



MILLENNIUM ENGINEERING, INC.

Land Surveyors and Civil Engineers

STORMWATER MANAGEMENT REPORT

FOR THE

ROCKY HILL MBTA COMMUNITY

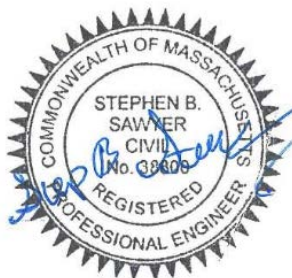
AT

**ELM STREET
AMESBURY, MA**

PREPARED FOR:

**DALE DEVELOPMENT, LLC.
360 WASHINGTON STREET
RYE, NH**

DATE: AUGUST 11, 2025



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Table of Contents

Stormwater Management Report
Rocky Hill MBTA Community Amesbury, MA

- I. Introduction**
- II. Stormwater Management Checklist**
- III. Hydrologic Analysis**
- IV. Stormwater Recharge Calculations**
- V. TSS Removal Calculations**
- VI. Water Quality Calculations**
- VII. Soils Analysis**
- VIII. Appendix**
 - a. Existing Conditions HydroCAD Report**
 - b. Proposed Conditions HydroCAD Report**
 - c. Watershed Maps**

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.¹ 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 8²
- 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

¹ 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.

² 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

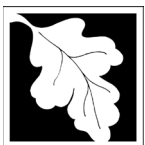
LID Measures: Stormwater Standards require LID measures to be considered. Document what environmentally sensitive design and LID Techniques were considered during the planning and design of the project:

- ☐ 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

Standard 2: Peak Rate Attenuation

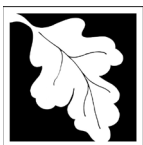
- ☐ Standard 2 waiver requested because the project is located in land subject to coastal storm flowage and stormwater discharge is to a wetland subject to coastal flooding.
- ☐ Evaluation provided to determine whether off-site flooding increases during the 100-year 24-hour storm.
- ☒ Calculations provided 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 Field¹
- ☐ 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.

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

Checklist (continued)



Checklist for Stormwater Report

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

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.

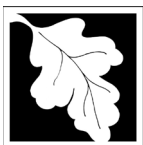
Standard 5: Land Uses With Higher Potential Pollutant Loads (LUHPPLs)

- ☐ 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

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

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.)

Subcatchment	Size	2 Yr	10 Yr	100 Yr
	(Acres)	Storm	Storm	Storm
DP 1	8.75	0.04	2.98	27.72
DP 2	3.23	1.46	7.16	21.18
DP 3A	16.38	0.03	0.06	5.02
DP 3B	10.47	1.34	8.37	40.37

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 * 346,171 s.f.
= 7,212 c.f.
 R_v (A soil) = $F \times \text{impervious area}$
= 0.60 in * 393,782
= 19,690 c.f.

Total Required Recharge Volume = 26,902 c.f.

Total Recharge provided

Inf. Basin 1 = 13,660 c.f.

Inf. Basin 2 = 12,381 c.f.

Inf. Basin 3 = 16,654 c.f.

Inf. Basin 4 = 4,784 c.f.

Inf. Basin 5= 11,936 c.f.

Sub. Inf. 1= 9,365 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.

Total Recharge provided = 87,815 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 BMP ¹	B TSS Removal Rate ¹	C Starting TSS Load*	D Amount Removed (B*C)	E Remaining 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 BMP ¹	B TSS Removal Rate ¹	C Starting TSS Load*	D Amount Removed (B*C)	E Remaining 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 BMP ¹	B TSS Removal Rate ¹	C Starting TSS Load*	D Amount Removed (B*C)	E Remaining 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 BMP ¹	B TSS Removal Rate ¹	C Starting TSS Load*	D Amount Removed (B*C)	E Remaining 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. 1

**TSS Removal
Calculation
Worksheet**

A BMP ¹	B TSS Removal Rate ¹	C Starting TSS Load*	D Amount Removed (B*C)	E Remaining 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. 2

**TSS Removal
Calculation
Worksheet**

A BMP ¹	B TSS Removal Rate ¹	C Starting TSS Load*	D Amount Removed (B*C)	E Remaining 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	B	C	D	E
BMP ¹	TSS Removal Rate ¹	Starting TSS Load*	Amount Removed (B*C)	Remaining 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:

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 Calculation Worksheet	B BMP ¹	C TSS Removal Rate ¹	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining Load (D-E)
	Constructed Stormwater 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 2**

TSS Removal Calculation Worksheet	B BMP ¹	C TSS Removal Rate ¹	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining Load (D-E)
	Constructed Stormwater 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: Constructed Wetland 3

TSS Removal Calculation Worksheet	B	C	D	E	F
	BMP ¹	TSS Removal Rate ¹	Starting TSS Load*	Amount Removed (C*D)	Remaining Load (D-E)
	Constructed Stormwater 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: Constructed Wetland 4

TSS Removal Calculation Worksheet	B	C	D	E	F
	BMP ¹	TSS Removal Rate ¹	Starting TSS Load*	Amount Removed (C*D)	Remaining Load (D-E)
	Constructed Stormwater 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:

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: Treatment for Det. Sub. 2

**TSS Removal
Calculation
Worksheet**

A BMP ¹	B TSS Removal Rate ¹	C Starting TSS Load*	D Amount Removed (B*C)	E Remaining Load (C-D)
Contech CDS	0.80	1.00	0.80	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 Calculation Worksheet	B BMP ¹	C TSS Removal Rate ¹	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining 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 Calculation Worksheet	B BMP ¹	C TSS Removal Rate ¹	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining 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 Calculation Worksheet	B BMP ¹	C TSS Removal Rate ¹	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining 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 Calculation Worksheet	B BMP ¹	C TSS Removal Rate ¹	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining 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 Calculation Worksheet	B	C	D	E	F
	BMP ¹	TSS Removal Rate ¹	Starting TSS Load*	Amount Removed (C*D)	Remaining 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: Sub. Inf. 1

TSS Removal Calculation Worksheet	B	C	D	E	F
	BMP ¹	TSS Removal Rate ¹	Starting TSS Load*	Amount Removed (C*D)	Remaining Load (D-E)
	Subsurface Infiltration 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. 2

TSS Removal Calculation Worksheet	B BMP ¹	C TSS Removal Rate ¹	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining Load (D-E)
	Subsurface Infiltration 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 Calculation Worksheet	B BMP ¹	C TSS Removal Rate ¹	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining Load (D-E)
	Subsurface Infiltration 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 Calculation Worksheet	B BMP ¹	C TSS Removal Rate ¹	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining Load (D-E)
	Subsurface Infiltration 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 Calculation Worksheet	B BMP ¹	C TSS Removal Rate ¹	D Starting TSS Load*	E Amount Removed (C*D)	F Remaining Load (D-E)
	Subsurface Infiltration 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 Calculation Worksheet	B	C	D	E	F
	BMP ¹	TSS Removal Rate ¹	Starting TSS Load*	Amount Removed (C*D)	Remaining Load (D-E)
	Subsurface Infiltration 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

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 = 54,145 s.f.

$54,145 \text{ s.f.} \times 1" / 12 \text{ (to convert to ft)} = 4,512 \text{ c.f. of runoff to be treated for water quality.}$

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

Inf. Basin 1

Total Impervious Area = 6,439 s.f.

$6,439 \text{ s.f.} \times 1" / 12 \text{ (to convert to ft)} = 537 \text{ c.f. of runoff to be treated for water quality.}$

Volume of the Rain garden below the lowest outlet = 13,660 c.f.

Sub. Inf. 1

Total Impervious Area = 28,183 s.f.

$28,183 \text{ s.f.} \times 1" / 12 \text{ (to convert to ft)} = 2,349 \text{ c.f. of runoff to be treated for water quality.}$

Volume of the Rain garden below the lowest outlet = 9,365 c.f.

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 = 10,498 s.f.

$10,498 \text{ s.f.} \times 1" / 12 \text{ (to convert to ft)} = 875 \text{ c.f. of runoff to be treated for water quality.}$

Volume of the Rain garden below the lowest outlet = 4,784 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.

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

Total Impervious Area = 8,843 s.f.

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

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.

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

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

Sub. Inf. 7

Total Impervious Area = 8,581 s.f.

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

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.

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

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

Sub. Det. 2

Total Impervious Area = 28,793 s.f.

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

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

Sub. Det. 3 / Constructed Wetland 4

Total Impervious Area = 47,001 s.f.

$47,001 \text{ s.f.} \times 1/2" / 12 \text{ (to convert to ft)} = 1,958 \text{ c.f. of runoff to be treated for water quality.}$

Volume of the Rain garden below the lowest outlet = 349 c.f.

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

VII. Soils Analysis

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



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%
Totals for Area of Interest		192.9	100.0%

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⁺ 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-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 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.
11" → 20"	B _w	Loamy Fine 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.
20" → 72"	2C	Loamy Fine Sand	2.5Y 6/2 light brownish gray	31" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
09" → 23"	B _w	Loamy Fine 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.
23" → 71"	2C	Loamy Fine Sand	2.5Y 6/2 light brownish gray	25" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
11" → 21"	B _w	Loamy Fine 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.
21" → 68"	2C	Loamy Fine Sand	2.5Y 6/2 light brownish gray	27" (m,3,p) 5YR 5/8 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⁺ 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-2A

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.
					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⁺ 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-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 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 _w	Loamy Fine 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.
21" → 68"	2C	Loamy Fine Sand	2.5Y 6/2 light brownish gray	38" (m,3,p) 5YR 5/8 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⁺ 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-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 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 _w	Loamy Fine 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.
22" → 58"	2C	Loamy Fine Sand	2.5Y 6/2 light brownish gray	36" (m,3,p) 5YR 5/8 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⁺ 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-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 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 _w	Loamy Fine 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.
20" → 75"	2C	Loamy Fine Sand	2.5Y 6/2 light brownish gray	60" (m,3,p) 5YR 5/8 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 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⁺ 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-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 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" → 19"	B _w	Loamy Fine 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.
19" → 80"	2C	Loamy Fine Sand	2.5Y 6/2 light brownish gray	58" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
09" → 20"	B _w	Loamy Fine 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.
20" → 70"	2C	Loamy Fine Sand	2.5Y 6/2 light brownish gray	51" (m,3,p) 5YR 5/8 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⁺ 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-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 _w	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" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
12" → 27"	B _w	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.
27" → 67"	2C	Sandy Loam	2.5Y 5/3 light olive brown	30" (m,3,p) 5YR 5/8 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⁺ 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-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 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" → 24"	B _w	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.
24" → 65"	2C	Sandy Loam	2.5Y 5/3 light olive brown	28" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
08" → 24"	B _w	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.
24" → 69"	2C	Sandy Loam	2.5Y 5/3 light olive brown	30" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
08" → 24"	B _w	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.
24" → 69"	2C	Sandy Loam	2.5Y 5/3 light olive brown	30" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
08" → 19"	B _w	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.
19" → 23" BEDROCK AT 23"	2C	Sandy Loam	2.5Y 5/3 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-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⁺ 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-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 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.
06" → 16"	B _w	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.
16" → 24" BEDROCK AT 24"	2C	Sandy Loam	2.5Y 5/3 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-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⁺ 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-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 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.
06" → 09"	B _w	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.
09" → 36" BEDROCK AT 36"	2C	Sandy Loam	2.5Y 5/3 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: 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⁺ 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-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 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.
06" → 11"	B _w	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.
11" → 24" BEDROCK AT 24"	2C	Sandy Loam	2.5Y 5/3 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-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⁺ 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-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 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.
06" → 13" BEDROCK AT 13"	B _w	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; 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⁺ 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-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 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.
07" → 18"	B _w	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.
18" → 31" BEDROCK AT 31"	2C	Sandy Loam	2.5Y 5/3 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-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⁺ 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-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 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" → 16"	B _w	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.
16" → 30" BEDROCK AT 31"	2C	Sandy Loam	2.5Y 5/3 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-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⁺ 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-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 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.
06" → 15"	B _w	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; 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⁺ 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-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 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.
06" → 12"	B _w	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; 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⁺ 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-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 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.
09" → 14"	B _w	Sandy Loam	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.
14" → 23" BEDROCK AT 23"	2C	Sandy Loam	2.5Y 5/3 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⁺ 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-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 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.
09" → 17"	B _w	Sandy Loam	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.
17" → 67"	2C	Sandy Loam	2.5Y 5/3 light olive brown	36" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
08" → 15"	B _w	Sandy Loam	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.
15" → 65"	2C	Sandy Loam	2.5Y 5/3 light olive brown	35" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
09" → 16"	B _w	Sandy Loam	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.
16" → 69"	2C	Sandy Loam	2.5Y 5/3 light olive brown	38" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
09" → 17"	B _w	Sandy Loam	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.
17" → 63"	2C	Sandy Loam	2.5Y 5/3 light olive brown	33" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
06" → 14"	B _w	Sandy Loam	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.
14" → 23" BEDROCK AT 23"	2C	Sandy Loam	2.5Y 5/3 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⁺ 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-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 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.
08" → 18"	B _w	Sandy Loam	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.
18" → 31" BEDROCK AT 31"	2C	Sandy Loam	2.5Y 5/3 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⁺ 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-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 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.
07" → 16"	B _w	Sandy Loam	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.
16" → 35" BEDROCK AT 35"	2C	Sandy Loam	2.5Y 5/3 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⁺ 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-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 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.
05" → 13"	B _w	Sandy Loam	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.
13" → 22" BEDROCK AT 22"	2C	Sandy Loam	2.5Y 5/3 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-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⁺ 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-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 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.
09" → 18"	B _w	Sandy Loam	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.
18" → 72"	2C	Sandy Loam	2.5Y 5/3 light olive brown	30" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
11" → 19"	B _w	Sandy Loam	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.
19" → 74"	2C	Sandy Loam	2.5Y 5/3 light olive brown	30" (m,3,p) 5YR 5/8 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⁺ 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-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 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" → 20"	B _w	Sandy Loam	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.
20" → 72"	2C	Sandy Loam	2.5Y 5/3 light olive brown	29" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
08" → 12"	B _w	Sandy Loam	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.
12" → 34" BEDROCK AT 34"	2C	Sandy Loam	2.5Y 5/3 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; 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⁺ 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-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 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.
09" → 18"	B _w	Sandy Loam	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.
18" → 27" BEDROCK AT 27"	2C	Sandy Loam	2.5Y 5/3 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⁺ 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-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 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.
09" → 14"	B _w	Sandy Loam	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.
18" → 20" BEDROCK AT 20"	2C	Sandy Loam	2.5Y 5/3 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⁺ 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-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 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.
07" → 18"	B _w	Sandy Loam	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.
18" → 38" BEDROCK AT 38"	2C	Sandy Loam	2.5Y 5/3 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⁺ 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-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 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.
08" → 18"	B _w	Sandy Loam	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.
18" → 69"	2C	Sandy Loam	2.5Y 5/3 light olive brown	35" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
06" → 14"	B _w	Sandy Loam	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.
14" → 67"	2C	Sandy Loam	2.5Y 5/3 light olive brown	37" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
06" → 18"	B _w	Sandy Loam	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.
18" → 69"	2C	Sandy Loam	2.5Y 5/3 light olive brown	35" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
09" → 21"	B _w	Sandy Loam	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.
21" → 35" Bedrock at 35"	2C	Sandy Loam	2.5Y 5/3 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⁺ 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-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 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.
11" → 16"	B _w	Sandy Loam	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.
16" → 40" Bedrock at 35"	2C	Sandy Loam	2.5Y 5/3 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⁺ 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-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 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.
11" → 18"	B _w	Sandy Loam	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.
18" → 24" Bedrock at 24"	2C	Sandy Loam	2.5Y 5/3 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⁺ 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-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 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.
09" → 18"	B _w	Sandy Loam	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.
18" → 24" Bedrock at 24"	2C	Sandy Loam	2.5Y 5/3 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⁺ 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-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 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.
09" → 18"	B _w	Sandy Loam	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.
18" → 24" Bedrock at 32"	2C	Sandy Loam	2.5Y 5/3 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⁺ 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-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 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.
08" → 18"	B _w	Sandy Loam	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.
18" → 59"	2C	Sandy Loam	2.5Y 5/3 light olive brown	39" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
07" → 17"	B _w	Sandy Loam	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.
17" → 59"	2C	Sandy Loam	2.5Y 5/3 light olive brown	28" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
05" → 15"	B _w	Sandy Loam	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.
15" → 59"	2C	Sandy Loam	2.5Y 5/3 light olive brown	24" (m,3,p) 5YR 5/8 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⁺ 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-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 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" → 18"	B _w	Sandy Loam	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.
18" → 40"	2C	Sandy Loam	2.5Y 5/3 light olive brown	28" (m,3,p) 5YR 5/8 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⁺ 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-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 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" → 16"	B _w	Sandy Loam	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.
18" → 33" Bedrock at 33"	2C	Sandy Loam	2.5Y 5/3 light olive brown	28" (m,3,p) 5YR 5/8 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⁺ 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-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 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" → 20"	B _w	Sandy Loam	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.
20" → 57"	2C	Sandy Loam	2.5Y 5/3 light olive brown	31" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
09" → 19"	B _w	Sandy Loam	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.
19" → 63"	2C	Sandy Loam	2.5Y 5/3 light olive brown	36" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
11" → 24"	B _w	Sandy Loam	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.
24" → 60"	2C	Sandy Loam	2.5Y 5/3 light olive brown	38" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
09" → 18"	B _w	Sandy Loam	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.
18" → 51"	2C	Sandy Loam	2.5Y 5/3 light olive brown	40" (m,3,p) 5YR 5/8 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⁺ 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-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 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" → 19"	B _w	Sandy Loam	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.
19" → 61"	2C	Sandy Loam	2.5Y 5/3 light olive brown	35" (m,3,p) 5YR 5/8 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⁺ 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-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 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" → 20"	B _w	Sandy Loam	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.
19" → 43" Bedrock at 43"	2C	Sandy Loam	2.5Y 5/3 light olive brown	32" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
05" → 15"	B _w	Sandy Loam	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.
15" → 60"	2C	Sandy Loam	2.5Y 5/3 light olive brown	42" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
05" → 13"	B _w	Sandy Loam	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.
13" → 22" Bedrock at 22"	2C	Sandy Loam	2.5Y 5/3 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⁺ 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-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 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" → 19"	B _w	Sandy Loam	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.
19" → 43" Bedrock at 43"	2C	Sandy Loam	2.5Y 5/3 light olive brown	36" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
09" → 16"	B _w	Sandy Loam	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.
16" → 60"	2C	Sandy Loam	2.5Y 5/3 light olive brown	32" (m,3,p) 5YR 5/8 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⁺ 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-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 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.
08" → 16"	B _w	Sandy Loam	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.
16" → 22" Bedrock at 22"	2C	Sandy Loam	2.5Y 5/3 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⁺ 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-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 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" → 21"	B _w	Sandy Loam	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.
21" → 53"	2C	Sandy Loam	2.5Y 5/3 light olive brown	36" (m,3,p) 5YR 5/8 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⁺ 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-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 fine	10YR 3/2 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 _C	Loamy Fine Sand	10YR 5/4 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 light brownish gray	48" (m,3,p) 5YR 5/8 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⁺ 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-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 fine	10YR 3/2 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 _C	Loamy Fine Sand	10YR 5/4 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 light brownish gray	50" (m,3,p) 5YR 5/8 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 fine	10YR 3/2 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" → 27"	B _C	Loamy Fine Sand	10YR 5/4 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" → 69"	2C	Loamy Fine Sand	2.5Y 6/2 light brownish gray	33" (m,3,p) 5YR 5/8 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⁺ 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-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 fine	10YR 3/2 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 _C	Loamy Fine Sand	10YR 5/4 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 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⁺ 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-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 fine	10YR 3/2 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 _C	Loamy Fine Sand	10YR 5/4 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 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 fine	10YR 3/2 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 _w	Sandy Loam fine	10YR 5/4 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 light brownish gray	34" (m,3,p) 5YR 5/8 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 fine	10YR 3/2 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 _w	Sandy Loam fine	10YR 5/4 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" R @ 42"	2C	Sandy Loam	2.5Y 6/2 light brownish gray	35" (m,3,p) 5YR 5/8 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⁺ 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-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 fine	10YR 3/2 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 _w	Sandy Loam fine	10YR 5/4 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" R @ 38"	2C	Sandy Loam	2.5Y 6/2 light brownish gray	38" (m,3,p) 5YR 5/8 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+ 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-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 fine	10YR 3/2 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 _w	Sandy Loam fine	10YR 5/4 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" R @ 35"	2C	Sandy Loam	2.5Y 6/2 light brownish gray	33" (m,3,p) 5YR 5/8 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⁺ 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-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 fine	10YR 3/2 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 _w	Sandy Loam fine	10YR 5/4 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 light brownish gray	39" (m,3,p) 5YR 5/8 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⁺ 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-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 fine	10YR 3/2 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 _w	Sandy Loam fine	10YR 5/4 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 light brownish gray	39" (m,3,p) 5YR 5/8 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⁺ 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-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 fine	10YR 3/2 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 _w	Sandy Loam fine	10YR 5/4 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 light brownish gray	37" (m,3,p) 5YR 5/8 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 fine	10YR 3/2 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 _w	Sandy Loam fine	10YR 5/4 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 light brownish gray	39" (m,3,p) 5YR 5/8 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⁺ 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-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 fine	10YR 3/2 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 _w	Sandy Loam fine	10YR 5/4 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 light brownish gray	40" (m,3,p) 5YR 5/8 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 fine	10YR 3/2 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 _w	Sandy Loam fine	10YR 5/4 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 light brownish gray	31" (m,3,p) 5YR 5/8 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⁺ 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-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 fine	10YR 3/2 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" → 17"	B _w	Sandy Loam fine	10YR 5/4 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.
17" → 41"	2C	Sandy Loam	2.5Y 6/2 light brownish gray	23" (m,3,p) 5YR 5/8 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 fine	10YR 3/2 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 _w	Sandy Loam fine	10YR 5/4 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 light brownish gray	30" (m,3,p) 5YR 5/8 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 fine	10YR 3/2 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 _w	Sandy Loam fine	10YR 5/4 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 light brownish gray	29" (m,3,p) 5YR 5/8 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⁺ 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-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 fine	10YR 3/2 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 _w	Sandy Loam fine	10YR 5/4 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 light brownish gray	29" (m,3,p) 5YR 5/8 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 fine	10YR 3/2 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 _w	Sandy Loam fine	10YR 5/4 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 light brownish gray	30" (m,3,p) 5YR 5/8 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 fine	10YR 3/2 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 _w	Sandy Loam fine	10YR 5/4 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 light brownish gray	33'' (m,3,p) 5YR 5/8 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⁺ 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 ► P24-1

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 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.
08'' → 17''	B _w	Loamy Fine 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.
17'' → 36''	2C	Loamy Fine Sand	2.5Y 6/2 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.

P24-2 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⁺ 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 ► P24-2

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 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.
07" → 15"	B _w	Loamy Fine 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.
15" → 36"	2C	Loamy Fine Sand	2.5Y 6/2 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.

P24-3 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 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.
07" → 15"	B _w	Loamy Fine 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.
15" → 36"	2C	Loamy Fine Sand	2.5Y 6/2 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.

P24-4 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 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.
07" → 14"	B _w	Loamy Fine 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.
14" → 33"	2C	Loamy Fine Sand	2.5Y 6/2 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.

P24-5 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 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.
05'' → 16''	B _w	Loamy Fine 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.
16'' → 36''	2C	Loamy Fine Sand	2.5Y 6/2 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⁺ 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 ► P24-6

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 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.
08" → 14"	B _w	Loamy Fine 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.
14" → 36"	2C	Loamy Fine Sand	2.5Y 6/2 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.

P24-7 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⁺ 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 ► P24-7

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 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.
07'' → 15''	B _w	Loamy Fine 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.
15'' → 36''	2C	Loamy Fine Sand	2.5Y 6/2 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⁺ 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 ► P24-8

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 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'' → 21''	B _w	Loamy Fine 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.
21'' → 36''	2C	Loamy Fine Sand	2.5Y 6/2 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⁺ 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 ► P24-9

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 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.
08'' → 20''	B _w	Sandy Loam fine	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.
20'' → 36''	2C	Loamy Fine Sand	2.5Y 6/2 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.

P24-10 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 _p	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.
14" → 24"	B _w	Sandy Loam fine	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.
24" → 36"	2C	Loamy Fine Sand	2.5Y 6/2 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⁺ 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 ► P24-11

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 _p	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" → 20"	B _w	Sandy Loam fine	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.
20" → 36"	2C	Loamy Fine Sand	2.5Y 6/2 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⁺ 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 ► P24-12

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 _p	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.
11'' → 18''	B _w	Sandy Loam fine	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.
18'' → 36''	2C	Loamy Fine Sand	2.5Y 6/2 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⁺ 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 ► P24-13

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 _p	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.
15'' → 19''	B _w	Sandy Loam fine	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.
19'' → 35''	2C	Loamy Fine Sand	2.5Y 6/2 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⁺ 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 ► P24-14

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 _p	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.
15" → 19"	B _w	Sandy Loam fine	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.
19" → 35"	2C	Sandy Loam fine	2.5Y 5/4 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⁺ 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 ► P24-15

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 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.
08" → 14"	B _w	Sandy Loam fine	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.
14" → 36"	2C	Sandy Loam fine	2.5Y 5/4 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 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.
09" → 13"	B _w	Sandy Loam fine	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.
13" → 36"	2C	Sandy Loam fine	2.5Y 5/4 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 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.
07" → 16"	B _w	Sandy Loam fine	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.
16" → 36"	2C	Sandy Loam fine	2.5Y 5/4 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.

P24-18 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 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" → 22"	B _w	Sandy Loam fine	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.
22" → 36"	2C	Sandy Loam fine	2.5Y 5/6 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.

P24-19 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⁺ 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 ► P24-19

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 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.
09" → 16"	B _w	Sandy Loam fine	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.
16" → 36"	2C	Sandy Loam fine	2.5Y 5/6 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.

P24-20 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 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.
11" → 18"	B _w	Sandy Loam fine	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.
18" → 36"	2C	Sandy Loam fine	2.5Y 5/6 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 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.
06" → 17"	B _w	Sandy Loam fine	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.
17" → 36"	2C	Sandy Loam fine	2.5Y 5/6 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 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.
05" → 17"	B _w	Sandy Loam fine	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.
17" → 36"	2C	Sandy Loam fine	2.5Y 5/6 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⁺ 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 ► P24-23

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 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.
05" → 16"	B _w	Sandy Loam fine	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.
16" → 36"	2C	Sandy Loam fine	2.5Y 5/4 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⁺ 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 ► P24-24

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 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.
08" → 13"	B _w	Sandy Loam fine	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.
13" → 36"	2C	Sandy Loam fine	2.5Y 5/4 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.

P24-25 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⁺ 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 ► P24-25

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 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.
09'' → 14''	B _w	Sandy Loam fine	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.
14'' → 36''	2C	Sandy Loam fine	2.5Y 5/4 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⁺ 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 ► P24-26

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 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'' → 16''	B _w	Sandy Loam fine	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.
16'' → 36''	2C	Sandy Loam fine	2.5Y 5/4 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⁺ feet Drainage way: 50⁺ feet Drinking water well: 100⁺ feet Abutting septic system: 50⁺ feet

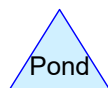
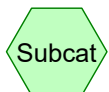
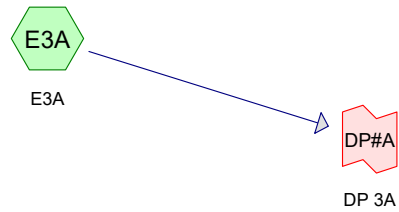
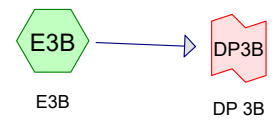
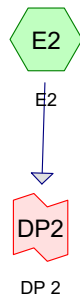
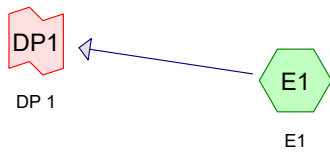
Wetlands: 50⁺ feet Public water supply reservoir: 400⁺ feet Tributary to reservoir: 200⁺ feet

SOIL PROFILE ► P24-27

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 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.
09'' → 15''	B _w	Sandy Loam fine	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.
15'' → 36''	2C	Sandy Loam fine	2.5Y 5/4 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.

IIX. Appendix

a. Existing Conditions HydroCAD Report



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Page 2

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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Page 3

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (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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Page 4

Area Listing (all nodes)

Area (acres)	CN	Description (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)
39.049	50	TOTAL AREA

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Page 5

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment 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	
39.049		TOTAL AREA

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Page 6

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
7.443	0.000	10.254	0.000	0.000	17.697	>75% Grass cover, Good	E1, E2, E3A, 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, E3A, E3B
0.000	0.000	2.272	0.000	0.000	2.272	Woods/grass comb., Good	E3B
23.153	0.000	15.897	0.000	0.000	39.049	TOTAL AREA	

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Type III 24-hr 2-Year Rainfall=3.15"

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Page 7

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

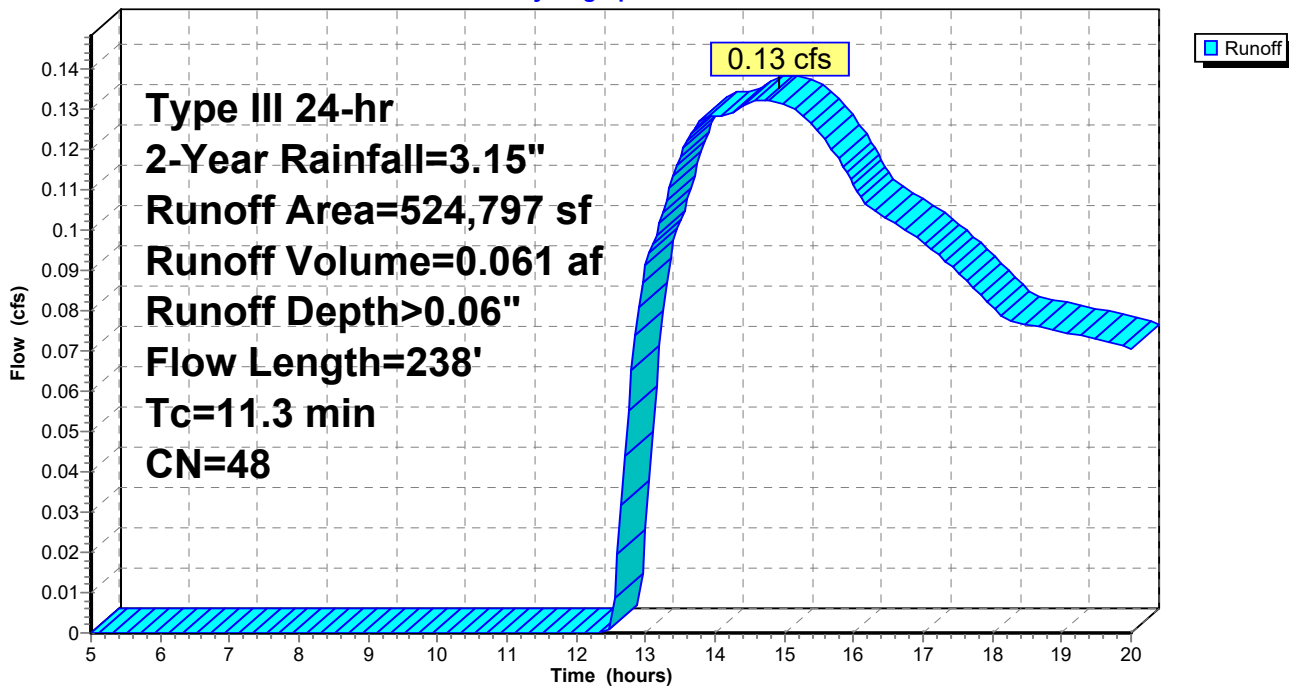
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.15"

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		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
2.6	188	0.0600	1.22		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
11.3	238	Total			

Subcatchment E1: E1

Hydrograph



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Type III 24-hr 2-Year Rainfall=3.15"

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Page 9

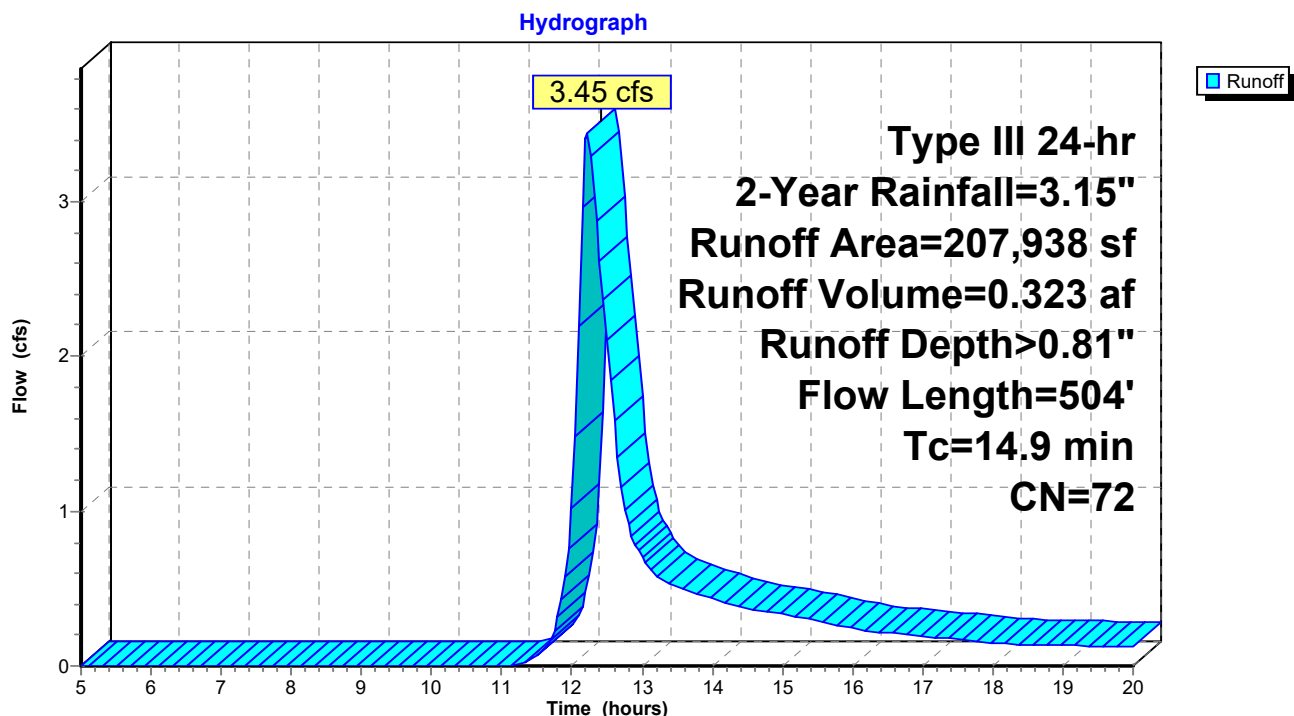
Summary for Subcatchment E2: E2

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		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
2.0	147	0.0300	1.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
7.2	307	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
14.9	504	Total			

Subcatchment E2: E2

Summary for Subcatchment E3A: E3A

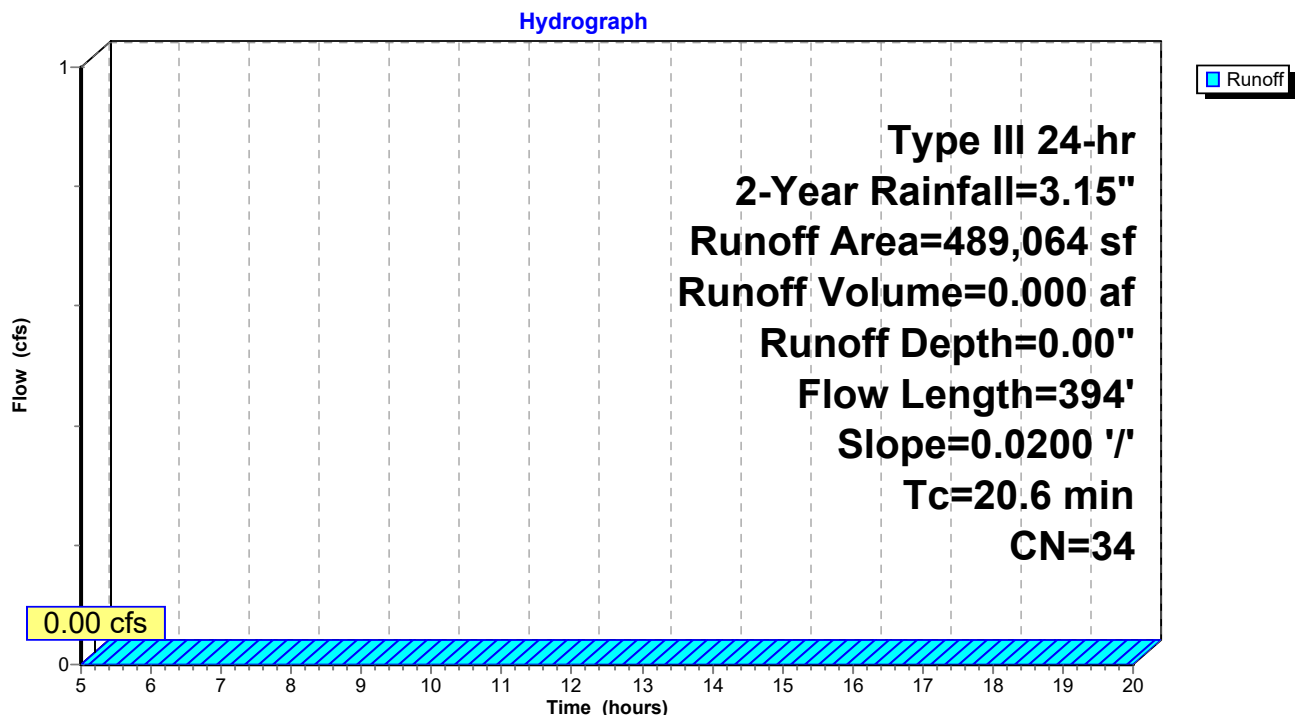
Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Link DP#A : DP 3A

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		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
8.1	344	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.6	394	Total			

Subcatchment E3A: E3A



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Type III 24-hr 2-Year Rainfall=3.15"

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Page 11

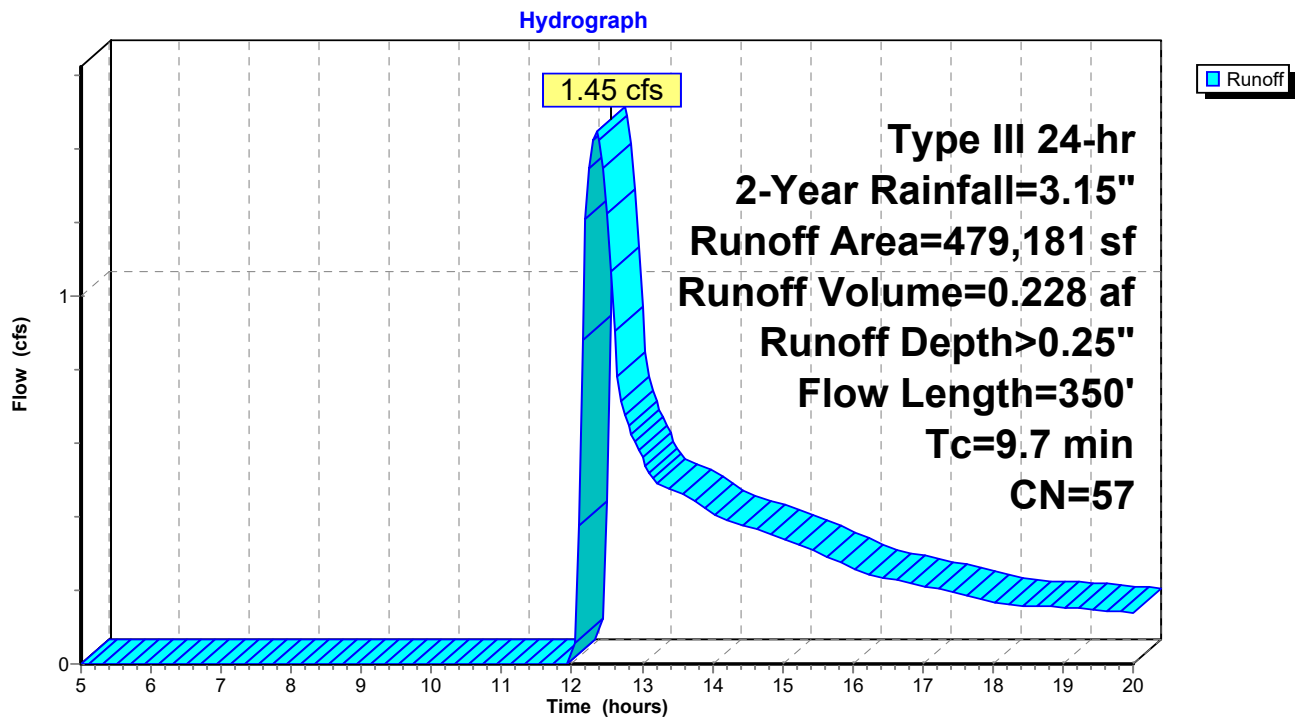
Summary for Subcatchment E3B: E3B

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, Range n= 0.130 P2= 3.10"
5.8	300	0.0300	0.87		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
9.7	350	Total			

Subcatchment E3B: E3B

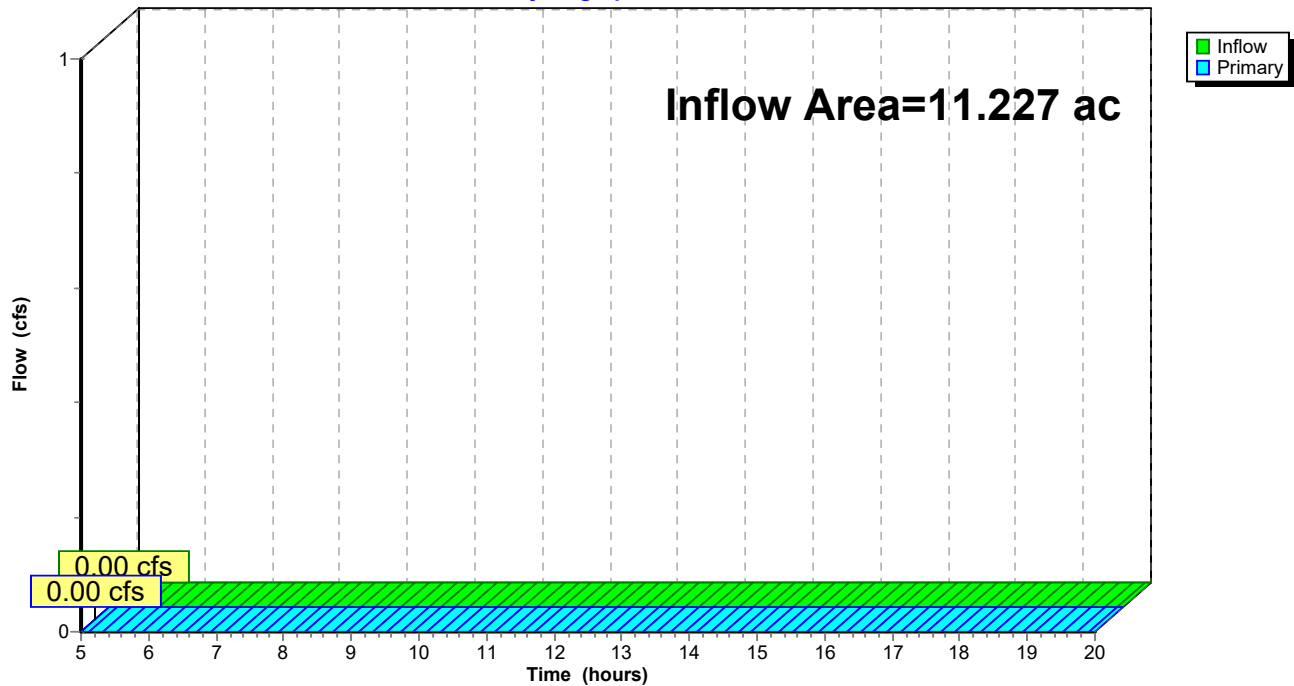
Summary for Link DP#A: DP 3A

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

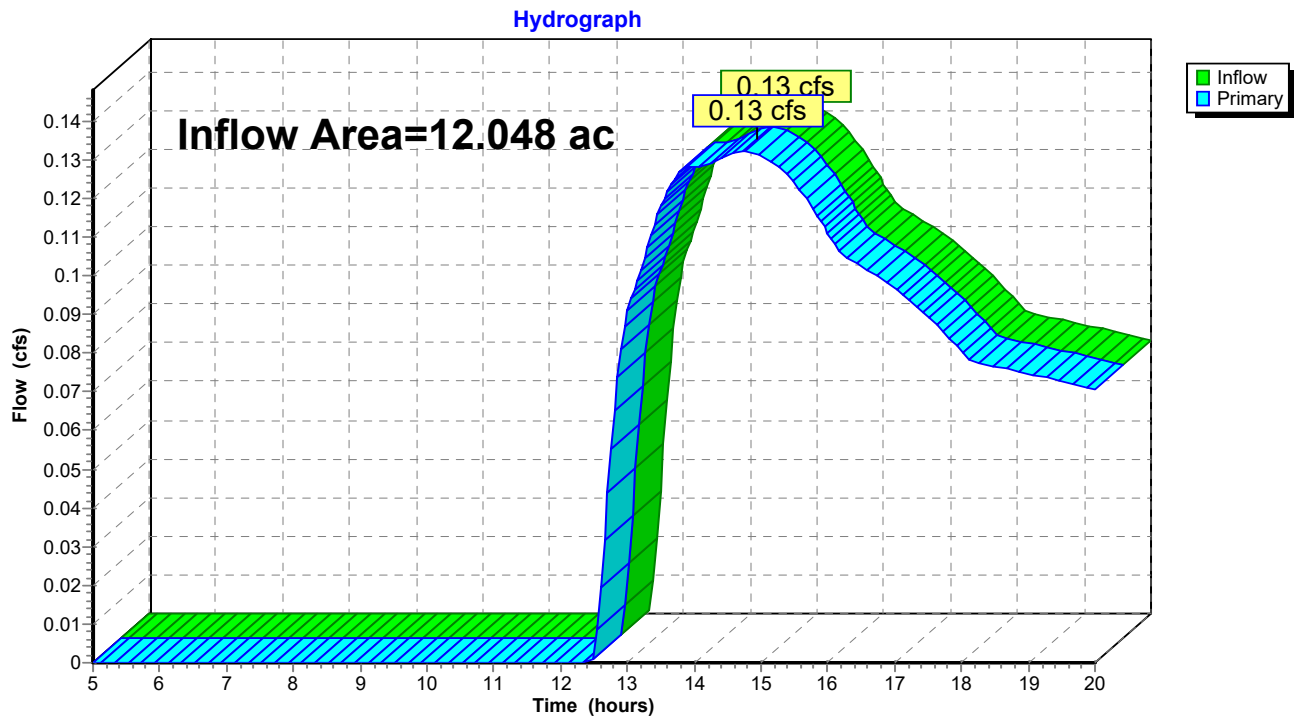


Summary for Link DP1: DP 1

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

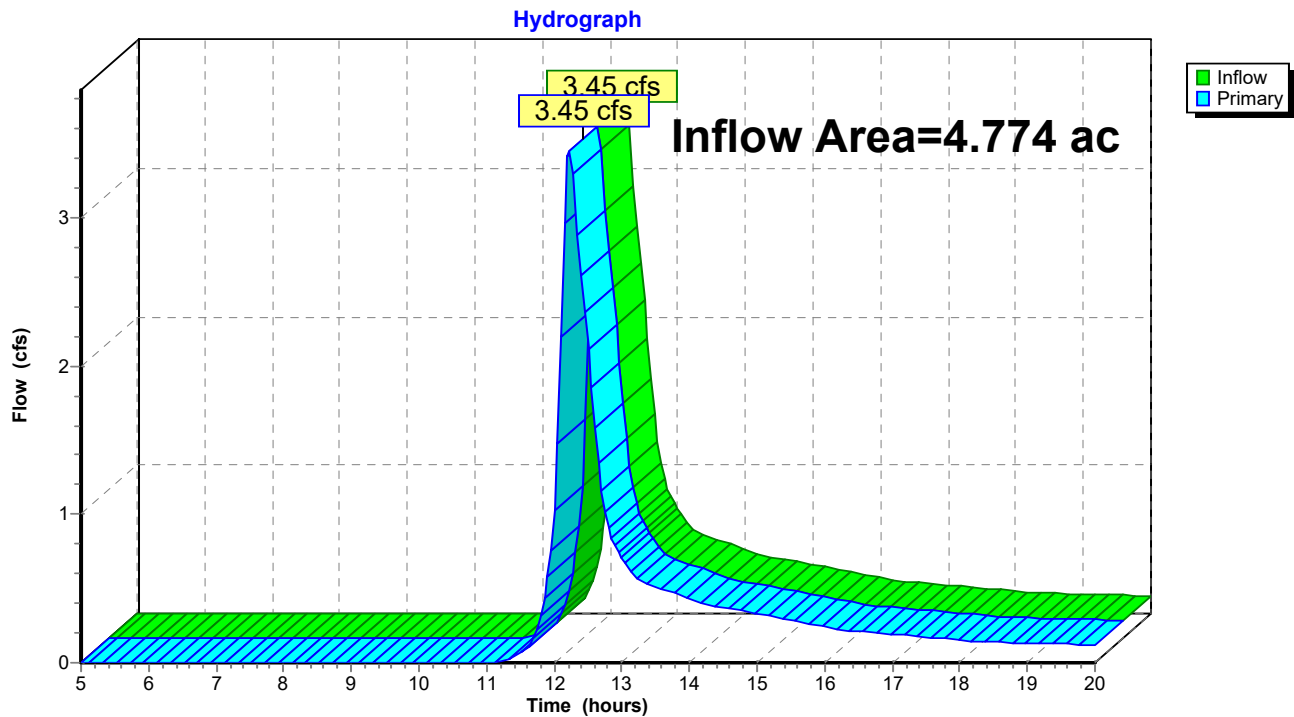


Summary for Link DP2: DP 2

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



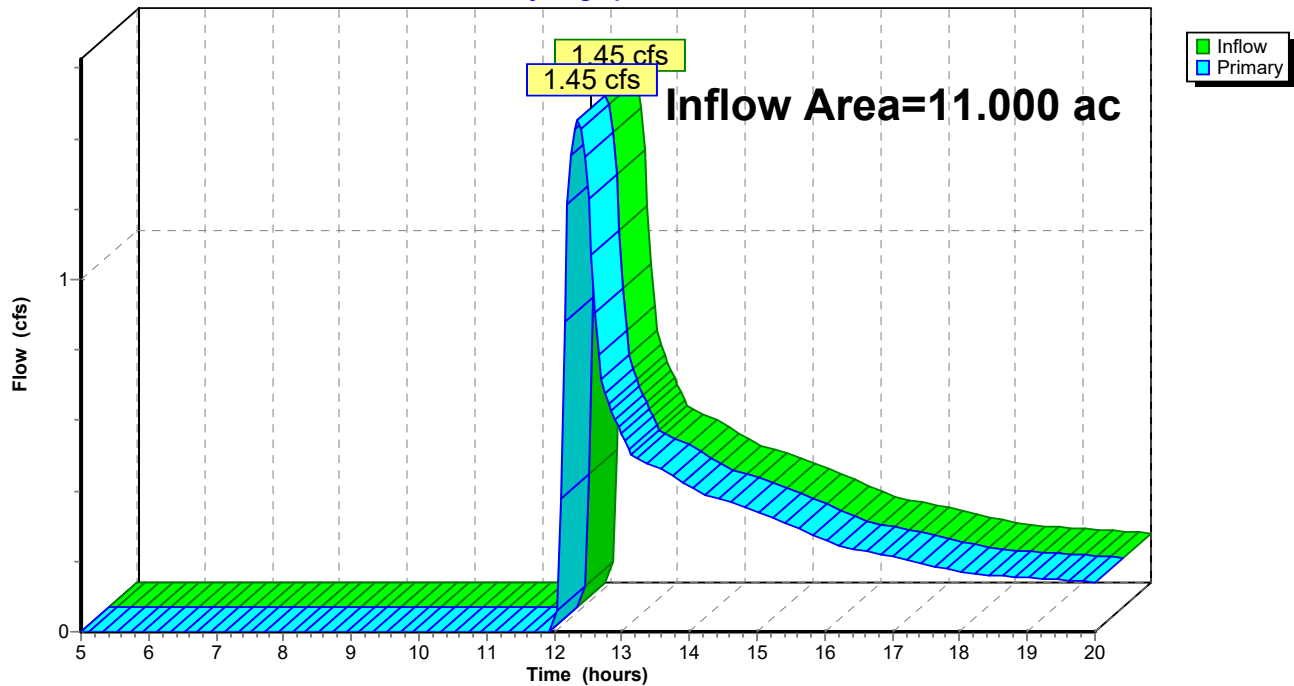
Summary for Link DP3B: DP 3B

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



RH Exist 8-11-25*Type III 24-hr 10-Year Rainfall=4.83"*

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Page 16

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>0.45"
Flow Length=238' Tc=11.3 min CN=48 Runoff=3.11 cfs 0.452 af

Subcatchment E2: E2

Runoff Area=207,938 sf 0.00% Impervious Runoff Depth>1.90"
Flow Length=504' Tc=14.9 min CN=72 Runoff=8.60 cfs 0.756 af

Subcatchment E3A: E3A

Runoff Area=489,064 sf 0.94% Impervious Runoff Depth>0.03"
Flow Length=394' Slope=0.0200 '/' Tc=20.6 min CN=34 Runoff=0.06 cfs 0.024 af

Subcatchment E3B: E3B

Runoff Area=479,181 sf 0.00% Impervious Runoff Depth>0.91"
Flow Length=350' Tc=9.7 min CN=57 Runoff=9.40 cfs 0.830 af

