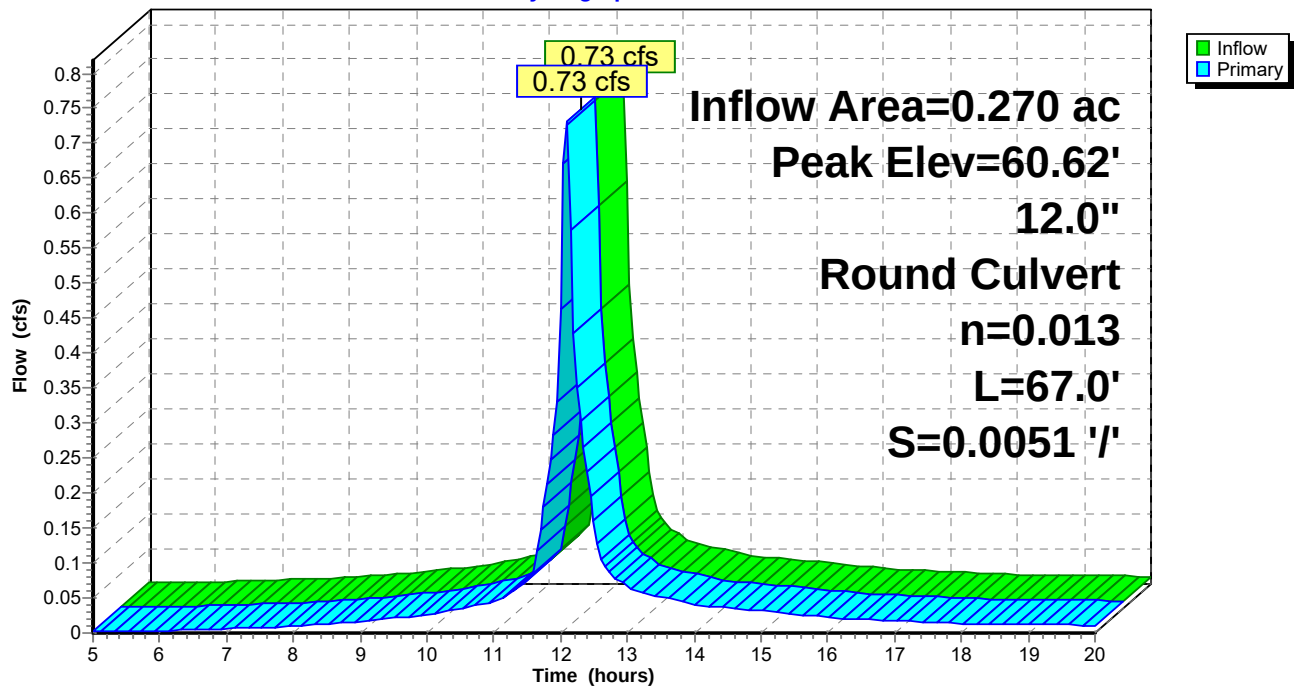
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.62' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.10' | <b>12.0" Round Culvert</b><br>L= 67.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.10' / 59.76' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.71 cfs @ 12.09 hrs HW=60.61' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.71 cfs @ 2.56 fps)

### Pond 34P: DMH 36

Hydrograph



### Summary for Pond 35P: DMH 37

Inflow Area = 0.314 ac, 84.39% Impervious, Inflow Depth > 2.38" for 2-Year event  
 Inflow = 0.86 cfs @ 12.09 hrs, Volume= 0.062 af  
 Outflow = 0.86 cfs @ 12.09 hrs, Volume= 0.062 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.86 cfs @ 12.09 hrs, Volume= 0.062 af  
 Routed to Pond 37P : DMH 38

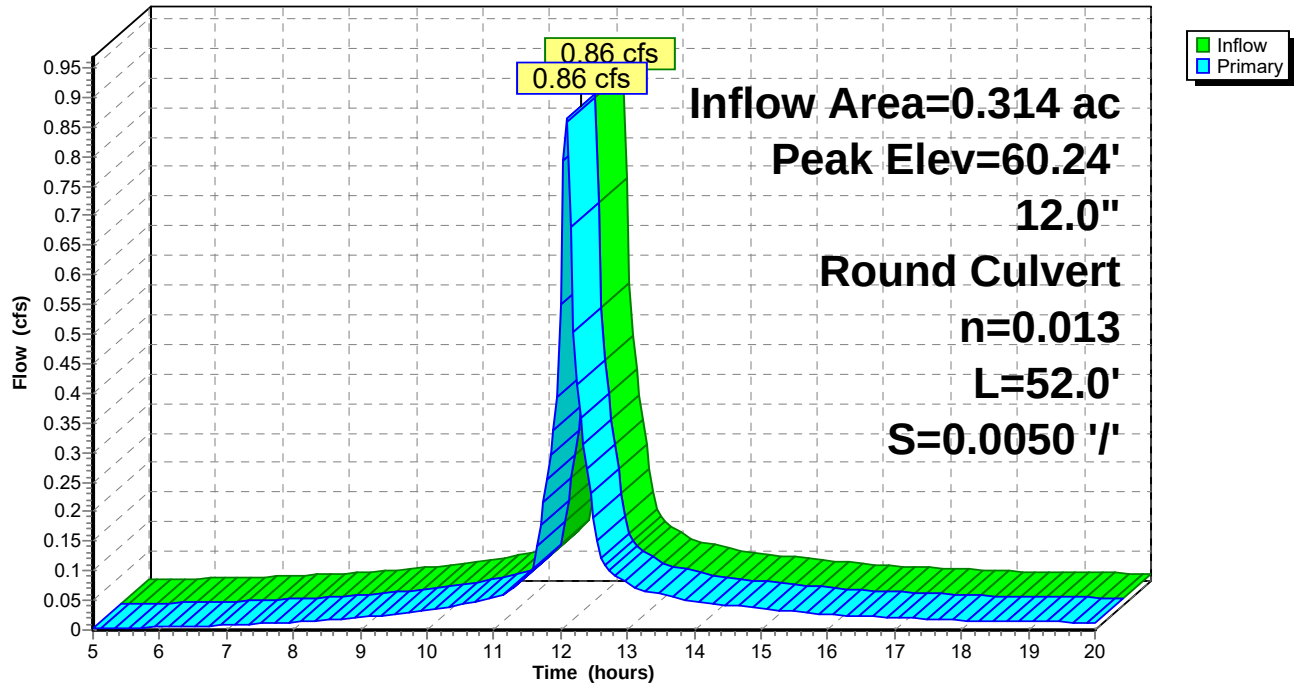
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.24' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.66' | <b>12.0" Round Culvert</b><br>L= 52.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.66' / 59.40' S= 0.0050 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.84 cfs @ 12.09 hrs HW=60.23' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.84 cfs @ 2.62 fps)

### Pond 35P: DMH 37

Hydrograph



**Summary for Pond 36P: CB 54**

Inflow Area = 0.200 ac, 94.53% Impervious, Inflow Depth > 2.64" for 2-Year event  
 Inflow = 0.59 cfs @ 12.09 hrs, Volume= 0.044 af  
 Outflow = 0.59 cfs @ 12.09 hrs, Volume= 0.044 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.59 cfs @ 12.09 hrs, Volume= 0.044 af  
 Routed to Pond 37P : DMH 38

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.64' @ 12.09 hrs

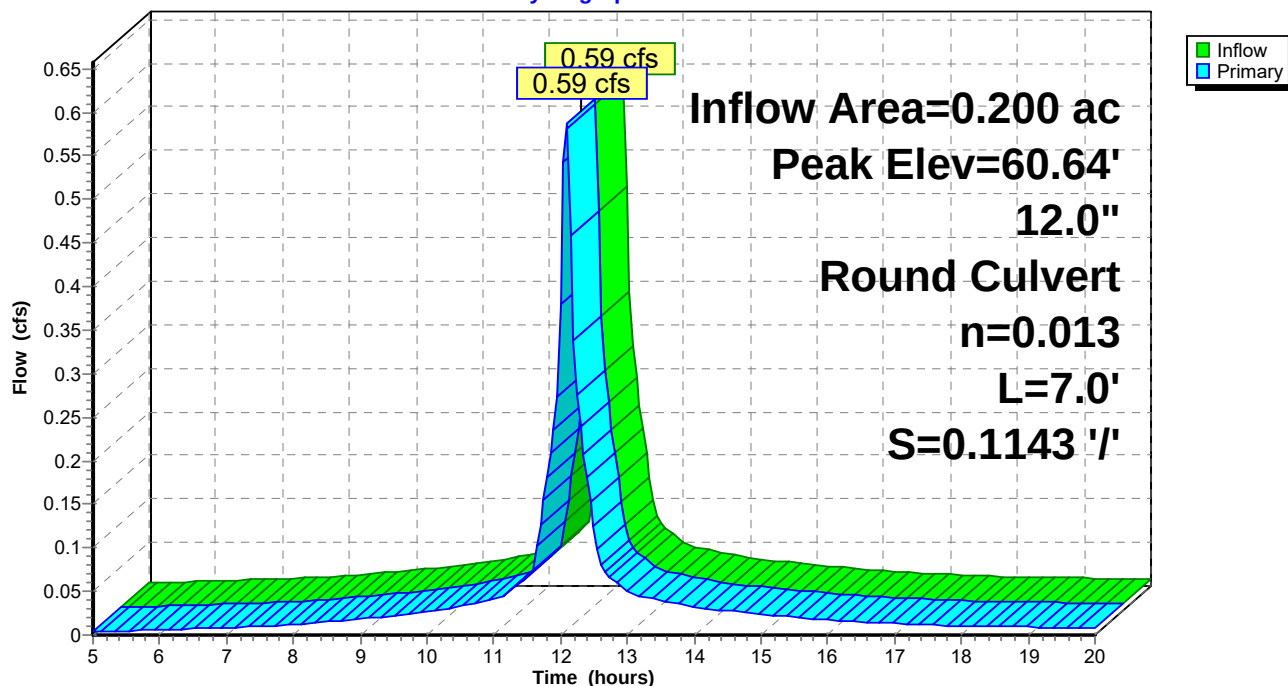
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.20' | <b>12.0" Round Culvert</b><br>L= 7.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.20' / 59.40' S= 0.1143 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.57 cfs @ 12.09 hrs HW=60.63' (Free Discharge)

↑**1=Culvert** (Inlet Controls 0.57 cfs @ 1.76 fps)

**Pond 36P: CB 54**

Hydrograph



**Summary for Pond 37P: DMH 38**

Inflow Area = 0.514 ac, 88.33% Impervious, Inflow Depth > 2.48" for 2-Year event  
 Inflow = 1.45 cfs @ 12.09 hrs, Volume= 0.106 af  
 Outflow = 1.45 cfs @ 12.09 hrs, Volume= 0.106 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.45 cfs @ 12.09 hrs, Volume= 0.106 af  
 Routed to Pond 38P : DMH 39

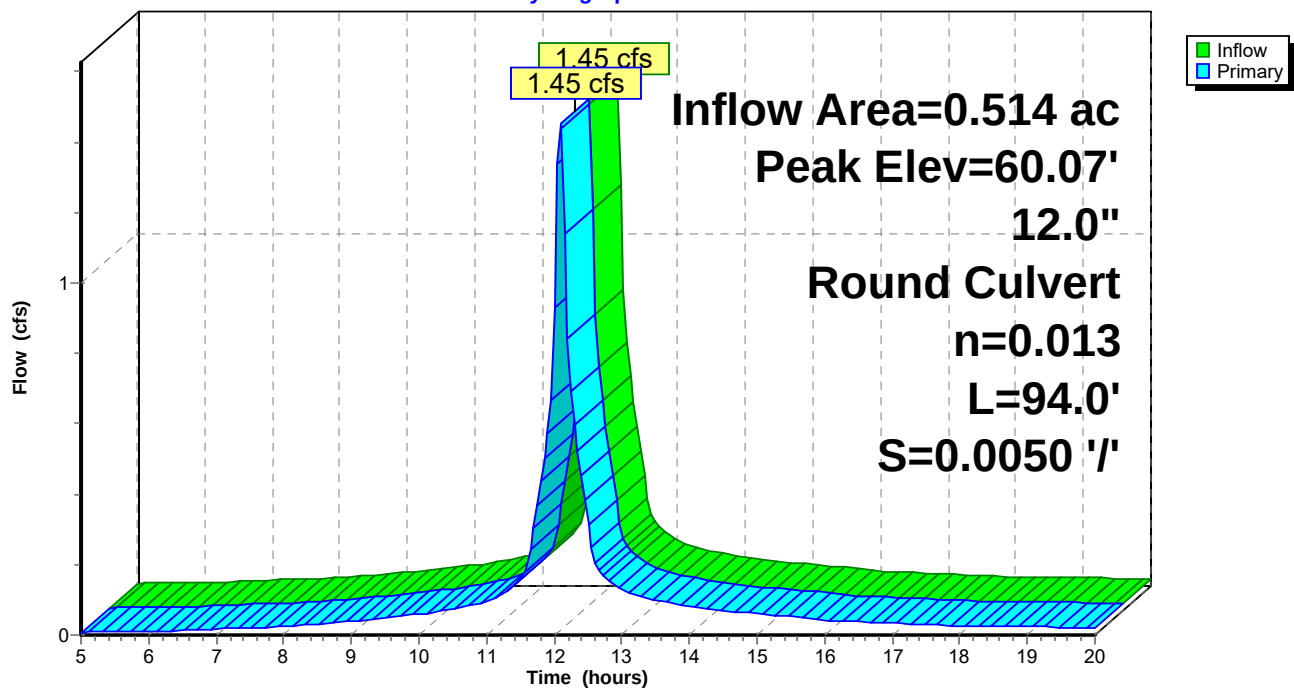
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.07' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.30' | <b>12.0" Round Culvert</b><br>L= 94.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.30' / 58.83' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.41 cfs @ 12.09 hrs HW=60.06' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 1.41 cfs @ 3.05 fps)

**Pond 37P: DMH 38****Hydrograph**

### Summary for Pond 38P: DMH 39

Inflow Area = 2.170 ac, 80.49% Impervious, Inflow Depth > 2.31" for 2-Year event  
 Inflow = 5.81 cfs @ 12.09 hrs, Volume= 0.417 af  
 Outflow = 5.81 cfs @ 12.09 hrs, Volume= 0.417 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.81 cfs @ 12.09 hrs, Volume= 0.417 af  
 Routed to Pond 15P : Inf. Basin 5

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 59.93' @ 12.09 hrs

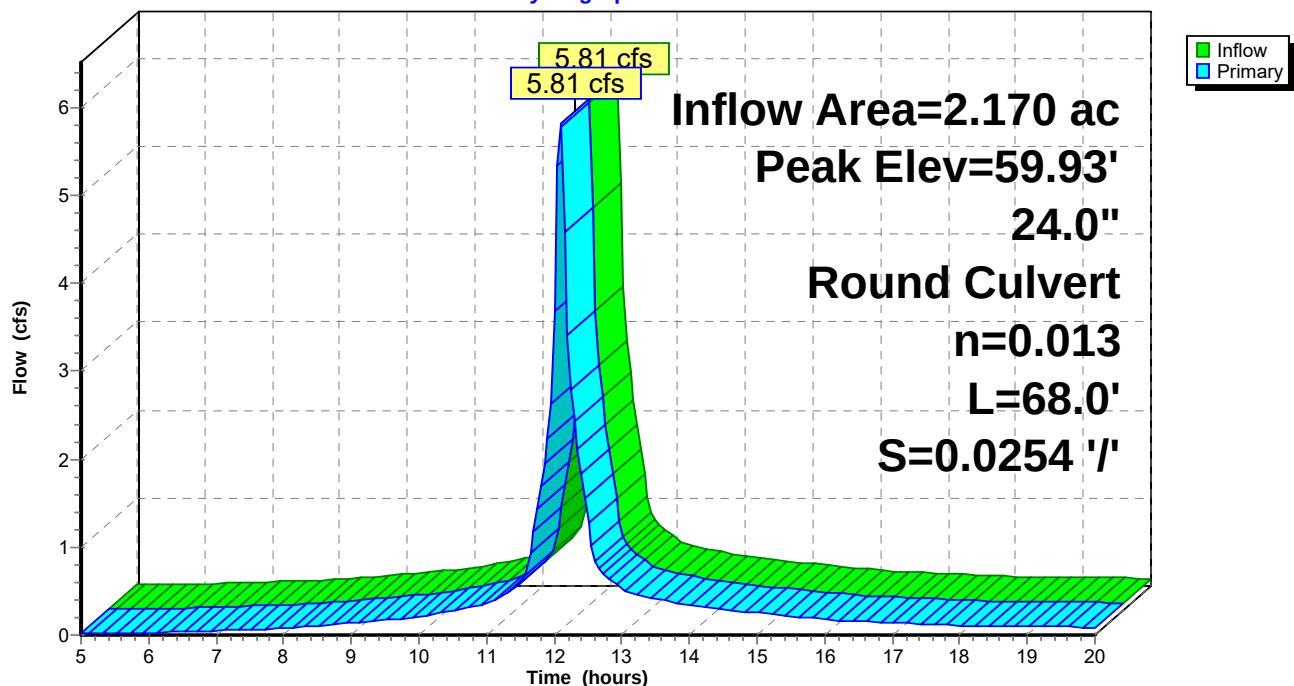
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.73' | <b>24.0" Round Culvert</b><br>L= 68.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.73' / 57.00' S= 0.0254 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=5.67 cfs @ 12.09 hrs HW=59.91' (Free Discharge)

↑**1=Culvert** (Inlet Controls 5.67 cfs @ 2.93 fps)

### Pond 38P: DMH 39

Hydrograph



### Summary for Pond 41P: CB 49

Inflow Area = 0.022 ac, 100.00% Impervious, Inflow Depth > 2.73" for 2-Year event  
 Inflow = 0.07 cfs @ 12.09 hrs, Volume= 0.005 af  
 Outflow = 0.07 cfs @ 12.09 hrs, Volume= 0.005 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.07 cfs @ 12.09 hrs, Volume= 0.005 af  
 Routed to Pond 43P : DMH 35

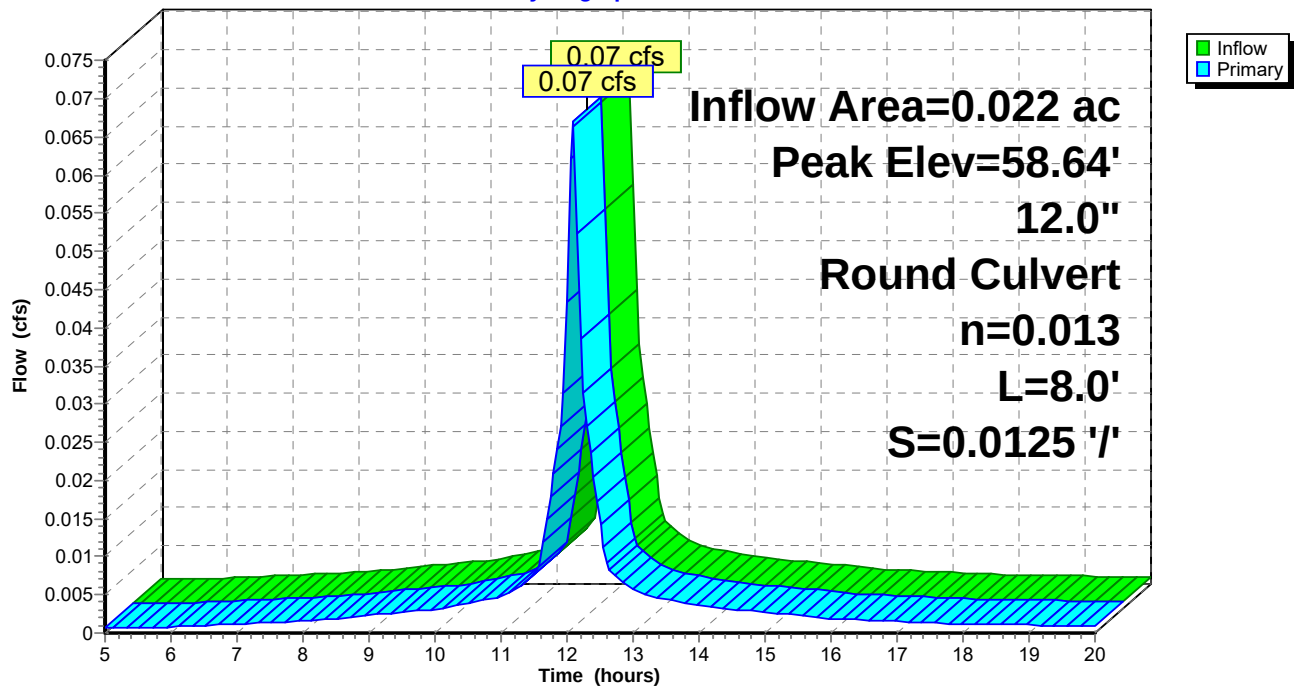
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.64' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.50' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.50' / 58.40' S= 0.0125 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.07 cfs @ 12.09 hrs HW=58.64' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.07 cfs @ 1.00 fps)

### Pond 41P: CB 49

Hydrograph



**Summary for Pond 42P: CB 50**

Inflow Area = 0.182 ac, 66.96% Impervious, Inflow Depth > 1.99" for 2-Year event  
 Inflow = 0.44 cfs @ 12.09 hrs, Volume= 0.030 af  
 Outflow = 0.44 cfs @ 12.09 hrs, Volume= 0.030 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.44 cfs @ 12.09 hrs, Volume= 0.030 af  
 Routed to Pond 43P : DMH 35

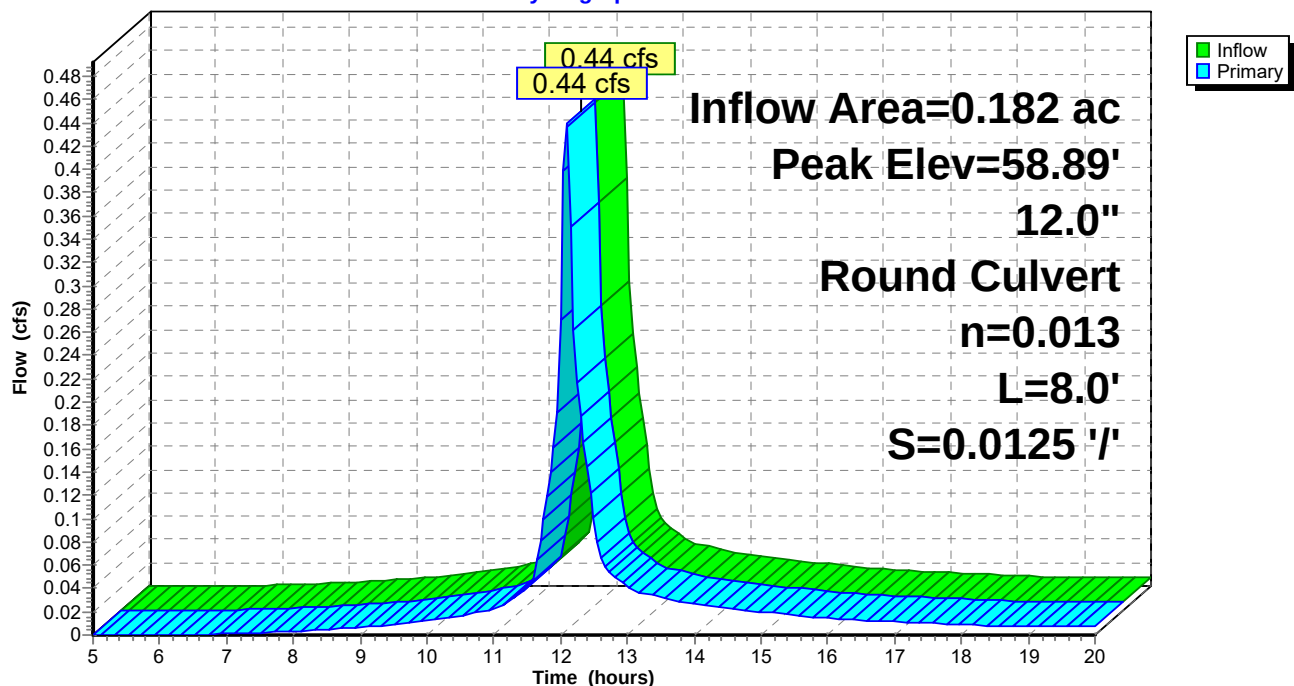
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.89' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.50' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.50' / 58.40' S= 0.0125 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.43 cfs @ 12.09 hrs HW=58.88' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.43 cfs @ 2.32 fps)

**Pond 42P: CB 50**

Hydrograph



### Summary for Pond 43P: DMH 35

Inflow Area = 0.205 ac, 70.58% Impervious, Inflow Depth > 2.08" for 2-Year event  
 Inflow = 0.51 cfs @ 12.09 hrs, Volume= 0.035 af  
 Outflow = 0.51 cfs @ 12.09 hrs, Volume= 0.035 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.51 cfs @ 12.09 hrs, Volume= 0.035 af  
 Routed to Pond 206P : DMH 34

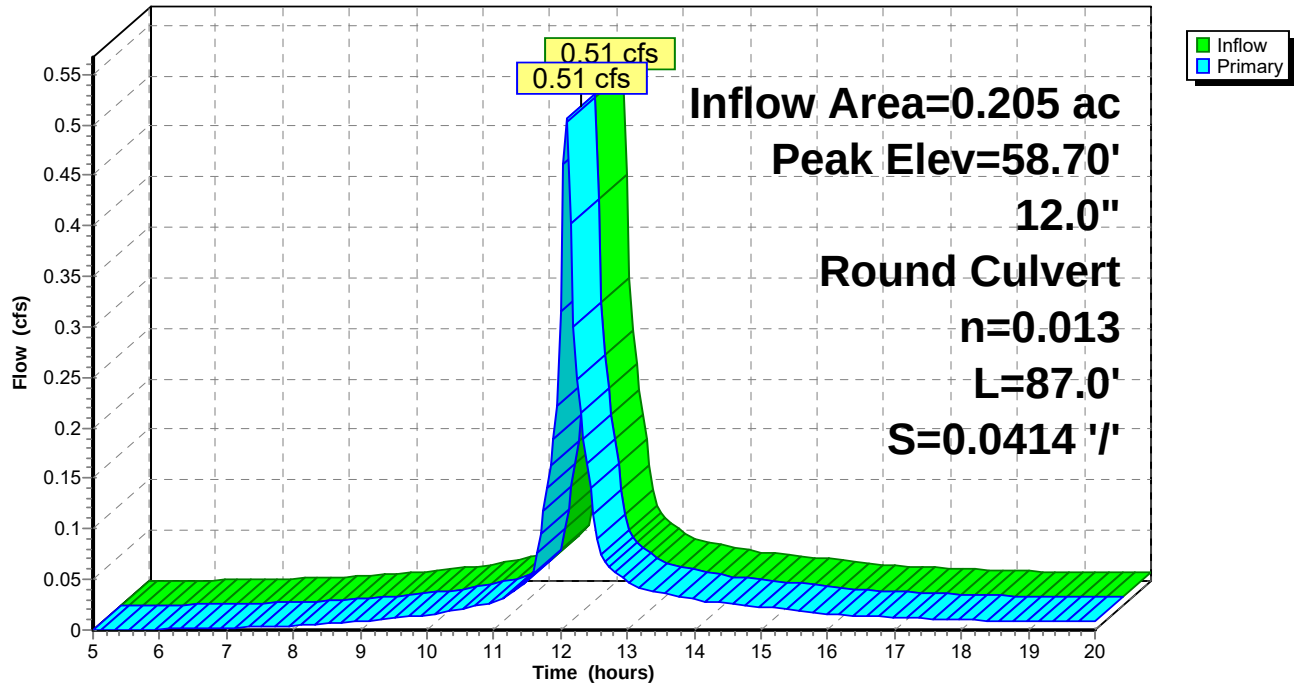
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.70' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.30' | <b>12.0" Round Culvert</b><br>L= 87.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.30' / 54.70' S= 0.0414 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.49 cfs @ 12.09 hrs HW=58.70' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.49 cfs @ 1.70 fps)

### Pond 43P: DMH 35

#### Hydrograph





### Summary for Pond 46P: CB 48

Inflow Area = 0.352 ac, 70.58% Impervious, Inflow Depth > 1.46" for 2-Year event  
 Inflow = 0.63 cfs @ 12.09 hrs, Volume= 0.043 af  
 Outflow = 0.63 cfs @ 12.09 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.63 cfs @ 12.09 hrs, Volume= 0.043 af  
 Routed to Pond 48P : DMH 33

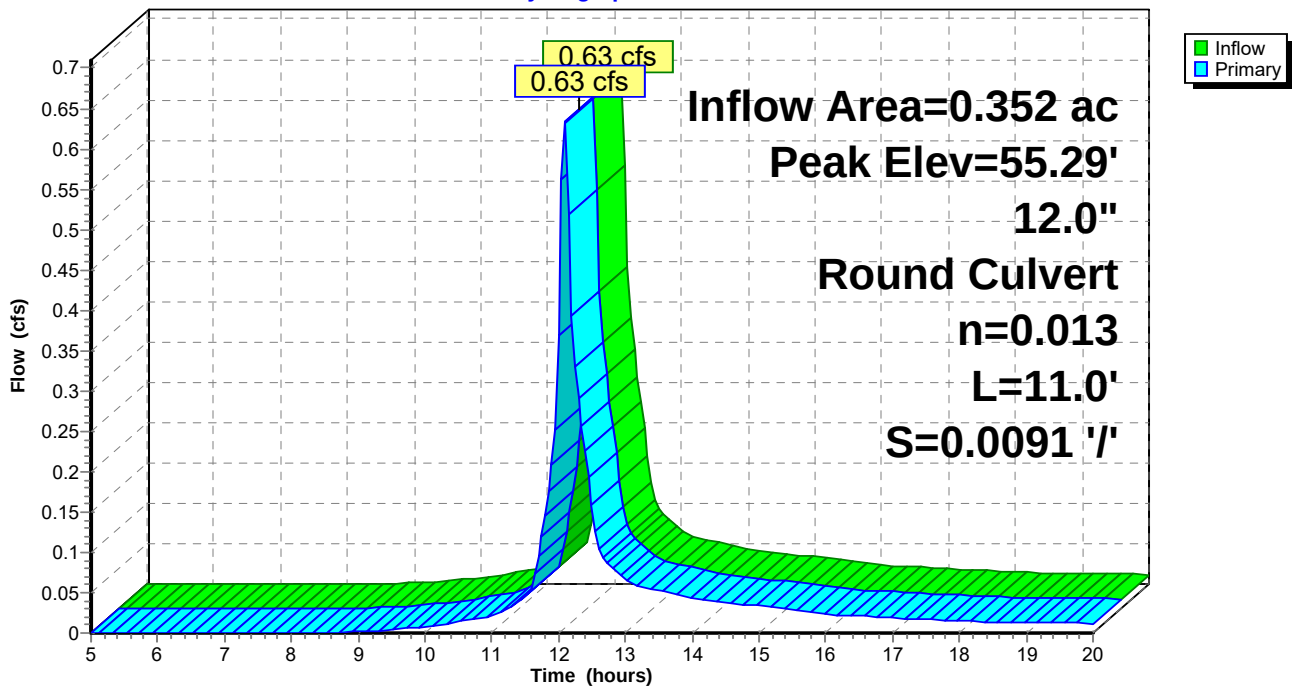
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 55.29' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.80' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.80' / 54.70' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.62 cfs @ 12.09 hrs HW=55.28' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.62 cfs @ 2.45 fps)

### Pond 46P: CB 48

Hydrograph



### Summary for Pond 47P: CB 47

Inflow Area = 0.120 ac, 97.54% Impervious, Inflow Depth > 2.64" for 2-Year event  
 Inflow = 0.35 cfs @ 12.09 hrs, Volume= 0.027 af  
 Outflow = 0.35 cfs @ 12.09 hrs, Volume= 0.027 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.35 cfs @ 12.09 hrs, Volume= 0.027 af  
 Routed to Pond 48P : DMH 33

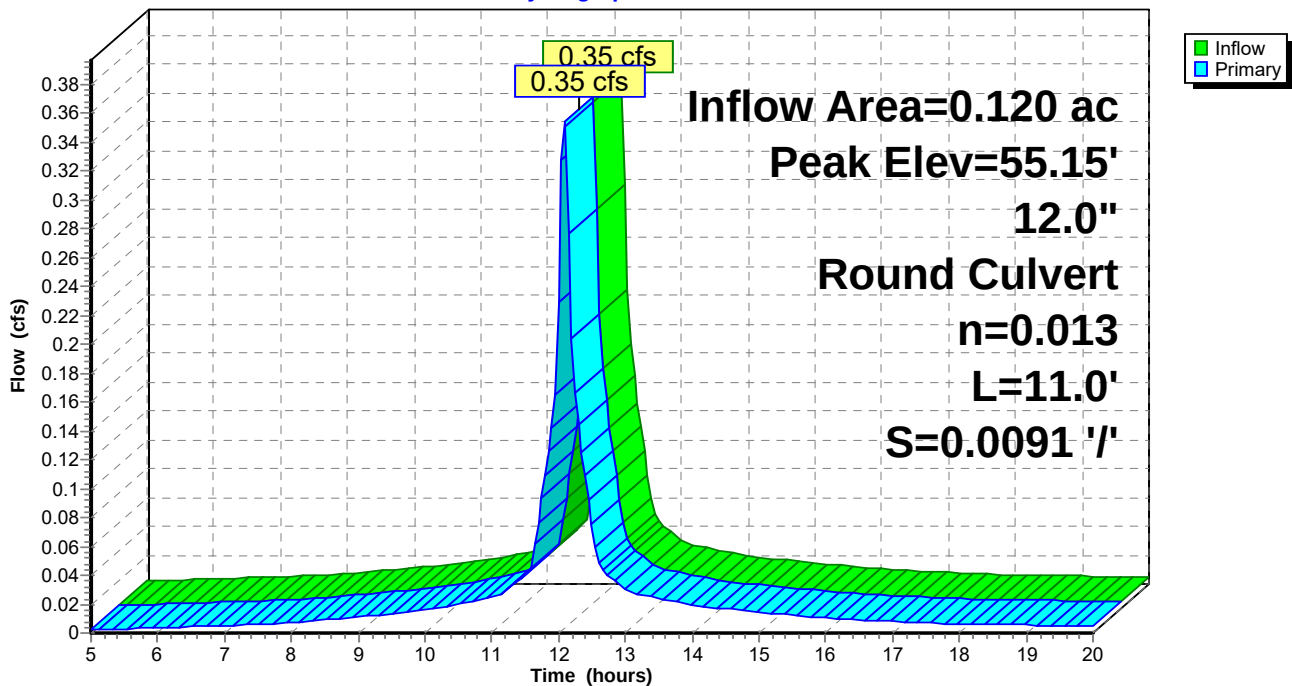
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 55.15' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.80' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.80' / 54.70' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.34 cfs @ 12.09 hrs HW=55.14' (Free Discharge)  
 1=Culvert (Barrel Controls 0.34 cfs @ 2.15 fps)

### Pond 47P: CB 47

Hydrograph



**Summary for Pond 48P: DMH 33**

Inflow Area = 0.472 ac, 77.45% Impervious, Inflow Depth > 1.76" for 2-Year event  
 Inflow = 0.99 cfs @ 12.09 hrs, Volume= 0.069 af  
 Outflow = 0.99 cfs @ 12.09 hrs, Volume= 0.069 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.99 cfs @ 12.09 hrs, Volume= 0.069 af  
 Routed to Pond 49P : Sub. Inf. 4

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 55.21' @ 12.09 hrs

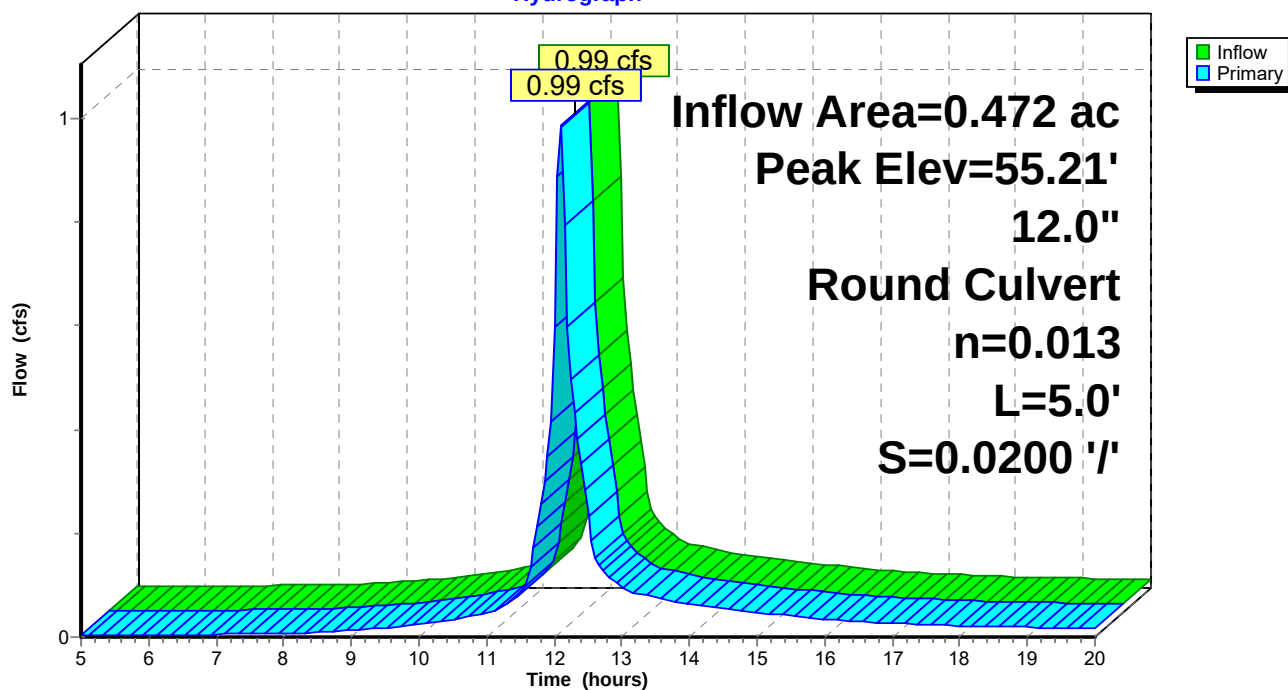
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.60' | <b>12.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0200 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.97 cfs @ 12.09 hrs HW=55.20' (Free Discharge)

1=Culvert (Barrel Controls 0.97 cfs @ 2.79 fps)

**Pond 48P: DMH 33**

Hydrograph



**Summary for Pond 49P: Sub. Inf. 4**

Inflow Area = 1.242 ac, 70.79% Impervious, Inflow Depth > 1.86" for 2-Year event  
 Inflow = 2.78 cfs @ 12.09 hrs, Volume= 0.193 af  
 Outflow = 0.14 cfs @ 14.84 hrs, Volume= 0.098 af, Atten= 95%, Lag= 164.8 min  
 Discarded = 0.12 cfs @ 14.84 hrs, Volume= 0.096 af  
 Primary = 0.02 cfs @ 14.84 hrs, Volume= 0.003 af  
 Routed to Link 59L : DP 1

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.04' @ 14.84 hrs Surf.Area= 0.074 ac Storage= 0.113 af

Plug-Flow detention time= 192.3 min calculated for 0.098 af (51% of inflow)  
 Center-of-Mass det. time= 108.1 min ( 884.5 - 776.4 )

| Volume   | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                        |
|----------|--------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A      | 54.00' | 0.045 af      | <b>55.25'W x 58.58'L x 3.00'H Field A</b><br>0.223 af Overall - 0.111 af Embedded = 0.112 af x 40.0% Voids                                                                                                                                                 |
| #2A      | 54.50' | 0.111 af      | <b>ADS StormTech SC-740 b +Cap x 104 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>104 Chambers in 13 Rows<br>Cap Storage= 2.7 cf x 2 x 13 rows = 69.0 cf |
| 0.156 af |        |               | Total Available Storage                                                                                                                                                                                                                                    |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 54.00' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 50.00'                                                                                                              |
| #2     | Primary   | 54.00' | <b>12.0" Round Culvert</b><br>L= 76.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.00' / 51.50' S= 0.0329 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 56.00' | <b>4.0" Vert. Orifice/Grate X 3.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                             |
| #4     | Device 2  | 56.80' | <b>4.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b><br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32                                                               |
| #5     | Primary   | 54.00' | <b>12.0" Round Culvert</b><br>L= 76.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.00' / 51.00' S= 0.0395 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #6     | Device 5  | 56.80' | <b>4.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b><br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32                                                               |
| #7     | Device 5  | 56.00' | <b>4.0" Vert. Orifice/Grate X 3.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                             |

**Discarded OutFlow** Max=0.12 cfs @ 14.84 hrs HW=56.04' (Free Discharge)

1=Exfiltration ( Controls 0.12 cfs)

**Primary OutFlow** Max=0.02 cfs @ 14.84 hrs HW=56.04' (Free Discharge)

2=Culvert (Passes 0.01 cfs of 3.70 cfs potential flow)

3=Orifice/Grate (Orifice Controls 0.01 cfs @ 0.66 fps)

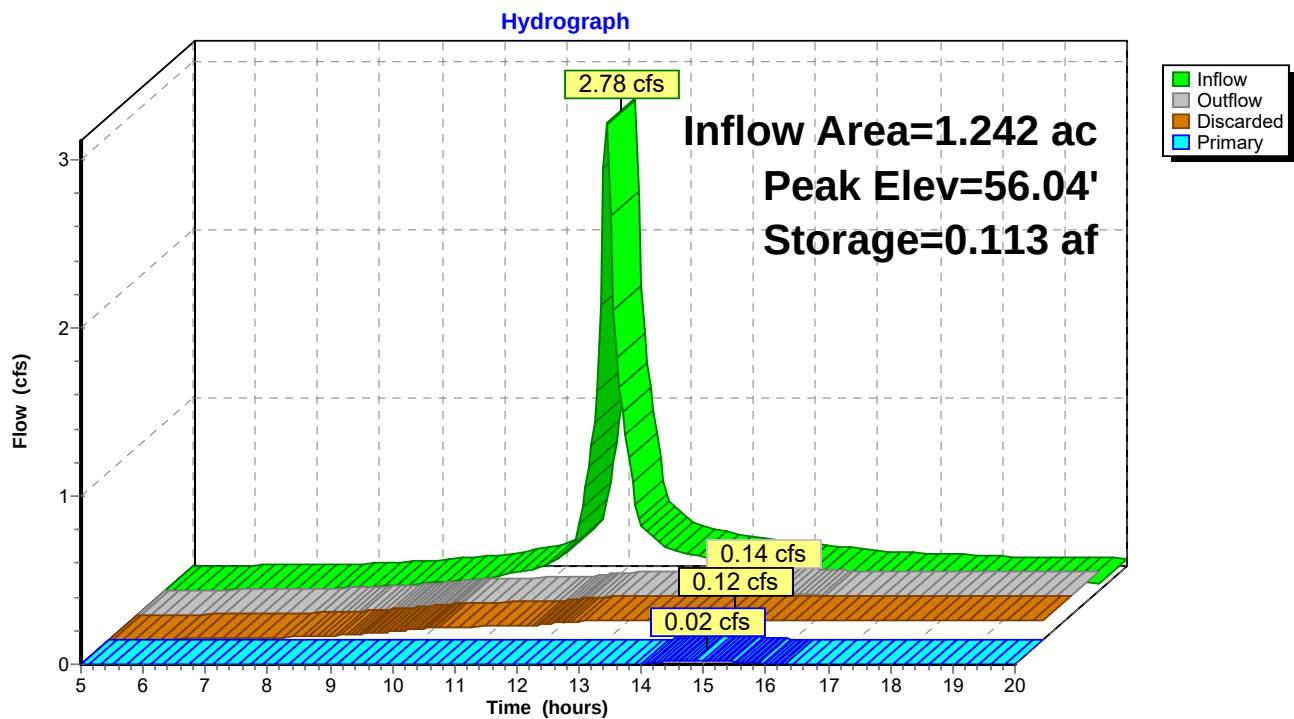
4=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

5=Culvert (Passes 0.01 cfs of 3.70 cfs potential flow)

6=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

7=Orifice/Grate (Orifice Controls 0.01 cfs @ 0.66 fps)

### Pond 49P: Sub. Inf. 4



**Summary for Pond 52P: CB 20**

Inflow Area = 0.321 ac, 29.26% Impervious, Inflow Depth > 0.22" for 2-Year event  
 Inflow = 0.04 cfs @ 12.32 hrs, Volume= 0.006 af  
 Outflow = 0.04 cfs @ 12.32 hrs, Volume= 0.006 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.04 cfs @ 12.32 hrs, Volume= 0.006 af  
 Routed to Pond 54P : DMH 15

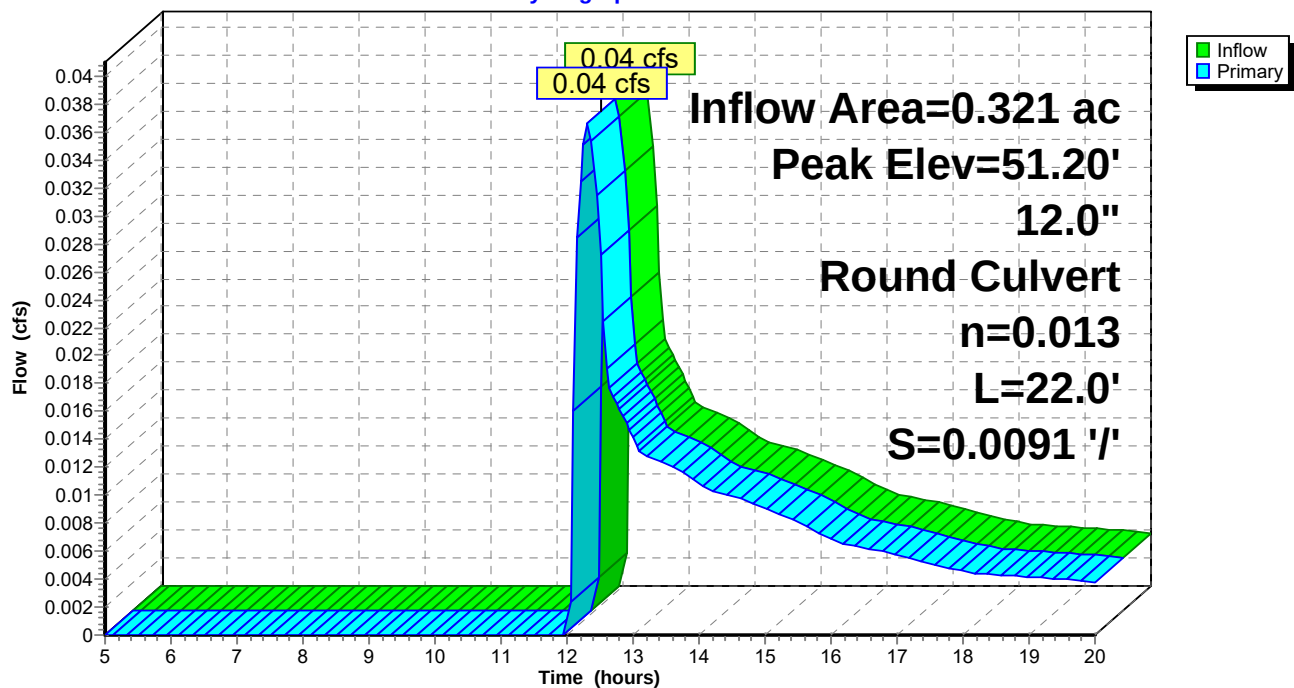
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 51.20' @ 12.32 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.10' | <b>12.0" Round Culvert</b><br>L= 22.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.10' / 50.90' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.04 cfs @ 12.32 hrs HW=51.20' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 0.04 cfs @ 0.86 fps)

**Pond 52P: CB 20****Hydrograph**

**Summary for Pond 53P: CB 21**

Inflow Area = 0.525 ac, 65.45% Impervious, Inflow Depth > 1.14" for 2-Year event  
 Inflow = 0.73 cfs @ 12.10 hrs, Volume= 0.050 af  
 Outflow = 0.73 cfs @ 12.10 hrs, Volume= 0.050 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.73 cfs @ 12.10 hrs, Volume= 0.050 af  
 Routed to Pond 54P : DMH 15

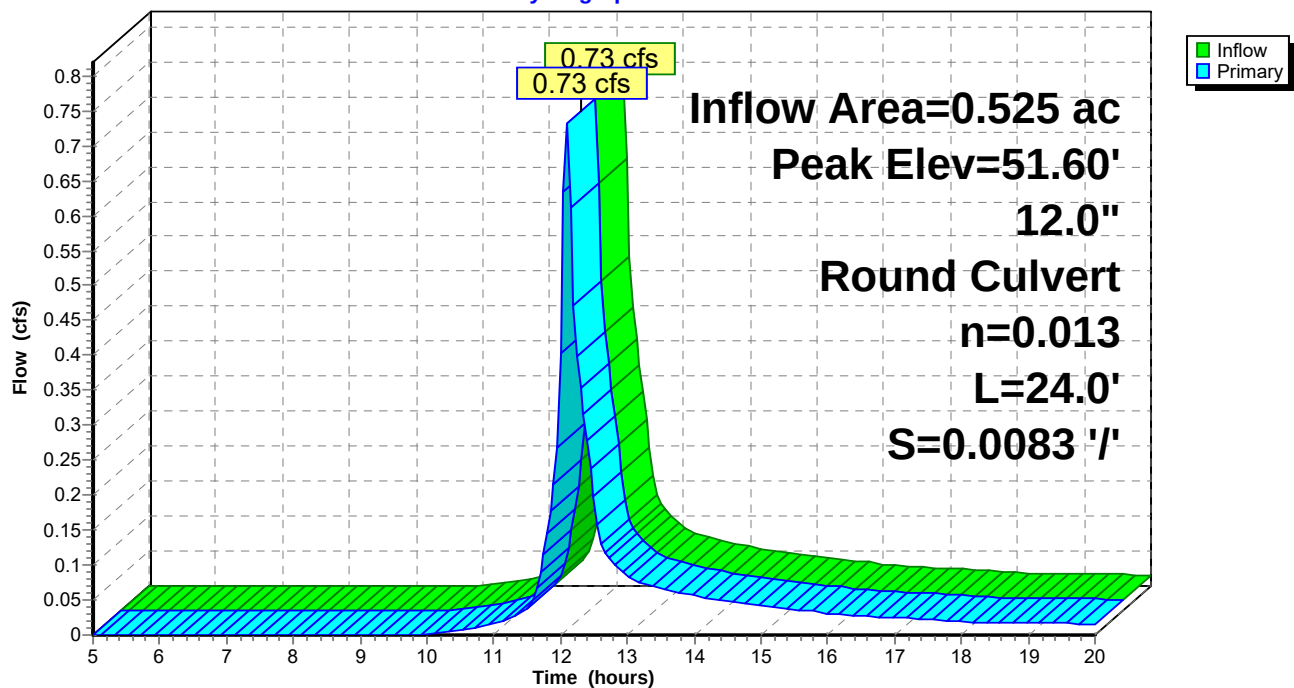
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.60' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.10' | <b>12.0" Round Culvert</b><br>L= 24.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.10' / 50.90' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.73 cfs @ 12.10 hrs HW=51.60' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.73 cfs @ 2.69 fps)

**Pond 53P: CB 21**

Hydrograph



**Summary for Pond 54P: DMH 15**

Inflow Area = 0.846 ac, 51.73% Impervious, Inflow Depth > 0.79" for 2-Year event  
 Inflow = 0.75 cfs @ 12.10 hrs, Volume= 0.056 af  
 Outflow = 0.75 cfs @ 12.10 hrs, Volume= 0.056 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.75 cfs @ 12.10 hrs, Volume= 0.056 af  
 Routed to Pond 55P : DMH 16

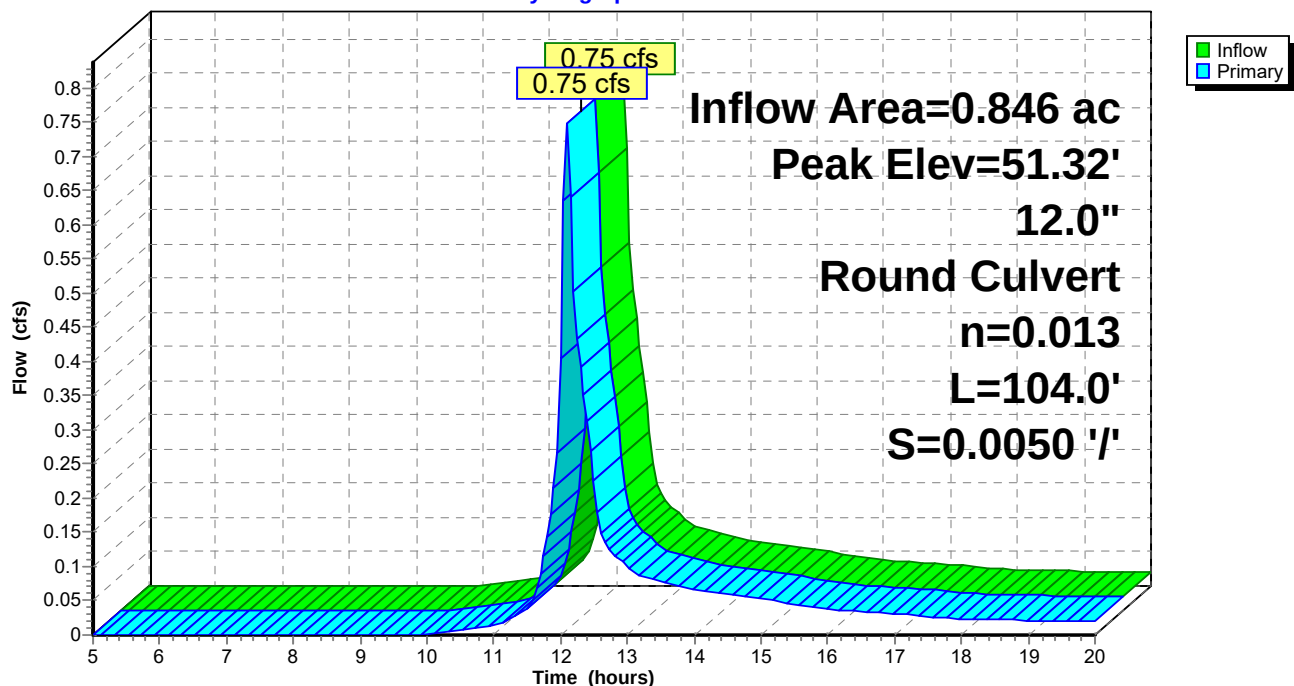
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.32' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.80' | <b>12.0" Round Culvert</b><br>L= 104.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.80' / 50.28' S= 0.0050 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.75 cfs @ 12.10 hrs HW=51.32' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.75 cfs @ 2.64 fps)

**Pond 54P: DMH 15**

Hydrograph





**Summary for Pond 55P: DMH 16**

Inflow Area = 0.846 ac, 51.73% Impervious, Inflow Depth > 0.79" for 2-Year event  
 Inflow = 0.75 cfs @ 12.10 hrs, Volume= 0.056 af  
 Outflow = 0.75 cfs @ 12.10 hrs, Volume= 0.056 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.75 cfs @ 12.10 hrs, Volume= 0.056 af  
 Routed to Pond 56P : Inf. Basin 4

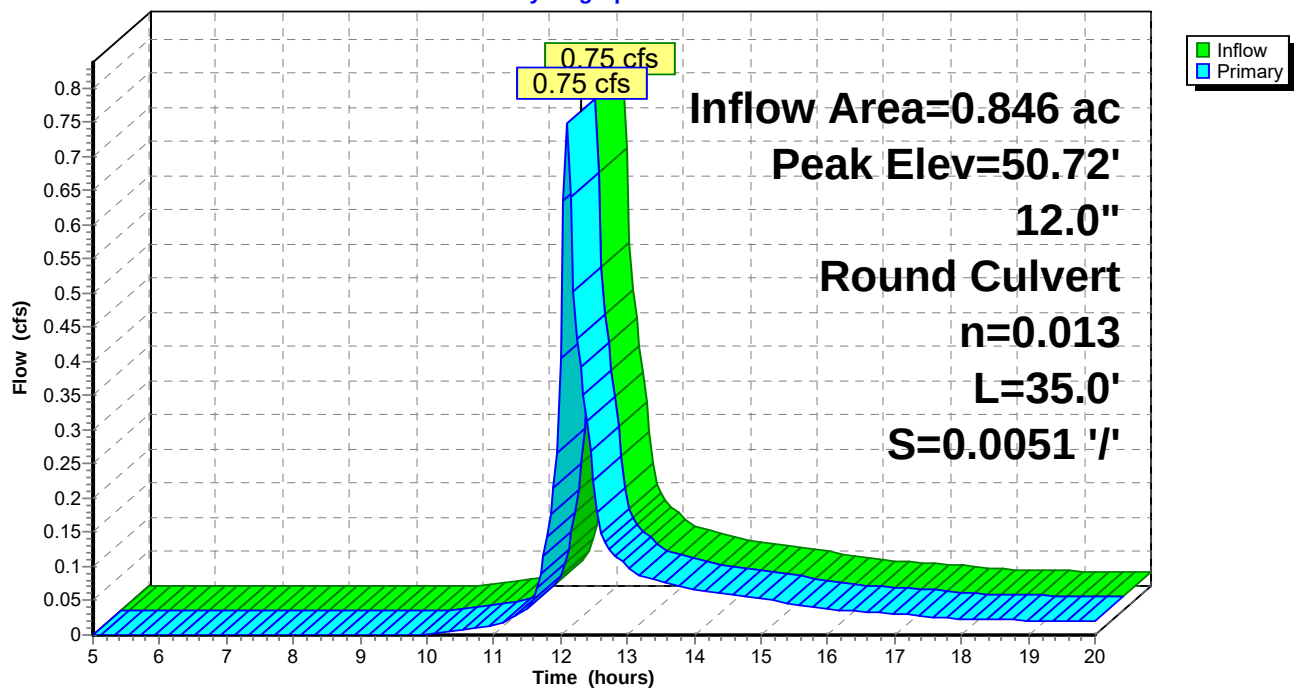
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.72' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.18' | <b>12.0" Round Culvert</b><br>L= 35.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.18' / 50.00' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.75 cfs @ 12.10 hrs HW=50.72' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.75 cfs @ 2.50 fps)

**Pond 55P: DMH 16**

Hydrograph



### Summary for Pond 56P: Inf. Basin 4

Inflow Area = 1.385 ac, 33.76% Impervious, Inflow Depth > 0.48" for 2-Year event  
 Inflow = 0.75 cfs @ 12.10 hrs, Volume= 0.056 af  
 Outflow = 0.31 cfs @ 12.40 hrs, Volume= 0.056 af, Atten= 59%, Lag= 18.3 min  
 Discarded = 0.31 cfs @ 12.40 hrs, Volume= 0.056 af  
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Link 59L : DP 1

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.33' @ 12.40 hrs Surf.Area= 1,415 sf Storage= 400 cf

Plug-Flow detention time= 9.3 min calculated for 0.056 af (100% of inflow)  
 Center-of-Mass det. time= 8.7 min ( 825.9 - 817.2 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 50.00' | 11,770 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 50.00               | 985                  | 0                         | 0                         |
| 51.00               | 2,275                | 1,630                     | 1,630                     |
| 52.00               | 2,983                | 2,629                     | 4,259                     |
| 53.00               | 3,742                | 3,363                     | 7,622                     |
| 54.00               | 4,554                | 4,148                     | 11,770                    |

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                                                                                   |
|--------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 50.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 48.00'                                                                                                                                                                              |
| #2     | Secondary | 53.50' | <b>6.0' long x 6.0' breadth Broad-Crested Rectangular Weir</b><br>Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00<br>2.50 3.00 3.50 4.00 4.50 5.00 5.50<br>Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65<br>2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83 |

**Discarded OutFlow** Max=0.31 cfs @ 12.40 hrs HW=50.33' (Free Discharge)

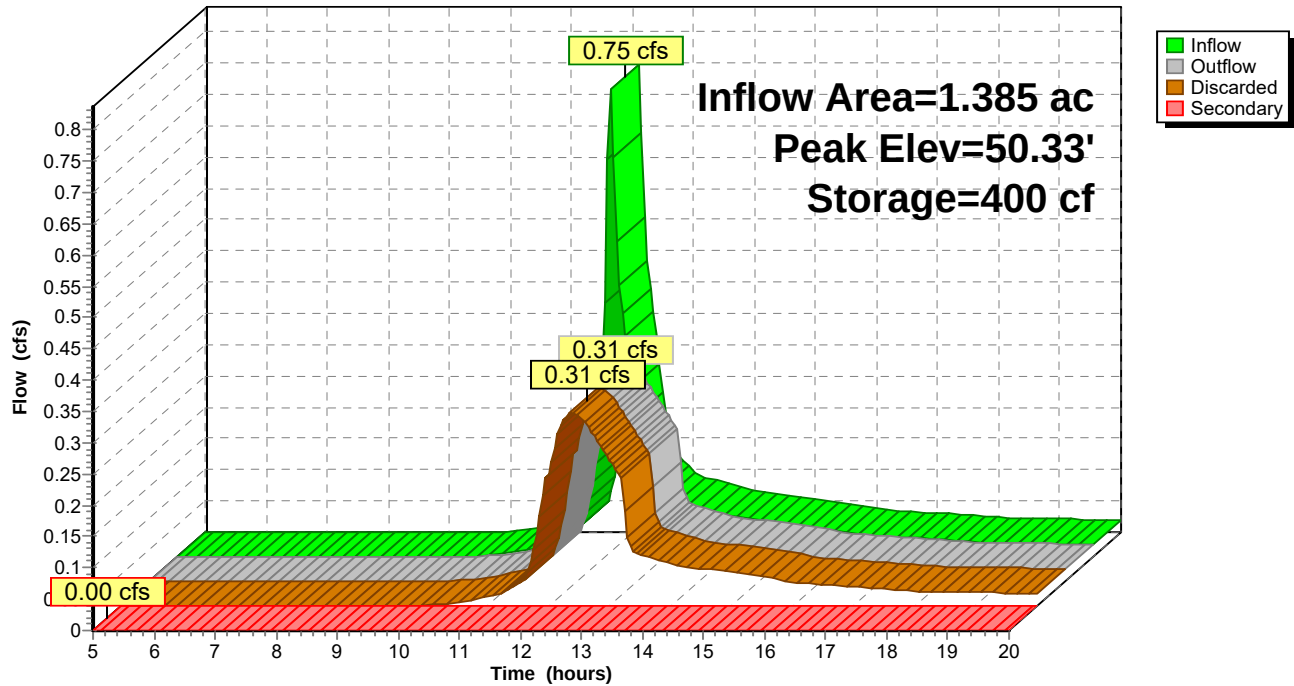
↑**1=Exfiltration** ( Controls 0.31 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=50.00' (Free Discharge)

↑**2=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)

**Pond 56P: Inf. Basin 4**

Hydrograph



### Summary for Pond 60P: Sub. Det. 1

Inflow Area = 1.994 ac, 68.75% Impervious, Inflow Depth > 2.02" for 2-Year event  
 Inflow = 4.86 cfs @ 12.09 hrs, Volume= 0.336 af  
 Outflow = 3.84 cfs @ 12.16 hrs, Volume= 0.251 af, Atten= 21%, Lag= 4.3 min  
 Primary = 3.84 cfs @ 12.16 hrs, Volume= 0.251 af  
 Routed to Pond 187P : Constructed Wetland 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.80' @ 12.16 hrs Surf.Area= 0.094 ac Storage= 0.116 af

Plug-Flow detention time= 107.4 min calculated for 0.250 af (74% of inflow)  
 Center-of-Mass det. time= 47.1 min ( 820.5 - 773.4 )

| Volume   | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                      |
|----------|--------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A      | 60.00' | 0.083 af      | <b>39.50'W x 103.30'L x 3.50'H Field A</b><br>0.328 af Overall - 0.119 af Embedded = 0.209 af x 40.0% Voids                                                                                                                                              |
| #2A      | 60.50' | 0.119 af      | <b>ADS StormTech SC-740 b +Cap x 112 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>112 Chambers in 8 Rows<br>Cap Storage= 2.7 cf x 2 x 8 rows = 42.5 cf |
| 0.203 af |        |               | Total Available Storage                                                                                                                                                                                                                                  |

Storage Group A created with Chamber Wizard

| Device | Routing  | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary  | 60.00' | <b>18.0" Round Culvert</b><br>L= 29.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.00' / 56.00' S= 0.1379 ' S= 0.1379 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |
| #2     | Device 1 | 60.50' | <b>1.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                                |
| #3     | Device 1 | 61.35' | <b>4.0' long Sharp-Crested Rectangular Weir</b> 2 End Contraction(s)                                                                                                                                                      |

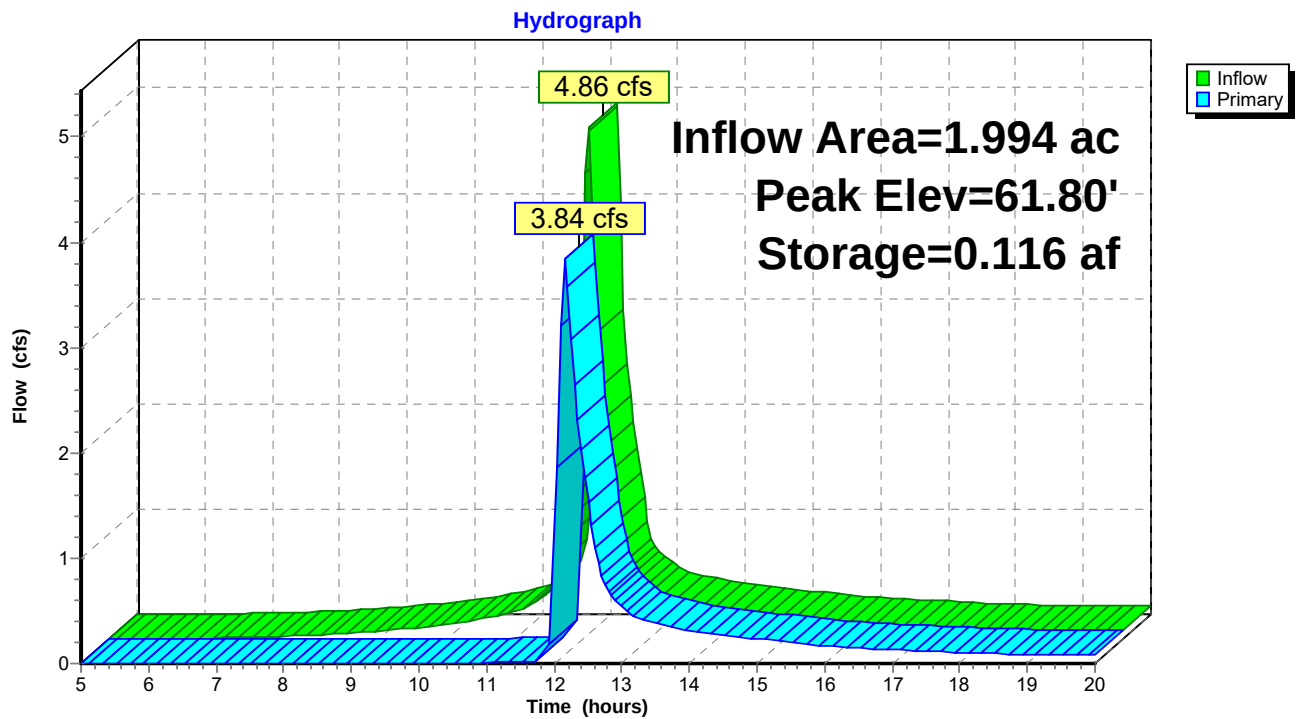
**Primary OutFlow** Max=3.76 cfs @ 12.16 hrs HW=61.79' (Free Discharge)

1=Culvert (Passes 3.76 cfs of 6.85 cfs potential flow)

2=Orifice/Grate (Orifice Controls 0.03 cfs @ 5.38 fps)

3=Sharp-Crested Rectangular Weir (Weir Controls 3.73 cfs @ 2.17 fps)

**Pond 60P: Sub. Det. 1**



### Summary for Pond 61P: CB 8

Inflow Area = 0.117 ac, 57.03% Impervious, Inflow Depth > 0.86" for 2-Year event  
 Inflow = 0.12 cfs @ 12.10 hrs, Volume= 0.008 af  
 Outflow = 0.12 cfs @ 12.10 hrs, Volume= 0.008 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.12 cfs @ 12.10 hrs, Volume= 0.008 af  
 Routed to Pond 171P : DMH 6

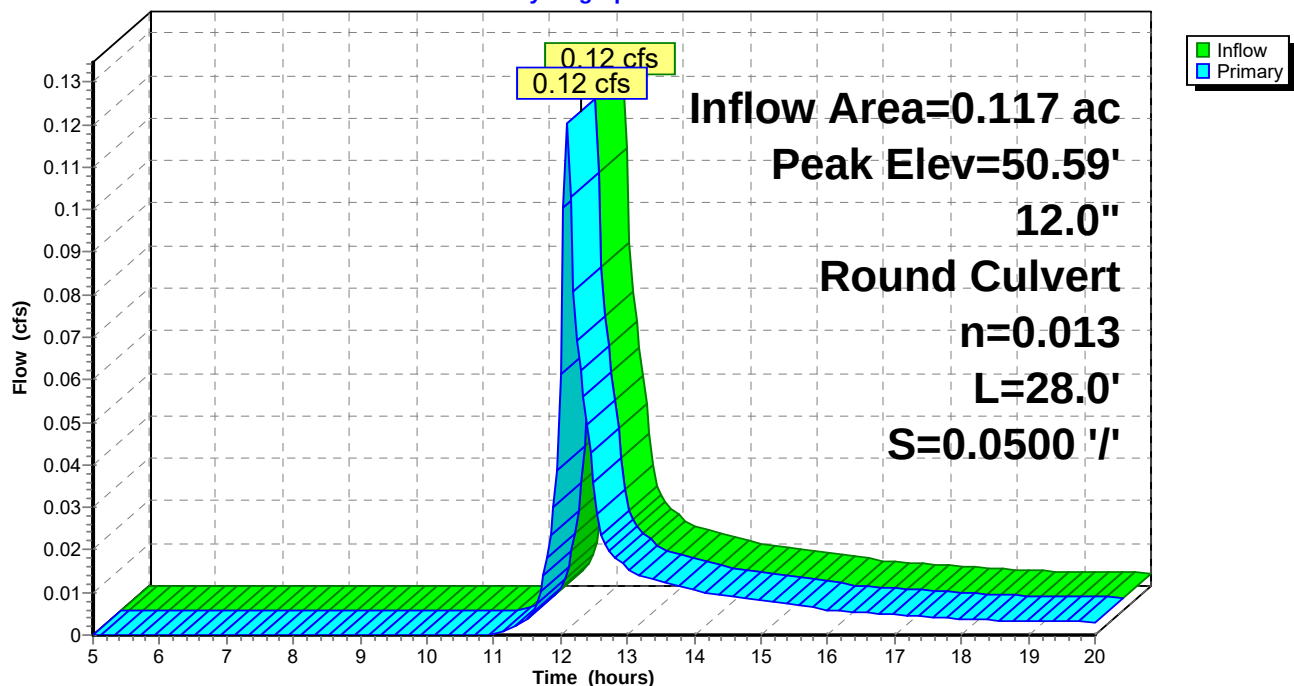
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.59' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.40' | <b>12.0" Round Culvert</b><br>L= 28.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.40' / 49.00' S= 0.0500 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.12 cfs @ 12.10 hrs HW=50.59' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.12 cfs @ 1.17 fps)

### Pond 61P: CB 8

Hydrograph



**Summary for Pond 62P: CB 66**

Inflow Area = 0.149 ac, 73.97% Impervious, Inflow Depth > 2.17" for 2-Year event  
 Inflow = 0.38 cfs @ 12.09 hrs, Volume= 0.027 af  
 Outflow = 0.38 cfs @ 12.09 hrs, Volume= 0.027 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.38 cfs @ 12.09 hrs, Volume= 0.027 af  
 Routed to Pond 64P : DMH 47

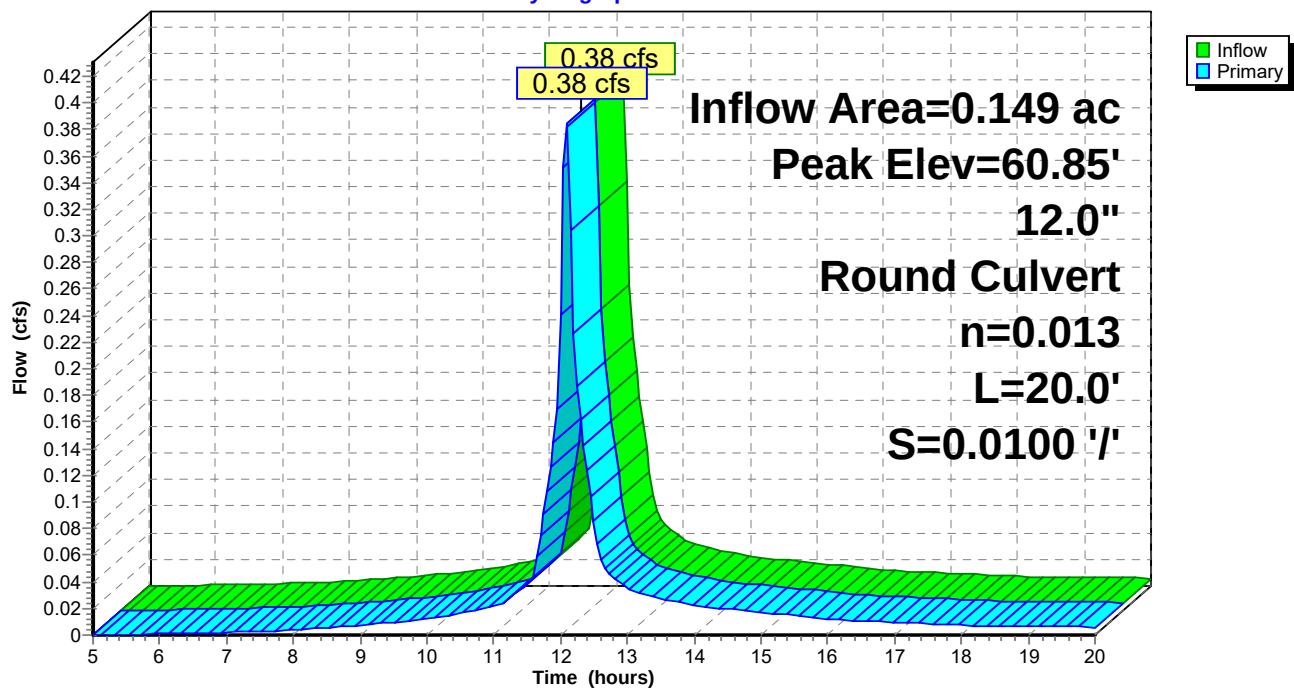
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.85' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.50' | <b>12.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.50' / 60.30' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.38 cfs @ 12.09 hrs HW=60.84' (Free Discharge)

↑**1=Culvert** (Inlet Controls 0.38 cfs @ 1.57 fps)

**Pond 62P: CB 66****Hydrograph**

**Summary for Pond 63P: CB 67**

Inflow Area = 0.034 ac, 87.02% Impervious, Inflow Depth > 2.45" for 2-Year event  
 Inflow = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af  
 Outflow = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af  
 Routed to Pond 64P : DMH 47

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.77' @ 12.09 hrs

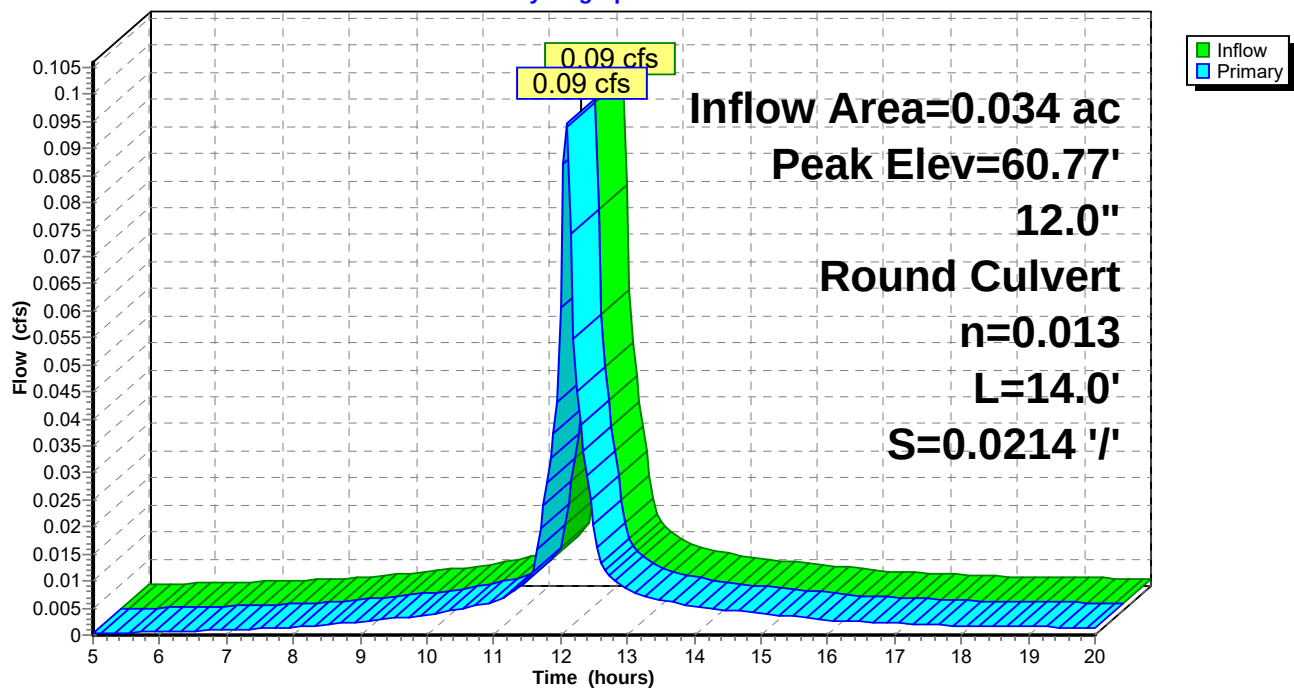
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.60' | <b>12.0" Round Culvert</b><br>L= 14.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.60' / 60.30' S= 0.0214 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.09 cfs @ 12.09 hrs HW=60.76' (Free Discharge)

↑**1=Culvert** (Inlet Controls 0.09 cfs @ 1.09 fps)

**Pond 63P: CB 67**

Hydrograph





**Summary for Pond 64P: DMH 47**

Inflow Area = 0.608 ac, 68.77% Impervious, Inflow Depth > 2.06" for 2-Year event  
 Inflow = 1.50 cfs @ 12.09 hrs, Volume= 0.105 af  
 Outflow = 1.50 cfs @ 12.09 hrs, Volume= 0.105 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.50 cfs @ 12.09 hrs, Volume= 0.105 af  
 Routed to Pond 207P : DMH 48

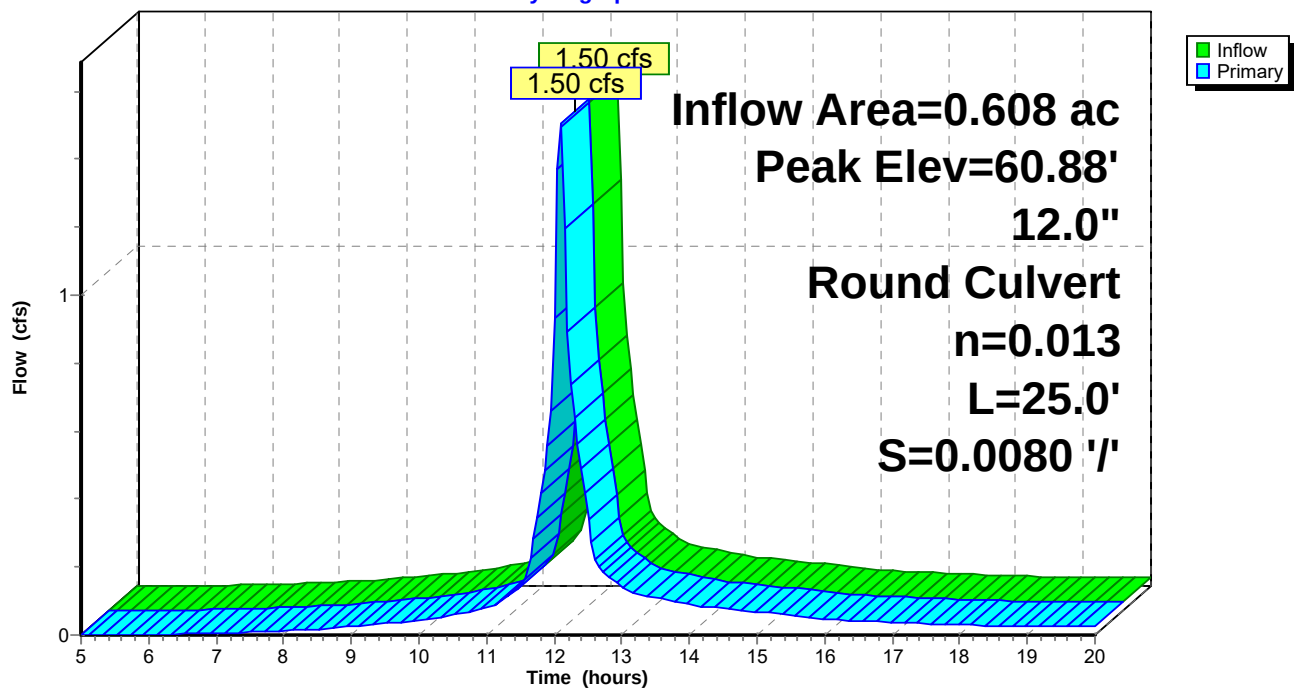
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.88' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.10' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.10' / 59.90' S= 0.0080 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.47 cfs @ 12.09 hrs HW=60.87' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.47 cfs @ 3.12 fps)

**Pond 64P: DMH 47**

Hydrograph



**Summary for Pond 65P: DMH 49**

Inflow Area = 0.253 ac, 88.87% Impervious, Inflow Depth > 2.49" for 2-Year event  
 Inflow = 0.72 cfs @ 12.09 hrs, Volume= 0.052 af  
 Outflow = 0.72 cfs @ 12.09 hrs, Volume= 0.052 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.72 cfs @ 12.09 hrs, Volume= 0.052 af  
 Routed to Pond 78P : DMH 50

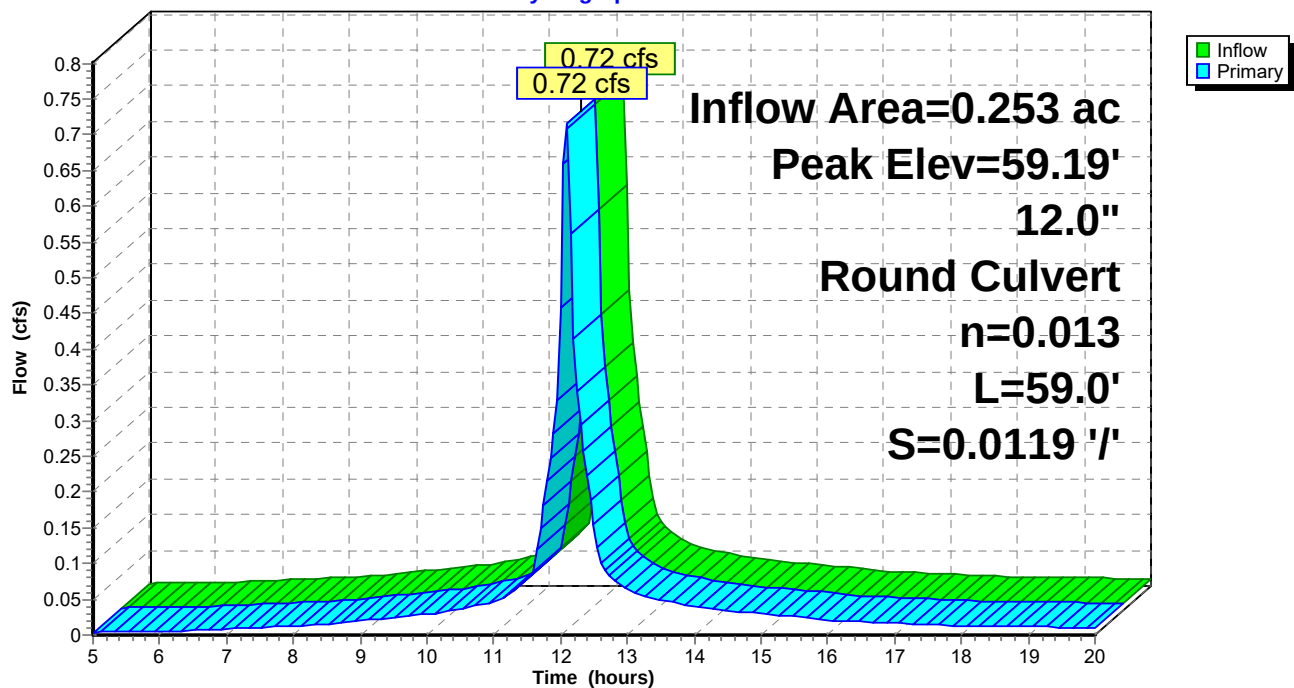
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 59.19' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.70' | <b>12.0" Round Culvert</b><br>L= 59.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.70' / 58.00' S= 0.0119 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.70 cfs @ 12.09 hrs HW=59.18' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 0.70 cfs @ 1.86 fps)

**Pond 65P: DMH 49****Hydrograph**

**Summary for Pond 66P: CB 68**

Inflow Area = 0.163 ac, 82.69% Impervious, Inflow Depth > 2.36" for 2-Year event  
 Inflow = 0.45 cfs @ 12.09 hrs, Volume= 0.032 af  
 Outflow = 0.45 cfs @ 12.09 hrs, Volume= 0.032 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.45 cfs @ 12.09 hrs, Volume= 0.032 af  
 Routed to Pond 65P : DMH 49

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 59.30' @ 12.09 hrs

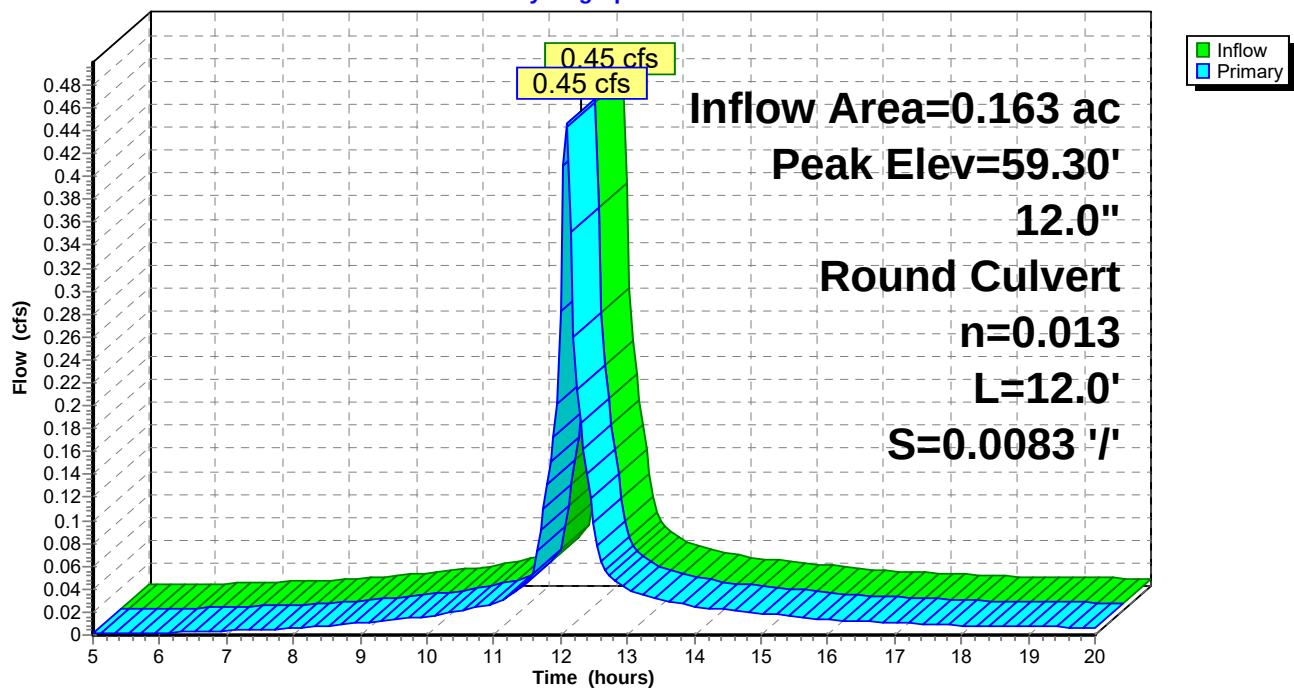
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.90' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.90' / 58.80' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.43 cfs @ 12.09 hrs HW=59.29' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 0.43 cfs @ 2.24 fps)

**Pond 66P: CB 68**

Hydrograph



**Summary for Pond 67P: CB 69**

Inflow Area = 0.090 ac, 100.00% Impervious, Inflow Depth > 2.73" for 2-Year event  
 Inflow = 0.27 cfs @ 12.09 hrs, Volume= 0.021 af  
 Outflow = 0.27 cfs @ 12.09 hrs, Volume= 0.021 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.27 cfs @ 12.09 hrs, Volume= 0.021 af  
 Routed to Pond 65P : DMH 49

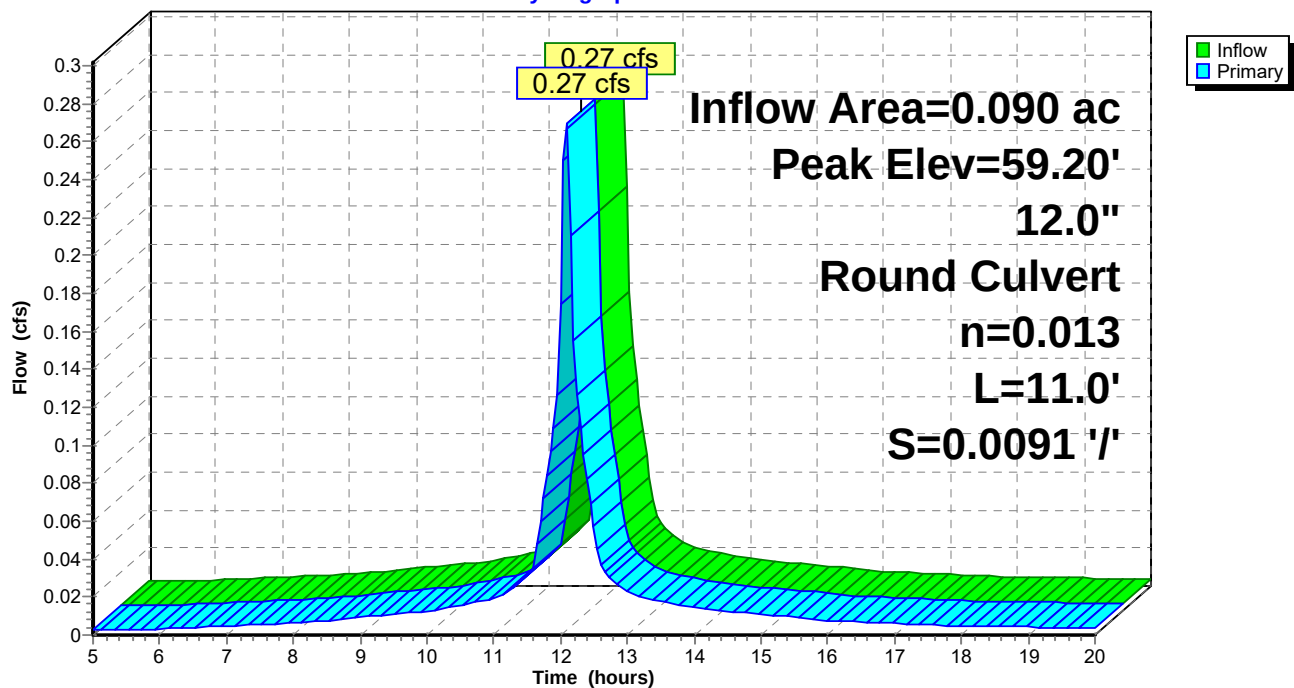
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.20' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.90' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.90' / 58.80' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.26 cfs @ 12.09 hrs HW=59.19' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.26 cfs @ 2.03 fps)

**Pond 67P: CB 69**

Hydrograph



### Summary for Pond 68P: Sub. Inf. 5

Inflow Area = 0.608 ac, 68.77% Impervious, Inflow Depth > 2.06" for 2-Year event  
 Inflow = 1.50 cfs @ 12.09 hrs, Volume= 0.105 af  
 Outflow = 0.60 cfs @ 12.34 hrs, Volume= 0.076 af, Atten= 60%, Lag= 14.7 min  
 Discarded = 0.07 cfs @ 12.34 hrs, Volume= 0.054 af  
 Primary = 0.54 cfs @ 12.34 hrs, Volume= 0.022 af  
 Routed to Link 60L : DP 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.92' @ 12.34 hrs Surf.Area= 0.042 ac Storage= 0.041 af

Plug-Flow detention time= 137.1 min calculated for 0.076 af (73% of inflow)  
 Center-of-Mass det. time= 73.7 min ( 845.3 - 771.7 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 59.30' | 0.030 af      | <b>24.83'W x 74.40'L x 2.33'H Field A</b><br>0.099 af Overall - 0.024 af Embedded = 0.075 af x 40.0% Voids                                                                                             |
| #2A    | 59.80' | 0.024 af      | <b>ADS StormTech SC-310 +Cap x 70 Inside #1</b><br>Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf<br>Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap<br>70 Chambers in 7 Rows |
|        |        | 0.054 af      | Total Available Storage                                                                                                                                                                                |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 59.30' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 56.00'                                                                                                              |
| #2     | Primary   | 59.30' | <b>12.0" Round Culvert</b><br>L= 71.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.30' / 57.00' S= 0.0324 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 60.80' | <b>4.0' long Sharp-Crested Vee/Trap Weir</b> Cv= 2.62 (C= 3.28)                                                                                                                                                  |

**Discarded OutFlow** Max=0.07 cfs @ 12.34 hrs HW=60.92' (Free Discharge)

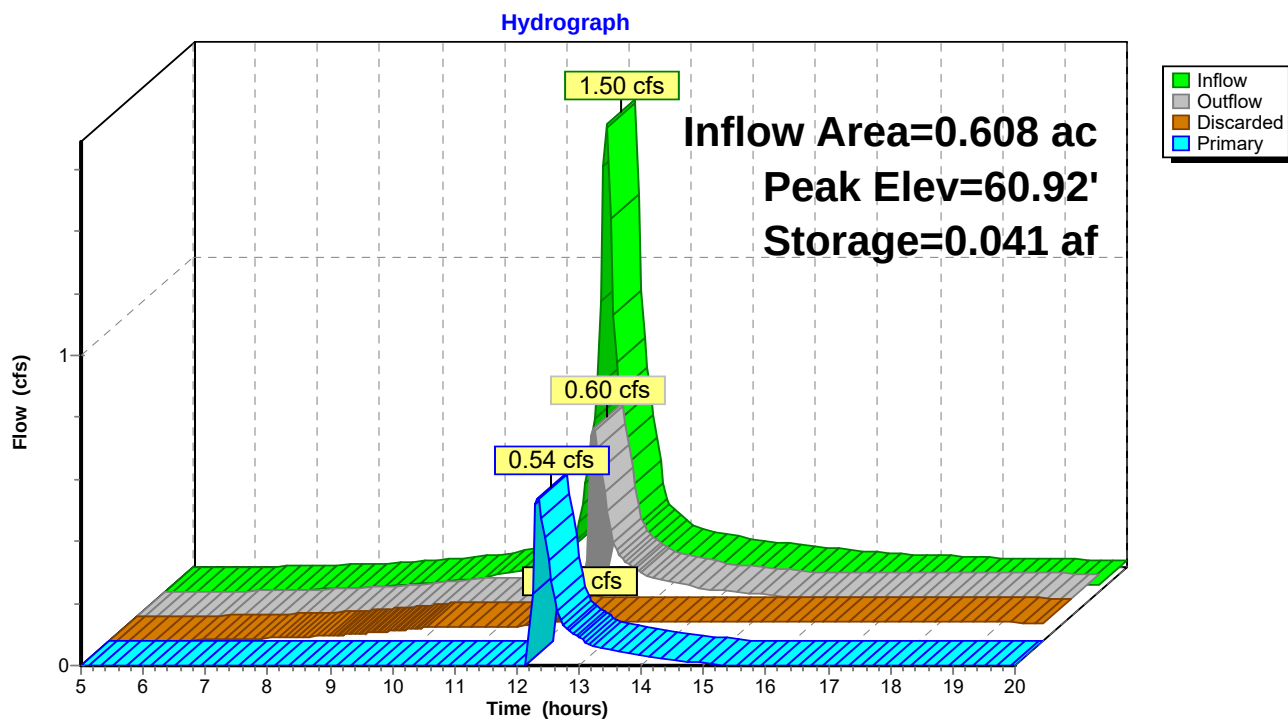
↑ **1=Exfiltration** ( Controls 0.07 cfs)

**Primary OutFlow** Max=0.53 cfs @ 12.34 hrs HW=60.92' (Free Discharge)

↑ **2=Culvert** (Passes 0.53 cfs of 3.16 cfs potential flow)

↑ **3=Sharp-Crested Vee/Trap Weir** (Weir Controls 0.53 cfs @ 1.12 fps)

# Pond 68P: Sub. Inf. 5



### Summary for Pond 69P: CB 72

Inflow Area = 0.245 ac, 72.86% Impervious, Inflow Depth > 2.08" for 2-Year event  
 Inflow = 0.61 cfs @ 12.09 hrs, Volume= 0.043 af  
 Outflow = 0.61 cfs @ 12.09 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.61 cfs @ 12.09 hrs, Volume= 0.043 af  
 Routed to Pond 71P : DMH 54

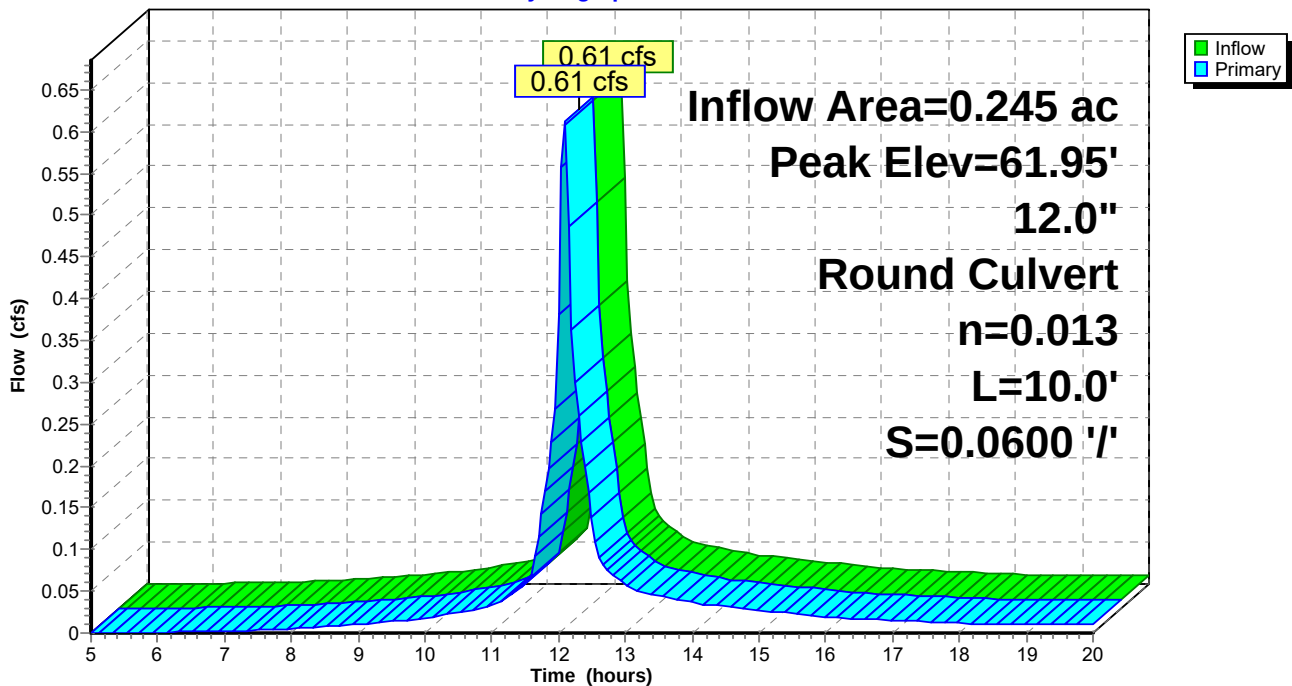
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.95' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.50' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.50' / 60.90' S= 0.0600 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.60 cfs @ 12.09 hrs HW=61.94' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.60 cfs @ 1.79 fps)

### Pond 69P: CB 72

Hydrograph



### Summary for Pond 70P: CB 73

Inflow Area = 0.154 ac, 76.98% Impervious, Inflow Depth > 2.17" for 2-Year event  
 Inflow = 0.40 cfs @ 12.09 hrs, Volume= 0.028 af  
 Outflow = 0.40 cfs @ 12.09 hrs, Volume= 0.028 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.40 cfs @ 12.09 hrs, Volume= 0.028 af  
 Routed to Pond 71P : DMH 54

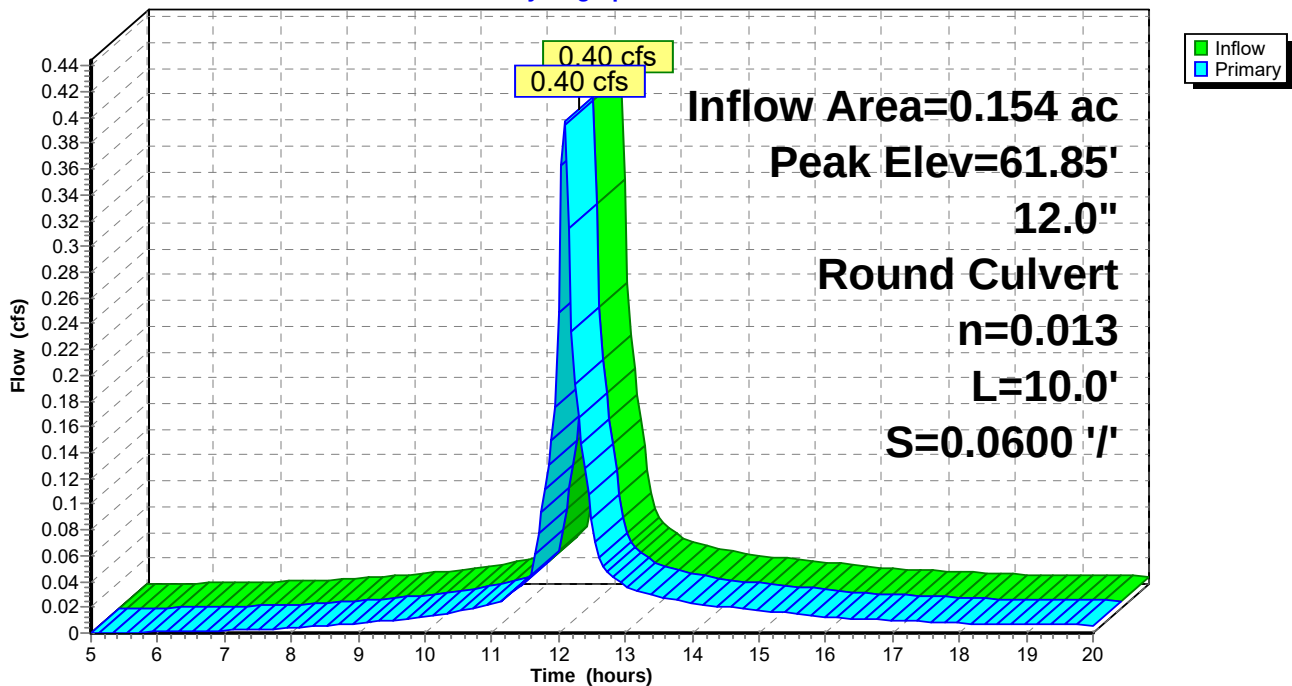
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.85' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.50' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.50' / 60.90' S= 0.0600 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.39 cfs @ 12.09 hrs HW=61.85' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.39 cfs @ 1.59 fps)

### Pond 70P: CB 73

Hydrograph





**Summary for Pond 71P: DMH 54**

Inflow Area = 0.399 ac, 74.45% Impervious, Inflow Depth > 2.12" for 2-Year event  
 Inflow = 1.01 cfs @ 12.09 hrs, Volume= 0.070 af  
 Outflow = 1.01 cfs @ 12.09 hrs, Volume= 0.070 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.01 cfs @ 12.09 hrs, Volume= 0.070 af  
 Routed to Pond 72P : Sub. Inf. 7

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 61.42' @ 12.09 hrs

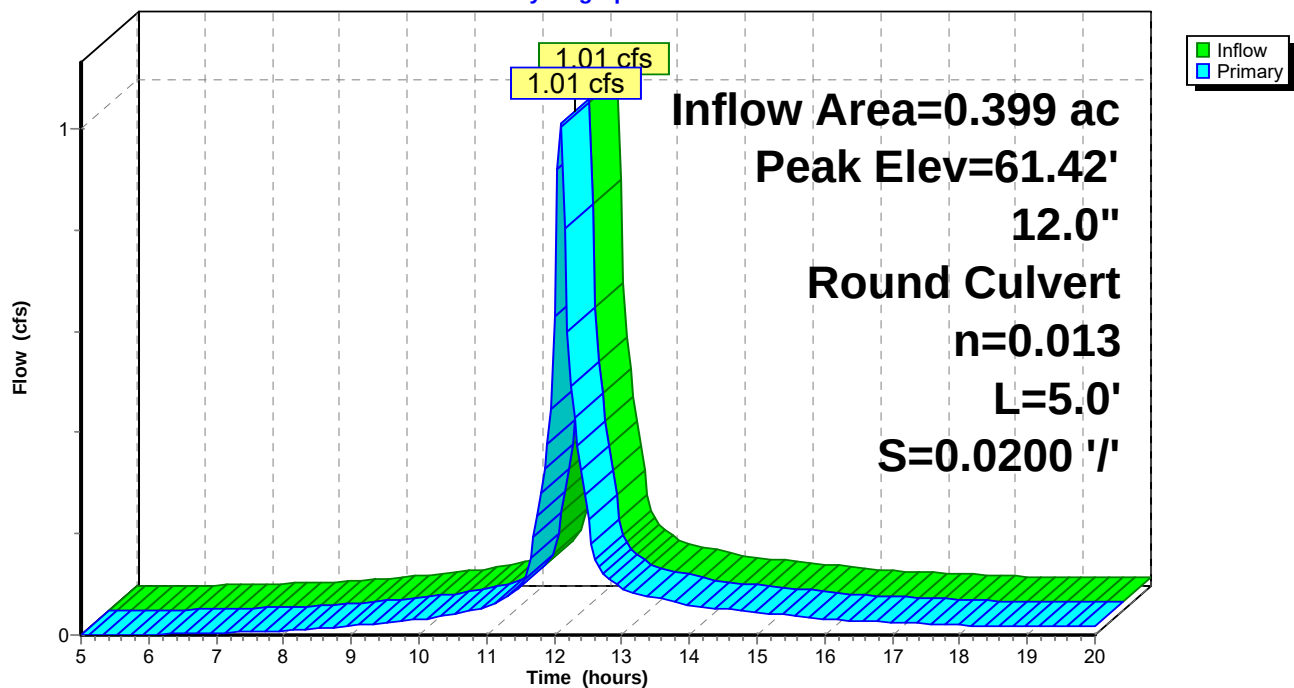
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.80' | <b>12.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.80' / 60.70' S= 0.0200 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.99 cfs @ 12.09 hrs HW=61.41' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 0.99 cfs @ 2.80 fps)

**Pond 71P: DMH 54**

Hydrograph



### Summary for Pond 72P: Sub. Inf. 7

Inflow Area = 0.399 ac, 74.45% Impervious, Inflow Depth > 2.12" for 2-Year event  
 Inflow = 1.01 cfs @ 12.09 hrs, Volume= 0.070 af  
 Outflow = 0.24 cfs @ 12.49 hrs, Volume= 0.055 af, Atten= 76%, Lag= 24.2 min  
 Discarded = 0.06 cfs @ 12.49 hrs, Volume= 0.046 af  
 Primary = 0.18 cfs @ 12.49 hrs, Volume= 0.009 af  
 Routed to Link 60L : DP 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.68' @ 12.49 hrs Surf.Area= 0.034 ac Storage= 0.030 af

Plug-Flow detention time= 149.1 min calculated for 0.055 af (79% of inflow)  
 Center-of-Mass det. time= 93.8 min ( 863.4 - 769.7 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                     |
|--------|--------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 60.20' | 0.024 af      | <b>38.17'W x 38.80'L x 2.33'H Field A</b><br>0.079 af Overall - 0.019 af Embedded = 0.061 af x 40.0% Voids                                                                                              |
| #2A    | 60.70' | 0.019 af      | <b>ADS StormTech SC-310 +Cap x 55 Inside #1</b><br>Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf<br>Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap<br>55 Chambers in 11 Rows |
|        |        | 0.043 af      | Total Available Storage                                                                                                                                                                                 |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 60.20' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 58.10'                                                                                                              |
| #2     | Primary   | 60.20' | <b>12.0" Round Culvert</b><br>L= 32.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.20' / 57.00' S= 0.1000 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 61.50' | <b>6.0" Vert. Orifice/Grate X 2.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                             |
| #4     | Device 2  | 62.20' | <b>4.0' long Sharp-Crested Vee/Trap Weir</b> Cv= 2.62 (C= 3.28)                                                                                                                                                  |

**Discarded OutFlow** Max=0.06 cfs @ 12.49 hrs HW=61.68' (Free Discharge)

↑ **1=Exfiltration** ( Controls 0.06 cfs)

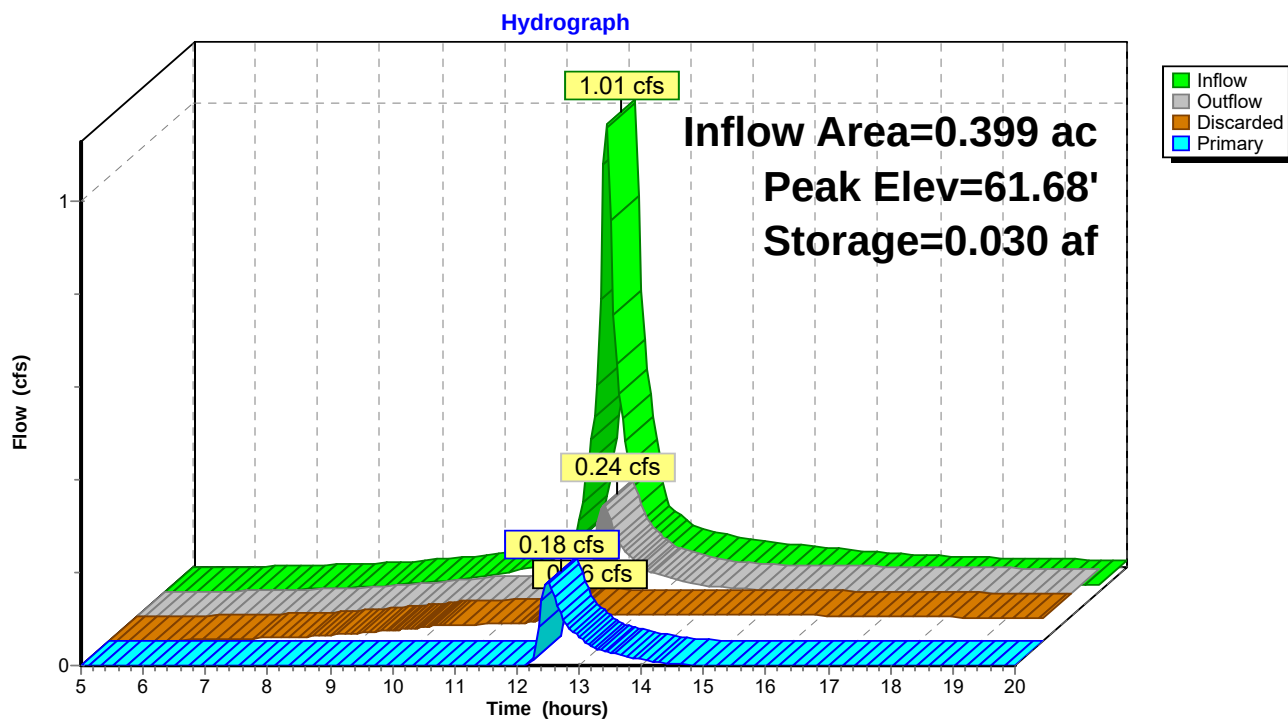
**Primary OutFlow** Max=0.18 cfs @ 12.49 hrs HW=61.68' (Free Discharge)

↑ **2=Culvert** (Passes 0.18 cfs of 2.95 cfs potential flow)

↑ **3=Orifice/Grate** (Orifice Controls 0.18 cfs @ 1.43 fps)

↑ **4=Sharp-Crested Vee/Trap Weir** ( Controls 0.00 cfs)

# Pond 72P: Sub. Inf. 7



### Summary for Pond 73P: CB 64

Inflow Area = 0.252 ac, 65.83% Impervious, Inflow Depth > 1.99" for 2-Year event  
 Inflow = 0.61 cfs @ 12.09 hrs, Volume= 0.042 af  
 Outflow = 0.61 cfs @ 12.09 hrs, Volume= 0.042 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.61 cfs @ 12.09 hrs, Volume= 0.042 af  
 Routed to Pond 75P : DMH 46

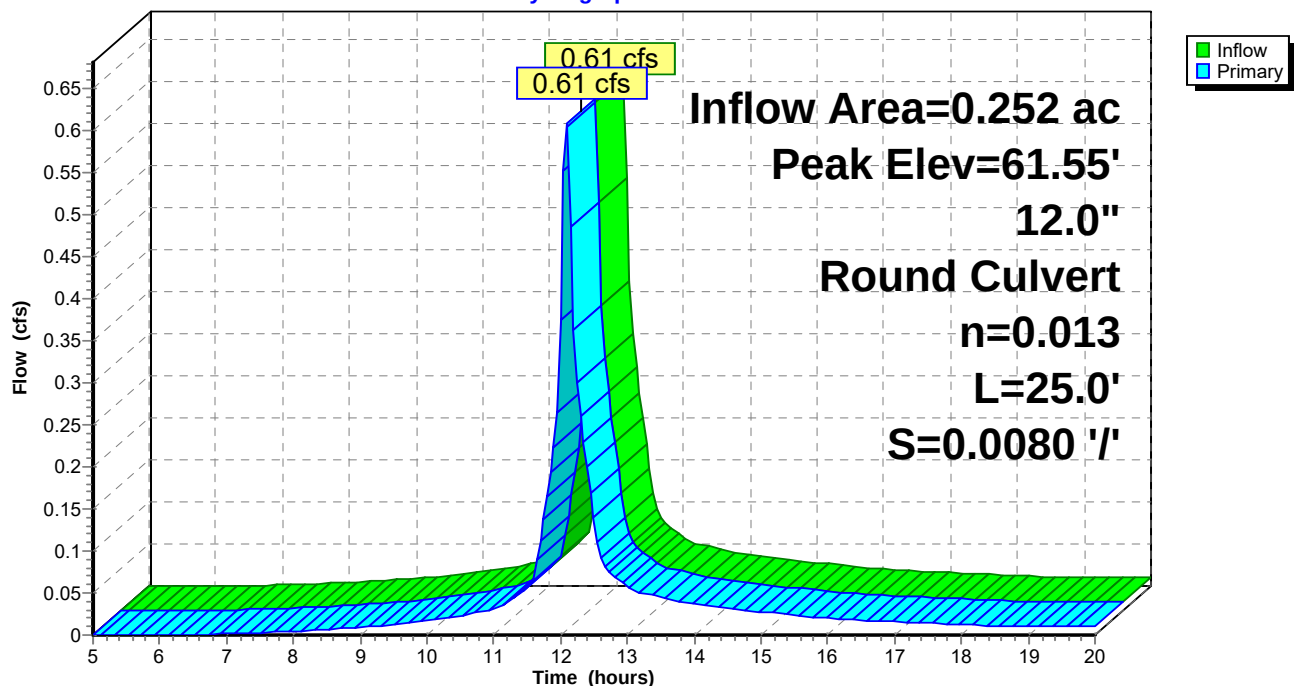
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.55' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.10' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.10' / 60.90' S= 0.0080 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.59 cfs @ 12.09 hrs HW=61.55' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.59 cfs @ 2.56 fps)

### Pond 73P: CB 64

Hydrograph



**Summary for Pond 74P: CB 65**

Inflow Area = 0.174 ac, 65.05% Impervious, Inflow Depth > 1.99" for 2-Year event  
 Inflow = 0.42 cfs @ 12.09 hrs, Volume= 0.029 af  
 Outflow = 0.42 cfs @ 12.09 hrs, Volume= 0.029 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.42 cfs @ 12.09 hrs, Volume= 0.029 af  
 Routed to Pond 75P : DMH 46

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 61.46' @ 12.09 hrs

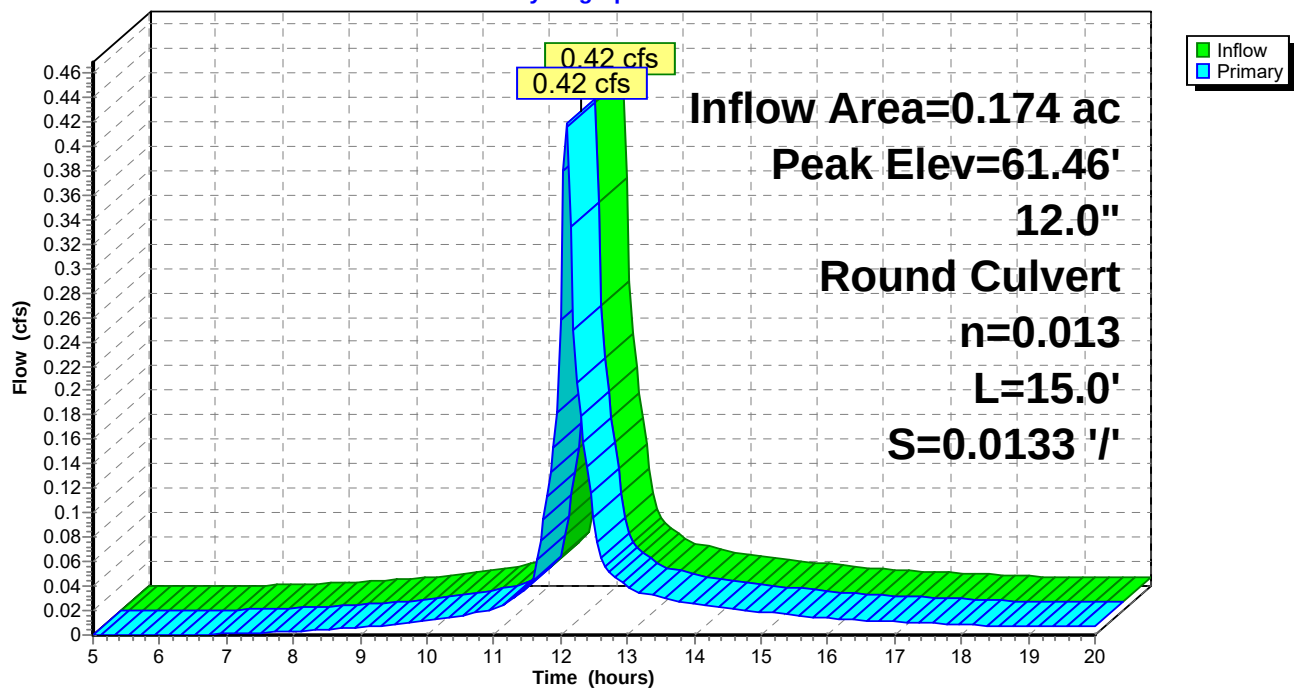
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.10' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.10' / 60.90' S= 0.0133 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.41 cfs @ 12.09 hrs HW=61.46' (Free Discharge)

↑**1=Culvert** (Inlet Controls 0.41 cfs @ 1.61 fps)

**Pond 74P: CB 65**

Hydrograph



**Summary for Pond 75P: DMH 46**

Inflow Area = 0.426 ac, 65.51% Impervious, Inflow Depth > 1.99" for 2-Year event  
 Inflow = 1.03 cfs @ 12.09 hrs, Volume= 0.071 af  
 Outflow = 1.03 cfs @ 12.09 hrs, Volume= 0.071 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.03 cfs @ 12.09 hrs, Volume= 0.071 af  
 Routed to Pond 64P : DMH 47

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 61.42' @ 12.09 hrs

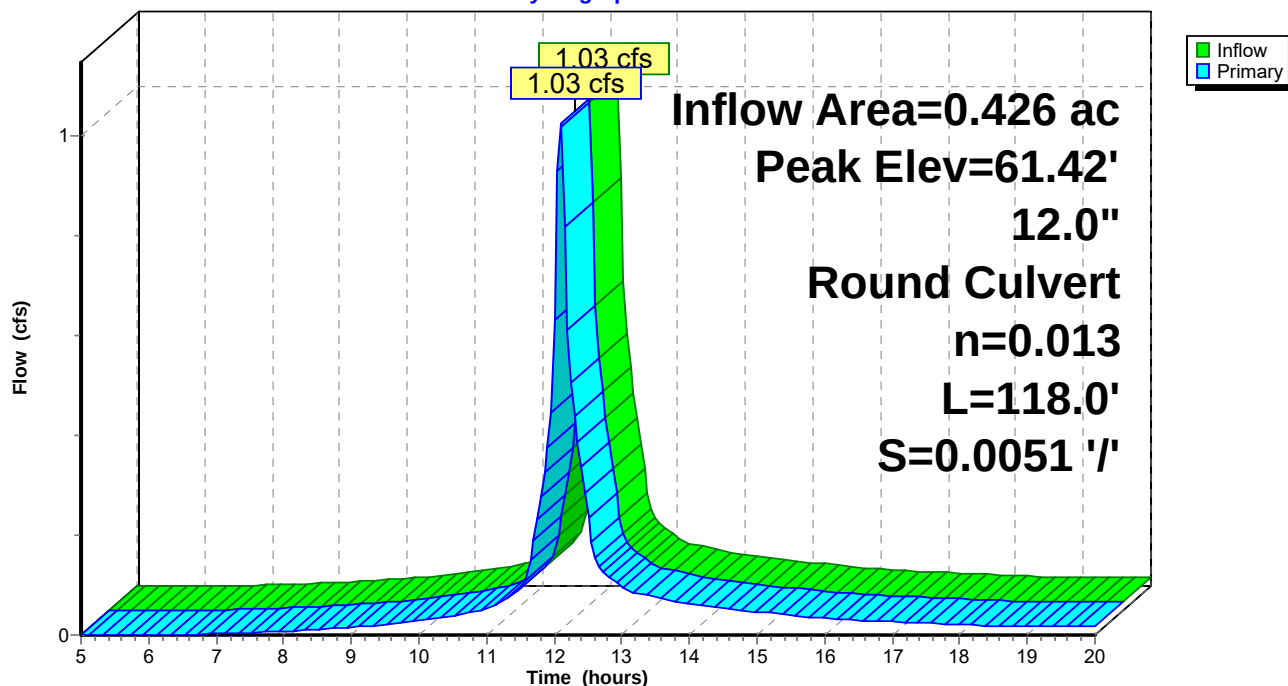
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.80' | <b>12.0" Round Culvert</b><br>L= 118.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.80' / 60.20' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.00 cfs @ 12.09 hrs HW=61.41' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 1.00 cfs @ 2.86 fps)

**Pond 75P: DMH 46**

Hydrograph



### Summary for Pond 76P: CB 70

Inflow Area = 0.189 ac, 71.07% Impervious, Inflow Depth > 2.08" for 2-Year event  
 Inflow = 0.47 cfs @ 12.09 hrs, Volume= 0.033 af  
 Outflow = 0.47 cfs @ 12.09 hrs, Volume= 0.033 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.47 cfs @ 12.09 hrs, Volume= 0.033 af  
 Routed to Pond 78P : DMH 50

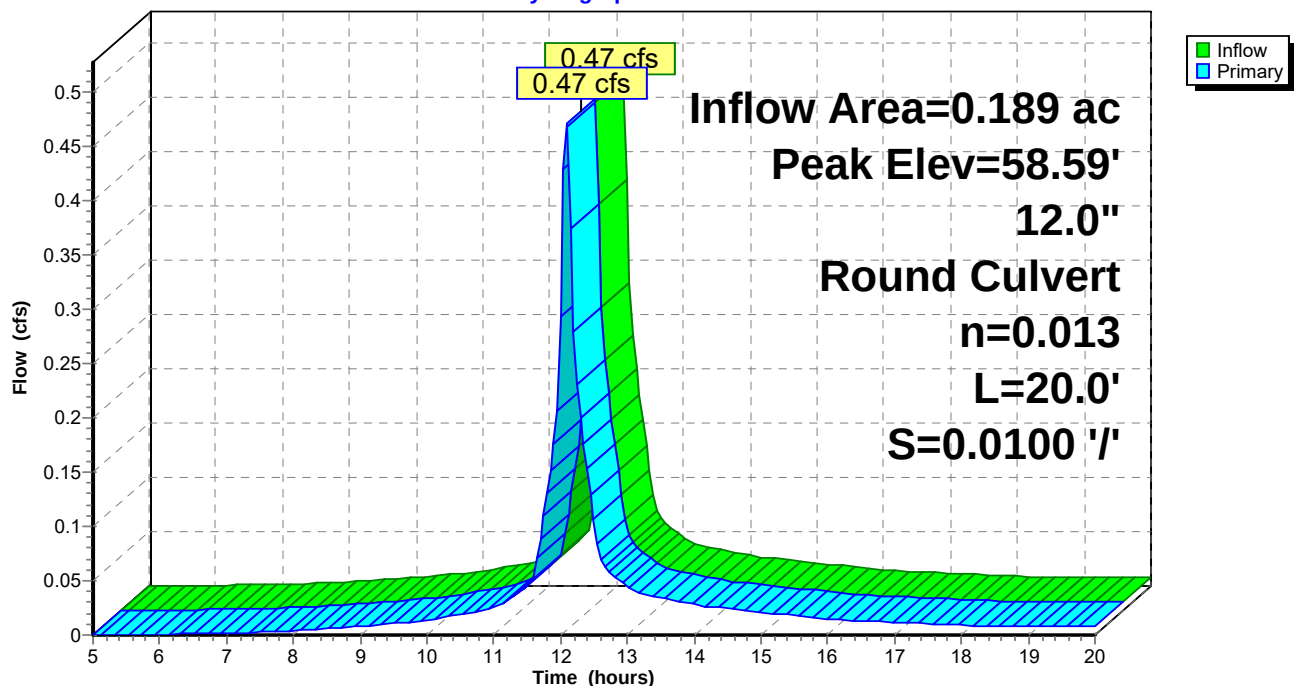
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.59' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.20' | <b>12.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.20' / 58.00' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.46 cfs @ 12.09 hrs HW=58.58' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.46 cfs @ 1.66 fps)

### Pond 76P: CB 70

Hydrograph



### Summary for Pond 77P: CB 71

Inflow Area = 0.098 ac, 95.31% Impervious, Inflow Depth > 2.45" for 2-Year event  
 Inflow = 0.28 cfs @ 12.09 hrs, Volume= 0.020 af  
 Outflow = 0.28 cfs @ 12.09 hrs, Volume= 0.020 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.28 cfs @ 12.09 hrs, Volume= 0.020 af  
 Routed to Pond 78P : DMH 50

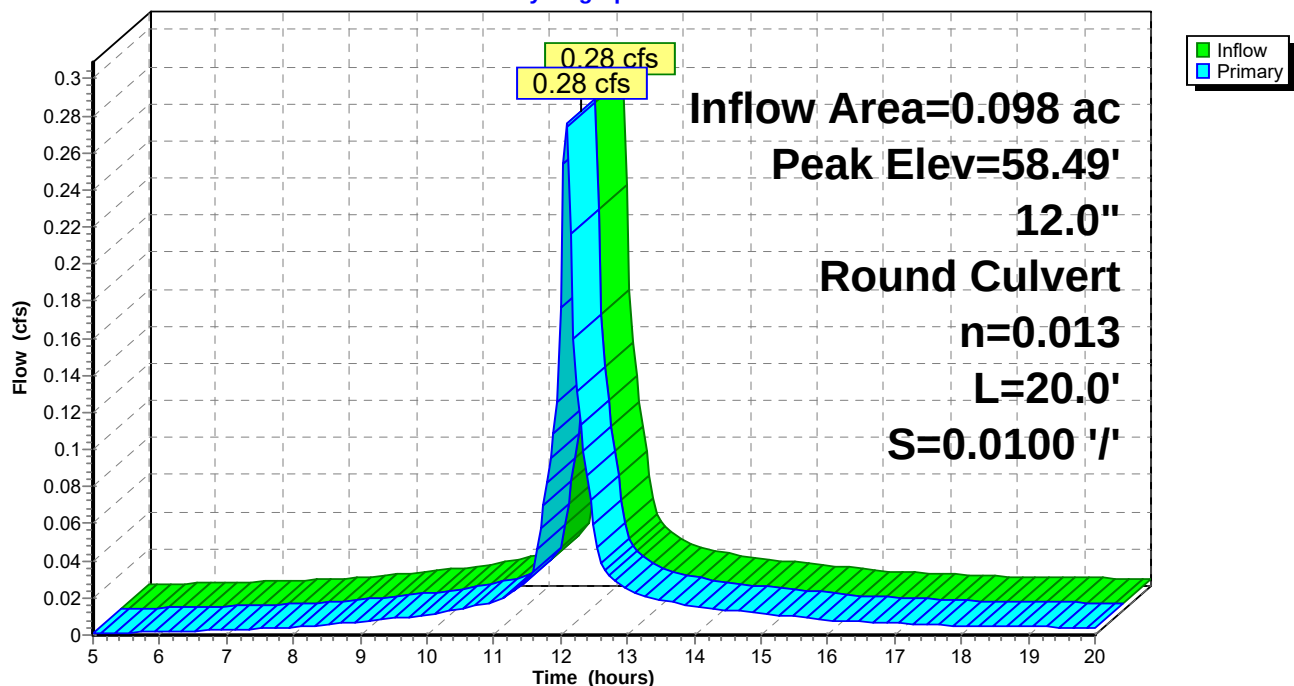
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.49' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.20' | <b>12.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.20' / 58.00' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.27 cfs @ 12.09 hrs HW=58.49' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.27 cfs @ 1.44 fps)

### Pond 77P: CB 71

Hydrograph





**Summary for Pond 78P: DMH 50**

Inflow Area = 0.540 ac, 83.81% Impervious, Inflow Depth > 2.34" for 2-Year event  
 Inflow = 1.46 cfs @ 12.09 hrs, Volume= 0.105 af  
 Outflow = 1.46 cfs @ 12.09 hrs, Volume= 0.105 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.46 cfs @ 12.09 hrs, Volume= 0.105 af  
 Routed to Pond 79P : DMH 51

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 58.54' @ 12.09 hrs

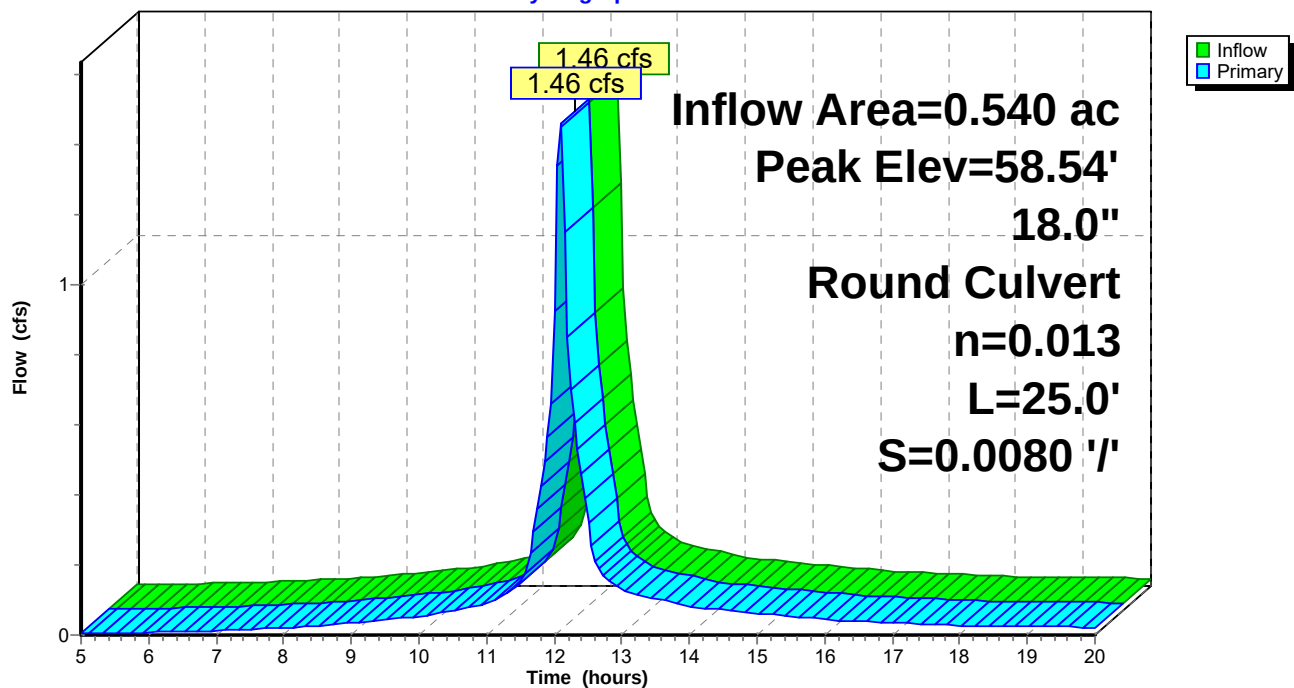
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.90' | <b>18.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.90' / 57.70' S= 0.0080 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=1.43 cfs @ 12.09 hrs HW=58.53' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 1.43 cfs @ 2.97 fps)

**Pond 78P: DMH 50**

Hydrograph



**Summary for Pond 79P: DMH 51**

Inflow Area = 0.688 ac, 87.30% Impervious, Inflow Depth > 2.42" for 2-Year event  
 Inflow = 1.91 cfs @ 12.09 hrs, Volume= 0.139 af  
 Outflow = 1.91 cfs @ 12.09 hrs, Volume= 0.139 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.91 cfs @ 12.09 hrs, Volume= 0.139 af  
 Routed to Pond 80P : DMH 52

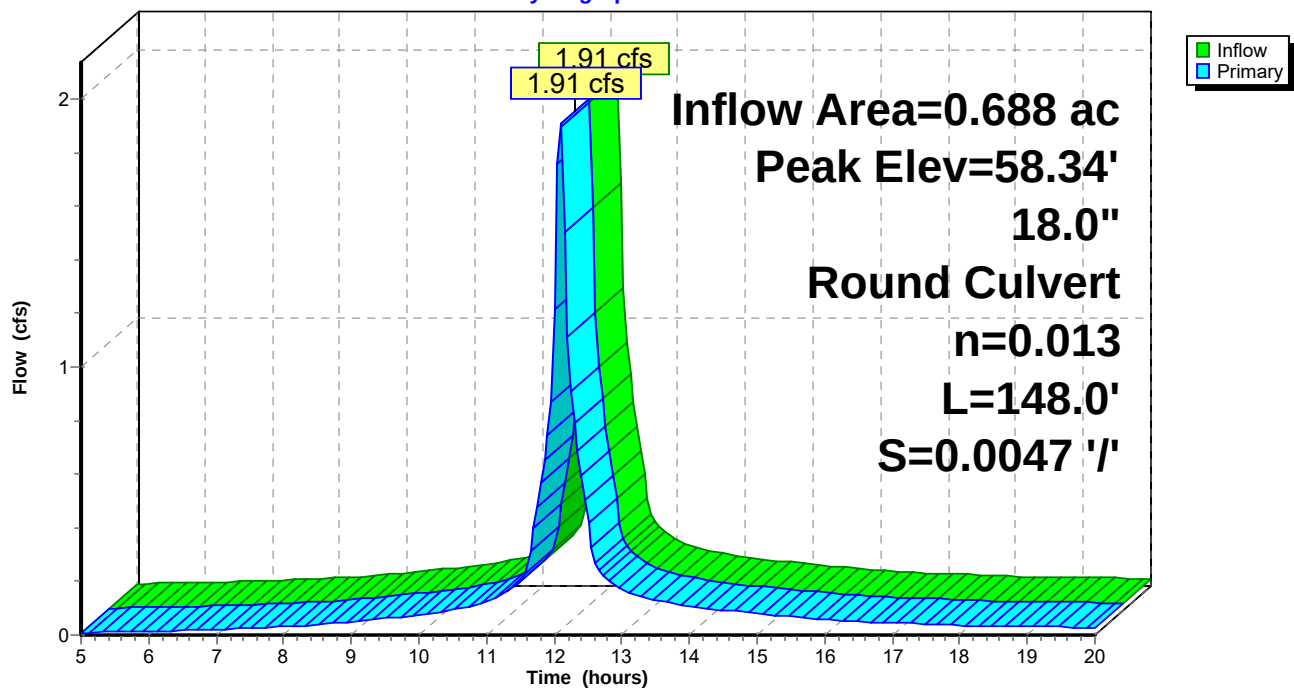
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 58.34' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.60' | <b>18.0" Round Culvert</b><br>L= 148.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.60' / 56.91' S= 0.0047 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=1.86 cfs @ 12.09 hrs HW=58.33' (Free Discharge)

1=Culvert (Barrel Controls 1.86 cfs @ 3.18 fps)

**Pond 79P: DMH 51****Hydrograph**

**Summary for Pond 80P: DMH 52**

Inflow Area = 0.688 ac, 87.30% Impervious, Inflow Depth > 2.42" for 2-Year event  
 Inflow = 1.91 cfs @ 12.09 hrs, Volume= 0.139 af  
 Outflow = 1.91 cfs @ 12.09 hrs, Volume= 0.139 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.91 cfs @ 12.09 hrs, Volume= 0.139 af  
 Routed to Pond 81P : DMH 53

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 57.54' @ 12.09 hrs

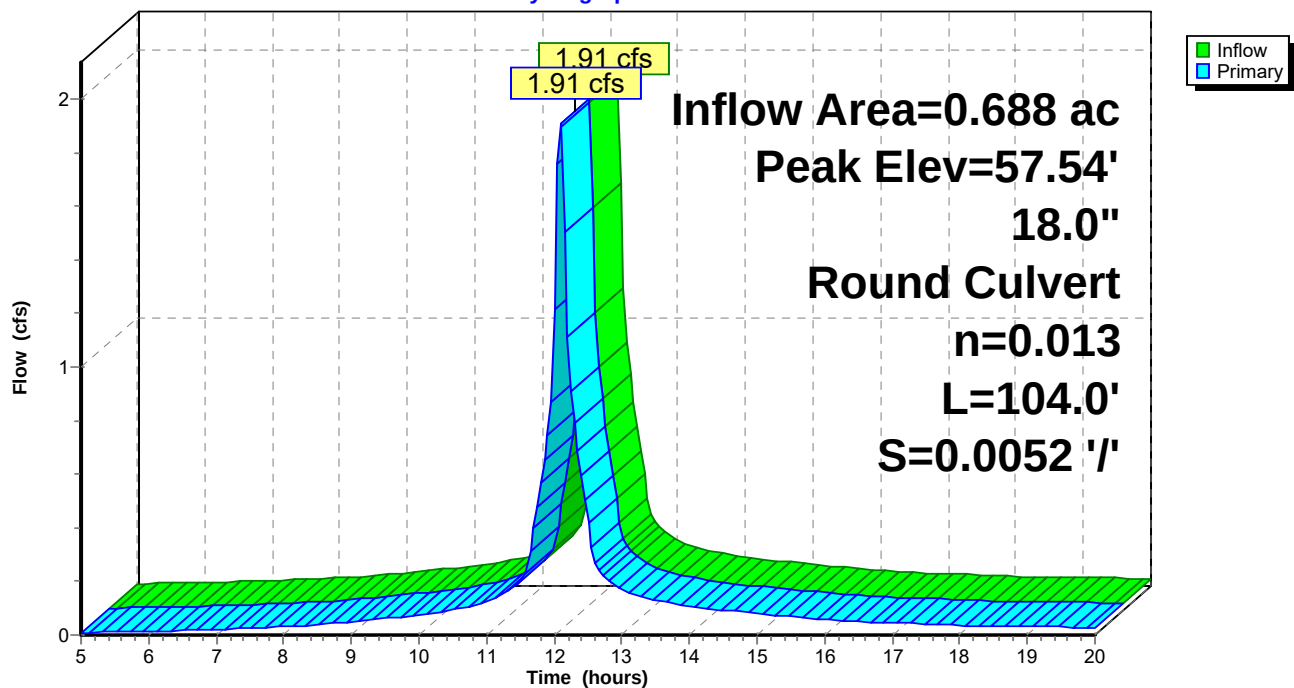
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 56.81' | <b>18.0" Round Culvert</b><br>L= 104.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 56.81' / 56.27' S= 0.0052 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=1.86 cfs @ 12.09 hrs HW=57.53' (Free Discharge)

1=Culvert (Barrel Controls 1.86 cfs @ 3.22 fps)

**Pond 80P: DMH 52**

Hydrograph



**Summary for Pond 81P: DMH 53**

Inflow Area = 0.688 ac, 87.30% Impervious, Inflow Depth > 2.42" for 2-Year event  
 Inflow = 1.91 cfs @ 12.09 hrs, Volume= 0.139 af  
 Outflow = 1.91 cfs @ 12.09 hrs, Volume= 0.139 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.91 cfs @ 12.09 hrs, Volume= 0.139 af  
 Routed to Pond 82P : Constructed Wetland 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 56.89' @ 12.09 hrs

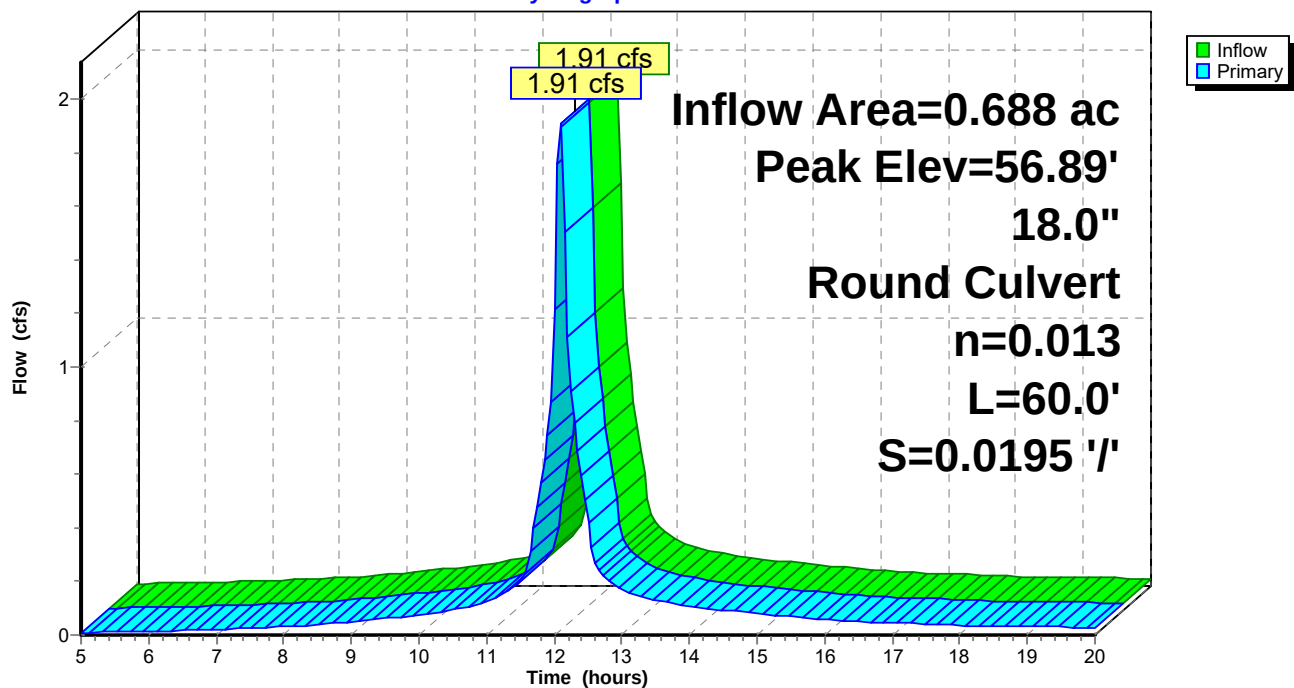
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 56.17' | <b>18.0" Round Culvert</b><br>L= 60.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 56.17' / 55.00' S= 0.0195 ' S= 0.0195 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=1.86 cfs @ 12.09 hrs HW=56.88' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 1.86 cfs @ 2.26 fps)

**Pond 81P: DMH 53**

Hydrograph



## Summary for Pond 82P: Constructed Wetland 2

Inflow Area = 1.006 ac, 75.98% Impervious, Inflow Depth > 2.04" for 2-Year event  
 Inflow = 2.37 cfs @ 12.09 hrs, Volume= 0.171 af  
 Outflow = 0.65 cfs @ 12.45 hrs, Volume= 0.109 af, Atten= 72%, Lag= 21.7 min  
 Primary = 0.65 cfs @ 12.45 hrs, Volume= 0.109 af  
 Routed to Link 188L : DP 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.51' @ 12.45 hrs Surf.Area= 3,014 sf Storage= 3,756 cf

Plug-Flow detention time= 154.8 min calculated for 0.108 af (64% of inflow)  
 Center-of-Mass det. time= 80.8 min ( 843.9 - 763.1 )

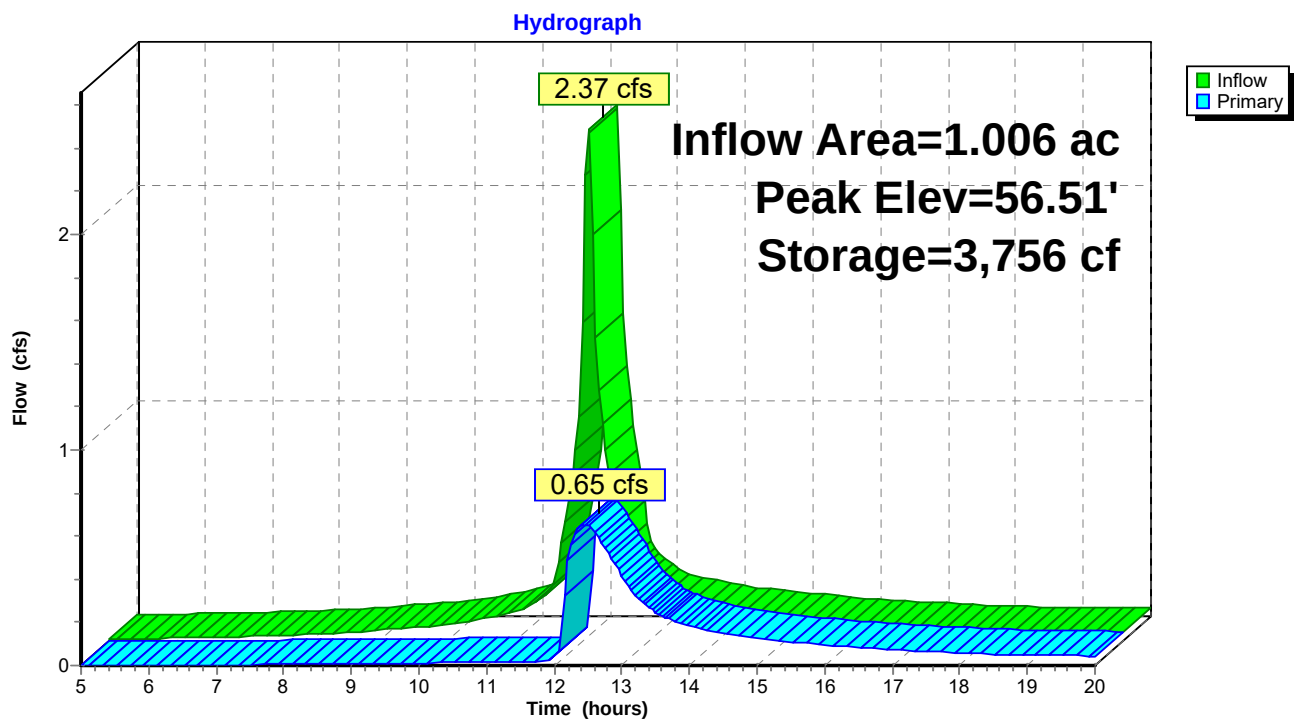
| Volume              | Invert               | Avail.Storage             | Storage Description                                        |
|---------------------|----------------------|---------------------------|------------------------------------------------------------|
| #1                  | 55.00'               | 13,641 cf                 | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet)                                  |
| 55.00               | 1,981                | 0                         | 0                                                          |
| 56.00               | 2,646                | 2,314                     | 2,314                                                      |
| 57.00               | 3,368                | 3,007                     | 5,321                                                      |
| 58.00               | 4,146                | 3,757                     | 9,078                                                      |
| 59.00               | 4,980                | 4,563                     | 13,641                                                     |

| Device | Routing  | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary  | 55.00' | <b>12.0" Round Culvert</b><br>L= 52.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 55.00' / 54.00' S= 0.0192 ' S= 0.0192 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #2     | Device 1 | 55.00' | <b>1.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                                |
| #3     | Device 1 | 56.10' | <b>4.0" Vert. Orifice/Grate X 3.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                      |

**Primary OutFlow** Max=0.65 cfs @ 12.45 hrs HW=56.51' (Free Discharge)

- 1=Culvert (Passes 0.65 cfs of 3.00 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.03 cfs @ 5.83 fps)
- 3=Orifice/Grate (Orifice Controls 0.62 cfs @ 2.37 fps)

# **Pond 82P: Constructed Wetland 2**



**Summary for Pond 83P: CB 86**

Inflow Area = 0.178 ac, 72.79% Impervious, Inflow Depth > 2.08" for 2-Year event  
 Inflow = 0.44 cfs @ 12.09 hrs, Volume= 0.031 af  
 Outflow = 0.44 cfs @ 12.09 hrs, Volume= 0.031 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.44 cfs @ 12.09 hrs, Volume= 0.031 af  
 Routed to Pond 85P : DMH 65

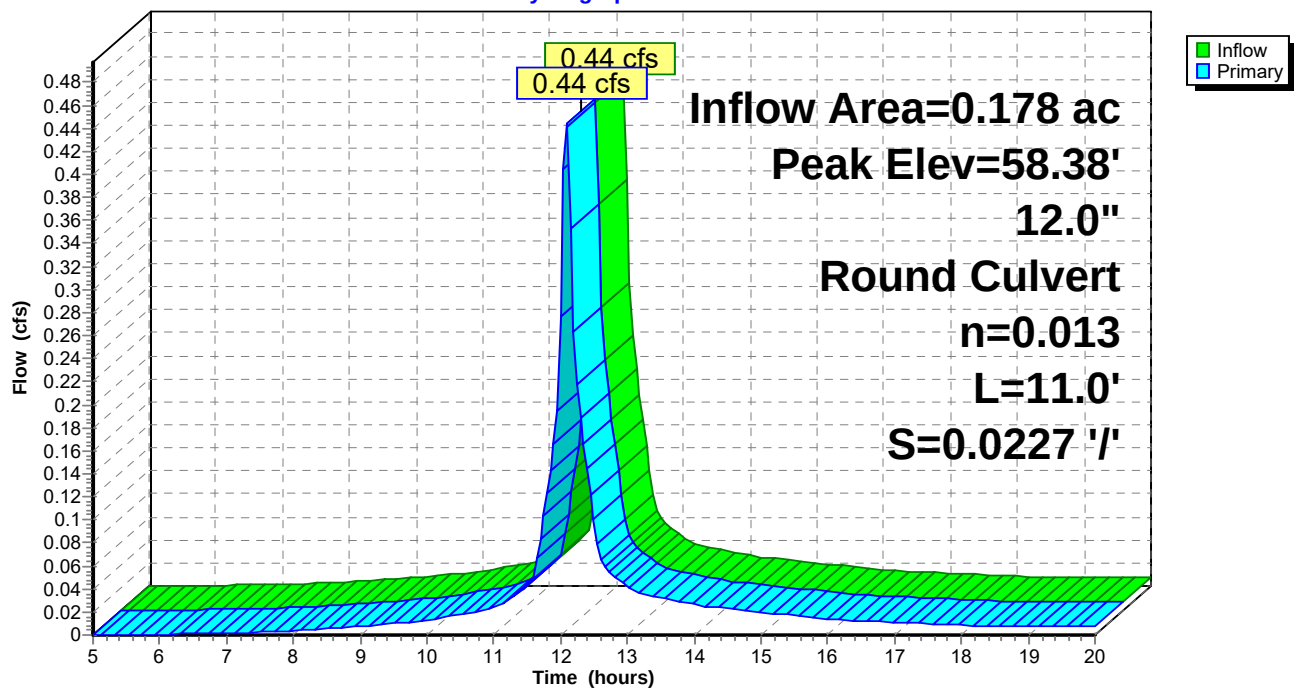
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.38' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.00' / 57.75' S= 0.0227 ' S= 0.0227 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.43 cfs @ 12.09 hrs HW=58.37' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.43 cfs @ 1.64 fps)

**Pond 83P: CB 86**

Hydrograph



**Summary for Pond 84P: CB 87**

Inflow Area = 0.189 ac, 78.29% Impervious, Inflow Depth > 2.26" for 2-Year event  
 Inflow = 0.50 cfs @ 12.09 hrs, Volume= 0.036 af  
 Outflow = 0.50 cfs @ 12.09 hrs, Volume= 0.036 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.50 cfs @ 12.09 hrs, Volume= 0.036 af  
 Routed to Pond 85P : DMH 65

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 58.40' @ 12.09 hrs

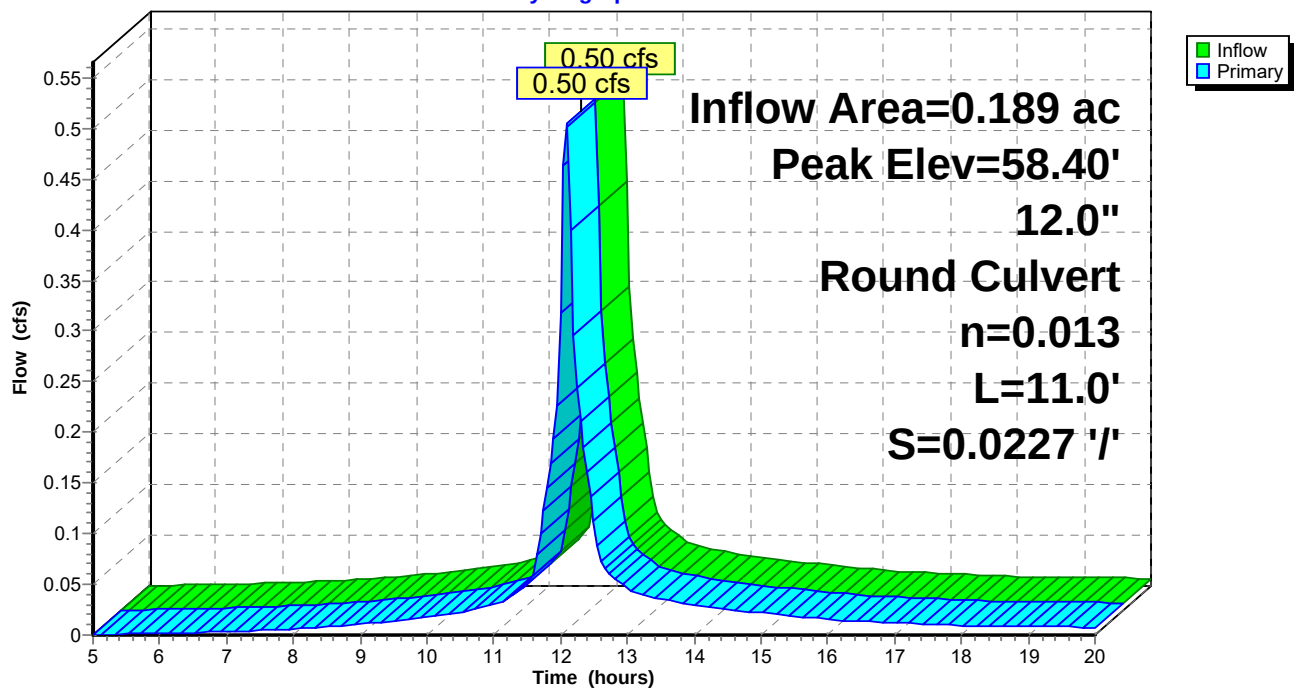
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.00' / 57.75' S= 0.0227 ' S= 0.0227 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.49 cfs @ 12.09 hrs HW=58.40' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 0.49 cfs @ 1.69 fps)

**Pond 84P: CB 87**

Hydrograph





**Summary for Pond 85P: DMH 65**

Inflow Area = 0.367 ac, 75.63% Impervious, Inflow Depth > 2.18" for 2-Year event  
 Inflow = 0.95 cfs @ 12.09 hrs, Volume= 0.067 af  
 Outflow = 0.95 cfs @ 12.09 hrs, Volume= 0.067 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.95 cfs @ 12.09 hrs, Volume= 0.067 af  
 Routed to Pond 97P : Sub. Det. 2

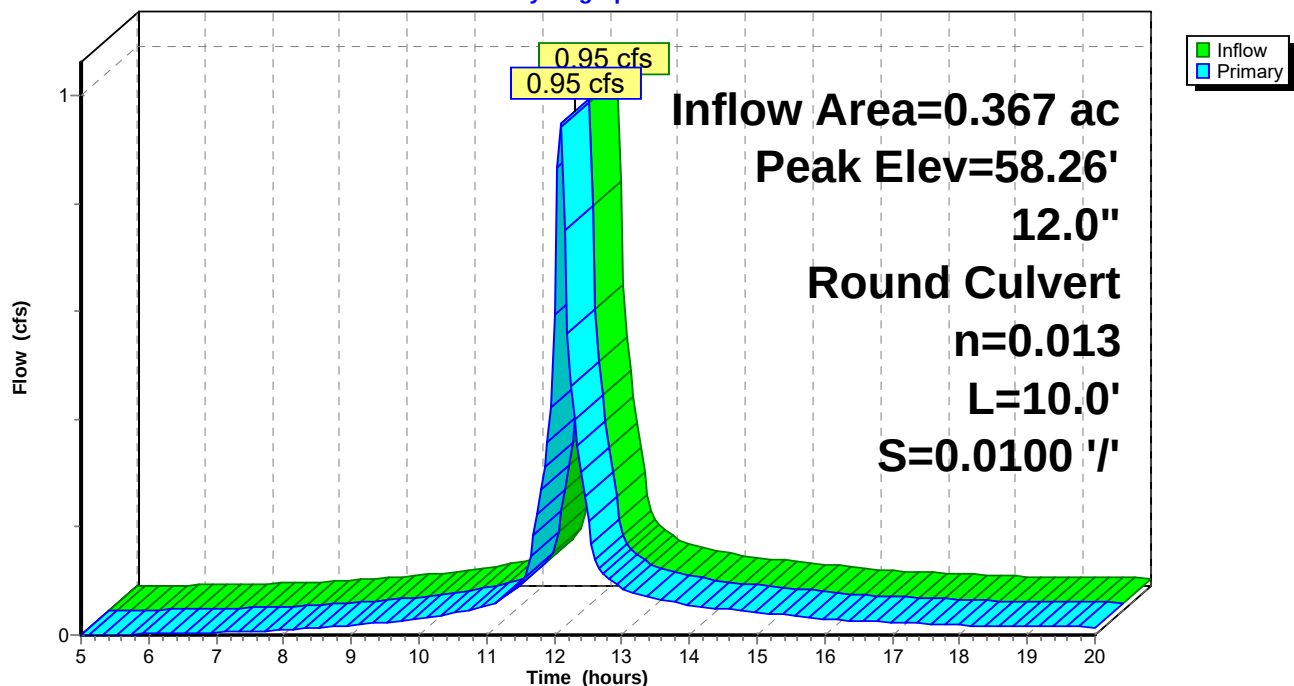
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 58.26' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.65' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.65' / 57.55' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.93 cfs @ 12.09 hrs HW=58.25' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 0.93 cfs @ 2.68 fps)

**Pond 85P: DMH 65****Hydrograph**

**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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Type III 24-hr 2-Year Rainfall=3.15"

Printed 1/7/2026

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**Summary for Pond 86P: Sub. Inf. 6**

Inflow Area = 0.589 ac, 36.87% Impervious, Inflow Depth > 1.46" for 2-Year event  
 Inflow = 1.06 cfs @ 12.09 hrs, Volume= 0.071 af  
 Outflow = 0.07 cfs @ 14.07 hrs, Volume= 0.048 af, Atten= 93%, Lag= 118.8 min  
 Discarded = 0.07 cfs @ 14.07 hrs, Volume= 0.047 af  
 Primary = 0.00 cfs @ 14.07 hrs, Volume= 0.000 af  
 Routed to Link 60L : DP 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.52' @ 14.07 hrs Surf.Area= 0.037 ac Storage= 0.037 af

Plug-Flow detention time= 197.5 min calculated for 0.048 af (67% of inflow)  
 Center-of-Mass det. time= 126.7 min ( 923.3 - 796.6 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 61.00' | 0.034 af      | <b>30.00'W x 53.46'L x 3.50'H Field A</b><br>0.129 af Overall - 0.045 af Embedded = 0.084 af x 40.0% Voids                                                                                                                                             |
| #2A    | 61.50' | 0.045 af      | <b>ADS StormTech SC-740 b +Cap x 42 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>42 Chambers in 6 Rows<br>Cap Storage= 2.7 cf x 2 x 6 rows = 31.9 cf |
|        |        |               | 0.079 af Total Available Storage                                                                                                                                                                                                                       |

Storage Group A created with Chamber Wizard

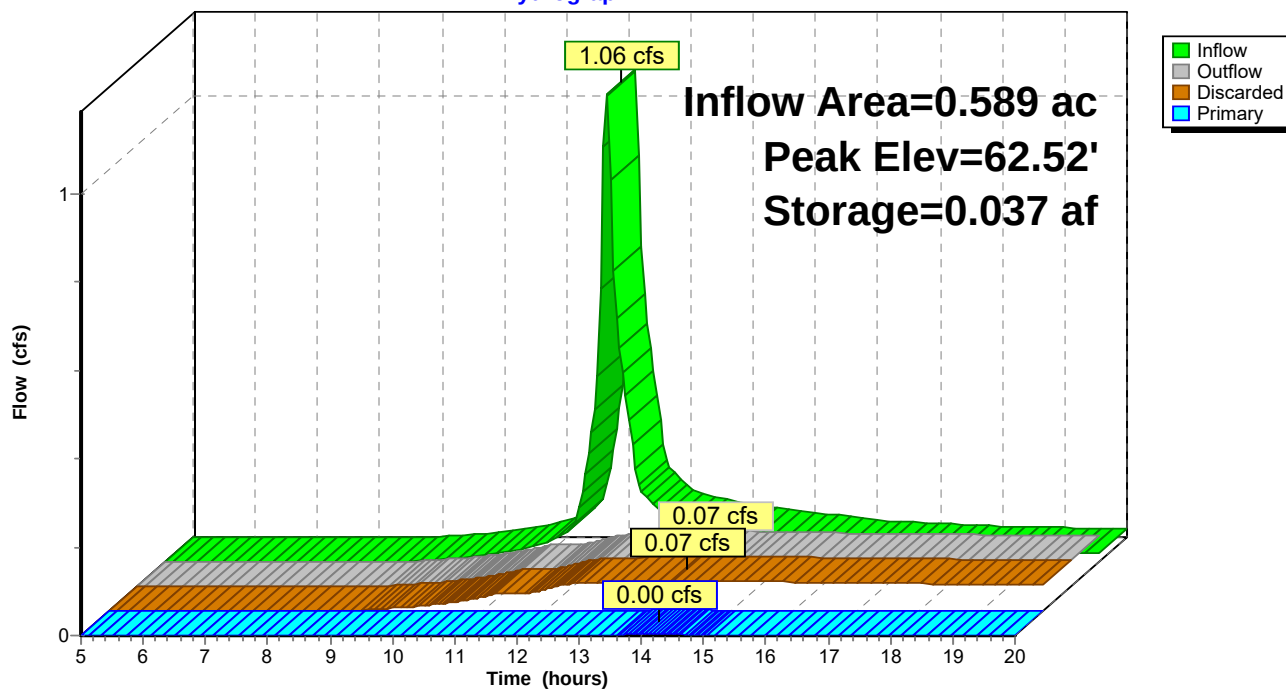
| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                             |
|--------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 61.00' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 59.00'                                                                                                                        |
| #2     | Primary   | 61.00' | <b>12.0" Round Culvert</b><br>L= 105.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.00' / 57.00' S= 0.0381 ' S= 0.0381 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 62.50' | <b>6.0" Vert. Orifice/Grate X 2.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                       |
| #4     | Device 2  | 63.50' | <b>4.0' long Sharp-Crested Vee/Trap Weir</b> Cv= 2.62 (C= 3.28)                                                                                                                                                            |

**Discarded OutFlow** Max=0.07 cfs @ 14.07 hrs HW=62.52' (Free Discharge)  
 ↳ **1=Exfiltration** ( Controls 0.07 cfs)

**Primary OutFlow** Max=0.00 cfs @ 14.07 hrs HW=62.52' (Free Discharge)  
 ↳ **2=Culvert** (Passes 0.00 cfs of 3.01 cfs potential flow)  
 ↳ **3=Orifice/Grate** (Orifice Controls 0.00 cfs @ 0.46 fps)  
 ↳ **4=Sharp-Crested Vee/Trap Weir** ( Controls 0.00 cfs)

# Pond 86P: Sub. Inf. 6

Hydrograph



**Summary for Pond 87P: CB 85**

Inflow Area = 0.124 ac, 69.69% Impervious, Inflow Depth > 2.08" for 2-Year event  
 Inflow = 0.31 cfs @ 12.09 hrs, Volume= 0.021 af  
 Outflow = 0.31 cfs @ 12.09 hrs, Volume= 0.021 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.31 cfs @ 12.09 hrs, Volume= 0.021 af  
 Routed to Pond 92P : DMH 63

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 62.32' @ 12.09 hrs

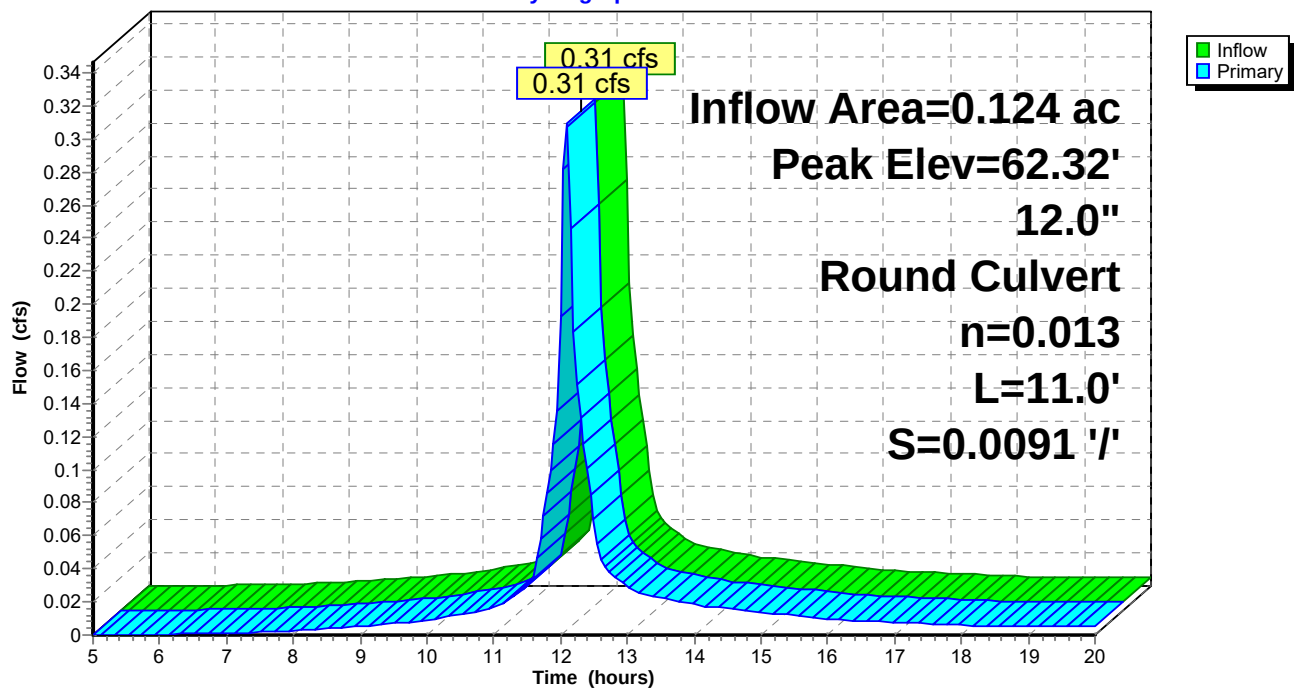
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.00' / 61.90' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.30 cfs @ 12.09 hrs HW=62.32' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 0.30 cfs @ 2.09 fps)

**Pond 87P: CB 85**

Hydrograph



**Summary for Pond 88P: CB 84**

Inflow Area = 0.066 ac, 66.55% Impervious, Inflow Depth > 1.99" for 2-Year event  
 Inflow = 0.16 cfs @ 12.09 hrs, Volume= 0.011 af  
 Outflow = 0.16 cfs @ 12.09 hrs, Volume= 0.011 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.16 cfs @ 12.09 hrs, Volume= 0.011 af  
 Routed to Pond 92P : DMH 63

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 62.22' @ 12.09 hrs

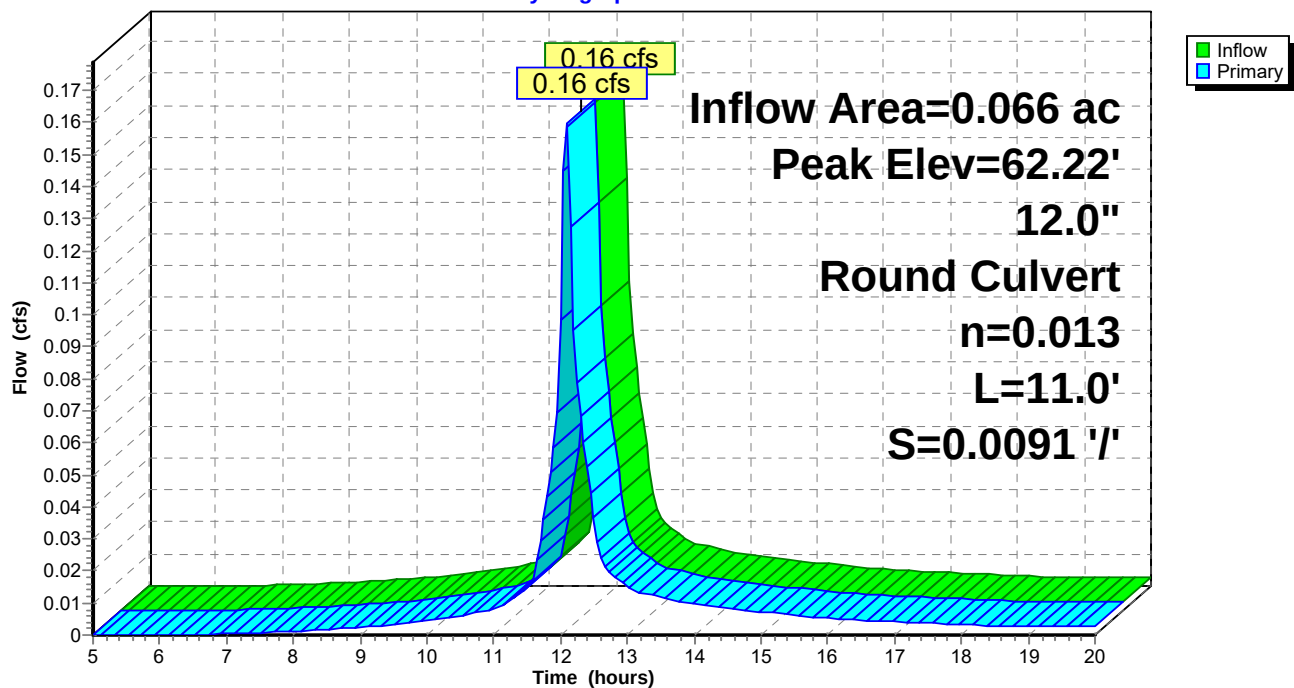
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.00' / 61.90' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.16 cfs @ 12.09 hrs HW=62.22' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 0.16 cfs @ 1.82 fps)

**Pond 88P: CB 84**

Hydrograph



### Summary for Pond 89P: CB 74

Inflow Area = 0.052 ac, 80.20% Impervious, Inflow Depth > 2.26" for 2-Year event  
 Inflow = 0.14 cfs @ 12.09 hrs, Volume= 0.010 af  
 Outflow = 0.14 cfs @ 12.09 hrs, Volume= 0.010 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.14 cfs @ 12.09 hrs, Volume= 0.010 af  
 Routed to Pond 91P : DMH 55

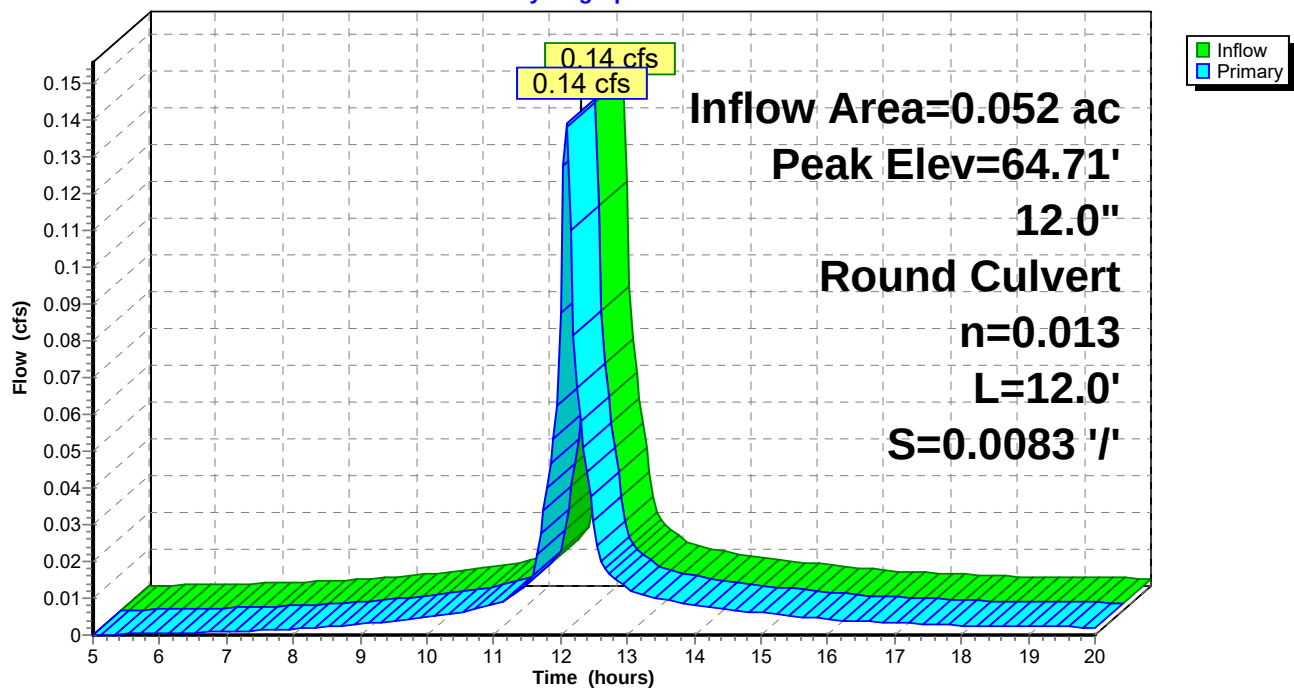
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.71' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 64.50' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 64.50' / 64.40' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.14 cfs @ 12.09 hrs HW=64.71' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.14 cfs @ 1.74 fps)

### Pond 89P: CB 74

Hydrograph



**Summary for Pond 90P: CB 75**

Inflow Area = 0.104 ac, 76.91% Impervious, Inflow Depth > 2.17" for 2-Year event  
 Inflow = 0.27 cfs @ 12.09 hrs, Volume= 0.019 af  
 Outflow = 0.27 cfs @ 12.09 hrs, Volume= 0.019 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.27 cfs @ 12.09 hrs, Volume= 0.019 af  
 Routed to Pond 91P : DMH 55

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 64.80' @ 12.09 hrs

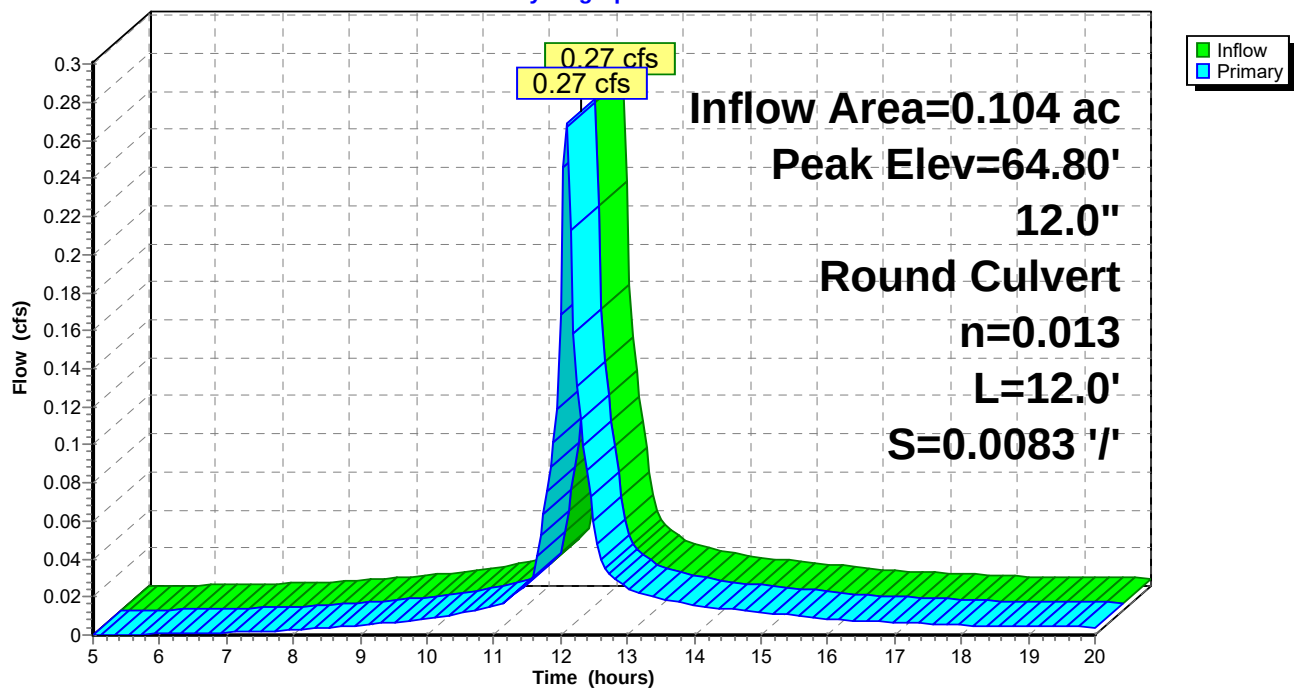
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 64.50' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 64.50' / 64.40' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.26 cfs @ 12.09 hrs HW=64.80' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 0.26 cfs @ 2.01 fps)

**Pond 90P: CB 75**

Hydrograph



**Summary for Pond 91P: DMH 55**

Inflow Area = 0.156 ac, 78.01% Impervious, Inflow Depth > 2.20" for 2-Year event  
 Inflow = 0.41 cfs @ 12.09 hrs, Volume= 0.029 af  
 Outflow = 0.41 cfs @ 12.09 hrs, Volume= 0.029 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.41 cfs @ 12.09 hrs, Volume= 0.029 af  
 Routed to Pond 96P : DMH 56

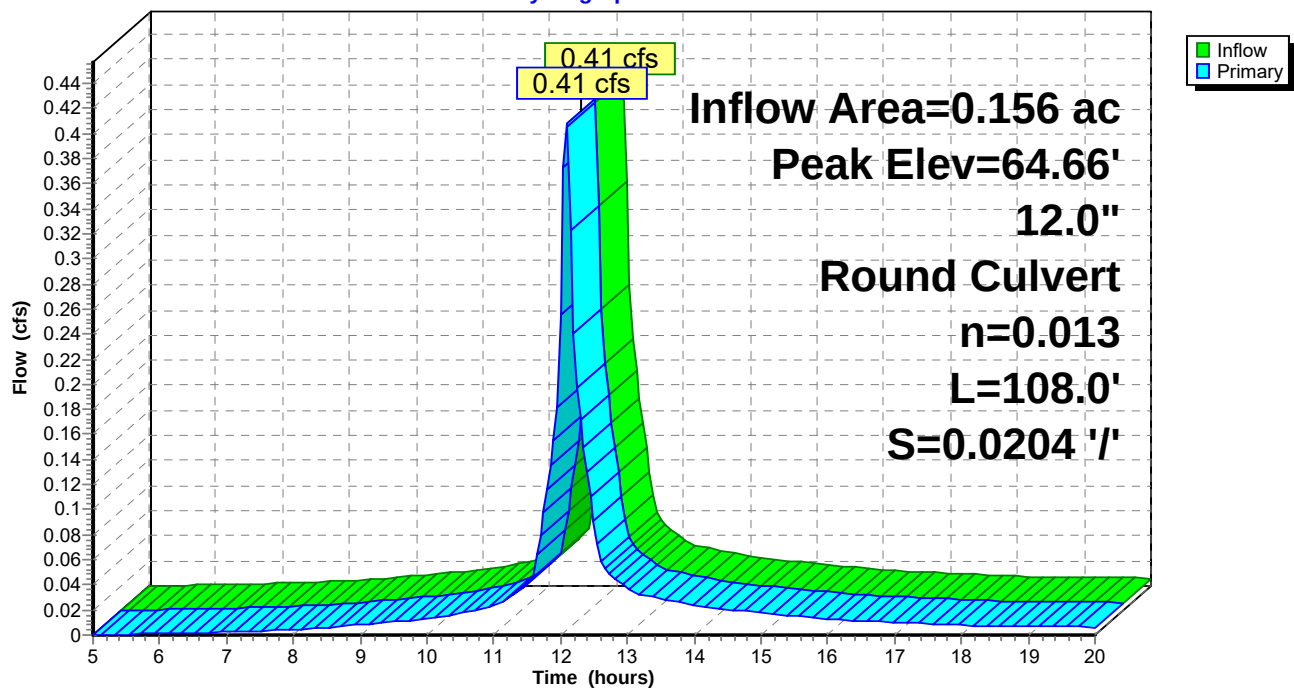
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.66' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 64.30' | <b>12.0" Round Culvert</b><br>L= 108.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 64.30' / 62.10' S= 0.0204 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.40 cfs @ 12.09 hrs HW=64.65' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.40 cfs @ 1.60 fps)

**Pond 91P: DMH 55**

Hydrograph





### Summary for Pond 92P: DMH 63

Inflow Area = 0.190 ac, 68.59% Impervious, Inflow Depth > 2.05" for 2-Year event  
 Inflow = 0.47 cfs @ 12.09 hrs, Volume= 0.033 af  
 Outflow = 0.47 cfs @ 12.09 hrs, Volume= 0.033 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.47 cfs @ 12.09 hrs, Volume= 0.033 af  
 Routed to Pond 93P : DMH 62

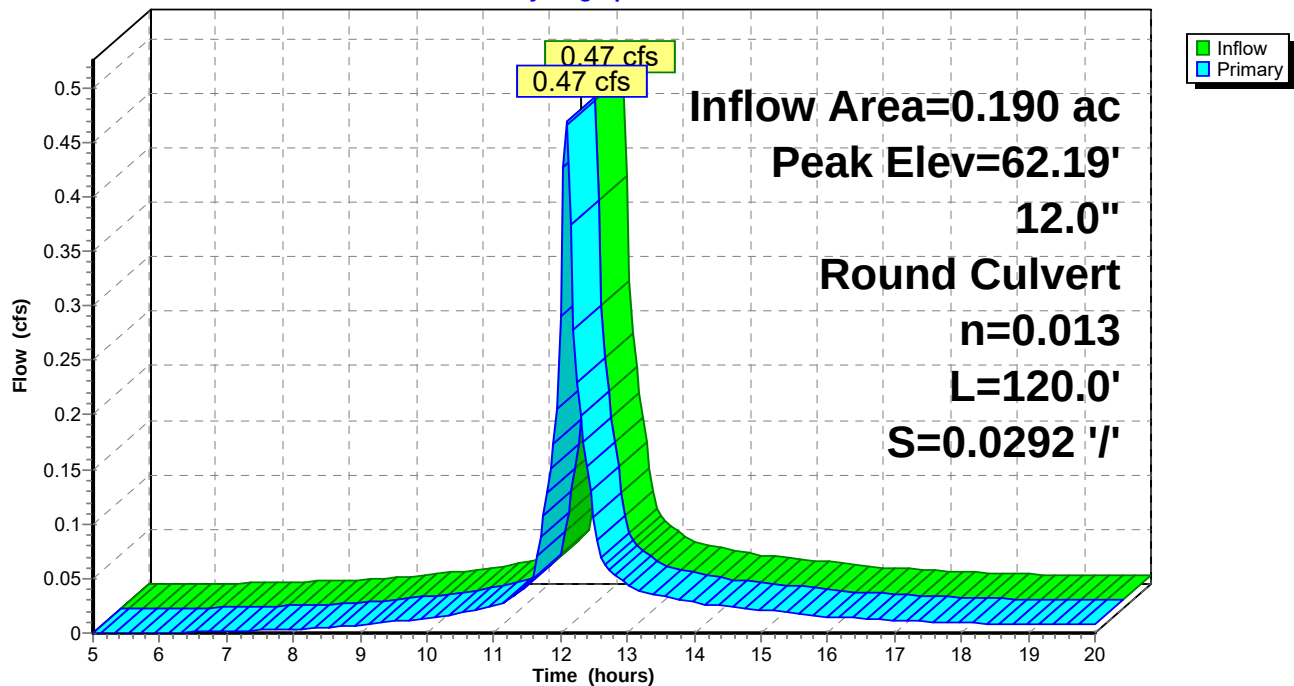
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.19' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.80' | <b>12.0" Round Culvert</b><br>L= 120.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.80' / 58.30' S= 0.0292 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.46 cfs @ 12.09 hrs HW=62.18' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.46 cfs @ 1.66 fps)

### Pond 92P: DMH 63

Hydrograph



**Summary for Pond 93P: DMH 62**

Inflow Area = 1.037 ac, 70.16% Impervious, Inflow Depth > 2.06" for 2-Year event  
 Inflow = 2.57 cfs @ 12.09 hrs, Volume= 0.178 af  
 Outflow = 2.57 cfs @ 12.09 hrs, Volume= 0.178 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.57 cfs @ 12.09 hrs, Volume= 0.178 af  
 Routed to Pond 209P : DMH 64

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 59.05' @ 12.09 hrs

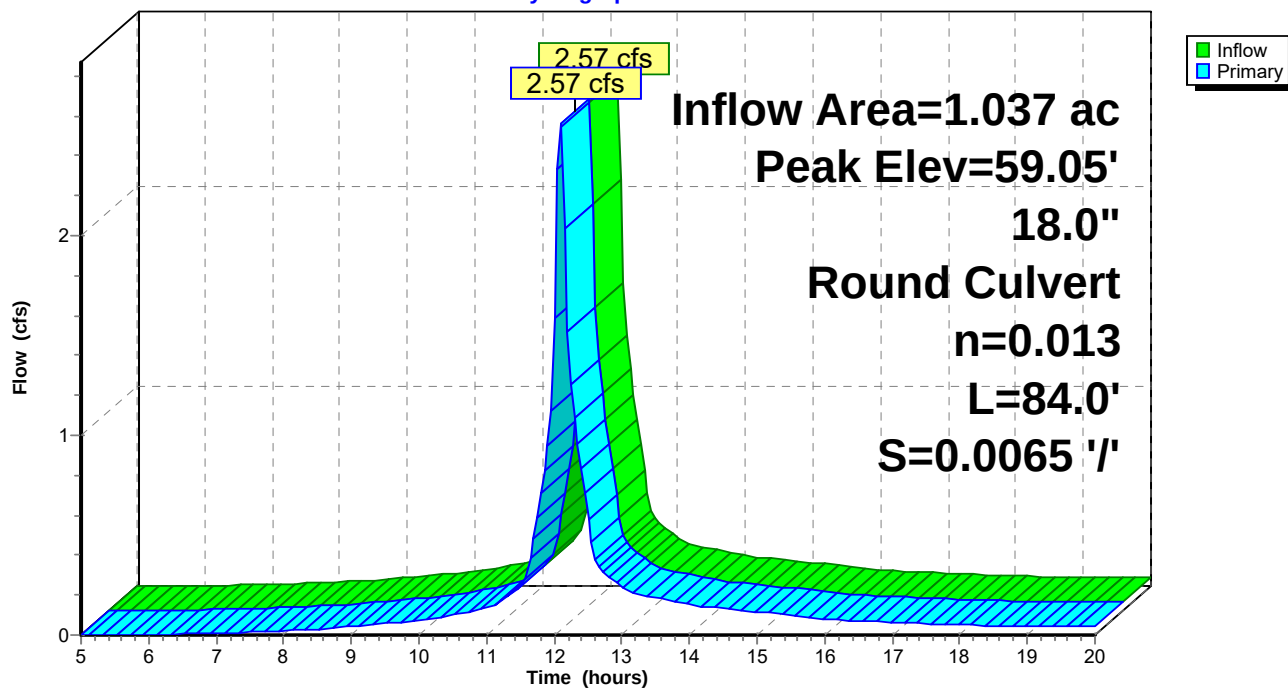
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.20' | <b>18.0" Round Culvert</b><br>L= 84.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.20' / 57.65' S= 0.0065 ' S= 0.0065 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.51 cfs @ 12.09 hrs HW=59.04' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 2.51 cfs @ 2.46 fps)

**Pond 93P: DMH 62**

Hydrograph



### Summary for Pond 94P: CB 77

Inflow Area = 0.204 ac, 71.21% Impervious, Inflow Depth > 2.08" for 2-Year event  
 Inflow = 0.51 cfs @ 12.09 hrs, Volume= 0.035 af  
 Outflow = 0.51 cfs @ 12.09 hrs, Volume= 0.035 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.51 cfs @ 12.09 hrs, Volume= 0.035 af  
 Routed to Pond 96P : DMH 56

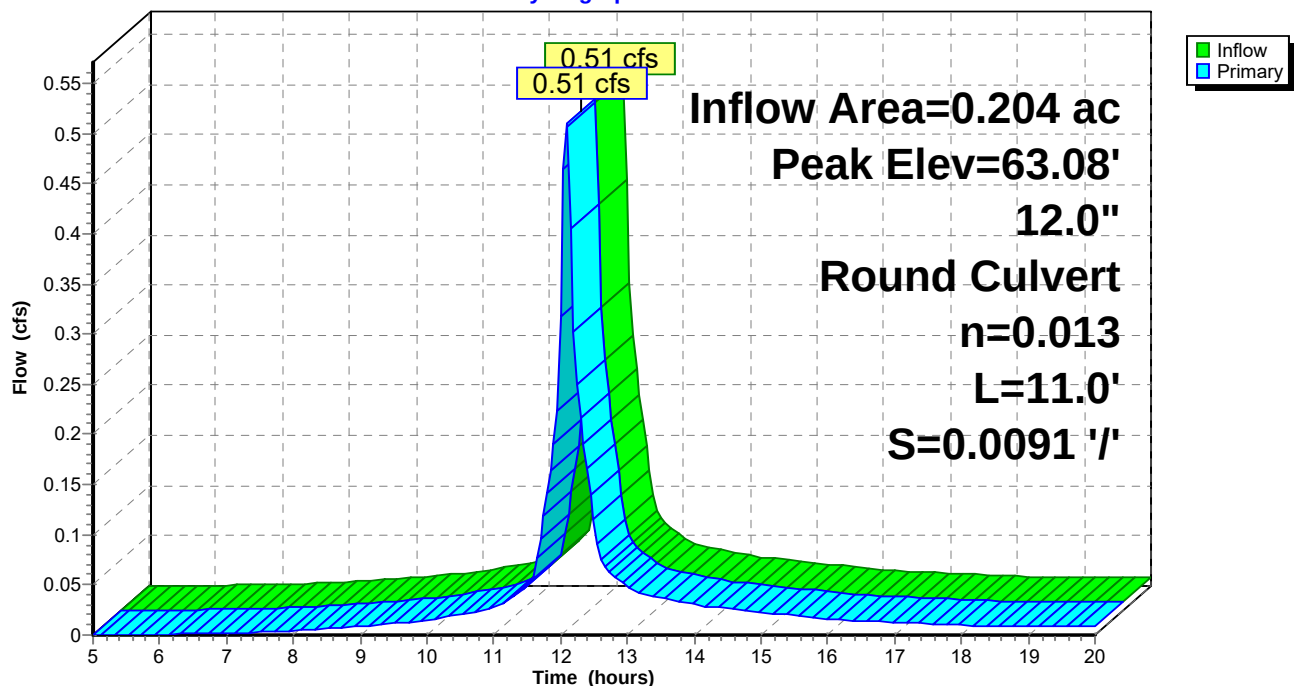
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.08' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.65' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.65' / 62.55' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.50 cfs @ 12.09 hrs HW=63.07' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.50 cfs @ 2.33 fps)

### Pond 94P: CB 77

Hydrograph



### Summary for Pond 95P: CB 76

Inflow Area = 0.141 ac, 70.69% Impervious, Inflow Depth > 2.08" for 2-Year event  
 Inflow = 0.35 cfs @ 12.09 hrs, Volume= 0.024 af  
 Outflow = 0.35 cfs @ 12.09 hrs, Volume= 0.024 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.35 cfs @ 12.09 hrs, Volume= 0.024 af  
 Routed to Pond 96P : DMH 56

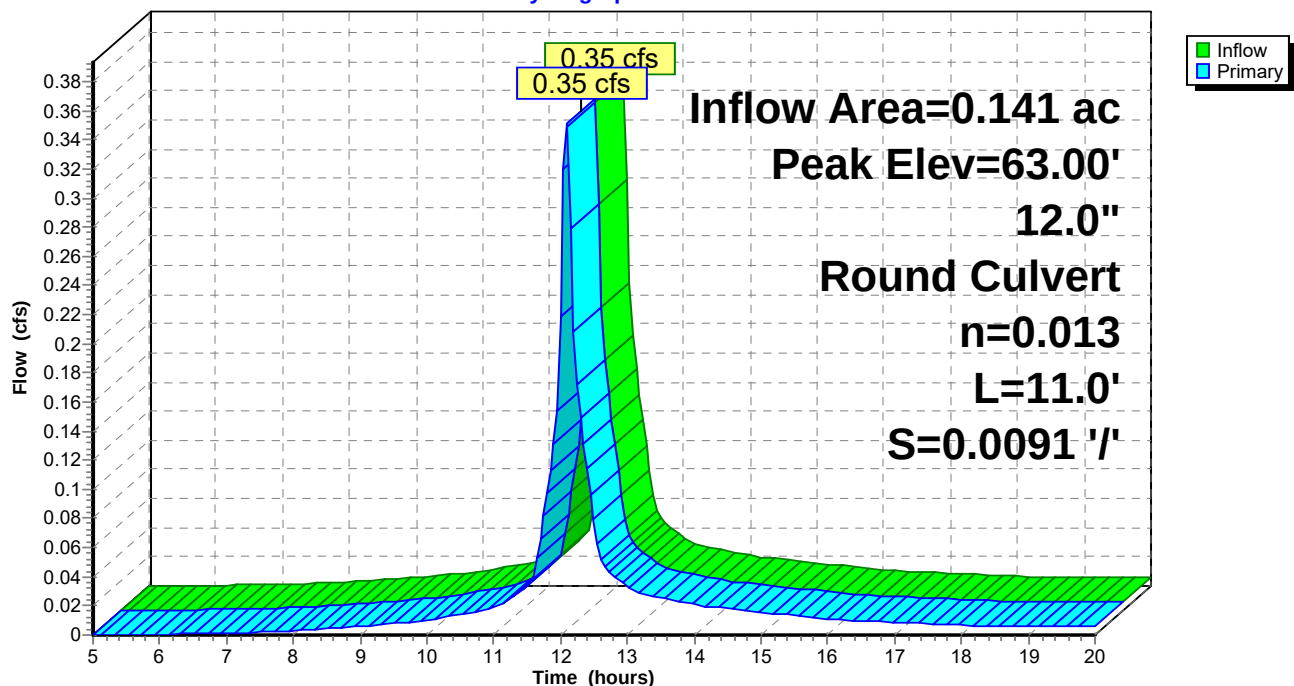
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.00' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.65' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.65' / 62.55' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.34 cfs @ 12.09 hrs HW=62.99' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.34 cfs @ 2.15 fps)

### Pond 95P: CB 76

Hydrograph



**Summary for Pond 96P: DMH 56**

Inflow Area = 1.141 ac, 72.03% Impervious, Inflow Depth > 2.11" for 2-Year event  
 Inflow = 2.88 cfs @ 12.09 hrs, Volume= 0.201 af  
 Outflow = 2.88 cfs @ 12.09 hrs, Volume= 0.201 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.88 cfs @ 12.09 hrs, Volume= 0.201 af  
 Routed to Pond 111P : DMH 57

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 62.91' @ 12.09 hrs

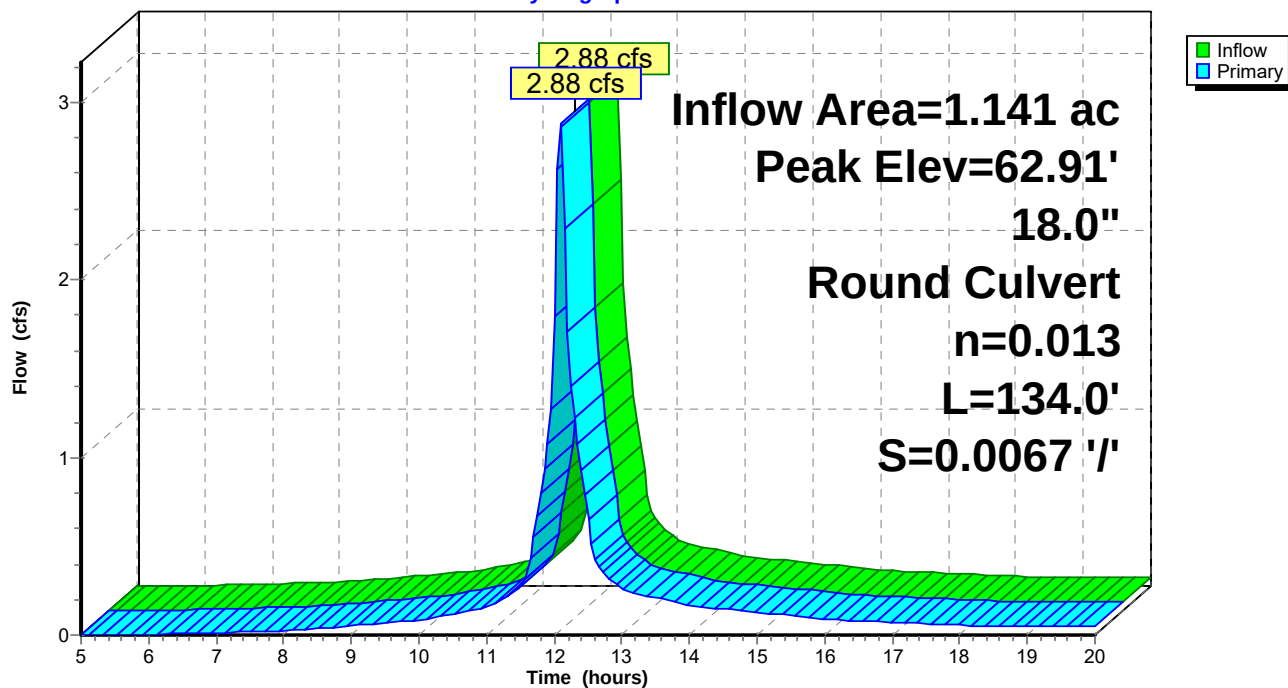
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.00' | <b>18.0" Round Culvert</b><br>L= 134.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.00' / 61.10' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.81 cfs @ 12.09 hrs HW=62.90' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 2.81 cfs @ 2.55 fps)

**Pond 96P: DMH 56**

Hydrograph



### Summary for Pond 97P: Sub. Det. 2

Inflow Area = 1.404 ac, 71.59% Impervious, Inflow Depth > 2.09" for 2-Year event  
 Inflow = 3.51 cfs @ 12.09 hrs, Volume= 0.245 af  
 Outflow = 0.04 cfs @ 20.00 hrs, Volume= 0.031 af, Atten= 99%, Lag= 474.6 min  
 Primary = 0.04 cfs @ 20.00 hrs, Volume= 0.031 af  
 Routed to Link 188L : DP 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.34' @ 20.00 hrs Surf.Area= 0.088 ac Storage= 0.214 af

Plug-Flow detention time= 331.8 min calculated for 0.031 af (13% of inflow)  
 Center-of-Mass det. time= 157.8 min ( 928.2 - 770.3 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 57.50' | 0.014 af      | <b>66.00'W x 58.00'L x 5.71'H Field A</b><br>0.502 af Overall - 0.467 af Embedded = 0.035 af x 40.0% Voids                                                                                             |
| #2A    | 57.54' | 0.367 af      | <b>Shea Leaching Chamber 8x14x5.7 x 32</b> Inside #1<br>Inside= 84.0"W x 60.0"H => 38.46 sf x 13.00'L = 500.0 cf<br>Outside= 96.0"W x 68.0"H => 45.36 sf x 14.00'L = 635.0 cf<br>32 Chambers in 8 Rows |
|        |        | 0.381 af      | Total Available Storage                                                                                                                                                                                |

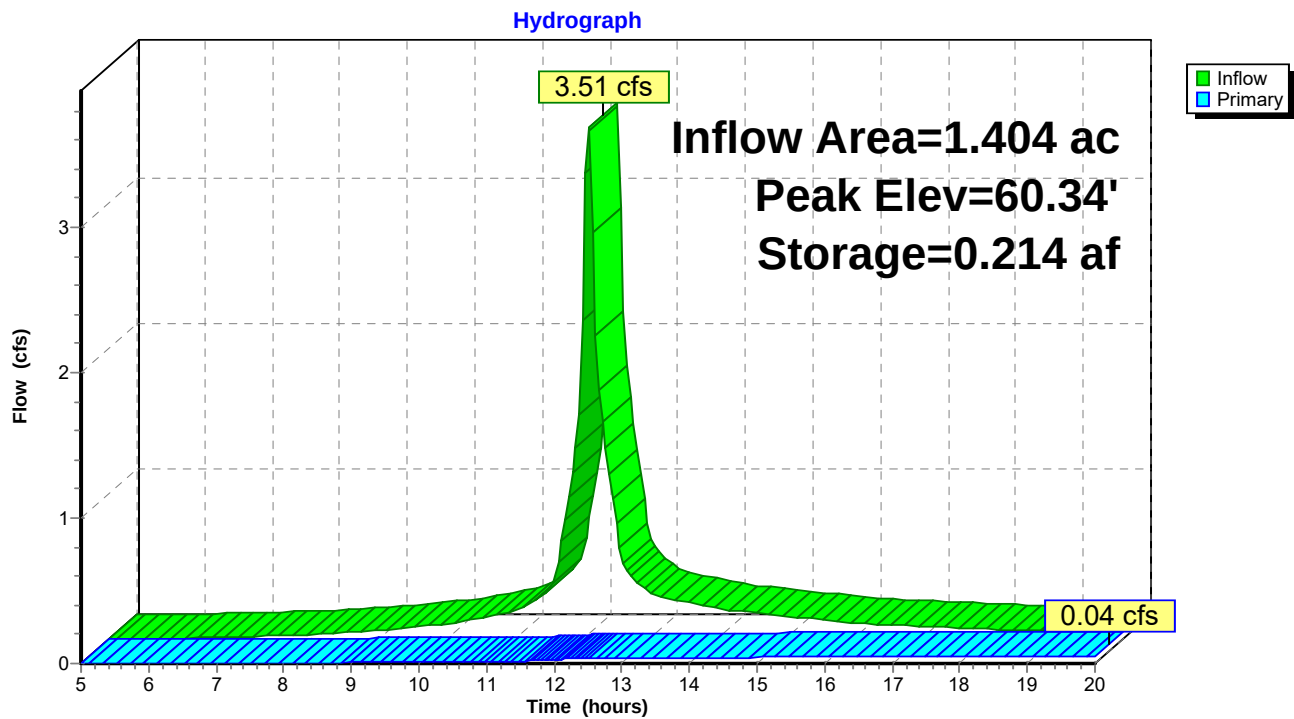
Storage Group A created with Chamber Wizard

| Device | Routing  | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary  | 57.50' | <b>18.0" Round Culvert</b><br>L= 30.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.50' / 53.00' S= 0.1500 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |
| #2     | Device 1 | 57.50' | <b>1.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                       |
| #3     | Device 1 | 60.50' | <b>2.0" Vert. Orifice/Grate X 2.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                             |
| #4     | Device 1 | 61.70' | <b>4.0' long Sharp-Crested Rectangular Weir</b> 2 End Contraction(s)                                                                                                                                             |

**Primary OutFlow** Max=0.04 cfs @ 20.00 hrs HW=60.34' (Free Discharge)

- 1=Culvert (Passes 0.04 cfs of 9.72 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.04 cfs @ 8.06 fps)
- 3=Orifice/Grate ( Controls 0.00 cfs)
- 4=Sharp-Crested Rectangular Weir ( Controls 0.00 cfs)

**Pond 97P: Sub. Det. 2**



**Summary for Pond 98P: DMH 61**

Inflow Area = 0.847 ac, 70.52% Impervious, Inflow Depth > 2.07" for 2-Year event  
 Inflow = 2.10 cfs @ 12.09 hrs, Volume= 0.146 af  
 Outflow = 2.10 cfs @ 12.09 hrs, Volume= 0.146 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.10 cfs @ 12.09 hrs, Volume= 0.146 af  
 Routed to Pond 93P : DMH 62

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.56' @ 12.09 hrs

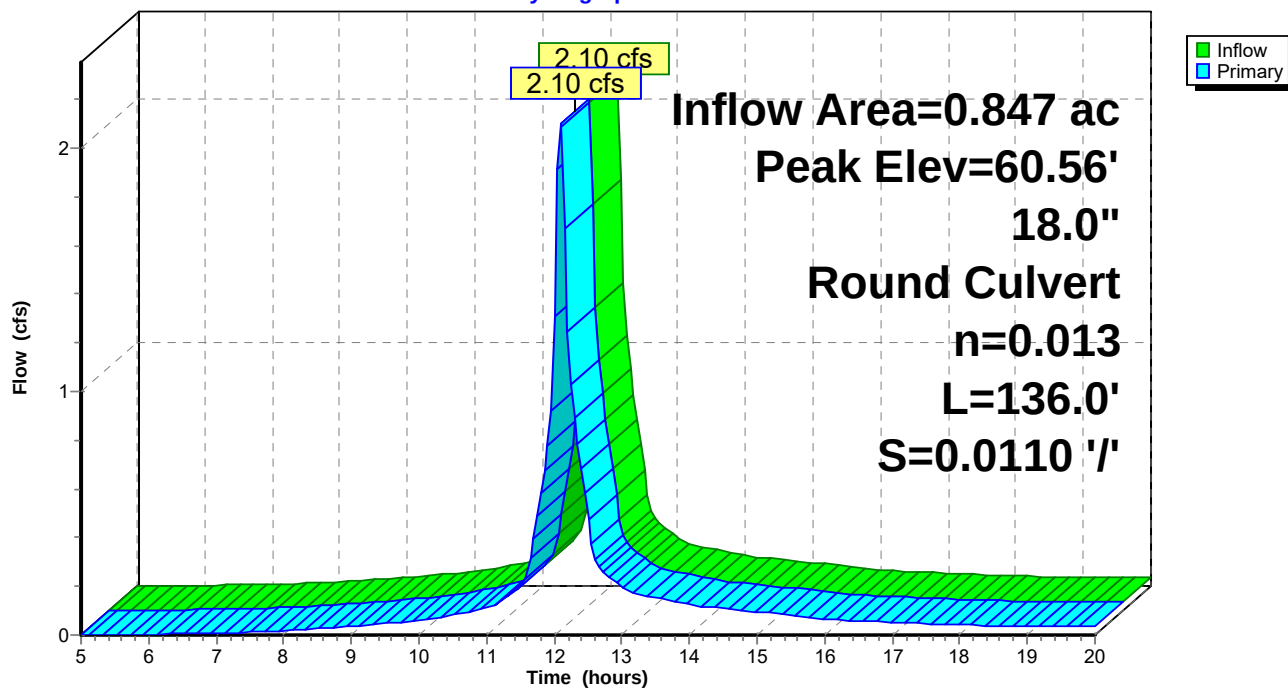
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.80' | <b>18.0" Round Culvert</b><br>L= 136.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.80' / 58.30' S= 0.0110 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.05 cfs @ 12.09 hrs HW=60.55' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 2.05 cfs @ 2.33 fps)

**Pond 98P: DMH 61**

Hydrograph





### Summary for Pond 99P: CB 81

Inflow Area = 0.258 ac, 68.08% Impervious, Inflow Depth > 1.99" for 2-Year event  
 Inflow = 0.62 cfs @ 12.09 hrs, Volume= 0.043 af  
 Outflow = 0.62 cfs @ 12.09 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.62 cfs @ 12.09 hrs, Volume= 0.043 af  
 Routed to Pond 101P : DMH 59

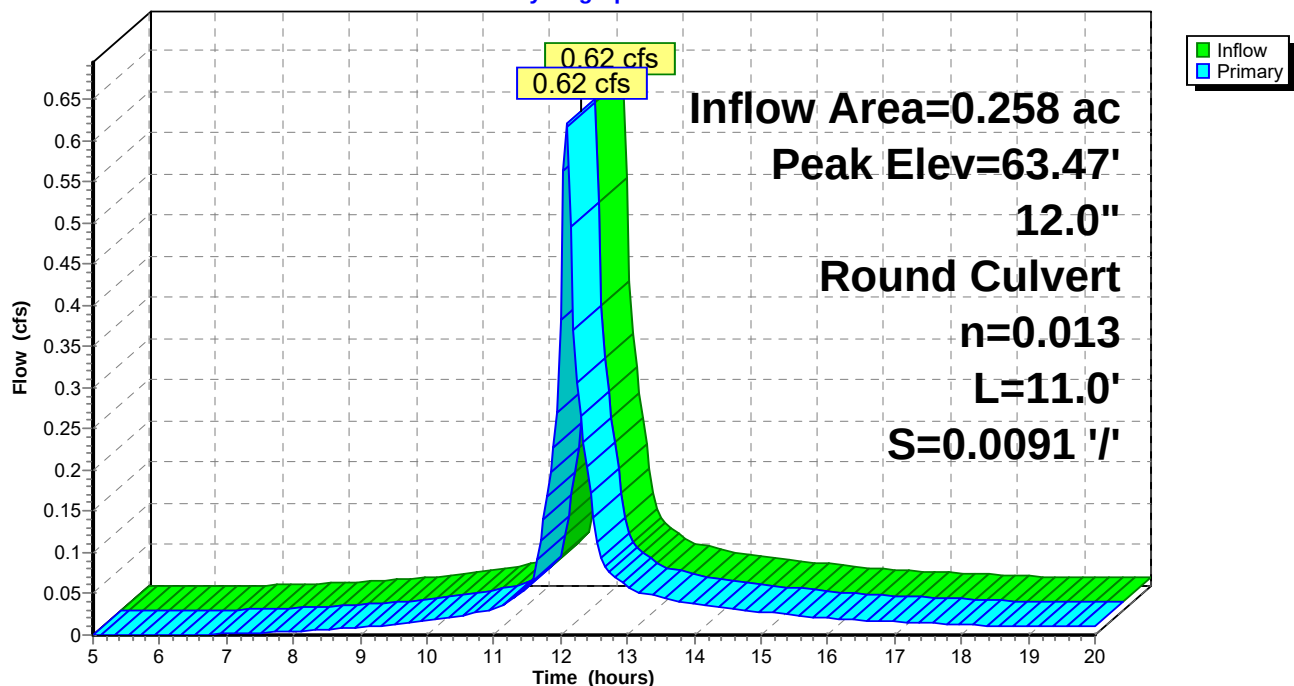
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.47' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.99' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.99' / 62.89' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.61 cfs @ 12.09 hrs HW=63.46' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.61 cfs @ 2.43 fps)

### Pond 99P: CB 81

Hydrograph



**Summary for Pond 100P: CB 80**

Inflow Area = 0.383 ac, 73.17% Impervious, Inflow Depth > 2.17" for 2-Year event  
 Inflow = 0.99 cfs @ 12.09 hrs, Volume= 0.069 af  
 Outflow = 0.99 cfs @ 12.09 hrs, Volume= 0.069 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.99 cfs @ 12.09 hrs, Volume= 0.069 af  
 Routed to Pond 101P : DMH 59

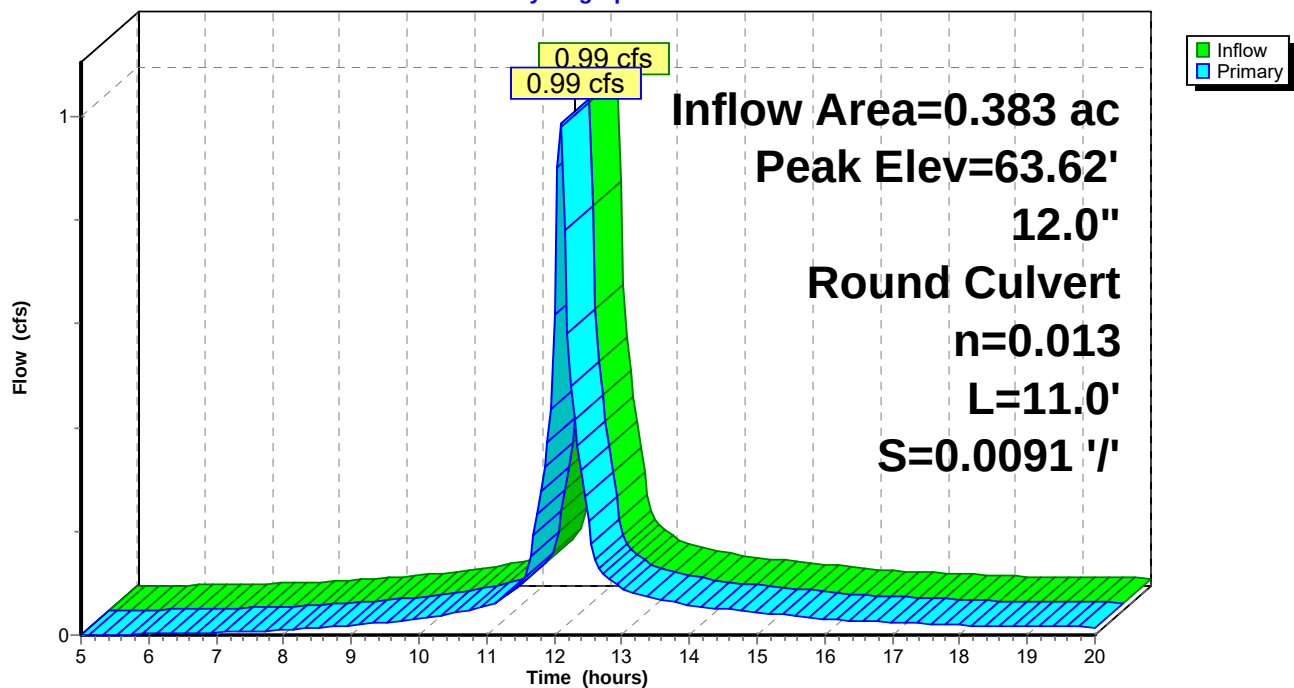
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 63.62' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.99' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.99' / 62.89' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.96 cfs @ 12.09 hrs HW=63.61' (Free Discharge)

1=Culvert (Barrel Controls 0.96 cfs @ 2.69 fps)

**Pond 100P: CB 80****Hydrograph**

**Summary for Pond 101P: DMH 59**

Inflow Area = 0.640 ac, 71.12% Impervious, Inflow Depth > 2.10" for 2-Year event  
 Inflow = 1.61 cfs @ 12.09 hrs, Volume= 0.112 af  
 Outflow = 1.61 cfs @ 12.09 hrs, Volume= 0.112 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.61 cfs @ 12.09 hrs, Volume= 0.112 af  
 Routed to Pond 96P : DMH 56

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 63.45' @ 12.09 hrs

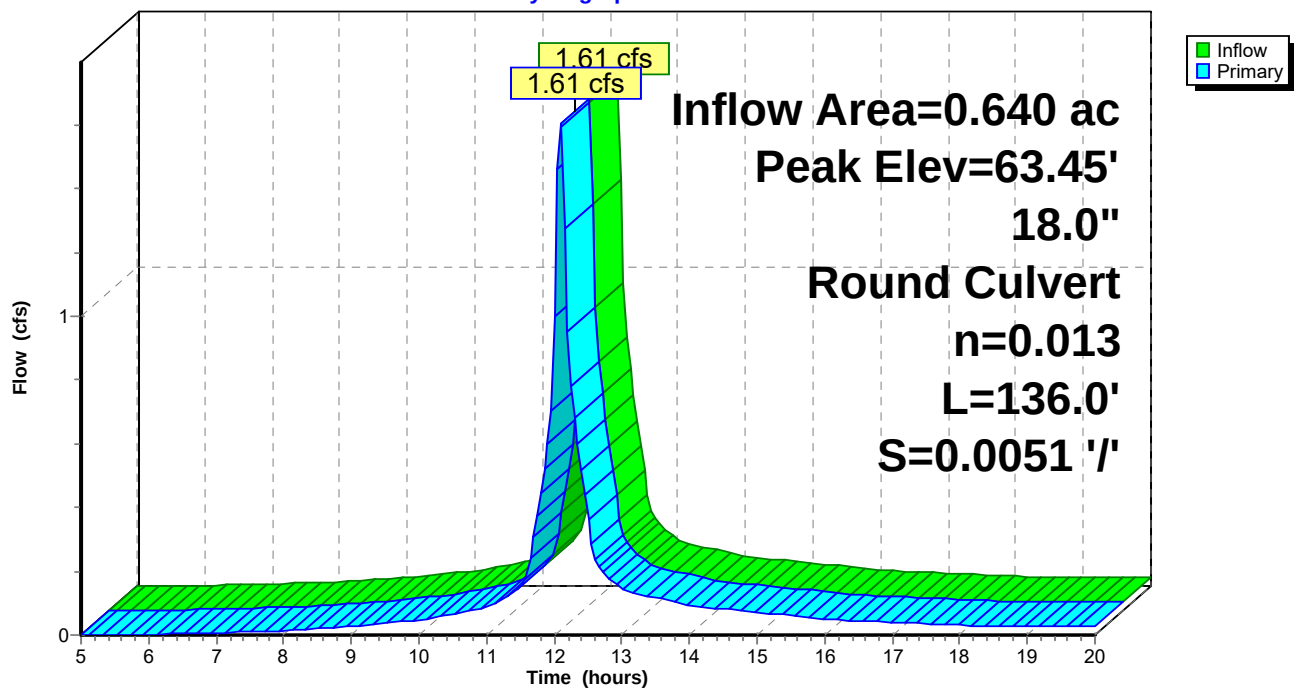
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.79' | <b>18.0" Round Culvert</b><br>L= 136.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.79' / 62.10' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=1.57 cfs @ 12.09 hrs HW=63.45' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 1.57 cfs @ 3.12 fps)

**Pond 101P: DMH 59**

Hydrograph



### Summary for Pond 102P: CB 93

Inflow Area = 0.178 ac, 69.60% Impervious, Inflow Depth > 2.08" for 2-Year event  
 Inflow = 0.44 cfs @ 12.09 hrs, Volume= 0.031 af  
 Outflow = 0.44 cfs @ 12.09 hrs, Volume= 0.031 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.44 cfs @ 12.09 hrs, Volume= 0.031 af  
 Routed to Pond 117P : DMH 69

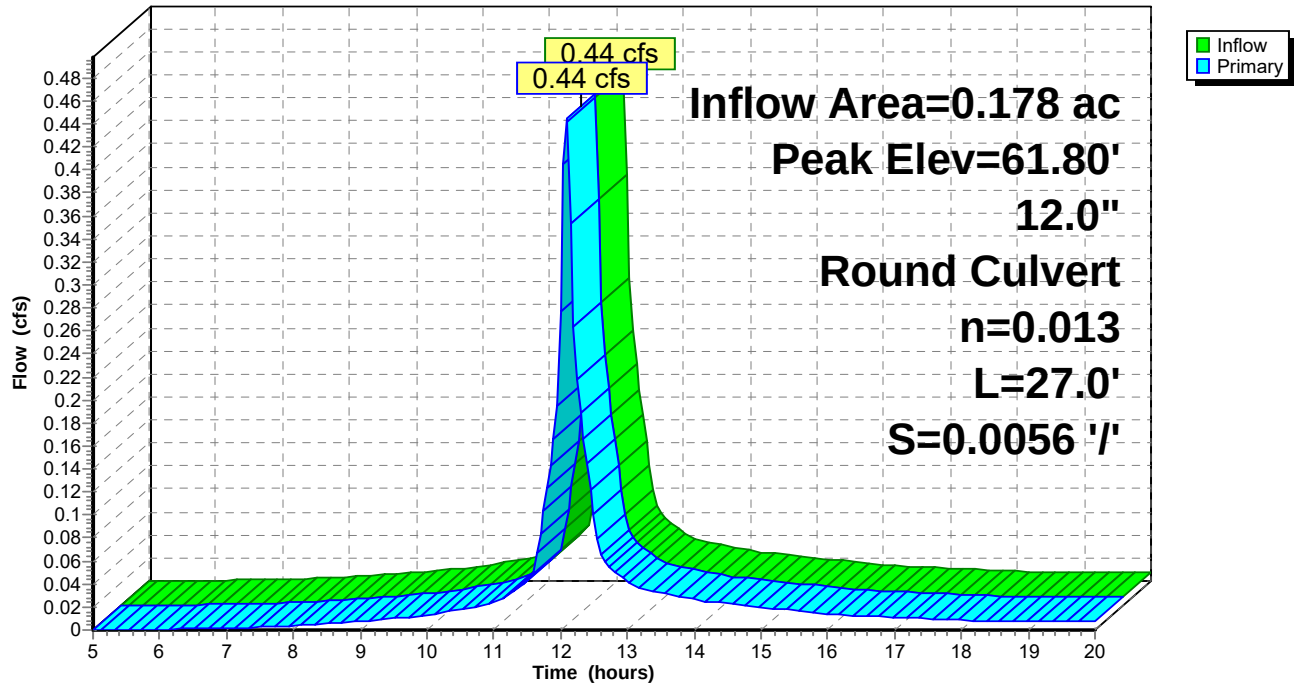
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.80' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.40' | <b>12.0" Round Culvert</b><br>L= 27.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.40' / 61.25' S= 0.0056 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.43 cfs @ 12.09 hrs HW=61.80' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.43 cfs @ 2.20 fps)

### Pond 102P: CB 93

#### Hydrograph



### Summary for Pond 103P: CB 92

Inflow Area = 0.313 ac, 76.83% Impervious, Inflow Depth > 2.17" for 2-Year event  
 Inflow = 0.81 cfs @ 12.09 hrs, Volume= 0.057 af  
 Outflow = 0.81 cfs @ 12.09 hrs, Volume= 0.057 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.81 cfs @ 12.09 hrs, Volume= 0.057 af  
 Routed to Pond 117P : DMH 69

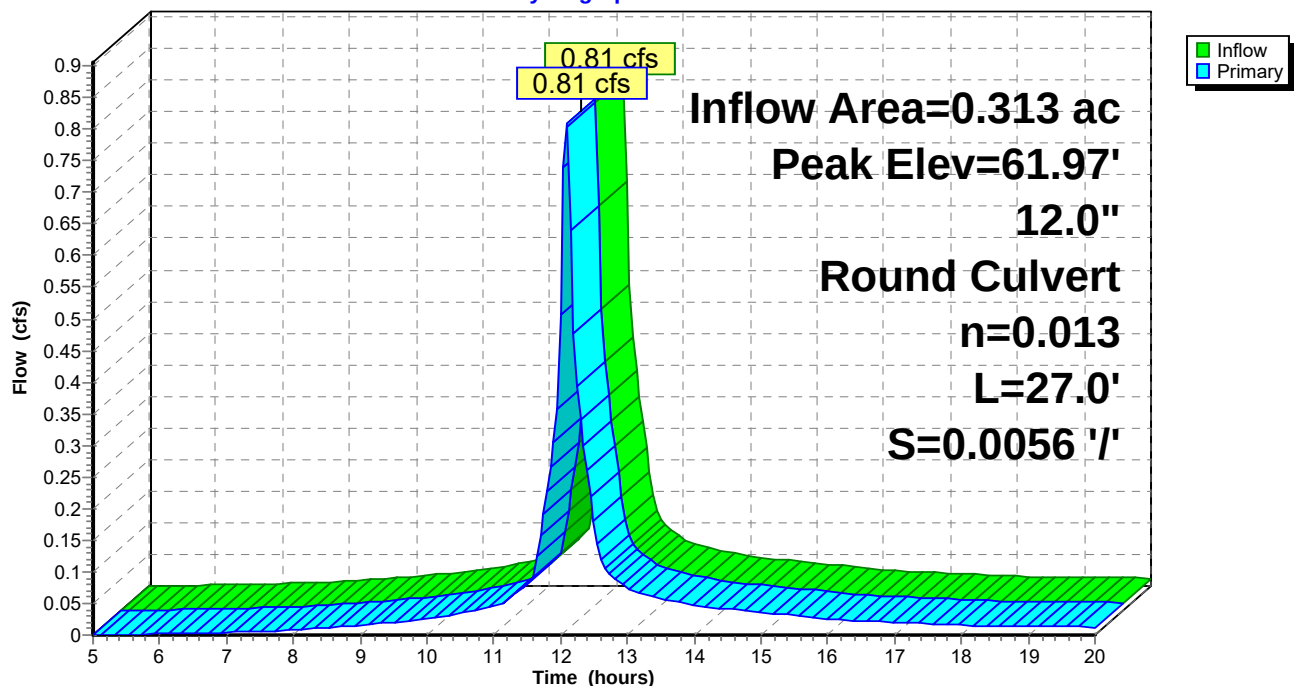
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.97' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.40' | <b>12.0" Round Culvert</b><br>L= 27.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.40' / 61.25' S= 0.0056 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.79 cfs @ 12.09 hrs HW=61.96' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.79 cfs @ 2.54 fps)

### Pond 103P: CB 92

#### Hydrograph



### Summary for Pond 104P: CB 83

Inflow Area = 0.343 ac, 64.21% Impervious, Inflow Depth > 1.91" for 2-Year event  
 Inflow = 0.80 cfs @ 12.09 hrs, Volume= 0.055 af  
 Outflow = 0.80 cfs @ 12.09 hrs, Volume= 0.055 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.80 cfs @ 12.09 hrs, Volume= 0.055 af  
 Routed to Pond 106P : DMH 60

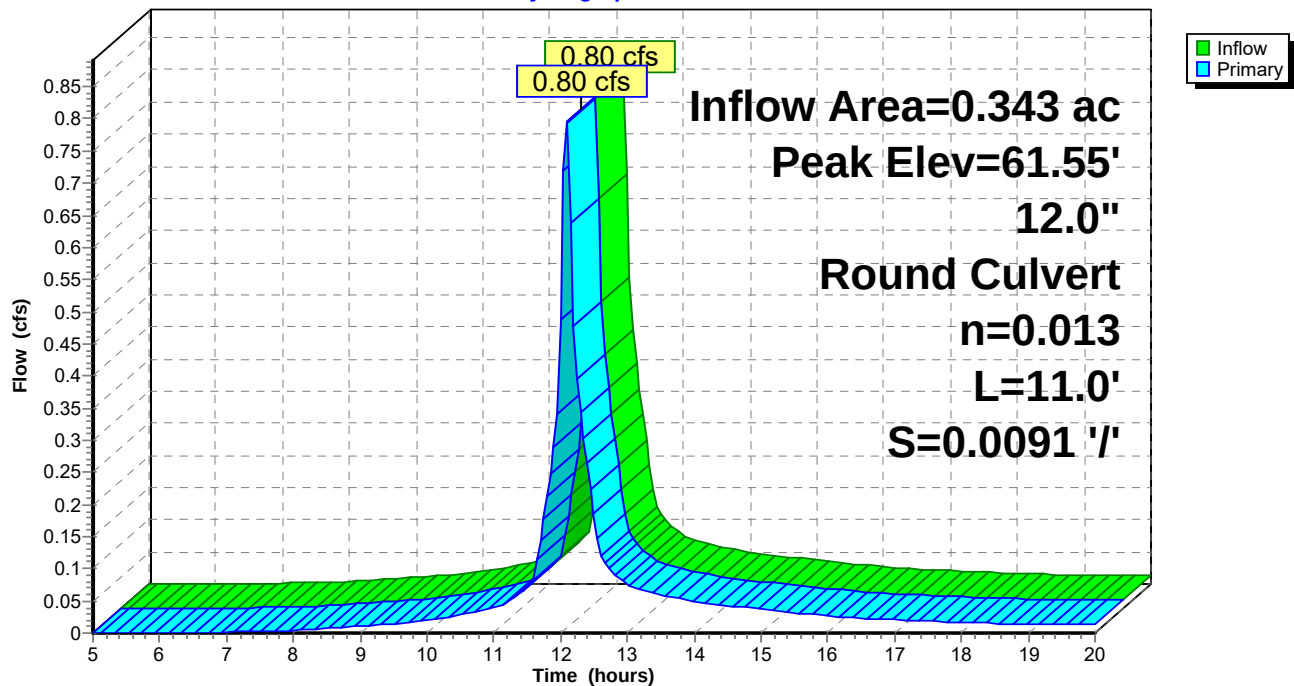
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.55' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.00' / 60.90' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.78 cfs @ 12.09 hrs HW=61.55' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.78 cfs @ 2.57 fps)

### Pond 104P: CB 83

#### Hydrograph



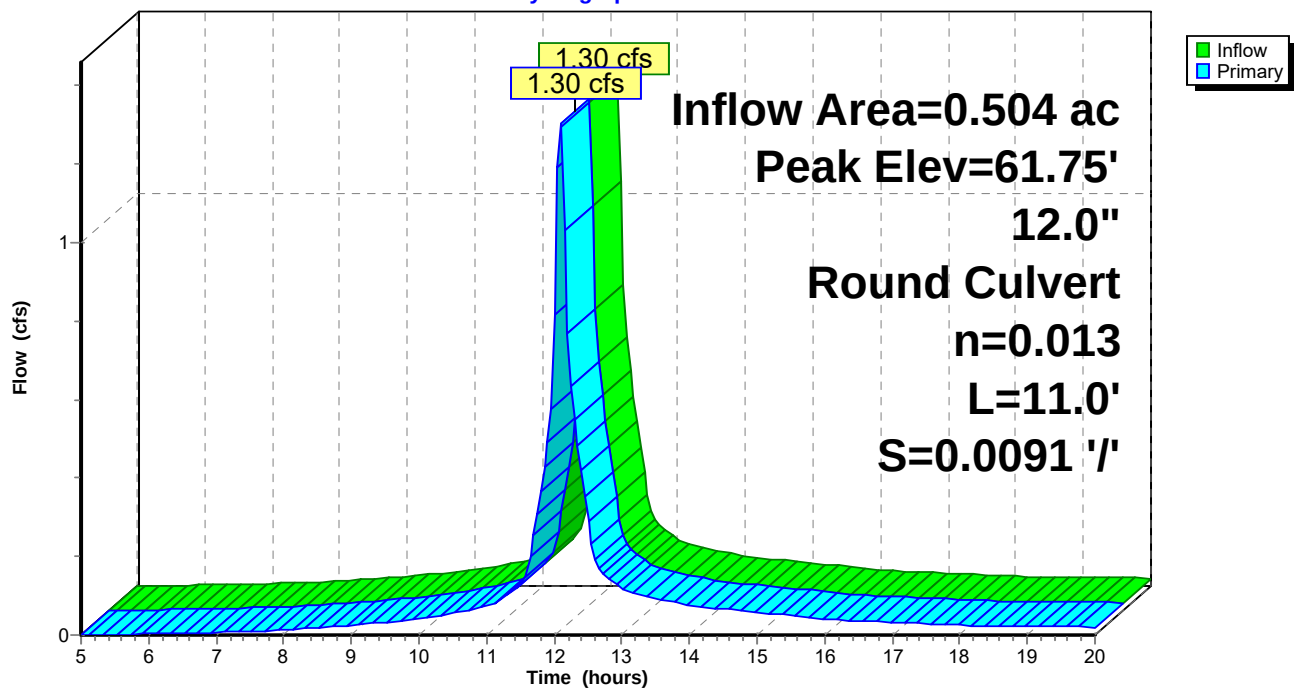
**Summary for Pond 105P: CB 82**

Inflow Area = 0.504 ac, 74.80% Impervious, Inflow Depth > 2.17" for 2-Year event  
 Inflow = 1.30 cfs @ 12.09 hrs, Volume= 0.091 af  
 Outflow = 1.30 cfs @ 12.09 hrs, Volume= 0.091 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.30 cfs @ 12.09 hrs, Volume= 0.091 af  
 Routed to Pond 106P : DMH 60

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.75' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.00' / 60.90' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.27 cfs @ 12.09 hrs HW=61.73' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.27 cfs @ 2.87 fps)

**Pond 105P: CB 82****Hydrograph**

### Summary for Pond 106P: DMH 60

Inflow Area = 0.847 ac, 70.52% Impervious, Inflow Depth > 2.07" for 2-Year event  
 Inflow = 2.10 cfs @ 12.09 hrs, Volume= 0.146 af  
 Outflow = 2.10 cfs @ 12.09 hrs, Volume= 0.146 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.10 cfs @ 12.09 hrs, Volume= 0.146 af  
 Routed to Pond 98P : DMH 61

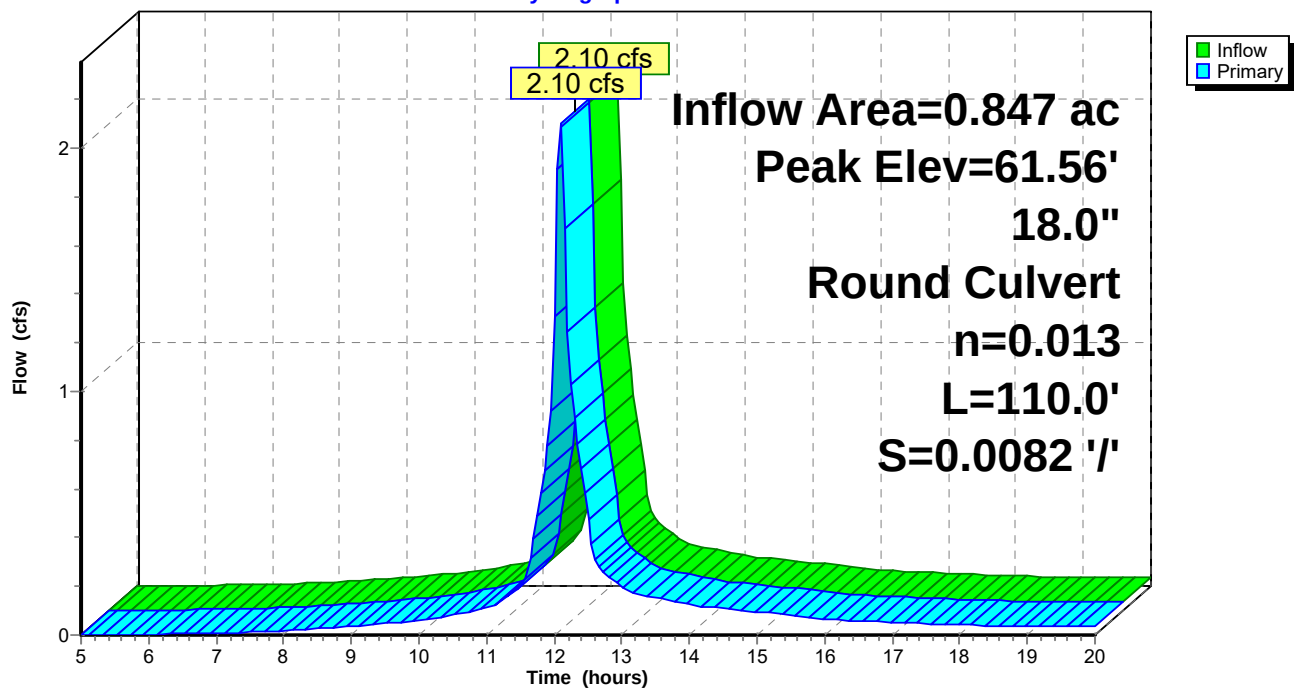
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.56' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.80' | <b>18.0" Round Culvert</b><br>L= 110.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.80' / 59.90' S= 0.0082 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.05 cfs @ 12.09 hrs HW=61.55' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.05 cfs @ 2.33 fps)

### Pond 106P: DMH 60

Hydrograph





### Summary for Pond 107P: CB

Inflow Area = 0.235 ac, 64.37% Impervious, Inflow Depth > 1.91" for 2-Year event  
 Inflow = 0.54 cfs @ 12.09 hrs, Volume= 0.037 af  
 Outflow = 0.54 cfs @ 12.09 hrs, Volume= 0.037 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.54 cfs @ 12.09 hrs, Volume= 0.037 af  
 Routed to Pond 119P : DMH 66

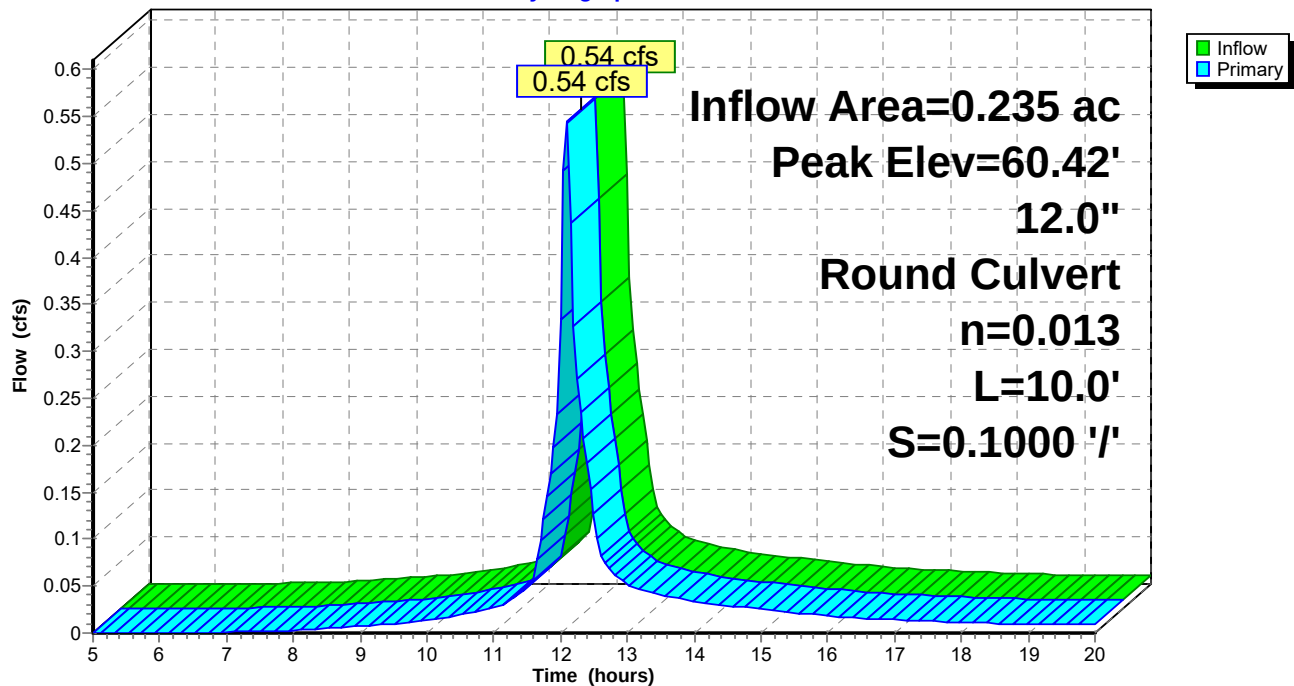
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.42' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.00' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.00' / 59.00' S= 0.1000 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.53 cfs @ 12.09 hrs HW=60.41' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.53 cfs @ 1.73 fps)

### Pond 107P: CB

Hydrograph



**Summary for Pond 108P: CB 88**

Inflow Area = 0.093 ac, 80.29% Impervious, Inflow Depth > 2.26" for 2-Year event  
 Inflow = 0.25 cfs @ 12.09 hrs, Volume= 0.018 af  
 Outflow = 0.25 cfs @ 12.09 hrs, Volume= 0.018 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.25 cfs @ 12.09 hrs, Volume= 0.018 af  
 Routed to Pond 119P : DMH 66

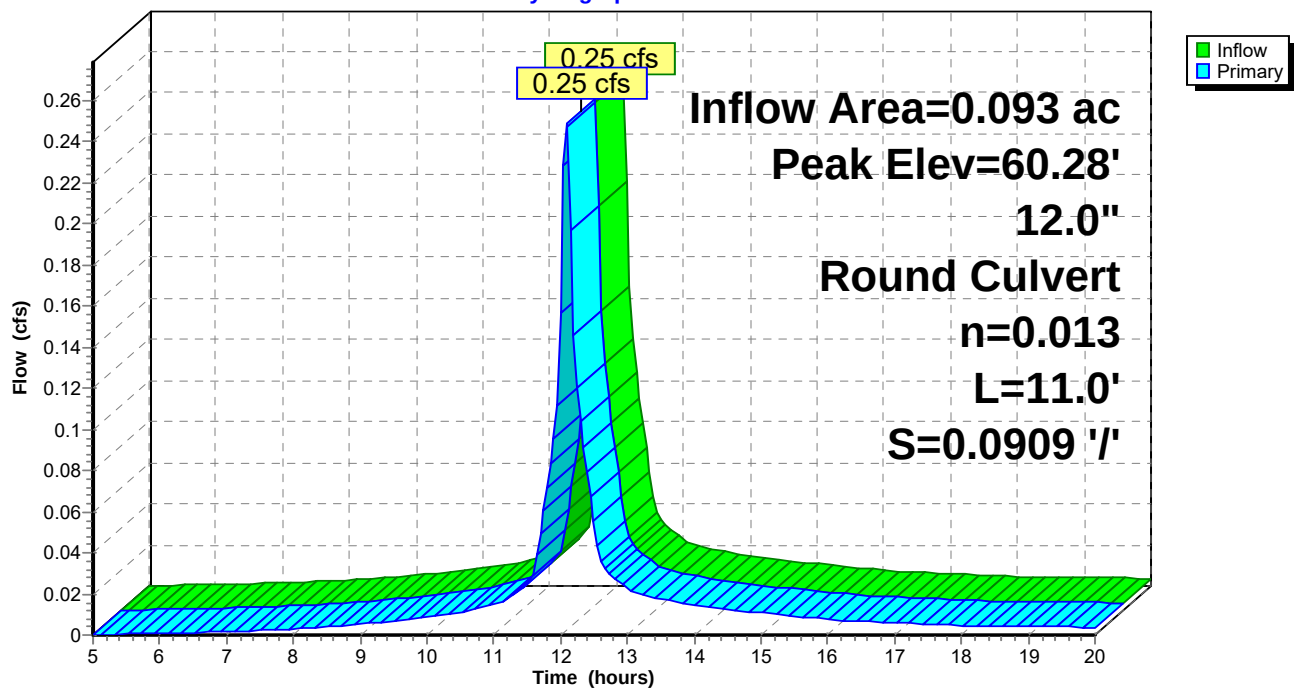
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.28' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.00' / 59.00' S= 0.0909 ' / ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.24 cfs @ 12.09 hrs HW=60.27' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.24 cfs @ 1.40 fps)

**Pond 108P: CB 88**

Hydrograph



**Summary for Pond 109P: CB 79**

Inflow Area = 0.457 ac, 64.44% Impervious, Inflow Depth > 1.91" for 2-Year event  
 Inflow = 1.06 cfs @ 12.09 hrs, Volume= 0.073 af  
 Outflow = 1.06 cfs @ 12.09 hrs, Volume= 0.073 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.06 cfs @ 12.09 hrs, Volume= 0.073 af  
 Routed to Pond 111P : DMH 57

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 62.07' @ 12.09 hrs

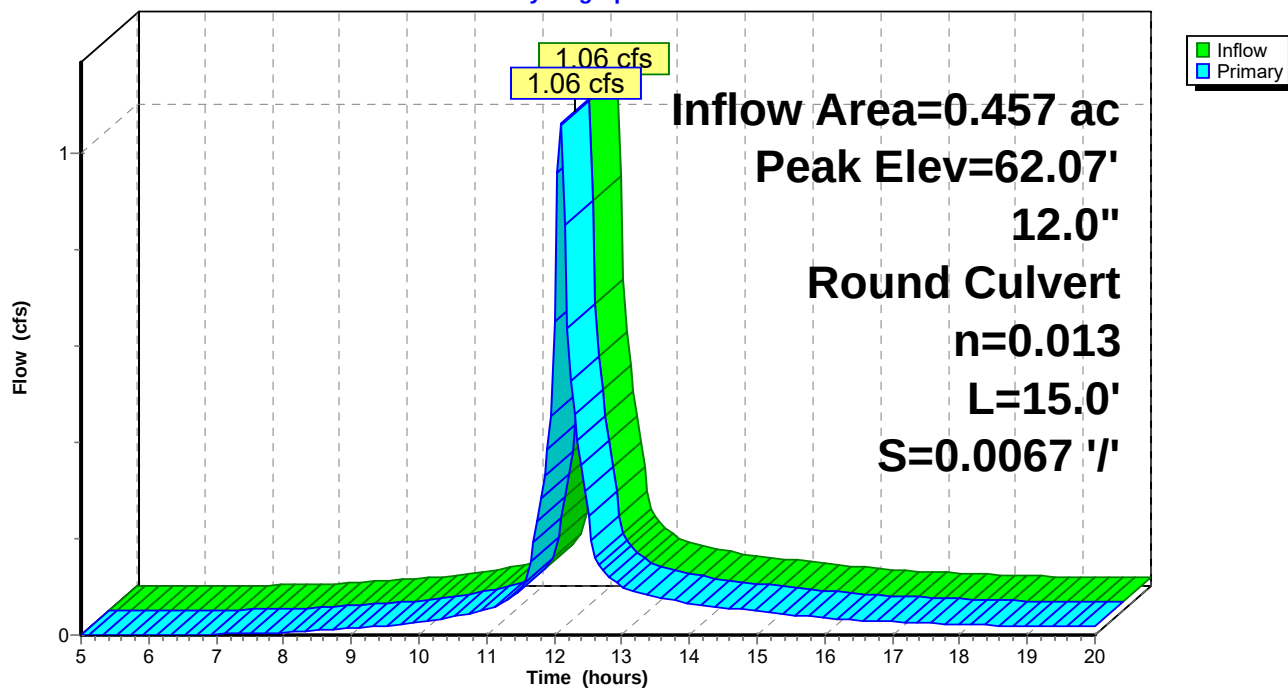
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.40' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.40' / 61.30' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.04 cfs @ 12.09 hrs HW=62.06' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 1.04 cfs @ 2.68 fps)

**Pond 109P: CB 79**

Hydrograph



**Summary for Pond 110P: CB 78**

Inflow Area = 0.396 ac, 64.26% Impervious, Inflow Depth > 1.91" for 2-Year event  
 Inflow = 0.92 cfs @ 12.09 hrs, Volume= 0.063 af  
 Outflow = 0.92 cfs @ 12.09 hrs, Volume= 0.063 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.92 cfs @ 12.09 hrs, Volume= 0.063 af  
 Routed to Pond 111P : DMH 57

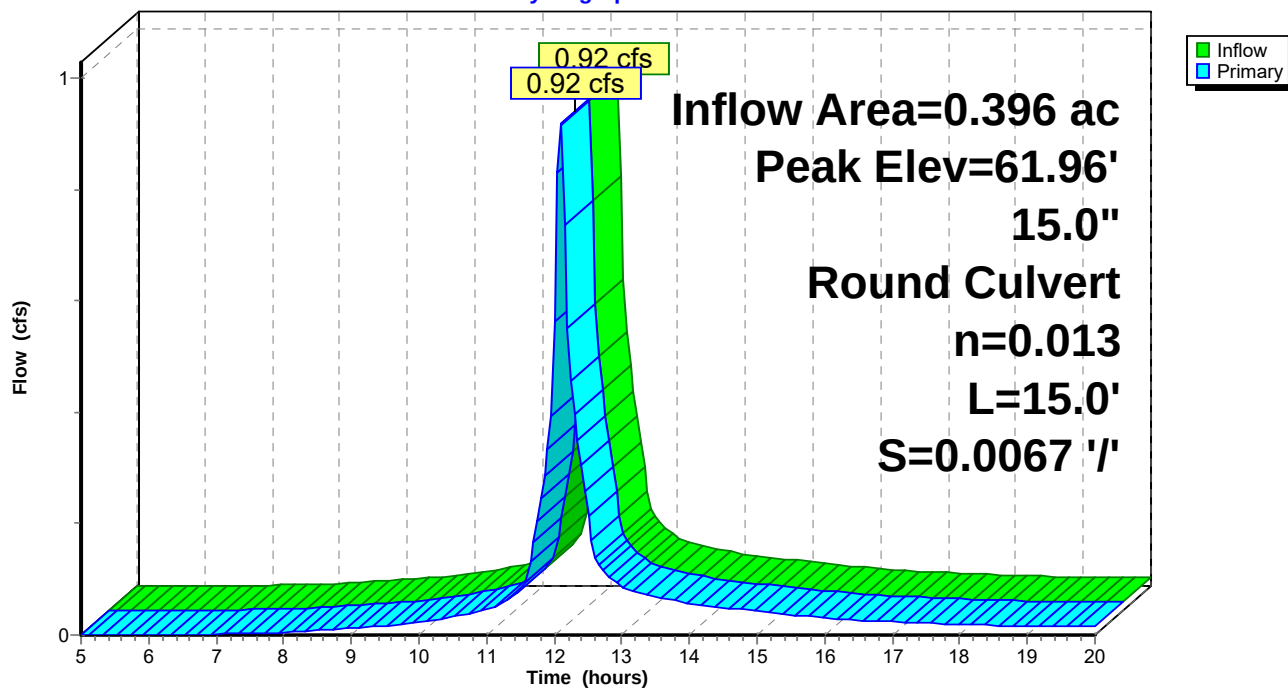
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 61.96' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.40' | <b>15.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.40' / 61.30' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf |

**Primary OutFlow** Max=0.90 cfs @ 12.09 hrs HW=61.95' (Free Discharge)

1=Culvert (Barrel Controls 0.90 cfs @ 2.52 fps)

**Pond 110P: CB 78****Hydrograph**

### Summary for Pond 111P: DMH 57

Inflow Area = 1.994 ac, 68.75% Impervious, Inflow Depth > 2.02" for 2-Year event  
 Inflow = 4.86 cfs @ 12.09 hrs, Volume= 0.336 af  
 Outflow = 4.86 cfs @ 12.09 hrs, Volume= 0.336 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.86 cfs @ 12.09 hrs, Volume= 0.336 af  
 Routed to Pond 208P : DMH 58

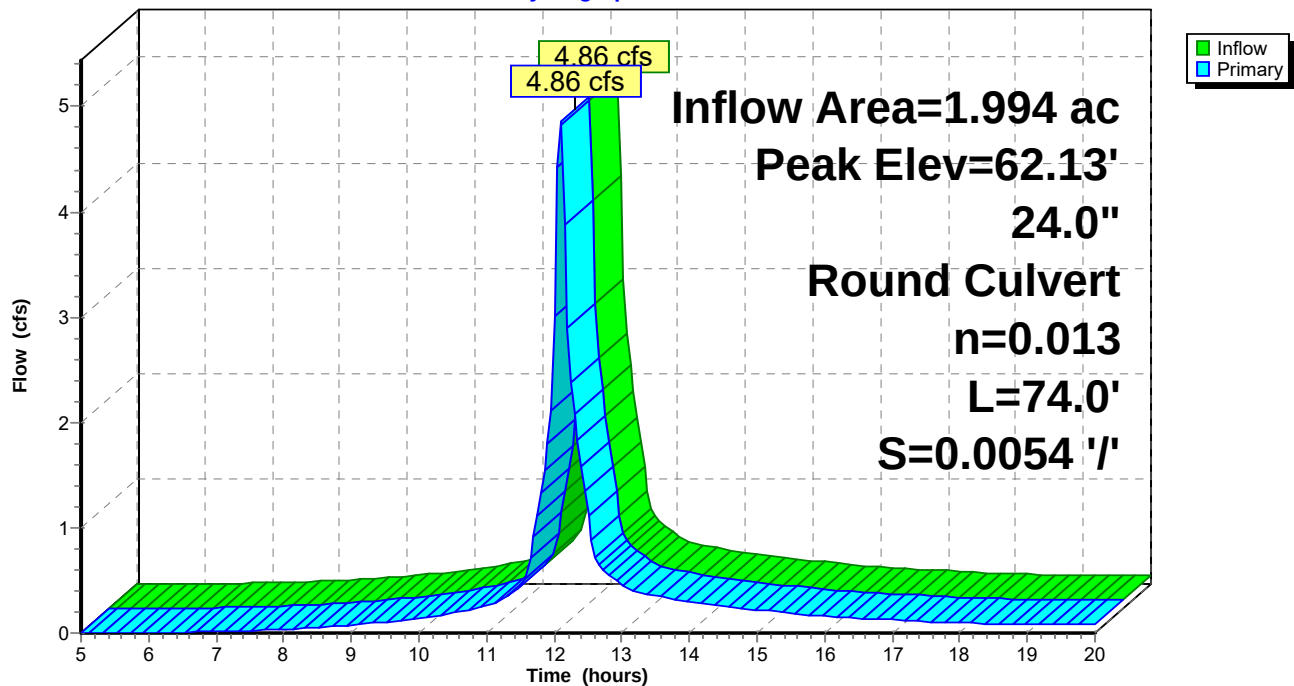
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.13' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.00' | <b>24.0" Round Culvert</b><br>L= 74.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.00' / 60.60' S= 0.0054 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=4.75 cfs @ 12.09 hrs HW=62.11' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 4.75 cfs @ 3.82 fps)

### Pond 111P: DMH 57

Hydrograph



### Summary for Pond 112P: CB 45

Inflow Area = 0.290 ac, 58.56% Impervious, Inflow Depth > 1.67" for 2-Year event  
 Inflow = 0.60 cfs @ 12.09 hrs, Volume= 0.040 af  
 Outflow = 0.60 cfs @ 12.09 hrs, Volume= 0.040 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.60 cfs @ 12.09 hrs, Volume= 0.040 af  
 Routed to Pond 123P : DMH 31

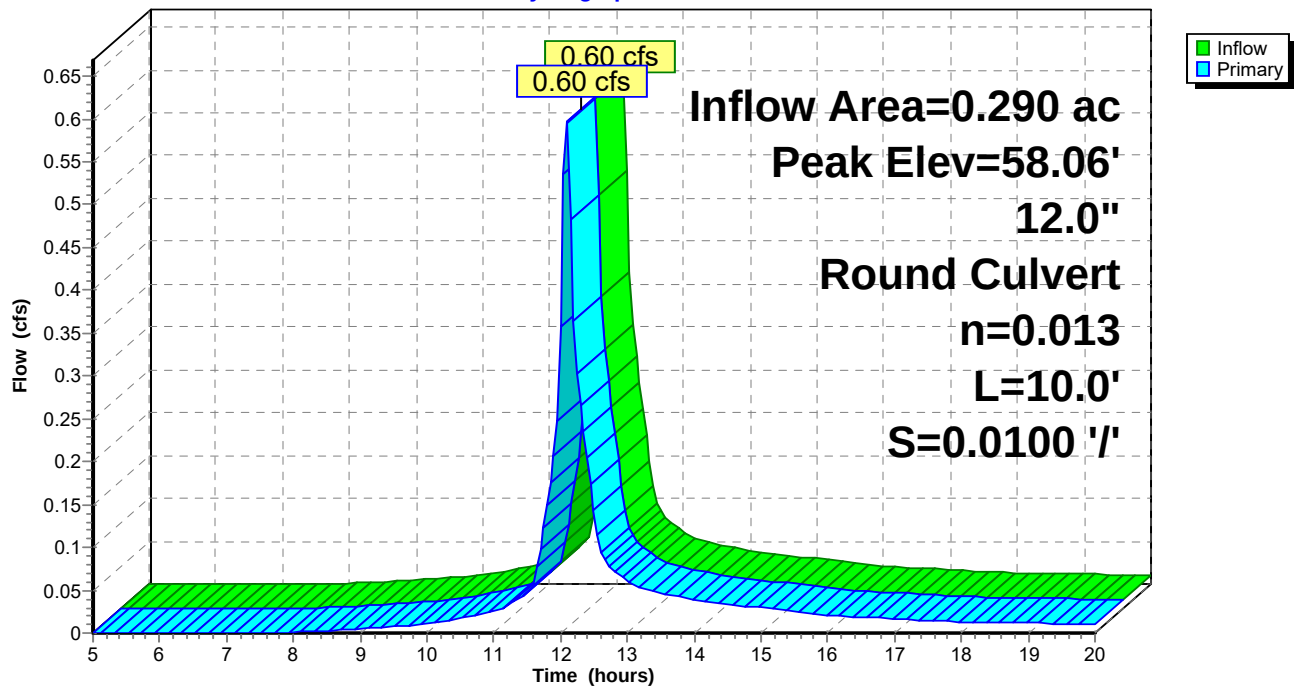
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.06' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.59' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.59' / 57.49' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.59 cfs @ 12.09 hrs HW=58.05' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.59 cfs @ 2.43 fps)

### Pond 112P: CB 45

#### Hydrograph



**Summary for Pond 113P: CB 95**

Inflow Area = 0.197 ac, 91.64% Impervious, Inflow Depth > 2.55" for 2-Year event  
 Inflow = 0.57 cfs @ 12.09 hrs, Volume= 0.042 af  
 Outflow = 0.57 cfs @ 12.09 hrs, Volume= 0.042 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.57 cfs @ 12.09 hrs, Volume= 0.042 af  
 Routed to Pond 118P : DMH 70

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.46' @ 12.09 hrs

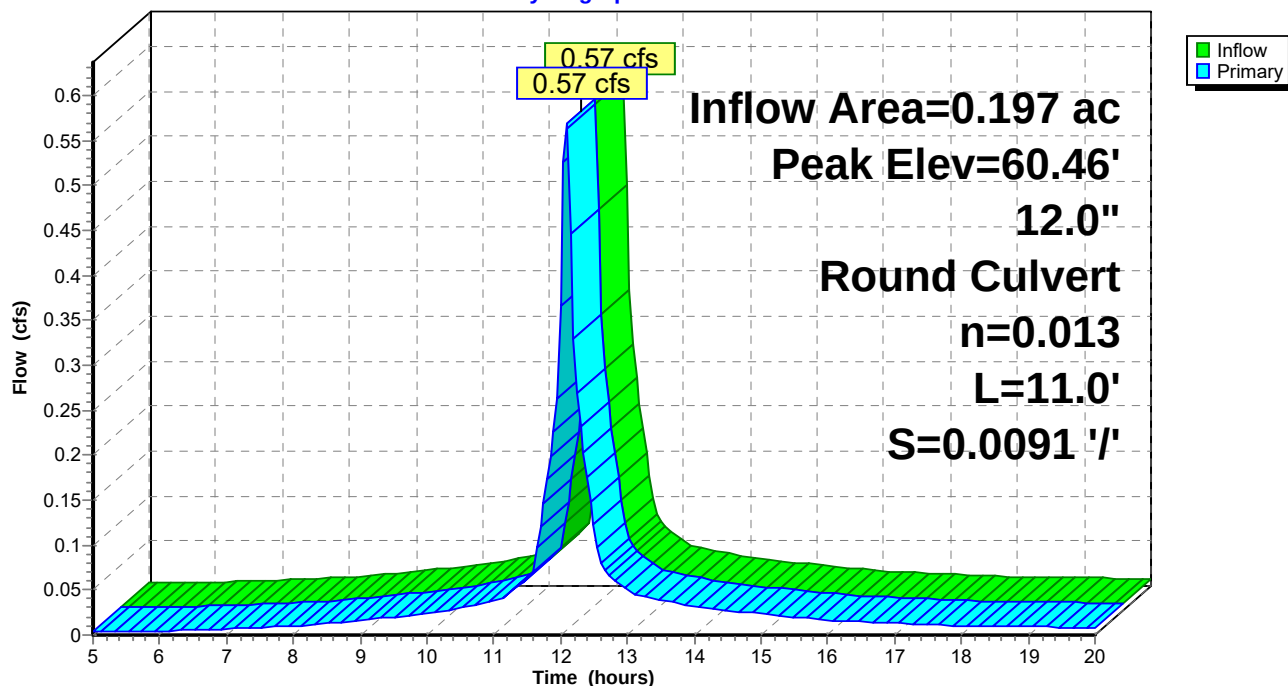
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.00' / 59.90' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.55 cfs @ 12.09 hrs HW=60.45' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 0.55 cfs @ 2.38 fps)

**Pond 113P: CB 95**

Hydrograph



### Summary for Pond 114P: CB 94

Inflow Area = 0.329 ac, 82.49% Impervious, Inflow Depth > 2.36" for 2-Year event  
 Inflow = 0.90 cfs @ 12.09 hrs, Volume= 0.065 af  
 Outflow = 0.90 cfs @ 12.09 hrs, Volume= 0.065 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.90 cfs @ 12.09 hrs, Volume= 0.065 af  
 Routed to Pond 118P : DMH 70

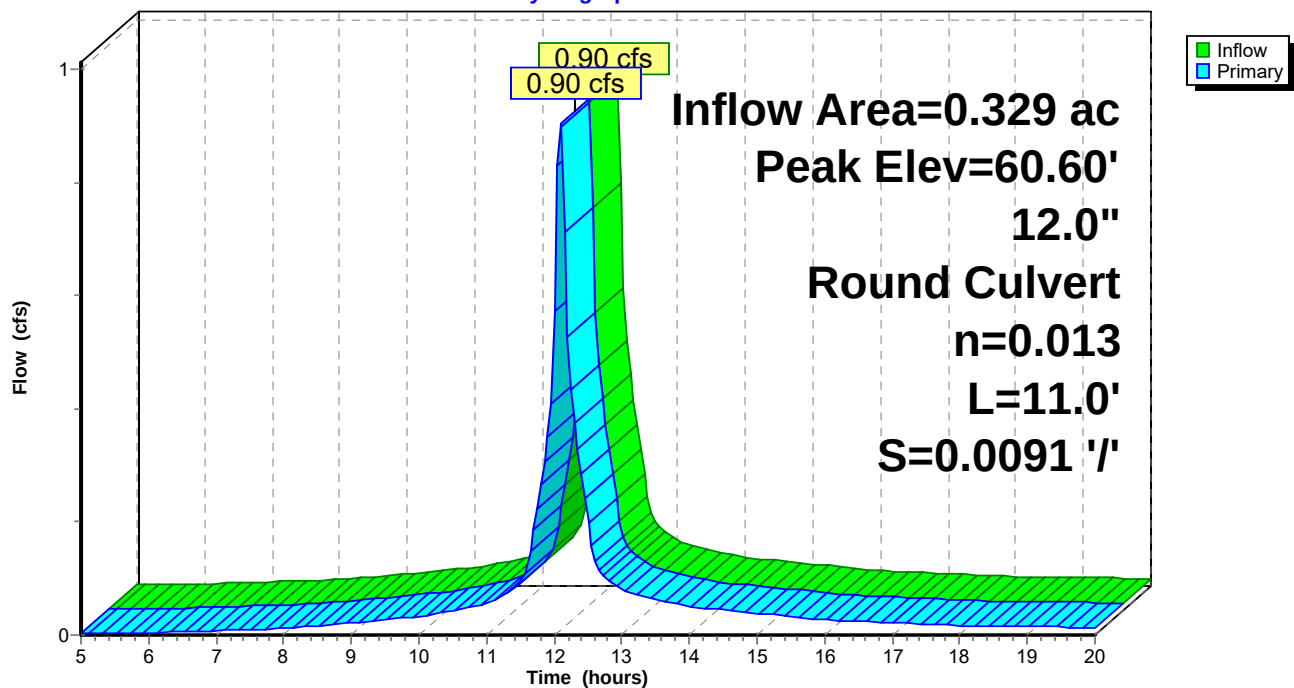
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.60' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.00' / 59.90' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.88 cfs @ 12.09 hrs HW=60.59' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.88 cfs @ 2.64 fps)

### Pond 114P: CB 94

#### Hydrograph





### Summary for Pond 115P: CB 91

Inflow Area = 0.332 ac, 76.35% Impervious, Inflow Depth > 2.17" for 2-Year event  
 Inflow = 0.86 cfs @ 12.09 hrs, Volume= 0.060 af  
 Outflow = 0.86 cfs @ 12.09 hrs, Volume= 0.060 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.86 cfs @ 12.09 hrs, Volume= 0.060 af  
 Routed to Pond 120P : DMH 67

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 59.77' @ 12.09 hrs

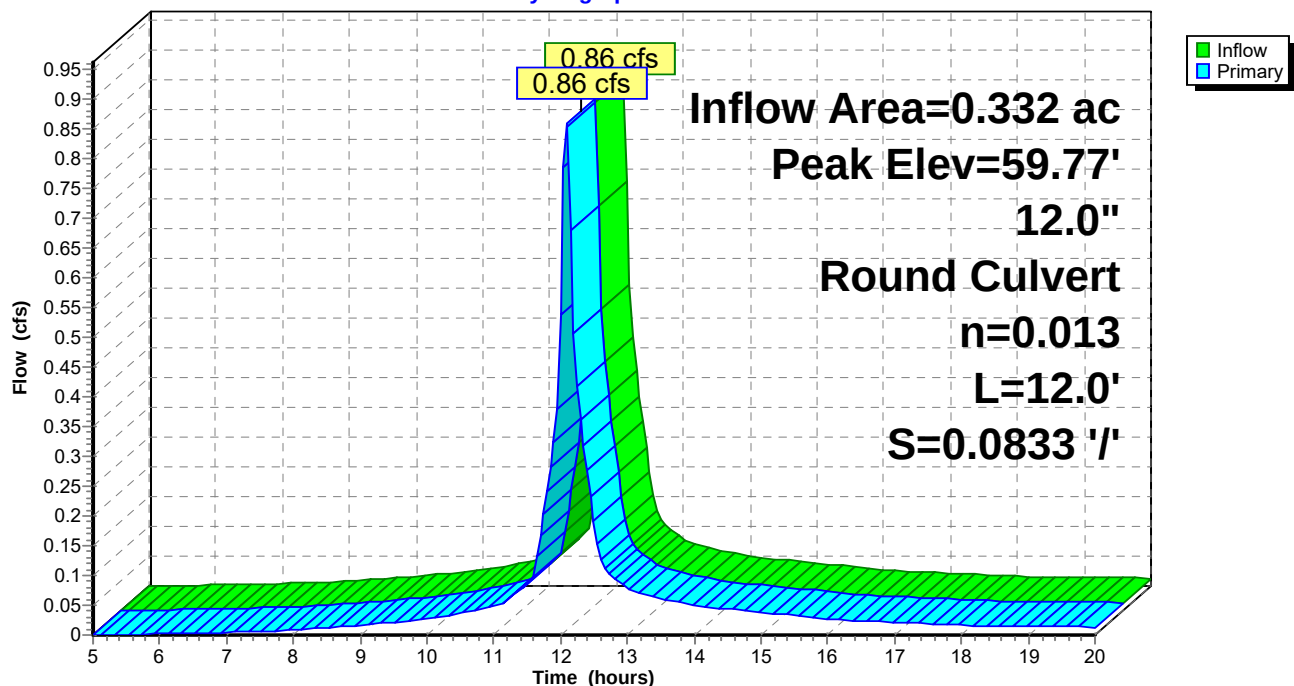
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.23' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.23' / 58.23' S= 0.0833 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.84 cfs @ 12.09 hrs HW=59.76' (Free Discharge)

↑**1=Culvert** (Inlet Controls 0.84 cfs @ 1.96 fps)

### Pond 115P: CB 91

#### Hydrograph



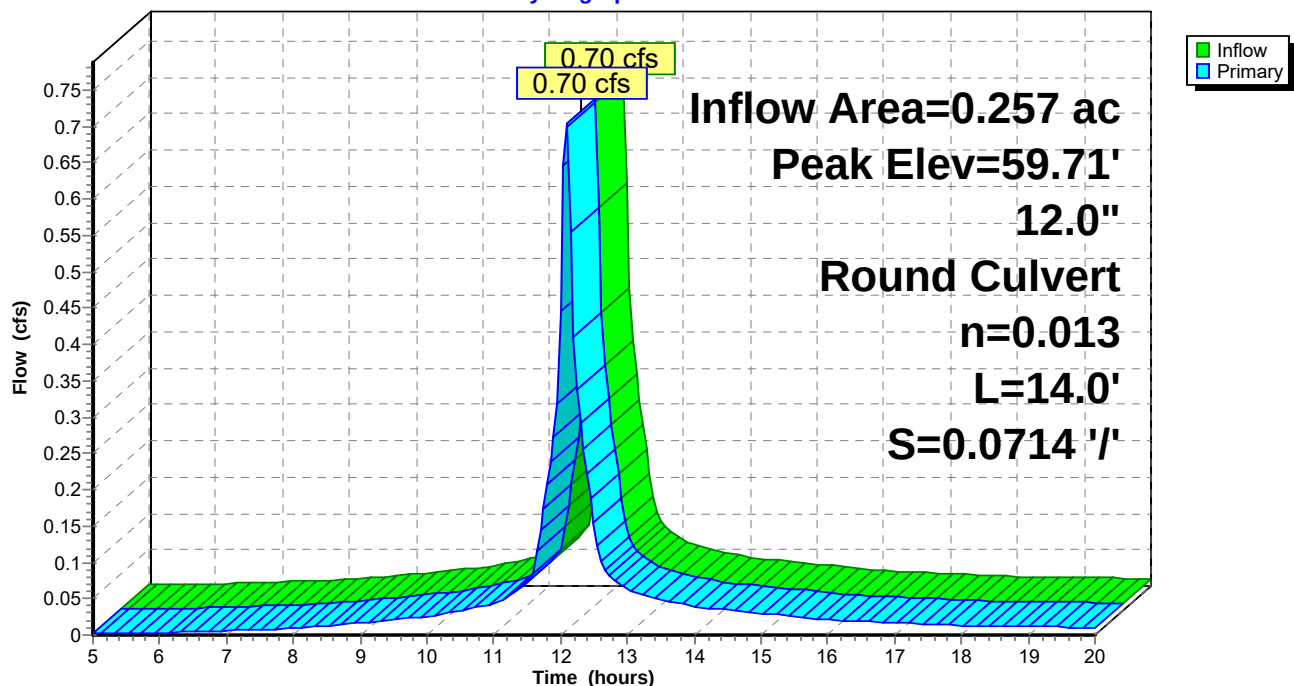
**Summary for Pond 116P: CB 90**

Inflow Area = 0.257 ac, 83.40% Impervious, Inflow Depth > 2.36" for 2-Year event  
 Inflow = 0.70 cfs @ 12.09 hrs, Volume= 0.050 af  
 Outflow = 0.70 cfs @ 12.09 hrs, Volume= 0.050 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.70 cfs @ 12.09 hrs, Volume= 0.050 af  
 Routed to Pond 120P : DMH 67

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.71' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.23' | <b>12.0" Round Culvert</b><br>L= 14.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.23' / 58.23' S= 0.0714 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.69 cfs @ 12.09 hrs HW=59.71' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.69 cfs @ 1.86 fps)

**Pond 116P: CB 90****Hydrograph**

**Summary for Pond 117P: DMH 69**

Inflow Area = 1.018 ac, 80.27% Impervious, Inflow Depth > 2.29" for 2-Year event  
 Inflow = 2.73 cfs @ 12.09 hrs, Volume= 0.194 af  
 Outflow = 2.73 cfs @ 12.09 hrs, Volume= 0.194 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.73 cfs @ 12.09 hrs, Volume= 0.194 af  
 Routed to Pond 119P : DMH 66

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.16' @ 12.09 hrs

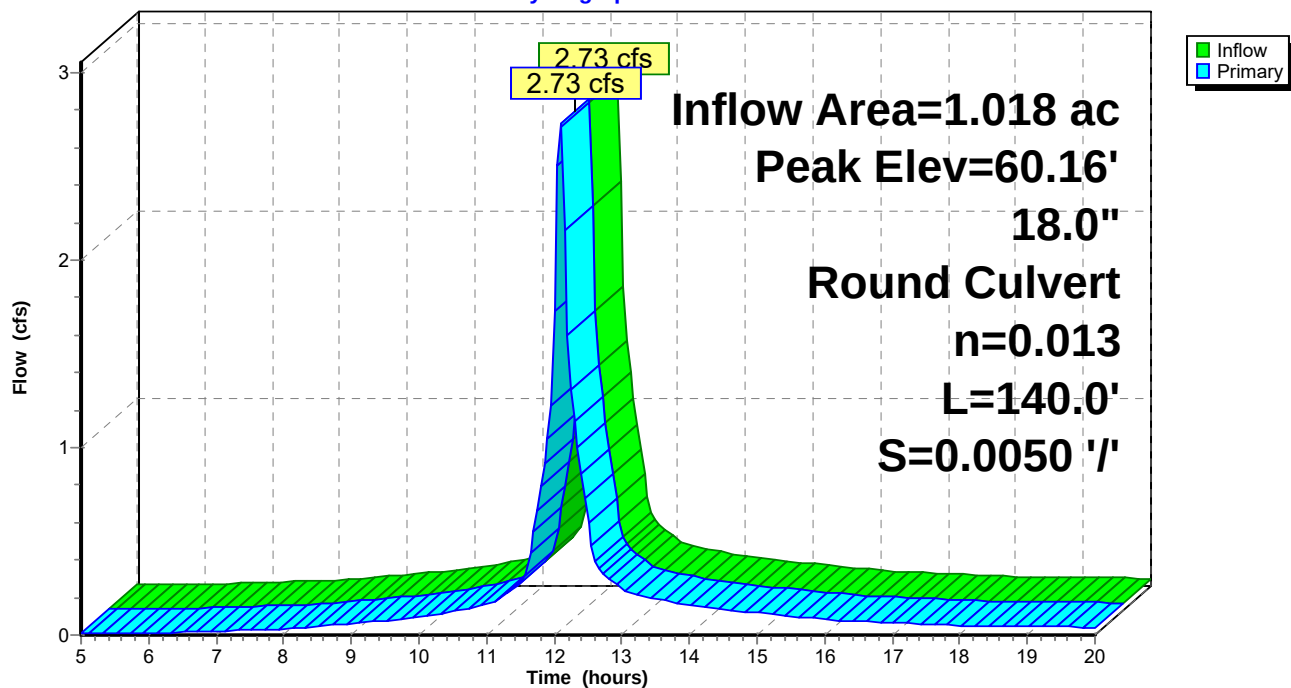
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.26' | <b>18.0" Round Culvert</b><br>L= 140.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.26' / 58.56' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.66 cfs @ 12.09 hrs HW=60.14' (Free Discharge)

1=Culvert (Barrel Controls 2.66 cfs @ 3.53 fps)

**Pond 117P: DMH 69**

Hydrograph



**Summary for Pond 118P: DMH 70**

Inflow Area = 0.527 ac, 85.92% Impervious, Inflow Depth > 2.43" for 2-Year event  
 Inflow = 1.47 cfs @ 12.09 hrs, Volume= 0.107 af  
 Outflow = 1.47 cfs @ 12.09 hrs, Volume= 0.107 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.47 cfs @ 12.09 hrs, Volume= 0.107 af  
 Routed to Pond 117P : DMH 69

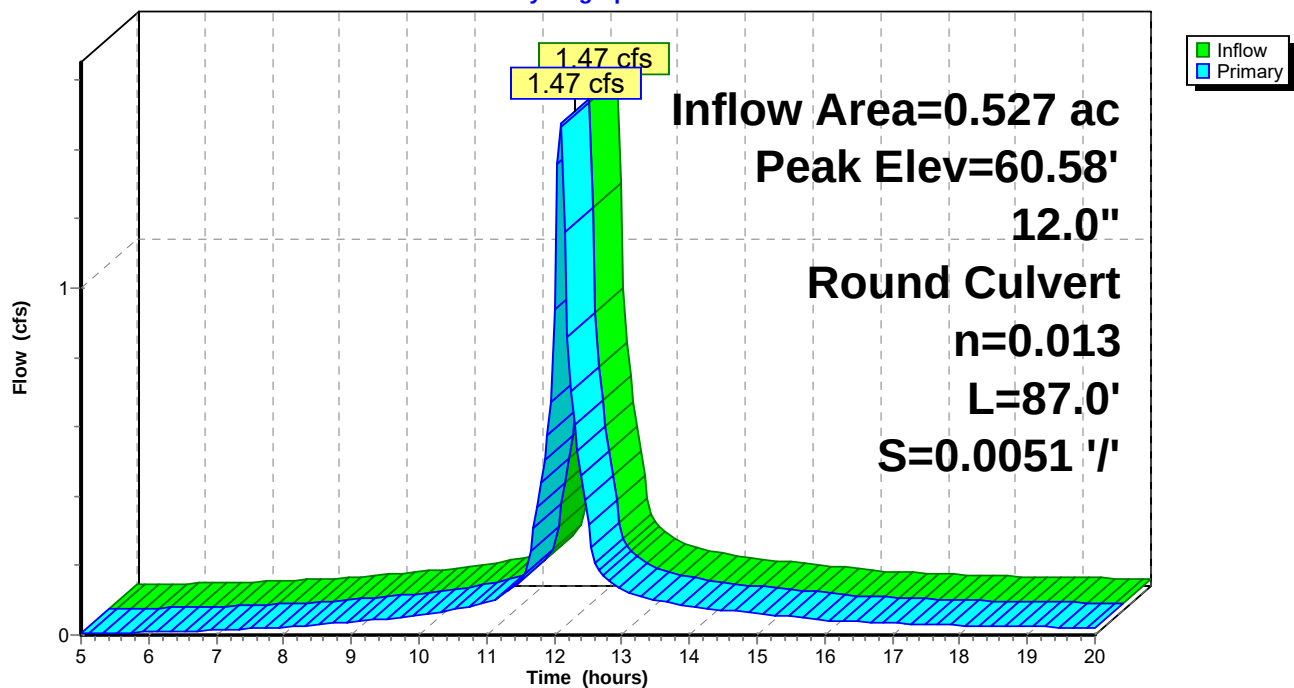
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.58' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.80' | <b>12.0" Round Culvert</b><br>L= 87.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.80' / 59.36' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.43 cfs @ 12.09 hrs HW=60.57' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.43 cfs @ 3.06 fps)

**Pond 118P: DMH 70**

Hydrograph



**Summary for Pond 119P: DMH 66**

Inflow Area = 1.346 ac, 77.50% Impervious, Inflow Depth > 2.22" for 2-Year event  
 Inflow = 3.52 cfs @ 12.09 hrs, Volume= 0.249 af  
 Outflow = 3.52 cfs @ 12.09 hrs, Volume= 0.249 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.52 cfs @ 12.09 hrs, Volume= 0.249 af  
 Routed to Pond 120P : DMH 67

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 59.52' @ 12.09 hrs

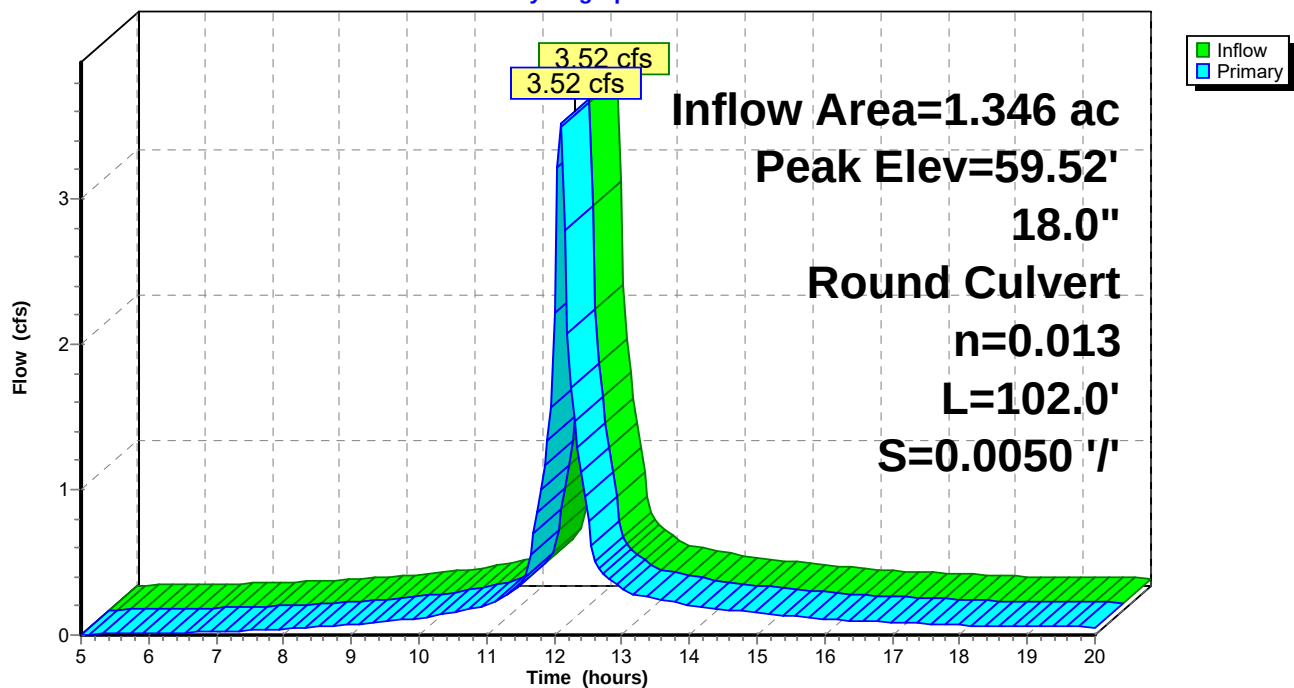
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.46' | <b>18.0" Round Culvert</b><br>L= 102.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.46' / 57.95' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=3.43 cfs @ 12.09 hrs HW=59.51' (Free Discharge)

1=Culvert (Barrel Controls 3.43 cfs @ 3.67 fps)

**Pond 119P: DMH 66**

Hydrograph



**Summary for Pond 120P: DMH 67**

Inflow Area = 1.935 ac, 78.08% Impervious, Inflow Depth > 2.23" for 2-Year event  
 Inflow = 5.08 cfs @ 12.09 hrs, Volume= 0.360 af  
 Outflow = 5.08 cfs @ 12.09 hrs, Volume= 0.360 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.08 cfs @ 12.09 hrs, Volume= 0.360 af  
 Routed to Pond 210P : DMH 68

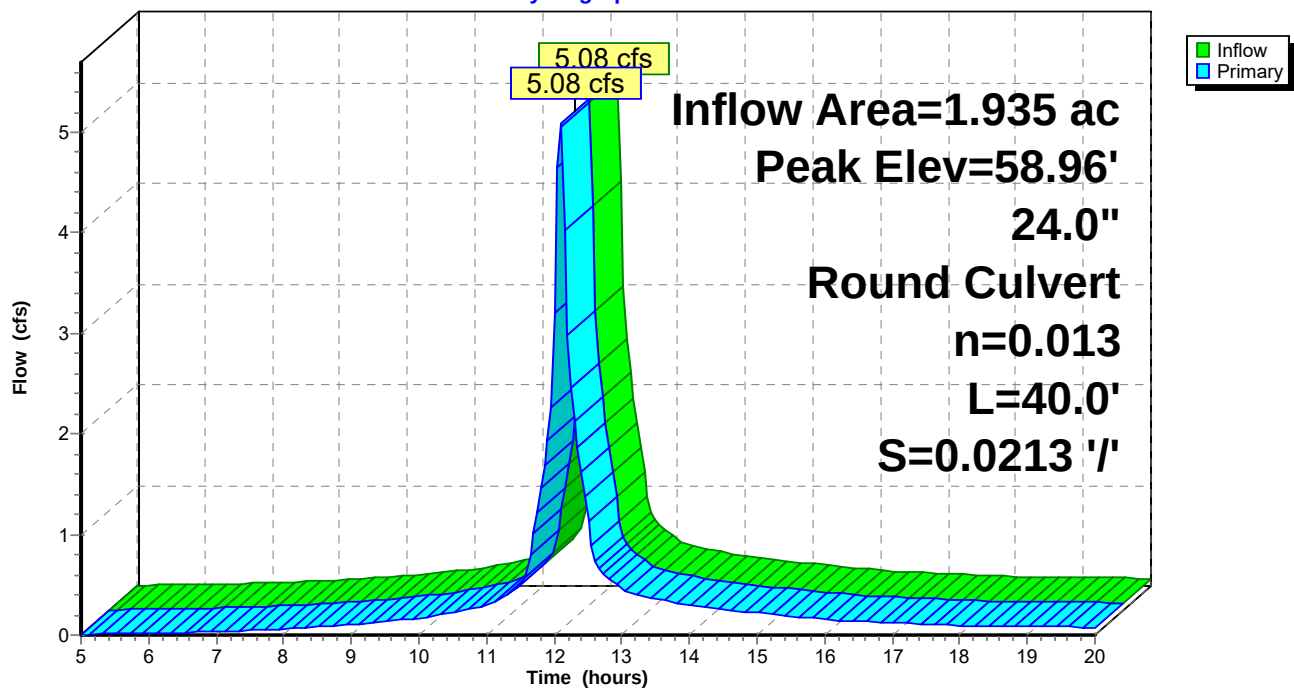
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.96' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.85' | <b>24.0" Round Culvert</b><br>L= 40.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.85' / 57.00' S= 0.0213 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=4.96 cfs @ 12.09 hrs HW=58.95' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 4.96 cfs @ 2.81 fps)

**Pond 120P: DMH 67**

Hydrograph



### Summary for Pond 122P: CB 46

Inflow Area = 0.275 ac, 72.42% Impervious, Inflow Depth > 2.08" for 2-Year event  
 Inflow = 0.69 cfs @ 12.09 hrs, Volume= 0.048 af  
 Outflow = 0.69 cfs @ 12.09 hrs, Volume= 0.048 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.69 cfs @ 12.09 hrs, Volume= 0.048 af  
 Routed to Pond 123P : DMH 31

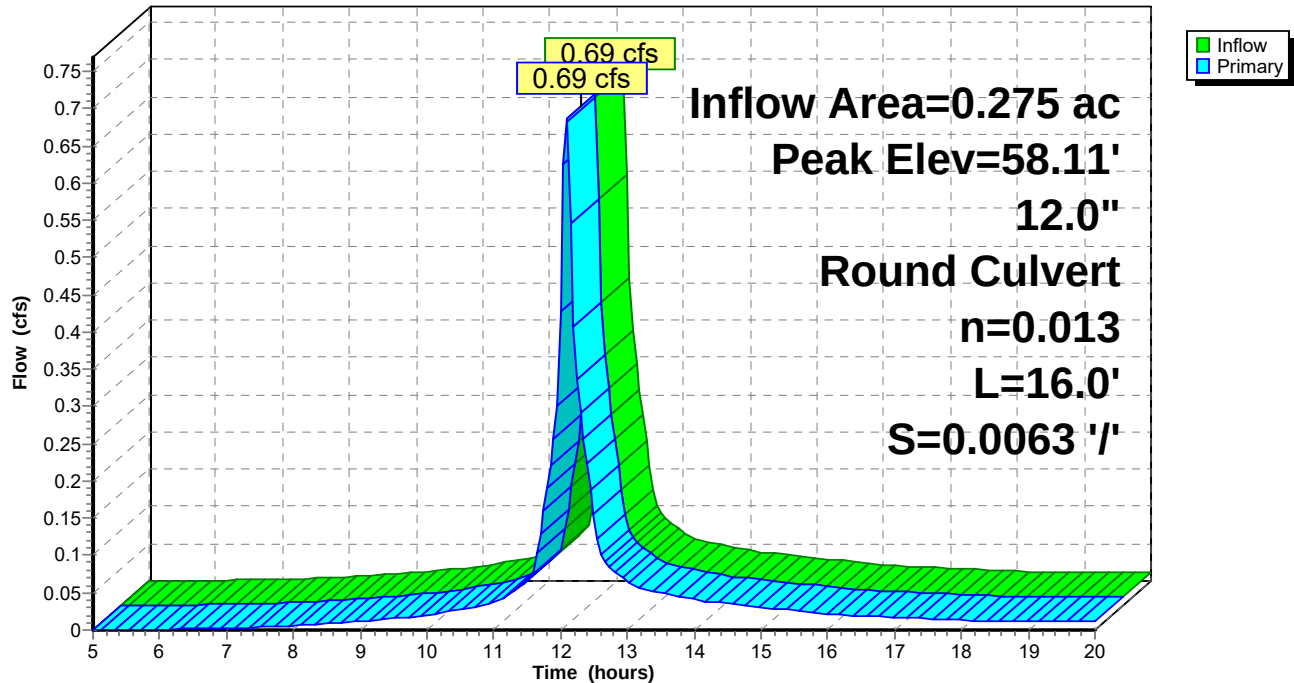
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.11' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.59' | <b>12.0" Round Culvert</b><br>L= 16.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.59' / 57.49' S= 0.0063 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.67 cfs @ 12.09 hrs HW=58.10' (Free Discharge)  
 1=Culvert (Barrel Controls 0.67 cfs @ 2.41 fps)

### Pond 122P: CB 46

#### Hydrograph



**Summary for Pond 123P: DMH 31**

Inflow Area = 0.565 ac, 65.31% Impervious, Inflow Depth > 1.87" for 2-Year event  
 Inflow = 1.28 cfs @ 12.09 hrs, Volume= 0.088 af  
 Outflow = 1.28 cfs @ 12.09 hrs, Volume= 0.088 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.28 cfs @ 12.09 hrs, Volume= 0.088 af  
 Routed to Pond 124P : DMH 32

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 57.97' @ 12.09 hrs

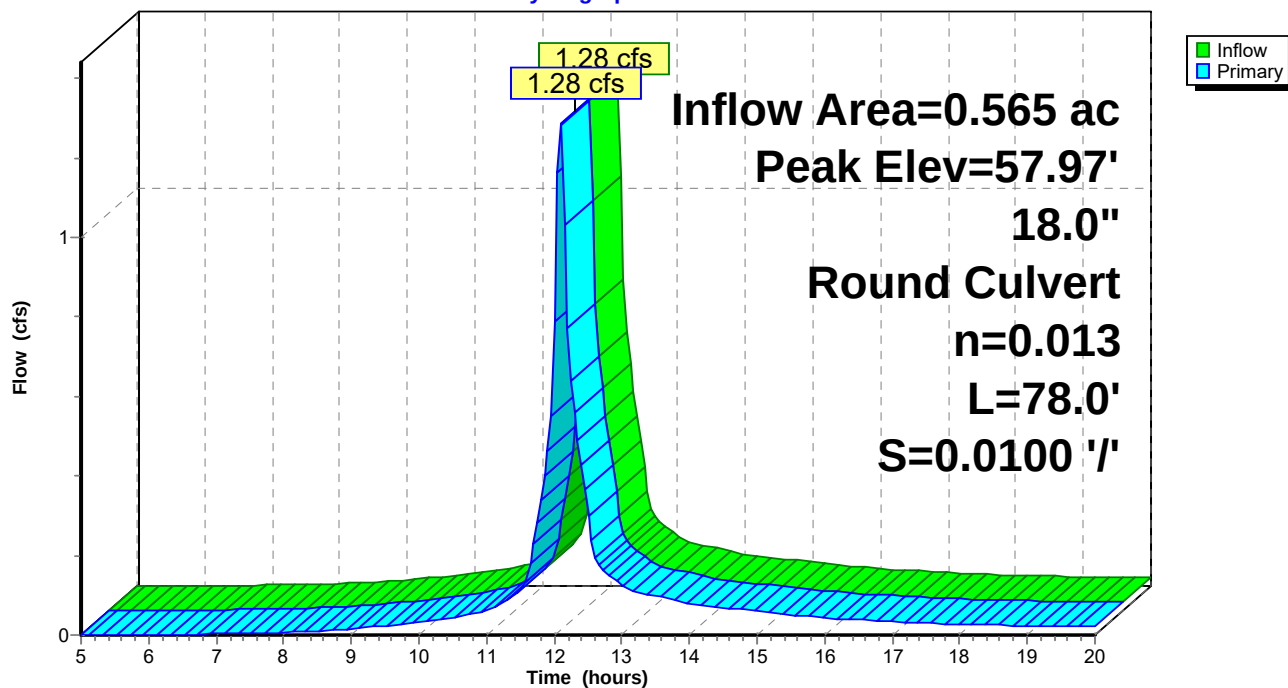
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.39' | <b>18.0" Round Culvert</b><br>L= 78.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.39' / 56.61' S= 0.0100 ' S= 0.0100 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=1.26 cfs @ 12.09 hrs HW=57.96' (Free Discharge)

↑**1=Culvert** (Inlet Controls 1.26 cfs @ 2.03 fps)

**Pond 123P: DMH 31**

Hydrograph





### Summary for Pond 124P: DMH 32

Inflow Area = 0.565 ac, 65.31% Impervious, Inflow Depth > 1.87" for 2-Year event  
 Inflow = 1.28 cfs @ 12.09 hrs, Volume= 0.088 af  
 Outflow = 1.28 cfs @ 12.09 hrs, Volume= 0.088 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.28 cfs @ 12.09 hrs, Volume= 0.088 af  
 Routed to Pond 206P : DMH 34

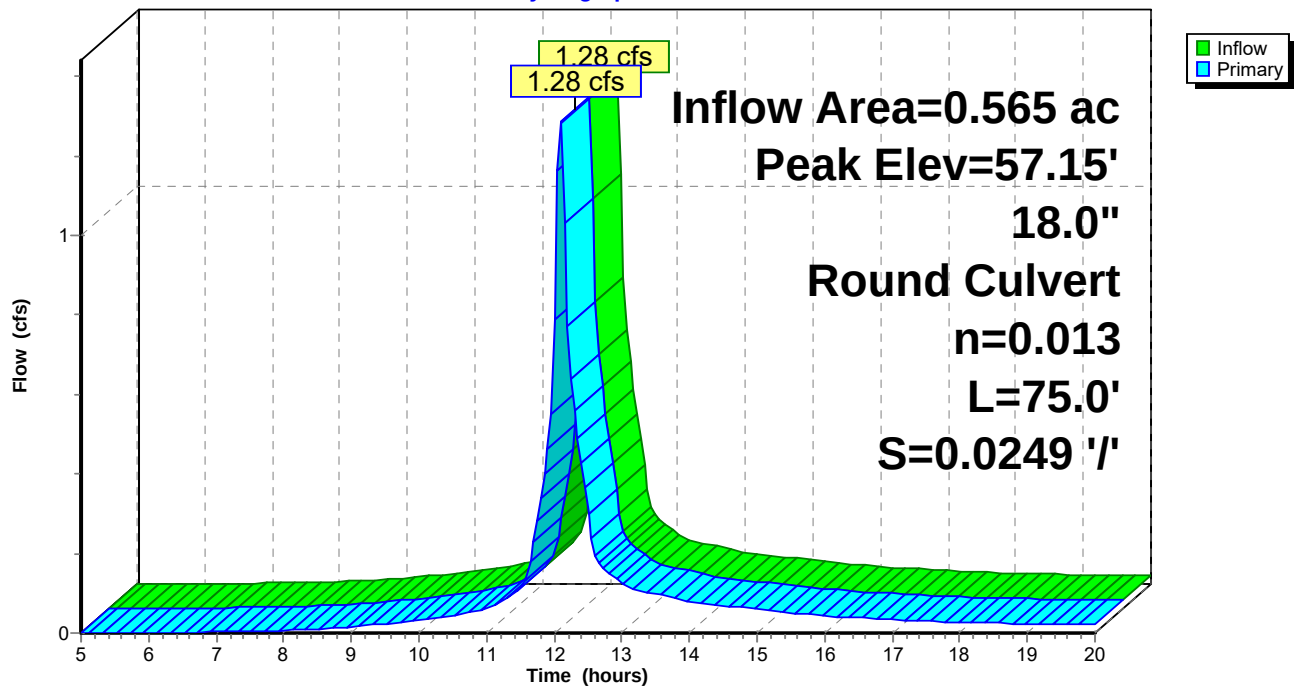
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 57.15' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 56.57' | <b>18.0" Round Culvert</b><br>L= 75.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 56.57' / 54.70' S= 0.0249 ' S= 0.0249 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=1.26 cfs @ 12.09 hrs HW=57.14' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.26 cfs @ 2.03 fps)

### Pond 124P: DMH 32

Hydrograph



### Summary for Pond 125P: CB 36

Inflow Area = 0.196 ac, 76.76% Impervious, Inflow Depth > 1.53" for 2-Year event  
 Inflow = 0.37 cfs @ 12.09 hrs, Volume= 0.025 af  
 Outflow = 0.37 cfs @ 12.09 hrs, Volume= 0.025 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.37 cfs @ 12.09 hrs, Volume= 0.025 af  
 Routed to Pond 127P : DMH 26

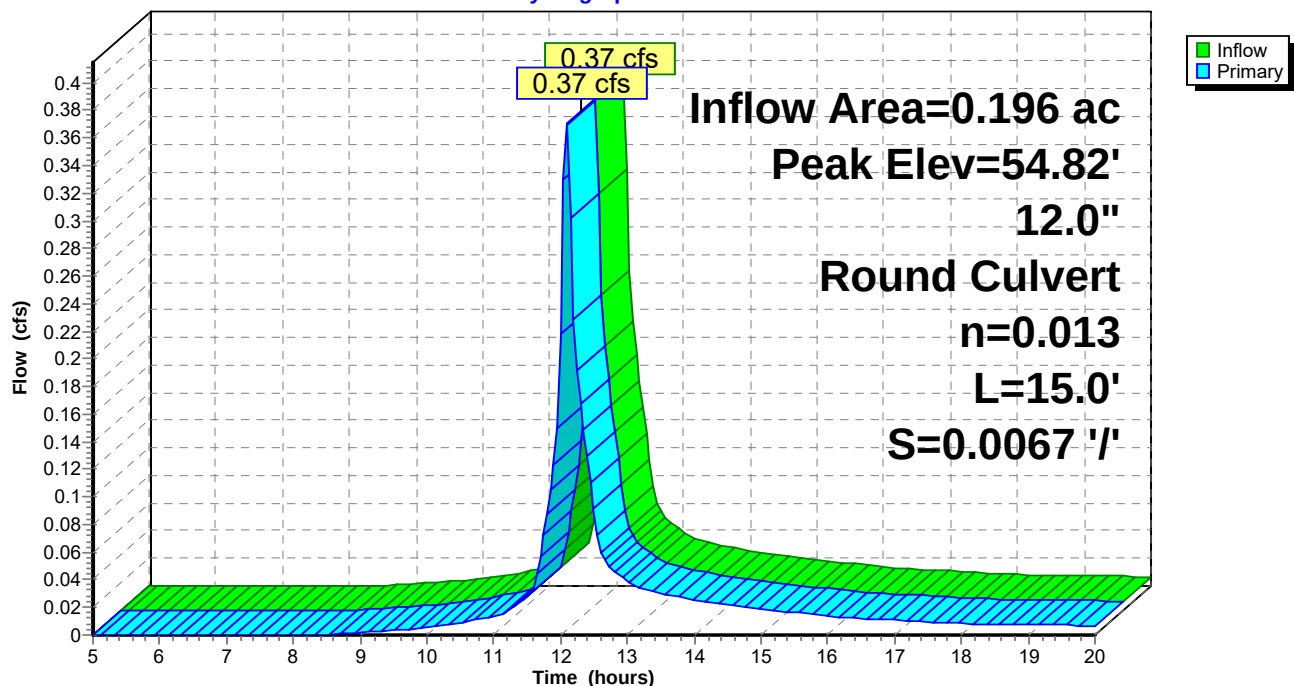
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.82' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.45' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.45' / 54.35' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.36 cfs @ 12.09 hrs HW=54.81' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.36 cfs @ 2.11 fps)

### Pond 125P: CB 36

#### Hydrograph



### Summary for Pond 126P: CB 37

Inflow Area = 0.225 ac, 79.18% Impervious, Inflow Depth > 1.67" for 2-Year event  
 Inflow = 0.46 cfs @ 12.09 hrs, Volume= 0.031 af  
 Outflow = 0.46 cfs @ 12.09 hrs, Volume= 0.031 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.46 cfs @ 12.09 hrs, Volume= 0.031 af  
 Routed to Pond 127P : DMH 26

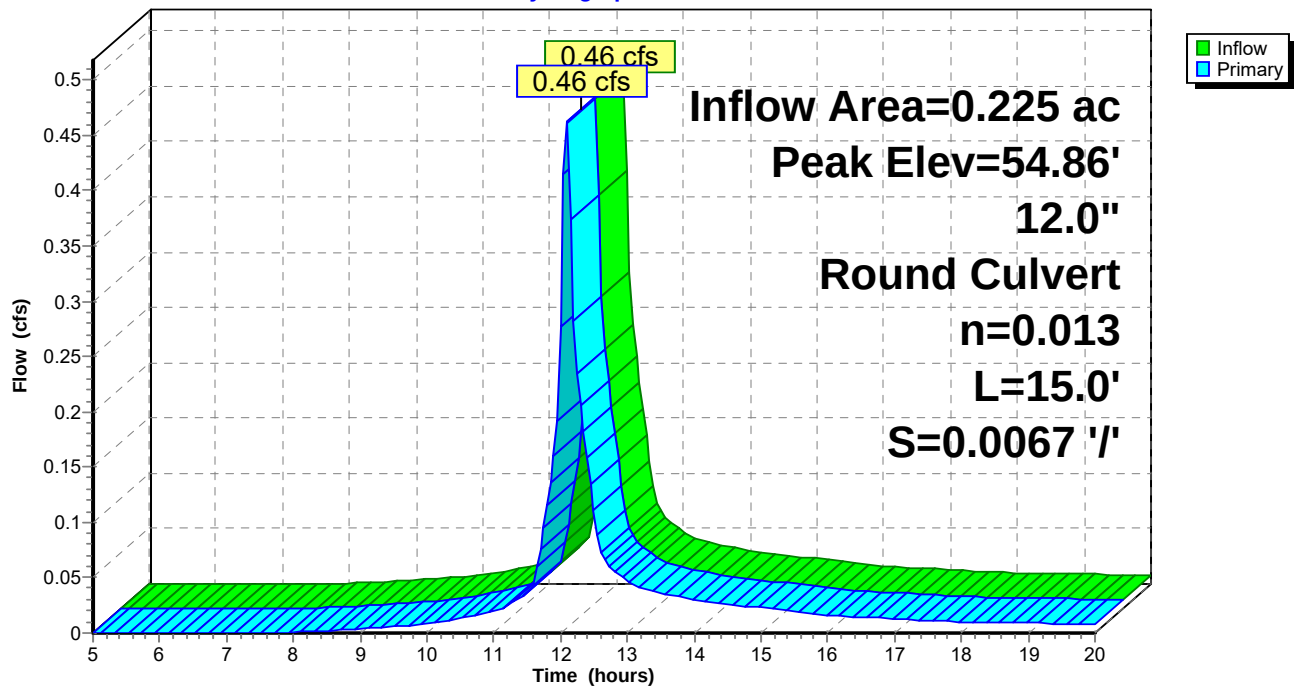
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.86' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.45' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.45' / 54.35' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.45 cfs @ 12.09 hrs HW=54.86' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.45 cfs @ 2.21 fps)

### Pond 126P: CB 37

#### Hydrograph



### Summary for Pond 127P: DMH 26

Inflow Area = 0.421 ac, 78.05% Impervious, Inflow Depth > 1.60" for 2-Year event  
 Inflow = 0.83 cfs @ 12.09 hrs, Volume= 0.056 af  
 Outflow = 0.83 cfs @ 12.09 hrs, Volume= 0.056 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.83 cfs @ 12.09 hrs, Volume= 0.056 af  
 Routed to Pond 205P : DMH 27

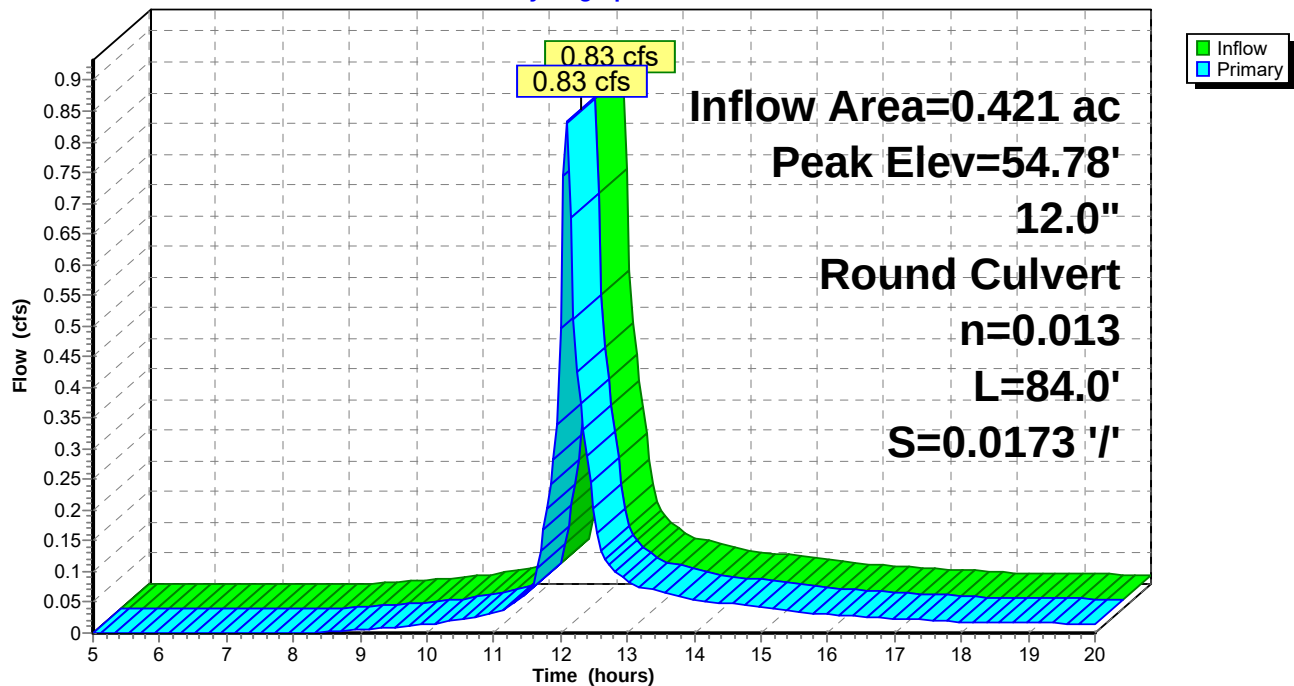
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.78' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.25' | <b>12.0" Round Culvert</b><br>L= 84.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.25' / 52.80' S= 0.0173 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.82 cfs @ 12.09 hrs HW=54.78' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.82 cfs @ 1.95 fps)

### Pond 127P: DMH 26

#### Hydrograph



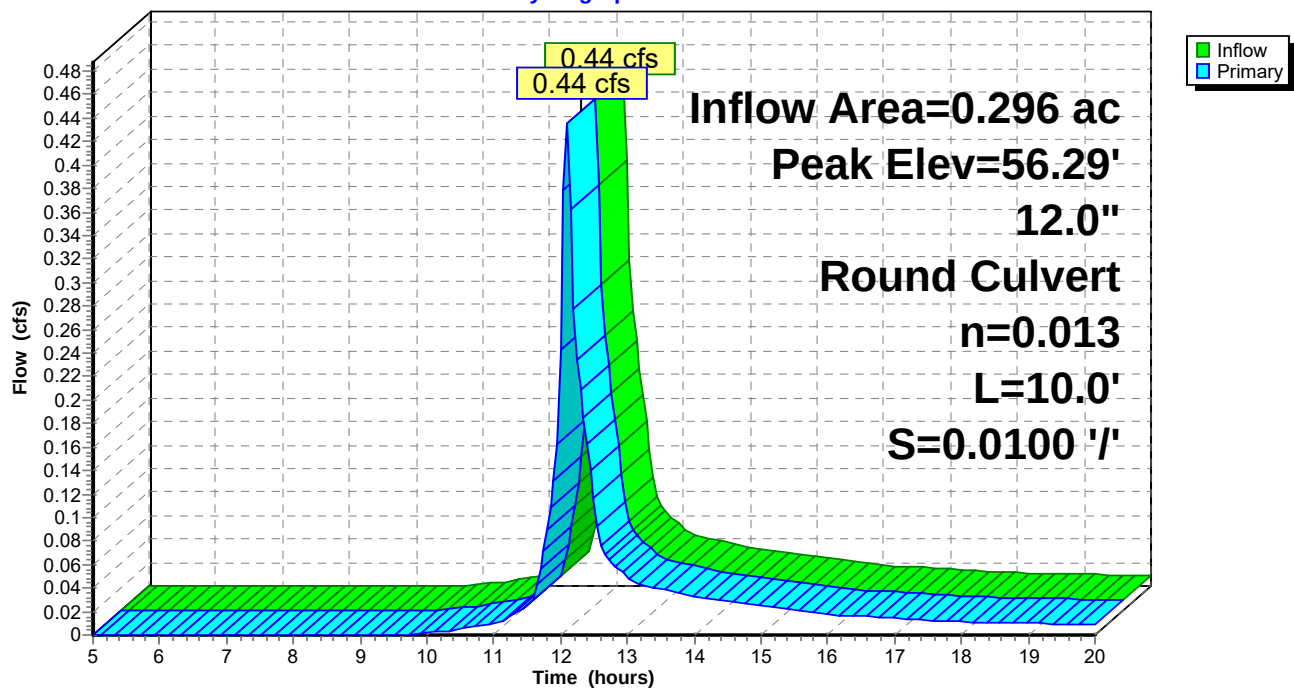
**Summary for Pond 128P: CB 30**

Inflow Area = 0.296 ac, 67.55% Impervious, Inflow Depth > 1.20" for 2-Year event  
 Inflow = 0.44 cfs @ 12.10 hrs, Volume= 0.029 af  
 Outflow = 0.44 cfs @ 12.10 hrs, Volume= 0.029 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.44 cfs @ 12.10 hrs, Volume= 0.029 af  
 Routed to Pond 141P : DMH 23

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.29' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 55.90' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 55.90' / 55.80' S= 0.0100 ' S= 0.0100 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.43 cfs @ 12.10 hrs HW=56.29' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.43 cfs @ 2.28 fps)

**Pond 128P: CB 30****Hydrograph**

### Summary for Pond 129P: CB 34

Inflow Area = 0.397 ac, 70.10% Impervious, Inflow Depth > 1.26" for 2-Year event  
 Inflow = 0.62 cfs @ 12.10 hrs, Volume= 0.042 af  
 Outflow = 0.62 cfs @ 12.10 hrs, Volume= 0.042 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.62 cfs @ 12.10 hrs, Volume= 0.042 af  
 Routed to Pond 134P : DMH 25

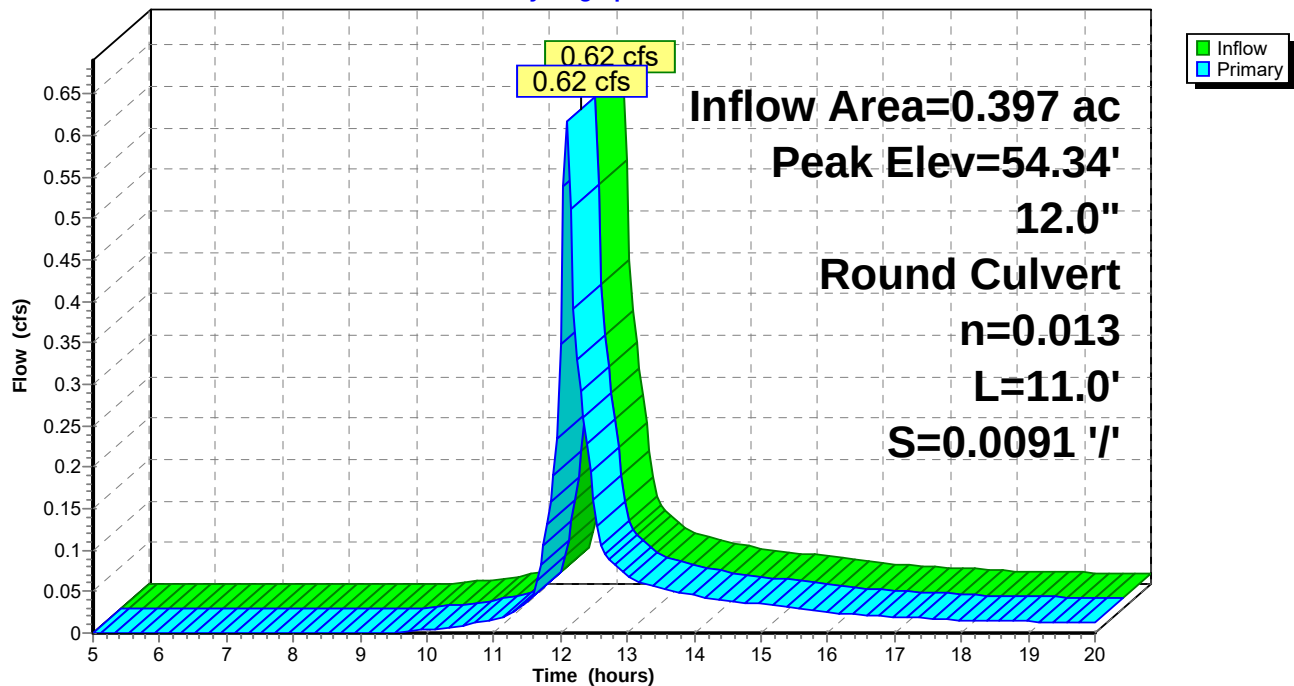
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.34' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.86' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.86' / 53.76' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.61 cfs @ 12.10 hrs HW=54.33' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.61 cfs @ 2.43 fps)

### Pond 129P: CB 34

Hydrograph



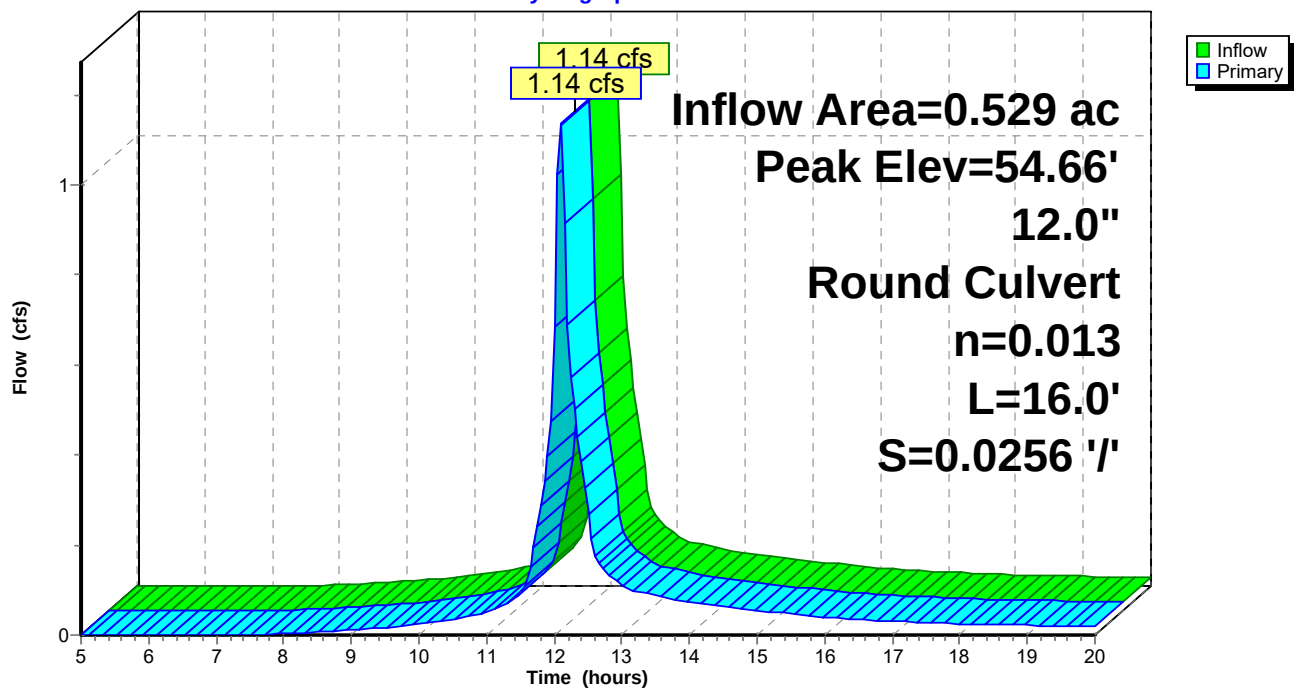
**Summary for Pond 130P: CB 32**

Inflow Area = 0.529 ac, 81.18% Impervious, Inflow Depth > 1.75" for 2-Year event  
 Inflow = 1.14 cfs @ 12.09 hrs, Volume= 0.077 af  
 Outflow = 1.14 cfs @ 12.09 hrs, Volume= 0.077 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.14 cfs @ 12.09 hrs, Volume= 0.077 af  
 Routed to Pond 133P : DMH 24

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.66' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.02' | <b>12.0" Round Culvert</b><br>L= 16.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.02' / 53.61' S= 0.0256 ' S= 0.0256 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.11 cfs @ 12.09 hrs HW=54.65' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.11 cfs @ 2.13 fps)

**Pond 130P: CB 32****Hydrograph**

**Summary for Pond 131P: CB 35**

Inflow Area = 0.350 ac, 63.87% Impervious, Inflow Depth > 1.08" for 2-Year event  
 Inflow = 0.46 cfs @ 12.10 hrs, Volume= 0.031 af  
 Outflow = 0.46 cfs @ 12.10 hrs, Volume= 0.031 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.46 cfs @ 12.10 hrs, Volume= 0.031 af  
 Routed to Pond 134P : DMH 25

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 54.27' @ 12.10 hrs

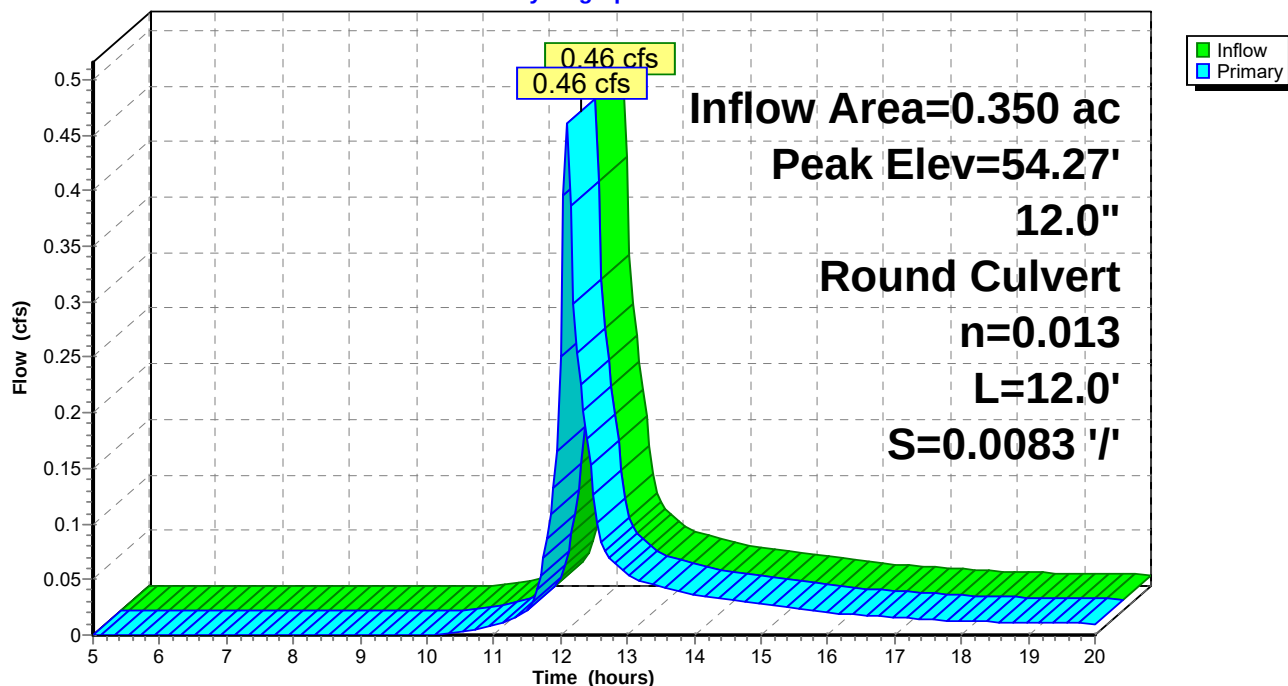
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.86' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.86' / 53.76' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.46 cfs @ 12.10 hrs HW=54.27' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 0.46 cfs @ 2.27 fps)

**Pond 131P: CB 35**

Hydrograph





### Summary for Pond 132P: CB 33

Inflow Area = 0.376 ac, 53.54% Impervious, Inflow Depth > 0.77" for 2-Year event  
 Inflow = 0.33 cfs @ 12.10 hrs, Volume= 0.024 af  
 Outflow = 0.33 cfs @ 12.10 hrs, Volume= 0.024 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.33 cfs @ 12.10 hrs, Volume= 0.024 af  
 Routed to Pond 133P : DMH 24

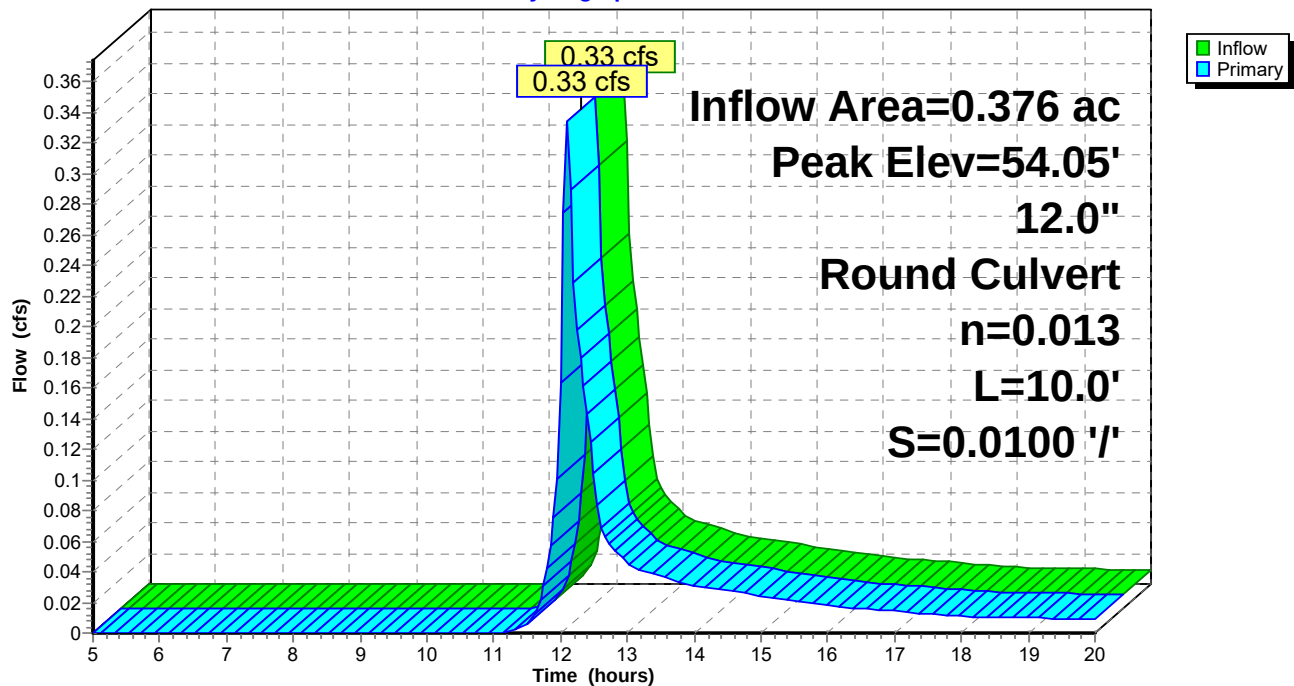
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.05' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.71' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.71' / 53.61' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.33 cfs @ 12.10 hrs HW=54.04' (Free Discharge)  
 1=Culvert (Barrel Controls 0.33 cfs @ 2.16 fps)

### Pond 132P: CB 33

#### Hydrograph



### Summary for Pond 133P: DMH 24

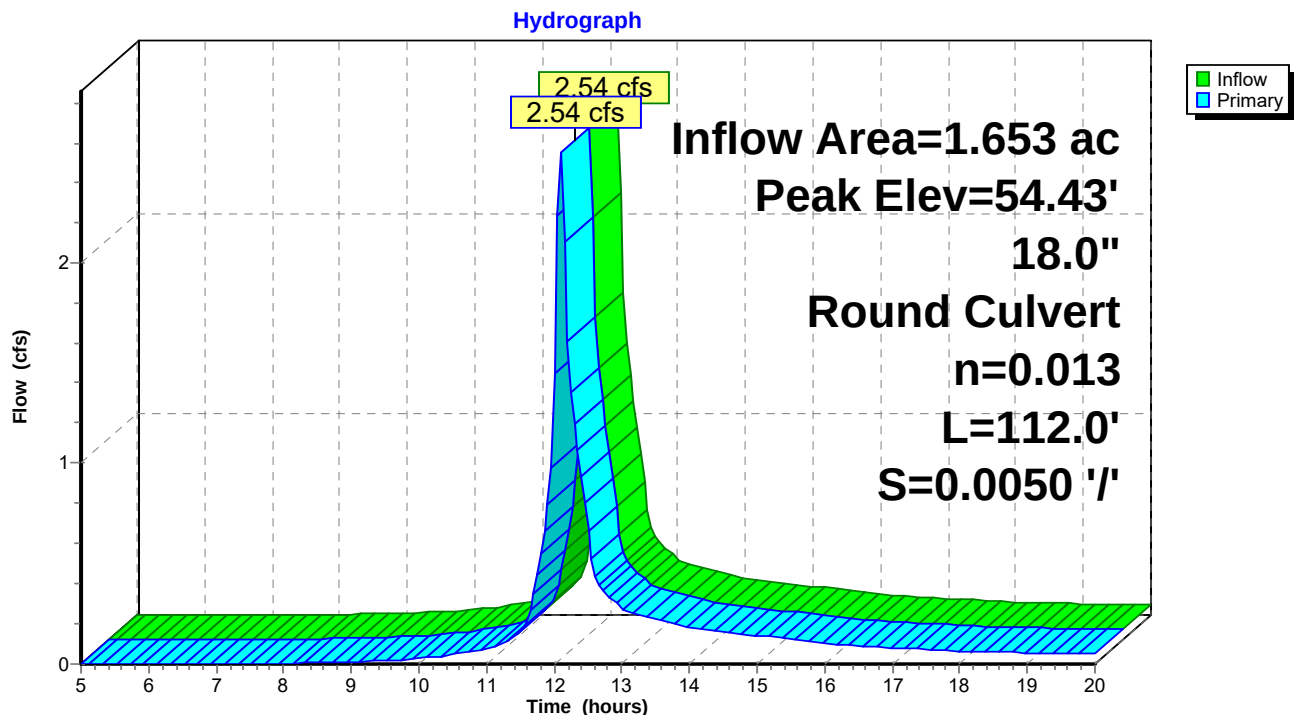
Inflow Area = 1.653 ac, 68.56% Impervious, Inflow Depth > 1.27" for 2-Year event  
 Inflow = 2.54 cfs @ 12.10 hrs, Volume= 0.174 af  
 Outflow = 2.54 cfs @ 12.10 hrs, Volume= 0.174 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.54 cfs @ 12.10 hrs, Volume= 0.174 af  
 Routed to Pond 135P : Inf. Basin 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.43' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.56' | <b>18.0" Round Culvert</b><br>L= 112.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.56' / 53.00' S= 0.0050 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.51 cfs @ 12.10 hrs HW=54.42' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.51 cfs @ 3.44 fps)

### Pond 133P: DMH 24



### Summary for Pond 134P: DMH 25

Inflow Area = 0.747 ac, 67.18% Impervious, Inflow Depth > 1.17" for 2-Year event  
 Inflow = 1.08 cfs @ 12.10 hrs, Volume= 0.073 af  
 Outflow = 1.08 cfs @ 12.10 hrs, Volume= 0.073 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.08 cfs @ 12.10 hrs, Volume= 0.073 af  
 Routed to Pond 133P : DMH 24

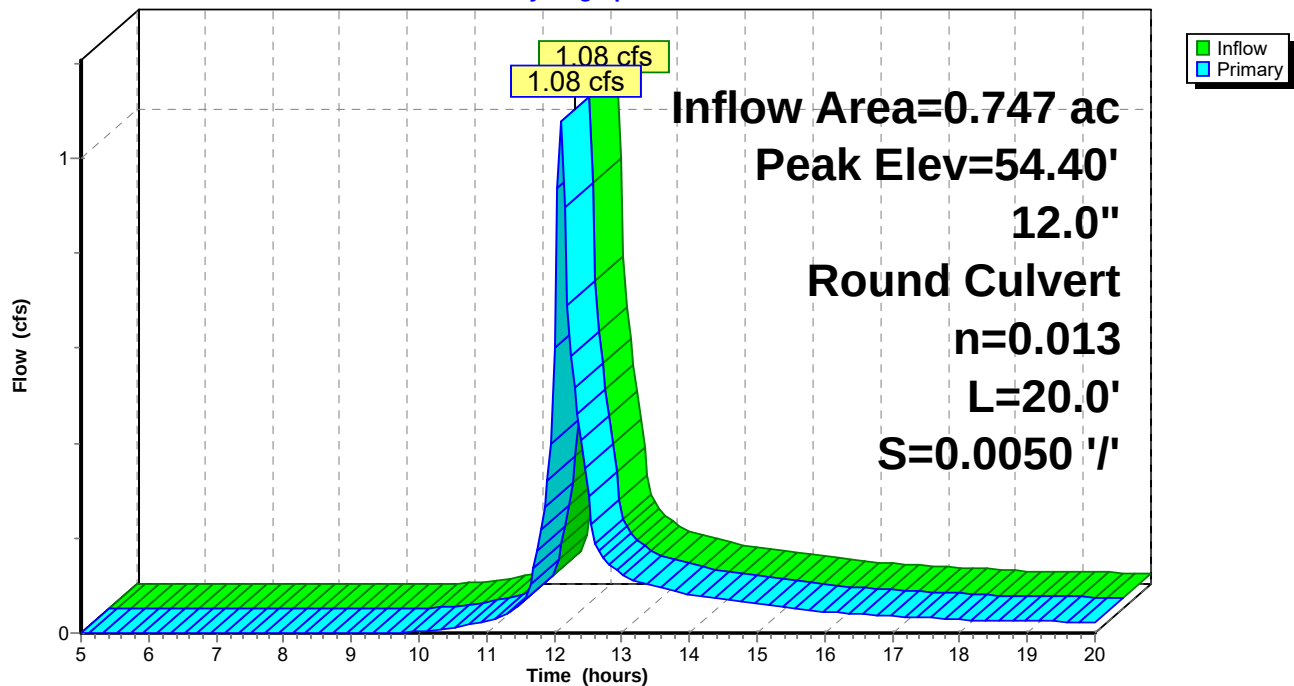
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.40' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.71' | <b>12.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.71' / 53.61' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.07 cfs @ 12.10 hrs HW=54.39' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.07 cfs @ 2.63 fps)

### Pond 134P: DMH 25

Hydrograph



### Summary for Pond 135P: Inf. Basin 3

Inflow Area = 2.229 ac, 60.86% Impervious, Inflow Depth > 1.13" for 2-Year event  
 Inflow = 3.06 cfs @ 12.10 hrs, Volume= 0.209 af  
 Outflow = 0.88 cfs @ 12.47 hrs, Volume= 0.209 af, Atten= 71%, Lag= 22.7 min  
 Discarded = 0.88 cfs @ 12.47 hrs, Volume= 0.209 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Link 203L : 3A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.87' @ 12.47 hrs Surf.Area= 3,438 sf Storage= 2,373 cf

Plug-Flow detention time= 21.9 min calculated for 0.208 af (100% of inflow)  
 Center-of-Mass det. time= 21.3 min ( 819.6 - 798.3 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 53.00' | 21,308 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 53.00               | 2,016                | 0                         | 0                         |
| 54.00               | 3,650                | 2,833                     | 2,833                     |
| 55.00               | 5,702                | 4,676                     | 7,509                     |
| 56.00               | 6,883                | 6,293                     | 13,802                    |
| 57.00               | 8,130                | 7,507                     | 21,308                    |

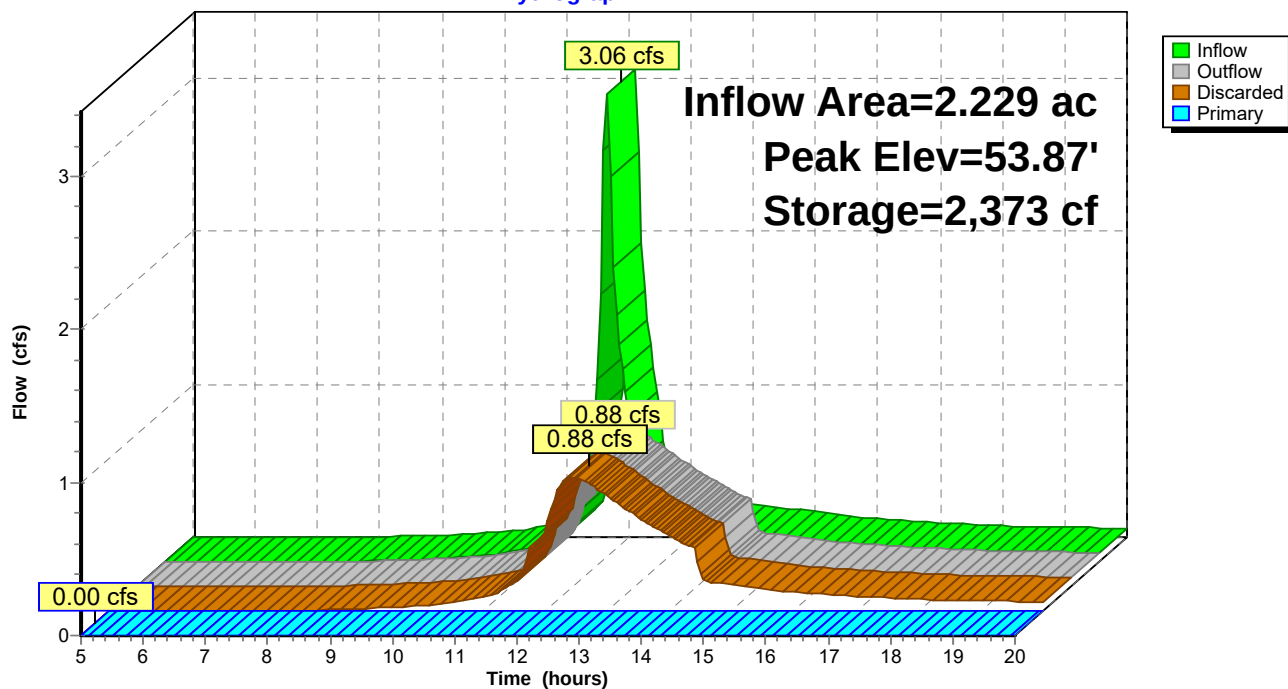
| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 53.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 51.00'                                                                                                                       |
| #2     | Primary   | 53.00' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.00' / 52.00' S= 0.0400 ' S= 0.0400 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 56.40' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                   |

**Discarded OutFlow** Max=0.87 cfs @ 12.47 hrs HW=53.87' (Free Discharge)  
 ↑**1=Exfiltration** ( Controls 0.87 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=53.00' (Free Discharge)  
 ↑**2=Culvert** ( Controls 0.00 cfs)  
 ↑**3=Orifice/Grate** ( Controls 0.00 cfs)

### Pond 135P: Inf. Basin 3

Hydrograph



### Summary for Pond 136P: CB 38

Inflow Area = 0.180 ac, 66.23% Impervious, Inflow Depth > 1.14" for 2-Year event  
 Inflow = 0.25 cfs @ 12.10 hrs, Volume= 0.017 af  
 Outflow = 0.25 cfs @ 12.10 hrs, Volume= 0.017 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.25 cfs @ 12.10 hrs, Volume= 0.017 af  
 Routed to Pond 139P : DMH 28

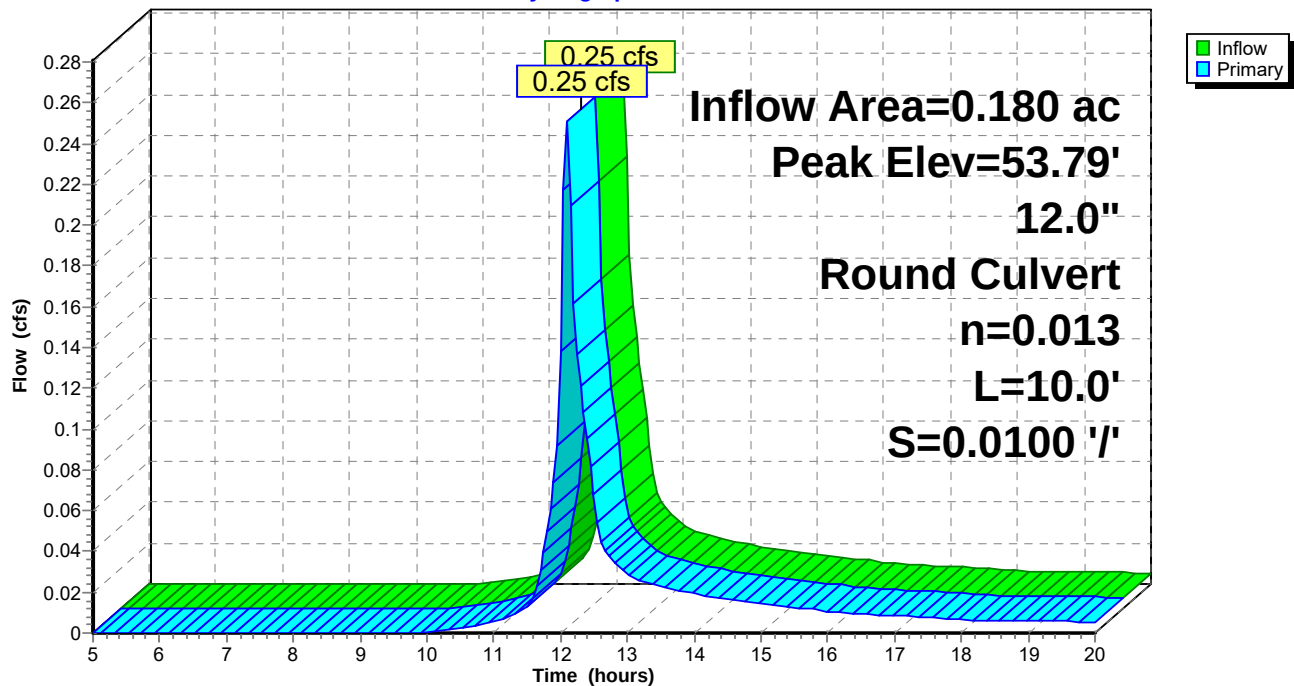
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.79' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.50' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.50' / 53.40' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.25 cfs @ 12.10 hrs HW=53.78' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.25 cfs @ 2.03 fps)

### Pond 136P: CB 38

Hydrograph



### Summary for Pond 137P: CB

Inflow Area = 0.250 ac, 80.29% Impervious, Inflow Depth > 1.67" for 2-Year event  
 Inflow = 0.52 cfs @ 12.09 hrs, Volume= 0.035 af  
 Outflow = 0.52 cfs @ 12.09 hrs, Volume= 0.035 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.52 cfs @ 12.09 hrs, Volume= 0.035 af  
 Routed to Pond 135P : Inf. Basin 3

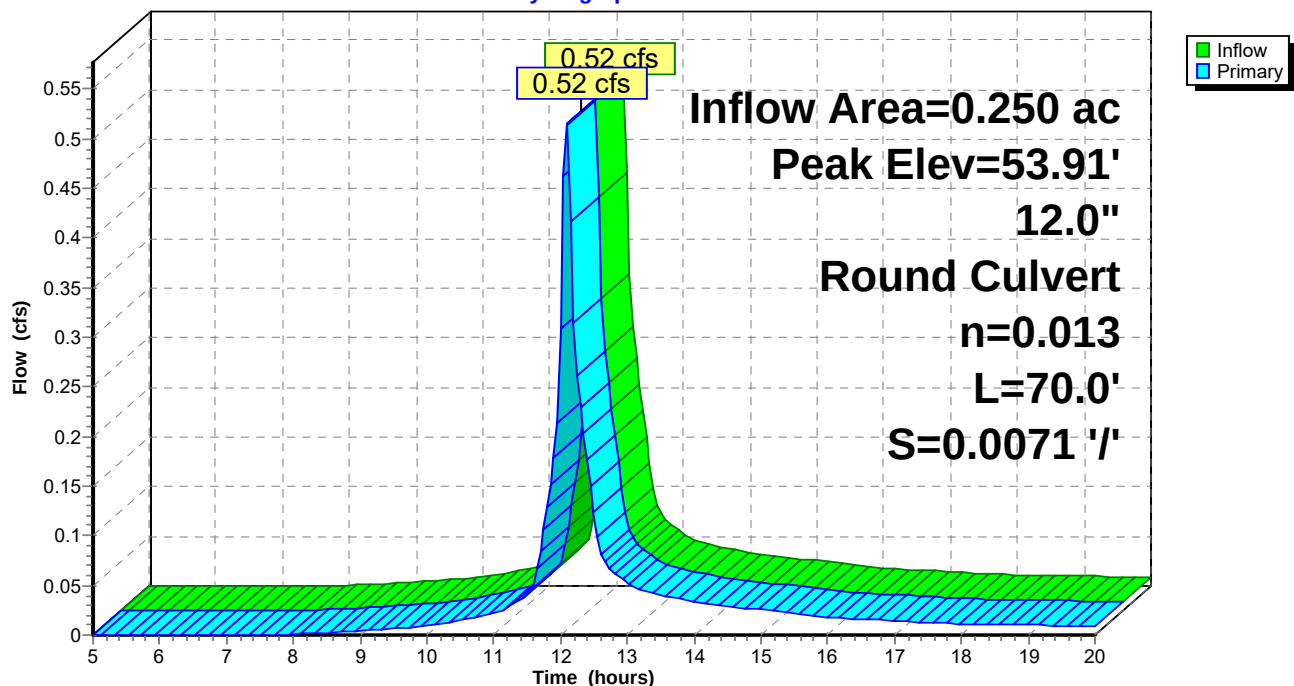
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.91' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.50' | <b>12.0" Round Culvert</b><br>L= 70.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.50' / 53.00' S= 0.0071 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.51 cfs @ 12.09 hrs HW=53.90' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.51 cfs @ 1.71 fps)

### Pond 137P: CB

Hydrograph



### Summary for Pond 138P: CB 39

Inflow Area = 0.145 ac, 72.58% Impervious, Inflow Depth > 1.39" for 2-Year event  
 Inflow = 0.25 cfs @ 12.09 hrs, Volume= 0.017 af  
 Outflow = 0.25 cfs @ 12.09 hrs, Volume= 0.017 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.25 cfs @ 12.09 hrs, Volume= 0.017 af  
 Routed to Pond 139P : DMH 28

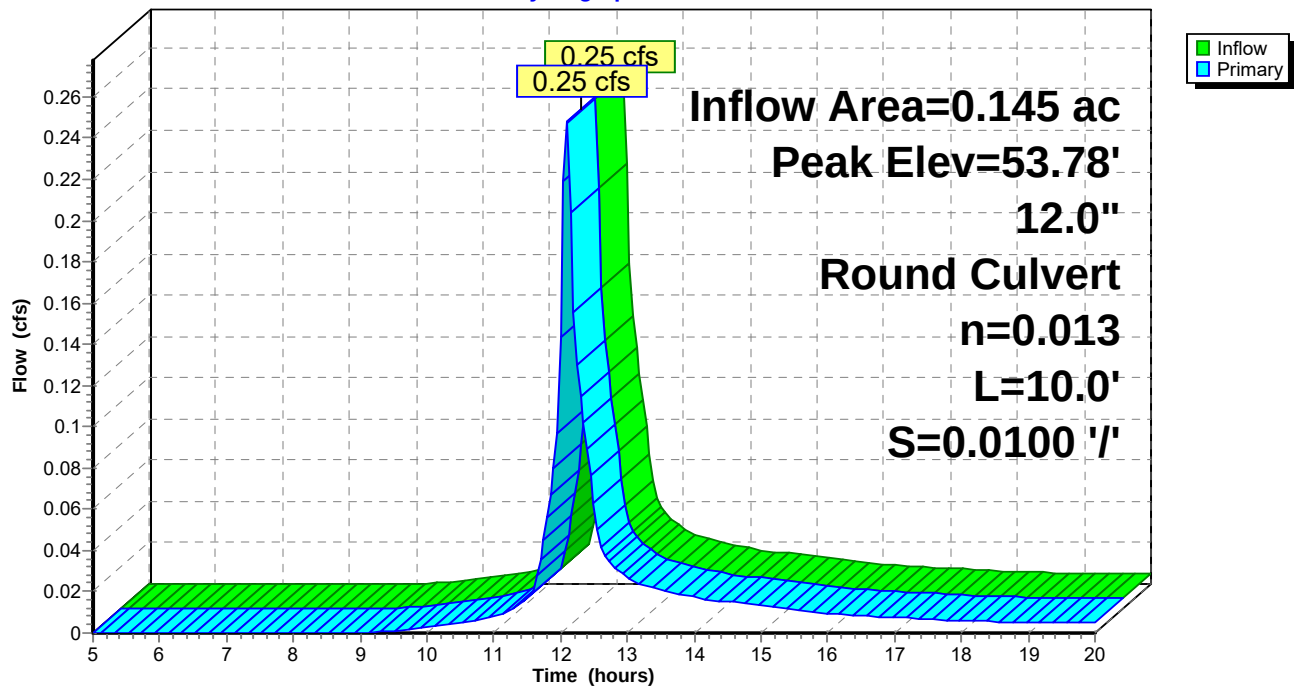
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.78' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.50' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.50' / 53.40' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.24 cfs @ 12.09 hrs HW=53.78' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.24 cfs @ 2.02 fps)

### Pond 138P: CB 39

Hydrograph





### Summary for Pond 139P: DMH 28

Inflow Area = 0.325 ac, 69.06% Impervious, Inflow Depth > 1.25" for 2-Year event  
 Inflow = 0.50 cfs @ 12.10 hrs, Volume= 0.034 af  
 Outflow = 0.50 cfs @ 12.10 hrs, Volume= 0.034 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.50 cfs @ 12.10 hrs, Volume= 0.034 af  
 Routed to Pond 205P : DMH 27

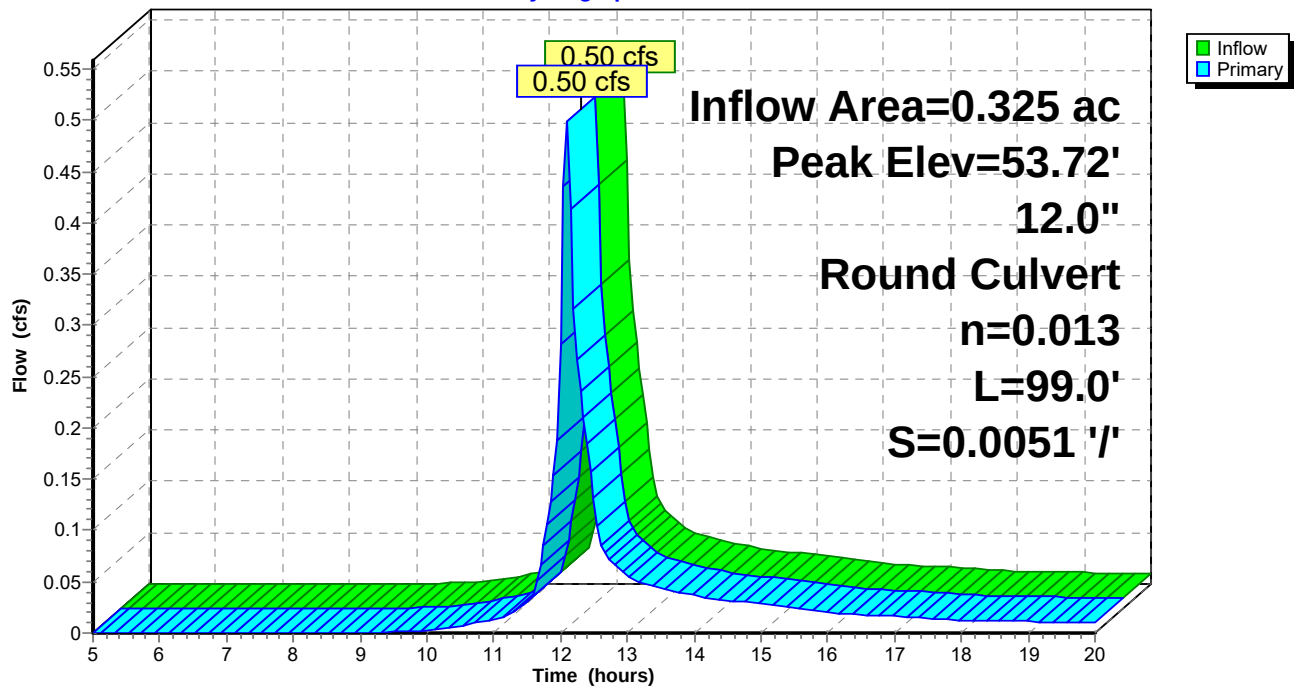
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.72' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.30' | <b>12.0" Round Culvert</b><br>L= 99.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.30' / 52.80' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.49 cfs @ 12.10 hrs HW=53.71' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.49 cfs @ 2.38 fps)

### Pond 139P: DMH 28

Hydrograph



### Summary for Pond 140P: CB 31

Inflow Area = 0.320 ac, 63.97% Impervious, Inflow Depth > 1.14" for 2-Year event  
 Inflow = 0.45 cfs @ 12.10 hrs, Volume= 0.030 af  
 Outflow = 0.45 cfs @ 12.10 hrs, Volume= 0.030 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.45 cfs @ 12.10 hrs, Volume= 0.030 af  
 Routed to Pond 141P : DMH 23

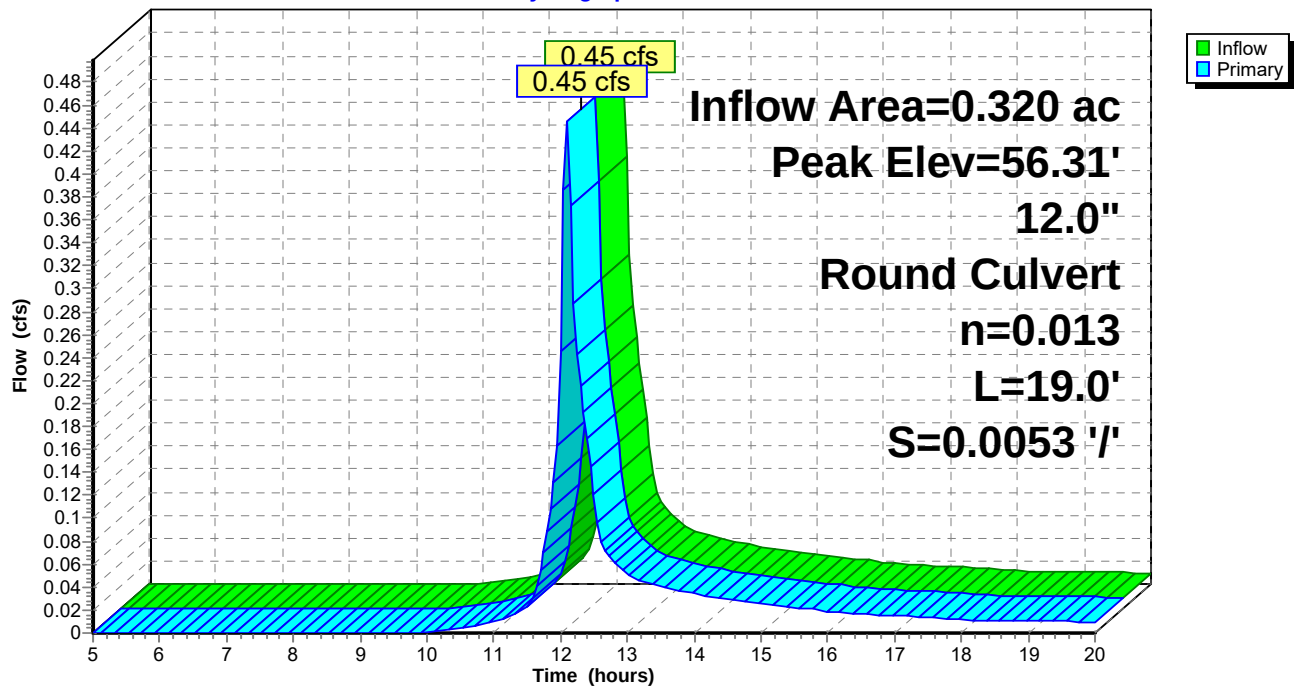
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.31' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 55.90' | <b>12.0" Round Culvert</b><br>L= 19.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 55.90' / 55.80' S= 0.0053 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.44 cfs @ 12.10 hrs HW=56.31' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.44 cfs @ 2.14 fps)

### Pond 140P: CB 31

#### Hydrograph



### Summary for Pond 141P: DMH 23

Inflow Area = 0.615 ac, 65.69% Impervious, Inflow Depth > 1.17" for 2-Year event  
 Inflow = 0.88 cfs @ 12.10 hrs, Volume= 0.060 af  
 Outflow = 0.88 cfs @ 12.10 hrs, Volume= 0.060 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.88 cfs @ 12.10 hrs, Volume= 0.060 af  
 Routed to Pond 150P : DMH 22

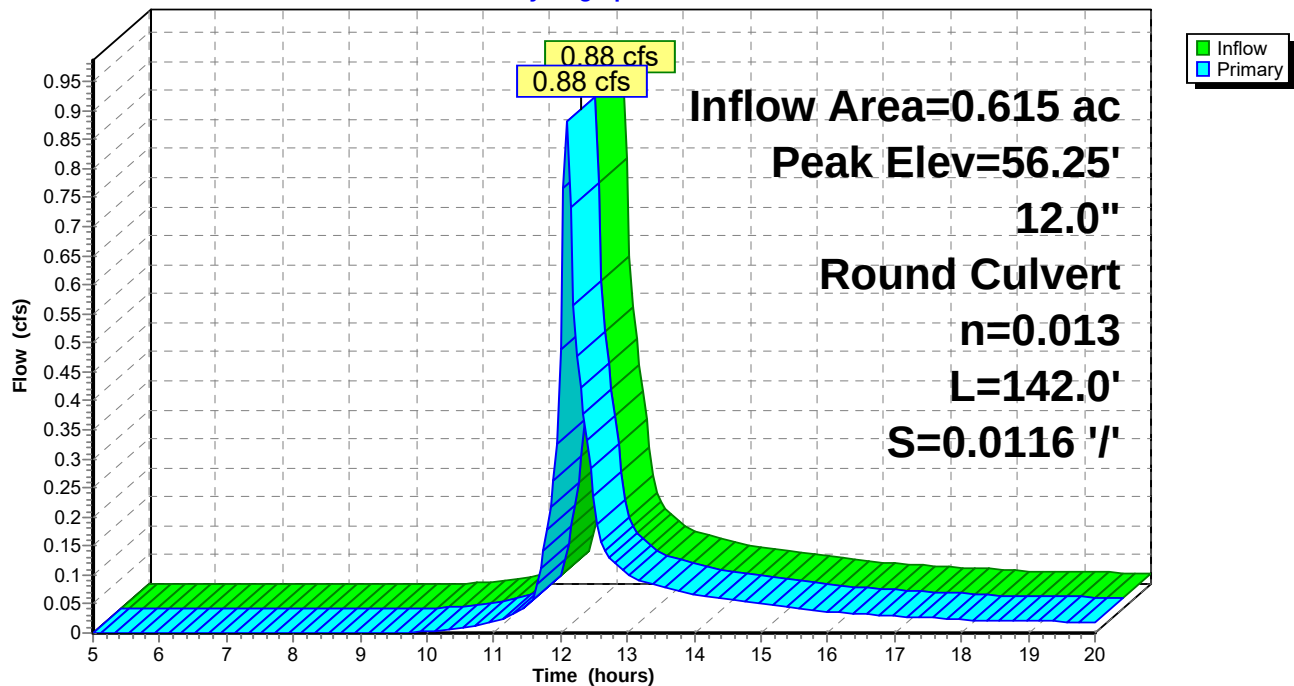
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.25' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 55.70' | <b>12.0" Round Culvert</b><br>L= 142.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 55.70' / 54.05' S= 0.0116 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.87 cfs @ 12.10 hrs HW=56.25' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.87 cfs @ 1.99 fps)

### Pond 141P: DMH 23

Hydrograph



### Summary for Pond 142P: CB 40

Inflow Area = 0.409 ac, 65.98% Impervious, Inflow Depth > 1.14" for 2-Year event  
 Inflow = 0.57 cfs @ 12.10 hrs, Volume= 0.039 af  
 Outflow = 0.57 cfs @ 12.10 hrs, Volume= 0.039 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.57 cfs @ 12.10 hrs, Volume= 0.039 af  
 Routed to Pond 144P : DMH 30

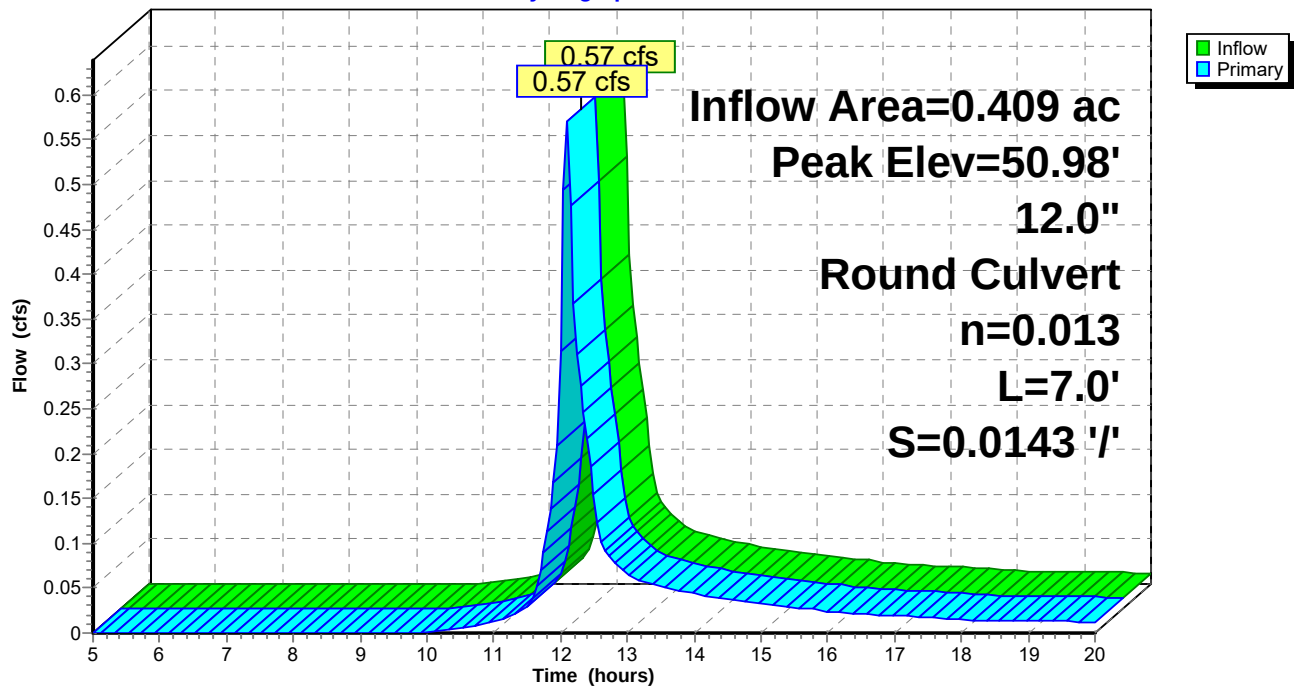
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.98' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.53' | <b>12.0" Round Culvert</b><br>L= 7.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.53' / 50.43' S= 0.0143 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.57 cfs @ 12.10 hrs HW=50.97' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.57 cfs @ 2.47 fps)

### Pond 142P: CB 40

#### Hydrograph



### Summary for Pond 143P: CB 41

Inflow Area = 0.577 ac, 66.17% Impervious, Inflow Depth > 1.14" for 2-Year event  
 Inflow = 0.80 cfs @ 12.10 hrs, Volume= 0.055 af  
 Outflow = 0.80 cfs @ 12.10 hrs, Volume= 0.055 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.80 cfs @ 12.10 hrs, Volume= 0.055 af  
 Routed to Pond 144P : DMH 30

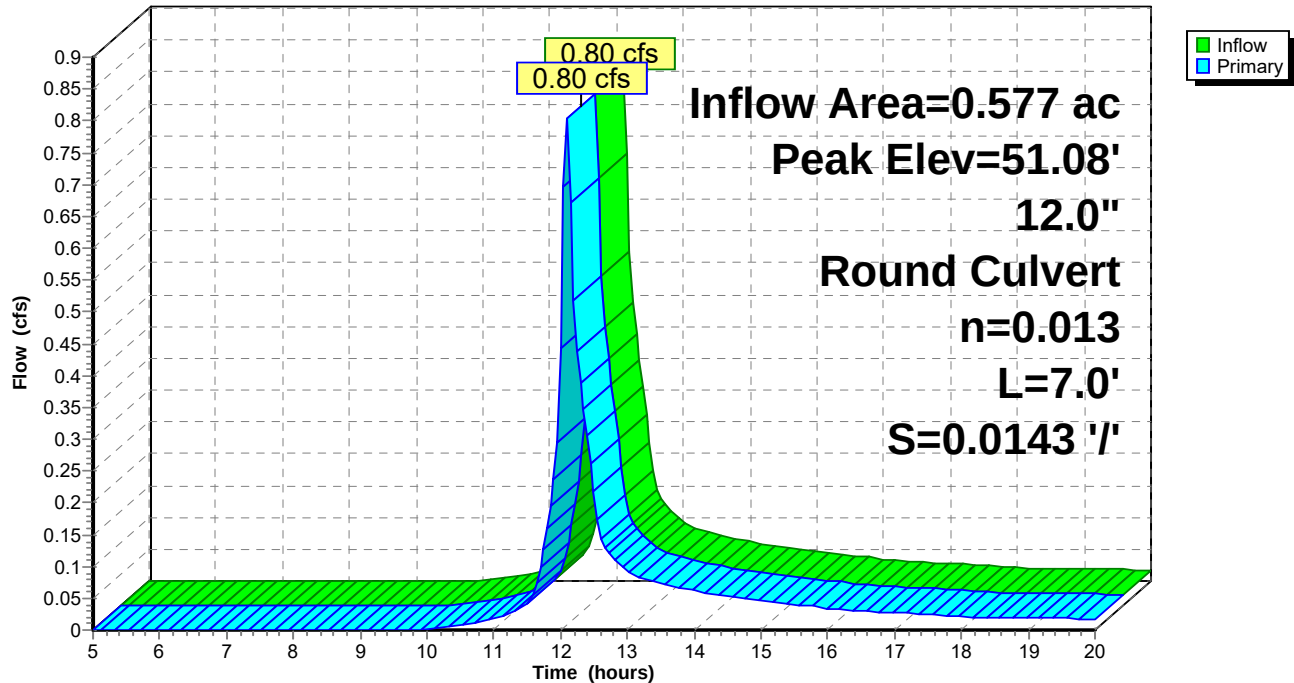
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.08' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.53' | <b>12.0" Round Culvert</b><br>L= 7.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.53' / 50.43' S= 0.0143 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.80 cfs @ 12.10 hrs HW=51.07' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.80 cfs @ 2.65 fps)

### Pond 143P: CB 41

#### Hydrograph



### Summary for Pond 144P: DMH 30

Inflow Area = 0.986 ac, 66.09% Impervious, Inflow Depth > 1.14" for 2-Year event  
 Inflow = 1.37 cfs @ 12.10 hrs, Volume= 0.093 af  
 Outflow = 1.37 cfs @ 12.10 hrs, Volume= 0.093 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.37 cfs @ 12.10 hrs, Volume= 0.093 af  
 Routed to Pond 145P : DMH 29

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 51.08' @ 12.10 hrs

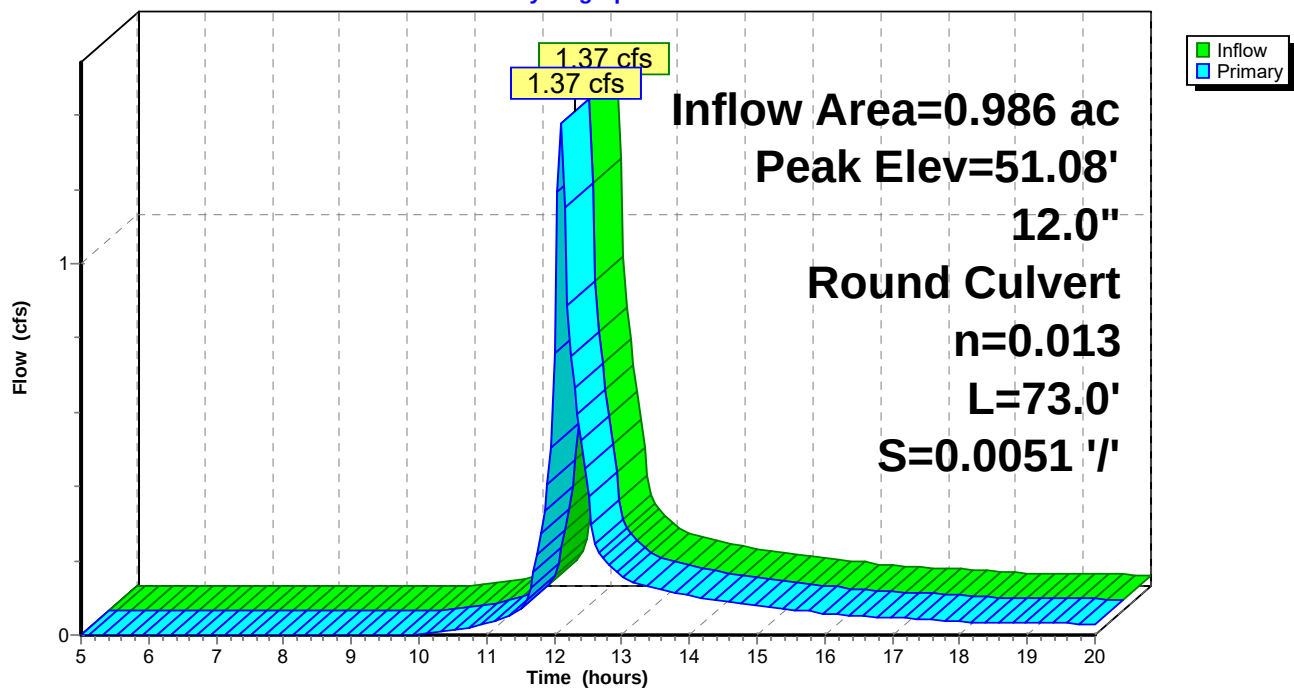
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.33' | <b>12.0" Round Culvert</b><br>L= 73.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.33' / 49.96' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.36 cfs @ 12.10 hrs HW=51.08' (Free Discharge)

↑**1=Culvert** (Barrel Controls 1.36 cfs @ 3.00 fps)

### Pond 144P: DMH 30

#### Hydrograph



**Summary for Pond 145P: DMH 29**

Inflow Area = 0.986 ac, 66.09% Impervious, Inflow Depth > 1.14" for 2-Year event  
 Inflow = 1.37 cfs @ 12.10 hrs, Volume= 0.093 af  
 Outflow = 1.37 cfs @ 12.10 hrs, Volume= 0.093 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.37 cfs @ 12.10 hrs, Volume= 0.093 af  
 Routed to Pond 146P : Inf. Basin 2

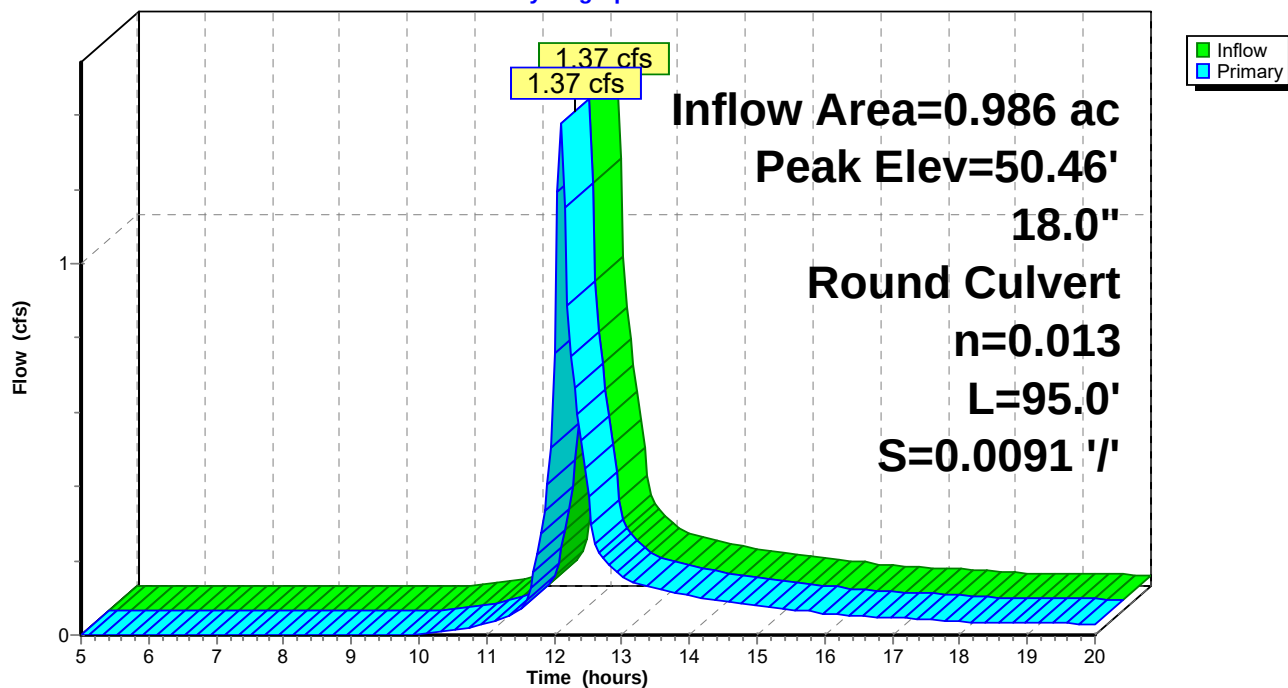
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.46' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 49.86' | <b>18.0" Round Culvert</b><br>L= 95.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.86' / 49.00' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=1.36 cfs @ 12.10 hrs HW=50.46' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.36 cfs @ 2.08 fps)

**Pond 145P: DMH 29**

Hydrograph



### Summary for Pond 146P: Inf. Basin 2

Inflow Area = 1.642 ac, 64.89% Impervious, Inflow Depth > 1.22" for 2-Year event  
 Inflow = 2.45 cfs @ 12.09 hrs, Volume= 0.167 af  
 Outflow = 0.72 cfs @ 12.46 hrs, Volume= 0.167 af, Atten= 70%, Lag= 22.0 min  
 Discarded = 0.72 cfs @ 12.46 hrs, Volume= 0.167 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Link 203L : 3A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 49.73' @ 12.46 hrs Surf.Area= 2,917 sf Storage= 1,793 cf

Plug-Flow detention time= 18.9 min calculated for 0.167 af (100% of inflow)  
 Center-of-Mass det. time= 18.4 min ( 814.9 - 796.5 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 49.00' | 18,306 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 49.00               | 1,966                | 0                         | 0                         |
| 50.00               | 3,261                | 2,614                     | 2,614                     |
| 51.00               | 4,560                | 3,911                     | 6,524                     |
| 52.00               | 5,952                | 5,256                     | 11,780                    |
| 53.00               | 7,099                | 6,526                     | 18,306                    |

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 49.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 47.00'                                                                                                              |
| #2     | Primary   | 49.00' | <b>12.0" Round Culvert</b><br>L= 42.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.00' / 45.00' S= 0.0952 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 52.20' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                          |

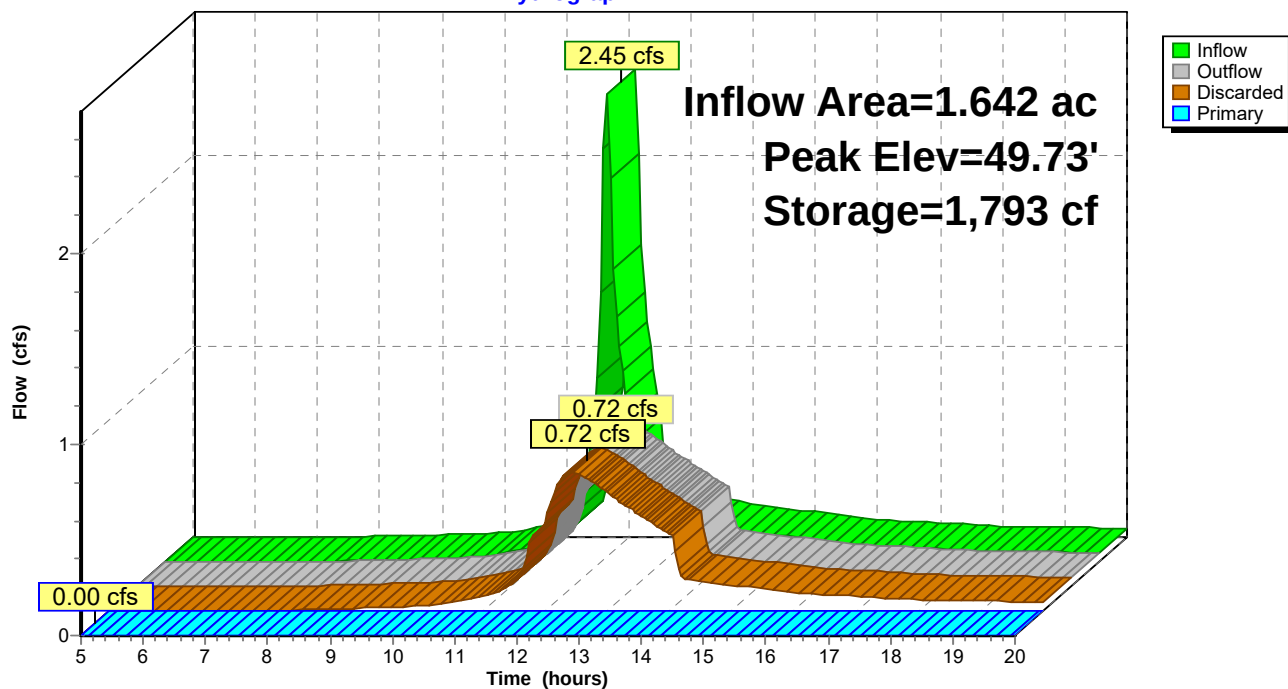
**Discarded OutFlow** Max=0.72 cfs @ 12.46 hrs HW=49.73' (Free Discharge)  
 ↑ **1=Exfiltration** ( Controls 0.72 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=49.00' (Free Discharge)  
 ↑ **2=Culvert** ( Controls 0.00 cfs)  
 ↑ **3=Orifice/Grate** ( Controls 0.00 cfs)



# Pond 146P: Inf. Basin 2

Hydrograph



### Summary for Pond 147P: CB 28

Inflow Area = 0.076 ac, 72.53% Impervious, Inflow Depth > 1.39" for 2-Year event  
 Inflow = 0.13 cfs @ 12.09 hrs, Volume= 0.009 af  
 Outflow = 0.13 cfs @ 12.09 hrs, Volume= 0.009 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.13 cfs @ 12.09 hrs, Volume= 0.009 af  
 Routed to Pond 150P : DMH 22

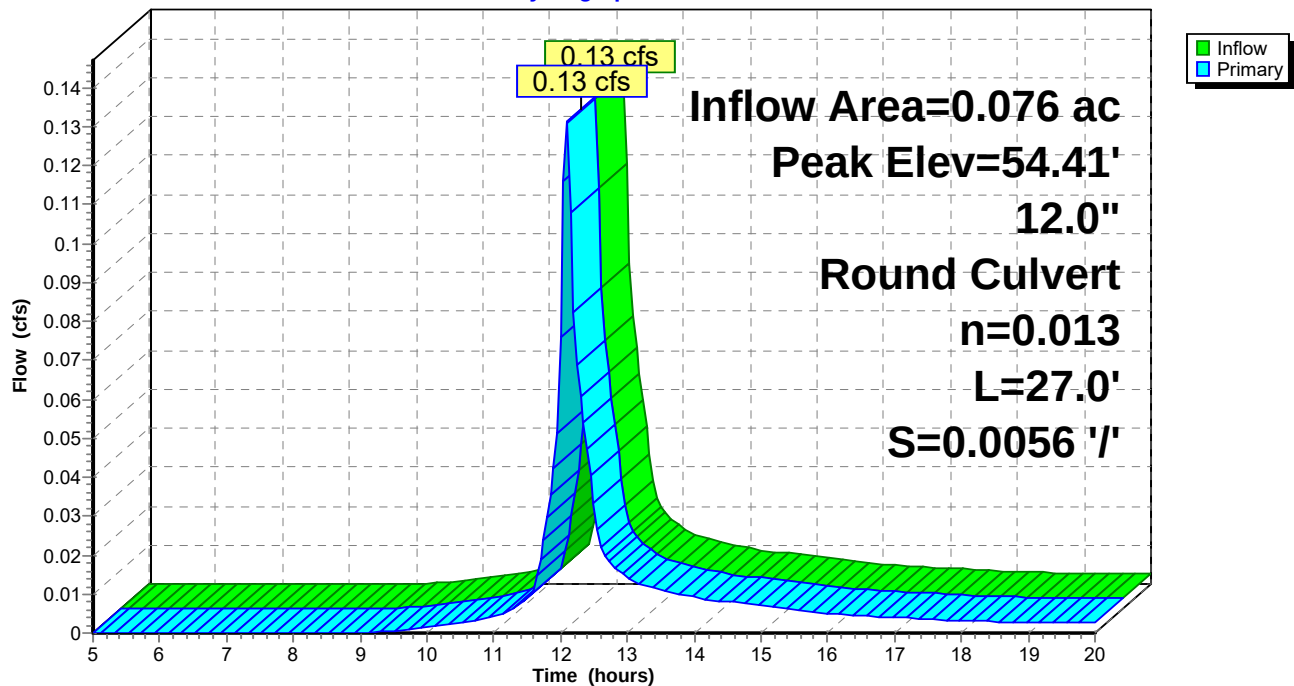
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.41' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.20' | <b>12.0" Round Culvert</b><br>L= 27.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.20' / 54.05' S= 0.0056 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.13 cfs @ 12.09 hrs HW=54.41' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.13 cfs @ 1.63 fps)