Link DP#A: DP 3A

Inflow=0.06 cfs 0.024 af
Primary=0.06 cfs 0.024 af

Link DP1: DP 1

Inflow=3.11 cfs 0.452 af
Primary=3.11 cfs 0.452 af

Link DP2: DP 2

Inflow=8.60 cfs 0.756 af
Primary=8.60 cfs 0.756 af

Link DP3B: DP 3B

Inflow=9.40 cfs 0.830 af
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

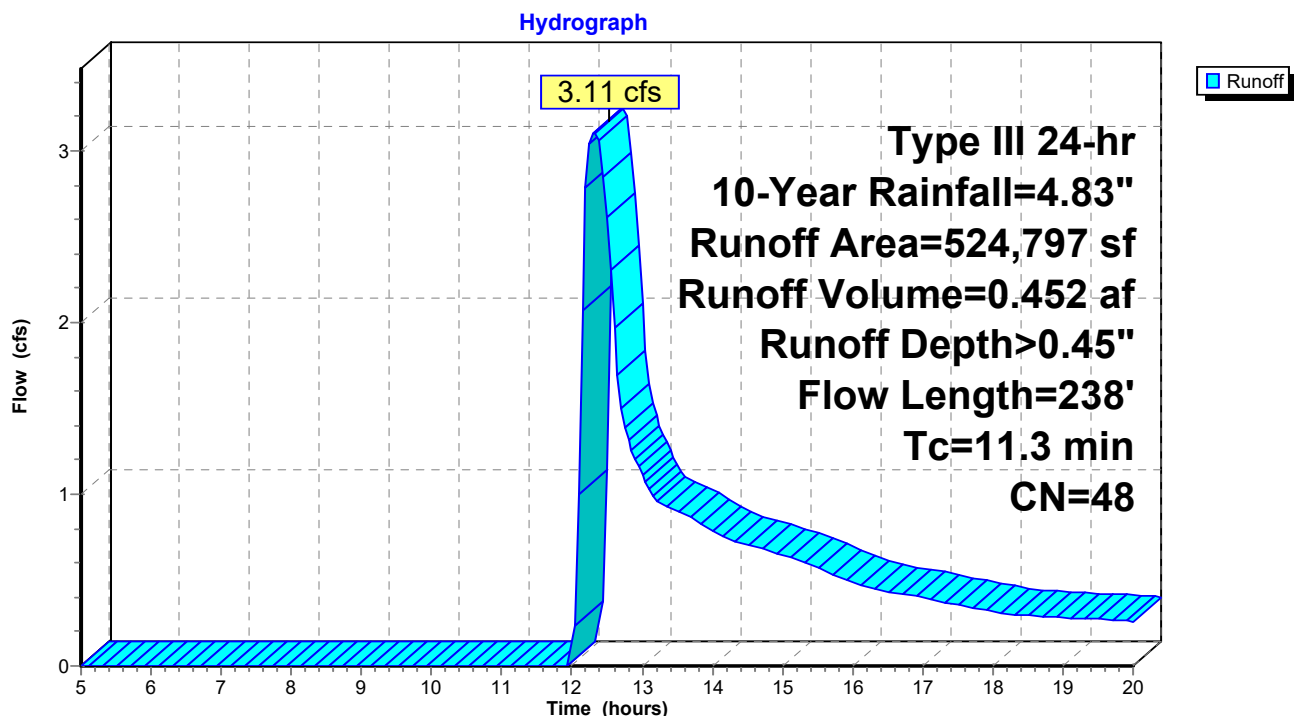
Summary for Subcatchment E1: E1

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		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
2.6	188	0.0600	1.22		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
11.3	238	Total			

Subcatchment E1: E1

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Type III 24-hr 10-Year Rainfall=4.83"

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Page 18

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

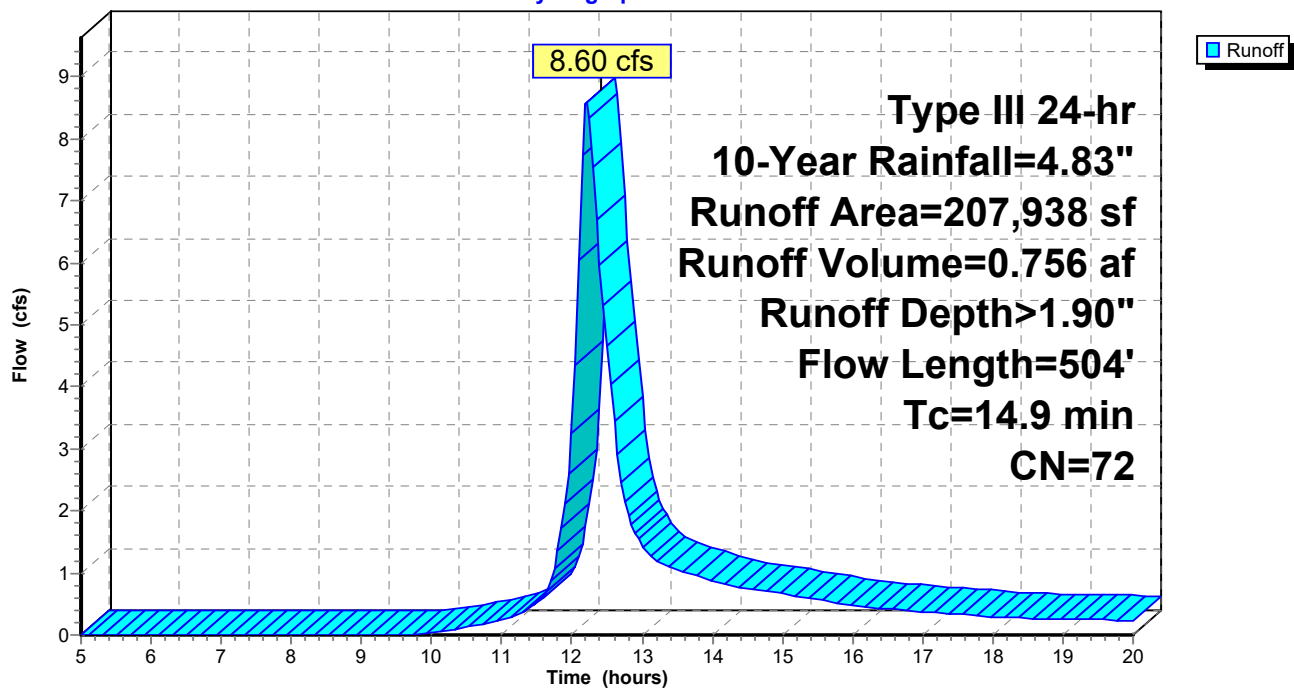
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.83"

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		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
2.0	147	0.0300	1.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
7.2	307	0.0200	0.71		Shallow Concentrated Flow, 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

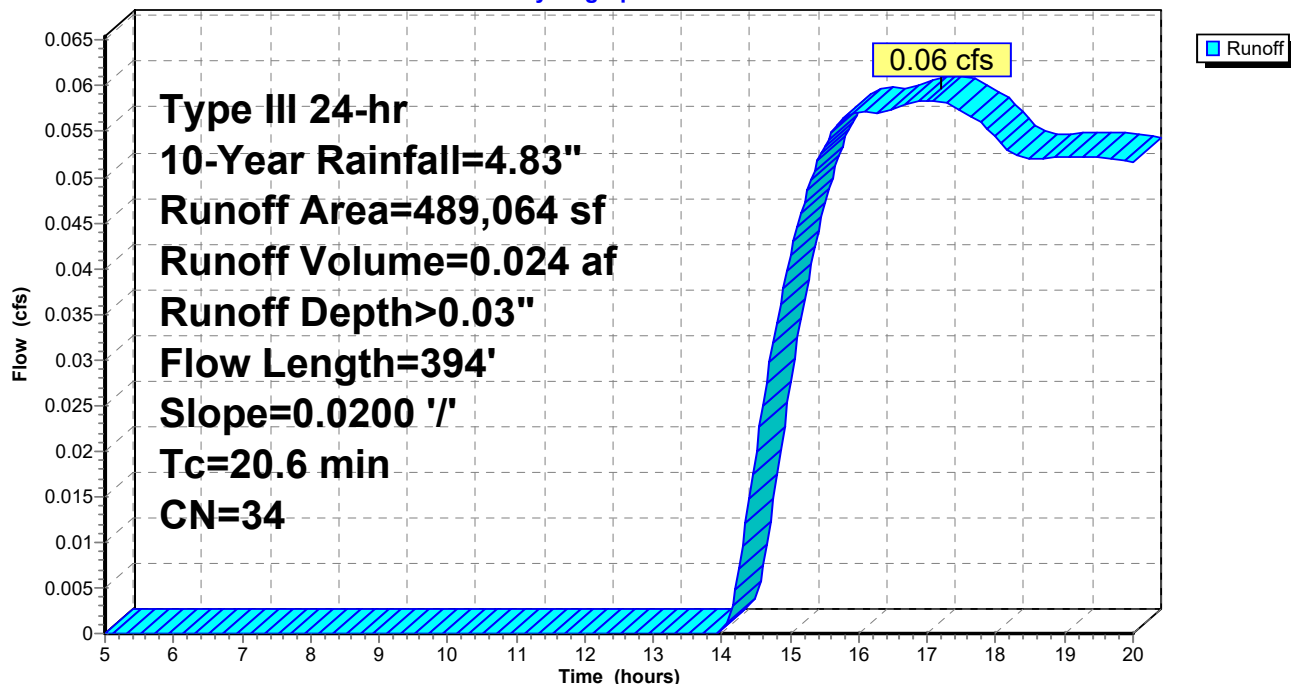
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.83"

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		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
8.1	344	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.6	394	Total			

Subcatchment E3A: E3A

Hydrograph



RH Exist 8-11-25

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Type III 24-hr 10-Year Rainfall=4.83"

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Page 20

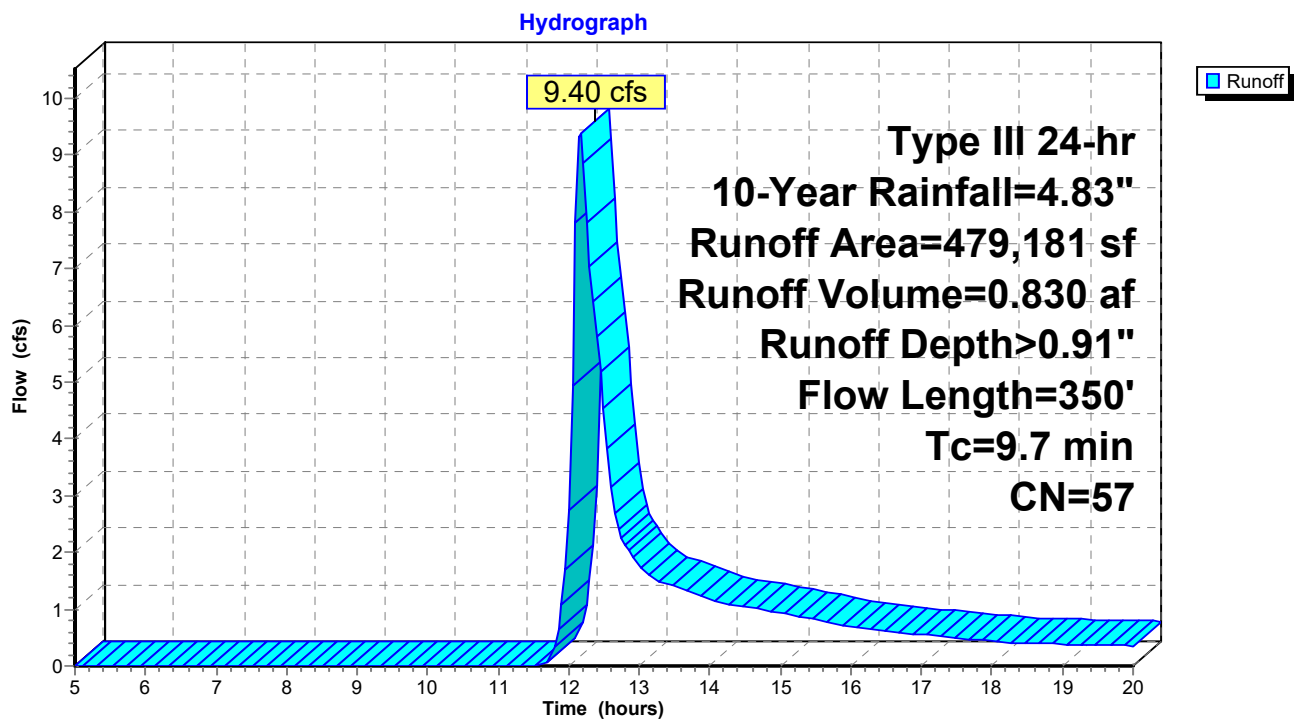
Summary for Subcatchment E3B: E3B

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, Range n= 0.130 P2= 3.10"
5.8	300	0.0300	0.87		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
9.7	350	Total			

Subcatchment E3B: E3B

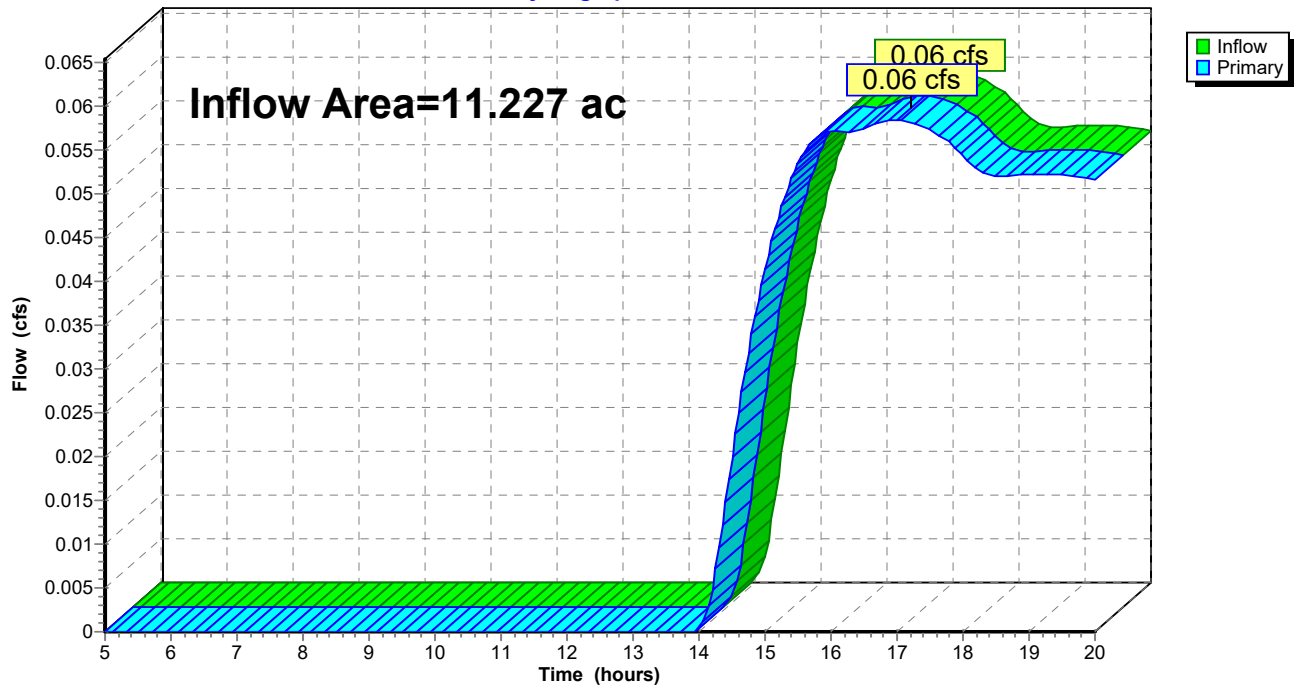
Summary for Link DP#A: DP 3A

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

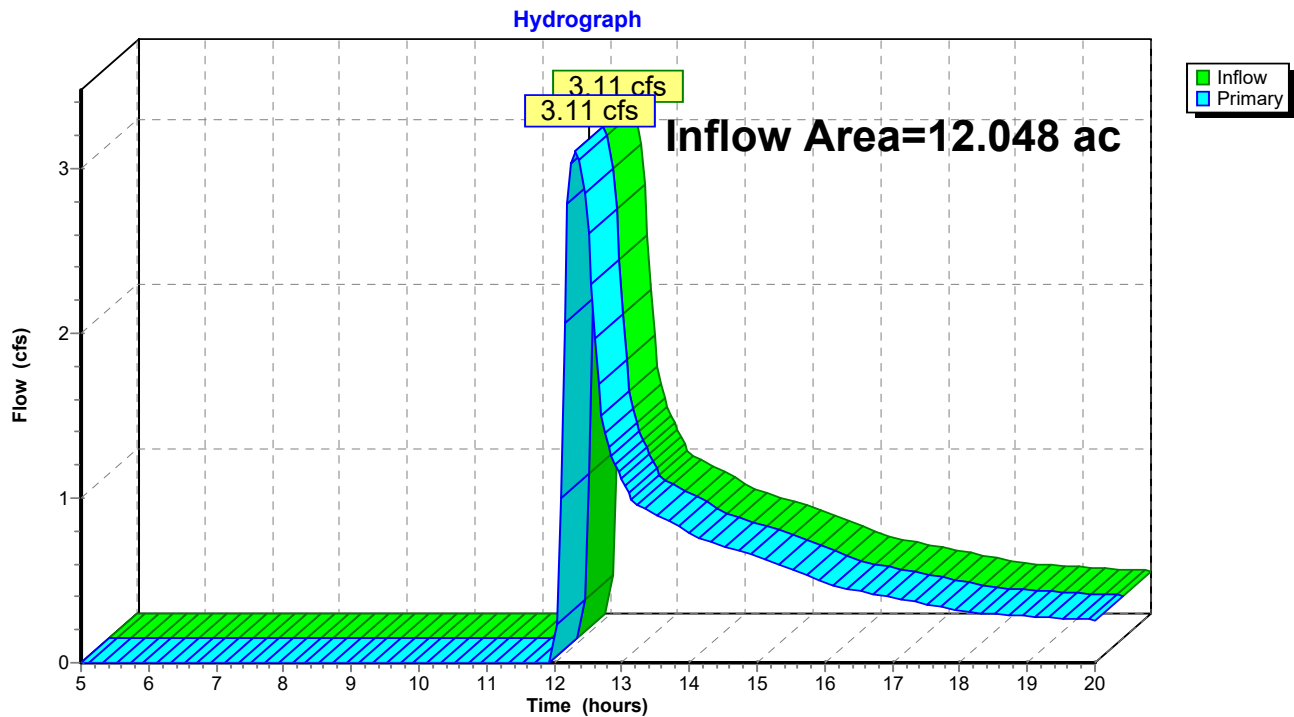


Summary for Link DP1: DP 1

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

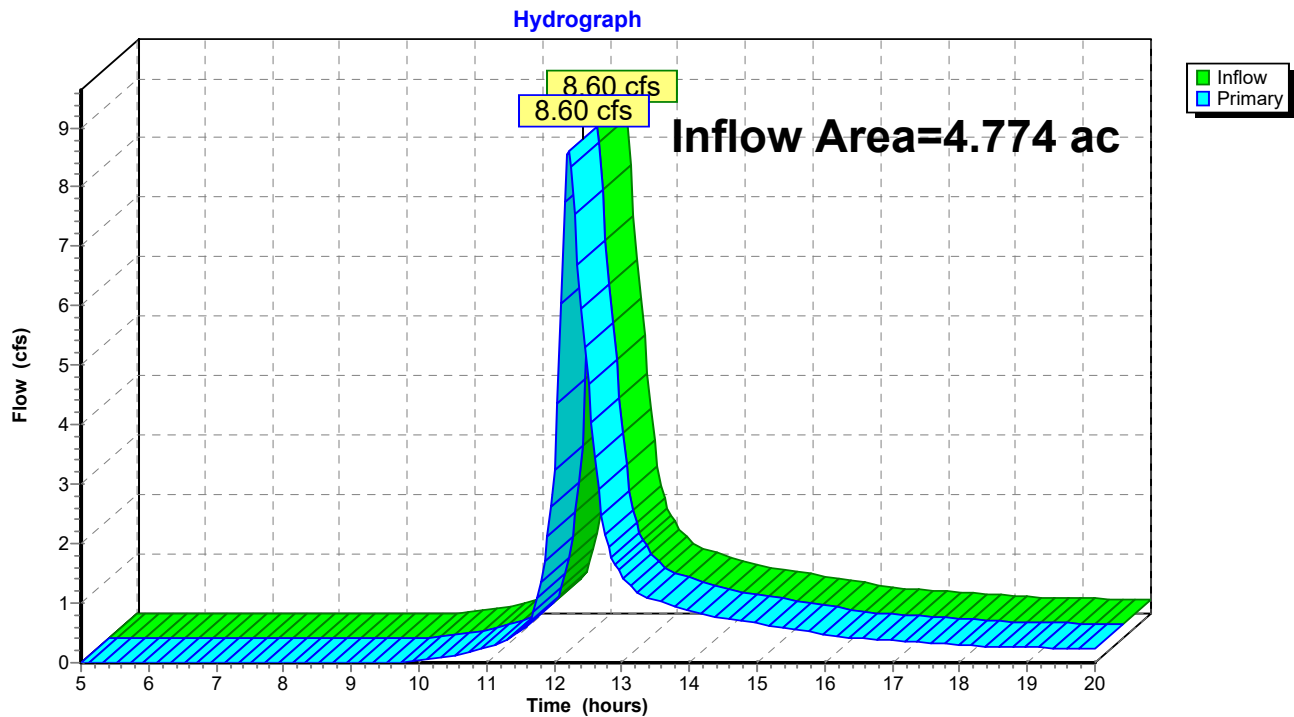


Summary for Link DP2: DP 2

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



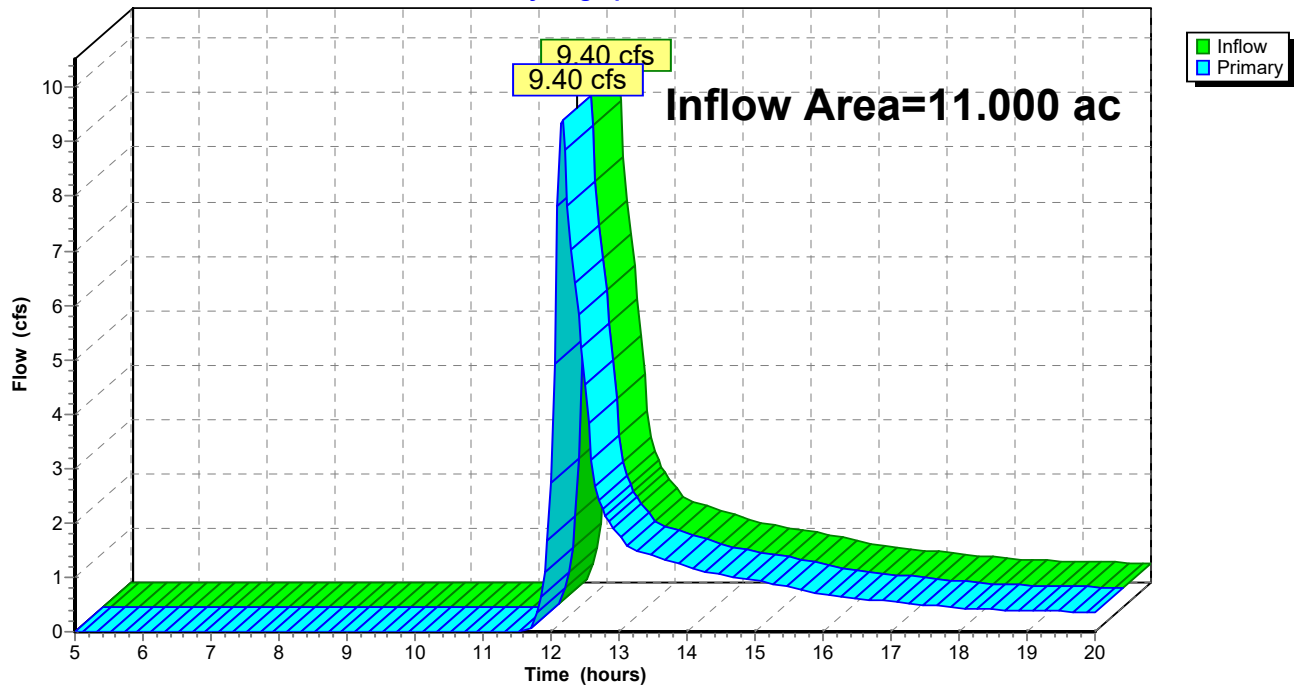
Summary for Link DP3B: DP 3B

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"*

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Page 25

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

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Type III 24-hr 100-Year Rainfall=8.94"

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Page 26

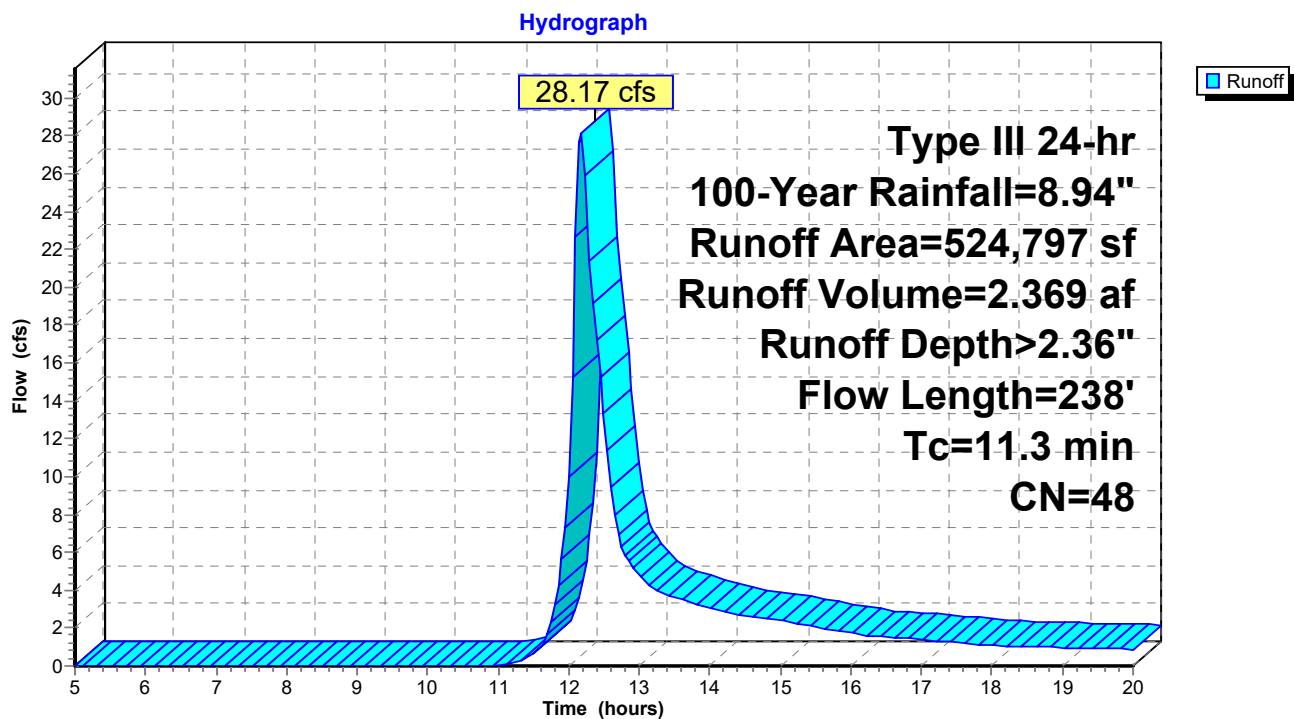
Summary for Subcatchment E1: E1

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		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
2.6	188	0.0600	1.22		Shallow Concentrated Flow, 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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Page 27

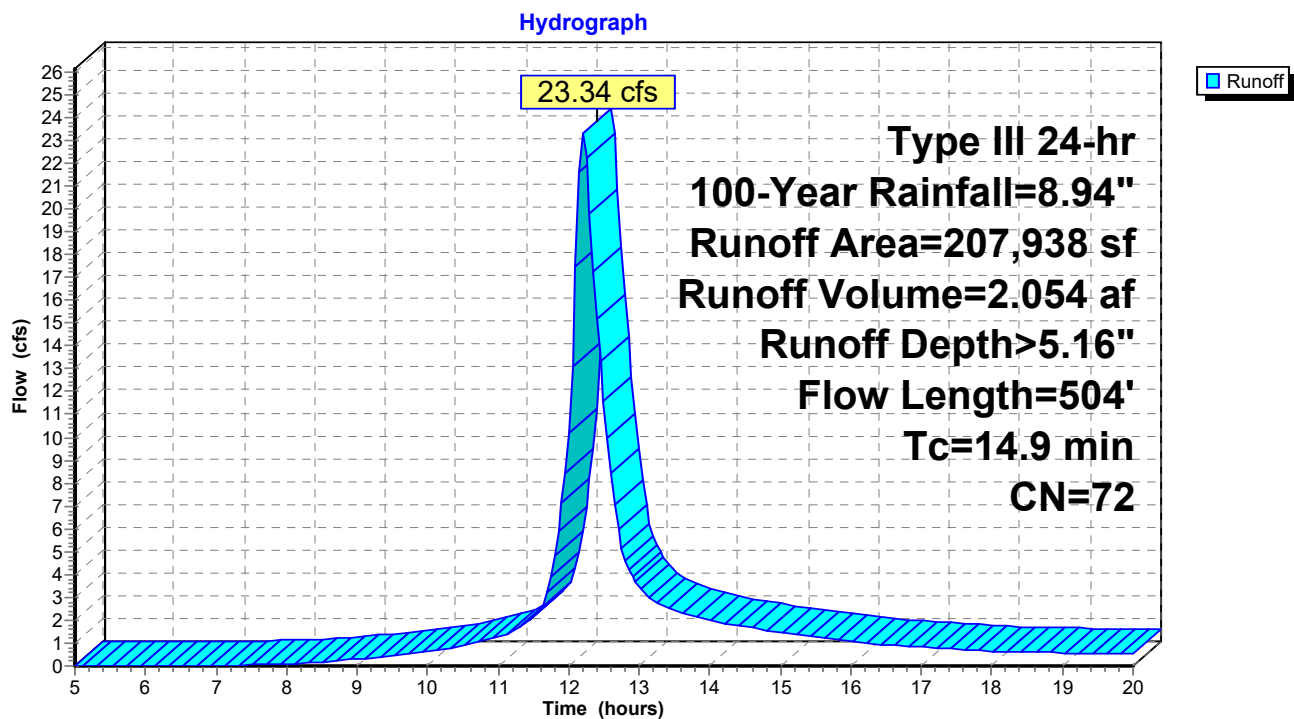
Summary for Subcatchment E2: E2

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		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
2.0	147	0.0300	1.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
7.2	307	0.0200	0.71		Shallow Concentrated Flow, 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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Page 28

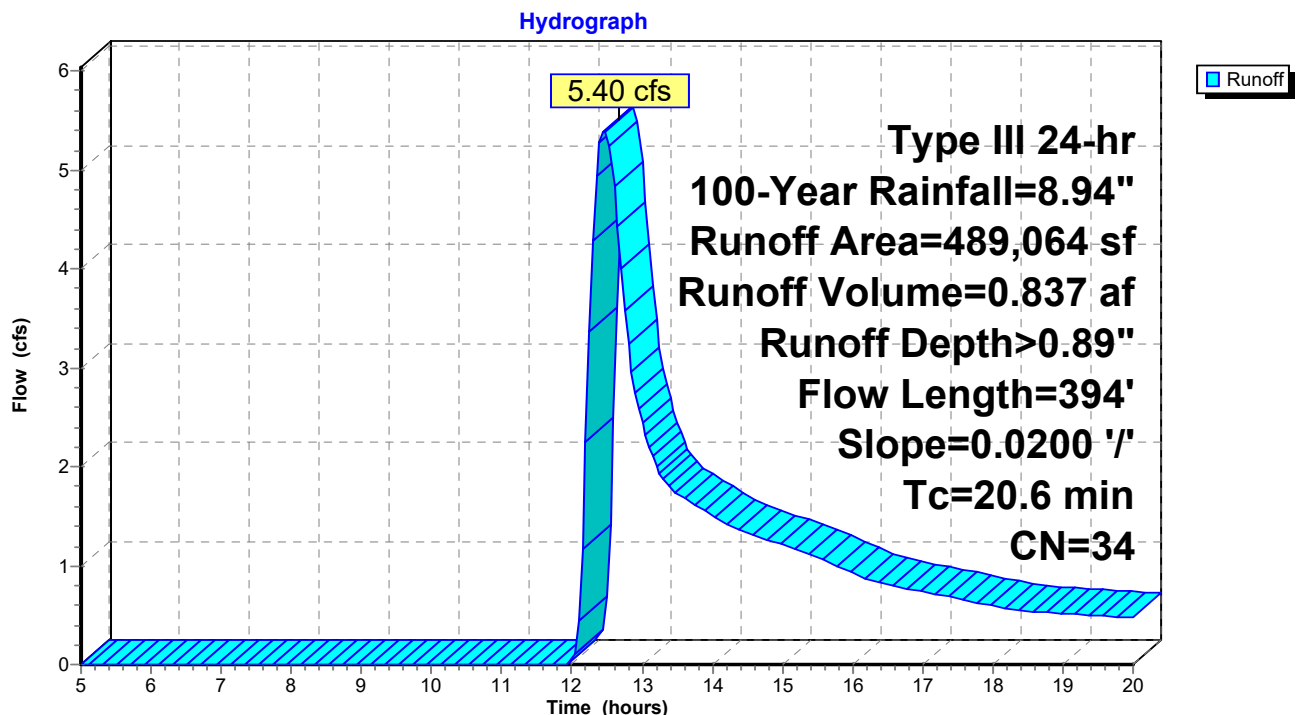
Summary for Subcatchment E3A: E3A

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		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
8.1	344	0.0200	0.71		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.6	394	Total			

Subcatchment E3A: E3A

Summary for Subcatchment E3B: E3B

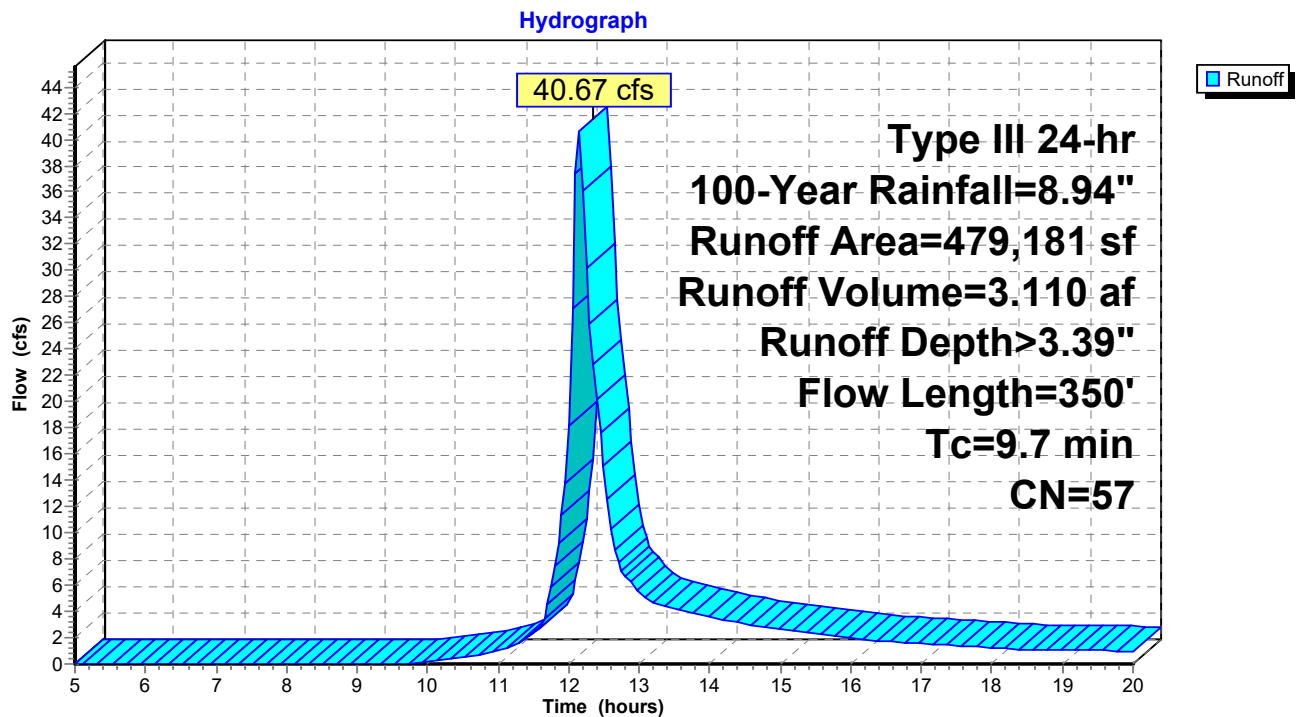
Runoff = 40.67 cfs @ 12.15 hrs, Volume= 3.110 af, Depth> 3.39"
Routed to Link DP3B : DP 3B

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, Range n= 0.130 P2= 3.10"
5.8	300	0.0300	0.87		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
9.7	350	Total			

Subcatchment E3B: E3B



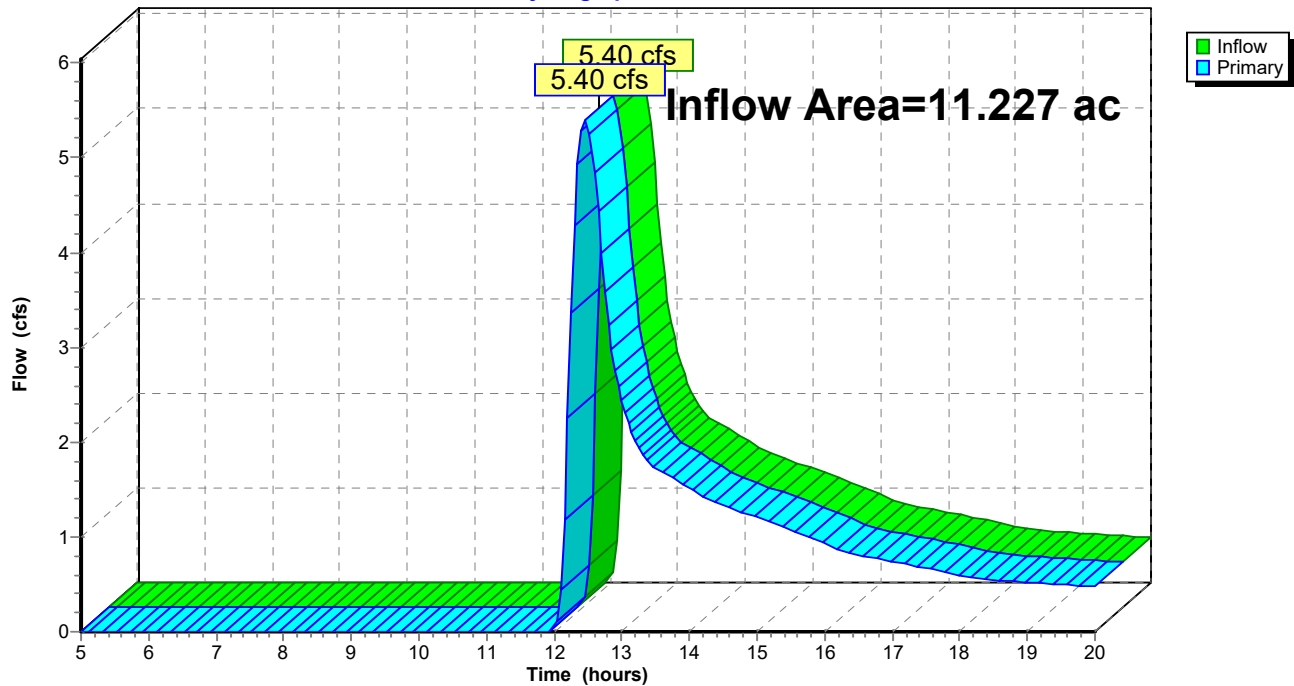
Summary for Link DP#A: DP 3A

Inflow Area = 11.227 ac, 0.94% Impervious, Inflow Depth > 0.89" 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

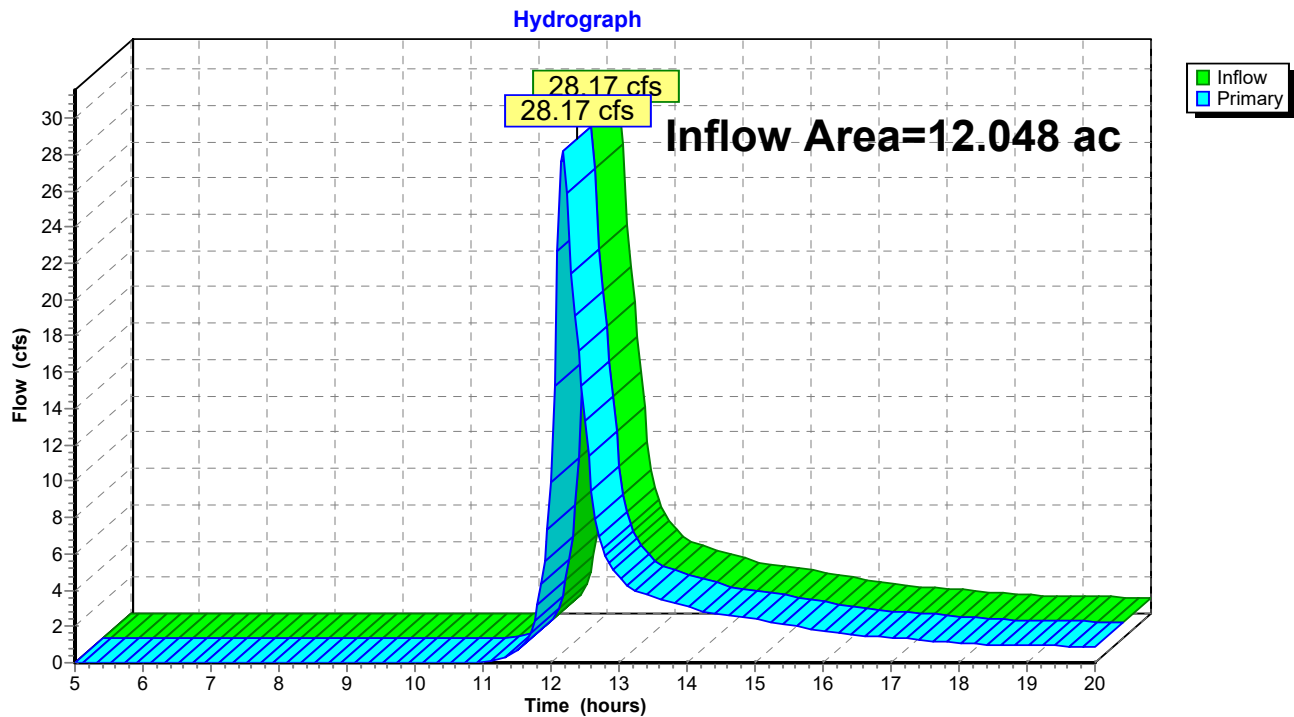


Summary for Link DP1: DP 1

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

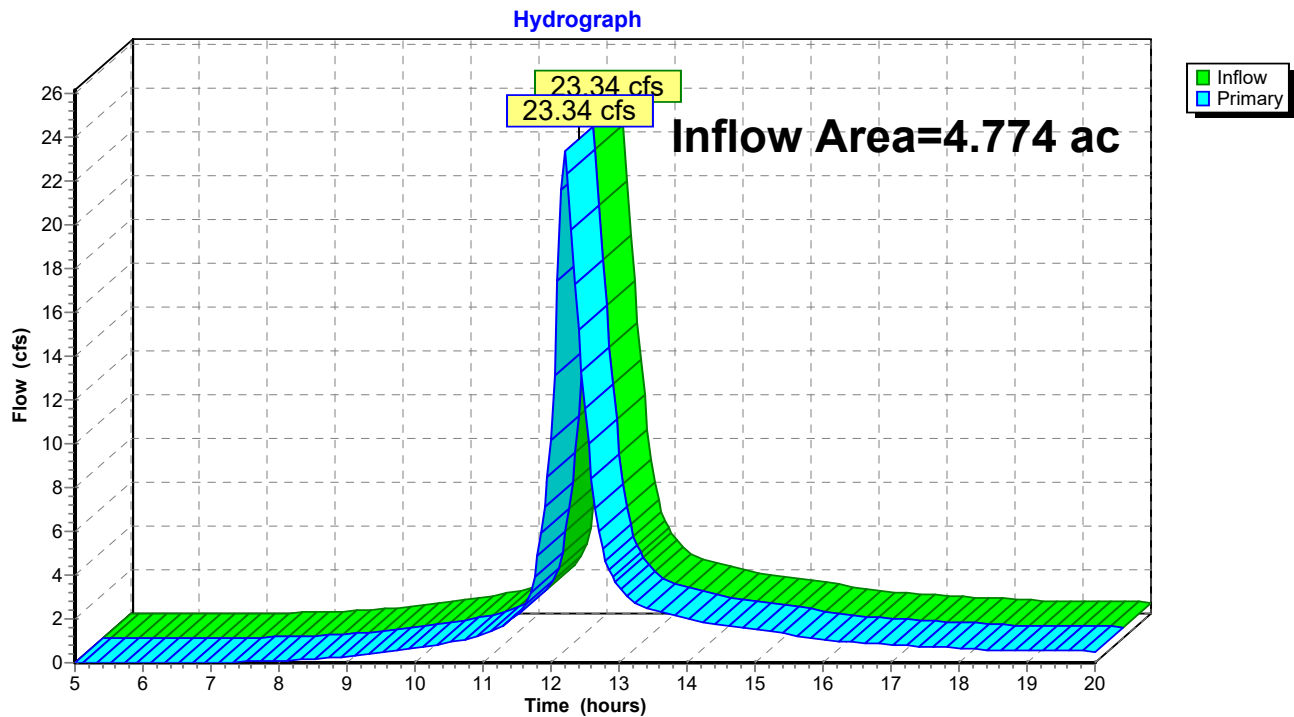


Summary for Link DP2: DP 2

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



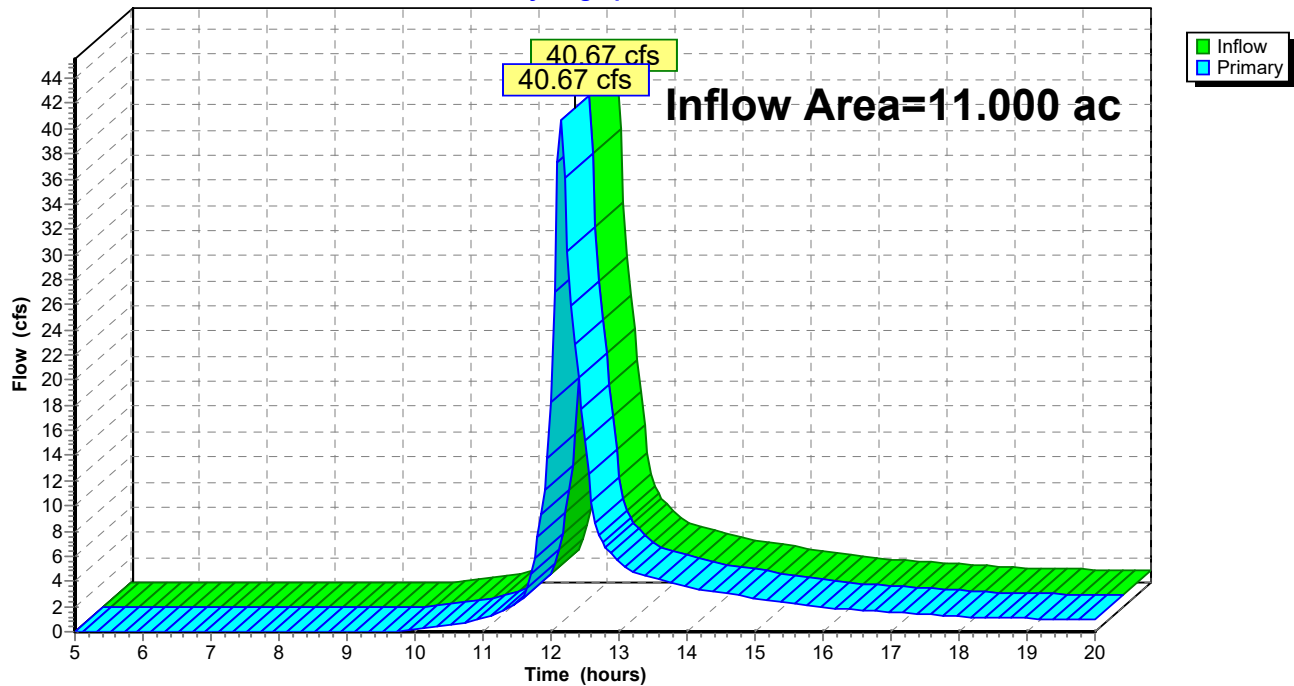
Summary for Link DP3B: DP 3B

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

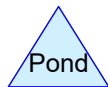
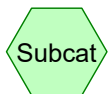
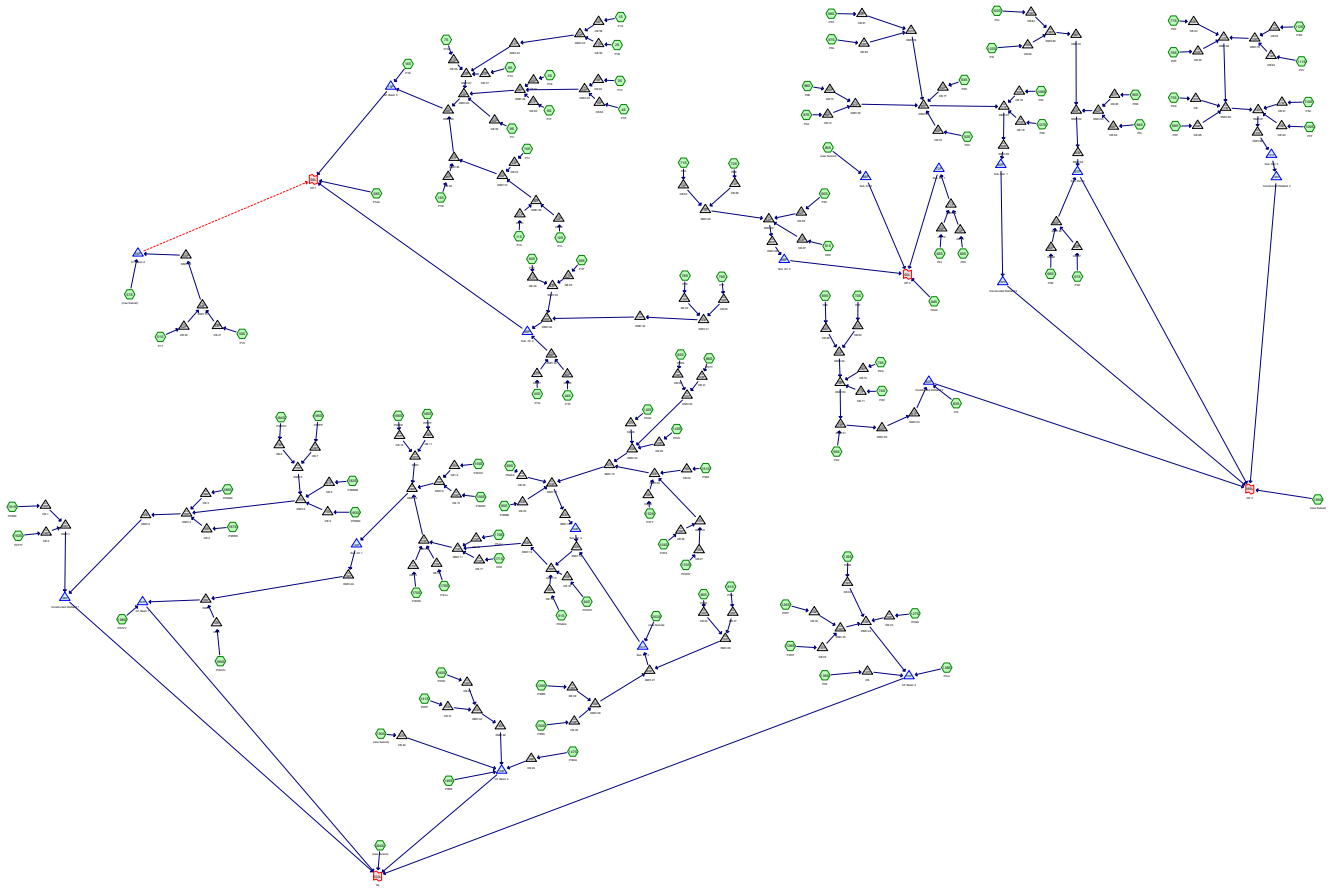
Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link DP3B: DP 3B

Hydrograph



b. Proposed Conditions HydroCAD Report



Routing Diagram for RH Post 8-11-25
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Page 2

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

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
9.019	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)
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)
5.409	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)
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)
0.120	98	Unconnected pavement, HSG A (58S, 84S, 189S, 202S)
0.165	98	Unconnected pavement, HSG C (44S, 84S, 85S, 189S)
3.514	98	Unconnected roofs, HSG A (44S, 45S, 50S, 51S, 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, 170S, 171S, 175S, 176S, 182S, 183S, 184S, 185S, 186S, 187S, 189S, 190S, 195S, 202S, 204S)
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)
5.595	30	Woods, Good, HSG A (57S, 58S, 184S, 186S, 189S, 191S, 204S)
1.957	70	Woods, Good, HSG C (58S, 84S, 189S)
39.794	70	TOTAL AREA

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
23.658	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
0.000	HSG B	
15.857	HSG C	1S, 2S, 3S, 4S, 5S, 6S, 7S, 8S, 9S, 10S, 11S, 12S, 13S, 14S, 39S, 40S, 44S, 45S, 58S, 60S, 61S, 62S, 63S, 64S, 65S, 66S, 67S, 68S, 69S, 70S, 71S, 72S, 73S, 75S, 76S, 77S, 78S, 79S, 83S, 84S, 85S, 86S, 87S, 88S, 92S, 93S, 95S, 97S, 98S, 102S, 103S, 107S, 108S, 109S, 110S, 111S, 112S, 127S, 189S
0.000	HSG D	
0.280	Other	58S
39.794		TOTAL AREA

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Page 5

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
9.019	0.000	5.952	0.000	0.000	14.971	>75% Grass cover, Good	1S, 2S, 3S, 4S, 5S, 6S, 8S, 9S, 11S, 12S, 13S, 14S, 39S, 44S, 45S, 50S, 51S, 57S, 58S, 60S, 61S, 62S, 63S, 64S, 65S, 66S, 67S, 68S, 69S, 71S, 72S, 73S, 74S, 75S, 76S, 77S, 78S, 79S, 80S, 81S, 82S, 83S, 84S, 85S, 86S, 87S, 88S, 89S, 90S, 91S,

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Page 6

Ground Covers (all nodes) (continued)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
5.409	0.000	5.270	0.000	0.000	10.679	Paved parking	1S, 2S, 3S, 4S, 5S, 6S, 7S, 8S, 9S, 10S, 11S, 12S, 13S, 39S, 40S, 44S, 45S, 50S, 51S, 60S, 61S, 62S, 63S, 64S, 65S, 66S, 67S, 68S, 69S, 70S, 71S, 72S, 73S, 74S, 75S, 76S, 77S, 78S, 79S, 80S, 81S, 82S, 83S, 86S, 87S, 88S, 89S, 90S, 91S, 92S, 93S,

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Page 7

Ground Covers (all nodes) (continued)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment 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
0.120	0.000	0.165	0.000	0.000	0.286	Unconnected pavement	44S, 58S, 84S, 85S, 189S, 202S
3.514	0.000	2.385	0.000	0.000	5.898	Unconnected roofs	1S, 2S, 3S, 5S, 6S, 8S, 11S, 12S, 13S, 14S, 39S, 44S, 45S, 50S, 51S, 57S, 58S, 60S, 62S, 63S, 65S, 66S, 67S, 69S, 71S, 73S, 74S, 75S, 76S, 77S, 78S, 79S, 80S, 81S, 82S, 83S, 84S, 86S, 88S, 90S, 91S,

RH Post 8-11-25

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Page 8

Ground Covers (all nodes) (continued)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchment Numbers
5.595	0.000	1.957	0.000	0.000	7.553	Woods, Good	57S, 58S, 84S, 184S, 186S, 189S, 191S, 204S
23.658	0.000	15.857	0.000	0.280	39.794	TOTAL AREA	

RH Post 8-11-25

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Page 9

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	15P	57.00	52.50	67.0	0.0672	0.013	0.0	18.0	0.0	
2	16P	62.10	62.00	12.0	0.0083	0.013	0.0	12.0	0.0	
3	17P	62.10	62.00	15.0	0.0067	0.013	0.0	12.0	0.0	
4	18P	63.88	63.78	13.0	0.0077	0.013	0.0	12.0	0.0	
5	19P	63.88	63.78	12.0	0.0083	0.013	0.0	12.0	0.0	
6	20P	61.90	61.57	66.0	0.0050	0.013	0.0	12.0	0.0	
7	21P	61.47	61.10	71.0	0.0052	0.013	0.0	12.0	0.0	
8	22P	61.20	61.10	10.0	0.0100	0.013	0.0	12.0	0.0	
9	23P	61.20	61.10	10.0	0.0100	0.013	0.0	12.0	0.0	
10	24P	61.00	59.23	55.0	0.0322	0.013	0.0	18.0	0.0	
11	25P	63.68	62.20	148.0	0.0100	0.013	0.0	12.0	0.0	
12	26P	62.30	62.20	15.0	0.0067	0.013	0.0	12.0	0.0	
13	27P	62.30	62.20	13.0	0.0077	0.013	0.0	12.0	0.0	
14	28P	62.10	59.23	85.0	0.0338	0.013	0.0	12.0	0.0	
15	29P	59.13	58.83	25.0	0.0120	0.013	0.0	24.0	0.0	
16	30P	60.23	59.23	15.0	0.0667	0.013	0.0	12.0	0.0	
17	31P	60.30	60.20	12.0	0.0083	0.013	0.0	12.0	0.0	
18	32P	60.30	60.20	12.0	0.0083	0.013	0.0	12.0	0.0	
19	33P	60.76	59.76	9.0	0.1111	0.013	0.0	12.0	0.0	
20	34P	60.10	59.76	67.0	0.0051	0.013	0.0	12.0	0.0	
21	35P	59.66	59.40	52.0	0.0050	0.013	0.0	12.0	0.0	
22	36P	60.20	59.40	7.0	0.1143	0.013	0.0	12.0	0.0	
23	37P	59.30	58.83	94.0	0.0050	0.013	0.0	12.0	0.0	
24	38P	58.73	57.00	68.0	0.0254	0.013	0.0	24.0	0.0	
25	41P	58.50	58.40	8.0	0.0125	0.013	0.0	12.0	0.0	
26	42P	58.50	58.40	8.0	0.0125	0.013	0.0	12.0	0.0	
27	43P	58.30	54.70	87.0	0.0414	0.013	0.0	12.0	0.0	
28	46P	54.80	54.70	11.0	0.0091	0.013	0.0	12.0	0.0	
29	47P	54.80	54.70	11.0	0.0091	0.013	0.0	12.0	0.0	
30	48P	54.60	54.50	5.0	0.0200	0.013	0.0	12.0	0.0	
31	49P	54.00	51.50	76.0	0.0329	0.013	0.0	12.0	0.0	
32	49P	54.00	51.00	76.0	0.0395	0.013	0.0	12.0	0.0	
33	52P	51.13	51.03	10.0	0.0100	0.013	0.0	12.0	0.0	
34	53P	51.13	51.03	10.0	0.0100	0.013	0.0	12.0	0.0	
35	54P	50.93	50.63	60.0	0.0050	0.013	0.0	12.0	0.0	
36	55P	50.53	50.00	88.0	0.0060	0.013	0.0	12.0	0.0	
37	60P	60.00	56.00	29.0	0.1379	0.013	0.0	18.0	0.0	
38	61P	48.30	48.17	25.0	0.0052	0.013	0.0	12.0	0.0	
39	62P	60.50	60.30	20.0	0.0100	0.013	0.0	12.0	0.0	
40	63P	60.60	60.30	14.0	0.0214	0.013	0.0	12.0	0.0	
41	64P	60.10	59.90	25.0	0.0080	0.013	0.0	12.0	0.0	
42	65P	58.70	58.00	59.0	0.0119	0.013	0.0	12.0	0.0	

RH Post 8-11-25

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Page 10

Pipe Listing (all nodes) (continued)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
43	66P	58.90	58.80	12.0	0.0083	0.013	0.0	12.0	0.0	
44	67P	58.90	58.80	11.0	0.0091	0.013	0.0	12.0	0.0	
45	68P	59.30	57.00	71.0	0.0324	0.013	0.0	12.0	0.0	
46	69P	61.50	60.90	10.0	0.0600	0.013	0.0	12.0	0.0	
47	70P	61.50	60.90	10.0	0.0600	0.013	0.0	12.0	0.0	
48	71P	60.80	60.70	5.0	0.0200	0.013	0.0	12.0	0.0	
49	72P	60.20	57.00	32.0	0.1000	0.013	0.0	12.0	0.0	
50	73P	61.10	60.90	25.0	0.0080	0.013	0.0	12.0	0.0	
51	74P	61.10	60.90	15.0	0.0133	0.013	0.0	12.0	0.0	
52	75P	60.80	60.20	118.0	0.0051	0.013	0.0	12.0	0.0	
53	76P	58.20	58.00	20.0	0.0100	0.013	0.0	12.0	0.0	
54	77P	58.20	58.00	20.0	0.0100	0.013	0.0	12.0	0.0	
55	78P	57.90	57.70	25.0	0.0080	0.013	0.0	18.0	0.0	
56	79P	57.60	56.91	148.0	0.0047	0.013	0.0	18.0	0.0	
57	80P	56.81	56.27	104.0	0.0052	0.013	0.0	18.0	0.0	
58	81P	56.17	55.00	60.0	0.0195	0.013	0.0	18.0	0.0	
59	82P	55.00	54.00	52.0	0.0192	0.013	0.0	12.0	0.0	
60	83P	58.00	57.75	11.0	0.0227	0.013	0.0	12.0	0.0	
61	84P	58.00	57.75	11.0	0.0227	0.013	0.0	12.0	0.0	
62	85P	57.65	57.55	10.0	0.0100	0.013	0.0	12.0	0.0	
63	86P	61.00	57.00	105.0	0.0381	0.013	0.0	12.0	0.0	
64	87P	62.00	61.90	11.0	0.0091	0.013	0.0	12.0	0.0	
65	88P	62.00	61.90	11.0	0.0091	0.013	0.0	12.0	0.0	
66	89P	64.50	64.40	12.0	0.0083	0.013	0.0	12.0	0.0	
67	90P	64.50	64.40	12.0	0.0083	0.013	0.0	12.0	0.0	
68	91P	64.30	62.10	108.0	0.0204	0.013	0.0	12.0	0.0	
69	92P	61.80	58.30	120.0	0.0292	0.013	0.0	12.0	0.0	
70	93P	58.20	57.65	84.0	0.0065	0.013	0.0	18.0	0.0	
71	94P	62.65	62.55	11.0	0.0091	0.013	0.0	12.0	0.0	
72	95P	62.65	62.55	11.0	0.0091	0.013	0.0	12.0	0.0	
73	96P	62.00	61.10	134.0	0.0067	0.013	0.0	18.0	0.0	
74	97P	57.50	53.00	30.0	0.1500	0.013	0.0	18.0	0.0	
75	98P	59.80	58.30	136.0	0.0110	0.013	0.0	18.0	0.0	
76	99P	62.99	62.89	11.0	0.0091	0.013	0.0	12.0	0.0	
77	100P	62.99	62.89	11.0	0.0091	0.013	0.0	12.0	0.0	
78	101P	62.79	62.10	136.0	0.0051	0.013	0.0	18.0	0.0	
79	102P	61.40	61.25	27.0	0.0056	0.013	0.0	12.0	0.0	
80	103P	61.40	61.25	27.0	0.0056	0.013	0.0	12.0	0.0	
81	104P	61.00	60.90	11.0	0.0091	0.013	0.0	12.0	0.0	
82	105P	61.00	60.90	11.0	0.0091	0.013	0.0	12.0	0.0	
83	106P	60.80	59.90	110.0	0.0082	0.013	0.0	18.0	0.0	
84	107P	60.00	59.00	10.0	0.1000	0.013	0.0	12.0	0.0	

RH Post 8-11-25

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Page 11

Pipe Listing (all nodes) (continued)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
85	108P	60.00	59.00	11.0	0.0909	0.013	0.0	12.0	0.0	
86	109P	61.40	61.30	15.0	0.0067	0.013	0.0	12.0	0.0	
87	110P	61.40	61.30	15.0	0.0067	0.013	0.0	15.0	0.0	
88	111P	61.00	60.60	74.0	0.0054	0.013	0.0	24.0	0.0	
89	112P	57.59	57.49	10.0	0.0100	0.013	0.0	12.0	0.0	
90	113P	60.00	59.90	11.0	0.0091	0.013	0.0	12.0	0.0	
91	114P	60.00	59.90	11.0	0.0091	0.013	0.0	12.0	0.0	
92	115P	59.23	58.23	12.0	0.0833	0.013	0.0	12.0	0.0	
93	116P	59.23	58.23	14.0	0.0714	0.013	0.0	12.0	0.0	
94	117P	59.26	58.56	140.0	0.0050	0.013	0.0	18.0	0.0	
95	118P	59.80	59.36	87.0	0.0051	0.013	0.0	12.0	0.0	
96	119P	58.46	57.95	102.0	0.0050	0.013	0.0	18.0	0.0	
97	120P	57.85	57.00	40.0	0.0213	0.013	0.0	24.0	0.0	
98	121P	57.00	53.00	55.0	0.0727	0.013	0.0	18.0	0.0	
99	122P	57.59	57.49	16.0	0.0063	0.013	0.0	12.0	0.0	
100	123P	57.39	56.61	78.0	0.0100	0.013	0.0	18.0	0.0	
101	124P	56.57	54.70	75.0	0.0249	0.013	0.0	18.0	0.0	
102	125P	54.45	54.35	15.0	0.0067	0.013	0.0	12.0	0.0	
103	126P	54.45	54.35	15.0	0.0067	0.013	0.0	12.0	0.0	
104	127P	54.25	52.80	84.0	0.0173	0.013	0.0	12.0	0.0	
105	128P	55.90	55.80	10.0	0.0100	0.013	0.0	12.0	0.0	
106	129P	53.86	53.76	11.0	0.0091	0.013	0.0	12.0	0.0	
107	130P	54.02	53.61	16.0	0.0256	0.013	0.0	12.0	0.0	
108	131P	53.86	53.76	12.0	0.0083	0.013	0.0	12.0	0.0	
109	132P	53.71	53.61	10.0	0.0100	0.013	0.0	12.0	0.0	
110	133P	53.56	53.00	112.0	0.0050	0.013	0.0	18.0	0.0	
111	134P	53.71	53.61	20.0	0.0050	0.013	0.0	12.0	0.0	
112	135P	53.00	52.00	25.0	0.0400	0.013	0.0	12.0	0.0	
113	136P	53.50	53.40	10.0	0.0100	0.013	0.0	12.0	0.0	
114	137P	53.50	53.00	70.0	0.0071	0.013	0.0	12.0	0.0	
115	138P	53.50	53.40	10.0	0.0100	0.013	0.0	12.0	0.0	
116	139P	53.30	52.80	99.0	0.0051	0.013	0.0	12.0	0.0	
117	140P	55.90	55.80	19.0	0.0053	0.013	0.0	12.0	0.0	
118	141P	55.70	54.05	142.0	0.0116	0.013	0.0	12.0	0.0	
119	142P	50.53	50.43	7.0	0.0143	0.013	0.0	12.0	0.0	
120	143P	50.53	50.43	7.0	0.0143	0.013	0.0	12.0	0.0	
121	144P	50.33	49.96	73.0	0.0051	0.013	0.0	12.0	0.0	
122	145P	49.86	49.00	95.0	0.0091	0.013	0.0	18.0	0.0	
123	146P	49.00	45.00	42.0	0.0952	0.013	0.0	12.0	0.0	
124	147P	54.20	54.05	27.0	0.0056	0.013	0.0	12.0	0.0	
125	148P	52.00	49.00	68.0	0.0441	0.013	0.0	12.0	0.0	
126	149P	54.20	54.05	19.0	0.0079	0.013	0.0	12.0	0.0	

RH Post 8-11-25

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Page 12

Pipe Listing (all nodes) (continued)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
127	150P	53.95	53.23	50.0	0.0144	0.013	0.0	12.0	0.0	
128	151P	52.30	52.15	28.0	0.0054	0.013	0.0	12.0	0.0	
129	152P	52.30	52.15	19.0	0.0079	0.013	0.0	12.0	0.0	
130	153P	52.05	51.55	94.0	0.0053	0.013	0.0	18.0	0.0	
131	154P	53.25	53.15	8.0	0.0125	0.013	0.0	12.0	0.0	
132	155P	54.60	54.50	10.0	0.0100	0.013	0.0	12.0	0.0	
133	156P	54.60	54.50	10.0	0.0100	0.013	0.0	12.0	0.0	
134	157P	54.40	53.50	86.0	0.0105	0.013	0.0	12.0	0.0	
135	158P	53.60	53.50	12.0	0.0083	0.013	0.0	12.0	0.0	
136	159P	53.60	53.50	12.0	0.0083	0.013	0.0	12.0	0.0	
137	160P	53.40	53.23	33.0	0.0052	0.013	0.0	12.0	0.0	
138	161P	53.13	52.15	100.0	0.0098	0.013	0.0	18.0	0.0	
139	162P	50.45	50.35	12.0	0.0083	0.013	0.0	12.0	0.0	
140	163P	50.45	50.35	20.0	0.0050	0.013	0.0	12.0	0.0	
141	164P	50.25	50.15	11.0	0.0091	0.013	0.0	12.0	0.0	
142	165P	53.25	53.15	8.0	0.0125	0.013	0.0	12.0	0.0	
143	166P	52.16	51.70	92.0	0.0050	0.013	0.0	12.0	0.0	
144	167P	50.50	50.40	9.0	0.0111	0.013	0.0	12.0	0.0	
145	168P	50.50	50.40	9.0	0.0111	0.013	0.0	12.0	0.0	
146	169P	51.60	51.06	107.0	0.0050	0.013	0.0	12.0	0.0	
147	170P	48.30	48.17	21.0	0.0062	0.013	0.0	12.0	0.0	
148	171P	48.07	47.45	94.0	0.0066	0.013	0.0	18.0	0.0	
149	172P	51.90	51.80	8.0	0.0125	0.013	0.0	12.0	0.0	
150	173P	51.90	51.80	8.0	0.0125	0.013	0.0	12.0	0.0	
151	174P	50.96	50.40	111.0	0.0050	0.013	0.0	18.0	0.0	
152	175P	48.27	48.17	14.0	0.0071	0.013	0.0	12.0	0.0	
153	176P	48.47	48.37	10.0	0.0100	0.013	0.0	12.0	0.0	
154	177P	50.50	50.40	9.0	0.0111	0.013	0.0	12.0	0.0	
155	178P	50.50	50.40	9.0	0.0111	0.013	0.0	12.0	0.0	
156	179P	50.30	50.20	8.0	0.0125	0.013	0.0	18.0	0.0	
157	180P	50.05	49.00	138.0	0.0076	0.013	0.0	18.0	0.0	
158	181P	50.30	50.20	16.0	0.0062	0.013	0.0	12.0	0.0	
159	182P	48.47	48.37	10.0	0.0100	0.013	0.0	12.0	0.0	
160	184P	49.35	47.87	169.0	0.0088	0.013	0.0	12.0	0.0	
161	185P	47.75	47.00	36.0	0.0208	0.013	0.0	12.0	0.0	
162	186P	46.00	43.50	186.0	0.0134	0.013	0.0	12.0	0.0	
163	187P	55.00	54.00	20.0	0.0500	0.013	0.0	24.0	0.0	
164	188P	47.60	47.45	20.0	0.0075	0.013	0.0	12.0	0.0	
165	189P	47.60	47.45	20.0	0.0075	0.013	0.0	12.0	0.0	
166	190P	47.35	46.35	166.0	0.0060	0.013	0.0	18.0	0.0	
167	191P	50.50	49.00	194.0	0.0077	0.013	0.0	12.0	0.0	
168	192P	49.50	49.40	10.0	0.0100	0.013	0.0	12.0	0.0	

Pipe Listing (all nodes) (continued)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
169	193P	47.00	46.85	25.0	0.0060	0.013	0.0	12.0	0.0	
170	194P	47.00	46.85	15.0	0.0100	0.013	0.0	12.0	0.0	
171	195P	53.00	52.00	50.0	0.0200	0.013	0.0	18.0	0.0	
172	196P	48.00	47.84	27.0	0.0059	0.013	0.0	12.0	0.0	
173	197P	47.00	43.50	25.0	0.1400	0.013	0.0	12.0	0.0	
174	198P	52.75	52.65	10.0	0.0100	0.013	0.0	18.0	0.0	
175	199P	46.25	46.00	48.0	0.0052	0.013	0.0	18.0	0.0	
176	200P	46.75	46.00	55.0	0.0136	0.013	0.0	12.0	0.0	
177	201P	54.00	53.65	20.0	0.0175	0.013	0.0	12.0	0.0	
178	202P	52.65	52.16	89.0	0.0055	0.013	0.0	18.0	0.0	
179	204P	51.05	51.50	5.0	-0.0900	0.013	0.0	18.0	0.0	
180	205P	52.70	52.60	16.0	0.0063	0.013	0.0	12.0	0.0	
181	206P	53.60	54.50	5.0	-0.1800	0.013	0.0	18.0	0.0	
182	207P	59.90	59.80	5.0	0.0200	0.013	0.0	12.0	0.0	
183	208P	60.55	60.50	5.0	0.0100	0.013	0.0	24.0	0.0	
184	209P	57.60	57.55	5.0	0.0100	0.013	0.0	18.0	0.0	
185	210P	57.85	57.05	11.0	0.0727	0.013	0.0	24.0	0.0	

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

Subcatchment1S: P1A	Runoff Area=7,501 sf 96.61% Impervious Runoff Depth>2.64" Tc=6.0 min CN=97 Runoff=0.51 cfs 0.038 af
Subcatchment2S: P1B	Runoff Area=16,584 sf 74.19% Impervious Runoff Depth>2.17" Tc=6.0 min CN=92 Runoff=0.98 cfs 0.069 af
Subcatchment3S: P1C	Runoff Area=6,087 sf 64.30% Impervious Runoff Depth>1.91" Tc=6.0 min CN=89 Runoff=0.32 cfs 0.022 af
Subcatchment4S: P1D	Runoff Area=2,767 sf 81.50% Impervious Runoff Depth>2.36" Tc=6.0 min CN=94 Runoff=0.17 cfs 0.012 af
Subcatchment5S: P1E	Runoff Area=11,538 sf 66.20% Impervious Runoff Depth>1.99" Tc=6.0 min CN=90 Runoff=0.64 cfs 0.044 af
Subcatchment6S: P1F	Runoff Area=4,817 sf 71.39% Impervious Runoff Depth>2.08" Tc=6.0 min CN=91 Runoff=0.28 cfs 0.019 af
Subcatchment7S: P1G	Runoff Area=5,511 sf 100.00% Impervious Runoff Depth>2.73" Tc=6.0 min CN=98 Runoff=0.38 cfs 0.029 af
Subcatchment8S: P1H	Runoff Area=13,713 sf 81.38% Impervious Runoff Depth>2.36" Tc=6.0 min CN=94 Runoff=0.86 cfs 0.062 af
Subcatchment9S: P1I	Runoff Area=3,616 sf 78.43% Impervious Runoff Depth>2.26" Tc=6.0 min CN=93 Runoff=0.22 cfs 0.016 af
Subcatchment10S: P1J	Runoff Area=1,937 sf 100.00% Impervious Runoff Depth>2.73" Tc=6.0 min CN=98 Runoff=0.13 cfs 0.010 af
Subcatchment11S: P1K	Runoff Area=1,936 sf 96.85% Impervious Runoff Depth>2.64" Tc=6.0 min CN=97 Runoff=0.13 cfs 0.010 af
Subcatchment12S: P1L	Runoff Area=9,821 sf 78.85% Impervious Runoff Depth>2.26" Tc=6.0 min CN=93 Runoff=0.60 cfs 0.043 af
Subcatchment13S: P1M	Runoff Area=8,699 sf 94.53% Impervious Runoff Depth>2.64" Tc=6.0 min CN=97 Runoff=0.59 cfs 0.044 af
Subcatchment14S: P1N	Runoff Area=14,865 sf 3.94% Impervious Runoff Depth>0.92" Tc=6.0 min UI Adjusted CN=74 Runoff=0.37 cfs 0.026 af
Subcatchment39S: P1P	Runoff Area=7,939 sf 66.96% Impervious Runoff Depth>1.99" Tc=6.0 min CN=90 Runoff=0.44 cfs 0.030 af
Subcatchment40S: P1O	Runoff Area=978 sf 100.00% Impervious Runoff Depth>2.73" Tc=6.0 min CN=98 Runoff=0.07 cfs 0.005 af

Subcatchment44S: P1R	Runoff Area=15,334 sf 70.58% Impervious Runoff Depth>1.46" Tc=6.0 min CN=83 Runoff=0.63 cfs 0.043 af
Subcatchment45S: P1Q	Runoff Area=5,247 sf 97.54% Impervious Runoff Depth>2.64" Tc=6.0 min CN=97 Runoff=0.35 cfs 0.027 af
Subcatchment50S: P1S	Runoff Area=15,055 sf 71.48% Impervious Runoff Depth>1.32" Tc=6.0 min CN=81 Runoff=0.56 cfs 0.038 af
Subcatchment51S: P1T	Runoff Area=10,844 sf 61.75% Impervious Runoff Depth>0.97" Tc=6.0 min CN=75 Runoff=0.29 cfs 0.020 af
Subcatchment57S: (new Subcat)	Runoff Area=16,396 sf 6.10% Impervious Runoff Depth=0.00" Flow Length=87' Tc=13.0 min UI Adjusted CN=39 Runoff=0.00 cfs 0.000 af
Subcatchment58S: P1AA	Runoff Area=217,595 sf 2.56% Impervious Runoff Depth>0.02" Flow Length=111' Tc=11.7 min UI Adjusted CN=45 Runoff=0.02 cfs 0.010 af
Subcatchment60S: P2C	Runoff Area=6,486 sf 73.97% Impervious Runoff Depth>2.17" Tc=6.0 min CN=92 Runoff=0.38 cfs 0.027 af
Subcatchment61S: P2D	Runoff Area=1,464 sf 87.02% Impervious Runoff Depth>2.45" Tc=6.0 min CN=95 Runoff=0.09 cfs 0.007 af
Subcatchment62S: P2J	Runoff Area=10,675 sf 72.86% Impervious Runoff Depth>2.08" Tc=6.0 min CN=91 Runoff=0.61 cfs 0.043 af
Subcatchment63S: P2K	Runoff Area=6,698 sf 76.98% Impervious Runoff Depth>2.17" Tc=6.0 min CN=92 Runoff=0.40 cfs 0.028 af
Subcatchment64S: P3L	Runoff Area=2,885 sf 66.55% Impervious Runoff Depth>1.99" Tc=6.0 min CN=90 Runoff=0.16 cfs 0.011 af
Subcatchment65S: P3M	Runoff Area=5,397 sf 69.69% Impervious Runoff Depth>2.08" Tc=6.0 min CN=91 Runoff=0.31 cfs 0.021 af
Subcatchment66S: P3N	Runoff Area=7,748 sf 72.79% Impervious Runoff Depth>2.08" Tc=6.0 min CN=91 Runoff=0.44 cfs 0.031 af
Subcatchment67S: P3O	Runoff Area=8,254 sf 78.29% Impervious Runoff Depth>2.26" Tc=6.0 min CN=93 Runoff=0.50 cfs 0.036 af
Subcatchment68S: P3P	Runoff Area=4,070 sf 80.29% Impervious Runoff Depth>2.26" Tc=6.0 min CN=93 Runoff=0.25 cfs 0.018 af
Subcatchment69S: P2E	Runoff Area=7,088 sf 82.69% Impervious Runoff Depth>2.36" Tc=6.0 min CN=94 Runoff=0.45 cfs 0.032 af
Subcatchment70S: P2F	Runoff Area=3,932 sf 100.00% Impervious Runoff Depth>2.73" Tc=6.0 min CN=98 Runoff=0.27 cfs 0.021 af
Subcatchment71S: P2A	Runoff Area=10,978 sf 65.83% Impervious Runoff Depth>1.99" Tc=6.0 min CN=90 Runoff=0.61 cfs 0.042 af

Subcatchment72S: P2B	Runoff Area=7,563 sf 65.05% Impervious Runoff Depth>1.99" Tc=6.0 min CN=90 Runoff=0.42 cfs 0.029 af
Subcatchment73S: P2G	Runoff Area=8,223 sf 71.07% Impervious Runoff Depth>2.08" Tc=6.0 min CN=91 Runoff=0.47 cfs 0.033 af
Subcatchment74S: P2H	Runoff Area=4,268 sf 95.31% Impervious Runoff Depth>2.45" Tc=6.0 min CN=95 Runoff=0.28 cfs 0.020 af
Subcatchment75S: P3Q	Runoff Area=10,219 sf 64.37% Impervious Runoff Depth>1.91" Tc=6.0 min CN=89 Runoff=0.54 cfs 0.037 af
Subcatchment76S: P3R	Runoff Area=13,649 sf 76.83% Impervious Runoff Depth>2.17" Tc=6.0 min CN=92 Runoff=0.81 cfs 0.057 af
Subcatchment77S: P3S	Runoff Area=7,757 sf 69.60% Impervious Runoff Depth>2.08" Tc=6.0 min CN=91 Runoff=0.44 cfs 0.031 af
Subcatchment78S: P1S	Runoff Area=12,630 sf 58.56% Impervious Runoff Depth>1.67" Tc=6.0 min CN=86 Runoff=0.60 cfs 0.040 af
Subcatchment79S: P1T	Runoff Area=11,982 sf 72.42% Impervious Runoff Depth>2.08" Tc=6.0 min CN=91 Runoff=0.69 cfs 0.048 af
Subcatchment80S: P3KK	Runoff Area=8,557 sf 76.76% Impervious Runoff Depth>1.53" Tc=6.0 min CN=84 Runoff=0.37 cfs 0.025 af
Subcatchment81S: P3LL	Runoff Area=9,785 sf 79.18% Impervious Runoff Depth>1.67" Tc=6.0 min CN=86 Runoff=0.46 cfs 0.031 af
Subcatchment82S: P3SS	Runoff Area=12,880 sf 67.55% Impervious Runoff Depth>1.20" Tc=6.0 min CN=79 Runoff=0.44 cfs 0.029 af
Subcatchment83S: P2I	Runoff Area=13,847 sf 51.48% Impervious Runoff Depth>1.20" Tc=6.0 min CN=79 Runoff=0.47 cfs 0.032 af
Subcatchment84S: P2AA	Runoff Area=71,125 sf 7.37% Impervious Runoff Depth>0.81" Flow Length=201' Tc=8.4 min UI Adjusted CN=72 Runoff=1.42 cfs 0.111 af
Subcatchment85S: (new Subcat)	Runoff Area=25,650 sf 36.87% Impervious Runoff Depth>1.46" Tc=6.0 min CN=83 Runoff=1.06 cfs 0.071 af
Subcatchment86S: P3TT	Runoff Area=13,926 sf 63.97% Impervious Runoff Depth>1.14" Tc=6.0 min CN=78 Runoff=0.45 cfs 0.030 af
Subcatchment87S: P3A	Runoff Area=2,273 sf 80.20% Impervious Runoff Depth>2.26" Tc=6.0 min CN=93 Runoff=0.14 cfs 0.010 af
Subcatchment88S: P3B	Runoff Area=4,538 sf 76.91% Impervious Runoff Depth>2.17" Tc=6.0 min CN=92 Runoff=0.27 cfs 0.019 af

Subcatchment89S: P3AAA	Runoff Area=6,945 sf 74.64% Impervious Runoff Depth>1.46" Tc=6.0 min CN=83 Runoff=0.29 cfs 0.019 af
Subcatchment90S: P3BBB	Runoff Area=9,141 sf 67.61% Impervious Runoff Depth>1.20" Tc=6.0 min CN=79 Runoff=0.31 cfs 0.021 af
Subcatchment91S: P3GGG	Runoff Area=9,122 sf 66.66% Impervious Runoff Depth>1.14" Tc=6.0 min CN=78 Runoff=0.29 cfs 0.020 af
Subcatchment92S: P3C	Runoff Area=6,128 sf 70.69% Impervious Runoff Depth>2.08" Tc=6.0 min CN=91 Runoff=0.35 cfs 0.024 af
Subcatchment93S: P3D	Runoff Area=8,893 sf 71.21% Impervious Runoff Depth>2.08" Tc=6.0 min CN=91 Runoff=0.51 cfs 0.035 af
Subcatchment94S: P3HHH	Runoff Area=9,026 sf 76.76% Impervious Runoff Depth>1.53" Tc=6.0 min CN=84 Runoff=0.39 cfs 0.026 af
Subcatchment95S: P2X	Runoff Area=6,460 sf 100.00% Impervious Runoff Depth>2.73" Tc=6.0 min CN=98 Runoff=0.44 cfs 0.034 af
Subcatchment97S: P3G	Runoff Area=16,665 sf 73.17% Impervious Runoff Depth>2.17" Tc=6.0 min CN=92 Runoff=0.99 cfs 0.069 af
Subcatchment98S: P3H	Runoff Area=11,218 sf 68.08% Impervious Runoff Depth>1.99" Tc=6.0 min CN=90 Runoff=0.62 cfs 0.043 af
Subcatchment102S: P3J	Runoff Area=14,925 sf 64.21% Impervious Runoff Depth>1.91" Tc=6.0 min CN=89 Runoff=0.80 cfs 0.055 af
Subcatchment103S: P3I	Runoff Area=21,963 sf 74.80% Impervious Runoff Depth>2.17" Tc=6.0 min CN=92 Runoff=1.30 cfs 0.091 af
Subcatchment107S: P3E	Runoff Area=17,242 sf 64.26% Impervious Runoff Depth>1.91" Tc=6.0 min CN=89 Runoff=0.92 cfs 0.063 af
Subcatchment108S: P3F	Runoff Area=19,891 sf 64.44% Impervious Runoff Depth>1.91" Tc=6.0 min CN=89 Runoff=1.06 cfs 0.073 af
Subcatchment109S: P3T	Runoff Area=11,178 sf 83.40% Impervious Runoff Depth>2.36" Tc=6.0 min CN=94 Runoff=0.70 cfs 0.050 af
Subcatchment110S: P3U	Runoff Area=14,474 sf 76.35% Impervious Runoff Depth>2.17" Tc=6.0 min CN=92 Runoff=0.86 cfs 0.060 af
Subcatchment111S: P3V	Runoff Area=14,345 sf 82.49% Impervious Runoff Depth>2.36" Tc=6.0 min CN=94 Runoff=0.90 cfs 0.065 af
Subcatchment112S: P3W	Runoff Area=8,601 sf 91.64% Impervious Runoff Depth>2.55" Tc=6.0 min CN=96 Runoff=0.57 cfs 0.042 af
Subcatchment125S: P3EE	Runoff Area=23,054 sf 81.18% Impervious Runoff Depth>1.75" Tc=6.0 min CN=87 Runoff=1.14 cfs 0.077 af

Subcatchment 126S: P3FF	Runoff Area=17,312 sf 70.10% Impervious Runoff Depth>1.26" Tc=6.0 min CN=80 Runoff=0.62 cfs 0.042 af
Subcatchment 127S: P3GG	Runoff Area=16,395 sf 53.54% Impervious Runoff Depth>0.77" Tc=6.0 min CN=71 Runoff=0.33 cfs 0.024 af
Subcatchment 128S: P3HH	Runoff Area=15,226 sf 63.87% Impervious Runoff Depth>1.08" Tc=6.0 min CN=77 Runoff=0.46 cfs 0.031 af
Subcatchment 129S: P3MM	Runoff Area=7,841 sf 66.23% Impervious Runoff Depth>1.14" Tc=6.0 min CN=78 Runoff=0.25 cfs 0.017 af
Subcatchment 130S: P3NN	Runoff Area=6,295 sf 72.58% Impervious Runoff Depth>1.39" Tc=6.0 min CN=82 Runoff=0.25 cfs 0.017 af
Subcatchment 136S: P3II	Runoff Area=10,900 sf 80.29% Impervious Runoff Depth>1.67" Tc=6.0 min CN=86 Runoff=0.52 cfs 0.035 af
Subcatchment 138S: P3JJ Flow Length=50' Slope=0.0100 '/	Runoff Area=14,214 sf 6.96% Impervious Runoff Depth>0.00" Tc=7.5 min UI Adjusted CN=41 Runoff=0.00 cfs 0.000 af
Subcatchment 140S: P3OO	Runoff Area=17,829 sf 65.98% Impervious Runoff Depth>1.14" Tc=6.0 min CN=78 Runoff=0.57 cfs 0.039 af
Subcatchment 141S: P3PP	Runoff Area=25,131 sf 66.17% Impervious Runoff Depth>1.14" Tc=6.0 min CN=78 Runoff=0.80 cfs 0.055 af
Subcatchment 142S: P3UU	Runoff Area=3,331 sf 72.53% Impervious Runoff Depth>1.39" Tc=6.0 min CN=82 Runoff=0.13 cfs 0.009 af
Subcatchment 143S: P3VV	Runoff Area=3,461 sf 73.82% Impervious Runoff Depth>1.46" Tc=6.0 min CN=83 Runoff=0.14 cfs 0.010 af
Subcatchment 147S: P3QQ	Runoff Area=8,544 sf 80.21% Impervious Runoff Depth>1.67" Tc=6.0 min CN=86 Runoff=0.40 cfs 0.027 af
Subcatchment 149S: P3RR Flow Length=50' Slope=0.0100 '/	Runoff Area=7,953 sf 10.10% Impervious Runoff Depth>0.00" Tc=7.5 min UI Adjusted CN=42 Runoff=0.00 cfs 0.000 af
Subcatchment 151S: P3ZZ	Runoff Area=6,359 sf 79.60% Impervious Runoff Depth>1.67" Tc=6.0 min CN=86 Runoff=0.30 cfs 0.020 af
Subcatchment 152S: P3YY	Runoff Area=5,089 sf 70.43% Impervious Runoff Depth>1.32" Tc=6.0 min CN=81 Runoff=0.19 cfs 0.013 af
Subcatchment 153S: P3WW	Runoff Area=9,574 sf 74.64% Impervious Runoff Depth>1.46" Tc=6.0 min CN=83 Runoff=0.40 cfs 0.027 af
Subcatchment 154S: P3XX	Runoff Area=4,702 sf 90.07% Impervious Runoff Depth>2.17" Tc=6.0 min CN=92 Runoff=0.28 cfs 0.020 af

Subcatchment 155S: P3CCC	Runoff Area=8,394 sf 67.64% Impervious Runoff Depth>1.20" Tc=6.0 min CN=79 Runoff=0.28 cfs 0.019 af
Subcatchment 156S: P3DDD	Runoff Area=14,850 sf 60.75% Impervious Runoff Depth>0.97" Tc=6.0 min CN=75 Runoff=0.40 cfs 0.028 af
Subcatchment 165S: P3FFF	Runoff Area=2,770 sf 55.52% Impervious Runoff Depth>0.82" Tc=6.0 min CN=72 Runoff=0.06 cfs 0.004 af
Subcatchment 166S: P3EEE	Runoff Area=4,031 sf 53.88% Impervious Runoff Depth>0.77" Tc=6.0 min CN=71 Runoff=0.08 cfs 0.006 af
Subcatchment 170S: P3JJJ	Runoff Area=13,803 sf 75.85% Impervious Runoff Depth>1.53" Tc=6.0 min CN=84 Runoff=0.60 cfs 0.040 af
Subcatchment 171S: P3III	Runoff Area=5,653 sf 71.18% Impervious Runoff Depth>1.32" Tc=6.0 min CN=81 Runoff=0.21 cfs 0.014 af
Subcatchment 175S: P3KKK	Runoff Area=13,720 sf 68.62% Impervious Runoff Depth>1.20" Tc=6.0 min CN=79 Runoff=0.46 cfs 0.031 af
Subcatchment 176S: P3LLL	Runoff Area=6,640 sf 60.77% Impervious Runoff Depth>0.97" Tc=6.0 min CN=75 Runoff=0.18 cfs 0.012 af
Subcatchment 182S: P3MMM	Runoff Area=11,484 sf 68.05% Impervious Runoff Depth>1.20" Tc=6.0 min CN=79 Runoff=0.39 cfs 0.026 af
Subcatchment 183S: P3NNN	Runoff Area=17,078 sf 53.13% Impervious Runoff Depth>0.72" Tc=6.0 min CN=70 Runoff=0.32 cfs 0.024 af
Subcatchment 184S: P3OOO	Runoff Area=20,782 sf 57.77% Impervious Runoff Depth>0.86" Tc=6.0 min CN=73 Runoff=0.49 cfs 0.034 af
Subcatchment 185S: P3PPP	Runoff Area=17,125 sf 73.16% Impervious Runoff Depth>1.39" Tc=6.0 min CN=82 Runoff=0.67 cfs 0.045 af
Subcatchment 186S: P3QQQ	Runoff Area=31,267 sf 28.78% Impervious Runoff Depth>0.09" Tc=6.0 min UI Adjusted CN=50 Runoff=0.01 cfs 0.006 af
Subcatchment 187S: P3RRR	Runoff Area=27,972 sf 65.44% Impervious Runoff Depth>1.14" Tc=6.0 min CN=78 Runoff=0.89 cfs 0.061 af
Subcatchment 189S: (new Subcat)	Runoff Area=179,843 sf 4.59% Impervious Runoff Depth>0.15" Flow Length=322' Tc=20.8 min UI Adjusted CN=53 Runoff=0.20 cfs 0.051 af
Subcatchment 190S: (new Subcat)	Runoff Area=12,078 sf 85.87% Impervious Runoff Depth>1.99" Tc=6.0 min CN=90 Runoff=0.67 cfs 0.046 af
Subcatchment 191S: P3SSS	Runoff Area=9,557 sf 30.44% Impervious Runoff Depth>0.13" Tc=6.0 min CN=52 Runoff=0.01 cfs 0.002 af
Subcatchment 192S: P3TTT	Runoff Area=6,608 sf 66.33% Impervious Runoff Depth>1.14" Tc=6.0 min CN=78 Runoff=0.21 cfs 0.014 af

Subcatchment195S: P3UUU	Runoff Area=13,818 sf 82.60% Impervious Runoff Depth>1.83" Tc=6.0 min CN=88 Runoff=0.71 cfs 0.048 af
Subcatchment198S: P3VVV	Runoff Area=12,978 sf 0.00% Impervious Runoff Depth=0.00" Tc=6.0 min CN=39 Runoff=0.00 cfs 0.000 af
Subcatchment202S: (new Subcat)	Runoff Area=26,038 sf 46.07% Impervious Runoff Depth>0.55" Tc=6.0 min CN=66 Runoff=0.34 cfs 0.027 af
Subcatchment204S: (new Subcat)	Runoff Area=154,169 sf 1.31% Impervious Runoff Depth=0.00" Flow Length=104' Tc=7.9 min CN=34 Runoff=0.00 cfs 0.000 af
Pond 15P: Inf. Basin 5	Peak Elev=58.75' Storage=11,957 cf Inflow=6.18 cfs 0.443 af Discarded=0.24 cfs 0.203 af Primary=0.00 cfs 0.000 af Outflow=0.24 cfs 0.203 af
Pond 16P: CB 58	Peak Elev=62.53' Inflow=0.51 cfs 0.038 af 12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.51 cfs 0.038 af
Pond 17P: CB 59	Peak Elev=62.74' Inflow=0.98 cfs 0.069 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' Outflow=0.98 cfs 0.069 af
Pond 18P: CB 63	Peak Elev=64.22' Inflow=0.32 cfs 0.022 af 12.0" Round Culvert n=0.013 L=13.0' S=0.0077 ' Outflow=0.32 cfs 0.022 af
Pond 19P: CB 62	Peak Elev=64.12' Inflow=0.17 cfs 0.012 af 12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.17 cfs 0.012 af
Pond 20P: DMH 43	Peak Elev=62.70' Inflow=1.49 cfs 0.107 af 12.0" Round Culvert n=0.013 L=66.0' S=0.0050 ' Outflow=1.49 cfs 0.107 af
Pond 21P: DMH 42	Peak Elev=62.26' Inflow=1.49 cfs 0.107 af 12.0" Round Culvert n=0.013 L=71.0' S=0.0052 ' Outflow=1.49 cfs 0.107 af
Pond 22P: CB 56	Peak Elev=61.56' Inflow=0.38 cfs 0.029 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=0.38 cfs 0.029 af
Pond 23P: CB 57	Peak Elev=61.78' Inflow=0.86 cfs 0.062 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=0.86 cfs 0.062 af
Pond 24P: DMH 41	Peak Elev=61.88' Inflow=2.73 cfs 0.197 af 18.0" Round Culvert n=0.013 L=55.0' S=0.0322 ' Outflow=2.73 cfs 0.197 af
Pond 25P: DMH 45	Peak Elev=64.08' Inflow=0.50 cfs 0.035 af 12.0" Round Culvert n=0.013 L=148.0' S=0.0100 ' Outflow=0.50 cfs 0.035 af
Pond 26P: CB 61	Peak Elev=62.80' Inflow=0.64 cfs 0.044 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' Outflow=0.64 cfs 0.044 af
Pond 27P: CB 60	Peak Elev=62.61' Inflow=0.28 cfs 0.019 af 12.0" Round Culvert n=0.013 L=13.0' S=0.0077 ' Outflow=0.28 cfs 0.019 af

Pond 28P: DMH 44

Peak Elev=62.83' Inflow=1.41 cfs 0.098 af
12.0" Round Culvert n=0.013 L=85.0' S=0.0338 '/' Outflow=1.41 cfs 0.098 af

Pond 29P: DMH 40

Peak Elev=60.15' Inflow=4.36 cfs 0.311 af
24.0" Round Culvert n=0.013 L=25.0' S=0.0120 '/' Outflow=4.36 cfs 0.311 af

Pond 30P: CB 55

Peak Elev=60.49' Inflow=0.22 cfs 0.016 af
12.0" Round Culvert n=0.013 L=15.0' S=0.0667 '/' Outflow=0.22 cfs 0.016 af

Pond 31P: CB 51

Peak Elev=60.50' Inflow=0.13 cfs 0.010 af
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.13 cfs 0.010 af

Pond 32P: CB 52

Peak Elev=60.77' Inflow=0.60 cfs 0.043 af
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.60 cfs 0.043 af

Pond 33P: CB 53

Peak Elev=60.96' Inflow=0.13 cfs 0.010 af
12.0" Round Culvert n=0.013 L=9.0' S=0.1111 '/' Outflow=0.13 cfs 0.010 af

Pond 34P: DMH 36

Peak Elev=60.62' Inflow=0.73 cfs 0.052 af
12.0" Round Culvert n=0.013 L=67.0' S=0.0051 '/' Outflow=0.73 cfs 0.052 af

Pond 35P: DMH 37

Peak Elev=60.24' Inflow=0.86 cfs 0.062 af
12.0" Round Culvert n=0.013 L=52.0' S=0.0050 '/' Outflow=0.86 cfs 0.062 af

Pond 36P: CB 54

Peak Elev=60.64' Inflow=0.59 cfs 0.044 af
12.0" Round Culvert n=0.013 L=7.0' S=0.1143 '/' Outflow=0.59 cfs 0.044 af

Pond 37P: DMH 38

Peak Elev=60.07' Inflow=1.45 cfs 0.106 af
12.0" Round Culvert n=0.013 L=94.0' S=0.0050 '/' Outflow=1.45 cfs 0.106 af

Pond 38P: DMH 39

Peak Elev=59.93' Inflow=5.81 cfs 0.417 af
24.0" Round Culvert n=0.013 L=68.0' S=0.0254 '/' Outflow=5.81 cfs 0.417 af

Pond 41P: CB 49

Peak Elev=58.64' Inflow=0.07 cfs 0.005 af
12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=0.07 cfs 0.005 af

Pond 42P: CB 50

Peak Elev=58.89' Inflow=0.44 cfs 0.030 af
12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=0.44 cfs 0.030 af

Pond 43P: DMH 35

Peak Elev=58.70' Inflow=0.51 cfs 0.035 af
12.0" Round Culvert n=0.013 L=87.0' S=0.0414 '/' Outflow=0.51 cfs 0.035 af

Pond 46P: CB 48

Peak Elev=55.29' Inflow=0.63 cfs 0.043 af
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.63 cfs 0.043 af

Pond 47P: CB 47

Peak Elev=55.15' Inflow=0.35 cfs 0.027 af
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.35 cfs 0.027 af

Pond 48P: DMH 33

Peak Elev=55.21' Inflow=0.99 cfs 0.069 af
12.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=0.99 cfs 0.069 af

Pond 49P: Sub. Inf. 4

Peak Elev=56.04' Storage=0.113 af Inflow=2.78 cfs 0.193 af
Discarded=0.12 cfs 0.096 af Primary=0.02 cfs 0.003 af Outflow=0.14 cfs 0.098 af

Pond 52P: CB 20	Peak Elev=51.44' Inflow=0.29 cfs 0.020 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.29 cfs 0.020 af
Pond 53P: CB 21	Peak Elev=51.58' Inflow=0.56 cfs 0.038 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.56 cfs 0.038 af
Pond 54P: DMH 15	Peak Elev=51.50' Inflow=0.85 cfs 0.058 af 12.0" Round Culvert n=0.013 L=60.0' S=0.0050 '/' Outflow=0.85 cfs 0.058 af
Pond 55P: DMH 16	Peak Elev=51.07' Inflow=0.85 cfs 0.058 af 12.0" Round Culvert n=0.013 L=88.0' S=0.0060 '/' Outflow=0.85 cfs 0.058 af
Pond 56P: Inf. Basin 4	Peak Elev=50.39' Storage=475 cf Inflow=0.85 cfs 0.058 af Discarded=0.33 cfs 0.058 af Secondary=0.00 cfs 0.000 af Outflow=0.33 cfs 0.058 af
Pond 60P: Sub. Det. 1	Peak Elev=61.80' Storage=0.158 af Inflow=4.86 cfs 0.336 af Outflow=2.10 cfs 0.204 af
Pond 61P: CB 8	Peak Elev=48.68' Inflow=0.39 cfs 0.026 af 12.0" Round Culvert n=0.013 L=25.0' S=0.0052 '/' Outflow=0.39 cfs 0.026 af
Pond 62P: CB 66	Peak Elev=60.85' Inflow=0.38 cfs 0.027 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0100 '/' Outflow=0.38 cfs 0.027 af
Pond 63P: CB 67	Peak Elev=60.77' Inflow=0.09 cfs 0.007 af 12.0" Round Culvert n=0.013 L=14.0' S=0.0214 '/' Outflow=0.09 cfs 0.007 af
Pond 64P: DMH 47	Peak Elev=60.88' Inflow=1.50 cfs 0.105 af 12.0" Round Culvert n=0.013 L=25.0' S=0.0080 '/' Outflow=1.50 cfs 0.105 af
Pond 65P: DMH 49	Peak Elev=59.19' Inflow=0.72 cfs 0.052 af 12.0" Round Culvert n=0.013 L=59.0' S=0.0119 '/' Outflow=0.72 cfs 0.052 af
Pond 66P: CB 68	Peak Elev=59.30' 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 67P: CB 69	Peak Elev=59.20' Inflow=0.27 cfs 0.021 af 12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.27 cfs 0.021 af
Pond 68P: Sub. Inf. 5	Peak Elev=60.92' Storage=0.041 af Inflow=1.50 cfs 0.105 af Discarded=0.07 cfs 0.054 af Primary=0.54 cfs 0.022 af Outflow=0.60 cfs 0.076 af
Pond 69P: CB 72	Peak Elev=61.95' Inflow=0.61 cfs 0.043 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0600 '/' Outflow=0.61 cfs 0.043 af
Pond 70P: CB 73	Peak Elev=61.85' Inflow=0.40 cfs 0.028 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0600 '/' Outflow=0.40 cfs 0.028 af
Pond 71P: DMH 54	Peak Elev=61.42' Inflow=1.01 cfs 0.070 af 12.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=1.01 cfs 0.070 af

Pond 72P: Sub. Inf. 7	Peak Elev=61.68' Storage=0.030 af Inflow=1.01 cfs 0.070 af Discarded=0.06 cfs 0.046 af Primary=0.18 cfs 0.009 af Outflow=0.24 cfs 0.055 af
Pond 73P: CB 64	Peak Elev=61.55' Inflow=0.61 cfs 0.042 af 12.0" Round Culvert n=0.013 L=25.0' S=0.0080 ' Outflow=0.61 cfs 0.042 af
Pond 74P: CB 65	Peak Elev=61.46' Inflow=0.42 cfs 0.029 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0133 ' Outflow=0.42 cfs 0.029 af
Pond 75P: DMH 46	Peak Elev=61.42' Inflow=1.03 cfs 0.071 af 12.0" Round Culvert n=0.013 L=118.0' S=0.0051 ' Outflow=1.03 cfs 0.071 af
Pond 76P: CB 70	Peak Elev=58.59' Inflow=0.47 cfs 0.033 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0100 ' Outflow=0.47 cfs 0.033 af
Pond 77P: CB 71	Peak Elev=58.49' Inflow=0.28 cfs 0.020 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0100 ' Outflow=0.28 cfs 0.020 af
Pond 78P: DMH 50	Peak Elev=58.54' Inflow=1.46 cfs 0.105 af 18.0" Round Culvert n=0.013 L=25.0' S=0.0080 ' Outflow=1.46 cfs 0.105 af
Pond 79P: DMH 51	Peak Elev=58.34' Inflow=1.91 cfs 0.139 af 18.0" Round Culvert n=0.013 L=148.0' S=0.0047 ' Outflow=1.91 cfs 0.139 af
Pond 80P: DMH 52	Peak Elev=57.54' Inflow=1.91 cfs 0.139 af 18.0" Round Culvert n=0.013 L=104.0' S=0.0052 ' Outflow=1.91 cfs 0.139 af
Pond 81P: DMH 53	Peak Elev=56.89' Inflow=1.91 cfs 0.139 af 18.0" Round Culvert n=0.013 L=60.0' S=0.0195 ' Outflow=1.91 cfs 0.139 af
Pond 82P: Constructed Wetland 2	Peak Elev=56.51' Storage=3,756 cf Inflow=2.37 cfs 0.171 af Outflow=0.65 cfs 0.109 af
Pond 83P: CB 86	Peak Elev=58.38' Inflow=0.44 cfs 0.031 af 12.0" Round Culvert n=0.013 L=11.0' S=0.0227 ' Outflow=0.44 cfs 0.031 af
Pond 84P: CB 87	Peak Elev=58.40' Inflow=0.50 cfs 0.036 af 12.0" Round Culvert n=0.013 L=11.0' S=0.0227 ' Outflow=0.50 cfs 0.036 af
Pond 85P: DMH 65	Peak Elev=58.26' Inflow=0.95 cfs 0.067 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=0.95 cfs 0.067 af
Pond 86P: Sub. Inf. 6	Peak Elev=62.52' Storage=0.037 af Inflow=1.06 cfs 0.071 af Discarded=0.07 cfs 0.047 af Primary=0.00 cfs 0.000 af Outflow=0.07 cfs 0.048 af
Pond 87P: CB 85	Peak Elev=62.32' Inflow=0.31 cfs 0.021 af 12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.31 cfs 0.021 af
Pond 88P: CB 84	Peak Elev=62.22' Inflow=0.16 cfs 0.011 af 12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.16 cfs 0.011 af
Pond 89P: CB 74	Peak Elev=64.71' Inflow=0.14 cfs 0.010 af 12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.14 cfs 0.010 af

Pond 90P: CB 75	Peak Elev=64.80' Inflow=0.27 cfs 0.019 af 12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.27 cfs 0.019 af
Pond 91P: DMH 55	Peak Elev=64.66' Inflow=0.41 cfs 0.029 af 12.0" Round Culvert n=0.013 L=108.0' S=0.0204 ' Outflow=0.41 cfs 0.029 af
Pond 92P: DMH 63	Peak Elev=62.19' Inflow=0.47 cfs 0.033 af 12.0" Round Culvert n=0.013 L=120.0' S=0.0292 ' Outflow=0.47 cfs 0.033 af
Pond 93P: DMH 62	Peak Elev=59.05' Inflow=2.57 cfs 0.178 af 18.0" Round Culvert n=0.013 L=84.0' S=0.0065 ' Outflow=2.57 cfs 0.178 af
Pond 94P: CB 77	Peak Elev=63.08' Inflow=0.51 cfs 0.035 af 12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.51 cfs 0.035 af
Pond 95P: CB 76	Peak Elev=63.00' Inflow=0.35 cfs 0.024 af 12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.35 cfs 0.024 af
Pond 96P: DMH 56	Peak Elev=62.91' Inflow=2.88 cfs 0.201 af 18.0" Round Culvert n=0.013 L=134.0' S=0.0067 ' Outflow=2.88 cfs 0.201 af
Pond 97P: Sub. Det. 2	Peak Elev=60.34' Storage=0.214 af Inflow=3.51 cfs 0.245 af Outflow=0.04 cfs 0.031 af
Pond 98P: DMH 61	Peak Elev=60.56' Inflow=2.10 cfs 0.146 af 18.0" Round Culvert n=0.013 L=136.0' S=0.0110 ' Outflow=2.10 cfs 0.146 af
Pond 99P: CB 81	Peak Elev=63.47' Inflow=0.62 cfs 0.043 af 12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.62 cfs 0.043 af
Pond 100P: CB 80	Peak Elev=63.62' Inflow=0.99 cfs 0.069 af 12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.99 cfs 0.069 af
Pond 101P: DMH 59	Peak Elev=63.45' Inflow=1.61 cfs 0.112 af 18.0" Round Culvert n=0.013 L=136.0' S=0.0051 ' Outflow=1.61 cfs 0.112 af
Pond 102P: CB 93	Peak Elev=61.80' Inflow=0.44 cfs 0.031 af 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
Pond 121P: Sub. Det. 3	Peak Elev=59.37' Storage=0.221 af Inflow=5.08 cfs 0.360 af Outflow=0.68 cfs 0.165 af
Pond 122P: CB 46	Peak Elev=58.11' Inflow=0.69 cfs 0.048 af 12.0" Round Culvert n=0.013 L=16.0' S=0.0063 '/' Outflow=0.69 cfs 0.048 af
Pond 123P: DMH 31	Peak Elev=57.97' Inflow=1.28 cfs 0.088 af 18.0" Round Culvert n=0.013 L=78.0' S=0.0100 '/' Outflow=1.28 cfs 0.088 af
Pond 124P: DMH 32	Peak Elev=57.15' Inflow=1.28 cfs 0.088 af 18.0" Round Culvert n=0.013 L=75.0' S=0.0249 '/' Outflow=1.28 cfs 0.088 af