### Pond 147P: CB 28

Hydrograph



### Summary for Pond 148P: CB 43

Inflow Area = 0.196 ac, 80.21% Impervious, Inflow Depth > 1.67" for 2-Year event  
 Inflow = 0.40 cfs @ 12.09 hrs, Volume= 0.027 af  
 Outflow = 0.40 cfs @ 12.09 hrs, Volume= 0.027 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.40 cfs @ 12.09 hrs, Volume= 0.027 af  
 Routed to Pond 146P : Inf. Basin 2

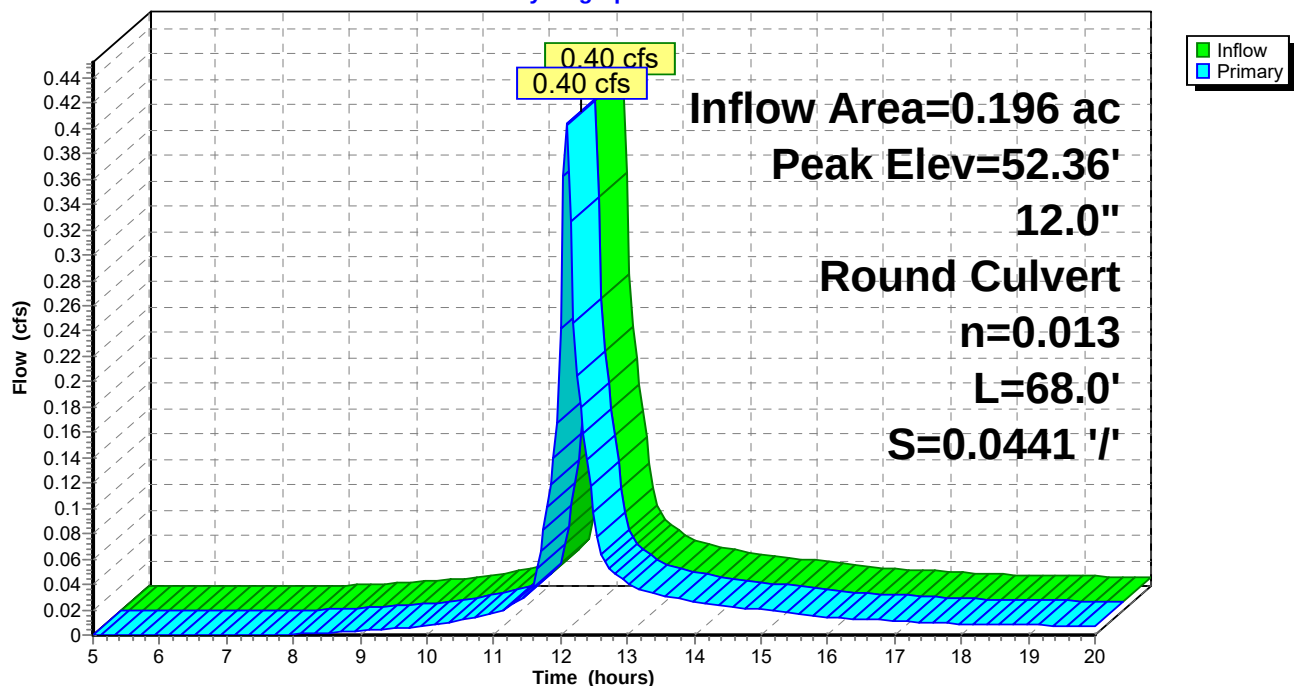
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.36' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.00' | <b>12.0" Round Culvert</b><br>L= 68.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.00' / 49.00' S= 0.0441 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.40 cfs @ 12.09 hrs HW=52.35' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.40 cfs @ 1.60 fps)

### Pond 148P: CB 43

#### Hydrograph



## Summary for Pond 149P: CB 29

Inflow Area = 0.079 ac, 73.82% Impervious, Inflow Depth > 1.46" for 2-Year event  
 Inflow = 0.14 cfs @ 12.09 hrs, Volume= 0.010 af  
 Outflow = 0.14 cfs @ 12.09 hrs, Volume= 0.010 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.14 cfs @ 12.09 hrs, Volume= 0.010 af  
 Routed to Pond 150P : DMH 22

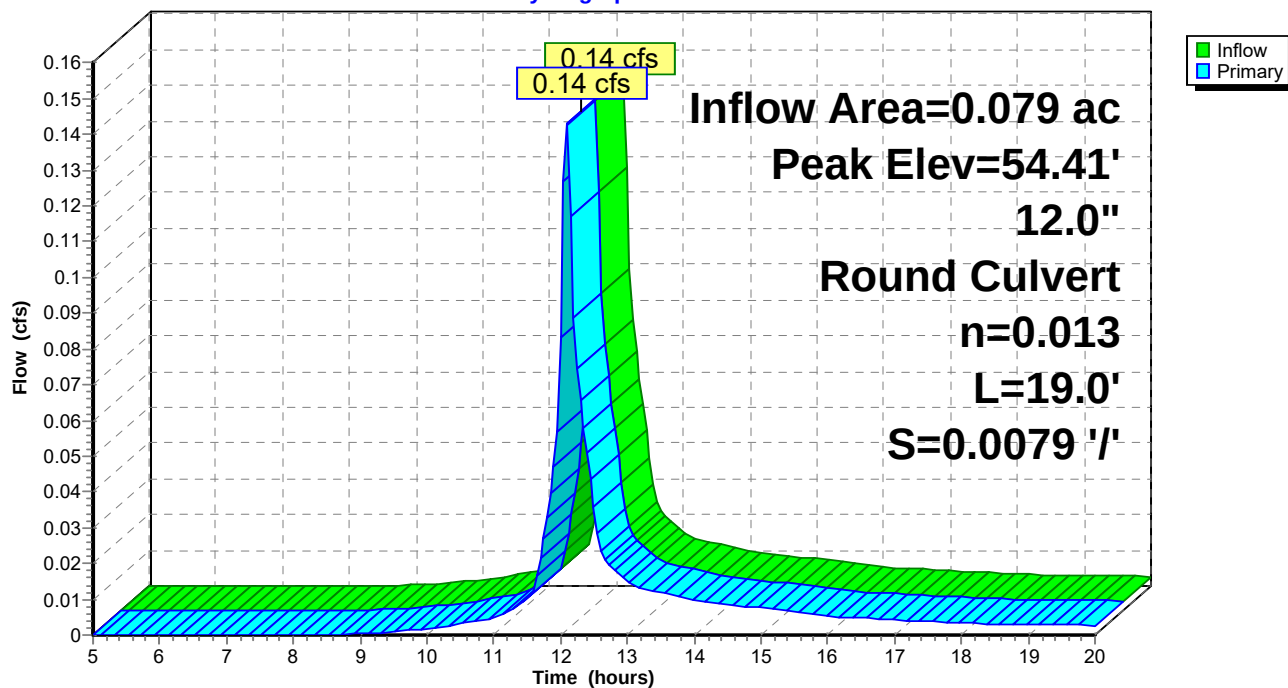
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 54.41' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.20' | <b>12.0" Round Culvert</b><br>L= 19.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.20' / 54.05' S= 0.0079 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.14 cfs @ 12.09 hrs HW=54.41' (Free Discharge)  
 1=Culvert (Barrel Controls 0.14 cfs @ 1.80 fps)

## Pond 149P: CB 29

## Hydrograph



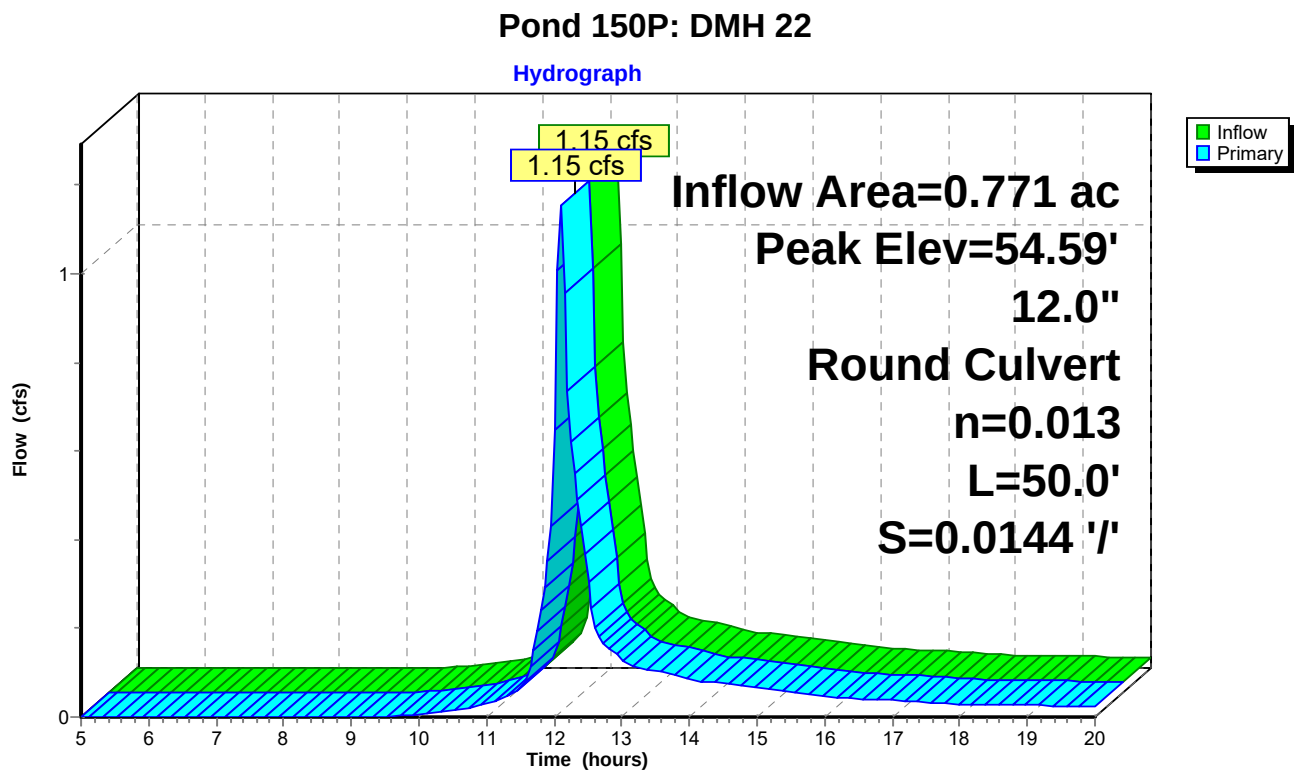
### Summary for Pond 150P: DMH 22

Inflow Area = 0.771 ac, 67.20% Impervious, Inflow Depth > 1.22" for 2-Year event  
 Inflow = 1.15 cfs @ 12.10 hrs, Volume= 0.078 af  
 Outflow = 1.15 cfs @ 12.10 hrs, Volume= 0.078 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.15 cfs @ 12.10 hrs, Volume= 0.078 af  
 Routed to Pond 161P : DMH 19

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.59' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.95' | <b>12.0" Round Culvert</b><br>L= 50.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.95' / 53.23' S= 0.0144 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.14 cfs @ 12.10 hrs HW=54.59' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.14 cfs @ 2.15 fps)



### Summary for Pond 151P: CB 22

Inflow Area = 0.159 ac, 74.64% Impervious, Inflow Depth > 1.46" for 2-Year event  
 Inflow = 0.29 cfs @ 12.09 hrs, Volume= 0.019 af  
 Outflow = 0.29 cfs @ 12.09 hrs, Volume= 0.019 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.29 cfs @ 12.09 hrs, Volume= 0.019 af  
 Routed to Pond 153P : DMH 17

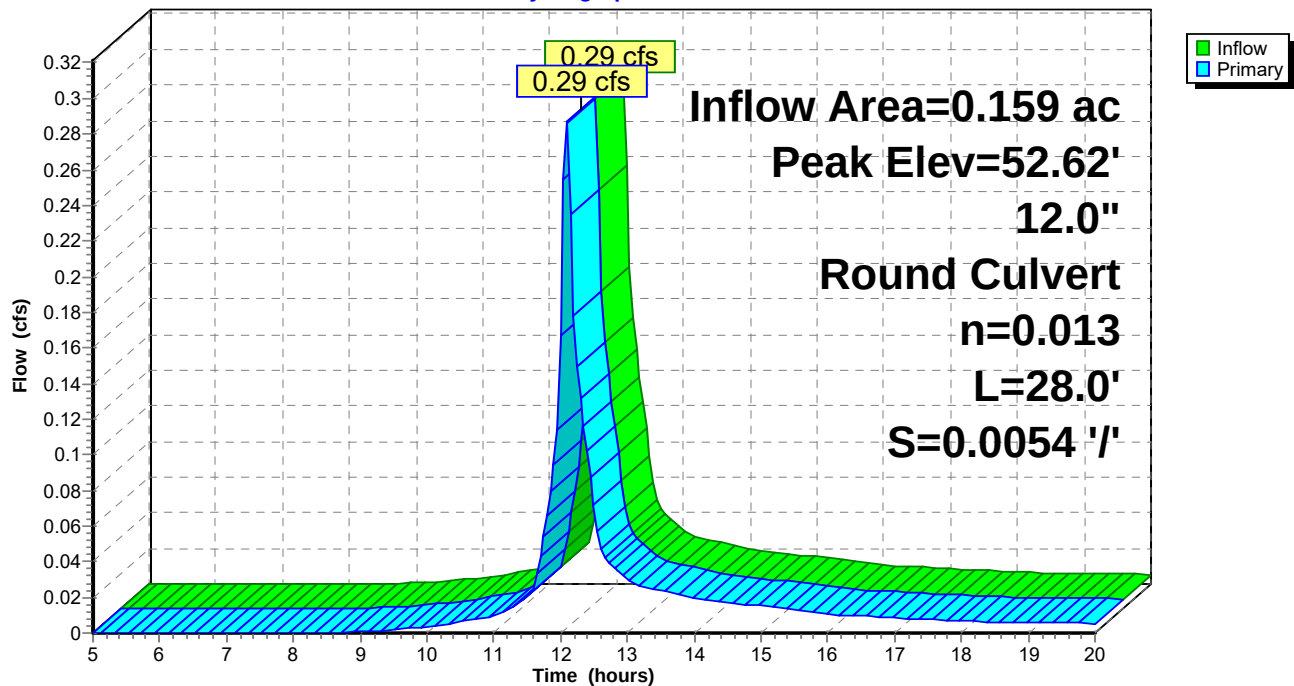
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.62' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.30' | <b>12.0" Round Culvert</b><br>L= 28.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.30' / 52.15' S= 0.0054 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.28 cfs @ 12.09 hrs HW=52.62' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.28 cfs @ 1.97 fps)

### Pond 151P: CB 22

#### Hydrograph



### Summary for Pond 152P: CB 23

Inflow Area = 0.210 ac, 67.61% Impervious, Inflow Depth > 1.20" for 2-Year event  
 Inflow = 0.31 cfs @ 12.10 hrs, Volume= 0.021 af  
 Outflow = 0.31 cfs @ 12.10 hrs, Volume= 0.021 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.31 cfs @ 12.10 hrs, Volume= 0.021 af  
 Routed to Pond 153P : DMH 17

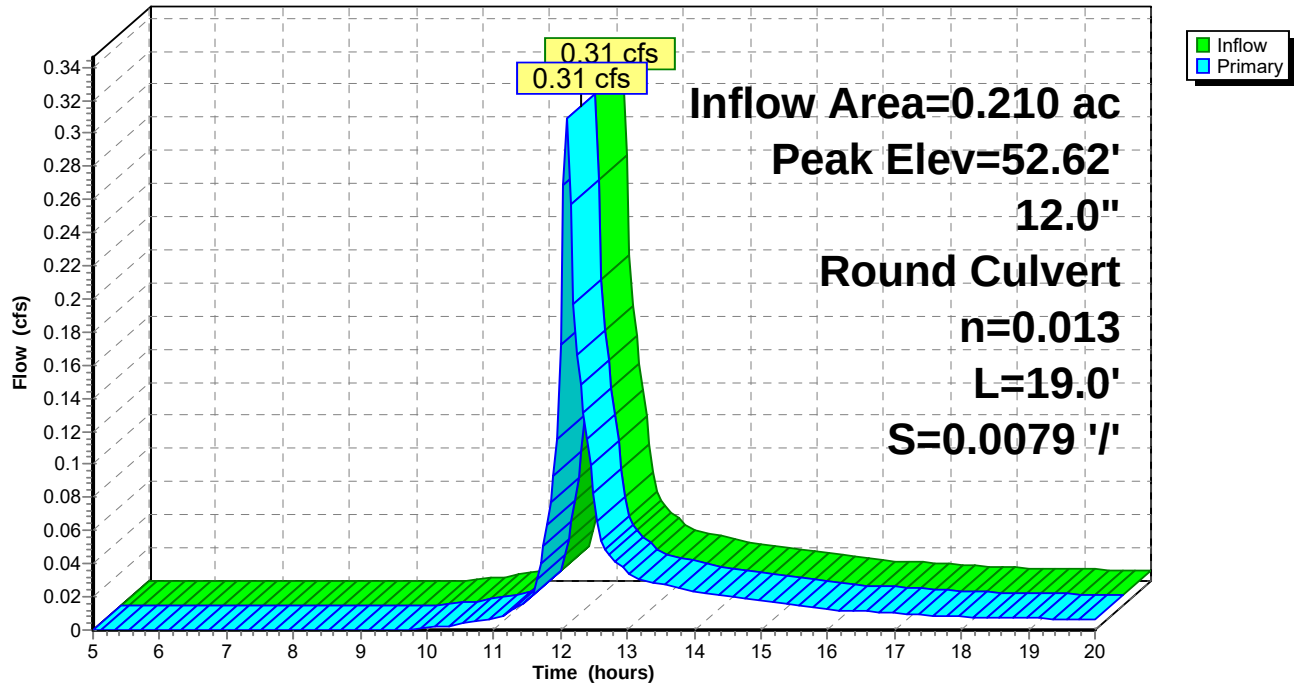
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.62' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.30' | <b>12.0" Round Culvert</b><br>L= 19.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.30' / 52.15' S= 0.0079 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.31 cfs @ 12.10 hrs HW=52.62' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.31 cfs @ 2.15 fps)

### Pond 152P: CB 23

#### Hydrograph



**Summary for Pond 153P: DMH 17**

Inflow Area = 1.731 ac, 71.57% Impervious, Inflow Depth > 1.37" for 2-Year event  
 Inflow = 2.92 cfs @ 12.09 hrs, Volume= 0.198 af  
 Outflow = 2.92 cfs @ 12.09 hrs, Volume= 0.198 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.92 cfs @ 12.09 hrs, Volume= 0.198 af  
 Routed to Pond 204P : DMH 18

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 52.99' @ 12.09 hrs

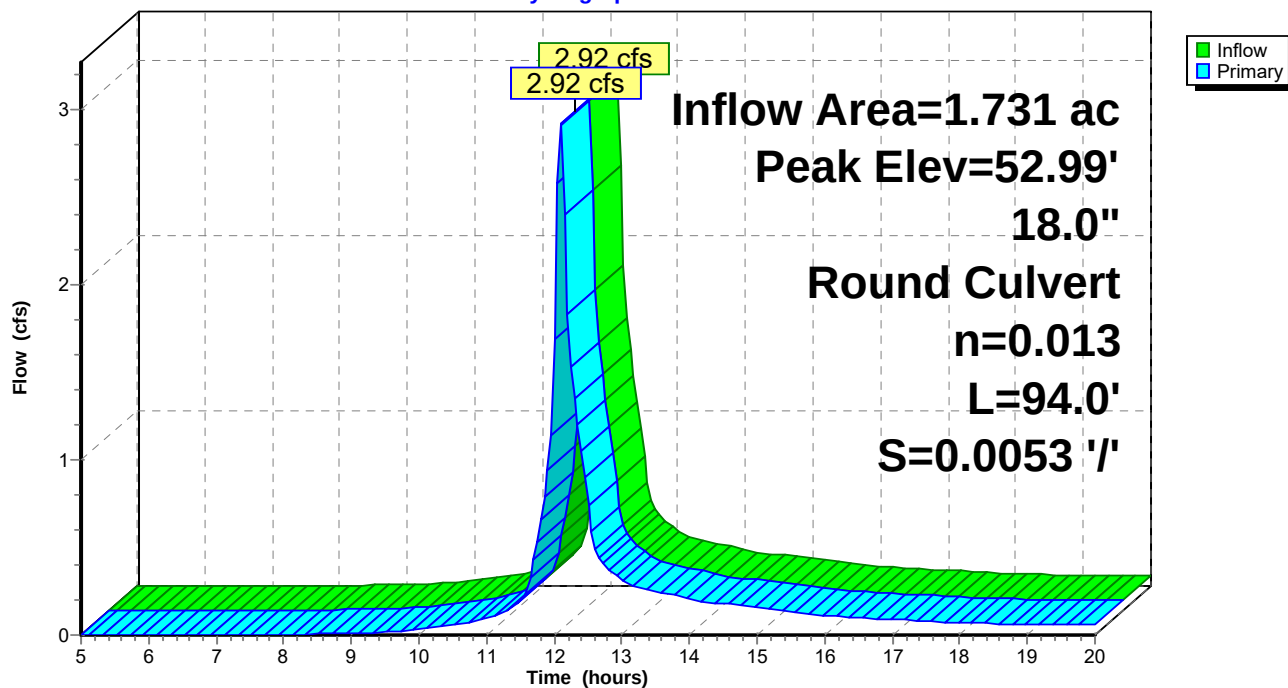
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.05' | <b>18.0" Round Culvert</b><br>L= 94.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.05' / 51.55' S= 0.0053 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.88 cfs @ 12.09 hrs HW=52.98' (Free Discharge)

1=Culvert (Barrel Controls 2.88 cfs @ 3.56 fps)

**Pond 153P: DMH 17**

Hydrograph





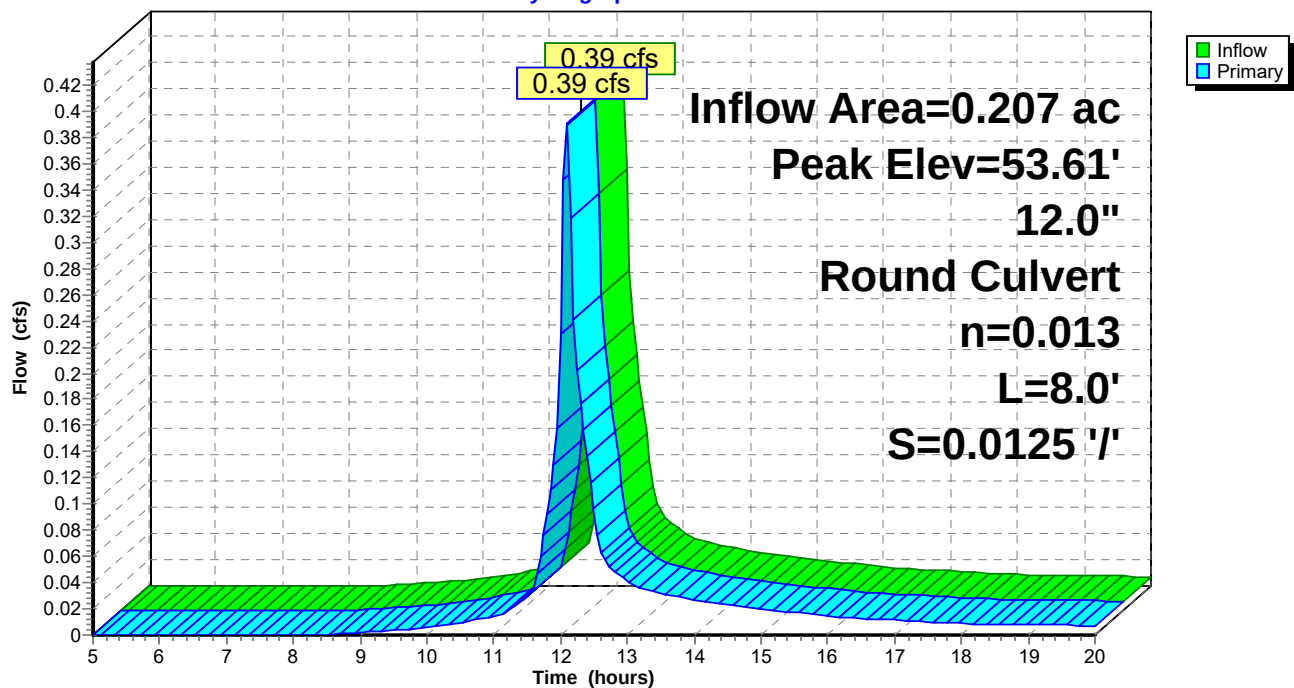
**Summary for Pond 154P: CB 18**

Inflow Area = 0.207 ac, 76.76% Impervious, Inflow Depth > 1.53" for 2-Year event  
 Inflow = 0.39 cfs @ 12.09 hrs, Volume= 0.026 af  
 Outflow = 0.39 cfs @ 12.09 hrs, Volume= 0.026 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.39 cfs @ 12.09 hrs, Volume= 0.026 af  
 Routed to Pond 166P : DMH 13

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.61' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.25' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.25' / 53.15' S= 0.0125 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.38 cfs @ 12.09 hrs HW=53.61' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.38 cfs @ 2.27 fps)

**Pond 154P: CB 18****Hydrograph**

### Summary for Pond 155P: CB 27

Inflow Area = 0.220 ac, 74.64% Impervious, Inflow Depth > 1.46" for 2-Year event  
 Inflow = 0.40 cfs @ 12.09 hrs, Volume= 0.027 af  
 Outflow = 0.40 cfs @ 12.09 hrs, Volume= 0.027 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.40 cfs @ 12.09 hrs, Volume= 0.027 af  
 Routed to Pond 157P : DMH 21

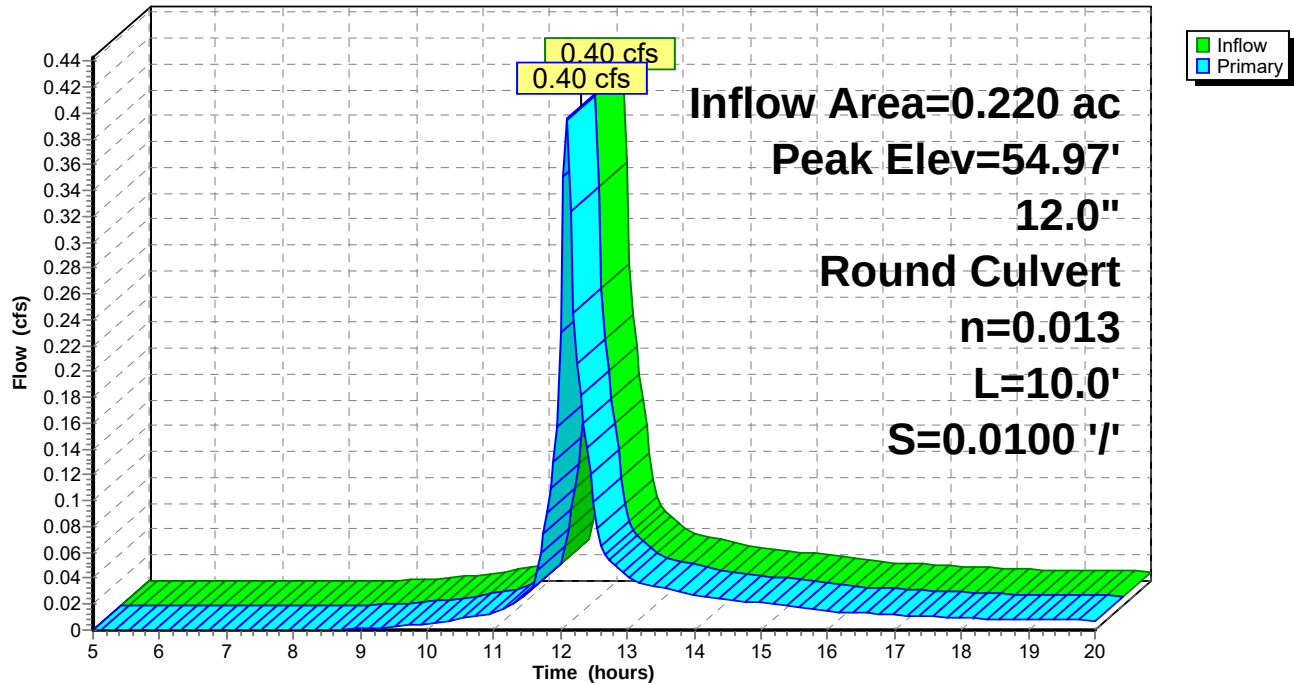
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.97' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.60' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.39 cfs @ 12.09 hrs HW=54.97' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.39 cfs @ 2.23 fps)

### Pond 155P: CB 27

#### Hydrograph



### Summary for Pond 156P: CB 26

Inflow Area = 0.108 ac, 90.07% Impervious, Inflow Depth > 2.17" for 2-Year event  
 Inflow = 0.28 cfs @ 12.09 hrs, Volume= 0.020 af  
 Outflow = 0.28 cfs @ 12.09 hrs, Volume= 0.020 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.28 cfs @ 12.09 hrs, Volume= 0.020 af  
 Routed to Pond 157P : DMH 21

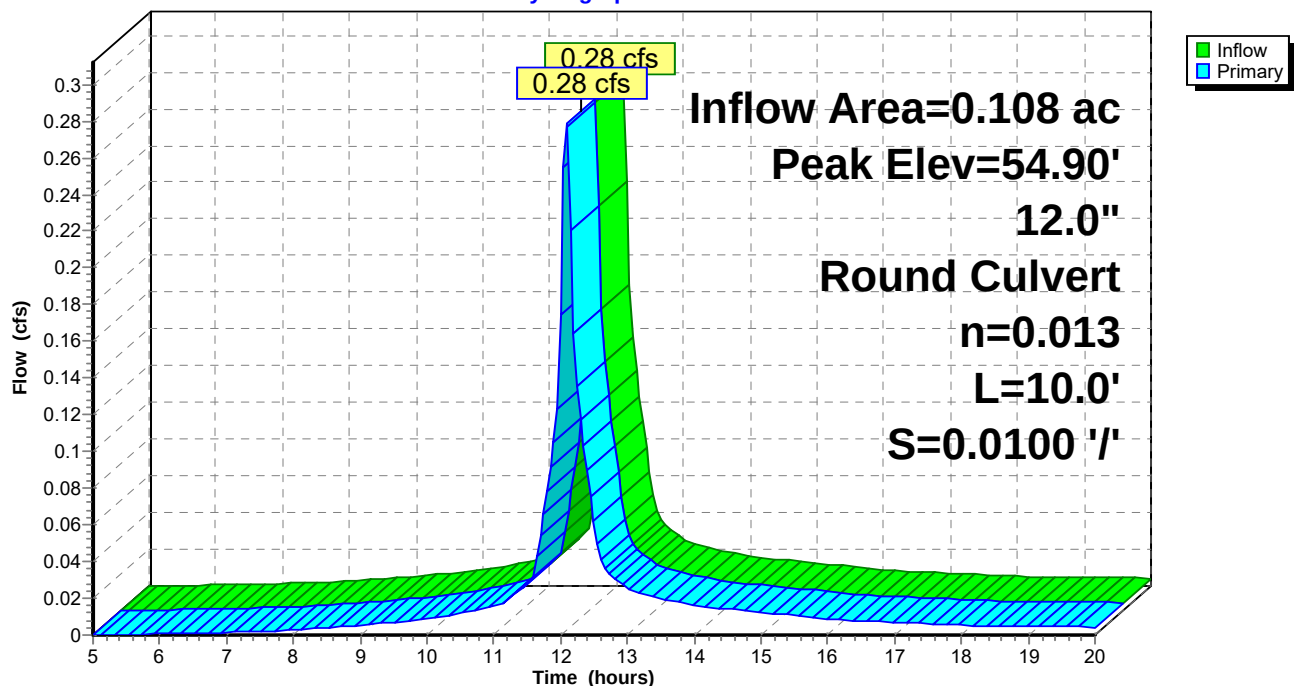
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.90' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.60' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.27 cfs @ 12.09 hrs HW=54.90' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.27 cfs @ 2.07 fps)

### Pond 156P: CB 26

#### Hydrograph



### Summary for Pond 157P: DMH 21

Inflow Area = 0.328 ac, 79.72% Impervious, Inflow Depth > 1.69" for 2-Year event  
 Inflow = 0.67 cfs @ 12.09 hrs, Volume= 0.046 af  
 Outflow = 0.67 cfs @ 12.09 hrs, Volume= 0.046 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.67 cfs @ 12.09 hrs, Volume= 0.046 af  
 Routed to Pond 160P : DMH 20

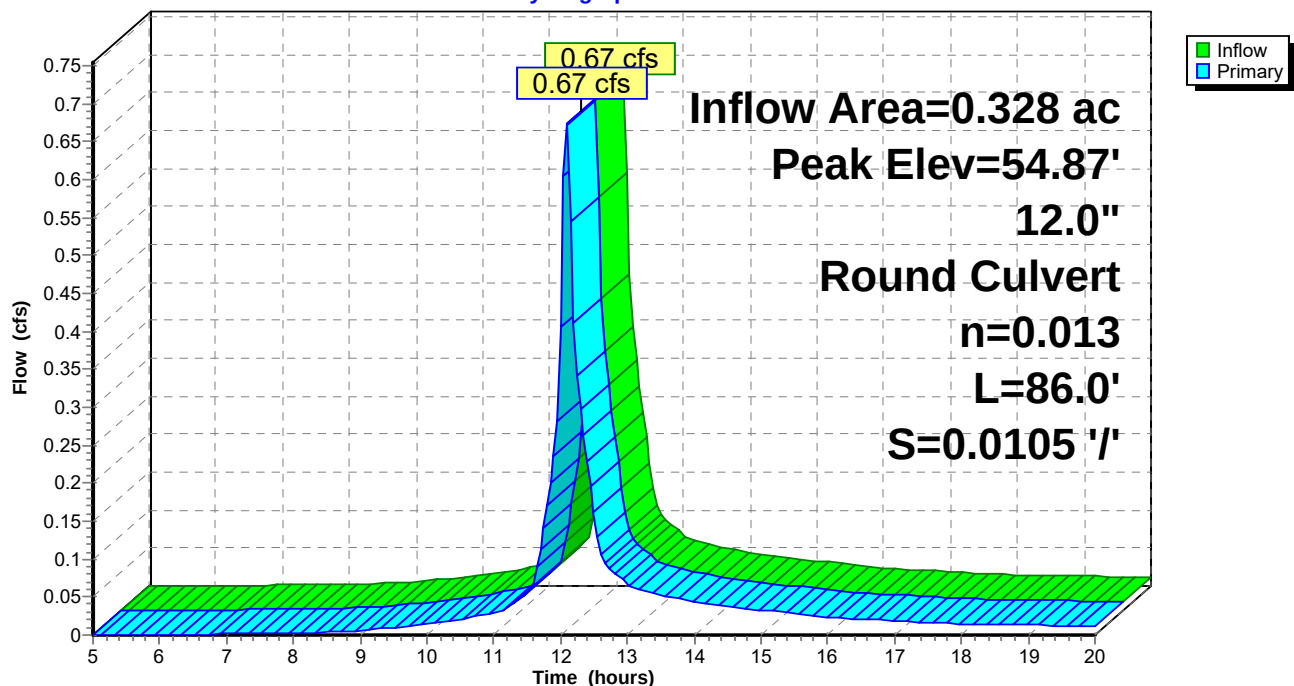
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.87' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.40' | <b>12.0" Round Culvert</b><br>L= 86.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.40' / 53.50' S= 0.0105 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.66 cfs @ 12.09 hrs HW=54.87' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.66 cfs @ 1.84 fps)

### Pond 157P: DMH 21

Hydrograph



### Summary for Pond 158P: CB 24

Inflow Area = 0.117 ac, 70.43% Impervious, Inflow Depth > 1.32" for 2-Year event  
 Inflow = 0.19 cfs @ 12.10 hrs, Volume= 0.013 af  
 Outflow = 0.19 cfs @ 12.10 hrs, Volume= 0.013 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.19 cfs @ 12.10 hrs, Volume= 0.013 af  
 Routed to Pond 160P : DMH 20

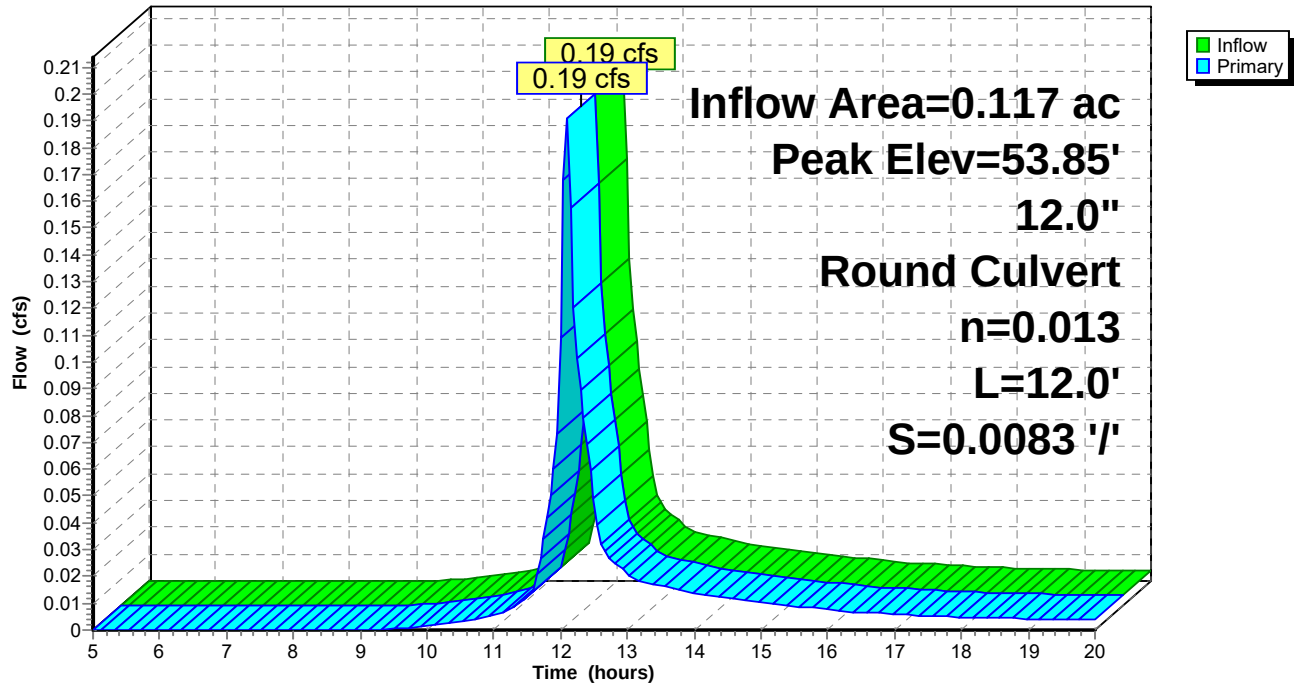
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.85' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.60' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.60' / 53.50' S= 0.0083 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.19 cfs @ 12.10 hrs HW=53.85' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.19 cfs @ 1.87 fps)

### Pond 158P: CB 24

#### Hydrograph



### Summary for Pond 159P: CB 25

Inflow Area = 0.146 ac, 79.60% Impervious, Inflow Depth > 1.67" for 2-Year event  
 Inflow = 0.30 cfs @ 12.09 hrs, Volume= 0.020 af  
 Outflow = 0.30 cfs @ 12.09 hrs, Volume= 0.020 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.30 cfs @ 12.09 hrs, Volume= 0.020 af  
 Routed to Pond 160P : DMH 20

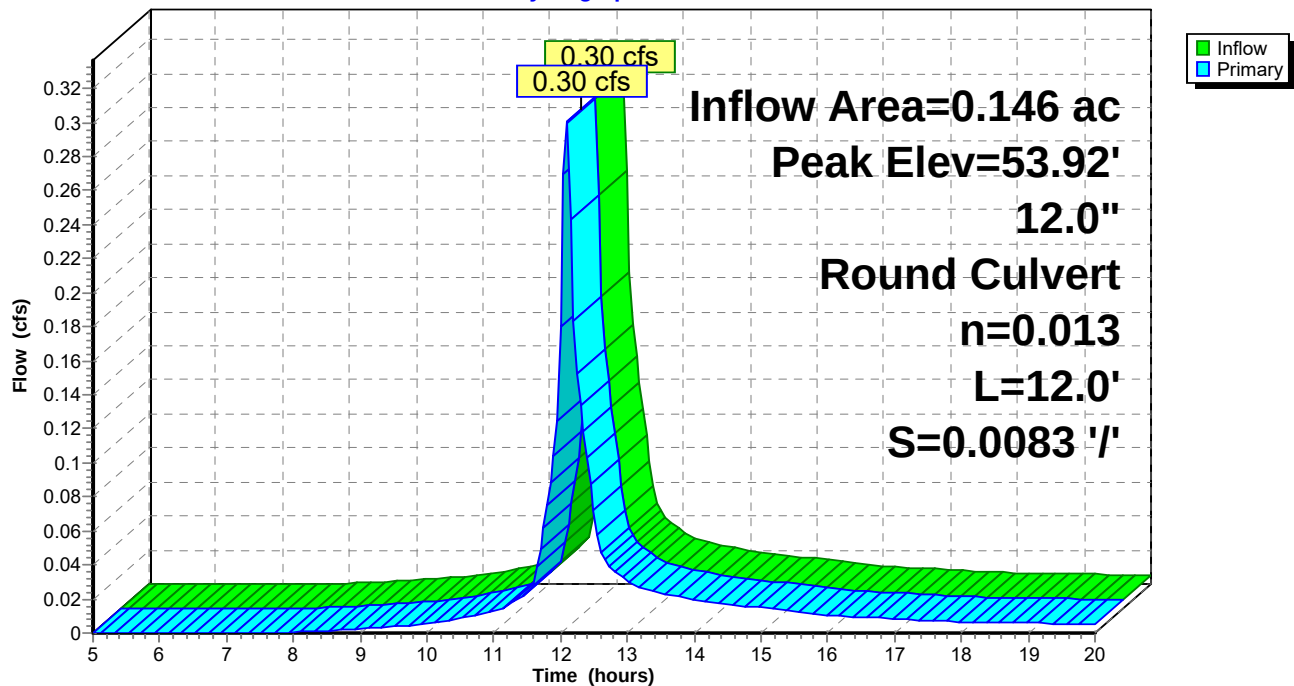
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.92' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.60' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.60' / 53.50' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.29 cfs @ 12.09 hrs HW=53.92' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.29 cfs @ 2.06 fps)

### Pond 159P: CB 25

#### Hydrograph



### Summary for Pond 160P: DMH 20

Inflow Area = 0.591 ac, 77.85% Impervious, Inflow Depth > 1.61" for 2-Year event  
 Inflow = 1.17 cfs @ 12.09 hrs, Volume= 0.079 af  
 Outflow = 1.17 cfs @ 12.09 hrs, Volume= 0.079 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.17 cfs @ 12.09 hrs, Volume= 0.079 af  
 Routed to Pond 161P : DMH 19

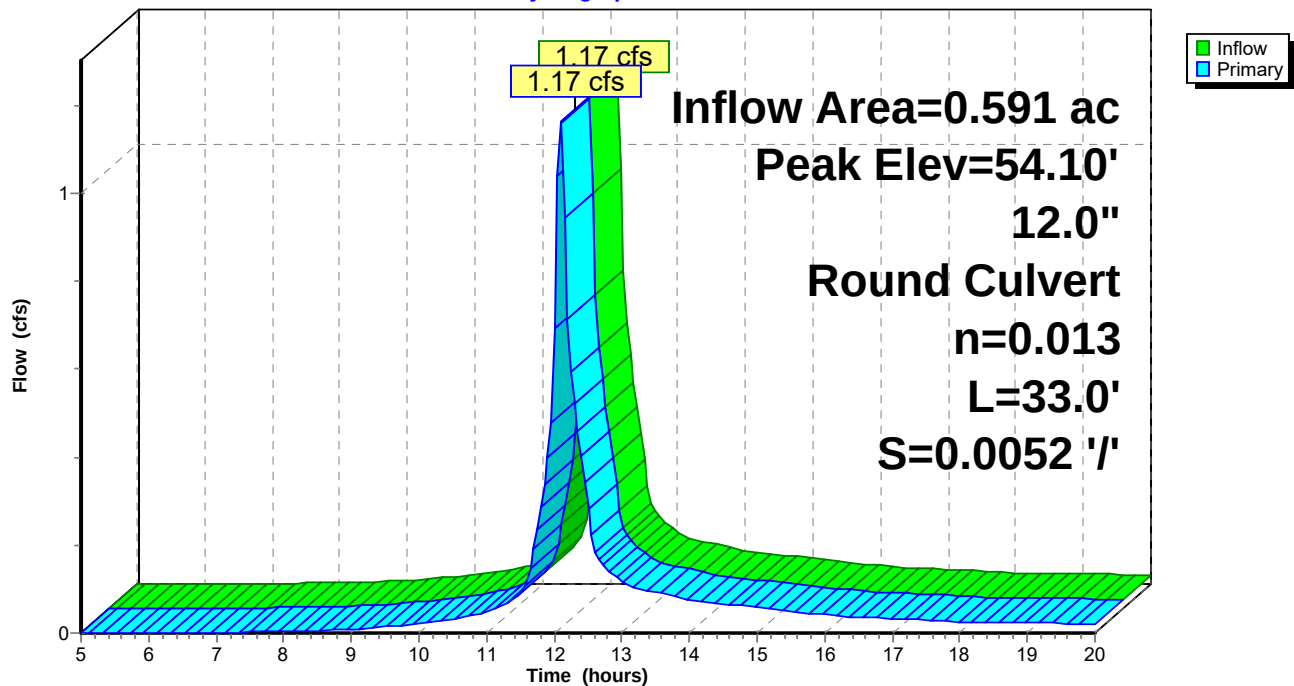
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.10' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.40' | <b>12.0" Round Culvert</b><br>L= 33.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.40' / 53.23' S= 0.0052 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.14 cfs @ 12.09 hrs HW=54.10' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.14 cfs @ 2.76 fps)

### Pond 160P: DMH 20

#### Hydrograph



**Summary for Pond 161P: DMH 19**

Inflow Area = 1.362 ac, 71.82% Impervious, Inflow Depth > 1.39" for 2-Year event  
 Inflow = 2.32 cfs @ 12.09 hrs, Volume= 0.158 af  
 Outflow = 2.32 cfs @ 12.09 hrs, Volume= 0.158 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.32 cfs @ 12.09 hrs, Volume= 0.158 af  
 Routed to Pond 153P : DMH 17

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 53.93' @ 12.09 hrs

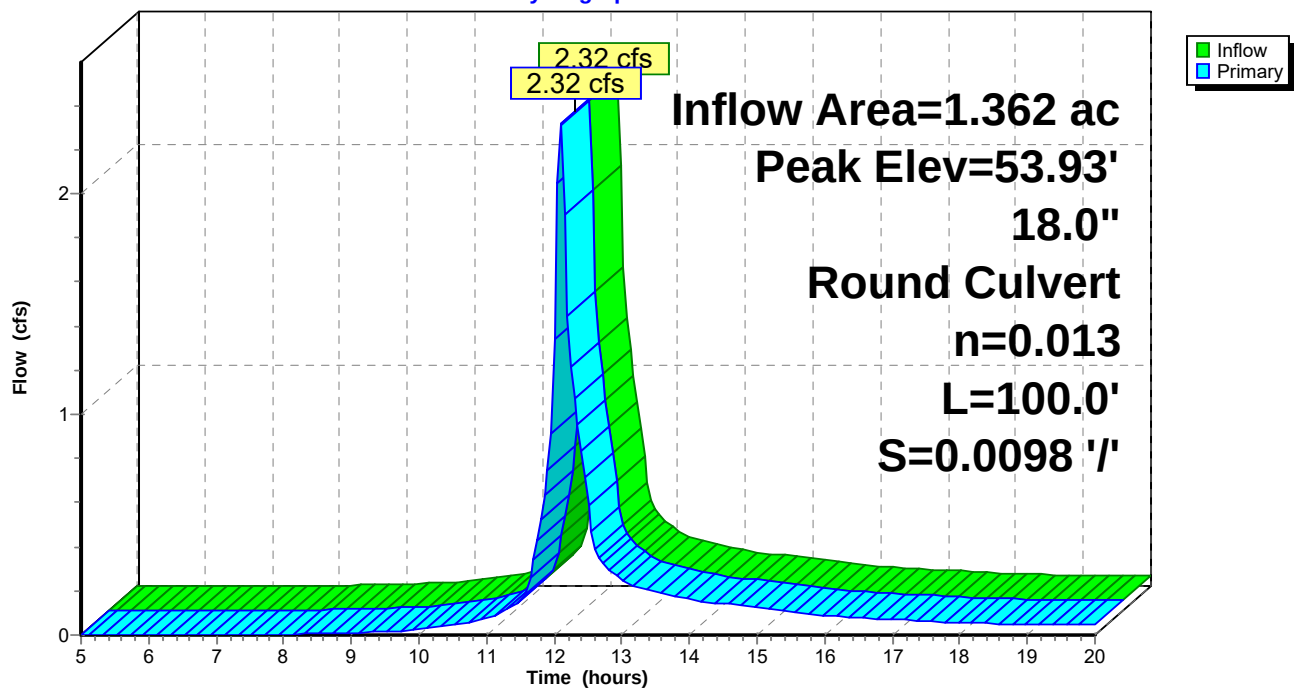
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.13' | <b>18.0" Round Culvert</b><br>L= 100.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.13' / 52.15' S= 0.0098 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.29 cfs @ 12.09 hrs HW=53.93' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 2.29 cfs @ 2.40 fps)

**Pond 161P: DMH 19**

Hydrograph





### Summary for Pond 162P: CB 15

Inflow Area = 0.390 ac, 63.16% Impervious, Inflow Depth > 1.02" for 2-Year event  
 Inflow = 0.48 cfs @ 12.10 hrs, Volume= 0.033 af  
 Outflow = 0.48 cfs @ 12.10 hrs, Volume= 0.033 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.48 cfs @ 12.10 hrs, Volume= 0.033 af  
 Routed to Pond 180P : DMH 9

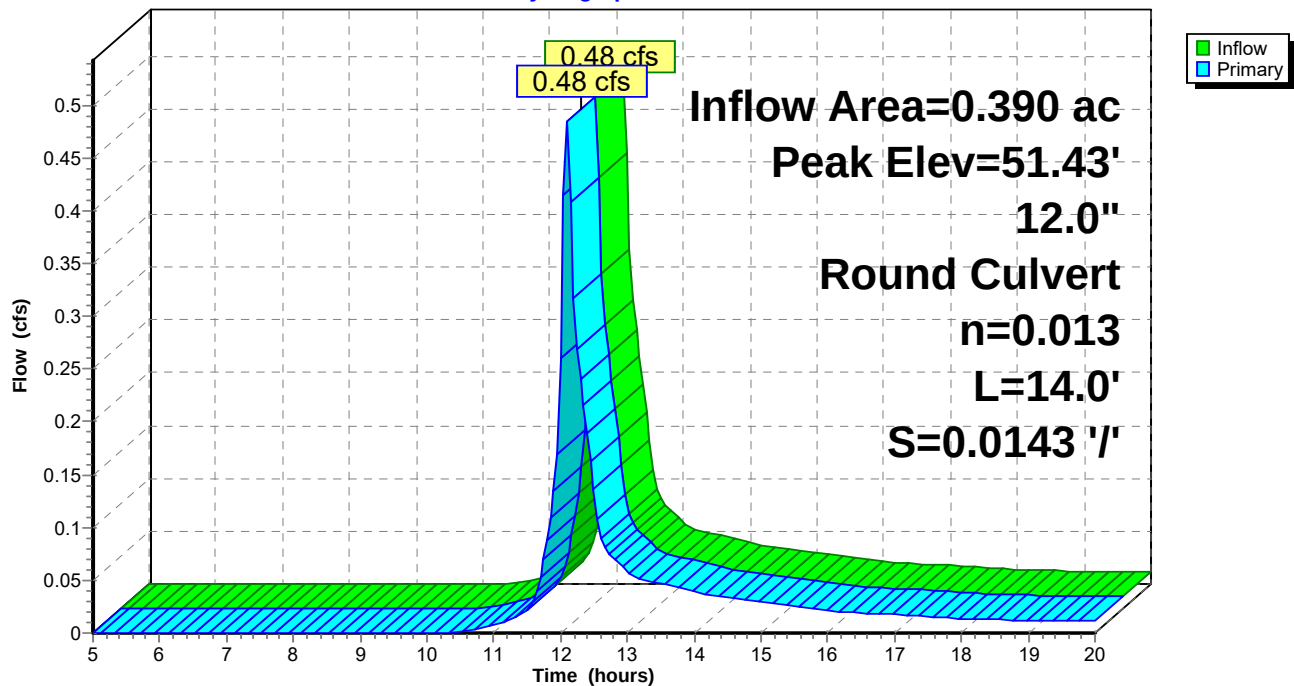
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.43' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.04' | <b>12.0" Round Culvert</b><br>L= 14.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.04' / 50.84' S= 0.0143 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.48 cfs @ 12.10 hrs HW=51.43' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.48 cfs @ 1.68 fps)

### Pond 162P: CB 15

#### Hydrograph



### Summary for Pond 163P: CB 14

Inflow Area = 0.311 ac, 63.37% Impervious, Inflow Depth > 1.02" for 2-Year event  
 Inflow = 0.39 cfs @ 12.10 hrs, Volume= 0.026 af  
 Outflow = 0.39 cfs @ 12.10 hrs, Volume= 0.026 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.39 cfs @ 12.10 hrs, Volume= 0.026 af  
 Routed to Pond 180P : DMH 9

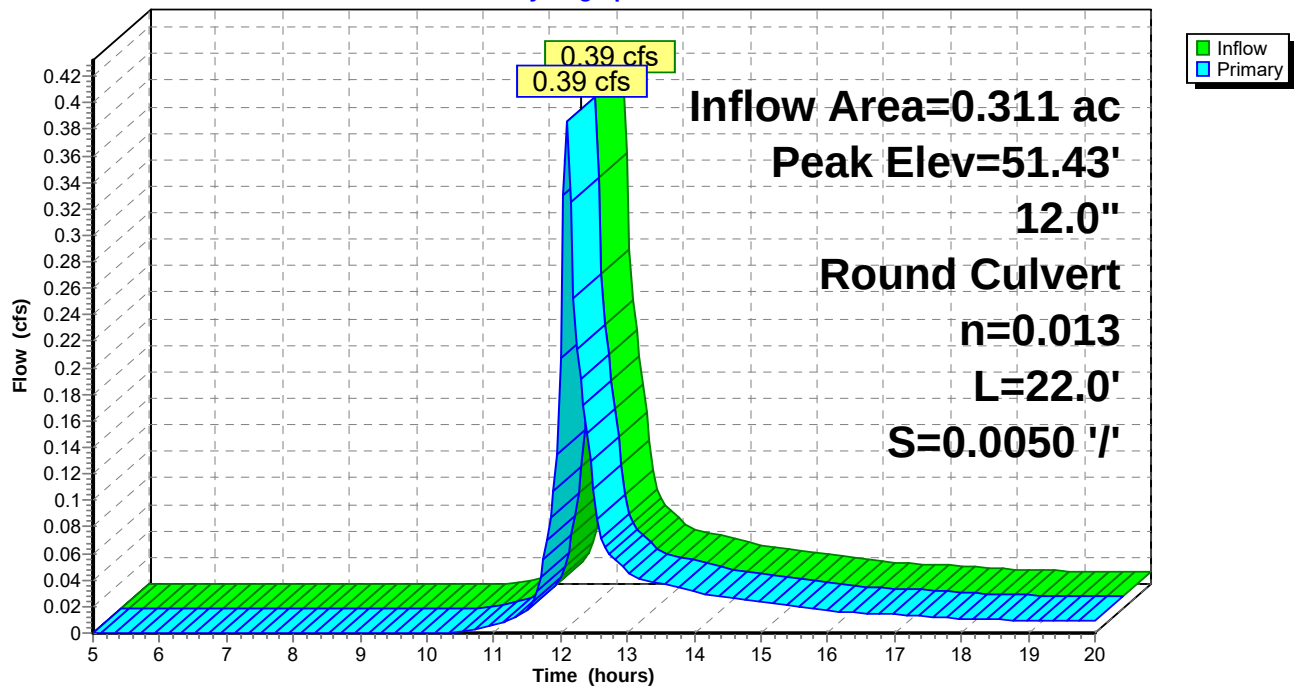
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.43' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.05' | <b>12.0" Round Culvert</b><br>L= 22.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.05' / 50.94' S= 0.0050 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.38 cfs @ 12.10 hrs HW=51.43' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.38 cfs @ 2.07 fps)

### Pond 163P: CB 14

#### Hydrograph



**Summary for Pond 165P: CB 19**

Inflow Area = 0.209 ac, 66.66% Impervious, Inflow Depth > 1.14" for 2-Year event  
 Inflow = 0.29 cfs @ 12.10 hrs, Volume= 0.020 af  
 Outflow = 0.29 cfs @ 12.10 hrs, Volume= 0.020 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.29 cfs @ 12.10 hrs, Volume= 0.020 af  
 Routed to Pond 166P : DMH 13

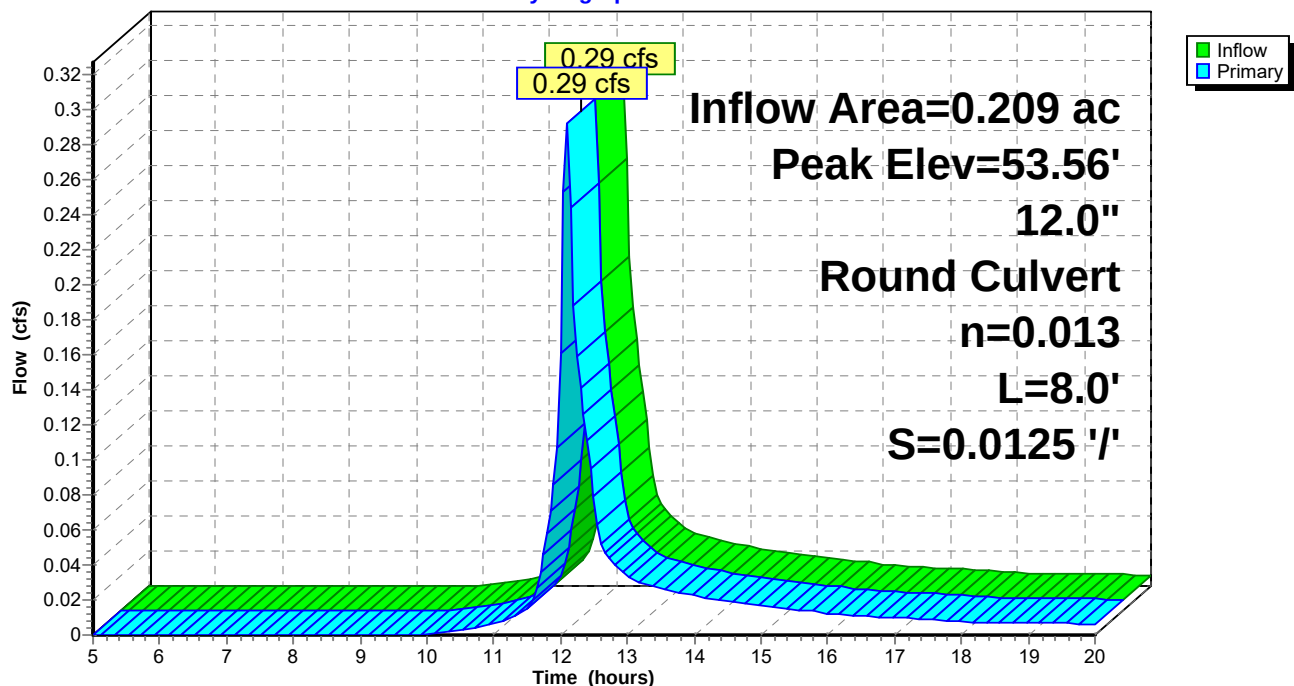
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.56' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.25' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.25' / 53.15' S= 0.0125 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.29 cfs @ 12.10 hrs HW=53.55' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.29 cfs @ 2.14 fps)

**Pond 165P: CB 19**

Hydrograph



### Summary for Pond 166P: DMH 13

Inflow Area = 3.491 ac, 67.77% Impervious, Inflow Depth > 0.16" for 2-Year event  
 Inflow = 0.68 cfs @ 12.10 hrs, Volume= 0.046 af  
 Outflow = 0.68 cfs @ 12.10 hrs, Volume= 0.046 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.68 cfs @ 12.10 hrs, Volume= 0.046 af  
 Routed to Pond 169P : DMH 12

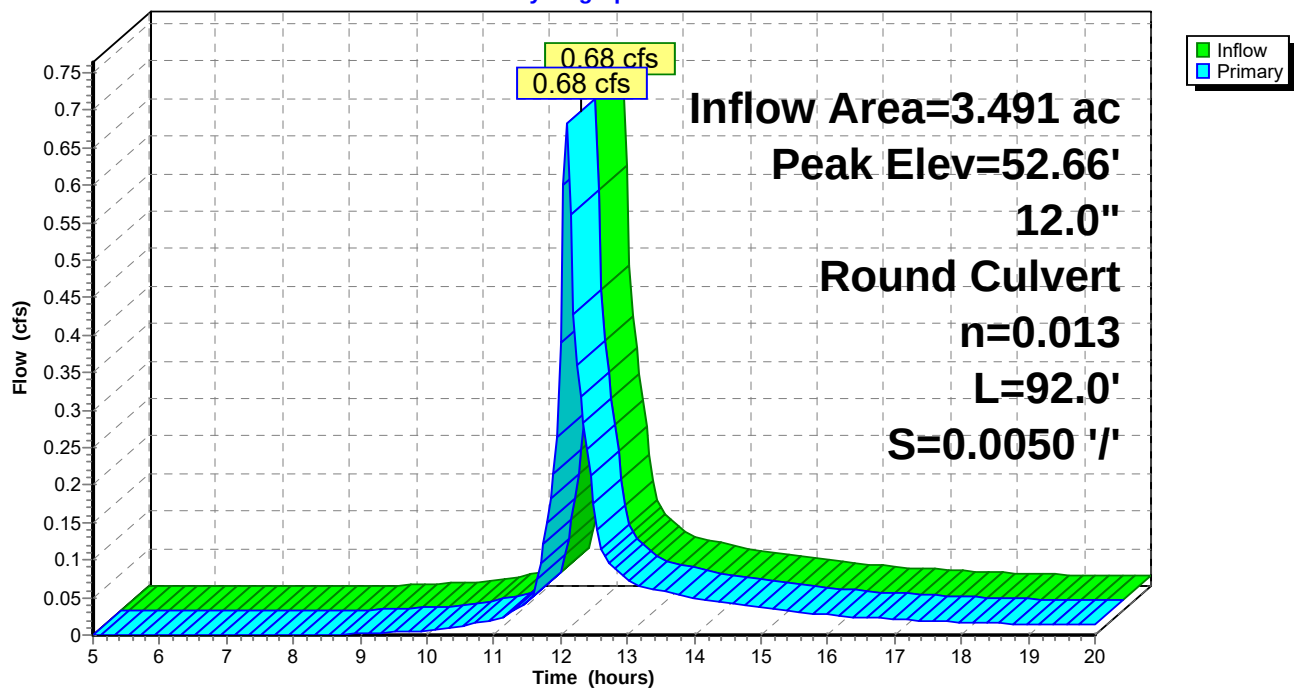
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.66' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.16' | <b>12.0" Round Culvert</b><br>L= 92.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.16' / 51.70' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.67 cfs @ 12.10 hrs HW=52.65' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.67 cfs @ 2.56 fps)

### Pond 166P: DMH 13

Hydrograph



### Summary for Pond 167P: CB 11

Inflow Area = 0.209 ac, 65.78% Impervious, Inflow Depth > 1.14" for 2-Year event  
 Inflow = 0.29 cfs @ 12.10 hrs, Volume= 0.020 af  
 Outflow = 0.29 cfs @ 12.10 hrs, Volume= 0.020 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.29 cfs @ 12.10 hrs, Volume= 0.020 af  
 Routed to Pond 181P : DMH 7

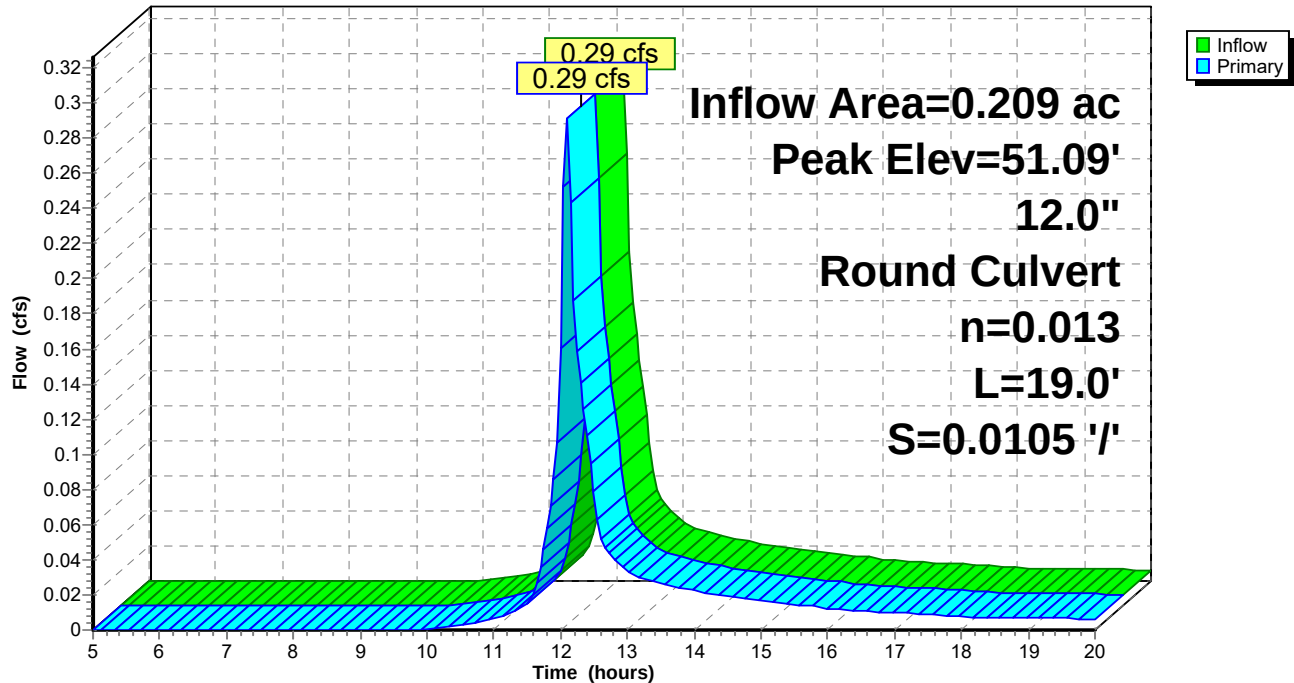
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.09' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.79' | <b>12.0" Round Culvert</b><br>L= 19.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.79' / 50.59' S= 0.0105 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.29 cfs @ 12.10 hrs HW=51.09' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.29 cfs @ 1.47 fps)

### Pond 167P: CB 11

#### Hydrograph



**Summary for Pond 168P: CB 10**

Inflow Area = 0.231 ac, 30.05% Impervious, Inflow Depth > 0.25" for 2-Year event  
 Inflow = 0.03 cfs @ 12.29 hrs, Volume= 0.005 af  
 Outflow = 0.03 cfs @ 12.29 hrs, Volume= 0.005 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.03 cfs @ 12.29 hrs, Volume= 0.005 af  
 Routed to Pond 181P : DMH 7

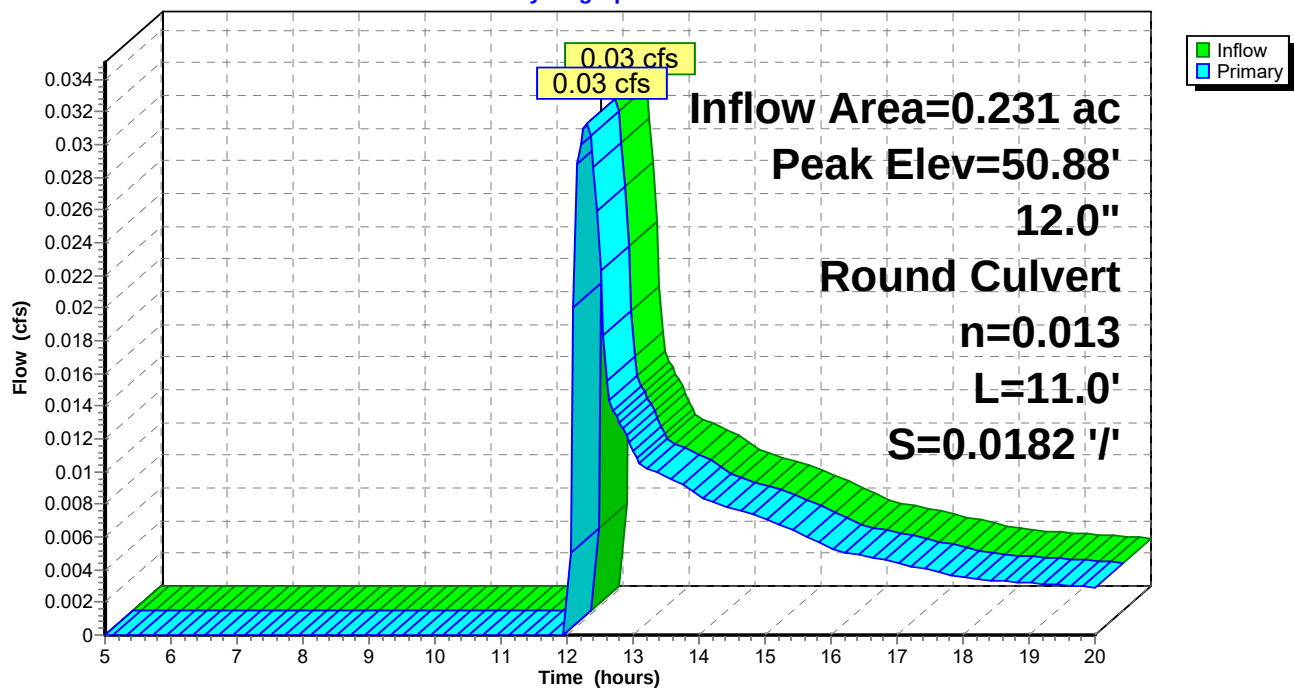
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 50.88' @ 12.29 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.79' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.79' / 50.59' S= 0.0182 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.03 cfs @ 12.29 hrs HW=50.88' (Free Discharge)

↑**1=Culvert** (Inlet Controls 0.03 cfs @ 0.83 fps)

**Pond 168P: CB 10****Hydrograph**

### Summary for Pond 169P: DMH 12

Inflow Area = 3.491 ac, 67.77% Impervious, Inflow Depth > 0.16" for 2-Year event  
 Inflow = 0.68 cfs @ 12.10 hrs, Volume= 0.046 af  
 Outflow = 0.68 cfs @ 12.10 hrs, Volume= 0.046 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.68 cfs @ 12.10 hrs, Volume= 0.046 af  
 Routed to Pond 174P : DMH 11

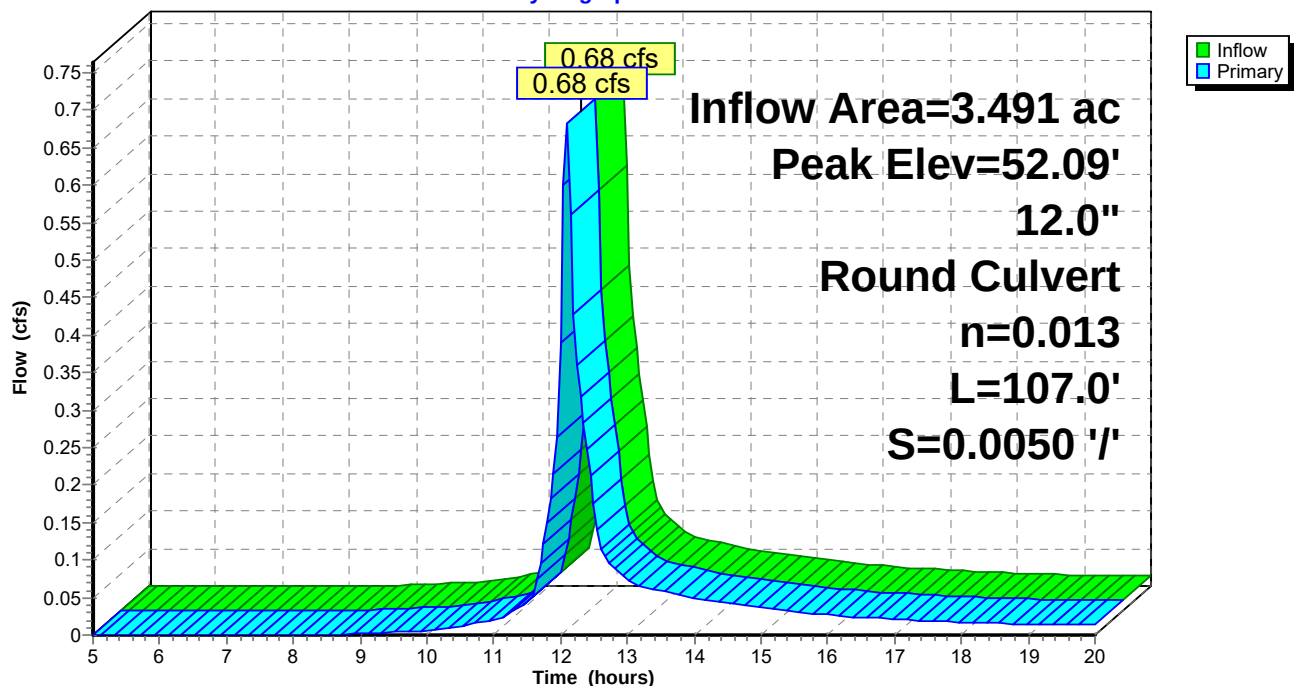
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.09' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.60' | <b>12.0" Round Culvert</b><br>L= 107.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.60' / 51.06' S= 0.0050 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.67 cfs @ 12.10 hrs HW=52.09' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.67 cfs @ 2.58 fps)

### Pond 169P: DMH 12

Hydrograph



**Summary for Pond 170P: CB 9**

Inflow Area = 0.227 ac, 61.54% Impervious, Inflow Depth > 0.97" for 2-Year event  
 Inflow = 0.26 cfs @ 12.10 hrs, Volume= 0.018 af  
 Outflow = 0.26 cfs @ 12.10 hrs, Volume= 0.018 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.26 cfs @ 12.10 hrs, Volume= 0.018 af  
 Routed to Pond 171P : DMH 6

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 50.68' @ 12.10 hrs

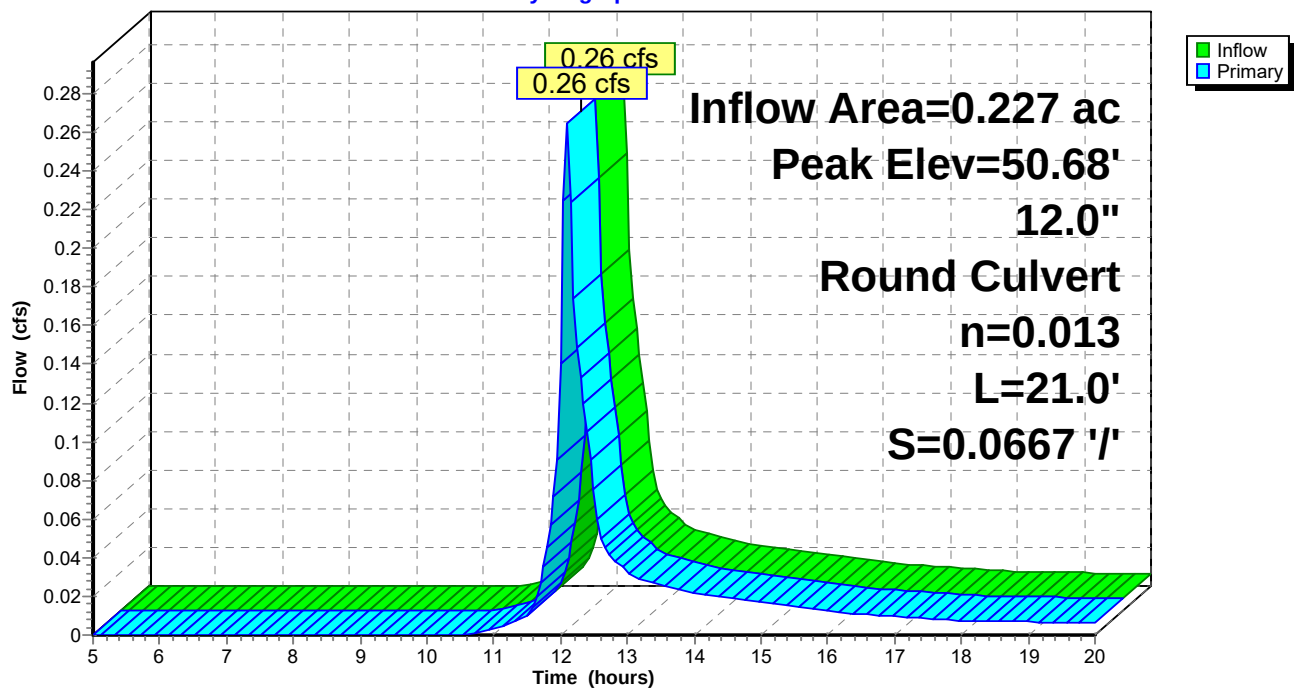
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.40' | <b>12.0" Round Culvert</b><br>L= 21.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.40' / 49.00' S= 0.0667 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.26 cfs @ 12.10 hrs HW=50.68' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 0.26 cfs @ 1.43 fps)

**Pond 170P: CB 9**

Hydrograph





### Summary for Pond 171P: DMH 6

Inflow Area = 2.272 ac, 49.70% Impervious, Inflow Depth > 0.73" for 2-Year event  
 Inflow = 1.96 cfs @ 12.10 hrs, Volume= 0.138 af  
 Outflow = 1.96 cfs @ 12.10 hrs, Volume= 0.138 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.96 cfs @ 12.10 hrs, Volume= 0.138 af  
 Routed to Pond 185P : DMH 4

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 49.53' @ 12.10 hrs

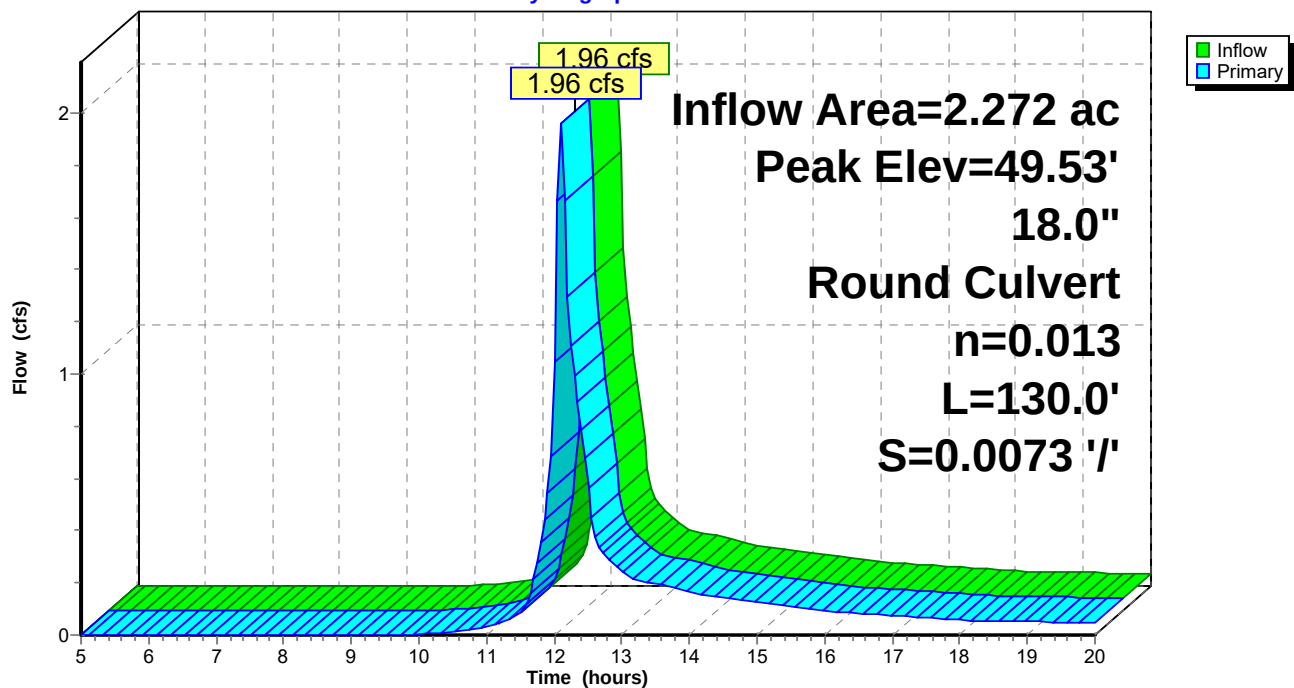
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.80' | <b>18.0" Round Culvert</b><br>L= 130.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.80' / 47.85' S= 0.0073 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=1.96 cfs @ 12.10 hrs HW=49.53' (Free Discharge)

↑**1=Culvert** (Inlet Controls 1.96 cfs @ 2.30 fps)

### Pond 171P: DMH 6

#### Hydrograph



**Summary for Pond 172P: CB 16**

Inflow Area = 0.317 ac, 75.85% Impervious, Inflow Depth > 1.53" for 2-Year event  
 Inflow = 0.60 cfs @ 12.09 hrs, Volume= 0.040 af  
 Outflow = 0.60 cfs @ 12.09 hrs, Volume= 0.040 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.60 cfs @ 12.09 hrs, Volume= 0.040 af  
 Routed to Pond 174P : DMH 11

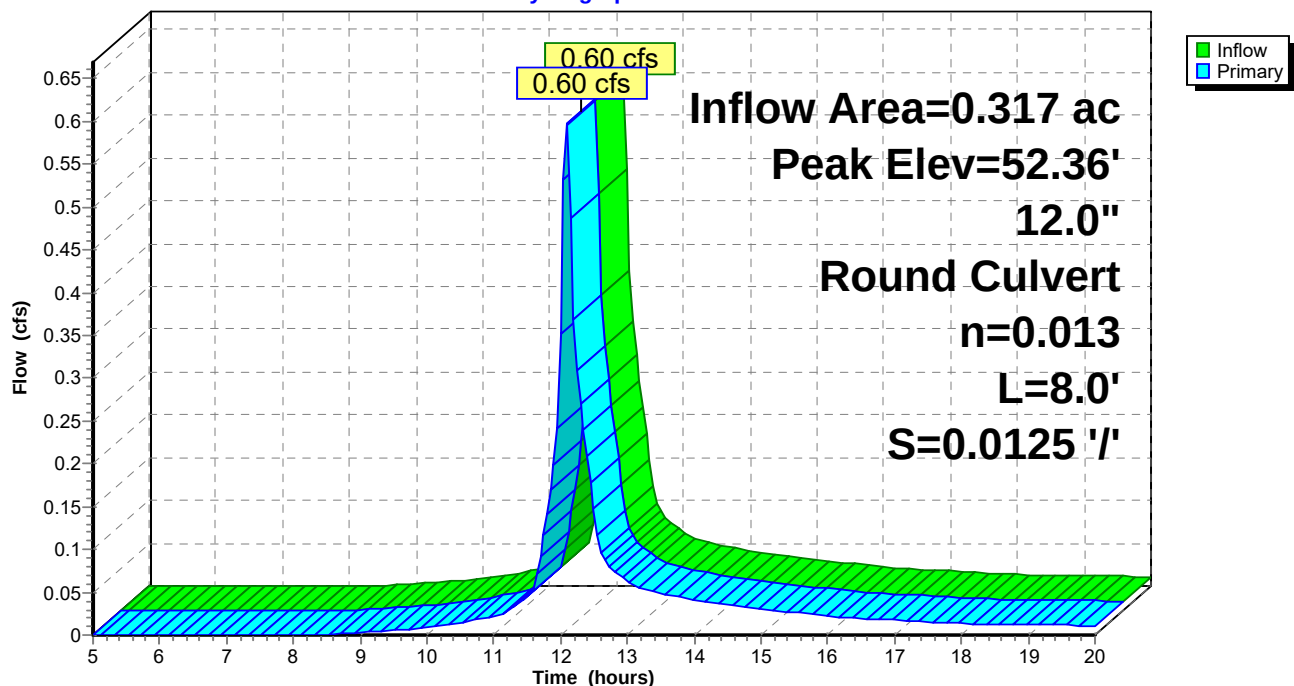
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.36' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.90' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.90' / 51.80' S= 0.0125 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.59 cfs @ 12.09 hrs HW=52.36' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.59 cfs @ 2.47 fps)

**Pond 172P: CB 16**

Hydrograph



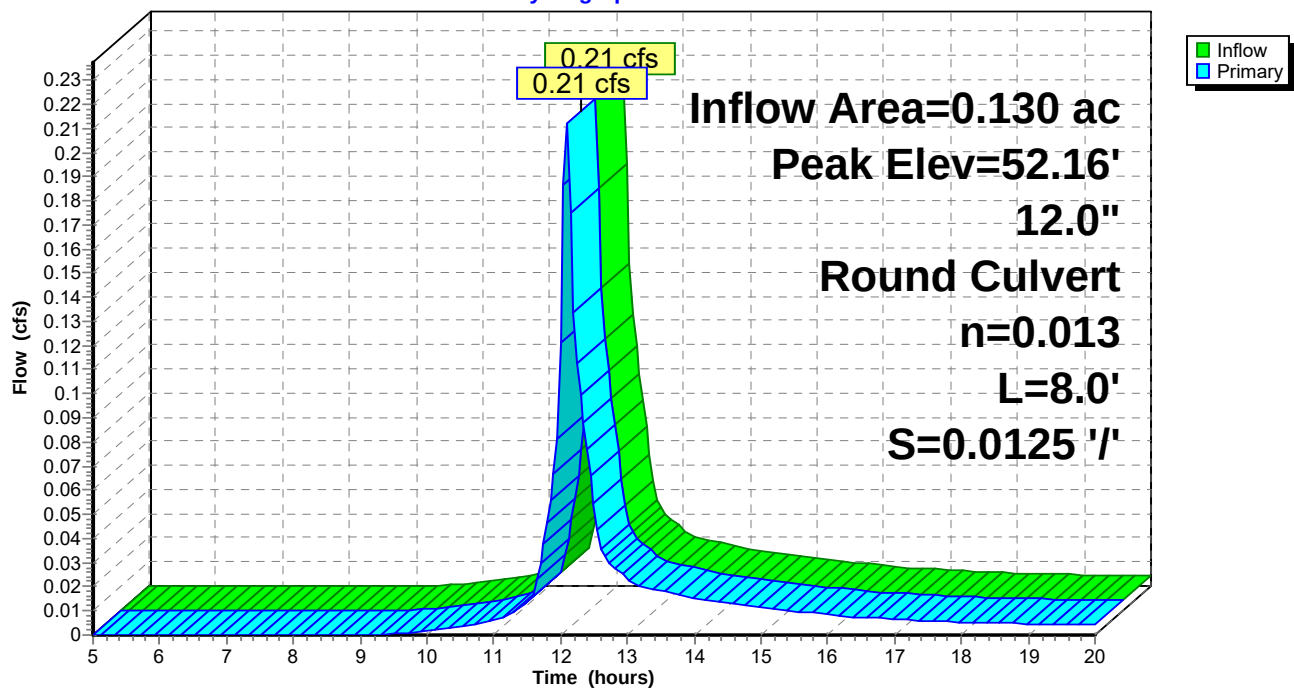
**Summary for Pond 173P: CB 17**

Inflow Area = 0.130 ac, 71.18% Impervious, Inflow Depth > 1.32" for 2-Year event  
 Inflow = 0.21 cfs @ 12.10 hrs, Volume= 0.014 af  
 Outflow = 0.21 cfs @ 12.10 hrs, Volume= 0.014 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.21 cfs @ 12.10 hrs, Volume= 0.014 af  
 Routed to Pond 174P : DMH 11

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.16' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.90' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.90' / 51.80' S= 0.0125 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.21 cfs @ 12.10 hrs HW=52.15' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.21 cfs @ 2.01 fps)

**Pond 173P: CB 17****Hydrograph**

### Summary for Pond 174P: DMH 11

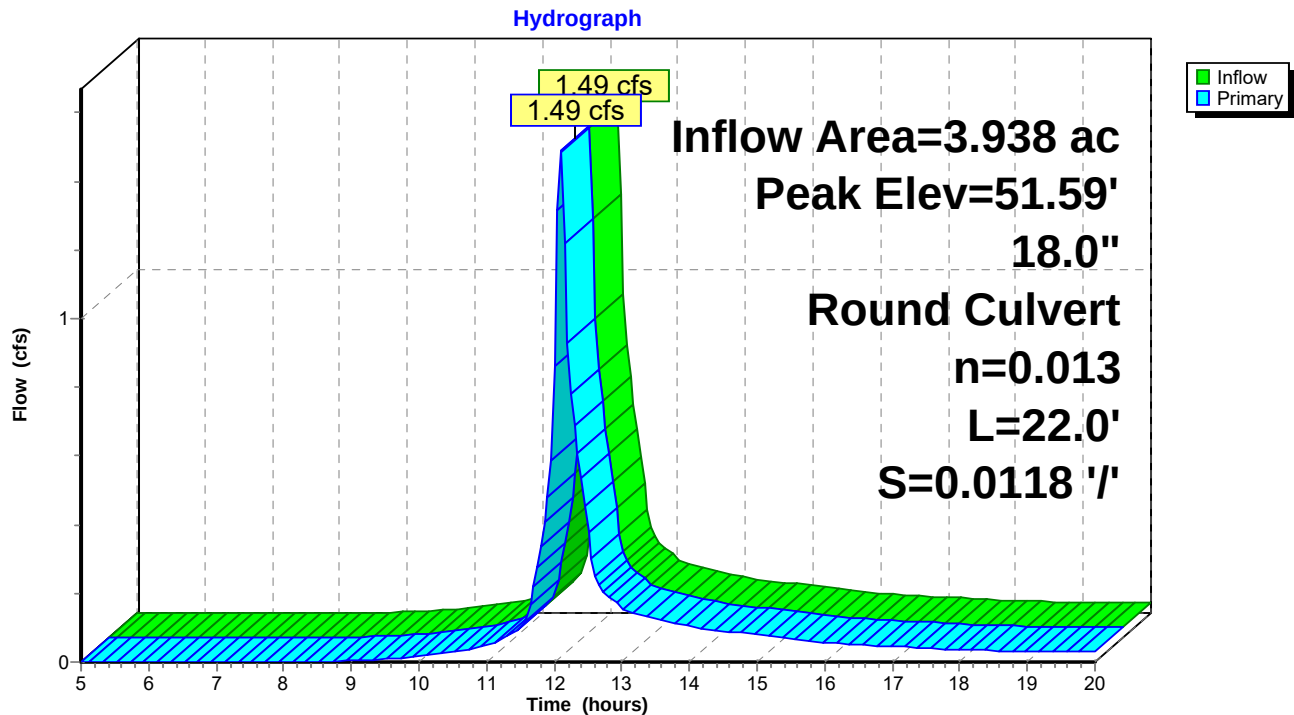
Inflow Area = 3.938 ac, 68.53% Impervious, Inflow Depth > 0.31" for 2-Year event  
 Inflow = 1.49 cfs @ 12.09 hrs, Volume= 0.101 af  
 Outflow = 1.49 cfs @ 12.09 hrs, Volume= 0.101 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.49 cfs @ 12.09 hrs, Volume= 0.101 af  
 Routed to Pond 217P : DMH 8A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.59' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.96' | <b>18.0" Round Culvert</b><br>L= 22.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.96' / 50.70' S= 0.0118 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=1.47 cfs @ 12.09 hrs HW=51.58' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 1.47 cfs @ 2.12 fps)

### Pond 174P: DMH 11



### Summary for Pond 175P: DMH 5

Inflow Area = 1.445 ac, 58.41% Impervious, Inflow Depth > 0.93" for 2-Year event  
 Inflow = 1.57 cfs @ 12.10 hrs, Volume= 0.111 af  
 Outflow = 1.57 cfs @ 12.10 hrs, Volume= 0.111 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.57 cfs @ 12.10 hrs, Volume= 0.111 af  
 Routed to Pond 171P : DMH 6

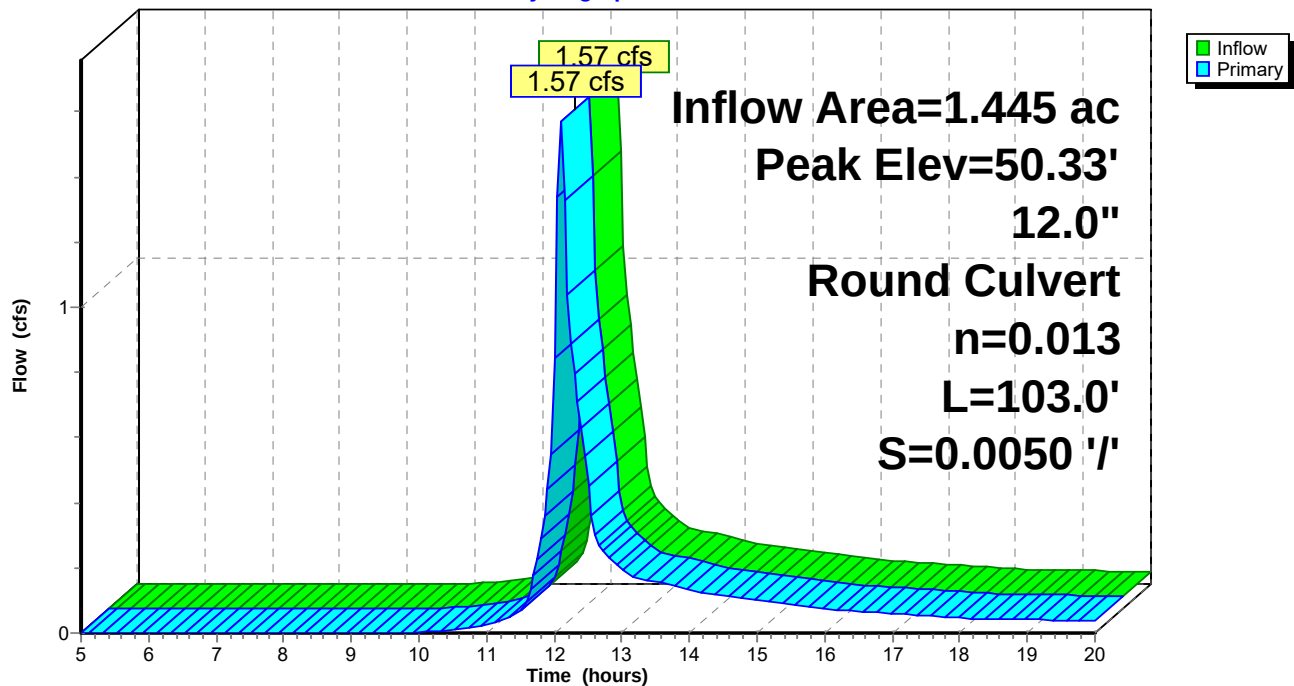
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.33' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 49.52' | <b>12.0" Round Culvert</b><br>L= 103.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.52' / 49.00' S= 0.0050 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.57 cfs @ 12.10 hrs HW=50.33' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.57 cfs @ 3.15 fps)

### Pond 175P: DMH 5

#### Hydrograph



### Summary for Pond 176P: CB 6

Inflow Area = 0.199 ac, 57.72% Impervious, Inflow Depth > 0.86" for 2-Year event  
 Inflow = 0.20 cfs @ 12.10 hrs, Volume= 0.014 af  
 Outflow = 0.20 cfs @ 12.10 hrs, Volume= 0.014 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.20 cfs @ 12.10 hrs, Volume= 0.014 af  
 Routed to Pond 175P : DMH 5

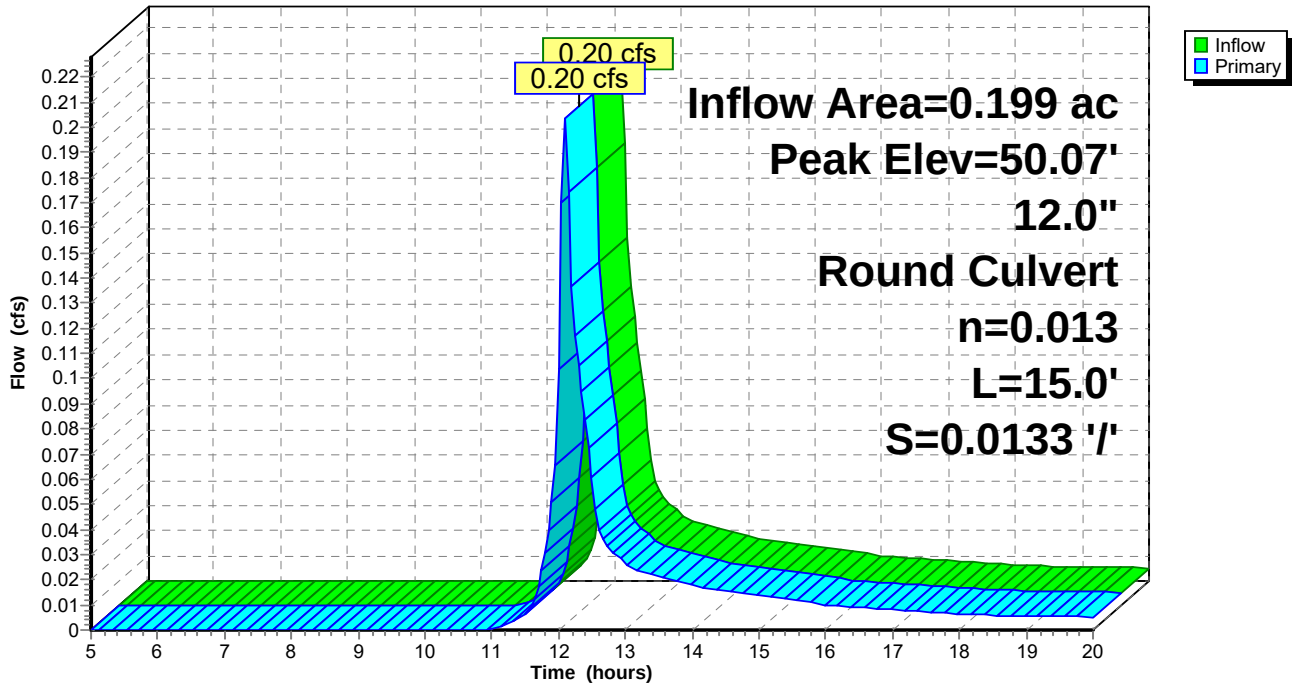
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.07' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 49.82' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.82' / 49.62' S= 0.0133 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.20 cfs @ 12.10 hrs HW=50.07' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.20 cfs @ 1.34 fps)

### Pond 176P: CB 6

Hydrograph



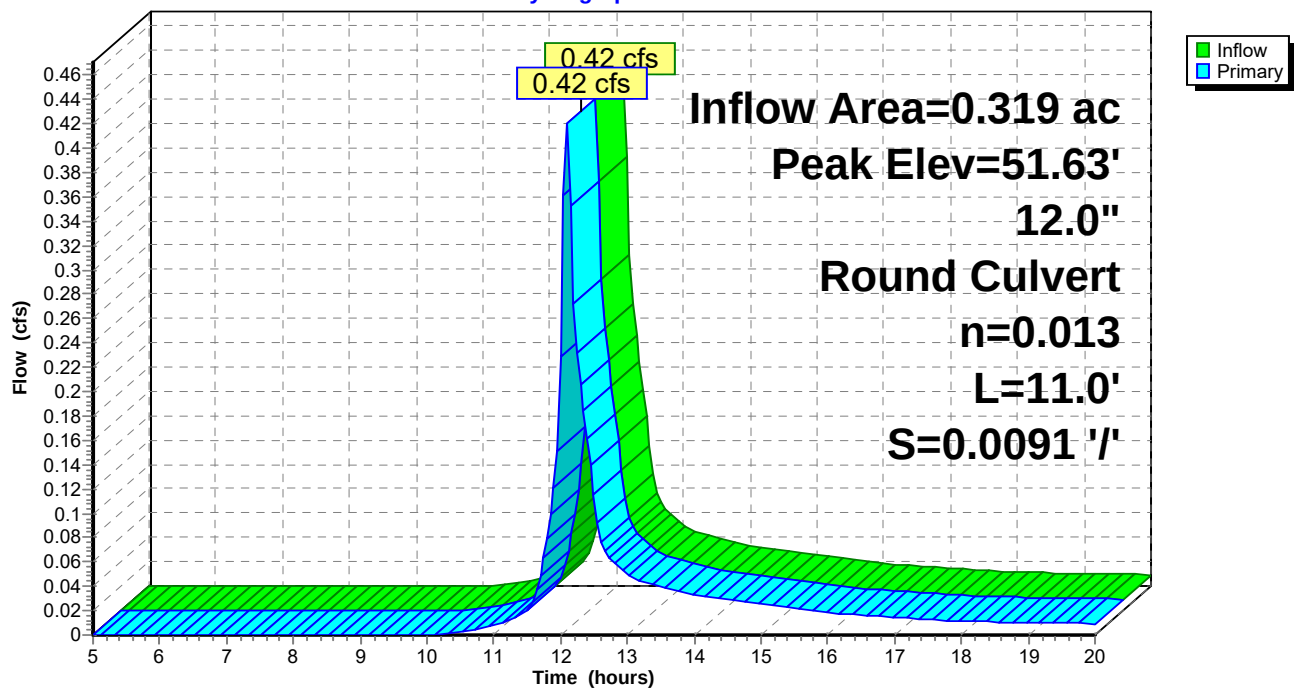
**Summary for Pond 177P: CB 13**

Inflow Area = 0.319 ac, 64.43% Impervious, Inflow Depth > 1.08" for 2-Year event  
 Inflow = 0.42 cfs @ 12.10 hrs, Volume= 0.029 af  
 Outflow = 0.42 cfs @ 12.10 hrs, Volume= 0.029 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.42 cfs @ 12.10 hrs, Volume= 0.029 af  
 Routed to Pond 179P : DMH 8

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.63' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.25' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.25' / 51.15' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.42 cfs @ 12.10 hrs HW=51.63' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.42 cfs @ 2.24 fps)

**Pond 177P: CB 13****Hydrograph**

### Summary for Pond 178P: CB 12

Inflow Area = 0.152 ac, 60.77% Impervious, Inflow Depth > 0.97" for 2-Year event  
 Inflow = 0.18 cfs @ 12.10 hrs, Volume= 0.012 af  
 Outflow = 0.18 cfs @ 12.10 hrs, Volume= 0.012 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.18 cfs @ 12.10 hrs, Volume= 0.012 af  
 Routed to Pond 179P : DMH 8

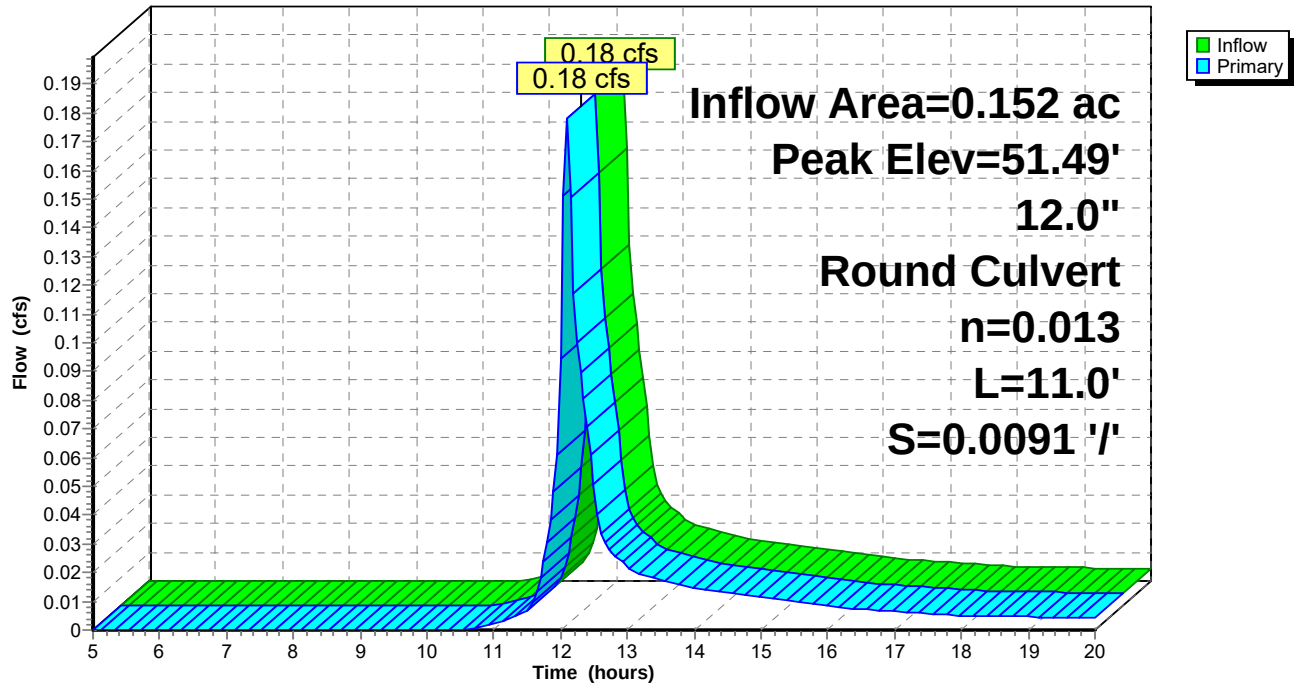
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.49' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.25' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.25' / 51.15' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.18 cfs @ 12.10 hrs HW=51.49' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.18 cfs @ 1.87 fps)

### Pond 178P: CB 12

#### Hydrograph





### Summary for Pond 179P: DMH 8

Inflow Area = 0.472 ac, 63.25% Impervious, Inflow Depth > 1.04" for 2-Year event  
 Inflow = 0.60 cfs @ 12.10 hrs, Volume= 0.041 af  
 Outflow = 0.60 cfs @ 12.10 hrs, Volume= 0.041 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.60 cfs @ 12.10 hrs, Volume= 0.041 af  
 Routed to Pond 217P : DMH 8A

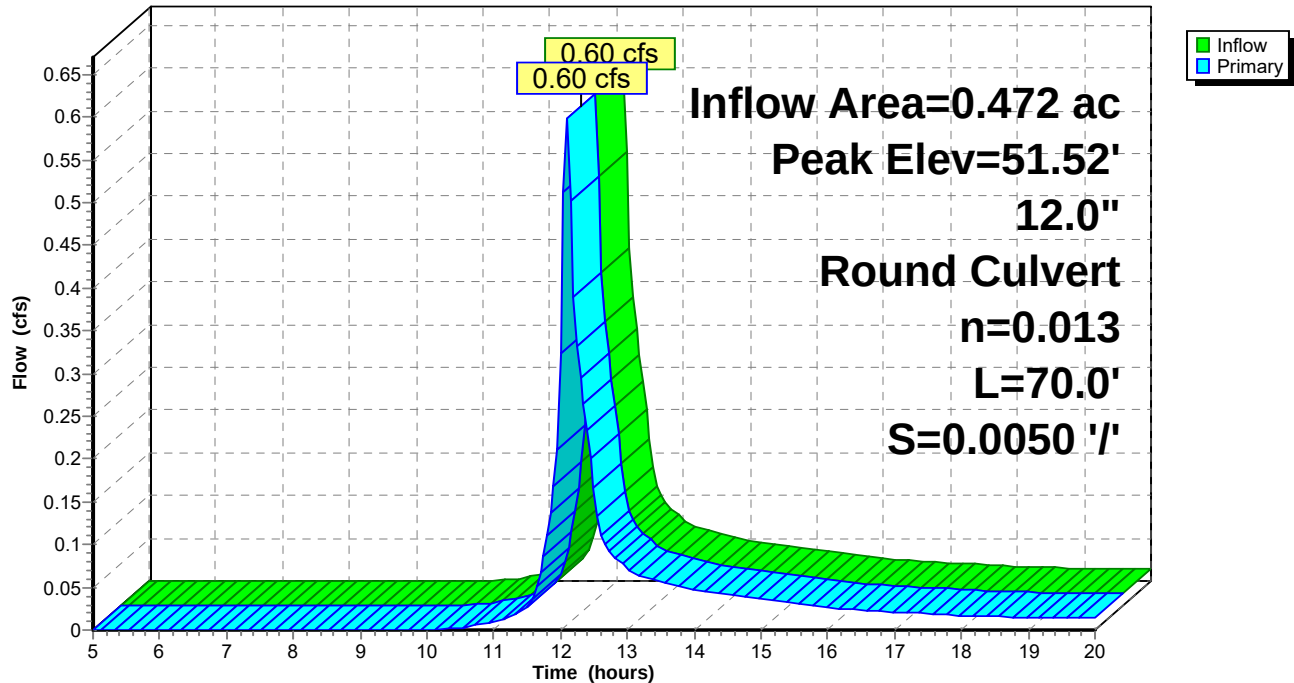
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.52' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.05' | <b>12.0" Round Culvert</b><br>L= 70.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.05' / 50.70' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.60 cfs @ 12.10 hrs HW=51.51' (Free Discharge)  
 1=Culvert (Barrel Controls 0.60 cfs @ 2.45 fps)

### Pond 179P: DMH 8

#### Hydrograph



**Summary for Pond 180P: DMH 9**

Inflow Area = 0.701 ac, 63.25% Impervious, Inflow Depth > 1.02" for 2-Year event  
 Inflow = 0.87 cfs @ 12.10 hrs, Volume= 0.060 af  
 Outflow = 0.87 cfs @ 12.10 hrs, Volume= 0.060 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.87 cfs @ 12.10 hrs, Volume= 0.060 af  
 Routed to Pond 181P : DMH 7

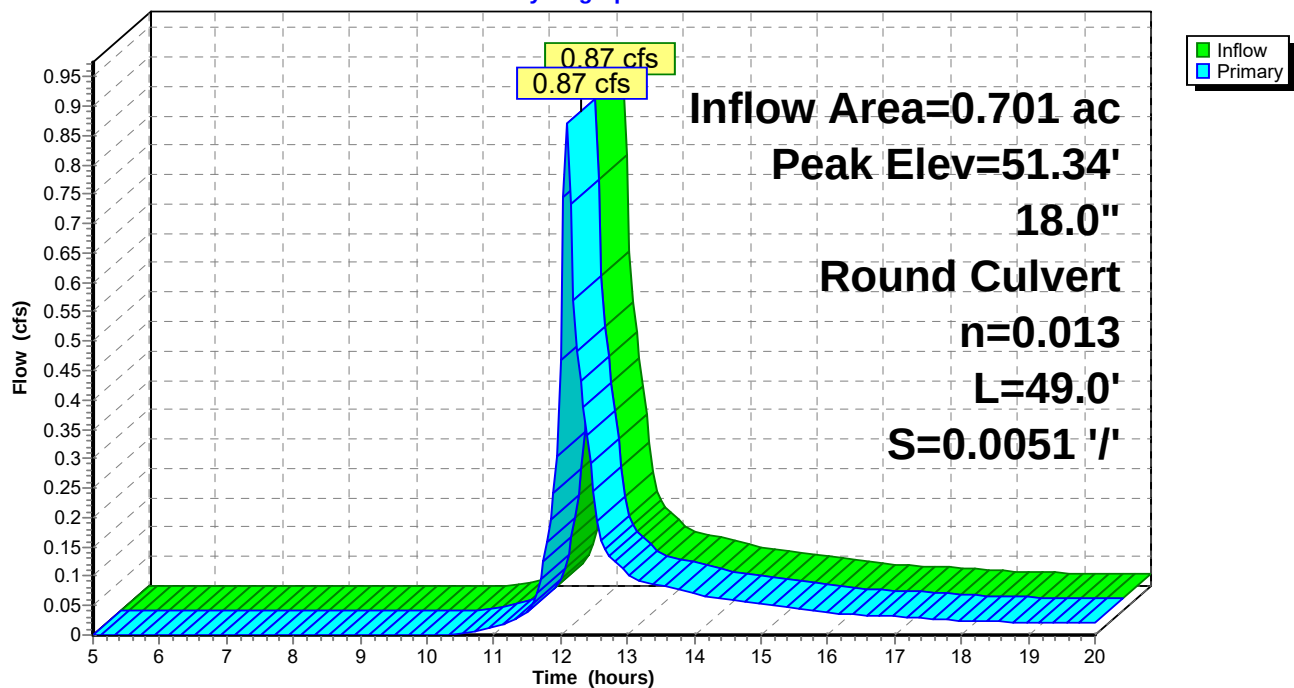
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.34' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.84' | <b>18.0" Round Culvert</b><br>L= 49.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.84' / 50.59' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=0.87 cfs @ 12.10 hrs HW=51.34' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.87 cfs @ 2.54 fps)

**Pond 180P: DMH 9**

Hydrograph



**Summary for Pond 181P: DMH 7**

Inflow Area = 1.141 ac, 56.99% Impervious, Inflow Depth > 0.89" for 2-Year event  
 Inflow = 1.18 cfs @ 12.10 hrs, Volume= 0.084 af  
 Outflow = 1.18 cfs @ 12.10 hrs, Volume= 0.084 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.18 cfs @ 12.10 hrs, Volume= 0.084 af  
 Routed to Pond 175P : DMH 5

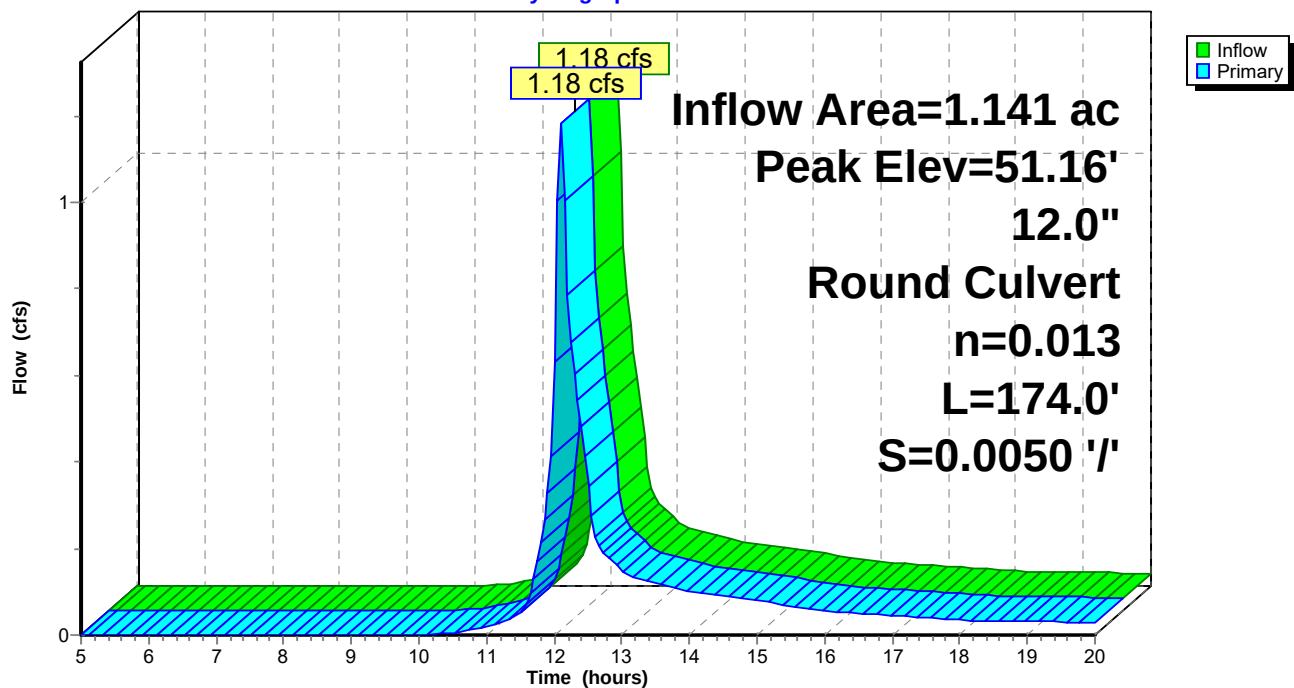
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 51.16' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.49' | <b>12.0" Round Culvert</b><br>L= 174.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.49' / 49.62' S= 0.0050 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.18 cfs @ 12.10 hrs HW=51.16' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 1.18 cfs @ 3.01 fps)

**Pond 181P: DMH 7****Hydrograph**

**Summary for Pond 182P: CB 7**

Inflow Area = 0.105 ac, 75.17% Impervious, Inflow Depth > 1.46" for 2-Year event  
 Inflow = 0.19 cfs @ 12.09 hrs, Volume= 0.013 af  
 Outflow = 0.19 cfs @ 12.09 hrs, Volume= 0.013 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.19 cfs @ 12.09 hrs, Volume= 0.013 af  
 Routed to Pond 175P : DMH 5

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 50.06' @ 12.09 hrs

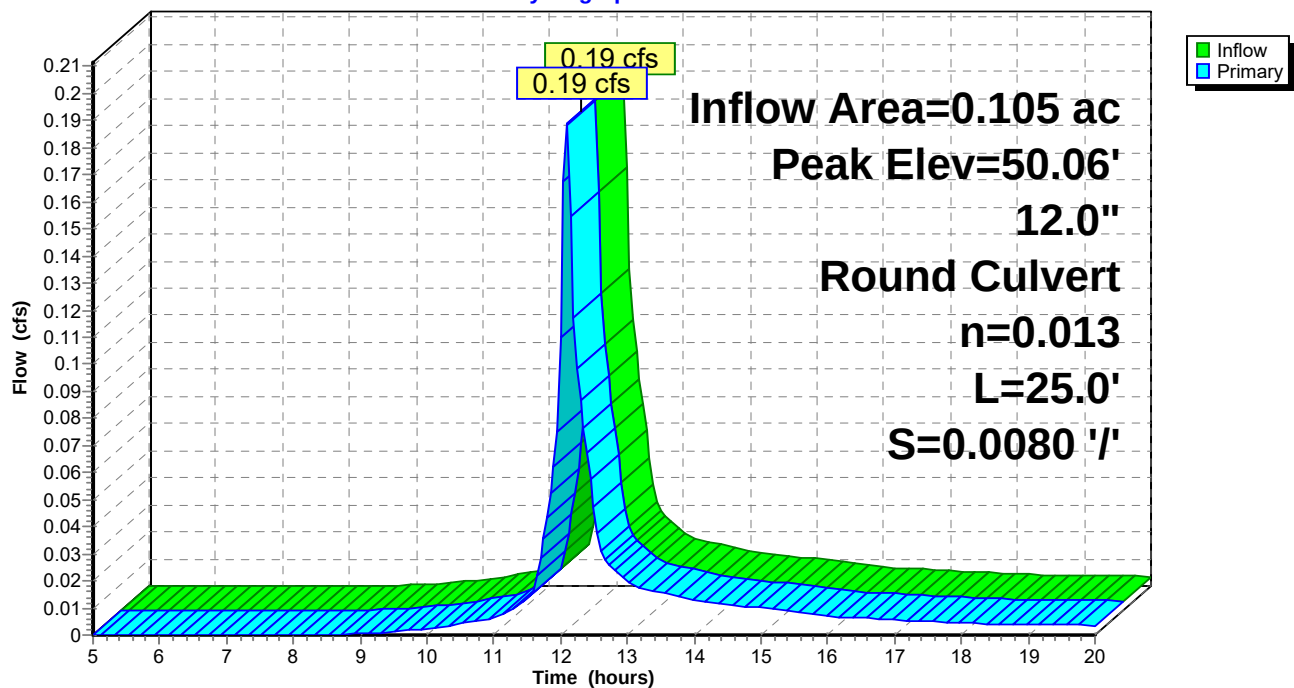
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 49.82' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.82' / 49.62' S= 0.0080 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.19 cfs @ 12.09 hrs HW=50.06' (Free Discharge)

1=Culvert (Barrel Controls 0.19 cfs @ 1.97 fps)

**Pond 182P: CB 7**

Hydrograph



### Summary for Pond 185P: DMH 4

Inflow Area = 7.166 ac, 62.94% Impervious, Inflow Depth > 0.31" for 2-Year event  
 Inflow = 2.65 cfs @ 12.10 hrs, Volume= 0.185 af  
 Outflow = 2.65 cfs @ 12.10 hrs, Volume= 0.185 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.65 cfs @ 12.10 hrs, Volume= 0.185 af  
 Routed to Pond 197P : Inf. Basin 1

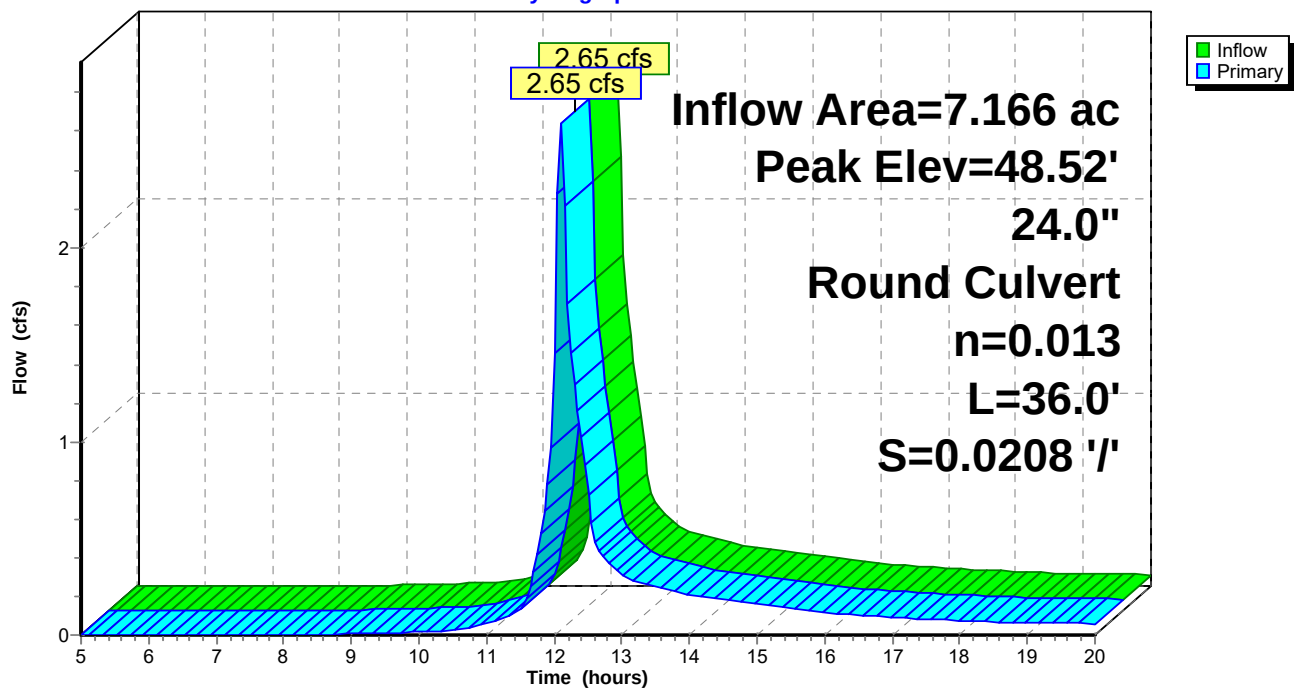
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 48.52' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 47.75' | <b>24.0" Round Culvert</b><br>L= 36.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 47.75' / 47.00' S= 0.0208 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=2.63 cfs @ 12.10 hrs HW=48.52' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 2.63 cfs @ 2.36 fps)

### Pond 185P: DMH 4

#### Hydrograph



**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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Type III 24-hr 2-Year Rainfall=3.15"

Printed 1/7/2026

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**Summary for Pond 186P: Constructed Wetland 1**

Inflow Area = 1.052 ac, 38.52% Impervious, Inflow Depth > 0.60" for 2-Year event  
 Inflow = 0.74 cfs @ 12.10 hrs, Volume= 0.053 af  
 Outflow = 0.02 cfs @ 18.10 hrs, Volume= 0.014 af, Atten= 97%, Lag= 359.9 min  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
     Routed to Pond 197P : Inf. Basin 1  
 Secondary = 0.02 cfs @ 18.10 hrs, Volume= 0.014 af  
     Routed to Link 203L : 3A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 46.99' @ 18.10 hrs Surf.Area= 2,266 sf Storage= 1,712 cf

Plug-Flow detention time= 253.2 min calculated for 0.014 af (26% of inflow)  
 Center-of-Mass det. time= 149.0 min ( 960.3 - 811.3 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 46.00' | 16,106 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 46.00               | 1,184                | 0                         | 0                         |
| 47.00               | 2,274                | 1,729                     | 1,729                     |
| 48.00               | 2,884                | 2,579                     | 4,308                     |
| 49.00               | 3,553                | 3,219                     | 7,527                     |
| 50.00               | 4,275                | 3,914                     | 11,441                    |
| 51.00               | 5,055                | 4,665                     | 16,106                    |

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                             |
|--------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Secondary | 46.00' | <b>12.0" Round Culvert</b><br>L= 186.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 46.00' / 43.50' S= 0.0134 ' S= 0.0134 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #2     | Device 1  | 46.00' | <b>0.9" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                                 |
| #3     | Primary   | 47.05' | <b>18.0" Round Culvert X 2.00</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 47.05' / 47.00' S= 0.0025 ' S= 0.0025 ' Cc= 0.900<br>n= 0.013 Cast iron, coated, Flow Area= 1.77 sf        |

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=46.00' (Free Discharge)

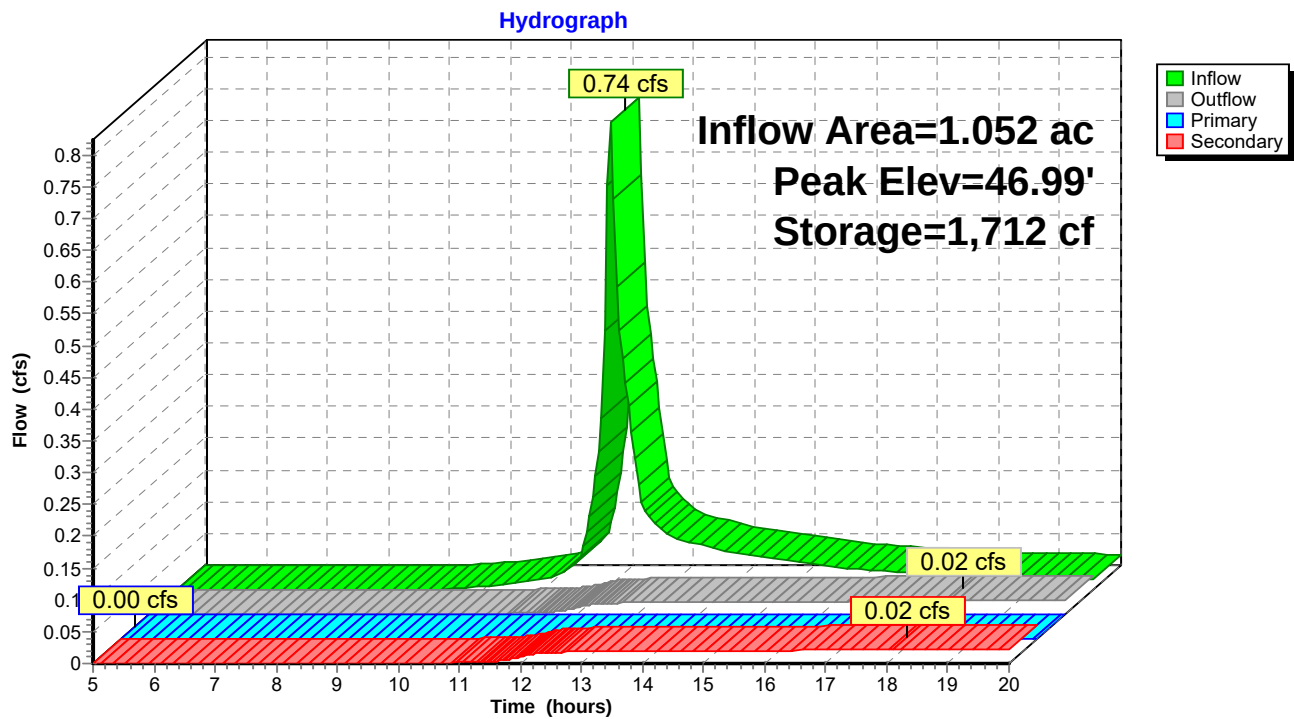
↑**3=Culvert** ( Controls 0.00 cfs)

**Secondary OutFlow** Max=0.02 cfs @ 18.10 hrs HW=46.99' (Free Discharge)

↑**1=Culvert** (Passes 0.02 cfs of 2.10 cfs potential flow)

↑**2=Orifice/Grate** (Orifice Controls 0.02 cfs @ 4.71 fps)

# Pond 186P: Constructed Wetland 1



### Summary for Pond 187P: Constructed Wetland 3

Inflow Area = 1.994 ac, 68.75% Impervious, Inflow Depth > 1.51" for 2-Year event  
 Inflow = 3.84 cfs @ 12.16 hrs, Volume= 0.251 af  
 Outflow = 0.52 cfs @ 13.03 hrs, Volume= 0.123 af, Atten= 86%, Lag= 51.9 min  
 Primary = 0.52 cfs @ 13.03 hrs, Volume= 0.123 af  
 Routed to Link 188L : DP 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.97' @ 13.03 hrs Surf.Area= 3,955 sf Storage= 5,800 cf

Plug-Flow detention time= 176.5 min calculated for 0.122 af (49% of inflow)  
 Center-of-Mass det. time= 93.0 min ( 913.5 - 820.5 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 55.00' | 10,466 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 55.00               | 1,991                | 0                         | 0                         |
| 56.00               | 2,932                | 2,462                     | 2,462                     |
| 57.00               | 3,987                | 3,460                     | 5,921                     |
| 58.00               | 5,102                | 4,545                     | 10,466                    |

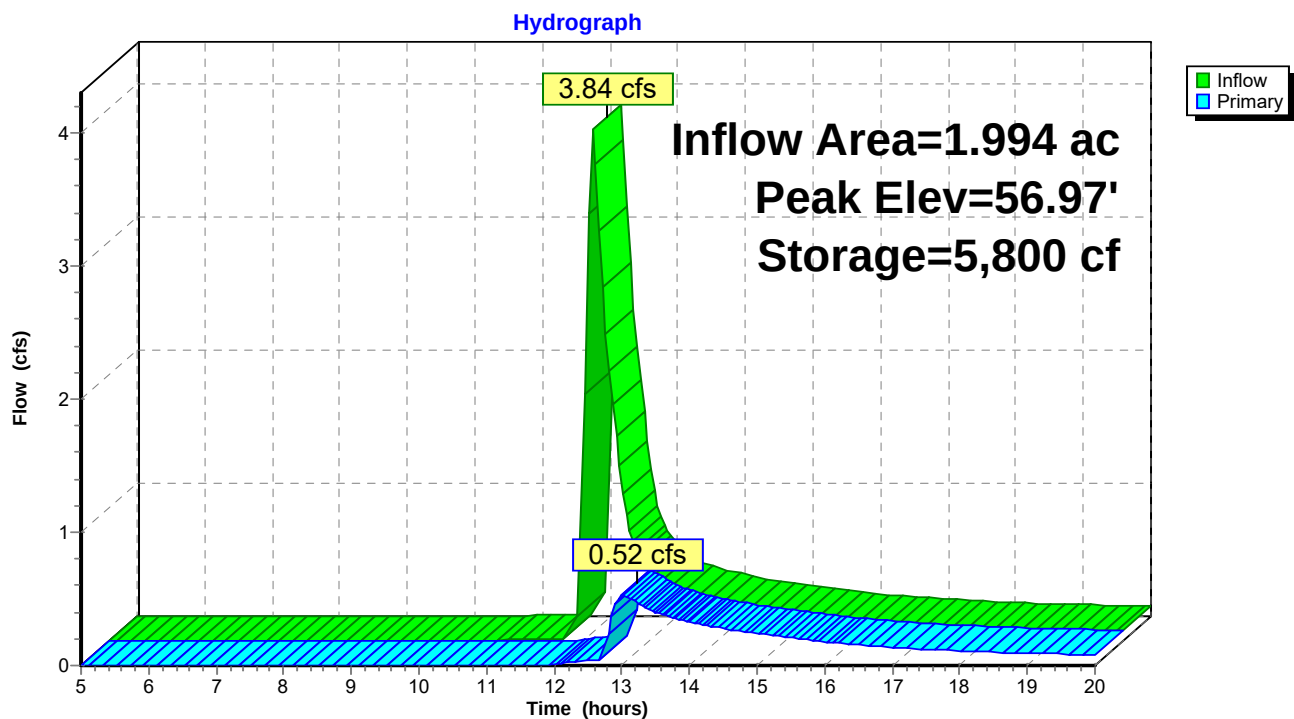
| Device | Routing  | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary  | 55.00' | <b>24.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 55.00' / 54.00' S= 0.0500 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |
| #2     | Device 1 | 55.00' | <b>1.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                       |
| #3     | Device 1 | 56.90' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                          |

**Primary OutFlow** Max=0.51 cfs @ 13.03 hrs HW=56.97' (Free Discharge)

- 1=Culvert (Passes 0.51 cfs of 11.81 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.04 cfs @ 6.69 fps)
- 3=Orifice/Grate (Weir Controls 0.48 cfs @ 0.86 fps)



### Pond 187P: Constructed Wetland 3



### Summary for Pond 188P: CB 3

Inflow Area = 0.158 ac, 54.66% Impervious, Inflow Depth > 0.72" for 2-Year event  
 Inflow = 0.13 cfs @ 12.10 hrs, Volume= 0.009 af  
 Outflow = 0.13 cfs @ 12.10 hrs, Volume= 0.009 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.13 cfs @ 12.10 hrs, Volume= 0.009 af  
 Routed to Pond 190P : DMH 3

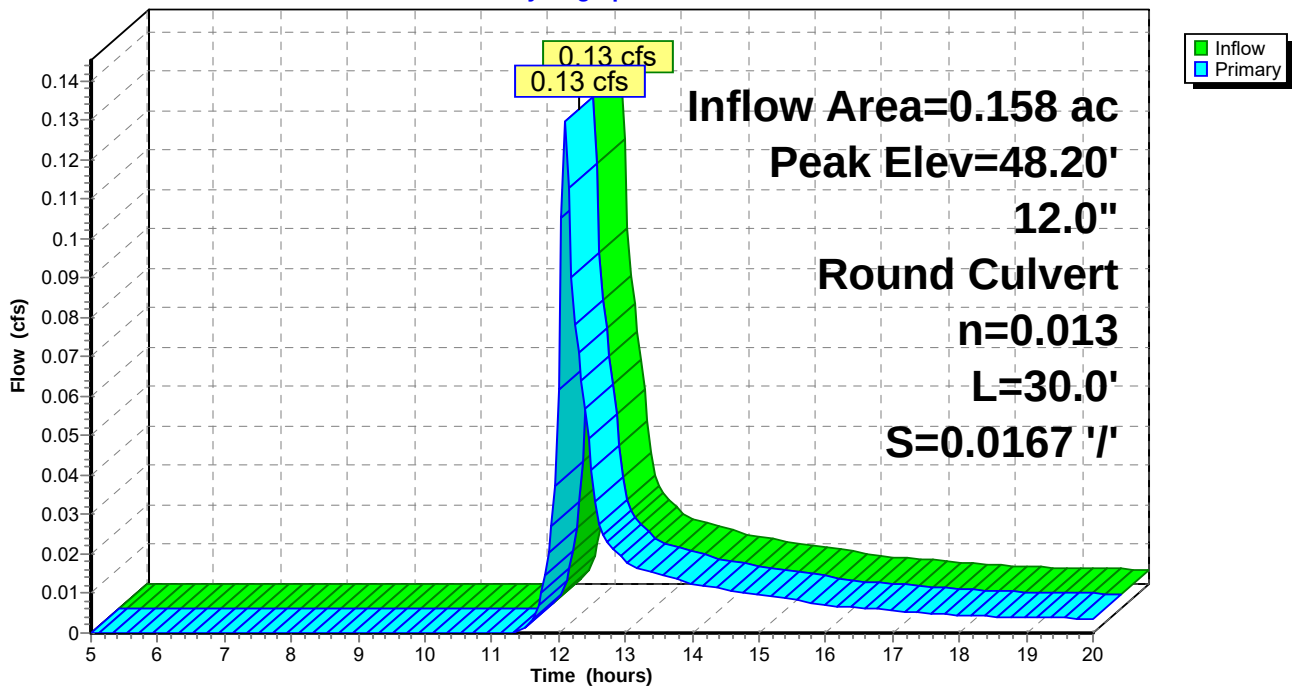
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 48.20' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.00' | <b>12.0" Round Culvert</b><br>L= 30.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.00' / 47.50' S= 0.0167 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.13 cfs @ 12.10 hrs HW=48.19' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.13 cfs @ 1.19 fps)

### Pond 188P: CB 3

Hydrograph



**Summary for Pond 189P: CB 4**

Inflow Area = 0.282 ac, 69.07% Impervious, Inflow Depth > 1.26" for 2-Year event  
 Inflow = 0.44 cfs @ 12.10 hrs, Volume= 0.030 af  
 Outflow = 0.44 cfs @ 12.10 hrs, Volume= 0.030 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.44 cfs @ 12.10 hrs, Volume= 0.030 af  
 Routed to Pond 190P : DMH 3

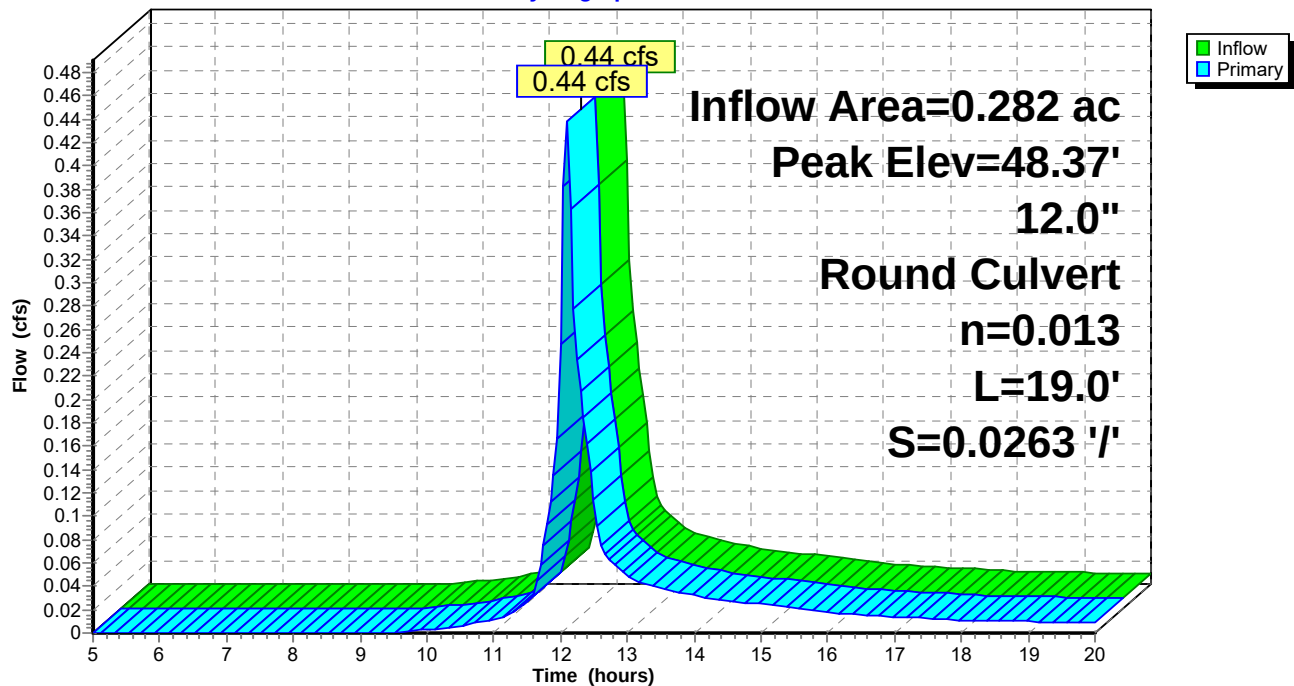
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 48.37' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.00' | <b>12.0" Round Culvert</b><br>L= 19.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.00' / 47.50' S= 0.0263 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.43 cfs @ 12.10 hrs HW=48.37' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.43 cfs @ 1.64 fps)

**Pond 189P: CB 4**

Hydrograph



### Summary for Pond 190P: DMH 3

Inflow Area = 0.440 ac, 63.90% Impervious, Inflow Depth > 1.07" for 2-Year event  
 Inflow = 0.57 cfs @ 12.10 hrs, Volume= 0.039 af  
 Outflow = 0.57 cfs @ 12.10 hrs, Volume= 0.039 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.57 cfs @ 12.10 hrs, Volume= 0.039 af  
 Routed to Pond 213P : DMH 2

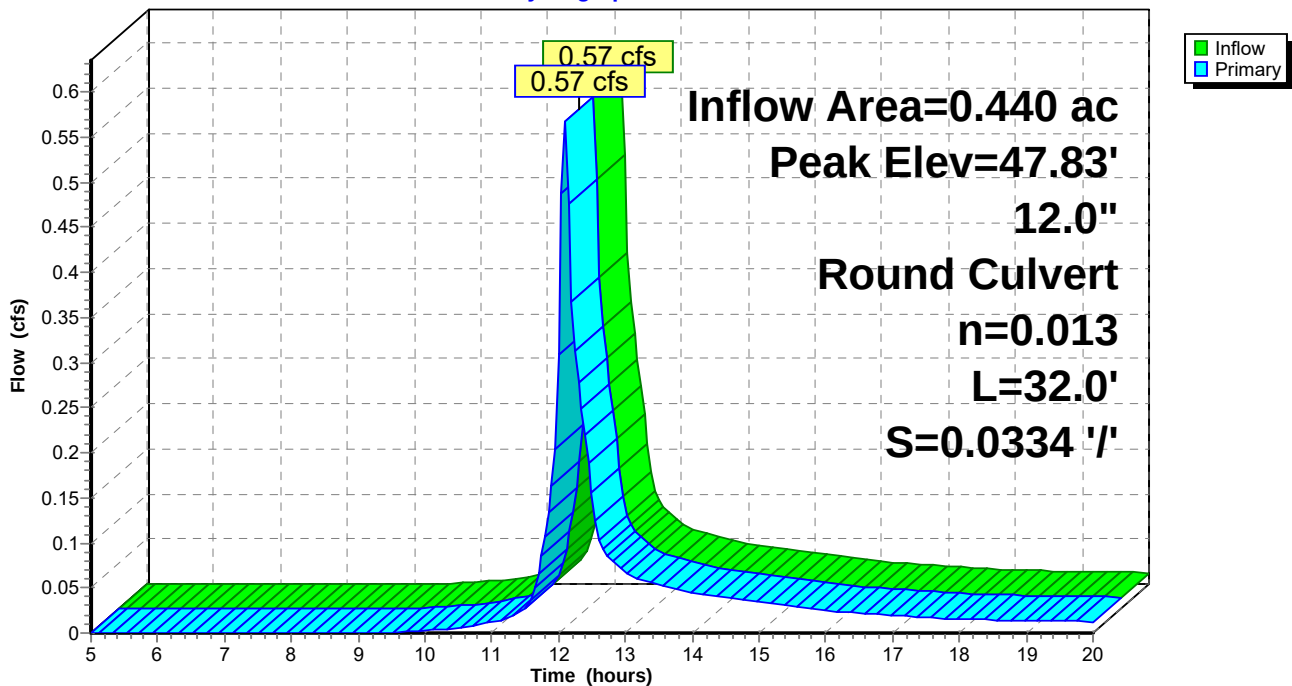
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 47.83' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 47.40' | <b>12.0" Round Culvert</b><br>L= 32.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 47.40' / 46.33' S= 0.0334 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.56 cfs @ 12.10 hrs HW=47.83' (Free Discharge)  
 1=Culvert (Inlet Controls 0.56 cfs @ 1.76 fps)

### Pond 190P: DMH 3

Hydrograph



### Summary for Pond 191P: CB 42

Inflow Area = 0.277 ac, 85.87% Impervious, Inflow Depth > 1.99" for 2-Year event  
 Inflow = 0.67 cfs @ 12.09 hrs, Volume= 0.046 af  
 Outflow = 0.67 cfs @ 12.09 hrs, Volume= 0.046 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.67 cfs @ 12.09 hrs, Volume= 0.046 af  
 Routed to Pond 146P : Inf. Basin 2

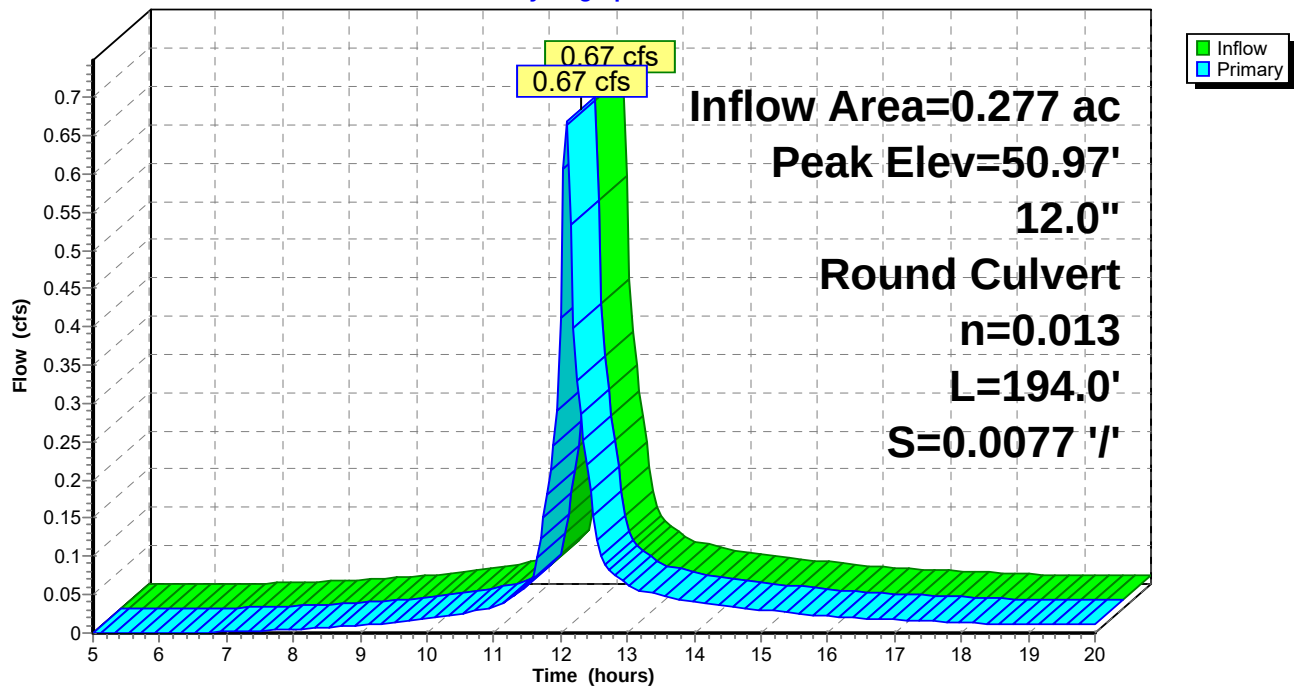
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.97' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.50' | <b>12.0" Round Culvert</b><br>L= 194.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.50' / 49.00' S= 0.0077 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.65 cfs @ 12.09 hrs HW=50.96' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.65 cfs @ 1.83 fps)

### Pond 191P: CB 42

#### Hydrograph



### Summary for Pond 192P: Sub. Inf. 8

Inflow Area = 0.214 ac, 64.54% Impervious, Inflow Depth > 1.08" for 2-Year event  
 Inflow = 0.28 cfs @ 12.10 hrs, Volume= 0.019 af  
 Outflow = 0.19 cfs @ 12.20 hrs, Volume= 0.019 af, Atten= 33%, Lag= 6.2 min  
 Discarded = 0.19 cfs @ 12.20 hrs, Volume= 0.019 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.46' @ 12.20 hrs Surf.Area= 0.022 ac Storage= 0.001 af

Plug-Flow detention time= 1.8 min calculated for 0.019 af (100% of inflow)  
 Center-of-Mass det. time= 1.6 min ( 813.3 - 811.7 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 50.33' | 0.020 af      | <b>20.50'W x 46.34'L x 3.50'H Field A</b><br>0.076 af Overall - 0.026 af Embedded = 0.051 af x 40.0% Voids                                                                                                                                             |
| #2A    | 50.83' | 0.026 af      | <b>ADS StormTech SC-740 b +Cap x 24 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>24 Chambers in 4 Rows<br>Cap Storage= 2.7 cf x 2 x 4 rows = 21.2 cf |
|        |        | 0.046 af      | Total Available Storage                                                                                                                                                                                                                                |

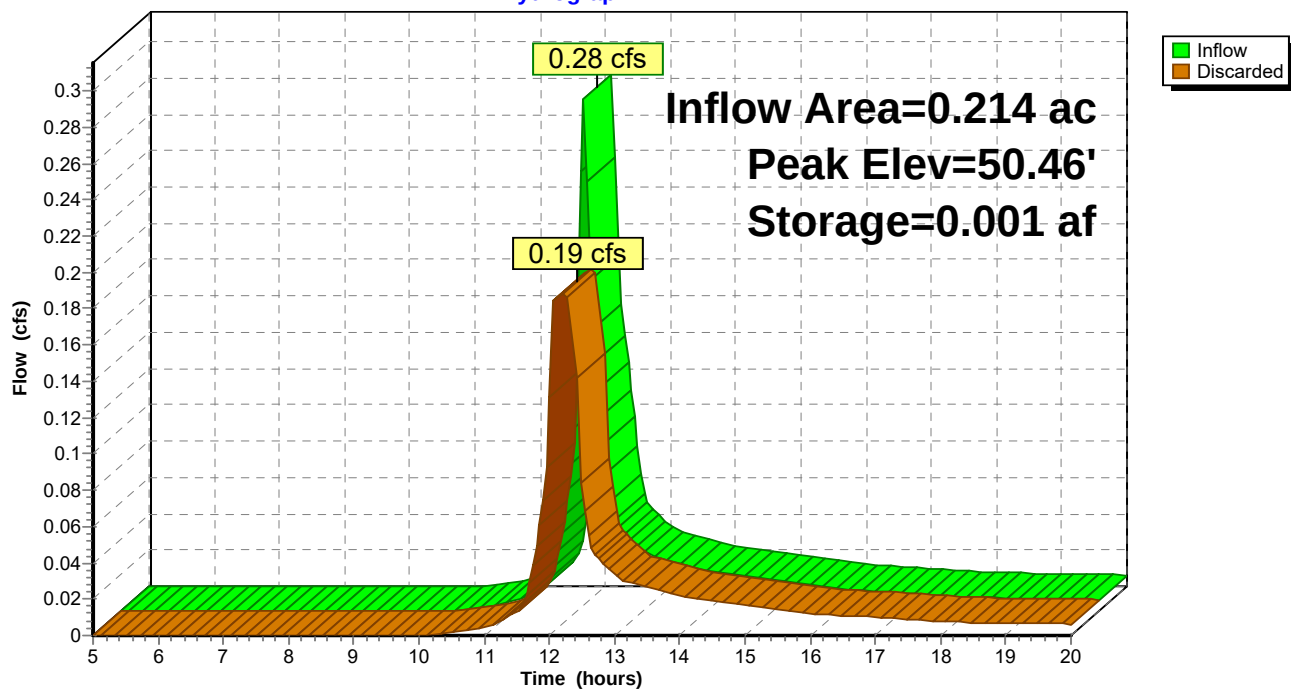
Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                      |
|--------|-----------|--------|-----------------------------------------------------------------------------------------------------|
| #1     | Discarded | 50.33' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 46.50' |

**Discarded OutFlow** Max=0.19 cfs @ 12.20 hrs HW=50.46' (Free Discharge)  
 ↑ **1=Exfiltration** ( Controls 0.19 cfs)

Pond 192P: Sub. Inf. 8

Hydrograph



**Summary for Pond 193P: CB 1**

Inflow Area = 0.172 ac, 31.70% Impervious, Inflow Depth > 0.15" for 2-Year event  
 Inflow = 0.01 cfs @ 12.39 hrs, Volume= 0.002 af  
 Outflow = 0.01 cfs @ 12.39 hrs, Volume= 0.002 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.01 cfs @ 12.39 hrs, Volume= 0.002 af  
 Routed to Pond 200P : DMH 1

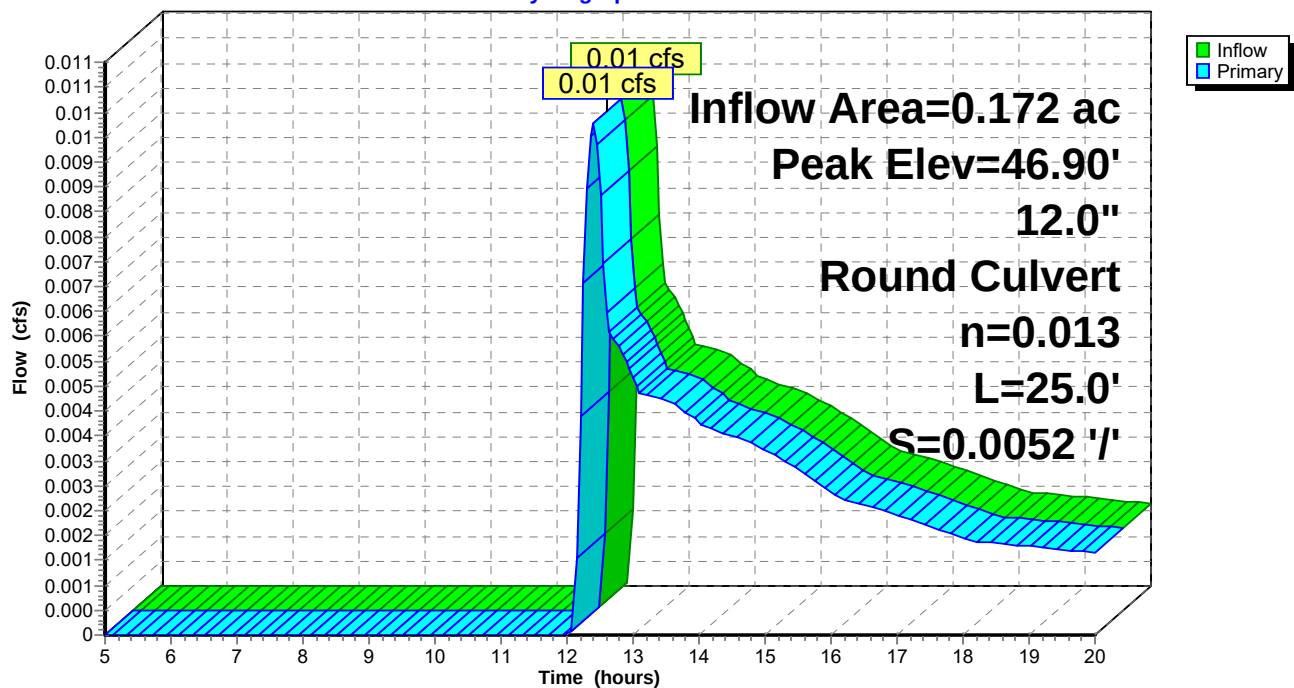
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 46.90' @ 12.39 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 46.84' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 46.84' / 46.71' S= 0.0052 ' / ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.01 cfs @ 12.39 hrs HW=46.90' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.01 cfs @ 0.79 fps)

**Pond 193P: CB 1**

Hydrograph





**Summary for Pond 194P: CB 2**

Inflow Area = 0.094 ac, 74.38% Impervious, Inflow Depth > 1.46" for 2-Year event  
 Inflow = 0.17 cfs @ 12.09 hrs, Volume= 0.011 af  
 Outflow = 0.17 cfs @ 12.09 hrs, Volume= 0.011 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.17 cfs @ 12.09 hrs, Volume= 0.011 af  
 Routed to Pond 200P : DMH 1

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 47.05' @ 12.09 hrs

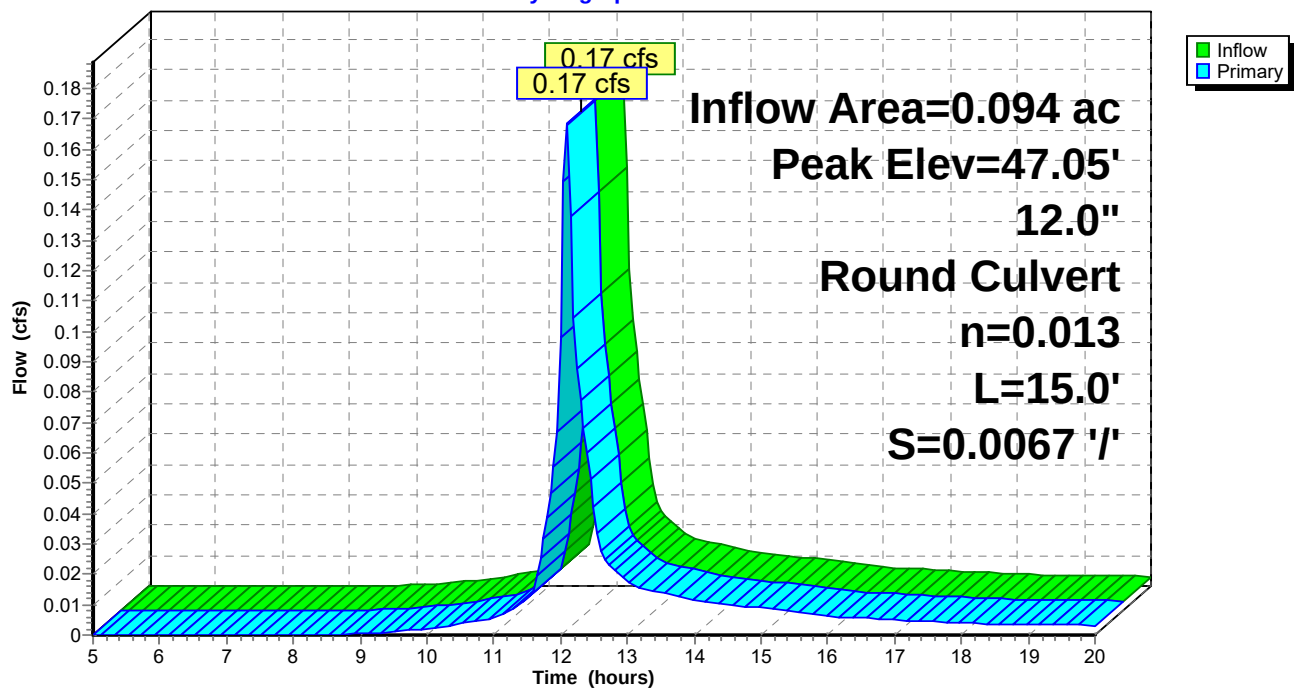
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 46.81' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 46.81' / 46.71' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.17 cfs @ 12.09 hrs HW=47.05' (Free Discharge)

1=Culvert (Barrel Controls 0.17 cfs @ 1.75 fps)

**Pond 194P: CB 2**

Hydrograph



### Summary for Pond 195P: Constructed Wetland 4

Inflow Area = 1.935 ac, 78.08% Impervious, Inflow Depth > 1.40" for 2-Year event  
 Inflow = 2.26 cfs @ 12.26 hrs, Volume= 0.226 af  
 Outflow = 0.34 cfs @ 13.81 hrs, Volume= 0.100 af, Atten= 85%, Lag= 92.7 min  
 Primary = 0.34 cfs @ 13.81 hrs, Volume= 0.100 af  
 Routed to Link 188L : DP 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.26' @ 13.81 hrs Surf.Area= 3,183 sf Storage= 7,011 cf

Plug-Flow detention time= 183.4 min calculated for 0.099 af (44% of inflow)  
 Center-of-Mass det. time= 131.2 min ( 919.5 - 788.3 )

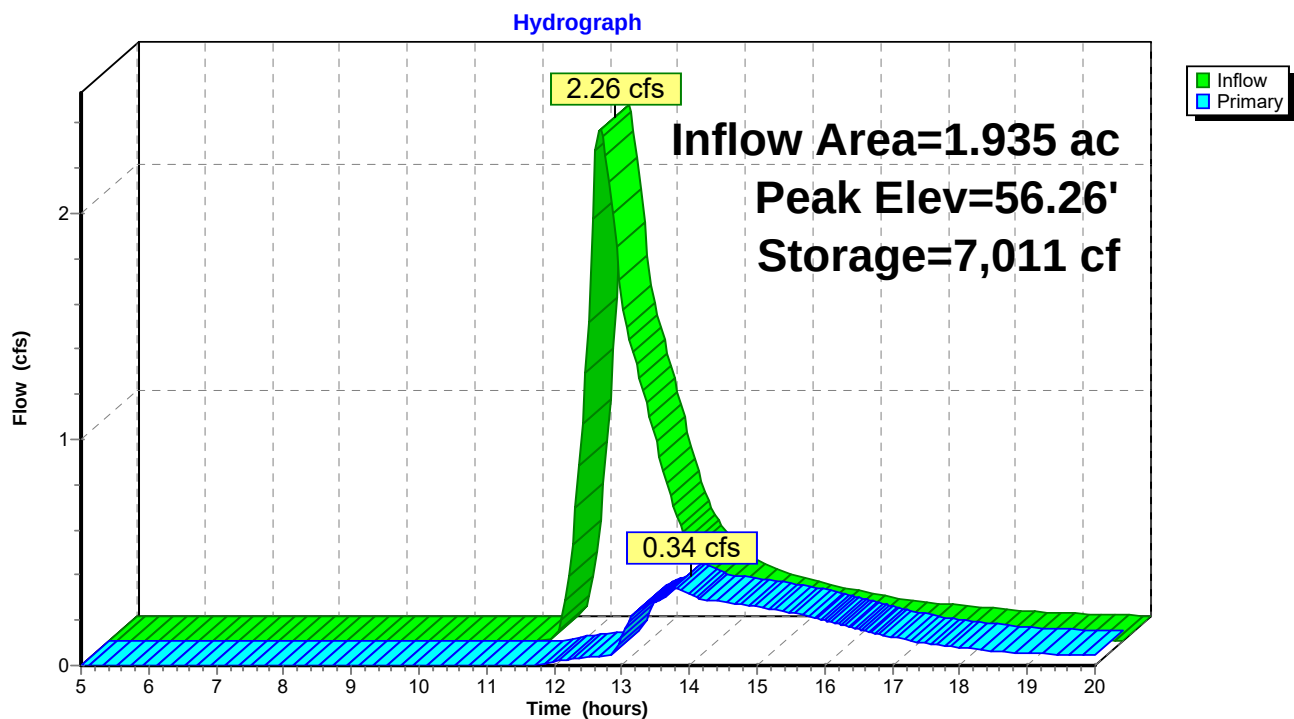
| Volume              | Invert               | Avail.Storage             | Storage Description                                        |
|---------------------|----------------------|---------------------------|------------------------------------------------------------|
| #1                  | 53.00'               | 9,558 cf                  | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet)                                  |
| 53.00               | 1,225                | 0                         | 0                                                          |
| 54.00               | 1,749                | 1,487                     | 1,487                                                      |
| 55.00               | 2,345                | 2,047                     | 3,534                                                      |
| 56.00               | 2,998                | 2,672                     | 6,206                                                      |
| 57.00               | 3,707                | 3,353                     | 9,558                                                      |

| Device | Routing  | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary  | 53.00' | <b>18.0" Round Culvert</b><br>L= 50.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.00' / 52.00' S= 0.0200 ' S= 0.0200 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |
| #2     | Device 1 | 53.00' | <b>1.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                                |
| #3     | Device 1 | 56.25' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                   |
| #4     | Device 1 | 55.75' | <b>4.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                                |

**Primary OutFlow** Max=0.32 cfs @ 13.81 hrs HW=56.26' (Free Discharge)

- 1=Culvert (Passes 0.32 cfs of 10.64 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.05 cfs @ 8.64 fps)
- 3=Orifice/Grate (Weir Controls 0.03 cfs @ 0.34 fps)
- 4=Orifice/Grate (Orifice Controls 0.25 cfs @ 2.82 fps)

### Pond 195P: Constructed Wetland 4



**Summary for Pond 196P: CB 5**

Inflow Area = 0.336 ac, 80.22% Impervious, Inflow Depth > 1.67" for 2-Year event  
 Inflow = 0.69 cfs @ 12.09 hrs, Volume= 0.047 af  
 Outflow = 0.69 cfs @ 12.09 hrs, Volume= 0.047 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.69 cfs @ 12.09 hrs, Volume= 0.047 af  
 Routed to Pond 185P : DMH 4

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 48.51' @ 12.09 hrs

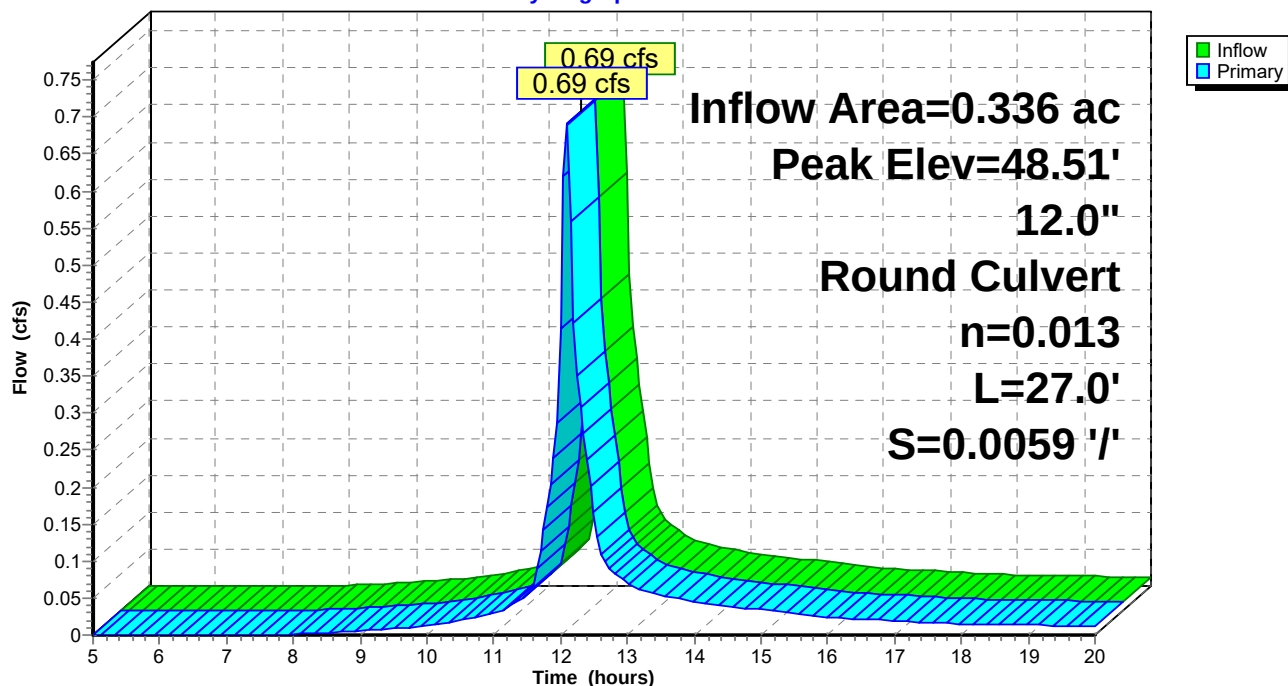
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.00' | <b>12.0" Round Culvert</b><br>L= 27.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.00' / 47.84' S= 0.0059 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.68 cfs @ 12.09 hrs HW=48.51' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 0.68 cfs @ 2.48 fps)

**Pond 196P: CB 5**

Hydrograph



### Summary for Pond 197P: Inf. Basin 1

Inflow Area = 8.503 ac, 57.81% Impervious, Inflow Depth > 0.26" for 2-Year event  
 Inflow = 2.65 cfs @ 12.10 hrs, Volume= 0.185 af  
 Outflow = 1.13 cfs @ 12.36 hrs, Volume= 0.185 af, Atten= 57%, Lag= 15.9 min  
 Discarded = 1.13 cfs @ 12.36 hrs, Volume= 0.185 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Link 203L : 3A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 46.75' @ 12.36 hrs Surf.Area= 5,073 sf Storage= 1,222 cf

Plug-Flow detention time= 8.0 min calculated for 0.184 af (100% of inflow)  
 Center-of-Mass det. time= 7.3 min ( 816.0 - 808.7 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 46.50' | 34,549 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

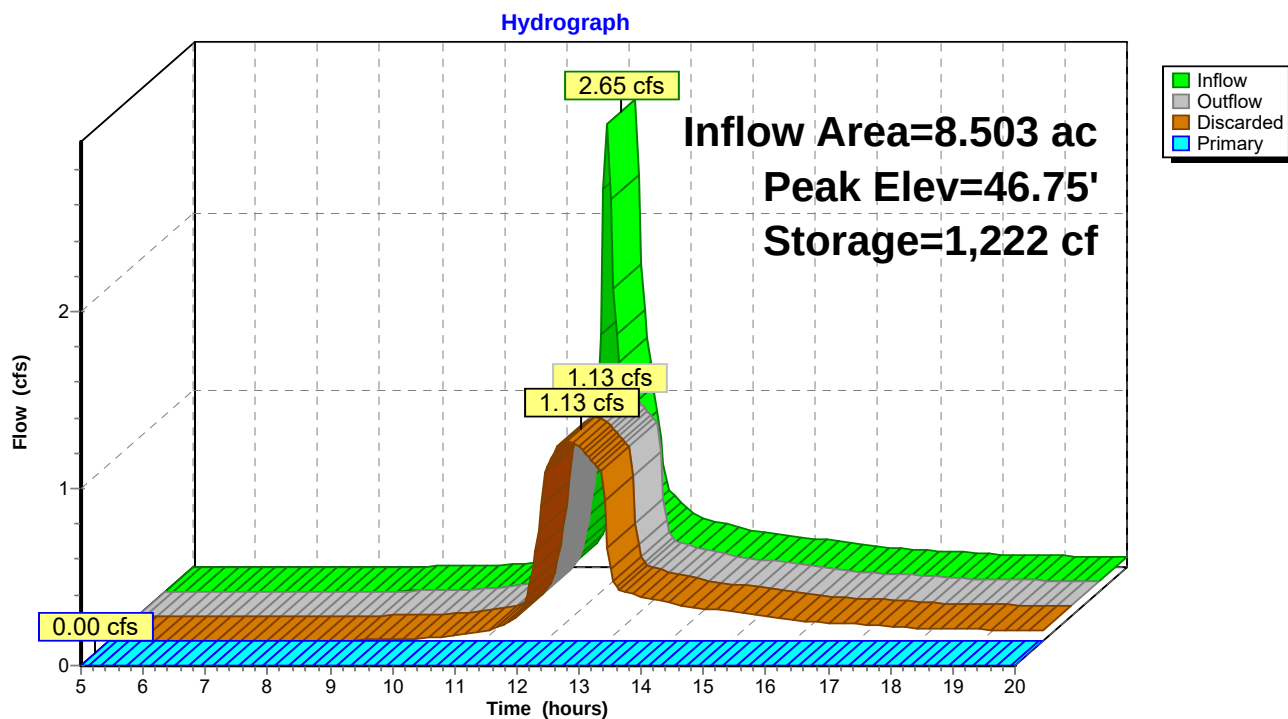
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 46.50               | 4,770                | 0                         | 0                         |
| 47.00               | 5,380                | 2,538                     | 2,538                     |
| 48.00               | 6,642                | 6,011                     | 8,549                     |
| 49.00               | 7,960                | 7,301                     | 15,850                    |
| 50.00               | 9,336                | 8,648                     | 24,498                    |
| 51.00               | 10,767               | 10,052                    | 34,549                    |

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 46.50' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 45.00'                                                                                                            |
| #2     | Primary   | 47.00' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 47.00' / 43.50' S= 0.1400 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 48.00' | <b>6.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                     |
| #4     | Device 2  | 50.50' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                        |

**Discarded OutFlow** Max=1.13 cfs @ 12.36 hrs HW=46.75' (Free Discharge)  
 ↳ **1=Exfiltration** ( Controls 1.13 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=46.50' (Free Discharge)  
 ↳ **2=Culvert** ( Controls 0.00 cfs)  
 ↳ ↳ **3=Orifice/Grate** ( Controls 0.00 cfs)  
 ↳ ↳ **4=Orifice/Grate** ( Controls 0.00 cfs)

# Pond 197P: Inf. Basin 1



### Summary for Pond 198P: Sub. Inf. 2

Inflow Area = 1.731 ac, 71.57% Impervious, Inflow Depth > 1.37" for 2-Year event  
 Inflow = 2.92 cfs @ 12.09 hrs, Volume= 0.198 af  
 Outflow = 1.29 cfs @ 12.32 hrs, Volume= 0.198 af, Atten= 56%, Lag= 13.6 min  
 Discarded = 1.29 cfs @ 12.32 hrs, Volume= 0.198 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Pond 202P : DMH 14

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.62' @ 12.32 hrs Surf.Area= 0.096 ac Storage= 0.028 af

Plug-Flow detention time= 5.9 min calculated for 0.197 af (100% of inflow)  
 Center-of-Mass det. time= 5.7 min ( 803.5 - 797.8 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                      |
|--------|--------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 51.00' | 0.086 af      | <b>30.00'W x 138.90'L x 3.50'H Field A</b><br>0.335 af Overall - 0.121 af Embedded = 0.214 af x 40.0% Voids                                                                                                                                              |
| #2A    | 51.50' | 0.121 af      | <b>ADS StormTech SC-740 b +Cap x 114 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>114 Chambers in 6 Rows<br>Cap Storage= 2.7 cf x 2 x 6 rows = 31.9 cf |
|        |        | 0.206 af      | Total Available Storage                                                                                                                                                                                                                                  |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 51.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 50.00'                                                                                                           |
| #2     | Primary   | 52.75' | <b>18.0" Round Culvert</b><br>L= 10.0' RCP, groove end projecting, Ke= 0.200<br>Inlet / Outlet Invert= 52.75' / 52.65' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Discarded OutFlow** Max=1.29 cfs @ 12.32 hrs HW=51.61' (Free Discharge)

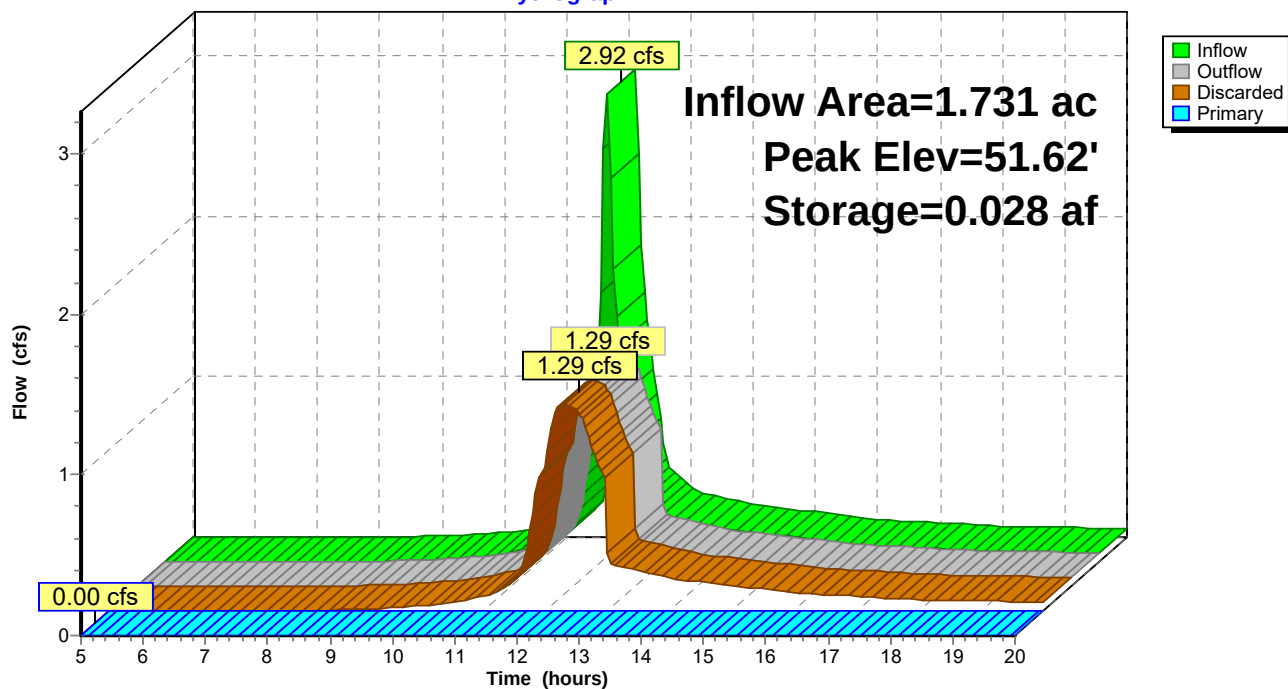
↑**1=Exfiltration** ( Controls 1.29 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=51.00' (Free Discharge)

↑**2=Culvert** ( Controls 0.00 cfs)

Pond 198P: Sub. Inf. 2

Hydrograph





### Summary for Pond 200P: DMH 1

Inflow Area = 0.265 ac, 46.75% Impervious, Inflow Depth > 0.61" for 2-Year event  
 Inflow = 0.17 cfs @ 12.09 hrs, Volume= 0.014 af  
 Outflow = 0.17 cfs @ 12.09 hrs, Volume= 0.014 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.17 cfs @ 12.09 hrs, Volume= 0.014 af  
 Routed to Pond 213P : DMH 2

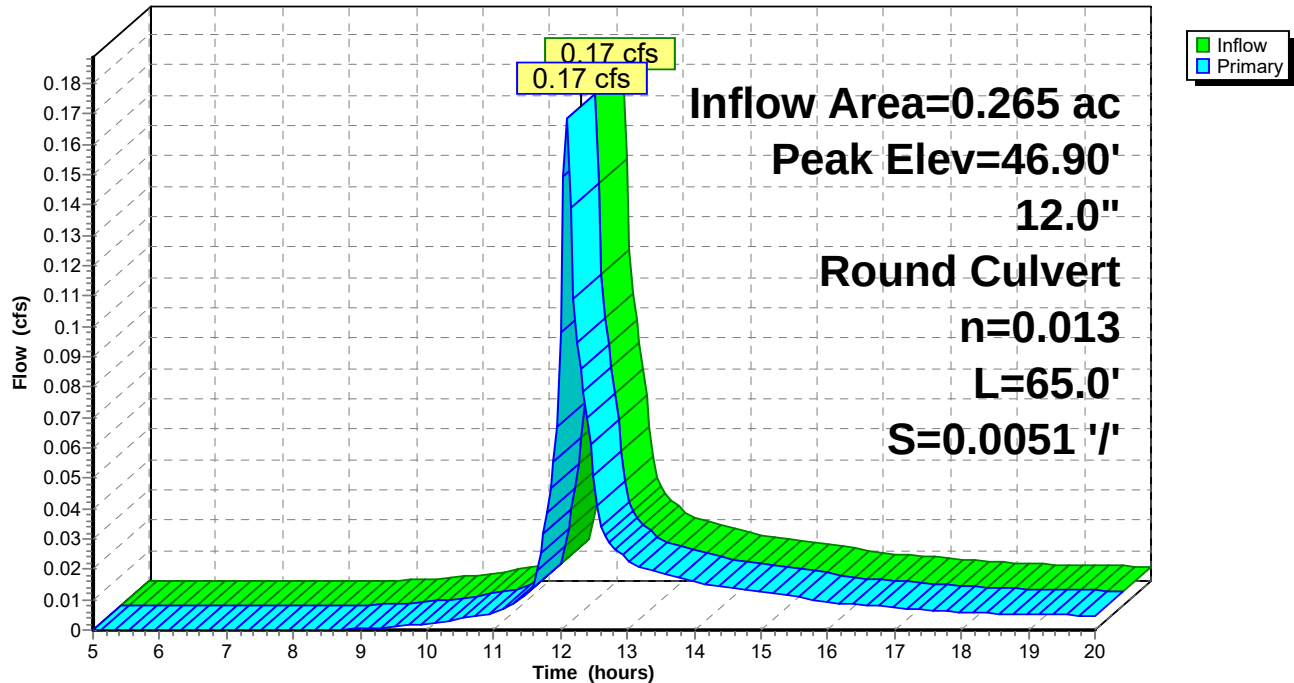
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 46.90' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 46.66' | <b>12.0" Round Culvert</b><br>L= 65.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 46.66' / 46.33' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.17 cfs @ 12.09 hrs HW=46.90' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.17 cfs @ 1.76 fps)

### Pond 200P: DMH 1

Hydrograph



### Summary for Pond 201P: Sub. Inf. 3

Inflow Area = 1.343 ac, 61.65% Impervious, Inflow Depth > 1.05" for 2-Year event  
 Inflow = 1.67 cfs @ 12.10 hrs, Volume= 0.117 af  
 Outflow = 0.90 cfs @ 12.26 hrs, Volume= 0.117 af, Atten= 46%, Lag= 10.0 min  
 Discarded = 0.90 cfs @ 12.26 hrs, Volume= 0.117 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Pond 202P : DMH 14

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.37' @ 12.26 hrs Surf.Area= 0.079 ac Storage= 0.012 af

Plug-Flow detention time= 3.4 min calculated for 0.117 af (100% of inflow)  
 Center-of-Mass det. time= 3.2 min ( 809.5 - 806.3 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 52.00' | 0.071 af      | <b>20.50'W x 167.38'L x 3.50'H Field A</b><br>0.276 af Overall - 0.098 af Embedded = 0.178 af x 40.0% Voids                                                                                                                                            |
| #2A    | 52.50' | 0.098 af      | <b>ADS StormTech SC-740 b +Cap x 92 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>92 Chambers in 4 Rows<br>Cap Storage= 2.7 cf x 2 x 4 rows = 21.2 cf |
|        |        | 0.169 af      | Total Available Storage                                                                                                                                                                                                                                |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 52.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 51.00'                                                                                                              |
| #2     | Primary   | 54.00' | <b>12.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.00' / 53.65' S= 0.0175 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Discarded OutFlow** Max=0.90 cfs @ 12.26 hrs HW=52.37' (Free Discharge)

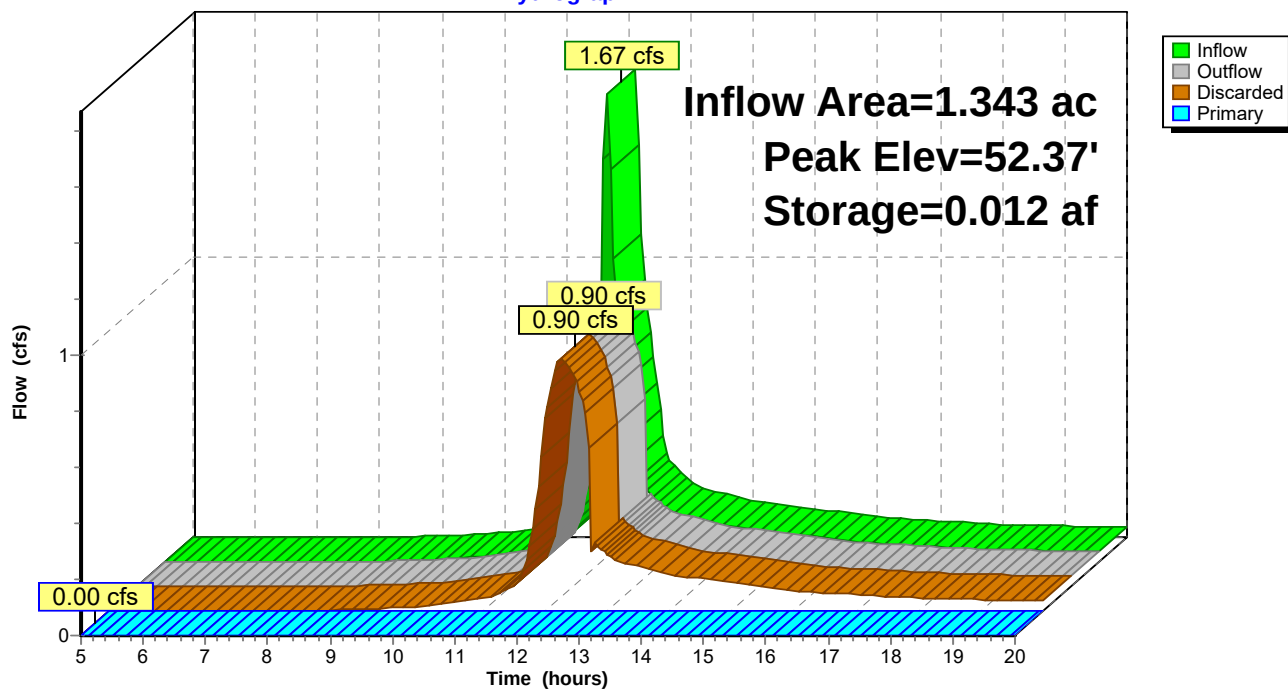
↑**1=Exfiltration** ( Controls 0.90 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=52.00' (Free Discharge)

↑**2=Culvert** ( Controls 0.00 cfs)

Pond 201P: Sub. Inf. 3

Hydrograph



### Summary for Pond 202P: DMH 14

Inflow Area = 3.074 ac, 67.24% Impervious, Inflow Depth = 0.00" for 2-Year event  
 Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Pond 166P : DMH 13

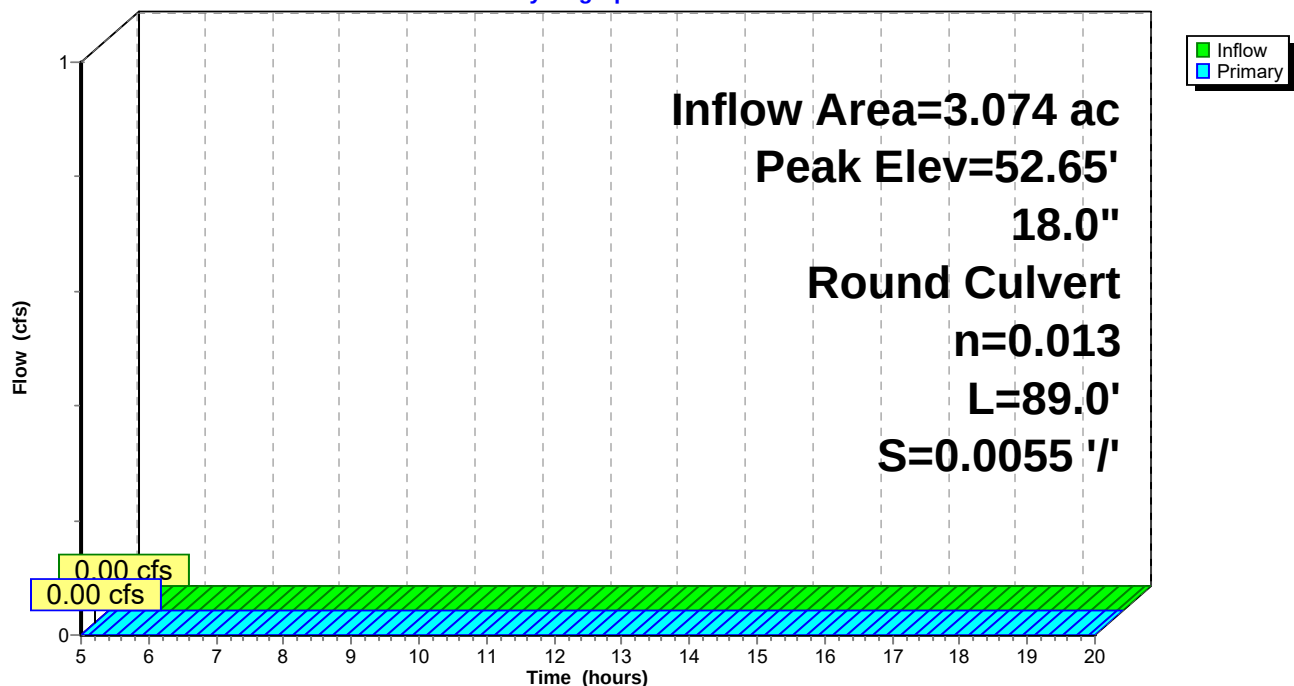
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.65' @ 5.00 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.65' | <b>18.0" Round Culvert</b><br>L= 89.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.65' / 52.16' S= 0.0055 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=52.65' (Free Discharge)  
 ↑1=Culvert ( Controls 0.00 cfs)

### Pond 202P: DMH 14

#### Hydrograph



**Summary for Pond 204P: DMH 18**

Inflow Area = 1.731 ac, 71.57% Impervious, Inflow Depth > 1.37" for 2-Year event  
 Inflow = 2.92 cfs @ 12.09 hrs, Volume= 0.198 af  
 Outflow = 2.92 cfs @ 12.09 hrs, Volume= 0.198 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.92 cfs @ 12.09 hrs, Volume= 0.198 af  
 Routed to Pond 198P : Sub. Inf. 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 52.42' @ 12.09 hrs

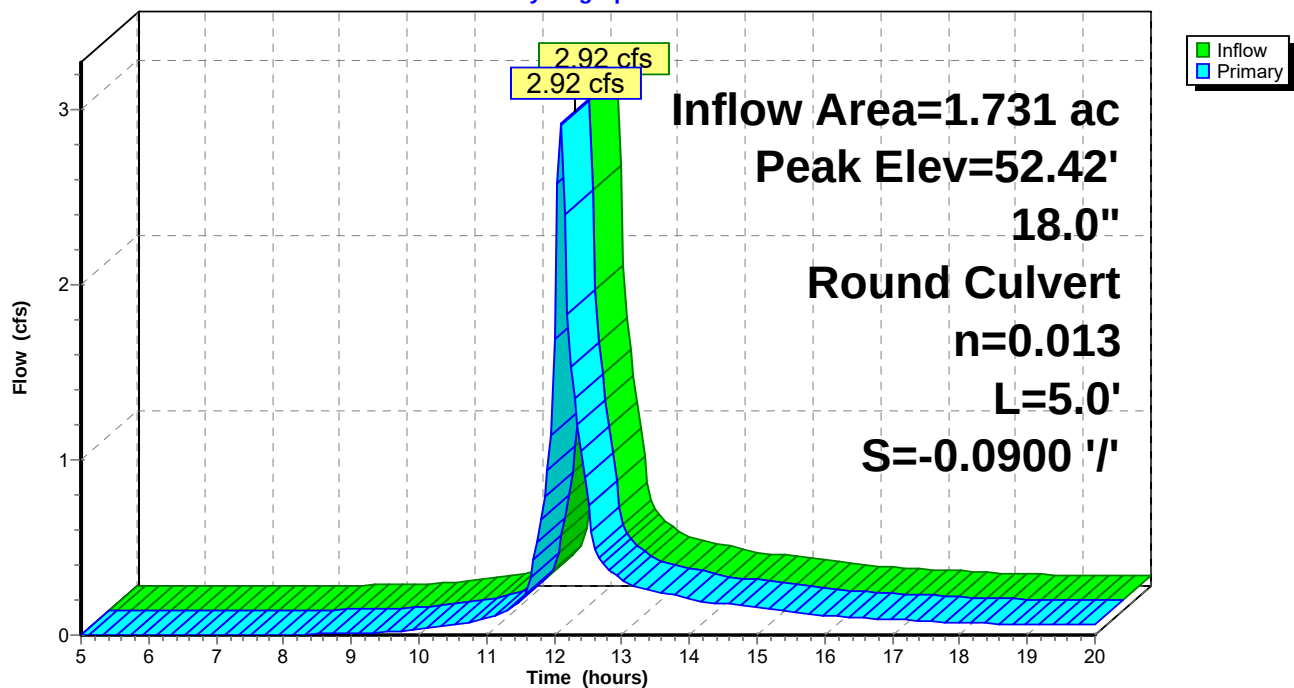
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.50' | <b>18.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.05' / 51.50' S= -0.0900 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.88 cfs @ 12.09 hrs HW=52.41' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 2.88 cfs @ 2.56 fps)

**Pond 204P: DMH 18**

Hydrograph



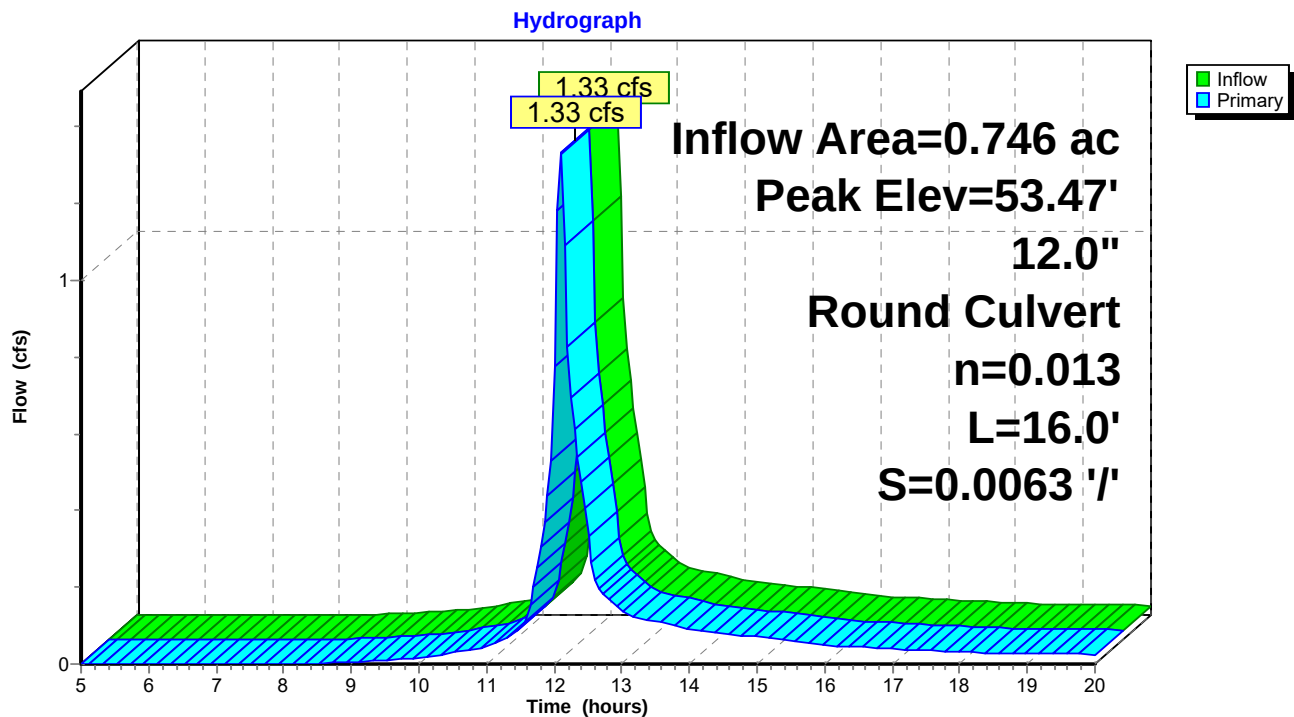
**Summary for Pond 205P: DMH 27**

Inflow Area = 0.746 ac, 74.14% Impervious, Inflow Depth > 1.45" for 2-Year event  
 Inflow = 1.33 cfs @ 12.09 hrs, Volume= 0.090 af  
 Outflow = 1.33 cfs @ 12.09 hrs, Volume= 0.090 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.33 cfs @ 12.09 hrs, Volume= 0.090 af  
 Routed to Pond 201P : Sub. Inf. 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.47' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.70' | <b>12.0" Round Culvert</b><br>L= 16.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.70' / 52.60' S= 0.0063 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.31 cfs @ 12.09 hrs HW=53.46' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.31 cfs @ 2.82 fps)

**Pond 205P: DMH 27**

**Summary for Pond 206P: DMH 34**

Inflow Area = 0.770 ac, 66.71% Impervious, Inflow Depth > 1.93" for 2-Year event  
 Inflow = 1.79 cfs @ 12.09 hrs, Volume= 0.124 af  
 Outflow = 1.79 cfs @ 12.09 hrs, Volume= 0.124 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.79 cfs @ 12.09 hrs, Volume= 0.124 af  
 Routed to Pond 49P : Sub. Inf. 4

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 55.19' @ 12.09 hrs

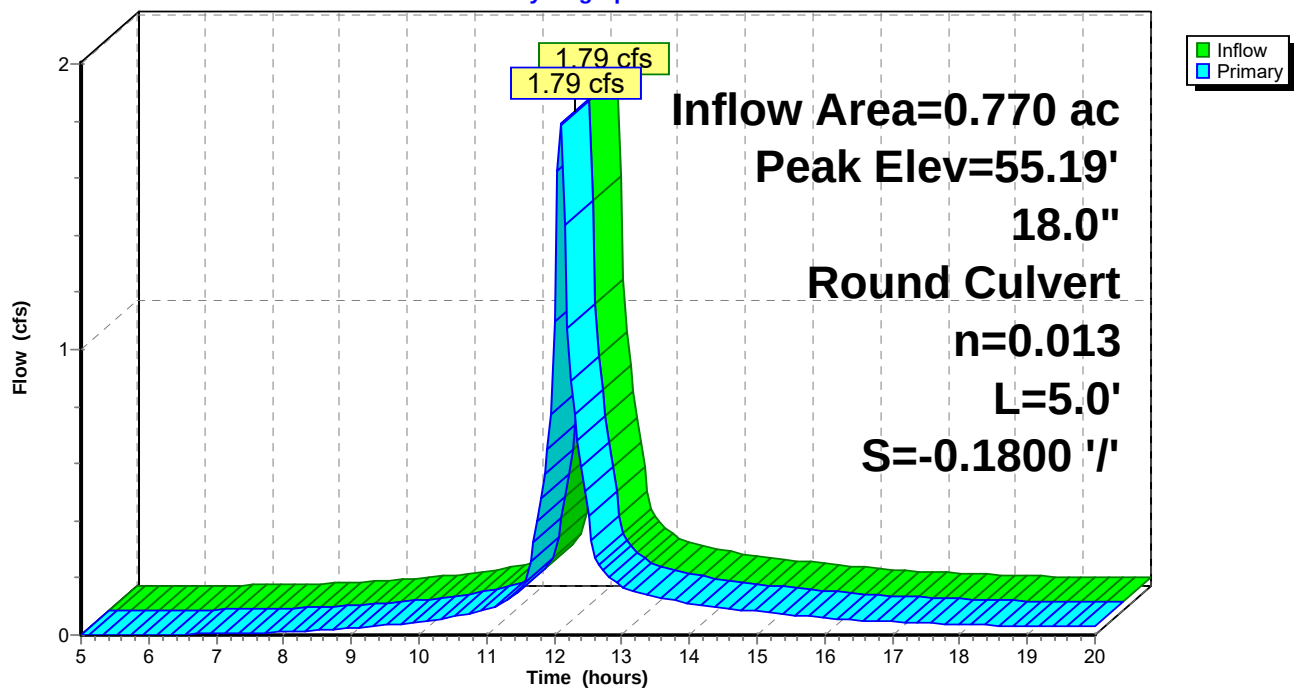
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.50' | <b>18.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.60' / 54.50' S= -0.1800 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=1.75 cfs @ 12.09 hrs HW=55.19' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 1.75 cfs @ 2.23 fps)

**Pond 206P: DMH 34**

Hydrograph



**Summary for Pond 207P: DMH 48**

Inflow Area = 0.608 ac, 68.77% Impervious, Inflow Depth > 2.06" for 2-Year event  
 Inflow = 1.50 cfs @ 12.09 hrs, Volume= 0.105 af  
 Outflow = 1.50 cfs @ 12.09 hrs, Volume= 0.105 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.50 cfs @ 12.09 hrs, Volume= 0.105 af  
 Routed to Pond 68P : Sub. Inf. 5

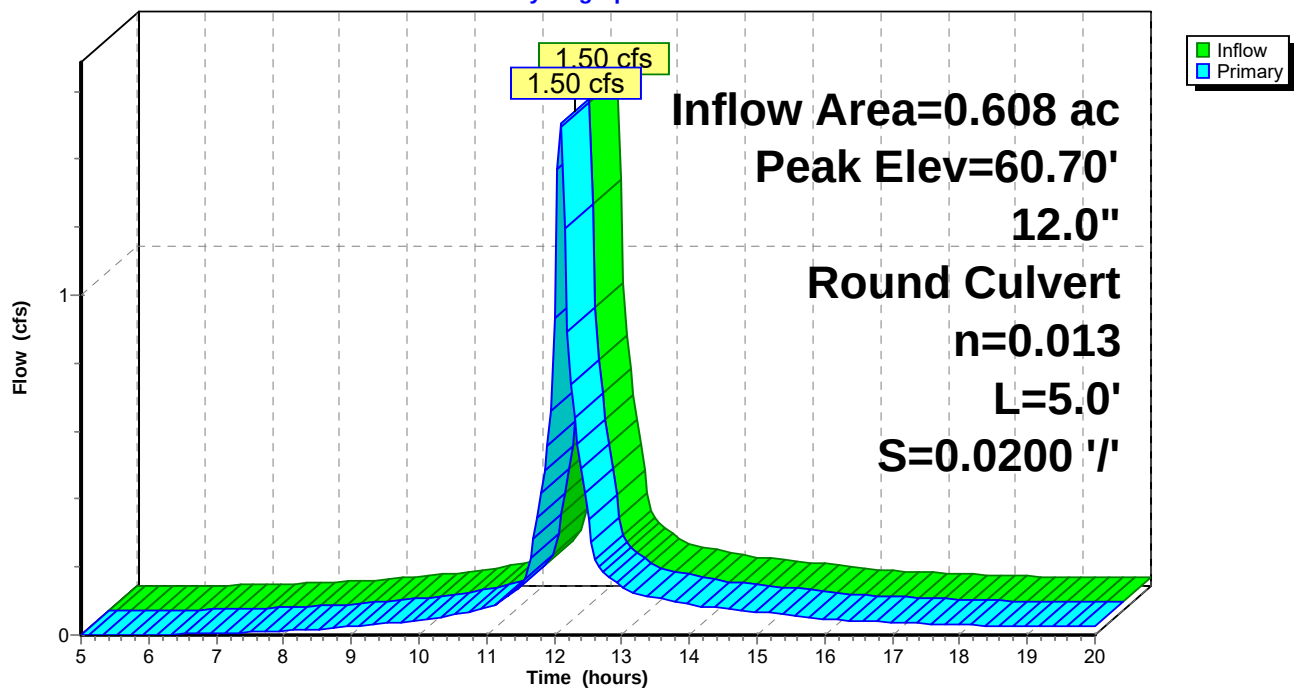
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.70' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.90' | <b>12.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.90' / 59.80' S= 0.0200 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.47 cfs @ 12.09 hrs HW=60.68' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.47 cfs @ 3.06 fps)

**Pond 207P: DMH 48**

Hydrograph





**Summary for Pond 208P: DMH 58**

Inflow Area = 1.994 ac, 68.75% Impervious, Inflow Depth > 2.02" for 2-Year event  
 Inflow = 4.86 cfs @ 12.09 hrs, Volume= 0.336 af  
 Outflow = 4.86 cfs @ 12.09 hrs, Volume= 0.336 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.86 cfs @ 12.09 hrs, Volume= 0.336 af  
 Routed to Pond 60P : Sub. Det. 1

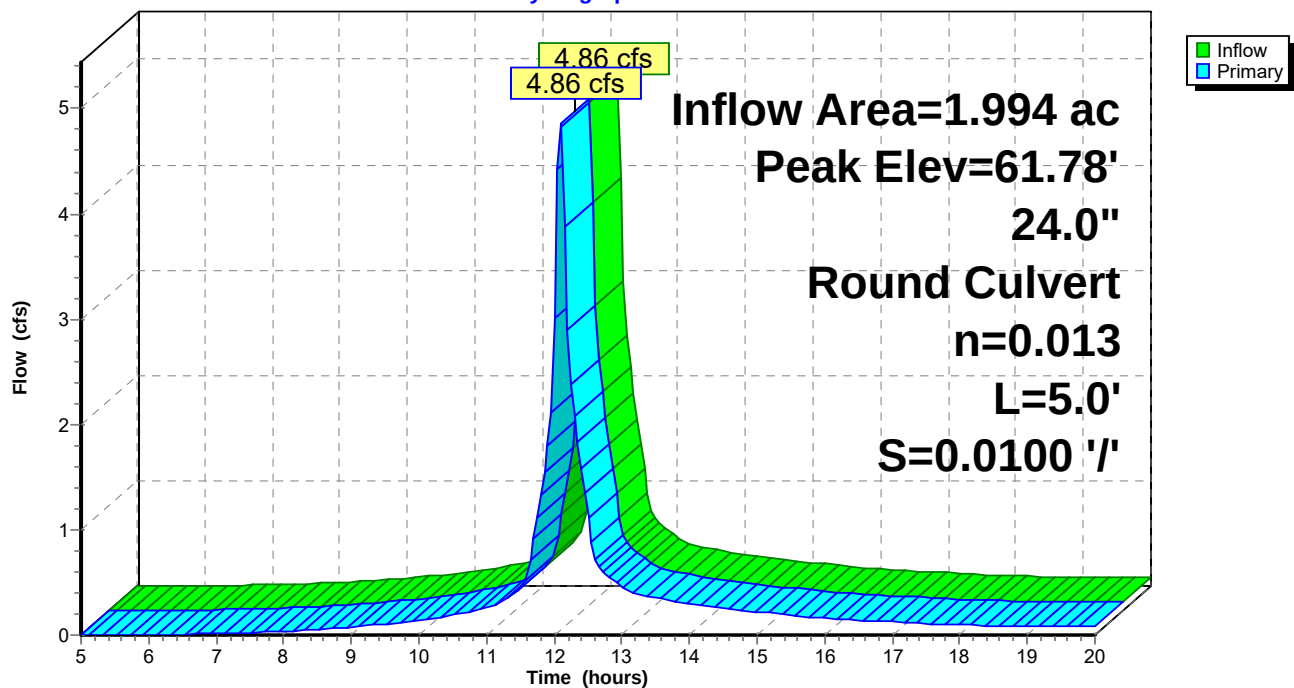
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.78' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.55' | <b>24.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.55' / 60.50' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=4.75 cfs @ 12.09 hrs HW=61.77' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 4.75 cfs @ 3.40 fps)

**Pond 208P: DMH 58**

Hydrograph



**Summary for Pond 209P: DMH 64**

Inflow Area = 1.037 ac, 70.16% Impervious, Inflow Depth > 2.06" for 2-Year event  
 Inflow = 2.57 cfs @ 12.09 hrs, Volume= 0.178 af  
 Outflow = 2.57 cfs @ 12.09 hrs, Volume= 0.178 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.57 cfs @ 12.09 hrs, Volume= 0.178 af  
 Routed to Pond 97P : Sub. Det. 2

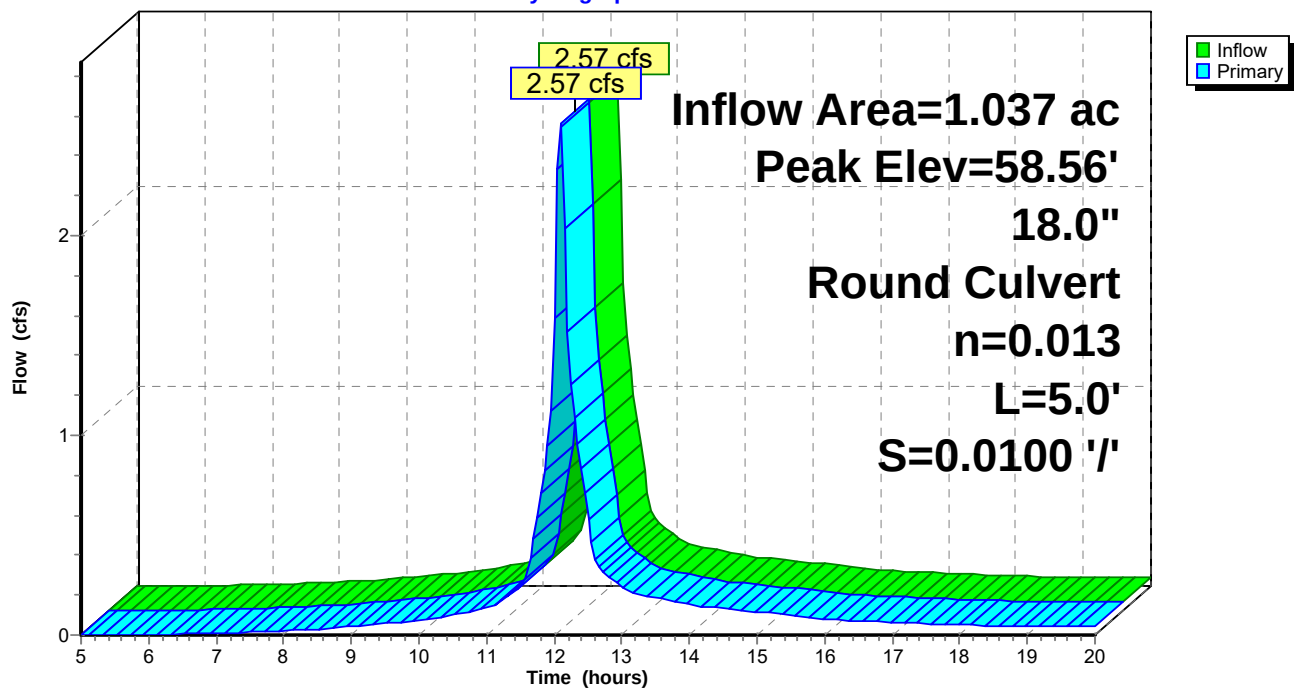
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.56' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.60' | <b>18.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.60' / 57.55' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.51 cfs @ 12.09 hrs HW=58.55' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.51 cfs @ 3.04 fps)

**Pond 209P: DMH 64**

Hydrograph



### Summary for Pond 210P: DMH 68

Inflow Area = 1.935 ac, 78.08% Impervious, Inflow Depth > 2.23" for 2-Year event  
 Inflow = 5.08 cfs @ 12.09 hrs, Volume= 0.360 af  
 Outflow = 5.08 cfs @ 12.09 hrs, Volume= 0.360 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.08 cfs @ 12.09 hrs, Volume= 0.360 af  
 Routed to Pond 221P : Inf. Basin 6

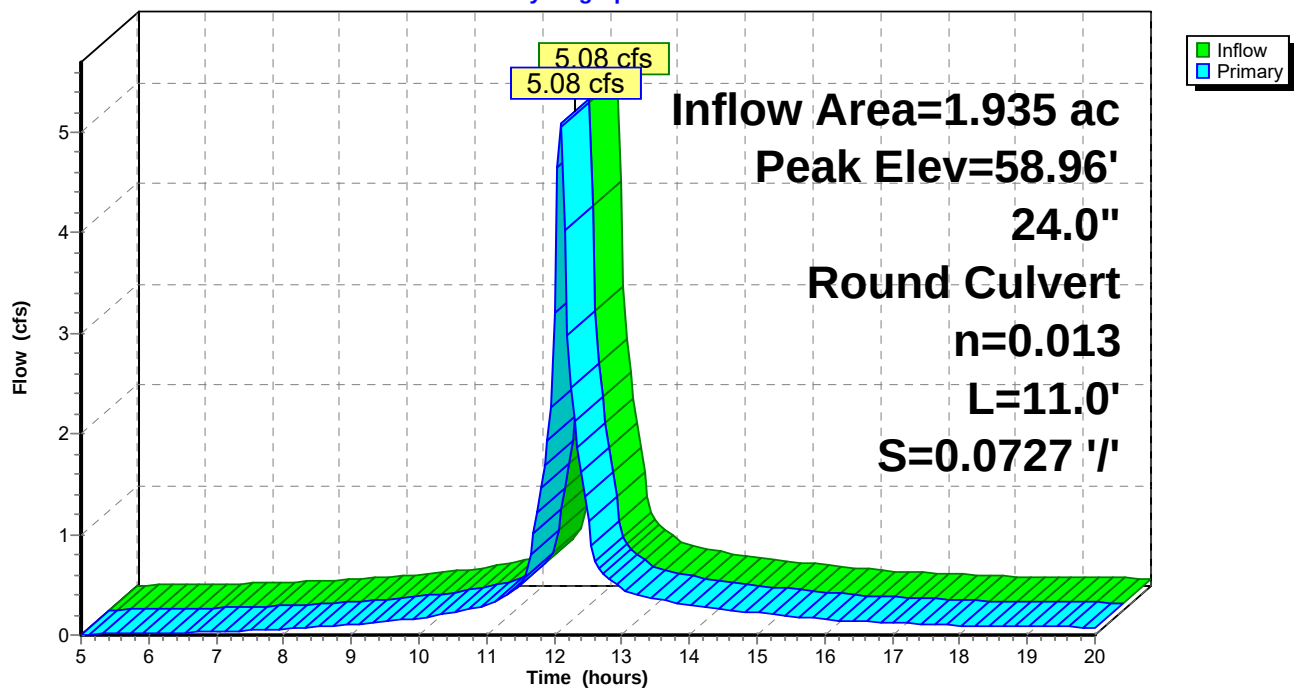
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.96' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.85' | <b>24.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.85' / 57.05' S= 0.0727 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=4.96 cfs @ 12.09 hrs HW=58.95' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 4.96 cfs @ 2.81 fps)

### Pond 210P: DMH 68

Hydrograph



### Summary for Pond 211P: Sub. Inf. 1B

Inflow Area = 4.409 ac, 67.96% Impervious, Inflow Depth > 0.39" for 2-Year event  
 Inflow = 2.09 cfs @ 12.10 hrs, Volume= 0.142 af  
 Outflow = 0.67 cfs @ 12.44 hrs, Volume= 0.142 af, Atten= 68%, Lag= 20.8 min  
 Discarded = 0.67 cfs @ 12.44 hrs, Volume= 0.142 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Pond 214P : DMH 4A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.78' @ 12.44 hrs Surf.Area= 0.064 ac Storage= 0.028 af

Plug-Flow detention time= 10.8 min calculated for 0.141 af (100% of inflow)  
 Center-of-Mass det. time= 10.6 min ( 813.0 - 802.4 )

| Volume   | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                    |
|----------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A      | 50.00' | 0.058 af      | <b>25.25'W x 110.42'L x 3.50'H Field A</b><br>0.224 af Overall - 0.080 af Embedded = 0.144 af x 40.0% Voids                                                                                                                                            |
| #2A      | 50.50' | 0.080 af      | <b>ADS StormTech SC-740 b +Cap x 75 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>75 Chambers in 5 Rows<br>Cap Storage= 2.7 cf x 2 x 5 rows = 26.5 cf |
| 0.137 af |        |               | Total Available Storage                                                                                                                                                                                                                                |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                             |
|--------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 50.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 47.00'                                                                                                                        |
| #2     | Primary   | 51.50' | <b>24.0" Round Culvert</b><br>L= 110.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.50' / 48.00' S= 0.0318 ' S= 0.0318 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

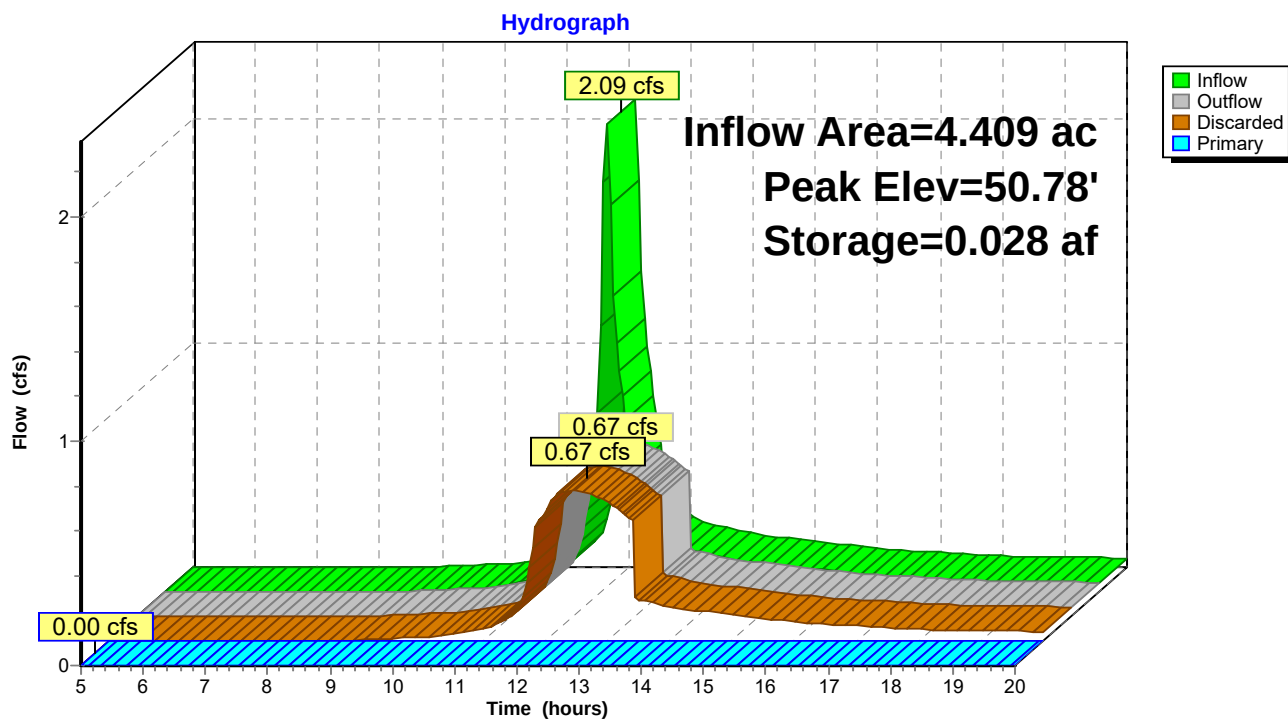
**Discarded OutFlow** Max=0.67 cfs @ 12.44 hrs HW=50.78' (Free Discharge)

↑**1=Exfiltration** ( Controls 0.67 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=50.00' (Free Discharge)

↑**2=Culvert** ( Controls 0.00 cfs)

**Pond 211P: Sub. Inf. 1B**



### Summary for Pond 212P: Sub. Inf. 1A

Inflow Area = 4.558 ac, 68.27% Impervious, Inflow Depth > 0.05" for 2-Year event  
 Inflow = 0.29 cfs @ 12.09 hrs, Volume= 0.020 af  
 Outflow = 0.29 cfs @ 12.11 hrs, Volume= 0.020 af, Atten= 3%, Lag= 1.2 min  
 Discarded = 0.29 cfs @ 12.11 hrs, Volume= 0.020 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Pond 185P : DMH 4

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 47.52' @ 12.11 hrs Surf.Area= 0.055 ac Storage= 0.000 af

Plug-Flow detention time= 1.2 min calculated for 0.020 af (100% of inflow)  
 Center-of-Mass det. time= 1.0 min ( 792.1 - 791.1 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 47.50' | 0.050 af      | <b>20.50'W x 117.54'L x 3.50'H Field A</b><br>0.194 af Overall - 0.068 af Embedded = 0.126 af x 40.0% Voids                                                                                                                                            |
| #2A    | 48.00' | 0.068 af      | <b>ADS StormTech SC-740 b +Cap x 64 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>64 Chambers in 4 Rows<br>Cap Storage= 2.7 cf x 2 x 4 rows = 21.2 cf |
|        |        | 0.118 af      | Total Available Storage                                                                                                                                                                                                                                |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 47.50' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 45.00'                                                                                                              |
| #2     | Primary   | 48.00' | <b>18.0" Round Culvert</b><br>L= 17.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.00' / 47.85' S= 0.0088 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

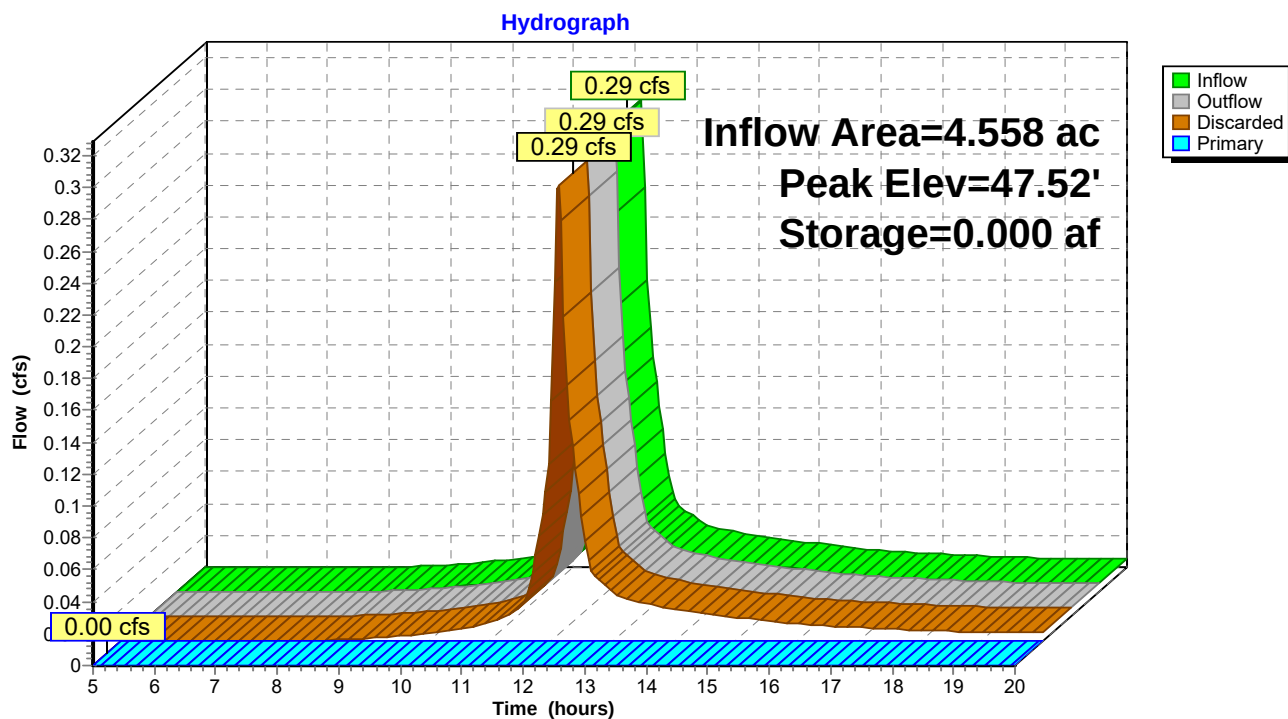
**Discarded OutFlow** Max=0.47 cfs @ 12.11 hrs HW=47.52' (Free Discharge)

↑**1=Exfiltration** ( Controls 0.47 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=47.50' (Free Discharge)

↑**2=Culvert** ( Controls 0.00 cfs)

Pond 212P: Sub. Inf. 1A



**Summary for Pond 213P: DMH 2**

Inflow Area = 0.705 ac, 57.45% Impervious, Inflow Depth > 0.90" for 2-Year event  
 Inflow = 0.74 cfs @ 12.10 hrs, Volume= 0.053 af  
 Outflow = 0.74 cfs @ 12.10 hrs, Volume= 0.053 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.74 cfs @ 12.10 hrs, Volume= 0.053 af  
 Routed to Pond 186P : Constructed Wetland 1

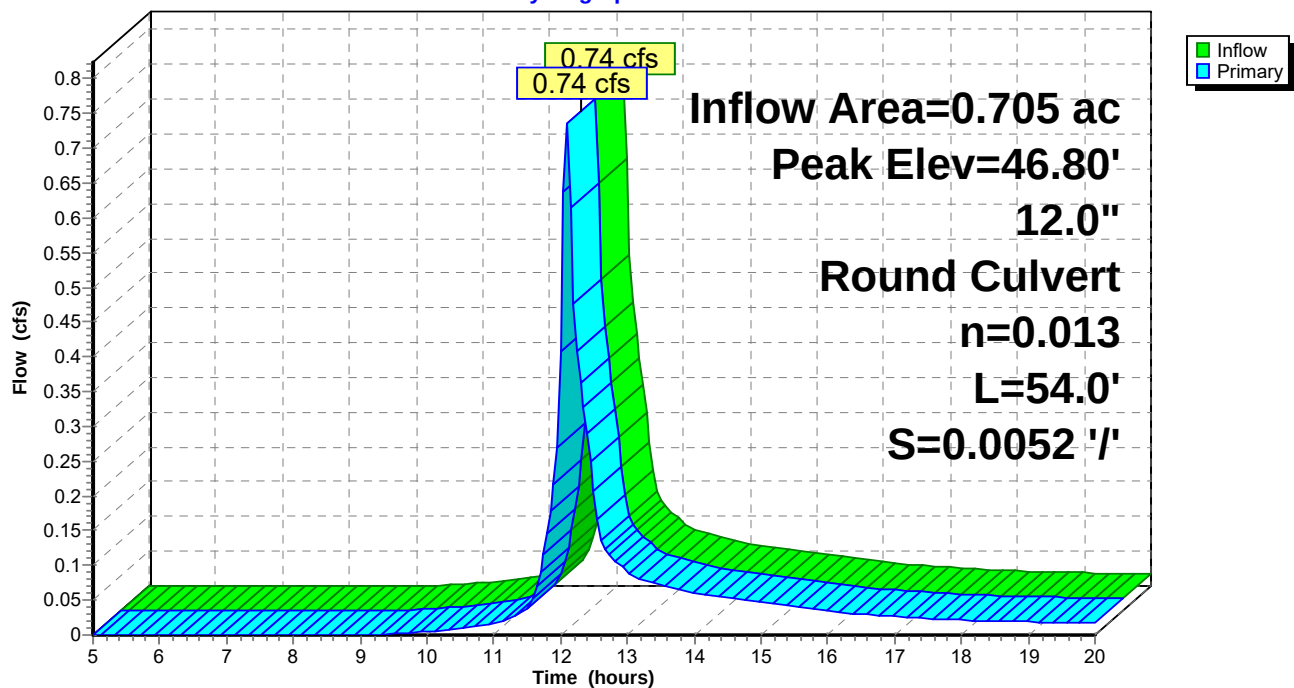
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 46.80' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 46.28' | <b>12.0" Round Culvert</b><br>L= 54.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 46.28' / 46.00' S= 0.0052 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.73 cfs @ 12.10 hrs HW=46.80' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.73 cfs @ 2.56 fps)

**Pond 213P: DMH 2**

Hydrograph





**Summary for Pond 214P: DMH 4A**

Inflow Area = 4.558 ac, 68.27% Impervious, Inflow Depth > 0.05" for 2-Year event  
 Inflow = 0.29 cfs @ 12.09 hrs, Volume= 0.020 af  
 Outflow = 0.29 cfs @ 12.09 hrs, Volume= 0.020 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.29 cfs @ 12.09 hrs, Volume= 0.020 af  
 Routed to Pond 212P : Sub. Inf. 1A

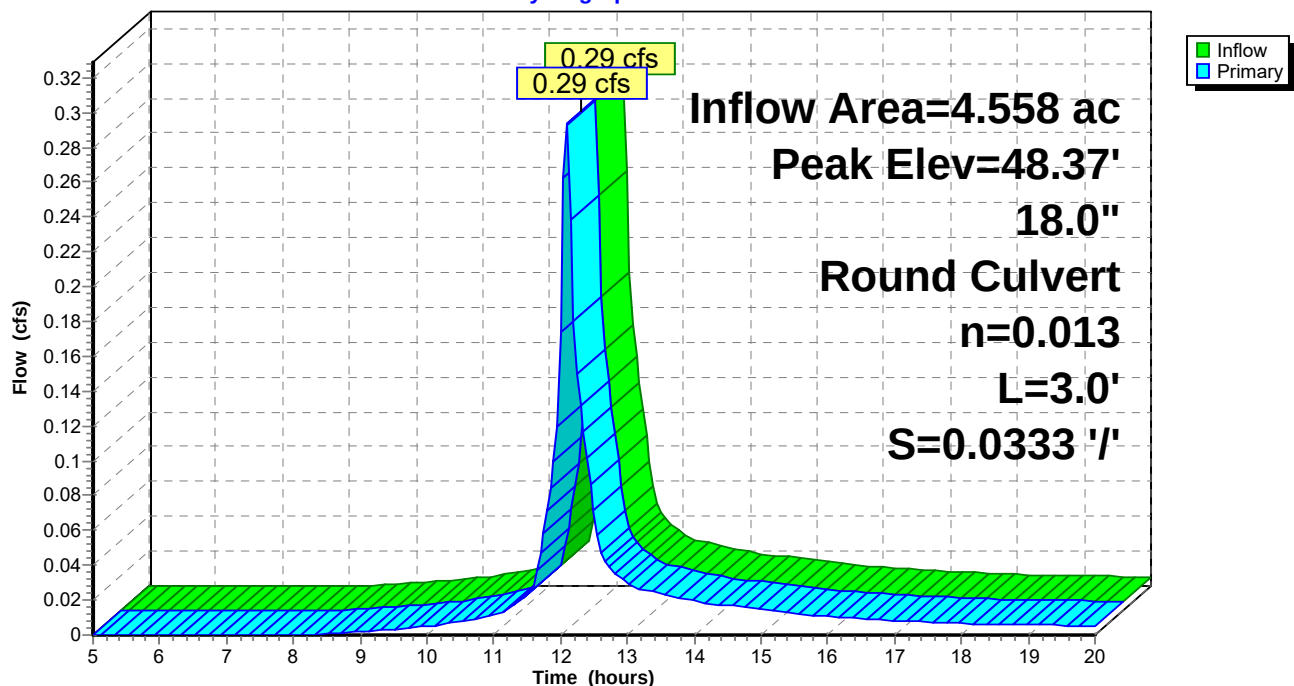
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 48.37' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                           |
|--------|---------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.10' | <b>18.0" Round Culvert</b><br>L= 3.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.10' / 48.00' S= 0.0333 ' S= 0.0333 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=0.29 cfs @ 12.09 hrs HW=48.36' (Free Discharge)  
 1=Culvert (Inlet Controls 0.29 cfs @ 1.38 fps)

**Pond 214P: DMH 4A**

Hydrograph



### Summary for Pond 215P: CB 5A

Inflow Area = 0.149 ac, 77.32% Impervious, Inflow Depth > 1.60" for 2-Year event  
 Inflow = 0.29 cfs @ 12.09 hrs, Volume= 0.020 af  
 Outflow = 0.29 cfs @ 12.09 hrs, Volume= 0.020 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.29 cfs @ 12.09 hrs, Volume= 0.020 af  
 Routed to Pond 214P : DMH 4A

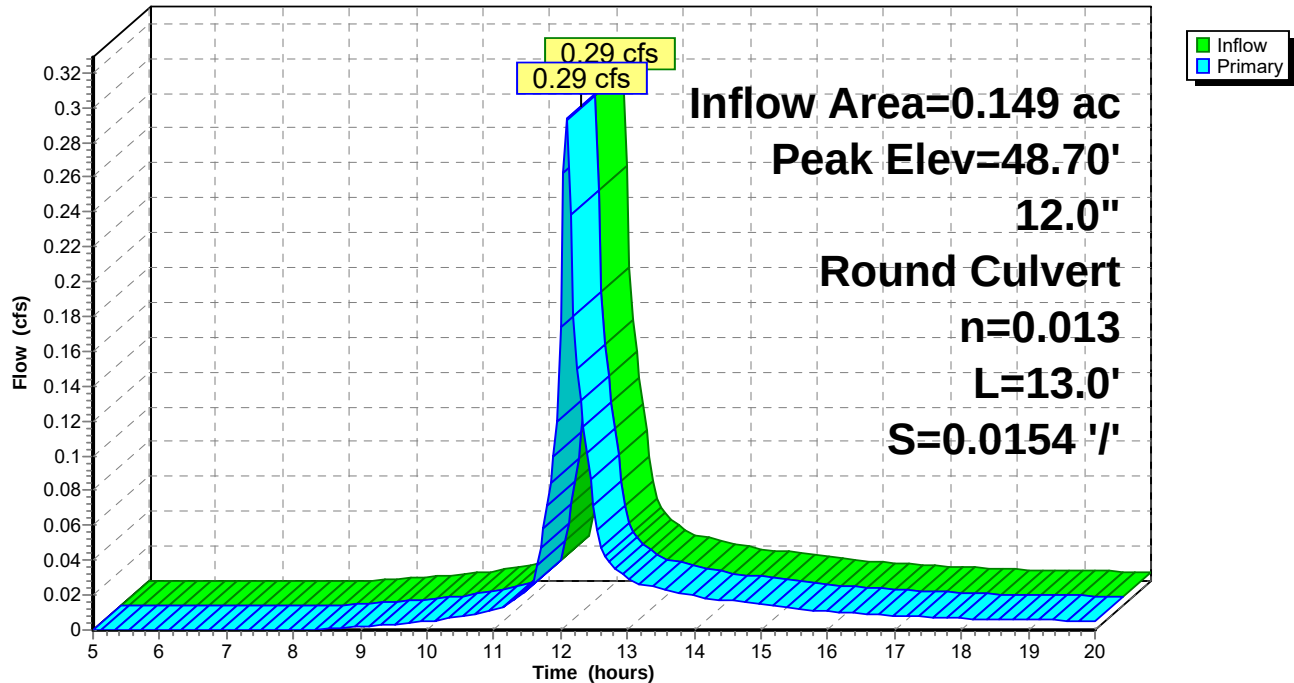
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 48.70' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.40' | <b>12.0" Round Culvert</b><br>L= 13.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.40' / 48.20' S= 0.0154 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.29 cfs @ 12.09 hrs HW=48.70' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.29 cfs @ 1.47 fps)

### Pond 215P: CB 5A

#### Hydrograph



**Summary for Pond 216P: CB 8A**

Inflow Area = 0.484 ac, 16.33% Impervious, Inflow Depth = 0.00" for 2-Year event  
 Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Pond 171P : DMH 6

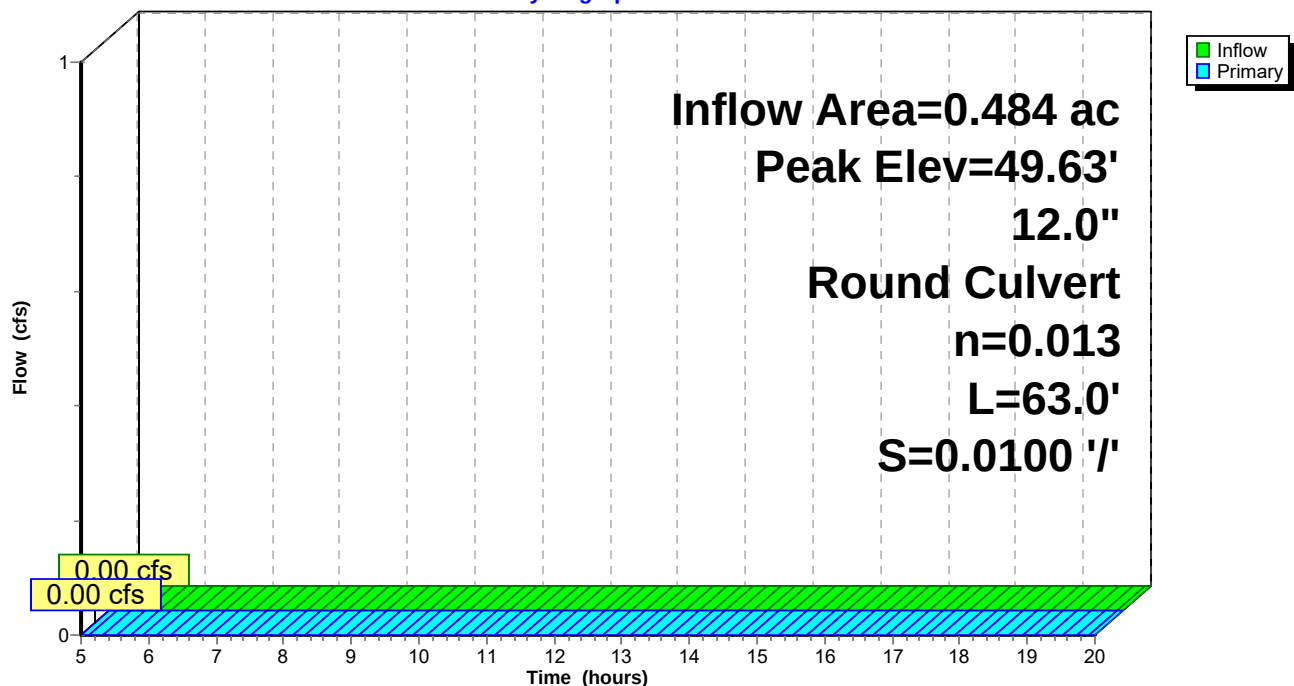
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 49.63' @ 5.00 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 49.63' | <b>12.0" Round Culvert</b><br>L= 63.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.63' / 49.00' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=49.63' (Free Discharge)

↑**1=Culvert** ( Controls 0.00 cfs)

**Pond 216P: CB 8A****Hydrograph**

**Summary for Pond 217P: DMH 8A**

Inflow Area = 4.409 ac, 67.96% Impervious, Inflow Depth > 0.39" for 2-Year event  
 Inflow = 2.09 cfs @ 12.10 hrs, Volume= 0.142 af  
 Outflow = 2.09 cfs @ 12.10 hrs, Volume= 0.142 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.09 cfs @ 12.10 hrs, Volume= 0.142 af  
 Routed to Pond 211P : Sub. Inf. 1B

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 51.41' @ 12.10 hrs

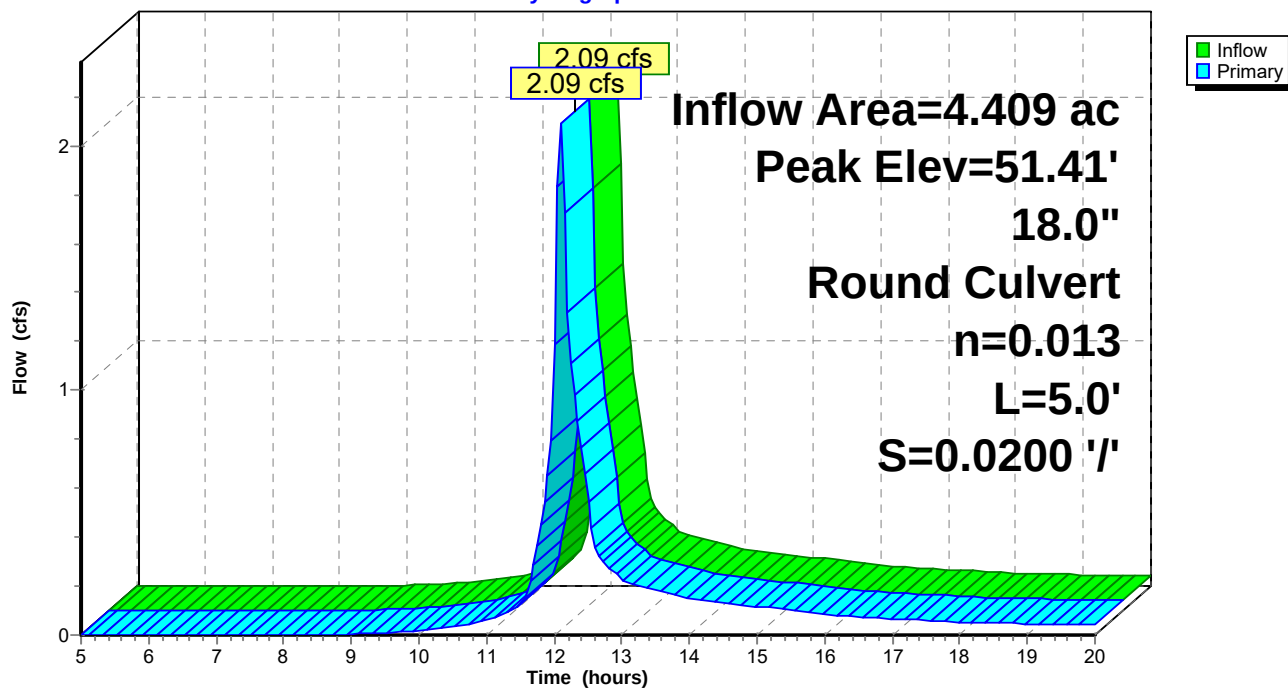
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.60' | <b>18.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.60' / 50.50' S= 0.0200 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.06 cfs @ 12.10 hrs HW=51.40' (Free Discharge)

1=Culvert (Barrel Controls 2.06 cfs @ 3.10 fps)

**Pond 217P: DMH 8A**

Hydrograph



### Summary for Pond 218P: CB A

Inflow Area = 0.214 ac, 64.54% Impervious, Inflow Depth > 1.08" for 2-Year event  
 Inflow = 0.28 cfs @ 12.10 hrs, Volume= 0.019 af  
 Outflow = 0.28 cfs @ 12.10 hrs, Volume= 0.019 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.28 cfs @ 12.10 hrs, Volume= 0.019 af  
 Routed to Pond 219P : DMH A

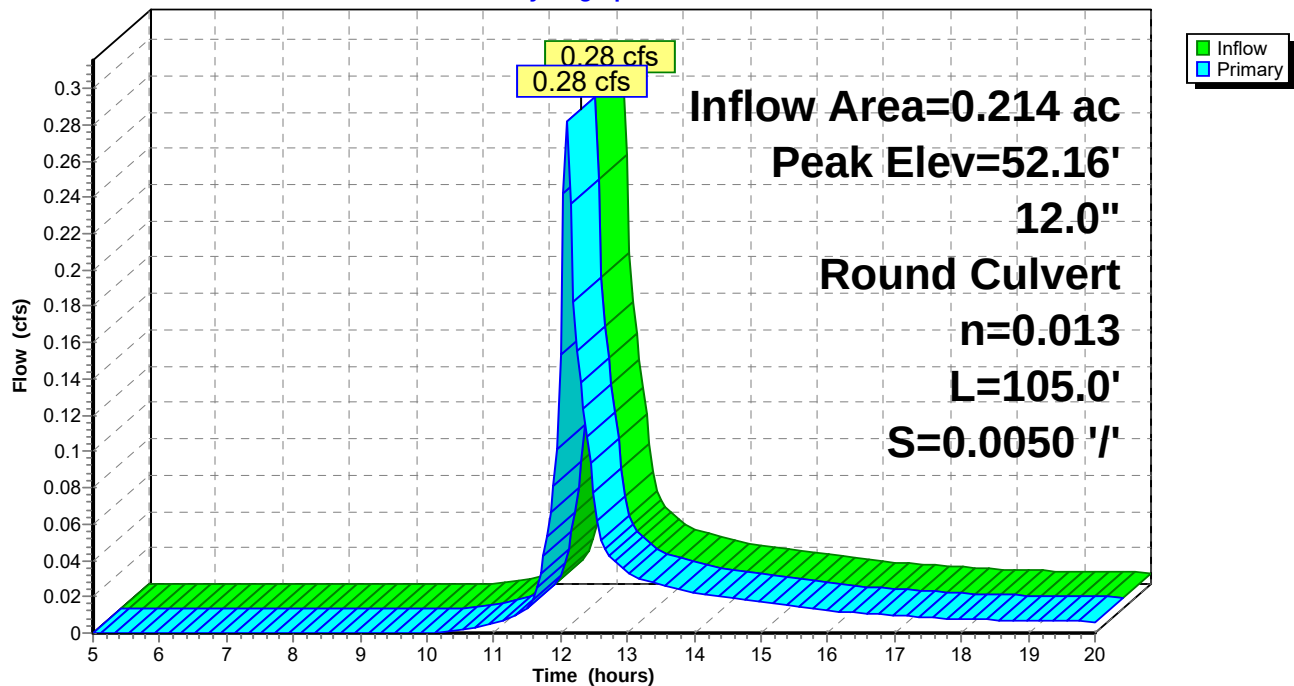
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.16' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.85' | <b>12.0" Round Culvert</b><br>L= 105.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.85' / 51.32' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.28 cfs @ 12.10 hrs HW=52.16' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.28 cfs @ 2.05 fps)

### Pond 218P: CB A

#### Hydrograph



### Summary for Pond 219P: DMH A

Inflow Area = 0.214 ac, 64.54% Impervious, Inflow Depth > 1.08" for 2-Year event  
 Inflow = 0.28 cfs @ 12.10 hrs, Volume= 0.019 af  
 Outflow = 0.28 cfs @ 12.10 hrs, Volume= 0.019 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.28 cfs @ 12.10 hrs, Volume= 0.019 af  
 Routed to Pond 220P : DMH B

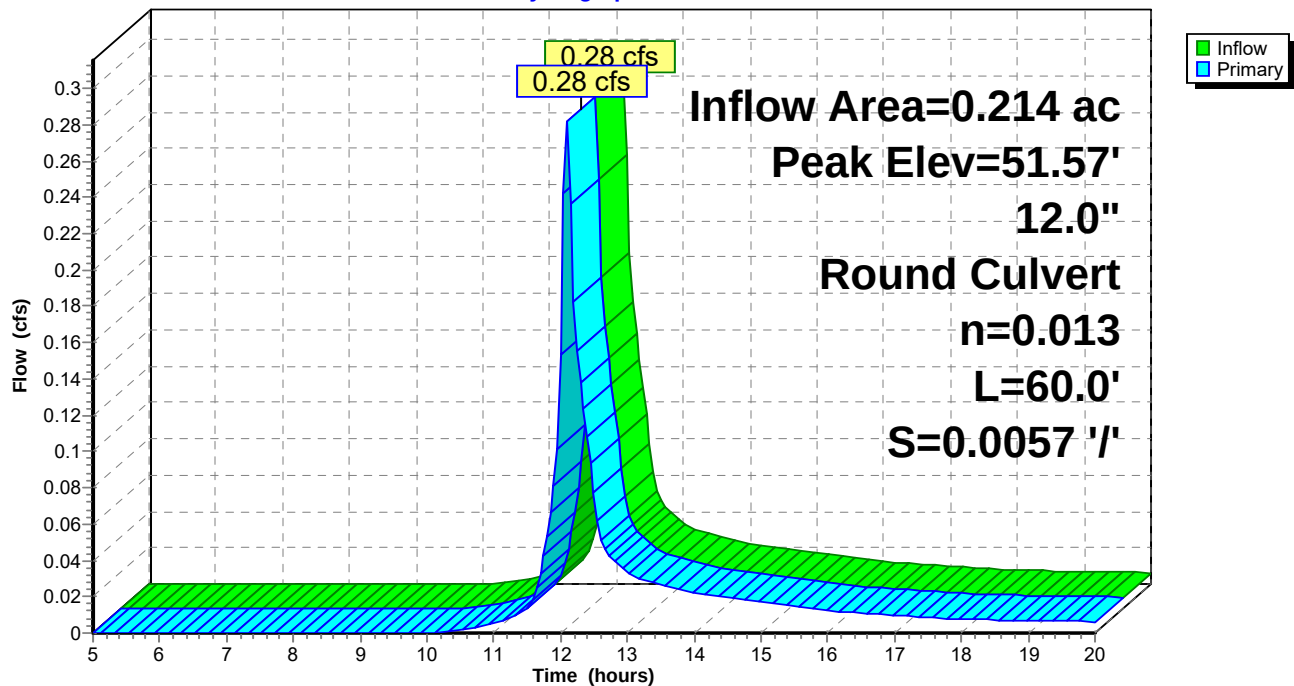
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.57' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.27' | <b>12.0" Round Culvert</b><br>L= 60.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.27' / 50.93' S= 0.0057 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.28 cfs @ 12.10 hrs HW=51.57' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.28 cfs @ 2.08 fps)

### Pond 219P: DMH A

Hydrograph



**Summary for Pond 220P: DMH B**

Inflow Area = 0.214 ac, 64.54% Impervious, Inflow Depth > 1.08" for 2-Year event  
 Inflow = 0.28 cfs @ 12.10 hrs, Volume= 0.019 af  
 Outflow = 0.28 cfs @ 12.10 hrs, Volume= 0.019 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.28 cfs @ 12.10 hrs, Volume= 0.019 af  
 Routed to Pond 192P : Sub. Inf. 8

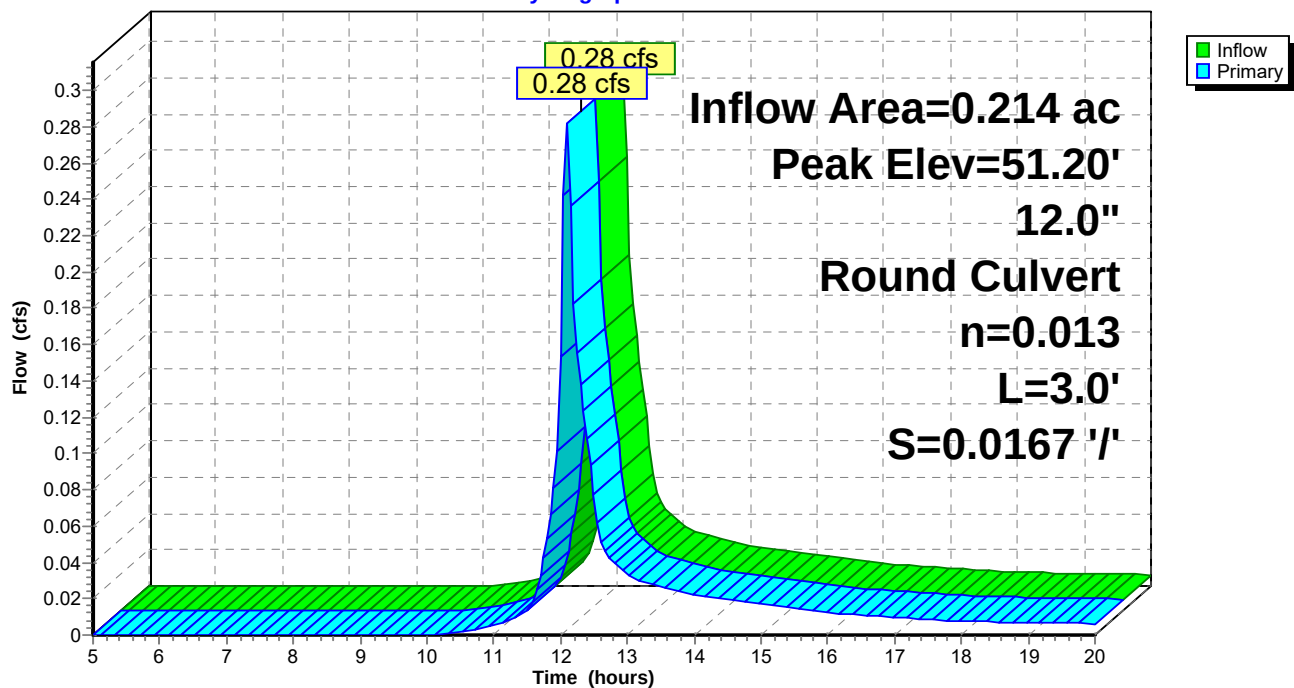
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.20' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.88' | <b>12.0" Round Culvert</b><br>L= 3.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.88' / 50.83' S= 0.0167 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.28 cfs @ 12.10 hrs HW=51.19' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.28 cfs @ 1.98 fps)

**Pond 220P: DMH B**

Hydrograph



### Summary for Pond 221P: Inf. Basin 6

Inflow Area = 1.935 ac, 78.08% Impervious, Inflow Depth > 2.23" for 2-Year event  
 Inflow = 5.08 cfs @ 12.09 hrs, Volume= 0.360 af  
 Outflow = 2.41 cfs @ 12.26 hrs, Volume= 0.325 af, Atten= 52%, Lag= 10.5 min  
 Discarded = 0.15 cfs @ 12.26 hrs, Volume= 0.099 af  
 Primary = 2.26 cfs @ 12.26 hrs, Volume= 0.226 af  
 Routed to Pond 195P : Constructed Wetland 4

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 57.51' @ 12.26 hrs Surf.Area= 3,989 sf Storage= 5,086 cf

Plug-Flow detention time= 71.3 min calculated for 0.324 af (90% of inflow)  
 Center-of-Mass det. time= 39.3 min ( 802.9 - 763.6 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 56.00' | 17,627 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 56.00               | 2,718                | 0                         | 0                         |
| 57.00               | 3,594                | 3,156                     | 3,156                     |
| 58.00               | 4,371                | 3,983                     | 7,139                     |
| 59.00               | 5,223                | 4,797                     | 11,936                    |
| 60.00               | 6,159                | 5,691                     | 17,627                    |

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 56.00' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 54.00'                                                                                                             |
| #2     | Primary   | 56.00' | <b>12.0" Round Culvert</b><br>L= 35.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 56.00' / 53.00' S= 0.0857 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 56.50' | <b>6.0" Vert. Orifice/Grate X 2.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                            |
| #4     | Device 2  | 57.30' | <b>24.0" W x 24.0" H Vert. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                      |

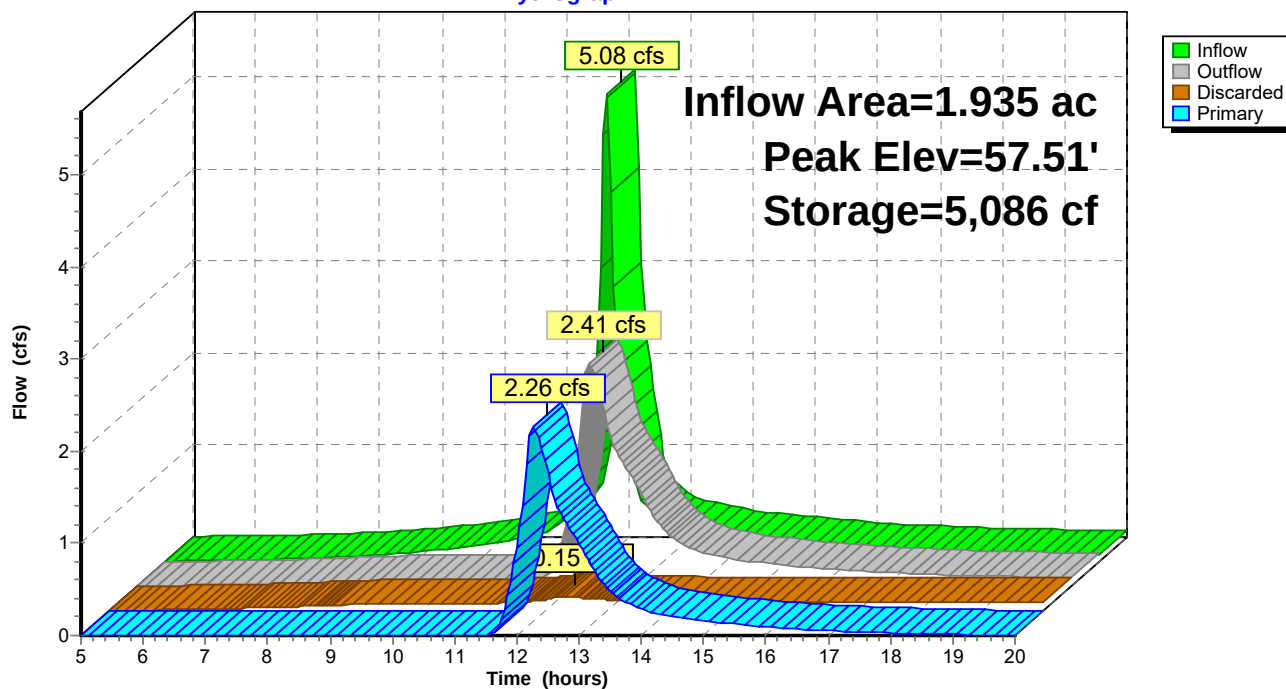
**Discarded OutFlow** Max=0.15 cfs @ 12.26 hrs HW=57.51' (Free Discharge)  
 ↳ **1=Exfiltration** ( Controls 0.15 cfs)

**Primary OutFlow** Max=2.25 cfs @ 12.26 hrs HW=57.51' (Free Discharge)  
 ↳ **2=Culvert** (Passes 2.25 cfs of 3.00 cfs potential flow)  
 ↳ ↳ **3=Orifice/Grate** (Orifice Controls 1.65 cfs @ 4.19 fps)  
 ↳ ↳ **4=Orifice/Grate** (Orifice Controls 0.60 cfs @ 1.46 fps)



# Pond 221P: Inf. Basin 6

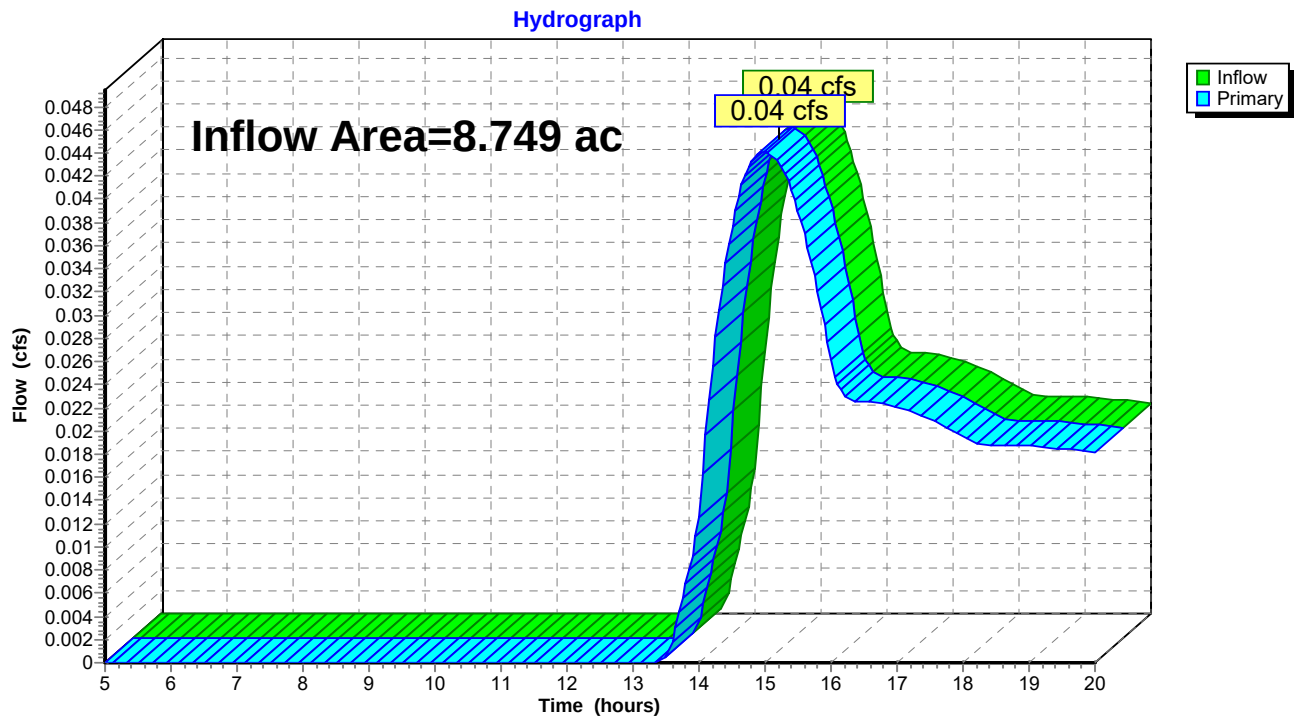
Hydrograph



**Summary for Link 59L: DP 1**

Inflow Area = 8.749 ac, 31.63% Impervious, Inflow Depth > 0.02" for 2-Year event  
Inflow = 0.04 cfs @ 14.99 hrs, Volume= 0.013 af  
Primary = 0.04 cfs @ 14.99 hrs, Volume= 0.013 af, Atten= 0%, Lag= 0.0 min

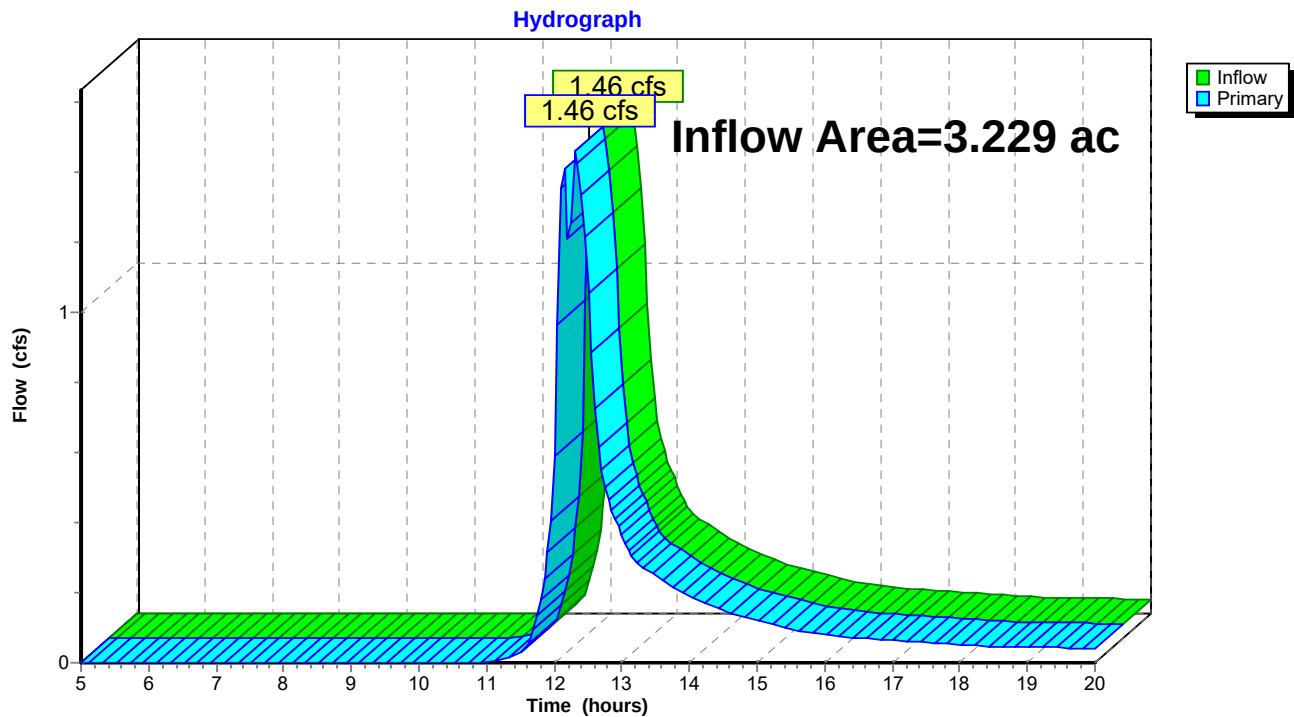
Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Link 59L: DP 1**

**Summary for Link 60L: DP 2**

Inflow Area = 3.229 ac, 32.60% Impervious, Inflow Depth > 0.53" for 2-Year event  
Inflow = 1.46 cfs @ 12.32 hrs, Volume= 0.143 af  
Primary = 1.46 cfs @ 12.32 hrs, Volume= 0.143 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Link 60L: DP 2**

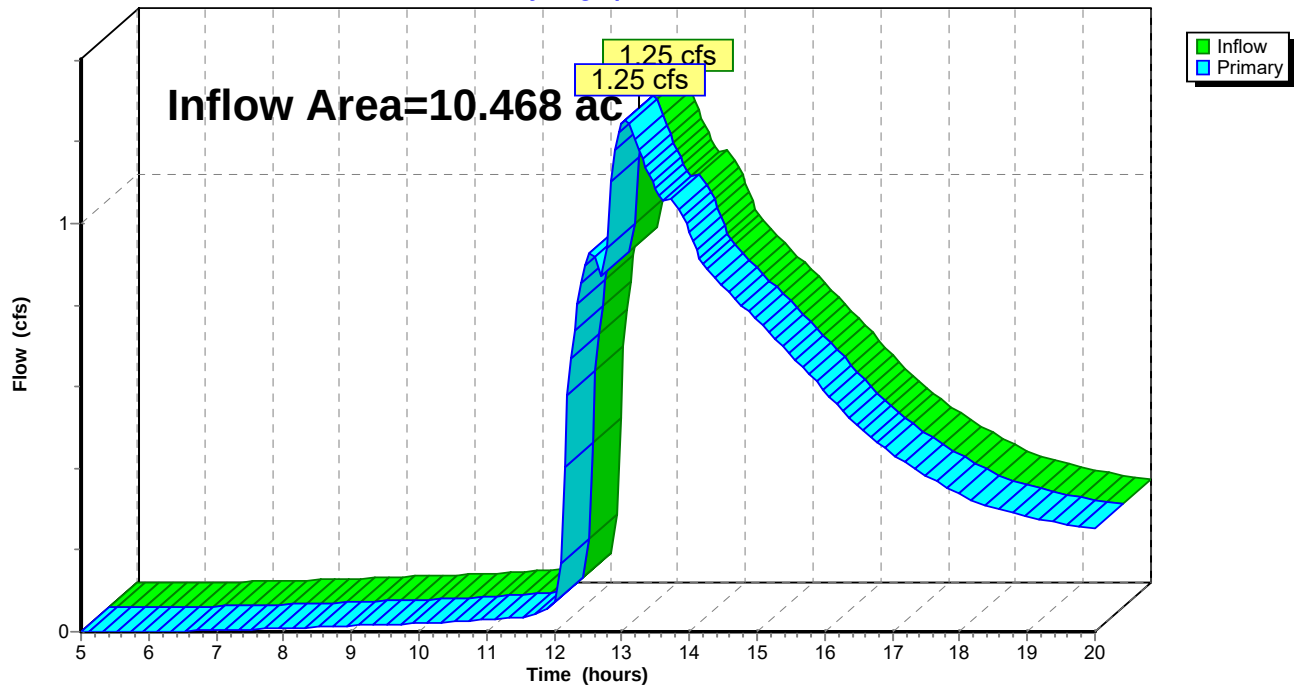
**Summary for Link 188L: DP 3**

Inflow Area = 10.468 ac, 46.25% Impervious, Inflow Depth > 0.47" for 2-Year event  
Inflow = 1.25 cfs @ 13.05 hrs, Volume= 0.414 af  
Primary = 1.25 cfs @ 13.05 hrs, Volume= 0.414 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Link 188L: DP 3**

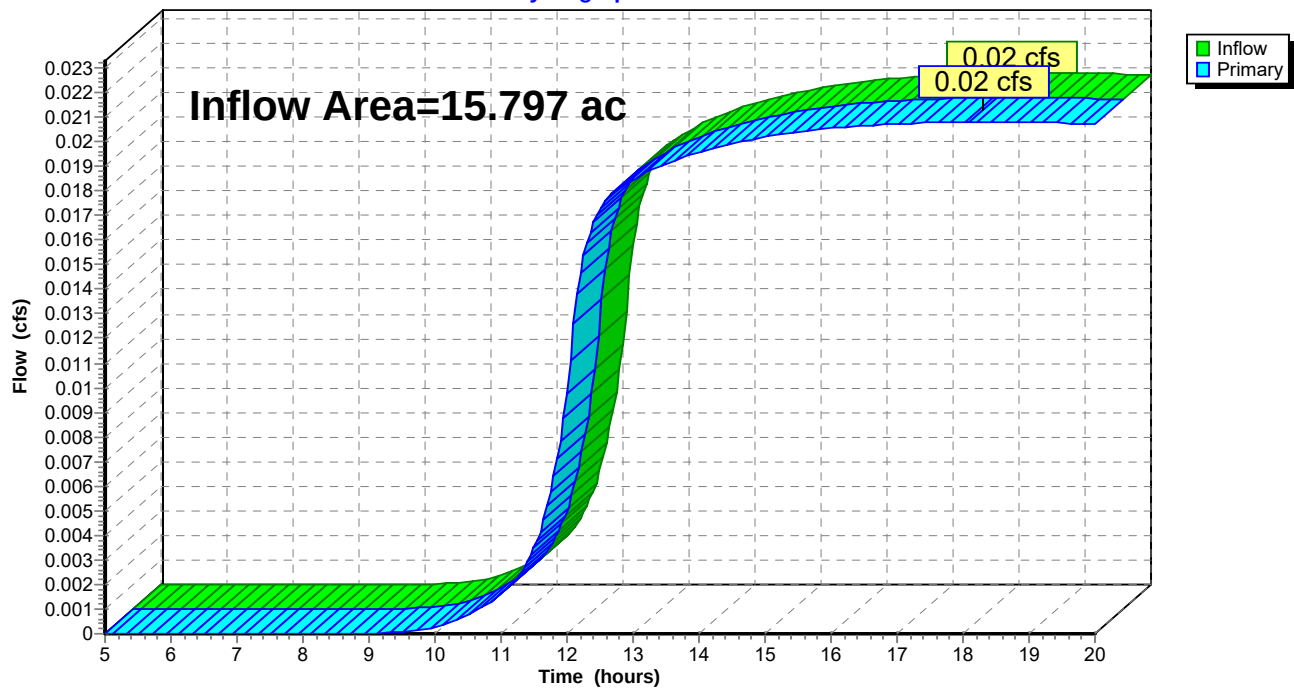
Hydrograph



**Summary for Link 203L: 3A**

Inflow Area = 15.797 ac, 47.23% Impervious, Inflow Depth > 0.01" for 2-Year event  
Inflow = 0.02 cfs @ 18.10 hrs, Volume= 0.014 af  
Primary = 0.02 cfs @ 18.10 hrs, Volume= 0.014 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Link 203L: 3A****Hydrograph**

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
 Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

|                             |                                                                                                                    |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Subcatchment1S: P1A</b>  | Runoff Area=7,501 sf 96.61% Impervious Runoff Depth>4.19"<br>Tc=6.0 min CN=97 Runoff=0.79 cfs 0.060 af             |
| <b>Subcatchment2S: P1B</b>  | Runoff Area=16,584 sf 74.19% Impervious Runoff Depth>3.71"<br>Tc=6.0 min CN=92 Runoff=1.63 cfs 0.118 af            |
| <b>Subcatchment3S: P1C</b>  | Runoff Area=6,087 sf 64.30% Impervious Runoff Depth>3.41"<br>Tc=6.0 min CN=89 Runoff=0.56 cfs 0.040 af             |
| <b>Subcatchment4S: P1D</b>  | Runoff Area=2,767 sf 81.50% Impervious Runoff Depth>3.91"<br>Tc=6.0 min CN=94 Runoff=0.28 cfs 0.021 af             |
| <b>Subcatchment5S: P1E</b>  | Runoff Area=11,538 sf 66.20% Impervious Runoff Depth>3.51"<br>Tc=6.0 min CN=90 Runoff=1.09 cfs 0.077 af            |
| <b>Subcatchment6S: P1F</b>  | Runoff Area=4,817 sf 71.39% Impervious Runoff Depth>3.61"<br>Tc=6.0 min CN=91 Runoff=0.46 cfs 0.033 af             |
| <b>Subcatchment7S: P1G</b>  | Runoff Area=5,511 sf 100.00% Impervious Runoff Depth>4.26"<br>Tc=6.0 min CN=98 Runoff=0.58 cfs 0.045 af            |
| <b>Subcatchment8S: P1H</b>  | Runoff Area=13,713 sf 81.38% Impervious Runoff Depth>3.91"<br>Tc=6.0 min CN=94 Runoff=1.39 cfs 0.102 af            |
| <b>Subcatchment9S: P1I</b>  | Runoff Area=3,616 sf 78.43% Impervious Runoff Depth>3.81"<br>Tc=6.0 min CN=93 Runoff=0.36 cfs 0.026 af             |
| <b>Subcatchment10S: P1J</b> | Runoff Area=1,937 sf 100.00% Impervious Runoff Depth>4.26"<br>Tc=6.0 min CN=98 Runoff=0.21 cfs 0.016 af            |
| <b>Subcatchment11S: P1K</b> | Runoff Area=1,936 sf 96.85% Impervious Runoff Depth>4.19"<br>Tc=6.0 min CN=97 Runoff=0.20 cfs 0.016 af             |
| <b>Subcatchment12S: P1L</b> | Runoff Area=9,821 sf 78.85% Impervious Runoff Depth>3.81"<br>Tc=6.0 min CN=93 Runoff=0.98 cfs 0.072 af             |
| <b>Subcatchment13S: P1M</b> | Runoff Area=8,699 sf 94.53% Impervious Runoff Depth>4.19"<br>Tc=6.0 min CN=97 Runoff=0.91 cfs 0.070 af             |
| <b>Subcatchment14S: P1N</b> | Runoff Area=14,865 sf 3.94% Impervious Runoff Depth>2.06"<br>Tc=6.0 min UI Adjusted CN=74 Runoff=0.87 cfs 0.059 af |
| <b>Subcatchment39S: P1P</b> | Runoff Area=7,939 sf 66.96% Impervious Runoff Depth>3.51"<br>Tc=6.0 min CN=90 Runoff=0.75 cfs 0.053 af             |
| <b>Subcatchment40S: P1O</b> | Runoff Area=978 sf 100.00% Impervious Runoff Depth>4.26"<br>Tc=6.0 min CN=98 Runoff=0.10 cfs 0.008 af              |

**RH Post 1-2-26**

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|                                      |                                                                                                                                       |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Subcatchment44S: P1R</b>          | Runoff Area=15,334 sf 70.58% Impervious Runoff Depth>2.83"<br>Tc=6.0 min CN=83 Runoff=1.22 cfs 0.083 af                               |
| <b>Subcatchment45S: P1Q</b>          | Runoff Area=5,247 sf 97.54% Impervious Runoff Depth>4.19"<br>Tc=6.0 min CN=97 Runoff=0.55 cfs 0.042 af                                |
| <b>Subcatchment50S: P1S</b>          | Runoff Area=22,872 sf 65.45% Impervious Runoff Depth>2.39"<br>Tc=6.0 min CN=78 Runoff=1.55 cfs 0.105 af                               |
| <b>Subcatchment51S: P1T</b>          | Runoff Area=13,963 sf 29.26% Impervious Runoff Depth>0.85"<br>Tc=6.0 min CN=56 Runoff=0.29 cfs 0.023 af                               |
| <b>Subcatchment57S: (new Subcat)</b> | Runoff Area=23,511 sf 5.60% Impervious Runoff Depth>0.13"<br>Flow Length=87' Tc=13.0 min UI Adjusted CN=39 Runoff=0.01 cfs 0.006 af   |
| <b>Subcatchment58S: P1AA</b>         | Runoff Area=217,595 sf 2.56% Impervious Runoff Depth>0.33"<br>Flow Length=111' Tc=11.7 min UI Adjusted CN=45 Runoff=0.78 cfs 0.136 af |
| <b>Subcatchment60S: P2C</b>          | Runoff Area=6,486 sf 73.97% Impervious Runoff Depth>3.71"<br>Tc=6.0 min CN=92 Runoff=0.64 cfs 0.046 af                                |
| <b>Subcatchment61S: P2D</b>          | Runoff Area=1,464 sf 87.02% Impervious Runoff Depth>4.00"<br>Tc=6.0 min CN=95 Runoff=0.15 cfs 0.011 af                                |
| <b>Subcatchment62S: P2J</b>          | Runoff Area=10,675 sf 72.86% Impervious Runoff Depth>3.61"<br>Tc=6.0 min CN=91 Runoff=1.03 cfs 0.074 af                               |
| <b>Subcatchment63S: P2K</b>          | Runoff Area=6,698 sf 76.98% Impervious Runoff Depth>3.71"<br>Tc=6.0 min CN=92 Runoff=0.66 cfs 0.048 af                                |
| <b>Subcatchment64S: P3L</b>          | Runoff Area=2,885 sf 66.55% Impervious Runoff Depth>3.51"<br>Tc=6.0 min CN=90 Runoff=0.27 cfs 0.019 af                                |
| <b>Subcatchment65S: P3M</b>          | Runoff Area=5,397 sf 69.69% Impervious Runoff Depth>3.61"<br>Tc=6.0 min CN=91 Runoff=0.52 cfs 0.037 af                                |
| <b>Subcatchment66S: P3N</b>          | Runoff Area=7,748 sf 72.79% Impervious Runoff Depth>3.61"<br>Tc=6.0 min CN=91 Runoff=0.75 cfs 0.053 af                                |
| <b>Subcatchment67S: P3O</b>          | Runoff Area=8,254 sf 78.29% Impervious Runoff Depth>3.81"<br>Tc=6.0 min CN=93 Runoff=0.82 cfs 0.060 af                                |
| <b>Subcatchment68S: P3P</b>          | Runoff Area=4,070 sf 80.29% Impervious Runoff Depth>3.81"<br>Tc=6.0 min CN=93 Runoff=0.41 cfs 0.030 af                                |
| <b>Subcatchment69S: P2E</b>          | Runoff Area=7,088 sf 82.69% Impervious Runoff Depth>3.91"<br>Tc=6.0 min CN=94 Runoff=0.72 cfs 0.053 af                                |
| <b>Subcatchment70S: P2F</b>          | Runoff Area=3,932 sf 100.00% Impervious Runoff Depth>4.26"<br>Tc=6.0 min CN=98 Runoff=0.42 cfs 0.032 af                               |
| <b>Subcatchment71S: P2A</b>          | Runoff Area=10,978 sf 65.83% Impervious Runoff Depth>3.51"<br>Tc=6.0 min CN=90 Runoff=1.04 cfs 0.074 af                               |

|                                      |                                                                                                                                     |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>Subcatchment72S: P2B</b>          | Runoff Area=7,563 sf 65.05% Impervious Runoff Depth>3.51"<br>Tc=6.0 min CN=90 Runoff=0.71 cfs 0.051 af                              |
| <b>Subcatchment73S: P2G</b>          | Runoff Area=8,223 sf 71.07% Impervious Runoff Depth>3.61"<br>Tc=6.0 min CN=91 Runoff=0.79 cfs 0.057 af                              |
| <b>Subcatchment74S: P2H</b>          | Runoff Area=4,268 sf 95.31% Impervious Runoff Depth>4.00"<br>Tc=6.0 min CN=95 Runoff=0.44 cfs 0.033 af                              |
| <b>Subcatchment75S: P3Q</b>          | Runoff Area=10,219 sf 64.37% Impervious Runoff Depth>3.41"<br>Tc=6.0 min CN=89 Runoff=0.94 cfs 0.067 af                             |
| <b>Subcatchment76S: P3R</b>          | Runoff Area=13,649 sf 76.83% Impervious Runoff Depth>3.71"<br>Tc=6.0 min CN=92 Runoff=1.34 cfs 0.097 af                             |
| <b>Subcatchment77S: P3S</b>          | Runoff Area=7,757 sf 69.60% Impervious Runoff Depth>3.61"<br>Tc=6.0 min CN=91 Runoff=0.75 cfs 0.054 af                              |
| <b>Subcatchment78S: P1S</b>          | Runoff Area=12,630 sf 58.56% Impervious Runoff Depth>3.11"<br>Tc=6.0 min CN=86 Runoff=1.09 cfs 0.075 af                             |
| <b>Subcatchment79S: P1T</b>          | Runoff Area=11,982 sf 72.42% Impervious Runoff Depth>3.61"<br>Tc=6.0 min CN=91 Runoff=1.15 cfs 0.083 af                             |
| <b>Subcatchment80S: P3KK</b>         | Runoff Area=8,557 sf 76.76% Impervious Runoff Depth>2.92"<br>Tc=6.0 min CN=84 Runoff=0.70 cfs 0.048 af                              |
| <b>Subcatchment81S: P3LL</b>         | Runoff Area=9,785 sf 79.18% Impervious Runoff Depth>3.11"<br>Tc=6.0 min CN=86 Runoff=0.84 cfs 0.058 af                              |
| <b>Subcatchment82S: P3SS</b>         | Runoff Area=12,880 sf 67.55% Impervious Runoff Depth>2.48"<br>Tc=6.0 min CN=79 Runoff=0.90 cfs 0.061 af                             |
| <b>Subcatchment83S: P2I</b>          | Runoff Area=13,847 sf 51.48% Impervious Runoff Depth>2.48"<br>Tc=6.0 min CN=79 Runoff=0.97 cfs 0.066 af                             |
| <b>Subcatchment84S: P2AA</b>         | Runoff Area=71,125 sf 7.37% Impervious Runoff Depth>1.91"<br>Flow Length=201' Tc=8.4 min UI Adjusted CN=72 Runoff=3.54 cfs 0.259 af |
| <b>Subcatchment85S: (new Subcat)</b> | Runoff Area=25,650 sf 36.87% Impervious Runoff Depth>2.83"<br>Tc=6.0 min CN=83 Runoff=2.03 cfs 0.139 af                             |
| <b>Subcatchment86S: P3TT</b>         | Runoff Area=13,926 sf 63.97% Impervious Runoff Depth>2.39"<br>Tc=6.0 min CN=78 Runoff=0.94 cfs 0.064 af                             |
| <b>Subcatchment87S: P3A</b>          | Runoff Area=2,273 sf 80.20% Impervious Runoff Depth>3.81"<br>Tc=6.0 min CN=93 Runoff=0.23 cfs 0.017 af                              |
| <b>Subcatchment88S: P3B</b>          | Runoff Area=4,538 sf 76.91% Impervious Runoff Depth>3.71"<br>Tc=6.0 min CN=92 Runoff=0.45 cfs 0.032 af                              |



**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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|                               |                                                                                                         |
|-------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Subcatchment89S: P3AAA</b> | Runoff Area=6,945 sf 74.64% Impervious Runoff Depth>2.83"<br>Tc=6.0 min CN=83 Runoff=0.55 cfs 0.038 af  |
| <b>Subcatchment90S: P3BBB</b> | Runoff Area=9,141 sf 67.61% Impervious Runoff Depth>2.48"<br>Tc=6.0 min CN=79 Runoff=0.64 cfs 0.043 af  |
| <b>Subcatchment91S: P3GGG</b> | Runoff Area=9,122 sf 66.66% Impervious Runoff Depth>2.39"<br>Tc=6.0 min CN=78 Runoff=0.62 cfs 0.042 af  |
| <b>Subcatchment92S: P3C</b>   | Runoff Area=6,128 sf 70.69% Impervious Runoff Depth>3.61"<br>Tc=6.0 min CN=91 Runoff=0.59 cfs 0.042 af  |
| <b>Subcatchment93S: P3D</b>   | Runoff Area=8,893 sf 71.21% Impervious Runoff Depth>3.61"<br>Tc=6.0 min CN=91 Runoff=0.86 cfs 0.061 af  |
| <b>Subcatchment94S: P3HHH</b> | Runoff Area=9,026 sf 76.76% Impervious Runoff Depth>2.92"<br>Tc=6.0 min CN=84 Runoff=0.74 cfs 0.050 af  |
| <b>Subcatchment95S: P2X</b>   | Runoff Area=6,460 sf 100.00% Impervious Runoff Depth>4.26"<br>Tc=6.0 min CN=98 Runoff=0.68 cfs 0.053 af |
| <b>Subcatchment97S: P3G</b>   | Runoff Area=16,665 sf 73.17% Impervious Runoff Depth>3.71"<br>Tc=6.0 min CN=92 Runoff=1.64 cfs 0.118 af |
| <b>Subcatchment98S: P3H</b>   | Runoff Area=11,218 sf 68.08% Impervious Runoff Depth>3.51"<br>Tc=6.0 min CN=90 Runoff=1.06 cfs 0.075 af |
| <b>Subcatchment102S: P3J</b>  | Runoff Area=14,925 sf 64.21% Impervious Runoff Depth>3.41"<br>Tc=6.0 min CN=89 Runoff=1.38 cfs 0.097 af |
| <b>Subcatchment103S: P3I</b>  | Runoff Area=21,963 sf 74.80% Impervious Runoff Depth>3.71"<br>Tc=6.0 min CN=92 Runoff=2.16 cfs 0.156 af |
| <b>Subcatchment107S: P3E</b>  | Runoff Area=17,242 sf 64.26% Impervious Runoff Depth>3.41"<br>Tc=6.0 min CN=89 Runoff=1.59 cfs 0.112 af |
| <b>Subcatchment108S: P3F</b>  | Runoff Area=19,891 sf 64.44% Impervious Runoff Depth>3.41"<br>Tc=6.0 min CN=89 Runoff=1.84 cfs 0.130 af |
| <b>Subcatchment109S: P3T</b>  | Runoff Area=11,178 sf 83.40% Impervious Runoff Depth>3.91"<br>Tc=6.0 min CN=94 Runoff=1.13 cfs 0.084 af |
| <b>Subcatchment110S: P3U</b>  | Runoff Area=14,474 sf 76.35% Impervious Runoff Depth>3.71"<br>Tc=6.0 min CN=92 Runoff=1.42 cfs 0.103 af |
| <b>Subcatchment111S: P3V</b>  | Runoff Area=14,345 sf 82.49% Impervious Runoff Depth>3.91"<br>Tc=6.0 min CN=94 Runoff=1.46 cfs 0.107 af |
| <b>Subcatchment112S: P3W</b>  | Runoff Area=8,601 sf 91.64% Impervious Runoff Depth>4.10"<br>Tc=6.0 min CN=96 Runoff=0.90 cfs 0.067 af  |
| <b>Subcatchment125S: P3EE</b> | Runoff Area=23,054 sf 81.18% Impervious Runoff Depth>3.21"<br>Tc=6.0 min CN=87 Runoff=2.03 cfs 0.142 af |

|                                                                   |                                                                                                                    |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Subcatchment126S: P3FF</b>                                     | Runoff Area=17,312 sf 70.10% Impervious Runoff Depth>2.56"<br>Tc=6.0 min CN=80 Runoff=1.25 cfs 0.085 af            |
| <b>Subcatchment127S: P3GG</b>                                     | Runoff Area=16,395 sf 53.54% Impervious Runoff Depth>1.83"<br>Tc=6.0 min CN=71 Runoff=0.85 cfs 0.057 af            |
| <b>Subcatchment128S: P3HH</b>                                     | Runoff Area=15,226 sf 63.87% Impervious Runoff Depth>2.31"<br>Tc=6.0 min CN=77 Runoff=1.00 cfs 0.067 af            |
| <b>Subcatchment129S: P3MM</b>                                     | Runoff Area=7,841 sf 66.23% Impervious Runoff Depth>2.39"<br>Tc=6.0 min CN=78 Runoff=0.53 cfs 0.036 af             |
| <b>Subcatchment130S: P3NN</b>                                     | Runoff Area=6,295 sf 72.58% Impervious Runoff Depth>2.74"<br>Tc=6.0 min CN=82 Runoff=0.48 cfs 0.033 af             |
| <b>Subcatchment136S: P3II</b>                                     | Runoff Area=10,900 sf 80.29% Impervious Runoff Depth>3.11"<br>Tc=6.0 min CN=86 Runoff=0.94 cfs 0.065 af            |
| <b>Subcatchment138S: P3JJ</b><br>Flow Length=50' Slope=0.0100 '/' | Runoff Area=14,214 sf 6.96% Impervious Runoff Depth>0.19"<br>Tc=7.5 min UI Adjusted CN=41 Runoff=0.02 cfs 0.005 af |
| <b>Subcatchment140S: P3OO</b>                                     | Runoff Area=17,829 sf 65.98% Impervious Runoff Depth>2.39"<br>Tc=6.0 min CN=78 Runoff=1.21 cfs 0.082 af            |
| <b>Subcatchment141S: P3PP</b>                                     | Runoff Area=25,131 sf 66.17% Impervious Runoff Depth>2.39"<br>Tc=6.0 min CN=78 Runoff=1.70 cfs 0.115 af            |
| <b>Subcatchment142S: P3UU</b>                                     | Runoff Area=3,331 sf 72.53% Impervious Runoff Depth>2.74"<br>Tc=6.0 min CN=82 Runoff=0.26 cfs 0.017 af             |
| <b>Subcatchment143S: P3VV</b>                                     | Runoff Area=3,461 sf 73.82% Impervious Runoff Depth>2.83"<br>Tc=6.0 min CN=83 Runoff=0.27 cfs 0.019 af             |
| <b>Subcatchment147S: P3QQ</b>                                     | Runoff Area=8,544 sf 80.21% Impervious Runoff Depth>3.11"<br>Tc=6.0 min CN=86 Runoff=0.74 cfs 0.051 af             |
| <b>Subcatchment149S: P3RR</b><br>Flow Length=50' Slope=0.0100 '/' | Runoff Area=7,953 sf 10.10% Impervious Runoff Depth>0.22"<br>Tc=7.5 min UI Adjusted CN=42 Runoff=0.01 cfs 0.003 af |
| <b>Subcatchment151S: P3ZZ</b>                                     | Runoff Area=6,359 sf 79.60% Impervious Runoff Depth>3.11"<br>Tc=6.0 min CN=86 Runoff=0.55 cfs 0.038 af             |
| <b>Subcatchment152S: P3YY</b>                                     | Runoff Area=5,089 sf 70.43% Impervious Runoff Depth>2.65"<br>Tc=6.0 min CN=81 Runoff=0.38 cfs 0.026 af             |
| <b>Subcatchment153S: P3WW</b>                                     | Runoff Area=9,574 sf 74.64% Impervious Runoff Depth>2.83"<br>Tc=6.0 min CN=83 Runoff=0.76 cfs 0.052 af             |
| <b>Subcatchment154S: P3XX</b>                                     | Runoff Area=4,702 sf 90.07% Impervious Runoff Depth>3.71"<br>Tc=6.0 min CN=92 Runoff=0.46 cfs 0.033 af             |

**RH Post 1-2-26**

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|                                       |                                                                                                                                       |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Subcatchment155S: P3CCC</b>        | Runoff Area=13,537 sf 63.37% Impervious Runoff Depth>2.22"<br>Tc=6.0 min CN=76 Runoff=0.85 cfs 0.058 af                               |
| <b>Subcatchment156S: P3DDD</b>        | Runoff Area=17,001 sf 63.16% Impervious Runoff Depth>2.22"<br>Tc=6.0 min CN=76 Runoff=1.07 cfs 0.072 af                               |
| <b>Subcatchment165S: P3FFF</b>        | Runoff Area=10,066 sf 30.05% Impervious Runoff Depth>0.91"<br>Tc=6.0 min CN=57 Runoff=0.22 cfs 0.017 af                               |
| <b>Subcatchment166S: P3EEE</b>        | Runoff Area=9,100 sf 65.78% Impervious Runoff Depth>2.39"<br>Tc=6.0 min CN=78 Runoff=0.62 cfs 0.042 af                                |
| <b>Subcatchment170S: P3JJJ</b>        | Runoff Area=13,803 sf 75.85% Impervious Runoff Depth>2.92"<br>Tc=6.0 min CN=84 Runoff=1.13 cfs 0.077 af                               |
| <b>Subcatchment171S: P3III</b>        | Runoff Area=5,653 sf 71.18% Impervious Runoff Depth>2.65"<br>Tc=6.0 min CN=81 Runoff=0.42 cfs 0.029 af                                |
| <b>Subcatchment175S: P3KKK</b>        | Runoff Area=13,904 sf 64.43% Impervious Runoff Depth>2.31"<br>Tc=6.0 min CN=77 Runoff=0.91 cfs 0.061 af                               |
| <b>Subcatchment176S: P3LLL</b>        | Runoff Area=6,640 sf 60.77% Impervious Runoff Depth>2.14"<br>Tc=6.0 min CN=75 Runoff=0.40 cfs 0.027 af                                |
| <b>Subcatchment182S: P3MMM</b>        | Runoff Area=5,111 sf 57.03% Impervious Runoff Depth>1.99"<br>Tc=6.0 min CN=73 Runoff=0.29 cfs 0.019 af                                |
| <b>Subcatchment183S: P3NNN</b>        | Runoff Area=9,871 sf 61.54% Impervious Runoff Depth>2.14"<br>Tc=6.0 min CN=75 Runoff=0.60 cfs 0.040 af                                |
| <b>Subcatchment184S: P3OOO</b>        | Runoff Area=8,647 sf 57.72% Impervious Runoff Depth>1.99"<br>Tc=6.0 min CN=73 Runoff=0.49 cfs 0.033 af                                |
| <b>Subcatchment185S: P3PPP</b>        | Runoff Area=4,572 sf 75.17% Impervious Runoff Depth>2.83"<br>Tc=6.0 min CN=83 Runoff=0.36 cfs 0.025 af                                |
| <b>Subcatchment186S: P3QQQ</b>        | Runoff Area=6,874 sf 54.66% Impervious Runoff Depth>1.76"<br>Tc=6.0 min CN=70 Runoff=0.34 cfs 0.023 af                                |
| <b>Subcatchment187S: P3RRR</b>        | Runoff Area=12,294 sf 69.07% Impervious Runoff Depth>2.56"<br>Tc=6.0 min CN=80 Runoff=0.89 cfs 0.060 af                               |
| <b>Subcatchment189S: (new Subcat)</b> | Runoff Area=179,843 sf 4.59% Impervious Runoff Depth>0.68"<br>Flow Length=322' Tc=20.8 min UI Adjusted CN=53 Runoff=1.82 cfs 0.236 af |
| <b>Subcatchment190S: (new Subcat)</b> | Runoff Area=12,078 sf 85.87% Impervious Runoff Depth>3.51"<br>Tc=6.0 min CN=90 Runoff=1.14 cfs 0.081 af                               |
| <b>Subcatchment191S: P3SSS</b>        | Runoff Area=7,482 sf 31.70% Impervious Runoff Depth>0.69"<br>Tc=6.0 min CN=53 Runoff=0.11 cfs 0.010 af                                |
| <b>Subcatchment192S: P3TTT</b>        | Runoff Area=4,075 sf 74.38% Impervious Runoff Depth>2.83"<br>Tc=6.0 min CN=83 Runoff=0.32 cfs 0.022 af                                |

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| <b>Subcatchment195S: P3UUU</b>        | Runoff Area=14,624 sf 80.22% Impervious Runoff Depth>3.11"<br>Tc=6.0 min CN=86 Runoff=1.26 cfs 0.087 af                                         |
| <b>Subcatchment198S: P3VVV</b>        | Runoff Area=12,434 sf 0.00% Impervious Runoff Depth>0.13"<br>Tc=6.0 min CN=39 Runoff=0.01 cfs 0.003 af                                          |
| <b>Subcatchment202S: (new Subcat)</b> | Runoff Area=26,038 sf 46.07% Impervious Runoff Depth>1.47"<br>Tc=6.0 min CN=66 Runoff=1.06 cfs 0.073 af                                         |
| <b>Subcatchment204S: (new Subcat)</b> | Runoff Area=149,084 sf 3.60% Impervious Runoff Depth>0.06"<br>Flow Length=135' Tc=8.1 min UI Adjusted CN=36 Runoff=0.04 cfs 0.017 af            |
| <b>Subcatchment205S: (new Subcat)</b> | Runoff Area=9,322 sf 64.54% Impervious Runoff Depth>2.31"<br>Tc=6.0 min CN=77 Runoff=0.61 cfs 0.041 af                                          |
| <b>Subcatchment206S: (new Subcat)</b> | Runoff Area=15,098 sf 0.00% Impervious Runoff Depth>0.13"<br>Tc=6.0 min CN=39 Runoff=0.01 cfs 0.004 af                                          |
| <b>Subcatchment207S: (new Subcat)</b> | Runoff Area=21,068 sf 16.33% Impervious Runoff Depth>0.13"<br>Flow Length=156' Tc=15.7 min UI Adjusted CN=39 Runoff=0.01 cfs 0.005 af           |
| <b>Subcatchment216S: (new Subcat)</b> | Runoff Area=6,486 sf 77.32% Impervious Runoff Depth>3.02"<br>Tc=6.0 min CN=85 Runoff=0.54 cfs 0.037 af                                          |
| <b>Pond 15P: Inf. Basin 5</b>         | Peak Elev=59.53' Storage=18,210 cf Inflow=10.32 cfs 0.754 af<br>Discarded=0.28 cfs 0.243 af Primary=0.66 cfs 0.229 af Outflow=0.94 cfs 0.471 af |
| <b>Pond 16P: CB 58</b>                | Peak Elev=62.65' Inflow=0.79 cfs 0.060 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.79 cfs 0.060 af                           |
| <b>Pond 17P: CB 59</b>                | Peak Elev=62.97' Inflow=1.63 cfs 0.118 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' Outflow=1.63 cfs 0.118 af                           |
| <b>Pond 18P: CB 63</b>                | Peak Elev=64.34' Inflow=0.56 cfs 0.040 af<br>12.0" Round Culvert n=0.013 L=13.0' S=0.0077 ' Outflow=0.56 cfs 0.040 af                           |
| <b>Pond 19P: CB 62</b>                | Peak Elev=64.19' Inflow=0.28 cfs 0.021 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.28 cfs 0.021 af                           |
| <b>Pond 20P: DMH 43</b>               | Peak Elev=63.05' Inflow=2.42 cfs 0.178 af<br>12.0" Round Culvert n=0.013 L=66.0' S=0.0050 ' Outflow=2.42 cfs 0.178 af                           |
| <b>Pond 21P: DMH 42</b>               | Peak Elev=62.62' Inflow=2.42 cfs 0.178 af<br>12.0" Round Culvert n=0.013 L=71.0' S=0.0052 ' Outflow=2.42 cfs 0.178 af                           |
| <b>Pond 22P: CB 56</b>                | Peak Elev=61.66' Inflow=0.58 cfs 0.045 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=0.58 cfs 0.045 af                           |
| <b>Pond 23P: CB 57</b>                | Peak Elev=61.97' Inflow=1.39 cfs 0.102 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=1.39 cfs 0.102 af                           |

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| <b>Pond 24P: DMH 41</b> | Peak Elev=62.19' Inflow=4.39 cfs 0.325 af<br>18.0" Round Culvert n=0.013 L=55.0' S=0.0322 ' Outflow=4.39 cfs 0.325 af  |
| <b>Pond 25P: DMH 45</b> | Peak Elev=64.22' Inflow=0.84 cfs 0.060 af<br>12.0" Round Culvert n=0.013 L=148.0' S=0.0100 ' Outflow=0.84 cfs 0.060 af |
| <b>Pond 26P: CB 61</b>  | Peak Elev=62.98' Inflow=1.09 cfs 0.077 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' Outflow=1.09 cfs 0.077 af  |
| <b>Pond 27P: CB 60</b>  | Peak Elev=62.71' Inflow=0.46 cfs 0.033 af<br>12.0" Round Culvert n=0.013 L=13.0' S=0.0077 ' Outflow=0.46 cfs 0.033 af  |
| <b>Pond 28P: DMH 44</b> | Peak Elev=63.24' Inflow=2.40 cfs 0.171 af<br>12.0" Round Culvert n=0.013 L=85.0' S=0.0338 ' Outflow=2.40 cfs 0.171 af  |
| <b>Pond 29P: DMH 40</b> | Peak Elev=60.51' Inflow=7.15 cfs 0.523 af<br>24.0" Round Culvert n=0.013 L=25.0' S=0.0120 ' Outflow=7.15 cfs 0.523 af  |
| <b>Pond 30P: CB 55</b>  | Peak Elev=60.57' Inflow=0.36 cfs 0.026 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0667 ' Outflow=0.36 cfs 0.026 af  |
| <b>Pond 31P: CB 51</b>  | Peak Elev=60.56' Inflow=0.20 cfs 0.016 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.20 cfs 0.016 af  |
| <b>Pond 32P: CB 52</b>  | Peak Elev=60.93' Inflow=0.98 cfs 0.072 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.98 cfs 0.072 af  |
| <b>Pond 33P: CB 53</b>  | Peak Elev=61.01' Inflow=0.21 cfs 0.016 af<br>12.0" Round Culvert n=0.013 L=9.0' S=0.1111 ' Outflow=0.21 cfs 0.016 af   |
| <b>Pond 34P: DMH 36</b> | Peak Elev=60.79' Inflow=1.18 cfs 0.087 af<br>12.0" Round Culvert n=0.013 L=67.0' S=0.0051 ' Outflow=1.18 cfs 0.087 af  |
| <b>Pond 35P: DMH 37</b> | Peak Elev=60.43' Inflow=1.39 cfs 0.103 af<br>12.0" Round Culvert n=0.013 L=52.0' S=0.0050 ' Outflow=1.39 cfs 0.103 af  |
| <b>Pond 36P: CB 54</b>  | Peak Elev=60.76' Inflow=0.91 cfs 0.070 af<br>12.0" Round Culvert n=0.013 L=7.0' S=0.1143 ' Outflow=0.91 cfs 0.070 af   |
| <b>Pond 37P: DMH 38</b> | Peak Elev=60.39' Inflow=2.30 cfs 0.173 af<br>12.0" Round Culvert n=0.013 L=94.0' S=0.0050 ' Outflow=2.30 cfs 0.173 af  |
| <b>Pond 38P: DMH 39</b> | Peak Elev=60.37' Inflow=9.45 cfs 0.695 af<br>24.0" Round Culvert n=0.013 L=68.0' S=0.0254 ' Outflow=9.45 cfs 0.695 af  |
| <b>Pond 41P: CB 49</b>  | Peak Elev=58.67' Inflow=0.10 cfs 0.008 af<br>12.0" Round Culvert n=0.013 L=8.0' S=0.0125 ' Outflow=0.10 cfs 0.008 af   |
| <b>Pond 42P: CB 50</b>  | Peak Elev=59.03' Inflow=0.75 cfs 0.053 af<br>12.0" Round Culvert n=0.013 L=8.0' S=0.0125 ' Outflow=0.75 cfs 0.053 af   |
| <b>Pond 43P: DMH 35</b> | Peak Elev=58.84' Inflow=0.85 cfs 0.061 af<br>12.0" Round Culvert n=0.013 L=87.0' S=0.0414 ' Outflow=0.85 cfs 0.061 af  |

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| <b>Pond 46P: CB 48</b>        | Peak Elev=55.51' Inflow=1.22 cfs 0.083 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=1.22 cfs 0.083 af                         |
| <b>Pond 47P: CB 47</b>        | Peak Elev=55.25' Inflow=0.55 cfs 0.042 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.55 cfs 0.042 af                         |
| <b>Pond 48P: DMH 33</b>       | Peak Elev=55.49' Inflow=1.77 cfs 0.125 af<br>12.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=1.77 cfs 0.125 af                          |
| <b>Pond 49P: Sub. Inf. 4</b>  | Peak Elev=56.60' Storage=0.141 af Inflow=4.86 cfs 0.344 af<br>Discarded=0.13 cfs 0.109 af Primary=1.65 cfs 0.129 af Outflow=1.78 cfs 0.238 af   |
| <b>Pond 52P: CB 20</b>        | Peak Elev=51.40' Inflow=0.29 cfs 0.023 af<br>12.0" Round Culvert n=0.013 L=22.0' S=0.0091 '/' Outflow=0.29 cfs 0.023 af                         |
| <b>Pond 53P: CB 21</b>        | Peak Elev=51.90' Inflow=1.55 cfs 0.105 af<br>12.0" Round Culvert n=0.013 L=24.0' S=0.0083 '/' Outflow=1.55 cfs 0.105 af                         |
| <b>Pond 54P: DMH 15</b>       | Peak Elev=51.70' Inflow=1.83 cfs 0.127 af<br>12.0" Round Culvert n=0.013 L=104.0' S=0.0050 '/' Outflow=1.83 cfs 0.127 af                        |
| <b>Pond 55P: DMH 16</b>       | Peak Elev=51.12' Inflow=1.83 cfs 0.127 af<br>12.0" Round Culvert n=0.013 L=35.0' S=0.0051 '/' Outflow=1.83 cfs 0.127 af                         |
| <b>Pond 56P: Inf. Basin 4</b> | Peak Elev=50.91' Storage=1,428 cf Inflow=1.83 cfs 0.133 af<br>Discarded=0.54 cfs 0.133 af Secondary=0.00 cfs 0.000 af Outflow=0.54 cfs 0.133 af |
| <b>Pond 60P: Sub. Det. 1</b>  | Peak Elev=62.04' Storage=0.132 af Inflow=8.25 cfs 0.588 af<br>Outflow=7.23 cfs 0.501 af                                                         |
| <b>Pond 61P: CB 8</b>         | Peak Elev=50.70' Inflow=0.29 cfs 0.019 af<br>12.0" Round Culvert n=0.013 L=28.0' S=0.0500 '/' Outflow=0.29 cfs 0.019 af                         |
| <b>Pond 62P: CB 66</b>        | Peak Elev=60.96' Inflow=0.64 cfs 0.046 af<br>12.0" Round Culvert n=0.013 L=20.0' S=0.0100 '/' Outflow=0.64 cfs 0.046 af                         |
| <b>Pond 63P: CB 67</b>        | Peak Elev=60.81' Inflow=0.15 cfs 0.011 af<br>12.0" Round Culvert n=0.013 L=14.0' S=0.0214 '/' Outflow=0.15 cfs 0.011 af                         |
| <b>Pond 64P: DMH 47</b>       | Peak Elev=61.32' Inflow=2.54 cfs 0.182 af<br>12.0" Round Culvert n=0.013 L=25.0' S=0.0080 '/' Outflow=2.54 cfs 0.182 af                         |
| <b>Pond 65P: DMH 49</b>       | Peak Elev=59.34' Inflow=1.14 cfs 0.085 af<br>12.0" Round Culvert n=0.013 L=59.0' S=0.0119 '/' Outflow=1.14 cfs 0.085 af                         |
| <b>Pond 66P: CB 68</b>        | Peak Elev=59.42' Inflow=0.72 cfs 0.053 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.72 cfs 0.053 af                         |
| <b>Pond 67P: CB 69</b>        | Peak Elev=59.28' Inflow=0.42 cfs 0.032 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.42 cfs 0.032 af                         |

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| <b>Pond 68P: Sub. Inf. 5</b>           | Peak Elev=61.13' Storage=0.045 af Inflow=2.54 cfs 0.182 af<br>Discarded=0.07 cfs 0.061 af Primary=2.44 cfs 0.086 af Outflow=2.51 cfs 0.147 af |
| <b>Pond 69P: CB 72</b>                 | Peak Elev=62.10' Inflow=1.03 cfs 0.074 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0600 '/' Outflow=1.03 cfs 0.074 af                       |
| <b>Pond 70P: CB 73</b>                 | Peak Elev=61.97' Inflow=0.66 cfs 0.048 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0600 '/' Outflow=0.66 cfs 0.048 af                       |
| <b>Pond 71P: DMH 54</b>                | Peak Elev=61.66' Inflow=1.69 cfs 0.121 af<br>12.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=1.69 cfs 0.121 af                        |
| <b>Pond 72P: Sub. Inf. 7</b>           | Peak Elev=62.10' Storage=0.037 af Inflow=1.69 cfs 0.121 af<br>Discarded=0.07 cfs 0.053 af Primary=1.12 cfs 0.048 af Outflow=1.19 cfs 0.101 af |
| <b>Pond 73P: CB 64</b>                 | Peak Elev=61.72' Inflow=1.04 cfs 0.074 af<br>12.0" Round Culvert n=0.013 L=25.0' S=0.0080 '/' Outflow=1.04 cfs 0.074 af                       |
| <b>Pond 74P: CB 65</b>                 | Peak Elev=61.59' Inflow=0.71 cfs 0.051 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0133 '/' Outflow=0.71 cfs 0.051 af                       |
| <b>Pond 75P: DMH 46</b>                | Peak Elev=61.66' Inflow=1.75 cfs 0.124 af<br>12.0" Round Culvert n=0.013 L=118.0' S=0.0051 '/' Outflow=1.75 cfs 0.124 af                      |
| <b>Pond 76P: CB 70</b>                 | Peak Elev=58.72' Inflow=0.79 cfs 0.057 af<br>12.0" Round Culvert n=0.013 L=20.0' S=0.0100 '/' Outflow=0.79 cfs 0.057 af                       |
| <b>Pond 77P: CB 71</b>                 | Peak Elev=58.57' Inflow=0.44 cfs 0.033 af<br>12.0" Round Culvert n=0.013 L=20.0' S=0.0100 '/' Outflow=0.44 cfs 0.033 af                       |
| <b>Pond 78P: DMH 50</b>                | Peak Elev=58.75' Inflow=2.37 cfs 0.174 af<br>18.0" Round Culvert n=0.013 L=25.0' S=0.0080 '/' Outflow=2.37 cfs 0.174 af                       |
| <b>Pond 79P: DMH 51</b>                | Peak Elev=58.57' Inflow=3.05 cfs 0.227 af<br>18.0" Round Culvert n=0.013 L=148.0' S=0.0047 '/' Outflow=3.05 cfs 0.227 af                      |
| <b>Pond 80P: DMH 52</b>                | Peak Elev=57.78' Inflow=3.05 cfs 0.227 af<br>18.0" Round Culvert n=0.013 L=104.0' S=0.0052 '/' Outflow=3.05 cfs 0.227 af                      |
| <b>Pond 81P: DMH 53</b>                | Peak Elev=57.11' Inflow=3.05 cfs 0.227 af<br>18.0" Round Culvert n=0.013 L=60.0' S=0.0195 '/' Outflow=3.05 cfs 0.227 af                       |
| <b>Pond 82P: Constructed Wetland 2</b> | Peak Elev=57.16' Storage=5,857 cf Inflow=4.02 cfs 0.293 af<br>Outflow=1.23 cfs 0.229 af                                                       |
| <b>Pond 83P: CB 86</b>                 | Peak Elev=58.50' Inflow=0.75 cfs 0.053 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0227 '/' Outflow=0.75 cfs 0.053 af                       |
| <b>Pond 84P: CB 87</b>                 | Peak Elev=58.53' Inflow=0.82 cfs 0.060 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0227 '/' Outflow=0.82 cfs 0.060 af                       |
| <b>Pond 85P: DMH 65</b>                | Peak Elev=58.49' Inflow=1.57 cfs 0.114 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=1.57 cfs 0.114 af                       |

**Pond 86P: Sub. Inf. 6**

Peak Elev=62.96' Storage=0.049 af Inflow=2.03 cfs 0.139 af  
Discarded=0.07 cfs 0.056 af Primary=0.86 cfs 0.052 af Outflow=0.94 cfs 0.108 af

**Pond 87P: CB 85**

Peak Elev=62.43' Inflow=0.52 cfs 0.037 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.52 cfs 0.037 af

**Pond 88P: CB 84**

Peak Elev=62.30' Inflow=0.27 cfs 0.019 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.27 cfs 0.019 af

**Pond 89P: CB 74**

Peak Elev=64.77' Inflow=0.23 cfs 0.017 af  
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.23 cfs 0.017 af

**Pond 90P: CB 75**

Peak Elev=64.90' Inflow=0.45 cfs 0.032 af  
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.45 cfs 0.032 af

**Pond 91P: DMH 55**

Peak Elev=64.77' Inflow=0.67 cfs 0.049 af  
12.0" Round Culvert n=0.013 L=108.0' S=0.0204 ' Outflow=0.67 cfs 0.049 af

**Pond 92P: DMH 63**

Peak Elev=62.32' Inflow=0.79 cfs 0.057 af  
12.0" Round Culvert n=0.013 L=120.0' S=0.0292 ' Outflow=0.79 cfs 0.057 af

**Pond 93P: DMH 62**

Peak Elev=59.38' Inflow=4.33 cfs 0.310 af  
18.0" Round Culvert n=0.013 L=84.0' S=0.0065 ' Outflow=4.33 cfs 0.310 af

**Pond 94P: CB 77**

Peak Elev=63.23' Inflow=0.86 cfs 0.061 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.86 cfs 0.061 af

**Pond 95P: CB 76**

Peak Elev=63.12' Inflow=0.59 cfs 0.042 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.59 cfs 0.042 af

**Pond 96P: DMH 56**

Peak Elev=63.27' Inflow=4.82 cfs 0.346 af  
18.0" Round Culvert n=0.013 L=134.0' S=0.0067 ' Outflow=4.82 cfs 0.346 af

**Pond 97P: Sub. Det. 2**

Peak Elev=61.55' Storage=0.305 af Inflow=5.90 cfs 0.423 af  
Outflow=0.26 cfs 0.157 af

**Pond 98P: DMH 61**

Peak Elev=60.83' Inflow=3.54 cfs 0.253 af  
18.0" Round Culvert n=0.013 L=136.0' S=0.0110 ' Outflow=3.54 cfs 0.253 af

**Pond 99P: CB 81**

Peak Elev=63.65' Inflow=1.06 cfs 0.075 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=1.06 cfs 0.075 af

**Pond 100P: CB 80**

Peak Elev=63.85' Inflow=1.64 cfs 0.118 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=1.64 cfs 0.118 af

**Pond 101P: DMH 59**

Peak Elev=63.68' Inflow=2.70 cfs 0.193 af  
18.0" Round Culvert n=0.013 L=136.0' S=0.0051 ' Outflow=2.70 cfs 0.193 af

**Pond 102P: CB 93**

Peak Elev=61.94' Inflow=0.75 cfs 0.054 af  
12.0" Round Culvert n=0.013 L=27.0' S=0.0056 ' Outflow=0.75 cfs 0.054 af



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| <b>Pond 103P: CB 92</b>  | Peak Elev=62.17' Inflow=1.34 cfs 0.097 af<br>12.0" Round Culvert n=0.013 L=27.0' S=0.0056 ' ' Outflow=1.34 cfs 0.097 af  |
| <b>Pond 104P: CB 83</b>  | Peak Elev=61.77' Inflow=1.38 cfs 0.097 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' ' Outflow=1.38 cfs 0.097 af  |
| <b>Pond 105P: CB 82</b>  | Peak Elev=62.04' Inflow=2.16 cfs 0.156 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' ' Outflow=2.16 cfs 0.156 af  |
| <b>Pond 106P: DMH 60</b> | Peak Elev=61.83' Inflow=3.54 cfs 0.253 af<br>18.0" Round Culvert n=0.013 L=110.0' S=0.0082 ' ' Outflow=3.54 cfs 0.253 af |
| <b>Pond 107P: CB</b>     | Peak Elev=60.57' Inflow=0.94 cfs 0.067 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.1000 ' ' Outflow=0.94 cfs 0.067 af  |
| <b>Pond 108P: CB 88</b>  | Peak Elev=60.36' Inflow=0.41 cfs 0.030 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0909 ' ' Outflow=0.41 cfs 0.030 af  |
| <b>Pond 109P: CB 79</b>  | Peak Elev=62.35' Inflow=1.84 cfs 0.130 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' ' Outflow=1.84 cfs 0.130 af  |
| <b>Pond 110P: CB 78</b>  | Peak Elev=62.17' Inflow=1.59 cfs 0.112 af<br>15.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' ' Outflow=1.59 cfs 0.112 af  |
| <b>Pond 111P: DMH 57</b> | Peak Elev=62.56' Inflow=8.25 cfs 0.588 af<br>24.0" Round Culvert n=0.013 L=74.0' S=0.0054 ' ' Outflow=8.25 cfs 0.588 af  |
| <b>Pond 112P: CB 45</b>  | Peak Elev=58.25' Inflow=1.09 cfs 0.075 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' ' Outflow=1.09 cfs 0.075 af  |
| <b>Pond 113P: CB 95</b>  | Peak Elev=60.59' Inflow=0.90 cfs 0.067 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' ' Outflow=0.90 cfs 0.067 af  |
| <b>Pond 114P: CB 94</b>  | Peak Elev=60.80' Inflow=1.46 cfs 0.107 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' ' Outflow=1.46 cfs 0.107 af  |
| <b>Pond 115P: CB 91</b>  | Peak Elev=59.96' Inflow=1.42 cfs 0.103 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0833 ' ' Outflow=1.42 cfs 0.103 af  |
| <b>Pond 116P: CB 90</b>  | Peak Elev=59.87' Inflow=1.13 cfs 0.084 af<br>12.0" Round Culvert n=0.013 L=14.0' S=0.0714 ' ' Outflow=1.13 cfs 0.084 af  |
| <b>Pond 117P: DMH 69</b> | Peak Elev=60.47' Inflow=4.44 cfs 0.325 af<br>18.0" Round Culvert n=0.013 L=140.0' S=0.0050 ' ' Outflow=4.44 cfs 0.325 af |
| <b>Pond 118P: DMH 70</b> | Peak Elev=60.92' Inflow=2.35 cfs 0.175 af<br>12.0" Round Culvert n=0.013 L=87.0' S=0.0051 ' ' Outflow=2.35 cfs 0.175 af  |
| <b>Pond 119P: DMH 66</b> | Peak Elev=59.95' Inflow=5.79 cfs 0.421 af<br>18.0" Round Culvert n=0.013 L=102.0' S=0.0050 ' ' Outflow=5.79 cfs 0.421 af |
| <b>Pond 120P: DMH 67</b> | Peak Elev=59.35' Inflow=8.34 cfs 0.607 af<br>24.0" Round Culvert n=0.013 L=40.0' S=0.0213 ' ' Outflow=8.34 cfs 0.607 af  |

|                                |                                                                                                                                               |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pond 122P: CB 46</b>        | Peak Elev=58.30' Inflow=1.15 cfs 0.083 af<br>12.0" Round Culvert n=0.013 L=16.0' S=0.0063 '/' Outflow=1.15 cfs 0.083 af                       |
| <b>Pond 123P: DMH 31</b>       | Peak Elev=58.18' Inflow=2.24 cfs 0.158 af<br>18.0" Round Culvert n=0.013 L=78.0' S=0.0100 '/' Outflow=2.24 cfs 0.158 af                       |
| <b>Pond 124P: DMH 32</b>       | Peak Elev=57.36' Inflow=2.24 cfs 0.158 af<br>18.0" Round Culvert n=0.013 L=75.0' S=0.0249 '/' Outflow=2.24 cfs 0.158 af                       |
| <b>Pond 125P: CB 36</b>        | Peak Elev=54.97' Inflow=0.70 cfs 0.048 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=0.70 cfs 0.048 af                       |
| <b>Pond 126P: CB 37</b>        | Peak Elev=55.03' Inflow=0.84 cfs 0.058 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=0.84 cfs 0.058 af                       |
| <b>Pond 127P: DMH 26</b>       | Peak Elev=55.02' Inflow=1.54 cfs 0.106 af<br>12.0" Round Culvert n=0.013 L=84.0' S=0.0173 '/' Outflow=1.54 cfs 0.106 af                       |
| <b>Pond 128P: CB 30</b>        | Peak Elev=56.49' Inflow=0.90 cfs 0.061 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.90 cfs 0.061 af                       |
| <b>Pond 129P: CB 34</b>        | Peak Elev=54.59' Inflow=1.25 cfs 0.085 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=1.25 cfs 0.085 af                       |
| <b>Pond 130P: CB 32</b>        | Peak Elev=54.98' Inflow=2.03 cfs 0.142 af<br>12.0" Round Culvert n=0.013 L=16.0' S=0.0256 '/' Outflow=2.03 cfs 0.142 af                       |
| <b>Pond 131P: CB 35</b>        | Peak Elev=54.50' Inflow=1.00 cfs 0.067 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=1.00 cfs 0.067 af                       |
| <b>Pond 132P: CB 33</b>        | Peak Elev=54.28' Inflow=0.85 cfs 0.057 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.85 cfs 0.057 af                       |
| <b>Pond 133P: DMH 24</b>       | Peak Elev=54.91' Inflow=5.13 cfs 0.351 af<br>18.0" Round Culvert n=0.013 L=112.0' S=0.0050 '/' Outflow=5.13 cfs 0.351 af                      |
| <b>Pond 134P: DMH 25</b>       | Peak Elev=54.83' Inflow=2.25 cfs 0.152 af<br>12.0" Round Culvert n=0.013 L=20.0' S=0.0050 '/' Outflow=2.25 cfs 0.152 af                       |
| <b>Pond 135P: Inf. Basin 3</b> | Peak Elev=54.67' Storage=5,734 cf Inflow=6.07 cfs 0.421 af<br>Discarded=1.46 cfs 0.421 af Primary=0.00 cfs 0.000 af Outflow=1.46 cfs 0.421 af |
| <b>Pond 136P: CB 38</b>        | Peak Elev=53.94' Inflow=0.53 cfs 0.036 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.53 cfs 0.036 af                       |
| <b>Pond 137P: CB</b>           | Peak Elev=54.07' Inflow=0.94 cfs 0.065 af<br>12.0" Round Culvert n=0.013 L=70.0' S=0.0071 '/' Outflow=0.94 cfs 0.065 af                       |
| <b>Pond 138P: CB 39</b>        | Peak Elev=53.91' Inflow=0.48 cfs 0.033 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.48 cfs 0.033 af                       |

**Pond 139P: DMH 28**

Peak Elev=53.92' Inflow=1.02 cfs 0.069 af  
12.0" Round Culvert n=0.013 L=99.0' S=0.0051 '/' Outflow=1.02 cfs 0.069 af

**Pond 140P: CB 31**

Peak Elev=56.53' Inflow=0.94 cfs 0.064 af  
12.0" Round Culvert n=0.013 L=19.0' S=0.0053 '/' Outflow=0.94 cfs 0.064 af

**Pond 141P: DMH 23**

Peak Elev=56.58' Inflow=1.85 cfs 0.125 af  
12.0" Round Culvert n=0.013 L=142.0' S=0.0116 '/' Outflow=1.85 cfs 0.125 af

**Pond 142P: CB 40**

Peak Elev=51.23' Inflow=1.21 cfs 0.082 af  
12.0" Round Culvert n=0.013 L=7.0' S=0.0143 '/' Outflow=1.21 cfs 0.082 af

**Pond 143P: CB 41**

Peak Elev=51.40' Inflow=1.70 cfs 0.115 af  
12.0" Round Culvert n=0.013 L=7.0' S=0.0143 '/' Outflow=1.70 cfs 0.115 af

**Pond 144P: DMH 30**

Peak Elev=51.85' Inflow=2.91 cfs 0.196 af  
12.0" Round Culvert n=0.013 L=73.0' S=0.0051 '/' Outflow=2.91 cfs 0.196 af

**Pond 145P: DMH 29**

Peak Elev=50.78' Inflow=2.91 cfs 0.196 af  
18.0" Round Culvert n=0.013 L=95.0' S=0.0091 '/' Outflow=2.91 cfs 0.196 af

**Pond 146P: Inf. Basin 2**

Peak Elev=50.50' Storage=4,423 cf Inflow=4.79 cfs 0.332 af  
Discarded=1.14 cfs 0.331 af Primary=0.00 cfs 0.000 af Outflow=1.14 cfs 0.331 af

**Pond 147P: CB 28**

Peak Elev=54.50' Inflow=0.26 cfs 0.017 af  
12.0" Round Culvert n=0.013 L=27.0' S=0.0056 '/' Outflow=0.26 cfs 0.017 af

**Pond 148P: CB 43**

Peak Elev=52.50' Inflow=0.74 cfs 0.051 af  
12.0" Round Culvert n=0.013 L=68.0' S=0.0441 '/' Outflow=0.74 cfs 0.051 af

**Pond 149P: CB 29**

Peak Elev=54.50' Inflow=0.27 cfs 0.019 af  
12.0" Round Culvert n=0.013 L=19.0' S=0.0079 '/' Outflow=0.27 cfs 0.019 af

**Pond 150P: DMH 22**

Peak Elev=55.08' Inflow=2.38 cfs 0.161 af  
12.0" Round Culvert n=0.013 L=50.0' S=0.0144 '/' Outflow=2.38 cfs 0.161 af

**Pond 151P: CB 22**

Peak Elev=52.76' Inflow=0.55 cfs 0.038 af  
12.0" Round Culvert n=0.013 L=28.0' S=0.0054 '/' Outflow=0.55 cfs 0.038 af

**Pond 152P: CB 23**

Peak Elev=52.78' Inflow=0.64 cfs 0.043 af  
12.0" Round Culvert n=0.013 L=19.0' S=0.0079 '/' Outflow=0.64 cfs 0.043 af

**Pond 153P: DMH 17**

Peak Elev=53.51' Inflow=5.72 cfs 0.391 af  
18.0" Round Culvert n=0.013 L=94.0' S=0.0053 '/' Outflow=5.72 cfs 0.391 af

**Pond 154P: CB 18**

Peak Elev=53.77' Inflow=0.74 cfs 0.050 af  
12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=0.74 cfs 0.050 af

**Pond 155P: CB 27**

Peak Elev=55.14' Inflow=0.76 cfs 0.052 af  
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.76 cfs 0.052 af

**Pond 156P: CB 26**

Peak Elev=55.00' Inflow=0.46 cfs 0.033 af  
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.46 cfs 0.033 af

**Pond 157P: DMH 21**

Peak Elev=55.07' Inflow=1.22 cfs 0.085 af  
12.0" Round Culvert n=0.013 L=86.0' S=0.0105 '/' Outflow=1.22 cfs 0.085 af

**Pond 158P: CB 24**

Peak Elev=53.97' Inflow=0.38 cfs 0.026 af  
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.38 cfs 0.026 af

**Pond 159P: CB 25**

Peak Elev=54.05' Inflow=0.55 cfs 0.038 af  
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.55 cfs 0.038 af

**Pond 160P: DMH 20**

Peak Elev=54.46' Inflow=2.15 cfs 0.149 af  
12.0" Round Culvert n=0.013 L=33.0' S=0.0052 '/' Outflow=2.15 cfs 0.149 af

**Pond 161P: DMH 19**

Peak Elev=54.34' Inflow=4.53 cfs 0.310 af  
18.0" Round Culvert n=0.013 L=100.0' S=0.0098 '/' Outflow=4.53 cfs 0.310 af

**Pond 162P: CB 15**

Peak Elev=51.66' Inflow=1.07 cfs 0.072 af  
12.0" Round Culvert n=0.013 L=14.0' S=0.0143 '/' Outflow=1.07 cfs 0.072 af

**Pond 163P: CB 14**

Peak Elev=51.65' Inflow=0.85 cfs 0.058 af  
12.0" Round Culvert n=0.013 L=22.0' S=0.0050 '/' Outflow=0.85 cfs 0.058 af

**Pond 165P: CB 19**

Peak Elev=53.72' Inflow=0.62 cfs 0.042 af  
12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=0.62 cfs 0.042 af

**Pond 166P: DMH 13**

Peak Elev=52.90' Inflow=1.35 cfs 0.092 af  
12.0" Round Culvert n=0.013 L=92.0' S=0.0050 '/' Outflow=1.35 cfs 0.092 af

**Pond 167P: CB 11**

Peak Elev=51.24' Inflow=0.62 cfs 0.042 af  
12.0" Round Culvert n=0.013 L=19.0' S=0.0105 '/' Outflow=0.62 cfs 0.042 af

**Pond 168P: CB 10**

Peak Elev=51.05' Inflow=0.22 cfs 0.017 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0182 '/' Outflow=0.22 cfs 0.017 af

**Pond 169P: DMH 12**

Peak Elev=52.34' Inflow=1.35 cfs 0.092 af  
12.0" Round Culvert n=0.013 L=107.0' S=0.0050 '/' Outflow=1.35 cfs 0.092 af

**Pond 170P: CB 9**

Peak Elev=50.84' Inflow=0.60 cfs 0.040 af  
12.0" Round Culvert n=0.013 L=21.0' S=0.0667 '/' Outflow=0.60 cfs 0.040 af

**Pond 171P: DMH 6**

Peak Elev=50.01' Inflow=4.50 cfs 0.312 af  
18.0" Round Culvert n=0.013 L=130.0' S=0.0073 '/' Outflow=4.50 cfs 0.312 af

**Pond 172P: CB 16**

Peak Elev=52.57' Inflow=1.13 cfs 0.077 af  
12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=1.13 cfs 0.077 af

**Pond 173P: CB 17**

Peak Elev=52.28' Inflow=0.42 cfs 0.029 af  
12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=0.42 cfs 0.029 af

**Pond 174P: DMH 11**

Peak Elev=51.88' Inflow=2.90 cfs 0.198 af  
18.0" Round Culvert n=0.013 L=22.0' S=0.0118 '/' Outflow=2.90 cfs 0.198 af

|                                         |                                                                                                                                               |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pond 175P: DMH 5</b>                 | Peak Elev=51.69' Inflow=3.61 cfs 0.247 af<br>12.0" Round Culvert n=0.013 L=103.0' S=0.0050 ' Outflow=3.61 cfs 0.247 af                        |
| <b>Pond 176P: CB 6</b>                  | Peak Elev=50.21' Inflow=0.49 cfs 0.033 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0133 ' Outflow=0.49 cfs 0.033 af                         |
| <b>Pond 177P: CB 13</b>                 | Peak Elev=51.85' Inflow=0.91 cfs 0.061 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.91 cfs 0.061 af                         |
| <b>Pond 178P: CB 12</b>                 | Peak Elev=51.63' Inflow=0.40 cfs 0.027 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.40 cfs 0.027 af                         |
| <b>Pond 179P: DMH 8</b>                 | Peak Elev=51.79' Inflow=1.31 cfs 0.089 af<br>12.0" Round Culvert n=0.013 L=70.0' S=0.0050 ' Outflow=1.31 cfs 0.089 af                         |
| <b>Pond 180P: DMH 9</b>                 | Peak Elev=51.61' Inflow=1.93 cfs 0.130 af<br>18.0" Round Culvert n=0.013 L=49.0' S=0.0051 ' Outflow=1.93 cfs 0.130 af                         |
| <b>Pond 181P: DMH 7</b>                 | Peak Elev=52.04' Inflow=2.77 cfs 0.189 af<br>12.0" Round Culvert n=0.013 L=174.0' S=0.0050 ' Outflow=2.77 cfs 0.189 af                        |
| <b>Pond 182P: CB 7</b>                  | Peak Elev=50.16' Inflow=0.36 cfs 0.025 af<br>12.0" Round Culvert n=0.013 L=25.0' S=0.0080 ' Outflow=0.36 cfs 0.025 af                         |
| <b>Pond 185P: DMH 4</b>                 | Peak Elev=48.95' Inflow=5.76 cfs 0.399 af<br>24.0" Round Culvert n=0.013 L=36.0' S=0.0208 ' Outflow=5.76 cfs 0.399 af                         |
| <b>Pond 186P: Constructed Wetland 1</b> | Peak Elev=47.30' Storage=2,438 cf Inflow=1.66 cfs 0.119 af<br>Primary=0.36 cfs 0.057 af Secondary=0.02 cfs 0.016 af Outflow=0.38 cfs 0.074 af |
| <b>Pond 187P: Constructed Wetland 3</b> | Peak Elev=57.25' Storage=6,942 cf Inflow=7.23 cfs 0.501 af<br>Outflow=5.40 cfs 0.372 af                                                       |
| <b>Pond 188P: CB 3</b>                  | Peak Elev=48.33' Inflow=0.34 cfs 0.023 af<br>12.0" Round Culvert n=0.013 L=30.0' S=0.0167 ' Outflow=0.34 cfs 0.023 af                         |
| <b>Pond 189P: CB 4</b>                  | Peak Elev=48.55' Inflow=0.89 cfs 0.060 af<br>12.0" Round Culvert n=0.013 L=19.0' S=0.0263 ' Outflow=0.89 cfs 0.060 af                         |
| <b>Pond 190P: DMH 3</b>                 | Peak Elev=48.07' Inflow=1.23 cfs 0.083 af<br>12.0" Round Culvert n=0.013 L=32.0' S=0.0334 ' Outflow=1.23 cfs 0.083 af                         |
| <b>Pond 191P: CB 42</b>                 | Peak Elev=51.14' Inflow=1.14 cfs 0.081 af<br>12.0" Round Culvert n=0.013 L=194.0' S=0.0077 ' Outflow=1.14 cfs 0.081 af                        |
| <b>Pond 192P: Sub. Inf. 8</b>           | Peak Elev=50.99' Storage=0.007 af Inflow=0.61 cfs 0.041 af<br>Outflow=0.21 cfs 0.041 af                                                       |
| <b>Pond 193P: CB 1</b>                  | Peak Elev=47.04' Inflow=0.11 cfs 0.010 af<br>12.0" Round Culvert n=0.013 L=25.0' S=0.0052 ' Outflow=0.11 cfs 0.010 af                         |
| <b>Pond 194P: CB 2</b>                  | Peak Elev=47.15' Inflow=0.32 cfs 0.022 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' Outflow=0.32 cfs 0.022 af                         |

|                                         |                                                                                                                                               |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pond 195P: Constructed Wetland 4</b> | Peak Elev=56.49' Storage=7,746 cf Inflow=3.73 cfs 0.452 af<br>Outflow=3.36 cfs 0.319 af                                                       |
| <b>Pond 196P: CB 5</b>                  | Peak Elev=48.73' Inflow=1.26 cfs 0.087 af<br>12.0" Round Culvert n=0.013 L=27.0' S=0.0059 '/' Outflow=1.26 cfs 0.087 af                       |
| <b>Pond 197P: Inf. Basin 1</b>          | Peak Elev=47.36' Storage=4,527 cf Inflow=5.76 cfs 0.459 af<br>Discarded=1.68 cfs 0.458 af Primary=0.00 cfs 0.000 af Outflow=1.68 cfs 0.458 af |
| <b>Pond 198P: Sub. Inf. 2</b>           | Peak Elev=52.38' Storage=0.088 af Inflow=5.72 cfs 0.391 af<br>Discarded=1.90 cfs 0.391 af Primary=0.00 cfs 0.000 af Outflow=1.90 cfs 0.391 af |
| <b>Pond 200P: DMH 1</b>                 | Peak Elev=47.05' Inflow=0.43 cfs 0.032 af<br>12.0" Round Culvert n=0.013 L=65.0' S=0.0051 '/' Outflow=0.43 cfs 0.032 af                       |
| <b>Pond 201P: Sub. Inf. 3</b>           | Peak Elev=53.00' Storage=0.048 af Inflow=3.61 cfs 0.248 af<br>Discarded=1.31 cfs 0.248 af Primary=0.00 cfs 0.000 af Outflow=1.31 cfs 0.248 af |
| <b>Pond 202P: DMH 14</b>                | Peak Elev=52.65' Inflow=0.00 cfs 0.000 af<br>18.0" Round Culvert n=0.013 L=89.0' S=0.0055 '/' Outflow=0.00 cfs 0.000 af                       |
| <b>Pond 204P: DMH 18</b>                | Peak Elev=52.96' Inflow=5.72 cfs 0.391 af<br>18.0" Round Culvert n=0.013 L=5.0' S=-0.0900 '/' Outflow=5.72 cfs 0.391 af                       |
| <b>Pond 205P: DMH 27</b>                | Peak Elev=53.93' Inflow=2.56 cfs 0.175 af<br>12.0" Round Culvert n=0.013 L=16.0' S=0.0063 '/' Outflow=2.56 cfs 0.175 af                       |
| <b>Pond 206P: DMH 34</b>                | Peak Elev=55.45' Inflow=3.09 cfs 0.219 af<br>18.0" Round Culvert n=0.013 L=5.0' S=-0.1800 '/' Outflow=3.09 cfs 0.219 af                       |
| <b>Pond 207P: DMH 48</b>                | Peak Elev=61.12' Inflow=2.54 cfs 0.182 af<br>12.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=2.54 cfs 0.182 af                        |
| <b>Pond 208P: DMH 58</b>                | Peak Elev=62.24' Inflow=8.25 cfs 0.588 af<br>24.0" Round Culvert n=0.013 L=5.0' S=0.0100 '/' Outflow=8.25 cfs 0.588 af                        |
| <b>Pond 209P: DMH 64</b>                | Peak Elev=58.92' Inflow=4.33 cfs 0.310 af<br>18.0" Round Culvert n=0.013 L=5.0' S=0.0100 '/' Outflow=4.33 cfs 0.310 af                        |
| <b>Pond 210P: DMH 68</b>                | Peak Elev=59.35' Inflow=8.34 cfs 0.607 af<br>24.0" Round Culvert n=0.013 L=11.0' S=0.0727 '/' Outflow=8.34 cfs 0.607 af                       |
| <b>Pond 211P: Sub. Inf. 1B</b>          | Peak Elev=51.81' Storage=0.079 af Inflow=4.22 cfs 0.287 af<br>Discarded=0.86 cfs 0.273 af Primary=0.47 cfs 0.013 af Outflow=1.33 cfs 0.287 af |
| <b>Pond 212P: Sub. Inf. 1A</b>          | Peak Elev=47.63' Storage=0.003 af Inflow=0.64 cfs 0.051 af<br>Discarded=0.48 cfs 0.051 af Primary=0.00 cfs 0.000 af Outflow=0.48 cfs 0.051 af |
| <b>Pond 213P: DMH 2</b>                 | Peak Elev=47.14' Inflow=1.66 cfs 0.115 af<br>12.0" Round Culvert n=0.013 L=54.0' S=0.0052 '/' Outflow=1.66 cfs 0.115 af                       |

**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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**Pond 214P: DMH 4A**

Peak Elev=48.50' Inflow=0.64 cfs 0.051 af  
 18.0" Round Culvert n=0.013 L=3.0' S=0.0333 '/' Outflow=0.64 cfs 0.051 af

**Pond 215P: CB 5A**

Peak Elev=48.82' Inflow=0.54 cfs 0.037 af  
 12.0" Round Culvert n=0.013 L=13.0' S=0.0154 '/' Outflow=0.54 cfs 0.037 af

**Pond 216P: CB 8A**

Peak Elev=49.69' Inflow=0.01 cfs 0.005 af  
 12.0" Round Culvert n=0.013 L=63.0' S=0.0100 '/' Outflow=0.01 cfs 0.005 af

**Pond 217P: DMH 8A**

Peak Elev=51.84' Inflow=4.22 cfs 0.287 af  
 18.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=4.22 cfs 0.287 af

**Pond 218P: CB A**

Peak Elev=52.31' Inflow=0.61 cfs 0.041 af  
 12.0" Round Culvert n=0.013 L=105.0' S=0.0050 '/' Outflow=0.61 cfs 0.041 af

**Pond 219P: DMH A**

Peak Elev=51.73' Inflow=0.61 cfs 0.041 af  
 12.0" Round Culvert n=0.013 L=60.0' S=0.0057 '/' Outflow=0.61 cfs 0.041 af

**Pond 220P: DMH B**

Peak Elev=51.37' Inflow=0.61 cfs 0.041 af  
 12.0" Round Culvert n=0.013 L=3.0' S=0.0167 '/' Outflow=0.61 cfs 0.041 af

**Pond 221P: Inf. Basin 6**

Peak Elev=58.06' Storage=7,407 cf Inflow=8.34 cfs 0.607 af  
 Discarded=0.19 cfs 0.116 af Primary=3.73 cfs 0.452 af Outflow=3.92 cfs 0.568 af

**Link 59L: DP 1**

Inflow=2.98 cfs 0.494 af  
 Primary=2.98 cfs 0.494 af

**Link 60L: DP 2**

Inflow=7.16 cfs 0.446 af  
 Primary=7.16 cfs 0.446 af

**Link 188L: DP 3**

Inflow=9.25 cfs 1.313 af  
 Primary=9.25 cfs 1.313 af

**Link 203L: 3A**

Inflow=0.06 cfs 0.033 af  
 Primary=0.06 cfs 0.033 af

**Total Runoff Area = 39.842 ac Runoff Volume = 6.510 af Average Runoff Depth = 1.96"**  
**58.01% Pervious = 23.114 ac 41.99% Impervious = 16.728 ac**

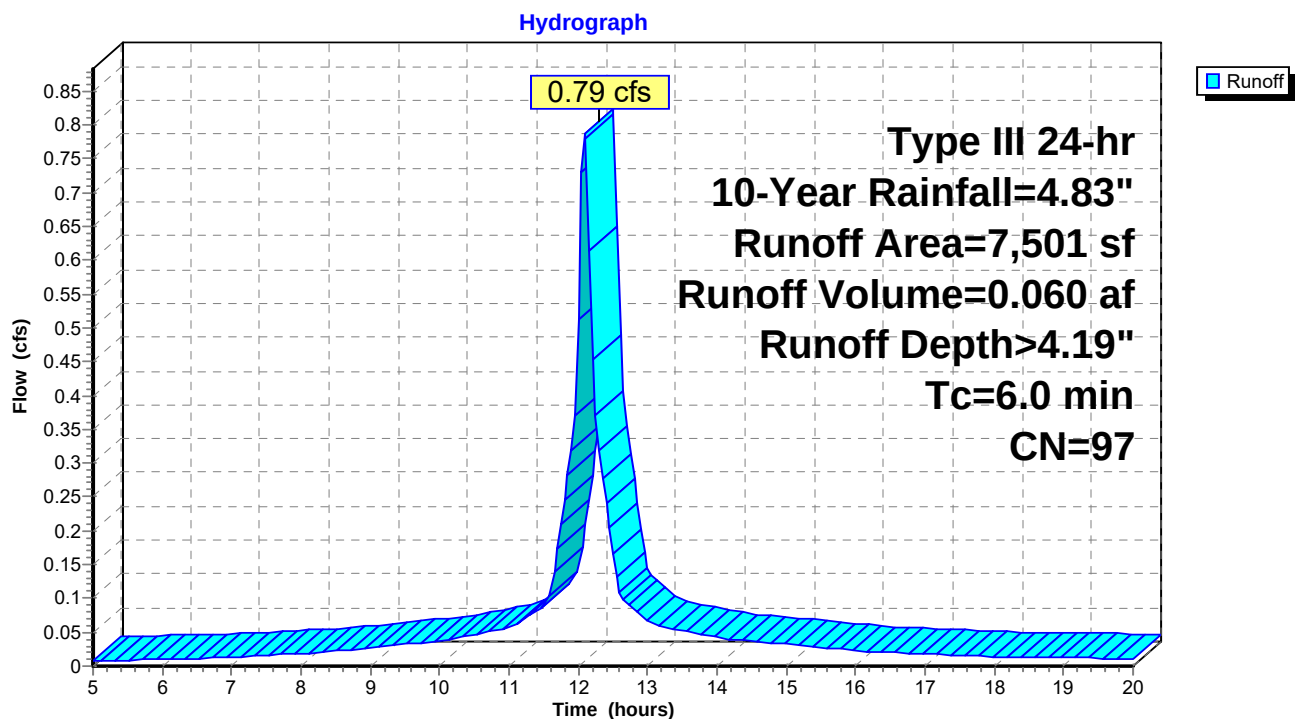
**Summary for Subcatchment 1S: P1A**

Runoff = 0.79 cfs @ 12.09 hrs, Volume= 0.060 af, Depth> 4.19"  
 Routed to Pond 16P : CB 58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 254       | 74 | >75% Grass cover, Good, HSG C |
| 1,384     | 98 | Unconnected roofs, HSG C      |
| 5,863     | 98 | Paved parking, HSG C          |
| 7,501     | 97 | Weighted Average              |
| 254       |    | 3.39% Pervious Area           |
| 7,247     |    | 96.61% Impervious Area        |
| 1,384     |    | 19.10% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 1S: P1A**



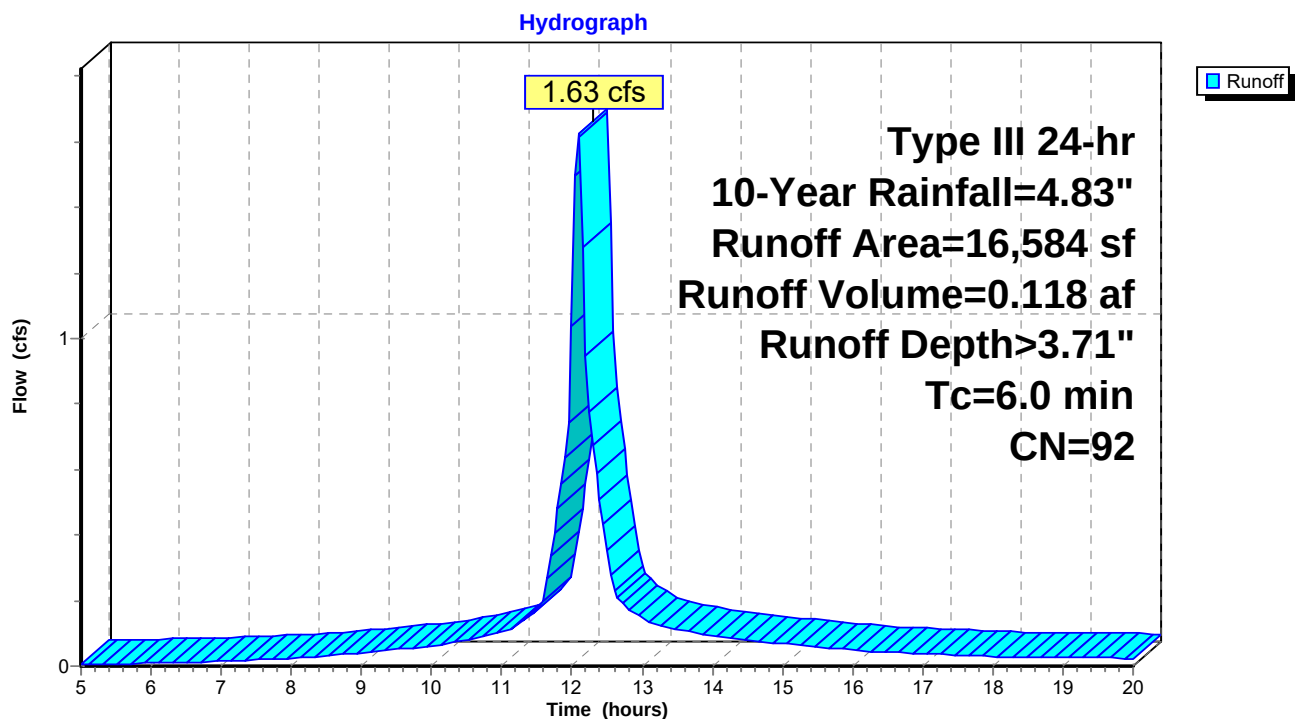
**Summary for Subcatchment 2S: P1B**

Runoff = 1.63 cfs @ 12.09 hrs, Volume= 0.118 af, Depth> 3.71"  
 Routed to Pond 17P : CB 59

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,226     | 98 | Unconnected roofs, HSG C      |
| 4,280     | 74 | >75% Grass cover, Good, HSG C |
| 7,078     | 98 | Paved parking, HSG C          |
| 16,584    | 92 | Weighted Average              |
| 4,280     |    | 25.81% Pervious Area          |
| 12,304    |    | 74.19% Impervious Area        |
| 5,226     |    | 42.47% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 2S: P1B**

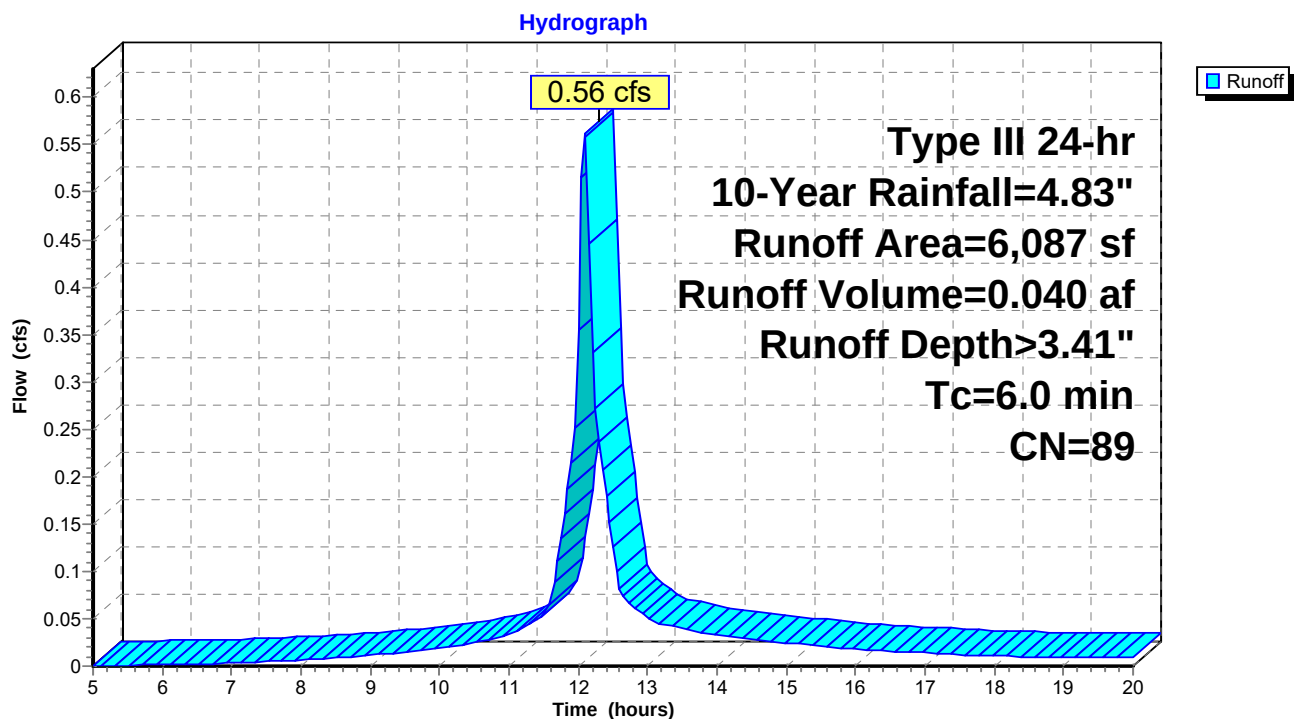
**Summary for Subcatchment 3S: P1C**

Runoff = 0.56 cfs @ 12.09 hrs, Volume= 0.040 af, Depth> 3.41"  
 Routed to Pond 18P : CB 63

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,616     | 98 | Unconnected roofs, HSG C      |
| 2,173     | 74 | >75% Grass cover, Good, HSG C |
| 2,298     | 98 | Paved parking, HSG C          |
| 6,087     | 89 | Weighted Average              |
| 2,173     |    | 35.70% Pervious Area          |
| 3,914     |    | 64.30% Impervious Area        |
| 1,616     |    | 41.29% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 3S: P1C**

### Summary for Subcatchment 4S: P1D

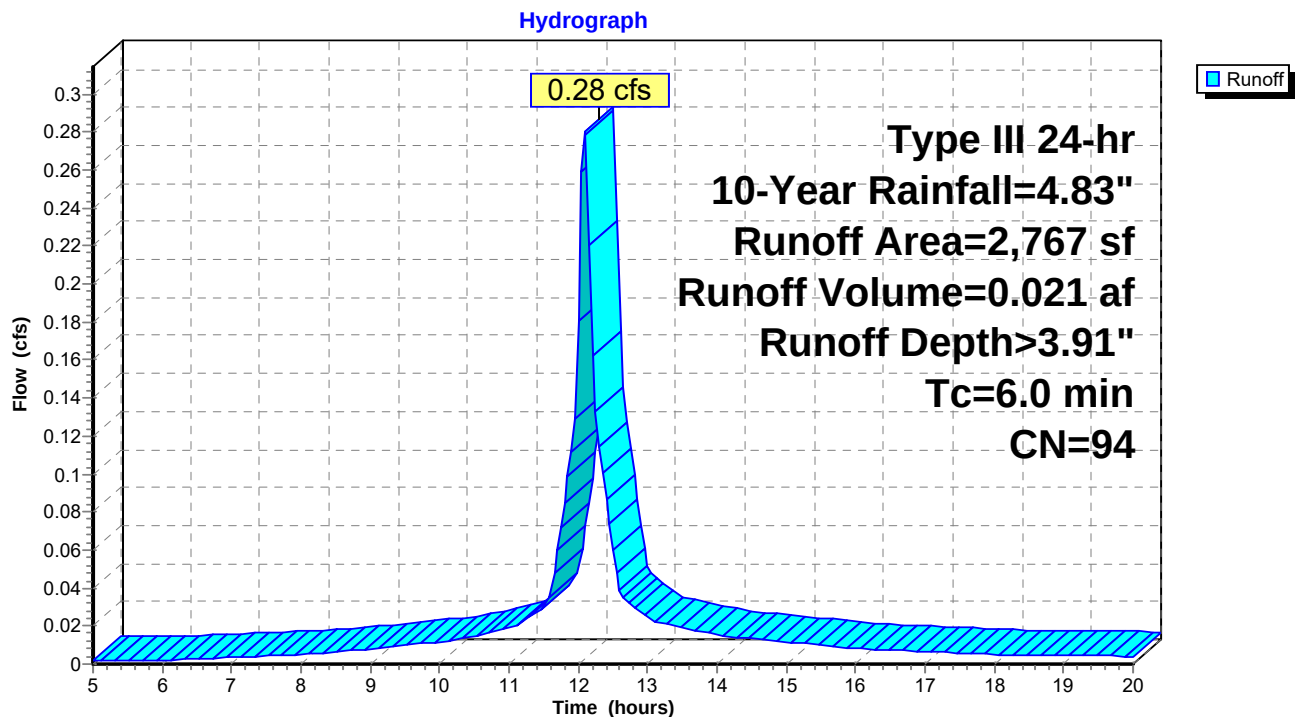
Runoff = 0.28 cfs @ 12.09 hrs, Volume= 0.021 af, Depth> 3.91"  
 Routed to Pond 19P : CB 62

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 512       | 74 | >75% Grass cover, Good, HSG C |
| 2,255     | 98 | Paved parking, HSG C          |
| 2,767     | 94 | Weighted Average              |
| 512       |    | 18.50% Pervious Area          |
| 2,255     |    | 81.50% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 4S: P1D



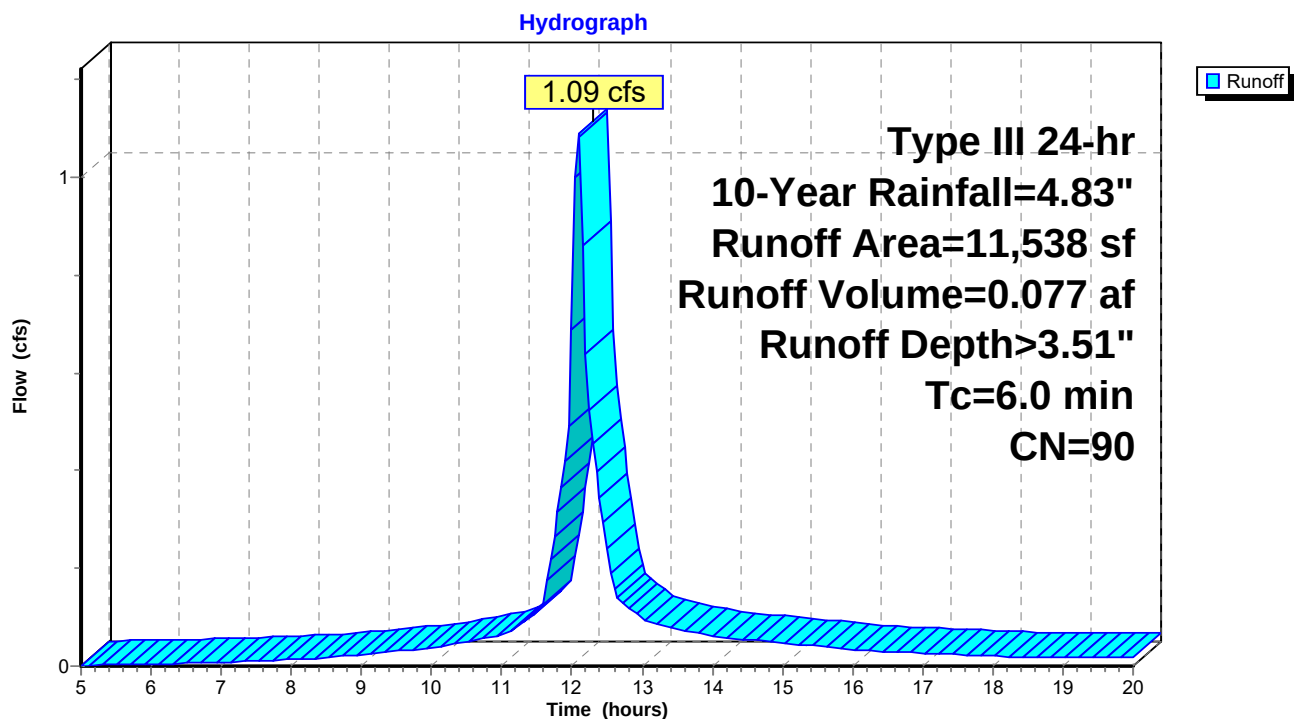
**Summary for Subcatchment 5S: P1E**

Runoff = 1.09 cfs @ 12.09 hrs, Volume= 0.077 af, Depth> 3.51"  
 Routed to Pond 26P : CB 61

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,900     | 74 | >75% Grass cover, Good, HSG C |
| 3,976     | 98 | Unconnected roofs, HSG C      |
| 3,662     | 98 | Paved parking, HSG C          |
| 11,538    | 90 | Weighted Average              |
| 3,900     |    | 33.80% Pervious Area          |
| 7,638     |    | 66.20% Impervious Area        |
| 3,976     |    | 52.06% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 5S: P1E**

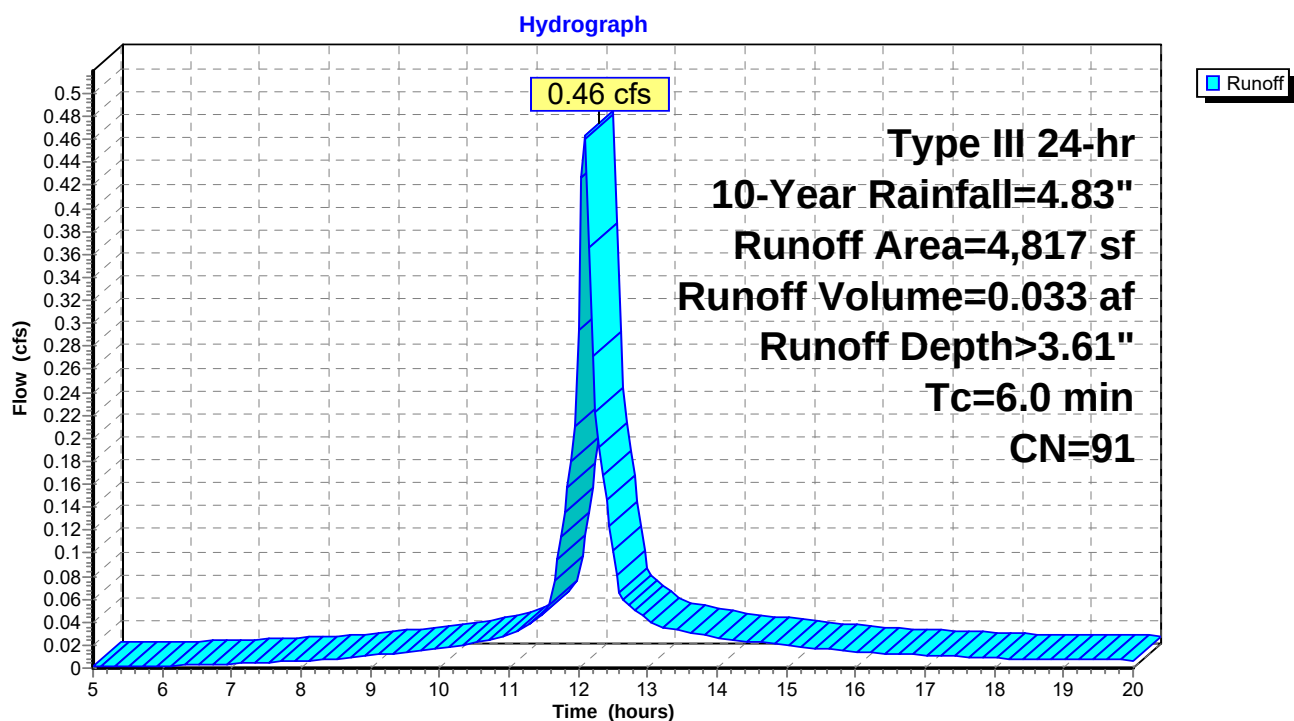
**Summary for Subcatchment 6S: P1F**

Runoff = 0.46 cfs @ 12.09 hrs, Volume= 0.033 af, Depth> 3.61"  
 Routed to Pond 27P : CB 60

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,378     | 74 | >75% Grass cover, Good, HSG C |
| 429       | 98 | Unconnected roofs, HSG C      |
| 3,010     | 98 | Paved parking, HSG C          |
| 4,817     | 91 | Weighted Average              |
| 1,378     |    | 28.61% Pervious Area          |
| 3,439     |    | 71.39% Impervious Area        |
| 429       |    | 12.47% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 6S: P1F**

**Summary for Subcatchment 7S: P1G**

Runoff = 0.58 cfs @ 12.09 hrs, Volume= 0.045 af, Depth> 4.26"  
 Routed to Pond 22P : CB 56

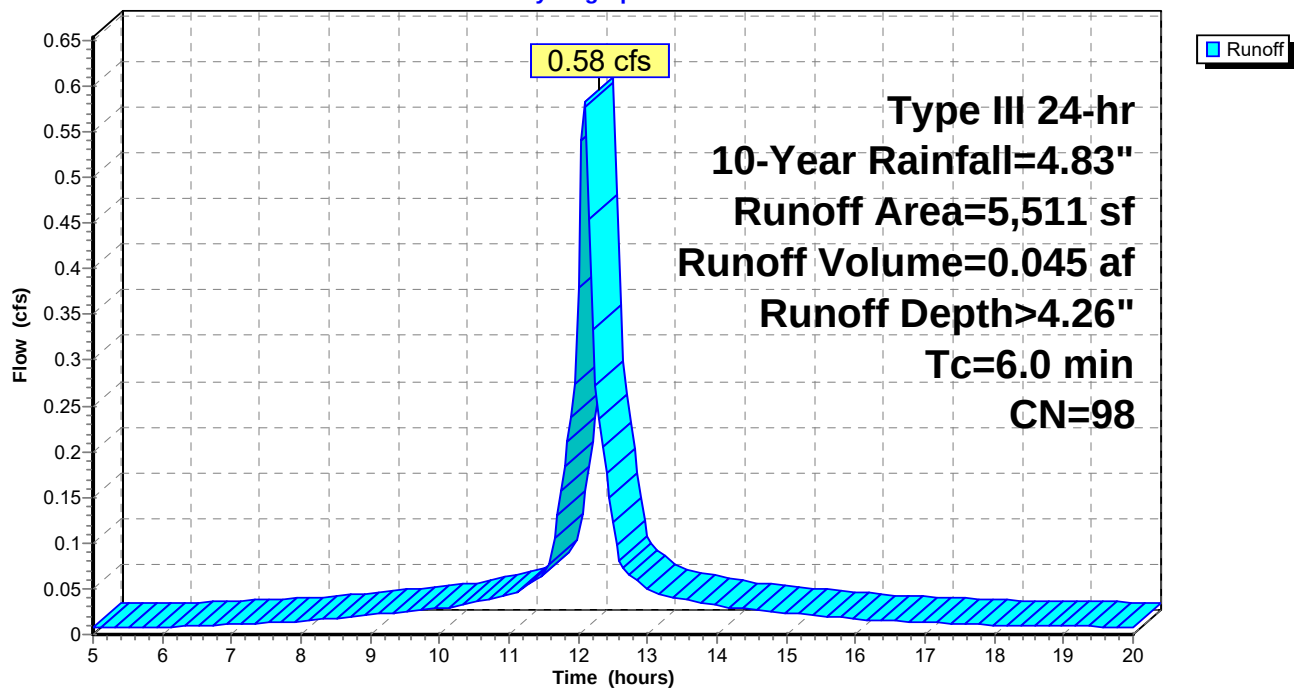
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description             |
|-----------|----|-------------------------|
| 5,511     | 98 | Paved parking, HSG C    |
| 5,511     |    | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 7S: P1G**

Hydrograph



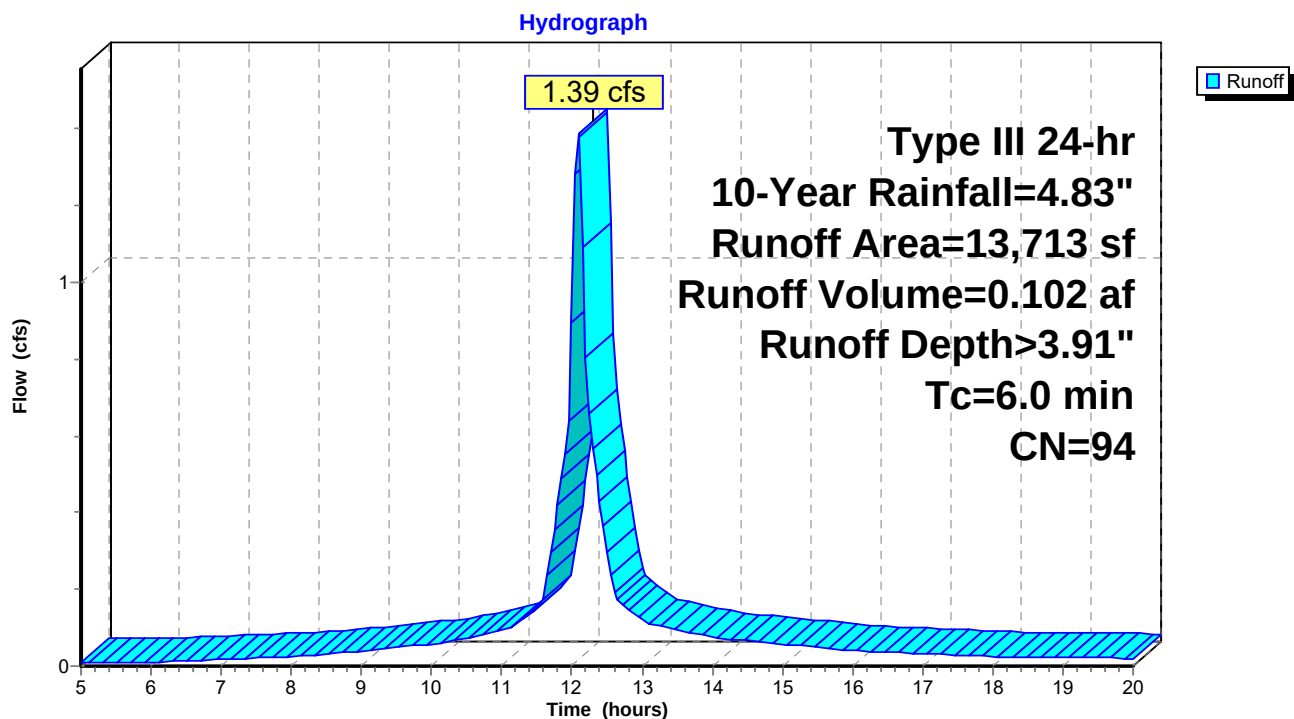
**Summary for Subcatchment 8S: P1H**

Runoff = 1.39 cfs @ 12.09 hrs, Volume= 0.102 af, Depth> 3.91"  
 Routed to Pond 23P : CB 57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,554     | 74 | >75% Grass cover, Good, HSG C |
| 5,795     | 98 | Unconnected roofs, HSG C      |
| 5,364     | 98 | Paved parking, HSG C          |
| 13,713    | 94 | Weighted Average              |
| 2,554     |    | 18.62% Pervious Area          |
| 11,159    |    | 81.38% Impervious Area        |
| 5,795     |    | 51.93% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 8S: P1H**

**Summary for Subcatchment 9S: P1I**

Runoff = 0.36 cfs @ 12.09 hrs, Volume= 0.026 af, Depth> 3.81"  
 Routed to Pond 30P : CB 55

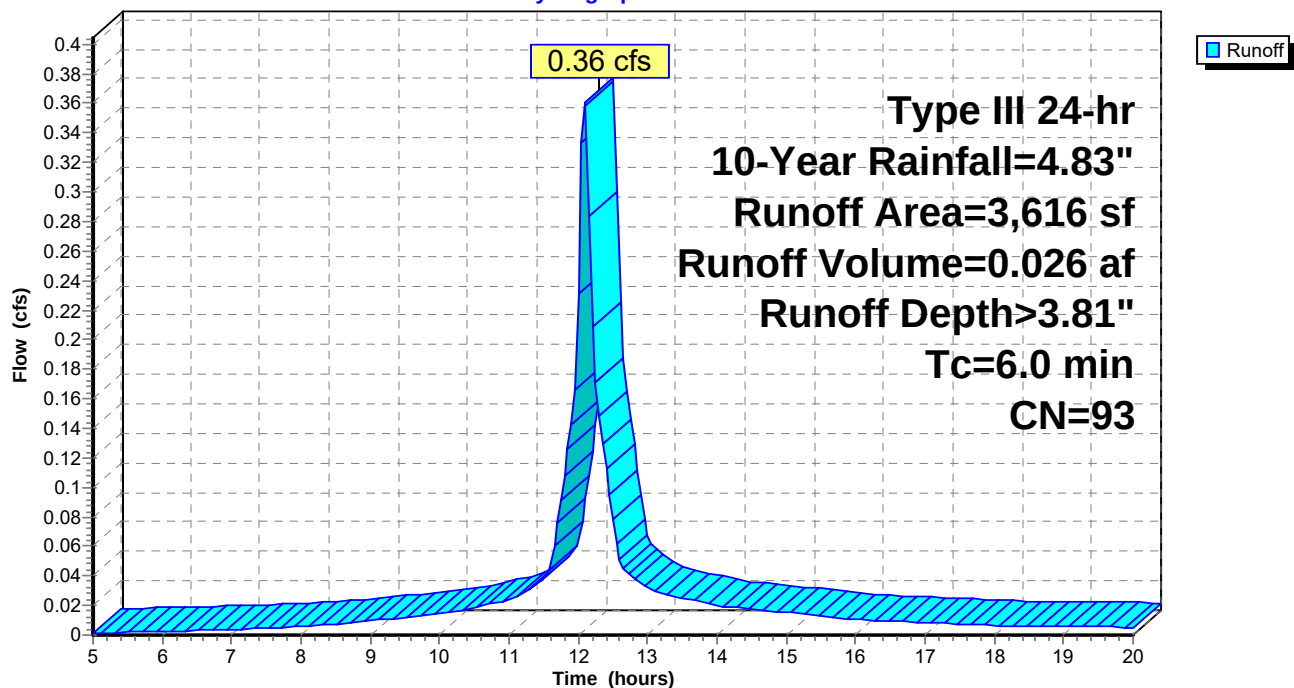
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 780       | 74 | >75% Grass cover, Good, HSG C |
| 2,836     | 98 | Paved parking, HSG C          |
| 3,616     | 93 | Weighted Average              |
| 780       |    | 21.57% Pervious Area          |
| 2,836     |    | 78.43% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 9S: P1I**

Hydrograph





**Summary for Subcatchment 10S: P1J**

Runoff = 0.21 cfs @ 12.09 hrs, Volume= 0.016 af, Depth> 4.26"  
 Routed to Pond 33P : CB 53

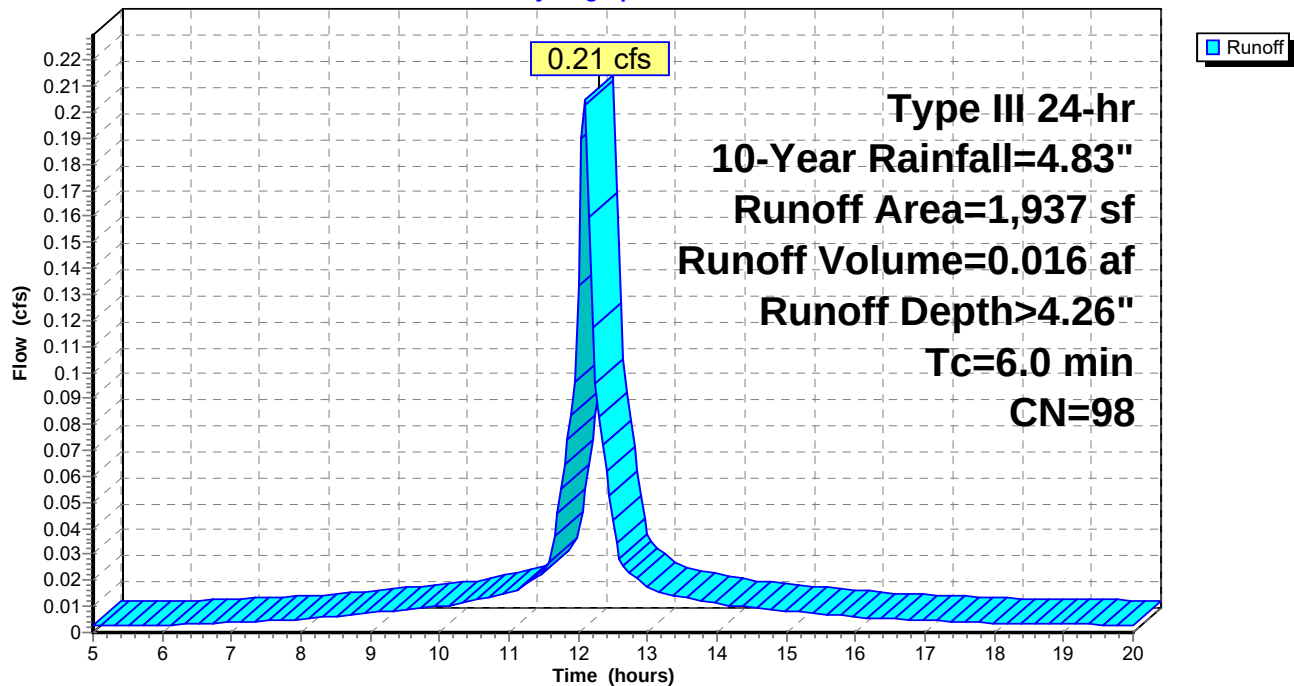
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description             |
|-----------|----|-------------------------|
| 1,937     | 98 | Paved parking, HSG C    |
| 1,937     |    | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 10S: P1J**

Hydrograph



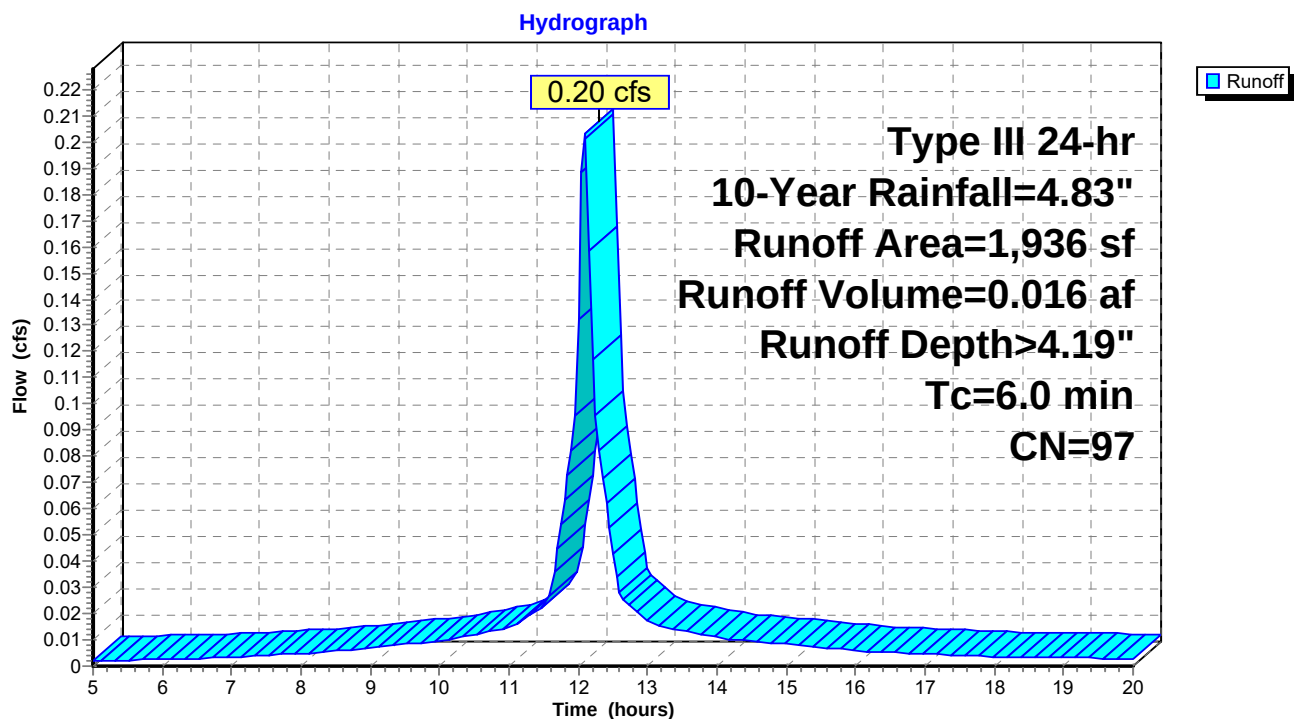
**Summary for Subcatchment 11S: P1K**

Runoff = 0.20 cfs @ 12.09 hrs, Volume= 0.016 af, Depth> 4.19"  
 Routed to Pond 31P : CB 51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 61        | 74 | >75% Grass cover, Good, HSG C |
| 354       | 98 | Unconnected roofs, HSG C      |
| 1,521     | 98 | Paved parking, HSG C          |
| 1,936     | 97 | Weighted Average              |
| 61        |    | 3.15% Pervious Area           |
| 1,875     |    | 96.85% Impervious Area        |
| 354       |    | 18.88% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 11S: P1K**

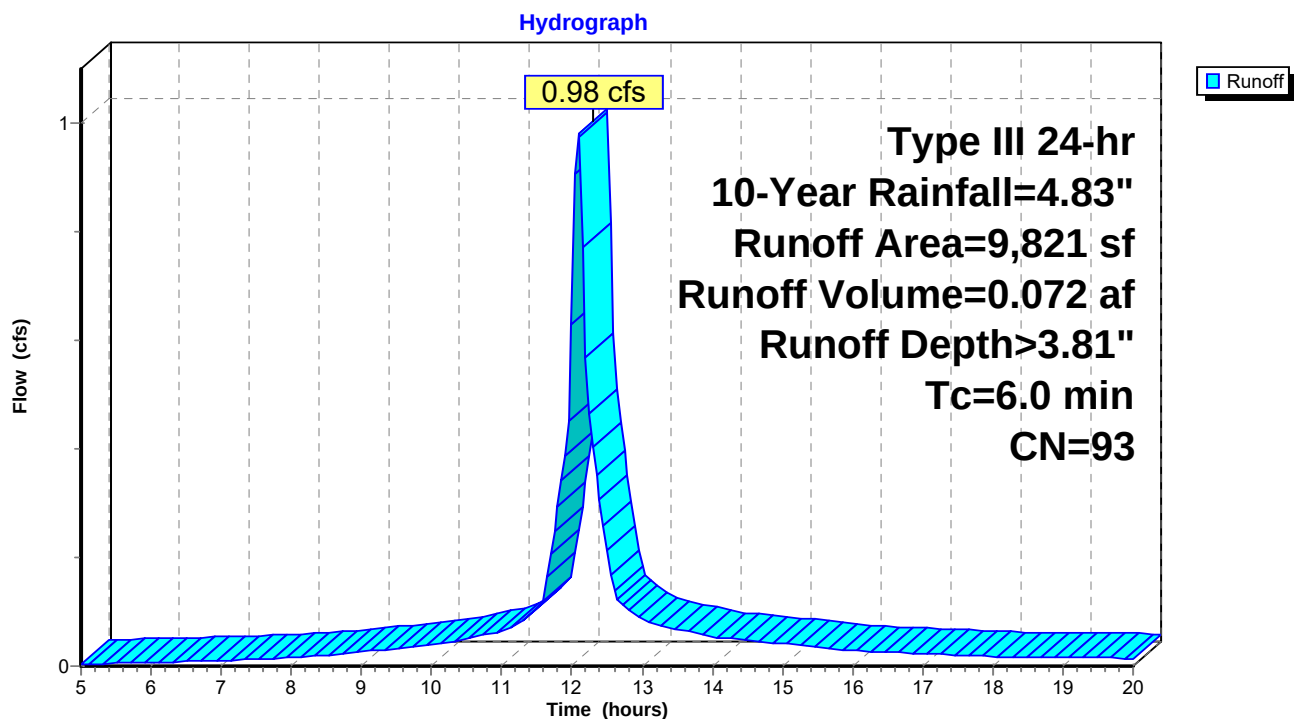
**Summary for Subcatchment 12S: P1L**

Runoff = 0.98 cfs @ 12.09 hrs, Volume= 0.072 af, Depth> 3.81"  
 Routed to Pond 32P : CB 52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,077     | 74 | >75% Grass cover, Good, HSG C |
| 2,390     | 98 | Unconnected roofs, HSG C      |
| 5,354     | 98 | Paved parking, HSG C          |
| 9,821     | 93 | Weighted Average              |
| 2,077     |    | 21.15% Pervious Area          |
| 7,744     |    | 78.85% Impervious Area        |
| 2,390     |    | 30.86% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 12S: P1L**