Pond 125P: CB 36	Peak Elev=54.82' Inflow=0.37 cfs 0.025 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=0.37 cfs 0.025 af
Pond 126P: CB 37	Peak Elev=54.86' Inflow=0.46 cfs 0.031 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=0.46 cfs 0.031 af
Pond 127P: DMH 26	Peak Elev=54.78' Inflow=0.83 cfs 0.056 af 12.0" Round Culvert n=0.013 L=84.0' S=0.0173 '/' Outflow=0.83 cfs 0.056 af
Pond 128P: CB 30	Peak Elev=56.29' Inflow=0.44 cfs 0.029 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.44 cfs 0.029 af
Pond 129P: CB 34	Peak Elev=54.34' Inflow=0.62 cfs 0.042 af 12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.62 cfs 0.042 af
Pond 130P: CB 32	Peak Elev=54.66' Inflow=1.14 cfs 0.077 af 12.0" Round Culvert n=0.013 L=16.0' S=0.0256 '/' Outflow=1.14 cfs 0.077 af
Pond 131P: CB 35	Peak Elev=54.27' Inflow=0.46 cfs 0.031 af 12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.46 cfs 0.031 af
Pond 132P: CB 33	Peak Elev=54.05' Inflow=0.33 cfs 0.024 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.33 cfs 0.024 af
Pond 133P: DMH 24	Peak Elev=54.43' Inflow=2.54 cfs 0.174 af 18.0" Round Culvert n=0.013 L=112.0' S=0.0050 '/' Outflow=2.54 cfs 0.174 af
Pond 134P: DMH 25	Peak Elev=54.40' Inflow=1.08 cfs 0.073 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0050 '/' Outflow=1.08 cfs 0.073 af
Pond 135P: Inf. Basin 3	Peak Elev=53.87' Storage=2,373 cf Inflow=3.06 cfs 0.209 af Discarded=0.88 cfs 0.209 af Primary=0.00 cfs 0.000 af Outflow=0.88 cfs 0.209 af
Pond 136P: CB 38	Peak Elev=53.79' Inflow=0.25 cfs 0.017 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.25 cfs 0.017 af
Pond 137P: CB	Peak Elev=53.91' Inflow=0.52 cfs 0.035 af 12.0" Round Culvert n=0.013 L=70.0' S=0.0071 '/' Outflow=0.52 cfs 0.035 af
Pond 138P: CB 39	Peak Elev=53.78' Inflow=0.25 cfs 0.017 af 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

Pond 157P: DMH 21

Peak Elev=54.87' Inflow=0.67 cfs 0.046 af
12.0" Round Culvert n=0.013 L=86.0' S=0.0105 '/' Outflow=0.67 cfs 0.046 af

Pond 158P: CB 24

Peak Elev=53.85' Inflow=0.19 cfs 0.013 af
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.19 cfs 0.013 af

Pond 159P: CB 25

Peak Elev=53.92' Inflow=0.30 cfs 0.020 af
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.30 cfs 0.020 af

Pond 160P: DMH 20

Peak Elev=54.10' Inflow=1.17 cfs 0.079 af
12.0" Round Culvert n=0.013 L=33.0' S=0.0052 '/' Outflow=1.17 cfs 0.079 af

Pond 161P: DMH 19

Peak Elev=53.93' Inflow=2.32 cfs 0.158 af
18.0" Round Culvert n=0.013 L=100.0' S=0.0098 '/' Outflow=2.32 cfs 0.158 af

Pond 162P: CB 15

Peak Elev=50.82' Inflow=0.40 cfs 0.028 af
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.40 cfs 0.028 af

Pond 163P: CB 14

Peak Elev=50.78' Inflow=0.28 cfs 0.019 af
12.0" Round Culvert n=0.013 L=20.0' S=0.0050 '/' Outflow=0.28 cfs 0.019 af

Pond 164P: DMH 9

Peak Elev=50.76' Inflow=0.68 cfs 0.047 af
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.68 cfs 0.047 af

Pond 165P: CB 19

Peak Elev=53.56' Inflow=0.29 cfs 0.020 af
12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=0.29 cfs 0.020 af

Pond 166P: DMH 13

Peak Elev=52.66' Inflow=0.68 cfs 0.046 af
12.0" Round Culvert n=0.013 L=92.0' S=0.0050 '/' Outflow=0.68 cfs 0.046 af

Pond 167P: CB 10

Peak Elev=50.66' Inflow=0.08 cfs 0.006 af
12.0" Round Culvert n=0.013 L=9.0' S=0.0111 '/' Outflow=0.08 cfs 0.006 af

Pond 168P: CB 11

Peak Elev=50.63' Inflow=0.06 cfs 0.004 af
12.0" Round Culvert n=0.013 L=9.0' S=0.0111 '/' Outflow=0.06 cfs 0.004 af

Pond 169P: DMH 12

Peak Elev=52.09' Inflow=0.68 cfs 0.046 af
12.0" Round Culvert n=0.013 L=107.0' S=0.0050 '/' Outflow=0.68 cfs 0.046 af

Pond 170P: CB 9

Peak Elev=48.64' Inflow=0.32 cfs 0.024 af
12.0" Round Culvert n=0.013 L=21.0' S=0.0062 '/' Outflow=0.32 cfs 0.024 af

Pond 171P: DMH 6

Peak Elev=48.78' Inflow=1.87 cfs 0.130 af
18.0" Round Culvert n=0.013 L=94.0' S=0.0066 '/' Outflow=1.87 cfs 0.130 af

Pond 172P: CB 16

Peak Elev=52.36' Inflow=0.60 cfs 0.040 af
12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=0.60 cfs 0.040 af

Pond 173P: CB 17

Peak Elev=52.16' Inflow=0.21 cfs 0.014 af
12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=0.21 cfs 0.014 af

Pond 174P: DMH 11

Peak Elev=51.60' Inflow=1.49 cfs 0.101 af
18.0" Round Culvert n=0.013 L=111.0' S=0.0050 '/' Outflow=1.49 cfs 0.101 af

Pond 175P: DMH 5

Peak Elev=48.97' Inflow=1.16 cfs 0.080 af
12.0" Round Culvert n=0.013 L=14.0' S=0.0071 '/' Outflow=1.16 cfs 0.080 af

Pond 176P: CB 6

Peak Elev=48.89' Inflow=0.49 cfs 0.034 af
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.49 cfs 0.034 af

Pond 177P: CB 13	Peak Elev=50.90' Inflow=0.46 cfs 0.031 af 12.0" Round Culvert n=0.013 L=9.0' S=0.0111 ' Outflow=0.46 cfs 0.031 af
Pond 178P: CB 12	Peak Elev=50.73' Inflow=0.18 cfs 0.012 af 12.0" Round Culvert n=0.013 L=9.0' S=0.0111 ' Outflow=0.18 cfs 0.012 af
Pond 179P: DMH 8	Peak Elev=51.13' Inflow=2.13 cfs 0.145 af 18.0" Round Culvert n=0.013 L=8.0' S=0.0125 ' Outflow=2.13 cfs 0.145 af
Pond 180P: DMH 10	Peak Elev=50.98' Inflow=2.96 cfs 0.201 af 18.0" Round Culvert n=0.013 L=138.0' S=0.0076 ' Outflow=2.96 cfs 0.201 af
Pond 181P: DMH	Peak Elev=50.52' Inflow=0.14 cfs 0.010 af 12.0" Round Culvert n=0.013 L=16.0' S=0.0062 ' Outflow=0.14 cfs 0.010 af
Pond 182P: CB 7	Peak Elev=48.97' Inflow=0.67 cfs 0.045 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=0.67 cfs 0.045 af
Pond 184P: DMH 4A	Peak Elev=49.35' Inflow=0.00 cfs 0.000 af 12.0" Round Culvert n=0.013 L=169.0' S=0.0088 ' Outflow=0.00 cfs 0.000 af
Pond 185P: DMH	Peak Elev=48.24' Inflow=0.71 cfs 0.048 af 12.0" Round Culvert n=0.013 L=36.0' S=0.0208 ' Outflow=0.71 cfs 0.048 af
Pond 186P: Constructed Wetland 1	Peak Elev=47.14' Storage=8,537 cf Inflow=2.98 cfs 0.213 af Outflow=0.03 cfs 0.017 af
Pond 187P: Constructed Wetland 3	Peak Elev=56.28' Storage=3,340 cf Inflow=2.10 cfs 0.204 af Outflow=0.64 cfs 0.142 af
Pond 188P: CB 3	Peak Elev=47.67' Inflow=0.01 cfs 0.006 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0075 ' Outflow=0.01 cfs 0.006 af
Pond 189P: CB 4	Peak Elev=48.18' Inflow=0.89 cfs 0.061 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0075 ' Outflow=0.89 cfs 0.061 af
Pond 190P: DMH 3	Peak Elev=48.24' Inflow=2.77 cfs 0.196 af 18.0" Round Culvert n=0.013 L=166.0' S=0.0060 ' Outflow=2.77 cfs 0.196 af
Pond 191P: CB 42	Peak Elev=50.97' Inflow=0.67 cfs 0.046 af 12.0" Round Culvert n=0.013 L=194.0' S=0.0077 ' Outflow=0.67 cfs 0.046 af
Pond 192P: Sub. Inf. 1	Peak Elev=49.01' Storage=0.027 af Inflow=2.96 cfs 0.201 af Discarded=1.31 cfs 0.201 af Primary=0.00 cfs 0.000 af Outflow=1.31 cfs 0.201 af
Pond 193P: CB 1	Peak Elev=47.06' Inflow=0.01 cfs 0.002 af 12.0" Round Culvert n=0.013 L=25.0' S=0.0060 ' Outflow=0.01 cfs 0.002 af
Pond 194P: CB 2	Peak Elev=47.25' Inflow=0.21 cfs 0.014 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0100 ' Outflow=0.21 cfs 0.014 af
Pond 195P: Constructed Wetland 4	Peak Elev=54.78' Storage=3,022 cf Inflow=0.68 cfs 0.165 af Outflow=0.31 cfs 0.104 af

Pond 196P: CB 5

Peak Elev=48.52' Inflow=0.71 cfs 0.048 af
12.0" Round Culvert n=0.013 L=27.0' S=0.0059 '/' Outflow=0.71 cfs 0.048 af

Pond 197P: Inf. Basin 1

Peak Elev=47.06' Storage=147 cf Inflow=0.71 cfs 0.048 af
Discarded=0.53 cfs 0.048 af Primary=0.00 cfs 0.000 af Outflow=0.53 cfs 0.048 af

Pond 198P: Sub. Inf. 2

Peak Elev=51.62' Storage=0.028 af Inflow=2.92 cfs 0.198 af
Discarded=1.29 cfs 0.198 af Primary=0.00 cfs 0.000 af Outflow=1.29 cfs 0.198 af

Pond 199P: DMH 2

Peak Elev=47.20' Inflow=2.77 cfs 0.196 af
18.0" Round Culvert n=0.013 L=48.0' S=0.0052 '/' Outflow=2.77 cfs 0.196 af

Pond 200P: DMH 1

Peak Elev=47.00' Inflow=0.21 cfs 0.017 af
12.0" Round Culvert n=0.013 L=55.0' S=0.0136 '/' Outflow=0.21 cfs 0.017 af

Pond 201P: Sub. Inf. 3

Peak Elev=52.37' Storage=0.012 af Inflow=1.67 cfs 0.117 af
Discarded=0.90 cfs 0.117 af Primary=0.00 cfs 0.000 af Outflow=0.90 cfs 0.117 af

Pond 202P: DMH 14

Peak Elev=52.65' Inflow=0.00 cfs 0.000 af
18.0" Round Culvert n=0.013 L=89.0' S=0.0055 '/' Outflow=0.00 cfs 0.000 af

Pond 204P: DMH 18

Peak Elev=52.42' Inflow=2.92 cfs 0.198 af
18.0" Round Culvert n=0.013 L=5.0' S=-0.0900 '/' Outflow=2.92 cfs 0.198 af

Pond 205P: DMH 27

Peak Elev=53.47' Inflow=1.33 cfs 0.090 af
12.0" Round Culvert n=0.013 L=16.0' S=0.0063 '/' Outflow=1.33 cfs 0.090 af

Pond 206P: DMH 34

Peak Elev=55.19' Inflow=1.79 cfs 0.124 af
18.0" Round Culvert n=0.013 L=5.0' S=-0.1800 '/' Outflow=1.79 cfs 0.124 af

Pond 207P: DMH 48

Peak Elev=60.70' Inflow=1.50 cfs 0.105 af
12.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=1.50 cfs 0.105 af

Pond 208P: DMH 58

Peak Elev=61.78' Inflow=4.86 cfs 0.336 af
24.0" Round Culvert n=0.013 L=5.0' S=0.0100 '/' Outflow=4.86 cfs 0.336 af

Pond 209P: DMH 64

Peak Elev=58.56' Inflow=2.57 cfs 0.178 af
18.0" Round Culvert n=0.013 L=5.0' S=0.0100 '/' Outflow=2.57 cfs 0.178 af

Pond 210P: DMH 68

Peak Elev=58.96' Inflow=5.08 cfs 0.360 af
24.0" Round Culvert n=0.013 L=11.0' S=0.0727 '/' Outflow=5.08 cfs 0.360 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=1.34 cfs 0.437 af
Primary=1.34 cfs 0.437 af

RH Post 8-11-25

Prepared by Millennium Engineering, Inc

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Type III 24-hr 2-Year Rainfall=3.15"

Printed 8/12/2025

Page 31

Link 203L: 3A

Inflow=0.03 cfs 0.017 af

Primary=0.03 cfs 0.017 af

Total Runoff Area = 39.794 ac Runoff Volume = 3.380 af Average Runoff Depth = 1.02"
57.30% Pervious = 22.803 ac 42.70% Impervious = 16.991 ac

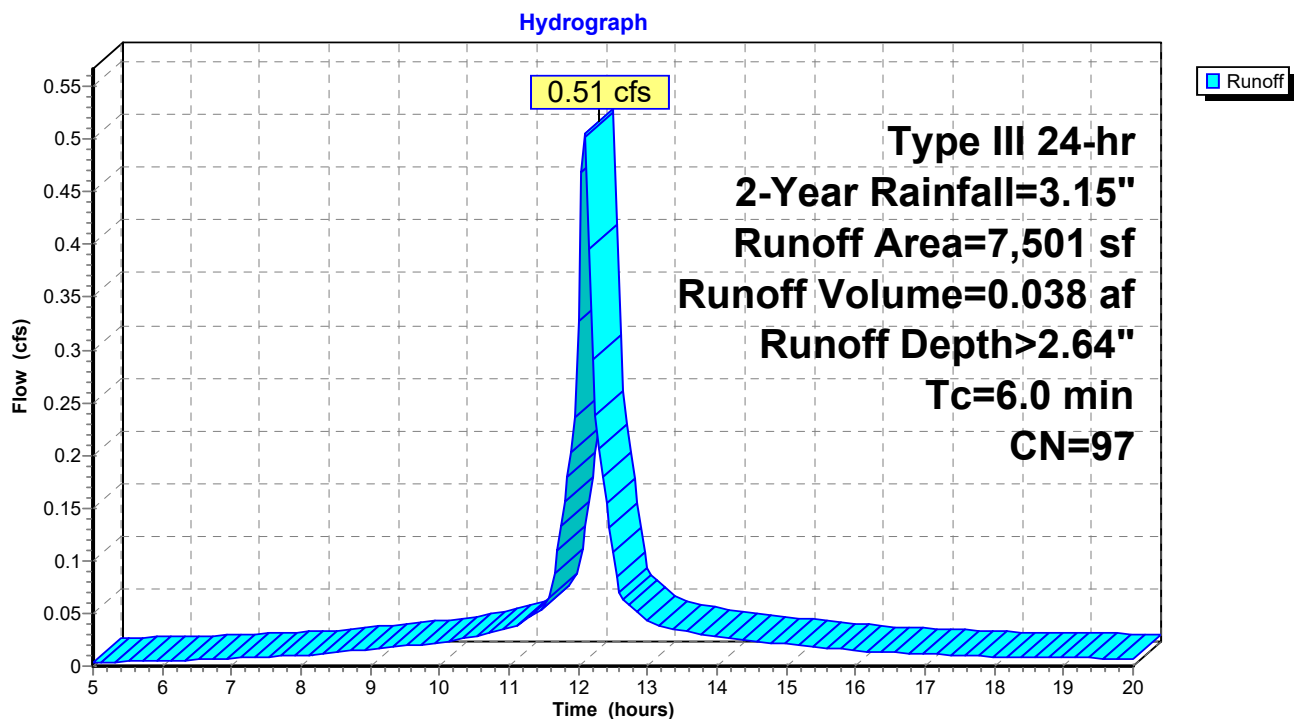
Summary for Subcatchment 1S: P1A

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

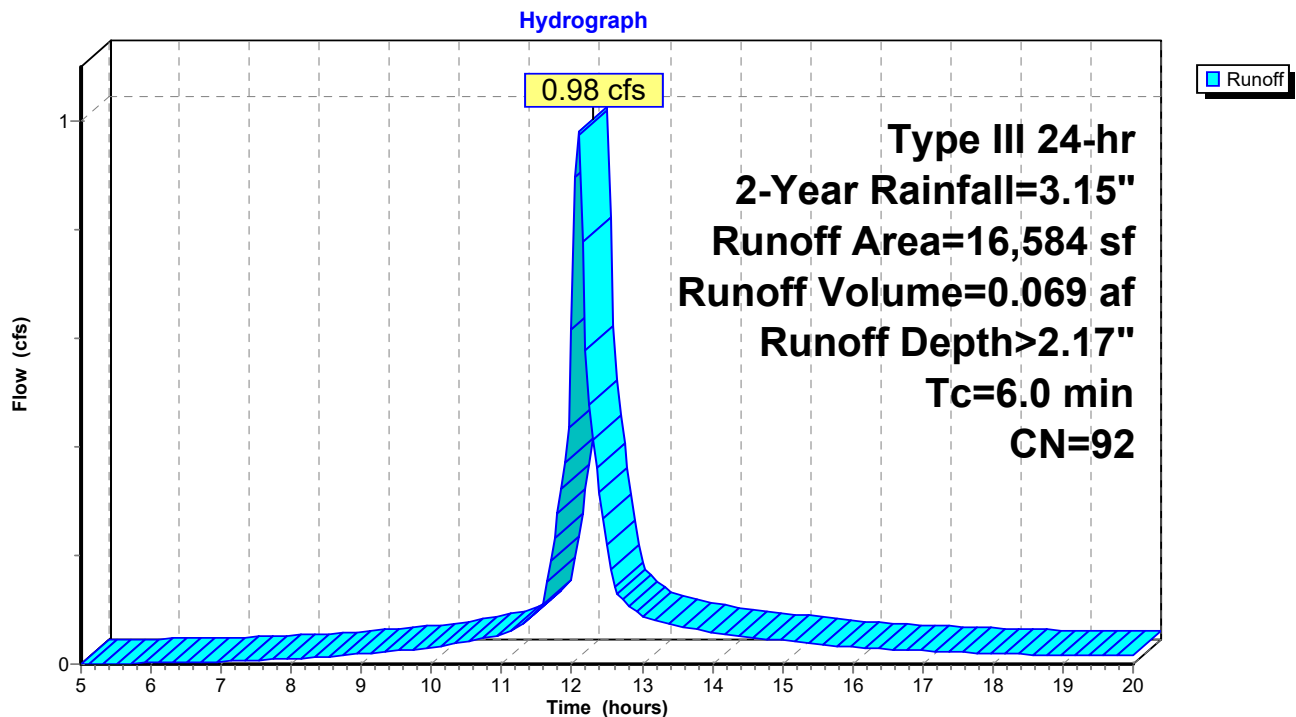
Runoff = 0.98 cfs @ 12.09 hrs, Volume= 0.069 af, Depth> 2.17"
Routed to Pond 17P : CB 59

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



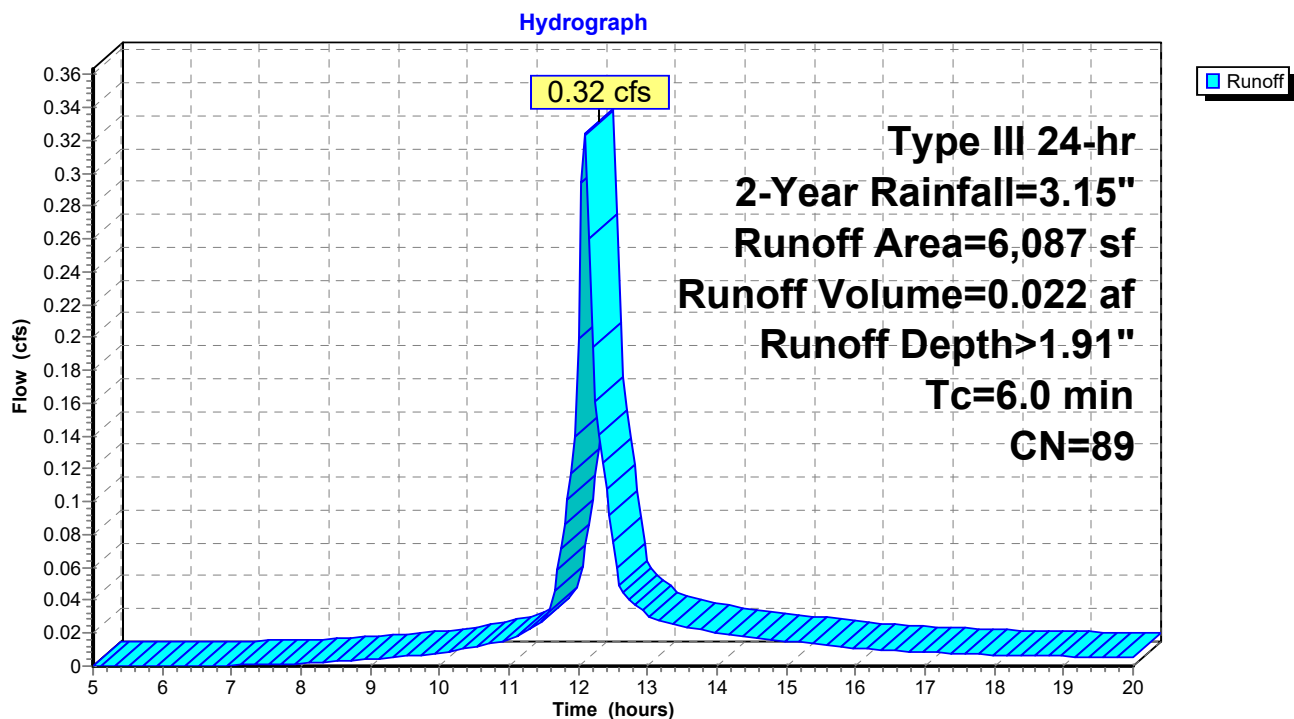
Summary for Subcatchment 3S: P1C

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

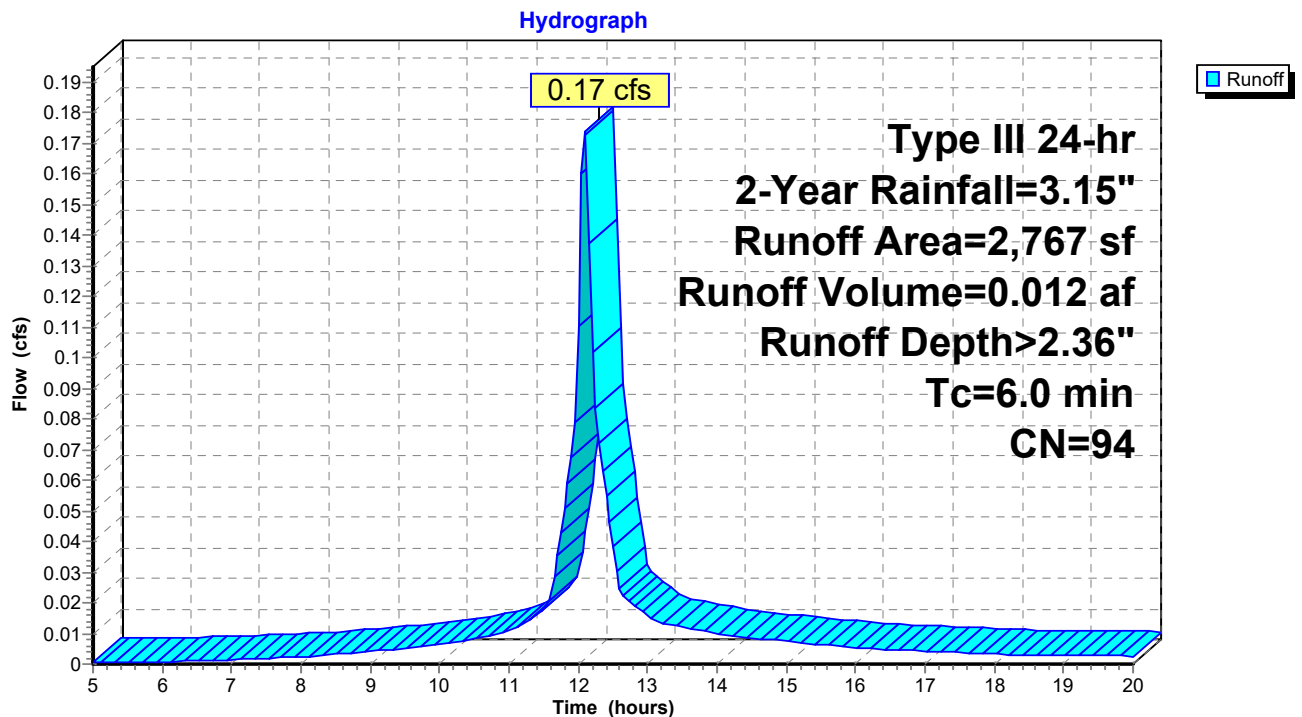
Runoff = 0.17 cfs @ 12.09 hrs, Volume= 0.012 af, Depth> 2.36"
Routed to Pond 19P : CB 62

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

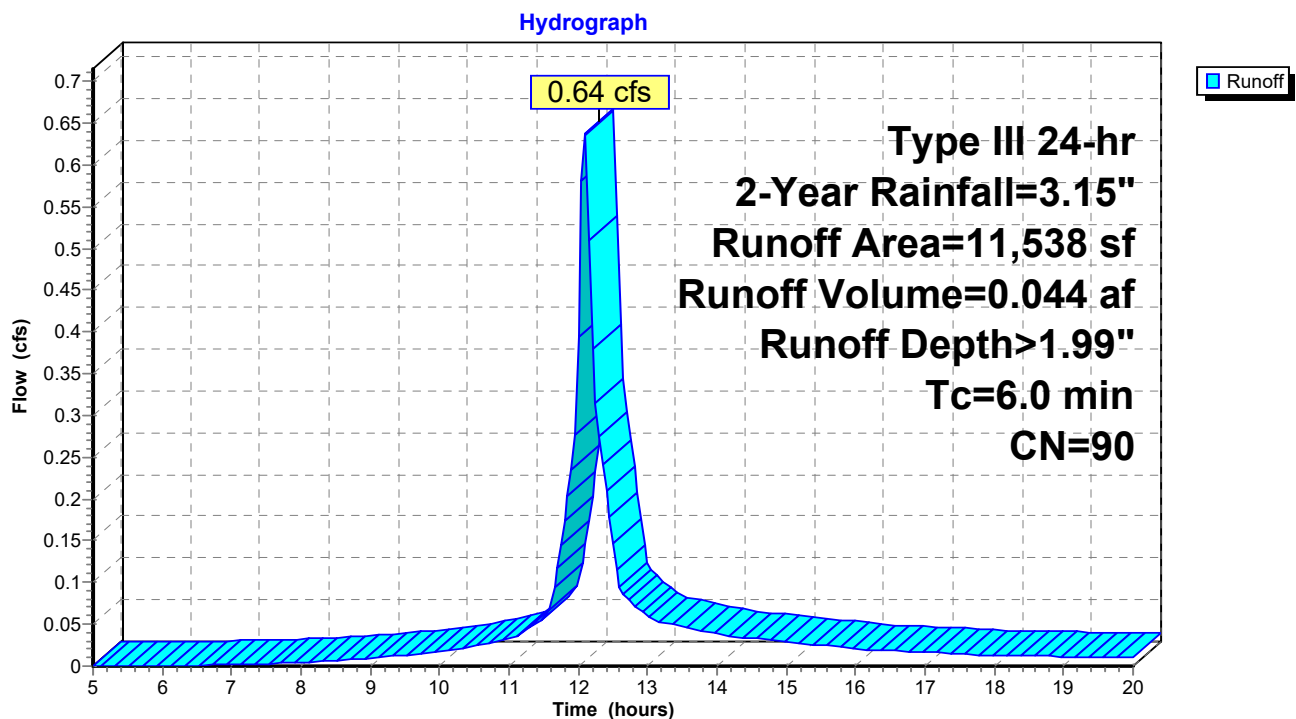
Runoff = 0.64 cfs @ 12.09 hrs, Volume= 0.044 af, Depth> 1.99"
Routed to Pond 26P : CB 61

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



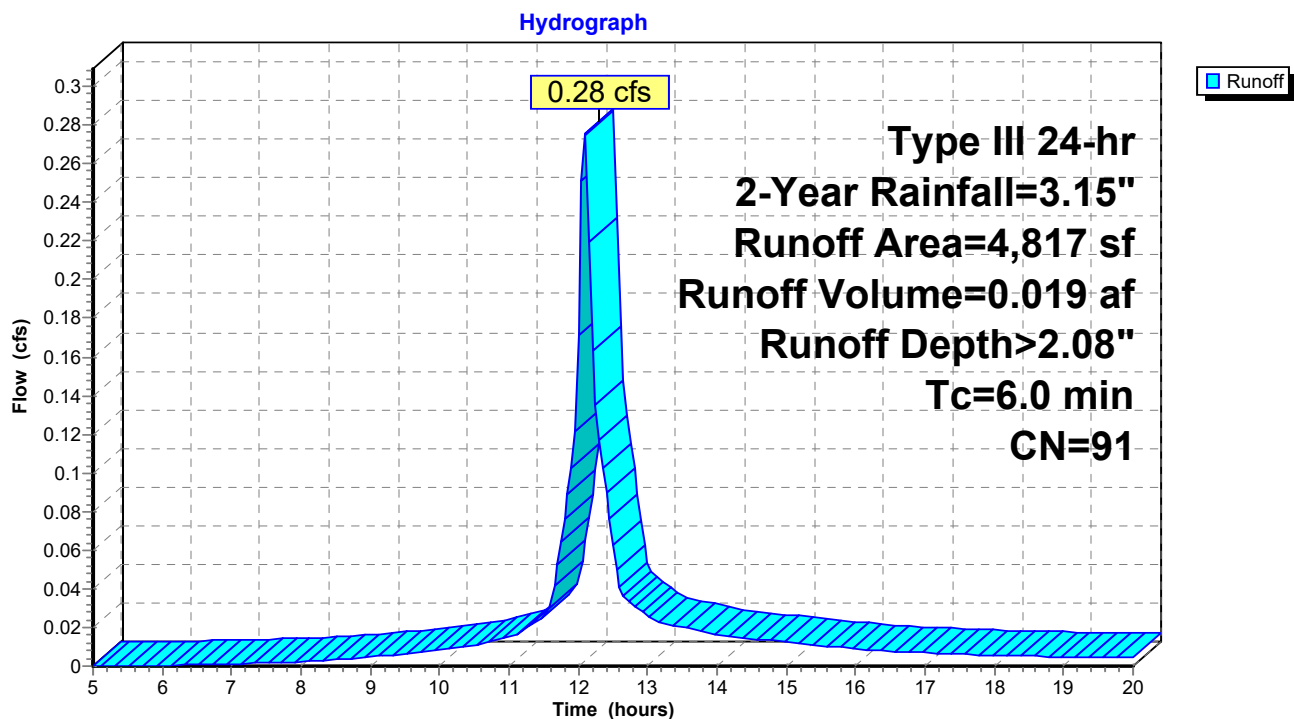
Summary for Subcatchment 6S: P1F

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

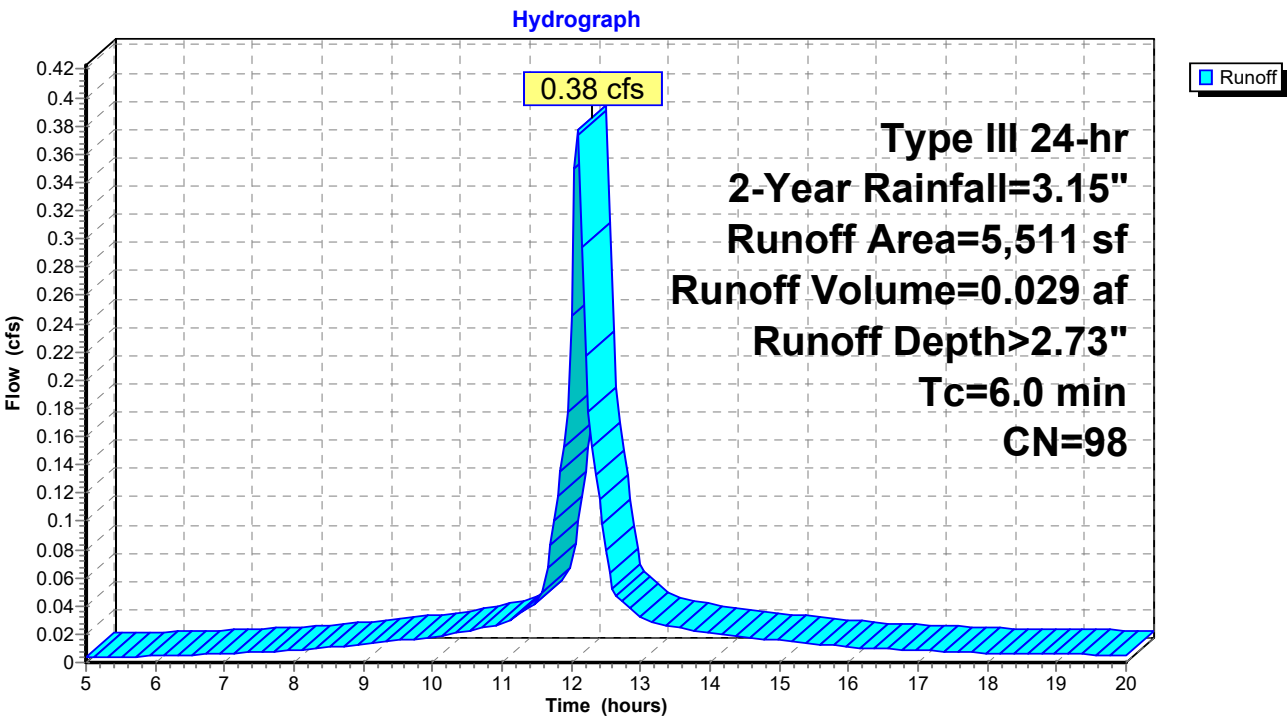
Runoff = 0.38 cfs @ 12.09 hrs, Volume= 0.029 af, Depth> 2.73"
Routed to Pond 22P : CB 56

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



Summary for Subcatchment 8S: P1H

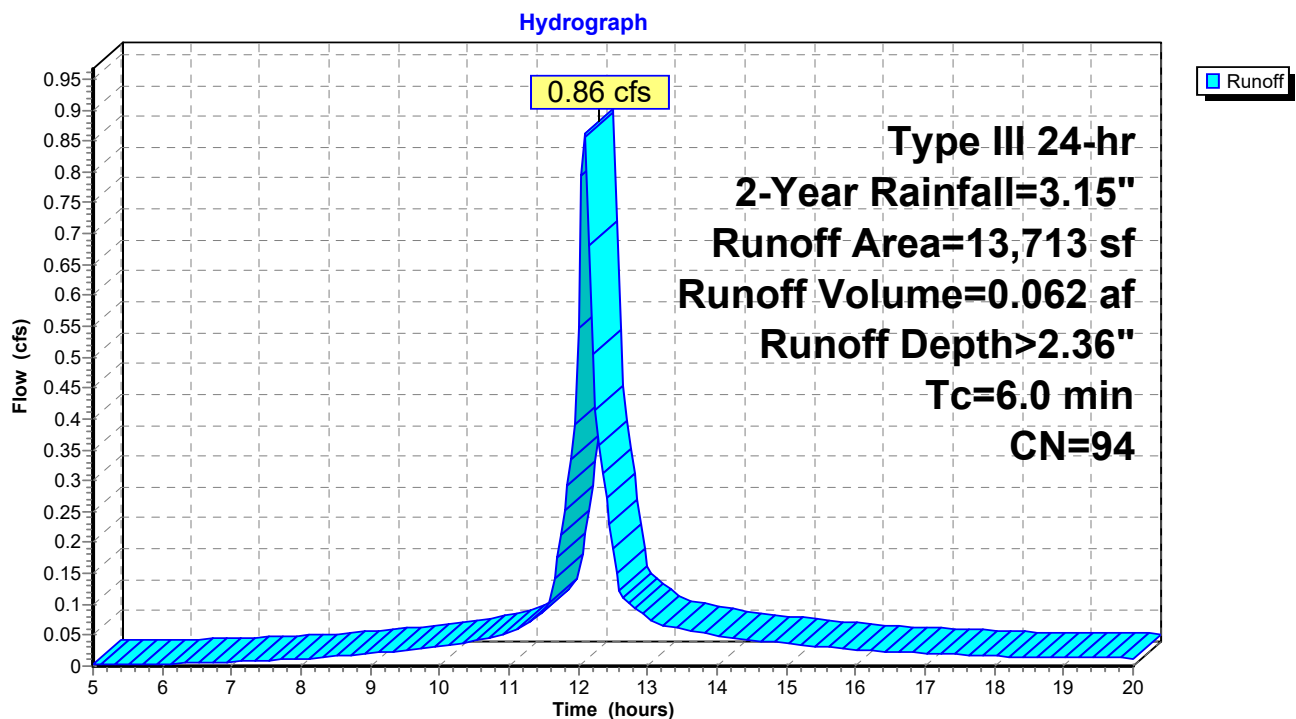
Runoff = 0.86 cfs @ 12.09 hrs, Volume= 0.062 af, Depth> 2.36"
Routed to Pond 23P : CB 57

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



Summary for Subcatchment 9S: P1I

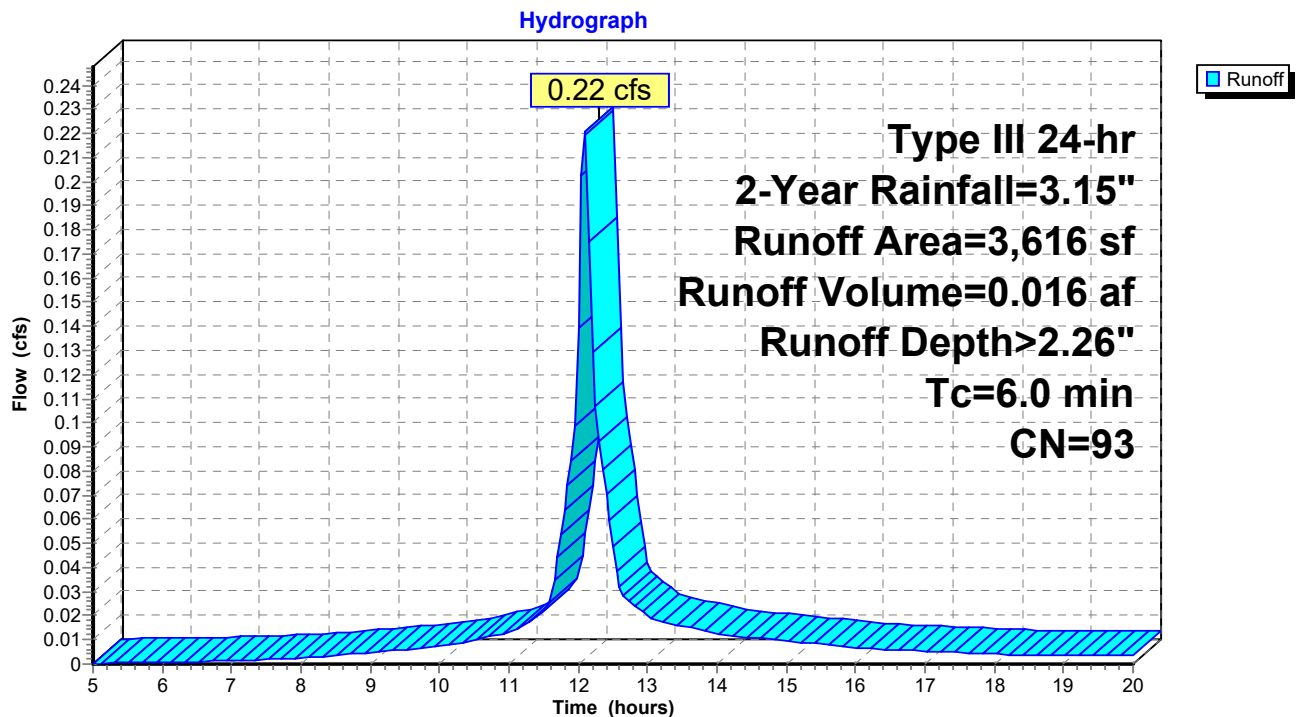
Runoff = 0.22 cfs @ 12.09 hrs, Volume= 0.016 af, Depth> 2.26"
Routed to Pond 30P : CB 55

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

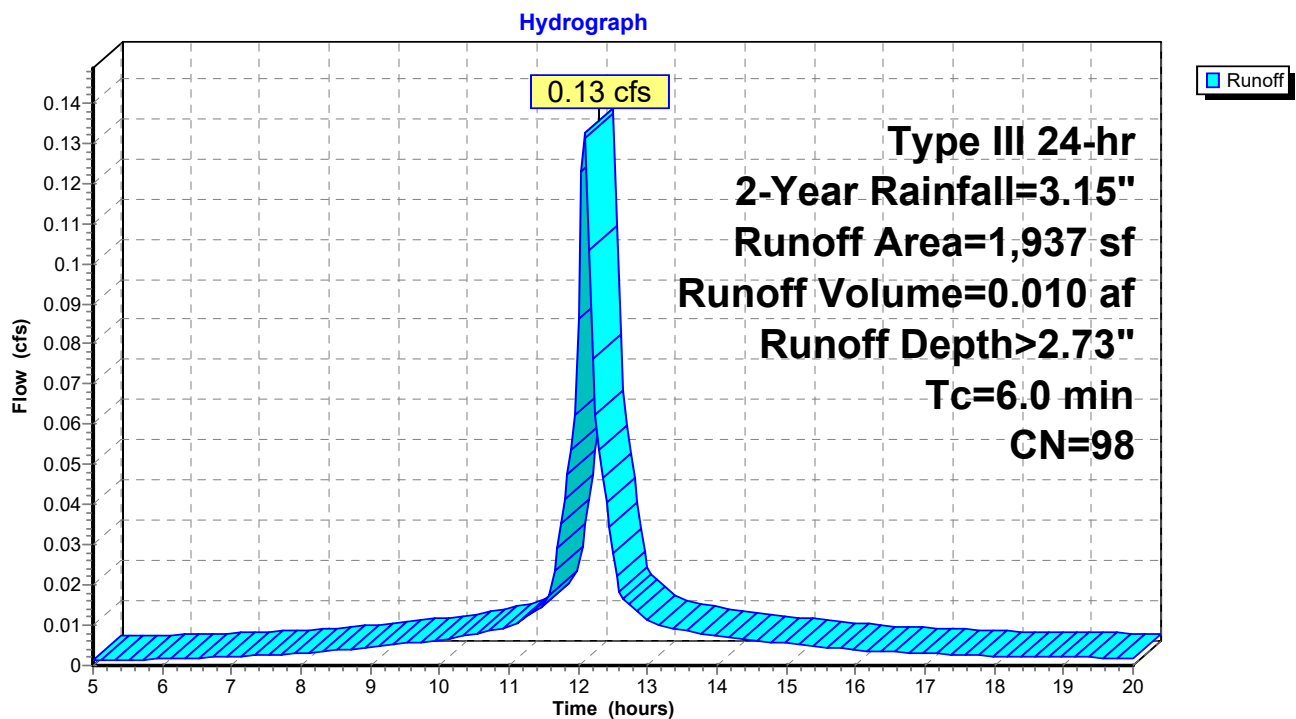
Runoff = 0.13 cfs @ 12.09 hrs, Volume= 0.010 af, Depth> 2.73"
 Routed to Pond 33P : CB 53

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



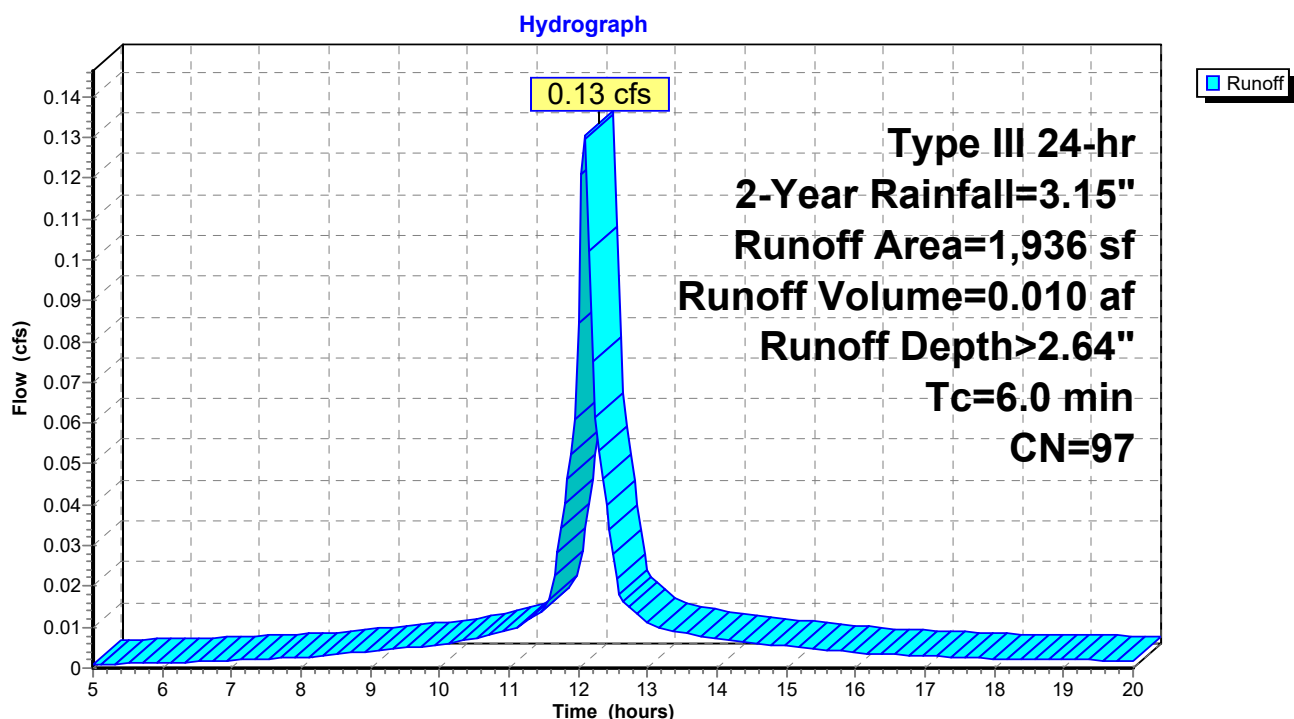
Summary for Subcatchment 11S: P1K

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

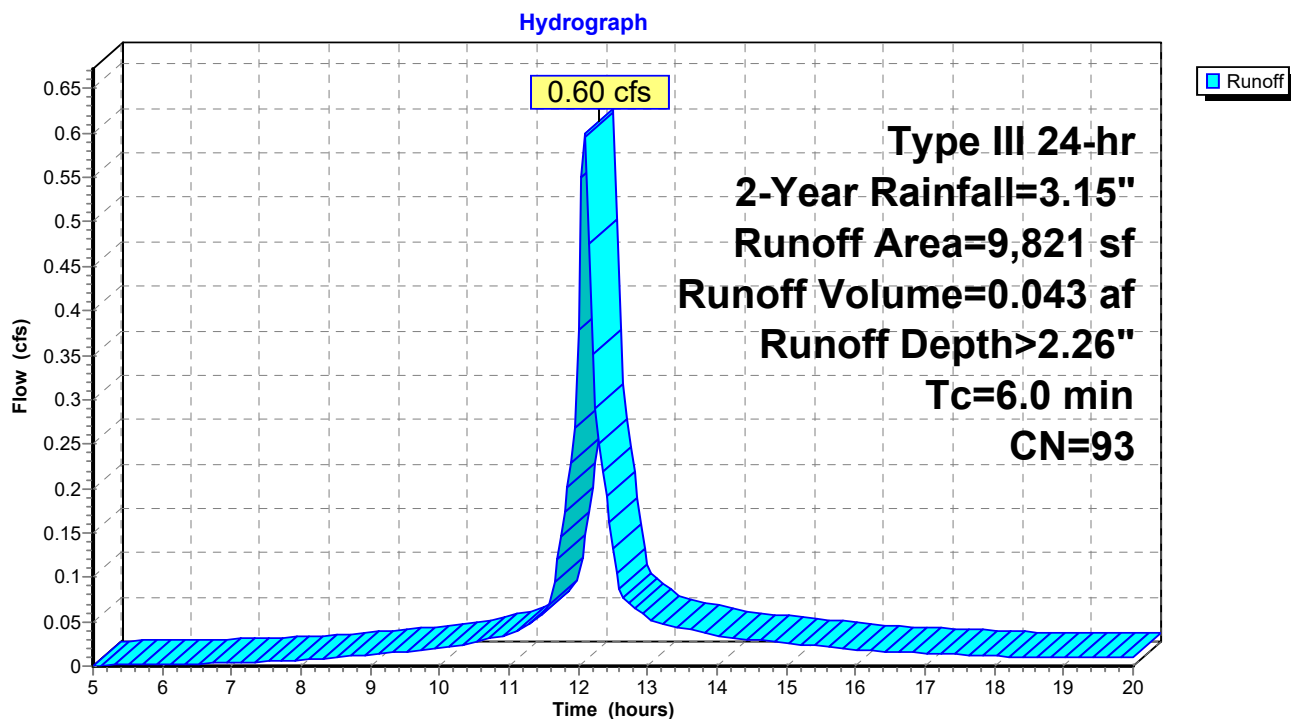
Runoff = 0.60 cfs @ 12.09 hrs, Volume= 0.043 af, Depth> 2.26"
Routed to Pond 32P : CB 52

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

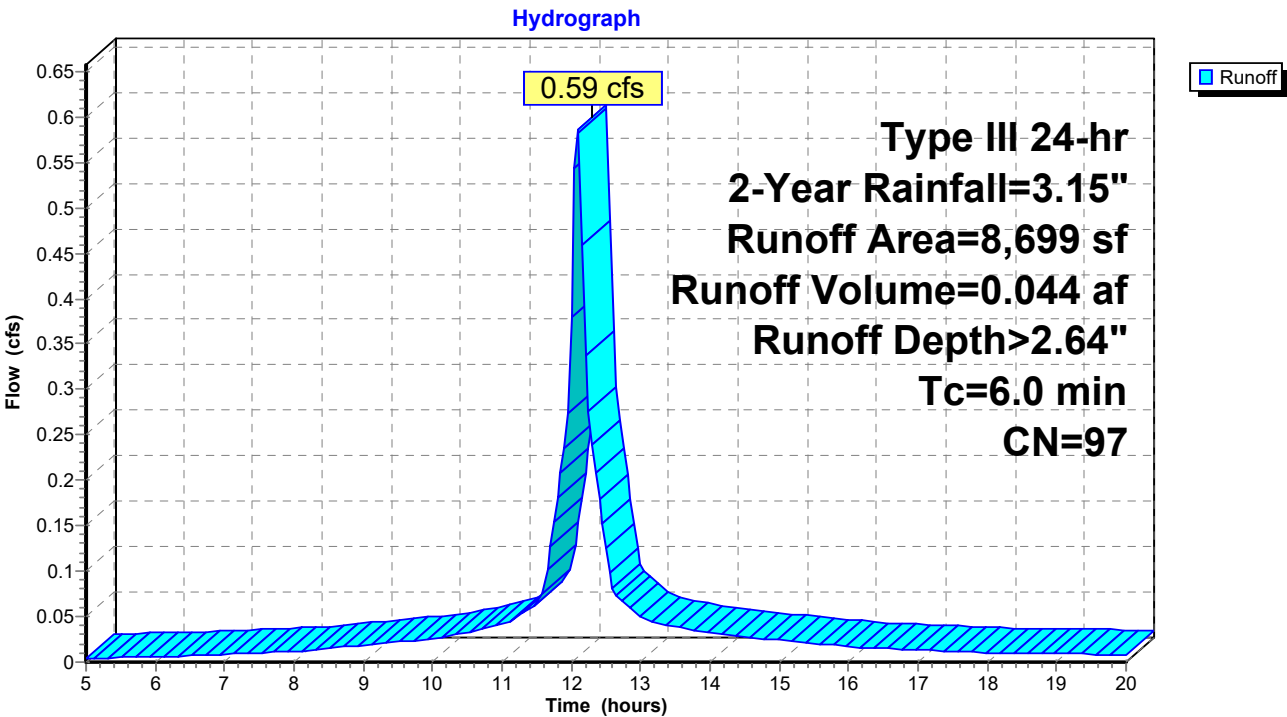
Runoff = 0.59 cfs @ 12.09 hrs, Volume= 0.044 af, Depth> 2.64"
Routed to Pond 36P : CB 54

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



Summary for Subcatchment 14S: P1N

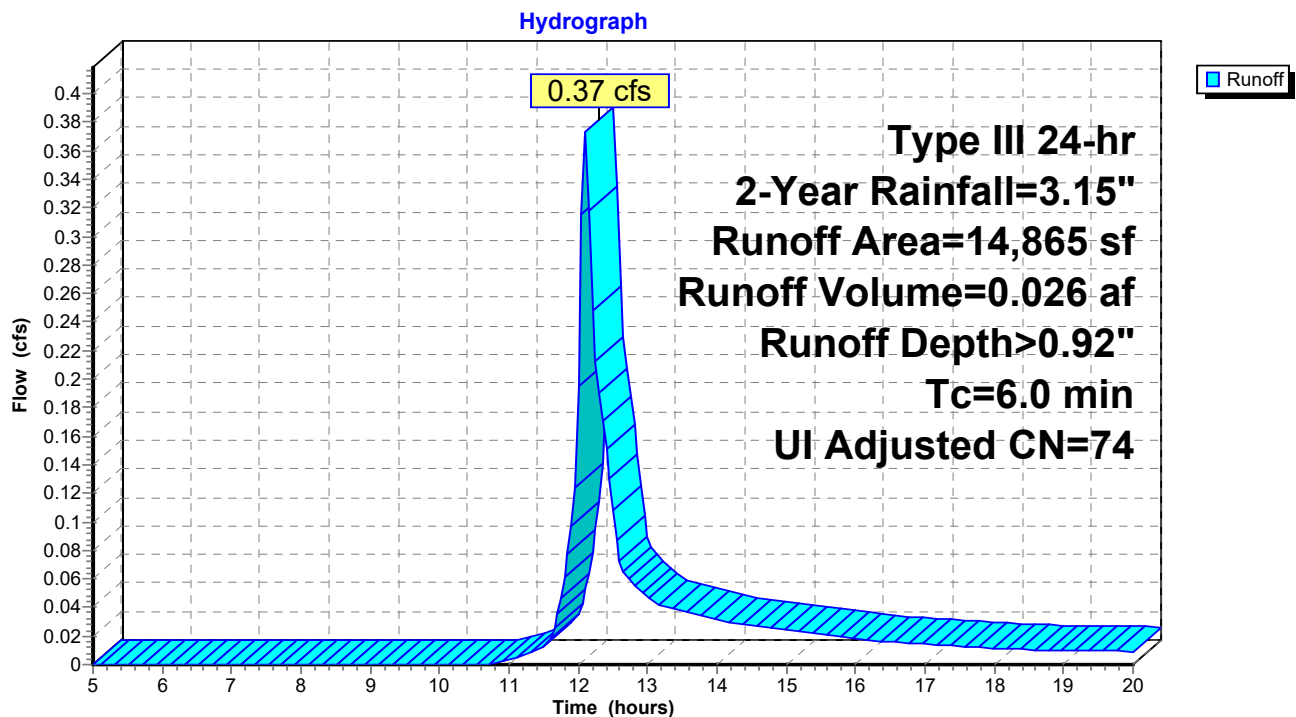
Runoff = 0.37 cfs @ 12.10 hrs, Volume= 0.026 af, Depth> 0.92"
Routed to Pond 15P : Inf. Basin 5

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

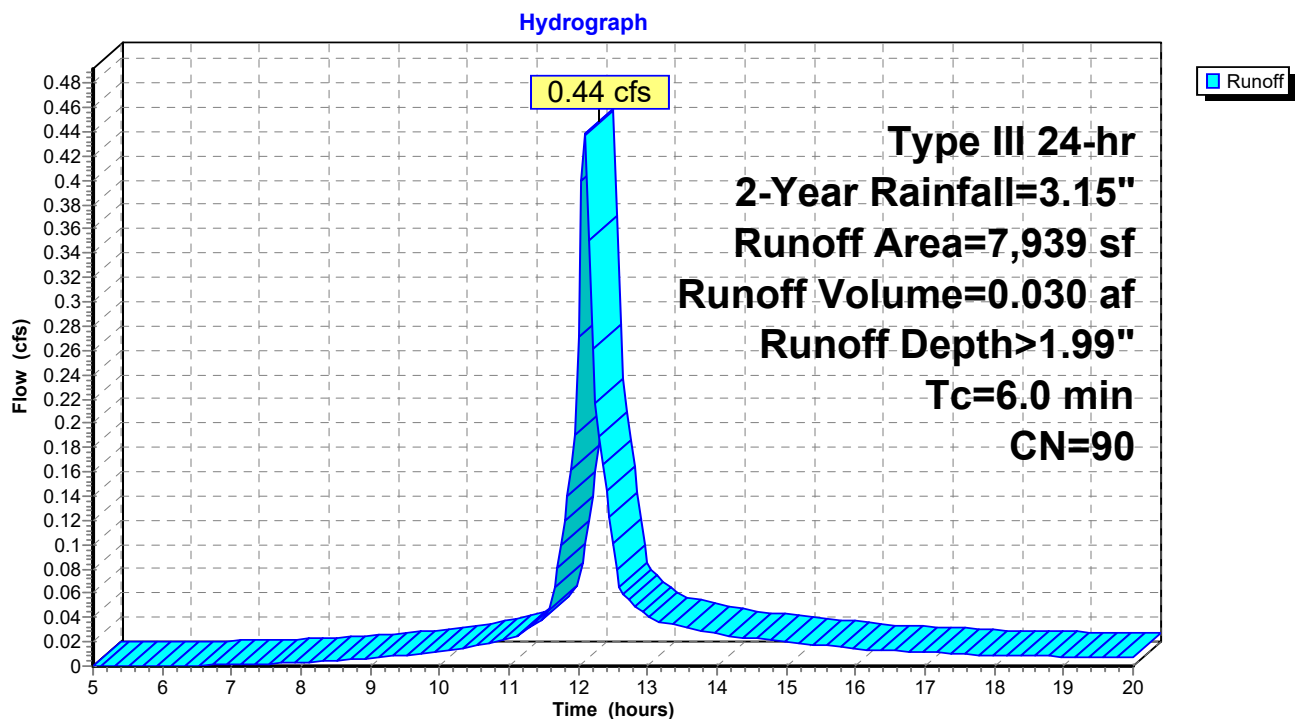
Runoff = 0.44 cfs @ 12.09 hrs, Volume= 0.030 af, Depth> 1.99"
Routed to Pond 42P : CB 50

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

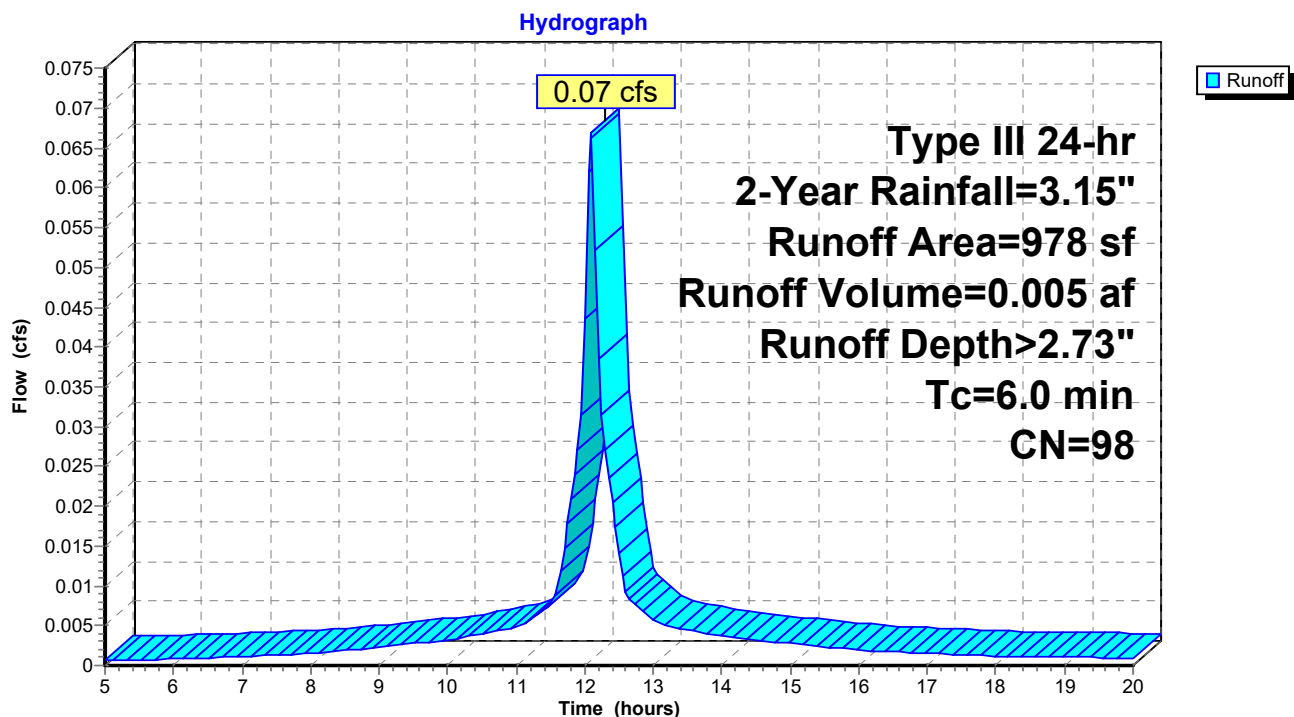
Runoff = 0.07 cfs @ 12.09 hrs, Volume= 0.005 af, Depth> 2.73"
Routed to Pond 41P : CB 49

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



Summary for Subcatchment 44S: P1R

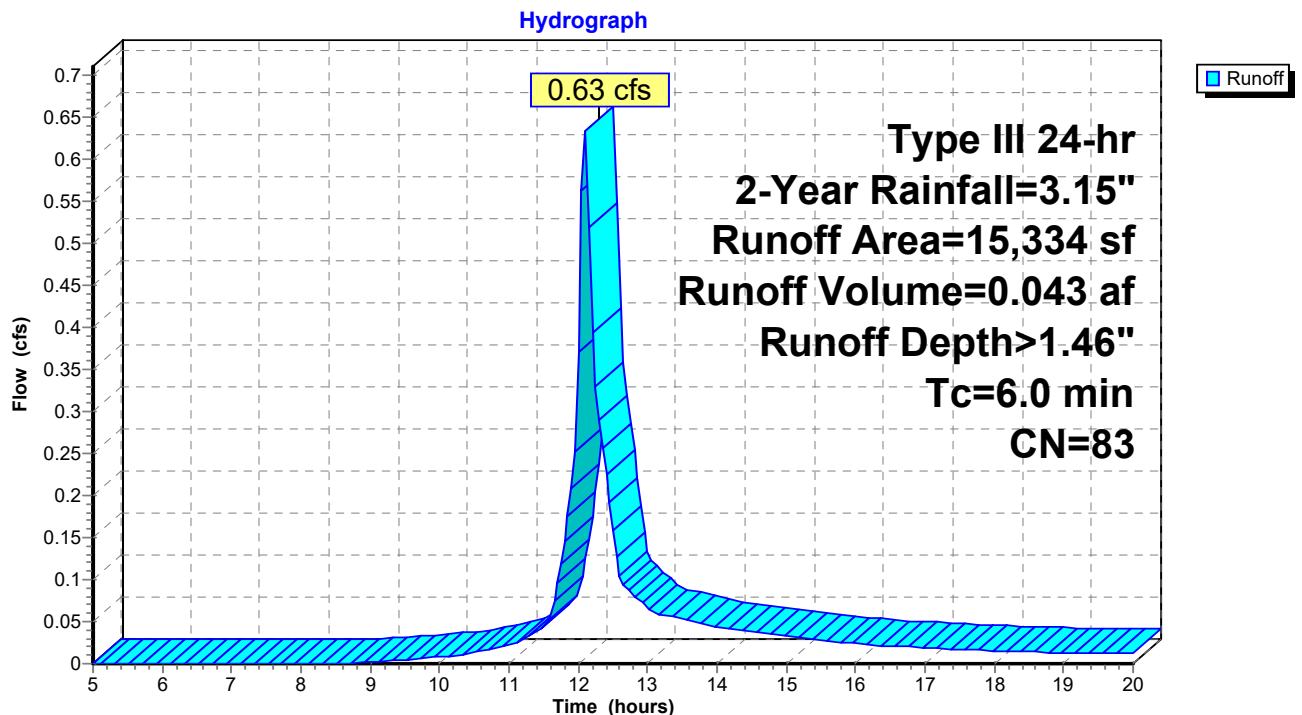
Runoff = 0.63 cfs @ 12.09 hrs, Volume= 0.043 af, Depth> 1.46"
Routed to Pond 46P : CB 48

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

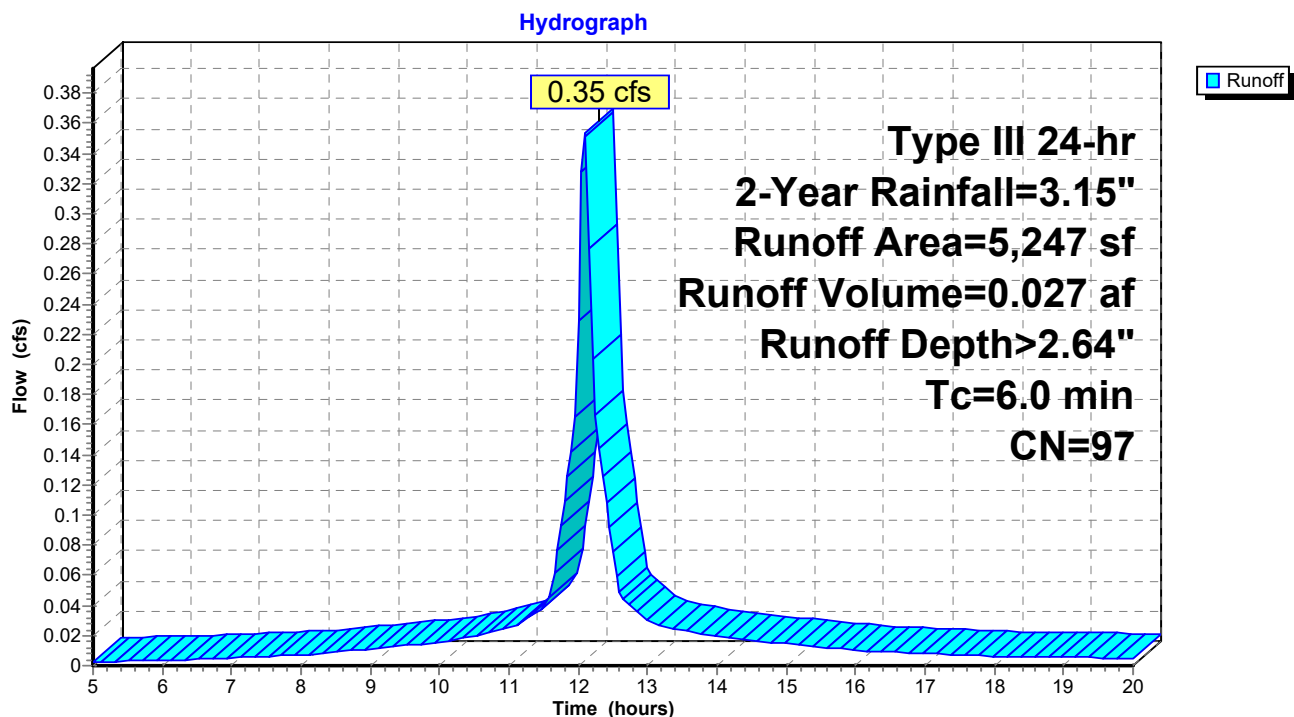
Runoff = 0.35 cfs @ 12.09 hrs, Volume= 0.027 af, Depth> 2.64"
Routed to Pond 47P : CB 47

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

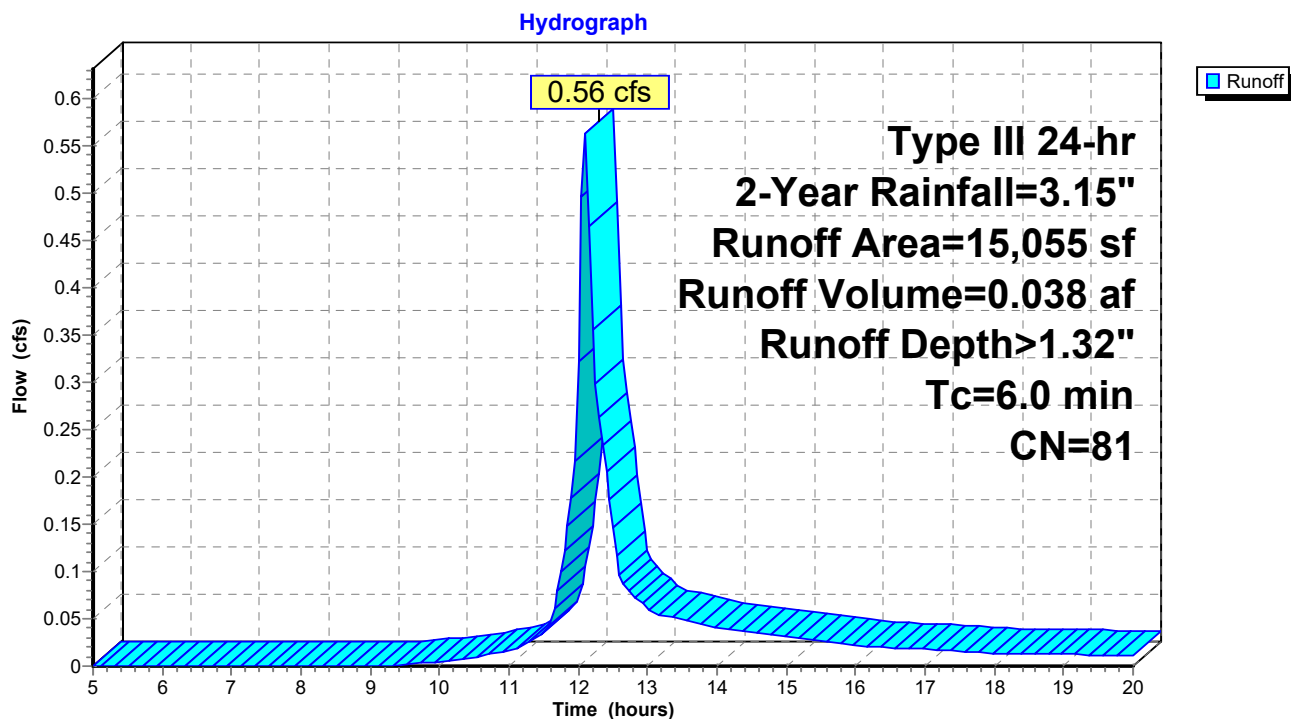
Runoff = 0.56 cfs @ 12.10 hrs, Volume= 0.038 af, Depth> 1.32"
Routed to Pond 53P : CB 21

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
4,736	98	Unconnected roofs, HSG A
4,294	39	>75% Grass cover, Good, HSG A
6,025	98	Paved parking, HSG A
15,055	81	Weighted Average
4,294		28.52% Pervious Area
10,761		71.48% Impervious Area
4,736		44.01% 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

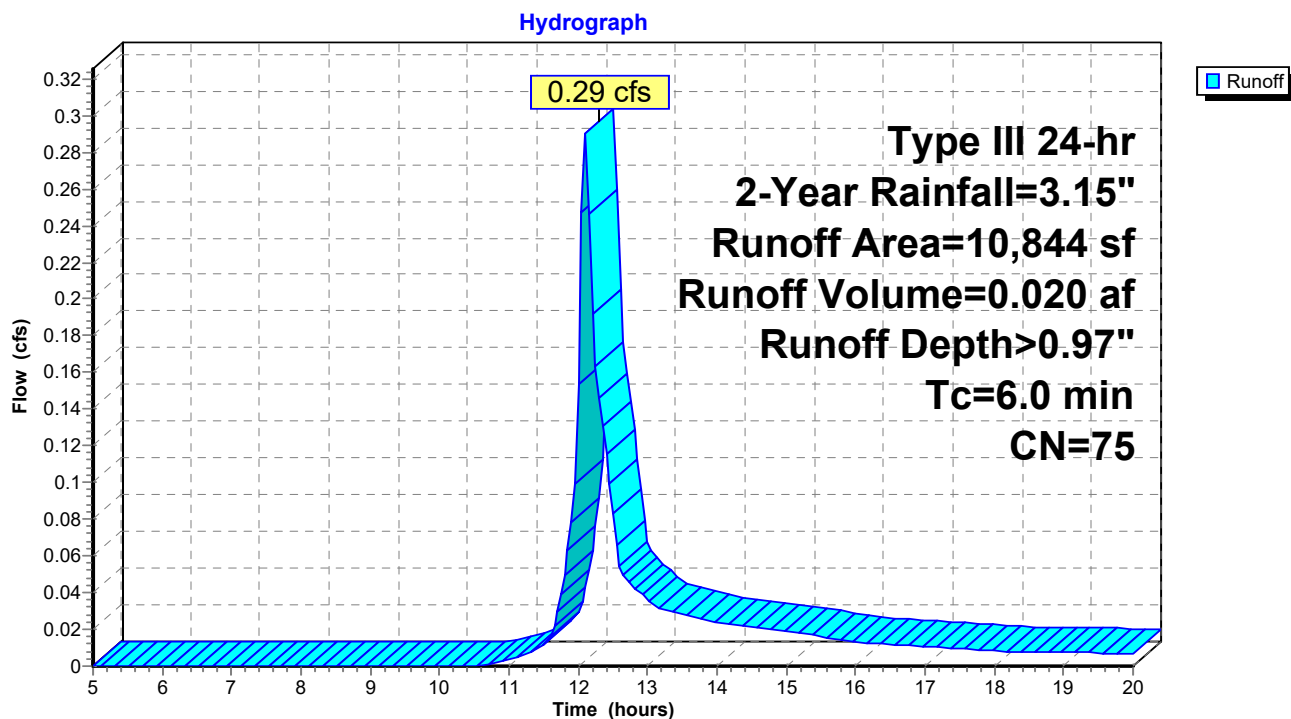
Runoff = 0.29 cfs @ 12.10 hrs, Volume= 0.020 af, Depth> 0.97"
Routed to Pond 52P : CB 20

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
4,148	39	>75% Grass cover, Good, HSG A
2,216	98	Unconnected roofs, HSG A
4,480	98	Paved parking, HSG A
10,844	75	Weighted Average
4,148		38.25% Pervious Area
6,696		61.75% Impervious Area
2,216		33.09% Unconnected

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)

[45] Hint: Runoff=Zero

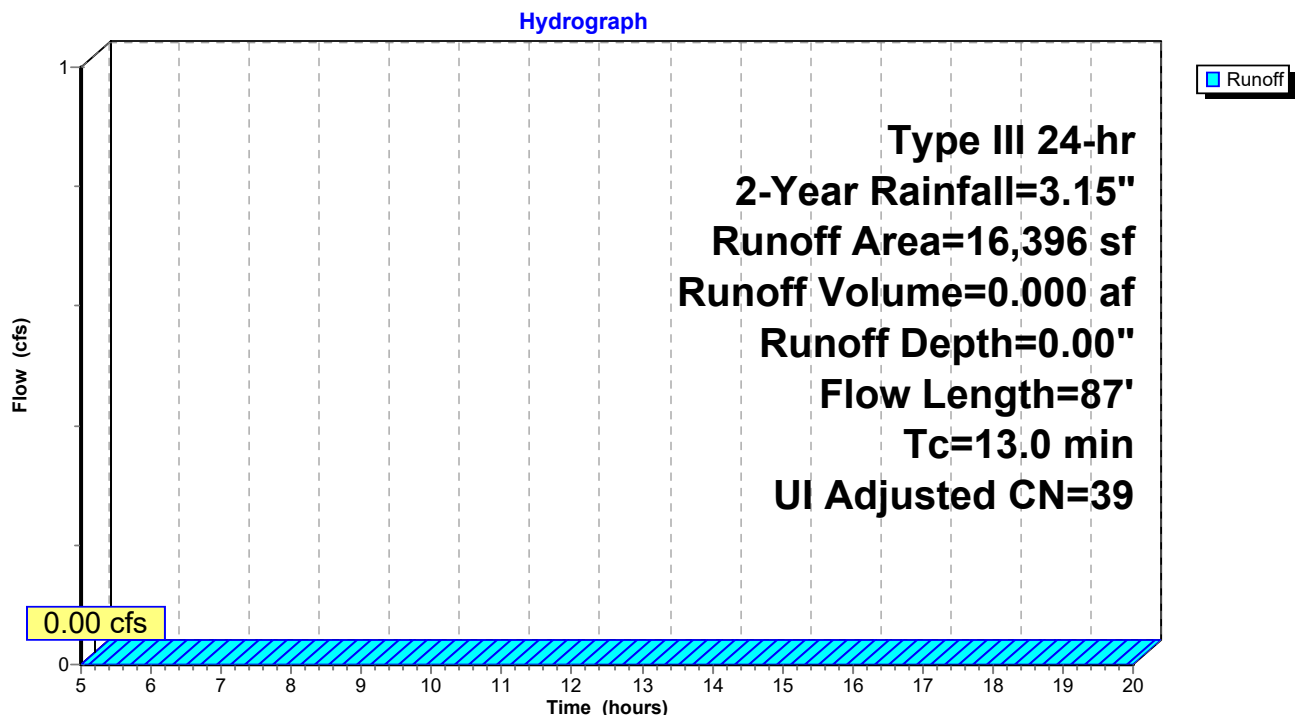
Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond 56P : Inf. Basin 4

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
1,000	98		Unconnected roofs, HSG A
3,657	30		Woods, Good, HSG A
11,739	39		>75% Grass cover, Good, HSG A
16,396	41	39	Weighted Average, UI Adjusted
15,396			93.90% Pervious Area
1,000			6.10% Impervious Area
1,000			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.5	50	0.0200	0.07		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
0.5	37	0.0300	1.21		Shallow Concentrated Flow, 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

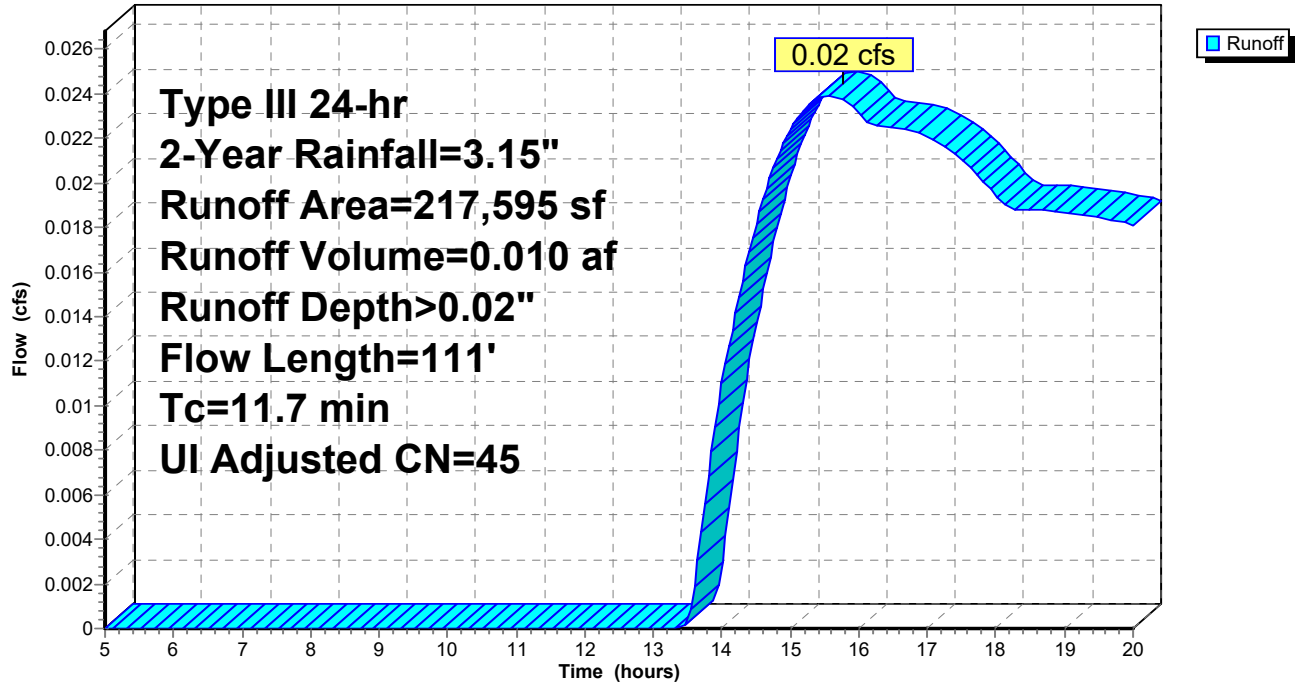
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-Year Rainfall=3.15"

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		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
1.0	61	0.0400	1.00		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
11.7	111	Total			

Subcatchment 58S: P1AA

Hydrograph



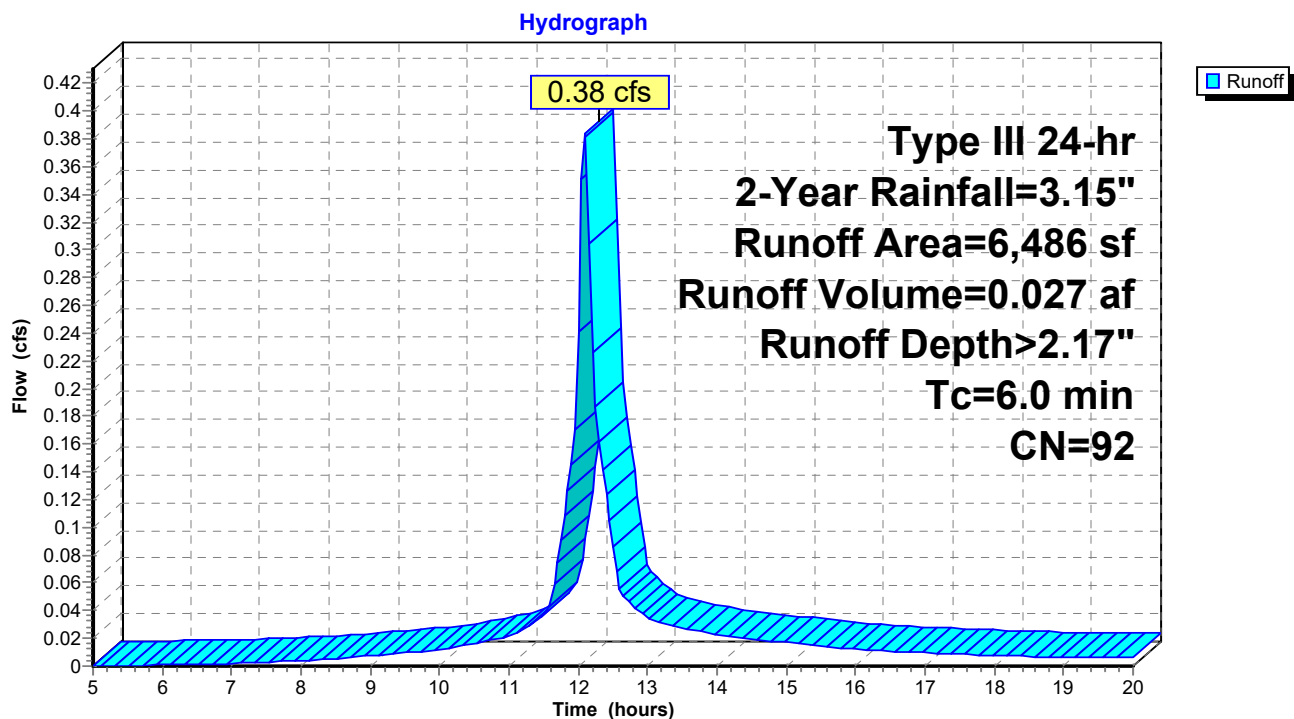
Summary for Subcatchment 60S: P2C

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

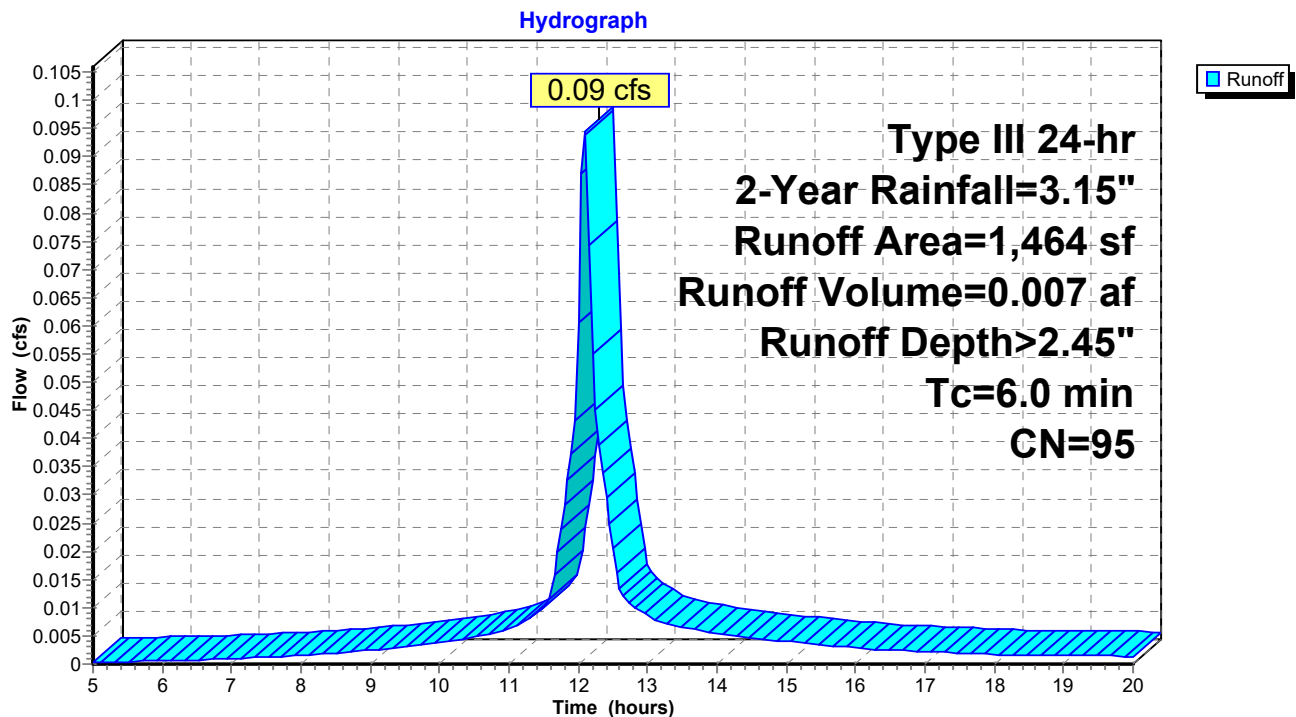
Runoff = 0.09 cfs @ 12.09 hrs, Volume= 0.007 af, Depth> 2.45"
Routed to Pond 63P : CB 67

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

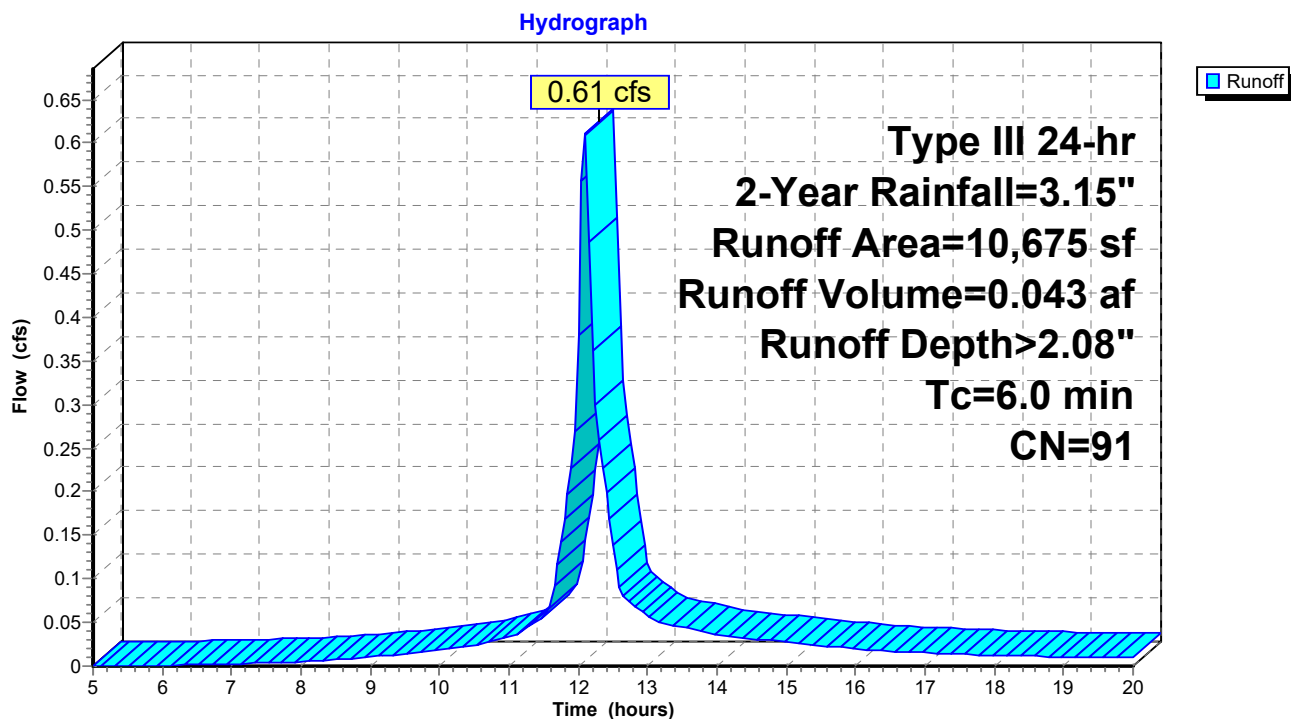
Runoff = 0.61 cfs @ 12.09 hrs, Volume= 0.043 af, Depth> 2.08"
Routed to Pond 69P : CB 72

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

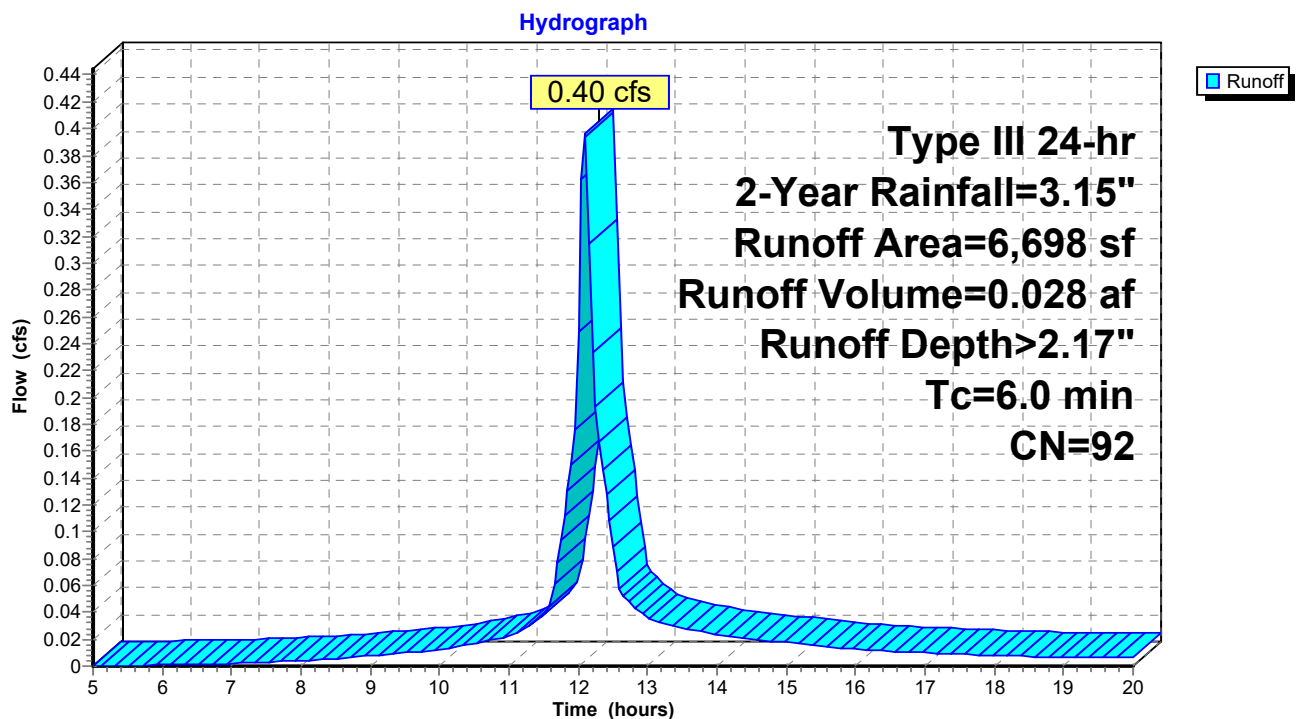
Runoff = 0.40 cfs @ 12.09 hrs, Volume= 0.028 af, Depth> 2.17"
Routed to Pond 70P : CB 73

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



Summary for Subcatchment 64S: P3L

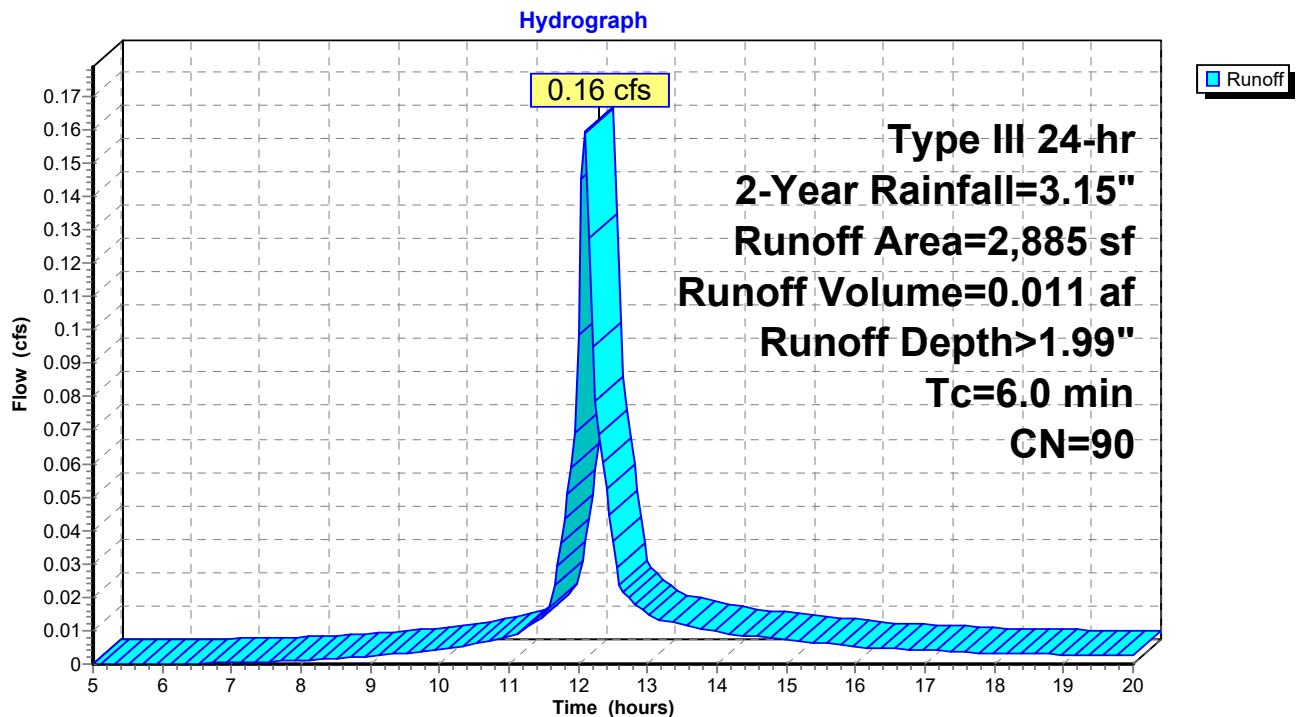
Runoff = 0.16 cfs @ 12.09 hrs, Volume= 0.011 af, Depth> 1.99"
Routed to Pond 88P : CB 84

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

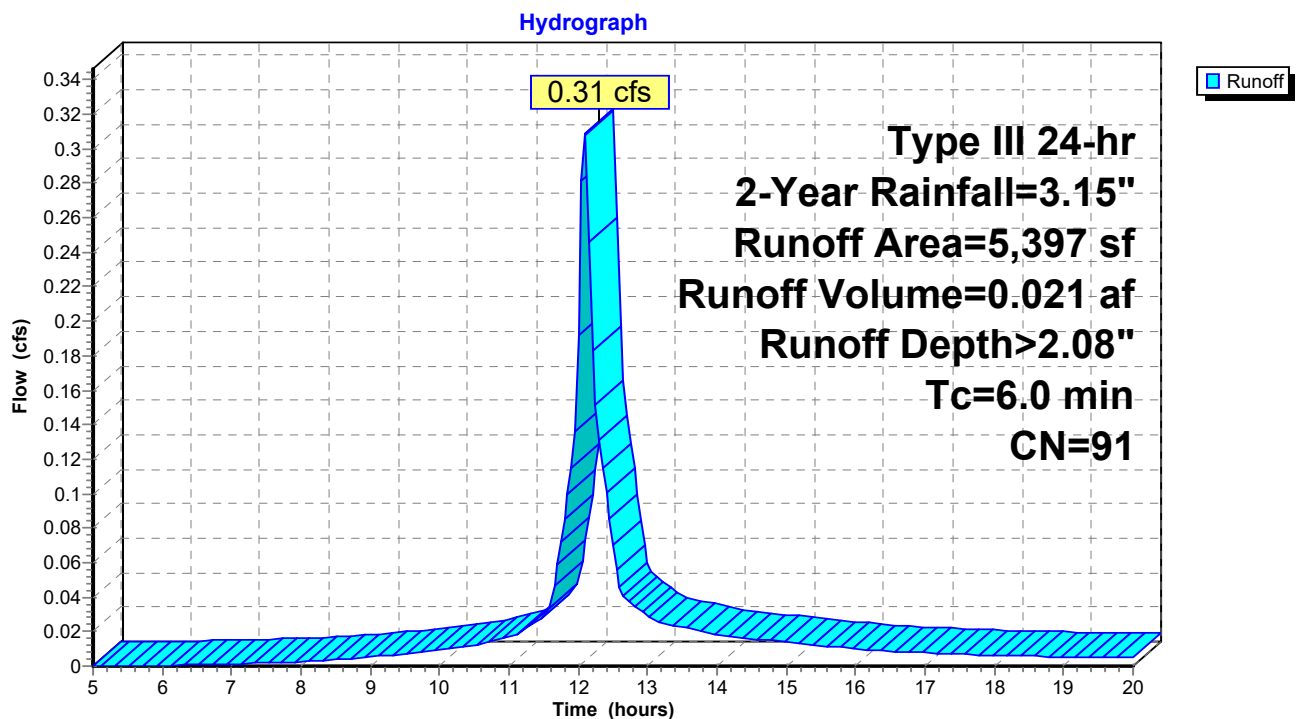
Runoff = 0.31 cfs @ 12.09 hrs, Volume= 0.021 af, Depth> 2.08"
Routed to Pond 87P : CB 85

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

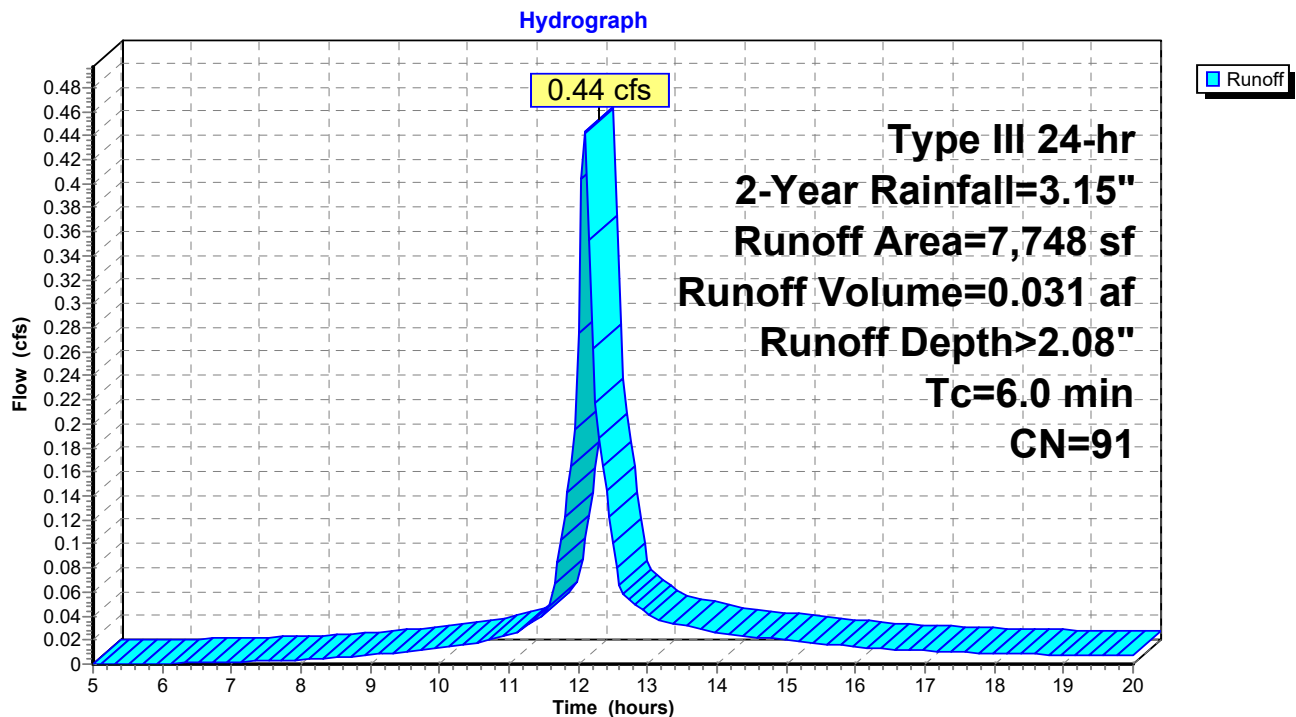
Runoff = 0.44 cfs @ 12.09 hrs, Volume= 0.031 af, Depth> 2.08"
Routed to Pond 83P : CB 86

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



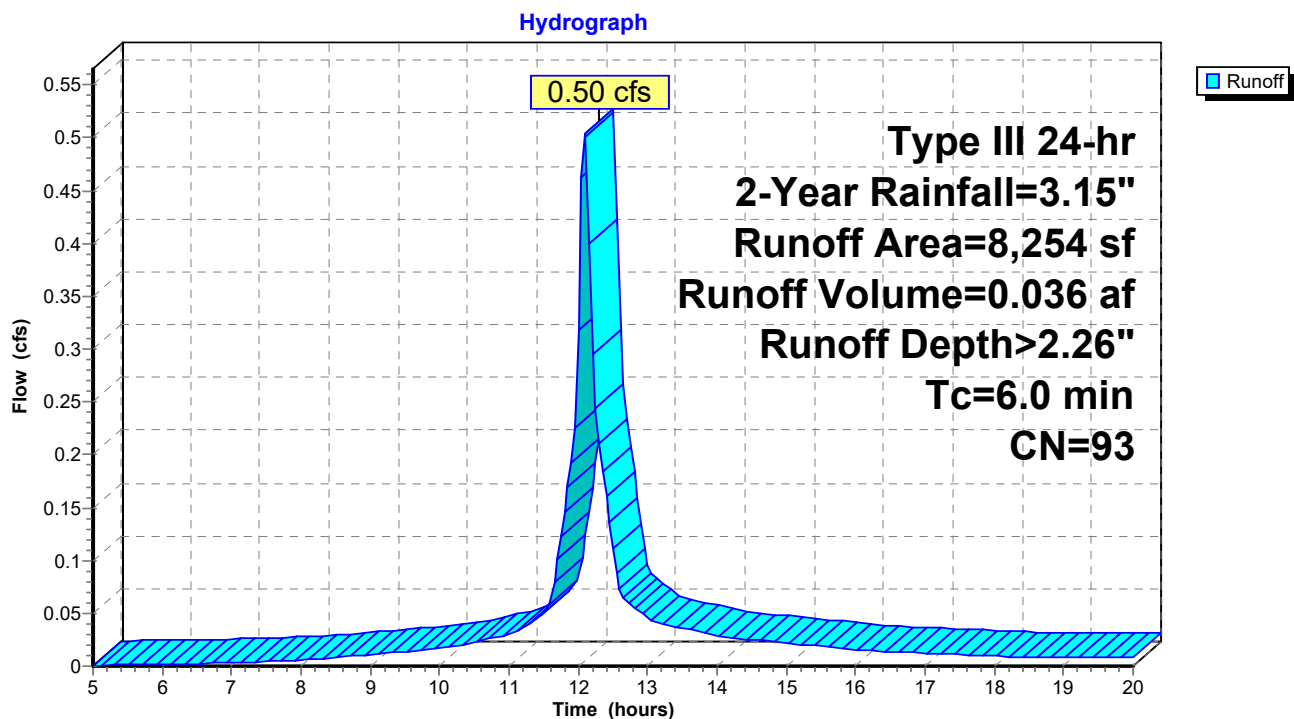
Summary for Subcatchment 67S: P3O

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

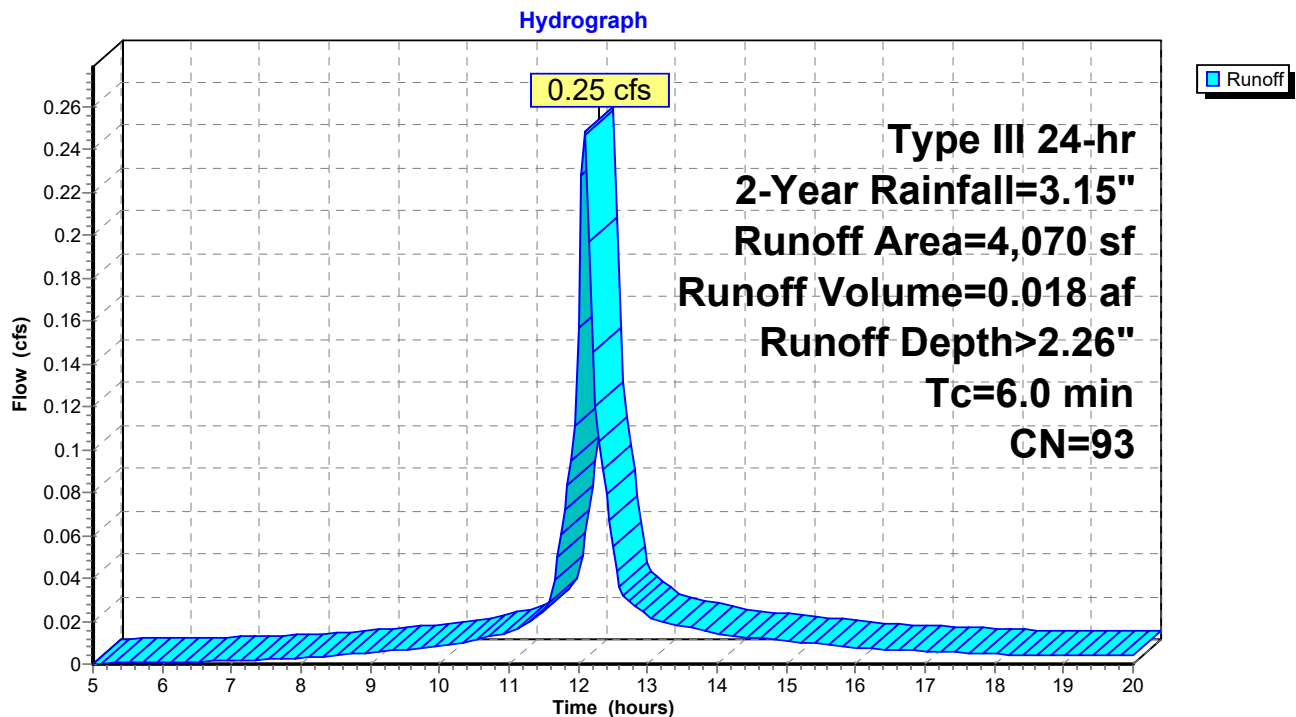
Runoff = 0.25 cfs @ 12.09 hrs, Volume= 0.018 af, Depth> 2.26"
Routed to Pond 108P : CB 88