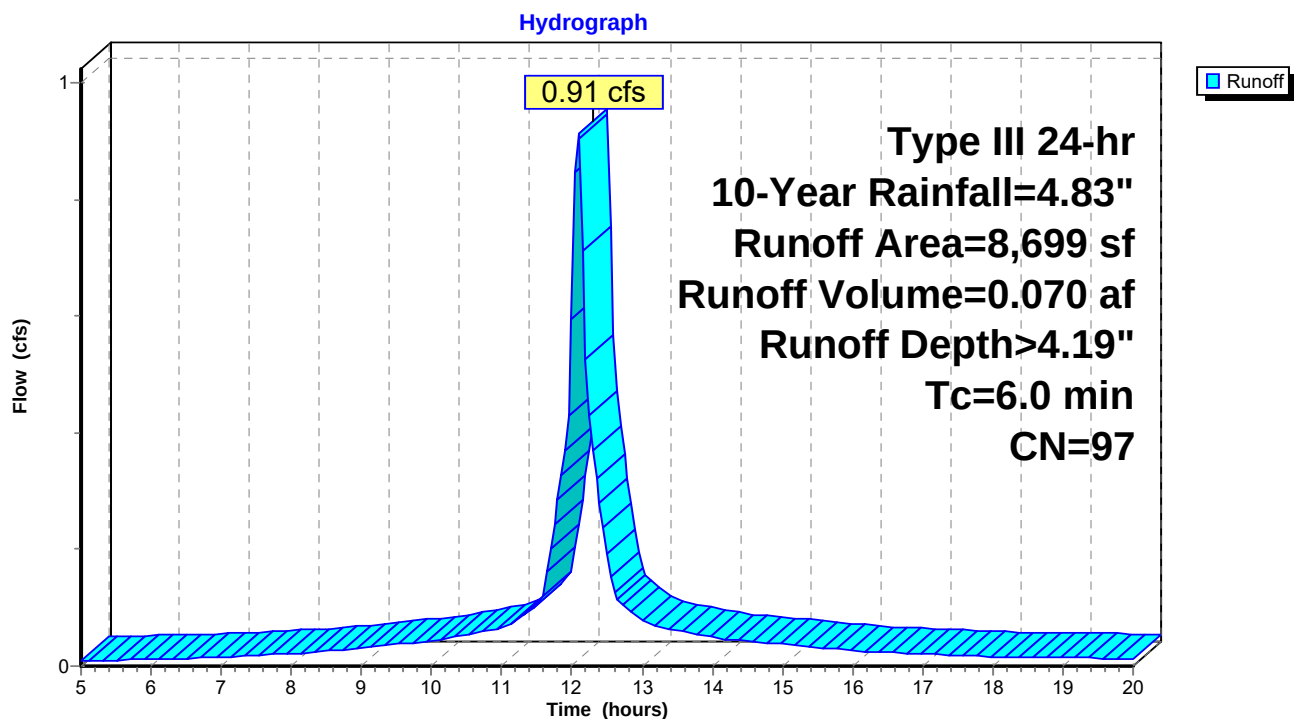
**Summary for Subcatchment 13S: P1M**

Runoff = 0.91 cfs @ 12.09 hrs, Volume= 0.070 af, Depth> 4.19"  
 Routed to Pond 36P : CB 54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 476       | 74 | >75% Grass cover, Good, HSG C |
| 569       | 98 | Unconnected roofs, HSG C      |
| 7,654     | 98 | Paved parking, HSG C          |
| 8,699     | 97 | Weighted Average              |
| 476       |    | 5.47% Pervious Area           |
| 8,223     |    | 94.53% Impervious Area        |
| 569       |    | 6.92% Unconnected             |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 13S: P1M**

**RH Post 1-2-26**

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Type III 24-hr 10-Year Rainfall=4.83"

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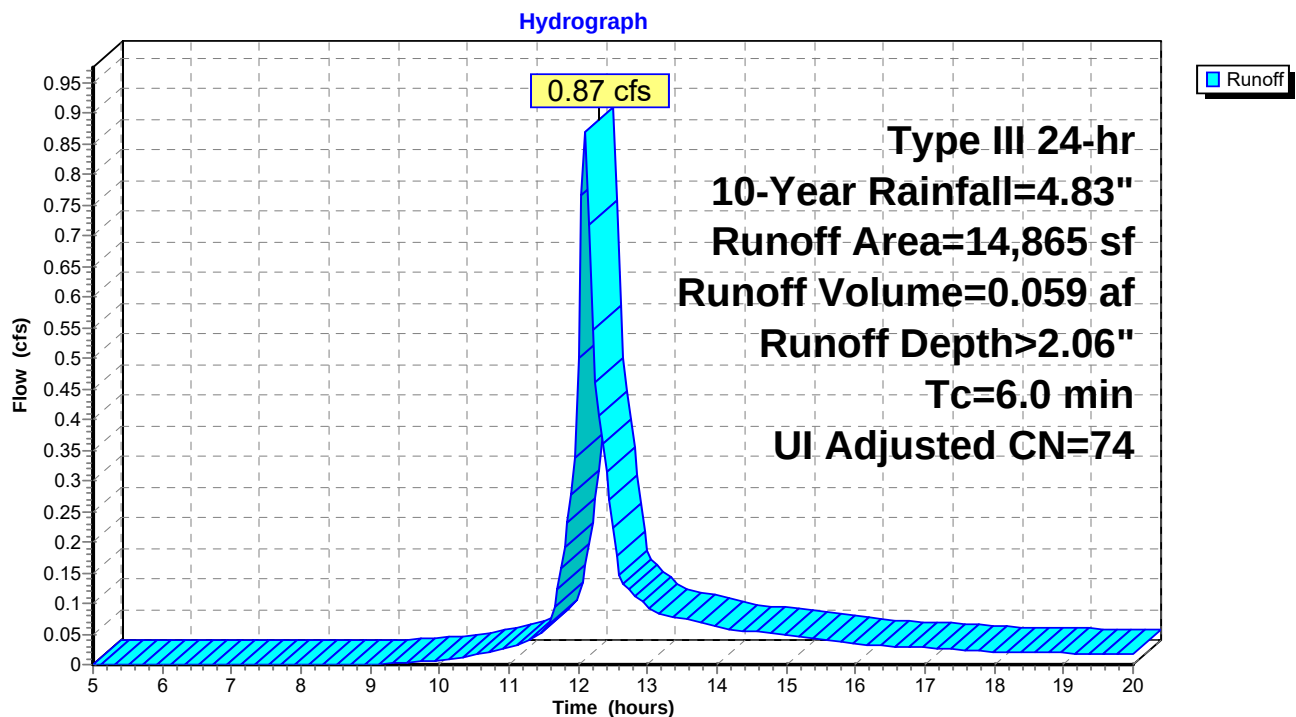
**Summary for Subcatchment 14S: P1N**

Runoff = 0.87 cfs @ 12.10 hrs, Volume= 0.059 af, Depth> 2.06"  
Routed to Pond 15P : Inf. Basin 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 586       | 98 |     | Unconnected roofs, HSG C      |
| 14,279    | 74 |     | >75% Grass cover, Good, HSG C |
| 14,865    | 75 | 74  | Weighted Average, UI Adjusted |
| 14,279    |    |     | 96.06% Pervious Area          |
| 586       |    |     | 3.94% Impervious Area         |
| 586       |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 14S: P1N**

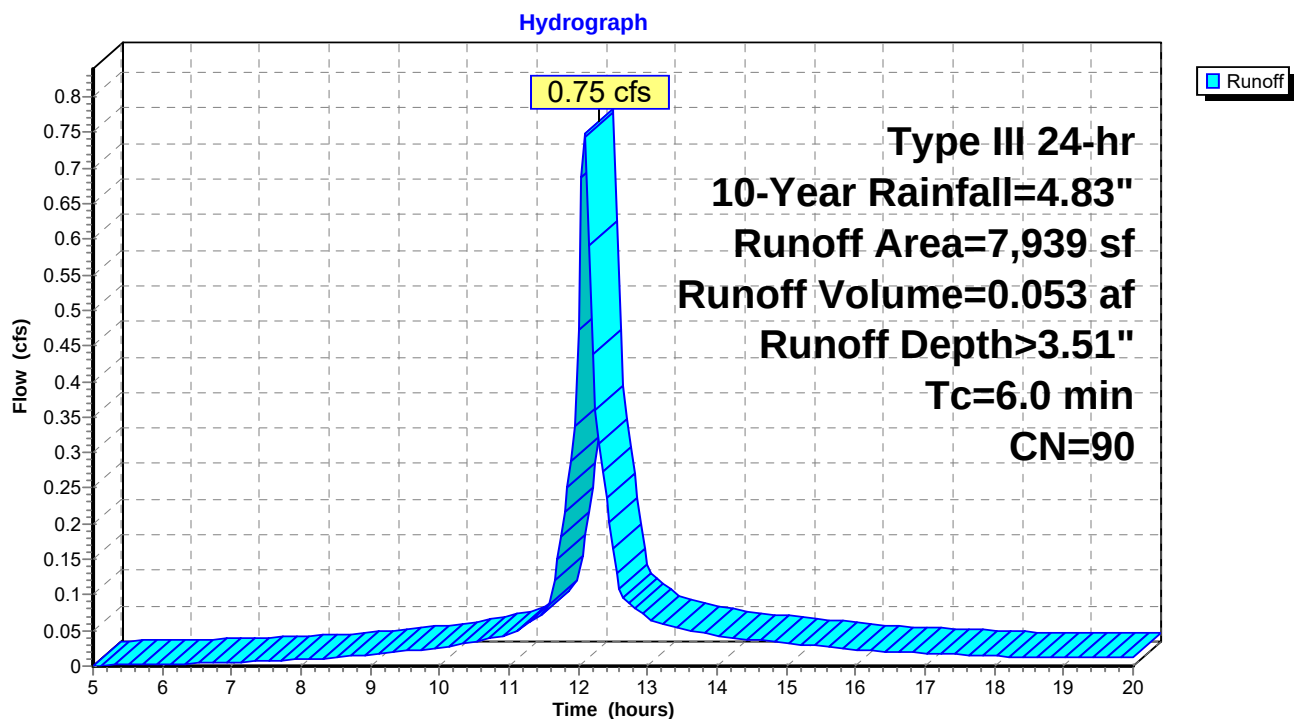
**Summary for Subcatchment 39S: P1P**

Runoff = 0.75 cfs @ 12.09 hrs, Volume= 0.053 af, Depth> 3.51"  
 Routed to Pond 42P : CB 50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,926     | 98 | Unconnected roofs, HSG C      |
| 2,623     | 74 | >75% Grass cover, Good, HSG C |
| 3,390     | 98 | Paved parking, HSG C          |
| 7,939     | 90 | Weighted Average              |
| 2,623     |    | 33.04% Pervious Area          |
| 5,316     |    | 66.96% Impervious Area        |
| 1,926     |    | 36.23% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 39S: P1P**

**Summary for Subcatchment 40S: P10**

Runoff = 0.10 cfs @ 12.09 hrs, Volume= 0.008 af, Depth> 4.26"  
 Routed to Pond 41P : CB 49

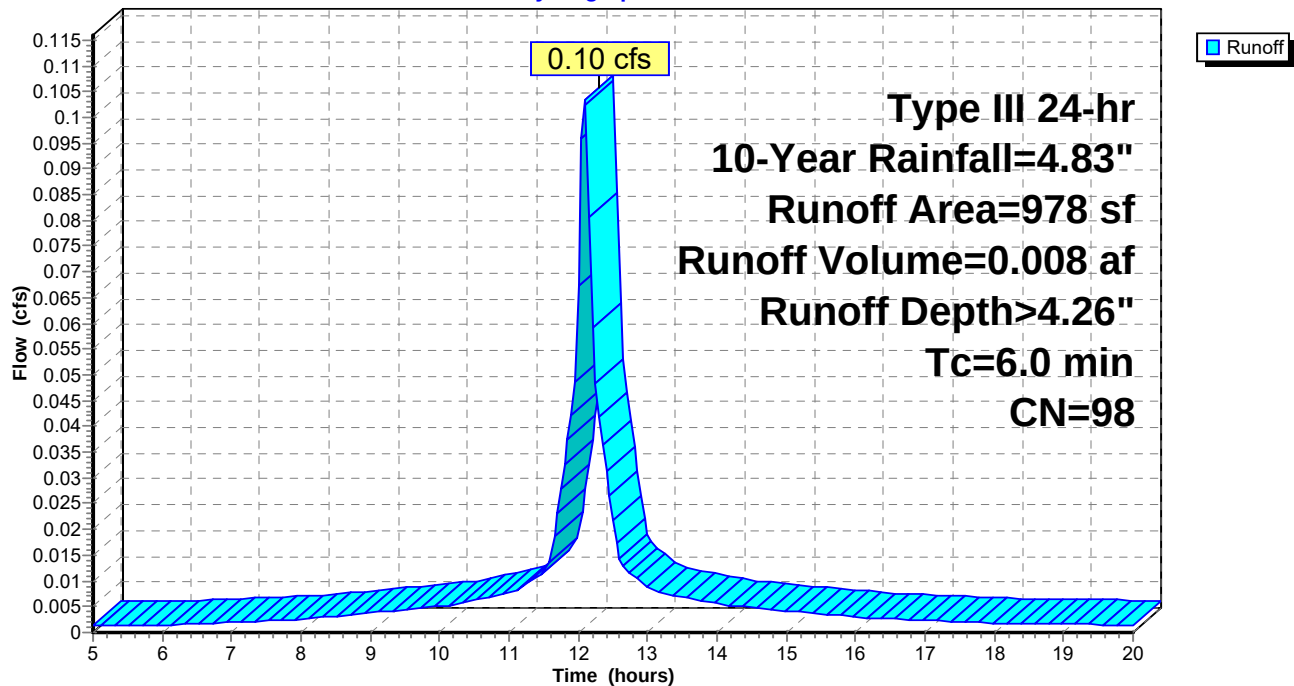
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description             |
|-----------|----|-------------------------|
| 978       | 98 | Paved parking, HSG C    |
| 978       |    | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 40S: P10**

Hydrograph



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Type III 24-hr 10-Year Rainfall=4.83"

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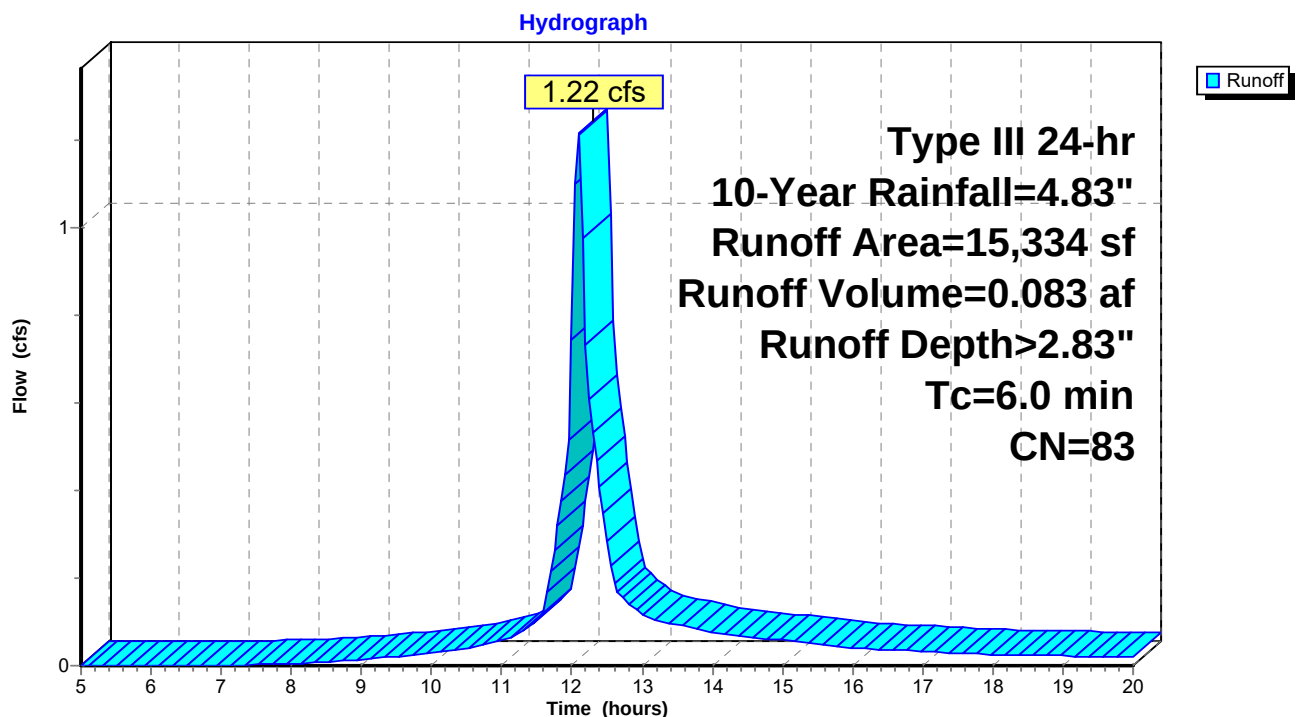
**Summary for Subcatchment 44S: P1R**

Runoff = 1.22 cfs @ 12.09 hrs, Volume= 0.083 af, Depth> 2.83"  
Routed to Pond 46P : CB 48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 704       | 98 | Unconnected pavement, HSG C   |
| 1,196     | 74 | >75% Grass cover, Good, HSG C |
| 955       | 98 | Paved parking, HSG C          |
| 2,884     | 98 | Unconnected roofs, HSG A      |
| 3,316     | 39 | >75% Grass cover, Good, HSG A |
| 6,279     | 98 | Paved parking, HSG A          |
| 15,334    | 83 | Weighted Average              |
| 4,512     |    | 29.42% Pervious Area          |
| 10,822    |    | 70.58% Impervious Area        |
| 3,588     |    | 33.15% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 44S: P1R**



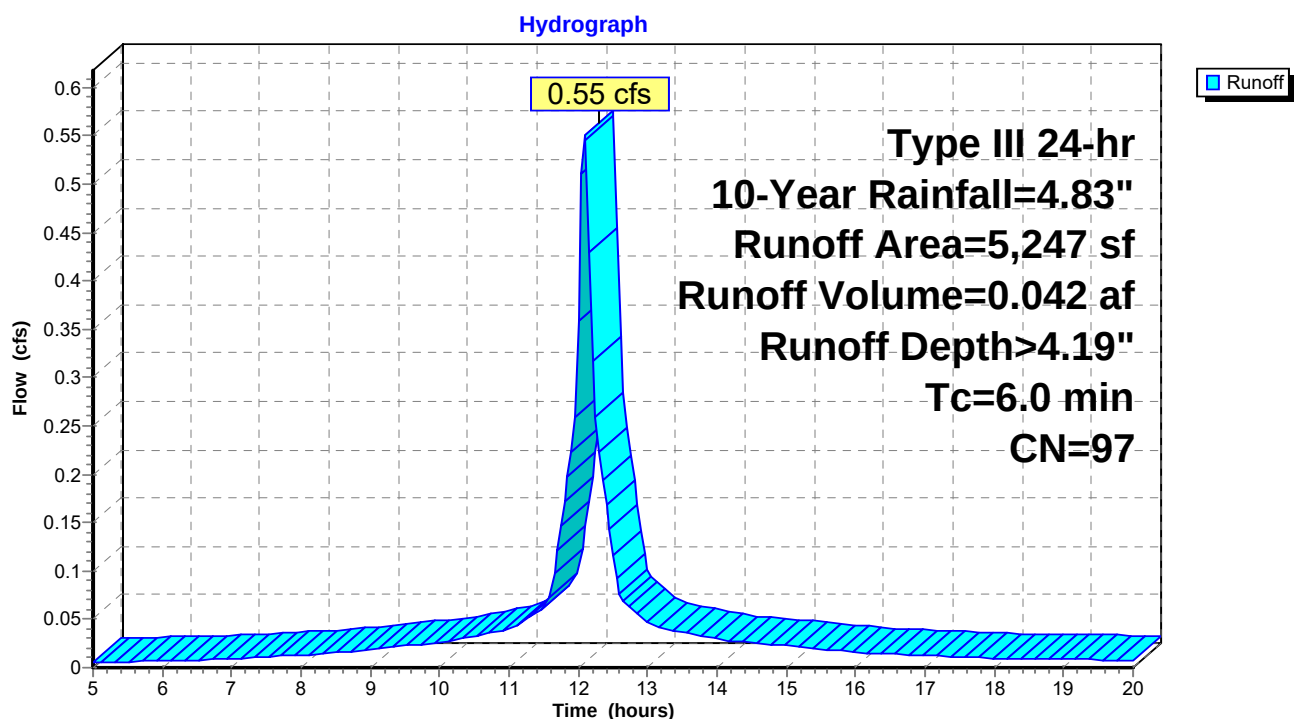
**Summary for Subcatchment 45S: P1Q**

Runoff = 0.55 cfs @ 12.09 hrs, Volume= 0.042 af, Depth> 4.19"  
 Routed to Pond 47P : CB 47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 49        | 74 | >75% Grass cover, Good, HSG C |
| 49        | 98 | Unconnected roofs, HSG C      |
| 1,120     | 98 | Paved parking, HSG C          |
| 80        | 39 | >75% Grass cover, Good, HSG A |
| 442       | 98 | Unconnected roofs, HSG A      |
| 3,507     | 98 | Paved parking, HSG A          |
| 5,247     | 97 | Weighted Average              |
| 129       |    | 2.46% Pervious Area           |
| 5,118     |    | 97.54% Impervious Area        |
| 491       |    | 9.59% Unconnected             |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 45S: P1Q**

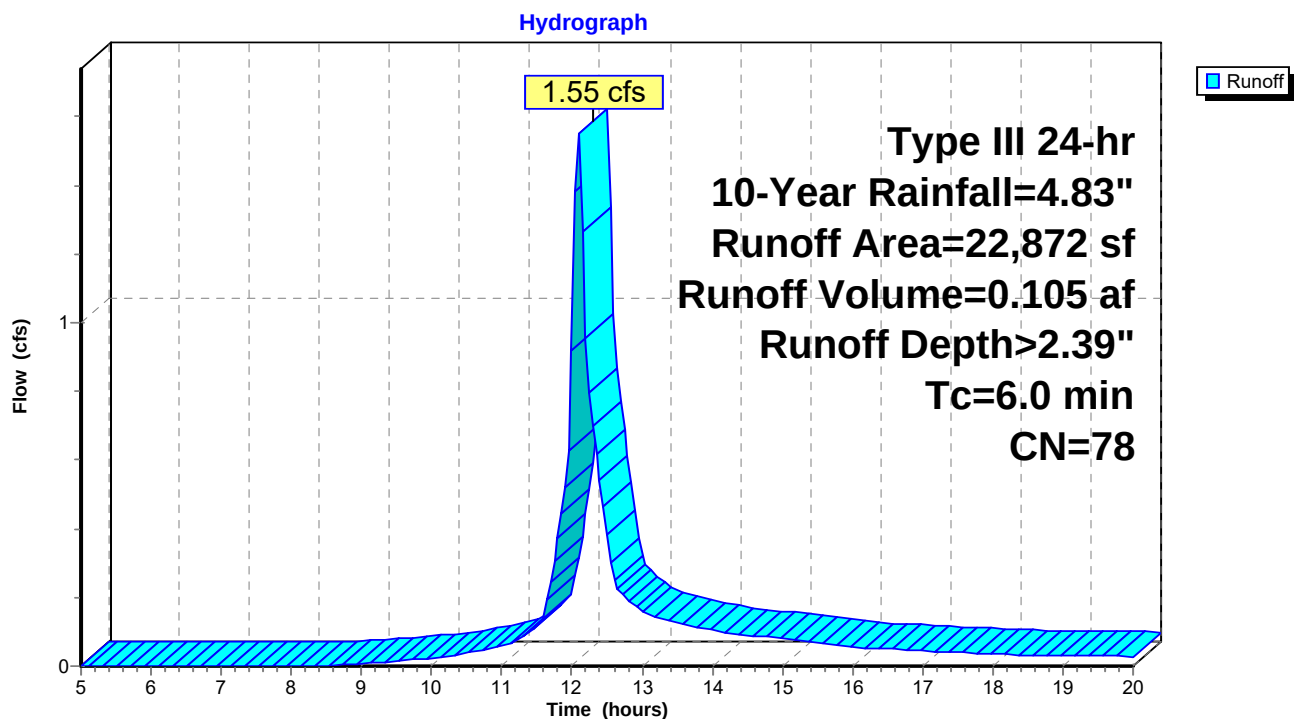
**Summary for Subcatchment 50S: P1S**

Runoff = 1.55 cfs @ 12.09 hrs, Volume= 0.105 af, Depth> 2.39"  
 Routed to Pond 53P : CB 21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 6,743     | 98 | Unconnected roofs, HSG A      |
| 7,903     | 39 | >75% Grass cover, Good, HSG A |
| 8,226     | 98 | Paved parking, HSG A          |
| 22,872    | 78 | Weighted Average              |
| 7,903     |    | 34.55% Pervious Area          |
| 14,969    |    | 65.45% Impervious Area        |
| 6,743     |    | 45.05% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 50S: P1S**

### Summary for Subcatchment 51S: P1T

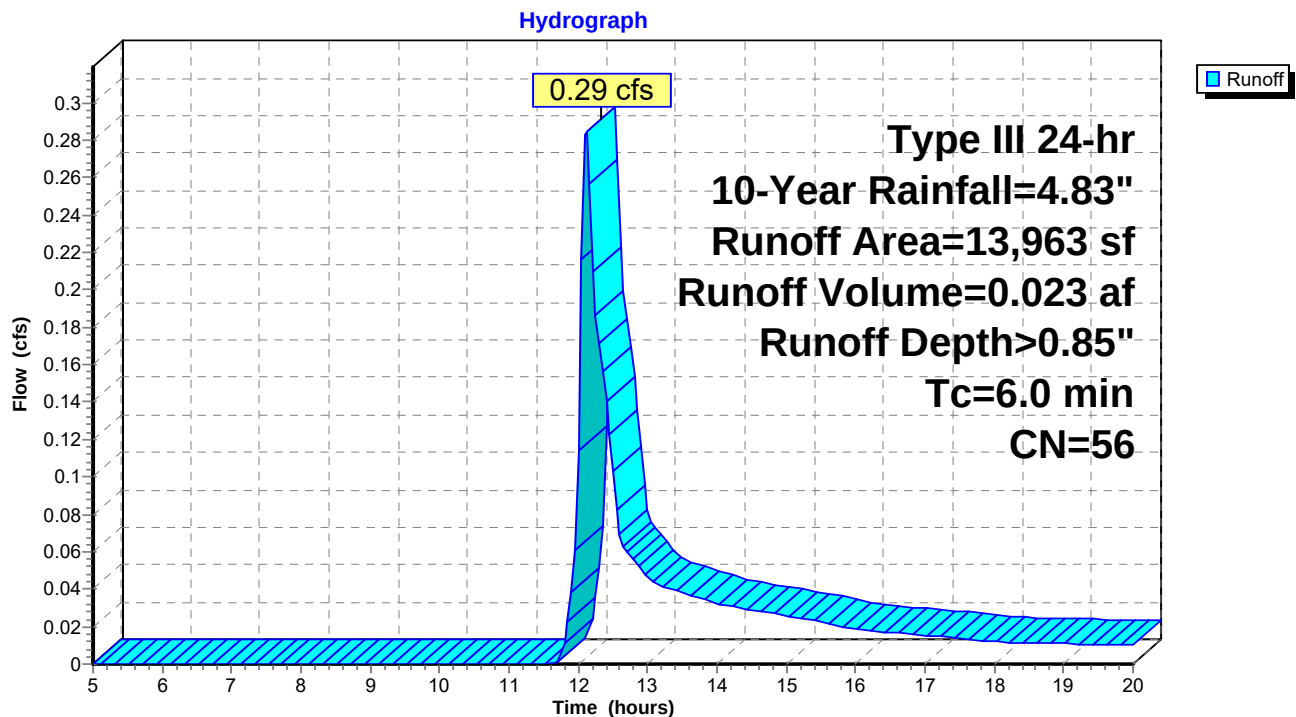
Runoff = 0.29 cfs @ 12.11 hrs, Volume= 0.023 af, Depth> 0.85"  
Routed to Pond 52P : CB 20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 9,878     | 39 | >75% Grass cover, Good, HSG A |
| 4,085     | 98 | Paved parking, HSG A          |
| 13,963    | 56 | Weighted Average              |
| 9,878     |    | 70.74% Pervious Area          |
| 4,085     |    | 29.26% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 51S: P1T



**Summary for Subcatchment 57S: (new Subcat)**

Runoff = 0.01 cfs @ 13.76 hrs, Volume= 0.006 af, Depth> 0.13"  
 Routed to Pond 56P : Inf. Basin 4

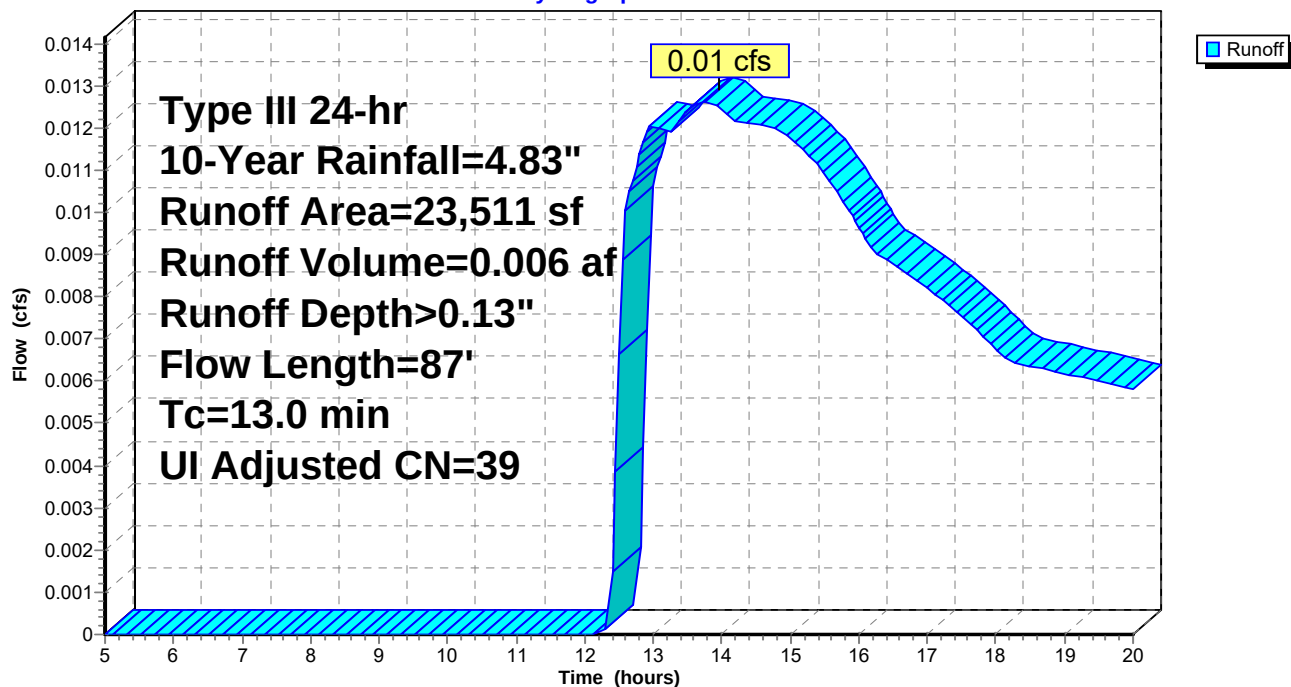
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 1,317     | 98 |     | Unconnected roofs, HSG A      |
| 4,111     | 30 |     | Woods, Good, HSG A            |
| 18,083    | 39 |     | >75% Grass cover, Good, HSG A |
| 23,511    | 41 | 39  | Weighted Average, UI Adjusted |
| 22,194    |    |     | 94.40% Pervious Area          |
| 1,317     |    |     | 5.60% Impervious Area         |
| 1,317     |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                          |
|----------|---------------|---------------|-------------------|----------------|----------------------------------------------------------------------|
| 12.5     | 50            | 0.0200        | 0.07              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10"     |
| 0.5      | 37            | 0.0300        | 1.21              |                | <b>Shallow Concentrated Flow,</b><br>Short Grass Pasture Kv= 7.0 fps |
| 13.0     | 87            | Total         |                   |                |                                                                      |

**Subcatchment 57S: (new Subcat)**

Hydrograph



**Summary for Subcatchment 58S: P1AA**

Runoff = 0.78 cfs @ 12.42 hrs, Volume= 0.136 af, Depth> 0.33"  
 Routed to Link 59L : DP 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

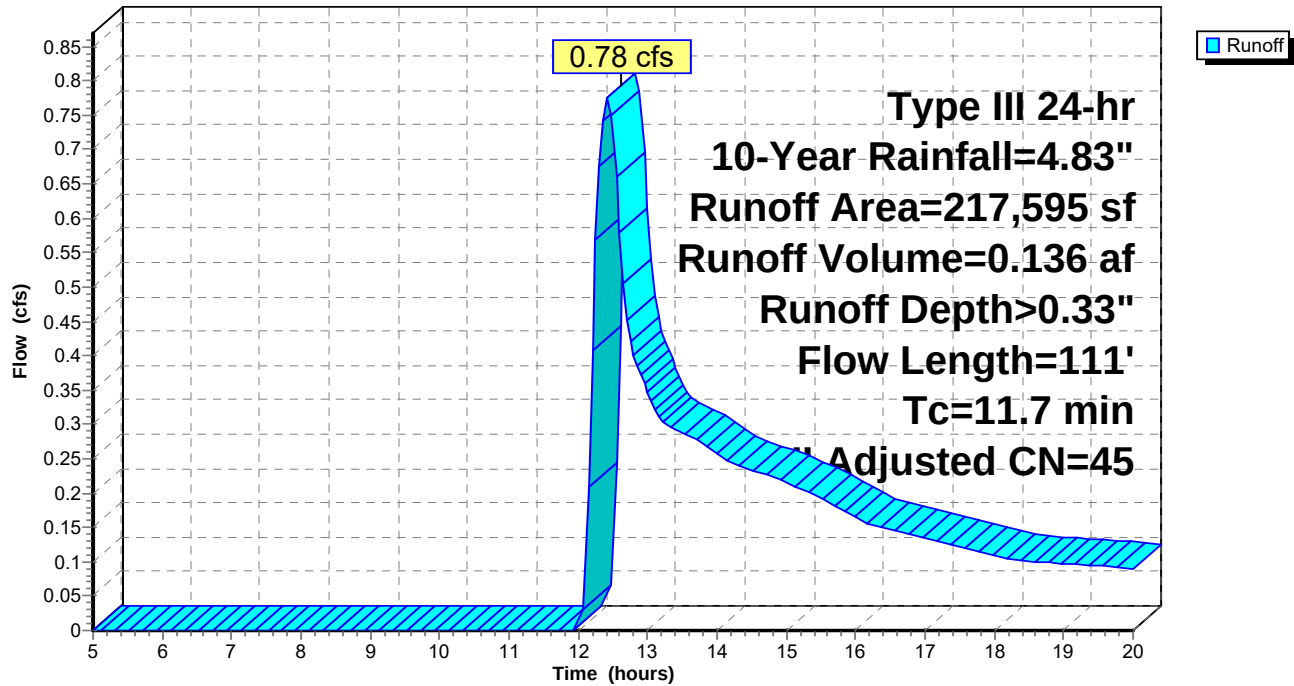
| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 1,776     | 98 |     | Unconnected roofs, HSG C      |
| 20,134    | 70 |     | Woods, Good, HSG C            |
| 38,005    | 74 |     | >75% Grass cover, Good, HSG C |
| 3,034     | 98 |     | Unconnected roofs, HSG A      |
| * 12,179  | 39 |     | Pervious Pavement             |
| 84,195    | 30 |     | Woods, Good, HSG A            |
| 57,506    | 39 |     | >75% Grass cover, Good, HSG A |
| 766       | 98 |     | Unconnected pavement, HSG A   |
| 217,595   | 46 | 45  | Weighted Average, UI Adjusted |
| 212,019   |    |     | 97.44% Pervious Area          |
| 5,576     |    |     | 2.56% Impervious Area         |
| 5,576     |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                      |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------|
| 10.7     | 50            | 0.0300        | 0.08              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10" |
| 1.0      | 61            | 0.0400        | 1.00              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps        |
| 11.7     | 111           | Total         |                   |                |                                                                  |

**Subcatchment 58S: P1AA**

Hydrograph



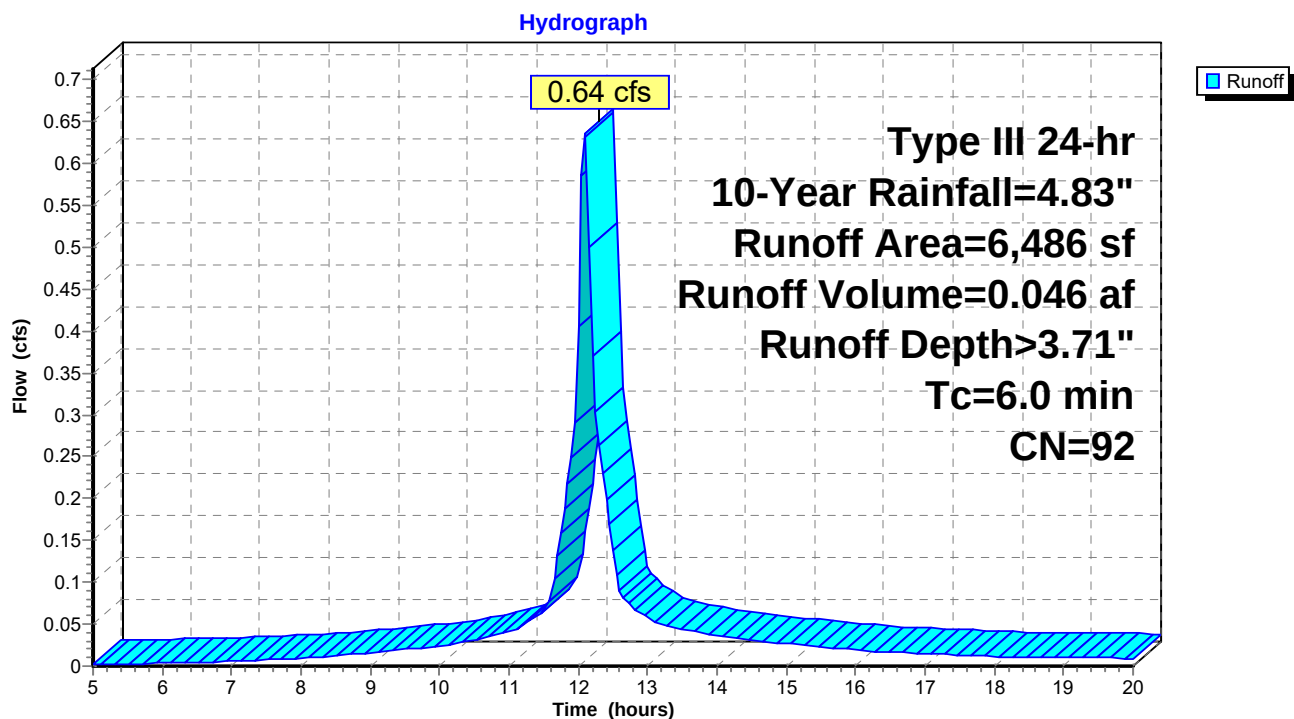
**Summary for Subcatchment 60S: P2C**

Runoff = 0.64 cfs @ 12.09 hrs, Volume= 0.046 af, Depth> 3.71"  
 Routed to Pond 62P : CB 66

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,086     | 98 | Unconnected roofs, HSG C      |
| 1,688     | 74 | >75% Grass cover, Good, HSG C |
| 2,712     | 98 | Paved parking, HSG C          |
| 6,486     | 92 | Weighted Average              |
| 1,688     |    | 26.03% Pervious Area          |
| 4,798     |    | 73.97% Impervious Area        |
| 2,086     |    | 43.48% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 60S: P2C**

### Summary for Subcatchment 61S: P2D

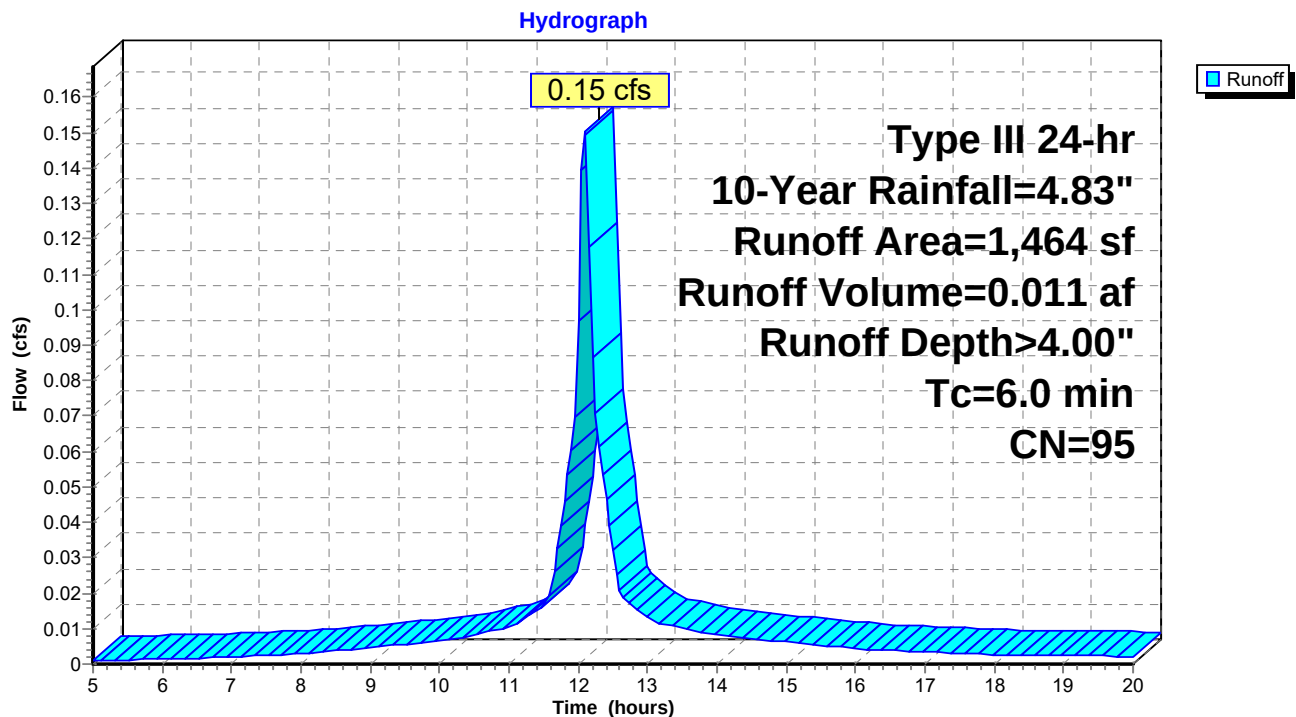
Runoff = 0.15 cfs @ 12.09 hrs, Volume= 0.011 af, Depth> 4.00"  
Routed to Pond 63P : CB 67

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 190       | 74 | >75% Grass cover, Good, HSG C |
| 1,274     | 98 | Paved parking, HSG C          |
| 1,464     | 95 | Weighted Average              |
| 190       |    | 12.98% Pervious Area          |
| 1,274     |    | 87.02% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 61S: P2D





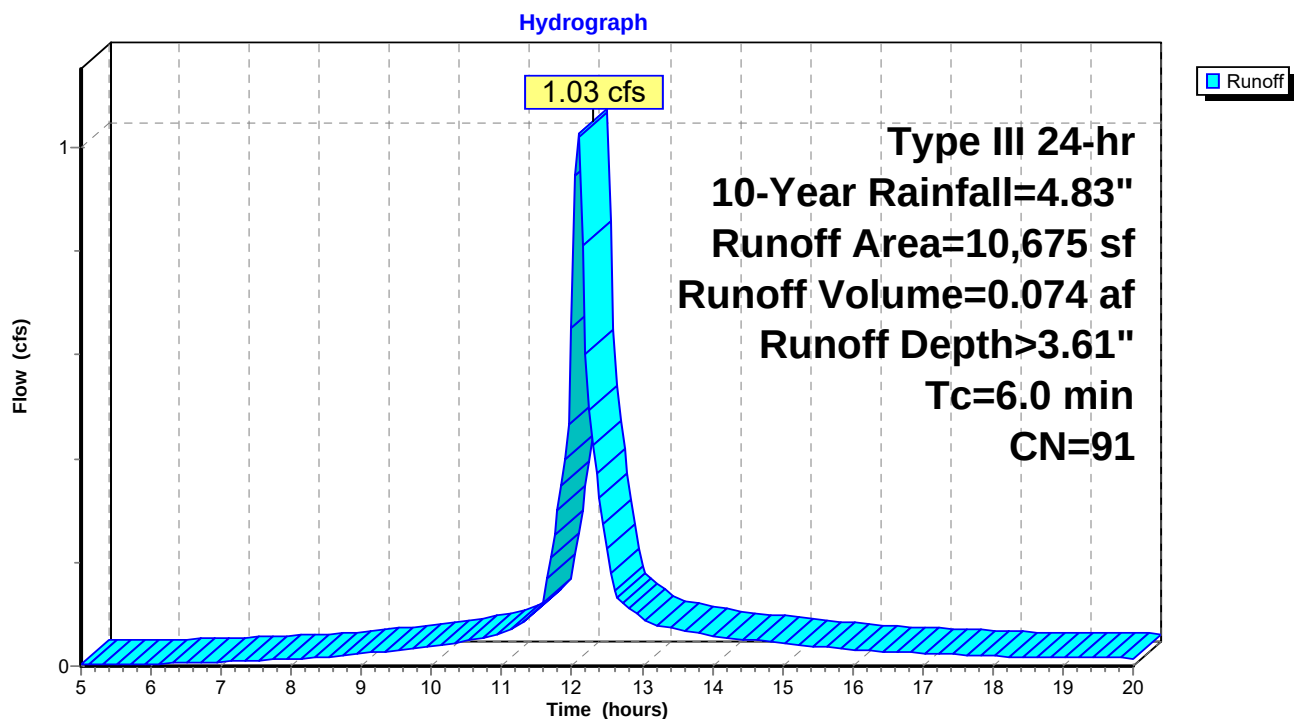
**Summary for Subcatchment 62S: P2J**

Runoff = 1.03 cfs @ 12.09 hrs, Volume= 0.074 af, Depth> 3.61"  
 Routed to Pond 69P : CB 72

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,207     | 98 | Unconnected roofs, HSG C      |
| 2,897     | 74 | >75% Grass cover, Good, HSG C |
| 4,571     | 98 | Paved parking, HSG C          |
| 10,675    | 91 | Weighted Average              |
| 2,897     |    | 27.14% Pervious Area          |
| 7,778     |    | 72.86% Impervious Area        |
| 3,207     |    | 41.23% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 62S: P2J**

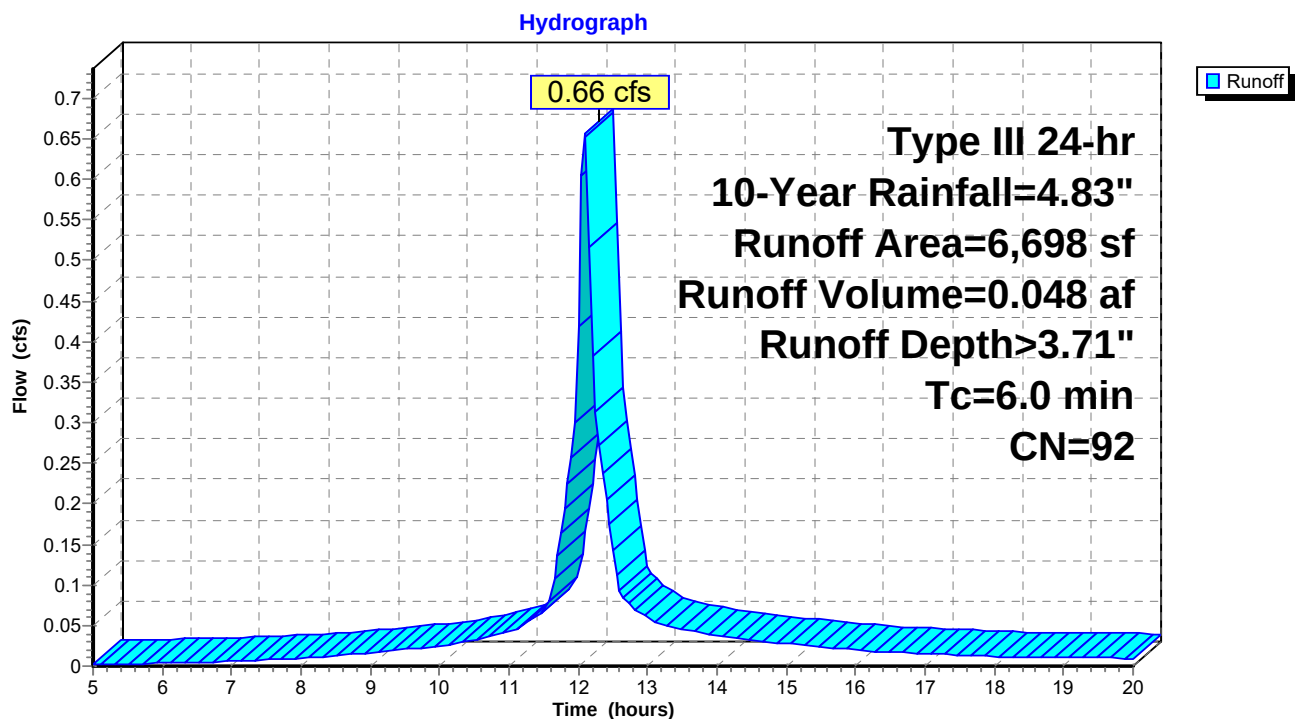
**Summary for Subcatchment 63S: P2K**

Runoff = 0.66 cfs @ 12.09 hrs, Volume= 0.048 af, Depth> 3.71"  
 Routed to Pond 70P : CB 73

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,542     | 74 | >75% Grass cover, Good, HSG C |
| 1,151     | 98 | Unconnected roofs, HSG C      |
| 4,005     | 98 | Paved parking, HSG C          |
| 6,698     | 92 | Weighted Average              |
| 1,542     |    | 23.02% Pervious Area          |
| 5,156     |    | 76.98% Impervious Area        |
| 1,151     |    | 22.32% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 63S: P2K**

### Summary for Subcatchment 64S: P3L

Runoff = 0.27 cfs @ 12.09 hrs, Volume= 0.019 af, Depth> 3.51"  
Routed to Pond 88P : CB 84

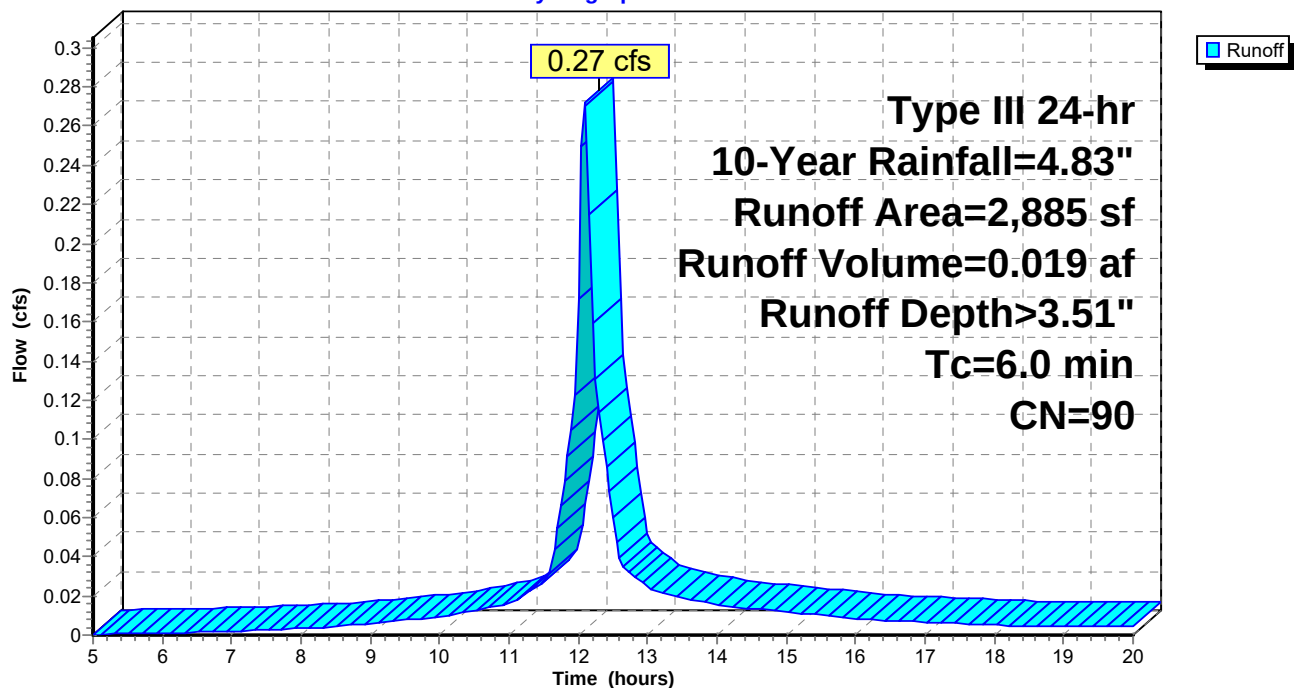
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 965       | 74 | >75% Grass cover, Good, HSG C |
| 1,920     | 98 | Paved parking, HSG C          |
| 2,885     | 90 | Weighted Average              |
| 965       |    | 33.45% Pervious Area          |
| 1,920     |    | 66.55% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 64S: P3L

Hydrograph



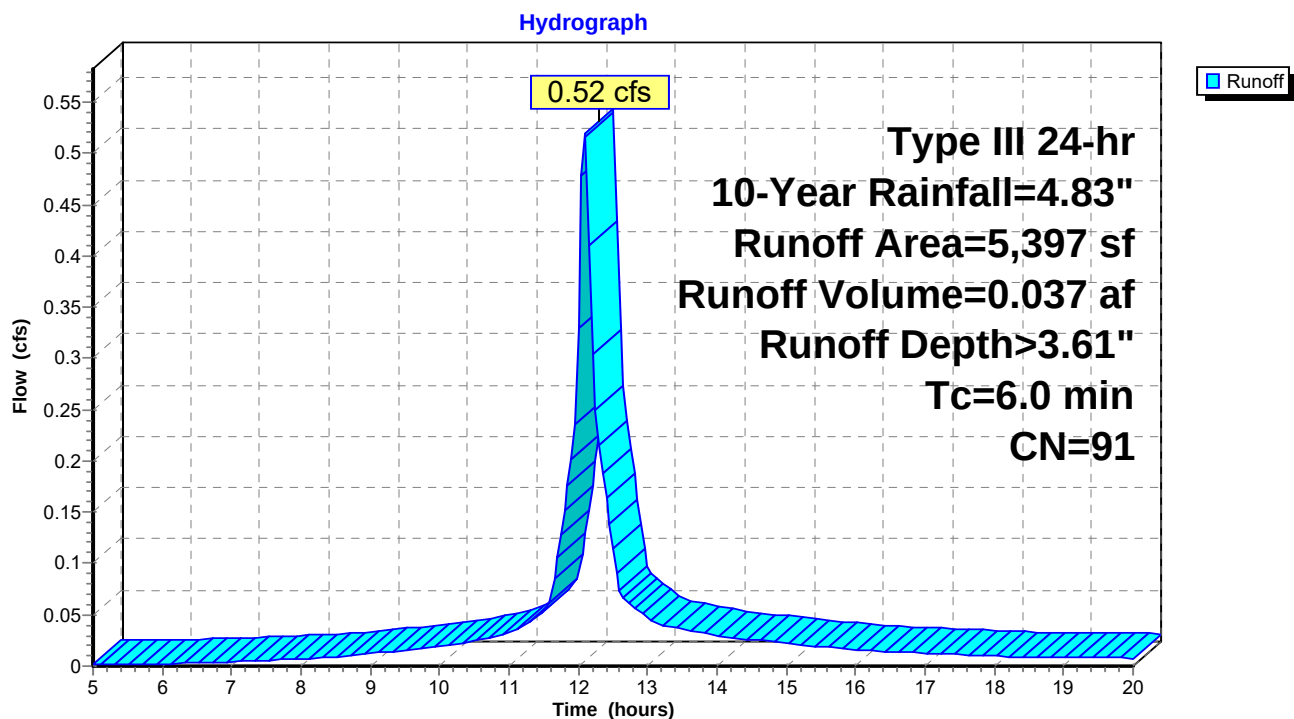
**Summary for Subcatchment 65S: P3M**

Runoff = 0.52 cfs @ 12.09 hrs, Volume= 0.037 af, Depth> 3.61"  
 Routed to Pond 87P : CB 85

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,636     | 74 | >75% Grass cover, Good, HSG C |
| 1,756     | 98 | Unconnected roofs, HSG C      |
| 2,005     | 98 | Paved parking, HSG C          |
| 5,397     | 91 | Weighted Average              |
| 1,636     |    | 30.31% Pervious Area          |
| 3,761     |    | 69.69% Impervious Area        |
| 1,756     |    | 46.69% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 65S: P3M**

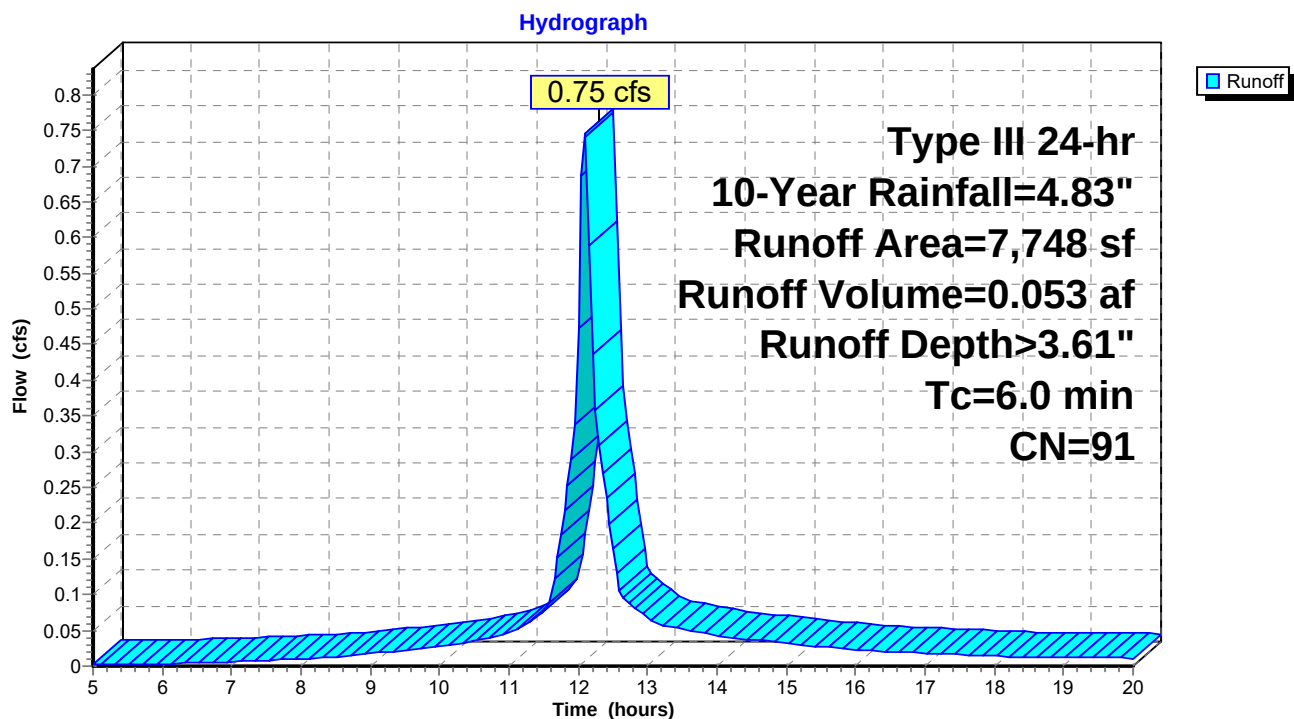
**Summary for Subcatchment 66S: P3N**

Runoff = 0.75 cfs @ 12.09 hrs, Volume= 0.053 af, Depth> 3.61"  
 Routed to Pond 83P : CB 86

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,108     | 74 | >75% Grass cover, Good, HSG C |
| 1,824     | 98 | Unconnected roofs, HSG C      |
| 3,816     | 98 | Paved parking, HSG C          |
| 7,748     | 91 | Weighted Average              |
| 2,108     |    | 27.21% Pervious Area          |
| 5,640     |    | 72.79% Impervious Area        |
| 1,824     |    | 32.34% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 66S: P3N**

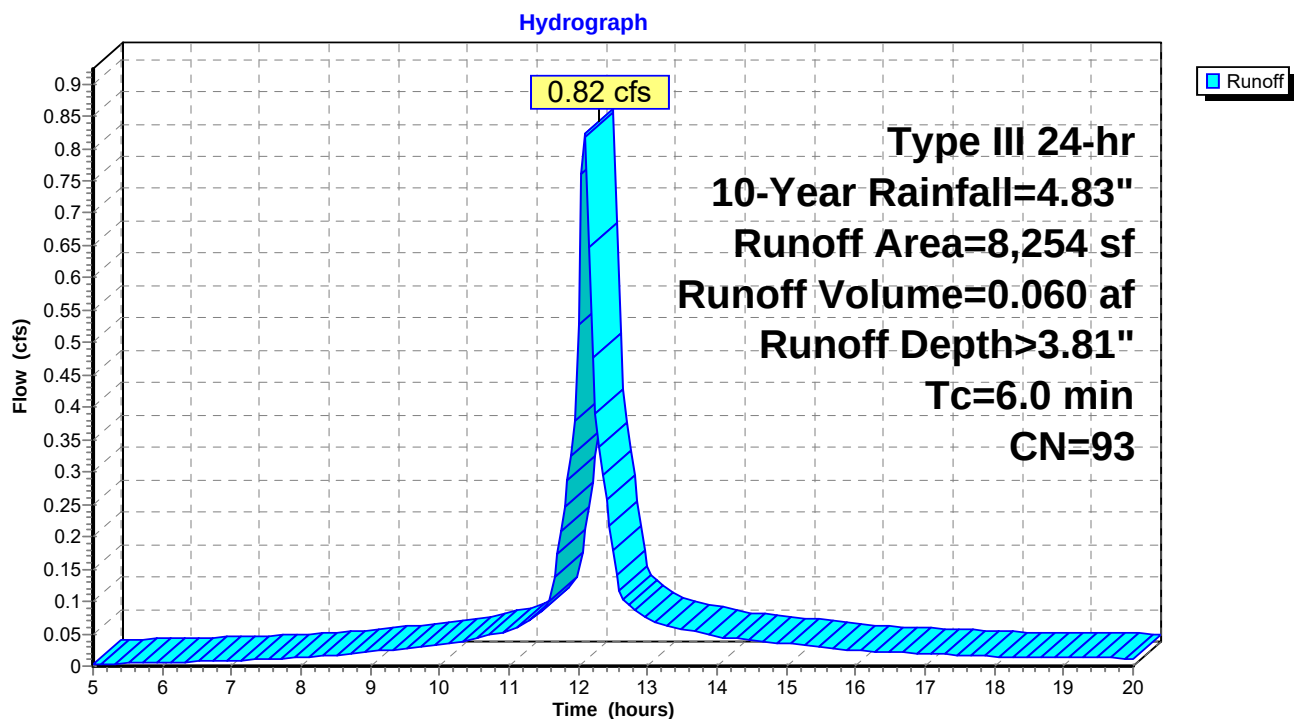
**Summary for Subcatchment 67S: P3O**

Runoff = 0.82 cfs @ 12.09 hrs, Volume= 0.060 af, Depth> 3.81"  
 Routed to Pond 84P : CB 87

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,792     | 74 | >75% Grass cover, Good, HSG C |
| 2,605     | 98 | Unconnected roofs, HSG C      |
| 3,857     | 98 | Paved parking, HSG C          |
| 8,254     | 93 | Weighted Average              |
| 1,792     |    | 21.71% Pervious Area          |
| 6,462     |    | 78.29% Impervious Area        |
| 2,605     |    | 40.31% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 67S: P3O**

### Summary for Subcatchment 68S: P3P

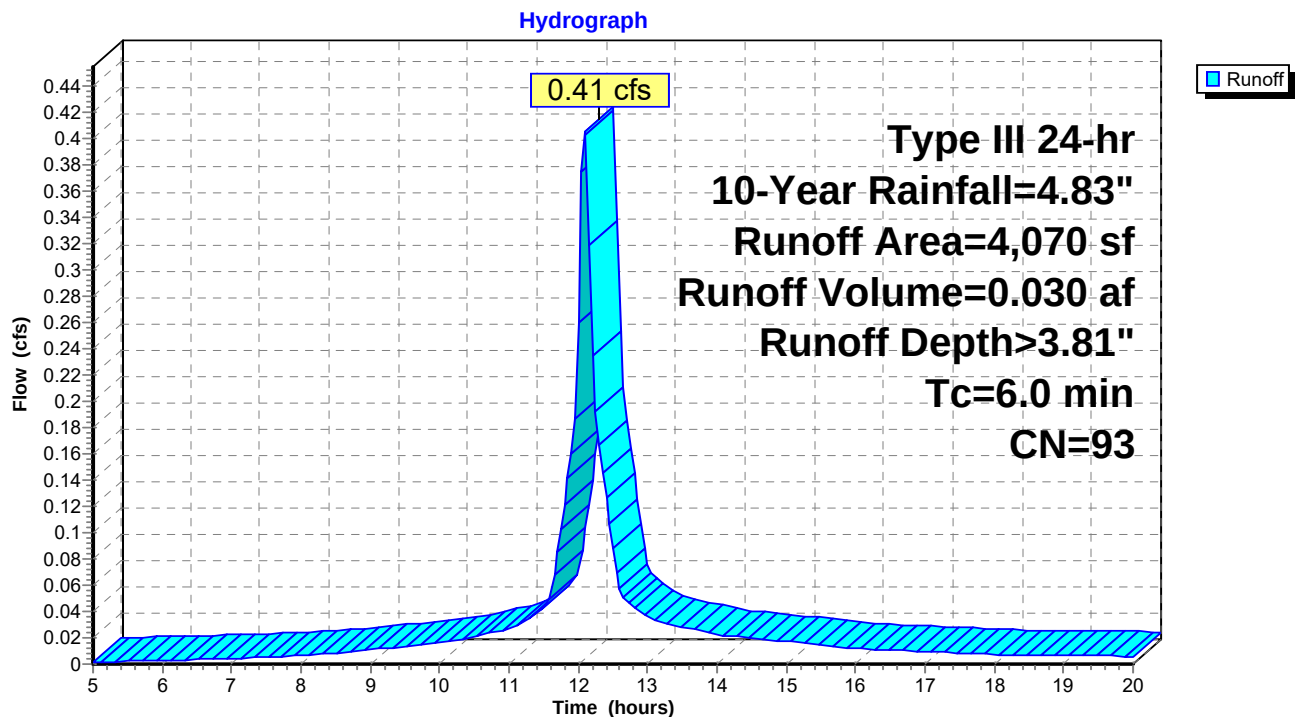
Runoff = 0.41 cfs @ 12.09 hrs, Volume= 0.030 af, Depth> 3.81"  
Routed to Pond 108P : CB 88

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 802       | 74 | >75% Grass cover, Good, HSG C |
| 3,268     | 98 | Paved parking, HSG C          |
| 4,070     | 93 | Weighted Average              |
| 802       |    | 19.71% Pervious Area          |
| 3,268     |    | 80.29% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 68S: P3P



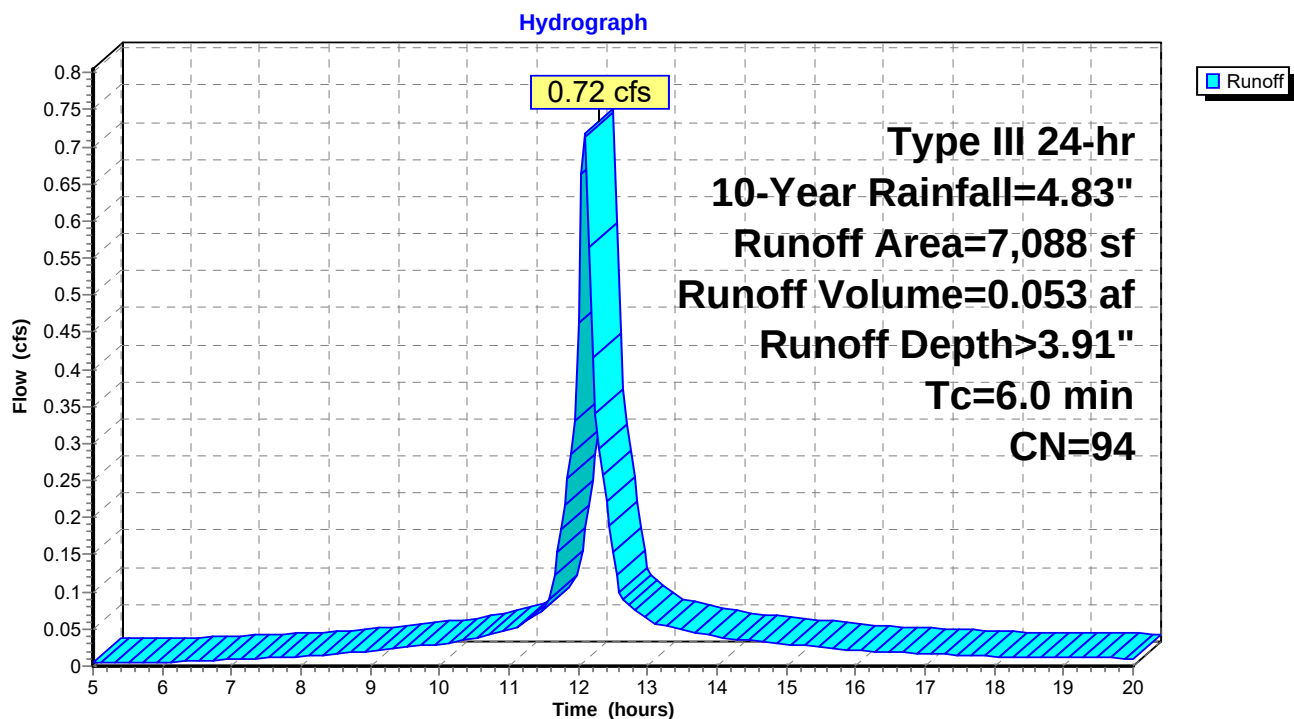
**Summary for Subcatchment 69S: P2E**

Runoff = 0.72 cfs @ 12.09 hrs, Volume= 0.053 af, Depth> 3.91"  
 Routed to Pond 66P : CB 68

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,227     | 74 | >75% Grass cover, Good, HSG C |
| 1,596     | 98 | Unconnected roofs, HSG C      |
| 4,265     | 98 | Paved parking, HSG C          |
| 7,088     | 94 | Weighted Average              |
| 1,227     |    | 17.31% Pervious Area          |
| 5,861     |    | 82.69% Impervious Area        |
| 1,596     |    | 27.23% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 69S: P2E**



**Summary for Subcatchment 70S: P2F**

Runoff = 0.42 cfs @ 12.09 hrs, Volume= 0.032 af, Depth> 4.26"  
 Routed to Pond 67P : CB 69

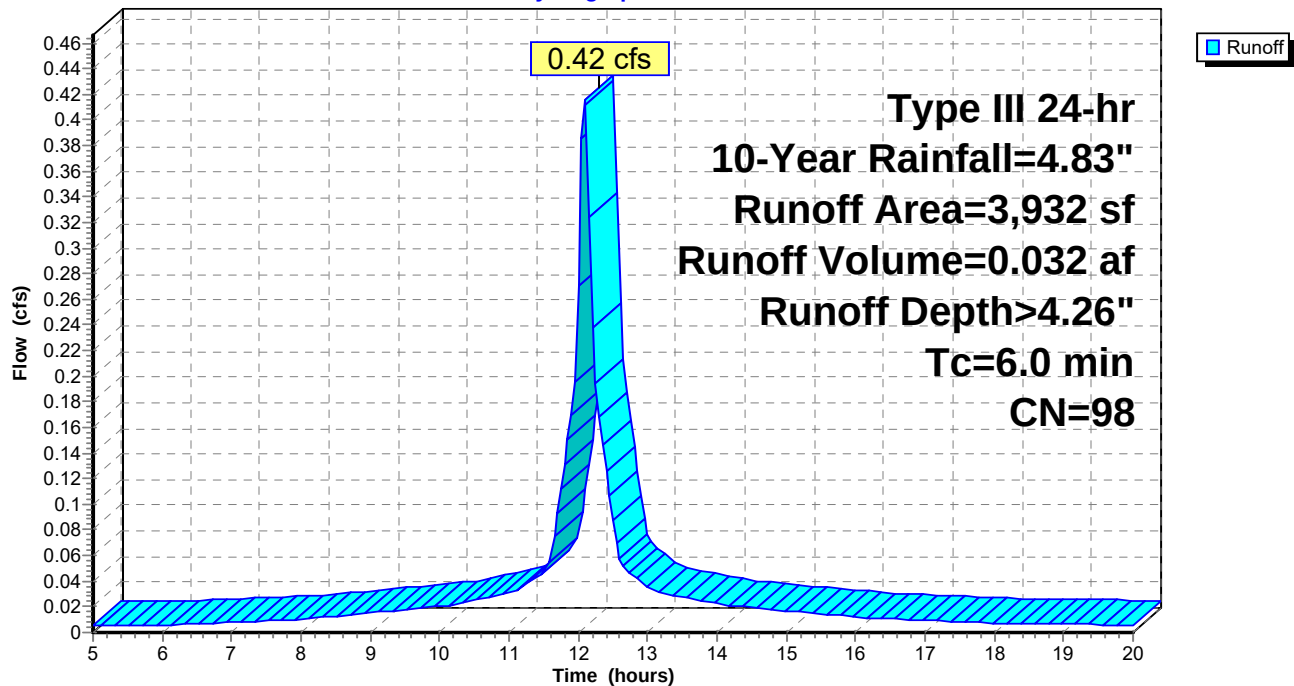
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description             |
|-----------|----|-------------------------|
| 3,932     | 98 | Paved parking, HSG C    |
| 3,932     |    | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 70S: P2F**

Hydrograph



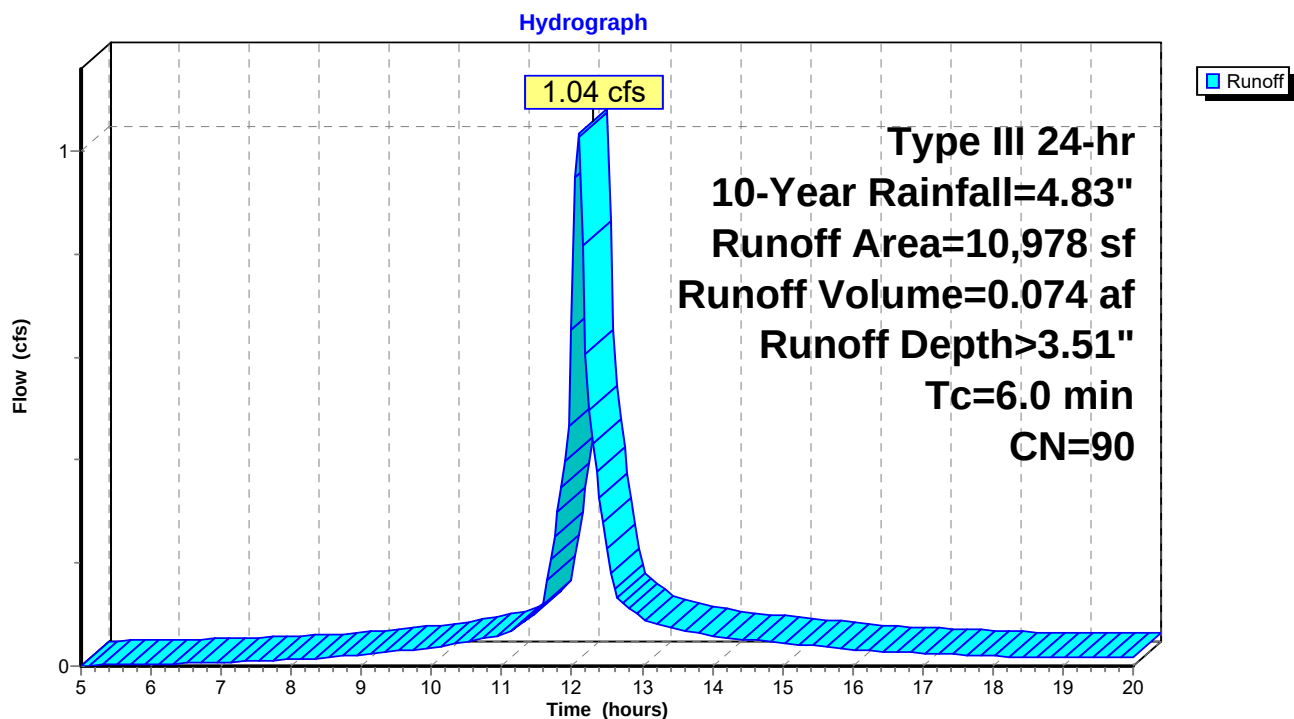
**Summary for Subcatchment 71S: P2A**

Runoff = 1.04 cfs @ 12.09 hrs, Volume= 0.074 af, Depth> 3.51"  
 Routed to Pond 73P : CB 64

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,800     | 98 | Unconnected roofs, HSG C      |
| 3,751     | 74 | >75% Grass cover, Good, HSG C |
| 4,427     | 98 | Paved parking, HSG C          |
| 10,978    | 90 | Weighted Average              |
| 3,751     |    | 34.17% Pervious Area          |
| 7,227     |    | 65.83% Impervious Area        |
| 2,800     |    | 38.74% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 71S: P2A**

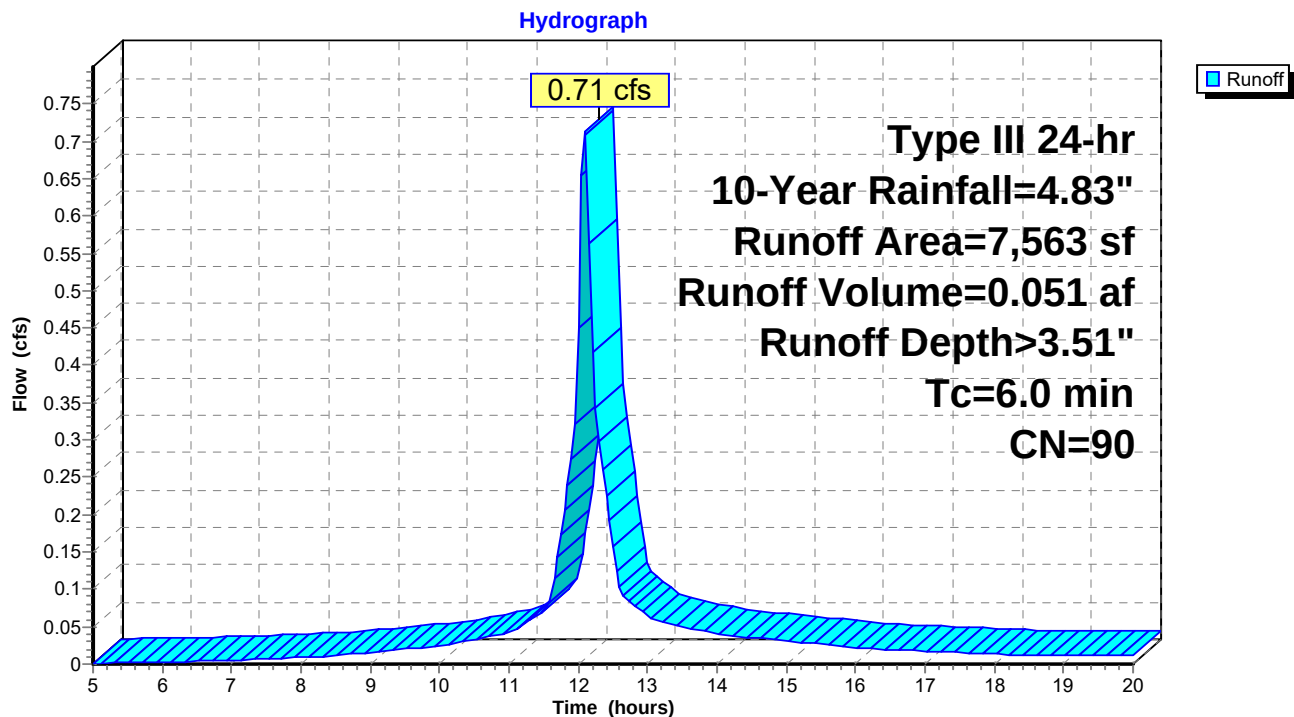
**Summary for Subcatchment 72S: P2B**

Runoff = 0.71 cfs @ 12.09 hrs, Volume= 0.051 af, Depth> 3.51"  
 Routed to Pond 74P : CB 65

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,643     | 74 | >75% Grass cover, Good, HSG C |
| 4,920     | 98 | Paved parking, HSG C          |
| 7,563     | 90 | Weighted Average              |
| 2,643     |    | 34.95% Pervious Area          |
| 4,920     |    | 65.05% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 72S: P2B**

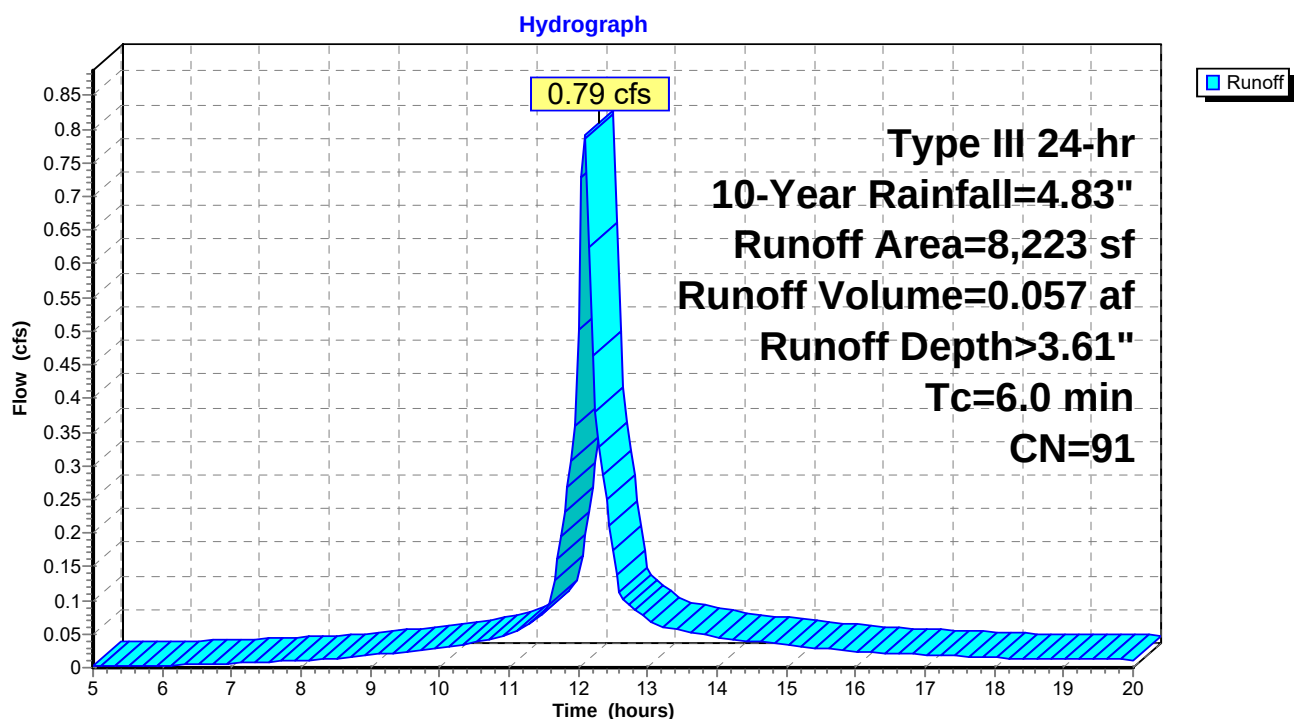
**Summary for Subcatchment 73S: P2G**

Runoff = 0.79 cfs @ 12.09 hrs, Volume= 0.057 af, Depth> 3.61"  
 Routed to Pond 76P : CB 70

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,345     | 74 | >75% Grass cover, Good, HSG C |
| 1,348     | 98 | Unconnected roofs, HSG C      |
| 122       | 98 | Unconnected roofs, HSG A      |
| 34        | 39 | >75% Grass cover, Good, HSG A |
| 673       | 98 | Paved parking, HSG A          |
| 3,701     | 98 | Paved parking, HSG C          |
| 8,223     | 91 | Weighted Average              |
| 2,379     |    | 28.93% Pervious Area          |
| 5,844     |    | 71.07% Impervious Area        |
| 1,470     |    | 25.15% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 73S: P2G**

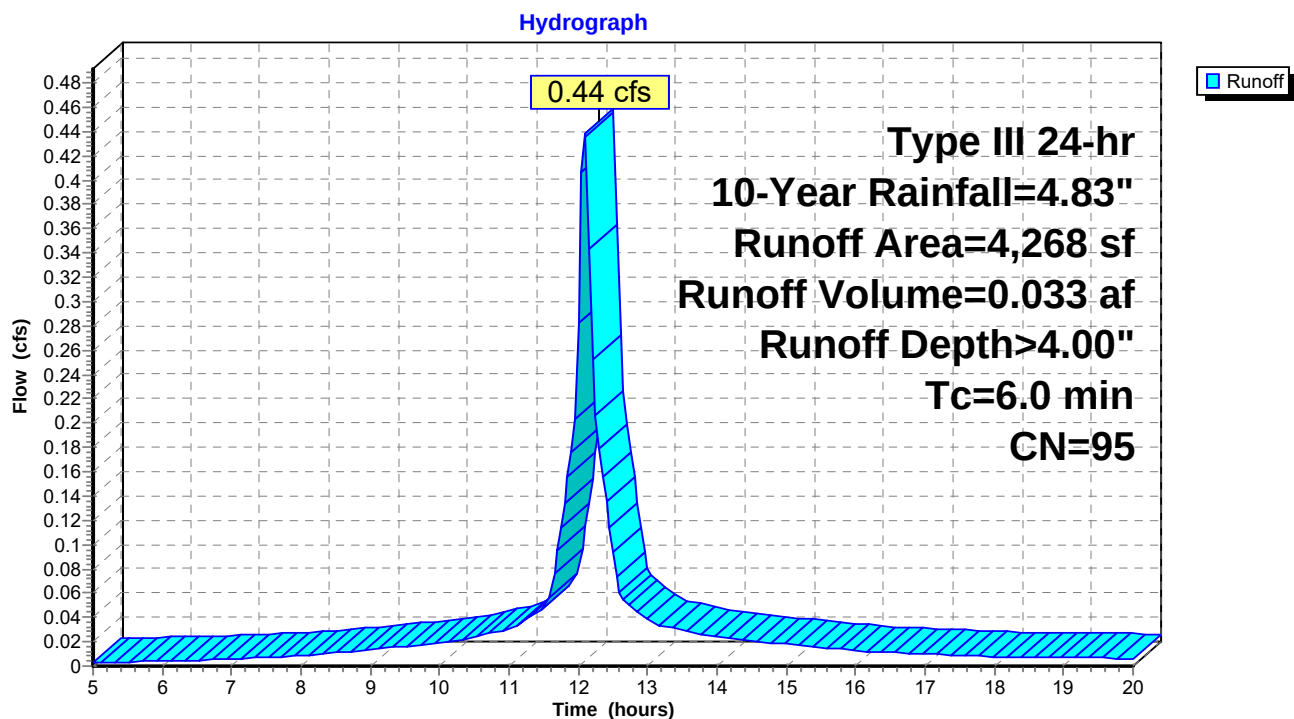
**Summary for Subcatchment 74S: P2H**

Runoff = 0.44 cfs @ 12.09 hrs, Volume= 0.033 af, Depth> 4.00"  
 Routed to Pond 77P : CB 71

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 200       | 39 | >75% Grass cover, Good, HSG A |
| 610       | 98 | Unconnected roofs, HSG A      |
| 3,458     | 98 | Paved parking, HSG A          |
| 4,268     | 95 | Weighted Average              |
| 200       |    | 4.69% Pervious Area           |
| 4,068     |    | 95.31% Impervious Area        |
| 610       |    | 15.00% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 74S: P2H**

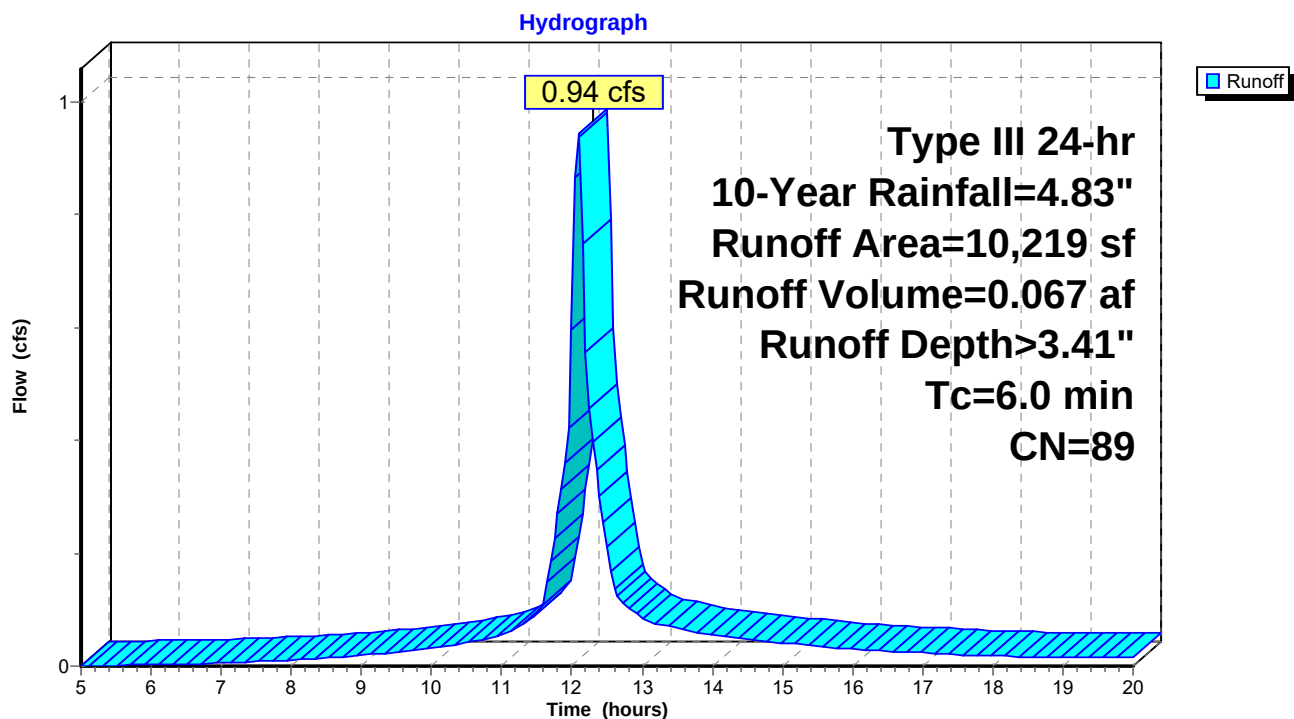
**Summary for Subcatchment 75S: P3Q**

Runoff = 0.94 cfs @ 12.09 hrs, Volume= 0.067 af, Depth> 3.41"  
 Routed to Pond 107P : CB

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,641     | 74 | >75% Grass cover, Good, HSG C |
| 1,994     | 98 | Unconnected roofs, HSG C      |
| 4,584     | 98 | Paved parking, HSG C          |
| 10,219    | 89 | Weighted Average              |
| 3,641     |    | 35.63% Pervious Area          |
| 6,578     |    | 64.37% Impervious Area        |
| 1,994     |    | 30.31% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 75S: P3Q**

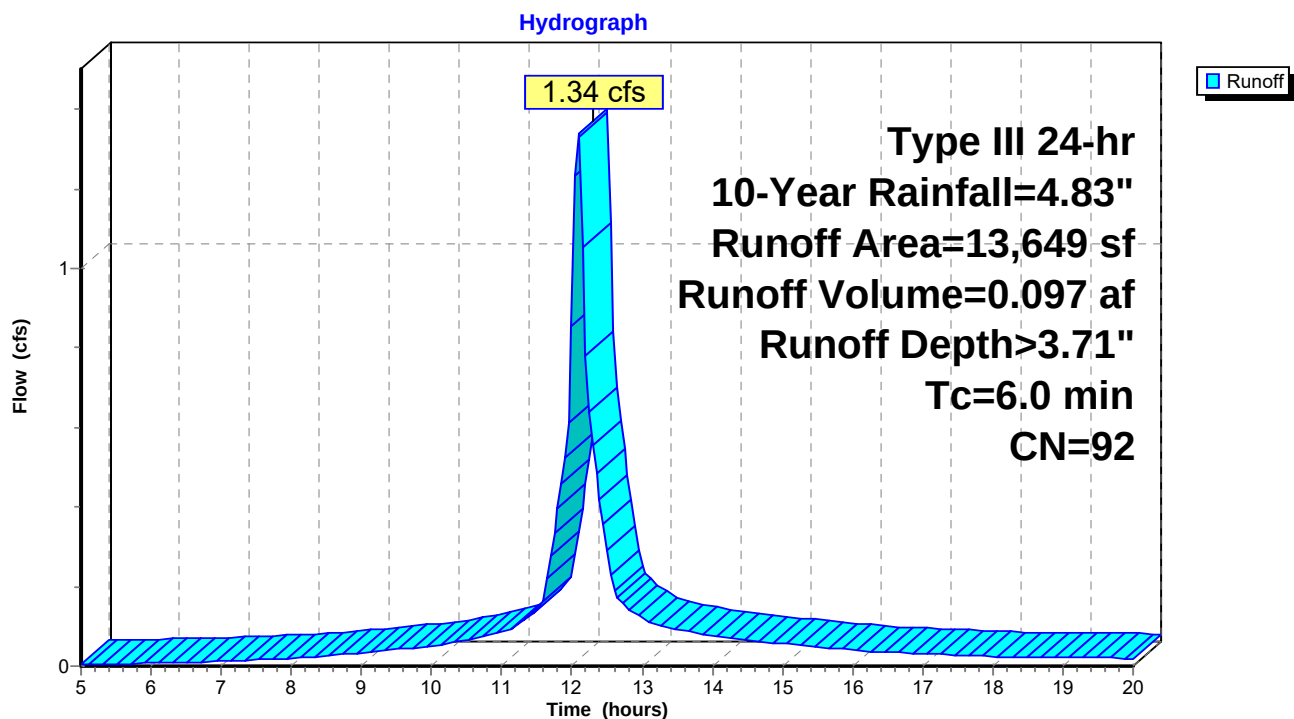
**Summary for Subcatchment 76S: P3R**

Runoff = 1.34 cfs @ 12.09 hrs, Volume= 0.097 af, Depth> 3.71"  
 Routed to Pond 103P : CB 92

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,162     | 74 | >75% Grass cover, Good, HSG C |
| 4,063     | 98 | Unconnected roofs, HSG C      |
| 6,424     | 98 | Paved parking, HSG C          |
| 13,649    | 92 | Weighted Average              |
| 3,162     |    | 23.17% Pervious Area          |
| 10,487    |    | 76.83% Impervious Area        |
| 4,063     |    | 38.74% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 76S: P3R**

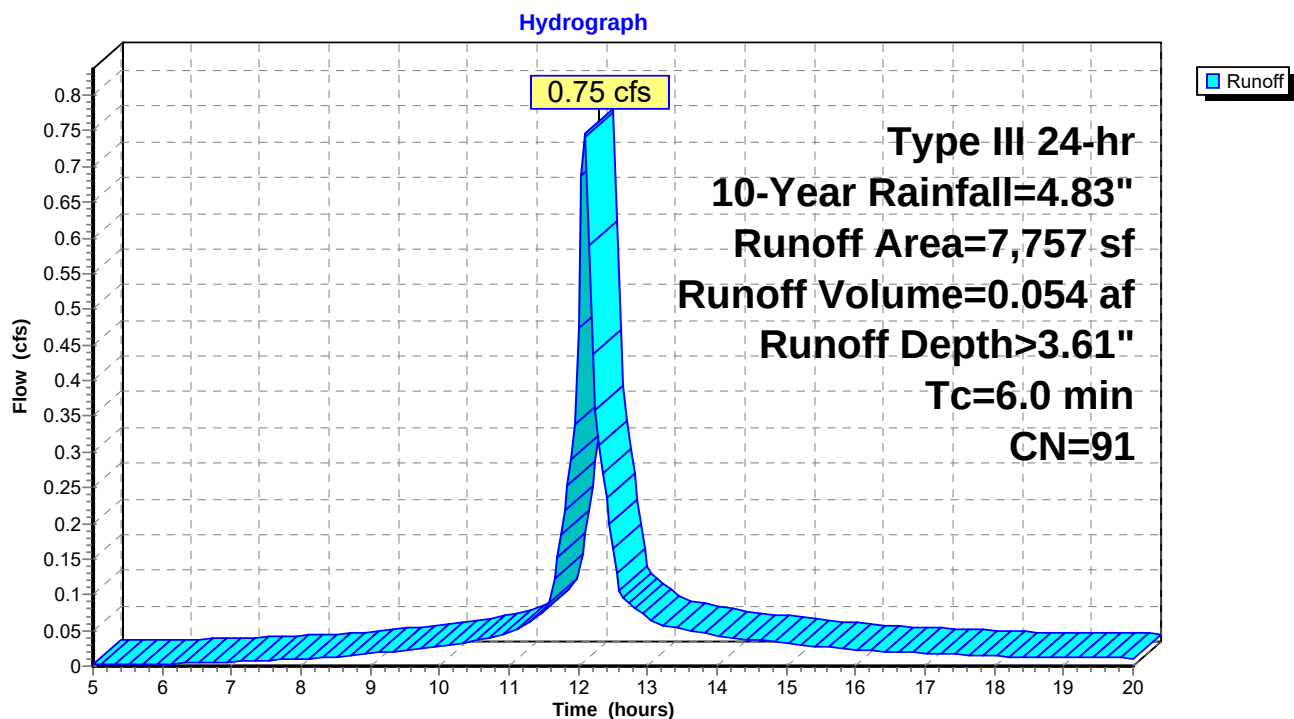
**Summary for Subcatchment 77S: P3S**

Runoff = 0.75 cfs @ 12.09 hrs, Volume= 0.054 af, Depth> 3.61"  
 Routed to Pond 102P : CB 93

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,358     | 74 | >75% Grass cover, Good, HSG C |
| 702       | 98 | Unconnected roofs, HSG C      |
| 4,697     | 98 | Paved parking, HSG C          |
| 7,757     | 91 | Weighted Average              |
| 2,358     |    | 30.40% Pervious Area          |
| 5,399     |    | 69.60% Impervious Area        |
| 702       |    | 13.00% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 77S: P3S**



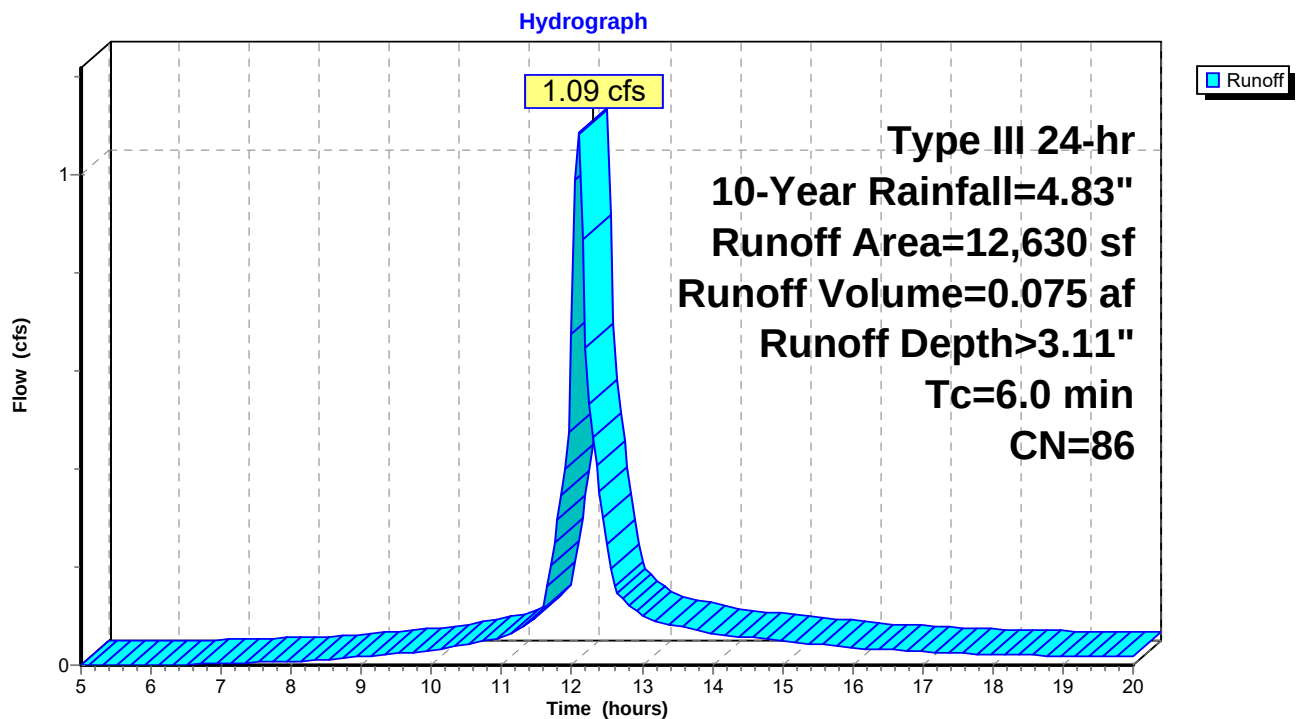
**Summary for Subcatchment 78S: P1S**

Runoff = 1.09 cfs @ 12.09 hrs, Volume= 0.075 af, Depth> 3.11"  
 Routed to Pond 112P : CB 45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,541     | 74 | >75% Grass cover, Good, HSG C |
| 2,275     | 98 | Unconnected roofs, HSG C      |
| 693       | 39 | >75% Grass cover, Good, HSG A |
| 412       | 98 | Paved parking, HSG A          |
| 4,709     | 98 | Paved parking, HSG C          |
| 12,630    | 86 | Weighted Average              |
| 5,234     |    | 41.44% Pervious Area          |
| 7,396     |    | 58.56% Impervious Area        |
| 2,275     |    | 30.76% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 78S: P1S**

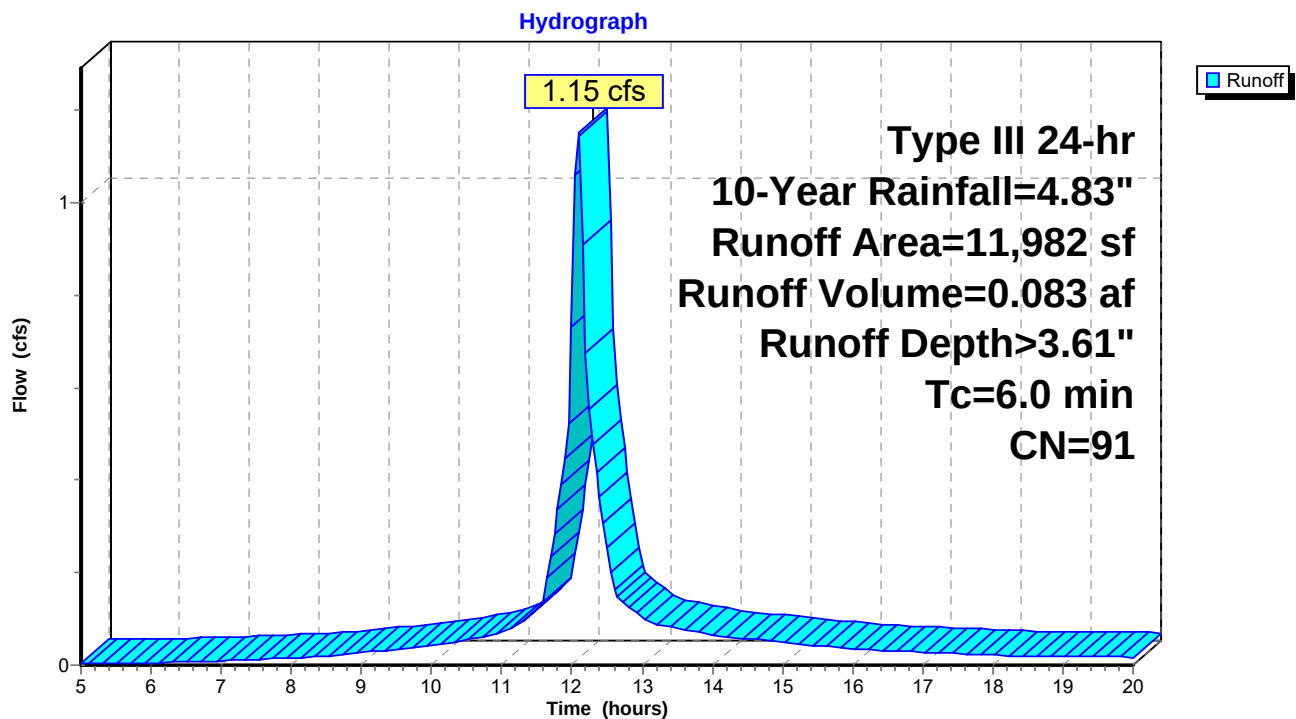
**Summary for Subcatchment 79S: P1T**

Runoff = 1.15 cfs @ 12.09 hrs, Volume= 0.083 af, Depth> 3.61"  
 Routed to Pond 122P : CB 46

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,187     | 74 | >75% Grass cover, Good, HSG C |
| 2,930     | 98 | Unconnected roofs, HSG C      |
| 118       | 39 | >75% Grass cover, Good, HSG A |
| 214       | 98 | Paved parking, HSG A          |
| 5,533     | 98 | Paved parking, HSG C          |
| 11,982    | 91 | Weighted Average              |
| 3,305     |    | 27.58% Pervious Area          |
| 8,677     |    | 72.42% Impervious Area        |
| 2,930     |    | 33.77% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 79S: P1T**

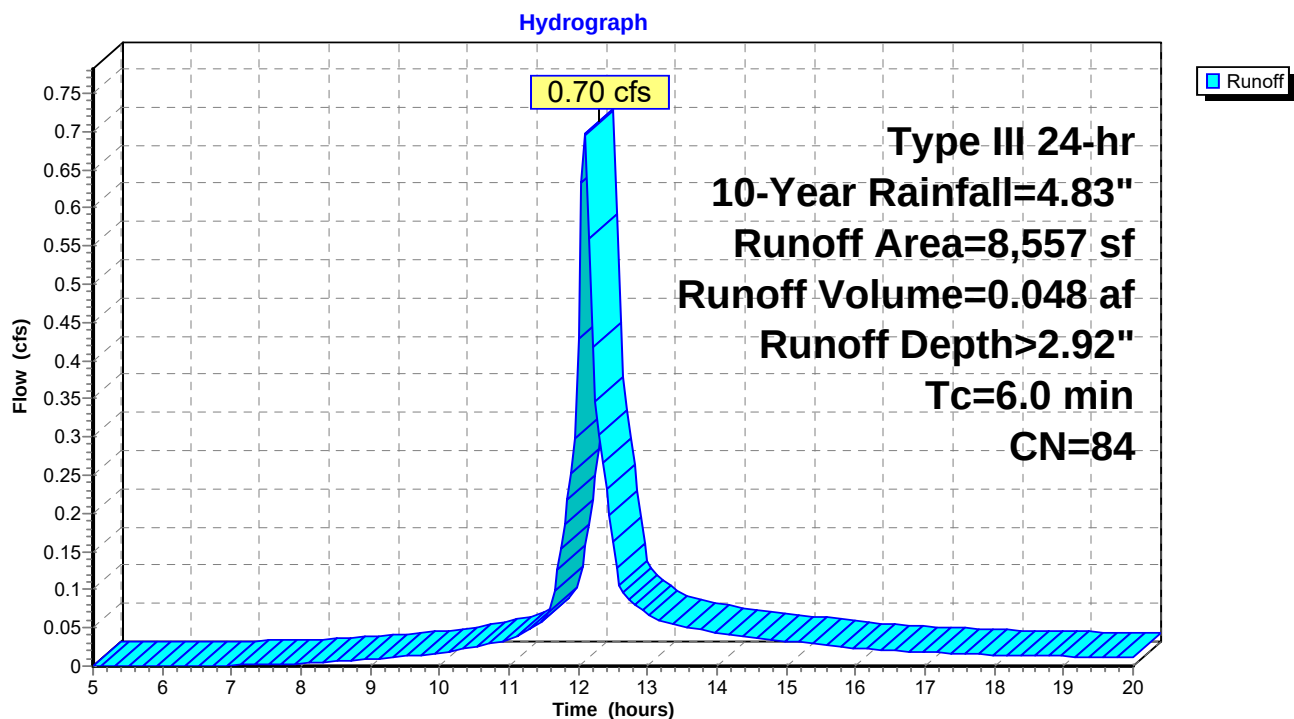
**Summary for Subcatchment 80S: P3KK**

Runoff = 0.70 cfs @ 12.09 hrs, Volume= 0.048 af, Depth> 2.92"  
 Routed to Pond 125P : CB 36

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,989     | 39 | >75% Grass cover, Good, HSG A |
| 4,268     | 98 | Unconnected roofs, HSG A      |
| 2,300     | 98 | Paved parking, HSG A          |
| 8,557     | 84 | Weighted Average              |
| 1,989     |    | 23.24% Pervious Area          |
| 6,568     |    | 76.76% Impervious Area        |
| 4,268     |    | 64.98% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 80S: P3KK**

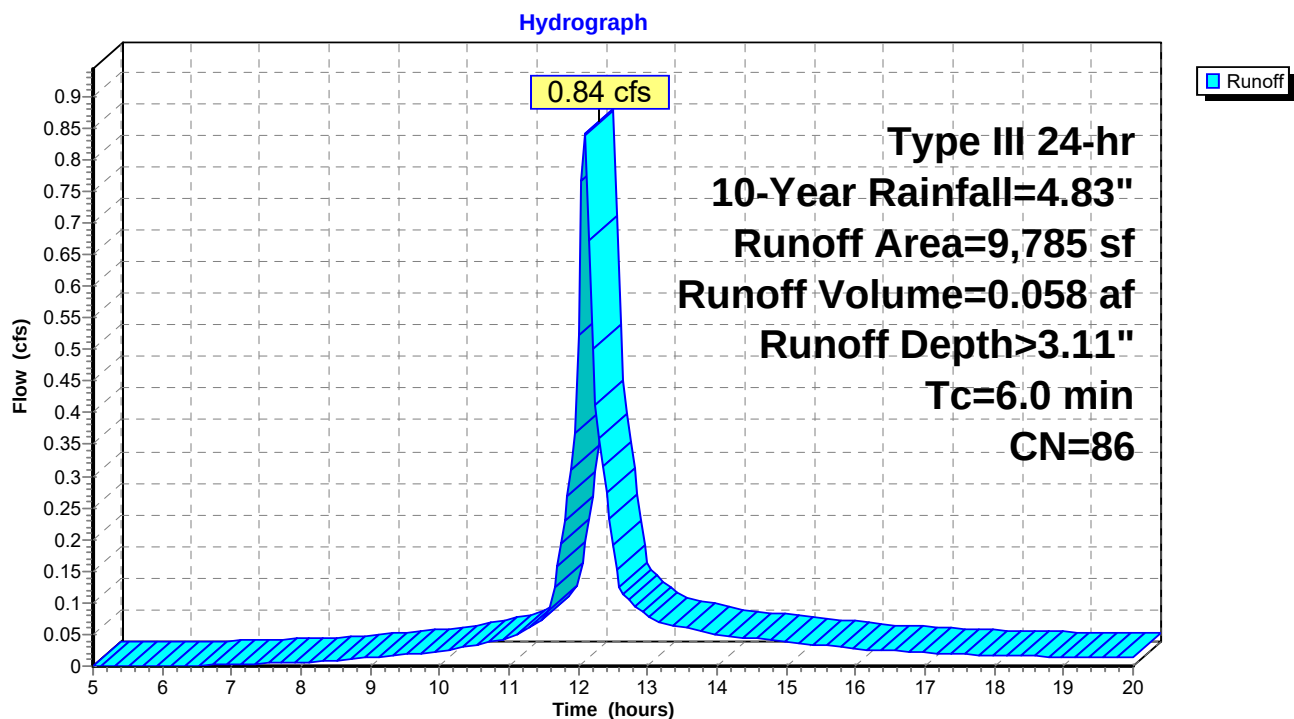
**Summary for Subcatchment 81S: P3LL**

Runoff = 0.84 cfs @ 12.09 hrs, Volume= 0.058 af, Depth> 3.11"  
 Routed to Pond 126P : CB 37

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,037     | 39 | >75% Grass cover, Good, HSG A |
| 4,991     | 98 | Unconnected roofs, HSG A      |
| 2,757     | 98 | Paved parking, HSG A          |
| 9,785     | 86 | Weighted Average              |
| 2,037     |    | 20.82% Pervious Area          |
| 7,748     |    | 79.18% Impervious Area        |
| 4,991     |    | 64.42% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 81S: P3LL**

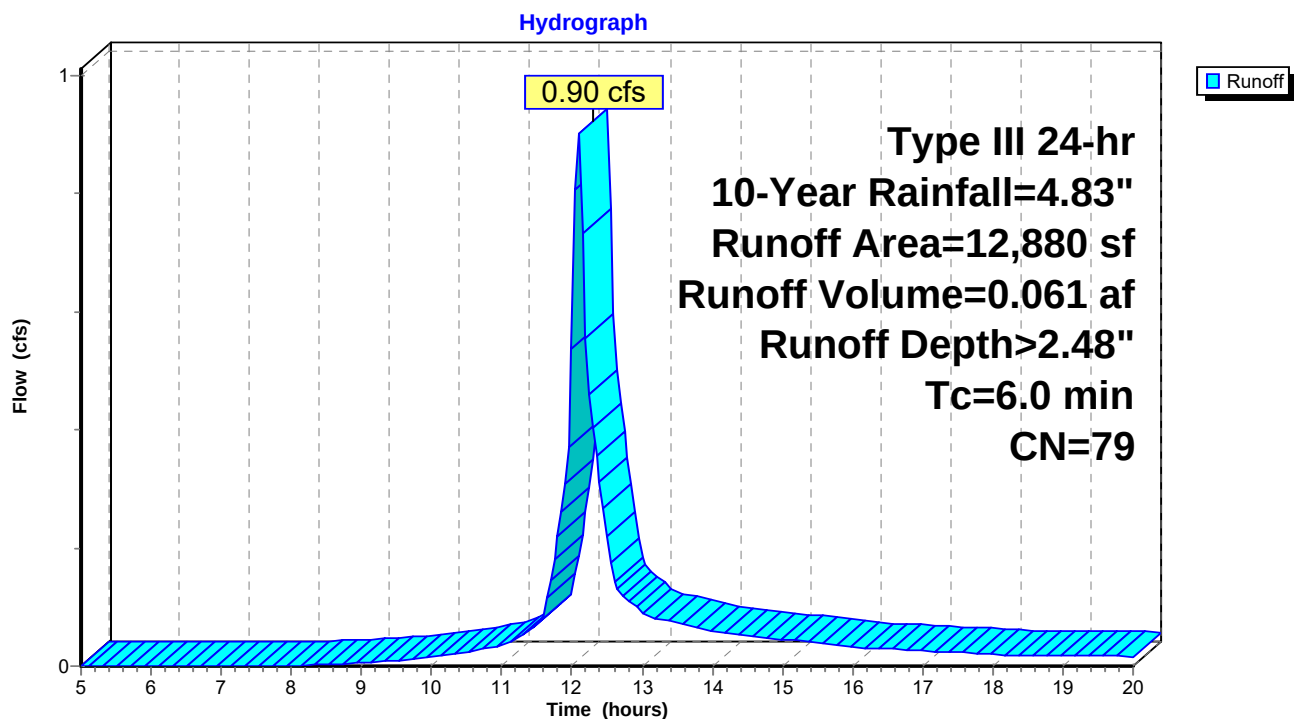
**Summary for Subcatchment 82S: P3SS**

Runoff = 0.90 cfs @ 12.09 hrs, Volume= 0.061 af, Depth> 2.48"  
 Routed to Pond 128P : CB 30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,180     | 39 | >75% Grass cover, Good, HSG A |
| 3,055     | 98 | Unconnected roofs, HSG A      |
| 5,645     | 98 | Paved parking, HSG A          |
| 12,880    | 79 | Weighted Average              |
| 4,180     |    | 32.45% Pervious Area          |
| 8,700     |    | 67.55% Impervious Area        |
| 3,055     |    | 35.11% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 82S: P3SS**

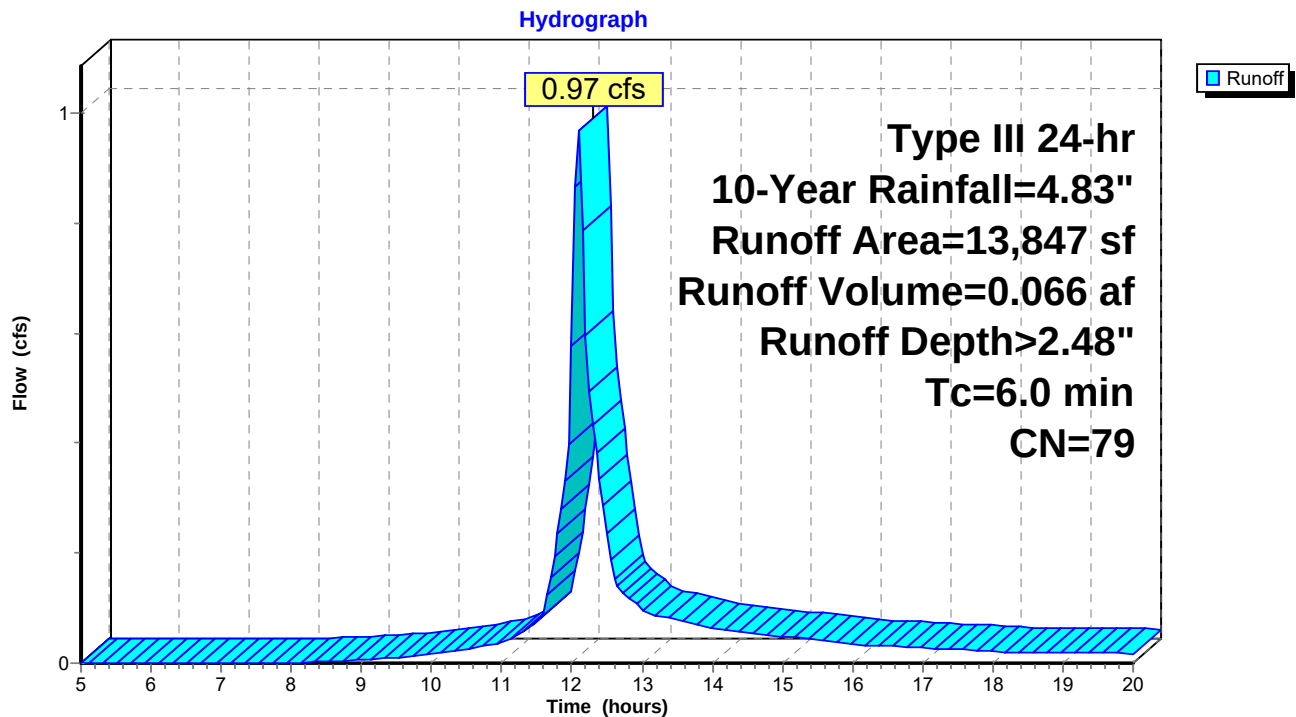
**Summary for Subcatchment 83S: P2I**

Runoff = 0.97 cfs @ 12.09 hrs, Volume= 0.066 af, Depth> 2.48"  
 Routed to Pond 82P : Constructed Wetland 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,861     | 39 | >75% Grass cover, Good, HSG A |
| 1,821     | 98 | Unconnected roofs, HSG A      |
| 3,857     | 74 | >75% Grass cover, Good, HSG C |
| 597       | 98 | Paved parking, HSG C          |
| 4,711     | 98 | Paved parking, HSG A          |
| 13,847    | 79 | Weighted Average              |
| 6,718     |    | 48.52% Pervious Area          |
| 7,129     |    | 51.48% Impervious Area        |
| 1,821     |    | 25.54% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 83S: P2I**

**Summary for Subcatchment 84S: P2AA**

Runoff = 3.54 cfs @ 12.12 hrs, Volume= 0.259 af, Depth> 1.91"  
 Routed to Link 60L : DP 2

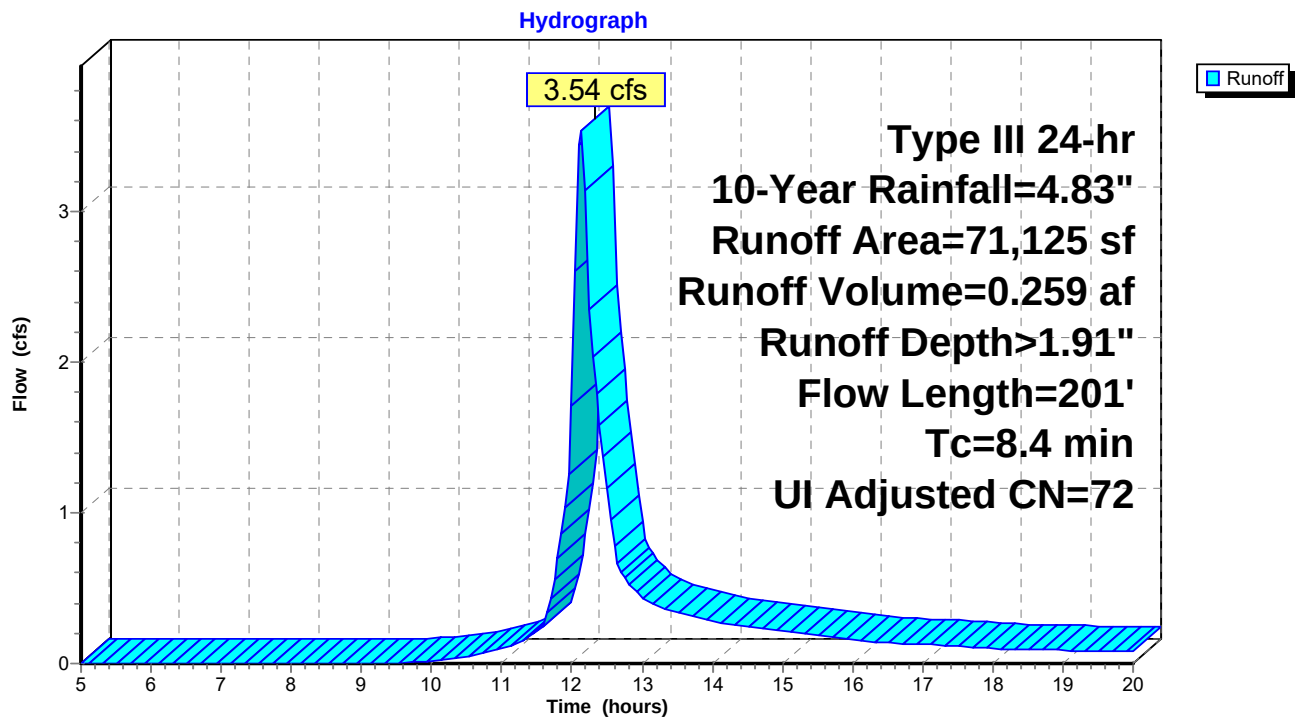
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 2,224     | 98 |     | Unconnected roofs, HSG C      |
| 1,231     | 98 |     | Unconnected pavement, HSG C   |
| 37,322    | 70 |     | Woods, Good, HSG C            |
| 27,161    | 74 |     | >75% Grass cover, Good, HSG C |
| 242       | 98 |     | Unconnected pavement, HSG A   |
| 1,399     | 39 |     | >75% Grass cover, Good, HSG A |
| 1,546     | 98 |     | Unconnected roofs, HSG A      |
| 71,125    | 73 | 72  | Weighted Average, UI Adjusted |
| 65,882    |    |     | 92.63% Pervious Area          |
| 5,243     |    |     | 7.37% Impervious Area         |
| 5,243     |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                          |
|----------|---------------|---------------|-------------------|----------------|----------------------------------------------------------------------|
| 5.7      | 50            | 0.0200        | 0.15              |                | <b>Sheet Flow,</b><br>Grass: Short n= 0.150 P2= 3.10"                |
| 1.4      | 68            | 0.0140        | 0.83              |                | <b>Shallow Concentrated Flow,</b><br>Short Grass Pasture Kv= 7.0 fps |
| 0.4      | 57            | 0.1200        | 2.42              |                | <b>Shallow Concentrated Flow,</b><br>Short Grass Pasture Kv= 7.0 fps |
| 0.9      | 26            | 0.0100        | 0.50              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps            |
| 8.4      | 201           | Total         |                   |                |                                                                      |

**Subcatchment 84S: P2AA**





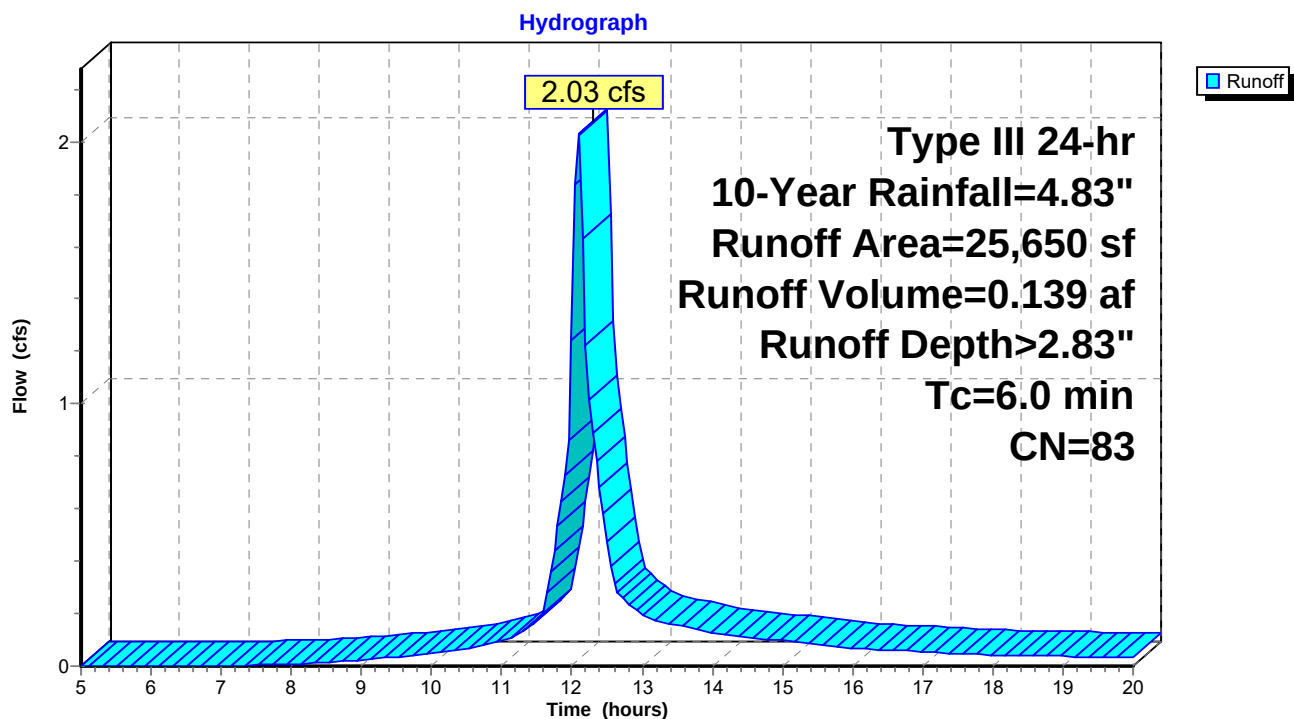
**Summary for Subcatchment 85S: (new Subcat)**

Runoff = 2.03 cfs @ 12.09 hrs, Volume= 0.139 af, Depth> 2.83"  
 Routed to Pond 86P : Sub. Inf. 6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,553     | 98 | Roofs, HSG C                  |
| 3,904     | 98 | Unconnected pavement, HSG C   |
| 16,193    | 74 | >75% Grass cover, Good, HSG C |
| 25,650    | 83 | Weighted Average              |
| 16,193    |    | 63.13% Pervious Area          |
| 9,457     |    | 36.87% Impervious Area        |
| 3,904     |    | 41.28% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 85S: (new Subcat)**

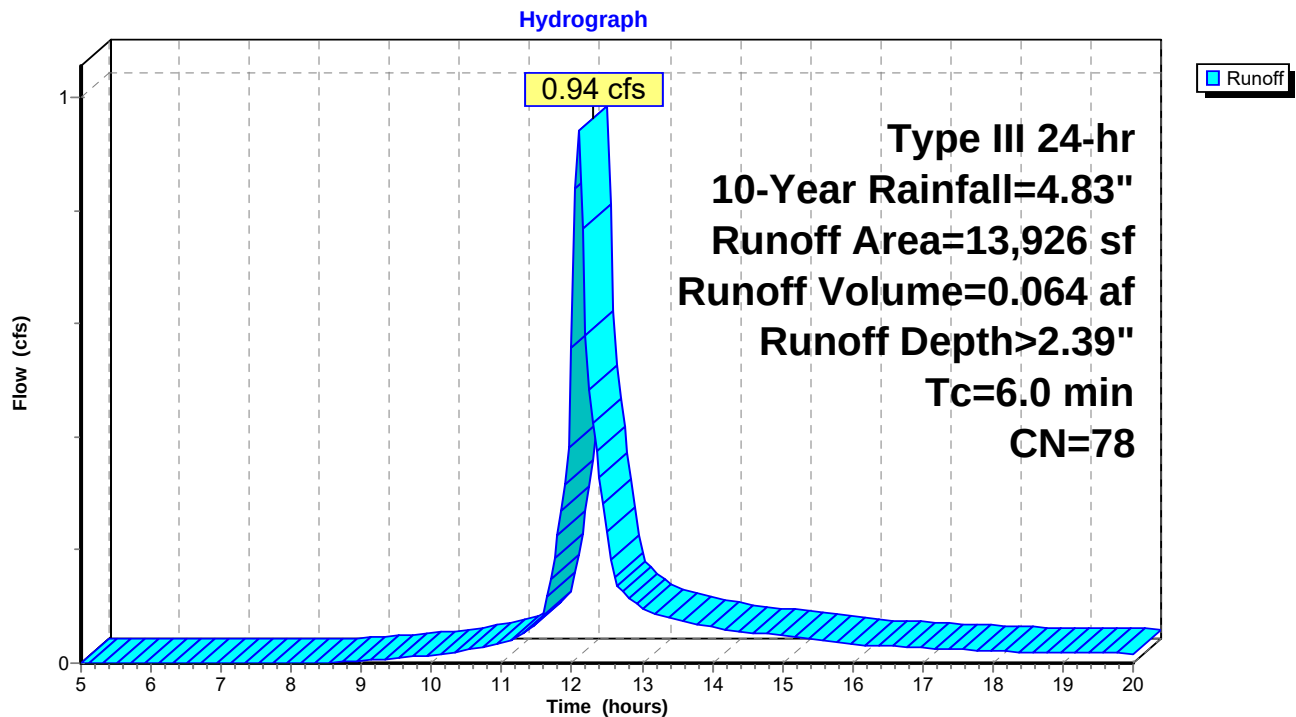
**Summary for Subcatchment 86S: P3TT**

Runoff = 0.94 cfs @ 12.09 hrs, Volume= 0.064 af, Depth> 2.39"  
 Routed to Pond 140P : CB 31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 956       | 98 | Unconnected roofs, HSG C      |
| 672       | 74 | >75% Grass cover, Good, HSG C |
| 4,346     | 39 | >75% Grass cover, Good, HSG A |
| 1,468     | 98 | Unconnected roofs, HSG A      |
| 6,484     | 98 | Paved parking, HSG A          |
| 13,926    | 78 | Weighted Average              |
| 5,018     |    | 36.03% Pervious Area          |
| 8,908     |    | 63.97% Impervious Area        |
| 2,424     |    | 27.21% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 86S: P3TT**

### Summary for Subcatchment 87S: P3A

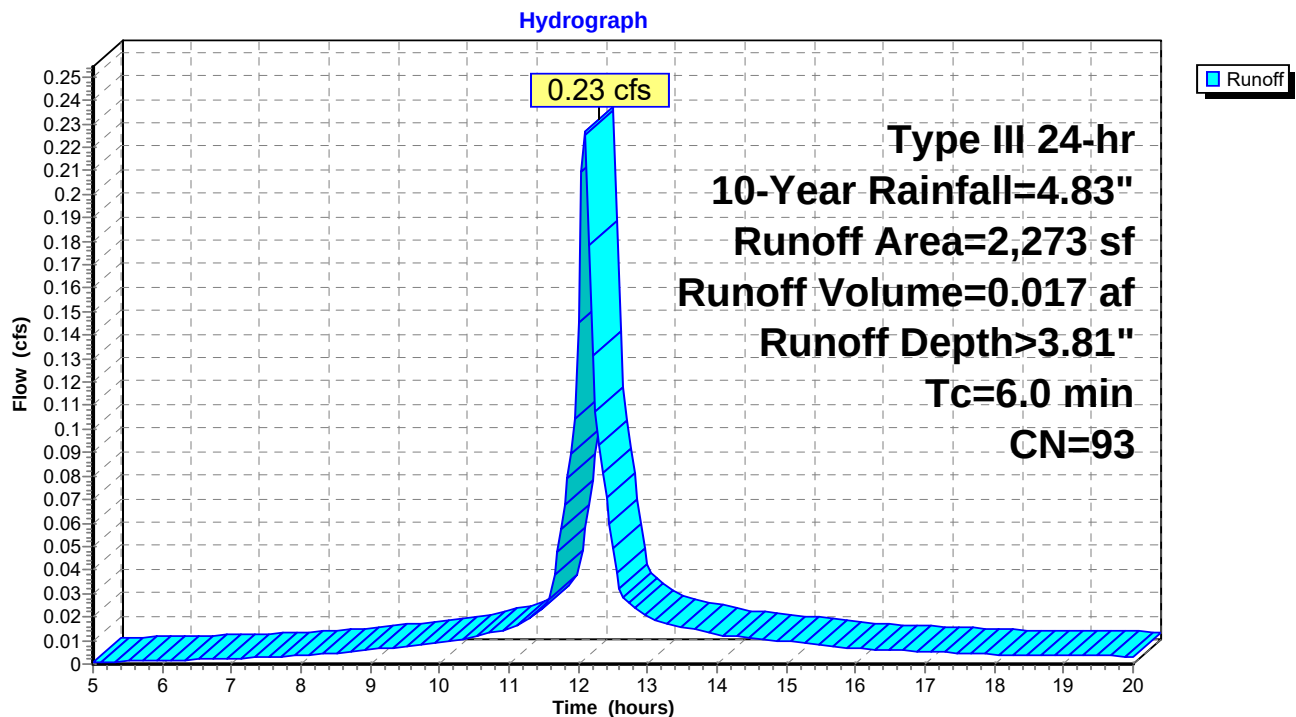
Runoff = 0.23 cfs @ 12.09 hrs, Volume= 0.017 af, Depth> 3.81"  
Routed to Pond 89P : CB 74

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 450       | 74 | >75% Grass cover, Good, HSG C |
| 1,823     | 98 | Paved parking, HSG C          |
| 2,273     | 93 | Weighted Average              |
| 450       |    | 19.80% Pervious Area          |
| 1,823     |    | 80.20% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 87S: P3A



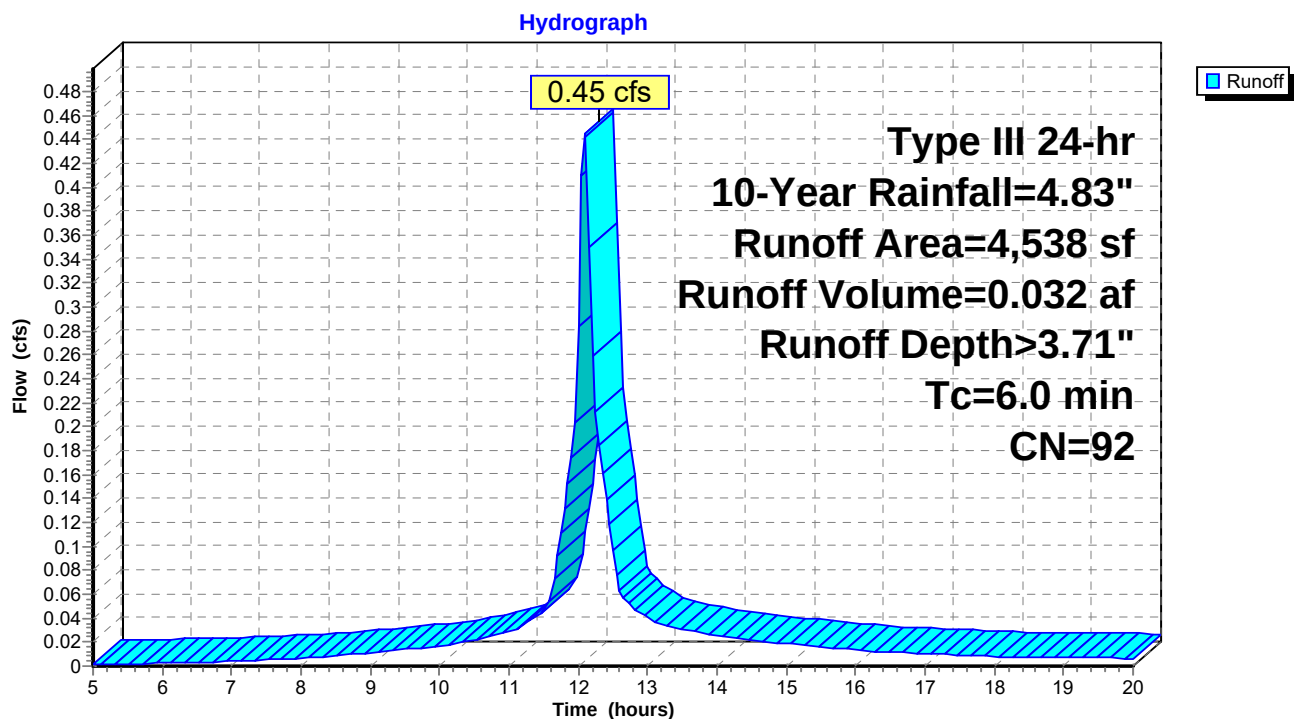
**Summary for Subcatchment 88S: P3B**

Runoff = 0.45 cfs @ 12.09 hrs, Volume= 0.032 af, Depth> 3.71"  
 Routed to Pond 90P : CB 75

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,048     | 74 | >75% Grass cover, Good, HSG C |
| 1,562     | 98 | Unconnected roofs, HSG C      |
| 1,928     | 98 | Paved parking, HSG C          |
| 4,538     | 92 | Weighted Average              |
| 1,048     |    | 23.09% Pervious Area          |
| 3,490     |    | 76.91% Impervious Area        |
| 1,562     |    | 44.76% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 88S: P3B**

**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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Type III 24-hr 10-Year Rainfall=4.83"

Printed 1/7/2026

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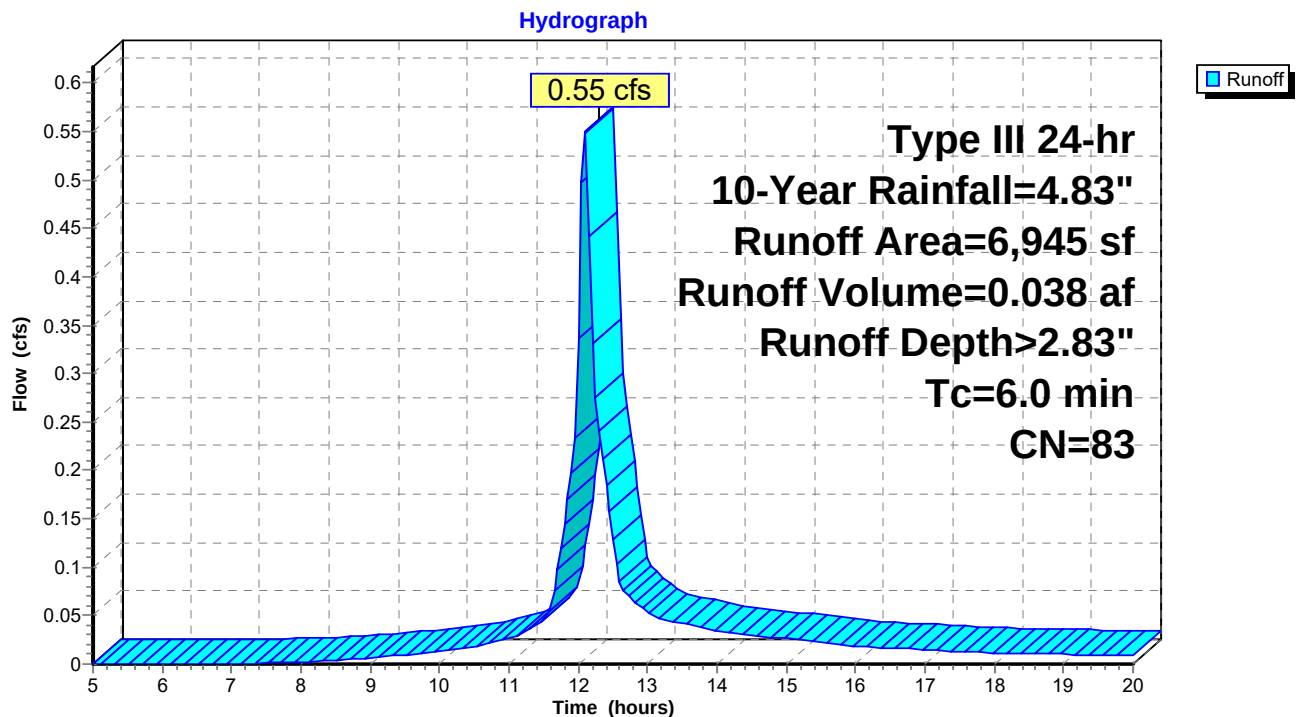
**Summary for Subcatchment 89S: P3AAA**

Runoff = 0.55 cfs @ 12.09 hrs, Volume= 0.038 af, Depth> 2.83"  
Routed to Pond 151P : CB 22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,761     | 39 | >75% Grass cover, Good, HSG A |
| 5,184     | 98 | Paved parking, HSG A          |
| 6,945     | 83 | Weighted Average              |
| 1,761     |    | 25.36% Pervious Area          |
| 5,184     |    | 74.64% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 89S: P3AAA**

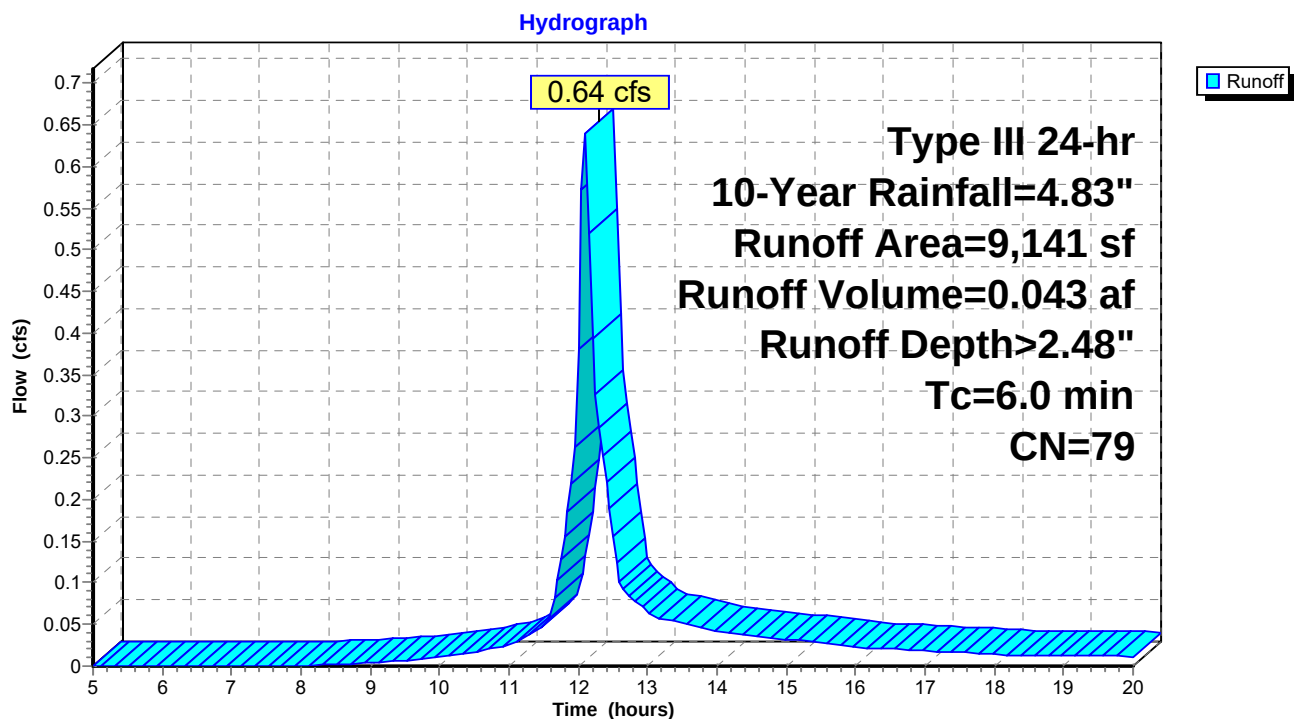
**Summary for Subcatchment 90S: P3BBB**

Runoff = 0.64 cfs @ 12.09 hrs, Volume= 0.043 af, Depth> 2.48"  
 Routed to Pond 152P : CB 23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,961     | 39 | >75% Grass cover, Good, HSG A |
| 2,084     | 98 | Unconnected roofs, HSG A      |
| 4,096     | 98 | Paved parking, HSG A          |
| 9,141     | 79 | Weighted Average              |
| 2,961     |    | 32.39% Pervious Area          |
| 6,180     |    | 67.61% Impervious Area        |
| 2,084     |    | 33.72% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 90S: P3BBB**

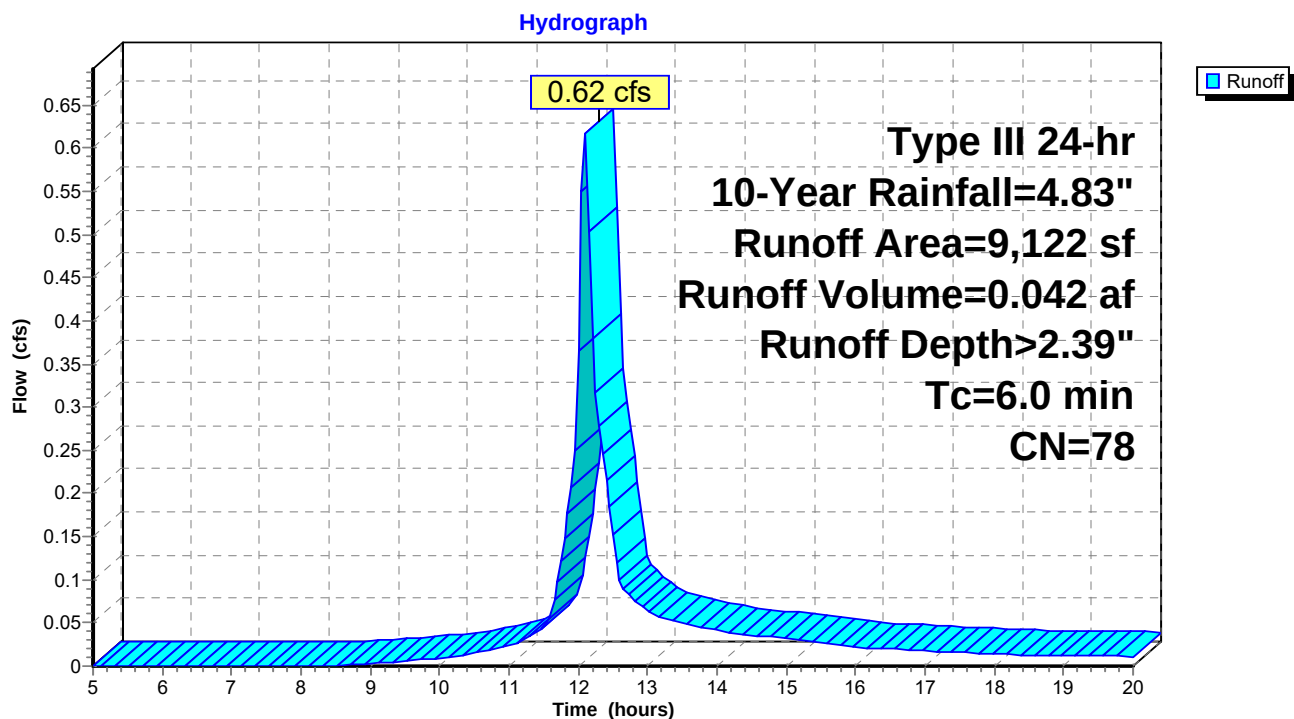
**Summary for Subcatchment 91S: P3GGG**

Runoff = 0.62 cfs @ 12.09 hrs, Volume= 0.042 af, Depth> 2.39"  
 Routed to Pond 165P : CB 19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,041     | 39 | >75% Grass cover, Good, HSG A |
| 3,271     | 98 | Unconnected roofs, HSG A      |
| 2,810     | 98 | Paved parking, HSG A          |
| 9,122     | 78 | Weighted Average              |
| 3,041     |    | 33.34% Pervious Area          |
| 6,081     |    | 66.66% Impervious Area        |
| 3,271     |    | 53.79% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 91S: P3GGG**

**Summary for Subcatchment 92S: P3C**

Runoff = 0.59 cfs @ 12.09 hrs, Volume= 0.042 af, Depth> 3.61"  
 Routed to Pond 95P : CB 76

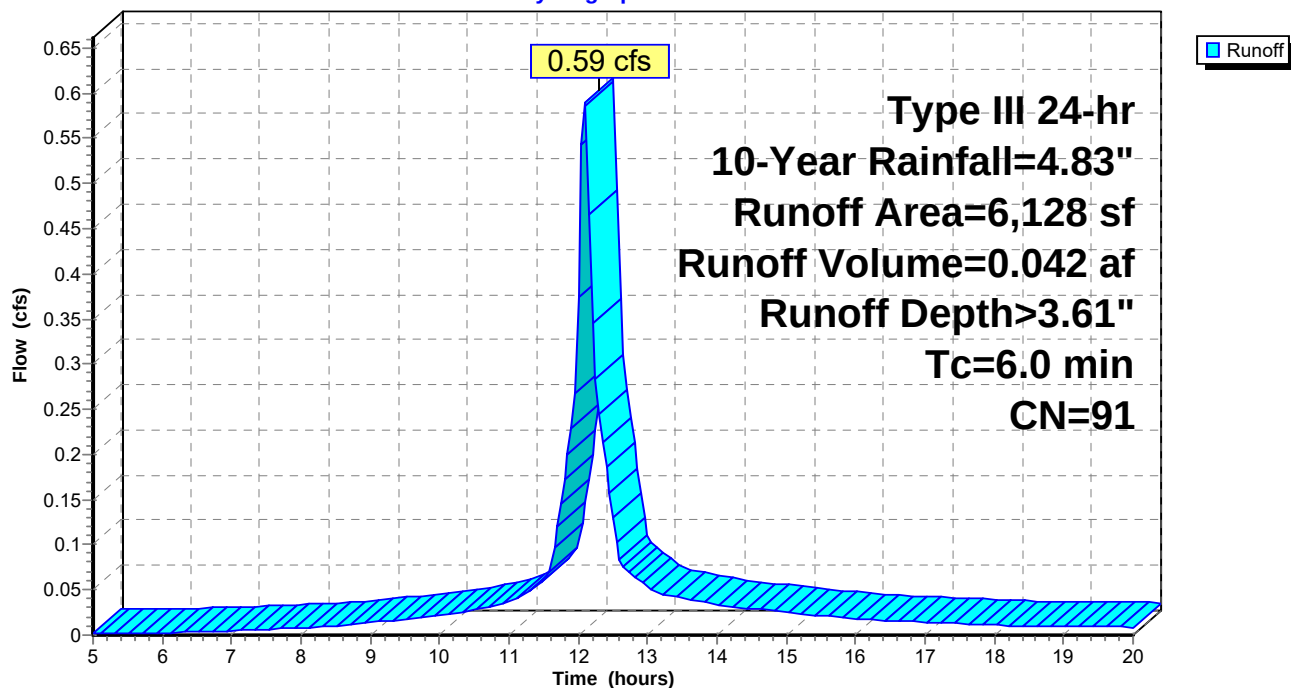
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,796     | 74 | >75% Grass cover, Good, HSG C |
| 348       | 98 | Unconnected roofs, HSG C      |
| 3,984     | 98 | Paved parking, HSG C          |
| 6,128     | 91 | Weighted Average              |
| 1,796     |    | 29.31% Pervious Area          |
| 4,332     |    | 70.69% Impervious Area        |
| 348       |    | 8.03% Unconnected             |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 92S: P3C**

Hydrograph





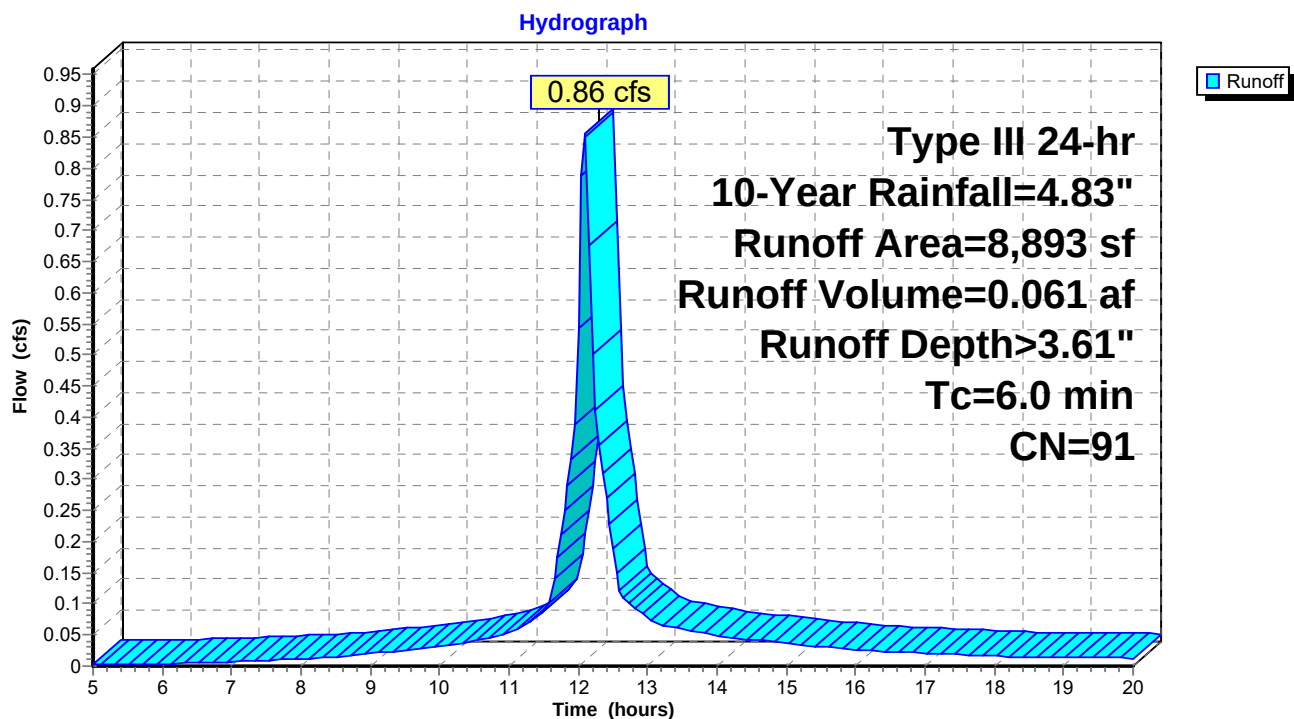
**Summary for Subcatchment 93S: P3D**

Runoff = 0.86 cfs @ 12.09 hrs, Volume= 0.061 af, Depth> 3.61"  
 Routed to Pond 94P : CB 77

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,560     | 74 | >75% Grass cover, Good, HSG C |
| 1,771     | 98 | Unconnected roofs, HSG C      |
| 4,562     | 98 | Paved parking, HSG C          |
| 8,893     | 91 | Weighted Average              |
| 2,560     |    | 28.79% Pervious Area          |
| 6,333     |    | 71.21% Impervious Area        |
| 1,771     |    | 27.96% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 93S: P3D**

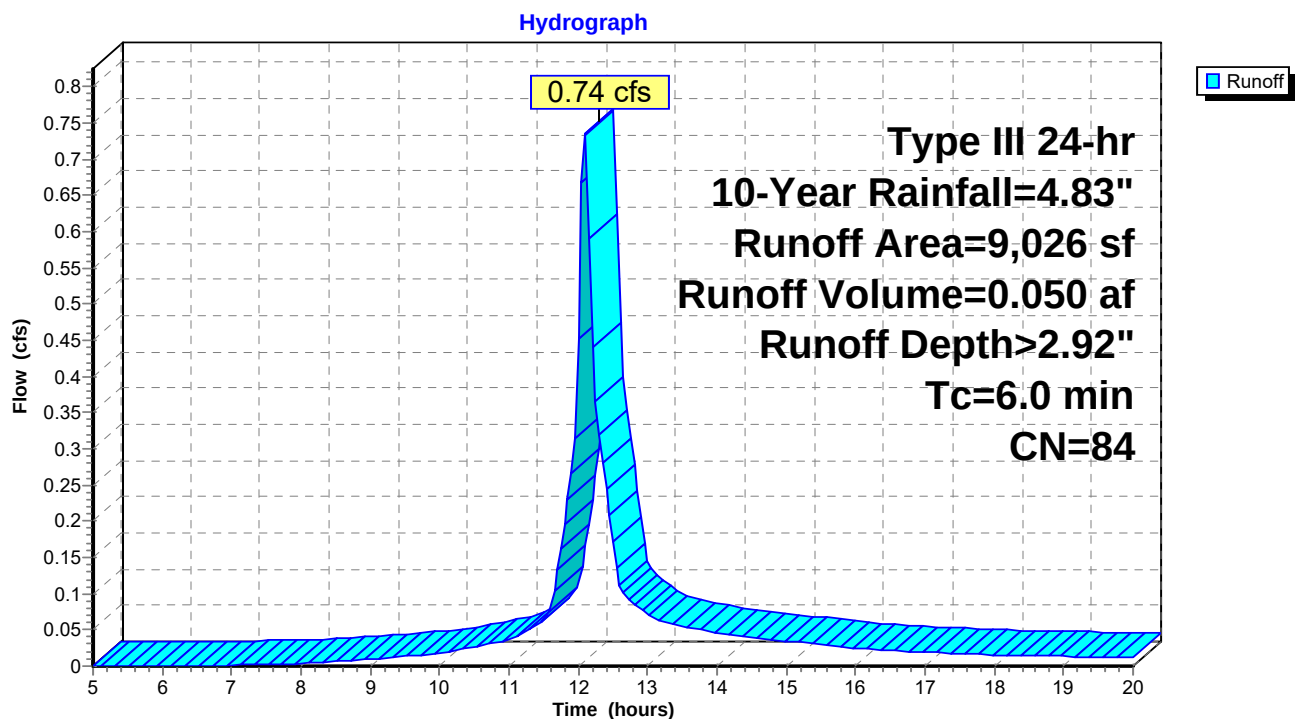
**Summary for Subcatchment 94S: P3HHH**

Runoff = 0.74 cfs @ 12.09 hrs, Volume= 0.050 af, Depth> 2.92"  
 Routed to Pond 154P : CB 18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,098     | 39 | >75% Grass cover, Good, HSG A |
| 3,837     | 98 | Unconnected roofs, HSG A      |
| 3,091     | 98 | Paved parking, HSG A          |
| 9,026     | 84 | Weighted Average              |
| 2,098     |    | 23.24% Pervious Area          |
| 6,928     |    | 76.76% Impervious Area        |
| 3,837     |    | 55.38% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 94S: P3HHH**

**Summary for Subcatchment 95S: P2X**

Runoff = 0.68 cfs @ 12.09 hrs, Volume= 0.053 af, Depth> 4.26"  
 Routed to Pond 79P : DMH 51

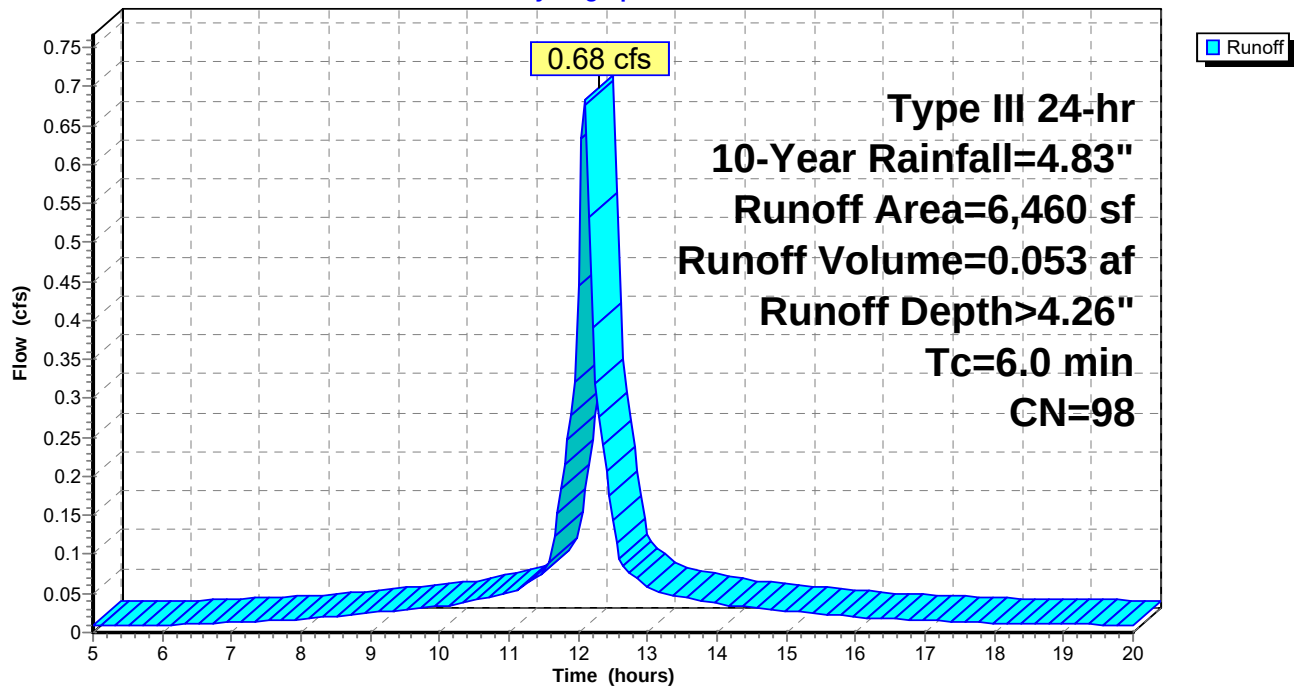
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description             |
|-----------|----|-------------------------|
| 6,460     | 98 | Paved parking, HSG C    |
| 6,460     |    | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 95S: P2X**

Hydrograph



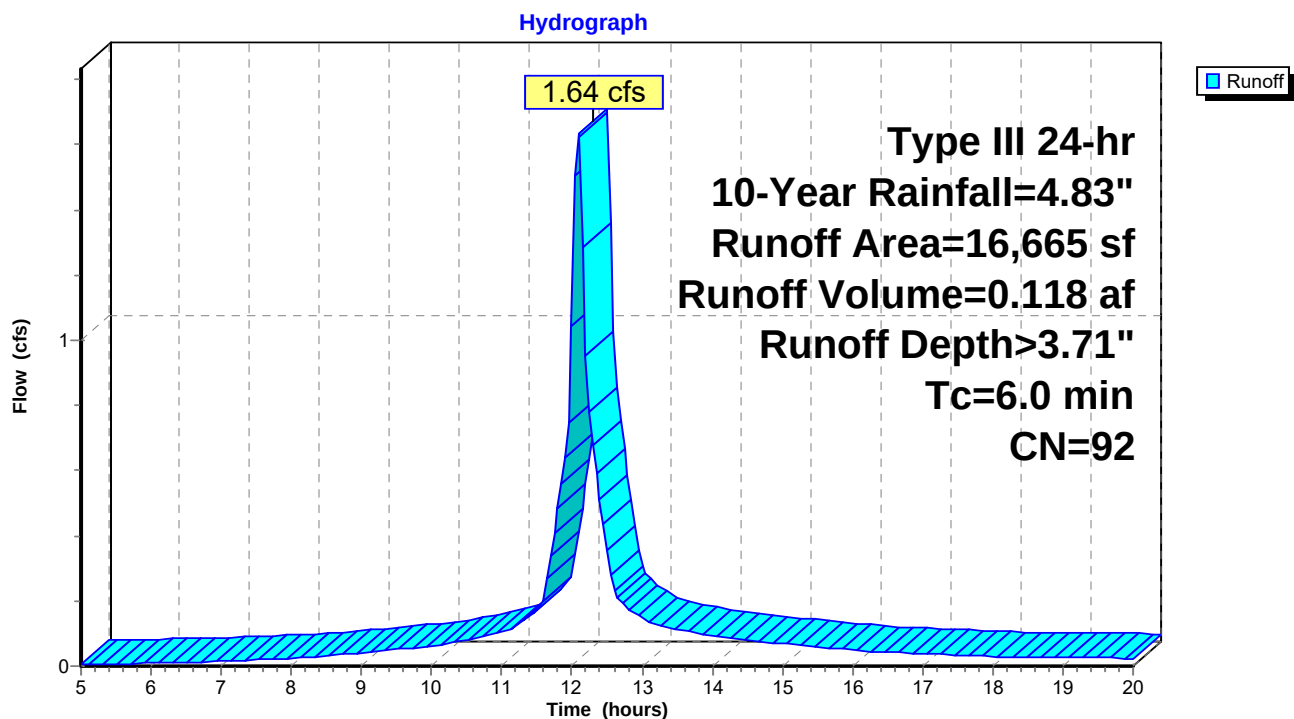
**Summary for Subcatchment 97S: P3G**

Runoff = 1.64 cfs @ 12.09 hrs, Volume= 0.118 af, Depth> 3.71"  
 Routed to Pond 100P : CB 80

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,471     | 74 | >75% Grass cover, Good, HSG C |
| 3,720     | 98 | Unconnected roofs, HSG C      |
| 8,474     | 98 | Paved parking, HSG C          |
| 16,665    | 92 | Weighted Average              |
| 4,471     |    | 26.83% Pervious Area          |
| 12,194    |    | 73.17% Impervious Area        |
| 3,720     |    | 30.51% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 97S: P3G**

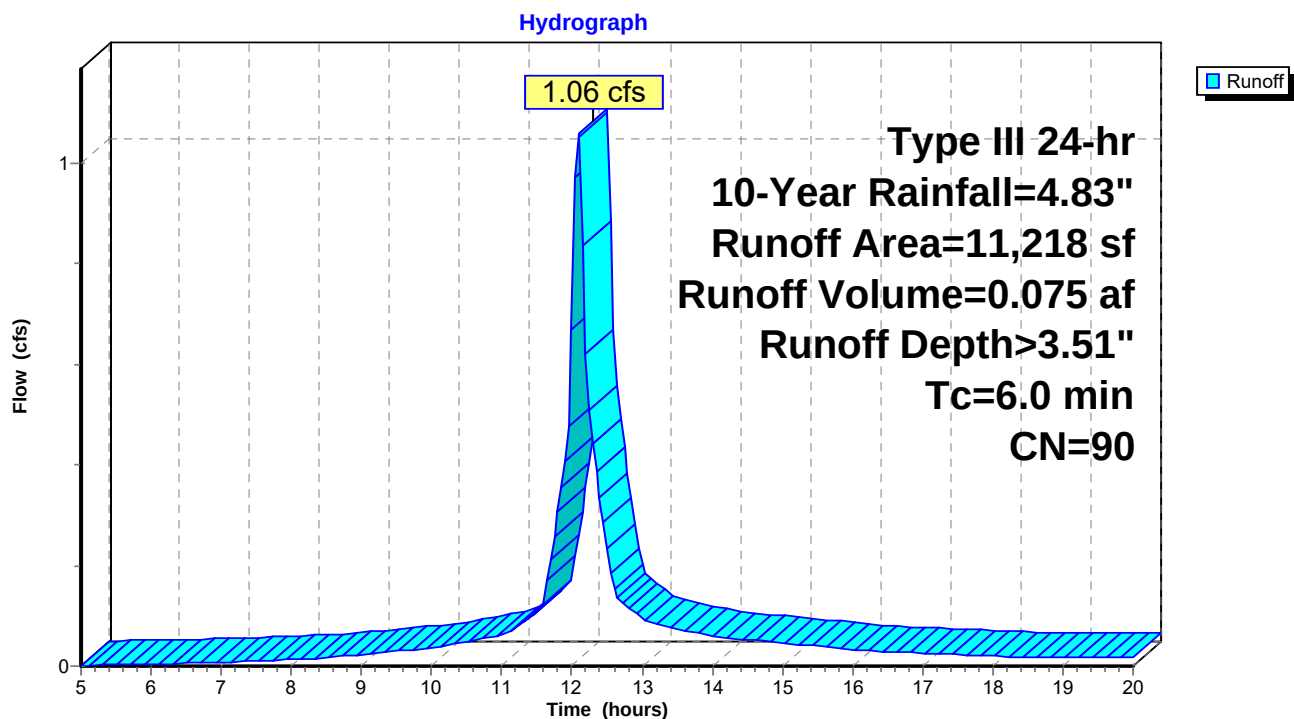
**Summary for Subcatchment 98S: P3H**

Runoff = 1.06 cfs @ 12.09 hrs, Volume= 0.075 af, Depth> 3.51"  
 Routed to Pond 99P : CB 81

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,581     | 74 | >75% Grass cover, Good, HSG C |
| 2,279     | 98 | Unconnected roofs, HSG C      |
| 5,358     | 98 | Paved parking, HSG C          |
| 11,218    | 90 | Weighted Average              |
| 3,581     |    | 31.92% Pervious Area          |
| 7,637     |    | 68.08% Impervious Area        |
| 2,279     |    | 29.84% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 98S: P3H**

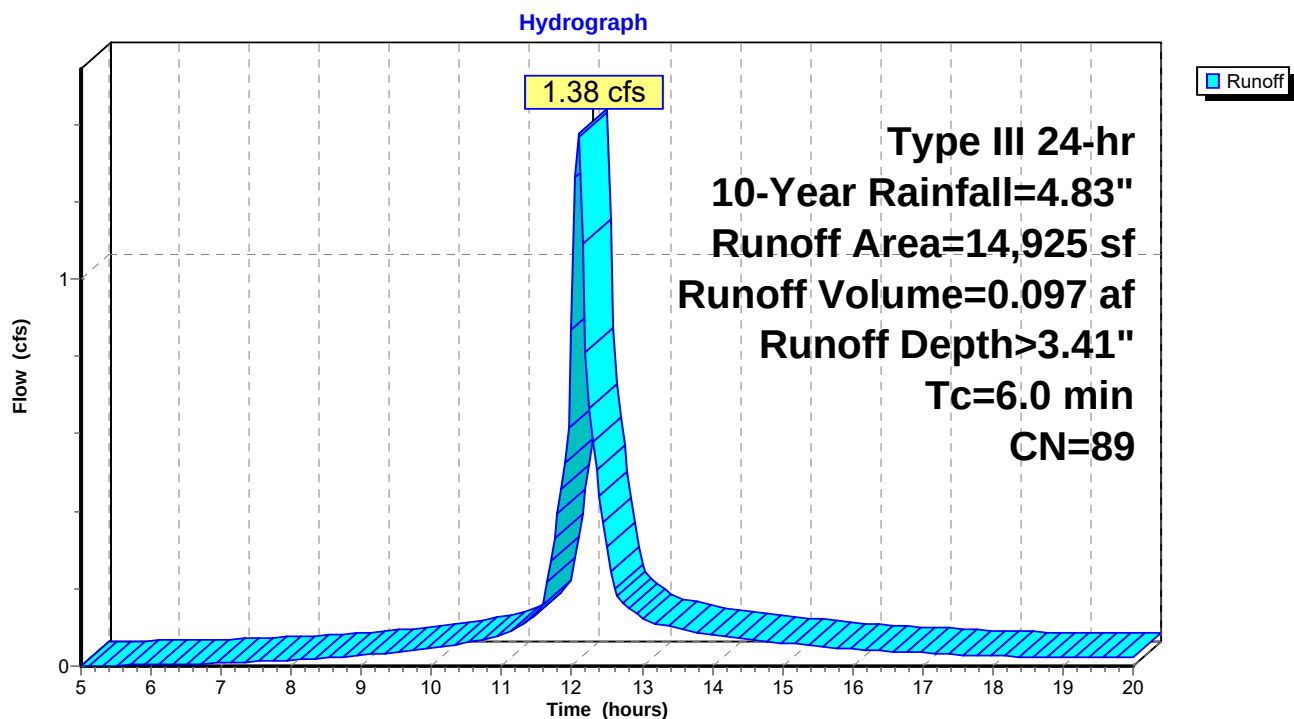
**Summary for Subcatchment 102S: P3J**

Runoff = 1.38 cfs @ 12.09 hrs, Volume= 0.097 af, Depth> 3.41"  
 Routed to Pond 104P : CB 83

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,342     | 74 | >75% Grass cover, Good, HSG C |
| 2,771     | 98 | Unconnected roofs, HSG C      |
| 6,812     | 98 | Paved parking, HSG C          |
| 14,925    | 89 | Weighted Average              |
| 5,342     |    | 35.79% Pervious Area          |
| 9,583     |    | 64.21% Impervious Area        |
| 2,771     |    | 28.92% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 102S: P3J**

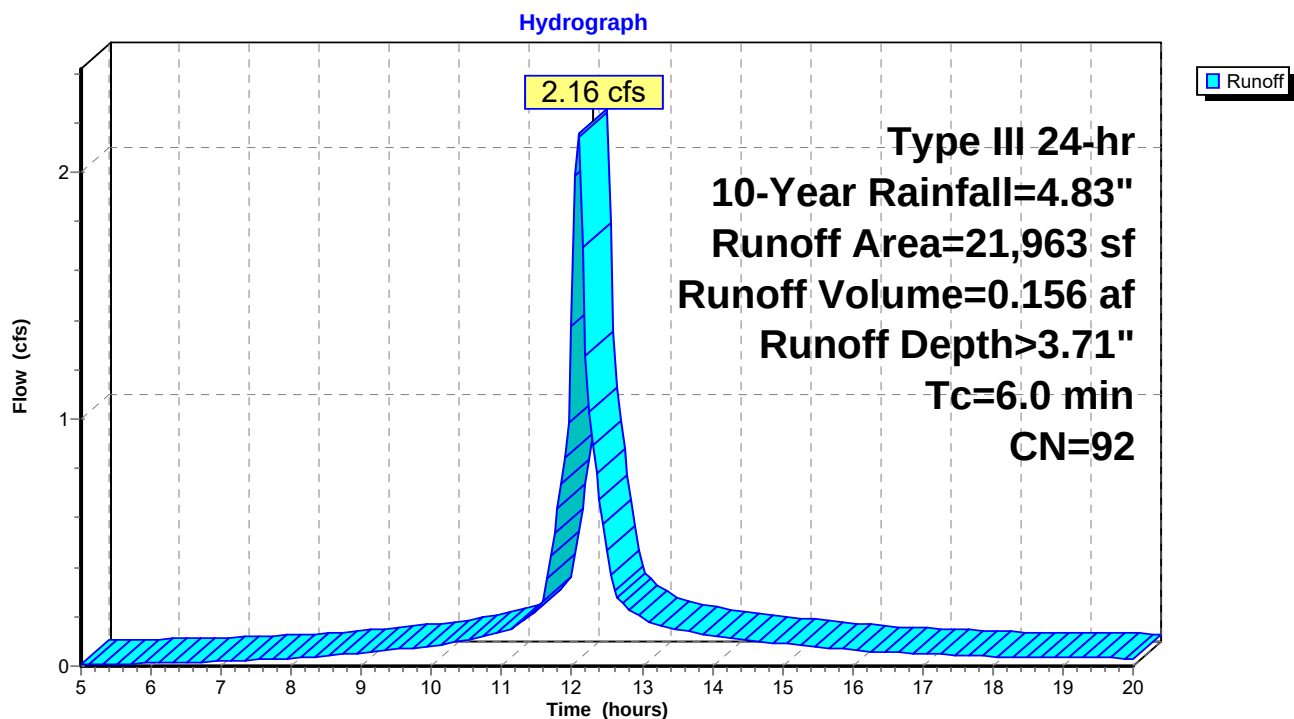
**Summary for Subcatchment 103S: P3I**

Runoff = 2.16 cfs @ 12.09 hrs, Volume= 0.156 af, Depth> 3.71"  
 Routed to Pond 105P : CB 82

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,534     | 74 | >75% Grass cover, Good, HSG C |
| 6,057     | 98 | Unconnected roofs, HSG C      |
| 10,372    | 98 | Paved parking, HSG C          |
| 21,963    | 92 | Weighted Average              |
| 5,534     |    | 25.20% Pervious Area          |
| 16,429    |    | 74.80% Impervious Area        |
| 6,057     |    | 36.87% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 103S: P3I**

**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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Type III 24-hr 10-Year Rainfall=4.83"

Printed 1/7/2026

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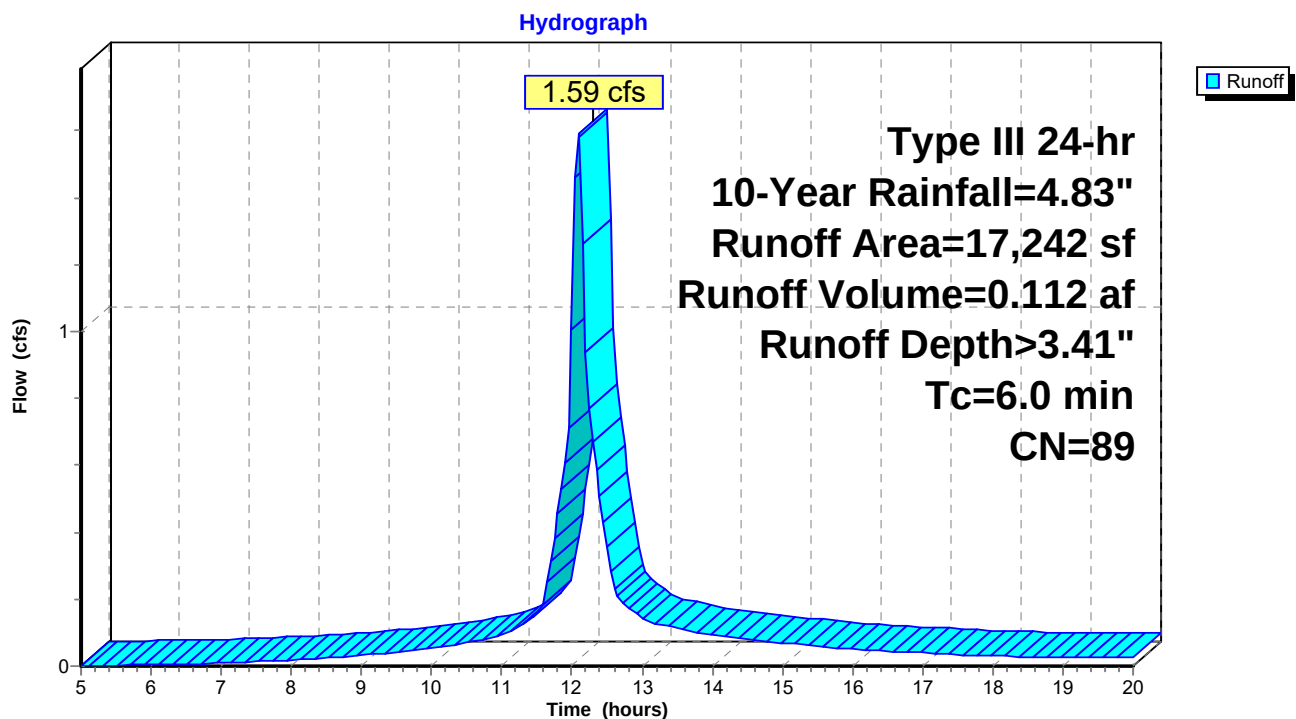
**Summary for Subcatchment 107S: P3E**

Runoff = 1.59 cfs @ 12.09 hrs, Volume= 0.112 af, Depth> 3.41"  
Routed to Pond 110P : CB 78

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 6,163     | 74 | >75% Grass cover, Good, HSG C |
| 2,724     | 98 | Unconnected roofs, HSG C      |
| 8,355     | 98 | Paved parking, HSG C          |
| 17,242    | 89 | Weighted Average              |
| 6,163     |    | 35.74% Pervious Area          |
| 11,079    |    | 64.26% Impervious Area        |
| 2,724     |    | 24.59% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 107S: P3E**



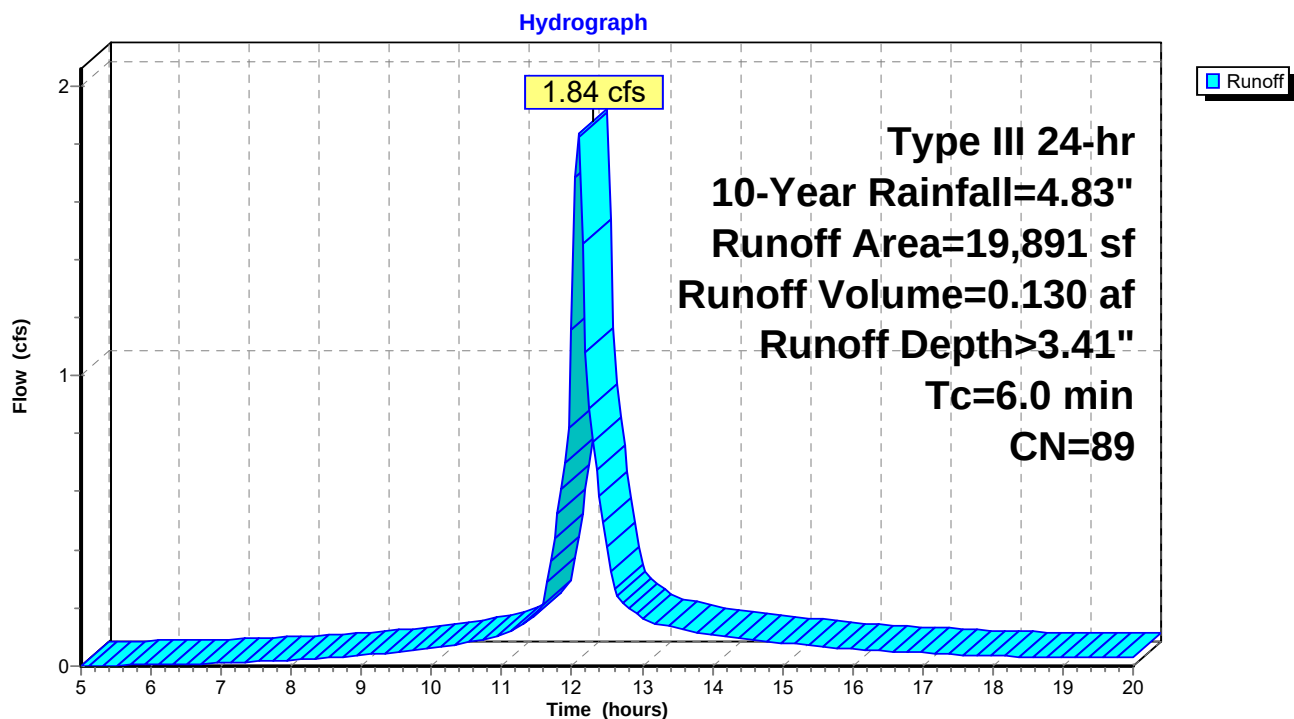
**Summary for Subcatchment 108S: P3F**

Runoff = 1.84 cfs @ 12.09 hrs, Volume= 0.130 af, Depth> 3.41"  
 Routed to Pond 109P : CB 79

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 7,073     | 74 | >75% Grass cover, Good, HSG C |
| 5,397     | 98 | Unconnected roofs, HSG C      |
| 7,421     | 98 | Paved parking, HSG C          |
| 19,891    | 89 | Weighted Average              |
| 7,073     |    | 35.56% Pervious Area          |
| 12,818    |    | 64.44% Impervious Area        |
| 5,397     |    | 42.10% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 108S: P3F**

### Summary for Subcatchment 109S: P3T

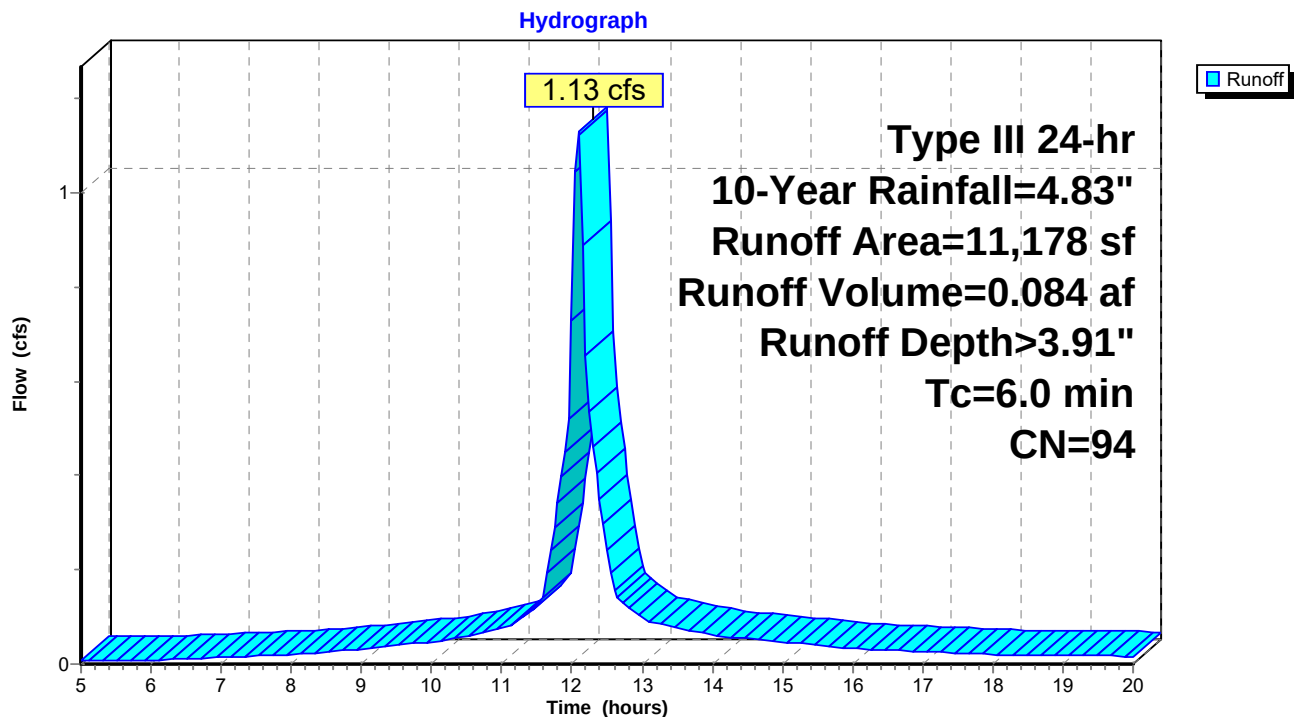
Runoff = 1.13 cfs @ 12.09 hrs, Volume= 0.084 af, Depth> 3.91"  
Routed to Pond 116P : CB 90

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,856     | 74 | >75% Grass cover, Good, HSG C |
| 9,322     | 98 | Paved parking, HSG C          |
| 11,178    | 94 | Weighted Average              |
| 1,856     |    | 16.60% Pervious Area          |
| 9,322     |    | 83.40% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 109S: P3T



### Summary for Subcatchment 110S: P3U

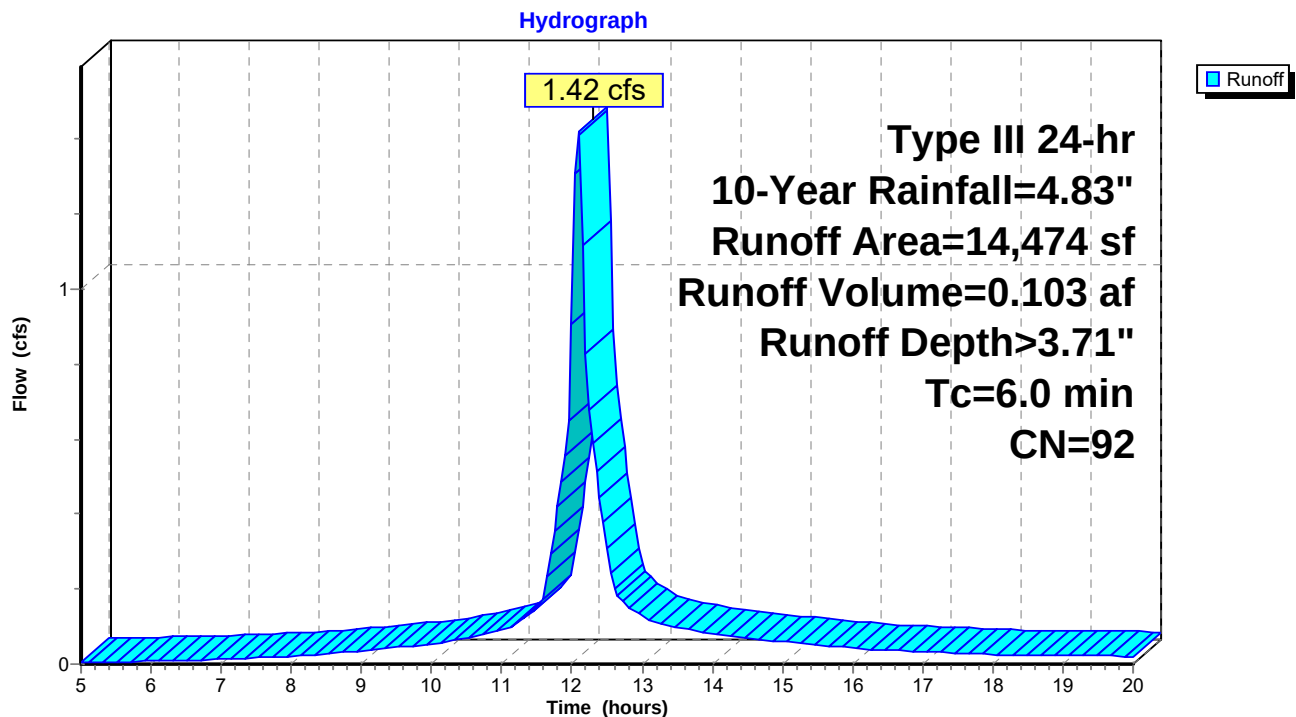
Runoff = 1.42 cfs @ 12.09 hrs, Volume= 0.103 af, Depth> 3.71"  
Routed to Pond 115P : CB 91

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,423     | 74 | >75% Grass cover, Good, HSG C |
| 6,099     | 98 | Unconnected roofs, HSG C      |
| 4,952     | 98 | Paved parking, HSG C          |
| 14,474    | 92 | Weighted Average              |
| 3,423     |    | 23.65% Pervious Area          |
| 11,051    |    | 76.35% Impervious Area        |
| 6,099     |    | 55.19% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 110S: P3U



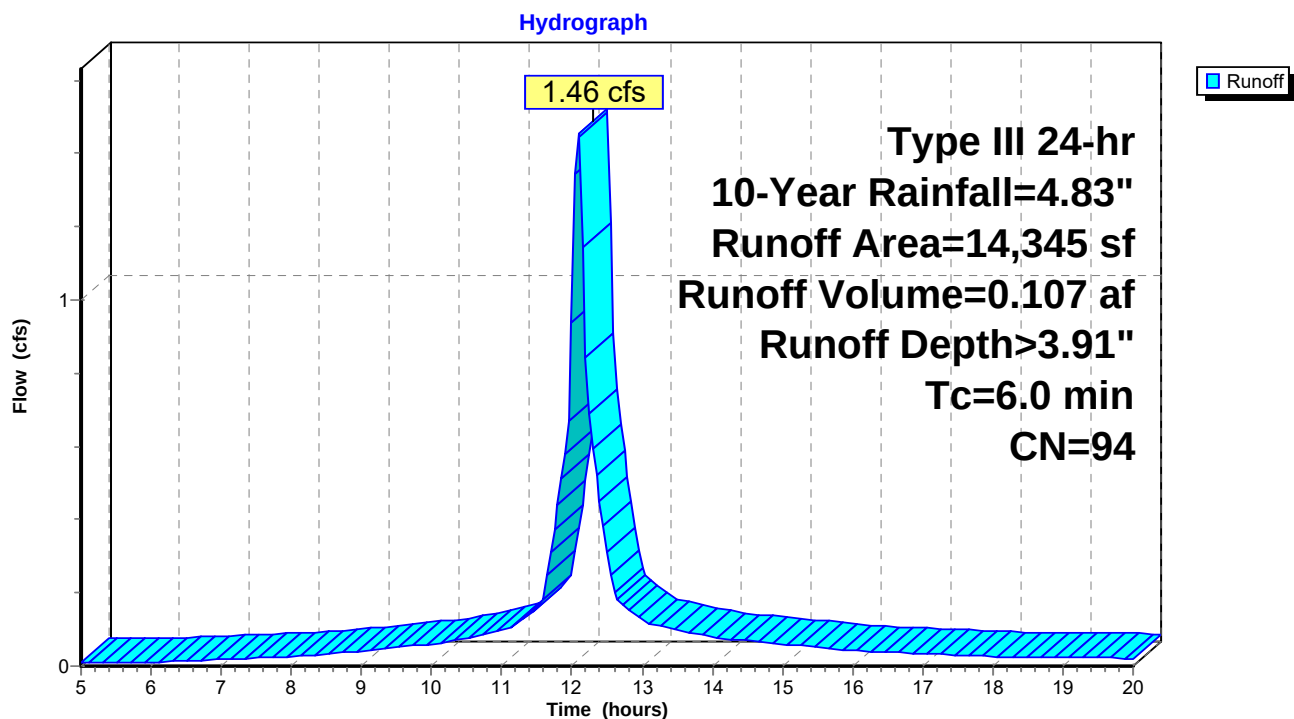
**Summary for Subcatchment 111S: P3V**

Runoff = 1.46 cfs @ 12.09 hrs, Volume= 0.107 af, Depth> 3.91"  
 Routed to Pond 114P : CB 94

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,512     | 74 | >75% Grass cover, Good, HSG C |
| 5,977     | 98 | Unconnected roofs, HSG C      |
| 5,856     | 98 | Paved parking, HSG C          |
| 14,345    | 94 | Weighted Average              |
| 2,512     |    | 17.51% Pervious Area          |
| 11,833    |    | 82.49% Impervious Area        |
| 5,977     |    | 50.51% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 111S: P3V**

### Summary for Subcatchment 112S: P3W

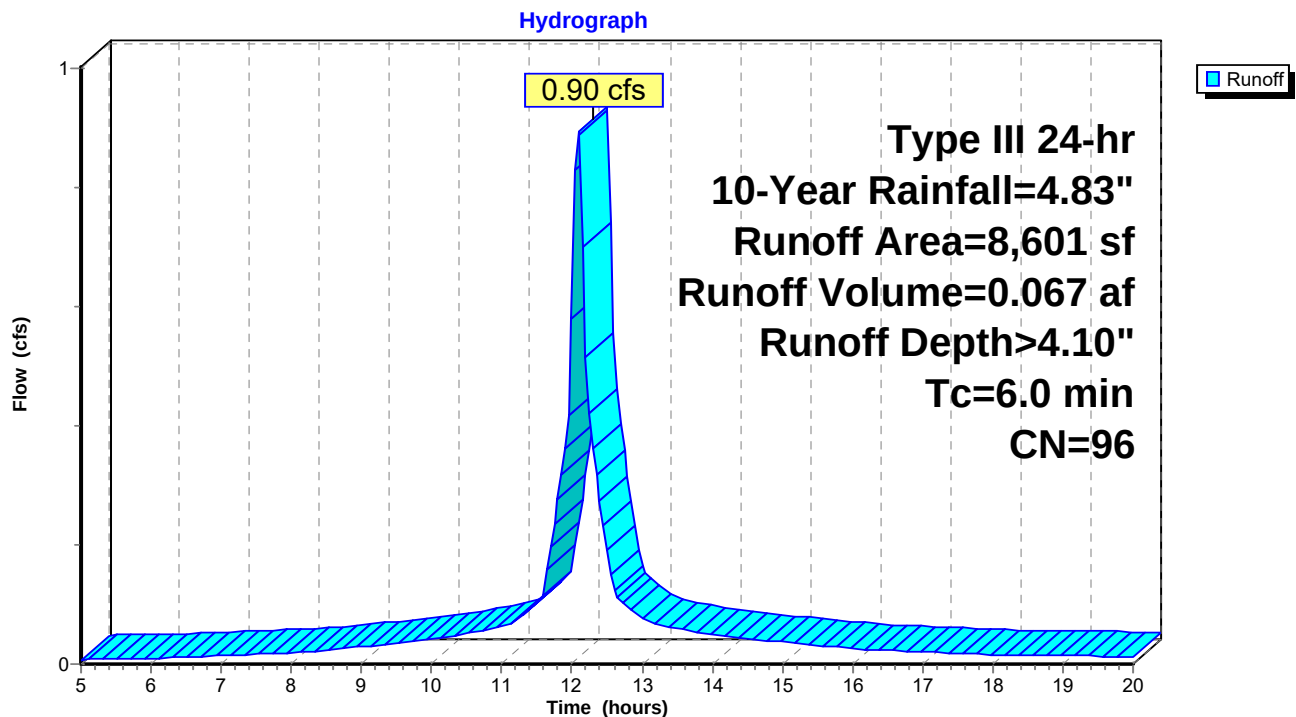
Runoff = 0.90 cfs @ 12.09 hrs, Volume= 0.067 af, Depth> 4.10"  
Routed to Pond 113P : CB 95

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 719       | 74 | >75% Grass cover, Good, HSG C |
| 7,882     | 98 | Paved parking, HSG C          |
| 8,601     | 96 | Weighted Average              |
| 719       |    | 8.36% Pervious Area           |
| 7,882     |    | 91.64% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 112S: P3W



**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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Type III 24-hr 10-Year Rainfall=4.83"

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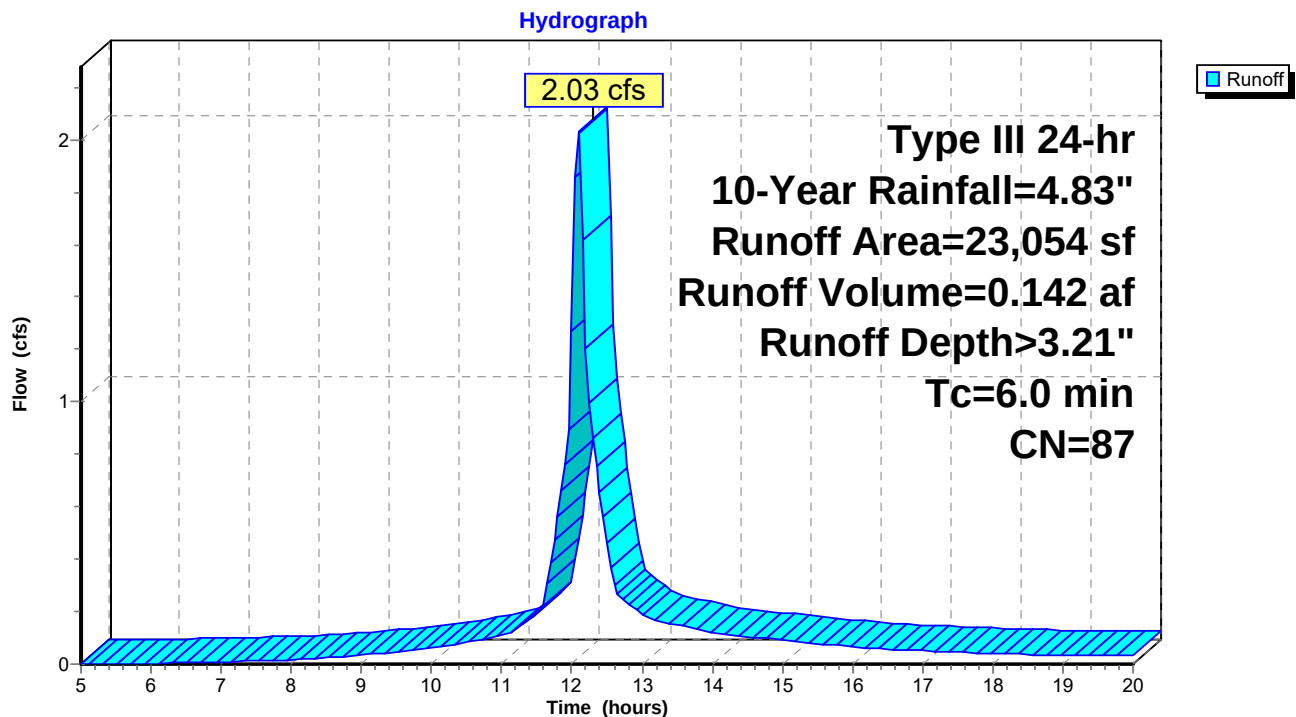
**Summary for Subcatchment 125S: P3EE**

Runoff = 2.03 cfs @ 12.09 hrs, Volume= 0.142 af, Depth> 3.21"  
Routed to Pond 130P : CB 32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,338     | 39 | >75% Grass cover, Good, HSG A |
| 8,274     | 98 | Unconnected roofs, HSG A      |
| 10,442    | 98 | Paved parking, HSG A          |
| 23,054    | 87 | Weighted Average              |
| 4,338     |    | 18.82% Pervious Area          |
| 18,716    |    | 81.18% Impervious Area        |
| 8,274     |    | 44.21% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 125S: P3EE**

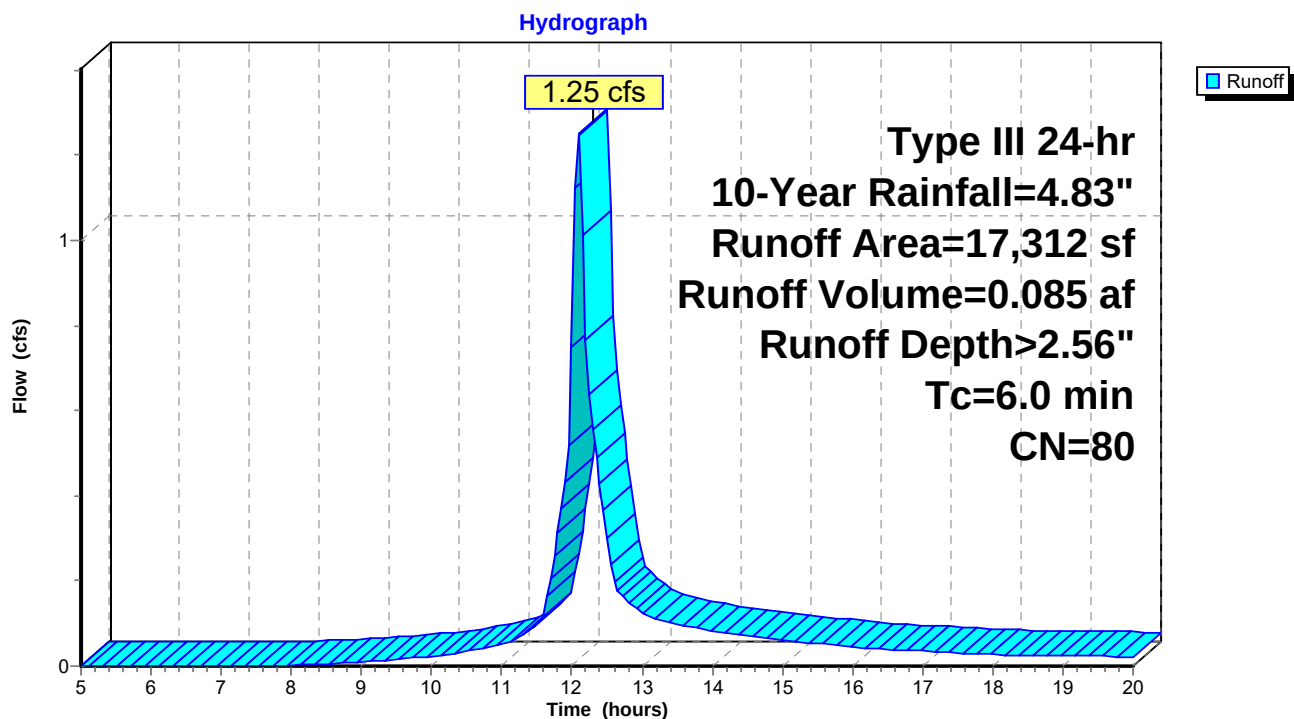
**Summary for Subcatchment 126S: P3FF**

Runoff = 1.25 cfs @ 12.09 hrs, Volume= 0.085 af, Depth> 2.56"  
 Routed to Pond 129P : CB 34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,177     | 39 | >75% Grass cover, Good, HSG A |
| 4,336     | 98 | Unconnected roofs, HSG A      |
| 7,799     | 98 | Paved parking, HSG A          |
| 17,312    | 80 | Weighted Average              |
| 5,177     |    | 29.90% Pervious Area          |
| 12,135    |    | 70.10% Impervious Area        |
| 4,336     |    | 35.73% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 126S: P3FF**

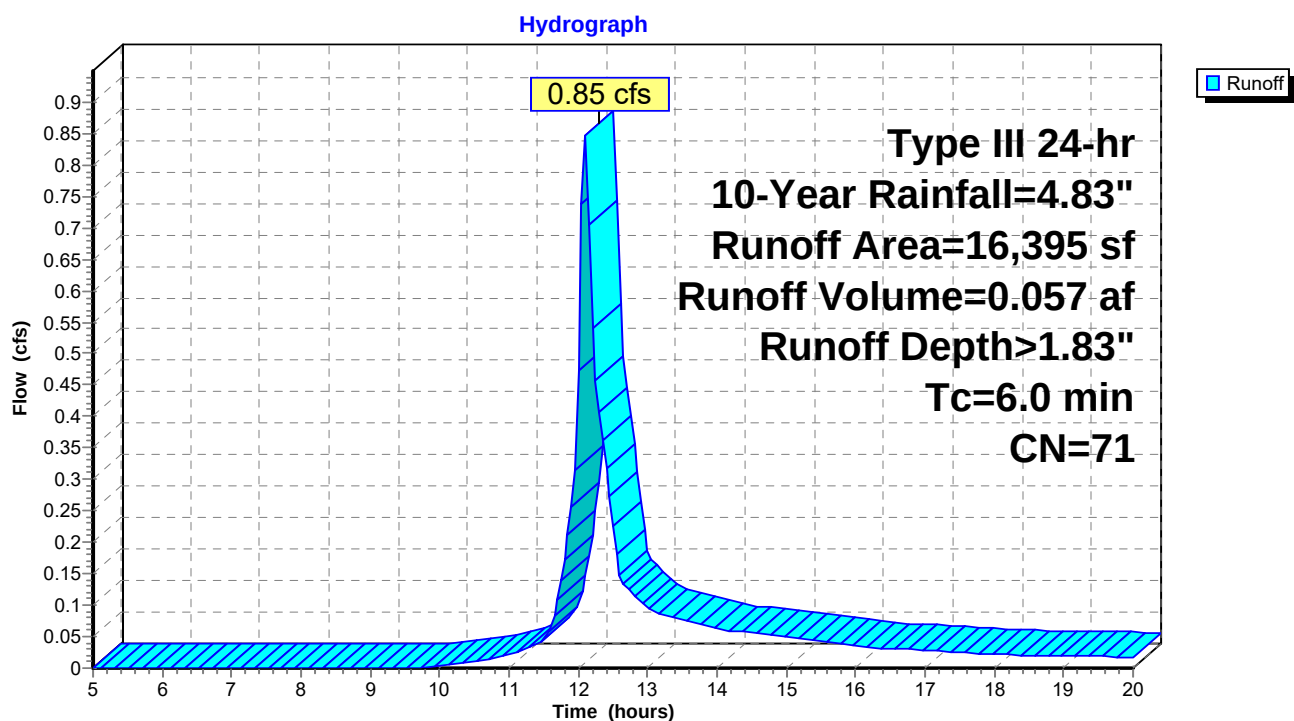
**Summary for Subcatchment 127S: P3GG**

Runoff = 0.85 cfs @ 12.10 hrs, Volume= 0.057 af, Depth> 1.83"  
 Routed to Pond 132P : CB 33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 7,617     | 39 | >75% Grass cover, Good, HSG A |
| 3,071     | 98 | Unconnected roofs, HSG C      |
| 5,707     | 98 | Paved parking, HSG A          |
| 16,395    | 71 | Weighted Average              |
| 7,617     |    | 46.46% Pervious Area          |
| 8,778     |    | 53.54% Impervious Area        |
| 3,071     |    | 34.99% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 127S: P3GG**



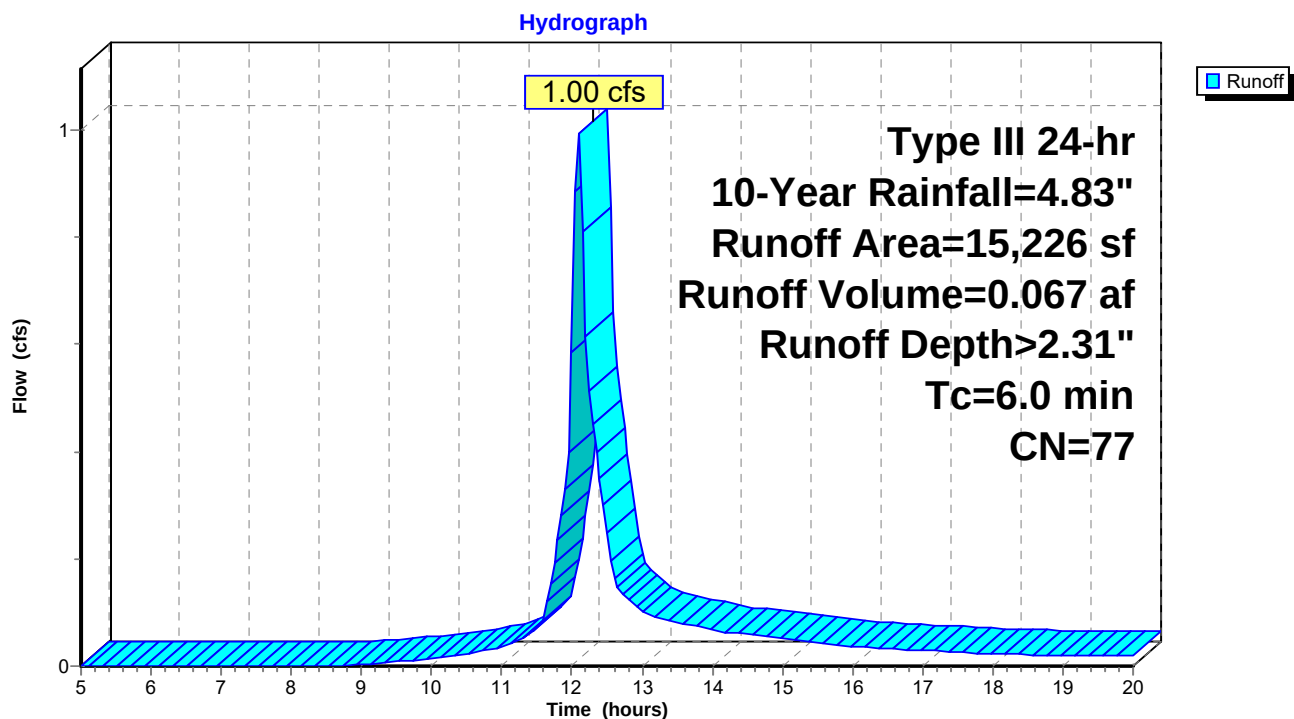
**Summary for Subcatchment 128S: P3HH**

Runoff = 1.00 cfs @ 12.09 hrs, Volume= 0.067 af, Depth> 2.31"  
 Routed to Pond 131P : CB 35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,501     | 39 | >75% Grass cover, Good, HSG A |
| 4,901     | 98 | Unconnected roofs, HSG A      |
| 4,824     | 98 | Paved parking, HSG A          |
| 15,226    | 77 | Weighted Average              |
| 5,501     |    | 36.13% Pervious Area          |
| 9,725     |    | 63.87% Impervious Area        |
| 4,901     |    | 50.40% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 128S: P3HH**

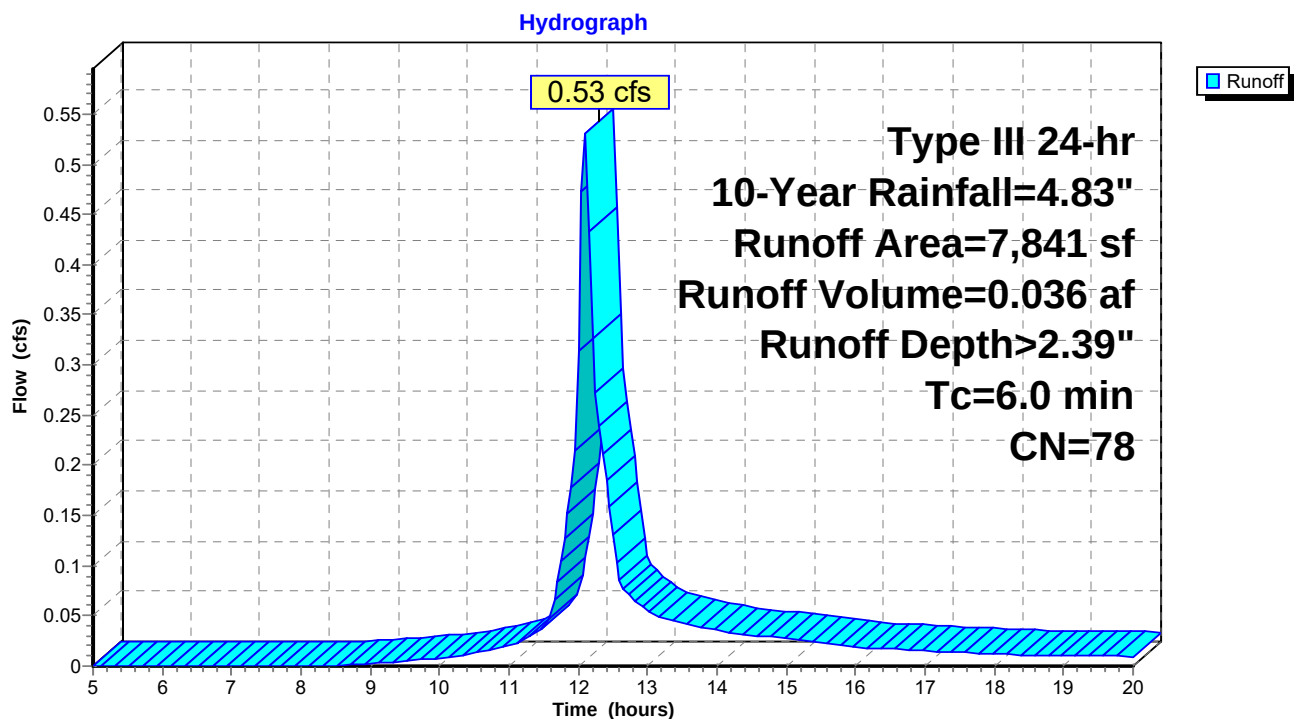
**Summary for Subcatchment 129S: P3MM**

Runoff = 0.53 cfs @ 12.09 hrs, Volume= 0.036 af, Depth> 2.39"  
 Routed to Pond 136P : CB 38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,648     | 39 | >75% Grass cover, Good, HSG A |
| 2,583     | 98 | Unconnected roofs, HSG A      |
| 2,610     | 98 | Paved parking, HSG A          |
| 7,841     | 78 | Weighted Average              |
| 2,648     |    | 33.77% Pervious Area          |
| 5,193     |    | 66.23% Impervious Area        |
| 2,583     |    | 49.74% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 129S: P3MM**

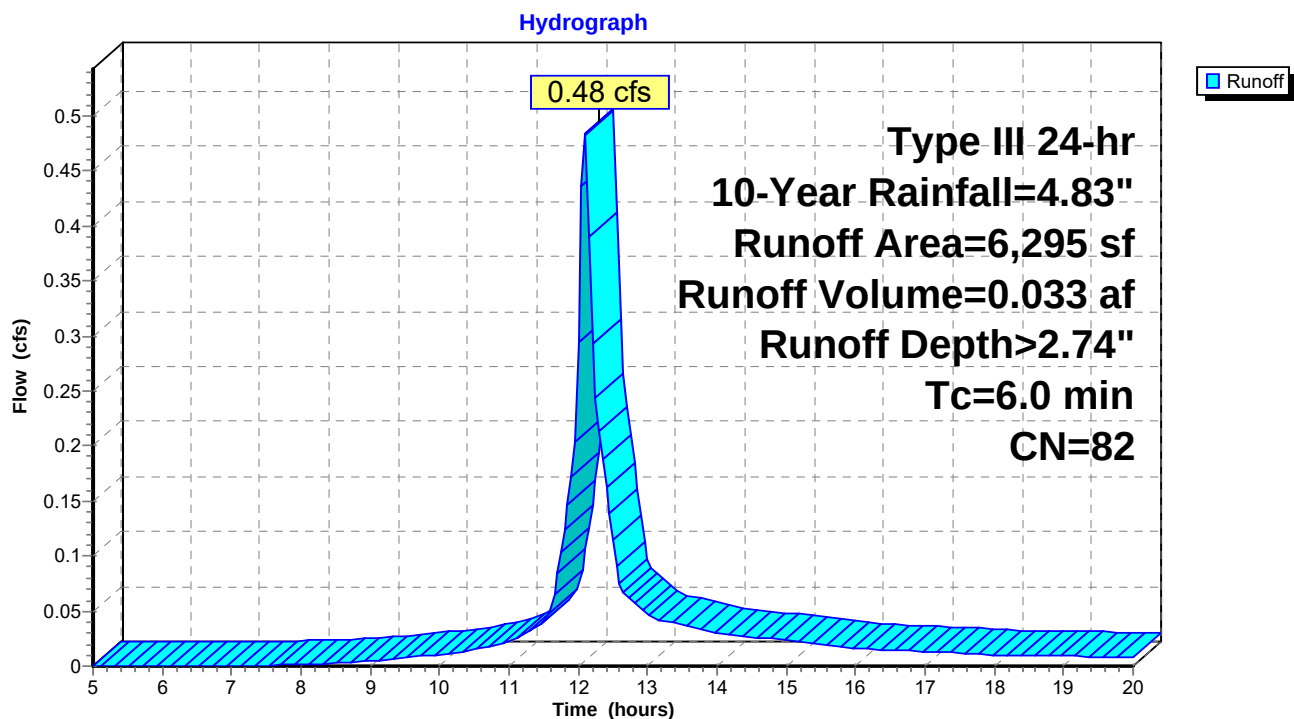
**Summary for Subcatchment 130S: P3NN**

Runoff = 0.48 cfs @ 12.09 hrs, Volume= 0.033 af, Depth> 2.74"  
 Routed to Pond 138P : CB 39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,726     | 39 | >75% Grass cover, Good, HSG A |
| 1,686     | 98 | Unconnected roofs, HSG A      |
| 2,883     | 98 | Paved parking, HSG A          |
| 6,295     | 82 | Weighted Average              |
| 1,726     |    | 27.42% Pervious Area          |
| 4,569     |    | 72.58% Impervious Area        |
| 1,686     |    | 36.90% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 130S: P3NN**

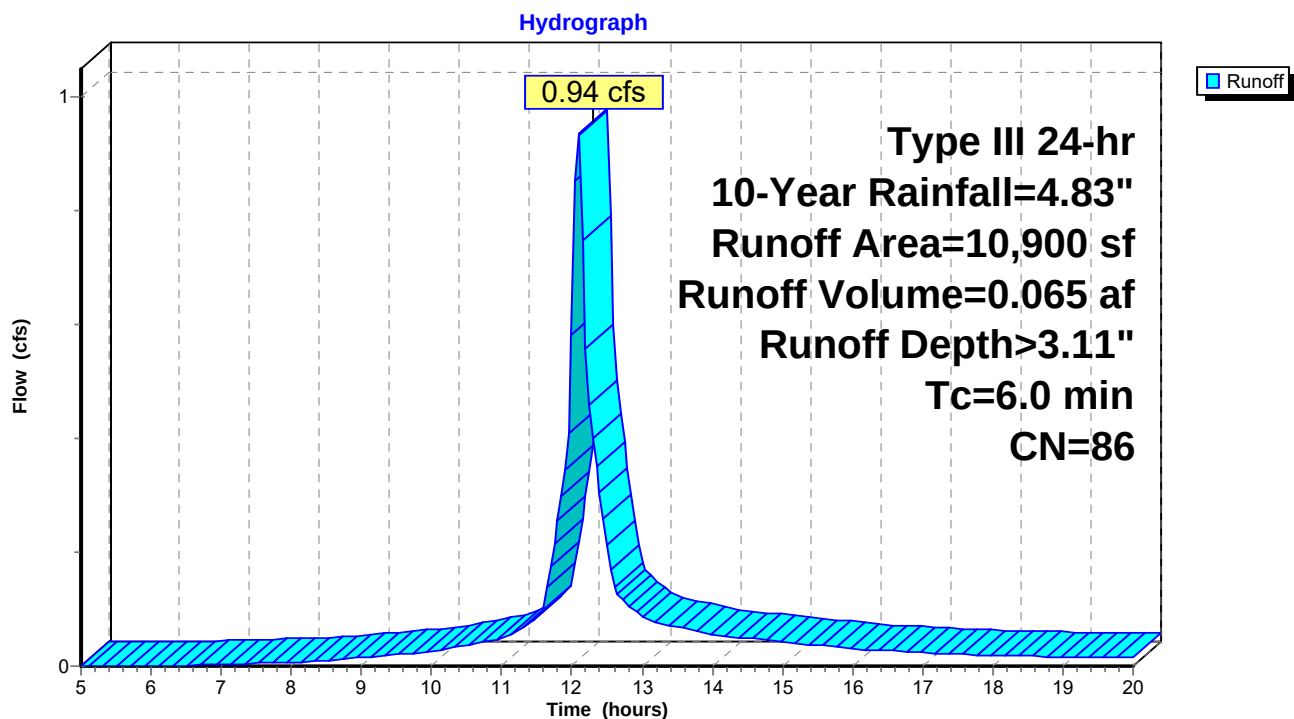
**Summary for Subcatchment 136S: P3II**

Runoff = 0.94 cfs @ 12.09 hrs, Volume= 0.065 af, Depth> 3.11"  
 Routed to Pond 137P : CB

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,148     | 39 | >75% Grass cover, Good, HSG A |
| 4,052     | 98 | Unconnected roofs, HSG A      |
| 4,700     | 98 | Paved parking, HSG A          |
| 10,900    | 86 | Weighted Average              |
| 2,148     |    | 19.71% Pervious Area          |
| 8,752     |    | 80.29% Impervious Area        |
| 4,052     |    | 46.30% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 136S: P3II**

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Type III 24-hr 10-Year Rainfall=4.83"

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**Summary for Subcatchment 138S: P3JJ**

Runoff = 0.02 cfs @ 12.46 hrs, Volume= 0.005 af, Depth> 0.19"  
Routed to Pond 135P : Inf. Basin 3

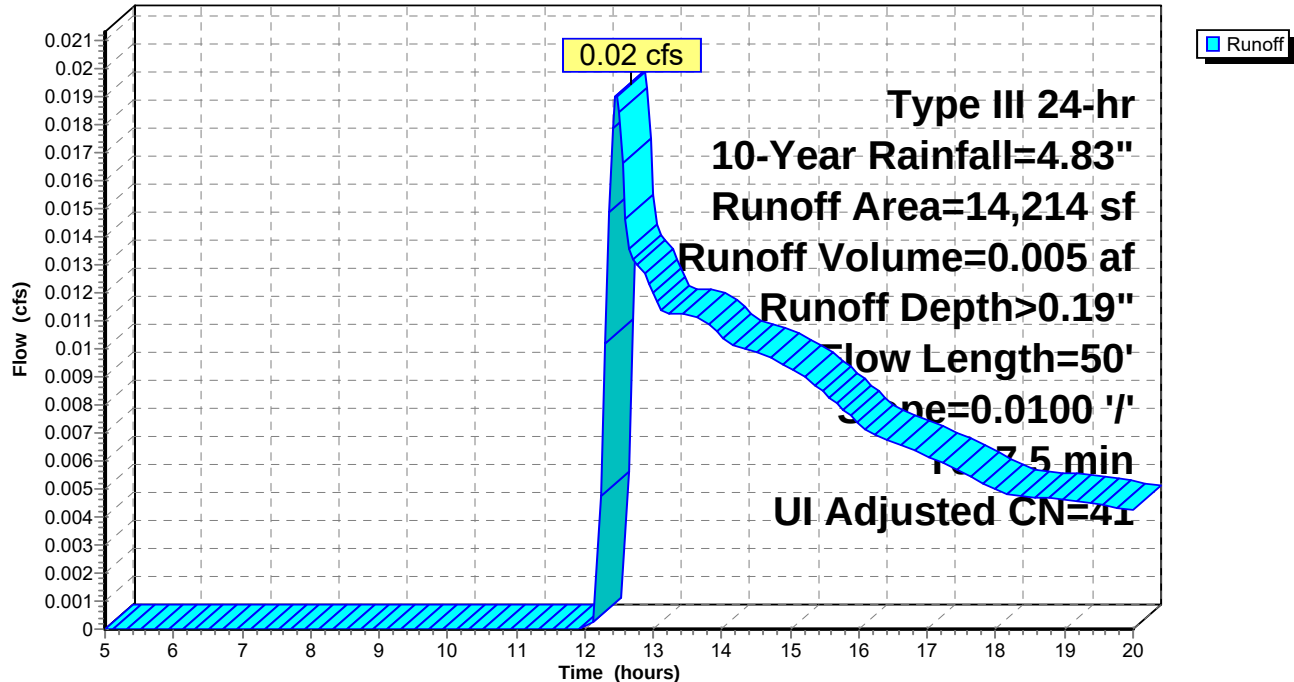
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 989       | 98 |     | Unconnected roofs, HSG A      |
| 13,225    | 39 |     | >75% Grass cover, Good, HSG A |
| 14,214    | 43 | 41  | Weighted Average, UI Adjusted |
| 13,225    |    |     | 93.04% Pervious Area          |
| 989       |    |     | 6.96% Impervious Area         |
| 989       |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                    |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------|
| 7.5      | 50            | 0.0100        | 0.11              |                | Sheet Flow,<br>Grass: Short n= 0.150 P2= 3.10" |

**Subcatchment 138S: P3JJ**

Hydrograph



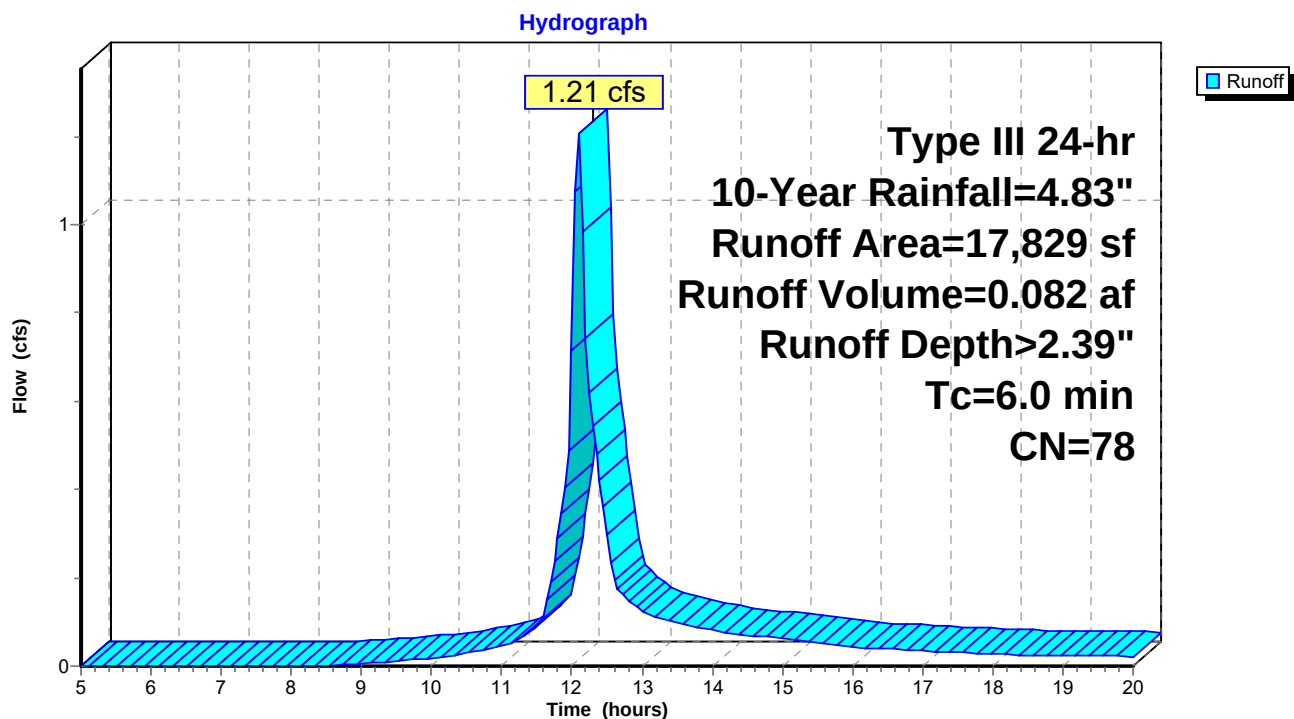
**Summary for Subcatchment 140S: P300**

Runoff = 1.21 cfs @ 12.09 hrs, Volume= 0.082 af, Depth> 2.39"  
 Routed to Pond 142P : CB 40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 6,065     | 39 | >75% Grass cover, Good, HSG A |
| 5,813     | 98 | Unconnected roofs, HSG A      |
| 5,951     | 98 | Paved parking, HSG A          |
| 17,829    | 78 | Weighted Average              |
| 6,065     |    | 34.02% Pervious Area          |
| 11,764    |    | 65.98% Impervious Area        |
| 5,813     |    | 49.41% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 140S: P300**

### Summary for Subcatchment 141S: P3PP

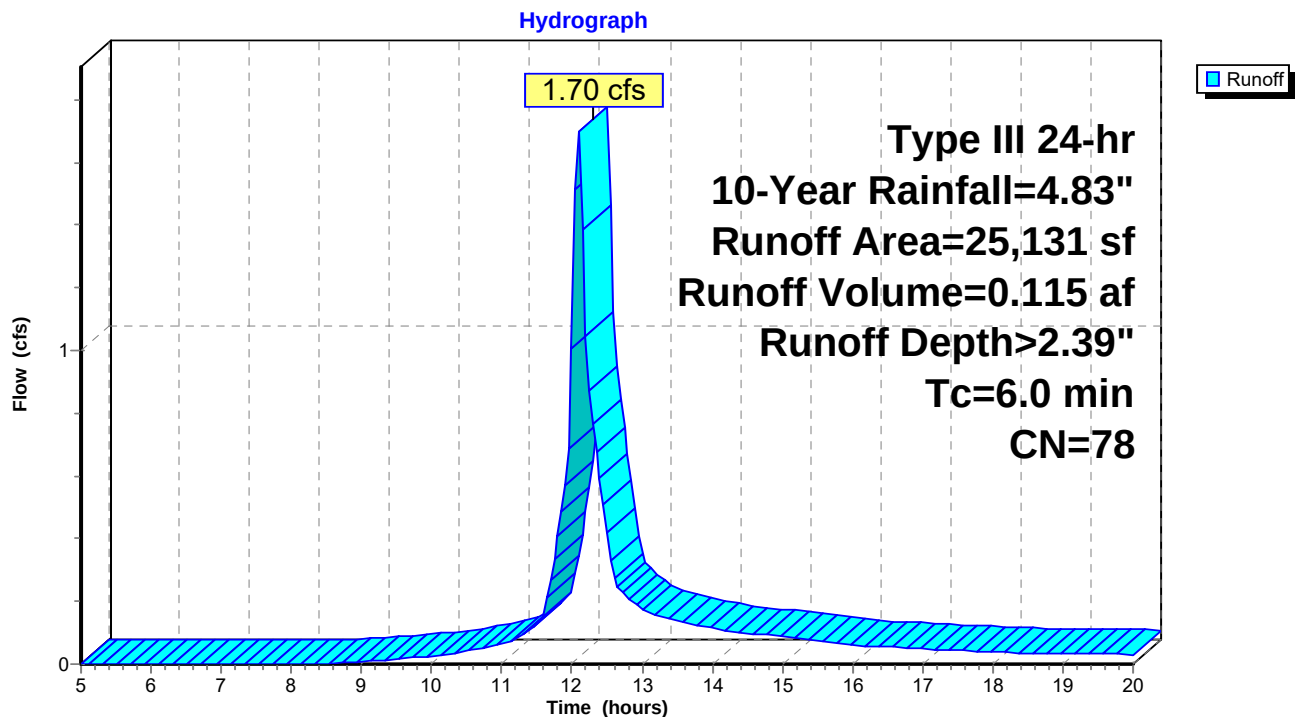
Runoff = 1.70 cfs @ 12.09 hrs, Volume= 0.115 af, Depth> 2.39"  
Routed to Pond 143P : CB 41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 8,502     | 39 | >75% Grass cover, Good, HSG A |
| 8,019     | 98 | Unconnected roofs, HSG A      |
| 8,610     | 98 | Paved parking, HSG A          |
| 25,131    | 78 | Weighted Average              |
| 8,502     |    | 33.83% Pervious Area          |
| 16,629    |    | 66.17% Impervious Area        |
| 8,019     |    | 48.22% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 141S: P3PP



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Type III 24-hr 10-Year Rainfall=4.83"

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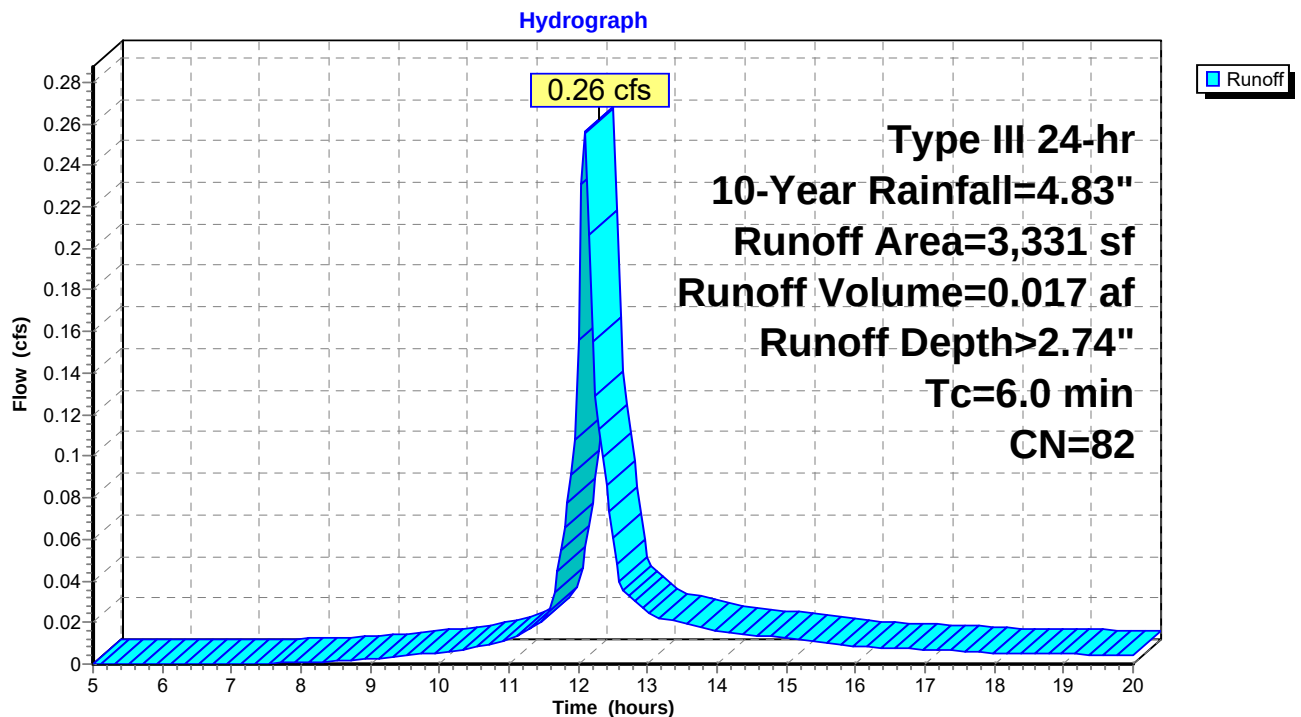
**Summary for Subcatchment 142S: P3UU**

Runoff = 0.26 cfs @ 12.09 hrs, Volume= 0.017 af, Depth> 2.74"  
Routed to Pond 147P : CB 28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 915       | 39 | >75% Grass cover, Good, HSG A |
| 2,416     | 98 | Paved parking, HSG A          |
| 3,331     | 82 | Weighted Average              |
| 915       |    | 27.47% Pervious Area          |
| 2,416     |    | 72.53% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 142S: P3UU**



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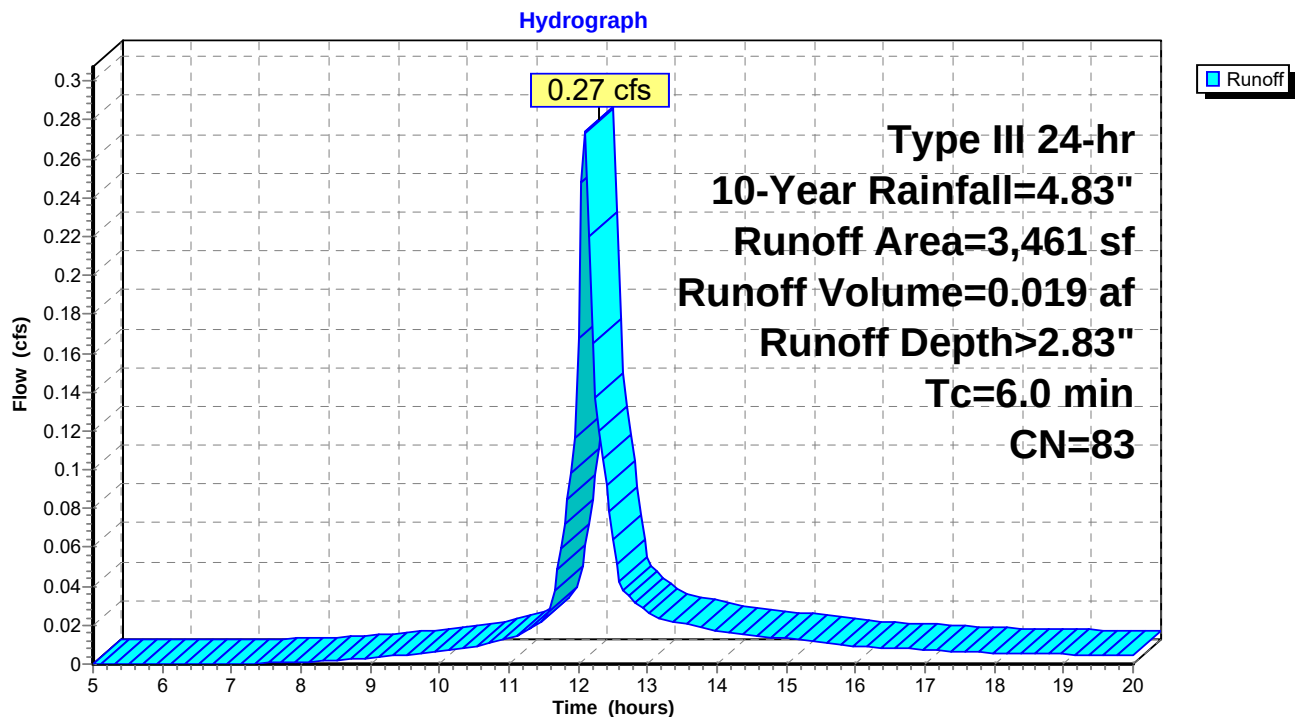
**Summary for Subcatchment 143S: P3VV**

Runoff = 0.27 cfs @ 12.09 hrs, Volume= 0.019 af, Depth> 2.83"  
Routed to Pond 149P : CB 29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 906       | 39 | >75% Grass cover, Good, HSG A |
| 2,555     | 98 | Paved parking, HSG A          |
| 3,461     | 83 | Weighted Average              |
| 906       |    | 26.18% Pervious Area          |
| 2,555     |    | 73.82% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 143S: P3VV**

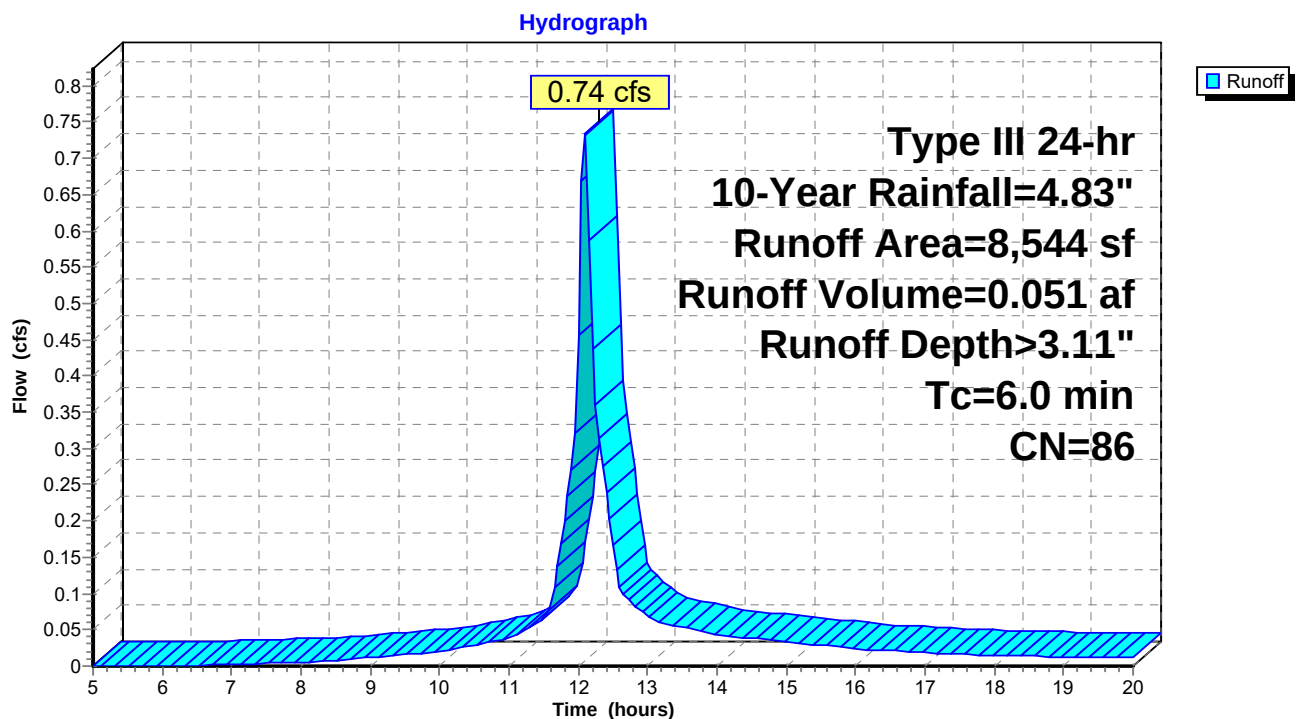
**Summary for Subcatchment 147S: P3QQ**

Runoff = 0.74 cfs @ 12.09 hrs, Volume= 0.051 af, Depth> 3.11"  
 Routed to Pond 148P : CB 43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,691     | 39 | >75% Grass cover, Good, HSG A |
| 2,319     | 98 | Unconnected roofs, HSG A      |
| 4,534     | 98 | Paved parking, HSG A          |
| 8,544     | 86 | Weighted Average              |
| 1,691     |    | 19.79% Pervious Area          |
| 6,853     |    | 80.21% Impervious Area        |
| 2,319     |    | 33.84% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 147S: P3QQ**

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Type III 24-hr 10-Year Rainfall=4.83"

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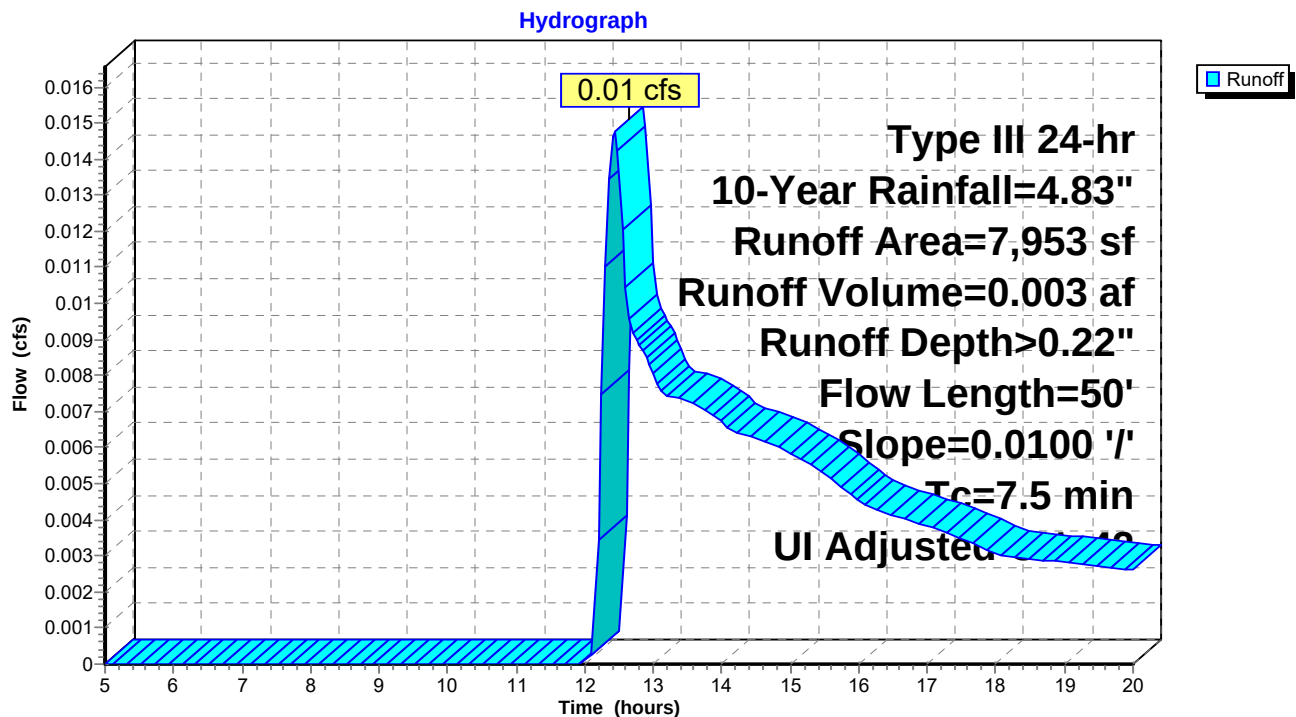
**Summary for Subcatchment 149S: P3RR**

Runoff = 0.01 cfs @ 12.43 hrs, Volume= 0.003 af, Depth> 0.22"  
Routed to Pond 146P : Inf. Basin 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 803       | 98 |     | Unconnected roofs, HSG A      |
| 7,150     | 39 |     | >75% Grass cover, Good, HSG A |
| 7,953     | 45 | 42  | Weighted Average, UI Adjusted |
| 7,150     |    |     | 89.90% Pervious Area          |
| 803       |    |     | 10.10% Impervious Area        |
| 803       |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                    |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------|
| 7.5      | 50            | 0.0100        | 0.11              |                | Sheet Flow,<br>Grass: Short n= 0.150 P2= 3.10" |

**Subcatchment 149S: P3RR**

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Type III 24-hr 10-Year Rainfall=4.83"

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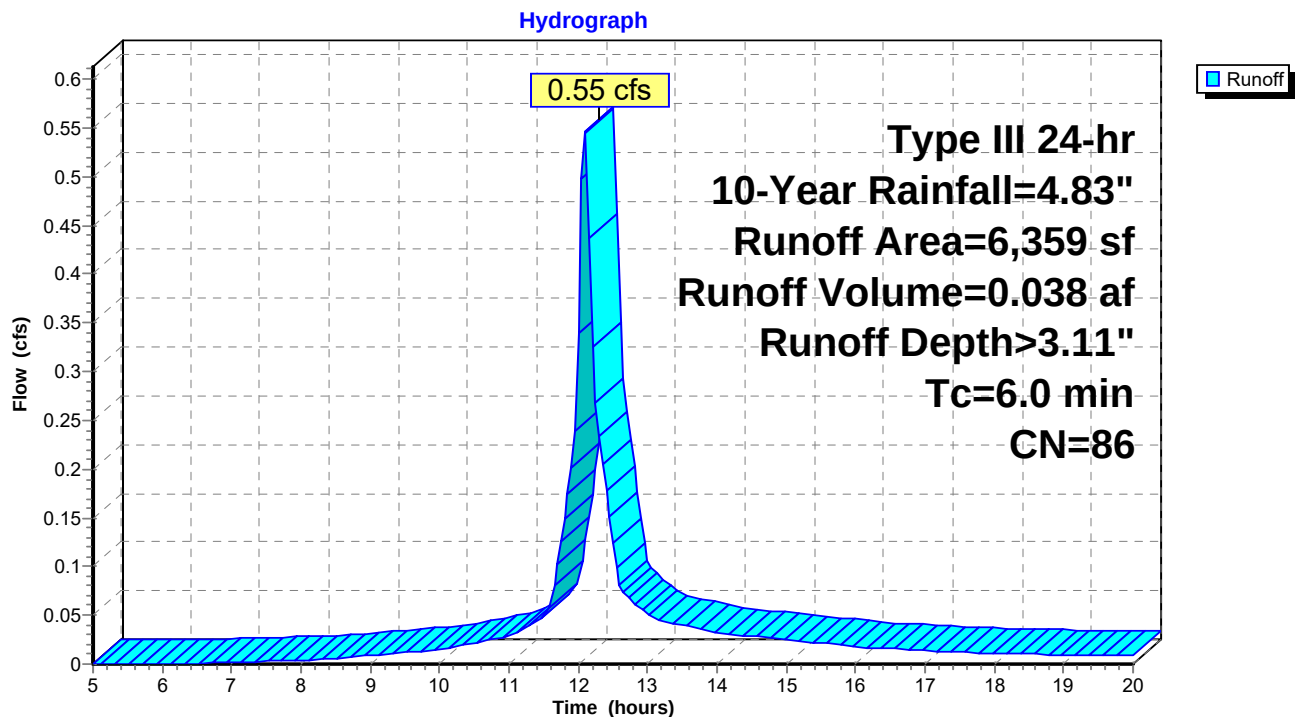
**Summary for Subcatchment 151S: P3ZZ**

Runoff = 0.55 cfs @ 12.09 hrs, Volume= 0.038 af, Depth> 3.11"  
Routed to Pond 159P : CB 25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,297     | 39 | >75% Grass cover, Good, HSG A |
| 5,062     | 98 | Paved parking, HSG A          |
| 6,359     | 86 | Weighted Average              |
| 1,297     |    | 20.40% Pervious Area          |
| 5,062     |    | 79.60% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 151S: P3ZZ**

### Summary for Subcatchment 152S: P3YY

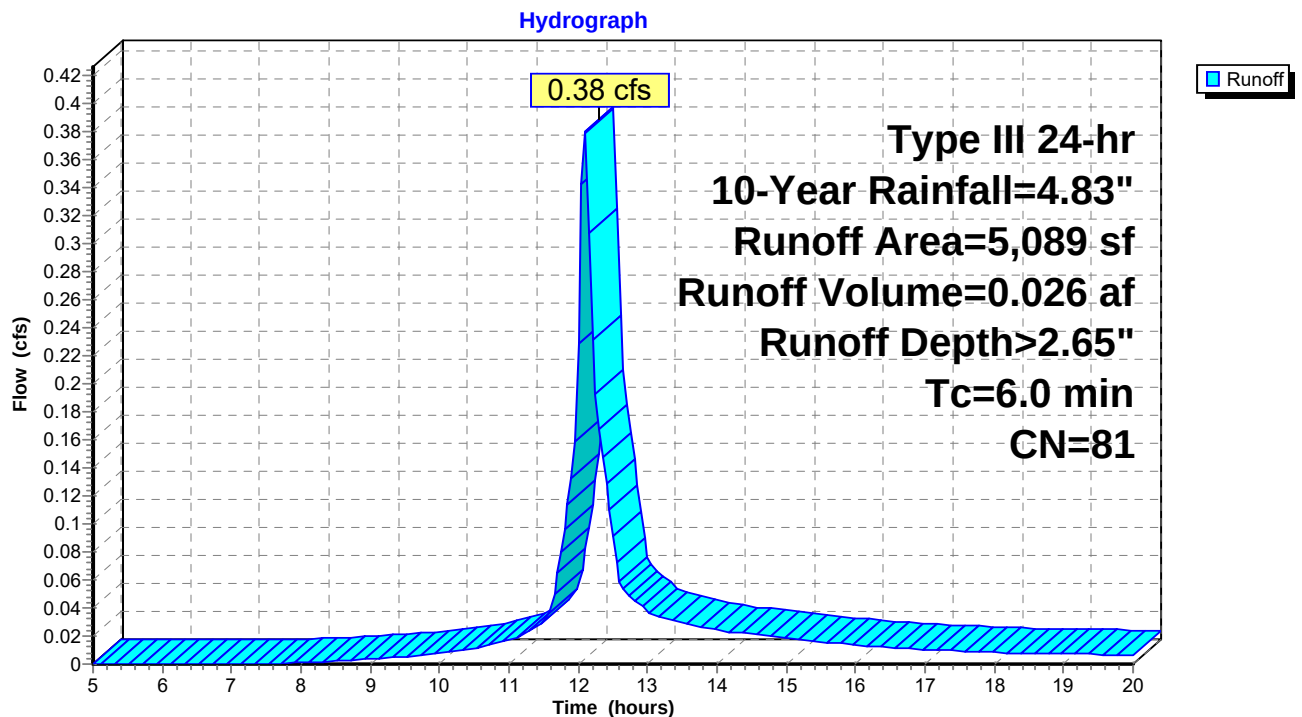
Runoff = 0.38 cfs @ 12.09 hrs, Volume= 0.026 af, Depth> 2.65"  
Routed to Pond 158P : CB 24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,505     | 39 | >75% Grass cover, Good, HSG A |
| 3,584     | 98 | Paved parking, HSG A          |
| 5,089     | 81 | Weighted Average              |
| 1,505     |    | 29.57% Pervious Area          |
| 3,584     |    | 70.43% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 152S: P3YY



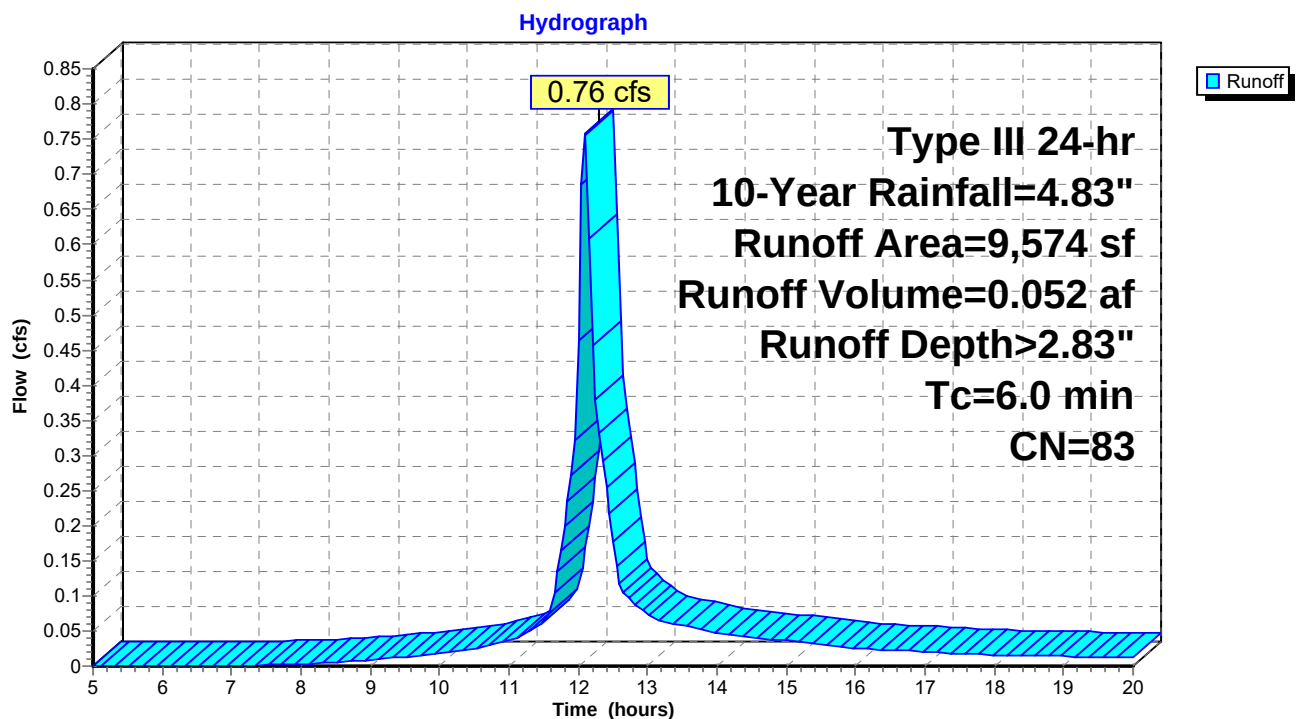
**Summary for Subcatchment 153S: P3WW**

Runoff = 0.76 cfs @ 12.09 hrs, Volume= 0.052 af, Depth> 2.83"  
 Routed to Pond 155P : CB 27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,428     | 39 | >75% Grass cover, Good, HSG A |
| 2,576     | 98 | Unconnected roofs, HSG A      |
| 4,570     | 98 | Paved parking, HSG A          |
| 9,574     | 83 | Weighted Average              |
| 2,428     |    | 25.36% Pervious Area          |
| 7,146     |    | 74.64% Impervious Area        |
| 2,576     |    | 36.05% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 153S: P3WW**

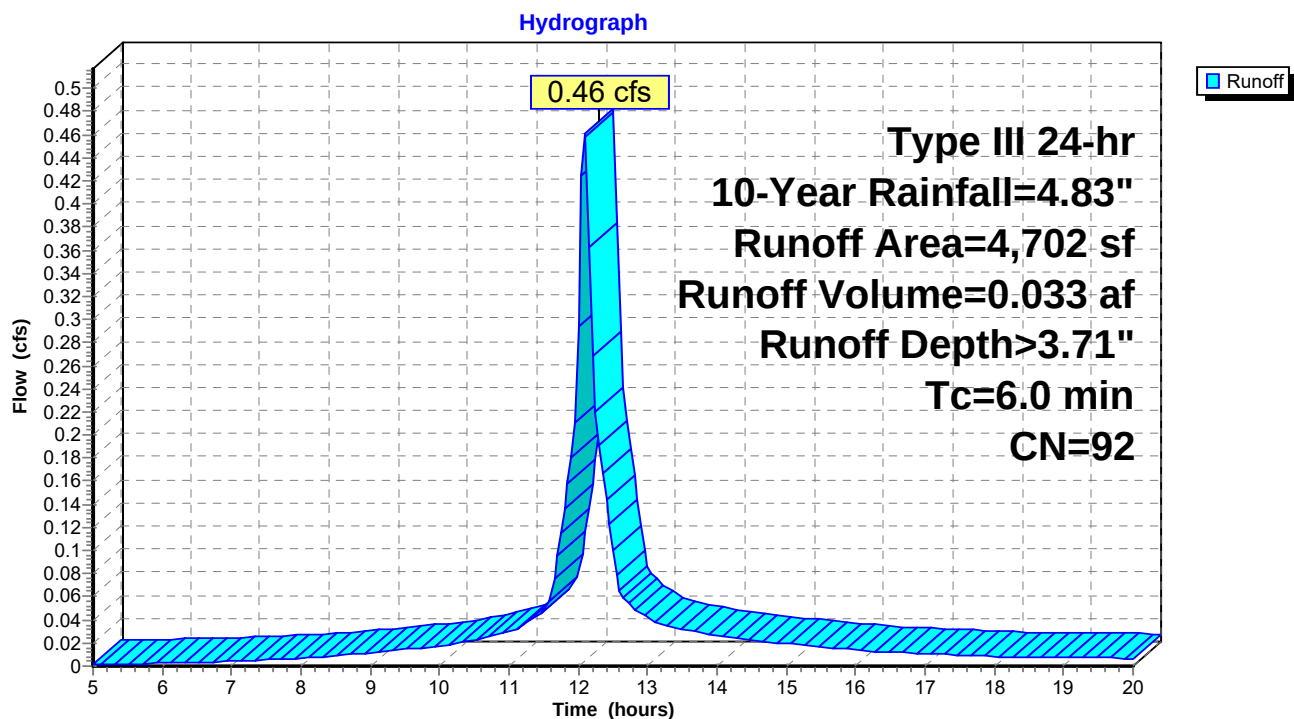
**Summary for Subcatchment 154S: P3XX**

Runoff = 0.46 cfs @ 12.09 hrs, Volume= 0.033 af, Depth> 3.71"  
 Routed to Pond 156P : CB 26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 467       | 39 | >75% Grass cover, Good, HSG A |
| 2,369     | 98 | Unconnected roofs, HSG A      |
| 1,866     | 98 | Paved parking, HSG A          |
| 4,702     | 92 | Weighted Average              |
| 467       |    | 9.93% Pervious Area           |
| 4,235     |    | 90.07% Impervious Area        |
| 2,369     |    | 55.94% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 154S: P3XX**

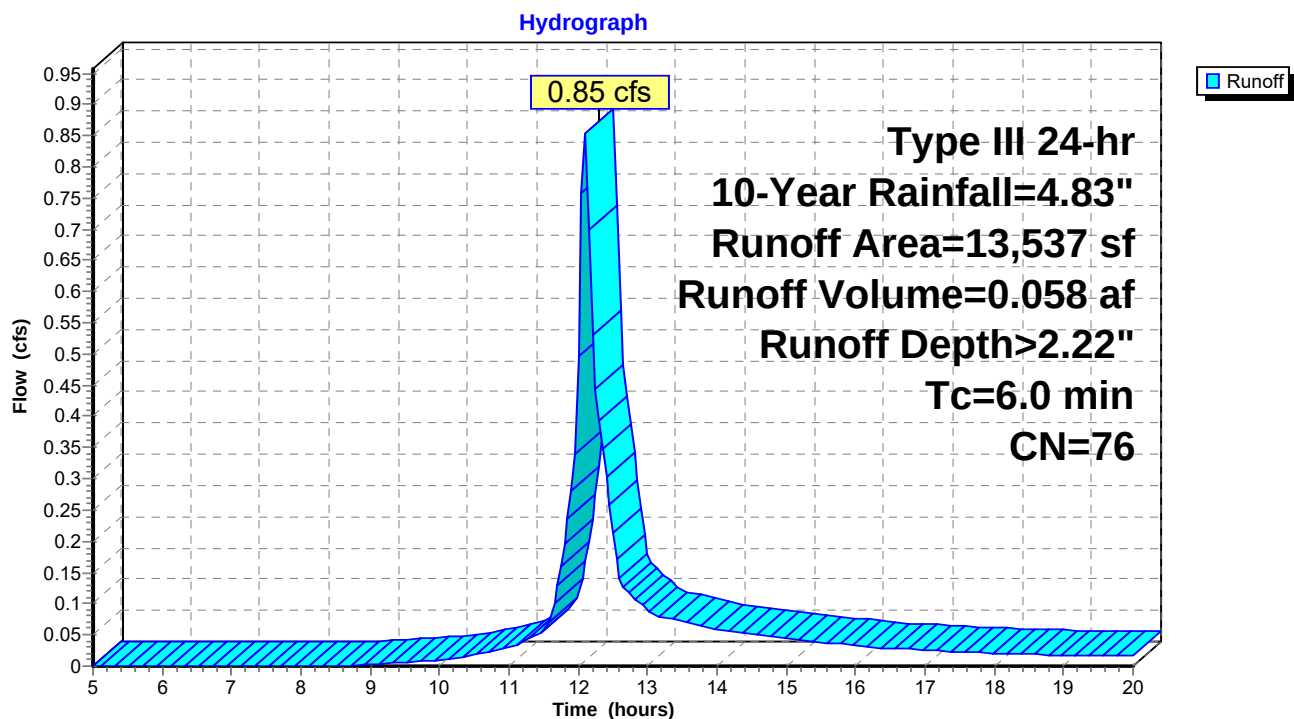
**Summary for Subcatchment 155S: P3CCC**

Runoff = 0.85 cfs @ 12.09 hrs, Volume= 0.058 af, Depth> 2.22"  
 Routed to Pond 163P : CB 14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,959     | 39 | >75% Grass cover, Good, HSG A |
| 1,047     | 98 | Unconnected roofs, HSG A      |
| 7,531     | 98 | Paved parking, HSG A          |
| 13,537    | 76 | Weighted Average              |
| 4,959     |    | 36.63% Pervious Area          |
| 8,578     |    | 63.37% Impervious Area        |
| 1,047     |    | 12.21% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 155S: P3CCC**



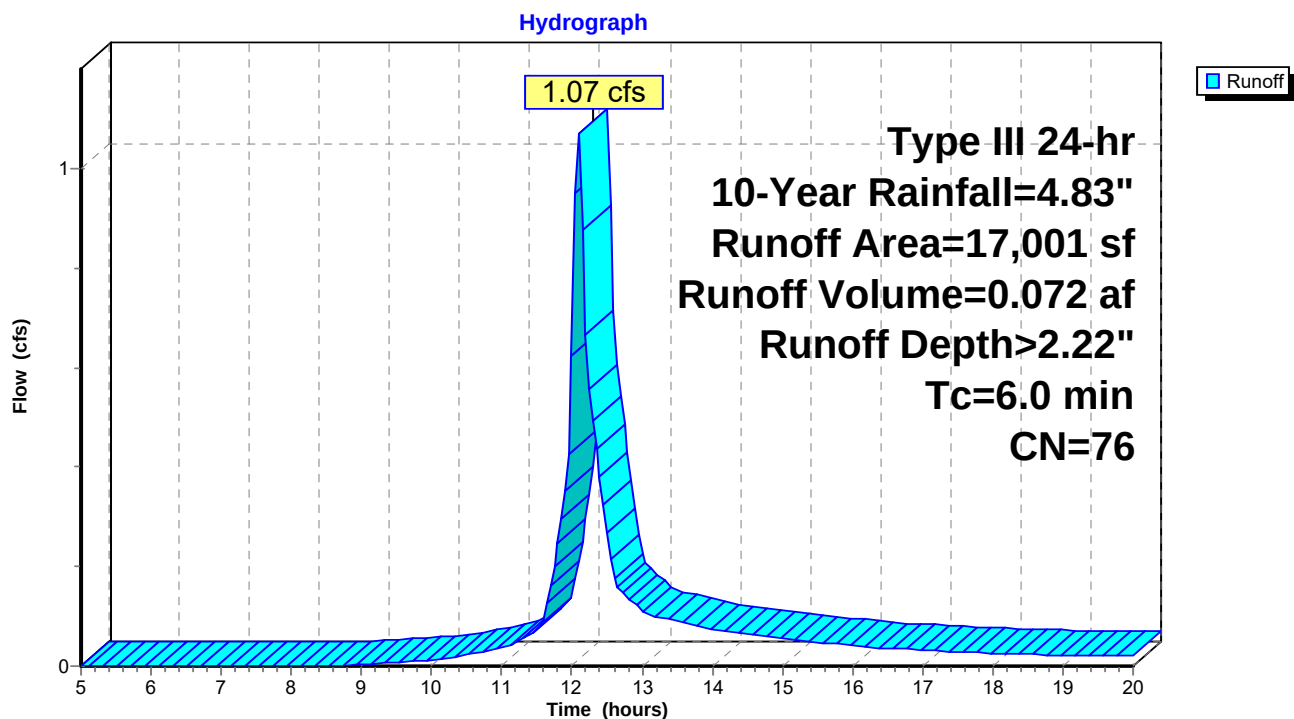
**Summary for Subcatchment 156S: P3DDD**

Runoff = 1.07 cfs @ 12.09 hrs, Volume= 0.072 af, Depth> 2.22"  
 Routed to Pond 162P : CB 15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 6,264     | 39 | >75% Grass cover, Good, HSG A |
| 3,815     | 98 | Unconnected roofs, HSG A      |
| 6,922     | 98 | Paved parking, HSG A          |
| 17,001    | 76 | Weighted Average              |
| 6,264     |    | 36.84% Pervious Area          |
| 10,737    |    | 63.16% Impervious Area        |
| 3,815     |    | 35.53% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 156S: P3DDD**

### Summary for Subcatchment 165S: P3FFF

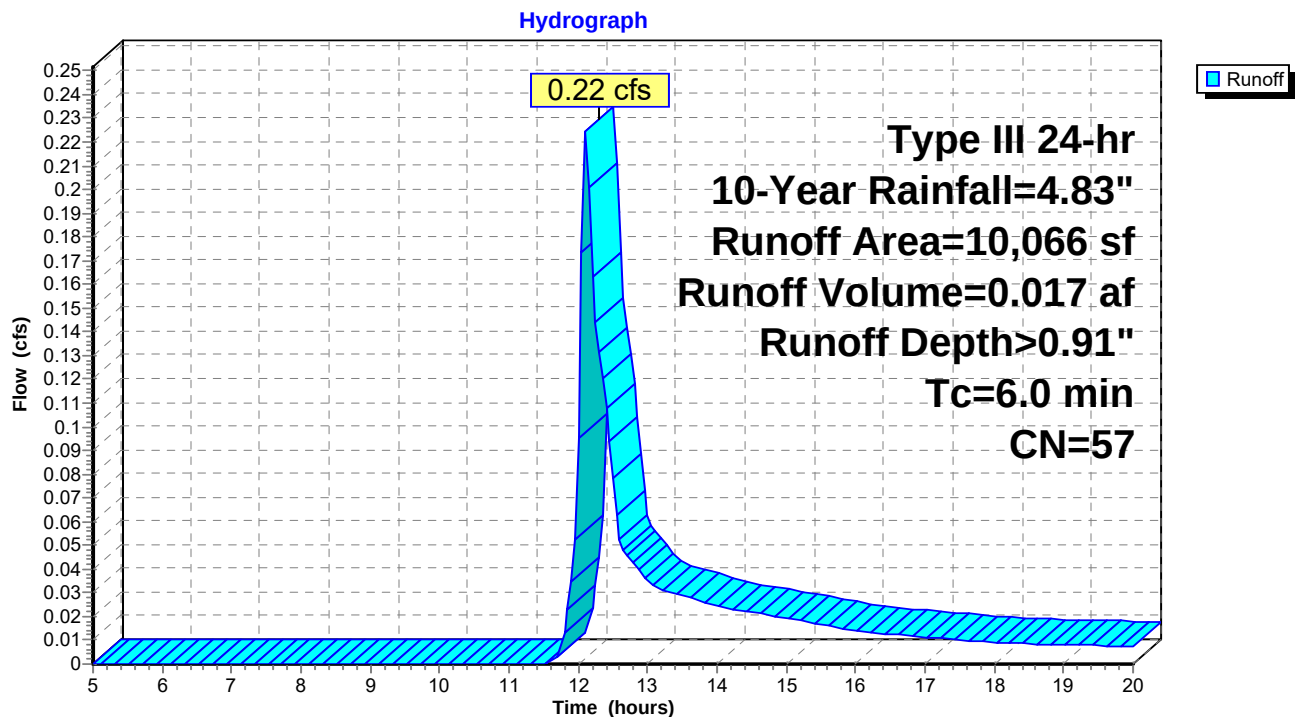
Runoff = 0.22 cfs @ 12.11 hrs, Volume= 0.017 af, Depth> 0.91"  
Routed to Pond 168P : CB 10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 7,041     | 39 | >75% Grass cover, Good, HSG A |
| 3,025     | 98 | Paved parking, HSG A          |
| 10,066    | 57 | Weighted Average              |
| 7,041     |    | 69.95% Pervious Area          |
| 3,025     |    | 30.05% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 165S: P3FFF



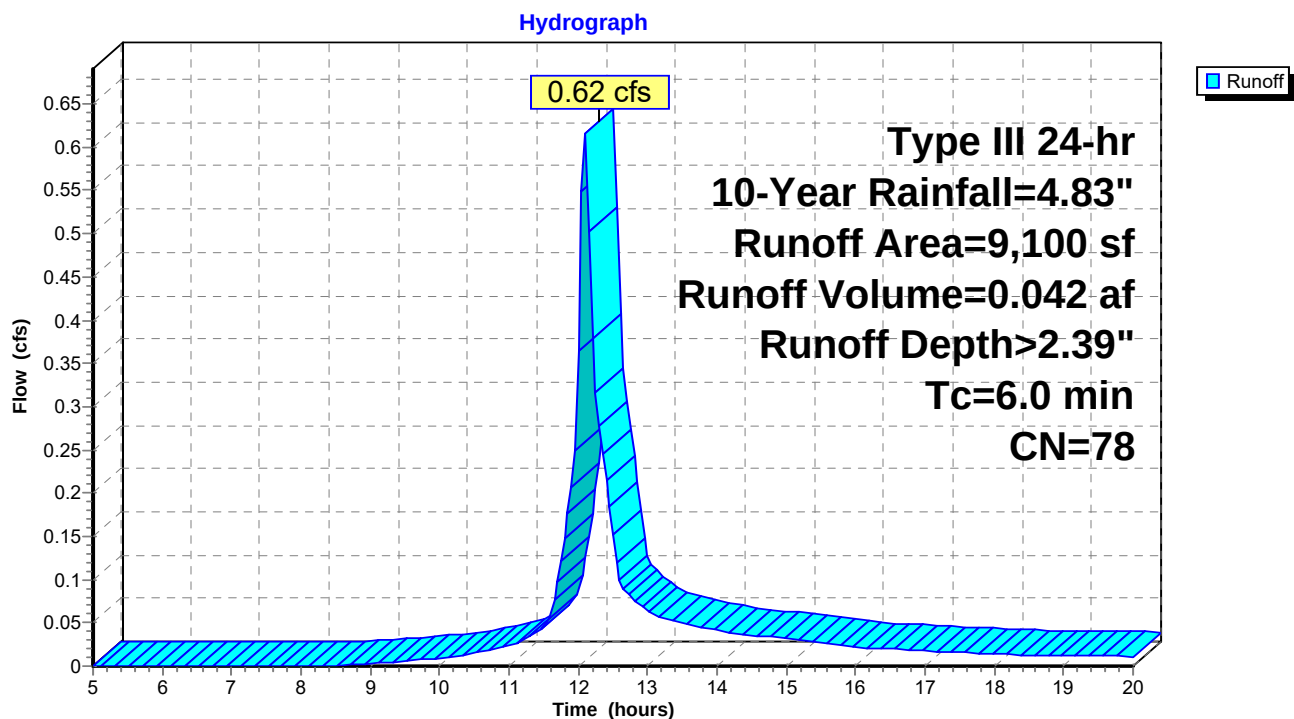
**Summary for Subcatchment 166S: P3EEE**

Runoff = 0.62 cfs @ 12.09 hrs, Volume= 0.042 af, Depth> 2.39"  
 Routed to Pond 167P : CB 11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,114     | 39 | >75% Grass cover, Good, HSG A |
| 3,120     | 98 | Paved parking, HSG A          |
| 2,866     | 98 | Unconnected roofs, HSG A      |
| 9,100     | 78 | Weighted Average              |
| 3,114     |    | 34.22% Pervious Area          |
| 5,986     |    | 65.78% Impervious Area        |
| 2,866     |    | 47.88% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 166S: P3EEE**

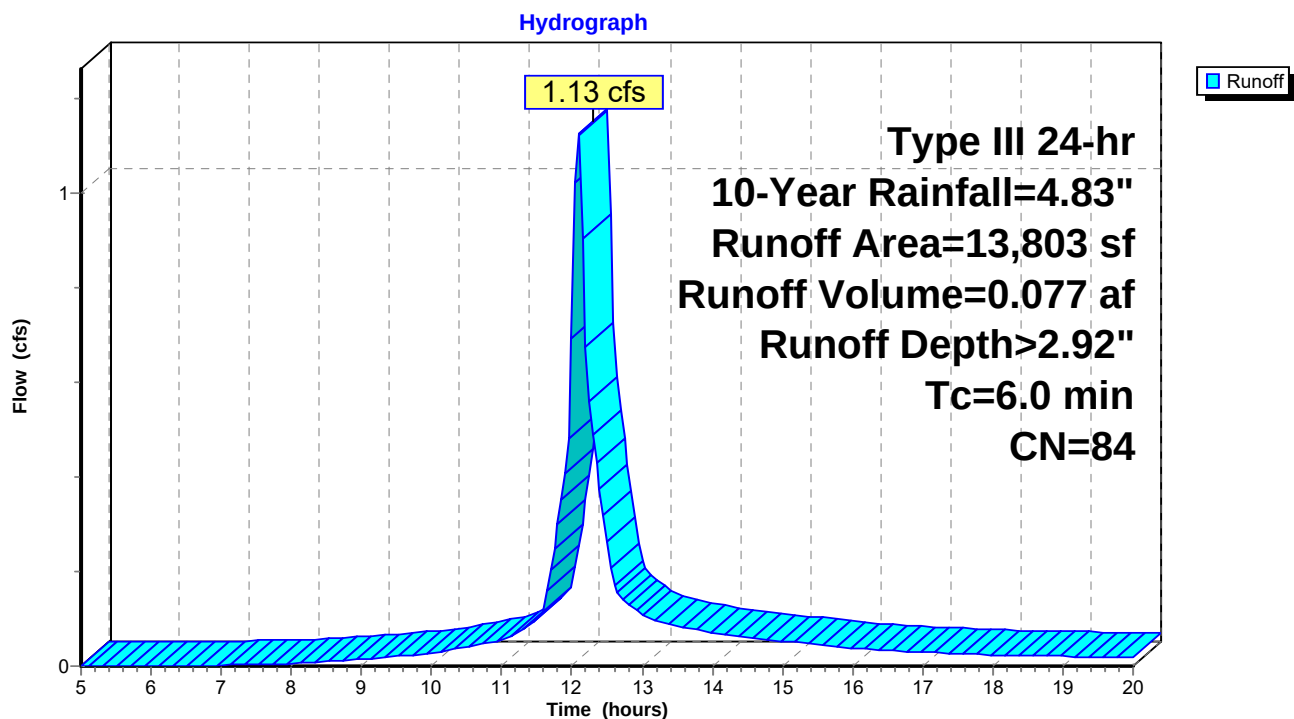
**Summary for Subcatchment 170S: P3JJJ**

Runoff = 1.13 cfs @ 12.09 hrs, Volume= 0.077 af, Depth> 2.92"  
 Routed to Pond 172P : CB 16

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,334     | 39 | >75% Grass cover, Good, HSG A |
| 6,476     | 98 | Unconnected roofs, HSG A      |
| 3,993     | 98 | Paved parking, HSG A          |
| 13,803    | 84 | Weighted Average              |
| 3,334     |    | 24.15% Pervious Area          |
| 10,469    |    | 75.85% Impervious Area        |
| 6,476     |    | 61.86% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 170S: P3JJJ**

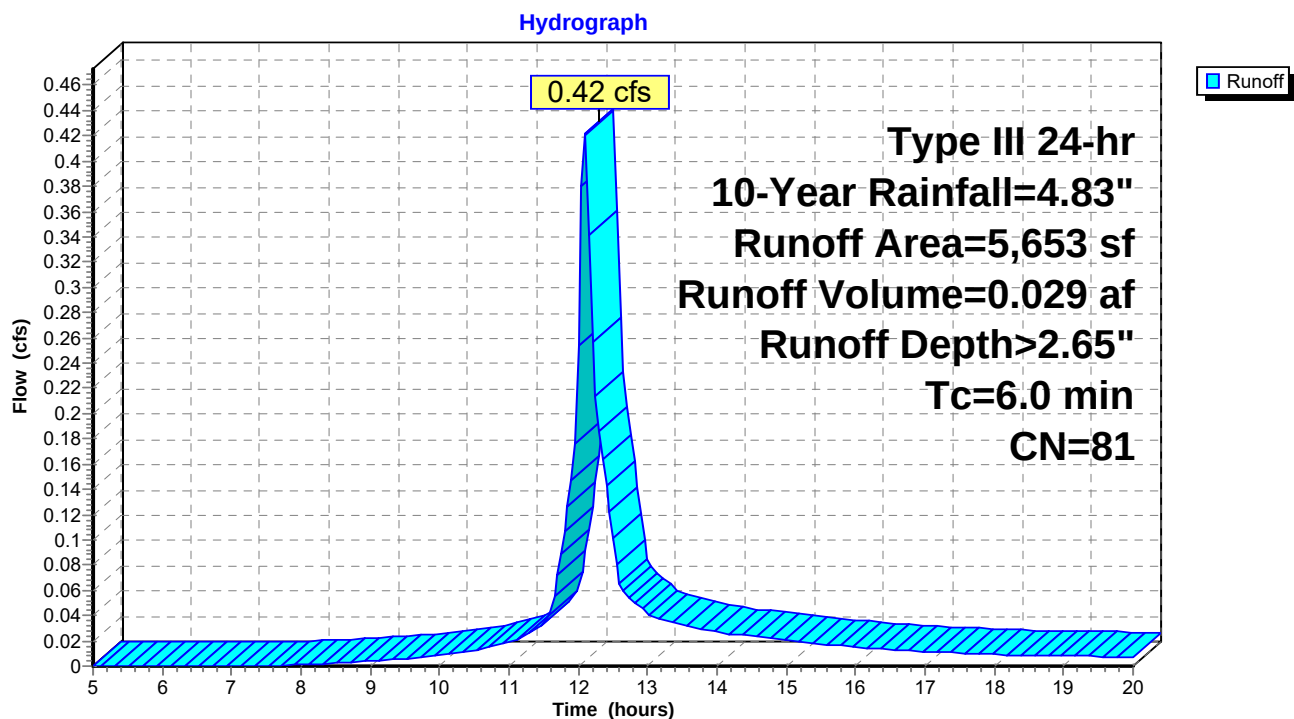
**Summary for Subcatchment 171S: P3III**

Runoff = 0.42 cfs @ 12.09 hrs, Volume= 0.029 af, Depth> 2.65"  
 Routed to Pond 173P : CB 17

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,629     | 39 | >75% Grass cover, Good, HSG A |
| 1,823     | 98 | Unconnected roofs, HSG A      |
| 2,201     | 98 | Paved parking, HSG A          |
| 5,653     | 81 | Weighted Average              |
| 1,629     |    | 28.82% Pervious Area          |
| 4,024     |    | 71.18% Impervious Area        |
| 1,823     |    | 45.30% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 171S: P3III**

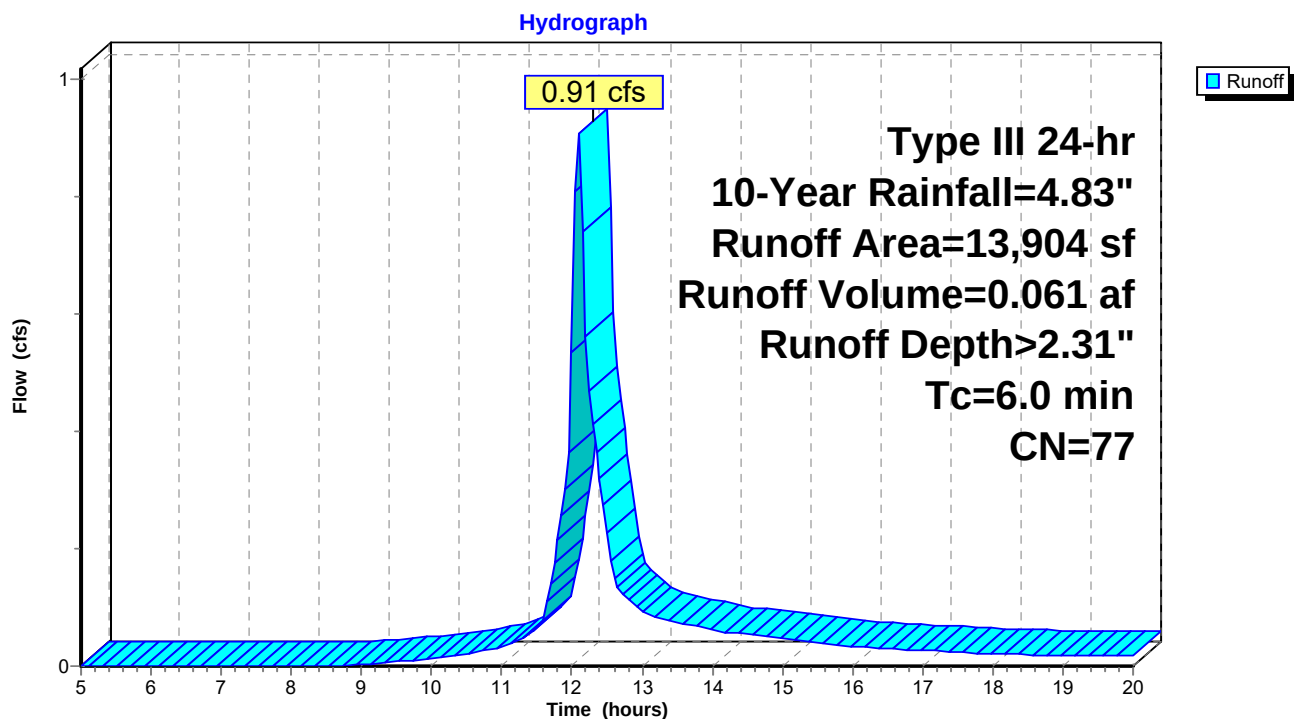
**Summary for Subcatchment 175S: P3KKK**

Runoff = 0.91 cfs @ 12.09 hrs, Volume= 0.061 af, Depth> 2.31"  
 Routed to Pond 177P : CB 13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,945     | 39 | >75% Grass cover, Good, HSG A |
| 3,545     | 98 | Unconnected roofs, HSG A      |
| 5,414     | 98 | Paved parking, HSG A          |
| 13,904    | 77 | Weighted Average              |
| 4,945     |    | 35.57% Pervious Area          |
| 8,959     |    | 64.43% Impervious Area        |
| 3,545     |    | 39.57% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 175S: P3KKK**

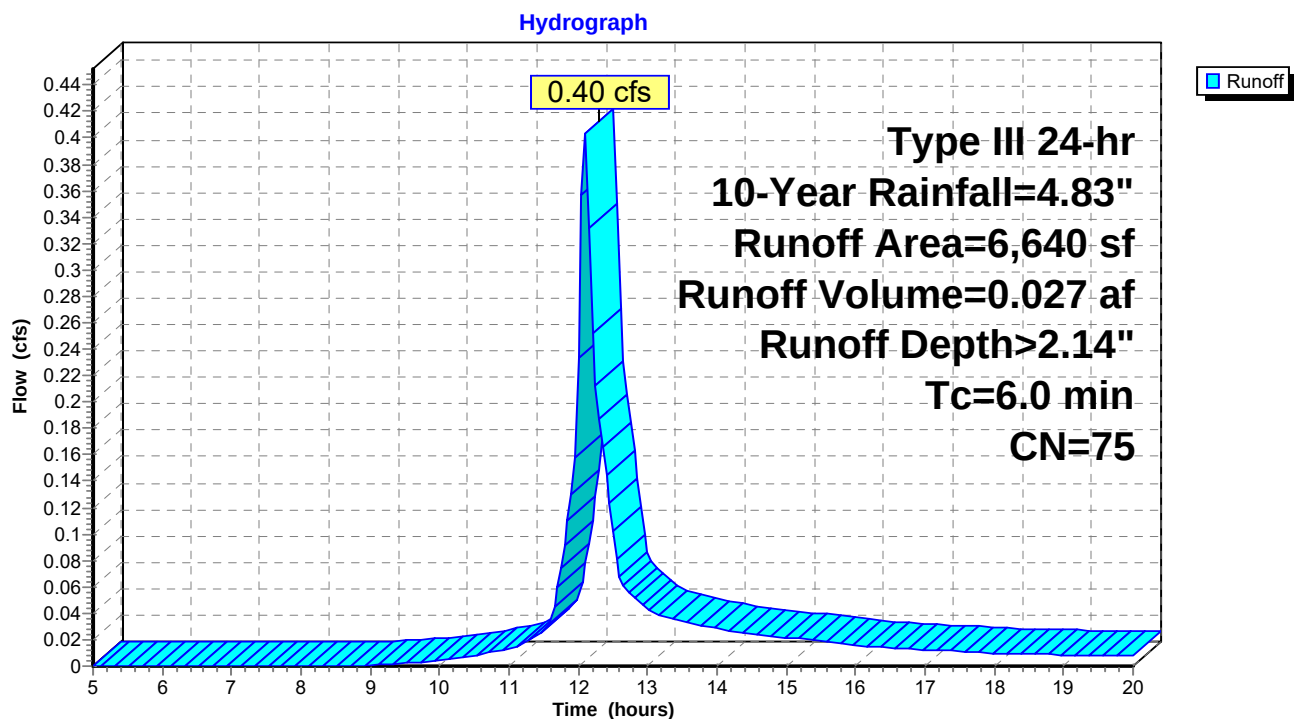
**Summary for Subcatchment 176S: P3LLL**

Runoff = 0.40 cfs @ 12.09 hrs, Volume= 0.027 af, Depth> 2.14"  
 Routed to Pond 178P : CB 12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,605     | 39 | >75% Grass cover, Good, HSG A |
| 958       | 98 | Unconnected roofs, HSG A      |
| 3,077     | 98 | Paved parking, HSG A          |
| 6,640     | 75 | Weighted Average              |
| 2,605     |    | 39.23% Pervious Area          |
| 4,035     |    | 60.77% Impervious Area        |
| 958       |    | 23.74% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 176S: P3LLL**

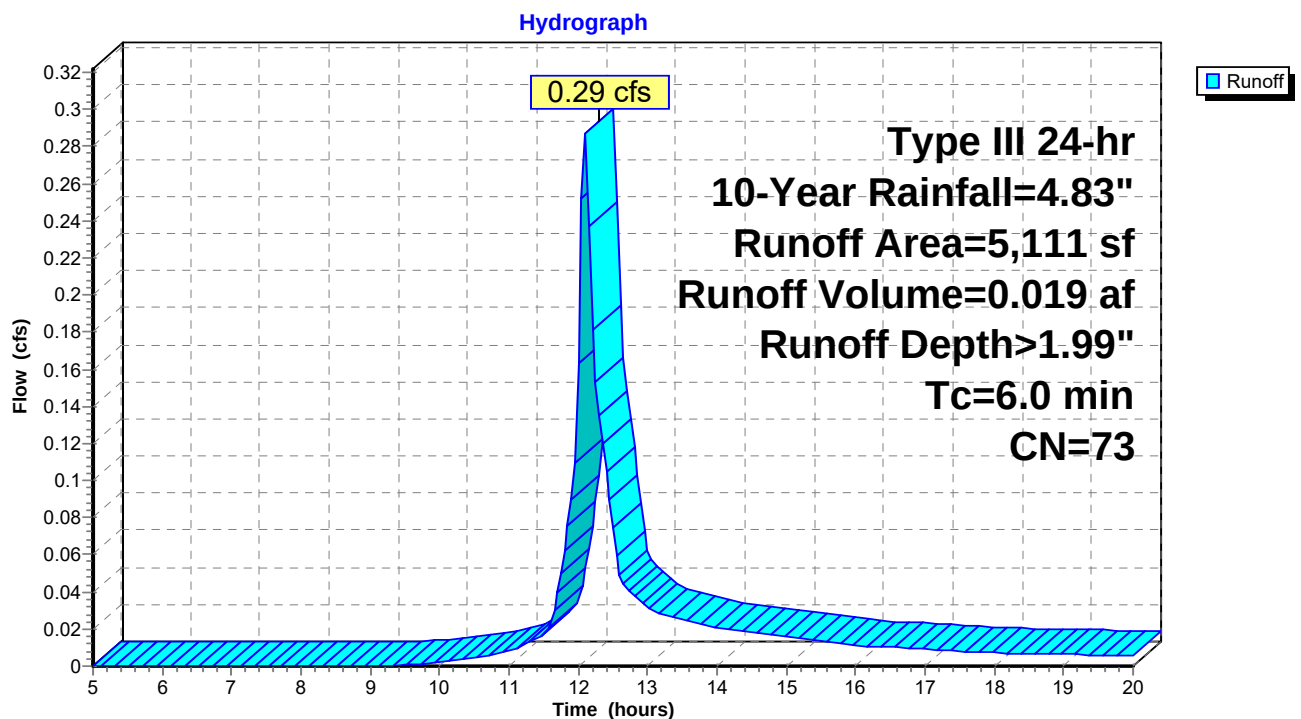
**Summary for Subcatchment 182S: P3MMM**

Runoff = 0.29 cfs @ 12.10 hrs, Volume= 0.019 af, Depth> 1.99"  
 Routed to Pond 61P : CB 8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,196     | 39 | >75% Grass cover, Good, HSG A |
| 413       | 98 | Unconnected roofs, HSG A      |
| 2,502     | 98 | Paved parking, HSG A          |
| 5,111     | 73 | Weighted Average              |
| 2,196     |    | 42.97% Pervious Area          |
| 2,915     |    | 57.03% Impervious Area        |
| 413       |    | 14.17% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 182S: P3MMM**



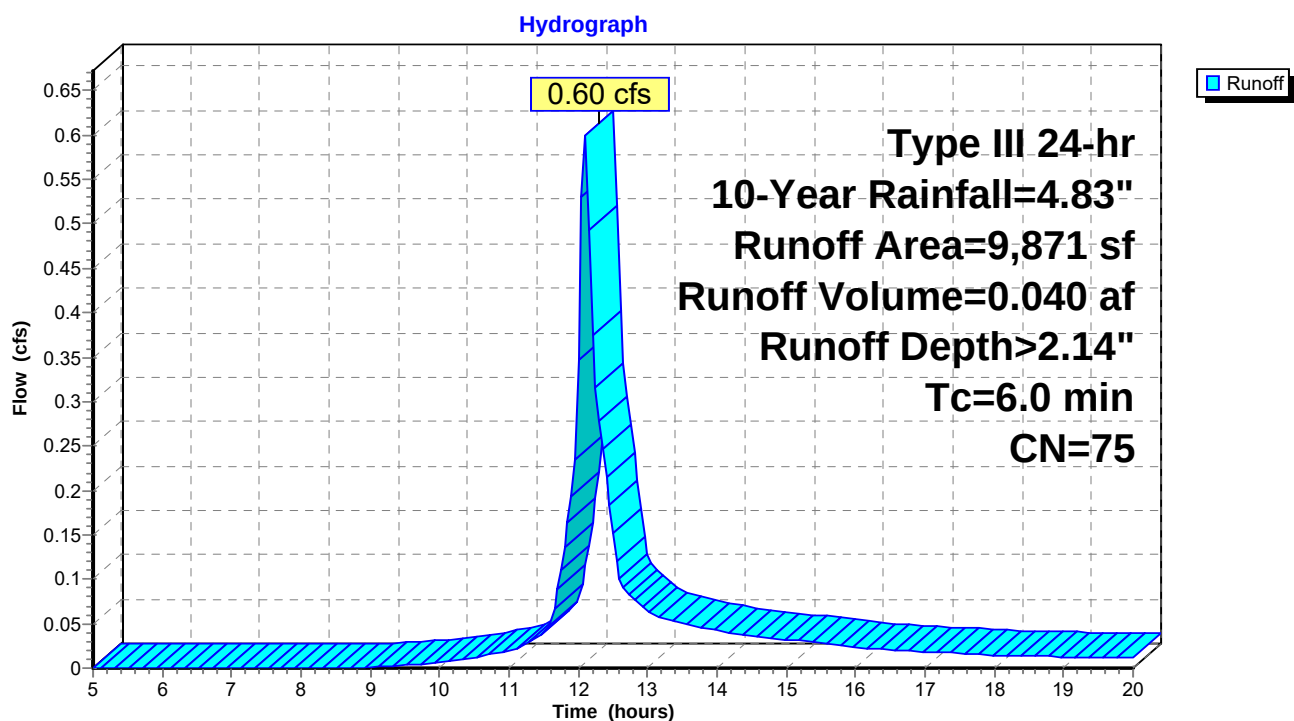
**Summary for Subcatchment 183S: P3NNN**

Runoff = 0.60 cfs @ 12.09 hrs, Volume= 0.040 af, Depth> 2.14"  
 Routed to Pond 170P : CB 9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,796     | 39 | >75% Grass cover, Good, HSG A |
| 2,443     | 98 | Unconnected roofs, HSG A      |
| 3,632     | 98 | Paved parking, HSG A          |
| 9,871     | 75 | Weighted Average              |
| 3,796     |    | 38.46% Pervious Area          |
| 6,075     |    | 61.54% Impervious Area        |
| 2,443     |    | 40.21% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 183S: P3NNN**

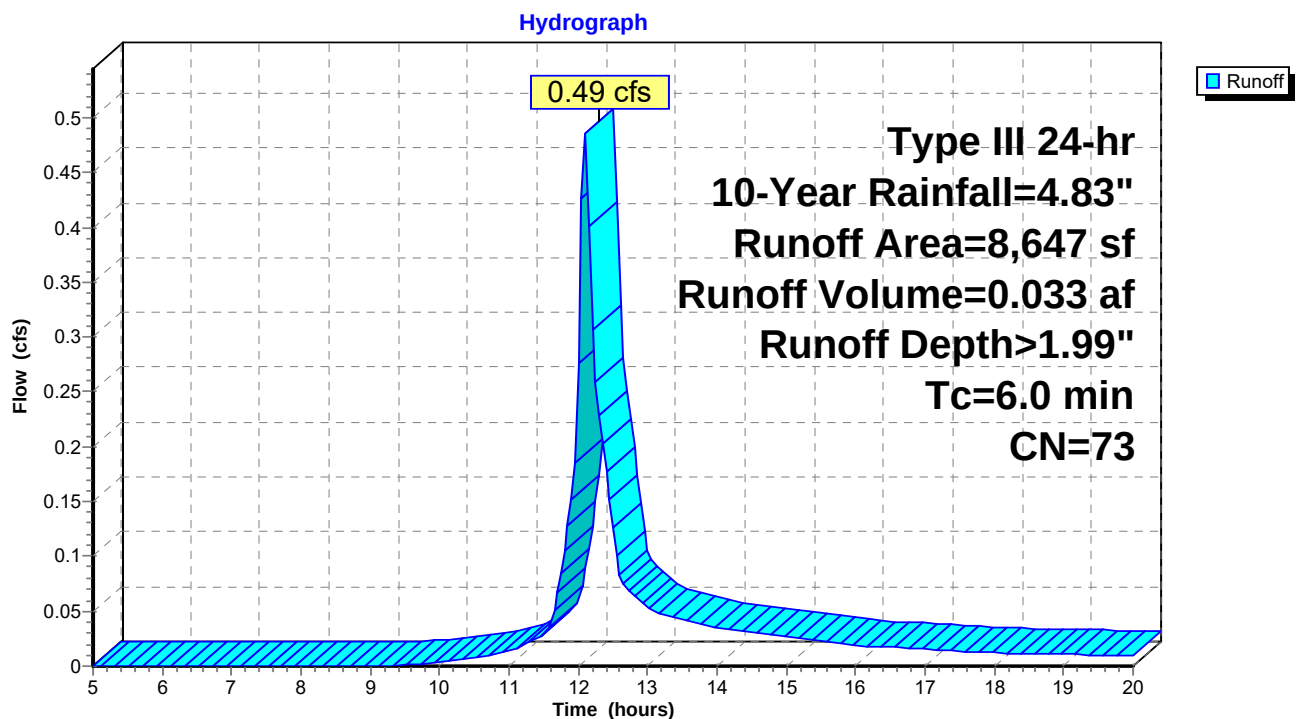
**Summary for Subcatchment 184S: P3000**

Runoff = 0.49 cfs @ 12.10 hrs, Volume= 0.033 af, Depth> 1.99"  
 Routed to Pond 176P : CB 6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,656     | 39 | >75% Grass cover, Good, HSG A |
| 1,177     | 98 | Unconnected roofs, HSG A      |
| 3,814     | 98 | Paved parking, HSG A          |
| 8,647     | 73 | Weighted Average              |
| 3,656     |    | 42.28% Pervious Area          |
| 4,991     |    | 57.72% Impervious Area        |
| 1,177     |    | 23.58% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 184S: P3000**

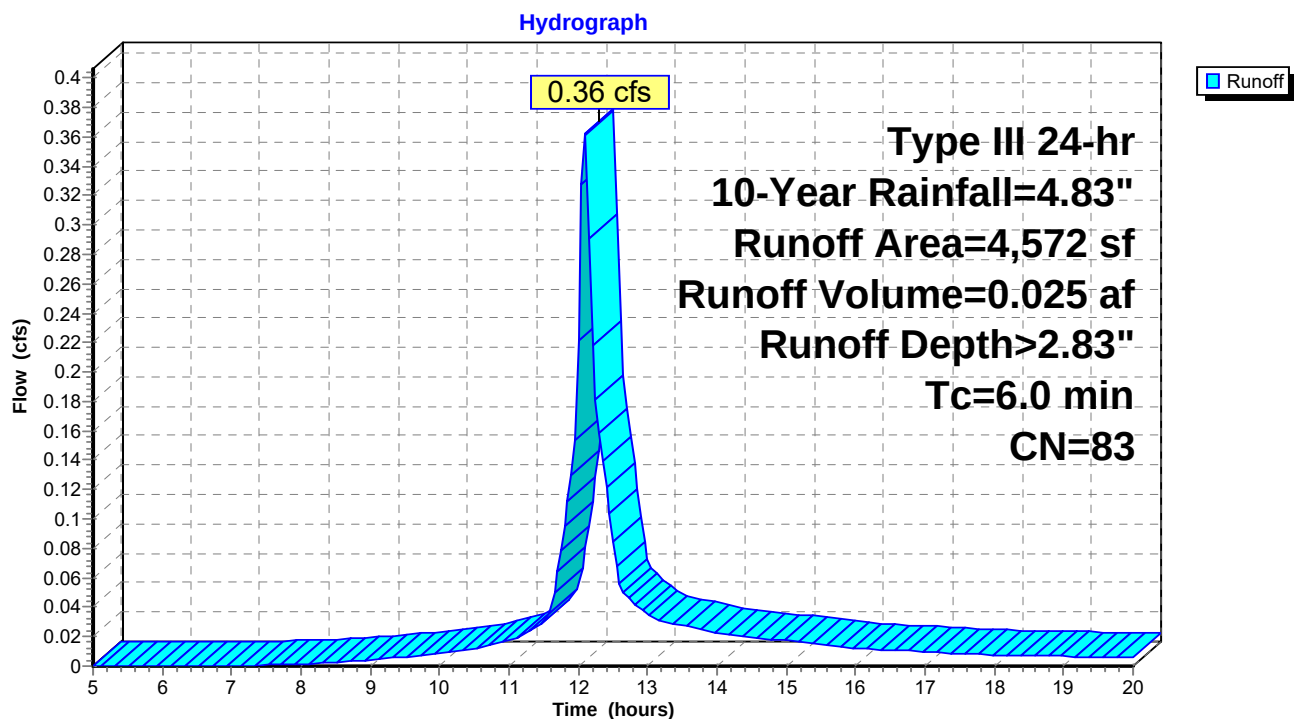
**Summary for Subcatchment 185S: P3PPP**

Runoff = 0.36 cfs @ 12.09 hrs, Volume= 0.025 af, Depth> 2.83"  
 Routed to Pond 182P : CB 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,135     | 39 | >75% Grass cover, Good, HSG A |
| 1,267     | 98 | Unconnected roofs, HSG A      |
| 2,170     | 98 | Paved parking, HSG A          |
| 4,572     | 83 | Weighted Average              |
| 1,135     |    | 24.83% Pervious Area          |
| 3,437     |    | 75.17% Impervious Area        |
| 1,267     |    | 36.86% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 185S: P3PPP**

### Summary for Subcatchment 186S: P3QQQ

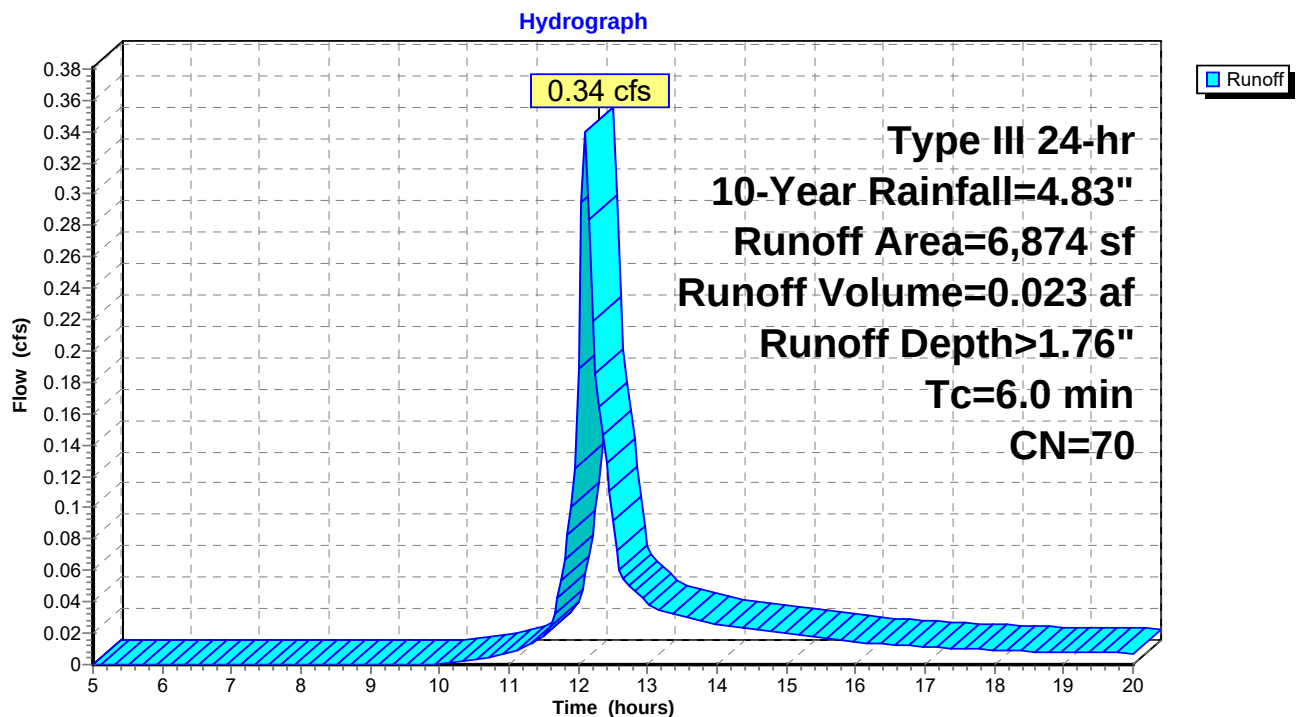
Runoff = 0.34 cfs @ 12.10 hrs, Volume= 0.023 af, Depth> 1.76"  
Routed to Pond 188P : CB 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,125     | 39 | >75% Grass cover, Good, HSG A |
| 992       | 30 | Woods, Good, HSG A            |
| 3,757     | 98 | Paved parking, HSG A          |
| 6,874     | 70 | Weighted Average              |
| 3,117     |    | 45.34% Pervious Area          |
| 3,757     |    | 54.66% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 186S: P3QQQ



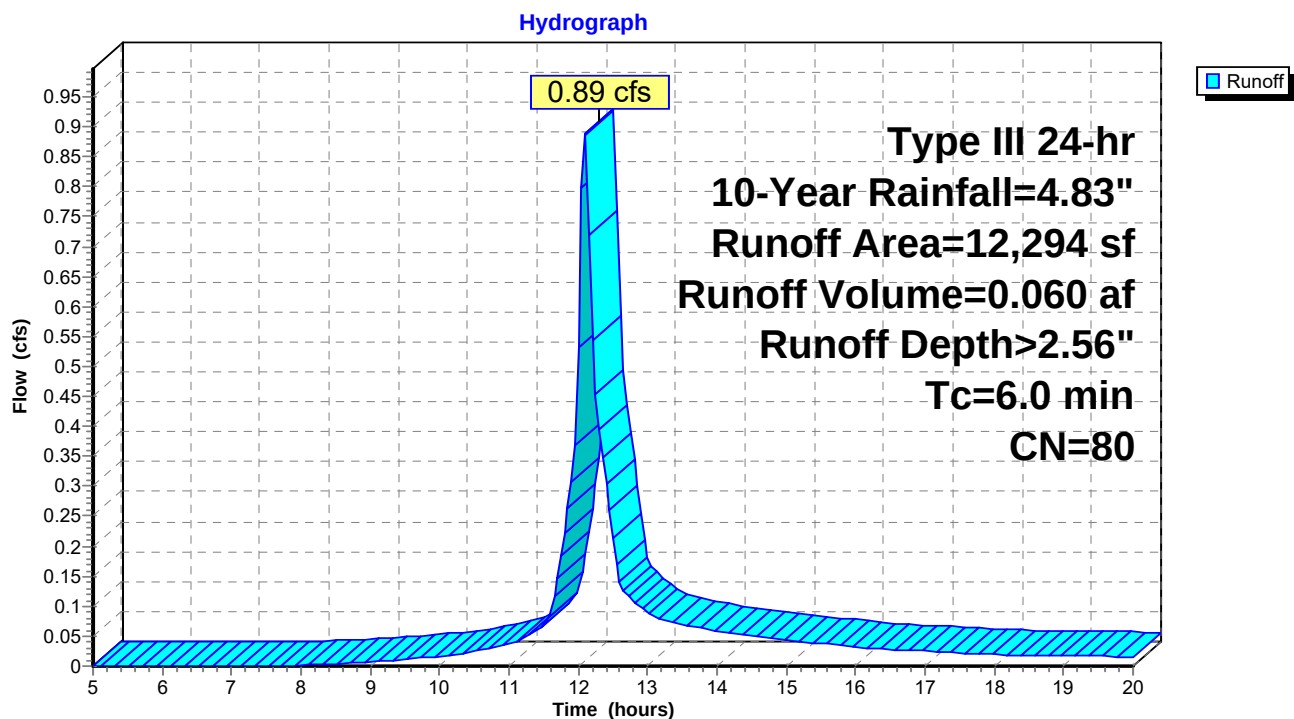
**Summary for Subcatchment 187S: P3RRR**

Runoff = 0.89 cfs @ 12.09 hrs, Volume= 0.060 af, Depth> 2.56"  
 Routed to Pond 189P : CB 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,803     | 39 | >75% Grass cover, Good, HSG A |
| 2,556     | 98 | Unconnected roofs, HSG A      |
| 5,935     | 98 | Paved parking, HSG A          |
| 12,294    | 80 | Weighted Average              |
| 3,803     |    | 30.93% Pervious Area          |
| 8,491     |    | 69.07% Impervious Area        |
| 2,556     |    | 30.10% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 187S: P3RRR**

**Summary for Subcatchment 189S: (new Subcat)**

Runoff = 1.82 cfs @ 12.38 hrs, Volume= 0.236 af, Depth> 0.68"  
 Routed to Link 188L : DP 3

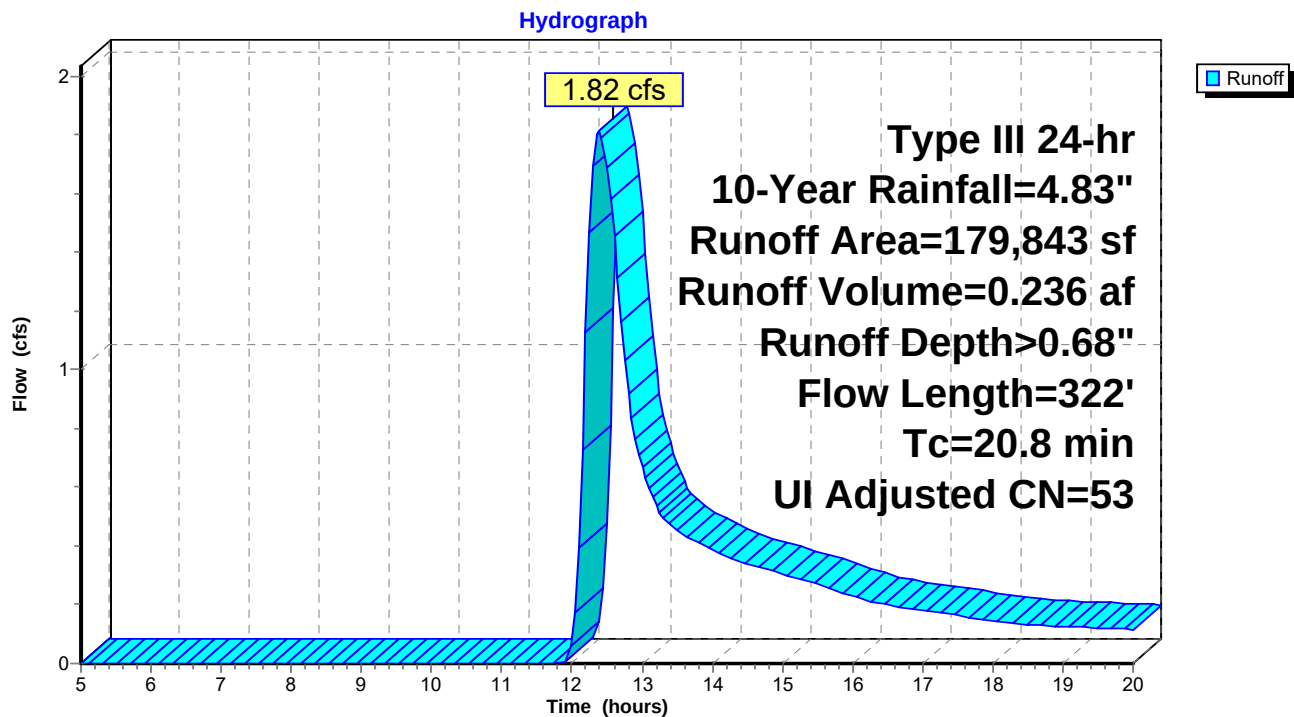
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 39,228    | 30 |     | Woods, Good, HSG A            |
| 27,809    | 70 |     | Woods, Good, HSG C            |
| 2,509     | 98 |     | Unconnected roofs, HSG C      |
| 1,351     | 98 |     | Unconnected pavement, HSG C   |
| 3,066     | 98 |     | Unconnected roofs, HSG A      |
| 1,335     | 98 |     | Unconnected pavement, HSG A   |
| 49,779    | 74 |     | >75% Grass cover, Good, HSG C |
| 54,766    | 39 |     | >75% Grass cover, Good, HSG A |
| 179,843   | 54 | 53  | Weighted Average, UI Adjusted |
| 171,582   |    |     | 95.41% Pervious Area          |
| 8,261     |    |     | 4.59% Impervious Area         |
| 8,261     |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                      |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------|
| 16.5     | 50            | 0.0100        | 0.05              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10" |
| 4.3      | 272           | 0.0450        | 1.06              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps        |
| 20.8     | 322           | Total         |                   |                |                                                                  |

**Subcatchment 189S: (new Subcat)**



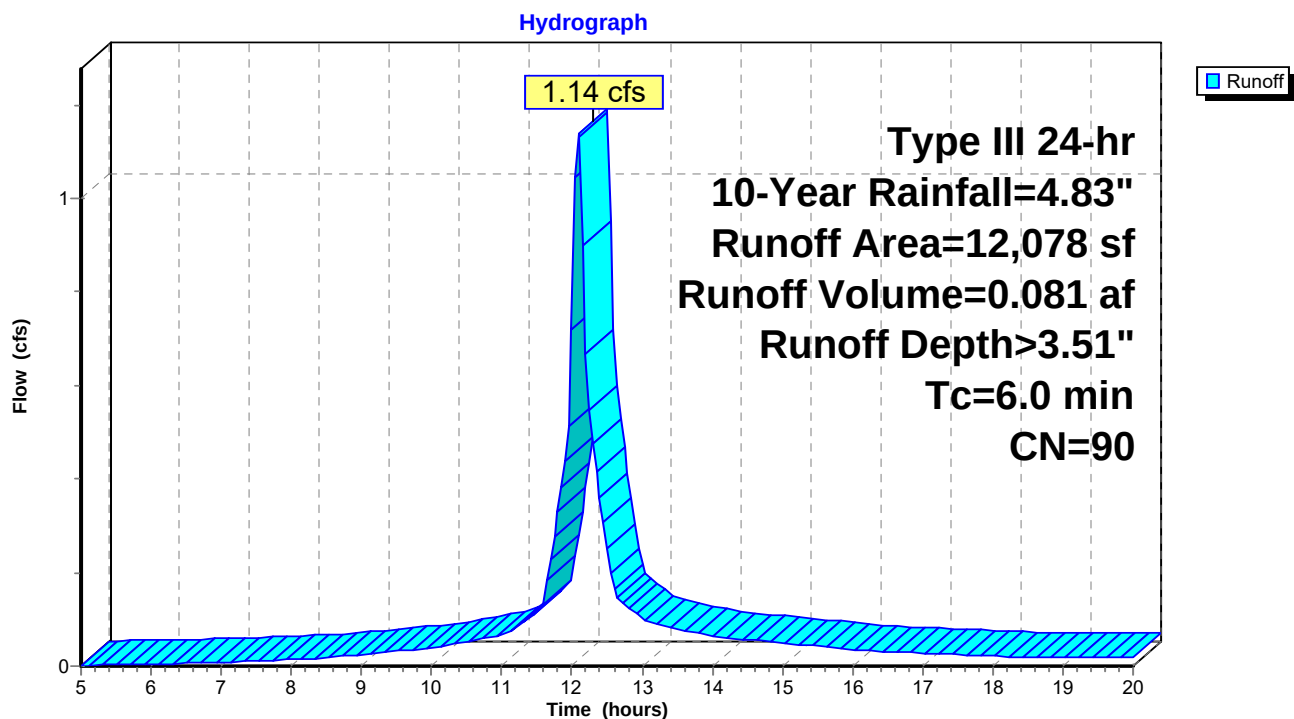
**Summary for Subcatchment 190S: (new Subcat)**

Runoff = 1.14 cfs @ 12.09 hrs, Volume= 0.081 af, Depth> 3.51"  
 Routed to Pond 191P : CB 42

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,763     | 98 | Unconnected roofs, HSG A      |
| 1,707     | 39 | >75% Grass cover, Good, HSG A |
| 6,608     | 98 | Paved parking, HSG A          |
| 12,078    | 90 | Weighted Average              |
| 1,707     |    | 14.13% Pervious Area          |
| 10,371    |    | 85.87% Impervious Area        |
| 3,763     |    | 36.28% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 190S: (new Subcat)**



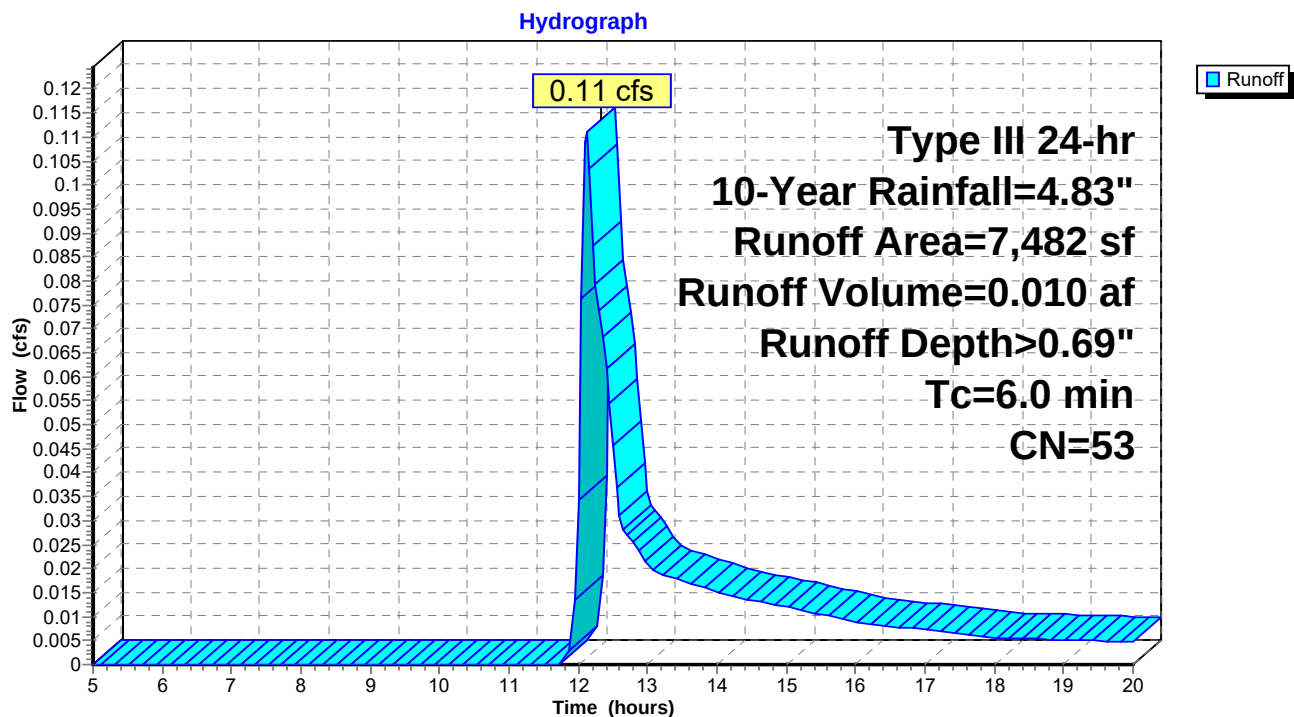
**Summary for Subcatchment 191S: P3SSS**

Runoff = 0.11 cfs @ 12.12 hrs, Volume= 0.010 af, Depth> 0.69"  
 Routed to Pond 193P : CB 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,068     | 39 | >75% Grass cover, Good, HSG A |
| 4,042     | 30 | Woods, Good, HSG A            |
| 2,372     | 98 | Paved parking, HSG A          |
| 7,482     | 53 | Weighted Average              |
| 5,110     |    | 68.30% Pervious Area          |
| 2,372     |    | 31.70% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 191S: P3SSS**

**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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Type III 24-hr 10-Year Rainfall=4.83"

Printed 1/7/2026

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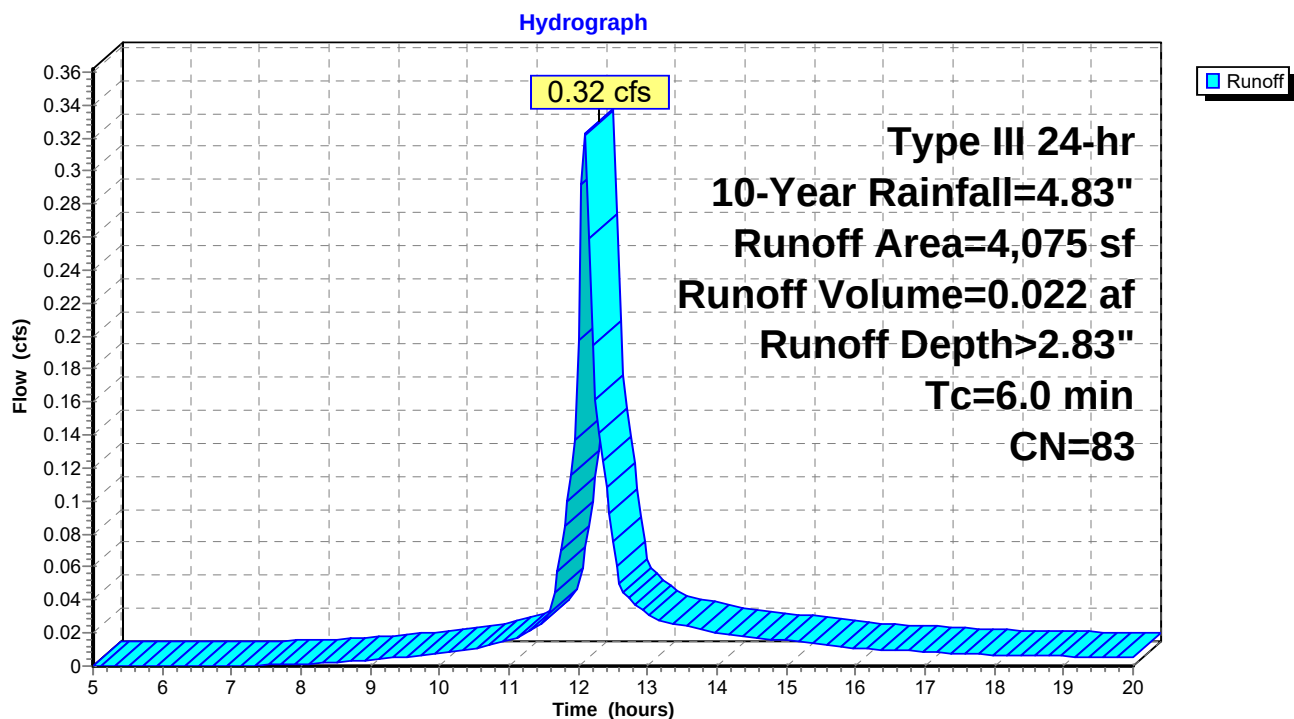
**Summary for Subcatchment 192S: P3TTT**

Runoff = 0.32 cfs @ 12.09 hrs, Volume= 0.022 af, Depth> 2.83"  
Routed to Pond 194P : CB 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,044     | 39 | >75% Grass cover, Good, HSG A |
| 3,031     | 98 | Paved parking, HSG A          |
| 4,075     | 83 | Weighted Average              |
| 1,044     |    | 25.62% Pervious Area          |
| 3,031     |    | 74.38% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 192S: P3TTT**

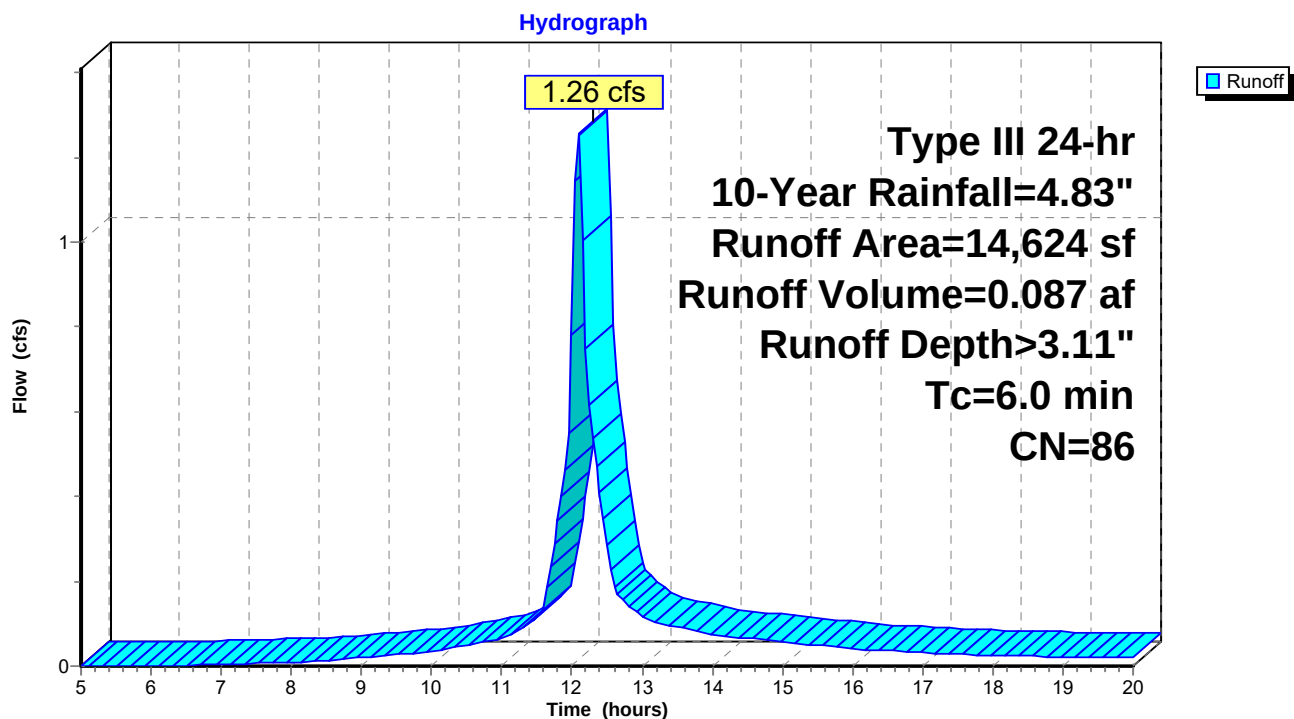
**Summary for Subcatchment 195S: P3UUU**

Runoff = 1.26 cfs @ 12.09 hrs, Volume= 0.087 af, Depth> 3.11"  
 Routed to Pond 196P : CB 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,892     | 39 | >75% Grass cover, Good, HSG A |
| 4,558     | 98 | Unconnected roofs, HSG A      |
| 7,174     | 98 | Paved parking, HSG A          |
| 14,624    | 86 | Weighted Average              |
| 2,892     |    | 19.78% Pervious Area          |
| 11,732    |    | 80.22% Impervious Area        |
| 4,558     |    | 38.85% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 195S: P3UUU**

Summary for Subcatchment 198S: P3VVV

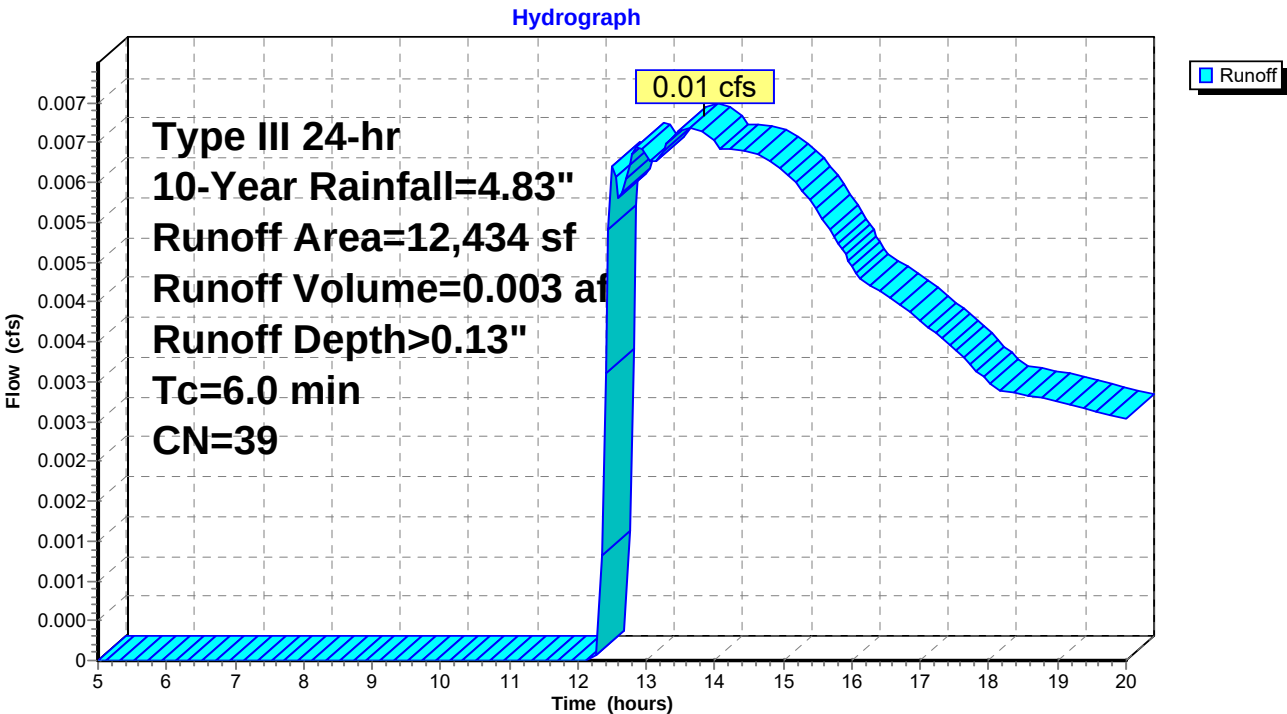
Runoff = 0.01 cfs @ 13.65 hrs, Volume= 0.003 af, Depth> 0.13"  
Routed to Pond 197P : Inf. Basin 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 12,434    | 39 | >75% Grass cover, Good, HSG A |
| 12,434    |    | 100.00% Pervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

Subcatchment 198S: P3VVV



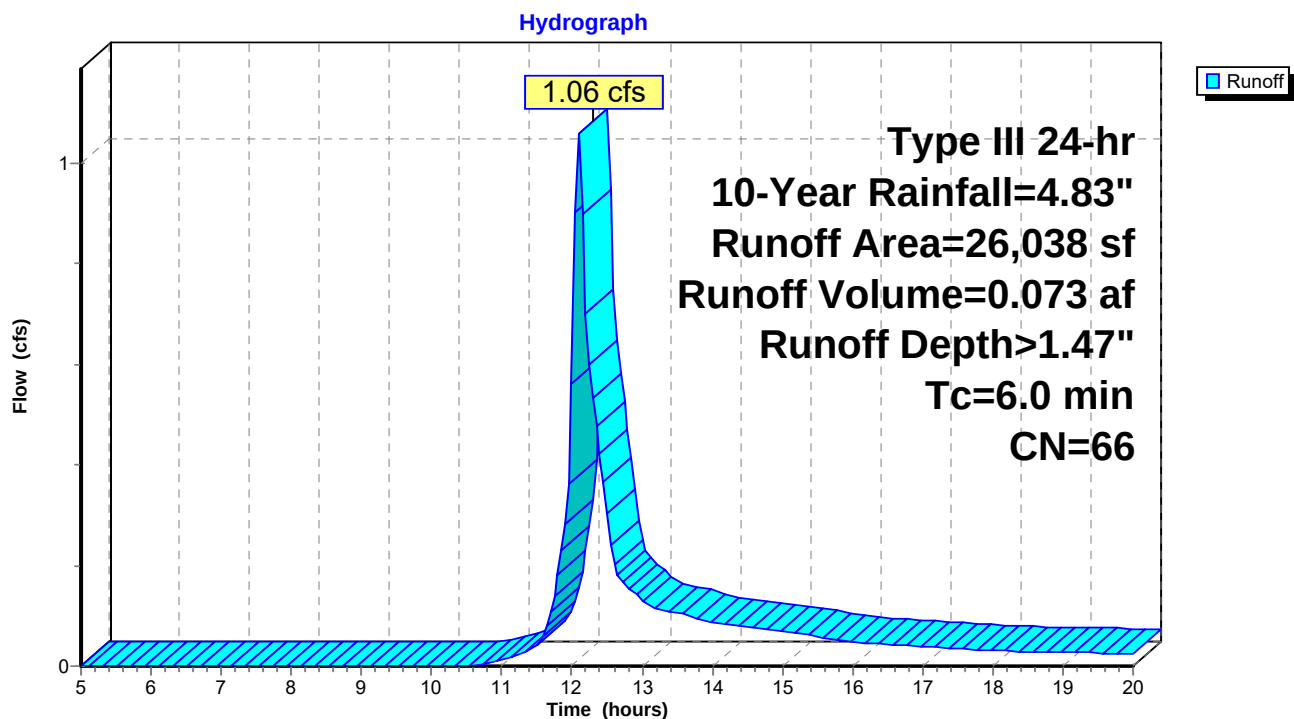
**Summary for Subcatchment 202S: (new Subcat)**

Runoff = 1.06 cfs @ 12.10 hrs, Volume= 0.073 af, Depth> 1.47"  
 Routed to Pond 201P : Sub. Inf. 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 9,091     | 98 | Unconnected roofs, HSG A      |
| 2,905     | 98 | Unconnected pavement, HSG A   |
| 14,042    | 39 | >75% Grass cover, Good, HSG A |
| 26,038    | 66 | Weighted Average              |
| 14,042    |    | 53.93% Pervious Area          |
| 11,996    |    | 46.07% Impervious Area        |
| 11,996    |    | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 202S: (new Subcat)**

**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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Type III 24-hr 10-Year Rainfall=4.83"

Printed 1/7/2026

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**Summary for Subcatchment 204S: (new Subcat)**

Runoff = 0.04 cfs @ 15.12 hrs, Volume= 0.017 af, Depth> 0.06"  
 Routed to Link 203L : 3A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

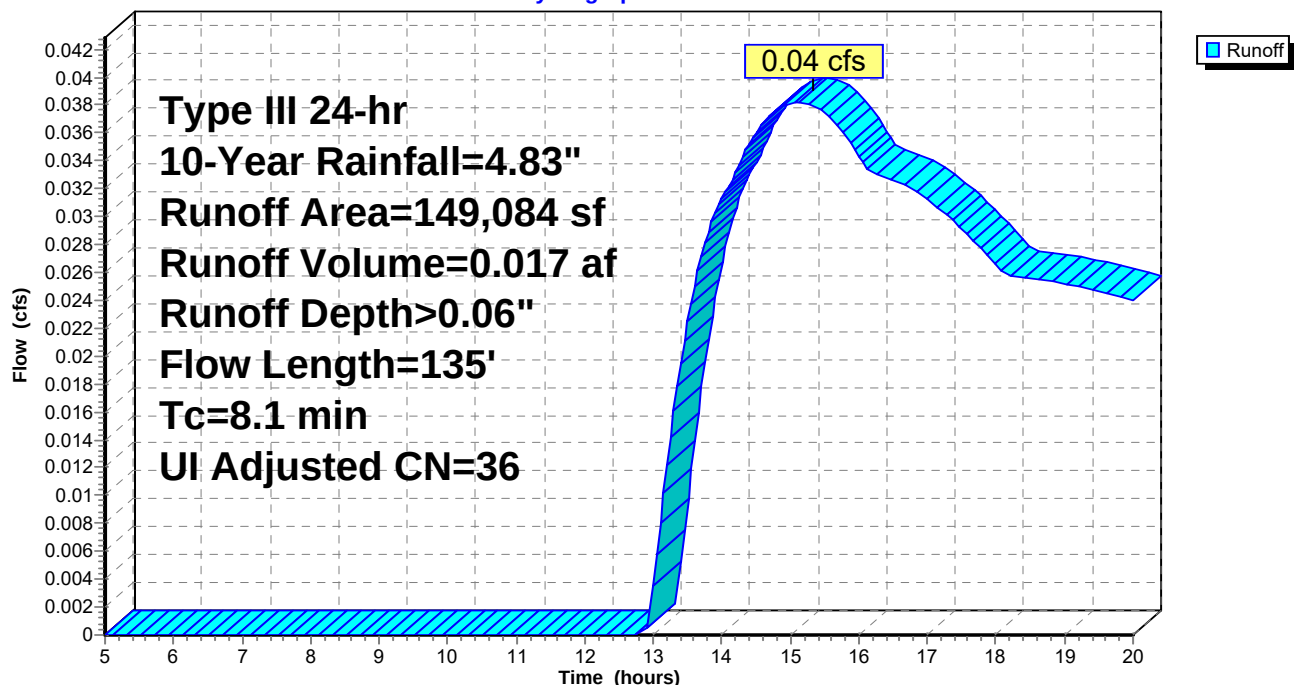
| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 72,013    | 30 |     | Woods, Good, HSG A            |
| 71,711    | 39 |     | >75% Grass cover, Good, HSG A |
| 3,689     | 98 |     | Unconnected roofs, HSG A      |
| 1,671     | 98 |     | Unconnected pavement, HSG A   |
| 149,084   | 37 | 36  | Weighted Average, UI Adjusted |
| 143,724   |    |     | 96.40% Pervious Area          |
| 5,360     |    |     | 3.60% Impervious Area         |
| 5,360     |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                          |
|----------|---------------|---------------|-------------------|----------------|----------------------------------------------------------------------|
| 7.5      | 50            | 0.0100        | 0.11              |                | <b>Sheet Flow,</b><br>Grass: Short n= 0.150 P2= 3.10"                |
| 0.6      | 85            | 0.1200        | 2.42              |                | <b>Shallow Concentrated Flow,</b><br>Short Grass Pasture Kv= 7.0 fps |
| 8.1      | 135           | Total         |                   |                |                                                                      |

**Subcatchment 204S: (new Subcat)**

Hydrograph



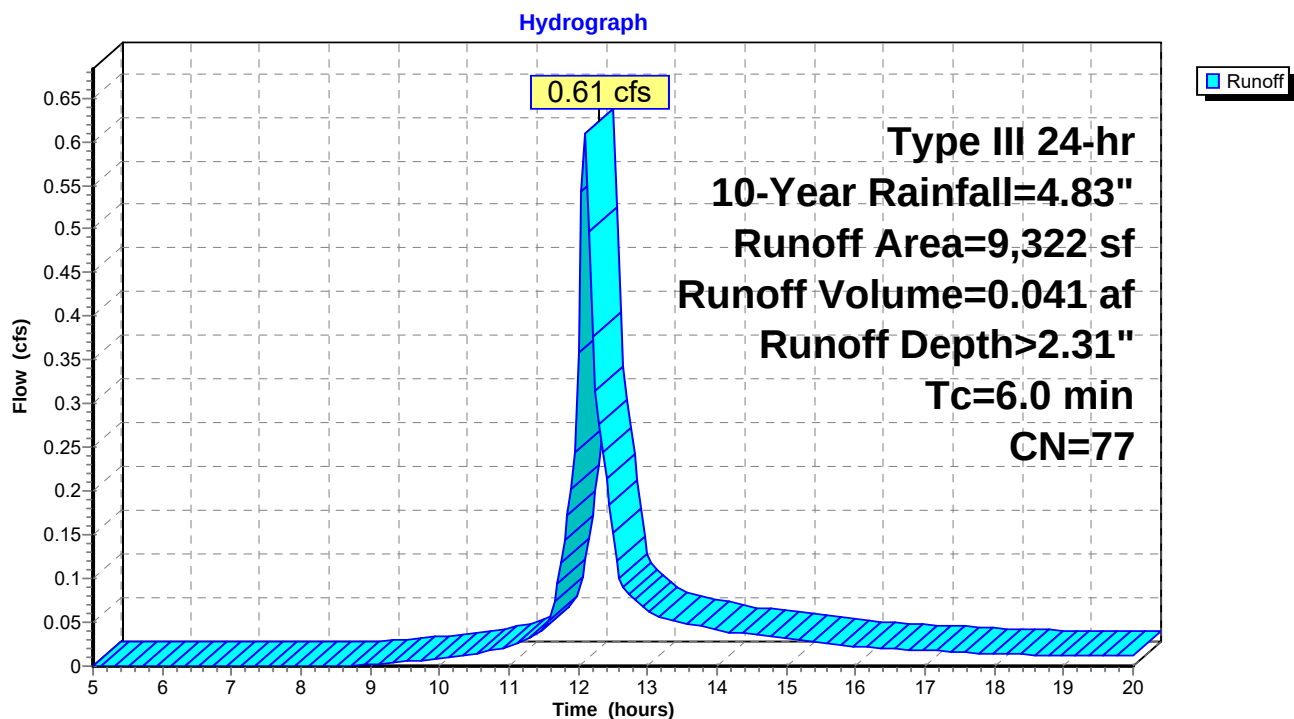
**Summary for Subcatchment 205S: (new Subcat)**

Runoff = 0.61 cfs @ 12.09 hrs, Volume= 0.041 af, Depth> 2.31"  
 Routed to Pond 218P : CB A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,257     | 98 | Paved parking, HSG A          |
| 1,759     | 98 | Unconnected roofs, HSG A      |
| 3,306     | 39 | >75% Grass cover, Good, HSG A |
| 9,322     | 77 | Weighted Average              |
| 3,306     |    | 35.46% Pervious Area          |
| 6,016     |    | 64.54% Impervious Area        |
| 1,759     |    | 29.24% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 205S: (new Subcat)**

**Summary for Subcatchment 206S: (new Subcat)**

Runoff = 0.01 cfs @ 13.65 hrs, Volume= 0.004 af, Depth> 0.13"  
 Routed to Pond 186P : Constructed Wetland 1

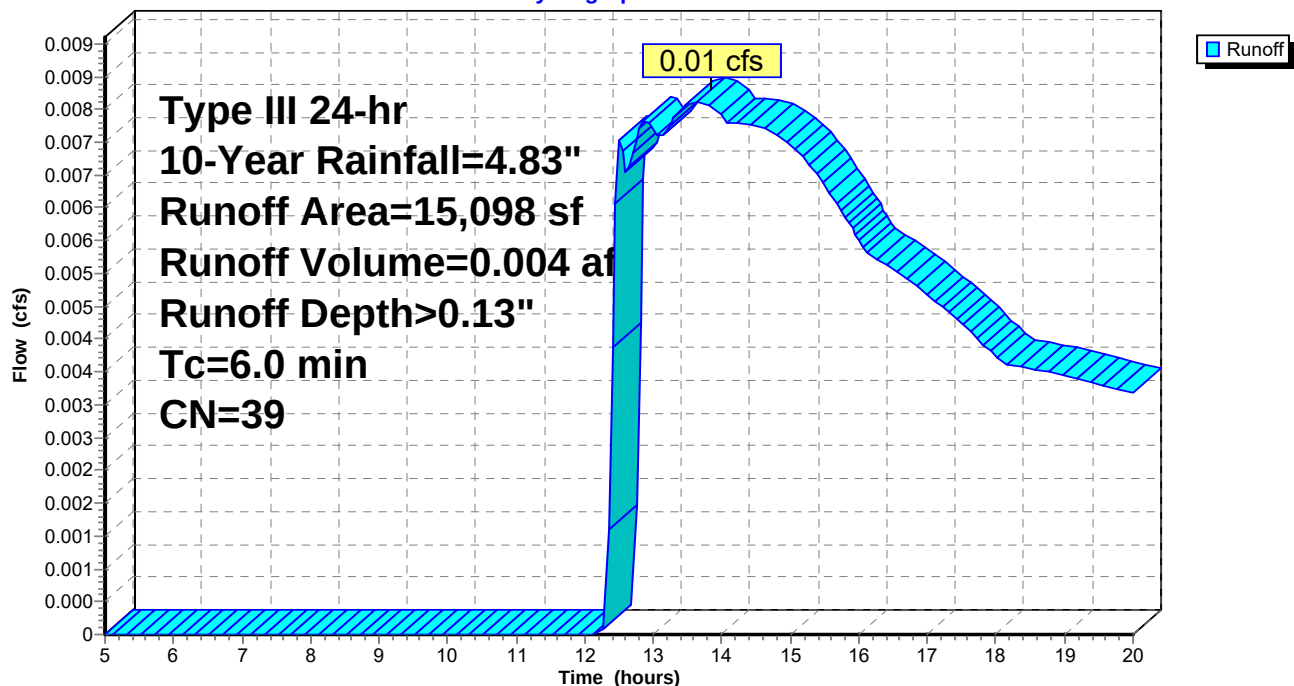
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 15,098    | 39 | >75% Grass cover, Good, HSG A |
| 15,098    |    | 100.00% Pervious Area         |

| Tc<br>(min) | Length<br>(feet) | Slope<br>(ft/ft) | Velocity<br>(ft/sec) | Capacity<br>(cfs) | Description   |
|-------------|------------------|------------------|----------------------|-------------------|---------------|
| 6.0         |                  |                  |                      |                   | Direct Entry, |

**Subcatchment 206S: (new Subcat)**

Hydrograph





**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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Type III 24-hr 10-Year Rainfall=4.83"

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**Summary for Subcatchment 207S: (new Subcat)**

Runoff = 0.01 cfs @ 13.80 hrs, Volume= 0.005 af, Depth> 0.13"  
 Routed to Pond 216P : CB 8A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

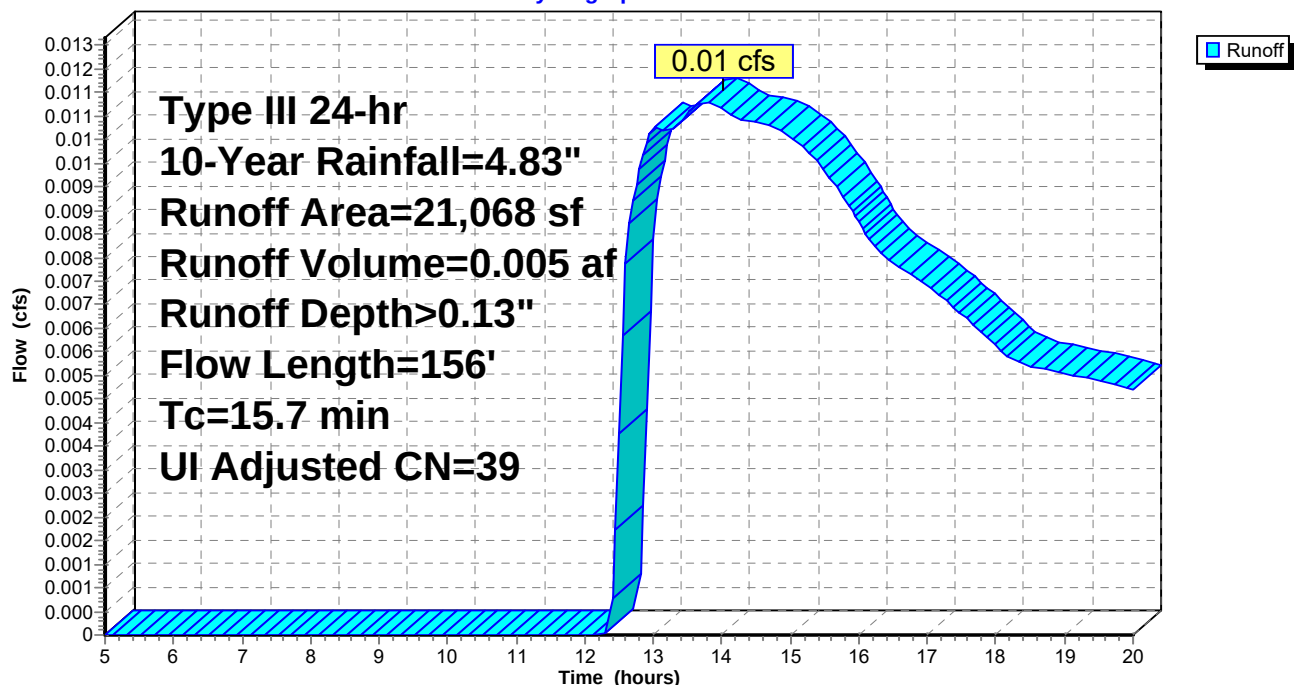
| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 1,937     | 98 |     | Unconnected roofs, HSG A      |
| 1,504     | 98 |     | Paved parking, HSG A          |
| 16,314    | 30 |     | Woods, Good, HSG A            |
| 1,313     | 39 |     | >75% Grass cover, Good, HSG A |
| 21,068    | 42 | 39  | Weighted Average, UI Adjusted |
| 17,627    |    |     | 83.67% Pervious Area          |
| 3,441     |    |     | 16.33% Impervious Area        |
| 1,937     |    |     | 56.29% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                      |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------|
| 11.5     | 50            | 0.0250        | 0.07              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10" |
| 4.2      | 106           | 0.0070        | 0.42              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps        |
| 15.7     | 156           | Total         |                   |                |                                                                  |

**Subcatchment 207S: (new Subcat)**

Hydrograph



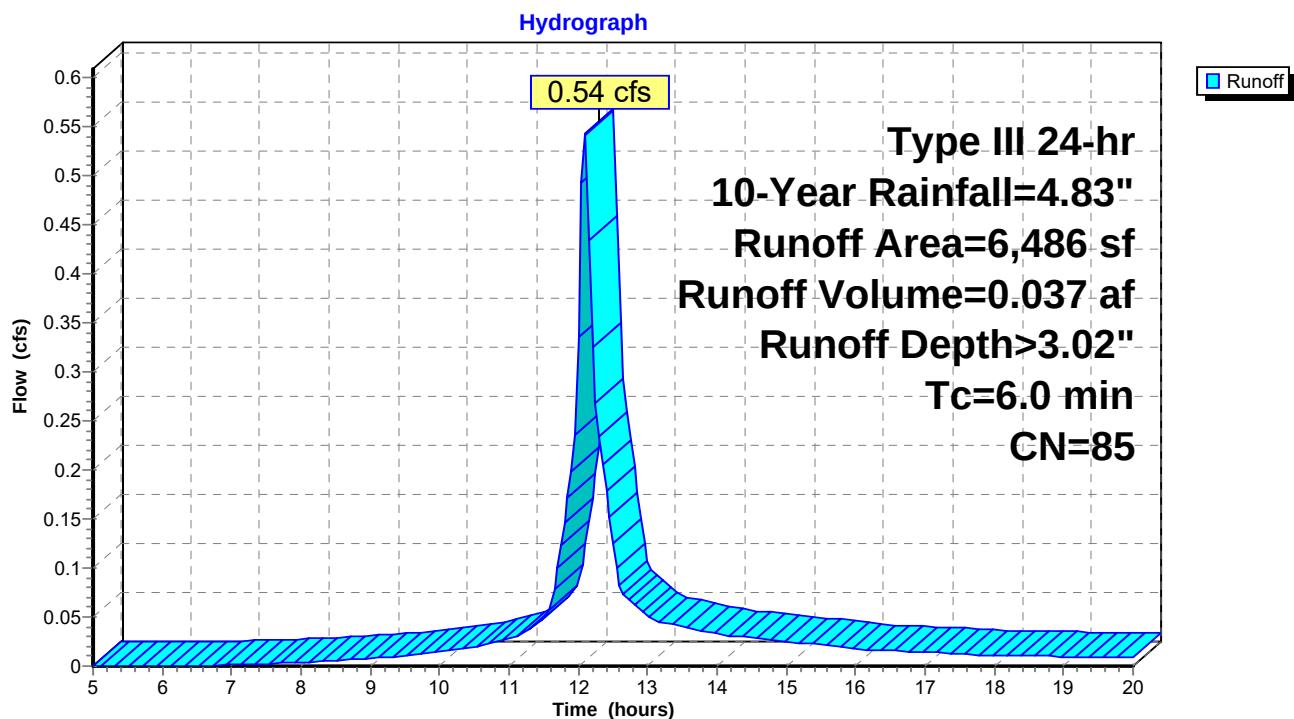
**Summary for Subcatchment 216S: (new Subcat)**

Runoff = 0.54 cfs @ 12.09 hrs, Volume= 0.037 af, Depth> 3.02"  
 Routed to Pond 215P : CB 5A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 10-Year Rainfall=4.83"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,069     | 98 | Paved parking, HSG A          |
| 1,946     | 98 | Unconnected roofs, HSG A      |
| 1,471     | 39 | >75% Grass cover, Good, HSG A |
| 6,486     | 85 | Weighted Average              |
| 1,471     |    | 22.68% Pervious Area          |
| 5,015     |    | 77.32% Impervious Area        |
| 1,946     |    | 38.80% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 216S: (new Subcat)**

### Summary for Pond 15P: Inf. Basin 5

Inflow Area = 2.511 ac, 70.09% Impervious, Inflow Depth > 3.60" for 10-Year event  
 Inflow = 10.32 cfs @ 12.09 hrs, Volume= 0.754 af  
 Outflow = 0.94 cfs @ 12.99 hrs, Volume= 0.471 af, Atten= 91%, Lag= 54.0 min  
 Discarded = 0.28 cfs @ 12.99 hrs, Volume= 0.243 af  
 Primary = 0.66 cfs @ 12.99 hrs, Volume= 0.229 af  
 Routed to Link 59L : DP 1

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.53' @ 12.99 hrs Surf.Area= 8,488 sf Storage= 18,210 cf

Plug-Flow detention time= 179.9 min calculated for 0.470 af (62% of inflow)  
 Center-of-Mass det. time= 105.2 min ( 859.1 - 753.9 )

| Volume              | Invert               | Avail.Storage             | Storage Description                                        |
|---------------------|----------------------|---------------------------|------------------------------------------------------------|
| #1                  | 57.00'               | 31,893 cf                 | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet)                                  |
| 57.00               | 5,984                | 0                         | 0                                                          |
| 58.00               | 6,929                | 6,457                     | 6,457                                                      |
| 59.00               | 7,931                | 7,430                     | 13,887                                                     |
| 60.00               | 8,989                | 8,460                     | 22,347                                                     |
| 61.00               | 10,104               | 9,547                     | 31,893                                                     |

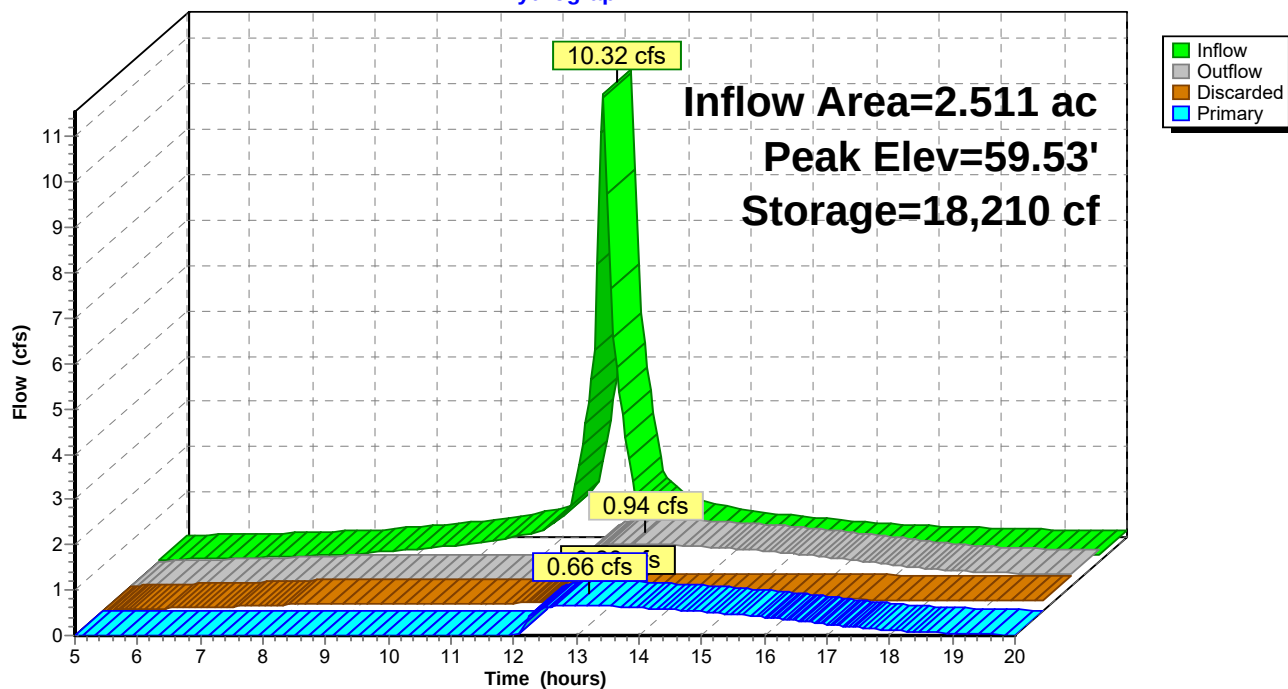
| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 57.00' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 52.00'                                                                                                              |
| #2     | Primary   | 57.00' | <b>18.0" Round Culvert</b><br>L= 67.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.00' / 52.50' S= 0.0672 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |
| #3     | Device 2  | 58.75' | <b>4.0" Vert. Orifice/Grate X 2.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                             |
| #4     | Device 2  | 59.80' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                          |

**Discarded OutFlow** Max=0.28 cfs @ 12.99 hrs HW=59.53' (Free Discharge)  
 ↳ **1=Exfiltration** ( Controls 0.28 cfs)

**Primary OutFlow** Max=0.66 cfs @ 12.99 hrs HW=59.53' (Free Discharge)  
 ↳ **2=Culvert** (Passes 0.66 cfs of 8.95 cfs potential flow)  
 ↳ **3=Orifice/Grate** (Orifice Controls 0.66 cfs @ 3.76 fps)  
 ↳ **4=Orifice/Grate** ( Controls 0.00 cfs)

# Pond 15P: Inf. Basin 5

Hydrograph



### Summary for Pond 16P: CB 58

Inflow Area = 0.172 ac, 96.61% Impervious, Inflow Depth > 4.19" for 10-Year event  
 Inflow = 0.79 cfs @ 12.09 hrs, Volume= 0.060 af  
 Outflow = 0.79 cfs @ 12.09 hrs, Volume= 0.060 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.79 cfs @ 12.09 hrs, Volume= 0.060 af  
 Routed to Pond 20P : DMH 43

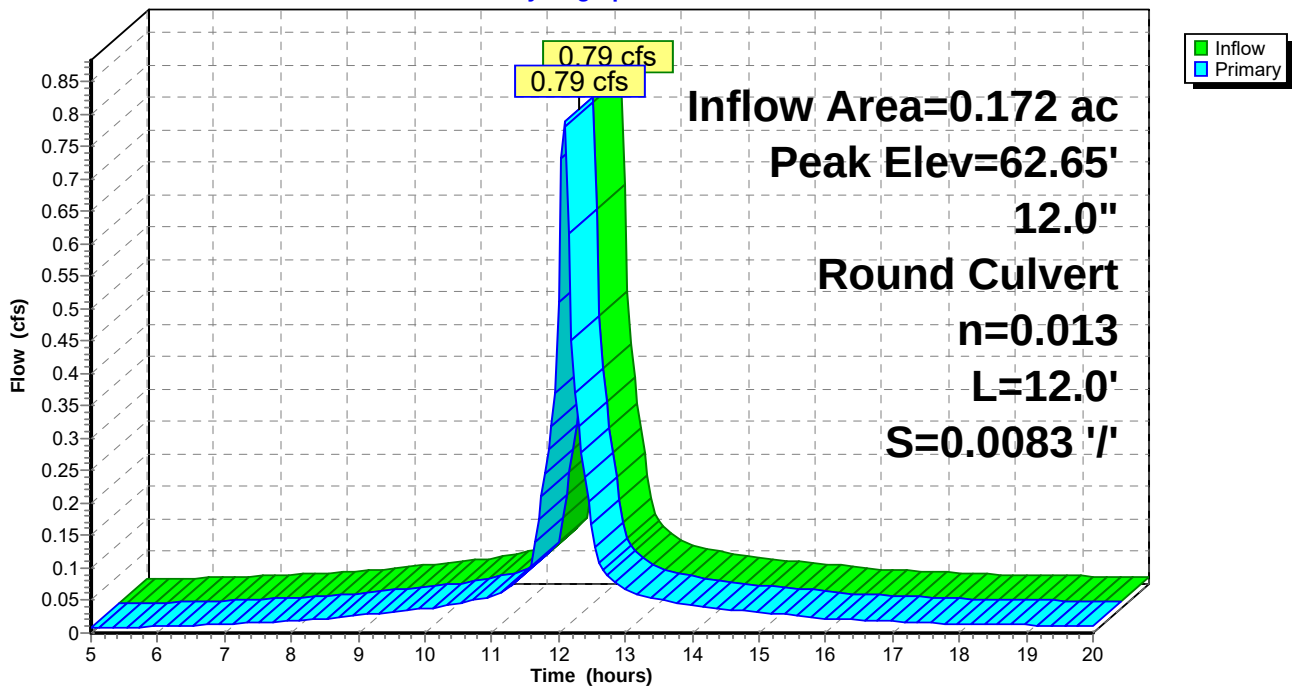
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.65' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.10' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.10' / 62.00' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.77 cfs @ 12.09 hrs HW=62.64' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.77 cfs @ 2.54 fps)

### Pond 16P: CB 58

#### Hydrograph



### Summary for Pond 17P: CB 59

Inflow Area = 0.381 ac, 74.19% Impervious, Inflow Depth > 3.71" for 10-Year event  
 Inflow = 1.63 cfs @ 12.09 hrs, Volume= 0.118 af  
 Outflow = 1.63 cfs @ 12.09 hrs, Volume= 0.118 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.63 cfs @ 12.09 hrs, Volume= 0.118 af  
 Routed to Pond 20P : DMH 43

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 62.97' @ 12.09 hrs

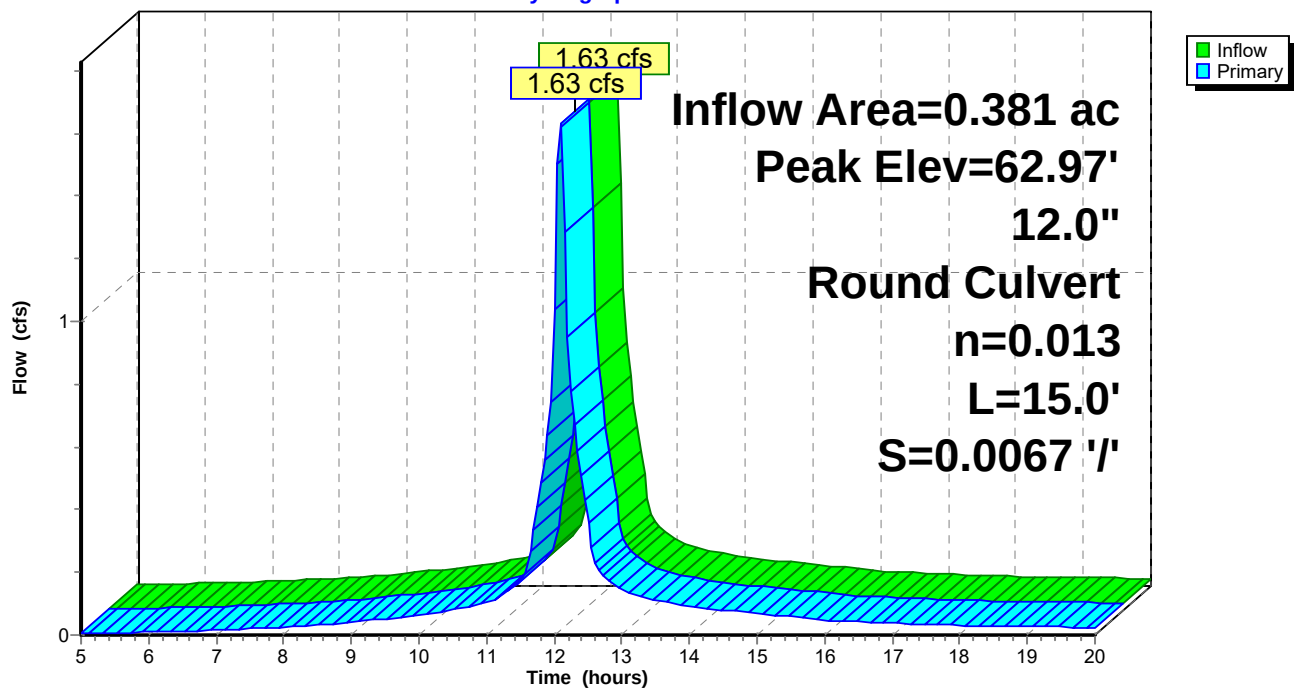
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.10' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.10' / 62.00' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.59 cfs @ 12.09 hrs HW=62.96' (Free Discharge)

1=Culvert (Barrel Controls 1.59 cfs @ 2.97 fps)

### Pond 17P: CB 59

#### Hydrograph



**Summary for Pond 18P: CB 63**

Inflow Area = 0.140 ac, 64.30% Impervious, Inflow Depth > 3.41" for 10-Year event  
 Inflow = 0.56 cfs @ 12.09 hrs, Volume= 0.040 af  
 Outflow = 0.56 cfs @ 12.09 hrs, Volume= 0.040 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.56 cfs @ 12.09 hrs, Volume= 0.040 af  
 Routed to Pond 25P : DMH 45

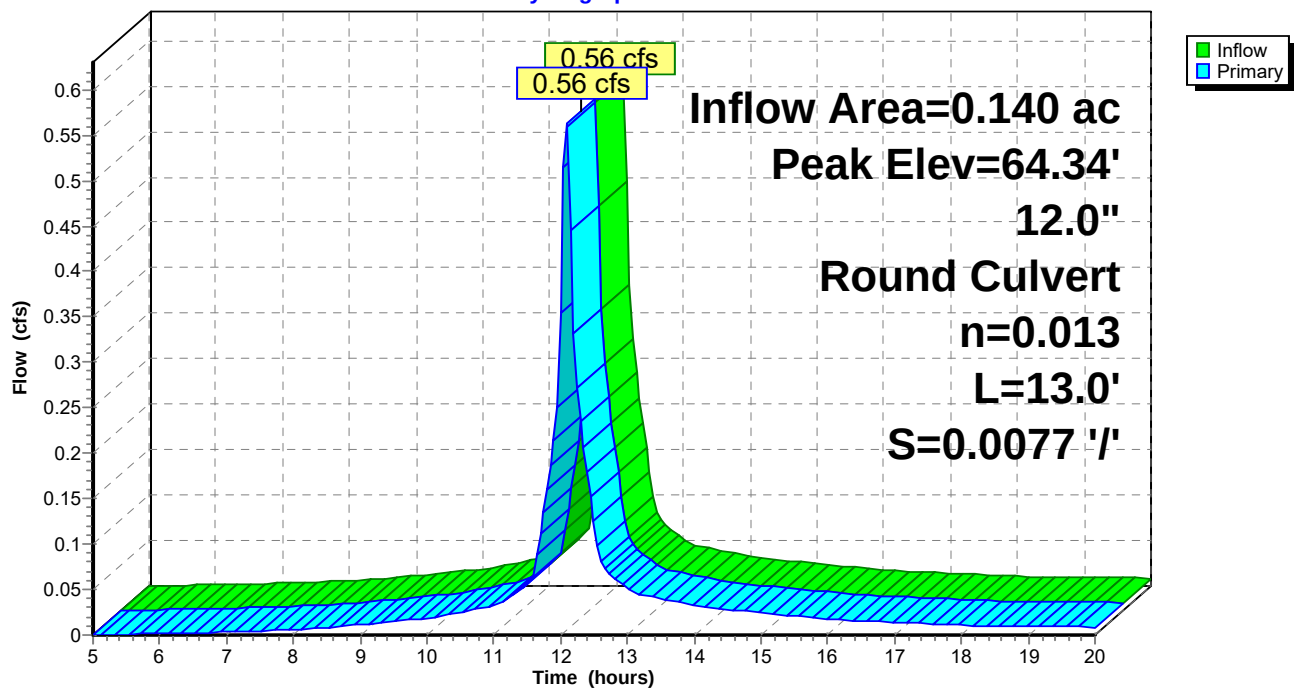
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.34' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 63.88' | <b>12.0" Round Culvert</b><br>L= 13.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 63.88' / 63.78' S= 0.0077 ' S= 0.0077 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.55 cfs @ 12.09 hrs HW=64.33' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.55 cfs @ 2.34 fps)

**Pond 18P: CB 63**

Hydrograph



**Summary for Pond 19P: CB 62**

Inflow Area = 0.064 ac, 81.50% Impervious, Inflow Depth > 3.91" for 10-Year event  
 Inflow = 0.28 cfs @ 12.09 hrs, Volume= 0.021 af  
 Outflow = 0.28 cfs @ 12.09 hrs, Volume= 0.021 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.28 cfs @ 12.09 hrs, Volume= 0.021 af  
 Routed to Pond 25P : DMH 45

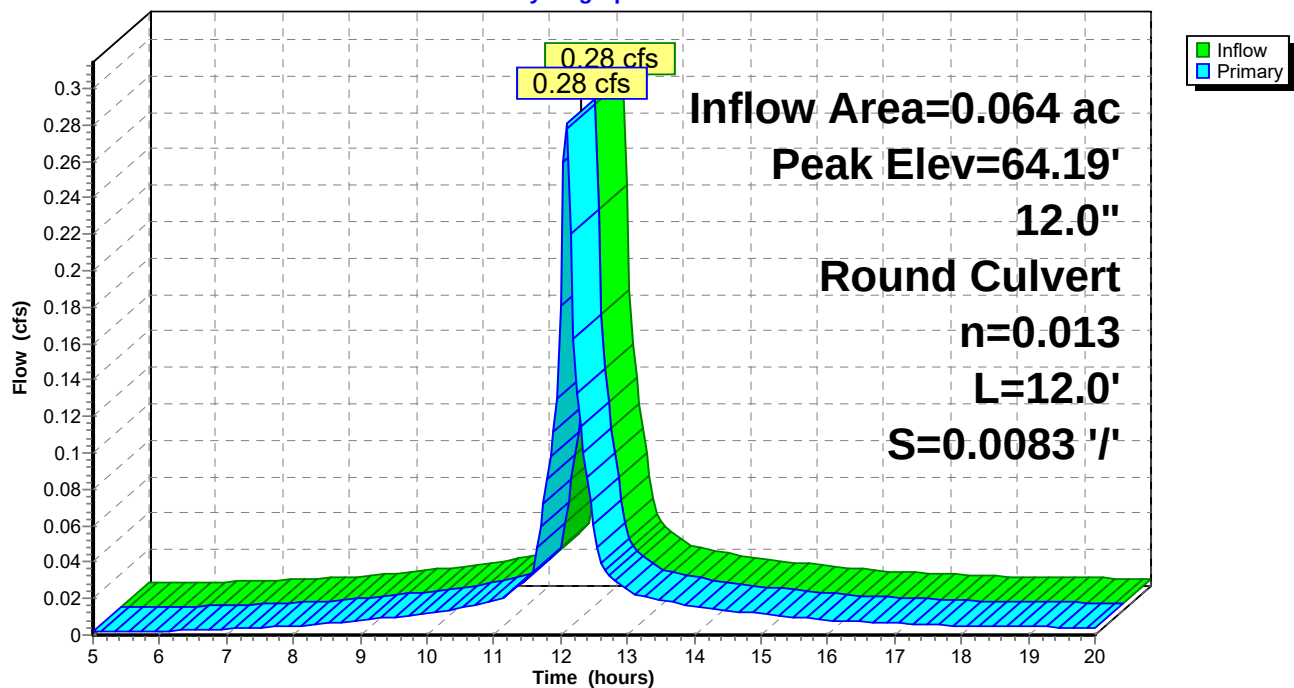
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.19' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 63.88' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 63.88' / 63.78' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.27 cfs @ 12.09 hrs HW=64.18' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.27 cfs @ 2.03 fps)

**Pond 19P: CB 62**

Hydrograph





### Summary for Pond 20P: DMH 43

Inflow Area = 0.553 ac, 81.18% Impervious, Inflow Depth > 3.86" for 10-Year event  
 Inflow = 2.42 cfs @ 12.09 hrs, Volume= 0.178 af  
 Outflow = 2.42 cfs @ 12.09 hrs, Volume= 0.178 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.42 cfs @ 12.09 hrs, Volume= 0.178 af  
 Routed to Pond 21P : DMH 42

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 63.05' @ 12.09 hrs

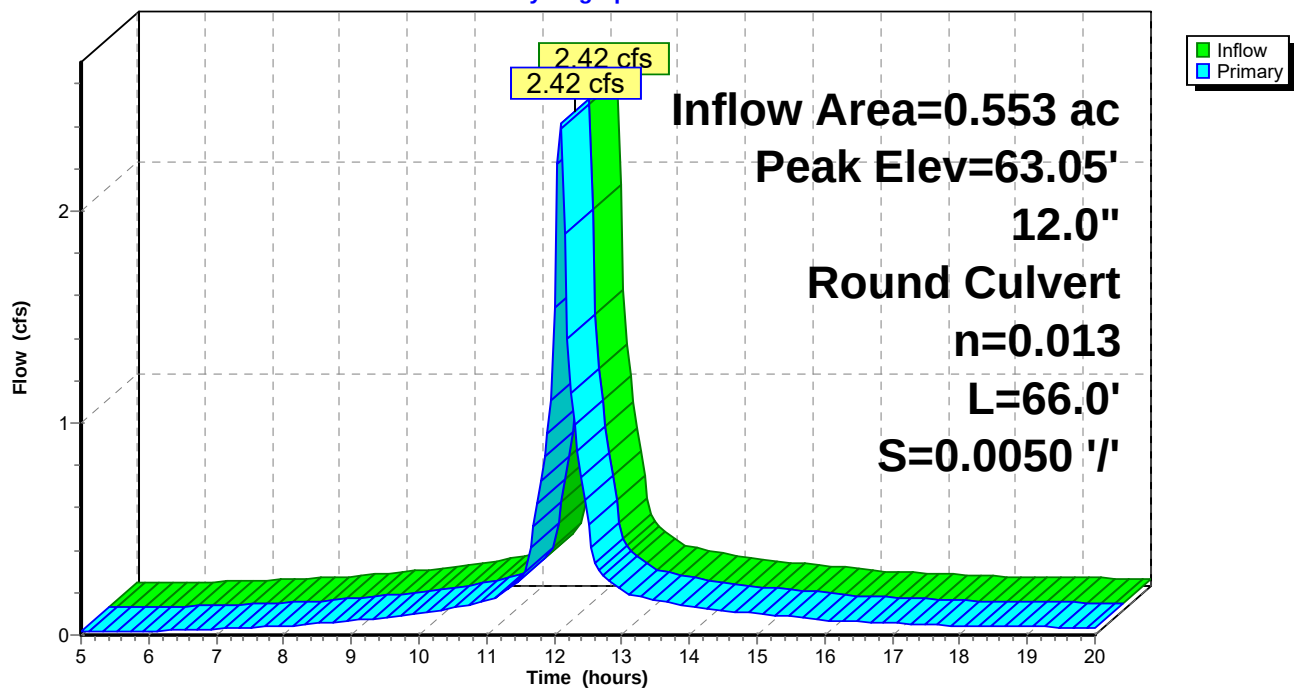
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.90' | <b>12.0" Round Culvert</b><br>L= 66.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.90' / 61.57' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.36 cfs @ 12.09 hrs HW=63.02' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 2.36 cfs @ 3.00 fps)

### Pond 20P: DMH 43

Hydrograph



**Summary for Pond 21P: DMH 42**

Inflow Area = 0.553 ac, 81.18% Impervious, Inflow Depth > 3.86" for 10-Year event  
 Inflow = 2.42 cfs @ 12.09 hrs, Volume= 0.178 af  
 Outflow = 2.42 cfs @ 12.09 hrs, Volume= 0.178 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.42 cfs @ 12.09 hrs, Volume= 0.178 af  
 Routed to Pond 24P : DMH 41