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

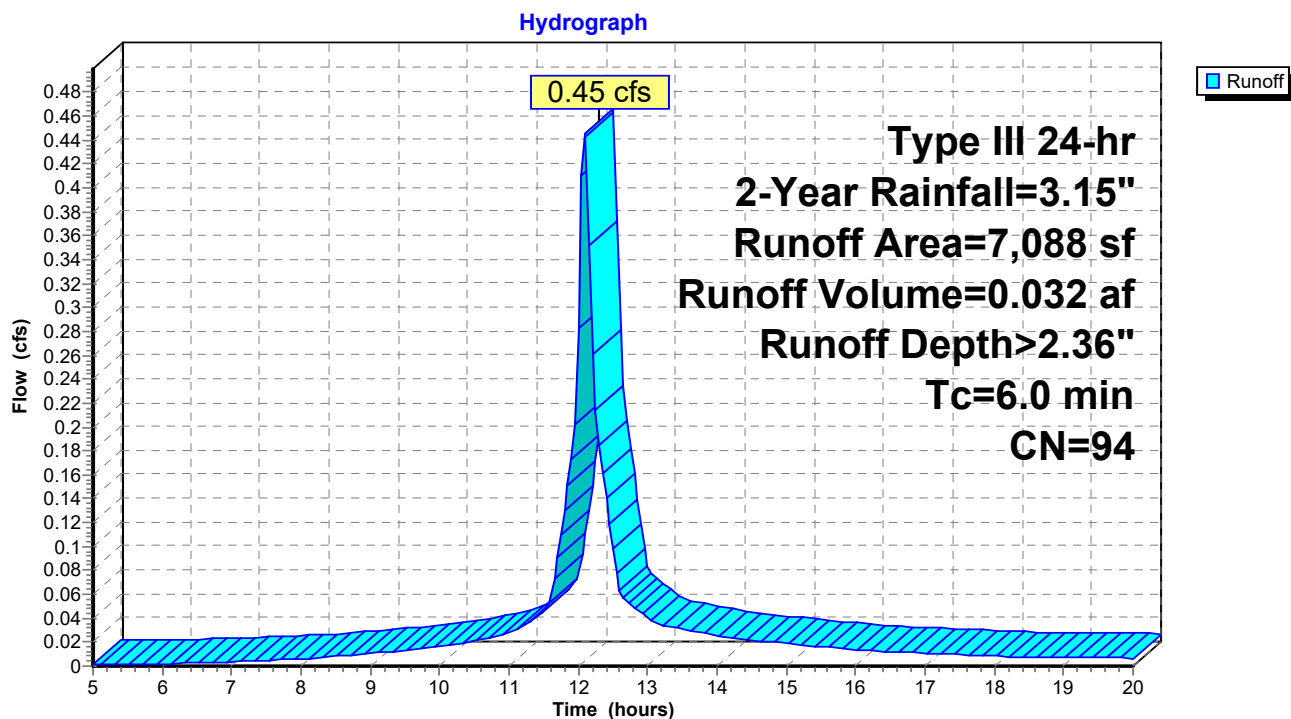
Runoff = 0.45 cfs @ 12.09 hrs, Volume= 0.032 af, Depth> 2.36"
Routed to Pond 66P : CB 68

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

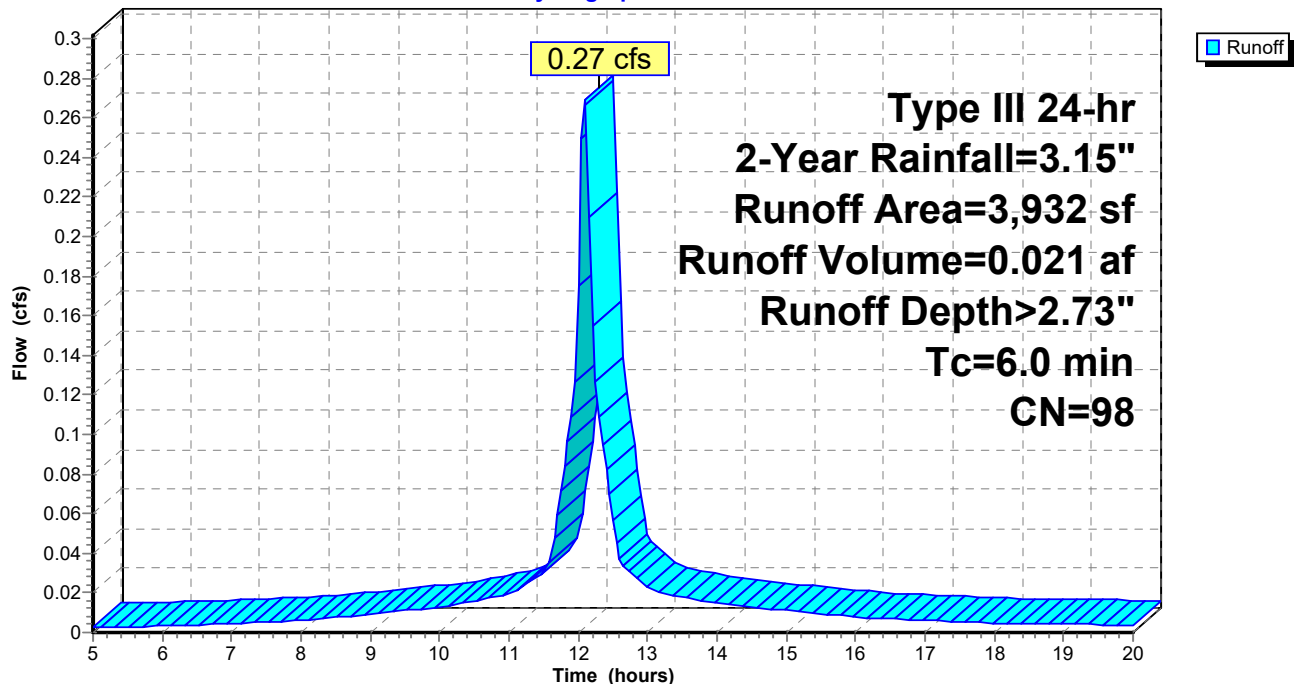
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.15"

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



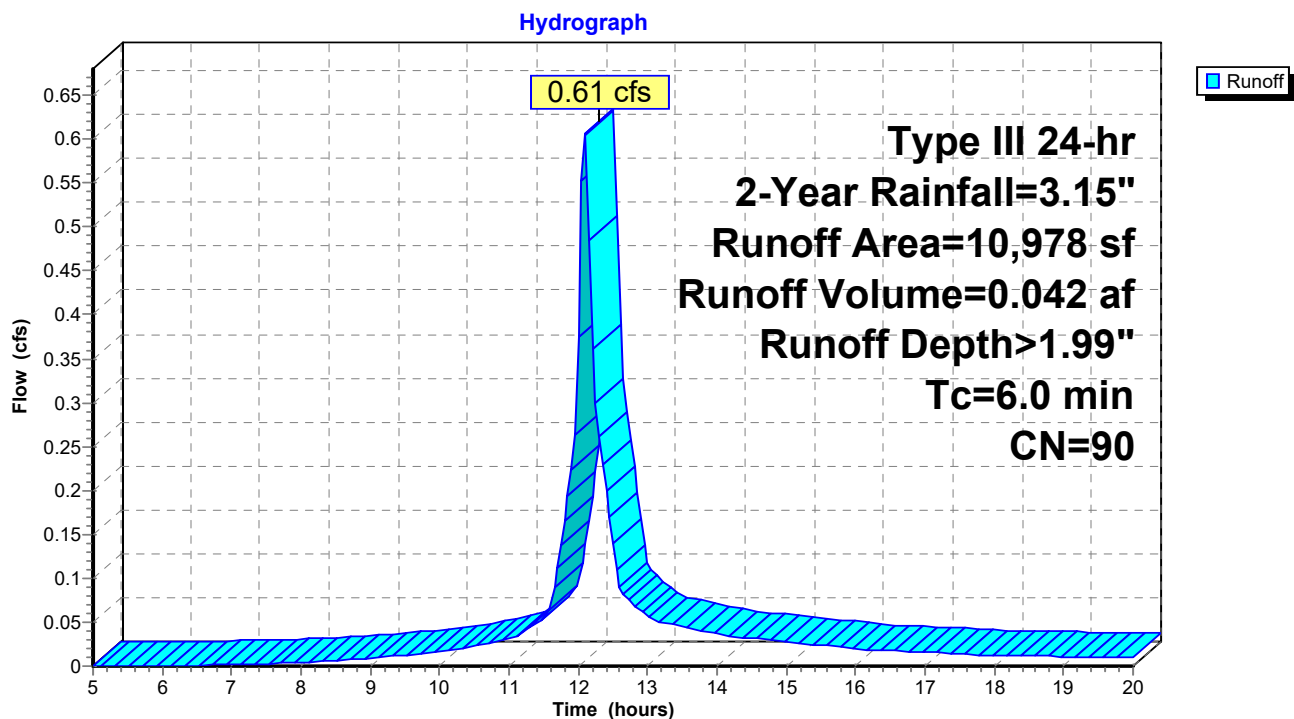
Summary for Subcatchment 71S: P2A

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

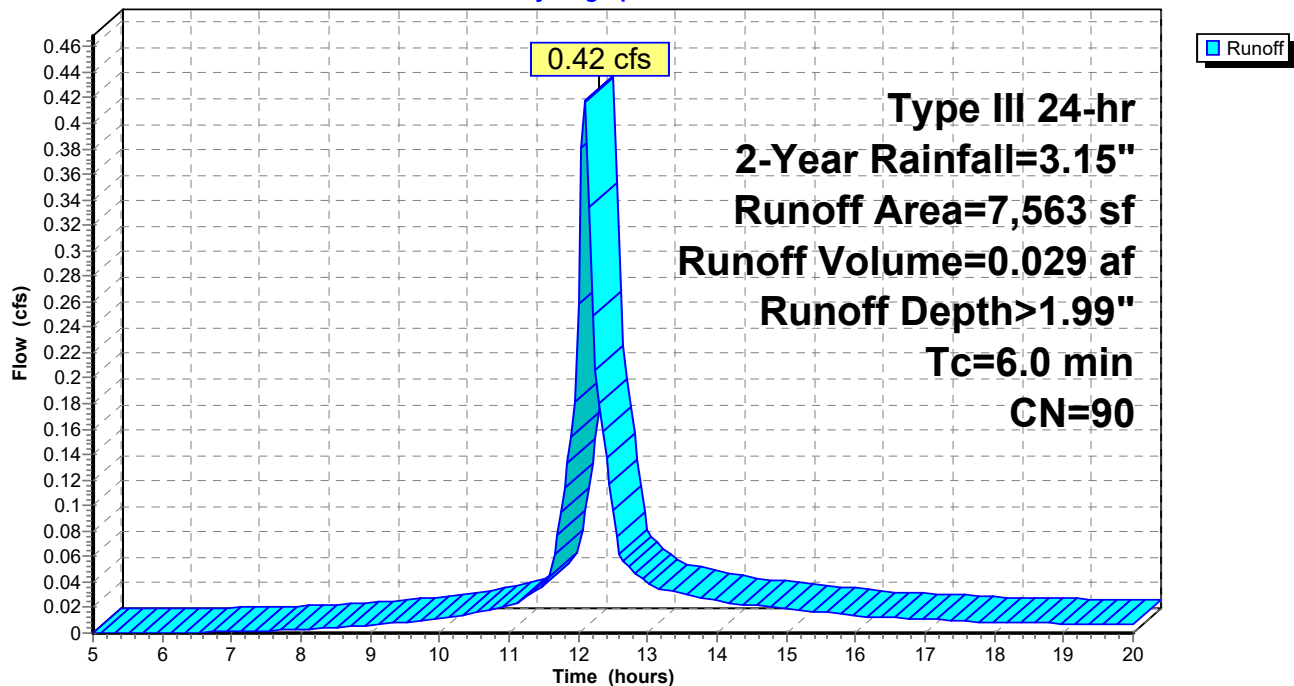
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.15"

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

Hydrograph



Summary for Subcatchment 73S: P2G

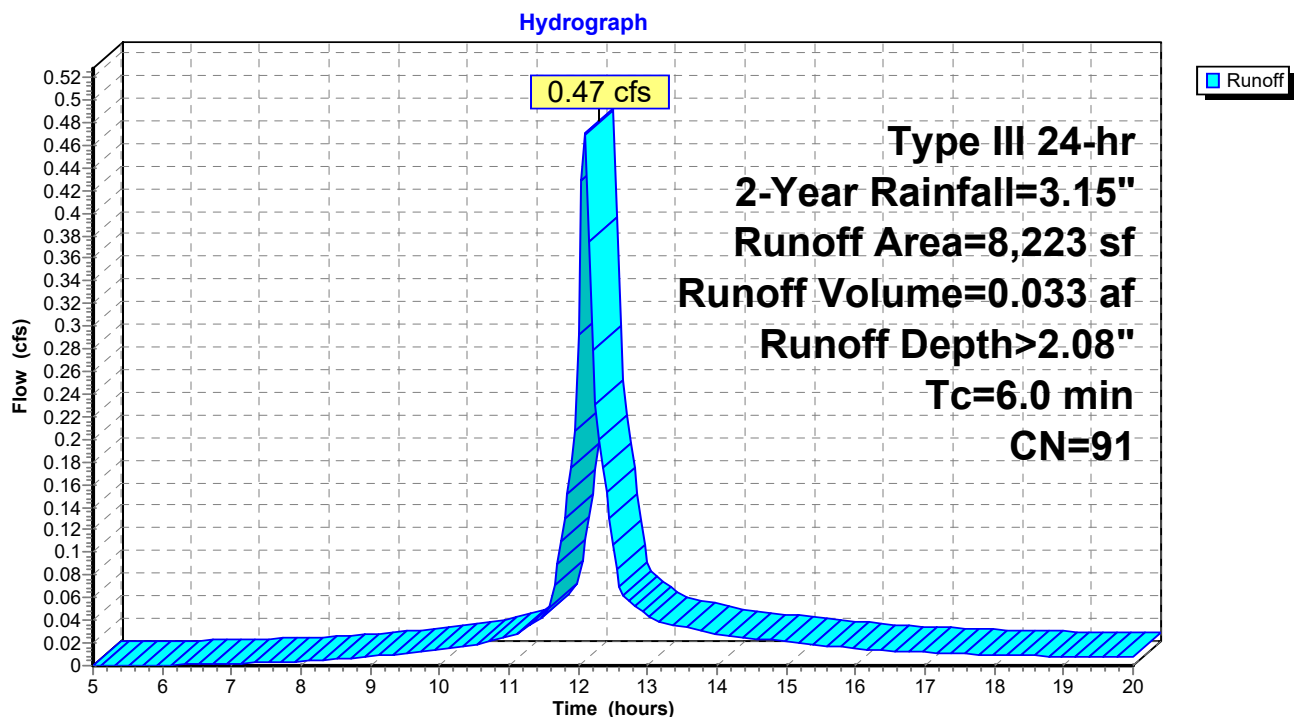
Runoff = 0.47 cfs @ 12.09 hrs, Volume= 0.033 af, Depth> 2.08"
Routed to Pond 76P : CB 70

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



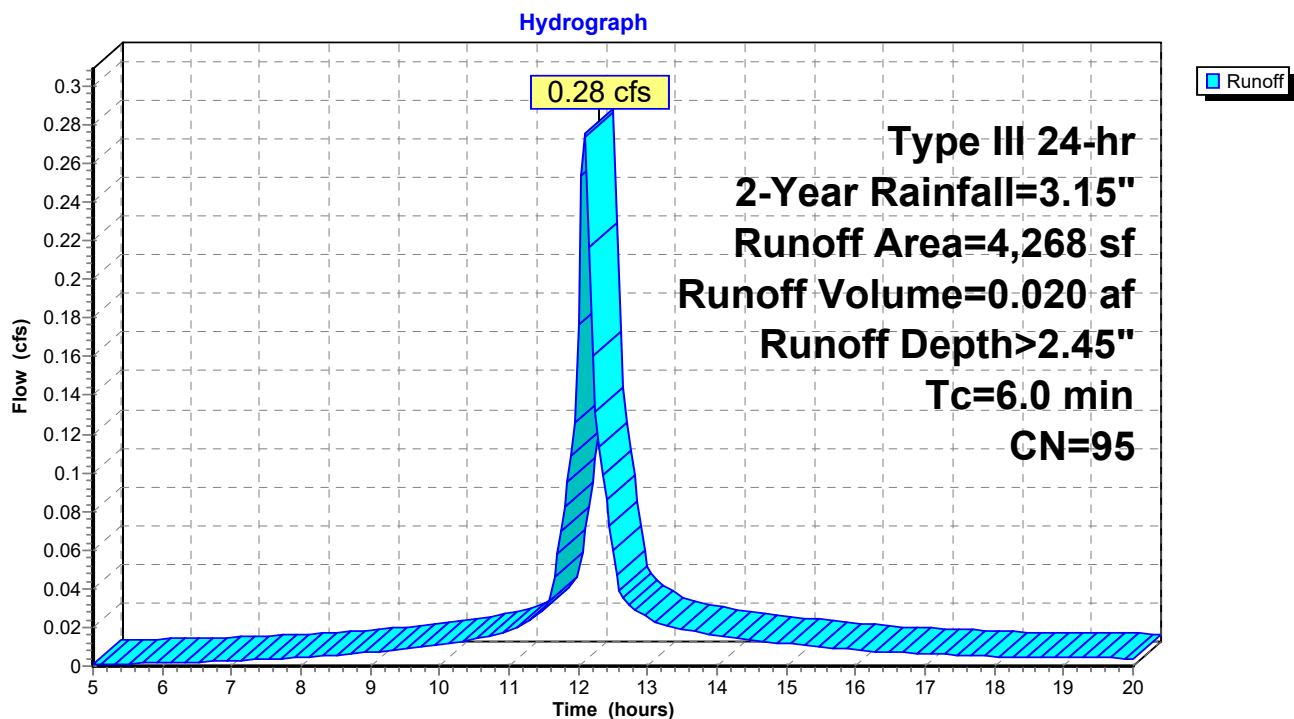
Summary for Subcatchment 74S: P2H

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

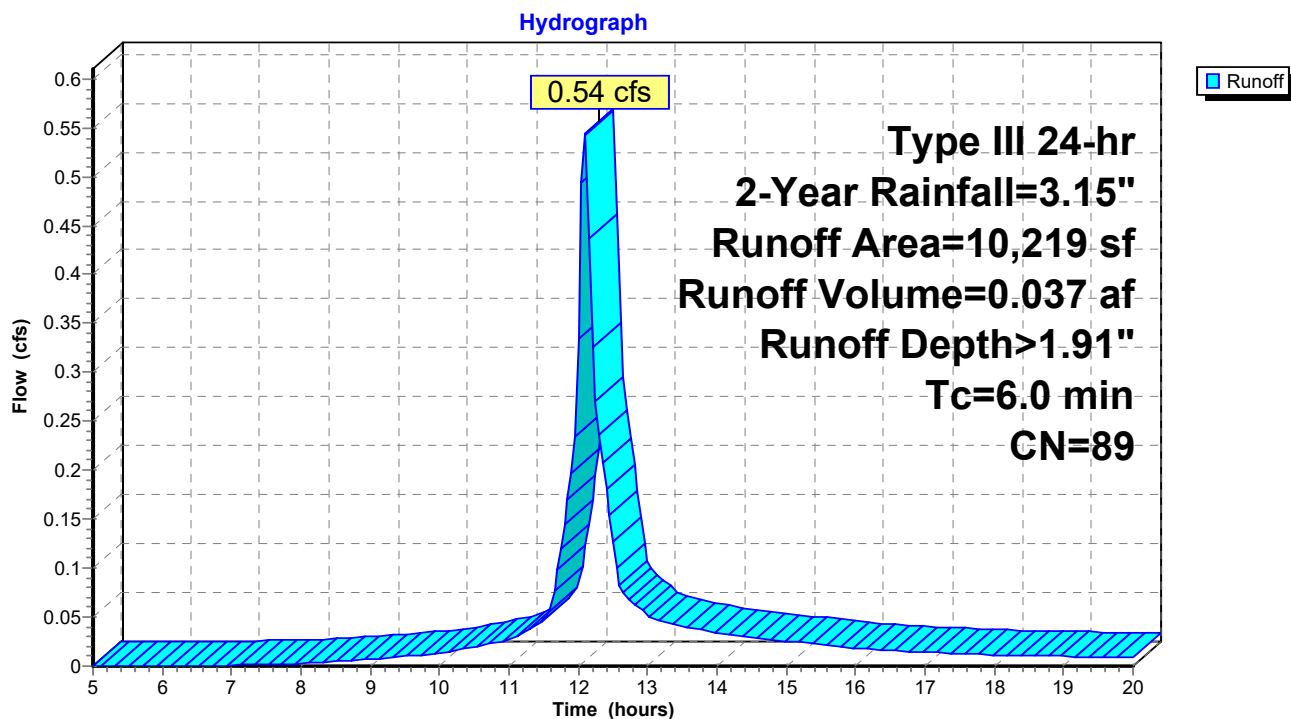
Runoff = 0.54 cfs @ 12.09 hrs, Volume= 0.037 af, Depth> 1.91"
Routed to Pond 107P : CB

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

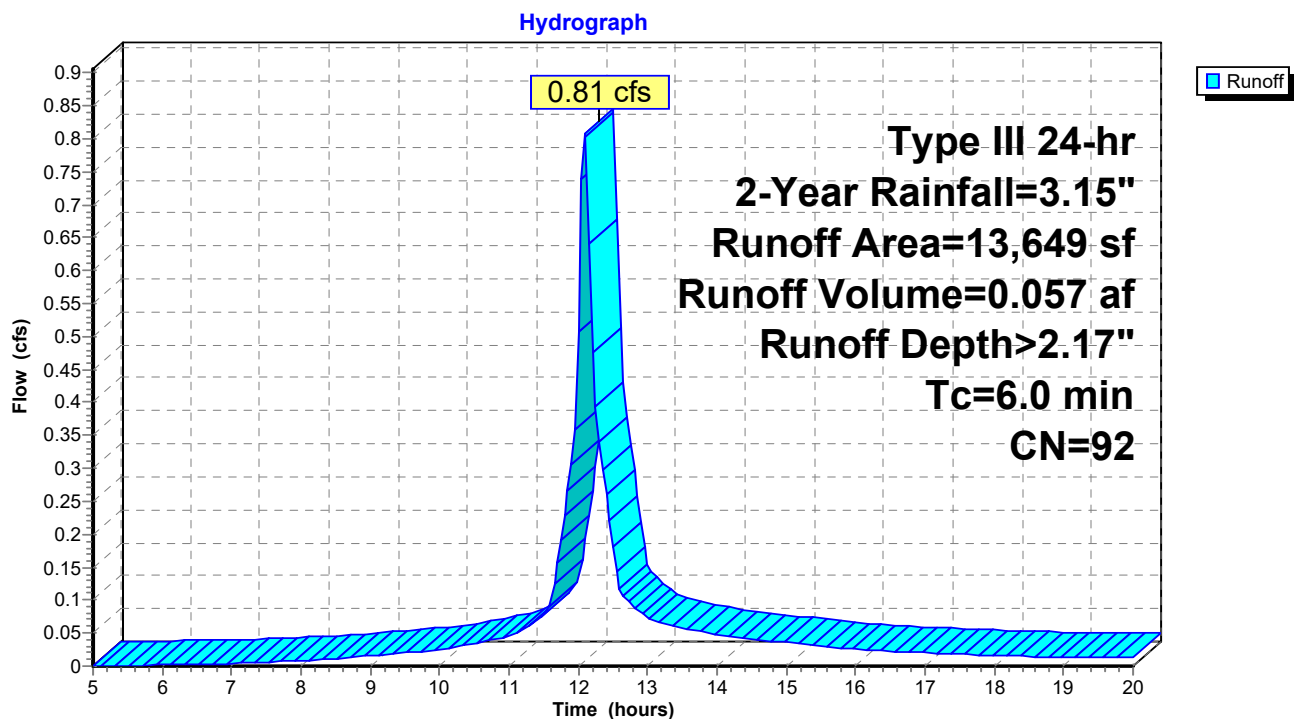
Runoff = 0.81 cfs @ 12.09 hrs, Volume= 0.057 af, Depth> 2.17"
Routed to Pond 103P : CB 92

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



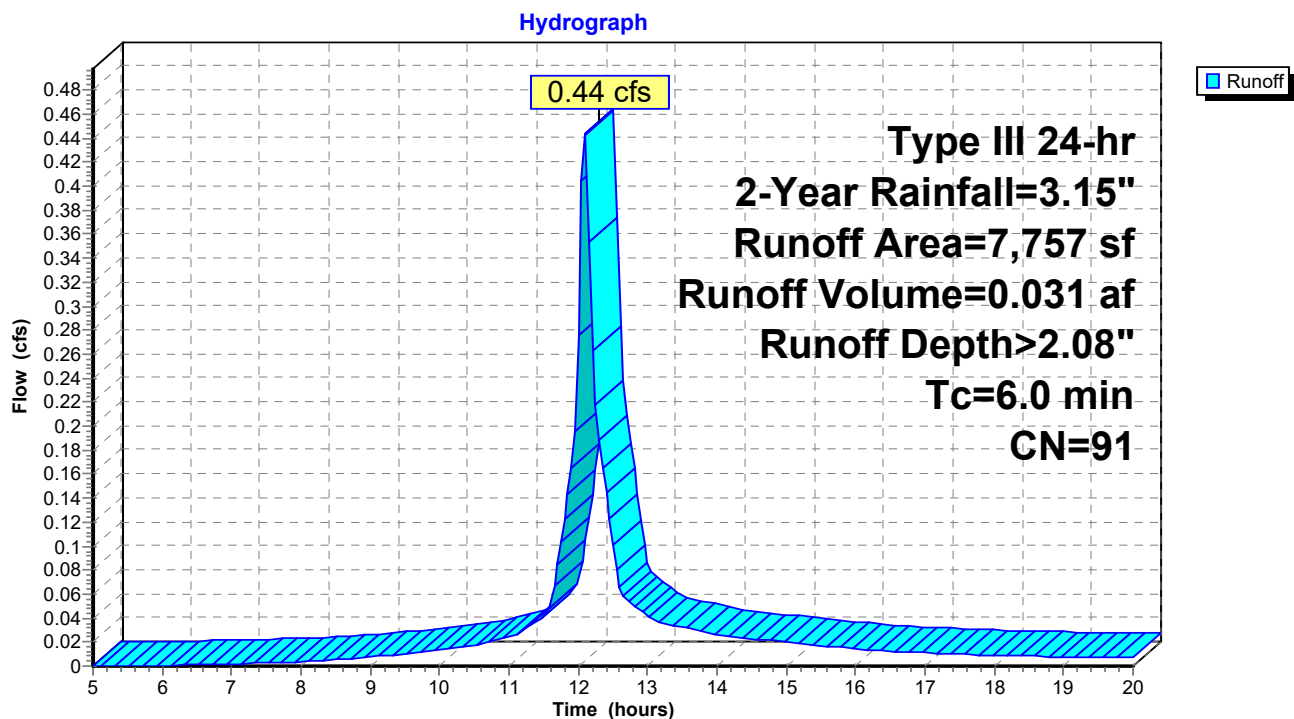
Summary for Subcatchment 77S: P3S

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

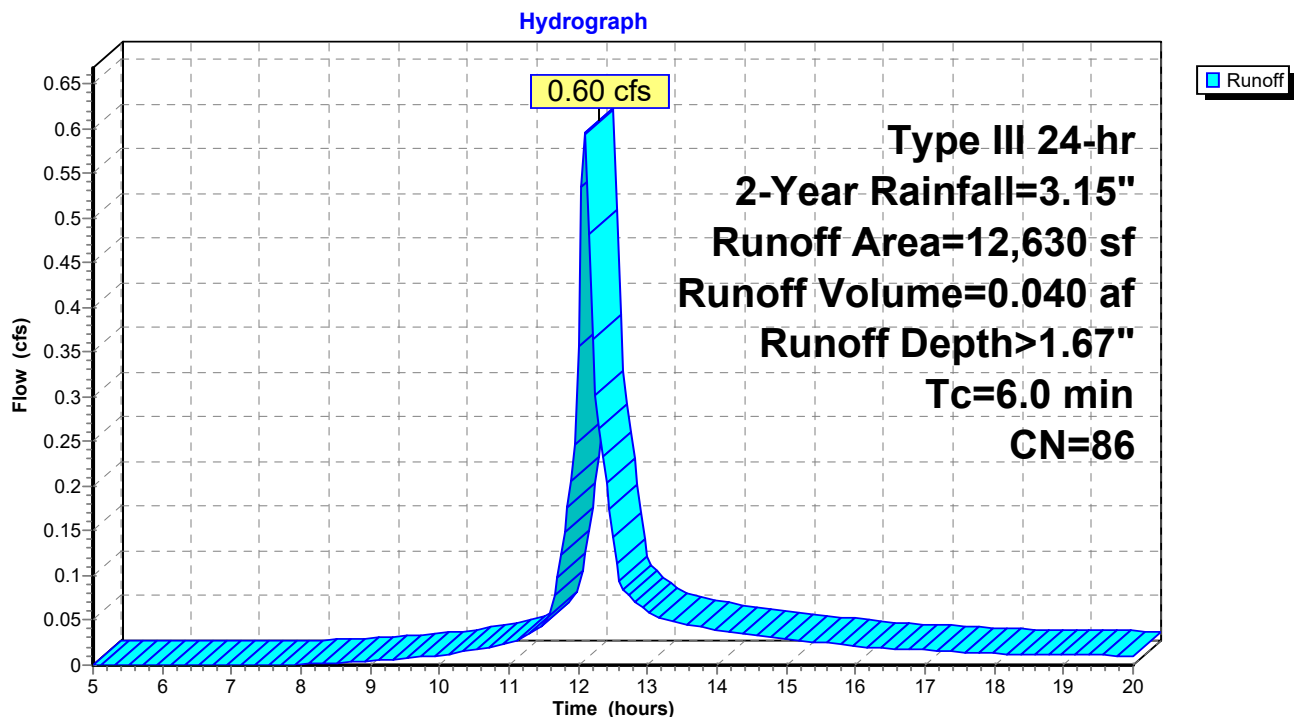
Runoff = 0.60 cfs @ 12.09 hrs, Volume= 0.040 af, Depth> 1.67"
Routed to Pond 112P : CB 45

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

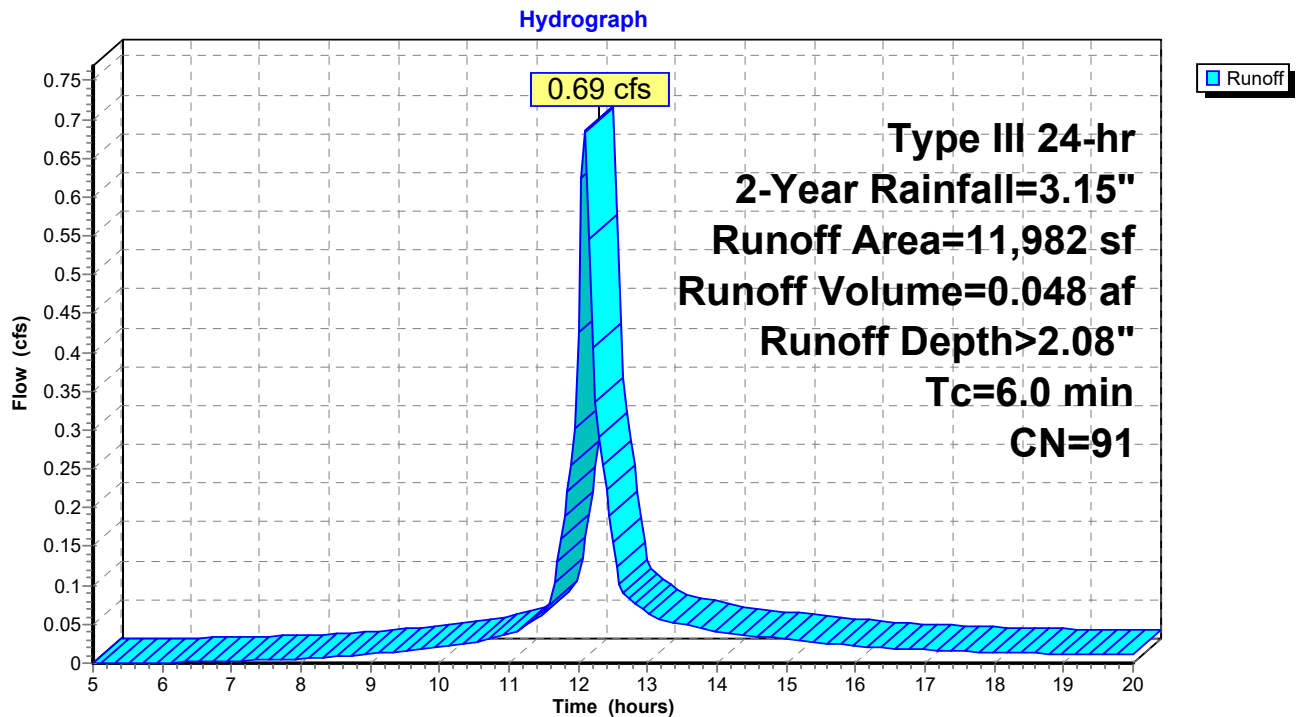
Runoff = 0.69 cfs @ 12.09 hrs, Volume= 0.048 af, Depth> 2.08"
Routed to Pond 122P : CB 46

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

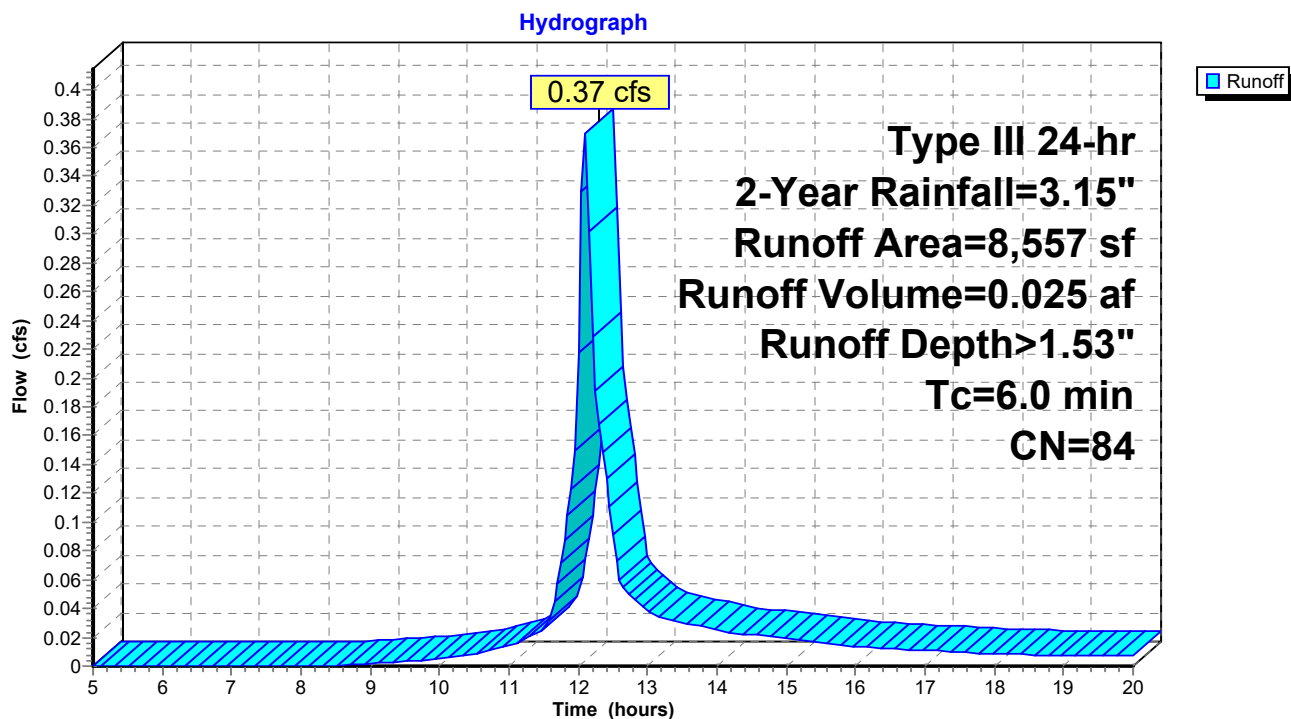
Runoff = 0.37 cfs @ 12.09 hrs, Volume= 0.025 af, Depth> 1.53"
Routed to Pond 125P : CB 36

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

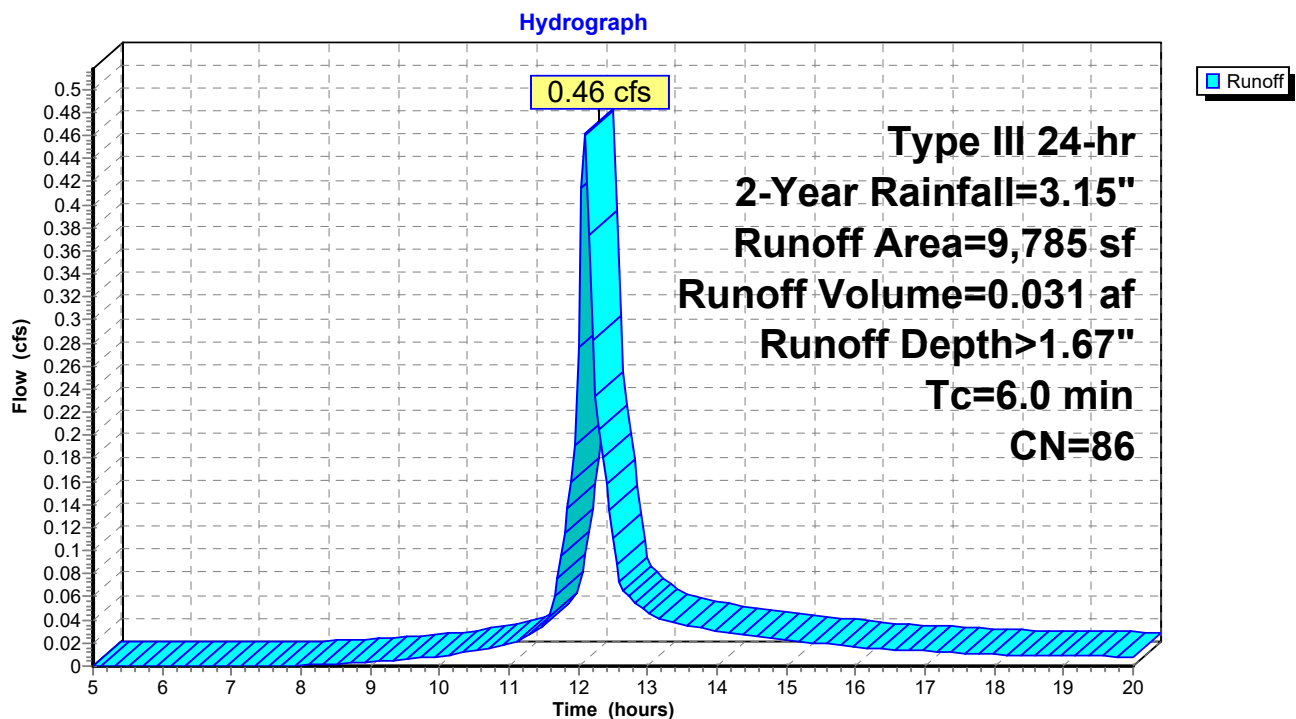
Runoff = 0.46 cfs @ 12.09 hrs, Volume= 0.031 af, Depth> 1.67"
Routed to Pond 126P : CB 37

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

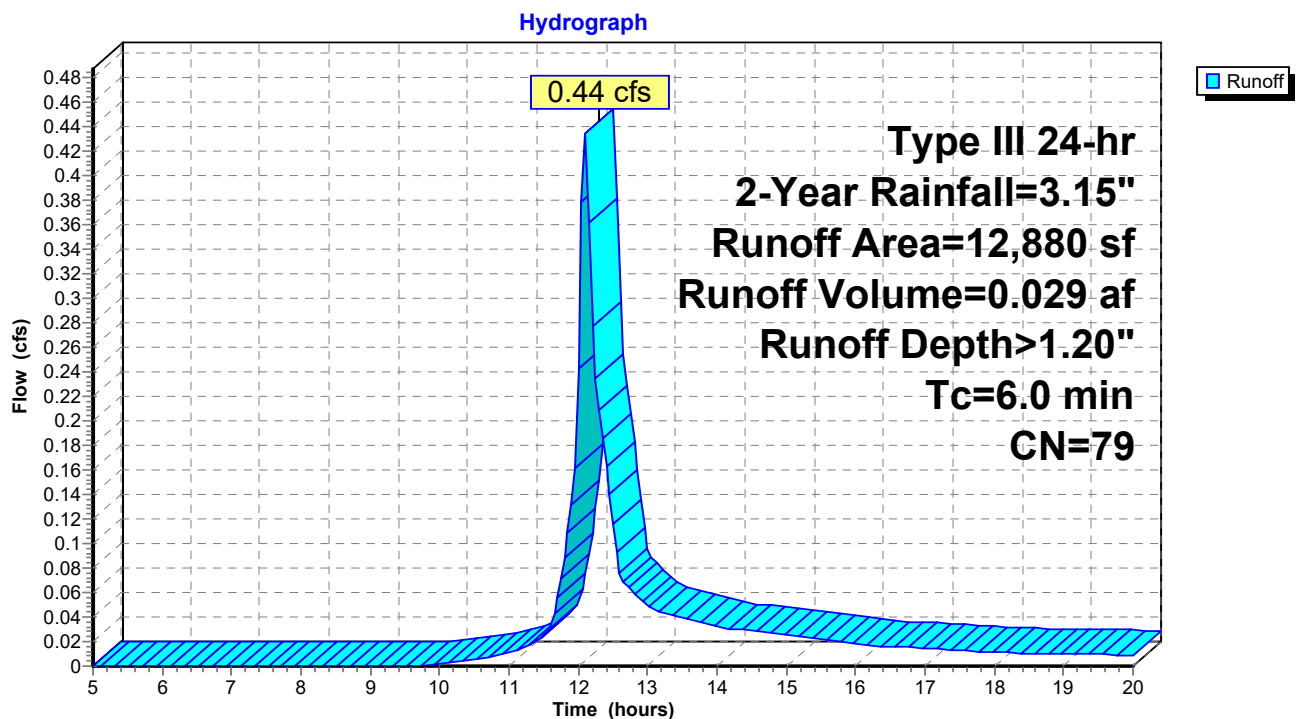
Runoff = 0.44 cfs @ 12.10 hrs, Volume= 0.029 af, Depth> 1.20"
Routed to Pond 128P : CB 30

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

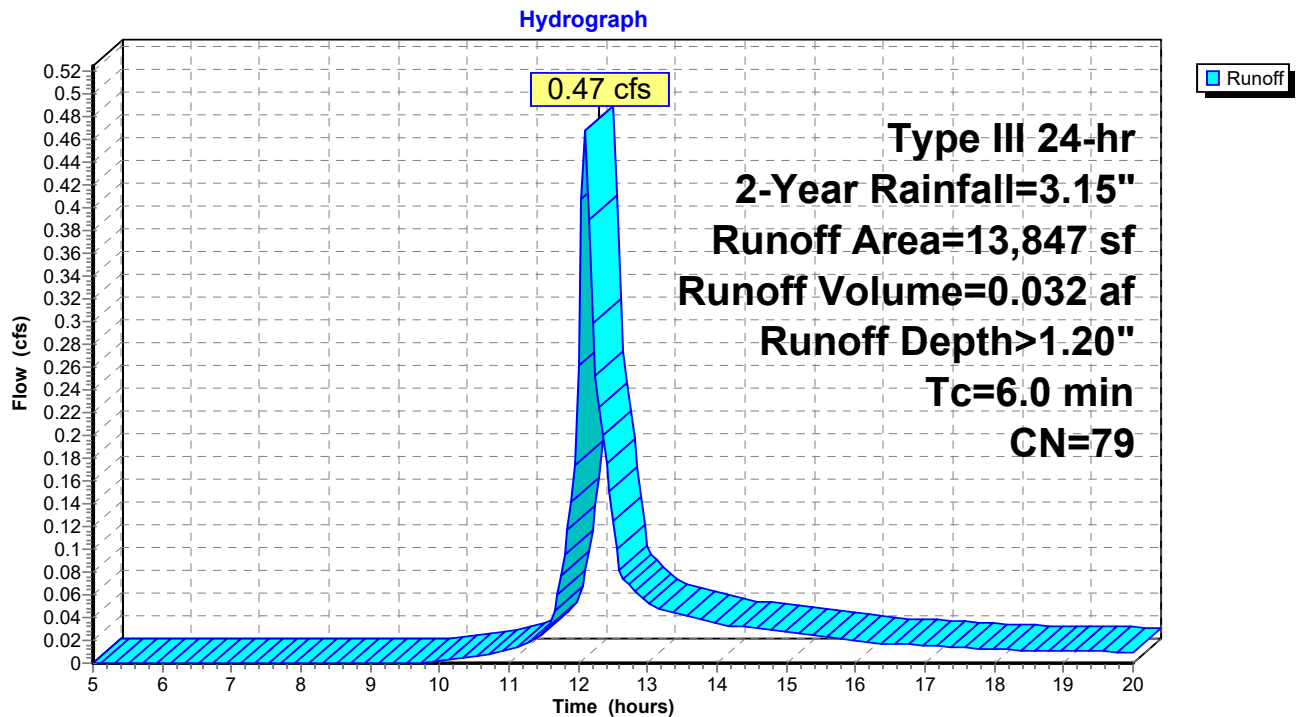
Runoff = 0.47 cfs @ 12.10 hrs, Volume= 0.032 af, Depth> 1.20"
 Routed to Pond 82P : Constructed Wetland 2

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

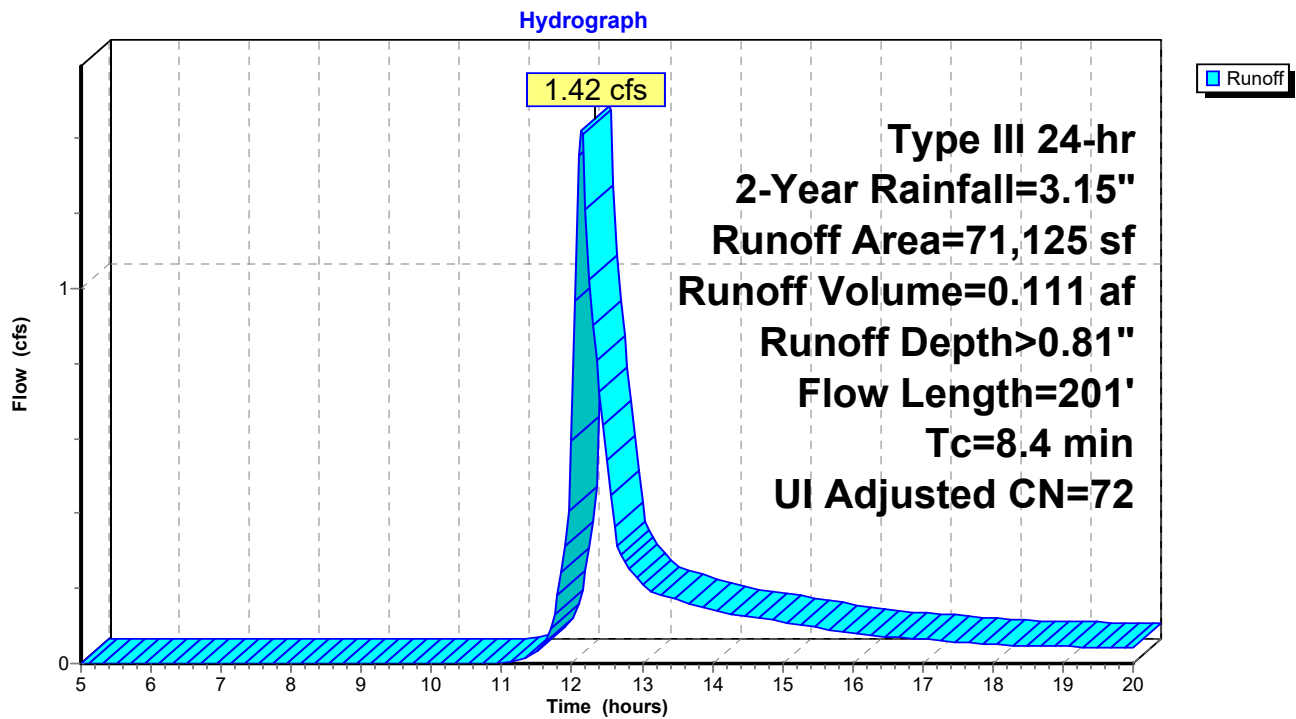
Runoff = 1.42 cfs @ 12.14 hrs, Volume= 0.111 af, Depth> 0.81"
 Routed to Link 60L : DP 2

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		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
1.4	68	0.0140	0.83		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.4	57	0.1200	2.42		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.9	26	0.0100	0.50		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
8.4	201	Total			

Subcatchment 84S: P2AA



Summary for Subcatchment 85S: (new Subcat)

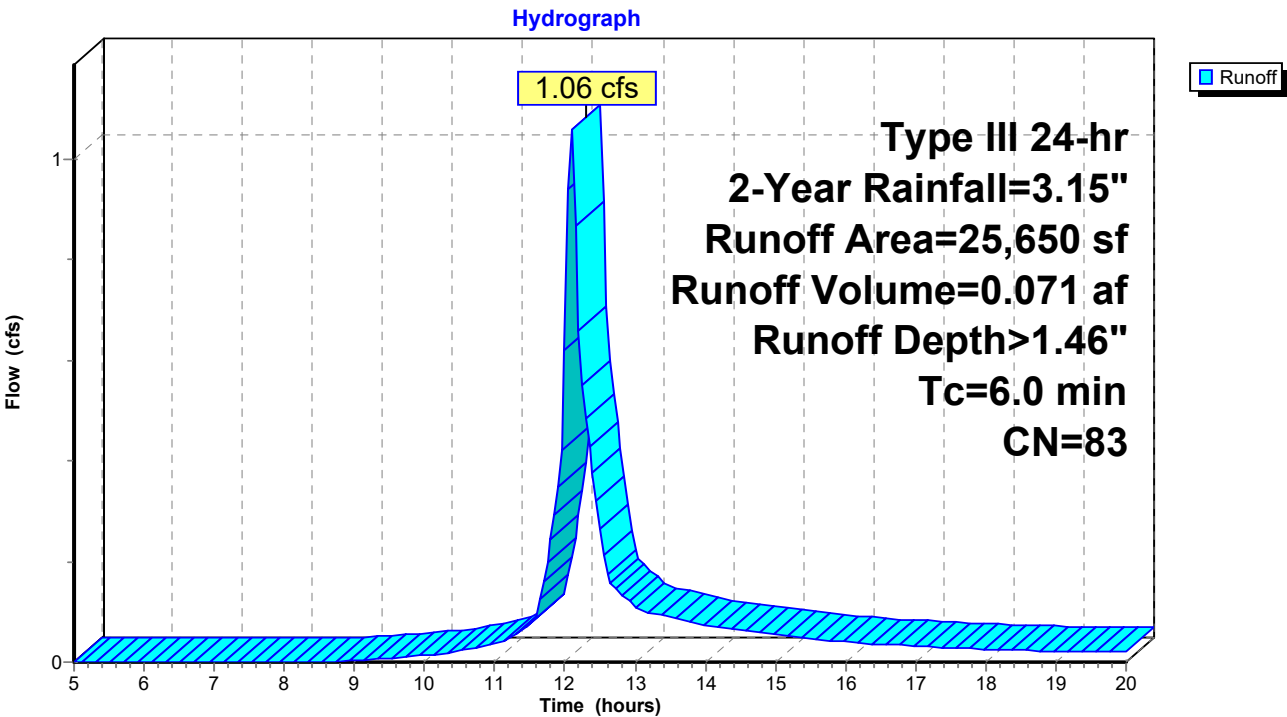
Runoff = 1.06 cfs @ 12.09 hrs, Volume= 0.071 af, Depth> 1.46"
Routed to Pond 86P : Sub. Inf. 6

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

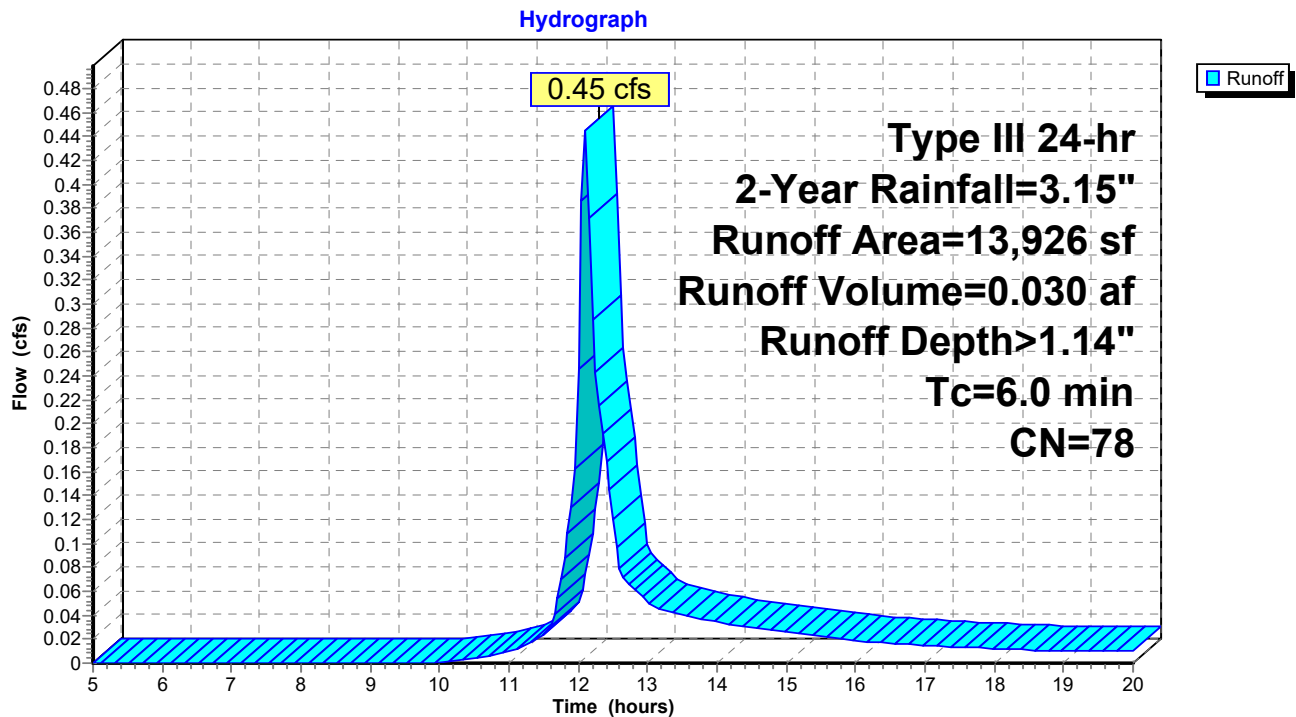
Runoff = 0.45 cfs @ 12.10 hrs, Volume= 0.030 af, Depth> 1.14"
Routed to Pond 140P : CB 31