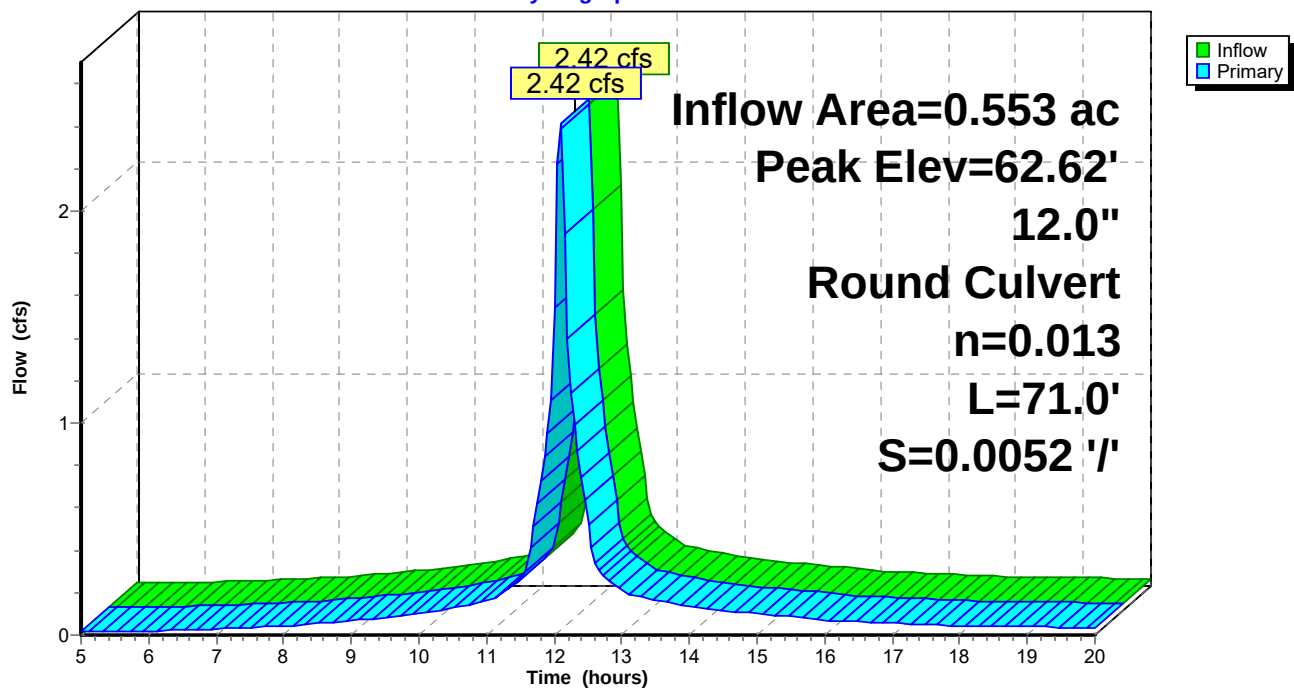
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.62' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.47' | <b>12.0" Round Culvert</b><br>L= 71.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.47' / 61.10' S= 0.0052 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.35 cfs @ 12.09 hrs HW=62.59' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.35 cfs @ 3.00 fps)

**Pond 21P: DMH 42**

Hydrograph



**Summary for Pond 22P: CB 56**

Inflow Area = 0.127 ac, 100.00% Impervious, Inflow Depth > 4.26" for 10-Year event  
 Inflow = 0.58 cfs @ 12.09 hrs, Volume= 0.045 af  
 Outflow = 0.58 cfs @ 12.09 hrs, Volume= 0.045 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.58 cfs @ 12.09 hrs, Volume= 0.045 af  
 Routed to Pond 24P : DMH 41

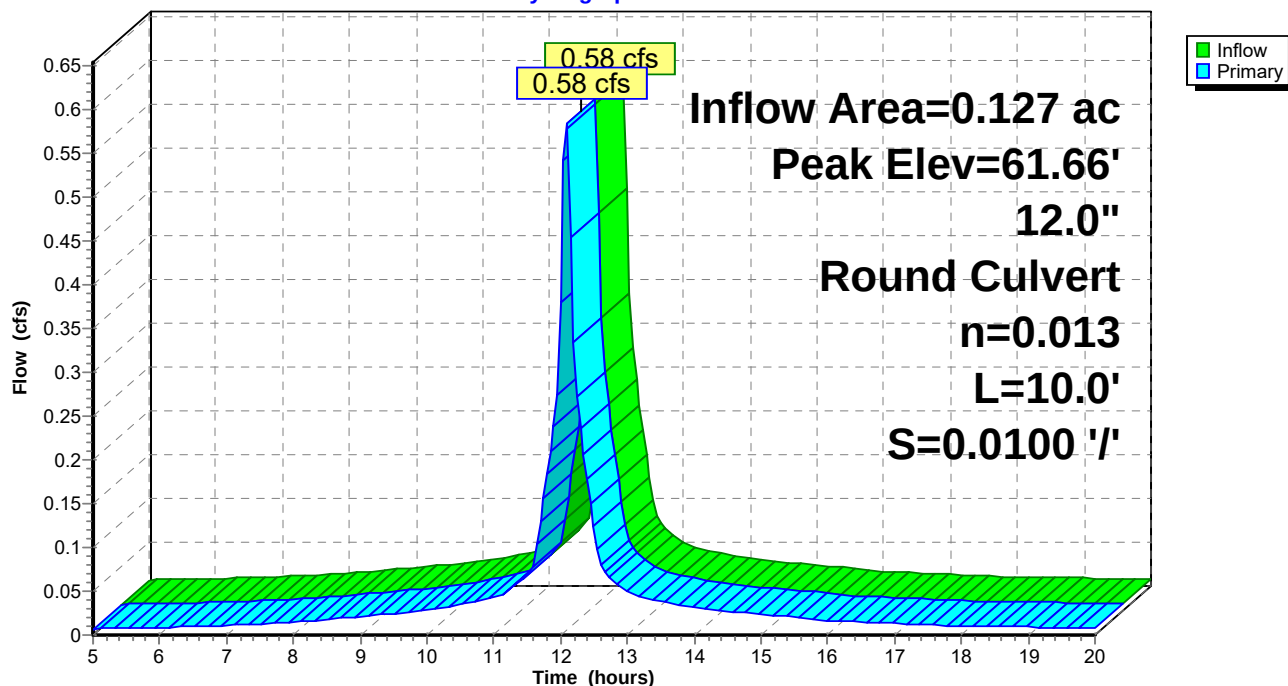
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.66' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.20' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.20' / 61.10' S= 0.0100 ' S= 0.0100 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.57 cfs @ 12.09 hrs HW=61.65' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.57 cfs @ 2.41 fps)

**Pond 22P: CB 56**

Hydrograph



**Summary for Pond 23P: CB 57**

Inflow Area = 0.315 ac, 81.38% Impervious, Inflow Depth > 3.91" for 10-Year event  
 Inflow = 1.39 cfs @ 12.09 hrs, Volume= 0.102 af  
 Outflow = 1.39 cfs @ 12.09 hrs, Volume= 0.102 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.39 cfs @ 12.09 hrs, Volume= 0.102 af  
 Routed to Pond 24P : DMH 41

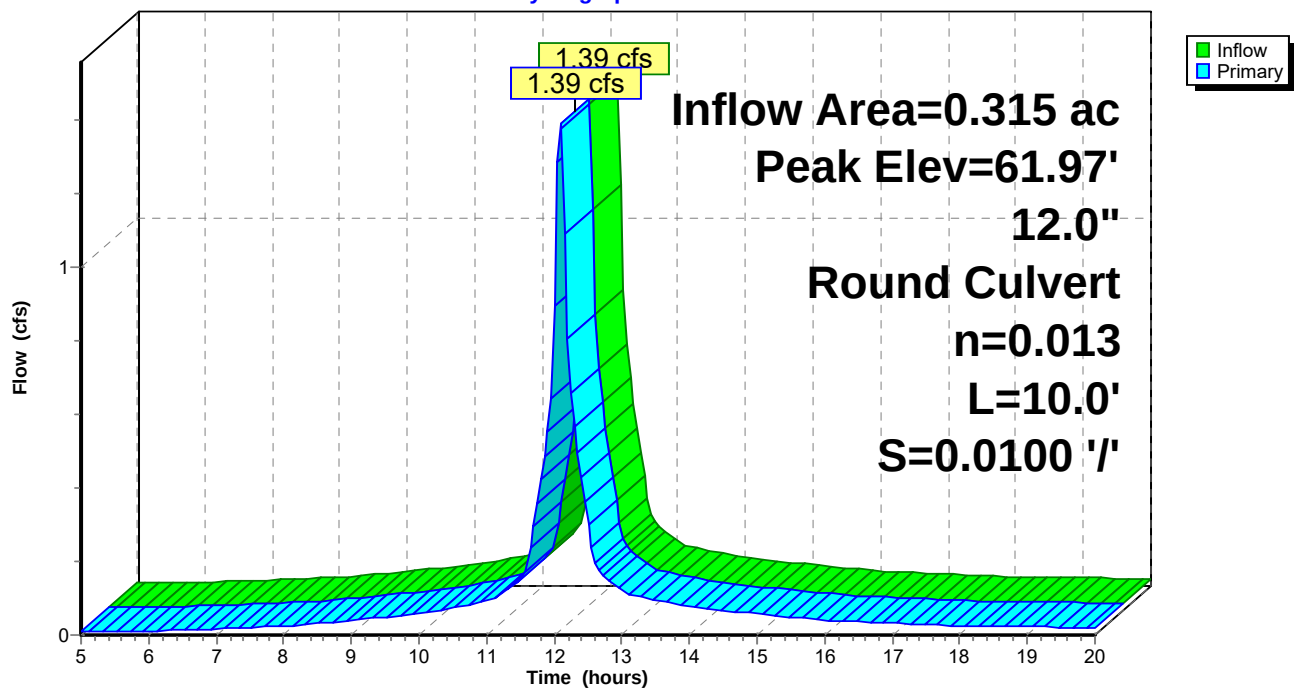
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.97' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.20' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.20' / 61.10' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.35 cfs @ 12.09 hrs HW=61.96' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.35 cfs @ 2.93 fps)

**Pond 23P: CB 57**

Hydrograph



## Summary for Pond 24P: DMH 41

Inflow Area = 0.994 ac, 83.63% Impervious, Inflow Depth > 3.92" for 10-Year event  
 Inflow = 4.39 cfs @ 12.09 hrs, Volume= 0.325 af  
 Outflow = 4.39 cfs @ 12.09 hrs, Volume= 0.325 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.39 cfs @ 12.09 hrs, Volume= 0.325 af  
 Routed to Pond 29P : DMH 40

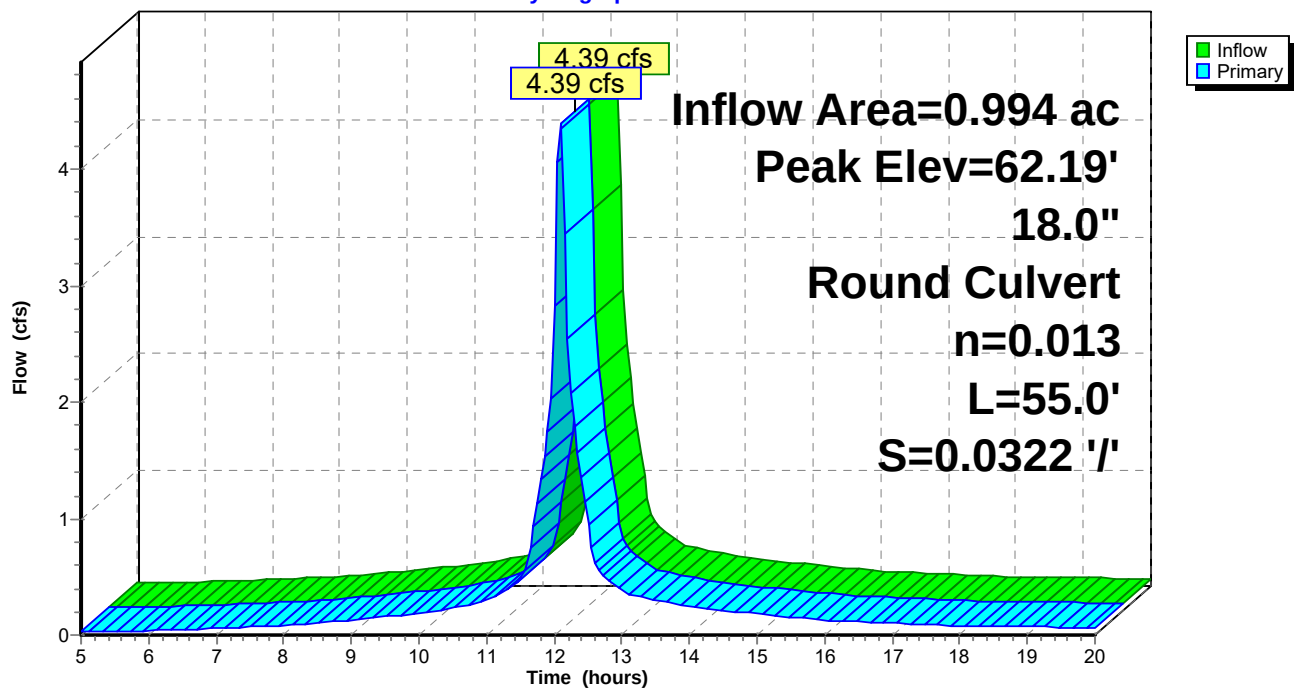
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 62.19' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.00' | <b>18.0" Round Culvert</b><br>L= 55.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.00' / 59.23' S= 0.0322 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=4.28 cfs @ 12.09 hrs HW=62.17' (Free Discharge)  
**1=Culvert** (Inlet Controls 4.28 cfs @ 2.90 fps)

## Pond 24P: DMH 41

## Hydrograph



### Summary for Pond 25P: DMH 45

Inflow Area = 0.203 ac, 69.67% Impervious, Inflow Depth > 3.56" for 10-Year event  
 Inflow = 0.84 cfs @ 12.09 hrs, Volume= 0.060 af  
 Outflow = 0.84 cfs @ 12.09 hrs, Volume= 0.060 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.84 cfs @ 12.09 hrs, Volume= 0.060 af  
 Routed to Pond 28P : DMH 44

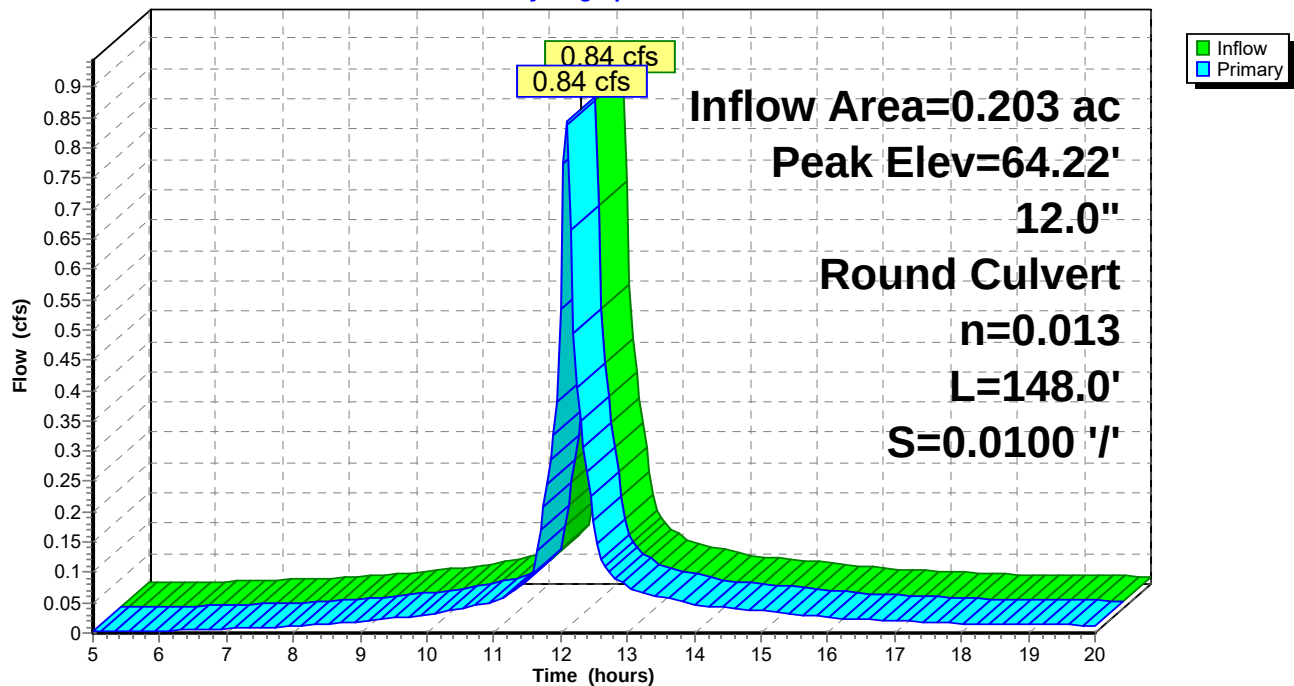
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.22' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 63.68' | <b>12.0" Round Culvert</b><br>L= 148.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 63.68' / 62.20' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.82 cfs @ 12.09 hrs HW=64.21' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.82 cfs @ 1.95 fps)

### Pond 25P: DMH 45

#### Hydrograph



**Summary for Pond 26P: CB 61**

Inflow Area = 0.265 ac, 66.20% Impervious, Inflow Depth > 3.51" for 10-Year event  
 Inflow = 1.09 cfs @ 12.09 hrs, Volume= 0.077 af  
 Outflow = 1.09 cfs @ 12.09 hrs, Volume= 0.077 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.09 cfs @ 12.09 hrs, Volume= 0.077 af  
 Routed to Pond 28P : DMH 44

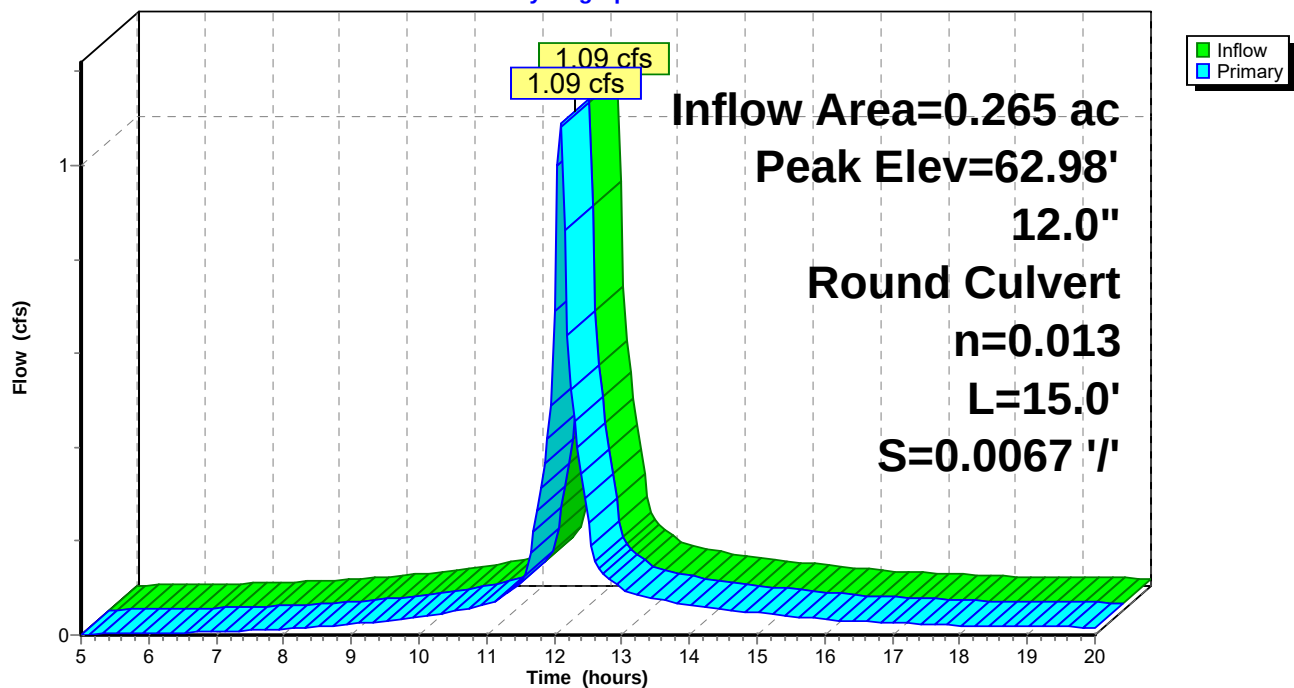
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.98' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.30' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.30' / 62.20' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.06 cfs @ 12.09 hrs HW=62.97' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.06 cfs @ 2.69 fps)

**Pond 26P: CB 61**

Hydrograph



## Summary for Pond 27P: CB 60

Inflow Area = 0.111 ac, 71.39% Impervious, Inflow Depth > 3.61" for 10-Year event  
 Inflow = 0.46 cfs @ 12.09 hrs, Volume= 0.033 af  
 Outflow = 0.46 cfs @ 12.09 hrs, Volume= 0.033 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.46 cfs @ 12.09 hrs, Volume= 0.033 af  
 Routed to Pond 28P : DMH 44

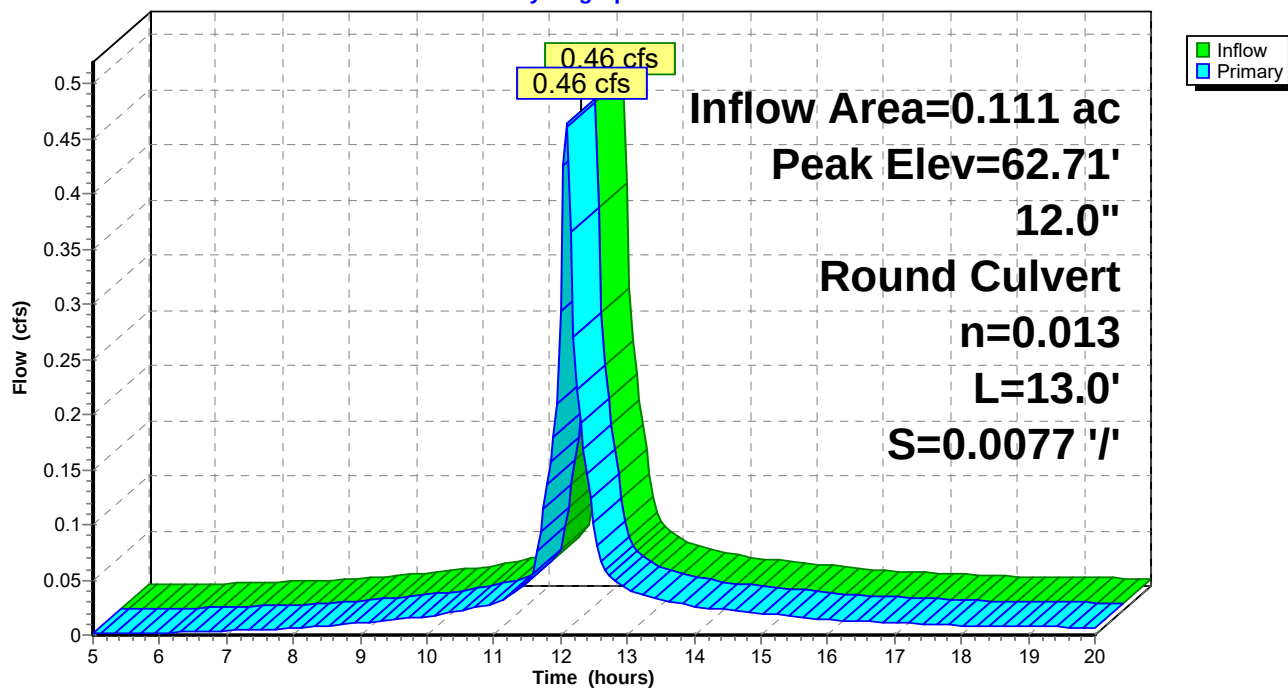
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 62.71' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.30' | <b>12.0" Round Culvert</b><br>L= 13.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.30' / 62.20' S= 0.0077 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.45 cfs @ 12.09 hrs HW=62.70' (Free Discharge)  
 1=Culvert (Barrel Controls 0.45 cfs @ 2.25 fps)

### Pond 27P: CB 60

## Hydrograph





**Summary for Pond 28P: DMH 44**

Inflow Area = 0.579 ac, 68.41% Impervious, Inflow Depth > 3.55" for 10-Year event  
 Inflow = 2.40 cfs @ 12.09 hrs, Volume= 0.171 af  
 Outflow = 2.40 cfs @ 12.09 hrs, Volume= 0.171 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.40 cfs @ 12.09 hrs, Volume= 0.171 af  
 Routed to Pond 29P : DMH 40

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 63.24' @ 12.09 hrs

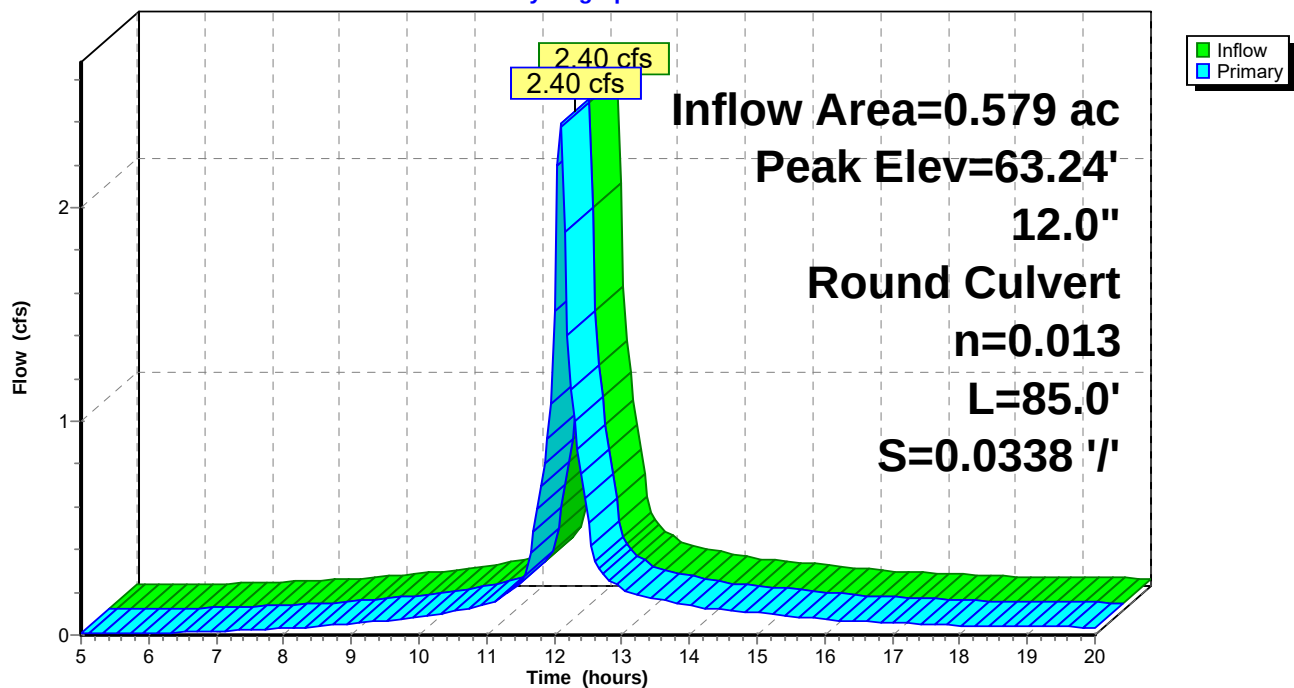
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.10' | <b>12.0" Round Culvert</b><br>L= 85.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.10' / 59.23' S= 0.0338 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.34 cfs @ 12.09 hrs HW=63.21' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 2.34 cfs @ 2.98 fps)

**Pond 28P: DMH 44**

Hydrograph



**Summary for Pond 29P: DMH 40**

Inflow Area = 1.656 ac, 78.05% Impervious, Inflow Depth > 3.79" for 10-Year event  
 Inflow = 7.15 cfs @ 12.09 hrs, Volume= 0.523 af  
 Outflow = 7.15 cfs @ 12.09 hrs, Volume= 0.523 af, Atten= 0%, Lag= 0.0 min  
 Primary = 7.15 cfs @ 12.09 hrs, Volume= 0.523 af  
 Routed to Pond 38P : DMH 39

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.51' @ 12.09 hrs

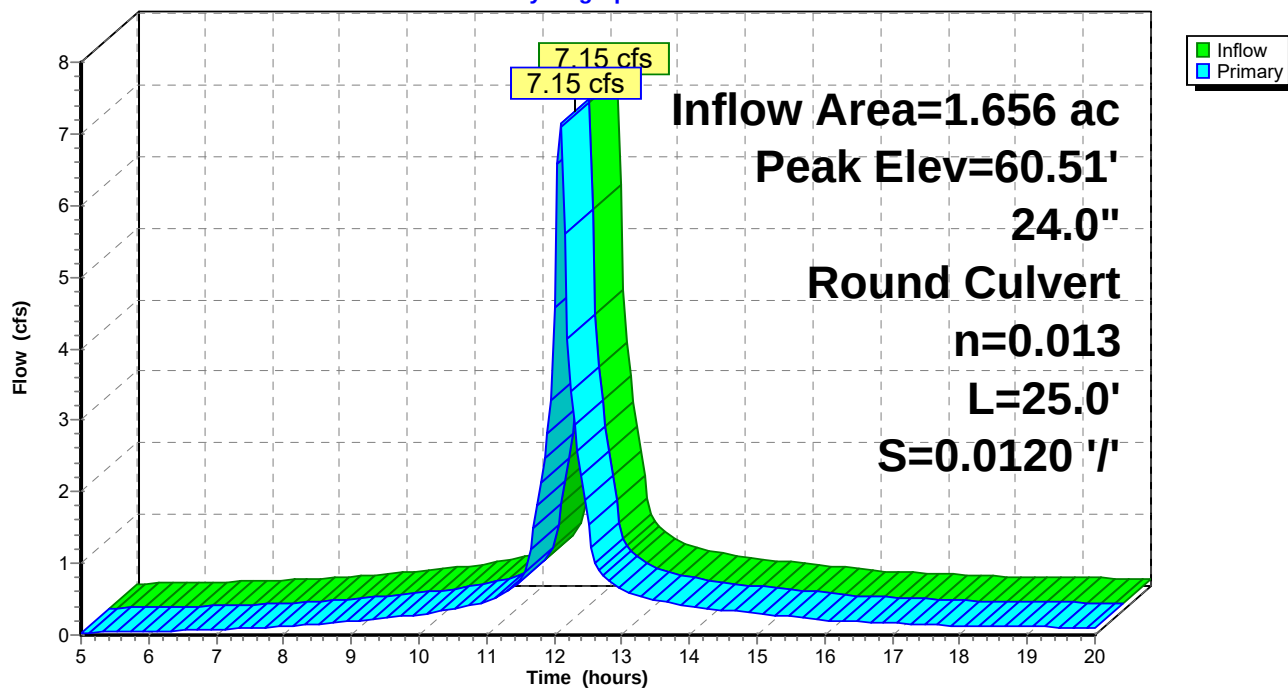
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.13' | <b>24.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.13' / 58.83' S= 0.0120 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=6.96 cfs @ 12.09 hrs HW=60.49' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 6.96 cfs @ 4.32 fps)

**Pond 29P: DMH 40**

Hydrograph



### Summary for Pond 30P: CB 55

Inflow Area = 0.083 ac, 78.43% Impervious, Inflow Depth > 3.81" for 10-Year event  
 Inflow = 0.36 cfs @ 12.09 hrs, Volume= 0.026 af  
 Outflow = 0.36 cfs @ 12.09 hrs, Volume= 0.026 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.36 cfs @ 12.09 hrs, Volume= 0.026 af  
 Routed to Pond 29P : DMH 40

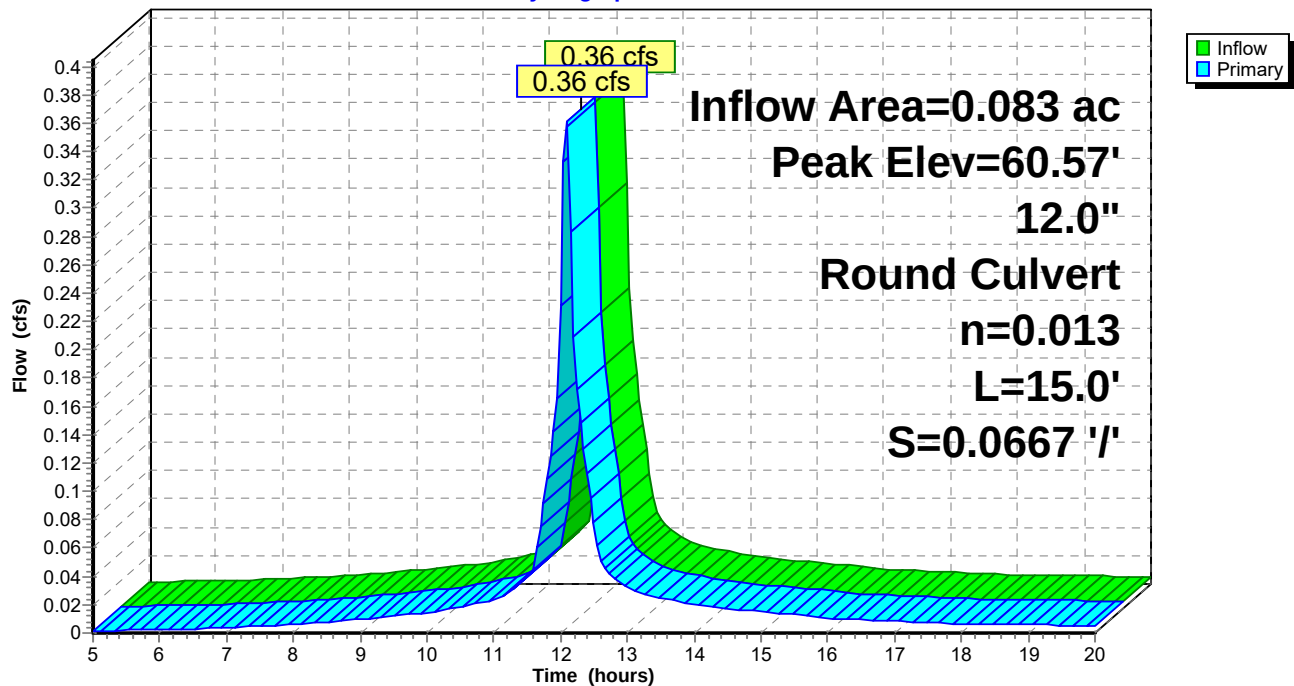
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.57' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.23' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.23' / 59.23' S= 0.0667 ' S= 0.0667 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.35 cfs @ 12.09 hrs HW=60.56' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.35 cfs @ 1.55 fps)

### Pond 30P: CB 55

Hydrograph



**Summary for Pond 31P: CB 51**

Inflow Area = 0.044 ac, 96.85% Impervious, Inflow Depth > 4.19" for 10-Year event  
 Inflow = 0.20 cfs @ 12.09 hrs, Volume= 0.016 af  
 Outflow = 0.20 cfs @ 12.09 hrs, Volume= 0.016 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.20 cfs @ 12.09 hrs, Volume= 0.016 af  
 Routed to Pond 34P : DMH 36

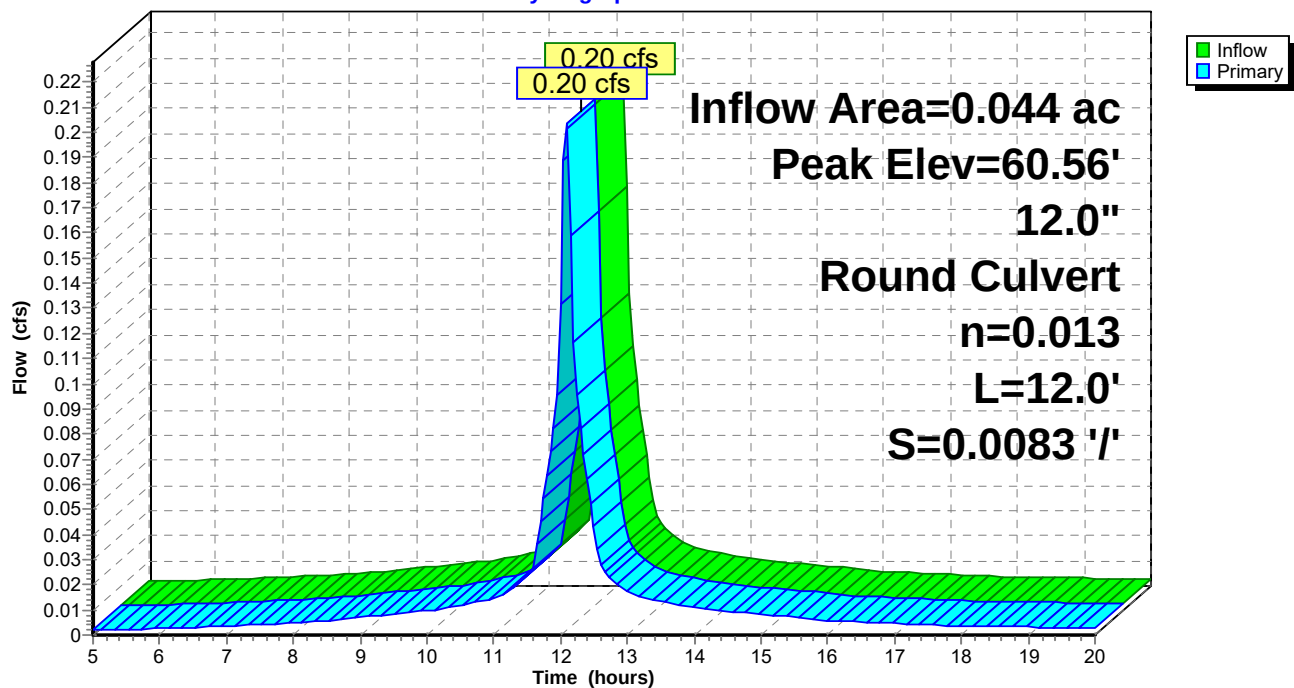
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.56' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.30' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.30' / 60.20' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.20 cfs @ 12.09 hrs HW=60.55' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.20 cfs @ 1.89 fps)

**Pond 31P: CB 51**

Hydrograph



### Summary for Pond 32P: CB 52

Inflow Area = 0.225 ac, 78.85% Impervious, Inflow Depth > 3.81" for 10-Year event  
 Inflow = 0.98 cfs @ 12.09 hrs, Volume= 0.072 af  
 Outflow = 0.98 cfs @ 12.09 hrs, Volume= 0.072 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.98 cfs @ 12.09 hrs, Volume= 0.072 af  
 Routed to Pond 34P : DMH 36

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.93' @ 12.09 hrs

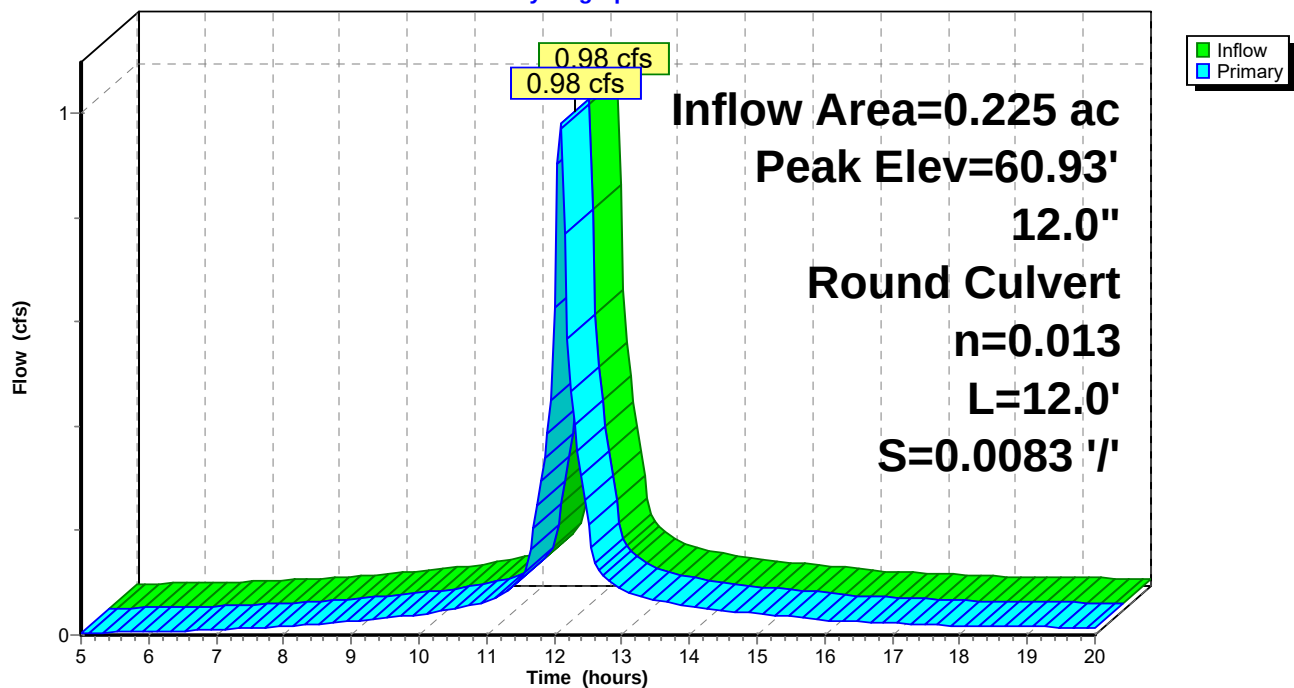
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.30' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.30' / 60.20' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.96 cfs @ 12.09 hrs HW=60.92' (Free Discharge)

1=Culvert (Barrel Controls 0.96 cfs @ 2.67 fps)

### Pond 32P: CB 52

#### Hydrograph



**Summary for Pond 33P: CB 53**

Inflow Area = 0.044 ac, 100.00% Impervious, Inflow Depth > 4.26" for 10-Year event  
 Inflow = 0.21 cfs @ 12.09 hrs, Volume= 0.016 af  
 Outflow = 0.21 cfs @ 12.09 hrs, Volume= 0.016 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.21 cfs @ 12.09 hrs, Volume= 0.016 af  
 Routed to Pond 35P : DMH 37

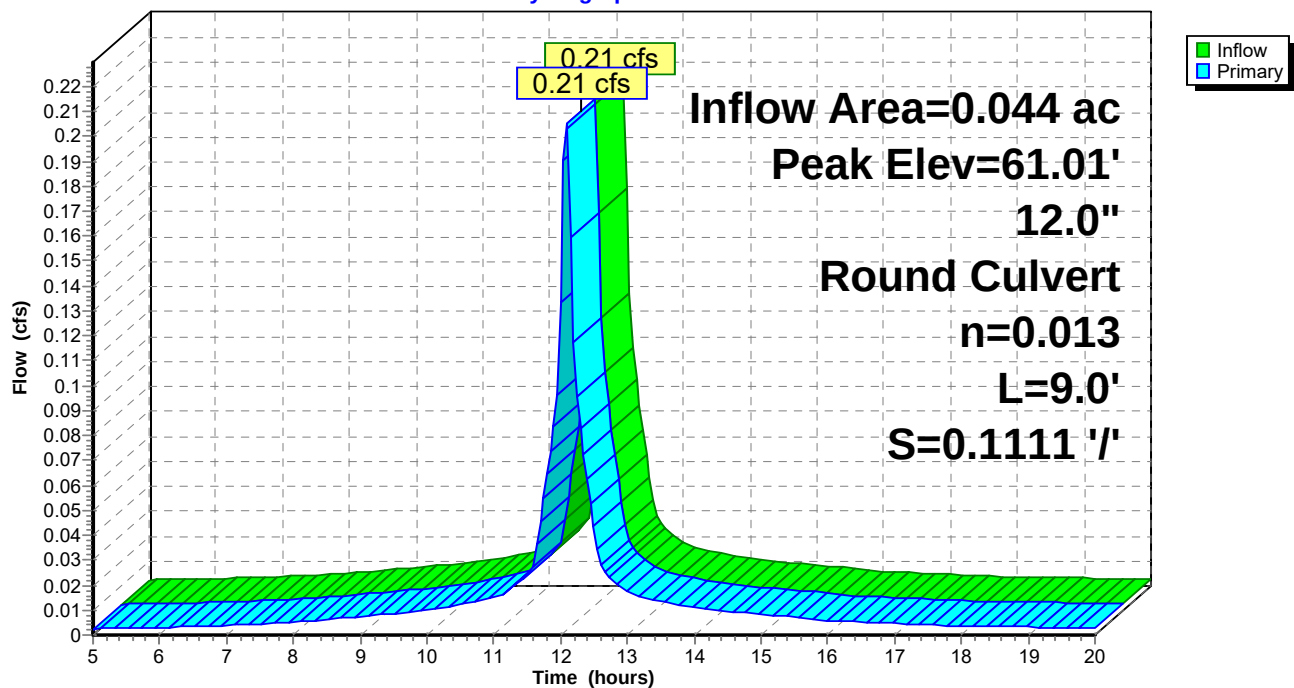
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.01' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.76' | <b>12.0" Round Culvert</b><br>L= 9.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.76' / 59.76' S= 0.1111 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.20 cfs @ 12.09 hrs HW=61.01' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.20 cfs @ 1.33 fps)

**Pond 33P: CB 53**

Hydrograph



### Summary for Pond 34P: DMH 36

Inflow Area = 0.270 ac, 81.82% Impervious, Inflow Depth > 3.87" for 10-Year event  
 Inflow = 1.18 cfs @ 12.09 hrs, Volume= 0.087 af  
 Outflow = 1.18 cfs @ 12.09 hrs, Volume= 0.087 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.18 cfs @ 12.09 hrs, Volume= 0.087 af  
 Routed to Pond 35P : DMH 37

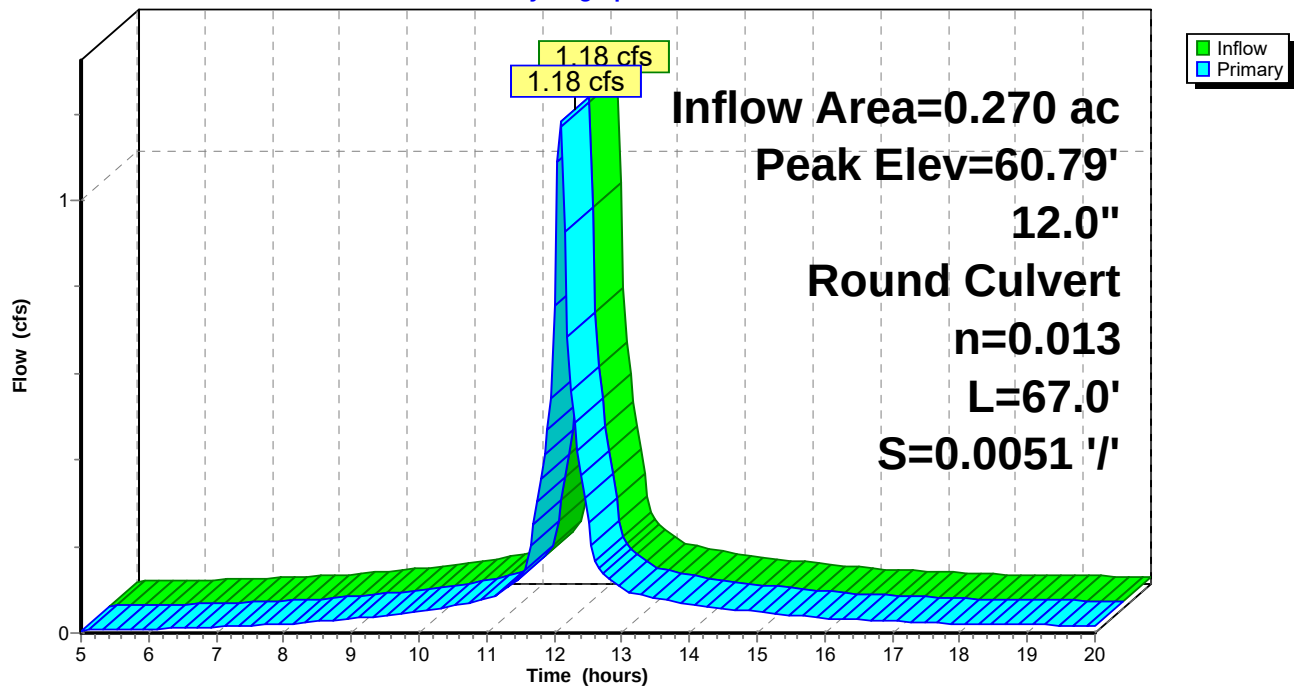
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.79' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.10' | <b>12.0" Round Culvert</b><br>L= 67.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.10' / 59.76' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.15 cfs @ 12.09 hrs HW=60.78' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.15 cfs @ 2.87 fps)

### Pond 34P: DMH 36

#### Hydrograph



**Summary for Pond 35P: DMH 37**

Inflow Area = 0.314 ac, 84.39% Impervious, Inflow Depth > 3.93" for 10-Year event  
 Inflow = 1.39 cfs @ 12.09 hrs, Volume= 0.103 af  
 Outflow = 1.39 cfs @ 12.09 hrs, Volume= 0.103 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.39 cfs @ 12.09 hrs, Volume= 0.103 af  
 Routed to Pond 37P : DMH 38

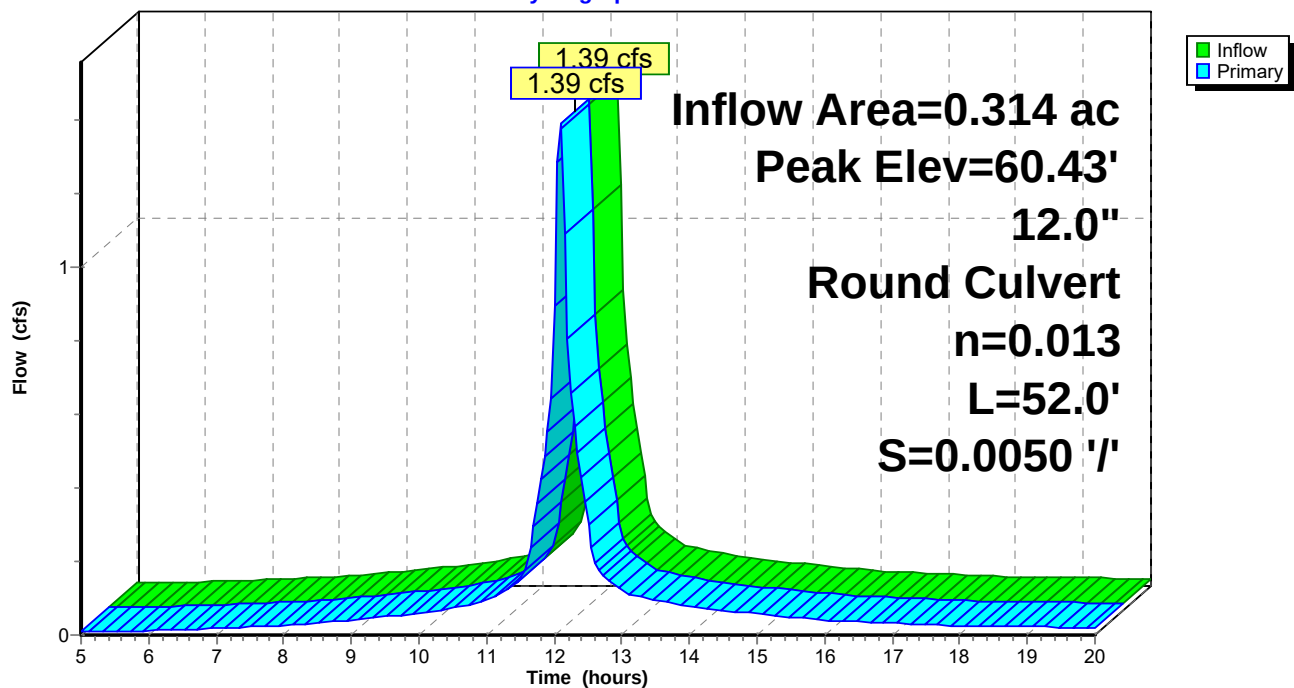
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.43' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.66' | <b>12.0" Round Culvert</b><br>L= 52.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.66' / 59.40' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.35 cfs @ 12.09 hrs HW=60.42' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.35 cfs @ 2.93 fps)

**Pond 35P: DMH 37**

Hydrograph





**Summary for Pond 36P: CB 54**

Inflow Area = 0.200 ac, 94.53% Impervious, Inflow Depth > 4.19" for 10-Year event  
 Inflow = 0.91 cfs @ 12.09 hrs, Volume= 0.070 af  
 Outflow = 0.91 cfs @ 12.09 hrs, Volume= 0.070 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.91 cfs @ 12.09 hrs, Volume= 0.070 af  
 Routed to Pond 37P : DMH 38

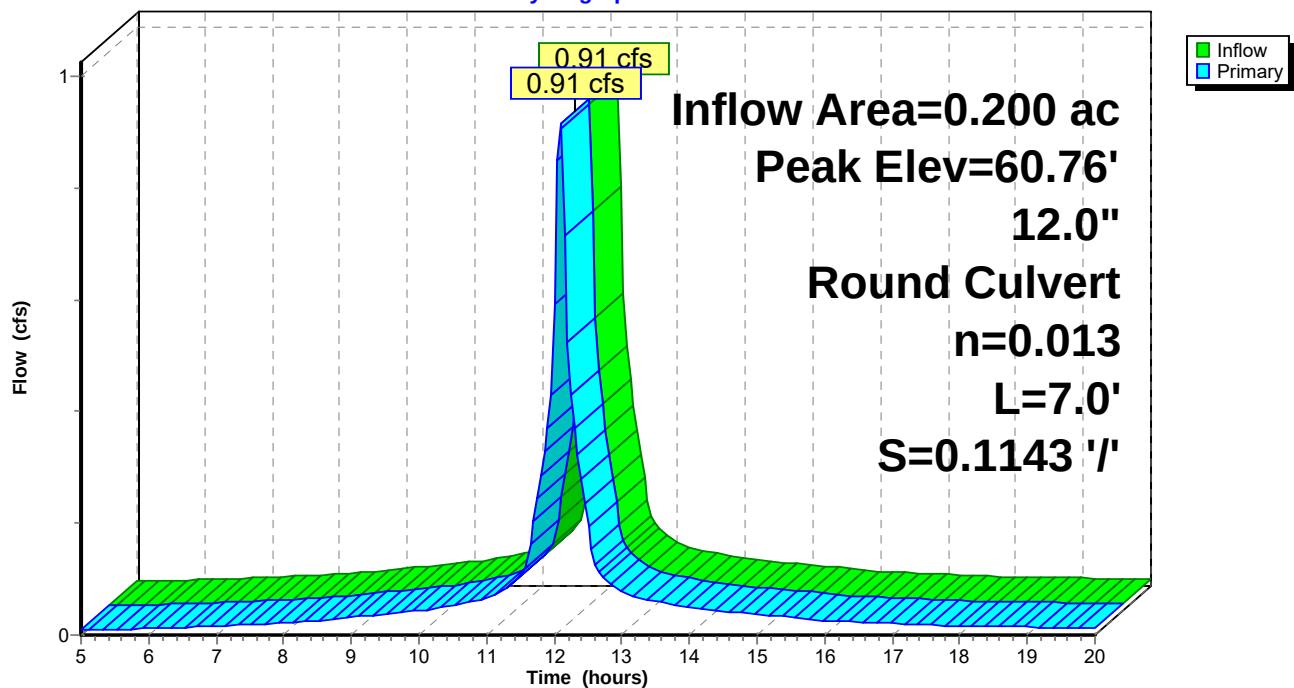
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.76' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.20' | <b>12.0" Round Culvert</b><br>L= 7.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.20' / 59.40' S= 0.1143 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.89 cfs @ 12.09 hrs HW=60.75' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.89 cfs @ 2.00 fps)

**Pond 36P: CB 54**

Hydrograph



**Summary for Pond 37P: DMH 38**

Inflow Area = 0.514 ac, 88.33% Impervious, Inflow Depth > 4.03" for 10-Year event  
 Inflow = 2.30 cfs @ 12.09 hrs, Volume= 0.173 af  
 Outflow = 2.30 cfs @ 12.09 hrs, Volume= 0.173 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.30 cfs @ 12.09 hrs, Volume= 0.173 af  
 Routed to Pond 38P : DMH 39

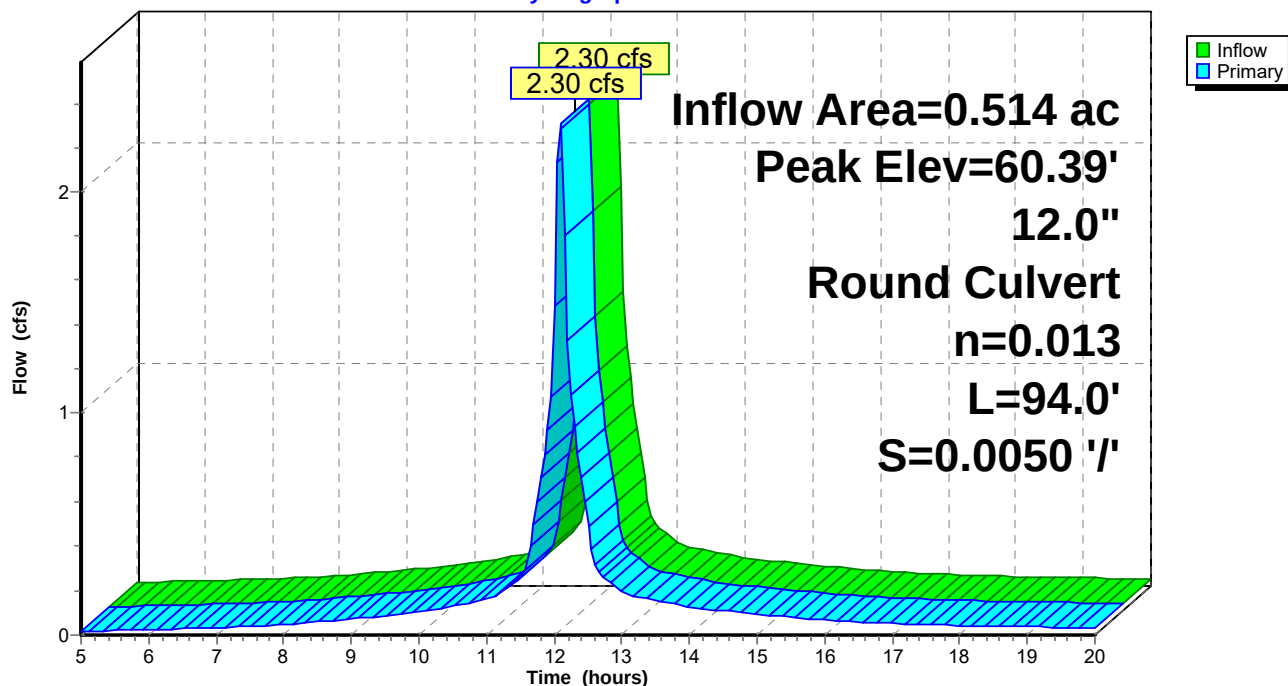
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.39' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.30' | <b>12.0" Round Culvert</b><br>L= 94.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.30' / 58.83' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.24 cfs @ 12.09 hrs HW=60.37' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 2.24 cfs @ 2.86 fps)

**Pond 37P: DMH 38****Hydrograph**

**Summary for Pond 38P: DMH 39**

Inflow Area = 2.170 ac, 80.49% Impervious, Inflow Depth > 3.84" for 10-Year event  
 Inflow = 9.45 cfs @ 12.09 hrs, Volume= 0.695 af  
 Outflow = 9.45 cfs @ 12.09 hrs, Volume= 0.695 af, Atten= 0%, Lag= 0.0 min  
 Primary = 9.45 cfs @ 12.09 hrs, Volume= 0.695 af  
 Routed to Pond 15P : Inf. Basin 5

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.37' @ 12.09 hrs

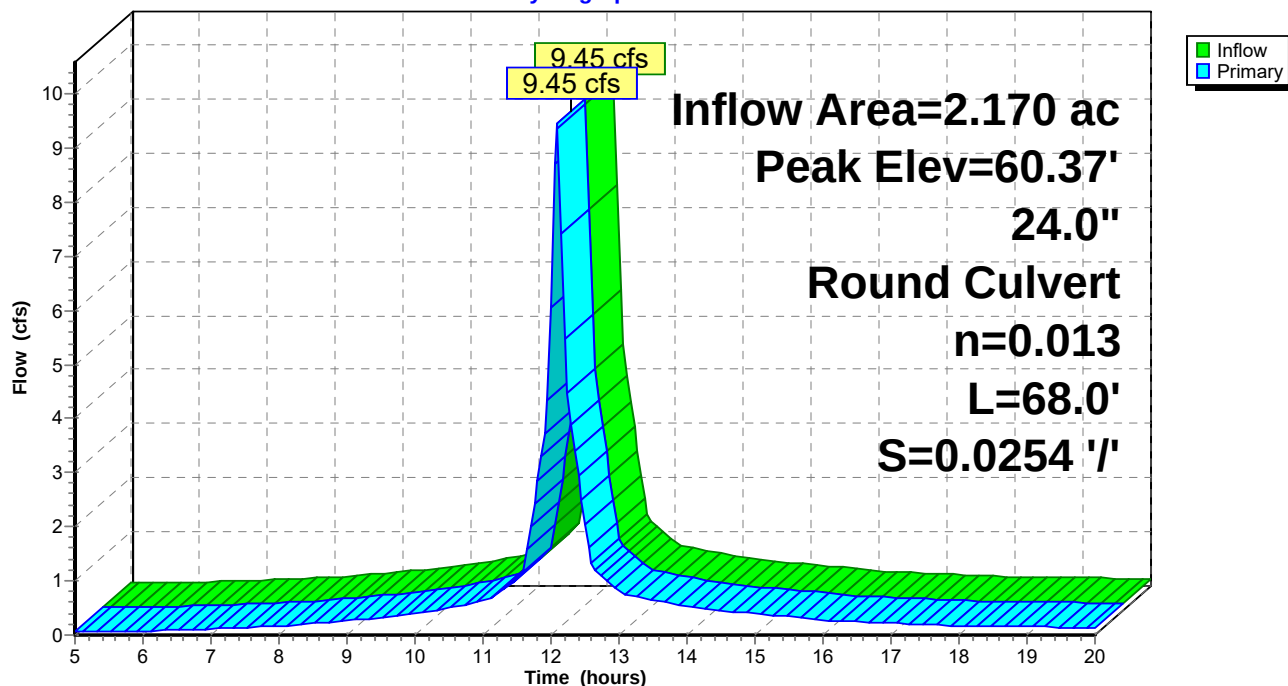
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.73' | <b>24.0" Round Culvert</b><br>L= 68.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.73' / 57.00' S= 0.0254 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=9.21 cfs @ 12.09 hrs HW=60.34' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 9.21 cfs @ 3.41 fps)

**Pond 38P: DMH 39**

Hydrograph



### Summary for Pond 41P: CB 49

Inflow Area = 0.022 ac, 100.00% Impervious, Inflow Depth > 4.26" for 10-Year event  
 Inflow = 0.10 cfs @ 12.09 hrs, Volume= 0.008 af  
 Outflow = 0.10 cfs @ 12.09 hrs, Volume= 0.008 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.10 cfs @ 12.09 hrs, Volume= 0.008 af  
 Routed to Pond 43P : DMH 35

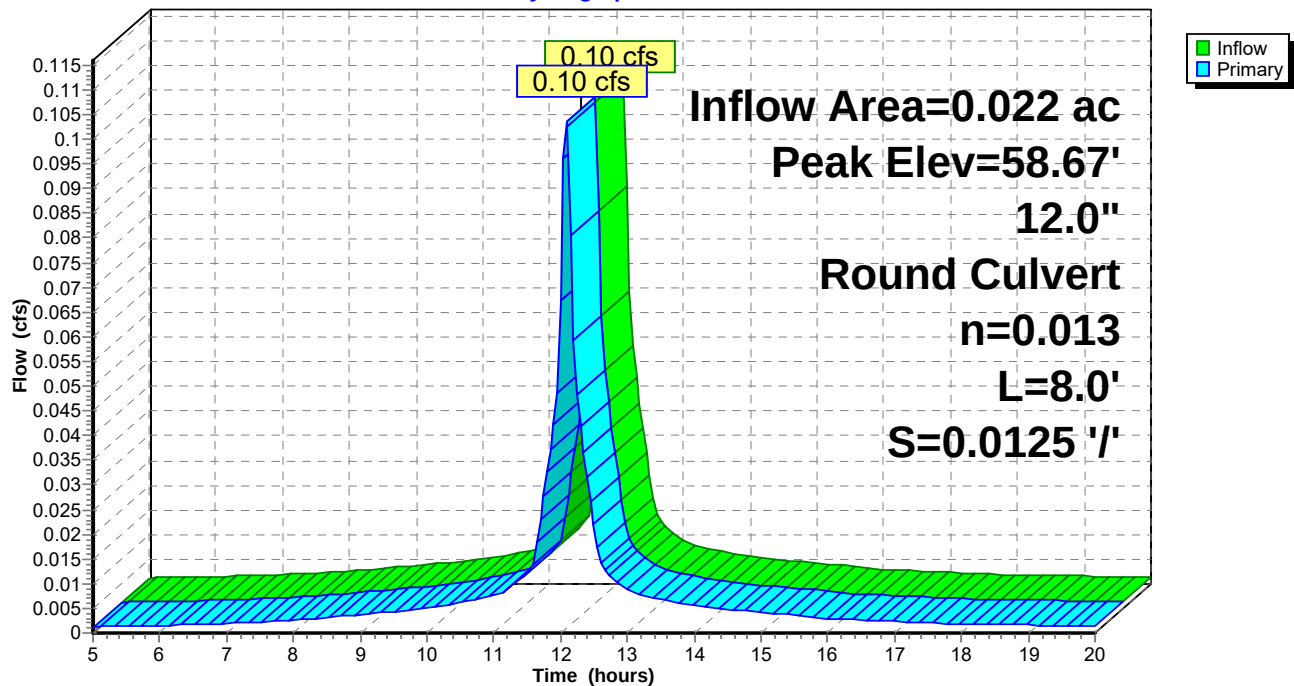
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.67' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.50' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.50' / 58.40' S= 0.0125 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.10 cfs @ 12.09 hrs HW=58.67' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.10 cfs @ 1.12 fps)

### Pond 41P: CB 49

Hydrograph



### Summary for Pond 42P: CB 50

Inflow Area = 0.182 ac, 66.96% Impervious, Inflow Depth > 3.51" for 10-Year event  
 Inflow = 0.75 cfs @ 12.09 hrs, Volume= 0.053 af  
 Outflow = 0.75 cfs @ 12.09 hrs, Volume= 0.053 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.75 cfs @ 12.09 hrs, Volume= 0.053 af  
 Routed to Pond 43P : DMH 35

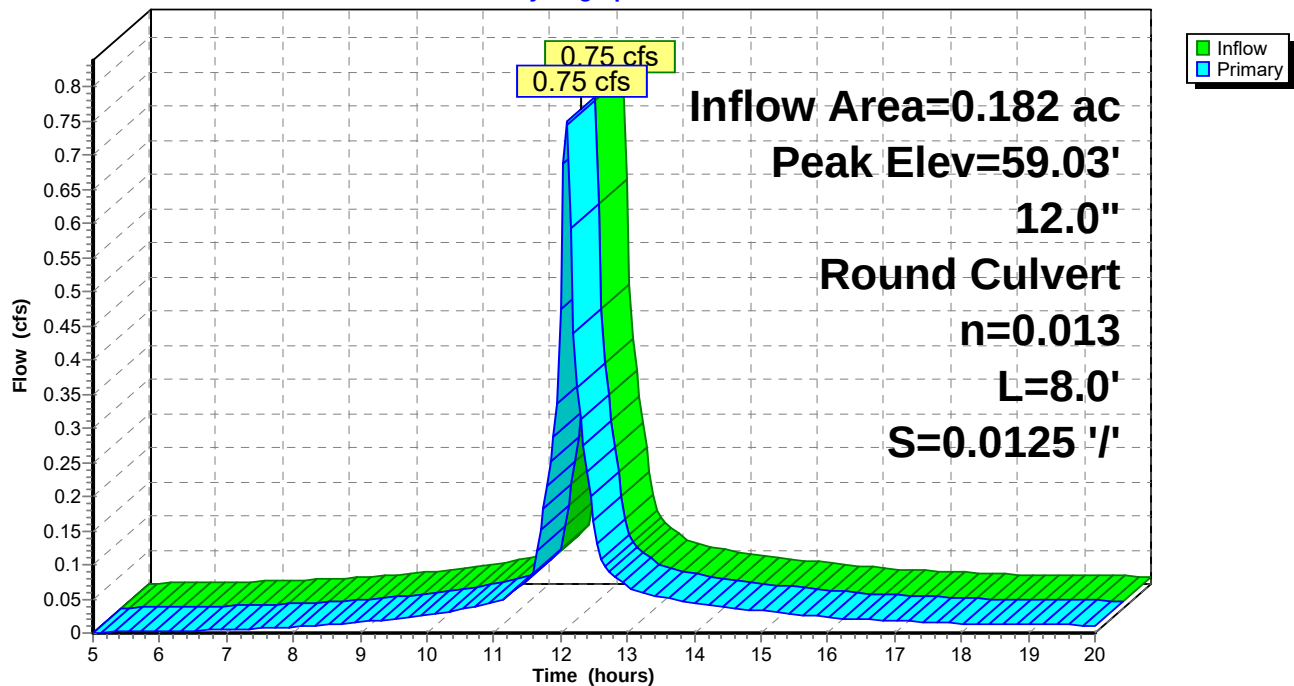
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.03' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.50' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.50' / 58.40' S= 0.0125 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.73 cfs @ 12.09 hrs HW=59.02' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.73 cfs @ 2.58 fps)

### Pond 42P: CB 50

#### Hydrograph



**Summary for Pond 43P: DMH 35**

Inflow Area = 0.205 ac, 70.58% Impervious, Inflow Depth > 3.59" for 10-Year event  
 Inflow = 0.85 cfs @ 12.09 hrs, Volume= 0.061 af  
 Outflow = 0.85 cfs @ 12.09 hrs, Volume= 0.061 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.85 cfs @ 12.09 hrs, Volume= 0.061 af  
 Routed to Pond 206P : DMH 34

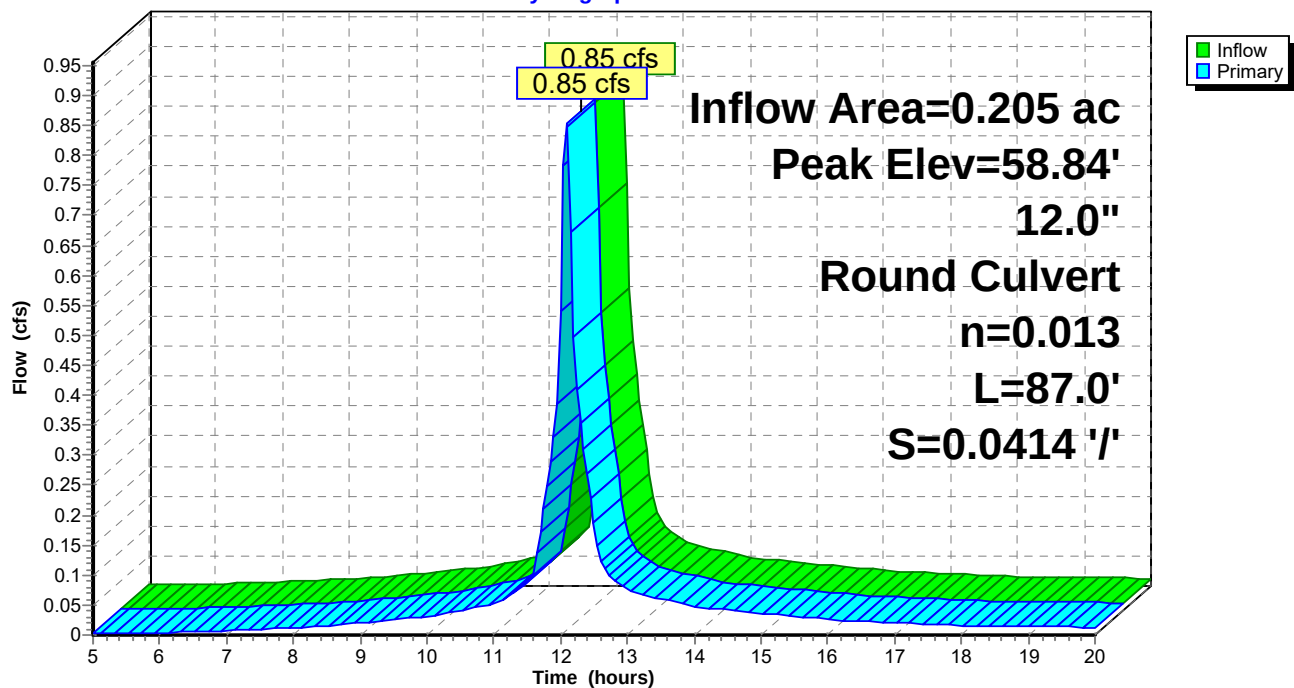
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.84' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.30' | <b>12.0" Round Culvert</b><br>L= 87.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.30' / 54.70' S= 0.0414 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.83 cfs @ 12.09 hrs HW=58.83' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.83 cfs @ 1.96 fps)

**Pond 43P: DMH 35**

Hydrograph



**Summary for Pond 46P: CB 48**

Inflow Area = 0.352 ac, 70.58% Impervious, Inflow Depth > 2.83" for 10-Year event  
 Inflow = 1.22 cfs @ 12.09 hrs, Volume= 0.083 af  
 Outflow = 1.22 cfs @ 12.09 hrs, Volume= 0.083 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.22 cfs @ 12.09 hrs, Volume= 0.083 af  
 Routed to Pond 48P : DMH 33

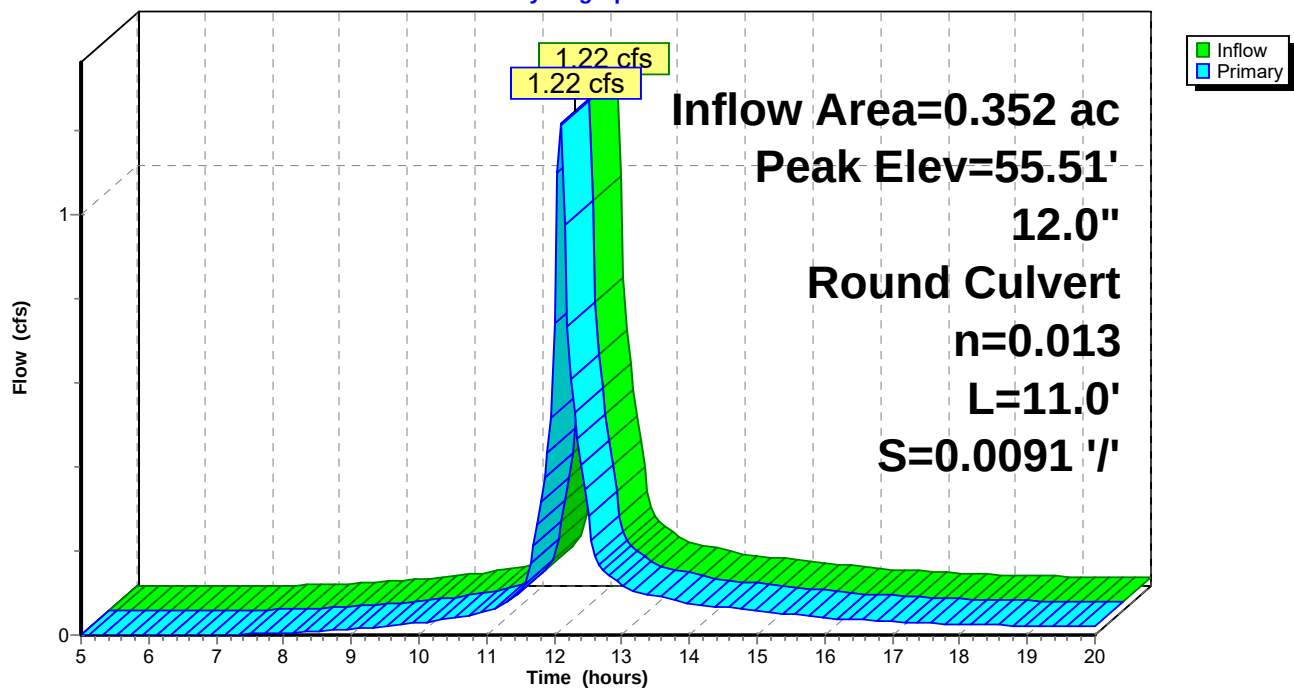
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 55.51' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.80' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.80' / 54.70' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.19 cfs @ 12.09 hrs HW=55.51' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.19 cfs @ 2.83 fps)

**Pond 46P: CB 48**

Hydrograph



**Summary for Pond 47P: CB 47**

Inflow Area = 0.120 ac, 97.54% Impervious, Inflow Depth > 4.19" for 10-Year event  
 Inflow = 0.55 cfs @ 12.09 hrs, Volume= 0.042 af  
 Outflow = 0.55 cfs @ 12.09 hrs, Volume= 0.042 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.55 cfs @ 12.09 hrs, Volume= 0.042 af  
 Routed to Pond 48P : DMH 33

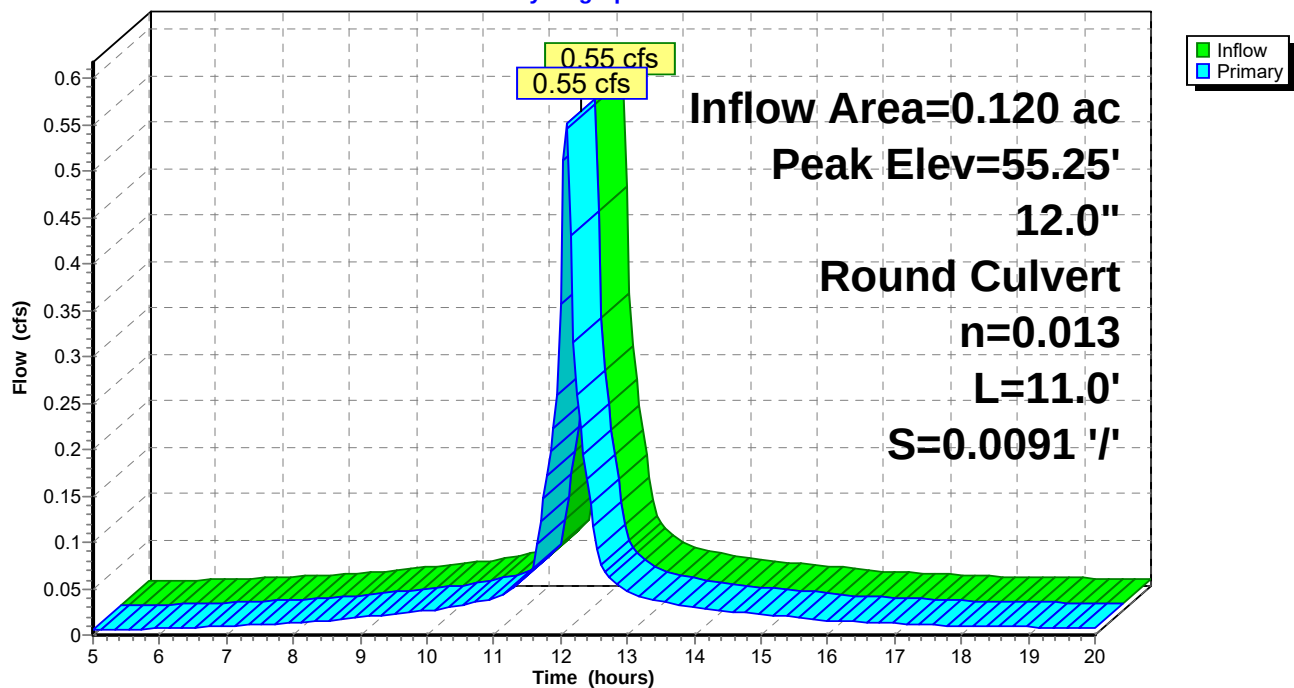
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 55.25' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.80' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.80' / 54.70' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.54 cfs @ 12.09 hrs HW=55.24' (Free Discharge)

1=Culvert (Barrel Controls 0.54 cfs @ 2.37 fps)

**Pond 47P: CB 47****Hydrograph**



**Summary for Pond 48P: DMH 33**

Inflow Area = 0.472 ac, 77.45% Impervious, Inflow Depth > 3.18" for 10-Year event  
 Inflow = 1.77 cfs @ 12.09 hrs, Volume= 0.125 af  
 Outflow = 1.77 cfs @ 12.09 hrs, Volume= 0.125 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.77 cfs @ 12.09 hrs, Volume= 0.125 af  
 Routed to Pond 49P : Sub. Inf. 4

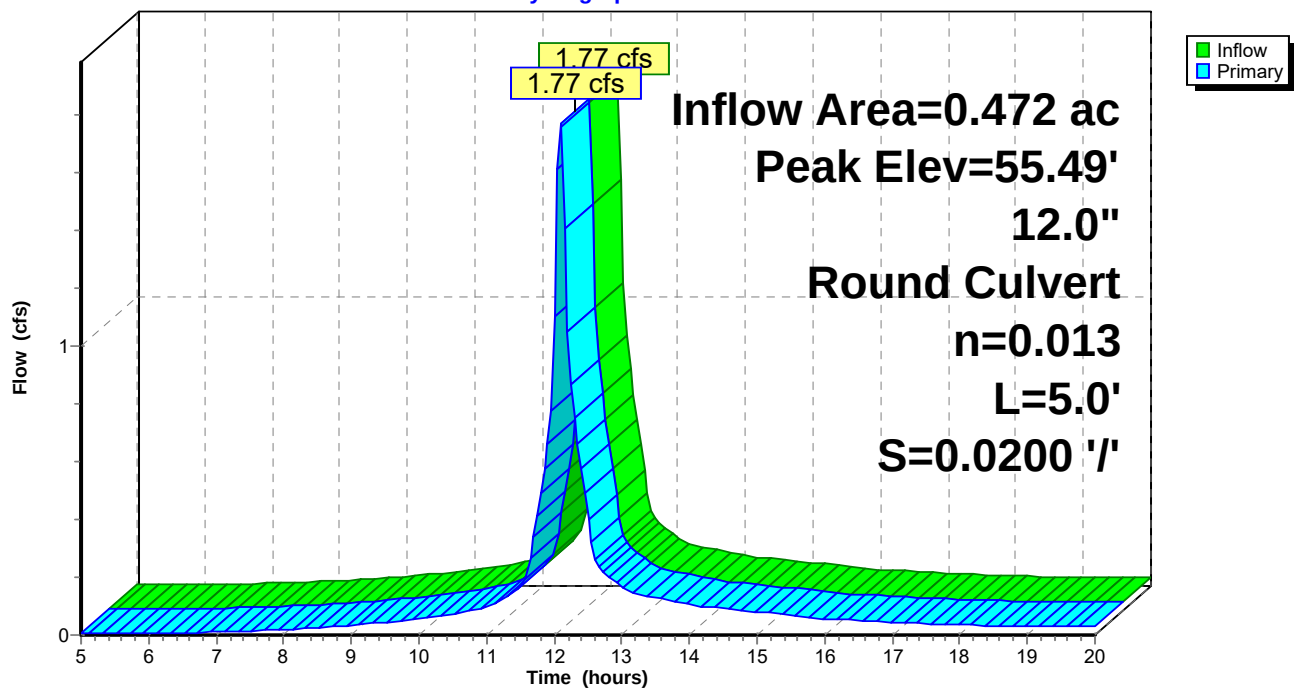
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 55.49' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.60' | <b>12.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0200 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.73 cfs @ 12.09 hrs HW=55.47' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 1.73 cfs @ 3.18 fps)

**Pond 48P: DMH 33****Hydrograph**

**Summary for Pond 49P: Sub. Inf. 4**

Inflow Area = 1.242 ac, 70.79% Impervious, Inflow Depth > 3.32" for 10-Year event  
 Inflow = 4.86 cfs @ 12.09 hrs, Volume= 0.344 af  
 Outflow = 1.78 cfs @ 12.36 hrs, Volume= 0.238 af, Atten= 63%, Lag= 16.0 min  
 Discarded = 0.13 cfs @ 12.36 hrs, Volume= 0.109 af  
 Primary = 1.65 cfs @ 12.36 hrs, Volume= 0.129 af  
 Routed to Link 59L : DP 1

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.60' @ 12.36 hrs Surf.Area= 0.074 ac Storage= 0.141 af

Plug-Flow detention time= 116.7 min calculated for 0.237 af (69% of inflow)  
 Center-of-Mass det. time= 50.0 min ( 814.8 - 764.9 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                        |
|--------|--------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 54.00' | 0.045 af      | <b>55.25'W x 58.58'L x 3.00'H Field A</b><br>0.223 af Overall - 0.111 af Embedded = 0.112 af x 40.0% Voids                                                                                                                                                 |
| #2A    | 54.50' | 0.111 af      | <b>ADS StormTech SC-740 b +Cap x 104 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>104 Chambers in 13 Rows<br>Cap Storage= 2.7 cf x 2 x 13 rows = 69.0 cf |
|        |        | 0.156 af      | Total Available Storage                                                                                                                                                                                                                                    |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 54.00' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 50.00'                                                                                                              |
| #2     | Primary   | 54.00' | <b>12.0" Round Culvert</b><br>L= 76.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.00' / 51.50' S= 0.0329 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 56.00' | <b>4.0" Vert. Orifice/Grate X 3.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                             |
| #4     | Device 2  | 56.80' | <b>4.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b><br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32                                                               |
| #5     | Primary   | 54.00' | <b>12.0" Round Culvert</b><br>L= 76.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.00' / 51.00' S= 0.0395 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #6     | Device 5  | 56.80' | <b>4.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b><br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32                                                               |
| #7     | Device 5  | 56.00' | <b>4.0" Vert. Orifice/Grate X 3.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                             |

**Discarded OutFlow** Max=0.13 cfs @ 12.36 hrs HW=56.60' (Free Discharge)

1=Exfiltration ( Controls 0.13 cfs)

**Primary OutFlow** Max=1.65 cfs @ 12.36 hrs HW=56.60' (Free Discharge)

2=Culvert (Passes 0.83 cfs of 4.32 cfs potential flow)

3=Orifice/Grate (Orifice Controls 0.83 cfs @ 3.15 fps)

4=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

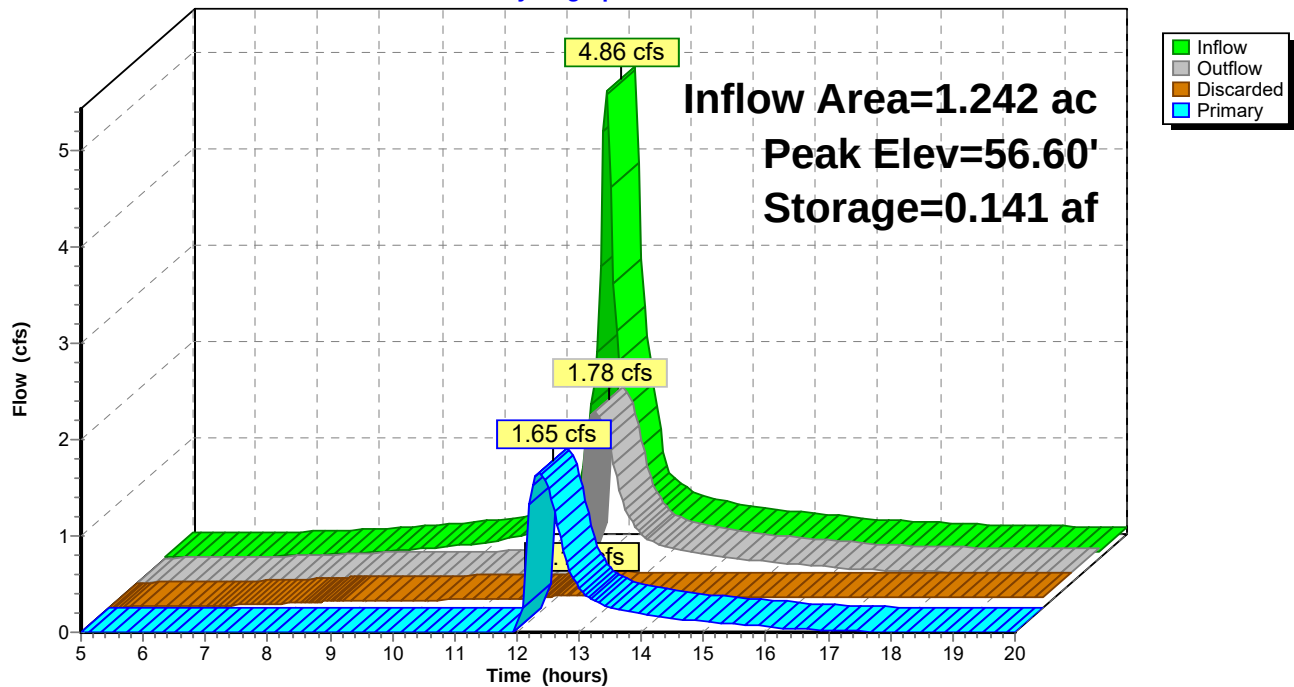
5=Culvert (Passes 0.83 cfs of 4.32 cfs potential flow)

6=Broad-Crested Rectangular Weir ( Controls 0.00 cfs)

7=Orifice/Grate (Orifice Controls 0.83 cfs @ 3.15 fps)

### Pond 49P: Sub. Inf. 4

Hydrograph



## Summary for Pond 52P: CB 20

Inflow Area = 0.321 ac, 29.26% Impervious, Inflow Depth > 0.85" for 10-Year event  
 Inflow = 0.29 cfs @ 12.11 hrs, Volume= 0.023 af  
 Outflow = 0.29 cfs @ 12.11 hrs, Volume= 0.023 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.29 cfs @ 12.11 hrs, Volume= 0.023 af  
 Routed to Pond 54P : DMH 15

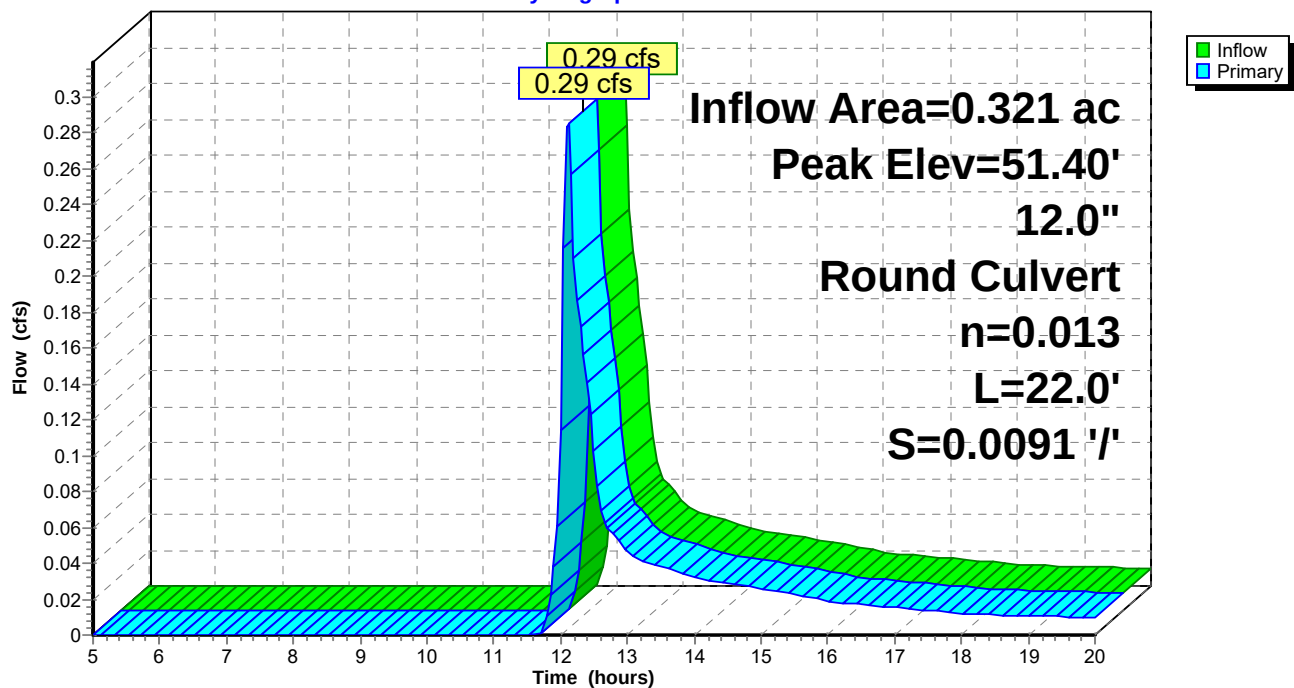
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 51.40' @ 12.11 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.10' | <b>12.0" Round Culvert</b><br>L= 22.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.10' / 50.90' S= 0.0091 ' / Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.28 cfs @ 12.11 hrs HW=51.39' (Free Discharge)  
**1=Culvert** (Inlet Controls 0.28 cfs @ 1.45 fps)

## Pond 52P: CB 20

## Hydrograph



**Summary for Pond 53P: CB 21**

Inflow Area = 0.525 ac, 65.45% Impervious, Inflow Depth > 2.39" for 10-Year event  
 Inflow = 1.55 cfs @ 12.09 hrs, Volume= 0.105 af  
 Outflow = 1.55 cfs @ 12.09 hrs, Volume= 0.105 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.55 cfs @ 12.09 hrs, Volume= 0.105 af  
 Routed to Pond 54P : DMH 15

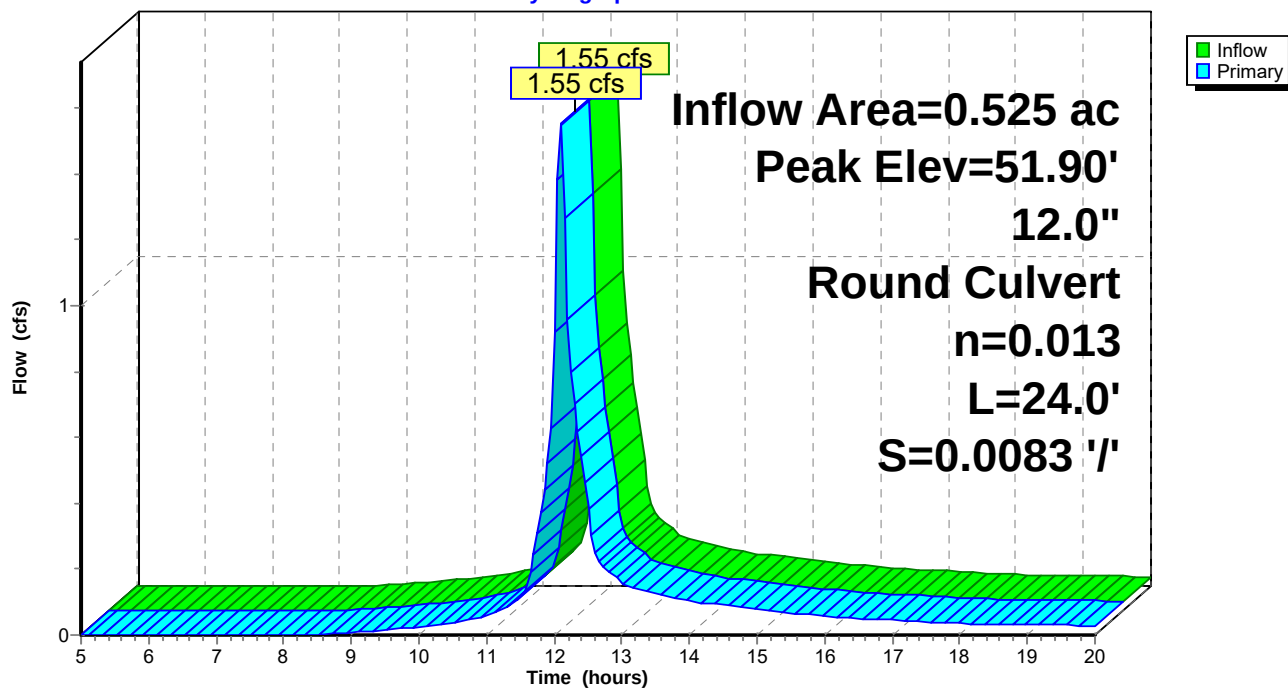
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.90' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.10' | <b>12.0" Round Culvert</b><br>L= 24.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.10' / 50.90' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.52 cfs @ 12.09 hrs HW=51.89' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.52 cfs @ 3.16 fps)

**Pond 53P: CB 21**

Hydrograph



### Summary for Pond 54P: DMH 15

Inflow Area = 0.846 ac, 51.73% Impervious, Inflow Depth > 1.81" for 10-Year event  
 Inflow = 1.83 cfs @ 12.10 hrs, Volume= 0.127 af  
 Outflow = 1.83 cfs @ 12.10 hrs, Volume= 0.127 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.83 cfs @ 12.10 hrs, Volume= 0.127 af  
 Routed to Pond 55P : DMH 16

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 51.70' @ 12.10 hrs

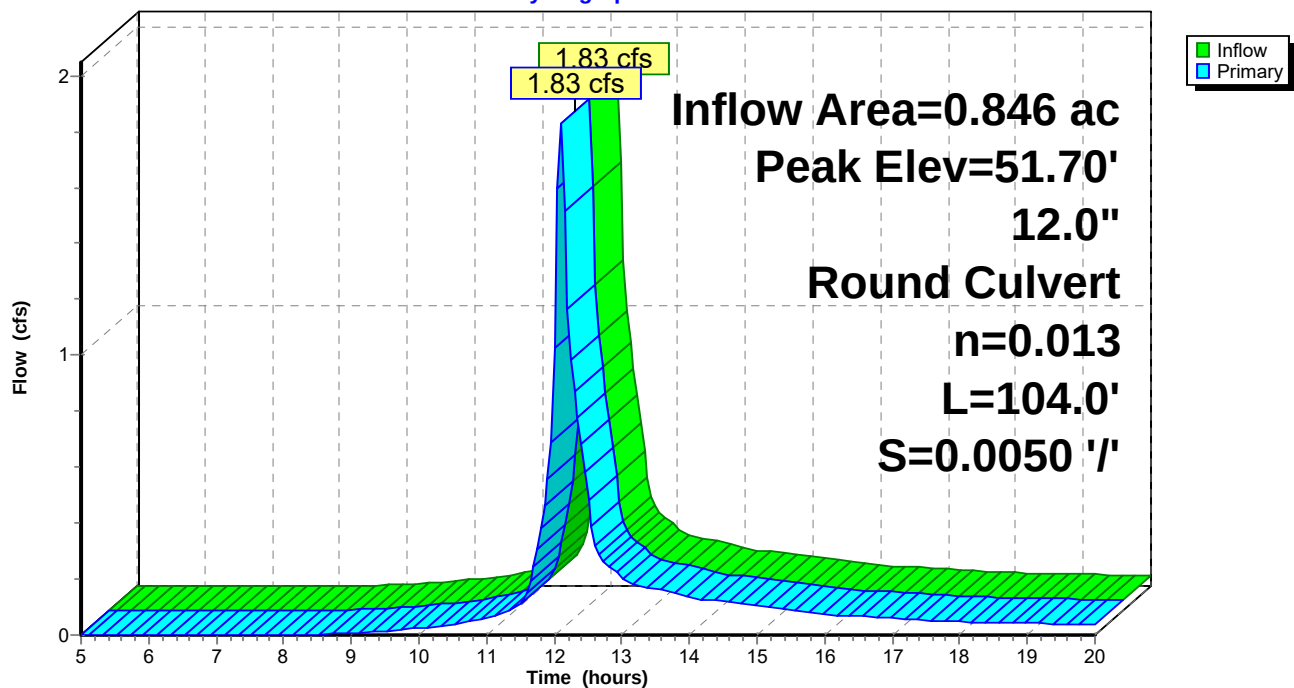
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.80' | <b>12.0" Round Culvert</b><br>L= 104.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.80' / 50.28' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.81 cfs @ 12.10 hrs HW=51.69' (Free Discharge)

1=Culvert (Barrel Controls 1.81 cfs @ 3.24 fps)

### Pond 54P: DMH 15

#### Hydrograph



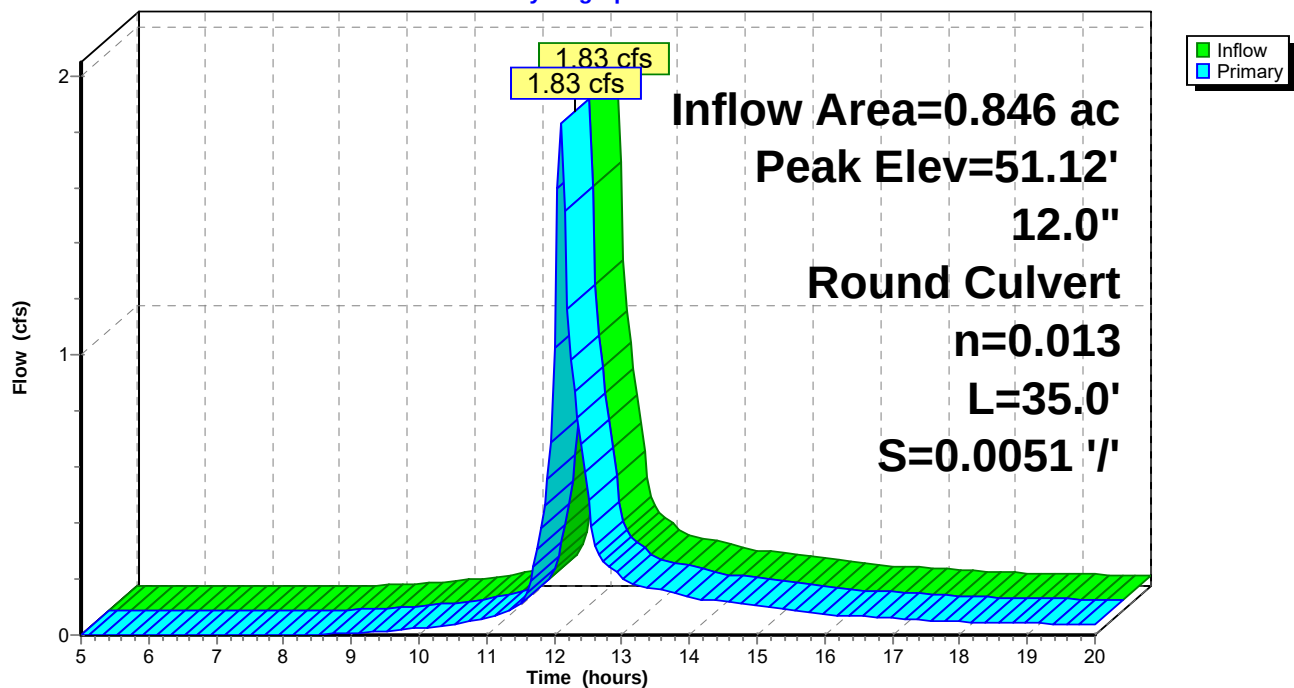
**Summary for Pond 55P: DMH 16**

Inflow Area = 0.846 ac, 51.73% Impervious, Inflow Depth > 1.81" for 10-Year event  
 Inflow = 1.83 cfs @ 12.10 hrs, Volume= 0.127 af  
 Outflow = 1.83 cfs @ 12.10 hrs, Volume= 0.127 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.83 cfs @ 12.10 hrs, Volume= 0.127 af  
 Routed to Pond 56P : Inf. Basin 4

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.12' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.18' | <b>12.0" Round Culvert</b><br>L= 35.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.18' / 50.00' S= 0.0051 ' / Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.81 cfs @ 12.10 hrs HW=51.11' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.81 cfs @ 3.09 fps)

**Pond 55P: DMH 16****Hydrograph**

### Summary for Pond 56P: Inf. Basin 4

Inflow Area = 1.385 ac, 33.76% Impervious, Inflow Depth > 1.15" for 10-Year event  
 Inflow = 1.83 cfs @ 12.10 hrs, Volume= 0.133 af  
 Outflow = 0.54 cfs @ 12.47 hrs, Volume= 0.133 af, Atten= 70%, Lag= 22.7 min  
 Discarded = 0.54 cfs @ 12.47 hrs, Volume= 0.133 af  
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Link 59L : DP 1

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.91' @ 12.47 hrs Surf.Area= 2,157 sf Storage= 1,428 cf

Plug-Flow detention time= 21.9 min calculated for 0.133 af (100% of inflow)  
 Center-of-Mass det. time= 21.3 min ( 828.5 - 807.2 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 50.00' | 11,770 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 50.00               | 985                  | 0                         | 0                         |
| 51.00               | 2,275                | 1,630                     | 1,630                     |
| 52.00               | 2,983                | 2,629                     | 4,259                     |
| 53.00               | 3,742                | 3,363                     | 7,622                     |
| 54.00               | 4,554                | 4,148                     | 11,770                    |

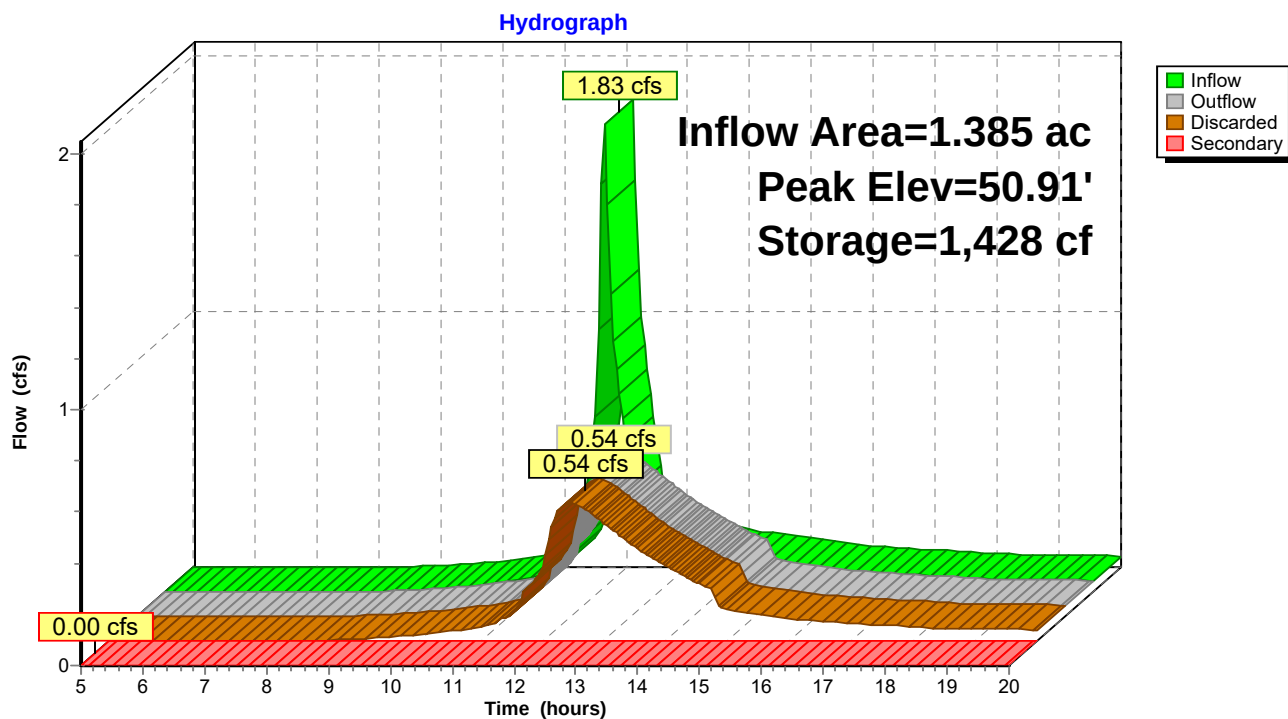
| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                                                                                   |
|--------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 50.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 48.00'                                                                                                                                                                              |
| #2     | Secondary | 53.50' | <b>6.0' long x 6.0' breadth Broad-Crested Rectangular Weir</b><br>Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00<br>2.50 3.00 3.50 4.00 4.50 5.00 5.50<br>Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65<br>2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83 |

**Discarded OutFlow** Max=0.54 cfs @ 12.47 hrs HW=50.91' (Free Discharge)  
 ↳ **1=Exfiltration** ( Controls 0.54 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=50.00' (Free Discharge)  
 ↳ **2=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)



# Pond 56P: Inf. Basin 4



### Summary for Pond 60P: Sub. Det. 1

Inflow Area = 1.994 ac, 68.75% Impervious, Inflow Depth > 3.54" for 10-Year event  
 Inflow = 8.25 cfs @ 12.09 hrs, Volume= 0.588 af  
 Outflow = 7.23 cfs @ 12.14 hrs, Volume= 0.501 af, Atten= 12%, Lag= 2.9 min  
 Primary = 7.23 cfs @ 12.14 hrs, Volume= 0.501 af  
 Routed to Pond 187P : Constructed Wetland 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.04' @ 12.14 hrs Surf.Area= 0.094 ac Storage= 0.132 af

Plug-Flow detention time= 80.5 min calculated for 0.500 af (85% of inflow)  
 Center-of-Mass det. time= 37.4 min ( 798.0 - 760.6 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                      |
|--------|--------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 60.00' | 0.083 af      | <b>39.50'W x 103.30'L x 3.50'H Field A</b><br>0.328 af Overall - 0.119 af Embedded = 0.209 af x 40.0% Voids                                                                                                                                              |
| #2A    | 60.50' | 0.119 af      | <b>ADS StormTech SC-740 b +Cap x 112 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>112 Chambers in 8 Rows<br>Cap Storage= 2.7 cf x 2 x 8 rows = 42.5 cf |
|        |        | 0.203 af      | Total Available Storage                                                                                                                                                                                                                                  |

Storage Group A created with Chamber Wizard

| Device | Routing  | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary  | 60.00' | <b>18.0" Round Culvert</b><br>L= 29.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.00' / 56.00' S= 0.1379 ' S= 0.1379 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |
| #2     | Device 1 | 60.50' | <b>1.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                                |
| #3     | Device 1 | 61.35' | <b>4.0' long Sharp-Crested Rectangular Weir</b> 2 End Contraction(s)                                                                                                                                                      |

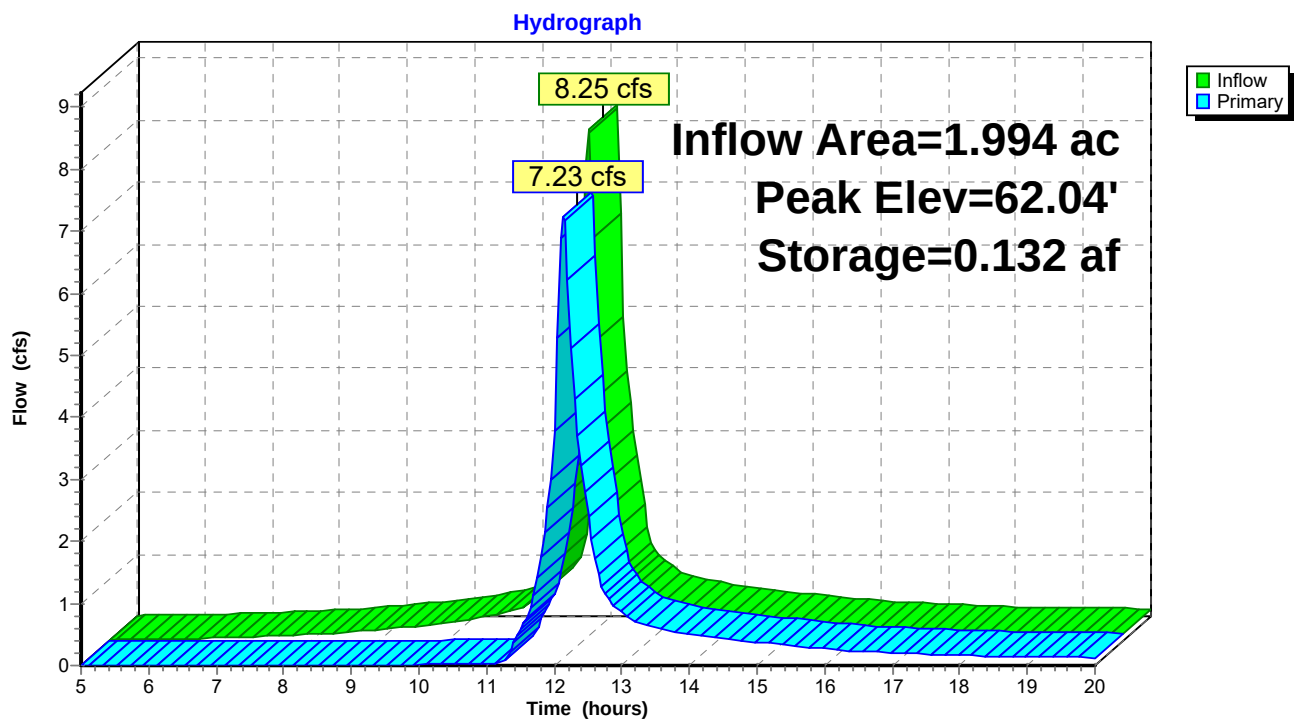
**Primary OutFlow** Max=7.10 cfs @ 12.14 hrs HW=62.03' (Free Discharge)

1=Culvert (Passes 7.10 cfs of 7.60 cfs potential flow)

2=Orifice/Grate (Orifice Controls 0.03 cfs @ 5.87 fps)

3=Sharp-Crested Rectangular Weir (Weir Controls 7.07 cfs @ 2.69 fps)

**Pond 60P: Sub. Det. 1**



**Summary for Pond 61P: CB 8**

Inflow Area = 0.117 ac, 57.03% Impervious, Inflow Depth > 1.99" for 10-Year event  
 Inflow = 0.29 cfs @ 12.10 hrs, Volume= 0.019 af  
 Outflow = 0.29 cfs @ 12.10 hrs, Volume= 0.019 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.29 cfs @ 12.10 hrs, Volume= 0.019 af  
 Routed to Pond 171P : DMH 6

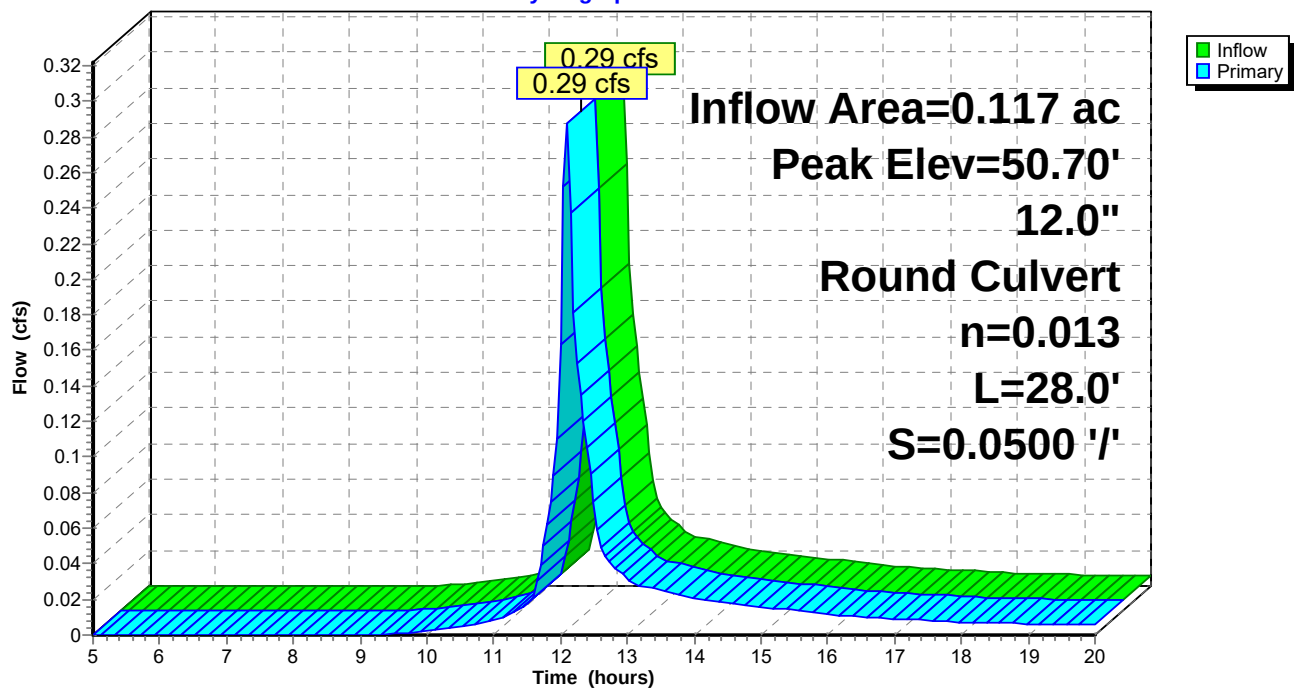
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.70' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.40' | <b>12.0" Round Culvert</b><br>L= 28.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.40' / 49.00' S= 0.0500 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.28 cfs @ 12.10 hrs HW=50.70' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.28 cfs @ 1.46 fps)

**Pond 61P: CB 8**

Hydrograph



### Summary for Pond 62P: CB 66

Inflow Area = 0.149 ac, 73.97% Impervious, Inflow Depth > 3.71" for 10-Year event  
 Inflow = 0.64 cfs @ 12.09 hrs, Volume= 0.046 af  
 Outflow = 0.64 cfs @ 12.09 hrs, Volume= 0.046 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.64 cfs @ 12.09 hrs, Volume= 0.046 af  
 Routed to Pond 64P : DMH 47

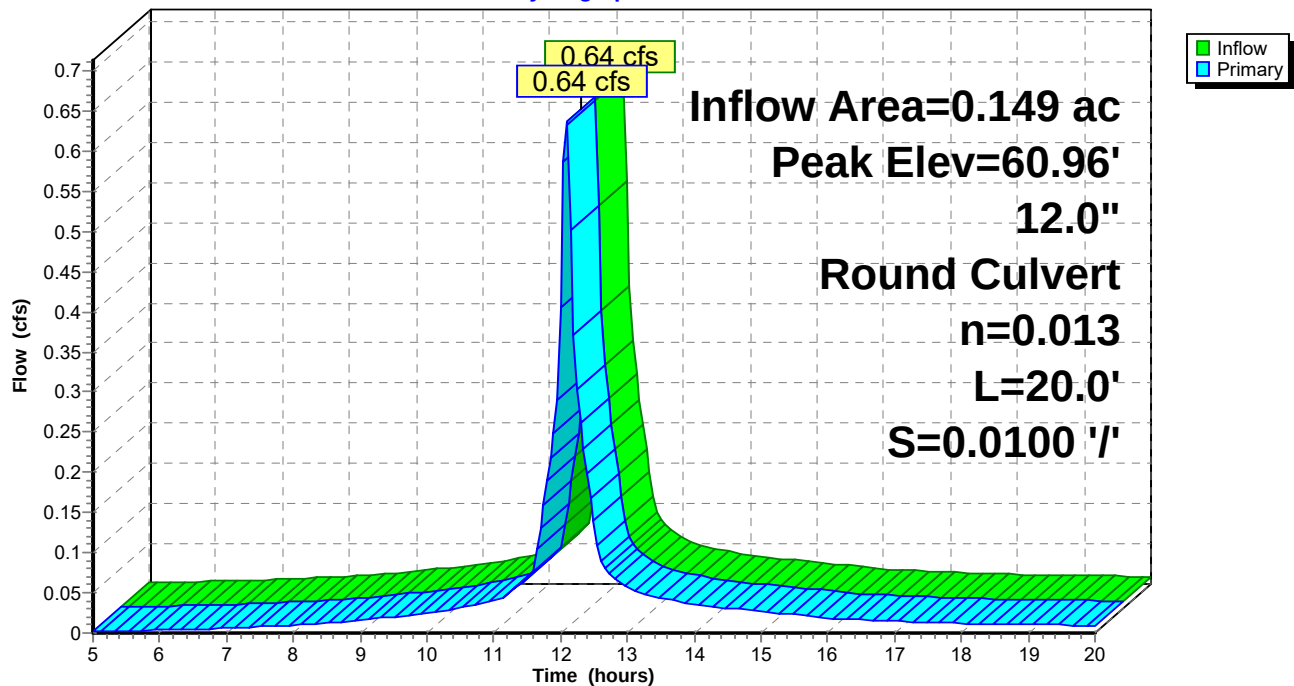
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.96' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.50' | <b>12.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.50' / 60.30' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.62 cfs @ 12.09 hrs HW=60.95' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.62 cfs @ 1.80 fps)

### Pond 62P: CB 66

Hydrograph



### Summary for Pond 63P: CB 67

Inflow Area = 0.034 ac, 87.02% Impervious, Inflow Depth > 4.00" for 10-Year event  
 Inflow = 0.15 cfs @ 12.09 hrs, Volume= 0.011 af  
 Outflow = 0.15 cfs @ 12.09 hrs, Volume= 0.011 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.15 cfs @ 12.09 hrs, Volume= 0.011 af  
 Routed to Pond 64P : DMH 47

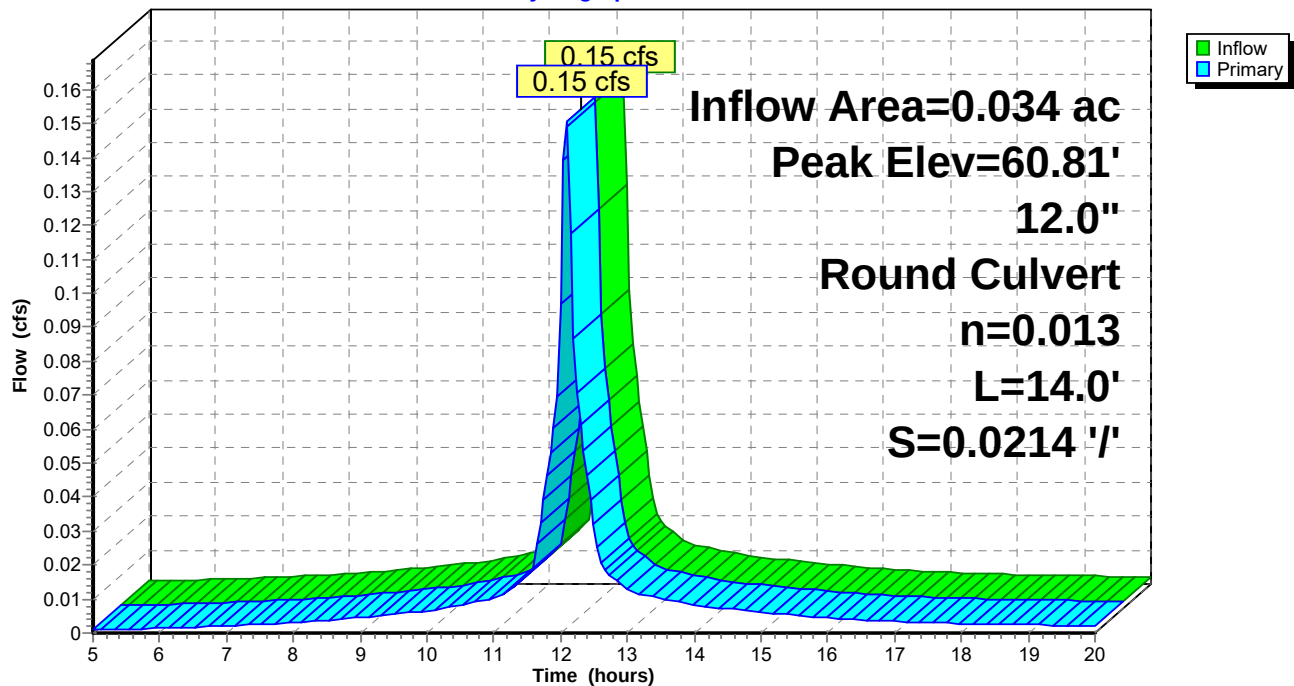
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.81' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.60' | <b>12.0" Round Culvert</b><br>L= 14.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.60' / 60.30' S= 0.0214 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.15 cfs @ 12.09 hrs HW=60.81' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.15 cfs @ 1.23 fps)

### Pond 63P: CB 67

Hydrograph



**Summary for Pond 64P: DMH 47**

Inflow Area = 0.608 ac, 68.77% Impervious, Inflow Depth > 3.58" for 10-Year event  
 Inflow = 2.54 cfs @ 12.09 hrs, Volume= 0.182 af  
 Outflow = 2.54 cfs @ 12.09 hrs, Volume= 0.182 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.54 cfs @ 12.09 hrs, Volume= 0.182 af  
 Routed to Pond 207P : DMH 48

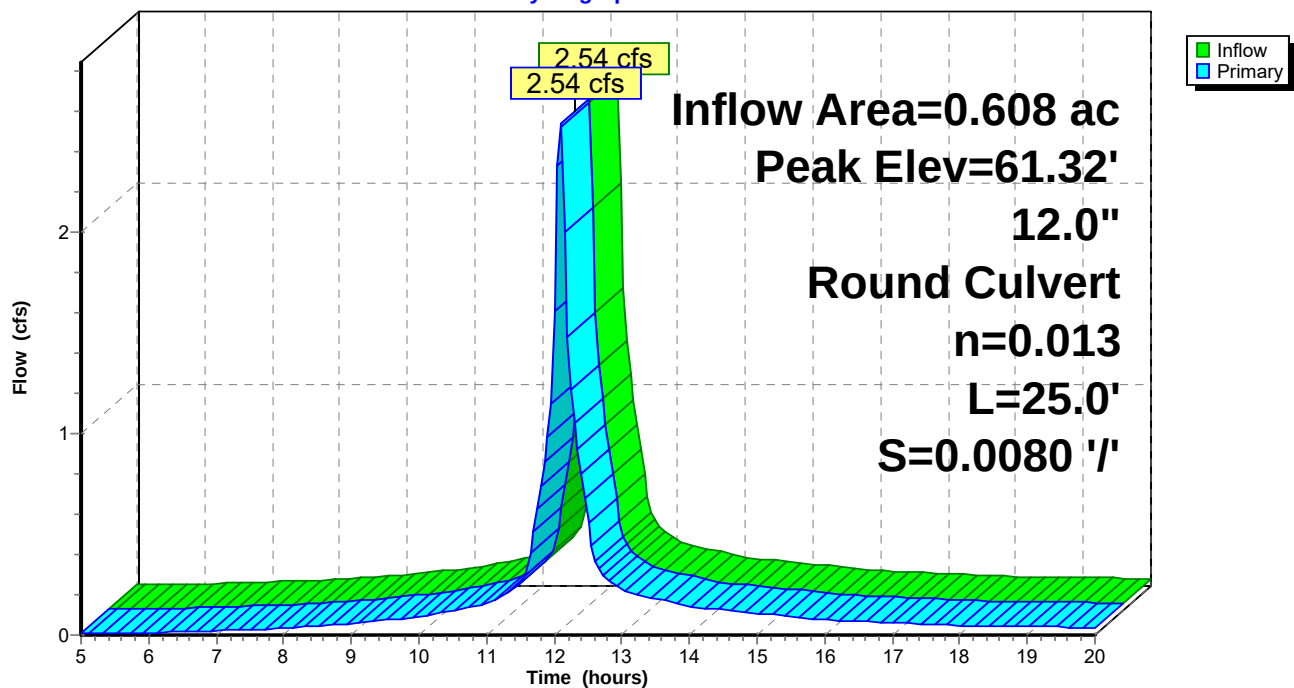
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.32' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.10' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.10' / 59.90' S= 0.0080 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.48 cfs @ 12.09 hrs HW=61.29' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.48 cfs @ 3.15 fps)

**Pond 64P: DMH 47**

Hydrograph



**Summary for Pond 65P: DMH 49**

Inflow Area = 0.253 ac, 88.87% Impervious, Inflow Depth > 4.03" for 10-Year event  
 Inflow = 1.14 cfs @ 12.09 hrs, Volume= 0.085 af  
 Outflow = 1.14 cfs @ 12.09 hrs, Volume= 0.085 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.14 cfs @ 12.09 hrs, Volume= 0.085 af  
 Routed to Pond 78P : DMH 50

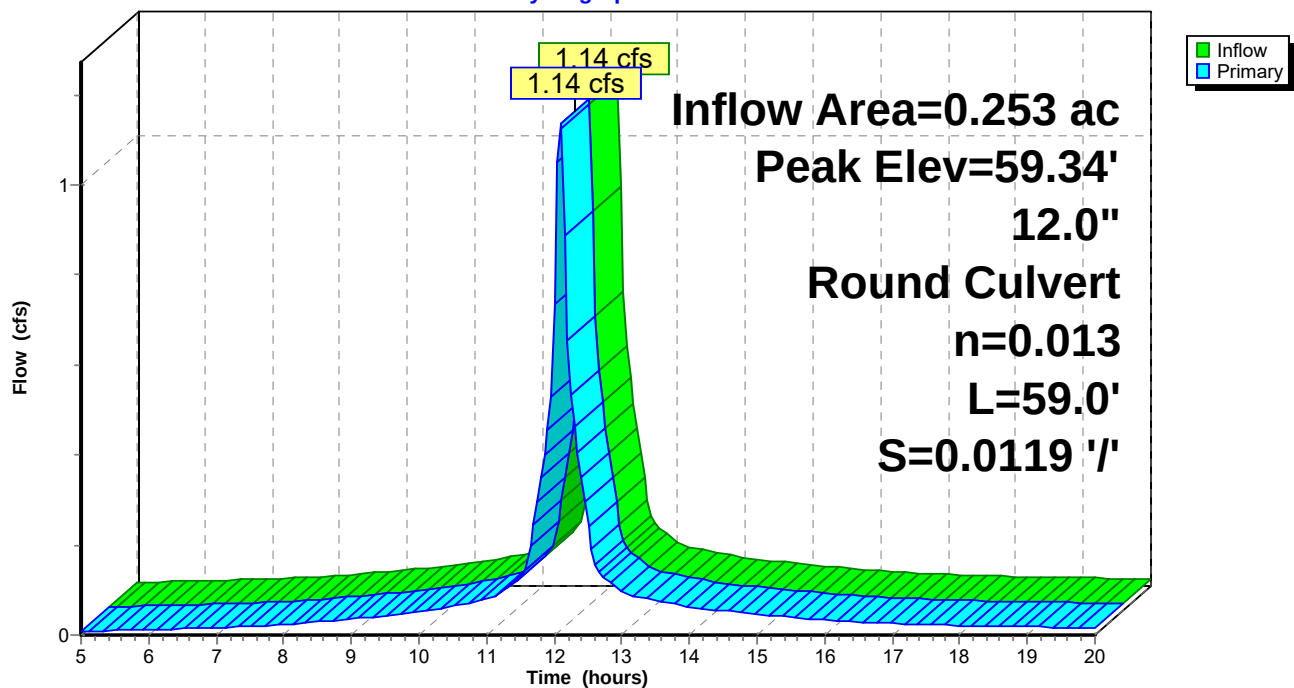
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 59.34' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.70' | <b>12.0" Round Culvert</b><br>L= 59.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.70' / 58.00' S= 0.0119 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.11 cfs @ 12.09 hrs HW=59.33' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 1.11 cfs @ 2.13 fps)

**Pond 65P: DMH 49****Hydrograph**



### Summary for Pond 66P: CB 68

Inflow Area = 0.163 ac, 82.69% Impervious, Inflow Depth > 3.91" for 10-Year event  
 Inflow = 0.72 cfs @ 12.09 hrs, Volume= 0.053 af  
 Outflow = 0.72 cfs @ 12.09 hrs, Volume= 0.053 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.72 cfs @ 12.09 hrs, Volume= 0.053 af  
 Routed to Pond 65P : DMH 49

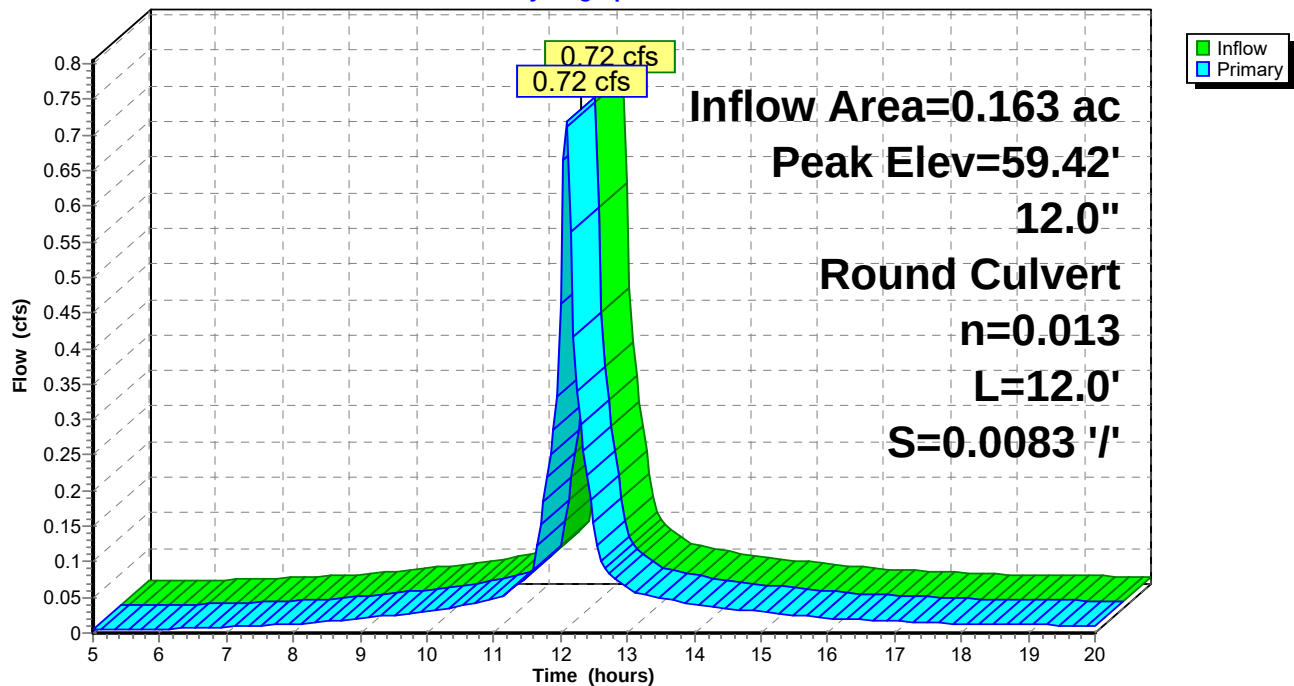
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.42' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.90' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.90' / 58.80' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.70 cfs @ 12.09 hrs HW=59.42' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.70 cfs @ 2.49 fps)

### Pond 66P: CB 68

Hydrograph



### Summary for Pond 67P: CB 69

Inflow Area = 0.090 ac, 100.00% Impervious, Inflow Depth > 4.26" for 10-Year event  
 Inflow = 0.42 cfs @ 12.09 hrs, Volume= 0.032 af  
 Outflow = 0.42 cfs @ 12.09 hrs, Volume= 0.032 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.42 cfs @ 12.09 hrs, Volume= 0.032 af  
 Routed to Pond 65P : DMH 49

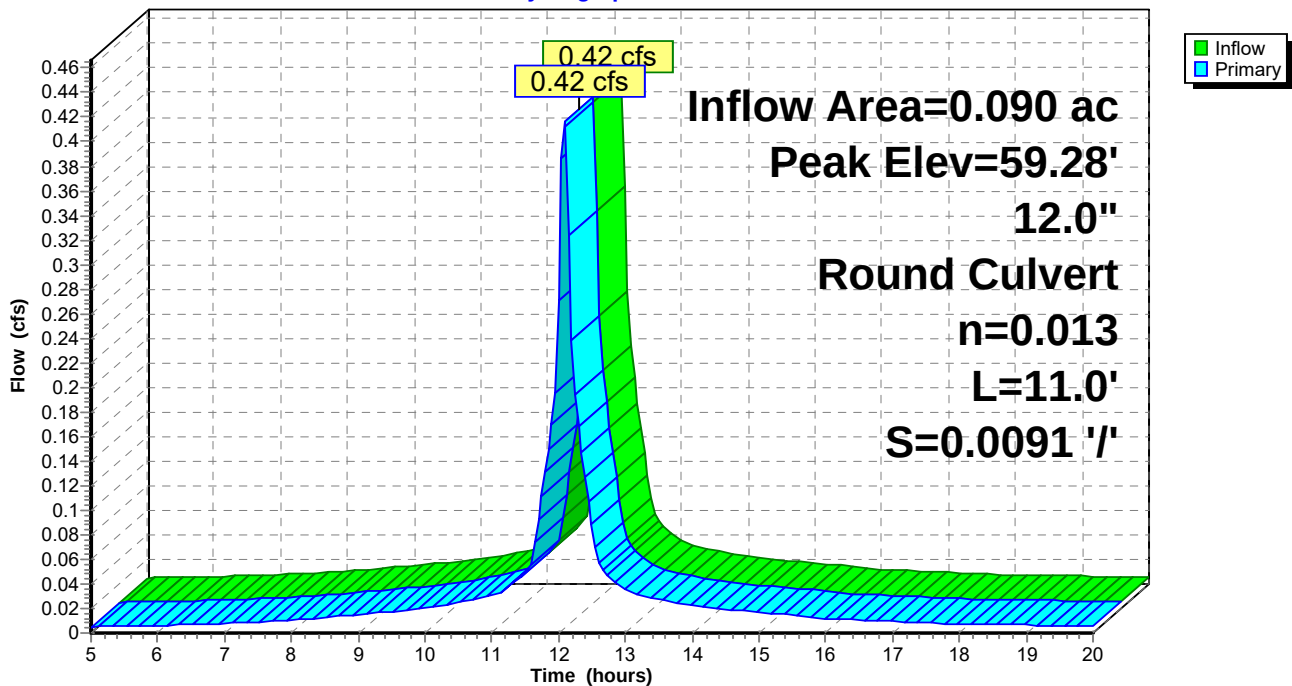
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.28' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.90' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.90' / 58.80' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.40 cfs @ 12.09 hrs HW=59.28' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.40 cfs @ 2.23 fps)

### Pond 67P: CB 69

Hydrograph



**Summary for Pond 68P: Sub. Inf. 5**

Inflow Area = 0.608 ac, 68.77% Impervious, Inflow Depth > 3.58" for 10-Year event  
 Inflow = 2.54 cfs @ 12.09 hrs, Volume= 0.182 af  
 Outflow = 2.51 cfs @ 12.11 hrs, Volume= 0.147 af, Atten= 1%, Lag= 1.3 min  
 Discarded = 0.07 cfs @ 12.11 hrs, Volume= 0.061 af  
 Primary = 2.44 cfs @ 12.11 hrs, Volume= 0.086 af  
 Routed to Link 60L : DP 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.13' @ 12.11 hrs Surf.Area= 0.042 ac Storage= 0.045 af

Plug-Flow detention time= 84.6 min calculated for 0.147 af (81% of inflow)  
 Center-of-Mass det. time= 33.7 min ( 792.9 - 759.2 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 59.30' | 0.030 af      | <b>24.83'W x 74.40'L x 2.33'H Field A</b><br>0.099 af Overall - 0.024 af Embedded = 0.075 af x 40.0% Voids                                                                                             |
| #2A    | 59.80' | 0.024 af      | <b>ADS StormTech SC-310 +Cap x 70 Inside #1</b><br>Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf<br>Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap<br>70 Chambers in 7 Rows |
|        |        | 0.054 af      | Total Available Storage                                                                                                                                                                                |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 59.30' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 56.00'                                                                                                            |
| #2     | Primary   | 59.30' | <b>12.0" Round Culvert</b><br>L= 71.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.30' / 57.00' S= 0.0324 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 60.80' | <b>4.0' long Sharp-Crested Vee/Trap Weir</b> Cv= 2.62 (C= 3.28)                                                                                                                                                |

**Discarded OutFlow** Max=0.07 cfs @ 12.11 hrs HW=61.12' (Free Discharge)

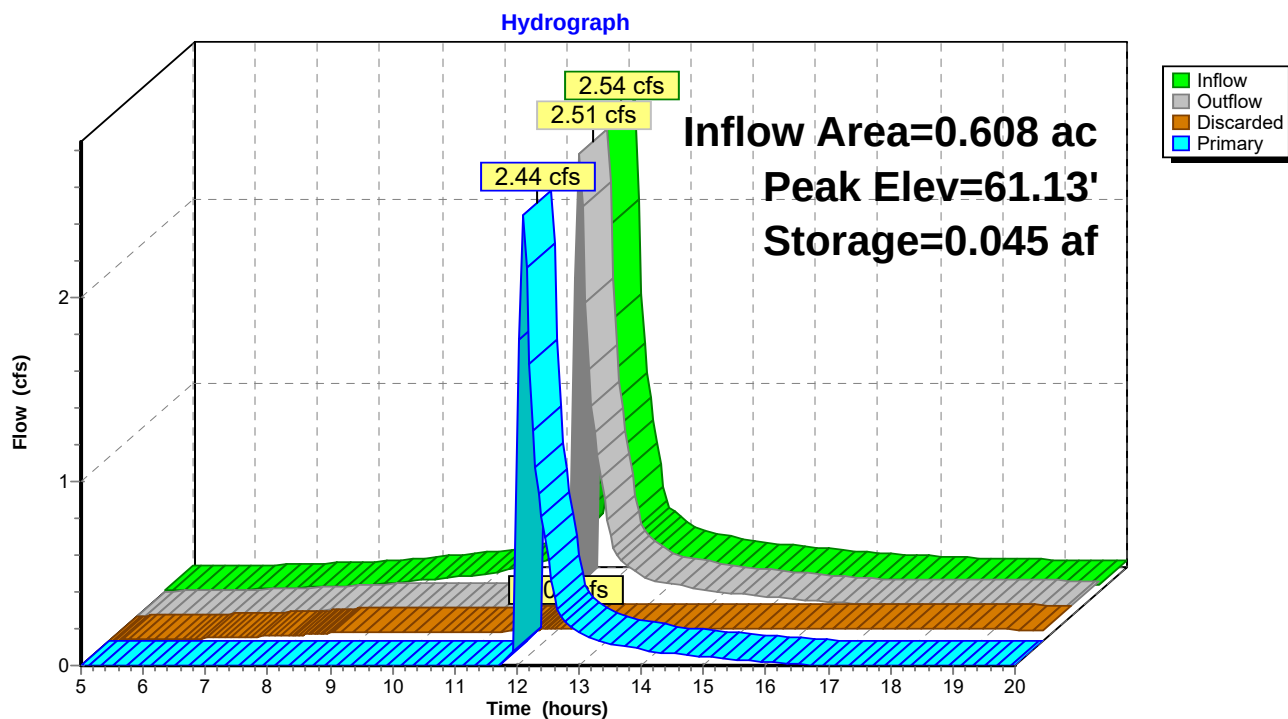
↑ **1=Exfiltration** ( Controls 0.07 cfs)

**Primary OutFlow** Max=2.37 cfs @ 12.11 hrs HW=61.12' (Free Discharge)

↑ **2=Culvert** (Passes 2.37 cfs of 3.43 cfs potential flow)

↑ **3=Sharp-Crested Vee/Trap Weir** (Weir Controls 2.37 cfs @ 1.85 fps)

# Pond 68P: Sub. Inf. 5



**Summary for Pond 69P: CB 72**

Inflow Area = 0.245 ac, 72.86% Impervious, Inflow Depth > 3.61" for 10-Year event  
 Inflow = 1.03 cfs @ 12.09 hrs, Volume= 0.074 af  
 Outflow = 1.03 cfs @ 12.09 hrs, Volume= 0.074 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.03 cfs @ 12.09 hrs, Volume= 0.074 af  
 Routed to Pond 71P : DMH 54

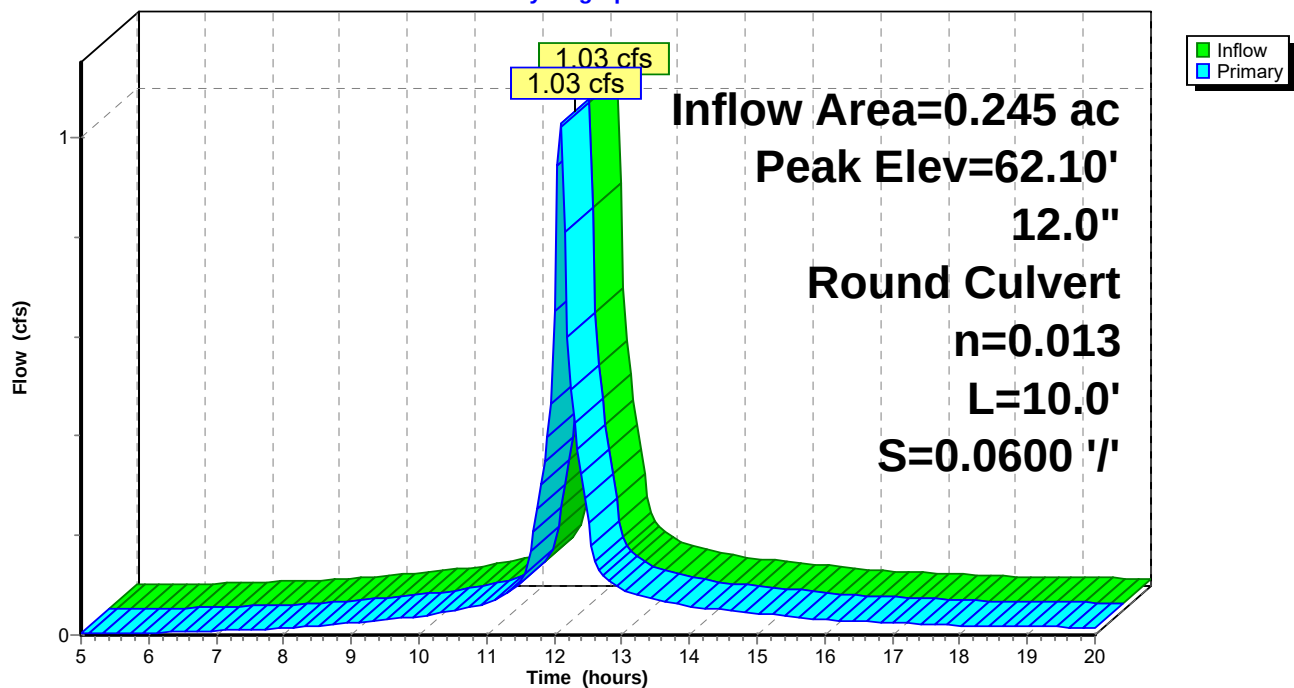
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.10' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.50' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.50' / 60.90' S= 0.0600 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.00 cfs @ 12.09 hrs HW=62.09' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.00 cfs @ 2.07 fps)

**Pond 69P: CB 72**

Hydrograph



**Summary for Pond 70P: CB 73**

Inflow Area = 0.154 ac, 76.98% Impervious, Inflow Depth > 3.71" for 10-Year event  
 Inflow = 0.66 cfs @ 12.09 hrs, Volume= 0.048 af  
 Outflow = 0.66 cfs @ 12.09 hrs, Volume= 0.048 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.66 cfs @ 12.09 hrs, Volume= 0.048 af  
 Routed to Pond 71P : DMH 54

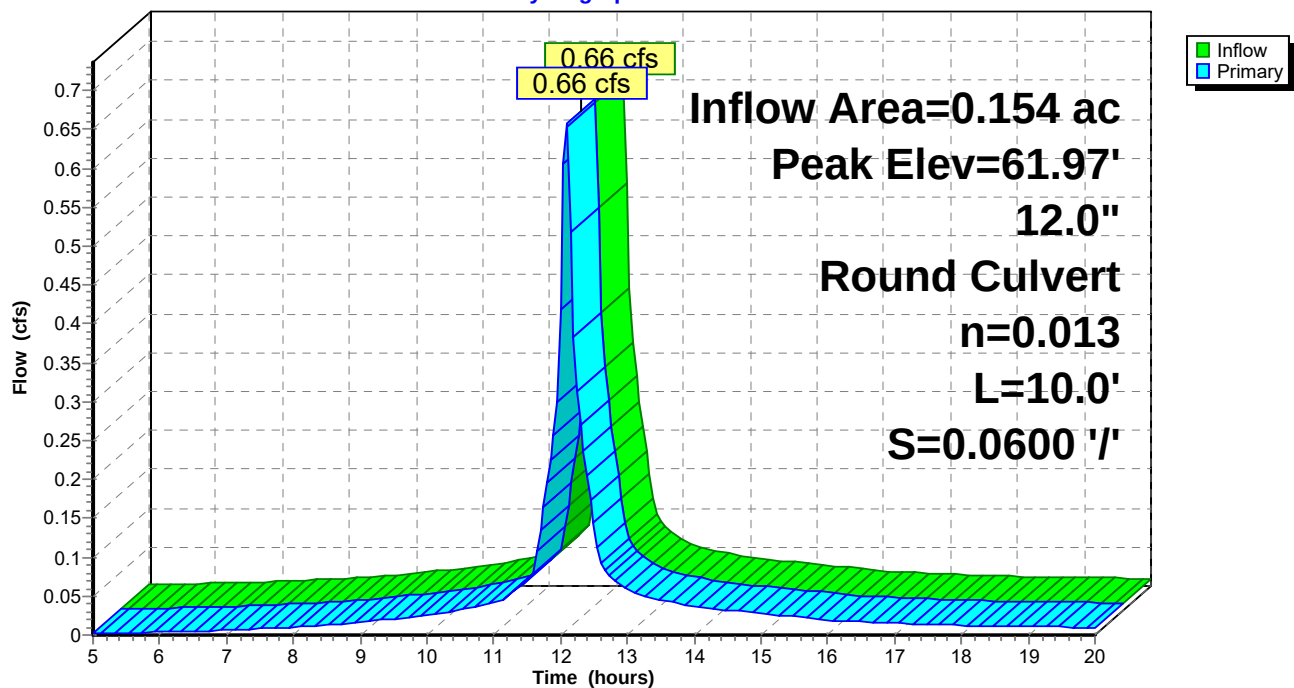
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.97' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.50' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.50' / 60.90' S= 0.0600 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.64 cfs @ 12.09 hrs HW=61.96' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.64 cfs @ 1.82 fps)

**Pond 70P: CB 73**

Hydrograph



**Summary for Pond 71P: DMH 54**

Inflow Area = 0.399 ac, 74.45% Impervious, Inflow Depth > 3.65" for 10-Year event  
 Inflow = 1.69 cfs @ 12.09 hrs, Volume= 0.121 af  
 Outflow = 1.69 cfs @ 12.09 hrs, Volume= 0.121 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.69 cfs @ 12.09 hrs, Volume= 0.121 af  
 Routed to Pond 72P : Sub. Inf. 7

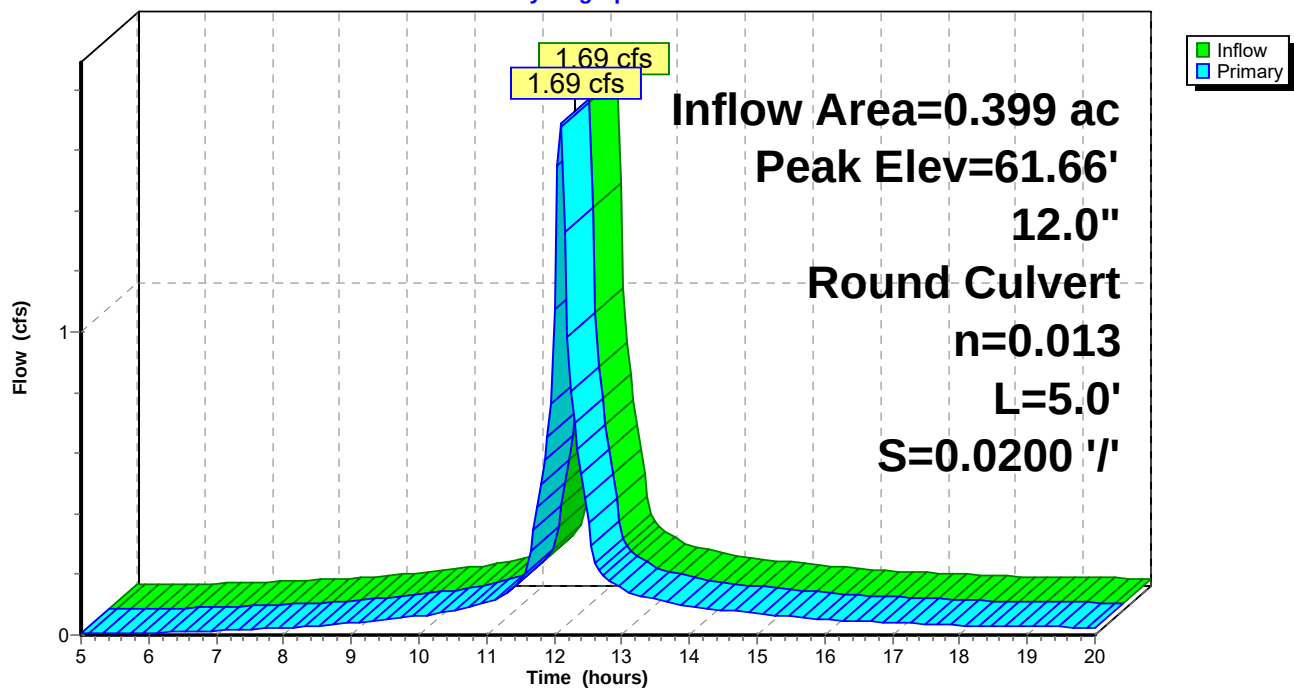
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.66' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.80' | <b>12.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.80' / 60.70' S= 0.0200 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.64 cfs @ 12.09 hrs HW=61.64' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.64 cfs @ 3.14 fps)

**Pond 71P: DMH 54**

Hydrograph



### Summary for Pond 72P: Sub. Inf. 7

Inflow Area = 0.399 ac, 74.45% Impervious, Inflow Depth > 3.65" for 10-Year event  
 Inflow = 1.69 cfs @ 12.09 hrs, Volume= 0.121 af  
 Outflow = 1.19 cfs @ 12.17 hrs, Volume= 0.101 af, Atten= 29%, Lag= 5.2 min  
 Discarded = 0.07 cfs @ 12.17 hrs, Volume= 0.053 af  
 Primary = 1.12 cfs @ 12.17 hrs, Volume= 0.048 af  
 Routed to Link 60L : DP 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.10' @ 12.17 hrs Surf.Area= 0.034 ac Storage= 0.037 af

Plug-Flow detention time= 95.6 min calculated for 0.101 af (83% of inflow)  
 Center-of-Mass det. time= 47.9 min ( 805.3 - 757.4 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                     |
|--------|--------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 60.20' | 0.024 af      | <b>38.17'W x 38.80'L x 2.33'H Field A</b><br>0.079 af Overall - 0.019 af Embedded = 0.061 af x 40.0% Voids                                                                                              |
| #2A    | 60.70' | 0.019 af      | <b>ADS StormTech SC-310 +Cap x 55 Inside #1</b><br>Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf<br>Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap<br>55 Chambers in 11 Rows |
|        |        | 0.043 af      | Total Available Storage                                                                                                                                                                                 |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 60.20' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 58.10'                                                                                                              |
| #2     | Primary   | 60.20' | <b>12.0" Round Culvert</b><br>L= 32.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.20' / 57.00' S= 0.1000 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 61.50' | <b>6.0" Vert. Orifice/Grate X 2.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                             |
| #4     | Device 2  | 62.20' | <b>4.0' long Sharp-Crested Vee/Trap Weir</b> Cv= 2.62 (C= 3.28)                                                                                                                                                  |

**Discarded OutFlow** Max=0.07 cfs @ 12.17 hrs HW=62.08' (Free Discharge)

↑ **1=Exfiltration** ( Controls 0.07 cfs)

**Primary OutFlow** Max=1.09 cfs @ 12.17 hrs HW=62.08' (Free Discharge)

↑ **2=Culvert** (Passes 1.09 cfs of 3.51 cfs potential flow)

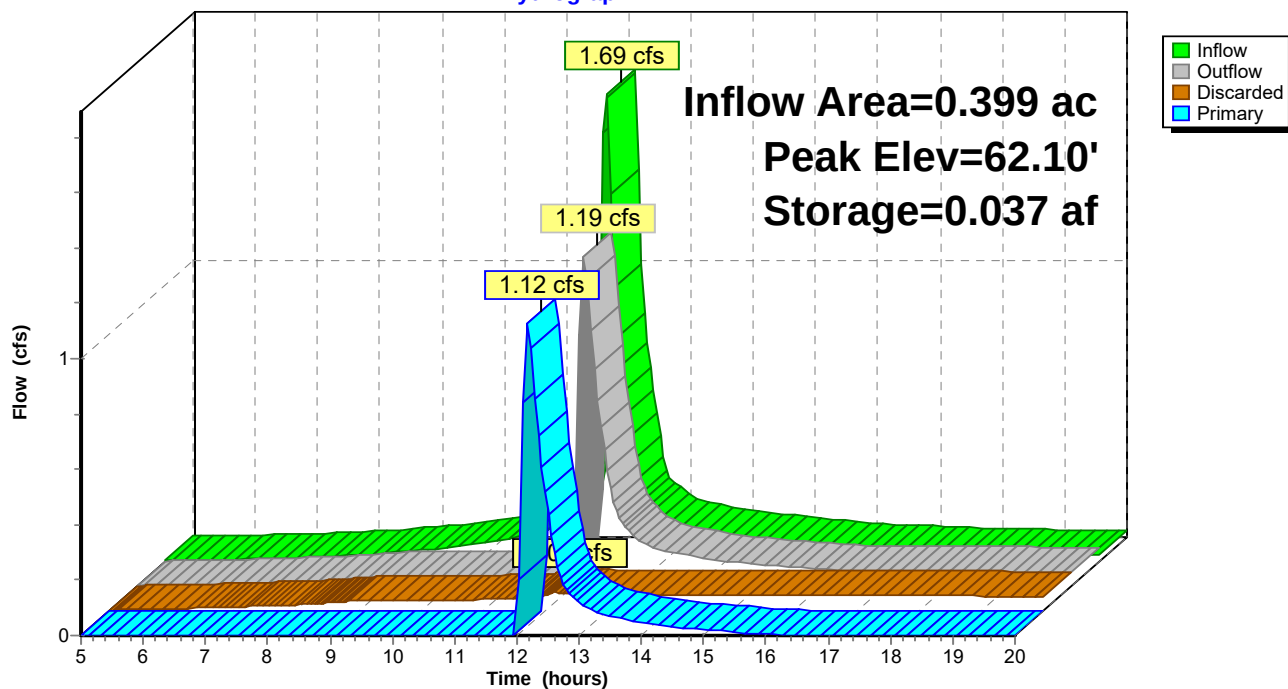
↑ **3=Orifice/Grate** (Orifice Controls 1.09 cfs @ 2.78 fps)

↑ **4=Sharp-Crested Vee/Trap Weir** ( Controls 0.00 cfs)



# Pond 72P: Sub. Inf. 7

## Hydrograph



**Summary for Pond 73P: CB 64**

Inflow Area = 0.252 ac, 65.83% Impervious, Inflow Depth > 3.51" for 10-Year event  
 Inflow = 1.04 cfs @ 12.09 hrs, Volume= 0.074 af  
 Outflow = 1.04 cfs @ 12.09 hrs, Volume= 0.074 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.04 cfs @ 12.09 hrs, Volume= 0.074 af  
 Routed to Pond 75P : DMH 46

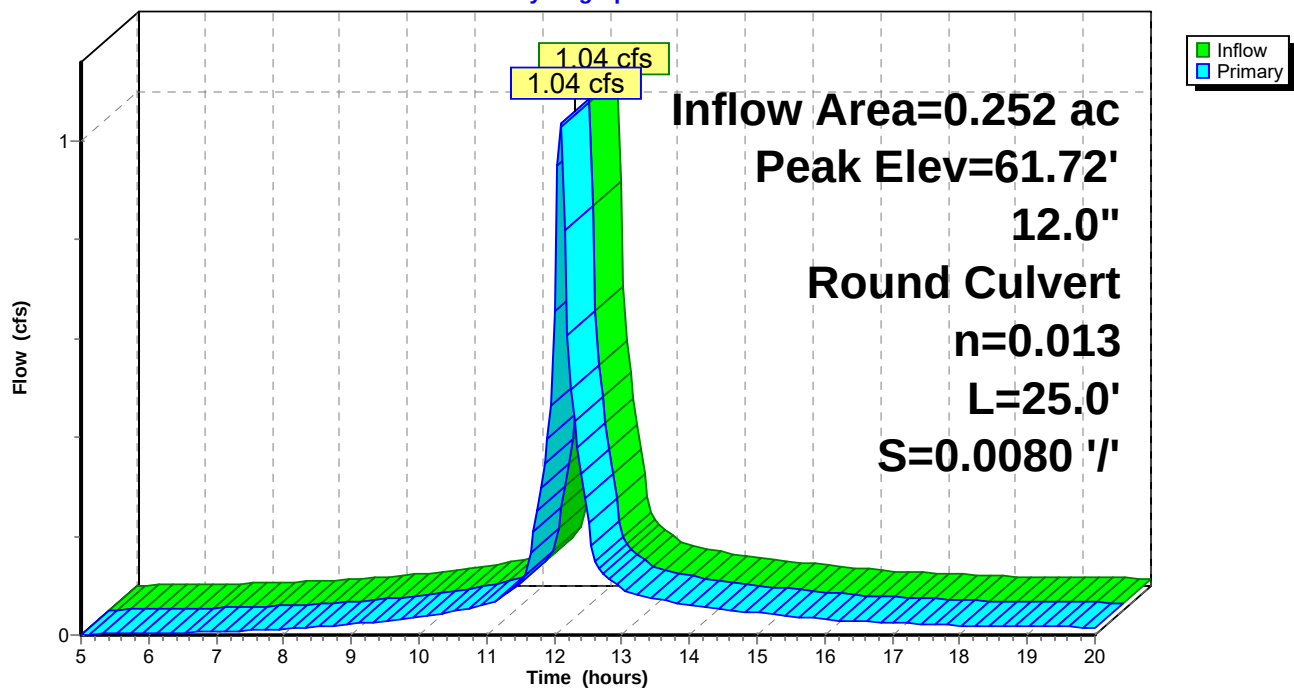
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.72' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.10' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.10' / 60.90' S= 0.0080 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.01 cfs @ 12.09 hrs HW=61.71' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.01 cfs @ 2.88 fps)

**Pond 73P: CB 64**

Hydrograph



**Summary for Pond 74P: CB 65**

Inflow Area = 0.174 ac, 65.05% Impervious, Inflow Depth > 3.51" for 10-Year event  
 Inflow = 0.71 cfs @ 12.09 hrs, Volume= 0.051 af  
 Outflow = 0.71 cfs @ 12.09 hrs, Volume= 0.051 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.71 cfs @ 12.09 hrs, Volume= 0.051 af  
 Routed to Pond 75P : DMH 46

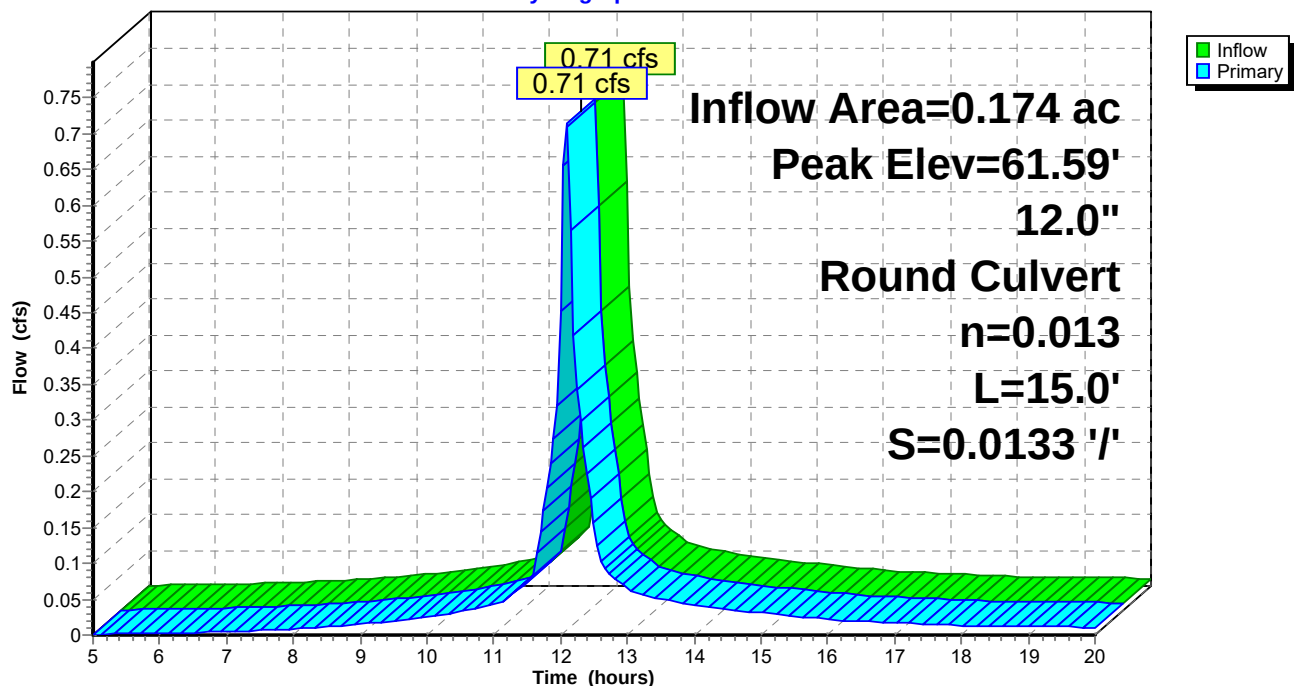
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.59' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.10' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.10' / 60.90' S= 0.0133 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.70 cfs @ 12.09 hrs HW=61.58' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.70 cfs @ 1.86 fps)

**Pond 74P: CB 65**

Hydrograph



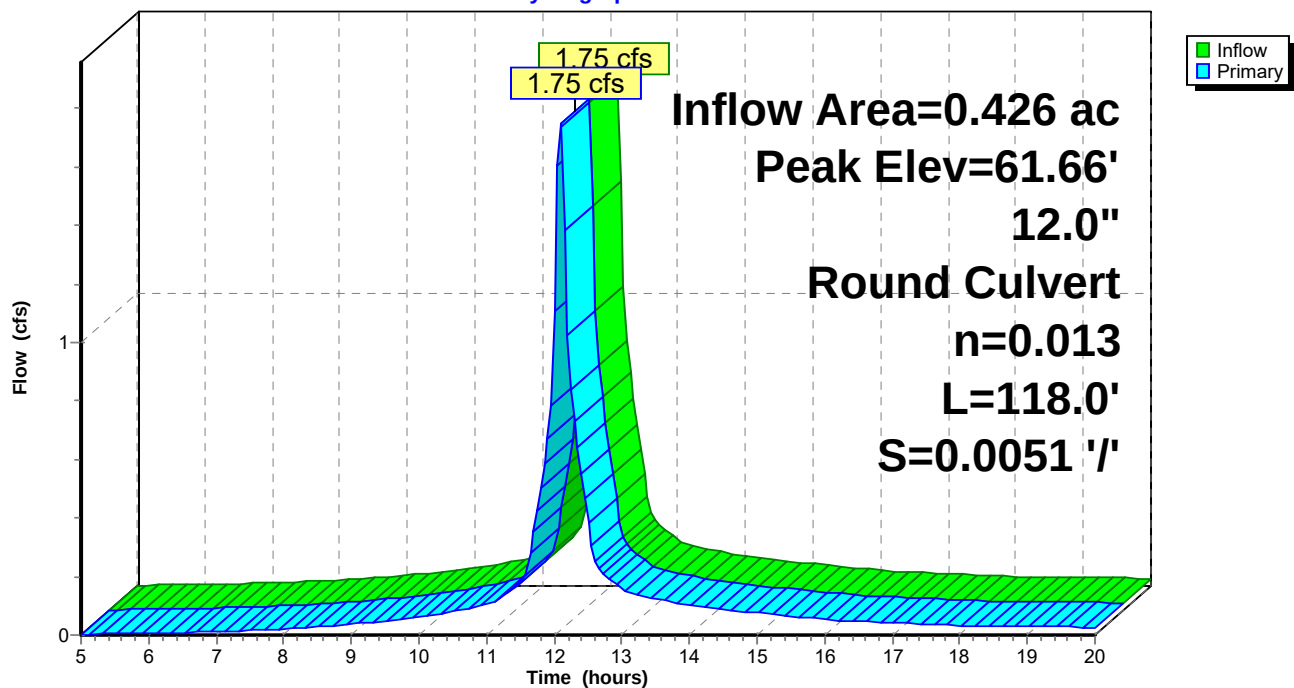
**Summary for Pond 75P: DMH 46**

Inflow Area = 0.426 ac, 65.51% Impervious, Inflow Depth > 3.51" for 10-Year event  
 Inflow = 1.75 cfs @ 12.09 hrs, Volume= 0.124 af  
 Outflow = 1.75 cfs @ 12.09 hrs, Volume= 0.124 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.75 cfs @ 12.09 hrs, Volume= 0.124 af  
 Routed to Pond 64P : DMH 47

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.66' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.80' | <b>12.0" Round Culvert</b><br>L= 118.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.80' / 60.20' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.71 cfs @ 12.09 hrs HW=61.65' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.71 cfs @ 3.23 fps)

**Pond 75P: DMH 46****Hydrograph**

### Summary for Pond 76P: CB 70

Inflow Area = 0.189 ac, 71.07% Impervious, Inflow Depth > 3.61" for 10-Year event  
 Inflow = 0.79 cfs @ 12.09 hrs, Volume= 0.057 af  
 Outflow = 0.79 cfs @ 12.09 hrs, Volume= 0.057 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.79 cfs @ 12.09 hrs, Volume= 0.057 af  
 Routed to Pond 78P : DMH 50

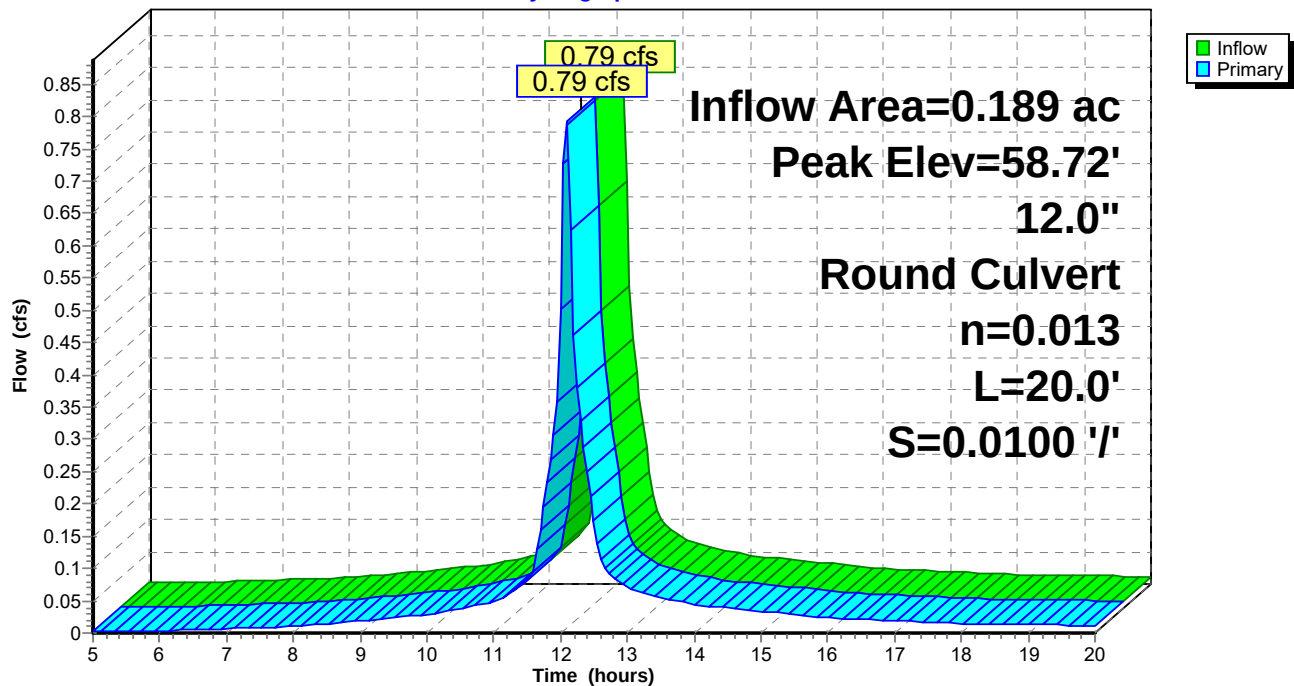
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.72' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.20' | <b>12.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.20' / 58.00' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.77 cfs @ 12.09 hrs HW=58.71' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.77 cfs @ 2.79 fps)

### Pond 76P: CB 70

Hydrograph



**Summary for Pond 77P: CB 71**

Inflow Area = 0.098 ac, 95.31% Impervious, Inflow Depth > 4.00" for 10-Year event  
 Inflow = 0.44 cfs @ 12.09 hrs, Volume= 0.033 af  
 Outflow = 0.44 cfs @ 12.09 hrs, Volume= 0.033 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.44 cfs @ 12.09 hrs, Volume= 0.033 af  
 Routed to Pond 78P : DMH 50

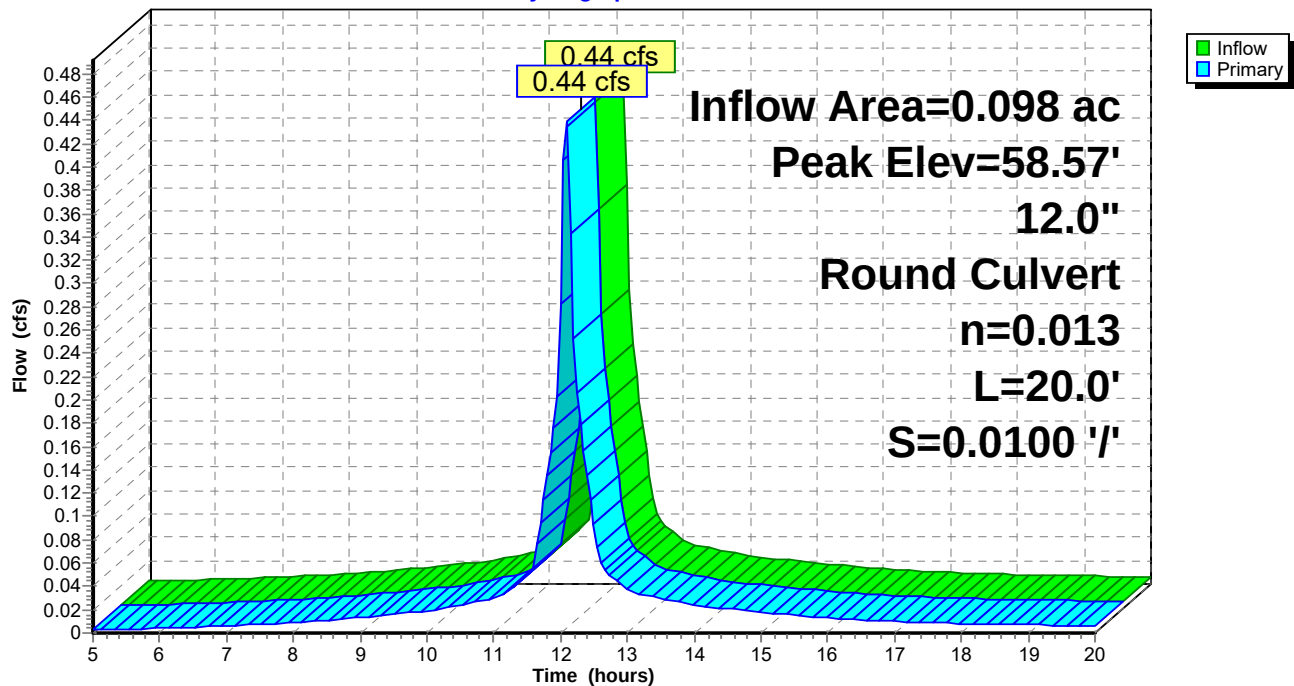
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.57' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.20' | <b>12.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.20' / 58.00' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.43 cfs @ 12.09 hrs HW=58.57' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.43 cfs @ 1.63 fps)

**Pond 77P: CB 71**

Hydrograph



### Summary for Pond 78P: DMH 50

Inflow Area = 0.540 ac, 83.81% Impervious, Inflow Depth > 3.88" for 10-Year event  
 Inflow = 2.37 cfs @ 12.09 hrs, Volume= 0.174 af  
 Outflow = 2.37 cfs @ 12.09 hrs, Volume= 0.174 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.37 cfs @ 12.09 hrs, Volume= 0.174 af  
 Routed to Pond 79P : DMH 51

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 58.75' @ 12.09 hrs

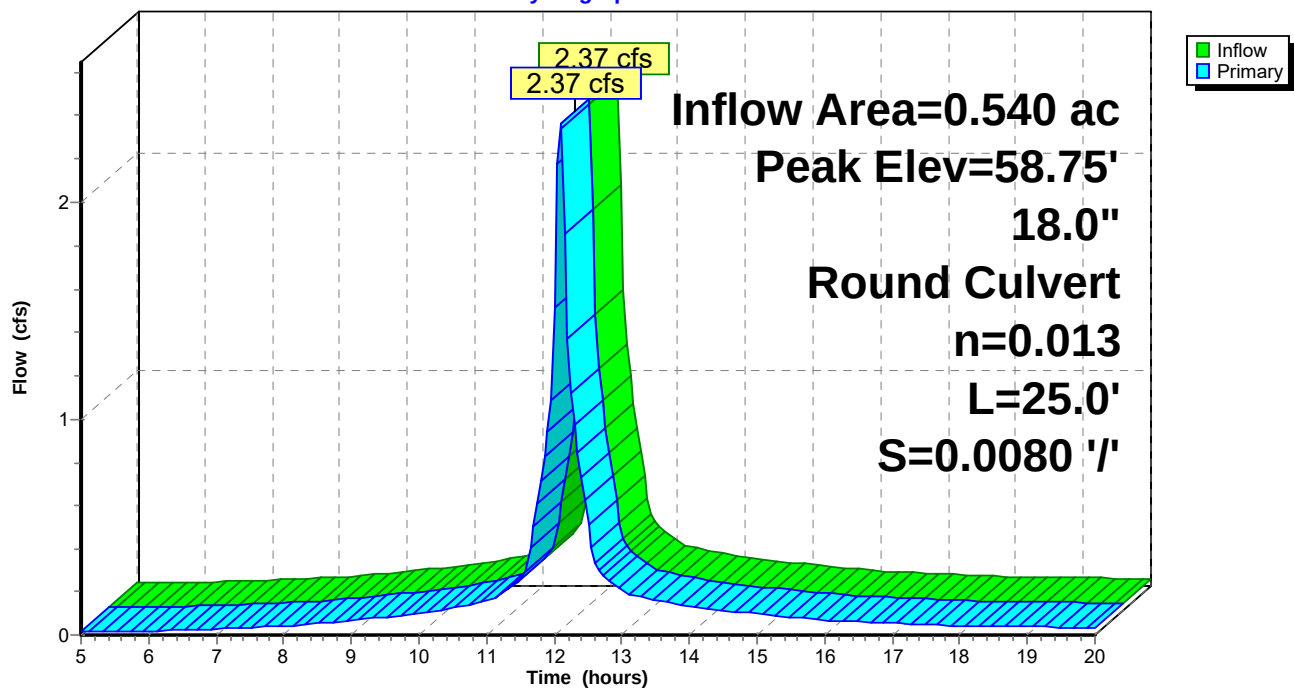
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.90' | <b>18.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.90' / 57.70' S= 0.0080 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.30 cfs @ 12.09 hrs HW=58.74' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 2.30 cfs @ 3.29 fps)

### Pond 78P: DMH 50

#### Hydrograph



**Summary for Pond 79P: DMH 51**

Inflow Area = 0.688 ac, 87.30% Impervious, Inflow Depth > 3.96" for 10-Year event  
 Inflow = 3.05 cfs @ 12.09 hrs, Volume= 0.227 af  
 Outflow = 3.05 cfs @ 12.09 hrs, Volume= 0.227 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.05 cfs @ 12.09 hrs, Volume= 0.227 af  
 Routed to Pond 80P : DMH 52

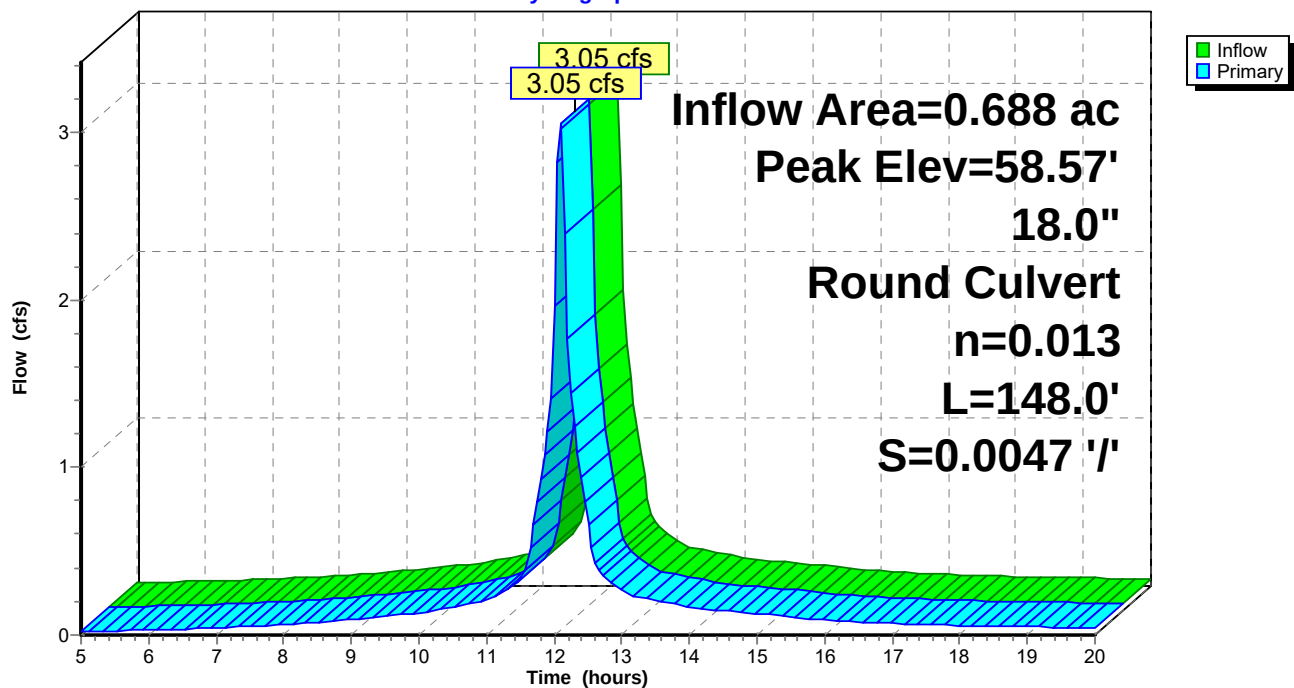
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.57' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.60' | <b>18.0" Round Culvert</b><br>L= 148.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.60' / 56.91' S= 0.0047 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.97 cfs @ 12.09 hrs HW=58.56' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.97 cfs @ 3.56 fps)

**Pond 79P: DMH 51**

Hydrograph





**Summary for Pond 80P: DMH 52**

Inflow Area = 0.688 ac, 87.30% Impervious, Inflow Depth > 3.96" for 10-Year event  
 Inflow = 3.05 cfs @ 12.09 hrs, Volume= 0.227 af  
 Outflow = 3.05 cfs @ 12.09 hrs, Volume= 0.227 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.05 cfs @ 12.09 hrs, Volume= 0.227 af  
 Routed to Pond 81P : DMH 53

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 57.78' @ 12.09 hrs

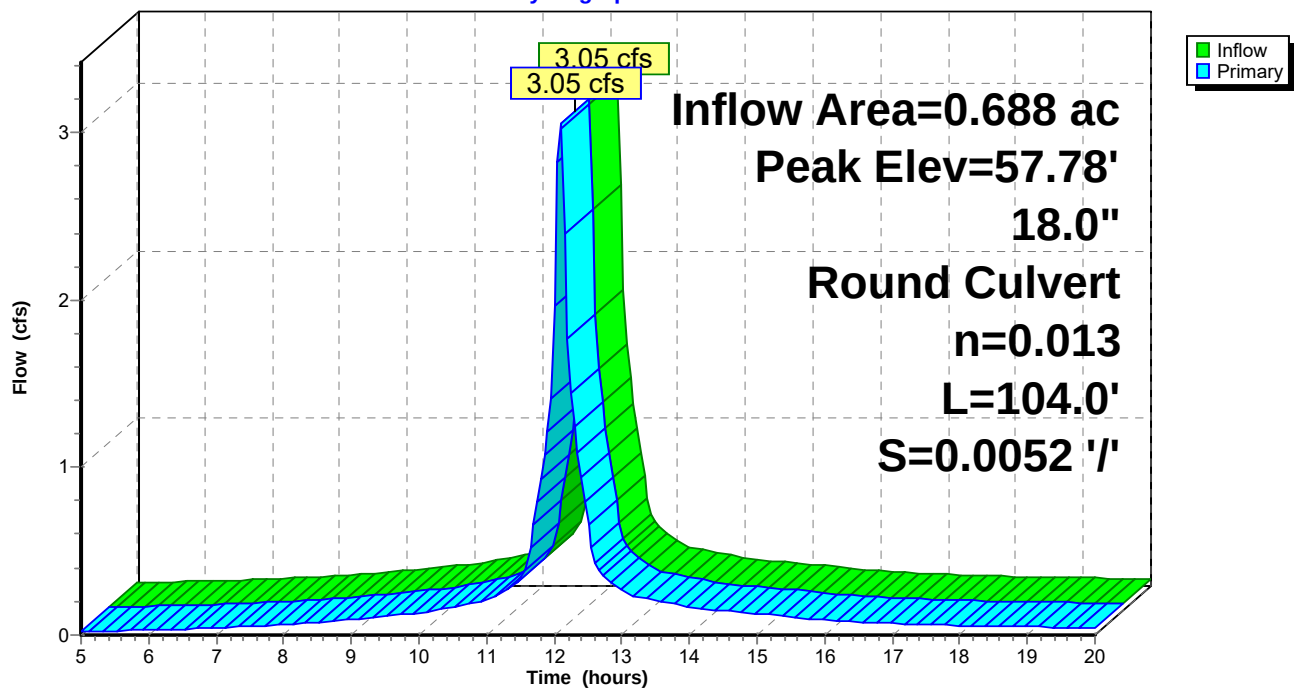
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 56.81' | <b>18.0" Round Culvert</b><br>L= 104.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 56.81' / 56.27' S= 0.0052 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.97 cfs @ 12.09 hrs HW=57.76' (Free Discharge)

1=Culvert (Barrel Controls 2.97 cfs @ 3.59 fps)

**Pond 80P: DMH 52**

Hydrograph



**Summary for Pond 81P: DMH 53**

Inflow Area = 0.688 ac, 87.30% Impervious, Inflow Depth > 3.96" for 10-Year event  
 Inflow = 3.05 cfs @ 12.09 hrs, Volume= 0.227 af  
 Outflow = 3.05 cfs @ 12.09 hrs, Volume= 0.227 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.05 cfs @ 12.09 hrs, Volume= 0.227 af  
 Routed to Pond 82P : Constructed Wetland 2

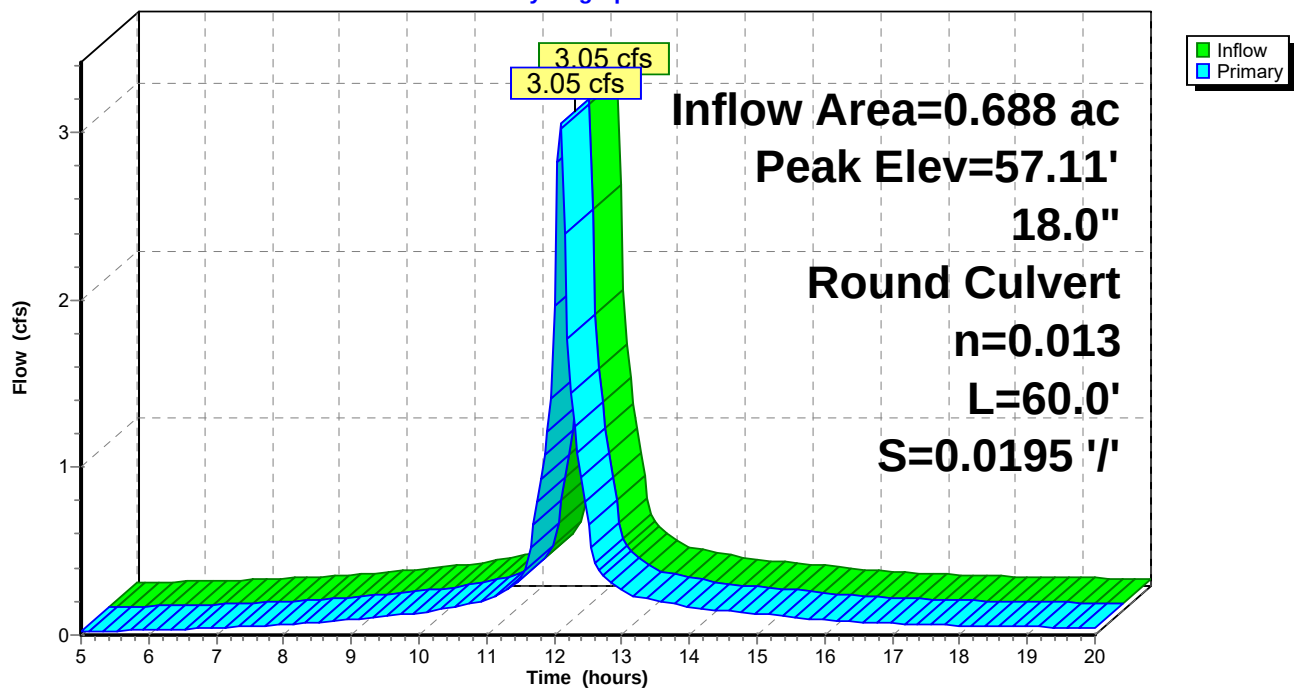
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 57.11' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 56.17' | <b>18.0" Round Culvert</b><br>L= 60.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 56.17' / 55.00' S= 0.0195 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.97 cfs @ 12.09 hrs HW=57.10' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.97 cfs @ 2.59 fps)

**Pond 81P: DMH 53**

Hydrograph



### Summary for Pond 82P: Constructed Wetland 2

Inflow Area = 1.006 ac, 75.98% Impervious, Inflow Depth > 3.49" for 10-Year event  
 Inflow = 4.02 cfs @ 12.09 hrs, Volume= 0.293 af  
 Outflow = 1.23 cfs @ 12.41 hrs, Volume= 0.229 af, Atten= 69%, Lag= 19.5 min  
 Primary = 1.23 cfs @ 12.41 hrs, Volume= 0.229 af  
 Routed to Link 188L : DP 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 57.16' @ 12.41 hrs Surf.Area= 3,490 sf Storage= 5,857 cf

Plug-Flow detention time= 125.6 min calculated for 0.229 af (78% of inflow)  
 Center-of-Mass det. time= 68.5 min ( 824.3 - 755.8 )

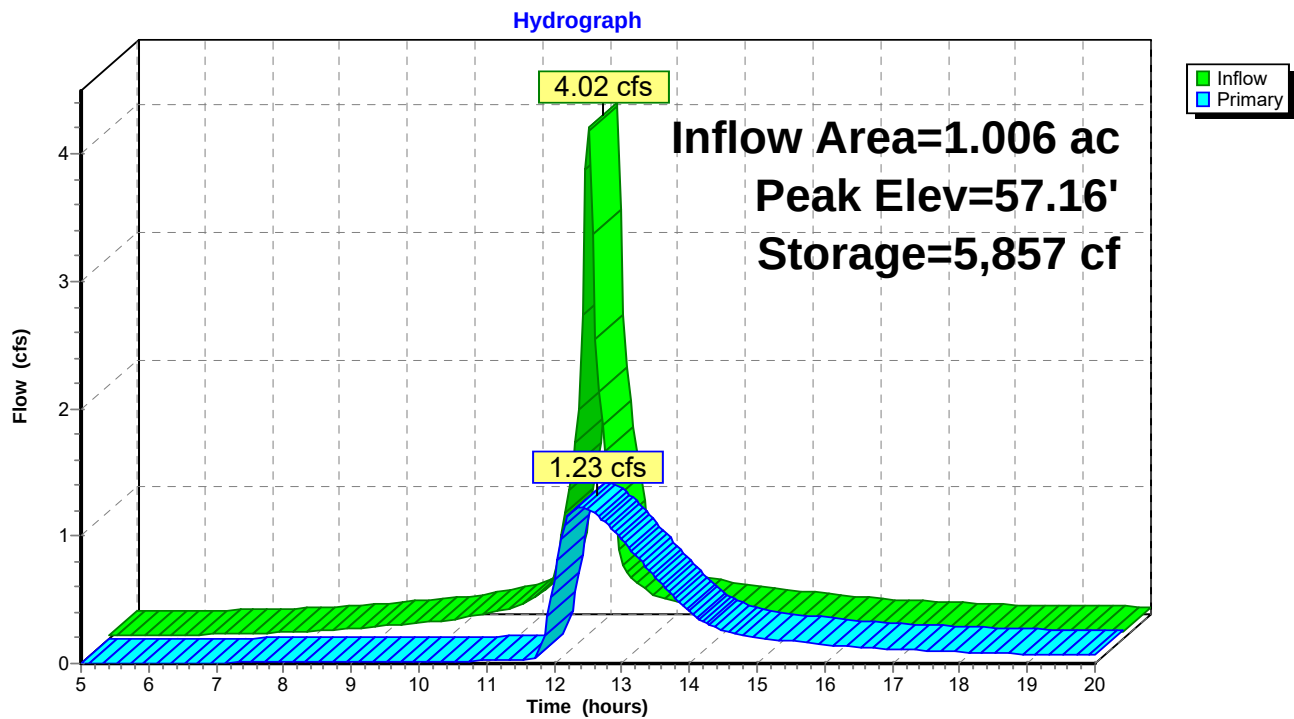
| Volume              | Invert               | Avail.Storage             | Storage Description                                        |
|---------------------|----------------------|---------------------------|------------------------------------------------------------|
| #1                  | 55.00'               | 13,641 cf                 | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet)                                  |
| 55.00               | 1,981                | 0                         | 0                                                          |
| 56.00               | 2,646                | 2,314                     | 2,314                                                      |
| 57.00               | 3,368                | 3,007                     | 5,321                                                      |
| 58.00               | 4,146                | 3,757                     | 9,078                                                      |
| 59.00               | 4,980                | 4,563                     | 13,641                                                     |

| Device | Routing  | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary  | 55.00' | <b>12.0" Round Culvert</b><br>L= 52.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 55.00' / 54.00' S= 0.0192 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #2     | Device 1 | 55.00' | <b>1.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                      |
| #3     | Device 1 | 56.10' | <b>4.0" Vert. Orifice/Grate X 3.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                            |

**Primary OutFlow** Max=1.23 cfs @ 12.41 hrs HW=57.16' (Free Discharge)

- 1=Culvert (Passes 1.23 cfs of 3.84 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.04 cfs @ 7.00 fps)
- 3=Orifice/Grate (Orifice Controls 1.19 cfs @ 4.54 fps)

**Pond 82P: Constructed Wetland 2**



**Summary for Pond 83P: CB 86**

Inflow Area = 0.178 ac, 72.79% Impervious, Inflow Depth > 3.61" for 10-Year event  
 Inflow = 0.75 cfs @ 12.09 hrs, Volume= 0.053 af  
 Outflow = 0.75 cfs @ 12.09 hrs, Volume= 0.053 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.75 cfs @ 12.09 hrs, Volume= 0.053 af  
 Routed to Pond 85P : DMH 65

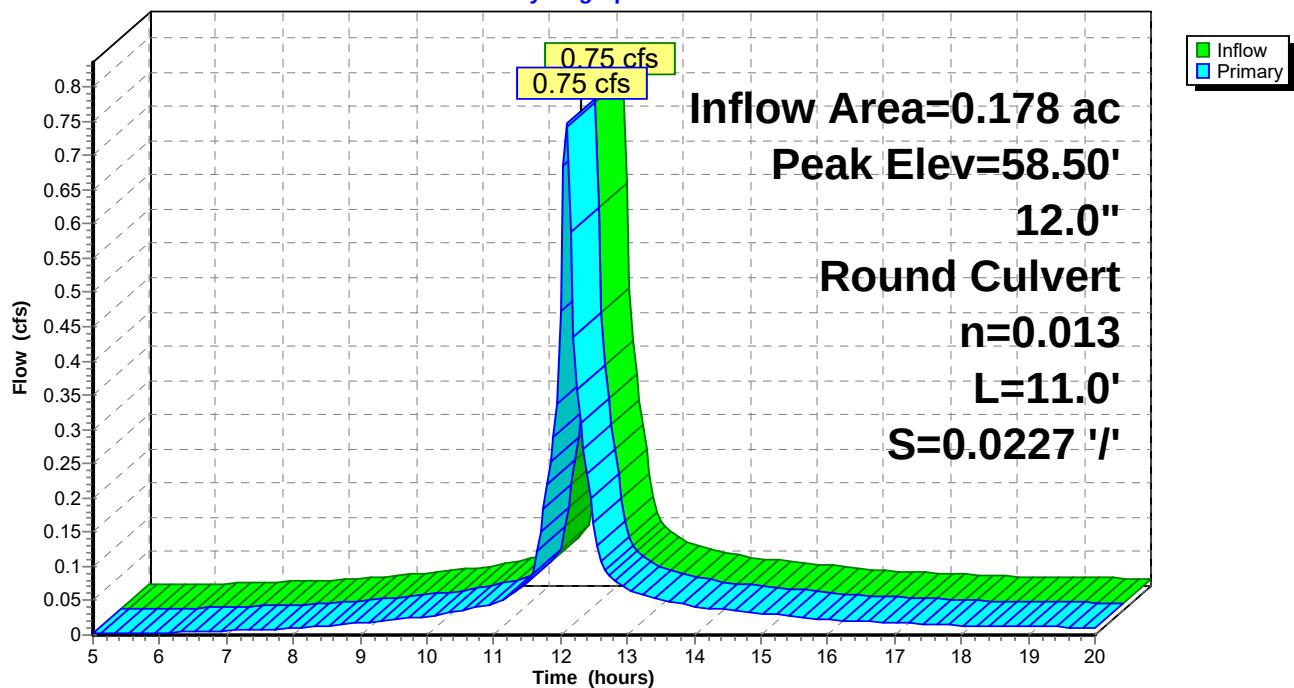
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.50' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.00' / 57.75' S= 0.0227 ' / ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.73 cfs @ 12.09 hrs HW=58.49' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.73 cfs @ 1.89 fps)

**Pond 83P: CB 86**

Hydrograph



**Summary for Pond 84P: CB 87**

Inflow Area = 0.189 ac, 78.29% Impervious, Inflow Depth > 3.81" for 10-Year event  
 Inflow = 0.82 cfs @ 12.09 hrs, Volume= 0.060 af  
 Outflow = 0.82 cfs @ 12.09 hrs, Volume= 0.060 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.82 cfs @ 12.09 hrs, Volume= 0.060 af  
 Routed to Pond 85P : DMH 65

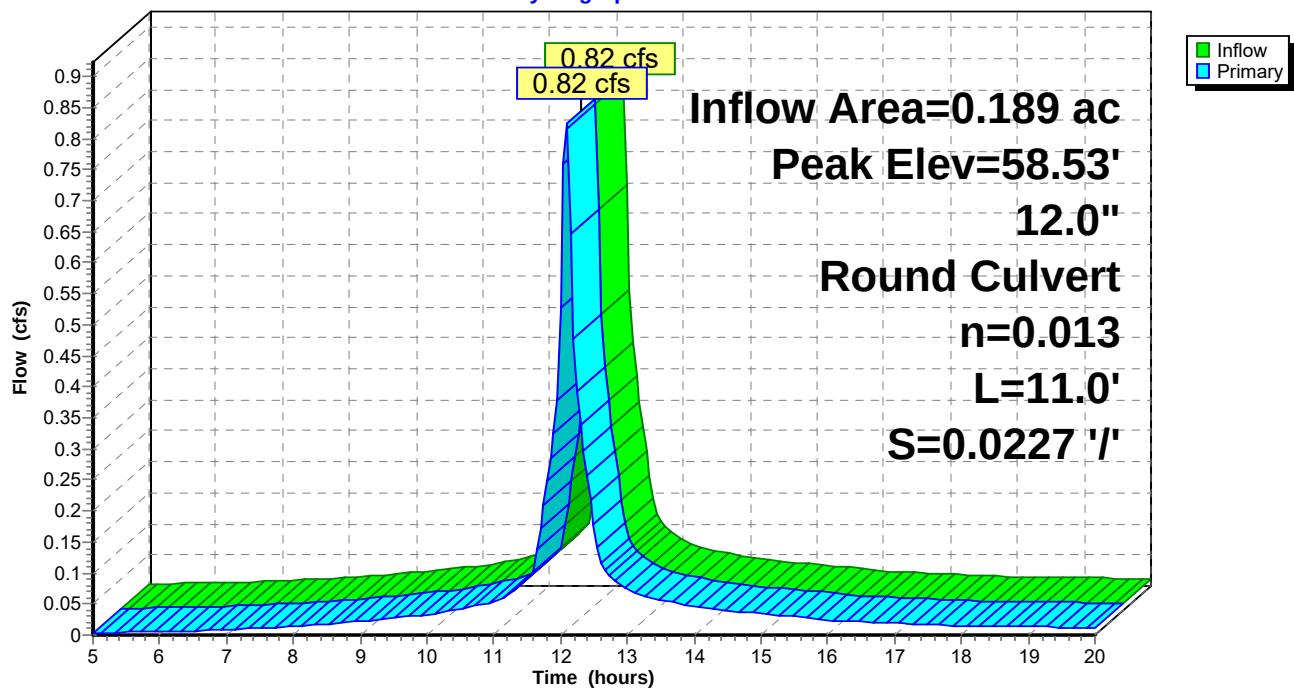
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.53' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.00' / 57.75' S= 0.0227 ' / ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.80 cfs @ 12.09 hrs HW=58.52' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.80 cfs @ 1.94 fps)

**Pond 84P: CB 87**

Hydrograph



**Summary for Pond 85P: DMH 65**

Inflow Area = 0.367 ac, 75.63% Impervious, Inflow Depth > 3.71" for 10-Year event  
 Inflow = 1.57 cfs @ 12.09 hrs, Volume= 0.114 af  
 Outflow = 1.57 cfs @ 12.09 hrs, Volume= 0.114 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.57 cfs @ 12.09 hrs, Volume= 0.114 af  
 Routed to Pond 97P : Sub. Det. 2

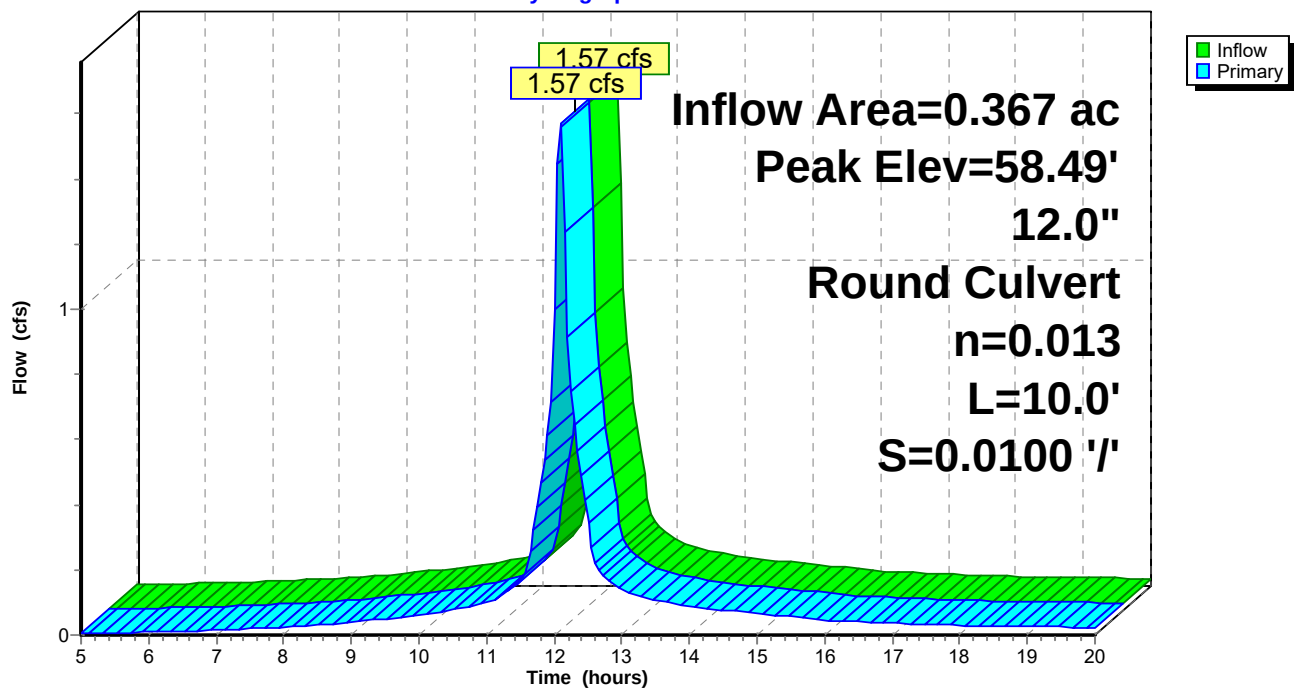
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.49' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.65' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.65' / 57.55' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.53 cfs @ 12.09 hrs HW=58.47' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.53 cfs @ 3.01 fps)

**Pond 85P: DMH 65**

Hydrograph



### Summary for Pond 86P: Sub. Inf. 6

Inflow Area = 0.589 ac, 36.87% Impervious, Inflow Depth > 2.83" for 10-Year event  
 Inflow = 2.03 cfs @ 12.09 hrs, Volume= 0.139 af  
 Outflow = 0.94 cfs @ 12.28 hrs, Volume= 0.108 af, Atten= 54%, Lag= 11.5 min  
 Discarded = 0.07 cfs @ 12.28 hrs, Volume= 0.056 af  
 Primary = 0.86 cfs @ 12.28 hrs, Volume= 0.052 af  
 Routed to Link 60L : DP 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.96' @ 12.28 hrs Surf.Area= 0.037 ac Storage= 0.049 af

Plug-Flow detention time= 110.6 min calculated for 0.108 af (78% of inflow)  
 Center-of-Mass det. time= 53.7 min ( 835.0 - 781.3 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 61.00' | 0.034 af      | <b>30.00'W x 53.46'L x 3.50'H Field A</b><br>0.129 af Overall - 0.045 af Embedded = 0.084 af x 40.0% Voids                                                                                                                                             |
| #2A    | 61.50' | 0.045 af      | <b>ADS StormTech SC-740 b +Cap x 42 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>42 Chambers in 6 Rows<br>Cap Storage= 2.7 cf x 2 x 6 rows = 31.9 cf |
|        |        | 0.079 af      | Total Available Storage                                                                                                                                                                                                                                |

Storage Group A created with Chamber Wizard

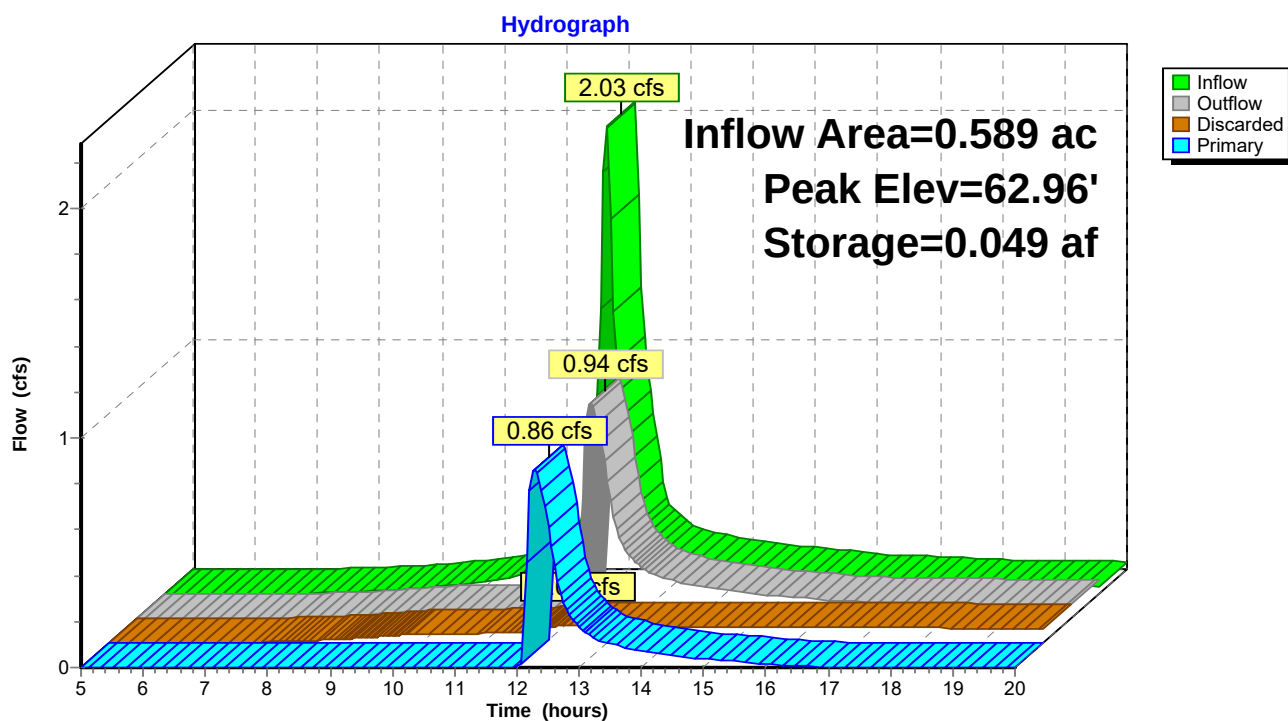
| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                             |
|--------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 61.00' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 59.00'                                                                                                                        |
| #2     | Primary   | 61.00' | <b>12.0" Round Culvert</b><br>L= 105.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.00' / 57.00' S= 0.0381 ' S= 0.0381 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 62.50' | <b>6.0" Vert. Orifice/Grate X 2.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                       |
| #4     | Device 2  | 63.50' | <b>4.0' long Sharp-Crested Vee/Trap Weir</b> Cv= 2.62 (C= 3.28)                                                                                                                                                            |

**Discarded OutFlow** Max=0.07 cfs @ 12.28 hrs HW=62.95' (Free Discharge)  
 ↳ **1=Exfiltration** ( Controls 0.07 cfs)

**Primary OutFlow** Max=0.86 cfs @ 12.28 hrs HW=62.95' (Free Discharge)  
 ↳ **2=Culvert** (Passes 0.86 cfs of 3.60 cfs potential flow)  
 ↳ **3=Orifice/Grate** (Orifice Controls 0.86 cfs @ 2.30 fps)  
 ↳ **4=Sharp-Crested Vee/Trap Weir** ( Controls 0.00 cfs)



**Pond 86P: Sub. Inf. 6**



**Summary for Pond 87P: CB 85**

Inflow Area = 0.124 ac, 69.69% Impervious, Inflow Depth > 3.61" for 10-Year event  
 Inflow = 0.52 cfs @ 12.09 hrs, Volume= 0.037 af  
 Outflow = 0.52 cfs @ 12.09 hrs, Volume= 0.037 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.52 cfs @ 12.09 hrs, Volume= 0.037 af  
 Routed to Pond 92P : DMH 63

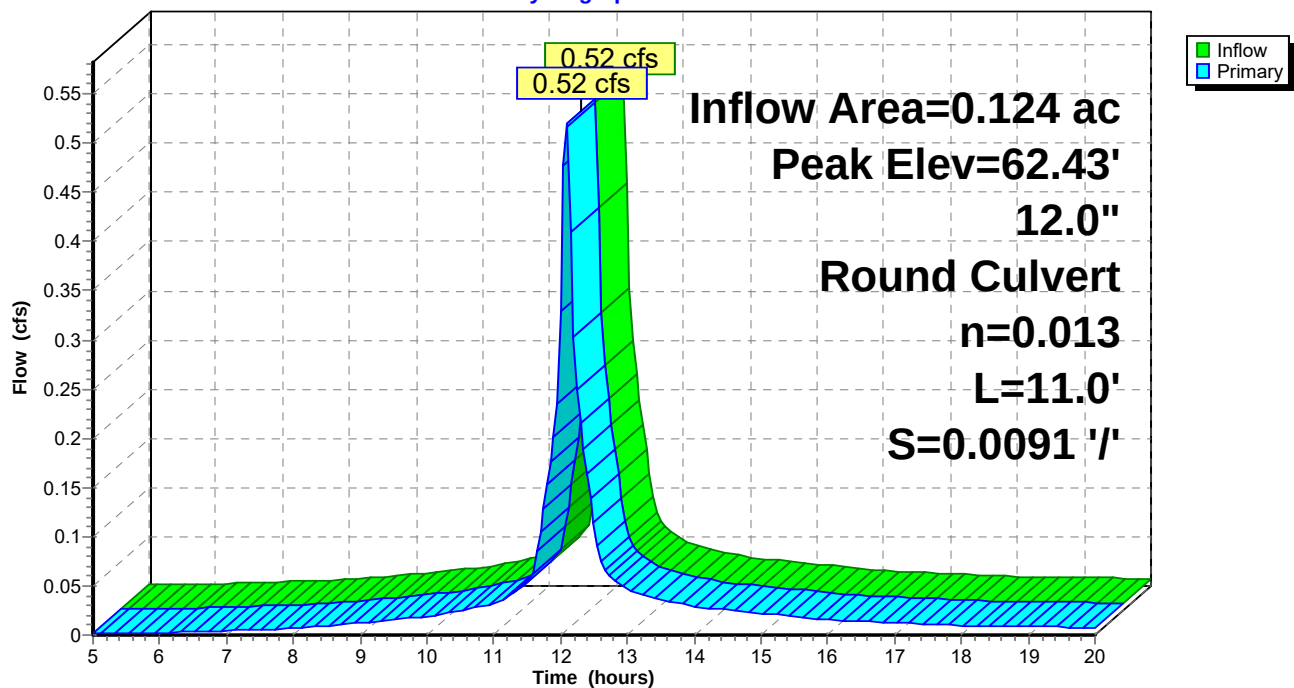
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.43' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.00' / 61.90' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.51 cfs @ 12.09 hrs HW=62.43' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.51 cfs @ 2.34 fps)

**Pond 87P: CB 85**

Hydrograph



### Summary for Pond 88P: CB 84

Inflow Area = 0.066 ac, 66.55% Impervious, Inflow Depth > 3.51" for 10-Year event  
 Inflow = 0.27 cfs @ 12.09 hrs, Volume= 0.019 af  
 Outflow = 0.27 cfs @ 12.09 hrs, Volume= 0.019 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.27 cfs @ 12.09 hrs, Volume= 0.019 af  
 Routed to Pond 92P : DMH 63

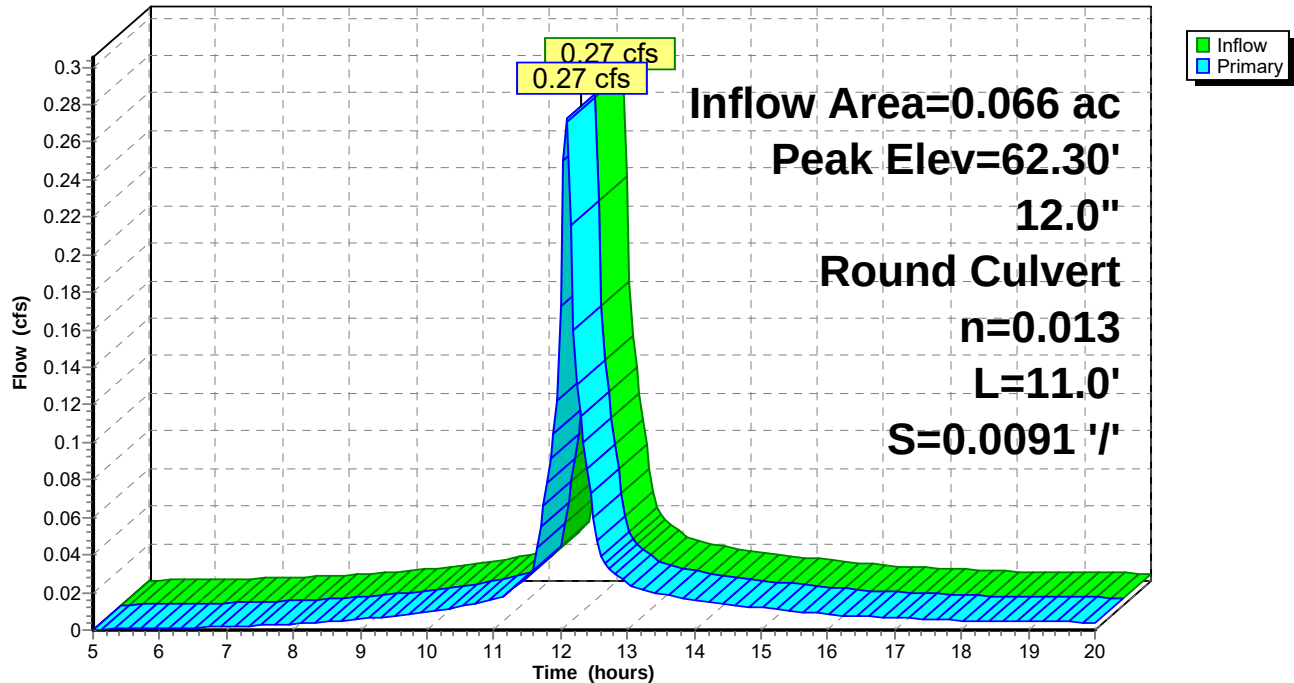
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.30' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.00' / 61.90' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.27 cfs @ 12.09 hrs HW=62.30' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.27 cfs @ 2.04 fps)

### Pond 88P: CB 84

Hydrograph



**Summary for Pond 89P: CB 74**

Inflow Area = 0.052 ac, 80.20% Impervious, Inflow Depth > 3.81" for 10-Year event  
 Inflow = 0.23 cfs @ 12.09 hrs, Volume= 0.017 af  
 Outflow = 0.23 cfs @ 12.09 hrs, Volume= 0.017 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.23 cfs @ 12.09 hrs, Volume= 0.017 af  
 Routed to Pond 91P : DMH 55

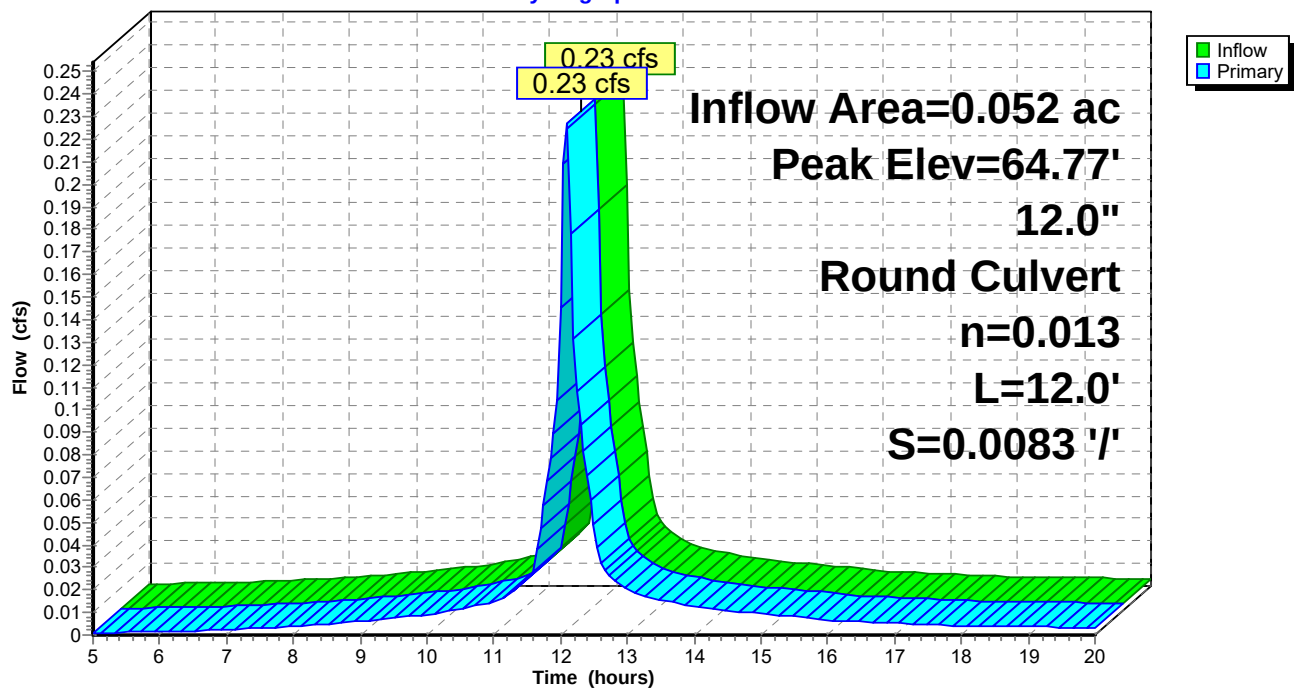
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.77' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 64.50' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 64.50' / 64.40' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.22 cfs @ 12.09 hrs HW=64.77' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.22 cfs @ 1.94 fps)

**Pond 89P: CB 74**

Hydrograph



**Summary for Pond 90P: CB 75**

Inflow Area = 0.104 ac, 76.91% Impervious, Inflow Depth > 3.71" for 10-Year event  
 Inflow = 0.45 cfs @ 12.09 hrs, Volume= 0.032 af  
 Outflow = 0.45 cfs @ 12.09 hrs, Volume= 0.032 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.45 cfs @ 12.09 hrs, Volume= 0.032 af  
 Routed to Pond 91P : DMH 55

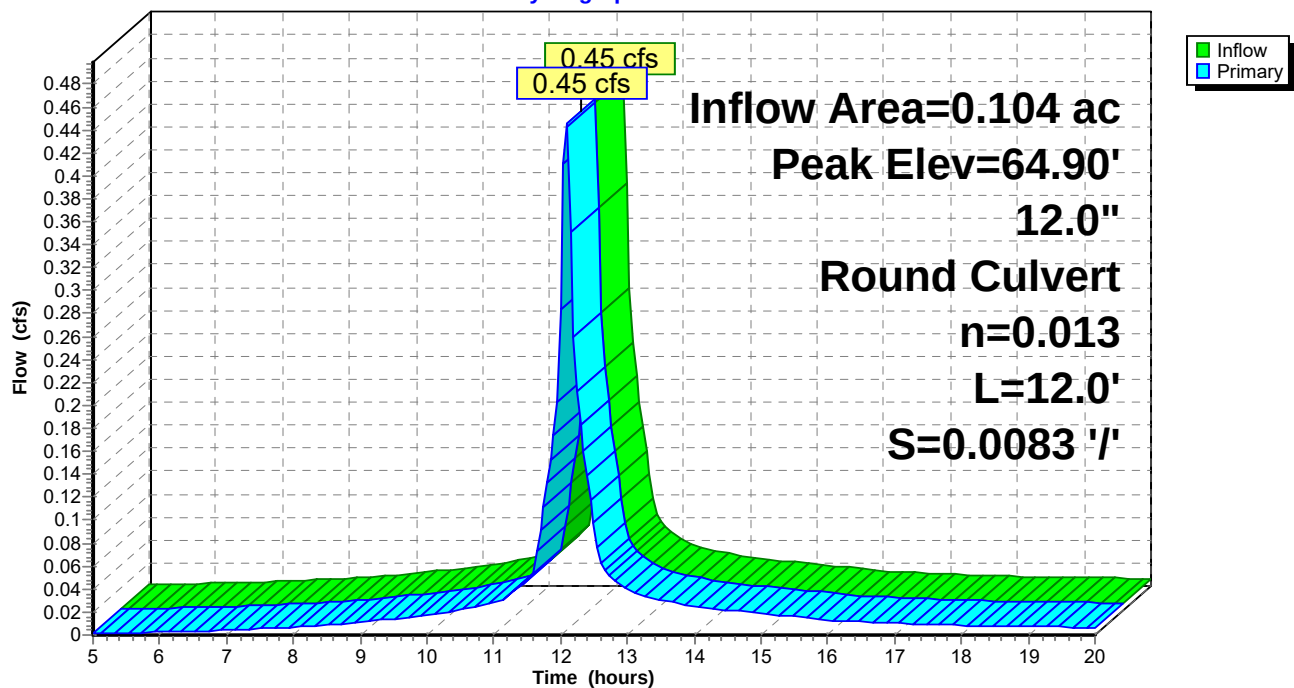
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.90' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 64.50' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 64.50' / 64.40' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.43 cfs @ 12.09 hrs HW=64.89' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.43 cfs @ 2.24 fps)

**Pond 90P: CB 75**

Hydrograph



**Summary for Pond 91P: DMH 55**

Inflow Area = 0.156 ac, 78.01% Impervious, Inflow Depth > 3.74" for 10-Year event  
 Inflow = 0.67 cfs @ 12.09 hrs, Volume= 0.049 af  
 Outflow = 0.67 cfs @ 12.09 hrs, Volume= 0.049 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.67 cfs @ 12.09 hrs, Volume= 0.049 af  
 Routed to Pond 96P : DMH 56

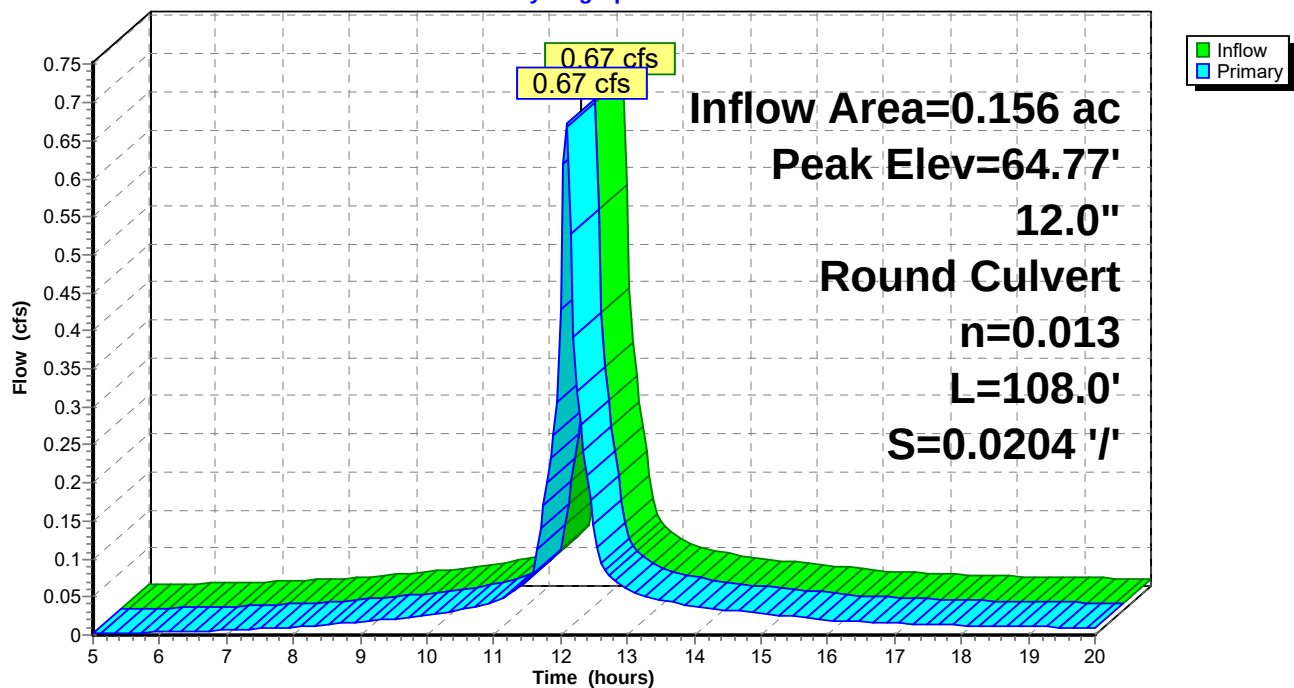
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.77' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 64.30' | <b>12.0" Round Culvert</b><br>L= 108.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 64.30' / 62.10' S= 0.0204 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.66 cfs @ 12.09 hrs HW=64.76' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.66 cfs @ 1.83 fps)

**Pond 91P: DMH 55**

Hydrograph



### Summary for Pond 92P: DMH 63

Inflow Area = 0.190 ac, 68.59% Impervious, Inflow Depth > 3.57" for 10-Year event  
 Inflow = 0.79 cfs @ 12.09 hrs, Volume= 0.057 af  
 Outflow = 0.79 cfs @ 12.09 hrs, Volume= 0.057 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.79 cfs @ 12.09 hrs, Volume= 0.057 af  
 Routed to Pond 93P : DMH 62

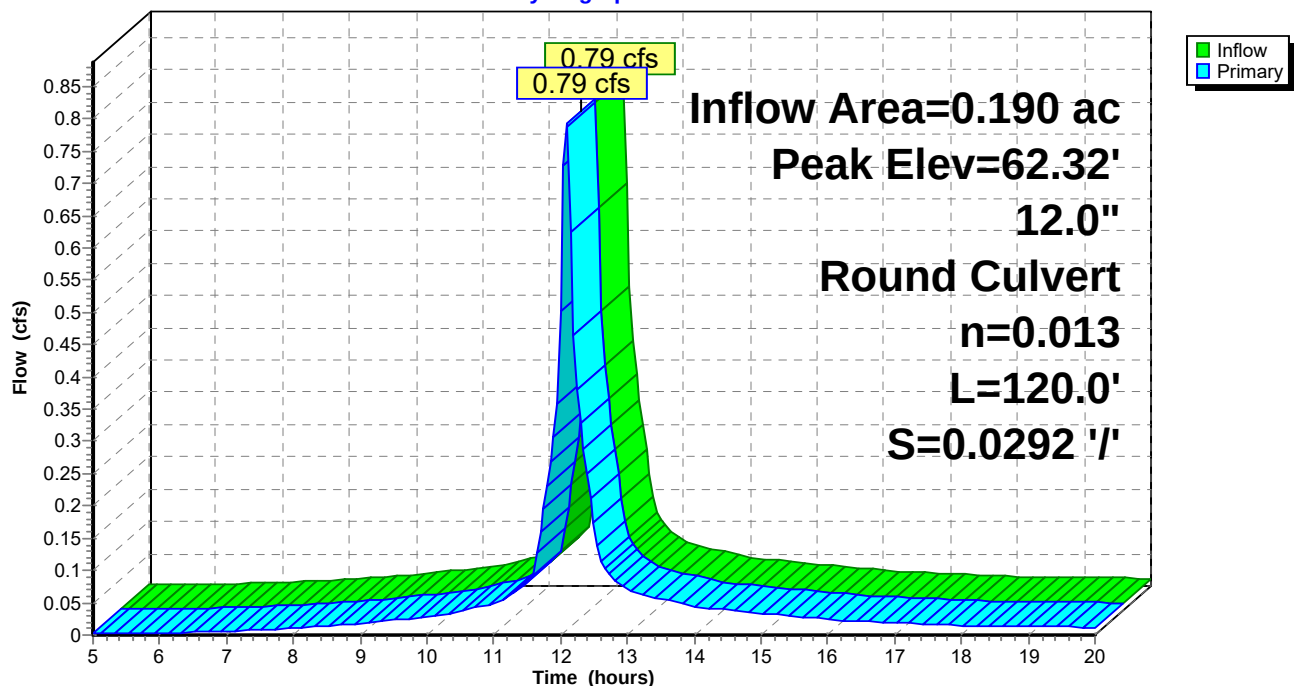
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.32' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.80' | <b>12.0" Round Culvert</b><br>L= 120.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.80' / 58.30' S= 0.0292 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.77 cfs @ 12.09 hrs HW=62.31' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.77 cfs @ 1.92 fps)

### Pond 92P: DMH 63

#### Hydrograph



### Summary for Pond 93P: DMH 62

Inflow Area = 1.037 ac, 70.16% Impervious, Inflow Depth > 3.58" for 10-Year event  
 Inflow = 4.33 cfs @ 12.09 hrs, Volume= 0.310 af  
 Outflow = 4.33 cfs @ 12.09 hrs, Volume= 0.310 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.33 cfs @ 12.09 hrs, Volume= 0.310 af  
 Routed to Pond 209P : DMH 64

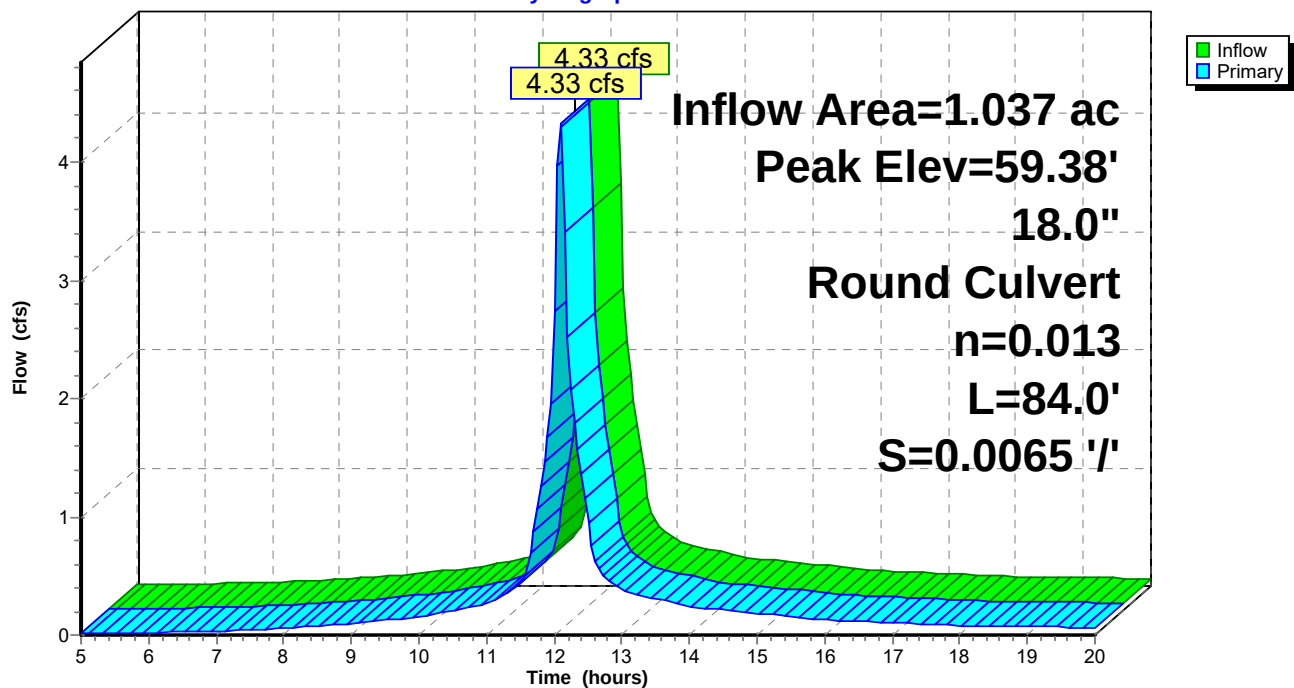
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.38' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.20' | <b>18.0" Round Culvert</b><br>L= 84.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.20' / 57.65' S= 0.0065 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=4.22 cfs @ 12.09 hrs HW=59.36' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 4.22 cfs @ 2.89 fps)

### Pond 93P: DMH 62

Hydrograph





### Summary for Pond 94P: CB 77

Inflow Area = 0.204 ac, 71.21% Impervious, Inflow Depth > 3.61" for 10-Year event  
 Inflow = 0.86 cfs @ 12.09 hrs, Volume= 0.061 af  
 Outflow = 0.86 cfs @ 12.09 hrs, Volume= 0.061 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.86 cfs @ 12.09 hrs, Volume= 0.061 af  
 Routed to Pond 96P : DMH 56

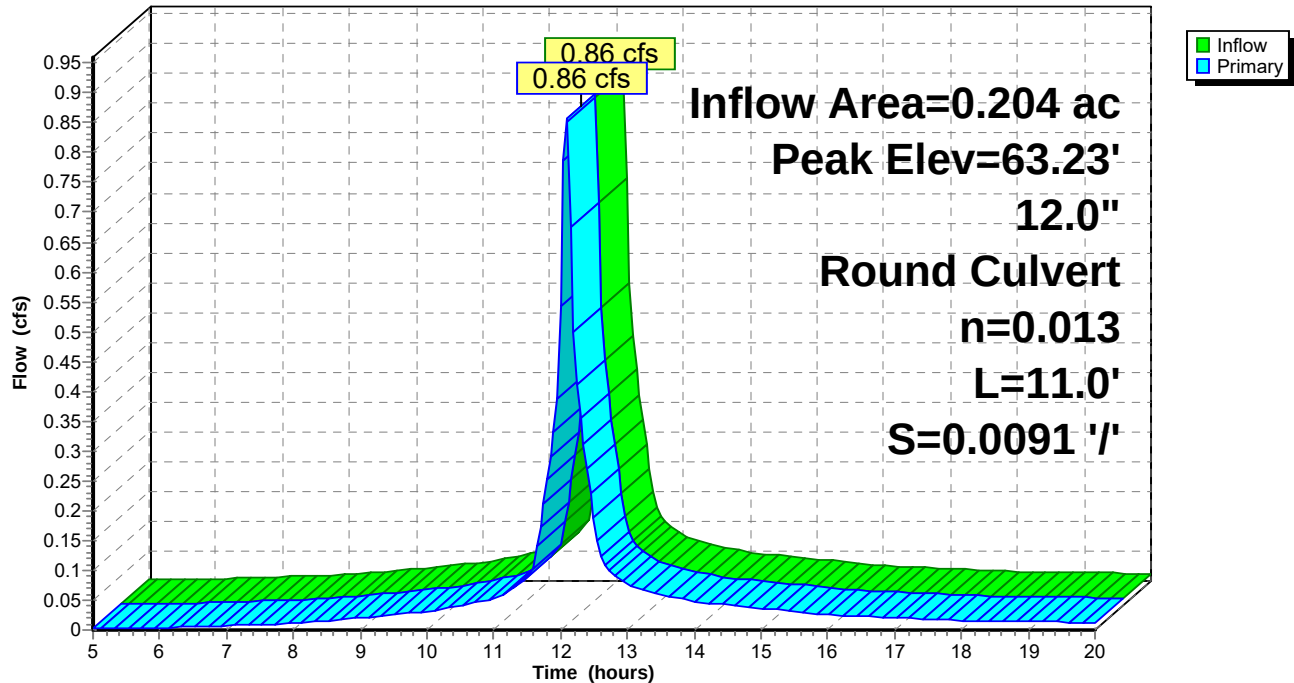
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.23' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.65' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.65' / 62.55' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.84 cfs @ 12.09 hrs HW=63.22' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.84 cfs @ 2.61 fps)

### Pond 94P: CB 77

Hydrograph



### Summary for Pond 95P: CB 76

Inflow Area = 0.141 ac, 70.69% Impervious, Inflow Depth > 3.61" for 10-Year event  
 Inflow = 0.59 cfs @ 12.09 hrs, Volume= 0.042 af  
 Outflow = 0.59 cfs @ 12.09 hrs, Volume= 0.042 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.59 cfs @ 12.09 hrs, Volume= 0.042 af  
 Routed to Pond 96P : DMH 56

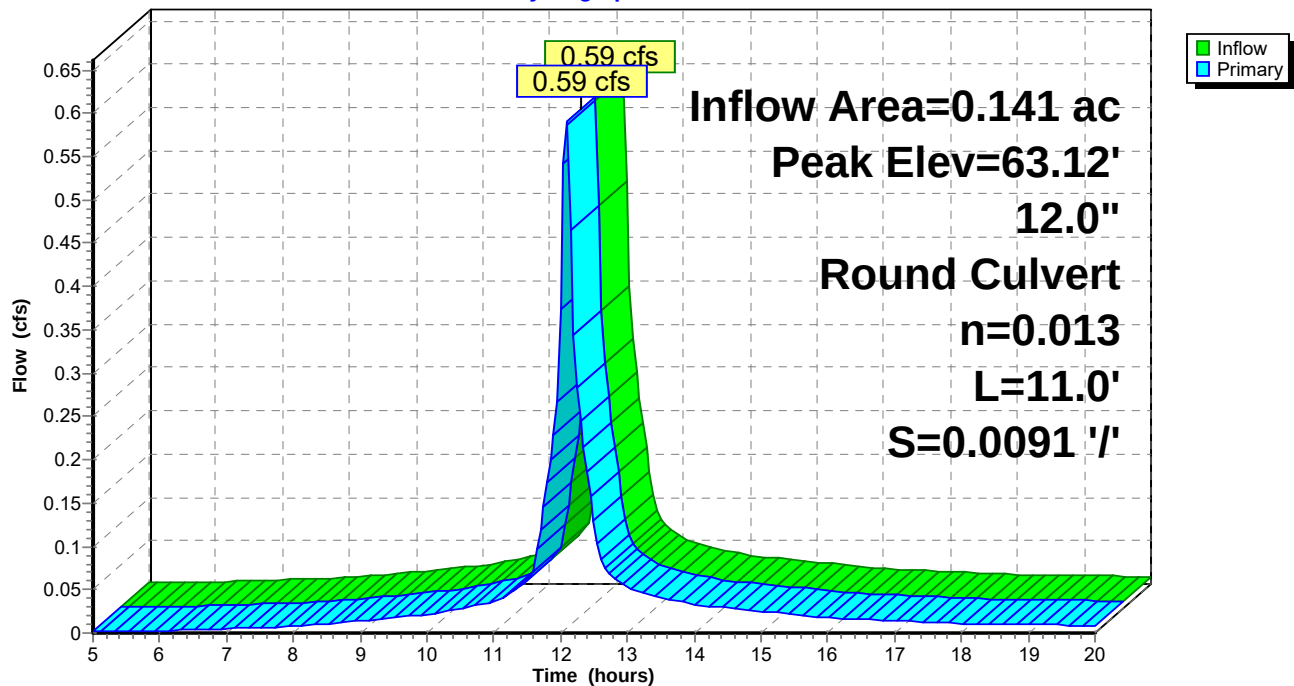
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.12' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.65' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.65' / 62.55' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.58 cfs @ 12.09 hrs HW=63.11' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.58 cfs @ 2.40 fps)

### Pond 95P: CB 76

Hydrograph



**Summary for Pond 96P: DMH 56**

Inflow Area = 1.141 ac, 72.03% Impervious, Inflow Depth > 3.64" for 10-Year event  
 Inflow = 4.82 cfs @ 12.09 hrs, Volume= 0.346 af  
 Outflow = 4.82 cfs @ 12.09 hrs, Volume= 0.346 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.82 cfs @ 12.09 hrs, Volume= 0.346 af  
 Routed to Pond 111P : DMH 57

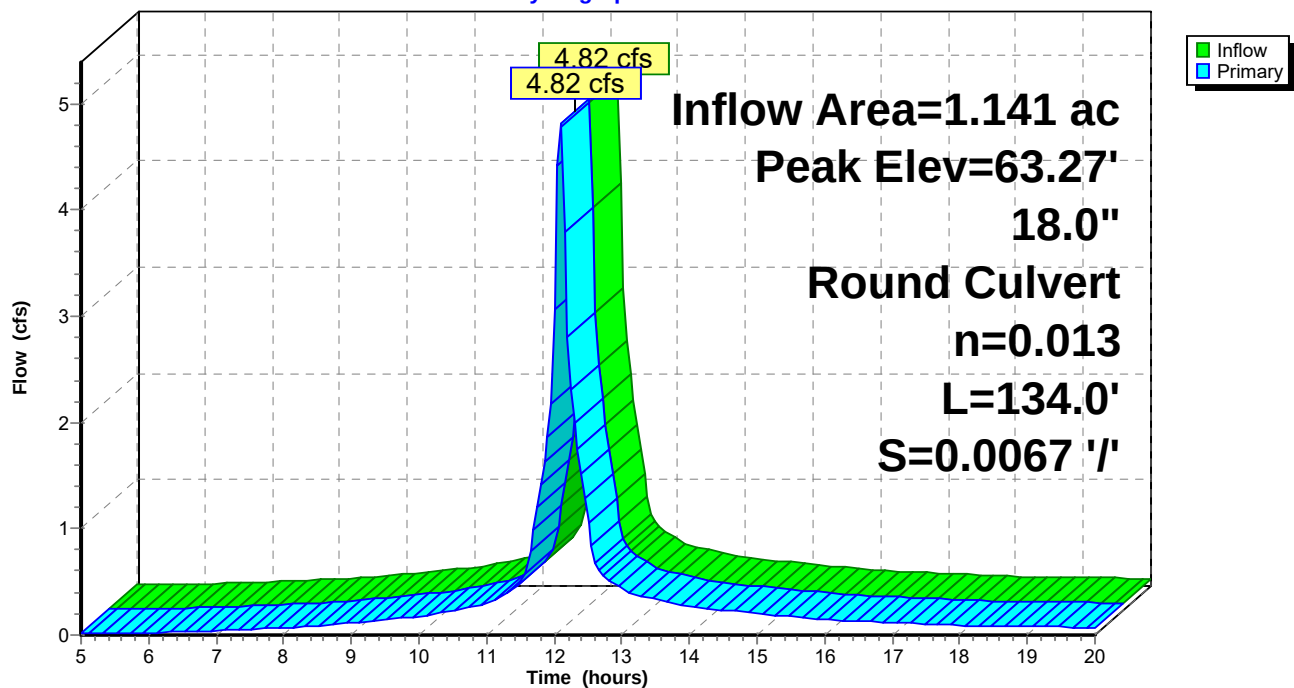
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.27' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.00' | <b>18.0" Round Culvert</b><br>L= 134.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.00' / 61.10' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=4.70 cfs @ 12.09 hrs HW=63.24' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 4.70 cfs @ 3.00 fps)

**Pond 96P: DMH 56**

Hydrograph



### Summary for Pond 97P: Sub. Det. 2

Inflow Area = 1.404 ac, 71.59% Impervious, Inflow Depth > 3.62" for 10-Year event  
 Inflow = 5.90 cfs @ 12.09 hrs, Volume= 0.423 af  
 Outflow = 0.26 cfs @ 14.92 hrs, Volume= 0.157 af, Atten= 96%, Lag= 169.9 min  
 Primary = 0.26 cfs @ 14.92 hrs, Volume= 0.157 af  
 Routed to Link 188L : DP 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.55' @ 14.92 hrs Surf.Area= 0.088 ac Storage= 0.305 af

Plug-Flow detention time= 295.3 min calculated for 0.157 af (37% of inflow)  
 Center-of-Mass det. time= 189.3 min ( 947.4 - 758.1 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 57.50' | 0.014 af      | <b>66.00'W x 58.00'L x 5.71'H Field A</b><br>0.502 af Overall - 0.467 af Embedded = 0.035 af x 40.0% Voids                                                                                             |
| #2A    | 57.54' | 0.367 af      | <b>Shea Leaching Chamber 8x14x5.7 x 32 Inside #1</b><br>Inside= 84.0"W x 60.0"H => 38.46 sf x 13.00'L = 500.0 cf<br>Outside= 96.0"W x 68.0"H => 45.36 sf x 14.00'L = 635.0 cf<br>32 Chambers in 8 Rows |
|        |        | 0.381 af      | Total Available Storage                                                                                                                                                                                |

Storage Group A created with Chamber Wizard

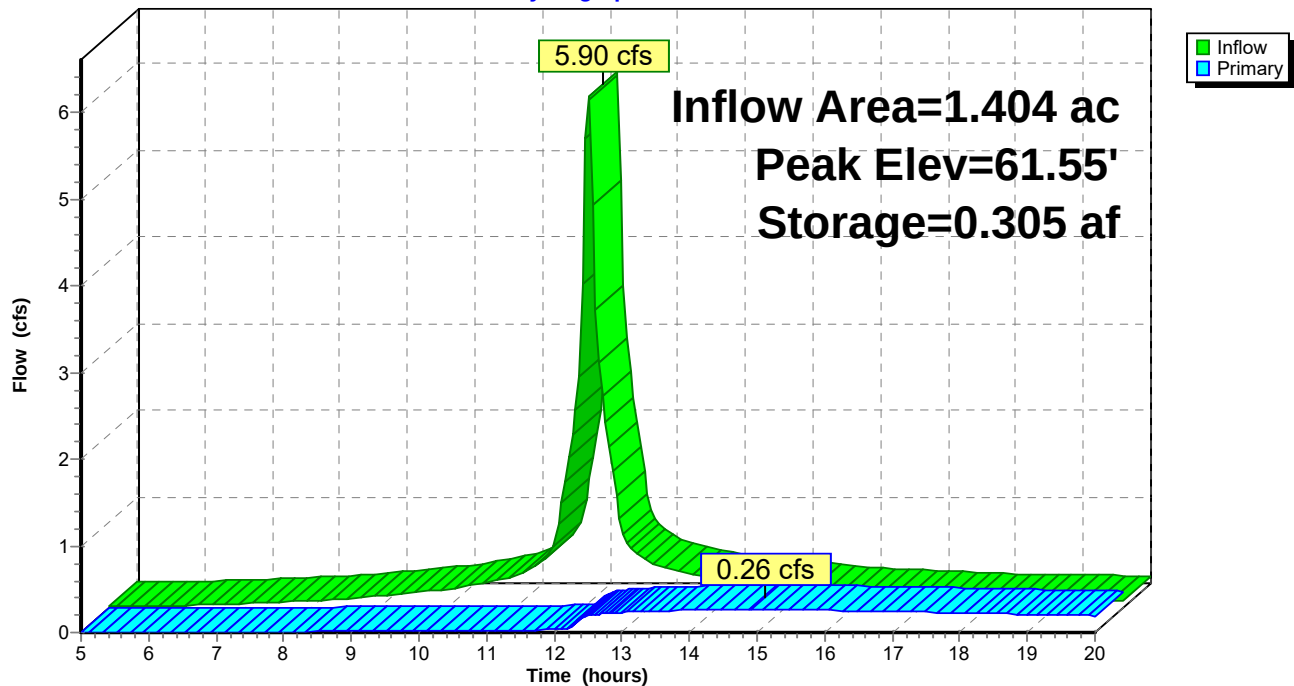
| Device | Routing  | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary  | 57.50' | <b>18.0" Round Culvert</b><br>L= 30.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.50' / 53.00' S= 0.1500 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |
| #2     | Device 1 | 57.50' | <b>1.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                      |
| #3     | Device 1 | 60.50' | <b>2.0" Vert. Orifice/Grate X 2.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                            |
| #4     | Device 1 | 61.70' | <b>4.0' long Sharp-Crested Rectangular Weir</b> 2 End Contraction(s)                                                                                                                                            |

**Primary OutFlow** Max=0.26 cfs @ 14.92 hrs HW=61.55' (Free Discharge)

- 1=Culvert (Passes 0.26 cfs of 12.20 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.05 cfs @ 9.64 fps)
- 3=Orifice/Grate (Orifice Controls 0.21 cfs @ 4.73 fps)
- 4=Sharp-Crested Rectangular Weir ( Controls 0.00 cfs)

Pond 97P: Sub. Det. 2

Hydrograph



### Summary for Pond 98P: DMH 61

Inflow Area = 0.847 ac, 70.52% Impervious, Inflow Depth > 3.59" for 10-Year event  
 Inflow = 3.54 cfs @ 12.09 hrs, Volume= 0.253 af  
 Outflow = 3.54 cfs @ 12.09 hrs, Volume= 0.253 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.54 cfs @ 12.09 hrs, Volume= 0.253 af  
 Routed to Pond 93P : DMH 62

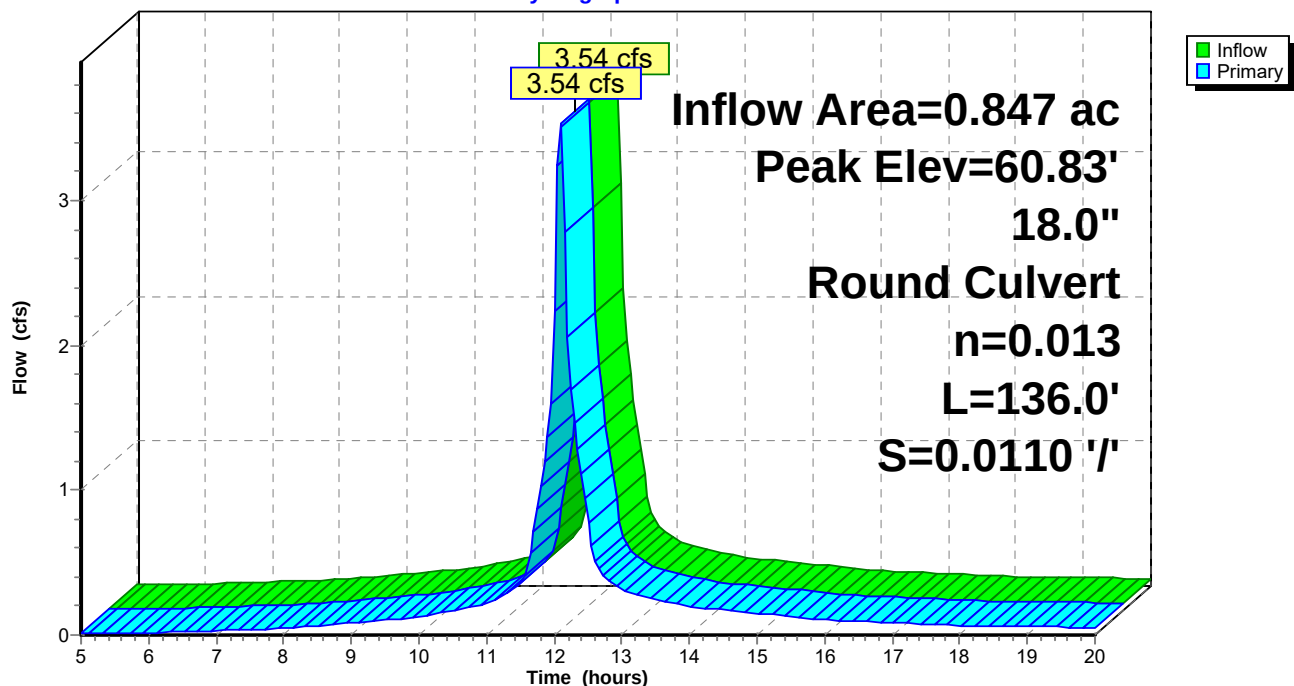
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.83' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.80' | <b>18.0" Round Culvert</b><br>L= 136.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.80' / 58.30' S= 0.0110 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=3.45 cfs @ 12.09 hrs HW=60.82' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 3.45 cfs @ 2.71 fps)

### Pond 98P: DMH 61

Hydrograph



**Summary for Pond 99P: CB 81**

Inflow Area = 0.258 ac, 68.08% Impervious, Inflow Depth > 3.51" for 10-Year event  
 Inflow = 1.06 cfs @ 12.09 hrs, Volume= 0.075 af  
 Outflow = 1.06 cfs @ 12.09 hrs, Volume= 0.075 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.06 cfs @ 12.09 hrs, Volume= 0.075 af  
 Routed to Pond 101P : DMH 59

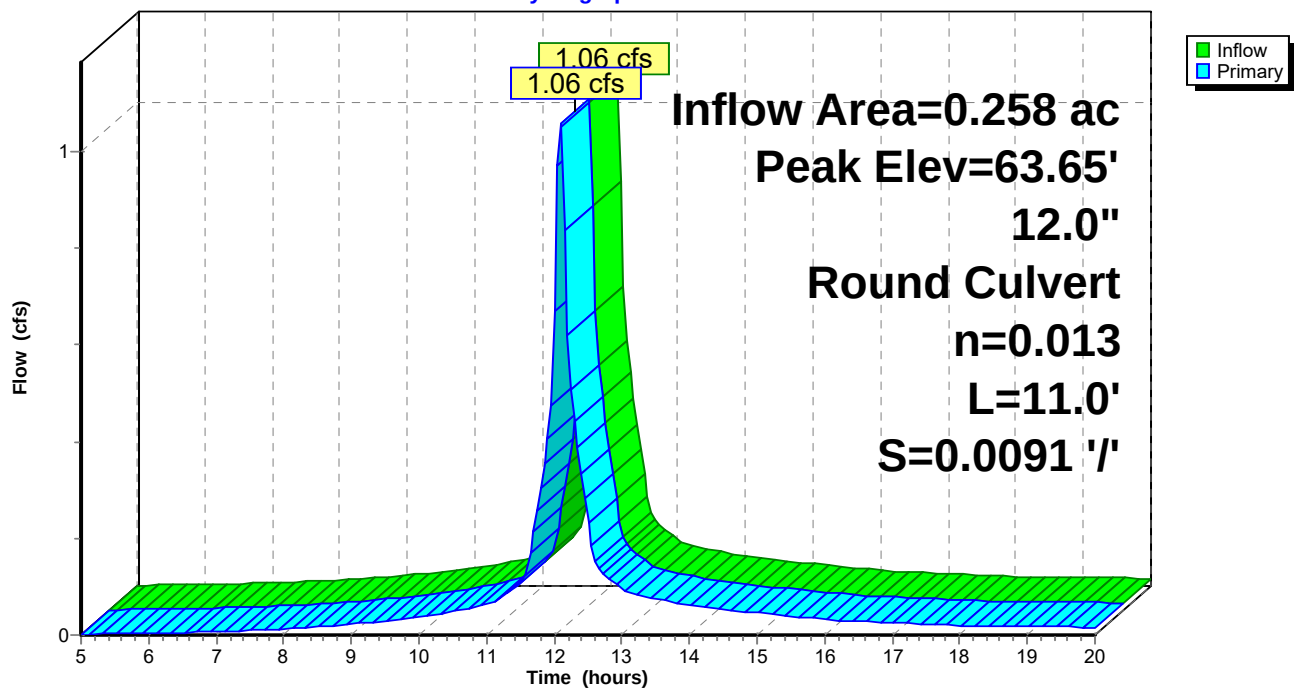
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.65' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.99' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.99' / 62.89' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.03 cfs @ 12.09 hrs HW=63.64' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.03 cfs @ 2.73 fps)

**Pond 99P: CB 81**

Hydrograph



### Summary for Pond 100P: CB 80

Inflow Area = 0.383 ac, 73.17% Impervious, Inflow Depth > 3.71" for 10-Year event  
 Inflow = 1.64 cfs @ 12.09 hrs, Volume= 0.118 af  
 Outflow = 1.64 cfs @ 12.09 hrs, Volume= 0.118 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.64 cfs @ 12.09 hrs, Volume= 0.118 af  
 Routed to Pond 101P : DMH 59

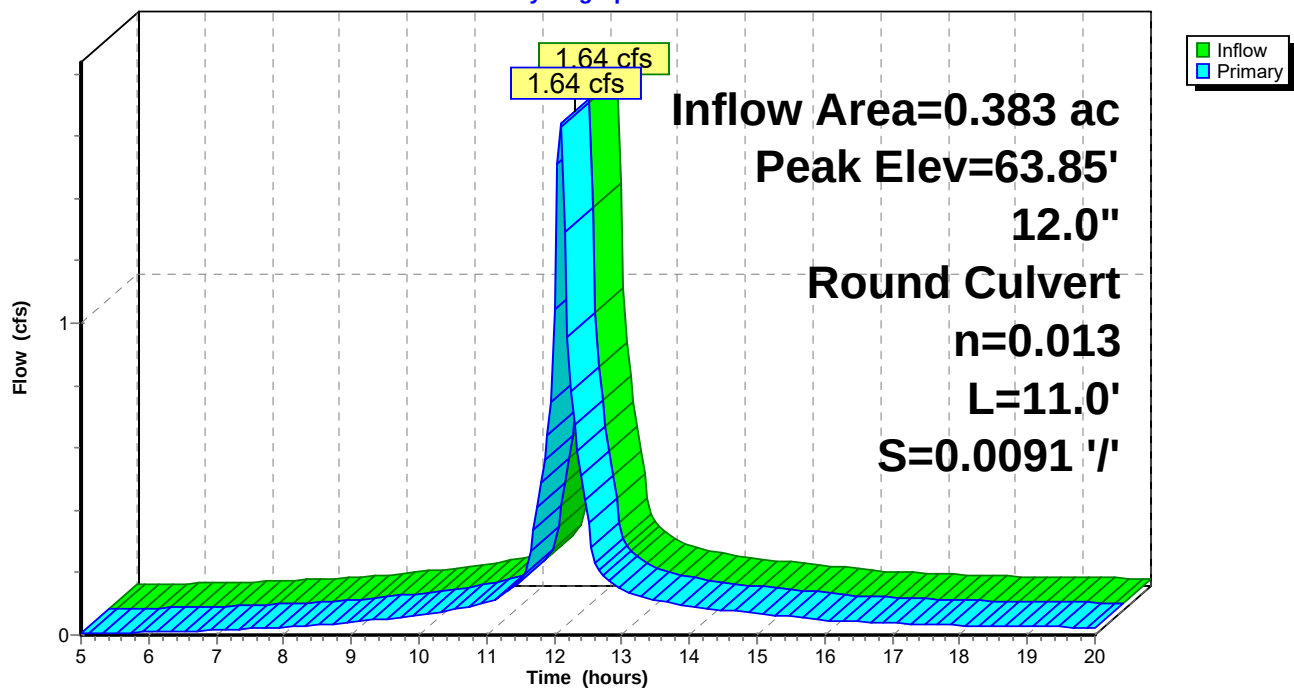
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.85' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.99' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.99' / 62.89' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.59 cfs @ 12.09 hrs HW=63.84' (Free Discharge)  
 1=Culvert (Barrel Controls 1.59 cfs @ 3.03 fps)

### Pond 100P: CB 80

#### Hydrograph





### Summary for Pond 101P: DMH 59

Inflow Area = 0.640 ac, 71.12% Impervious, Inflow Depth > 3.63" for 10-Year event  
 Inflow = 2.70 cfs @ 12.09 hrs, Volume= 0.193 af  
 Outflow = 2.70 cfs @ 12.09 hrs, Volume= 0.193 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.70 cfs @ 12.09 hrs, Volume= 0.193 af  
 Routed to Pond 96P : DMH 56

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 63.68' @ 12.09 hrs

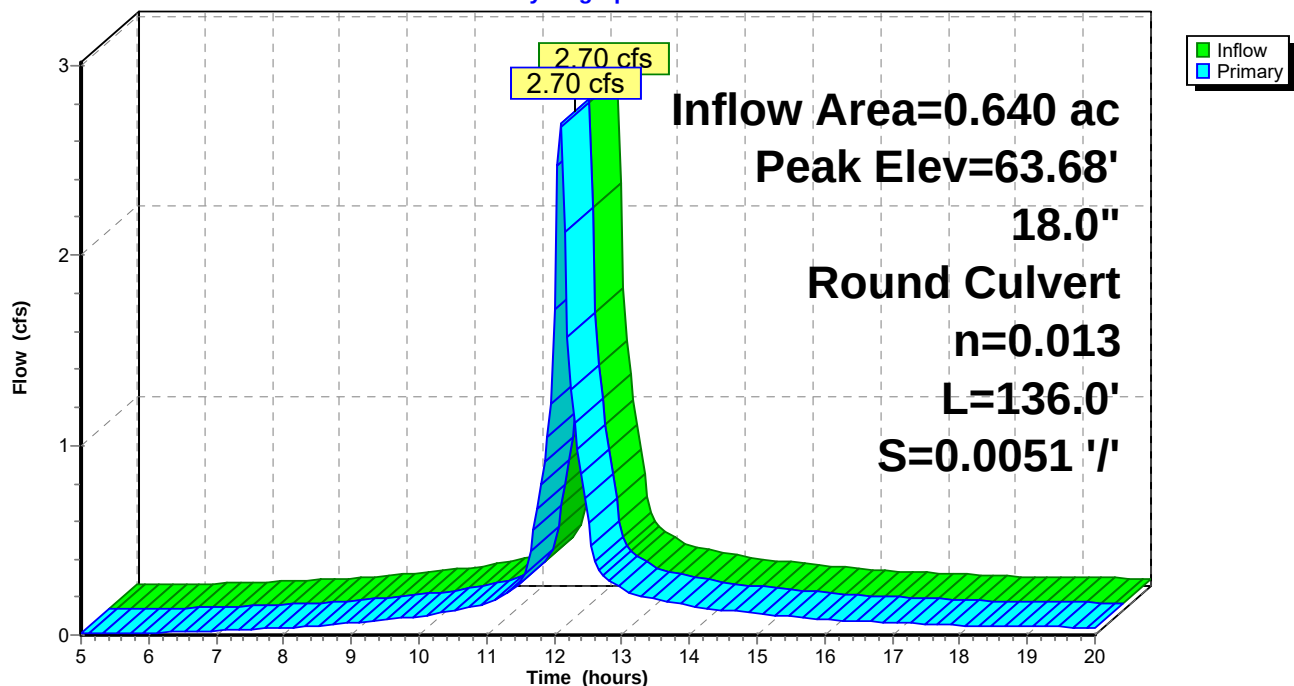
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.79' | <b>18.0" Round Culvert</b><br>L= 136.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.79' / 62.10' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.63 cfs @ 12.09 hrs HW=63.67' (Free Discharge)

1=Culvert (Barrel Controls 2.63 cfs @ 3.53 fps)

### Pond 101P: DMH 59

#### Hydrograph



**Summary for Pond 102P: CB 93**

Inflow Area = 0.178 ac, 69.60% Impervious, Inflow Depth > 3.61" for 10-Year event  
 Inflow = 0.75 cfs @ 12.09 hrs, Volume= 0.054 af  
 Outflow = 0.75 cfs @ 12.09 hrs, Volume= 0.054 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.75 cfs @ 12.09 hrs, Volume= 0.054 af  
 Routed to Pond 117P : DMH 69

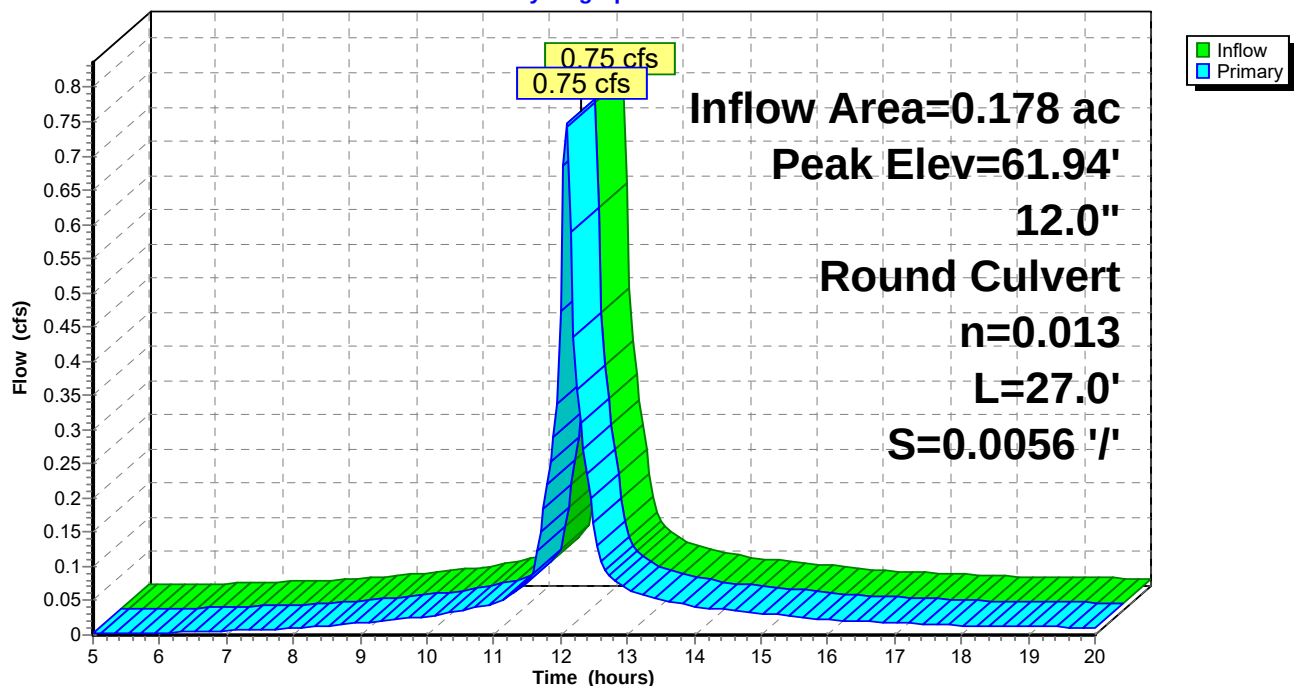
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.94' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.40' | <b>12.0" Round Culvert</b><br>L= 27.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.40' / 61.25' S= 0.0056 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.73 cfs @ 12.09 hrs HW=61.93' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.73 cfs @ 2.49 fps)

**Pond 102P: CB 93**

Hydrograph



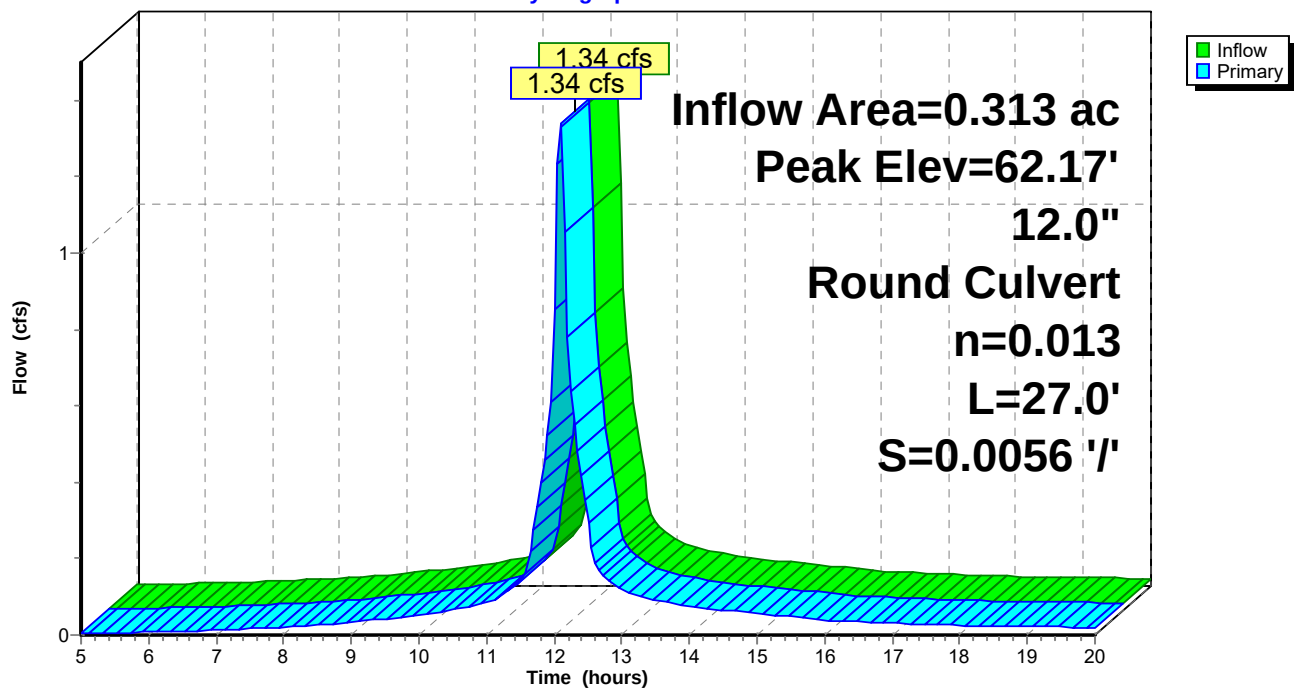
**Summary for Pond 103P: CB 92**

Inflow Area = 0.313 ac, 76.83% Impervious, Inflow Depth > 3.71" for 10-Year event  
 Inflow = 1.34 cfs @ 12.09 hrs, Volume= 0.097 af  
 Outflow = 1.34 cfs @ 12.09 hrs, Volume= 0.097 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.34 cfs @ 12.09 hrs, Volume= 0.097 af  
 Routed to Pond 117P : DMH 69

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.17' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.40' | <b>12.0" Round Culvert</b><br>L= 27.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.40' / 61.25' S= 0.0056 ' S= 0.0056 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.31 cfs @ 12.09 hrs HW=62.15' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.31 cfs @ 2.86 fps)

**Pond 103P: CB 92****Hydrograph**

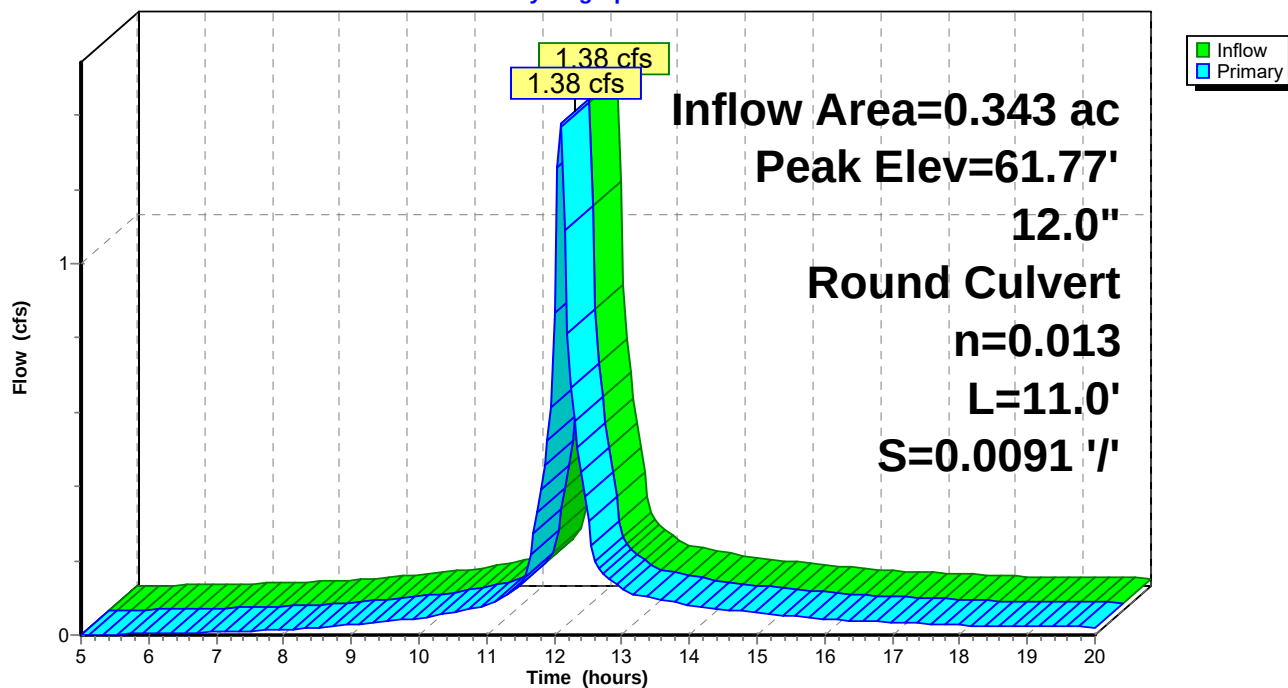
**Summary for Pond 104P: CB 83**

Inflow Area = 0.343 ac, 64.21% Impervious, Inflow Depth > 3.41" for 10-Year event  
 Inflow = 1.38 cfs @ 12.09 hrs, Volume= 0.097 af  
 Outflow = 1.38 cfs @ 12.09 hrs, Volume= 0.097 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.38 cfs @ 12.09 hrs, Volume= 0.097 af  
 Routed to Pond 106P : DMH 60

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.77' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.00' / 60.90' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.35 cfs @ 12.09 hrs HW=61.76' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.35 cfs @ 2.91 fps)

**Pond 104P: CB 83****Hydrograph**

### Summary for Pond 105P: CB 82

Inflow Area = 0.504 ac, 74.80% Impervious, Inflow Depth > 3.71" for 10-Year event  
 Inflow = 2.16 cfs @ 12.09 hrs, Volume= 0.156 af  
 Outflow = 2.16 cfs @ 12.09 hrs, Volume= 0.156 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.16 cfs @ 12.09 hrs, Volume= 0.156 af  
 Routed to Pond 106P : DMH 60

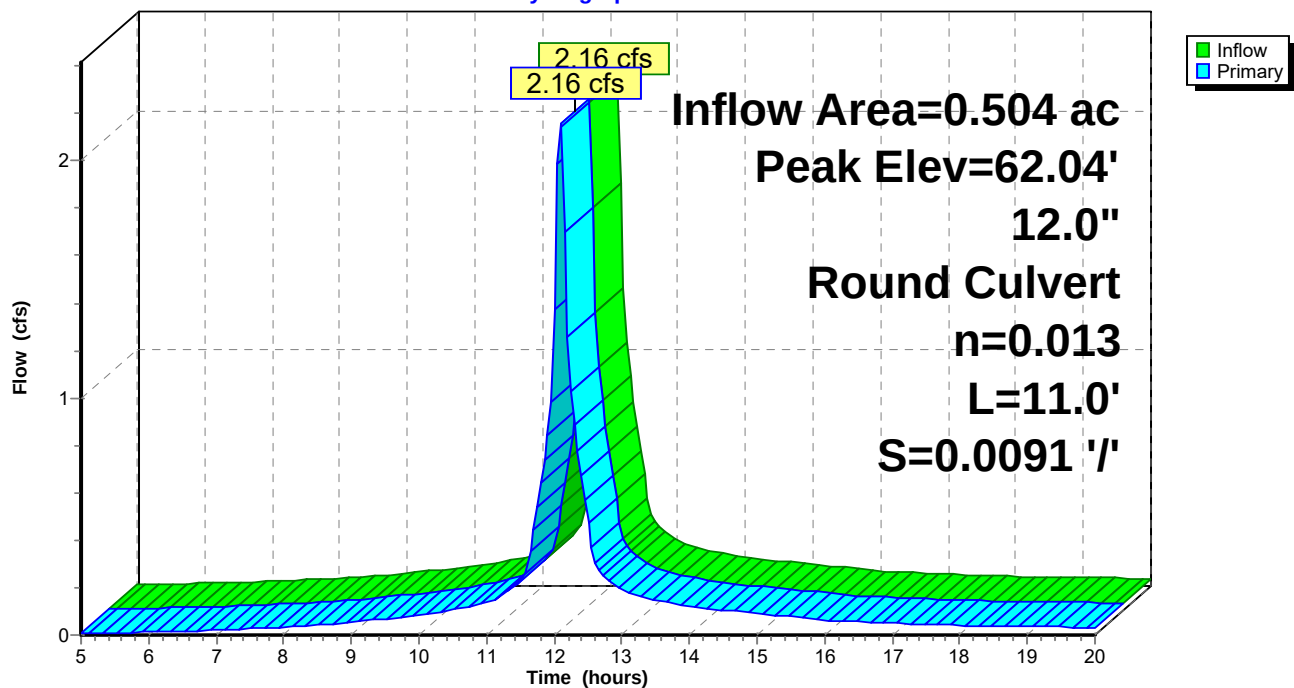
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.04' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.00' / 60.90' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.10 cfs @ 12.09 hrs HW=62.02' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.10 cfs @ 3.25 fps)

### Pond 105P: CB 82

#### Hydrograph



### Summary for Pond 106P: DMH 60

Inflow Area = 0.847 ac, 70.52% Impervious, Inflow Depth > 3.59" for 10-Year event  
 Inflow = 3.54 cfs @ 12.09 hrs, Volume= 0.253 af  
 Outflow = 3.54 cfs @ 12.09 hrs, Volume= 0.253 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.54 cfs @ 12.09 hrs, Volume= 0.253 af  
 Routed to Pond 98P : DMH 61

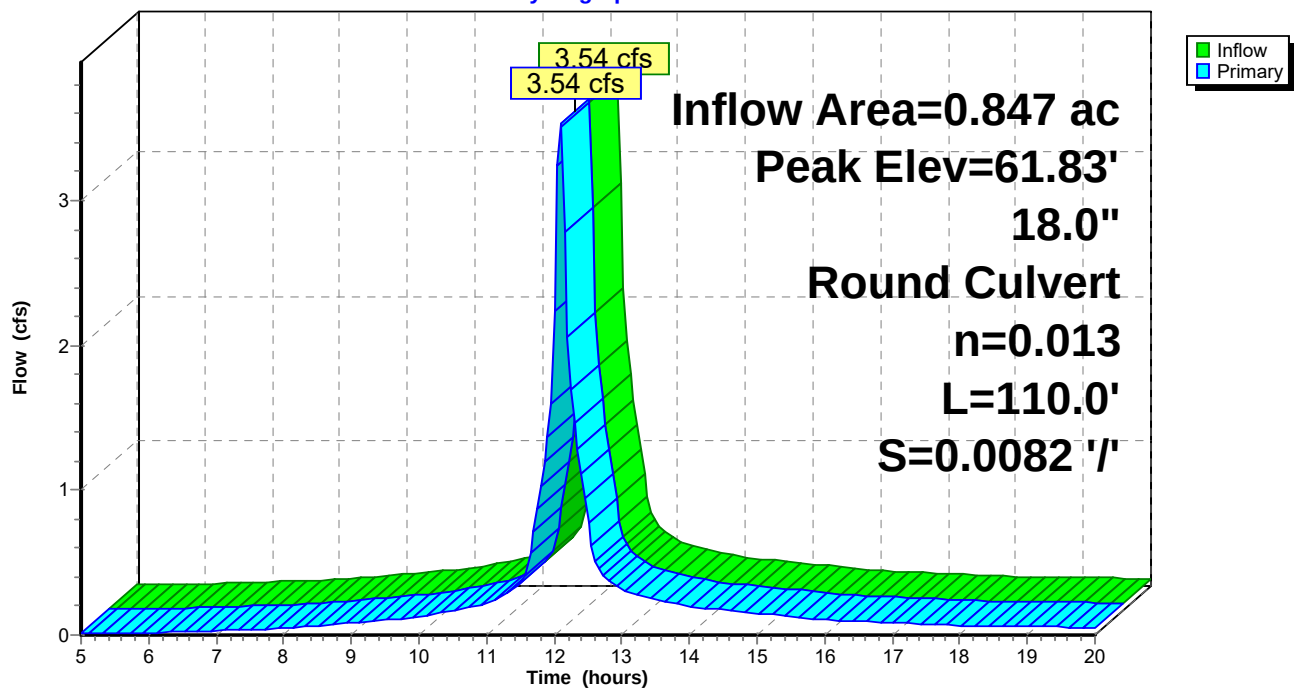
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.83' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.80' | <b>18.0" Round Culvert</b><br>L= 110.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.80' / 59.90' S= 0.0082 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=3.45 cfs @ 12.09 hrs HW=61.82' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 3.45 cfs @ 2.71 fps)

### Pond 106P: DMH 60

#### Hydrograph



### Summary for Pond 107P: CB

Inflow Area = 0.235 ac, 64.37% Impervious, Inflow Depth > 3.41" for 10-Year event  
 Inflow = 0.94 cfs @ 12.09 hrs, Volume= 0.067 af  
 Outflow = 0.94 cfs @ 12.09 hrs, Volume= 0.067 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.94 cfs @ 12.09 hrs, Volume= 0.067 af  
 Routed to Pond 119P : DMH 66

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.57' @ 12.09 hrs

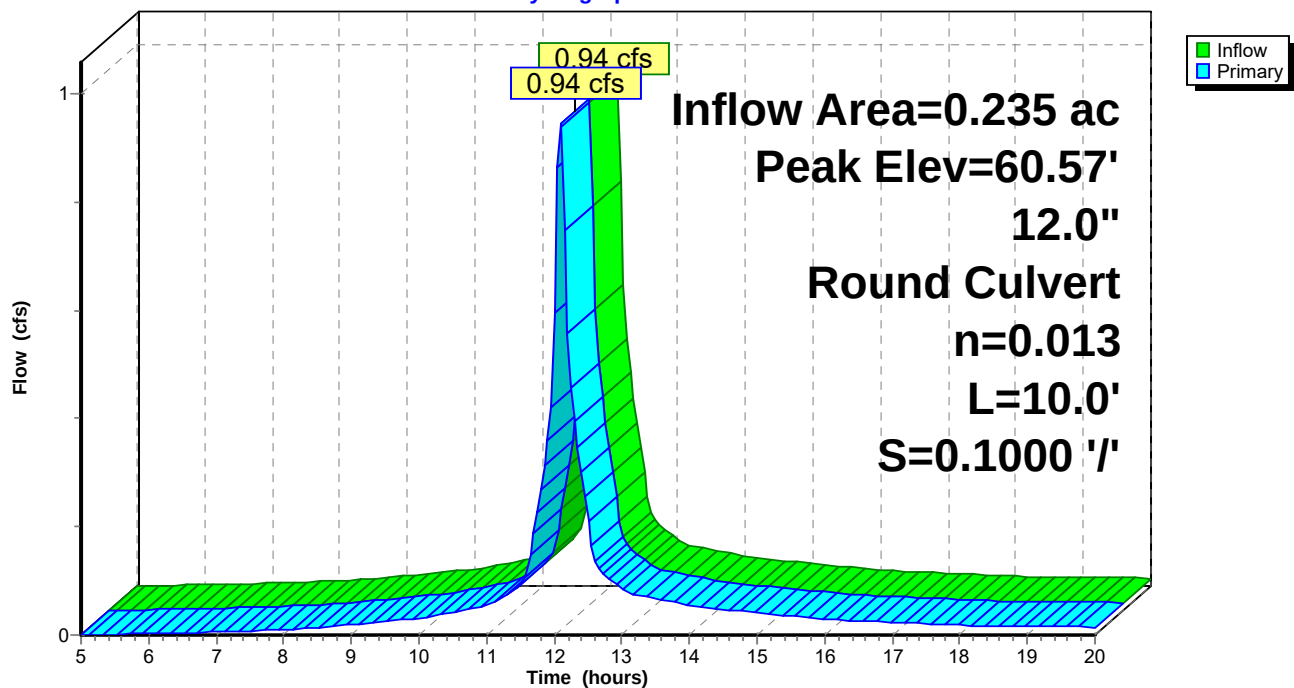
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.00' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.00' / 59.00' S= 0.1000 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.92 cfs @ 12.09 hrs HW=60.56' (Free Discharge)

↑**1=Culvert** (Inlet Controls 0.92 cfs @ 2.02 fps)

### Pond 107P: CB

Hydrograph



**Summary for Pond 108P: CB 88**

Inflow Area = 0.093 ac, 80.29% Impervious, Inflow Depth > 3.81" for 10-Year event  
 Inflow = 0.41 cfs @ 12.09 hrs, Volume= 0.030 af  
 Outflow = 0.41 cfs @ 12.09 hrs, Volume= 0.030 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.41 cfs @ 12.09 hrs, Volume= 0.030 af  
 Routed to Pond 119P : DMH 66

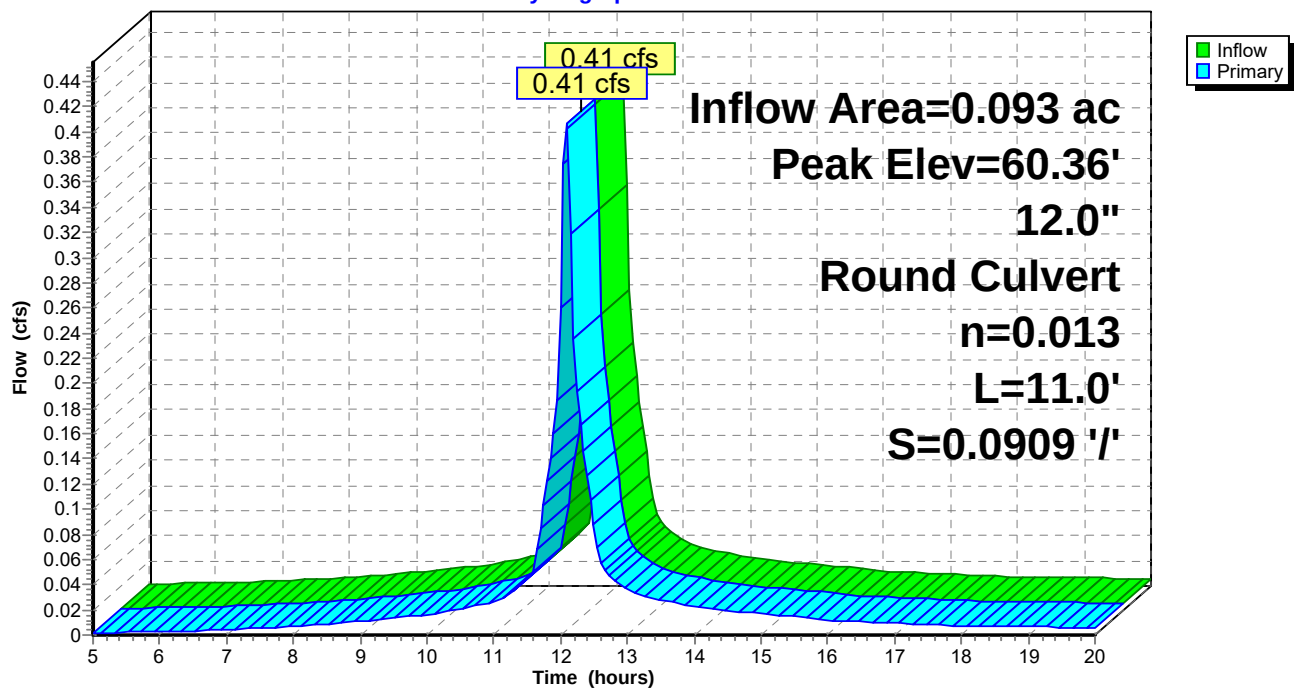
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.36' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.00' / 59.00' S= 0.0909 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.40 cfs @ 12.09 hrs HW=60.35' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.40 cfs @ 1.60 fps)

**Pond 108P: CB 88**

Hydrograph





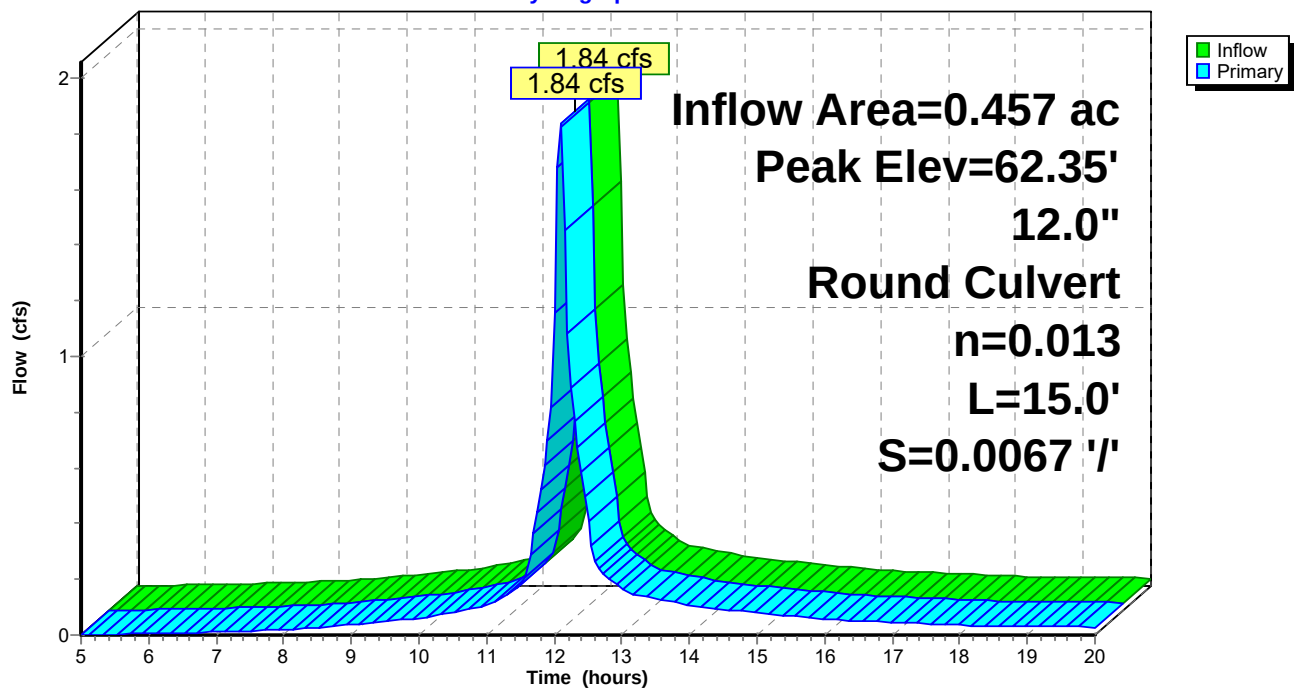
**Summary for Pond 109P: CB 79**

Inflow Area = 0.457 ac, 64.44% Impervious, Inflow Depth > 3.41" for 10-Year event  
 Inflow = 1.84 cfs @ 12.09 hrs, Volume= 0.130 af  
 Outflow = 1.84 cfs @ 12.09 hrs, Volume= 0.130 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.84 cfs @ 12.09 hrs, Volume= 0.130 af  
 Routed to Pond 111P : DMH 57

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.35' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.40' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.40' / 61.30' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.79 cfs @ 12.09 hrs HW=62.33' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.79 cfs @ 3.07 fps)

**Pond 109P: CB 79****Hydrograph**

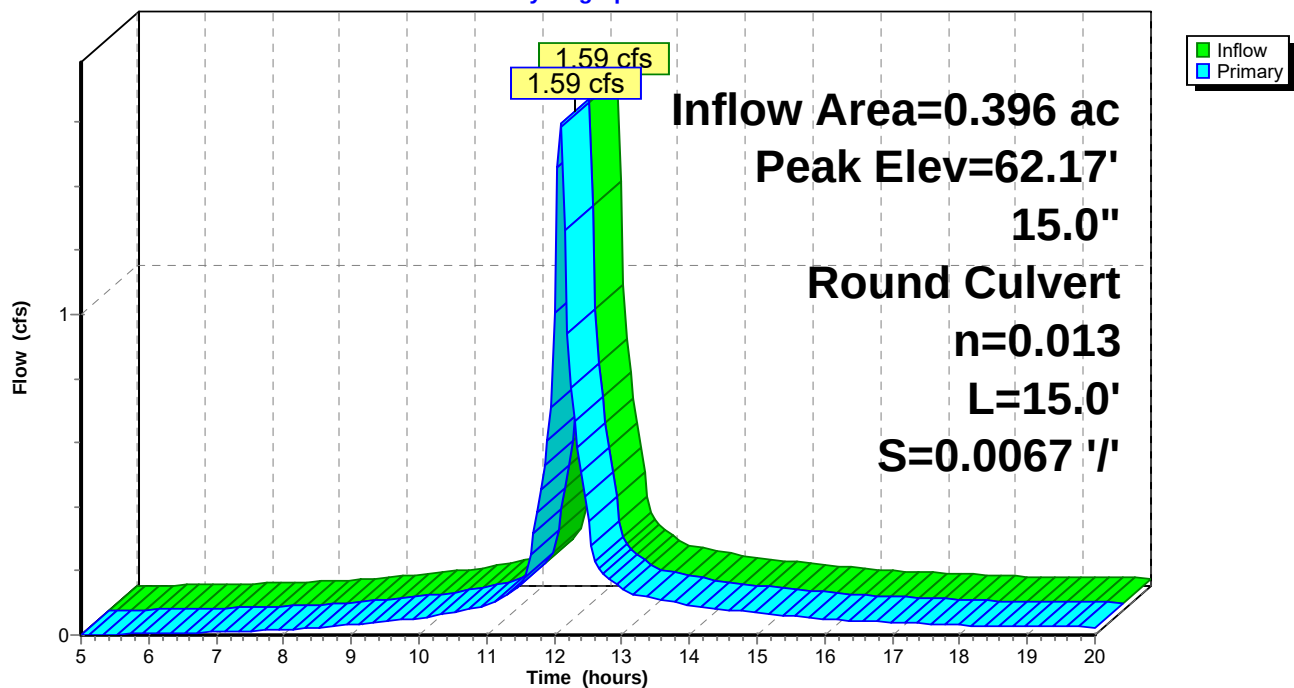
**Summary for Pond 110P: CB 78**

Inflow Area = 0.396 ac, 64.26% Impervious, Inflow Depth > 3.41" for 10-Year event  
 Inflow = 1.59 cfs @ 12.09 hrs, Volume= 0.112 af  
 Outflow = 1.59 cfs @ 12.09 hrs, Volume= 0.112 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.59 cfs @ 12.09 hrs, Volume= 0.112 af  
 Routed to Pond 111P : DMH 57

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.17' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.40' | <b>15.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.40' / 61.30' S= 0.0067 ' S= 0.0067 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf |

**Primary OutFlow** Max=1.56 cfs @ 12.09 hrs HW=62.16' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.56 cfs @ 2.86 fps)

**Pond 110P: CB 78****Hydrograph**

### Summary for Pond 111P: DMH 57

Inflow Area = 1.994 ac, 68.75% Impervious, Inflow Depth > 3.54" for 10-Year event  
 Inflow = 8.25 cfs @ 12.09 hrs, Volume= 0.588 af  
 Outflow = 8.25 cfs @ 12.09 hrs, Volume= 0.588 af, Atten= 0%, Lag= 0.0 min  
 Primary = 8.25 cfs @ 12.09 hrs, Volume= 0.588 af  
 Routed to Pond 208P : DMH 58

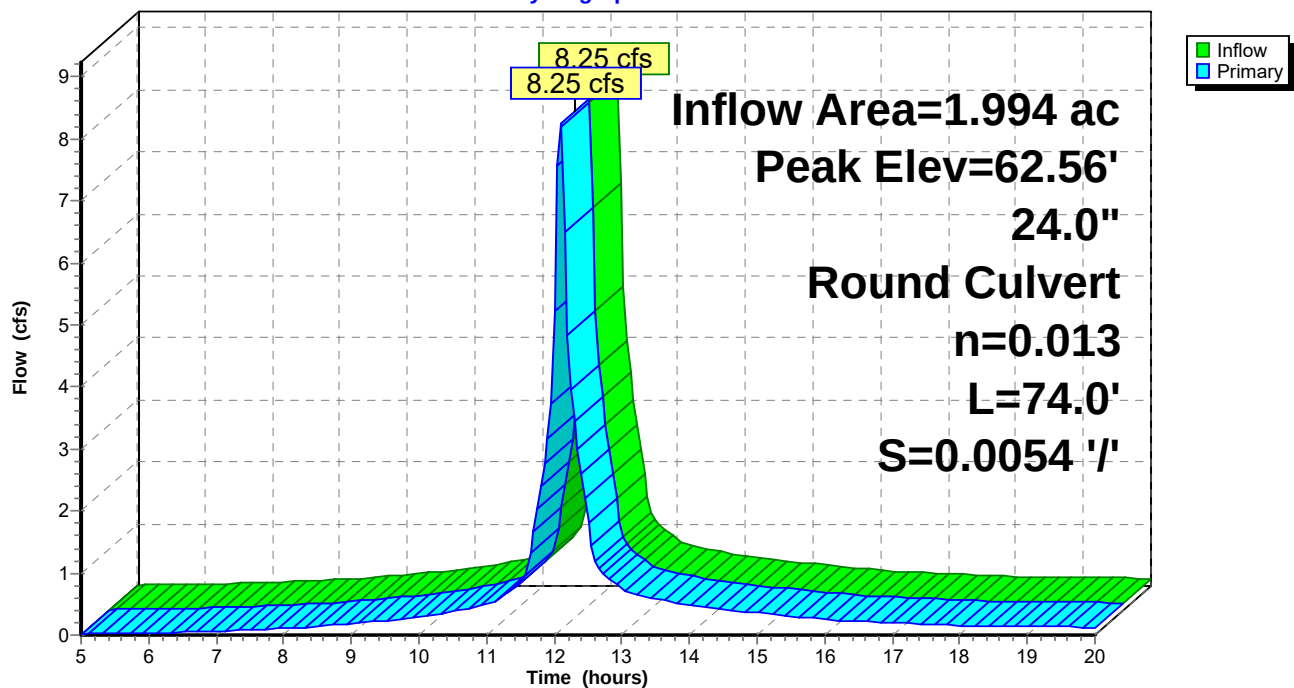
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.56' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.00' | <b>24.0" Round Culvert</b><br>L= 74.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.00' / 60.60' S= 0.0054 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=8.04 cfs @ 12.09 hrs HW=62.53' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 8.04 cfs @ 4.30 fps)

### Pond 111P: DMH 57

#### Hydrograph



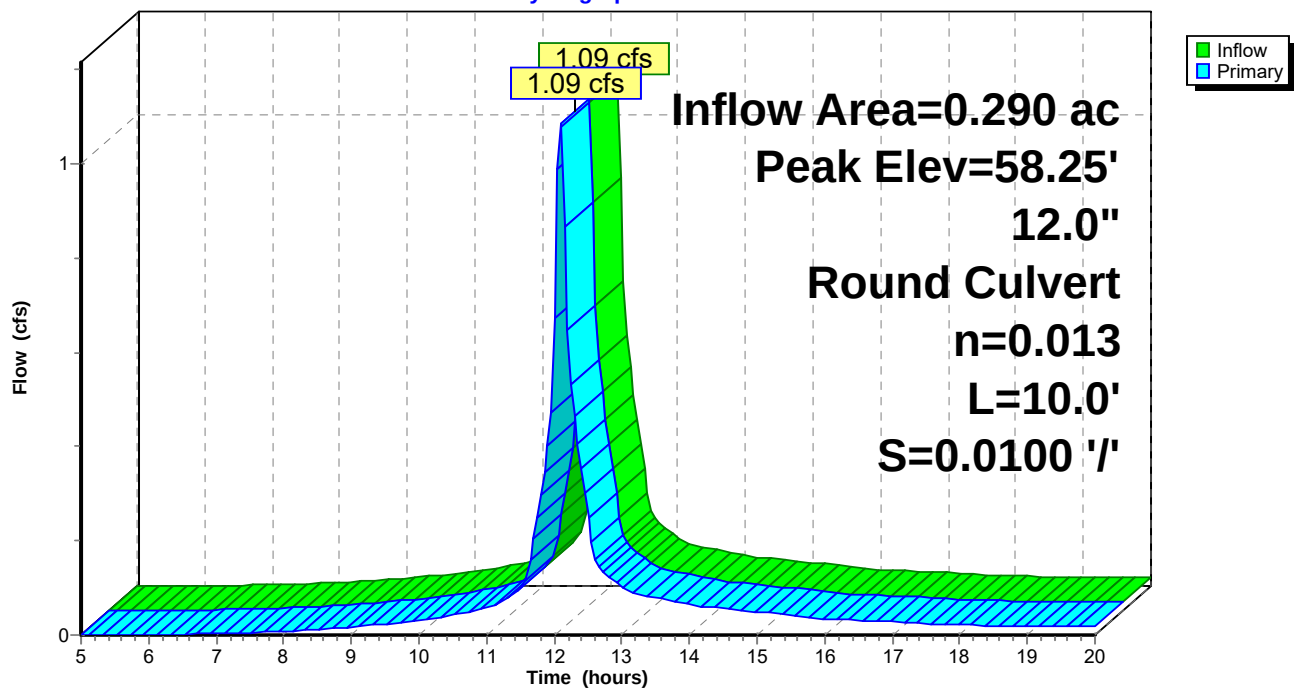
**Summary for Pond 112P: CB 45**

Inflow Area = 0.290 ac, 58.56% Impervious, Inflow Depth > 3.11" for 10-Year event  
 Inflow = 1.09 cfs @ 12.09 hrs, Volume= 0.075 af  
 Outflow = 1.09 cfs @ 12.09 hrs, Volume= 0.075 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.09 cfs @ 12.09 hrs, Volume= 0.075 af  
 Routed to Pond 123P : DMH 31

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.25' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.59' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.59' / 57.49' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.06 cfs @ 12.09 hrs HW=58.25' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.06 cfs @ 2.77 fps)

**Pond 112P: CB 45****Hydrograph**

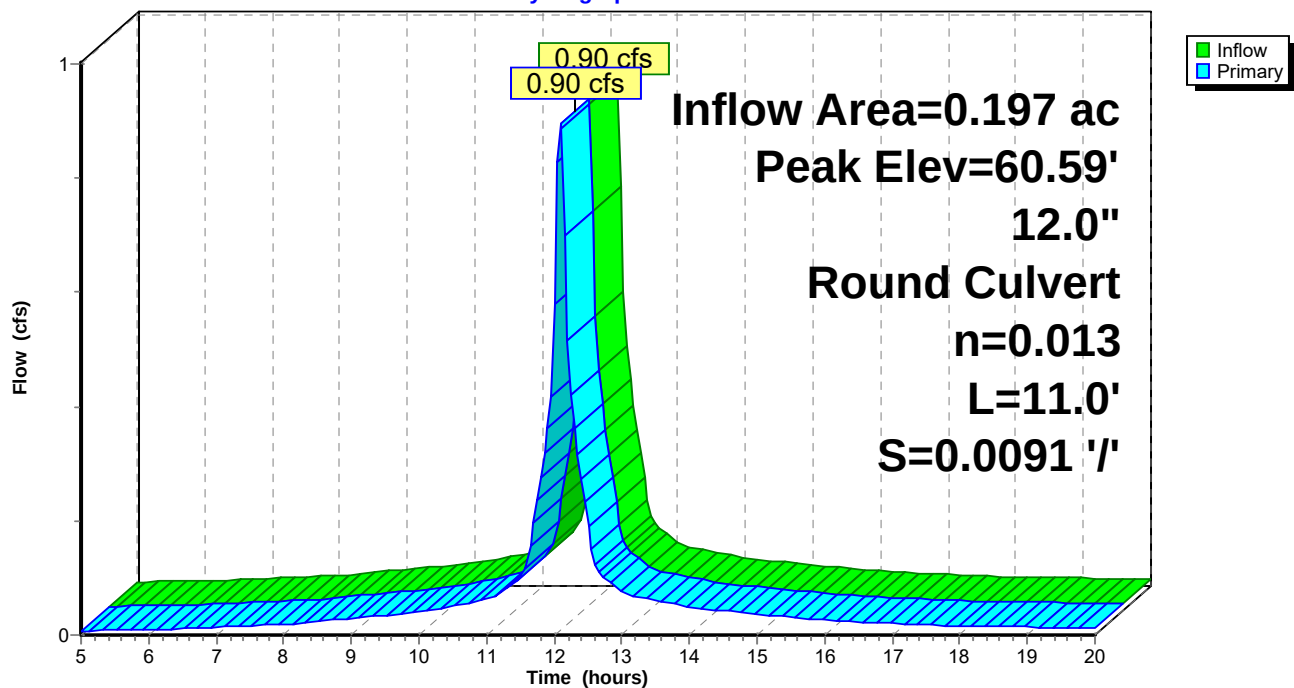
**Summary for Pond 113P: CB 95**

Inflow Area = 0.197 ac, 91.64% Impervious, Inflow Depth > 4.10" for 10-Year event  
 Inflow = 0.90 cfs @ 12.09 hrs, Volume= 0.067 af  
 Outflow = 0.90 cfs @ 12.09 hrs, Volume= 0.067 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.90 cfs @ 12.09 hrs, Volume= 0.067 af  
 Routed to Pond 118P : DMH 70

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.59' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.00' / 59.90' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.87 cfs @ 12.09 hrs HW=60.58' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.87 cfs @ 2.63 fps)

**Pond 113P: CB 95****Hydrograph**

### Summary for Pond 114P: CB 94

Inflow Area = 0.329 ac, 82.49% Impervious, Inflow Depth > 3.91" for 10-Year event  
 Inflow = 1.46 cfs @ 12.09 hrs, Volume= 0.107 af  
 Outflow = 1.46 cfs @ 12.09 hrs, Volume= 0.107 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.46 cfs @ 12.09 hrs, Volume= 0.107 af  
 Routed to Pond 118P : DMH 70

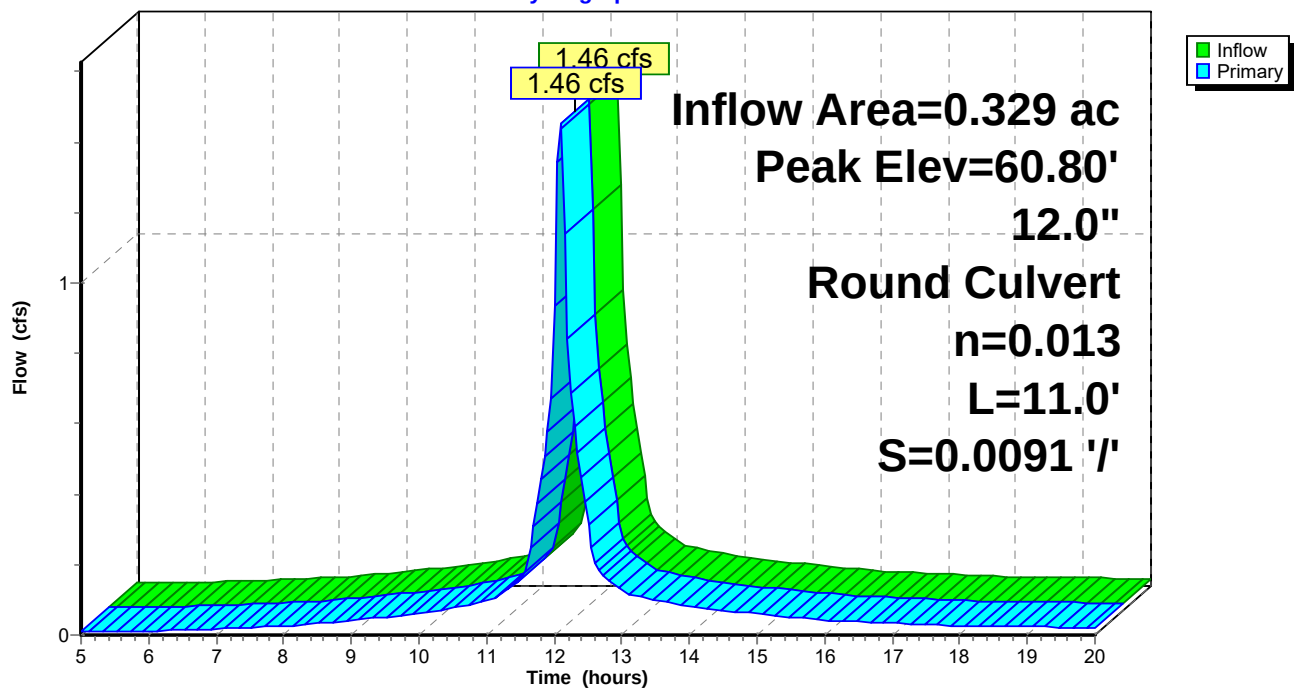
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.80' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.00' / 59.90' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.42 cfs @ 12.09 hrs HW=60.79' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.42 cfs @ 2.94 fps)

### Pond 114P: CB 94

#### Hydrograph



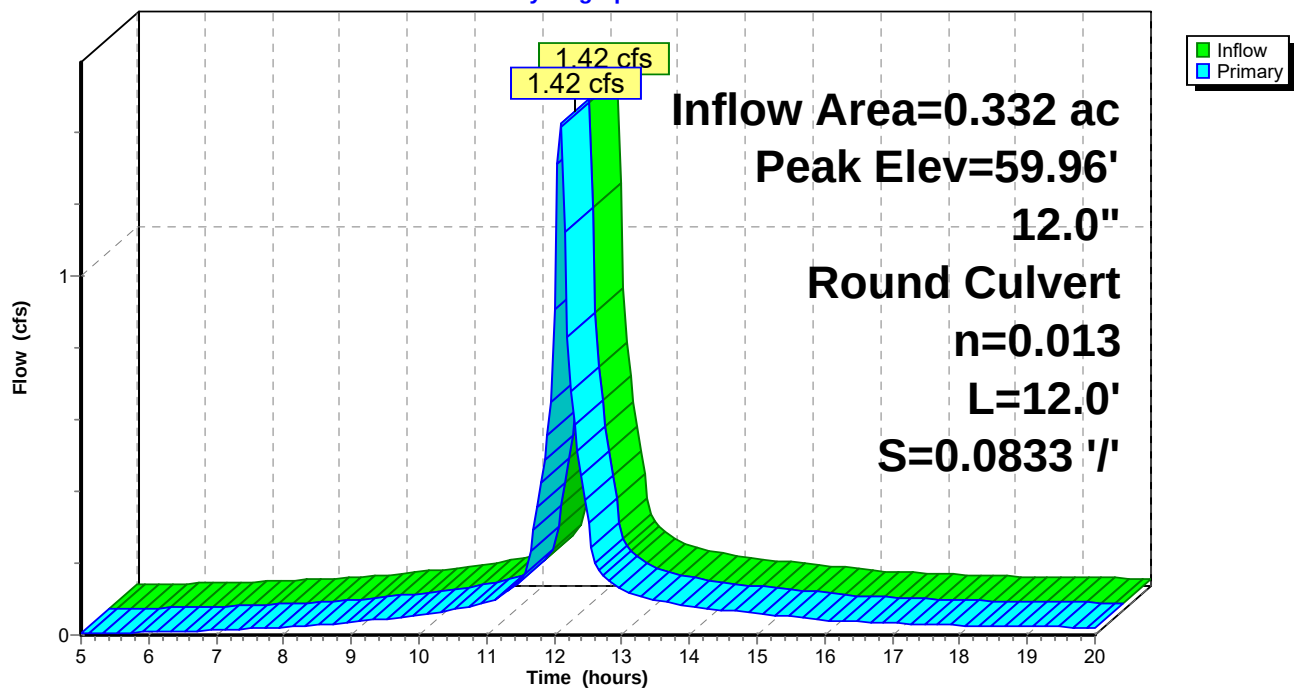
**Summary for Pond 115P: CB 91**

Inflow Area = 0.332 ac, 76.35% Impervious, Inflow Depth > 3.71" for 10-Year event  
 Inflow = 1.42 cfs @ 12.09 hrs, Volume= 0.103 af  
 Outflow = 1.42 cfs @ 12.09 hrs, Volume= 0.103 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.42 cfs @ 12.09 hrs, Volume= 0.103 af  
 Routed to Pond 120P : DMH 67

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.96' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.23' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.23' / 58.23' S= 0.0833 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.38 cfs @ 12.09 hrs HW=59.95' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.38 cfs @ 2.28 fps)

**Pond 115P: CB 91****Hydrograph**

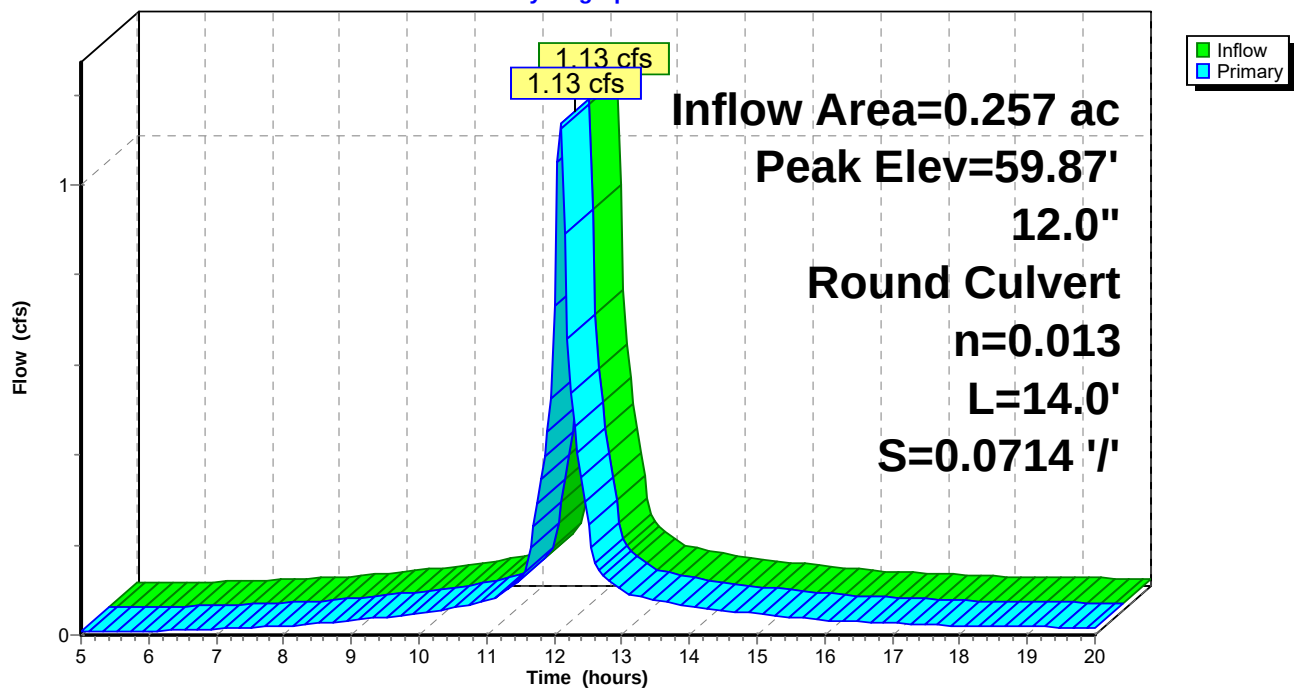
**Summary for Pond 116P: CB 90**

Inflow Area = 0.257 ac, 83.40% Impervious, Inflow Depth > 3.91" for 10-Year event  
 Inflow = 1.13 cfs @ 12.09 hrs, Volume= 0.084 af  
 Outflow = 1.13 cfs @ 12.09 hrs, Volume= 0.084 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.13 cfs @ 12.09 hrs, Volume= 0.084 af  
 Routed to Pond 120P : DMH 67

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.87' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.23' | <b>12.0" Round Culvert</b><br>L= 14.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.23' / 58.23' S= 0.0714 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.10 cfs @ 12.09 hrs HW=59.86' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.10 cfs @ 2.13 fps)

**Pond 116P: CB 90****Hydrograph**



### Summary for Pond 117P: DMH 69

Inflow Area = 1.018 ac, 80.27% Impervious, Inflow Depth > 3.83" for 10-Year event  
 Inflow = 4.44 cfs @ 12.09 hrs, Volume= 0.325 af  
 Outflow = 4.44 cfs @ 12.09 hrs, Volume= 0.325 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.44 cfs @ 12.09 hrs, Volume= 0.325 af  
 Routed to Pond 119P : DMH 66

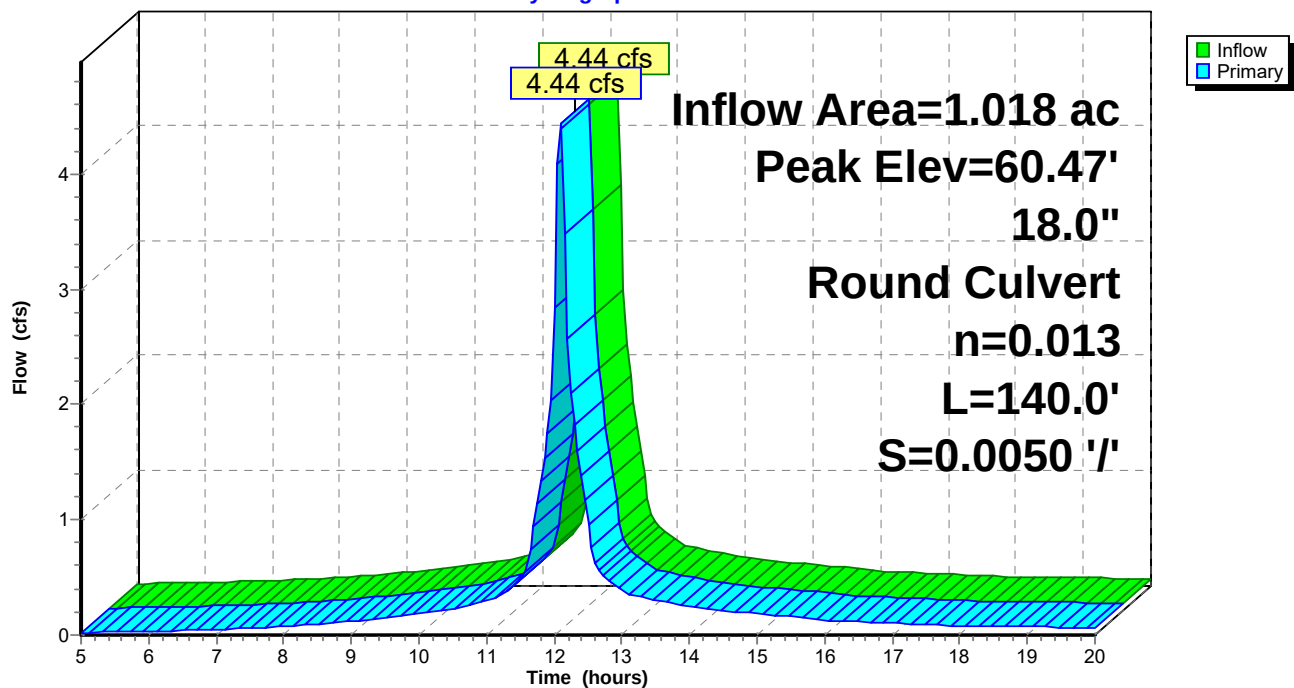
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.47' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.26' | <b>18.0" Round Culvert</b><br>L= 140.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.26' / 58.56' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=4.32 cfs @ 12.09 hrs HW=60.45' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 4.32 cfs @ 3.94 fps)

### Pond 117P: DMH 69

Hydrograph



### Summary for Pond 118P: DMH 70

Inflow Area = 0.527 ac, 85.92% Impervious, Inflow Depth > 3.98" for 10-Year event  
 Inflow = 2.35 cfs @ 12.09 hrs, Volume= 0.175 af  
 Outflow = 2.35 cfs @ 12.09 hrs, Volume= 0.175 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.35 cfs @ 12.09 hrs, Volume= 0.175 af  
 Routed to Pond 117P : DMH 69

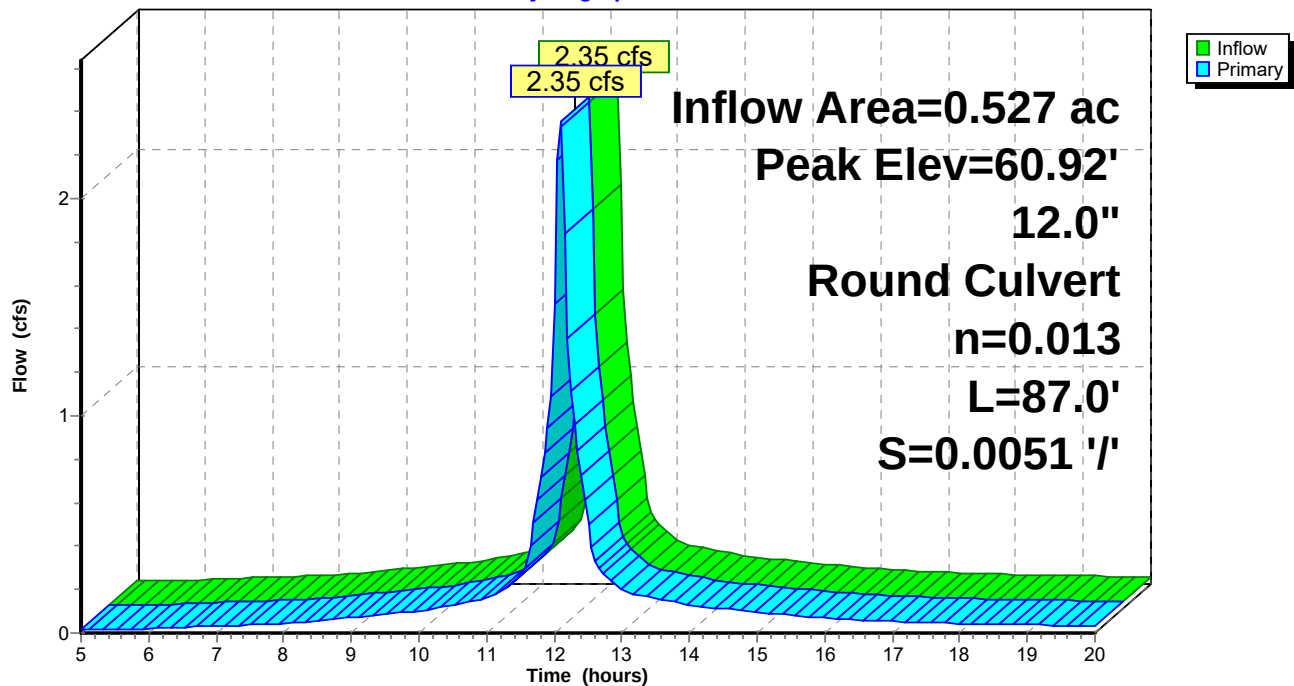
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.92' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.80' | <b>12.0" Round Culvert</b><br>L= 87.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.80' / 59.36' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.29 cfs @ 12.09 hrs HW=60.89' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 2.29 cfs @ 2.92 fps)

### Pond 118P: DMH 70

Hydrograph



### Summary for Pond 119P: DMH 66

Inflow Area = 1.346 ac, 77.50% Impervious, Inflow Depth > 3.76" for 10-Year event  
 Inflow = 5.79 cfs @ 12.09 hrs, Volume= 0.421 af  
 Outflow = 5.79 cfs @ 12.09 hrs, Volume= 0.421 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.79 cfs @ 12.09 hrs, Volume= 0.421 af  
 Routed to Pond 120P : DMH 67

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 59.95' @ 12.09 hrs

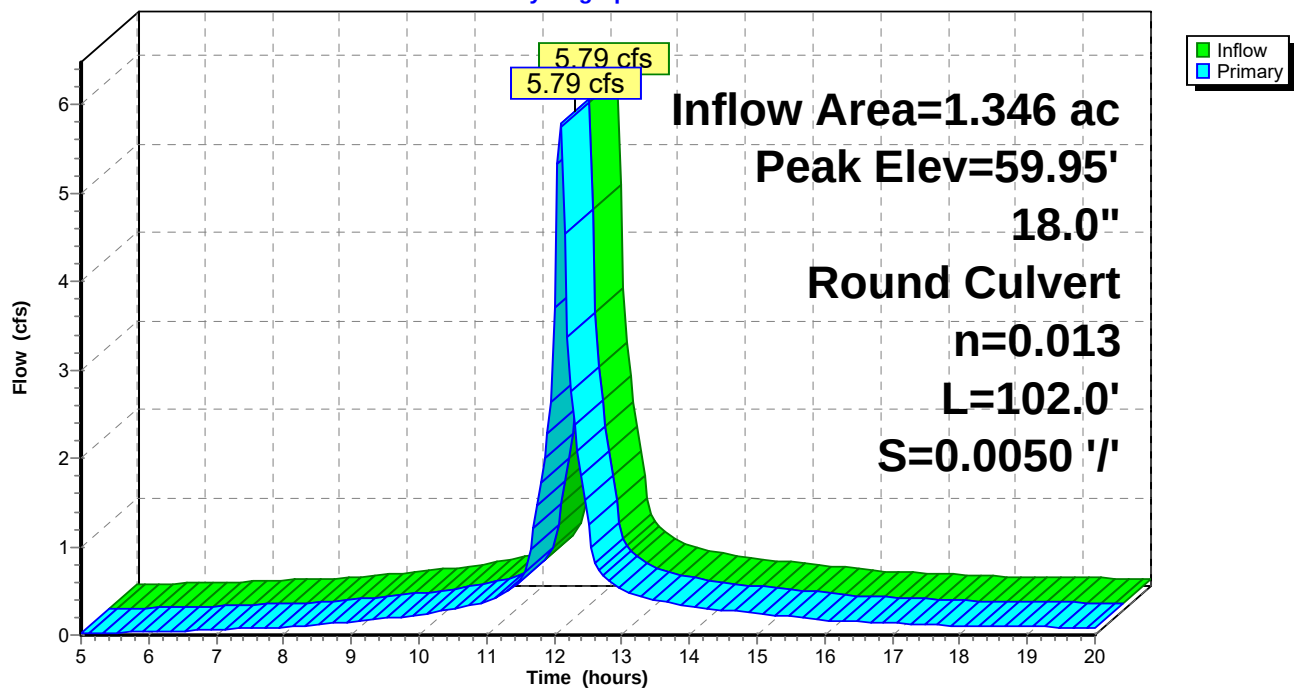
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.46' | <b>18.0" Round Culvert</b><br>L= 102.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.46' / 57.95' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=5.64 cfs @ 12.09 hrs HW=59.92' (Free Discharge)

1=Culvert (Barrel Controls 5.64 cfs @ 4.09 fps)

### Pond 119P: DMH 66

#### Hydrograph



### Summary for Pond 120P: DMH 67

Inflow Area = 1.935 ac, 78.08% Impervious, Inflow Depth > 3.77" for 10-Year event  
 Inflow = 8.34 cfs @ 12.09 hrs, Volume= 0.607 af  
 Outflow = 8.34 cfs @ 12.09 hrs, Volume= 0.607 af, Atten= 0%, Lag= 0.0 min  
 Primary = 8.34 cfs @ 12.09 hrs, Volume= 0.607 af  
 Routed to Pond 210P : DMH 68

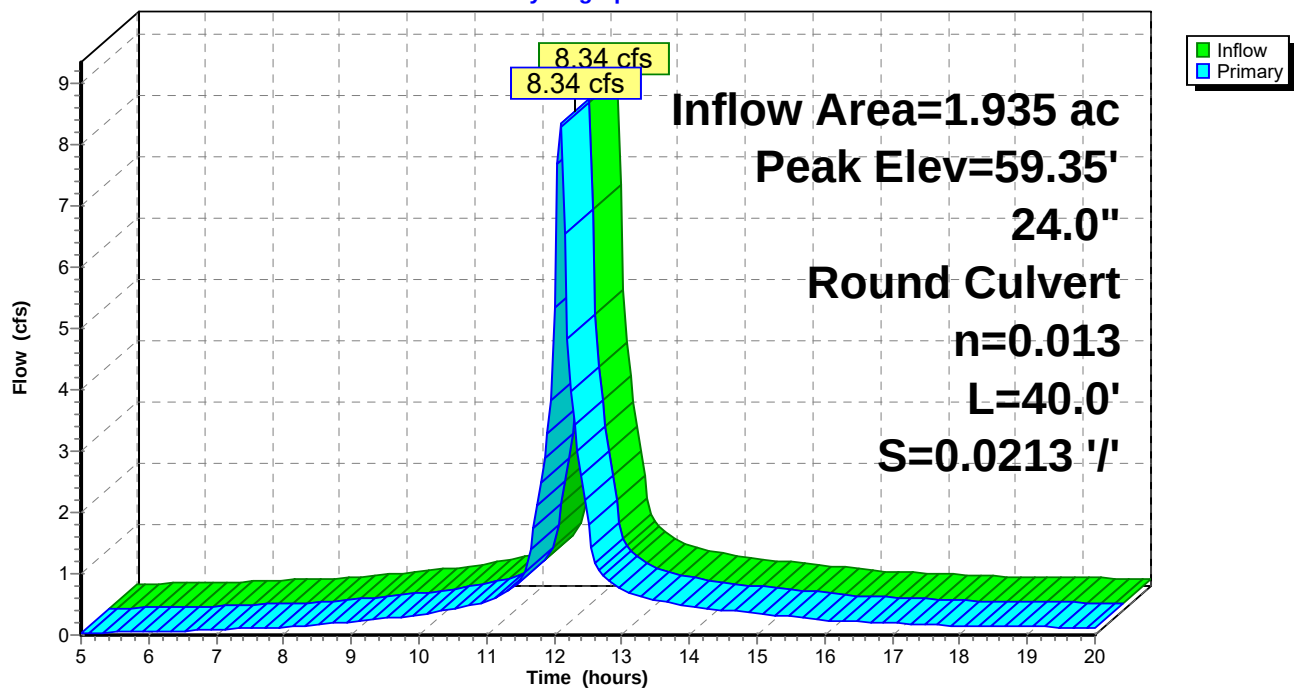
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.35' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.85' | <b>24.0" Round Culvert</b><br>L= 40.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.85' / 57.00' S= 0.0213 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=8.13 cfs @ 12.09 hrs HW=59.33' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 8.13 cfs @ 3.27 fps)

### Pond 120P: DMH 67

Hydrograph



### Summary for Pond 122P: CB 46

Inflow Area = 0.275 ac, 72.42% Impervious, Inflow Depth > 3.61" for 10-Year event  
 Inflow = 1.15 cfs @ 12.09 hrs, Volume= 0.083 af  
 Outflow = 1.15 cfs @ 12.09 hrs, Volume= 0.083 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.15 cfs @ 12.09 hrs, Volume= 0.083 af  
 Routed to Pond 123P : DMH 31

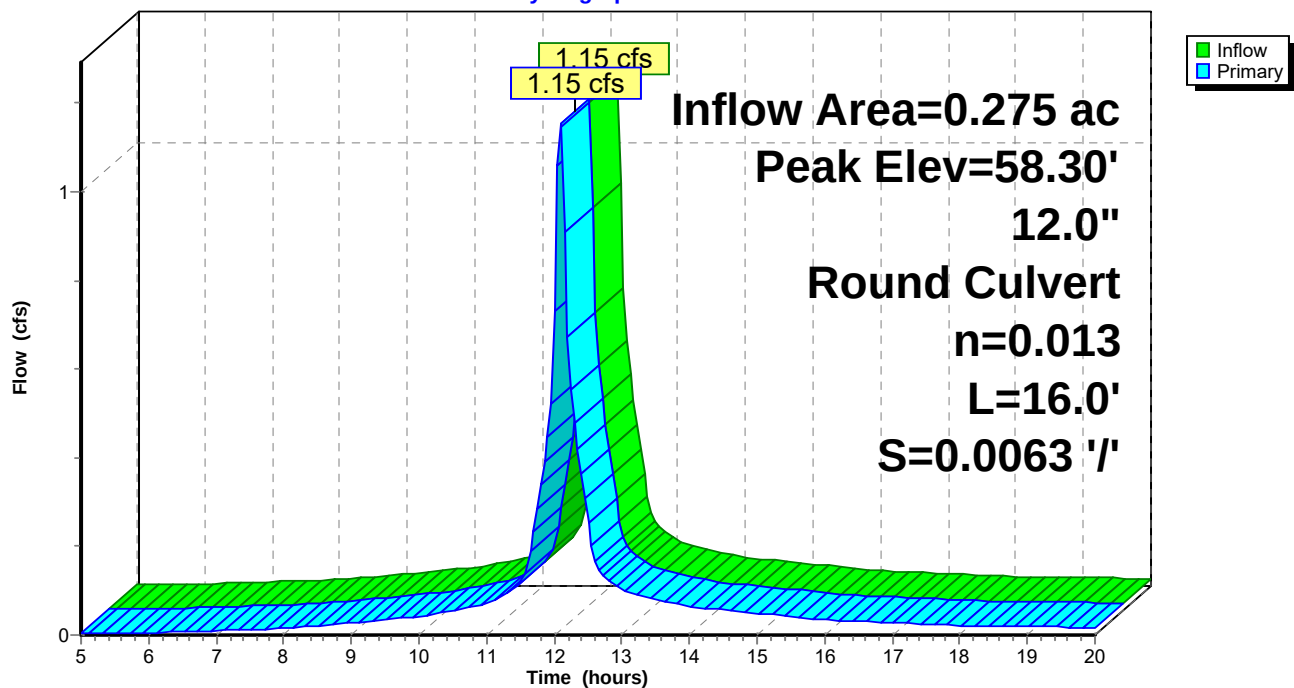
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.30' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.59' | <b>12.0" Round Culvert</b><br>L= 16.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.59' / 57.49' S= 0.0063 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.13 cfs @ 12.09 hrs HW=58.29' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.13 cfs @ 2.72 fps)

### Pond 122P: CB 46

#### Hydrograph



### Summary for Pond 123P: DMH 31

Inflow Area = 0.565 ac, 65.31% Impervious, Inflow Depth > 3.35" for 10-Year event  
 Inflow = 2.24 cfs @ 12.09 hrs, Volume= 0.158 af  
 Outflow = 2.24 cfs @ 12.09 hrs, Volume= 0.158 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.24 cfs @ 12.09 hrs, Volume= 0.158 af  
 Routed to Pond 124P : DMH 32

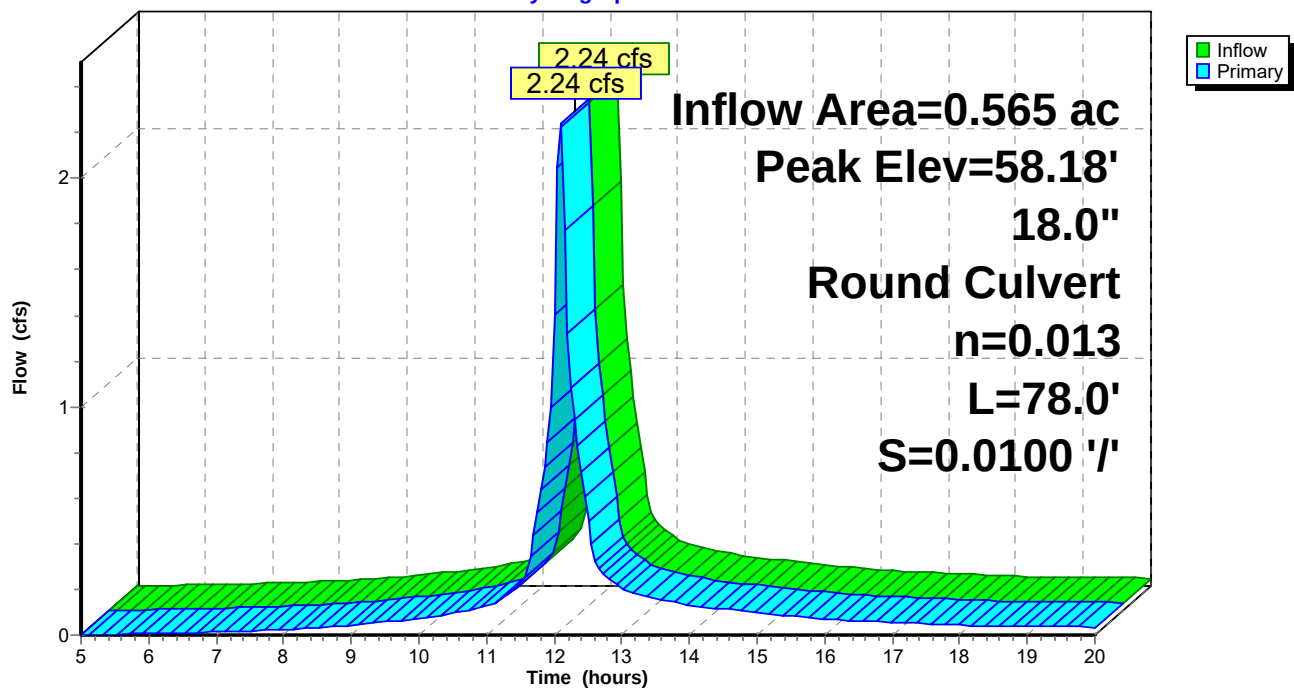
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.18' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.39' | <b>18.0" Round Culvert</b><br>L= 78.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.39' / 56.61' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.19 cfs @ 12.09 hrs HW=58.17' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.19 cfs @ 2.37 fps)

### Pond 123P: DMH 31

#### Hydrograph



**Summary for Pond 124P: DMH 32**

Inflow Area = 0.565 ac, 65.31% Impervious, Inflow Depth > 3.35" for 10-Year event  
 Inflow = 2.24 cfs @ 12.09 hrs, Volume= 0.158 af  
 Outflow = 2.24 cfs @ 12.09 hrs, Volume= 0.158 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.24 cfs @ 12.09 hrs, Volume= 0.158 af  
 Routed to Pond 206P : DMH 34

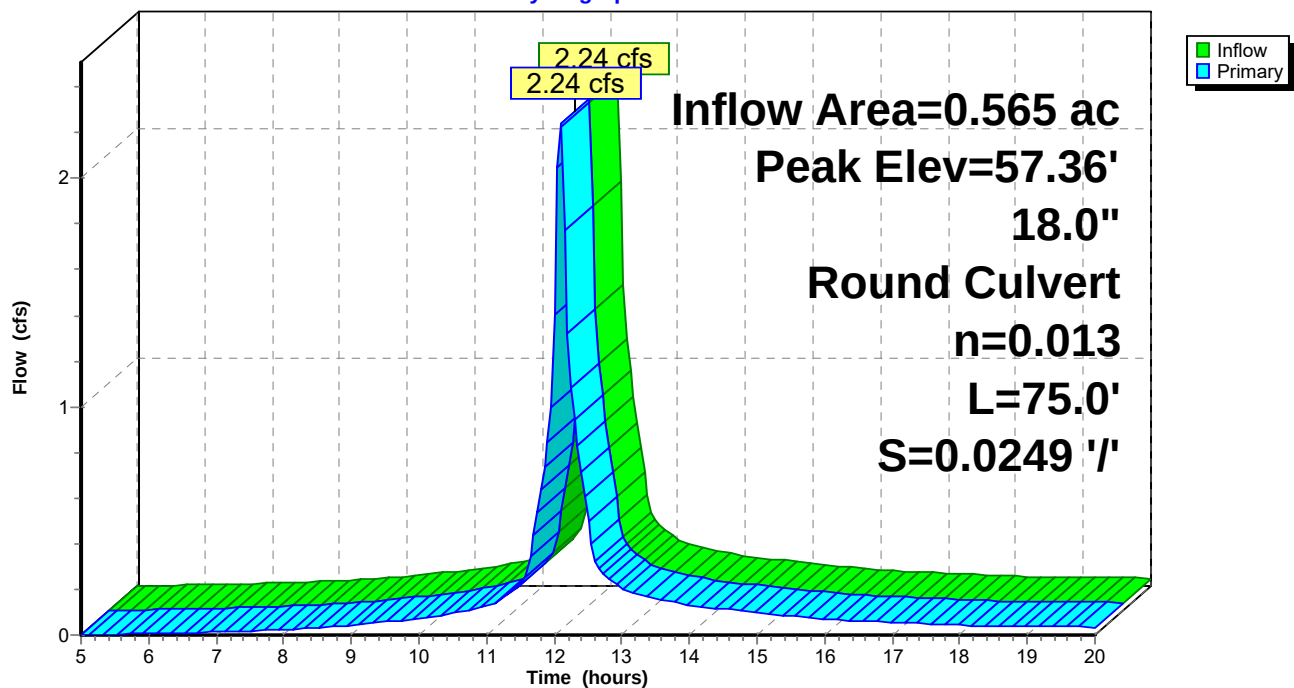
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 57.36' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 56.57' | <b>18.0" Round Culvert</b><br>L= 75.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 56.57' / 54.70' S= 0.0249 ' S= 0.0249 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.19 cfs @ 12.09 hrs HW=57.35' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.19 cfs @ 2.37 fps)

**Pond 124P: DMH 32**

Hydrograph



**Summary for Pond 125P: CB 36**

Inflow Area = 0.196 ac, 76.76% Impervious, Inflow Depth > 2.92" for 10-Year event  
 Inflow = 0.70 cfs @ 12.09 hrs, Volume= 0.048 af  
 Outflow = 0.70 cfs @ 12.09 hrs, Volume= 0.048 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.70 cfs @ 12.09 hrs, Volume= 0.048 af  
 Routed to Pond 127P : DMH 26

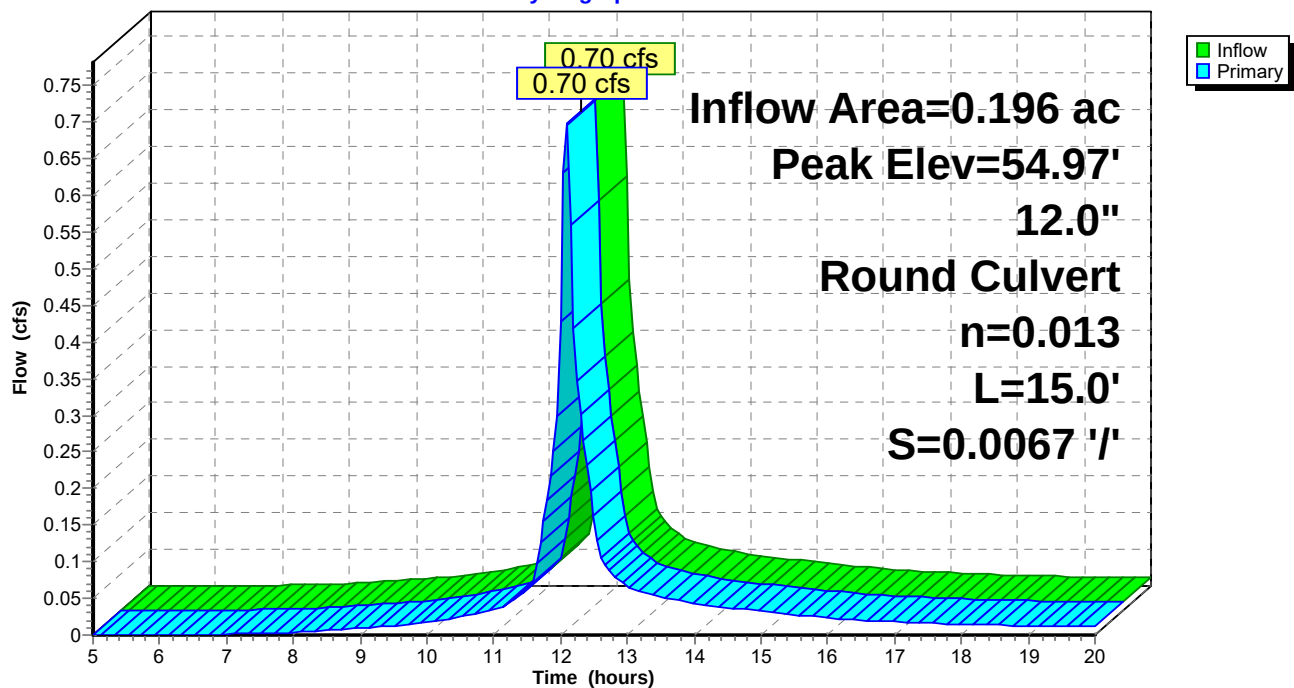
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.97' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.45' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.45' / 54.35' S= 0.0067 ' S= 0.0067 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.68 cfs @ 12.09 hrs HW=54.97' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.68 cfs @ 2.43 fps)

**Pond 125P: CB 36**

Hydrograph





### Summary for Pond 126P: CB 37

Inflow Area = 0.225 ac, 79.18% Impervious, Inflow Depth > 3.11" for 10-Year event  
 Inflow = 0.84 cfs @ 12.09 hrs, Volume= 0.058 af  
 Outflow = 0.84 cfs @ 12.09 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.84 cfs @ 12.09 hrs, Volume= 0.058 af  
 Routed to Pond 127P : DMH 26

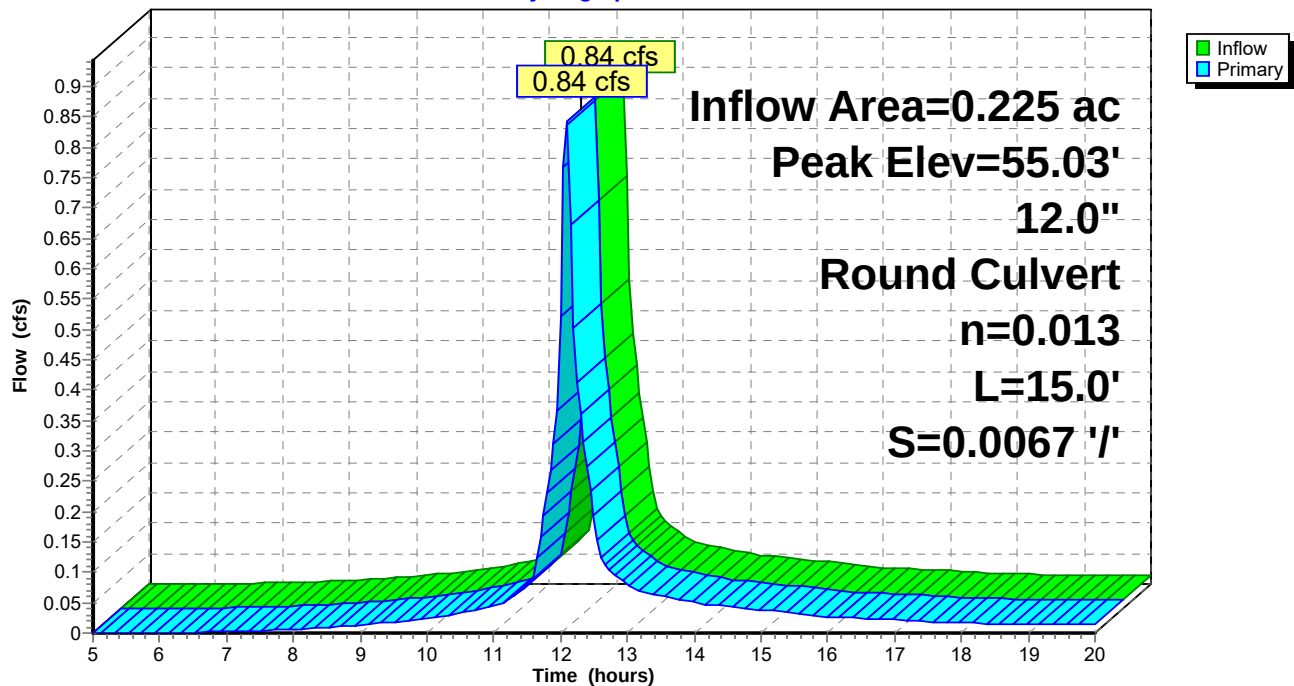
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 55.03' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.45' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.45' / 54.35' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.82 cfs @ 12.09 hrs HW=55.03' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.82 cfs @ 2.54 fps)

### Pond 126P: CB 37

Hydrograph



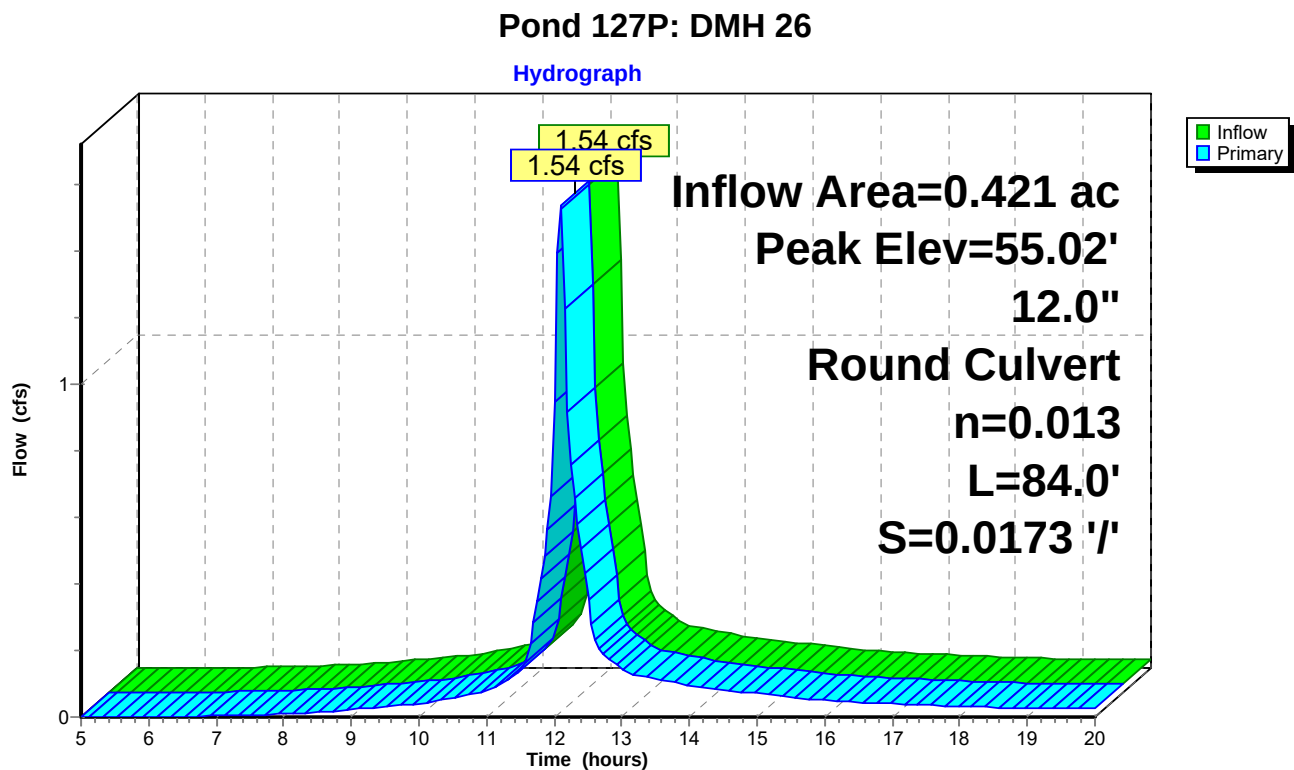
**Summary for Pond 127P: DMH 26**

Inflow Area = 0.421 ac, 78.05% Impervious, Inflow Depth > 3.02" for 10-Year event  
 Inflow = 1.54 cfs @ 12.09 hrs, Volume= 0.106 af  
 Outflow = 1.54 cfs @ 12.09 hrs, Volume= 0.106 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.54 cfs @ 12.09 hrs, Volume= 0.106 af  
 Routed to Pond 205P : DMH 27

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 55.02' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.25' | <b>12.0" Round Culvert</b><br>L= 84.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.25' / 52.80' S= 0.0173 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.51 cfs @ 12.09 hrs HW=55.01' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.51 cfs @ 2.35 fps)



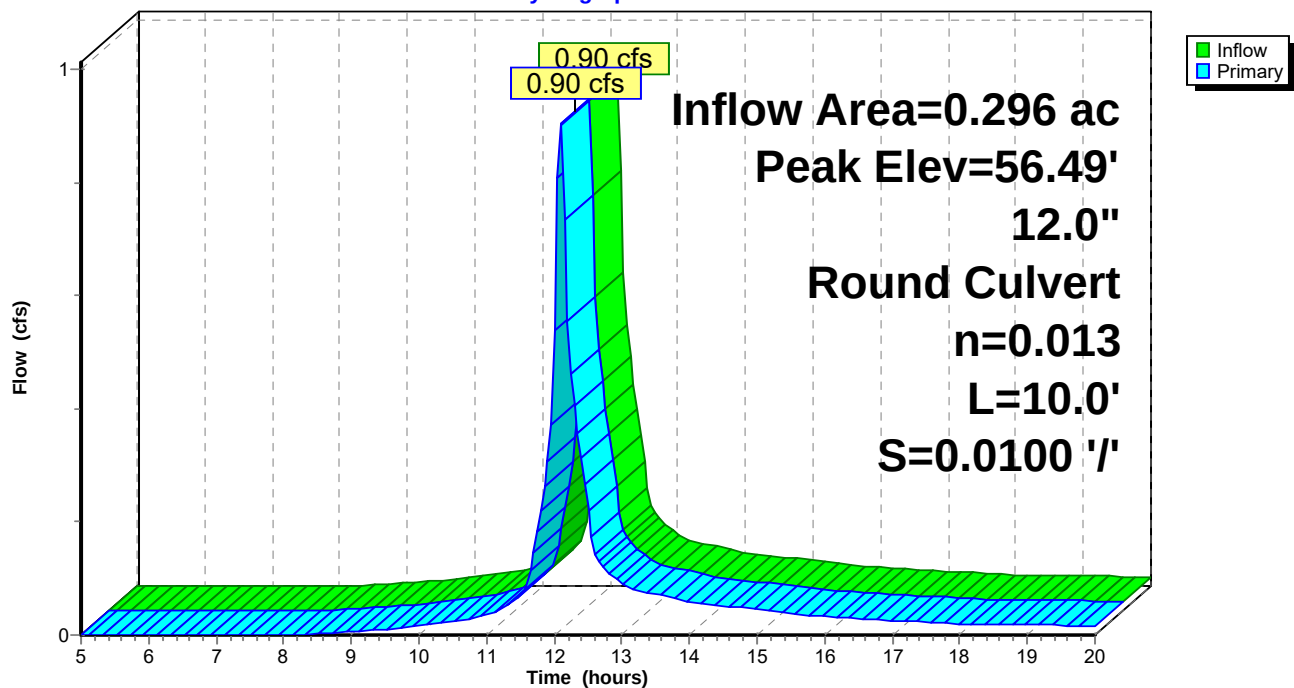
**Summary for Pond 128P: CB 30**

Inflow Area = 0.296 ac, 67.55% Impervious, Inflow Depth > 2.48" for 10-Year event  
 Inflow = 0.90 cfs @ 12.09 hrs, Volume= 0.061 af  
 Outflow = 0.90 cfs @ 12.09 hrs, Volume= 0.061 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.90 cfs @ 12.09 hrs, Volume= 0.061 af  
 Routed to Pond 141P : DMH 23

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.49' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 55.90' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 55.90' / 55.80' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.89 cfs @ 12.09 hrs HW=56.49' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.89 cfs @ 2.66 fps)

**Pond 128P: CB 30****Hydrograph**

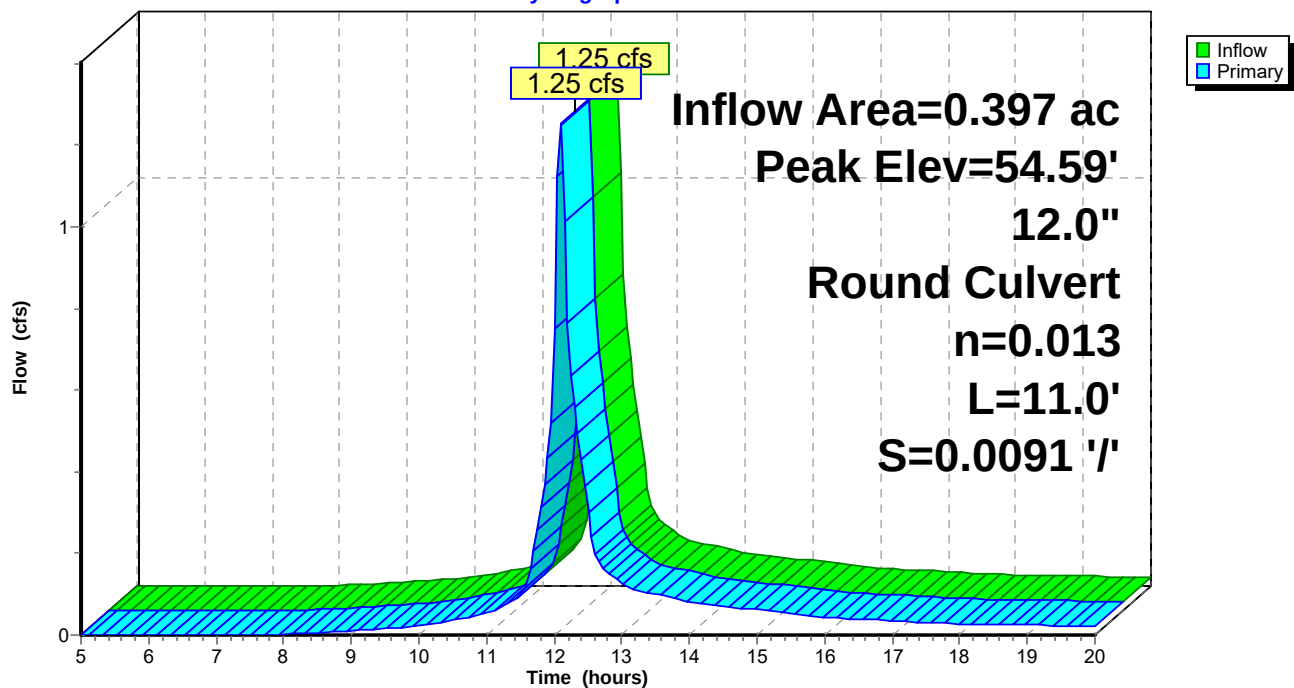
**Summary for Pond 129P: CB 34**

Inflow Area = 0.397 ac, 70.10% Impervious, Inflow Depth > 2.56" for 10-Year event  
 Inflow = 1.25 cfs @ 12.09 hrs, Volume= 0.085 af  
 Outflow = 1.25 cfs @ 12.09 hrs, Volume= 0.085 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.25 cfs @ 12.09 hrs, Volume= 0.085 af  
 Routed to Pond 134P : DMH 25

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.59' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.86' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.86' / 53.76' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.23 cfs @ 12.09 hrs HW=54.58' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.23 cfs @ 2.85 fps)

**Pond 129P: CB 34****Hydrograph**

### Summary for Pond 130P: CB 32

Inflow Area = 0.529 ac, 81.18% Impervious, Inflow Depth > 3.21" for 10-Year event  
 Inflow = 2.03 cfs @ 12.09 hrs, Volume= 0.142 af  
 Outflow = 2.03 cfs @ 12.09 hrs, Volume= 0.142 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.03 cfs @ 12.09 hrs, Volume= 0.142 af  
 Routed to Pond 133P : DMH 24

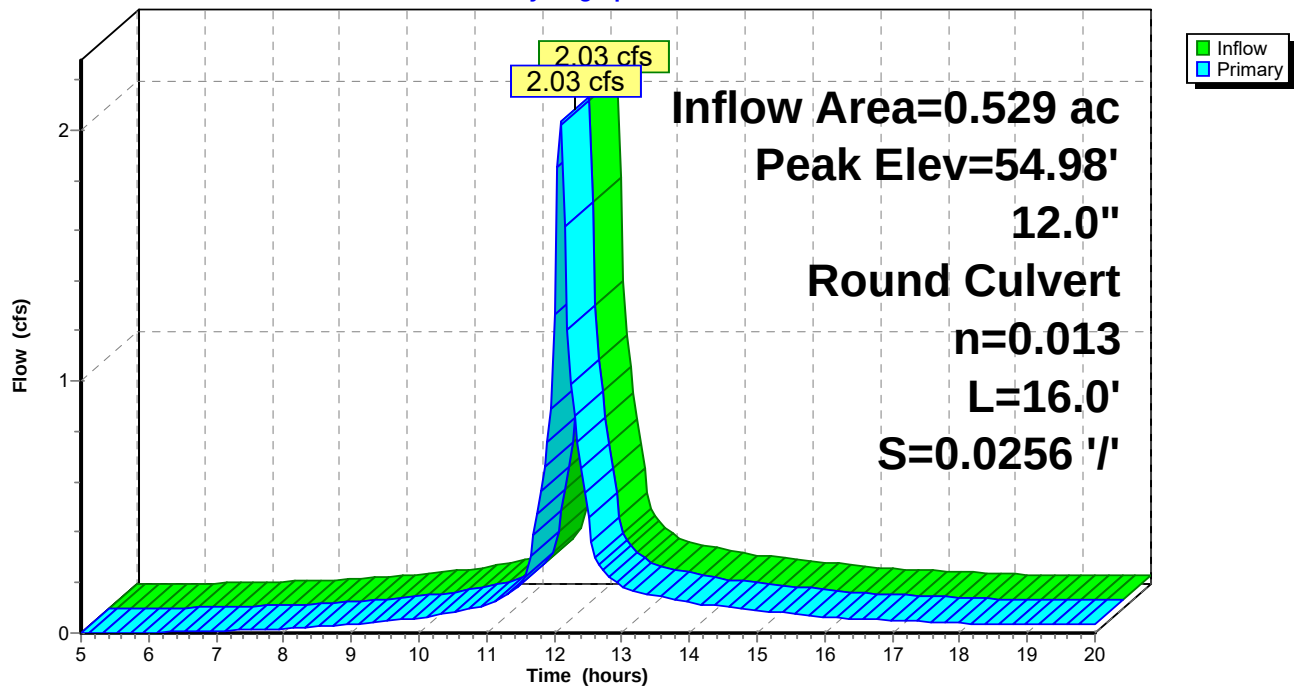
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.98' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.02' | <b>12.0" Round Culvert</b><br>L= 16.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.02' / 53.61' S= 0.0256 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.99 cfs @ 12.09 hrs HW=54.96' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.99 cfs @ 2.60 fps)

### Pond 130P: CB 32

#### Hydrograph



### Summary for Pond 131P: CB 35

Inflow Area = 0.350 ac, 63.87% Impervious, Inflow Depth > 2.31" for 10-Year event  
 Inflow = 1.00 cfs @ 12.09 hrs, Volume= 0.067 af  
 Outflow = 1.00 cfs @ 12.09 hrs, Volume= 0.067 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.00 cfs @ 12.09 hrs, Volume= 0.067 af  
 Routed to Pond 134P : DMH 25

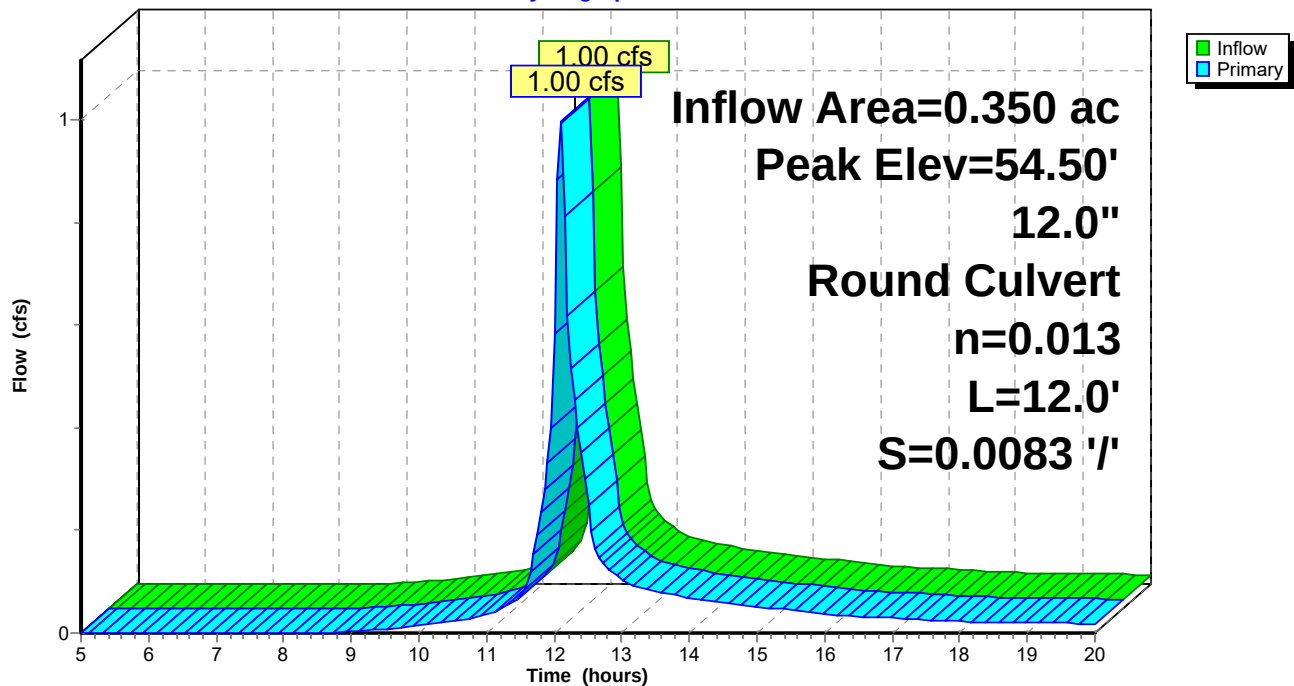
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.50' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.86' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.86' / 53.76' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.98 cfs @ 12.09 hrs HW=54.49' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.98 cfs @ 2.69 fps)

### Pond 131P: CB 35

#### Hydrograph



**Summary for Pond 132P: CB 33**

Inflow Area = 0.376 ac, 53.54% Impervious, Inflow Depth > 1.83" for 10-Year event  
 Inflow = 0.85 cfs @ 12.10 hrs, Volume= 0.057 af  
 Outflow = 0.85 cfs @ 12.10 hrs, Volume= 0.057 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.85 cfs @ 12.10 hrs, Volume= 0.057 af  
 Routed to Pond 133P : DMH 24

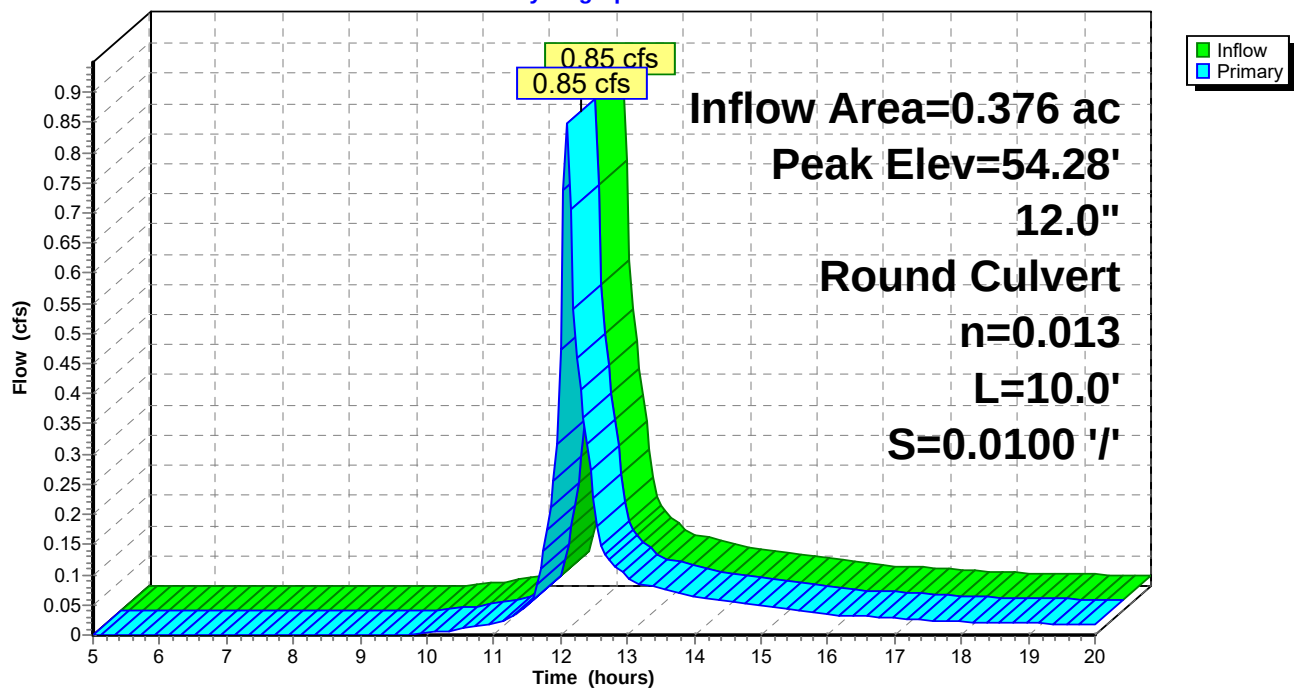
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.28' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.71' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.71' / 53.61' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.84 cfs @ 12.10 hrs HW=54.28' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.84 cfs @ 2.63 fps)

**Pond 132P: CB 33**

Hydrograph



**Summary for Pond 133P: DMH 24**

Inflow Area = 1.653 ac, 68.56% Impervious, Inflow Depth > 2.55" for 10-Year event  
 Inflow = 5.13 cfs @ 12.09 hrs, Volume= 0.351 af  
 Outflow = 5.13 cfs @ 12.09 hrs, Volume= 0.351 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.13 cfs @ 12.09 hrs, Volume= 0.351 af  
 Routed to Pond 135P : Inf. Basin 3

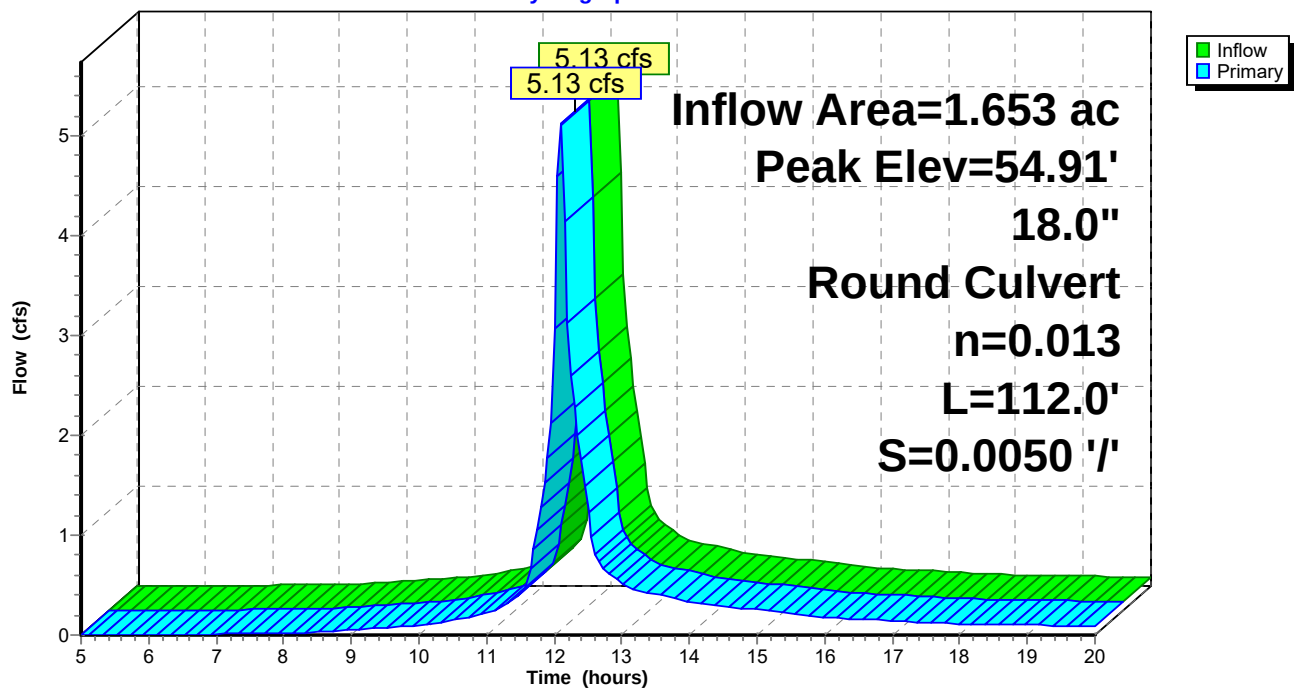
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.91' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.56' | <b>18.0" Round Culvert</b><br>L= 112.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.56' / 53.00' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=5.04 cfs @ 12.09 hrs HW=54.90' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 5.04 cfs @ 4.02 fps)

**Pond 133P: DMH 24**

Hydrograph





**Summary for Pond 134P: DMH 25**

Inflow Area = 0.747 ac, 67.18% Impervious, Inflow Depth > 2.44" for 10-Year event  
 Inflow = 2.25 cfs @ 12.09 hrs, Volume= 0.152 af  
 Outflow = 2.25 cfs @ 12.09 hrs, Volume= 0.152 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.25 cfs @ 12.09 hrs, Volume= 0.152 af  
 Routed to Pond 133P : DMH 24

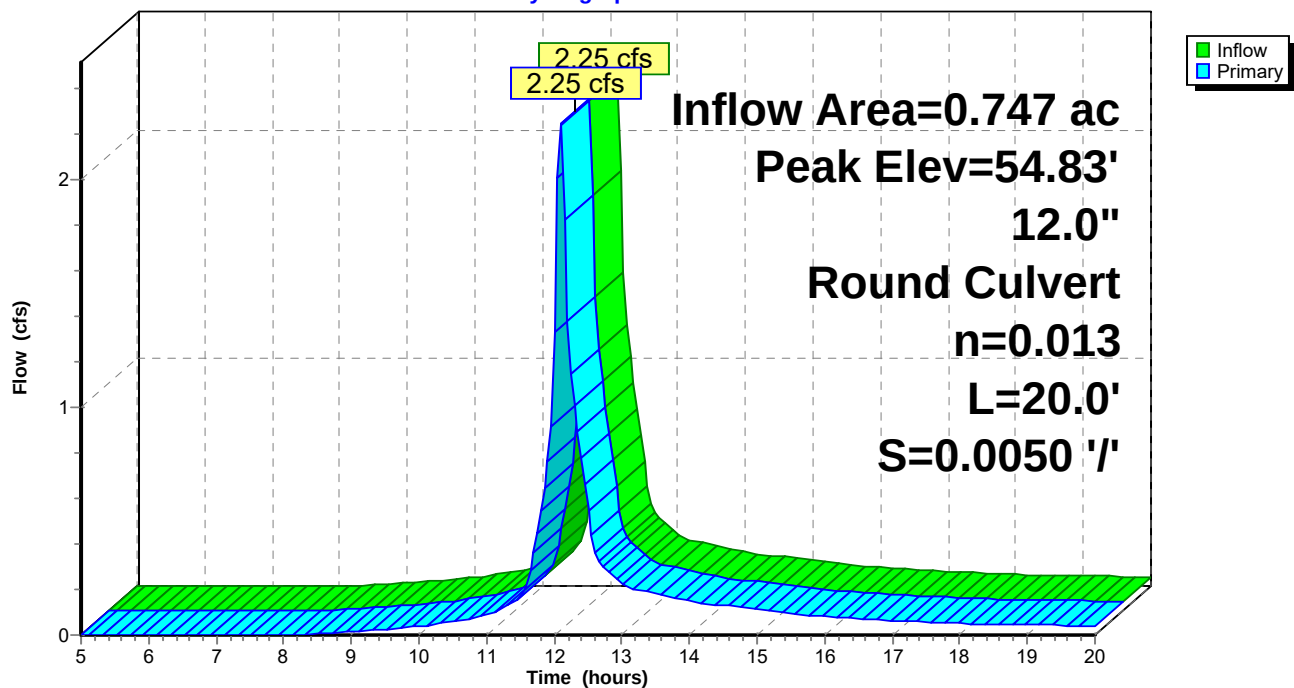
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.83' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.71' | <b>12.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.71' / 53.61' S= 0.0050 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.21 cfs @ 12.09 hrs HW=54.81' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.21 cfs @ 3.19 fps)

**Pond 134P: DMH 25**

Hydrograph



### Summary for Pond 135P: Inf. Basin 3

Inflow Area = 2.229 ac, 60.86% Impervious, Inflow Depth > 2.27" for 10-Year event  
 Inflow = 6.07 cfs @ 12.09 hrs, Volume= 0.421 af  
 Outflow = 1.46 cfs @ 12.50 hrs, Volume= 0.421 af, Atten= 76%, Lag= 24.6 min  
 Discarded = 1.46 cfs @ 12.50 hrs, Volume= 0.421 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Link 203L : 3A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.67' @ 12.50 hrs Surf.Area= 5,023 sf Storage= 5,734 cf

Plug-Flow detention time= 37.4 min calculated for 0.419 af (100% of inflow)  
 Center-of-Mass det. time= 36.8 min ( 822.0 - 785.3 )

| Volume              | Invert               | Avail.Storage             | Storage Description                                        |
|---------------------|----------------------|---------------------------|------------------------------------------------------------|
| #1                  | 53.00'               | 21,308 cf                 | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet)                                  |
| 53.00               | 2,016                | 0                         | 0                                                          |
| 54.00               | 3,650                | 2,833                     | 2,833                                                      |
| 55.00               | 5,702                | 4,676                     | 7,509                                                      |
| 56.00               | 6,883                | 6,293                     | 13,802                                                     |
| 57.00               | 8,130                | 7,507                     | 21,308                                                     |

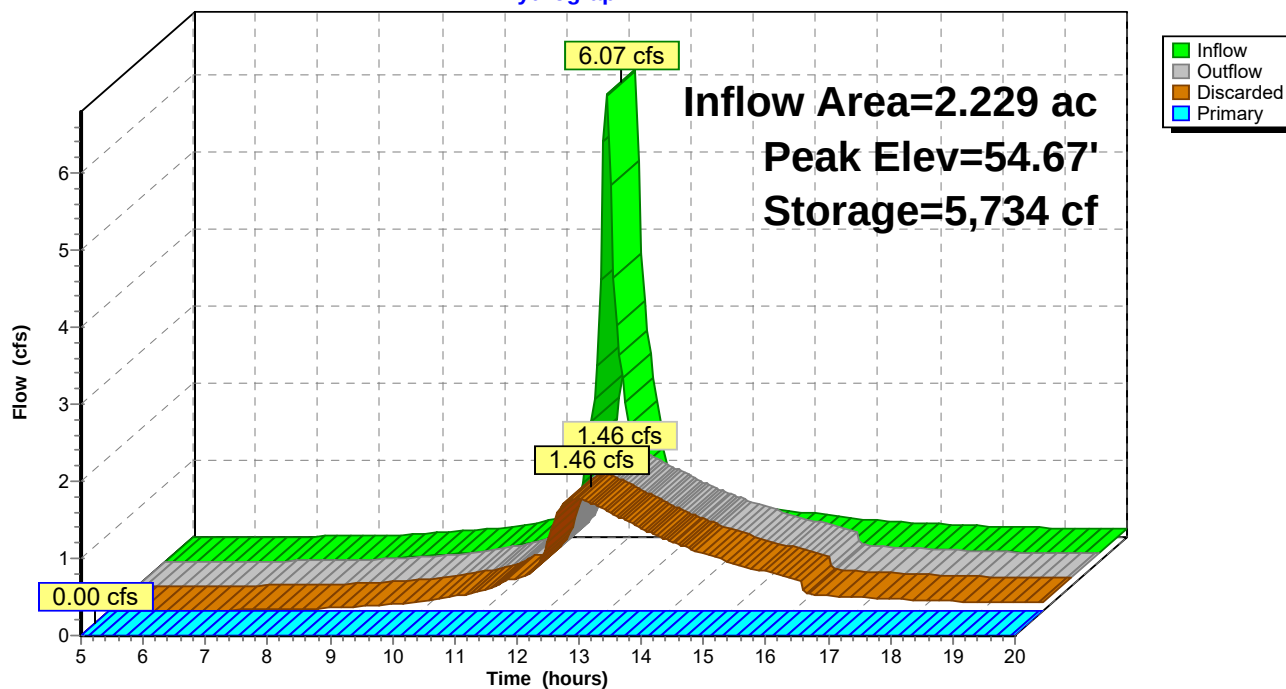
| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 53.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 51.00'                                                                                                                       |
| #2     | Primary   | 53.00' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.00' / 52.00' S= 0.0400 ' S= 0.0400 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 56.40' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                   |

**Discarded OutFlow** Max=1.46 cfs @ 12.50 hrs HW=54.67' (Free Discharge)  
 ↑ **1=Exfiltration** ( Controls 1.46 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=53.00' (Free Discharge)  
 ↑ **2=Culvert** ( Controls 0.00 cfs)  
 ↑ **3=Orifice/Grate** ( Controls 0.00 cfs)

### Pond 135P: Inf. Basin 3

Hydrograph



**Summary for Pond 136P: CB 38**

Inflow Area = 0.180 ac, 66.23% Impervious, Inflow Depth > 2.39" for 10-Year event  
 Inflow = 0.53 cfs @ 12.09 hrs, Volume= 0.036 af  
 Outflow = 0.53 cfs @ 12.09 hrs, Volume= 0.036 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.53 cfs @ 12.09 hrs, Volume= 0.036 af  
 Routed to Pond 139P : DMH 28

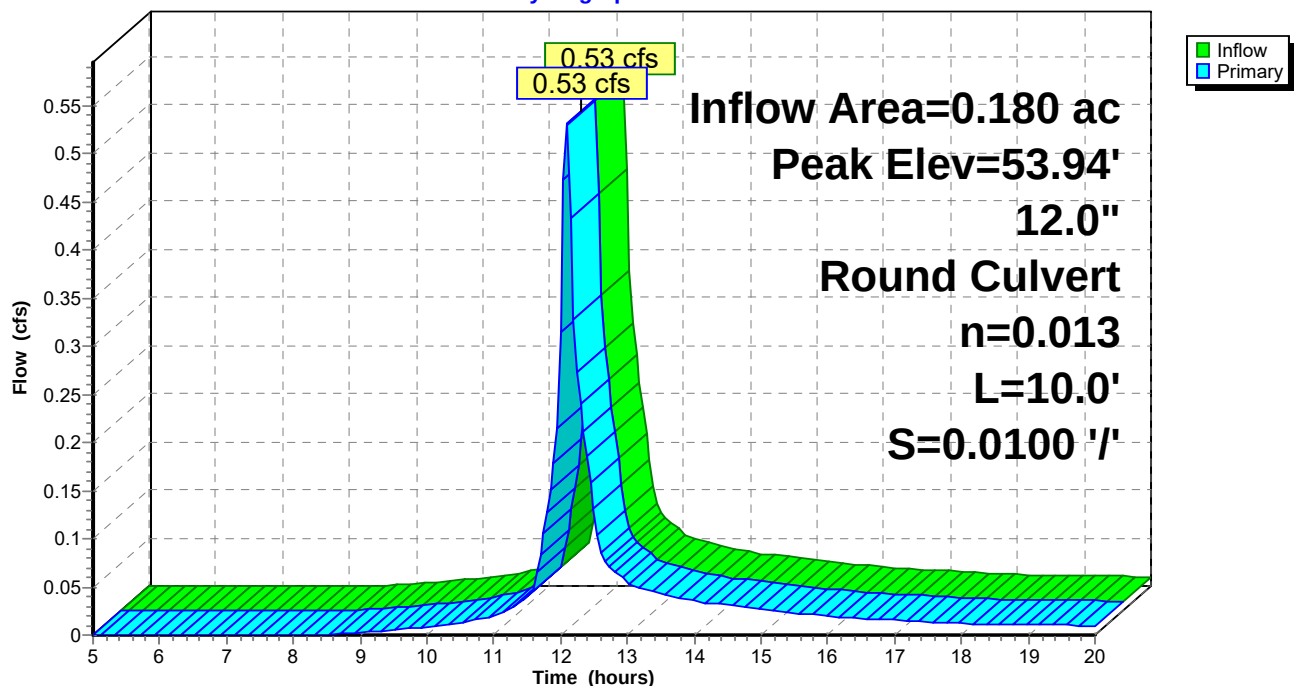
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.94' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.50' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.50' / 53.40' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.52 cfs @ 12.09 hrs HW=53.93' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.52 cfs @ 2.37 fps)

**Pond 136P: CB 38**

Hydrograph



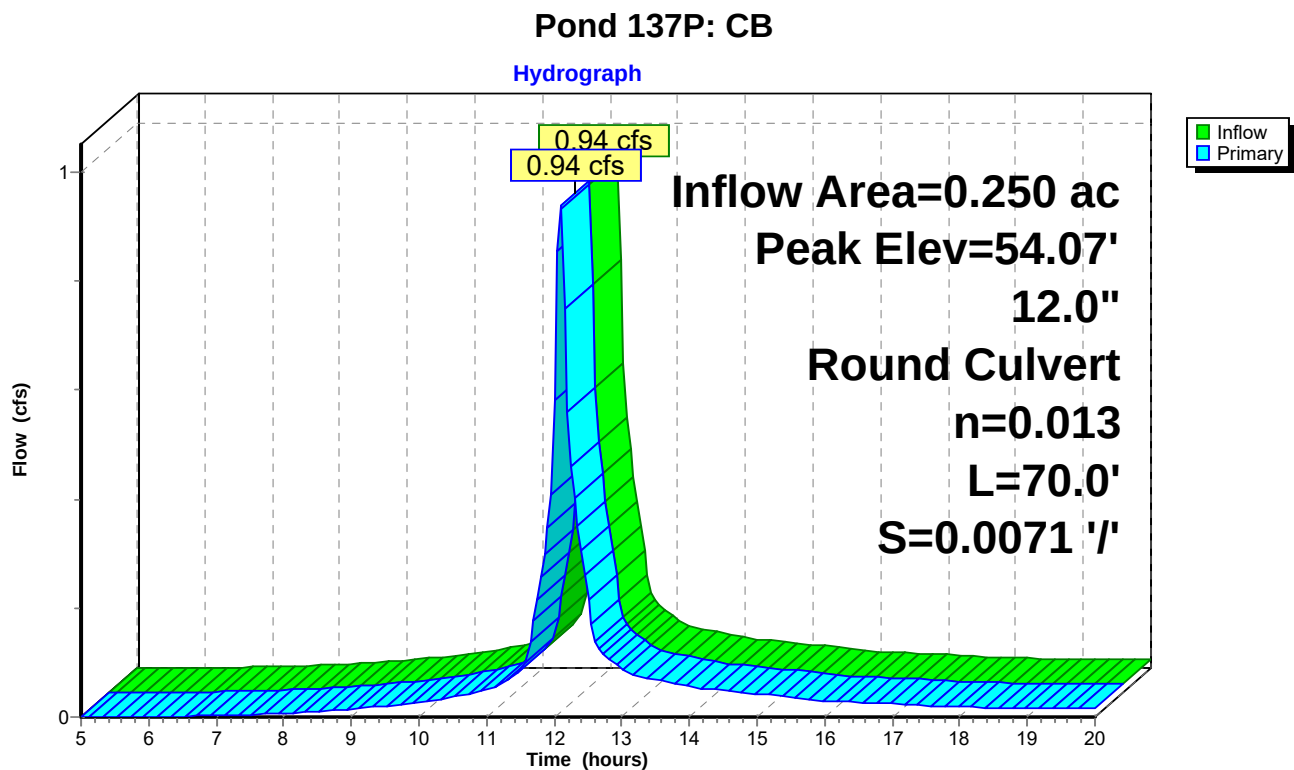
### Summary for Pond 137P: CB

Inflow Area = 0.250 ac, 80.29% Impervious, Inflow Depth > 3.11" for 10-Year event  
 Inflow = 0.94 cfs @ 12.09 hrs, Volume= 0.065 af  
 Outflow = 0.94 cfs @ 12.09 hrs, Volume= 0.065 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.94 cfs @ 12.09 hrs, Volume= 0.065 af  
 Routed to Pond 135P : Inf. Basin 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.07' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.50' | <b>12.0" Round Culvert</b><br>L= 70.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.50' / 53.00' S= 0.0071 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.92 cfs @ 12.09 hrs HW=54.06' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.92 cfs @ 2.02 fps)



**Summary for Pond 138P: CB 39**

Inflow Area = 0.145 ac, 72.58% Impervious, Inflow Depth > 2.74" for 10-Year event  
 Inflow = 0.48 cfs @ 12.09 hrs, Volume= 0.033 af  
 Outflow = 0.48 cfs @ 12.09 hrs, Volume= 0.033 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.48 cfs @ 12.09 hrs, Volume= 0.033 af  
 Routed to Pond 139P : DMH 28

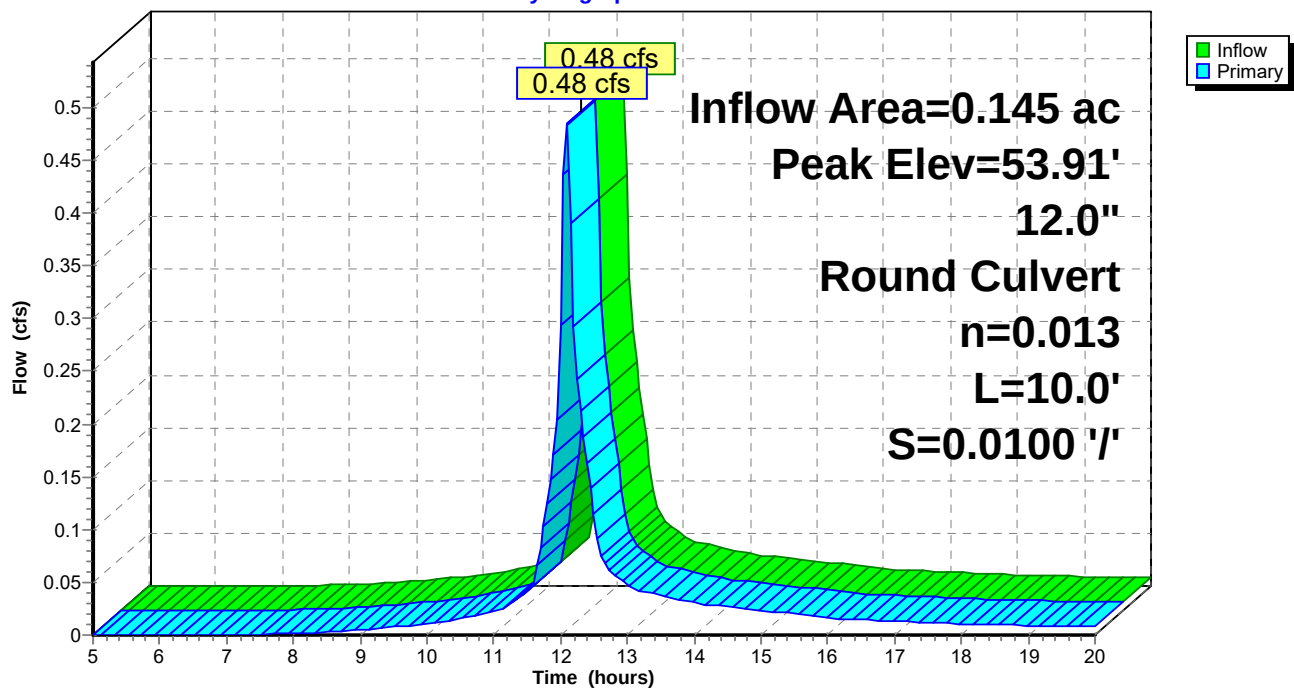
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.91' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.50' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.50' / 53.40' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.48 cfs @ 12.09 hrs HW=53.91' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.48 cfs @ 2.33 fps)

**Pond 138P: CB 39**

Hydrograph



**Summary for Pond 139P: DMH 28**

Inflow Area = 0.325 ac, 69.06% Impervious, Inflow Depth > 2.55" for 10-Year event  
 Inflow = 1.02 cfs @ 12.09 hrs, Volume= 0.069 af  
 Outflow = 1.02 cfs @ 12.09 hrs, Volume= 0.069 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.02 cfs @ 12.09 hrs, Volume= 0.069 af  
 Routed to Pond 205P : DMH 27

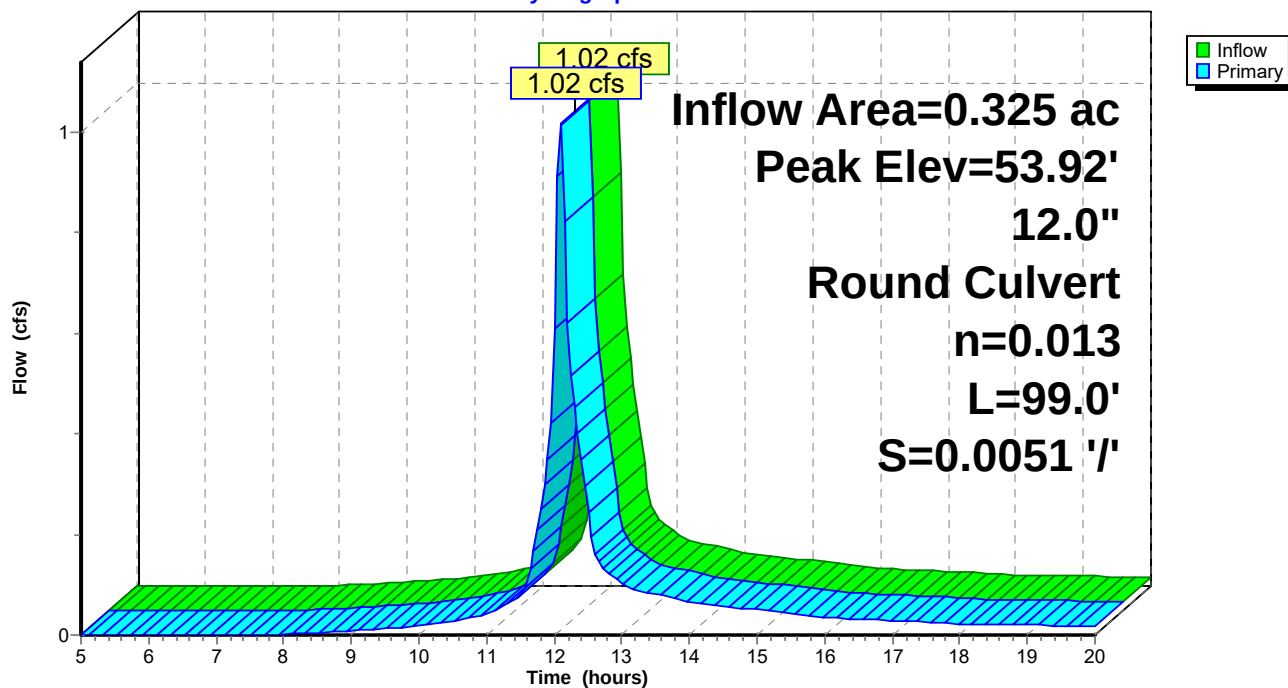
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.92' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.30' | <b>12.0" Round Culvert</b><br>L= 99.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.30' / 52.80' S= 0.0051 ' S= 0.0051 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.00 cfs @ 12.09 hrs HW=53.91' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.00 cfs @ 2.83 fps)

**Pond 139P: DMH 28**

Hydrograph



**Summary for Pond 140P: CB 31**

Inflow Area = 0.320 ac, 63.97% Impervious, Inflow Depth > 2.39" for 10-Year event  
 Inflow = 0.94 cfs @ 12.09 hrs, Volume= 0.064 af  
 Outflow = 0.94 cfs @ 12.09 hrs, Volume= 0.064 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.94 cfs @ 12.09 hrs, Volume= 0.064 af  
 Routed to Pond 141P : DMH 23

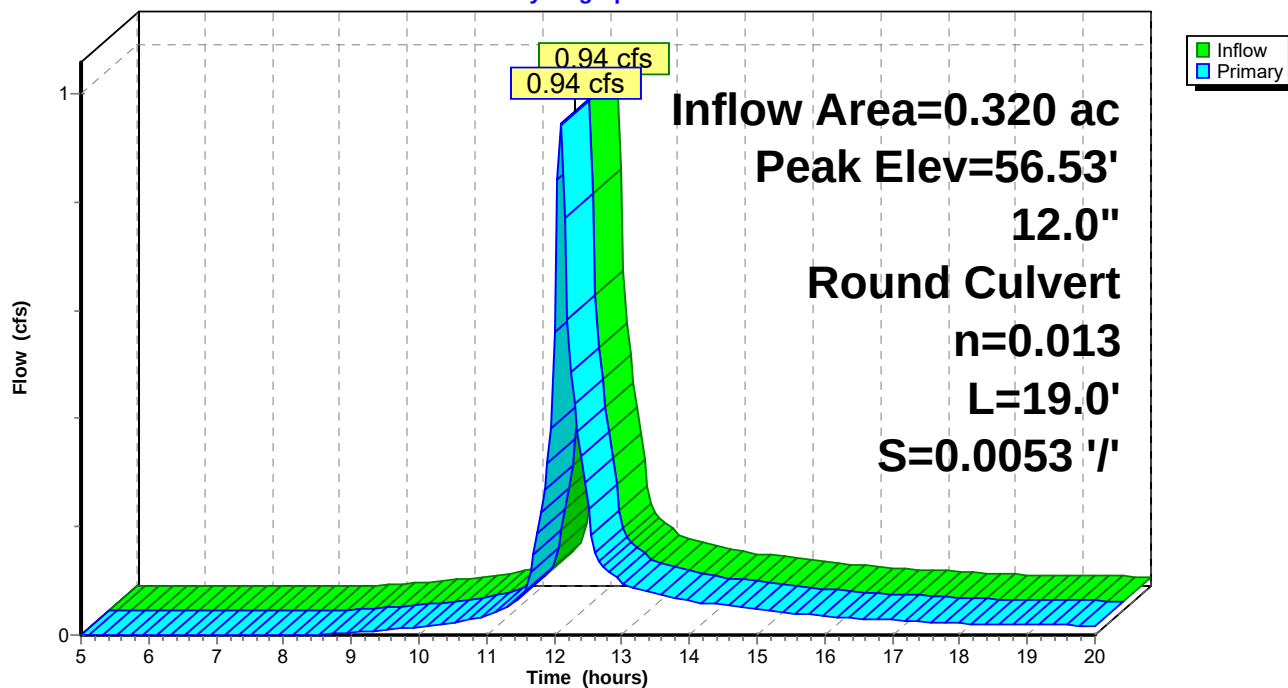
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.53' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 55.90' | <b>12.0" Round Culvert</b><br>L= 19.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 55.90' / 55.80' S= 0.0053 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.93 cfs @ 12.09 hrs HW=56.53' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.93 cfs @ 2.56 fps)

**Pond 140P: CB 31**

Hydrograph





### Summary for Pond 141P: DMH 23

Inflow Area = 0.615 ac, 65.69% Impervious, Inflow Depth > 2.43" for 10-Year event  
 Inflow = 1.85 cfs @ 12.09 hrs, Volume= 0.125 af  
 Outflow = 1.85 cfs @ 12.09 hrs, Volume= 0.125 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.85 cfs @ 12.09 hrs, Volume= 0.125 af  
 Routed to Pond 150P : DMH 22

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 56.58' @ 12.09 hrs

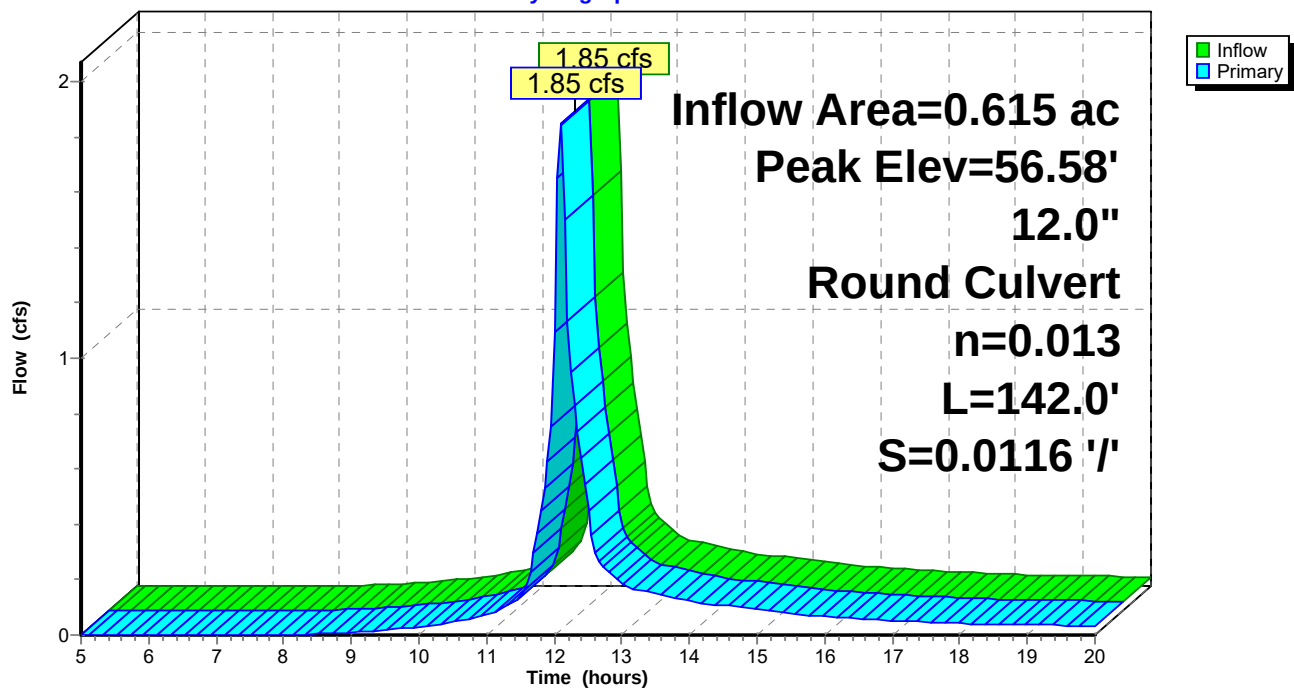
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 55.70' | <b>12.0" Round Culvert</b><br>L= 142.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 55.70' / 54.05' S= 0.0116 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.82 cfs @ 12.09 hrs HW=56.57' (Free Discharge)

↑**1=Culvert** (Inlet Controls 1.82 cfs @ 2.51 fps)

### Pond 141P: DMH 23

Hydrograph



### Summary for Pond 142P: CB 40

Inflow Area = 0.409 ac, 65.98% Impervious, Inflow Depth > 2.39" for 10-Year event  
 Inflow = 1.21 cfs @ 12.09 hrs, Volume= 0.082 af  
 Outflow = 1.21 cfs @ 12.09 hrs, Volume= 0.082 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.21 cfs @ 12.09 hrs, Volume= 0.082 af  
 Routed to Pond 144P : DMH 30

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 51.23' @ 12.09 hrs

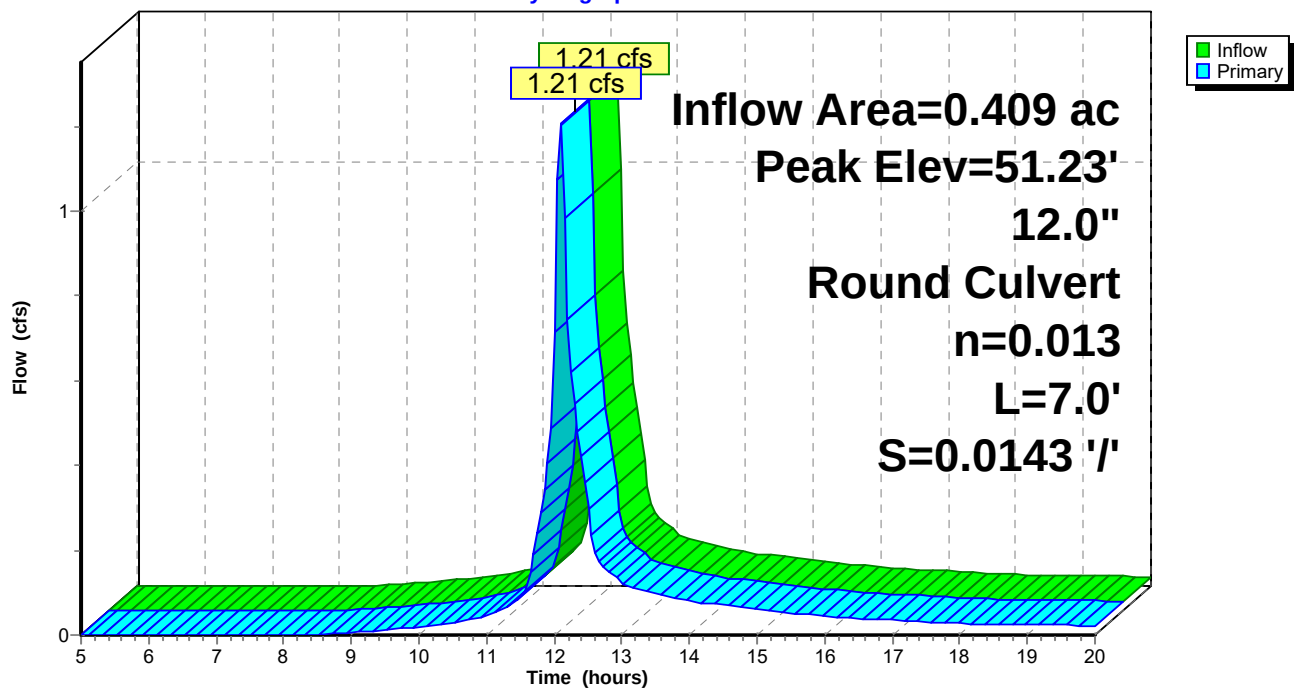
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.53' | <b>12.0" Round Culvert</b><br>L= 7.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.53' / 50.43' S= 0.0143 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.19 cfs @ 12.09 hrs HW=51.22' (Free Discharge)

1=Culvert (Barrel Controls 1.19 cfs @ 2.88 fps)

### Pond 142P: CB 40

#### Hydrograph



### Summary for Pond 143P: CB 41

Inflow Area = 0.577 ac, 66.17% Impervious, Inflow Depth > 2.39" for 10-Year event  
 Inflow = 1.70 cfs @ 12.09 hrs, Volume= 0.115 af  
 Outflow = 1.70 cfs @ 12.09 hrs, Volume= 0.115 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.70 cfs @ 12.09 hrs, Volume= 0.115 af  
 Routed to Pond 144P : DMH 30

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 51.40' @ 12.09 hrs

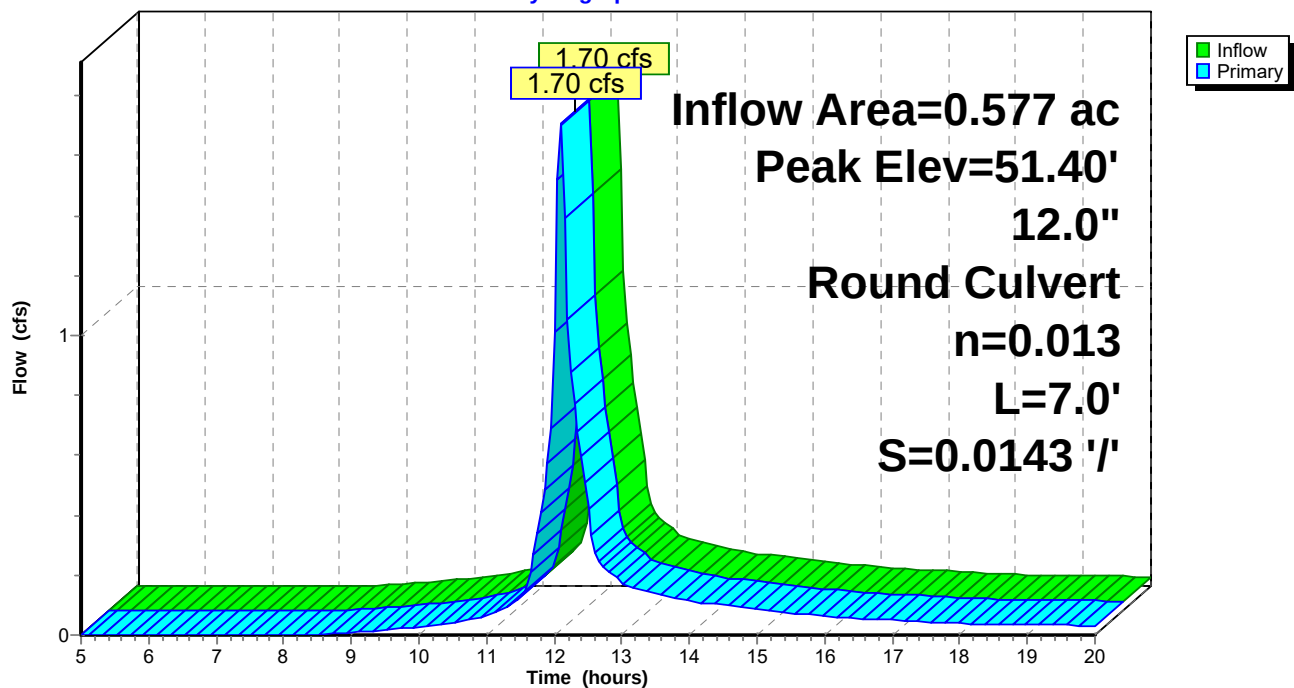
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.53' | <b>12.0" Round Culvert</b><br>L= 7.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.53' / 50.43' S= 0.0143 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.67 cfs @ 12.09 hrs HW=51.39' (Free Discharge)

1=Culvert (Barrel Controls 1.67 cfs @ 3.12 fps)

### Pond 143P: CB 41

#### Hydrograph



**Summary for Pond 144P: DMH 30**

Inflow Area = 0.986 ac, 66.09% Impervious, Inflow Depth > 2.39" for 10-Year event  
 Inflow = 2.91 cfs @ 12.09 hrs, Volume= 0.196 af  
 Outflow = 2.91 cfs @ 12.09 hrs, Volume= 0.196 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.91 cfs @ 12.09 hrs, Volume= 0.196 af  
 Routed to Pond 145P : DMH 29

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 51.85' @ 12.10 hrs

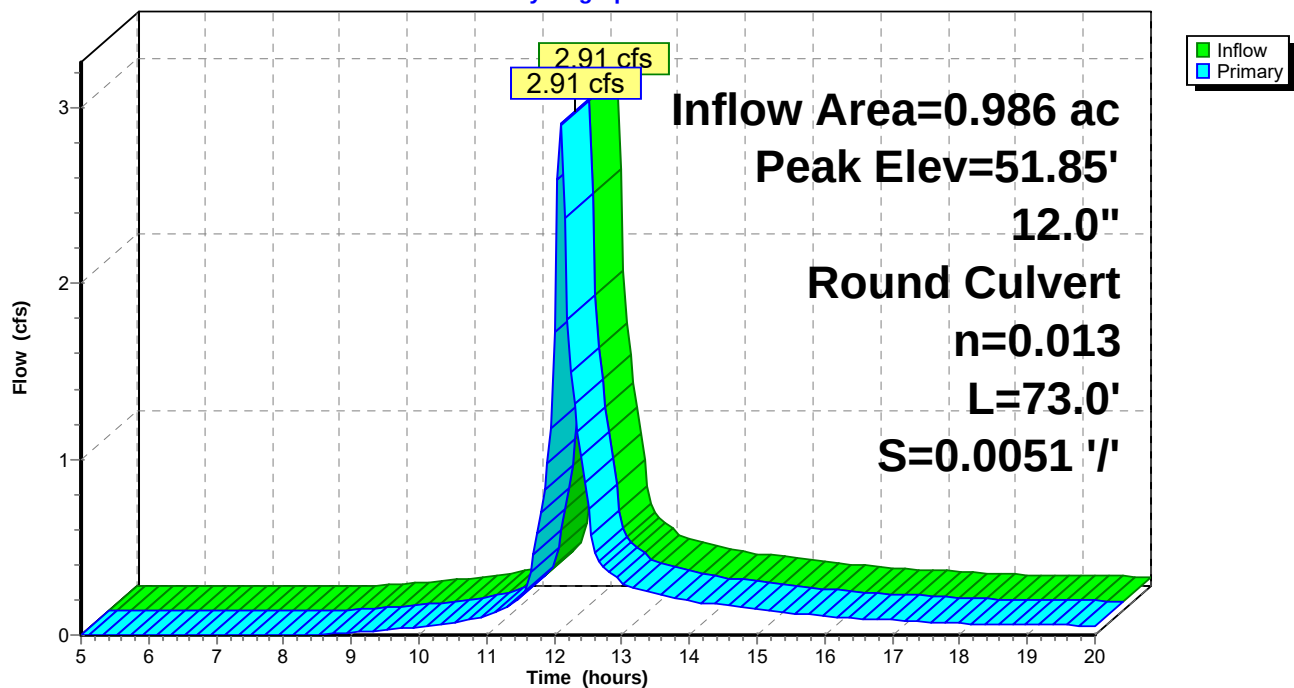
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.33' | <b>12.0" Round Culvert</b><br>L= 73.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.33' / 49.96' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.85 cfs @ 12.09 hrs HW=51.81' (Free Discharge)

1=Culvert (Barrel Controls 2.85 cfs @ 3.62 fps)

**Pond 144P: DMH 30**

Hydrograph



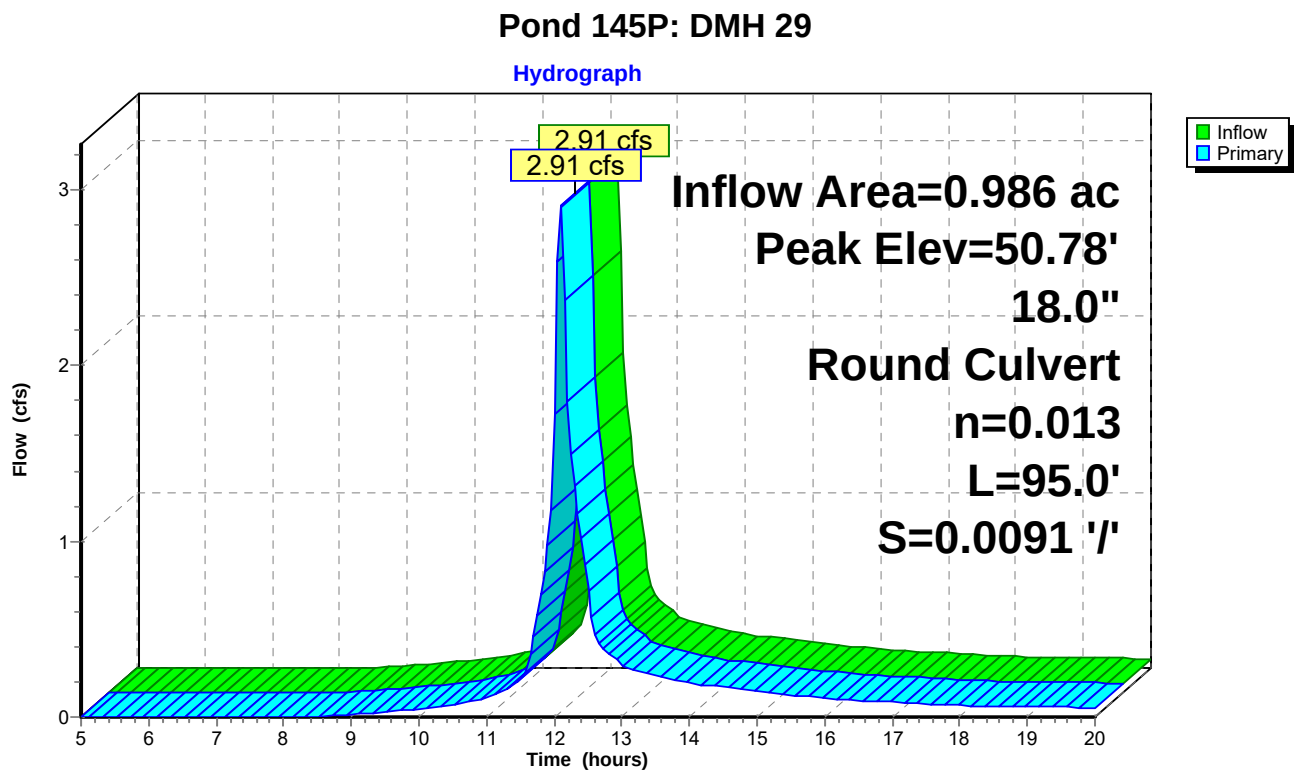
### Summary for Pond 145P: DMH 29

Inflow Area = 0.986 ac, 66.09% Impervious, Inflow Depth > 2.39" for 10-Year event  
 Inflow = 2.91 cfs @ 12.09 hrs, Volume= 0.196 af  
 Outflow = 2.91 cfs @ 12.09 hrs, Volume= 0.196 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.91 cfs @ 12.09 hrs, Volume= 0.196 af  
 Routed to Pond 146P : Inf. Basin 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.78' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 49.86' | <b>18.0" Round Culvert</b><br>L= 95.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.86' / 49.00' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.86 cfs @ 12.09 hrs HW=50.77' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 2.86 cfs @ 2.56 fps)



### Summary for Pond 146P: Inf. Basin 2

Inflow Area = 1.642 ac, 64.89% Impervious, Inflow Depth > 2.42" for 10-Year event  
 Inflow = 4.79 cfs @ 12.09 hrs, Volume= 0.332 af  
 Outflow = 1.14 cfs @ 12.50 hrs, Volume= 0.331 af, Atten= 76%, Lag= 24.6 min  
 Discarded = 1.14 cfs @ 12.50 hrs, Volume= 0.331 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Link 203L : 3A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.50' @ 12.50 hrs Surf.Area= 3,916 sf Storage= 4,423 cf

Plug-Flow detention time= 34.6 min calculated for 0.330 af (100% of inflow)  
 Center-of-Mass det. time= 34.0 min ( 817.3 - 783.3 )

| Volume              | Invert               | Avail.Storage             | Storage Description                                        |
|---------------------|----------------------|---------------------------|------------------------------------------------------------|
| #1                  | 49.00'               | 18,306 cf                 | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet)                                  |
| 49.00               | 1,966                | 0                         | 0                                                          |
| 50.00               | 3,261                | 2,614                     | 2,614                                                      |
| 51.00               | 4,560                | 3,911                     | 6,524                                                      |
| 52.00               | 5,952                | 5,256                     | 11,780                                                     |
| 53.00               | 7,099                | 6,526                     | 18,306                                                     |

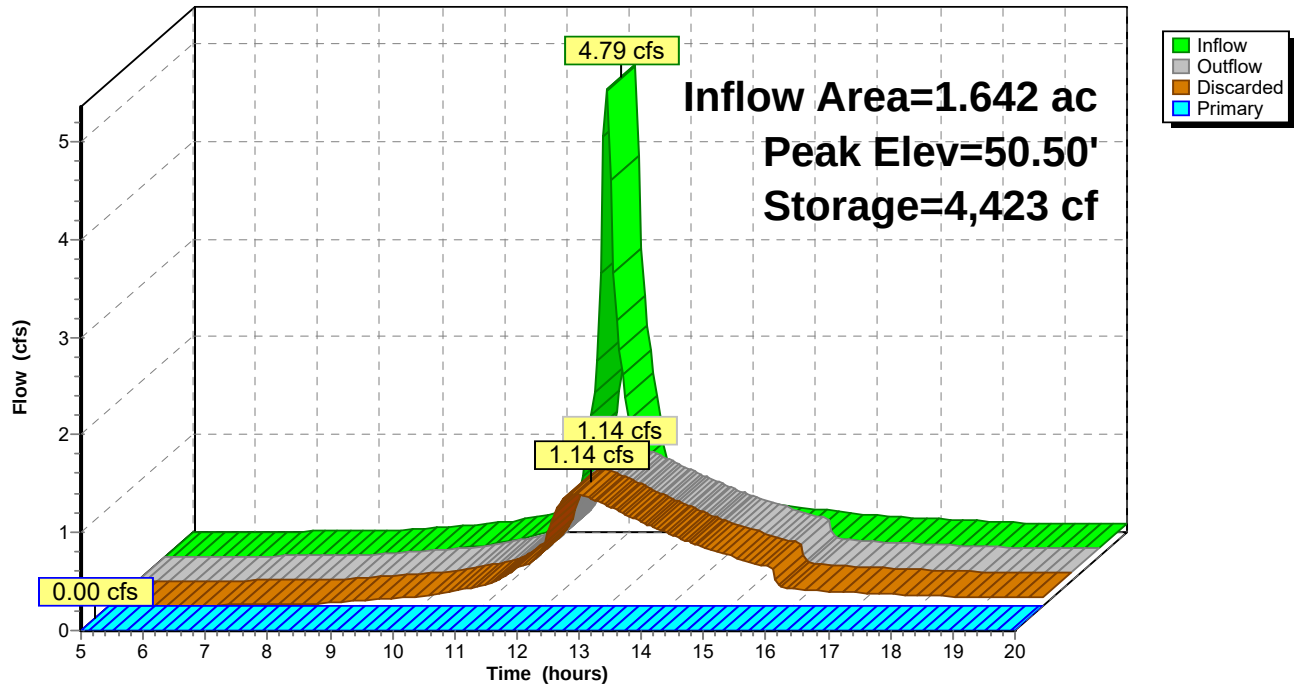
| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 49.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 47.00'                                                                                                               |
| #2     | Primary   | 49.00' | <b>12.0" Round Culvert</b><br>L= 42.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.00' / 45.00' S= 0.0952 ' / ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 52.20' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                           |

**Discarded OutFlow** Max=1.14 cfs @ 12.50 hrs HW=50.50' (Free Discharge)  
 ↑ **1=Exfiltration** ( Controls 1.14 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=49.00' (Free Discharge)  
 ↑ **2=Culvert** (Passes 0.00 cfs of 0.00 cfs potential flow)  
 ↑ **3=Orifice/Grate** ( Controls 0.00 cfs)

# Pond 146P: Inf. Basin 2

Hydrograph



### Summary for Pond 147P: CB 28

Inflow Area = 0.076 ac, 72.53% Impervious, Inflow Depth > 2.74" for 10-Year event  
 Inflow = 0.26 cfs @ 12.09 hrs, Volume= 0.017 af  
 Outflow = 0.26 cfs @ 12.09 hrs, Volume= 0.017 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.26 cfs @ 12.09 hrs, Volume= 0.017 af  
 Routed to Pond 150P : DMH 22

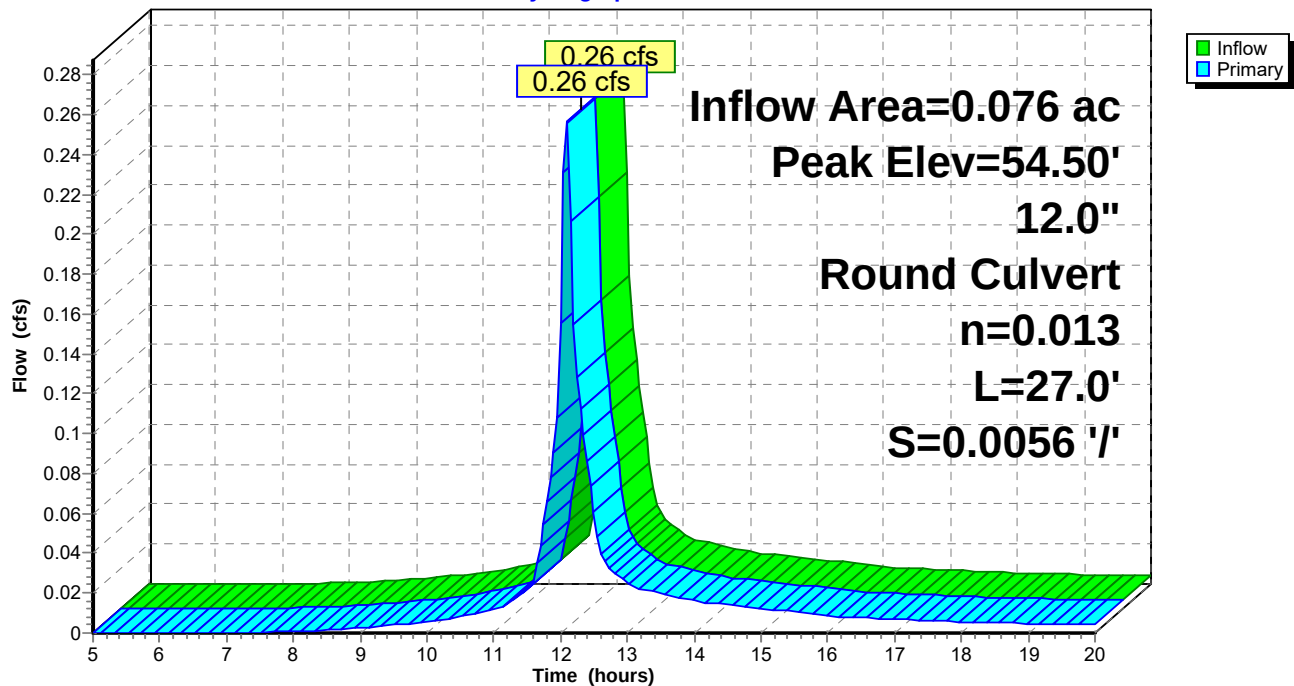
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.50' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.20' | <b>12.0" Round Culvert</b><br>L= 27.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.20' / 54.05' S= 0.0056 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.25 cfs @ 12.09 hrs HW=54.50' (Free Discharge)  
 1=Culvert (Barrel Controls 0.25 cfs @ 1.93 fps)

### Pond 147P: CB 28

#### Hydrograph





## Summary for Pond 148P: CB 43

Inflow Area = 0.196 ac, 80.21% Impervious, Inflow Depth > 3.11" for 10-Year event  
Inflow = 0.74 cfs @ 12.09 hrs, Volume= 0.051 af  
Outflow = 0.74 cfs @ 12.09 hrs, Volume= 0.051 af, Atten= 0%, Lag= 0.0 min  
Primary = 0.74 cfs @ 12.09 hrs, Volume= 0.051 af  
Routed to Pond 146P : Inf. Basin 2

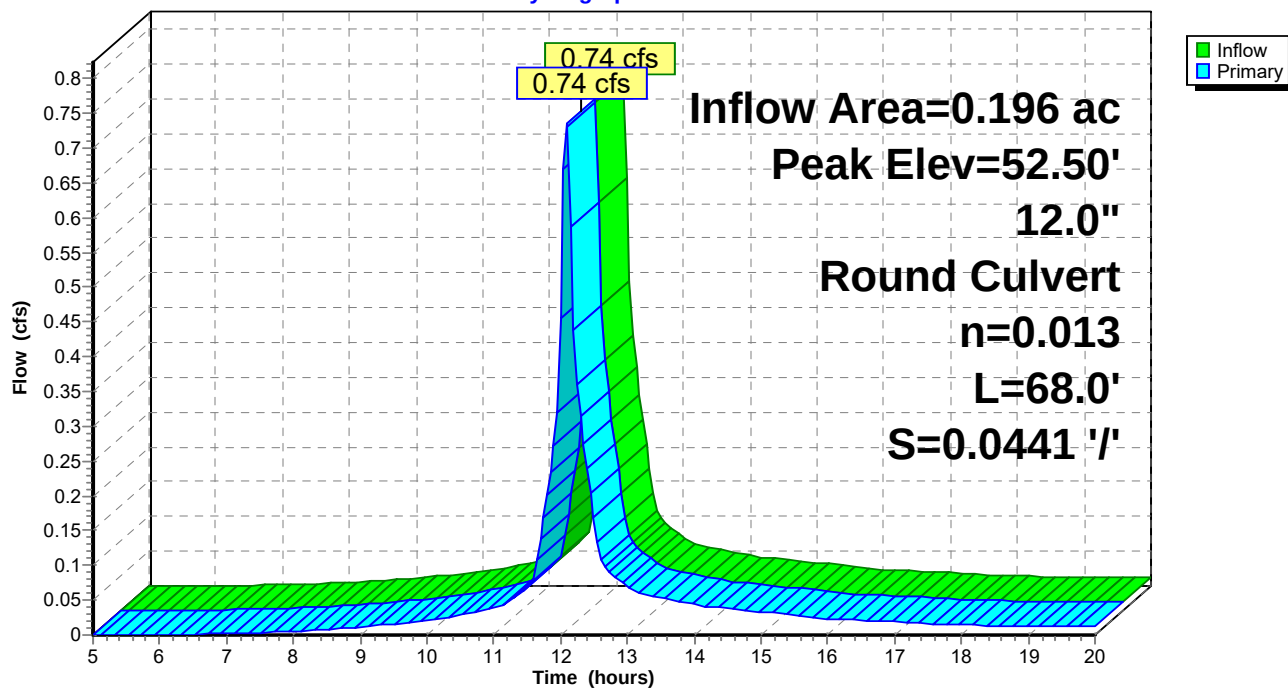
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 52.50' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.00' | <b>12.0" Round Culvert</b><br>L= 68.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.00' / 49.00' S= 0.0441 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.72 cfs @ 12.09 hrs HW=52.49' (Free Discharge)  
 1=Culvert (Inlet Controls 0.72 cfs @ 1.88 fps)

## Pond 148P: CB 43

## Hydrograph



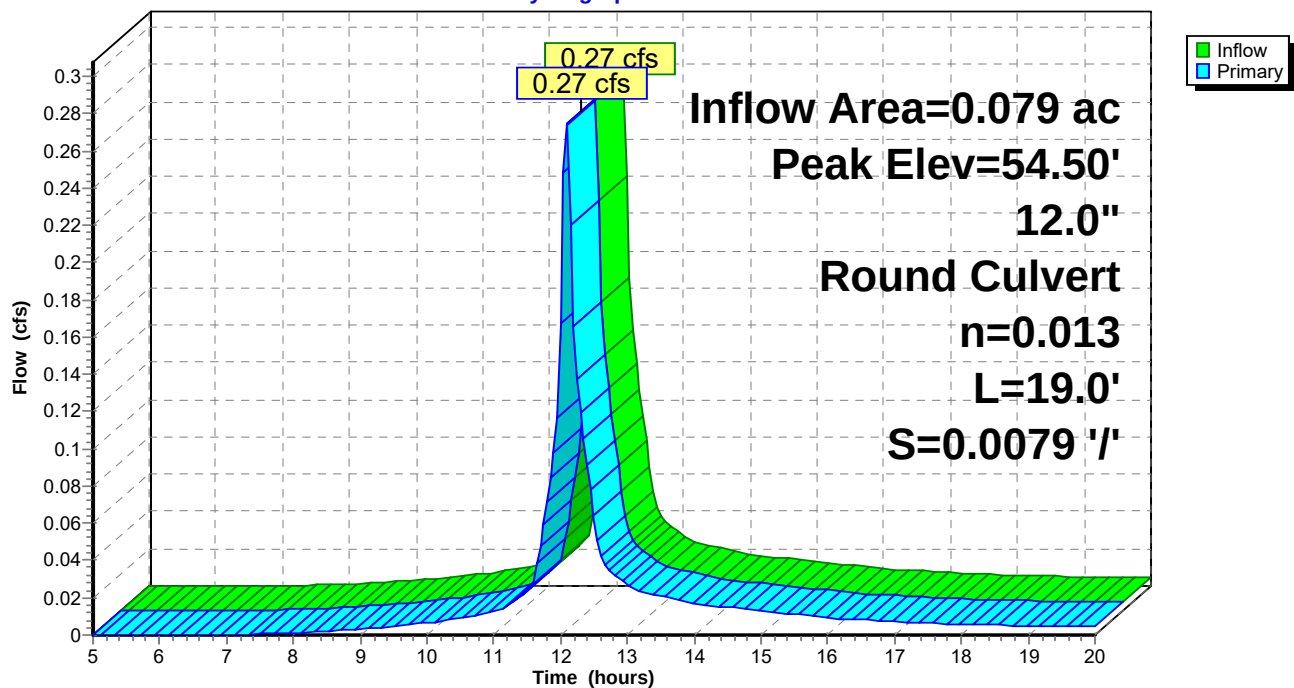
**Summary for Pond 149P: CB 29**

Inflow Area = 0.079 ac, 73.82% Impervious, Inflow Depth > 2.83" for 10-Year event  
 Inflow = 0.27 cfs @ 12.09 hrs, Volume= 0.019 af  
 Outflow = 0.27 cfs @ 12.09 hrs, Volume= 0.019 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.27 cfs @ 12.09 hrs, Volume= 0.019 af  
 Routed to Pond 150P : DMH 22

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.50' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.20' | <b>12.0" Round Culvert</b><br>L= 19.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.20' / 54.05' S= 0.0079 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.27 cfs @ 12.09 hrs HW=54.49' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.27 cfs @ 2.09 fps)

**Pond 149P: CB 29****Hydrograph**

### Summary for Pond 150P: DMH 22

Inflow Area = 0.771 ac, 67.20% Impervious, Inflow Depth > 2.50" for 10-Year event  
 Inflow = 2.38 cfs @ 12.09 hrs, Volume= 0.161 af  
 Outflow = 2.38 cfs @ 12.09 hrs, Volume= 0.161 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.38 cfs @ 12.09 hrs, Volume= 0.161 af  
 Routed to Pond 161P : DMH 19

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 55.08' @ 12.09 hrs

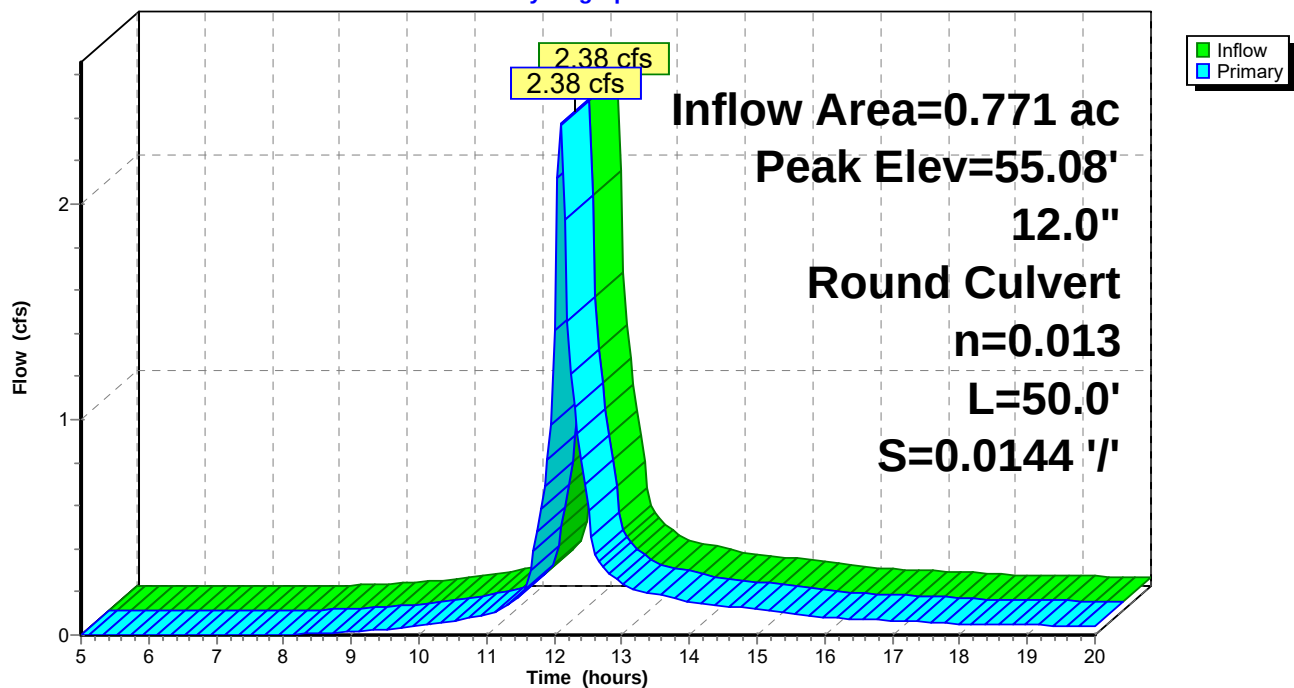
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.95' | <b>12.0" Round Culvert</b><br>L= 50.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.95' / 53.23' S= 0.0144 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.34 cfs @ 12.09 hrs HW=55.06' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 2.34 cfs @ 2.97 fps)

### Pond 150P: DMH 22

#### Hydrograph



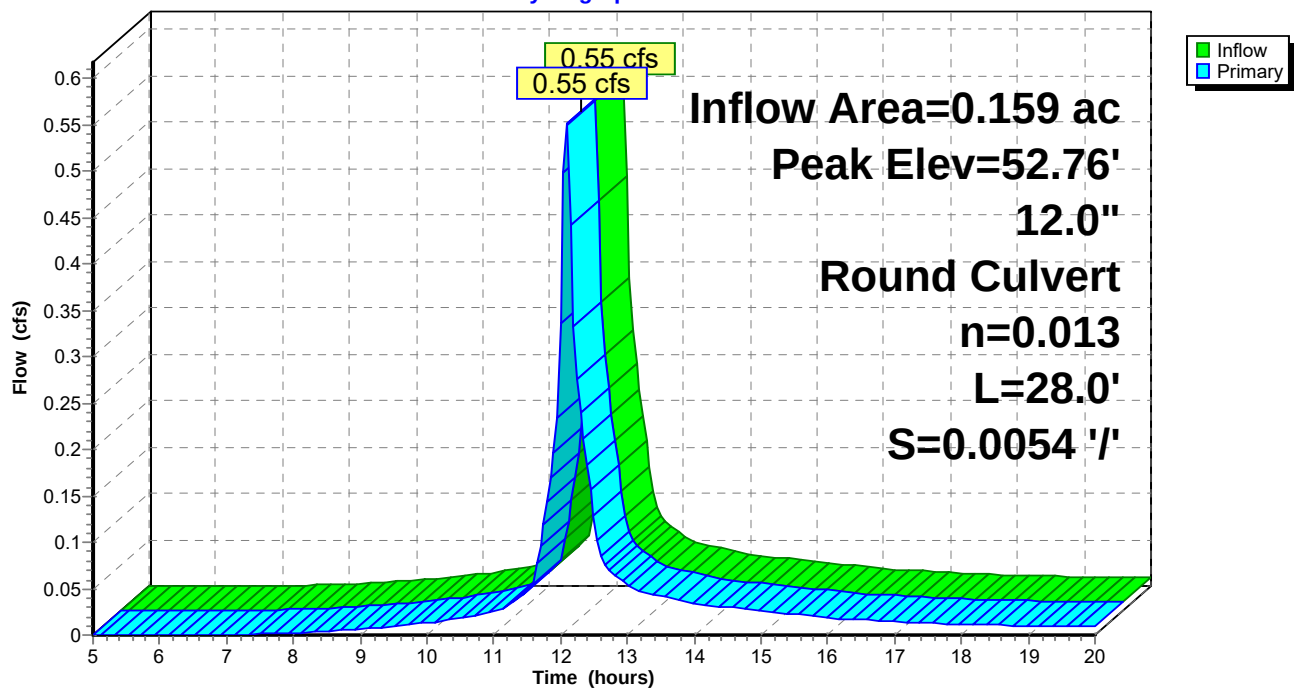
**Summary for Pond 151P: CB 22**

Inflow Area = 0.159 ac, 74.64% Impervious, Inflow Depth > 2.83" for 10-Year event  
 Inflow = 0.55 cfs @ 12.09 hrs, Volume= 0.038 af  
 Outflow = 0.55 cfs @ 12.09 hrs, Volume= 0.038 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.55 cfs @ 12.09 hrs, Volume= 0.038 af  
 Routed to Pond 153P : DMH 17

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.76' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.30' | <b>12.0" Round Culvert</b><br>L= 28.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.30' / 52.15' S= 0.0054 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.54 cfs @ 12.09 hrs HW=52.75' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.54 cfs @ 2.31 fps)

**Pond 151P: CB 22****Hydrograph**

### Summary for Pond 152P: CB 23

Inflow Area = 0.210 ac, 67.61% Impervious, Inflow Depth > 2.48" for 10-Year event  
 Inflow = 0.64 cfs @ 12.09 hrs, Volume= 0.043 af  
 Outflow = 0.64 cfs @ 12.09 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.64 cfs @ 12.09 hrs, Volume= 0.043 af  
 Routed to Pond 153P : DMH 17

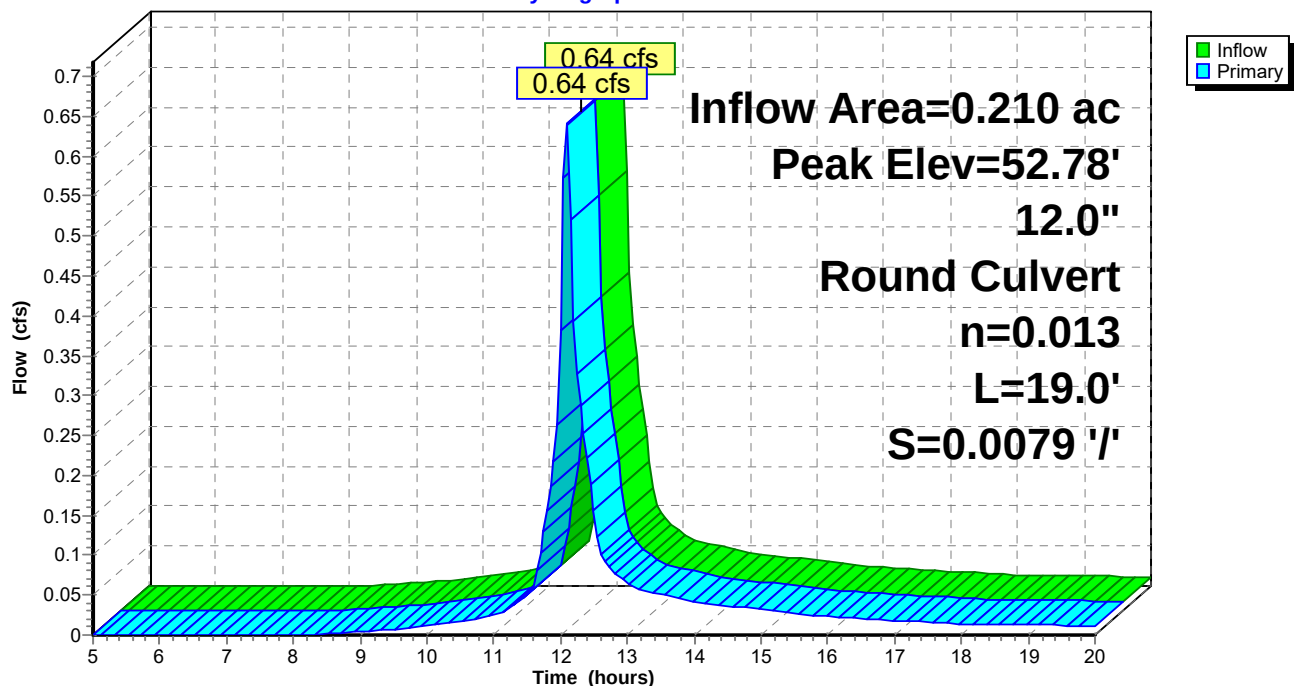
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.78' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.30' | <b>12.0" Round Culvert</b><br>L= 19.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.30' / 52.15' S= 0.0079 ' S= 0.0079 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.63 cfs @ 12.09 hrs HW=52.77' (Free Discharge)  
 1=Culvert (Barrel Controls 0.63 cfs @ 2.52 fps)

### Pond 152P: CB 23

#### Hydrograph



### Summary for Pond 153P: DMH 17

Inflow Area = 1.731 ac, 71.57% Impervious, Inflow Depth > 2.71" for 10-Year event  
 Inflow = 5.72 cfs @ 12.09 hrs, Volume= 0.391 af  
 Outflow = 5.72 cfs @ 12.09 hrs, Volume= 0.391 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.72 cfs @ 12.09 hrs, Volume= 0.391 af  
 Routed to Pond 204P : DMH 18

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 53.51' @ 12.09 hrs

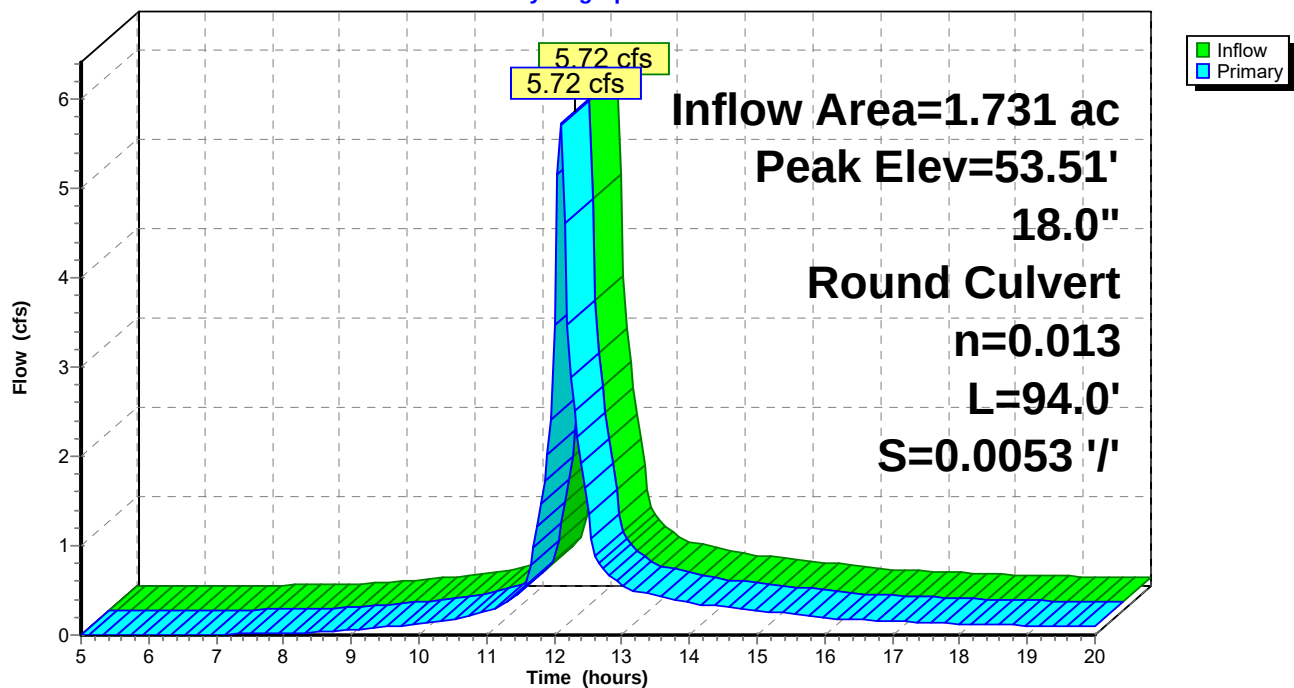
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.05' | <b>18.0" Round Culvert</b><br>L= 94.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.05' / 51.55' S= 0.0053 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=5.63 cfs @ 12.09 hrs HW=53.49' (Free Discharge)

1=Culvert (Barrel Controls 5.63 cfs @ 4.13 fps)

### Pond 153P: DMH 17

#### Hydrograph



### Summary for Pond 154P: CB 18

Inflow Area = 0.207 ac, 76.76% Impervious, Inflow Depth > 2.92" for 10-Year event  
 Inflow = 0.74 cfs @ 12.09 hrs, Volume= 0.050 af  
 Outflow = 0.74 cfs @ 12.09 hrs, Volume= 0.050 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.74 cfs @ 12.09 hrs, Volume= 0.050 af  
 Routed to Pond 166P : DMH 13

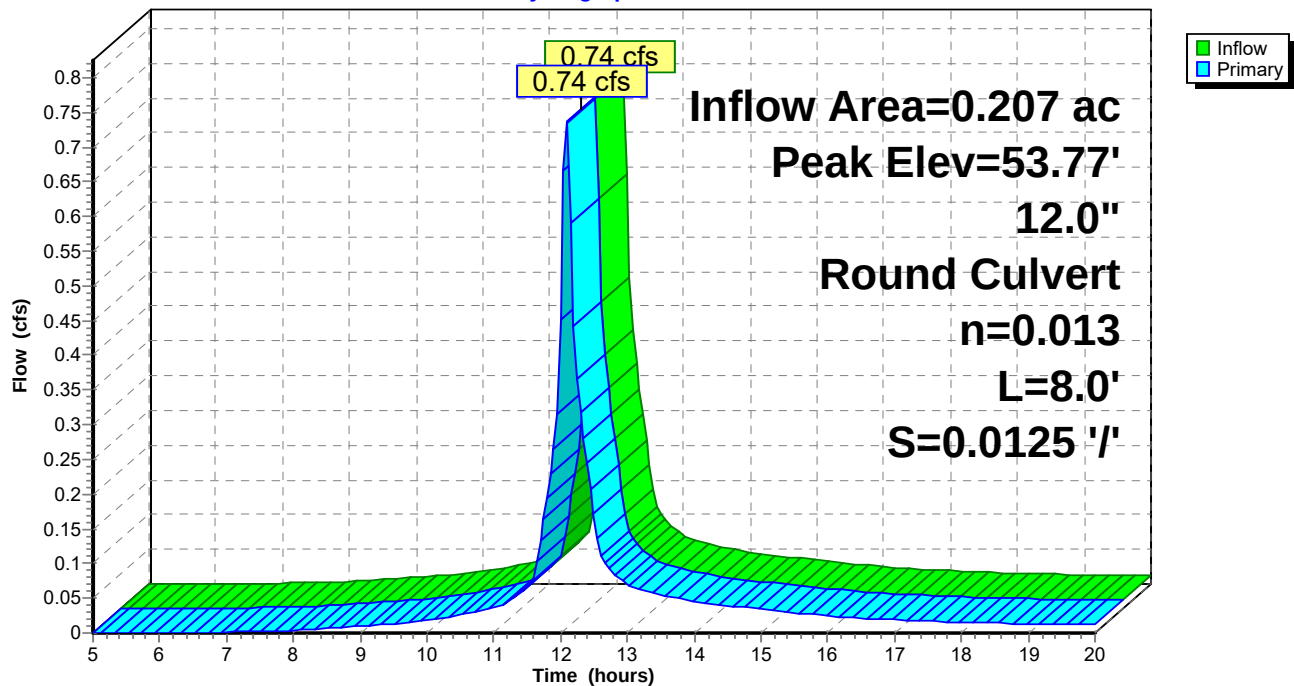
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.77' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.25' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.25' / 53.15' S= 0.0125 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.72 cfs @ 12.09 hrs HW=53.76' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.72 cfs @ 2.58 fps)

### Pond 154P: CB 18

#### Hydrograph



### Summary for Pond 155P: CB 27

Inflow Area = 0.220 ac, 74.64% Impervious, Inflow Depth > 2.83" for 10-Year event  
 Inflow = 0.76 cfs @ 12.09 hrs, Volume= 0.052 af  
 Outflow = 0.76 cfs @ 12.09 hrs, Volume= 0.052 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.76 cfs @ 12.09 hrs, Volume= 0.052 af  
 Routed to Pond 157P : DMH 21

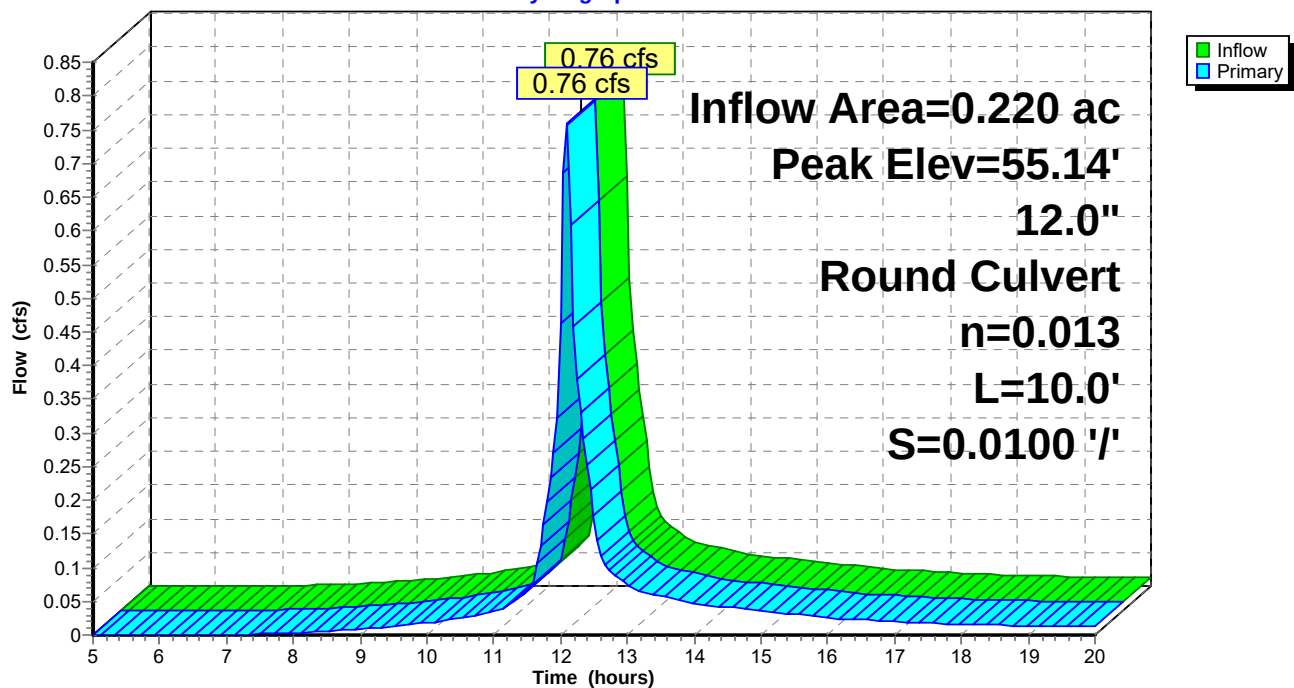
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 55.14' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.60' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.74 cfs @ 12.09 hrs HW=55.13' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.74 cfs @ 2.56 fps)

### Pond 155P: CB 27

#### Hydrograph





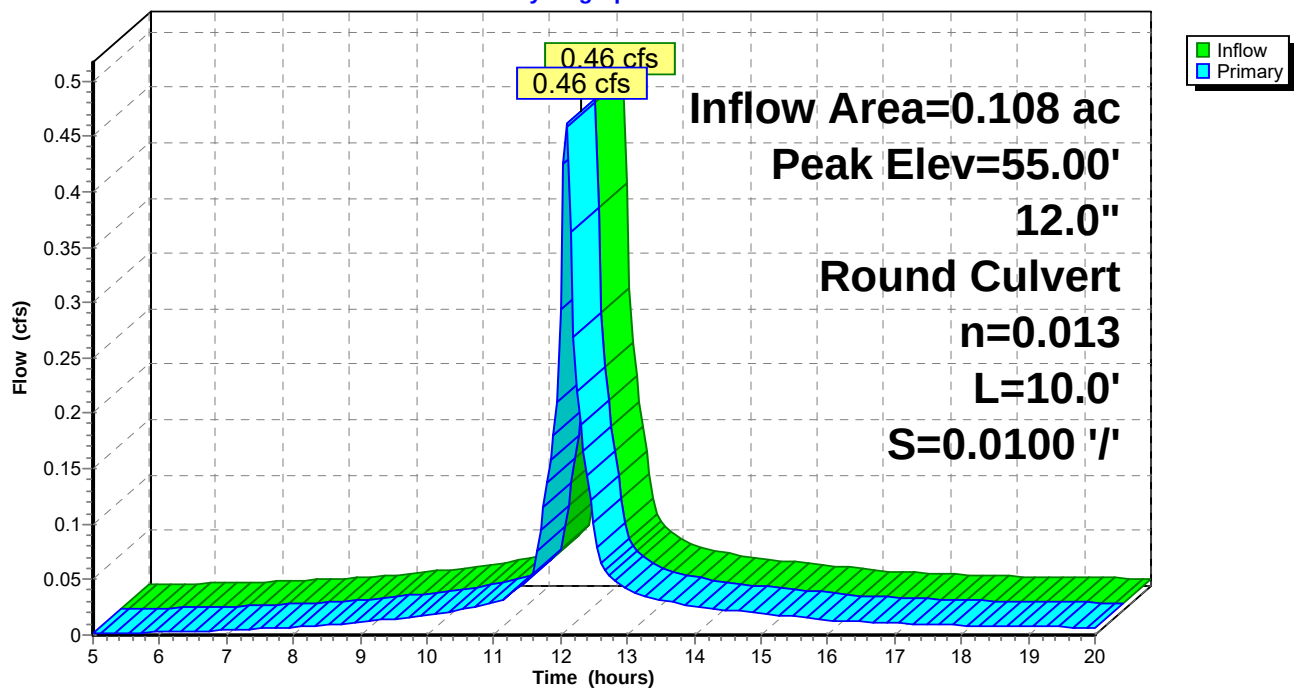
**Summary for Pond 156P: CB 26**

Inflow Area = 0.108 ac, 90.07% Impervious, Inflow Depth > 3.71" for 10-Year event  
 Inflow = 0.46 cfs @ 12.09 hrs, Volume= 0.033 af  
 Outflow = 0.46 cfs @ 12.09 hrs, Volume= 0.033 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.46 cfs @ 12.09 hrs, Volume= 0.033 af  
 Routed to Pond 157P : DMH 21

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 55.00' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.60' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.45 cfs @ 12.09 hrs HW=55.00' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.45 cfs @ 2.30 fps)

**Pond 156P: CB 26****Hydrograph**

**Summary for Pond 157P: DMH 21**

Inflow Area = 0.328 ac, 79.72% Impervious, Inflow Depth > 3.12" for 10-Year event  
 Inflow = 1.22 cfs @ 12.09 hrs, Volume= 0.085 af  
 Outflow = 1.22 cfs @ 12.09 hrs, Volume= 0.085 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.22 cfs @ 12.09 hrs, Volume= 0.085 af  
 Routed to Pond 160P : DMH 20

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 55.07' @ 12.09 hrs

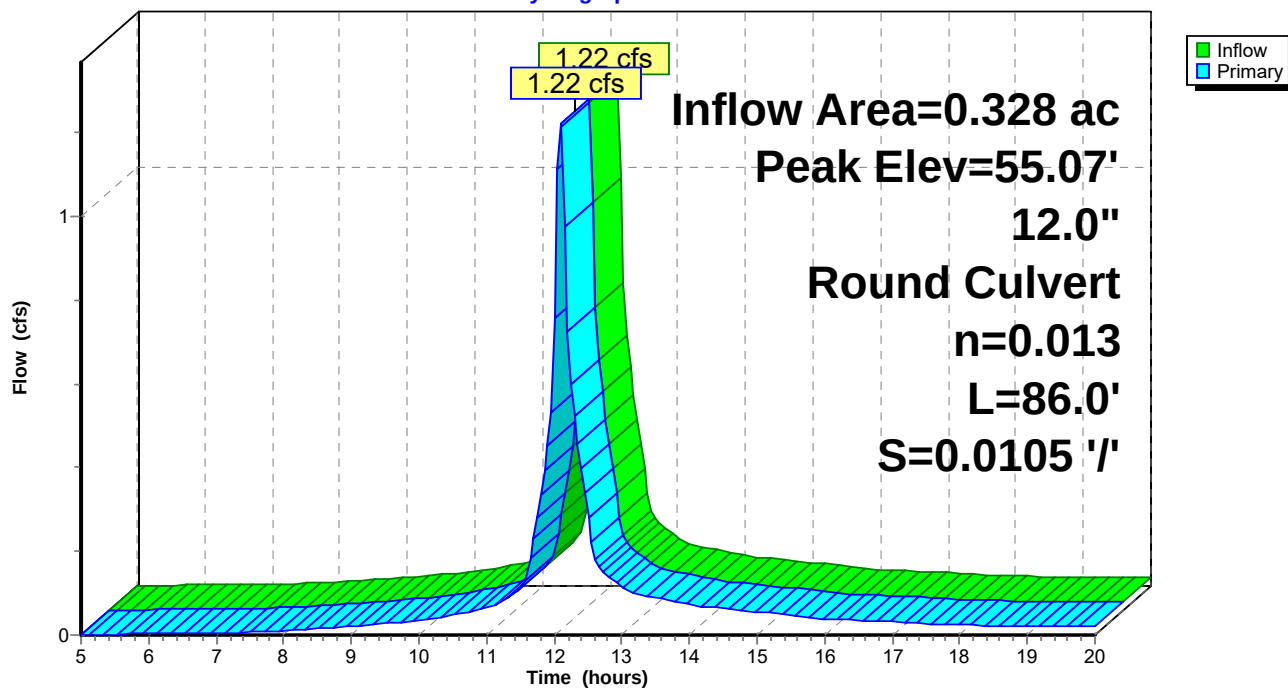
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.40' | <b>12.0" Round Culvert</b><br>L= 86.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.40' / 53.50' S= 0.0105 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.19 cfs @ 12.09 hrs HW=55.06' (Free Discharge)

↑**1=Culvert** (Inlet Controls 1.19 cfs @ 2.18 fps)

**Pond 157P: DMH 21**

Hydrograph



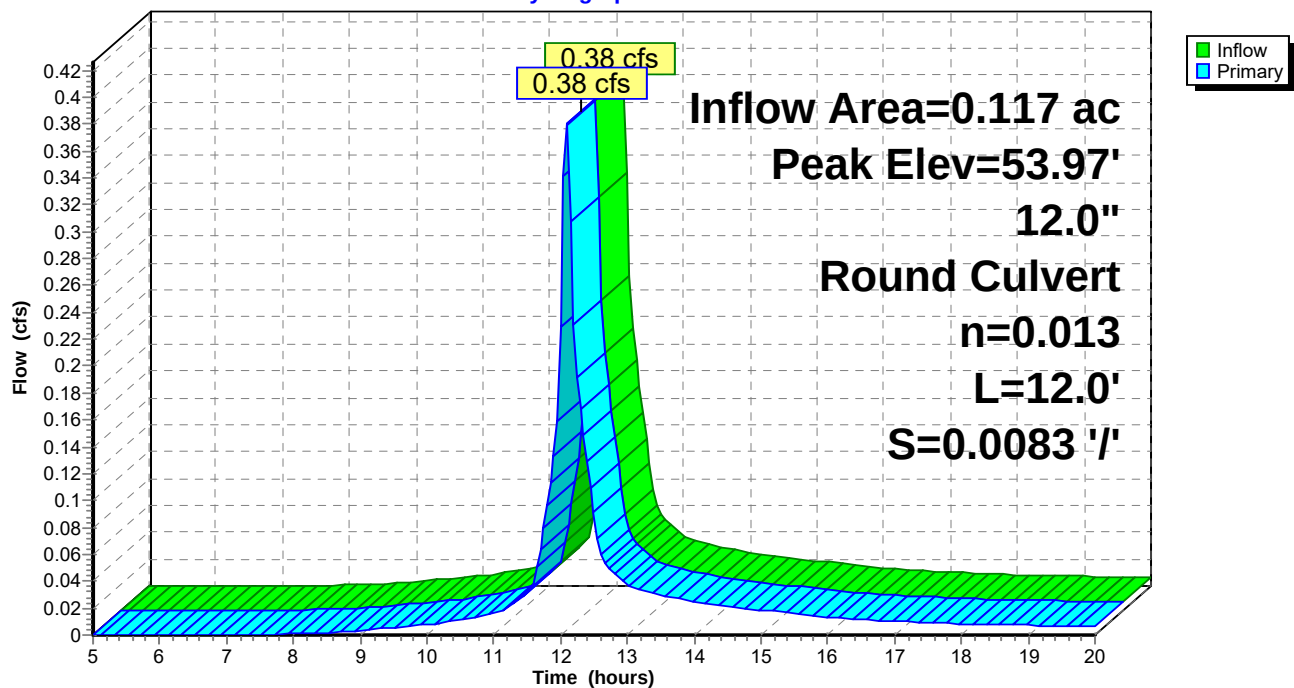
**Summary for Pond 158P: CB 24**

Inflow Area = 0.117 ac, 70.43% Impervious, Inflow Depth > 2.65" for 10-Year event  
 Inflow = 0.38 cfs @ 12.09 hrs, Volume= 0.026 af  
 Outflow = 0.38 cfs @ 12.09 hrs, Volume= 0.026 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.38 cfs @ 12.09 hrs, Volume= 0.026 af  
 Routed to Pond 160P : DMH 20

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.97' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.60' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.60' / 53.50' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.37 cfs @ 12.09 hrs HW=53.96' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.37 cfs @ 2.17 fps)

**Pond 158P: CB 24****Hydrograph**

**Summary for Pond 159P: CB 25**

Inflow Area = 0.146 ac, 79.60% Impervious, Inflow Depth > 3.11" for 10-Year event  
 Inflow = 0.55 cfs @ 12.09 hrs, Volume= 0.038 af  
 Outflow = 0.55 cfs @ 12.09 hrs, Volume= 0.038 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.55 cfs @ 12.09 hrs, Volume= 0.038 af  
 Routed to Pond 160P : DMH 20

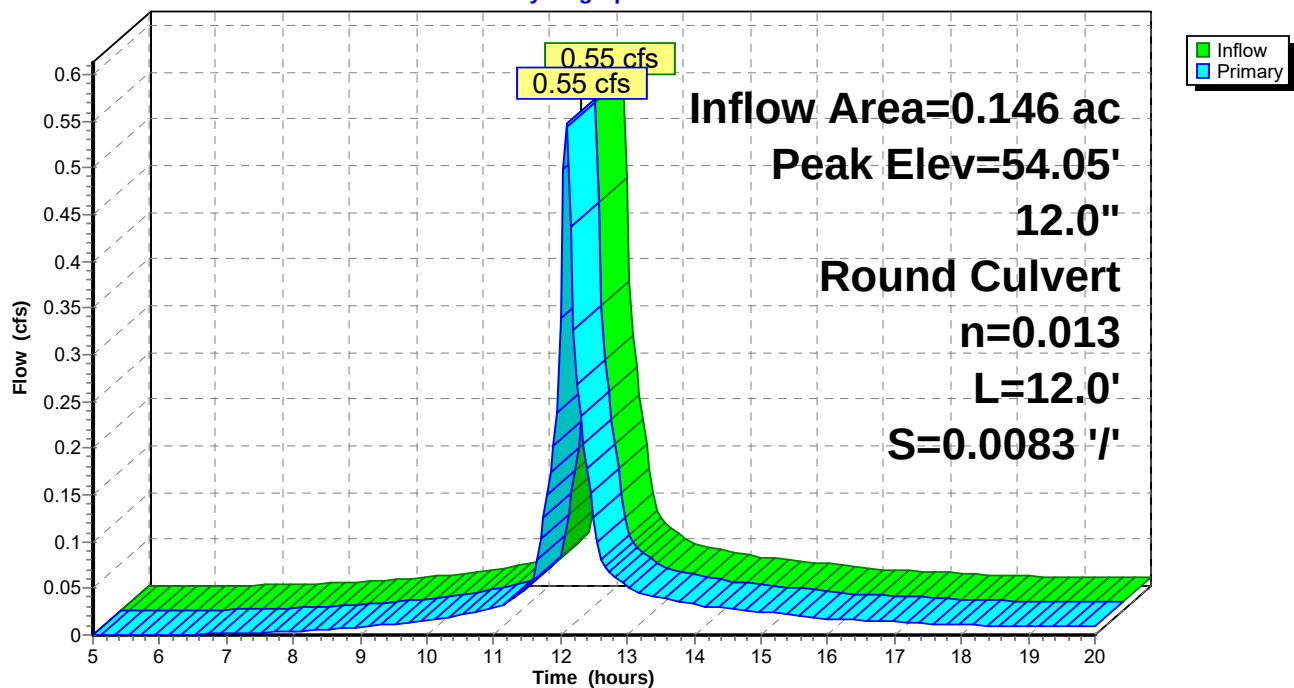
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.05' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.60' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.60' / 53.50' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.53 cfs @ 12.09 hrs HW=54.04' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.53 cfs @ 2.35 fps)

**Pond 159P: CB 25**

Hydrograph



**Summary for Pond 160P: DMH 20**

Inflow Area = 0.591 ac, 77.85% Impervious, Inflow Depth > 3.02" for 10-Year event  
 Inflow = 2.15 cfs @ 12.09 hrs, Volume= 0.149 af  
 Outflow = 2.15 cfs @ 12.09 hrs, Volume= 0.149 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.15 cfs @ 12.09 hrs, Volume= 0.149 af  
 Routed to Pond 161P : DMH 19

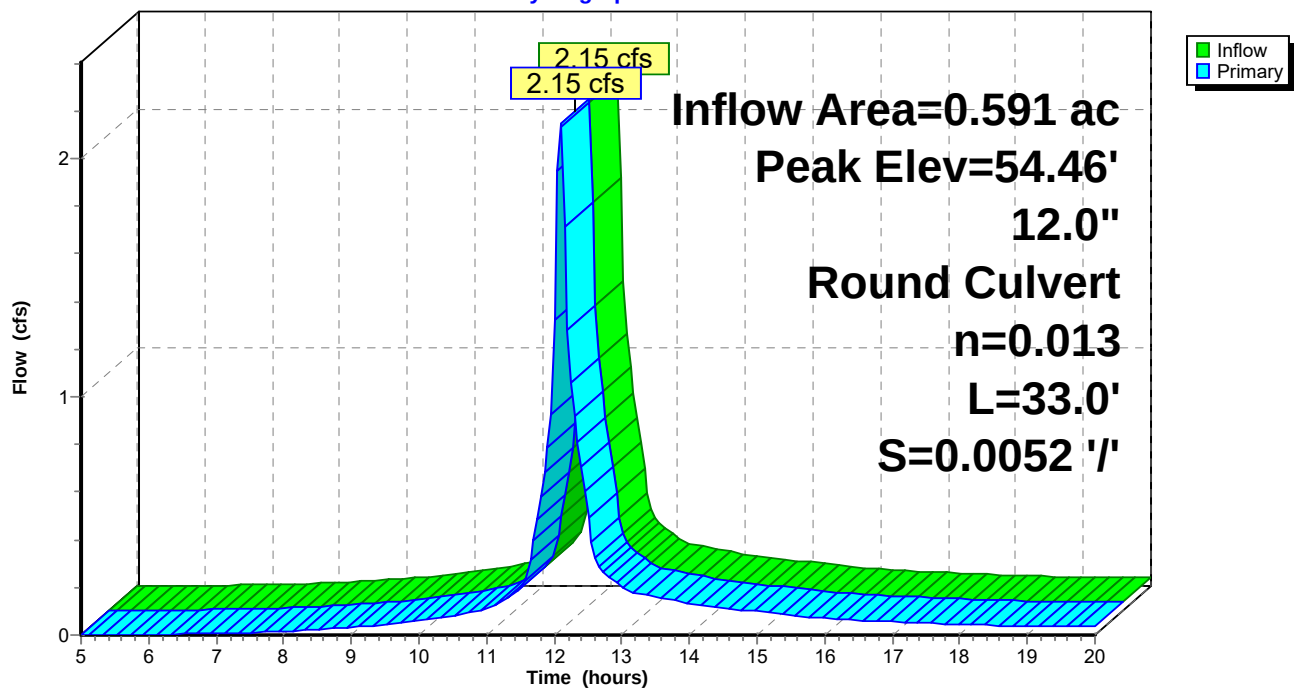
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.46' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.40' | <b>12.0" Round Culvert</b><br>L= 33.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.40' / 53.23' S= 0.0052 ' / Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.10 cfs @ 12.09 hrs HW=54.44' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.10 cfs @ 3.20 fps)

**Pond 160P: DMH 20**

Hydrograph



**Summary for Pond 161P: DMH 19**

Inflow Area = 1.362 ac, 71.82% Impervious, Inflow Depth > 2.73" for 10-Year event  
 Inflow = 4.53 cfs @ 12.09 hrs, Volume= 0.310 af  
 Outflow = 4.53 cfs @ 12.09 hrs, Volume= 0.310 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.53 cfs @ 12.09 hrs, Volume= 0.310 af  
 Routed to Pond 153P : DMH 17

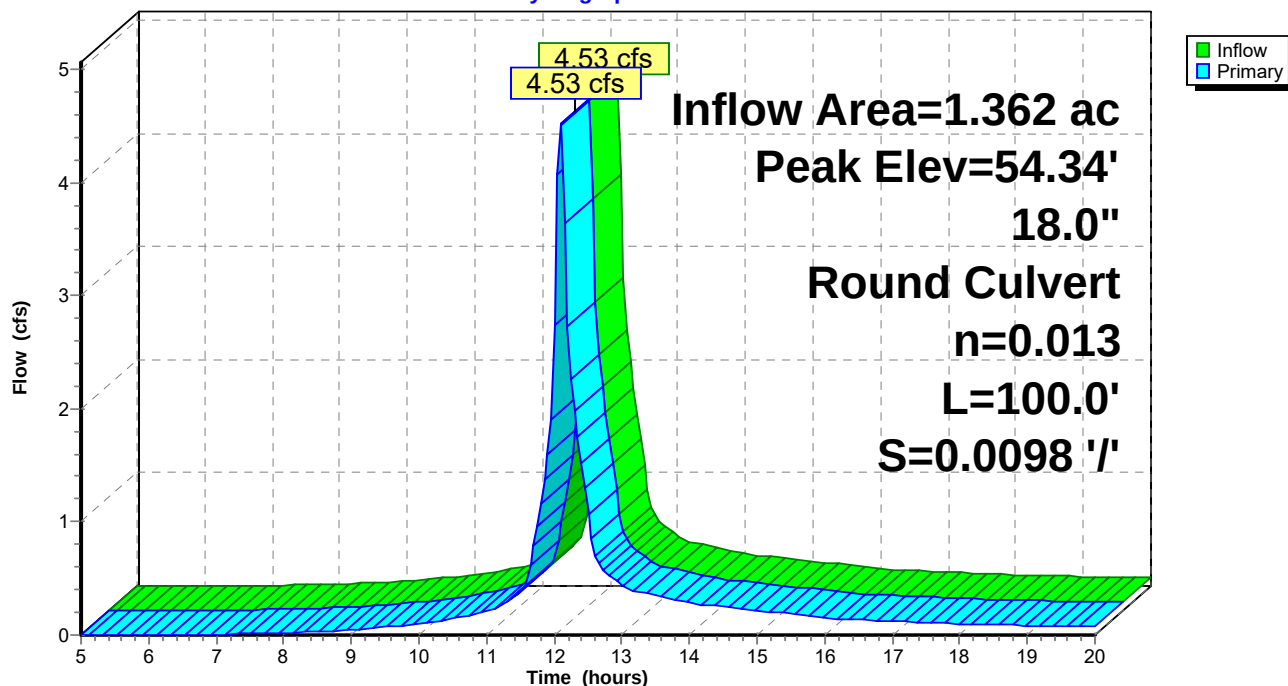
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.34' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.13' | <b>18.0" Round Culvert</b><br>L= 100.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.13' / 52.15' S= 0.0098 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=4.44 cfs @ 12.09 hrs HW=54.33' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 4.44 cfs @ 2.94 fps)

**Pond 161P: DMH 19**

Hydrograph



### Summary for Pond 162P: CB 15

Inflow Area = 0.390 ac, 63.16% Impervious, Inflow Depth > 2.22" for 10-Year event  
 Inflow = 1.07 cfs @ 12.09 hrs, Volume= 0.072 af  
 Outflow = 1.07 cfs @ 12.09 hrs, Volume= 0.072 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.07 cfs @ 12.09 hrs, Volume= 0.072 af  
 Routed to Pond 180P : DMH 9

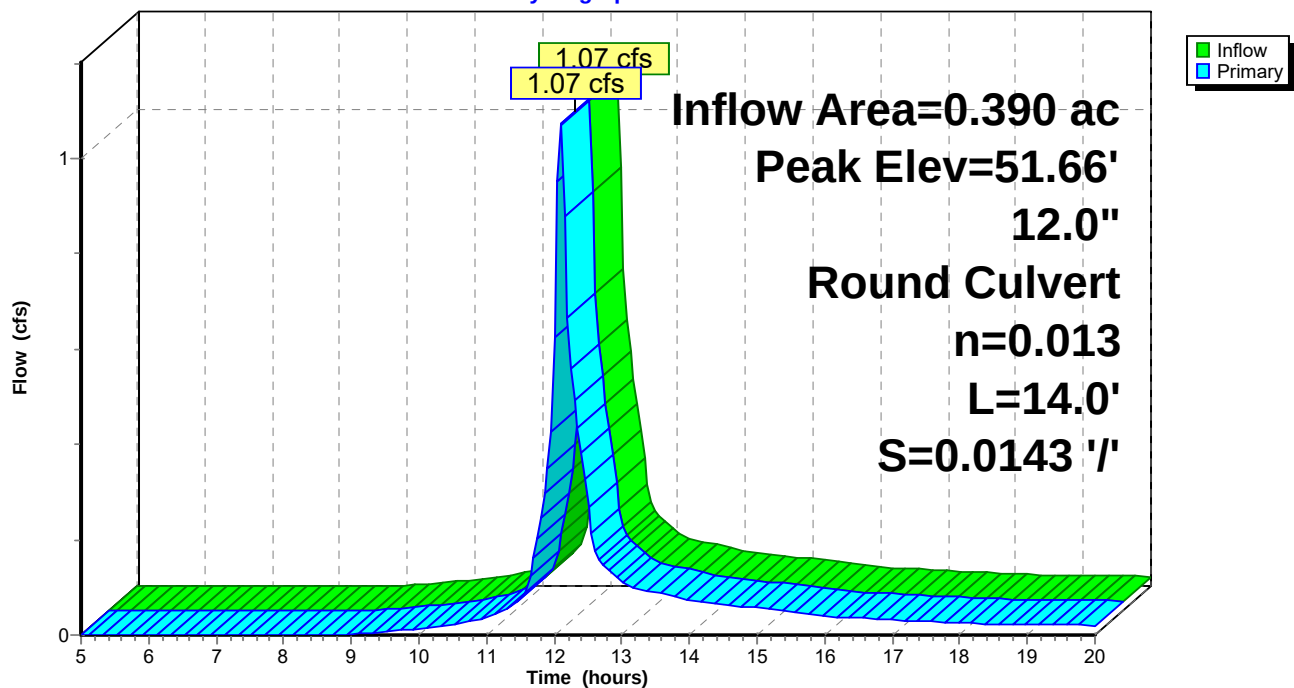
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.66' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.04' | <b>12.0" Round Culvert</b><br>L= 14.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.04' / 50.84' S= 0.0143 ' S= 0.0143 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.06 cfs @ 12.09 hrs HW=51.65' (Free Discharge)  
 1=Culvert (Inlet Controls 1.06 cfs @ 2.10 fps)

### Pond 162P: CB 15

#### Hydrograph



### Summary for Pond 163P: CB 14

Inflow Area = 0.311 ac, 63.37% Impervious, Inflow Depth > 2.22" for 10-Year event  
 Inflow = 0.85 cfs @ 12.09 hrs, Volume= 0.058 af  
 Outflow = 0.85 cfs @ 12.09 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.85 cfs @ 12.09 hrs, Volume= 0.058 af  
 Routed to Pond 180P : DMH 9

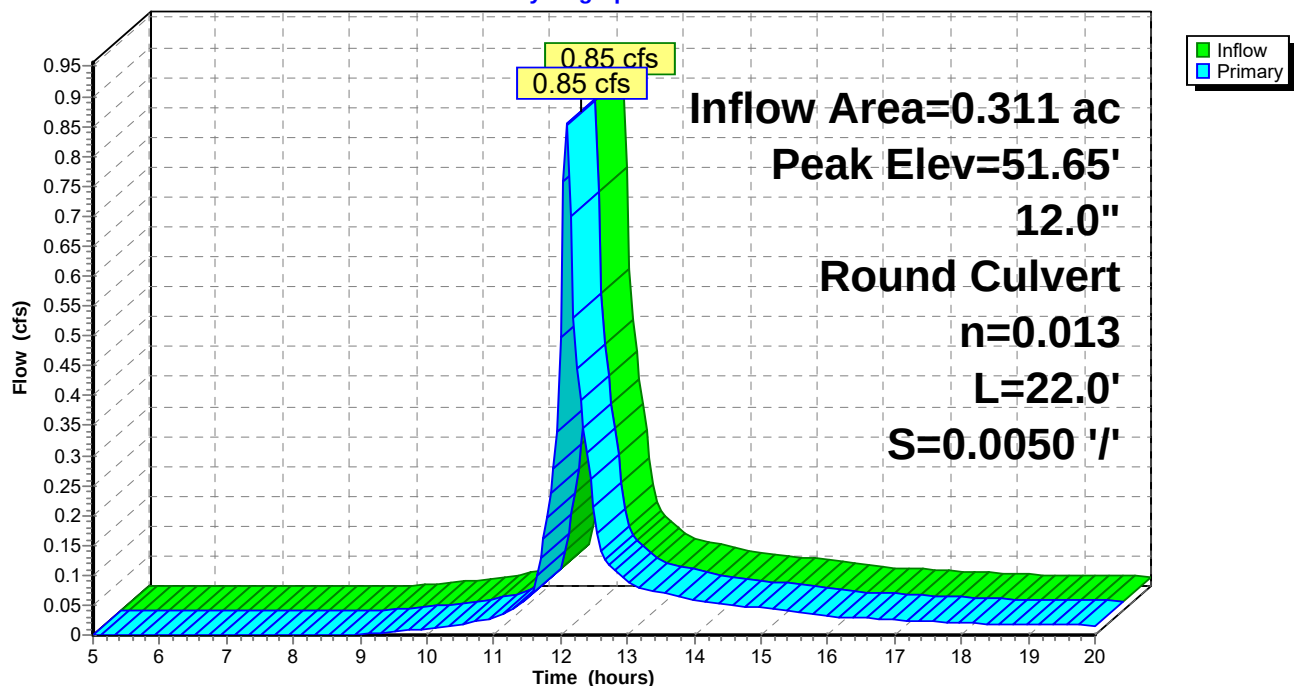
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.65' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.05' | <b>12.0" Round Culvert</b><br>L= 22.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.05' / 50.94' S= 0.0050 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.84 cfs @ 12.09 hrs HW=51.64' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.84 cfs @ 2.50 fps)

### Pond 163P: CB 14

#### Hydrograph





### Summary for Pond 165P: CB 19

Inflow Area = 0.209 ac, 66.66% Impervious, Inflow Depth > 2.39" for 10-Year event  
 Inflow = 0.62 cfs @ 12.09 hrs, Volume= 0.042 af  
 Outflow = 0.62 cfs @ 12.09 hrs, Volume= 0.042 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.62 cfs @ 12.09 hrs, Volume= 0.042 af  
 Routed to Pond 166P : DMH 13

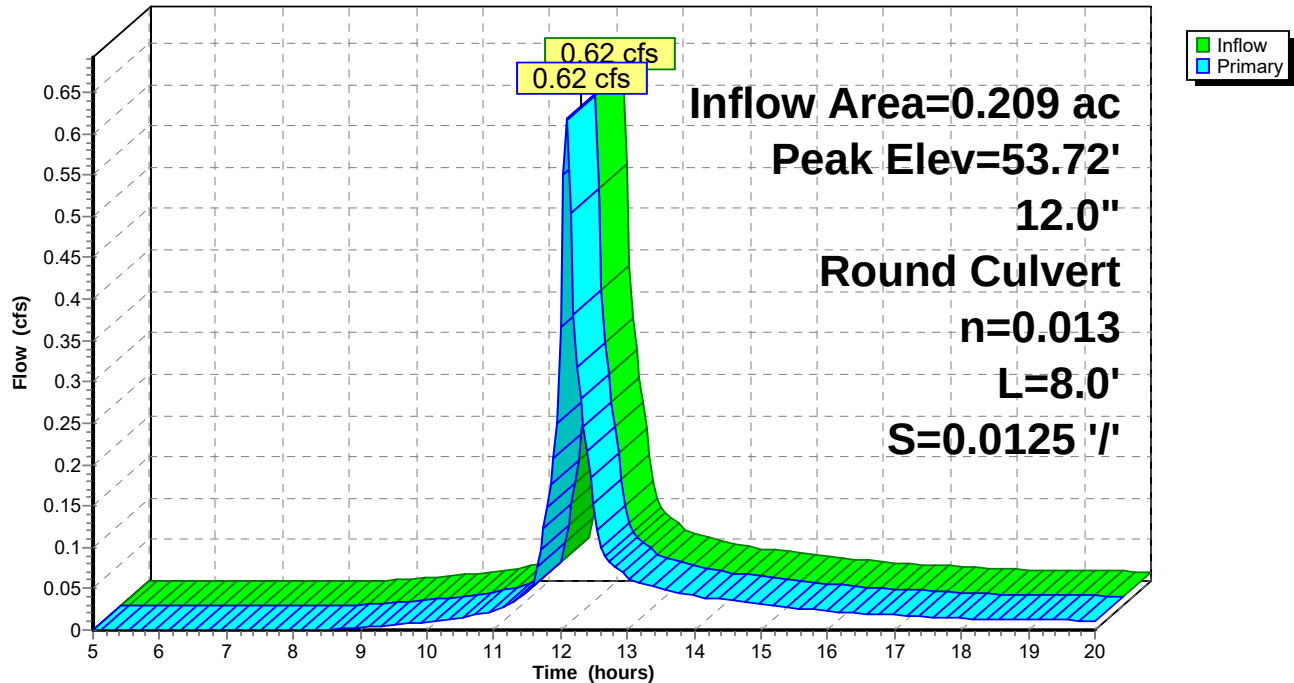
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.72' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.25' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.25' / 53.15' S= 0.0125 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.61 cfs @ 12.09 hrs HW=53.72' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.61 cfs @ 2.49 fps)

### Pond 165P: CB 19

#### Hydrograph



### Summary for Pond 166P: DMH 13

Inflow Area = 3.491 ac, 67.77% Impervious, Inflow Depth > 0.32" for 10-Year event  
 Inflow = 1.35 cfs @ 12.09 hrs, Volume= 0.092 af  
 Outflow = 1.35 cfs @ 12.09 hrs, Volume= 0.092 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.35 cfs @ 12.09 hrs, Volume= 0.092 af  
 Routed to Pond 169P : DMH 12

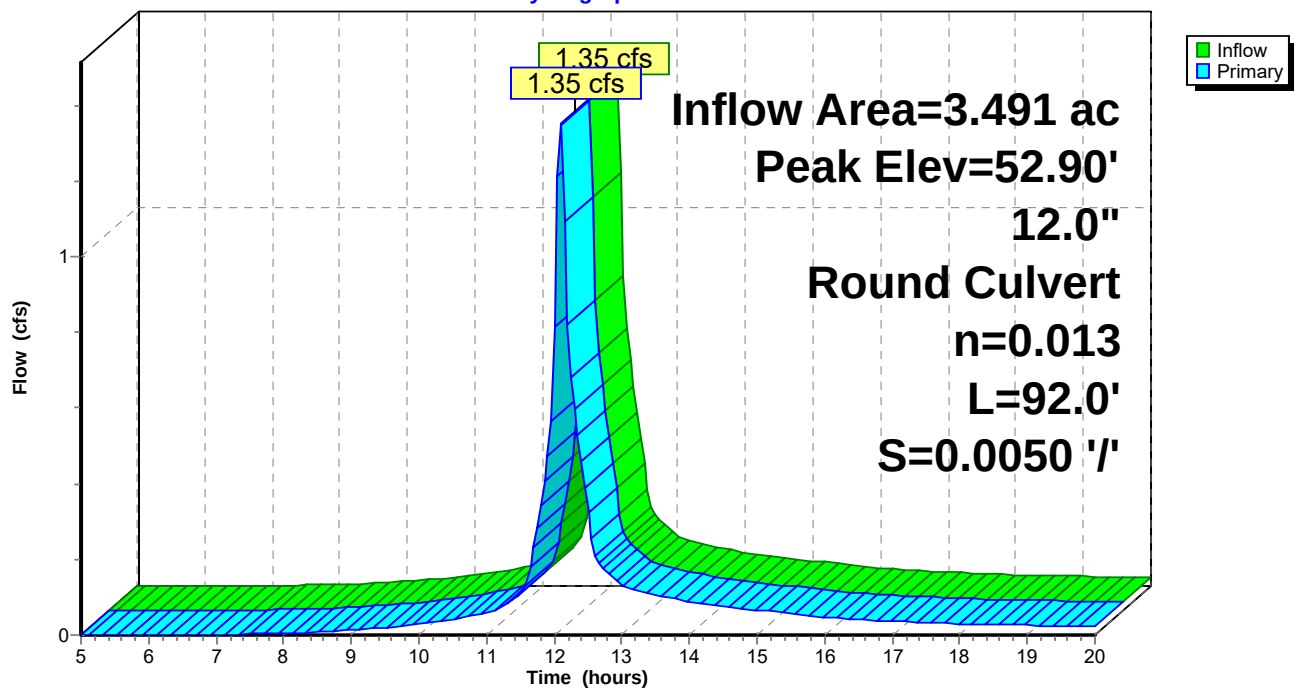
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.90' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.16' | <b>12.0" Round Culvert</b><br>L= 92.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.16' / 51.70' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.33 cfs @ 12.09 hrs HW=52.89' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.33 cfs @ 3.01 fps)

### Pond 166P: DMH 13

#### Hydrograph



### Summary for Pond 167P: CB 11

Inflow Area = 0.209 ac, 65.78% Impervious, Inflow Depth > 2.39" for 10-Year event  
 Inflow = 0.62 cfs @ 12.09 hrs, Volume= 0.042 af  
 Outflow = 0.62 cfs @ 12.09 hrs, Volume= 0.042 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.62 cfs @ 12.09 hrs, Volume= 0.042 af  
 Routed to Pond 181P : DMH 7

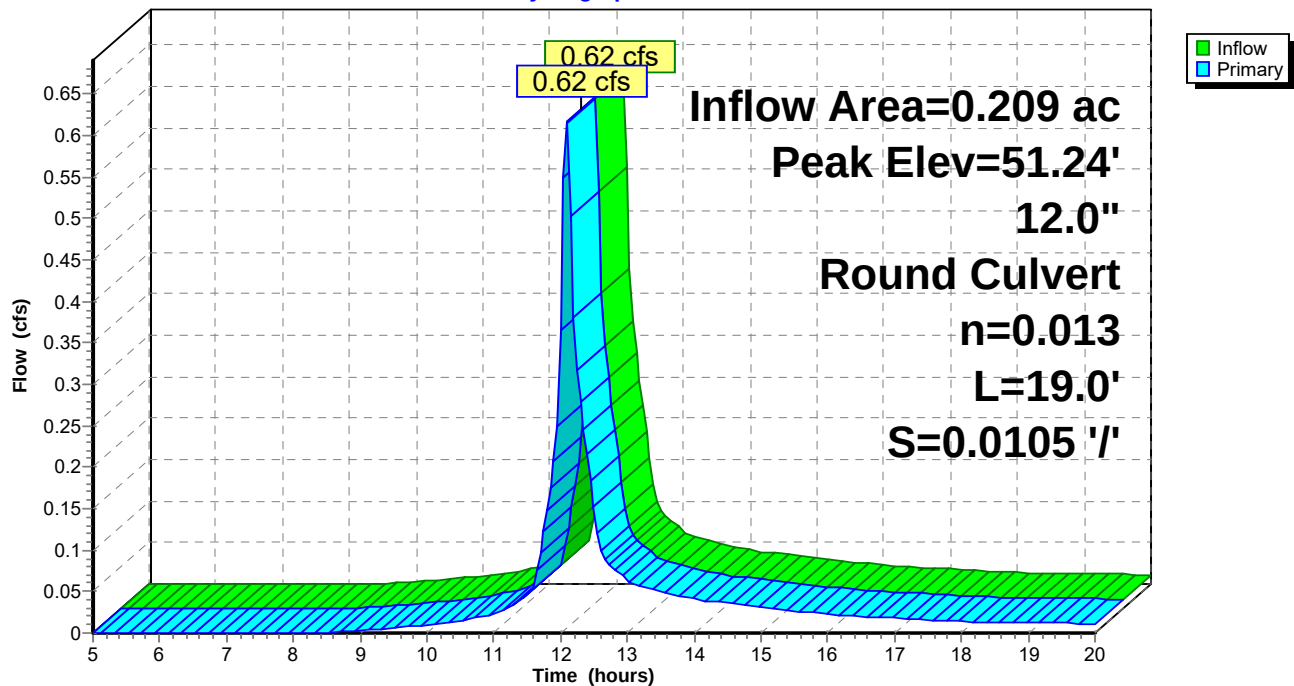
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.24' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.79' | <b>12.0" Round Culvert</b><br>L= 19.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.79' / 50.59' S= 0.0105 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.61 cfs @ 12.09 hrs HW=51.24' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.61 cfs @ 1.79 fps)

### Pond 167P: CB 11

#### Hydrograph



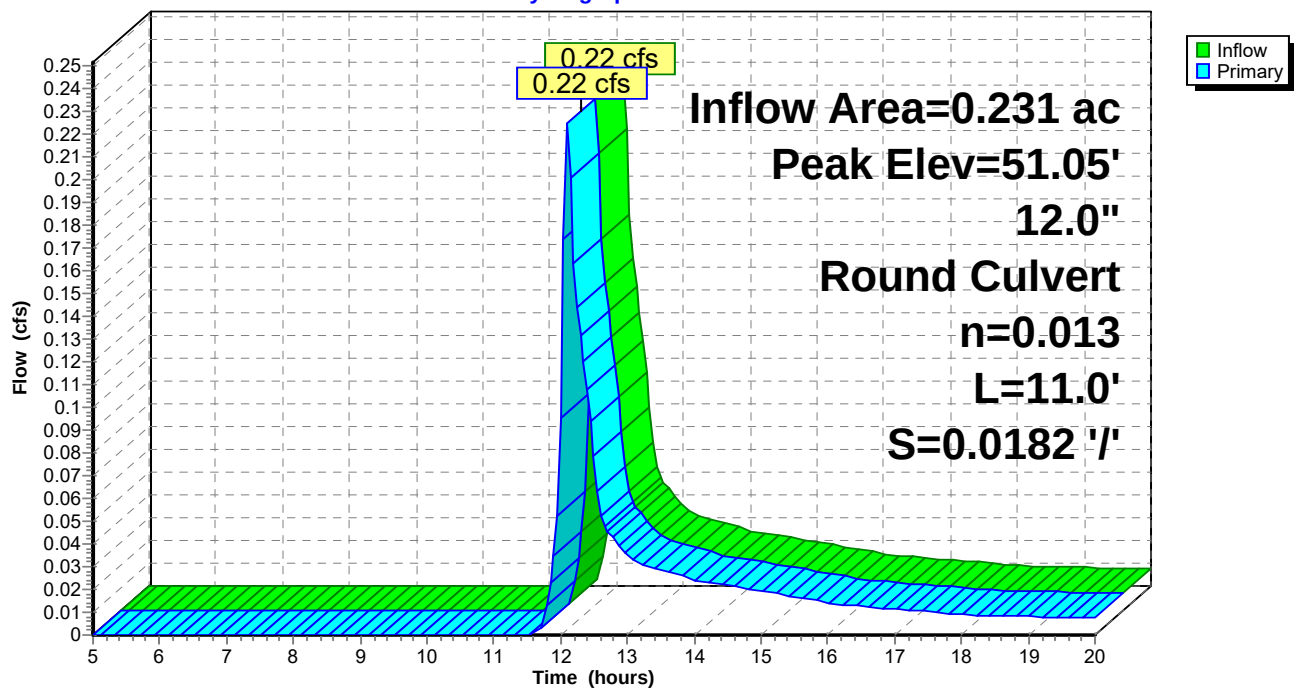
**Summary for Pond 168P: CB 10**

Inflow Area = 0.231 ac, 30.05% Impervious, Inflow Depth > 0.91" for 10-Year event  
 Inflow = 0.22 cfs @ 12.11 hrs, Volume= 0.017 af  
 Outflow = 0.22 cfs @ 12.11 hrs, Volume= 0.017 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.22 cfs @ 12.11 hrs, Volume= 0.017 af  
 Routed to Pond 181P : DMH 7

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.05' @ 12.11 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.79' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.79' / 50.59' S= 0.0182 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.22 cfs @ 12.11 hrs HW=51.05' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.22 cfs @ 1.37 fps)

**Pond 168P: CB 10****Hydrograph**

### Summary for Pond 169P: DMH 12

Inflow Area = 3.491 ac, 67.77% Impervious, Inflow Depth > 0.32" for 10-Year event  
 Inflow = 1.35 cfs @ 12.09 hrs, Volume= 0.092 af  
 Outflow = 1.35 cfs @ 12.09 hrs, Volume= 0.092 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.35 cfs @ 12.09 hrs, Volume= 0.092 af  
 Routed to Pond 174P : DMH 11

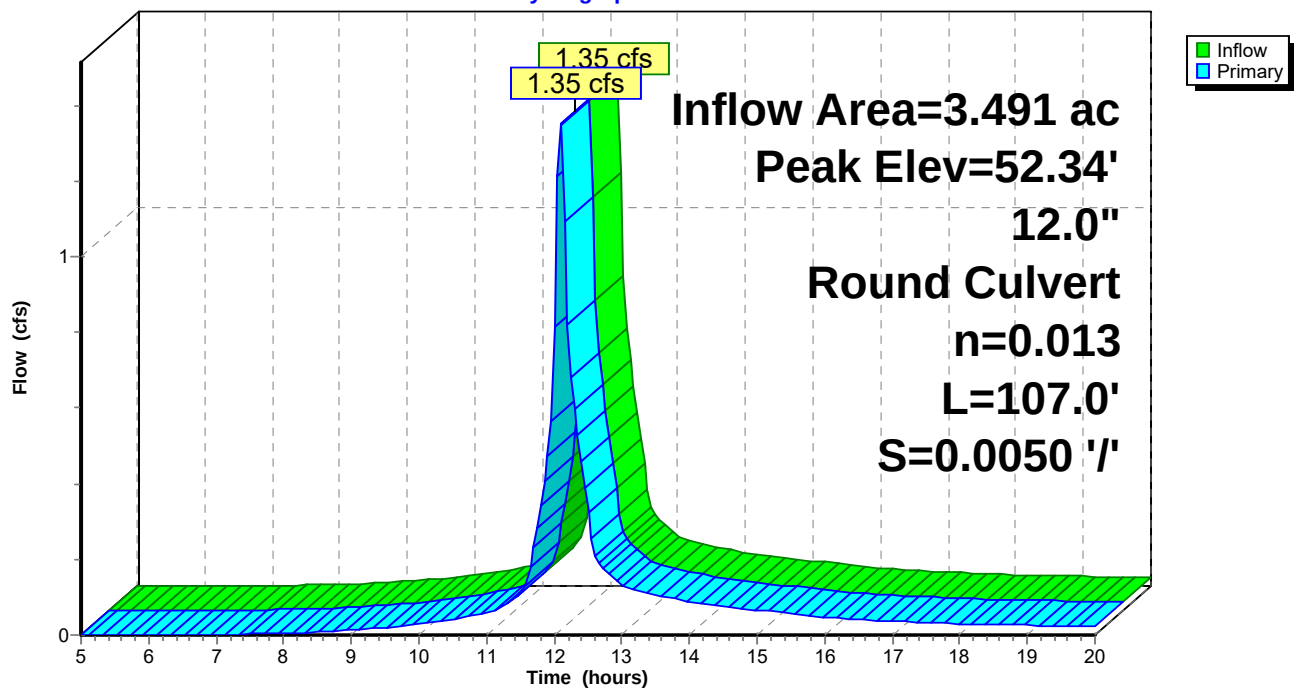
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.34' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                     |
|--------|---------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.60' | <b>12.0" Round Culvert</b><br>L= 107.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.60' / 51.06' S= 0.0050 ' / ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.33 cfs @ 12.09 hrs HW=52.33' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.33 cfs @ 3.04 fps)

### Pond 169P: DMH 12

#### Hydrograph



### Summary for Pond 170P: CB 9

Inflow Area = 0.227 ac, 61.54% Impervious, Inflow Depth > 2.14" for 10-Year event  
 Inflow = 0.60 cfs @ 12.09 hrs, Volume= 0.040 af  
 Outflow = 0.60 cfs @ 12.09 hrs, Volume= 0.040 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.60 cfs @ 12.09 hrs, Volume= 0.040 af  
 Routed to Pond 171P : DMH 6

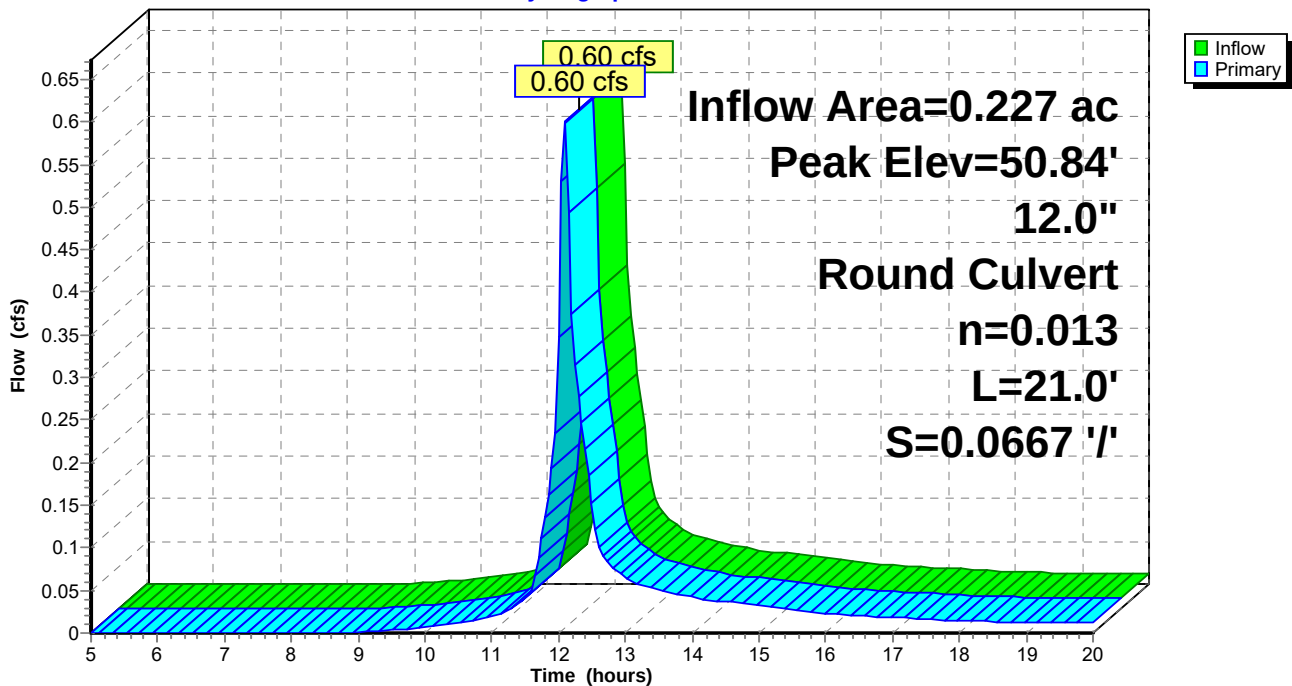
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.84' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.40' | <b>12.0" Round Culvert</b><br>L= 21.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.40' / 49.00' S= 0.0667 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.59 cfs @ 12.09 hrs HW=50.84' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.59 cfs @ 1.78 fps)

### Pond 170P: CB 9

Hydrograph



**Summary for Pond 171P: DMH 6**

Inflow Area = 2.272 ac, 49.70% Impervious, Inflow Depth > 1.65" for 10-Year event  
 Inflow = 4.50 cfs @ 12.09 hrs, Volume= 0.312 af  
 Outflow = 4.50 cfs @ 12.09 hrs, Volume= 0.312 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.50 cfs @ 12.09 hrs, Volume= 0.312 af  
 Routed to Pond 185P : DMH 4

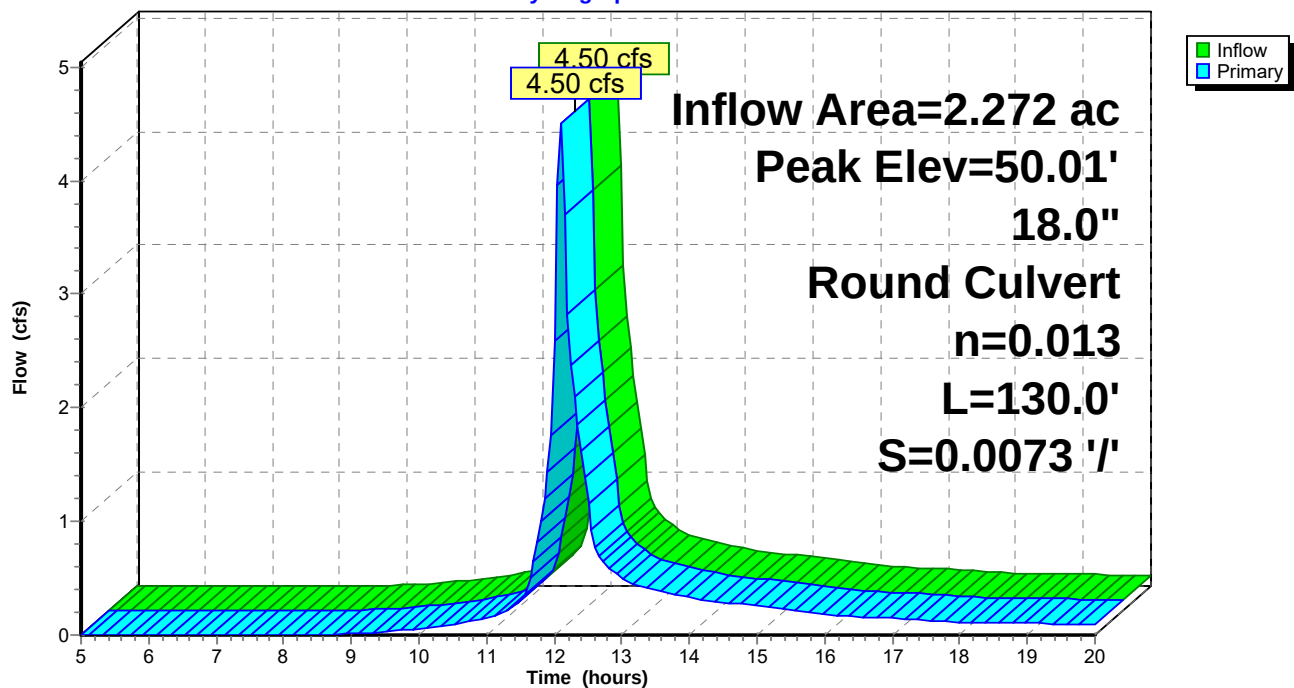
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.01' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.80' | <b>18.0" Round Culvert</b><br>L= 130.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.80' / 47.85' S= 0.0073 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=4.44 cfs @ 12.09 hrs HW=50.00' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 4.44 cfs @ 2.94 fps)

**Pond 171P: DMH 6**

Hydrograph



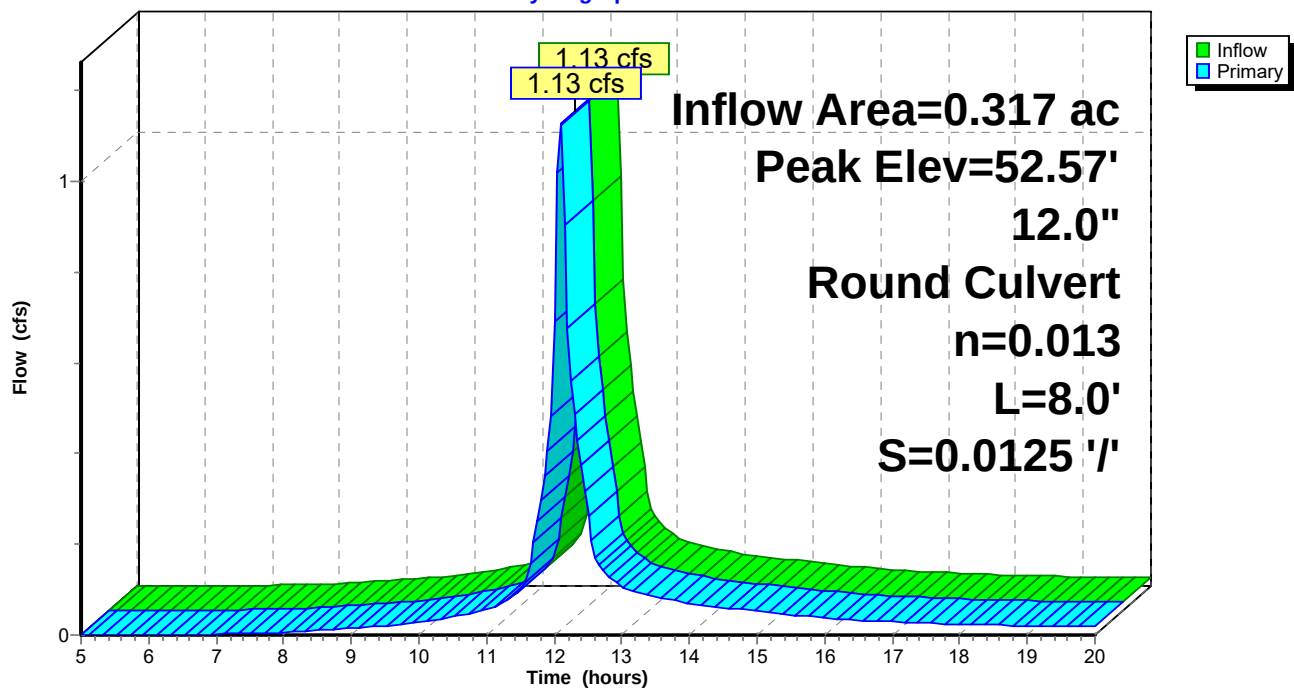
**Summary for Pond 172P: CB 16**

Inflow Area = 0.317 ac, 75.85% Impervious, Inflow Depth > 2.92" for 10-Year event  
 Inflow = 1.13 cfs @ 12.09 hrs, Volume= 0.077 af  
 Outflow = 1.13 cfs @ 12.09 hrs, Volume= 0.077 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.13 cfs @ 12.09 hrs, Volume= 0.077 af  
 Routed to Pond 174P : DMH 11

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.57' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                           |
|--------|---------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.90' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.90' / 51.80' S= 0.0125 ' S= 0.0125 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.10 cfs @ 12.09 hrs HW=52.56' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.10 cfs @ 2.82 fps)

**Pond 172P: CB 16****Hydrograph**



### Summary for Pond 173P: CB 17

Inflow Area = 0.130 ac, 71.18% Impervious, Inflow Depth > 2.65" for 10-Year event  
 Inflow = 0.42 cfs @ 12.09 hrs, Volume= 0.029 af  
 Outflow = 0.42 cfs @ 12.09 hrs, Volume= 0.029 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.42 cfs @ 12.09 hrs, Volume= 0.029 af  
 Routed to Pond 174P : DMH 11

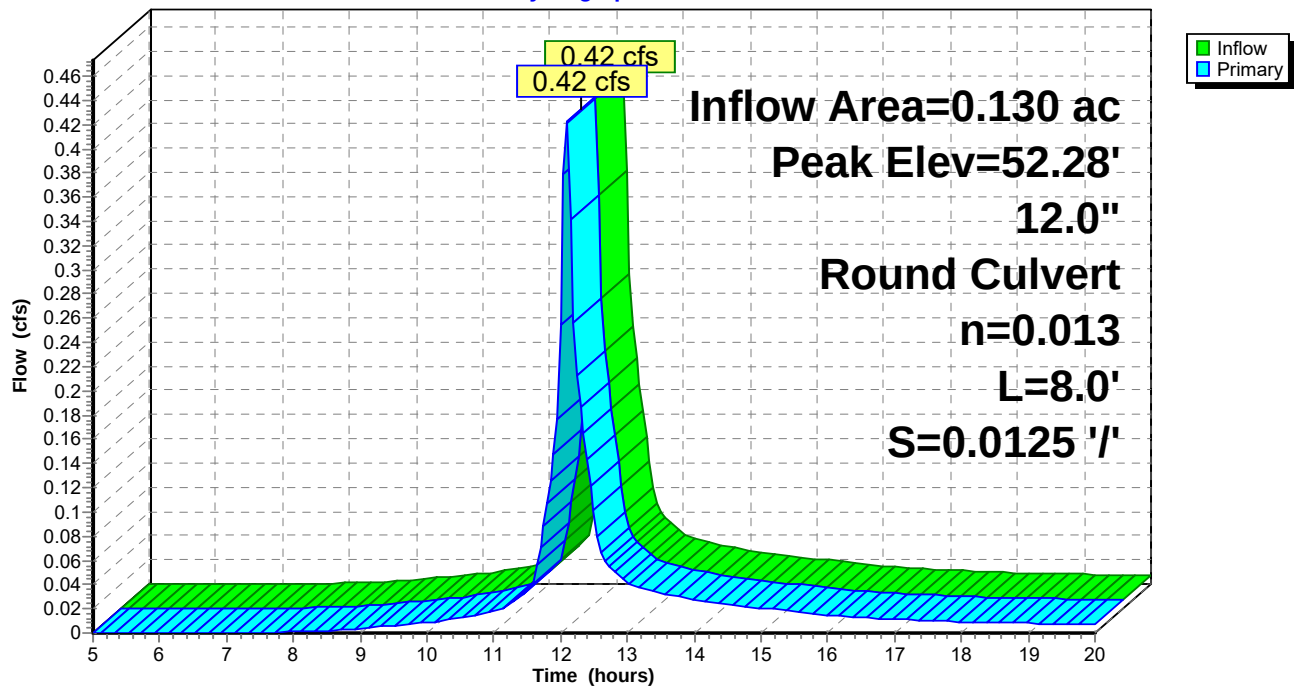
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.28' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.90' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.90' / 51.80' S= 0.0125 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.41 cfs @ 12.09 hrs HW=52.27' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.41 cfs @ 2.30 fps)

### Pond 173P: CB 17

#### Hydrograph



**Summary for Pond 174P: DMH 11**

Inflow Area = 3.938 ac, 68.53% Impervious, Inflow Depth > 0.60" for 10-Year event  
 Inflow = 2.90 cfs @ 12.09 hrs, Volume= 0.198 af  
 Outflow = 2.90 cfs @ 12.09 hrs, Volume= 0.198 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.90 cfs @ 12.09 hrs, Volume= 0.198 af  
 Routed to Pond 217P : DMH 8A

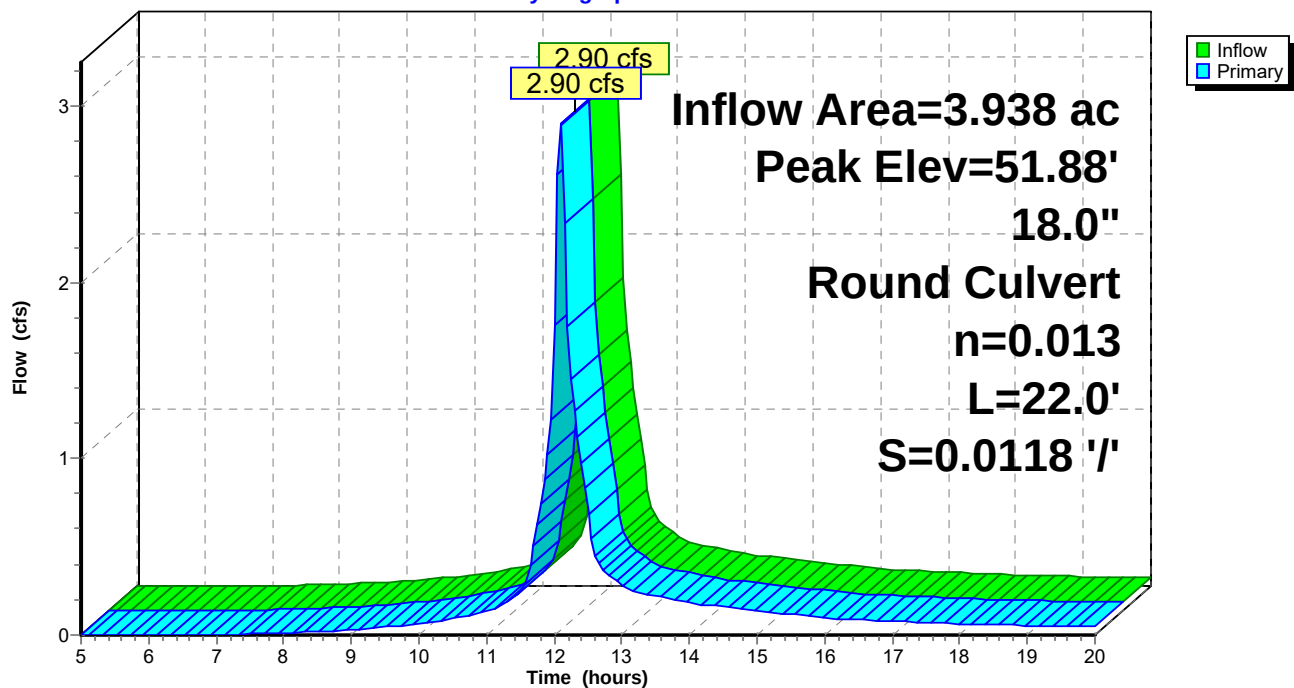
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.88' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.96' | <b>18.0" Round Culvert</b><br>L= 22.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.96' / 50.70' S= 0.0118 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=2.84 cfs @ 12.09 hrs HW=51.87' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.84 cfs @ 3.66 fps)

**Pond 174P: DMH 11**

Hydrograph



### Summary for Pond 175P: DMH 5

Inflow Area = 1.445 ac, 58.41% Impervious, Inflow Depth > 2.05" for 10-Year event  
 Inflow = 3.61 cfs @ 12.09 hrs, Volume= 0.247 af  
 Outflow = 3.61 cfs @ 12.09 hrs, Volume= 0.247 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.61 cfs @ 12.09 hrs, Volume= 0.247 af  
 Routed to Pond 171P : DMH 6

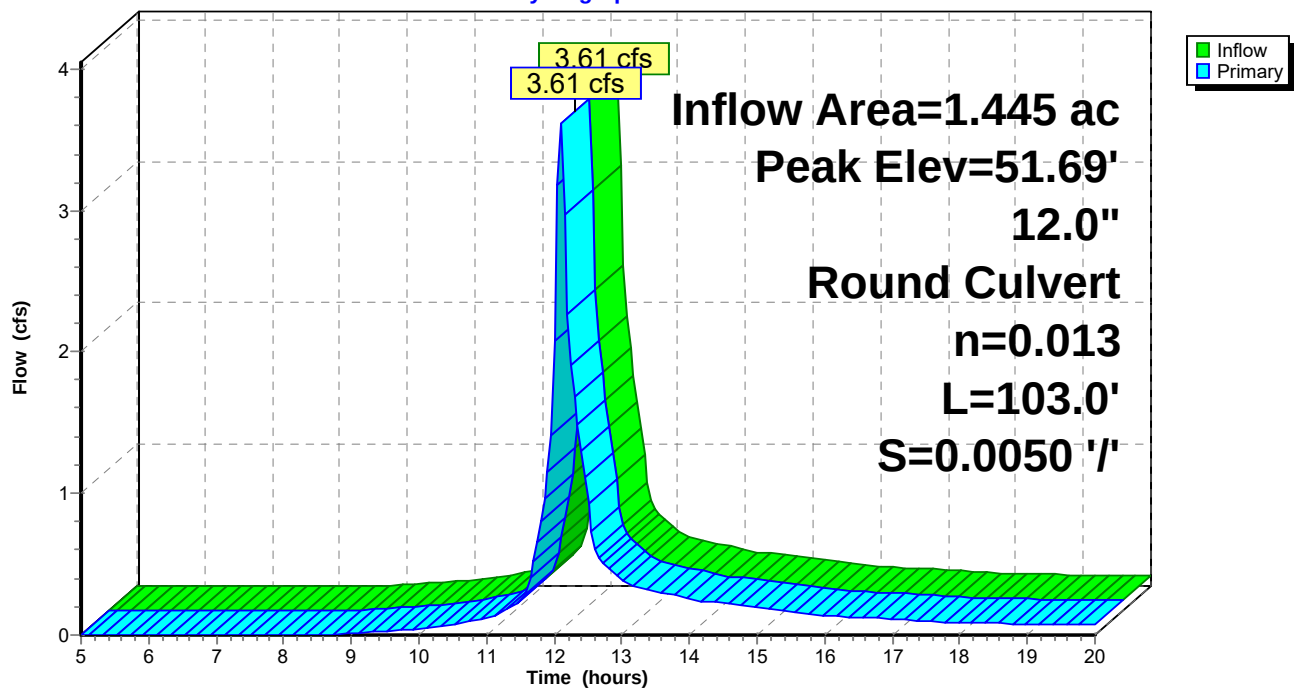
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.69' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 49.52' | <b>12.0" Round Culvert</b><br>L= 103.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.52' / 49.00' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=3.57 cfs @ 12.09 hrs HW=51.65' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 3.57 cfs @ 4.54 fps)

### Pond 175P: DMH 5

Hydrograph



### Summary for Pond 176P: CB 6

Inflow Area = 0.199 ac, 57.72% Impervious, Inflow Depth > 1.99" for 10-Year event  
 Inflow = 0.49 cfs @ 12.10 hrs, Volume= 0.033 af  
 Outflow = 0.49 cfs @ 12.10 hrs, Volume= 0.033 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.49 cfs @ 12.10 hrs, Volume= 0.033 af  
 Routed to Pond 175P : DMH 5

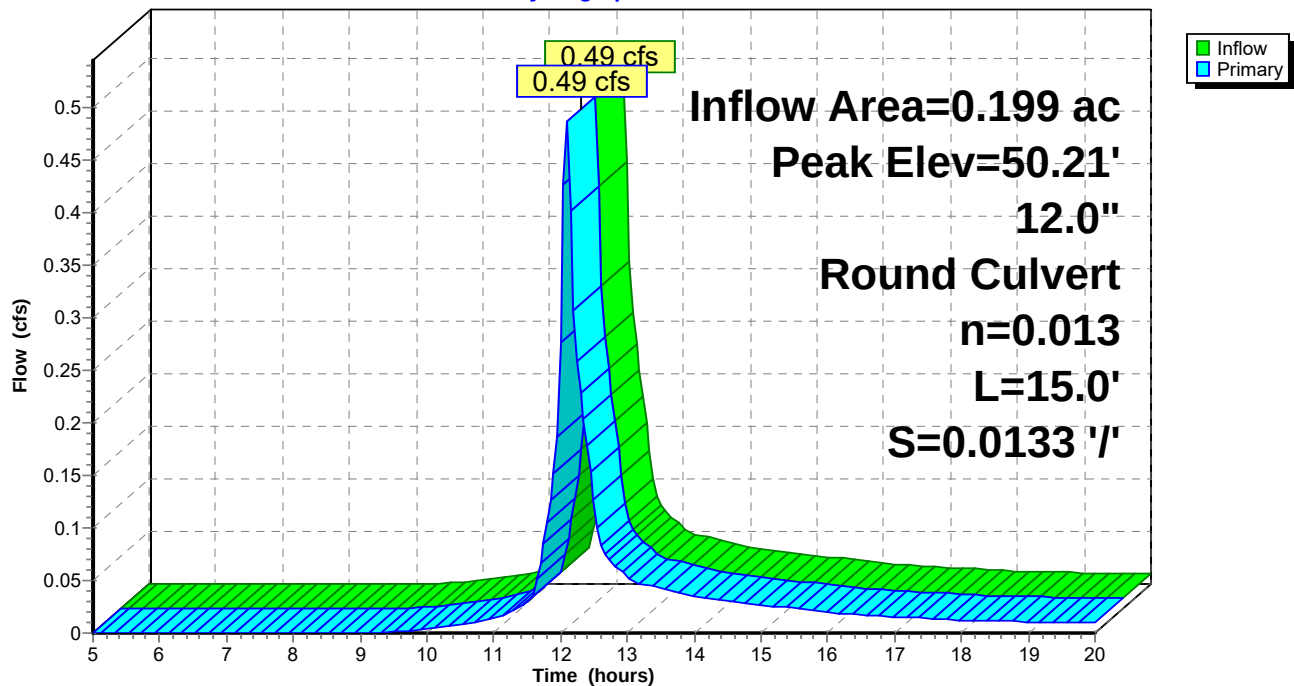
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.21' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 49.82' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.82' / 49.62' S= 0.0133 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.48 cfs @ 12.10 hrs HW=50.21' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.48 cfs @ 1.68 fps)

### Pond 176P: CB 6

Hydrograph



### Summary for Pond 177P: CB 13

Inflow Area = 0.319 ac, 64.43% Impervious, Inflow Depth > 2.31" for 10-Year event  
 Inflow = 0.91 cfs @ 12.09 hrs, Volume= 0.061 af  
 Outflow = 0.91 cfs @ 12.09 hrs, Volume= 0.061 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.91 cfs @ 12.09 hrs, Volume= 0.061 af  
 Routed to Pond 179P : DMH 8

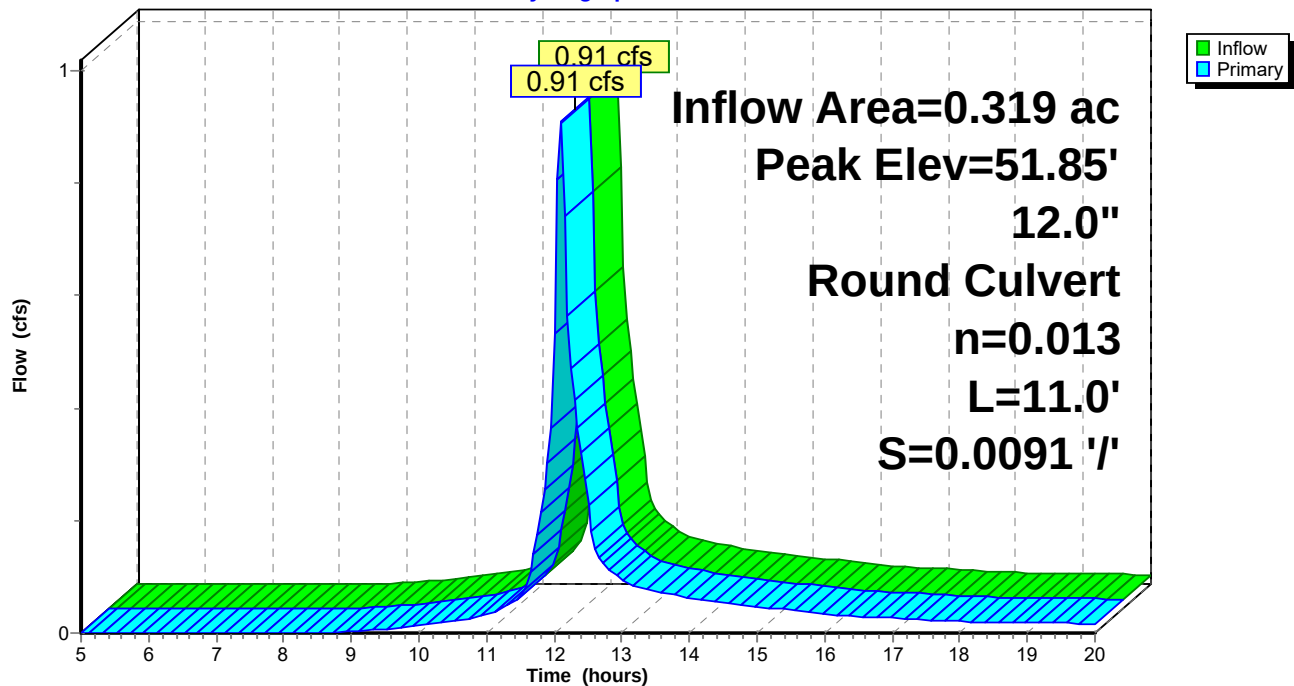
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.85' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.25' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.25' / 51.15' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.90 cfs @ 12.09 hrs HW=51.84' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.90 cfs @ 2.65 fps)

### Pond 177P: CB 13

#### Hydrograph



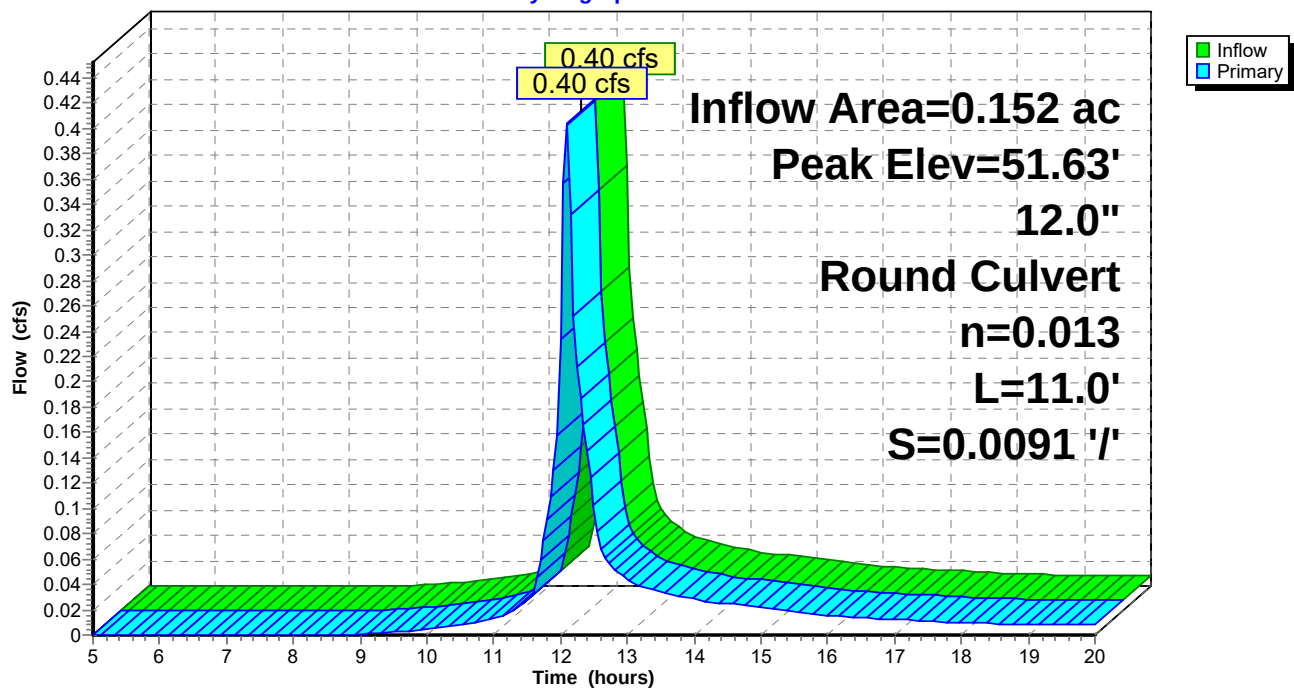
**Summary for Pond 178P: CB 12**

Inflow Area = 0.152 ac, 60.77% Impervious, Inflow Depth > 2.14" for 10-Year event  
 Inflow = 0.40 cfs @ 12.09 hrs, Volume= 0.027 af  
 Outflow = 0.40 cfs @ 12.09 hrs, Volume= 0.027 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.40 cfs @ 12.09 hrs, Volume= 0.027 af  
 Routed to Pond 179P : DMH 8

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.63' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.25' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.25' / 51.15' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.40 cfs @ 12.09 hrs HW=51.62' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.40 cfs @ 2.22 fps)

**Pond 178P: CB 12****Hydrograph**

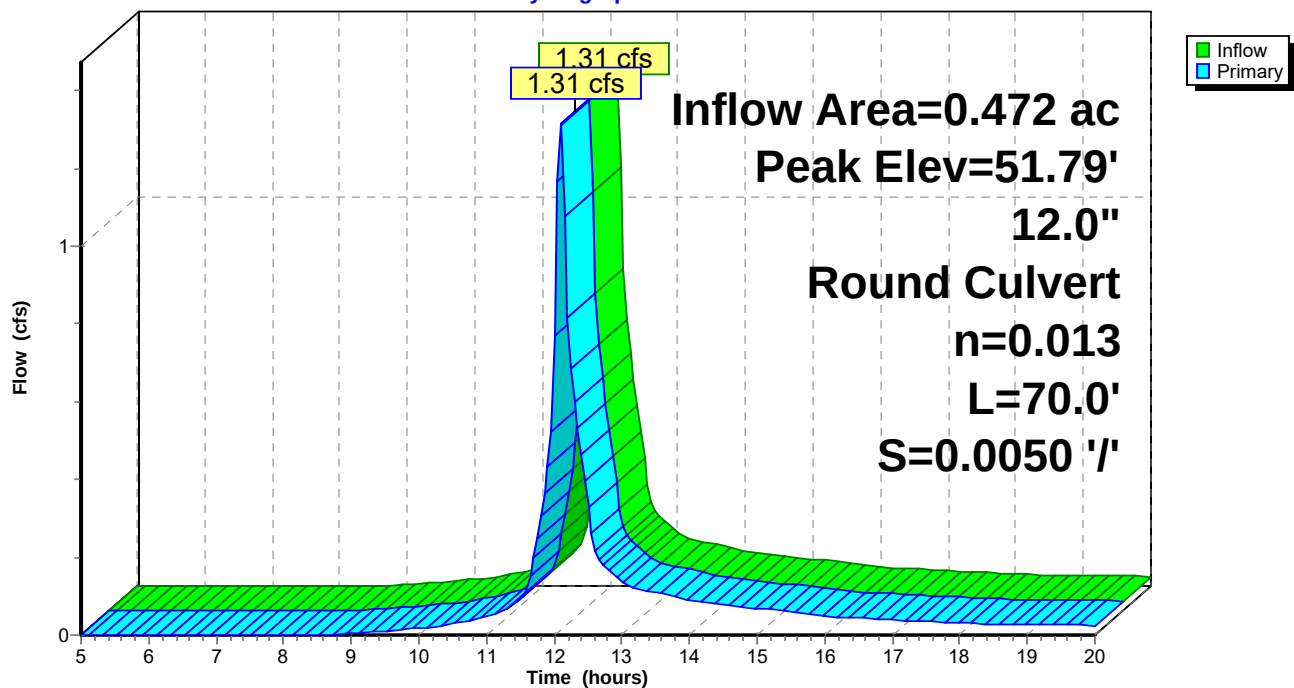
**Summary for Pond 179P: DMH 8**

Inflow Area = 0.472 ac, 63.25% Impervious, Inflow Depth > 2.25" for 10-Year event  
 Inflow = 1.31 cfs @ 12.09 hrs, Volume= 0.089 af  
 Outflow = 1.31 cfs @ 12.09 hrs, Volume= 0.089 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.31 cfs @ 12.09 hrs, Volume= 0.089 af  
 Routed to Pond 217P : DMH 8A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.79' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.05' | <b>12.0" Round Culvert</b><br>L= 70.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.05' / 50.70' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.29 cfs @ 12.09 hrs HW=51.78' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.29 cfs @ 2.95 fps)

**Pond 179P: DMH 8****Hydrograph**

**Summary for Pond 180P: DMH 9**

Inflow Area = 0.701 ac, 63.25% Impervious, Inflow Depth > 2.22" for 10-Year event  
 Inflow = 1.93 cfs @ 12.09 hrs, Volume= 0.130 af  
 Outflow = 1.93 cfs @ 12.09 hrs, Volume= 0.130 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.93 cfs @ 12.09 hrs, Volume= 0.130 af  
 Routed to Pond 181P : DMH 7

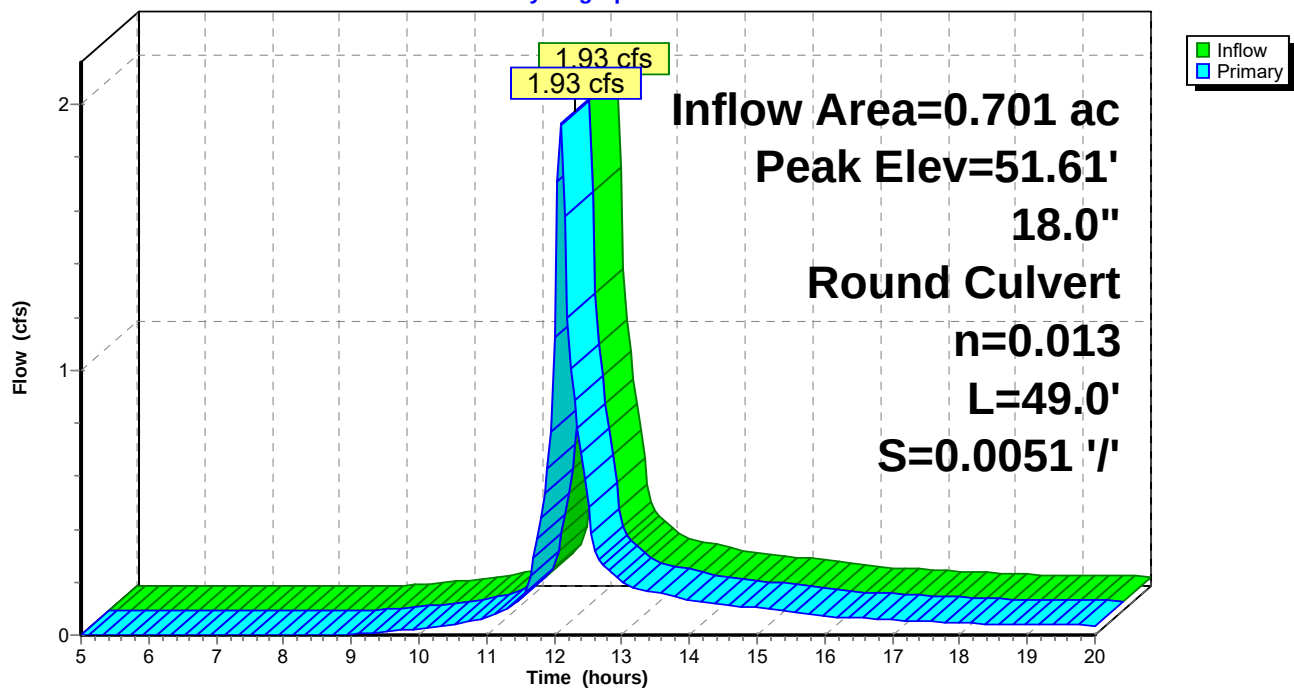
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.61' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.84' | <b>18.0" Round Culvert</b><br>L= 49.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.84' / 50.59' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=1.90 cfs @ 12.09 hrs HW=51.61' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.90 cfs @ 3.05 fps)

**Pond 180P: DMH 9**

Hydrograph





**Summary for Pond 181P: DMH 7**

Inflow Area = 1.141 ac, 56.99% Impervious, Inflow Depth > 1.99" for 10-Year event  
 Inflow = 2.77 cfs @ 12.10 hrs, Volume= 0.189 af  
 Outflow = 2.77 cfs @ 12.10 hrs, Volume= 0.189 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.77 cfs @ 12.10 hrs, Volume= 0.189 af  
 Routed to Pond 175P : DMH 5

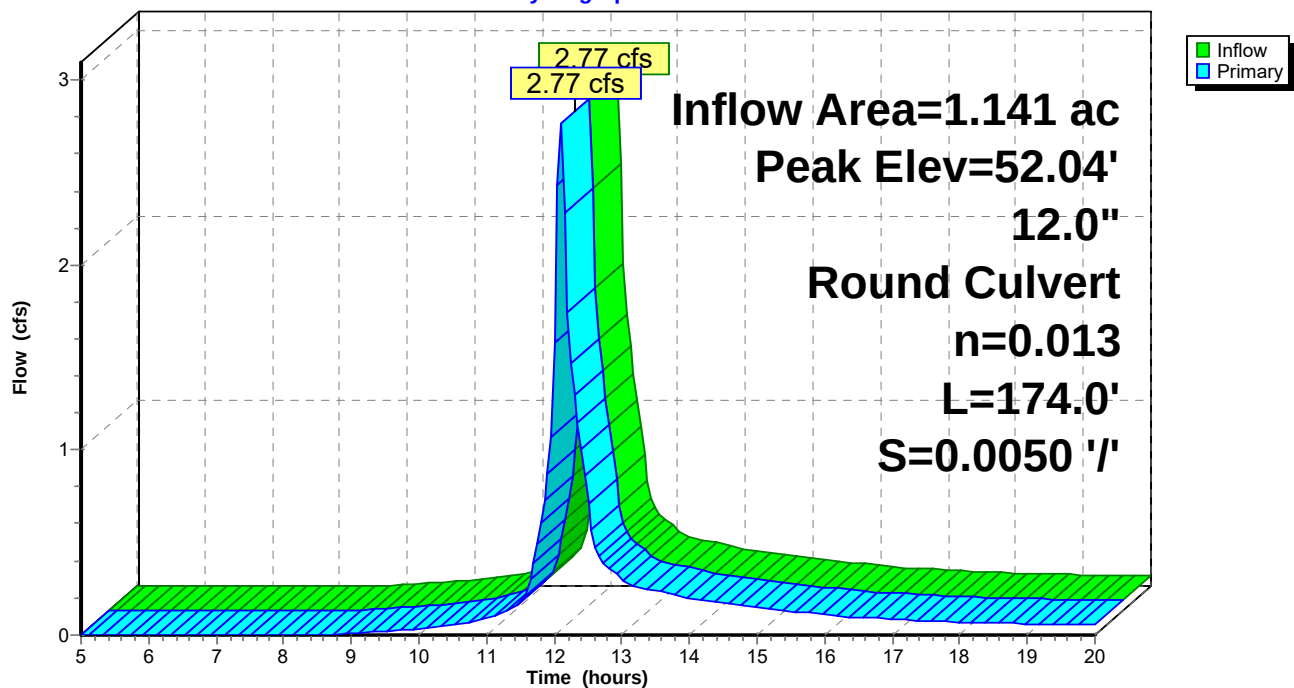
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 52.04' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.49' | <b>12.0" Round Culvert</b><br>L= 174.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.49' / 49.62' S= 0.0050 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.73 cfs @ 12.10 hrs HW=52.00' (Free Discharge)

1=Culvert (Barrel Controls 2.73 cfs @ 3.47 fps)

**Pond 181P: DMH 7****Hydrograph**

**Summary for Pond 182P: CB 7**

Inflow Area = 0.105 ac, 75.17% Impervious, Inflow Depth > 2.83" for 10-Year event  
 Inflow = 0.36 cfs @ 12.09 hrs, Volume= 0.025 af  
 Outflow = 0.36 cfs @ 12.09 hrs, Volume= 0.025 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.36 cfs @ 12.09 hrs, Volume= 0.025 af  
 Routed to Pond 175P : DMH 5

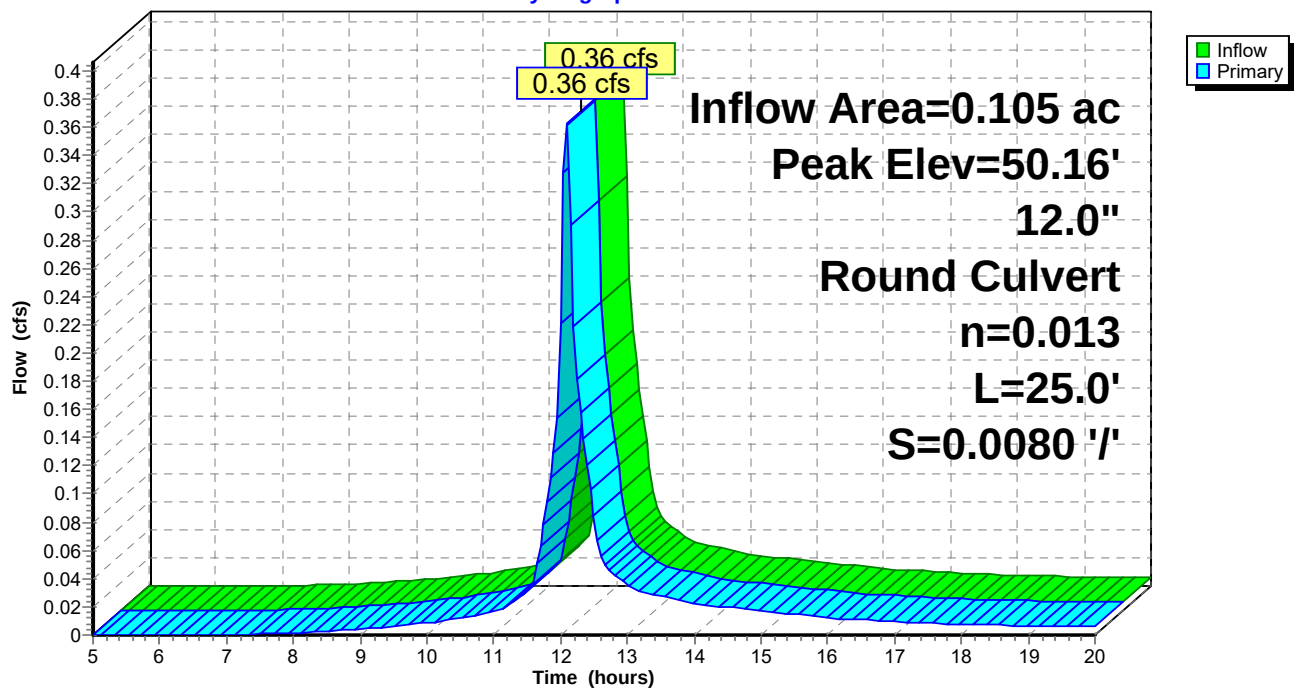
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.16' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 49.82' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.82' / 49.62' S= 0.0080 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.36 cfs @ 12.09 hrs HW=50.16' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.36 cfs @ 2.29 fps)

**Pond 182P: CB 7**

Hydrograph



### Summary for Pond 185P: DMH 4

Inflow Area = 7.166 ac, 62.94% Impervious, Inflow Depth > 0.67" for 10-Year event  
 Inflow = 5.76 cfs @ 12.09 hrs, Volume= 0.399 af  
 Outflow = 5.76 cfs @ 12.09 hrs, Volume= 0.399 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.76 cfs @ 12.09 hrs, Volume= 0.399 af  
 Routed to Pond 197P : Inf. Basin 1

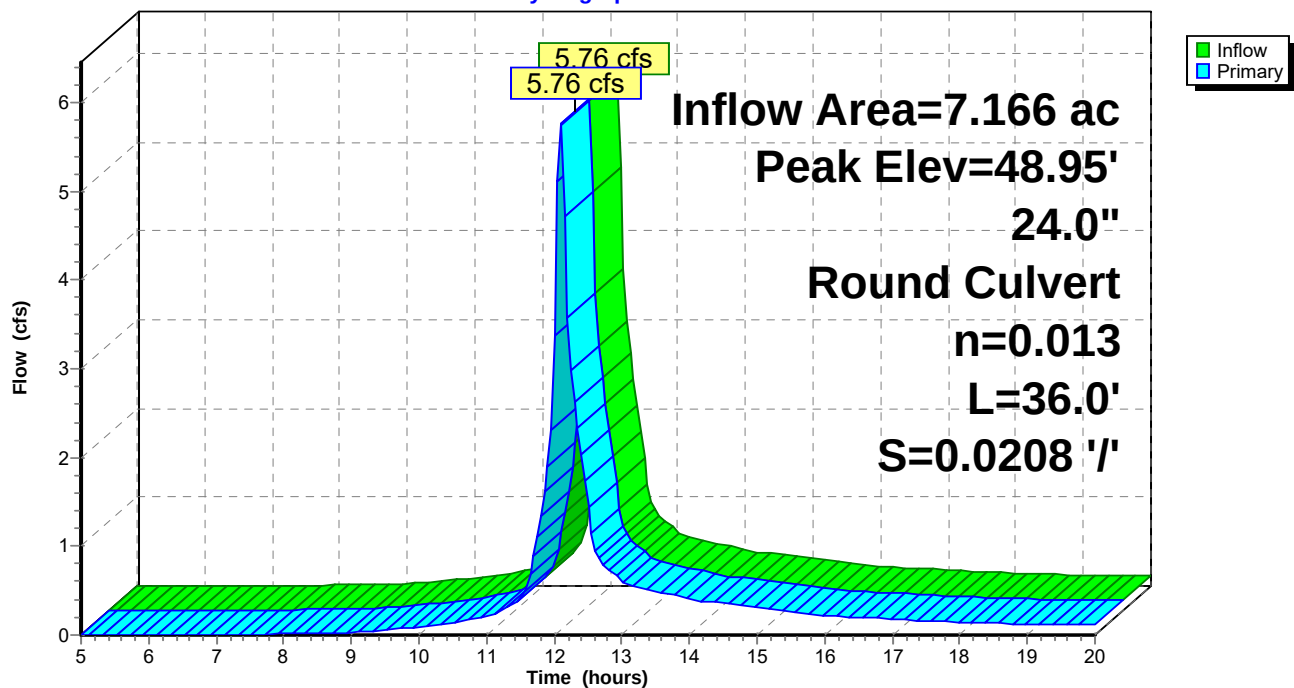
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 48.95' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 47.75' | <b>24.0" Round Culvert</b><br>L= 36.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 47.75' / 47.00' S= 0.0208 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=5.67 cfs @ 12.09 hrs HW=48.93' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 5.67 cfs @ 2.93 fps)

### Pond 185P: DMH 4

#### Hydrograph



### Summary for Pond 186P: Constructed Wetland 1

Inflow Area = 1.052 ac, 38.52% Impervious, Inflow Depth > 1.36" for 10-Year event  
 Inflow = 1.66 cfs @ 12.10 hrs, Volume= 0.119 af  
 Outflow = 0.38 cfs @ 12.53 hrs, Volume= 0.074 af, Atten= 77%, Lag= 26.2 min  
 Primary = 0.36 cfs @ 12.53 hrs, Volume= 0.057 af  
 Routed to Pond 197P : Inf. Basin 1  
 Secondary = 0.02 cfs @ 12.53 hrs, Volume= 0.016 af  
 Routed to Link 203L : 3A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 47.30' @ 12.53 hrs Surf.Area= 2,457 sf Storage= 2,438 cf

Plug-Flow detention time= 158.2 min calculated for 0.073 af (62% of inflow)  
 Center-of-Mass det. time= 78.6 min ( 879.4 - 800.8 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 46.00' | 16,106 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 46.00               | 1,184                | 0                         | 0                         |
| 47.00               | 2,274                | 1,729                     | 1,729                     |
| 48.00               | 2,884                | 2,579                     | 4,308                     |
| 49.00               | 3,553                | 3,219                     | 7,527                     |
| 50.00               | 4,275                | 3,914                     | 11,441                    |
| 51.00               | 5,055                | 4,665                     | 16,106                    |

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Secondary | 46.00' | <b>12.0" Round Culvert</b><br>L= 186.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 46.00' / 43.50' S= 0.0134 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #2     | Device 1  | 46.00' | <b>0.9" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                       |
| #3     | Primary   | 47.05' | <b>18.0" Round Culvert X 2.00</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 47.05' / 47.00' S= 0.0025 '/' Cc= 0.900<br>n= 0.013 Cast iron, coated, Flow Area= 1.77 sf        |

**Primary OutFlow** Max=0.36 cfs @ 12.53 hrs HW=47.30' (Free Discharge)

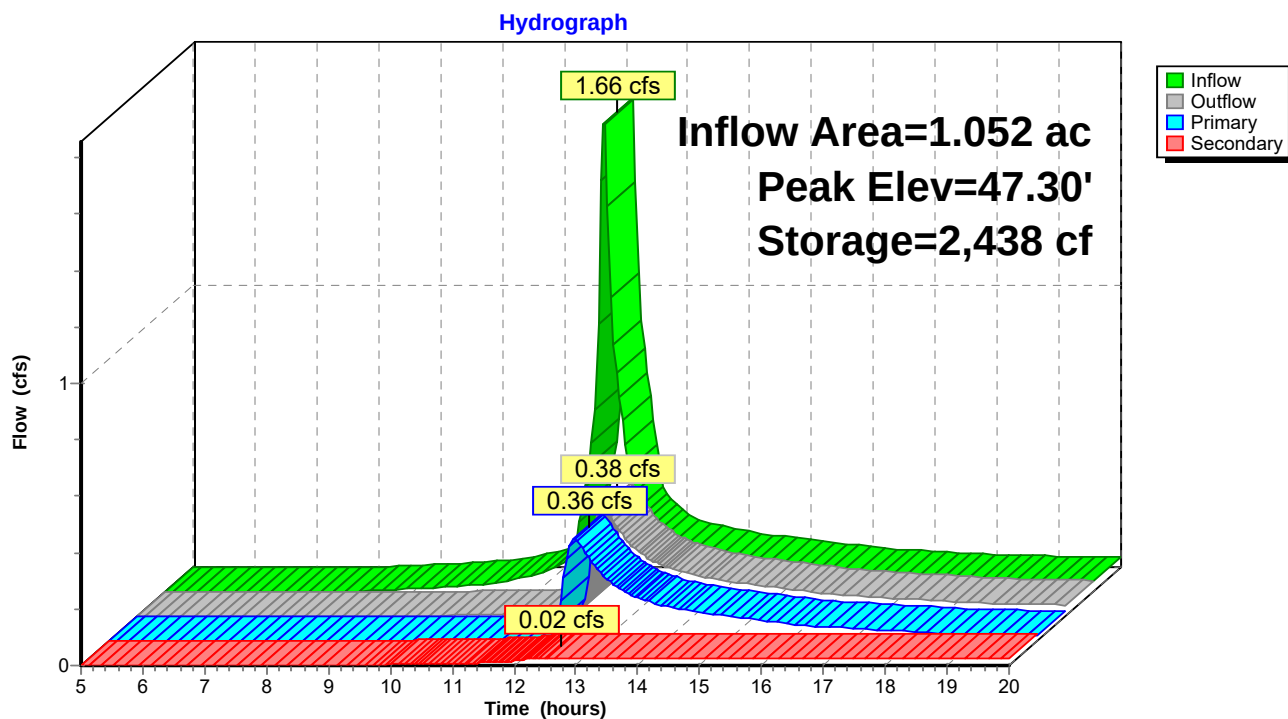
↑**3=Culvert** (Barrel Controls 0.36 cfs @ 1.41 fps)

**Secondary OutFlow** Max=0.02 cfs @ 12.53 hrs HW=47.30' (Free Discharge)

↑**1=Culvert** (Passes 0.02 cfs of 2.67 cfs potential flow)

↑**2=Orifice/Grate** (Orifice Controls 0.02 cfs @ 5.41 fps)

# Pond 186P: Constructed Wetland 1



**Summary for Pond 187P: Constructed Wetland 3**

Inflow Area = 1.994 ac, 68.75% Impervious, Inflow Depth > 3.02" for 10-Year event  
 Inflow = 7.23 cfs @ 12.14 hrs, Volume= 0.501 af  
 Outflow = 5.40 cfs @ 12.25 hrs, Volume= 0.372 af, Atten= 25%, Lag= 6.8 min  
 Primary = 5.40 cfs @ 12.25 hrs, Volume= 0.372 af  
 Routed to Link 188L : DP 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 57.25' @ 12.25 hrs Surf.Area= 4,263 sf Storage= 6,942 cf

Plug-Flow detention time= 92.7 min calculated for 0.372 af (74% of inflow)  
 Center-of-Mass det. time= 34.3 min ( 832.3 - 798.0 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 55.00' | 10,466 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

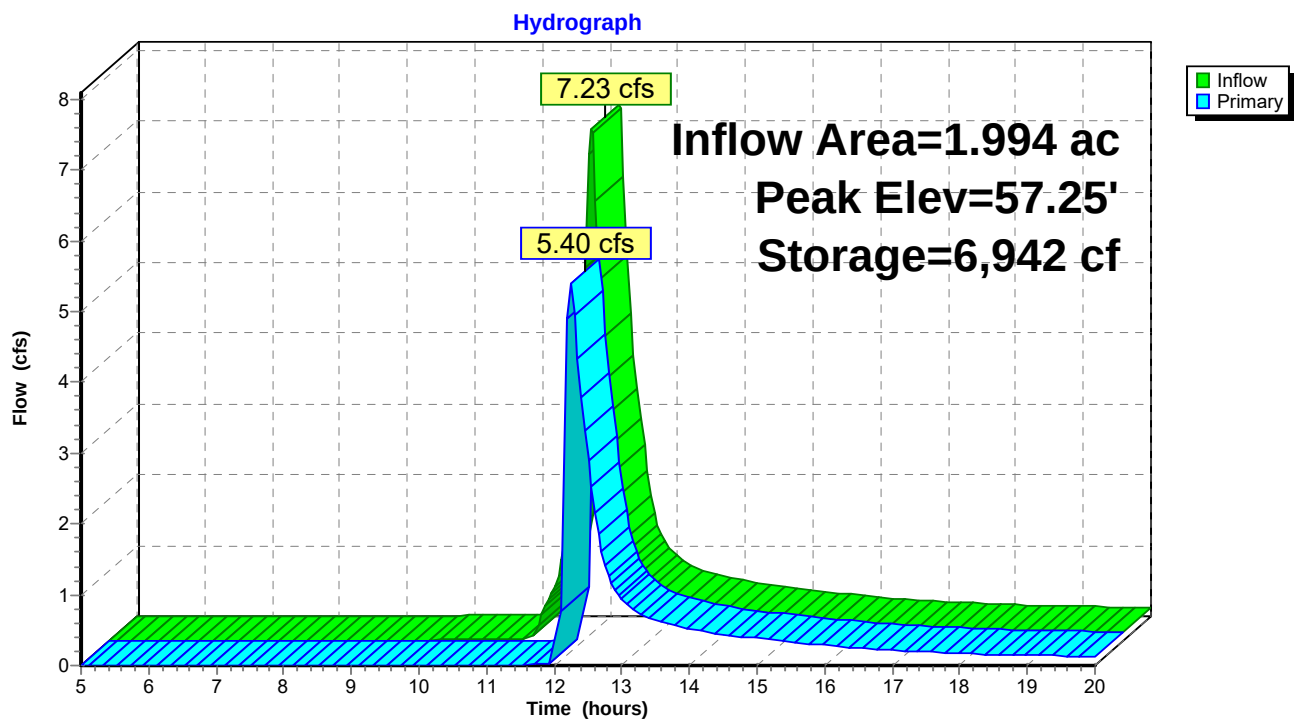
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 55.00               | 1,991                | 0                         | 0                         |
| 56.00               | 2,932                | 2,462                     | 2,462                     |
| 57.00               | 3,987                | 3,460                     | 5,921                     |
| 58.00               | 5,102                | 4,545                     | 10,466                    |

| Device | Routing  | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary  | 55.00' | <b>24.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 55.00' / 54.00' S= 0.0500 ' S= 0.0500 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |
| #2     | Device 1 | 55.00' | <b>1.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                                |
| #3     | Device 1 | 56.90' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                   |

**Primary OutFlow** Max=5.39 cfs @ 12.25 hrs HW=57.25' (Free Discharge)

1=Culvert (Passes 5.39 cfs of 13.34 cfs potential flow)  
 2=Orifice/Grate (Orifice Controls 0.04 cfs @ 7.15 fps)  
 3=Orifice/Grate (Weir Controls 5.35 cfs @ 1.93 fps)

### Pond 187P: Constructed Wetland 3



**Summary for Pond 188P: CB 3**

Inflow Area = 0.158 ac, 54.66% Impervious, Inflow Depth > 1.76" for 10-Year event  
 Inflow = 0.34 cfs @ 12.10 hrs, Volume= 0.023 af  
 Outflow = 0.34 cfs @ 12.10 hrs, Volume= 0.023 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.34 cfs @ 12.10 hrs, Volume= 0.023 af  
 Routed to Pond 190P : DMH 3

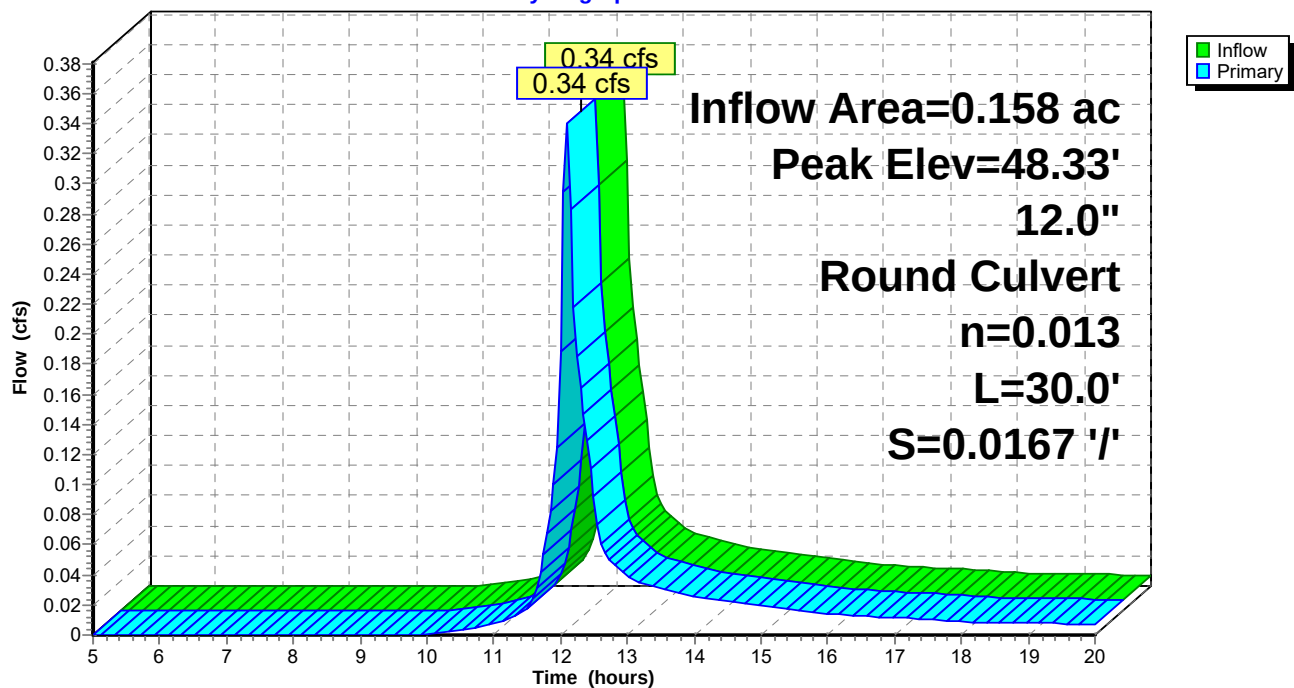
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 48.33' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.00' | <b>12.0" Round Culvert</b><br>L= 30.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.00' / 47.50' S= 0.0167 ' S= 0.0167 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.34 cfs @ 12.10 hrs HW=48.32' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.34 cfs @ 1.53 fps)

**Pond 188P: CB 3**

Hydrograph





**Summary for Pond 189P: CB 4**

Inflow Area = 0.282 ac, 69.07% Impervious, Inflow Depth > 2.56" for 10-Year event  
 Inflow = 0.89 cfs @ 12.09 hrs, Volume= 0.060 af  
 Outflow = 0.89 cfs @ 12.09 hrs, Volume= 0.060 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.89 cfs @ 12.09 hrs, Volume= 0.060 af  
 Routed to Pond 190P : DMH 3

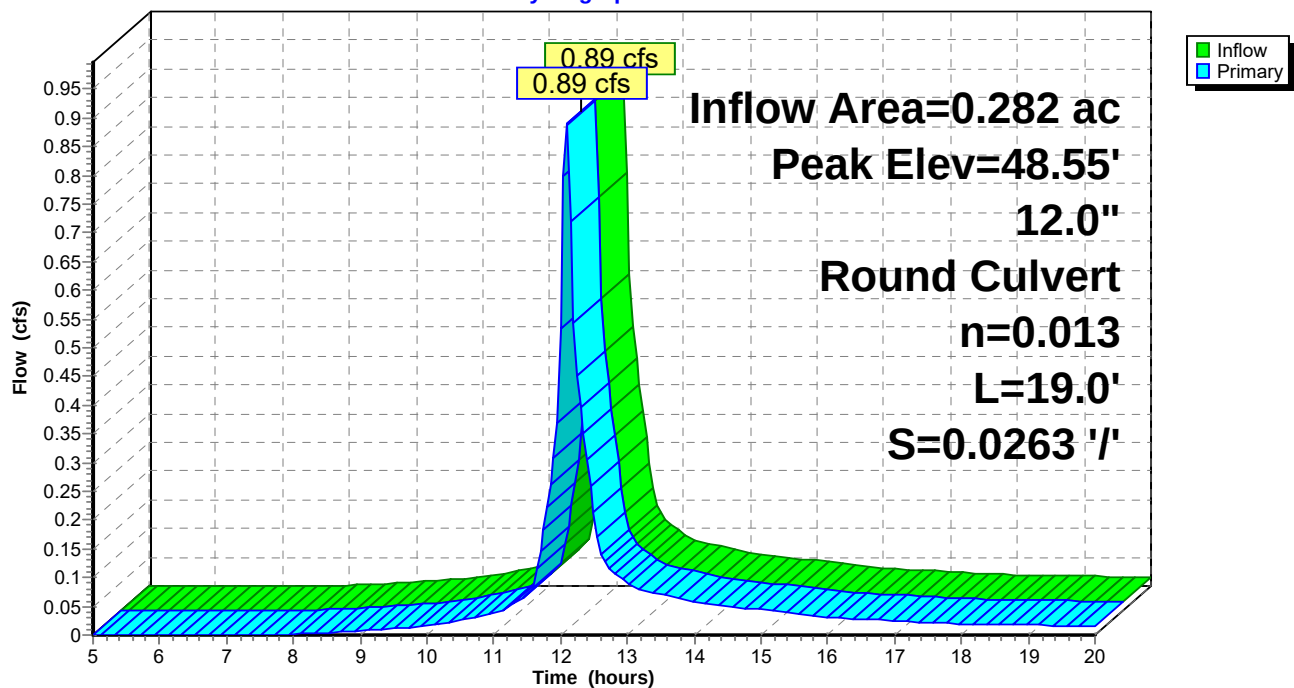
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 48.55' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.00' | <b>12.0" Round Culvert</b><br>L= 19.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.00' / 47.50' S= 0.0263 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.87 cfs @ 12.09 hrs HW=48.55' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.87 cfs @ 1.99 fps)

**Pond 189P: CB 4**

Hydrograph



### Summary for Pond 190P: DMH 3

Inflow Area = 0.440 ac, 63.90% Impervious, Inflow Depth > 2.27" for 10-Year event  
 Inflow = 1.23 cfs @ 12.09 hrs, Volume= 0.083 af  
 Outflow = 1.23 cfs @ 12.09 hrs, Volume= 0.083 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.23 cfs @ 12.09 hrs, Volume= 0.083 af  
 Routed to Pond 213P : DMH 2

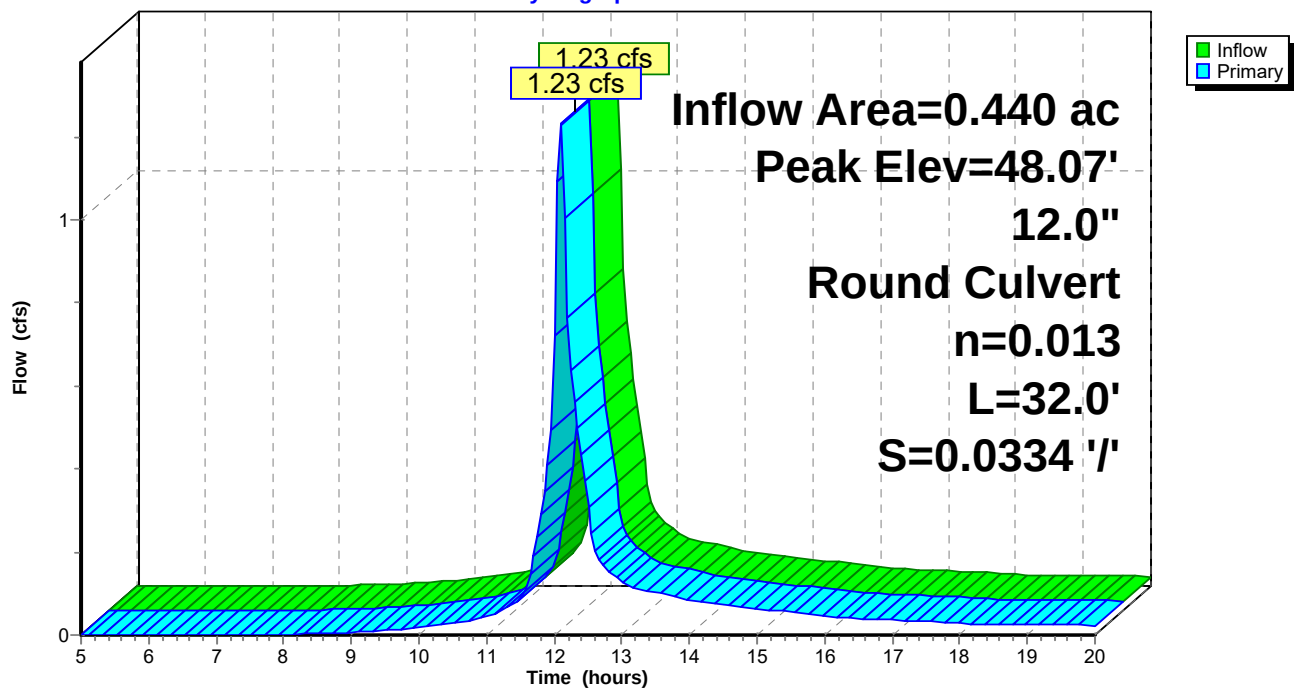
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 48.07' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 47.40' | <b>12.0" Round Culvert</b><br>L= 32.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 47.40' / 46.33' S= 0.0334 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.21 cfs @ 12.09 hrs HW=48.06' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.21 cfs @ 2.19 fps)

### Pond 190P: DMH 3

#### Hydrograph



## Summary for Pond 191P: CB 42

Inflow Area = 0.277 ac, 85.87% Impervious, Inflow Depth > 3.51" for 10-Year event  
 Inflow = 1.14 cfs @ 12.09 hrs, Volume= 0.081 af  
 Outflow = 1.14 cfs @ 12.09 hrs, Volume= 0.081 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.14 cfs @ 12.09 hrs, Volume= 0.081 af  
 Routed to Pond 146P : Inf. Basin 2

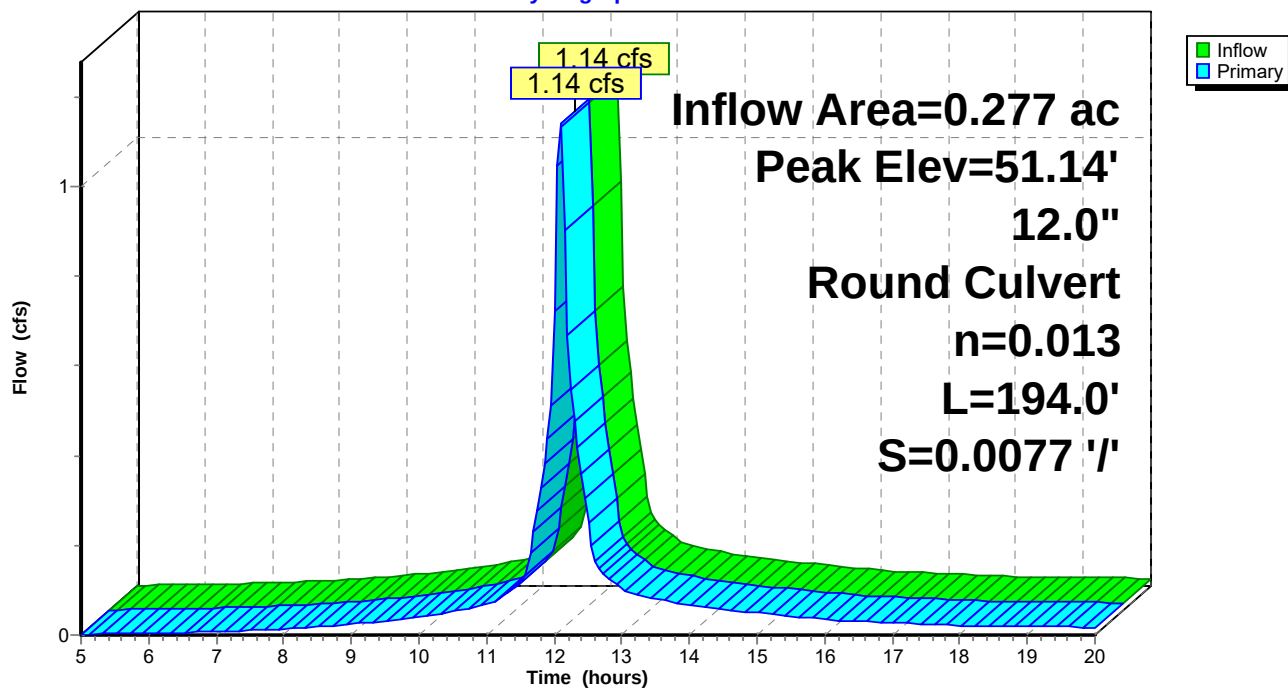
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 51.14' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.50' | <b>12.0" Round Culvert</b><br>L= 194.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.50' / 49.00' S= 0.0077 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.11 cfs @ 12.09 hrs HW=51.13' (Free Discharge)  
 1=Culvert (Inlet Controls 1.11 cfs @ 2.13 fps)

## Pond 191P: CB 42

## Hydrograph



**Summary for Pond 192P: Sub. Inf. 8**

Inflow Area = 0.214 ac, 64.54% Impervious, Inflow Depth > 2.31" for 10-Year event  
 Inflow = 0.61 cfs @ 12.09 hrs, Volume= 0.041 af  
 Outflow = 0.21 cfs @ 12.40 hrs, Volume= 0.041 af, Atten= 65%, Lag= 18.5 min  
 Discarded = 0.21 cfs @ 12.40 hrs, Volume= 0.041 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.99' @ 12.40 hrs Surf.Area= 0.022 ac Storage= 0.007 af

Plug-Flow detention time= 8.4 min calculated for 0.041 af (100% of inflow)  
 Center-of-Mass det. time= 8.2 min ( 802.9 - 794.7 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 50.33' | 0.020 af      | <b>20.50'W x 46.34'L x 3.50'H Field A</b><br>0.076 af Overall - 0.026 af Embedded = 0.051 af x 40.0% Voids                                                                                                                                             |
| #2A    | 50.83' | 0.026 af      | <b>ADS StormTech SC-740 b +Cap x 24 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>24 Chambers in 4 Rows<br>Cap Storage= 2.7 cf x 2 x 4 rows = 21.2 cf |
|        |        | 0.046 af      | Total Available Storage                                                                                                                                                                                                                                |

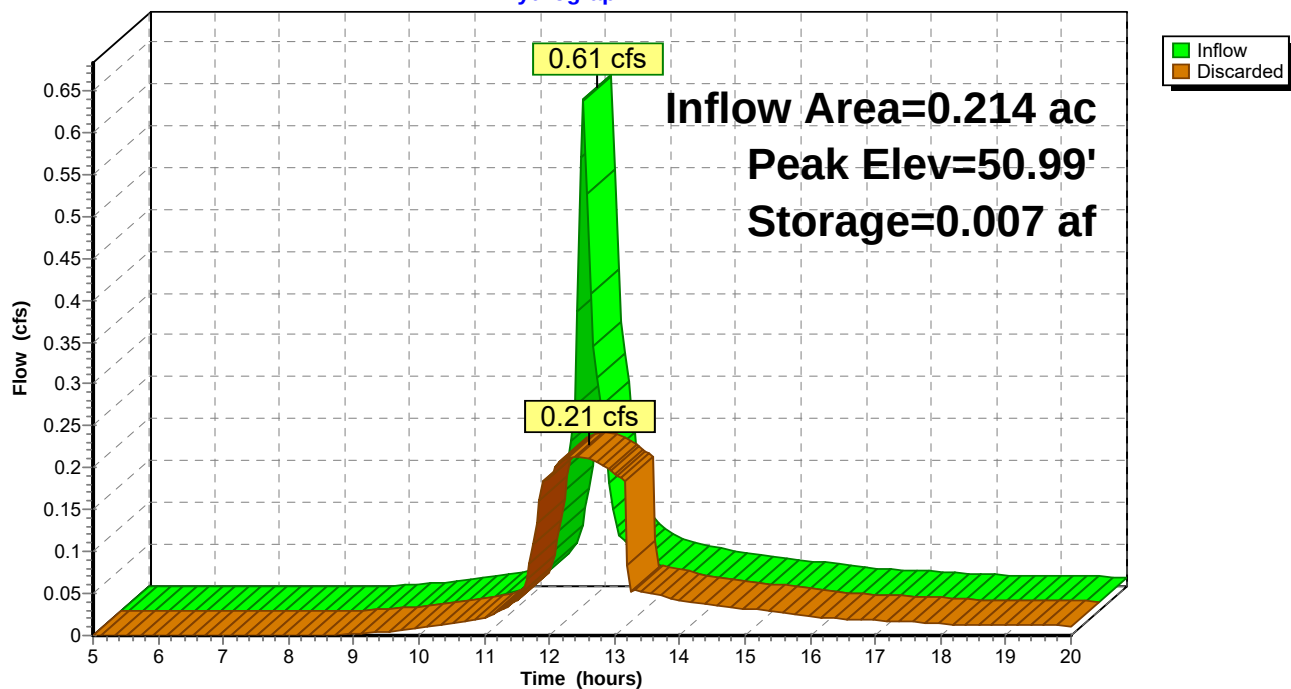
Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                      |
|--------|-----------|--------|-----------------------------------------------------------------------------------------------------|
| #1     | Discarded | 50.33' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 46.50' |

**Discarded OutFlow** Max=0.21 cfs @ 12.40 hrs HW=50.99' (Free Discharge)  
 ↑ **1=Exfiltration** ( Controls 0.21 cfs)

Pond 192P: Sub. Inf. 8

Hydrograph



**Summary for Pond 193P: CB 1**

Inflow Area = 0.172 ac, 31.70% Impervious, Inflow Depth > 0.69" for 10-Year event  
 Inflow = 0.11 cfs @ 12.12 hrs, Volume= 0.010 af  
 Outflow = 0.11 cfs @ 12.12 hrs, Volume= 0.010 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.11 cfs @ 12.12 hrs, Volume= 0.010 af  
 Routed to Pond 200P : DMH 1

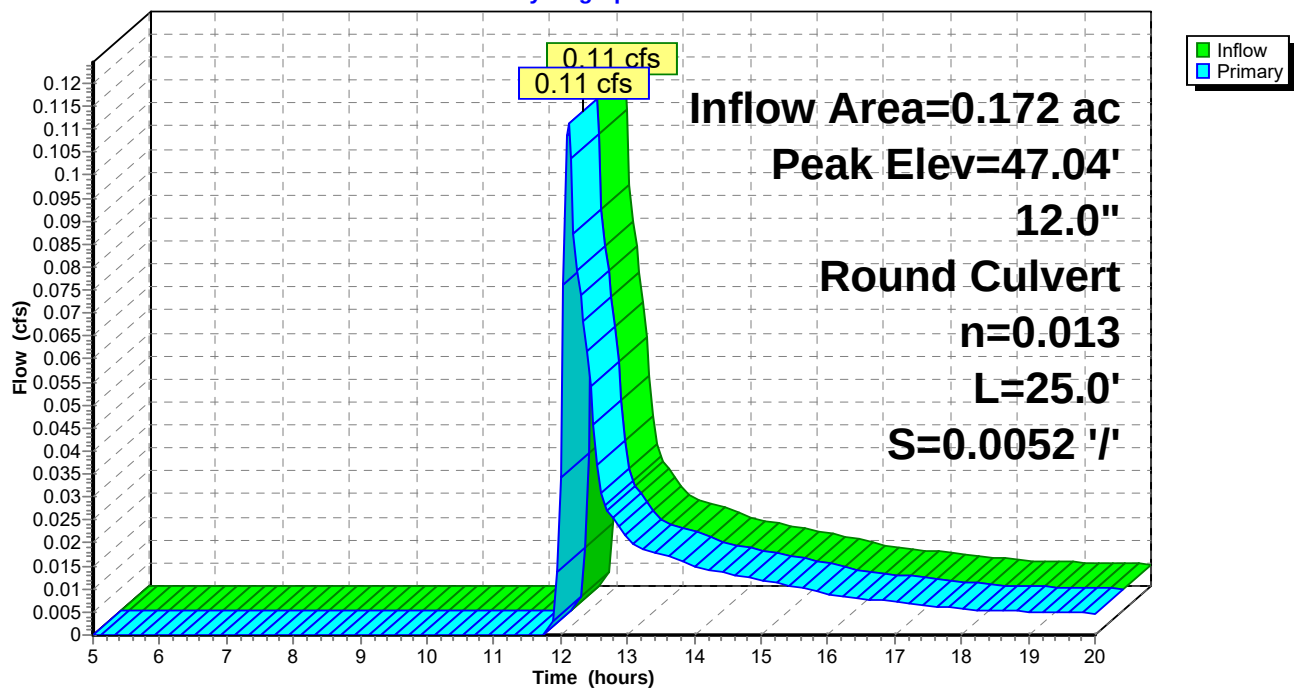
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 47.04' @ 12.12 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 46.84' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 46.84' / 46.71' S= 0.0052 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.11 cfs @ 12.12 hrs HW=47.03' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.11 cfs @ 1.52 fps)

**Pond 193P: CB 1**

Hydrograph



**Summary for Pond 194P: CB 2**

Inflow Area = 0.094 ac, 74.38% Impervious, Inflow Depth > 2.83" for 10-Year event  
 Inflow = 0.32 cfs @ 12.09 hrs, Volume= 0.022 af  
 Outflow = 0.32 cfs @ 12.09 hrs, Volume= 0.022 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.32 cfs @ 12.09 hrs, Volume= 0.022 af  
 Routed to Pond 200P : DMH 1

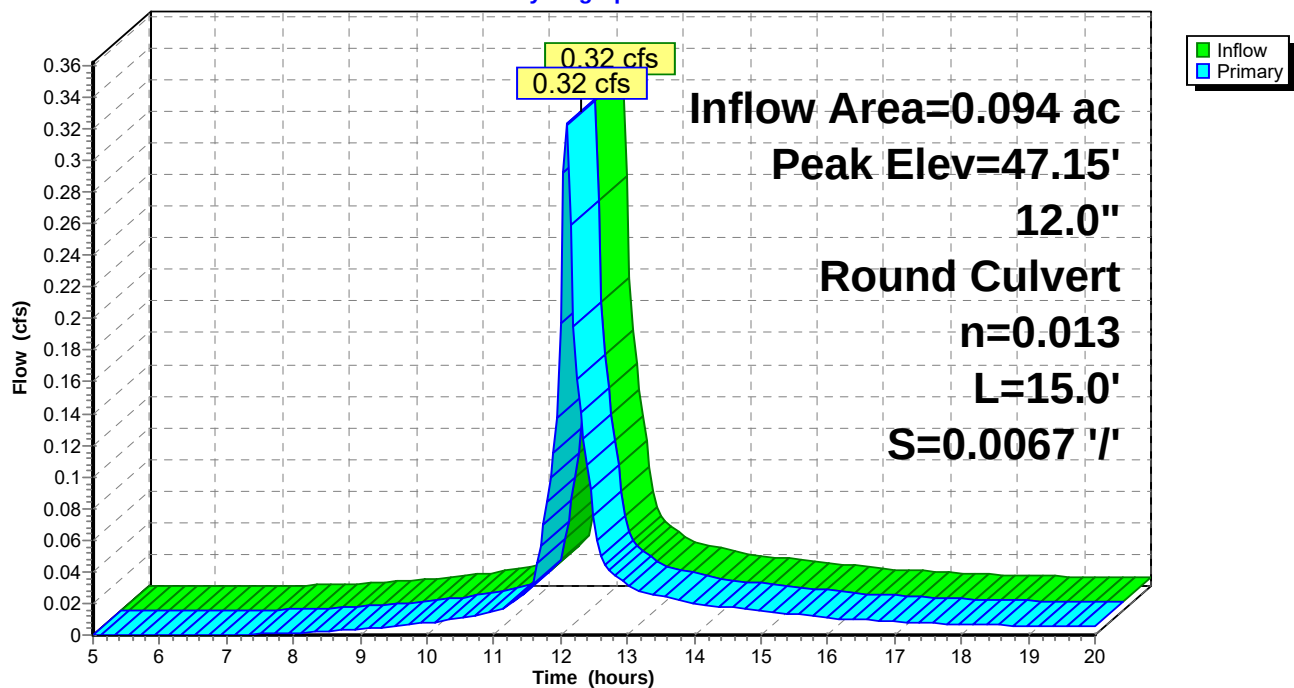
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 47.15' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 46.81' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 46.81' / 46.71' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.32 cfs @ 12.09 hrs HW=47.15' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.32 cfs @ 2.04 fps)

**Pond 194P: CB 2**

Hydrograph



### Summary for Pond 195P: Constructed Wetland 4

Inflow Area = 1.935 ac, 78.08% Impervious, Inflow Depth > 2.80" for 10-Year event  
 Inflow = 3.73 cfs @ 12.26 hrs, Volume= 0.452 af  
 Outflow = 3.36 cfs @ 12.56 hrs, Volume= 0.319 af, Atten= 10%, Lag= 18.1 min  
 Primary = 3.36 cfs @ 12.56 hrs, Volume= 0.319 af  
 Routed to Link 188L : DP 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.49' @ 12.56 hrs Surf.Area= 3,342 sf Storage= 7,746 cf

Plug-Flow detention time= 106.1 min calculated for 0.319 af (71% of inflow)  
 Center-of-Mass det. time= 59.5 min ( 844.7 - 785.2 )

| Volume              | Invert               | Avail.Storage             | Storage Description                                        |
|---------------------|----------------------|---------------------------|------------------------------------------------------------|
| #1                  | 53.00'               | 9,558 cf                  | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet)                                  |
| 53.00               | 1,225                | 0                         | 0                                                          |
| 54.00               | 1,749                | 1,487                     | 1,487                                                      |
| 55.00               | 2,345                | 2,047                     | 3,534                                                      |
| 56.00               | 2,998                | 2,672                     | 6,206                                                      |
| 57.00               | 3,707                | 3,353                     | 9,558                                                      |

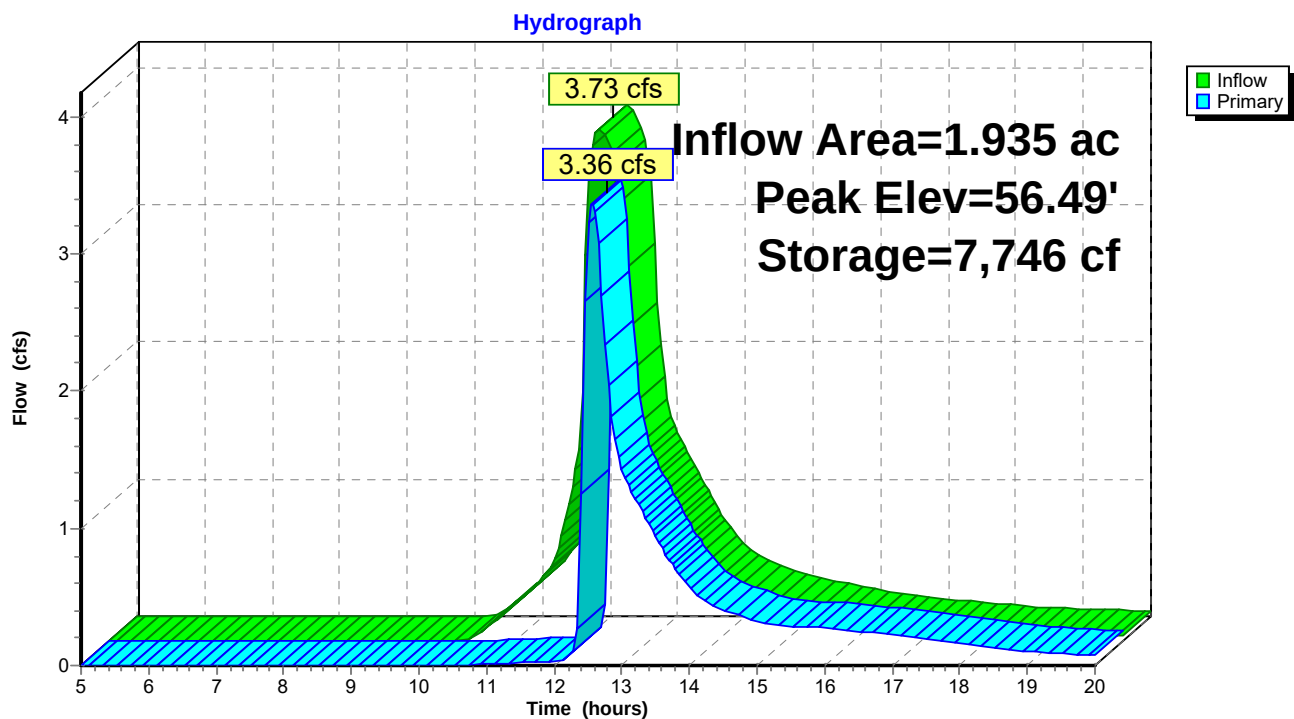
| Device | Routing  | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary  | 53.00' | <b>18.0" Round Culvert</b><br>L= 50.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.00' / 52.00' S= 0.0200 ' S= 0.0200 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |
| #2     | Device 1 | 53.00' | <b>1.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                                |
| #3     | Device 1 | 56.25' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                   |
| #4     | Device 1 | 55.75' | <b>4.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                                |

**Primary OutFlow** Max=3.35 cfs @ 12.56 hrs HW=56.48' (Free Discharge)

- 1=Culvert (Passes 3.35 cfs of 11.11 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.05 cfs @ 8.93 fps)
- 3=Orifice/Grate (Weir Controls 2.98 cfs @ 1.59 fps)
- 4=Orifice/Grate (Orifice Controls 0.32 cfs @ 3.63 fps)



# Pond 195P: Constructed Wetland 4



**Summary for Pond 196P: CB 5**

Inflow Area = 0.336 ac, 80.22% Impervious, Inflow Depth > 3.11" for 10-Year event  
 Inflow = 1.26 cfs @ 12.09 hrs, Volume= 0.087 af  
 Outflow = 1.26 cfs @ 12.09 hrs, Volume= 0.087 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.26 cfs @ 12.09 hrs, Volume= 0.087 af  
 Routed to Pond 185P : DMH 4

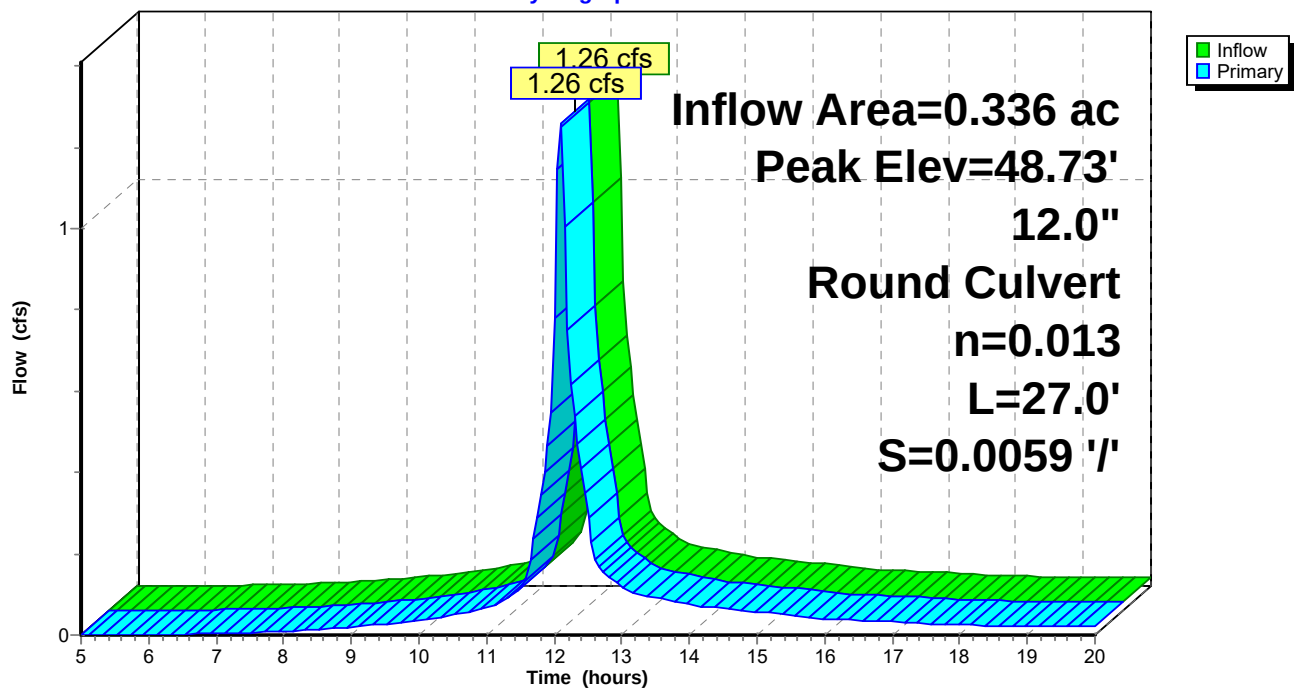
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 48.73' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.00' | <b>12.0" Round Culvert</b><br>L= 27.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.00' / 47.84' S= 0.0059 ' S= 0.0059 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.23 cfs @ 12.09 hrs HW=48.72' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.23 cfs @ 2.85 fps)

**Pond 196P: CB 5**

Hydrograph



**Summary for Pond 197P: Inf. Basin 1**

Inflow Area = 8.503 ac, 57.81% Impervious, Inflow Depth > 0.65" for 10-Year event  
 Inflow = 5.76 cfs @ 12.09 hrs, Volume= 0.459 af  
 Outflow = 1.68 cfs @ 12.52 hrs, Volume= 0.458 af, Atten= 71%, Lag= 25.7 min  
 Discarded = 1.68 cfs @ 12.52 hrs, Volume= 0.458 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Link 203L : 3A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 47.36' @ 12.52 hrs Surf.Area= 5,828 sf Storage= 4,527 cf

Plug-Flow detention time= 21.4 min calculated for 0.458 af (100% of inflow)  
 Center-of-Mass det. time= 20.8 min ( 825.5 - 804.6 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 46.50' | 34,549 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 46.50               | 4,770                | 0                         | 0                         |
| 47.00               | 5,380                | 2,538                     | 2,538                     |
| 48.00               | 6,642                | 6,011                     | 8,549                     |
| 49.00               | 7,960                | 7,301                     | 15,850                    |
| 50.00               | 9,336                | 8,648                     | 24,498                    |
| 51.00               | 10,767               | 10,052                    | 34,549                    |

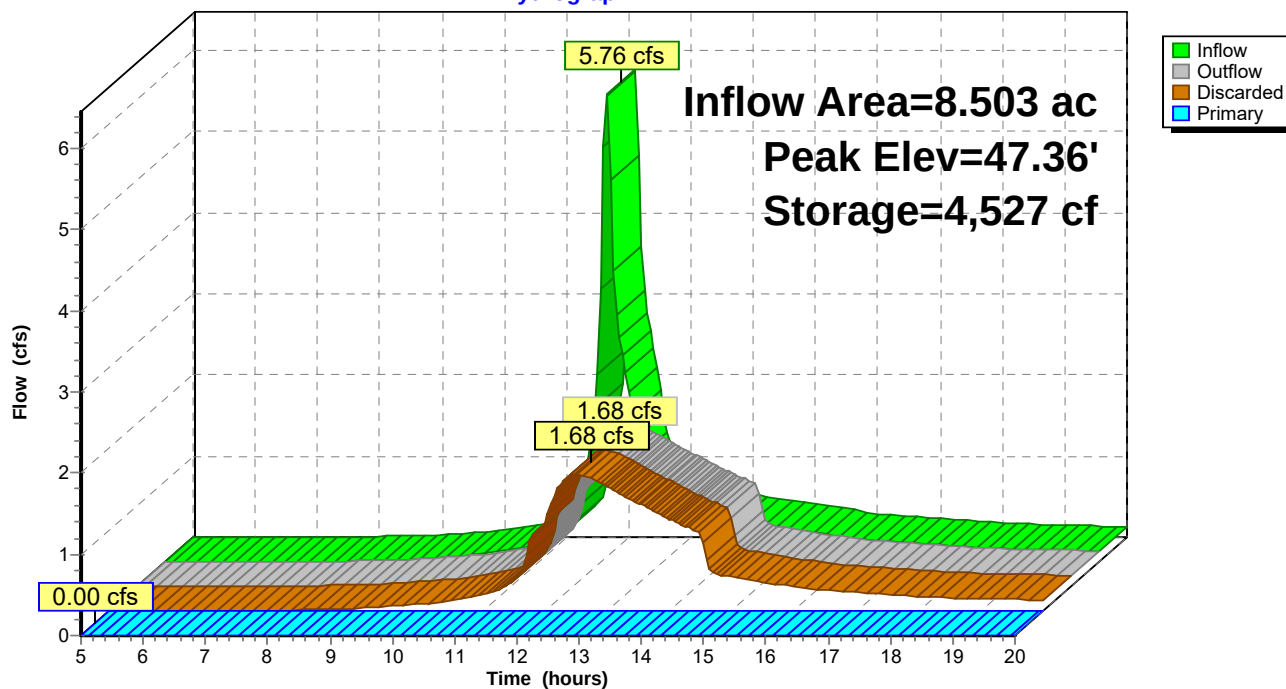
| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 46.50' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 45.00'                                                                                                             |
| #2     | Primary   | 47.00' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 47.00' / 43.50' S= 0.1400 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 48.00' | <b>6.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                      |
| #4     | Device 2  | 50.50' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                         |

**Discarded OutFlow** Max=1.68 cfs @ 12.52 hrs HW=47.35' (Free Discharge)  
 ↳ **1=Exfiltration** ( Controls 1.68 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=46.50' (Free Discharge)  
 ↳ **2=Culvert** ( Controls 0.00 cfs)  
 ↳ ↳ **3=Orifice/Grate** ( Controls 0.00 cfs)  
 ↳ ↳ **4=Orifice/Grate** ( Controls 0.00 cfs)

# Pond 197P: Inf. Basin 1

Hydrograph



### Summary for Pond 198P: Sub. Inf. 2

Inflow Area = 1.731 ac, 71.57% Impervious, Inflow Depth > 2.71" for 10-Year event  
 Inflow = 5.72 cfs @ 12.09 hrs, Volume= 0.391 af  
 Outflow = 1.90 cfs @ 12.41 hrs, Volume= 0.391 af, Atten= 67%, Lag= 18.8 min  
 Discarded = 1.90 cfs @ 12.41 hrs, Volume= 0.391 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Pond 202P : DMH 14

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.38' @ 12.41 hrs Surf.Area= 0.096 ac Storage= 0.088 af

Plug-Flow detention time= 14.2 min calculated for 0.391 af (100% of inflow)  
 Center-of-Mass det. time= 14.0 min ( 797.1 - 783.0 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                      |
|--------|--------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 51.00' | 0.086 af      | <b>30.00'W x 138.90'L x 3.50'H Field A</b><br>0.335 af Overall - 0.121 af Embedded = 0.214 af x 40.0% Voids                                                                                                                                              |
| #2A    | 51.50' | 0.121 af      | <b>ADS StormTech SC-740 b +Cap x 114 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>114 Chambers in 6 Rows<br>Cap Storage= 2.7 cf x 2 x 6 rows = 31.9 cf |
|        |        | 0.206 af      | Total Available Storage                                                                                                                                                                                                                                  |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                               |
|--------|-----------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 51.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 50.00'                                                                                                          |
| #2     | Primary   | 52.75' | <b>18.0" Round Culvert</b><br>L= 10.0' RCP, groove end projecting, Ke= 0.200<br>Inlet / Outlet Invert= 52.75' / 52.65' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Discarded OutFlow** Max=1.90 cfs @ 12.41 hrs HW=52.38' (Free Discharge)

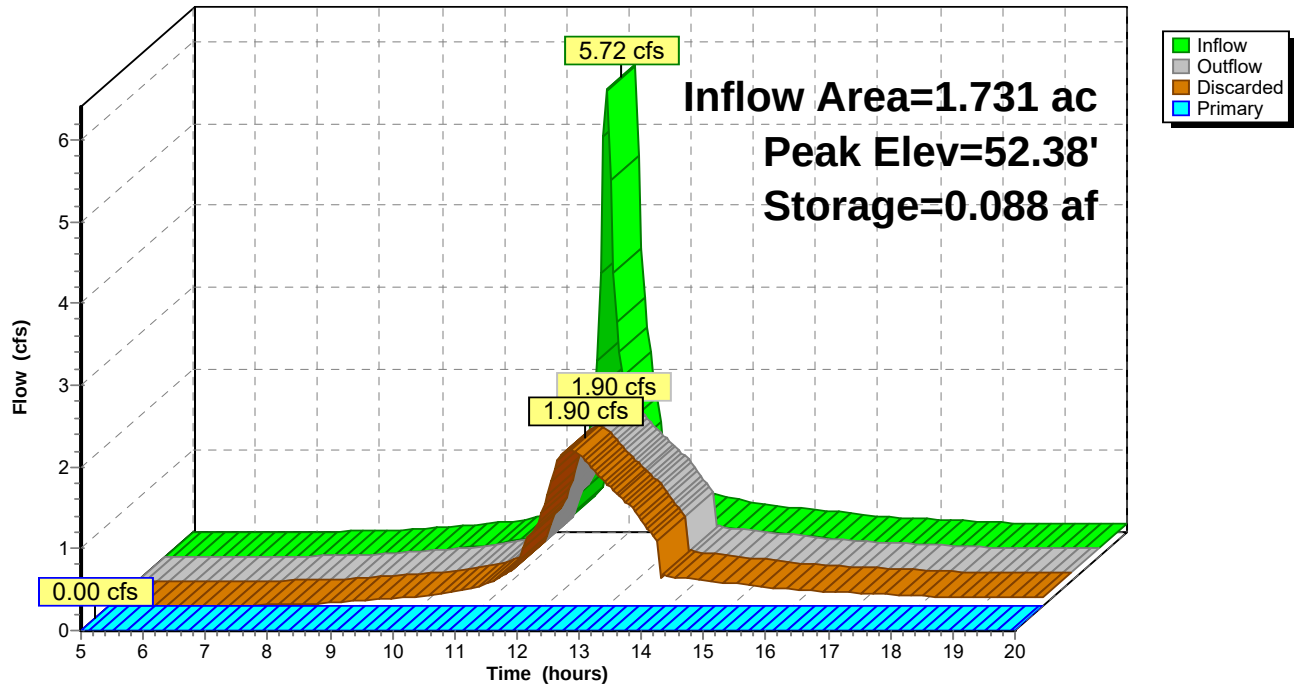
↑**1=Exfiltration** ( Controls 1.90 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=51.00' (Free Discharge)

↑**2=Culvert** ( Controls 0.00 cfs)

Pond 198P: Sub. Inf. 2

Hydrograph



**Summary for Pond 200P: DMH 1**

Inflow Area = 0.265 ac, 46.75% Impervious, Inflow Depth > 1.45" for 10-Year event  
 Inflow = 0.43 cfs @ 12.10 hrs, Volume= 0.032 af  
 Outflow = 0.43 cfs @ 12.10 hrs, Volume= 0.032 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.43 cfs @ 12.10 hrs, Volume= 0.032 af  
 Routed to Pond 213P : DMH 2

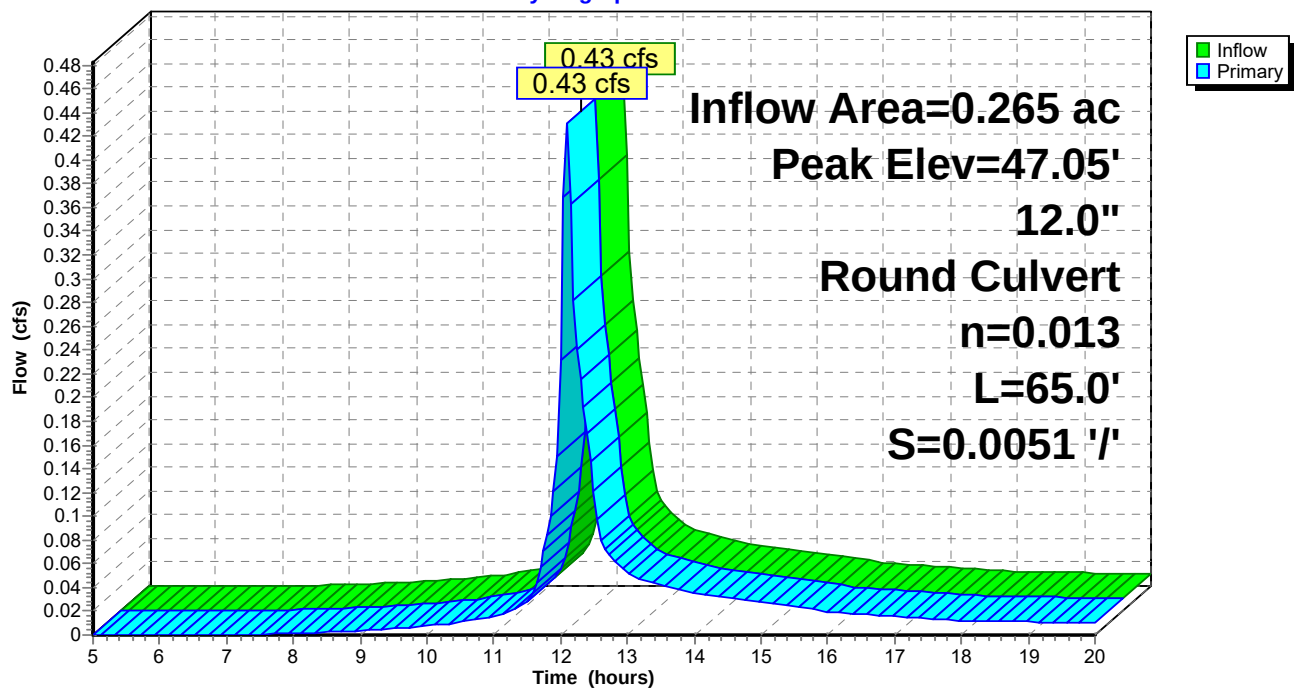
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 47.05' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 46.66' | <b>12.0" Round Culvert</b><br>L= 65.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 46.66' / 46.33' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.43 cfs @ 12.10 hrs HW=47.05' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.43 cfs @ 2.26 fps)

**Pond 200P: DMH 1**

Hydrograph



### Summary for Pond 201P: Sub. Inf. 3

Inflow Area = 1.343 ac, 61.65% Impervious, Inflow Depth > 2.22" for 10-Year event  
 Inflow = 3.61 cfs @ 12.09 hrs, Volume= 0.248 af  
 Outflow = 1.31 cfs @ 12.39 hrs, Volume= 0.248 af, Atten= 64%, Lag= 17.8 min  
 Discarded = 1.31 cfs @ 12.39 hrs, Volume= 0.248 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Pond 202P : DMH 14

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.00' @ 12.39 hrs Surf.Area= 0.079 ac Storage= 0.048 af

Plug-Flow detention time= 10.4 min calculated for 0.248 af (100% of inflow)  
 Center-of-Mass det. time= 10.3 min ( 801.8 - 791.5 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 52.00' | 0.071 af      | <b>20.50'W x 167.38'L x 3.50'H Field A</b><br>0.276 af Overall - 0.098 af Embedded = 0.178 af x 40.0% Voids                                                                                                                                            |
| #2A    | 52.50' | 0.098 af      | <b>ADS StormTech SC-740 b +Cap x 92 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>92 Chambers in 4 Rows<br>Cap Storage= 2.7 cf x 2 x 4 rows = 21.2 cf |
|        |        | 0.169 af      | Total Available Storage                                                                                                                                                                                                                                |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 52.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 51.00'                                                                                                              |
| #2     | Primary   | 54.00' | <b>12.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.00' / 53.65' S= 0.0175 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Discarded OutFlow** Max=1.31 cfs @ 12.39 hrs HW=53.00' (Free Discharge)

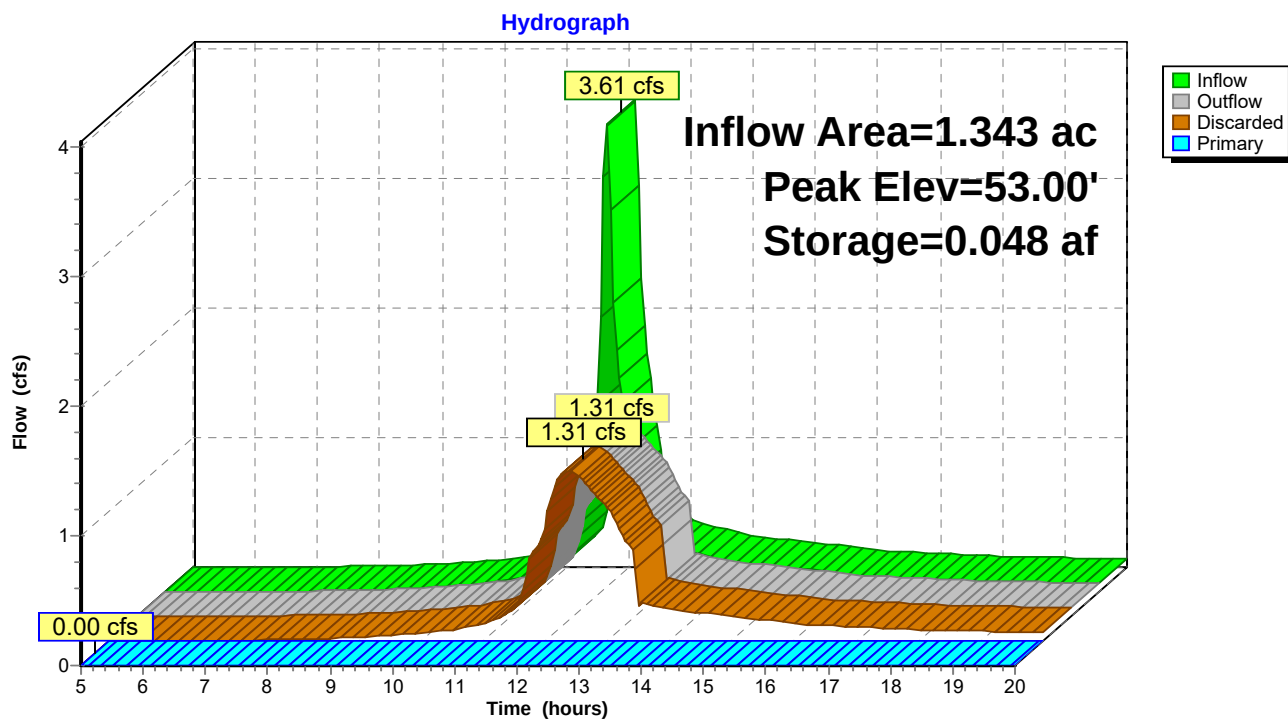
↑ **1=Exfiltration** ( Controls 1.31 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=52.00' (Free Discharge)

↑ **2=Culvert** ( Controls 0.00 cfs)



Pond 201P: Sub. Inf. 3



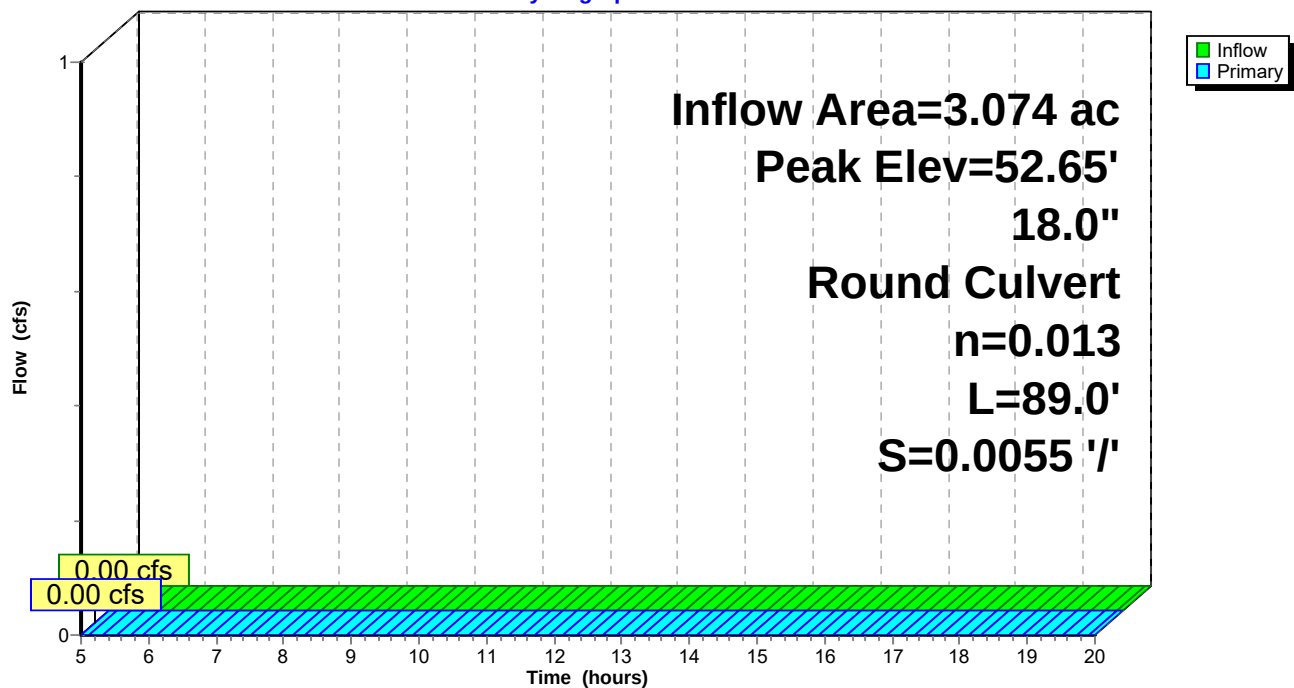
**Summary for Pond 202P: DMH 14**

Inflow Area = 3.074 ac, 67.24% Impervious, Inflow Depth = 0.00" for 10-Year event  
 Inflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Outflow = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Pond 166P : DMH 13

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.65' @ 5.00 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.65' | <b>18.0" Round Culvert</b><br>L= 89.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.65' / 52.16' S= 0.0055 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=52.65' (Free Discharge)  
 ↑ **1=Culvert** ( Controls 0.00 cfs)

**Pond 202P: DMH 14****Hydrograph**

**Summary for Pond 204P: DMH 18**

Inflow Area = 1.731 ac, 71.57% Impervious, Inflow Depth > 2.71" for 10-Year event  
 Inflow = 5.72 cfs @ 12.09 hrs, Volume= 0.391 af  
 Outflow = 5.72 cfs @ 12.09 hrs, Volume= 0.391 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.72 cfs @ 12.09 hrs, Volume= 0.391 af  
 Routed to Pond 198P : Sub. Inf. 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 52.96' @ 12.09 hrs

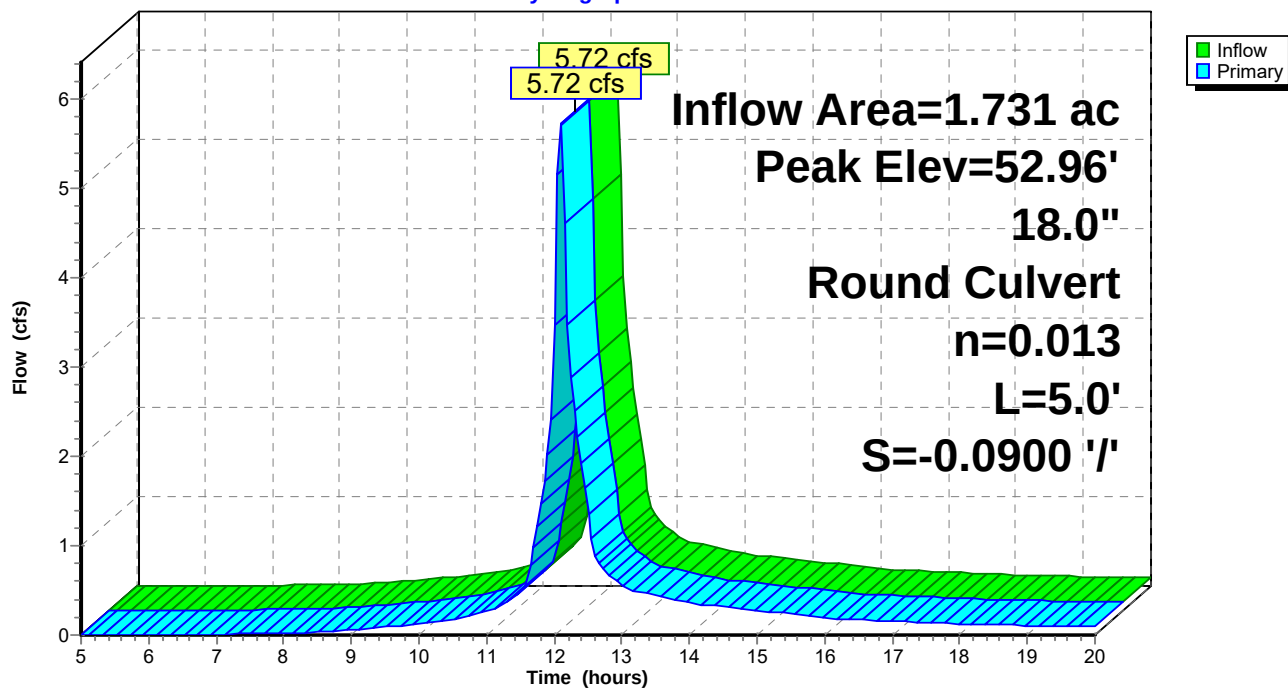
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.50' | <b>18.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.05' / 51.50' S= -0.0900 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=5.62 cfs @ 12.09 hrs HW=52.94' (Free Discharge)

↑**1=Culvert** (Inlet Controls 5.62 cfs @ 3.22 fps)

**Pond 204P: DMH 18**

Hydrograph



### Summary for Pond 205P: DMH 27

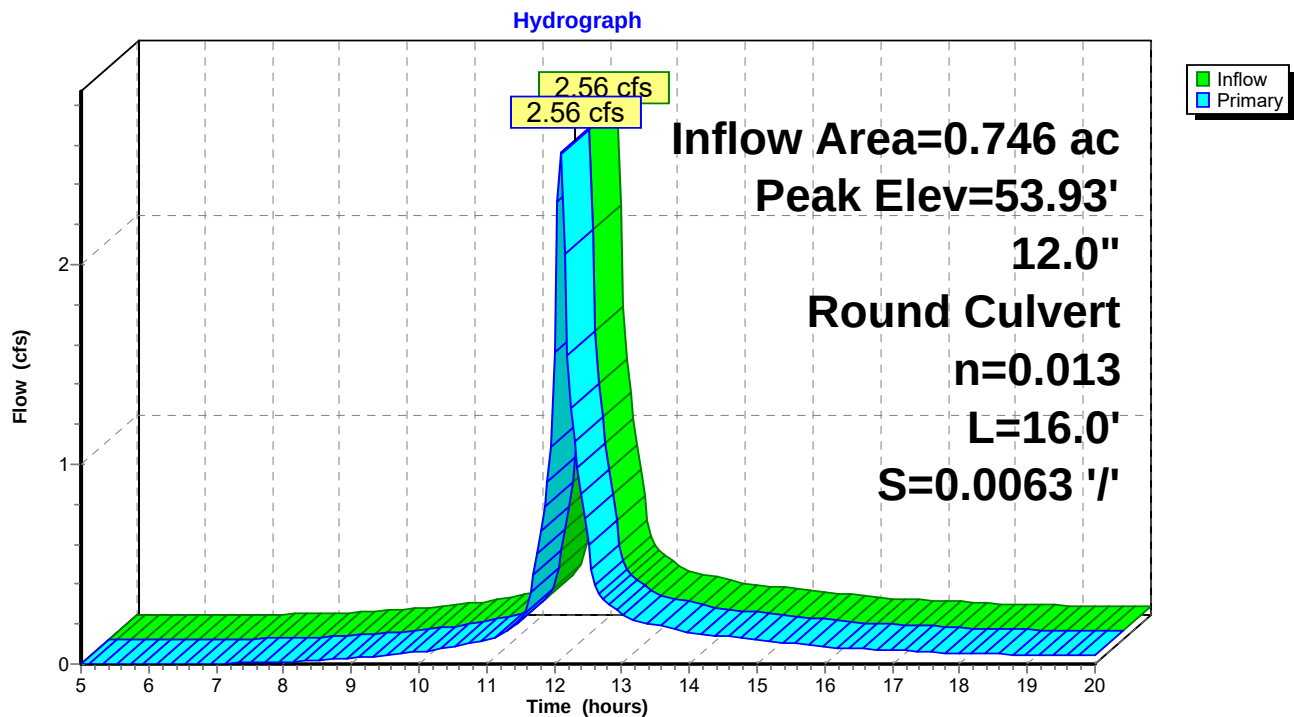
Inflow Area = 0.746 ac, 74.14% Impervious, Inflow Depth > 2.82" for 10-Year event  
 Inflow = 2.56 cfs @ 12.09 hrs, Volume= 0.175 af  
 Outflow = 2.56 cfs @ 12.09 hrs, Volume= 0.175 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.56 cfs @ 12.09 hrs, Volume= 0.175 af  
 Routed to Pond 201P : Sub. Inf. 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.93' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.70' | <b>12.0" Round Culvert</b><br>L= 16.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.70' / 52.60' S= 0.0063 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.51 cfs @ 12.09 hrs HW=53.91' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.51 cfs @ 3.36 fps)

### Pond 205P: DMH 27



**Summary for Pond 206P: DMH 34**

Inflow Area = 0.770 ac, 66.71% Impervious, Inflow Depth > 3.42" for 10-Year event  
 Inflow = 3.09 cfs @ 12.09 hrs, Volume= 0.219 af  
 Outflow = 3.09 cfs @ 12.09 hrs, Volume= 0.219 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.09 cfs @ 12.09 hrs, Volume= 0.219 af  
 Routed to Pond 49P : Sub. Inf. 4

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 55.45' @ 12.09 hrs

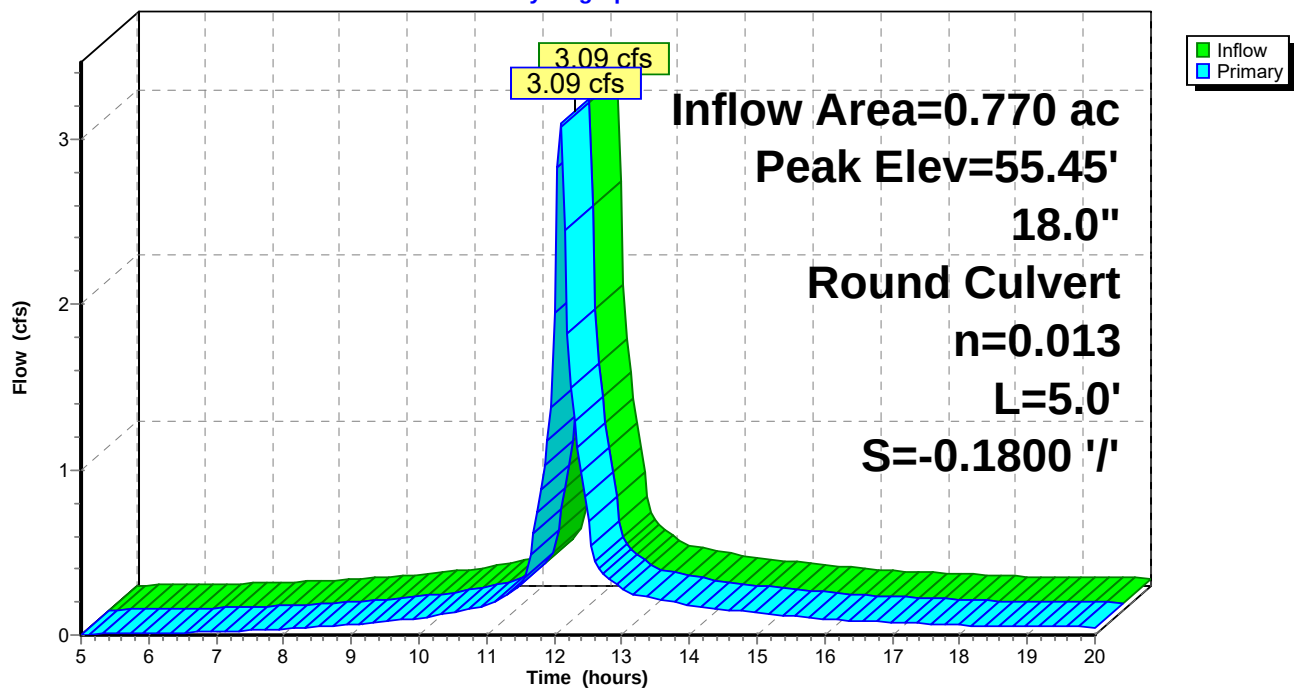
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.50' | <b>18.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.60' / 54.50' S= -0.1800 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=3.02 cfs @ 12.09 hrs HW=55.44' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 3.02 cfs @ 2.60 fps)

**Pond 206P: DMH 34**

Hydrograph



### Summary for Pond 207P: DMH 48

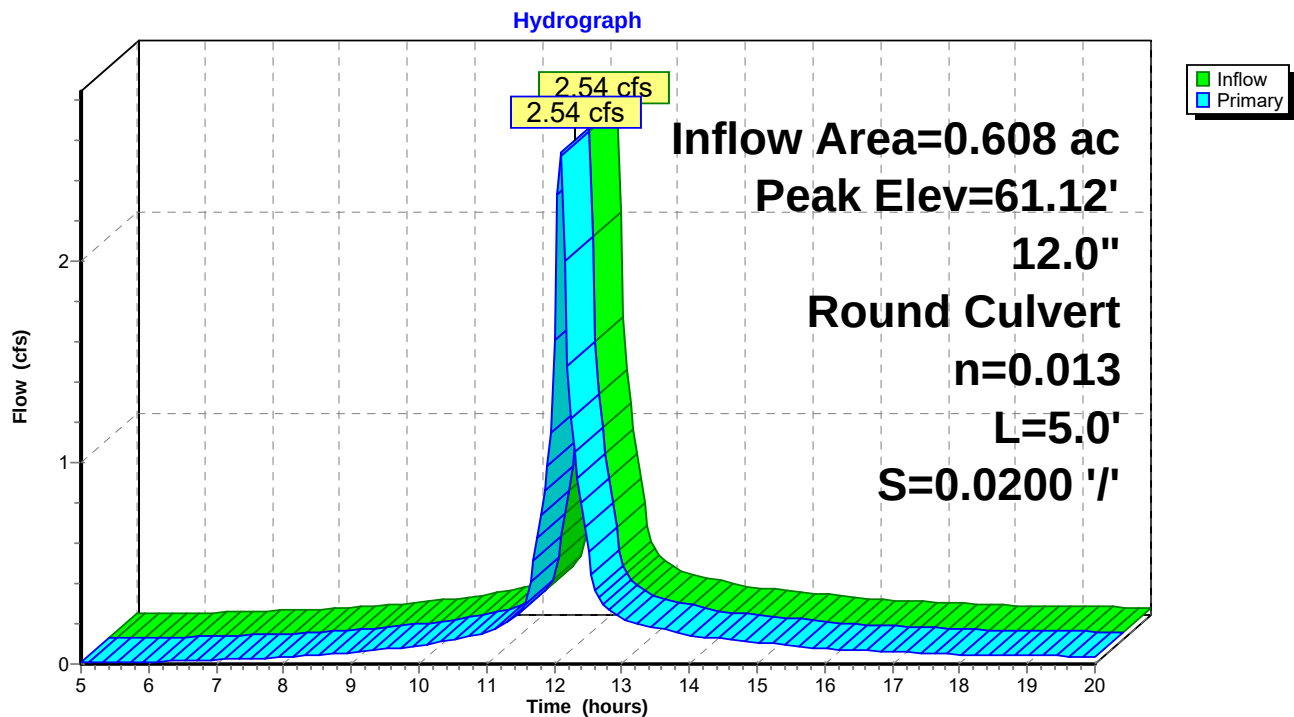
Inflow Area = 0.608 ac, 68.77% Impervious, Inflow Depth > 3.58" for 10-Year event  
 Inflow = 2.54 cfs @ 12.09 hrs, Volume= 0.182 af  
 Outflow = 2.54 cfs @ 12.09 hrs, Volume= 0.182 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.54 cfs @ 12.09 hrs, Volume= 0.182 af  
 Routed to Pond 68P : Sub. Inf. 5

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.12' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.90' | <b>12.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.90' / 59.80' S= 0.0200 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.48 cfs @ 12.09 hrs HW=61.09' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.48 cfs @ 3.15 fps)

### Pond 207P: DMH 48



### Summary for Pond 208P: DMH 58

Inflow Area = 1.994 ac, 68.75% Impervious, Inflow Depth > 3.54" for 10-Year event  
 Inflow = 8.25 cfs @ 12.09 hrs, Volume= 0.588 af  
 Outflow = 8.25 cfs @ 12.09 hrs, Volume= 0.588 af, Atten= 0%, Lag= 0.0 min  
 Primary = 8.25 cfs @ 12.09 hrs, Volume= 0.588 af  
 Routed to Pond 60P : Sub. Det. 1

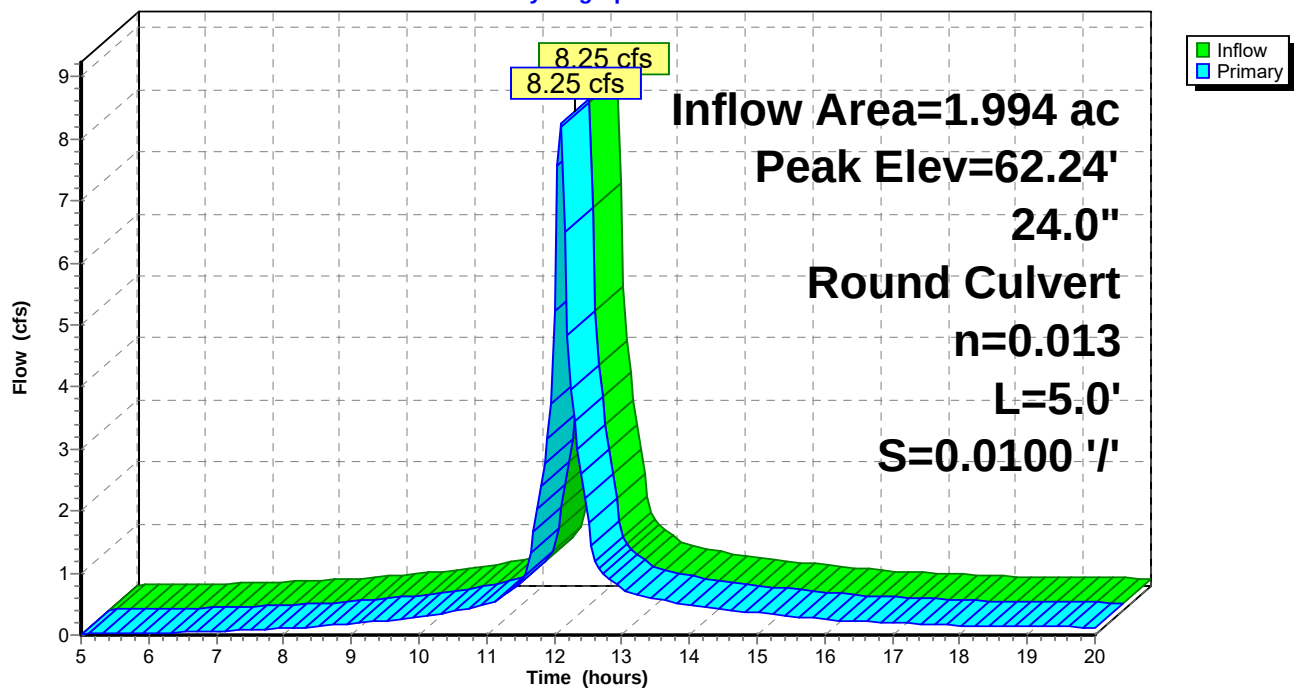
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.24' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.55' | <b>24.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.55' / 60.50' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=8.04 cfs @ 12.09 hrs HW=62.21' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 8.04 cfs @ 3.91 fps)

### Pond 208P: DMH 58

#### Hydrograph



### Summary for Pond 209P: DMH 64

Inflow Area = 1.037 ac, 70.16% Impervious, Inflow Depth > 3.58" for 10-Year event  
 Inflow = 4.33 cfs @ 12.09 hrs, Volume= 0.310 af  
 Outflow = 4.33 cfs @ 12.09 hrs, Volume= 0.310 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.33 cfs @ 12.09 hrs, Volume= 0.310 af  
 Routed to Pond 97P : Sub. Det. 2

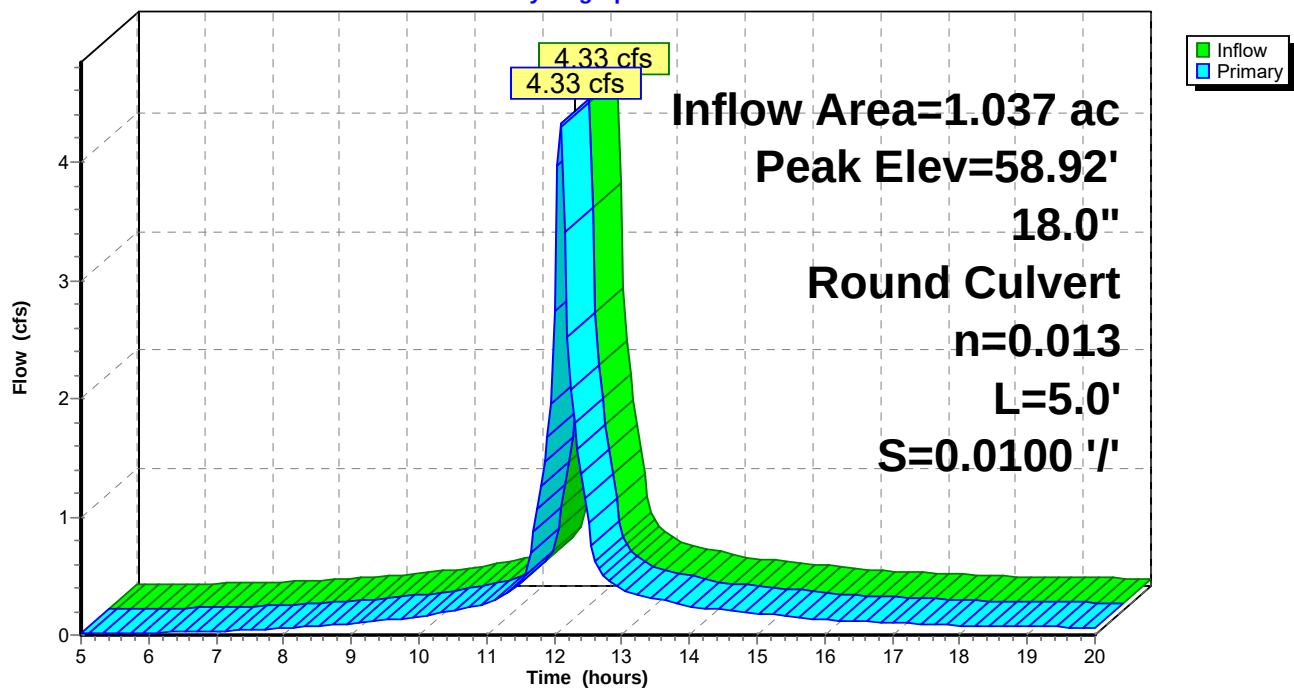
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.92' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.60' | <b>18.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.60' / 57.55' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=4.22 cfs @ 12.09 hrs HW=58.89' (Free Discharge)  
 1=Culvert (Barrel Controls 4.22 cfs @ 3.49 fps)

### Pond 209P: DMH 64

Hydrograph





## Summary for Pond 210P: DMH 68

Inflow Area = 1.935 ac, 78.08% Impervious, Inflow Depth > 3.77" for 10-Year event  
 Inflow = 8.34 cfs @ 12.09 hrs, Volume= 0.607 af  
 Outflow = 8.34 cfs @ 12.09 hrs, Volume= 0.607 af, Atten= 0%, Lag= 0.0 min  
 Primary = 8.34 cfs @ 12.09 hrs, Volume= 0.607 af  
 Routed to Pond 221P : Inf. Basin 6

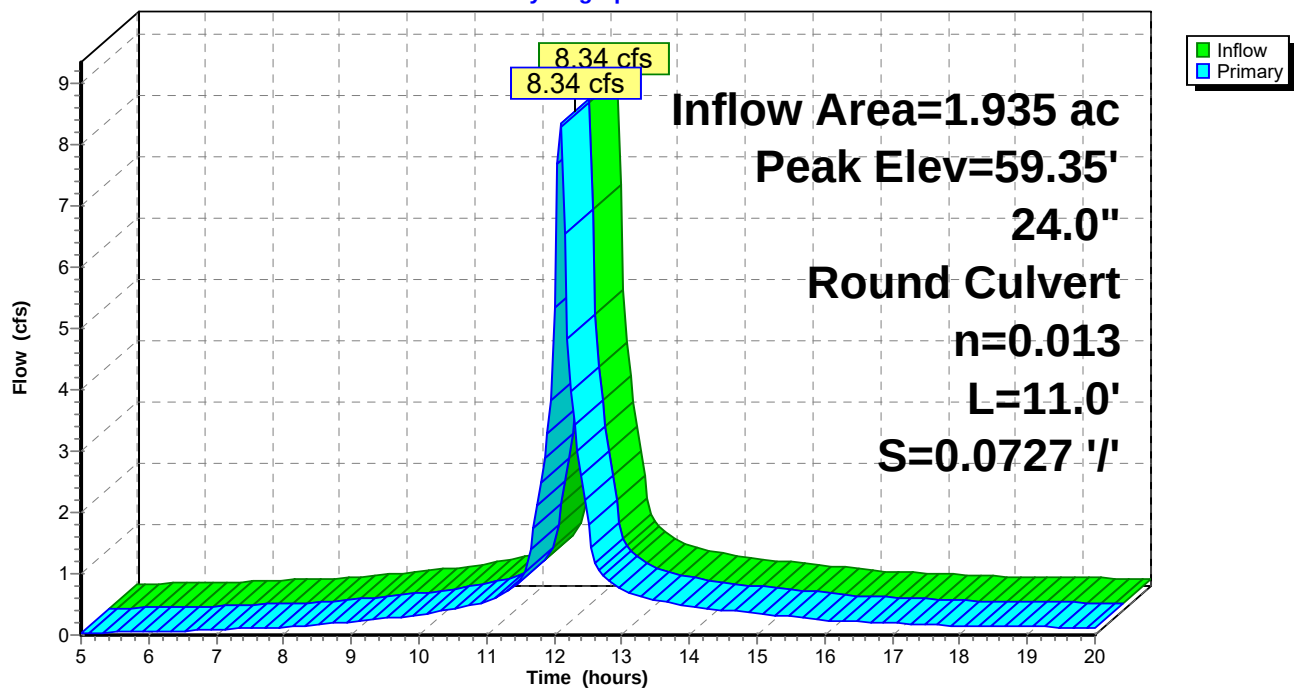
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 59.35' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.85' | <b>24.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.85' / 57.05' S= 0.0727 ' / ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=8.13 cfs @ 12.09 hrs HW=59.33' (Free Discharge)  
 1=Culvert (Inlet Controls 8.13 cfs @ 3.27 fps)

### Pond 210P: DMH 68

## Hydrograph



**Summary for Pond 211P: Sub. Inf. 1B**

Inflow Area = 4.409 ac, 67.96% Impervious, Inflow Depth > 0.78" for 10-Year event  
 Inflow = 4.22 cfs @ 12.09 hrs, Volume= 0.287 af  
 Outflow = 1.33 cfs @ 12.43 hrs, Volume= 0.287 af, Atten= 69%, Lag= 20.2 min  
 Discarded = 0.86 cfs @ 12.43 hrs, Volume= 0.273 af  
 Primary = 0.47 cfs @ 12.43 hrs, Volume= 0.013 af  
 Routed to Pond 214P : DMH 4A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.81' @ 12.43 hrs Surf.Area= 0.064 ac Storage= 0.079 af

Plug-Flow detention time= 27.4 min calculated for 0.287 af (100% of inflow)  
 Center-of-Mass det. time= 27.3 min ( 814.1 - 786.8 )

| Volume   | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                    |
|----------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A      | 50.00' | 0.058 af      | <b>25.25'W x 110.42'L x 3.50'H Field A</b><br>0.224 af Overall - 0.080 af Embedded = 0.144 af x 40.0% Voids                                                                                                                                            |
| #2A      | 50.50' | 0.080 af      | <b>ADS StormTech SC-740 b +Cap x 75 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>75 Chambers in 5 Rows<br>Cap Storage= 2.7 cf x 2 x 5 rows = 26.5 cf |
| 0.137 af |        |               | Total Available Storage                                                                                                                                                                                                                                |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 50.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 47.00'                                                                                                               |
| #2     | Primary   | 51.50' | <b>24.0" Round Culvert</b><br>L= 110.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.50' / 48.00' S= 0.0318 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

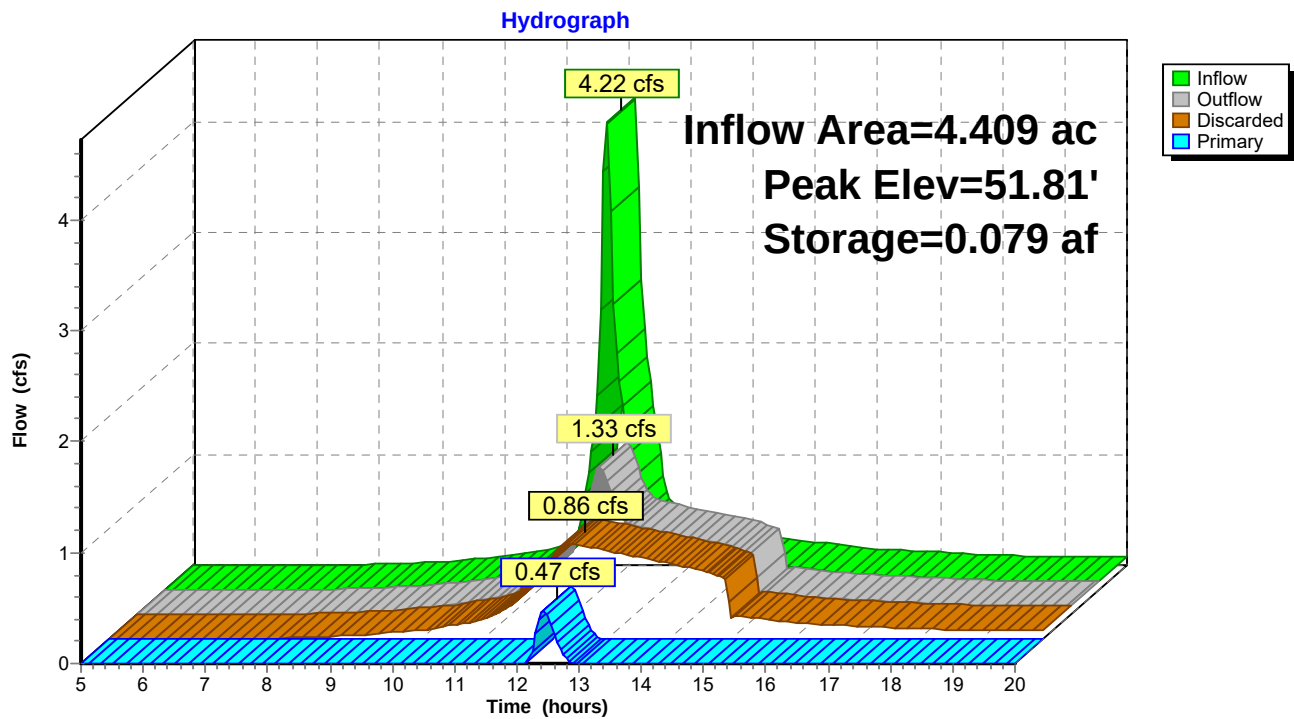
**Discarded OutFlow** Max=0.86 cfs @ 12.43 hrs HW=51.81' (Free Discharge)

↑**1=Exfiltration** ( Controls 0.86 cfs)

**Primary OutFlow** Max=0.46 cfs @ 12.43 hrs HW=51.81' (Free Discharge)

↑**2=Culvert** (Inlet Controls 0.46 cfs @ 1.50 fps)

**Pond 211P: Sub. Inf. 1B**



**Summary for Pond 212P: Sub. Inf. 1A**

Inflow Area = 4.558 ac, 68.27% Impervious, Inflow Depth > 0.13" for 10-Year event  
 Inflow = 0.64 cfs @ 12.41 hrs, Volume= 0.051 af  
 Outflow = 0.48 cfs @ 12.53 hrs, Volume= 0.051 af, Atten= 24%, Lag= 7.4 min  
 Discarded = 0.48 cfs @ 12.53 hrs, Volume= 0.051 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Pond 185P : DMH 4

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 47.63' @ 12.53 hrs Surf.Area= 0.055 ac Storage= 0.003 af

Plug-Flow detention time= 1.8 min calculated for 0.050 af (100% of inflow)  
 Center-of-Mass det. time= 1.7 min ( 770.7 - 769.1 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 47.50' | 0.050 af      | <b>20.50'W x 117.54'L x 3.50'H Field A</b><br>0.194 af Overall - 0.068 af Embedded = 0.126 af x 40.0% Voids                                                                                                                                            |
| #2A    | 48.00' | 0.068 af      | <b>ADS StormTech SC-740 b +Cap x 64 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>64 Chambers in 4 Rows<br>Cap Storage= 2.7 cf x 2 x 4 rows = 21.2 cf |
|        |        | 0.118 af      | Total Available Storage                                                                                                                                                                                                                                |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 47.50' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 45.00'                                                                                                                       |
| #2     | Primary   | 48.00' | <b>18.0" Round Culvert</b><br>L= 17.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.00' / 47.85' S= 0.0088 ' S= 0.0088 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

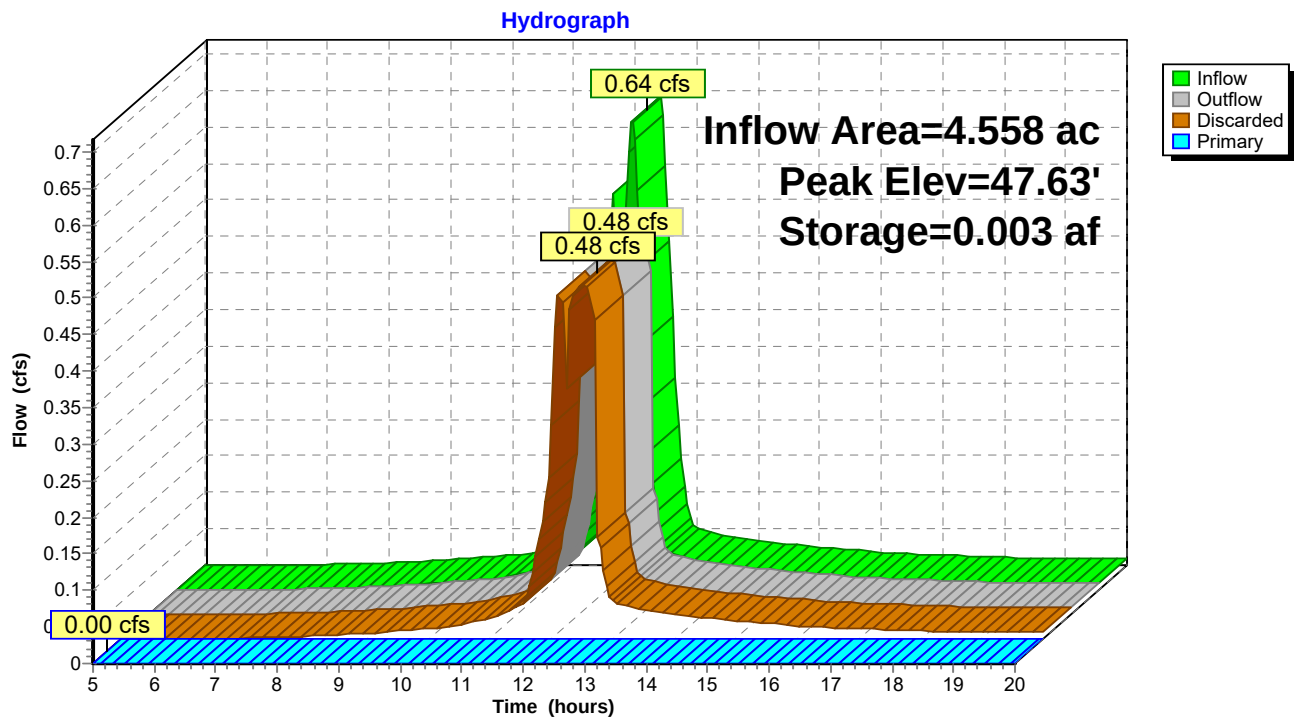
**Discarded OutFlow** Max=0.48 cfs @ 12.53 hrs HW=47.63' (Free Discharge)

↑ **1=Exfiltration** ( Controls 0.48 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=47.50' (Free Discharge)

↑ **2=Culvert** ( Controls 0.00 cfs)

**Pond 212P: Sub. Inf. 1A**



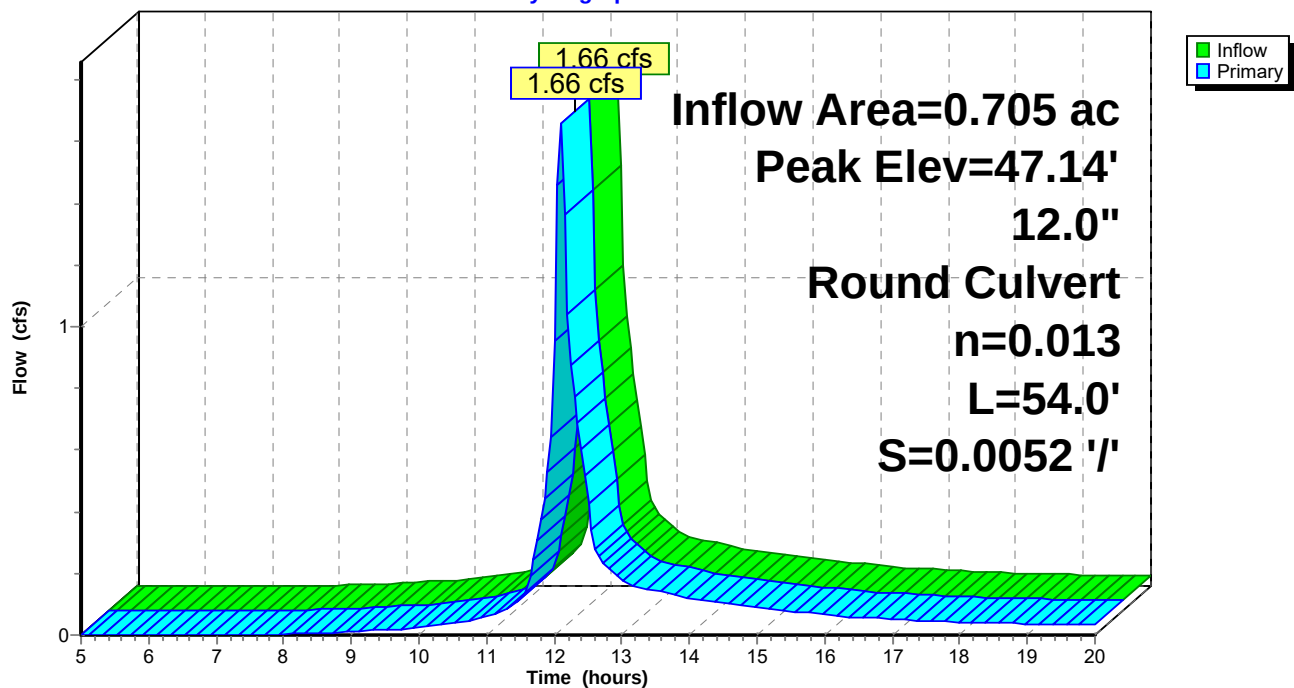
**Summary for Pond 213P: DMH 2**

Inflow Area = 0.705 ac, 57.45% Impervious, Inflow Depth > 1.96" for 10-Year event  
 Inflow = 1.66 cfs @ 12.10 hrs, Volume= 0.115 af  
 Outflow = 1.66 cfs @ 12.10 hrs, Volume= 0.115 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.66 cfs @ 12.10 hrs, Volume= 0.115 af  
 Routed to Pond 186P : Constructed Wetland 1

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 47.14' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 46.28' | <b>12.0" Round Culvert</b><br>L= 54.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 46.28' / 46.00' S= 0.0052 ' / Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.64 cfs @ 12.10 hrs HW=47.13' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.64 cfs @ 3.09 fps)

**Pond 213P: DMH 2****Hydrograph**

### Summary for Pond 214P: DMH 4A

Inflow Area = 4.558 ac, 68.27% Impervious, Inflow Depth > 0.13" for 10-Year event  
 Inflow = 0.64 cfs @ 12.41 hrs, Volume= 0.051 af  
 Outflow = 0.64 cfs @ 12.41 hrs, Volume= 0.051 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.64 cfs @ 12.41 hrs, Volume= 0.051 af  
 Routed to Pond 212P : Sub. Inf. 1A

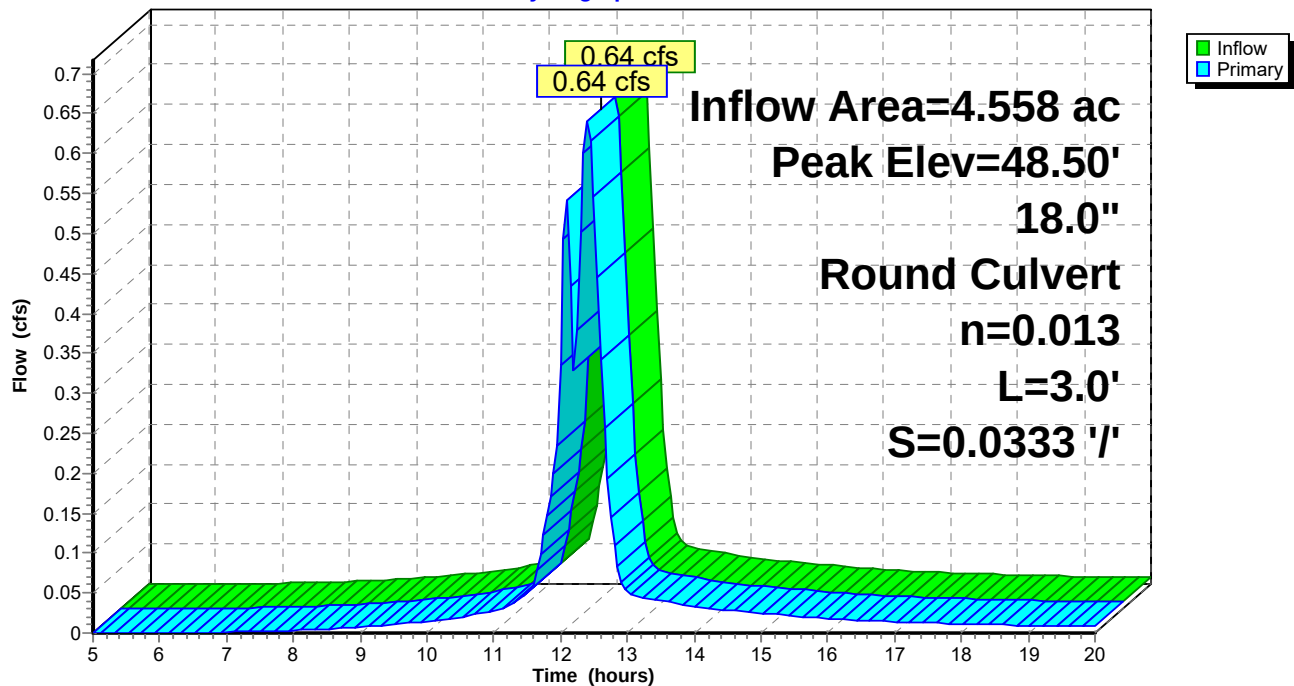
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 48.50' @ 12.41 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.10' | <b>18.0" Round Culvert</b><br>L= 3.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.10' / 48.00' S= 0.0333 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=0.64 cfs @ 12.41 hrs HW=48.50' (Free Discharge)  
 1=Culvert (Barrel Controls 0.64 cfs @ 2.51 fps)

### Pond 214P: DMH 4A

Hydrograph



**Summary for Pond 215P: CB 5A**

Inflow Area = 0.149 ac, 77.32% Impervious, Inflow Depth > 3.02" for 10-Year event  
 Inflow = 0.54 cfs @ 12.09 hrs, Volume= 0.037 af  
 Outflow = 0.54 cfs @ 12.09 hrs, Volume= 0.037 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.54 cfs @ 12.09 hrs, Volume= 0.037 af  
 Routed to Pond 214P : DMH 4A

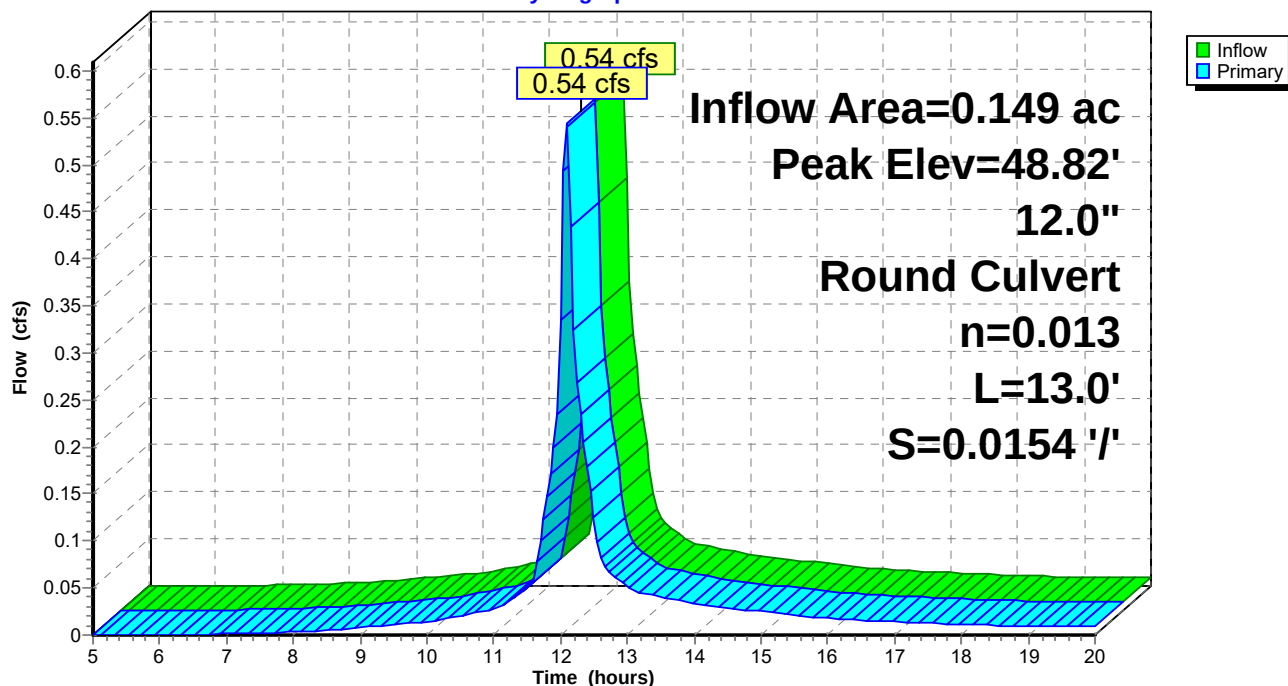
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 48.82' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.40' | <b>12.0" Round Culvert</b><br>L= 13.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.40' / 48.20' S= 0.0154 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.53 cfs @ 12.09 hrs HW=48.81' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.53 cfs @ 1.73 fps)

**Pond 215P: CB 5A**

Hydrograph





**Summary for Pond 216P: CB 8A**

Inflow Area = 0.484 ac, 16.33% Impervious, Inflow Depth > 0.13" for 10-Year event  
 Inflow = 0.01 cfs @ 13.80 hrs, Volume= 0.005 af  
 Outflow = 0.01 cfs @ 13.80 hrs, Volume= 0.005 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.01 cfs @ 13.80 hrs, Volume= 0.005 af  
 Routed to Pond 171P : DMH 6

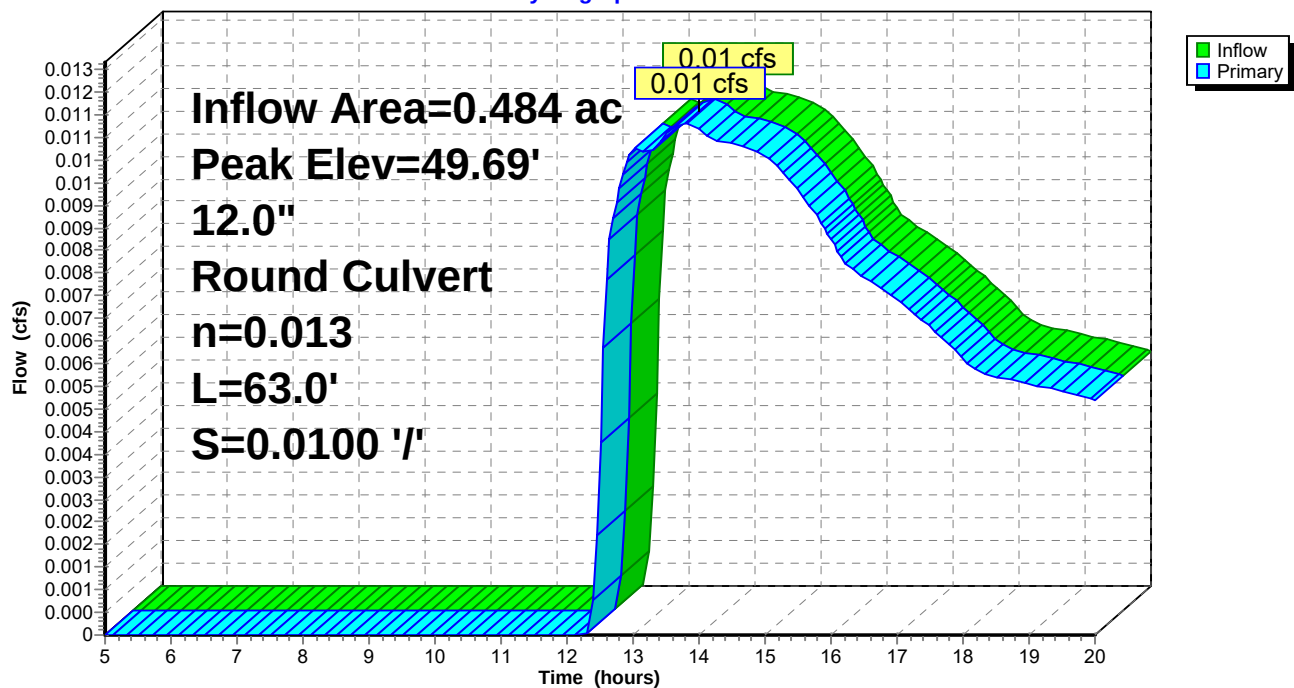
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 49.69' @ 13.80 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 49.63' | <b>12.0" Round Culvert</b><br>L= 63.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.63' / 49.00' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.01 cfs @ 13.80 hrs HW=49.69' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 0.01 cfs @ 0.64 fps)

**Pond 216P: CB 8A****Hydrograph**

### Summary for Pond 217P: DMH 8A

Inflow Area = 4.409 ac, 67.96% Impervious, Inflow Depth > 0.78" for 10-Year event  
 Inflow = 4.22 cfs @ 12.09 hrs, Volume= 0.287 af  
 Outflow = 4.22 cfs @ 12.09 hrs, Volume= 0.287 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.22 cfs @ 12.09 hrs, Volume= 0.287 af  
 Routed to Pond 211P : Sub. Inf. 1B

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 51.84' @ 12.09 hrs

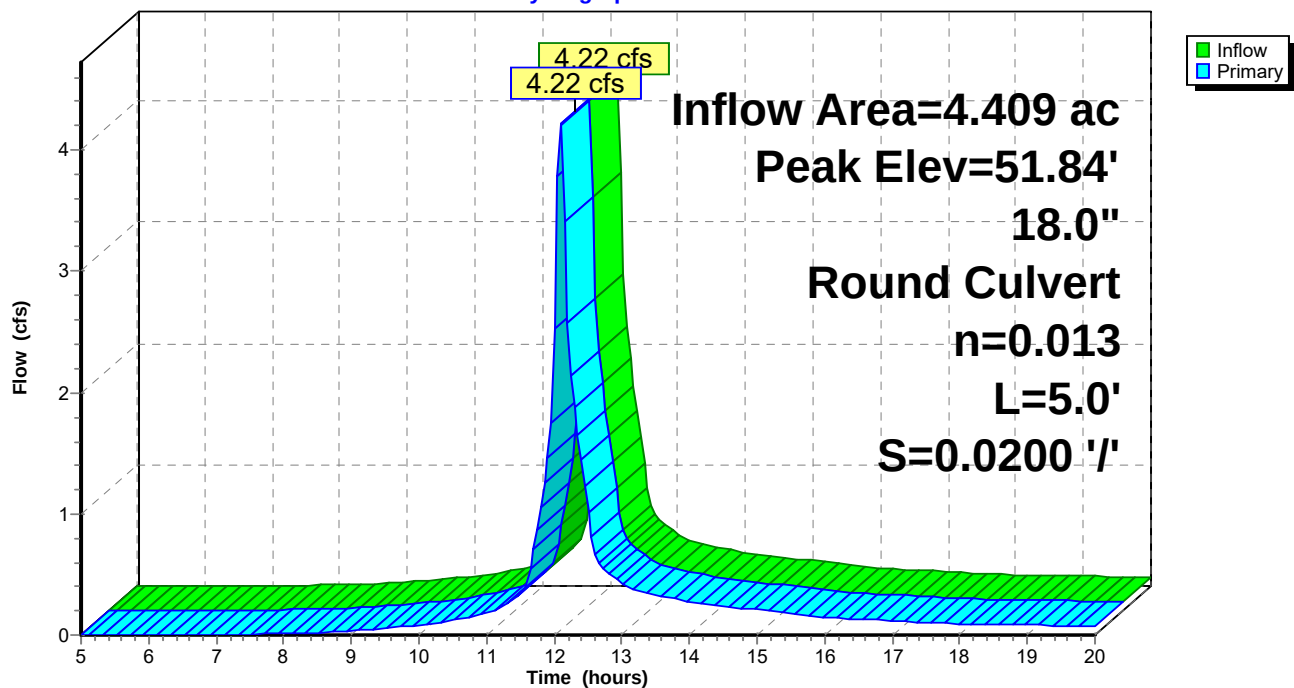
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.60' | <b>18.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.60' / 50.50' S= 0.0200 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=4.14 cfs @ 12.09 hrs HW=51.83' (Free Discharge)

1=Culvert (Barrel Controls 4.14 cfs @ 3.64 fps)

### Pond 217P: DMH 8A

Hydrograph



**Summary for Pond 218P: CB A**

Inflow Area = 0.214 ac, 64.54% Impervious, Inflow Depth > 2.31" for 10-Year event  
 Inflow = 0.61 cfs @ 12.09 hrs, Volume= 0.041 af  
 Outflow = 0.61 cfs @ 12.09 hrs, Volume= 0.041 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.61 cfs @ 12.09 hrs, Volume= 0.041 af  
 Routed to Pond 219P : DMH A

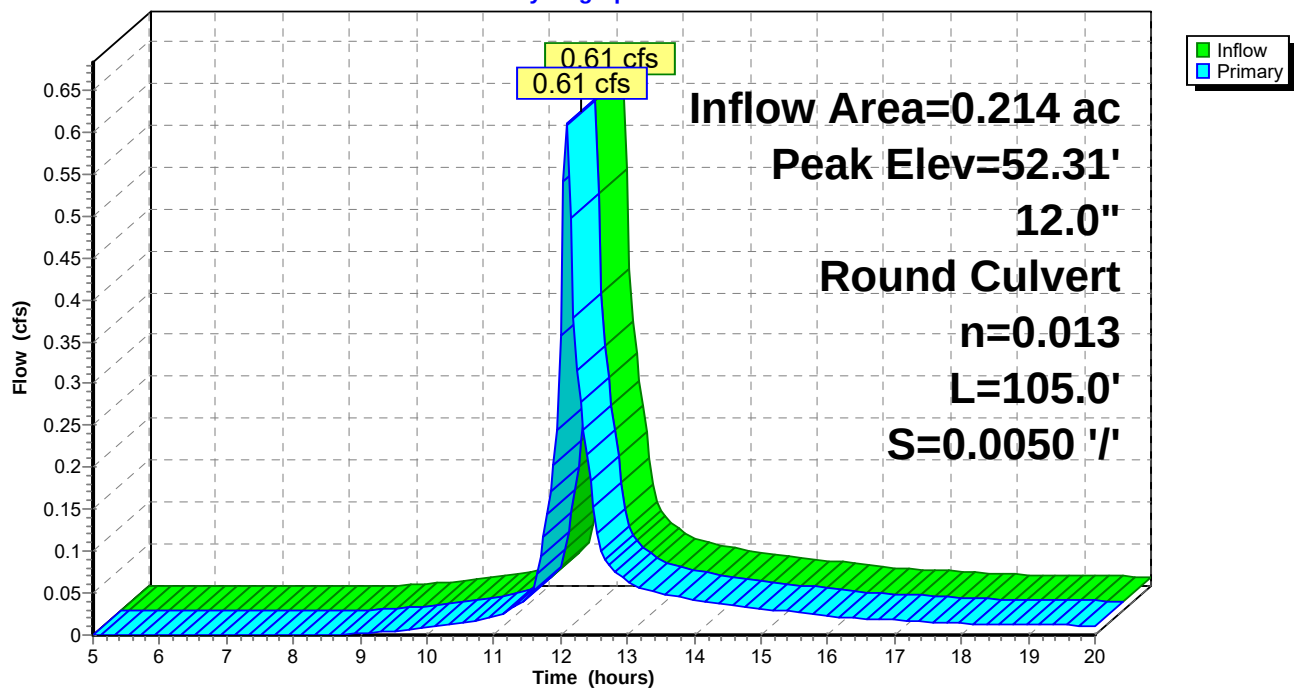
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.31' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.85' | <b>12.0" Round Culvert</b><br>L= 105.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.85' / 51.32' S= 0.0050 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.60 cfs @ 12.09 hrs HW=52.31' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.60 cfs @ 2.50 fps)

**Pond 218P: CB A**

Hydrograph



**Summary for Pond 219P: DMH A**

Inflow Area = 0.214 ac, 64.54% Impervious, Inflow Depth > 2.31" for 10-Year event  
 Inflow = 0.61 cfs @ 12.09 hrs, Volume= 0.041 af  
 Outflow = 0.61 cfs @ 12.09 hrs, Volume= 0.041 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.61 cfs @ 12.09 hrs, Volume= 0.041 af  
 Routed to Pond 220P : DMH B

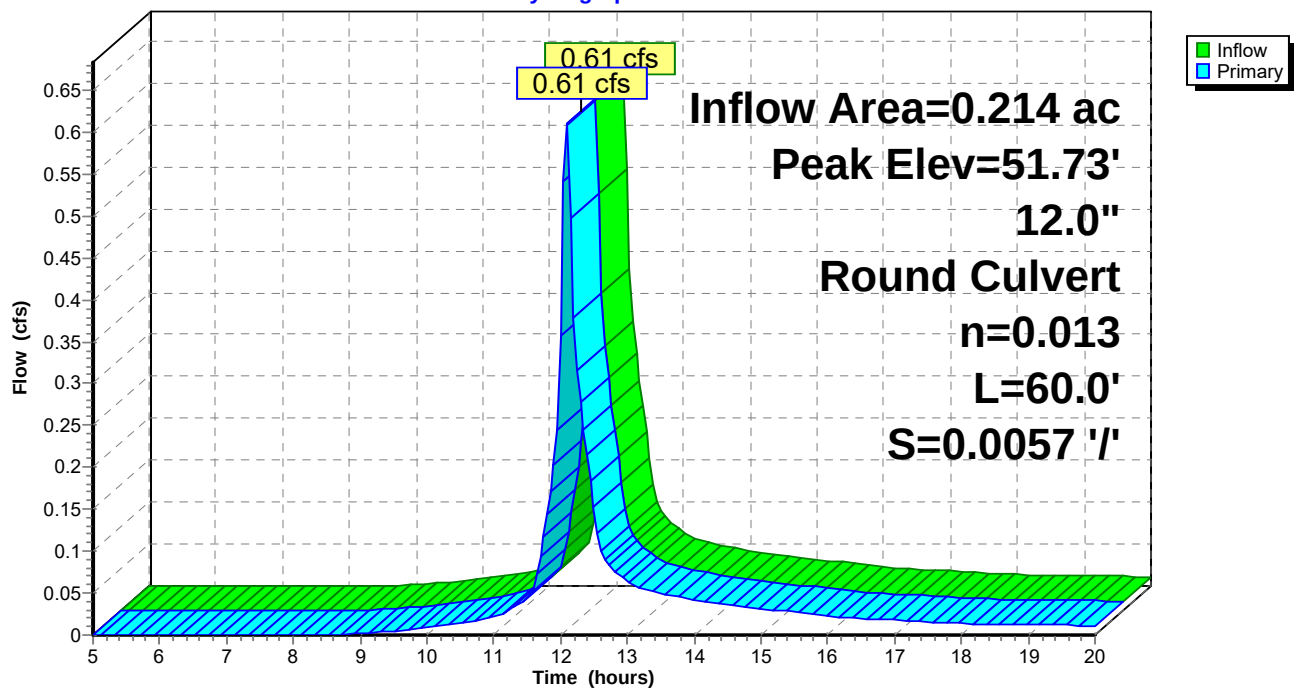
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.73' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.27' | <b>12.0" Round Culvert</b><br>L= 60.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.27' / 50.93' S= 0.0057 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.60 cfs @ 12.09 hrs HW=51.73' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.60 cfs @ 2.52 fps)

**Pond 219P: DMH A**

Hydrograph



### Summary for Pond 220P: DMH B

Inflow Area = 0.214 ac, 64.54% Impervious, Inflow Depth > 2.31" for 10-Year event  
 Inflow = 0.61 cfs @ 12.09 hrs, Volume= 0.041 af  
 Outflow = 0.61 cfs @ 12.09 hrs, Volume= 0.041 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.61 cfs @ 12.09 hrs, Volume= 0.041 af  
 Routed to Pond 192P : Sub. Inf. 8

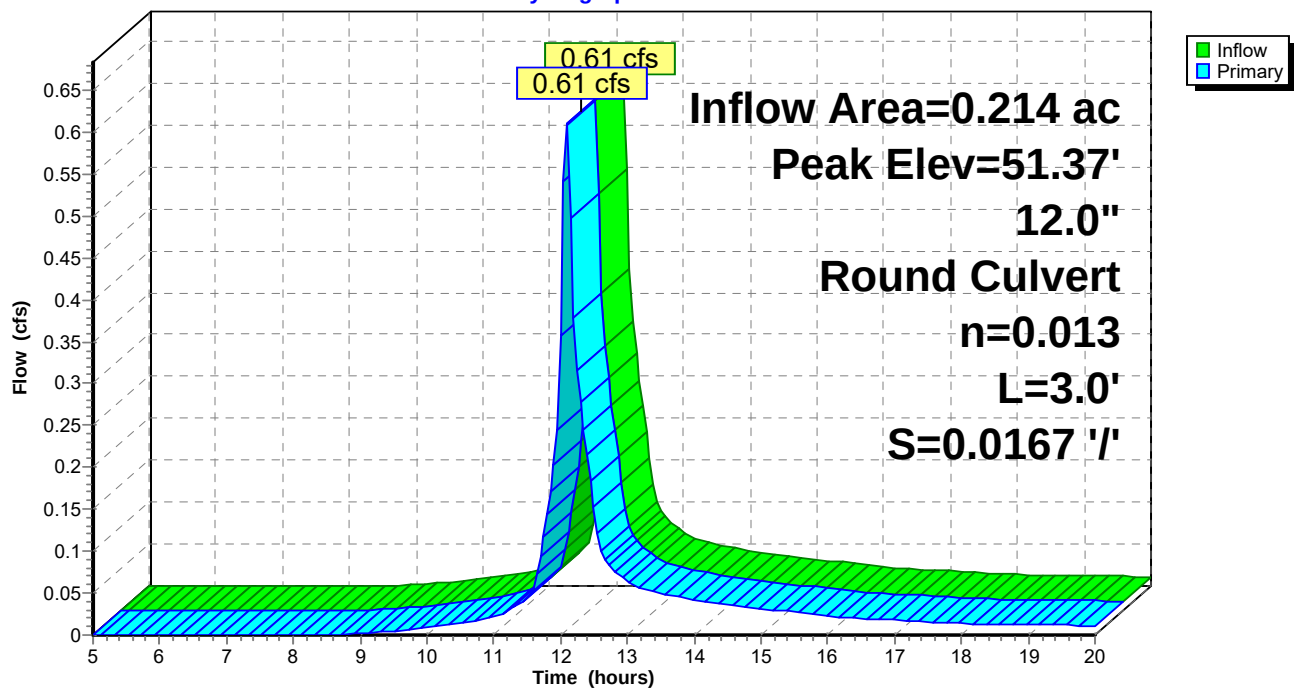
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.37' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.88' | <b>12.0" Round Culvert</b><br>L= 3.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.88' / 50.83' S= 0.0167 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.60 cfs @ 12.09 hrs HW=51.36' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.60 cfs @ 2.33 fps)

### Pond 220P: DMH B

Hydrograph



### Summary for Pond 221P: Inf. Basin 6

Inflow Area = 1.935 ac, 78.08% Impervious, Inflow Depth > 3.77" for 10-Year event  
 Inflow = 8.34 cfs @ 12.09 hrs, Volume= 0.607 af  
 Outflow = 3.92 cfs @ 12.26 hrs, Volume= 0.568 af, Atten= 53%, Lag= 10.3 min  
 Discarded = 0.19 cfs @ 12.26 hrs, Volume= 0.116 af  
 Primary = 3.73 cfs @ 12.26 hrs, Volume= 0.452 af  
 Routed to Pond 195P : Constructed Wetland 4

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.06' @ 12.26 hrs Surf.Area= 4,423 sf Storage= 7,407 cf

Plug-Flow detention time= 58.9 min calculated for 0.568 af (94% of inflow)  
 Center-of-Mass det. time= 35.0 min ( 788.0 - 753.0 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 56.00' | 17,627 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

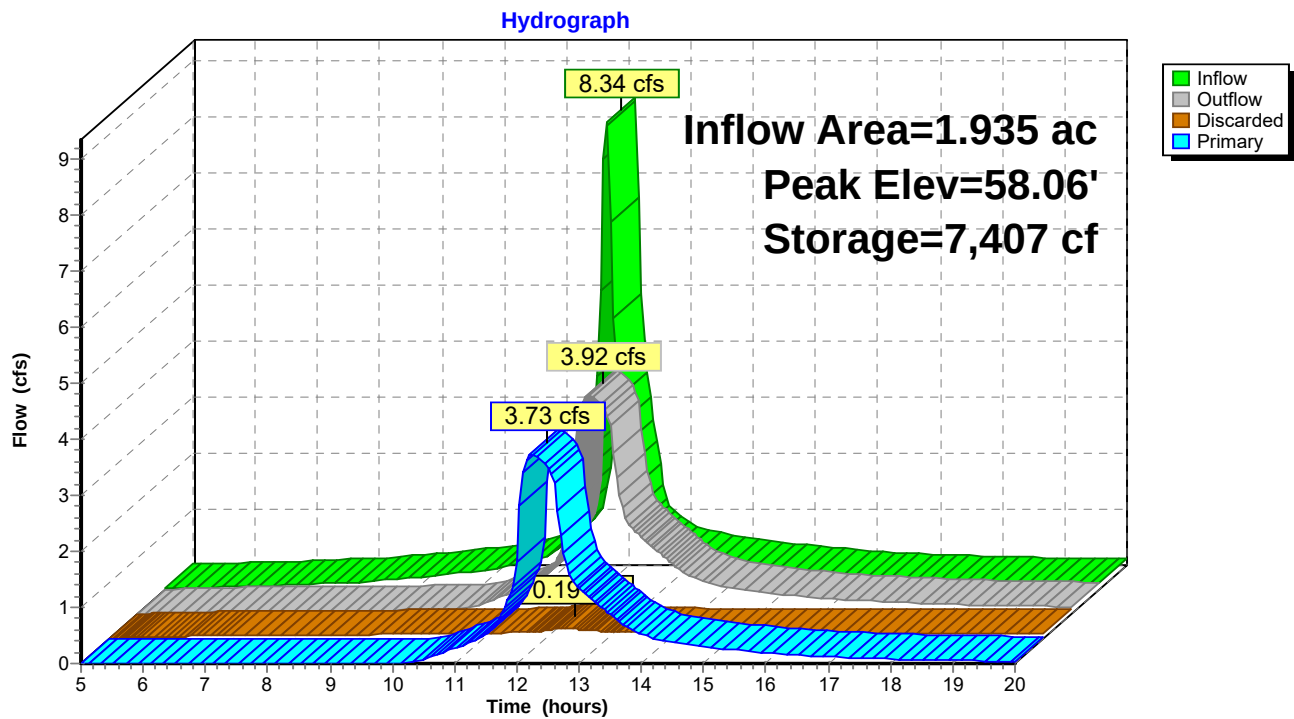
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 56.00               | 2,718                | 0                         | 0                         |
| 57.00               | 3,594                | 3,156                     | 3,156                     |
| 58.00               | 4,371                | 3,983                     | 7,139                     |
| 59.00               | 5,223                | 4,797                     | 11,936                    |
| 60.00               | 6,159                | 5,691                     | 17,627                    |

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 56.00' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 54.00'                                                                                                                       |
| #2     | Primary   | 56.00' | <b>12.0" Round Culvert</b><br>L= 35.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 56.00' / 53.00' S= 0.0857 ' S= 0.0857 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 56.50' | <b>6.0" Vert. Orifice/Grate X 2.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                      |
| #4     | Device 2  | 57.30' | <b>24.0" W x 24.0" H Vert. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                |

**Discarded OutFlow** Max=0.19 cfs @ 12.26 hrs HW=58.06' (Free Discharge)  
 ↳ **1=Exfiltration** ( Controls 0.19 cfs)

**Primary OutFlow** Max=3.73 cfs @ 12.26 hrs HW=58.06' (Free Discharge)  
 ↳ **2=Culvert** (Inlet Controls 3.73 cfs @ 4.75 fps)  
 ↳ ↳ **3=Orifice/Grate** (Passes < 2.16 cfs potential flow)  
 ↳ ↳ **4=Orifice/Grate** (Passes < 4.24 cfs potential flow)

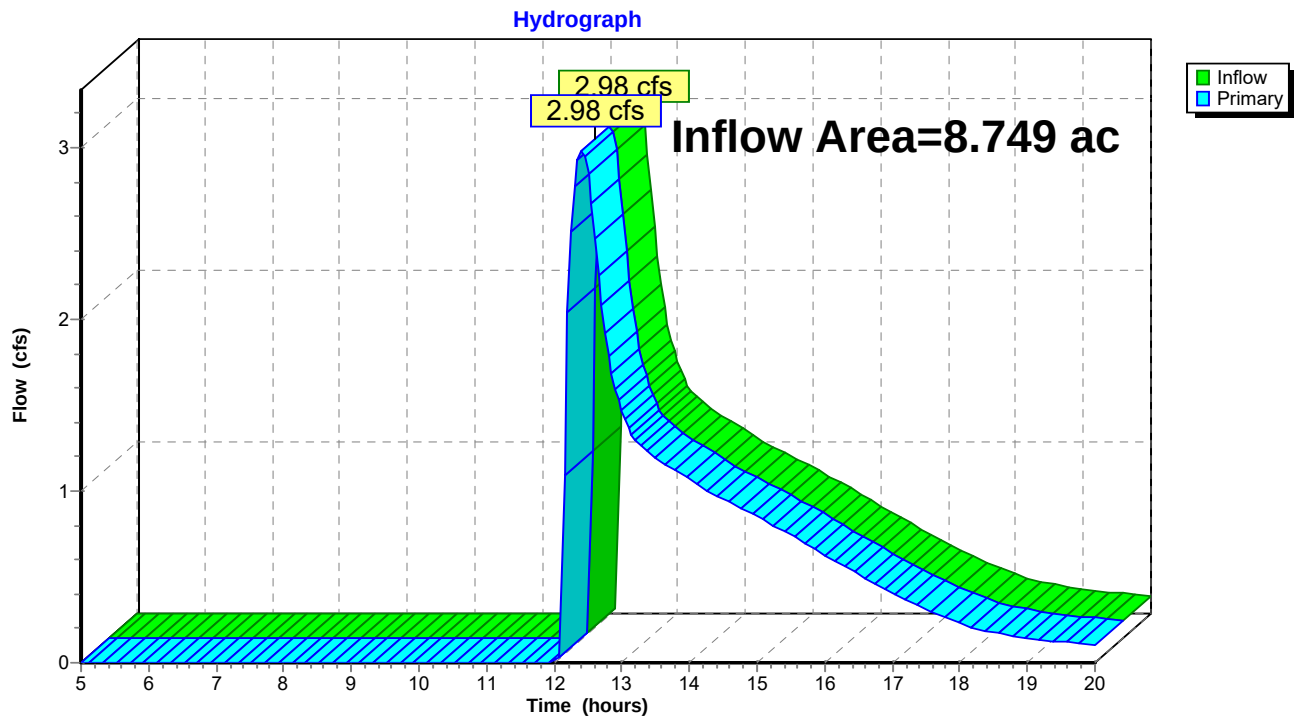
**Pond 221P: Inf. Basin 6**



**Summary for Link 59L: DP 1**

Inflow Area = 8.749 ac, 31.63% Impervious, Inflow Depth > 0.68" for 10-Year event  
Inflow = 2.98 cfs @ 12.41 hrs, Volume= 0.494 af  
Primary = 2.98 cfs @ 12.41 hrs, Volume= 0.494 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

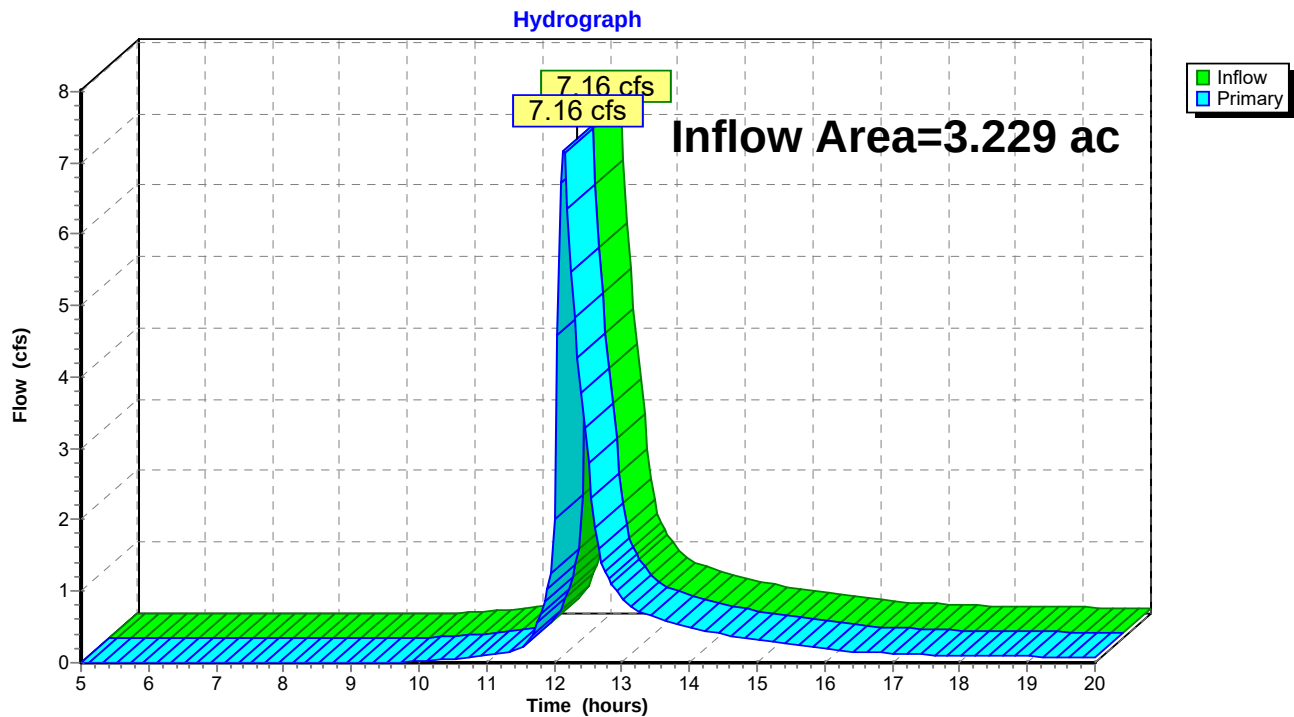
**Link 59L: DP 1**



**Summary for Link 60L: DP 2**

Inflow Area = 3.229 ac, 32.60% Impervious, Inflow Depth > 1.66" for 10-Year event  
Inflow = 7.16 cfs @ 12.14 hrs, Volume= 0.446 af  
Primary = 7.16 cfs @ 12.14 hrs, Volume= 0.446 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Link 60L: DP 2**

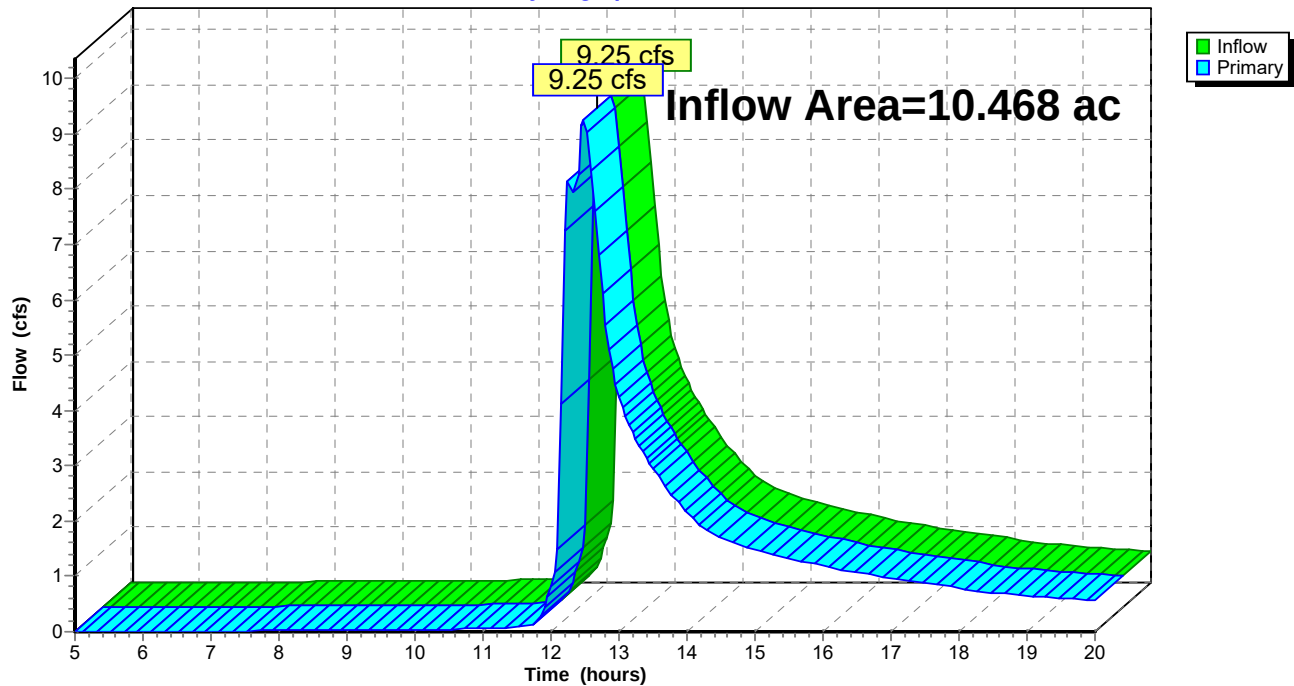
**Summary for Link 188L: DP 3**

Inflow Area = 10.468 ac, 46.25% Impervious, Inflow Depth > 1.51" for 10-Year event  
Inflow = 9.25 cfs @ 12.48 hrs, Volume= 1.313 af  
Primary = 9.25 cfs @ 12.48 hrs, Volume= 1.313 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Link 188L: DP 3**

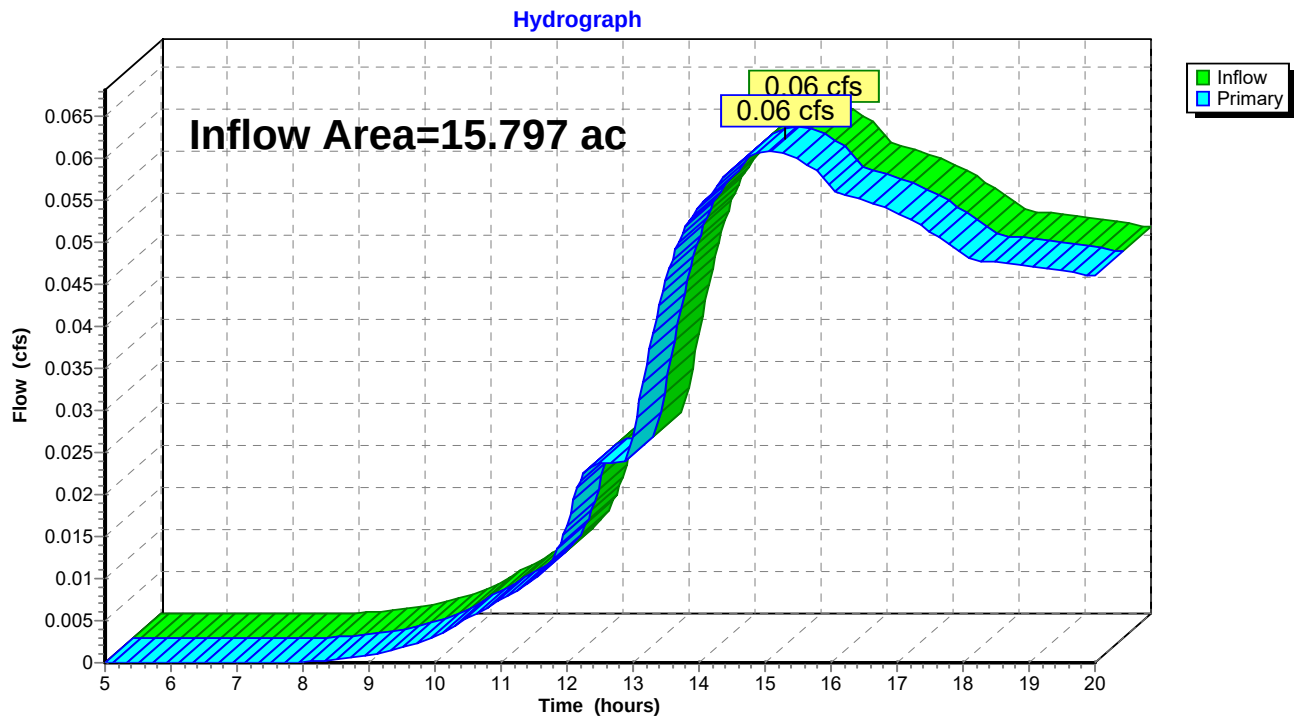
Hydrograph



**Summary for Link 203L: 3A**

Inflow Area = 15.797 ac, 47.23% Impervious, Inflow Depth > 0.03" for 10-Year event  
Inflow = 0.06 cfs @ 15.10 hrs, Volume= 0.033 af  
Primary = 0.06 cfs @ 15.10 hrs, Volume= 0.033 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Link 203L: 3A**

Time span=5.00-20.00 hrs, dt=0.05 hrs, 301 points  
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN  
Reach routing by Stor-Ind+Trans method - Pond routing by Stor-Ind method

|                             |                                                                                                                    |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Subcatchment1S: P1A</b>  | Runoff Area=7,501 sf 96.61% Impervious Runoff Depth>7.94"<br>Tc=6.0 min CN=97 Runoff=1.47 cfs 0.114 af             |
| <b>Subcatchment2S: P1B</b>  | Runoff Area=16,584 sf 74.19% Impervious Runoff Depth>7.50"<br>Tc=6.0 min CN=92 Runoff=3.18 cfs 0.238 af            |
| <b>Subcatchment3S: P1C</b>  | Runoff Area=6,087 sf 64.30% Impervious Runoff Depth>7.18"<br>Tc=6.0 min CN=89 Runoff=1.14 cfs 0.084 af             |
| <b>Subcatchment4S: P1D</b>  | Runoff Area=2,767 sf 81.50% Impervious Runoff Depth>7.69"<br>Tc=6.0 min CN=94 Runoff=0.54 cfs 0.041 af             |
| <b>Subcatchment5S: P1E</b>  | Runoff Area=11,538 sf 66.20% Impervious Runoff Depth>7.29"<br>Tc=6.0 min CN=90 Runoff=2.18 cfs 0.161 af            |
| <b>Subcatchment6S: P1F</b>  | Runoff Area=4,817 sf 71.39% Impervious Runoff Depth>7.40"<br>Tc=6.0 min CN=91 Runoff=0.92 cfs 0.068 af             |
| <b>Subcatchment7S: P1G</b>  | Runoff Area=5,511 sf 100.00% Impervious Runoff Depth>8.00"<br>Tc=6.0 min CN=98 Runoff=1.08 cfs 0.084 af            |
| <b>Subcatchment8S: P1H</b>  | Runoff Area=13,713 sf 81.38% Impervious Runoff Depth>7.69"<br>Tc=6.0 min CN=94 Runoff=2.66 cfs 0.202 af            |
| <b>Subcatchment9S: P1I</b>  | Runoff Area=3,616 sf 78.43% Impervious Runoff Depth>7.60"<br>Tc=6.0 min CN=93 Runoff=0.70 cfs 0.053 af             |
| <b>Subcatchment10S: P1J</b> | Runoff Area=1,937 sf 100.00% Impervious Runoff Depth>8.00"<br>Tc=6.0 min CN=98 Runoff=0.38 cfs 0.030 af            |
| <b>Subcatchment11S: P1K</b> | Runoff Area=1,936 sf 96.85% Impervious Runoff Depth>7.94"<br>Tc=6.0 min CN=97 Runoff=0.38 cfs 0.029 af             |
| <b>Subcatchment12S: P1L</b> | Runoff Area=9,821 sf 78.85% Impervious Runoff Depth>7.60"<br>Tc=6.0 min CN=93 Runoff=1.89 cfs 0.143 af             |
| <b>Subcatchment13S: P1M</b> | Runoff Area=8,699 sf 94.53% Impervious Runoff Depth>7.94"<br>Tc=6.0 min CN=97 Runoff=1.71 cfs 0.132 af             |
| <b>Subcatchment14S: P1N</b> | Runoff Area=14,865 sf 3.94% Impervious Runoff Depth>5.42"<br>Tc=6.0 min UI Adjusted CN=74 Runoff=2.25 cfs 0.154 af |
| <b>Subcatchment39S: P1P</b> | Runoff Area=7,939 sf 66.96% Impervious Runoff Depth>7.29"<br>Tc=6.0 min CN=90 Runoff=1.50 cfs 0.111 af             |
| <b>Subcatchment40S: P1O</b> | Runoff Area=978 sf 100.00% Impervious Runoff Depth>8.00"<br>Tc=6.0 min CN=98 Runoff=0.19 cfs 0.015 af              |

**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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*Type III 24-hr 100-Year Rainfall=8.94"*

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|                                      |                                                                                                                                       |
|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Subcatchment44S: P1R</b>          | Runoff Area=15,334 sf 70.58% Impervious Runoff Depth>6.50"<br>Tc=6.0 min CN=83 Runoff=2.68 cfs 0.191 af                               |
| <b>Subcatchment45S: P1Q</b>          | Runoff Area=5,247 sf 97.54% Impervious Runoff Depth>7.94"<br>Tc=6.0 min CN=97 Runoff=1.03 cfs 0.080 af                                |
| <b>Subcatchment50S: P1S</b>          | Runoff Area=22,872 sf 65.45% Impervious Runoff Depth>5.90"<br>Tc=6.0 min CN=78 Runoff=3.72 cfs 0.258 af                               |
| <b>Subcatchment51S: P1T</b>          | Runoff Area=13,963 sf 29.26% Impervious Runoff Depth>3.28"<br>Tc=6.0 min CN=56 Runoff=1.29 cfs 0.088 af                               |
| <b>Subcatchment57S: (new Subcat)</b> | Runoff Area=23,511 sf 5.60% Impervious Runoff Depth>1.39"<br>Flow Length=87' Tc=13.0 min UI Adjusted CN=39 Runoff=0.58 cfs 0.062 af   |
| <b>Subcatchment58S: P1AA</b>         | Runoff Area=217,595 sf 2.56% Impervious Runoff Depth>2.03"<br>Flow Length=111' Tc=11.7 min UI Adjusted CN=45 Runoff=9.49 cfs 0.844 af |
| <b>Subcatchment60S: P2C</b>          | Runoff Area=6,486 sf 73.97% Impervious Runoff Depth>7.50"<br>Tc=6.0 min CN=92 Runoff=1.24 cfs 0.093 af                                |
| <b>Subcatchment61S: P2D</b>          | Runoff Area=1,464 sf 87.02% Impervious Runoff Depth>7.78"<br>Tc=6.0 min CN=95 Runoff=0.29 cfs 0.022 af                                |
| <b>Subcatchment62S: P2J</b>          | Runoff Area=10,675 sf 72.86% Impervious Runoff Depth>7.40"<br>Tc=6.0 min CN=91 Runoff=2.03 cfs 0.151 af                               |
| <b>Subcatchment63S: P2K</b>          | Runoff Area=6,698 sf 76.98% Impervious Runoff Depth>7.50"<br>Tc=6.0 min CN=92 Runoff=1.28 cfs 0.096 af                                |
| <b>Subcatchment64S: P3L</b>          | Runoff Area=2,885 sf 66.55% Impervious Runoff Depth>7.29"<br>Tc=6.0 min CN=90 Runoff=0.54 cfs 0.040 af                                |
| <b>Subcatchment65S: P3M</b>          | Runoff Area=5,397 sf 69.69% Impervious Runoff Depth>7.40"<br>Tc=6.0 min CN=91 Runoff=1.03 cfs 0.076 af                                |
| <b>Subcatchment66S: P3N</b>          | Runoff Area=7,748 sf 72.79% Impervious Runoff Depth>7.40"<br>Tc=6.0 min CN=91 Runoff=1.47 cfs 0.110 af                                |
| <b>Subcatchment67S: P3O</b>          | Runoff Area=8,254 sf 78.29% Impervious Runoff Depth>7.60"<br>Tc=6.0 min CN=93 Runoff=1.59 cfs 0.120 af                                |
| <b>Subcatchment68S: P3P</b>          | Runoff Area=4,070 sf 80.29% Impervious Runoff Depth>7.60"<br>Tc=6.0 min CN=93 Runoff=0.78 cfs 0.059 af                                |
| <b>Subcatchment69S: P2E</b>          | Runoff Area=7,088 sf 82.69% Impervious Runoff Depth>7.69"<br>Tc=6.0 min CN=94 Runoff=1.37 cfs 0.104 af                                |
| <b>Subcatchment70S: P2F</b>          | Runoff Area=3,932 sf 100.00% Impervious Runoff Depth>8.00"<br>Tc=6.0 min CN=98 Runoff=0.77 cfs 0.060 af                               |
| <b>Subcatchment71S: P2A</b>          | Runoff Area=10,978 sf 65.83% Impervious Runoff Depth>7.29"<br>Tc=6.0 min CN=90 Runoff=2.07 cfs 0.153 af                               |

|                                      |                                                                                                                                     |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| <b>Subcatchment72S: P2B</b>          | Runoff Area=7,563 sf 65.05% Impervious Runoff Depth>7.29"<br>Tc=6.0 min CN=90 Runoff=1.43 cfs 0.106 af                              |
| <b>Subcatchment73S: P2G</b>          | Runoff Area=8,223 sf 71.07% Impervious Runoff Depth>7.40"<br>Tc=6.0 min CN=91 Runoff=1.56 cfs 0.116 af                              |
| <b>Subcatchment74S: P2H</b>          | Runoff Area=4,268 sf 95.31% Impervious Runoff Depth>7.78"<br>Tc=6.0 min CN=95 Runoff=0.83 cfs 0.064 af                              |
| <b>Subcatchment75S: P3Q</b>          | Runoff Area=10,219 sf 64.37% Impervious Runoff Depth>7.18"<br>Tc=6.0 min CN=89 Runoff=1.91 cfs 0.140 af                             |
| <b>Subcatchment76S: P3R</b>          | Runoff Area=13,649 sf 76.83% Impervious Runoff Depth>7.50"<br>Tc=6.0 min CN=92 Runoff=2.61 cfs 0.196 af                             |
| <b>Subcatchment77S: P3S</b>          | Runoff Area=7,757 sf 69.60% Impervious Runoff Depth>7.40"<br>Tc=6.0 min CN=91 Runoff=1.48 cfs 0.110 af                              |
| <b>Subcatchment78S: P1S</b>          | Runoff Area=12,630 sf 58.56% Impervious Runoff Depth>6.85"<br>Tc=6.0 min CN=86 Runoff=2.29 cfs 0.165 af                             |
| <b>Subcatchment79S: P1T</b>          | Runoff Area=11,982 sf 72.42% Impervious Runoff Depth>7.40"<br>Tc=6.0 min CN=91 Runoff=2.28 cfs 0.170 af                             |
| <b>Subcatchment80S: P3KK</b>         | Runoff Area=8,557 sf 76.76% Impervious Runoff Depth>6.62"<br>Tc=6.0 min CN=84 Runoff=1.52 cfs 0.108 af                              |
| <b>Subcatchment81S: P3LL</b>         | Runoff Area=9,785 sf 79.18% Impervious Runoff Depth>6.85"<br>Tc=6.0 min CN=86 Runoff=1.78 cfs 0.128 af                              |
| <b>Subcatchment82S: P3SS</b>         | Runoff Area=12,880 sf 67.55% Impervious Runoff Depth>6.02"<br>Tc=6.0 min CN=79 Runoff=2.13 cfs 0.148 af                             |
| <b>Subcatchment83S: P2I</b>          | Runoff Area=13,847 sf 51.48% Impervious Runoff Depth>6.02"<br>Tc=6.0 min CN=79 Runoff=2.29 cfs 0.159 af                             |
| <b>Subcatchment84S: P2AA</b>         | Runoff Area=71,125 sf 7.37% Impervious Runoff Depth>5.17"<br>Flow Length=201' Tc=8.4 min UI Adjusted CN=72 Runoff=9.59 cfs 0.704 af |
| <b>Subcatchment85S: (new Subcat)</b> | Runoff Area=25,650 sf 36.87% Impervious Runoff Depth>6.50"<br>Tc=6.0 min CN=83 Runoff=4.49 cfs 0.319 af                             |
| <b>Subcatchment86S: P3TT</b>         | Runoff Area=13,926 sf 63.97% Impervious Runoff Depth>5.90"<br>Tc=6.0 min CN=78 Runoff=2.26 cfs 0.157 af                             |
| <b>Subcatchment87S: P3A</b>          | Runoff Area=2,273 sf 80.20% Impervious Runoff Depth>7.60"<br>Tc=6.0 min CN=93 Runoff=0.44 cfs 0.033 af                              |
| <b>Subcatchment88S: P3B</b>          | Runoff Area=4,538 sf 76.91% Impervious Runoff Depth>7.50"<br>Tc=6.0 min CN=92 Runoff=0.87 cfs 0.065 af                              |

**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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*Type III 24-hr 100-Year Rainfall=8.94"*

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|                               |                                                                                                         |
|-------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Subcatchment89S: P3AAA</b> | Runoff Area=6,945 sf 74.64% Impervious Runoff Depth>6.50"<br>Tc=6.0 min CN=83 Runoff=1.21 cfs 0.086 af  |
| <b>Subcatchment90S: P3BBB</b> | Runoff Area=9,141 sf 67.61% Impervious Runoff Depth>6.02"<br>Tc=6.0 min CN=79 Runoff=1.51 cfs 0.105 af  |
| <b>Subcatchment91S: P3GGG</b> | Runoff Area=9,122 sf 66.66% Impervious Runoff Depth>5.90"<br>Tc=6.0 min CN=78 Runoff=1.48 cfs 0.103 af  |
| <b>Subcatchment92S: P3C</b>   | Runoff Area=6,128 sf 70.69% Impervious Runoff Depth>7.40"<br>Tc=6.0 min CN=91 Runoff=1.17 cfs 0.087 af  |
| <b>Subcatchment93S: P3D</b>   | Runoff Area=8,893 sf 71.21% Impervious Runoff Depth>7.40"<br>Tc=6.0 min CN=91 Runoff=1.69 cfs 0.126 af  |
| <b>Subcatchment94S: P3HHH</b> | Runoff Area=9,026 sf 76.76% Impervious Runoff Depth>6.62"<br>Tc=6.0 min CN=84 Runoff=1.60 cfs 0.114 af  |
| <b>Subcatchment95S: P2X</b>   | Runoff Area=6,460 sf 100.00% Impervious Runoff Depth>8.00"<br>Tc=6.0 min CN=98 Runoff=1.27 cfs 0.099 af |
| <b>Subcatchment97S: P3G</b>   | Runoff Area=16,665 sf 73.17% Impervious Runoff Depth>7.50"<br>Tc=6.0 min CN=92 Runoff=3.19 cfs 0.239 af |
| <b>Subcatchment98S: P3H</b>   | Runoff Area=11,218 sf 68.08% Impervious Runoff Depth>7.29"<br>Tc=6.0 min CN=90 Runoff=2.12 cfs 0.157 af |
| <b>Subcatchment102S: P3J</b>  | Runoff Area=14,925 sf 64.21% Impervious Runoff Depth>7.18"<br>Tc=6.0 min CN=89 Runoff=2.79 cfs 0.205 af |
| <b>Subcatchment103S: P3I</b>  | Runoff Area=21,963 sf 74.80% Impervious Runoff Depth>7.50"<br>Tc=6.0 min CN=92 Runoff=4.21 cfs 0.315 af |
| <b>Subcatchment107S: P3E</b>  | Runoff Area=17,242 sf 64.26% Impervious Runoff Depth>7.18"<br>Tc=6.0 min CN=89 Runoff=3.22 cfs 0.237 af |
| <b>Subcatchment108S: P3F</b>  | Runoff Area=19,891 sf 64.44% Impervious Runoff Depth>7.18"<br>Tc=6.0 min CN=89 Runoff=3.72 cfs 0.273 af |
| <b>Subcatchment109S: P3T</b>  | Runoff Area=11,178 sf 83.40% Impervious Runoff Depth>7.69"<br>Tc=6.0 min CN=94 Runoff=2.17 cfs 0.165 af |
| <b>Subcatchment110S: P3U</b>  | Runoff Area=14,474 sf 76.35% Impervious Runoff Depth>7.50"<br>Tc=6.0 min CN=92 Runoff=2.77 cfs 0.208 af |
| <b>Subcatchment111S: P3V</b>  | Runoff Area=14,345 sf 82.49% Impervious Runoff Depth>7.69"<br>Tc=6.0 min CN=94 Runoff=2.78 cfs 0.211 af |
| <b>Subcatchment112S: P3W</b>  | Runoff Area=8,601 sf 91.64% Impervious Runoff Depth>7.86"<br>Tc=6.0 min CN=96 Runoff=1.68 cfs 0.129 af  |
| <b>Subcatchment125S: P3EE</b> | Runoff Area=23,054 sf 81.18% Impervious Runoff Depth>6.96"<br>Tc=6.0 min CN=87 Runoff=4.23 cfs 0.307 af |

|                                                                  |                                                                                                                    |
|------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Subcatchment126S: P3FF</b>                                    | Runoff Area=17,312 sf 70.10% Impervious Runoff Depth>6.14"<br>Tc=6.0 min CN=80 Runoff=2.90 cfs 0.203 af            |
| <b>Subcatchment127S: P3GG</b>                                    | Runoff Area=16,395 sf 53.54% Impervious Runoff Depth>5.06"<br>Tc=6.0 min CN=71 Runoff=2.33 cfs 0.159 af            |
| <b>Subcatchment128S: P3HH</b>                                    | Runoff Area=15,226 sf 63.87% Impervious Runoff Depth>5.78"<br>Tc=6.0 min CN=77 Runoff=2.43 cfs 0.168 af            |
| <b>Subcatchment129S: P3MM</b>                                    | Runoff Area=7,841 sf 66.23% Impervious Runoff Depth>5.90"<br>Tc=6.0 min CN=78 Runoff=1.27 cfs 0.088 af             |
| <b>Subcatchment130S: P3NN</b>                                    | Runoff Area=6,295 sf 72.58% Impervious Runoff Depth>6.38"<br>Tc=6.0 min CN=82 Runoff=1.09 cfs 0.077 af             |
| <b>Subcatchment136S: P3II</b>                                    | Runoff Area=10,900 sf 80.29% Impervious Runoff Depth>6.85"<br>Tc=6.0 min CN=86 Runoff=1.98 cfs 0.143 af            |
| <b>Subcatchment138S: P3JJ</b><br>Flow Length=50' Slope=0.0100 '/ | Runoff Area=14,214 sf 6.96% Impervious Runoff Depth>1.60"<br>Tc=7.5 min UI Adjusted CN=41 Runoff=0.51 cfs 0.044 af |
| <b>Subcatchment140S: P3OO</b>                                    | Runoff Area=17,829 sf 65.98% Impervious Runoff Depth>5.90"<br>Tc=6.0 min CN=78 Runoff=2.90 cfs 0.201 af            |
| <b>Subcatchment141S: P3PP</b>                                    | Runoff Area=25,131 sf 66.17% Impervious Runoff Depth>5.90"<br>Tc=6.0 min CN=78 Runoff=4.08 cfs 0.284 af            |
| <b>Subcatchment142S: P3UU</b>                                    | Runoff Area=3,331 sf 72.53% Impervious Runoff Depth>6.38"<br>Tc=6.0 min CN=82 Runoff=0.57 cfs 0.041 af             |
| <b>Subcatchment143S: P3VV</b>                                    | Runoff Area=3,461 sf 73.82% Impervious Runoff Depth>6.50"<br>Tc=6.0 min CN=83 Runoff=0.61 cfs 0.043 af             |
| <b>Subcatchment147S: P3QQ</b>                                    | Runoff Area=8,544 sf 80.21% Impervious Runoff Depth>6.85"<br>Tc=6.0 min CN=86 Runoff=1.55 cfs 0.112 af             |
| <b>Subcatchment149S: P3RR</b><br>Flow Length=50' Slope=0.0100 '/ | Runoff Area=7,953 sf 10.10% Impervious Runoff Depth>1.71"<br>Tc=7.5 min UI Adjusted CN=42 Runoff=0.31 cfs 0.026 af |
| <b>Subcatchment151S: P3ZZ</b>                                    | Runoff Area=6,359 sf 79.60% Impervious Runoff Depth>6.85"<br>Tc=6.0 min CN=86 Runoff=1.15 cfs 0.083 af             |
| <b>Subcatchment152S: P3YY</b>                                    | Runoff Area=5,089 sf 70.43% Impervious Runoff Depth>6.26"<br>Tc=6.0 min CN=81 Runoff=0.87 cfs 0.061 af             |
| <b>Subcatchment153S: P3WW</b>                                    | Runoff Area=9,574 sf 74.64% Impervious Runoff Depth>6.50"<br>Tc=6.0 min CN=83 Runoff=1.67 cfs 0.119 af             |
| <b>Subcatchment154S: P3XX</b>                                    | Runoff Area=4,702 sf 90.07% Impervious Runoff Depth>7.50"<br>Tc=6.0 min CN=92 Runoff=0.90 cfs 0.067 af             |



**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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*Type III 24-hr 100-Year Rainfall=8.94"*

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|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Subcatchment155S: P3CCC</b>        | Runoff Area=13,537 sf 63.37% Impervious Runoff Depth>5.66"<br>Tc=6.0 min CN=76 Runoff=2.12 cfs 0.147 af                               |
| <b>Subcatchment156S: P3DDD</b>        | Runoff Area=17,001 sf 63.16% Impervious Runoff Depth>5.66"<br>Tc=6.0 min CN=76 Runoff=2.67 cfs 0.184 af                               |
| <b>Subcatchment165S: P3FFF</b>        | Runoff Area=10,066 sf 30.05% Impervious Runoff Depth>3.40"<br>Tc=6.0 min CN=57 Runoff=0.97 cfs 0.065 af                               |
| <b>Subcatchment166S: P3EEE</b>        | Runoff Area=9,100 sf 65.78% Impervious Runoff Depth>5.90"<br>Tc=6.0 min CN=78 Runoff=1.48 cfs 0.103 af                                |
| <b>Subcatchment170S: P3JJJ</b>        | Runoff Area=13,803 sf 75.85% Impervious Runoff Depth>6.62"<br>Tc=6.0 min CN=84 Runoff=2.45 cfs 0.175 af                               |
| <b>Subcatchment171S: P3III</b>        | Runoff Area=5,653 sf 71.18% Impervious Runoff Depth>6.26"<br>Tc=6.0 min CN=81 Runoff=0.96 cfs 0.068 af                                |
| <b>Subcatchment175S: P3KKK</b>        | Runoff Area=13,904 sf 64.43% Impervious Runoff Depth>5.78"<br>Tc=6.0 min CN=77 Runoff=2.22 cfs 0.154 af                               |
| <b>Subcatchment176S: P3LLL</b>        | Runoff Area=6,640 sf 60.77% Impervious Runoff Depth>5.54"<br>Tc=6.0 min CN=75 Runoff=1.02 cfs 0.070 af                                |
| <b>Subcatchment182S: P3MMM</b>        | Runoff Area=5,111 sf 57.03% Impervious Runoff Depth>5.30"<br>Tc=6.0 min CN=73 Runoff=0.76 cfs 0.052 af                                |
| <b>Subcatchment183S: P3NNN</b>        | Runoff Area=9,871 sf 61.54% Impervious Runoff Depth>5.54"<br>Tc=6.0 min CN=75 Runoff=1.52 cfs 0.105 af                                |
| <b>Subcatchment184S: P3OOO</b>        | Runoff Area=8,647 sf 57.72% Impervious Runoff Depth>5.30"<br>Tc=6.0 min CN=73 Runoff=1.28 cfs 0.088 af                                |
| <b>Subcatchment185S: P3PPP</b>        | Runoff Area=4,572 sf 75.17% Impervious Runoff Depth>6.50"<br>Tc=6.0 min CN=83 Runoff=0.80 cfs 0.057 af                                |
| <b>Subcatchment186S: P3QQQ</b>        | Runoff Area=6,874 sf 54.66% Impervious Runoff Depth>4.94"<br>Tc=6.0 min CN=70 Runoff=0.96 cfs 0.065 af                                |
| <b>Subcatchment187S: P3RRR</b>        | Runoff Area=12,294 sf 69.07% Impervious Runoff Depth>6.14"<br>Tc=6.0 min CN=80 Runoff=2.06 cfs 0.144 af                               |
| <b>Subcatchment189S: (new Subcat)</b> | Runoff Area=179,843 sf 4.59% Impervious Runoff Depth>2.92"<br>Flow Length=322' Tc=20.8 min UI Adjusted CN=53 Runoff=9.84 cfs 1.003 af |
| <b>Subcatchment190S: (new Subcat)</b> | Runoff Area=12,078 sf 85.87% Impervious Runoff Depth>7.29"<br>Tc=6.0 min CN=90 Runoff=2.28 cfs 0.168 af                               |
| <b>Subcatchment191S: P3SSS</b>        | Runoff Area=7,482 sf 31.70% Impervious Runoff Depth>2.93"<br>Tc=6.0 min CN=53 Runoff=0.61 cfs 0.042 af                                |
| <b>Subcatchment192S: P3TTT</b>        | Runoff Area=4,075 sf 74.38% Impervious Runoff Depth>6.50"<br>Tc=6.0 min CN=83 Runoff=0.71 cfs 0.051 af                                |

|                                       |                                                                                                                                                   |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Subcatchment195S: P3UUU</b>        | Runoff Area=14,624 sf 80.22% Impervious Runoff Depth>6.85"<br>Tc=6.0 min CN=86 Runoff=2.65 cfs 0.192 af                                           |
| <b>Subcatchment198S: P3VVV</b>        | Runoff Area=12,434 sf 0.00% Impervious Runoff Depth>1.39"<br>Tc=6.0 min CN=39 Runoff=0.39 cfs 0.033 af                                            |
| <b>Subcatchment202S: (new Subcat)</b> | Runoff Area=26,038 sf 46.07% Impervious Runoff Depth>4.46"<br>Tc=6.0 min CN=66 Runoff=3.29 cfs 0.222 af                                           |
| <b>Subcatchment204S: (new Subcat)</b> | Runoff Area=149,084 sf 3.60% Impervious Runoff Depth>1.09"<br>Flow Length=135' Tc=8.1 min UI Adjusted CN=36 Runoff=2.91 cfs 0.312 af              |
| <b>Subcatchment205S: (new Subcat)</b> | Runoff Area=9,322 sf 64.54% Impervious Runoff Depth>5.78"<br>Tc=6.0 min CN=77 Runoff=1.49 cfs 0.103 af                                            |
| <b>Subcatchment206S: (new Subcat)</b> | Runoff Area=15,098 sf 0.00% Impervious Runoff Depth>1.39"<br>Tc=6.0 min CN=39 Runoff=0.48 cfs 0.040 af                                            |
| <b>Subcatchment207S: (new Subcat)</b> | Runoff Area=21,068 sf 16.33% Impervious Runoff Depth>1.39"<br>Flow Length=156' Tc=15.7 min UI Adjusted CN=39 Runoff=0.49 cfs 0.056 af             |
| <b>Subcatchment216S: (new Subcat)</b> | Runoff Area=6,486 sf 77.32% Impervious Runoff Depth>6.73"<br>Tc=6.0 min CN=85 Runoff=1.16 cfs 0.084 af                                            |
| <b>Pond 15P: Inf. Basin 5</b>         | Peak Elev=60.48' Storage=26,758 cf Inflow=20.47 cfs 1.532 af<br>Discarded=0.35 cfs 0.287 af Primary=11.09 cfs 0.927 af Outflow=11.44 cfs 1.213 af |
| <b>Pond 16P: CB 58</b>                | Peak Elev=62.91' Inflow=1.47 cfs 0.114 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=1.47 cfs 0.114 af                             |
| <b>Pond 17P: CB 59</b>                | Peak Elev=63.73' Inflow=3.18 cfs 0.238 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' Outflow=3.18 cfs 0.238 af                             |
| <b>Pond 18P: CB 63</b>                | Peak Elev=64.57' Inflow=1.14 cfs 0.084 af<br>12.0" Round Culvert n=0.013 L=13.0' S=0.0077 ' Outflow=1.14 cfs 0.084 af                             |
| <b>Pond 19P: CB 62</b>                | Peak Elev=64.32' Inflow=0.54 cfs 0.041 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.54 cfs 0.041 af                             |
| <b>Pond 20P: DMH 43</b>               | Peak Elev=64.82' Inflow=4.65 cfs 0.352 af<br>12.0" Round Culvert n=0.013 L=66.0' S=0.0050 ' Outflow=4.65 cfs 0.352 af                             |
| <b>Pond 21P: DMH 42</b>               | Peak Elev=64.39' Inflow=4.65 cfs 0.352 af<br>12.0" Round Culvert n=0.013 L=71.0' S=0.0052 ' Outflow=4.65 cfs 0.352 af                             |
| <b>Pond 22P: CB 56</b>                | Peak Elev=61.86' Inflow=1.08 cfs 0.084 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=1.08 cfs 0.084 af                             |
| <b>Pond 23P: CB 57</b>                | Peak Elev=62.49' Inflow=2.66 cfs 0.202 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=2.66 cfs 0.202 af                             |

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| <b>Pond 24P: DMH 41</b> | Peak Elev=63.31' Inflow=8.39 cfs 0.638 af<br>18.0" Round Culvert n=0.013 L=55.0' S=0.0322 ' Outflow=8.39 cfs 0.638 af   |
| <b>Pond 25P: DMH 45</b> | Peak Elev=64.50' Inflow=1.68 cfs 0.124 af<br>12.0" Round Culvert n=0.013 L=148.0' S=0.0100 ' Outflow=1.68 cfs 0.124 af  |
| <b>Pond 26P: CB 61</b>  | Peak Elev=63.37' Inflow=2.18 cfs 0.161 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' Outflow=2.18 cfs 0.161 af   |
| <b>Pond 27P: CB 60</b>  | Peak Elev=62.91' Inflow=0.92 cfs 0.068 af<br>12.0" Round Culvert n=0.013 L=13.0' S=0.0077 ' Outflow=0.92 cfs 0.068 af   |
| <b>Pond 28P: DMH 44</b> | Peak Elev=65.14' Inflow=4.77 cfs 0.354 af<br>12.0" Round Culvert n=0.013 L=85.0' S=0.0338 ' Outflow=4.77 cfs 0.354 af   |
| <b>Pond 29P: DMH 40</b> | Peak Elev=61.47' Inflow=13.86 cfs 1.044 af<br>24.0" Round Culvert n=0.013 L=25.0' S=0.0120 ' Outflow=13.86 cfs 1.044 af |
| <b>Pond 30P: CB 55</b>  | Peak Elev=60.71' Inflow=0.70 cfs 0.053 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0667 ' Outflow=0.70 cfs 0.053 af   |
| <b>Pond 31P: CB 51</b>  | Peak Elev=60.67' Inflow=0.38 cfs 0.029 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.38 cfs 0.029 af   |
| <b>Pond 32P: CB 52</b>  | Peak Elev=61.25' Inflow=1.89 cfs 0.143 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=1.89 cfs 0.143 af   |
| <b>Pond 33P: CB 53</b>  | Peak Elev=61.11' Inflow=0.38 cfs 0.030 af<br>12.0" Round Culvert n=0.013 L=9.0' S=0.1111 ' Outflow=0.38 cfs 0.030 af    |
| <b>Pond 34P: DMH 36</b> | Peak Elev=61.18' Inflow=2.27 cfs 0.172 af<br>12.0" Round Culvert n=0.013 L=67.0' S=0.0051 ' Outflow=2.27 cfs 0.172 af   |
| <b>Pond 35P: DMH 37</b> | Peak Elev=61.02' Inflow=2.66 cfs 0.202 af<br>12.0" Round Culvert n=0.013 L=52.0' S=0.0050 ' Outflow=2.66 cfs 0.202 af   |
| <b>Pond 36P: CB 54</b>  | Peak Elev=61.03' Inflow=1.71 cfs 0.132 af<br>12.0" Round Culvert n=0.013 L=7.0' S=0.1143 ' Outflow=1.71 cfs 0.132 af    |
| <b>Pond 37P: DMH 38</b> | Peak Elev=62.15' Inflow=4.36 cfs 0.334 af<br>12.0" Round Culvert n=0.013 L=94.0' S=0.0050 ' Outflow=4.36 cfs 0.334 af   |
| <b>Pond 38P: DMH 39</b> | Peak Elev=62.05' Inflow=18.22 cfs 1.378 af<br>24.0" Round Culvert n=0.013 L=68.0' S=0.0254 ' Outflow=18.22 cfs 1.378 af |
| <b>Pond 41P: CB 49</b>  | Peak Elev=58.74' Inflow=0.19 cfs 0.015 af<br>12.0" Round Culvert n=0.013 L=8.0' S=0.0125 ' Outflow=0.19 cfs 0.015 af    |
| <b>Pond 42P: CB 50</b>  | Peak Elev=59.30' Inflow=1.50 cfs 0.111 af<br>12.0" Round Culvert n=0.013 L=8.0' S=0.0125 ' Outflow=1.50 cfs 0.111 af    |
| <b>Pond 43P: DMH 35</b> | Peak Elev=59.12' Inflow=1.69 cfs 0.126 af<br>12.0" Round Culvert n=0.013 L=87.0' S=0.0414 ' Outflow=1.69 cfs 0.126 af   |

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| <b>Pond 46P: CB 48</b>        | Peak Elev=56.10' Inflow=2.68 cfs 0.191 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=2.68 cfs 0.191 af                           |
| <b>Pond 47P: CB 47</b>        | Peak Elev=55.45' Inflow=1.03 cfs 0.080 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=1.03 cfs 0.080 af                           |
| <b>Pond 48P: DMH 33</b>       | Peak Elev=56.64' Inflow=3.71 cfs 0.270 af<br>12.0" Round Culvert n=0.013 L=5.0' S=0.0200 ' Outflow=3.71 cfs 0.270 af                            |
| <b>Pond 49P: Sub. Inf. 4</b>  | Peak Elev=57.27' Storage=0.156 af Inflow=9.97 cfs 0.731 af<br>Discarded=0.14 cfs 0.128 af Primary=9.99 cfs 0.490 af Outflow=10.13 cfs 0.618 af  |
| <b>Pond 52P: CB 20</b>        | Peak Elev=51.80' Inflow=1.29 cfs 0.088 af<br>12.0" Round Culvert n=0.013 L=22.0' S=0.0091 ' Outflow=1.29 cfs 0.088 af                           |
| <b>Pond 53P: CB 21</b>        | Peak Elev=53.15' Inflow=3.72 cfs 0.258 af<br>12.0" Round Culvert n=0.013 L=24.0' S=0.0083 ' Outflow=3.72 cfs 0.258 af                           |
| <b>Pond 54P: DMH 15</b>       | Peak Elev=54.53' Inflow=5.00 cfs 0.346 af<br>12.0" Round Culvert n=0.013 L=104.0' S=0.0050 ' Outflow=5.00 cfs 0.346 af                          |
| <b>Pond 55P: DMH 16</b>       | Peak Elev=53.48' Inflow=5.00 cfs 0.346 af<br>12.0" Round Culvert n=0.013 L=35.0' S=0.0051 ' Outflow=5.00 cfs 0.346 af                           |
| <b>Pond 56P: Inf. Basin 4</b> | Peak Elev=52.54' Storage=5,978 cf Inflow=5.32 cfs 0.408 af<br>Discarded=1.14 cfs 0.408 af Secondary=0.00 cfs 0.000 af Outflow=1.14 cfs 0.408 af |
| <b>Pond 60P: Sub. Det. 1</b>  | Peak Elev=63.46' Storage=0.201 af Inflow=16.42 cfs 1.217 af<br>Outflow=11.05 cfs 1.128 af                                                       |
| <b>Pond 61P: CB 8</b>         | Peak Elev=50.90' Inflow=0.76 cfs 0.052 af<br>12.0" Round Culvert n=0.013 L=28.0' S=0.0500 ' Outflow=0.76 cfs 0.052 af                           |
| <b>Pond 62P: CB 66</b>        | Peak Elev=61.18' Inflow=1.24 cfs 0.093 af<br>12.0" Round Culvert n=0.013 L=20.0' S=0.0100 ' Outflow=1.24 cfs 0.093 af                           |
| <b>Pond 63P: CB 67</b>        | Peak Elev=60.90' Inflow=0.29 cfs 0.022 af<br>12.0" Round Culvert n=0.013 L=14.0' S=0.0214 ' Outflow=0.29 cfs 0.022 af                           |
| <b>Pond 64P: DMH 47</b>       | Peak Elev=63.42' Inflow=5.03 cfs 0.374 af<br>12.0" Round Culvert n=0.013 L=25.0' S=0.0080 ' Outflow=5.03 cfs 0.374 af                           |
| <b>Pond 65P: DMH 49</b>       | Peak Elev=59.71' Inflow=2.15 cfs 0.164 af<br>12.0" Round Culvert n=0.013 L=59.0' S=0.0119 ' Outflow=2.15 cfs 0.164 af                           |
| <b>Pond 66P: CB 68</b>        | Peak Elev=59.67' Inflow=1.37 cfs 0.104 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=1.37 cfs 0.104 af                           |
| <b>Pond 67P: CB 69</b>        | Peak Elev=59.45' Inflow=0.77 cfs 0.060 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.77 cfs 0.060 af                           |

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| <b>Pond 68P: Sub. Inf. 5</b>           | Peak Elev=61.65' Storage=0.054 af Inflow=5.03 cfs 0.374 af<br>Discarded=0.07 cfs 0.072 af Primary=4.07 cfs 0.263 af Outflow=4.14 cfs 0.335 af |
| <b>Pond 69P: CB 72</b>                 | Peak Elev=62.45' Inflow=2.03 cfs 0.151 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0600 '/' Outflow=2.03 cfs 0.151 af                       |
| <b>Pond 70P: CB 73</b>                 | Peak Elev=62.19' Inflow=1.28 cfs 0.096 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0600 '/' Outflow=1.28 cfs 0.096 af                       |
| <b>Pond 71P: DMH 54</b>                | Peak Elev=62.53' Inflow=3.31 cfs 0.247 af<br>12.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=3.31 cfs 0.247 af                        |
| <b>Pond 72P: Sub. Inf. 7</b>           | Peak Elev=62.45' Storage=0.042 af Inflow=3.31 cfs 0.247 af<br>Discarded=0.07 cfs 0.063 af Primary=3.21 cfs 0.158 af Outflow=3.28 cfs 0.221 af |
| <b>Pond 73P: CB 64</b>                 | Peak Elev=62.07' Inflow=2.07 cfs 0.153 af<br>12.0" Round Culvert n=0.013 L=25.0' S=0.0080 '/' Outflow=2.07 cfs 0.153 af                       |
| <b>Pond 74P: CB 65</b>                 | Peak Elev=61.84' Inflow=1.43 cfs 0.106 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0133 '/' Outflow=1.43 cfs 0.106 af                       |
| <b>Pond 75P: DMH 46</b>                | Peak Elev=62.92' Inflow=3.50 cfs 0.259 af<br>12.0" Round Culvert n=0.013 L=118.0' S=0.0051 '/' Outflow=3.50 cfs 0.259 af                      |
| <b>Pond 76P: CB 70</b>                 | Peak Elev=58.99' Inflow=1.56 cfs 0.116 af<br>12.0" Round Culvert n=0.013 L=20.0' S=0.0100 '/' Outflow=1.56 cfs 0.116 af                       |
| <b>Pond 77P: CB 71</b>                 | Peak Elev=58.73' Inflow=0.83 cfs 0.064 af<br>12.0" Round Culvert n=0.013 L=20.0' S=0.0100 '/' Outflow=0.83 cfs 0.064 af                       |
| <b>Pond 78P: DMH 50</b>                | Peak Elev=59.17' Inflow=4.54 cfs 0.344 af<br>18.0" Round Culvert n=0.013 L=25.0' S=0.0080 '/' Outflow=4.54 cfs 0.344 af                       |
| <b>Pond 79P: DMH 51</b>                | Peak Elev=59.09' Inflow=5.82 cfs 0.443 af<br>18.0" Round Culvert n=0.013 L=148.0' S=0.0047 '/' Outflow=5.82 cfs 0.443 af                      |
| <b>Pond 80P: DMH 52</b>                | Peak Elev=58.30' Inflow=5.82 cfs 0.443 af<br>18.0" Round Culvert n=0.013 L=104.0' S=0.0052 '/' Outflow=5.82 cfs 0.443 af                      |
| <b>Pond 81P: DMH 53</b>                | Peak Elev=57.66' Inflow=5.82 cfs 0.443 af<br>18.0" Round Culvert n=0.013 L=60.0' S=0.0195 '/' Outflow=5.82 cfs 0.443 af                       |
| <b>Pond 82P: Constructed Wetland 2</b> | Peak Elev=58.45' Storage=11,040 cf Inflow=8.10 cfs 0.603 af<br>Outflow=1.91 cfs 0.536 af                                                      |
| <b>Pond 83P: CB 86</b>                 | Peak Elev=58.75' Inflow=1.47 cfs 0.110 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0227 '/' Outflow=1.47 cfs 0.110 af                       |
| <b>Pond 84P: CB 87</b>                 | Peak Elev=58.79' Inflow=1.59 cfs 0.120 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0227 '/' Outflow=1.59 cfs 0.120 af                       |
| <b>Pond 85P: DMH 65</b>                | Peak Elev=59.20' Inflow=3.07 cfs 0.230 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=3.07 cfs 0.230 af                       |

**Pond 86P: Sub. Inf. 6**

Peak Elev=63.83' Storage=0.069 af Inflow=4.49 cfs 0.319 af  
Discarded=0.09 cfs 0.069 af Primary=4.43 cfs 0.213 af Outflow=4.52 cfs 0.281 af

**Pond 87P: CB 85**

Peak Elev=62.64' Inflow=1.03 cfs 0.076 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=1.03 cfs 0.076 af

**Pond 88P: CB 84**

Peak Elev=62.44' Inflow=0.54 cfs 0.040 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.54 cfs 0.040 af

**Pond 89P: CB 74**

Peak Elev=64.90' Inflow=0.44 cfs 0.033 af  
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.44 cfs 0.033 af

**Pond 90P: CB 75**

Peak Elev=65.09' Inflow=0.87 cfs 0.065 af  
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.87 cfs 0.065 af

**Pond 91P: DMH 55**

Peak Elev=65.00' Inflow=1.31 cfs 0.098 af  
12.0" Round Culvert n=0.013 L=108.0' S=0.0204 ' Outflow=1.31 cfs 0.098 af

**Pond 92P: DMH 63**

Peak Elev=62.58' Inflow=1.57 cfs 0.117 af  
12.0" Round Culvert n=0.013 L=120.0' S=0.0292 ' Outflow=1.57 cfs 0.117 af

**Pond 93P: DMH 62**

Peak Elev=60.57' Inflow=8.57 cfs 0.637 af  
18.0" Round Culvert n=0.013 L=84.0' S=0.0065 ' Outflow=8.57 cfs 0.637 af

**Pond 94P: CB 77**

Peak Elev=63.53' Inflow=1.69 cfs 0.126 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=1.69 cfs 0.126 af

**Pond 95P: CB 76**

Peak Elev=63.35' Inflow=1.17 cfs 0.087 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=1.17 cfs 0.087 af

**Pond 96P: DMH 56**

Peak Elev=64.73' Inflow=9.47 cfs 0.706 af  
18.0" Round Culvert n=0.013 L=134.0' S=0.0067 ' Outflow=9.47 cfs 0.706 af

**Pond 97P: Sub. Det. 2**

Peak Elev=62.49' Storage=0.376 af Inflow=11.64 cfs 0.867 af  
Outflow=9.14 cfs 0.566 af

**Pond 98P: DMH 61**

Peak Elev=61.63' Inflow=7.00 cfs 0.520 af  
18.0" Round Culvert n=0.013 L=136.0' S=0.0110 ' Outflow=7.00 cfs 0.520 af

**Pond 99P: CB 81**

Peak Elev=64.02' Inflow=2.12 cfs 0.157 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=2.12 cfs 0.157 af

**Pond 100P: CB 80**

Peak Elev=64.63' Inflow=3.19 cfs 0.239 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=3.19 cfs 0.239 af

**Pond 101P: DMH 59**

Peak Elev=64.16' Inflow=5.31 cfs 0.396 af  
18.0" Round Culvert n=0.013 L=136.0' S=0.0051 ' Outflow=5.31 cfs 0.396 af

**Pond 102P: CB 93**

Peak Elev=62.21' Inflow=1.48 cfs 0.110 af  
12.0" Round Culvert n=0.013 L=27.0' S=0.0056 ' Outflow=1.48 cfs 0.110 af

**Pond 103P: CB 92**

Peak Elev=62.66' Inflow=2.61 cfs 0.196 af  
12.0" Round Culvert n=0.013 L=27.0' S=0.0056 '/' Outflow=2.61 cfs 0.196 af

**Pond 104P: CB 83**

Peak Elev=62.37' Inflow=2.79 cfs 0.205 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=2.79 cfs 0.205 af

**Pond 105P: CB 82**

Peak Elev=63.48' Inflow=4.21 cfs 0.315 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=4.21 cfs 0.315 af

**Pond 106P: DMH 60**

Peak Elev=62.63' Inflow=7.00 cfs 0.520 af  
18.0" Round Culvert n=0.013 L=110.0' S=0.0082 '/' Outflow=7.00 cfs 0.520 af

**Pond 107P: CB**

Peak Elev=60.90' Inflow=1.91 cfs 0.140 af  
12.0" Round Culvert n=0.013 L=10.0' S=0.1000 '/' Outflow=1.91 cfs 0.140 af

**Pond 108P: CB 88**

Peak Elev=60.51' Inflow=0.78 cfs 0.059 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0909 '/' Outflow=0.78 cfs 0.059 af

**Pond 109P: CB 79**

Peak Elev=63.45' Inflow=3.72 cfs 0.273 af  
12.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=3.72 cfs 0.273 af

**Pond 110P: CB 78**

Peak Elev=62.59' Inflow=3.22 cfs 0.237 af  
15.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=3.22 cfs 0.237 af

**Pond 111P: DMH 57**

Peak Elev=63.88' Inflow=16.42 cfs 1.217 af  
24.0" Round Culvert n=0.013 L=74.0' S=0.0054 '/' Outflow=16.42 cfs 1.217 af

**Pond 112P: CB 45**

Peak Elev=58.68' Inflow=2.29 cfs 0.165 af  
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=2.29 cfs 0.165 af

**Pond 113P: CB 95**

Peak Elev=60.88' Inflow=1.68 cfs 0.129 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=1.68 cfs 0.129 af

**Pond 114P: CB 94**

Peak Elev=61.36' Inflow=2.78 cfs 0.211 af  
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=2.78 cfs 0.211 af

**Pond 115P: CB 91**

Peak Elev=60.59' Inflow=2.77 cfs 0.208 af  
12.0" Round Culvert n=0.013 L=12.0' S=0.0833 '/' Outflow=2.77 cfs 0.208 af

**Pond 116P: CB 90**

Peak Elev=60.25' Inflow=2.17 cfs 0.165 af  
12.0" Round Culvert n=0.013 L=14.0' S=0.0714 '/' Outflow=2.17 cfs 0.165 af

**Pond 117P: DMH 69**

Peak Elev=61.68' Inflow=8.56 cfs 0.646 af  
18.0" Round Culvert n=0.013 L=140.0' S=0.0050 '/' Outflow=8.56 cfs 0.646 af

**Pond 118P: DMH 70**

Peak Elev=62.68' Inflow=4.47 cfs 0.341 af  
12.0" Round Culvert n=0.013 L=87.0' S=0.0051 '/' Outflow=4.47 cfs 0.341 af

**Pond 119P: DMH 66**

Peak Elev=62.01' Inflow=11.25 cfs 0.846 af  
18.0" Round Culvert n=0.013 L=102.0' S=0.0050 '/' Outflow=11.25 cfs 0.846 af

**Pond 120P: DMH 67**

Peak Elev=60.68' Inflow=16.19 cfs 1.218 af  
24.0" Round Culvert n=0.013 L=40.0' S=0.0213 '/' Outflow=16.19 cfs 1.218 af

|                                |                                                                                                                                                 |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pond 122P: CB 46</b>        | Peak Elev=58.70' Inflow=2.28 cfs 0.170 af<br>12.0" Round Culvert n=0.013 L=16.0' S=0.0063 '/' Outflow=2.28 cfs 0.170 af                         |
| <b>Pond 123P: DMH 31</b>       | Peak Elev=58.61' Inflow=4.57 cfs 0.335 af<br>18.0" Round Culvert n=0.013 L=78.0' S=0.0100 '/' Outflow=4.57 cfs 0.335 af                         |
| <b>Pond 124P: DMH 32</b>       | Peak Elev=57.79' Inflow=4.57 cfs 0.335 af<br>18.0" Round Culvert n=0.013 L=75.0' S=0.0249 '/' Outflow=4.57 cfs 0.335 af                         |
| <b>Pond 125P: CB 36</b>        | Peak Elev=55.28' Inflow=1.52 cfs 0.108 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=1.52 cfs 0.108 af                         |
| <b>Pond 126P: CB 37</b>        | Peak Elev=55.37' Inflow=1.78 cfs 0.128 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=1.78 cfs 0.128 af                         |
| <b>Pond 127P: DMH 26</b>       | Peak Elev=55.96' Inflow=3.29 cfs 0.236 af<br>12.0" Round Culvert n=0.013 L=84.0' S=0.0173 '/' Outflow=3.29 cfs 0.236 af                         |
| <b>Pond 128P: CB 30</b>        | Peak Elev=56.93' Inflow=2.13 cfs 0.148 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=2.13 cfs 0.148 af                         |
| <b>Pond 129P: CB 34</b>        | Peak Elev=55.30' Inflow=2.90 cfs 0.203 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=2.90 cfs 0.203 af                         |
| <b>Pond 130P: CB 32</b>        | Peak Elev=56.52' Inflow=4.23 cfs 0.307 af<br>12.0" Round Culvert n=0.013 L=16.0' S=0.0256 '/' Outflow=4.23 cfs 0.307 af                         |
| <b>Pond 131P: CB 35</b>        | Peak Elev=55.02' Inflow=2.43 cfs 0.168 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=2.43 cfs 0.168 af                         |
| <b>Pond 132P: CB 33</b>        | Peak Elev=54.82' Inflow=2.33 cfs 0.159 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=2.33 cfs 0.159 af                         |
| <b>Pond 133P: DMH 24</b>       | Peak Elev=57.44' Inflow=11.89 cfs 0.837 af<br>18.0" Round Culvert n=0.013 L=112.0' S=0.0050 '/' Outflow=11.89 cfs 0.837 af                      |
| <b>Pond 134P: DMH 25</b>       | Peak Elev=57.39' Inflow=5.33 cfs 0.372 af<br>12.0" Round Culvert n=0.013 L=20.0' S=0.0050 '/' Outflow=5.33 cfs 0.372 af                         |
| <b>Pond 135P: Inf. Basin 3</b> | Peak Elev=56.40' Storage=16,641 cf Inflow=14.34 cfs 1.024 af<br>Discarded=2.70 cfs 1.023 af Primary=0.00 cfs 0.000 af Outflow=2.70 cfs 1.023 af |
| <b>Pond 136P: CB 38</b>        | Peak Elev=54.23' Inflow=1.27 cfs 0.088 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=1.27 cfs 0.088 af                         |
| <b>Pond 137P: CB</b>           | Peak Elev=54.43' Inflow=1.98 cfs 0.143 af<br>12.0" Round Culvert n=0.013 L=70.0' S=0.0071 '/' Outflow=1.98 cfs 0.143 af                         |
| <b>Pond 138P: CB 39</b>        | Peak Elev=54.16' Inflow=1.09 cfs 0.077 af<br>12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=1.09 cfs 0.077 af                         |



**Pond 139P: DMH 28**

Peak Elev=54.42' Inflow=2.36 cfs 0.165 af  
12.0" Round Culvert n=0.013 L=99.0' S=0.0051 ' Outflow=2.36 cfs 0.165 af

**Pond 140P: CB 31**

Peak Elev=57.02' Inflow=2.26 cfs 0.157 af  
12.0" Round Culvert n=0.013 L=19.0' S=0.0053 ' Outflow=2.26 cfs 0.157 af

**Pond 141P: DMH 23**

Peak Elev=58.36' Inflow=4.39 cfs 0.305 af  
12.0" Round Culvert n=0.013 L=142.0' S=0.0116 ' Outflow=4.39 cfs 0.305 af

**Pond 142P: CB 40**

Peak Elev=51.97' Inflow=2.90 cfs 0.201 af  
12.0" Round Culvert n=0.013 L=7.0' S=0.0143 ' Outflow=2.90 cfs 0.201 af

**Pond 143P: CB 41**

Peak Elev=52.90' Inflow=4.08 cfs 0.284 af  
12.0" Round Culvert n=0.013 L=7.0' S=0.0143 ' Outflow=4.08 cfs 0.284 af

**Pond 144P: DMH 30**

Peak Elev=56.28' Inflow=6.98 cfs 0.485 af  
12.0" Round Culvert n=0.013 L=73.0' S=0.0051 ' Outflow=6.98 cfs 0.485 af

**Pond 145P: DMH 29**

Peak Elev=51.69' Inflow=6.98 cfs 0.485 af  
18.0" Round Culvert n=0.013 L=95.0' S=0.0091 ' Outflow=6.98 cfs 0.485 af

**Pond 146P: Inf. Basin 2**

Peak Elev=52.13' Storage=12,554 cf Inflow=11.10 cfs 0.791 af  
Discarded=2.17 cfs 0.790 af Primary=0.00 cfs 0.000 af Outflow=2.17 cfs 0.790 af

**Pond 147P: CB 28**

Peak Elev=54.67' Inflow=0.57 cfs 0.041 af  
12.0" Round Culvert n=0.013 L=27.0' S=0.0056 ' Outflow=0.57 cfs 0.041 af

**Pond 148P: CB 43**

Peak Elev=52.78' Inflow=1.55 cfs 0.112 af  
12.0" Round Culvert n=0.013 L=68.0' S=0.0441 ' Outflow=1.55 cfs 0.112 af

**Pond 149P: CB 29**

Peak Elev=54.66' Inflow=0.61 cfs 0.043 af  
12.0" Round Culvert n=0.013 L=19.0' S=0.0079 ' Outflow=0.61 cfs 0.043 af

**Pond 150P: DMH 22**

Peak Elev=57.92' Inflow=5.57 cfs 0.389 af  
12.0" Round Culvert n=0.013 L=50.0' S=0.0144 ' Outflow=5.57 cfs 0.389 af

**Pond 151P: CB 22**

Peak Elev=53.02' Inflow=1.21 cfs 0.086 af  
12.0" Round Culvert n=0.013 L=28.0' S=0.0054 ' Outflow=1.21 cfs 0.086 af

**Pond 152P: CB 23**

Peak Elev=53.10' Inflow=1.51 cfs 0.105 af  
12.0" Round Culvert n=0.013 L=19.0' S=0.0079 ' Outflow=1.51 cfs 0.105 af

**Pond 153P: DMH 17**

Peak Elev=56.47' Inflow=12.89 cfs 0.912 af  
18.0" Round Culvert n=0.013 L=94.0' S=0.0053 ' Outflow=12.89 cfs 0.912 af

**Pond 154P: CB 18**

Peak Elev=54.09' Inflow=1.60 cfs 0.114 af  
12.0" Round Culvert n=0.013 L=8.0' S=0.0125 ' Outflow=1.60 cfs 0.114 af

**Pond 155P: CB 27**

Peak Elev=55.47' Inflow=1.67 cfs 0.119 af  
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=1.67 cfs 0.119 af

**Pond 156P: CB 26**

Peak Elev=55.19' Inflow=0.90 cfs 0.067 af  
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=0.90 cfs 0.067 af

|                          |                                                                                                                            |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------|
| <b>Pond 157P: DMH 21</b> | Peak Elev=55.64' Inflow=2.58 cfs 0.186 af<br>12.0" Round Culvert n=0.013 L=86.0' S=0.0105 '/' Outflow=2.58 cfs 0.186 af    |
| <b>Pond 158P: CB 24</b>  | Peak Elev=54.19' Inflow=0.87 cfs 0.061 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.87 cfs 0.061 af    |
| <b>Pond 159P: CB 25</b>  | Peak Elev=54.29' Inflow=1.15 cfs 0.083 af<br>12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=1.15 cfs 0.083 af    |
| <b>Pond 160P: DMH 20</b> | Peak Elev=56.26' Inflow=4.60 cfs 0.331 af<br>12.0" Round Culvert n=0.013 L=33.0' S=0.0052 '/' Outflow=4.60 cfs 0.331 af    |
| <b>Pond 161P: DMH 19</b> | Peak Elev=56.16' Inflow=10.16 cfs 0.720 af<br>18.0" Round Culvert n=0.013 L=100.0' S=0.0098 '/' Outflow=10.16 cfs 0.720 af |
| <b>Pond 162P: CB 15</b>  | Peak Elev=52.34' Inflow=2.67 cfs 0.184 af<br>12.0" Round Culvert n=0.013 L=14.0' S=0.0143 '/' Outflow=2.67 cfs 0.184 af    |
| <b>Pond 163P: CB 14</b>  | Peak Elev=52.12' Inflow=2.12 cfs 0.147 af<br>12.0" Round Culvert n=0.013 L=22.0' S=0.0050 '/' Outflow=2.12 cfs 0.147 af    |
| <b>Pond 165P: CB 19</b>  | Peak Elev=54.05' Inflow=1.48 cfs 0.103 af<br>12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=1.48 cfs 0.103 af     |
| <b>Pond 166P: DMH 13</b> | Peak Elev=60.75' Inflow=8.17 cfs 0.393 af<br>12.0" Round Culvert n=0.013 L=92.0' S=0.0050 '/' Outflow=8.17 cfs 0.393 af    |
| <b>Pond 167P: CB 11</b>  | Peak Elev=51.55' Inflow=1.48 cfs 0.103 af<br>12.0" Round Culvert n=0.013 L=19.0' S=0.0105 '/' Outflow=1.48 cfs 0.103 af    |
| <b>Pond 168P: CB 10</b>  | Peak Elev=51.37' Inflow=0.97 cfs 0.065 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0182 '/' Outflow=0.97 cfs 0.065 af    |
| <b>Pond 169P: DMH 12</b> | Peak Elev=60.90' Inflow=8.17 cfs 0.393 af<br>12.0" Round Culvert n=0.013 L=107.0' S=0.0050 '/' Outflow=8.17 cfs 0.393 af   |
| <b>Pond 170P: CB 9</b>   | Peak Elev=51.17' Inflow=1.52 cfs 0.105 af<br>12.0" Round Culvert n=0.013 L=21.0' S=0.0667 '/' Outflow=1.52 cfs 0.105 af    |
| <b>Pond 171P: DMH 6</b>  | Peak Elev=52.63' Inflow=11.79 cfs 0.855 af<br>18.0" Round Culvert n=0.013 L=130.0' S=0.0073 '/' Outflow=11.79 cfs 0.855 af |
| <b>Pond 172P: CB 16</b>  | Peak Elev=53.07' Inflow=2.45 cfs 0.175 af<br>12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=2.45 cfs 0.175 af     |
| <b>Pond 173P: CB 17</b>  | Peak Elev=52.51' Inflow=0.96 cfs 0.068 af<br>12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=0.96 cfs 0.068 af     |
| <b>Pond 174P: DMH 11</b> | Peak Elev=54.05' Inflow=10.28 cfs 0.636 af<br>18.0" Round Culvert n=0.013 L=22.0' S=0.0118 '/' Outflow=10.28 cfs 0.636 af  |

|                                         |                                                                                                                                               |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pond 175P: DMH 5</b>                 | Peak Elev=61.20' Inflow=9.32 cfs 0.643 af<br>12.0" Round Culvert n=0.013 L=103.0' S=0.0050 ' Outflow=9.32 cfs 0.643 af                        |
| <b>Pond 176P: CB 6</b>                  | Peak Elev=50.51' Inflow=1.28 cfs 0.088 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0133 ' Outflow=1.28 cfs 0.088 af                         |
| <b>Pond 177P: CB 13</b>                 | Peak Elev=52.32' Inflow=2.22 cfs 0.154 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=2.22 cfs 0.154 af                         |
| <b>Pond 178P: CB 12</b>                 | Peak Elev=51.89' Inflow=1.02 cfs 0.070 af<br>12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=1.02 cfs 0.070 af                         |
| <b>Pond 179P: DMH 8</b>                 | Peak Elev=52.79' Inflow=3.24 cfs 0.224 af<br>12.0" Round Culvert n=0.013 L=70.0' S=0.0050 ' Outflow=3.24 cfs 0.224 af                         |
| <b>Pond 180P: DMH 9</b>                 | Peak Elev=52.19' Inflow=4.79 cfs 0.331 af<br>18.0" Round Culvert n=0.013 L=49.0' S=0.0051 ' Outflow=4.79 cfs 0.331 af                         |
| <b>Pond 181P: DMH 7</b>                 | Peak Elev=60.30' Inflow=7.23 cfs 0.499 af<br>12.0" Round Culvert n=0.013 L=174.0' S=0.0050 ' Outflow=7.23 cfs 0.499 af                        |
| <b>Pond 182P: CB 7</b>                  | Peak Elev=50.35' Inflow=0.80 cfs 0.057 af<br>12.0" Round Culvert n=0.013 L=25.0' S=0.0080 ' Outflow=0.80 cfs 0.057 af                         |
| <b>Pond 185P: DMH 4</b>                 | Peak Elev=50.43' Inflow=15.50 cfs 1.374 af<br>24.0" Round Culvert n=0.013 L=36.0' S=0.0208 ' Outflow=15.50 cfs 1.374 af                       |
| <b>Pond 186P: Constructed Wetland 1</b> | Peak Elev=47.86' Storage=3,915 cf Inflow=4.80 cfs 0.342 af<br>Primary=3.55 cfs 0.274 af Secondary=0.03 cfs 0.020 af Outflow=3.57 cfs 0.294 af |
| <b>Pond 187P: Constructed Wetland 3</b> | Peak Elev=57.45' Storage=7,841 cf Inflow=11.05 cfs 1.128 af<br>Outflow=10.79 cfs 0.998 af                                                     |
| <b>Pond 188P: CB 3</b>                  | Peak Elev=48.58' Inflow=0.96 cfs 0.065 af<br>12.0" Round Culvert n=0.013 L=30.0' S=0.0167 ' Outflow=0.96 cfs 0.065 af                         |
| <b>Pond 189P: CB 4</b>                  | Peak Elev=48.97' Inflow=2.06 cfs 0.144 af<br>12.0" Round Culvert n=0.013 L=19.0' S=0.0263 ' Outflow=2.06 cfs 0.144 af                         |
| <b>Pond 190P: DMH 3</b>                 | Peak Elev=48.92' Inflow=3.02 cfs 0.209 af<br>12.0" Round Culvert n=0.013 L=32.0' S=0.0334 ' Outflow=3.02 cfs 0.209 af                         |
| <b>Pond 191P: CB 42</b>                 | Peak Elev=51.58' Inflow=2.28 cfs 0.168 af<br>12.0" Round Culvert n=0.013 L=194.0' S=0.0077 ' Outflow=2.28 cfs 0.168 af                        |
| <b>Pond 192P: Sub. Inf. 8</b>           | Peak Elev=52.51' Storage=0.032 af Inflow=1.49 cfs 0.103 af<br>Outflow=0.29 cfs 0.103 af                                                       |
| <b>Pond 193P: CB 1</b>                  | Peak Elev=47.33' Inflow=0.61 cfs 0.042 af<br>12.0" Round Culvert n=0.013 L=25.0' S=0.0052 ' Outflow=0.61 cfs 0.042 af                         |
| <b>Pond 194P: CB 2</b>                  | Peak Elev=47.34' Inflow=0.71 cfs 0.051 af<br>12.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' Outflow=0.71 cfs 0.051 af                         |

|                                         |                                                                                                                                                  |
|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Pond 195P: Constructed Wetland 4</b> | Peak Elev=56.57' Storage=8,039 cf Inflow=5.20 cfs 1.029 af<br>Outflow=5.19 cfs 0.883 af                                                          |
| <b>Pond 196P: CB 5</b>                  | Peak Elev=49.28' Inflow=2.65 cfs 0.192 af<br>12.0" Round Culvert n=0.013 L=27.0' S=0.0059 '/' Outflow=2.65 cfs 0.192 af                          |
| <b>Pond 197P: Inf. Basin 1</b>          | Peak Elev=50.43' Storage=28,646 cf Inflow=19.31 cfs 1.680 af<br>Discarded=5.02 cfs 1.482 af Primary=1.40 cfs 0.197 af Outflow=6.42 cfs 1.679 af  |
| <b>Pond 198P: Sub. Inf. 2</b>           | Peak Elev=54.00' Storage=0.187 af Inflow=12.89 cfs 0.912 af<br>Discarded=3.19 cfs 0.779 af Primary=5.12 cfs 0.133 af Outflow=8.30 cfs 0.911 af   |
| <b>Pond 200P: DMH 1</b>                 | Peak Elev=47.40' Inflow=1.32 cfs 0.093 af<br>12.0" Round Culvert n=0.013 L=65.0' S=0.0051 '/' Outflow=1.32 cfs 0.093 af                          |
| <b>Pond 201P: Sub. Inf. 3</b>           | Peak Elev=54.79' Storage=0.146 af Inflow=8.94 cfs 0.624 af<br>Discarded=2.49 cfs 0.580 af Primary=1.59 cfs 0.044 af Outflow=4.08 cfs 0.624 af    |
| <b>Pond 202P: DMH 14</b>                | Peak Elev=54.31' Inflow=6.43 cfs 0.176 af<br>18.0" Round Culvert n=0.013 L=89.0' S=0.0055 '/' Outflow=6.43 cfs 0.176 af                          |
| <b>Pond 204P: DMH 18</b>                | Peak Elev=55.92' Inflow=12.89 cfs 0.912 af<br>18.0" Round Culvert n=0.013 L=5.0' S=-0.0900 '/' Outflow=12.89 cfs 0.912 af                        |
| <b>Pond 205P: DMH 27</b>                | Peak Elev=56.77' Inflow=5.65 cfs 0.402 af<br>12.0" Round Culvert n=0.013 L=16.0' S=0.0063 '/' Outflow=5.65 cfs 0.402 af                          |
| <b>Pond 206P: DMH 34</b>                | Peak Elev=56.11' Inflow=6.26 cfs 0.461 af<br>18.0" Round Culvert n=0.013 L=5.0' S=-0.1800 '/' Outflow=6.26 cfs 0.461 af                          |
| <b>Pond 207P: DMH 48</b>                | Peak Elev=63.22' Inflow=5.03 cfs 0.374 af<br>12.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=5.03 cfs 0.374 af                           |
| <b>Pond 208P: DMH 58</b>                | Peak Elev=63.43' Inflow=16.42 cfs 1.217 af<br>24.0" Round Culvert n=0.013 L=5.0' S=0.0100 '/' Outflow=16.42 cfs 1.217 af                         |
| <b>Pond 209P: DMH 64</b>                | Peak Elev=59.97' Inflow=8.57 cfs 0.637 af<br>18.0" Round Culvert n=0.013 L=5.0' S=0.0100 '/' Outflow=8.57 cfs 0.637 af                           |
| <b>Pond 210P: DMH 68</b>                | Peak Elev=60.68' Inflow=16.19 cfs 1.218 af<br>24.0" Round Culvert n=0.013 L=11.0' S=0.0727 '/' Outflow=16.19 cfs 1.218 af                        |
| <b>Pond 211P: Sub. Inf. 1B</b>          | Peak Elev=53.34' Storage=0.133 af Inflow=12.72 cfs 0.860 af<br>Discarded=1.13 cfs 0.475 af Primary=11.02 cfs 0.385 af Outflow=12.15 cfs 0.860 af |
| <b>Pond 212P: Sub. Inf. 1A</b>          | Peak Elev=50.31' Storage=0.103 af Inflow=11.69 cfs 0.468 af<br>Discarded=0.98 cfs 0.142 af Primary=8.39 cfs 0.327 af Outflow=9.37 cfs 0.468 af   |
| <b>Pond 213P: DMH 2</b>                 | Peak Elev=48.89' Inflow=4.34 cfs 0.302 af<br>12.0" Round Culvert n=0.013 L=54.0' S=0.0052 '/' Outflow=4.34 cfs 0.302 af                          |