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



Summary for Subcatchment 87S: P3A

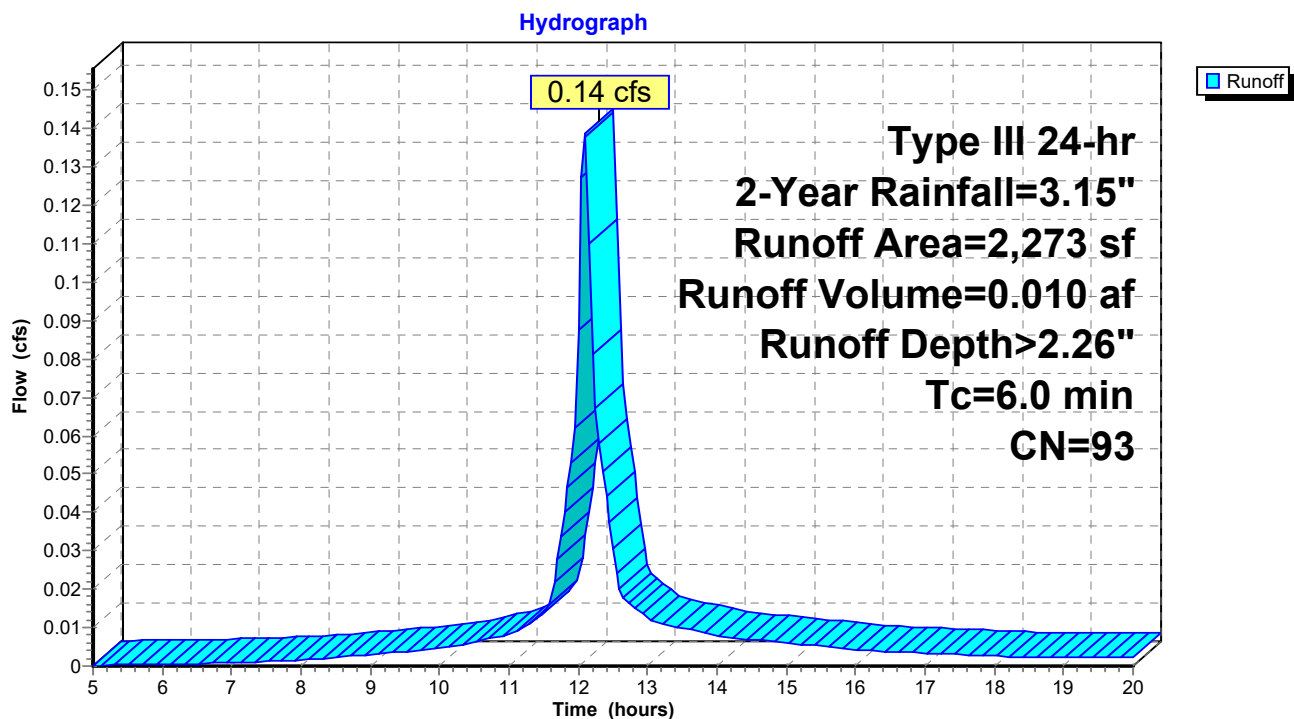
Runoff = 0.14 cfs @ 12.09 hrs, Volume= 0.010 af, Depth> 2.26"
Routed to Pond 89P : CB 74

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



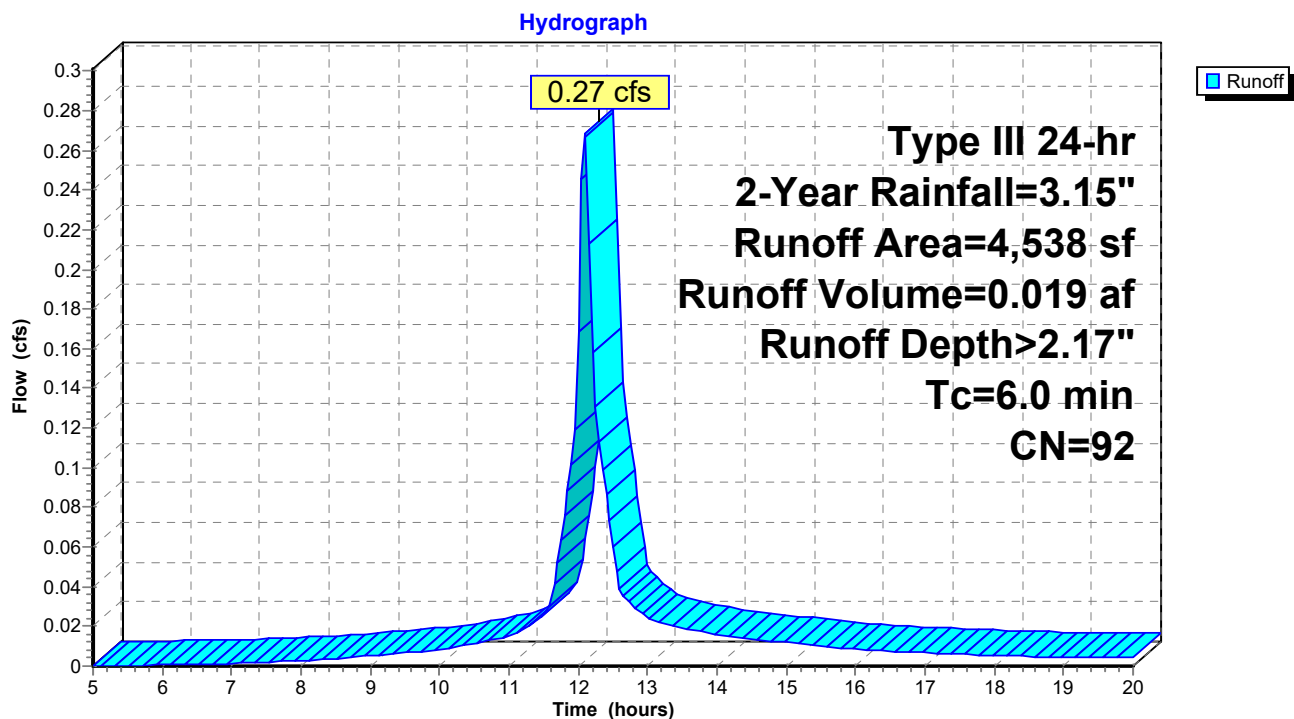
Summary for Subcatchment 88S: P3B

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

Summary for Subcatchment 89S: P3AAA

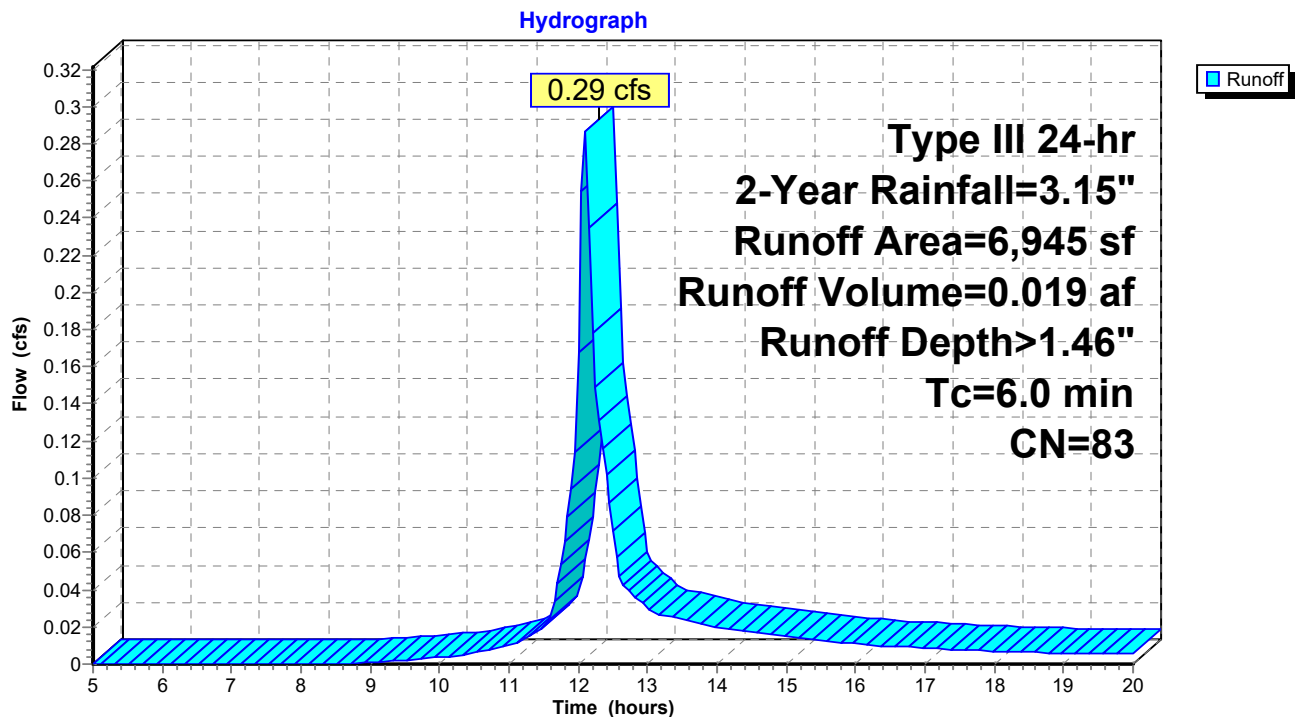
Runoff = 0.29 cfs @ 12.09 hrs, Volume= 0.019 af, Depth> 1.46"
Routed to Pond 151P : CB 22

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

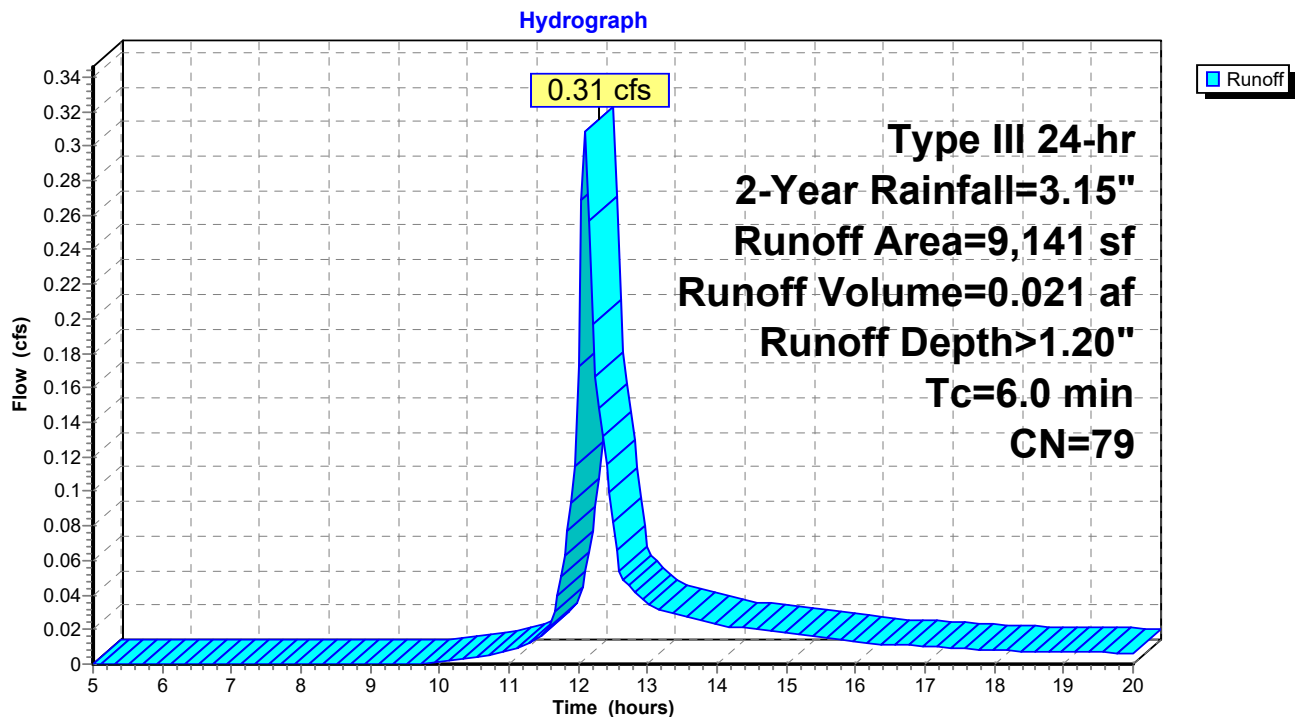
Runoff = 0.31 cfs @ 12.10 hrs, Volume= 0.021 af, Depth> 1.20"
Routed to Pond 152P : CB 23

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

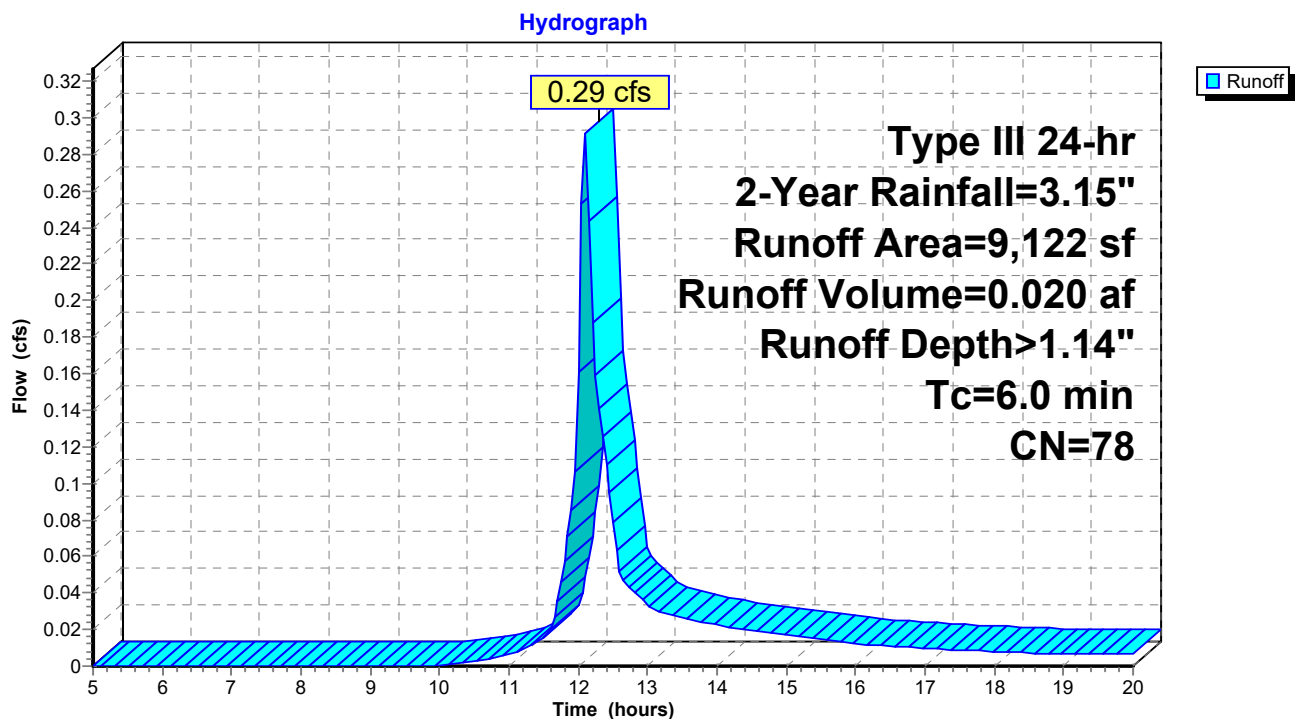
Runoff = 0.29 cfs @ 12.10 hrs, Volume= 0.020 af, Depth> 1.14"
Routed to Pond 165P : CB 19

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

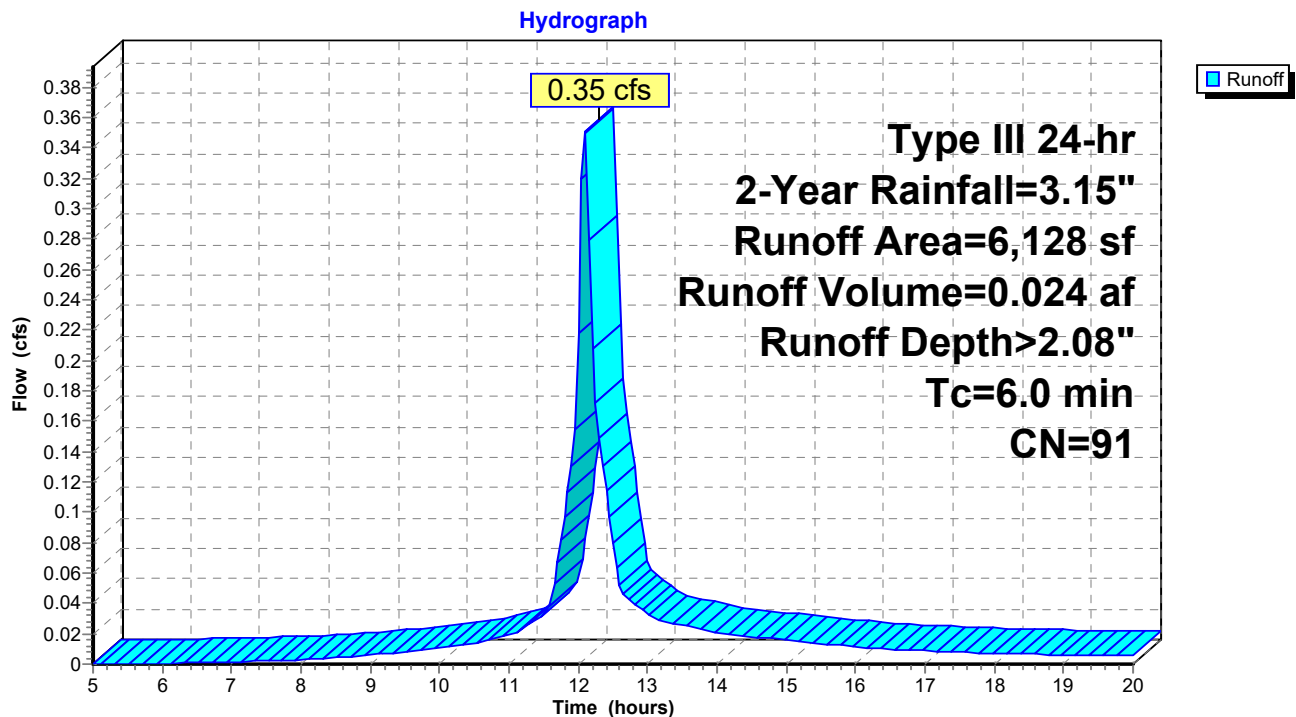
Runoff = 0.35 cfs @ 12.09 hrs, Volume= 0.024 af, Depth> 2.08"
Routed to Pond 95P : CB 76

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

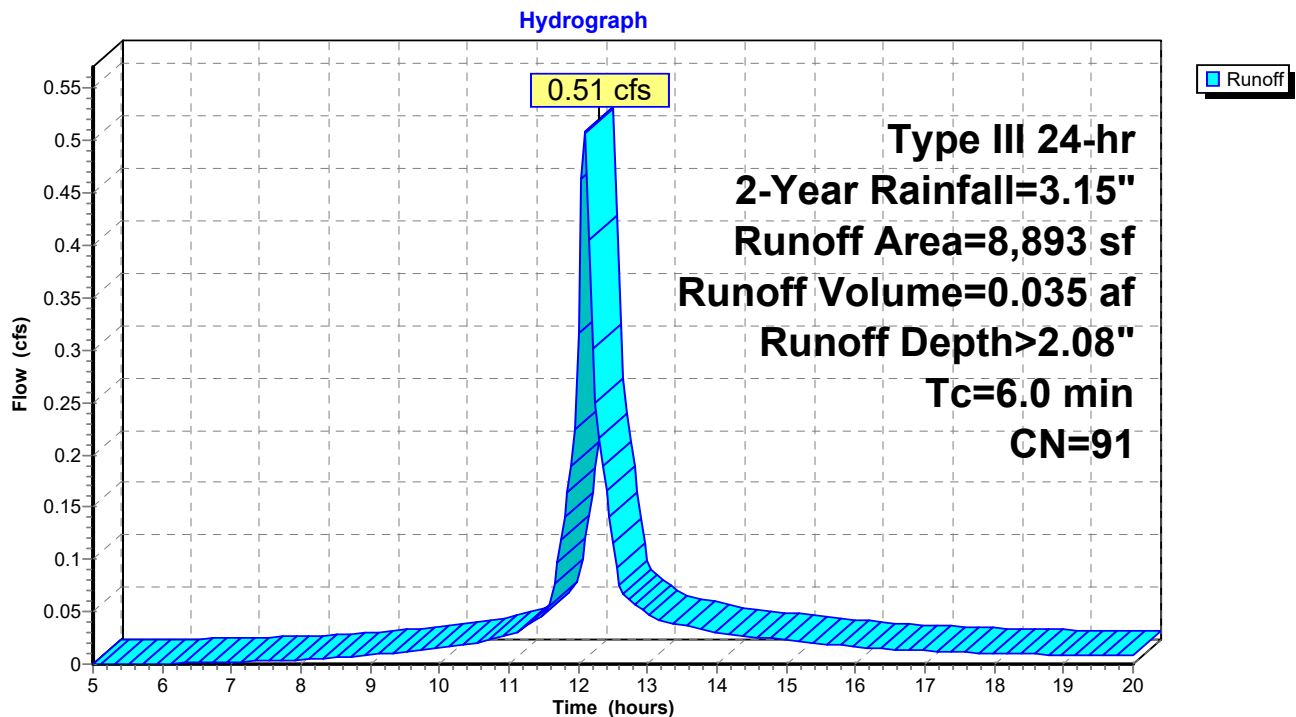
Runoff = 0.51 cfs @ 12.09 hrs, Volume= 0.035 af, Depth> 2.08"
Routed to Pond 94P : CB 77

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



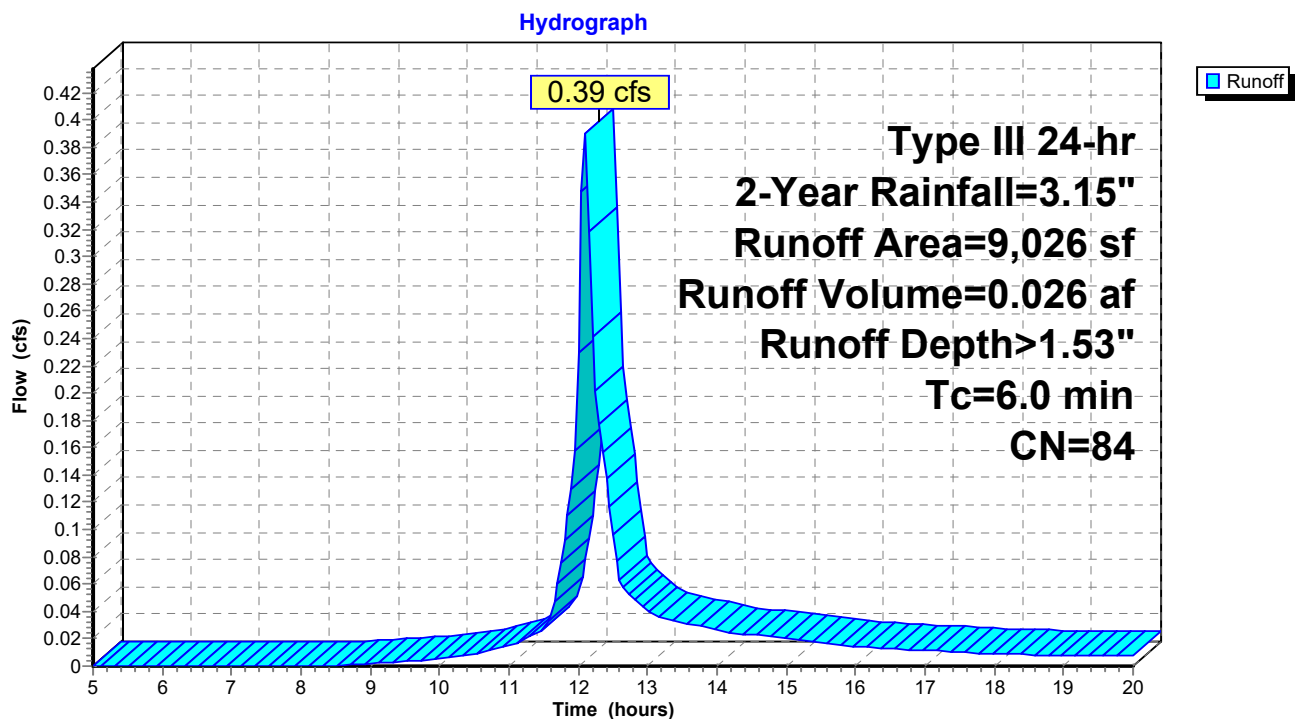
Summary for Subcatchment 94S: P3HHH

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

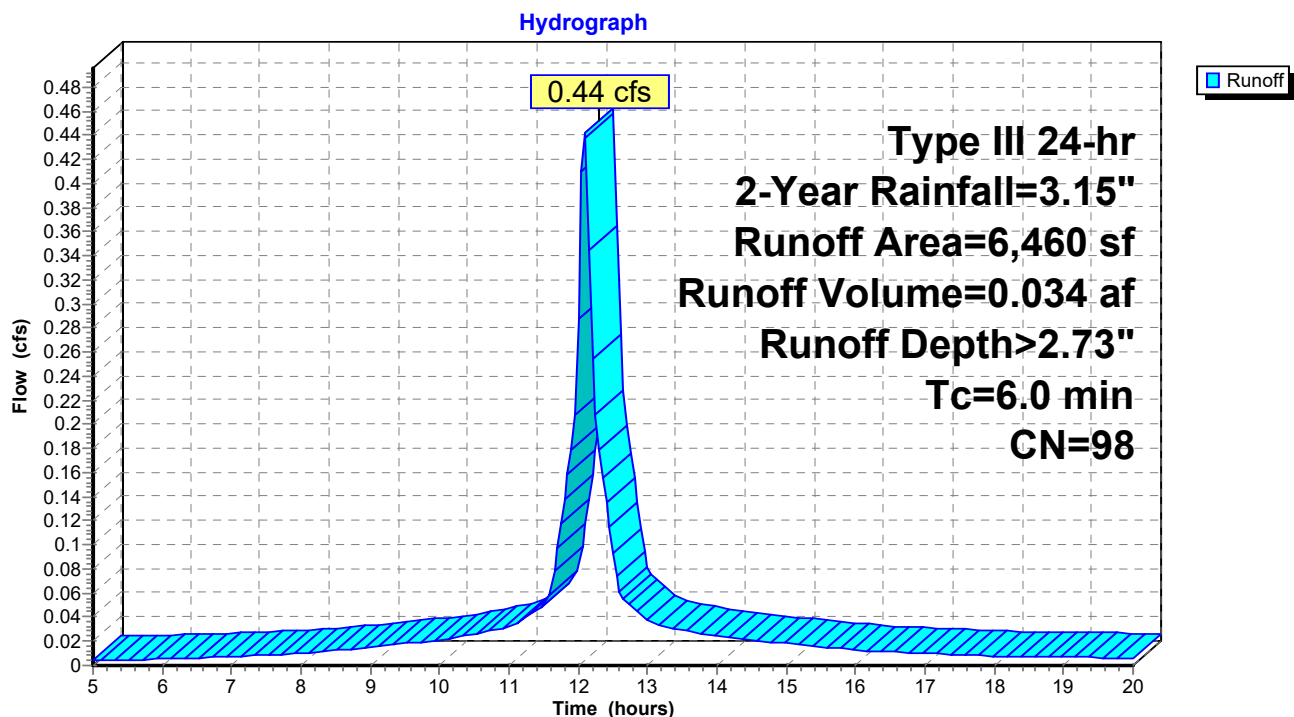
Runoff = 0.44 cfs @ 12.09 hrs, Volume= 0.034 af, Depth> 2.73"
Routed to Pond 79P : DMH 51

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



Summary for Subcatchment 97S: P3G

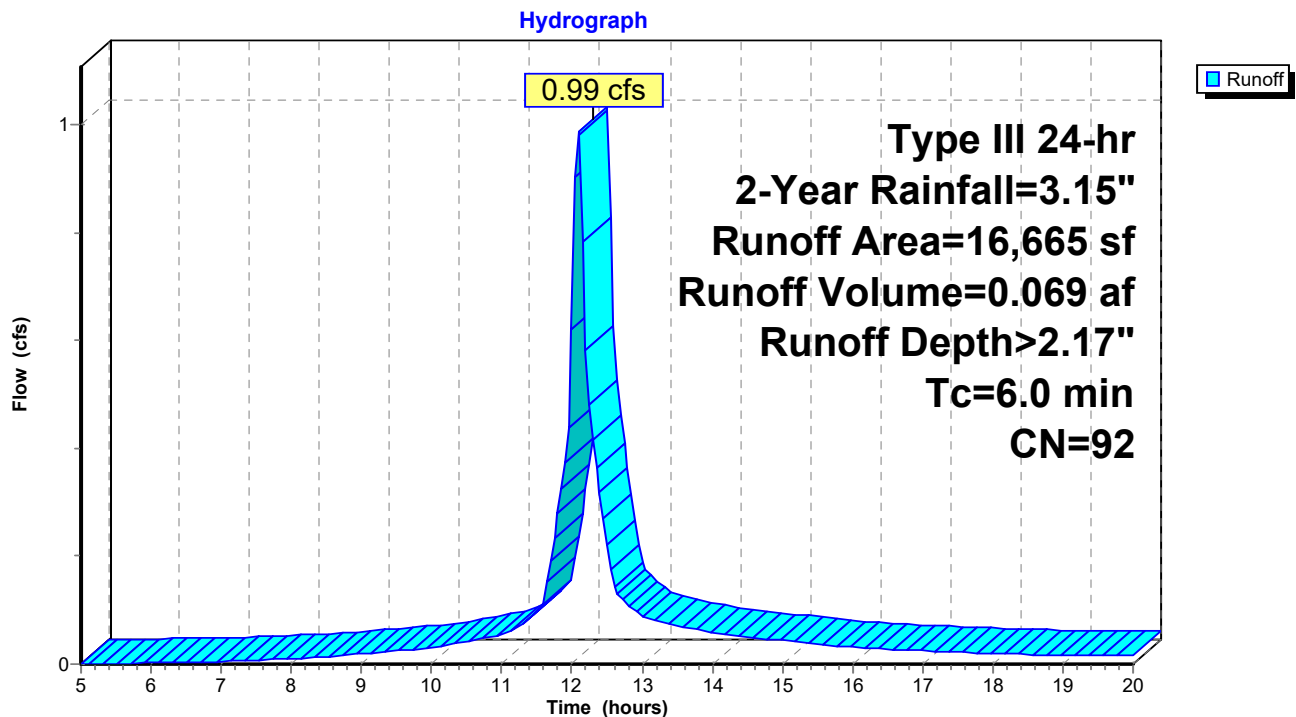
Runoff = 0.99 cfs @ 12.09 hrs, Volume= 0.069 af, Depth> 2.17"
Routed to Pond 100P : CB 80

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

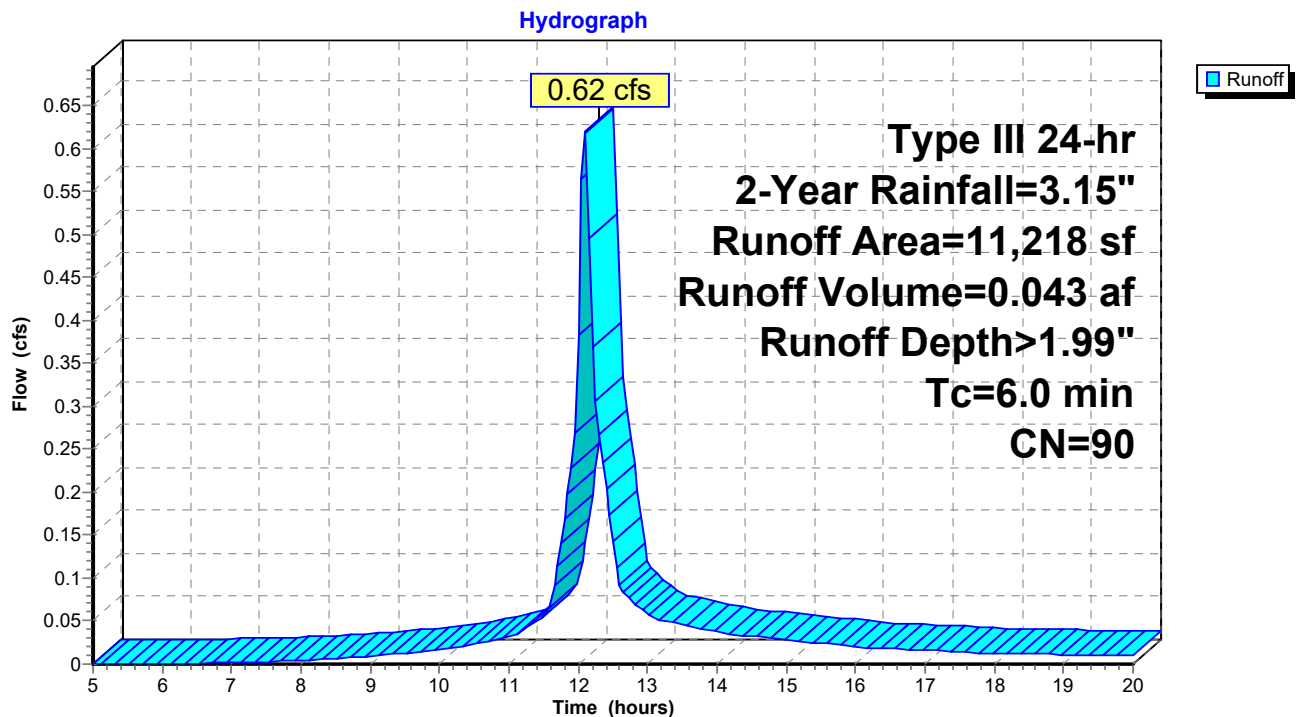
Runoff = 0.62 cfs @ 12.09 hrs, Volume= 0.043 af, Depth> 1.99"
Routed to Pond 99P : CB 81

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

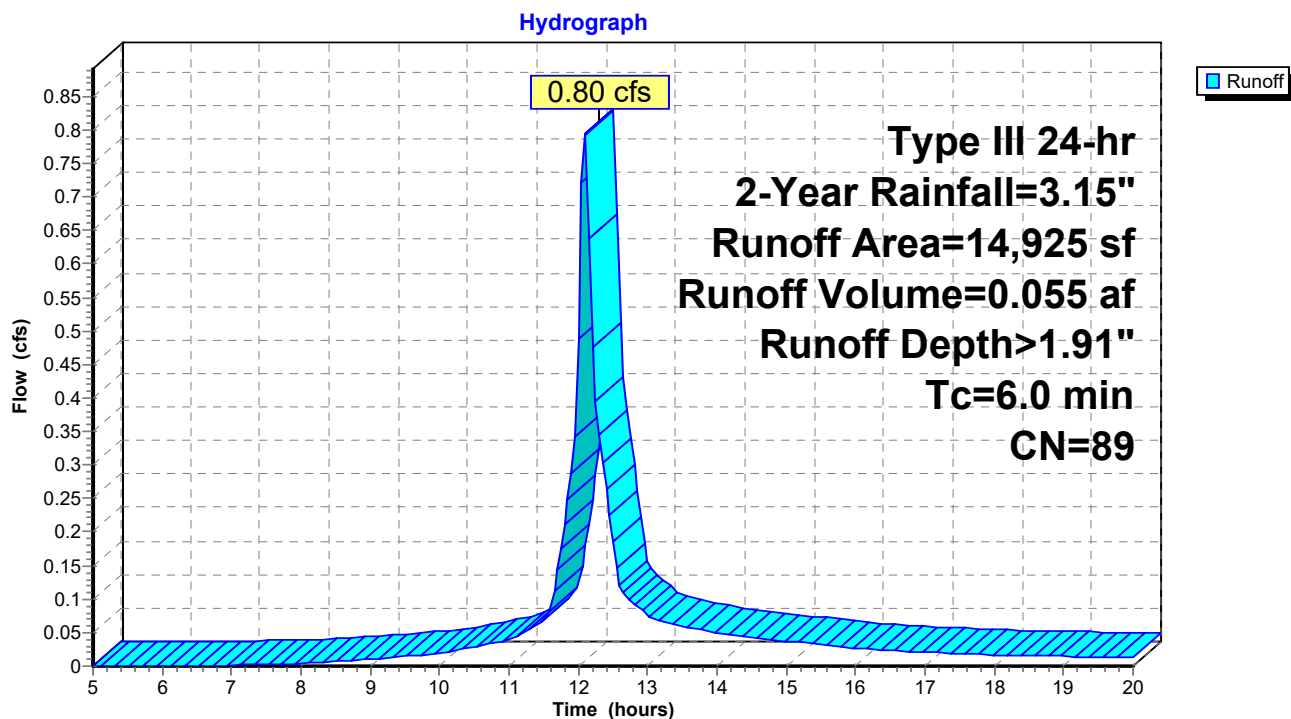
Runoff = 0.80 cfs @ 12.09 hrs, Volume= 0.055 af, Depth> 1.91"
Routed to Pond 104P : CB 83

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

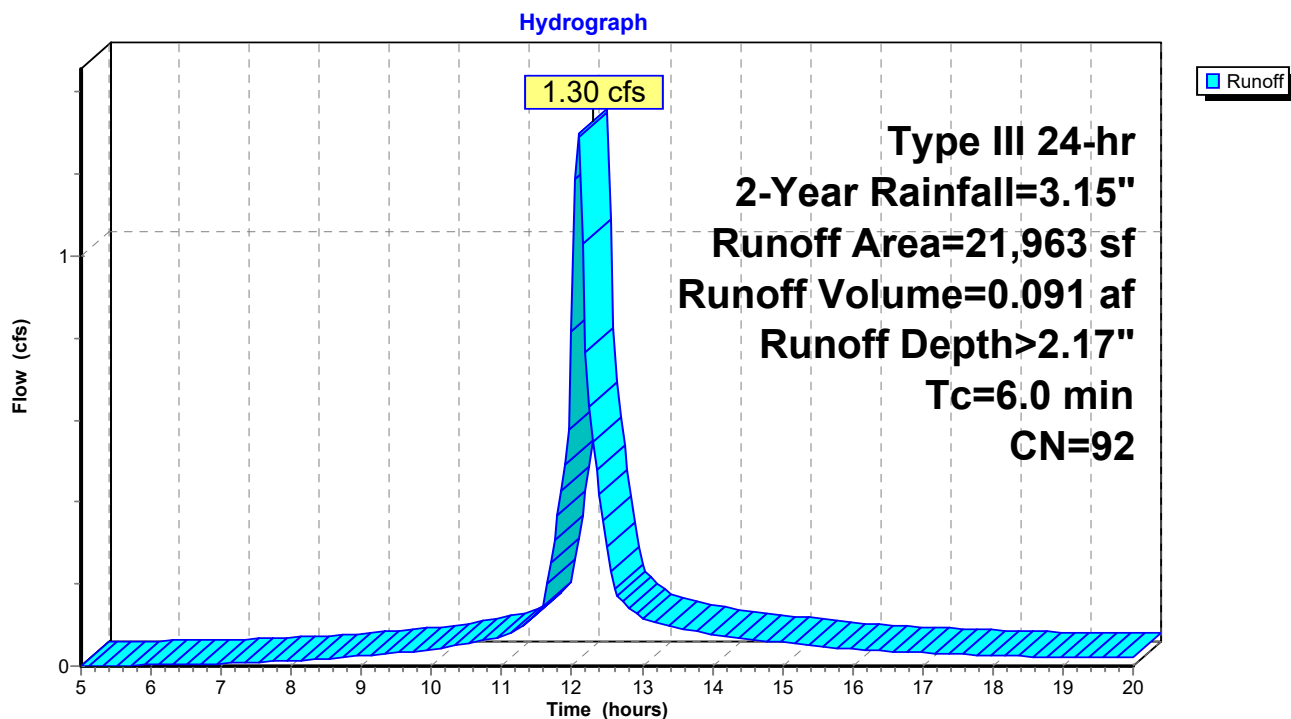
Runoff = 1.30 cfs @ 12.09 hrs, Volume= 0.091 af, Depth> 2.17"
Routed to Pond 105P : CB 82

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

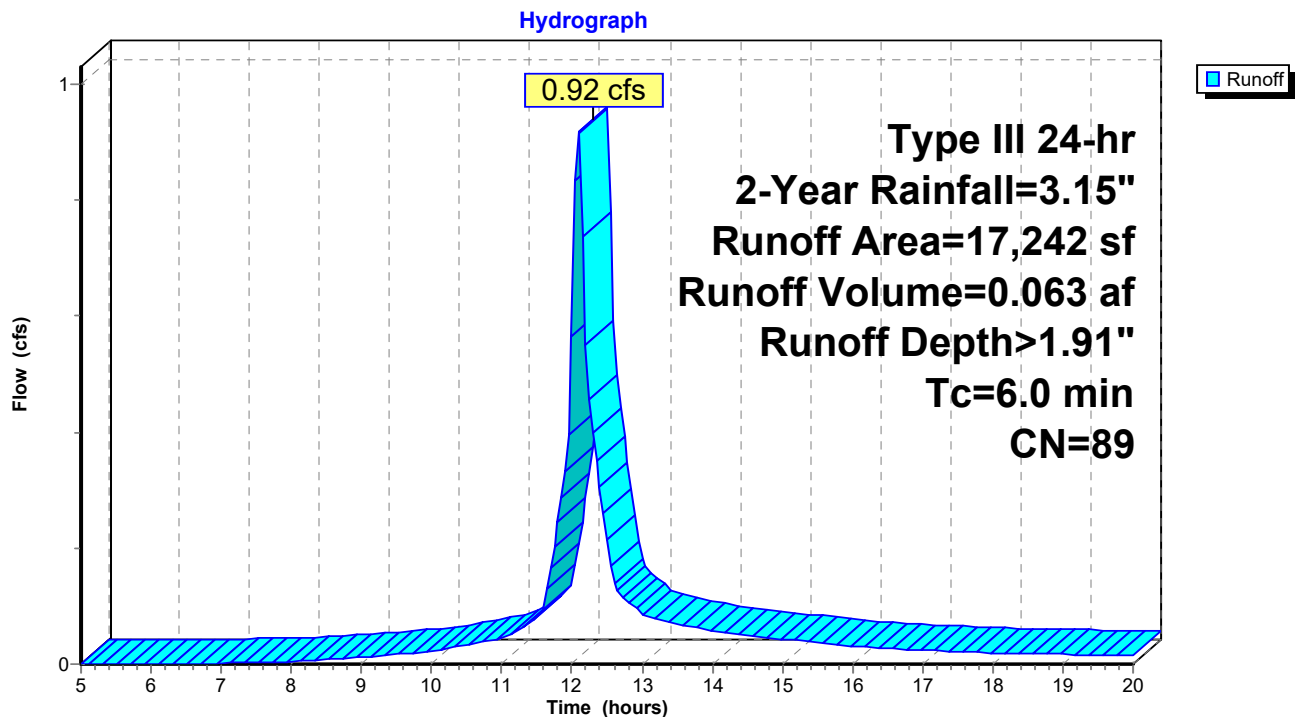
Runoff = 0.92 cfs @ 12.09 hrs, Volume= 0.063 af, Depth> 1.91"
Routed to Pond 110P : CB 78

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

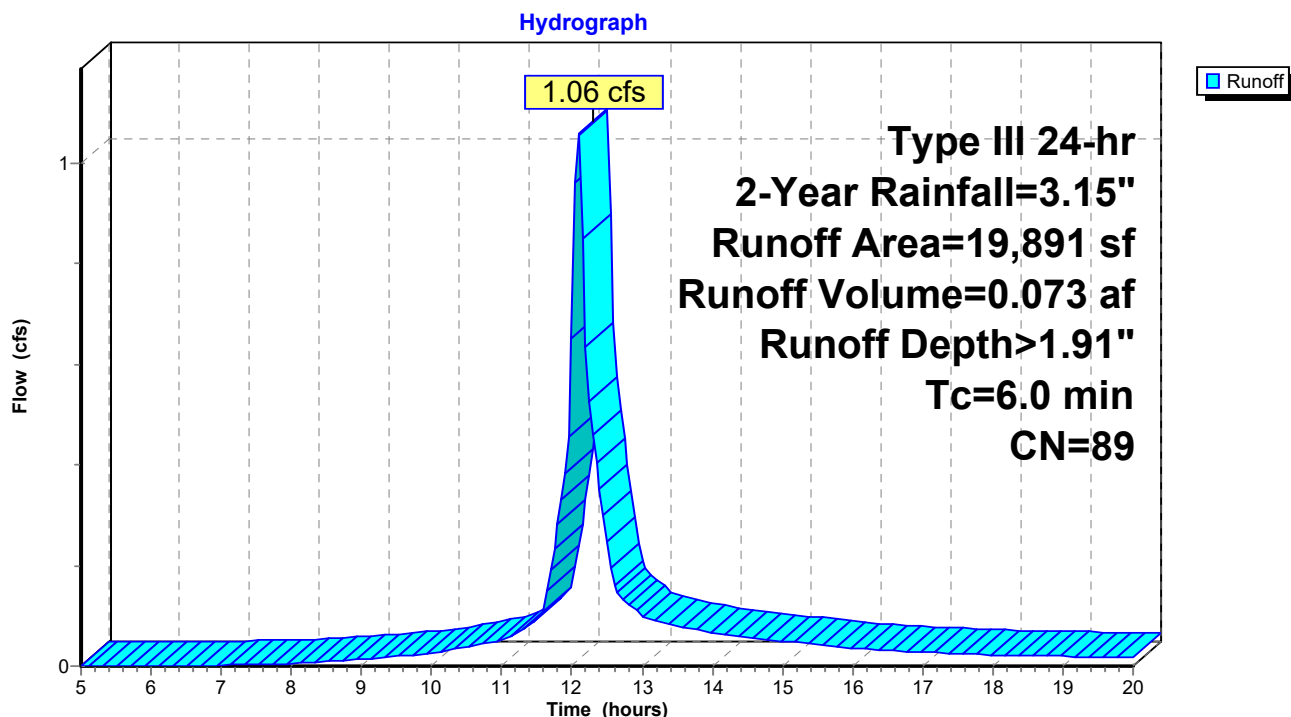
Runoff = 1.06 cfs @ 12.09 hrs, Volume= 0.073 af, Depth> 1.91"
Routed to Pond 109P : CB 79

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



Summary for Subcatchment 109S: P3T

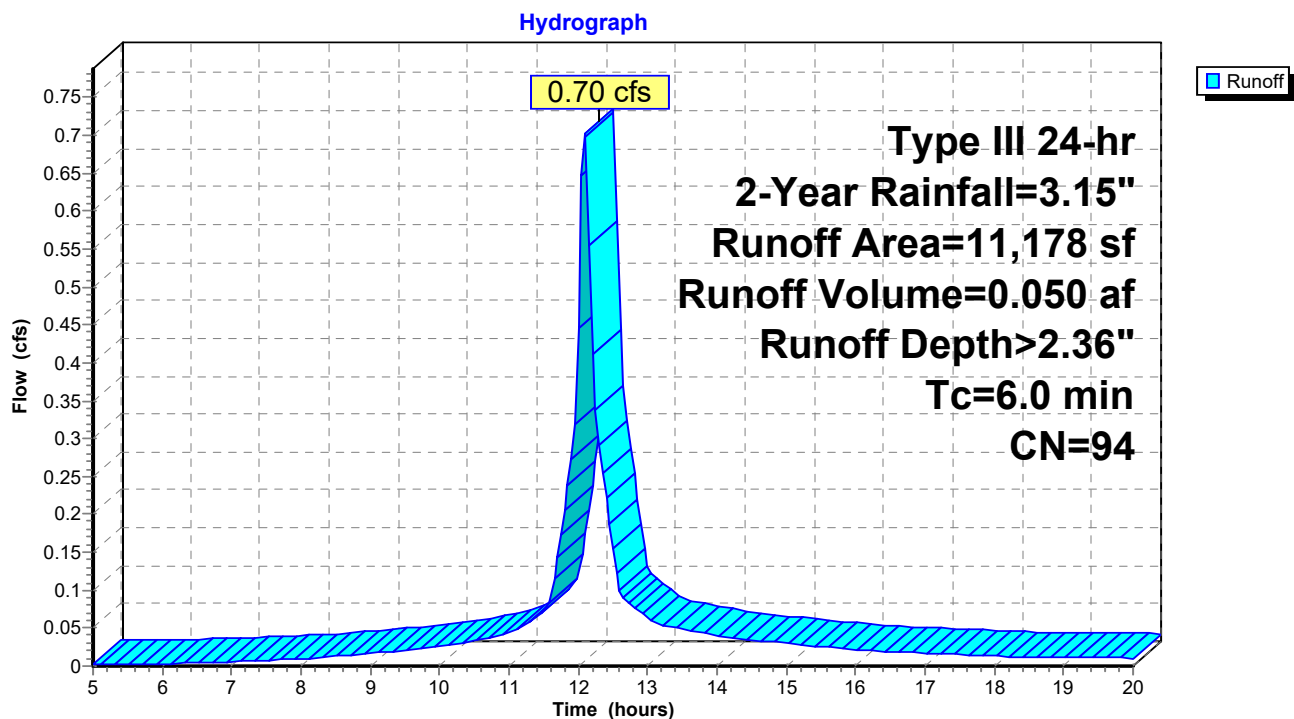
Runoff = 0.70 cfs @ 12.09 hrs, Volume= 0.050 af, Depth> 2.36"
Routed to Pond 116P : CB 90

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

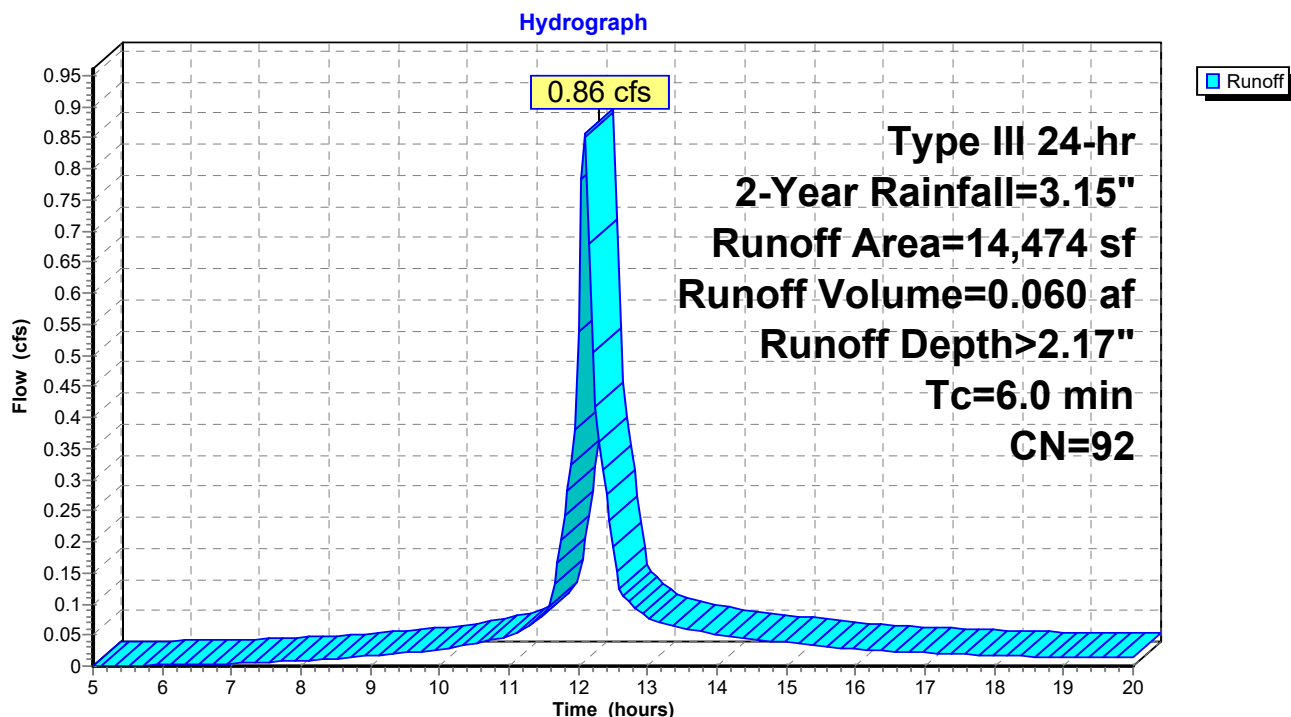
Runoff = 0.86 cfs @ 12.09 hrs, Volume= 0.060 af, Depth> 2.17"
Routed to Pond 115P : CB 91

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



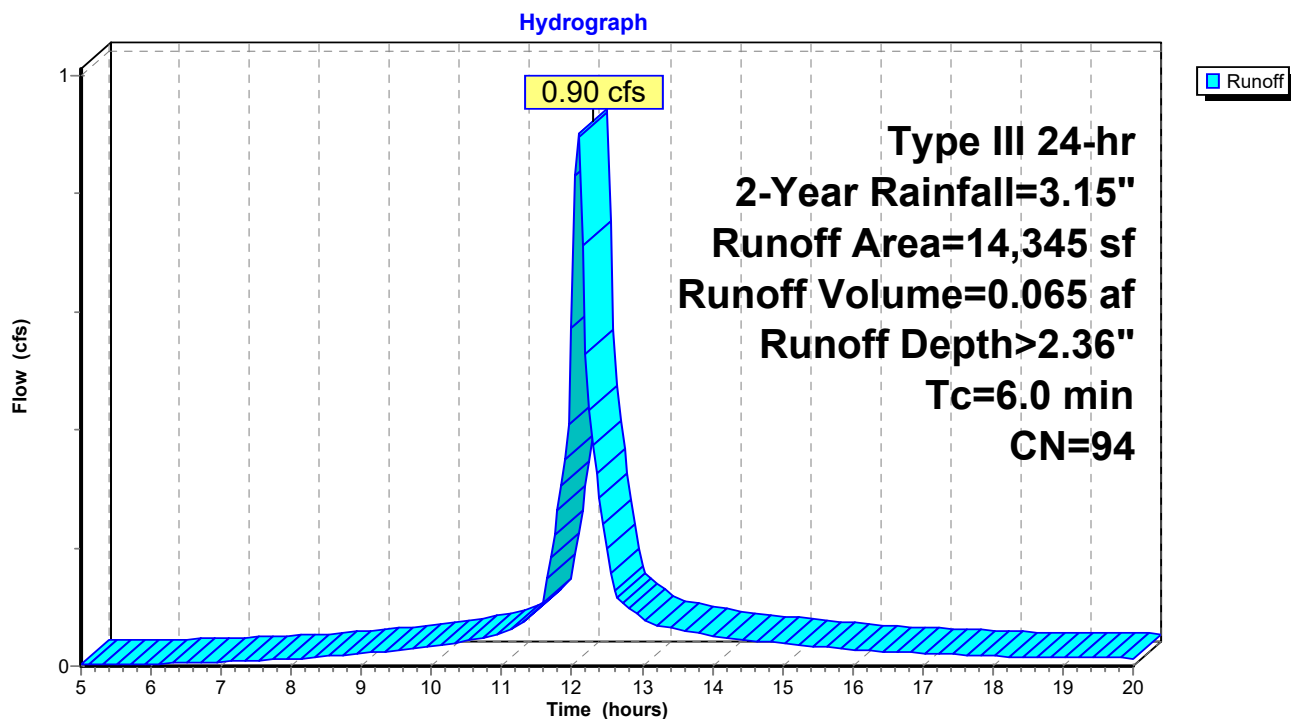
Summary for Subcatchment 111S: P3V

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

Summary for Subcatchment 112S: P3W

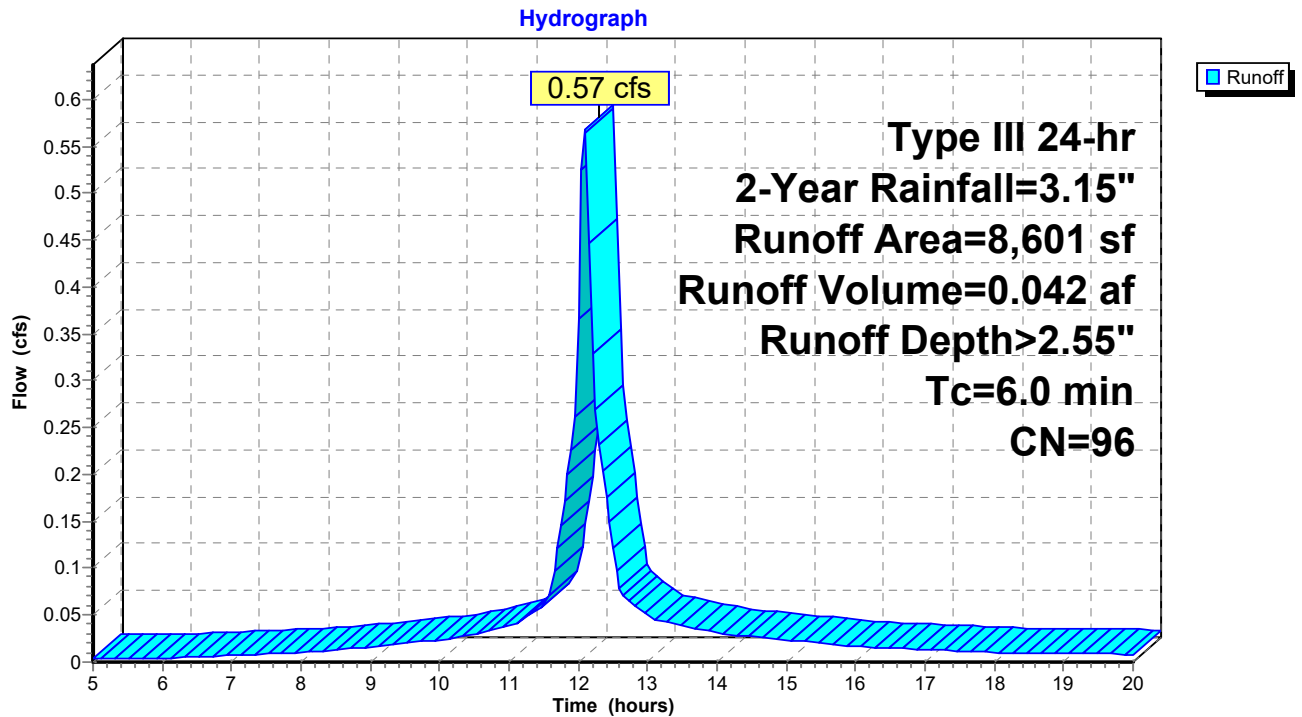
Runoff = 0.57 cfs @ 12.09 hrs, Volume= 0.042 af, Depth> 2.55"
Routed to Pond 113P : CB 95