**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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*Type III 24-hr 100-Year Rainfall=8.94"*

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**Pond 214P: DMH 4A**

Peak Elev=51.88' Inflow=11.69 cfs 0.468 af  
 18.0" Round Culvert n=0.013 L=3.0' S=0.0333 '/' Outflow=11.69 cfs 0.468 af

**Pond 215P: CB 5A**

Peak Elev=49.05' Inflow=1.16 cfs 0.084 af  
 12.0" Round Culvert n=0.013 L=13.0' S=0.0154 '/' Outflow=1.16 cfs 0.084 af

**Pond 216P: CB 8A**

Peak Elev=50.03' Inflow=0.49 cfs 0.056 af  
 12.0" Round Culvert n=0.013 L=63.0' S=0.0100 '/' Outflow=0.49 cfs 0.056 af

**Pond 217P: DMH 8A**

Peak Elev=54.93' Inflow=12.72 cfs 0.860 af  
 18.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=12.72 cfs 0.860 af

**Pond 218P: CB A**

Peak Elev=52.63' Inflow=1.49 cfs 0.103 af  
 12.0" Round Culvert n=0.013 L=105.0' S=0.0050 '/' Outflow=1.49 cfs 0.103 af

**Pond 219P: DMH A**

Peak Elev=52.05' Inflow=1.49 cfs 0.103 af  
 12.0" Round Culvert n=0.013 L=60.0' S=0.0057 '/' Outflow=1.49 cfs 0.103 af

**Pond 220P: DMH B**

Peak Elev=51.71' Inflow=1.49 cfs 0.103 af  
 12.0" Round Culvert n=0.013 L=3.0' S=0.0167 '/' Outflow=1.49 cfs 0.103 af

**Pond 221P: Inf. Basin 6**

Peak Elev=59.53' Storage=14,850 cf Inflow=16.19 cfs 1.218 af  
 Discarded=0.29 cfs 0.144 af Primary=5.20 cfs 1.029 af Outflow=5.49 cfs 1.173 af

**Link 59L: DP 1**

Inflow=27.72 cfs 2.261 af  
 Primary=27.72 cfs 2.261 af

**Link 60L: DP 2**

Inflow=21.18 cfs 1.338 af  
 Primary=21.18 cfs 1.338 af

**Link 188L: DP 3**

Inflow=34.16 cfs 3.986 af  
 Primary=34.16 cfs 3.986 af

**Link 203L: 3A**

Inflow=3.55 cfs 0.529 af  
 Primary=3.55 cfs 0.529 af

**Total Runoff Area = 39.842 ac Runoff Volume = 16.021 af Average Runoff Depth = 4.83"**  
**58.01% Pervious = 23.114 ac 41.99% Impervious = 16.728 ac**

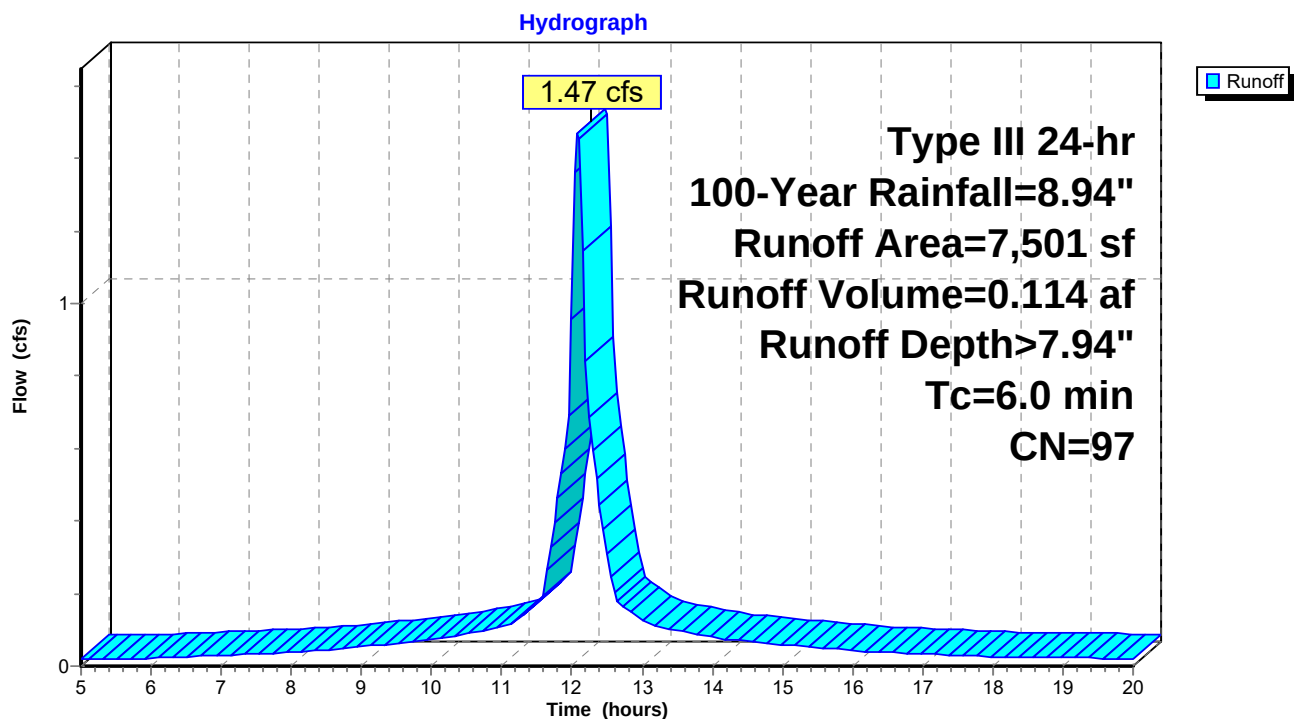
**Summary for Subcatchment 1S: P1A**

Runoff = 1.47 cfs @ 12.09 hrs, Volume= 0.114 af, Depth> 7.94"  
 Routed to Pond 16P : CB 58

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 254       | 74 | >75% Grass cover, Good, HSG C |
| 1,384     | 98 | Unconnected roofs, HSG C      |
| 5,863     | 98 | Paved parking, HSG C          |
| 7,501     | 97 | Weighted Average              |
| 254       |    | 3.39% Pervious Area           |
| 7,247     |    | 96.61% Impervious Area        |
| 1,384     |    | 19.10% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 1S: P1A**

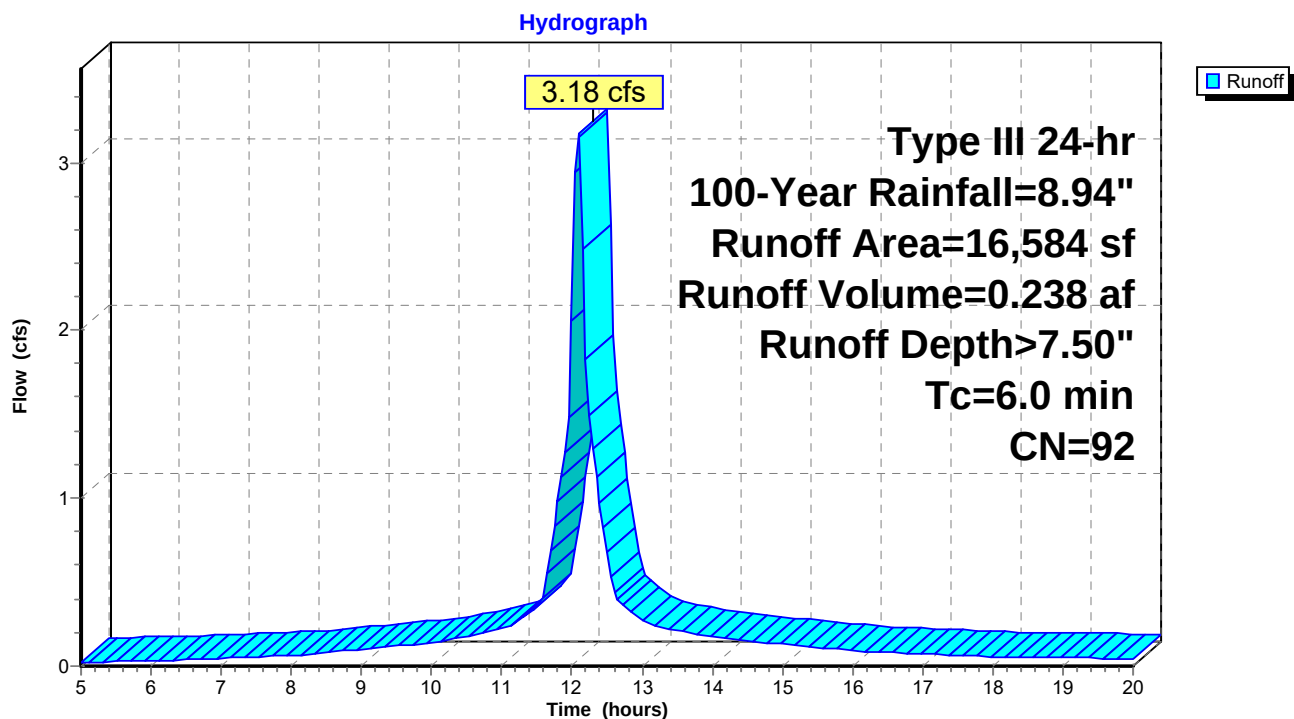
**Summary for Subcatchment 2S: P1B**

Runoff = 3.18 cfs @ 12.09 hrs, Volume= 0.238 af, Depth> 7.50"  
 Routed to Pond 17P : CB 59

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,226     | 98 | Unconnected roofs, HSG C      |
| 4,280     | 74 | >75% Grass cover, Good, HSG C |
| 7,078     | 98 | Paved parking, HSG C          |
| 16,584    | 92 | Weighted Average              |
| 4,280     |    | 25.81% Pervious Area          |
| 12,304    |    | 74.19% Impervious Area        |
| 5,226     |    | 42.47% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 2S: P1B**

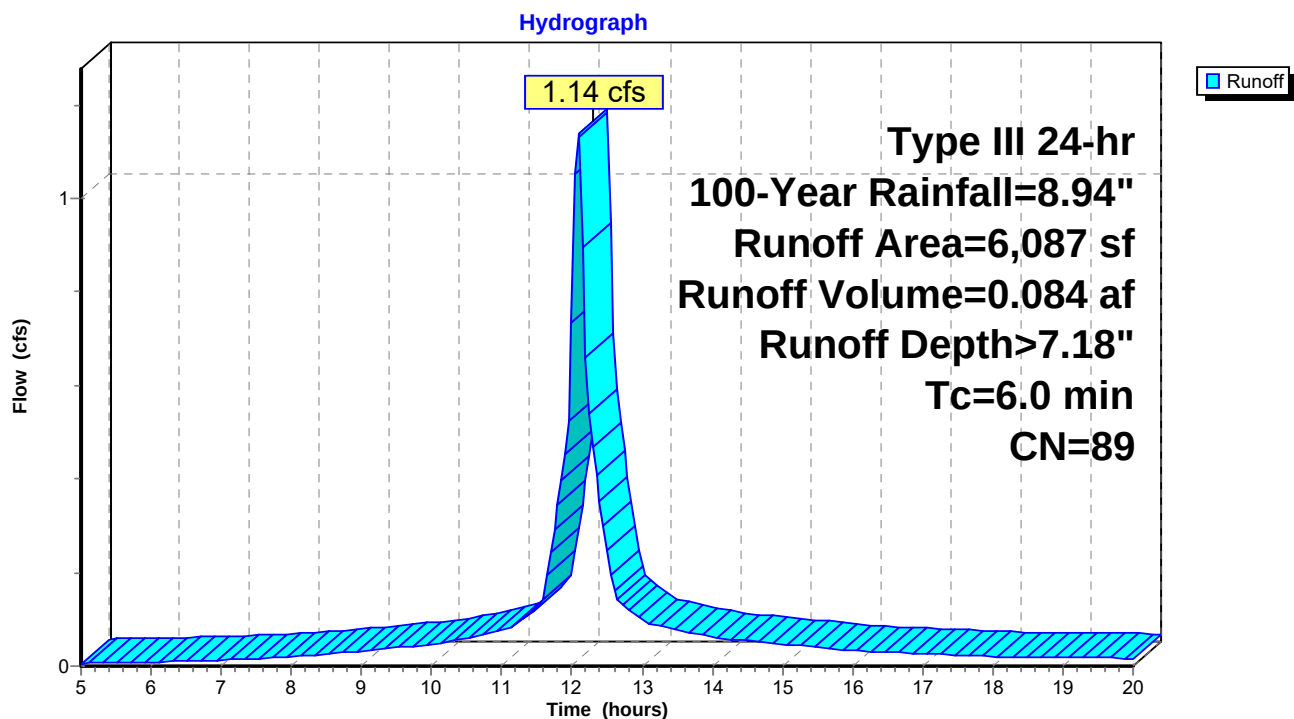
**Summary for Subcatchment 3S: P1C**

Runoff = 1.14 cfs @ 12.09 hrs, Volume= 0.084 af, Depth> 7.18"  
 Routed to Pond 18P : CB 63

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,616     | 98 | Unconnected roofs, HSG C      |
| 2,173     | 74 | >75% Grass cover, Good, HSG C |
| 2,298     | 98 | Paved parking, HSG C          |
| 6,087     | 89 | Weighted Average              |
| 2,173     |    | 35.70% Pervious Area          |
| 3,914     |    | 64.30% Impervious Area        |
| 1,616     |    | 41.29% Unconnected            |

| Tc<br>(min) | Length<br>(feet) | Slope<br>(ft/ft) | Velocity<br>(ft/sec) | Capacity<br>(cfs) | Description   |
|-------------|------------------|------------------|----------------------|-------------------|---------------|
| 6.0         |                  |                  |                      |                   | Direct Entry, |

**Subcatchment 3S: P1C**



**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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Type III 24-hr 100-Year Rainfall=8.94"

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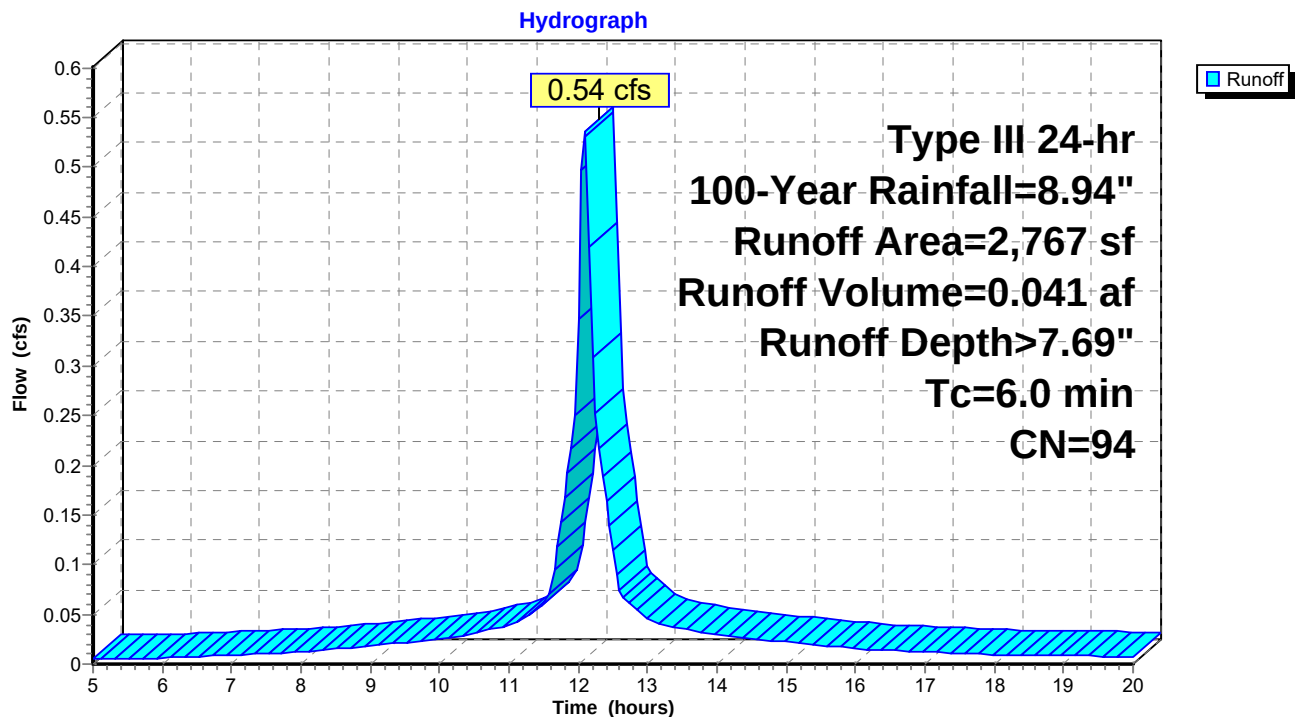
**Summary for Subcatchment 4S: P1D**

Runoff = 0.54 cfs @ 12.09 hrs, Volume= 0.041 af, Depth> 7.69"  
Routed to Pond 19P : CB 62

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 512       | 74 | >75% Grass cover, Good, HSG C |
| 2,255     | 98 | Paved parking, HSG C          |
| 2,767     | 94 | Weighted Average              |
| 512       |    | 18.50% Pervious Area          |
| 2,255     |    | 81.50% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 4S: P1D**

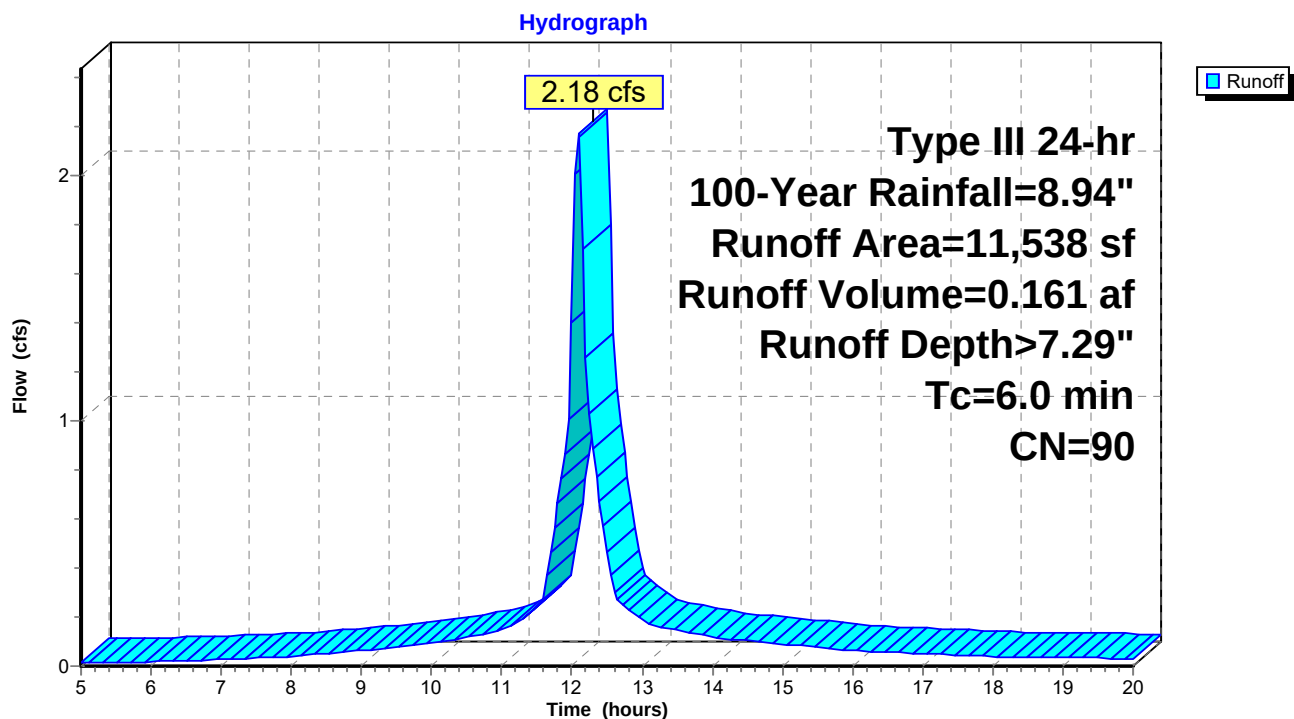
**Summary for Subcatchment 5S: P1E**

Runoff = 2.18 cfs @ 12.09 hrs, Volume= 0.161 af, Depth> 7.29"  
 Routed to Pond 26P : CB 61

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,900     | 74 | >75% Grass cover, Good, HSG C |
| 3,976     | 98 | Unconnected roofs, HSG C      |
| 3,662     | 98 | Paved parking, HSG C          |
| 11,538    | 90 | Weighted Average              |
| 3,900     |    | 33.80% Pervious Area          |
| 7,638     |    | 66.20% Impervious Area        |
| 3,976     |    | 52.06% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 5S: P1E**

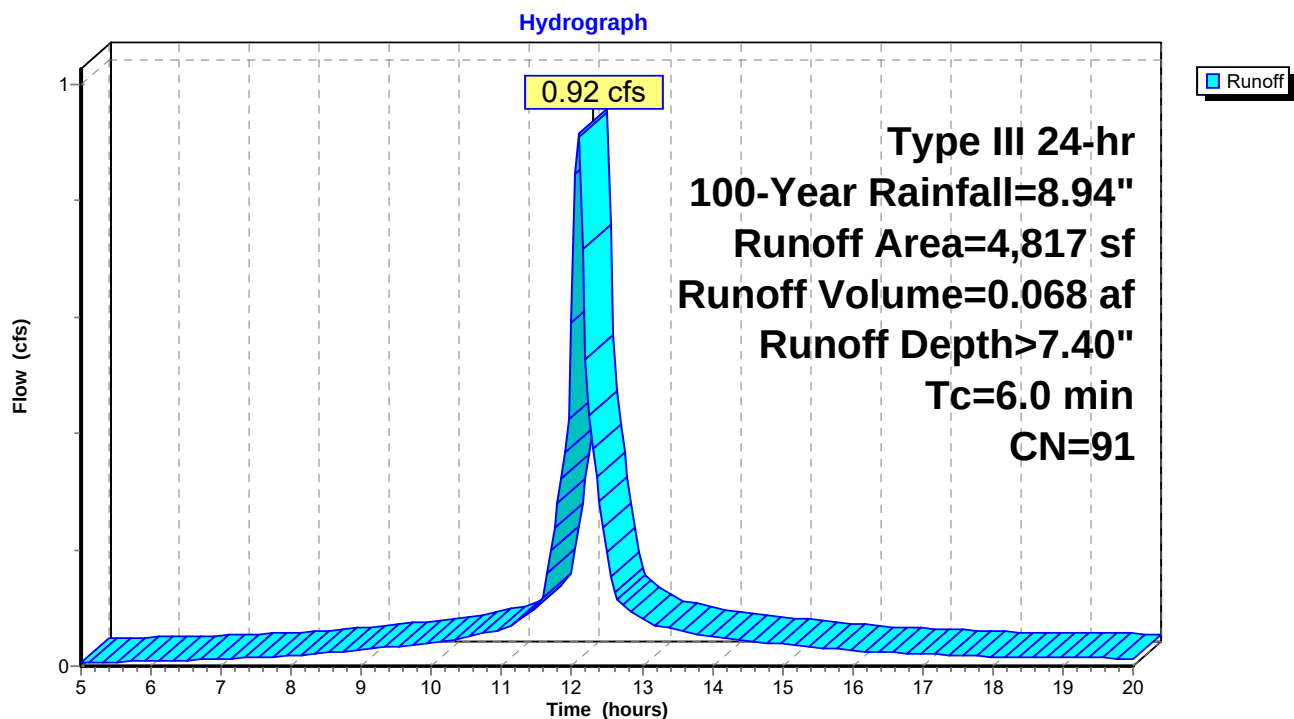
**Summary for Subcatchment 6S: P1F**

Runoff = 0.92 cfs @ 12.09 hrs, Volume= 0.068 af, Depth> 7.40"  
 Routed to Pond 27P : CB 60

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,378     | 74 | >75% Grass cover, Good, HSG C |
| 429       | 98 | Unconnected roofs, HSG C      |
| 3,010     | 98 | Paved parking, HSG C          |
| 4,817     | 91 | Weighted Average              |
| 1,378     |    | 28.61% Pervious Area          |
| 3,439     |    | 71.39% Impervious Area        |
| 429       |    | 12.47% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 6S: P1F**

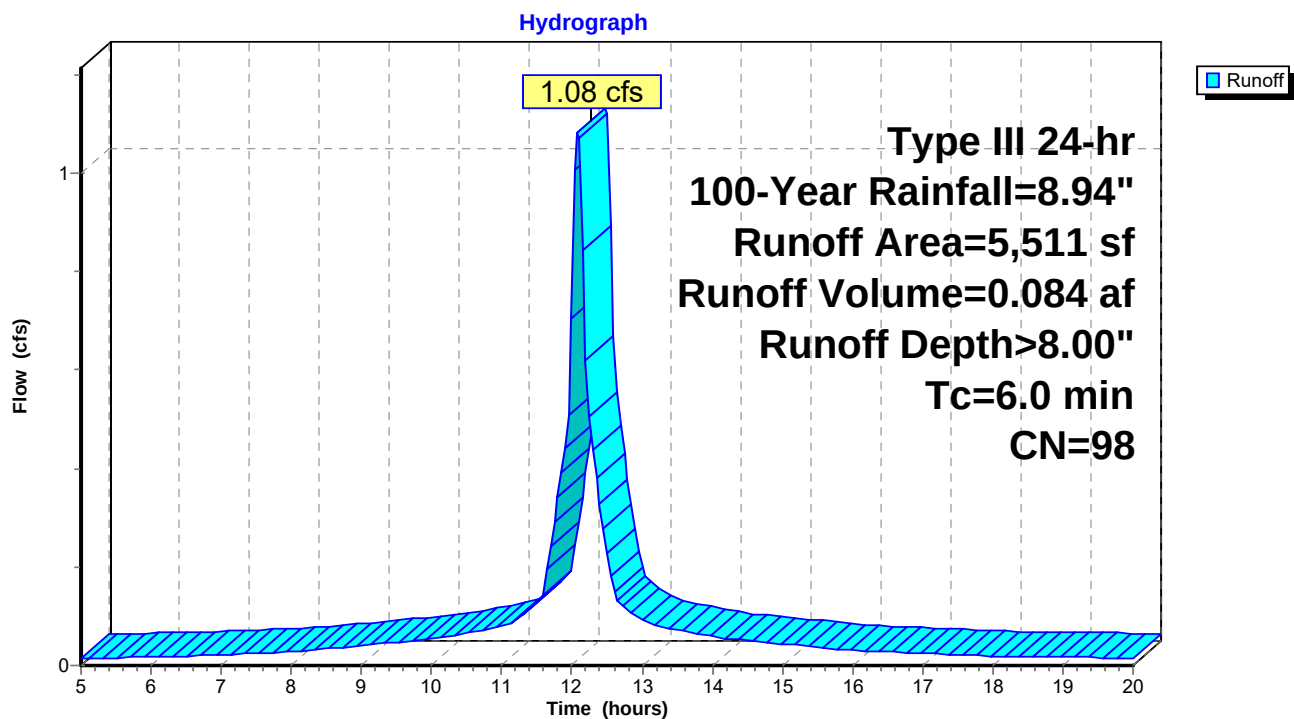
**Summary for Subcatchment 7S: P1G**

Runoff = 1.08 cfs @ 12.09 hrs, Volume= 0.084 af, Depth> 8.00"  
 Routed to Pond 22P : CB 56

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description             |
|-----------|----|-------------------------|
| 5,511     | 98 | Paved parking, HSG C    |
| 5,511     |    | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 7S: P1G**

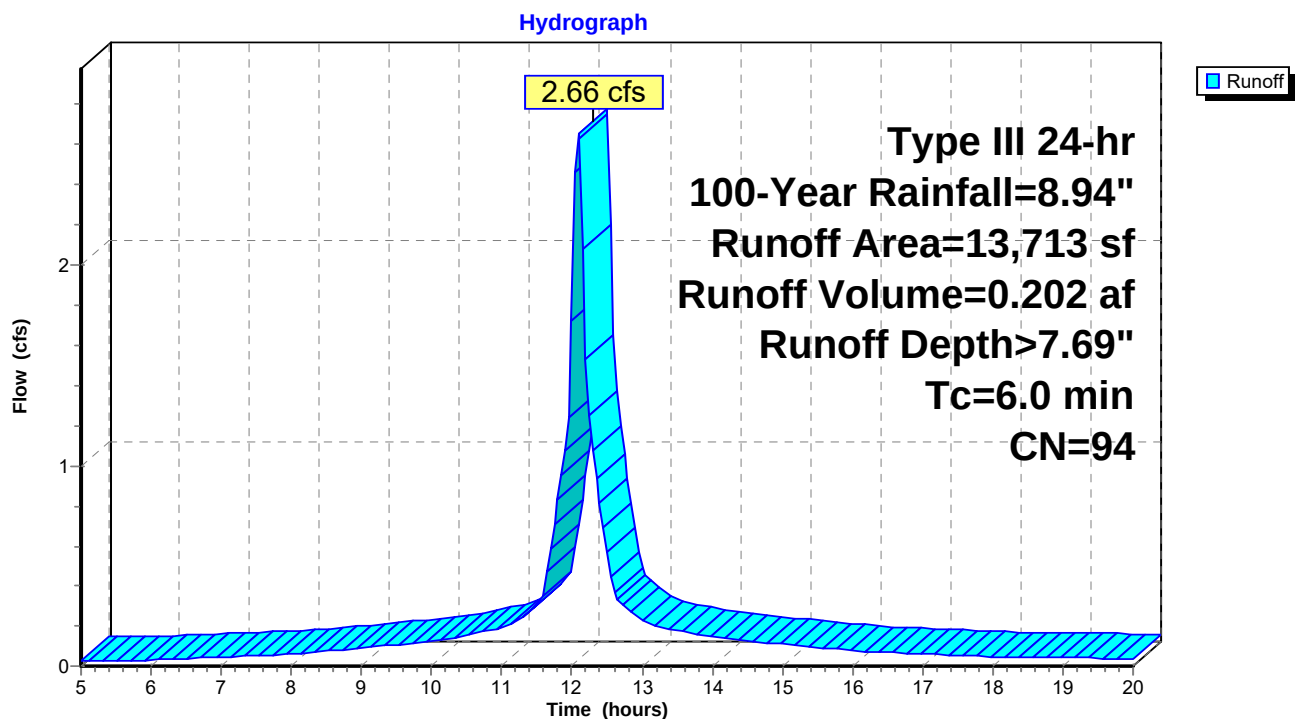
**Summary for Subcatchment 8S: P1H**

Runoff = 2.66 cfs @ 12.09 hrs, Volume= 0.202 af, Depth> 7.69"  
 Routed to Pond 23P : CB 57

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,554     | 74 | >75% Grass cover, Good, HSG C |
| 5,795     | 98 | Unconnected roofs, HSG C      |
| 5,364     | 98 | Paved parking, HSG C          |
| 13,713    | 94 | Weighted Average              |
| 2,554     |    | 18.62% Pervious Area          |
| 11,159    |    | 81.38% Impervious Area        |
| 5,795     |    | 51.93% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 8S: P1H**

### Summary for Subcatchment 9S: P1I

Runoff = 0.70 cfs @ 12.09 hrs, Volume= 0.053 af, Depth> 7.60"  
Routed to Pond 30P : CB 55

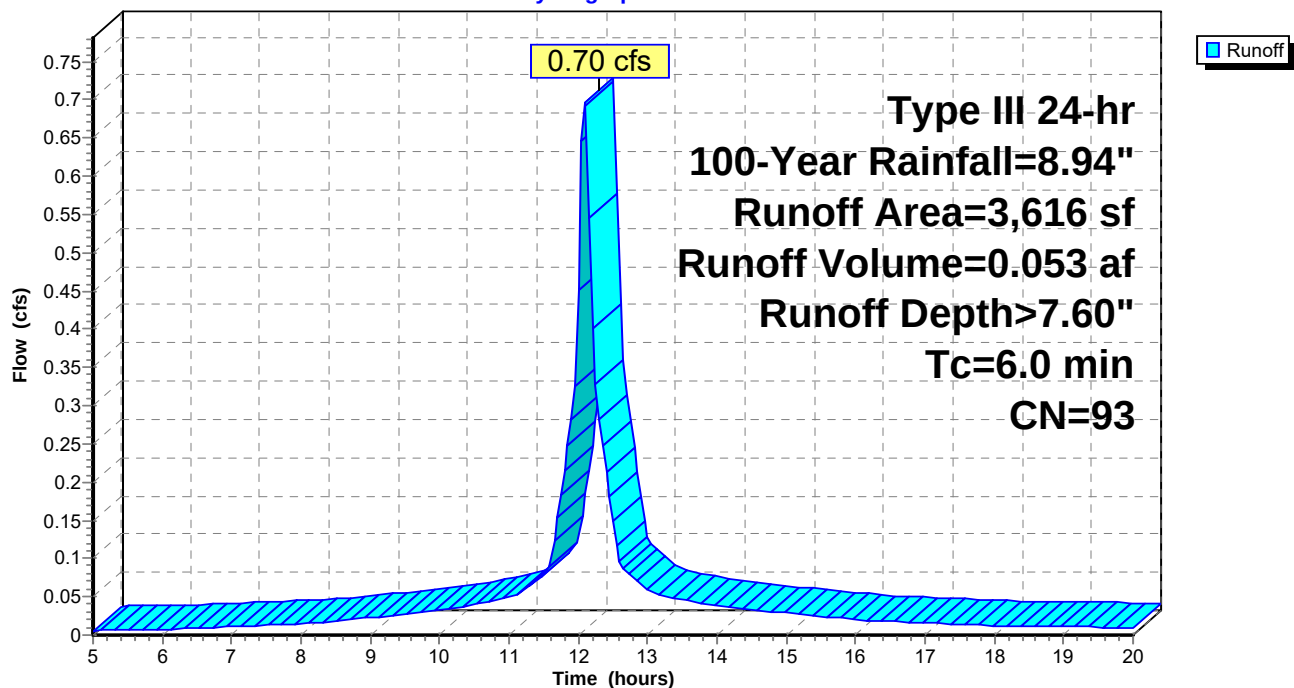
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 780       | 74 | >75% Grass cover, Good, HSG C |
| 2,836     | 98 | Paved parking, HSG C          |
| 3,616     | 93 | Weighted Average              |
| 780       |    | 21.57% Pervious Area          |
| 2,836     |    | 78.43% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 9S: P1I

Hydrograph



**Summary for Subcatchment 10S: P1J**

Runoff = 0.38 cfs @ 12.09 hrs, Volume= 0.030 af, Depth> 8.00"  
 Routed to Pond 33P : CB 53

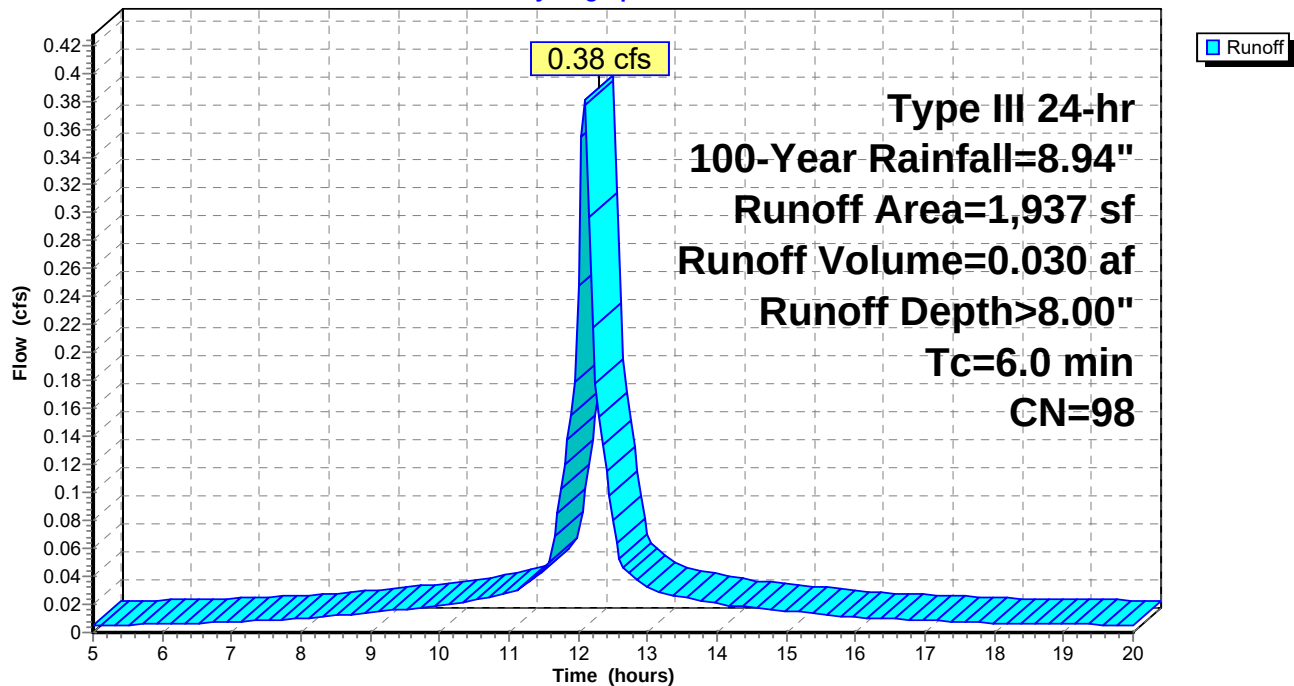
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description             |
|-----------|----|-------------------------|
| 1,937     | 98 | Paved parking, HSG C    |
| 1,937     |    | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 10S: P1J**

Hydrograph



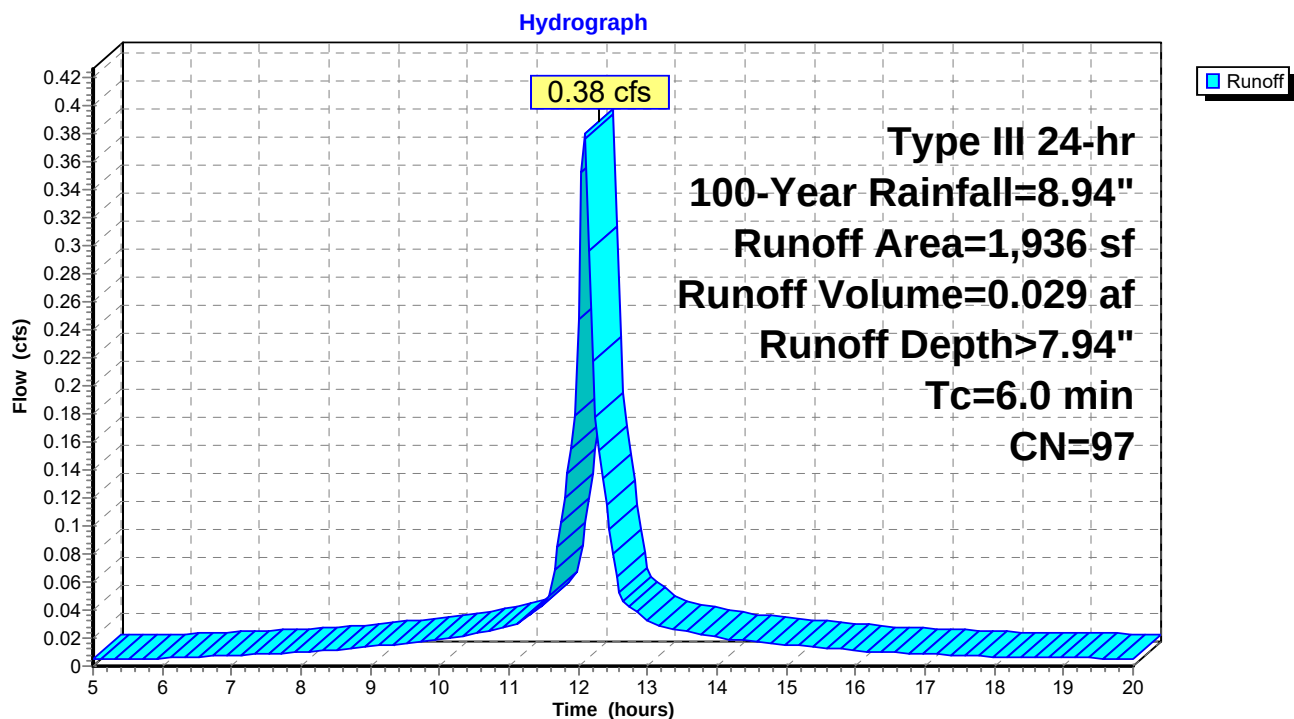
**Summary for Subcatchment 11S: P1K**

Runoff = 0.38 cfs @ 12.09 hrs, Volume= 0.029 af, Depth> 7.94"  
 Routed to Pond 31P : CB 51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 61        | 74 | >75% Grass cover, Good, HSG C |
| 354       | 98 | Unconnected roofs, HSG C      |
| 1,521     | 98 | Paved parking, HSG C          |
| 1,936     | 97 | Weighted Average              |
| 61        |    | 3.15% Pervious Area           |
| 1,875     |    | 96.85% Impervious Area        |
| 354       |    | 18.88% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 11S: P1K**



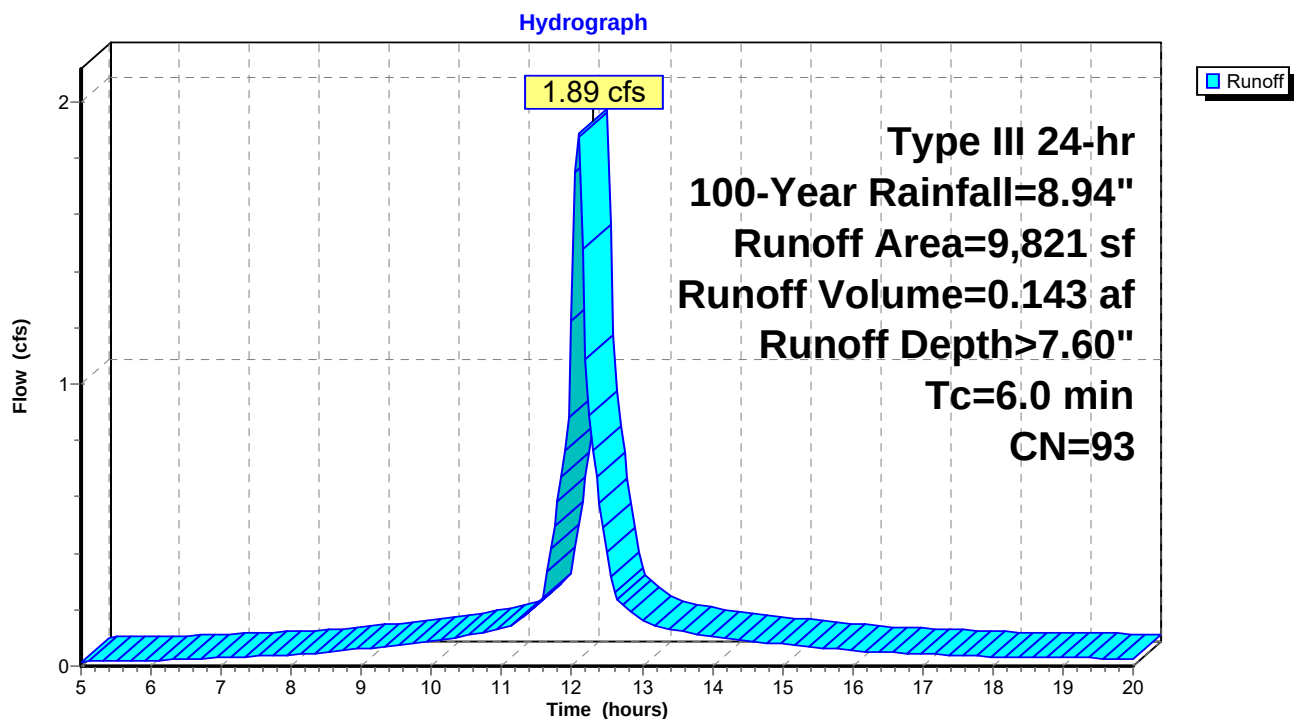
**Summary for Subcatchment 12S: P1L**

Runoff = 1.89 cfs @ 12.09 hrs, Volume= 0.143 af, Depth> 7.60"  
 Routed to Pond 32P : CB 52

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,077     | 74 | >75% Grass cover, Good, HSG C |
| 2,390     | 98 | Unconnected roofs, HSG C      |
| 5,354     | 98 | Paved parking, HSG C          |
| 9,821     | 93 | Weighted Average              |
| 2,077     |    | 21.15% Pervious Area          |
| 7,744     |    | 78.85% Impervious Area        |
| 2,390     |    | 30.86% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 12S: P1L**

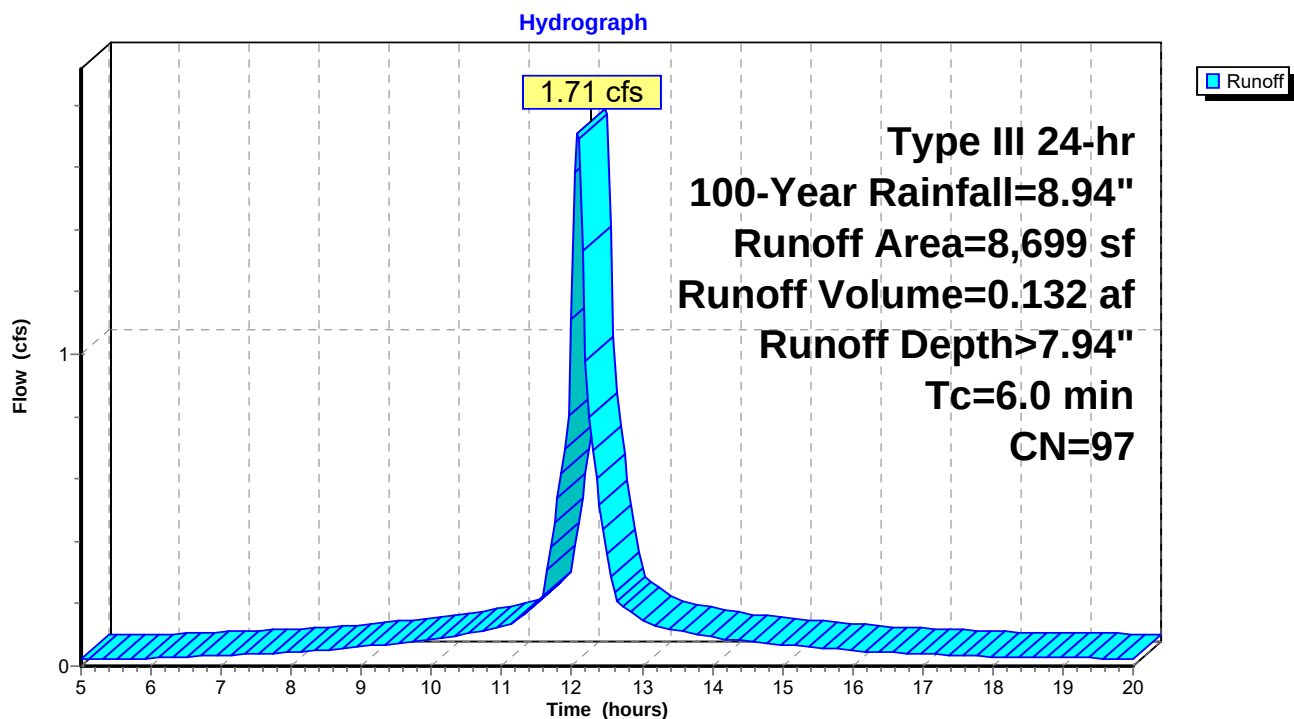
**Summary for Subcatchment 13S: P1M**

Runoff = 1.71 cfs @ 12.09 hrs, Volume= 0.132 af, Depth> 7.94"  
 Routed to Pond 36P : CB 54

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 476       | 74 | >75% Grass cover, Good, HSG C |
| 569       | 98 | Unconnected roofs, HSG C      |
| 7,654     | 98 | Paved parking, HSG C          |
| 8,699     | 97 | Weighted Average              |
| 476       |    | 5.47% Pervious Area           |
| 8,223     |    | 94.53% Impervious Area        |
| 569       |    | 6.92% Unconnected             |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 13S: P1M**

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Type III 24-hr 100-Year Rainfall=8.94"

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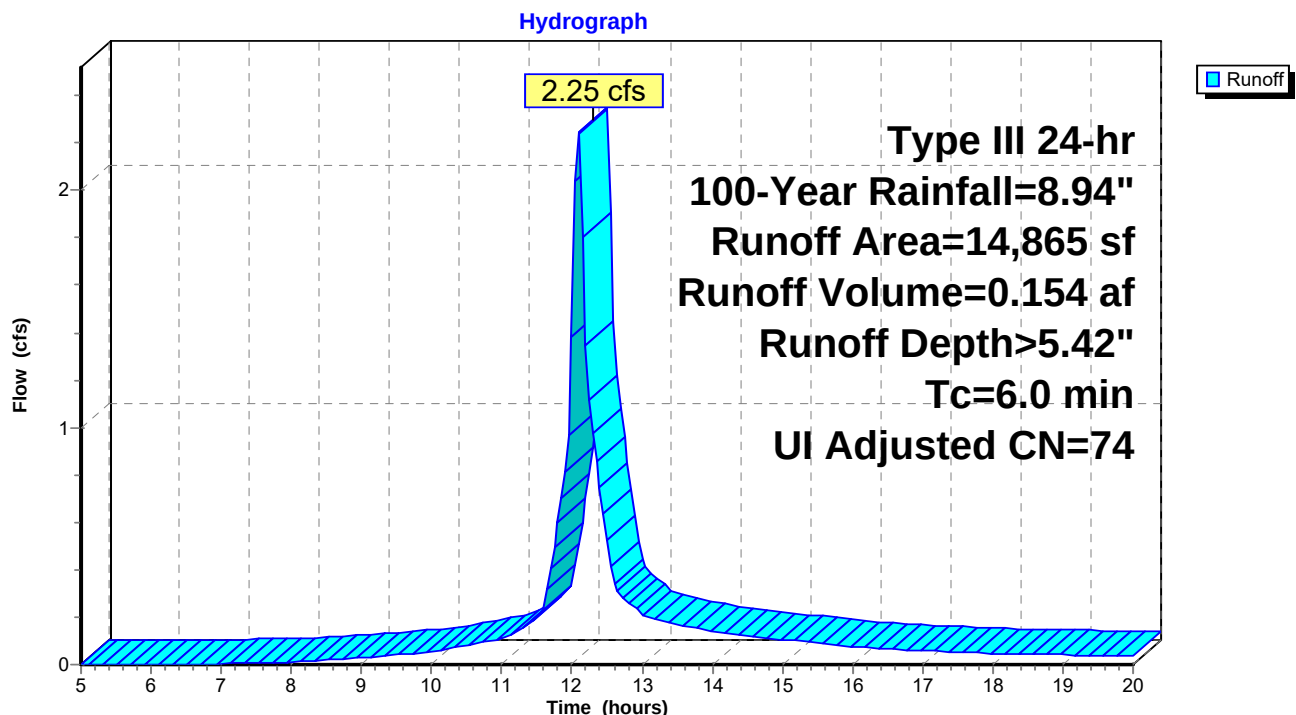
**Summary for Subcatchment 14S: P1N**

Runoff = 2.25 cfs @ 12.09 hrs, Volume= 0.154 af, Depth> 5.42"  
Routed to Pond 15P : Inf. Basin 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 586       | 98 |     | Unconnected roofs, HSG C      |
| 14,279    | 74 |     | >75% Grass cover, Good, HSG C |
| 14,865    | 75 | 74  | Weighted Average, UI Adjusted |
| 14,279    |    |     | 96.06% Pervious Area          |
| 586       |    |     | 3.94% Impervious Area         |
| 586       |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 14S: P1N**

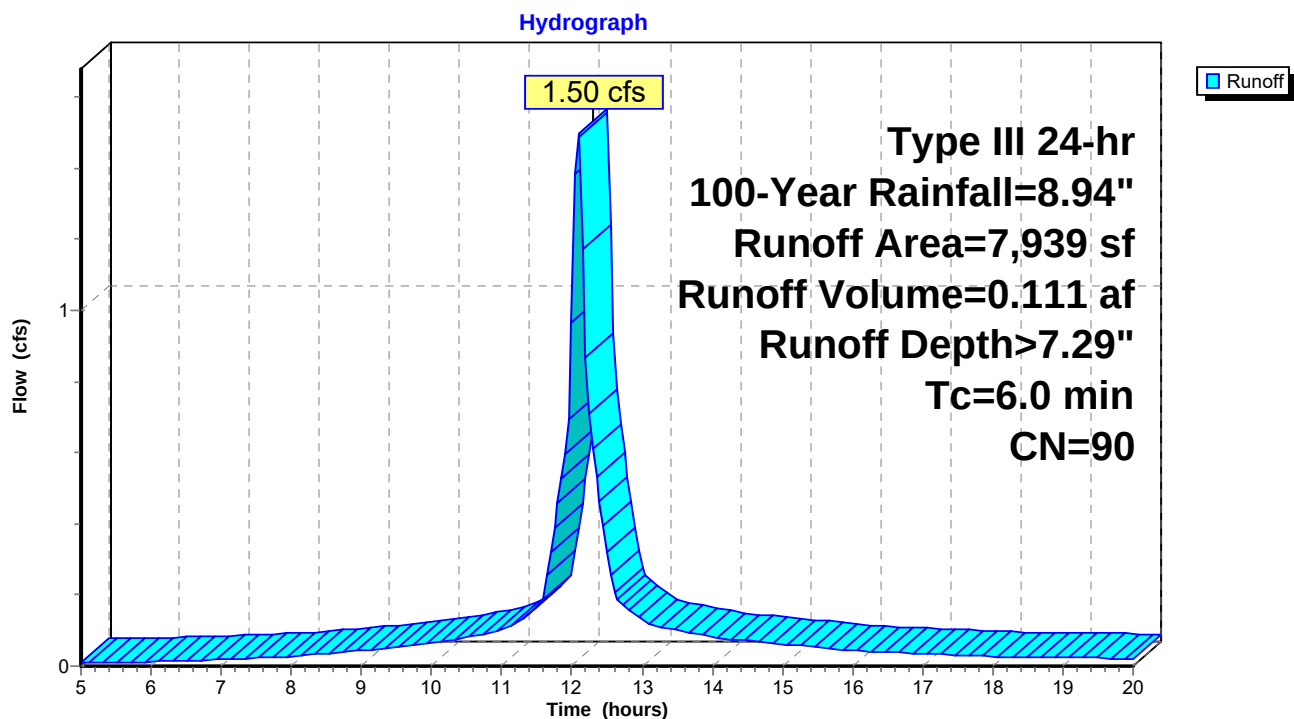
**Summary for Subcatchment 39S: P1P**

Runoff = 1.50 cfs @ 12.09 hrs, Volume= 0.111 af, Depth> 7.29"  
 Routed to Pond 42P : CB 50

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,926     | 98 | Unconnected roofs, HSG C      |
| 2,623     | 74 | >75% Grass cover, Good, HSG C |
| 3,390     | 98 | Paved parking, HSG C          |
| 7,939     | 90 | Weighted Average              |
| 2,623     |    | 33.04% Pervious Area          |
| 5,316     |    | 66.96% Impervious Area        |
| 1,926     |    | 36.23% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 39S: P1P**

**Summary for Subcatchment 40S: P10**

Runoff = 0.19 cfs @ 12.09 hrs, Volume= 0.015 af, Depth> 8.00"  
 Routed to Pond 41P : CB 49

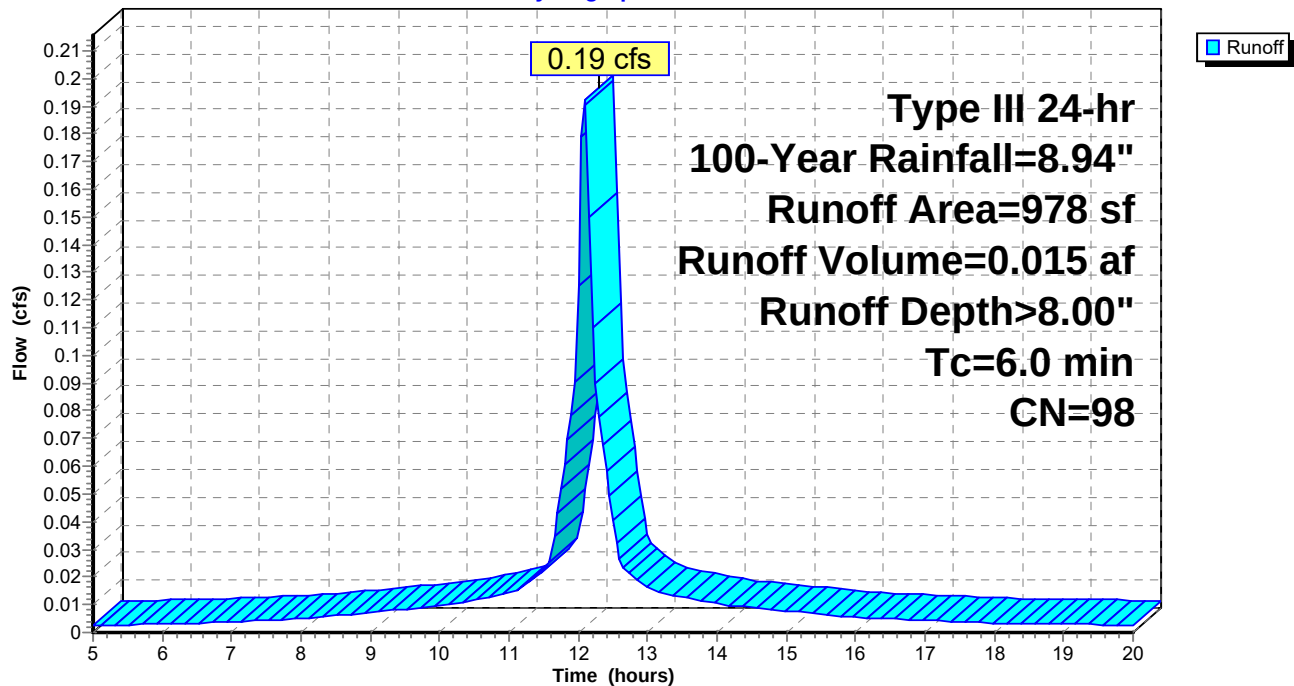
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description             |
|-----------|----|-------------------------|
| 978       | 98 | Paved parking, HSG C    |
| 978       |    | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 40S: P10**

Hydrograph



### Summary for Subcatchment 44S: P1R

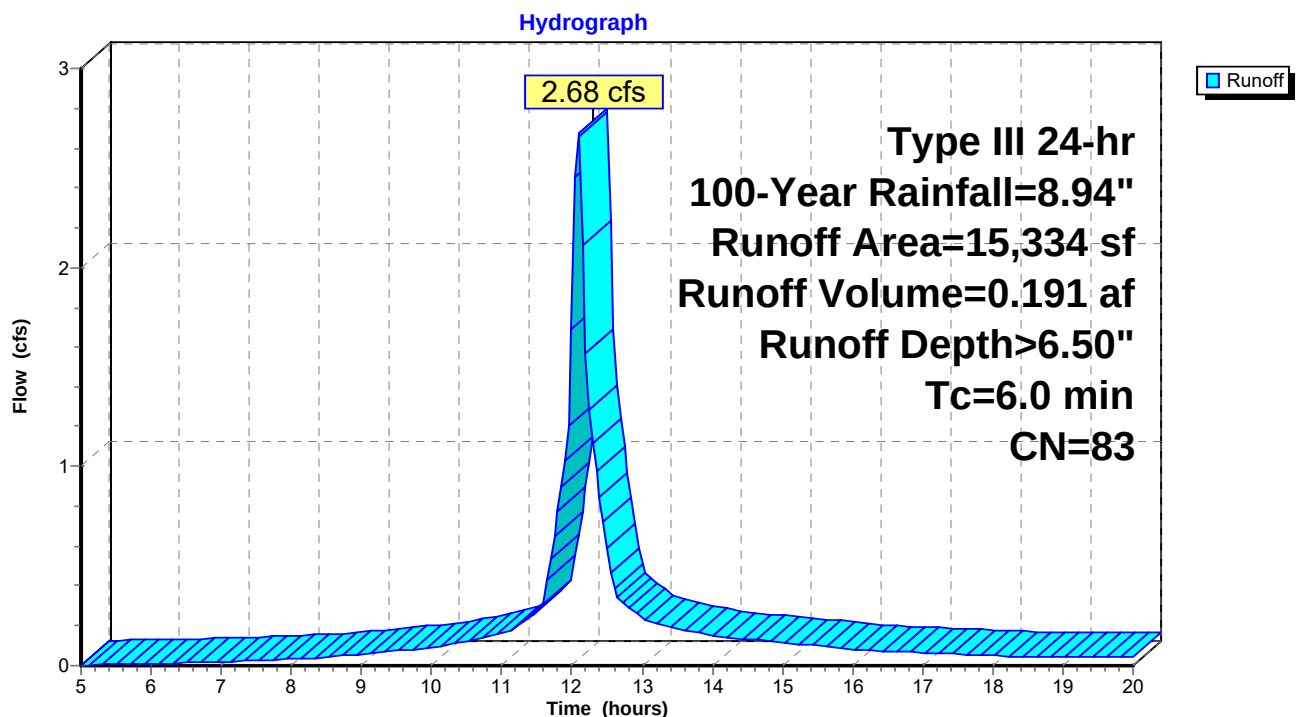
Runoff = 2.68 cfs @ 12.09 hrs, Volume= 0.191 af, Depth> 6.50"  
Routed to Pond 46P : CB 48

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 704       | 98 | Unconnected pavement, HSG C   |
| 1,196     | 74 | >75% Grass cover, Good, HSG C |
| 955       | 98 | Paved parking, HSG C          |
| 2,884     | 98 | Unconnected roofs, HSG A      |
| 3,316     | 39 | >75% Grass cover, Good, HSG A |
| 6,279     | 98 | Paved parking, HSG A          |
| 15,334    | 83 | Weighted Average              |
| 4,512     |    | 29.42% Pervious Area          |
| 10,822    |    | 70.58% Impervious Area        |
| 3,588     |    | 33.15% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 44S: P1R



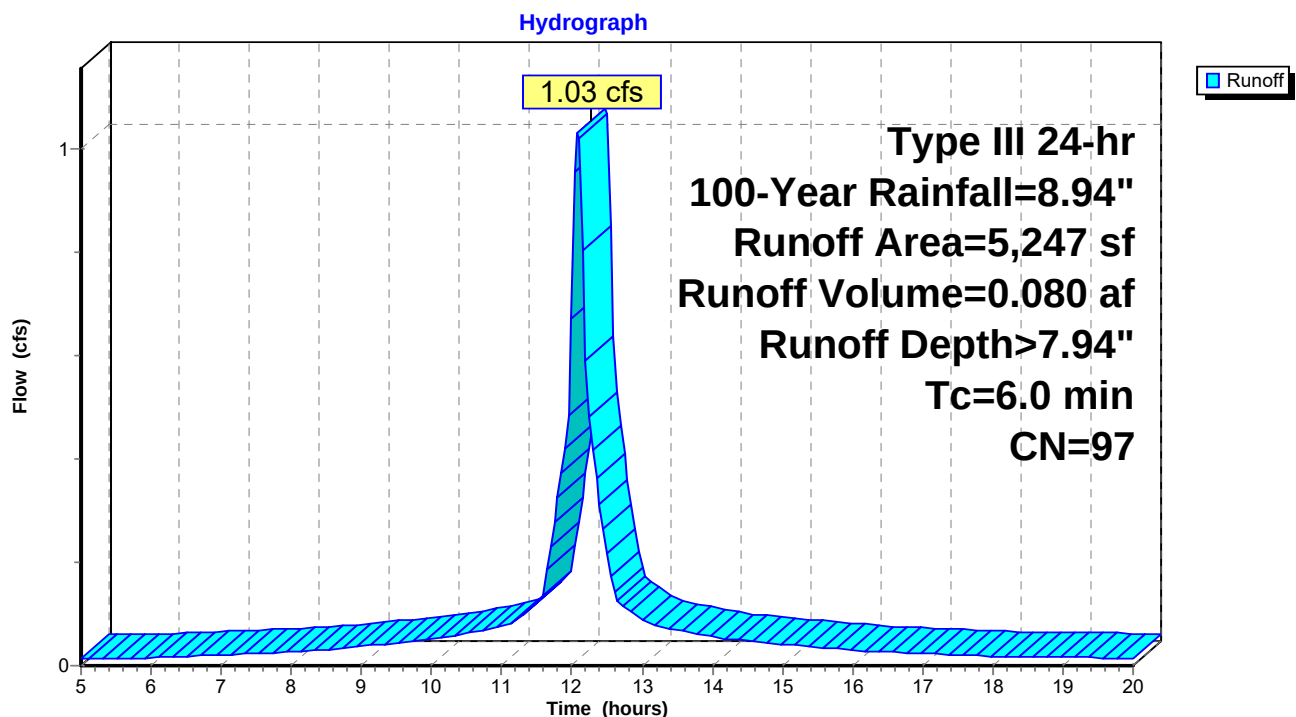
**Summary for Subcatchment 45S: P1Q**

Runoff = 1.03 cfs @ 12.09 hrs, Volume= 0.080 af, Depth> 7.94"  
 Routed to Pond 47P : CB 47

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 49        | 74 | >75% Grass cover, Good, HSG C |
| 49        | 98 | Unconnected roofs, HSG C      |
| 1,120     | 98 | Paved parking, HSG C          |
| 80        | 39 | >75% Grass cover, Good, HSG A |
| 442       | 98 | Unconnected roofs, HSG A      |
| 3,507     | 98 | Paved parking, HSG A          |
| 5,247     | 97 | Weighted Average              |
| 129       |    | 2.46% Pervious Area           |
| 5,118     |    | 97.54% Impervious Area        |
| 491       |    | 9.59% Unconnected             |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 45S: P1Q**

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Type III 24-hr 100-Year Rainfall=8.94"

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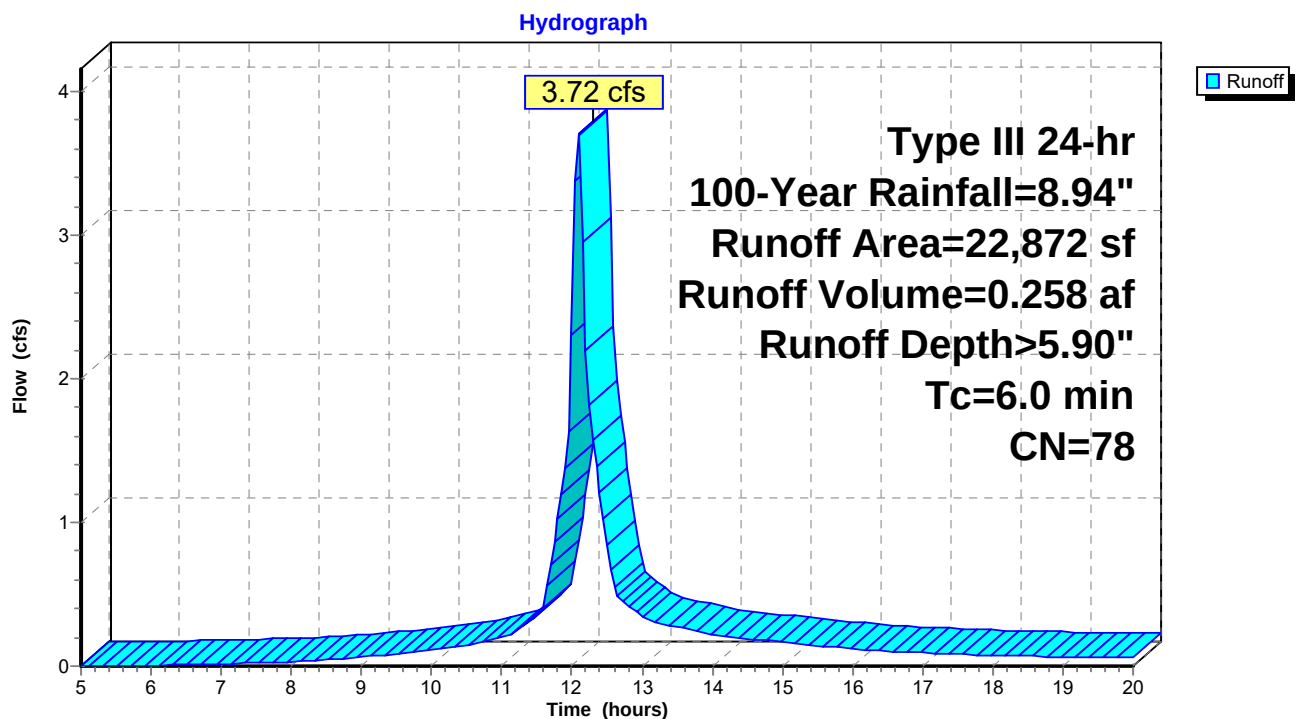
**Summary for Subcatchment 50S: P1S**

Runoff = 3.72 cfs @ 12.09 hrs, Volume= 0.258 af, Depth> 5.90"  
Routed to Pond 53P : CB 21

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 6,743     | 98 | Unconnected roofs, HSG A      |
| 7,903     | 39 | >75% Grass cover, Good, HSG A |
| 8,226     | 98 | Paved parking, HSG A          |
| 22,872    | 78 | Weighted Average              |
| 7,903     |    | 34.55% Pervious Area          |
| 14,969    |    | 65.45% Impervious Area        |
| 6,743     |    | 45.05% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 50S: P1S**



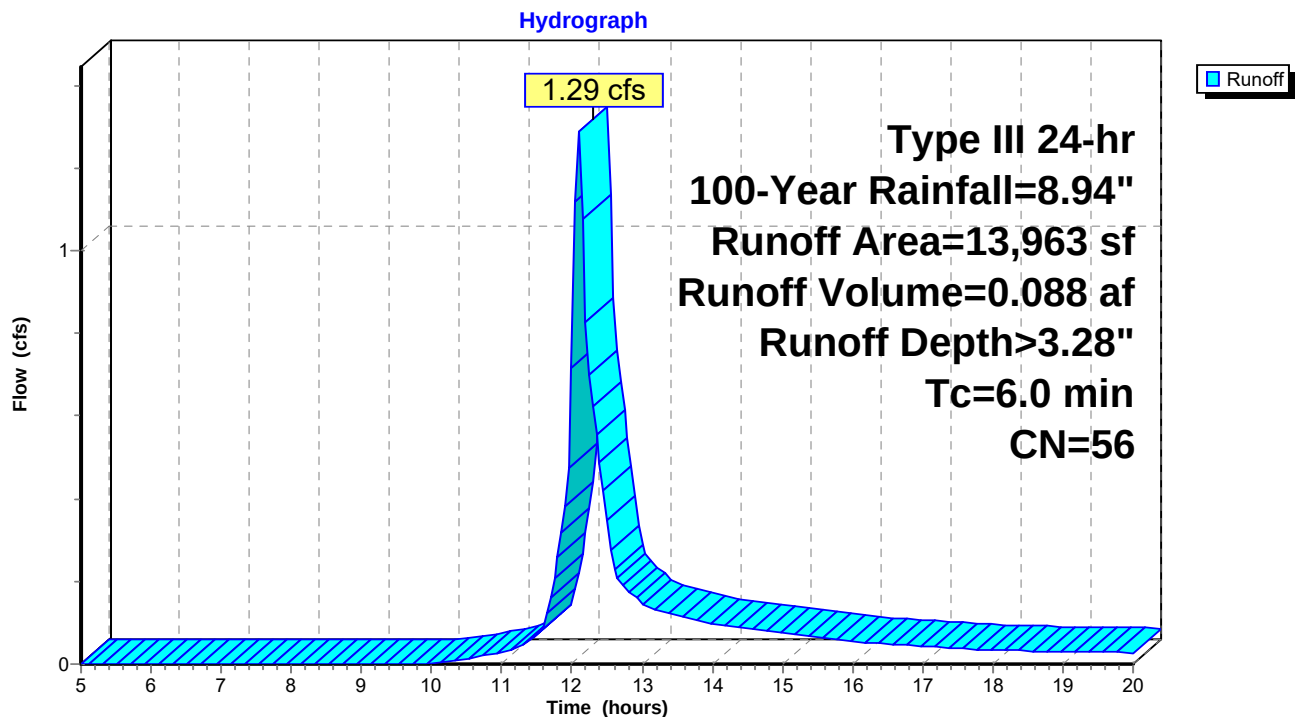
**Summary for Subcatchment 51S: P1T**

Runoff = 1.29 cfs @ 12.10 hrs, Volume= 0.088 af, Depth> 3.28"  
 Routed to Pond 52P : CB 20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 9,878     | 39 | >75% Grass cover, Good, HSG A |
| 4,085     | 98 | Paved parking, HSG A          |
| 13,963    | 56 | Weighted Average              |
| 9,878     |    | 70.74% Pervious Area          |
| 4,085     |    | 29.26% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 51S: P1T**

### Summary for Subcatchment 57S: (new Subcat)

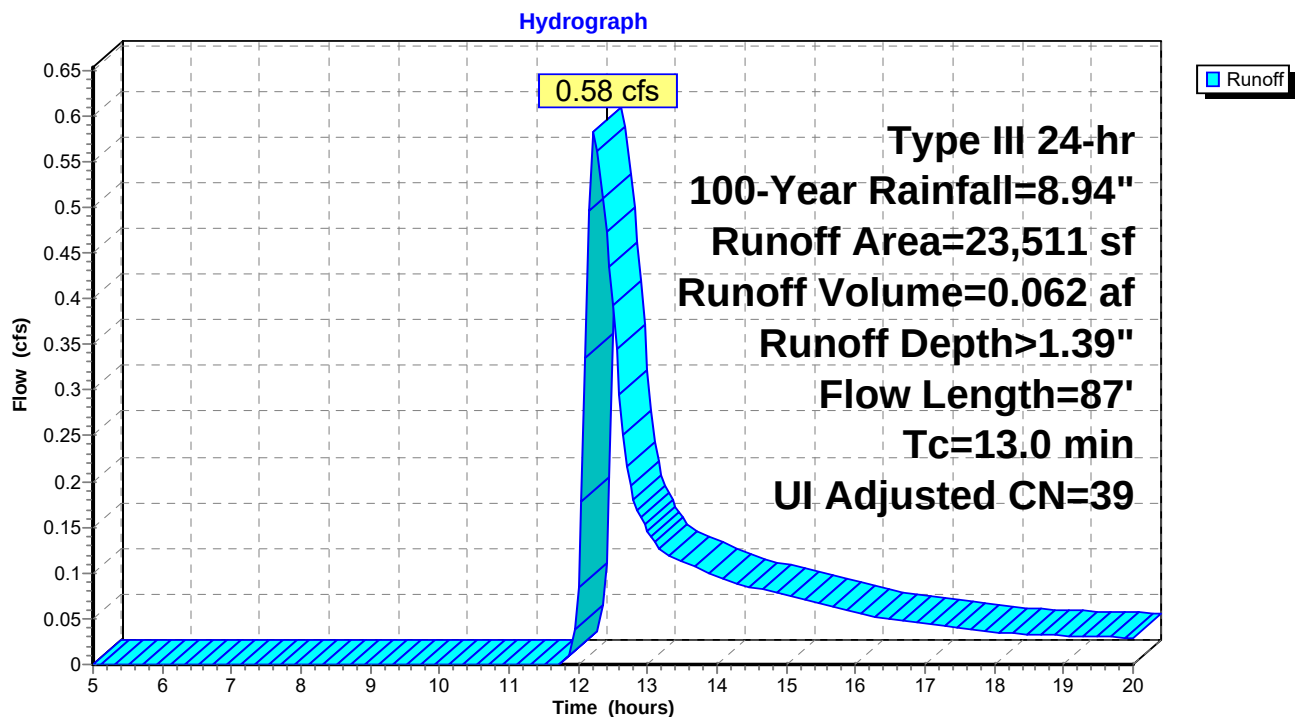
Runoff = 0.58 cfs @ 12.23 hrs, Volume= 0.062 af, Depth> 1.39"  
Routed to Pond 56P : Inf. Basin 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 1,317     | 98 |     | Unconnected roofs, HSG A      |
| 4,111     | 30 |     | Woods, Good, HSG A            |
| 18,083    | 39 |     | >75% Grass cover, Good, HSG A |
| 23,511    | 41 | 39  | Weighted Average, UI Adjusted |
| 22,194    |    |     | 94.40% Pervious Area          |
| 1,317     |    |     | 5.60% Impervious Area         |
| 1,317     |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                          |
|----------|---------------|---------------|-------------------|----------------|----------------------------------------------------------------------|
| 12.5     | 50            | 0.0200        | 0.07              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10"     |
| 0.5      | 37            | 0.0300        | 1.21              |                | <b>Shallow Concentrated Flow,</b><br>Short Grass Pasture Kv= 7.0 fps |
| 13.0     | 87            | Total         |                   |                |                                                                      |

### Subcatchment 57S: (new Subcat)



**Summary for Subcatchment 58S: P1AA**

Runoff = 9.49 cfs @ 12.19 hrs, Volume= 0.844 af, Depth> 2.03"  
 Routed to Link 59L : DP 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

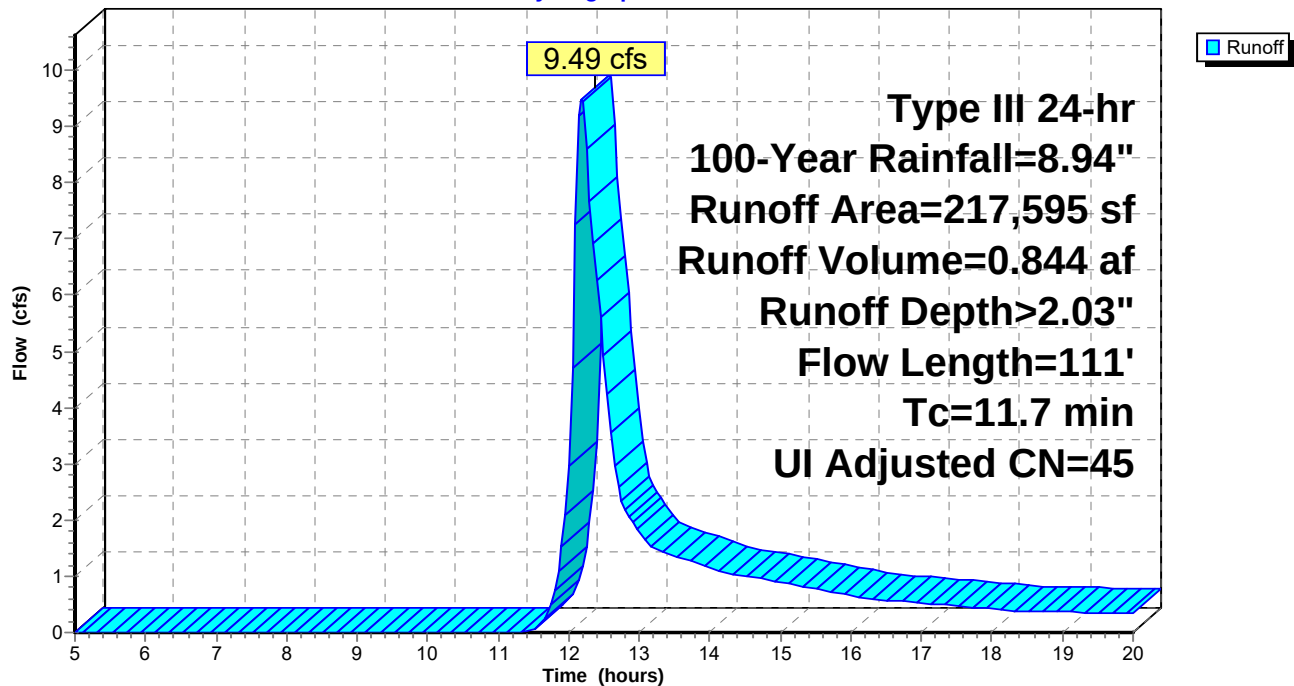
| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 1,776     | 98 |     | Unconnected roofs, HSG C      |
| 20,134    | 70 |     | Woods, Good, HSG C            |
| 38,005    | 74 |     | >75% Grass cover, Good, HSG C |
| 3,034     | 98 |     | Unconnected roofs, HSG A      |
| * 12,179  | 39 |     | Pervious Pavement             |
| 84,195    | 30 |     | Woods, Good, HSG A            |
| 57,506    | 39 |     | >75% Grass cover, Good, HSG A |
| 766       | 98 |     | Unconnected pavement, HSG A   |
| 217,595   | 46 | 45  | Weighted Average, UI Adjusted |
| 212,019   |    |     | 97.44% Pervious Area          |
| 5,576     |    |     | 2.56% Impervious Area         |
| 5,576     |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                      |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------|
| 10.7     | 50            | 0.0300        | 0.08              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10" |
| 1.0      | 61            | 0.0400        | 1.00              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps        |
| 11.7     | 111           | Total         |                   |                |                                                                  |

**Subcatchment 58S: P1AA**

Hydrograph



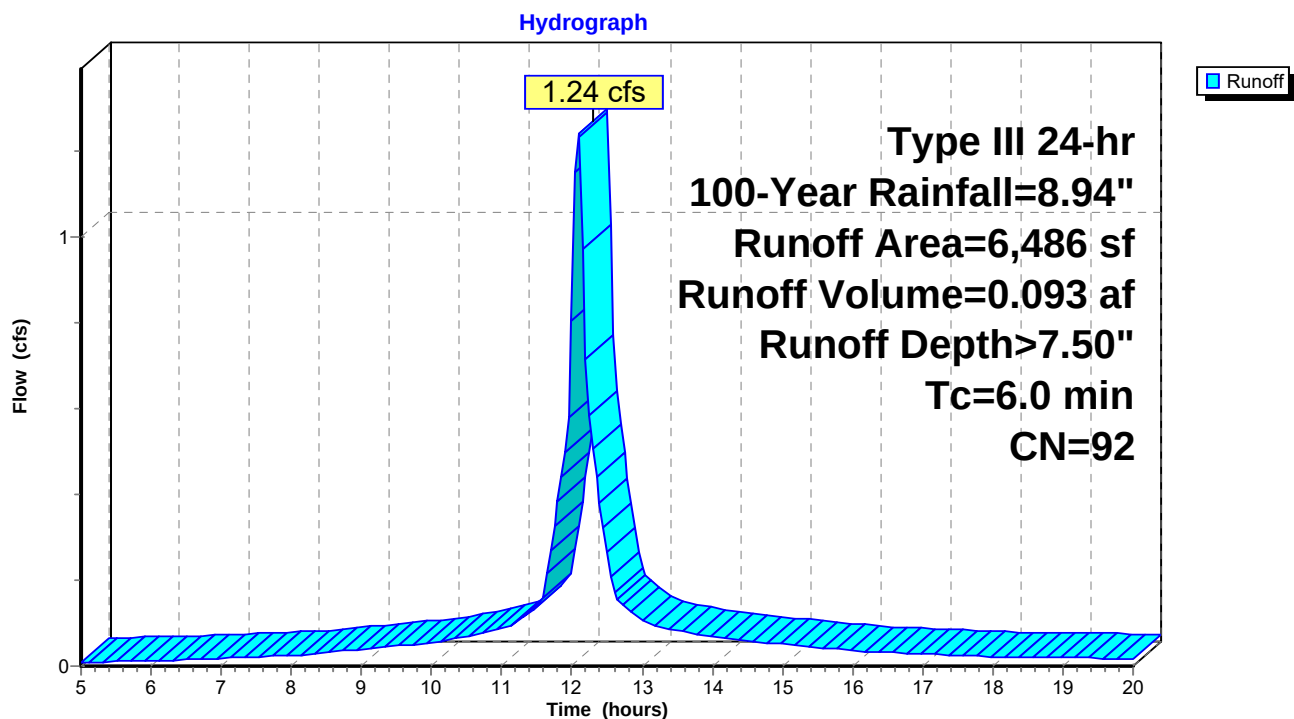
**Summary for Subcatchment 60S: P2C**

Runoff = 1.24 cfs @ 12.09 hrs, Volume= 0.093 af, Depth> 7.50"  
 Routed to Pond 62P : CB 66

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,086     | 98 | Unconnected roofs, HSG C      |
| 1,688     | 74 | >75% Grass cover, Good, HSG C |
| 2,712     | 98 | Paved parking, HSG C          |
| 6,486     | 92 | Weighted Average              |
| 1,688     |    | 26.03% Pervious Area          |
| 4,798     |    | 73.97% Impervious Area        |
| 2,086     |    | 43.48% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 60S: P2C**

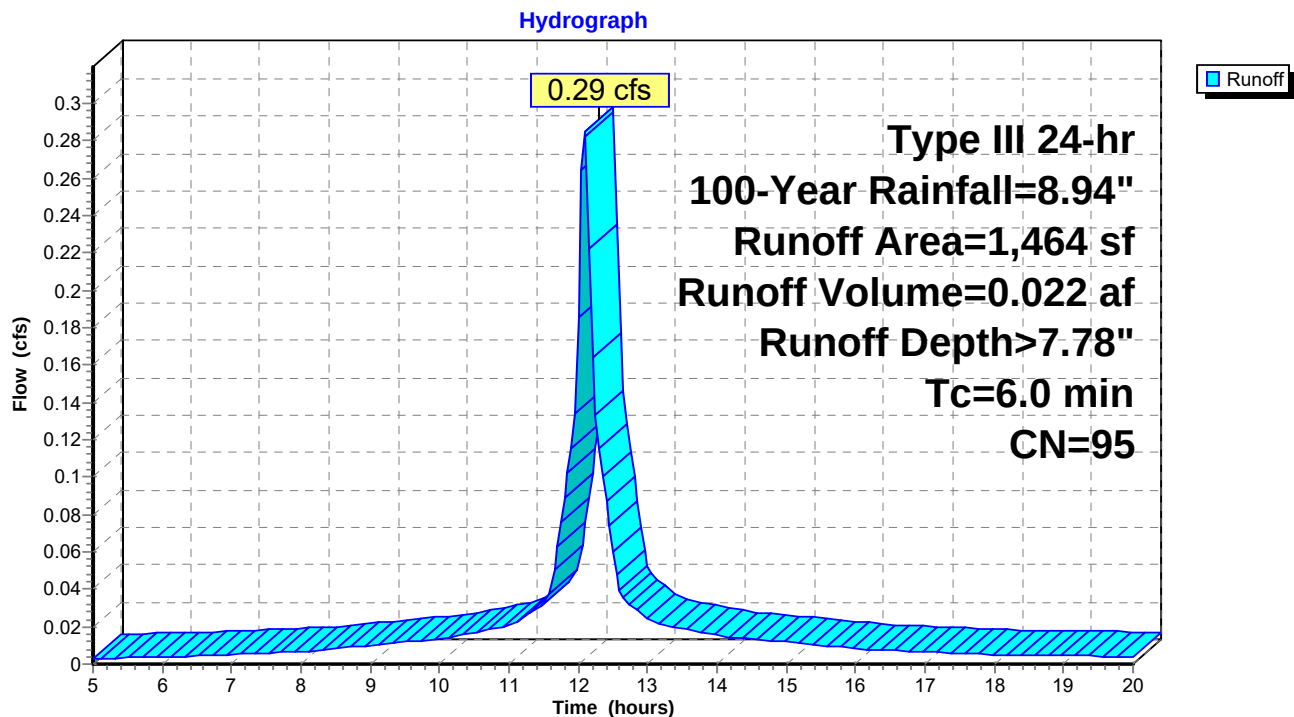
**Summary for Subcatchment 61S: P2D**

Runoff = 0.29 cfs @ 12.09 hrs, Volume= 0.022 af, Depth> 7.78"  
 Routed to Pond 63P : CB 67

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 190       | 74 | >75% Grass cover, Good, HSG C |
| 1,274     | 98 | Paved parking, HSG C          |
| 1,464     | 95 | Weighted Average              |
| 190       |    | 12.98% Pervious Area          |
| 1,274     |    | 87.02% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 61S: P2D**

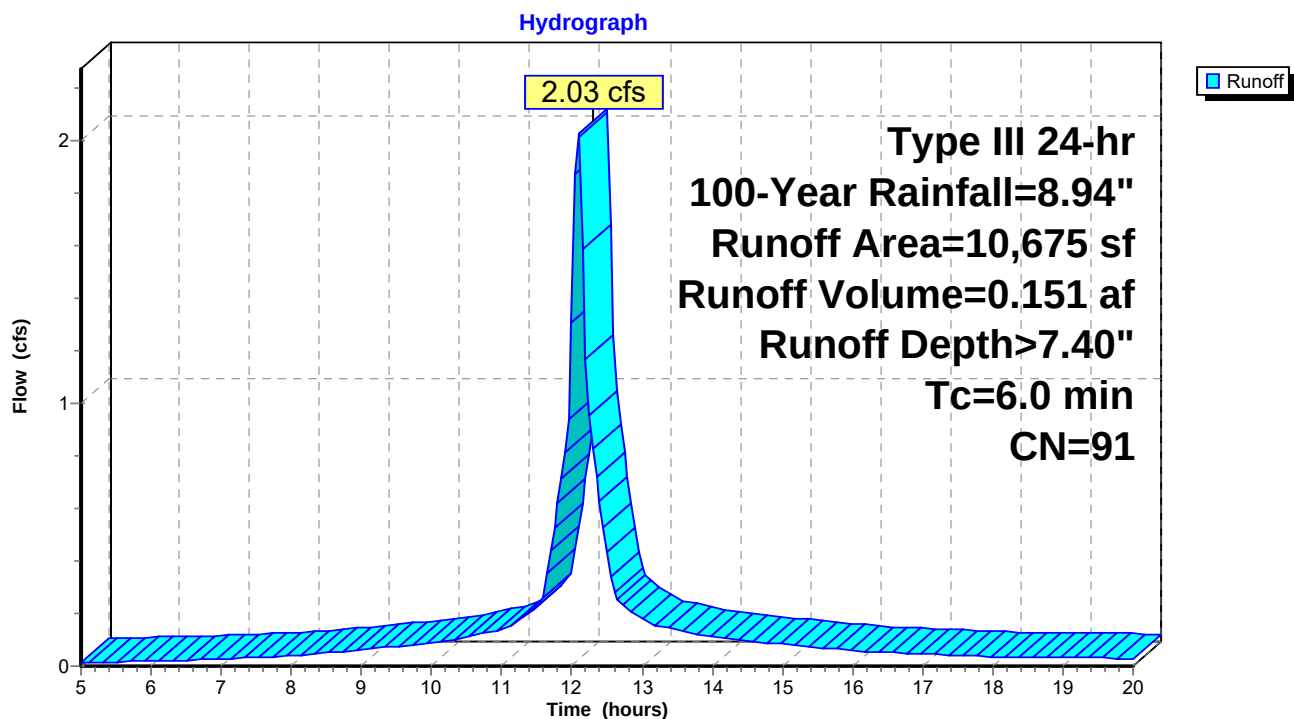
**Summary for Subcatchment 62S: P2J**

Runoff = 2.03 cfs @ 12.09 hrs, Volume= 0.151 af, Depth> 7.40"  
 Routed to Pond 69P : CB 72

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,207     | 98 | Unconnected roofs, HSG C      |
| 2,897     | 74 | >75% Grass cover, Good, HSG C |
| 4,571     | 98 | Paved parking, HSG C          |
| 10,675    | 91 | Weighted Average              |
| 2,897     |    | 27.14% Pervious Area          |
| 7,778     |    | 72.86% Impervious Area        |
| 3,207     |    | 41.23% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 62S: P2J**

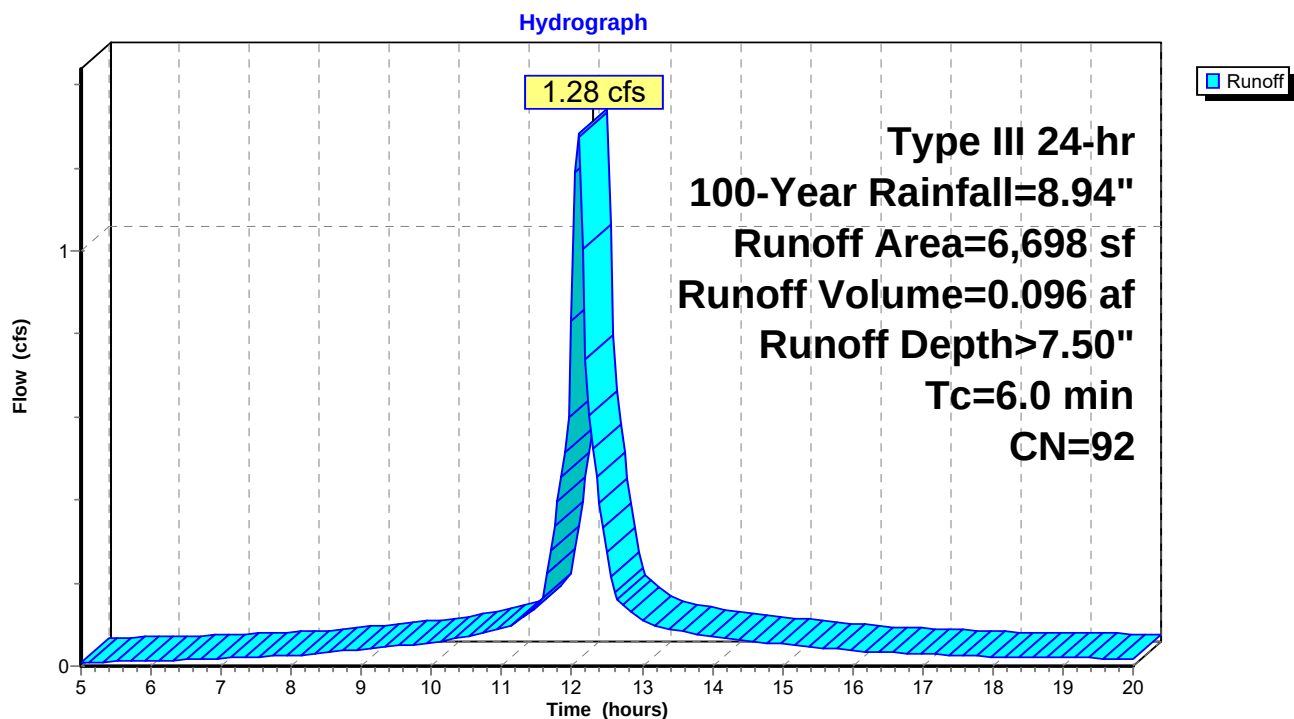
**Summary for Subcatchment 63S: P2K**

Runoff = 1.28 cfs @ 12.09 hrs, Volume= 0.096 af, Depth> 7.50"  
 Routed to Pond 70P : CB 73

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,542     | 74 | >75% Grass cover, Good, HSG C |
| 1,151     | 98 | Unconnected roofs, HSG C      |
| 4,005     | 98 | Paved parking, HSG C          |
| 6,698     | 92 | Weighted Average              |
| 1,542     |    | 23.02% Pervious Area          |
| 5,156     |    | 76.98% Impervious Area        |
| 1,151     |    | 22.32% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 63S: P2K**



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Type III 24-hr 100-Year Rainfall=8.94"

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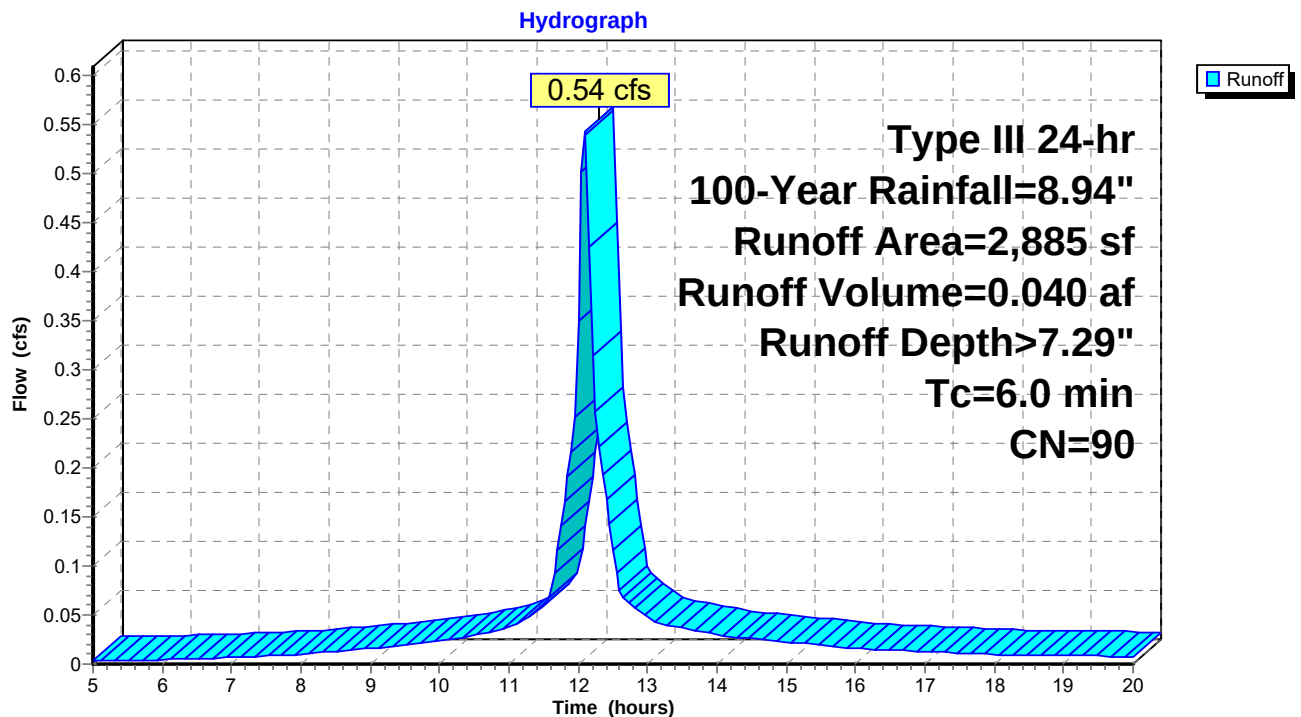
**Summary for Subcatchment 64S: P3L**

Runoff = 0.54 cfs @ 12.09 hrs, Volume= 0.040 af, Depth> 7.29"  
Routed to Pond 88P : CB 84

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 965       | 74 | >75% Grass cover, Good, HSG C |
| 1,920     | 98 | Paved parking, HSG C          |
| 2,885     | 90 | Weighted Average              |
| 965       |    | 33.45% Pervious Area          |
| 1,920     |    | 66.55% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 64S: P3L**

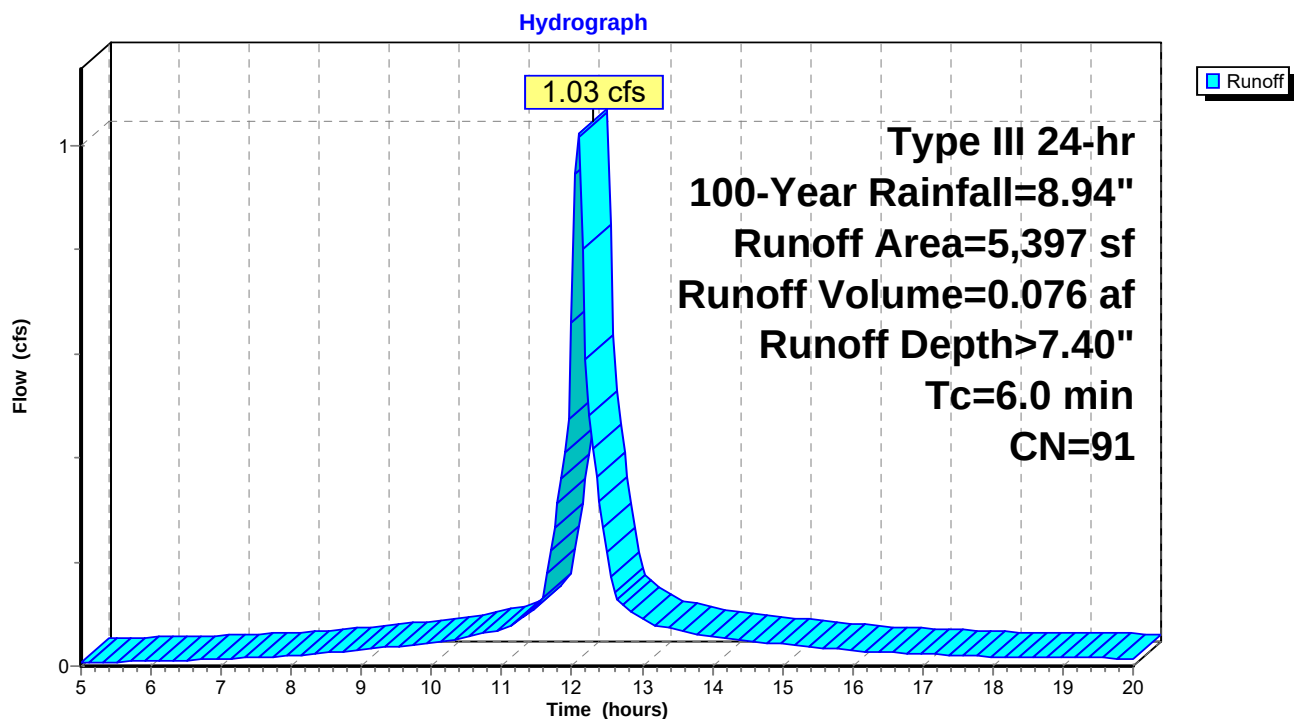
**Summary for Subcatchment 65S: P3M**

Runoff = 1.03 cfs @ 12.09 hrs, Volume= 0.076 af, Depth> 7.40"  
 Routed to Pond 87P : CB 85

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,636     | 74 | >75% Grass cover, Good, HSG C |
| 1,756     | 98 | Unconnected roofs, HSG C      |
| 2,005     | 98 | Paved parking, HSG C          |
| 5,397     | 91 | Weighted Average              |
| 1,636     |    | 30.31% Pervious Area          |
| 3,761     |    | 69.69% Impervious Area        |
| 1,756     |    | 46.69% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 65S: P3M**

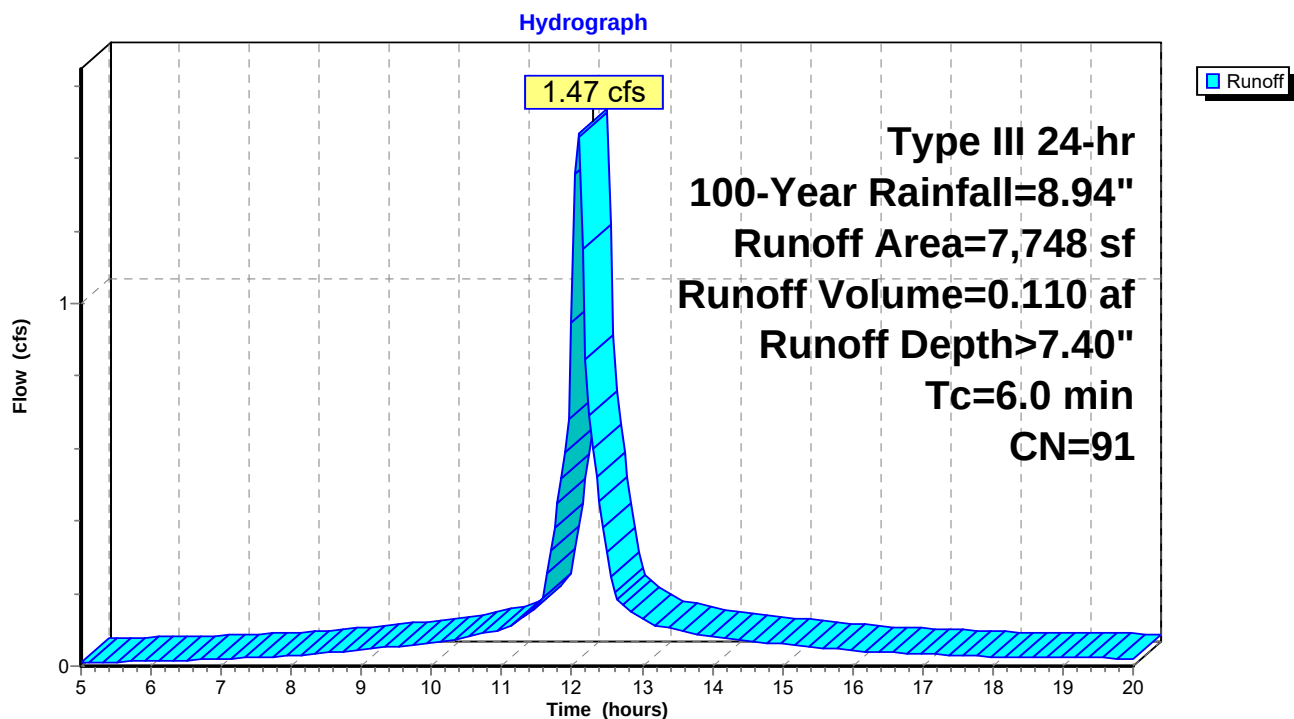
**Summary for Subcatchment 66S: P3N**

Runoff = 1.47 cfs @ 12.09 hrs, Volume= 0.110 af, Depth> 7.40"  
 Routed to Pond 83P : CB 86

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,108     | 74 | >75% Grass cover, Good, HSG C |
| 1,824     | 98 | Unconnected roofs, HSG C      |
| 3,816     | 98 | Paved parking, HSG C          |
| 7,748     | 91 | Weighted Average              |
| 2,108     |    | 27.21% Pervious Area          |
| 5,640     |    | 72.79% Impervious Area        |
| 1,824     |    | 32.34% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 66S: P3N**

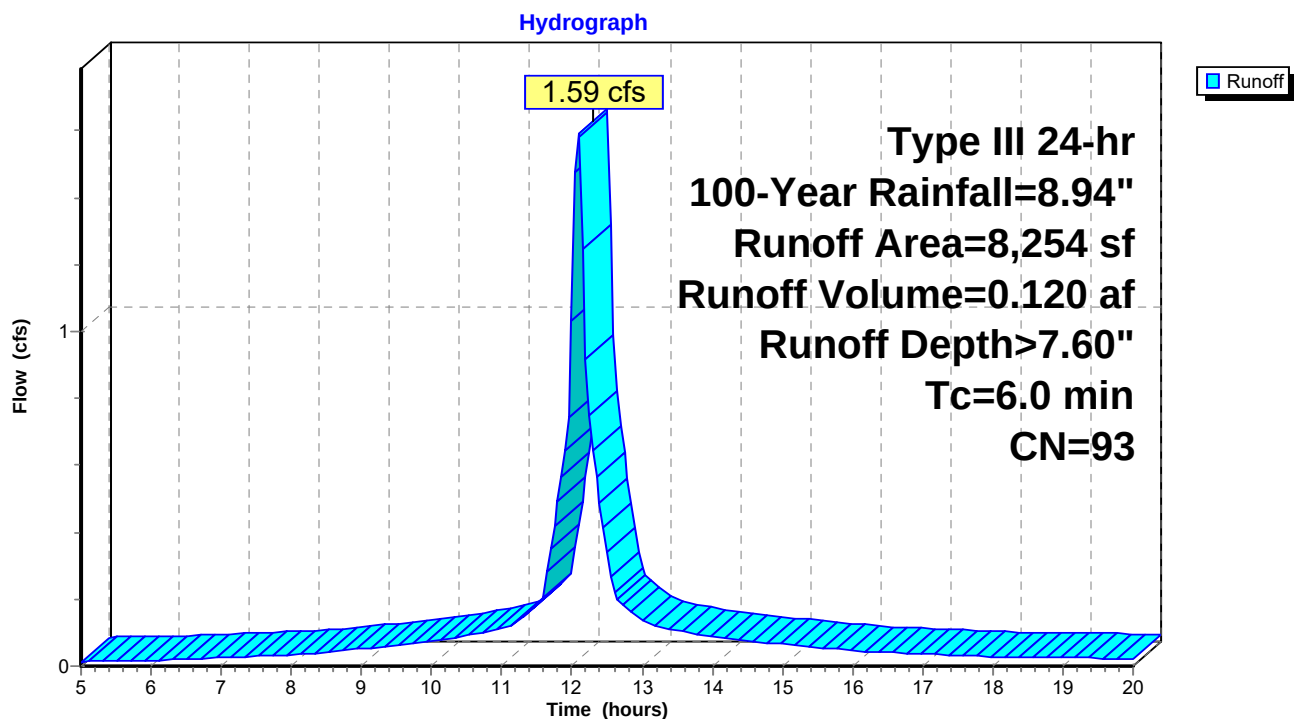
**Summary for Subcatchment 67S: P3O**

Runoff = 1.59 cfs @ 12.09 hrs, Volume= 0.120 af, Depth> 7.60"  
 Routed to Pond 84P : CB 87

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,792     | 74 | >75% Grass cover, Good, HSG C |
| 2,605     | 98 | Unconnected roofs, HSG C      |
| 3,857     | 98 | Paved parking, HSG C          |
| 8,254     | 93 | Weighted Average              |
| 1,792     |    | 21.71% Pervious Area          |
| 6,462     |    | 78.29% Impervious Area        |
| 2,605     |    | 40.31% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 67S: P3O**

**Summary for Subcatchment 68S: P3P**

Runoff = 0.78 cfs @ 12.09 hrs, Volume= 0.059 af, Depth> 7.60"  
 Routed to Pond 108P : CB 88

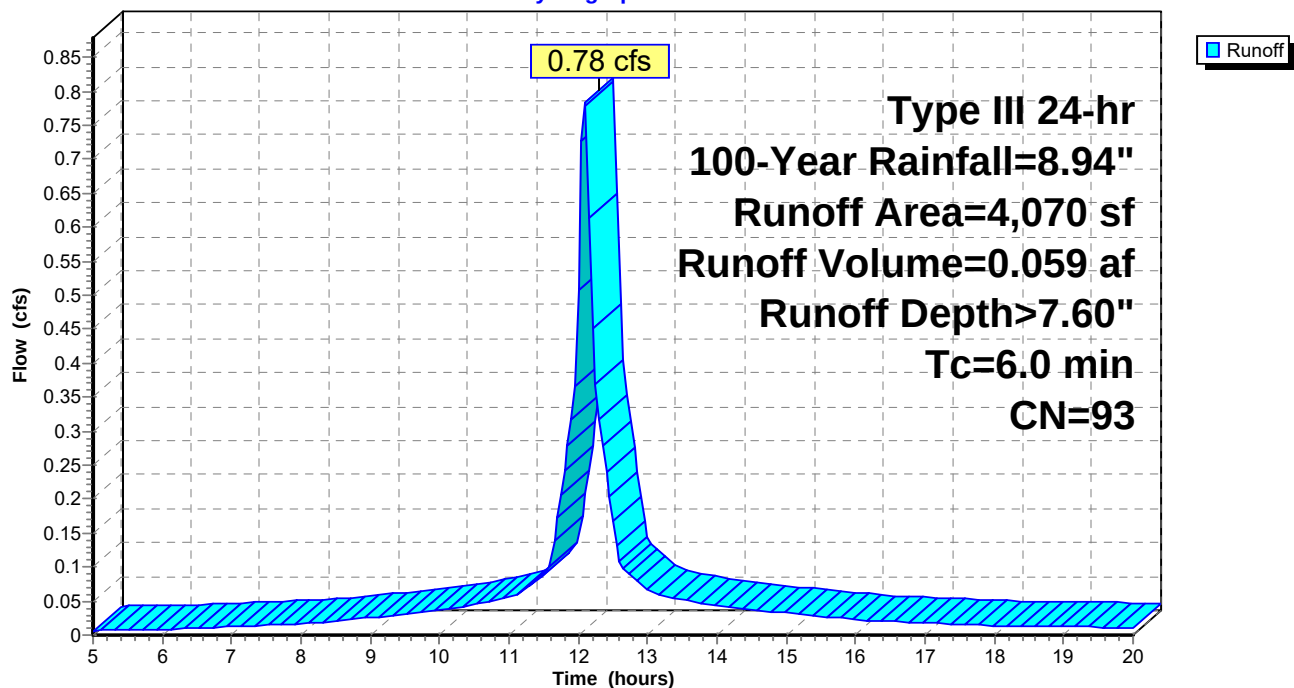
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 802       | 74 | >75% Grass cover, Good, HSG C |
| 3,268     | 98 | Paved parking, HSG C          |
| 4,070     | 93 | Weighted Average              |
| 802       |    | 19.71% Pervious Area          |
| 3,268     |    | 80.29% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 68S: P3P**

Hydrograph



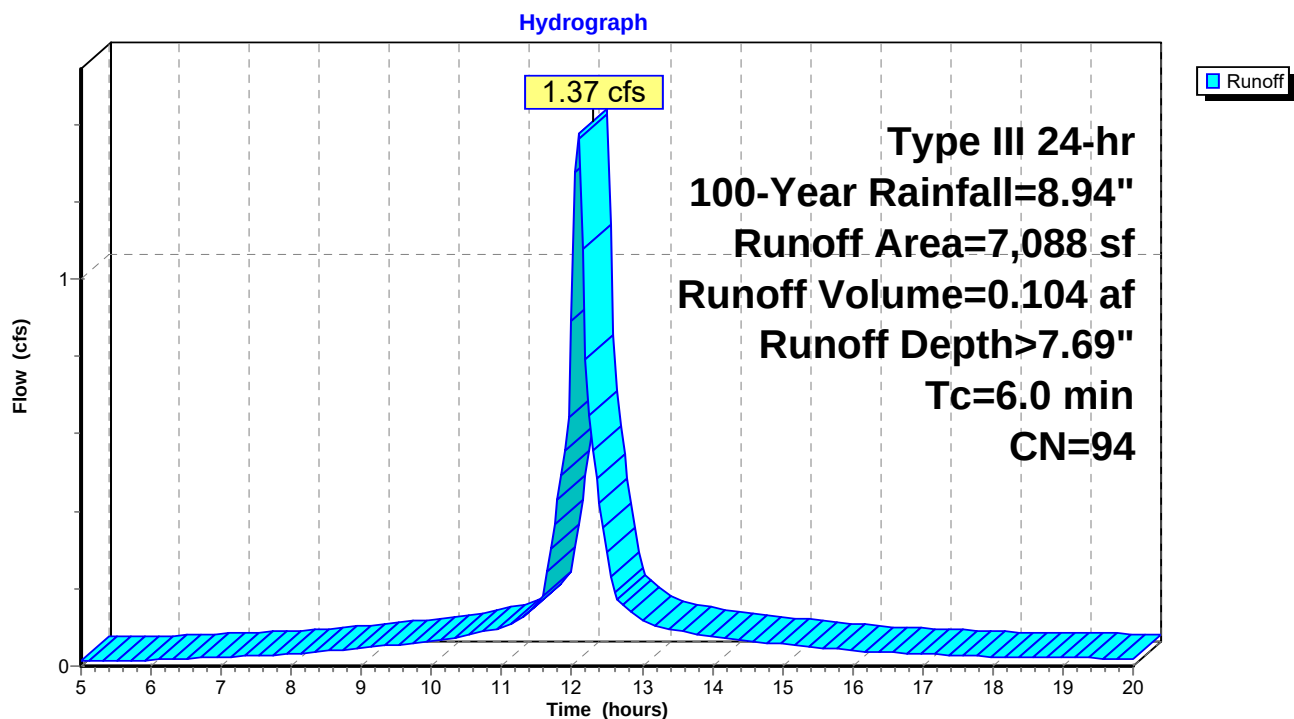
**Summary for Subcatchment 69S: P2E**

Runoff = 1.37 cfs @ 12.09 hrs, Volume= 0.104 af, Depth> 7.69"  
 Routed to Pond 66P : CB 68

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,227     | 74 | >75% Grass cover, Good, HSG C |
| 1,596     | 98 | Unconnected roofs, HSG C      |
| 4,265     | 98 | Paved parking, HSG C          |
| 7,088     | 94 | Weighted Average              |
| 1,227     |    | 17.31% Pervious Area          |
| 5,861     |    | 82.69% Impervious Area        |
| 1,596     |    | 27.23% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 69S: P2E**

**Summary for Subcatchment 70S: P2F**

Runoff = 0.77 cfs @ 12.09 hrs, Volume= 0.060 af, Depth> 8.00"  
 Routed to Pond 67P : CB 69

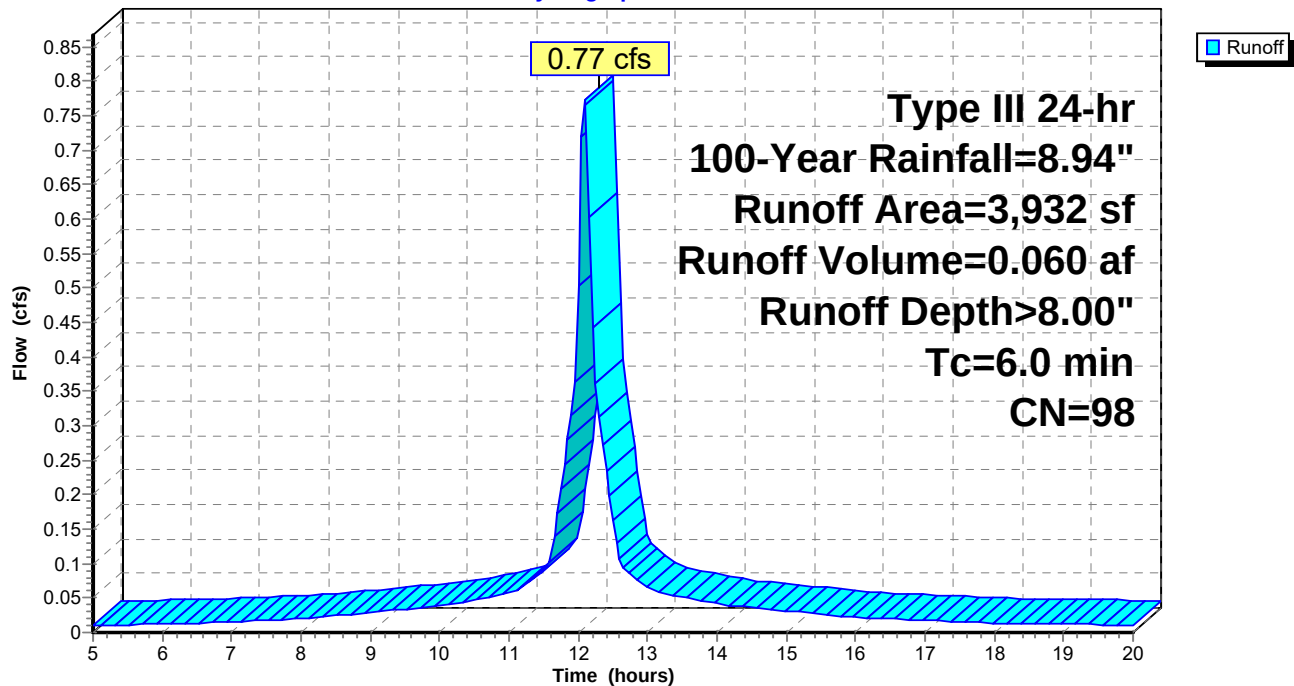
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description             |
|-----------|----|-------------------------|
| 3,932     | 98 | Paved parking, HSG C    |
| 3,932     |    | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 70S: P2F**

Hydrograph



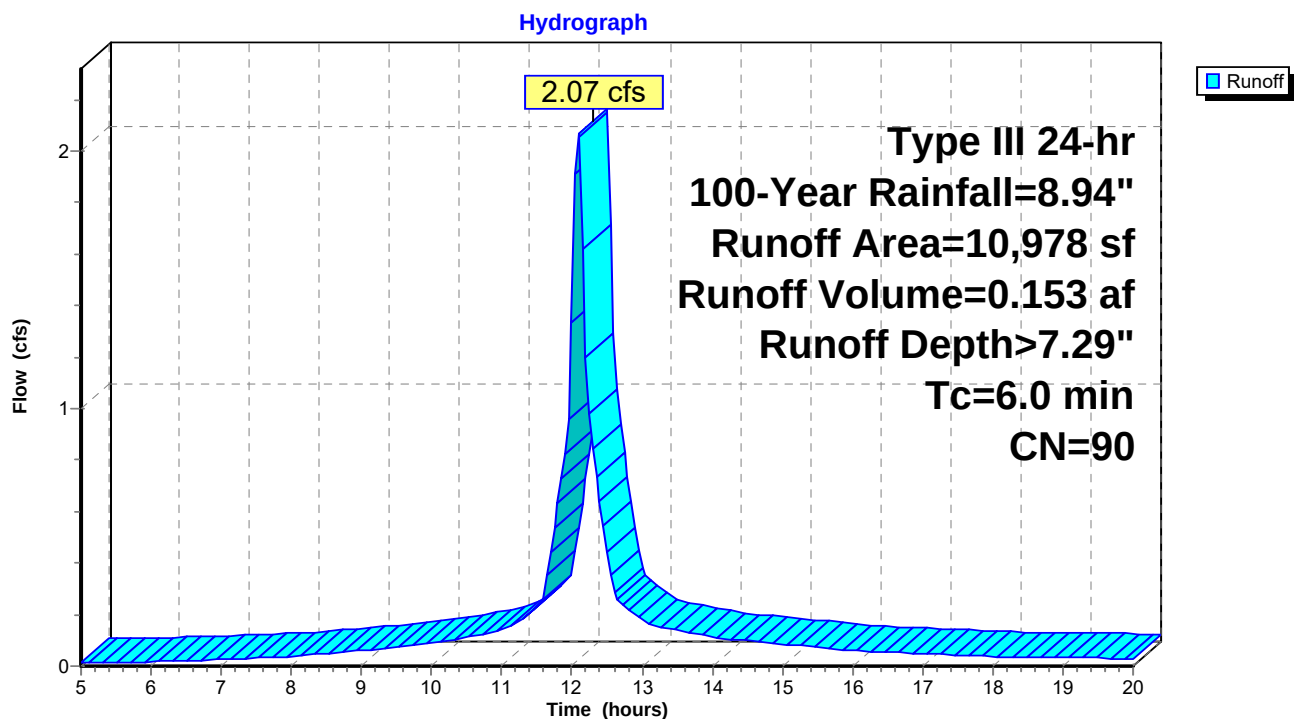
**Summary for Subcatchment 71S: P2A**

Runoff = 2.07 cfs @ 12.09 hrs, Volume= 0.153 af, Depth> 7.29"  
 Routed to Pond 73P : CB 64

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,800     | 98 | Unconnected roofs, HSG C      |
| 3,751     | 74 | >75% Grass cover, Good, HSG C |
| 4,427     | 98 | Paved parking, HSG C          |
| 10,978    | 90 | Weighted Average              |
| 3,751     |    | 34.17% Pervious Area          |
| 7,227     |    | 65.83% Impervious Area        |
| 2,800     |    | 38.74% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 71S: P2A**



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Type III 24-hr 100-Year Rainfall=8.94"

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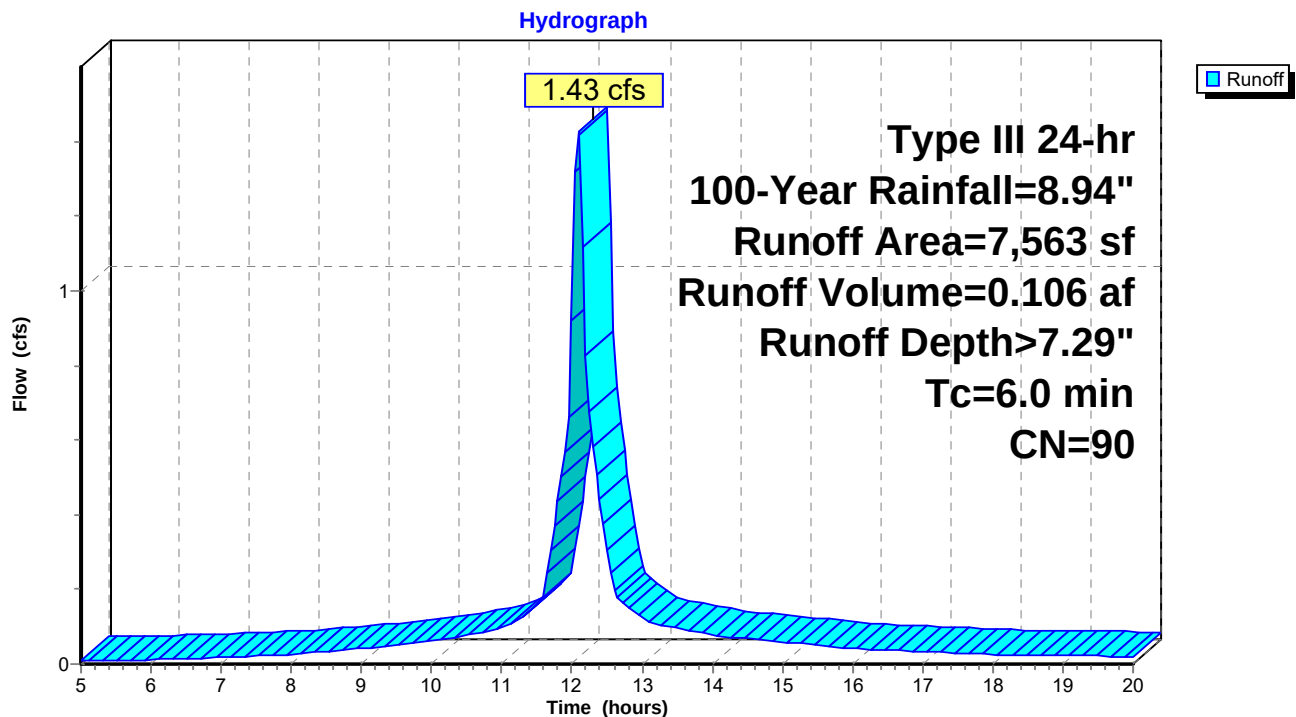
**Summary for Subcatchment 72S: P2B**

Runoff = 1.43 cfs @ 12.09 hrs, Volume= 0.106 af, Depth> 7.29"  
Routed to Pond 74P : CB 65

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,643     | 74 | >75% Grass cover, Good, HSG C |
| 4,920     | 98 | Paved parking, HSG C          |
| 7,563     | 90 | Weighted Average              |
| 2,643     |    | 34.95% Pervious Area          |
| 4,920     |    | 65.05% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 72S: P2B**

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Type III 24-hr 100-Year Rainfall=8.94"

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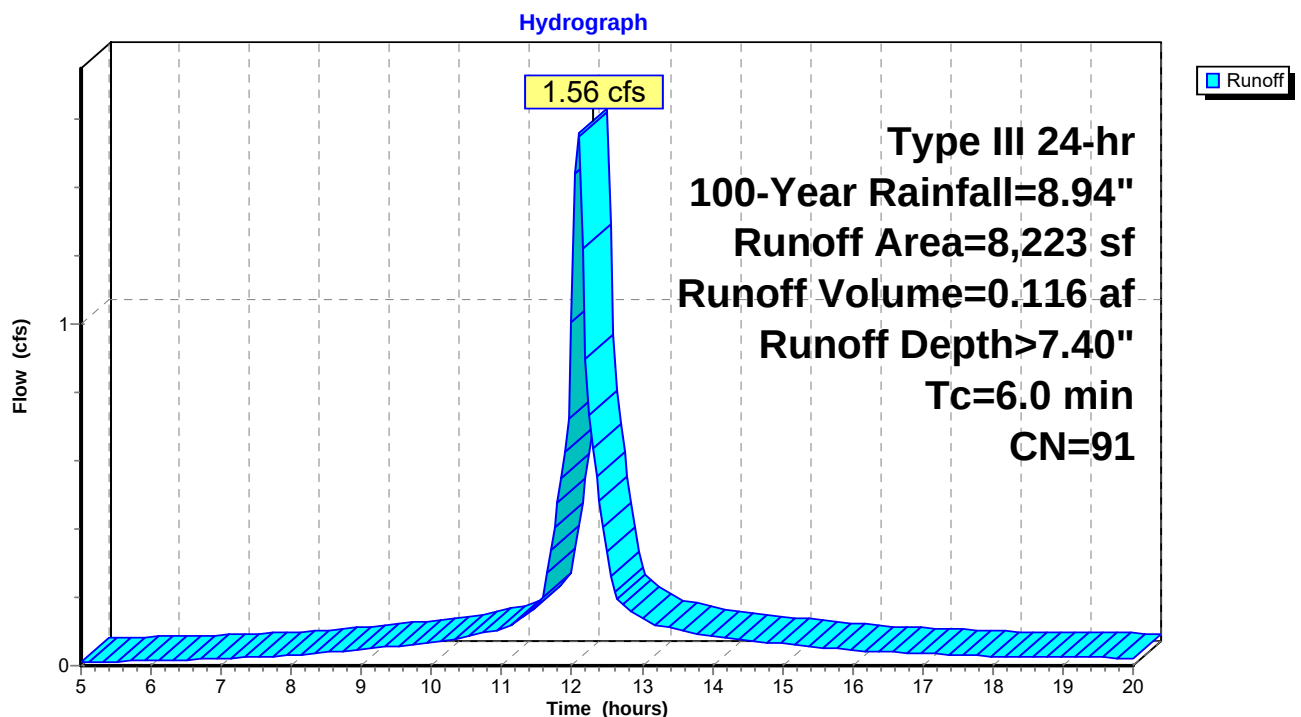
**Summary for Subcatchment 73S: P2G**

Runoff = 1.56 cfs @ 12.09 hrs, Volume= 0.116 af, Depth> 7.40"  
Routed to Pond 76P : CB 70

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,345     | 74 | >75% Grass cover, Good, HSG C |
| 1,348     | 98 | Unconnected roofs, HSG C      |
| 122       | 98 | Unconnected roofs, HSG A      |
| 34        | 39 | >75% Grass cover, Good, HSG A |
| 673       | 98 | Paved parking, HSG A          |
| 3,701     | 98 | Paved parking, HSG C          |
| 8,223     | 91 | Weighted Average              |
| 2,379     |    | 28.93% Pervious Area          |
| 5,844     |    | 71.07% Impervious Area        |
| 1,470     |    | 25.15% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 73S: P2G**

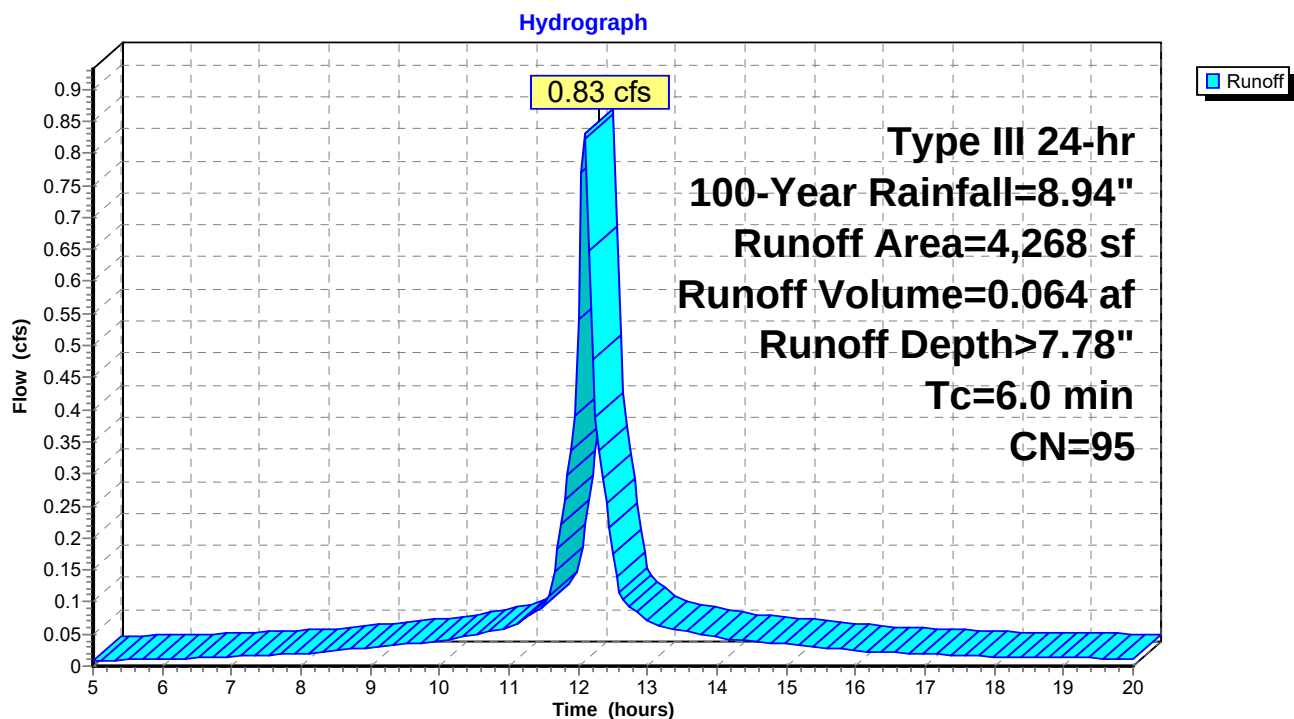
**Summary for Subcatchment 74S: P2H**

Runoff = 0.83 cfs @ 12.09 hrs, Volume= 0.064 af, Depth> 7.78"  
 Routed to Pond 77P : CB 71

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 200       | 39 | >75% Grass cover, Good, HSG A |
| 610       | 98 | Unconnected roofs, HSG A      |
| 3,458     | 98 | Paved parking, HSG A          |
| 4,268     | 95 | Weighted Average              |
| 200       |    | 4.69% Pervious Area           |
| 4,068     |    | 95.31% Impervious Area        |
| 610       |    | 15.00% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 74S: P2H**

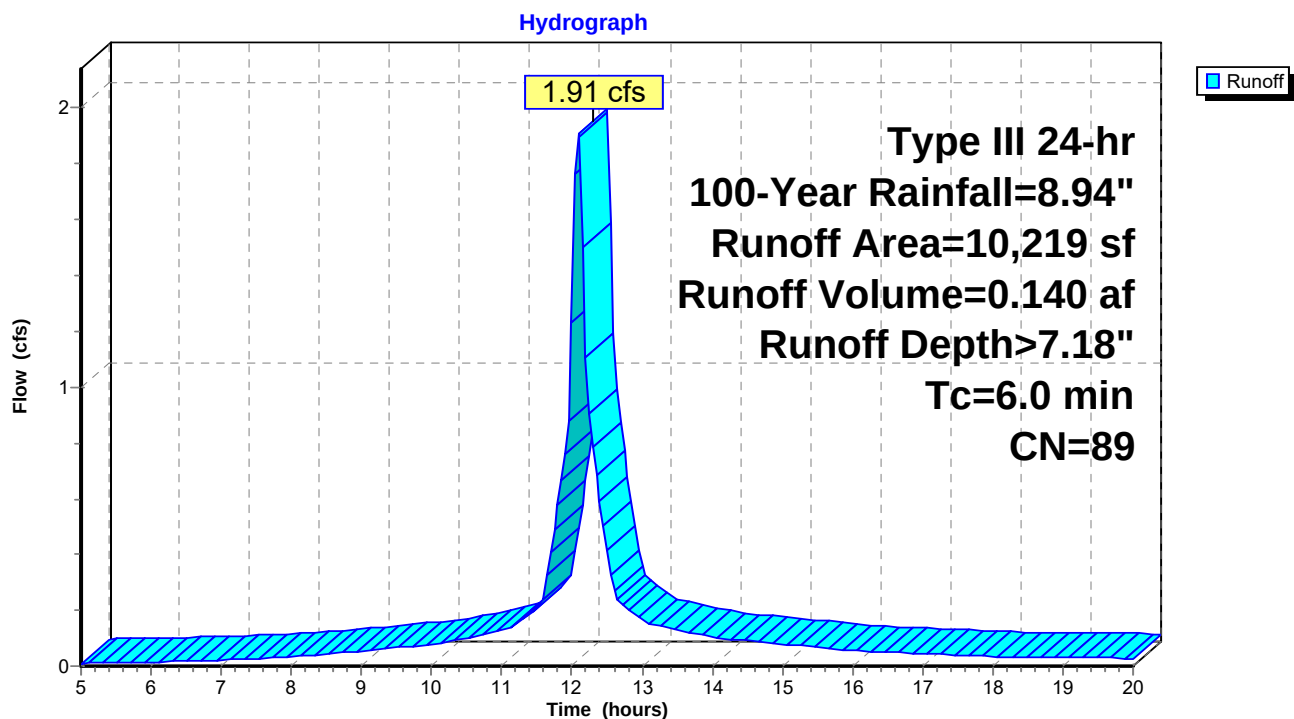
**Summary for Subcatchment 75S: P3Q**

Runoff = 1.91 cfs @ 12.09 hrs, Volume= 0.140 af, Depth> 7.18"  
 Routed to Pond 107P : CB

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,641     | 74 | >75% Grass cover, Good, HSG C |
| 1,994     | 98 | Unconnected roofs, HSG C      |
| 4,584     | 98 | Paved parking, HSG C          |
| 10,219    | 89 | Weighted Average              |
| 3,641     |    | 35.63% Pervious Area          |
| 6,578     |    | 64.37% Impervious Area        |
| 1,994     |    | 30.31% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 75S: P3Q**

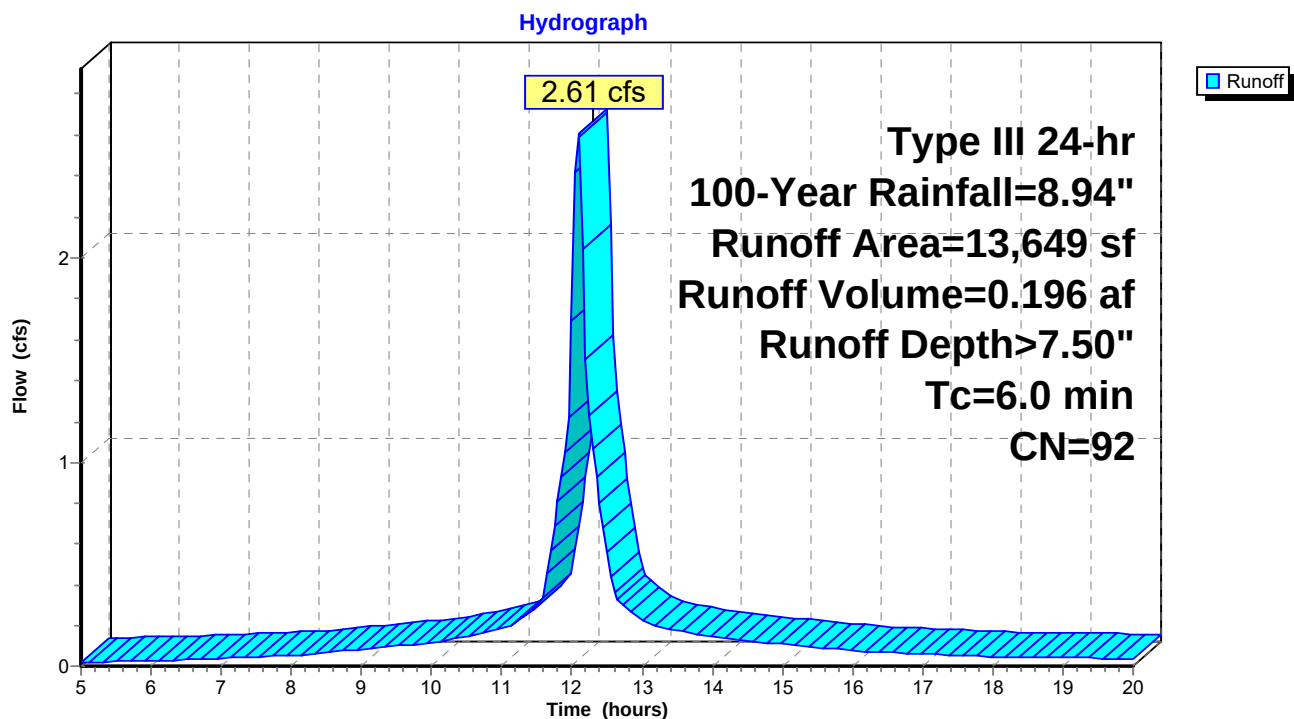
**Summary for Subcatchment 76S: P3R**

Runoff = 2.61 cfs @ 12.09 hrs, Volume= 0.196 af, Depth> 7.50"  
 Routed to Pond 103P : CB 92

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,162     | 74 | >75% Grass cover, Good, HSG C |
| 4,063     | 98 | Unconnected roofs, HSG C      |
| 6,424     | 98 | Paved parking, HSG C          |
| 13,649    | 92 | Weighted Average              |
| 3,162     |    | 23.17% Pervious Area          |
| 10,487    |    | 76.83% Impervious Area        |
| 4,063     |    | 38.74% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 76S: P3R**

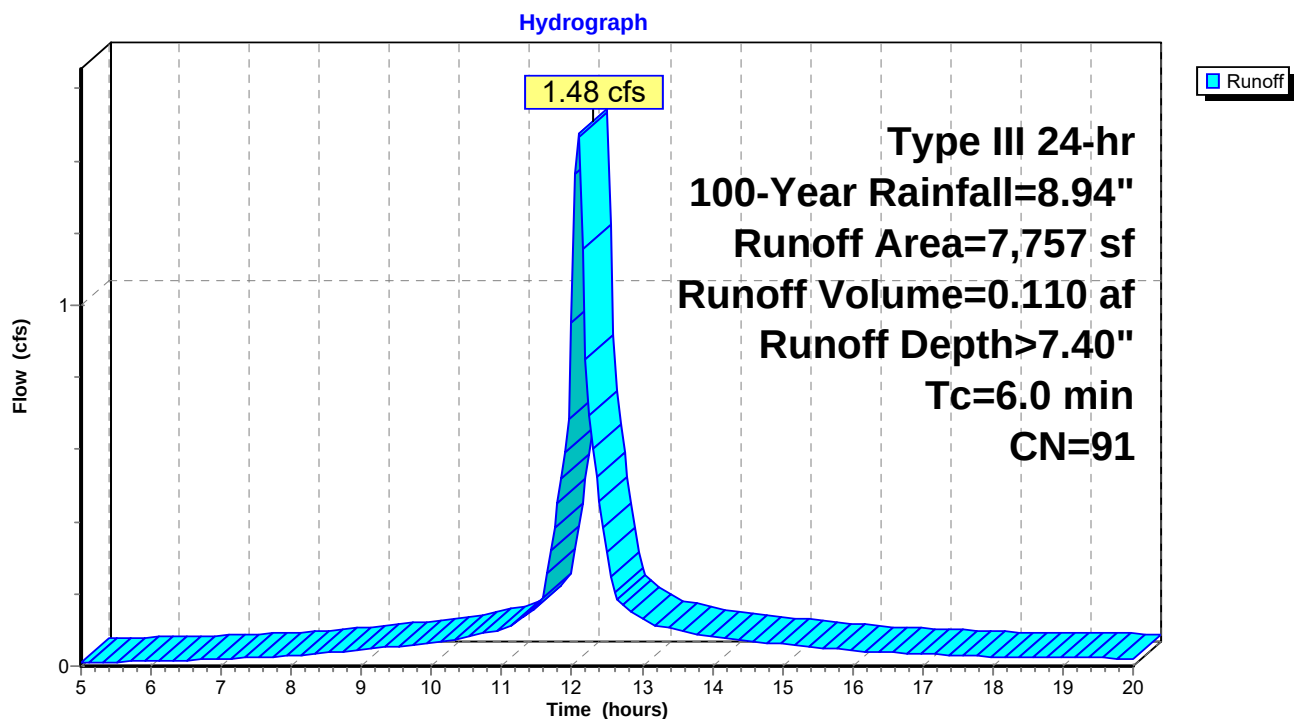
**Summary for Subcatchment 77S: P3S**

Runoff = 1.48 cfs @ 12.09 hrs, Volume= 0.110 af, Depth> 7.40"  
 Routed to Pond 102P : CB 93

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,358     | 74 | >75% Grass cover, Good, HSG C |
| 702       | 98 | Unconnected roofs, HSG C      |
| 4,697     | 98 | Paved parking, HSG C          |
| 7,757     | 91 | Weighted Average              |
| 2,358     |    | 30.40% Pervious Area          |
| 5,399     |    | 69.60% Impervious Area        |
| 702       |    | 13.00% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 77S: P3S**

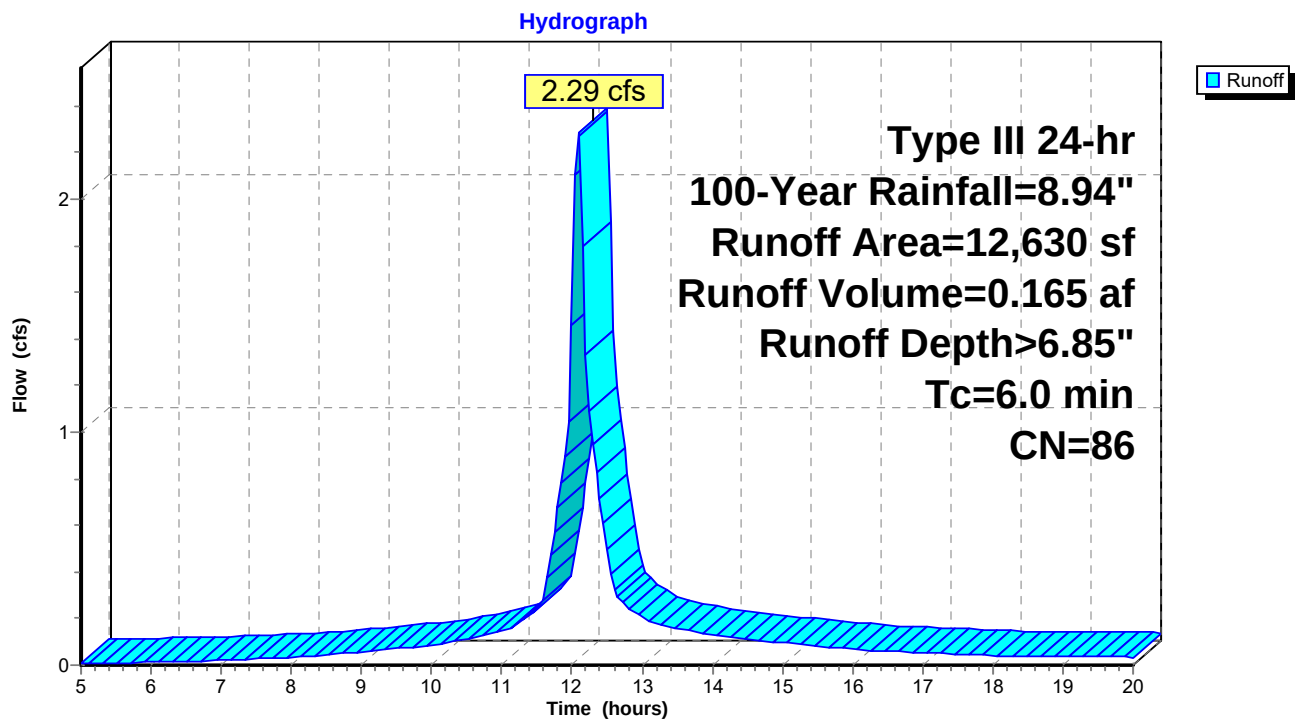
**Summary for Subcatchment 78S: P1S**

Runoff = 2.29 cfs @ 12.09 hrs, Volume= 0.165 af, Depth> 6.85"  
 Routed to Pond 112P : CB 45

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,541     | 74 | >75% Grass cover, Good, HSG C |
| 2,275     | 98 | Unconnected roofs, HSG C      |
| 693       | 39 | >75% Grass cover, Good, HSG A |
| 412       | 98 | Paved parking, HSG A          |
| 4,709     | 98 | Paved parking, HSG C          |
| 12,630    | 86 | Weighted Average              |
| 5,234     |    | 41.44% Pervious Area          |
| 7,396     |    | 58.56% Impervious Area        |
| 2,275     |    | 30.76% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 78S: P1S**

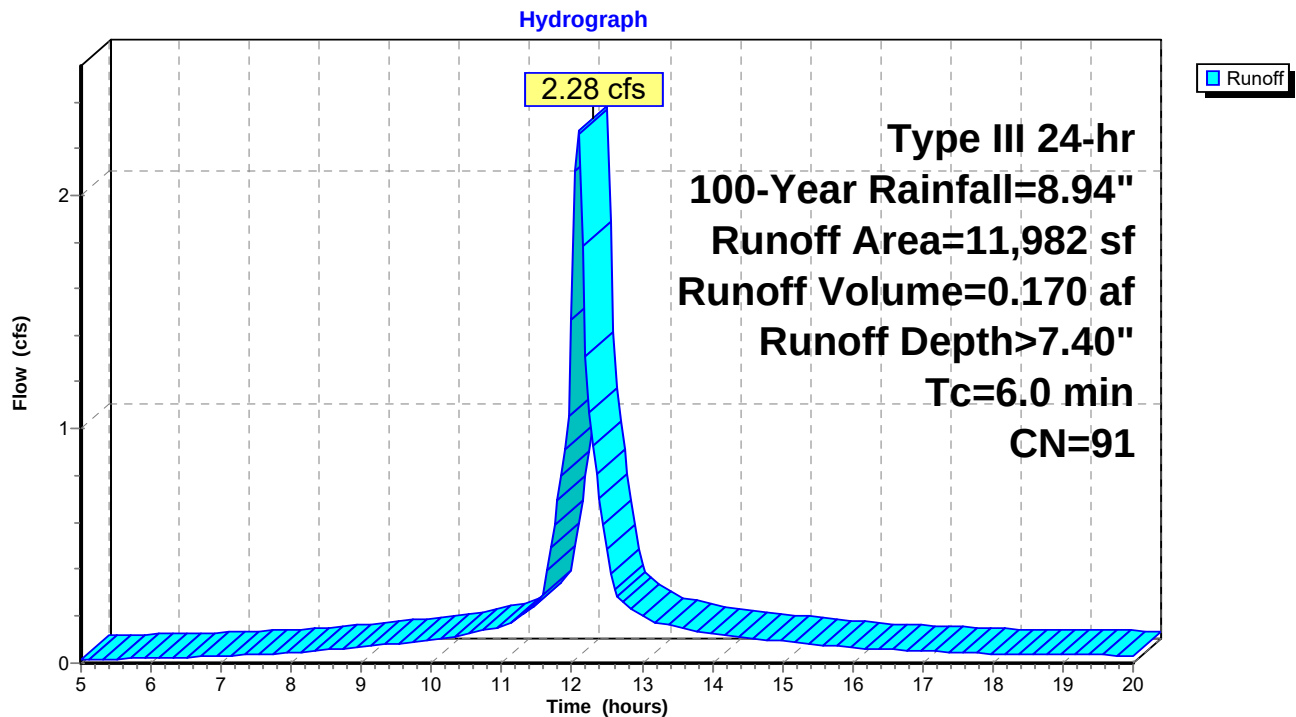
**Summary for Subcatchment 79S: P1T**

Runoff = 2.28 cfs @ 12.09 hrs, Volume= 0.170 af, Depth> 7.40"  
 Routed to Pond 122P : CB 46

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,187     | 74 | >75% Grass cover, Good, HSG C |
| 2,930     | 98 | Unconnected roofs, HSG C      |
| 118       | 39 | >75% Grass cover, Good, HSG A |
| 214       | 98 | Paved parking, HSG A          |
| 5,533     | 98 | Paved parking, HSG C          |
| 11,982    | 91 | Weighted Average              |
| 3,305     |    | 27.58% Pervious Area          |
| 8,677     |    | 72.42% Impervious Area        |
| 2,930     |    | 33.77% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 79S: P1T**



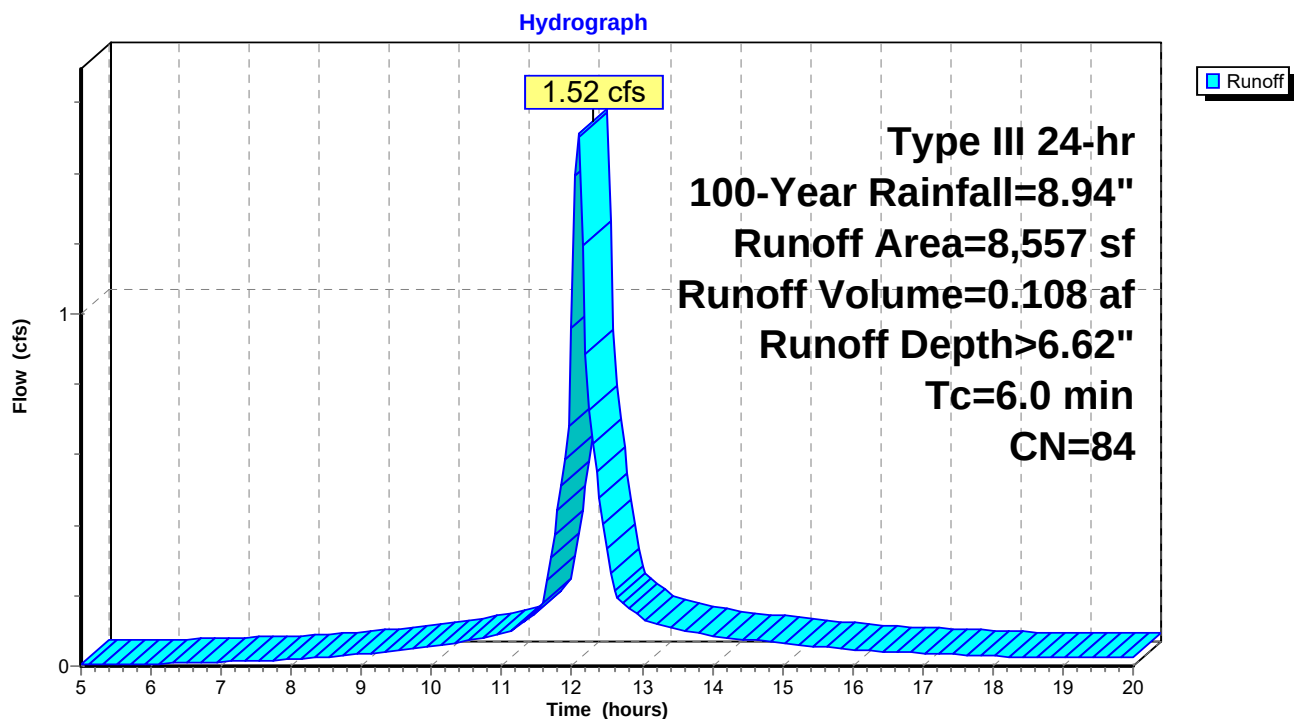
**Summary for Subcatchment 80S: P3KK**

Runoff = 1.52 cfs @ 12.09 hrs, Volume= 0.108 af, Depth> 6.62"  
 Routed to Pond 125P : CB 36

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,989     | 39 | >75% Grass cover, Good, HSG A |
| 4,268     | 98 | Unconnected roofs, HSG A      |
| 2,300     | 98 | Paved parking, HSG A          |
| 8,557     | 84 | Weighted Average              |
| 1,989     |    | 23.24% Pervious Area          |
| 6,568     |    | 76.76% Impervious Area        |
| 4,268     |    | 64.98% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 80S: P3KK**

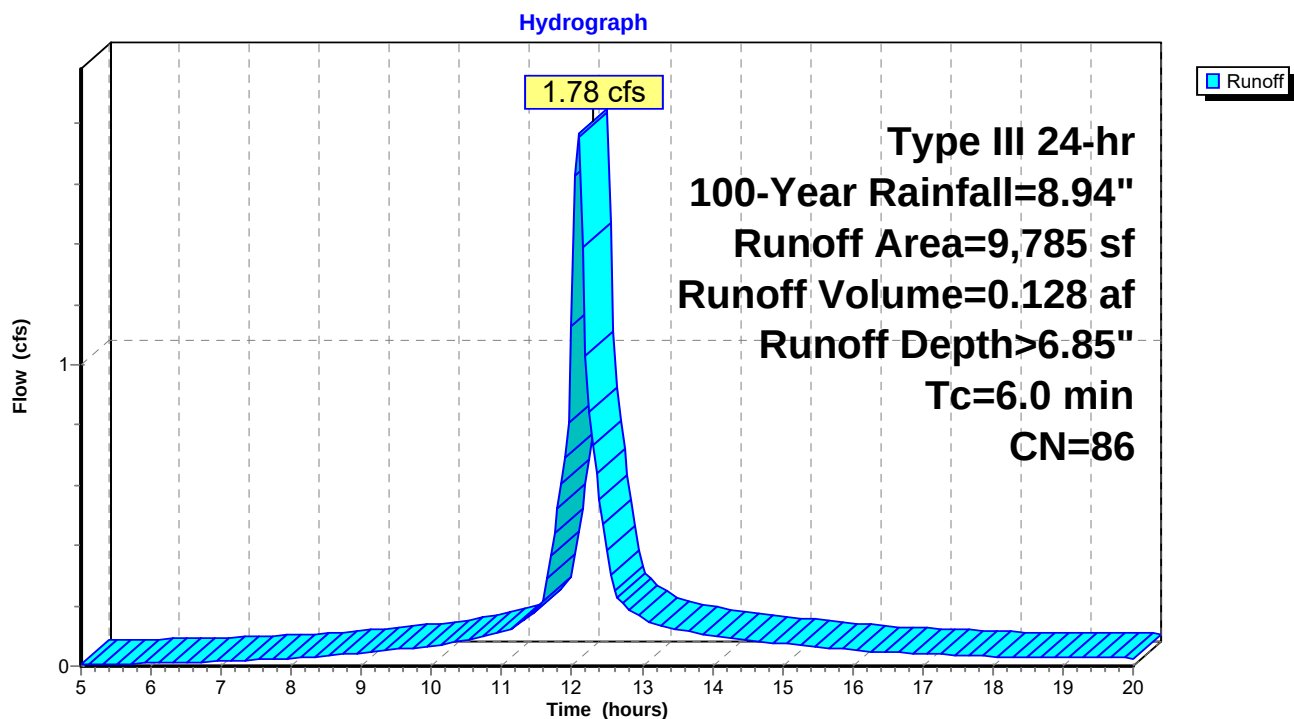
**Summary for Subcatchment 81S: P3LL**

Runoff = 1.78 cfs @ 12.09 hrs, Volume= 0.128 af, Depth> 6.85"  
 Routed to Pond 126P : CB 37

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,037     | 39 | >75% Grass cover, Good, HSG A |
| 4,991     | 98 | Unconnected roofs, HSG A      |
| 2,757     | 98 | Paved parking, HSG A          |
| 9,785     | 86 | Weighted Average              |
| 2,037     |    | 20.82% Pervious Area          |
| 7,748     |    | 79.18% Impervious Area        |
| 4,991     |    | 64.42% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 81S: P3LL**

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Type III 24-hr 100-Year Rainfall=8.94"

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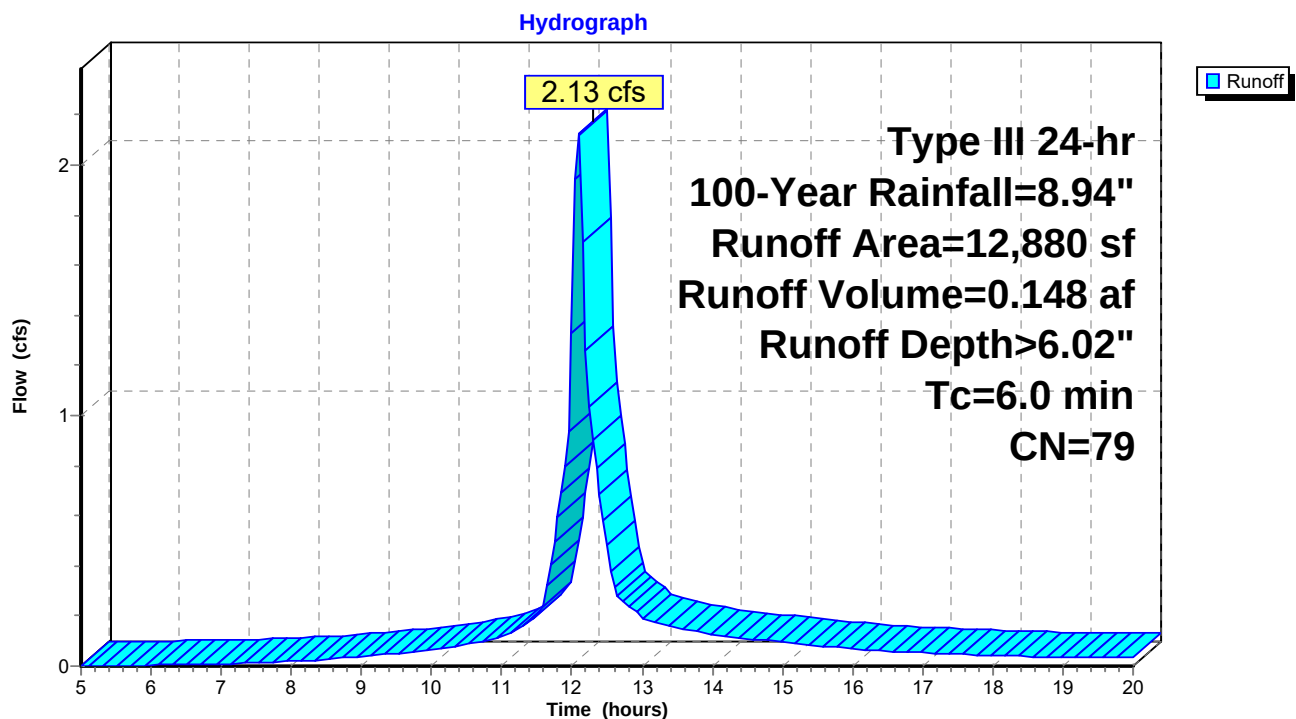
**Summary for Subcatchment 82S: P3SS**

Runoff = 2.13 cfs @ 12.09 hrs, Volume= 0.148 af, Depth> 6.02"  
Routed to Pond 128P : CB 30

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,180     | 39 | >75% Grass cover, Good, HSG A |
| 3,055     | 98 | Unconnected roofs, HSG A      |
| 5,645     | 98 | Paved parking, HSG A          |
| 12,880    | 79 | Weighted Average              |
| 4,180     |    | 32.45% Pervious Area          |
| 8,700     |    | 67.55% Impervious Area        |
| 3,055     |    | 35.11% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 82S: P3SS**

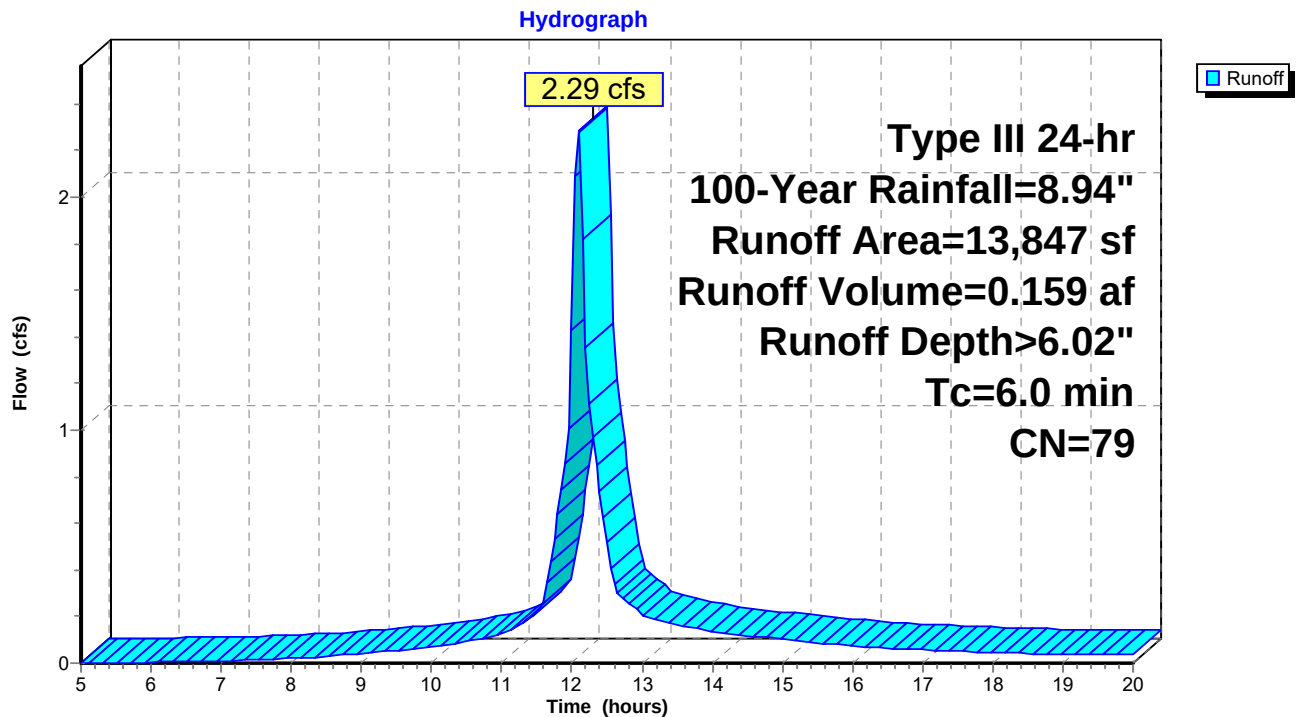
**Summary for Subcatchment 83S: P2I**

Runoff = 2.29 cfs @ 12.09 hrs, Volume= 0.159 af, Depth> 6.02"  
 Routed to Pond 82P : Constructed Wetland 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,861     | 39 | >75% Grass cover, Good, HSG A |
| 1,821     | 98 | Unconnected roofs, HSG A      |
| 3,857     | 74 | >75% Grass cover, Good, HSG C |
| 597       | 98 | Paved parking, HSG C          |
| 4,711     | 98 | Paved parking, HSG A          |
| 13,847    | 79 | Weighted Average              |
| 6,718     |    | 48.52% Pervious Area          |
| 7,129     |    | 51.48% Impervious Area        |
| 1,821     |    | 25.54% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 83S: P2I**

**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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Type III 24-hr 100-Year Rainfall=8.94"

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**Summary for Subcatchment 84S: P2AA**

Runoff = 9.59 cfs @ 12.12 hrs, Volume= 0.704 af, Depth> 5.17"  
 Routed to Link 60L : DP 2

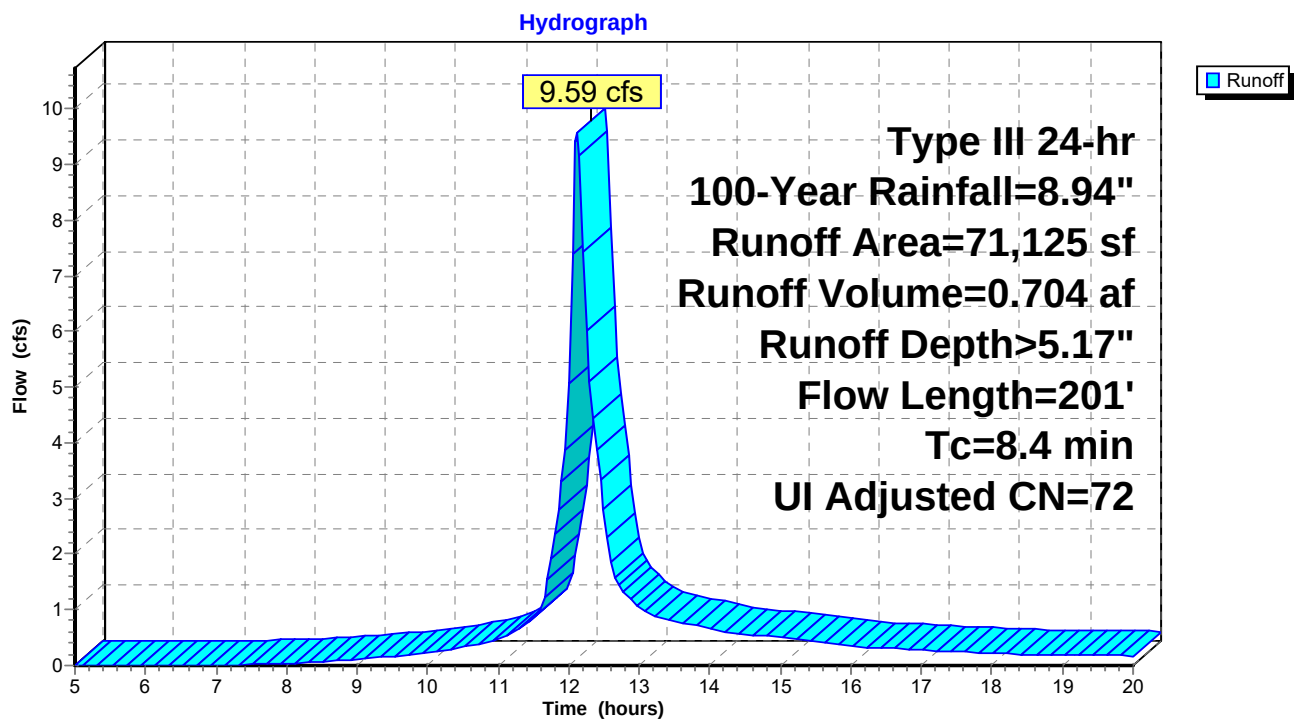
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 2,224     | 98 |     | Unconnected roofs, HSG C      |
| 1,231     | 98 |     | Unconnected pavement, HSG C   |
| 37,322    | 70 |     | Woods, Good, HSG C            |
| 27,161    | 74 |     | >75% Grass cover, Good, HSG C |
| 242       | 98 |     | Unconnected pavement, HSG A   |
| 1,399     | 39 |     | >75% Grass cover, Good, HSG A |
| 1,546     | 98 |     | Unconnected roofs, HSG A      |
| 71,125    | 73 | 72  | Weighted Average, UI Adjusted |
| 65,882    |    |     | 92.63% Pervious Area          |
| 5,243     |    |     | 7.37% Impervious Area         |
| 5,243     |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                          |
|----------|---------------|---------------|-------------------|----------------|----------------------------------------------------------------------|
| 5.7      | 50            | 0.0200        | 0.15              |                | <b>Sheet Flow,</b><br>Grass: Short n= 0.150 P2= 3.10"                |
| 1.4      | 68            | 0.0140        | 0.83              |                | <b>Shallow Concentrated Flow,</b><br>Short Grass Pasture Kv= 7.0 fps |
| 0.4      | 57            | 0.1200        | 2.42              |                | <b>Shallow Concentrated Flow,</b><br>Short Grass Pasture Kv= 7.0 fps |
| 0.9      | 26            | 0.0100        | 0.50              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps            |
| 8.4      | 201           | Total         |                   |                |                                                                      |

**Subcatchment 84S: P2AA**



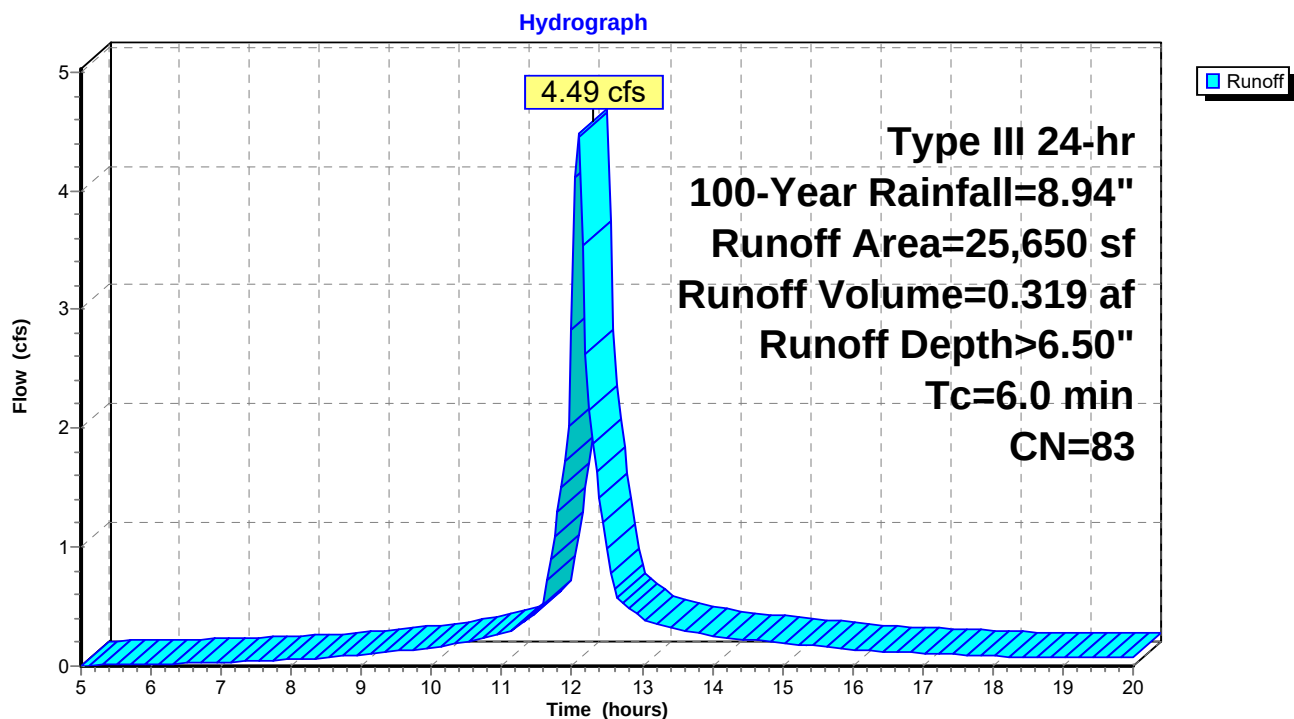
**Summary for Subcatchment 85S: (new Subcat)**

Runoff = 4.49 cfs @ 12.09 hrs, Volume= 0.319 af, Depth> 6.50"  
 Routed to Pond 86P : Sub. Inf. 6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,553     | 98 | Roofs, HSG C                  |
| 3,904     | 98 | Unconnected pavement, HSG C   |
| 16,193    | 74 | >75% Grass cover, Good, HSG C |
| 25,650    | 83 | Weighted Average              |
| 16,193    |    | 63.13% Pervious Area          |
| 9,457     |    | 36.87% Impervious Area        |
| 3,904     |    | 41.28% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 85S: (new Subcat)**

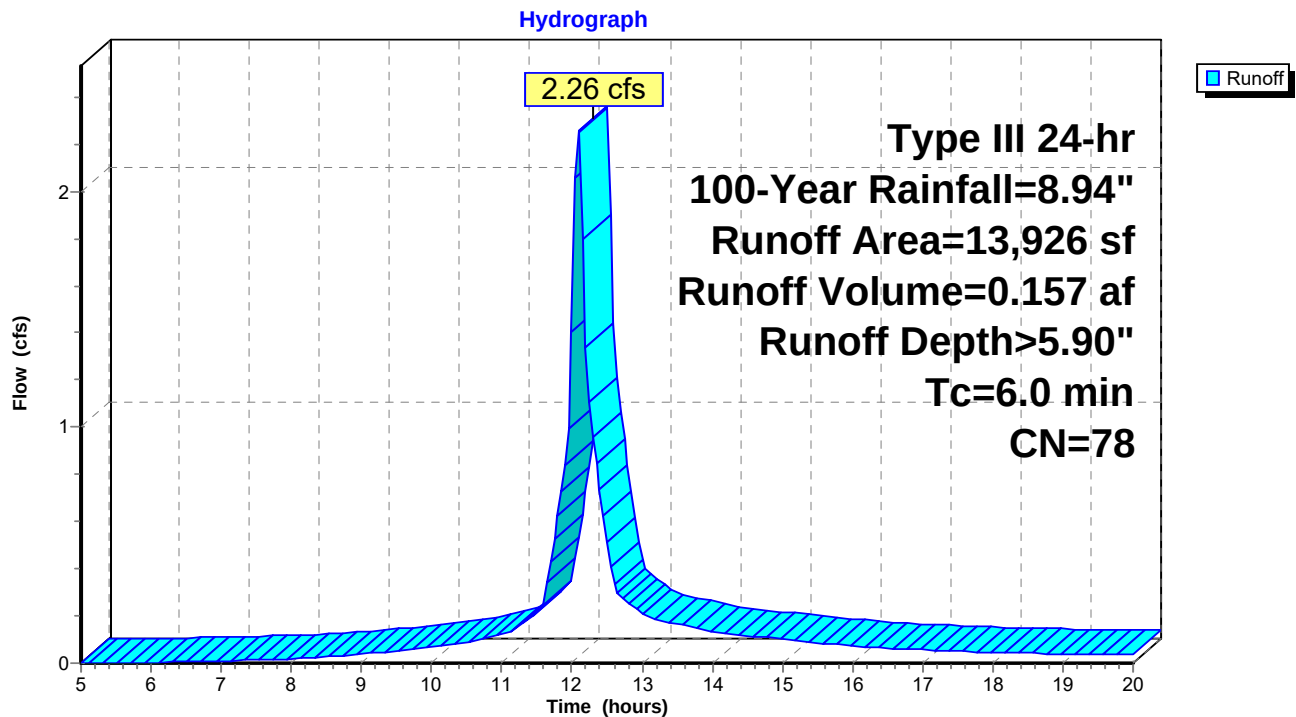
**Summary for Subcatchment 86S: P3TT**

Runoff = 2.26 cfs @ 12.09 hrs, Volume= 0.157 af, Depth> 5.90"  
 Routed to Pond 140P : CB 31

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 956       | 98 | Unconnected roofs, HSG C      |
| 672       | 74 | >75% Grass cover, Good, HSG C |
| 4,346     | 39 | >75% Grass cover, Good, HSG A |
| 1,468     | 98 | Unconnected roofs, HSG A      |
| 6,484     | 98 | Paved parking, HSG A          |
| 13,926    | 78 | Weighted Average              |
| 5,018     |    | 36.03% Pervious Area          |
| 8,908     |    | 63.97% Impervious Area        |
| 2,424     |    | 27.21% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 86S: P3TT**



**Summary for Subcatchment 87S: P3A**

Runoff = 0.44 cfs @ 12.09 hrs, Volume= 0.033 af, Depth> 7.60"  
 Routed to Pond 89P : CB 74

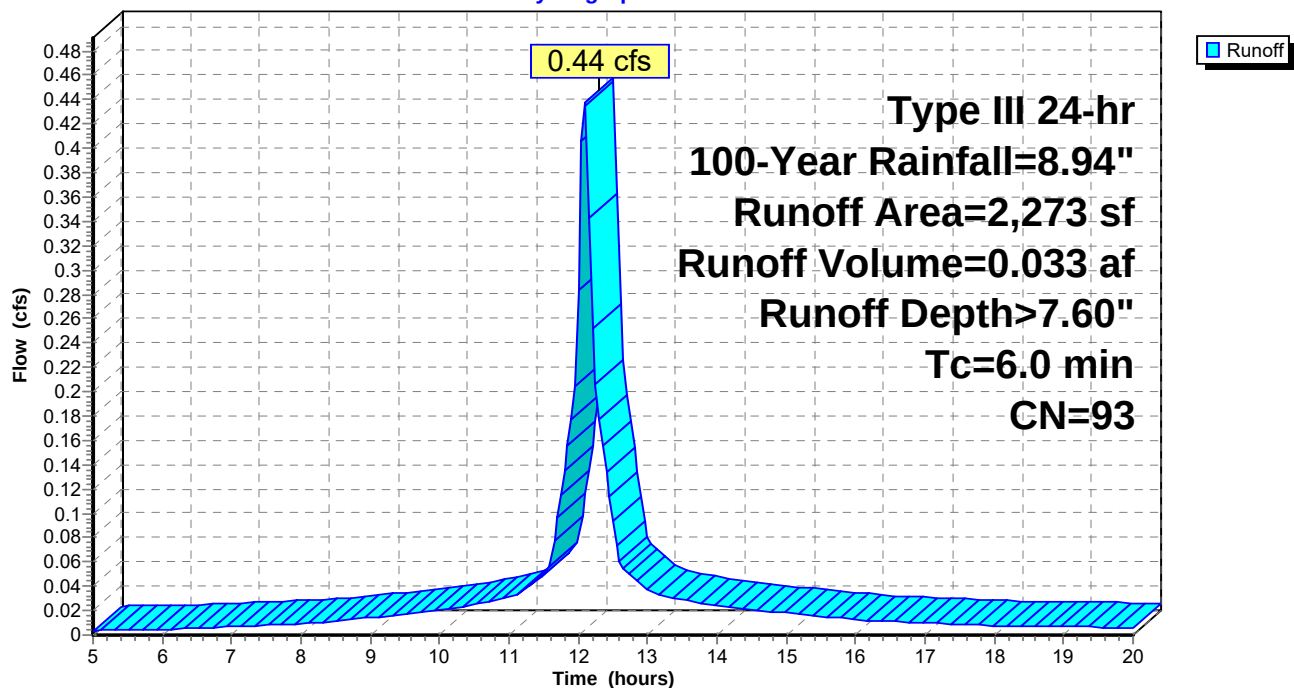
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 450       | 74 | >75% Grass cover, Good, HSG C |
| 1,823     | 98 | Paved parking, HSG C          |
| 2,273     | 93 | Weighted Average              |
| 450       |    | 19.80% Pervious Area          |
| 1,823     |    | 80.20% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 87S: P3A**

Hydrograph



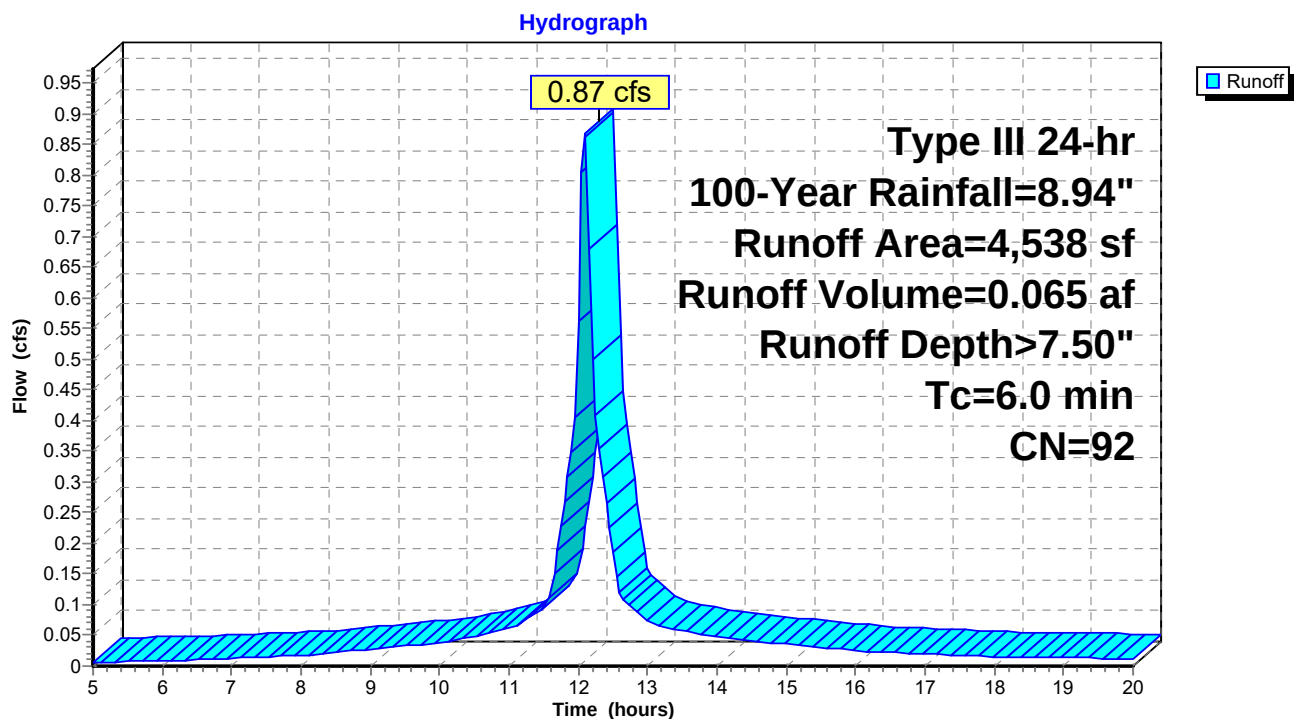
**Summary for Subcatchment 88S: P3B**

Runoff = 0.87 cfs @ 12.09 hrs, Volume= 0.065 af, Depth> 7.50"  
 Routed to Pond 90P : CB 75

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,048     | 74 | >75% Grass cover, Good, HSG C |
| 1,562     | 98 | Unconnected roofs, HSG C      |
| 1,928     | 98 | Paved parking, HSG C          |
| 4,538     | 92 | Weighted Average              |
| 1,048     |    | 23.09% Pervious Area          |
| 3,490     |    | 76.91% Impervious Area        |
| 1,562     |    | 44.76% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 88S: P3B**

**RH Post 1-2-26**

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Type III 24-hr 100-Year Rainfall=8.94"

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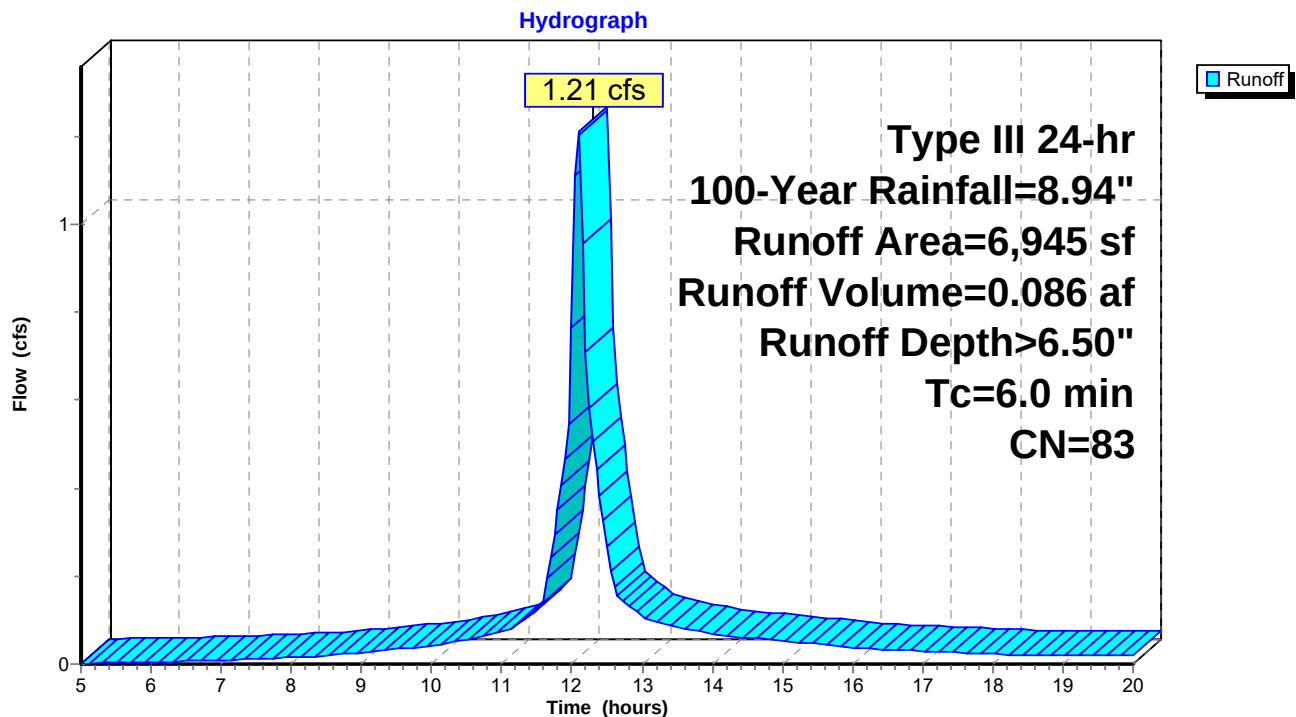
**Summary for Subcatchment 89S: P3AAA**

Runoff = 1.21 cfs @ 12.09 hrs, Volume= 0.086 af, Depth> 6.50"  
Routed to Pond 151P : CB 22

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,761     | 39 | >75% Grass cover, Good, HSG A |
| 5,184     | 98 | Paved parking, HSG A          |
| 6,945     | 83 | Weighted Average              |
| 1,761     |    | 25.36% Pervious Area          |
| 5,184     |    | 74.64% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 89S: P3AAA**

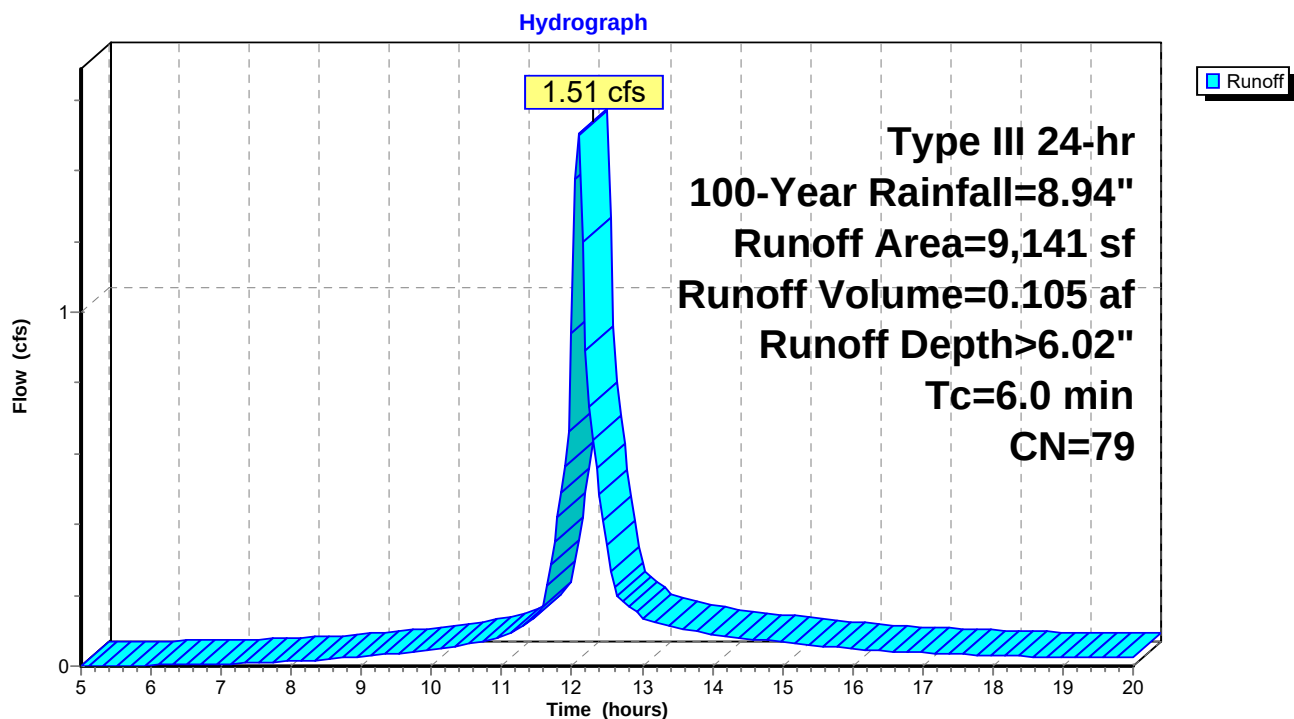
**Summary for Subcatchment 90S: P3BBB**

Runoff = 1.51 cfs @ 12.09 hrs, Volume= 0.105 af, Depth> 6.02"  
 Routed to Pond 152P : CB 23

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,961     | 39 | >75% Grass cover, Good, HSG A |
| 2,084     | 98 | Unconnected roofs, HSG A      |
| 4,096     | 98 | Paved parking, HSG A          |
| 9,141     | 79 | Weighted Average              |
| 2,961     |    | 32.39% Pervious Area          |
| 6,180     |    | 67.61% Impervious Area        |
| 2,084     |    | 33.72% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 90S: P3BBB**

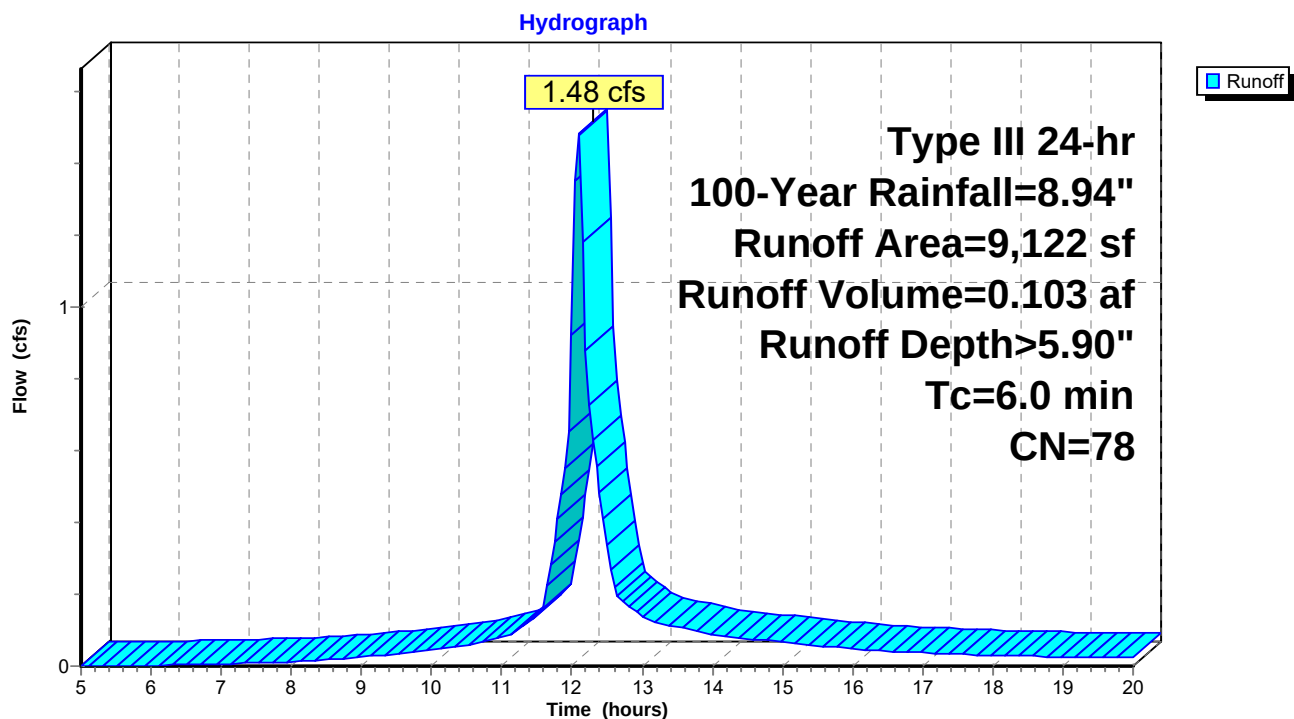
**Summary for Subcatchment 91S: P3GGG**

Runoff = 1.48 cfs @ 12.09 hrs, Volume= 0.103 af, Depth> 5.90"  
 Routed to Pond 165P : CB 19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,041     | 39 | >75% Grass cover, Good, HSG A |
| 3,271     | 98 | Unconnected roofs, HSG A      |
| 2,810     | 98 | Paved parking, HSG A          |
| 9,122     | 78 | Weighted Average              |
| 3,041     |    | 33.34% Pervious Area          |
| 6,081     |    | 66.66% Impervious Area        |
| 3,271     |    | 53.79% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 91S: P3GGG**

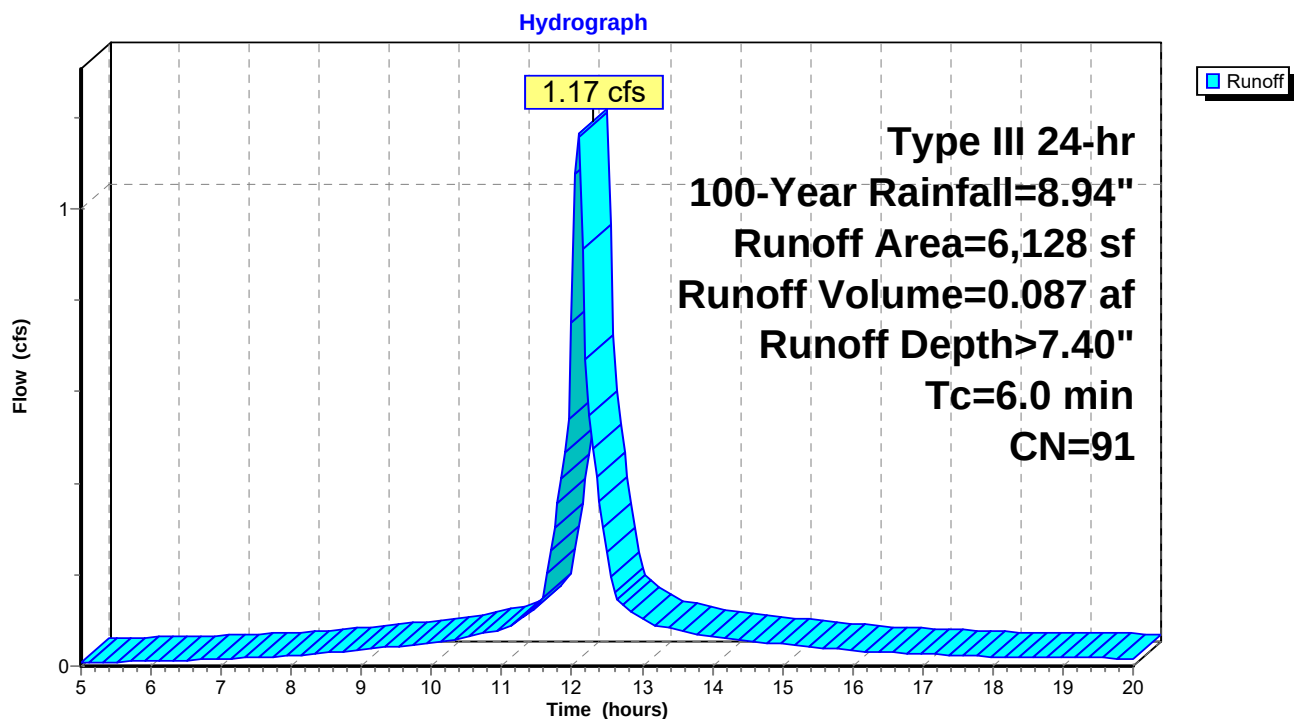
**Summary for Subcatchment 92S: P3C**

Runoff = 1.17 cfs @ 12.09 hrs, Volume= 0.087 af, Depth> 7.40"  
 Routed to Pond 95P : CB 76

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,796     | 74 | >75% Grass cover, Good, HSG C |
| 348       | 98 | Unconnected roofs, HSG C      |
| 3,984     | 98 | Paved parking, HSG C          |
| 6,128     | 91 | Weighted Average              |
| 1,796     |    | 29.31% Pervious Area          |
| 4,332     |    | 70.69% Impervious Area        |
| 348       |    | 8.03% Unconnected             |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 92S: P3C**

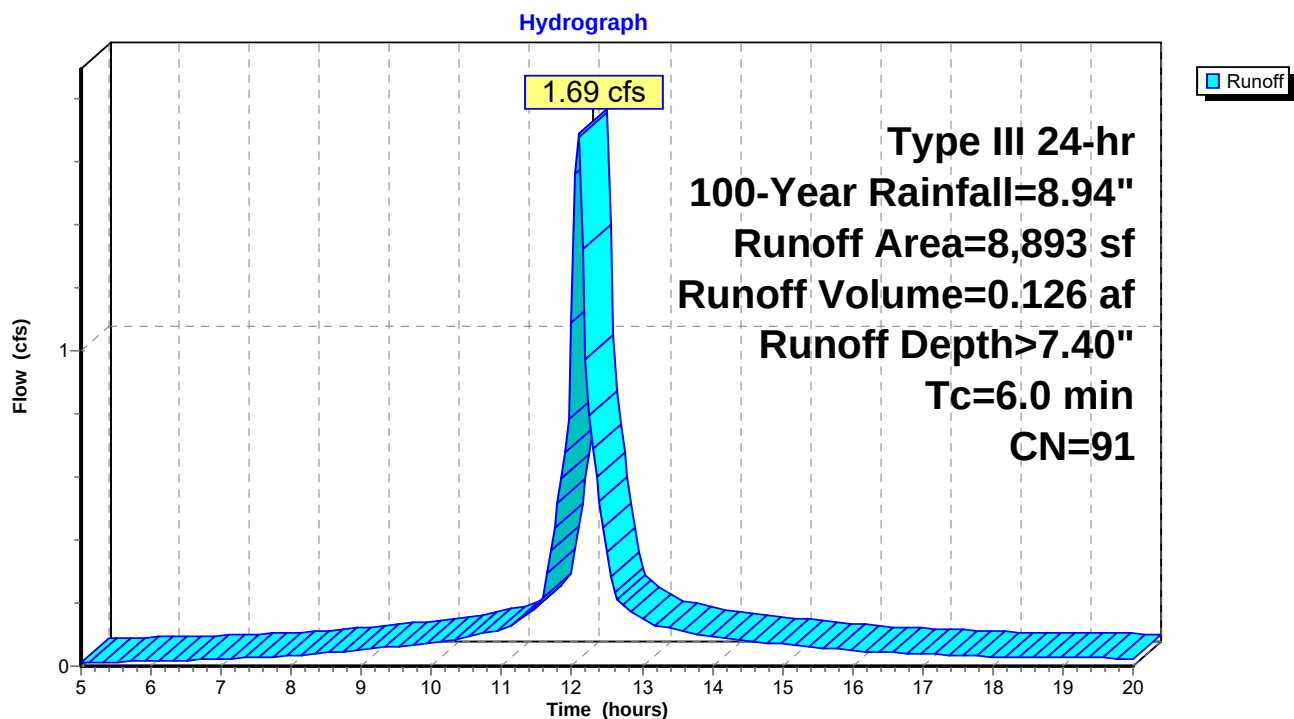
**Summary for Subcatchment 93S: P3D**

Runoff = 1.69 cfs @ 12.09 hrs, Volume= 0.126 af, Depth> 7.40"  
 Routed to Pond 94P : CB 77

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,560     | 74 | >75% Grass cover, Good, HSG C |
| 1,771     | 98 | Unconnected roofs, HSG C      |
| 4,562     | 98 | Paved parking, HSG C          |
| 8,893     | 91 | Weighted Average              |
| 2,560     |    | 28.79% Pervious Area          |
| 6,333     |    | 71.21% Impervious Area        |
| 1,771     |    | 27.96% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 93S: P3D**

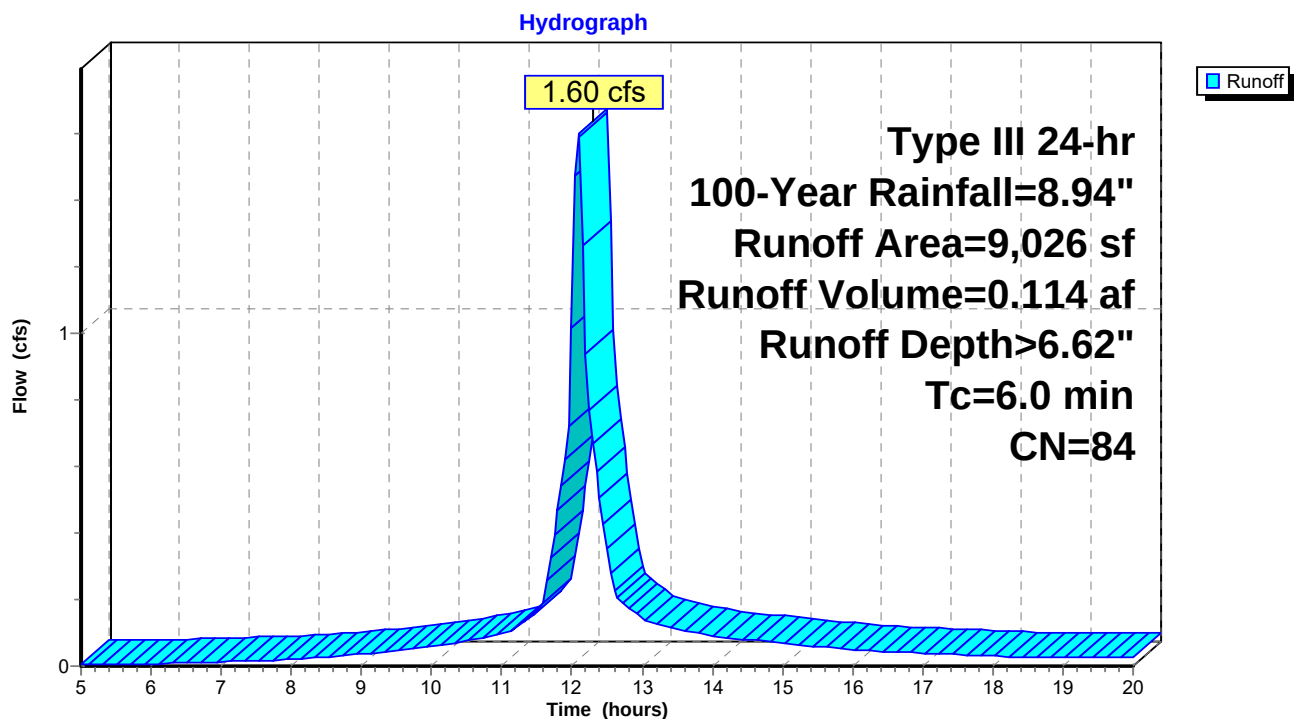
**Summary for Subcatchment 94S: P3HHH**

Runoff = 1.60 cfs @ 12.09 hrs, Volume= 0.114 af, Depth> 6.62"  
 Routed to Pond 154P : CB 18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,098     | 39 | >75% Grass cover, Good, HSG A |
| 3,837     | 98 | Unconnected roofs, HSG A      |
| 3,091     | 98 | Paved parking, HSG A          |
| 9,026     | 84 | Weighted Average              |
| 2,098     |    | 23.24% Pervious Area          |
| 6,928     |    | 76.76% Impervious Area        |
| 3,837     |    | 55.38% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 94S: P3HHH**



Summary for Subcatchment 95S: P2X

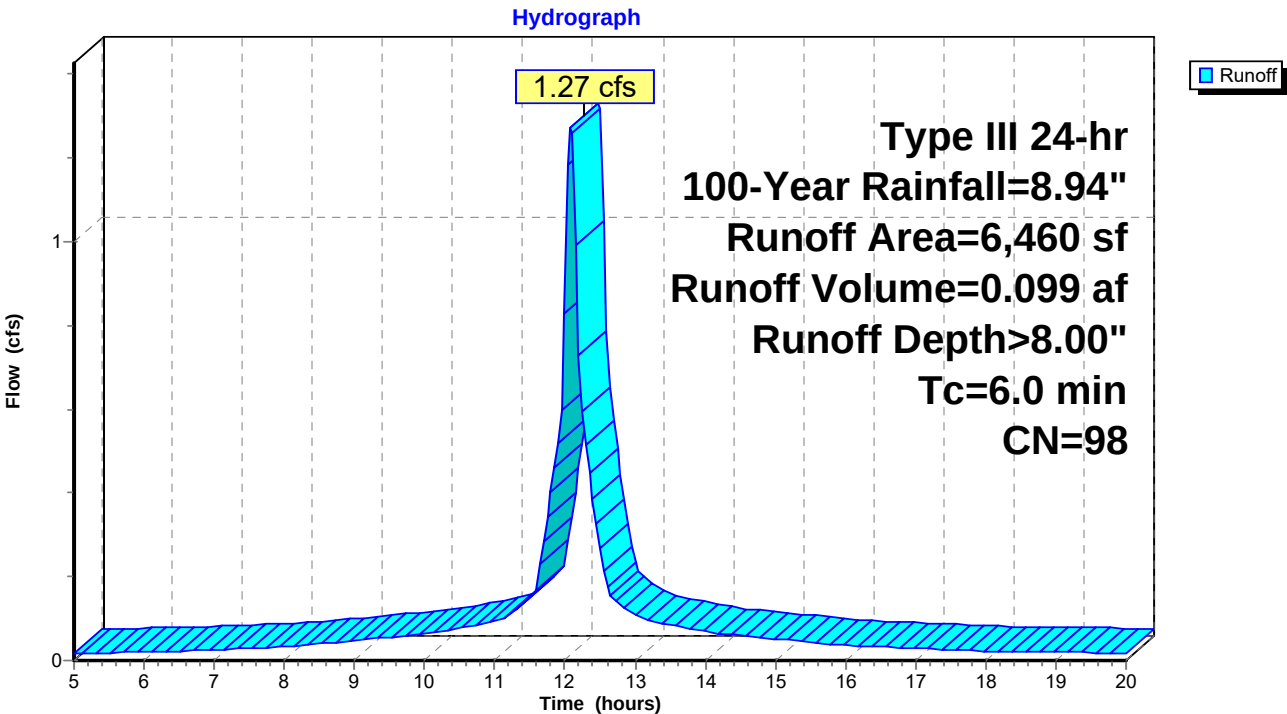
Runoff = 1.27 cfs @ 12.09 hrs, Volume= 0.099 af, Depth> 8.00"  
Routed to Pond 79P : DMH 51

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description             |
|-----------|----|-------------------------|
| 6,460     | 98 | Paved parking, HSG C    |
| 6,460     |    | 100.00% Impervious Area |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

Subcatchment 95S: P2X



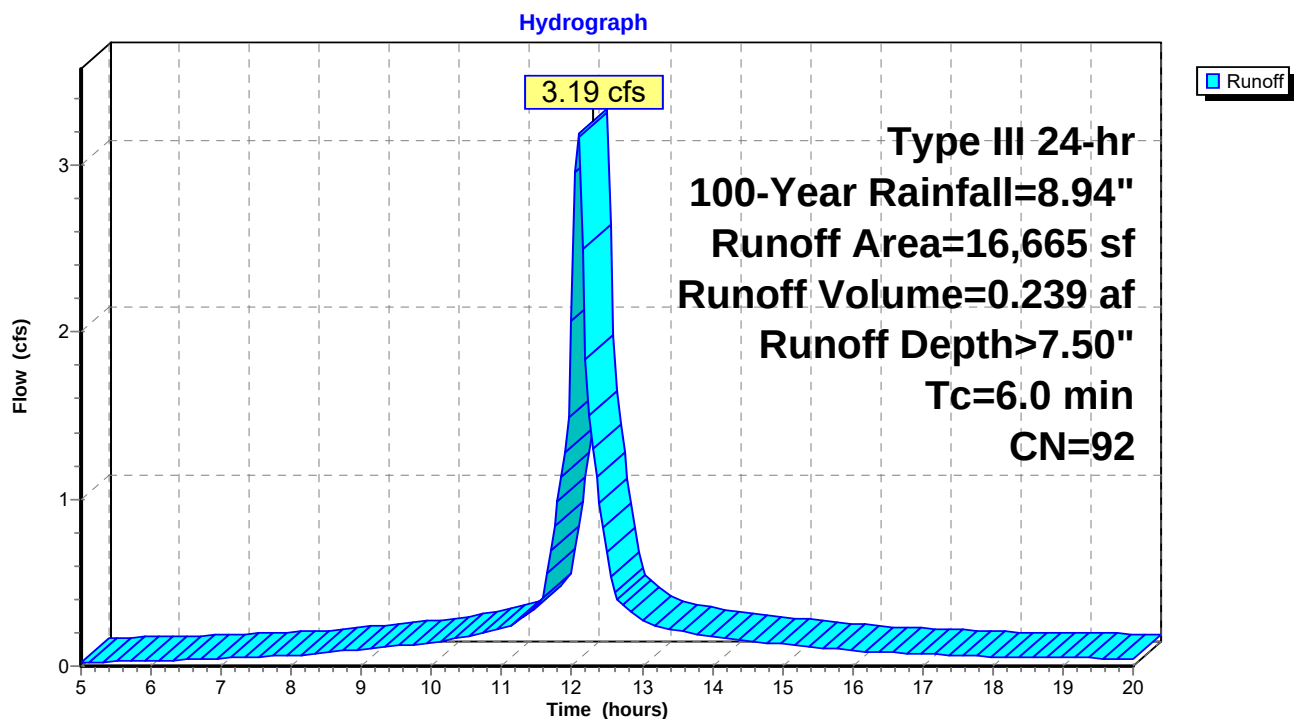
**Summary for Subcatchment 97S: P3G**

Runoff = 3.19 cfs @ 12.09 hrs, Volume= 0.239 af, Depth> 7.50"  
 Routed to Pond 100P : CB 80

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,471     | 74 | >75% Grass cover, Good, HSG C |
| 3,720     | 98 | Unconnected roofs, HSG C      |
| 8,474     | 98 | Paved parking, HSG C          |
| 16,665    | 92 | Weighted Average              |
| 4,471     |    | 26.83% Pervious Area          |
| 12,194    |    | 73.17% Impervious Area        |
| 3,720     |    | 30.51% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 97S: P3G**

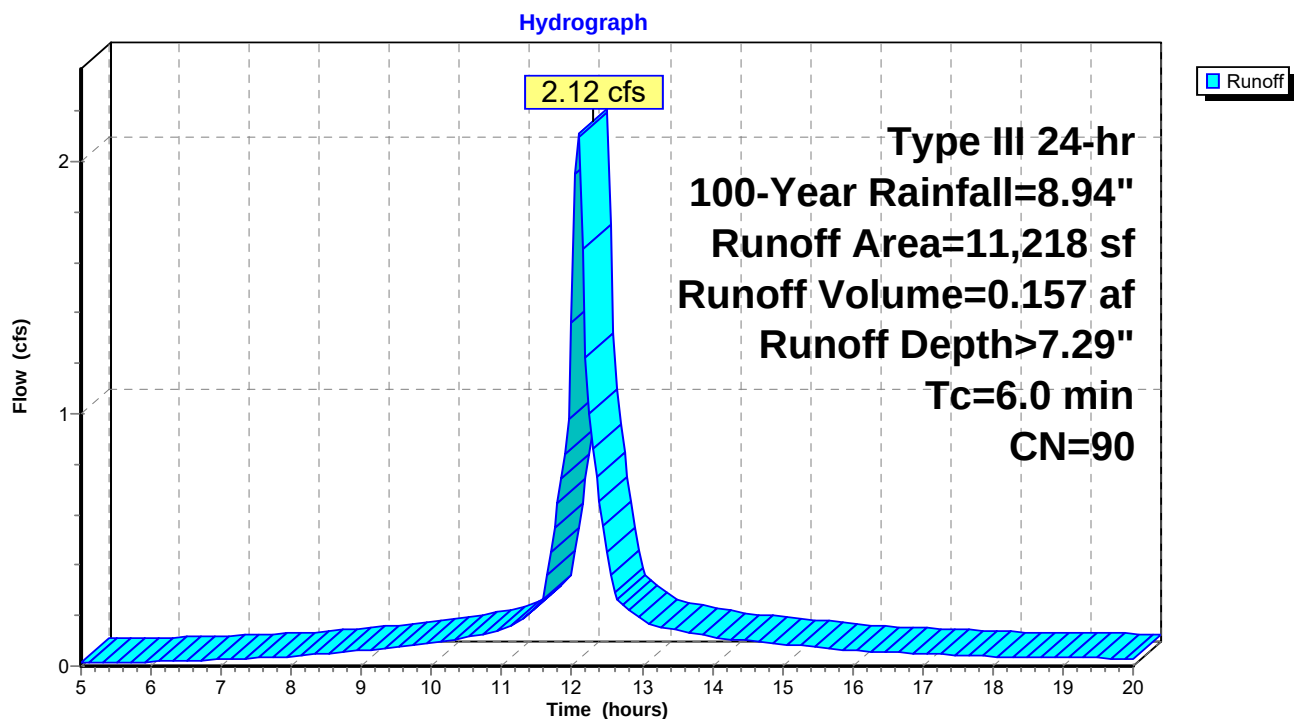
**Summary for Subcatchment 98S: P3H**

Runoff = 2.12 cfs @ 12.09 hrs, Volume= 0.157 af, Depth> 7.29"  
 Routed to Pond 99P : CB 81

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,581     | 74 | >75% Grass cover, Good, HSG C |
| 2,279     | 98 | Unconnected roofs, HSG C      |
| 5,358     | 98 | Paved parking, HSG C          |
| 11,218    | 90 | Weighted Average              |
| 3,581     |    | 31.92% Pervious Area          |
| 7,637     |    | 68.08% Impervious Area        |
| 2,279     |    | 29.84% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 98S: P3H**

**RH Post 1-2-26**

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Type III 24-hr 100-Year Rainfall=8.94"

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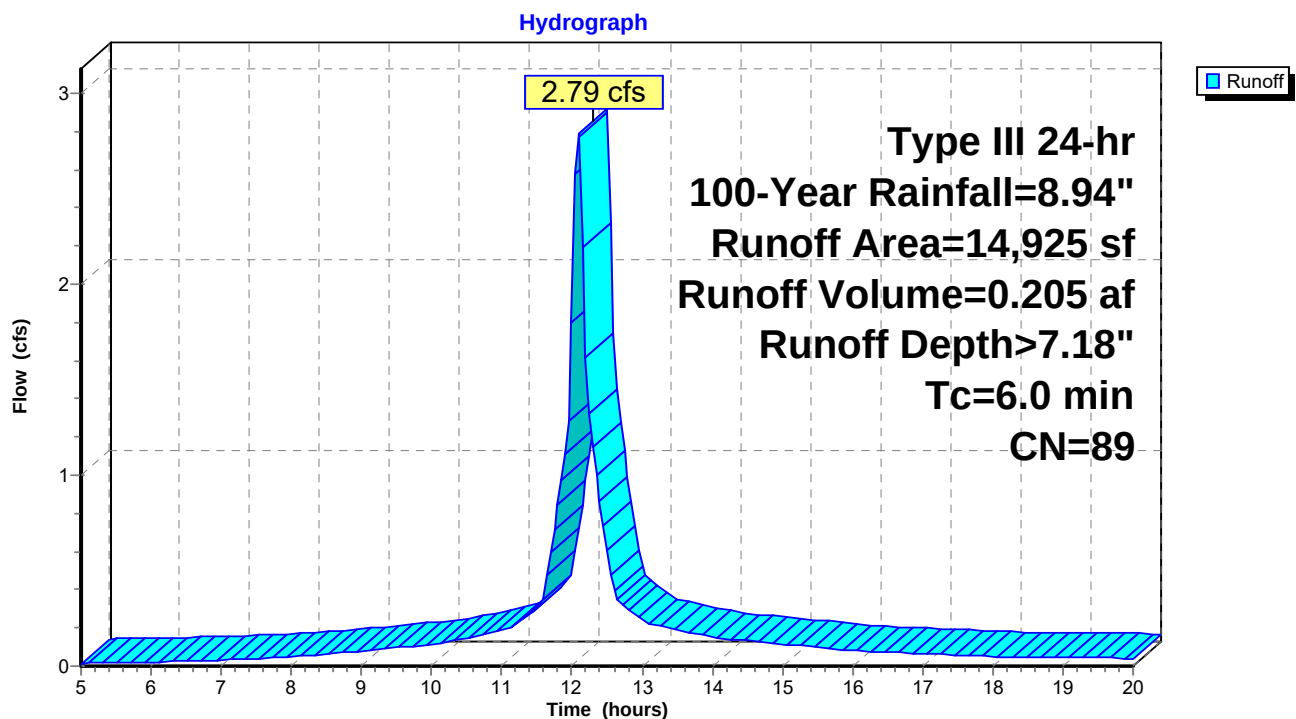
**Summary for Subcatchment 102S: P3J**

Runoff = 2.79 cfs @ 12.09 hrs, Volume= 0.205 af, Depth> 7.18"  
Routed to Pond 104P : CB 83

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,342     | 74 | >75% Grass cover, Good, HSG C |
| 2,771     | 98 | Unconnected roofs, HSG C      |
| 6,812     | 98 | Paved parking, HSG C          |
| 14,925    | 89 | Weighted Average              |
| 5,342     |    | 35.79% Pervious Area          |
| 9,583     |    | 64.21% Impervious Area        |
| 2,771     |    | 28.92% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 102S: P3J**

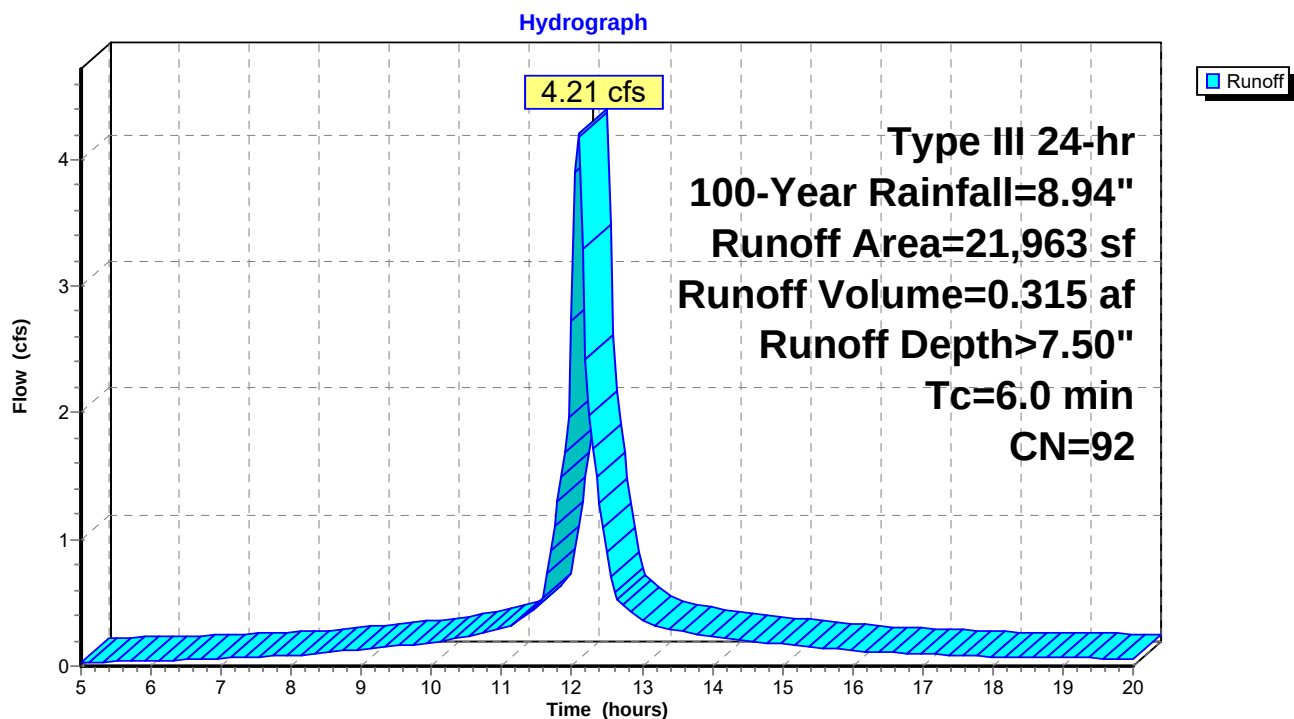
**Summary for Subcatchment 103S: P3I**

Runoff = 4.21 cfs @ 12.09 hrs, Volume= 0.315 af, Depth> 7.50"  
 Routed to Pond 105P : CB 82

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,534     | 74 | >75% Grass cover, Good, HSG C |
| 6,057     | 98 | Unconnected roofs, HSG C      |
| 10,372    | 98 | Paved parking, HSG C          |
| 21,963    | 92 | Weighted Average              |
| 5,534     |    | 25.20% Pervious Area          |
| 16,429    |    | 74.80% Impervious Area        |
| 6,057     |    | 36.87% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 103S: P3I**

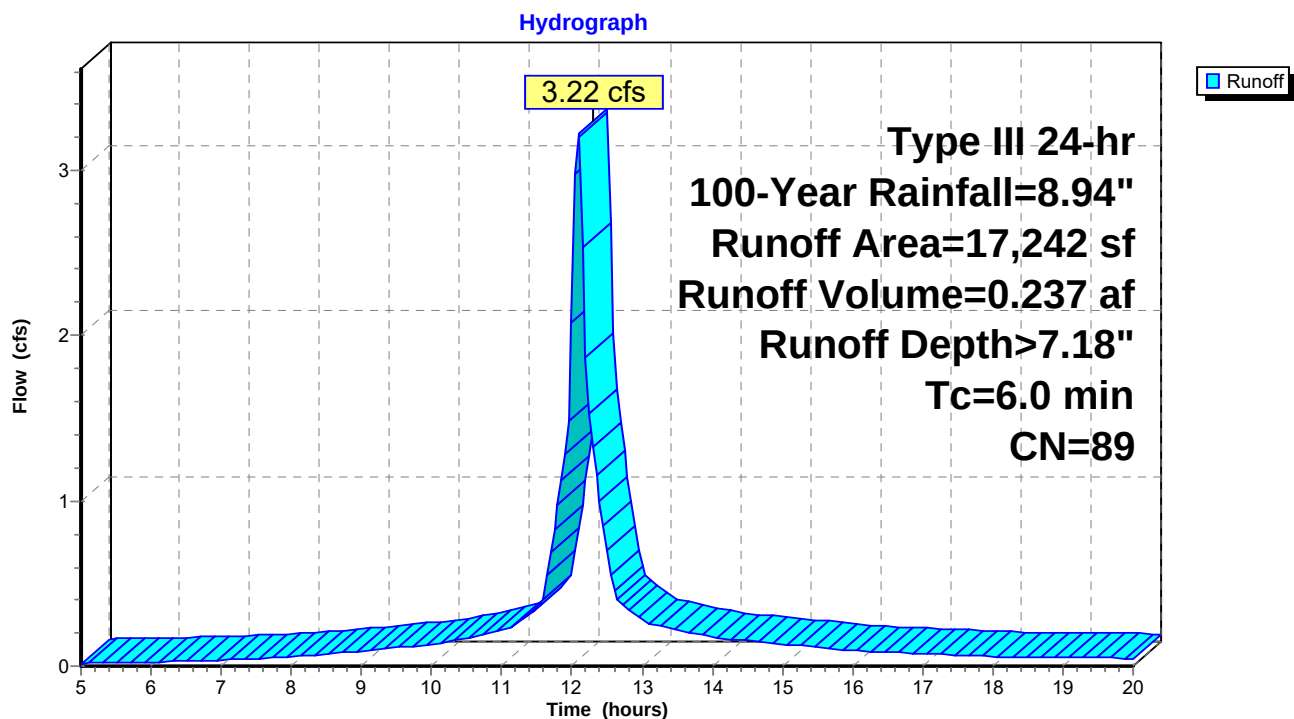
**Summary for Subcatchment 107S: P3E**

Runoff = 3.22 cfs @ 12.09 hrs, Volume= 0.237 af, Depth> 7.18"  
 Routed to Pond 110P : CB 78

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 6,163     | 74 | >75% Grass cover, Good, HSG C |
| 2,724     | 98 | Unconnected roofs, HSG C      |
| 8,355     | 98 | Paved parking, HSG C          |
| 17,242    | 89 | Weighted Average              |
| 6,163     |    | 35.74% Pervious Area          |
| 11,079    |    | 64.26% Impervious Area        |
| 2,724     |    | 24.59% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 107S: P3E**

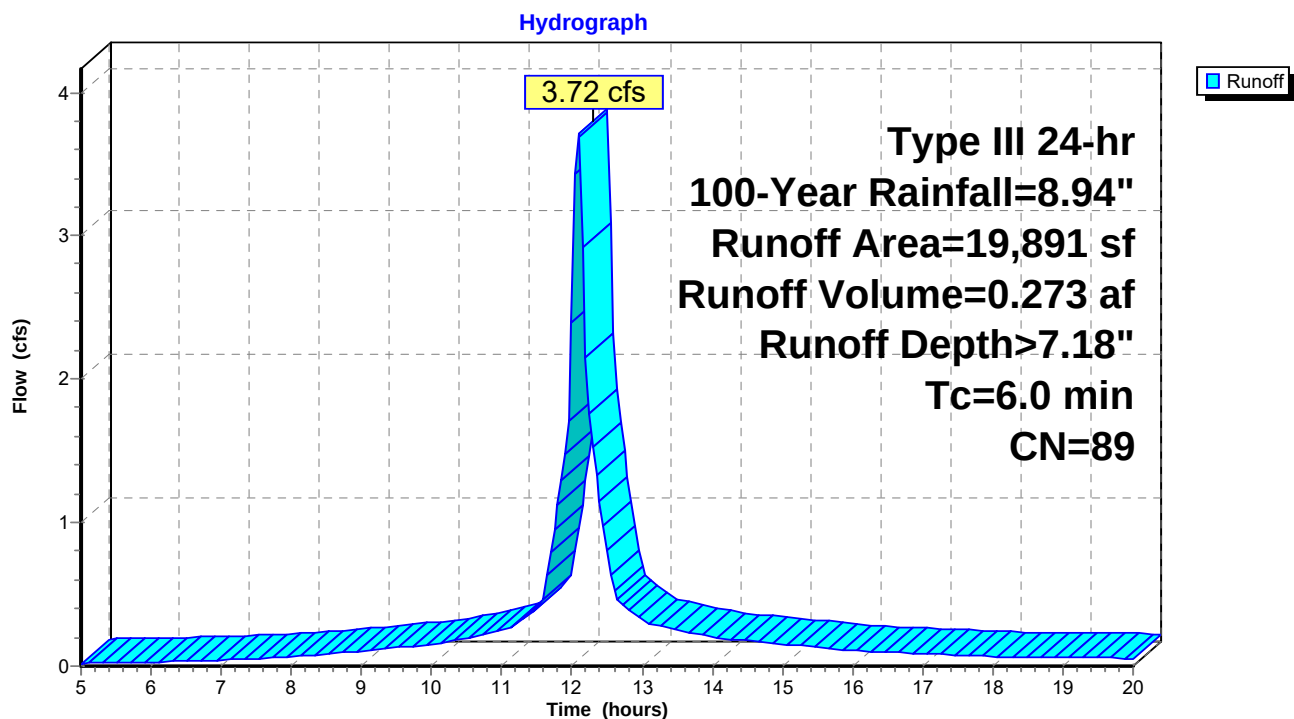
**Summary for Subcatchment 108S: P3F**

Runoff = 3.72 cfs @ 12.09 hrs, Volume= 0.273 af, Depth> 7.18"  
 Routed to Pond 109P : CB 79

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 7,073     | 74 | >75% Grass cover, Good, HSG C |
| 5,397     | 98 | Unconnected roofs, HSG C      |
| 7,421     | 98 | Paved parking, HSG C          |
| 19,891    | 89 | Weighted Average              |
| 7,073     |    | 35.56% Pervious Area          |
| 12,818    |    | 64.44% Impervious Area        |
| 5,397     |    | 42.10% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 108S: P3F**

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Type III 24-hr 100-Year Rainfall=8.94"

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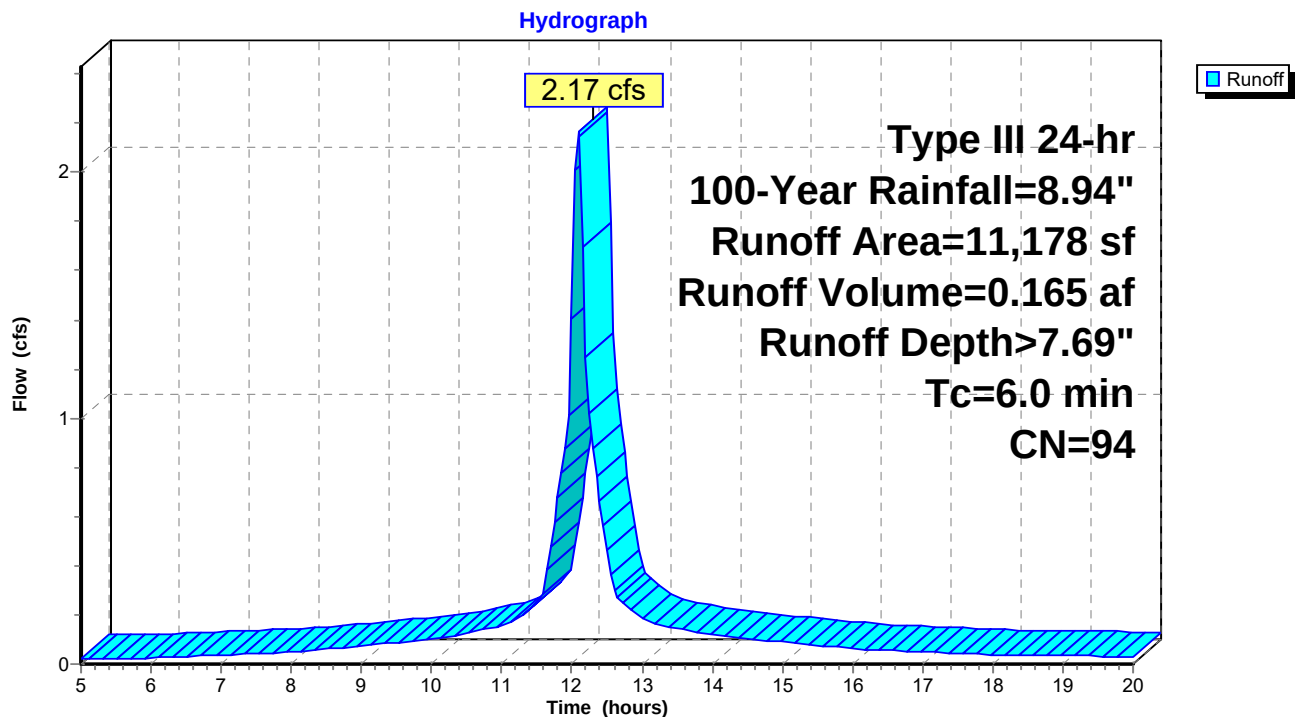
**Summary for Subcatchment 109S: P3T**

Runoff = 2.17 cfs @ 12.09 hrs, Volume= 0.165 af, Depth> 7.69"  
Routed to Pond 116P : CB 90

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,856     | 74 | >75% Grass cover, Good, HSG C |
| 9,322     | 98 | Paved parking, HSG C          |
| 11,178    | 94 | Weighted Average              |
| 1,856     |    | 16.60% Pervious Area          |
| 9,322     |    | 83.40% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 109S: P3T**



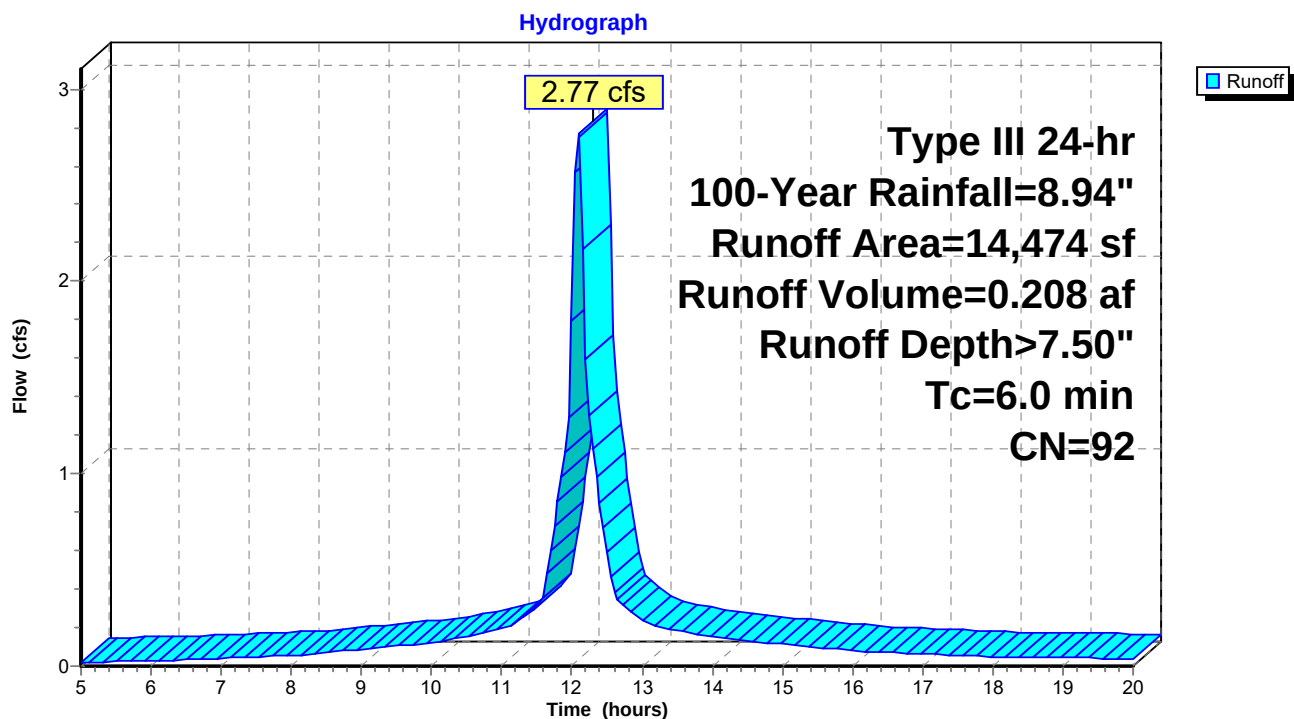
**Summary for Subcatchment 110S: P3U**

Runoff = 2.77 cfs @ 12.09 hrs, Volume= 0.208 af, Depth> 7.50"  
 Routed to Pond 115P : CB 91

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,423     | 74 | >75% Grass cover, Good, HSG C |
| 6,099     | 98 | Unconnected roofs, HSG C      |
| 4,952     | 98 | Paved parking, HSG C          |
| 14,474    | 92 | Weighted Average              |
| 3,423     |    | 23.65% Pervious Area          |
| 11,051    |    | 76.35% Impervious Area        |
| 6,099     |    | 55.19% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 110S: P3U**

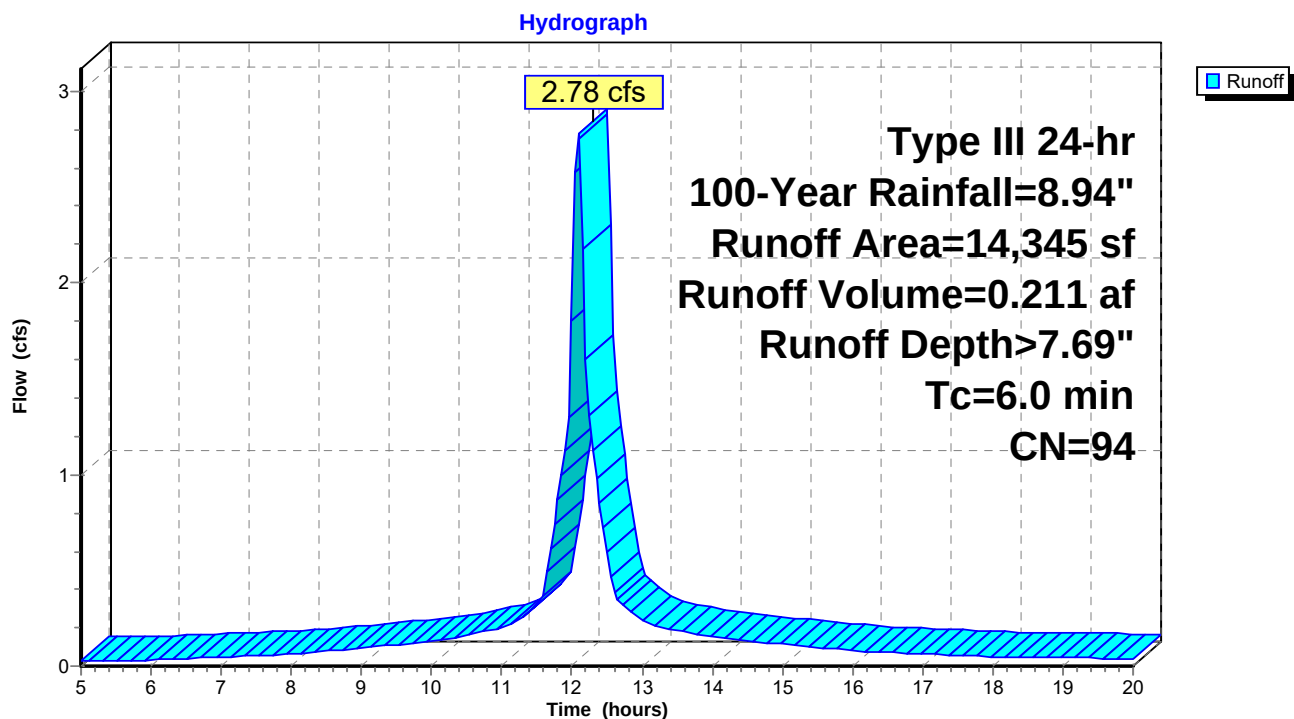
**Summary for Subcatchment 111S: P3V**

Runoff = 2.78 cfs @ 12.09 hrs, Volume= 0.211 af, Depth> 7.69"  
 Routed to Pond 114P : CB 94

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,512     | 74 | >75% Grass cover, Good, HSG C |
| 5,977     | 98 | Unconnected roofs, HSG C      |
| 5,856     | 98 | Paved parking, HSG C          |
| 14,345    | 94 | Weighted Average              |
| 2,512     |    | 17.51% Pervious Area          |
| 11,833    |    | 82.49% Impervious Area        |
| 5,977     |    | 50.51% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 111S: P3V**

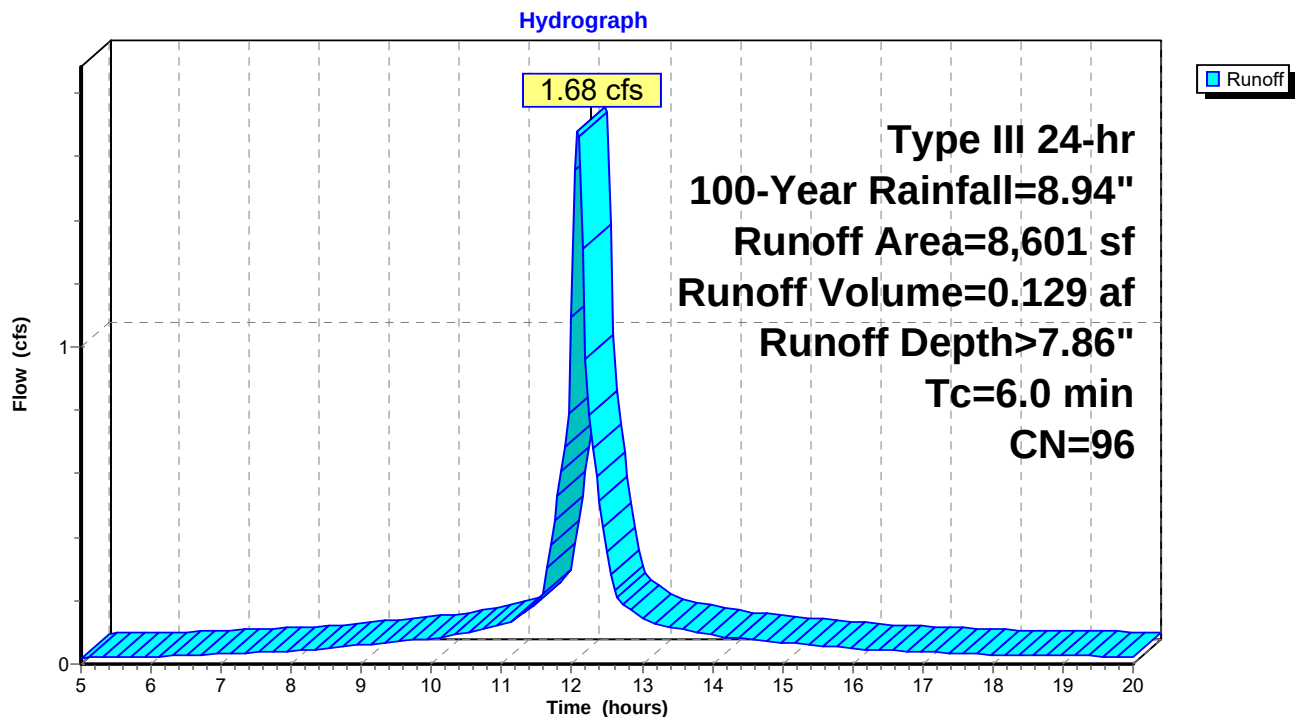
**Summary for Subcatchment 112S: P3W**

Runoff = 1.68 cfs @ 12.09 hrs, Volume= 0.129 af, Depth> 7.86"  
 Routed to Pond 113P : CB 95

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 719       | 74 | >75% Grass cover, Good, HSG C |
| 7,882     | 98 | Paved parking, HSG C          |
| 8,601     | 96 | Weighted Average              |
| 719       |    | 8.36% Pervious Area           |
| 7,882     |    | 91.64% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 112S: P3W**

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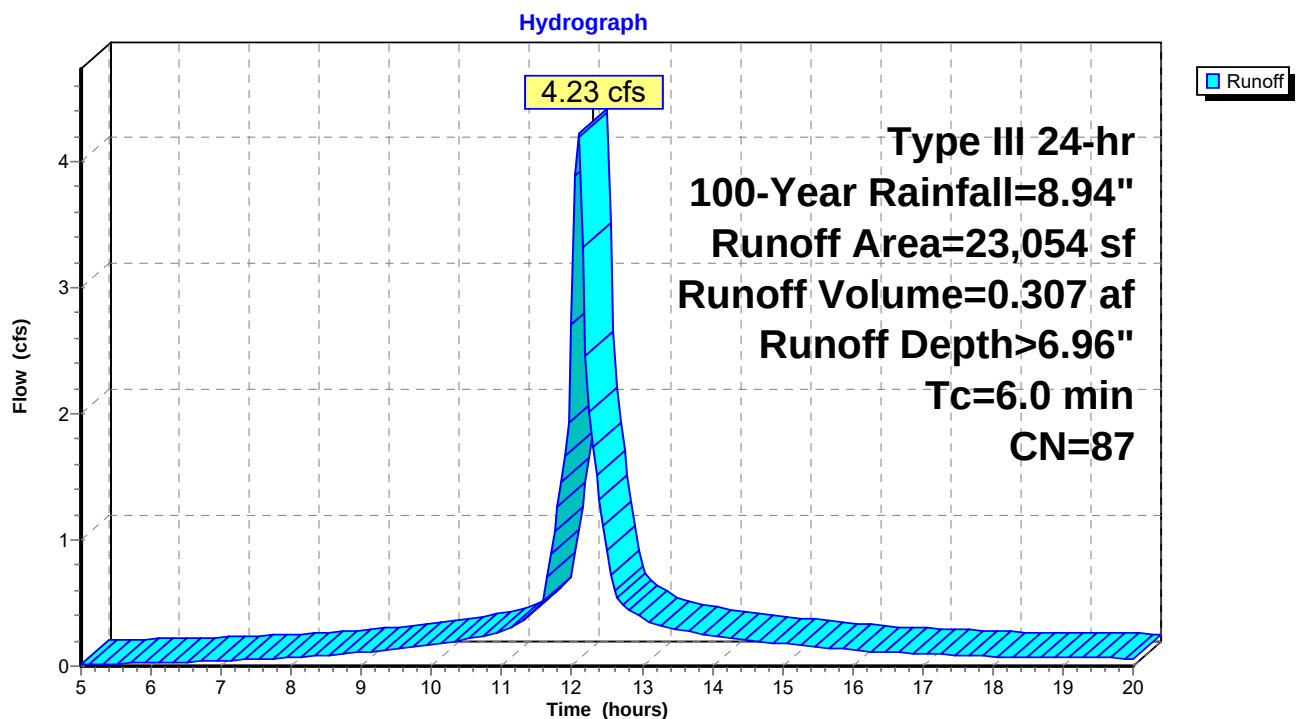
**Summary for Subcatchment 125S: P3EE**

Runoff = 4.23 cfs @ 12.09 hrs, Volume= 0.307 af, Depth> 6.96"  
Routed to Pond 130P : CB 32

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,338     | 39 | >75% Grass cover, Good, HSG A |
| 8,274     | 98 | Unconnected roofs, HSG A      |
| 10,442    | 98 | Paved parking, HSG A          |
| 23,054    | 87 | Weighted Average              |
| 4,338     |    | 18.82% Pervious Area          |
| 18,716    |    | 81.18% Impervious Area        |
| 8,274     |    | 44.21% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 125S: P3EE**

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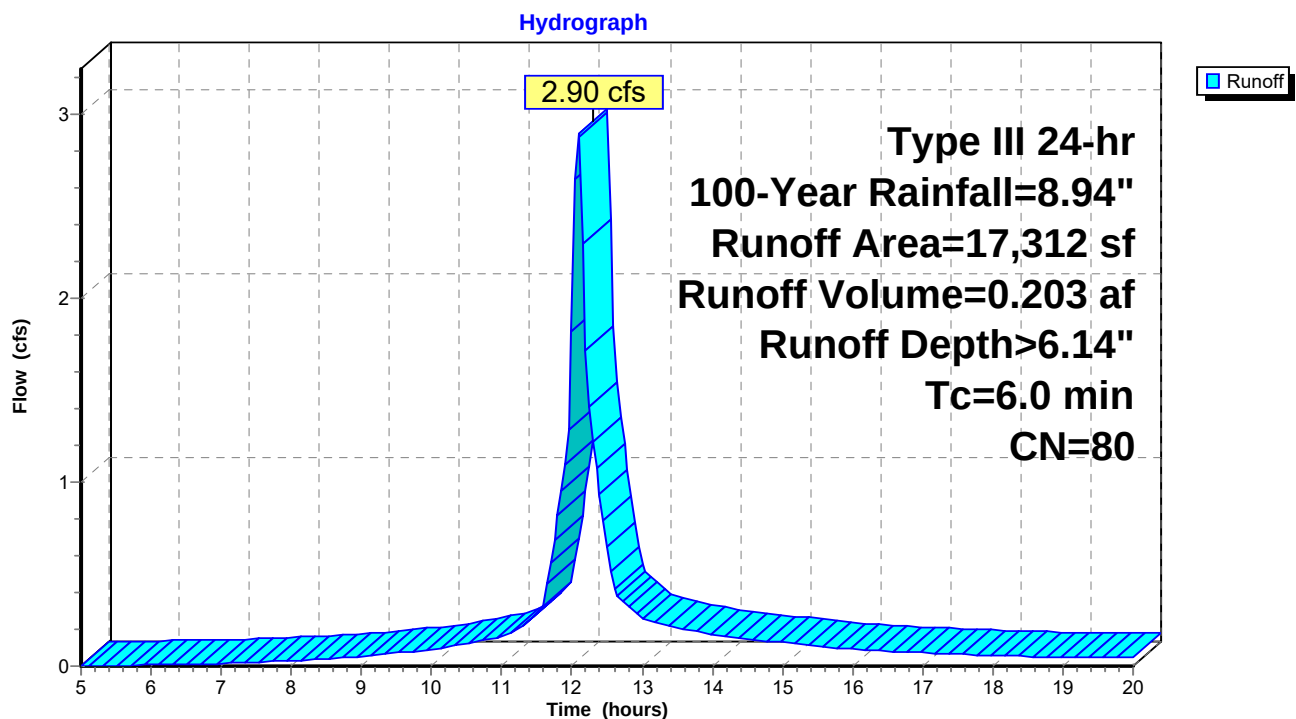
**Summary for Subcatchment 126S: P3FF**

Runoff = 2.90 cfs @ 12.09 hrs, Volume= 0.203 af, Depth> 6.14"  
Routed to Pond 129P : CB 34

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,177     | 39 | >75% Grass cover, Good, HSG A |
| 4,336     | 98 | Unconnected roofs, HSG A      |
| 7,799     | 98 | Paved parking, HSG A          |
| 17,312    | 80 | Weighted Average              |
| 5,177     |    | 29.90% Pervious Area          |
| 12,135    |    | 70.10% Impervious Area        |
| 4,336     |    | 35.73% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 126S: P3FF**

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Type III 24-hr 100-Year Rainfall=8.94"

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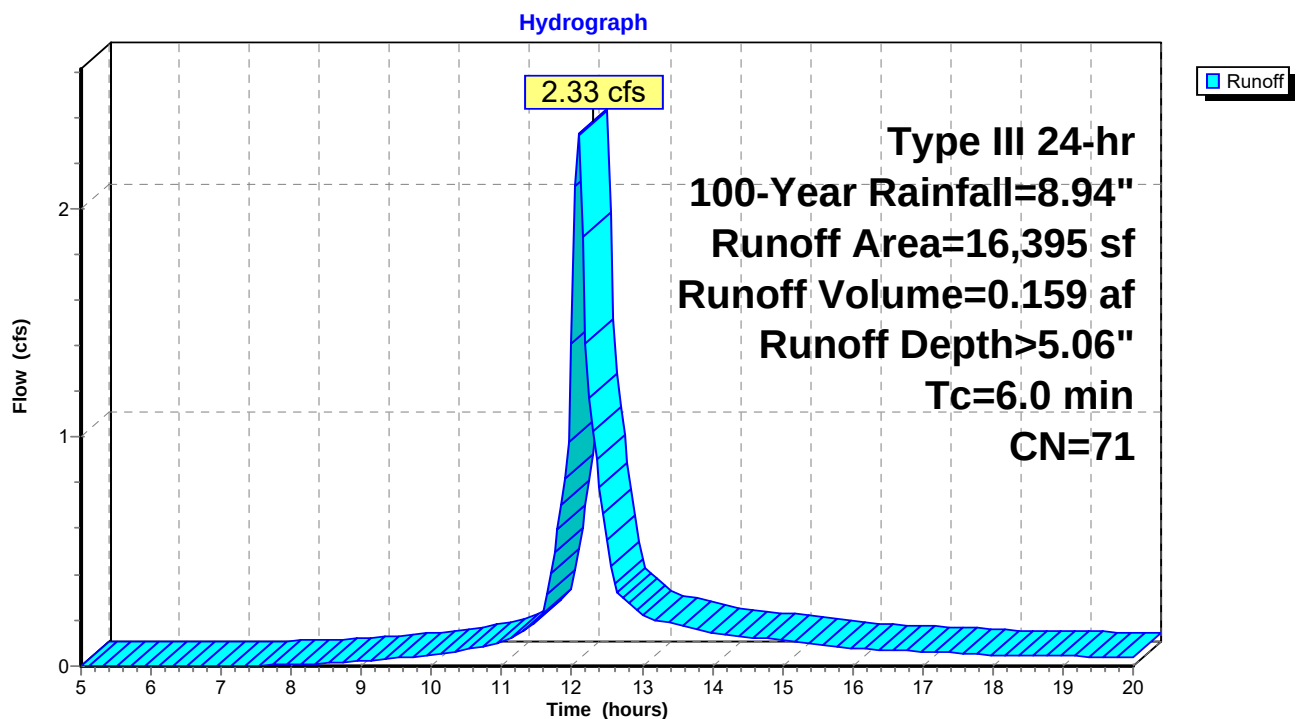
**Summary for Subcatchment 127S: P3GG**

Runoff = 2.33 cfs @ 12.09 hrs, Volume= 0.159 af, Depth> 5.06"  
Routed to Pond 132P : CB 33

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 7,617     | 39 | >75% Grass cover, Good, HSG A |
| 3,071     | 98 | Unconnected roofs, HSG C      |
| 5,707     | 98 | Paved parking, HSG A          |
| 16,395    | 71 | Weighted Average              |
| 7,617     |    | 46.46% Pervious Area          |
| 8,778     |    | 53.54% Impervious Area        |
| 3,071     |    | 34.99% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 127S: P3GG**

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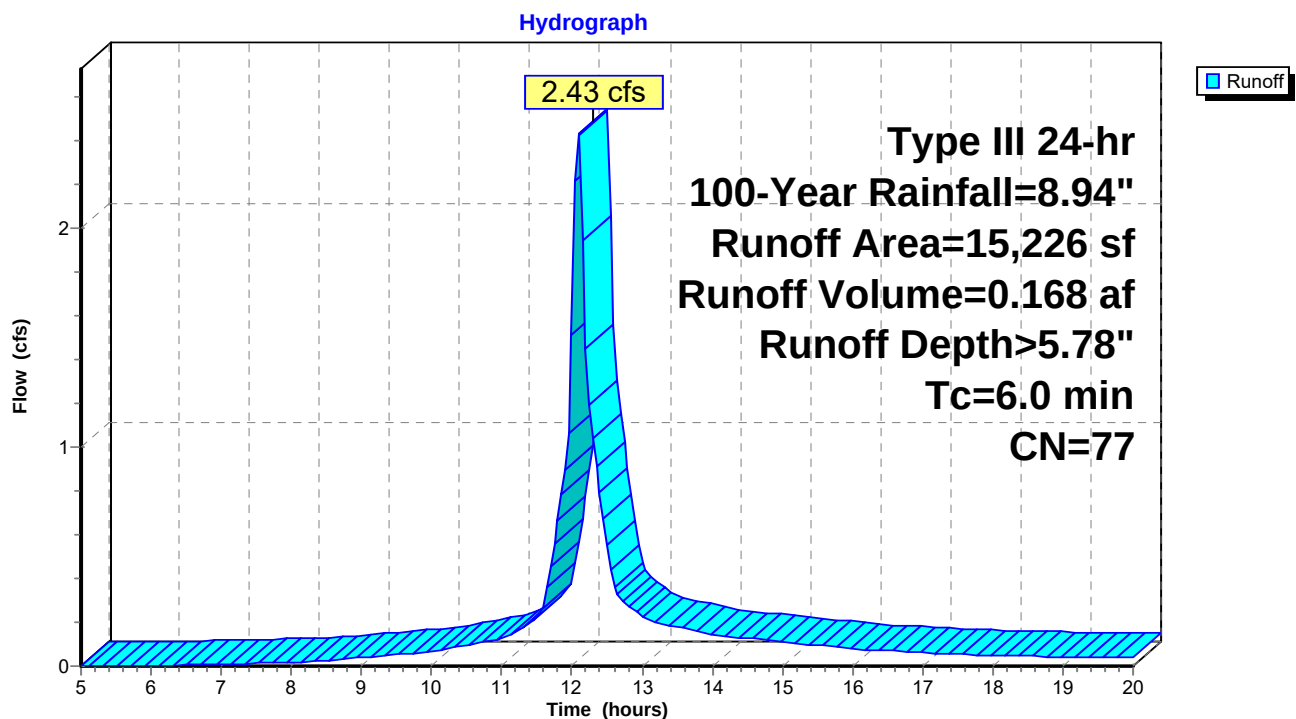
**Summary for Subcatchment 128S: P3HH**

Runoff = 2.43 cfs @ 12.09 hrs, Volume= 0.168 af, Depth> 5.78"  
Routed to Pond 131P : CB 35

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 5,501     | 39 | >75% Grass cover, Good, HSG A |
| 4,901     | 98 | Unconnected roofs, HSG A      |
| 4,824     | 98 | Paved parking, HSG A          |
| 15,226    | 77 | Weighted Average              |
| 5,501     |    | 36.13% Pervious Area          |
| 9,725     |    | 63.87% Impervious Area        |
| 4,901     |    | 50.40% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 128S: P3HH**

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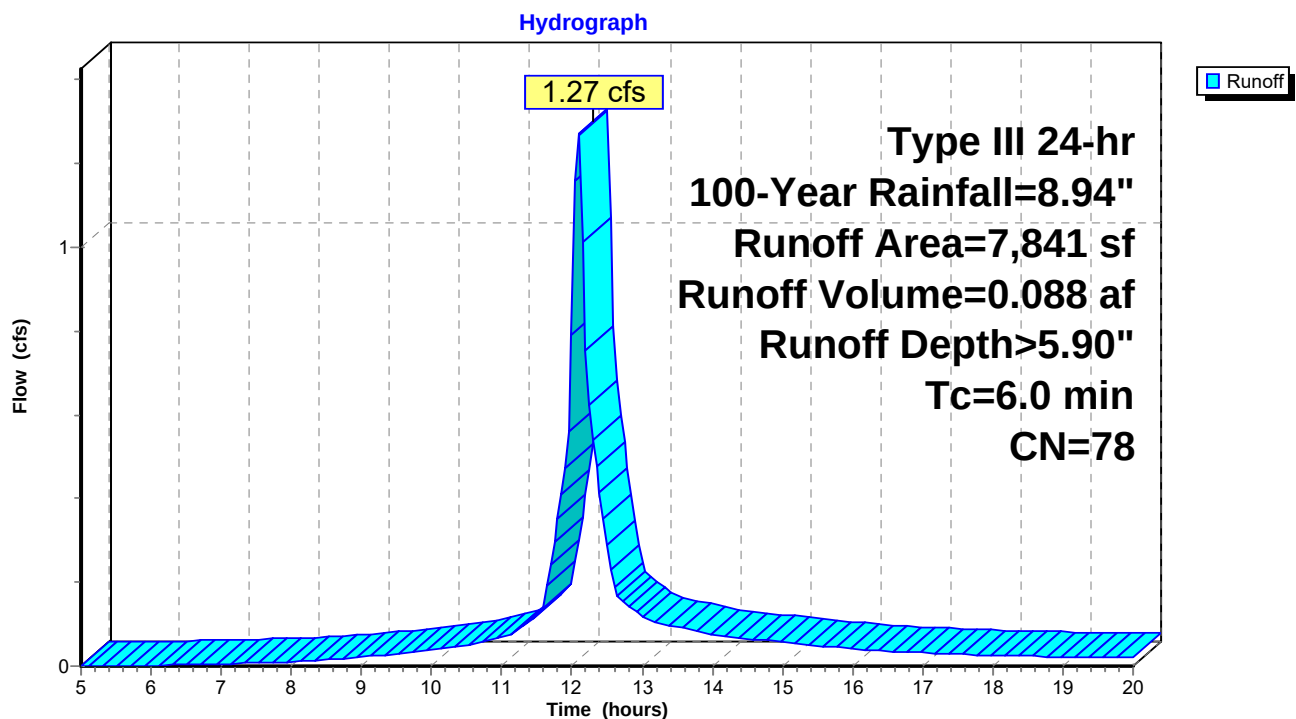
**Summary for Subcatchment 129S: P3MM**

Runoff = 1.27 cfs @ 12.09 hrs, Volume= 0.088 af, Depth> 5.90"  
Routed to Pond 136P : CB 38

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,648     | 39 | >75% Grass cover, Good, HSG A |
| 2,583     | 98 | Unconnected roofs, HSG A      |
| 2,610     | 98 | Paved parking, HSG A          |
| 7,841     | 78 | Weighted Average              |
| 2,648     |    | 33.77% Pervious Area          |
| 5,193     |    | 66.23% Impervious Area        |
| 2,583     |    | 49.74% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 129S: P3MM**



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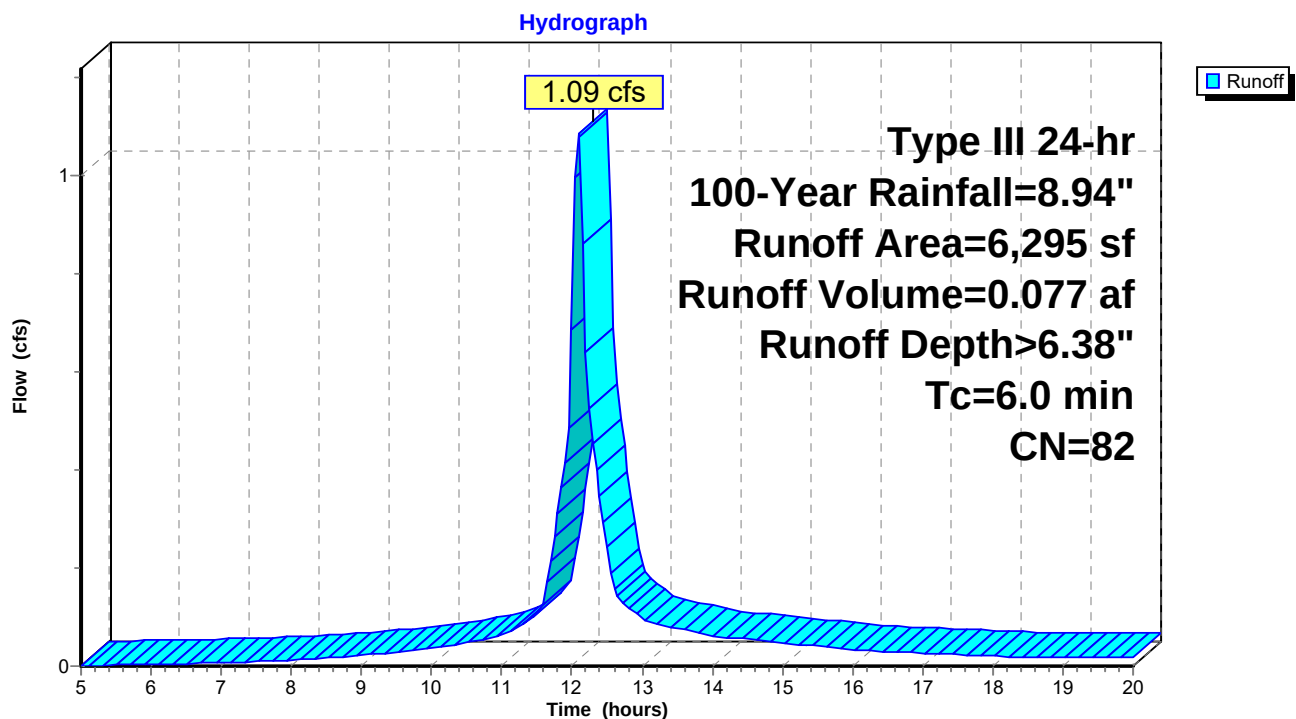
**Summary for Subcatchment 130S: P3NN**

Runoff = 1.09 cfs @ 12.09 hrs, Volume= 0.077 af, Depth> 6.38"  
Routed to Pond 138P : CB 39

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,726     | 39 | >75% Grass cover, Good, HSG A |
| 1,686     | 98 | Unconnected roofs, HSG A      |
| 2,883     | 98 | Paved parking, HSG A          |
| 6,295     | 82 | Weighted Average              |
| 1,726     |    | 27.42% Pervious Area          |
| 4,569     |    | 72.58% Impervious Area        |
| 1,686     |    | 36.90% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 130S: P3NN**

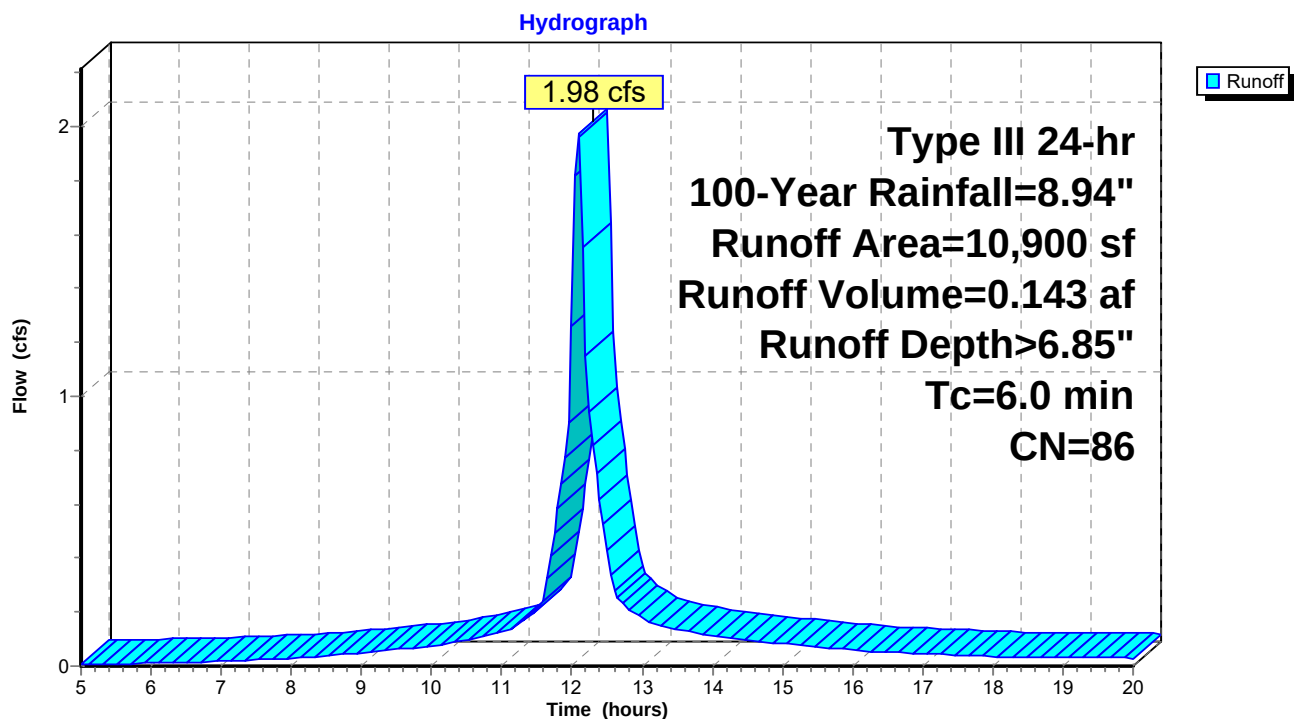
**Summary for Subcatchment 136S: P3II**

Runoff = 1.98 cfs @ 12.09 hrs, Volume= 0.143 af, Depth> 6.85"  
 Routed to Pond 137P : CB

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,148     | 39 | >75% Grass cover, Good, HSG A |
| 4,052     | 98 | Unconnected roofs, HSG A      |
| 4,700     | 98 | Paved parking, HSG A          |
| 10,900    | 86 | Weighted Average              |
| 2,148     |    | 19.71% Pervious Area          |
| 8,752     |    | 80.29% Impervious Area        |
| 4,052     |    | 46.30% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 136S: P3II**

### Summary for Subcatchment 138S: P3JJ

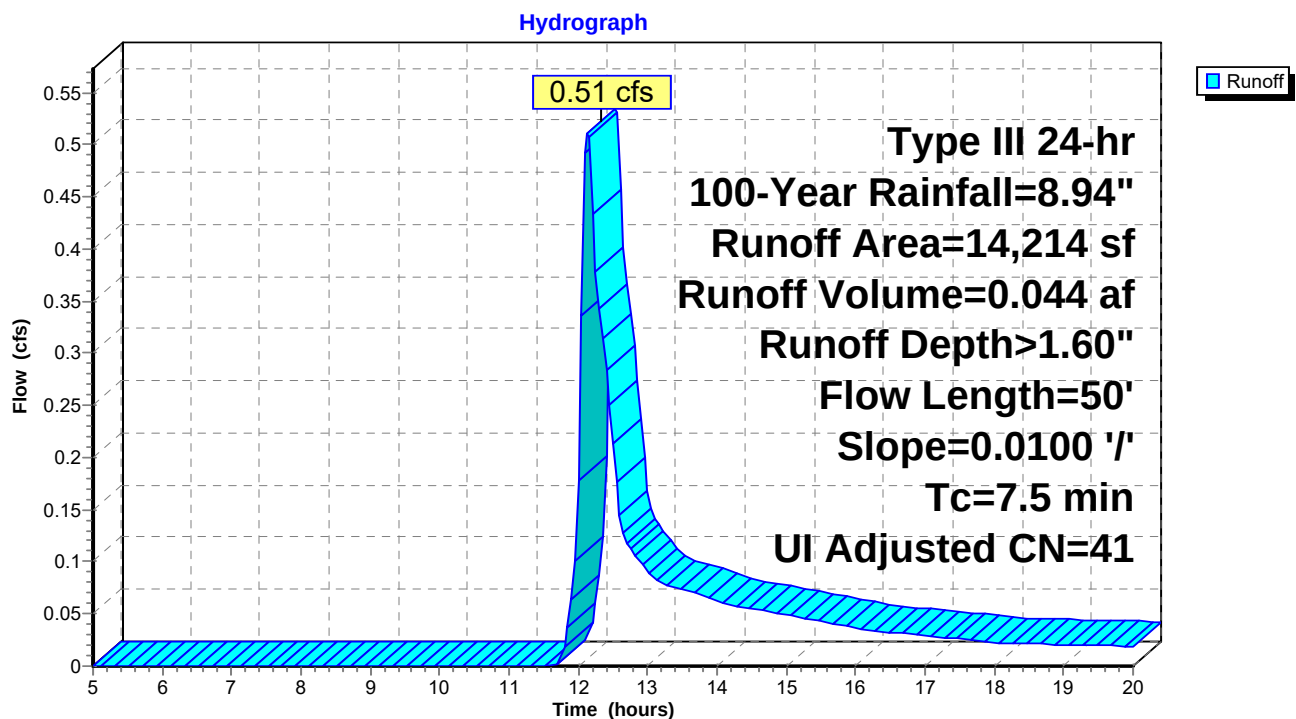
Runoff = 0.51 cfs @ 12.13 hrs, Volume= 0.044 af, Depth> 1.60"  
Routed to Pond 135P : Inf. Basin 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 989       | 98 |     | Unconnected roofs, HSG A      |
| 13,225    | 39 |     | >75% Grass cover, Good, HSG A |
| 14,214    | 43 | 41  | Weighted Average, UI Adjusted |
| 13,225    |    |     | 93.04% Pervious Area          |
| 989       |    |     | 6.96% Impervious Area         |
| 989       |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                    |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------|
| 7.5      | 50            | 0.0100        | 0.11              |                | Sheet Flow,<br>Grass: Short n= 0.150 P2= 3.10" |

### Subcatchment 138S: P3JJ



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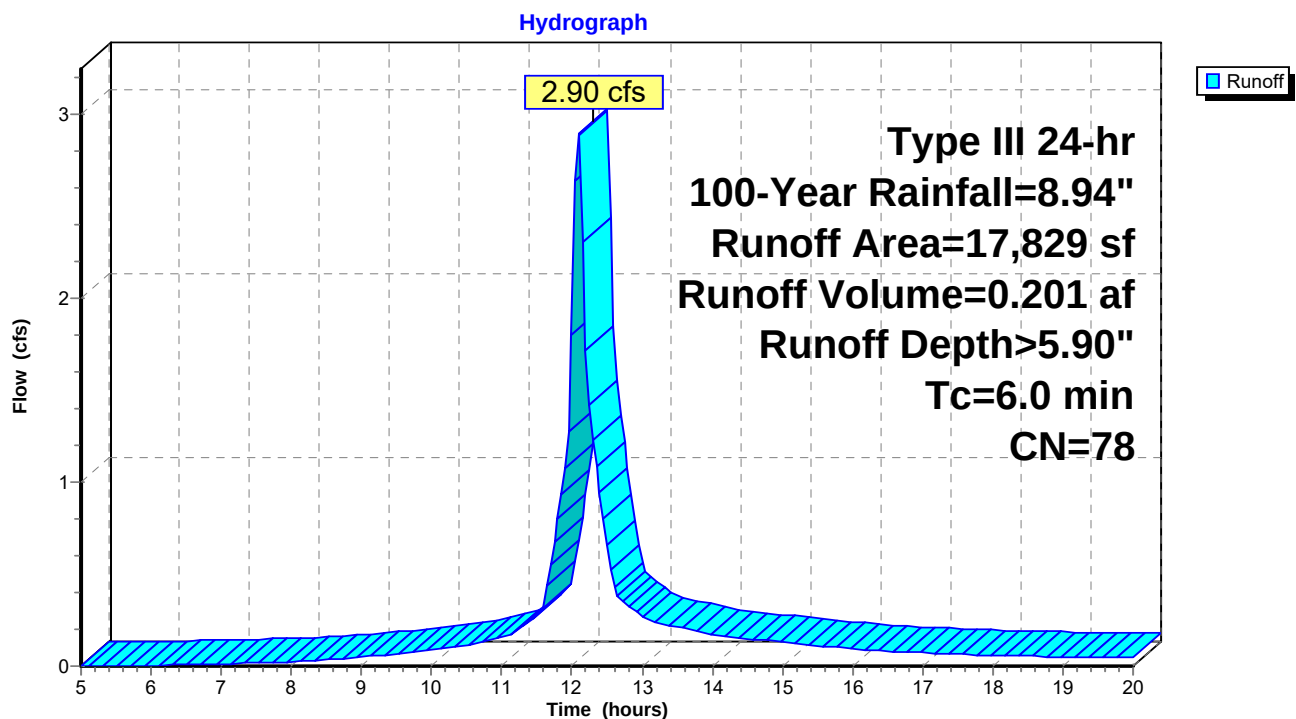
**Summary for Subcatchment 140S: P300**

Runoff = 2.90 cfs @ 12.09 hrs, Volume= 0.201 af, Depth> 5.90"  
Routed to Pond 142P : CB 40

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 6,065     | 39 | >75% Grass cover, Good, HSG A |
| 5,813     | 98 | Unconnected roofs, HSG A      |
| 5,951     | 98 | Paved parking, HSG A          |
| 17,829    | 78 | Weighted Average              |
| 6,065     |    | 34.02% Pervious Area          |
| 11,764    |    | 65.98% Impervious Area        |
| 5,813     |    | 49.41% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 140S: P300**

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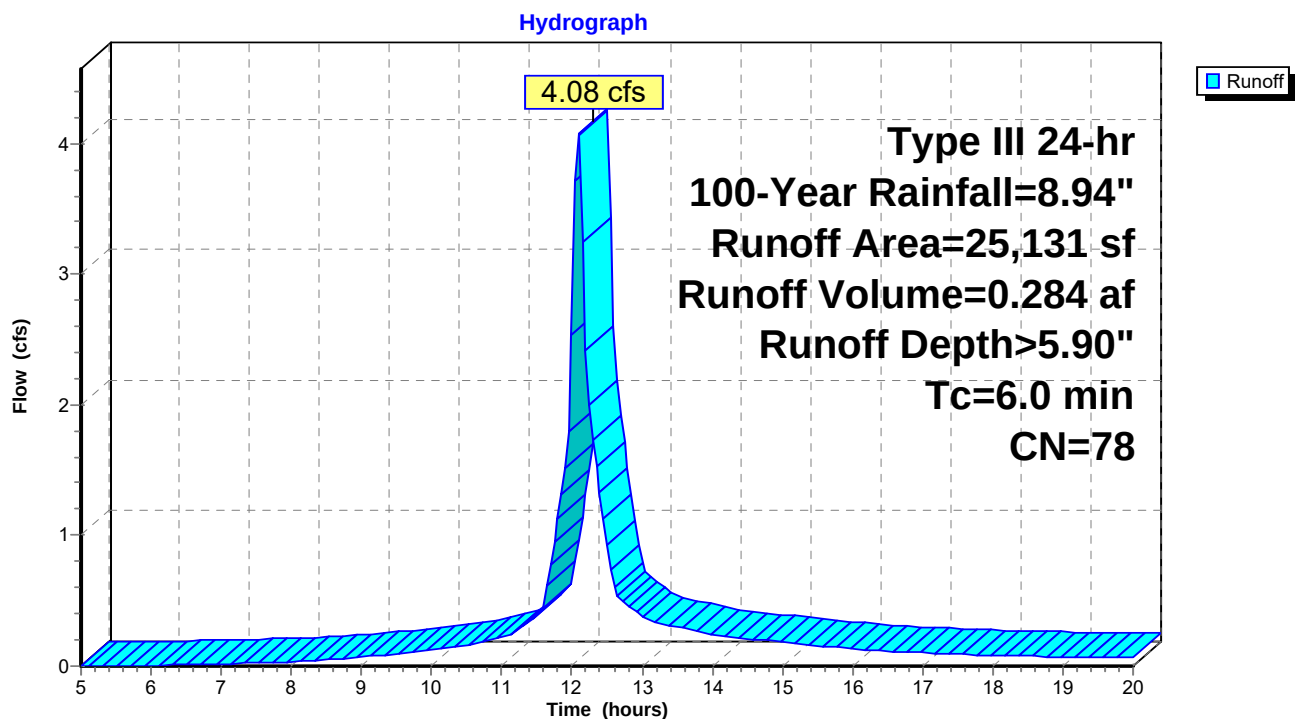
**Summary for Subcatchment 141S: P3PP**

Runoff = 4.08 cfs @ 12.09 hrs, Volume= 0.284 af, Depth> 5.90"  
Routed to Pond 143P : CB 41

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 8,502     | 39 | >75% Grass cover, Good, HSG A |
| 8,019     | 98 | Unconnected roofs, HSG A      |
| 8,610     | 98 | Paved parking, HSG A          |
| 25,131    | 78 | Weighted Average              |
| 8,502     |    | 33.83% Pervious Area          |
| 16,629    |    | 66.17% Impervious Area        |
| 8,019     |    | 48.22% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 141S: P3PP**

### Summary for Subcatchment 142S: P3UU

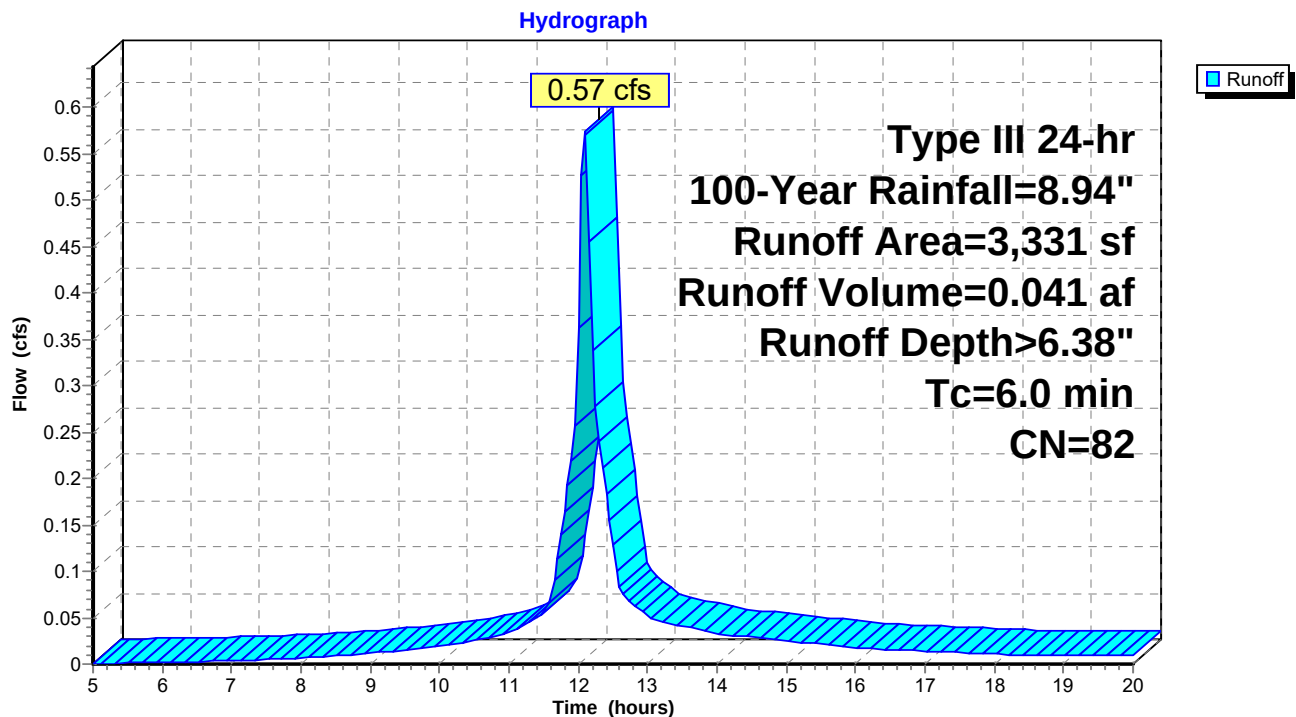
Runoff = 0.57 cfs @ 12.09 hrs, Volume= 0.041 af, Depth> 6.38"  
Routed to Pond 147P : CB 28

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 915       | 39 | >75% Grass cover, Good, HSG A |
| 2,416     | 98 | Paved parking, HSG A          |
| 3,331     | 82 | Weighted Average              |
| 915       |    | 27.47% Pervious Area          |
| 2,416     |    | 72.53% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 142S: P3UU



### Summary for Subcatchment 143S: P3VV

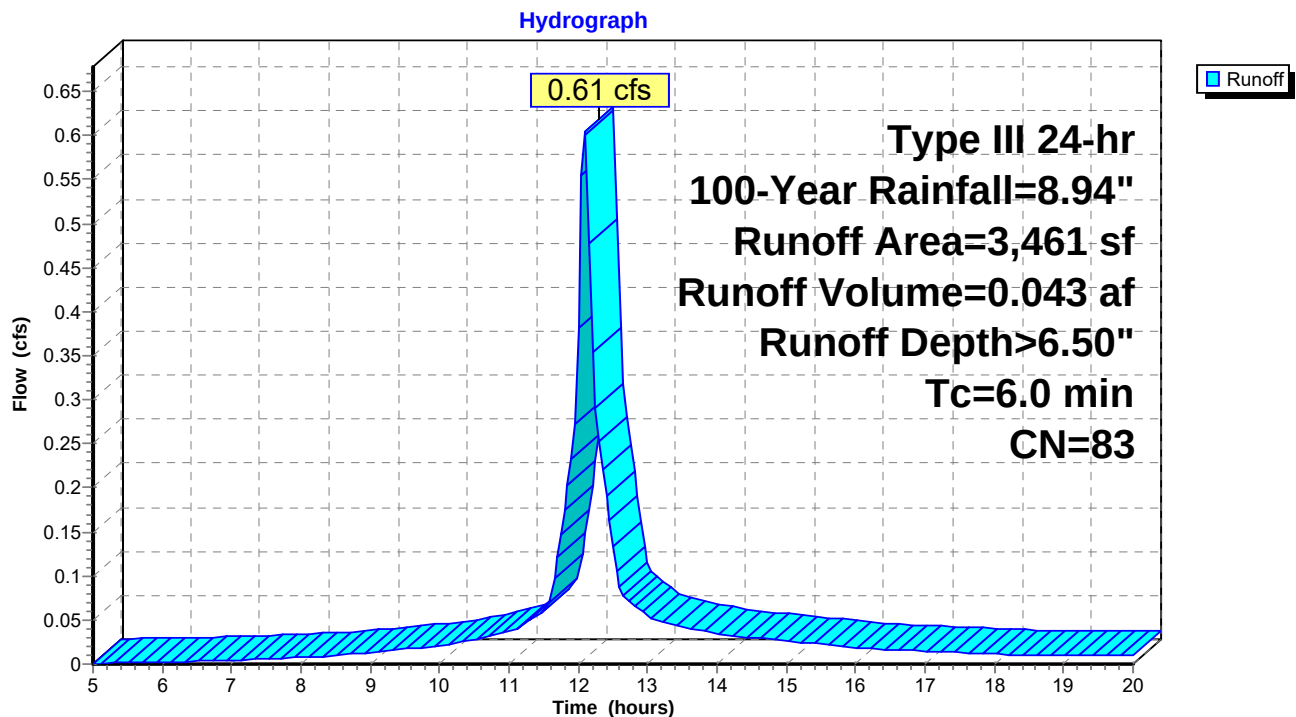
Runoff = 0.61 cfs @ 12.09 hrs, Volume= 0.043 af, Depth> 6.50"  
Routed to Pond 149P : CB 29

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 906       | 39 | >75% Grass cover, Good, HSG A |
| 2,555     | 98 | Paved parking, HSG A          |
| 3,461     | 83 | Weighted Average              |
| 906       |    | 26.18% Pervious Area          |
| 2,555     |    | 73.82% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 143S: P3VV



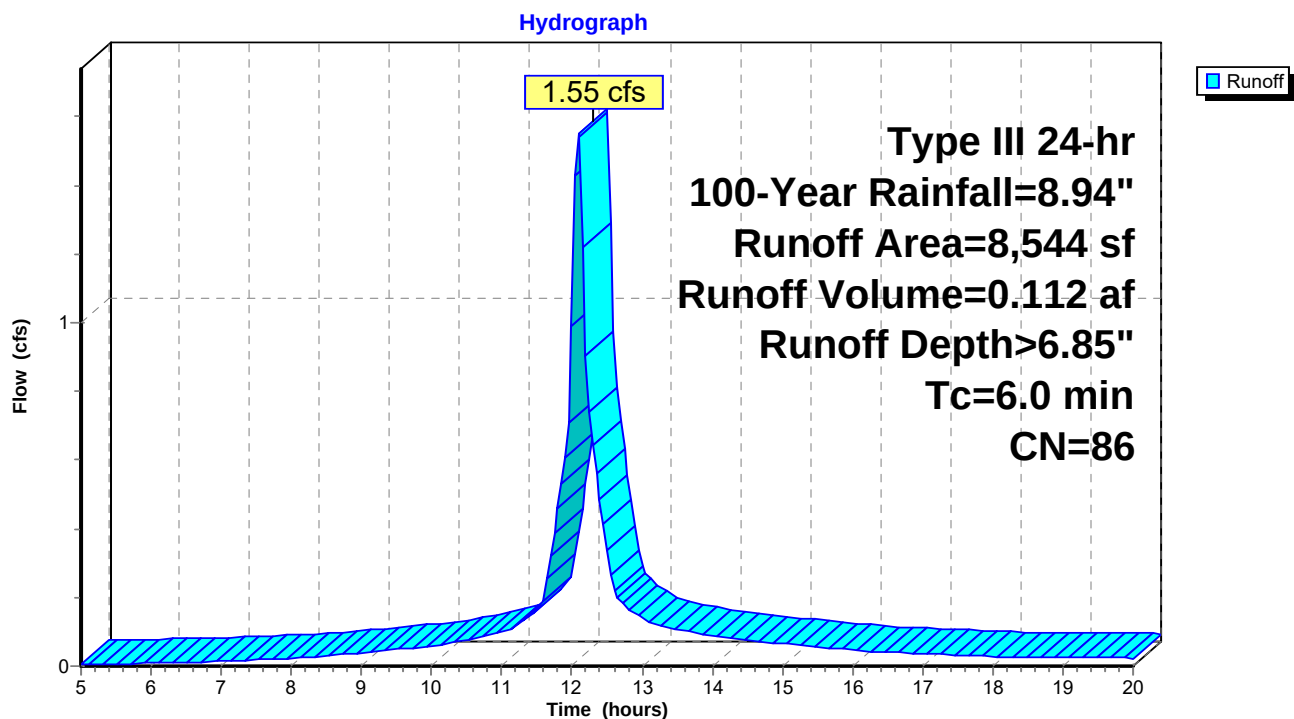
**Summary for Subcatchment 147S: P3QQ**

Runoff = 1.55 cfs @ 12.09 hrs, Volume= 0.112 af, Depth> 6.85"  
 Routed to Pond 148P : CB 43

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,691     | 39 | >75% Grass cover, Good, HSG A |
| 2,319     | 98 | Unconnected roofs, HSG A      |
| 4,534     | 98 | Paved parking, HSG A          |
| 8,544     | 86 | Weighted Average              |
| 1,691     |    | 19.79% Pervious Area          |
| 6,853     |    | 80.21% Impervious Area        |
| 2,319     |    | 33.84% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 147S: P3QQ**



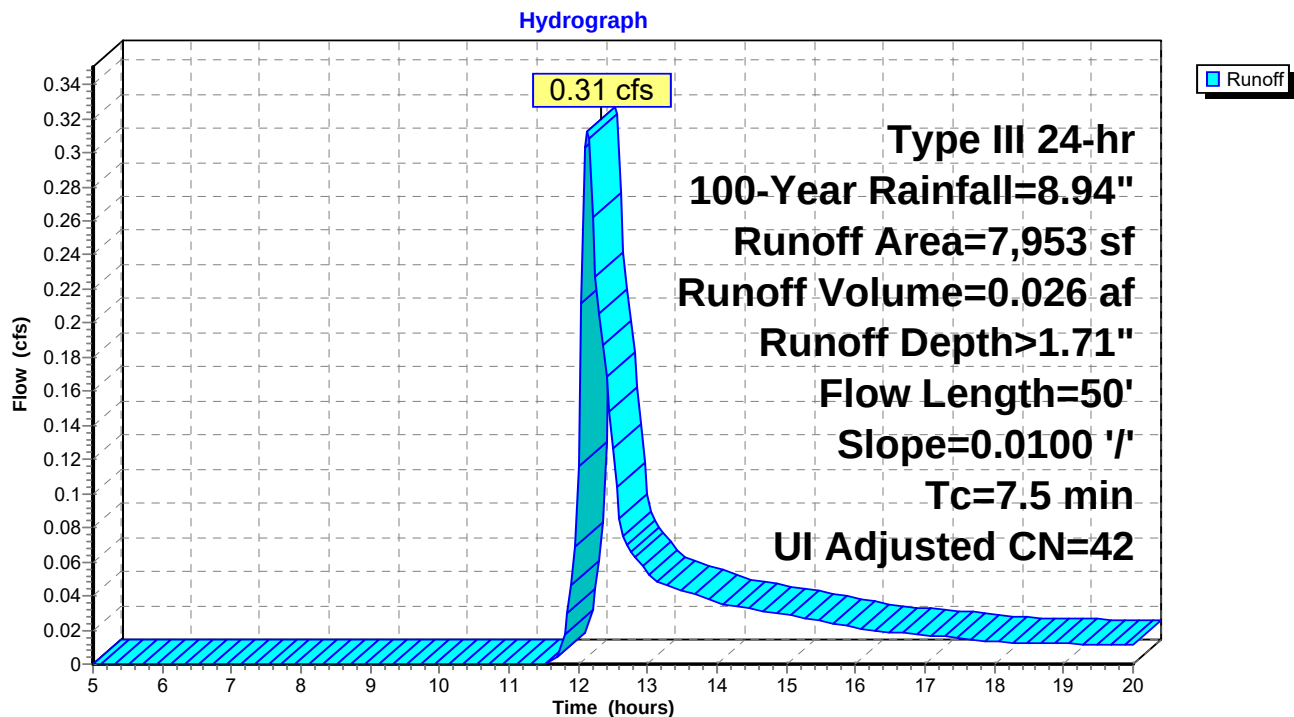
**Summary for Subcatchment 149S: P3RR**

Runoff = 0.31 cfs @ 12.13 hrs, Volume= 0.026 af, Depth> 1.71"  
 Routed to Pond 146P : Inf. Basin 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 803       | 98 |     | Unconnected roofs, HSG A      |
| 7,150     | 39 |     | >75% Grass cover, Good, HSG A |
| 7,953     | 45 | 42  | Weighted Average, UI Adjusted |
| 7,150     |    |     | 89.90% Pervious Area          |
| 803       |    |     | 10.10% Impervious Area        |
| 803       |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                    |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------|
| 7.5      | 50            | 0.0100        | 0.11              |                | Sheet Flow,<br>Grass: Short n= 0.150 P2= 3.10" |

**Subcatchment 149S: P3RR**

### Summary for Subcatchment 151S: P3ZZ

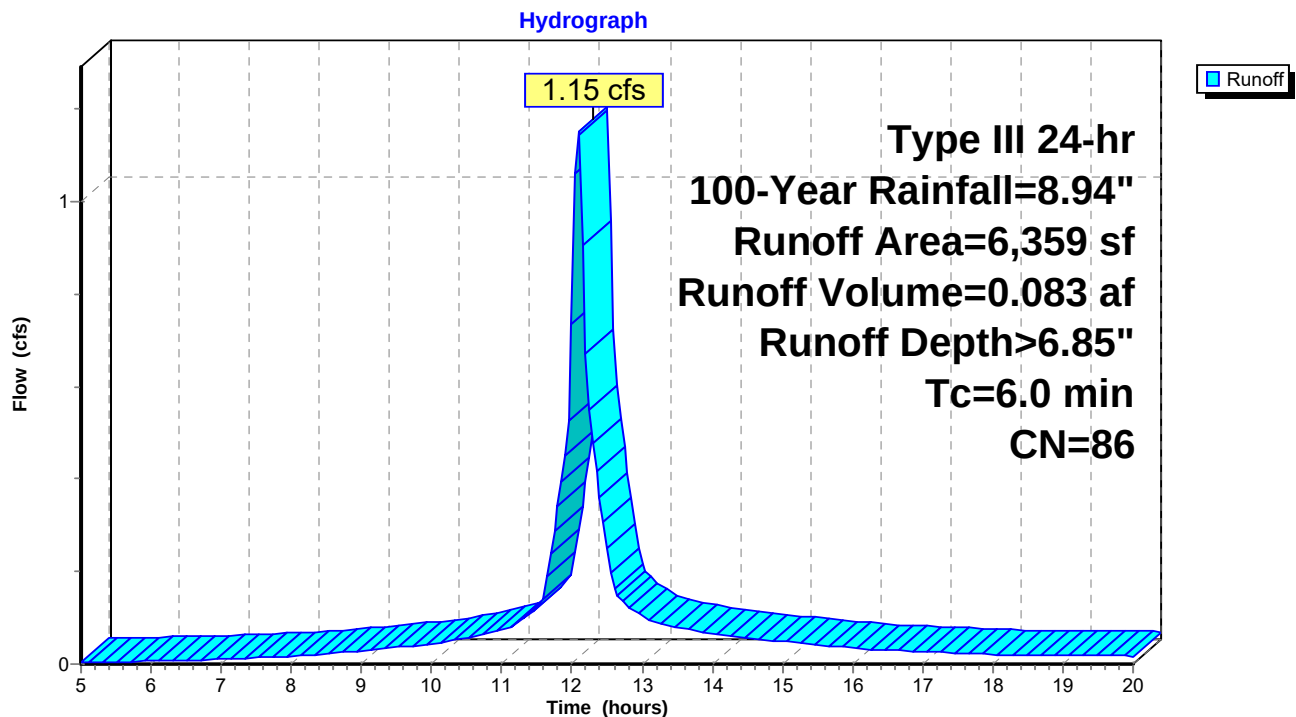
Runoff = 1.15 cfs @ 12.09 hrs, Volume= 0.083 af, Depth> 6.85"  
Routed to Pond 159P : CB 25

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,297     | 39 | >75% Grass cover, Good, HSG A |
| 5,062     | 98 | Paved parking, HSG A          |
| 6,359     | 86 | Weighted Average              |
| 1,297     |    | 20.40% Pervious Area          |
| 5,062     |    | 79.60% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 151S: P3ZZ



### Summary for Subcatchment 152S: P3YY

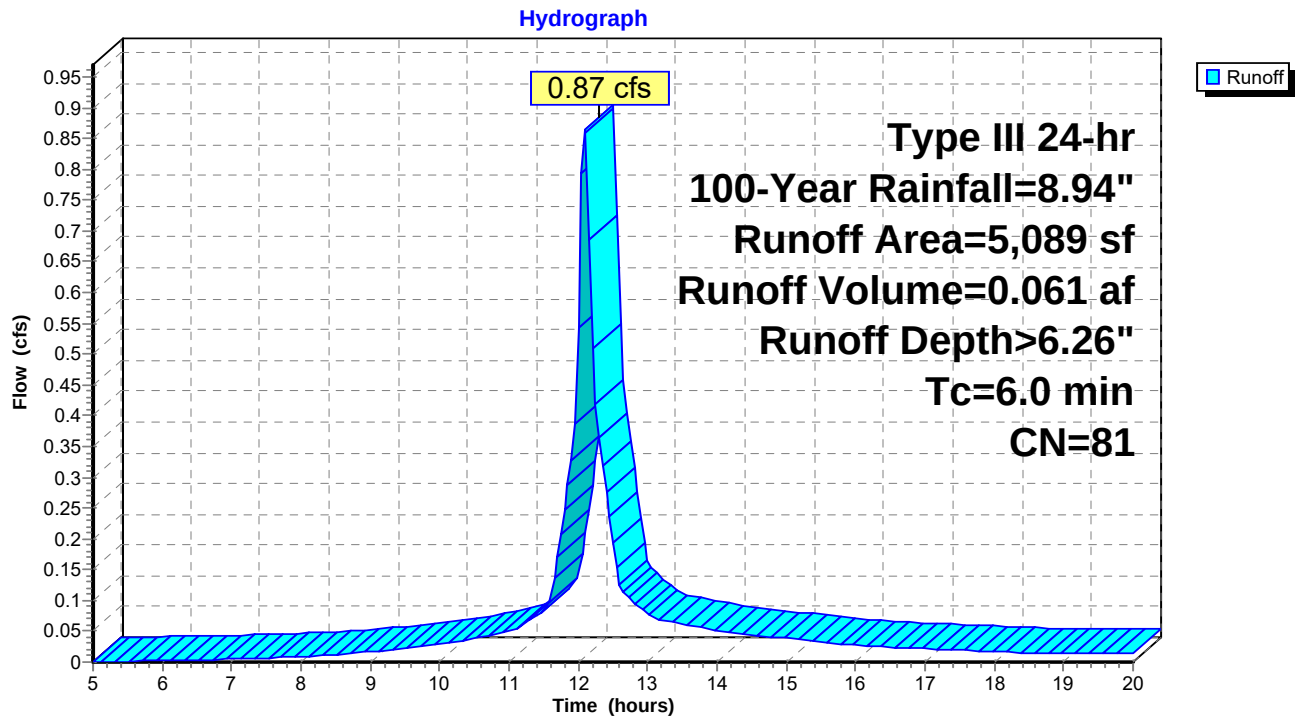
Runoff = 0.87 cfs @ 12.09 hrs, Volume= 0.061 af, Depth> 6.26"  
Routed to Pond 158P : CB 24

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,505     | 39 | >75% Grass cover, Good, HSG A |
| 3,584     | 98 | Paved parking, HSG A          |
| 5,089     | 81 | Weighted Average              |
| 1,505     |    | 29.57% Pervious Area          |
| 3,584     |    | 70.43% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 152S: P3YY



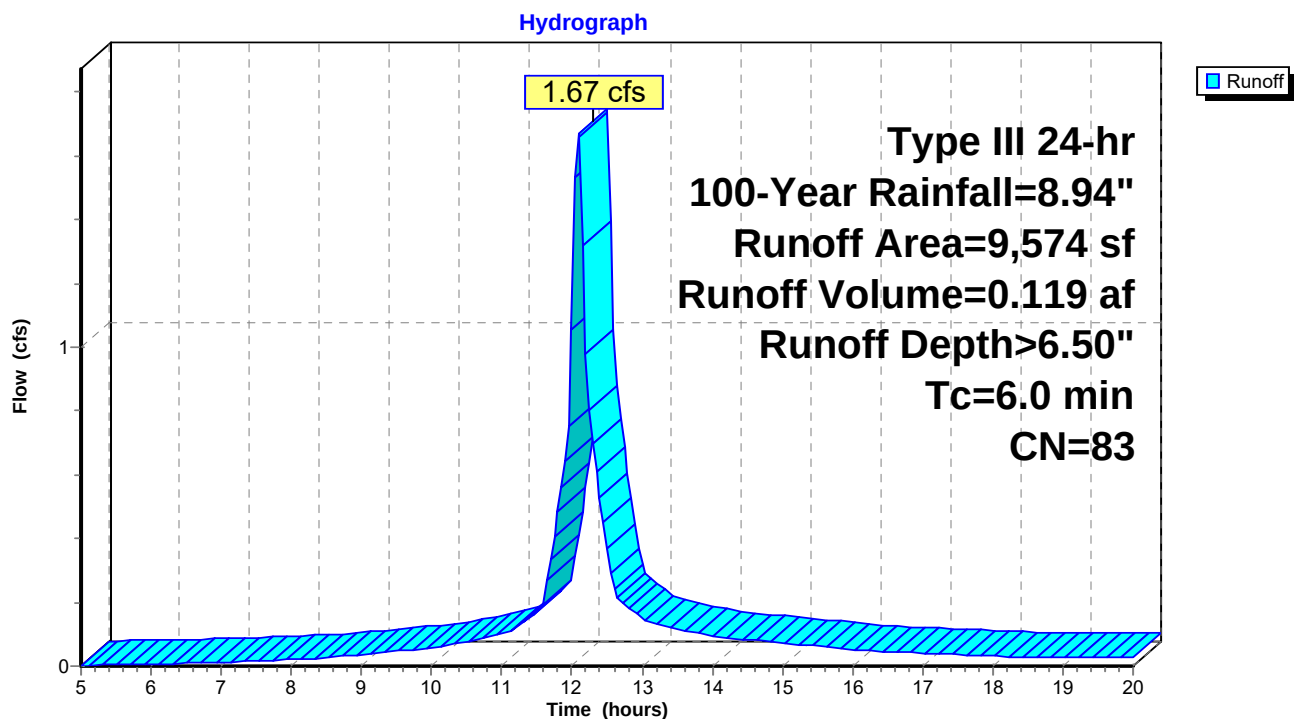
**Summary for Subcatchment 153S: P3WW**

Runoff = 1.67 cfs @ 12.09 hrs, Volume= 0.119 af, Depth> 6.50"  
 Routed to Pond 155P : CB 27

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,428     | 39 | >75% Grass cover, Good, HSG A |
| 2,576     | 98 | Unconnected roofs, HSG A      |
| 4,570     | 98 | Paved parking, HSG A          |
| 9,574     | 83 | Weighted Average              |
| 2,428     |    | 25.36% Pervious Area          |
| 7,146     |    | 74.64% Impervious Area        |
| 2,576     |    | 36.05% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 153S: P3WW**

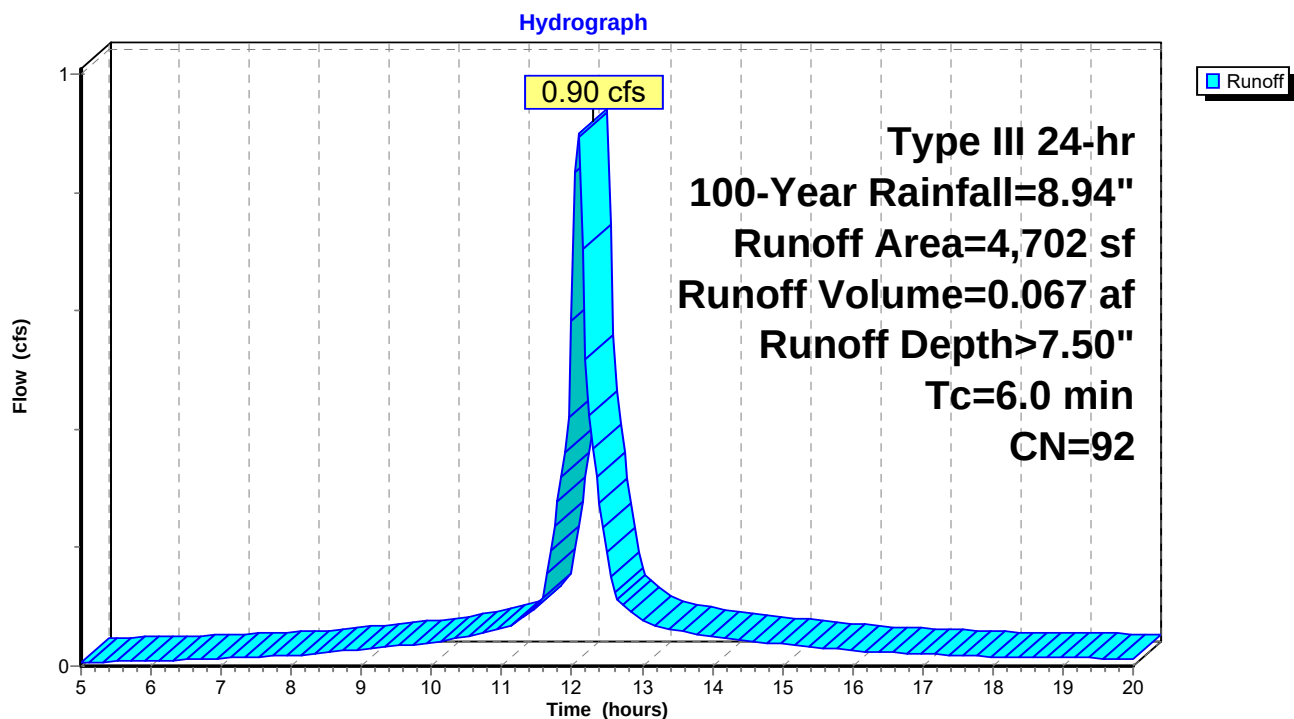
**Summary for Subcatchment 154S: P3XX**

Runoff = 0.90 cfs @ 12.09 hrs, Volume= 0.067 af, Depth> 7.50"  
 Routed to Pond 156P : CB 26

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 467       | 39 | >75% Grass cover, Good, HSG A |
| 2,369     | 98 | Unconnected roofs, HSG A      |
| 1,866     | 98 | Paved parking, HSG A          |
| 4,702     | 92 | Weighted Average              |
| 467       |    | 9.93% Pervious Area           |
| 4,235     |    | 90.07% Impervious Area        |
| 2,369     |    | 55.94% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 154S: P3XX**

**RH Post 1-2-26**

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Type III 24-hr 100-Year Rainfall=8.94"

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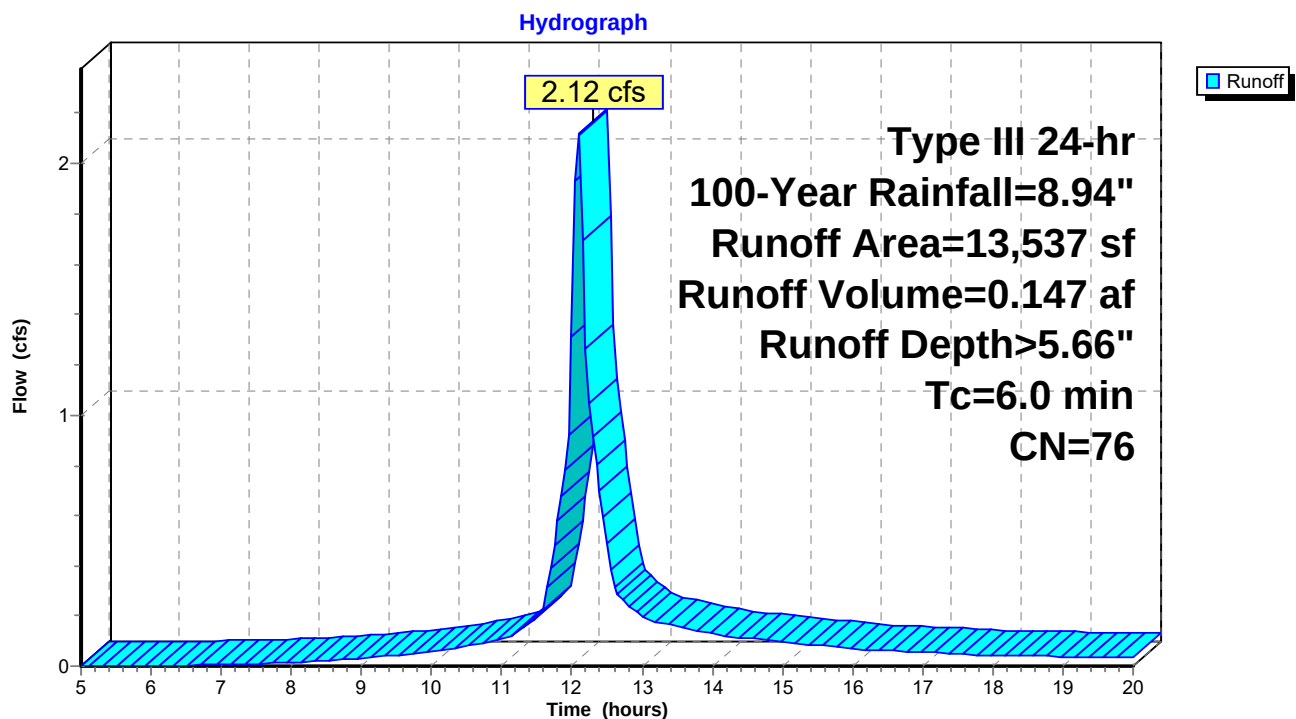
**Summary for Subcatchment 155S: P3CCC**

Runoff = 2.12 cfs @ 12.09 hrs, Volume= 0.147 af, Depth> 5.66"  
Routed to Pond 163P : CB 14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,959     | 39 | >75% Grass cover, Good, HSG A |
| 1,047     | 98 | Unconnected roofs, HSG A      |
| 7,531     | 98 | Paved parking, HSG A          |
| 13,537    | 76 | Weighted Average              |
| 4,959     |    | 36.63% Pervious Area          |
| 8,578     |    | 63.37% Impervious Area        |
| 1,047     |    | 12.21% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 155S: P3CCC**

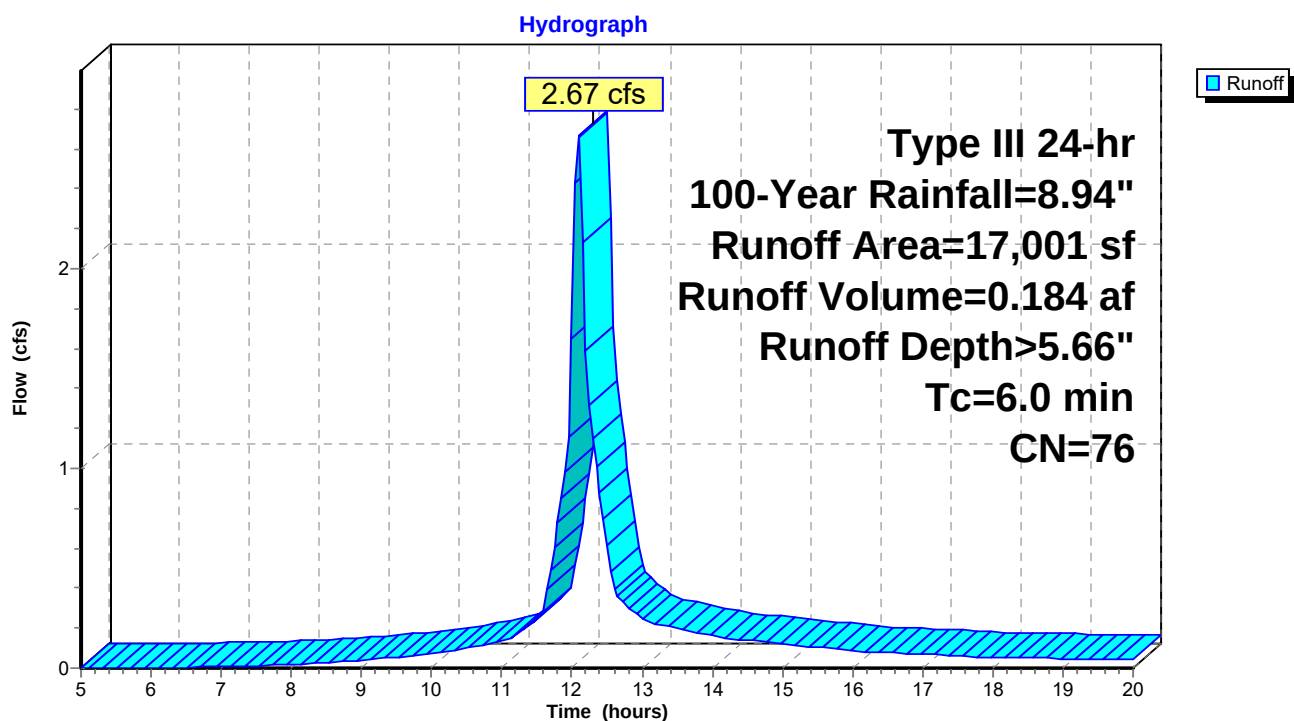
**Summary for Subcatchment 156S: P3DDD**

Runoff = 2.67 cfs @ 12.09 hrs, Volume= 0.184 af, Depth> 5.66"  
 Routed to Pond 162P : CB 15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 6,264     | 39 | >75% Grass cover, Good, HSG A |
| 3,815     | 98 | Unconnected roofs, HSG A      |
| 6,922     | 98 | Paved parking, HSG A          |
| 17,001    | 76 | Weighted Average              |
| 6,264     |    | 36.84% Pervious Area          |
| 10,737    |    | 63.16% Impervious Area        |
| 3,815     |    | 35.53% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 156S: P3DDD**

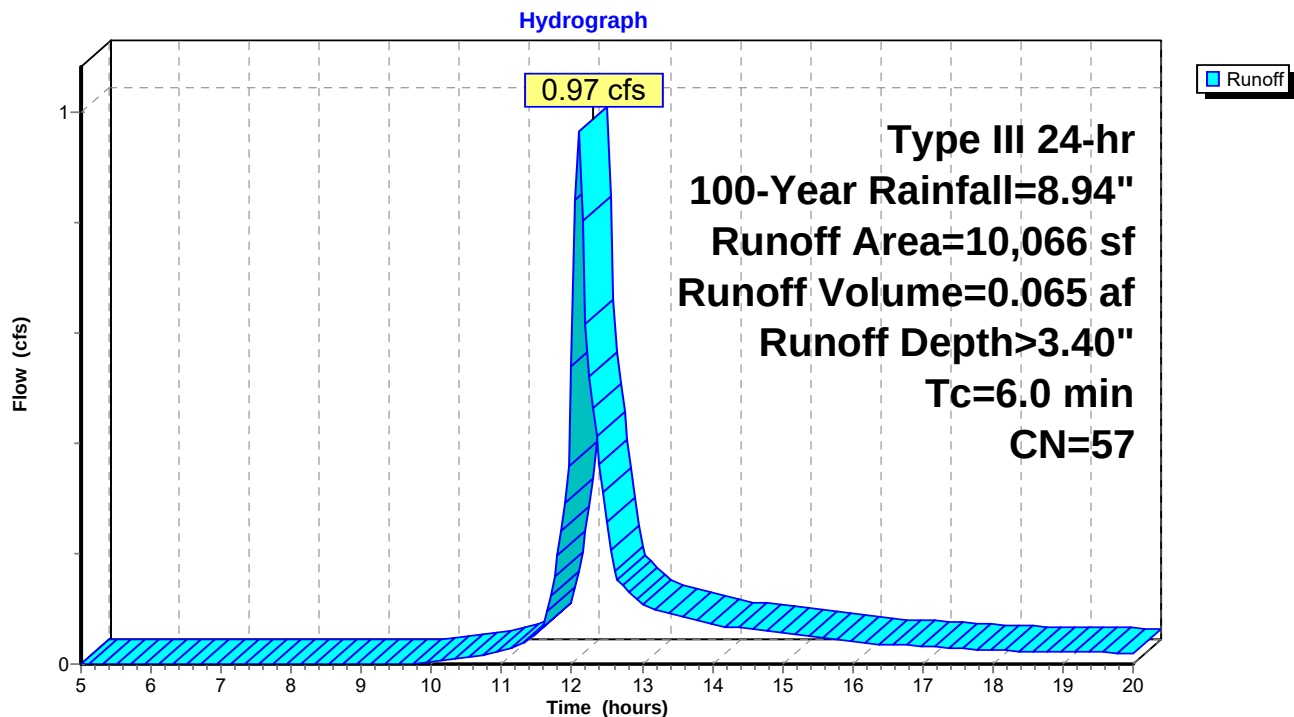
**Summary for Subcatchment 165S: P3FFF**

Runoff = 0.97 cfs @ 12.10 hrs, Volume= 0.065 af, Depth> 3.40"  
 Routed to Pond 168P : CB 10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 7,041     | 39 | >75% Grass cover, Good, HSG A |
| 3,025     | 98 | Paved parking, HSG A          |
| 10,066    | 57 | Weighted Average              |
| 7,041     |    | 69.95% Pervious Area          |
| 3,025     |    | 30.05% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 165S: P3FFF**



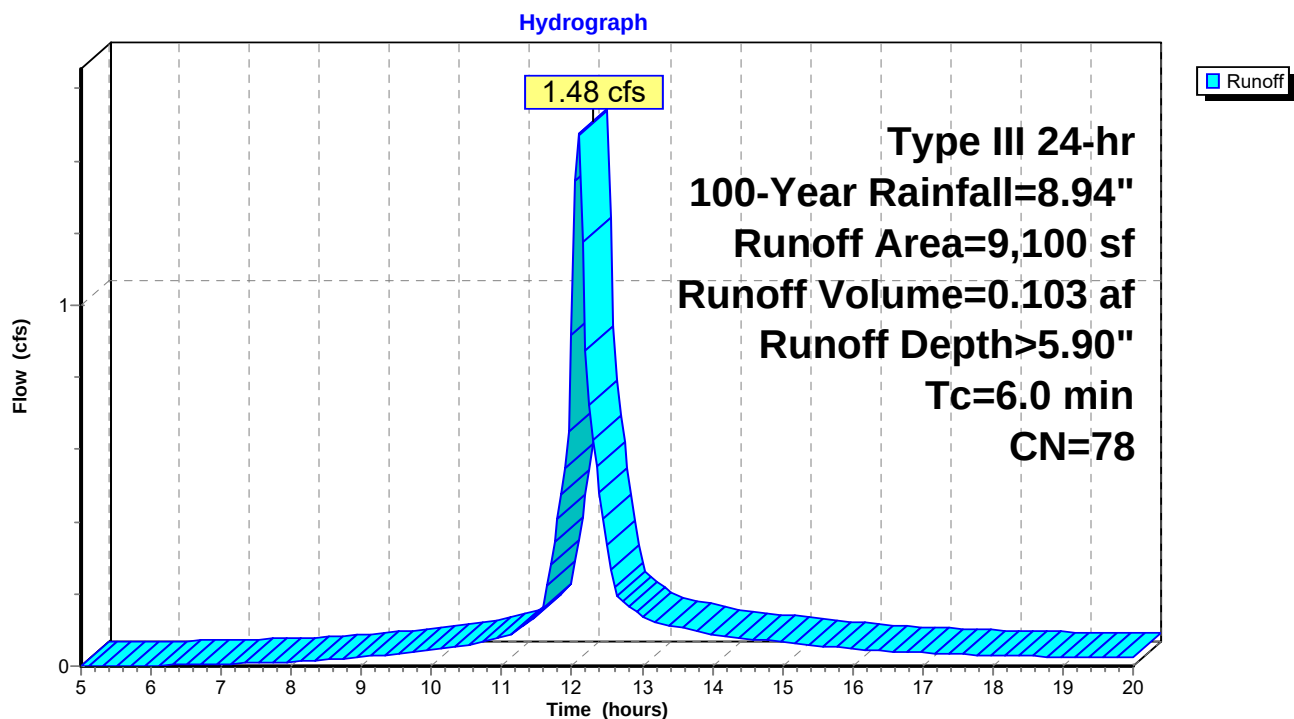
**Summary for Subcatchment 166S: P3EEE**

Runoff = 1.48 cfs @ 12.09 hrs, Volume= 0.103 af, Depth> 5.90"  
 Routed to Pond 167P : CB 11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,114     | 39 | >75% Grass cover, Good, HSG A |
| 3,120     | 98 | Paved parking, HSG A          |
| 2,866     | 98 | Unconnected roofs, HSG A      |
| 9,100     | 78 | Weighted Average              |
| 3,114     |    | 34.22% Pervious Area          |
| 5,986     |    | 65.78% Impervious Area        |
| 2,866     |    | 47.88% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 166S: P3EEE**

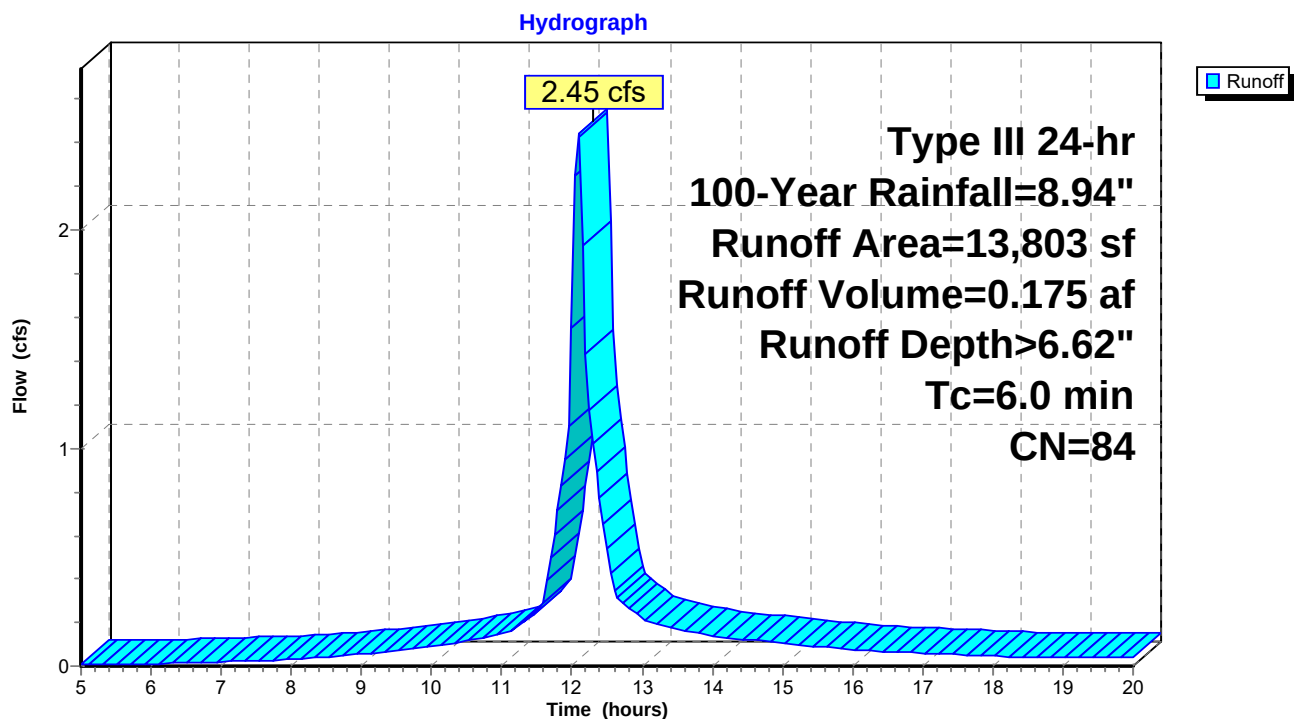
**Summary for Subcatchment 170S: P3JJJ**

Runoff = 2.45 cfs @ 12.09 hrs, Volume= 0.175 af, Depth> 6.62"  
 Routed to Pond 172P : CB 16

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,334     | 39 | >75% Grass cover, Good, HSG A |
| 6,476     | 98 | Unconnected roofs, HSG A      |
| 3,993     | 98 | Paved parking, HSG A          |
| 13,803    | 84 | Weighted Average              |
| 3,334     |    | 24.15% Pervious Area          |
| 10,469    |    | 75.85% Impervious Area        |
| 6,476     |    | 61.86% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 170S: P3JJJ**

**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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Type III 24-hr 100-Year Rainfall=8.94"

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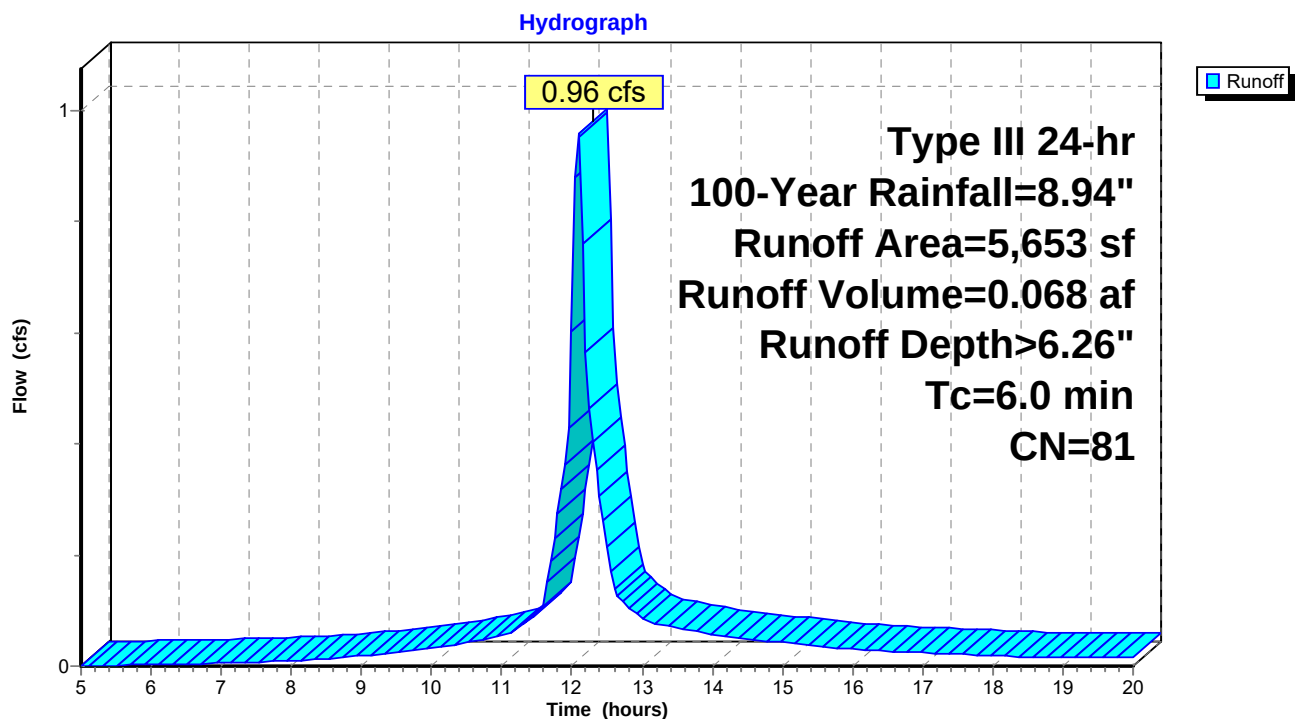
**Summary for Subcatchment 171S: P3III**

Runoff = 0.96 cfs @ 12.09 hrs, Volume= 0.068 af, Depth> 6.26"  
Routed to Pond 173P : CB 17

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,629     | 39 | >75% Grass cover, Good, HSG A |
| 1,823     | 98 | Unconnected roofs, HSG A      |
| 2,201     | 98 | Paved parking, HSG A          |
| 5,653     | 81 | Weighted Average              |
| 1,629     |    | 28.82% Pervious Area          |
| 4,024     |    | 71.18% Impervious Area        |
| 1,823     |    | 45.30% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 171S: P3III**

### Summary for Subcatchment 175S: P3KKK

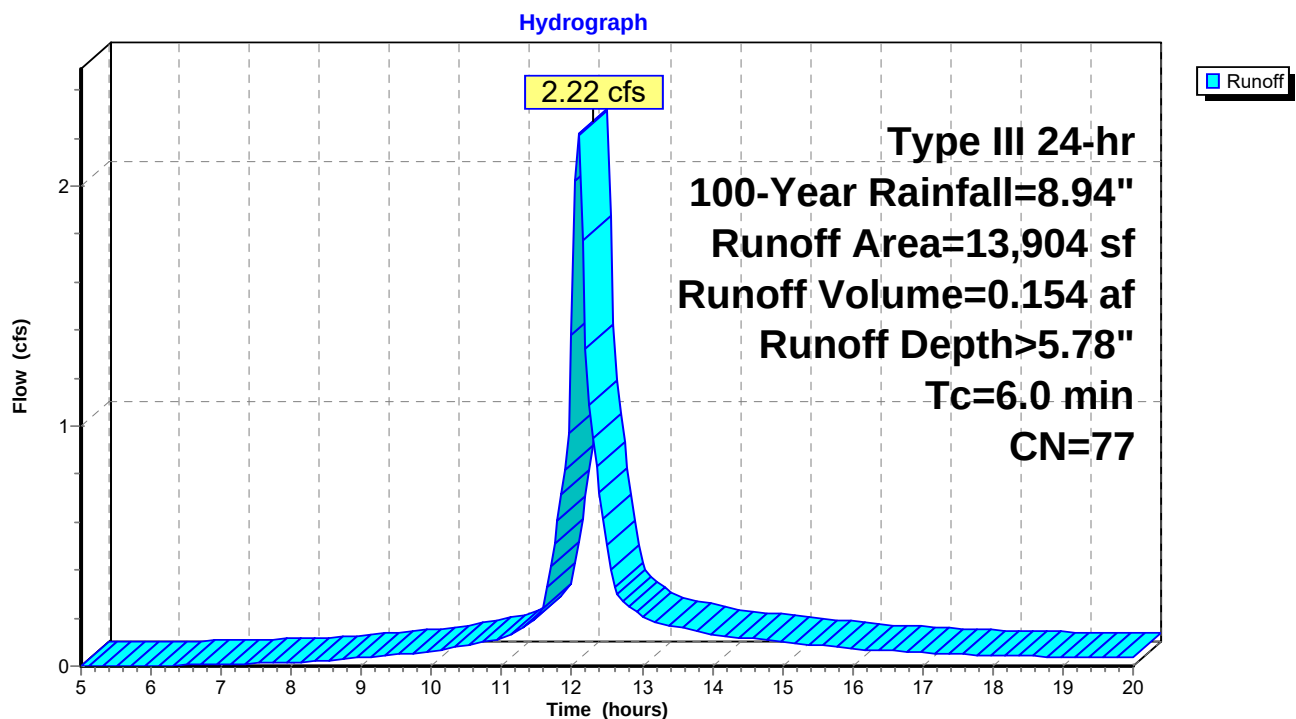
Runoff = 2.22 cfs @ 12.09 hrs, Volume= 0.154 af, Depth> 5.78"  
Routed to Pond 177P : CB 13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,945     | 39 | >75% Grass cover, Good, HSG A |
| 3,545     | 98 | Unconnected roofs, HSG A      |
| 5,414     | 98 | Paved parking, HSG A          |
| 13,904    | 77 | Weighted Average              |
| 4,945     |    | 35.57% Pervious Area          |
| 8,959     |    | 64.43% Impervious Area        |
| 3,545     |    | 39.57% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 175S: P3KKK



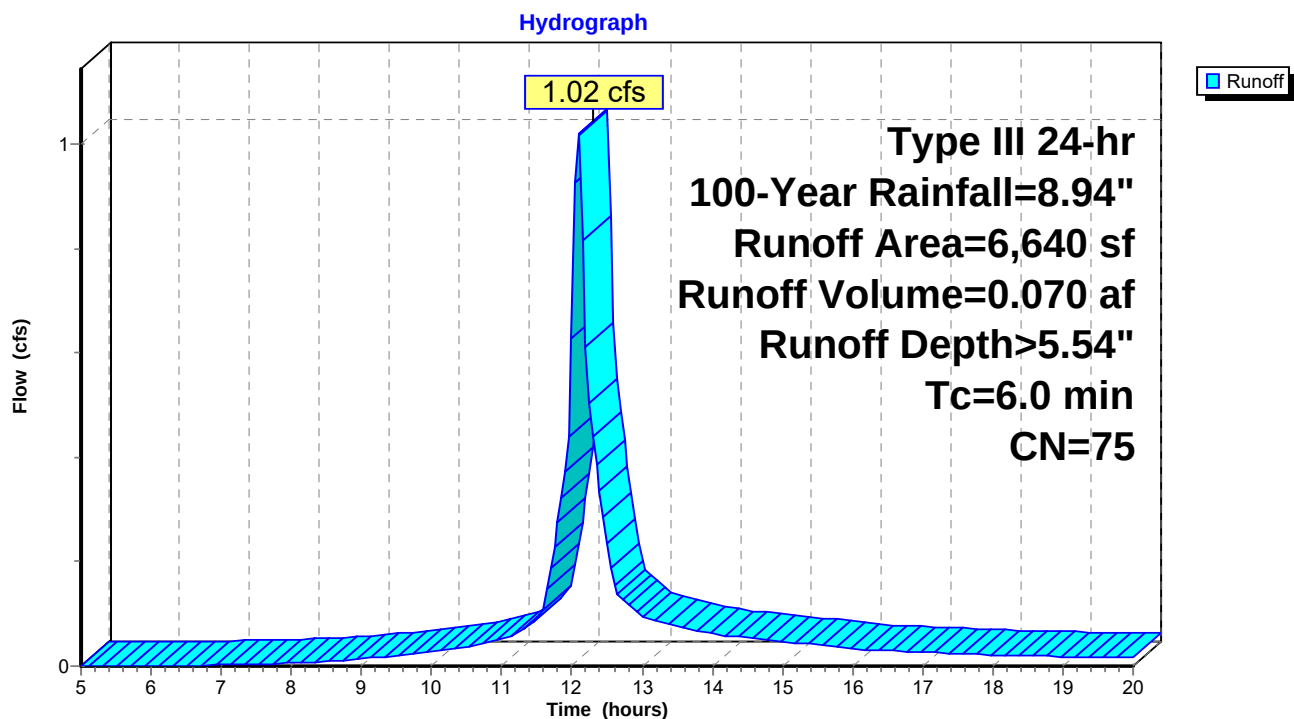
**Summary for Subcatchment 176S: P3LLL**

Runoff = 1.02 cfs @ 12.09 hrs, Volume= 0.070 af, Depth> 5.54"  
 Routed to Pond 178P : CB 12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,605     | 39 | >75% Grass cover, Good, HSG A |
| 958       | 98 | Unconnected roofs, HSG A      |
| 3,077     | 98 | Paved parking, HSG A          |
| 6,640     | 75 | Weighted Average              |
| 2,605     |    | 39.23% Pervious Area          |
| 4,035     |    | 60.77% Impervious Area        |
| 958       |    | 23.74% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 176S: P3LLL**

### Summary for Subcatchment 182S: P3MMM

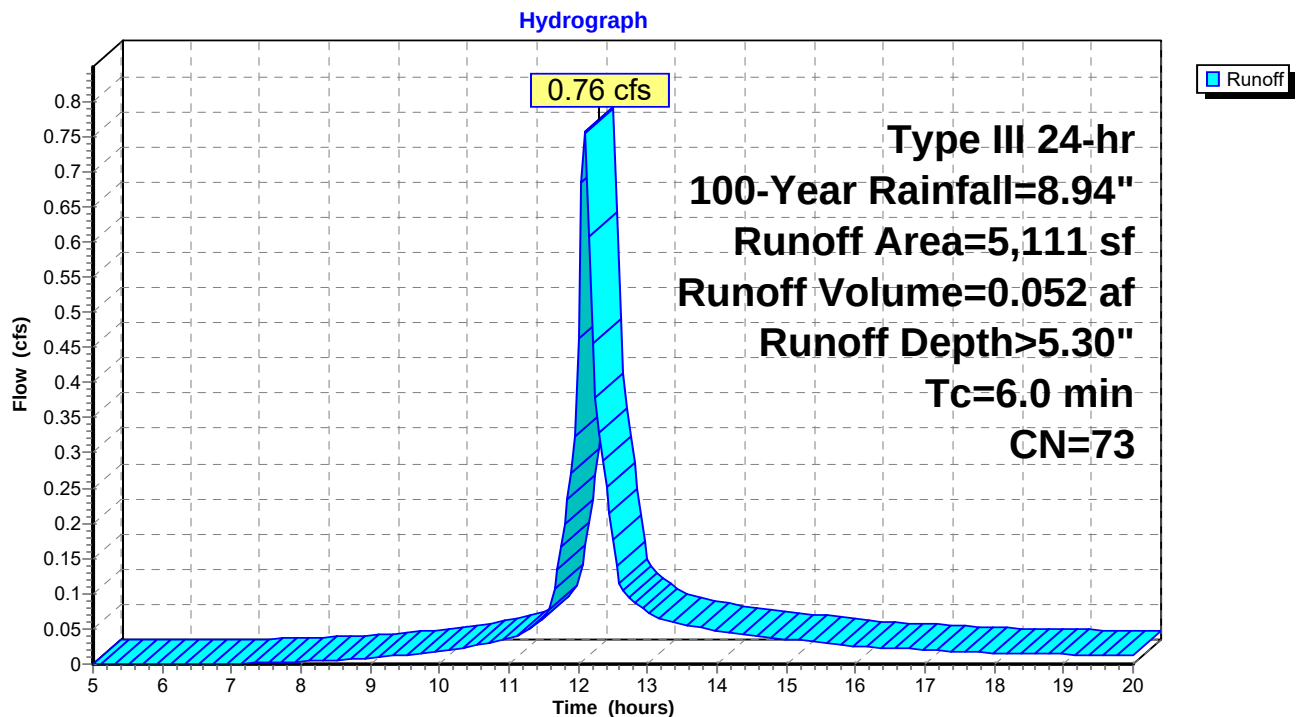
Runoff = 0.76 cfs @ 12.09 hrs, Volume= 0.052 af, Depth> 5.30"  
Routed to Pond 61P : CB 8

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,196     | 39 | >75% Grass cover, Good, HSG A |
| 413       | 98 | Unconnected roofs, HSG A      |
| 2,502     | 98 | Paved parking, HSG A          |
| 5,111     | 73 | Weighted Average              |
| 2,196     |    | 42.97% Pervious Area          |
| 2,915     |    | 57.03% Impervious Area        |
| 413       |    | 14.17% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 182S: P3MMM



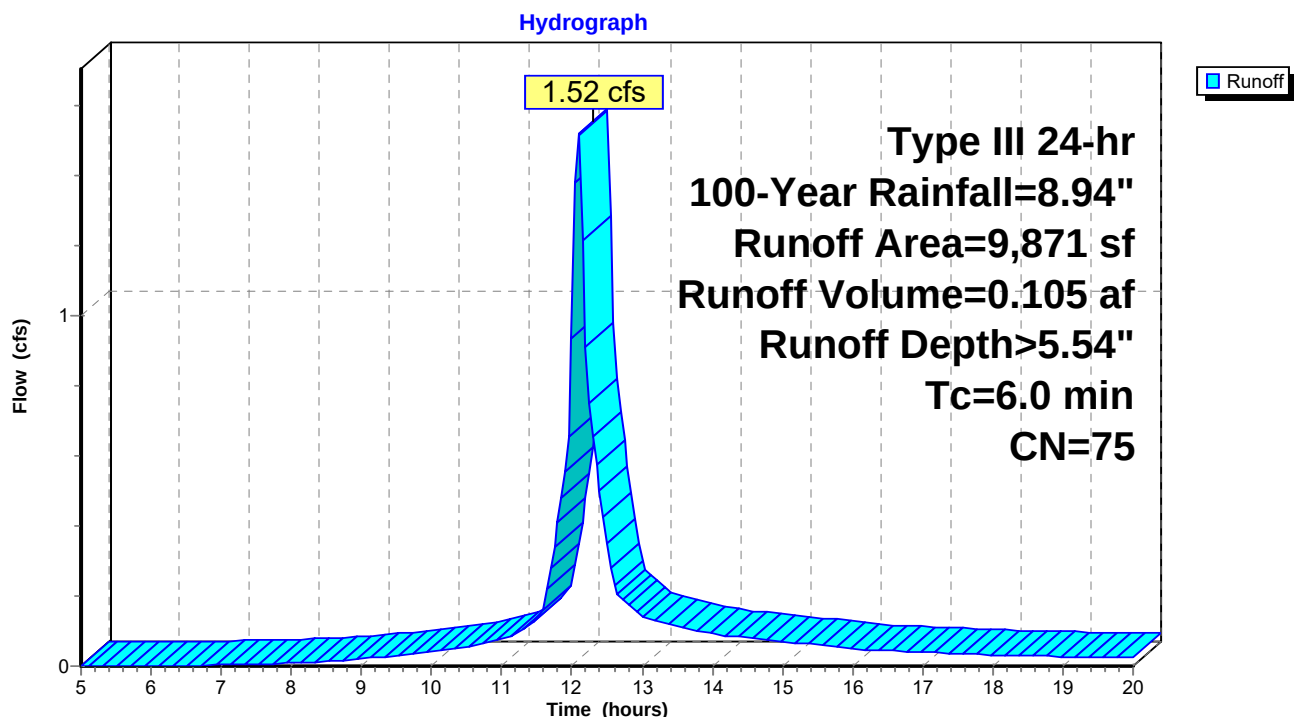
**Summary for Subcatchment 183S: P3NNN**

Runoff = 1.52 cfs @ 12.09 hrs, Volume= 0.105 af, Depth> 5.54"  
 Routed to Pond 170P : CB 9

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,796     | 39 | >75% Grass cover, Good, HSG A |
| 2,443     | 98 | Unconnected roofs, HSG A      |
| 3,632     | 98 | Paved parking, HSG A          |
| 9,871     | 75 | Weighted Average              |
| 3,796     |    | 38.46% Pervious Area          |
| 6,075     |    | 61.54% Impervious Area        |
| 2,443     |    | 40.21% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 183S: P3NNN**

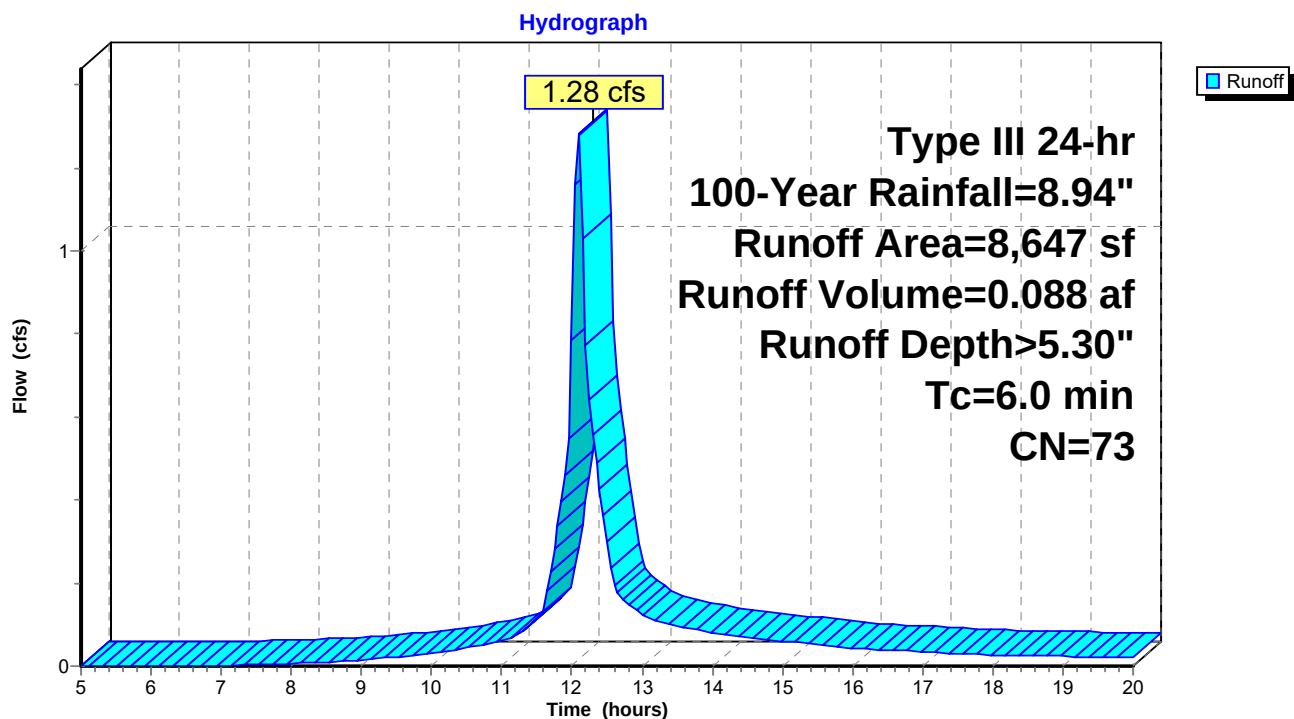
**Summary for Subcatchment 184S: P3000**

Runoff = 1.28 cfs @ 12.09 hrs, Volume= 0.088 af, Depth> 5.30"  
 Routed to Pond 176P : CB 6

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,656     | 39 | >75% Grass cover, Good, HSG A |
| 1,177     | 98 | Unconnected roofs, HSG A      |
| 3,814     | 98 | Paved parking, HSG A          |
| 8,647     | 73 | Weighted Average              |
| 3,656     |    | 42.28% Pervious Area          |
| 4,991     |    | 57.72% Impervious Area        |
| 1,177     |    | 23.58% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 184S: P3000**



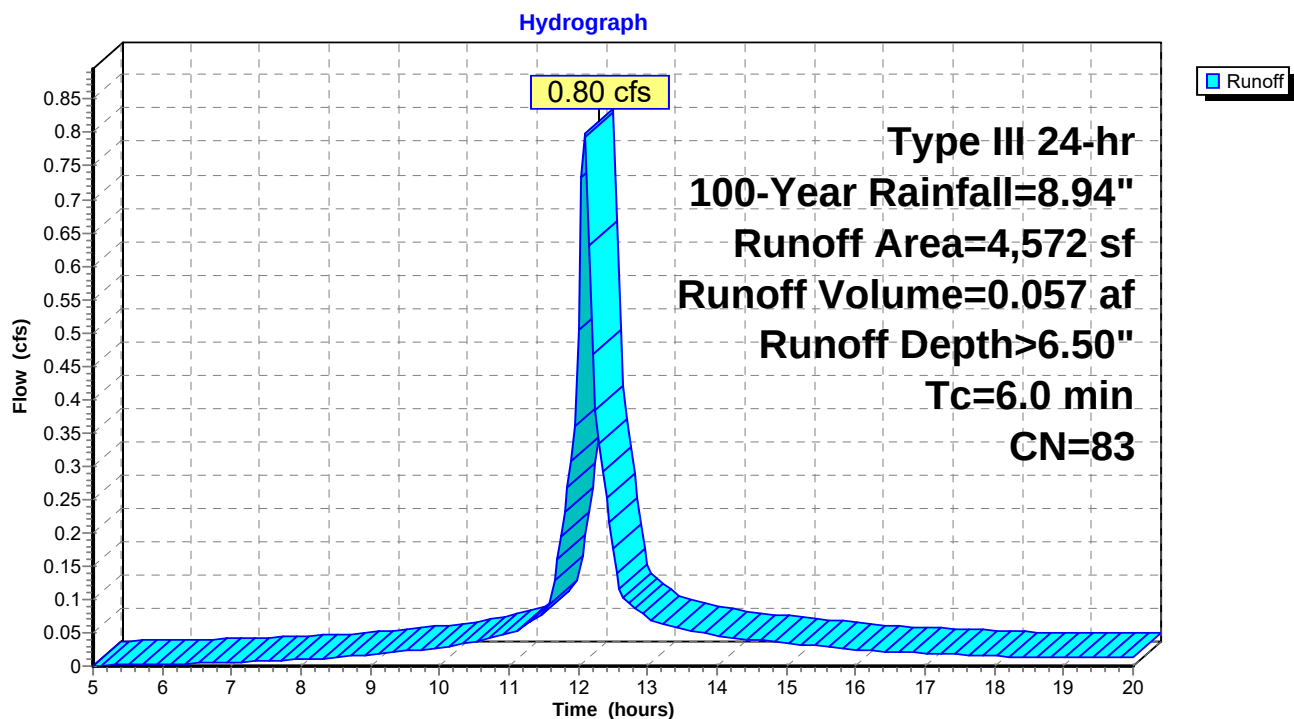
**Summary for Subcatchment 185S: P3PPP**

Runoff = 0.80 cfs @ 12.09 hrs, Volume= 0.057 af, Depth> 6.50"  
 Routed to Pond 182P : CB 7

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,135     | 39 | >75% Grass cover, Good, HSG A |
| 1,267     | 98 | Unconnected roofs, HSG A      |
| 2,170     | 98 | Paved parking, HSG A          |
| 4,572     | 83 | Weighted Average              |
| 1,135     |    | 24.83% Pervious Area          |
| 3,437     |    | 75.17% Impervious Area        |
| 1,267     |    | 36.86% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 185S: P3PPP**

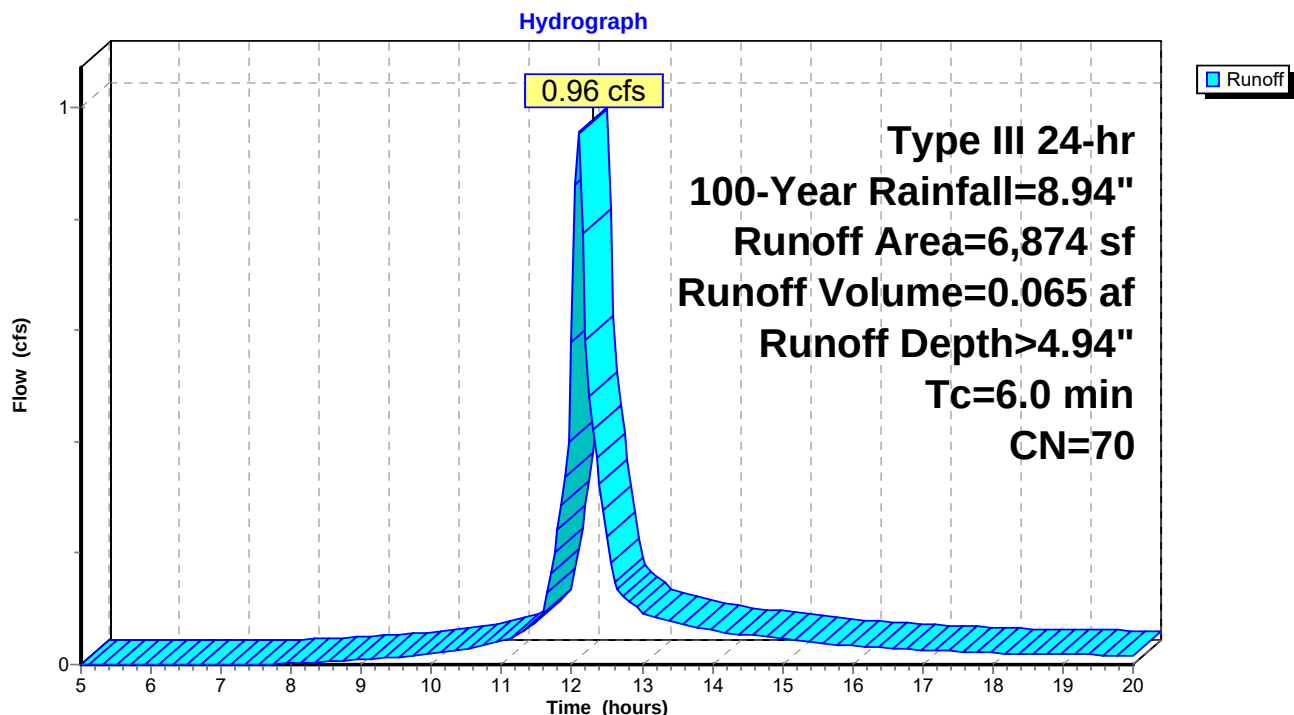
**Summary for Subcatchment 186S: P3QQQ**

Runoff = 0.96 cfs @ 12.09 hrs, Volume= 0.065 af, Depth> 4.94"  
 Routed to Pond 188P : CB 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,125     | 39 | >75% Grass cover, Good, HSG A |
| 992       | 30 | Woods, Good, HSG A            |
| 3,757     | 98 | Paved parking, HSG A          |
| 6,874     | 70 | Weighted Average              |
| 3,117     |    | 45.34% Pervious Area          |
| 3,757     |    | 54.66% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 186S: P3QQQ**

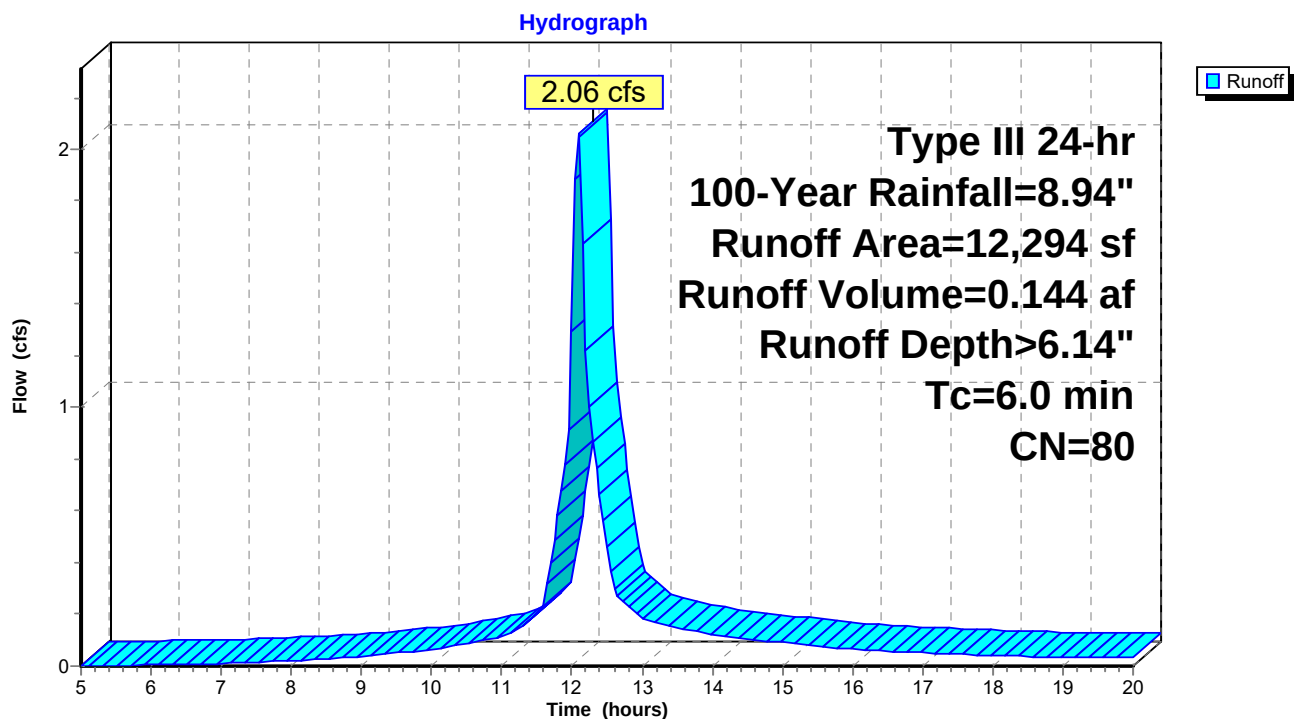
**Summary for Subcatchment 187S: P3RRR**

Runoff = 2.06 cfs @ 12.09 hrs, Volume= 0.144 af, Depth> 6.14"  
 Routed to Pond 189P : CB 4

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,803     | 39 | >75% Grass cover, Good, HSG A |
| 2,556     | 98 | Unconnected roofs, HSG A      |
| 5,935     | 98 | Paved parking, HSG A          |
| 12,294    | 80 | Weighted Average              |
| 3,803     |    | 30.93% Pervious Area          |
| 8,491     |    | 69.07% Impervious Area        |
| 2,556     |    | 30.10% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 187S: P3RRR**

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Type III 24-hr 100-Year Rainfall=8.94"

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**Summary for Subcatchment 189S: (new Subcat)**

Runoff = 9.84 cfs @ 12.31 hrs, Volume= 1.003 af, Depth> 2.92"  
 Routed to Link 188L : DP 3

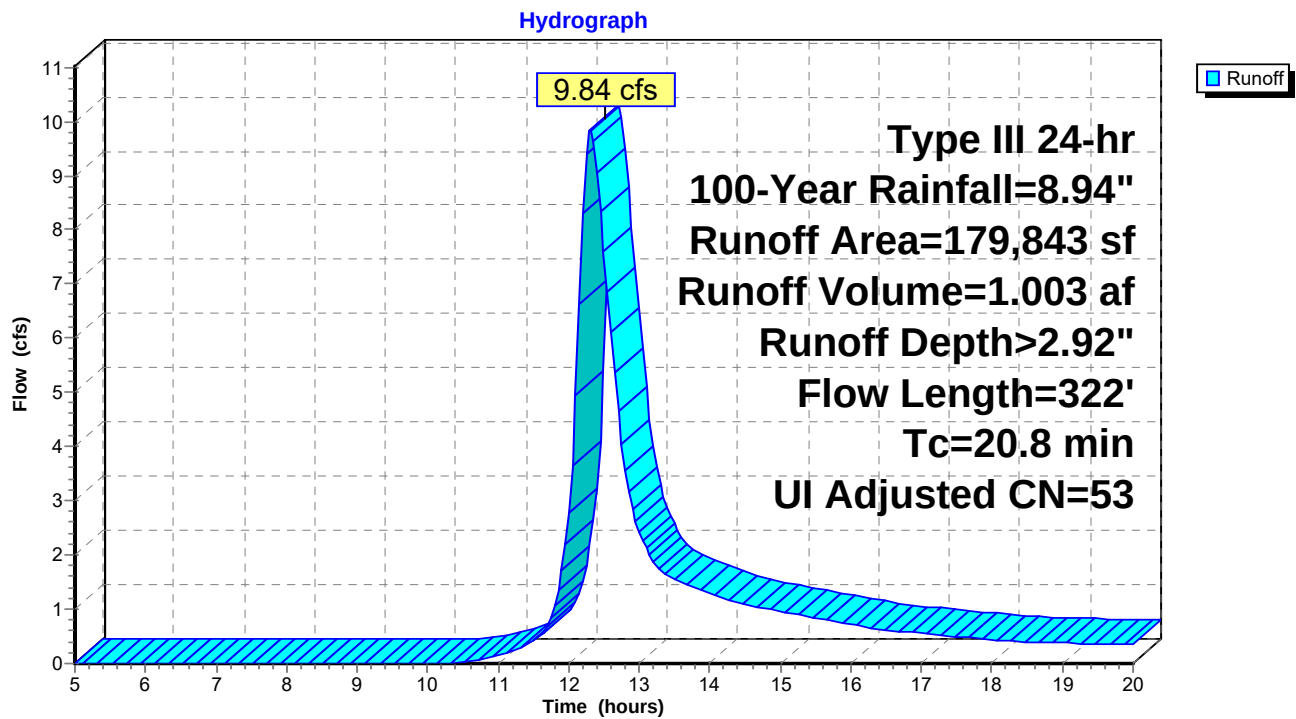
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 39,228    | 30 |     | Woods, Good, HSG A            |
| 27,809    | 70 |     | Woods, Good, HSG C            |
| 2,509     | 98 |     | Unconnected roofs, HSG C      |
| 1,351     | 98 |     | Unconnected pavement, HSG C   |
| 3,066     | 98 |     | Unconnected roofs, HSG A      |
| 1,335     | 98 |     | Unconnected pavement, HSG A   |
| 49,779    | 74 |     | >75% Grass cover, Good, HSG C |
| 54,766    | 39 |     | >75% Grass cover, Good, HSG A |
| 179,843   | 54 | 53  | Weighted Average, UI Adjusted |
| 171,582   |    |     | 95.41% Pervious Area          |
| 8,261     |    |     | 4.59% Impervious Area         |
| 8,261     |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                      |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------|
| 16.5     | 50            | 0.0100        | 0.05              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10" |
| 4.3      | 272           | 0.0450        | 1.06              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps        |
| 20.8     | 322           | Total         |                   |                |                                                                  |

**Subcatchment 189S: (new Subcat)**



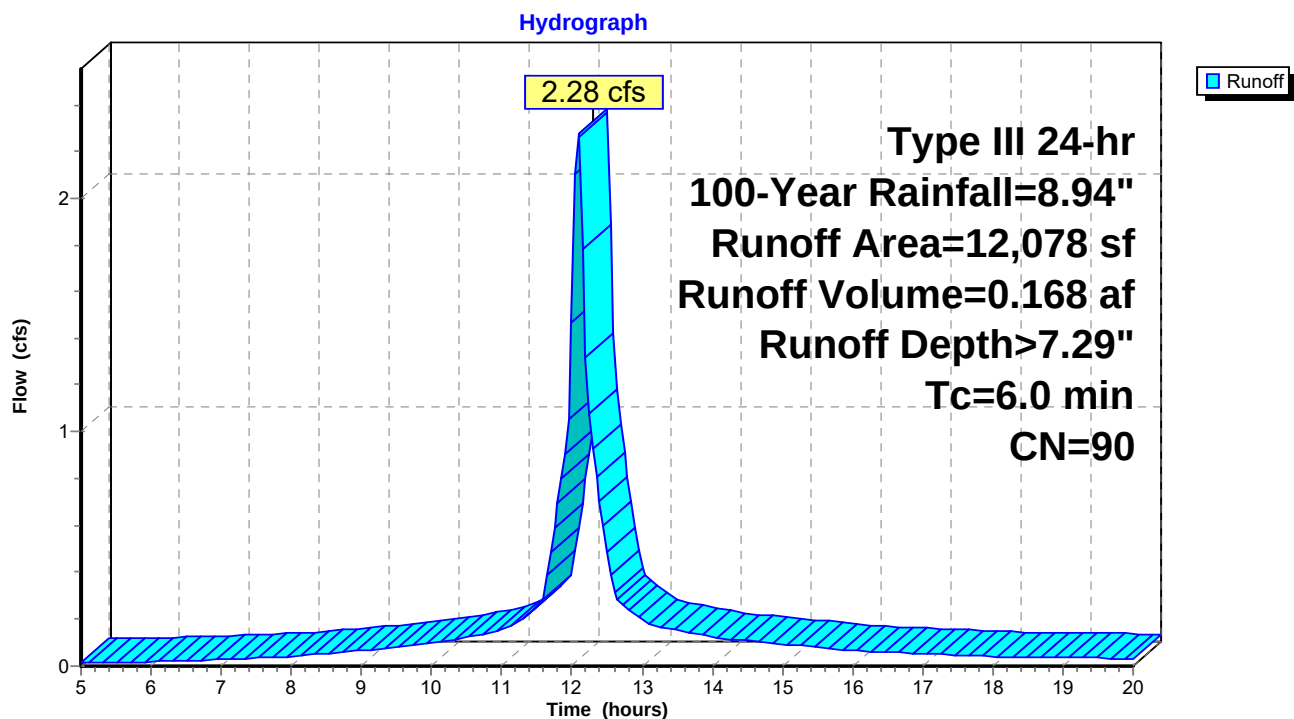
**Summary for Subcatchment 190S: (new Subcat)**

Runoff = 2.28 cfs @ 12.09 hrs, Volume= 0.168 af, Depth> 7.29"  
 Routed to Pond 191P : CB 42

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,763     | 98 | Unconnected roofs, HSG A      |
| 1,707     | 39 | >75% Grass cover, Good, HSG A |
| 6,608     | 98 | Paved parking, HSG A          |
| 12,078    | 90 | Weighted Average              |
| 1,707     |    | 14.13% Pervious Area          |
| 10,371    |    | 85.87% Impervious Area        |
| 3,763     |    | 36.28% Unconnected            |

| Tc<br>(min) | Length<br>(feet) | Slope<br>(ft/ft) | Velocity<br>(ft/sec) | Capacity<br>(cfs) | Description   |
|-------------|------------------|------------------|----------------------|-------------------|---------------|
| 6.0         |                  |                  |                      |                   | Direct Entry, |

**Subcatchment 190S: (new Subcat)**

### Summary for Subcatchment 191S: P3SSS

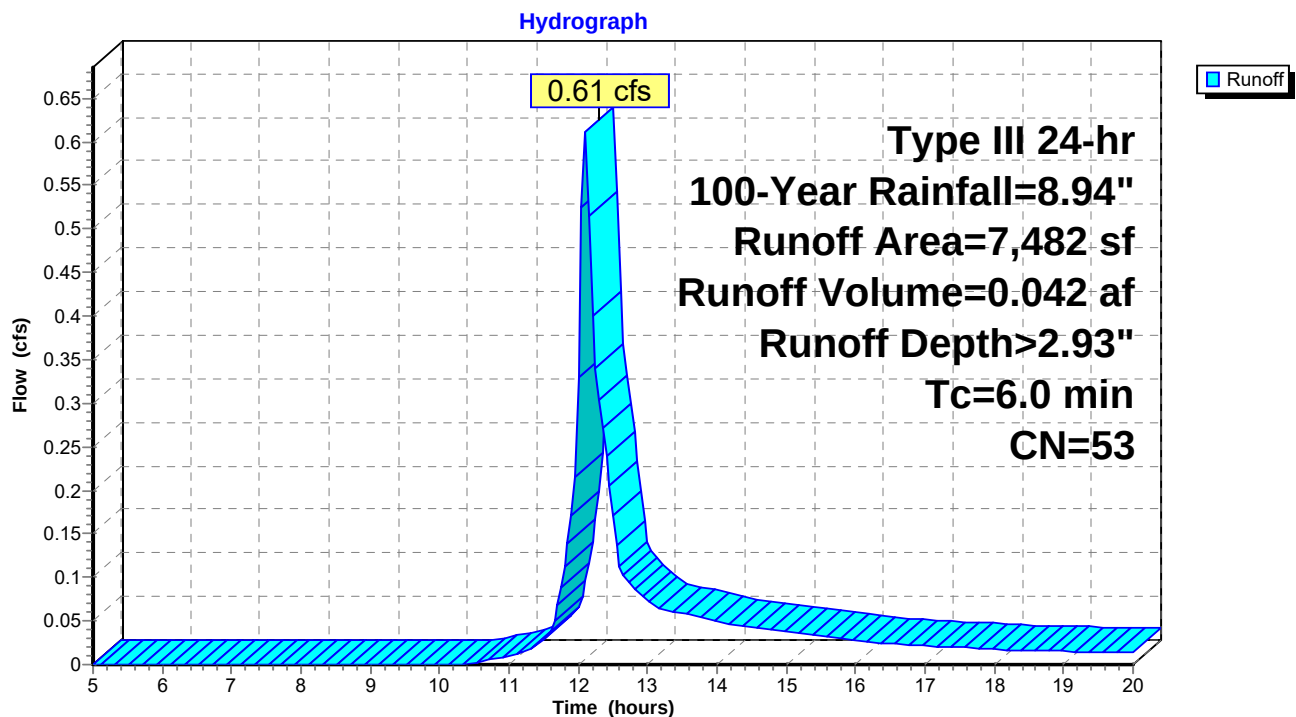
Runoff = 0.61 cfs @ 12.10 hrs, Volume= 0.042 af, Depth> 2.93"  
Routed to Pond 193P : CB 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,068     | 39 | >75% Grass cover, Good, HSG A |
| 4,042     | 30 | Woods, Good, HSG A            |
| 2,372     | 98 | Paved parking, HSG A          |
| 7,482     | 53 | Weighted Average              |
| 5,110     |    | 68.30% Pervious Area          |
| 2,372     |    | 31.70% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 191S: P3SSS



### Summary for Subcatchment 192S: P3TTT

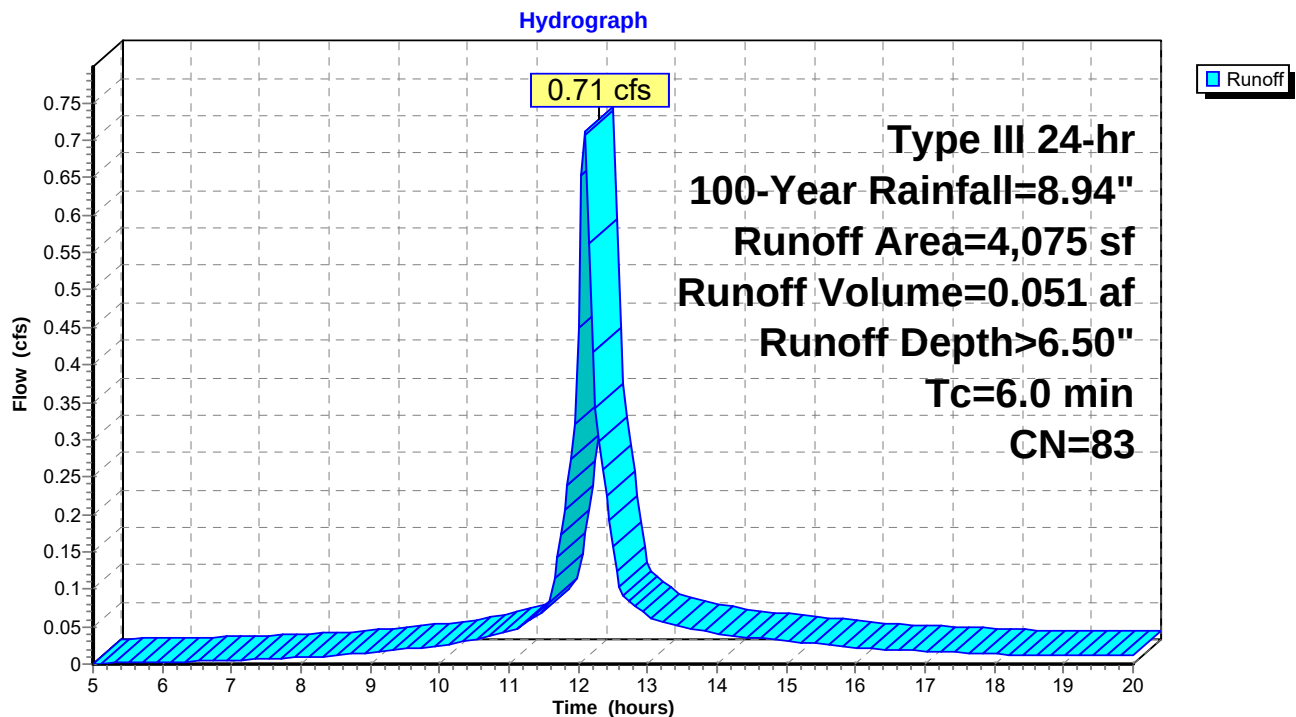
Runoff = 0.71 cfs @ 12.09 hrs, Volume= 0.051 af, Depth> 6.50"  
Routed to Pond 194P : CB 2

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 1,044     | 39 | >75% Grass cover, Good, HSG A |
| 3,031     | 98 | Paved parking, HSG A          |
| 4,075     | 83 | Weighted Average              |
| 1,044     |    | 25.62% Pervious Area          |
| 3,031     |    | 74.38% Impervious Area        |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

### Subcatchment 192S: P3TTT





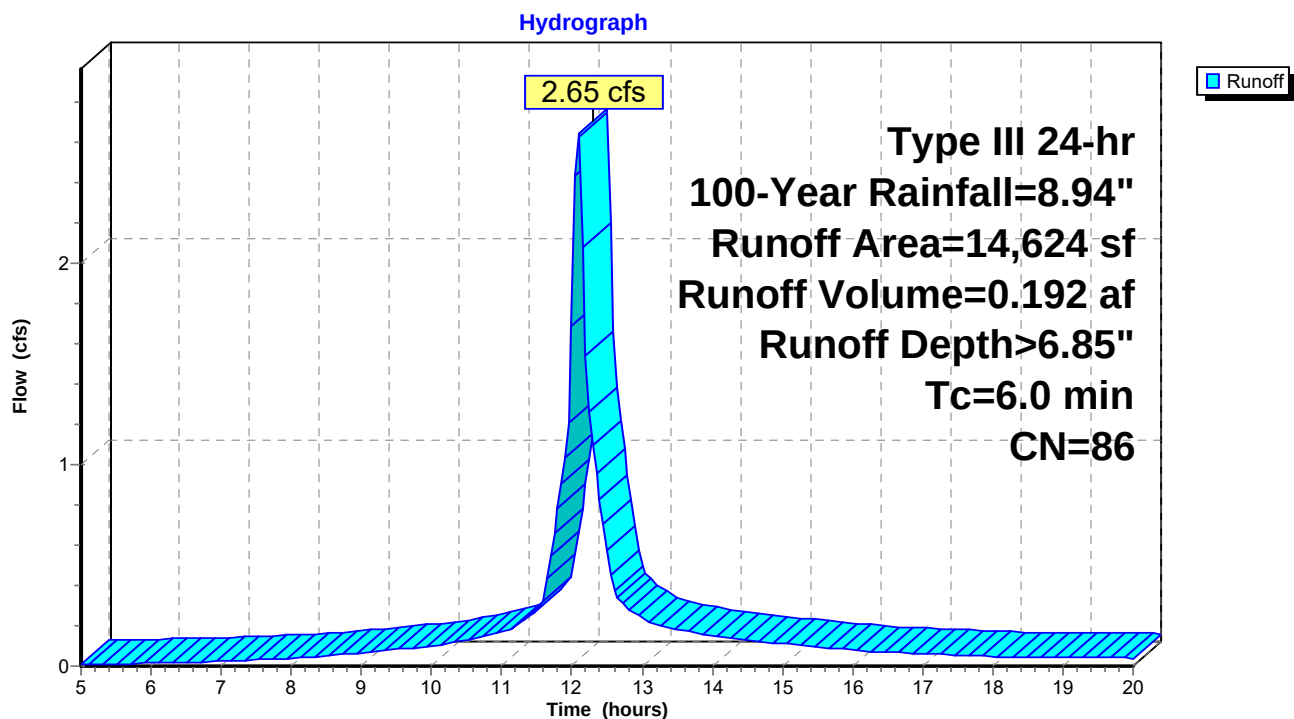
**Summary for Subcatchment 195S: P3UUU**

Runoff = 2.65 cfs @ 12.09 hrs, Volume= 0.192 af, Depth> 6.85"  
 Routed to Pond 196P : CB 5

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 2,892     | 39 | >75% Grass cover, Good, HSG A |
| 4,558     | 98 | Unconnected roofs, HSG A      |
| 7,174     | 98 | Paved parking, HSG A          |
| 14,624    | 86 | Weighted Average              |
| 2,892     |    | 19.78% Pervious Area          |
| 11,732    |    | 80.22% Impervious Area        |
| 4,558     |    | 38.85% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 195S: P3UUU**

**Summary for Subcatchment 198S: P3VVV**

Runoff = 0.39 cfs @ 12.11 hrs, Volume= 0.033 af, Depth> 1.39"  
 Routed to Pond 197P : Inf. Basin 1

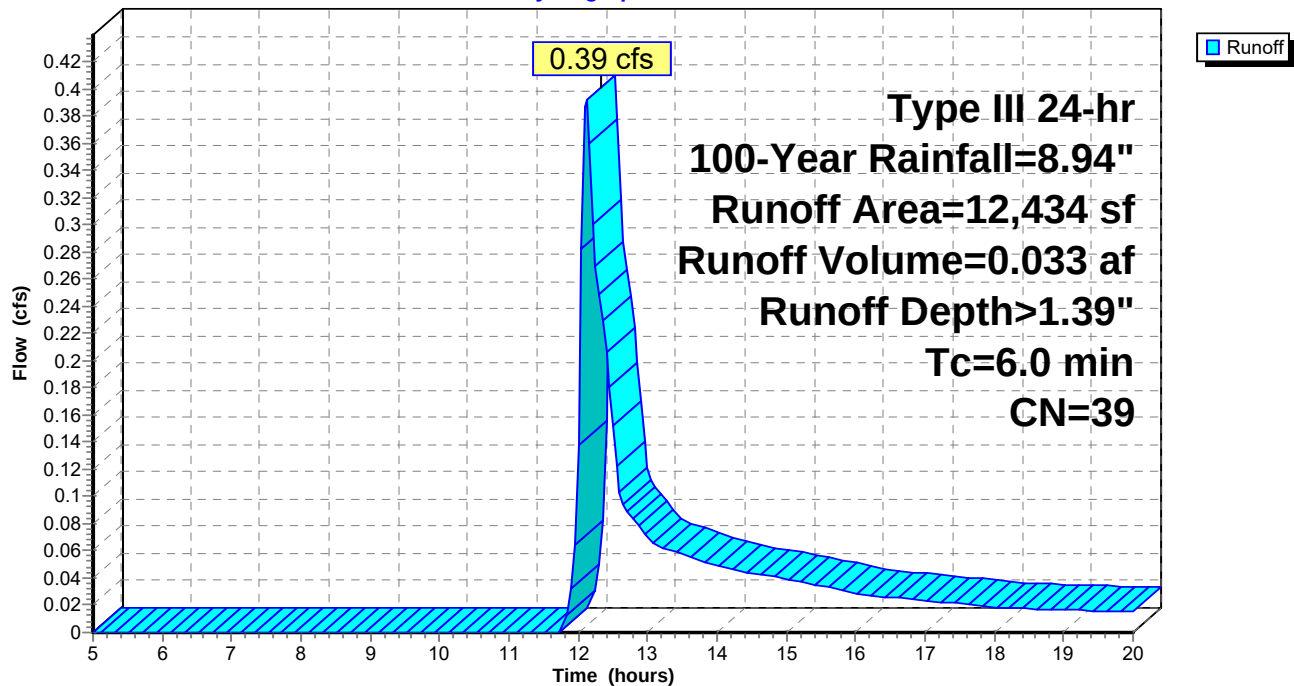
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 12,434    | 39 | >75% Grass cover, Good, HSG A |
| 12,434    |    | 100.00% Pervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 198S: P3VVV**

Hydrograph



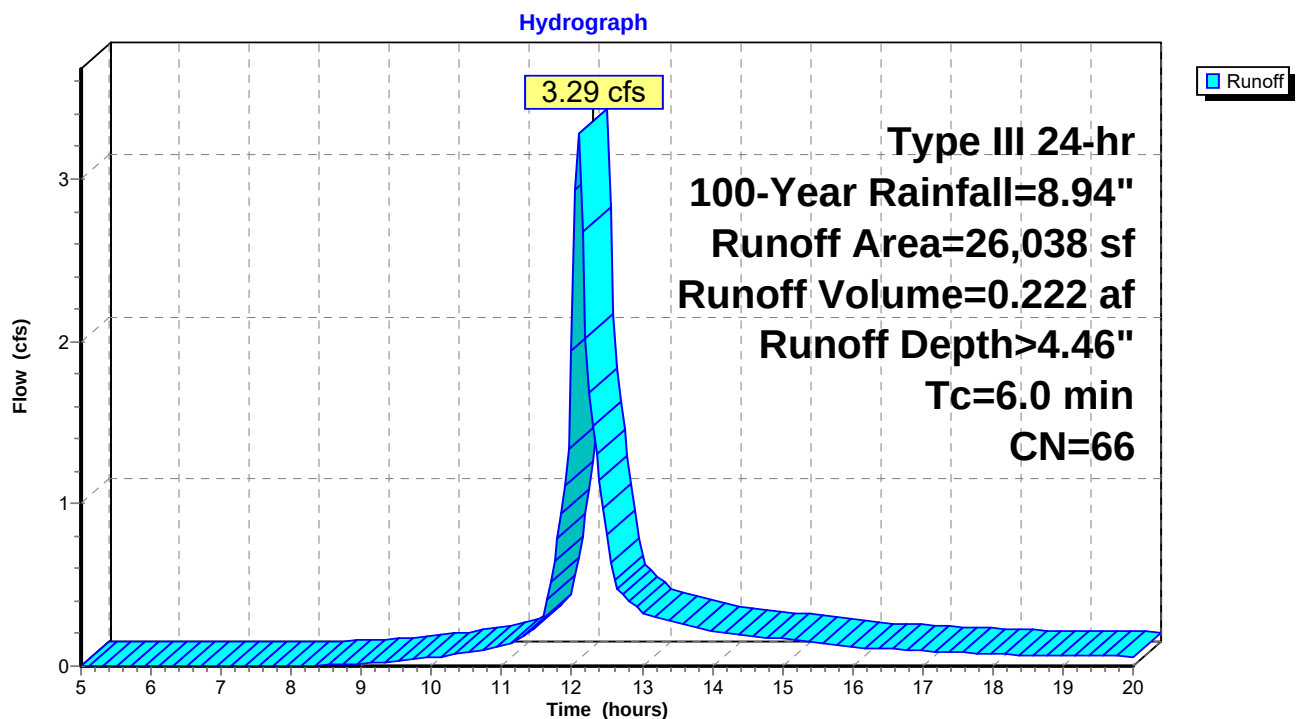
**Summary for Subcatchment 202S: (new Subcat)**

Runoff = 3.29 cfs @ 12.09 hrs, Volume= 0.222 af, Depth> 4.46"  
 Routed to Pond 201P : Sub. Inf. 3

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 9,091     | 98 | Unconnected roofs, HSG A      |
| 2,905     | 98 | Unconnected pavement, HSG A   |
| 14,042    | 39 | >75% Grass cover, Good, HSG A |
| 26,038    | 66 | Weighted Average              |
| 14,042    |    | 53.93% Pervious Area          |
| 11,996    |    | 46.07% Impervious Area        |
| 11,996    |    | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 202S: (new Subcat)**

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Type III 24-hr 100-Year Rainfall=8.94"

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**Summary for Subcatchment 204S: (new Subcat)**

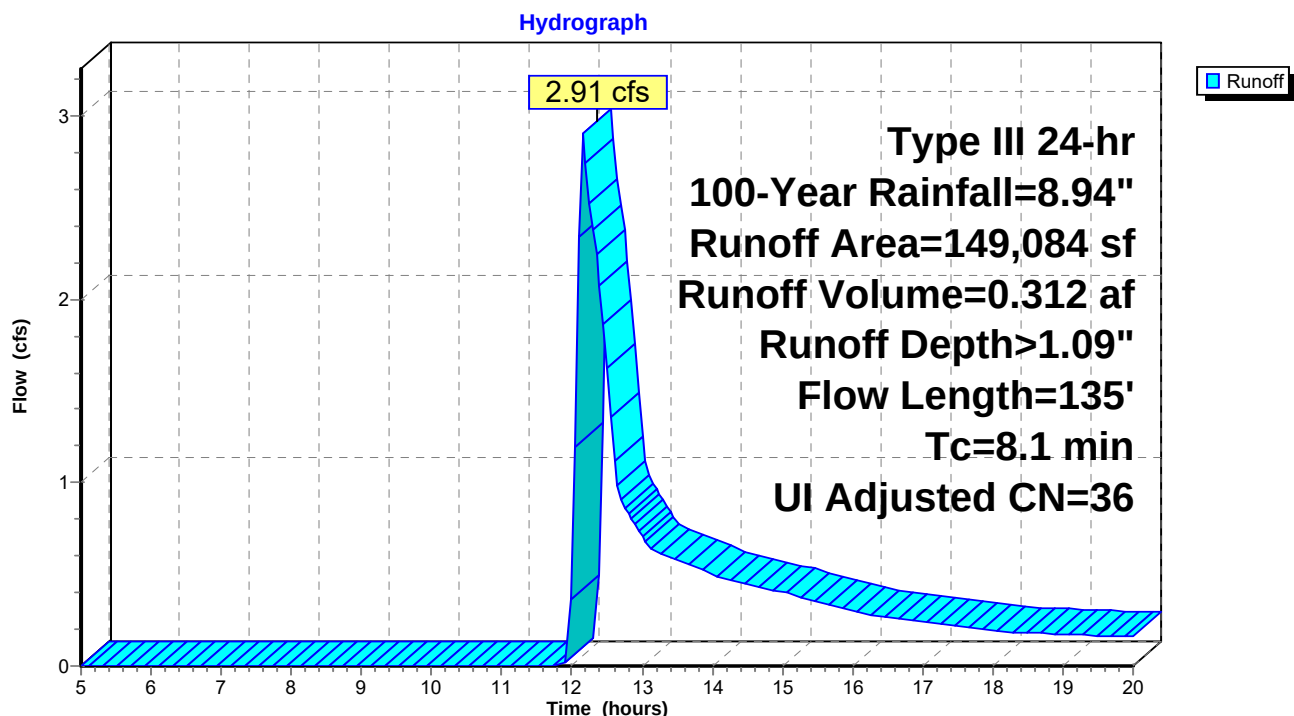
Runoff = 2.91 cfs @ 12.16 hrs, Volume= 0.312 af, Depth> 1.09"  
 Routed to Link 203L : 3A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 72,013    | 30 |     | Woods, Good, HSG A            |
| 71,711    | 39 |     | >75% Grass cover, Good, HSG A |
| 3,689     | 98 |     | Unconnected roofs, HSG A      |
| 1,671     | 98 |     | Unconnected pavement, HSG A   |
| 149,084   | 37 | 36  | Weighted Average, UI Adjusted |
| 143,724   |    |     | 96.40% Pervious Area          |
| 5,360     |    |     | 3.60% Impervious Area         |
| 5,360     |    |     | 100.00% Unconnected           |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                          |
|----------|---------------|---------------|-------------------|----------------|----------------------------------------------------------------------|
| 7.5      | 50            | 0.0100        | 0.11              |                | <b>Sheet Flow,</b><br>Grass: Short n= 0.150 P2= 3.10"                |
| 0.6      | 85            | 0.1200        | 2.42              |                | <b>Shallow Concentrated Flow,</b><br>Short Grass Pasture Kv= 7.0 fps |
| 8.1      | 135           | Total         |                   |                |                                                                      |

**Subcatchment 204S: (new Subcat)**

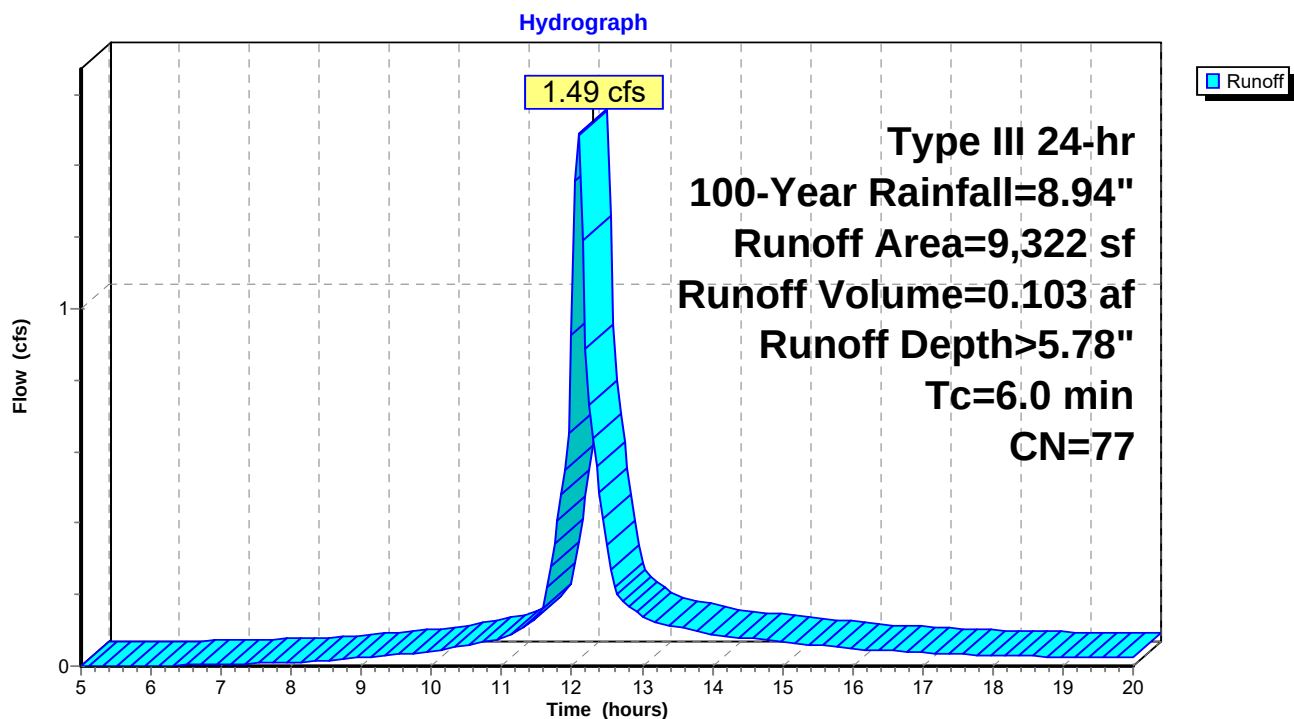
**Summary for Subcatchment 205S: (new Subcat)**

Runoff = 1.49 cfs @ 12.09 hrs, Volume= 0.103 af, Depth> 5.78"  
 Routed to Pond 218P : CB A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 4,257     | 98 | Paved parking, HSG A          |
| 1,759     | 98 | Unconnected roofs, HSG A      |
| 3,306     | 39 | >75% Grass cover, Good, HSG A |
| 9,322     | 77 | Weighted Average              |
| 3,306     |    | 35.46% Pervious Area          |
| 6,016     |    | 64.54% Impervious Area        |
| 1,759     |    | 29.24% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 205S: (new Subcat)**

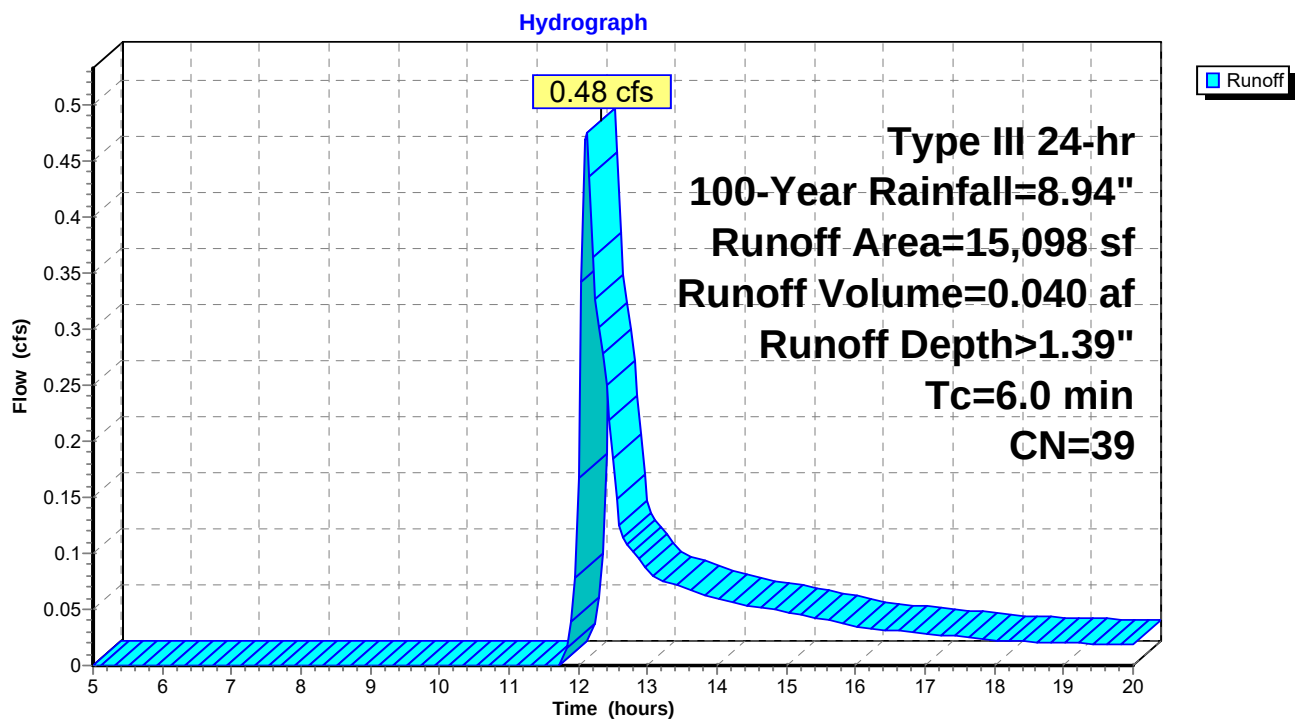
**Summary for Subcatchment 206S: (new Subcat)**

Runoff = 0.48 cfs @ 12.11 hrs, Volume= 0.040 af, Depth> 1.39"  
 Routed to Pond 186P : Constructed Wetland 1

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 15,098    | 39 | >75% Grass cover, Good, HSG A |
| 15,098    |    | 100.00% Pervious Area         |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 206S: (new Subcat)**

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Type III 24-hr 100-Year Rainfall=8.94"

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**Summary for Subcatchment 207S: (new Subcat)**

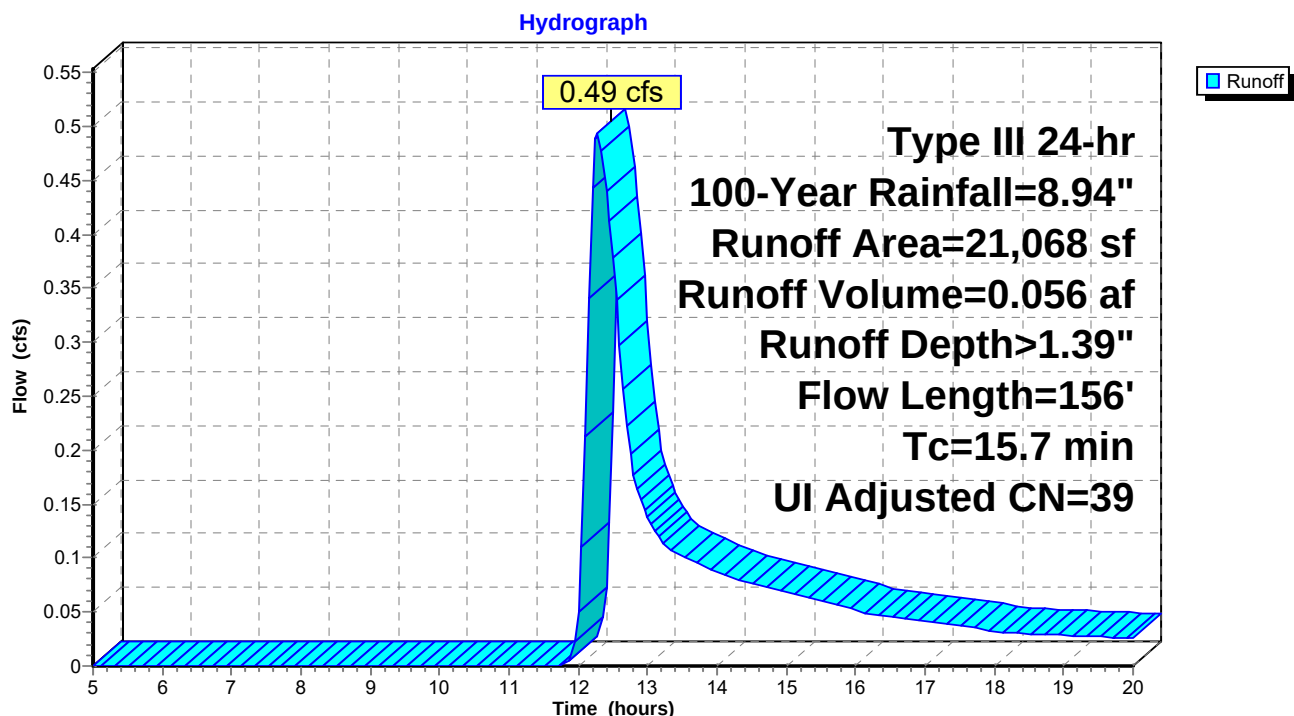
Runoff = 0.49 cfs @ 12.27 hrs, Volume= 0.056 af, Depth> 1.39"  
 Routed to Pond 216P : CB 8A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Adj | Description                   |
|-----------|----|-----|-------------------------------|
| 1,937     | 98 |     | Unconnected roofs, HSG A      |
| 1,504     | 98 |     | Paved parking, HSG A          |
| 16,314    | 30 |     | Woods, Good, HSG A            |
| 1,313     | 39 |     | >75% Grass cover, Good, HSG A |
| 21,068    | 42 | 39  | Weighted Average, UI Adjusted |
| 17,627    |    |     | 83.67% Pervious Area          |
| 3,441     |    |     | 16.33% Impervious Area        |
| 1,937     |    |     | 56.29% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description                                                      |
|----------|---------------|---------------|-------------------|----------------|------------------------------------------------------------------|
| 11.5     | 50            | 0.0250        | 0.07              |                | <b>Sheet Flow,</b><br>Woods: Light underbrush n= 0.400 P2= 3.10" |
| 4.2      | 106           | 0.0070        | 0.42              |                | <b>Shallow Concentrated Flow,</b><br>Woodland Kv= 5.0 fps        |
| 15.7     | 156           | Total         |                   |                |                                                                  |

**Subcatchment 207S: (new Subcat)**

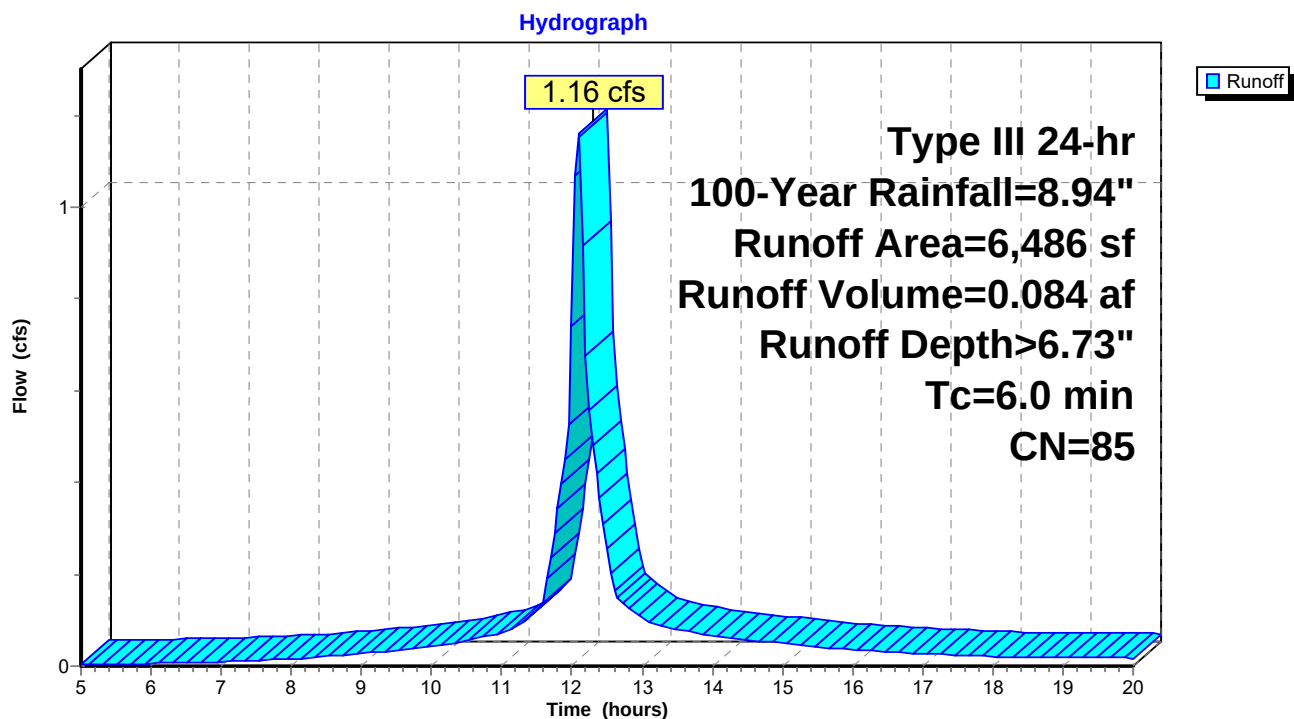
**Summary for Subcatchment 216S: (new Subcat)**

Runoff = 1.16 cfs @ 12.09 hrs, Volume= 0.084 af, Depth> 6.73"  
 Routed to Pond 215P : CB 5A

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Type III 24-hr 100-Year Rainfall=8.94"

| Area (sf) | CN | Description                   |
|-----------|----|-------------------------------|
| 3,069     | 98 | Paved parking, HSG A          |
| 1,946     | 98 | Unconnected roofs, HSG A      |
| 1,471     | 39 | >75% Grass cover, Good, HSG A |
| 6,486     | 85 | Weighted Average              |
| 1,471     |    | 22.68% Pervious Area          |
| 5,015     |    | 77.32% Impervious Area        |
| 1,946     |    | 38.80% Unconnected            |

| Tc (min) | Length (feet) | Slope (ft/ft) | Velocity (ft/sec) | Capacity (cfs) | Description   |
|----------|---------------|---------------|-------------------|----------------|---------------|
| 6.0      |               |               |                   |                | Direct Entry, |

**Subcatchment 216S: (new Subcat)**



### Summary for Pond 15P: Inf. Basin 5

Inflow Area = 2.511 ac, 70.09% Impervious, Inflow Depth > 7.32" for 100-Year event  
 Inflow = 20.47 cfs @ 12.09 hrs, Volume= 1.532 af  
 Outflow = 11.44 cfs @ 12.21 hrs, Volume= 1.213 af, Atten= 44%, Lag= 7.6 min  
 Discarded = 0.35 cfs @ 12.21 hrs, Volume= 0.287 af  
 Primary = 11.09 cfs @ 12.21 hrs, Volume= 0.927 af  
 Routed to Link 59L : DP 1

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.48' @ 12.21 hrs Surf.Area= 9,521 sf Storage= 26,758 cf

Plug-Flow detention time= 134.9 min calculated for 1.209 af (79% of inflow)  
 Center-of-Mass det. time= 80.0 min ( 824.6 - 744.7 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 57.00' | 31,893 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

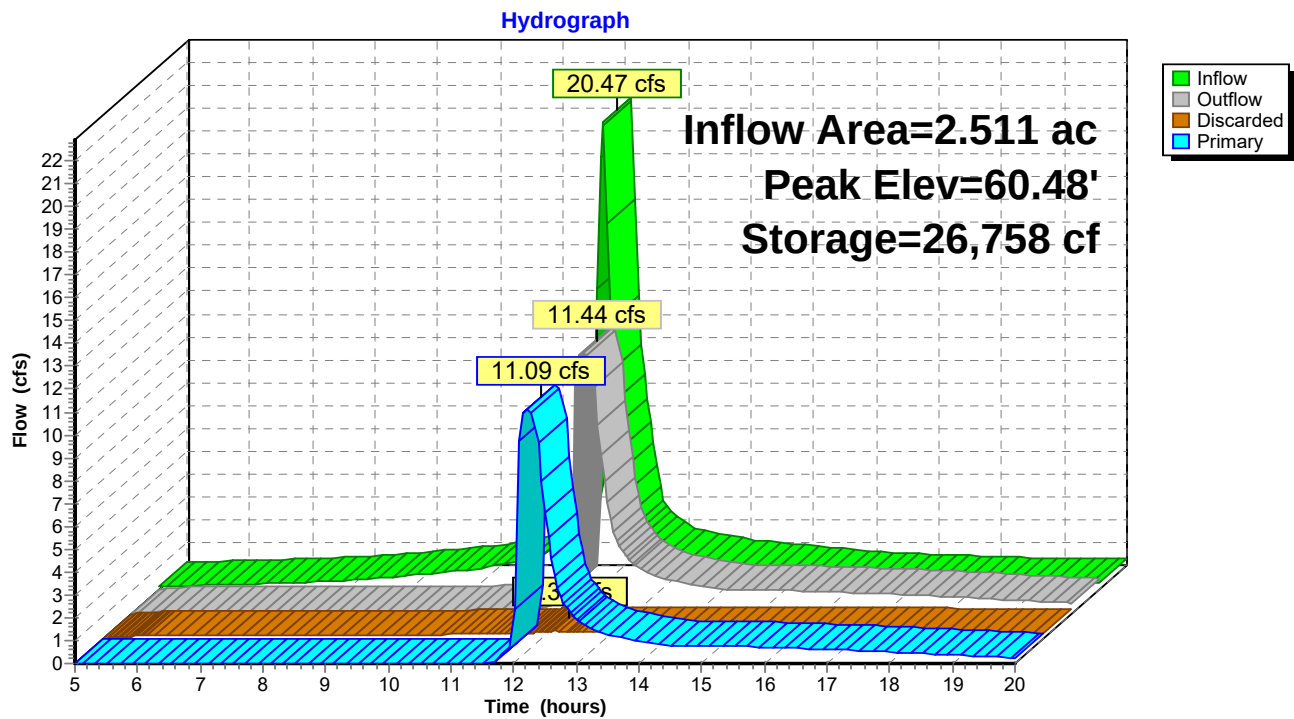
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 57.00               | 5,984                | 0                         | 0                         |
| 58.00               | 6,929                | 6,457                     | 6,457                     |
| 59.00               | 7,931                | 7,430                     | 13,887                    |
| 60.00               | 8,989                | 8,460                     | 22,347                    |
| 61.00               | 10,104               | 9,547                     | 31,893                    |

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 57.00' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 52.00'                                                                                                              |
| #2     | Primary   | 57.00' | <b>18.0" Round Culvert</b><br>L= 67.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.00' / 52.50' S= 0.0672 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |
| #3     | Device 2  | 58.75' | <b>4.0" Vert. Orifice/Grate X 2.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                             |
| #4     | Device 2  | 59.80' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                          |

**Discarded OutFlow** Max=0.35 cfs @ 12.21 hrs HW=60.47' (Free Discharge)  
 ↳ **1=Exfiltration** ( Controls 0.35 cfs)

**Primary OutFlow** Max=11.08 cfs @ 12.21 hrs HW=60.47' (Free Discharge)  
 ↳ **2=Culvert** (Inlet Controls 11.08 cfs @ 6.27 fps)  
 ↳ **3=Orifice/Grate** (Passes < 1.05 cfs potential flow)  
 ↳ **4=Orifice/Grate** (Passes < 14.36 cfs potential flow)

**Pond 15P: Inf. Basin 5**



**Summary for Pond 16P: CB 58**

Inflow Area = 0.172 ac, 96.61% Impervious, Inflow Depth > 7.94" for 100-Year event  
 Inflow = 1.47 cfs @ 12.09 hrs, Volume= 0.114 af  
 Outflow = 1.47 cfs @ 12.09 hrs, Volume= 0.114 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.47 cfs @ 12.09 hrs, Volume= 0.114 af  
 Routed to Pond 20P : DMH 43

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 62.91' @ 12.09 hrs

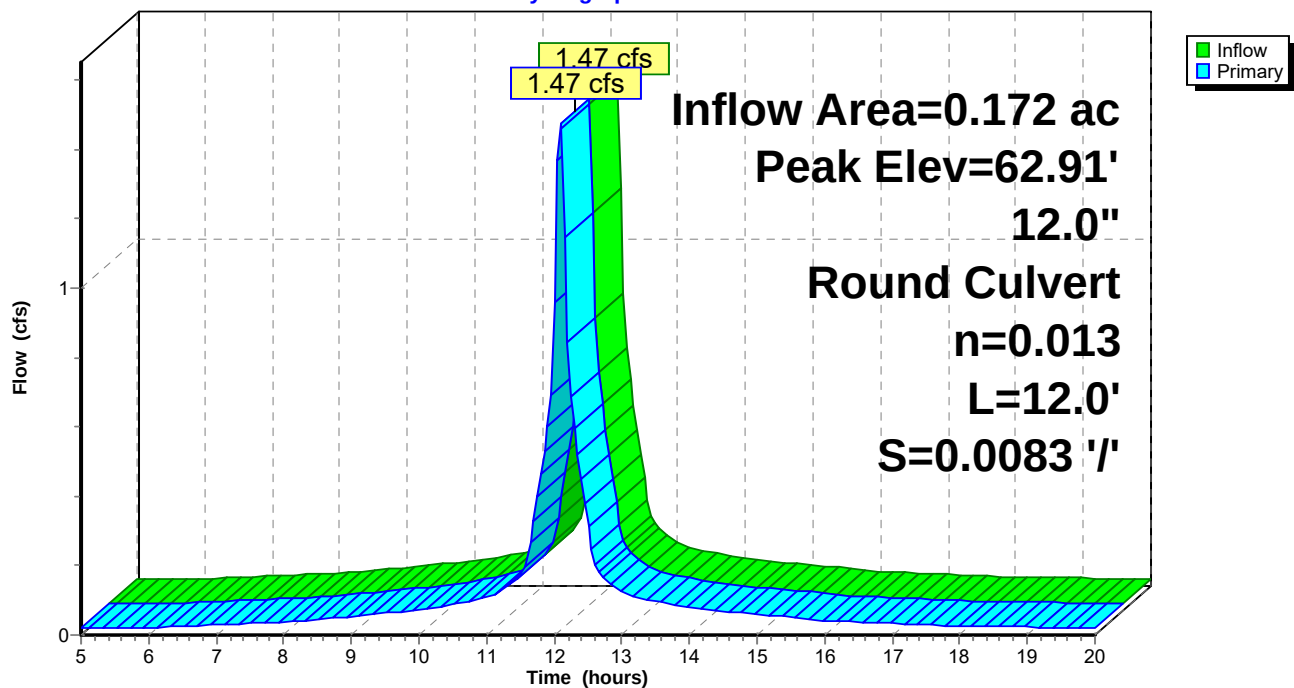
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.10' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.10' / 62.00' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.43 cfs @ 12.09 hrs HW=62.89' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 1.43 cfs @ 2.94 fps)

**Pond 16P: CB 58**

Hydrograph



**Summary for Pond 17P: CB 59**

Inflow Area = 0.381 ac, 74.19% Impervious, Inflow Depth > 7.50" for 100-Year event  
 Inflow = 3.18 cfs @ 12.09 hrs, Volume= 0.238 af  
 Outflow = 3.18 cfs @ 12.09 hrs, Volume= 0.238 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.18 cfs @ 12.09 hrs, Volume= 0.238 af  
 Routed to Pond 20P : DMH 43

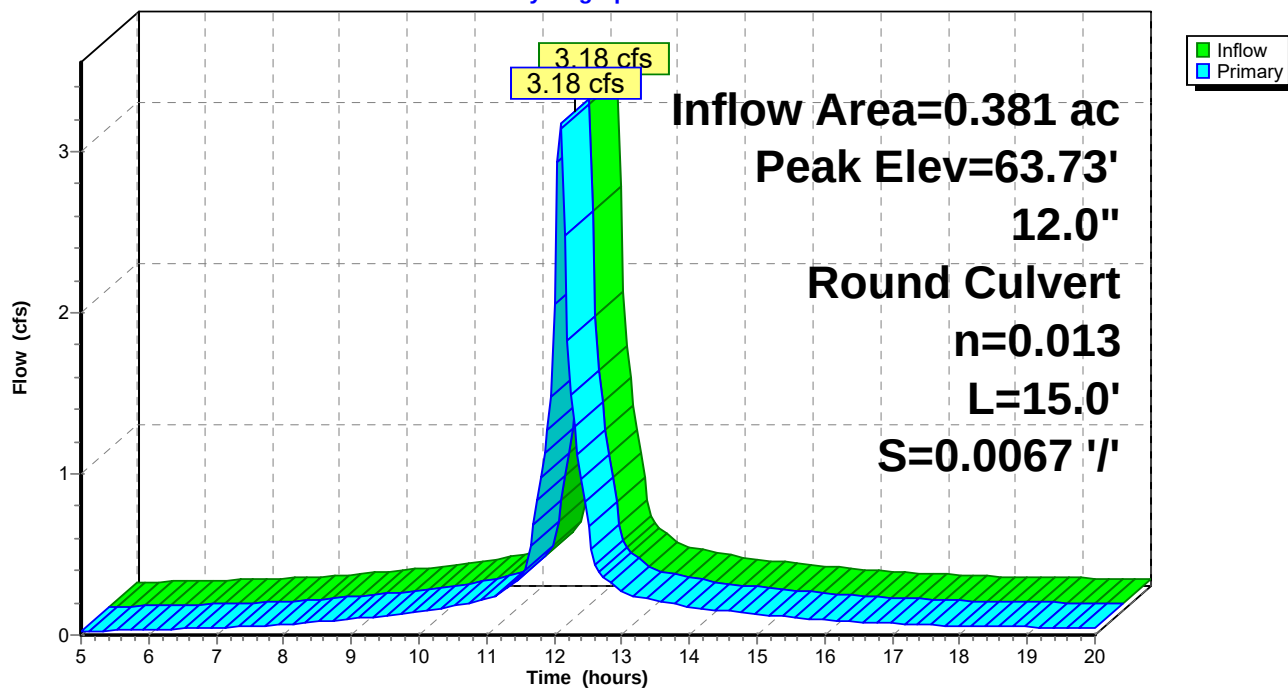
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.73' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.10' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.10' / 62.00' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=3.09 cfs @ 12.09 hrs HW=63.67' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 3.09 cfs @ 3.94 fps)

**Pond 17P: CB 59**

Hydrograph



### Summary for Pond 18P: CB 63

Inflow Area = 0.140 ac, 64.30% Impervious, Inflow Depth > 7.18" for 100-Year event  
 Inflow = 1.14 cfs @ 12.09 hrs, Volume= 0.084 af  
 Outflow = 1.14 cfs @ 12.09 hrs, Volume= 0.084 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.14 cfs @ 12.09 hrs, Volume= 0.084 af  
 Routed to Pond 25P : DMH 45

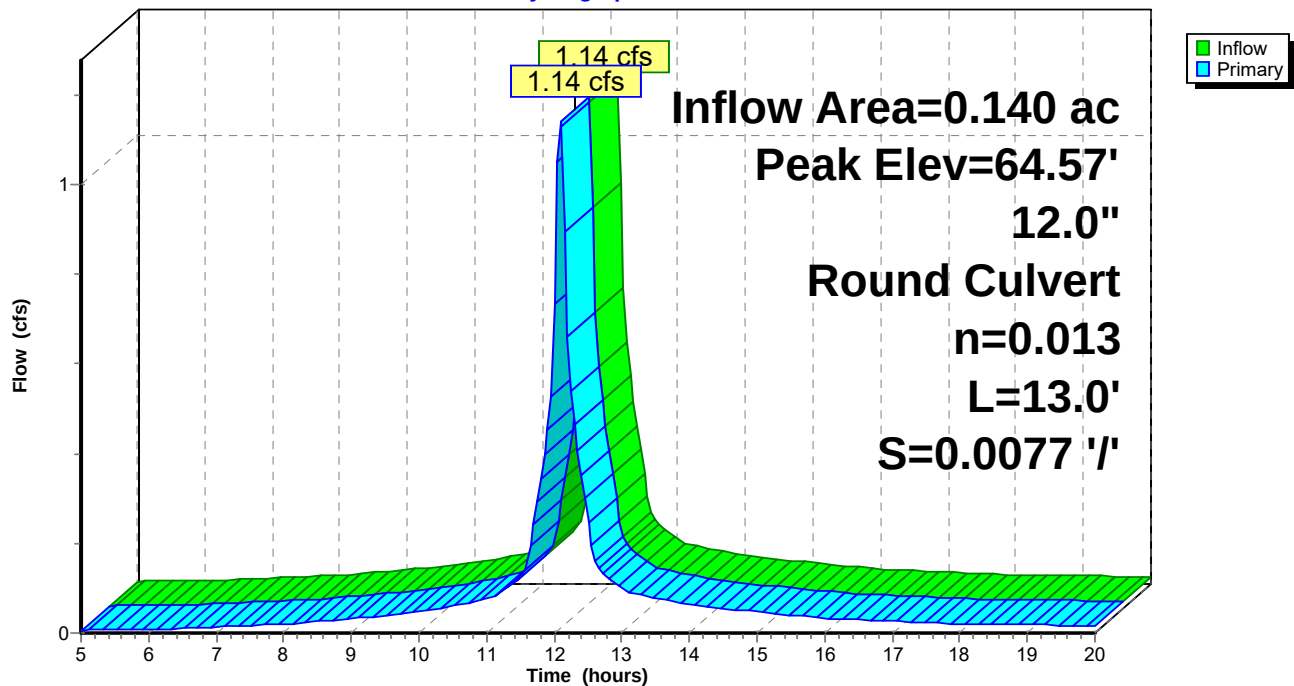
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.57' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 63.88' | <b>12.0" Round Culvert</b><br>L= 13.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 63.88' / 63.78' S= 0.0077 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.11 cfs @ 12.09 hrs HW=64.56' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.11 cfs @ 2.75 fps)

### Pond 18P: CB 63

Hydrograph



**Summary for Pond 19P: CB 62**

Inflow Area = 0.064 ac, 81.50% Impervious, Inflow Depth > 7.69" for 100-Year event  
 Inflow = 0.54 cfs @ 12.09 hrs, Volume= 0.041 af  
 Outflow = 0.54 cfs @ 12.09 hrs, Volume= 0.041 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.54 cfs @ 12.09 hrs, Volume= 0.041 af  
 Routed to Pond 25P : DMH 45

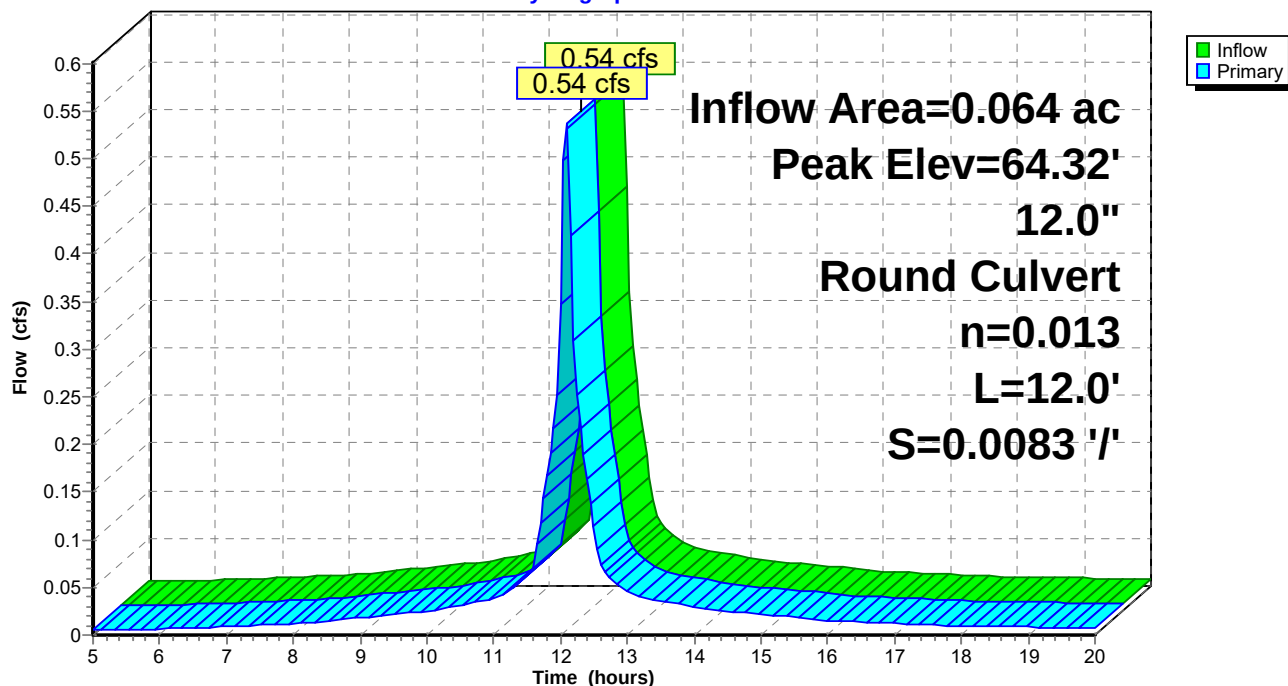
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.32' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 63.88' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 63.88' / 63.78' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.52 cfs @ 12.09 hrs HW=64.32' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.52 cfs @ 2.34 fps)

**Pond 19P: CB 62**

Hydrograph



**Summary for Pond 20P: DMH 43**

Inflow Area = 0.553 ac, 81.18% Impervious, Inflow Depth > 7.64" for 100-Year event  
 Inflow = 4.65 cfs @ 12.09 hrs, Volume= 0.352 af  
 Outflow = 4.65 cfs @ 12.09 hrs, Volume= 0.352 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.65 cfs @ 12.09 hrs, Volume= 0.352 af  
 Routed to Pond 21P : DMH 42

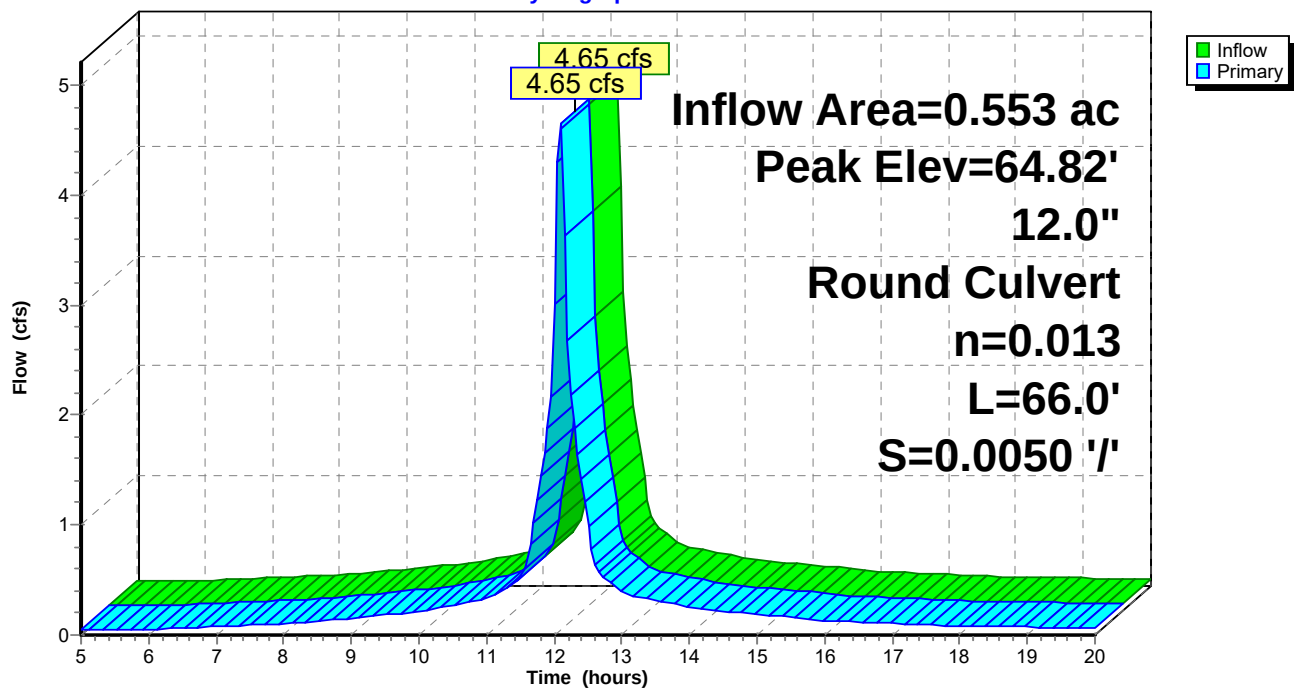
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 64.82' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.90' | <b>12.0" Round Culvert</b><br>L= 66.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.90' / 61.57' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=4.53 cfs @ 12.09 hrs HW=64.70' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 4.53 cfs @ 5.77 fps)

**Pond 20P: DMH 43****Hydrograph**

**Summary for Pond 21P: DMH 42**

Inflow Area = 0.553 ac, 81.18% Impervious, Inflow Depth > 7.64" for 100-Year event  
 Inflow = 4.65 cfs @ 12.09 hrs, Volume= 0.352 af  
 Outflow = 4.65 cfs @ 12.09 hrs, Volume= 0.352 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.65 cfs @ 12.09 hrs, Volume= 0.352 af  
 Routed to Pond 24P : DMH 41

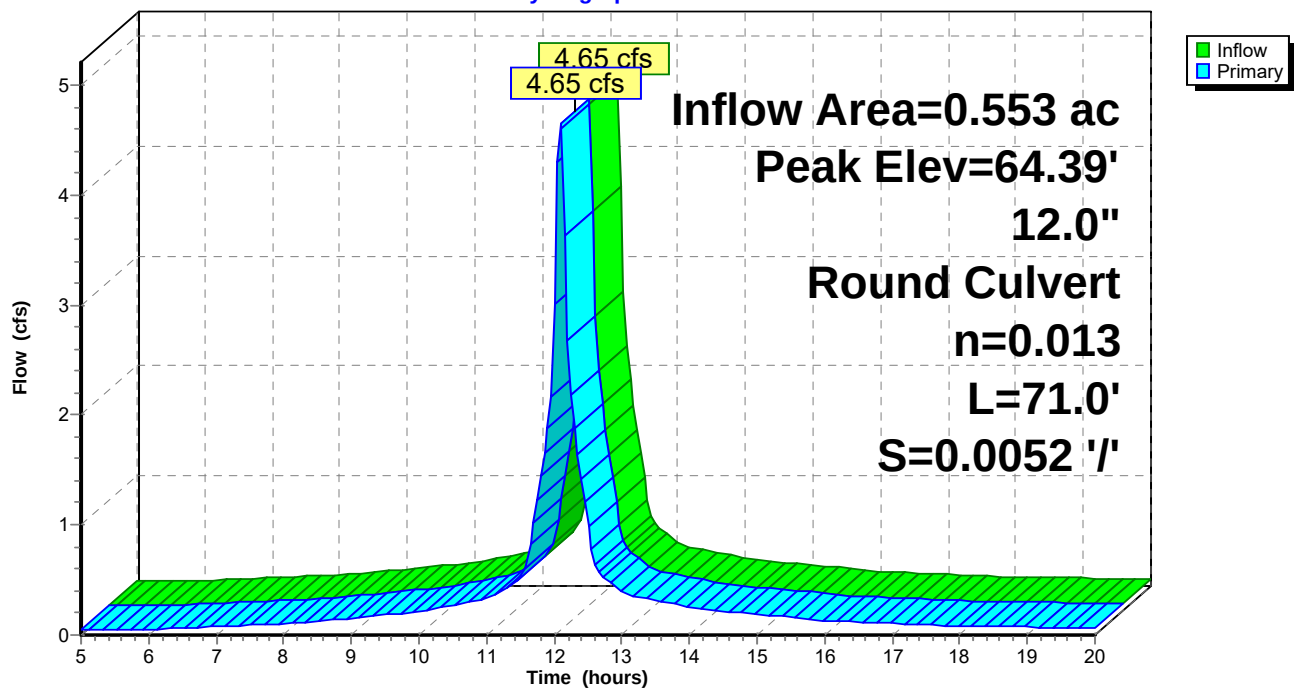
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.39' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.47' | <b>12.0" Round Culvert</b><br>L= 71.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.47' / 61.10' S= 0.0052 ' / Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=4.53 cfs @ 12.09 hrs HW=64.27' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 4.53 cfs @ 5.77 fps)

**Pond 21P: DMH 42**

Hydrograph





**Summary for Pond 22P: CB 56**

Inflow Area = 0.127 ac, 100.00% Impervious, Inflow Depth > 8.00" for 100-Year event  
 Inflow = 1.08 cfs @ 12.09 hrs, Volume= 0.084 af  
 Outflow = 1.08 cfs @ 12.09 hrs, Volume= 0.084 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.08 cfs @ 12.09 hrs, Volume= 0.084 af  
 Routed to Pond 24P : DMH 41

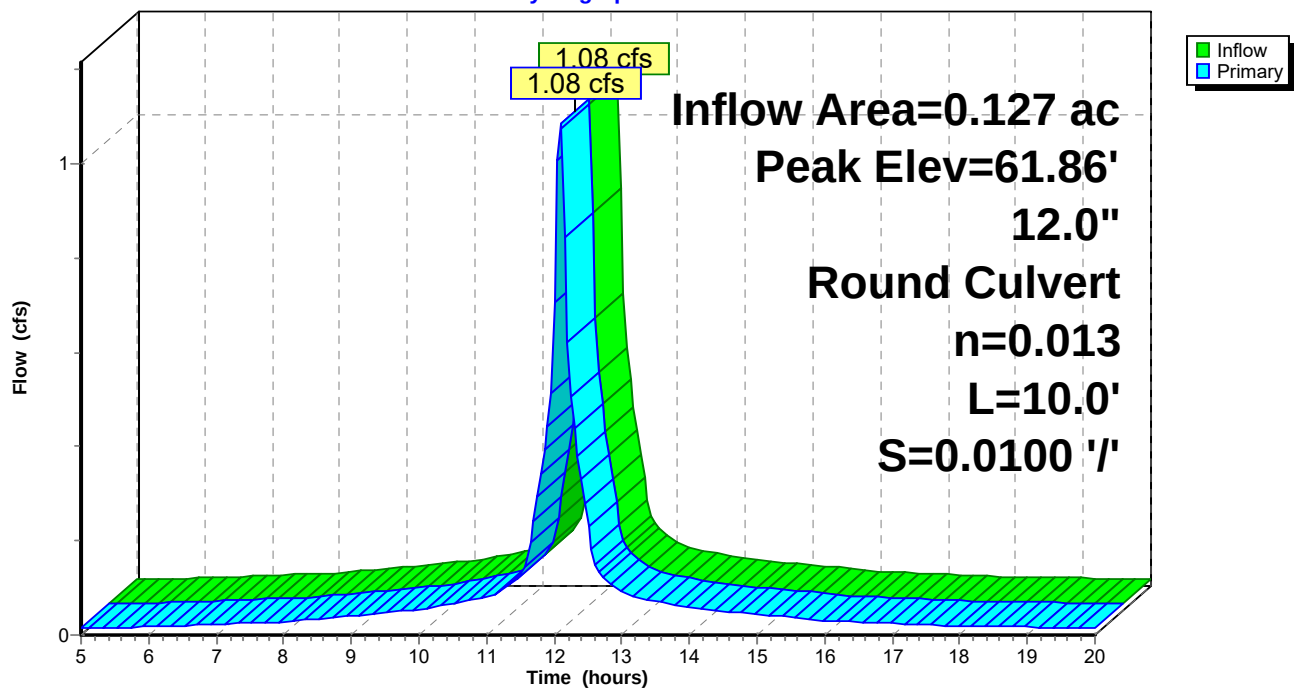
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.86' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.20' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.20' / 61.10' S= 0.0100 ' S= 0.0100 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.06 cfs @ 12.09 hrs HW=61.85' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.06 cfs @ 2.76 fps)

**Pond 22P: CB 56**

Hydrograph



### Summary for Pond 23P: CB 57

Inflow Area = 0.315 ac, 81.38% Impervious, Inflow Depth > 7.69" for 100-Year event  
 Inflow = 2.66 cfs @ 12.09 hrs, Volume= 0.202 af  
 Outflow = 2.66 cfs @ 12.09 hrs, Volume= 0.202 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.66 cfs @ 12.09 hrs, Volume= 0.202 af  
 Routed to Pond 24P : DMH 41

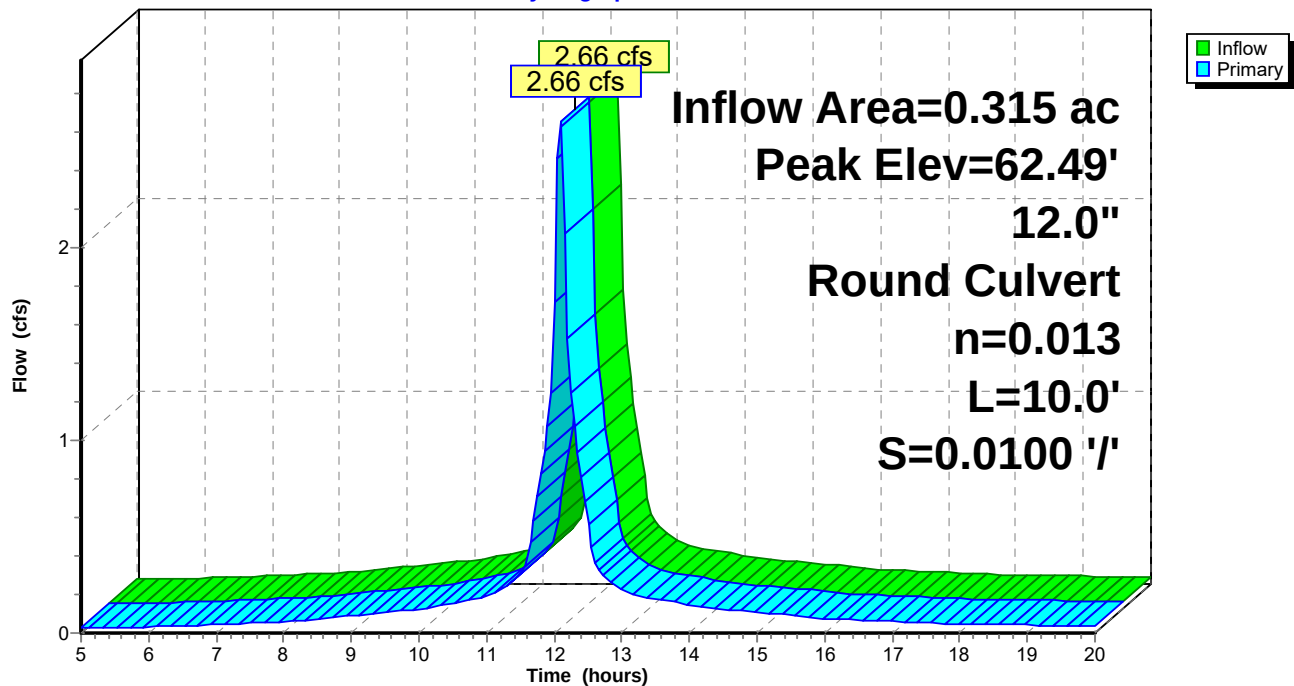
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.49' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.20' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.20' / 61.10' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.59 cfs @ 12.09 hrs HW=62.45' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.59 cfs @ 3.30 fps)

### Pond 23P: CB 57

Hydrograph



### Summary for Pond 24P: DMH 41

Inflow Area = 0.994 ac, 83.63% Impervious, Inflow Depth > 7.70" for 100-Year event  
 Inflow = 8.39 cfs @ 12.09 hrs, Volume= 0.638 af  
 Outflow = 8.39 cfs @ 12.09 hrs, Volume= 0.638 af, Atten= 0%, Lag= 0.0 min  
 Primary = 8.39 cfs @ 12.09 hrs, Volume= 0.638 af  
 Routed to Pond 29P : DMH 40

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 63.31' @ 12.09 hrs

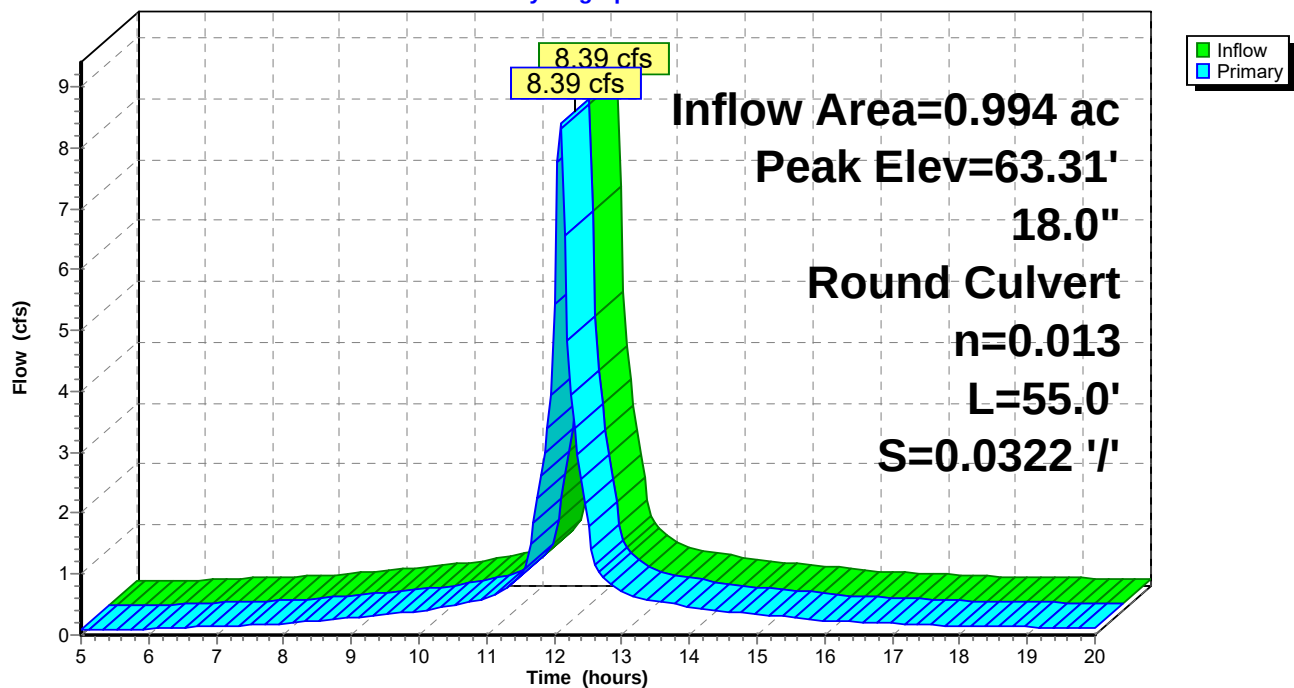
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.00' | <b>18.0" Round Culvert</b><br>L= 55.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.00' / 59.23' S= 0.0322 ' S= 0.0322 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=8.17 cfs @ 12.09 hrs HW=63.23' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 8.17 cfs @ 4.63 fps)

### Pond 24P: DMH 41

#### Hydrograph



**Summary for Pond 25P: DMH 45**

Inflow Area = 0.203 ac, 69.67% Impervious, Inflow Depth > 7.34" for 100-Year event  
 Inflow = 1.68 cfs @ 12.09 hrs, Volume= 0.124 af  
 Outflow = 1.68 cfs @ 12.09 hrs, Volume= 0.124 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.68 cfs @ 12.09 hrs, Volume= 0.124 af  
 Routed to Pond 28P : DMH 44

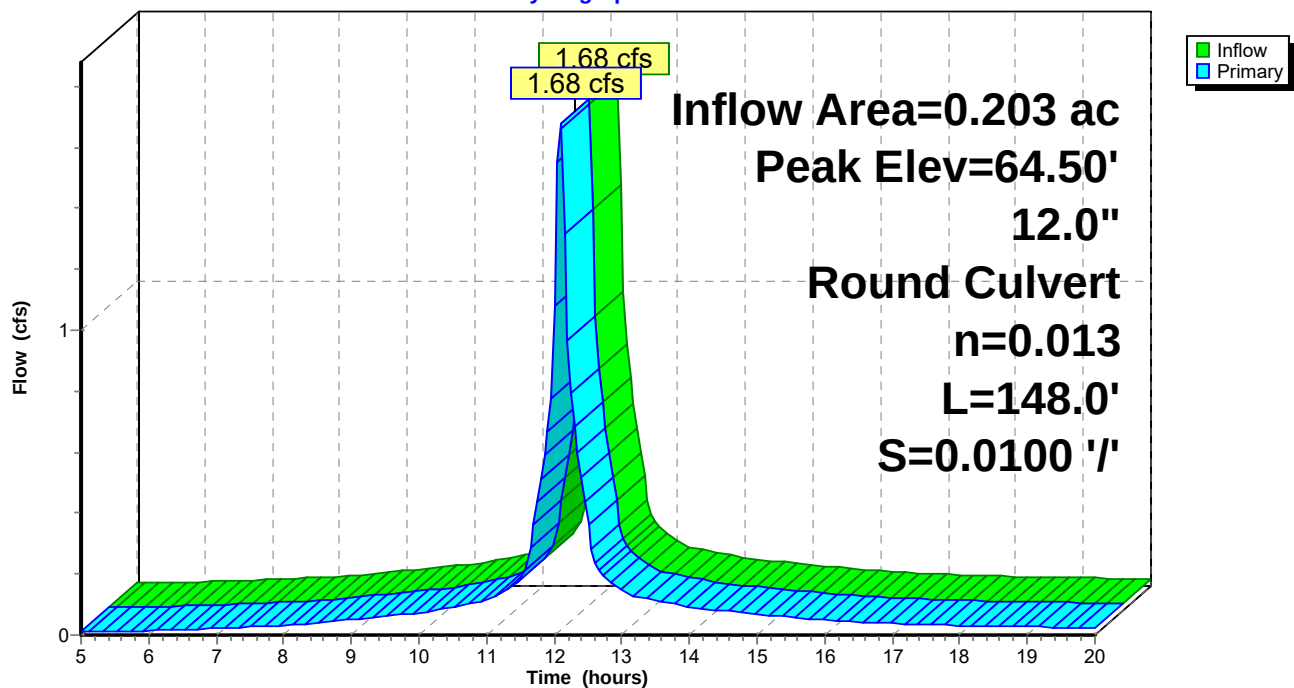
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.50' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 63.68' | <b>12.0" Round Culvert</b><br>L= 148.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 63.68' / 62.20' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.63 cfs @ 12.09 hrs HW=64.48' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.63 cfs @ 2.41 fps)

**Pond 25P: DMH 45**

Hydrograph



### Summary for Pond 26P: CB 61

Inflow Area = 0.265 ac, 66.20% Impervious, Inflow Depth > 7.29" for 100-Year event  
 Inflow = 2.18 cfs @ 12.09 hrs, Volume= 0.161 af  
 Outflow = 2.18 cfs @ 12.09 hrs, Volume= 0.161 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.18 cfs @ 12.09 hrs, Volume= 0.161 af  
 Routed to Pond 28P : DMH 44

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 63.37' @ 12.09 hrs

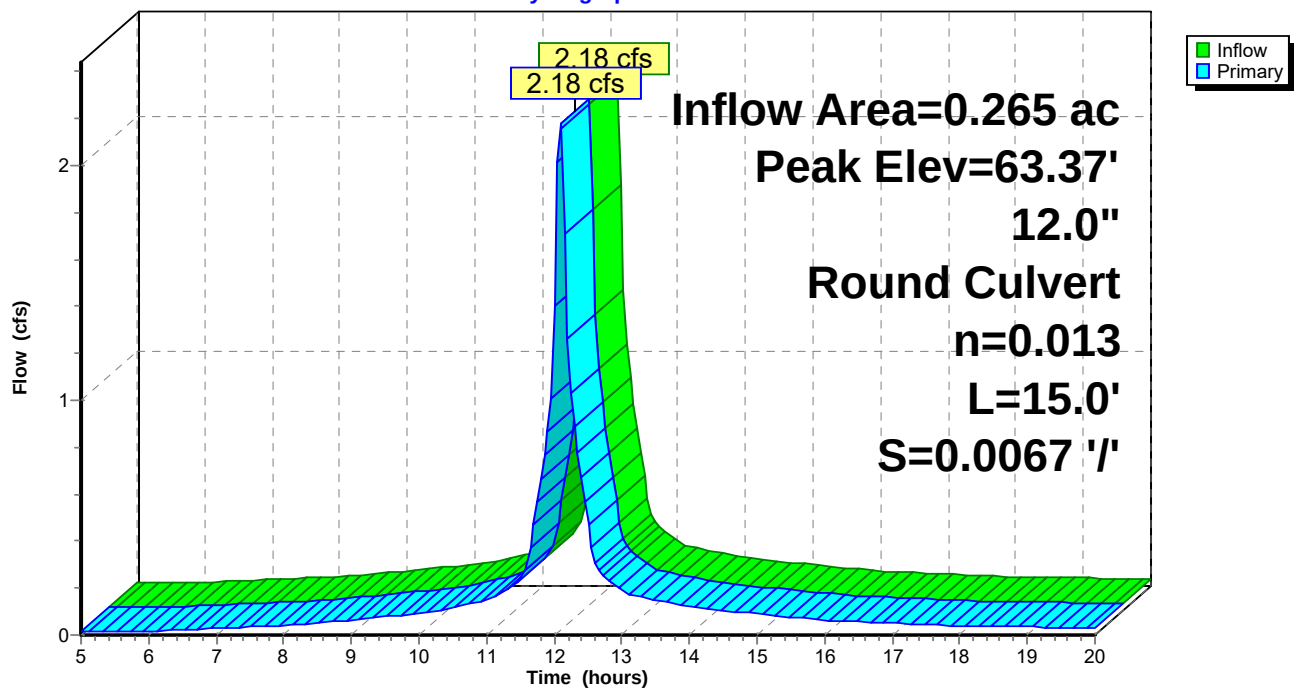
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.30' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.30' / 62.20' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.12 cfs @ 12.09 hrs HW=63.35' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 2.12 cfs @ 3.21 fps)

### Pond 26P: CB 61

Hydrograph



### Summary for Pond 27P: CB 60

Inflow Area = 0.111 ac, 71.39% Impervious, Inflow Depth > 7.40" for 100-Year event  
 Inflow = 0.92 cfs @ 12.09 hrs, Volume= 0.068 af  
 Outflow = 0.92 cfs @ 12.09 hrs, Volume= 0.068 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.92 cfs @ 12.09 hrs, Volume= 0.068 af  
 Routed to Pond 28P : DMH 44

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 62.91' @ 12.09 hrs

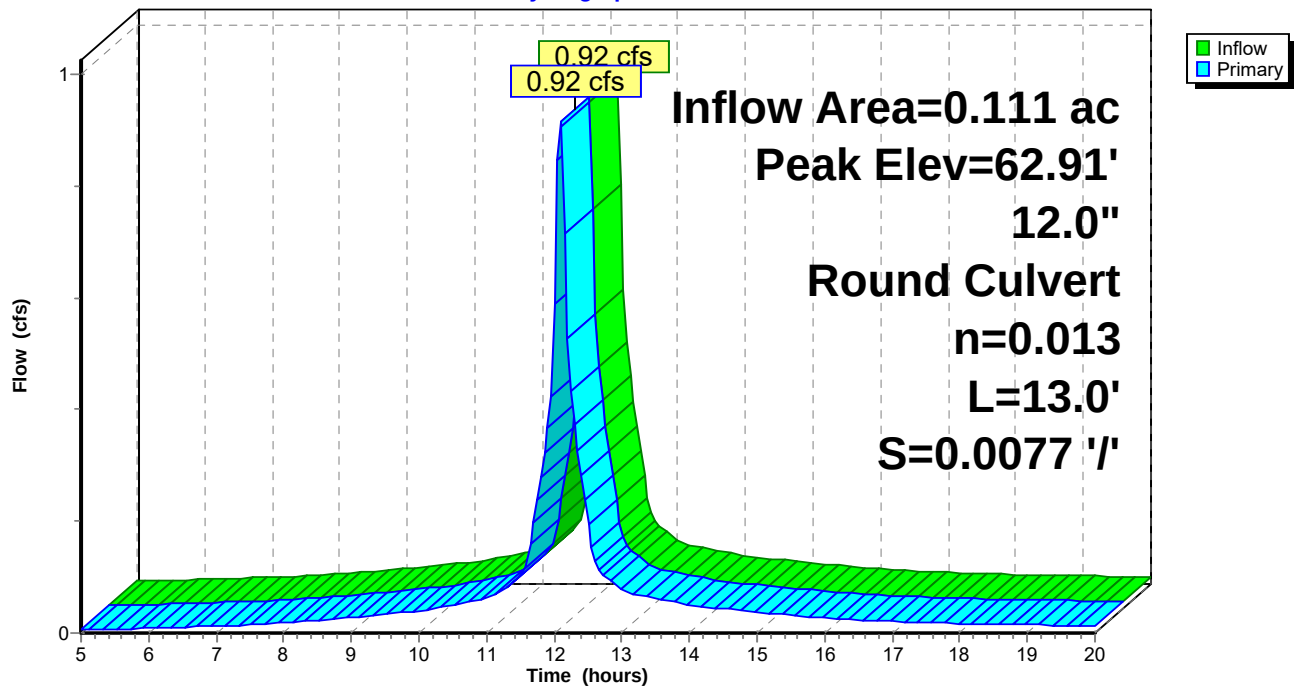
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.30' | <b>12.0" Round Culvert</b><br>L= 13.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.30' / 62.20' S= 0.0077 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.89 cfs @ 12.09 hrs HW=62.90' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 0.89 cfs @ 2.61 fps)

### Pond 27P: CB 60

Hydrograph



### Summary for Pond 28P: DMH 44

Inflow Area = 0.579 ac, 68.41% Impervious, Inflow Depth > 7.33" for 100-Year event  
 Inflow = 4.77 cfs @ 12.09 hrs, Volume= 0.354 af  
 Outflow = 4.77 cfs @ 12.09 hrs, Volume= 0.354 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.77 cfs @ 12.09 hrs, Volume= 0.354 af  
 Routed to Pond 29P : DMH 40

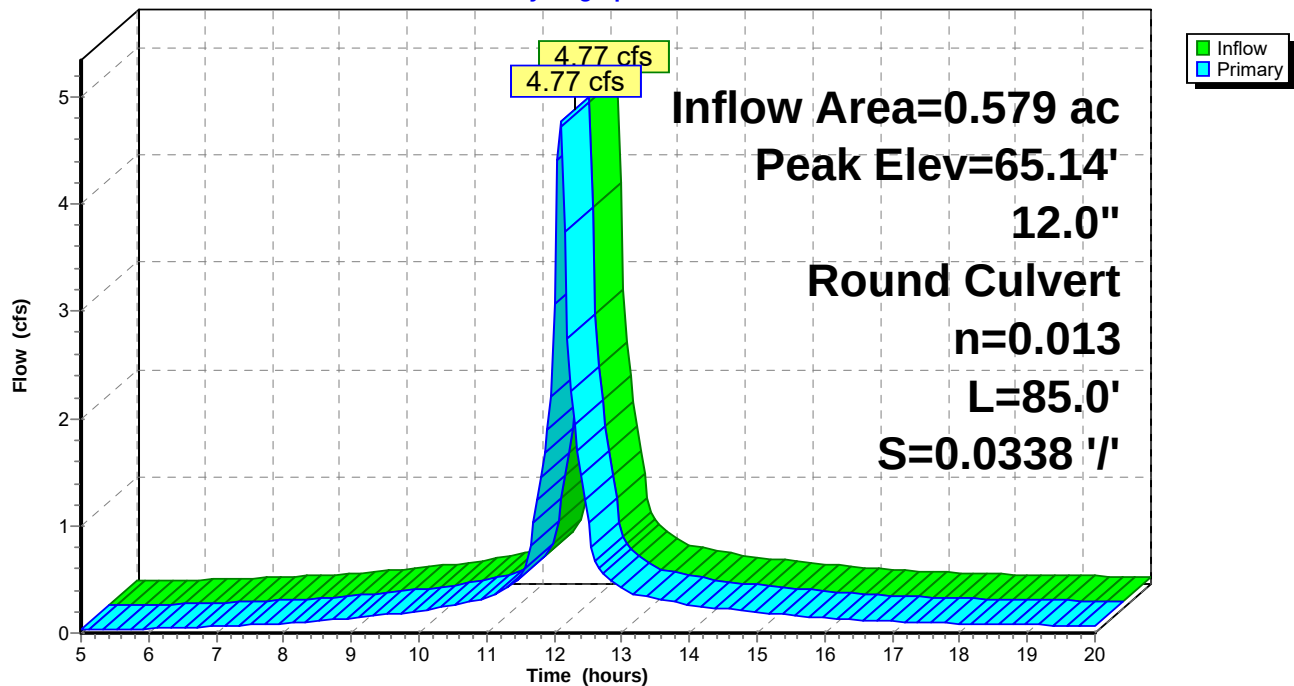
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 65.14' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.10' | <b>12.0" Round Culvert</b><br>L= 85.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.10' / 59.23' S= 0.0338 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=4.65 cfs @ 12.09 hrs HW=65.02' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 4.65 cfs @ 5.91 fps)

### Pond 28P: DMH 44

Hydrograph



### Summary for Pond 29P: DMH 40

Inflow Area = 1.656 ac, 78.05% Impervious, Inflow Depth > 7.57" for 100-Year event  
 Inflow = 13.86 cfs @ 12.09 hrs, Volume= 1.044 af  
 Outflow = 13.86 cfs @ 12.09 hrs, Volume= 1.044 af, Atten= 0%, Lag= 0.0 min  
 Primary = 13.86 cfs @ 12.09 hrs, Volume= 1.044 af  
 Routed to Pond 38P : DMH 39

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 61.47' @ 12.09 hrs

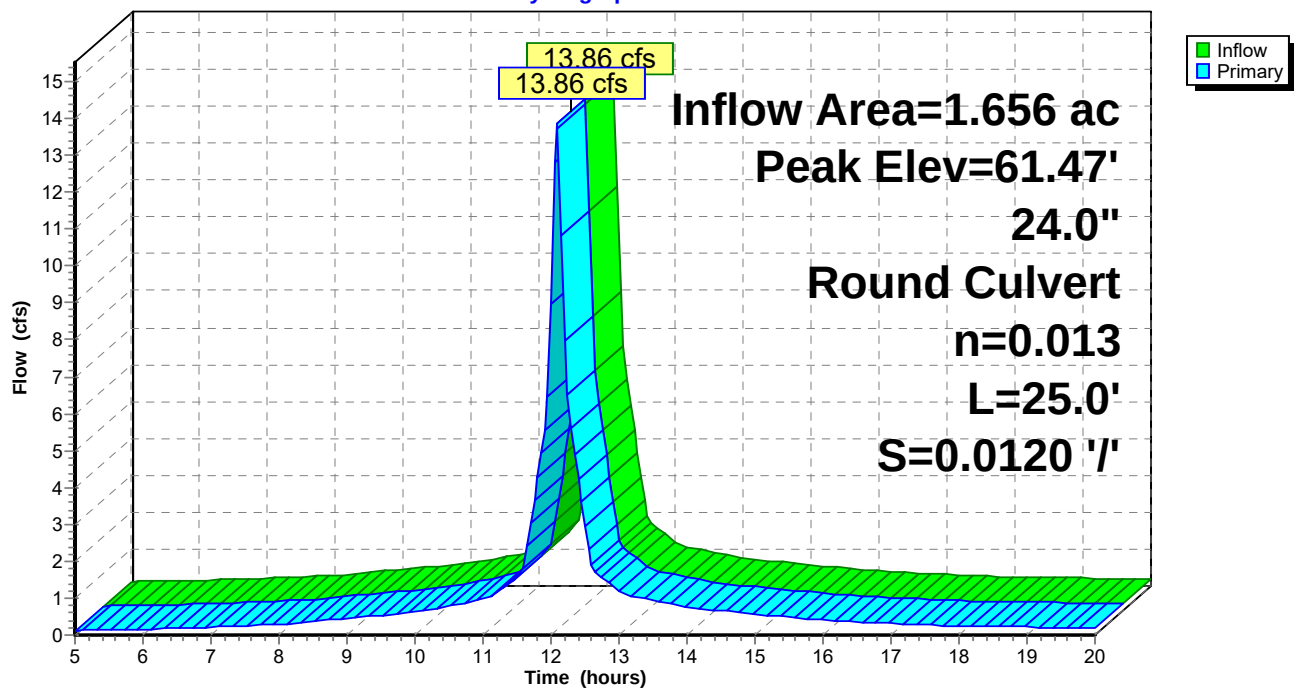
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.13' | <b>24.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.13' / 58.83' S= 0.0120 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=13.50 cfs @ 12.09 hrs HW=61.41' (Free Discharge)

↑**1=Culvert** (Inlet Controls 13.50 cfs @ 4.30 fps)

### Pond 29P: DMH 40

Hydrograph





**Summary for Pond 30P: CB 55**

Inflow Area = 0.083 ac, 78.43% Impervious, Inflow Depth > 7.60" for 100-Year event  
 Inflow = 0.70 cfs @ 12.09 hrs, Volume= 0.053 af  
 Outflow = 0.70 cfs @ 12.09 hrs, Volume= 0.053 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.70 cfs @ 12.09 hrs, Volume= 0.053 af  
 Routed to Pond 29P : DMH 40

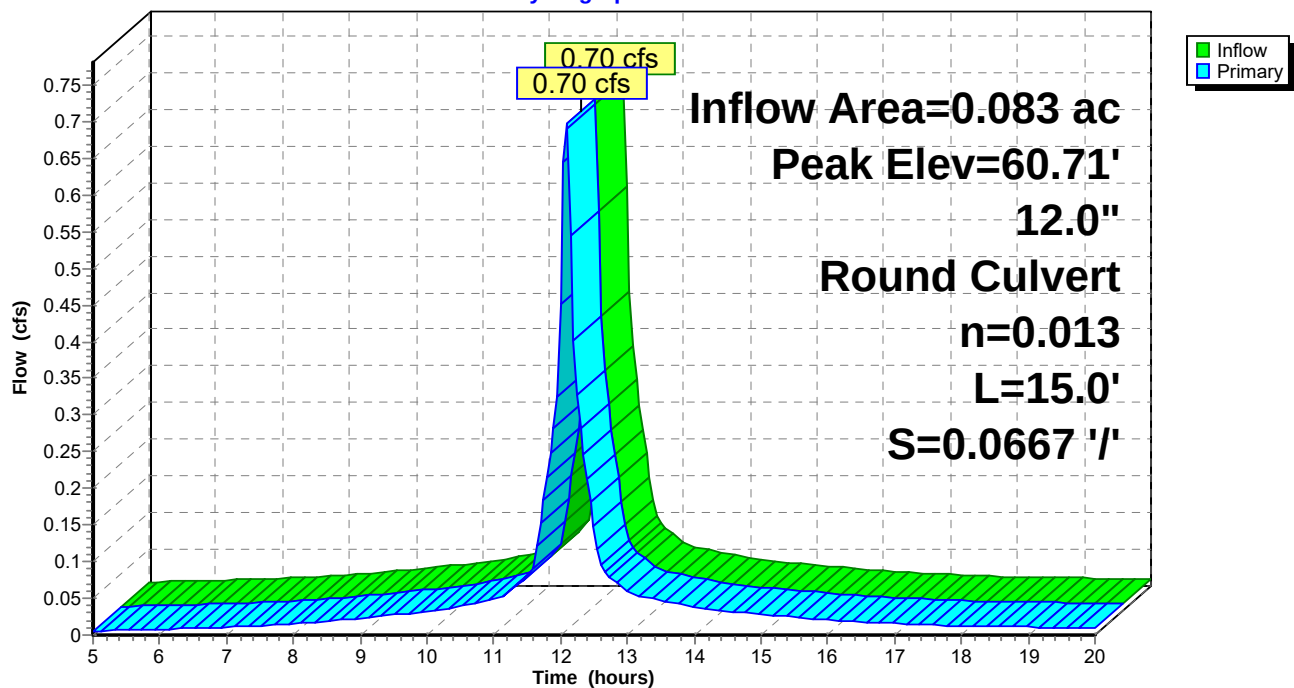
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.71' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.23' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.23' / 59.23' S= 0.0667 ' S= 0.0667 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.68 cfs @ 12.09 hrs HW=60.70' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.68 cfs @ 1.85 fps)

**Pond 30P: CB 55**

Hydrograph



### Summary for Pond 31P: CB 51

Inflow Area = 0.044 ac, 96.85% Impervious, Inflow Depth > 7.94" for 100-Year event  
 Inflow = 0.38 cfs @ 12.09 hrs, Volume= 0.029 af  
 Outflow = 0.38 cfs @ 12.09 hrs, Volume= 0.029 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.38 cfs @ 12.09 hrs, Volume= 0.029 af  
 Routed to Pond 34P : DMH 36

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.67' @ 12.09 hrs

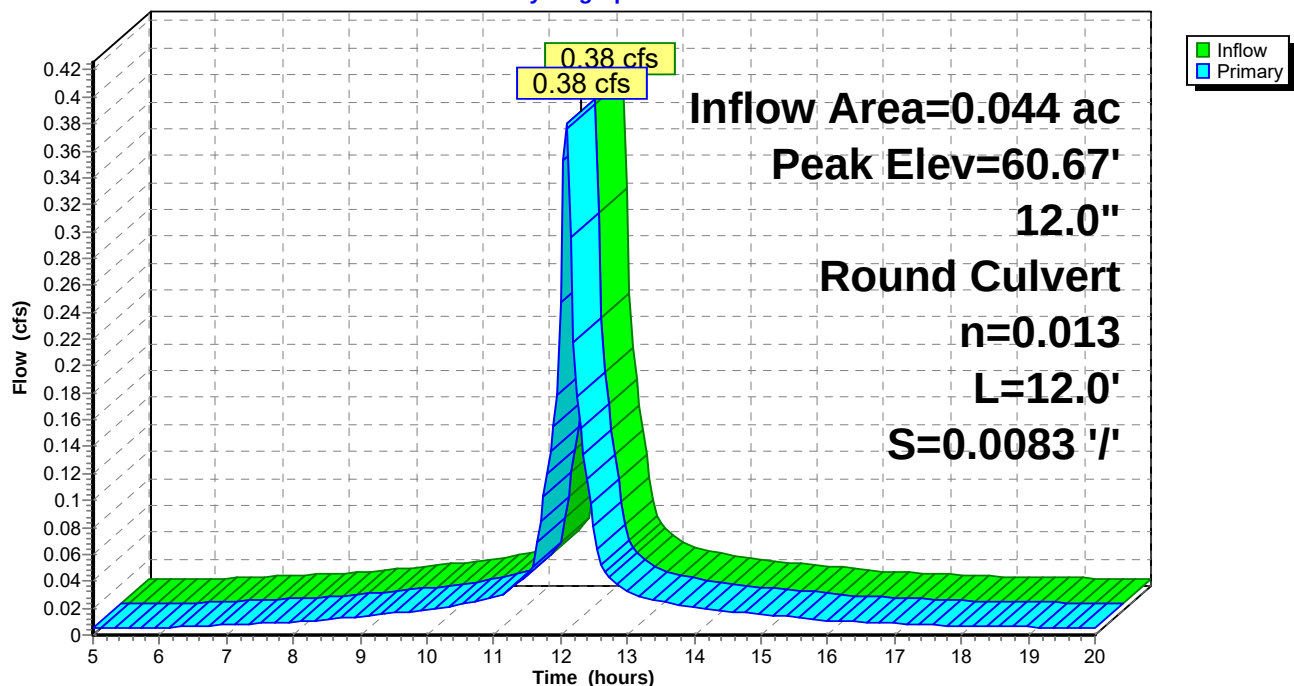
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.30' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.30' / 60.20' S= 0.0083 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.37 cfs @ 12.09 hrs HW=60.66' (Free Discharge)

1=Culvert (Barrel Controls 0.37 cfs @ 2.17 fps)

### Pond 31P: CB 51

Hydrograph



### Summary for Pond 32P: CB 52

Inflow Area = 0.225 ac, 78.85% Impervious, Inflow Depth > 7.60" for 100-Year event  
 Inflow = 1.89 cfs @ 12.09 hrs, Volume= 0.143 af  
 Outflow = 1.89 cfs @ 12.09 hrs, Volume= 0.143 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.89 cfs @ 12.09 hrs, Volume= 0.143 af  
 Routed to Pond 34P : DMH 36

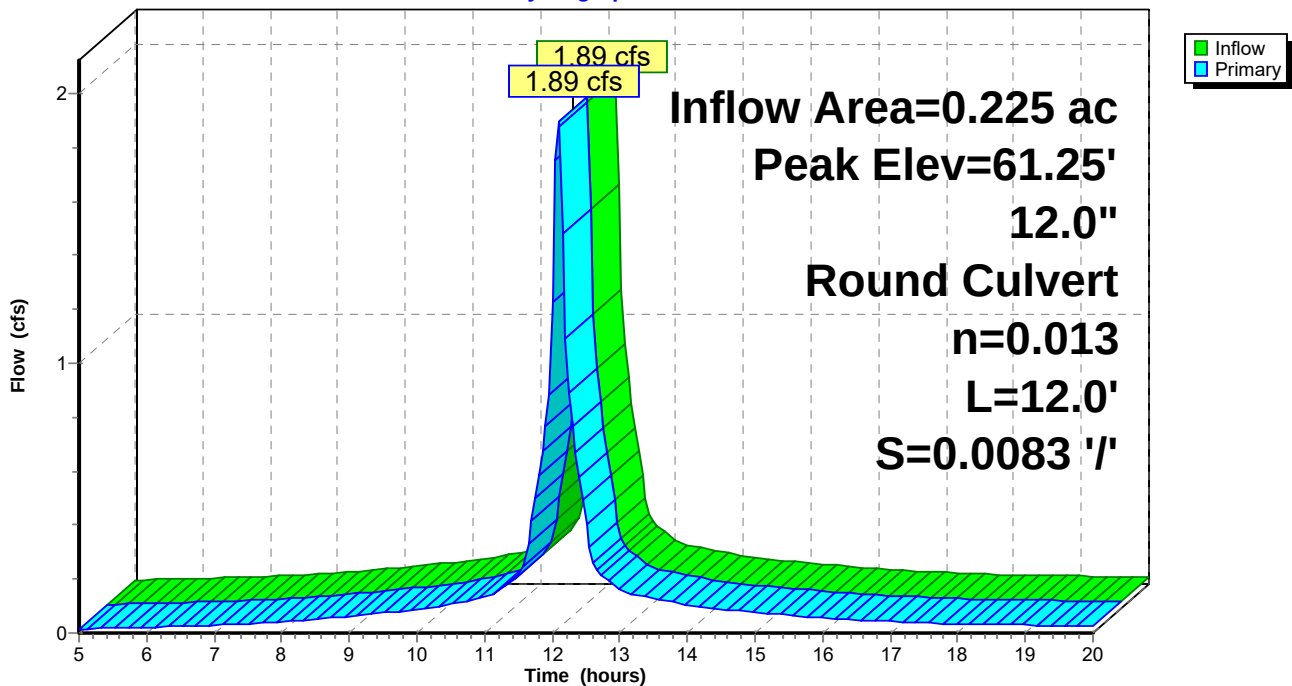
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.25' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.30' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.30' / 60.20' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.84 cfs @ 12.09 hrs HW=61.24' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.84 cfs @ 3.13 fps)

### Pond 32P: CB 52

Hydrograph



**Summary for Pond 33P: CB 53**

Inflow Area = 0.044 ac, 100.00% Impervious, Inflow Depth > 8.00" for 100-Year event  
 Inflow = 0.38 cfs @ 12.09 hrs, Volume= 0.030 af  
 Outflow = 0.38 cfs @ 12.09 hrs, Volume= 0.030 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.38 cfs @ 12.09 hrs, Volume= 0.030 af  
 Routed to Pond 35P : DMH 37

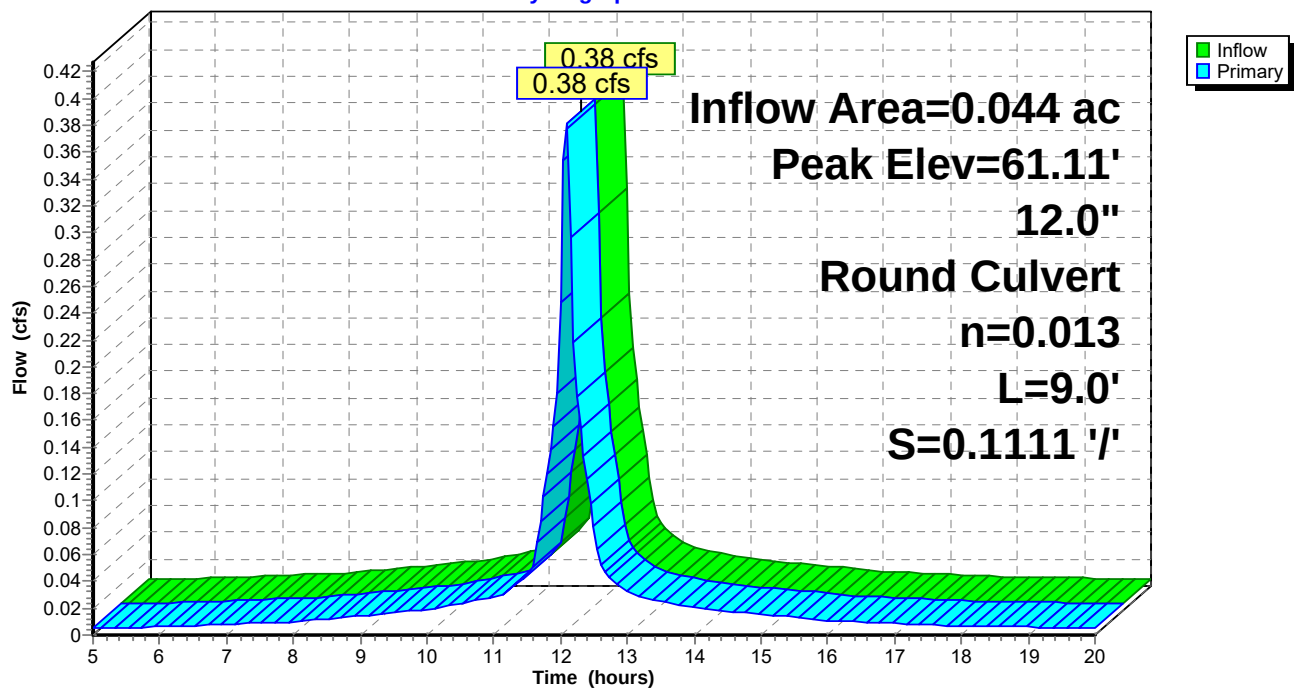
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.11' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.76' | <b>12.0" Round Culvert</b><br>L= 9.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.76' / 59.76' S= 0.1111 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.37 cfs @ 12.09 hrs HW=61.10' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.37 cfs @ 1.57 fps)

**Pond 33P: CB 53**

Hydrograph



**Summary for Pond 34P: DMH 36**

Inflow Area = 0.270 ac, 81.82% Impervious, Inflow Depth > 7.66" for 100-Year event  
 Inflow = 2.27 cfs @ 12.09 hrs, Volume= 0.172 af  
 Outflow = 2.27 cfs @ 12.09 hrs, Volume= 0.172 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.27 cfs @ 12.09 hrs, Volume= 0.172 af  
 Routed to Pond 35P : DMH 37

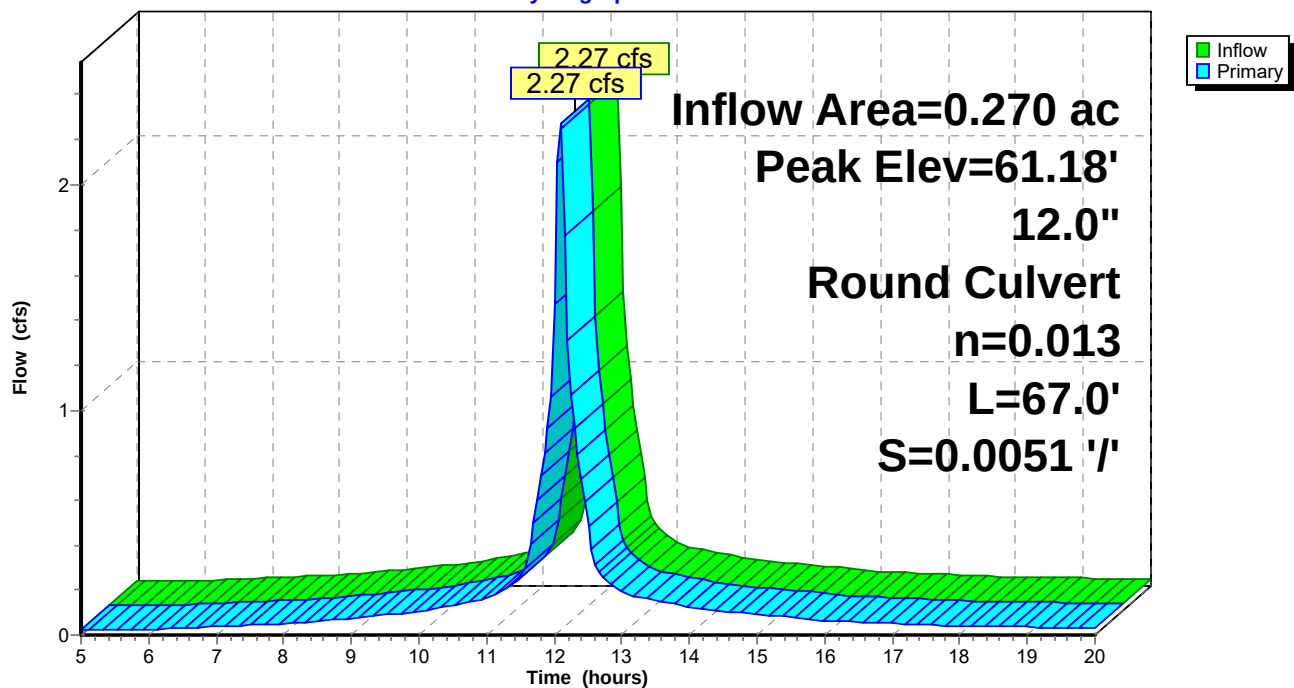
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.18' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.10' | <b>12.0" Round Culvert</b><br>L= 67.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.10' / 59.76' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.21 cfs @ 12.09 hrs HW=61.15' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.21 cfs @ 3.32 fps)

**Pond 34P: DMH 36**

Hydrograph



### Summary for Pond 35P: DMH 37

Inflow Area = 0.314 ac, 84.39% Impervious, Inflow Depth > 7.70" for 100-Year event  
 Inflow = 2.66 cfs @ 12.09 hrs, Volume= 0.202 af  
 Outflow = 2.66 cfs @ 12.09 hrs, Volume= 0.202 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.66 cfs @ 12.09 hrs, Volume= 0.202 af  
 Routed to Pond 37P : DMH 38

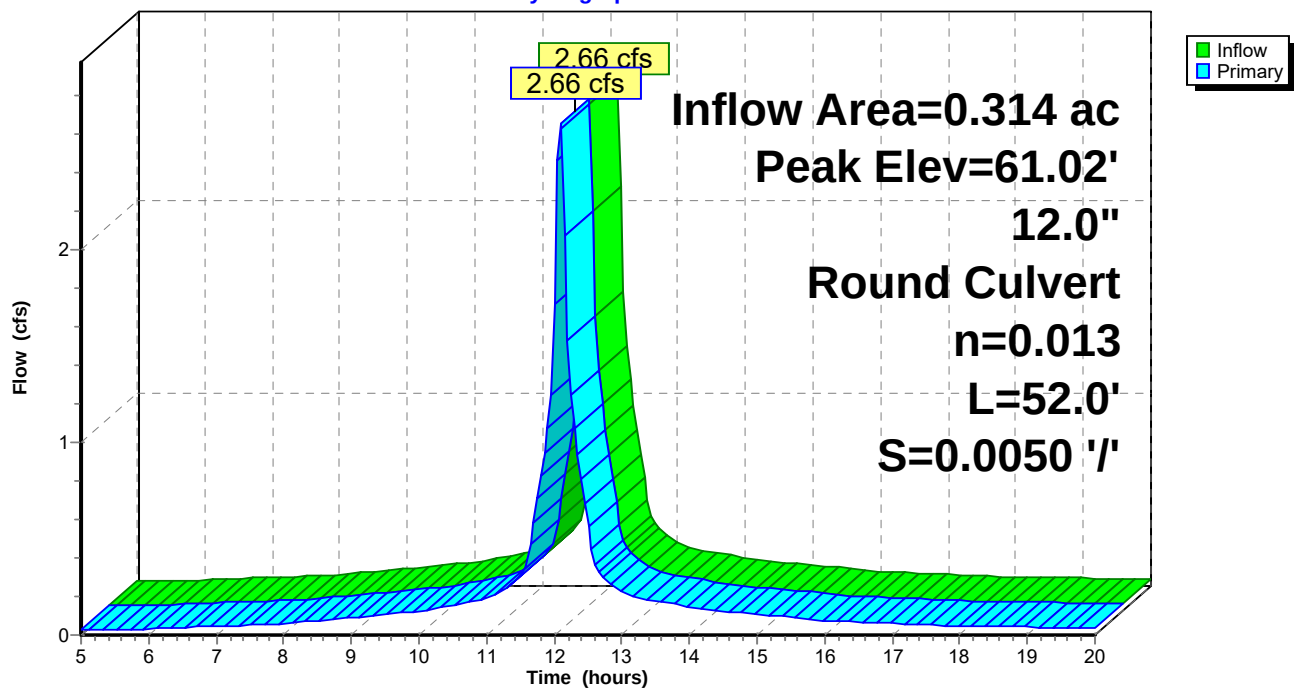
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.02' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.66' | <b>12.0" Round Culvert</b><br>L= 52.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.66' / 59.40' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.63 cfs @ 12.09 hrs HW=60.97' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.63 cfs @ 3.36 fps)

### Pond 35P: DMH 37

Hydrograph



**Summary for Pond 36P: CB 54**

Inflow Area = 0.200 ac, 94.53% Impervious, Inflow Depth > 7.94" for 100-Year event  
 Inflow = 1.71 cfs @ 12.09 hrs, Volume= 0.132 af  
 Outflow = 1.71 cfs @ 12.09 hrs, Volume= 0.132 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.71 cfs @ 12.09 hrs, Volume= 0.132 af  
 Routed to Pond 37P : DMH 38

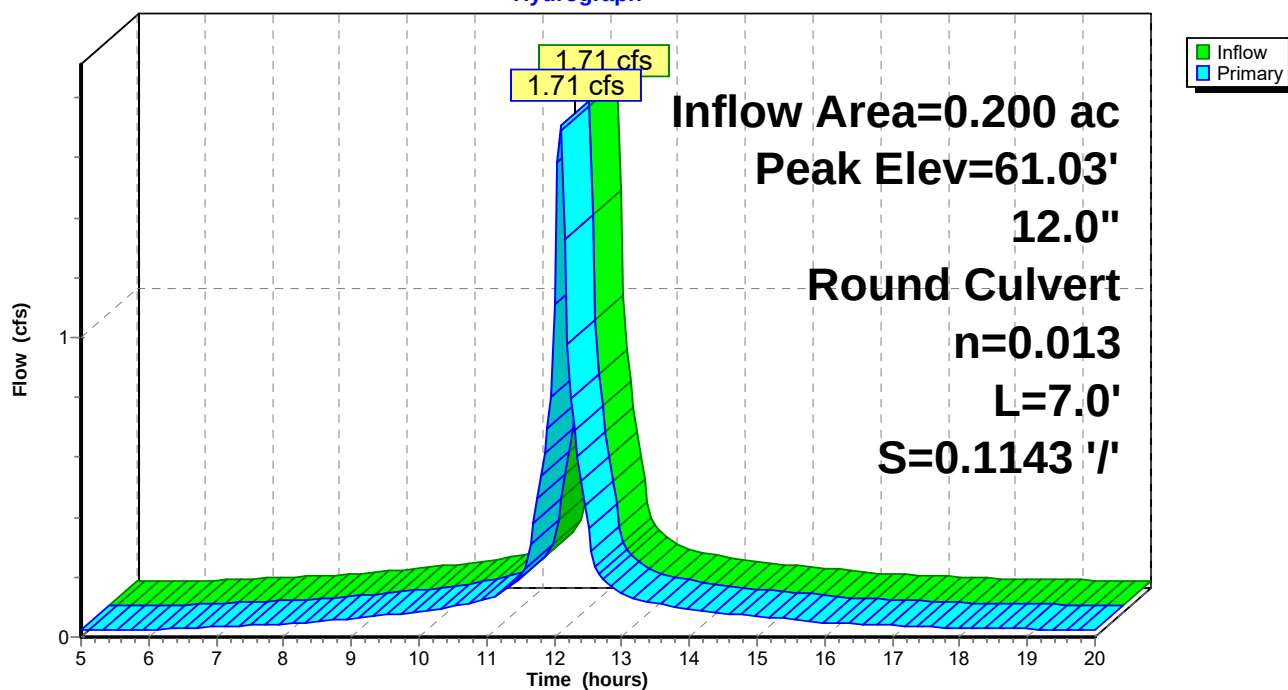
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.03' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.20' | <b>12.0" Round Culvert</b><br>L= 7.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.20' / 59.40' S= 0.1143 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.66 cfs @ 12.09 hrs HW=61.01' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.66 cfs @ 2.43 fps)

**Pond 36P: CB 54**

Hydrograph



**Summary for Pond 37P: DMH 38**

Inflow Area = 0.514 ac, 88.33% Impervious, Inflow Depth > 7.79" for 100-Year event  
 Inflow = 4.36 cfs @ 12.09 hrs, Volume= 0.334 af  
 Outflow = 4.36 cfs @ 12.09 hrs, Volume= 0.334 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.36 cfs @ 12.09 hrs, Volume= 0.334 af  
 Routed to Pond 38P : DMH 39

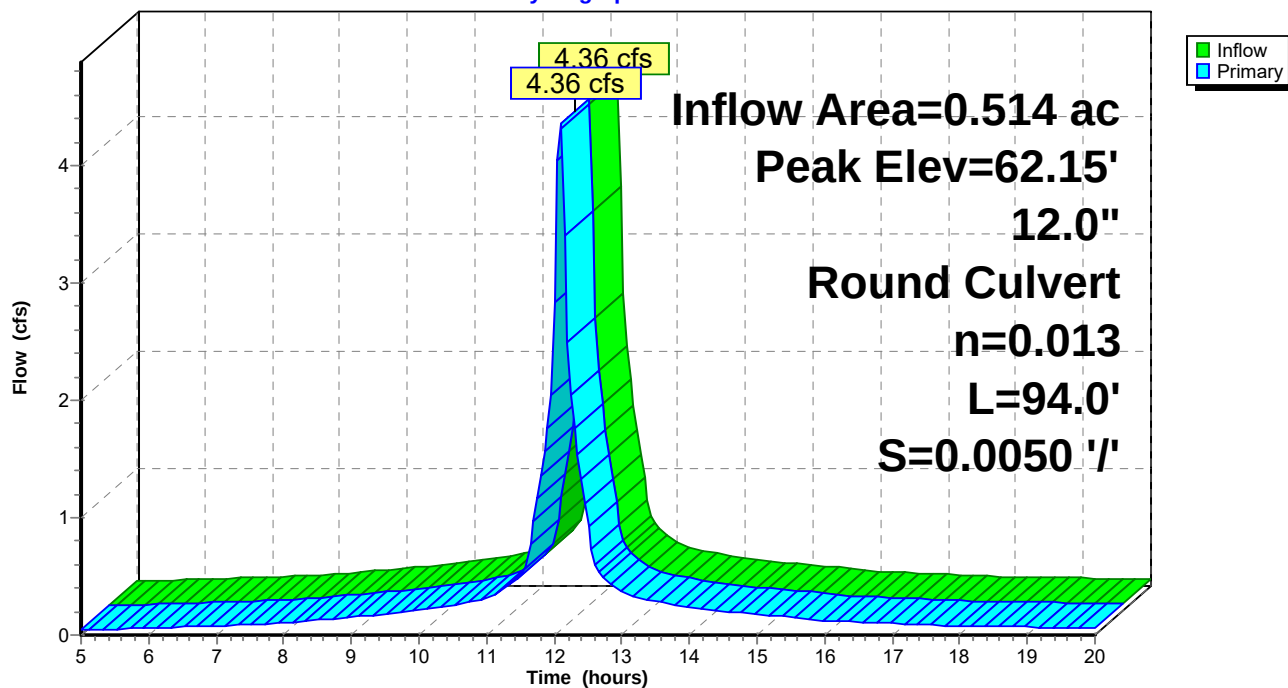
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.15' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.30' | <b>12.0" Round Culvert</b><br>L= 94.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.30' / 58.83' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=4.25 cfs @ 12.09 hrs HW=62.03' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 4.25 cfs @ 5.41 fps)

**Pond 37P: DMH 38**

Hydrograph





**Summary for Pond 38P: DMH 39**

Inflow Area = 2.170 ac, 80.49% Impervious, Inflow Depth > 7.62" for 100-Year event  
 Inflow = 18.22 cfs @ 12.09 hrs, Volume= 1.378 af  
 Outflow = 18.22 cfs @ 12.09 hrs, Volume= 1.378 af, Atten= 0%, Lag= 0.0 min  
 Primary = 18.22 cfs @ 12.09 hrs, Volume= 1.378 af  
 Routed to Pond 15P : Inf. Basin 5

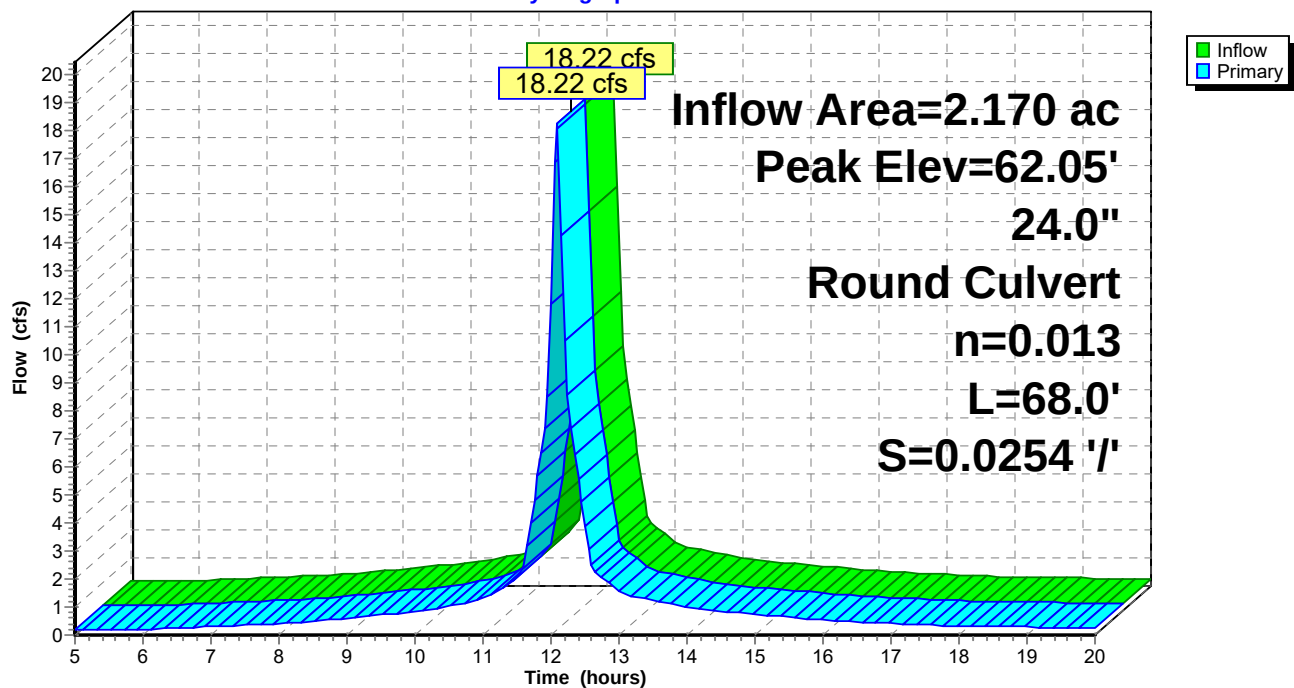
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.05' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.73' | <b>24.0" Round Culvert</b><br>L= 68.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.73' / 57.00' S= 0.0254 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=17.74 cfs @ 12.09 hrs HW=61.94' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 17.74 cfs @ 5.65 fps)

**Pond 38P: DMH 39**

Hydrograph



**Summary for Pond 41P: CB 49**

Inflow Area = 0.022 ac, 100.00% Impervious, Inflow Depth > 8.00" for 100-Year event  
 Inflow = 0.19 cfs @ 12.09 hrs, Volume= 0.015 af  
 Outflow = 0.19 cfs @ 12.09 hrs, Volume= 0.015 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.19 cfs @ 12.09 hrs, Volume= 0.015 af  
 Routed to Pond 43P : DMH 35

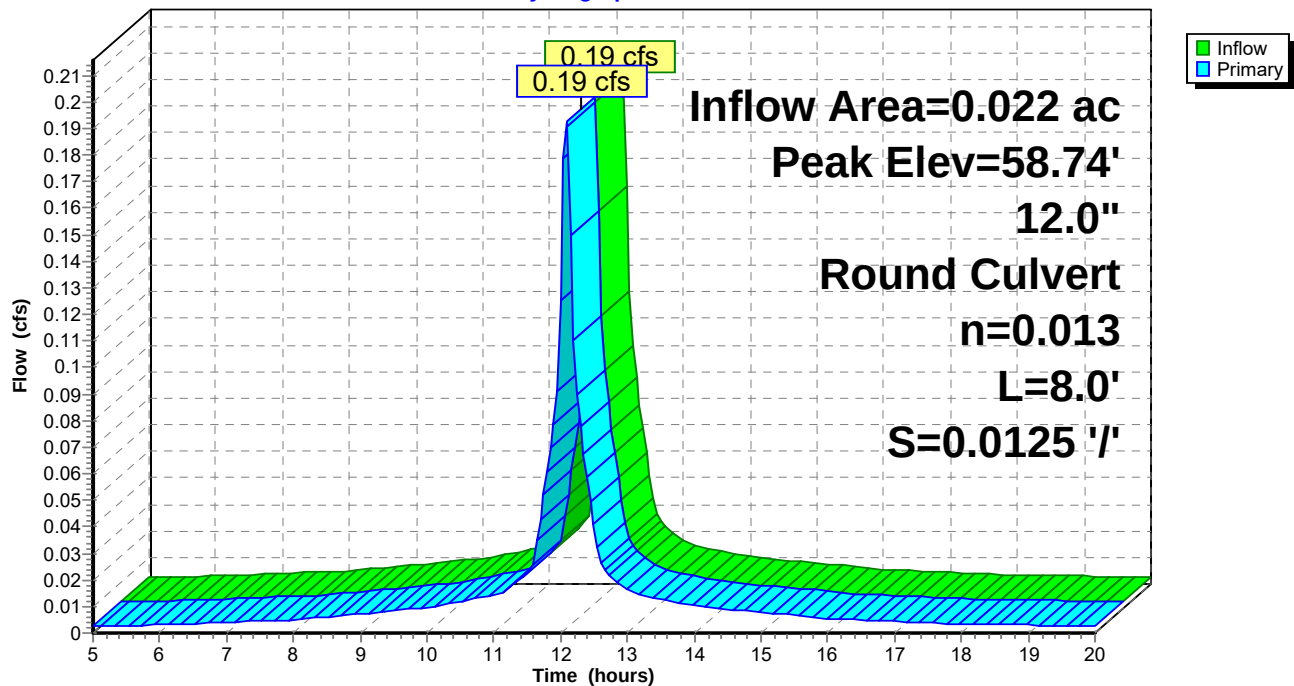
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.74' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.50' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.50' / 58.40' S= 0.0125 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.19 cfs @ 12.09 hrs HW=58.74' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.19 cfs @ 1.97 fps)

**Pond 41P: CB 49**

Hydrograph



### Summary for Pond 42P: CB 50

Inflow Area = 0.182 ac, 66.96% Impervious, Inflow Depth > 7.29" for 100-Year event  
 Inflow = 1.50 cfs @ 12.09 hrs, Volume= 0.111 af  
 Outflow = 1.50 cfs @ 12.09 hrs, Volume= 0.111 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.50 cfs @ 12.09 hrs, Volume= 0.111 af  
 Routed to Pond 43P : DMH 35

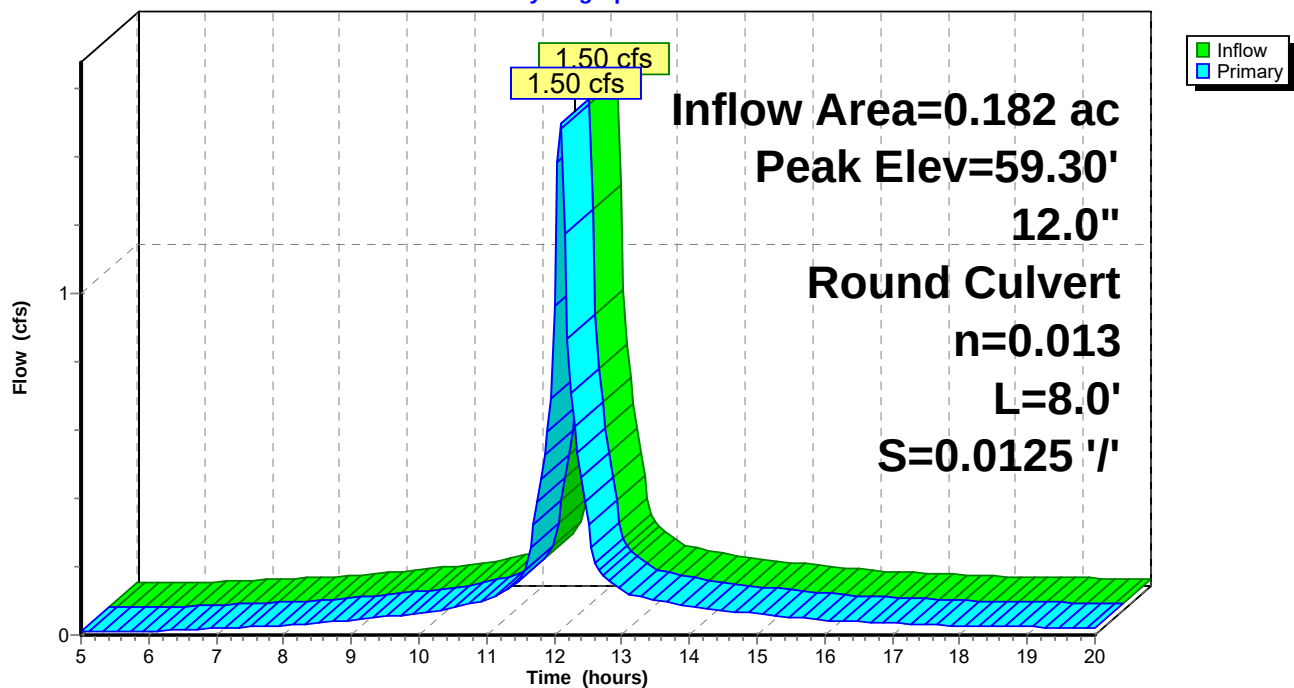
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.30' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.50' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.50' / 58.40' S= 0.0125 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.46 cfs @ 12.09 hrs HW=59.29' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.46 cfs @ 3.01 fps)

### Pond 42P: CB 50

Hydrograph



### Summary for Pond 43P: DMH 35

Inflow Area = 0.205 ac, 70.58% Impervious, Inflow Depth > 7.37" for 100-Year event  
 Inflow = 1.69 cfs @ 12.09 hrs, Volume= 0.126 af  
 Outflow = 1.69 cfs @ 12.09 hrs, Volume= 0.126 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.69 cfs @ 12.09 hrs, Volume= 0.126 af  
 Routed to Pond 206P : DMH 34

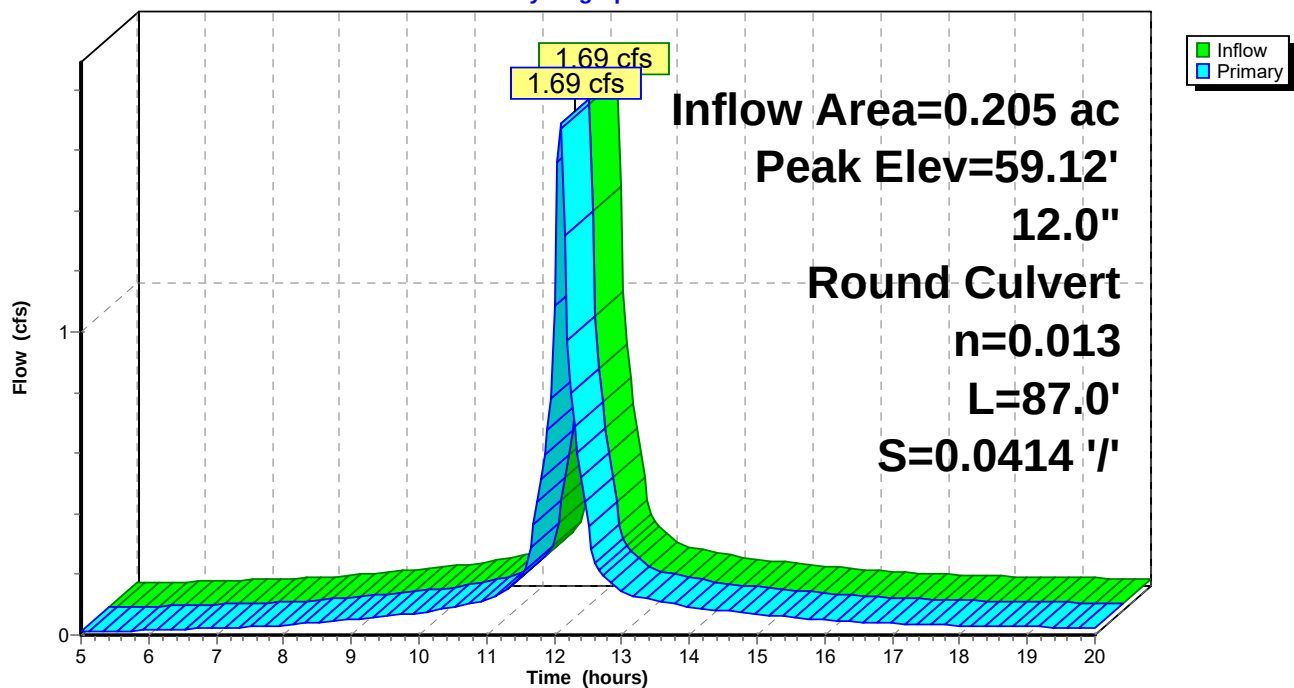
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.12' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.30' | <b>12.0" Round Culvert</b><br>L= 87.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.30' / 54.70' S= 0.0414 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.65 cfs @ 12.09 hrs HW=59.11' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.65 cfs @ 2.42 fps)

### Pond 43P: DMH 35

#### Hydrograph



**Summary for Pond 46P: CB 48**

Inflow Area = 0.352 ac, 70.58% Impervious, Inflow Depth > 6.50" for 100-Year event  
 Inflow = 2.68 cfs @ 12.09 hrs, Volume= 0.191 af  
 Outflow = 2.68 cfs @ 12.09 hrs, Volume= 0.191 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.68 cfs @ 12.09 hrs, Volume= 0.191 af  
 Routed to Pond 48P : DMH 33

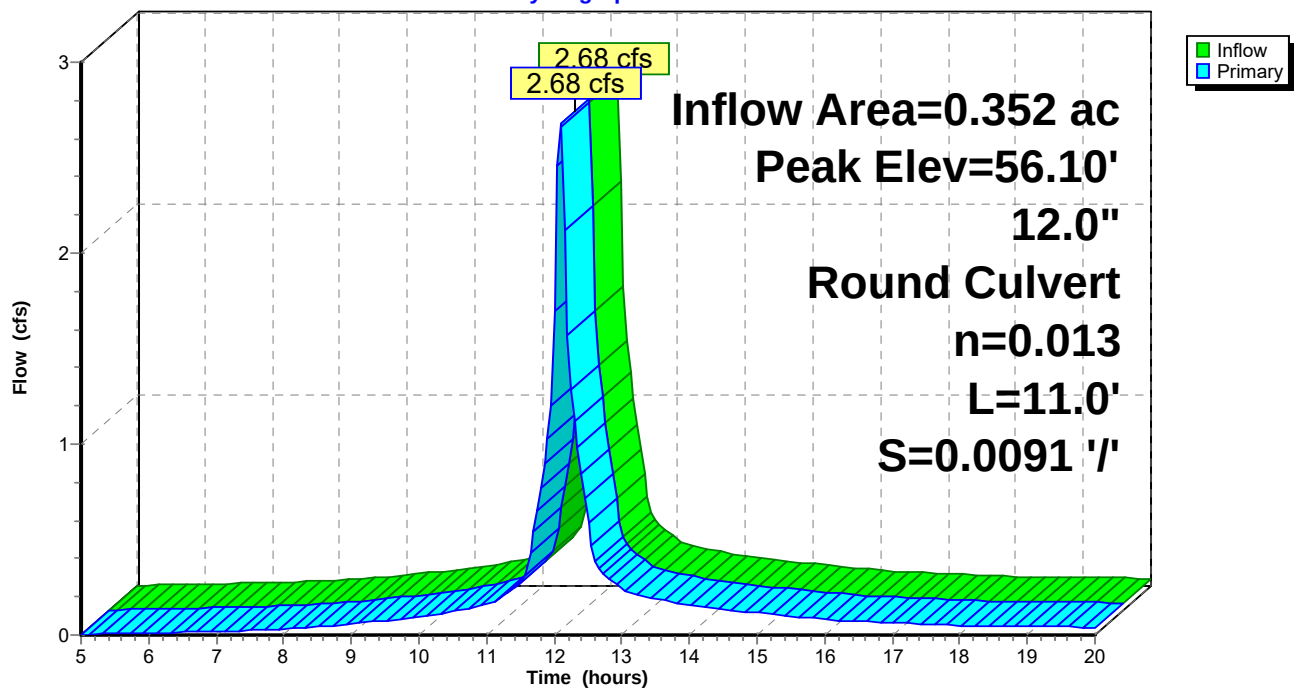
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.10' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.80' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.80' / 54.70' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.62 cfs @ 12.09 hrs HW=56.07' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.62 cfs @ 3.33 fps)

**Pond 46P: CB 48**

Hydrograph



**Summary for Pond 47P: CB 47**

Inflow Area = 0.120 ac, 97.54% Impervious, Inflow Depth > 7.94" for 100-Year event  
 Inflow = 1.03 cfs @ 12.09 hrs, Volume= 0.080 af  
 Outflow = 1.03 cfs @ 12.09 hrs, Volume= 0.080 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.03 cfs @ 12.09 hrs, Volume= 0.080 af  
 Routed to Pond 48P : DMH 33

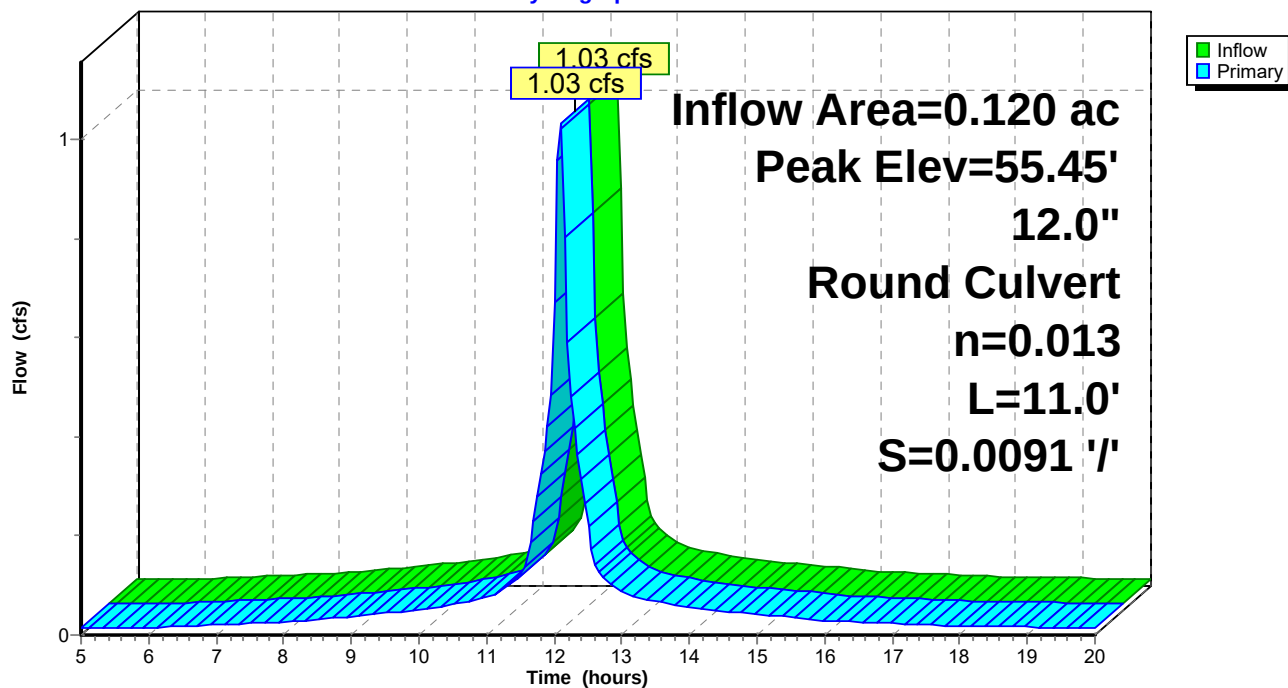
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 55.45' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.80' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.80' / 54.70' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.00 cfs @ 12.09 hrs HW=55.44' (Free Discharge)  
 ↑ **1=Culvert** (Barrel Controls 1.00 cfs @ 2.72 fps)

**Pond 47P: CB 47**

Hydrograph



**Summary for Pond 48P: DMH 33**

Inflow Area = 0.472 ac, 77.45% Impervious, Inflow Depth > 6.87" for 100-Year event  
 Inflow = 3.71 cfs @ 12.09 hrs, Volume= 0.270 af  
 Outflow = 3.71 cfs @ 12.09 hrs, Volume= 0.270 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.71 cfs @ 12.09 hrs, Volume= 0.270 af  
 Routed to Pond 49P : Sub. Inf. 4

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 56.64' @ 12.09 hrs

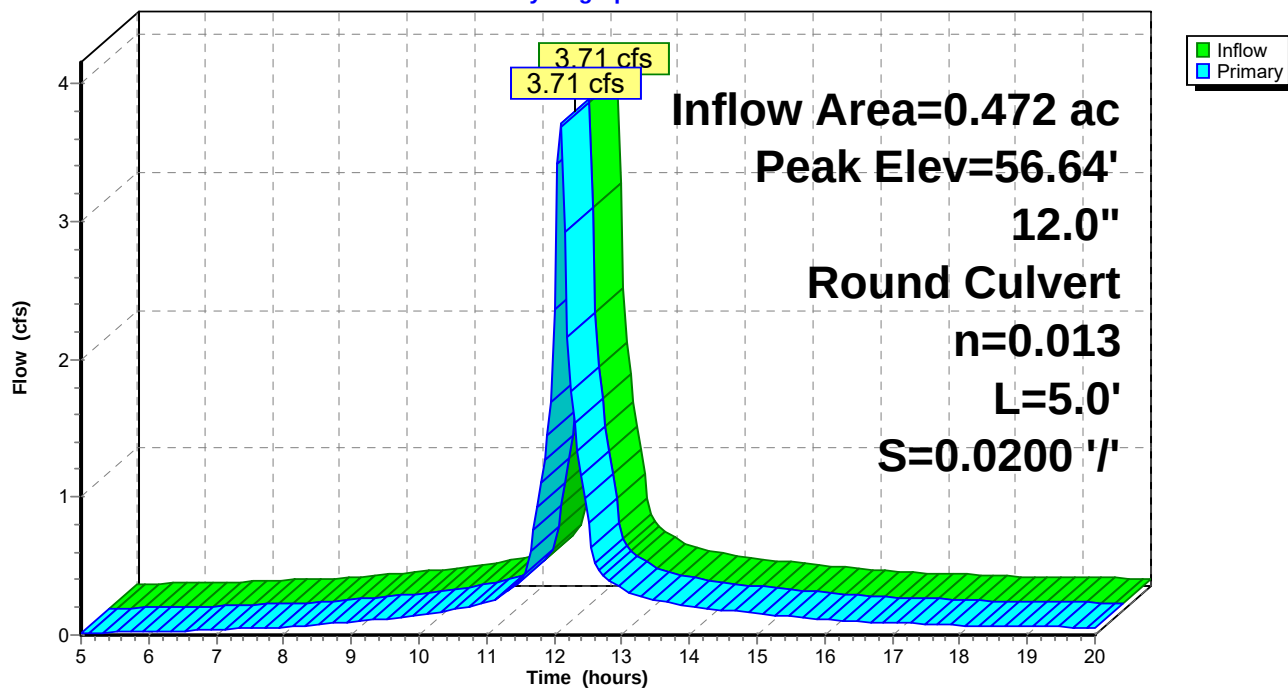
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.60' | <b>12.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0200 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=3.62 cfs @ 12.09 hrs HW=56.57' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 3.62 cfs @ 4.61 fps)

**Pond 48P: DMH 33**

Hydrograph



**Summary for Pond 49P: Sub. Inf. 4**

Inflow Area = 1.242 ac, 70.79% Impervious, Inflow Depth > 7.06" for 100-Year event  
 Inflow = 9.97 cfs @ 12.09 hrs, Volume= 0.731 af  
 Outflow = 10.13 cfs @ 12.09 hrs, Volume= 0.618 af, Atten= 0%, Lag= 0.1 min  
 Discarded = 0.14 cfs @ 12.09 hrs, Volume= 0.128 af  
 Primary = 9.99 cfs @ 12.09 hrs, Volume= 0.490 af  
 Routed to Link 59L : DP 1

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 57.27' @ 12.09 hrs Surf.Area= 0.074 ac Storage= 0.156 af

Plug-Flow detention time= 77.2 min calculated for 0.616 af (84% of inflow)  
 Center-of-Mass det. time= 32.1 min ( 783.1 - 750.9 )

| Volume   | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                        |
|----------|--------|---------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A      | 54.00' | 0.045 af      | <b>55.25'W x 58.58'L x 3.00'H Field A</b><br>0.223 af Overall - 0.111 af Embedded = 0.112 af x 40.0% Voids                                                                                                                                                 |
| #2A      | 54.50' | 0.111 af      | <b>ADS StormTech SC-740 b +Cap x 104 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>104 Chambers in 13 Rows<br>Cap Storage= 2.7 cf x 2 x 13 rows = 69.0 cf |
| 0.156 af |        |               | Total Available Storage                                                                                                                                                                                                                                    |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 54.00' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 50.00'                                                                                                              |
| #2     | Primary   | 54.00' | <b>12.0" Round Culvert</b><br>L= 76.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.00' / 51.50' S= 0.0329 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 56.00' | <b>4.0" Vert. Orifice/Grate X 3.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                             |
| #4     | Device 2  | 56.80' | <b>4.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b><br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32                                                               |
| #5     | Primary   | 54.00' | <b>12.0" Round Culvert</b><br>L= 76.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.00' / 51.00' S= 0.0395 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #6     | Device 5  | 56.80' | <b>4.0' long x 0.5' breadth Broad-Crested Rectangular Weir</b><br>Head (feet) 0.20 0.40 0.60 0.80 1.00<br>Coef. (English) 2.80 2.92 3.08 3.30 3.32                                                               |
| #7     | Device 5  | 56.00' | <b>4.0" Vert. Orifice/Grate X 3.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                             |



**Discarded OutFlow** Max=0.14 cfs @ 12.09 hrs HW=57.26' (Free Discharge)

1=Exfiltration ( Controls 0.14 cfs)

**Primary OutFlow** Max=9.92 cfs @ 12.09 hrs HW=57.26' (Free Discharge)

2=Culvert (Inlet Controls 4.96 cfs @ 6.31 fps)

3=Orifice/Grate (Passes < 1.32 cfs potential flow)

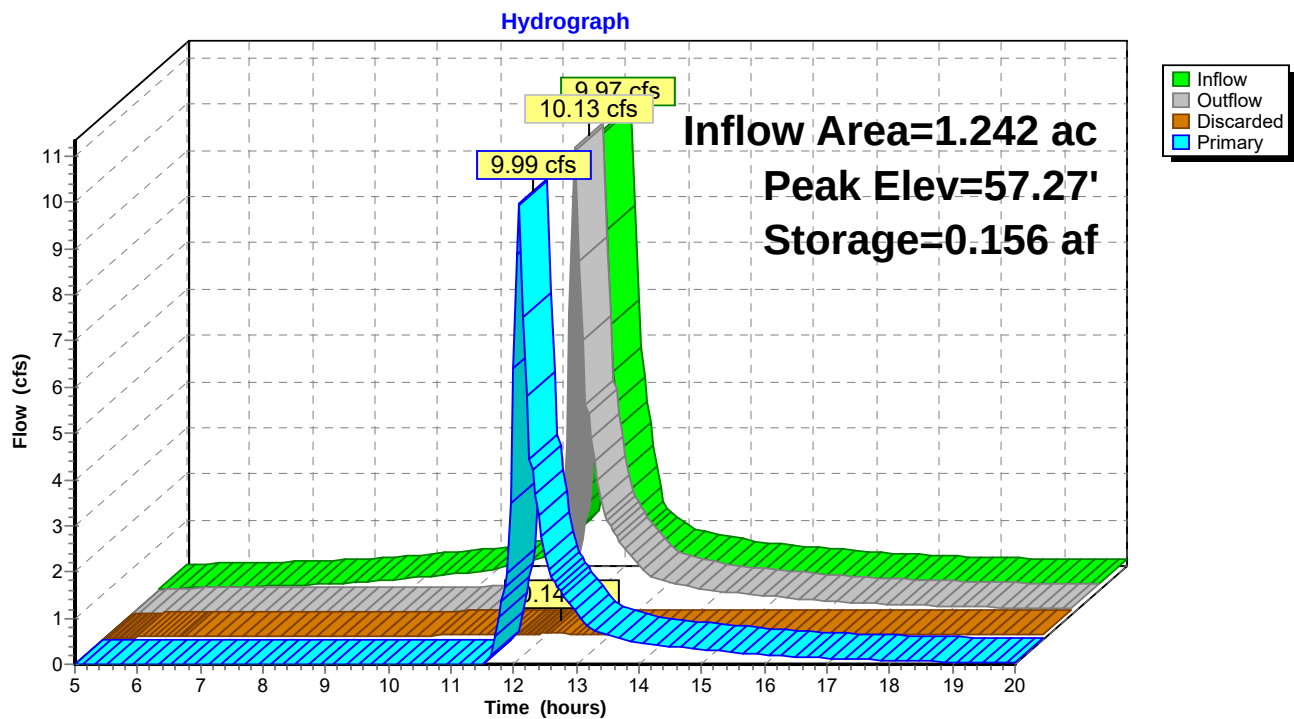
4=Broad-Crested Rectangular Weir (Passes < 3.68 cfs potential flow)

5=Culvert (Inlet Controls 4.96 cfs @ 6.31 fps)

6=Broad-Crested Rectangular Weir (Passes < 3.68 cfs potential flow)

7=Orifice/Grate (Passes < 1.32 cfs potential flow)

### Pond 49P: Sub. Inf. 4



### Summary for Pond 52P: CB 20

Inflow Area = 0.321 ac, 29.26% Impervious, Inflow Depth > 3.28" for 100-Year event  
 Inflow = 1.29 cfs @ 12.10 hrs, Volume= 0.088 af  
 Outflow = 1.29 cfs @ 12.10 hrs, Volume= 0.088 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.29 cfs @ 12.10 hrs, Volume= 0.088 af  
 Routed to Pond 54P : DMH 15

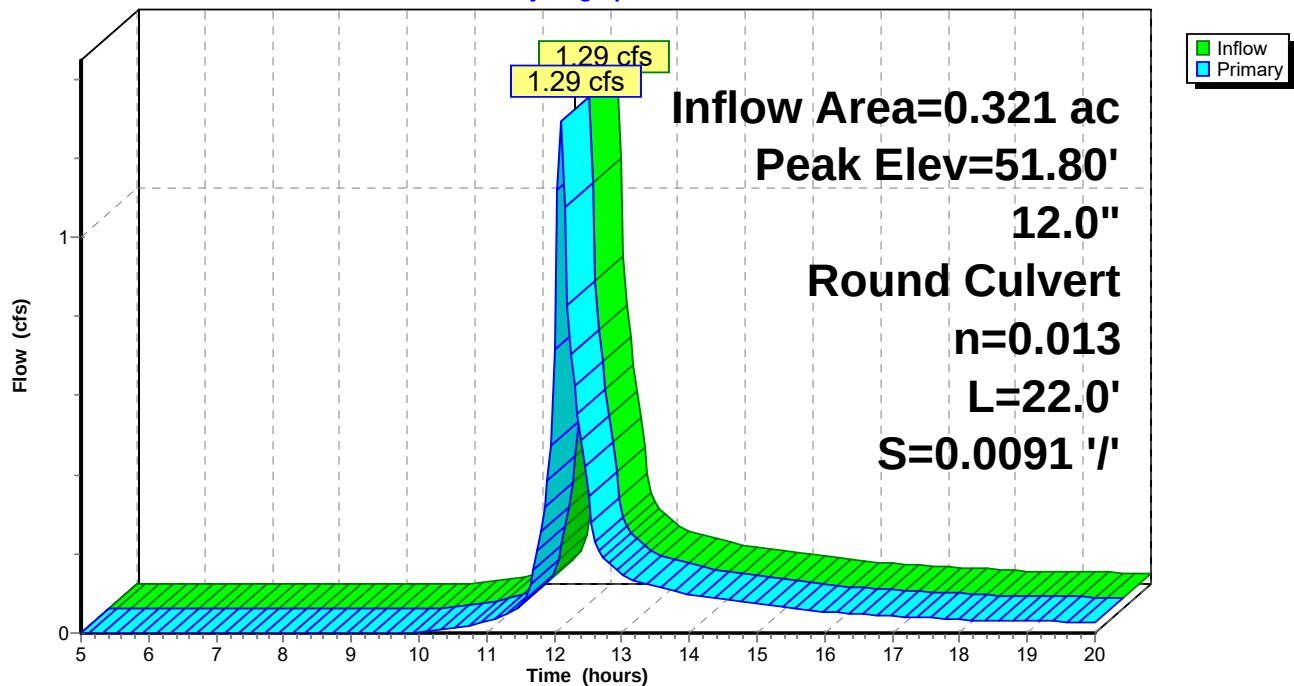
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.80' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.10' | <b>12.0" Round Culvert</b><br>L= 22.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.10' / 50.90' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.28 cfs @ 12.10 hrs HW=51.80' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.28 cfs @ 3.07 fps)

### Pond 52P: CB 20

Hydrograph



**Summary for Pond 53P: CB 21**

Inflow Area = 0.525 ac, 65.45% Impervious, Inflow Depth > 5.90" for 100-Year event  
 Inflow = 3.72 cfs @ 12.09 hrs, Volume= 0.258 af  
 Outflow = 3.72 cfs @ 12.09 hrs, Volume= 0.258 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.72 cfs @ 12.09 hrs, Volume= 0.258 af  
 Routed to Pond 54P : DMH 15

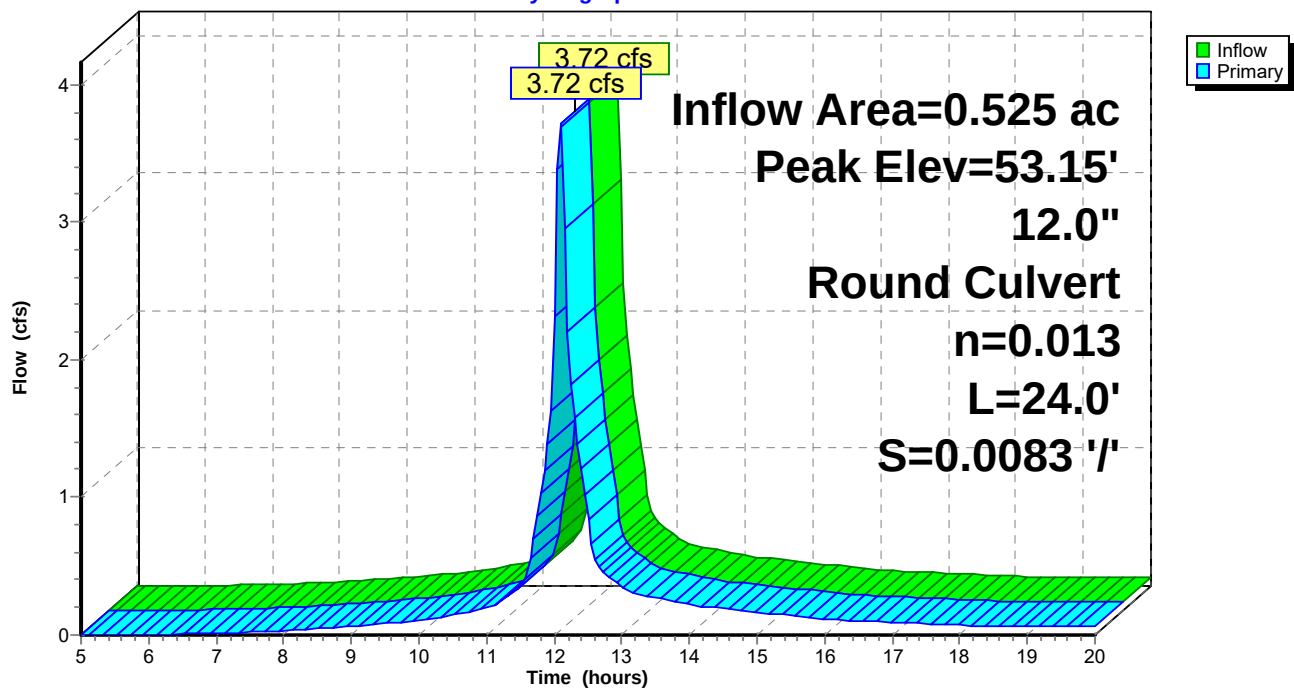
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.15' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.10' | <b>12.0" Round Culvert</b><br>L= 24.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.10' / 50.90' S= 0.0083 ' S= 0.0083 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=3.63 cfs @ 12.09 hrs HW=53.08' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 3.63 cfs @ 4.62 fps)

**Pond 53P: CB 21**

Hydrograph



### Summary for Pond 54P: DMH 15

Inflow Area = 0.846 ac, 51.73% Impervious, Inflow Depth > 4.91" for 100-Year event  
 Inflow = 5.00 cfs @ 12.09 hrs, Volume= 0.346 af  
 Outflow = 5.00 cfs @ 12.09 hrs, Volume= 0.346 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.00 cfs @ 12.09 hrs, Volume= 0.346 af  
 Routed to Pond 55P : DMH 16

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 54.53' @ 12.09 hrs

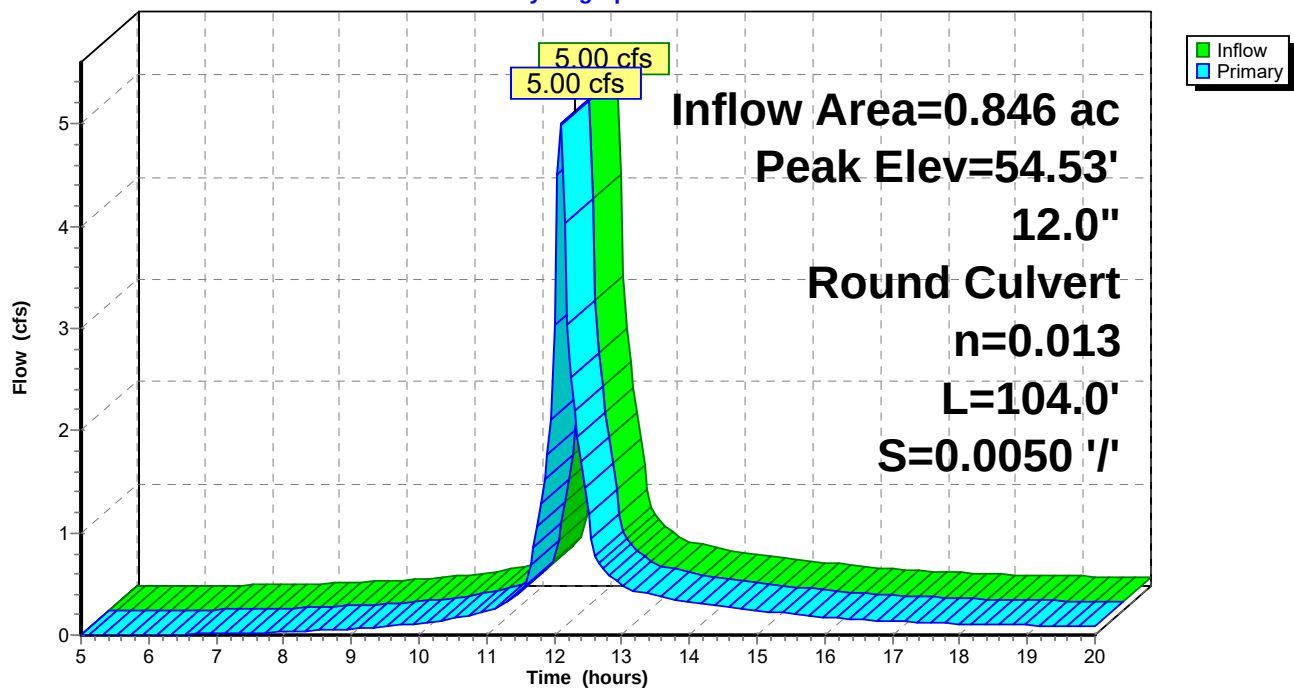
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.80' | <b>12.0" Round Culvert</b><br>L= 104.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.80' / 50.28' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=4.91 cfs @ 12.09 hrs HW=54.41' (Free Discharge)

1=Culvert (Barrel Controls 4.91 cfs @ 6.25 fps)

### Pond 54P: DMH 15

#### Hydrograph



### Summary for Pond 55P: DMH 16

Inflow Area = 0.846 ac, 51.73% Impervious, Inflow Depth > 4.91" for 100-Year event  
 Inflow = 5.00 cfs @ 12.09 hrs, Volume= 0.346 af  
 Outflow = 5.00 cfs @ 12.09 hrs, Volume= 0.346 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.00 cfs @ 12.09 hrs, Volume= 0.346 af  
 Routed to Pond 56P : Inf. Basin 4

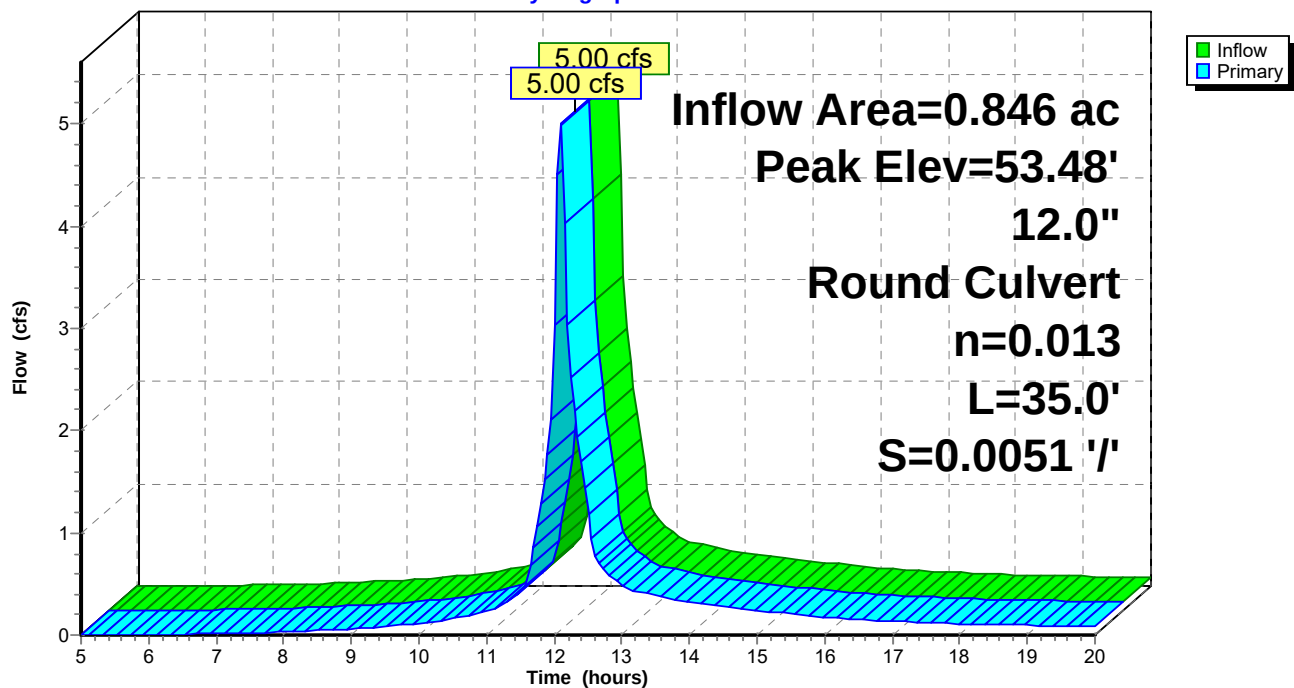
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.48' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.18' | <b>12.0" Round Culvert</b><br>L= 35.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.18' / 50.00' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=4.91 cfs @ 12.09 hrs HW=53.38' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 4.91 cfs @ 6.25 fps)

### Pond 55P: DMH 16

Hydrograph



**Summary for Pond 56P: Inf. Basin 4**

Inflow Area = 1.385 ac, 33.76% Impervious, Inflow Depth > 3.54" for 100-Year event  
 Inflow = 5.32 cfs @ 12.10 hrs, Volume= 0.408 af  
 Outflow = 1.14 cfs @ 12.59 hrs, Volume= 0.408 af, Atten= 79%, Lag= 29.4 min  
 Discarded = 1.14 cfs @ 12.59 hrs, Volume= 0.408 af  
 Secondary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Link 59L : DP 1

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.54' @ 12.59 hrs Surf.Area= 3,392 sf Storage= 5,978 cf

Plug-Flow detention time= 54.7 min calculated for 0.406 af (100% of inflow)  
 Center-of-Mass det. time= 54.0 min ( 845.5 - 791.5 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 50.00' | 11,770 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 50.00               | 985                  | 0                         | 0                         |
| 51.00               | 2,275                | 1,630                     | 1,630                     |
| 52.00               | 2,983                | 2,629                     | 4,259                     |
| 53.00               | 3,742                | 3,363                     | 7,622                     |
| 54.00               | 4,554                | 4,148                     | 11,770                    |

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                                                                                   |
|--------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 50.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 48.00'                                                                                                                                                                              |
| #2     | Secondary | 53.50' | <b>6.0' long x 6.0' breadth Broad-Crested Rectangular Weir</b><br>Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00<br>2.50 3.00 3.50 4.00 4.50 5.00 5.50<br>Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65<br>2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83 |

**Discarded OutFlow** Max=1.14 cfs @ 12.59 hrs HW=52.54' (Free Discharge)

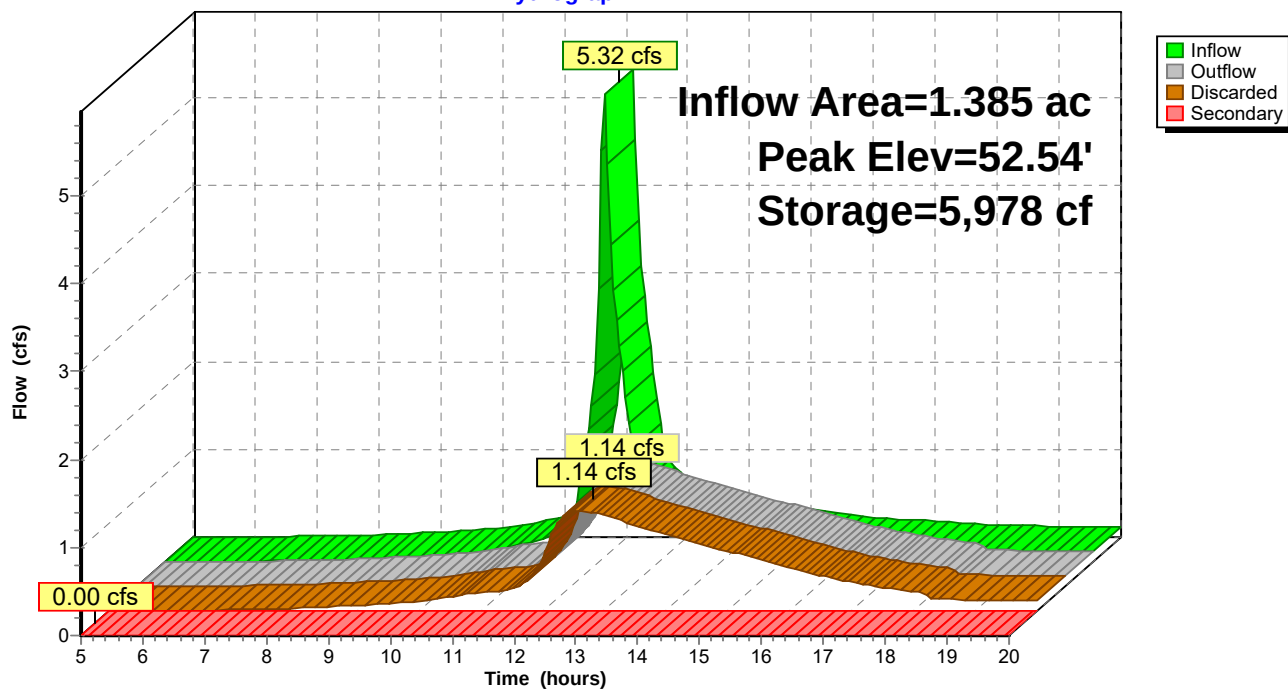
↑**1=Exfiltration** ( Controls 1.14 cfs)

**Secondary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=50.00' (Free Discharge)

↑**2=Broad-Crested Rectangular Weir** ( Controls 0.00 cfs)

# Pond 56P: Inf. Basin 4

Hydrograph



### Summary for Pond 60P: Sub. Det. 1

Inflow Area = 1.994 ac, 68.75% Impervious, Inflow Depth > 7.32" for 100-Year event  
 Inflow = 16.42 cfs @ 12.09 hrs, Volume= 1.217 af  
 Outflow = 11.05 cfs @ 12.18 hrs, Volume= 1.128 af, Atten= 33%, Lag= 5.5 min  
 Primary = 11.05 cfs @ 12.18 hrs, Volume= 1.128 af  
 Routed to Pond 187P : Constructed Wetland 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.46' @ 12.18 hrs Surf.Area= 0.094 ac Storage= 0.201 af

Plug-Flow detention time= 53.7 min calculated for 1.124 af (92% of inflow)  
 Center-of-Mass det. time= 27.7 min ( 774.8 - 747.0 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                      |
|--------|--------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 60.00' | 0.083 af      | <b>39.50'W x 103.30'L x 3.50'H Field A</b><br>0.328 af Overall - 0.119 af Embedded = 0.209 af x 40.0% Voids                                                                                                                                              |
| #2A    | 60.50' | 0.119 af      | <b>ADS StormTech SC-740 b +Cap x 112 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>112 Chambers in 8 Rows<br>Cap Storage= 2.7 cf x 2 x 8 rows = 42.5 cf |
|        |        | 0.203 af      | Total Available Storage                                                                                                                                                                                                                                  |

Storage Group A created with Chamber Wizard

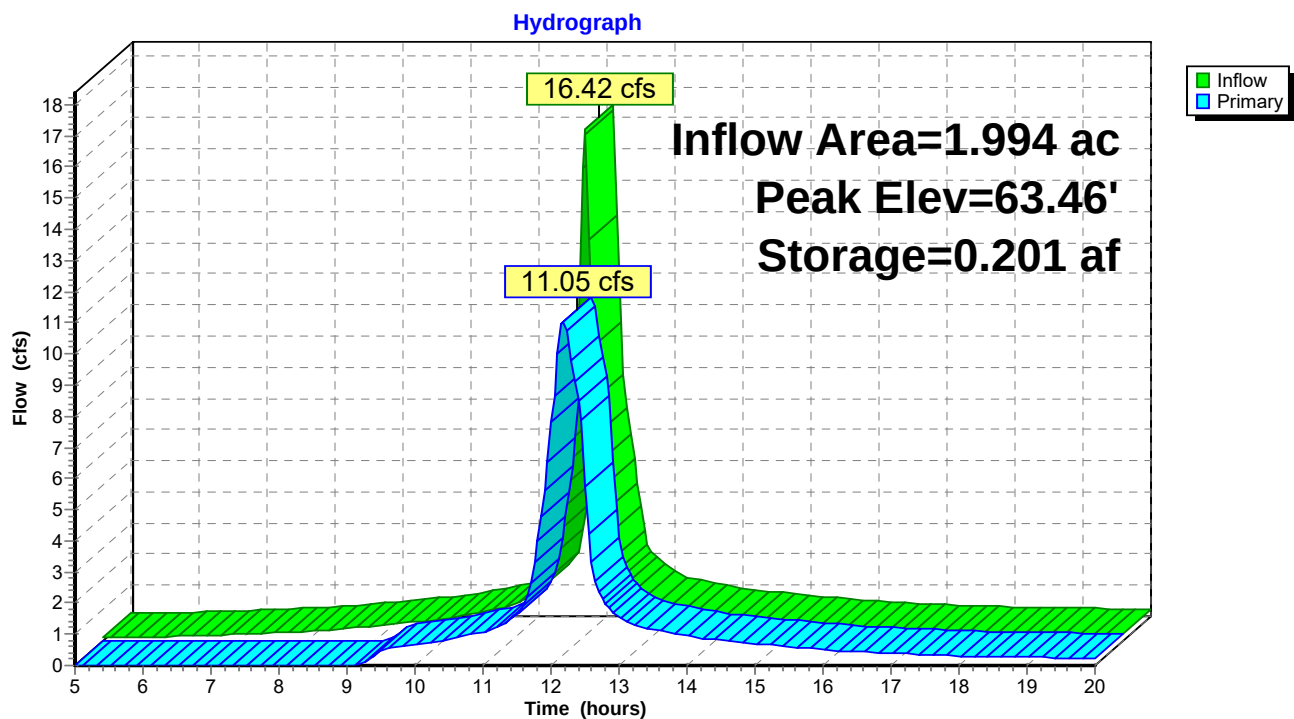
| Device | Routing  | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary  | 60.00' | <b>18.0" Round Culvert</b><br>L= 29.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.00' / 56.00' S= 0.1379 ' S= 0.1379 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |
| #2     | Device 1 | 60.50' | <b>1.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                                |
| #3     | Device 1 | 61.35' | <b>4.0' long Sharp-Crested Rectangular Weir</b> 2 End Contraction(s)                                                                                                                                                      |

**Primary OutFlow** Max=10.98 cfs @ 12.18 hrs HW=63.42' (Free Discharge)

- 1=Culvert (Inlet Controls 10.98 cfs @ 6.22 fps)
- 2=Orifice/Grate (Passes < 0.04 cfs potential flow)
- 3=Sharp-Crested Rectangular Weir (Passes < 35.01 cfs potential flow)



Pond 60P: Sub. Det. 1



### Summary for Pond 61P: CB 8

Inflow Area = 0.117 ac, 57.03% Impervious, Inflow Depth > 5.30" for 100-Year event  
 Inflow = 0.76 cfs @ 12.09 hrs, Volume= 0.052 af  
 Outflow = 0.76 cfs @ 12.09 hrs, Volume= 0.052 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.76 cfs @ 12.09 hrs, Volume= 0.052 af  
 Routed to Pond 171P : DMH 6

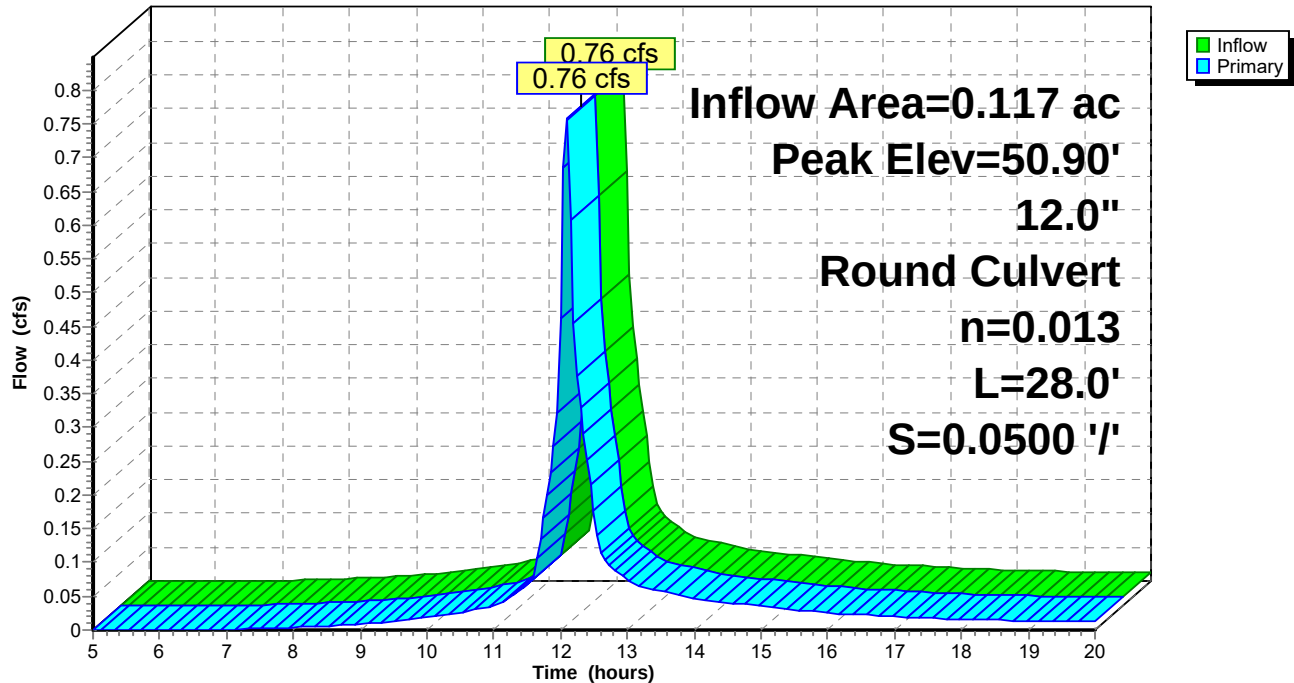
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.90' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.40' | <b>12.0" Round Culvert</b><br>L= 28.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.40' / 49.00' S= 0.0500 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.74 cfs @ 12.09 hrs HW=50.90' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.74 cfs @ 1.90 fps)

### Pond 61P: CB 8

Hydrograph



### Summary for Pond 62P: CB 66

Inflow Area = 0.149 ac, 73.97% Impervious, Inflow Depth > 7.50" for 100-Year event  
 Inflow = 1.24 cfs @ 12.09 hrs, Volume= 0.093 af  
 Outflow = 1.24 cfs @ 12.09 hrs, Volume= 0.093 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.24 cfs @ 12.09 hrs, Volume= 0.093 af  
 Routed to Pond 64P : DMH 47

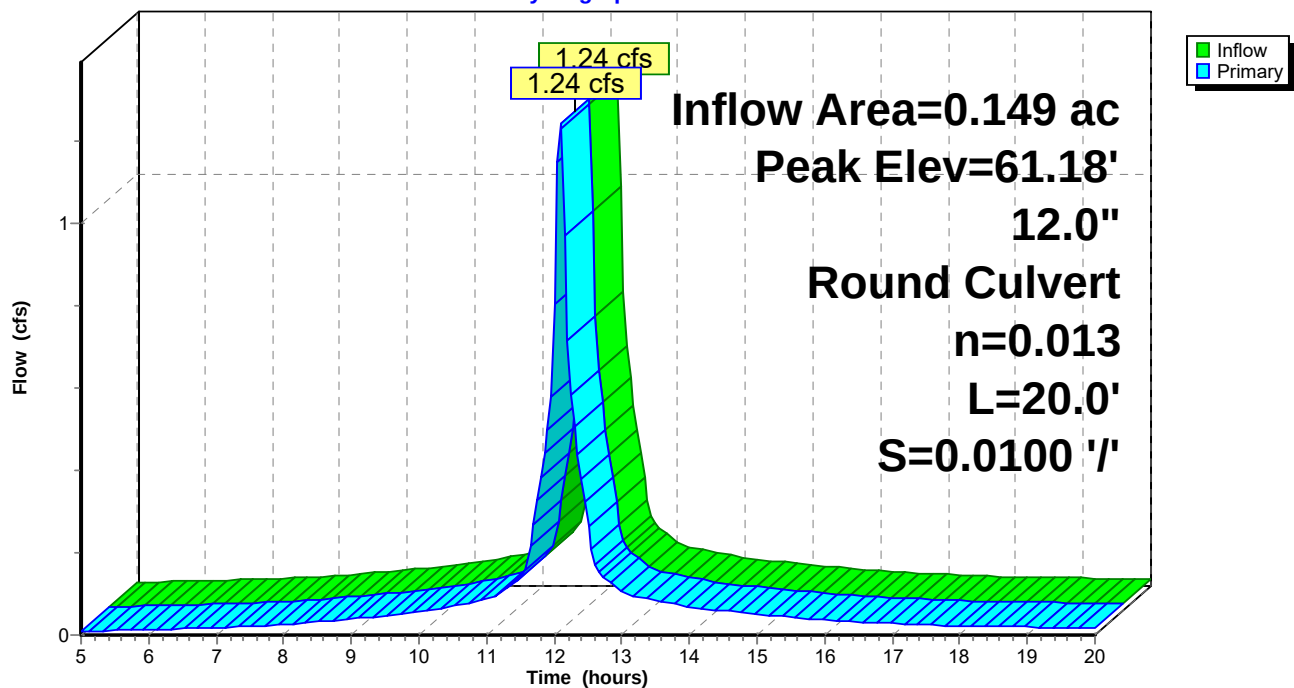
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.18' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.50' | <b>12.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.50' / 60.30' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.21 cfs @ 12.09 hrs HW=61.17' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.21 cfs @ 3.06 fps)

### Pond 62P: CB 66

Hydrograph



## Summary for Pond 63P: CB 67

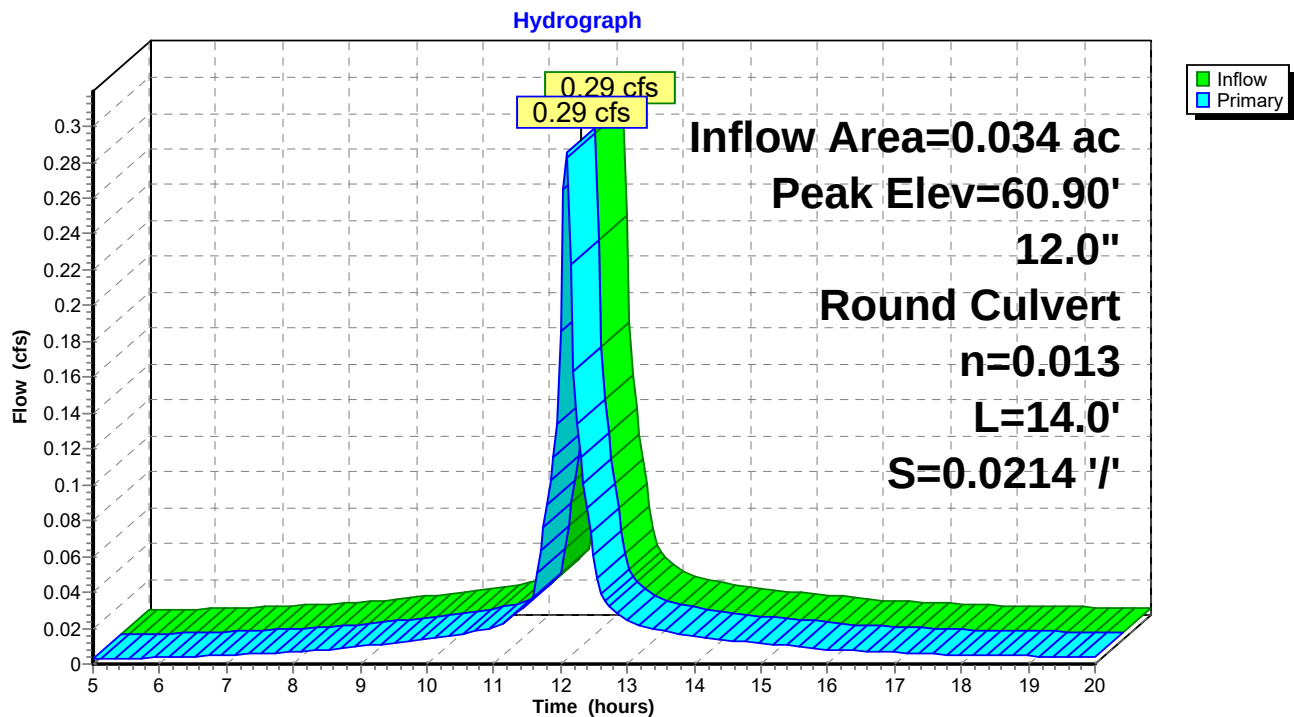
Inflow Area = 0.034 ac, 87.02% Impervious, Inflow Depth > 7.78" for 100-Year event  
 Inflow = 0.29 cfs @ 12.09 hrs, Volume= 0.022 af  
 Outflow = 0.29 cfs @ 12.09 hrs, Volume= 0.022 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.29 cfs @ 12.09 hrs, Volume= 0.022 af  
 Routed to Pond 64P : DMH 47

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 60.90' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.60' | <b>12.0" Round Culvert</b><br>L= 14.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.60' / 60.30' S= 0.0214 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.28 cfs @ 12.09 hrs HW=60.89' (Free Discharge)  
 1=Culvert (Inlet Controls 0.28 cfs @ 1.45 fps)

### Pond 63P: CB 67



### Summary for Pond 64P: DMH 47

Inflow Area = 0.608 ac, 68.77% Impervious, Inflow Depth > 7.37" for 100-Year event  
 Inflow = 5.03 cfs @ 12.09 hrs, Volume= 0.374 af  
 Outflow = 5.03 cfs @ 12.09 hrs, Volume= 0.374 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.03 cfs @ 12.09 hrs, Volume= 0.374 af  
 Routed to Pond 207P : DMH 48

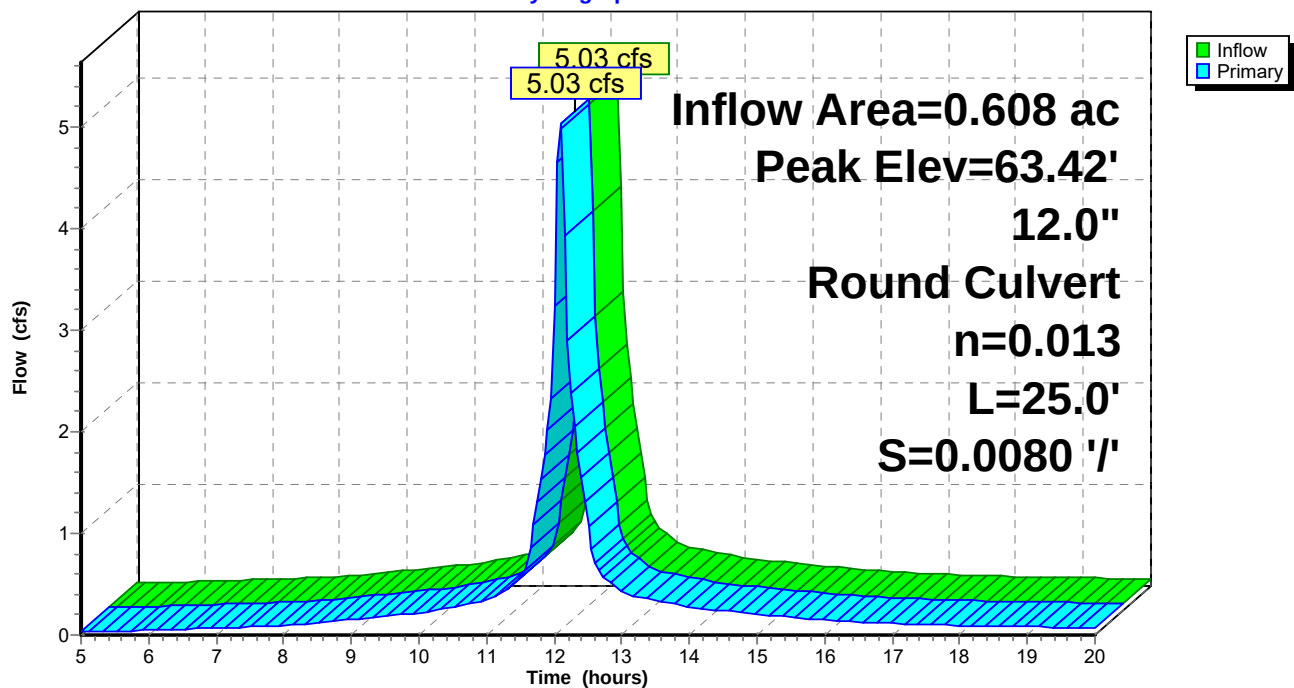
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.42' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.10' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.10' / 59.90' S= 0.0080 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=4.90 cfs @ 12.09 hrs HW=63.29' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 4.90 cfs @ 6.23 fps)

### Pond 64P: DMH 47

Hydrograph



### Summary for Pond 65P: DMH 49

Inflow Area = 0.253 ac, 88.87% Impervious, Inflow Depth > 7.80" for 100-Year event  
 Inflow = 2.15 cfs @ 12.09 hrs, Volume= 0.164 af  
 Outflow = 2.15 cfs @ 12.09 hrs, Volume= 0.164 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.15 cfs @ 12.09 hrs, Volume= 0.164 af  
 Routed to Pond 78P : DMH 50

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 59.71' @ 12.09 hrs

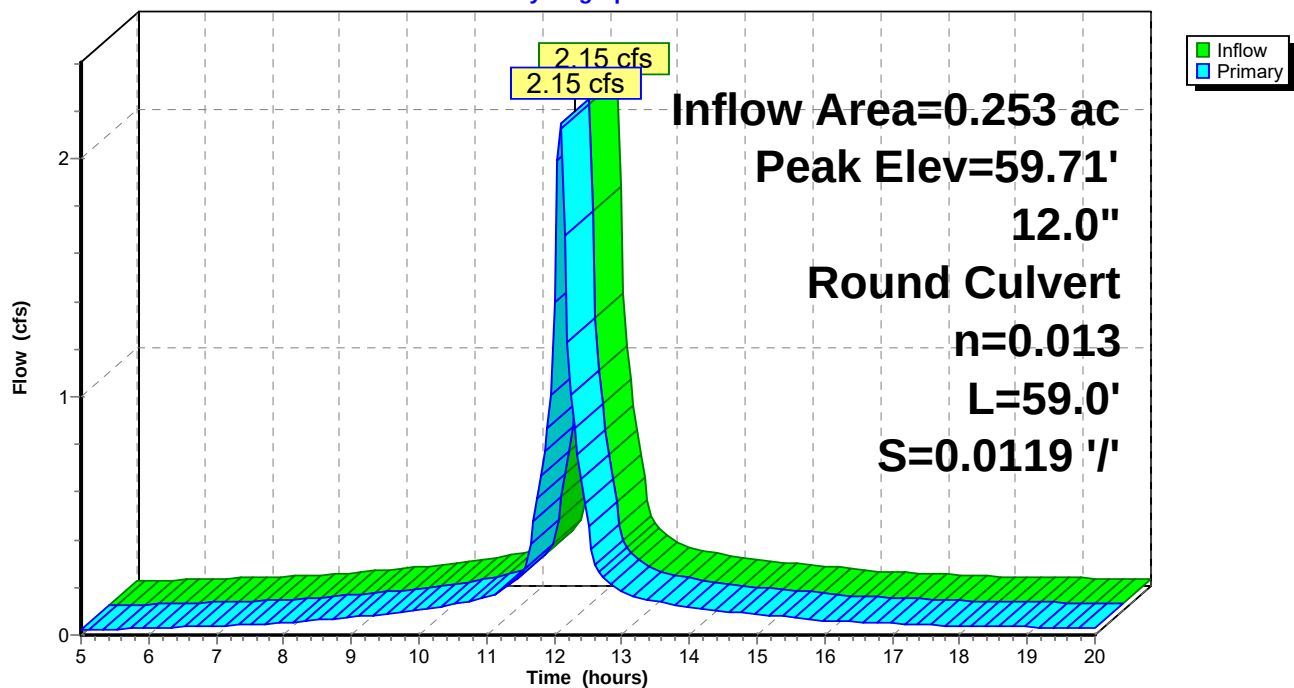
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.70' | <b>12.0" Round Culvert</b><br>L= 59.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.70' / 58.00' S= 0.0119 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.10 cfs @ 12.09 hrs HW=59.69' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 2.10 cfs @ 2.67 fps)

### Pond 65P: DMH 49

#### Hydrograph



**Summary for Pond 66P: CB 68**

Inflow Area = 0.163 ac, 82.69% Impervious, Inflow Depth > 7.69" for 100-Year event  
 Inflow = 1.37 cfs @ 12.09 hrs, Volume= 0.104 af  
 Outflow = 1.37 cfs @ 12.09 hrs, Volume= 0.104 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.37 cfs @ 12.09 hrs, Volume= 0.104 af  
 Routed to Pond 65P : DMH 49

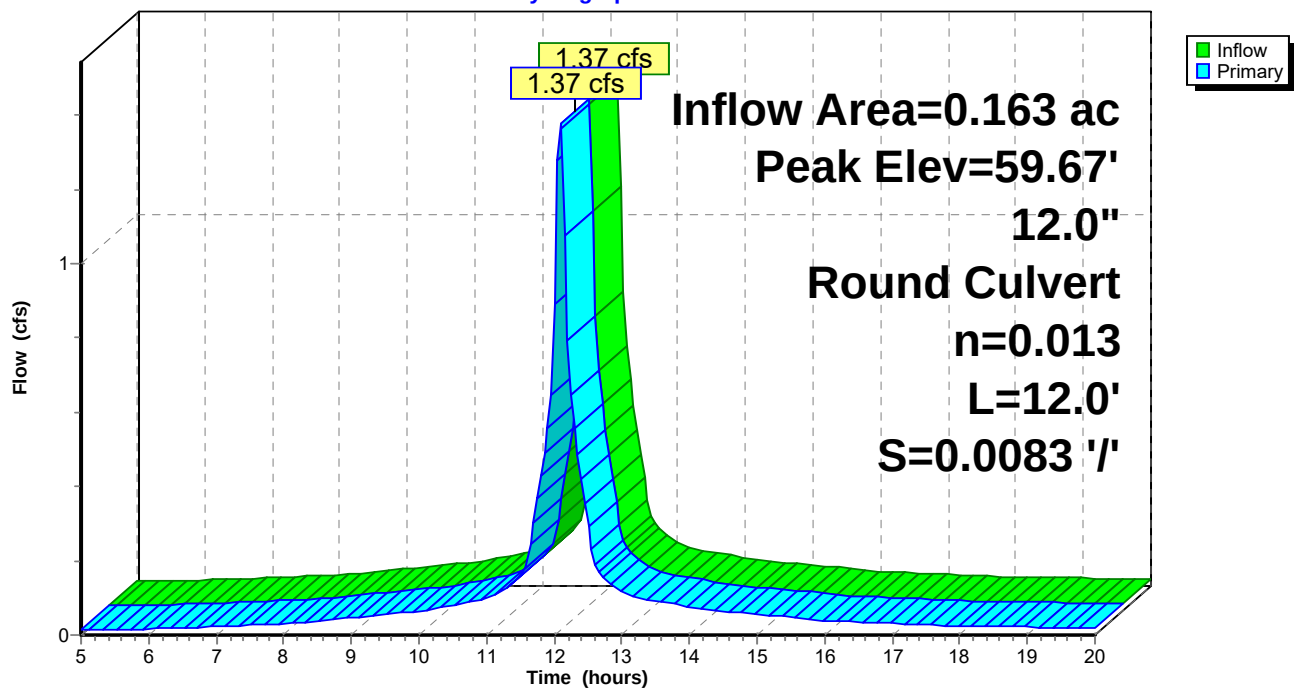
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.67' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.90' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.90' / 58.80' S= 0.0083 ' / ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.34 cfs @ 12.09 hrs HW=59.66' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.34 cfs @ 2.89 fps)

**Pond 66P: CB 68**

Hydrograph



**Summary for Pond 67P: CB 69**

Inflow Area = 0.090 ac, 100.00% Impervious, Inflow Depth > 8.00" for 100-Year event  
 Inflow = 0.77 cfs @ 12.09 hrs, Volume= 0.060 af  
 Outflow = 0.77 cfs @ 12.09 hrs, Volume= 0.060 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.77 cfs @ 12.09 hrs, Volume= 0.060 af  
 Routed to Pond 65P : DMH 49

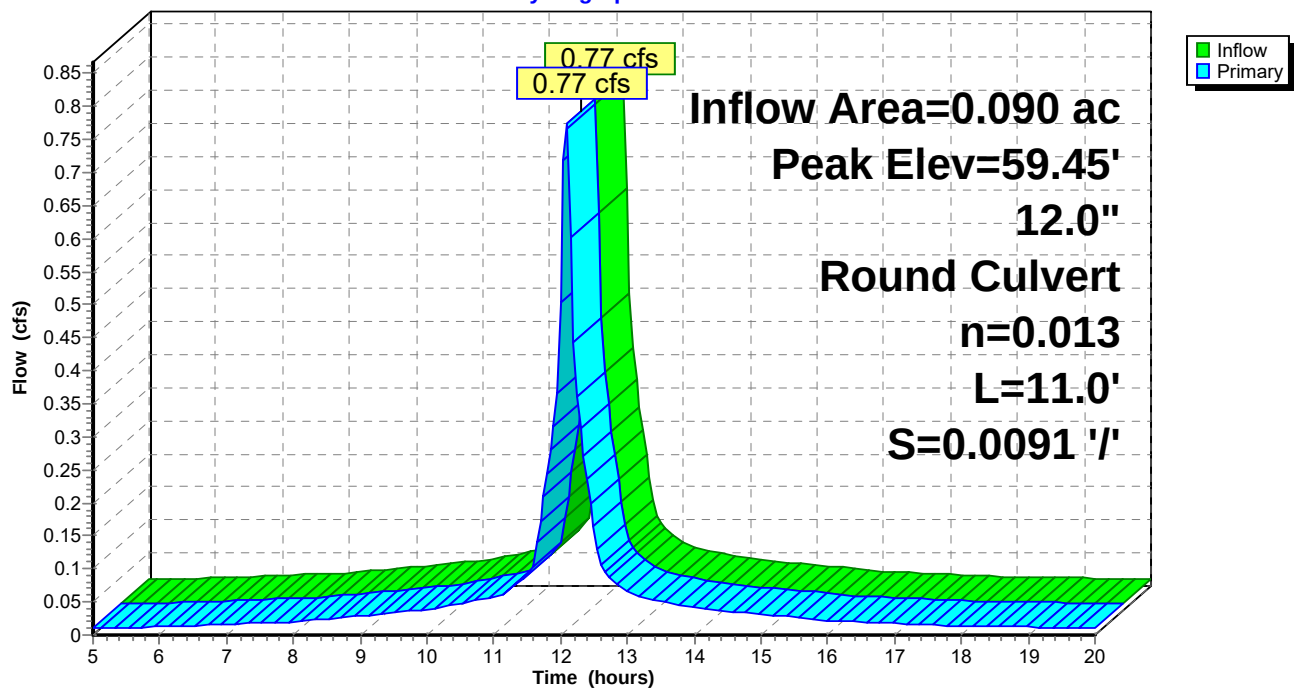
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.45' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.90' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.90' / 58.80' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.75 cfs @ 12.09 hrs HW=59.44' (Free Discharge)  
 1=Culvert (Barrel Controls 0.75 cfs @ 2.55 fps)

**Pond 67P: CB 69**

Hydrograph





### Summary for Pond 68P: Sub. Inf. 5

Inflow Area = 0.608 ac, 68.77% Impervious, Inflow Depth > 7.37" for 100-Year event  
 Inflow = 5.03 cfs @ 12.09 hrs, Volume= 0.374 af  
 Outflow = 4.14 cfs @ 12.14 hrs, Volume= 0.335 af, Atten= 18%, Lag= 3.5 min  
 Discarded = 0.07 cfs @ 12.14 hrs, Volume= 0.072 af  
 Primary = 4.07 cfs @ 12.14 hrs, Volume= 0.263 af  
 Routed to Link 60L : DP 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.65' @ 12.14 hrs Surf.Area= 0.042 ac Storage= 0.054 af

Plug-Flow detention time= 57.1 min calculated for 0.335 af (90% of inflow)  
 Center-of-Mass det. time= 22.3 min ( 768.4 - 746.1 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 59.30' | 0.030 af      | <b>24.83'W x 74.40'L x 2.33'H Field A</b><br>0.099 af Overall - 0.024 af Embedded = 0.075 af x 40.0% Voids                                                                                             |
| #2A    | 59.80' | 0.024 af      | <b>ADS StormTech SC-310 +Cap x 70 Inside #1</b><br>Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf<br>Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap<br>70 Chambers in 7 Rows |
|        |        | 0.054 af      | Total Available Storage                                                                                                                                                                                |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 59.30' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 56.00'                                                                                                              |
| #2     | Primary   | 59.30' | <b>12.0" Round Culvert</b><br>L= 71.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.30' / 57.00' S= 0.0324 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 60.80' | <b>4.0' long Sharp-Crested Vee/Trap Weir</b> Cv= 2.62 (C= 3.28)                                                                                                                                                  |

**Discarded OutFlow** Max=0.07 cfs @ 12.14 hrs HW=61.64' (Free Discharge)

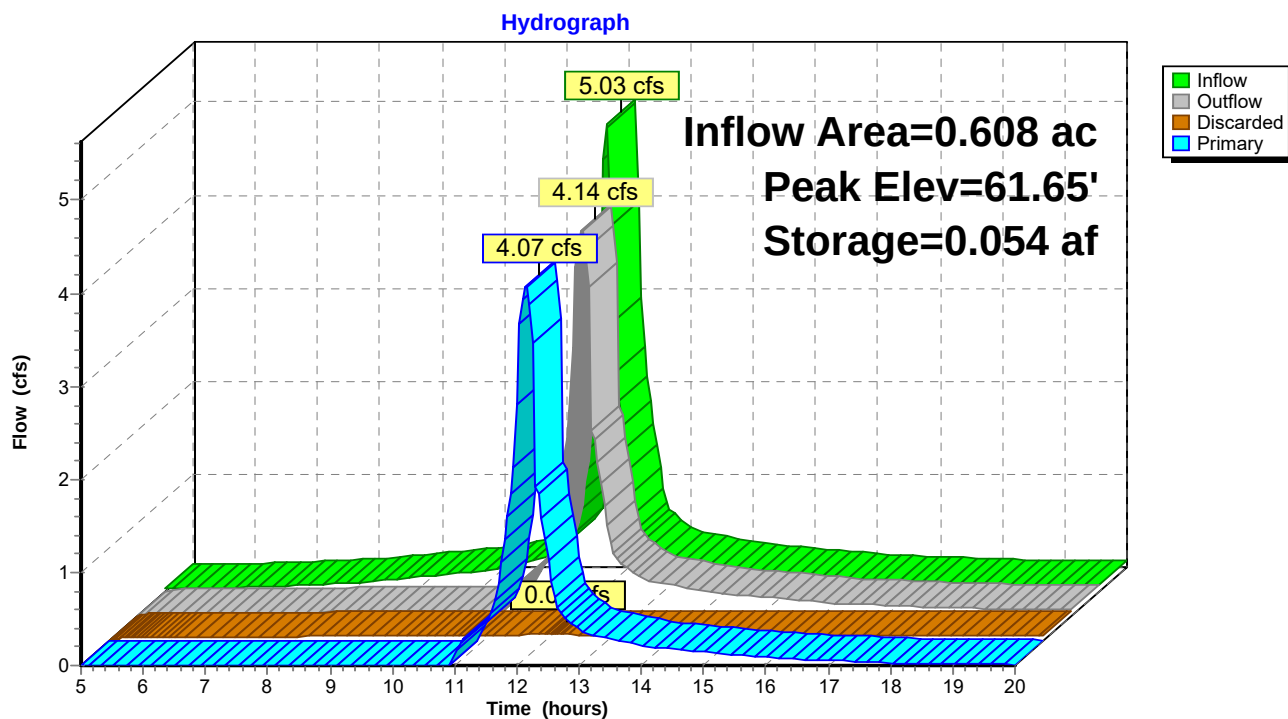
↑ **1=Exfiltration** ( Controls 0.07 cfs)

**Primary OutFlow** Max=4.05 cfs @ 12.14 hrs HW=61.64' (Free Discharge)

↑ **2=Culvert** (Inlet Controls 4.05 cfs @ 5.16 fps)

↑ **3=Sharp-Crested Vee/Trap Weir** (Passes 4.05 cfs of 10.09 cfs potential flow)

**Pond 68P: Sub. Inf. 5**



### Summary for Pond 69P: CB 72

Inflow Area = 0.245 ac, 72.86% Impervious, Inflow Depth > 7.40" for 100-Year event  
 Inflow = 2.03 cfs @ 12.09 hrs, Volume= 0.151 af  
 Outflow = 2.03 cfs @ 12.09 hrs, Volume= 0.151 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.03 cfs @ 12.09 hrs, Volume= 0.151 af  
 Routed to Pond 71P : DMH 54

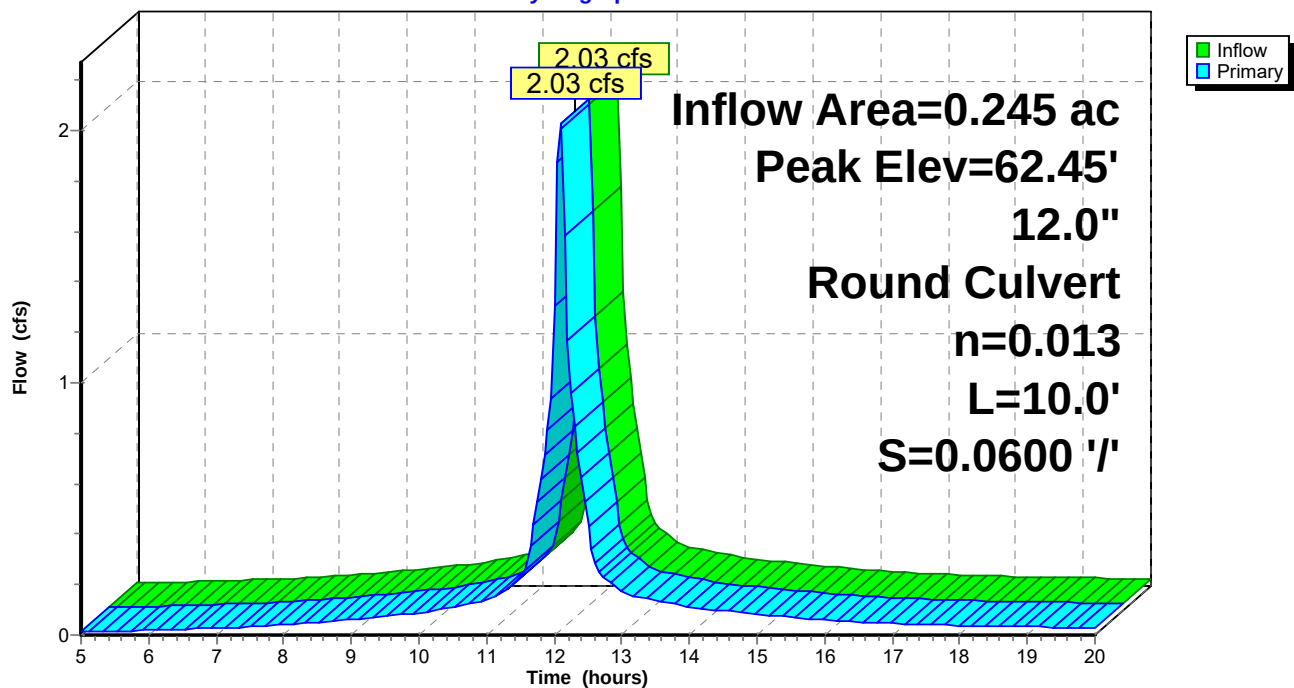
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.45' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.50' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.50' / 60.90' S= 0.0600 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.98 cfs @ 12.09 hrs HW=62.43' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.98 cfs @ 2.60 fps)

### Pond 69P: CB 72

Hydrograph



### Summary for Pond 70P: CB 73

Inflow Area = 0.154 ac, 76.98% Impervious, Inflow Depth > 7.50" for 100-Year event  
 Inflow = 1.28 cfs @ 12.09 hrs, Volume= 0.096 af  
 Outflow = 1.28 cfs @ 12.09 hrs, Volume= 0.096 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.28 cfs @ 12.09 hrs, Volume= 0.096 af  
 Routed to Pond 71P : DMH 54

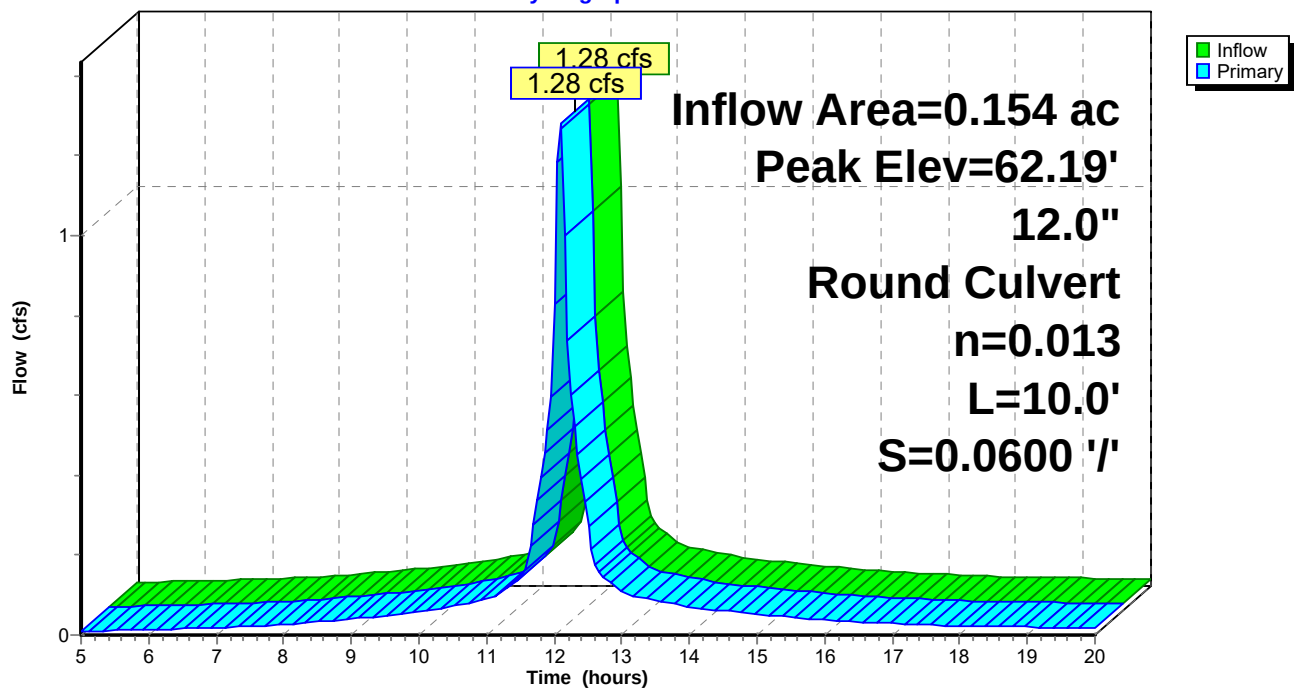
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.19' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.50' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.50' / 60.90' S= 0.0600 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.25 cfs @ 12.09 hrs HW=62.18' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 1.25 cfs @ 2.21 fps)

### Pond 70P: CB 73

#### Hydrograph



**Summary for Pond 71P: DMH 54**

Inflow Area = 0.399 ac, 74.45% Impervious, Inflow Depth > 7.44" for 100-Year event  
 Inflow = 3.31 cfs @ 12.09 hrs, Volume= 0.247 af  
 Outflow = 3.31 cfs @ 12.09 hrs, Volume= 0.247 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.31 cfs @ 12.09 hrs, Volume= 0.247 af  
 Routed to Pond 72P : Sub. Inf. 7

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 62.53' @ 12.09 hrs

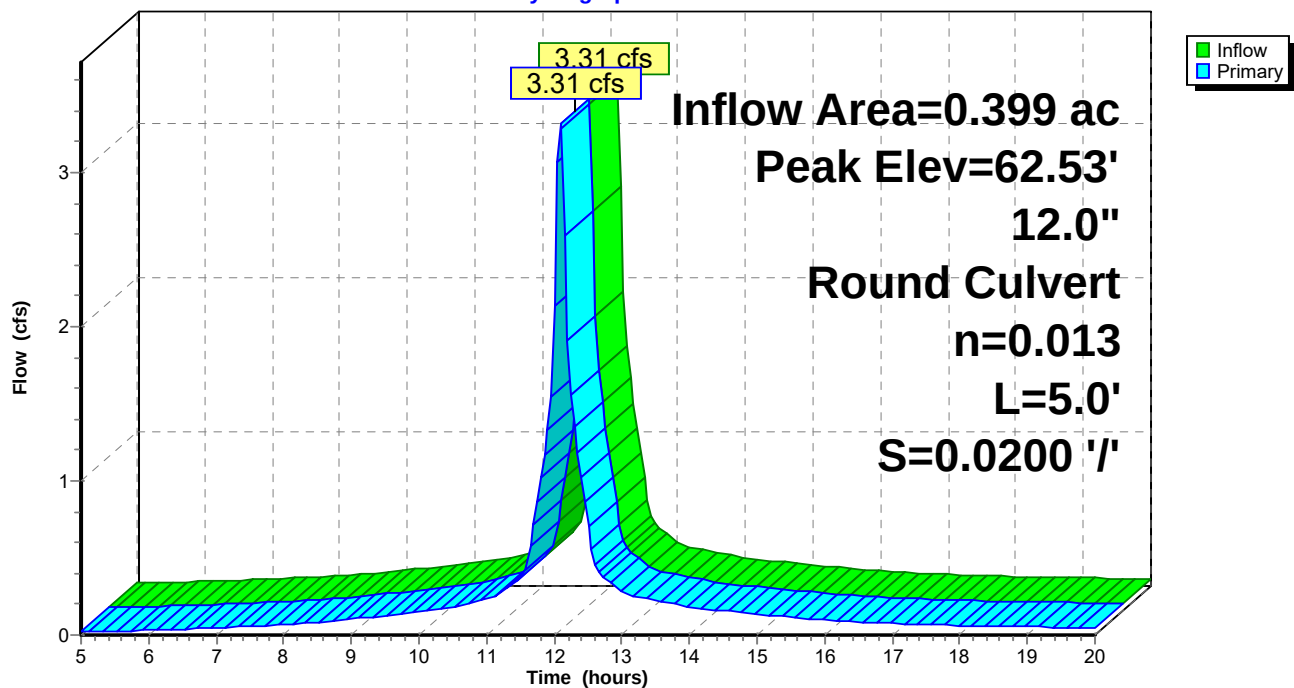
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.80' | <b>12.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.80' / 60.70' S= 0.0200 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=3.23 cfs @ 12.09 hrs HW=62.47' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 3.23 cfs @ 4.11 fps)

**Pond 71P: DMH 54**

Hydrograph



### Summary for Pond 72P: Sub. Inf. 7

Inflow Area = 0.399 ac, 74.45% Impervious, Inflow Depth > 7.44" for 100-Year event  
 Inflow = 3.31 cfs @ 12.09 hrs, Volume= 0.247 af  
 Outflow = 3.28 cfs @ 12.10 hrs, Volume= 0.221 af, Atten= 1%, Lag= 1.0 min  
 Discarded = 0.07 cfs @ 12.10 hrs, Volume= 0.063 af  
 Primary = 3.21 cfs @ 12.10 hrs, Volume= 0.158 af  
 Routed to Link 60L : DP 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.45' @ 12.10 hrs Surf.Area= 0.034 ac Storage= 0.042 af

Plug-Flow detention time= 61.2 min calculated for 0.220 af (89% of inflow)  
 Center-of-Mass det. time= 26.4 min ( 771.4 - 744.9 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                     |
|--------|--------|---------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 60.20' | 0.024 af      | <b>38.17'W x 38.80'L x 2.33'H Field A</b><br>0.079 af Overall - 0.019 af Embedded = 0.061 af x 40.0% Voids                                                                                              |
| #2A    | 60.70' | 0.019 af      | <b>ADS StormTech SC-310 +Cap x 55 Inside #1</b><br>Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf<br>Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap<br>55 Chambers in 11 Rows |
|        |        | 0.043 af      | Total Available Storage                                                                                                                                                                                 |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 60.20' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 58.10'                                                                                                              |
| #2     | Primary   | 60.20' | <b>12.0" Round Culvert</b><br>L= 32.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.20' / 57.00' S= 0.1000 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 61.50' | <b>6.0" Vert. Orifice/Grate X 2.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                             |
| #4     | Device 2  | 62.20' | <b>4.0' long Sharp-Crested Vee/Trap Weir</b> Cv= 2.62 (C= 3.28)                                                                                                                                                  |

**Discarded OutFlow** Max=0.07 cfs @ 12.10 hrs HW=62.45' (Free Discharge)

↑ **1=Exfiltration** ( Controls 0.07 cfs)

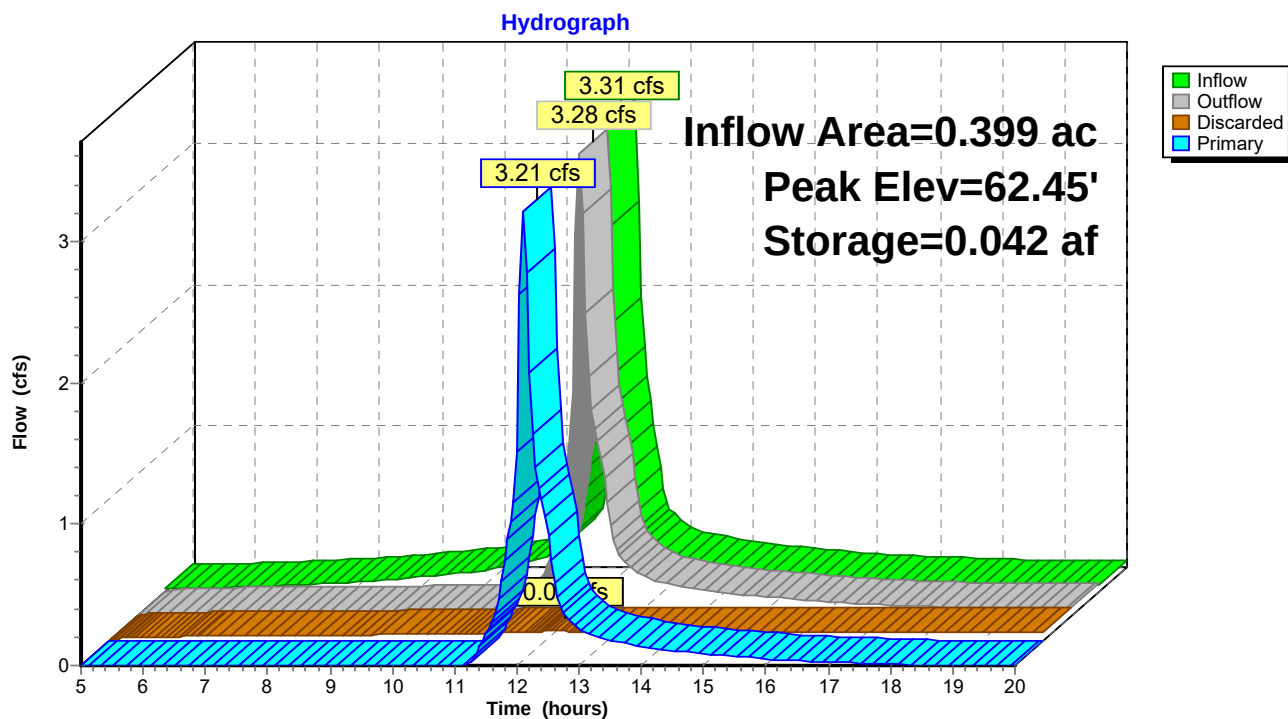
**Primary OutFlow** Max=3.17 cfs @ 12.10 hrs HW=62.45' (Free Discharge)

↑ **2=Culvert** (Passes 3.17 cfs of 3.94 cfs potential flow)

↑ **3=Orifice/Grate** (Orifice Controls 1.58 cfs @ 4.02 fps)

↑ **4=Sharp-Crested Vee/Trap Weir** (Weir Controls 1.60 cfs @ 1.62 fps)

# Pond 72P: Sub. Inf. 7



**Summary for Pond 73P: CB 64**

Inflow Area = 0.252 ac, 65.83% Impervious, Inflow Depth > 7.29" for 100-Year event  
 Inflow = 2.07 cfs @ 12.09 hrs, Volume= 0.153 af  
 Outflow = 2.07 cfs @ 12.09 hrs, Volume= 0.153 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.07 cfs @ 12.09 hrs, Volume= 0.153 af  
 Routed to Pond 75P : DMH 46

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 62.07' @ 12.09 hrs

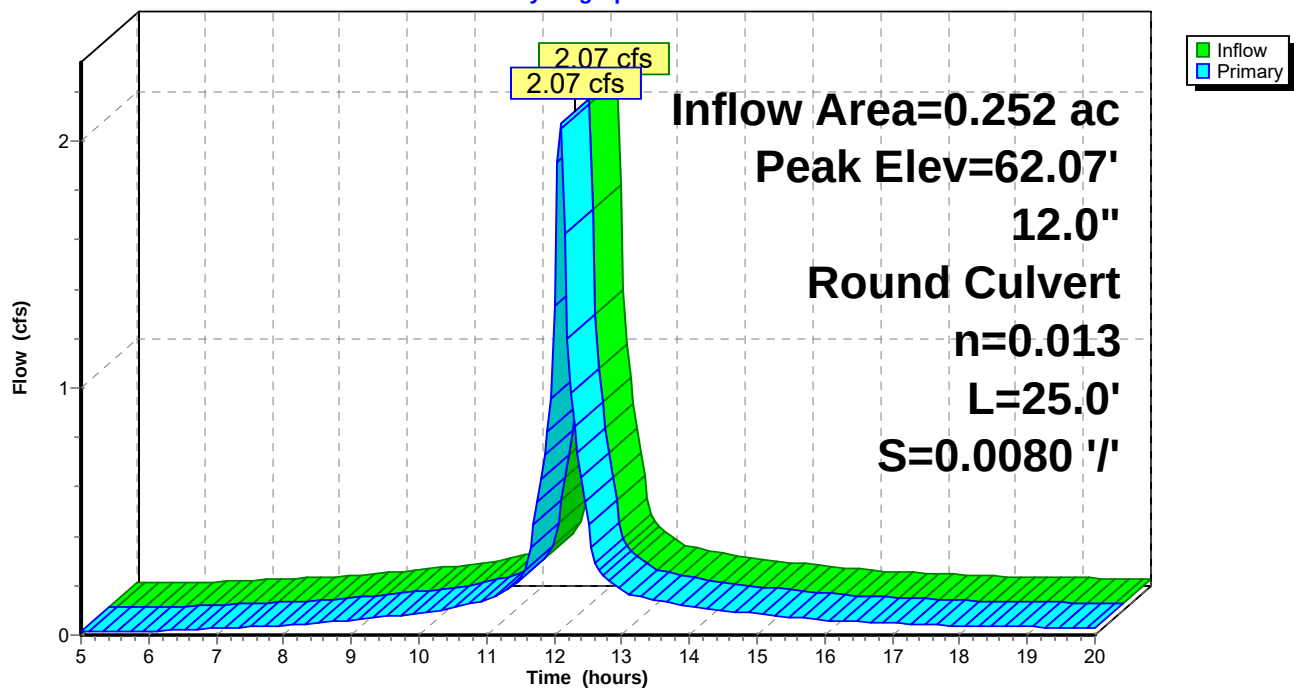
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.10' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.10' / 60.90' S= 0.0080 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.02 cfs @ 12.09 hrs HW=62.06' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 2.02 cfs @ 3.35 fps)

**Pond 73P: CB 64**

Hydrograph





**Summary for Pond 74P: CB 65**

Inflow Area = 0.174 ac, 65.05% Impervious, Inflow Depth > 7.29" for 100-Year event  
 Inflow = 1.43 cfs @ 12.09 hrs, Volume= 0.106 af  
 Outflow = 1.43 cfs @ 12.09 hrs, Volume= 0.106 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.43 cfs @ 12.09 hrs, Volume= 0.106 af  
 Routed to Pond 75P : DMH 46

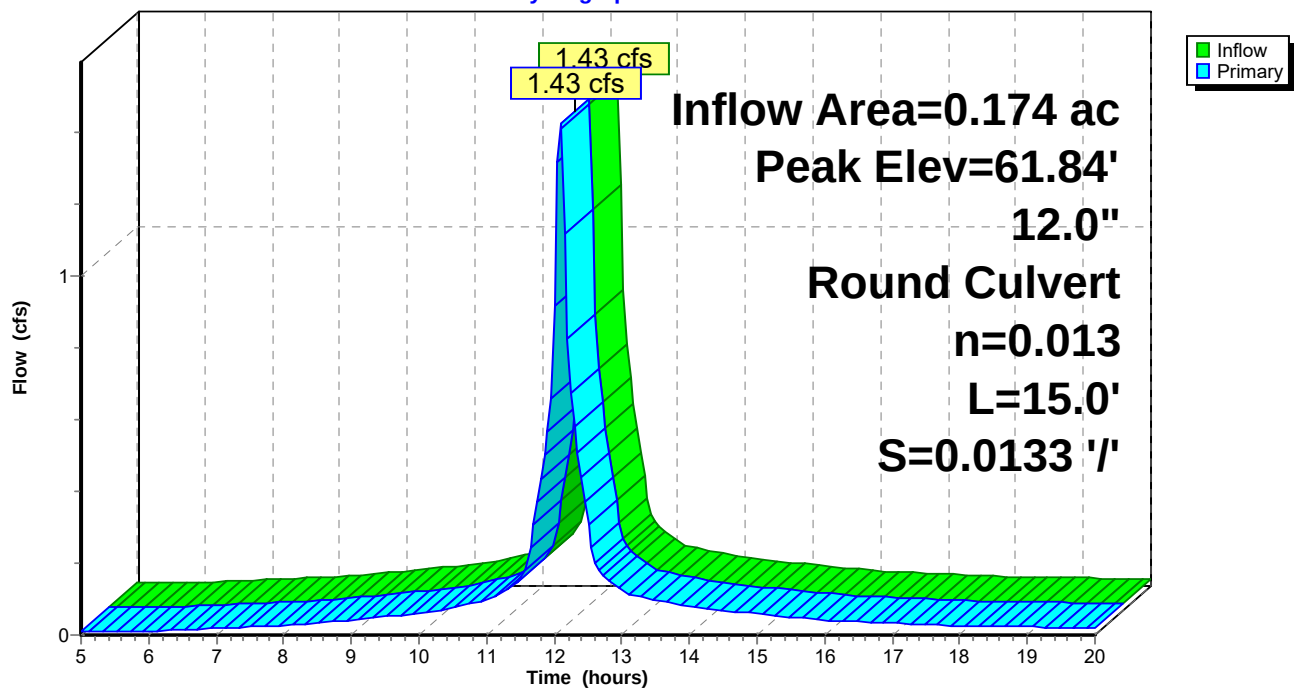
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.84' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.10' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.10' / 60.90' S= 0.0133 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.39 cfs @ 12.09 hrs HW=61.82' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.39 cfs @ 2.29 fps)

**Pond 74P: CB 65**

Hydrograph



**Summary for Pond 75P: DMH 46**

Inflow Area = 0.426 ac, 65.51% Impervious, Inflow Depth > 7.29" for 100-Year event  
 Inflow = 3.50 cfs @ 12.09 hrs, Volume= 0.259 af  
 Outflow = 3.50 cfs @ 12.09 hrs, Volume= 0.259 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.50 cfs @ 12.09 hrs, Volume= 0.259 af  
 Routed to Pond 64P : DMH 47

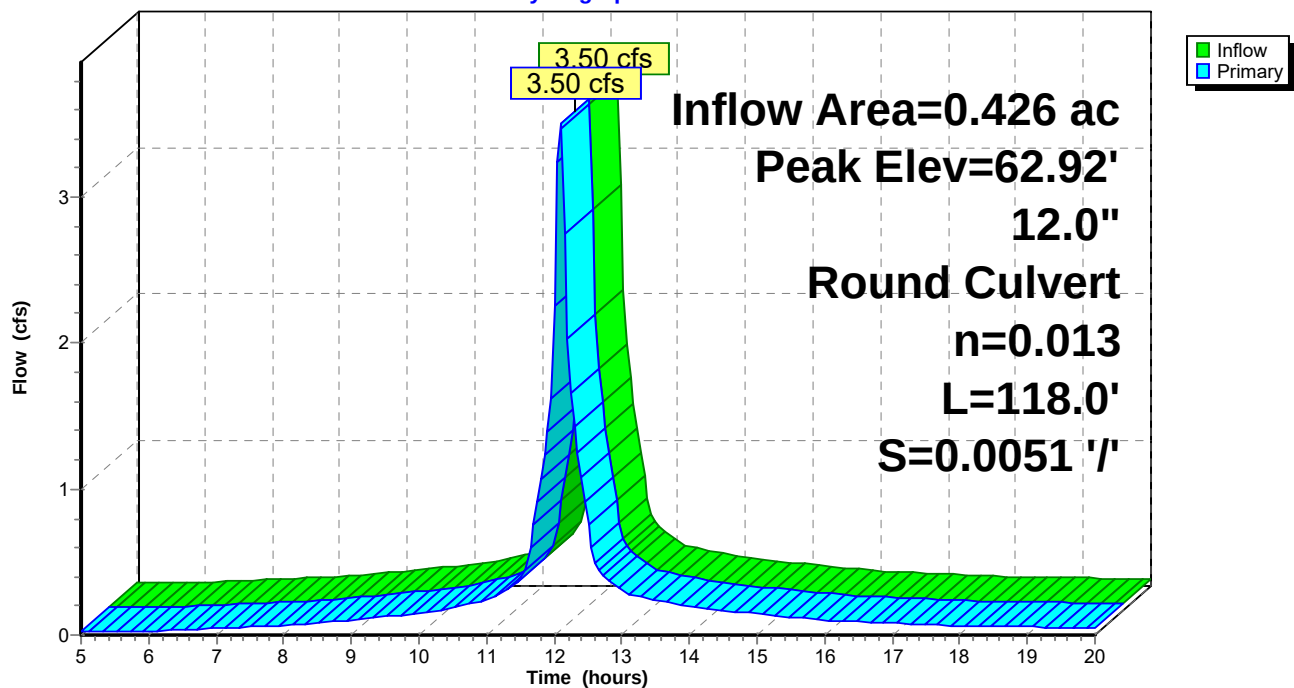
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.92' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.80' | <b>12.0" Round Culvert</b><br>L= 118.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.80' / 60.20' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=3.41 cfs @ 12.09 hrs HW=62.84' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 3.41 cfs @ 4.34 fps)

**Pond 75P: DMH 46**

Hydrograph



### Summary for Pond 76P: CB 70

Inflow Area = 0.189 ac, 71.07% Impervious, Inflow Depth > 7.40" for 100-Year event  
 Inflow = 1.56 cfs @ 12.09 hrs, Volume= 0.116 af  
 Outflow = 1.56 cfs @ 12.09 hrs, Volume= 0.116 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.56 cfs @ 12.09 hrs, Volume= 0.116 af  
 Routed to Pond 78P : DMH 50

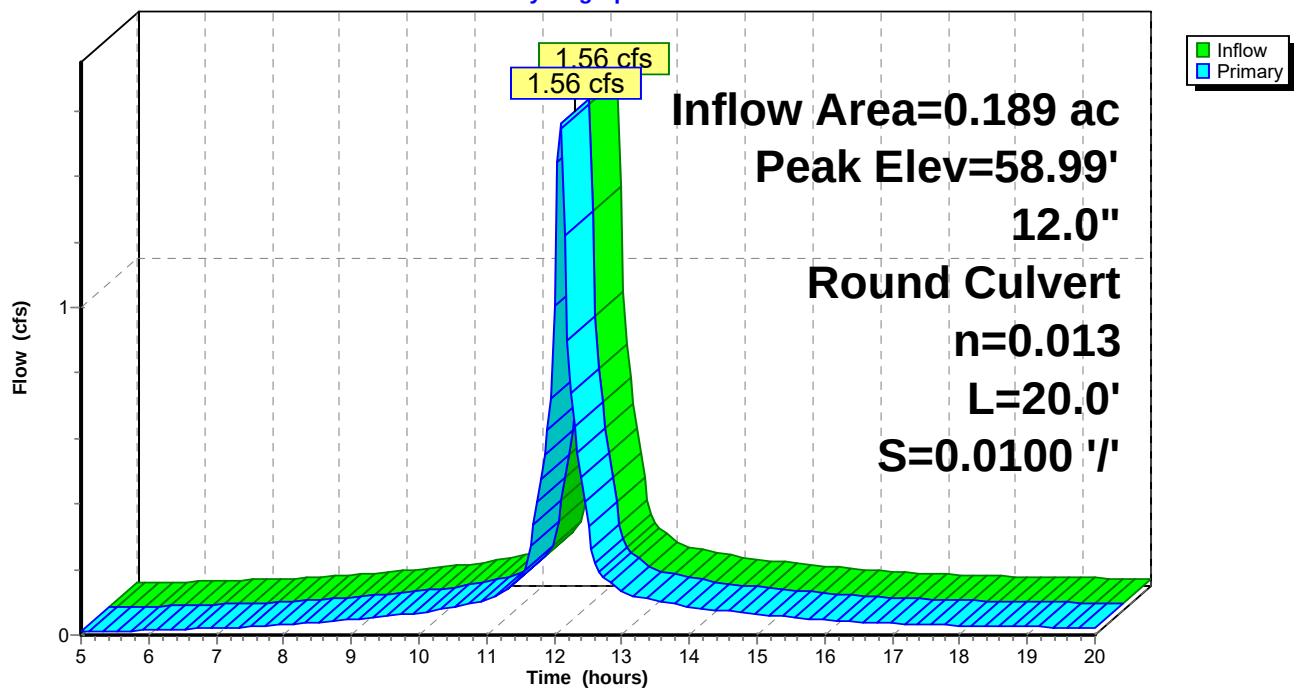
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.99' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.20' | <b>12.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.20' / 58.00' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.52 cfs @ 12.09 hrs HW=58.98' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.52 cfs @ 3.21 fps)

### Pond 76P: CB 70

Hydrograph



### Summary for Pond 77P: CB 71

Inflow Area = 0.098 ac, 95.31% Impervious, Inflow Depth > 7.78" for 100-Year event  
 Inflow = 0.83 cfs @ 12.09 hrs, Volume= 0.064 af  
 Outflow = 0.83 cfs @ 12.09 hrs, Volume= 0.064 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.83 cfs @ 12.09 hrs, Volume= 0.064 af  
 Routed to Pond 78P : DMH 50

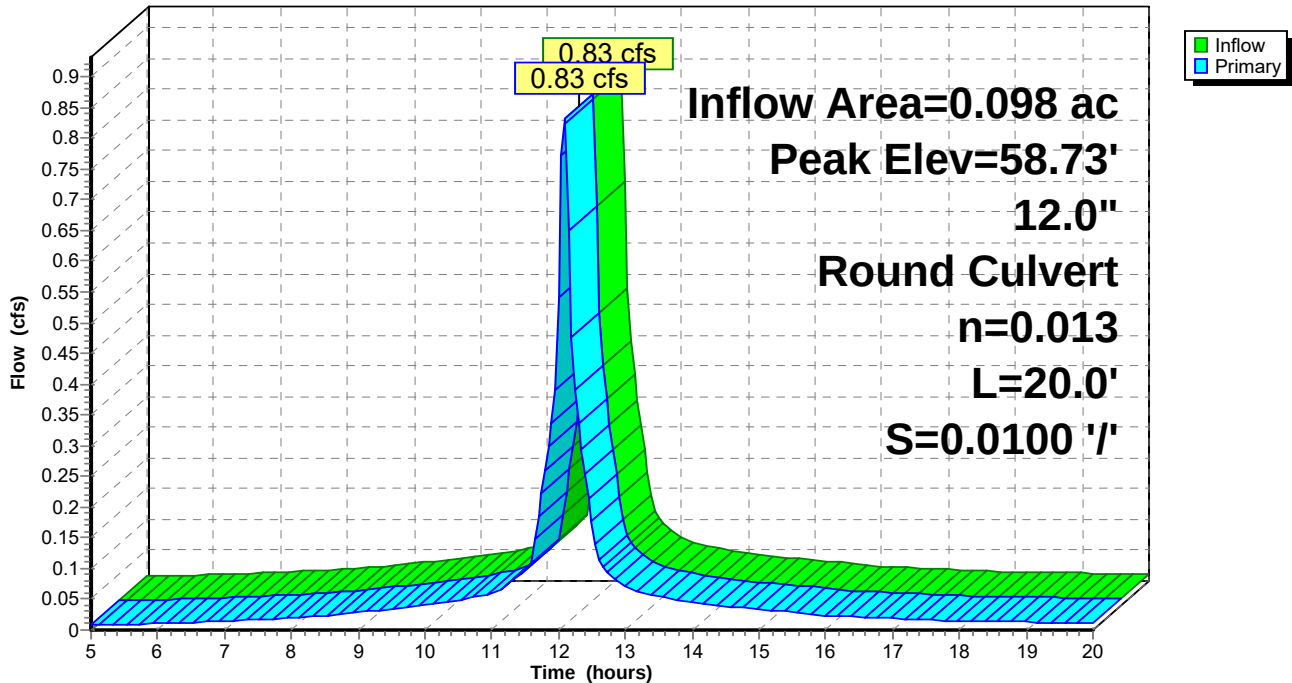
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.73' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.20' | <b>12.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.20' / 58.00' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.81 cfs @ 12.09 hrs HW=58.72' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.81 cfs @ 2.82 fps)

### Pond 77P: CB 71

Hydrograph



**Summary for Pond 78P: DMH 50**

Inflow Area = 0.540 ac, 83.81% Impervious, Inflow Depth > 7.66" for 100-Year event  
 Inflow = 4.54 cfs @ 12.09 hrs, Volume= 0.344 af  
 Outflow = 4.54 cfs @ 12.09 hrs, Volume= 0.344 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.54 cfs @ 12.09 hrs, Volume= 0.344 af  
 Routed to Pond 79P : DMH 51

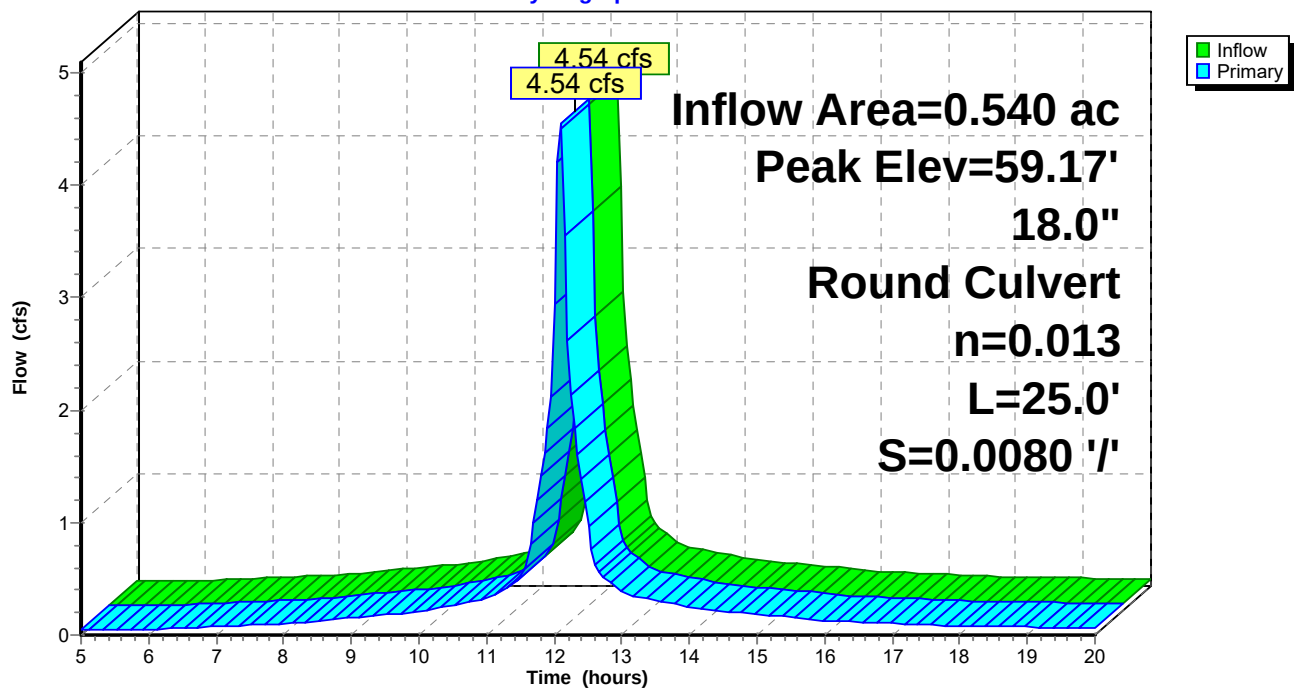
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 59.17' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.90' | <b>18.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.90' / 57.70' S= 0.0080 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=4.42 cfs @ 12.09 hrs HW=59.15' (Free Discharge)

1=Culvert (Barrel Controls 4.42 cfs @ 3.80 fps)

**Pond 78P: DMH 50****Hydrograph**

**Summary for Pond 79P: DMH 51**

Inflow Area = 0.688 ac, 87.30% Impervious, Inflow Depth > 7.73" for 100-Year event  
 Inflow = 5.82 cfs @ 12.09 hrs, Volume= 0.443 af  
 Outflow = 5.82 cfs @ 12.09 hrs, Volume= 0.443 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.82 cfs @ 12.09 hrs, Volume= 0.443 af  
 Routed to Pond 80P : DMH 52

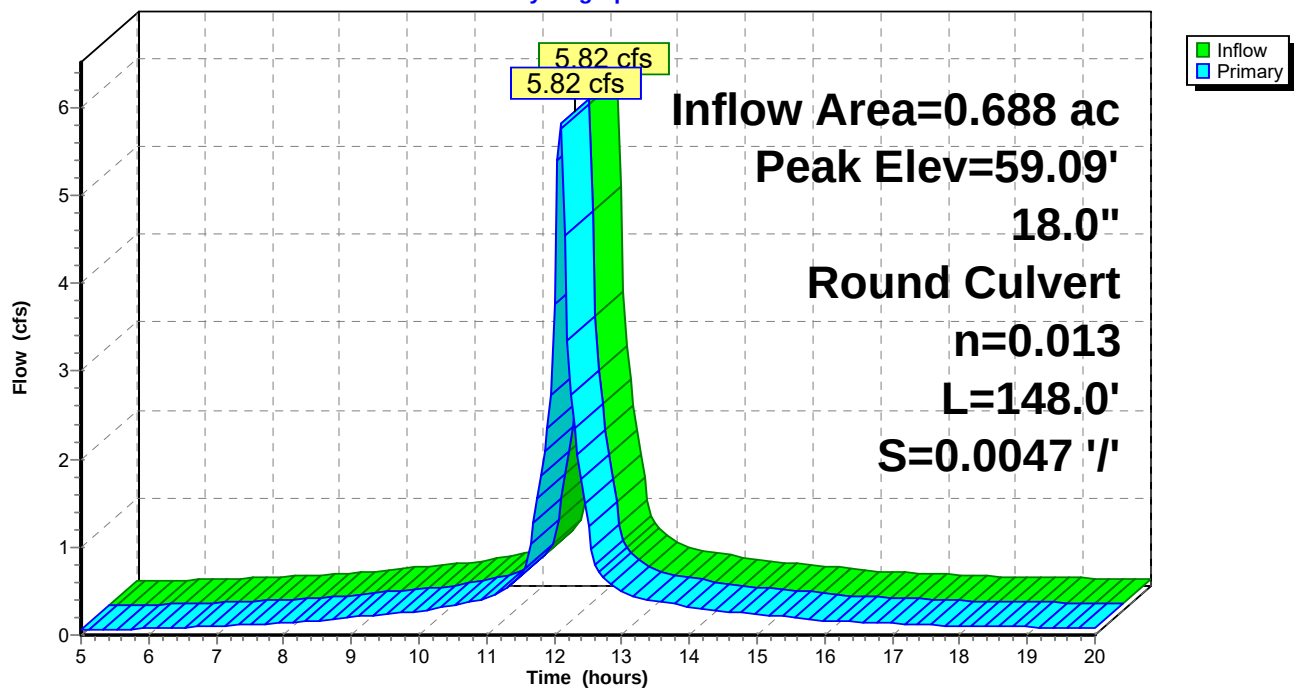
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.09' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.60' | <b>18.0" Round Culvert</b><br>L= 148.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.60' / 56.91' S= 0.0047 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=5.67 cfs @ 12.09 hrs HW=59.06' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 5.67 cfs @ 4.11 fps)

**Pond 79P: DMH 51**

Hydrograph



### Summary for Pond 80P: DMH 52

Inflow Area = 0.688 ac, 87.30% Impervious, Inflow Depth > 7.73" for 100-Year event  
 Inflow = 5.82 cfs @ 12.09 hrs, Volume= 0.443 af  
 Outflow = 5.82 cfs @ 12.09 hrs, Volume= 0.443 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.82 cfs @ 12.09 hrs, Volume= 0.443 af  
 Routed to Pond 81P : DMH 53

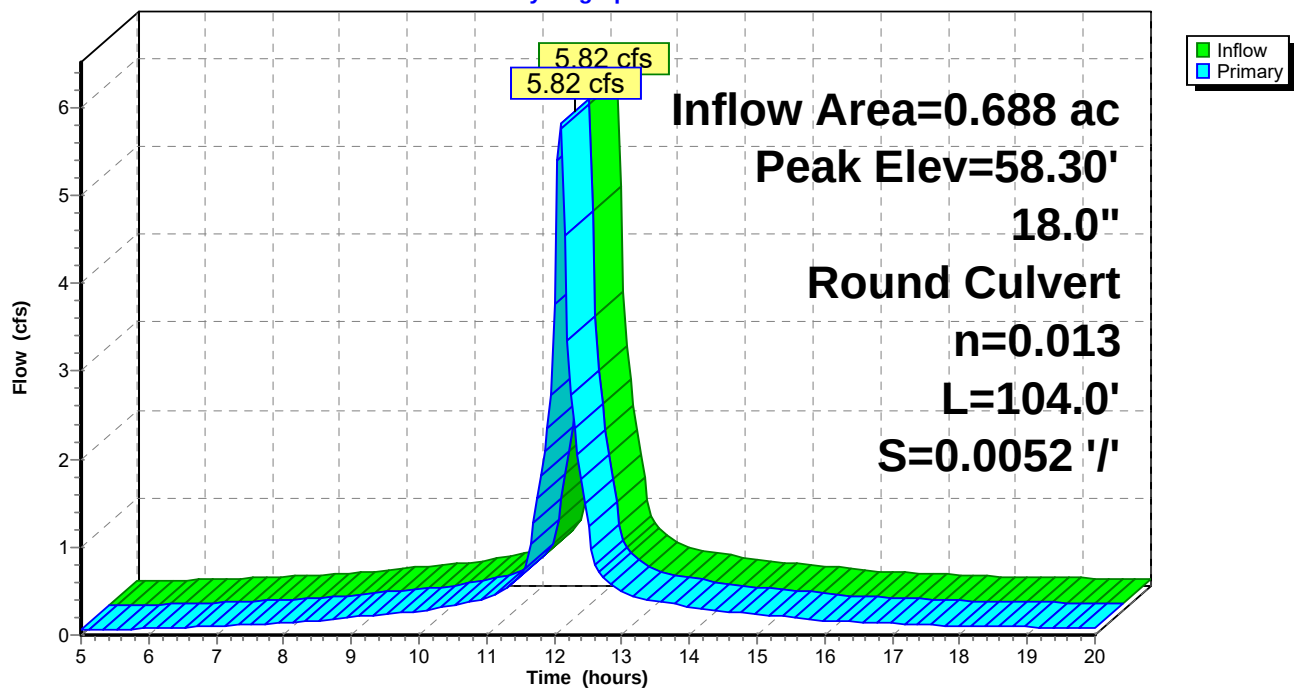
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.30' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 56.81' | <b>18.0" Round Culvert</b><br>L= 104.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 56.81' / 56.27' S= 0.0052 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=5.69 cfs @ 12.09 hrs HW=58.27' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 5.69 cfs @ 3.24 fps)

### Pond 80P: DMH 52

#### Hydrograph



**Summary for Pond 81P: DMH 53**

Inflow Area = 0.688 ac, 87.30% Impervious, Inflow Depth > 7.73" for 100-Year event  
 Inflow = 5.82 cfs @ 12.09 hrs, Volume= 0.443 af  
 Outflow = 5.82 cfs @ 12.09 hrs, Volume= 0.443 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.82 cfs @ 12.09 hrs, Volume= 0.443 af  
 Routed to Pond 82P : Constructed Wetland 2

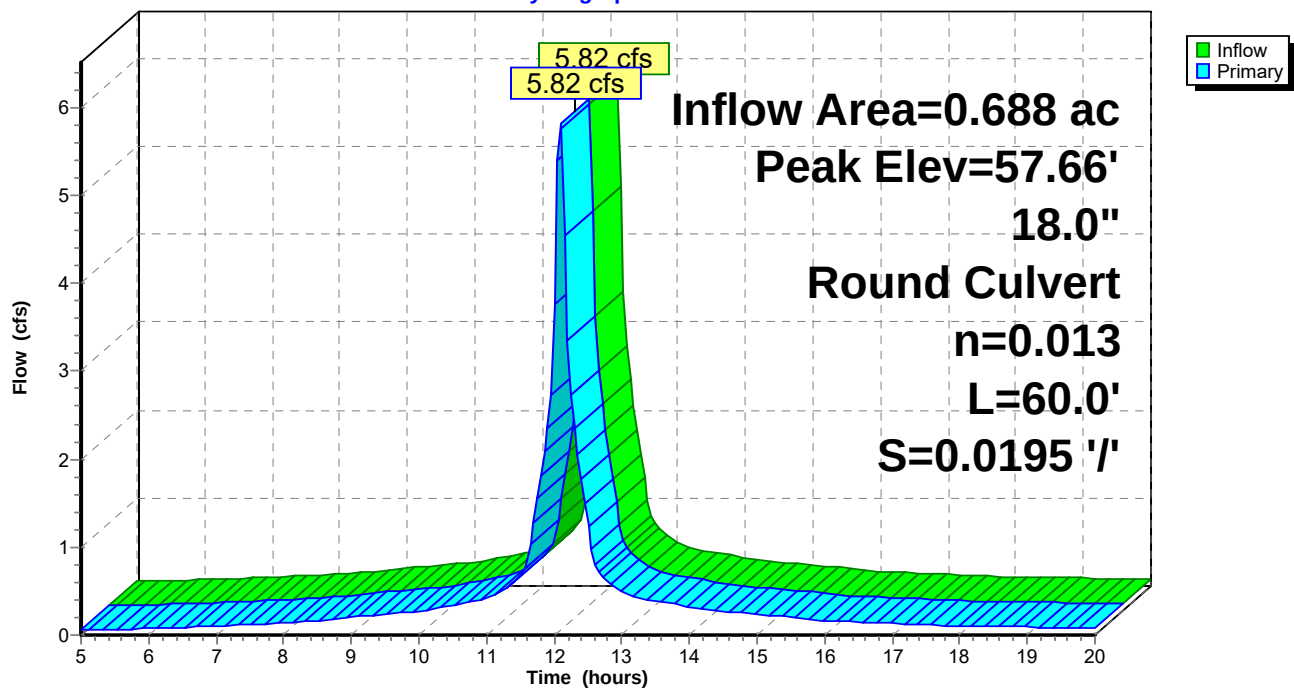
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 57.66' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 56.17' | <b>18.0" Round Culvert</b><br>L= 60.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 56.17' / 55.00' S= 0.0195 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=5.67 cfs @ 12.09 hrs HW=57.62' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 5.67 cfs @ 3.24 fps)

**Pond 81P: DMH 53**

Hydrograph





### Summary for Pond 82P: Constructed Wetland 2

Inflow Area = 1.006 ac, 75.98% Impervious, Inflow Depth > 7.19" for 100-Year event  
 Inflow = 8.10 cfs @ 12.09 hrs, Volume= 0.603 af  
 Outflow = 1.91 cfs @ 12.48 hrs, Volume= 0.536 af, Atten= 76%, Lag= 23.5 min  
 Primary = 1.91 cfs @ 12.48 hrs, Volume= 0.536 af  
 Routed to Link 188L : DP 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.45' @ 12.48 hrs Surf.Area= 4,524 sf Storage= 11,040 cf

Plug-Flow detention time= 107.3 min calculated for 0.536 af (89% of inflow)  
 Center-of-Mass det. time= 70.7 min ( 817.4 - 746.7 )

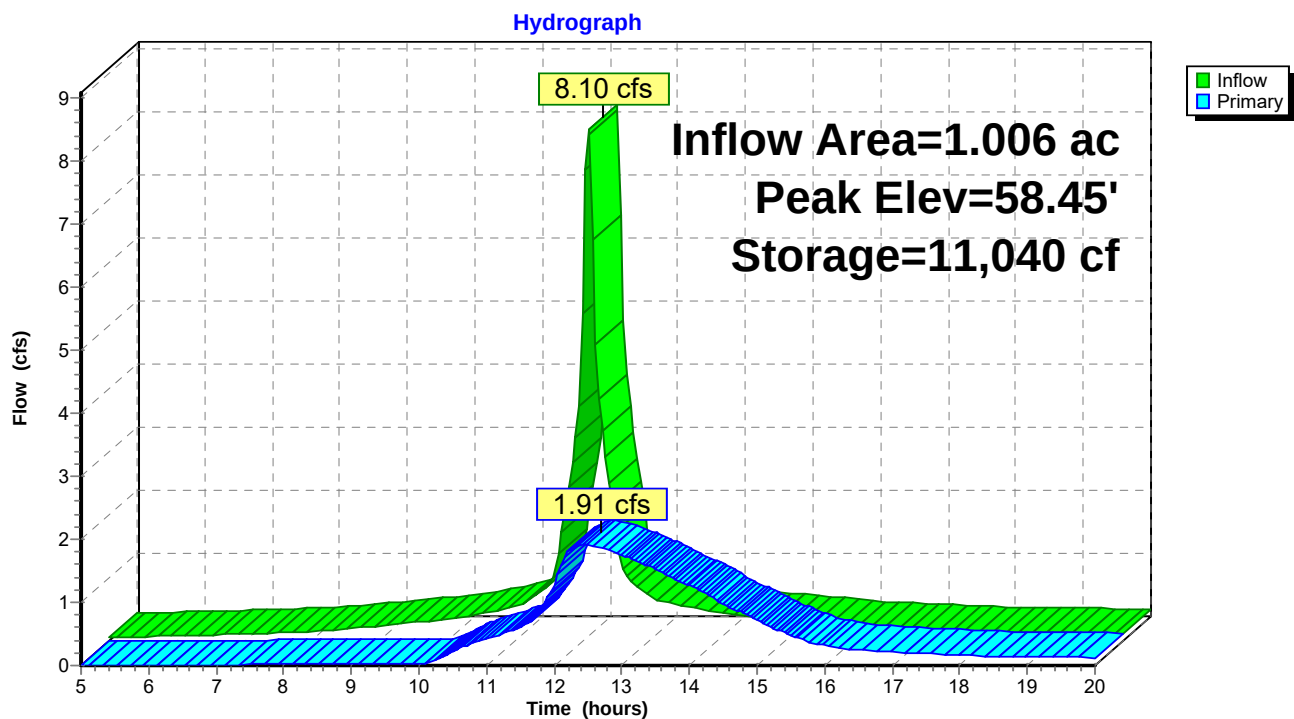
| Volume              | Invert               | Avail.Storage             | Storage Description                                        |
|---------------------|----------------------|---------------------------|------------------------------------------------------------|
| #1                  | 55.00'               | 13,641 cf                 | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet)                                  |
| 55.00               | 1,981                | 0                         | 0                                                          |
| 56.00               | 2,646                | 2,314                     | 2,314                                                      |
| 57.00               | 3,368                | 3,007                     | 5,321                                                      |
| 58.00               | 4,146                | 3,757                     | 9,078                                                      |
| 59.00               | 4,980                | 4,563                     | 13,641                                                     |

| Device | Routing  | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary  | 55.00' | <b>12.0" Round Culvert</b><br>L= 52.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 55.00' / 54.00' S= 0.0192 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #2     | Device 1 | 55.00' | <b>1.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                      |
| #3     | Device 1 | 56.10' | <b>4.0" Vert. Orifice/Grate X 3.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                            |

**Primary OutFlow** Max=1.91 cfs @ 12.48 hrs HW=58.45' (Free Discharge)

- ↑ **1=Culvert** (Passes 1.91 cfs of 5.13 cfs potential flow)
- ↑ **2=Orifice/Grate** (Orifice Controls 0.05 cfs @ 8.89 fps)
- ↑ **3=Orifice/Grate** (Orifice Controls 1.86 cfs @ 7.12 fps)

# **Pond 82P: Constructed Wetland 2**



**Summary for Pond 83P: CB 86**

Inflow Area = 0.178 ac, 72.79% Impervious, Inflow Depth > 7.40" for 100-Year event  
 Inflow = 1.47 cfs @ 12.09 hrs, Volume= 0.110 af  
 Outflow = 1.47 cfs @ 12.09 hrs, Volume= 0.110 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.47 cfs @ 12.09 hrs, Volume= 0.110 af  
 Routed to Pond 85P : DMH 65

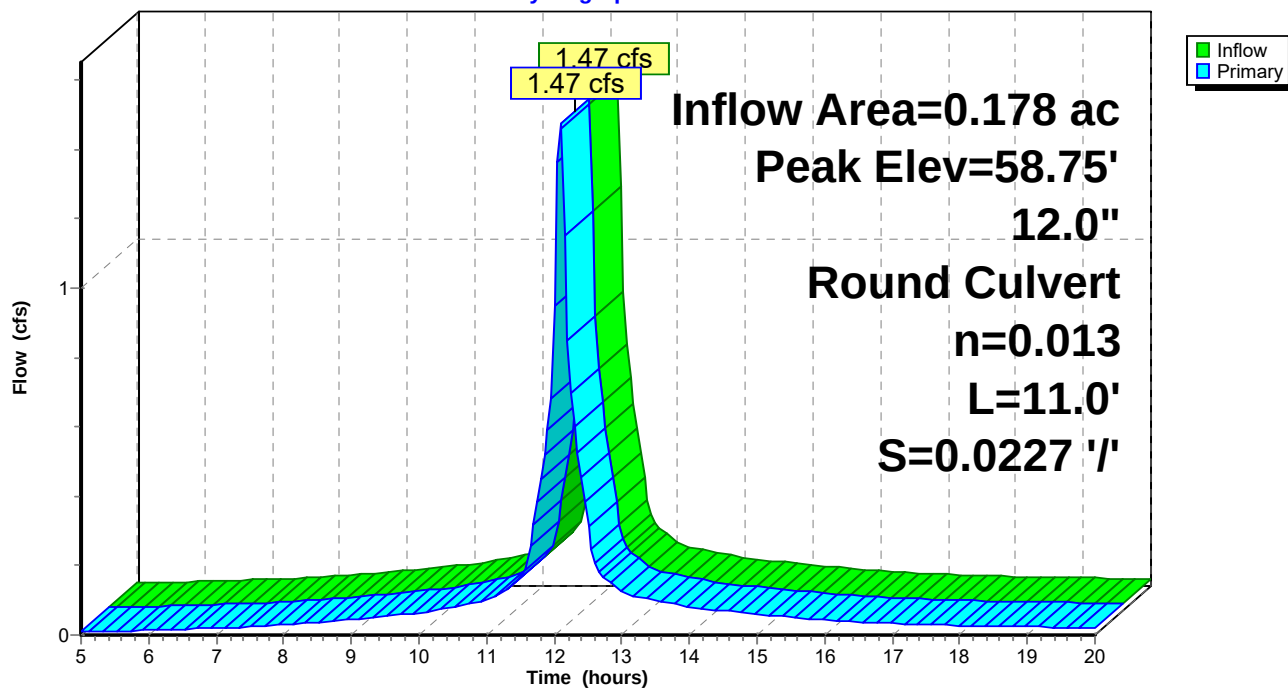
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.75' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.00' / 57.75' S= 0.0227 ' / ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.43 cfs @ 12.09 hrs HW=58.74' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.43 cfs @ 2.31 fps)

**Pond 83P: CB 86**

Hydrograph



**Summary for Pond 84P: CB 87**

Inflow Area = 0.189 ac, 78.29% Impervious, Inflow Depth > 7.60" for 100-Year event  
 Inflow = 1.59 cfs @ 12.09 hrs, Volume= 0.120 af  
 Outflow = 1.59 cfs @ 12.09 hrs, Volume= 0.120 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.59 cfs @ 12.09 hrs, Volume= 0.120 af  
 Routed to Pond 85P : DMH 65

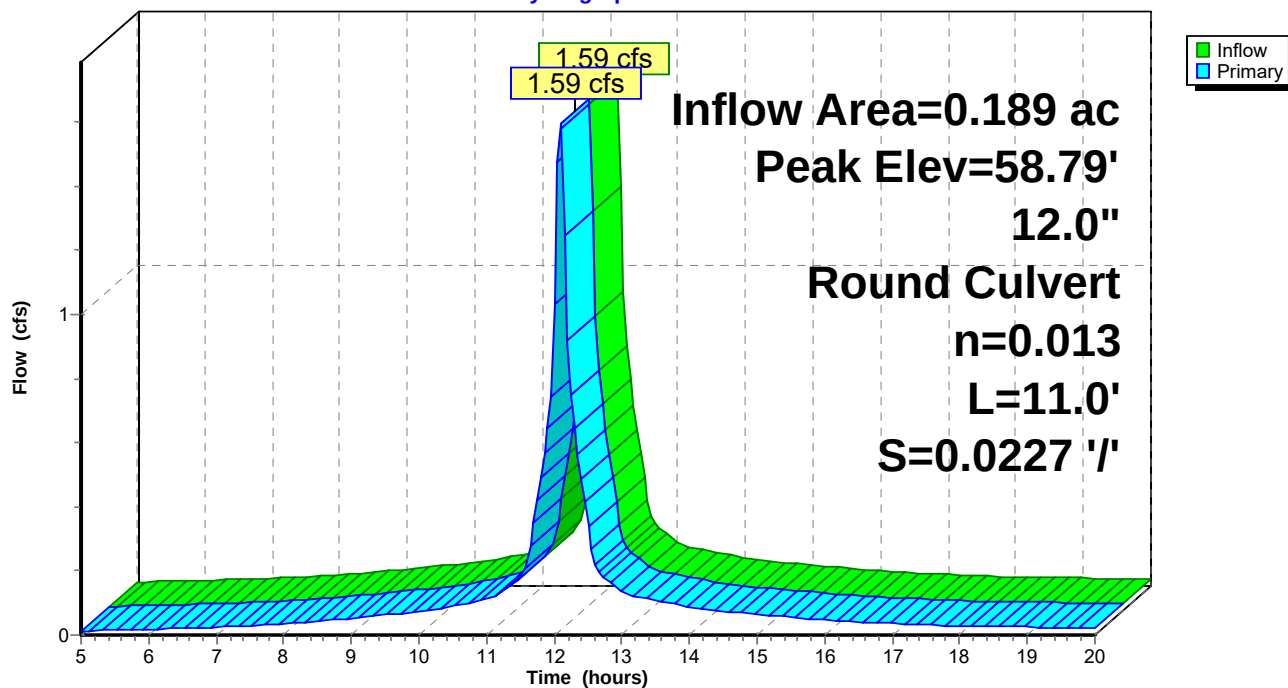
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.79' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.00' / 57.75' S= 0.0227 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.55 cfs @ 12.09 hrs HW=58.78' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.55 cfs @ 2.37 fps)

**Pond 84P: CB 87**

Hydrograph



**Summary for Pond 85P: DMH 65**

Inflow Area = 0.367 ac, 75.63% Impervious, Inflow Depth > 7.50" for 100-Year event  
 Inflow = 3.07 cfs @ 12.09 hrs, Volume= 0.230 af  
 Outflow = 3.07 cfs @ 12.09 hrs, Volume= 0.230 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.07 cfs @ 12.09 hrs, Volume= 0.230 af  
 Routed to Pond 97P : Sub. Det. 2

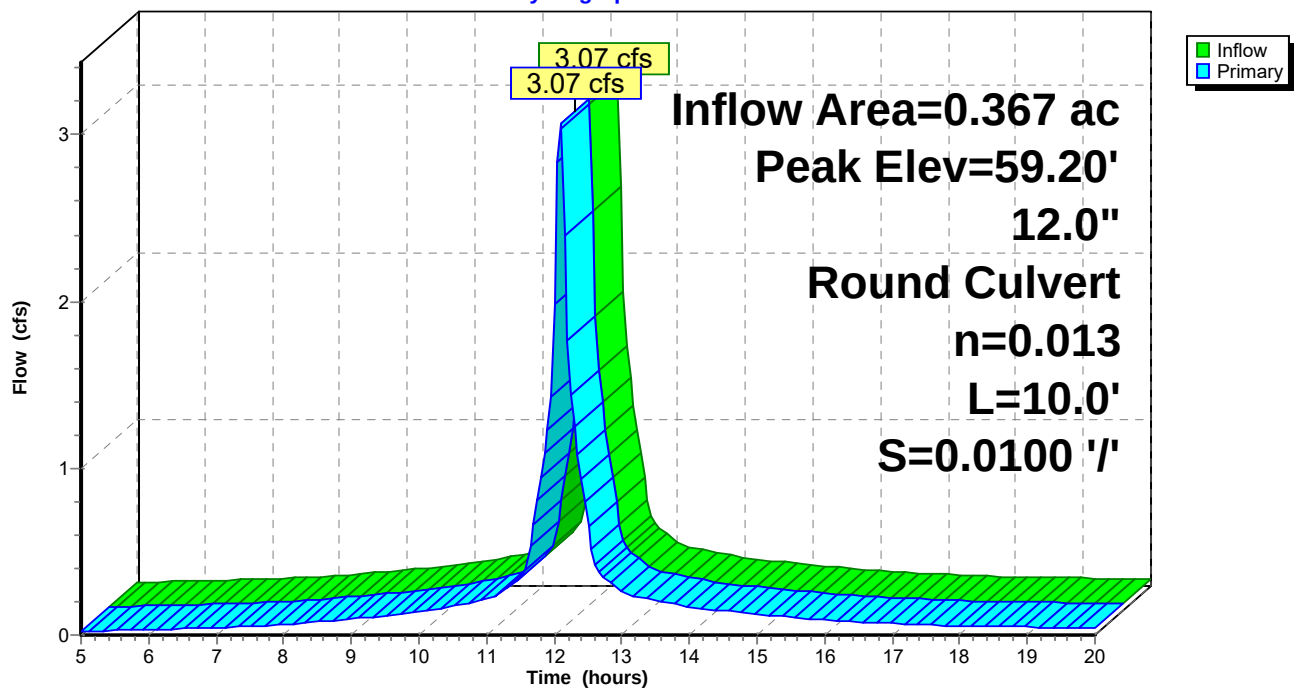
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.20' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.65' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.65' / 57.55' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.99 cfs @ 12.09 hrs HW=59.15' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.99 cfs @ 3.80 fps)

**Pond 85P: DMH 65**

Hydrograph



### Summary for Pond 86P: Sub. Inf. 6

Inflow Area = 0.589 ac, 36.87% Impervious, Inflow Depth > 6.50" for 100-Year event  
 Inflow = 4.49 cfs @ 12.09 hrs, Volume= 0.319 af  
 Outflow = 4.52 cfs @ 12.12 hrs, Volume= 0.281 af, Atten= 0%, Lag= 1.6 min  
 Discarded = 0.09 cfs @ 12.12 hrs, Volume= 0.069 af  
 Primary = 4.43 cfs @ 12.12 hrs, Volume= 0.213 af  
 Routed to Link 60L : DP 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.83' @ 12.12 hrs Surf.Area= 0.037 ac Storage= 0.069 af

Plug-Flow detention time= 63.2 min calculated for 0.280 af (88% of inflow)  
 Center-of-Mass det. time= 26.5 min ( 788.1 - 761.7 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 61.00' | 0.034 af      | <b>30.00'W x 53.46'L x 3.50'H Field A</b><br>0.129 af Overall - 0.045 af Embedded = 0.084 af x 40.0% Voids                                                                                                                                             |
| #2A    | 61.50' | 0.045 af      | <b>ADS StormTech SC-740 b +Cap x 42 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>42 Chambers in 6 Rows<br>Cap Storage= 2.7 cf x 2 x 6 rows = 31.9 cf |
|        |        | 0.079 af      | Total Available Storage                                                                                                                                                                                                                                |

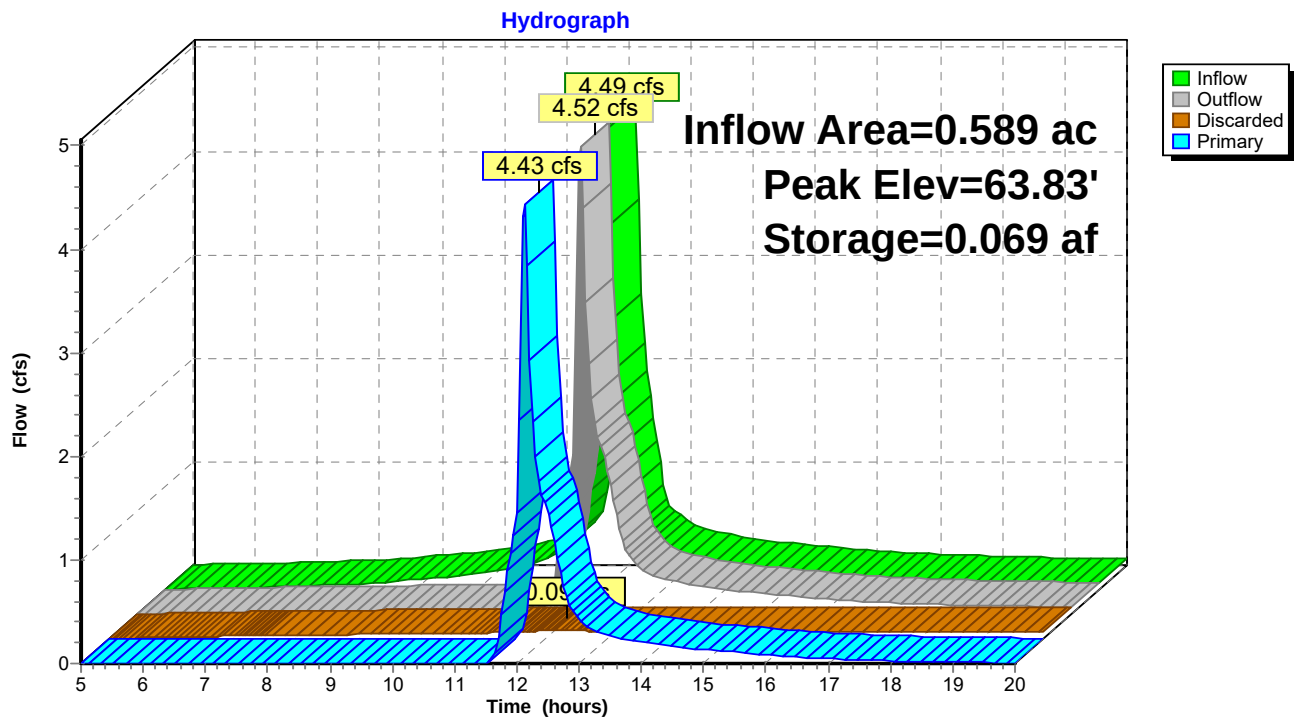
Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 61.00' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 59.00'                                                                                                              |
| #2     | Primary   | 61.00' | <b>12.0" Round Culvert</b><br>L= 105.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.00' / 57.00' S= 0.0381 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 62.50' | <b>6.0" Vert. Orifice/Grate X 2.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                             |
| #4     | Device 2  | 63.50' | <b>4.0' long Sharp-Crested Vee/Trap Weir</b> Cv= 2.62 (C= 3.28)                                                                                                                                                  |

**Discarded OutFlow** Max=0.09 cfs @ 12.12 hrs HW=63.81' (Free Discharge)  
 ↳ **1=Exfiltration** ( Controls 0.09 cfs)

**Primary OutFlow** Max=4.16 cfs @ 12.12 hrs HW=63.81' (Free Discharge)  
 ↳ **2=Culvert** (Passes 4.16 cfs of 4.53 cfs potential flow)  
 ↳ **3=Orifice/Grate** (Orifice Controls 1.94 cfs @ 4.95 fps)  
 ↳ **4=Sharp-Crested Vee/Trap Weir** (Weir Controls 2.22 cfs @ 1.81 fps)

**Pond 86P: Sub. Inf. 6**



### Summary for Pond 87P: CB 85

Inflow Area = 0.124 ac, 69.69% Impervious, Inflow Depth > 7.40" for 100-Year event  
 Inflow = 1.03 cfs @ 12.09 hrs, Volume= 0.076 af  
 Outflow = 1.03 cfs @ 12.09 hrs, Volume= 0.076 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.03 cfs @ 12.09 hrs, Volume= 0.076 af  
 Routed to Pond 92P : DMH 63

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 62.64' @ 12.09 hrs

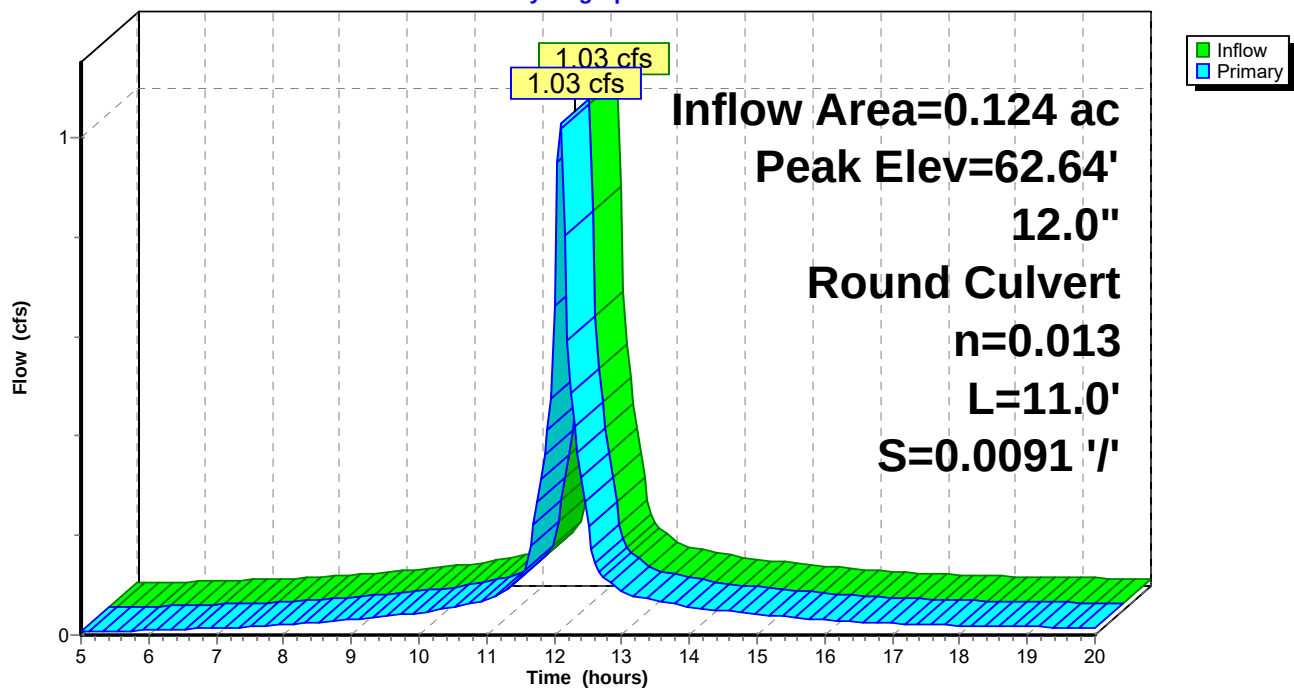
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.00' / 61.90' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.00 cfs @ 12.09 hrs HW=62.63' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 1.00 cfs @ 2.71 fps)

### Pond 87P: CB 85

Hydrograph





### Summary for Pond 88P: CB 84

Inflow Area = 0.066 ac, 66.55% Impervious, Inflow Depth > 7.29" for 100-Year event  
 Inflow = 0.54 cfs @ 12.09 hrs, Volume= 0.040 af  
 Outflow = 0.54 cfs @ 12.09 hrs, Volume= 0.040 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.54 cfs @ 12.09 hrs, Volume= 0.040 af  
 Routed to Pond 92P : DMH 63

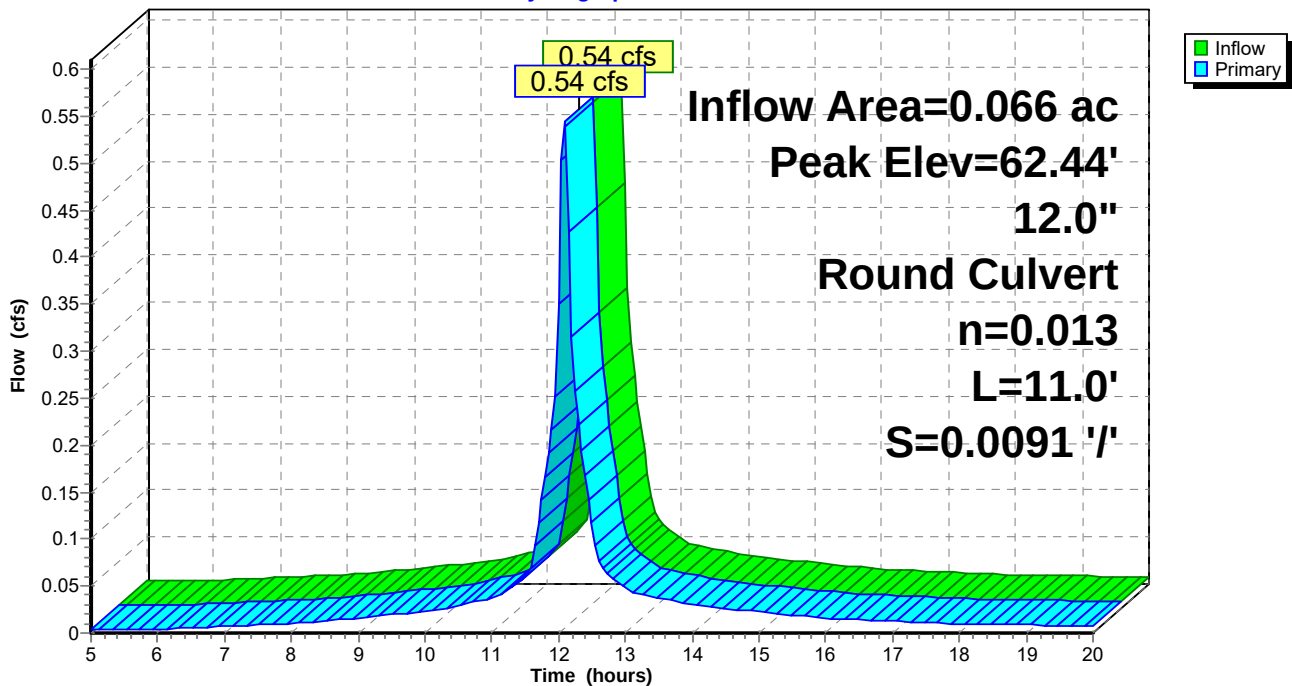
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.44' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.00' / 61.90' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.53 cfs @ 12.09 hrs HW=62.44' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.53 cfs @ 2.36 fps)

### Pond 88P: CB 84

Hydrograph



### Summary for Pond 89P: CB 74

Inflow Area = 0.052 ac, 80.20% Impervious, Inflow Depth > 7.60" for 100-Year event  
 Inflow = 0.44 cfs @ 12.09 hrs, Volume= 0.033 af  
 Outflow = 0.44 cfs @ 12.09 hrs, Volume= 0.033 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.44 cfs @ 12.09 hrs, Volume= 0.033 af  
 Routed to Pond 91P : DMH 55

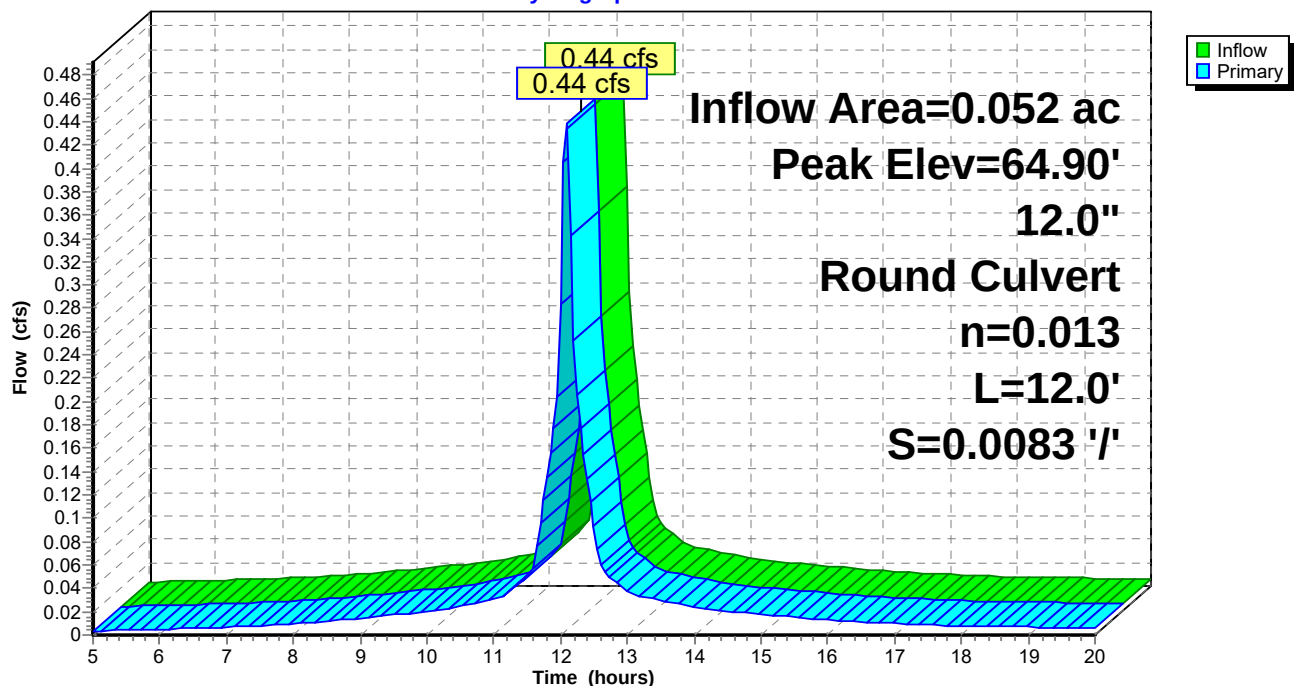
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.90' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 64.50' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 64.50' / 64.40' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.43 cfs @ 12.09 hrs HW=64.89' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.43 cfs @ 2.23 fps)

### Pond 89P: CB 74

Hydrograph



**Summary for Pond 90P: CB 75**

Inflow Area = 0.104 ac, 76.91% Impervious, Inflow Depth > 7.50" for 100-Year event  
 Inflow = 0.87 cfs @ 12.09 hrs, Volume= 0.065 af  
 Outflow = 0.87 cfs @ 12.09 hrs, Volume= 0.065 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.87 cfs @ 12.09 hrs, Volume= 0.065 af  
 Routed to Pond 91P : DMH 55

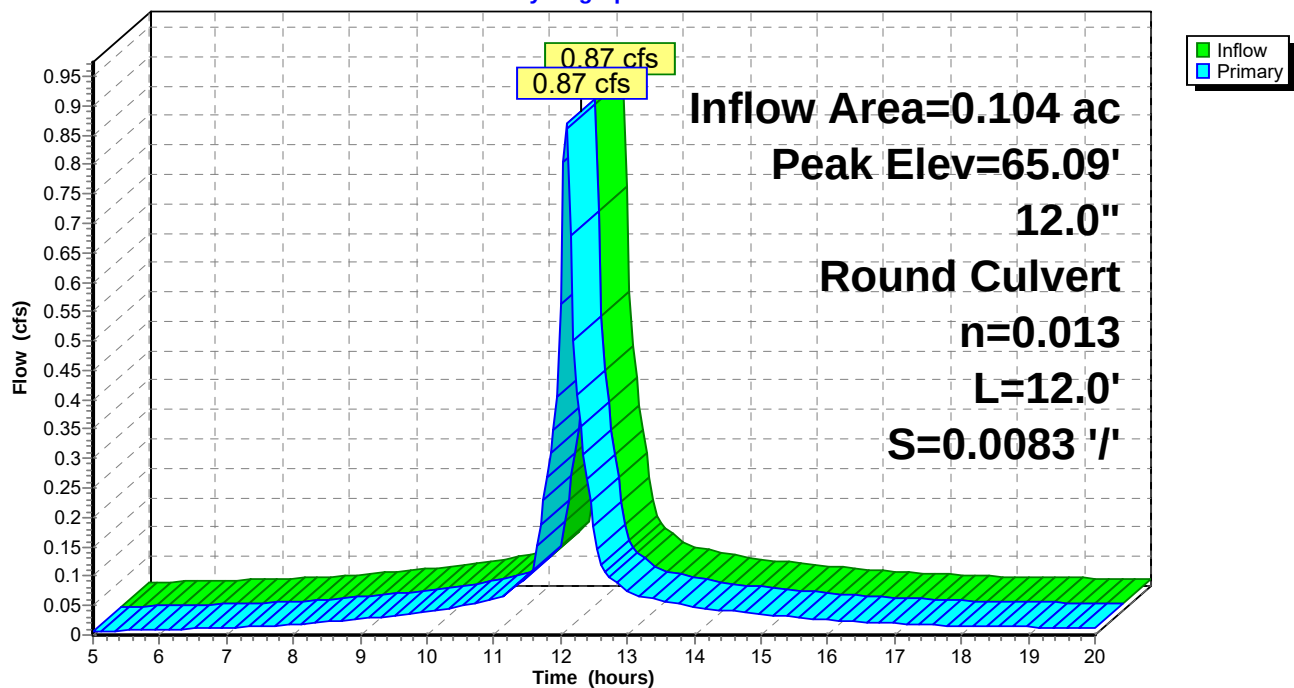
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 65.09' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 64.50' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 64.50' / 64.40' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.85 cfs @ 12.09 hrs HW=65.08' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.85 cfs @ 2.60 fps)

**Pond 90P: CB 75**

Hydrograph



**Summary for Pond 91P: DMH 55**

Inflow Area = 0.156 ac, 78.01% Impervious, Inflow Depth > 7.53" for 100-Year event  
 Inflow = 1.31 cfs @ 12.09 hrs, Volume= 0.098 af  
 Outflow = 1.31 cfs @ 12.09 hrs, Volume= 0.098 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.31 cfs @ 12.09 hrs, Volume= 0.098 af  
 Routed to Pond 96P : DMH 56

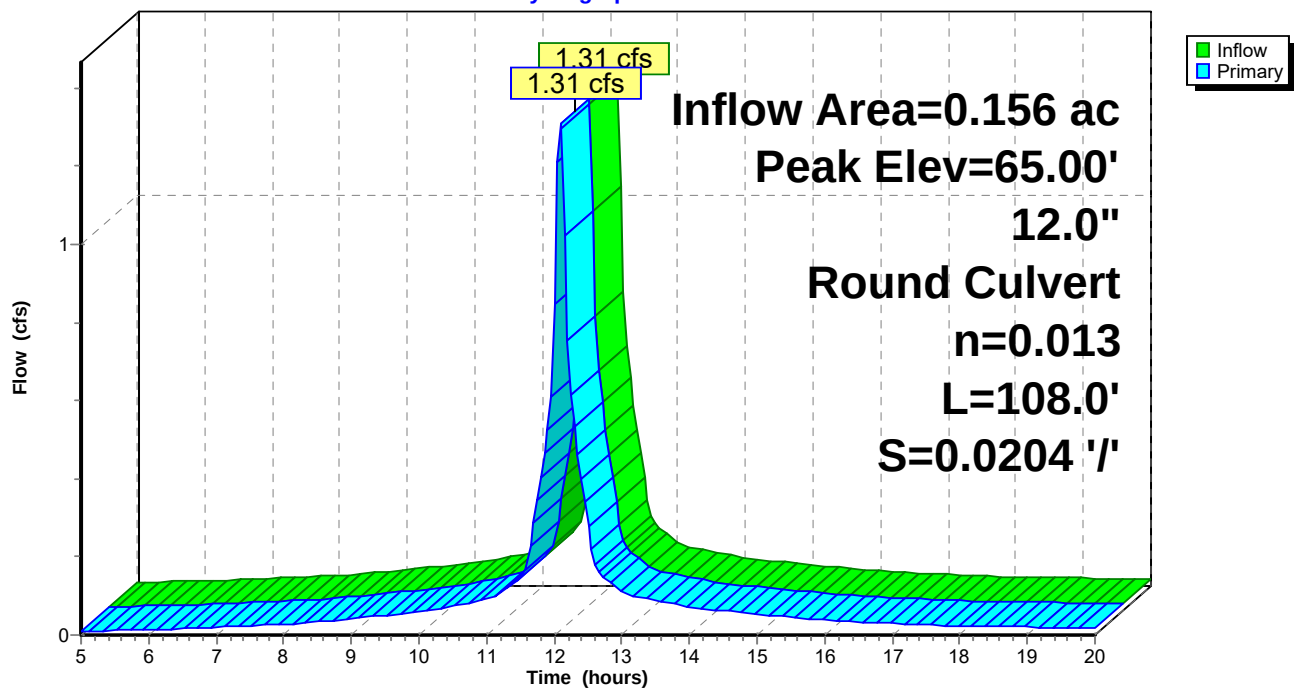
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 65.00' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 64.30' | <b>12.0" Round Culvert</b><br>L= 108.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 64.30' / 62.10' S= 0.0204 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.27 cfs @ 12.09 hrs HW=64.98' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.27 cfs @ 2.22 fps)

**Pond 91P: DMH 55**

Hydrograph



**Summary for Pond 92P: DMH 63**

Inflow Area = 0.190 ac, 68.59% Impervious, Inflow Depth > 7.36" for 100-Year event  
 Inflow = 1.57 cfs @ 12.09 hrs, Volume= 0.117 af  
 Outflow = 1.57 cfs @ 12.09 hrs, Volume= 0.117 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.57 cfs @ 12.09 hrs, Volume= 0.117 af  
 Routed to Pond 93P : DMH 62

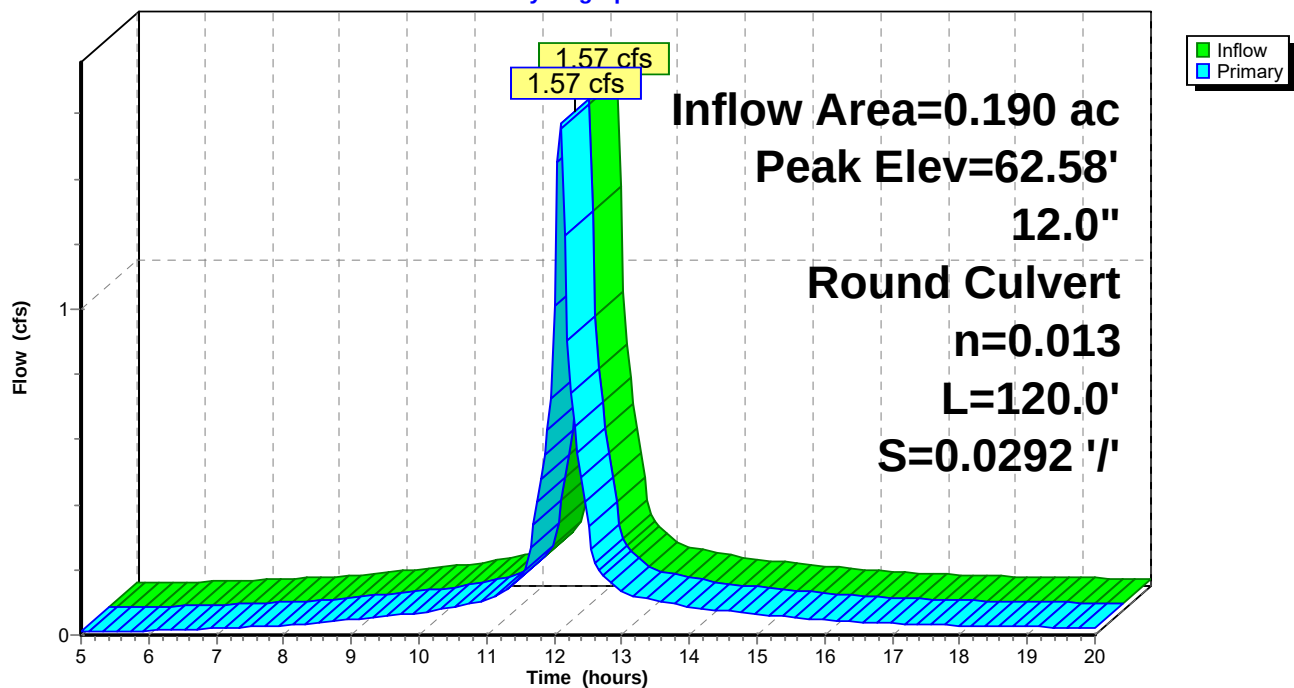
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.58' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.80' | <b>12.0" Round Culvert</b><br>L= 120.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.80' / 58.30' S= 0.0292 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.53 cfs @ 12.09 hrs HW=62.57' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.53 cfs @ 2.36 fps)

**Pond 92P: DMH 63**

Hydrograph



**Summary for Pond 93P: DMH 62**

Inflow Area = 1.037 ac, 70.16% Impervious, Inflow Depth > 7.37" for 100-Year event  
 Inflow = 8.57 cfs @ 12.09 hrs, Volume= 0.637 af  
 Outflow = 8.57 cfs @ 12.09 hrs, Volume= 0.637 af, Atten= 0%, Lag= 0.0 min  
 Primary = 8.57 cfs @ 12.09 hrs, Volume= 0.637 af  
 Routed to Pond 209P : DMH 64

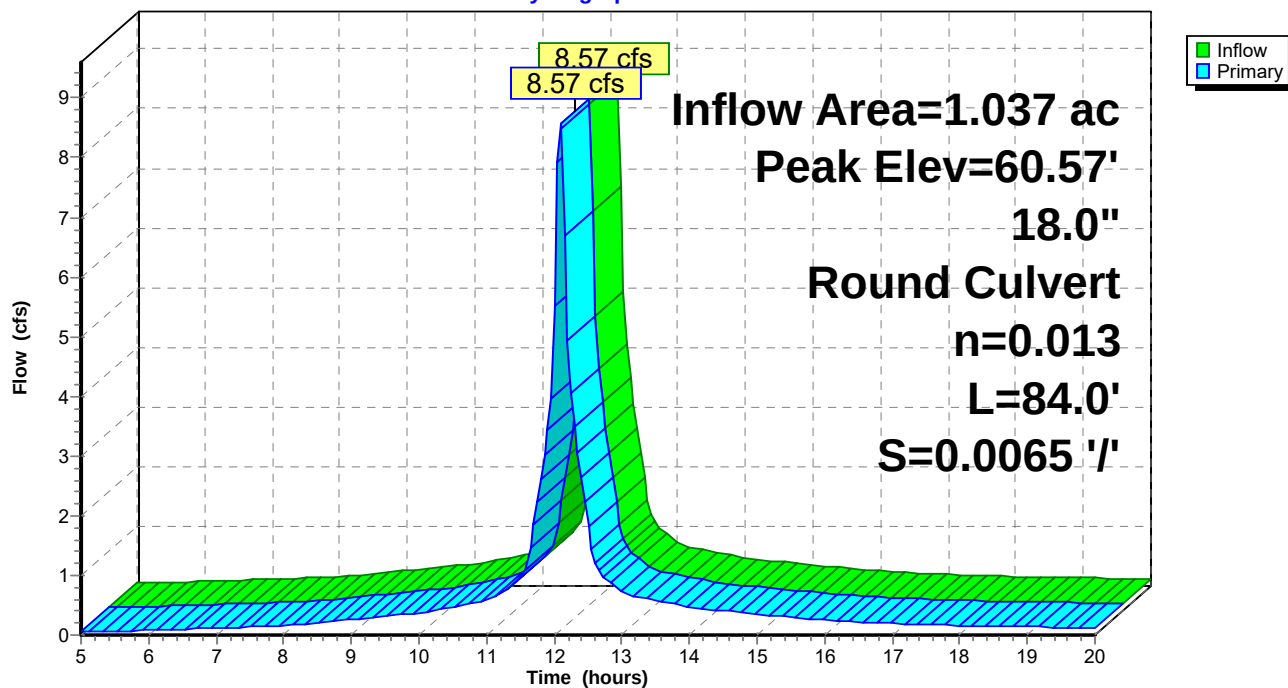
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.57' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.20' | <b>18.0" Round Culvert</b><br>L= 84.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.20' / 57.65' S= 0.0065 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=8.35 cfs @ 12.09 hrs HW=60.49' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 8.35 cfs @ 4.72 fps)

**Pond 93P: DMH 62**

Hydrograph



### Summary for Pond 94P: CB 77

Inflow Area = 0.204 ac, 71.21% Impervious, Inflow Depth > 7.40" for 100-Year event  
 Inflow = 1.69 cfs @ 12.09 hrs, Volume= 0.126 af  
 Outflow = 1.69 cfs @ 12.09 hrs, Volume= 0.126 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.69 cfs @ 12.09 hrs, Volume= 0.126 af  
 Routed to Pond 96P : DMH 56

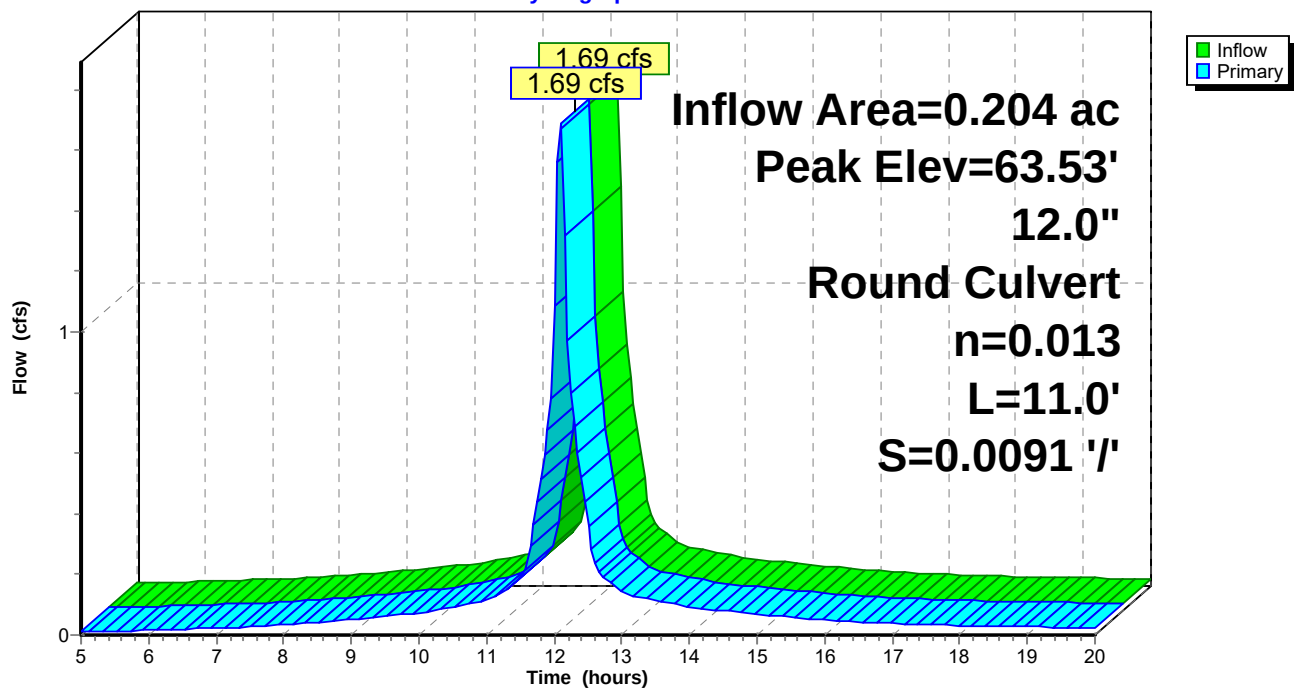
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.53' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.65' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.65' / 62.55' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.65 cfs @ 12.09 hrs HW=63.52' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.65 cfs @ 3.05 fps)

### Pond 94P: CB 77

Hydrograph



### Summary for Pond 95P: CB 76

Inflow Area = 0.141 ac, 70.69% Impervious, Inflow Depth > 7.40" for 100-Year event  
 Inflow = 1.17 cfs @ 12.09 hrs, Volume= 0.087 af  
 Outflow = 1.17 cfs @ 12.09 hrs, Volume= 0.087 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.17 cfs @ 12.09 hrs, Volume= 0.087 af  
 Routed to Pond 96P : DMH 56

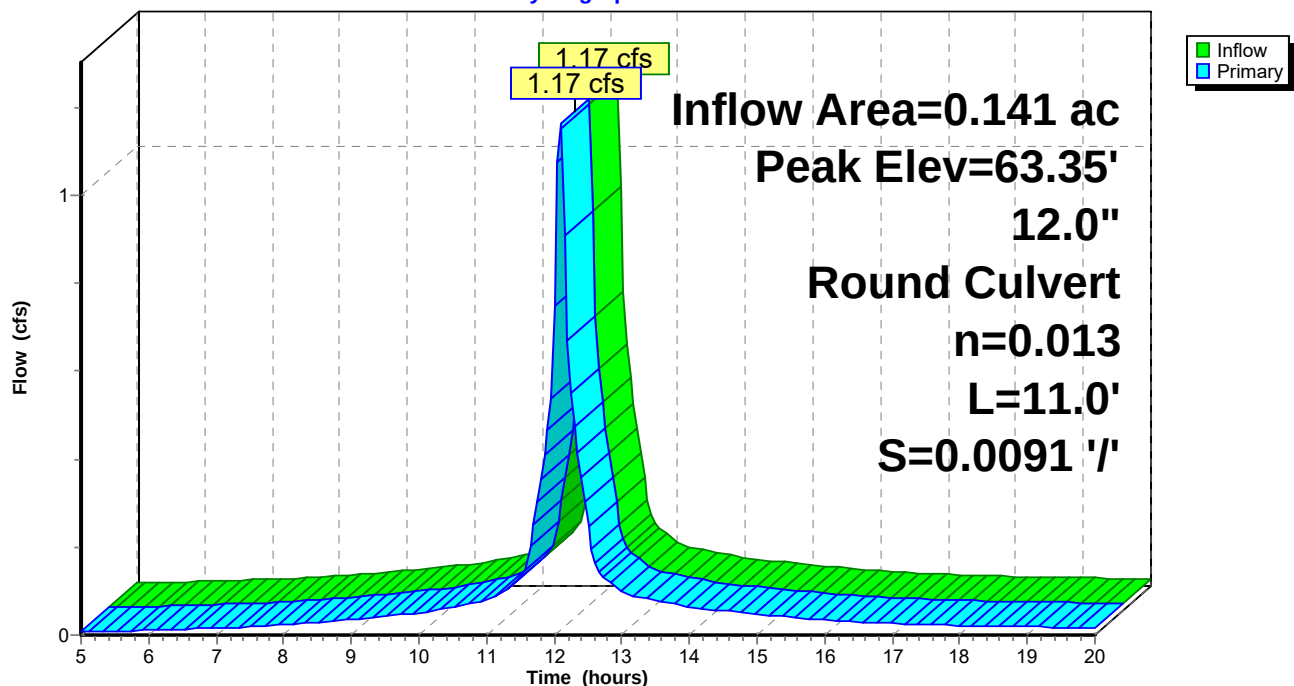
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.35' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.65' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.65' / 62.55' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.13 cfs @ 12.09 hrs HW=63.33' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.13 cfs @ 2.79 fps)

### Pond 95P: CB 76

#### Hydrograph





### Summary for Pond 96P: DMH 56

Inflow Area = 1.141 ac, 72.03% Impervious, Inflow Depth > 7.43" for 100-Year event  
 Inflow = 9.47 cfs @ 12.09 hrs, Volume= 0.706 af  
 Outflow = 9.47 cfs @ 12.09 hrs, Volume= 0.706 af, Atten= 0%, Lag= 0.0 min  
 Primary = 9.47 cfs @ 12.09 hrs, Volume= 0.706 af  
 Routed to Pond 111P : DMH 57

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 64.73' @ 12.09 hrs

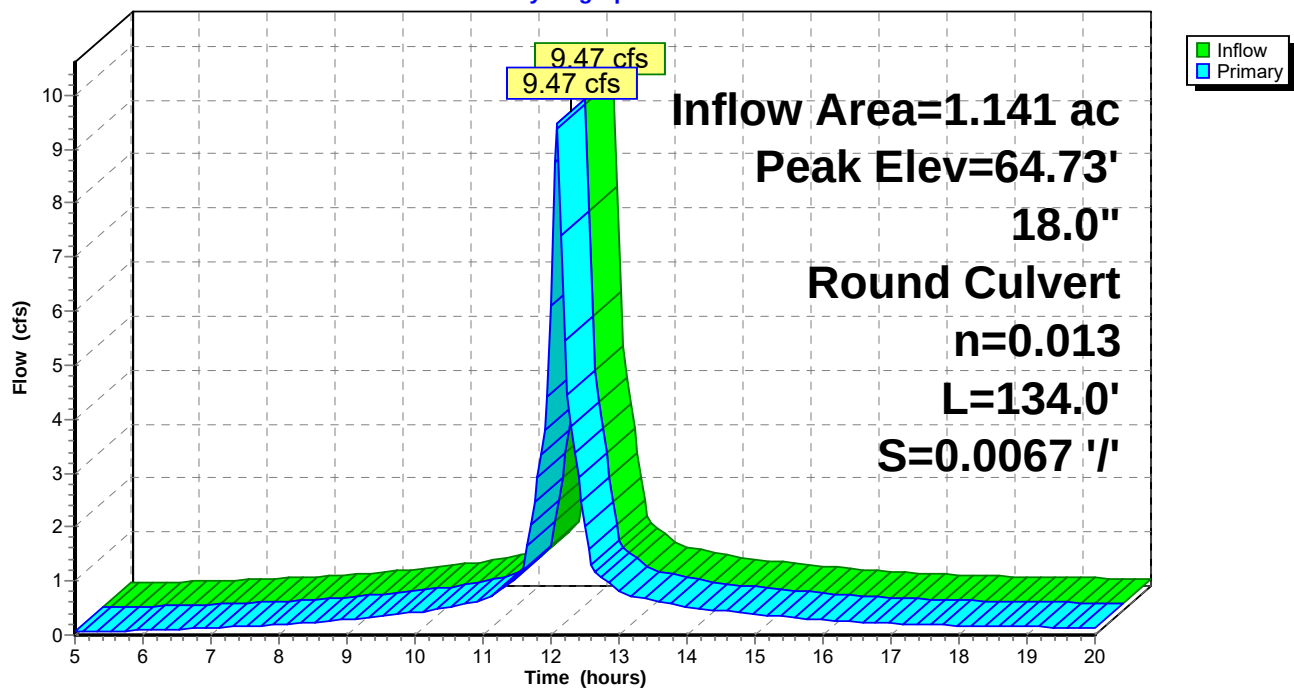
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.00' | <b>18.0" Round Culvert</b><br>L= 134.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.00' / 61.10' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=9.23 cfs @ 12.09 hrs HW=64.64' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 9.23 cfs @ 5.22 fps)

### Pond 96P: DMH 56

Hydrograph



### Summary for Pond 97P: Sub. Det. 2

Inflow Area = 1.404 ac, 71.59% Impervious, Inflow Depth > 7.40" for 100-Year event  
 Inflow = 11.64 cfs @ 12.09 hrs, Volume= 0.867 af  
 Outflow = 9.14 cfs @ 12.16 hrs, Volume= 0.566 af, Atten= 21%, Lag= 4.5 min  
 Primary = 9.14 cfs @ 12.16 hrs, Volume= 0.566 af  
 Routed to Link 188L : DP 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.49' @ 12.16 hrs Surf.Area= 0.088 ac Storage= 0.376 af

Plug-Flow detention time= 151.0 min calculated for 0.566 af (65% of inflow)  
 Center-of-Mass det. time= 78.5 min ( 824.0 - 745.5 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 57.50' | 0.014 af      | <b>66.00'W x 58.00'L x 5.71'H Field A</b><br>0.502 af Overall - 0.467 af Embedded = 0.035 af x 40.0% Voids                                                                                             |
| #2A    | 57.54' | 0.367 af      | <b>Shea Leaching Chamber 8x14x5.7 x 32 Inside #1</b><br>Inside= 84.0"W x 60.0"H => 38.46 sf x 13.00'L = 500.0 cf<br>Outside= 96.0"W x 68.0"H => 45.36 sf x 14.00'L = 635.0 cf<br>32 Chambers in 8 Rows |
|        |        | 0.381 af      | Total Available Storage                                                                                                                                                                                |

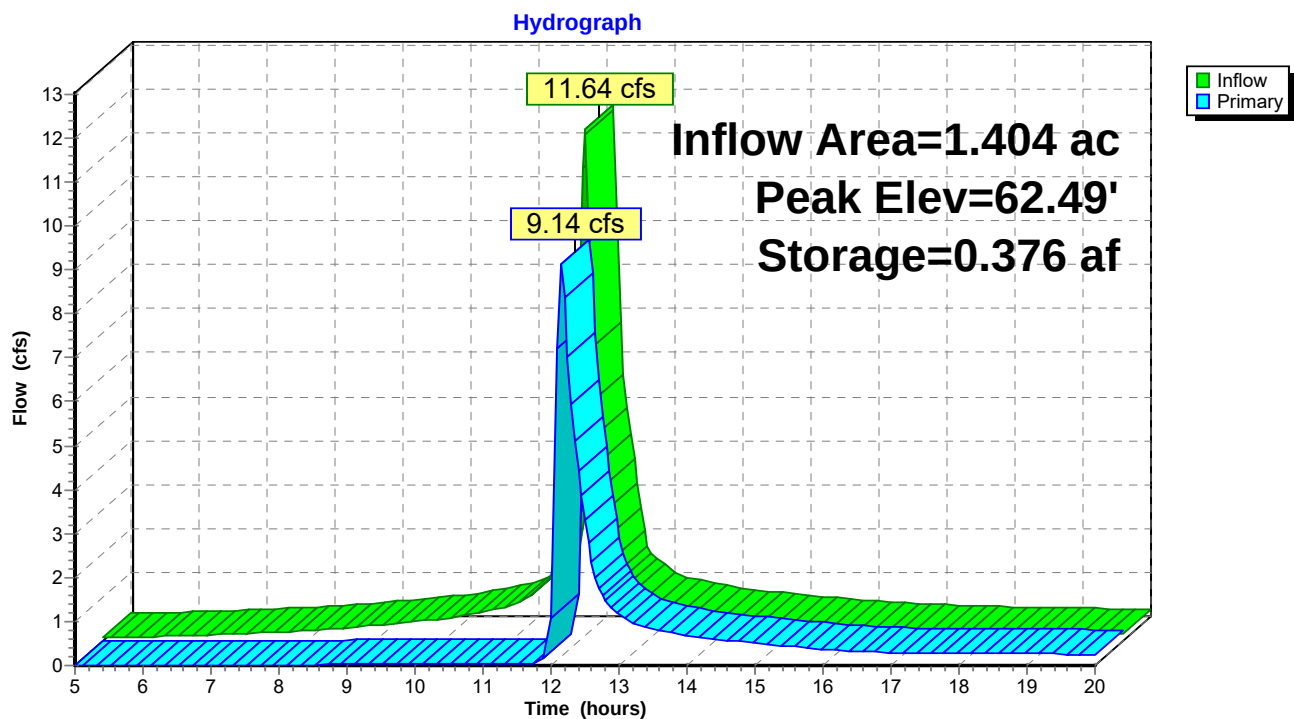
Storage Group A created with Chamber Wizard

| Device | Routing  | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary  | 57.50' | <b>18.0" Round Culvert</b><br>L= 30.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.50' / 53.00' S= 0.1500 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |
| #2     | Device 1 | 57.50' | <b>1.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                       |
| #3     | Device 1 | 60.50' | <b>2.0" Vert. Orifice/Grate X 2.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                             |
| #4     | Device 1 | 61.70' | <b>4.0' long Sharp-Crested Rectangular Weir</b> 2 End Contraction(s)                                                                                                                                             |

**Primary OutFlow** Max=8.91 cfs @ 12.16 hrs HW=62.47' (Free Discharge)

- 1=Culvert (Passes 8.91 cfs of 13.81 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.06 cfs @ 10.69 fps)
- 3=Orifice/Grate (Orifice Controls 0.29 cfs @ 6.62 fps)
- 4=Sharp-Crested Rectangular Weir (Weir Controls 8.56 cfs @ 2.88 fps)

Pond 97P: Sub. Det. 2



### Summary for Pond 98P: DMH 61

Inflow Area = 0.847 ac, 70.52% Impervious, Inflow Depth > 7.37" for 100-Year event  
 Inflow = 7.00 cfs @ 12.09 hrs, Volume= 0.520 af  
 Outflow = 7.00 cfs @ 12.09 hrs, Volume= 0.520 af, Atten= 0%, Lag= 0.0 min  
 Primary = 7.00 cfs @ 12.09 hrs, Volume= 0.520 af  
 Routed to Pond 93P : DMH 62

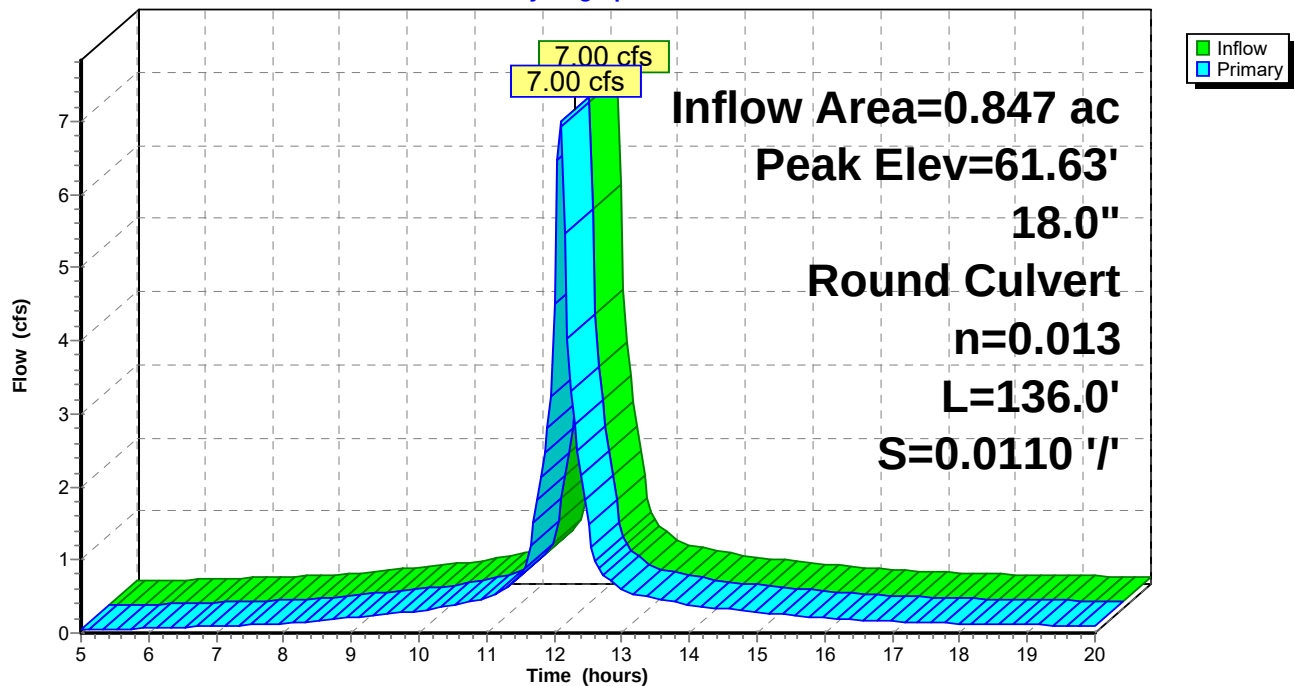
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.63' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.80' | <b>18.0" Round Culvert</b><br>L= 136.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.80' / 58.30' S= 0.0110 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=6.82 cfs @ 12.09 hrs HW=61.58' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 6.82 cfs @ 3.86 fps)

### Pond 98P: DMH 61

Hydrograph



### Summary for Pond 99P: CB 81

Inflow Area = 0.258 ac, 68.08% Impervious, Inflow Depth > 7.29" for 100-Year event  
 Inflow = 2.12 cfs @ 12.09 hrs, Volume= 0.157 af  
 Outflow = 2.12 cfs @ 12.09 hrs, Volume= 0.157 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.12 cfs @ 12.09 hrs, Volume= 0.157 af  
 Routed to Pond 101P : DMH 59

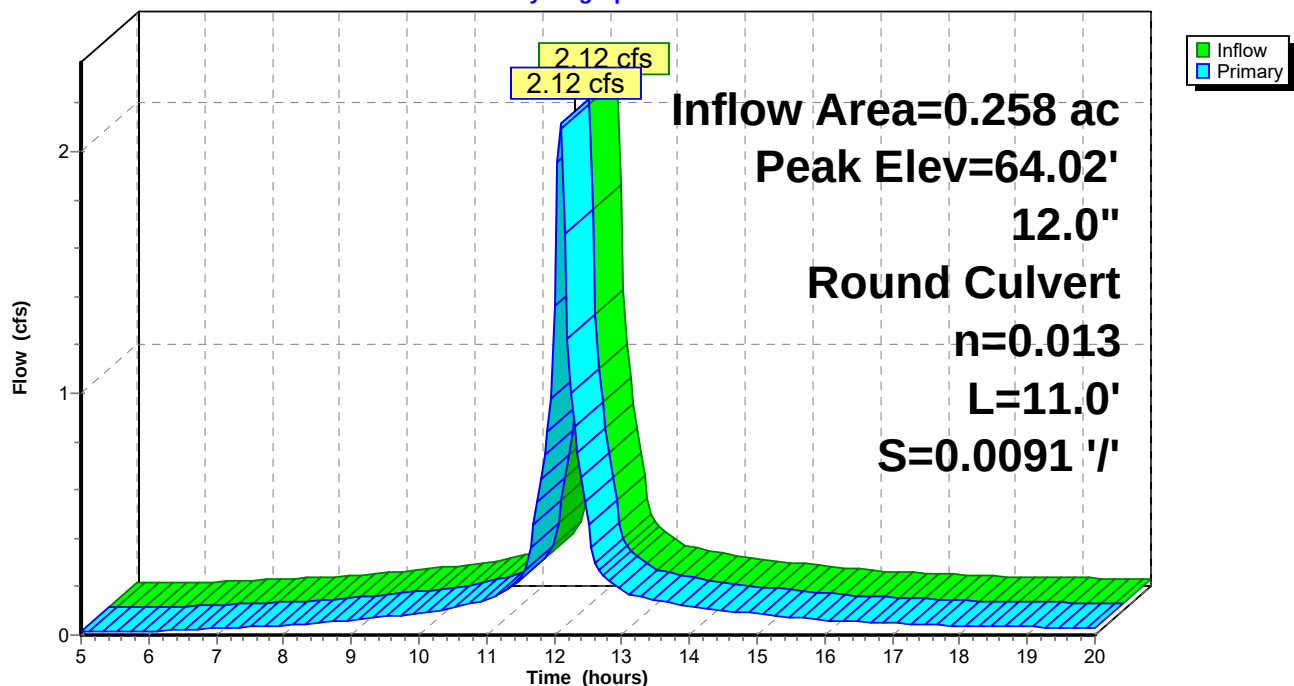
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.02' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.99' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.99' / 62.89' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.06 cfs @ 12.09 hrs HW=64.00' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.06 cfs @ 3.23 fps)

### Pond 99P: CB 81

Hydrograph



### Summary for Pond 100P: CB 80

Inflow Area = 0.383 ac, 73.17% Impervious, Inflow Depth > 7.50" for 100-Year event  
 Inflow = 3.19 cfs @ 12.09 hrs, Volume= 0.239 af  
 Outflow = 3.19 cfs @ 12.09 hrs, Volume= 0.239 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.19 cfs @ 12.09 hrs, Volume= 0.239 af  
 Routed to Pond 101P : DMH 59

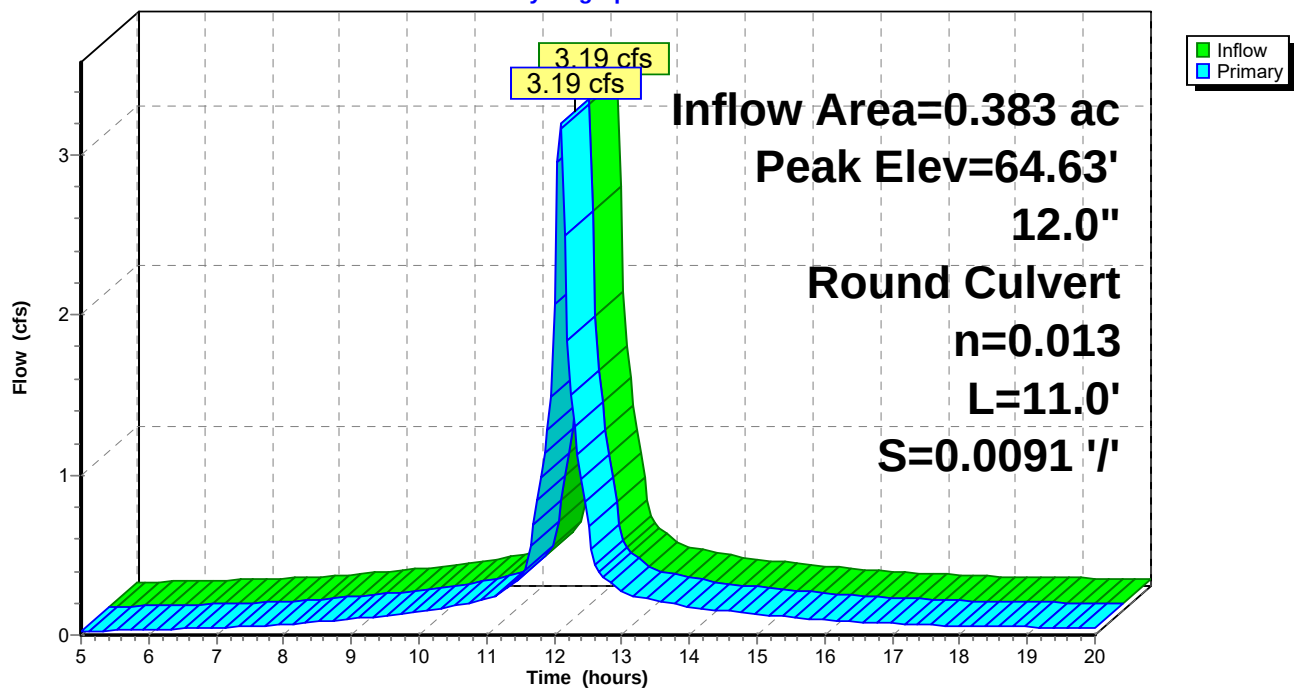
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.63' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.99' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.99' / 62.89' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=3.11 cfs @ 12.09 hrs HW=64.57' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 3.11 cfs @ 3.96 fps)

### Pond 100P: CB 80

#### Hydrograph



### Summary for Pond 101P: DMH 59

Inflow Area = 0.640 ac, 71.12% Impervious, Inflow Depth > 7.42" for 100-Year event  
 Inflow = 5.31 cfs @ 12.09 hrs, Volume= 0.396 af  
 Outflow = 5.31 cfs @ 12.09 hrs, Volume= 0.396 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.31 cfs @ 12.09 hrs, Volume= 0.396 af  
 Routed to Pond 96P : DMH 56

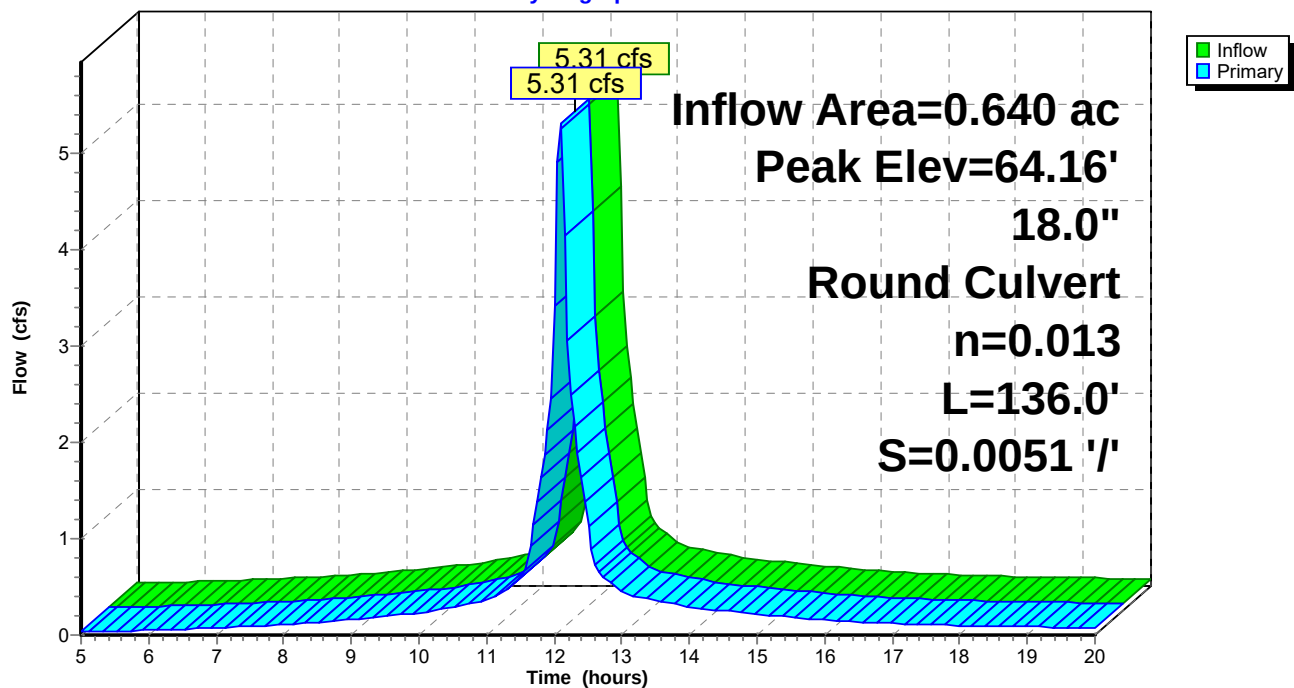
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 64.16' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 62.79' | <b>18.0" Round Culvert</b><br>L= 136.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 62.79' / 62.10' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=5.17 cfs @ 12.09 hrs HW=64.13' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 5.17 cfs @ 4.10 fps)

### Pond 101P: DMH 59

Hydrograph



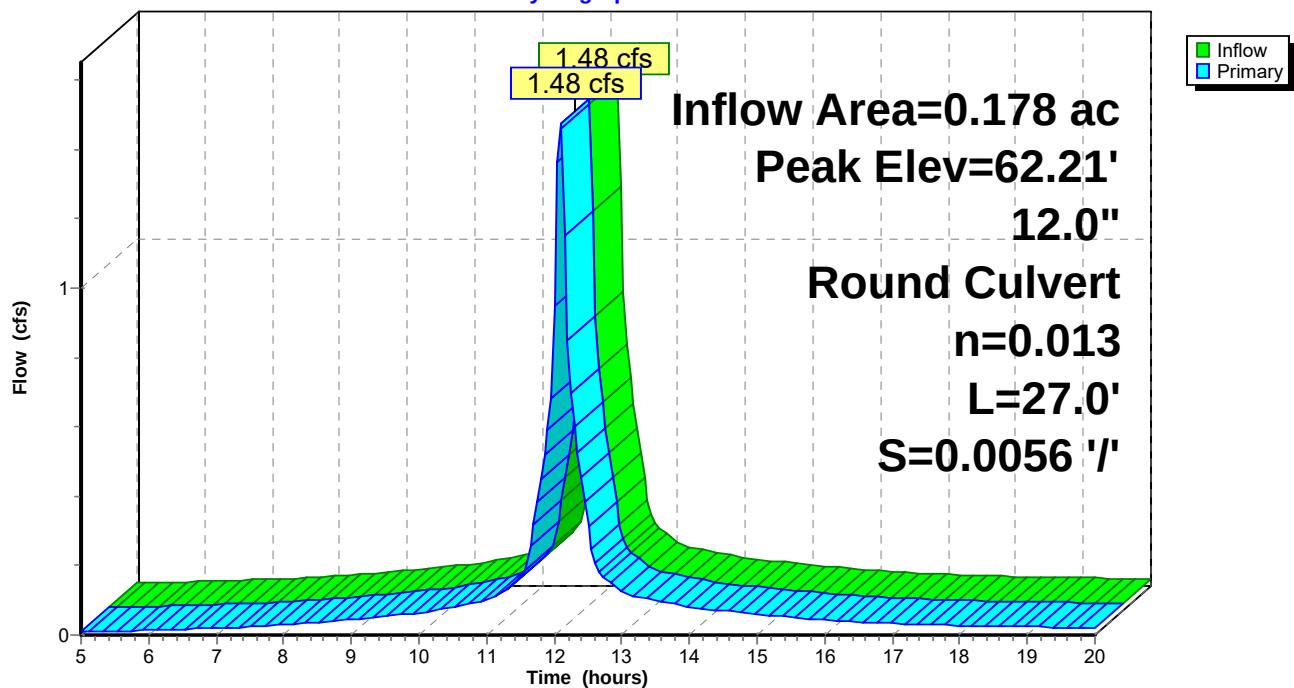
**Summary for Pond 102P: CB 93**

Inflow Area = 0.178 ac, 69.60% Impervious, Inflow Depth > 7.40" for 100-Year event  
 Inflow = 1.48 cfs @ 12.09 hrs, Volume= 0.110 af  
 Outflow = 1.48 cfs @ 12.09 hrs, Volume= 0.110 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.48 cfs @ 12.09 hrs, Volume= 0.110 af  
 Routed to Pond 117P : DMH 69

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.21' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.40' | <b>12.0" Round Culvert</b><br>L= 27.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.40' / 61.25' S= 0.0056 ' / Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.44 cfs @ 12.09 hrs HW=62.20' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.44 cfs @ 2.92 fps)

**Pond 102P: CB 93****Hydrograph**



### Summary for Pond 103P: CB 92

Inflow Area = 0.313 ac, 76.83% Impervious, Inflow Depth > 7.50" for 100-Year event  
 Inflow = 2.61 cfs @ 12.09 hrs, Volume= 0.196 af  
 Outflow = 2.61 cfs @ 12.09 hrs, Volume= 0.196 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.61 cfs @ 12.09 hrs, Volume= 0.196 af  
 Routed to Pond 117P : DMH 69

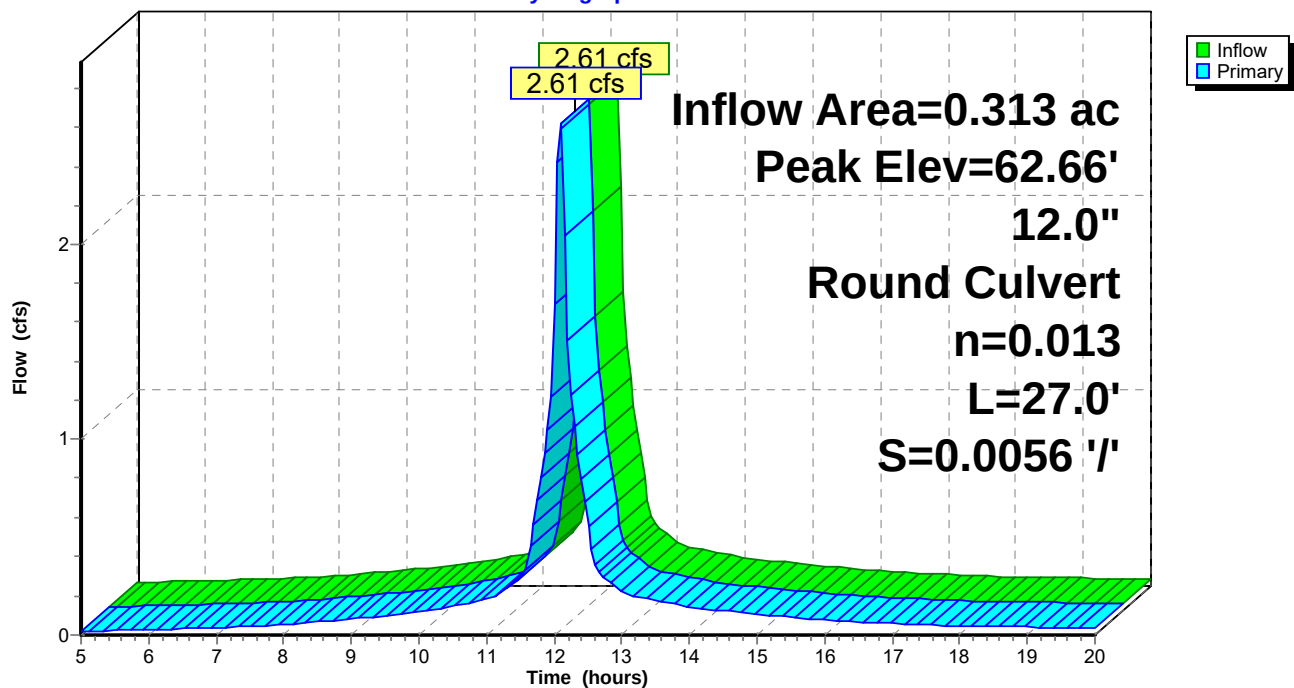
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.66' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.40' | <b>12.0" Round Culvert</b><br>L= 27.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.40' / 61.25' S= 0.0056 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.55 cfs @ 12.09 hrs HW=62.63' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.55 cfs @ 3.25 fps)

### Pond 103P: CB 92

#### Hydrograph



**Summary for Pond 104P: CB 83**

Inflow Area = 0.343 ac, 64.21% Impervious, Inflow Depth > 7.18" for 100-Year event  
 Inflow = 2.79 cfs @ 12.09 hrs, Volume= 0.205 af  
 Outflow = 2.79 cfs @ 12.09 hrs, Volume= 0.205 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.79 cfs @ 12.09 hrs, Volume= 0.205 af  
 Routed to Pond 106P : DMH 60

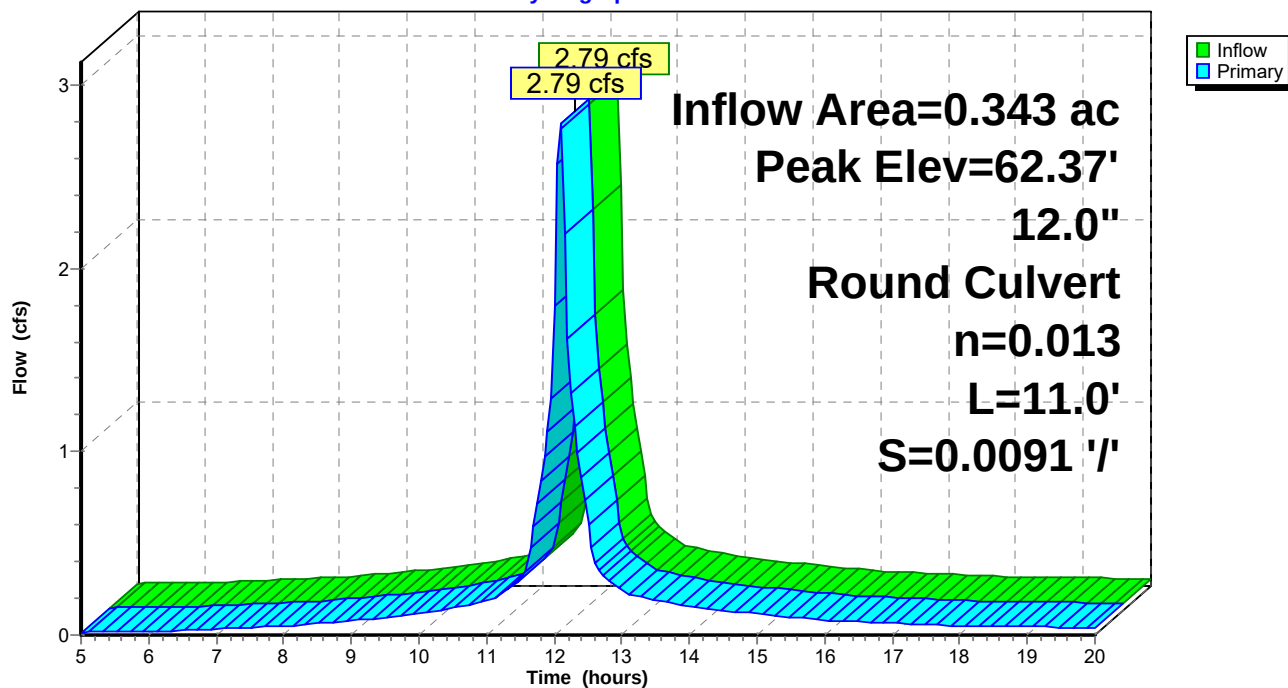
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.37' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.00' / 60.90' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.72 cfs @ 12.09 hrs HW=62.33' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.72 cfs @ 3.46 fps)

**Pond 104P: CB 83**

Hydrograph



### Summary for Pond 105P: CB 82

Inflow Area = 0.504 ac, 74.80% Impervious, Inflow Depth > 7.50" for 100-Year event  
 Inflow = 4.21 cfs @ 12.09 hrs, Volume= 0.315 af  
 Outflow = 4.21 cfs @ 12.09 hrs, Volume= 0.315 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.21 cfs @ 12.09 hrs, Volume= 0.315 af  
 Routed to Pond 106P : DMH 60

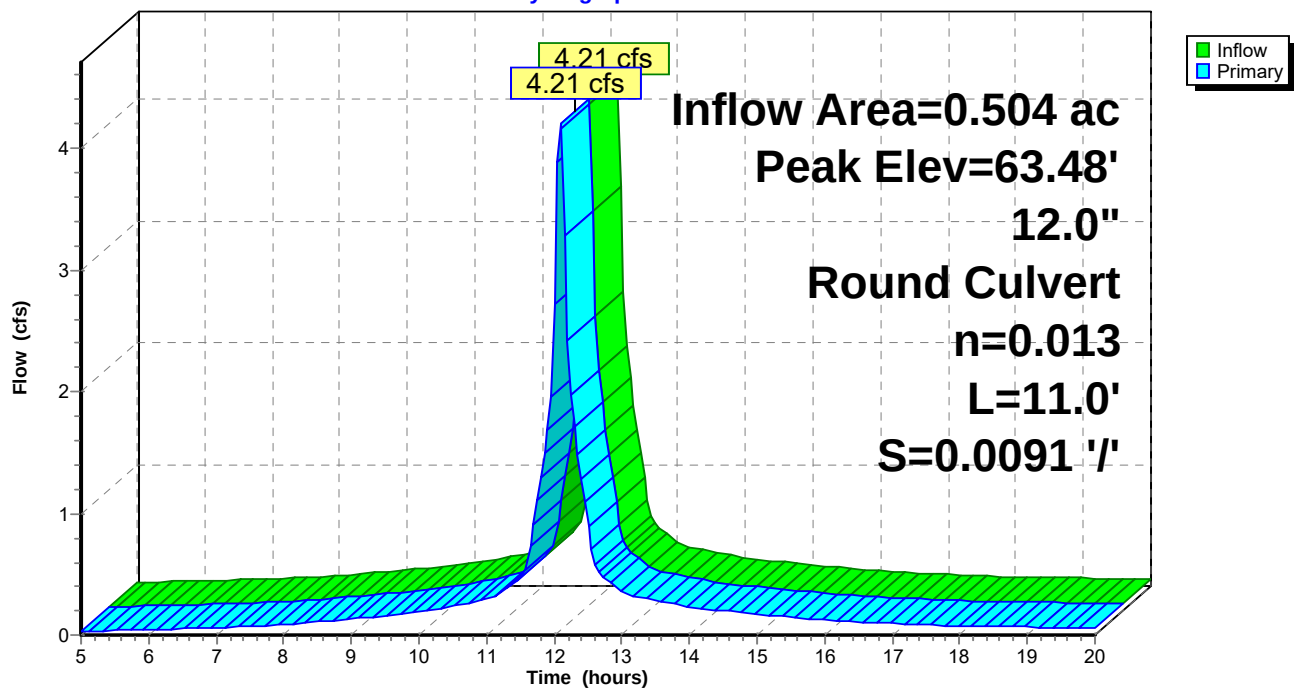
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.48' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.00' / 60.90' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=4.10 cfs @ 12.09 hrs HW=63.38' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 4.10 cfs @ 5.22 fps)

### Pond 105P: CB 82

#### Hydrograph



**Summary for Pond 106P: DMH 60**

Inflow Area = 0.847 ac, 70.52% Impervious, Inflow Depth > 7.37" for 100-Year event  
 Inflow = 7.00 cfs @ 12.09 hrs, Volume= 0.520 af  
 Outflow = 7.00 cfs @ 12.09 hrs, Volume= 0.520 af, Atten= 0%, Lag= 0.0 min  
 Primary = 7.00 cfs @ 12.09 hrs, Volume= 0.520 af  
 Routed to Pond 98P : DMH 61

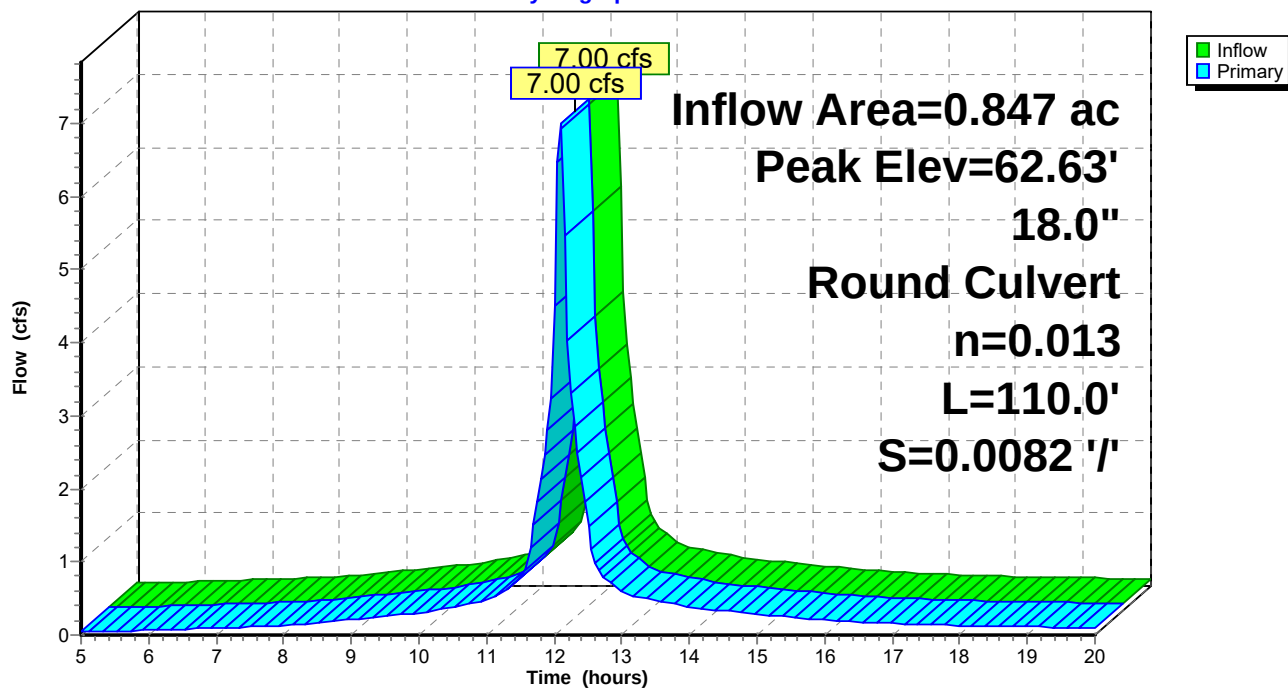
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.63' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.80' | <b>18.0" Round Culvert</b><br>L= 110.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.80' / 59.90' S= 0.0082 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=6.82 cfs @ 12.09 hrs HW=62.58' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 6.82 cfs @ 3.86 fps)

**Pond 106P: DMH 60**

Hydrograph



### Summary for Pond 107P: CB

Inflow Area = 0.235 ac, 64.37% Impervious, Inflow Depth > 7.18" for 100-Year event  
 Inflow = 1.91 cfs @ 12.09 hrs, Volume= 0.140 af  
 Outflow = 1.91 cfs @ 12.09 hrs, Volume= 0.140 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.91 cfs @ 12.09 hrs, Volume= 0.140 af  
 Routed to Pond 119P : DMH 66

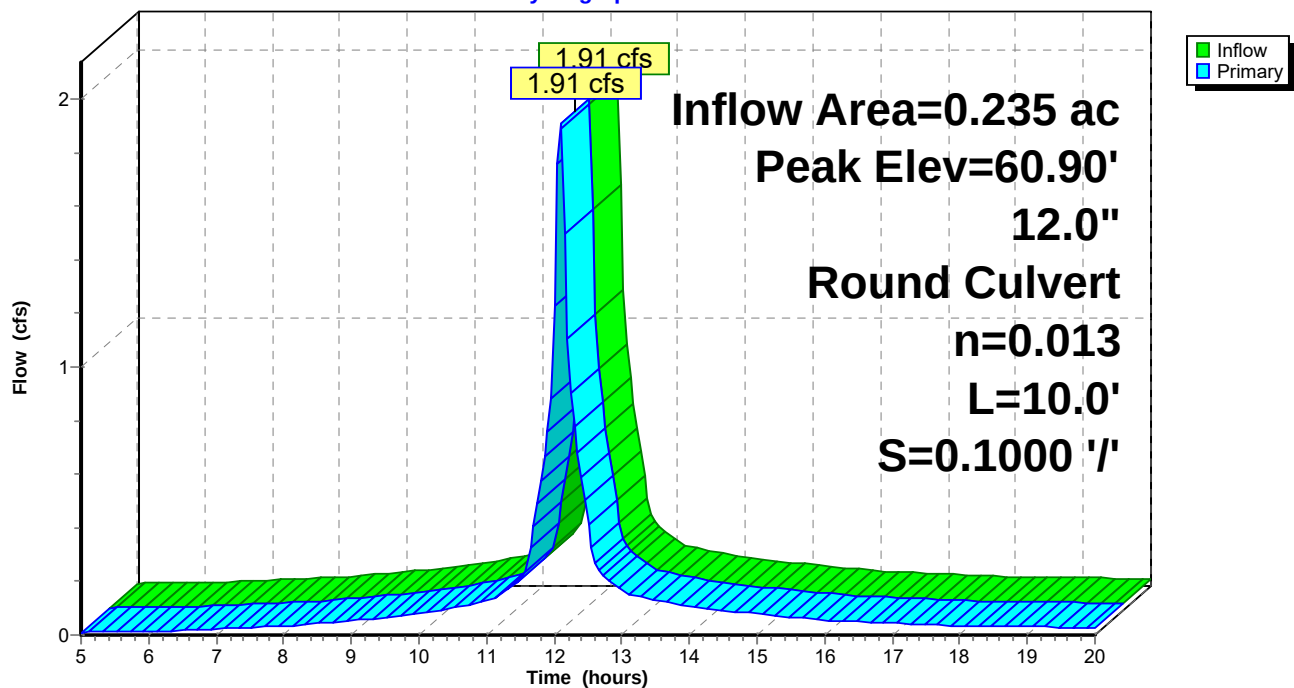
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.90' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.00' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.00' / 59.00' S= 0.1000 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.86 cfs @ 12.09 hrs HW=60.89' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.86 cfs @ 2.53 fps)

### Pond 107P: CB

Hydrograph



### Summary for Pond 108P: CB 88

Inflow Area = 0.093 ac, 80.29% Impervious, Inflow Depth > 7.60" for 100-Year event  
 Inflow = 0.78 cfs @ 12.09 hrs, Volume= 0.059 af  
 Outflow = 0.78 cfs @ 12.09 hrs, Volume= 0.059 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.78 cfs @ 12.09 hrs, Volume= 0.059 af  
 Routed to Pond 119P : DMH 66

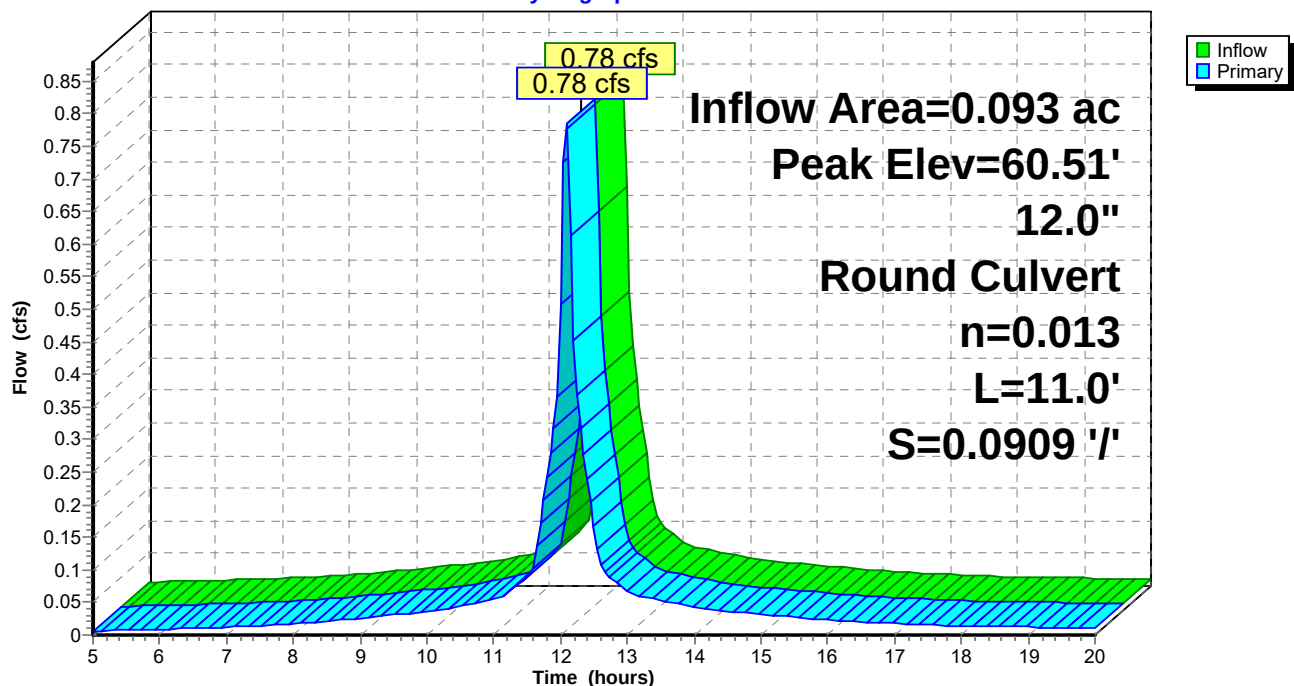
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.51' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.00' / 59.00' S= 0.0909 ' / ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.76 cfs @ 12.09 hrs HW=60.51' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.76 cfs @ 1.91 fps)

### Pond 108P: CB 88

#### Hydrograph



### Summary for Pond 109P: CB 79

Inflow Area = 0.457 ac, 64.44% Impervious, Inflow Depth > 7.18" for 100-Year event  
 Inflow = 3.72 cfs @ 12.09 hrs, Volume= 0.273 af  
 Outflow = 3.72 cfs @ 12.09 hrs, Volume= 0.273 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.72 cfs @ 12.09 hrs, Volume= 0.273 af  
 Routed to Pond 111P : DMH 57

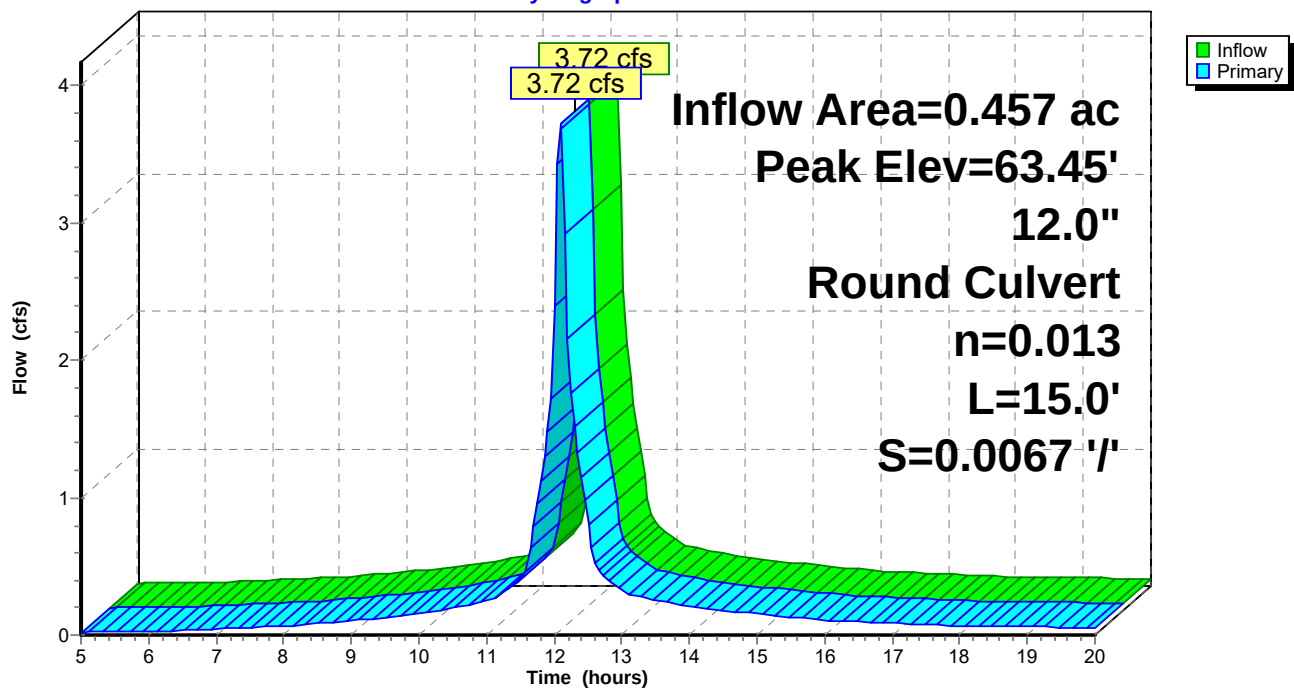
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.45' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.40' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.40' / 61.30' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=3.63 cfs @ 12.09 hrs HW=63.37' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 3.63 cfs @ 4.62 fps)

### Pond 109P: CB 79

#### Hydrograph



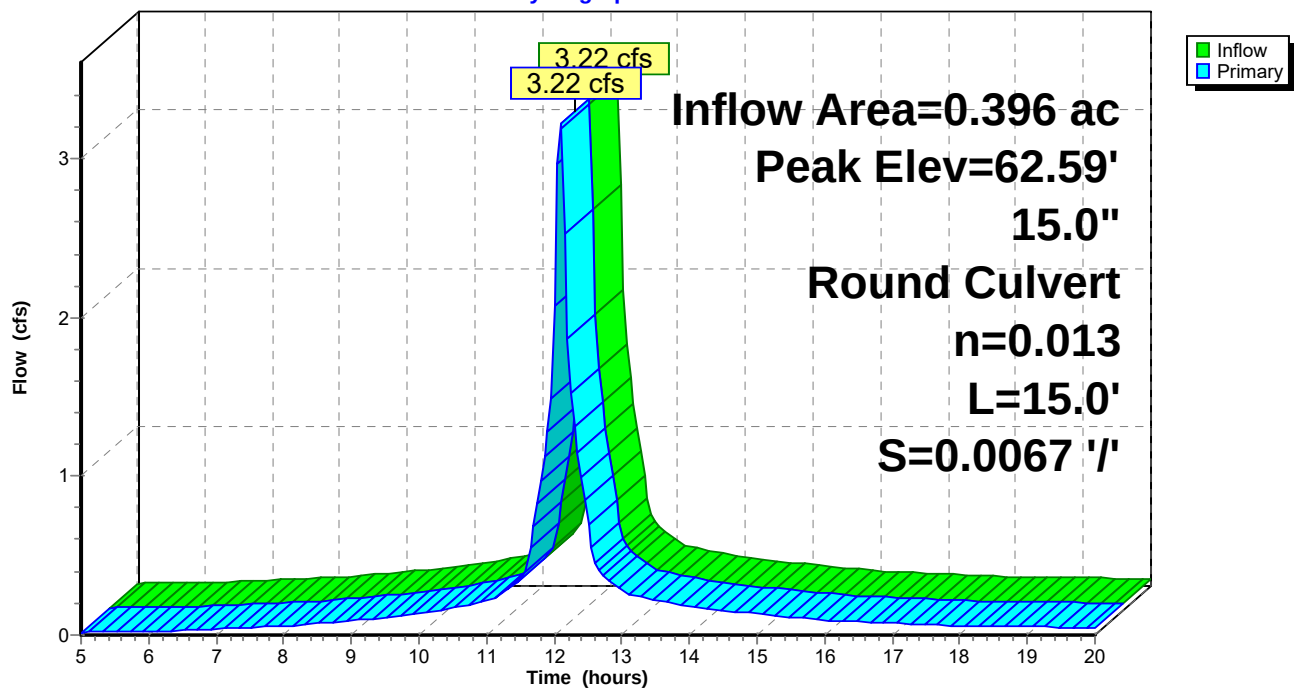
**Summary for Pond 110P: CB 78**

Inflow Area = 0.396 ac, 64.26% Impervious, Inflow Depth > 7.18" for 100-Year event  
 Inflow = 3.22 cfs @ 12.09 hrs, Volume= 0.237 af  
 Outflow = 3.22 cfs @ 12.09 hrs, Volume= 0.237 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.22 cfs @ 12.09 hrs, Volume= 0.237 af  
 Routed to Pond 111P : DMH 57

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.59' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.40' | <b>15.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.40' / 61.30' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf |

**Primary OutFlow** Max=3.14 cfs @ 12.09 hrs HW=62.57' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 3.14 cfs @ 3.41 fps)

**Pond 110P: CB 78****Hydrograph**



**Summary for Pond 111P: DMH 57**

Inflow Area = 1.994 ac, 68.75% Impervious, Inflow Depth > 7.32" for 100-Year event  
 Inflow = 16.42 cfs @ 12.09 hrs, Volume= 1.217 af  
 Outflow = 16.42 cfs @ 12.09 hrs, Volume= 1.217 af, Atten= 0%, Lag= 0.0 min  
 Primary = 16.42 cfs @ 12.09 hrs, Volume= 1.217 af  
 Routed to Pond 208P : DMH 58

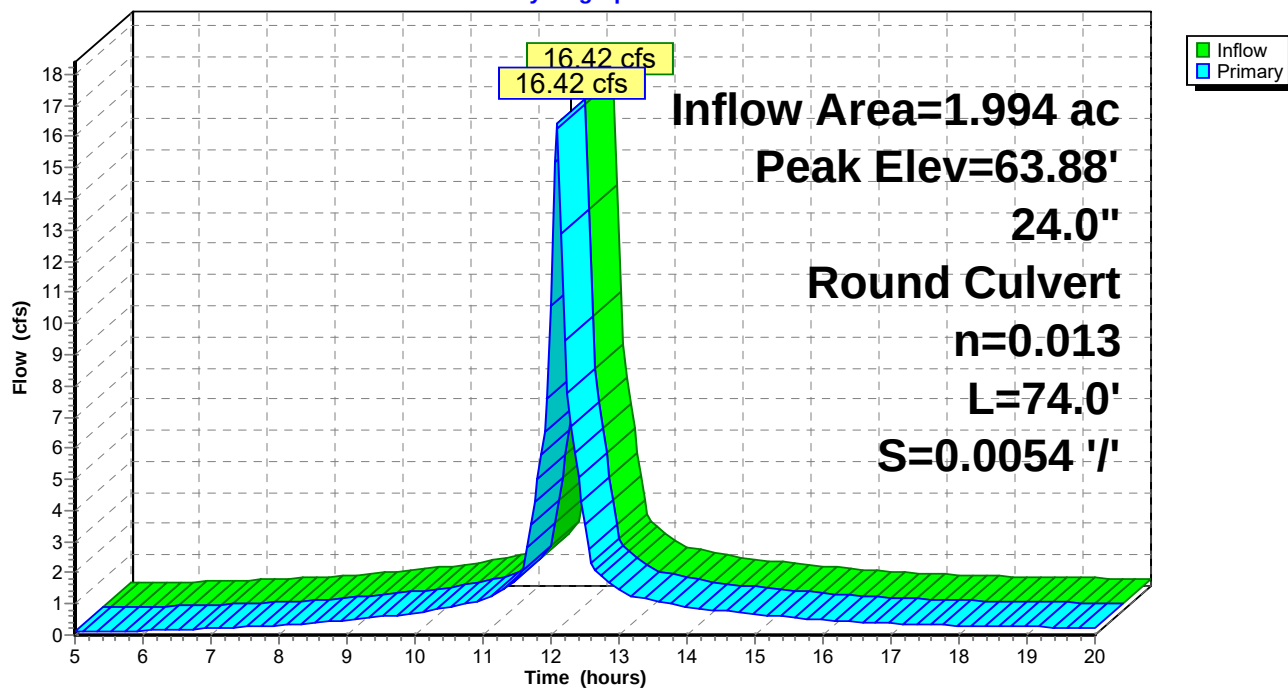
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.88' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 61.00' | <b>24.0" Round Culvert</b><br>L= 74.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 61.00' / 60.60' S= 0.0054 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=16.00 cfs @ 12.09 hrs HW=63.79' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 16.00 cfs @ 5.09 fps)

**Pond 111P: DMH 57**

Hydrograph



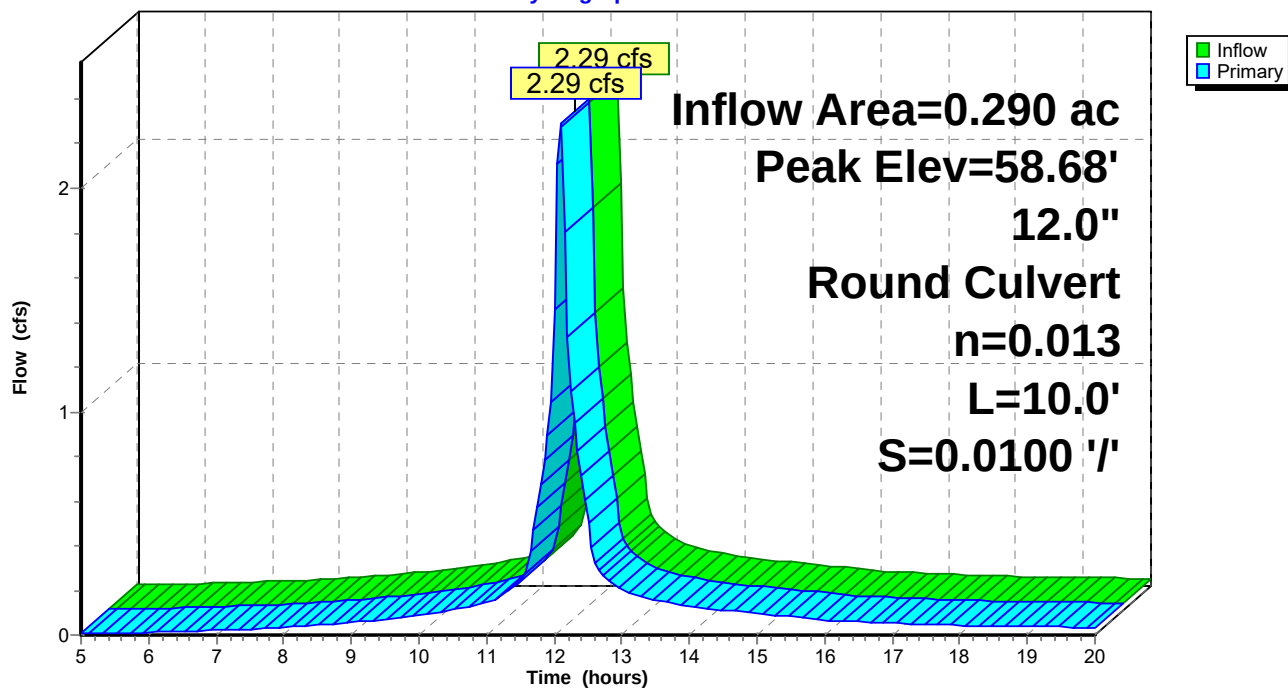
**Summary for Pond 112P: CB 45**

Inflow Area = 0.290 ac, 58.56% Impervious, Inflow Depth > 6.85" for 100-Year event  
 Inflow = 2.29 cfs @ 12.09 hrs, Volume= 0.165 af  
 Outflow = 2.29 cfs @ 12.09 hrs, Volume= 0.165 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.29 cfs @ 12.09 hrs, Volume= 0.165 af  
 Routed to Pond 123P : DMH 31

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.68' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.59' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.59' / 57.49' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.23 cfs @ 12.09 hrs HW=58.66' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.23 cfs @ 3.32 fps)

**Pond 112P: CB 45****Hydrograph**

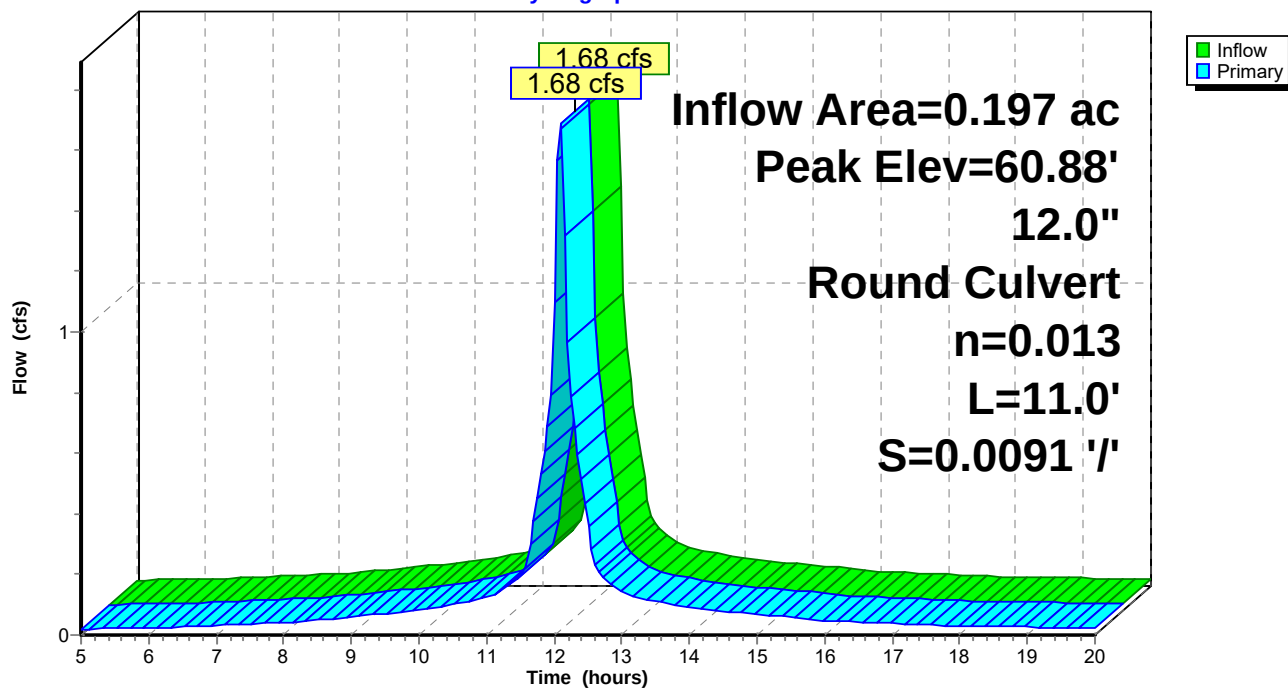
**Summary for Pond 113P: CB 95**

Inflow Area = 0.197 ac, 91.64% Impervious, Inflow Depth > 7.86" for 100-Year event  
 Inflow = 1.68 cfs @ 12.09 hrs, Volume= 0.129 af  
 Outflow = 1.68 cfs @ 12.09 hrs, Volume= 0.129 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.68 cfs @ 12.09 hrs, Volume= 0.129 af  
 Routed to Pond 118P : DMH 70

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.88' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.00' / 59.90' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.64 cfs @ 12.09 hrs HW=60.86' (Free Discharge)  
 1=Culvert (Barrel Controls 1.64 cfs @ 3.05 fps)

**Pond 113P: CB 95****Hydrograph**

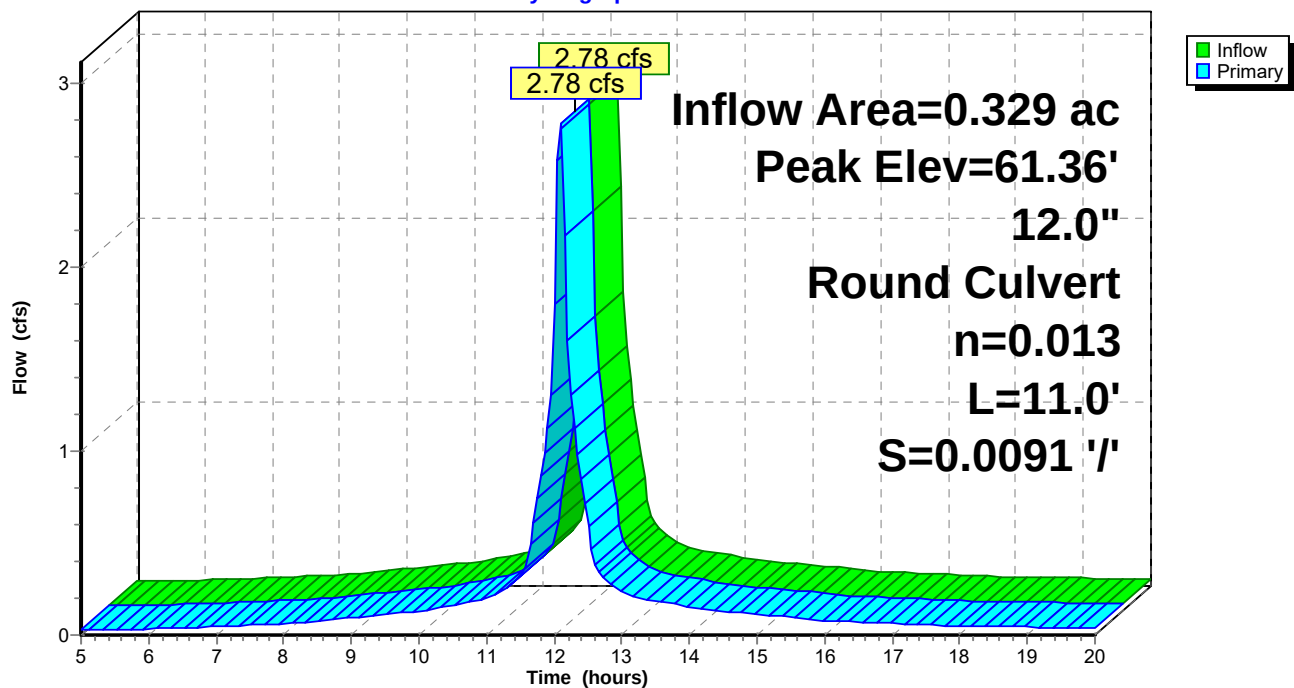
**Summary for Pond 114P: CB 94**

Inflow Area = 0.329 ac, 82.49% Impervious, Inflow Depth > 7.69" for 100-Year event  
 Inflow = 2.78 cfs @ 12.09 hrs, Volume= 0.211 af  
 Outflow = 2.78 cfs @ 12.09 hrs, Volume= 0.211 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.78 cfs @ 12.09 hrs, Volume= 0.211 af  
 Routed to Pond 118P : DMH 70

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.36' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.00' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.00' / 59.90' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.71 cfs @ 12.09 hrs HW=61.32' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.71 cfs @ 3.45 fps)

**Pond 114P: CB 94****Hydrograph**

### Summary for Pond 115P: CB 91

Inflow Area = 0.332 ac, 76.35% Impervious, Inflow Depth > 7.50" for 100-Year event  
 Inflow = 2.77 cfs @ 12.09 hrs, Volume= 0.208 af  
 Outflow = 2.77 cfs @ 12.09 hrs, Volume= 0.208 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.77 cfs @ 12.09 hrs, Volume= 0.208 af  
 Routed to Pond 120P : DMH 67

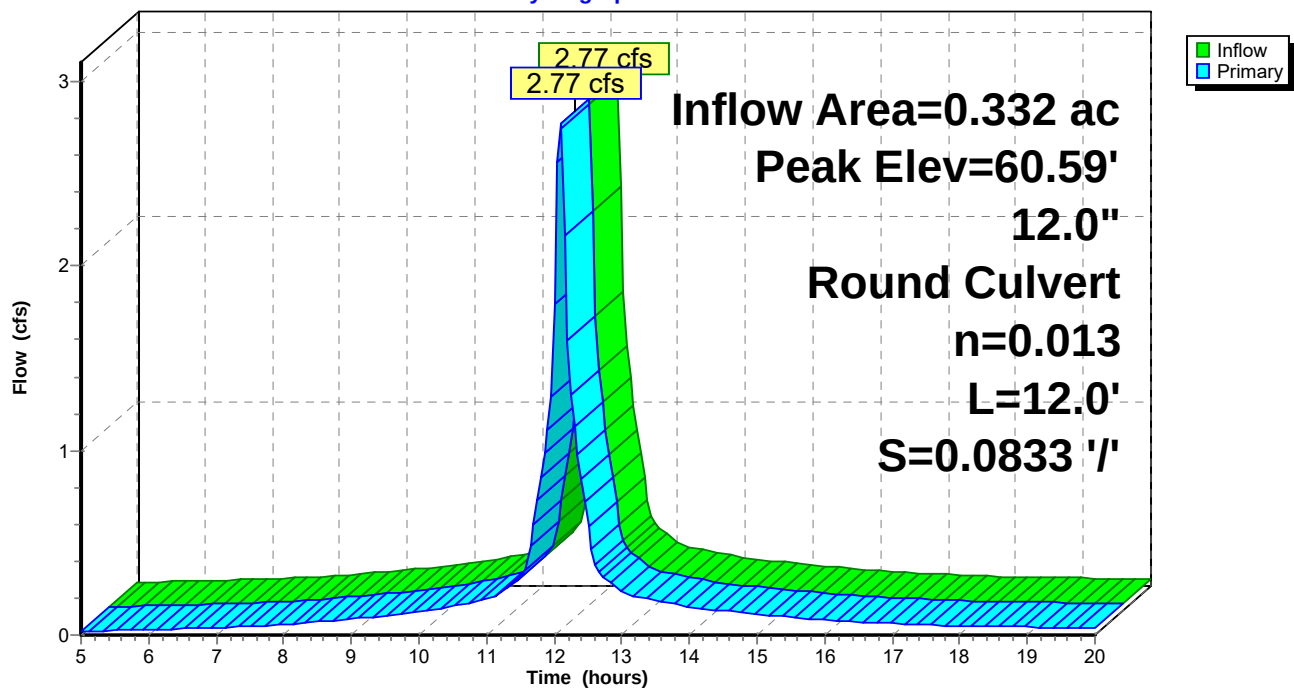
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.59' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.23' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.23' / 58.23' S= 0.0833 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.70 cfs @ 12.09 hrs HW=60.55' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.70 cfs @ 3.44 fps)

### Pond 115P: CB 91

#### Hydrograph



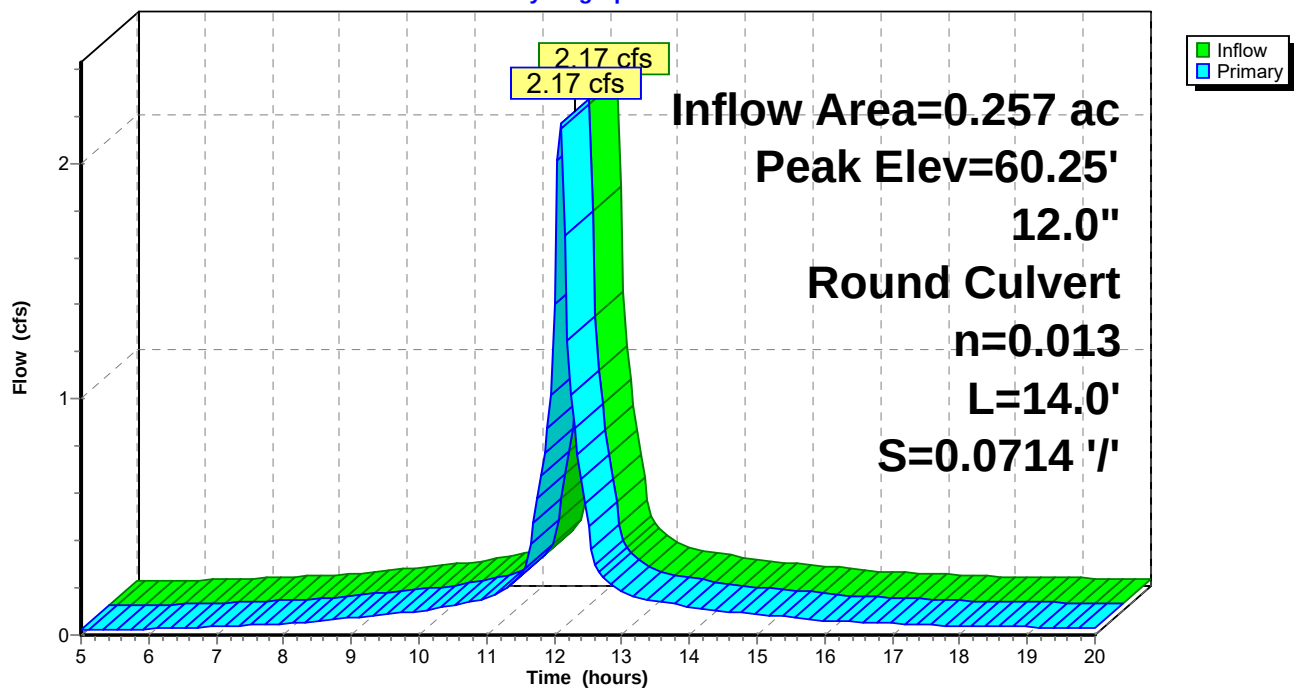
**Summary for Pond 116P: CB 90**

Inflow Area = 0.257 ac, 83.40% Impervious, Inflow Depth > 7.69" for 100-Year event  
 Inflow = 2.17 cfs @ 12.09 hrs, Volume= 0.165 af  
 Outflow = 2.17 cfs @ 12.09 hrs, Volume= 0.165 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.17 cfs @ 12.09 hrs, Volume= 0.165 af  
 Routed to Pond 120P : DMH 67

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.25' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.23' | <b>12.0" Round Culvert</b><br>L= 14.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.23' / 58.23' S= 0.0714 ' S= 0.0714 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.11 cfs @ 12.09 hrs HW=60.23' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.11 cfs @ 2.69 fps)

**Pond 116P: CB 90****Hydrograph**

**Summary for Pond 117P: DMH 69**

Inflow Area = 1.018 ac, 80.27% Impervious, Inflow Depth > 7.62" for 100-Year event  
 Inflow = 8.56 cfs @ 12.09 hrs, Volume= 0.646 af  
 Outflow = 8.56 cfs @ 12.09 hrs, Volume= 0.646 af, Atten= 0%, Lag= 0.0 min  
 Primary = 8.56 cfs @ 12.09 hrs, Volume= 0.646 af  
 Routed to Pond 119P : DMH 66

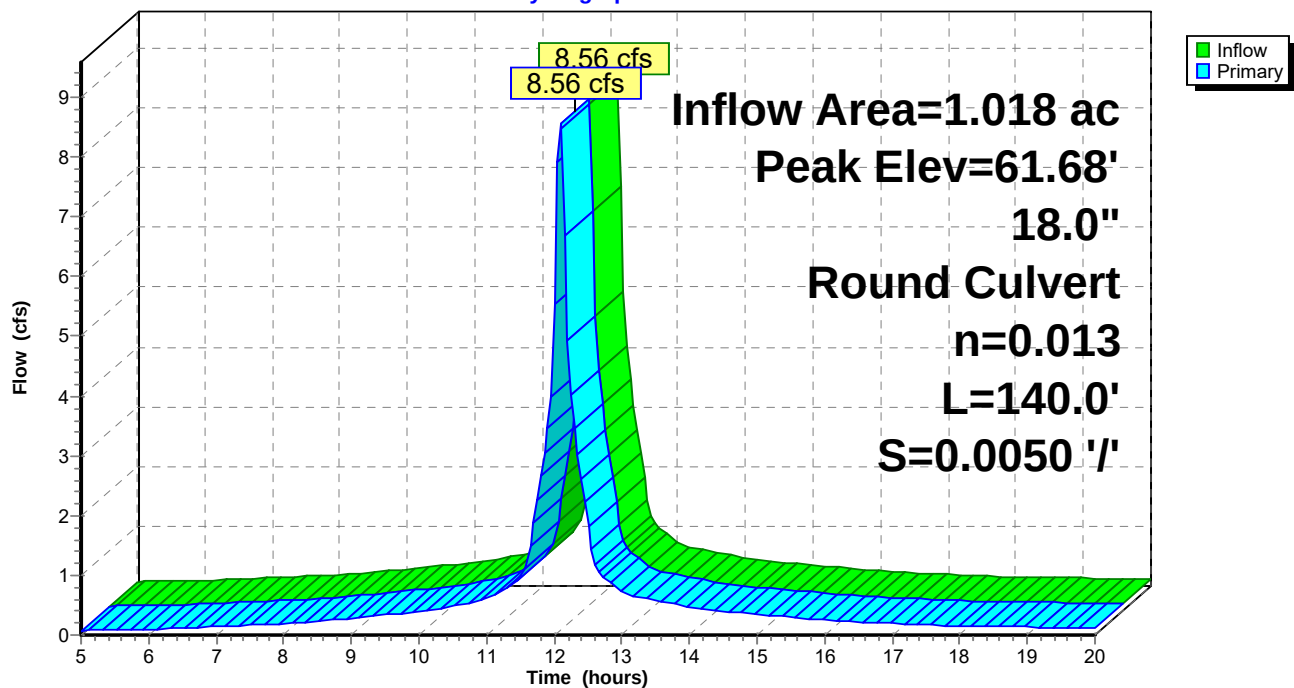
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 61.68' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.26' | <b>18.0" Round Culvert</b><br>L= 140.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.26' / 58.56' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=8.33 cfs @ 12.09 hrs HW=61.60' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 8.33 cfs @ 4.71 fps)

**Pond 117P: DMH 69**

Hydrograph



**Summary for Pond 118P: DMH 70**

Inflow Area = 0.527 ac, 85.92% Impervious, Inflow Depth > 7.76" for 100-Year event  
 Inflow = 4.47 cfs @ 12.09 hrs, Volume= 0.341 af  
 Outflow = 4.47 cfs @ 12.09 hrs, Volume= 0.341 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.47 cfs @ 12.09 hrs, Volume= 0.341 af  
 Routed to Pond 117P : DMH 69

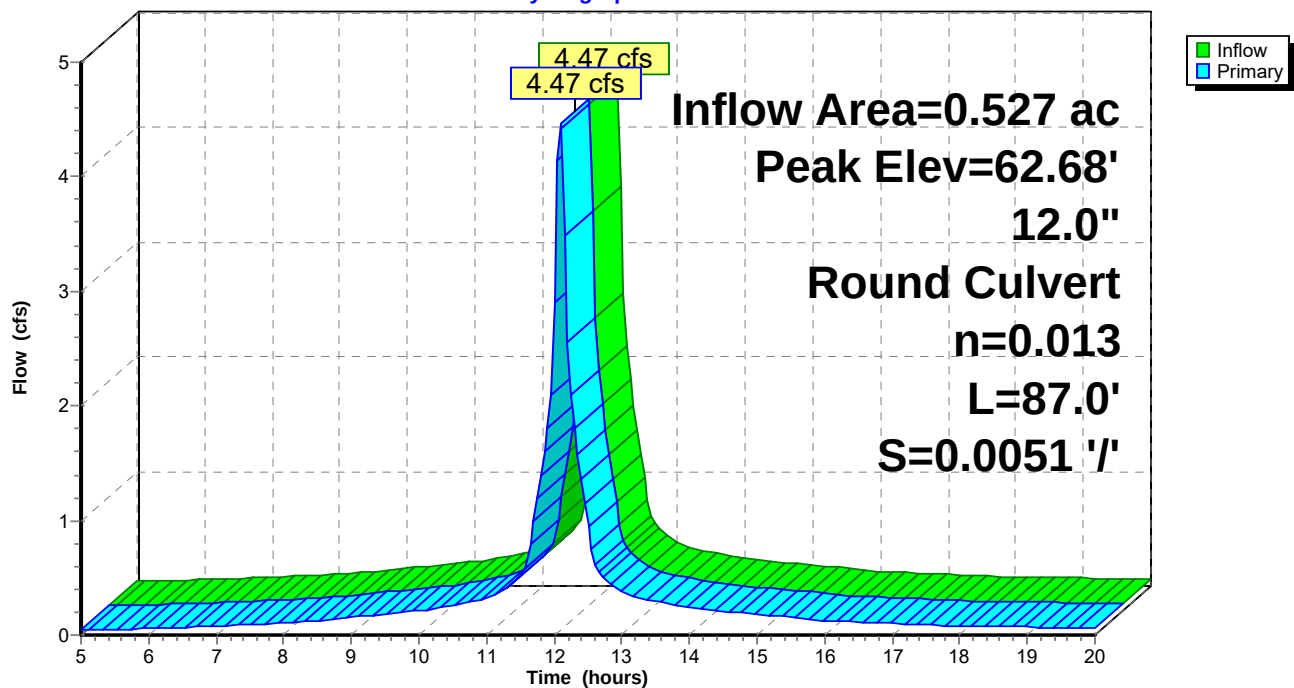
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.68' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.80' | <b>12.0" Round Culvert</b><br>L= 87.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.80' / 59.36' S= 0.0051 ' S= 0.0051 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=4.35 cfs @ 12.09 hrs HW=62.56' (Free Discharge)  
 1=Culvert (Barrel Controls 4.35 cfs @ 5.54 fps)

**Pond 118P: DMH 70**

Hydrograph





### Summary for Pond 119P: DMH 66

Inflow Area = 1.346 ac, 77.50% Impervious, Inflow Depth > 7.54" for 100-Year event  
 Inflow = 11.25 cfs @ 12.09 hrs, Volume= 0.846 af  
 Outflow = 11.25 cfs @ 12.09 hrs, Volume= 0.846 af, Atten= 0%, Lag= 0.0 min  
 Primary = 11.25 cfs @ 12.09 hrs, Volume= 0.846 af  
 Routed to Pond 120P : DMH 67

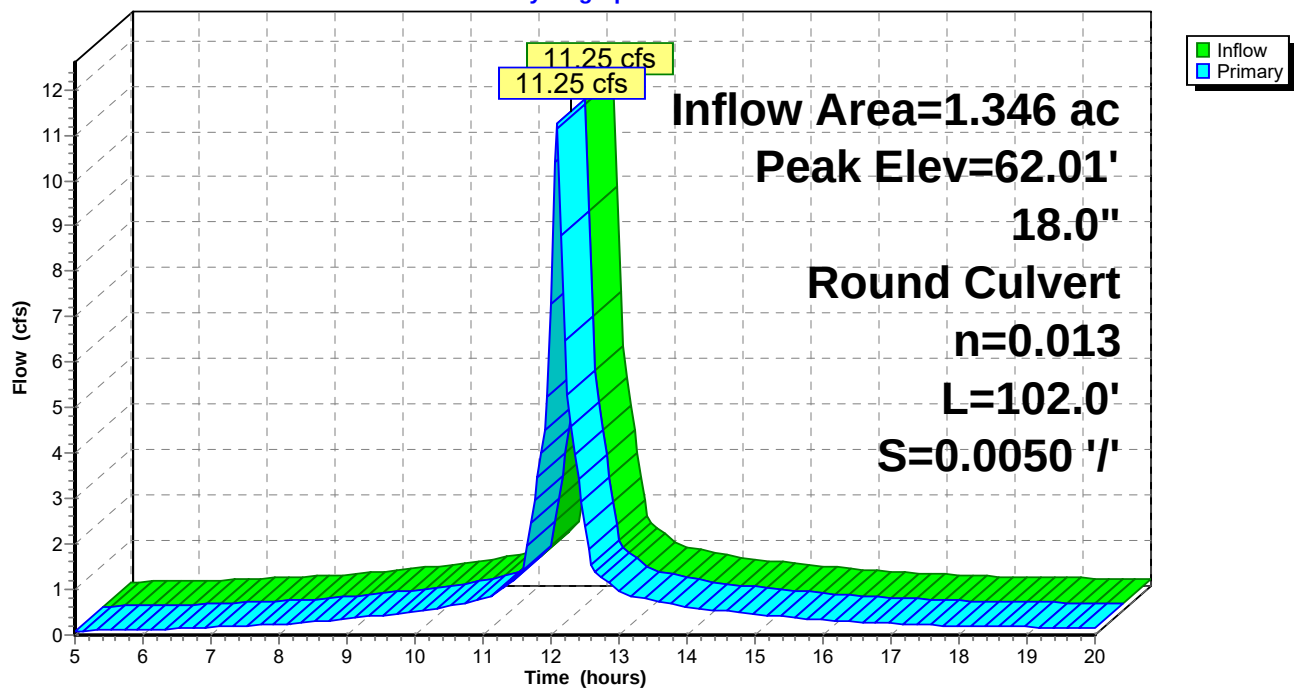
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 62.01' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 58.46' | <b>18.0" Round Culvert</b><br>L= 102.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 58.46' / 57.95' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=10.96 cfs @ 12.09 hrs HW=61.87' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 10.96 cfs @ 6.20 fps)

### Pond 119P: DMH 66

Hydrograph



### Summary for Pond 120P: DMH 67

Inflow Area = 1.935 ac, 78.08% Impervious, Inflow Depth > 7.55" for 100-Year event  
 Inflow = 16.19 cfs @ 12.09 hrs, Volume= 1.218 af  
 Outflow = 16.19 cfs @ 12.09 hrs, Volume= 1.218 af, Atten= 0%, Lag= 0.0 min  
 Primary = 16.19 cfs @ 12.09 hrs, Volume= 1.218 af  
 Routed to Pond 210P : DMH 68

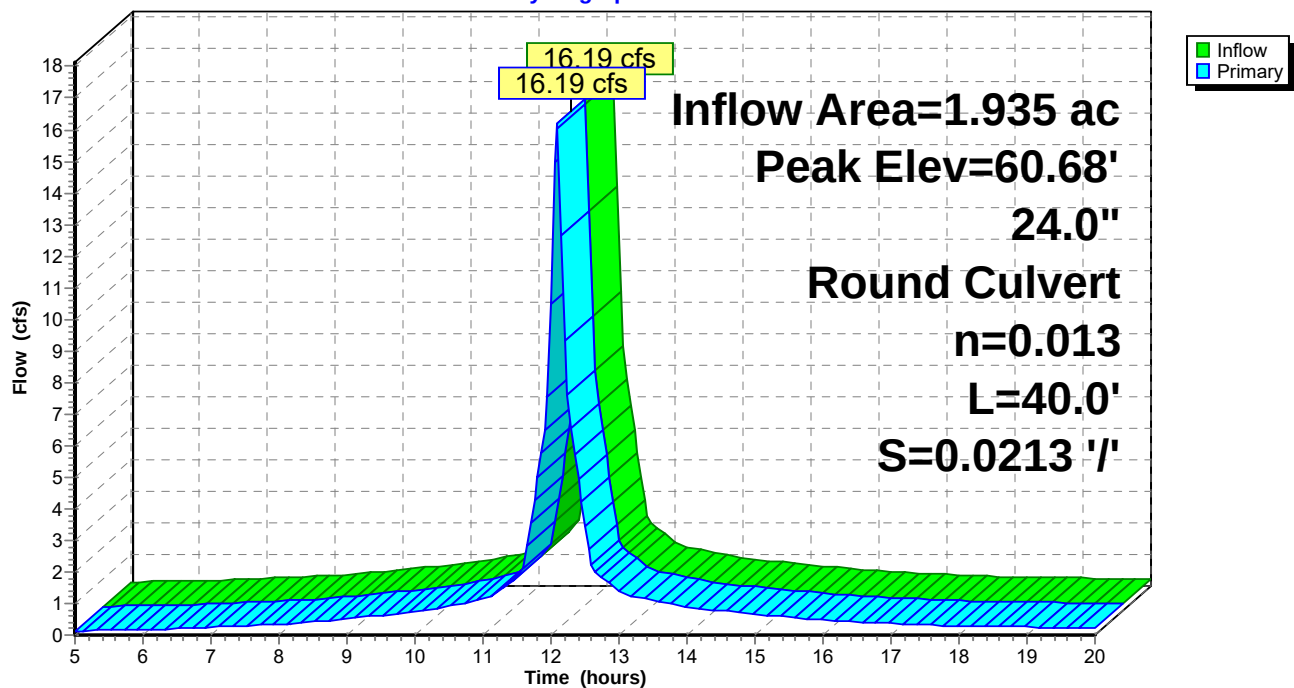
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.68' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.85' | <b>24.0" Round Culvert</b><br>L= 40.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.85' / 57.00' S= 0.0213 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=15.77 cfs @ 12.09 hrs HW=60.59' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 15.77 cfs @ 5.02 fps)

### Pond 120P: DMH 67

#### Hydrograph



### Summary for Pond 122P: CB 46

Inflow Area = 0.275 ac, 72.42% Impervious, Inflow Depth > 7.40" for 100-Year event  
 Inflow = 2.28 cfs @ 12.09 hrs, Volume= 0.170 af  
 Outflow = 2.28 cfs @ 12.09 hrs, Volume= 0.170 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.28 cfs @ 12.09 hrs, Volume= 0.170 af  
 Routed to Pond 123P : DMH 31

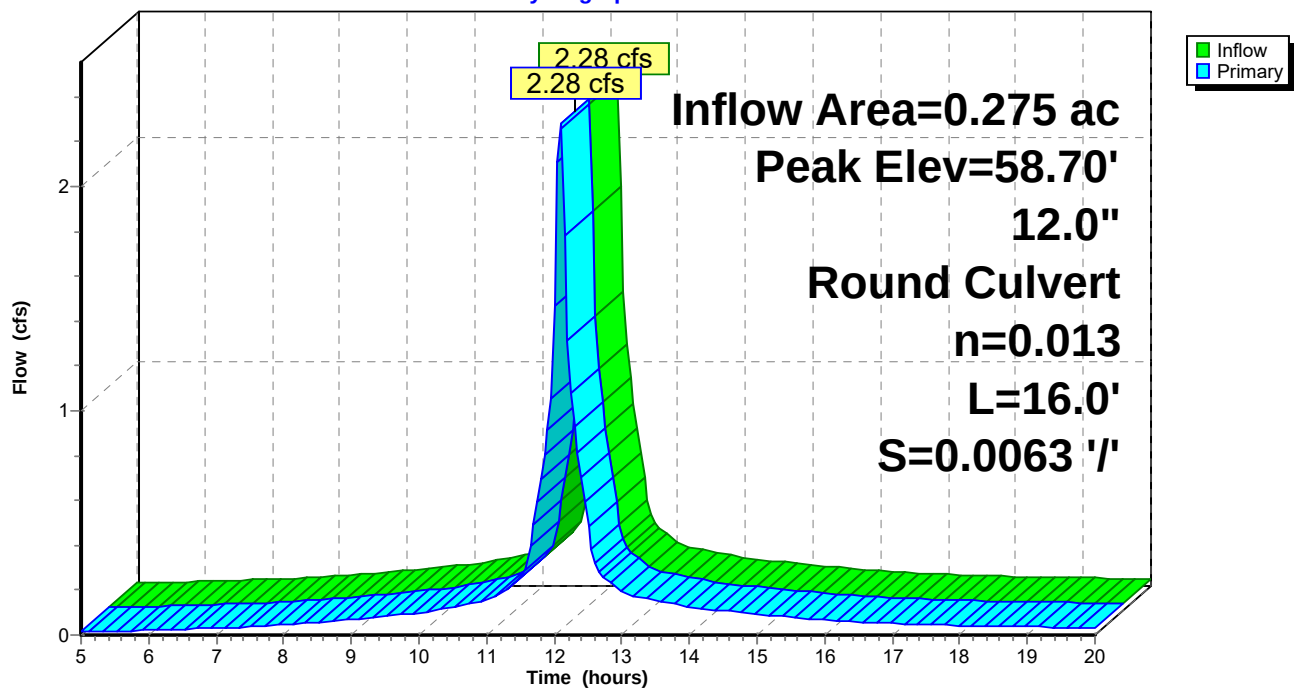
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.70' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.59' | <b>12.0" Round Culvert</b><br>L= 16.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.59' / 57.49' S= 0.0063 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.22 cfs @ 12.09 hrs HW=58.68' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.22 cfs @ 3.24 fps)

### Pond 122P: CB 46

#### Hydrograph



### Summary for Pond 123P: DMH 31

Inflow Area = 0.565 ac, 65.31% Impervious, Inflow Depth > 7.12" for 100-Year event  
 Inflow = 4.57 cfs @ 12.09 hrs, Volume= 0.335 af  
 Outflow = 4.57 cfs @ 12.09 hrs, Volume= 0.335 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.57 cfs @ 12.09 hrs, Volume= 0.335 af  
 Routed to Pond 124P : DMH 32

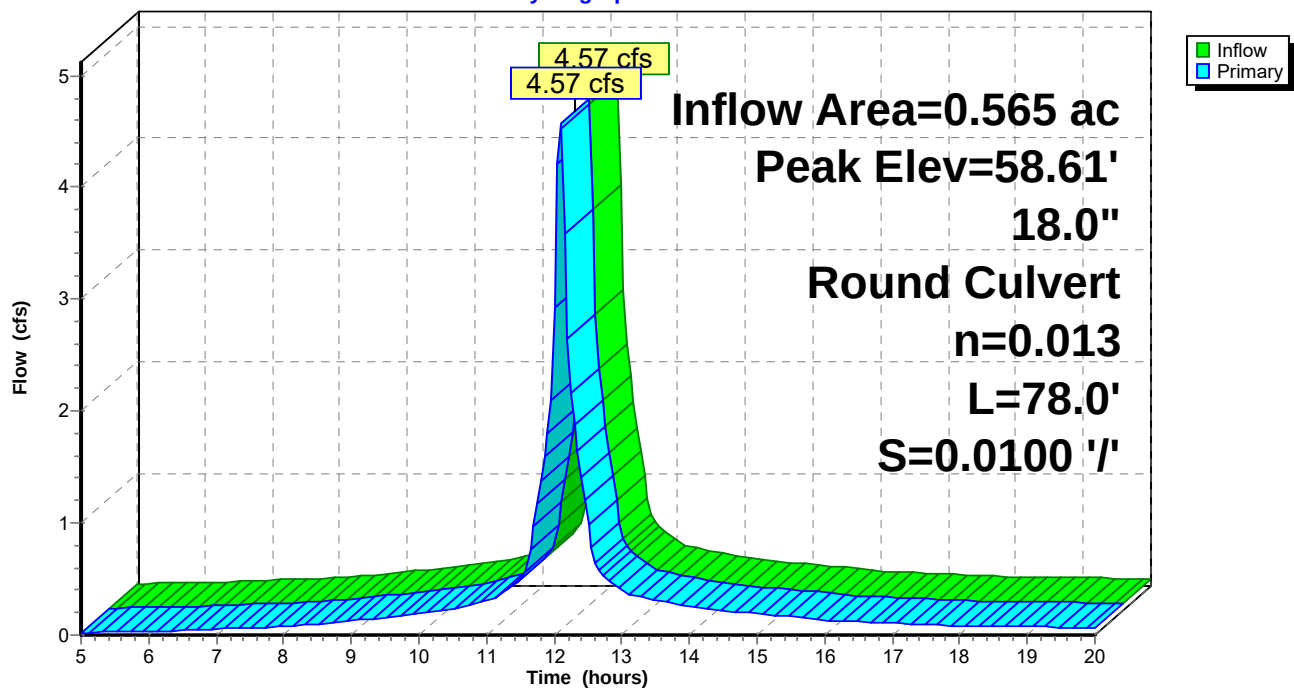
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.61' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.39' | <b>18.0" Round Culvert</b><br>L= 78.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.39' / 56.61' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=4.45 cfs @ 12.09 hrs HW=58.59' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 4.45 cfs @ 2.94 fps)

### Pond 123P: DMH 31

#### Hydrograph



**Summary for Pond 124P: DMH 32**

Inflow Area = 0.565 ac, 65.31% Impervious, Inflow Depth > 7.12" for 100-Year event  
 Inflow = 4.57 cfs @ 12.09 hrs, Volume= 0.335 af  
 Outflow = 4.57 cfs @ 12.09 hrs, Volume= 0.335 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.57 cfs @ 12.09 hrs, Volume= 0.335 af  
 Routed to Pond 206P : DMH 34

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 57.79' @ 12.09 hrs

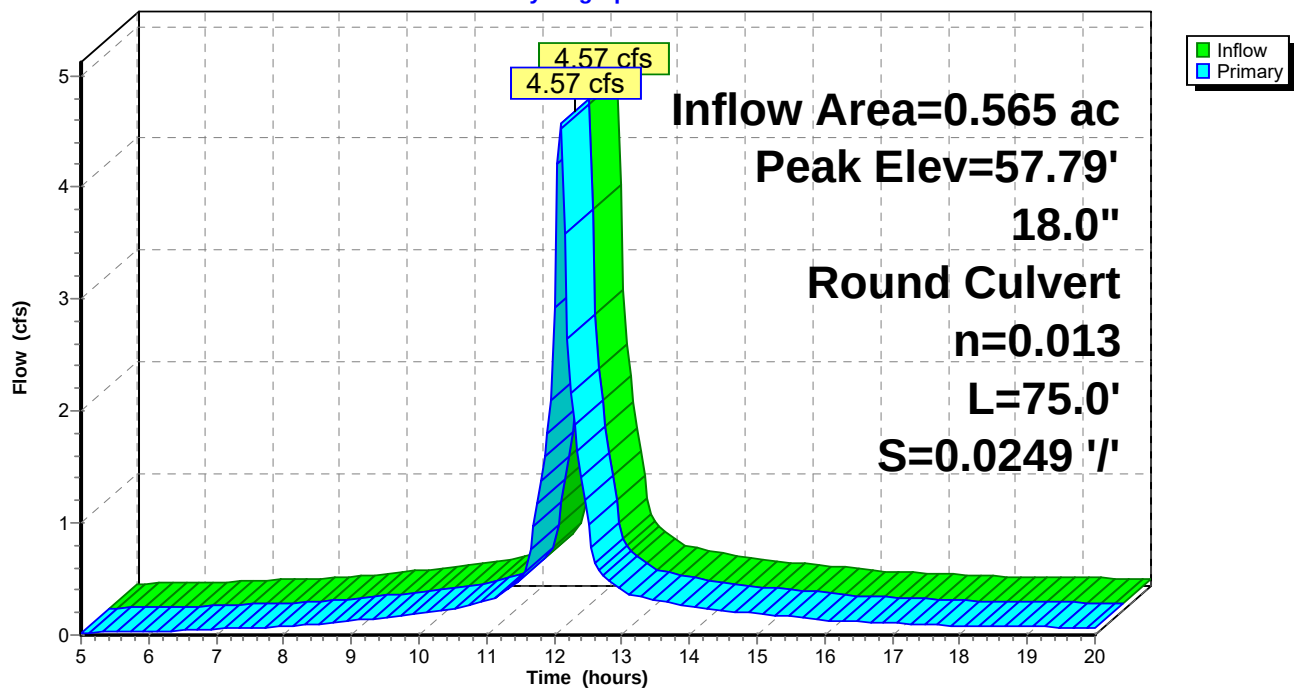
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 56.57' | <b>18.0" Round Culvert</b><br>L= 75.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 56.57' / 54.70' S= 0.0249 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=4.45 cfs @ 12.09 hrs HW=57.77' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 4.45 cfs @ 2.94 fps)

**Pond 124P: DMH 32**

Hydrograph



## Summary for Pond 125P: CB 36

Inflow Area = 0.196 ac, 76.76% Impervious, Inflow Depth > 6.62" for 100-Year event  
 Inflow = 1.52 cfs @ 12.09 hrs, Volume= 0.108 af  
 Outflow = 1.52 cfs @ 12.09 hrs, Volume= 0.108 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.52 cfs @ 12.09 hrs, Volume= 0.108 af  
 Routed to Pond 127P : DMH 26

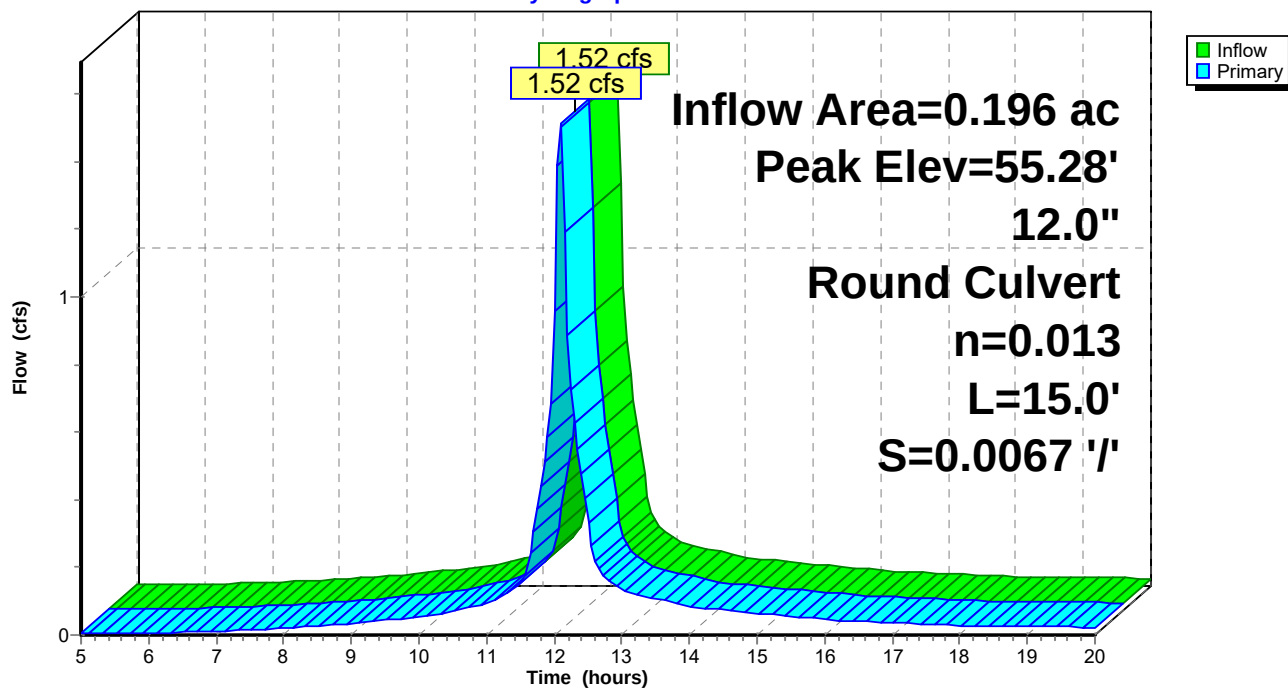
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 55.28' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.45' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.45' / 54.35' S= 0.0067 ' / ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.48 cfs @ 12.09 hrs HW=55.27' (Free Discharge)  
 1=Culvert (Barrel Controls 1.48 cfs @ 2.92 fps)

## Pond 125P: CB 36

## Hydrograph



### Summary for Pond 126P: CB 37

Inflow Area = 0.225 ac, 79.18% Impervious, Inflow Depth > 6.85" for 100-Year event  
 Inflow = 1.78 cfs @ 12.09 hrs, Volume= 0.128 af  
 Outflow = 1.78 cfs @ 12.09 hrs, Volume= 0.128 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.78 cfs @ 12.09 hrs, Volume= 0.128 af  
 Routed to Pond 127P : DMH 26

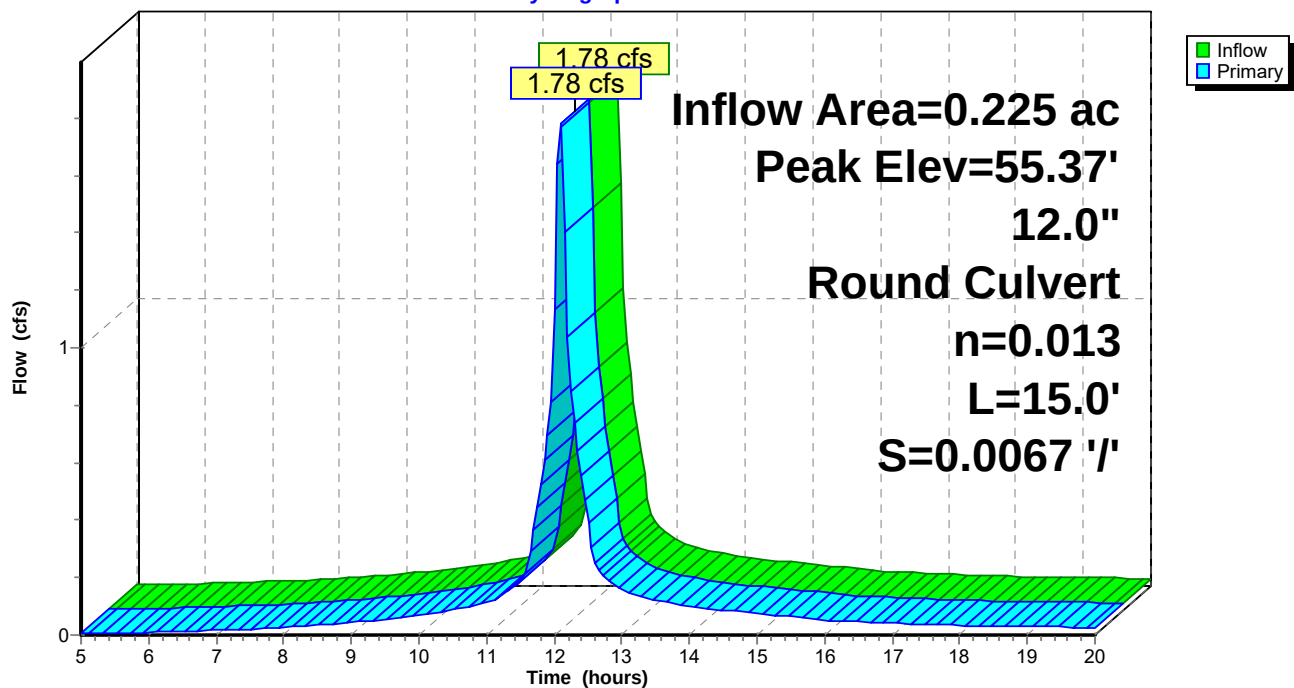
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 55.37' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.45' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.45' / 54.35' S= 0.0067 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.73 cfs @ 12.09 hrs HW=55.36' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.73 cfs @ 3.04 fps)

### Pond 126P: CB 37

#### Hydrograph



### Summary for Pond 127P: DMH 26

Inflow Area = 0.421 ac, 78.05% Impervious, Inflow Depth > 6.74" for 100-Year event  
 Inflow = 3.29 cfs @ 12.09 hrs, Volume= 0.236 af  
 Outflow = 3.29 cfs @ 12.09 hrs, Volume= 0.236 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.29 cfs @ 12.09 hrs, Volume= 0.236 af  
 Routed to Pond 205P : DMH 27

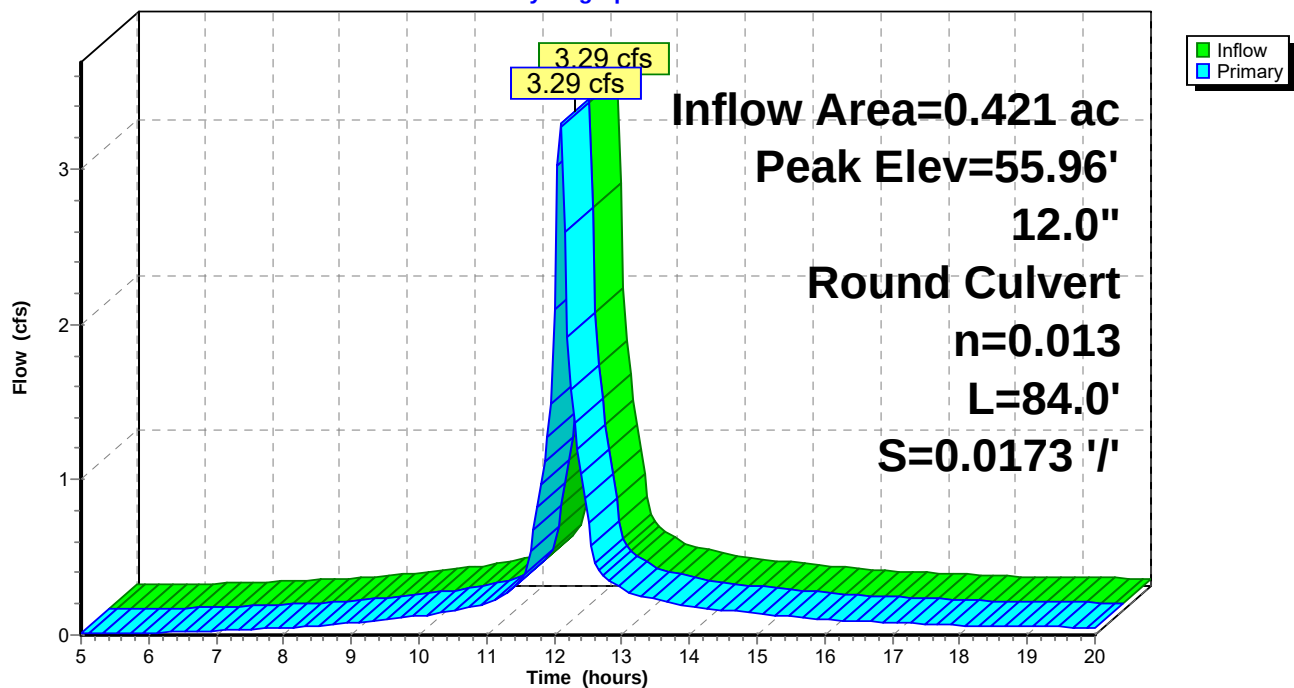
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 55.96' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.25' | <b>12.0" Round Culvert</b><br>L= 84.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.25' / 52.80' S= 0.0173 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=3.21 cfs @ 12.09 hrs HW=55.91' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 3.21 cfs @ 4.09 fps)

### Pond 127P: DMH 26

#### Hydrograph





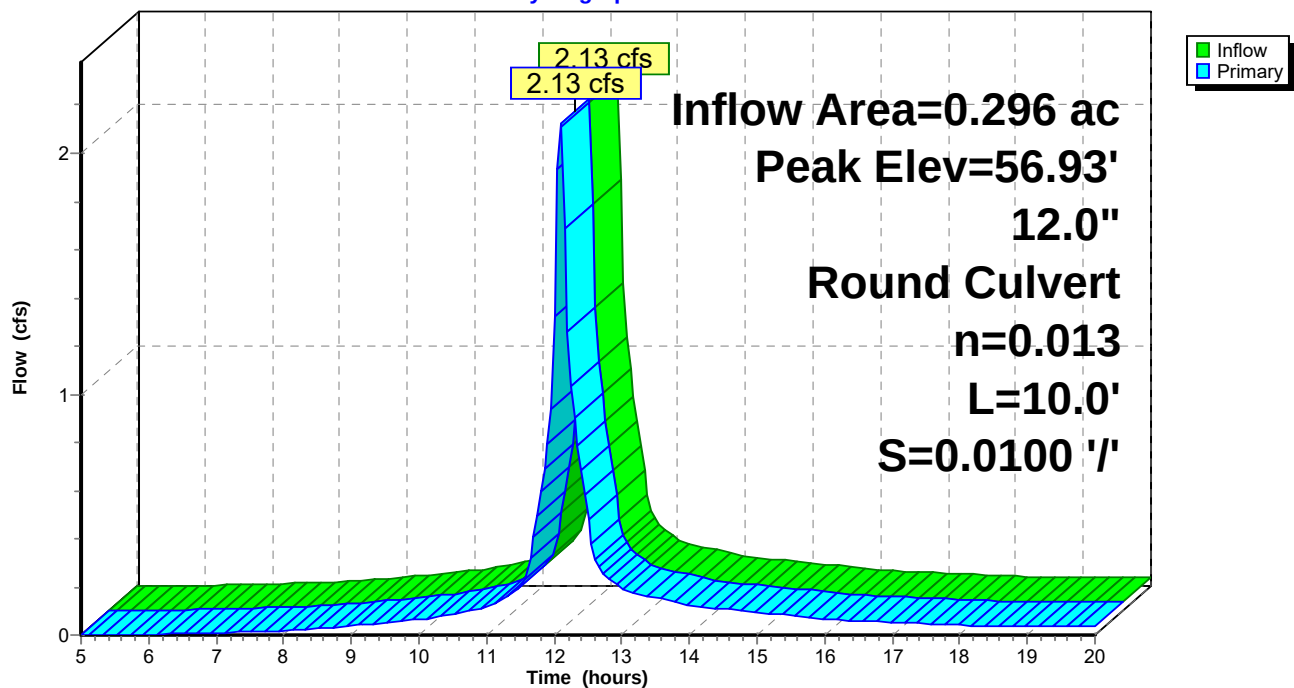
**Summary for Pond 128P: CB 30**

Inflow Area = 0.296 ac, 67.55% Impervious, Inflow Depth > 6.02" for 100-Year event  
 Inflow = 2.13 cfs @ 12.09 hrs, Volume= 0.148 af  
 Outflow = 2.13 cfs @ 12.09 hrs, Volume= 0.148 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.13 cfs @ 12.09 hrs, Volume= 0.148 af  
 Routed to Pond 141P : DMH 23

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.93' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 55.90' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 55.90' / 55.80' S= 0.0100 ' S= 0.0100 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.08 cfs @ 12.09 hrs HW=56.91' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.08 cfs @ 3.25 fps)

**Pond 128P: CB 30****Hydrograph**

### Summary for Pond 129P: CB 34

Inflow Area = 0.397 ac, 70.10% Impervious, Inflow Depth > 6.14" for 100-Year event  
 Inflow = 2.90 cfs @ 12.09 hrs, Volume= 0.203 af  
 Outflow = 2.90 cfs @ 12.09 hrs, Volume= 0.203 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.90 cfs @ 12.09 hrs, Volume= 0.203 af  
 Routed to Pond 134P : DMH 25

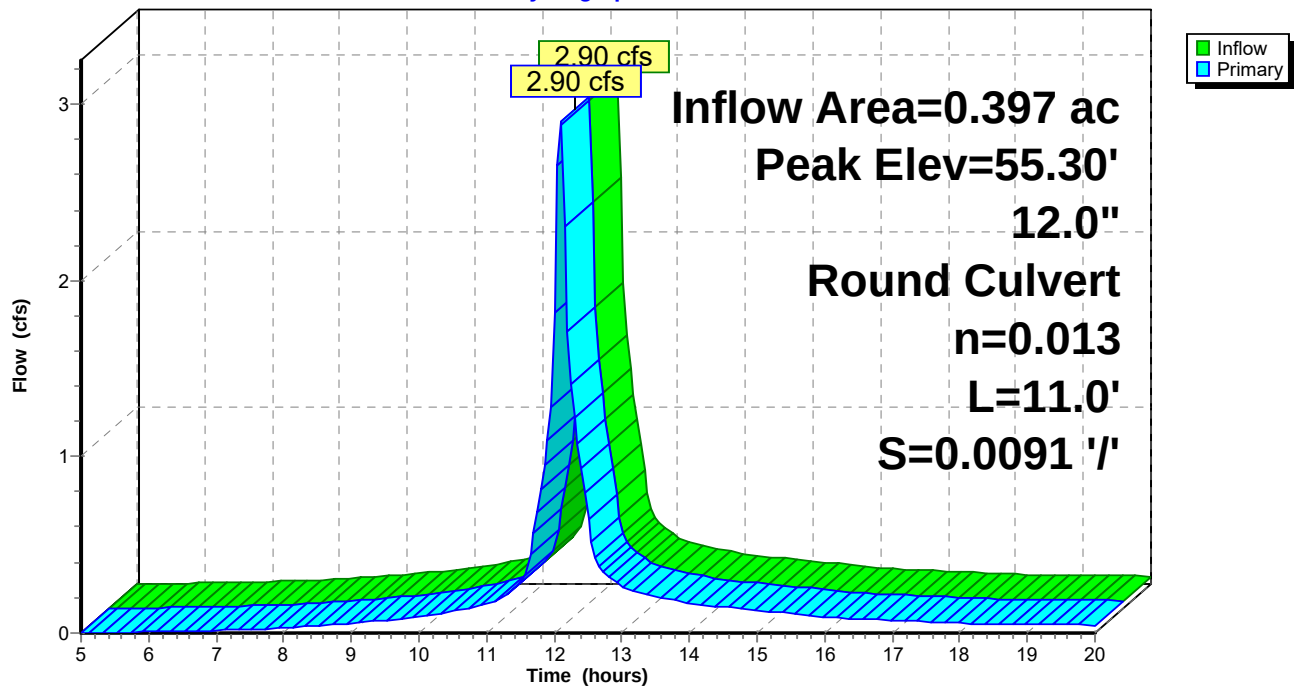
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 55.30' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.86' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.86' / 53.76' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.84 cfs @ 12.09 hrs HW=55.26' (Free Discharge)  
 1=Culvert (Inlet Controls 2.84 cfs @ 3.61 fps)

### Pond 129P: CB 34

#### Hydrograph



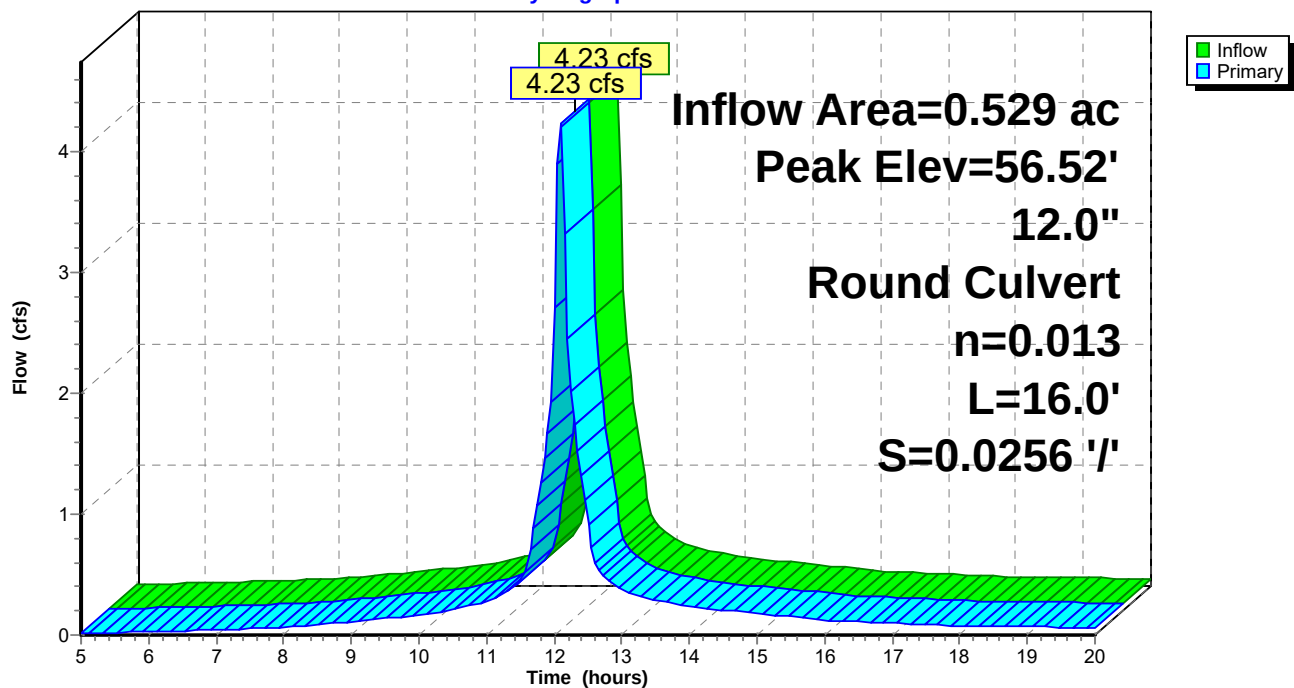
**Summary for Pond 130P: CB 32**

Inflow Area = 0.529 ac, 81.18% Impervious, Inflow Depth > 6.96" for 100-Year event  
 Inflow = 4.23 cfs @ 12.09 hrs, Volume= 0.307 af  
 Outflow = 4.23 cfs @ 12.09 hrs, Volume= 0.307 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.23 cfs @ 12.09 hrs, Volume= 0.307 af  
 Routed to Pond 133P : DMH 24

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.52' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.02' | <b>12.0" Round Culvert</b><br>L= 16.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.02' / 53.61' S= 0.0256 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=4.12 cfs @ 12.09 hrs HW=56.43' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 4.12 cfs @ 5.25 fps)

**Pond 130P: CB 32****Hydrograph**

**Summary for Pond 131P: CB 35**

Inflow Area = 0.350 ac, 63.87% Impervious, Inflow Depth > 5.78" for 100-Year event  
 Inflow = 2.43 cfs @ 12.09 hrs, Volume= 0.168 af  
 Outflow = 2.43 cfs @ 12.09 hrs, Volume= 0.168 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.43 cfs @ 12.09 hrs, Volume= 0.168 af  
 Routed to Pond 134P : DMH 25

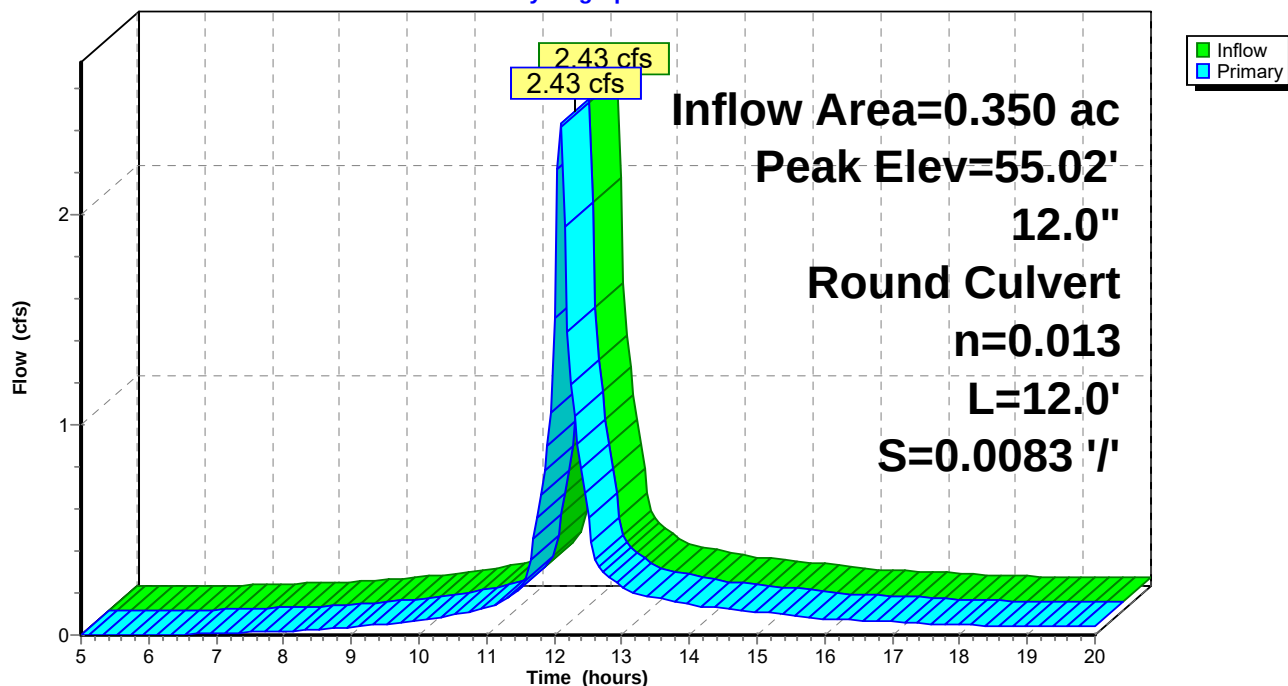
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 55.02' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.86' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.86' / 53.76' S= 0.0083 ' S= 0.0083 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.39 cfs @ 12.09 hrs HW=55.00' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 2.39 cfs @ 3.04 fps)

**Pond 131P: CB 35****Hydrograph**

### Summary for Pond 132P: CB 33

Inflow Area = 0.376 ac, 53.54% Impervious, Inflow Depth > 5.06" for 100-Year event  
 Inflow = 2.33 cfs @ 12.09 hrs, Volume= 0.159 af  
 Outflow = 2.33 cfs @ 12.09 hrs, Volume= 0.159 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.33 cfs @ 12.09 hrs, Volume= 0.159 af  
 Routed to Pond 133P : DMH 24

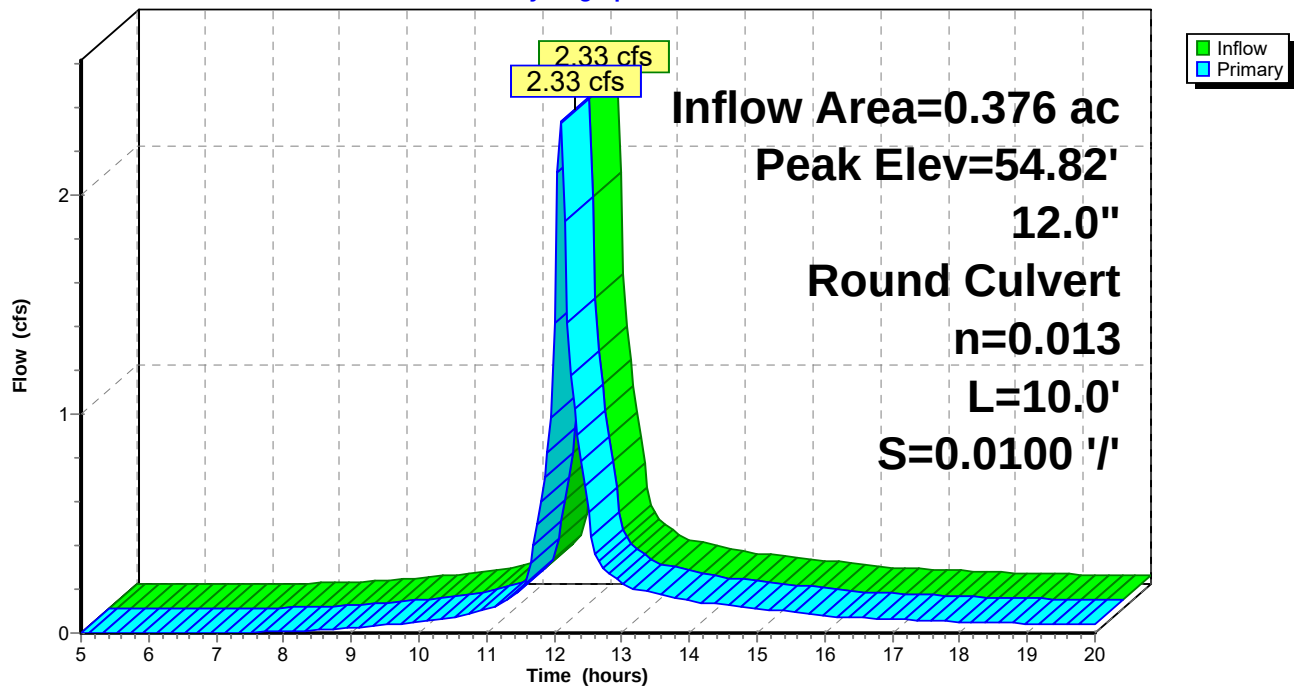
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.82' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.71' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.71' / 53.61' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.29 cfs @ 12.09 hrs HW=54.80' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.29 cfs @ 2.92 fps)

### Pond 132P: CB 33

#### Hydrograph



**Summary for Pond 133P: DMH 24**

Inflow Area = 1.653 ac, 68.56% Impervious, Inflow Depth > 6.08" for 100-Year event  
 Inflow = 11.89 cfs @ 12.09 hrs, Volume= 0.837 af  
 Outflow = 11.89 cfs @ 12.09 hrs, Volume= 0.837 af, Atten= 0%, Lag= 0.0 min  
 Primary = 11.89 cfs @ 12.09 hrs, Volume= 0.837 af  
 Routed to Pond 135P : Inf. Basin 3

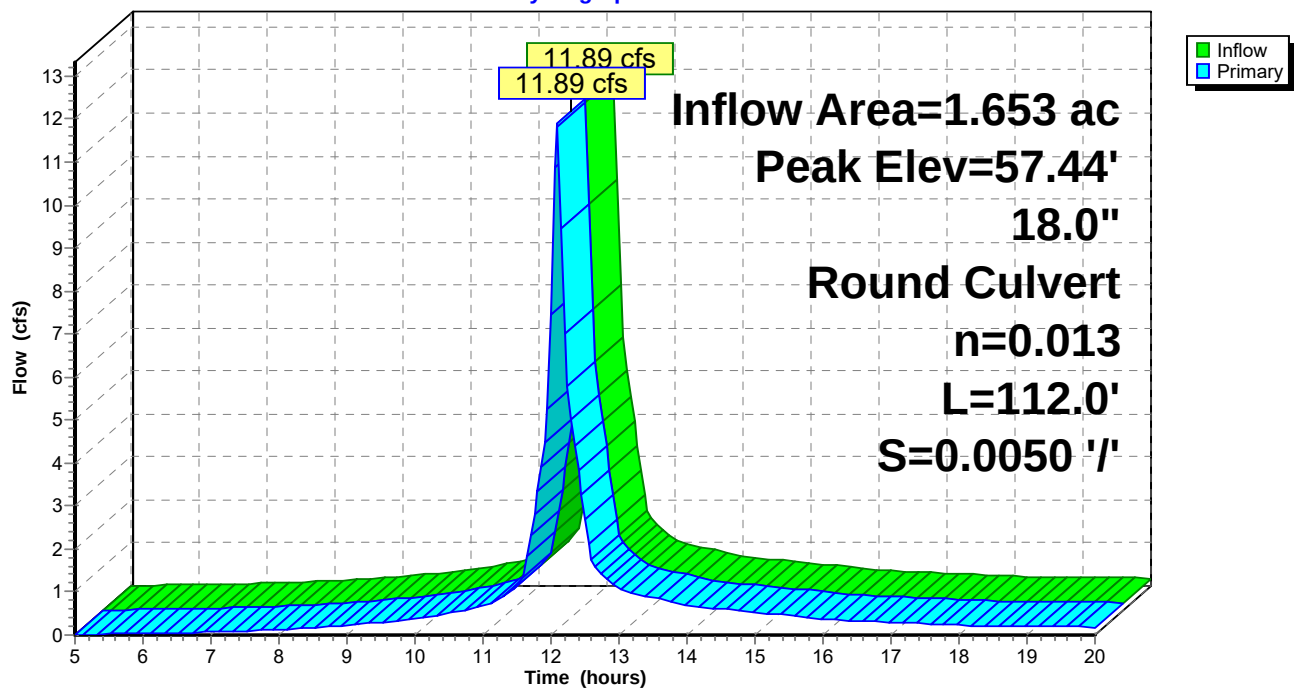
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 57.44' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.56' | <b>18.0" Round Culvert</b><br>L= 112.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.56' / 53.00' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=11.62 cfs @ 12.09 hrs HW=57.30' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 11.62 cfs @ 6.58 fps)

**Pond 133P: DMH 24**

Hydrograph



### Summary for Pond 134P: DMH 25

Inflow Area = 0.747 ac, 67.18% Impervious, Inflow Depth > 5.97" for 100-Year event  
 Inflow = 5.33 cfs @ 12.09 hrs, Volume= 0.372 af  
 Outflow = 5.33 cfs @ 12.09 hrs, Volume= 0.372 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.33 cfs @ 12.09 hrs, Volume= 0.372 af  
 Routed to Pond 133P : DMH 24

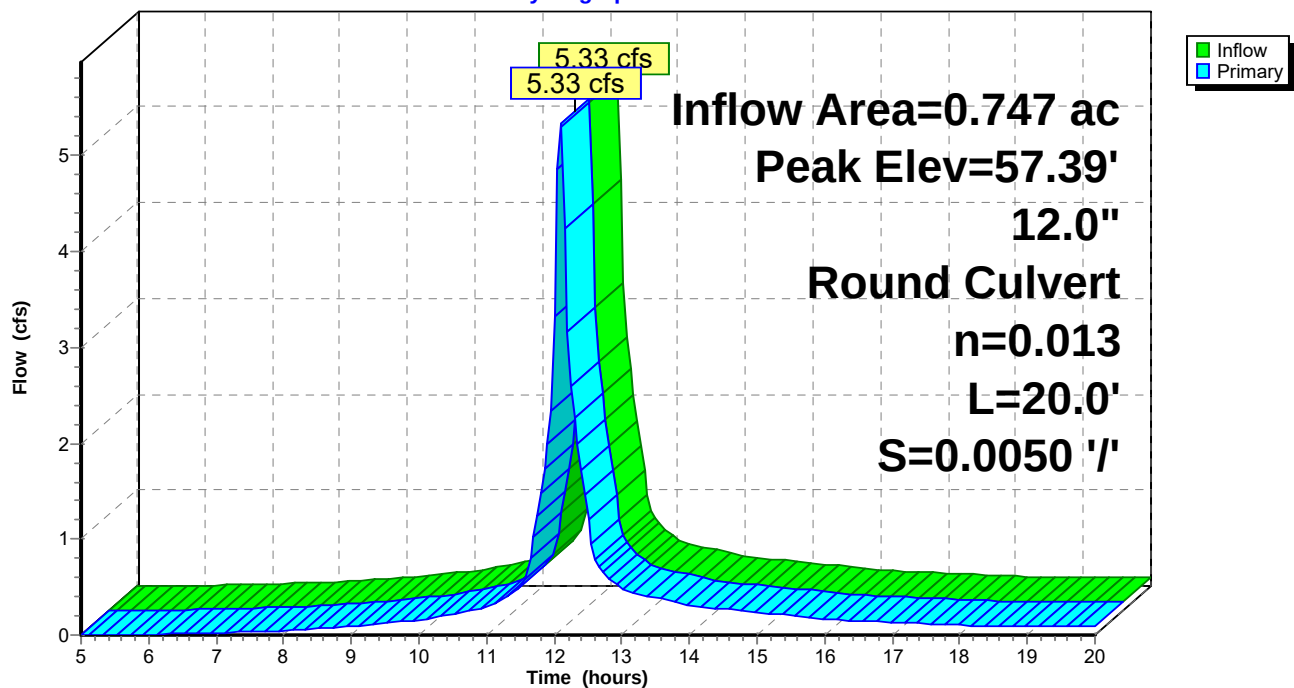
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 57.39' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.71' | <b>12.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.71' / 53.61' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=5.21 cfs @ 12.09 hrs HW=57.26' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 5.21 cfs @ 6.64 fps)

### Pond 134P: DMH 25

Hydrograph



### Summary for Pond 135P: Inf. Basin 3

Inflow Area = 2.229 ac, 60.86% Impervious, Inflow Depth > 5.51" for 100-Year event  
 Inflow = 14.34 cfs @ 12.09 hrs, Volume= 1.024 af  
 Outflow = 2.70 cfs @ 12.55 hrs, Volume= 1.023 af, Atten= 81%, Lag= 27.5 min  
 Discarded = 2.70 cfs @ 12.55 hrs, Volume= 1.023 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Link 203L : 3A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.40' @ 12.55 hrs Surf.Area= 7,380 sf Storage= 16,641 cf

Plug-Flow detention time= 65.6 min calculated for 1.019 af (100% of inflow)  
 Center-of-Mass det. time= 64.9 min ( 833.2 - 768.3 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 53.00' | 21,308 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 53.00               | 2,016                | 0                         | 0                         |
| 54.00               | 3,650                | 2,833                     | 2,833                     |
| 55.00               | 5,702                | 4,676                     | 7,509                     |
| 56.00               | 6,883                | 6,293                     | 13,802                    |
| 57.00               | 8,130                | 7,507                     | 21,308                    |

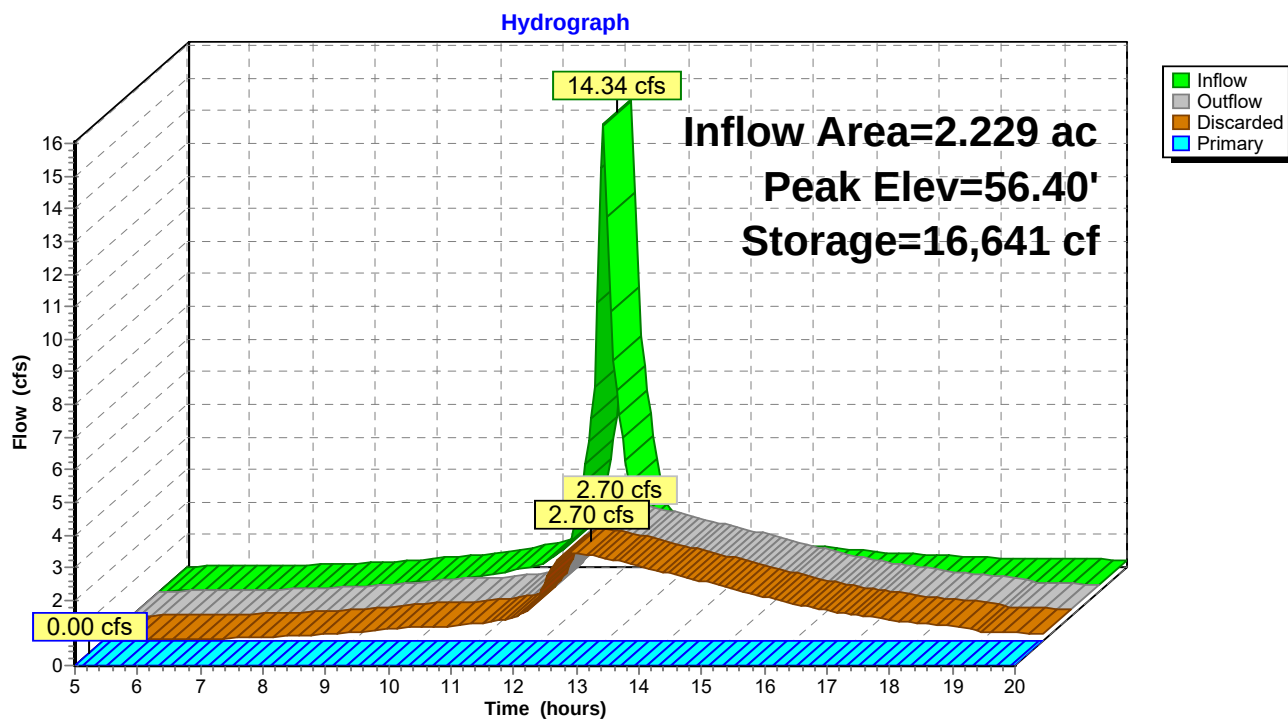
| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 53.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 51.00'                                                                                                             |
| #2     | Primary   | 53.00' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.00' / 52.00' S= 0.0400 ' S Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 56.40' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                         |

**Discarded OutFlow** Max=2.70 cfs @ 12.55 hrs HW=56.40' (Free Discharge)  
 ↳ **1=Exfiltration** ( Controls 2.70 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=53.00' (Free Discharge)  
 ↳ **2=Culvert** (Passes 0.00 cfs of 0.00 cfs potential flow)  
 ↳ **3=Orifice/Grate** ( Controls 0.00 cfs)



### Pond 135P: Inf. Basin 3



### Summary for Pond 136P: CB 38

Inflow Area = 0.180 ac, 66.23% Impervious, Inflow Depth > 5.90" for 100-Year event  
 Inflow = 1.27 cfs @ 12.09 hrs, Volume= 0.088 af  
 Outflow = 1.27 cfs @ 12.09 hrs, Volume= 0.088 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.27 cfs @ 12.09 hrs, Volume= 0.088 af  
 Routed to Pond 139P : DMH 28

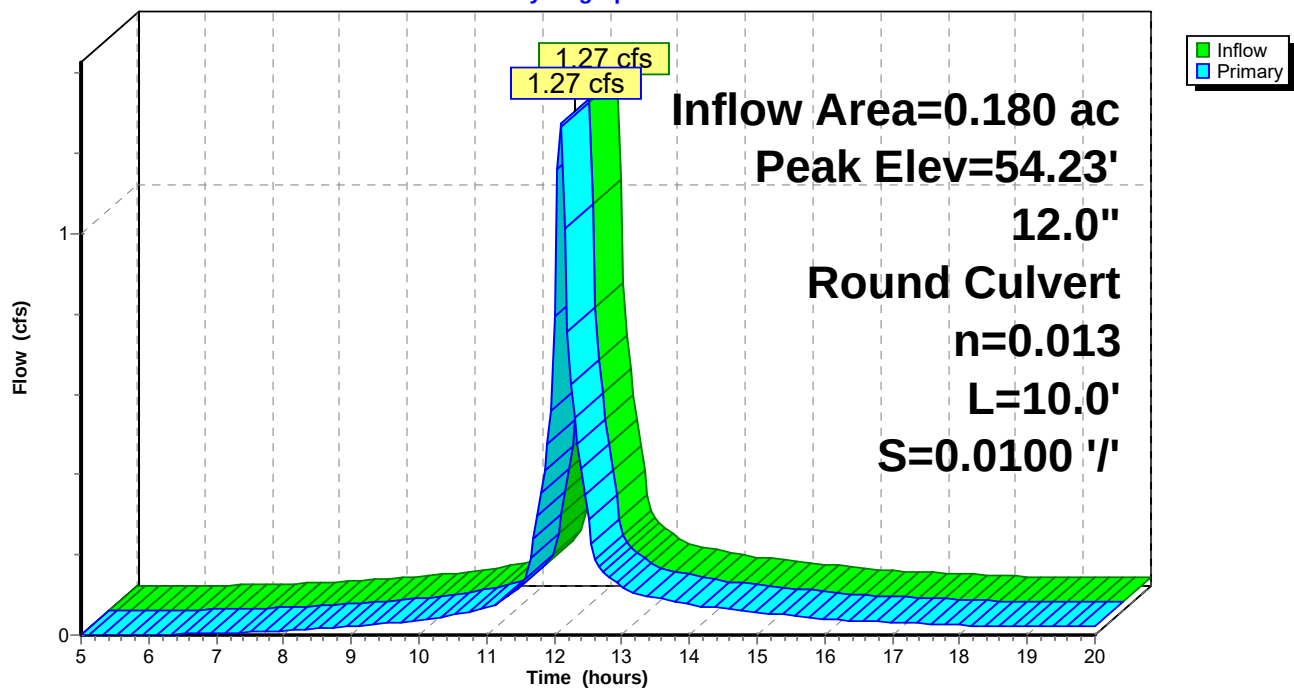
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.23' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.50' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.50' / 53.40' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.24 cfs @ 12.09 hrs HW=54.22' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.24 cfs @ 2.87 fps)

### Pond 136P: CB 38

#### Hydrograph



**Summary for Pond 137P: CB**

Inflow Area = 0.250 ac, 80.29% Impervious, Inflow Depth > 6.85" for 100-Year event  
 Inflow = 1.98 cfs @ 12.09 hrs, Volume= 0.143 af  
 Outflow = 1.98 cfs @ 12.09 hrs, Volume= 0.143 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.98 cfs @ 12.09 hrs, Volume= 0.143 af  
 Routed to Pond 135P : Inf. Basin 3

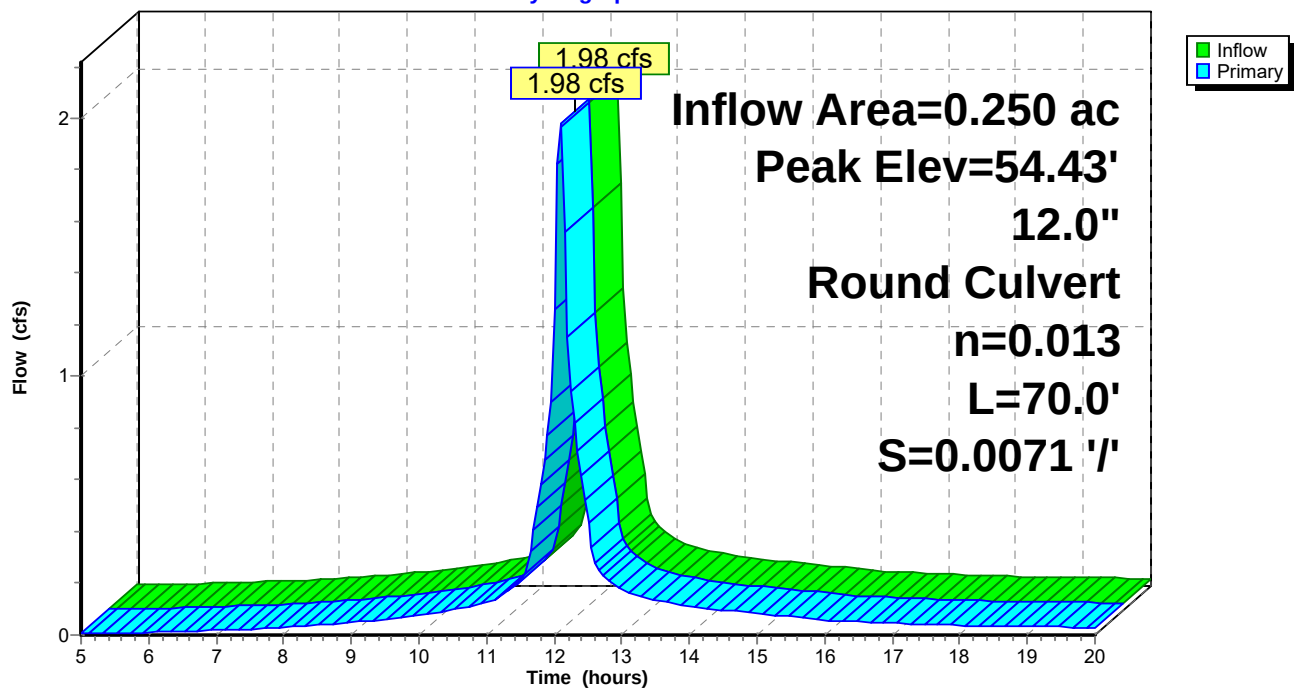
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.43' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.50' | <b>12.0" Round Culvert</b><br>L= 70.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.50' / 53.00' S= 0.0071 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.93 cfs @ 12.09 hrs HW=54.41' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.93 cfs @ 2.57 fps)

**Pond 137P: CB**

Hydrograph



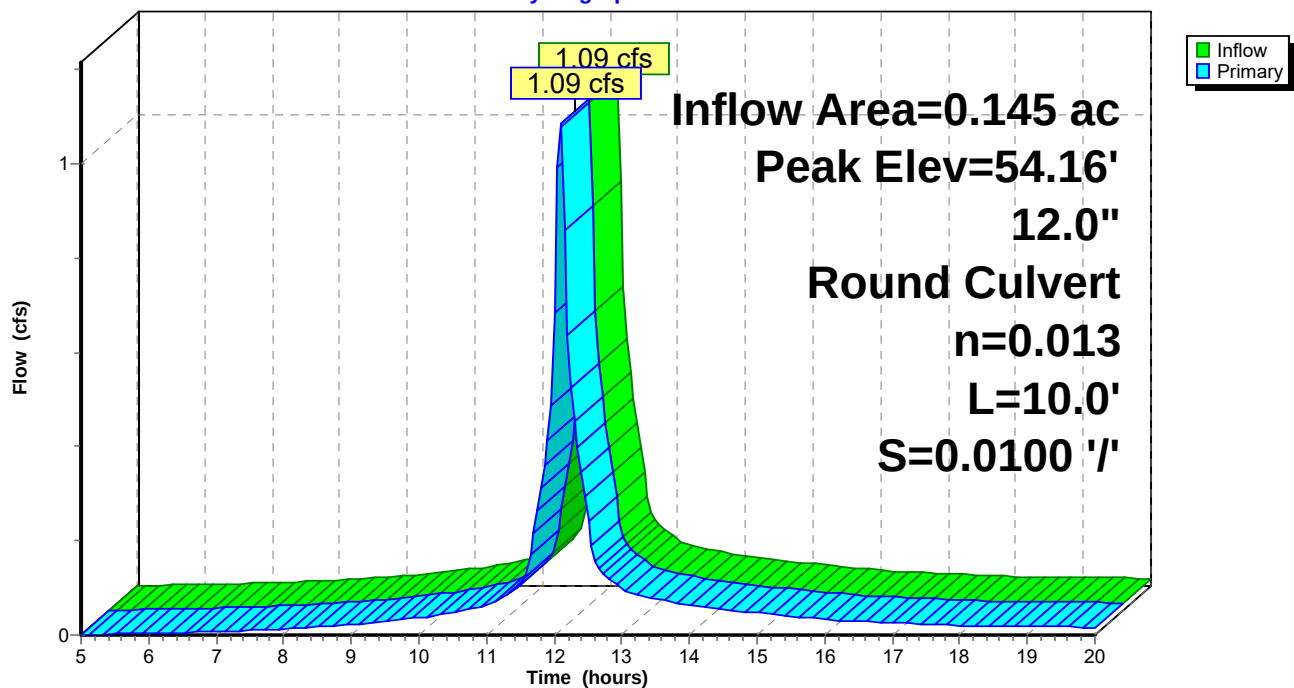
**Summary for Pond 138P: CB 39**

Inflow Area = 0.145 ac, 72.58% Impervious, Inflow Depth > 6.38" for 100-Year event  
 Inflow = 1.09 cfs @ 12.09 hrs, Volume= 0.077 af  
 Outflow = 1.09 cfs @ 12.09 hrs, Volume= 0.077 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.09 cfs @ 12.09 hrs, Volume= 0.077 af  
 Routed to Pond 139P : DMH 28

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.16' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.50' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.50' / 53.40' S= 0.0100 ' S= 0.0100 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.06 cfs @ 12.09 hrs HW=54.15' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.06 cfs @ 2.77 fps)

**Pond 138P: CB 39****Hydrograph**

**Summary for Pond 139P: DMH 28**

Inflow Area = 0.325 ac, 69.06% Impervious, Inflow Depth > 6.11" for 100-Year event  
 Inflow = 2.36 cfs @ 12.09 hrs, Volume= 0.165 af  
 Outflow = 2.36 cfs @ 12.09 hrs, Volume= 0.165 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.36 cfs @ 12.09 hrs, Volume= 0.165 af  
 Routed to Pond 205P : DMH 27

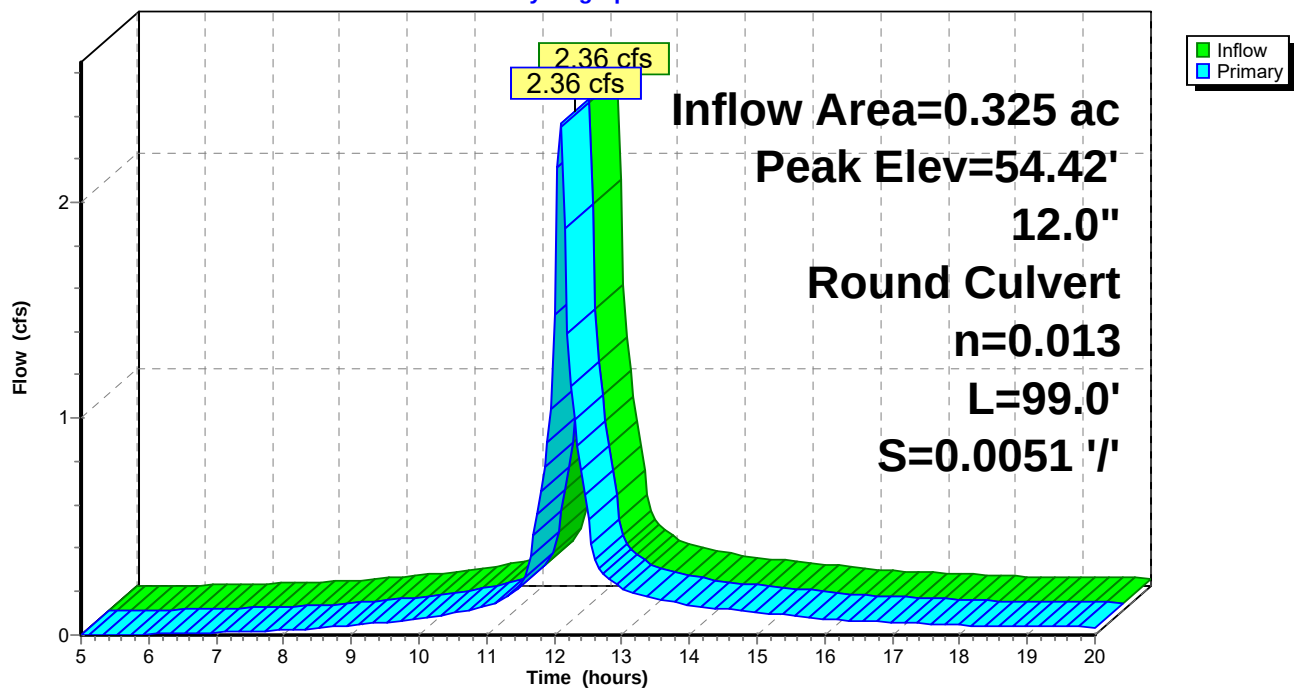
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.42' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.30' | <b>12.0" Round Culvert</b><br>L= 99.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.30' / 52.80' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.31 cfs @ 12.09 hrs HW=54.40' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.31 cfs @ 2.94 fps)

**Pond 139P: DMH 28**

Hydrograph



### Summary for Pond 140P: CB 31

Inflow Area = 0.320 ac, 63.97% Impervious, Inflow Depth > 5.90" for 100-Year event  
 Inflow = 2.26 cfs @ 12.09 hrs, Volume= 0.157 af  
 Outflow = 2.26 cfs @ 12.09 hrs, Volume= 0.157 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.26 cfs @ 12.09 hrs, Volume= 0.157 af  
 Routed to Pond 141P : DMH 23

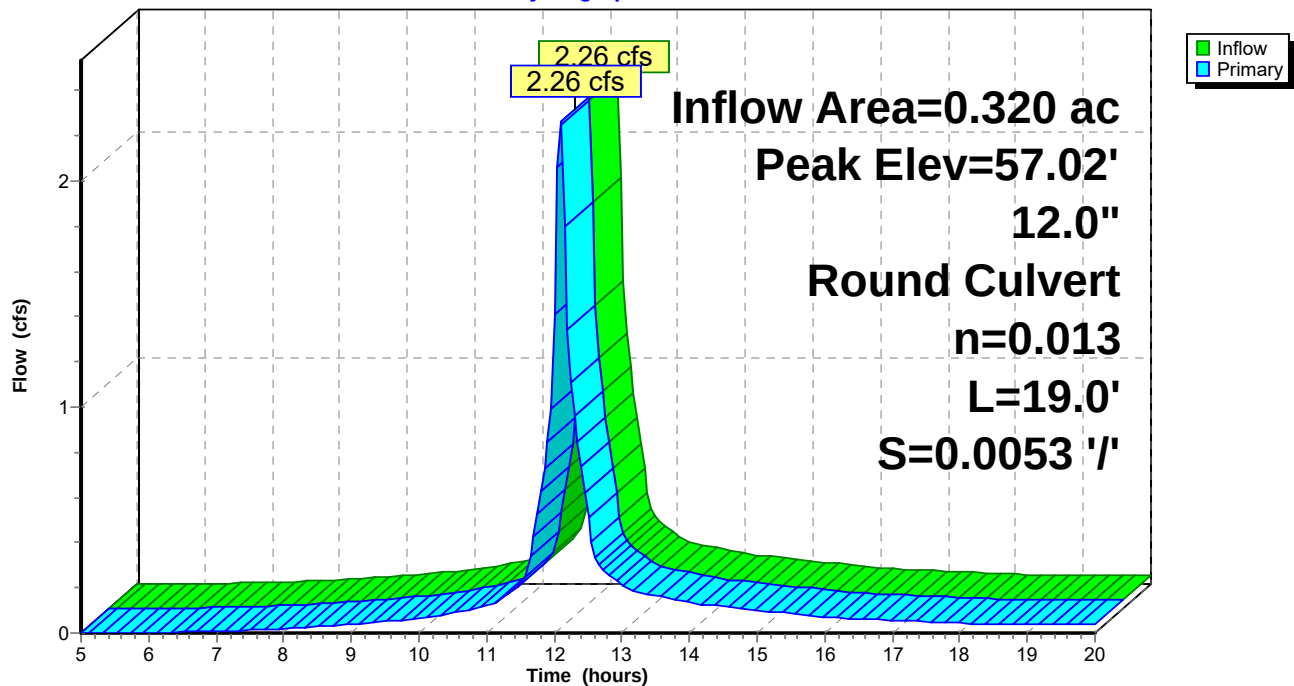
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 57.02' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 55.90' | <b>12.0" Round Culvert</b><br>L= 19.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 55.90' / 55.80' S= 0.0053 ' / ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.21 cfs @ 12.09 hrs HW=57.00' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.21 cfs @ 3.20 fps)

### Pond 140P: CB 31

#### Hydrograph



### Summary for Pond 141P: DMH 23

Inflow Area = 0.615 ac, 65.69% Impervious, Inflow Depth > 5.96" for 100-Year event  
 Inflow = 4.39 cfs @ 12.09 hrs, Volume= 0.305 af  
 Outflow = 4.39 cfs @ 12.09 hrs, Volume= 0.305 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.39 cfs @ 12.09 hrs, Volume= 0.305 af  
 Routed to Pond 150P : DMH 22

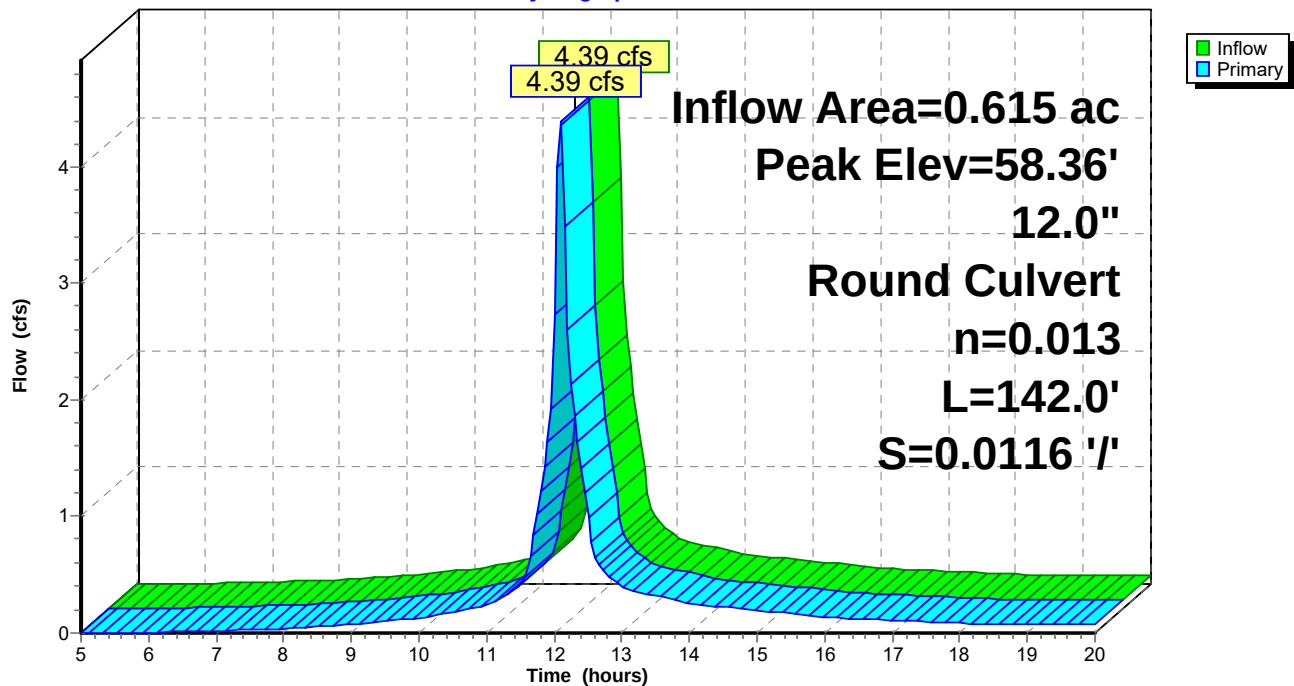
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 58.36' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 55.70' | <b>12.0" Round Culvert</b><br>L= 142.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 55.70' / 54.05' S= 0.0116 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=4.29 cfs @ 12.09 hrs HW=58.26' (Free Discharge)  
 1=Culvert (Inlet Controls 4.29 cfs @ 5.46 fps)

### Pond 141P: DMH 23

Hydrograph



### Summary for Pond 142P: CB 40

Inflow Area = 0.409 ac, 65.98% Impervious, Inflow Depth > 5.90" for 100-Year event  
 Inflow = 2.90 cfs @ 12.09 hrs, Volume= 0.201 af  
 Outflow = 2.90 cfs @ 12.09 hrs, Volume= 0.201 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.90 cfs @ 12.09 hrs, Volume= 0.201 af  
 Routed to Pond 144P : DMH 30

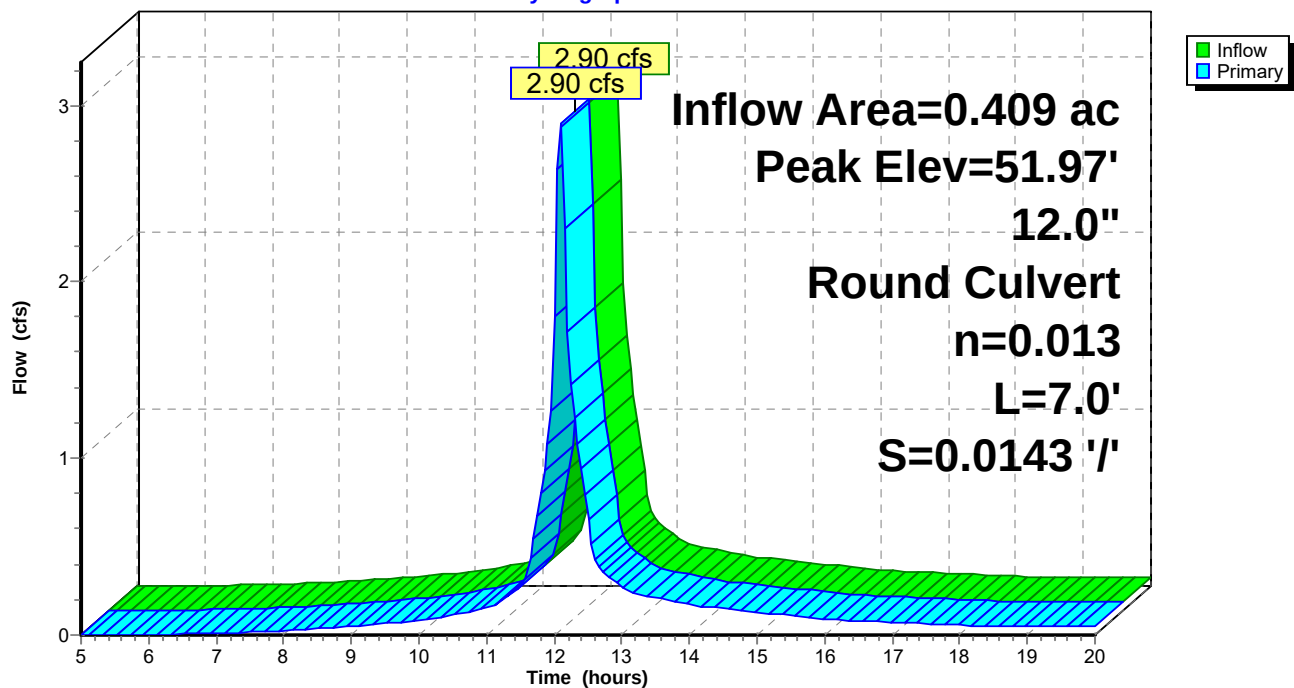
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.97' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.53' | <b>12.0" Round Culvert</b><br>L= 7.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.53' / 50.43' S= 0.0143 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.83 cfs @ 12.09 hrs HW=51.93' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.83 cfs @ 3.61 fps)

### Pond 142P: CB 40

#### Hydrograph





### Summary for Pond 143P: CB 41

Inflow Area = 0.577 ac, 66.17% Impervious, Inflow Depth > 5.90" for 100-Year event  
 Inflow = 4.08 cfs @ 12.09 hrs, Volume= 0.284 af  
 Outflow = 4.08 cfs @ 12.09 hrs, Volume= 0.284 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.08 cfs @ 12.09 hrs, Volume= 0.284 af  
 Routed to Pond 144P : DMH 30

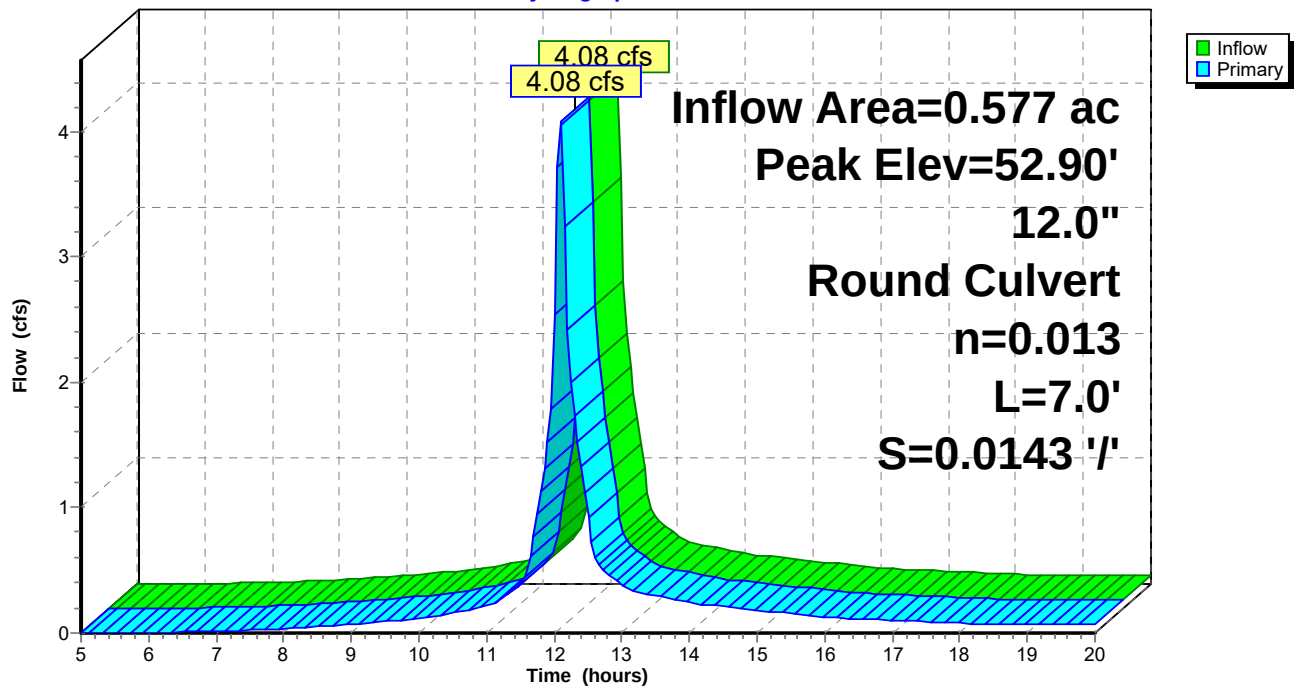
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.90' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.53' | <b>12.0" Round Culvert</b><br>L= 7.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.53' / 50.43' S= 0.0143 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=3.99 cfs @ 12.09 hrs HW=52.82' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 3.99 cfs @ 5.08 fps)

### Pond 143P: CB 41

#### Hydrograph



**Summary for Pond 144P: DMH 30**

Inflow Area = 0.986 ac, 66.09% Impervious, Inflow Depth > 5.90" for 100-Year event  
 Inflow = 6.98 cfs @ 12.09 hrs, Volume= 0.485 af  
 Outflow = 6.98 cfs @ 12.09 hrs, Volume= 0.485 af, Atten= 0%, Lag= 0.0 min  
 Primary = 6.98 cfs @ 12.09 hrs, Volume= 0.485 af  
 Routed to Pond 145P : DMH 29

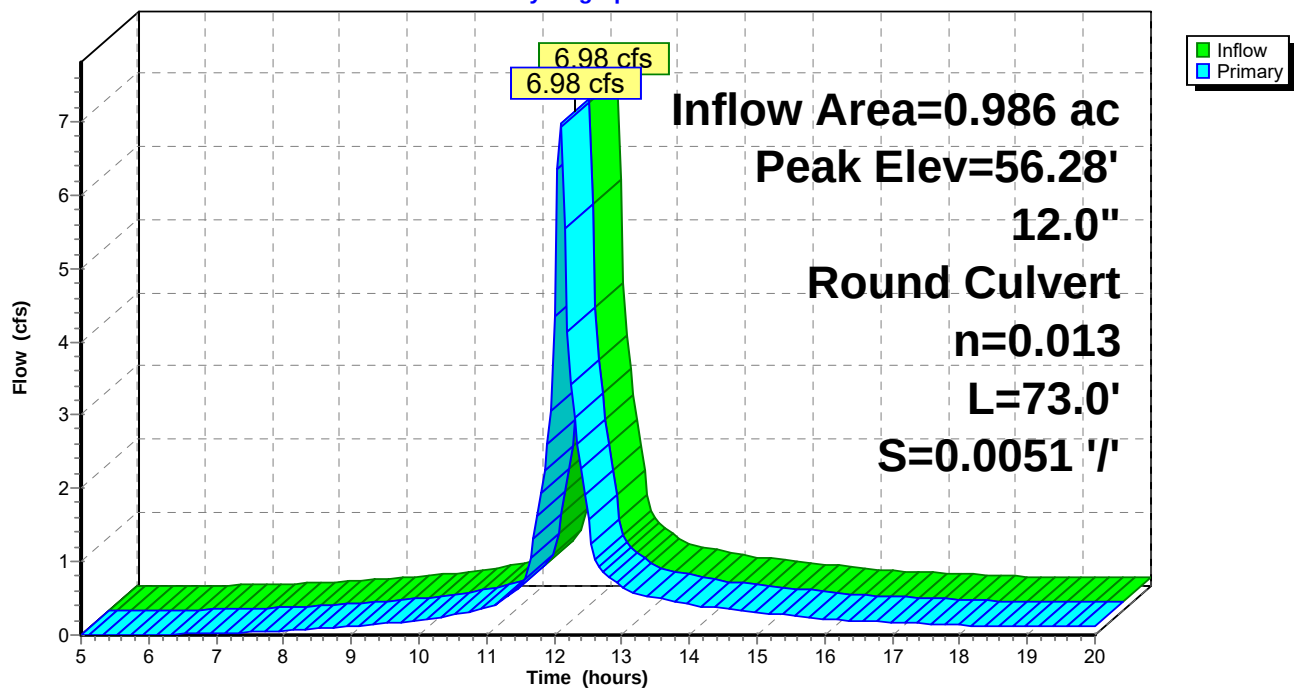
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.28' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.33' | <b>12.0" Round Culvert</b><br>L= 73.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.33' / 49.96' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=6.82 cfs @ 12.09 hrs HW=56.05' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 6.82 cfs @ 8.69 fps)

**Pond 144P: DMH 30**

Hydrograph



**Summary for Pond 145P: DMH 29**

Inflow Area = 0.986 ac, 66.09% Impervious, Inflow Depth > 5.90" for 100-Year event  
 Inflow = 6.98 cfs @ 12.09 hrs, Volume= 0.485 af  
 Outflow = 6.98 cfs @ 12.09 hrs, Volume= 0.485 af, Atten= 0%, Lag= 0.0 min  
 Primary = 6.98 cfs @ 12.09 hrs, Volume= 0.485 af  
 Routed to Pond 146P : Inf. Basin 2

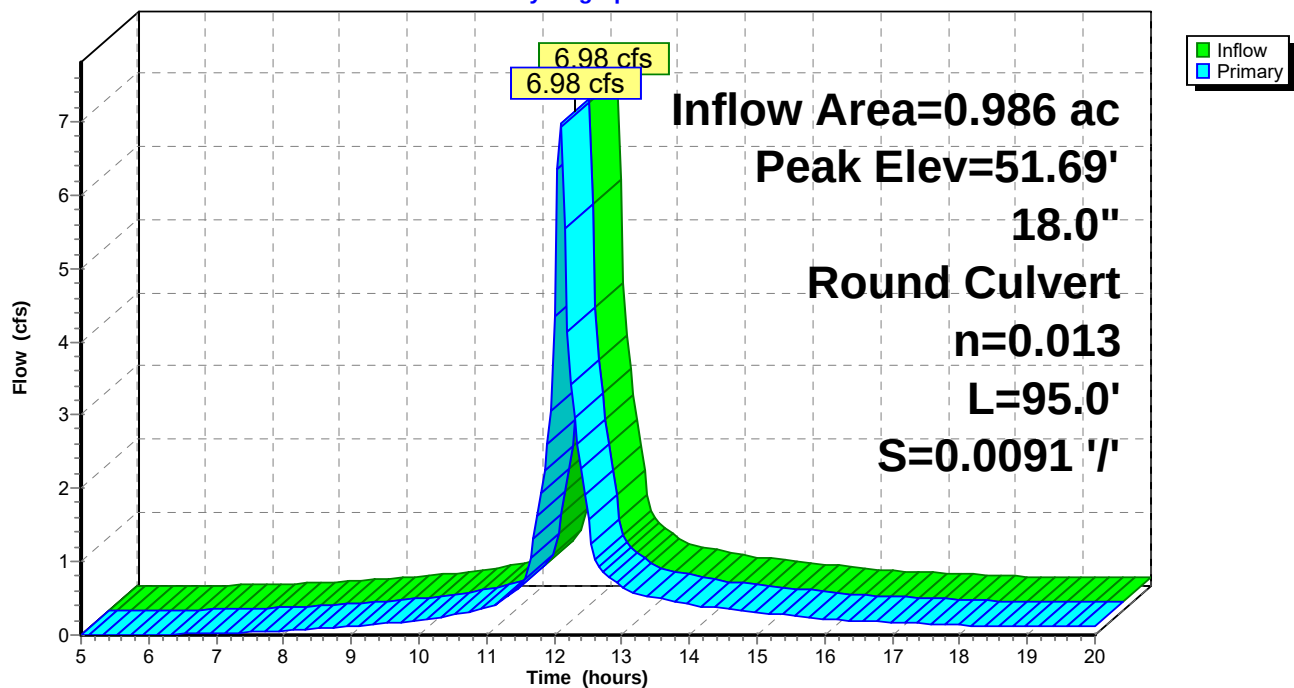
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.69' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 49.86' | <b>18.0" Round Culvert</b><br>L= 95.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.86' / 49.00' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=6.82 cfs @ 12.09 hrs HW=51.64' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 6.82 cfs @ 3.86 fps)

**Pond 145P: DMH 29**

Hydrograph



**RH Post 1-2-26**

Type III 24-hr 100-Year Rainfall=8.94"

Prepared by Millennium Engineering, Inc

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**Summary for Pond 146P: Inf. Basin 2**

Inflow Area = 1.642 ac, 64.89% Impervious, Inflow Depth > 5.78" for 100-Year event  
 Inflow = 11.10 cfs @ 12.09 hrs, Volume= 0.791 af  
 Outflow = 2.17 cfs @ 12.54 hrs, Volume= 0.790 af, Atten= 80%, Lag= 26.8 min  
 Discarded = 2.17 cfs @ 12.54 hrs, Volume= 0.790 af  
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af  
 Routed to Link 203L : 3A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.13' @ 12.54 hrs Surf.Area= 6,099 sf Storage= 12,554 cf

Plug-Flow detention time= 60.5 min calculated for 0.788 af (100% of inflow)  
 Center-of-Mass det. time= 59.9 min ( 826.2 - 766.4 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 49.00' | 18,306 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 49.00               | 1,966                | 0                         | 0                         |
| 50.00               | 3,261                | 2,614                     | 2,614                     |
| 51.00               | 4,560                | 3,911                     | 6,524                     |
| 52.00               | 5,952                | 5,256                     | 11,780                    |
| 53.00               | 7,099                | 6,526                     | 18,306                    |

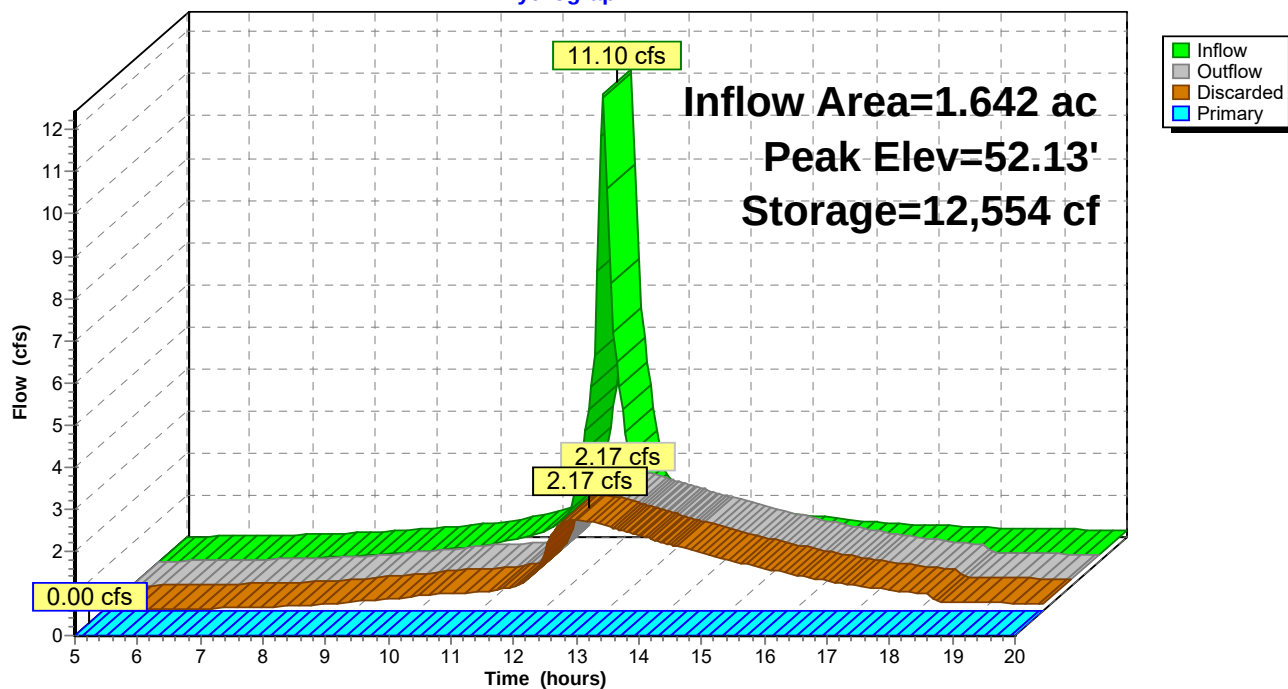
| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 49.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 47.00'                                                                                                              |
| #2     | Primary   | 49.00' | <b>12.0" Round Culvert</b><br>L= 42.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.00' / 45.00' S= 0.0952 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 52.20' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                          |

**Discarded OutFlow** Max=2.17 cfs @ 12.54 hrs HW=52.13' (Free Discharge)  
 ↳ **1=Exfiltration** ( Controls 2.17 cfs)

**Primary OutFlow** Max=0.00 cfs @ 5.00 hrs HW=49.00' (Free Discharge)  
 ↳ **2=Culvert** (Passes 0.00 cfs of 0.00 cfs potential flow)  
 ↳ **3=Orifice/Grate** ( Controls 0.00 cfs)

# Pond 146P: Inf. Basin 2

Hydrograph



**Summary for Pond 147P: CB 28**

Inflow Area = 0.076 ac, 72.53% Impervious, Inflow Depth > 6.38" for 100-Year event  
 Inflow = 0.57 cfs @ 12.09 hrs, Volume= 0.041 af  
 Outflow = 0.57 cfs @ 12.09 hrs, Volume= 0.041 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.57 cfs @ 12.09 hrs, Volume= 0.041 af  
 Routed to Pond 150P : DMH 22

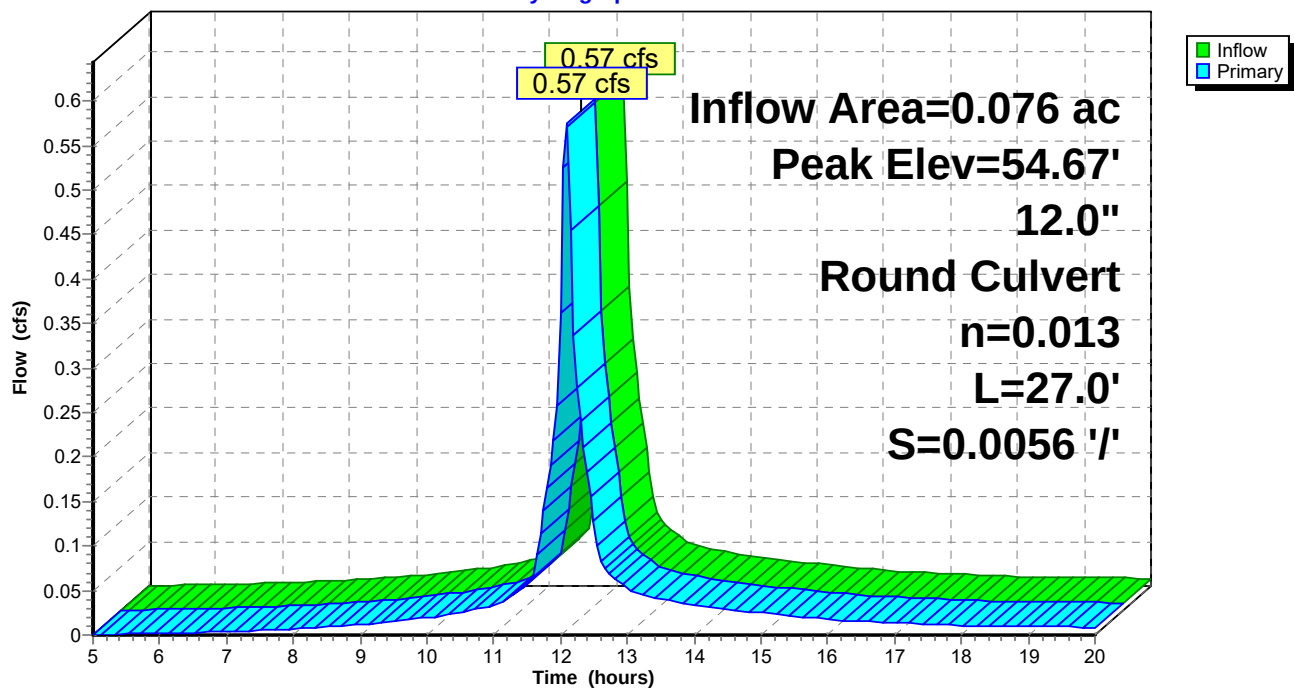
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.67' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.20' | <b>12.0" Round Culvert</b><br>L= 27.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.20' / 54.05' S= 0.0056 ' / ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.56 cfs @ 12.09 hrs HW=54.66' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.56 cfs @ 2.34 fps)

**Pond 147P: CB 28**

Hydrograph



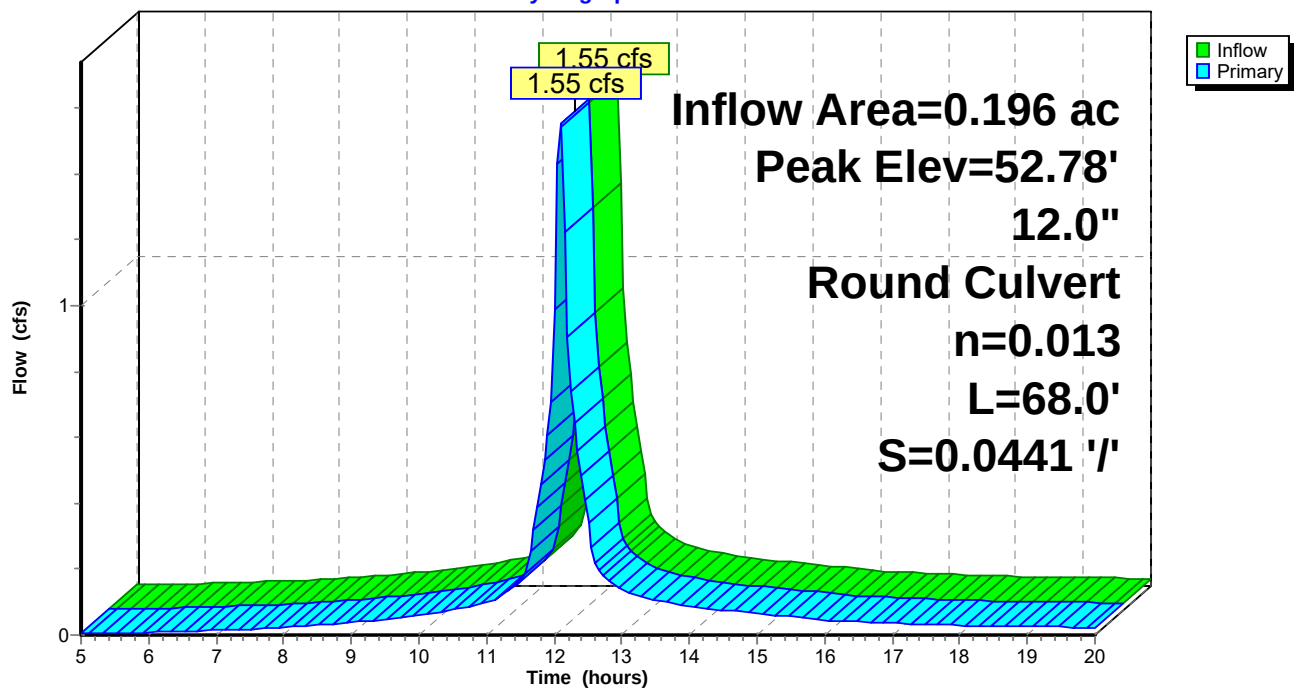
**Summary for Pond 148P: CB 43**

Inflow Area = 0.196 ac, 80.21% Impervious, Inflow Depth > 6.85" for 100-Year event  
 Inflow = 1.55 cfs @ 12.09 hrs, Volume= 0.112 af  
 Outflow = 1.55 cfs @ 12.09 hrs, Volume= 0.112 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.55 cfs @ 12.09 hrs, Volume= 0.112 af  
 Routed to Pond 146P : Inf. Basin 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.78' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.00' | <b>12.0" Round Culvert</b><br>L= 68.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.00' / 49.00' S= 0.0441 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.51 cfs @ 12.09 hrs HW=52.76' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.51 cfs @ 2.35 fps)

**Pond 148P: CB 43****Hydrograph**

## Summary for Pond 149P: CB 29

Inflow Area = 0.079 ac, 73.82% Impervious, Inflow Depth > 6.50" for 100-Year event  
 Inflow = 0.61 cfs @ 12.09 hrs, Volume= 0.043 af  
 Outflow = 0.61 cfs @ 12.09 hrs, Volume= 0.043 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.61 cfs @ 12.09 hrs, Volume= 0.043 af  
 Routed to Pond 150P : DMH 22

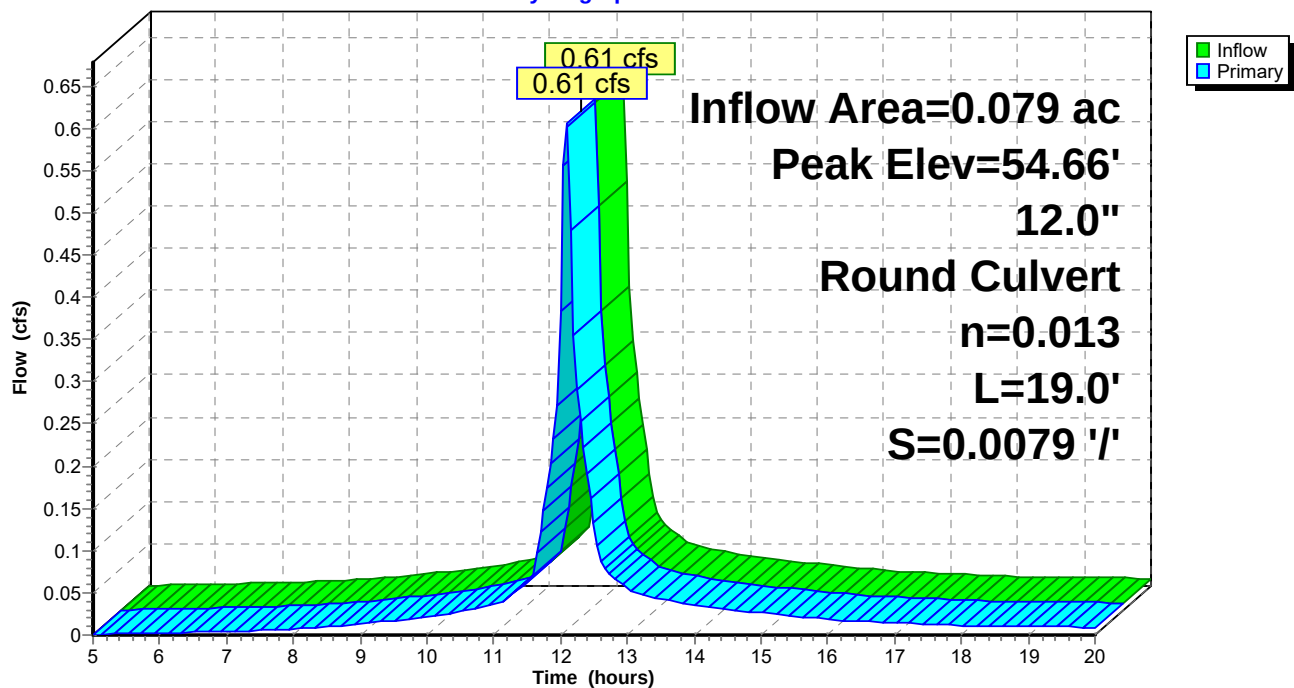
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 54.66' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.20' | <b>12.0" Round Culvert</b><br>L= 19.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.20' / 54.05' S= 0.0079 ' / ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.59 cfs @ 12.09 hrs HW=54.66' (Free Discharge)  
 ↳ 1=Culvert (Barrel Controls 0.59 cfs @ 2.48 fps)

## Pond 149P: CB 29

## Hydrograph





### Summary for Pond 150P: DMH 22

Inflow Area = 0.771 ac, 67.20% Impervious, Inflow Depth > 6.05" for 100-Year event  
 Inflow = 5.57 cfs @ 12.09 hrs, Volume= 0.389 af  
 Outflow = 5.57 cfs @ 12.09 hrs, Volume= 0.389 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.57 cfs @ 12.09 hrs, Volume= 0.389 af  
 Routed to Pond 161P : DMH 19

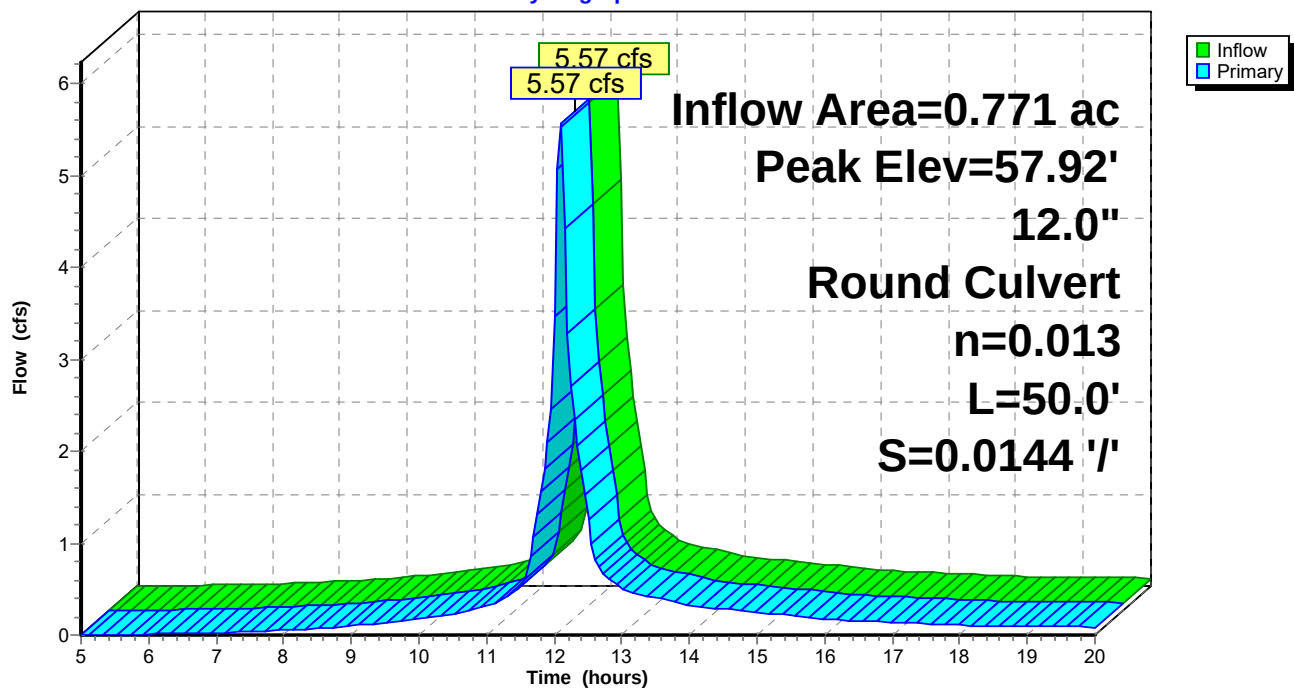
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 57.92' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.95' | <b>12.0" Round Culvert</b><br>L= 50.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.95' / 53.23' S= 0.0144 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=5.44 cfs @ 12.09 hrs HW=57.77' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 5.44 cfs @ 6.93 fps)

### Pond 150P: DMH 22

#### Hydrograph



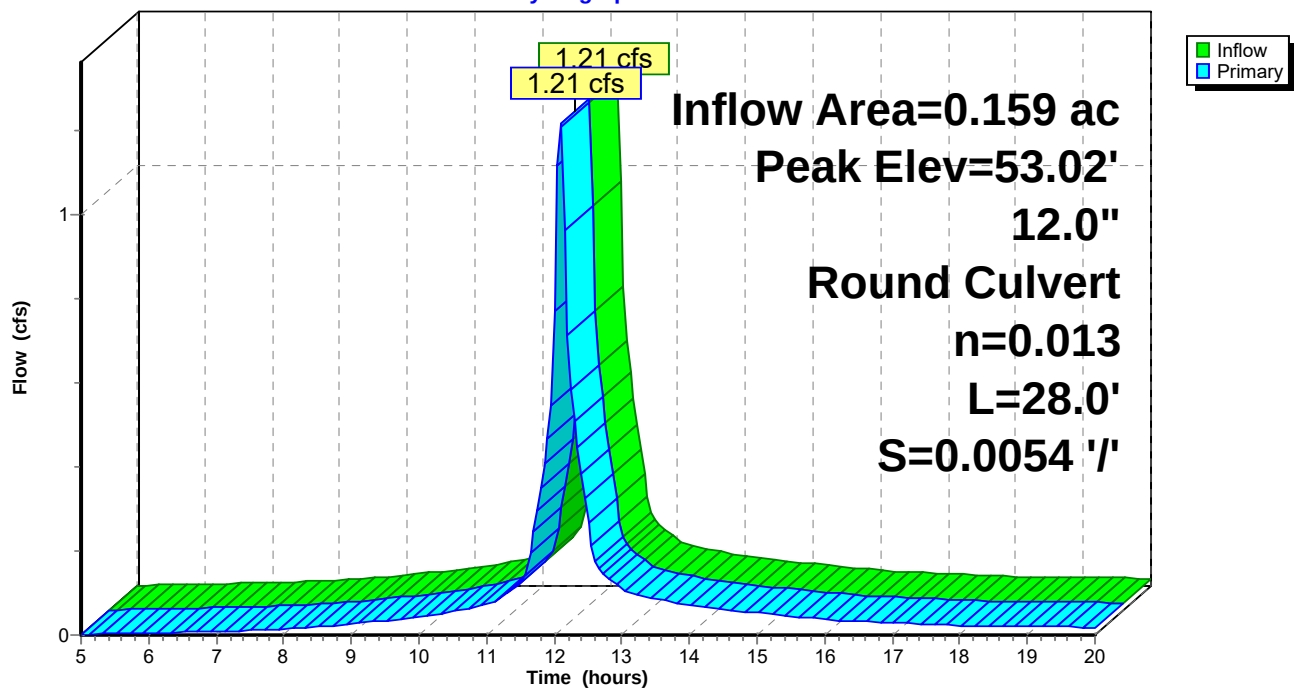
**Summary for Pond 151P: CB 22**

Inflow Area = 0.159 ac, 74.64% Impervious, Inflow Depth > 6.50" for 100-Year event  
 Inflow = 1.21 cfs @ 12.09 hrs, Volume= 0.086 af  
 Outflow = 1.21 cfs @ 12.09 hrs, Volume= 0.086 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.21 cfs @ 12.09 hrs, Volume= 0.086 af  
 Routed to Pond 153P : DMH 17

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.02' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.30' | <b>12.0" Round Culvert</b><br>L= 28.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.30' / 52.15' S= 0.0054 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.18 cfs @ 12.09 hrs HW=53.01' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.18 cfs @ 2.78 fps)

**Pond 151P: CB 22****Hydrograph**

### Summary for Pond 152P: CB 23

Inflow Area = 0.210 ac, 67.61% Impervious, Inflow Depth > 6.02" for 100-Year event  
 Inflow = 1.51 cfs @ 12.09 hrs, Volume= 0.105 af  
 Outflow = 1.51 cfs @ 12.09 hrs, Volume= 0.105 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.51 cfs @ 12.09 hrs, Volume= 0.105 af  
 Routed to Pond 153P : DMH 17

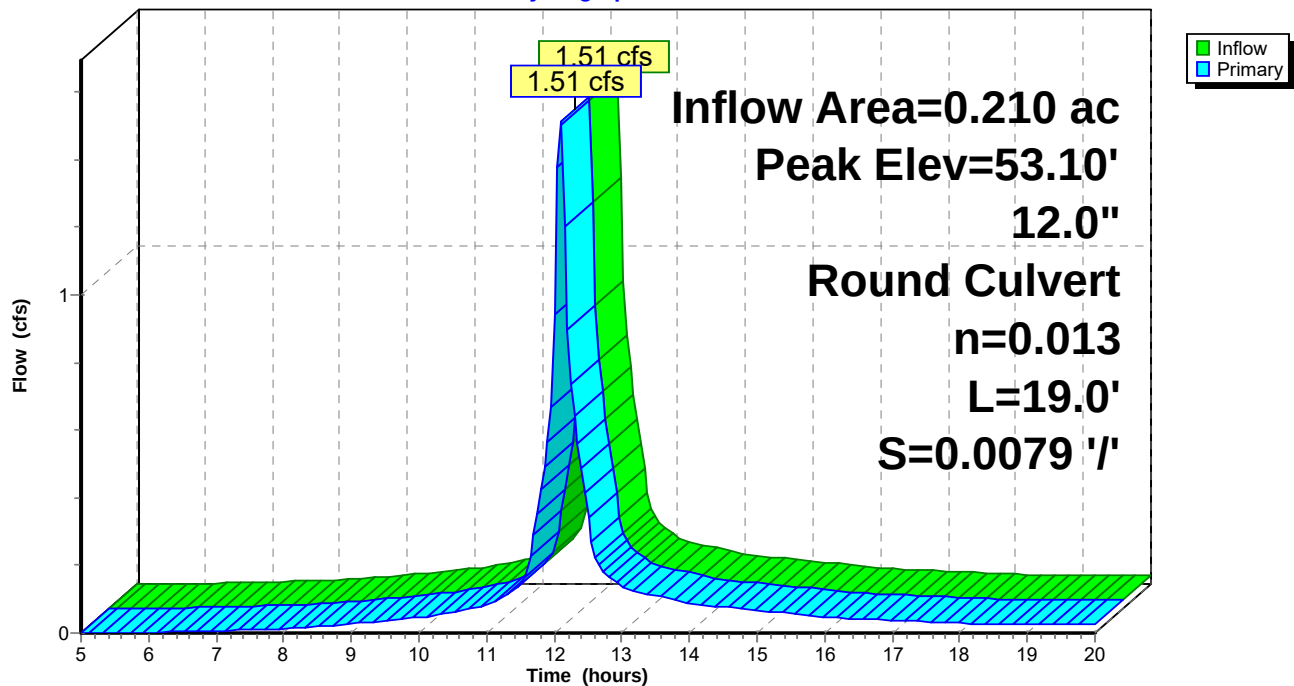
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.10' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.30' | <b>12.0" Round Culvert</b><br>L= 19.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.30' / 52.15' S= 0.0079 ' S= 0.0079 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.47 cfs @ 12.09 hrs HW=53.09' (Free Discharge)  
 1=Culvert (Barrel Controls 1.47 cfs @ 3.04 fps)

### Pond 152P: CB 23

#### Hydrograph



**Summary for Pond 153P: DMH 17**

Inflow Area = 1.731 ac, 71.57% Impervious, Inflow Depth > 6.32" for 100-Year event  
 Inflow = 12.89 cfs @ 12.09 hrs, Volume= 0.912 af  
 Outflow = 12.89 cfs @ 12.09 hrs, Volume= 0.912 af, Atten= 0%, Lag= 0.0 min  
 Primary = 12.89 cfs @ 12.09 hrs, Volume= 0.912 af  
 Routed to Pond 204P : DMH 18

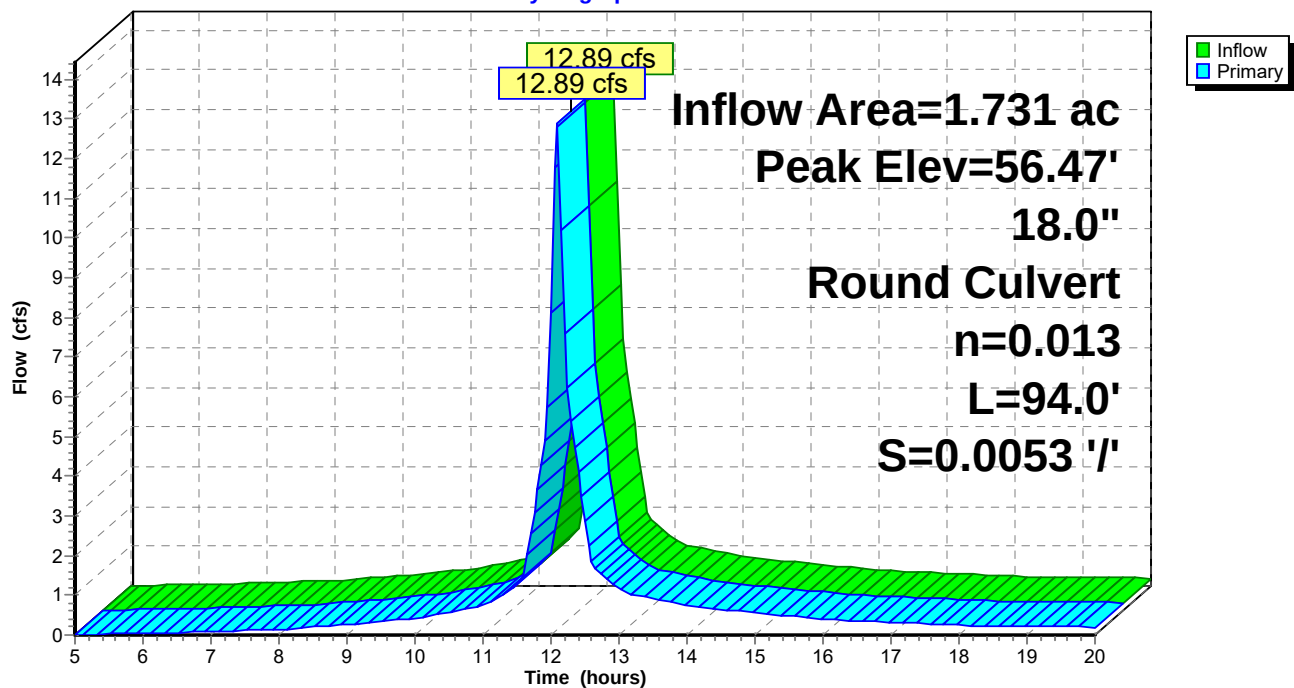
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.47' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.05' | <b>18.0" Round Culvert</b><br>L= 94.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.05' / 51.55' S= 0.0053 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=12.58 cfs @ 12.09 hrs HW=56.31' (Free Discharge)  
 1=Culvert (Inlet Controls 12.58 cfs @ 7.12 fps)

**Pond 153P: DMH 17**

Hydrograph



### Summary for Pond 154P: CB 18

Inflow Area = 0.207 ac, 76.76% Impervious, Inflow Depth > 6.62" for 100-Year event  
 Inflow = 1.60 cfs @ 12.09 hrs, Volume= 0.114 af  
 Outflow = 1.60 cfs @ 12.09 hrs, Volume= 0.114 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.60 cfs @ 12.09 hrs, Volume= 0.114 af  
 Routed to Pond 166P : DMH 13

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 54.09' @ 12.09 hrs

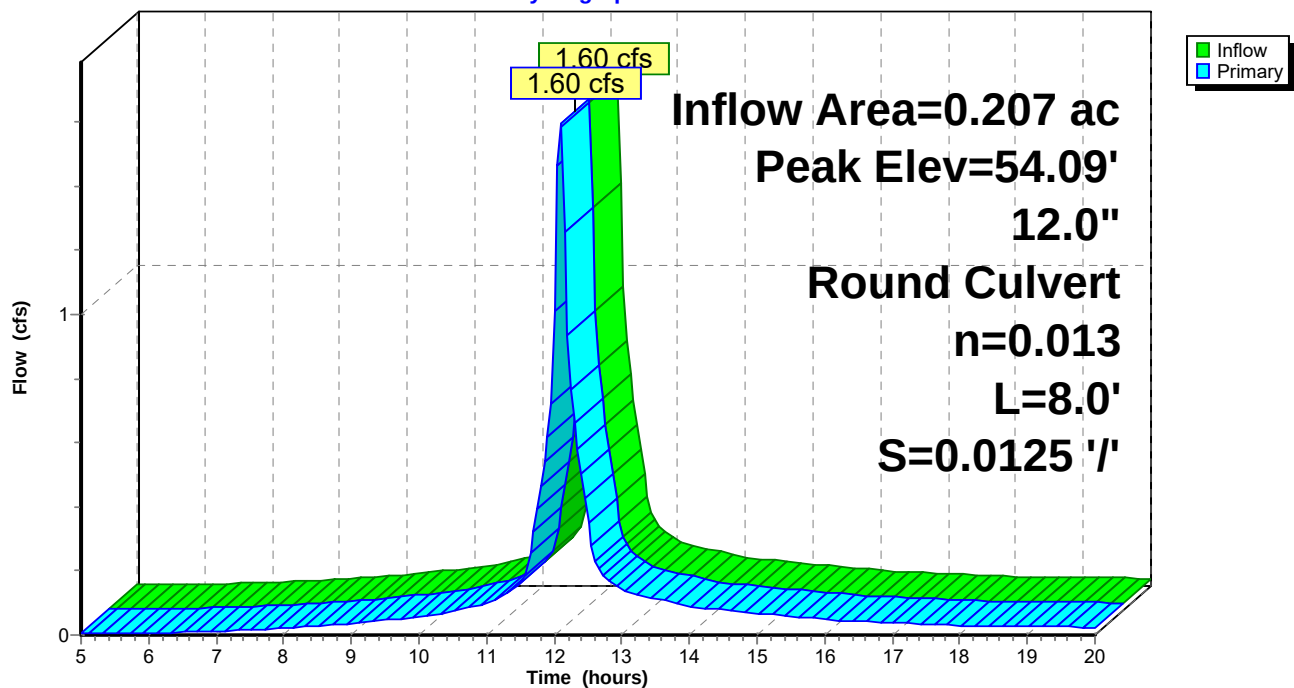
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                           |
|--------|---------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.25' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.25' / 53.15' S= 0.0125 ' S= 0.0125 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.56 cfs @ 12.09 hrs HW=54.08' (Free Discharge)

1=Culvert (Barrel Controls 1.56 cfs @ 3.05 fps)

### Pond 154P: CB 18

#### Hydrograph



## Summary for Pond 155P: CB 27

Inflow Area = 0.220 ac, 74.64% Impervious, Inflow Depth > 6.50" for 100-Year event  
Inflow = 1.67 cfs @ 12.09 hrs, Volume= 0.119 af  
Outflow = 1.67 cfs @ 12.09 hrs, Volume= 0.119 af, Atten= 0%, Lag= 0.0 min  
Primary = 1.67 cfs @ 12.09 hrs, Volume= 0.119 af  
Routed to Pond 157P : DMH 21

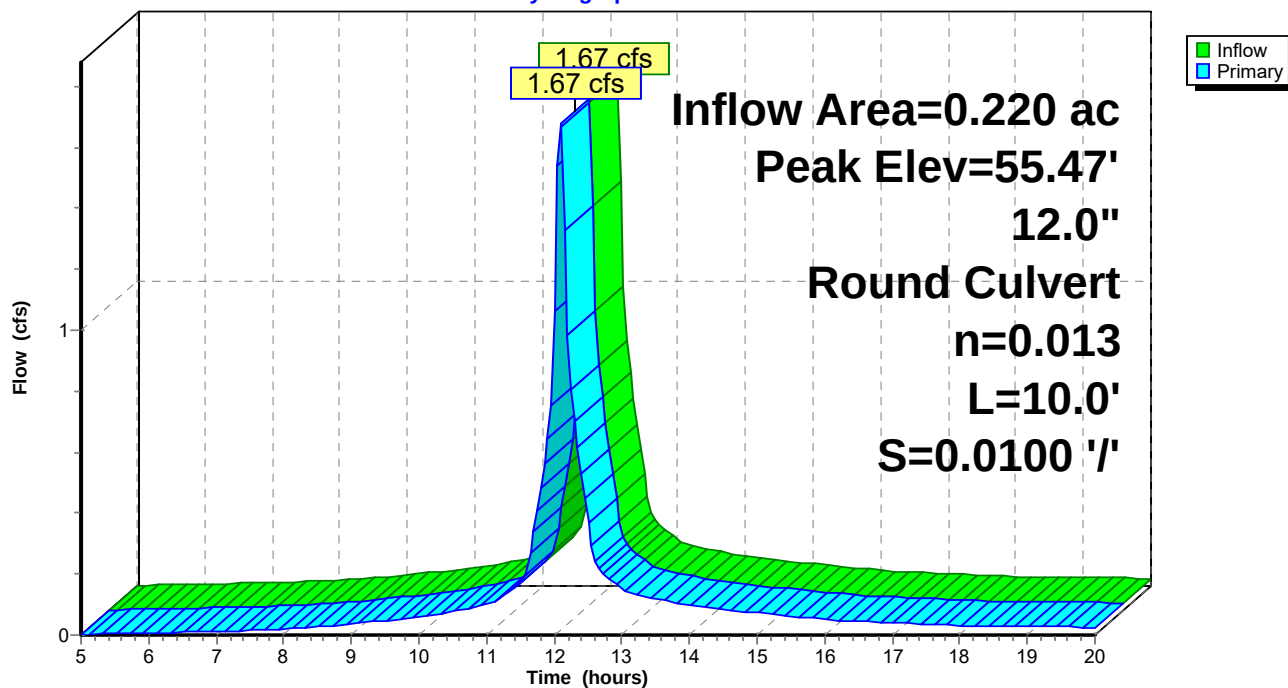
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 55.47' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.60' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.63 cfs @ 12.09 hrs HW=55.46' (Free Discharge)  
 1=Culvert (Barrel Controls 1.63 cfs @ 3.06 fps)

## Pond 155P: CB 27

## Hydrograph



### Summary for Pond 156P: CB 26

Inflow Area = 0.108 ac, 90.07% Impervious, Inflow Depth > 7.50" for 100-Year event  
 Inflow = 0.90 cfs @ 12.09 hrs, Volume= 0.067 af  
 Outflow = 0.90 cfs @ 12.09 hrs, Volume= 0.067 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.90 cfs @ 12.09 hrs, Volume= 0.067 af  
 Routed to Pond 157P : DMH 21

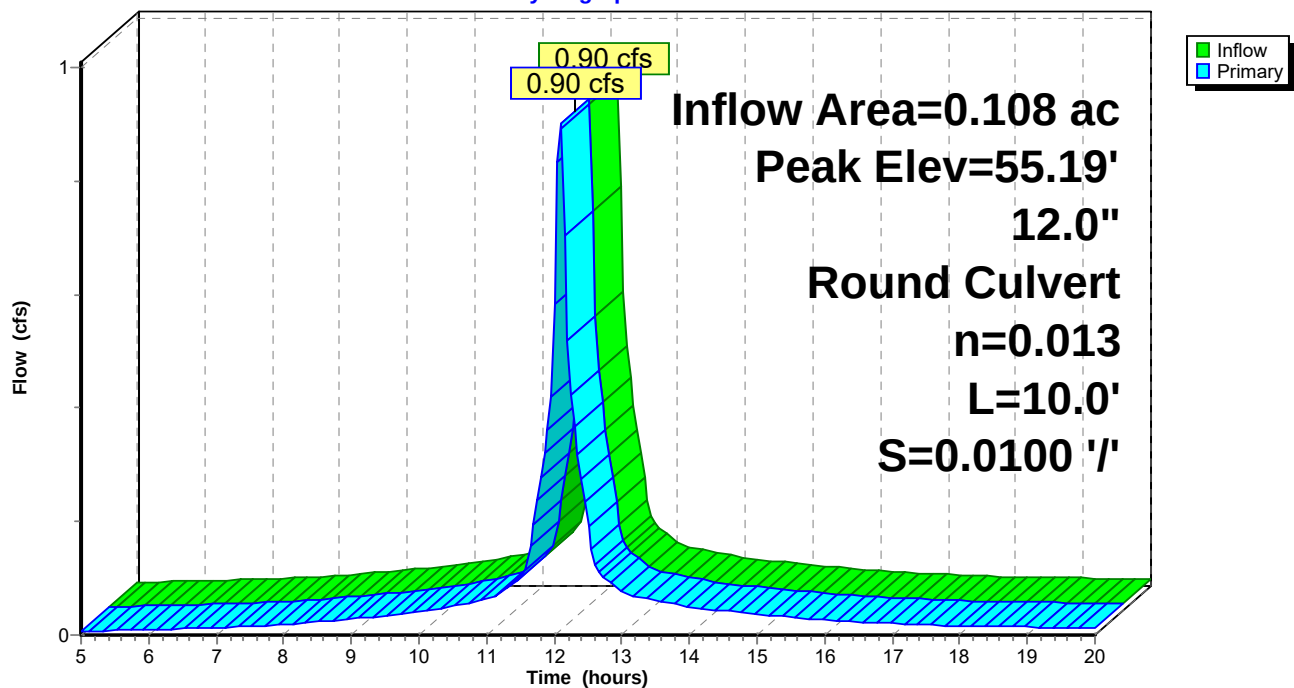
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 55.19' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.60' | <b>12.0" Round Culvert</b><br>L= 10.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.88 cfs @ 12.09 hrs HW=55.18' (Free Discharge)  
 1=Culvert (Barrel Controls 0.88 cfs @ 2.65 fps)

### Pond 156P: CB 26

#### Hydrograph



**Summary for Pond 157P: DMH 21**

Inflow Area = 0.328 ac, 79.72% Impervious, Inflow Depth > 6.83" for 100-Year event  
 Inflow = 2.58 cfs @ 12.09 hrs, Volume= 0.186 af  
 Outflow = 2.58 cfs @ 12.09 hrs, Volume= 0.186 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.58 cfs @ 12.09 hrs, Volume= 0.186 af  
 Routed to Pond 160P : DMH 20

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 55.64' @ 12.09 hrs

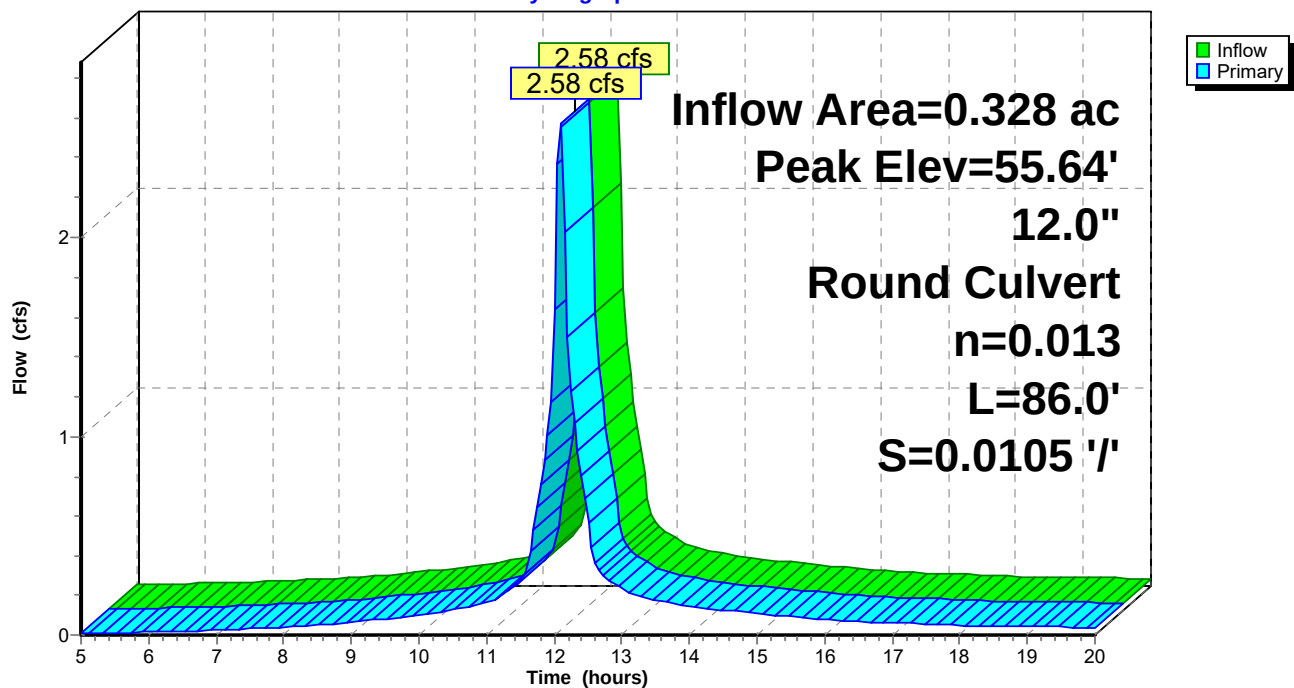
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.40' | <b>12.0" Round Culvert</b><br>L= 86.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.40' / 53.50' S= 0.0105 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.51 cfs @ 12.09 hrs HW=55.61' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 2.51 cfs @ 3.20 fps)

**Pond 157P: DMH 21**

Hydrograph





### Summary for Pond 158P: CB 24

Inflow Area = 0.117 ac, 70.43% Impervious, Inflow Depth > 6.26" for 100-Year event  
 Inflow = 0.87 cfs @ 12.09 hrs, Volume= 0.061 af  
 Outflow = 0.87 cfs @ 12.09 hrs, Volume= 0.061 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.87 cfs @ 12.09 hrs, Volume= 0.061 af  
 Routed to Pond 160P : DMH 20

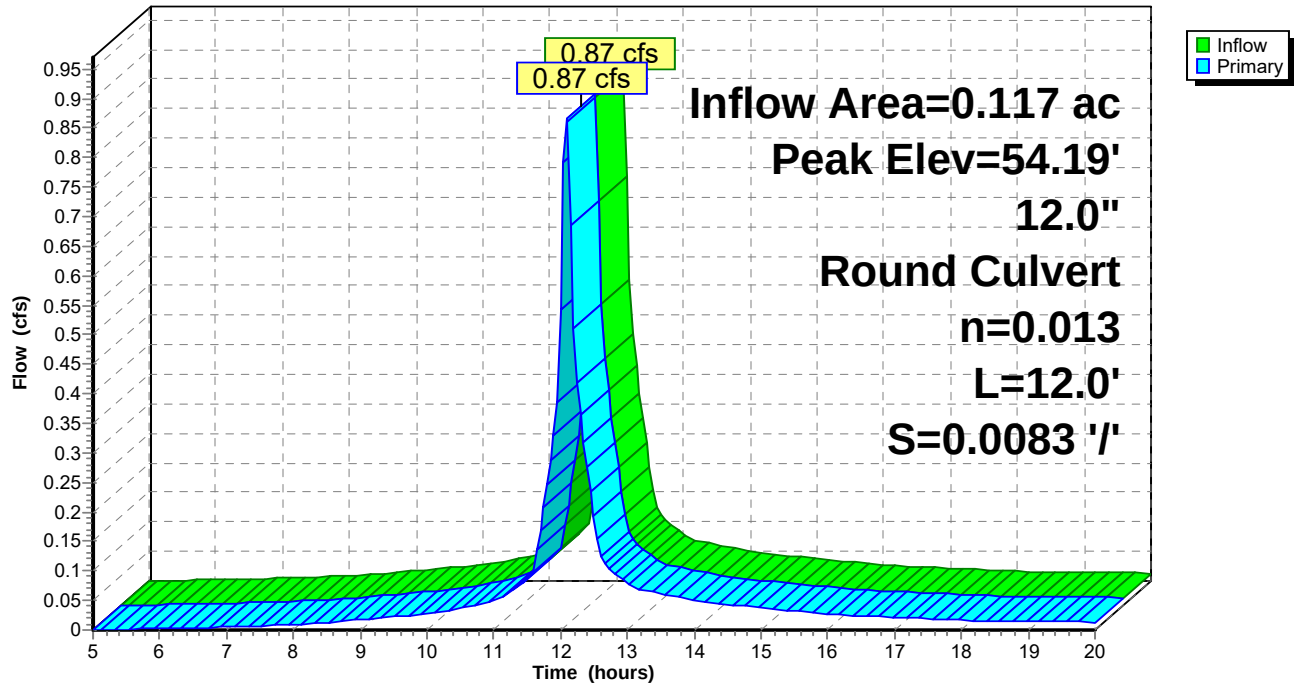
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.19' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.60' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.60' / 53.50' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.85 cfs @ 12.09 hrs HW=54.18' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.85 cfs @ 2.60 fps)

### Pond 158P: CB 24

#### Hydrograph



### Summary for Pond 159P: CB 25

Inflow Area = 0.146 ac, 79.60% Impervious, Inflow Depth > 6.85" for 100-Year event  
 Inflow = 1.15 cfs @ 12.09 hrs, Volume= 0.083 af  
 Outflow = 1.15 cfs @ 12.09 hrs, Volume= 0.083 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.15 cfs @ 12.09 hrs, Volume= 0.083 af  
 Routed to Pond 160P : DMH 20

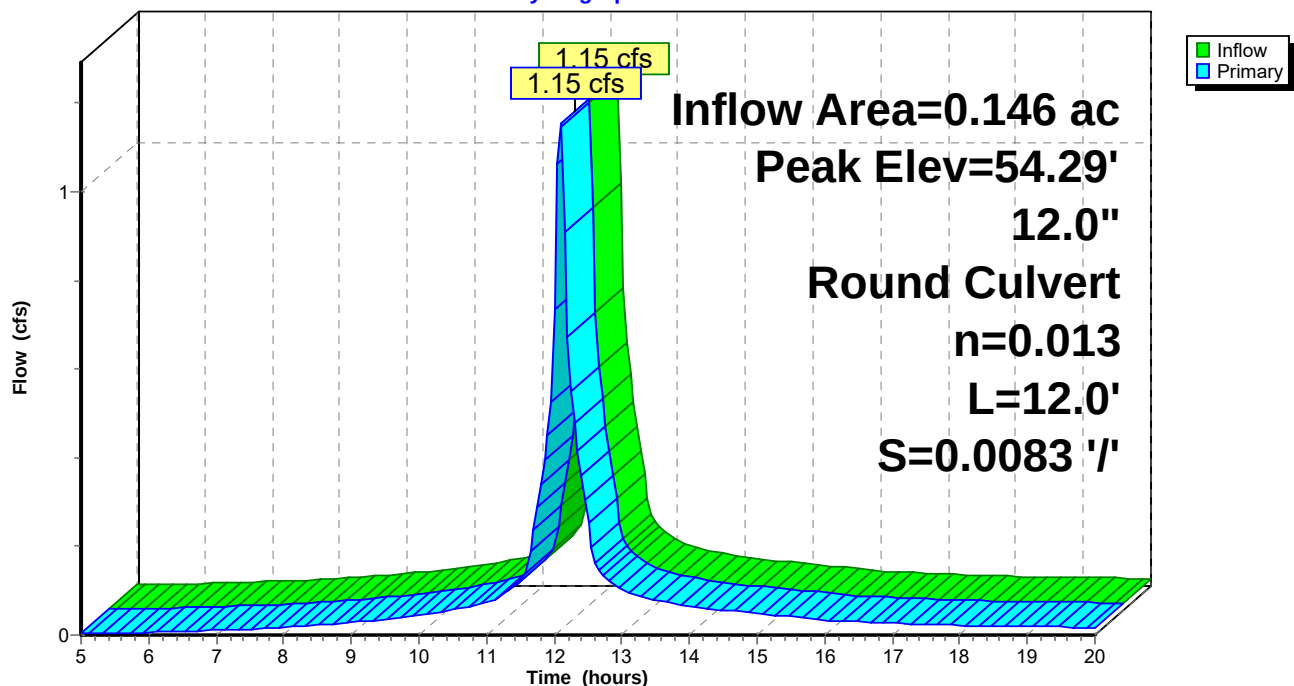
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.29' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.60' | <b>12.0" Round Culvert</b><br>L= 12.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.60' / 53.50' S= 0.0083 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.12 cfs @ 12.09 hrs HW=54.28' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.12 cfs @ 2.77 fps)

### Pond 159P: CB 25

#### Hydrograph



**Summary for Pond 160P: DMH 20**

Inflow Area = 0.591 ac, 77.85% Impervious, Inflow Depth > 6.72" for 100-Year event  
 Inflow = 4.60 cfs @ 12.09 hrs, Volume= 0.331 af  
 Outflow = 4.60 cfs @ 12.09 hrs, Volume= 0.331 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.60 cfs @ 12.09 hrs, Volume= 0.331 af  
 Routed to Pond 161P : DMH 19

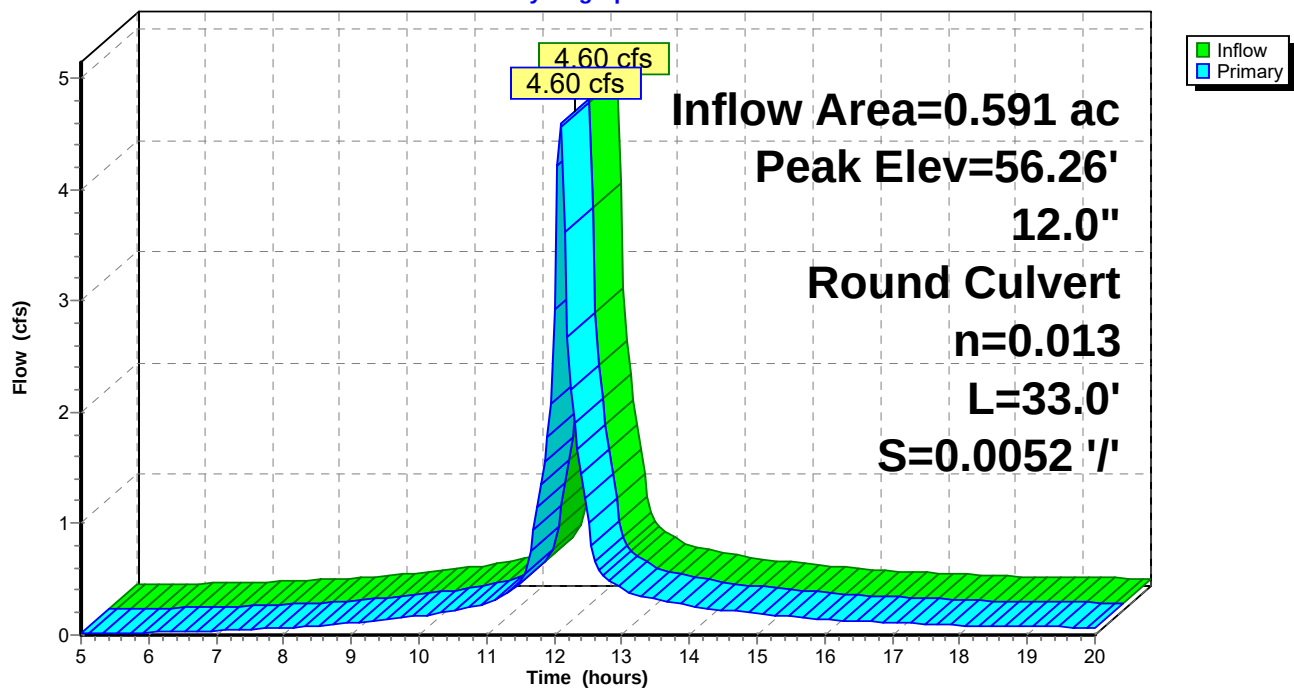
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.26' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.40' | <b>12.0" Round Culvert</b><br>L= 33.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.40' / 53.23' S= 0.0052 ' S= 0.0052 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=4.48 cfs @ 12.09 hrs HW=56.15' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 4.48 cfs @ 5.71 fps)

**Pond 160P: DMH 20**

Hydrograph



### Summary for Pond 161P: DMH 19

Inflow Area = 1.362 ac, 71.82% Impervious, Inflow Depth > 6.34" for 100-Year event  
 Inflow = 10.16 cfs @ 12.09 hrs, Volume= 0.720 af  
 Outflow = 10.16 cfs @ 12.09 hrs, Volume= 0.720 af, Atten= 0%, Lag= 0.0 min  
 Primary = 10.16 cfs @ 12.09 hrs, Volume= 0.720 af  
 Routed to Pond 153P : DMH 17

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 56.16' @ 12.09 hrs

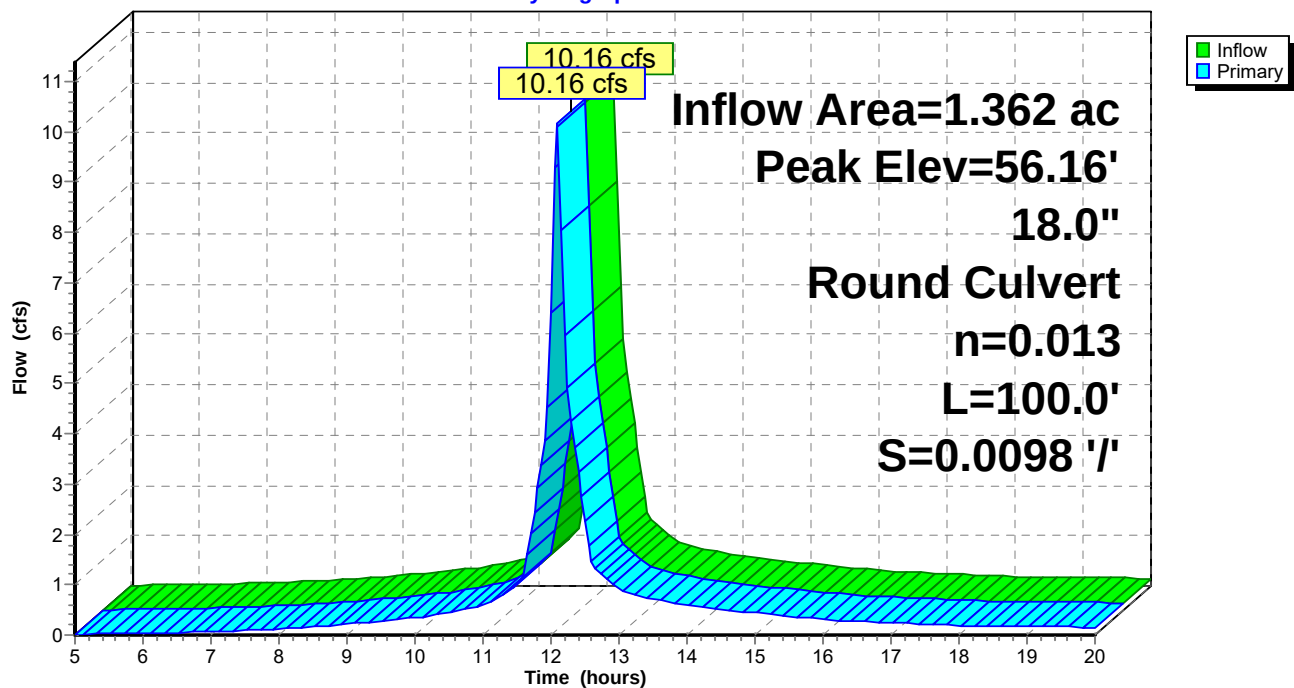
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.13' | <b>18.0" Round Culvert</b><br>L= 100.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.13' / 52.15' S= 0.0098 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=9.92 cfs @ 12.09 hrs HW=56.06' (Free Discharge)

↑**1=Culvert** (Inlet Controls 9.92 cfs @ 5.62 fps)

### Pond 161P: DMH 19

Hydrograph



### Summary for Pond 162P: CB 15

Inflow Area = 0.390 ac, 63.16% Impervious, Inflow Depth > 5.66" for 100-Year event  
 Inflow = 2.67 cfs @ 12.09 hrs, Volume= 0.184 af  
 Outflow = 2.67 cfs @ 12.09 hrs, Volume= 0.184 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.67 cfs @ 12.09 hrs, Volume= 0.184 af  
 Routed to Pond 180P : DMH 9

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 52.34' @ 12.09 hrs

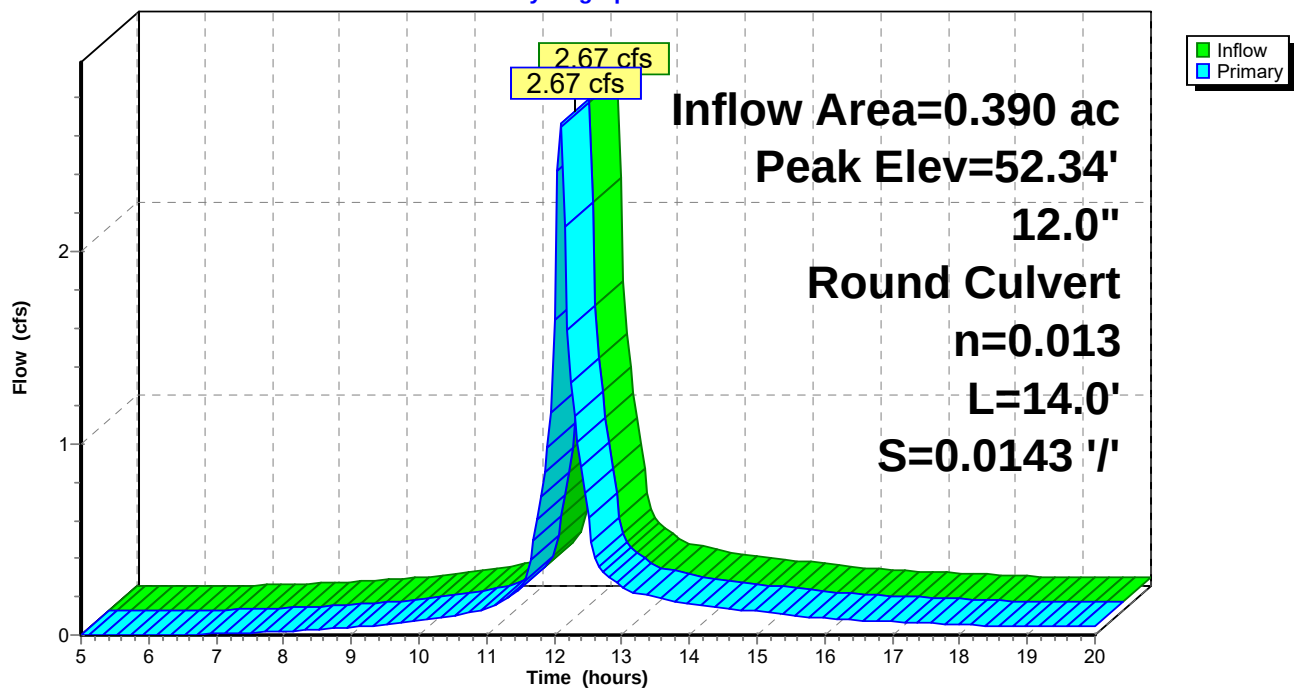
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.04' | <b>12.0" Round Culvert</b><br>L= 14.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.04' / 50.84' S= 0.0143 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.61 cfs @ 12.09 hrs HW=52.30' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 2.61 cfs @ 3.32 fps)

### Pond 162P: CB 15

#### Hydrograph



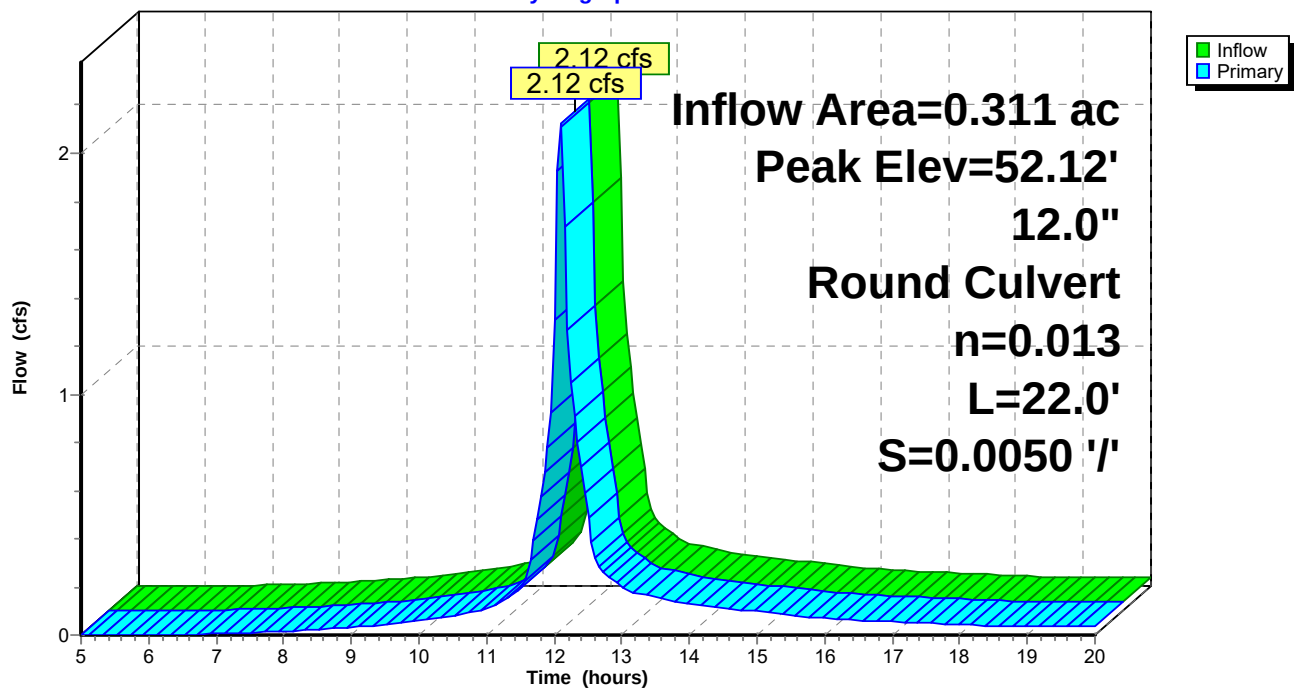
**Summary for Pond 163P: CB 14**

Inflow Area = 0.311 ac, 63.37% Impervious, Inflow Depth > 5.66" for 100-Year event  
 Inflow = 2.12 cfs @ 12.09 hrs, Volume= 0.147 af  
 Outflow = 2.12 cfs @ 12.09 hrs, Volume= 0.147 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.12 cfs @ 12.09 hrs, Volume= 0.147 af  
 Routed to Pond 180P : DMH 9

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.12' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.05' | <b>12.0" Round Culvert</b><br>L= 22.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.05' / 50.94' S= 0.0050 ' S= 0.0050 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.08 cfs @ 12.09 hrs HW=52.10' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.08 cfs @ 3.14 fps)

**Pond 163P: CB 14****Hydrograph**

**Summary for Pond 165P: CB 19**

Inflow Area = 0.209 ac, 66.66% Impervious, Inflow Depth > 5.90" for 100-Year event  
 Inflow = 1.48 cfs @ 12.09 hrs, Volume= 0.103 af  
 Outflow = 1.48 cfs @ 12.09 hrs, Volume= 0.103 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.48 cfs @ 12.09 hrs, Volume= 0.103 af  
 Routed to Pond 166P : DMH 13

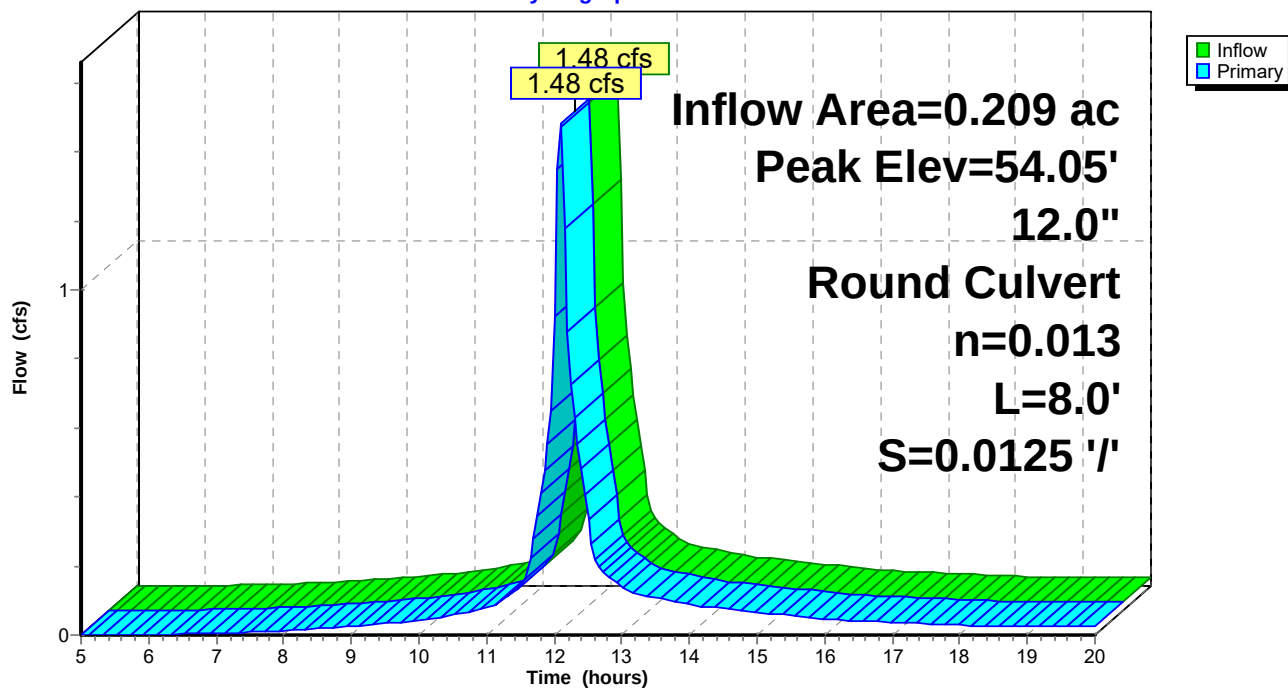
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 54.05' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 53.25' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.25' / 53.15' S= 0.0125 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.45 cfs @ 12.09 hrs HW=54.04' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 1.45 cfs @ 3.00 fps)

**Pond 165P: CB 19****Hydrograph**

### Summary for Pond 166P: DMH 13

Inflow Area = 3.491 ac, 67.77% Impervious, Inflow Depth > 1.35" for 100-Year event  
 Inflow = 8.17 cfs @ 12.20 hrs, Volume= 0.393 af  
 Outflow = 8.17 cfs @ 12.20 hrs, Volume= 0.393 af, Atten= 0%, Lag= 0.0 min  
 Primary = 8.17 cfs @ 12.20 hrs, Volume= 0.393 af  
 Routed to Pond 169P : DMH 12

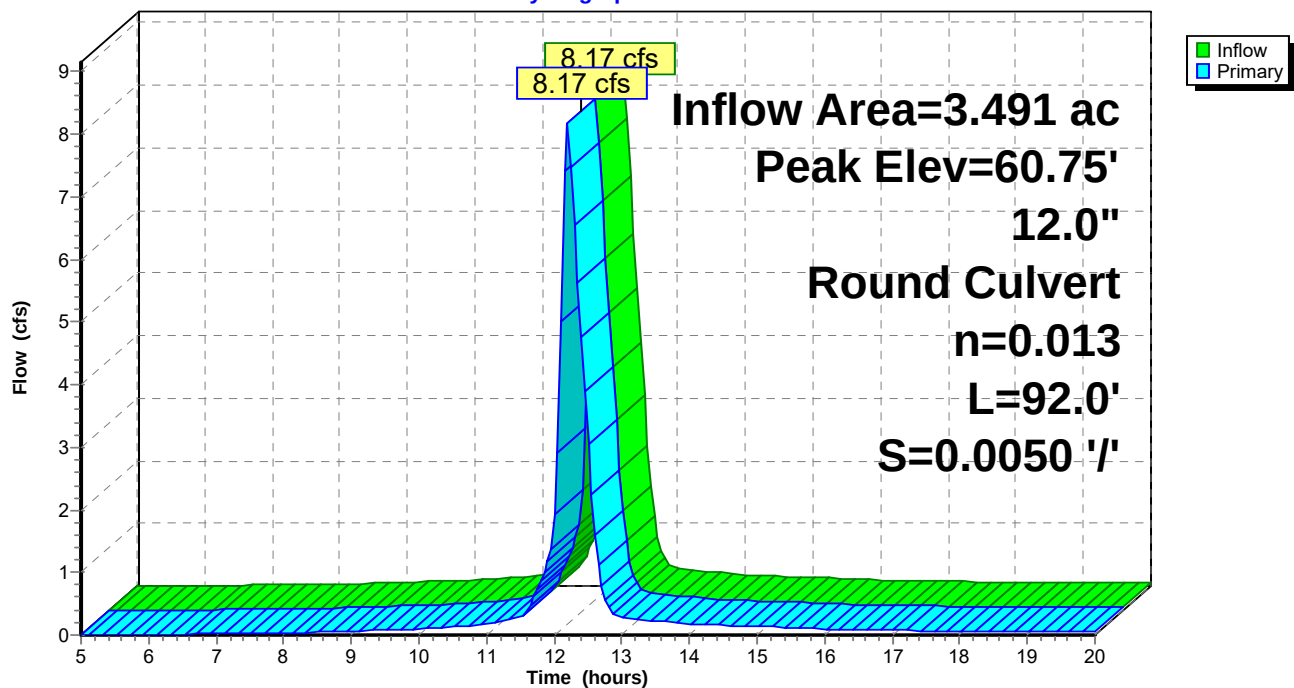
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.75' @ 12.20 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.16' | <b>12.0" Round Culvert</b><br>L= 92.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.16' / 51.70' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=8.16 cfs @ 12.20 hrs HW=60.72' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 8.16 cfs @ 10.39 fps)

### Pond 166P: DMH 13

#### Hydrograph





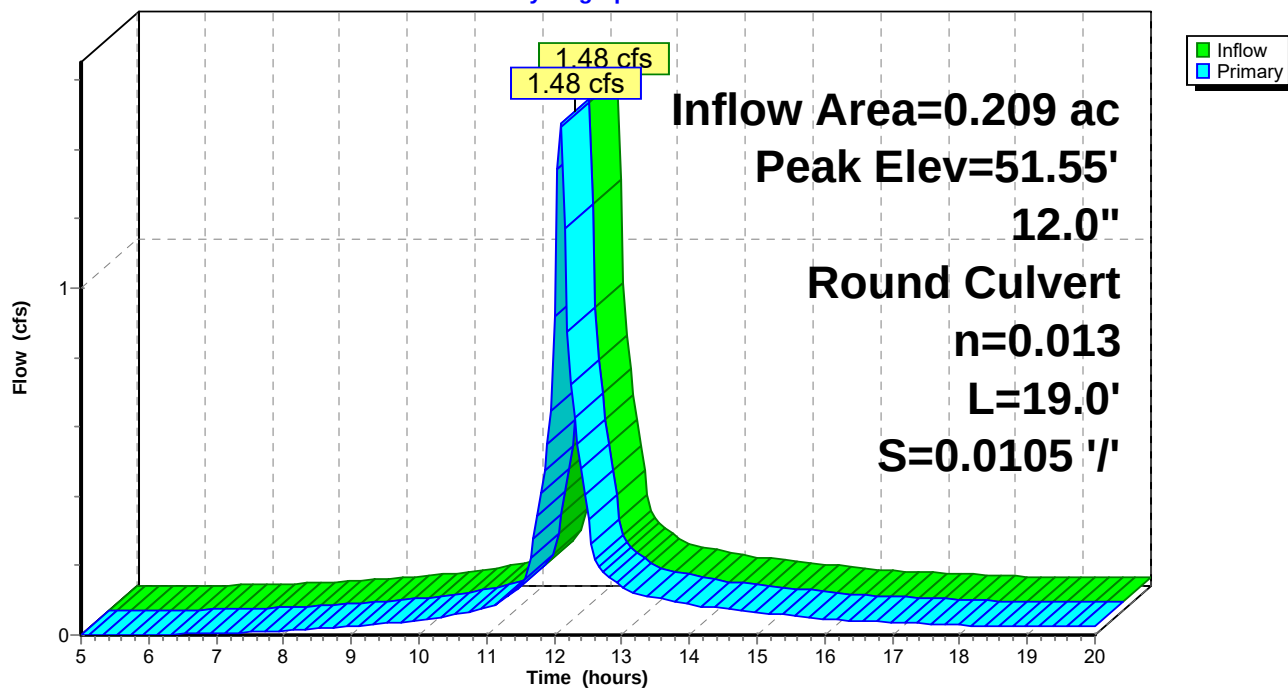
**Summary for Pond 167P: CB 11**

Inflow Area = 0.209 ac, 65.78% Impervious, Inflow Depth > 5.90" for 100-Year event  
 Inflow = 1.48 cfs @ 12.09 hrs, Volume= 0.103 af  
 Outflow = 1.48 cfs @ 12.09 hrs, Volume= 0.103 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.48 cfs @ 12.09 hrs, Volume= 0.103 af  
 Routed to Pond 181P : DMH 7

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.55' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.79' | <b>12.0" Round Culvert</b><br>L= 19.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.79' / 50.59' S= 0.0105 ' S= 0.0105 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.44 cfs @ 12.09 hrs HW=51.54' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.44 cfs @ 3.19 fps)

**Pond 167P: CB 11****Hydrograph**

**Summary for Pond 168P: CB 10**

Inflow Area = 0.231 ac, 30.05% Impervious, Inflow Depth > 3.40" for 100-Year event  
 Inflow = 0.97 cfs @ 12.10 hrs, Volume= 0.065 af  
 Outflow = 0.97 cfs @ 12.10 hrs, Volume= 0.065 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.97 cfs @ 12.10 hrs, Volume= 0.065 af  
 Routed to Pond 181P : DMH 7

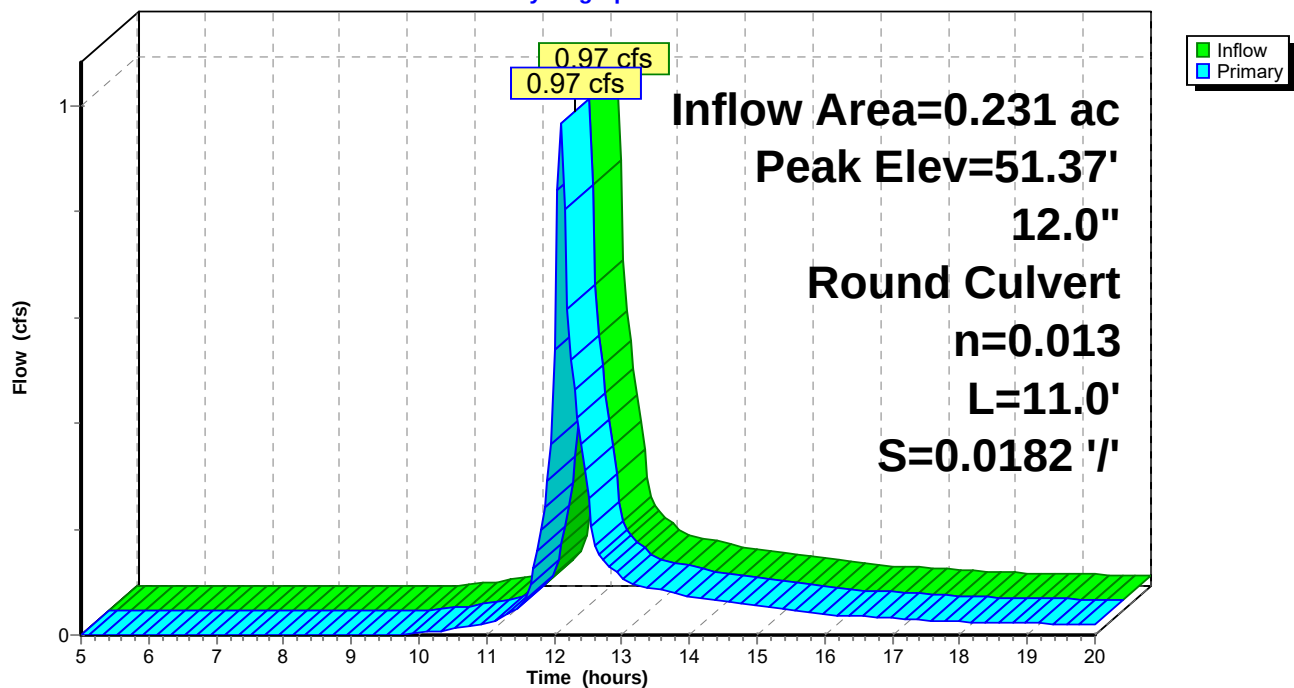
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 51.37' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.79' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.79' / 50.59' S= 0.0182 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.96 cfs @ 12.10 hrs HW=51.37' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 0.96 cfs @ 2.04 fps)

**Pond 168P: CB 10****Hydrograph**

**Summary for Pond 169P: DMH 12**

Inflow Area = 3.491 ac, 67.77% Impervious, Inflow Depth > 1.35" for 100-Year event  
 Inflow = 8.17 cfs @ 12.20 hrs, Volume= 0.393 af  
 Outflow = 8.17 cfs @ 12.20 hrs, Volume= 0.393 af, Atten= 0%, Lag= 0.0 min  
 Primary = 8.17 cfs @ 12.20 hrs, Volume= 0.393 af  
 Routed to Pond 174P : DMH 11

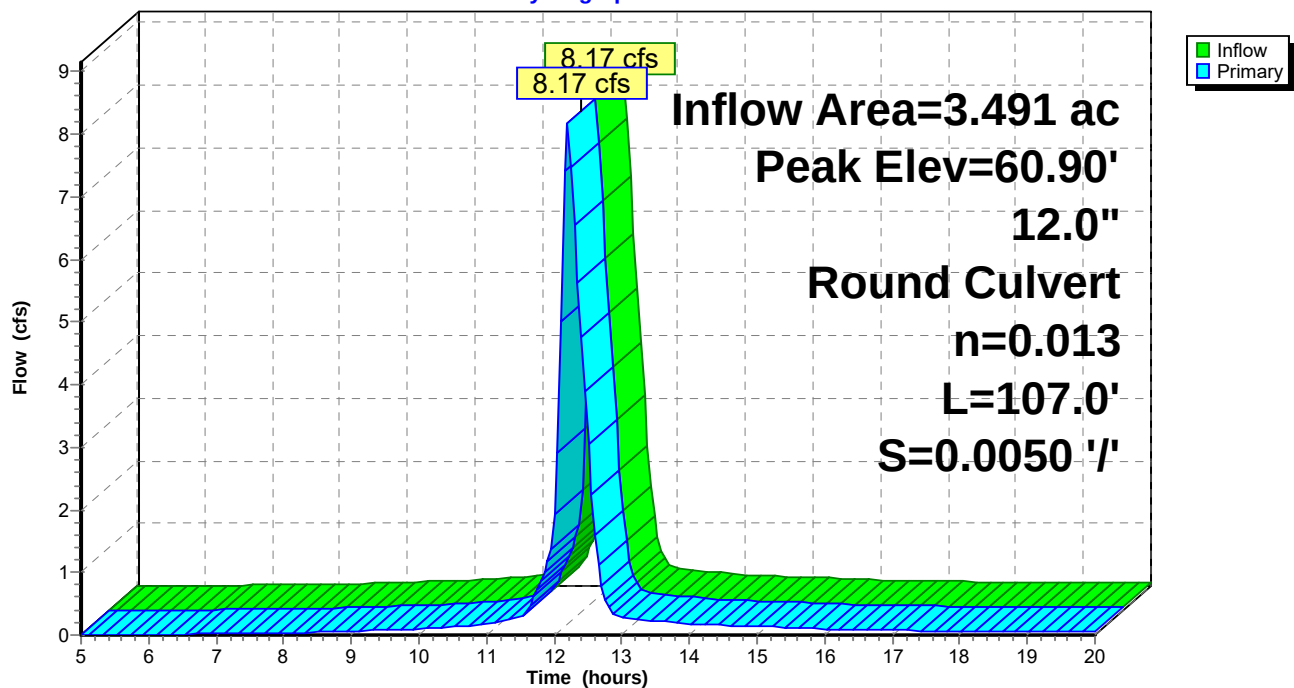
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.90' @ 12.20 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.60' | <b>12.0" Round Culvert</b><br>L= 107.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.60' / 51.06' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=8.16 cfs @ 12.20 hrs HW=60.87' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 8.16 cfs @ 10.39 fps)

**Pond 169P: DMH 12**

Hydrograph



### Summary for Pond 170P: CB 9

Inflow Area = 0.227 ac, 61.54% Impervious, Inflow Depth > 5.54" for 100-Year event  
 Inflow = 1.52 cfs @ 12.09 hrs, Volume= 0.105 af  
 Outflow = 1.52 cfs @ 12.09 hrs, Volume= 0.105 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.52 cfs @ 12.09 hrs, Volume= 0.105 af  
 Routed to Pond 171P : DMH 6

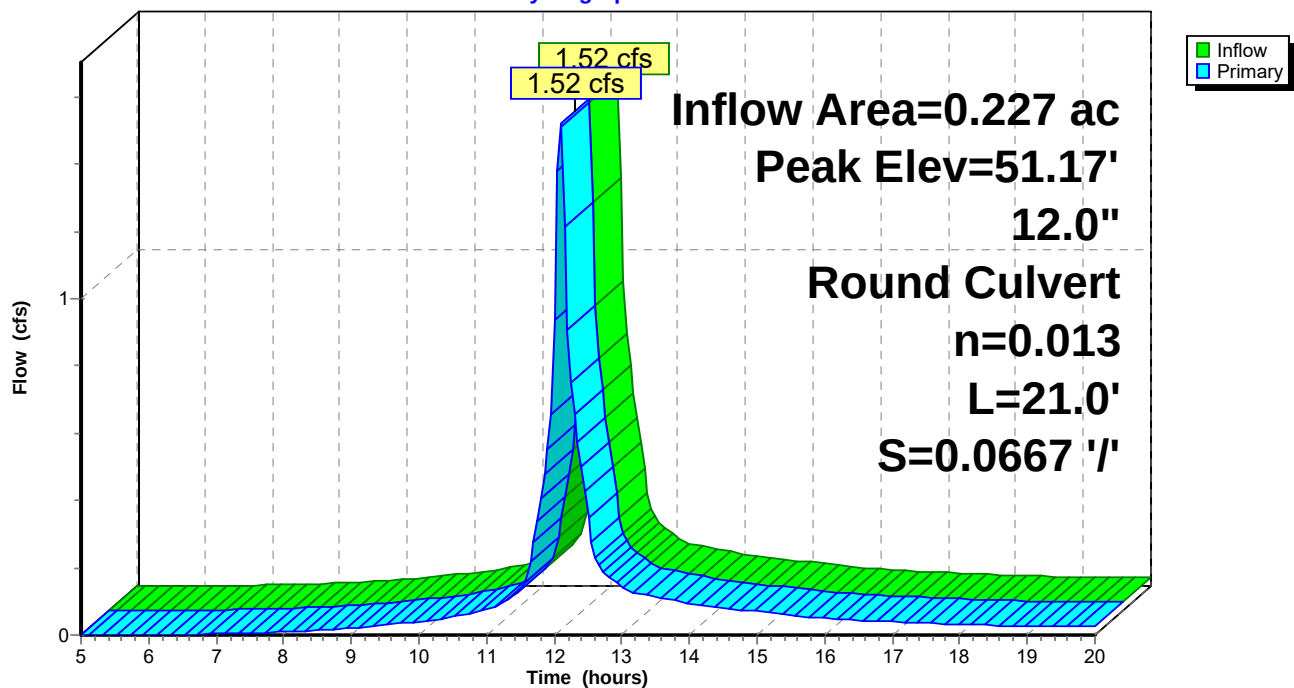
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.17' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.40' | <b>12.0" Round Culvert</b><br>L= 21.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.40' / 49.00' S= 0.0667 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.49 cfs @ 12.09 hrs HW=51.16' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 1.49 cfs @ 2.34 fps)

### Pond 170P: CB 9

Hydrograph



### Summary for Pond 171P: DMH 6

Inflow Area = 2.272 ac, 49.70% Impervious, Inflow Depth > 4.52" for 100-Year event  
 Inflow = 11.79 cfs @ 12.09 hrs, Volume= 0.855 af  
 Outflow = 11.79 cfs @ 12.09 hrs, Volume= 0.855 af, Atten= 0%, Lag= 0.0 min  
 Primary = 11.79 cfs @ 12.09 hrs, Volume= 0.855 af  
 Routed to Pond 185P : DMH 4

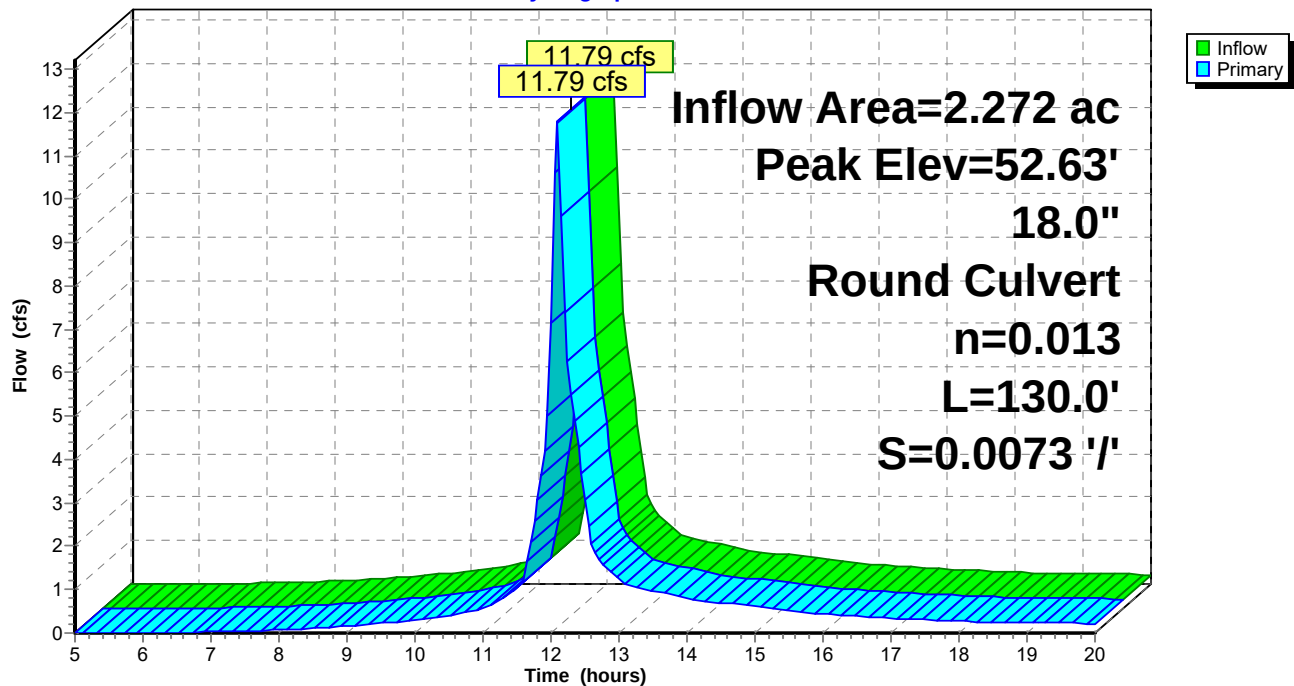
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.63' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.80' | <b>18.0" Round Culvert</b><br>L= 130.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.80' / 47.85' S= 0.0073 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=11.59 cfs @ 12.09 hrs HW=52.53' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 11.59 cfs @ 6.56 fps)

### Pond 171P: DMH 6

#### Hydrograph



### Summary for Pond 172P: CB 16

Inflow Area = 0.317 ac, 75.85% Impervious, Inflow Depth > 6.62" for 100-Year event  
 Inflow = 2.45 cfs @ 12.09 hrs, Volume= 0.175 af  
 Outflow = 2.45 cfs @ 12.09 hrs, Volume= 0.175 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.45 cfs @ 12.09 hrs, Volume= 0.175 af  
 Routed to Pond 174P : DMH 11

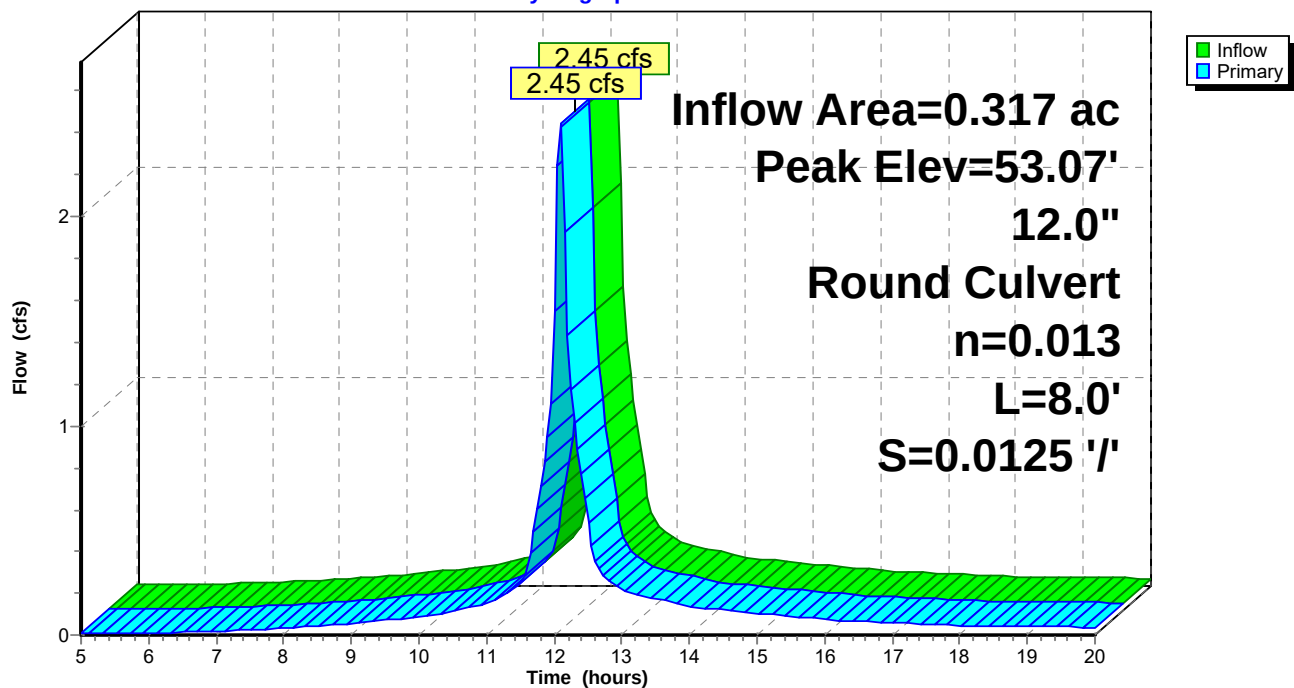
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.07' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                           |
|--------|---------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.90' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.90' / 51.80' S= 0.0125 ' S= 0.0125 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.39 cfs @ 12.09 hrs HW=53.04' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.39 cfs @ 3.04 fps)

### Pond 172P: CB 16

#### Hydrograph



### Summary for Pond 173P: CB 17

Inflow Area = 0.130 ac, 71.18% Impervious, Inflow Depth > 6.26" for 100-Year event  
 Inflow = 0.96 cfs @ 12.09 hrs, Volume= 0.068 af  
 Outflow = 0.96 cfs @ 12.09 hrs, Volume= 0.068 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.96 cfs @ 12.09 hrs, Volume= 0.068 af  
 Routed to Pond 174P : DMH 11

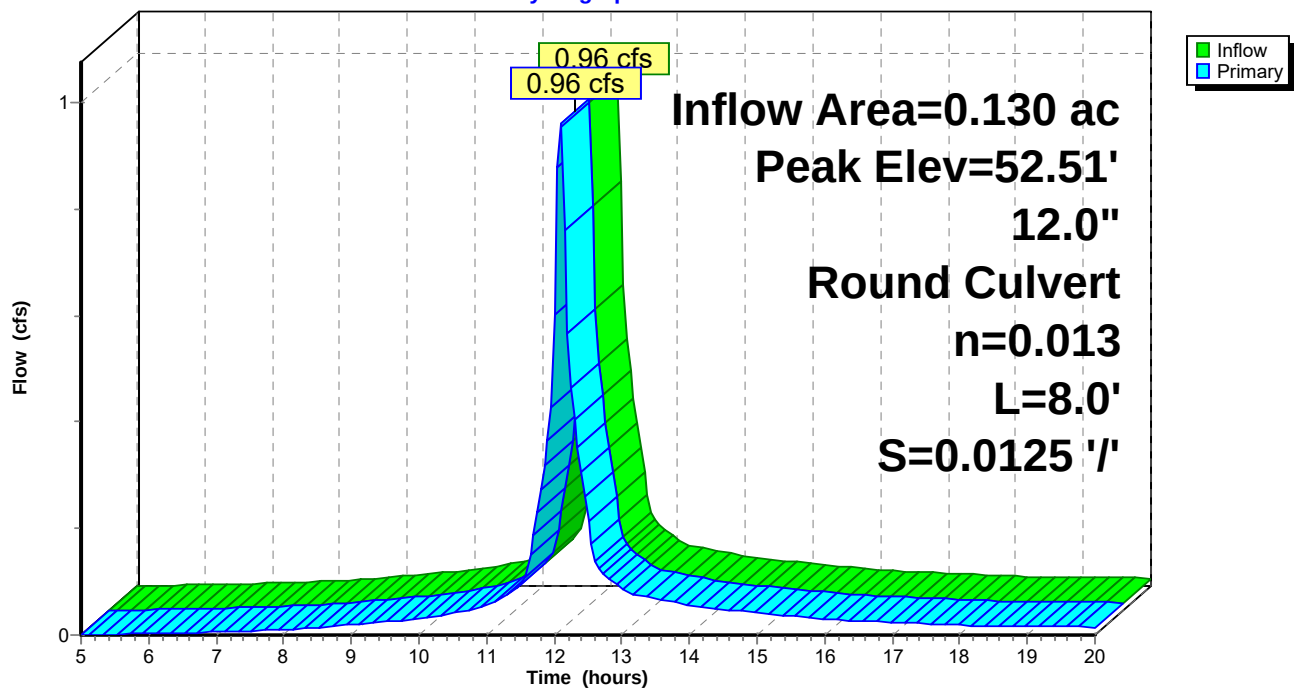
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.51' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                           |
|--------|---------|--------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.90' | <b>12.0" Round Culvert</b><br>L= 8.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.90' / 51.80' S= 0.0125 ' S= 0.0125 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.94 cfs @ 12.09 hrs HW=52.50' (Free Discharge)  
 1=Culvert (Barrel Controls 0.94 cfs @ 2.72 fps)

### Pond 173P: CB 17

#### Hydrograph



**Summary for Pond 174P: DMH 11**

Inflow Area = 3.938 ac, 68.53% Impervious, Inflow Depth > 1.94" for 100-Year event  
 Inflow = 10.28 cfs @ 12.18 hrs, Volume= 0.636 af  
 Outflow = 10.28 cfs @ 12.18 hrs, Volume= 0.636 af, Atten= 0%, Lag= 0.0 min  
 Primary = 10.28 cfs @ 12.18 hrs, Volume= 0.636 af  
 Routed to Pond 217P : DMH 8A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 54.05' @ 12.18 hrs

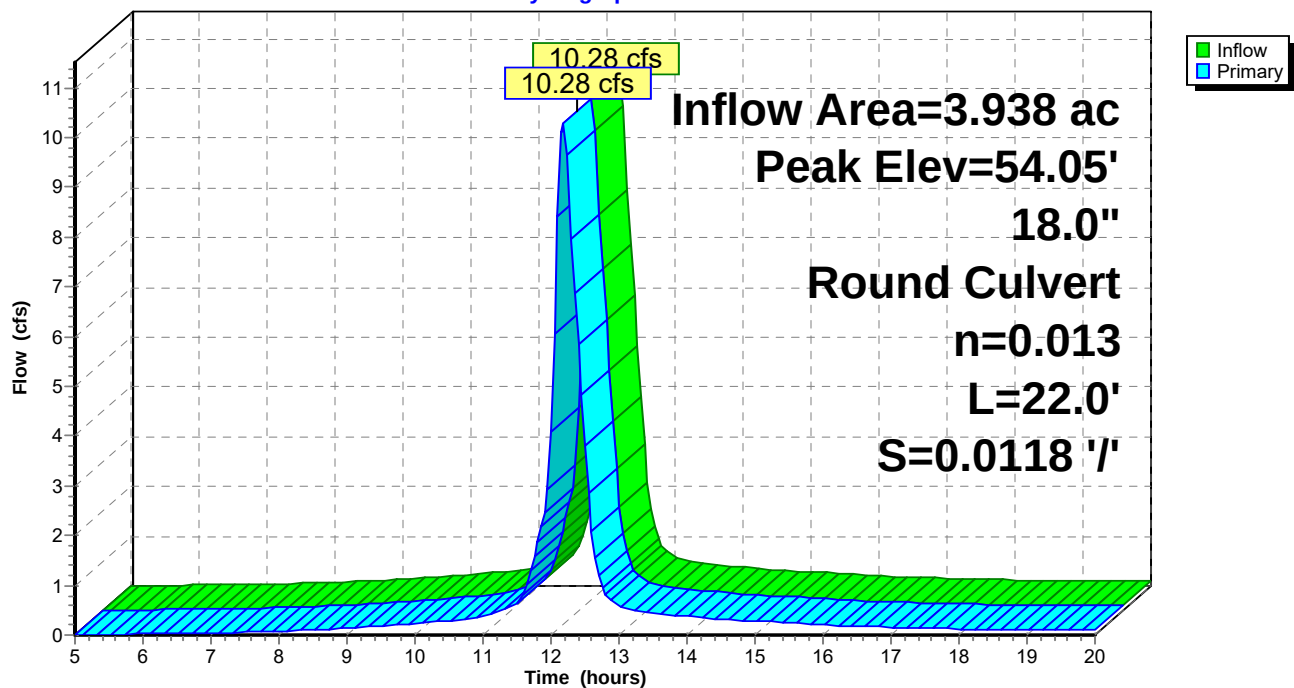
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.96' | <b>18.0" Round Culvert</b><br>L= 22.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.96' / 50.70' S= 0.0118 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=10.14 cfs @ 12.18 hrs HW=53.99' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 10.14 cfs @ 5.74 fps)

**Pond 174P: DMH 11**

Hydrograph





**Summary for Pond 175P: DMH 5**

Inflow Area = 1.445 ac, 58.41% Impervious, Inflow Depth > 5.34" for 100-Year event  
 Inflow = 9.32 cfs @ 12.09 hrs, Volume= 0.643 af  
 Outflow = 9.32 cfs @ 12.09 hrs, Volume= 0.643 af, Atten= 0%, Lag= 0.0 min  
 Primary = 9.32 cfs @ 12.09 hrs, Volume= 0.643 af  
 Routed to Pond 171P : DMH 6

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 61.20' @ 12.09 hrs

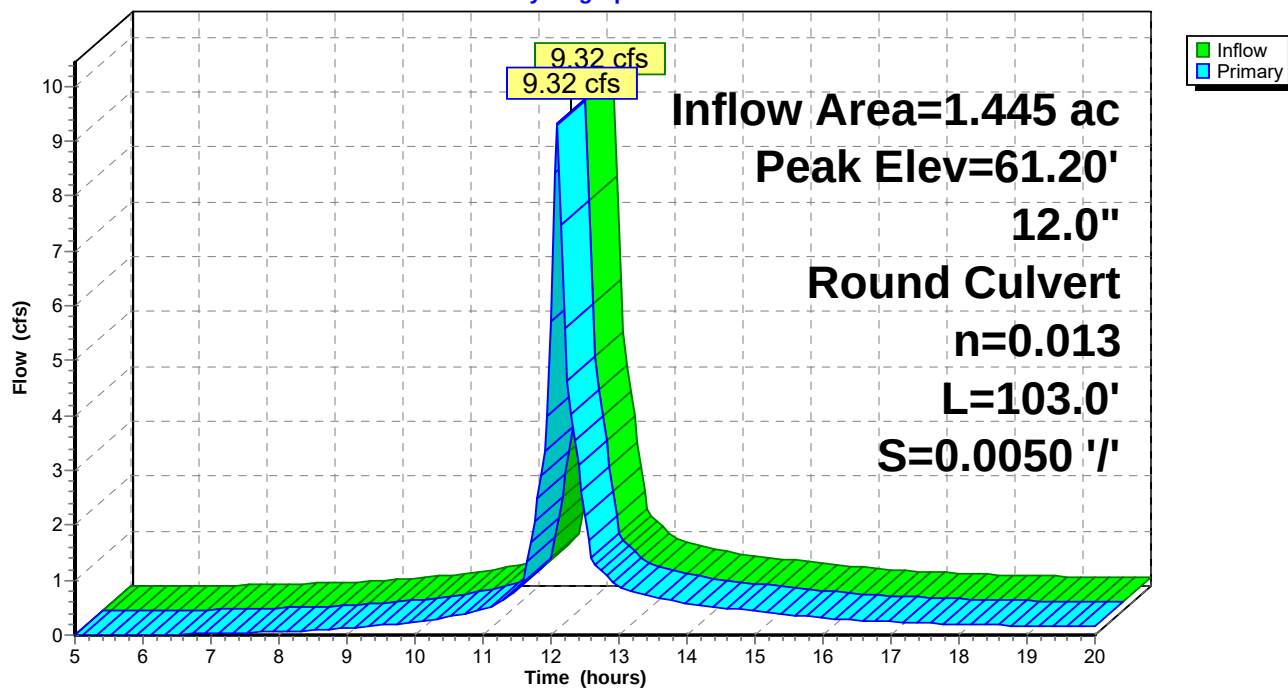
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 49.52' | <b>12.0" Round Culvert</b><br>L= 103.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.52' / 49.00' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=9.12 cfs @ 12.09 hrs HW=60.76' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 9.12 cfs @ 11.62 fps)

**Pond 175P: DMH 5**

Hydrograph



**Summary for Pond 176P: CB 6**

Inflow Area = 0.199 ac, 57.72% Impervious, Inflow Depth > 5.30" for 100-Year event  
 Inflow = 1.28 cfs @ 12.09 hrs, Volume= 0.088 af  
 Outflow = 1.28 cfs @ 12.09 hrs, Volume= 0.088 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.28 cfs @ 12.09 hrs, Volume= 0.088 af  
 Routed to Pond 175P : DMH 5

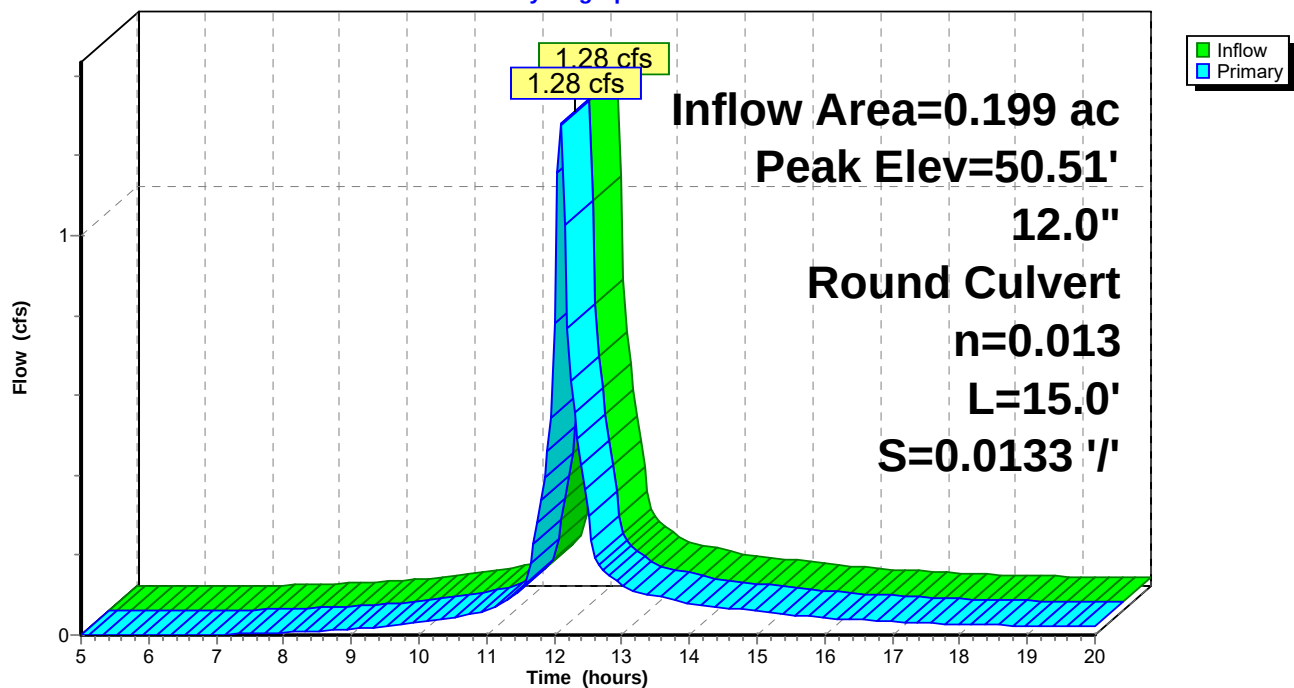
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.51' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 49.82' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.82' / 49.62' S= 0.0133 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.26 cfs @ 12.09 hrs HW=50.50' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 1.26 cfs @ 2.21 fps)

**Pond 176P: CB 6**

Hydrograph



### Summary for Pond 177P: CB 13

Inflow Area = 0.319 ac, 64.43% Impervious, Inflow Depth > 5.78" for 100-Year event  
 Inflow = 2.22 cfs @ 12.09 hrs, Volume= 0.154 af  
 Outflow = 2.22 cfs @ 12.09 hrs, Volume= 0.154 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.22 cfs @ 12.09 hrs, Volume= 0.154 af  
 Routed to Pond 179P : DMH 8

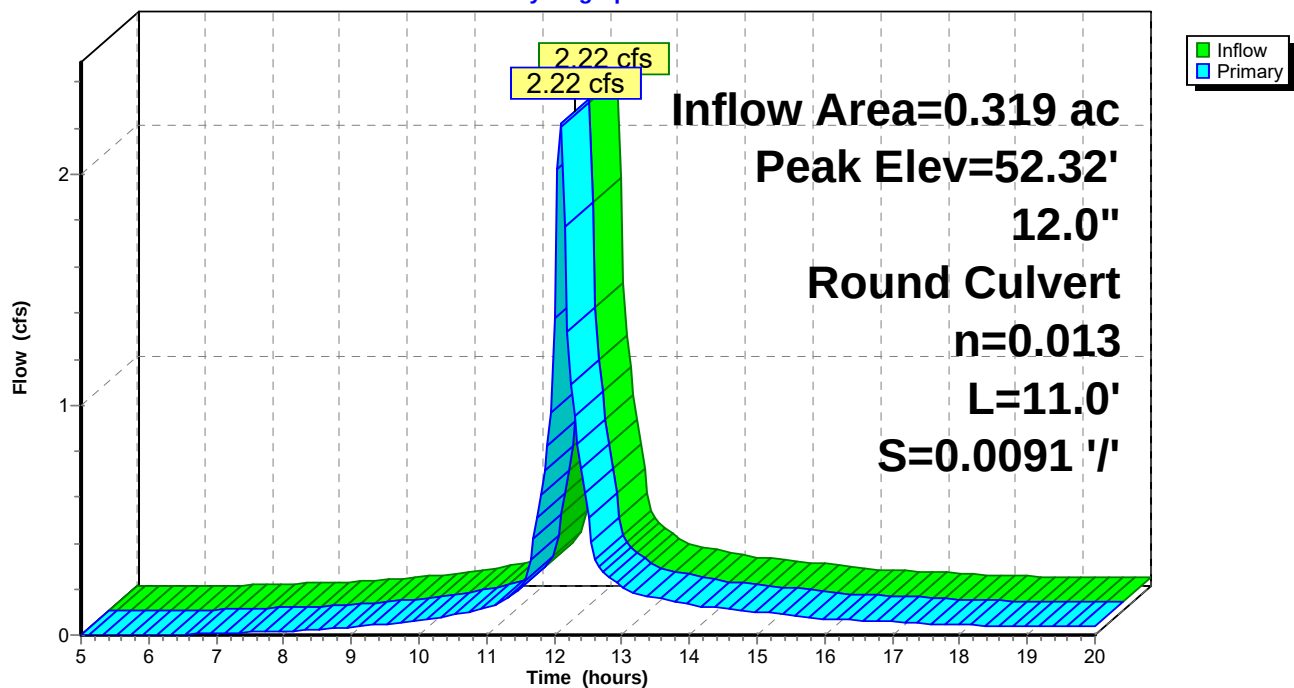
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.32' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.25' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.25' / 51.15' S= 0.0091 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.17 cfs @ 12.09 hrs HW=52.30' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 2.17 cfs @ 3.28 fps)

### Pond 177P: CB 13

#### Hydrograph



### Summary for Pond 178P: CB 12

Inflow Area = 0.152 ac, 60.77% Impervious, Inflow Depth > 5.54" for 100-Year event  
 Inflow = 1.02 cfs @ 12.09 hrs, Volume= 0.070 af  
 Outflow = 1.02 cfs @ 12.09 hrs, Volume= 0.070 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.02 cfs @ 12.09 hrs, Volume= 0.070 af  
 Routed to Pond 179P : DMH 8

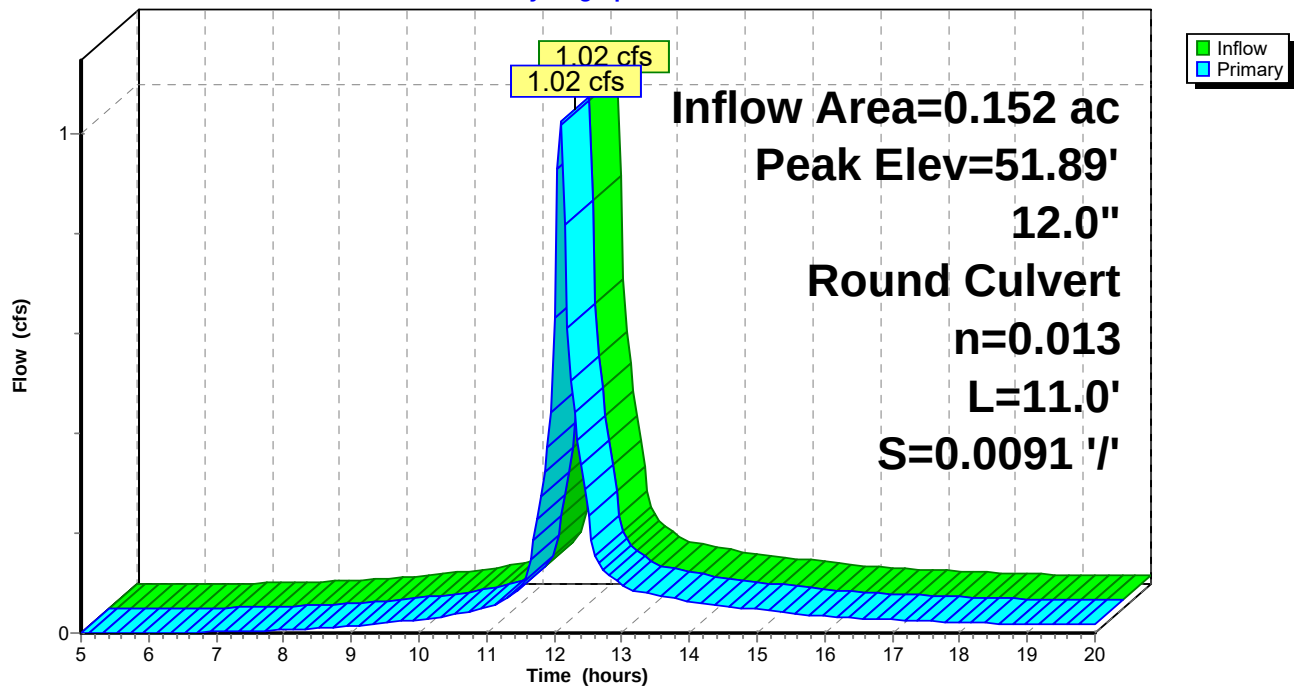
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.89' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.25' | <b>12.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.25' / 51.15' S= 0.0091 ' S= 0.0091 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.00 cfs @ 12.09 hrs HW=51.88' (Free Discharge)  
 1=Culvert (Barrel Controls 1.00 cfs @ 2.71 fps)

### Pond 178P: CB 12

#### Hydrograph



### Summary for Pond 179P: DMH 8

Inflow Area = 0.472 ac, 63.25% Impervious, Inflow Depth > 5.70" for 100-Year event  
 Inflow = 3.24 cfs @ 12.09 hrs, Volume= 0.224 af  
 Outflow = 3.24 cfs @ 12.09 hrs, Volume= 0.224 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.24 cfs @ 12.09 hrs, Volume= 0.224 af  
 Routed to Pond 217P : DMH 8A

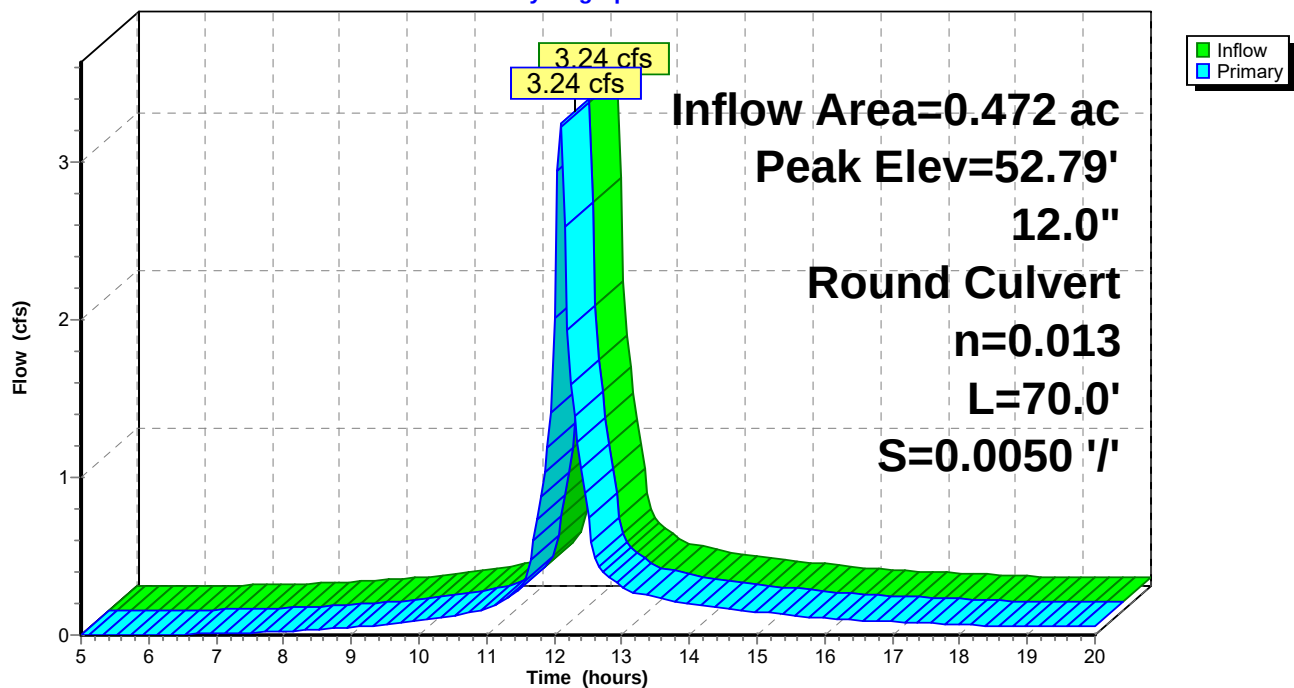
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.79' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.05' | <b>12.0" Round Culvert</b><br>L= 70.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.05' / 50.70' S= 0.0050 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=3.17 cfs @ 12.09 hrs HW=52.74' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 3.17 cfs @ 4.04 fps)

### Pond 179P: DMH 8

#### Hydrograph



### Summary for Pond 180P: DMH 9

Inflow Area = 0.701 ac, 63.25% Impervious, Inflow Depth > 5.66" for 100-Year event  
 Inflow = 4.79 cfs @ 12.09 hrs, Volume= 0.331 af  
 Outflow = 4.79 cfs @ 12.09 hrs, Volume= 0.331 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.79 cfs @ 12.09 hrs, Volume= 0.331 af  
 Routed to Pond 181P : DMH 7

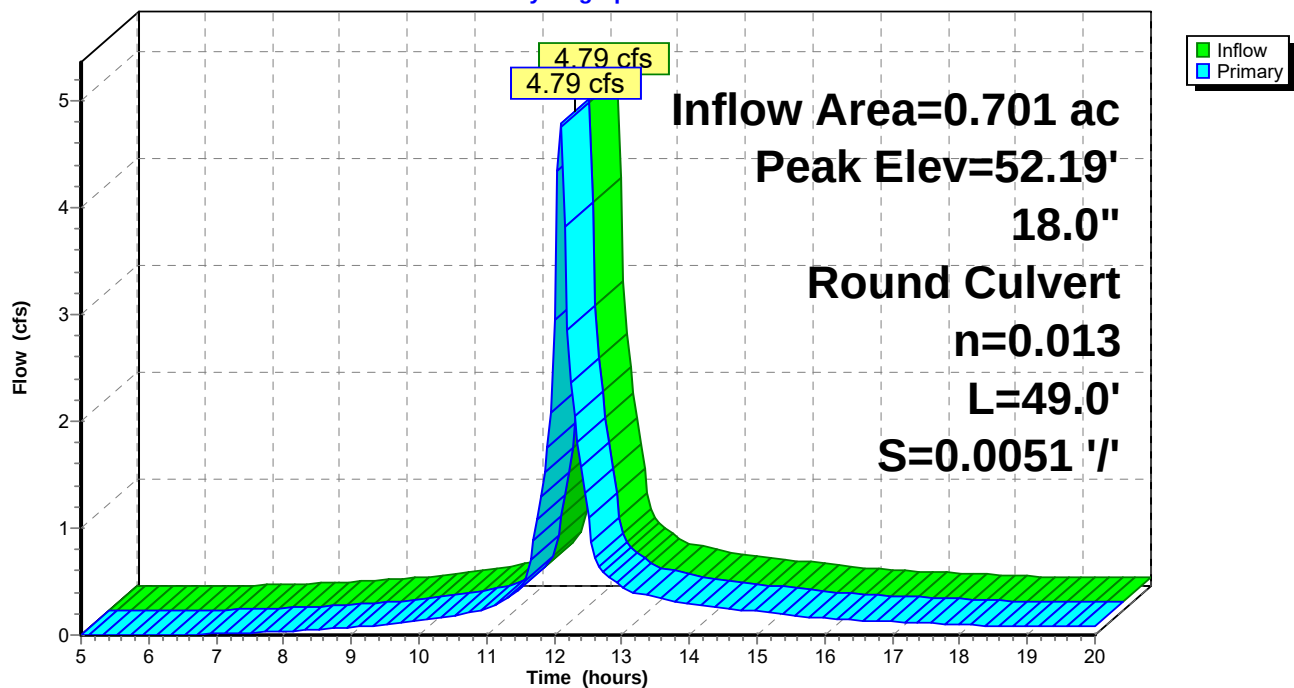
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.19' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.84' | <b>18.0" Round Culvert</b><br>L= 49.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.84' / 50.59' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=4.69 cfs @ 12.09 hrs HW=52.17' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 4.69 cfs @ 3.77 fps)

### Pond 180P: DMH 9

Hydrograph



**Summary for Pond 181P: DMH 7**

Inflow Area = 1.141 ac, 56.99% Impervious, Inflow Depth > 5.24" for 100-Year event  
 Inflow = 7.23 cfs @ 12.09 hrs, Volume= 0.499 af  
 Outflow = 7.23 cfs @ 12.09 hrs, Volume= 0.499 af, Atten= 0%, Lag= 0.0 min  
 Primary = 7.23 cfs @ 12.09 hrs, Volume= 0.499 af  
 Routed to Pond 175P : DMH 5

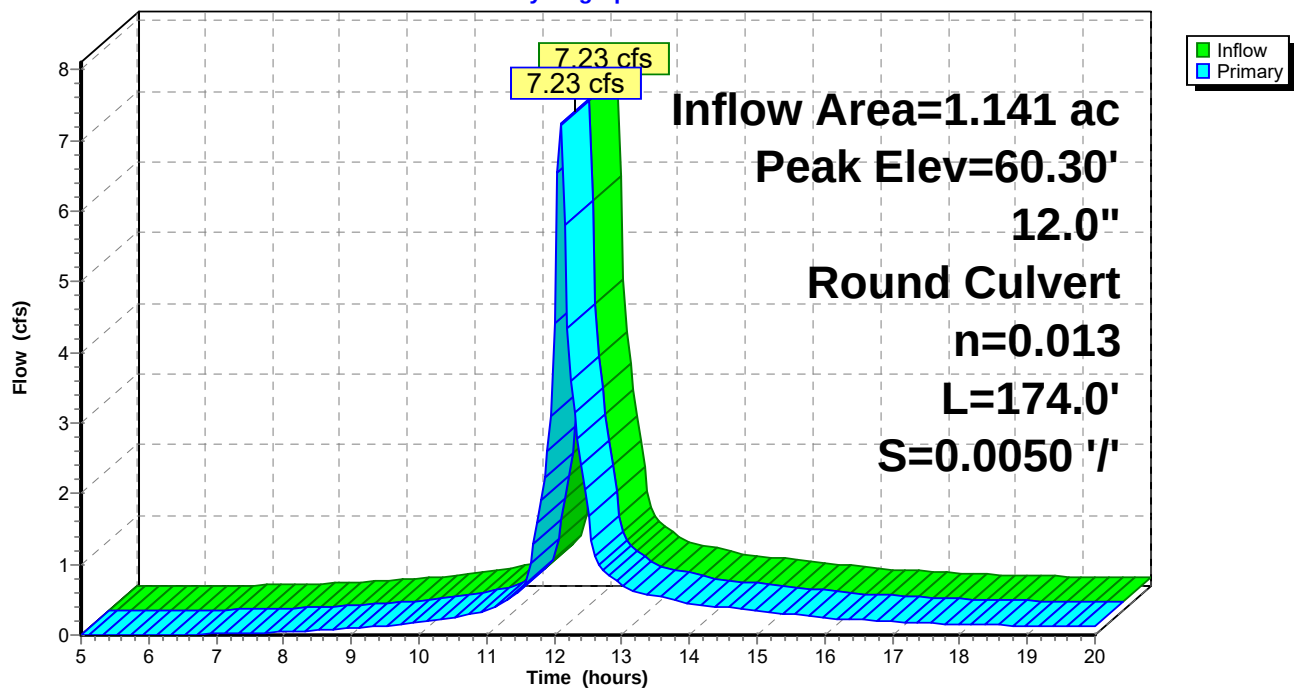
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.30' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.49' | <b>12.0" Round Culvert</b><br>L= 174.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.49' / 49.62' S= 0.0050 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=7.09 cfs @ 12.09 hrs HW=59.93' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 7.09 cfs @ 9.02 fps)

**Pond 181P: DMH 7**

Hydrograph



**Summary for Pond 182P: CB 7**

Inflow Area = 0.105 ac, 75.17% Impervious, Inflow Depth > 6.50" for 100-Year event  
 Inflow = 0.80 cfs @ 12.09 hrs, Volume= 0.057 af  
 Outflow = 0.80 cfs @ 12.09 hrs, Volume= 0.057 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.80 cfs @ 12.09 hrs, Volume= 0.057 af  
 Routed to Pond 175P : DMH 5

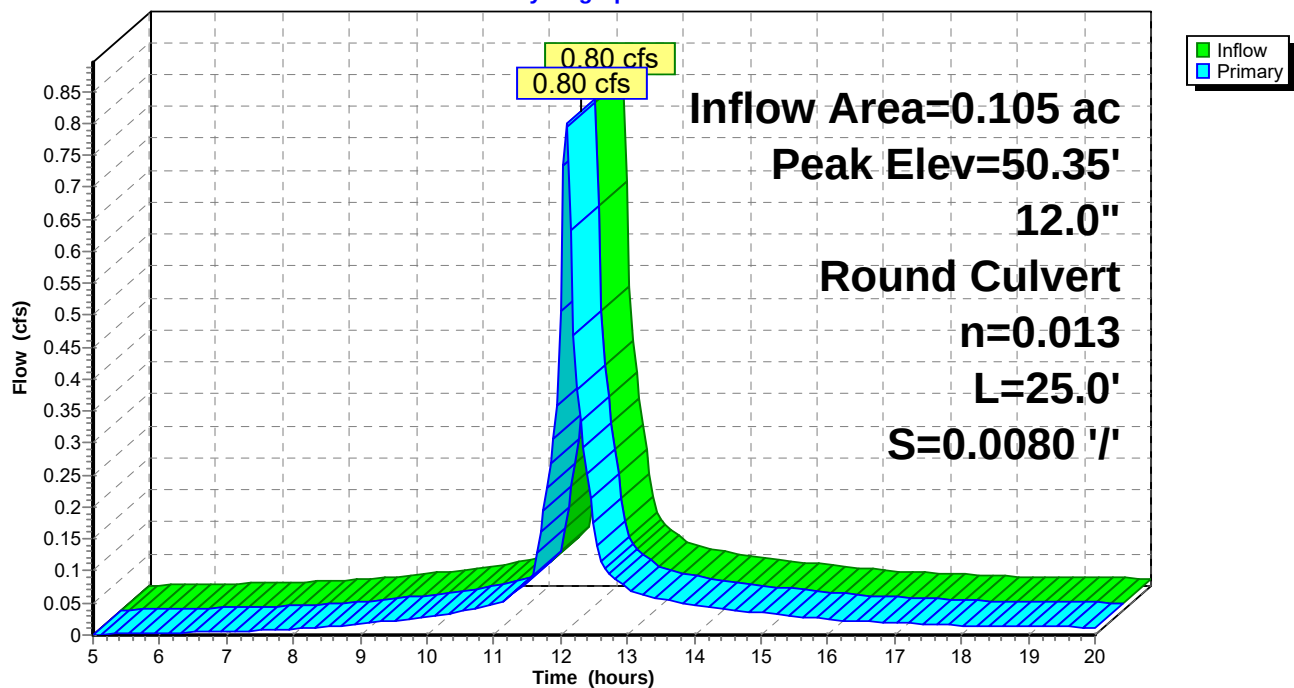
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.35' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 49.82' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.82' / 49.62' S= 0.0080 ' S= 0.0080 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.78 cfs @ 12.09 hrs HW=50.34' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.78 cfs @ 2.72 fps)

**Pond 182P: CB 7**

Hydrograph





### Summary for Pond 185P: DMH 4

Inflow Area = 7.166 ac, 62.94% Impervious, Inflow Depth > 2.30" for 100-Year event  
 Inflow = 15.50 cfs @ 12.20 hrs, Volume= 1.374 af  
 Outflow = 15.50 cfs @ 12.20 hrs, Volume= 1.374 af, Atten= 0%, Lag= 0.0 min  
 Primary = 15.50 cfs @ 12.20 hrs, Volume= 1.374 af  
 Routed to Pond 197P : Inf. Basin 1

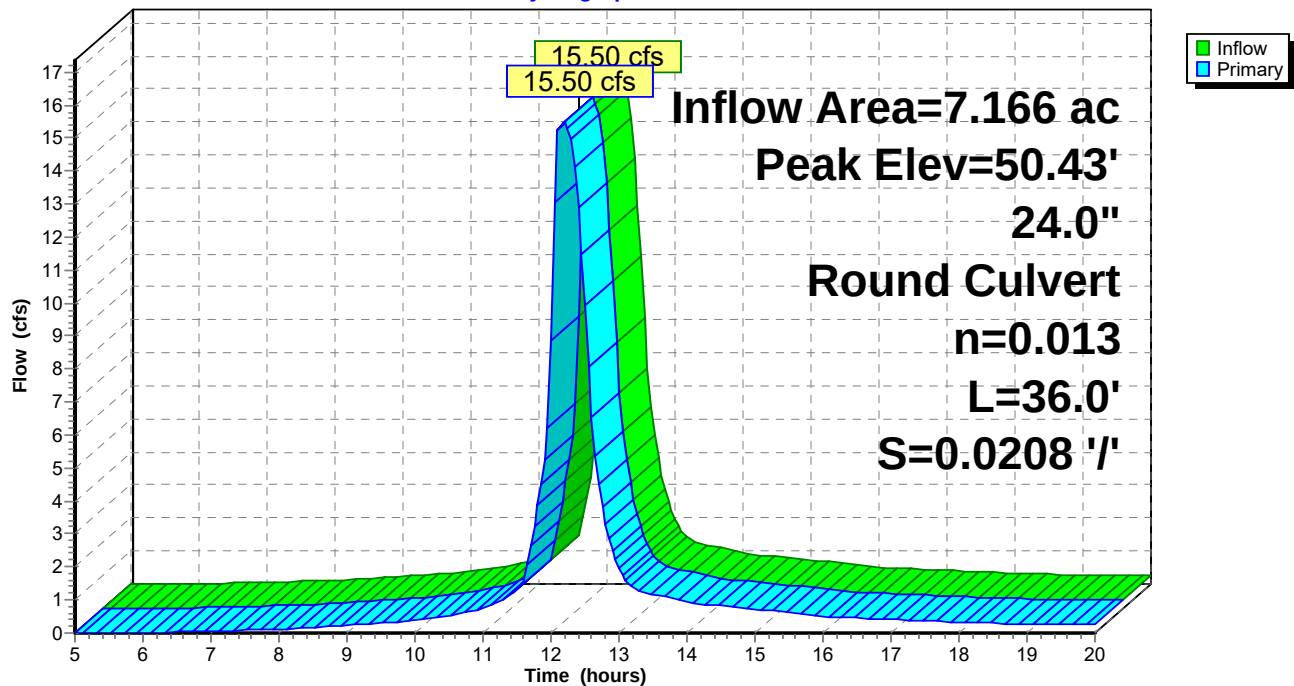
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.43' @ 12.20 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 47.75' | <b>24.0" Round Culvert</b><br>L= 36.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 47.75' / 47.00' S= 0.0208 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=15.49 cfs @ 12.20 hrs HW=50.43' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 15.49 cfs @ 4.93 fps)

### Pond 185P: DMH 4

Hydrograph



### Summary for Pond 186P: Constructed Wetland 1

Inflow Area = 1.052 ac, 38.52% Impervious, Inflow Depth > 3.90" for 100-Year event  
 Inflow = 4.80 cfs @ 12.09 hrs, Volume= 0.342 af  
 Outflow = 3.57 cfs @ 12.17 hrs, Volume= 0.294 af, Atten= 26%, Lag= 4.7 min  
 Primary = 3.55 cfs @ 12.17 hrs, Volume= 0.274 af  
 Routed to Pond 197P : Inf. Basin 1  
 Secondary = 0.03 cfs @ 12.17 hrs, Volume= 0.020 af  
 Routed to Link 203L : 3A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 47.86' @ 12.17 hrs Surf.Area= 2,800 sf Storage= 3,915 cf

Plug-Flow detention time= 78.4 min calculated for 0.294 af (86% of inflow)  
 Center-of-Mass det. time= 35.3 min ( 820.2 - 785.0 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 46.00' | 16,106 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 46.00               | 1,184                | 0                         | 0                         |
| 47.00               | 2,274                | 1,729                     | 1,729                     |
| 48.00               | 2,884                | 2,579                     | 4,308                     |
| 49.00               | 3,553                | 3,219                     | 7,527                     |
| 50.00               | 4,275                | 3,914                     | 11,441                    |
| 51.00               | 5,055                | 4,665                     | 16,106                    |

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Secondary | 46.00' | <b>12.0" Round Culvert</b><br>L= 186.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 46.00' / 43.50' S= 0.0134 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #2     | Device 1  | 46.00' | <b>0.9" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                       |
| #3     | Primary   | 47.05' | <b>18.0" Round Culvert X 2.00</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 47.05' / 47.00' S= 0.0025 '/' Cc= 0.900<br>n= 0.013 Cast iron, coated, Flow Area= 1.77 sf        |

**Primary OutFlow** Max=3.47 cfs @ 12.17 hrs HW=47.85' (Free Discharge)

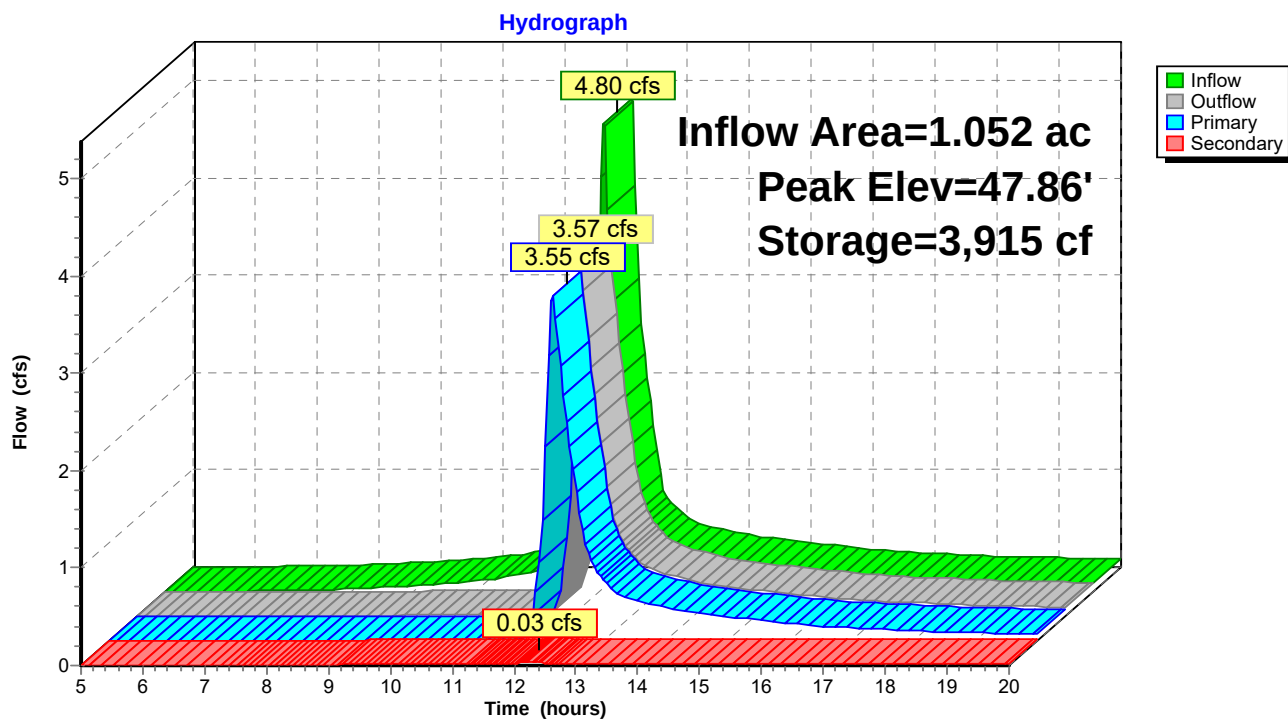
↑**3=Culvert** (Barrel Controls 3.47 cfs @ 2.62 fps)

**Secondary OutFlow** Max=0.03 cfs @ 12.17 hrs HW=47.85' (Free Discharge)

↑**1=Culvert** (Passes 0.03 cfs of 3.47 cfs potential flow)

↑**2=Orifice/Grate** (Orifice Controls 0.03 cfs @ 6.49 fps)

# Pond 186P: Constructed Wetland 1



**Summary for Pond 187P: Constructed Wetland 3**

Inflow Area = 1.994 ac, 68.75% Impervious, Inflow Depth > 6.79" for 100-Year event  
 Inflow = 11.05 cfs @ 12.18 hrs, Volume= 1.128 af  
 Outflow = 10.79 cfs @ 12.23 hrs, Volume= 0.998 af, Atten= 2%, Lag= 2.9 min  
 Primary = 10.79 cfs @ 12.23 hrs, Volume= 0.998 af  
 Routed to Link 188L : DP 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 57.45' @ 12.23 hrs Surf.Area= 4,492 sf Storage= 7,841 cf

Plug-Flow detention time= 57.7 min calculated for 0.994 af (88% of inflow)  
 Center-of-Mass det. time= 23.1 min ( 797.9 - 774.8 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 55.00' | 10,466 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

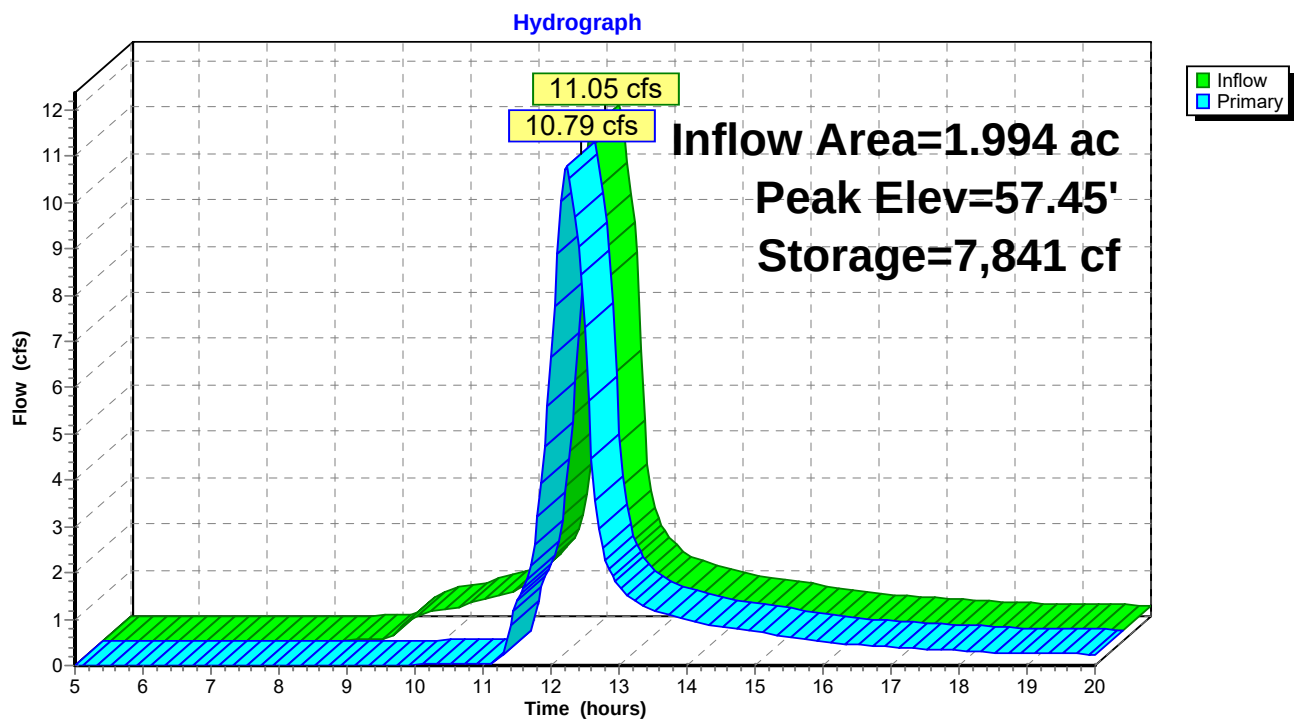
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 55.00               | 1,991                | 0                         | 0                         |
| 56.00               | 2,932                | 2,462                     | 2,462                     |
| 57.00               | 3,987                | 3,460                     | 5,921                     |
| 58.00               | 5,102                | 4,545                     | 10,466                    |

| Device | Routing  | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary  | 55.00' | <b>24.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 55.00' / 54.00' S= 0.0500 ' S= 0.0500 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |
| #2     | Device 1 | 55.00' | <b>1.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                                |
| #3     | Device 1 | 56.90' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                   |

**Primary OutFlow** Max=10.74 cfs @ 12.23 hrs HW=57.45' (Free Discharge)

1=Culvert (Passes 10.74 cfs of 14.38 cfs potential flow)  
 2=Orifice/Grate (Orifice Controls 0.04 cfs @ 7.47 fps)  
 3=Orifice/Grate (Weir Controls 10.70 cfs @ 2.43 fps)

### Pond 187P: Constructed Wetland 3



**Summary for Pond 188P: CB 3**

Inflow Area = 0.158 ac, 54.66% Impervious, Inflow Depth > 4.94" for 100-Year event  
 Inflow = 0.96 cfs @ 12.09 hrs, Volume= 0.065 af  
 Outflow = 0.96 cfs @ 12.09 hrs, Volume= 0.065 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.96 cfs @ 12.09 hrs, Volume= 0.065 af  
 Routed to Pond 190P : DMH 3

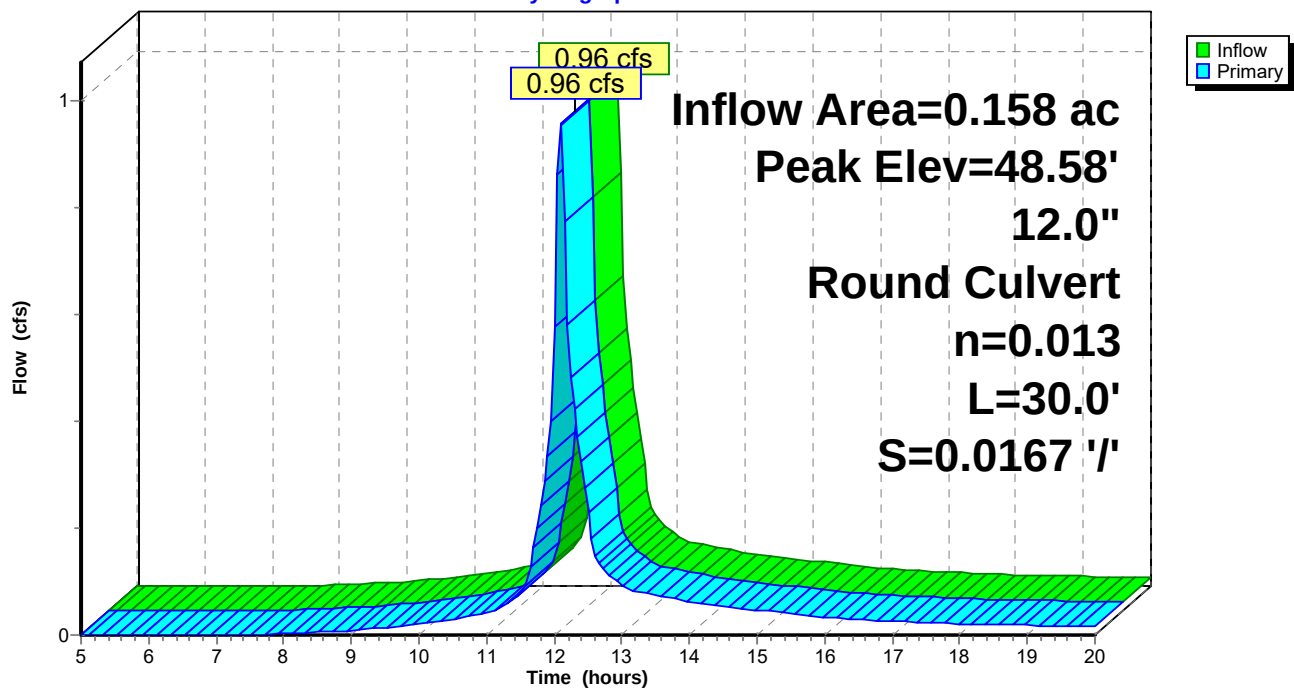
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 48.58' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.00' | <b>12.0" Round Culvert</b><br>L= 30.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.00' / 47.50' S= 0.0167 ' S= 0.0167 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.94 cfs @ 12.09 hrs HW=48.57' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 0.94 cfs @ 2.03 fps)

**Pond 188P: CB 3**

Hydrograph



### Summary for Pond 189P: CB 4

Inflow Area = 0.282 ac, 69.07% Impervious, Inflow Depth > 6.14" for 100-Year event  
 Inflow = 2.06 cfs @ 12.09 hrs, Volume= 0.144 af  
 Outflow = 2.06 cfs @ 12.09 hrs, Volume= 0.144 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.06 cfs @ 12.09 hrs, Volume= 0.144 af  
 Routed to Pond 190P : DMH 3

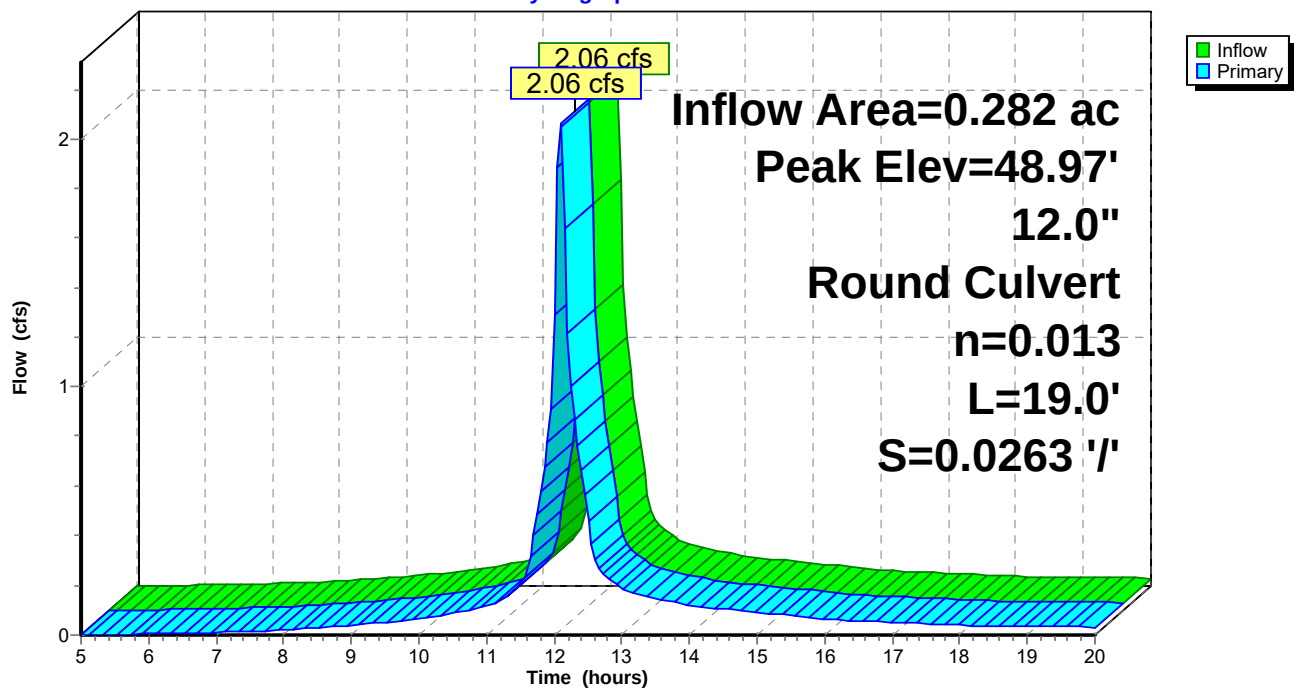
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 48.97' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.00' | <b>12.0" Round Culvert</b><br>L= 19.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.00' / 47.50' S= 0.0263 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.02 cfs @ 12.09 hrs HW=48.95' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.02 cfs @ 2.62 fps)

### Pond 189P: CB 4

Hydrograph



**Summary for Pond 190P: DMH 3**

Inflow Area = 0.440 ac, 63.90% Impervious, Inflow Depth > 5.71" for 100-Year event  
 Inflow = 3.02 cfs @ 12.09 hrs, Volume= 0.209 af  
 Outflow = 3.02 cfs @ 12.09 hrs, Volume= 0.209 af, Atten= 0%, Lag= 0.0 min  
 Primary = 3.02 cfs @ 12.09 hrs, Volume= 0.209 af  
 Routed to Pond 213P : DMH 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 48.92' @ 12.09 hrs

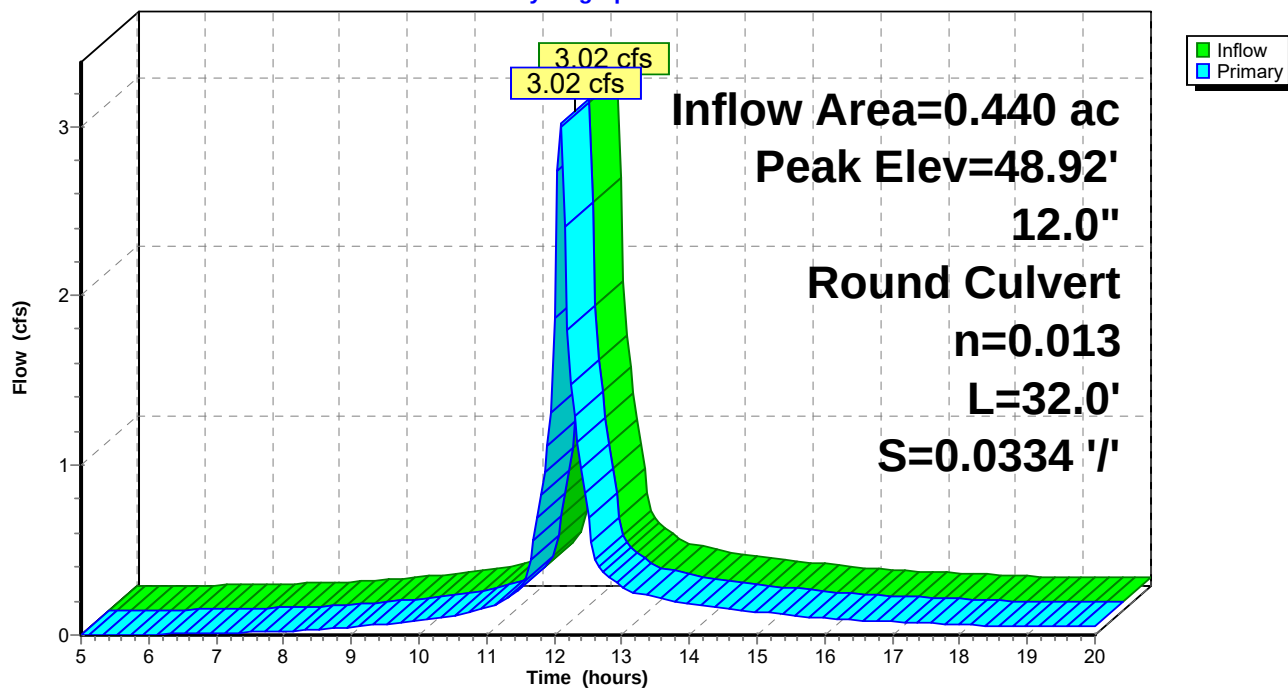
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 47.40' | <b>12.0" Round Culvert</b><br>L= 32.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 47.40' / 46.33' S= 0.0334 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.95 cfs @ 12.09 hrs HW=48.88' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 2.95 cfs @ 3.76 fps)

**Pond 190P: DMH 3**

Hydrograph





### Summary for Pond 191P: CB 42

Inflow Area = 0.277 ac, 85.87% Impervious, Inflow Depth > 7.29" for 100-Year event  
 Inflow = 2.28 cfs @ 12.09 hrs, Volume= 0.168 af  
 Outflow = 2.28 cfs @ 12.09 hrs, Volume= 0.168 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.28 cfs @ 12.09 hrs, Volume= 0.168 af  
 Routed to Pond 146P : Inf. Basin 2

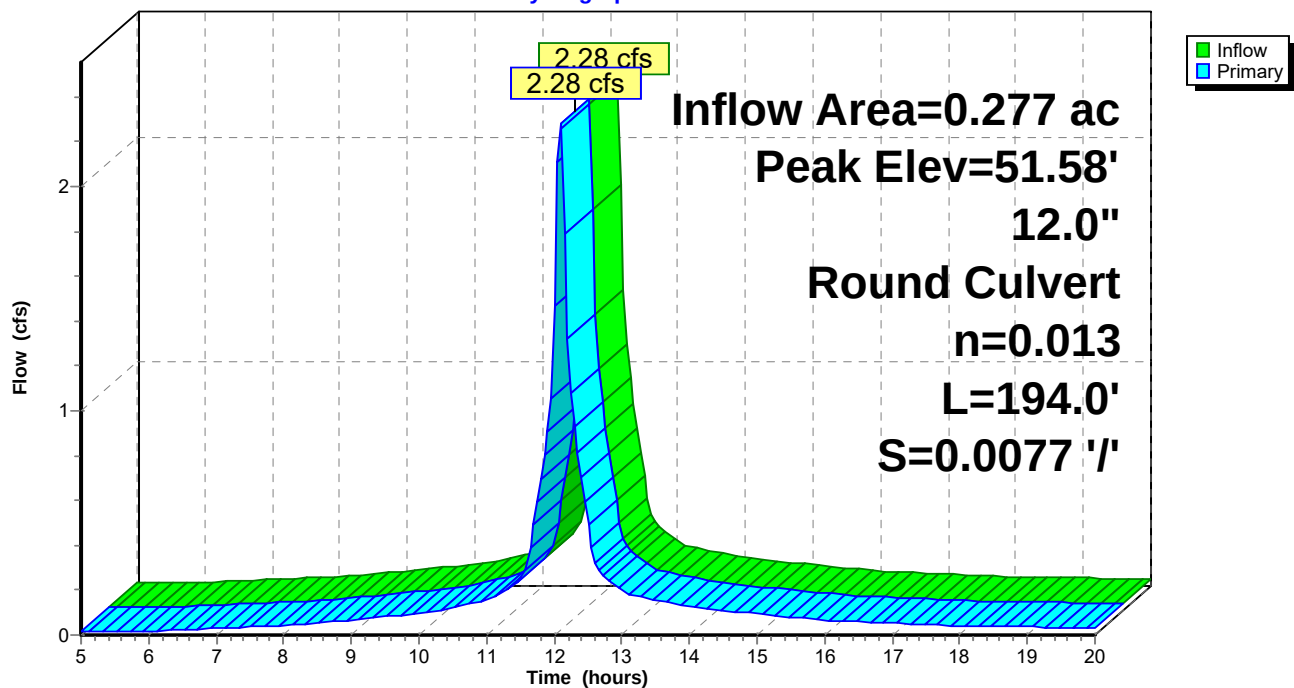
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.58' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.50' | <b>12.0" Round Culvert</b><br>L= 194.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.50' / 49.00' S= 0.0077 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.22 cfs @ 12.09 hrs HW=51.55' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 2.22 cfs @ 2.83 fps)

### Pond 191P: CB 42

#### Hydrograph



**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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Type III 24-hr 100-Year Rainfall=8.94"

Printed 1/7/2026

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**Summary for Pond 192P: Sub. Inf. 8**

Inflow Area = 0.214 ac, 64.54% Impervious, Inflow Depth > 5.78" for 100-Year event  
 Inflow = 1.49 cfs @ 12.09 hrs, Volume= 0.103 af  
 Outflow = 0.29 cfs @ 12.54 hrs, Volume= 0.103 af, Atten= 81%, Lag= 27.0 min  
 Discarded = 0.29 cfs @ 12.54 hrs, Volume= 0.103 af

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.51' @ 12.54 hrs Surf.Area= 0.022 ac Storage= 0.032 af

Plug-Flow detention time= 36.4 min calculated for 0.103 af (100% of inflow)  
 Center-of-Mass det. time= 36.2 min ( 809.6 - 773.3 )

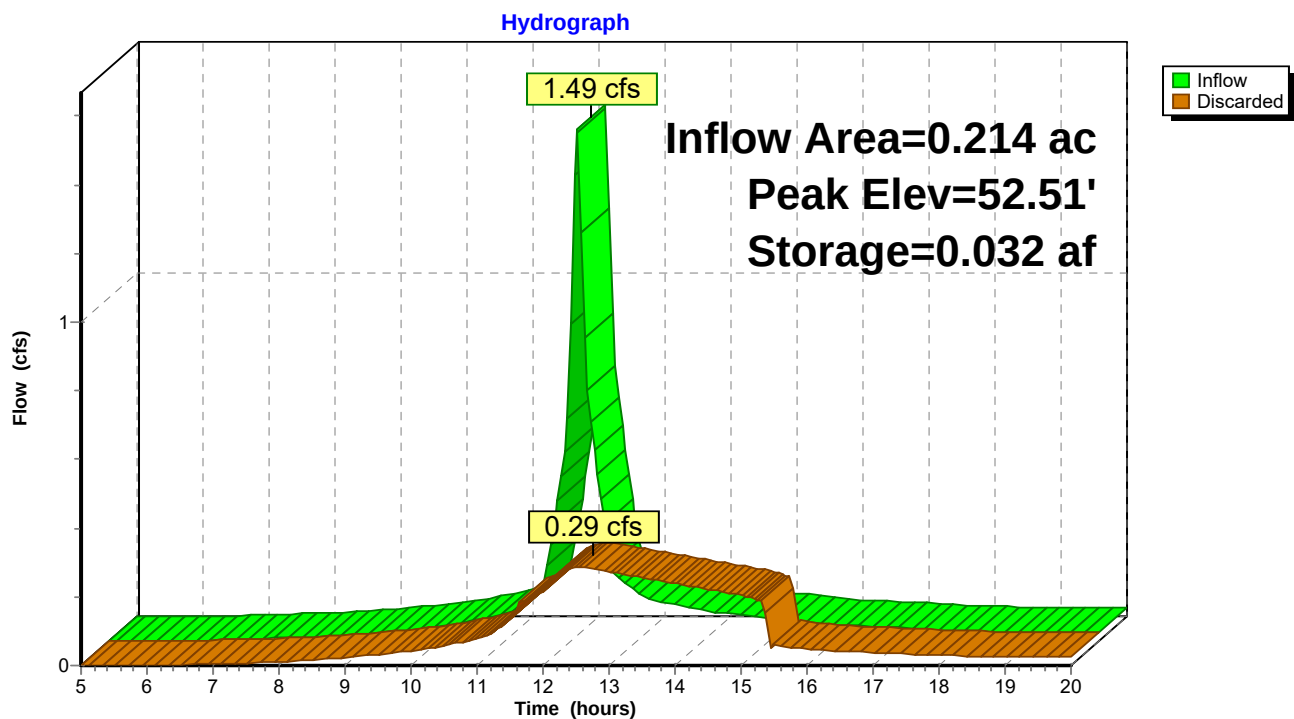
| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 50.33' | 0.020 af      | <b>20.50'W x 46.34'L x 3.50'H Field A</b><br>0.076 af Overall - 0.026 af Embedded = 0.051 af x 40.0% Voids                                                                                                                                             |
| #2A    | 50.83' | 0.026 af      | <b>ADS StormTech SC-740 b +Cap x 24 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>24 Chambers in 4 Rows<br>Cap Storage= 2.7 cf x 2 x 4 rows = 21.2 cf |
|        |        | 0.046 af      | Total Available Storage                                                                                                                                                                                                                                |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                      |
|--------|-----------|--------|-----------------------------------------------------------------------------------------------------|
| #1     | Discarded | 50.33' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 46.50' |

**Discarded OutFlow** Max=0.29 cfs @ 12.54 hrs HW=52.51' (Free Discharge)  
 ↑ **1=Exfiltration** ( Controls 0.29 cfs)

**Pond 192P: Sub. Inf. 8**



**Summary for Pond 193P: CB 1**

Inflow Area = 0.172 ac, 31.70% Impervious, Inflow Depth > 2.93" for 100-Year event  
 Inflow = 0.61 cfs @ 12.10 hrs, Volume= 0.042 af  
 Outflow = 0.61 cfs @ 12.10 hrs, Volume= 0.042 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.61 cfs @ 12.10 hrs, Volume= 0.042 af  
 Routed to Pond 200P : DMH 1

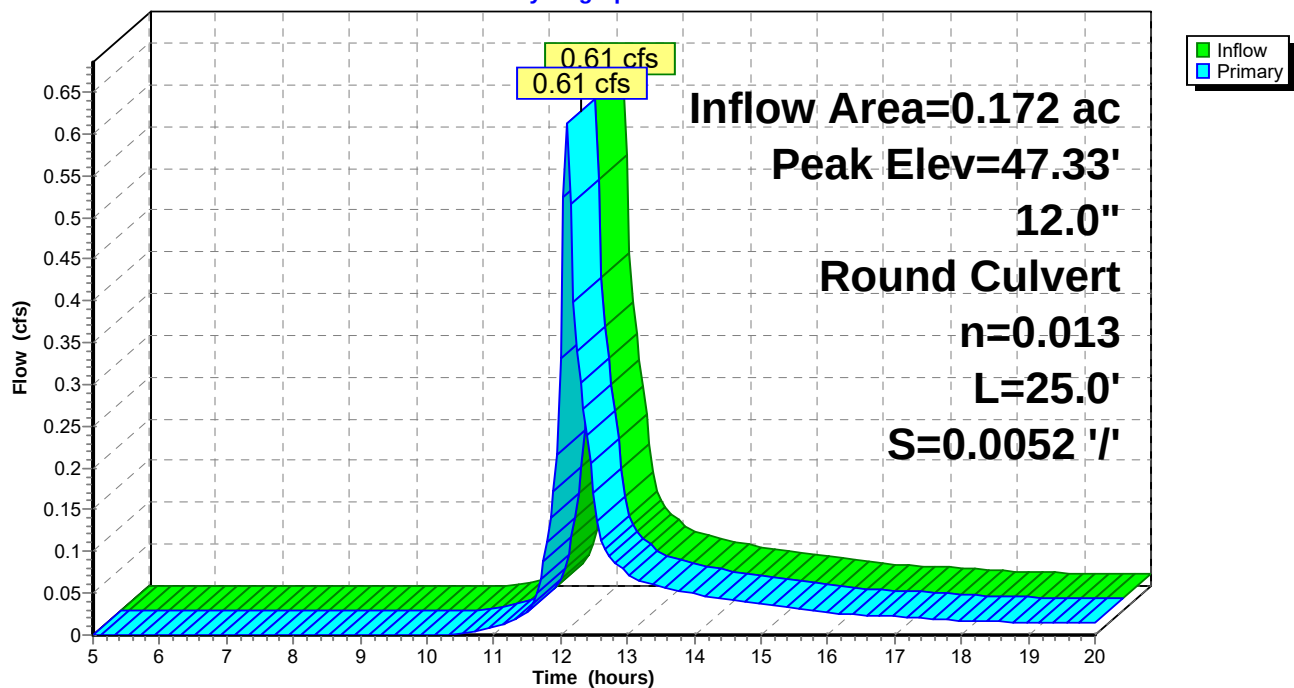
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 47.33' @ 12.10 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 46.84' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 46.84' / 46.71' S= 0.0052 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.61 cfs @ 12.10 hrs HW=47.33' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 0.61 cfs @ 2.34 fps)

**Pond 193P: CB 1**

Hydrograph



## Summary for Pond 194P: CB 2

Inflow Area = 0.094 ac, 74.38% Impervious, Inflow Depth > 6.50" for 100-Year event  
Inflow = 0.71 cfs @ 12.09 hrs, Volume= 0.051 af  
Outflow = 0.71 cfs @ 12.09 hrs, Volume= 0.051 af, Atten= 0%, Lag= 0.0 min  
Primary = 0.71 cfs @ 12.09 hrs, Volume= 0.051 af  
Routed to Pond 200P : DMH 1

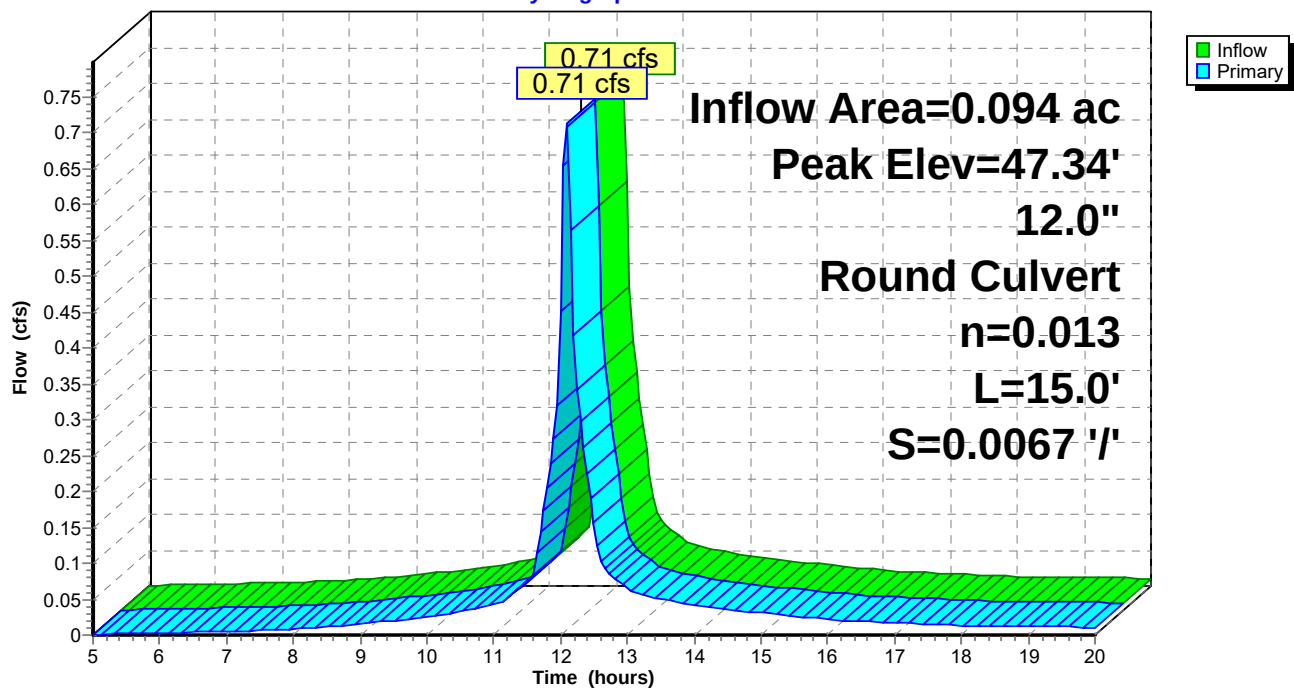
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
Peak Elev= 47.34' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|---------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 46.81' | <b>12.0" Round Culvert</b><br>L= 15.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 46.81' / 46.71' S= 0.0067 ' / ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.70 cfs @ 12.09 hrs HW=47.33' (Free Discharge)  
 ↳ 1=Culvert (Barrel Controls 0.70 cfs @ 2.44 fps)

## Pond 194P: CB 2

## Hydrograph



### Summary for Pond 195P: Constructed Wetland 4

Inflow Area = 1.935 ac, 78.08% Impervious, Inflow Depth > 6.38" for 100-Year event  
 Inflow = 5.20 cfs @ 12.37 hrs, Volume= 1.029 af  
 Outflow = 5.19 cfs @ 12.41 hrs, Volume= 0.883 af, Atten= 0%, Lag= 2.7 min  
 Primary = 5.19 cfs @ 12.41 hrs, Volume= 0.883 af  
 Routed to Link 188L : DP 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.57' @ 12.41 hrs Surf.Area= 3,404 sf Storage= 8,039 cf

Plug-Flow detention time= 70.9 min calculated for 0.883 af (86% of inflow)  
 Center-of-Mass det. time= 35.5 min ( 814.4 - 778.8 )

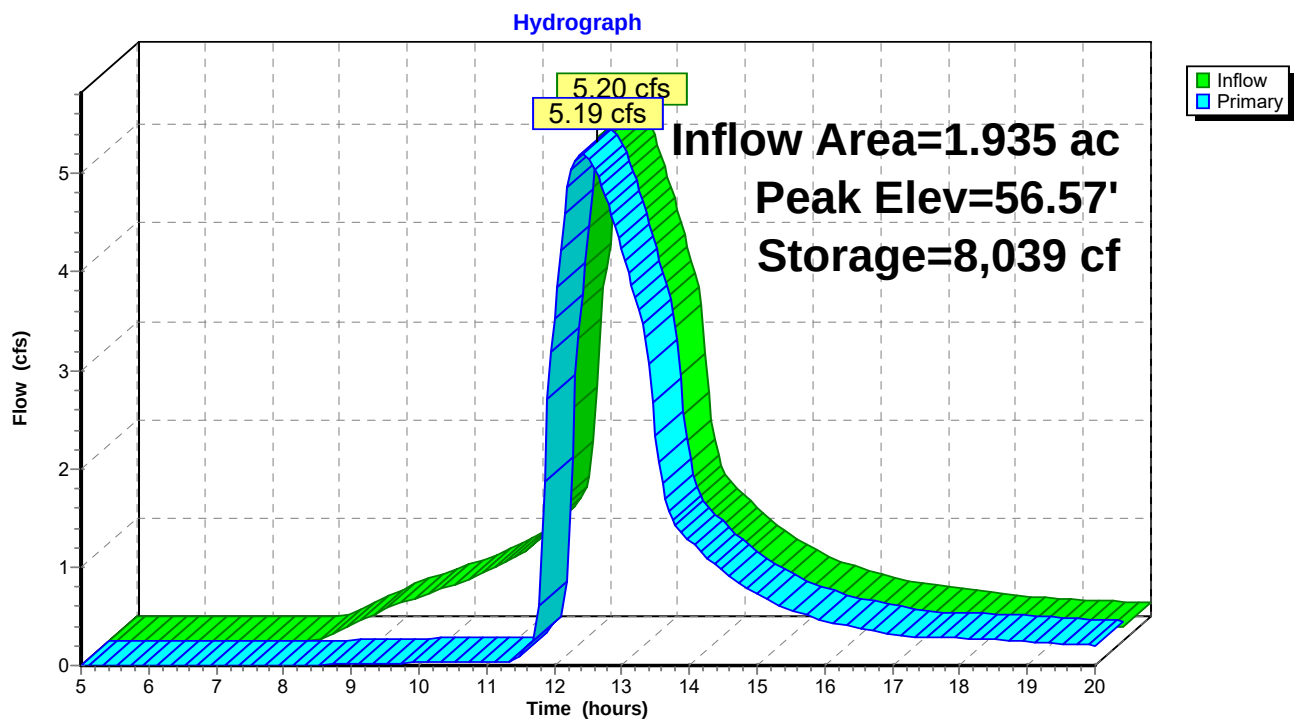
| Volume              | Invert               | Avail.Storage             | Storage Description                                        |
|---------------------|----------------------|---------------------------|------------------------------------------------------------|
| #1                  | 53.00'               | 9,558 cf                  | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet)                                  |
| 53.00               | 1,225                | 0                         | 0                                                          |
| 54.00               | 1,749                | 1,487                     | 1,487                                                      |
| 55.00               | 2,345                | 2,047                     | 3,534                                                      |
| 56.00               | 2,998                | 2,672                     | 6,206                                                      |
| 57.00               | 3,707                | 3,353                     | 9,558                                                      |

| Device | Routing  | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary  | 53.00' | <b>18.0" Round Culvert</b><br>L= 50.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.00' / 52.00' S= 0.0200 ' S= 0.0200 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |
| #2     | Device 1 | 53.00' | <b>1.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                                |
| #3     | Device 1 | 56.25' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                   |
| #4     | Device 1 | 55.75' | <b>4.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                                |

**Primary OutFlow** Max=5.18 cfs @ 12.41 hrs HW=56.57' (Free Discharge)

- 1=Culvert (Passes 5.18 cfs of 11.29 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.05 cfs @ 9.05 fps)
- 3=Orifice/Grate (Weir Controls 4.79 cfs @ 1.86 fps)
- 4=Orifice/Grate (Orifice Controls 0.34 cfs @ 3.90 fps)

### Pond 195P: Constructed Wetland 4



### Summary for Pond 196P: CB 5

Inflow Area = 0.336 ac, 80.22% Impervious, Inflow Depth > 6.85" for 100-Year event  
 Inflow = 2.65 cfs @ 12.09 hrs, Volume= 0.192 af  
 Outflow = 2.65 cfs @ 12.09 hrs, Volume= 0.192 af, Atten= 0%, Lag= 0.0 min  
 Primary = 2.65 cfs @ 12.09 hrs, Volume= 0.192 af  
 Routed to Pond 185P : DMH 4

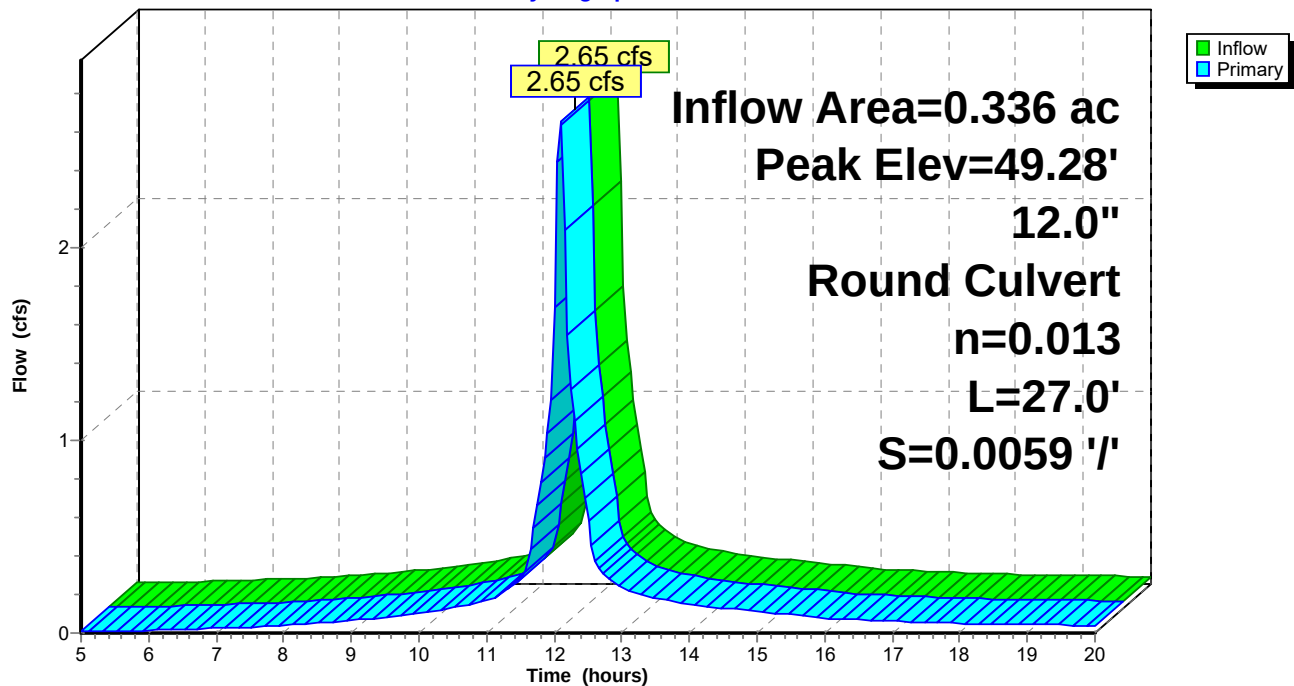
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 49.28' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.00' | <b>12.0" Round Culvert</b><br>L= 27.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.00' / 47.84' S= 0.0059 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=2.59 cfs @ 12.09 hrs HW=49.25' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 2.59 cfs @ 3.29 fps)

### Pond 196P: CB 5

Hydrograph





**RH Post 1-2-26**

Type III 24-hr 100-Year Rainfall=8.94"

Prepared by Millennium Engineering, Inc

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**Summary for Pond 197P: Inf. Basin 1**

Inflow Area = 8.503 ac, 57.81% Impervious, Inflow Depth > 2.37" for 100-Year event  
 Inflow = 19.31 cfs @ 12.18 hrs, Volume= 1.680 af  
 Outflow = 6.42 cfs @ 12.66 hrs, Volume= 1.679 af, Atten= 67%, Lag= 28.9 min  
 Discarded = 5.02 cfs @ 12.66 hrs, Volume= 1.482 af  
 Primary = 1.40 cfs @ 12.66 hrs, Volume= 0.197 af  
 Routed to Link 203L : 3A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.43' @ 12.66 hrs Surf.Area= 9,952 sf Storage= 28,646 cf

Plug-Flow detention time= 52.6 min calculated for 1.679 af (100% of inflow)  
 Center-of-Mass det. time= 52.1 min ( 831.1 - 779.0 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 46.50' | 34,549 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 46.50               | 4,770                | 0                         | 0                         |
| 47.00               | 5,380                | 2,538                     | 2,538                     |
| 48.00               | 6,642                | 6,011                     | 8,549                     |
| 49.00               | 7,960                | 7,301                     | 15,850                    |
| 50.00               | 9,336                | 8,648                     | 24,498                    |
| 51.00               | 10,767               | 10,052                    | 34,549                    |

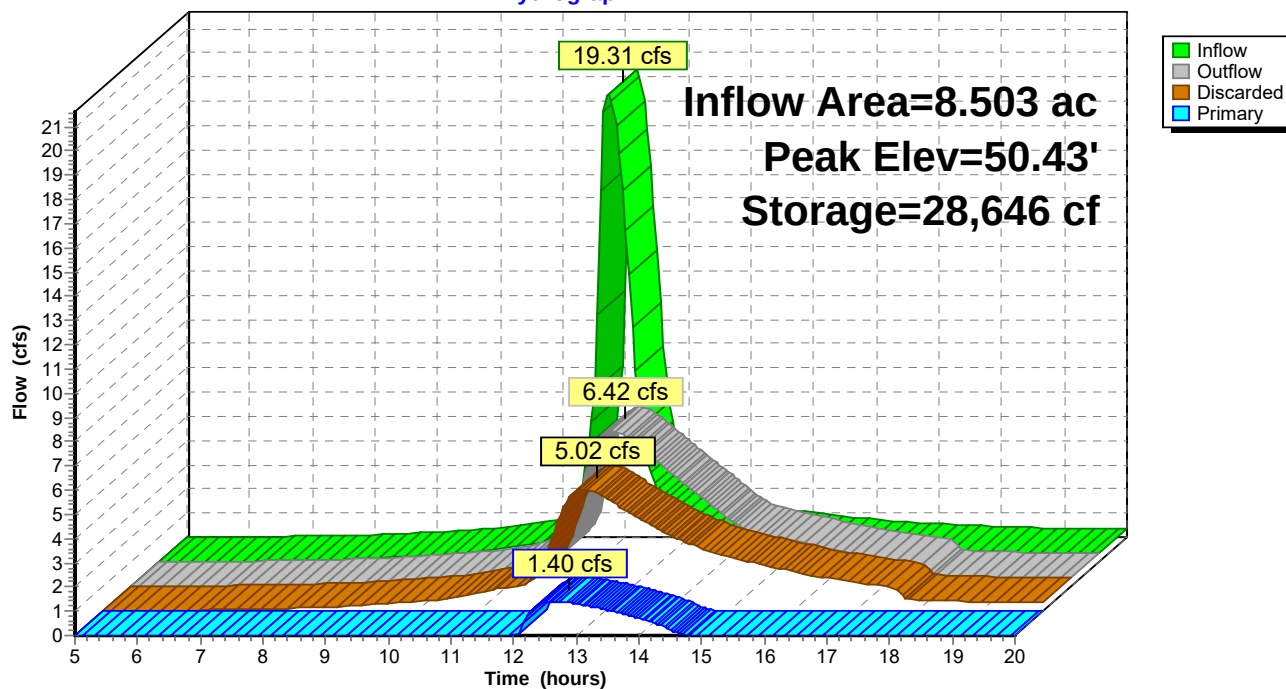
| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 46.50' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 45.00'                                                                                                             |
| #2     | Primary   | 47.00' | <b>12.0" Round Culvert</b><br>L= 25.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 47.00' / 43.50' S= 0.1400 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 48.00' | <b>6.0" Vert. Orifice/Grate</b> C= 0.600 Limited to weir flow at low heads                                                                                                                                      |
| #4     | Device 2  | 50.50' | <b>24.0" x 24.0" Horiz. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                         |

**Discarded OutFlow** Max=5.02 cfs @ 12.66 hrs HW=50.43' (Free Discharge)  
 ↳ **1=Exfiltration** ( Controls 5.02 cfs)

**Primary OutFlow** Max=1.40 cfs @ 12.66 hrs HW=50.43' (Free Discharge)  
 ↳ **2=Culvert** (Passes 1.40 cfs of 5.11 cfs potential flow)  
 ↳ **3=Orifice/Grate** (Orifice Controls 1.40 cfs @ 7.11 fps)  
 ↳ **4=Orifice/Grate** ( Controls 0.00 cfs)

# Pond 197P: Inf. Basin 1

Hydrograph



### Summary for Pond 198P: Sub. Inf. 2

Inflow Area = 1.731 ac, 71.57% Impervious, Inflow Depth > 6.32" for 100-Year event  
 Inflow = 12.89 cfs @ 12.09 hrs, Volume= 0.912 af  
 Outflow = 8.30 cfs @ 12.20 hrs, Volume= 0.911 af, Atten= 36%, Lag= 6.6 min  
 Discarded = 3.19 cfs @ 12.20 hrs, Volume= 0.779 af  
 Primary = 5.12 cfs @ 12.20 hrs, Volume= 0.133 af  
 Routed to Pond 202P : DMH 14

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.00' @ 12.20 hrs Surf.Area= 0.096 ac Storage= 0.187 af

Plug-Flow detention time= 17.3 min calculated for 0.908 af (100% of inflow)  
 Center-of-Mass det. time= 17.1 min ( 781.1 - 764.0 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                      |
|--------|--------|---------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 51.00' | 0.086 af      | <b>30.00'W x 138.90'L x 3.50'H Field A</b><br>0.335 af Overall - 0.121 af Embedded = 0.214 af x 40.0% Voids                                                                                                                                              |
| #2A    | 51.50' | 0.121 af      | <b>ADS StormTech SC-740 b +Cap x 114 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>114 Chambers in 6 Rows<br>Cap Storage= 2.7 cf x 2 x 6 rows = 31.9 cf |
|        |        | 0.206 af      | Total Available Storage                                                                                                                                                                                                                                  |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|-----------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 51.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 50.00'                                                                                                            |
| #2     | Primary   | 52.75' | <b>18.0" Round Culvert</b><br>L= 10.0' RCP, groove end projecting, Ke= 0.200<br>Inlet / Outlet Invert= 52.75' / 52.65' S= 0.0100 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

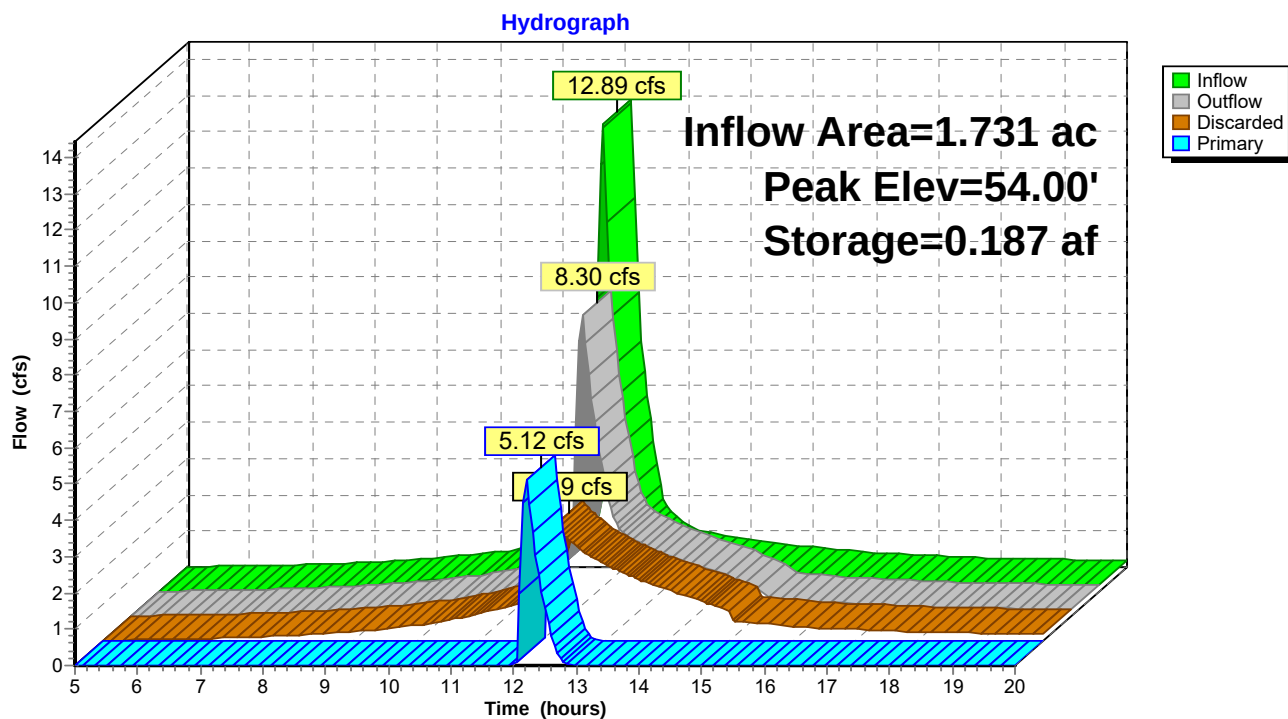
**Discarded OutFlow** Max=3.19 cfs @ 12.20 hrs HW=53.99' (Free Discharge)

↑ **1=Exfiltration** ( Controls 3.19 cfs)

**Primary OutFlow** Max=5.10 cfs @ 12.20 hrs HW=53.99' (Free Discharge)

↑ **2=Culvert** (Barrel Controls 5.10 cfs @ 4.42 fps)

Pond 198P: Sub. Inf. 2



**Summary for Pond 200P: DMH 1**

Inflow Area = 0.265 ac, 46.75% Impervious, Inflow Depth > 4.19" for 100-Year event  
 Inflow = 1.32 cfs @ 12.09 hrs, Volume= 0.093 af  
 Outflow = 1.32 cfs @ 12.09 hrs, Volume= 0.093 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.32 cfs @ 12.09 hrs, Volume= 0.093 af  
 Routed to Pond 213P : DMH 2

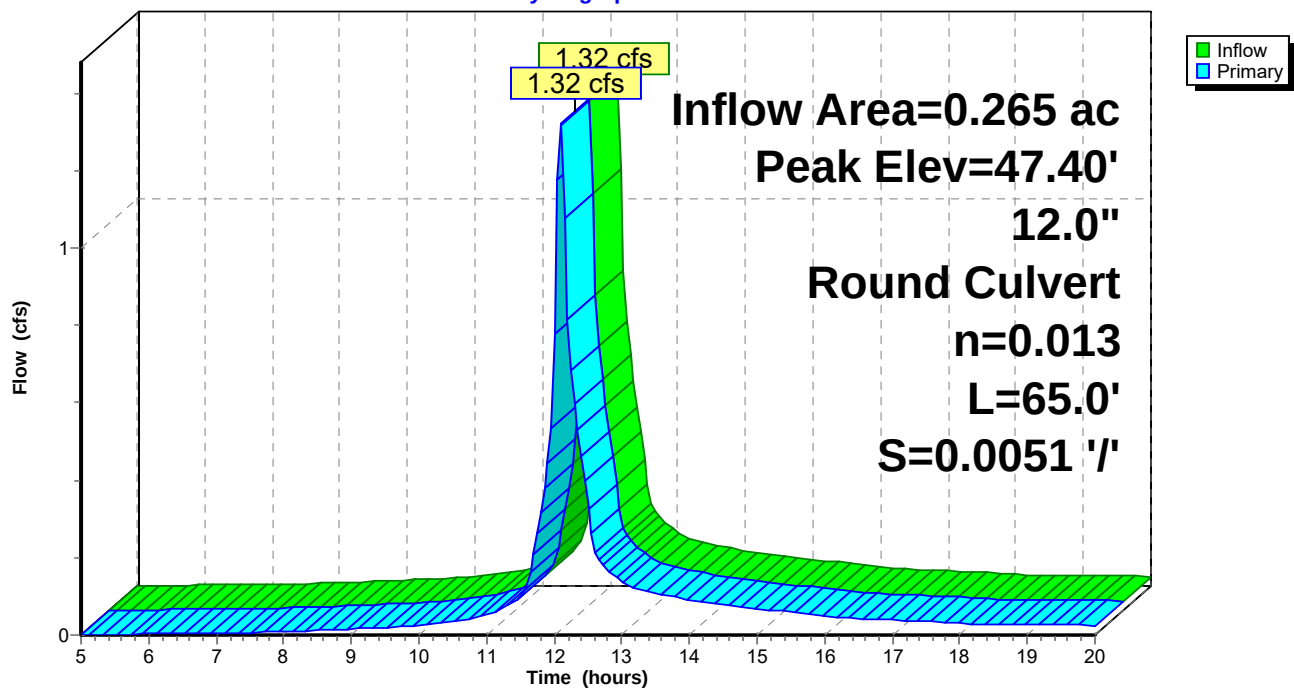
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 47.40' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 46.66' | <b>12.0" Round Culvert</b><br>L= 65.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 46.66' / 46.33' S= 0.0051 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.30 cfs @ 12.09 hrs HW=47.39' (Free Discharge)  
 ↑ **1=Culvert** (Barrel Controls 1.30 cfs @ 2.95 fps)

**Pond 200P: DMH 1**

Hydrograph



### Summary for Pond 201P: Sub. Inf. 3

Inflow Area = 1.343 ac, 61.65% Impervious, Inflow Depth > 5.57" for 100-Year event  
 Inflow = 8.94 cfs @ 12.09 hrs, Volume= 0.624 af  
 Outflow = 4.08 cfs @ 12.28 hrs, Volume= 0.624 af, Atten= 54%, Lag= 11.5 min  
 Discarded = 2.49 cfs @ 12.28 hrs, Volume= 0.580 af  
 Primary = 1.59 cfs @ 12.28 hrs, Volume= 0.044 af  
 Routed to Pond 202P : DMH 14

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.79' @ 12.28 hrs Surf.Area= 0.079 ac Storage= 0.146 af

Plug-Flow detention time= 19.4 min calculated for 0.622 af (100% of inflow)  
 Center-of-Mass det. time= 19.2 min ( 791.8 - 772.6 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 52.00' | 0.071 af      | <b>20.50'W x 167.38'L x 3.50'H Field A</b><br>0.276 af Overall - 0.098 af Embedded = 0.178 af x 40.0% Voids                                                                                                                                            |
| #2A    | 52.50' | 0.098 af      | <b>ADS StormTech SC-740 b +Cap x 92 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>92 Chambers in 4 Rows<br>Cap Storage= 2.7 cf x 2 x 4 rows = 21.2 cf |
|        |        | 0.169 af      | Total Available Storage                                                                                                                                                                                                                                |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|-----------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 52.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 51.00'                                                                                                             |
| #2     | Primary   | 54.00' | <b>12.0" Round Culvert</b><br>L= 20.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 54.00' / 53.65' S= 0.0175 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

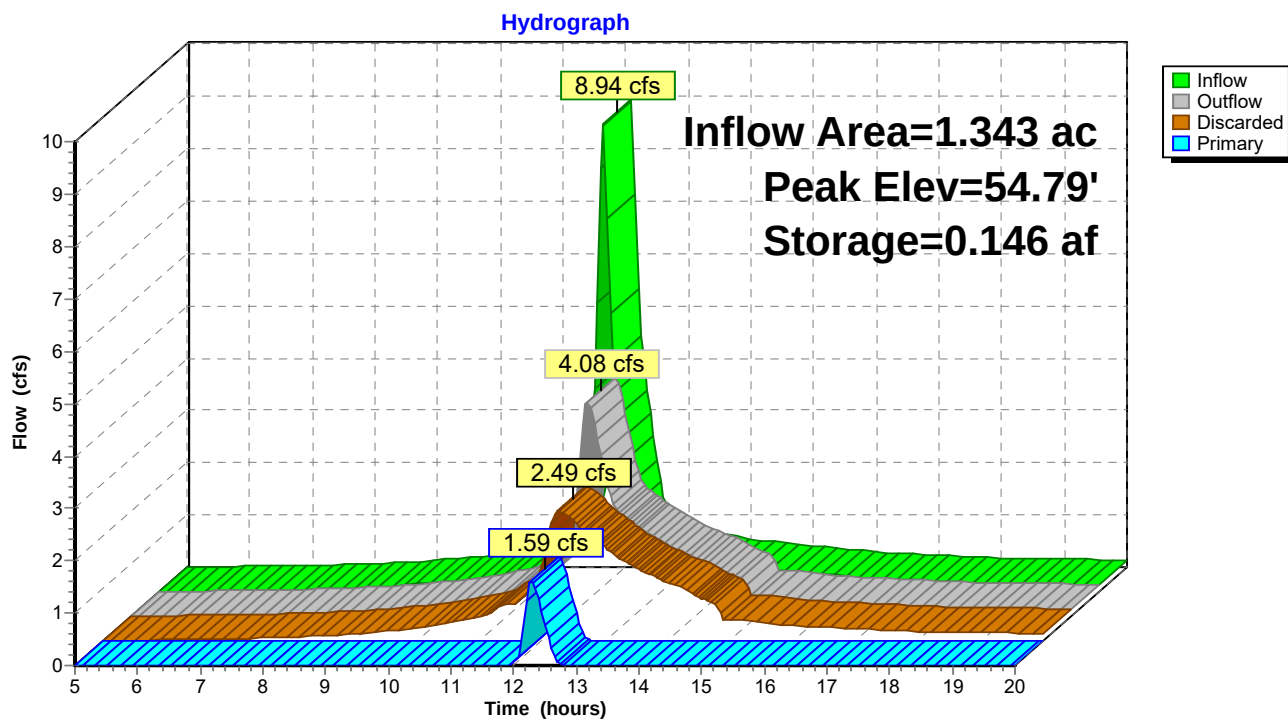
**Discarded OutFlow** Max=2.49 cfs @ 12.28 hrs HW=54.79' (Free Discharge)

↑**1=Exfiltration** ( Controls 2.49 cfs)

**Primary OutFlow** Max=1.58 cfs @ 12.28 hrs HW=54.79' (Free Discharge)

↑**2=Culvert** (Inlet Controls 1.58 cfs @ 2.38 fps)

### Pond 201P: Sub. Inf. 3



**Summary for Pond 202P: DMH 14**

Inflow Area = 3.074 ac, 67.24% Impervious, Inflow Depth = 0.69" for 100-Year event  
 Inflow = 6.43 cfs @ 12.21 hrs, Volume= 0.176 af  
 Outflow = 6.43 cfs @ 12.21 hrs, Volume= 0.176 af, Atten= 0%, Lag= 0.0 min  
 Primary = 6.43 cfs @ 12.21 hrs, Volume= 0.176 af  
 Routed to Pond 166P : DMH 13

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 54.31' @ 12.21 hrs

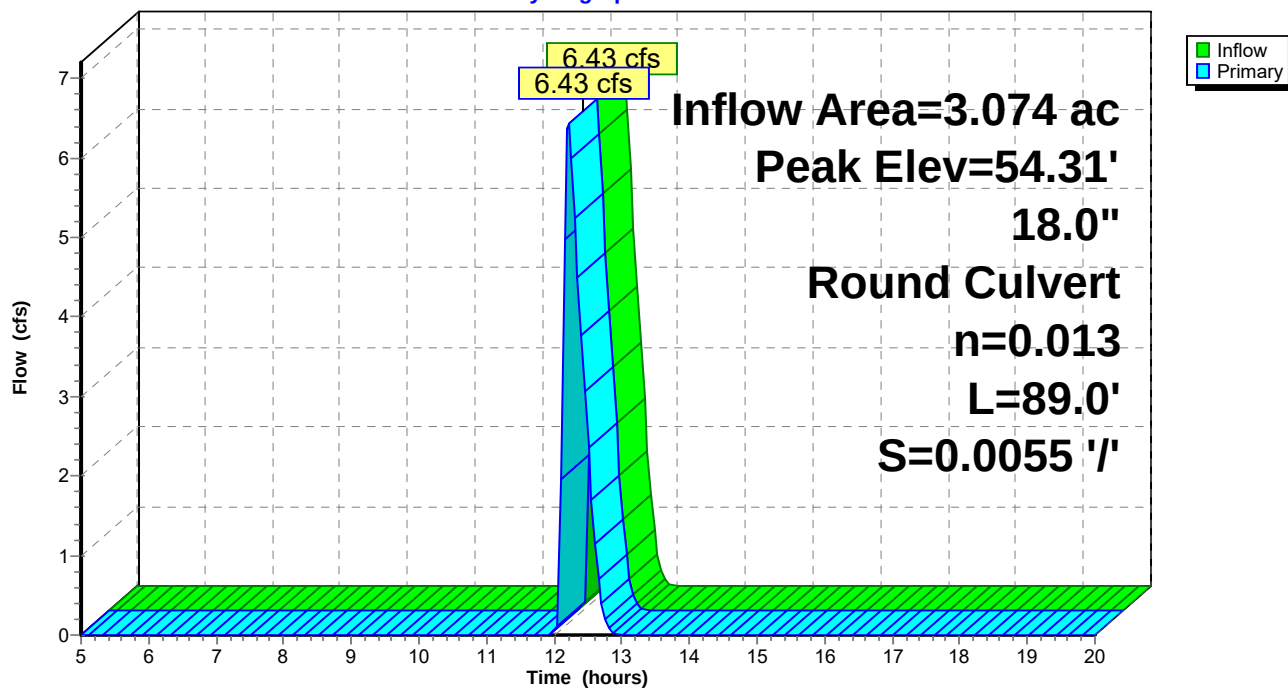
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.65' | <b>18.0" Round Culvert</b><br>L= 89.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.65' / 52.16' S= 0.0055 ' S= 0.0055 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=6.25 cfs @ 12.21 hrs HW=54.27' (Free Discharge)

↑ **1=Culvert** (Inlet Controls 6.25 cfs @ 3.54 fps)

**Pond 202P: DMH 14**

Hydrograph





**Summary for Pond 204P: DMH 18**

Inflow Area = 1.731 ac, 71.57% Impervious, Inflow Depth > 6.32" for 100-Year event  
 Inflow = 12.89 cfs @ 12.09 hrs, Volume= 0.912 af  
 Outflow = 12.89 cfs @ 12.09 hrs, Volume= 0.912 af, Atten= 0%, Lag= 0.0 min  
 Primary = 12.89 cfs @ 12.09 hrs, Volume= 0.912 af  
 Routed to Pond 198P : Sub. Inf. 2

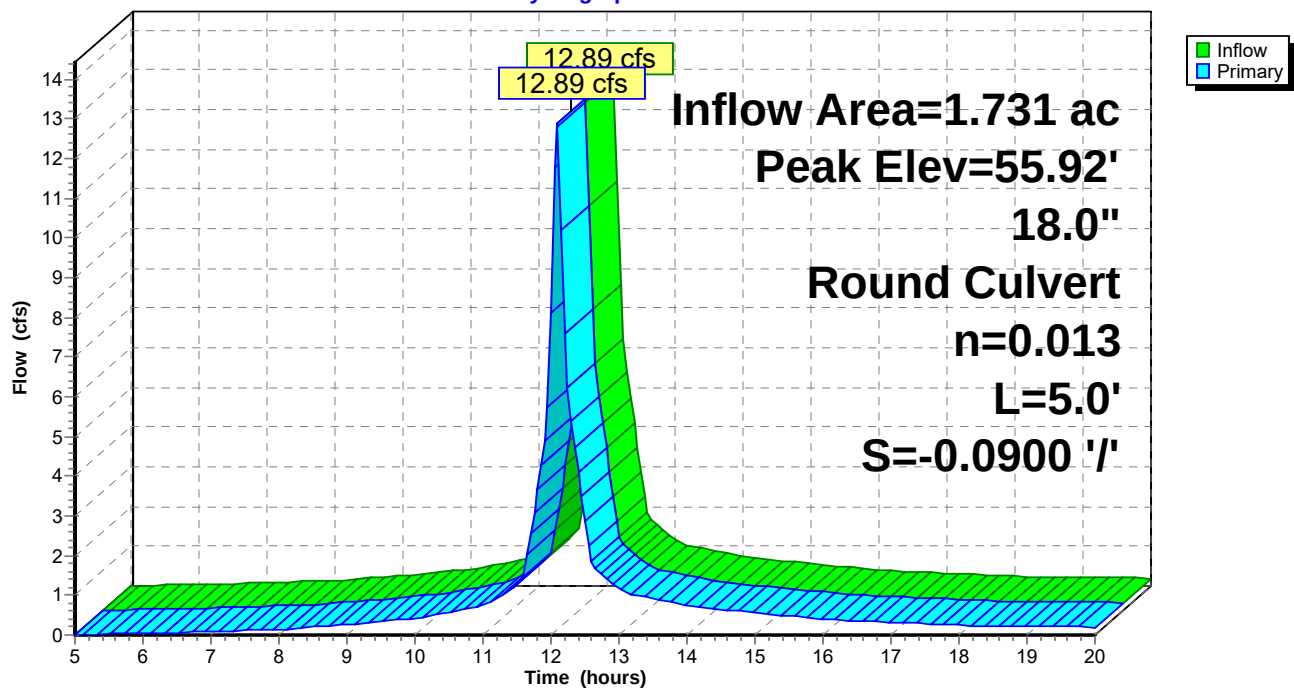
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 55.92' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.50' | <b>18.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.05' / 51.50' S= -0.0900 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=12.58 cfs @ 12.09 hrs HW=55.76' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 12.58 cfs @ 7.12 fps)

**Pond 204P: DMH 18**

Hydrograph



### Summary for Pond 205P: DMH 27

Inflow Area = 0.746 ac, 74.14% Impervious, Inflow Depth > 6.47" for 100-Year event  
 Inflow = 5.65 cfs @ 12.09 hrs, Volume= 0.402 af  
 Outflow = 5.65 cfs @ 12.09 hrs, Volume= 0.402 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.65 cfs @ 12.09 hrs, Volume= 0.402 af  
 Routed to Pond 201P : Sub. Inf. 3

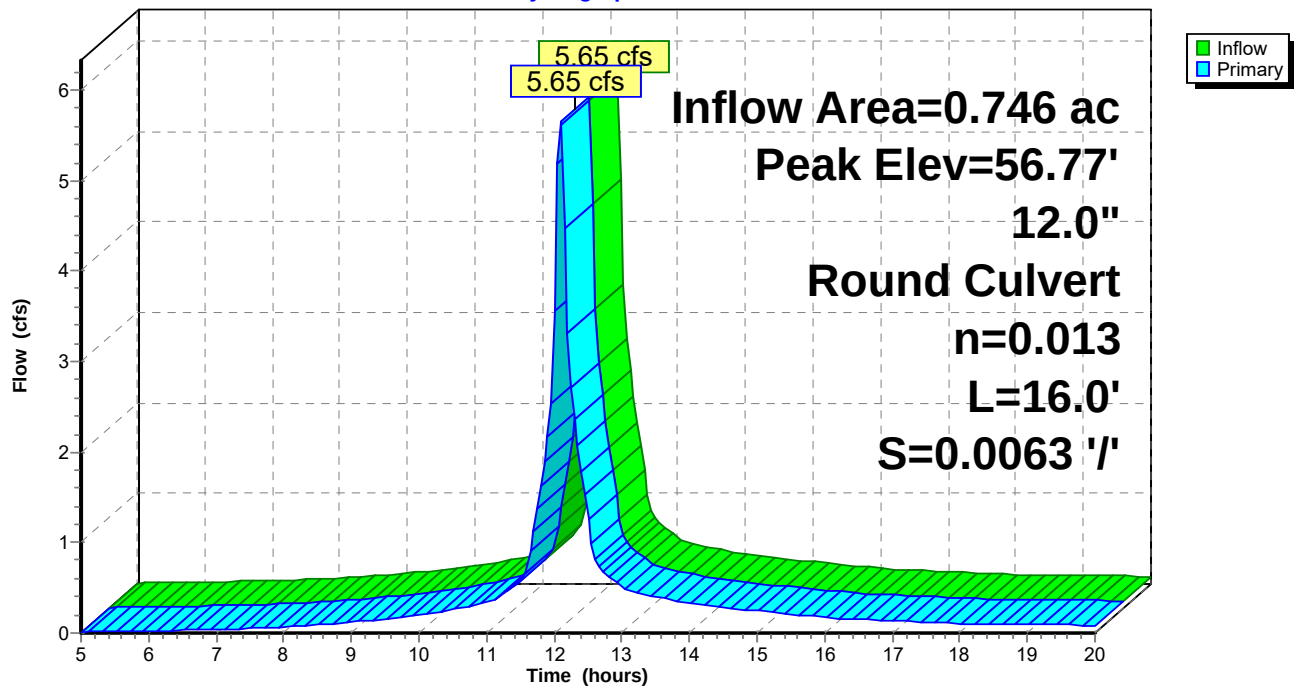
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.77' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 52.70' | <b>12.0" Round Culvert</b><br>L= 16.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 52.70' / 52.60' S= 0.0063 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=5.52 cfs @ 12.09 hrs HW=56.61' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 5.52 cfs @ 7.02 fps)

### Pond 205P: DMH 27

#### Hydrograph



**Summary for Pond 206P: DMH 34**

Inflow Area = 0.770 ac, 66.71% Impervious, Inflow Depth > 7.18" for 100-Year event  
 Inflow = 6.26 cfs @ 12.09 hrs, Volume= 0.461 af  
 Outflow = 6.26 cfs @ 12.09 hrs, Volume= 0.461 af, Atten= 0%, Lag= 0.0 min  
 Primary = 6.26 cfs @ 12.09 hrs, Volume= 0.461 af  
 Routed to Pond 49P : Sub. Inf. 4

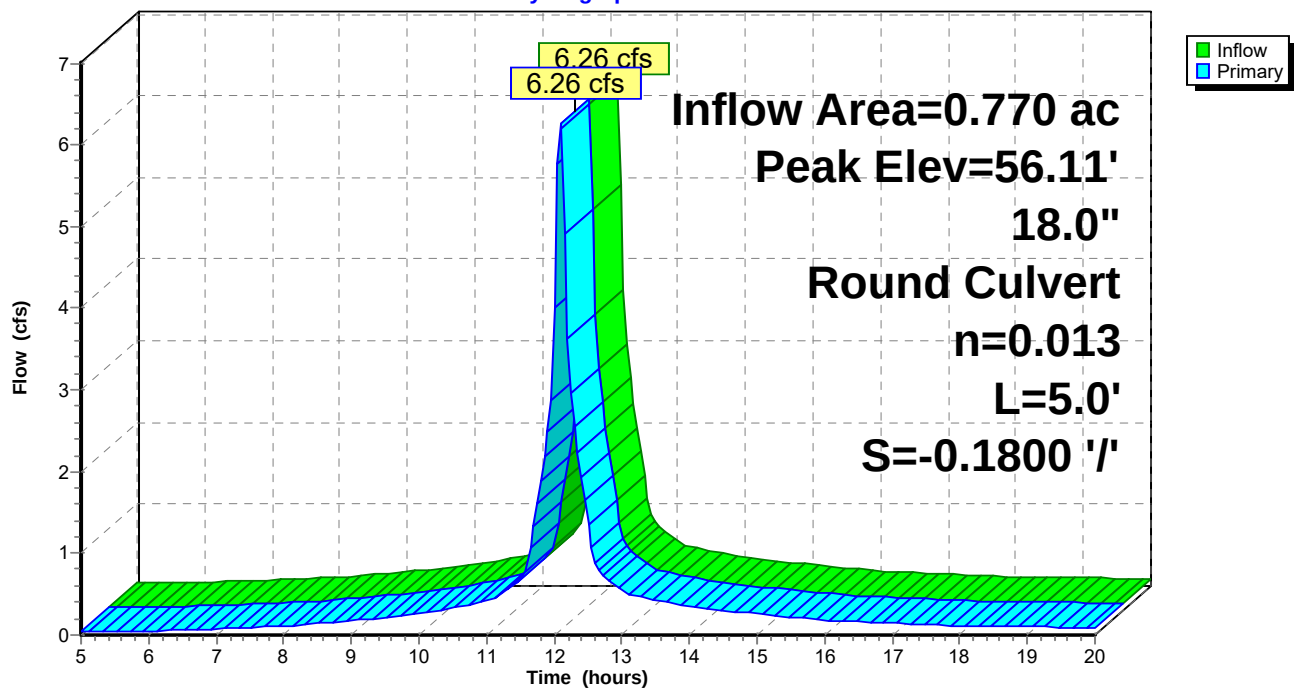
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 56.11' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 54.50' | <b>18.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 53.60' / 54.50' S= -0.1800 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=6.10 cfs @ 12.09 hrs HW=56.07' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 6.10 cfs @ 3.45 fps)

**Pond 206P: DMH 34**

Hydrograph



### Summary for Pond 207P: DMH 48

Inflow Area = 0.608 ac, 68.77% Impervious, Inflow Depth > 7.37" for 100-Year event  
 Inflow = 5.03 cfs @ 12.09 hrs, Volume= 0.374 af  
 Outflow = 5.03 cfs @ 12.09 hrs, Volume= 0.374 af, Atten= 0%, Lag= 0.0 min  
 Primary = 5.03 cfs @ 12.09 hrs, Volume= 0.374 af  
 Routed to Pond 68P : Sub. Inf. 5

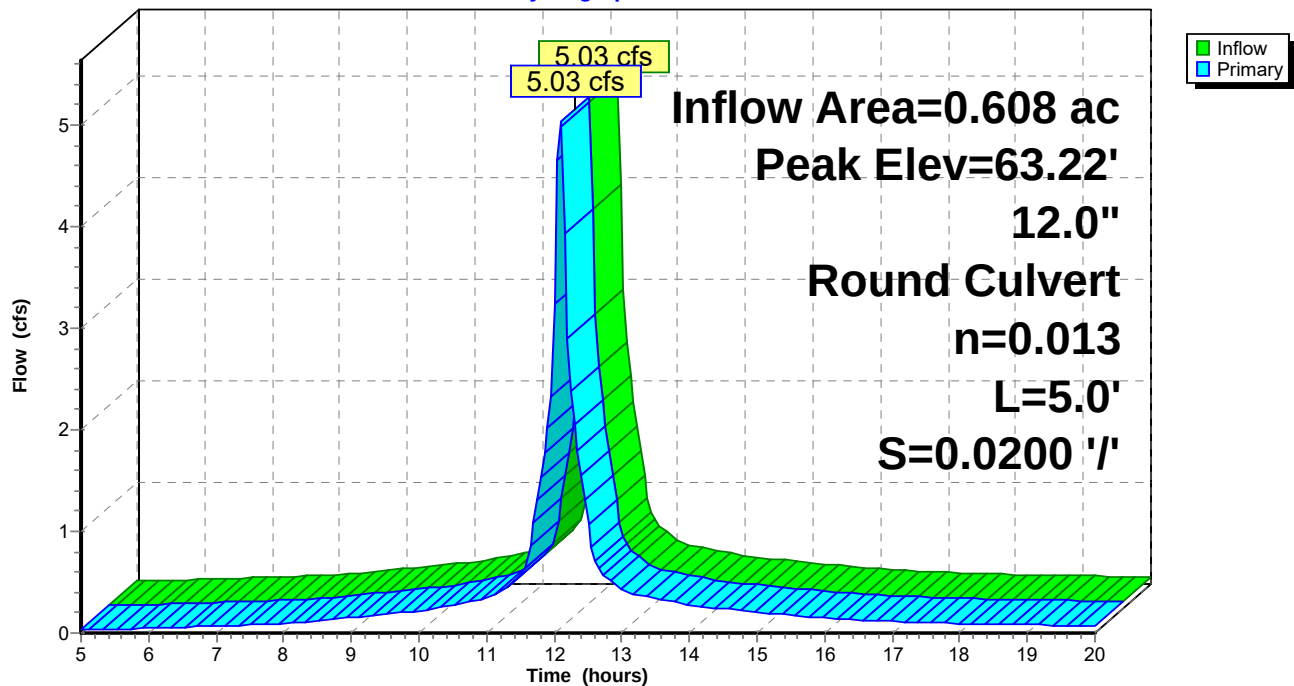
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.22' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 59.90' | <b>12.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 59.90' / 59.80' S= 0.0200 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=4.90 cfs @ 12.09 hrs HW=63.09' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 4.90 cfs @ 6.23 fps)

### Pond 207P: DMH 48

Hydrograph



**Summary for Pond 208P: DMH 58**

Inflow Area = 1.994 ac, 68.75% Impervious, Inflow Depth > 7.32" for 100-Year event  
 Inflow = 16.42 cfs @ 12.09 hrs, Volume= 1.217 af  
 Outflow = 16.42 cfs @ 12.09 hrs, Volume= 1.217 af, Atten= 0%, Lag= 0.0 min  
 Primary = 16.42 cfs @ 12.09 hrs, Volume= 1.217 af  
 Routed to Pond 60P : Sub. Det. 1

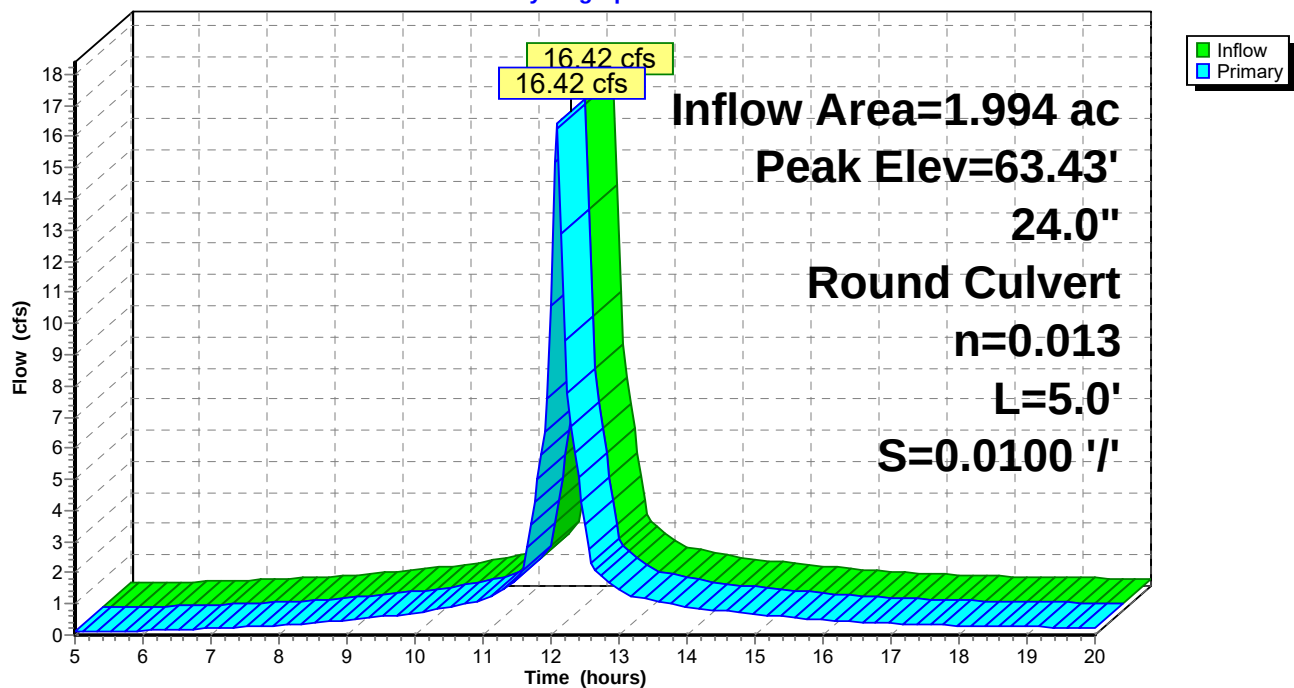
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 63.43' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 60.55' | <b>24.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 60.55' / 60.50' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=16.03 cfs @ 12.09 hrs HW=63.35' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 16.03 cfs @ 5.10 fps)

**Pond 208P: DMH 58**

Hydrograph



**Summary for Pond 209P: DMH 64**

Inflow Area = 1.037 ac, 70.16% Impervious, Inflow Depth > 7.37" for 100-Year event  
 Inflow = 8.57 cfs @ 12.09 hrs, Volume= 0.637 af  
 Outflow = 8.57 cfs @ 12.09 hrs, Volume= 0.637 af, Atten= 0%, Lag= 0.0 min  
 Primary = 8.57 cfs @ 12.09 hrs, Volume= 0.637 af  
 Routed to Pond 97P : Sub. Det. 2

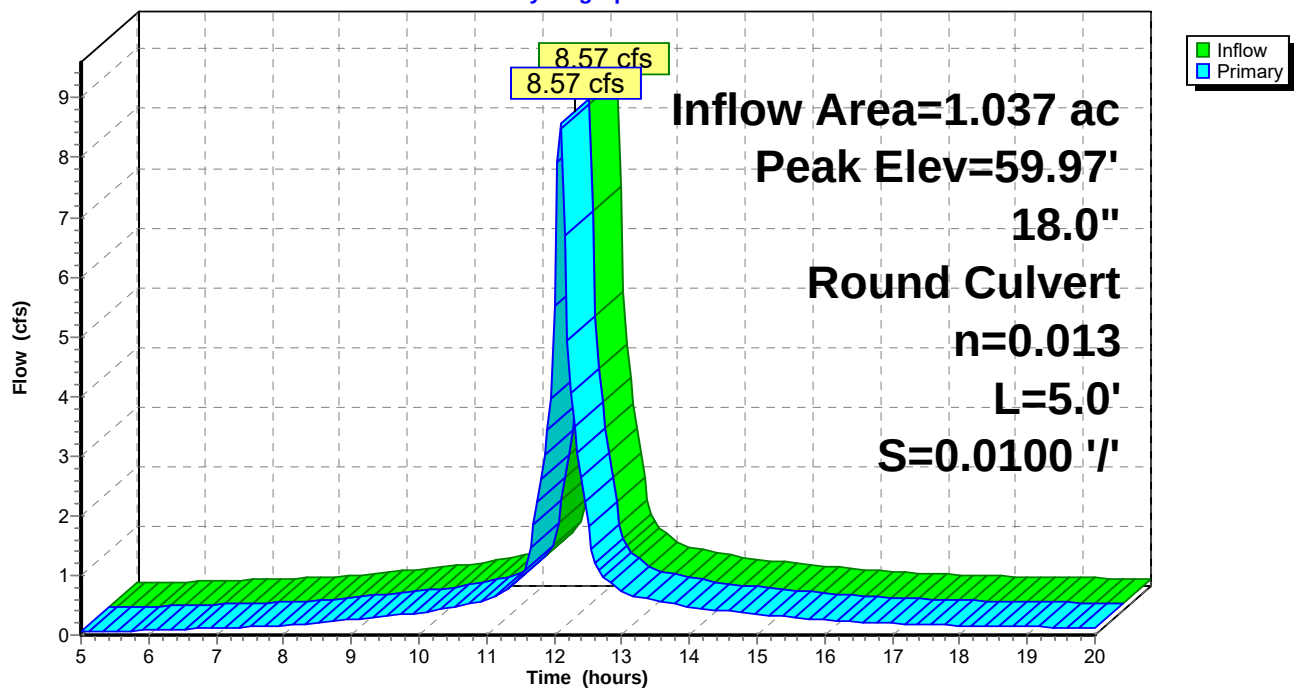
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.97' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.60' | <b>18.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.60' / 57.55' S= 0.0100 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=8.35 cfs @ 12.09 hrs HW=59.89' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 8.35 cfs @ 4.72 fps)

**Pond 209P: DMH 64**

Hydrograph



**Summary for Pond 210P: DMH 68**

Inflow Area = 1.935 ac, 78.08% Impervious, Inflow Depth > 7.55" for 100-Year event  
 Inflow = 16.19 cfs @ 12.09 hrs, Volume= 1.218 af  
 Outflow = 16.19 cfs @ 12.09 hrs, Volume= 1.218 af, Atten= 0%, Lag= 0.0 min  
 Primary = 16.19 cfs @ 12.09 hrs, Volume= 1.218 af  
 Routed to Pond 221P : Inf. Basin 6

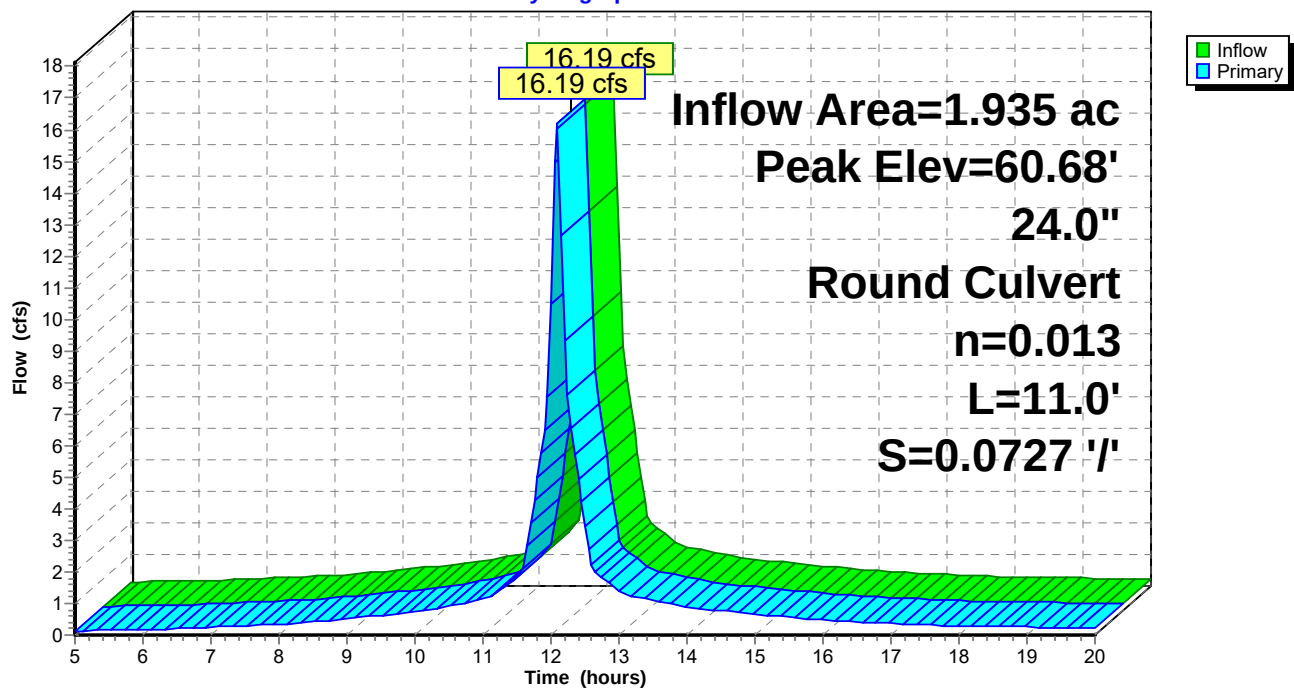
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 60.68' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 57.85' | <b>24.0" Round Culvert</b><br>L= 11.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 57.85' / 57.05' S= 0.0727 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Primary OutFlow** Max=15.77 cfs @ 12.09 hrs HW=60.59' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 15.77 cfs @ 5.02 fps)

**Pond 210P: DMH 68**

Hydrograph



### Summary for Pond 211P: Sub. Inf. 1B

Inflow Area = 4.409 ac, 67.96% Impervious, Inflow Depth > 2.34" for 100-Year event  
 Inflow = 12.72 cfs @ 12.16 hrs, Volume= 0.860 af  
 Outflow = 12.15 cfs @ 12.20 hrs, Volume= 0.860 af, Atten= 4%, Lag= 2.9 min  
 Discarded = 1.13 cfs @ 12.20 hrs, Volume= 0.475 af  
 Primary = 11.02 cfs @ 12.20 hrs, Volume= 0.385 af  
 Routed to Pond 214P : DMH 4A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 53.34' @ 12.20 hrs Surf.Area= 0.064 ac Storage= 0.133 af

Plug-Flow detention time= 19.4 min calculated for 0.857 af (100% of inflow)  
 Center-of-Mass det. time= 19.2 min ( 780.4 - 761.2 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 50.00' | 0.058 af      | <b>25.25'W x 110.42'L x 3.50'H Field A</b><br>0.224 af Overall - 0.080 af Embedded = 0.144 af x 40.0% Voids                                                                                                                                            |
| #2A    | 50.50' | 0.080 af      | <b>ADS StormTech SC-740 b +Cap x 75 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>75 Chambers in 5 Rows<br>Cap Storage= 2.7 cf x 2 x 5 rows = 26.5 cf |
|        |        | 0.137 af      | Total Available Storage                                                                                                                                                                                                                                |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                    |
|--------|-----------|--------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 50.00' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 47.00'                                                                                                               |
| #2     | Primary   | 51.50' | <b>24.0" Round Culvert</b><br>L= 110.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.50' / 48.00' S= 0.0318 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf |

**Discarded OutFlow** Max=1.13 cfs @ 12.20 hrs HW=53.33' (Free Discharge)

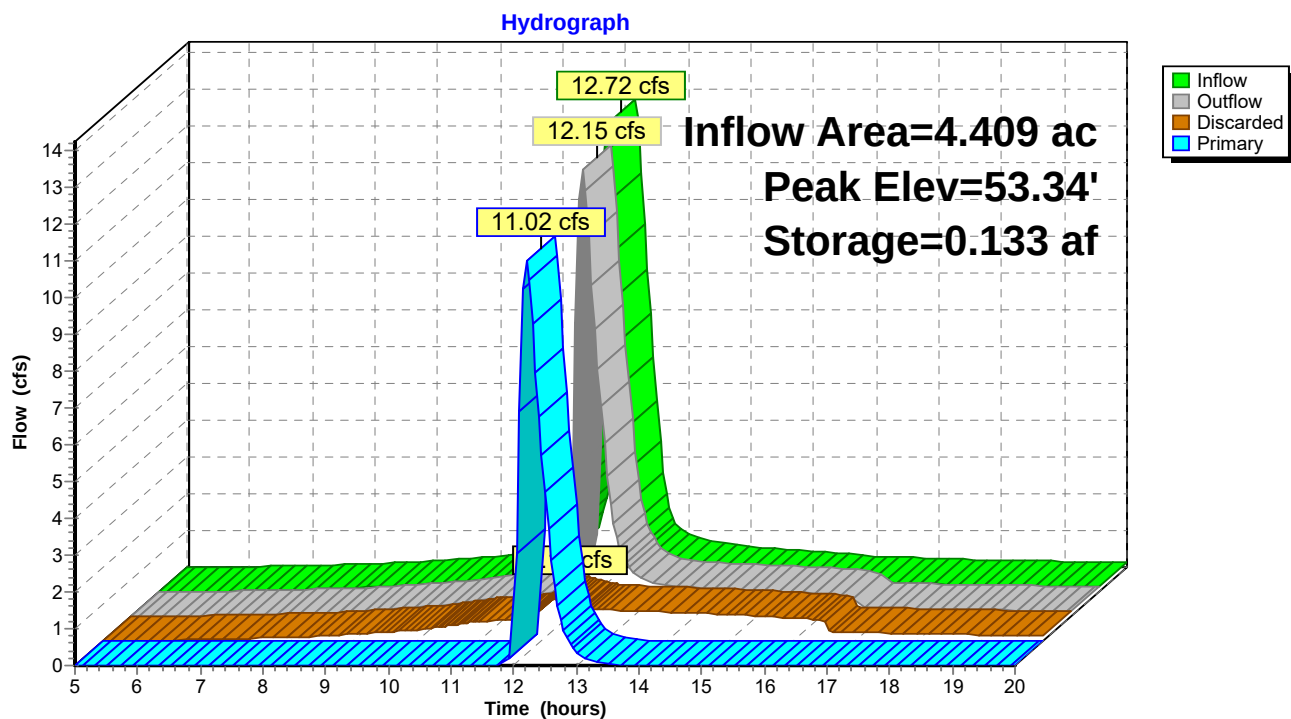
↑ **1=Exfiltration** ( Controls 1.13 cfs)

**Primary OutFlow** Max=10.97 cfs @ 12.20 hrs HW=53.33' (Free Discharge)

↑ **2=Culvert** (Inlet Controls 10.97 cfs @ 3.64 fps)



Pond 211P: Sub. Inf. 1B



**Summary for Pond 212P: Sub. Inf. 1A**

Inflow Area = 4.558 ac, 68.27% Impervious, Inflow Depth > 1.23" for 100-Year event  
 Inflow = 11.69 cfs @ 12.20 hrs, Volume= 0.468 af  
 Outflow = 9.37 cfs @ 12.32 hrs, Volume= 0.468 af, Atten= 20%, Lag= 7.2 min  
 Discarded = 0.98 cfs @ 12.32 hrs, Volume= 0.142 af  
 Primary = 8.39 cfs @ 12.32 hrs, Volume= 0.327 af  
 Routed to Pond 185P : DMH 4

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.31' @ 12.32 hrs Surf.Area= 0.055 ac Storage= 0.103 af

Plug-Flow detention time= 9.1 min calculated for 0.467 af (100% of inflow)  
 Center-of-Mass det. time= 9.0 min ( 752.8 - 743.8 )

| Volume | Invert | Avail.Storage | Storage Description                                                                                                                                                                                                                                    |
|--------|--------|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1A    | 47.50' | 0.050 af      | <b>20.50'W x 117.54'L x 3.50'H Field A</b><br>0.194 af Overall - 0.068 af Embedded = 0.126 af x 40.0% Voids                                                                                                                                            |
| #2A    | 48.00' | 0.068 af      | <b>ADS StormTech SC-740 b +Cap x 64 Inside #1</b><br>Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf<br>Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap<br>64 Chambers in 4 Rows<br>Cap Storage= 2.7 cf x 2 x 4 rows = 21.2 cf |
|        |        | 0.118 af      | Total Available Storage                                                                                                                                                                                                                                |

Storage Group A created with Chamber Wizard

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|-----------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 47.50' | <b>8.270 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 45.00'                                                                                                              |
| #2     | Primary   | 48.00' | <b>18.0" Round Culvert</b><br>L= 17.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.00' / 47.85' S= 0.0088 ' /' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

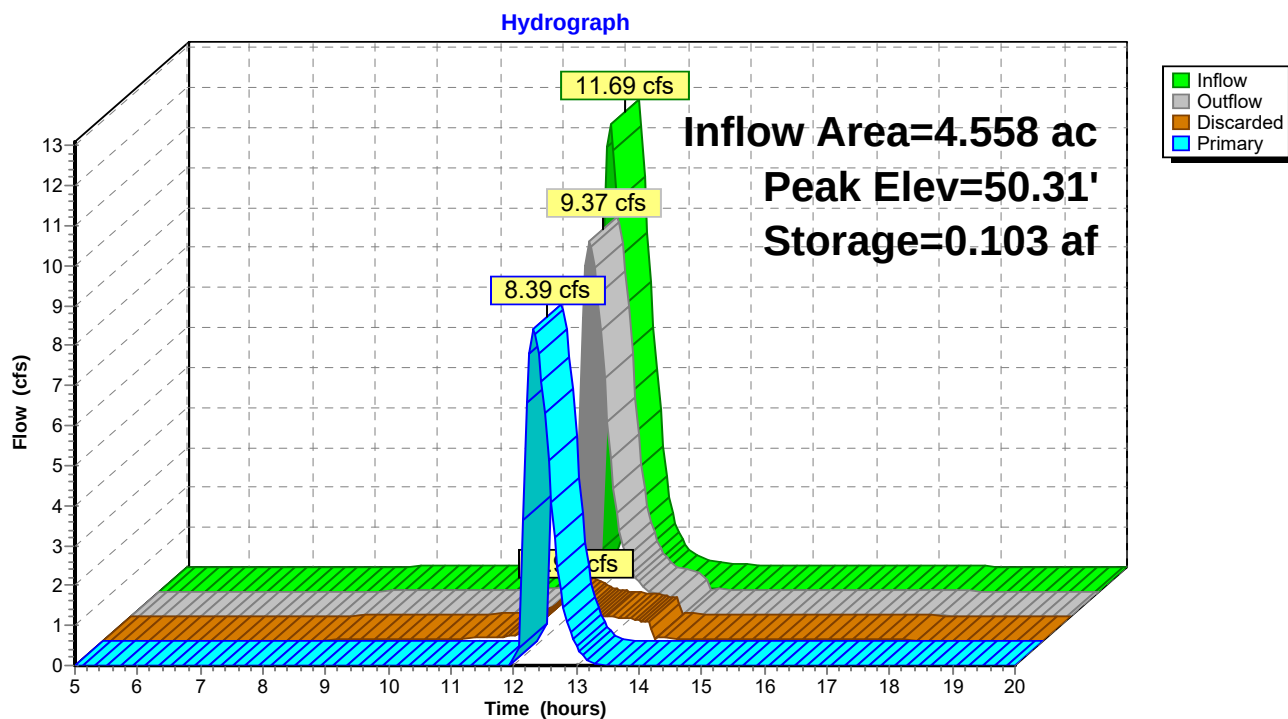
**Discarded OutFlow** Max=0.98 cfs @ 12.32 hrs HW=50.28' (Free Discharge)

↑**1=Exfiltration** ( Controls 0.98 cfs)

**Primary OutFlow** Max=8.32 cfs @ 12.32 hrs HW=50.28' (Free Discharge)

↑**2=Culvert** (Inlet Controls 8.32 cfs @ 4.71 fps)

Pond 212P: Sub. Inf. 1A



### Summary for Pond 213P: DMH 2

Inflow Area = 0.705 ac, 57.45% Impervious, Inflow Depth > 5.14" for 100-Year event  
 Inflow = 4.34 cfs @ 12.09 hrs, Volume= 0.302 af  
 Outflow = 4.34 cfs @ 12.09 hrs, Volume= 0.302 af, Atten= 0%, Lag= 0.0 min  
 Primary = 4.34 cfs @ 12.09 hrs, Volume= 0.302 af  
 Routed to Pond 186P : Constructed Wetland 1

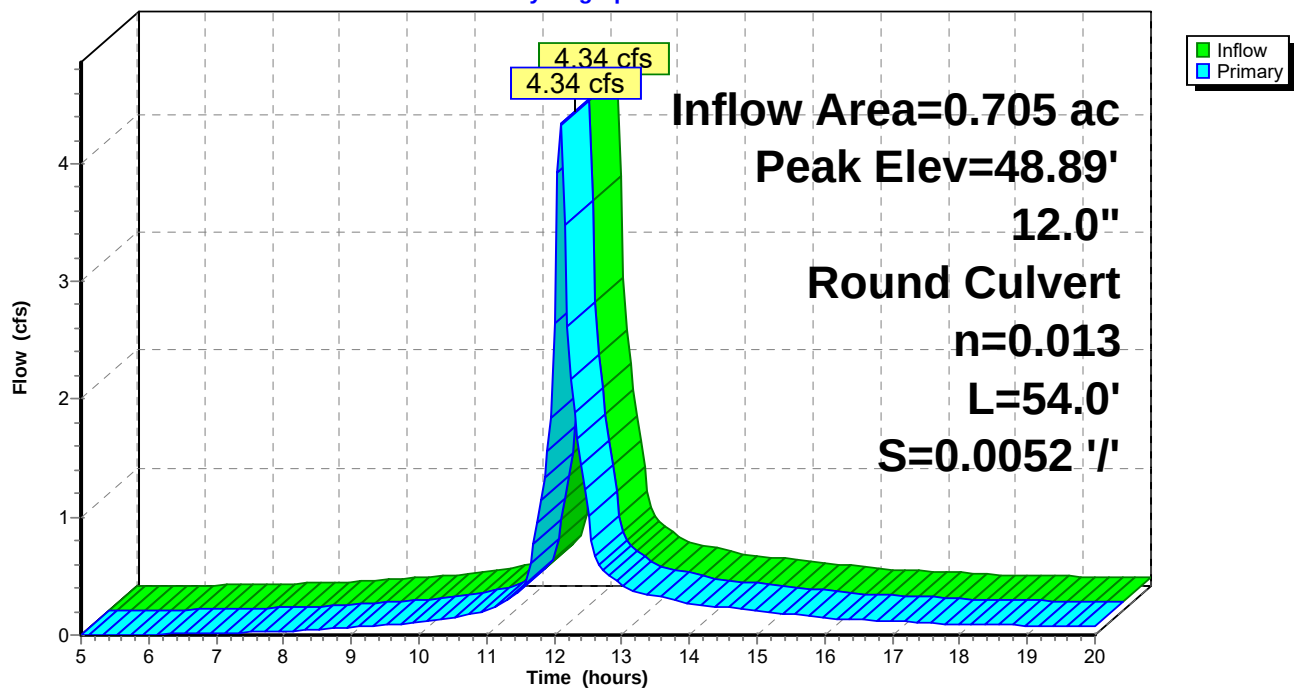
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 48.89' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 46.28' | <b>12.0" Round Culvert</b><br>L= 54.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 46.28' / 46.00' S= 0.0052 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=4.25 cfs @ 12.09 hrs HW=48.81' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 4.25 cfs @ 5.41 fps)

### Pond 213P: DMH 2

#### Hydrograph



**Summary for Pond 214P: DMH 4A**

Inflow Area = 4.558 ac, 68.27% Impervious, Inflow Depth > 1.23" for 100-Year event  
 Inflow = 11.69 cfs @ 12.20 hrs, Volume= 0.468 af  
 Outflow = 11.69 cfs @ 12.20 hrs, Volume= 0.468 af, Atten= 0%, Lag= 0.0 min  
 Primary = 11.69 cfs @ 12.20 hrs, Volume= 0.468 af  
 Routed to Pond 212P : Sub. Inf. 1A

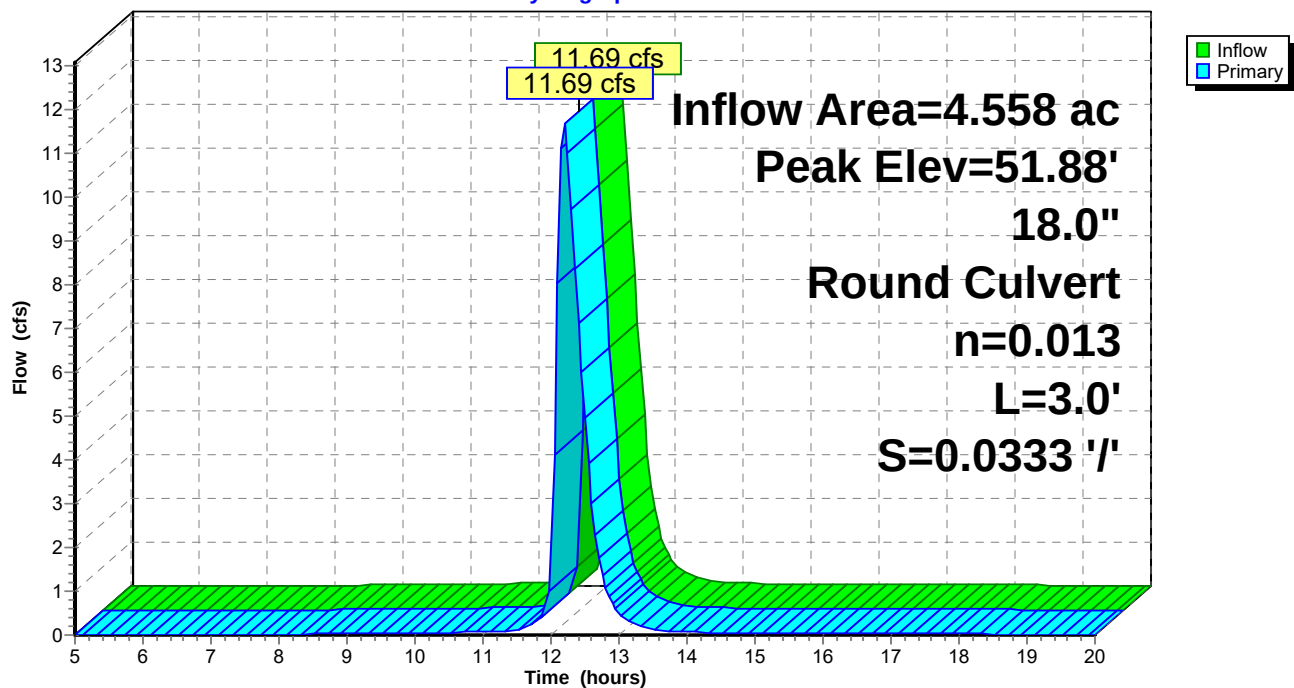
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.88' @ 12.20 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.10' | <b>18.0" Round Culvert</b><br>L= 3.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.10' / 48.00' S= 0.0333 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=11.67 cfs @ 12.20 hrs HW=51.87' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 11.67 cfs @ 6.60 fps)

**Pond 214P: DMH 4A**

Hydrograph



**Summary for Pond 215P: CB 5A**

Inflow Area = 0.149 ac, 77.32% Impervious, Inflow Depth > 6.73" for 100-Year event  
 Inflow = 1.16 cfs @ 12.09 hrs, Volume= 0.084 af  
 Outflow = 1.16 cfs @ 12.09 hrs, Volume= 0.084 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.16 cfs @ 12.09 hrs, Volume= 0.084 af  
 Routed to Pond 214P : DMH 4A

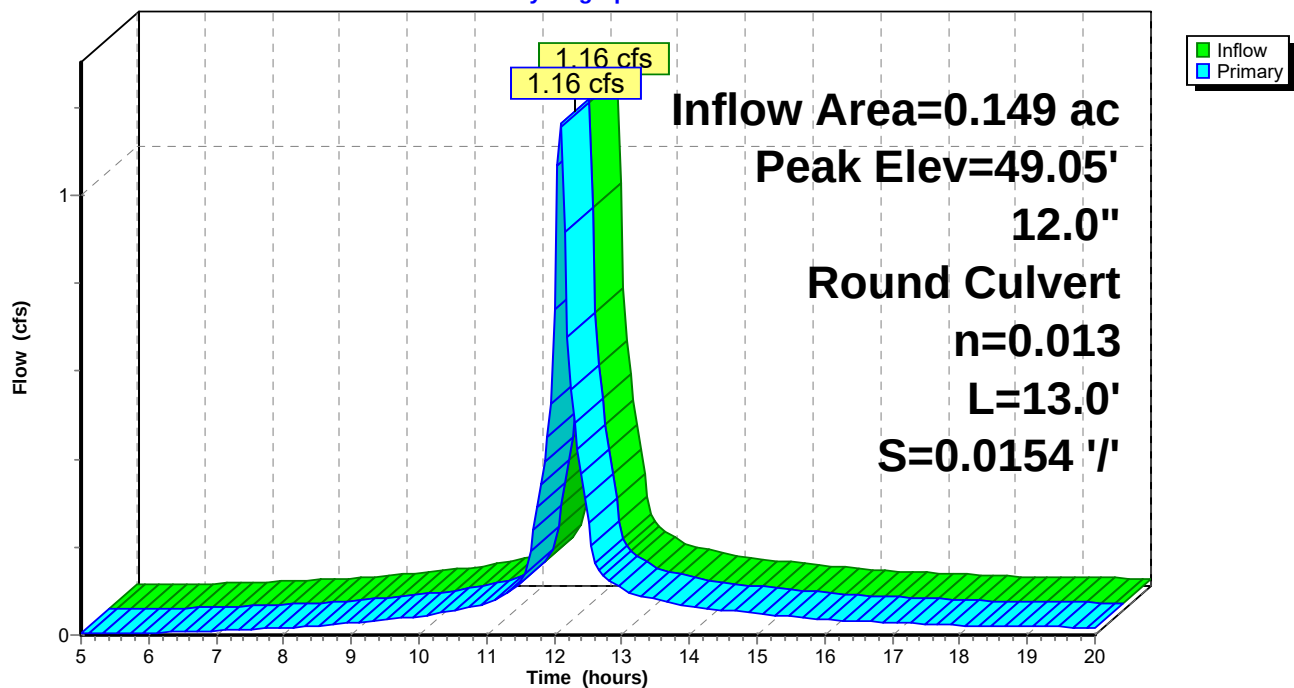
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 49.05' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 48.40' | <b>12.0" Round Culvert</b><br>L= 13.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 48.40' / 48.20' S= 0.0154 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.13 cfs @ 12.09 hrs HW=49.04' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 1.13 cfs @ 2.15 fps)

**Pond 215P: CB 5A**

Hydrograph



**Summary for Pond 216P: CB 8A**

Inflow Area = 0.484 ac, 16.33% Impervious, Inflow Depth > 1.39" for 100-Year event  
 Inflow = 0.49 cfs @ 12.27 hrs, Volume= 0.056 af  
 Outflow = 0.49 cfs @ 12.27 hrs, Volume= 0.056 af, Atten= 0%, Lag= 0.0 min  
 Primary = 0.49 cfs @ 12.27 hrs, Volume= 0.056 af  
 Routed to Pond 171P : DMH 6

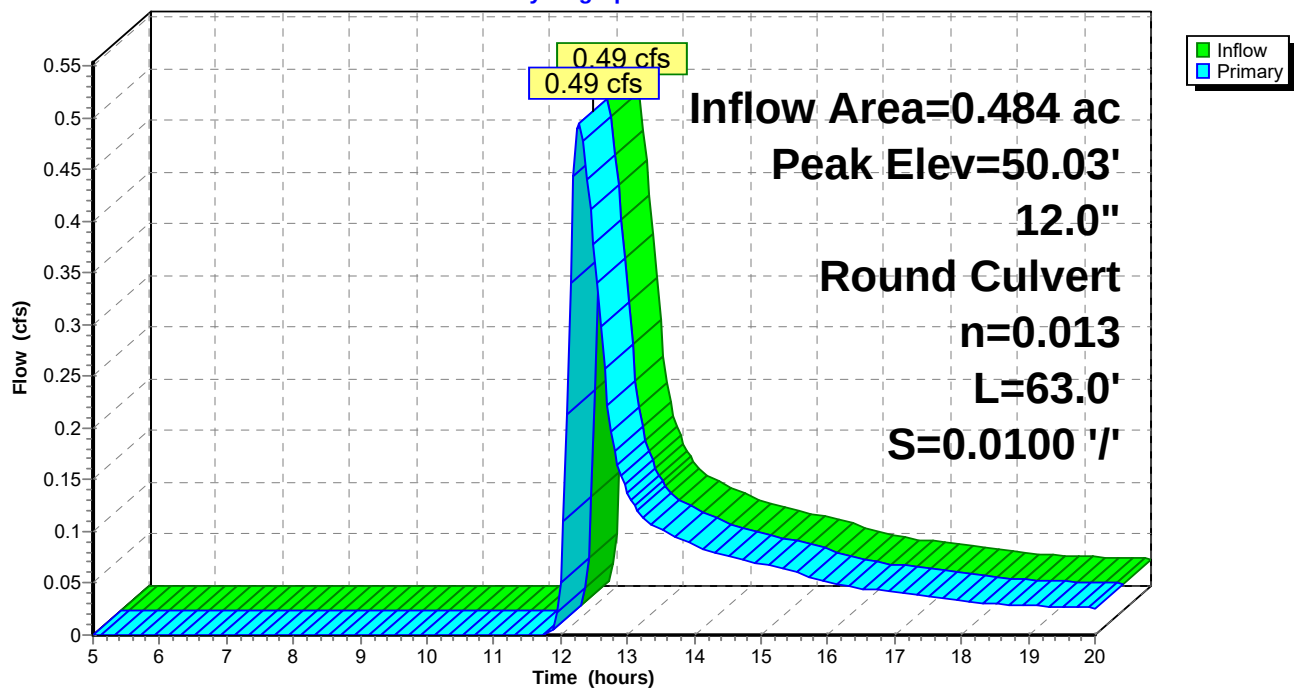
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 50.03' @ 12.27 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 49.63' | <b>12.0" Round Culvert</b><br>L= 63.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 49.63' / 49.00' S= 0.0100 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=0.49 cfs @ 12.27 hrs HW=50.03' (Free Discharge)  
 ↳ **1=Culvert** (Inlet Controls 0.49 cfs @ 1.69 fps)

**Pond 216P: CB 8A**

Hydrograph



**Summary for Pond 217P: DMH 8A**

Inflow Area = 4.409 ac, 67.96% Impervious, Inflow Depth > 2.34" for 100-Year event  
 Inflow = 12.72 cfs @ 12.16 hrs, Volume= 0.860 af  
 Outflow = 12.72 cfs @ 12.16 hrs, Volume= 0.860 af, Atten= 0%, Lag= 0.0 min  
 Primary = 12.72 cfs @ 12.16 hrs, Volume= 0.860 af  
 Routed to Pond 211P : Sub. Inf. 1B

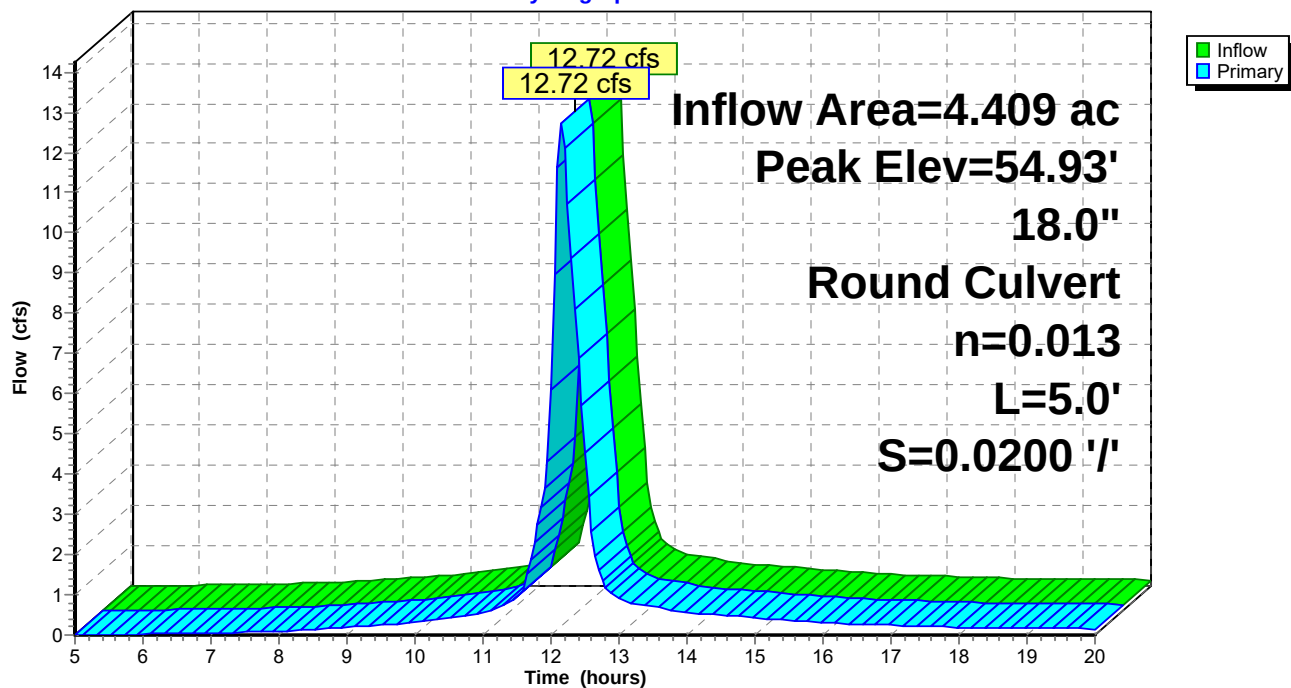
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 54.93' @ 12.16 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                |
|--------|---------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.60' | <b>18.0" Round Culvert</b><br>L= 5.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.60' / 50.50' S= 0.0200 '/ Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf |

**Primary OutFlow** Max=12.62 cfs @ 12.16 hrs HW=54.88' (Free Discharge)  
 ↑ **1=Culvert** (Inlet Controls 12.62 cfs @ 7.14 fps)

**Pond 217P: DMH 8A**

Hydrograph





**Summary for Pond 218P: CB A**

Inflow Area = 0.214 ac, 64.54% Impervious, Inflow Depth > 5.78" for 100-Year event  
 Inflow = 1.49 cfs @ 12.09 hrs, Volume= 0.103 af  
 Outflow = 1.49 cfs @ 12.09 hrs, Volume= 0.103 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.49 cfs @ 12.09 hrs, Volume= 0.103 af  
 Routed to Pond 219P : DMH A

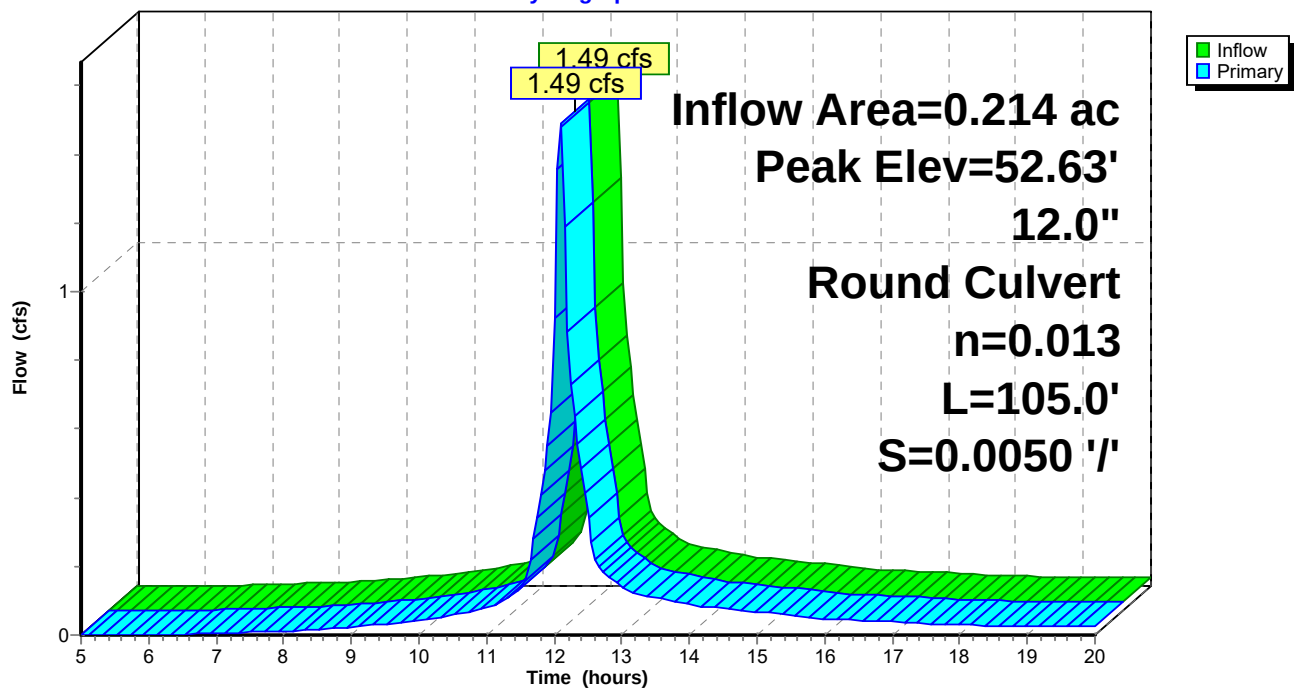
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 52.63' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                   |
|--------|---------|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.85' | <b>12.0" Round Culvert</b><br>L= 105.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.85' / 51.32' S= 0.0050 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.46 cfs @ 12.09 hrs HW=52.62' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.46 cfs @ 3.10 fps)

**Pond 218P: CB A**

Hydrograph



### Summary for Pond 219P: DMH A

Inflow Area = 0.214 ac, 64.54% Impervious, Inflow Depth > 5.78" for 100-Year event  
 Inflow = 1.49 cfs @ 12.09 hrs, Volume= 0.103 af  
 Outflow = 1.49 cfs @ 12.09 hrs, Volume= 0.103 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.49 cfs @ 12.09 hrs, Volume= 0.103 af  
 Routed to Pond 220P : DMH B

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 52.05' @ 12.09 hrs

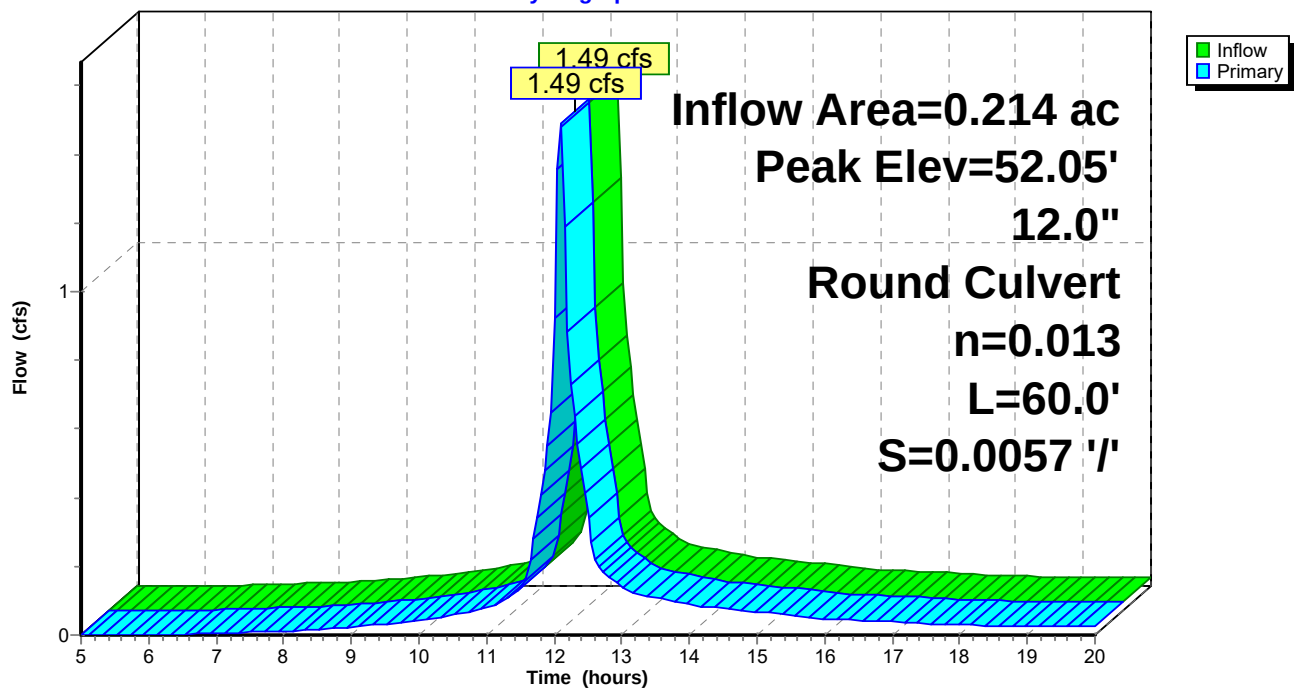
| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                  |
|--------|---------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 51.27' | <b>12.0" Round Culvert</b><br>L= 60.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 51.27' / 50.93' S= 0.0057 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.46 cfs @ 12.09 hrs HW=52.04' (Free Discharge)

↑ **1=Culvert** (Barrel Controls 1.46 cfs @ 3.09 fps)

### Pond 219P: DMH A

Hydrograph



### Summary for Pond 220P: DMH B

Inflow Area = 0.214 ac, 64.54% Impervious, Inflow Depth > 5.78" for 100-Year event  
 Inflow = 1.49 cfs @ 12.09 hrs, Volume= 0.103 af  
 Outflow = 1.49 cfs @ 12.09 hrs, Volume= 0.103 af, Atten= 0%, Lag= 0.0 min  
 Primary = 1.49 cfs @ 12.09 hrs, Volume= 0.103 af  
 Routed to Pond 192P : Sub. Inf. 8

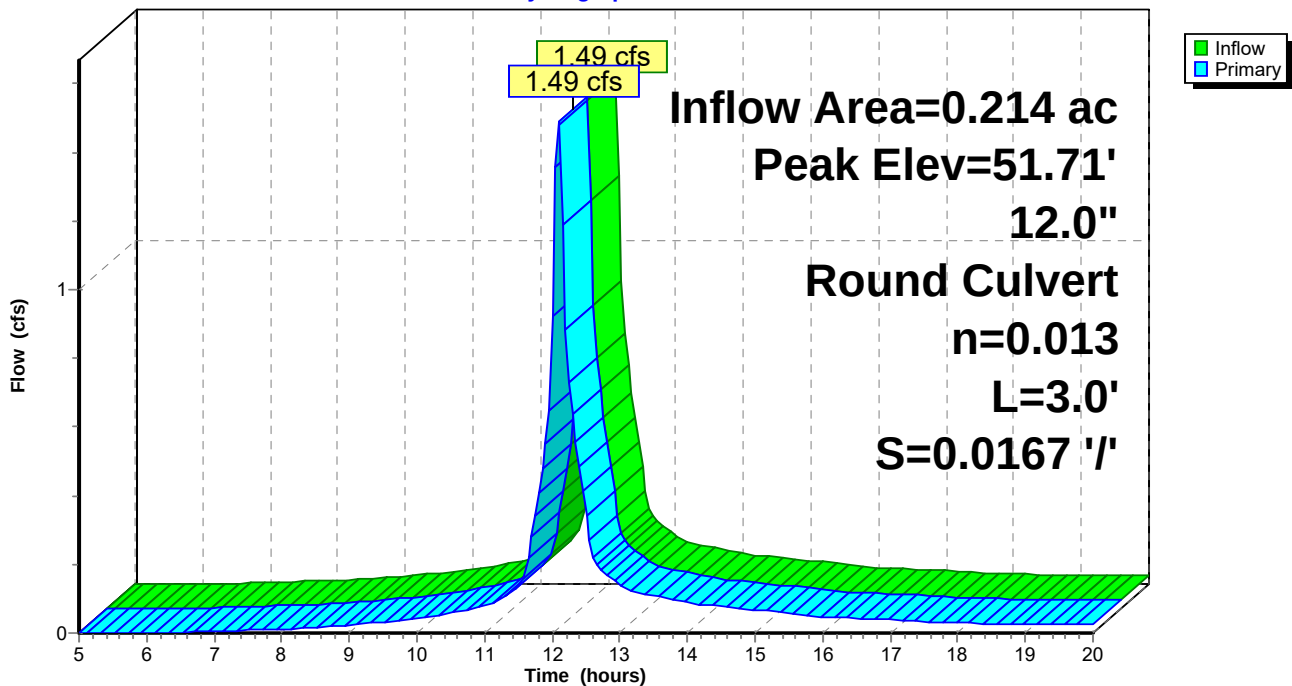
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 51.71' @ 12.09 hrs

| Device | Routing | Invert | Outlet Devices                                                                                                                                                                                                 |
|--------|---------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Primary | 50.88' | <b>12.0" Round Culvert</b><br>L= 3.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 50.88' / 50.83' S= 0.0167 '/' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |

**Primary OutFlow** Max=1.46 cfs @ 12.09 hrs HW=51.70' (Free Discharge)  
 ↳ **1=Culvert** (Barrel Controls 1.46 cfs @ 2.88 fps)

### Pond 220P: DMH B

Hydrograph



**RH Post 1-2-26**

Prepared by Millennium Engineering, Inc

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Type III 24-hr 100-Year Rainfall=8.94"

Printed 1/7/2026

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**Summary for Pond 221P: Inf. Basin 6**

Inflow Area = 1.935 ac, 78.08% Impervious, Inflow Depth > 7.55" for 100-Year event  
 Inflow = 16.19 cfs @ 12.09 hrs, Volume= 1.218 af  
 Outflow = 5.49 cfs @ 12.37 hrs, Volume= 1.173 af, Atten= 66%, Lag= 16.8 min  
 Discarded = 0.29 cfs @ 12.37 hrs, Volume= 0.144 af  
 Primary = 5.20 cfs @ 12.37 hrs, Volume= 1.029 af  
 Routed to Pond 195P : Constructed Wetland 4

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs  
 Peak Elev= 59.53' @ 12.37 hrs Surf.Area= 5,722 sf Storage= 14,850 cf

Plug-Flow detention time= 50.5 min calculated for 1.169 af (96% of inflow)  
 Center-of-Mass det. time= 35.5 min ( 778.0 - 742.4 )

| Volume | Invert | Avail.Storage | Storage Description                                        |
|--------|--------|---------------|------------------------------------------------------------|
| #1     | 56.00' | 17,627 cf     | <b>Custom Stage Data (Prismatic)</b> Listed below (Recalc) |

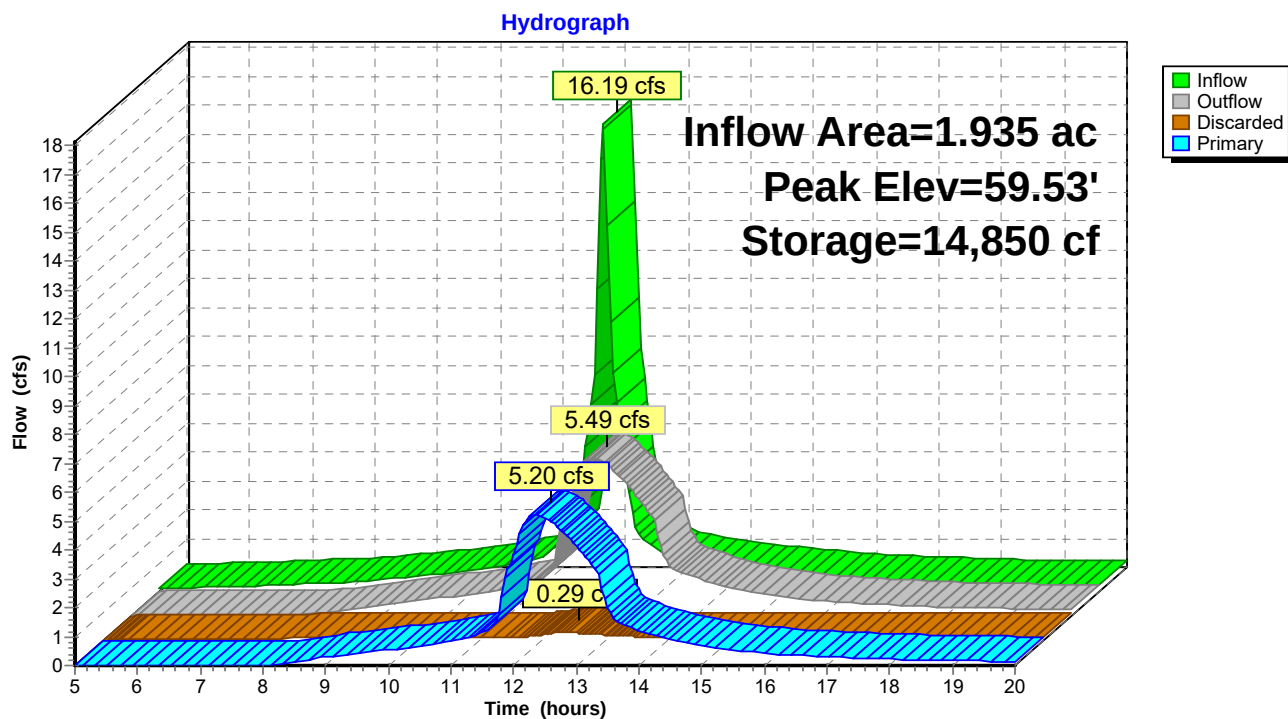
| Elevation<br>(feet) | Surf.Area<br>(sq-ft) | Inc.Store<br>(cubic-feet) | Cum.Store<br>(cubic-feet) |
|---------------------|----------------------|---------------------------|---------------------------|
| 56.00               | 2,718                | 0                         | 0                         |
| 57.00               | 3,594                | 3,156                     | 3,156                     |
| 58.00               | 4,371                | 3,983                     | 7,139                     |
| 59.00               | 5,223                | 4,797                     | 11,936                    |
| 60.00               | 6,159                | 5,691                     | 17,627                    |

| Device | Routing   | Invert | Outlet Devices                                                                                                                                                                                                            |
|--------|-----------|--------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| #1     | Discarded | 56.00' | <b>1.020 in/hr Exfiltration over Surface area</b><br>Conductivity to Groundwater Elevation = 54.00'                                                                                                                       |
| #2     | Primary   | 56.00' | <b>12.0" Round Culvert</b><br>L= 35.0' CPP, projecting, no headwall, Ke= 0.900<br>Inlet / Outlet Invert= 56.00' / 53.00' S= 0.0857 ' S= 0.0857 ' Cc= 0.900<br>n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf |
| #3     | Device 2  | 56.50' | <b>6.0" Vert. Orifice/Grate X 2.00</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                      |
| #4     | Device 2  | 57.30' | <b>24.0" W x 24.0" H Vert. Orifice/Grate</b> C= 0.600<br>Limited to weir flow at low heads                                                                                                                                |

**Discarded OutFlow** Max=0.29 cfs @ 12.37 hrs HW=59.53' (Free Discharge)  
 ↳ **1=Exfiltration** ( Controls 0.29 cfs)

**Primary OutFlow** Max=5.20 cfs @ 12.37 hrs HW=59.53' (Free Discharge)  
 ↳ **2=Culvert** (Inlet Controls 5.20 cfs @ 6.62 fps)  
 ↳ ↳ **3=Orifice/Grate** (Passes < 3.15 cfs potential flow)  
 ↳ ↳ **4=Orifice/Grate** (Passes < 20.67 cfs potential flow)

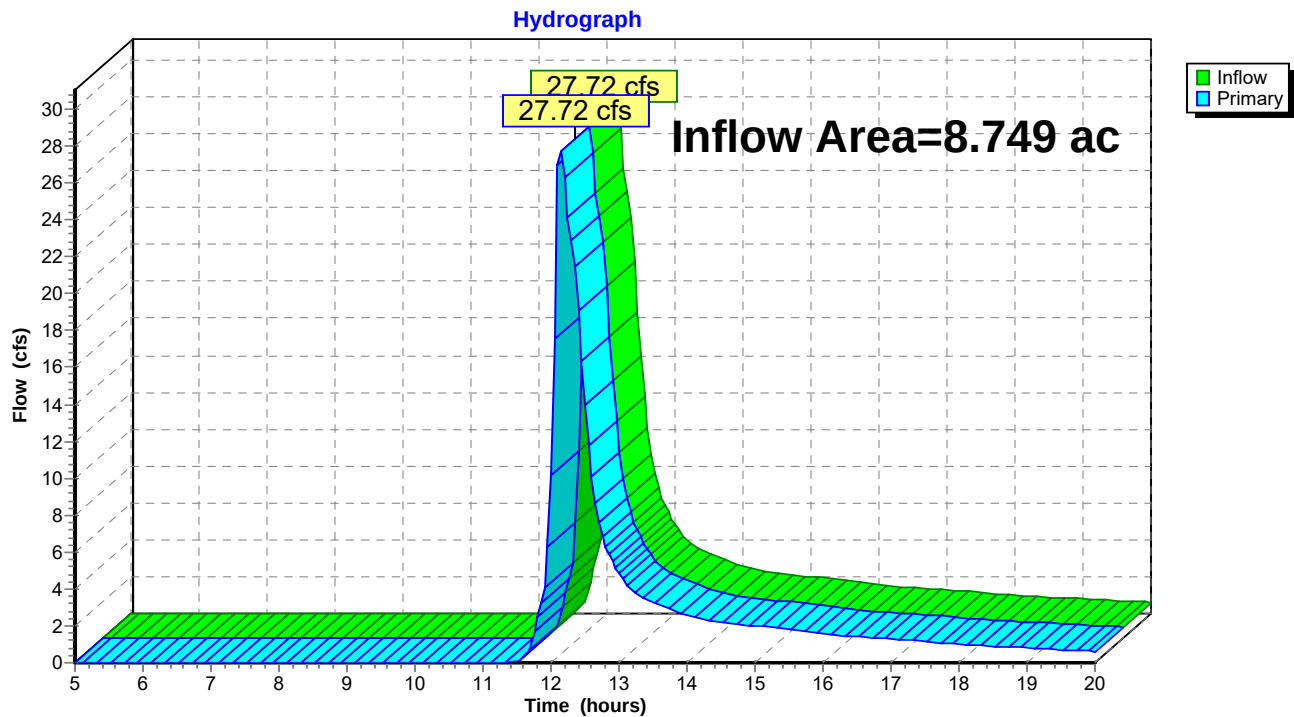
# Pond 221P: Inf. Basin 6



**Summary for Link 59L: DP 1**

Inflow Area = 8.749 ac, 31.63% Impervious, Inflow Depth > 3.10" for 100-Year event  
Inflow = 27.72 cfs @ 12.14 hrs, Volume= 2.261 af  
Primary = 27.72 cfs @ 12.14 hrs, Volume= 2.261 af, Atten= 0%, Lag= 0.0 min

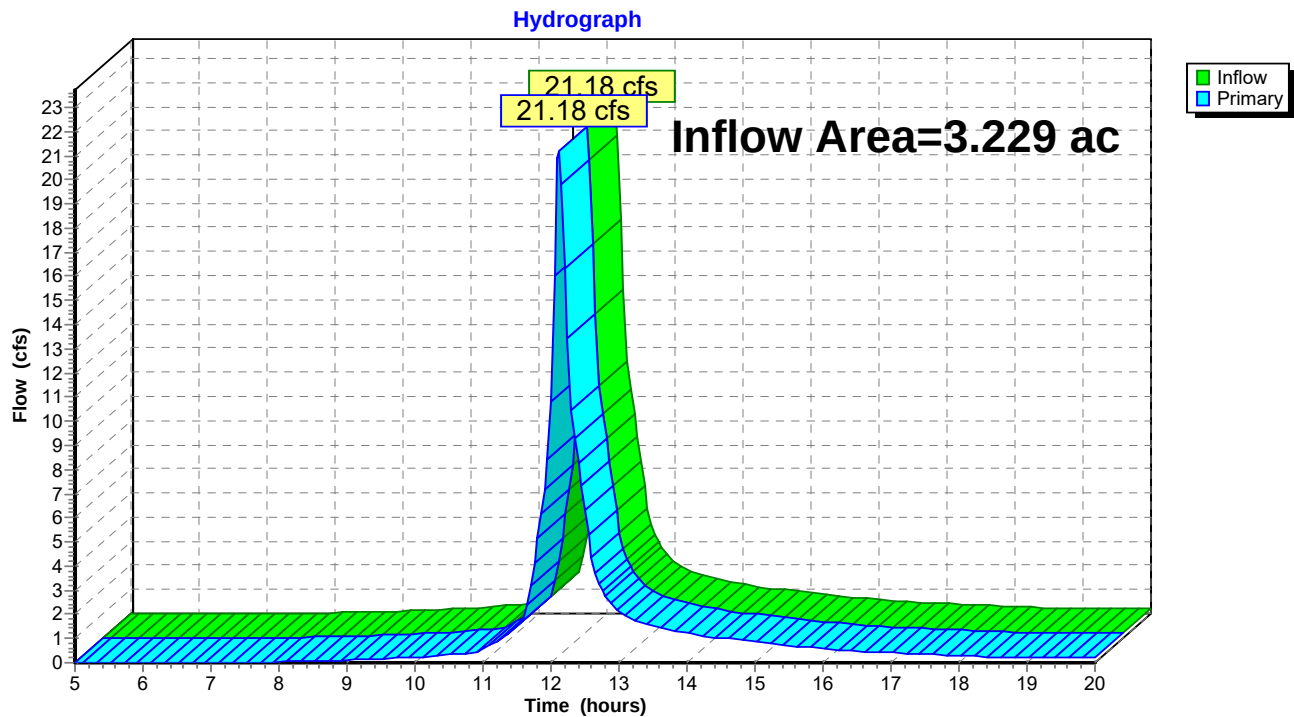
Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Link 59L: DP 1**

**Summary for Link 60L: DP 2**

Inflow Area = 3.229 ac, 32.60% Impervious, Inflow Depth > 4.97" for 100-Year event  
Inflow = 21.18 cfs @ 12.12 hrs, Volume= 1.338 af  
Primary = 21.18 cfs @ 12.12 hrs, Volume= 1.338 af, Atten= 0%, Lag= 0.0 min

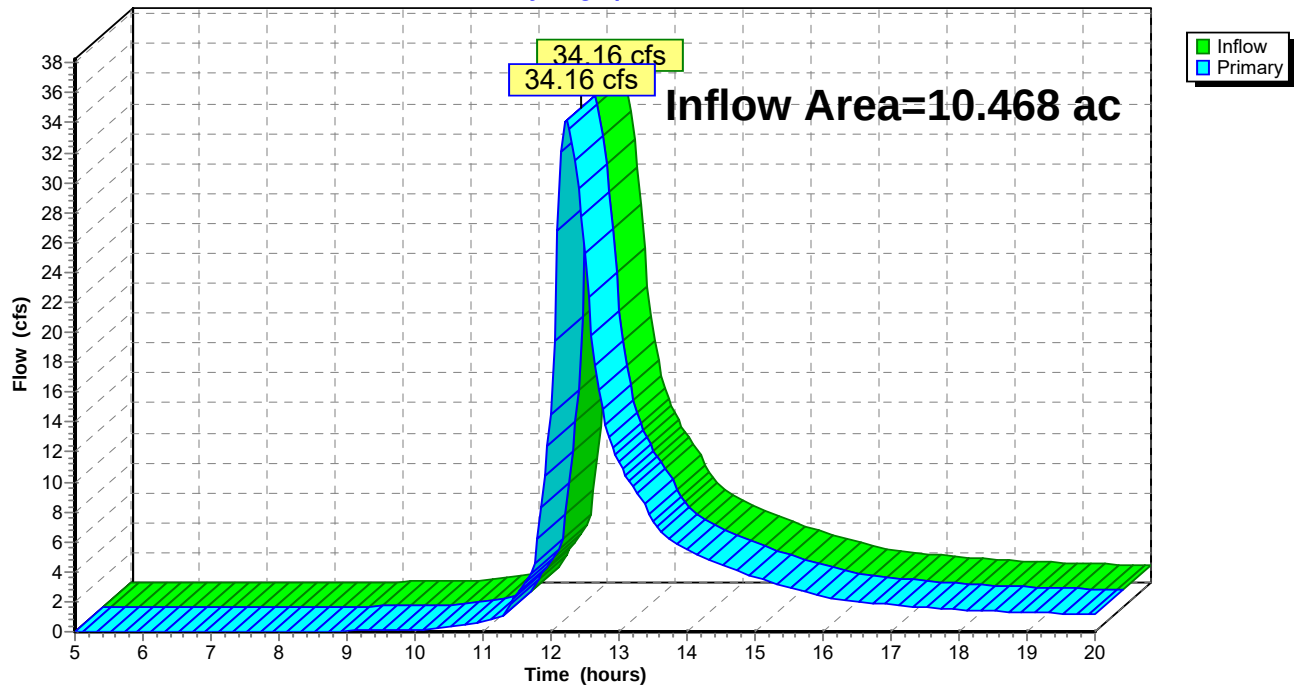
Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Link 60L: DP 2**

**Summary for Link 188L: DP 3**

Inflow Area = 10.468 ac, 46.25% Impervious, Inflow Depth > 4.57" for 100-Year event  
Inflow = 34.16 cfs @ 12.23 hrs, Volume= 3.986 af  
Primary = 34.16 cfs @ 12.23 hrs, Volume= 3.986 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

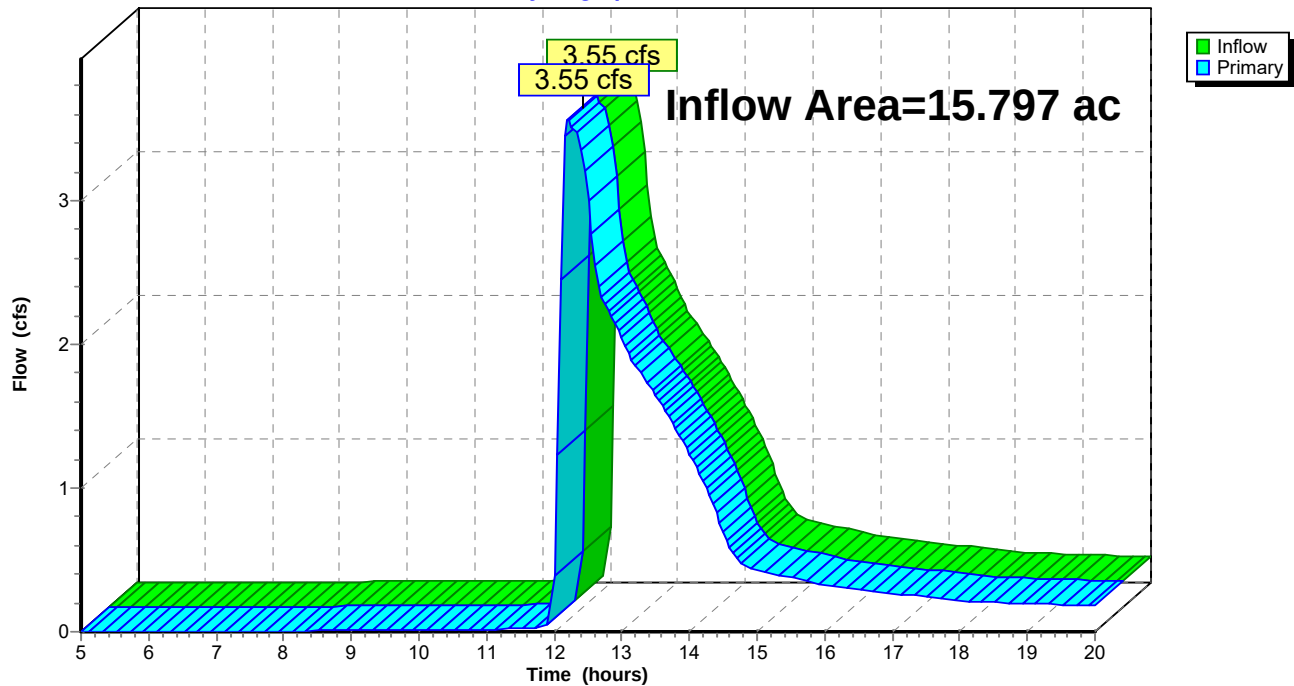
**Link 188L: DP 3****Hydrograph**



**Summary for Link 203L: 3A**

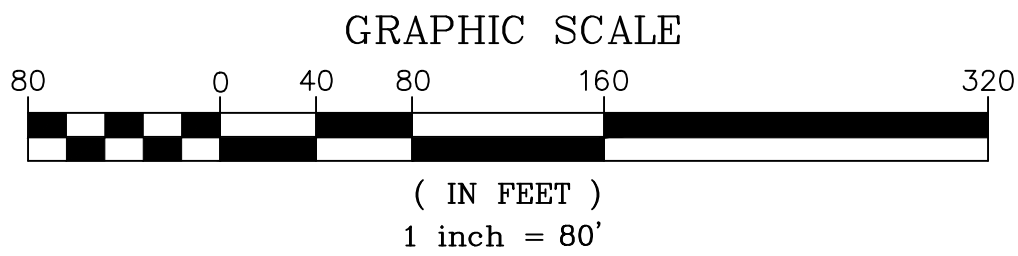
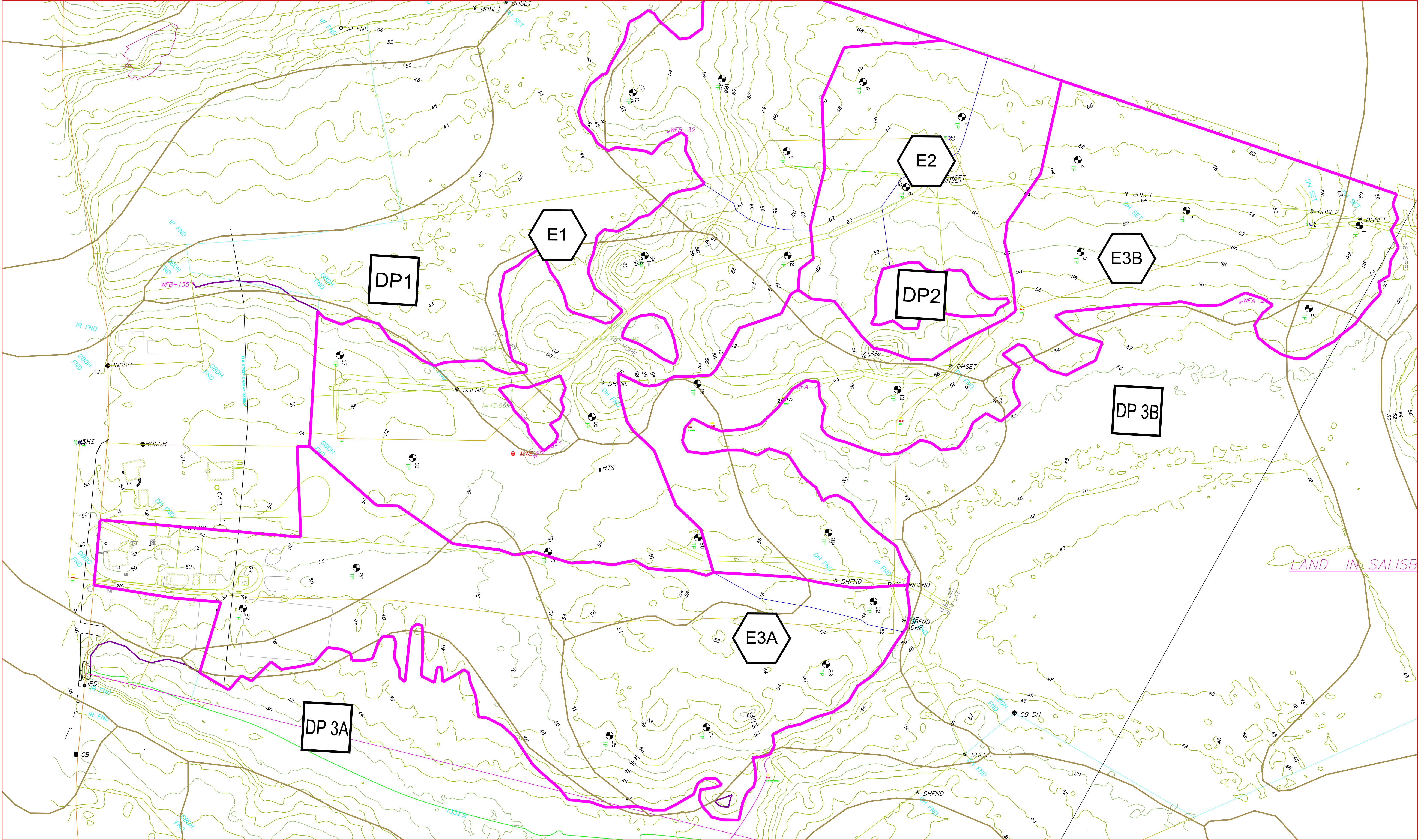
Inflow Area = 15.797 ac, 47.23% Impervious, Inflow Depth > 0.40" for 100-Year event  
Inflow = 3.55 cfs @ 12.21 hrs, Volume= 0.529 af  
Primary = 3.55 cfs @ 12.21 hrs, Volume= 0.529 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

**Link 203L: 3A****Hydrograph**

### **c. Watershed Maps**





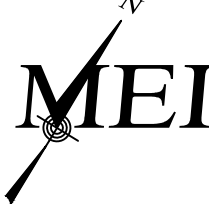
PREPARED FOR

DALE DEVELOPMENT, LLC

360 WASHINGTON STREET

RYE, NH 03870

| NO. | DATE | DESCRIPTION | BY |
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SCALE: 1"=80'

DATE: AUG. 11, 2025

CALC. BY: J.T.M.

CHKD. BY: E.W.B.

PROJECT: M234272

ROCKY HILL MBTA

COMMUNITY

IN

AMESBURY, MA

AT

ELM STREET

PRE-

DEVELOPMENT

WATERSHED

MAP

SHEET: 1 OF 1