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

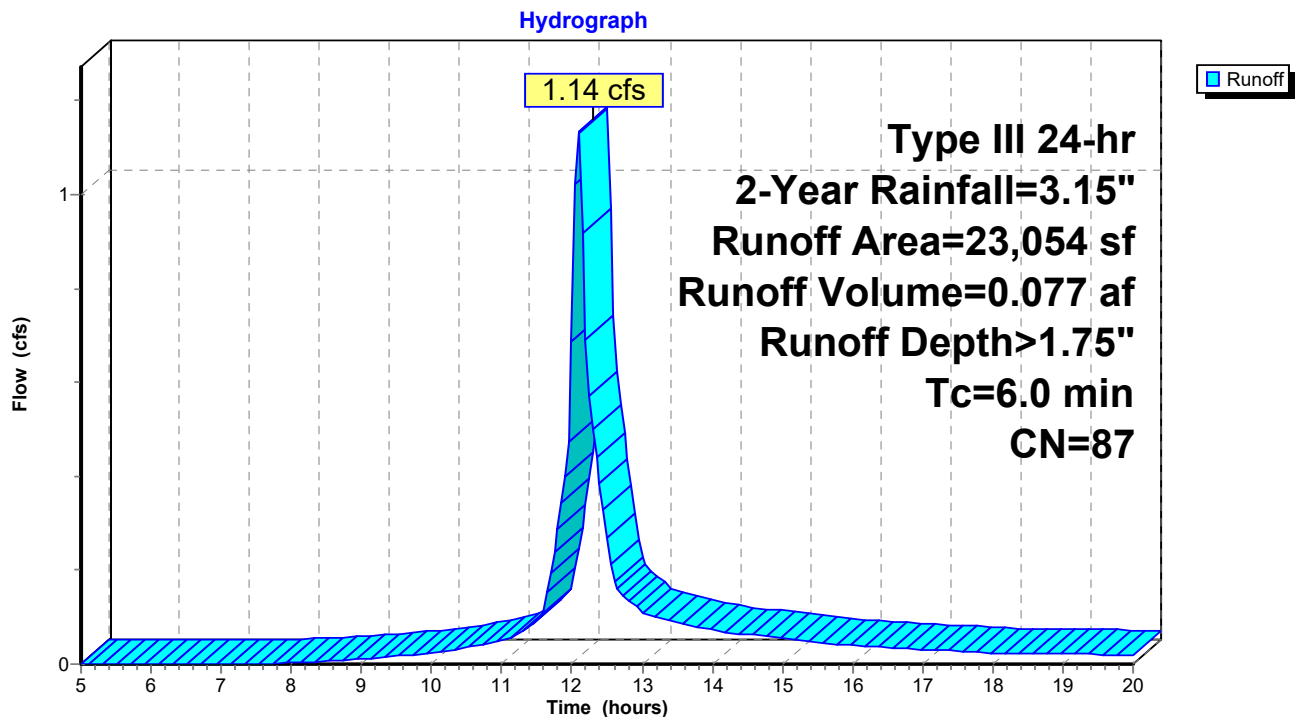
Runoff = 1.14 cfs @ 12.09 hrs, Volume= 0.077 af, Depth> 1.75"
Routed to Pond 130P : CB 32

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

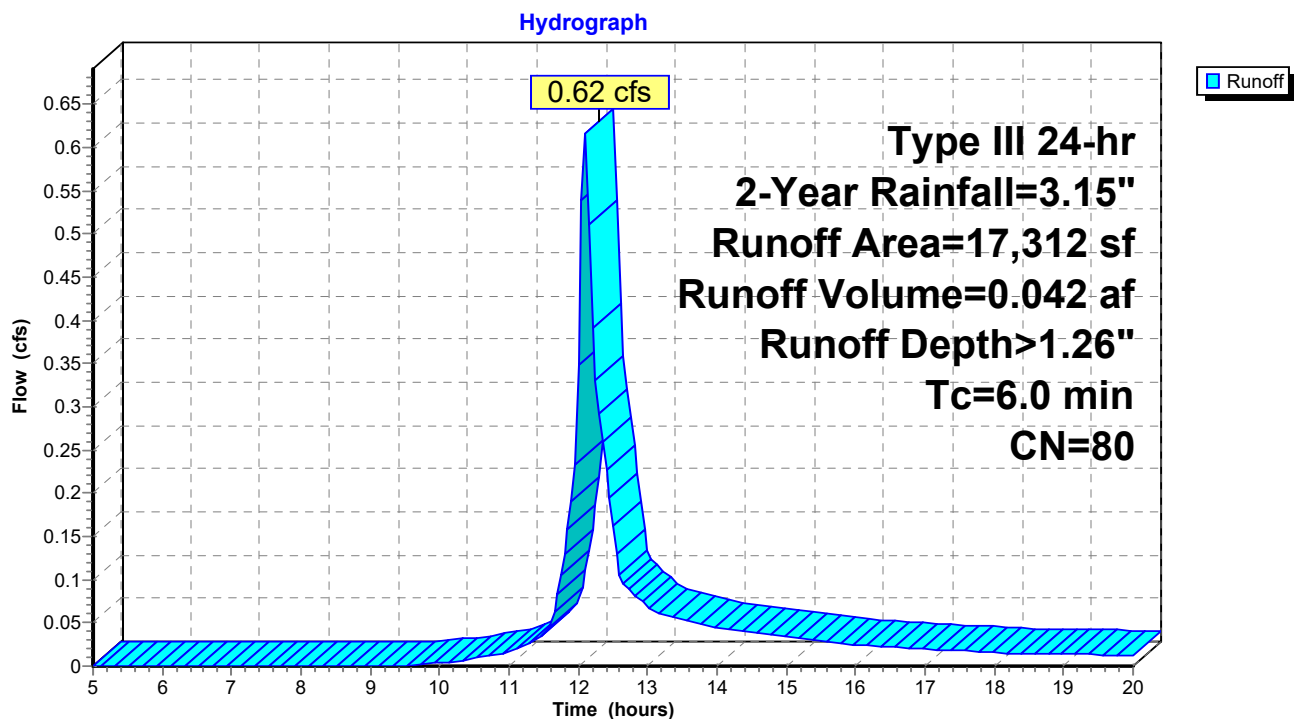
Runoff = 0.62 cfs @ 12.10 hrs, Volume= 0.042 af, Depth> 1.26"
Routed to Pond 129P : CB 34

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

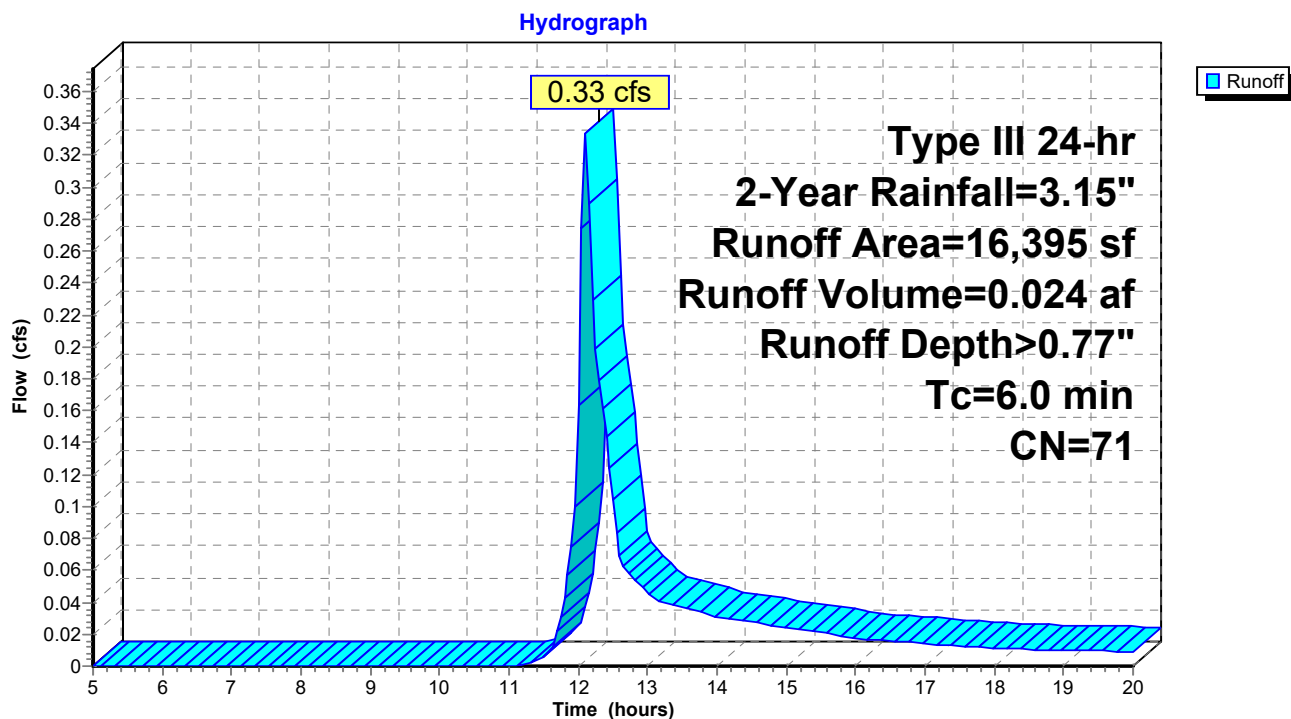
Runoff = 0.33 cfs @ 12.10 hrs, Volume= 0.024 af, Depth> 0.77"
Routed to Pond 132P : CB 33

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

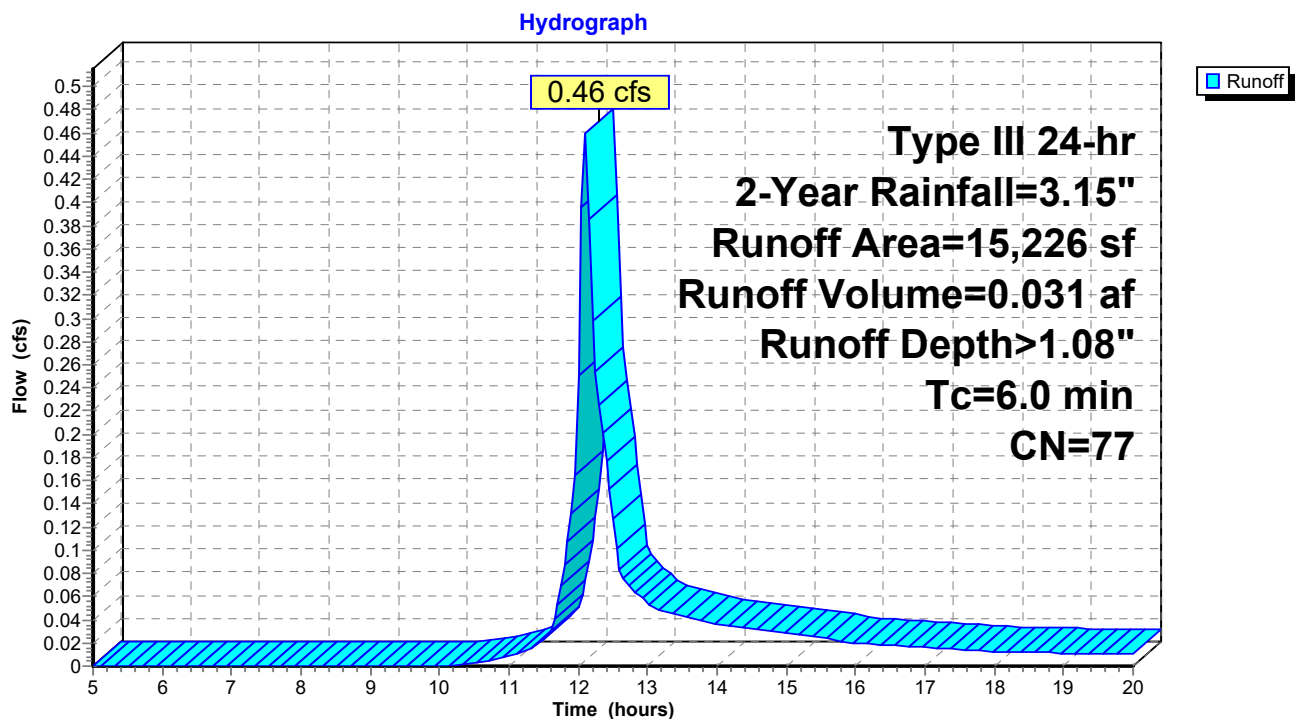
Runoff = 0.46 cfs @ 12.10 hrs, Volume= 0.031 af, Depth> 1.08"
Routed to Pond 131P : CB 35

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

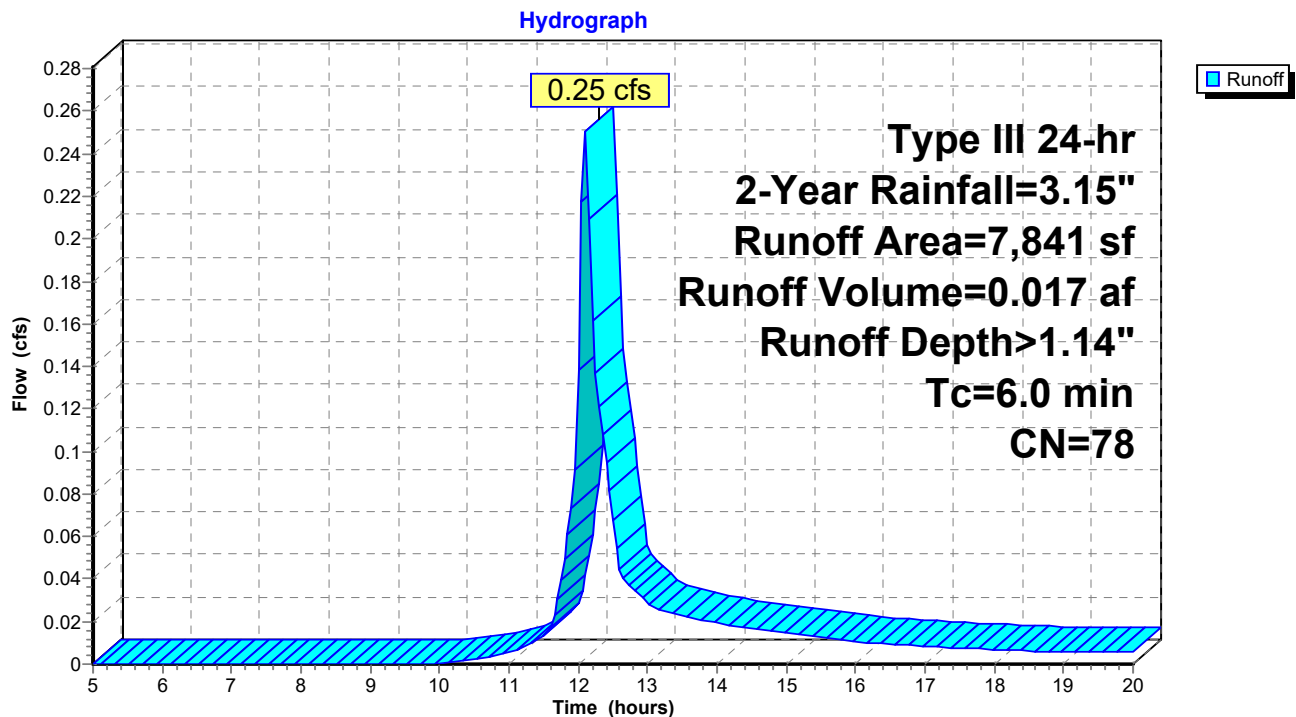
Runoff = 0.25 cfs @ 12.10 hrs, Volume= 0.017 af, Depth> 1.14"
Routed to Pond 136P : CB 38

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



Summary for Subcatchment 130S: P3NN

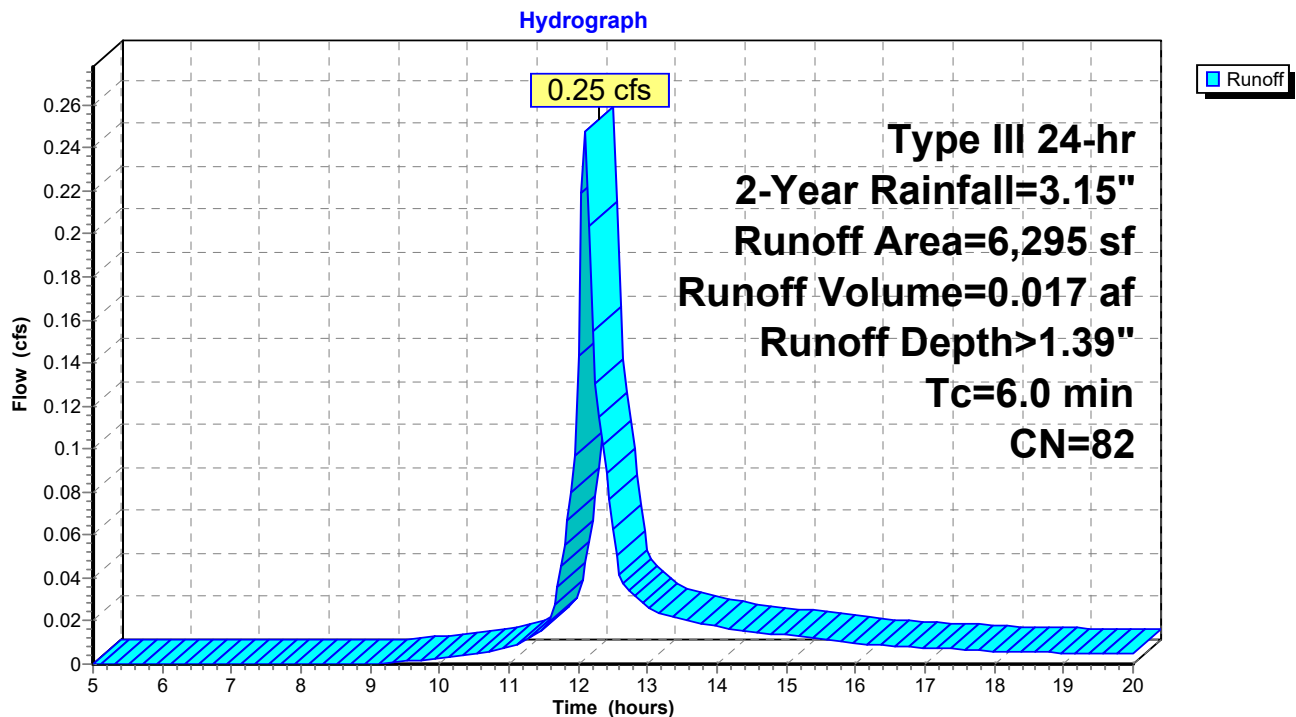
Runoff = 0.25 cfs @ 12.09 hrs, Volume= 0.017 af, Depth> 1.39"
 Routed to Pond 138P : CB 39

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



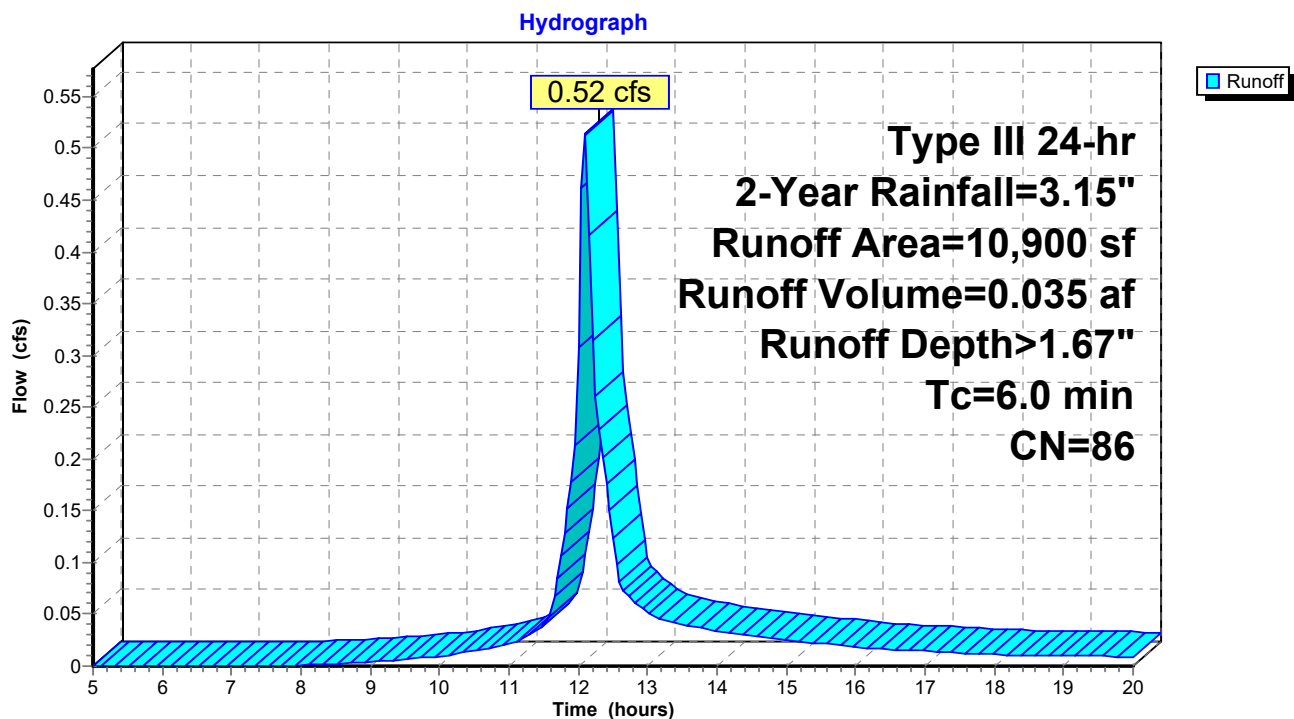
Summary for Subcatchment 136S: P3II

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

[73] Warning: Peak may fall outside time span

Runoff = 0.00 cfs @ 20.00 hrs, Volume= 0.000 af, Depth> 0.00"
Routed to Pond 135P : Inf. Basin 3

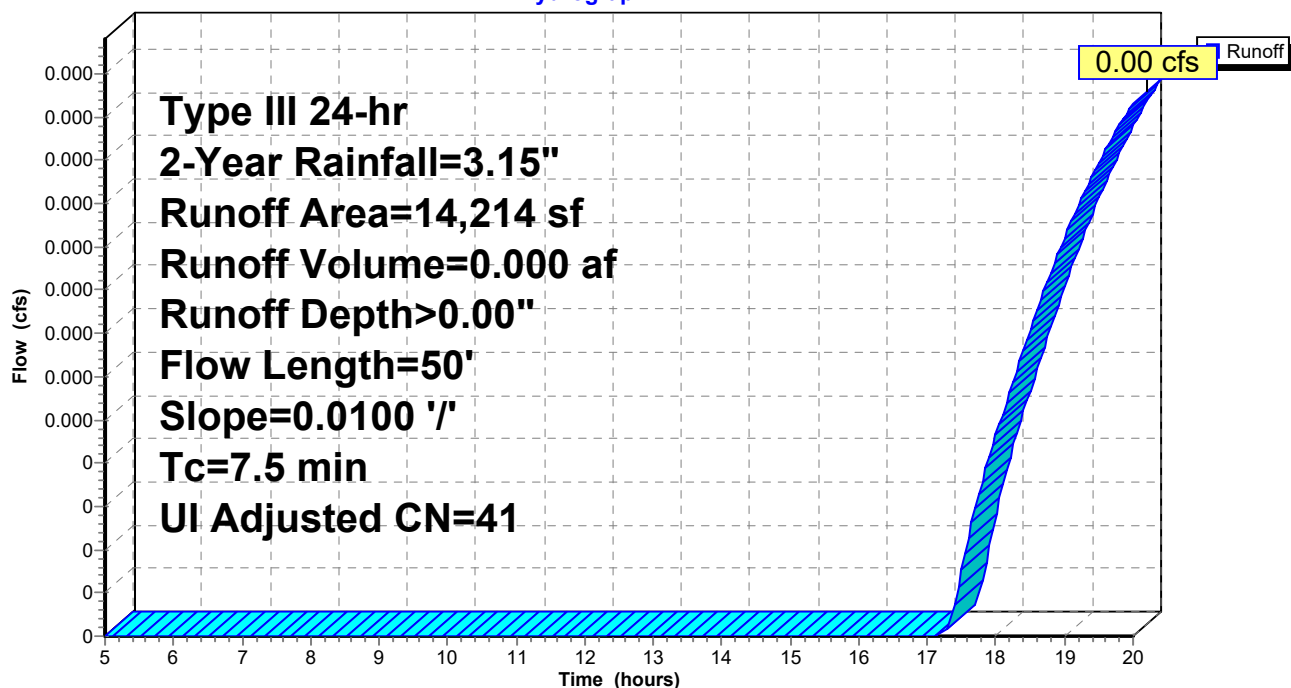
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=3.15"

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, Grass: Short n= 0.150 P2= 3.10"

Subcatchment 138S: P3JJ

Hydrograph



Summary for Subcatchment 140S: P300

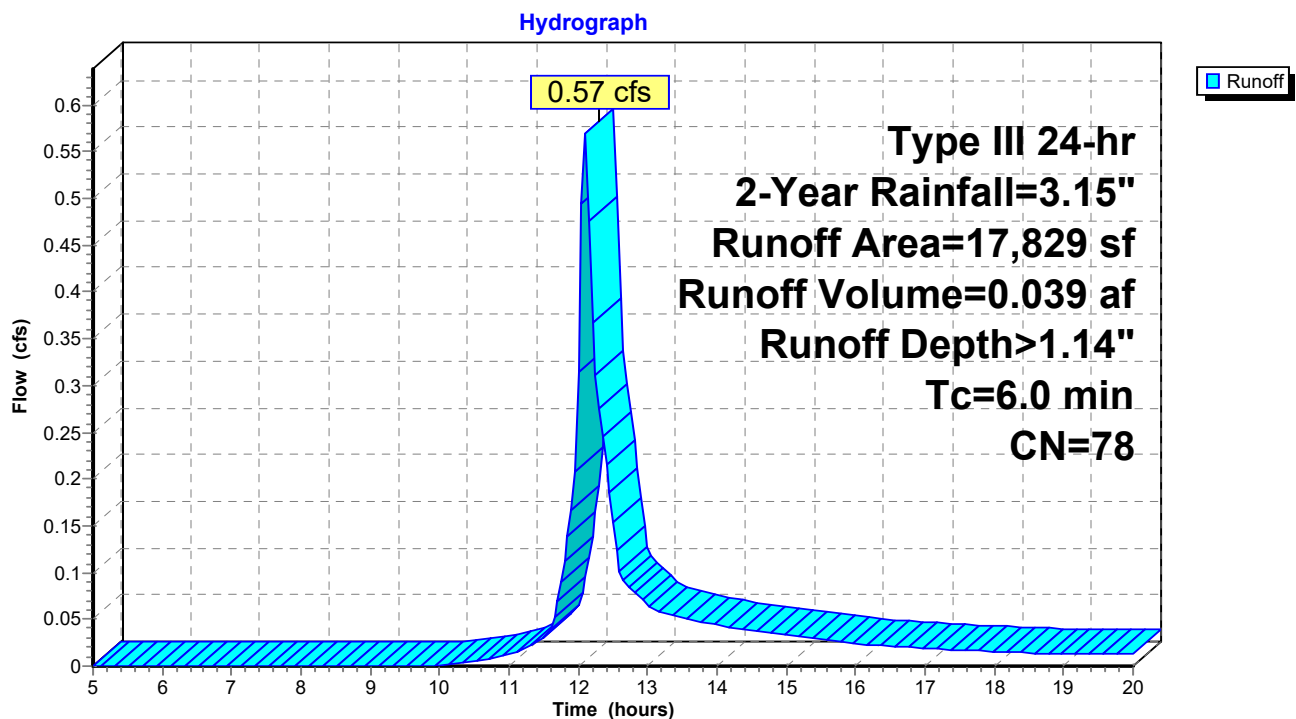
Runoff = 0.57 cfs @ 12.10 hrs, Volume= 0.039 af, Depth> 1.14"
Routed to Pond 142P : CB 40

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



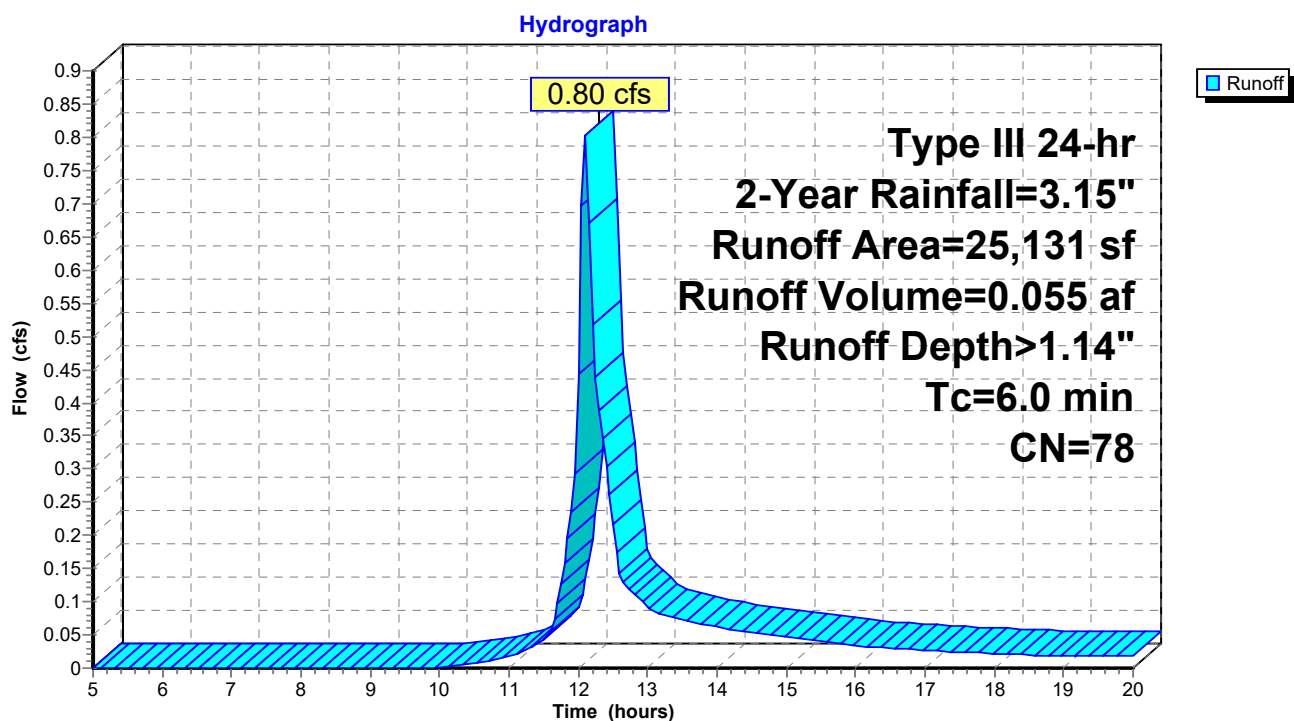
Summary for Subcatchment 141S: P3PP

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

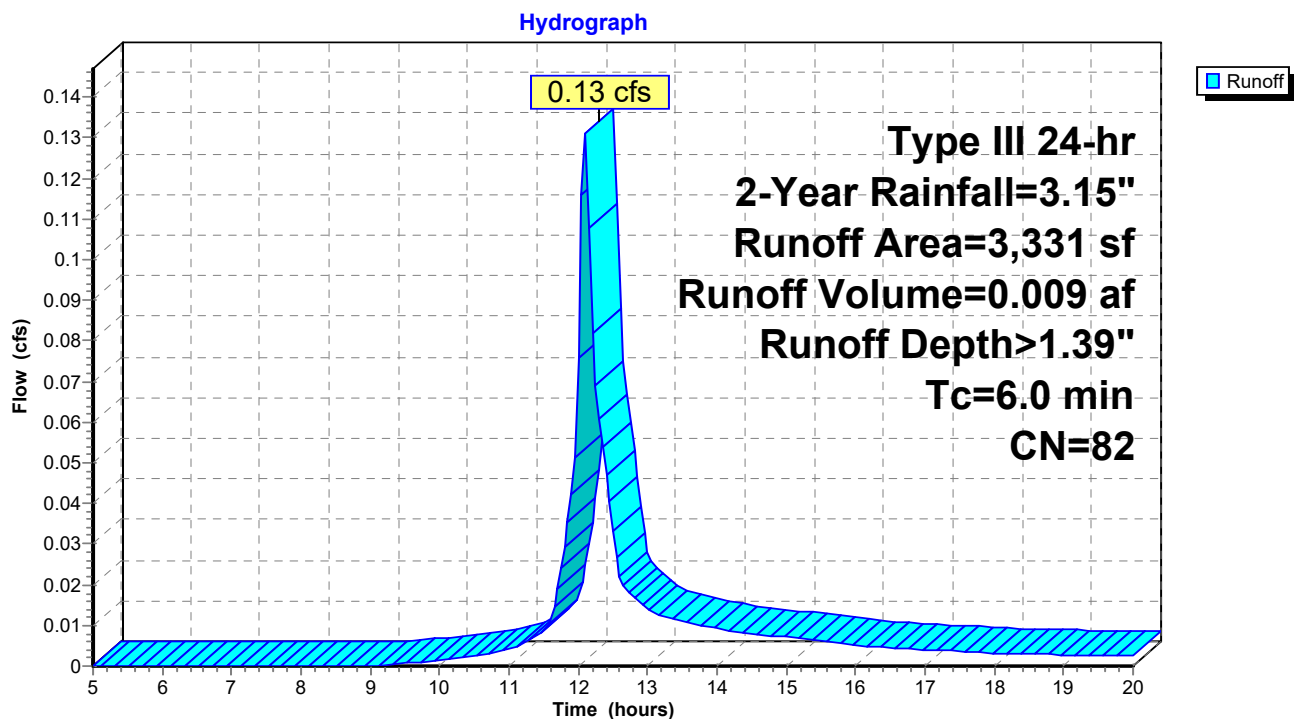
Runoff = 0.13 cfs @ 12.09 hrs, Volume= 0.009 af, Depth> 1.39"
Routed to Pond 147P : CB 28

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



Summary for Subcatchment 143S: P3VV

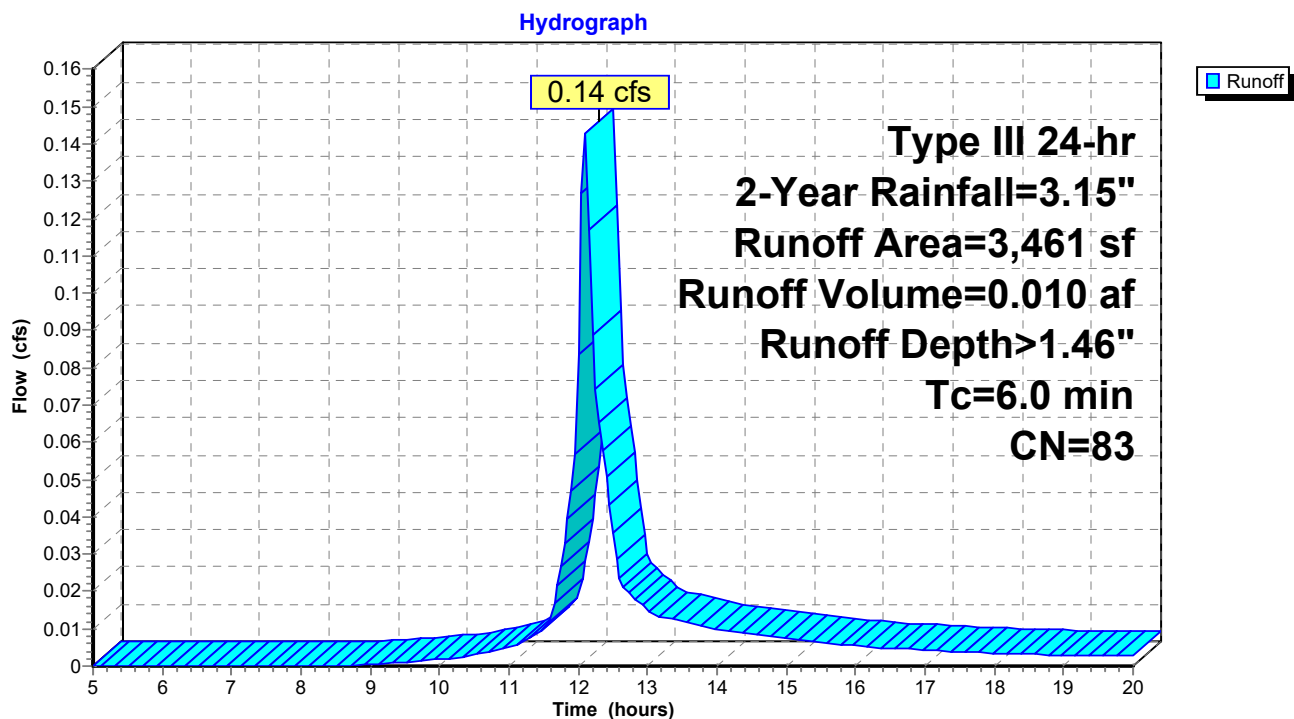
Runoff = 0.14 cfs @ 12.09 hrs, Volume= 0.010 af, Depth> 1.46"
Routed to Pond 149P : CB 29

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

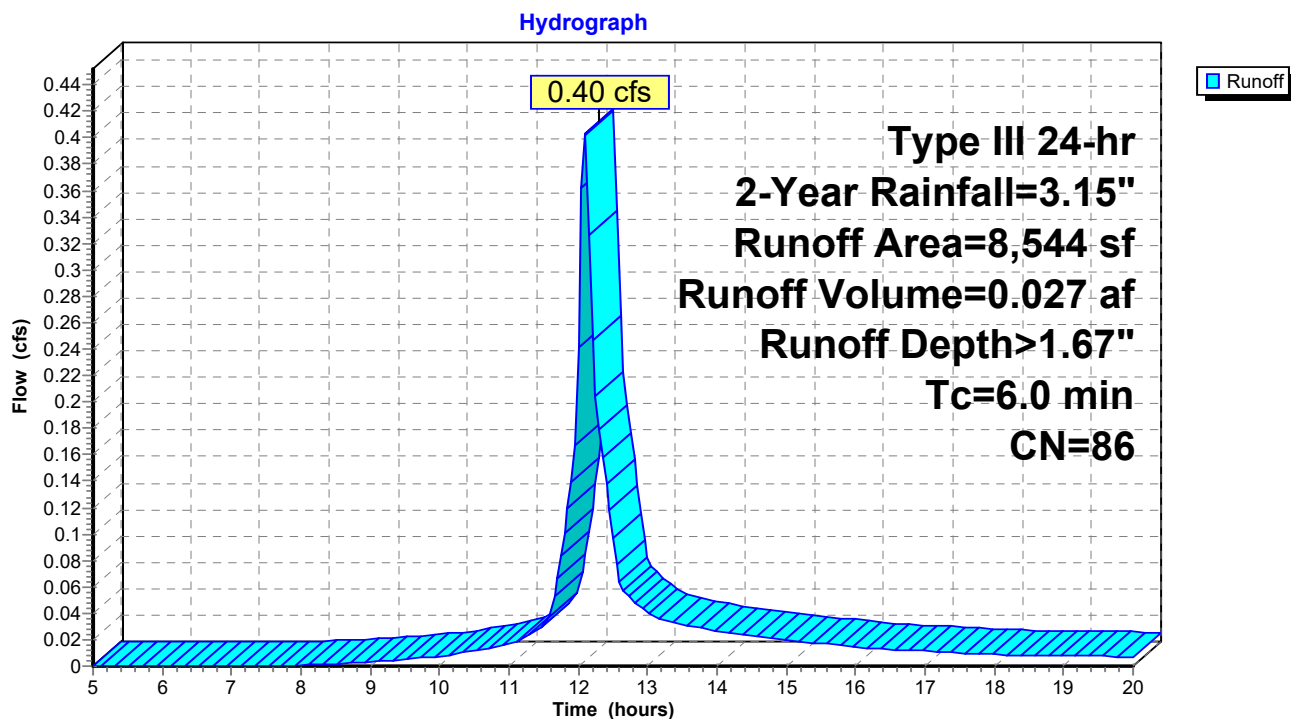
Runoff = 0.40 cfs @ 12.09 hrs, Volume= 0.027 af, Depth> 1.67"
Routed to Pond 148P : CB 43

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

[73] Warning: Peak may fall outside time span

Runoff = 0.00 cfs @ 20.00 hrs, Volume= 0.000 af, Depth> 0.00"
 Routed to Pond 146P : Inf. Basin 2

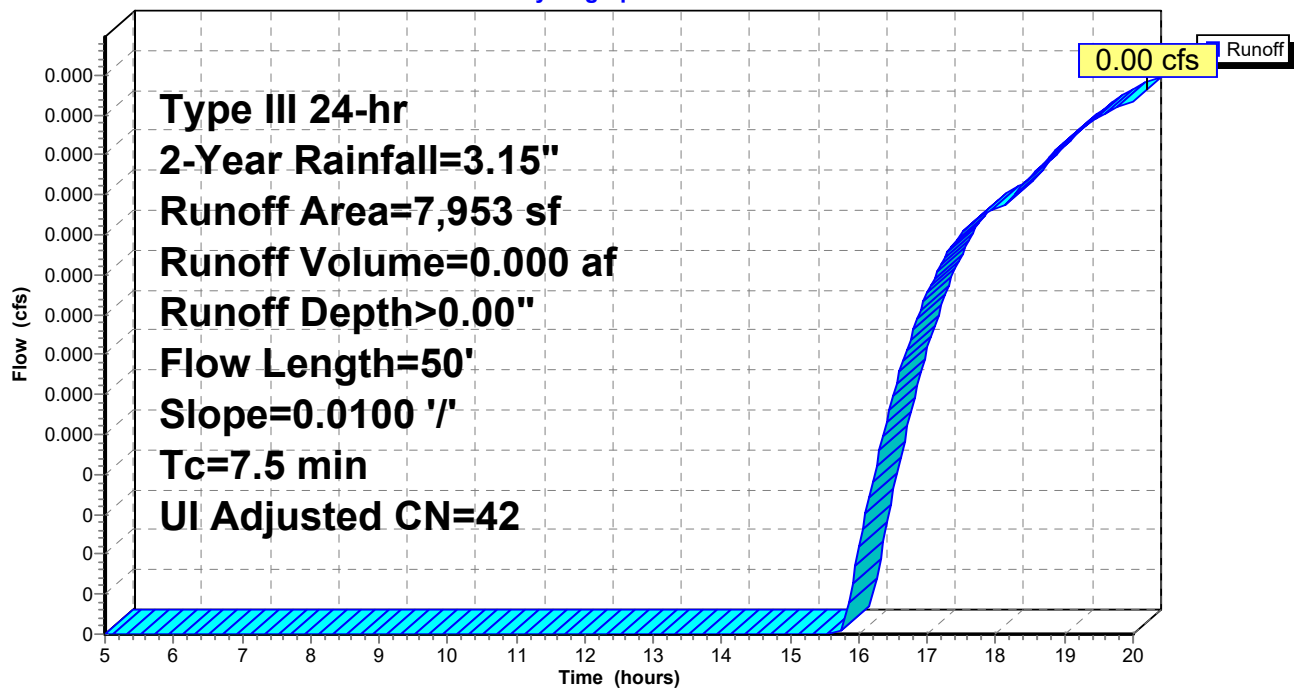
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 2-Year Rainfall=3.15"

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, Grass: Short n= 0.150 P2= 3.10"

Subcatchment 149S: P3RR

Hydrograph



Summary for Subcatchment 151S: P3ZZ

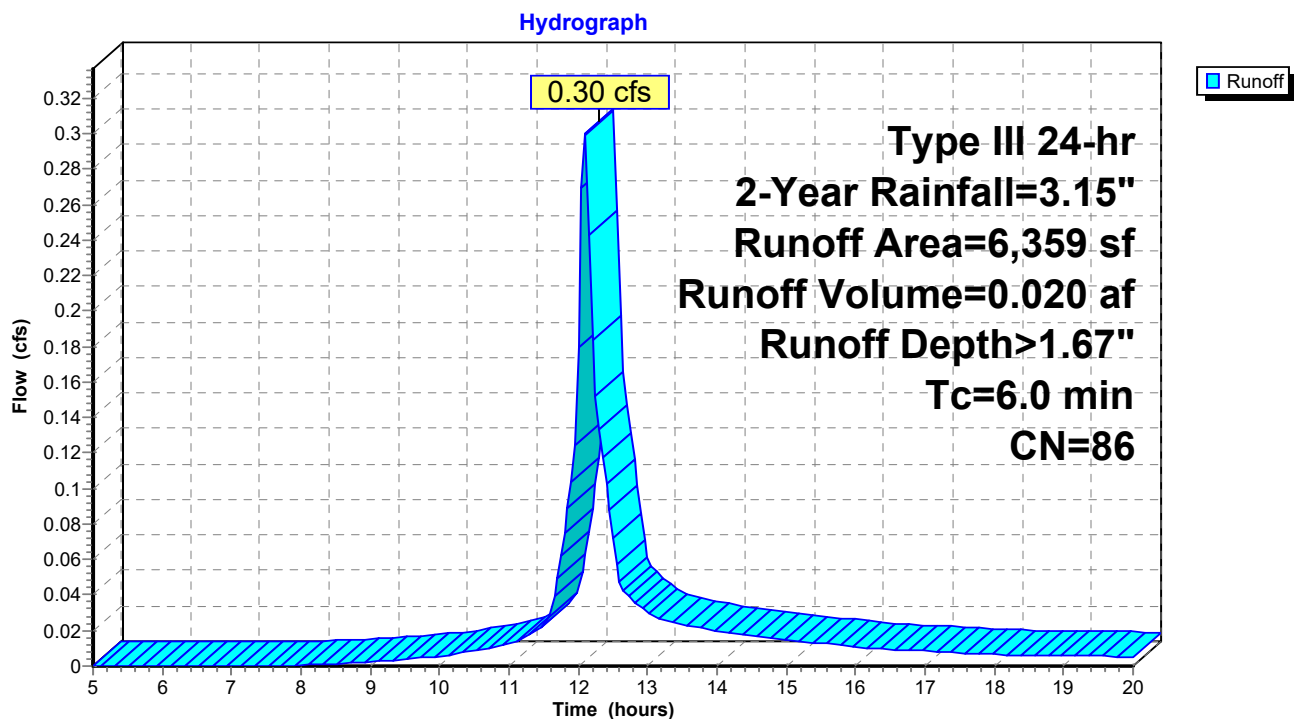
Runoff = 0.30 cfs @ 12.09 hrs, Volume= 0.020 af, Depth> 1.67"
Routed to Pond 159P : CB 25

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

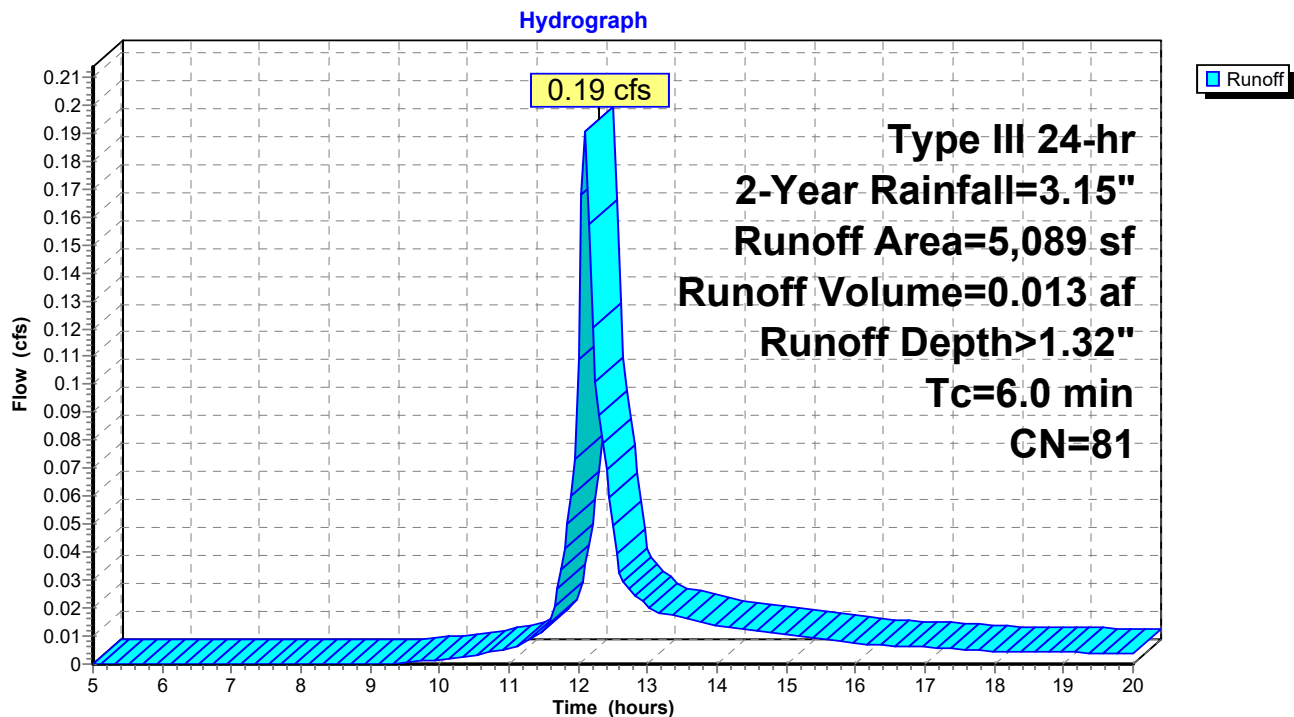
Runoff = 0.19 cfs @ 12.10 hrs, Volume= 0.013 af, Depth> 1.32"
Routed to Pond 158P : CB 24

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

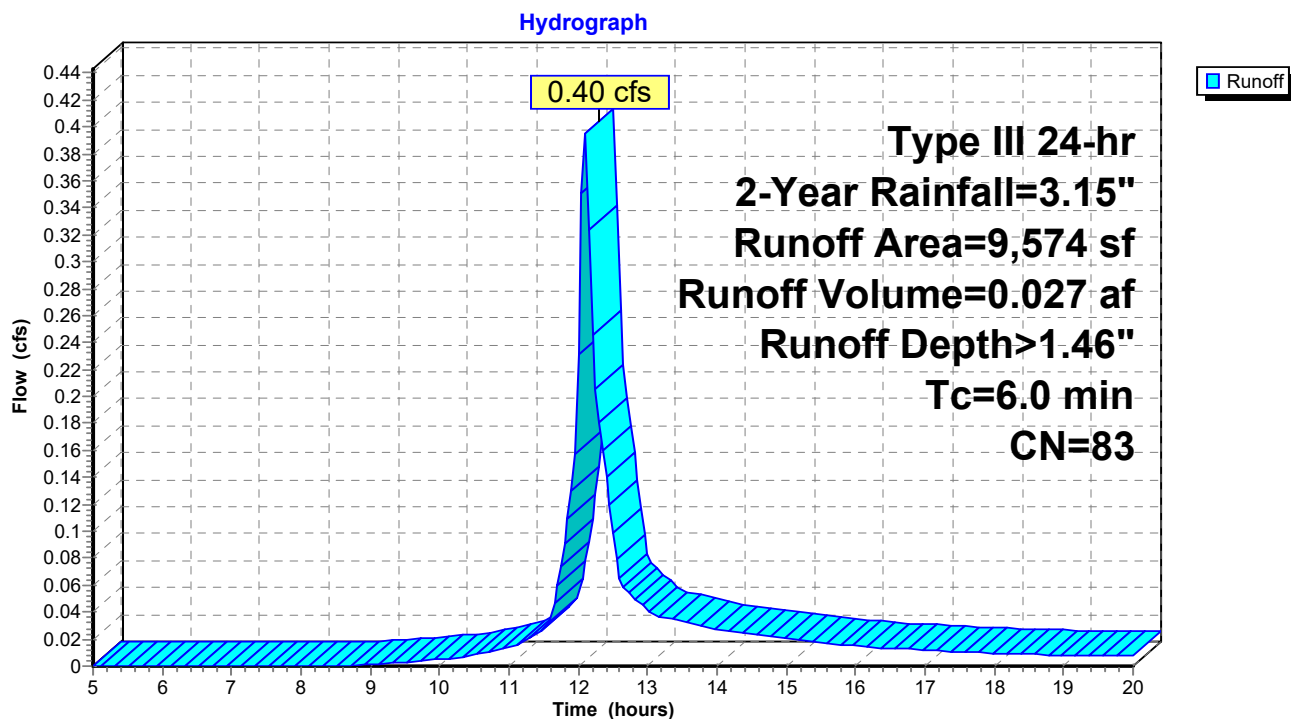
Runoff = 0.40 cfs @ 12.09 hrs, Volume= 0.027 af, Depth> 1.46"
Routed to Pond 155P : CB 27

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



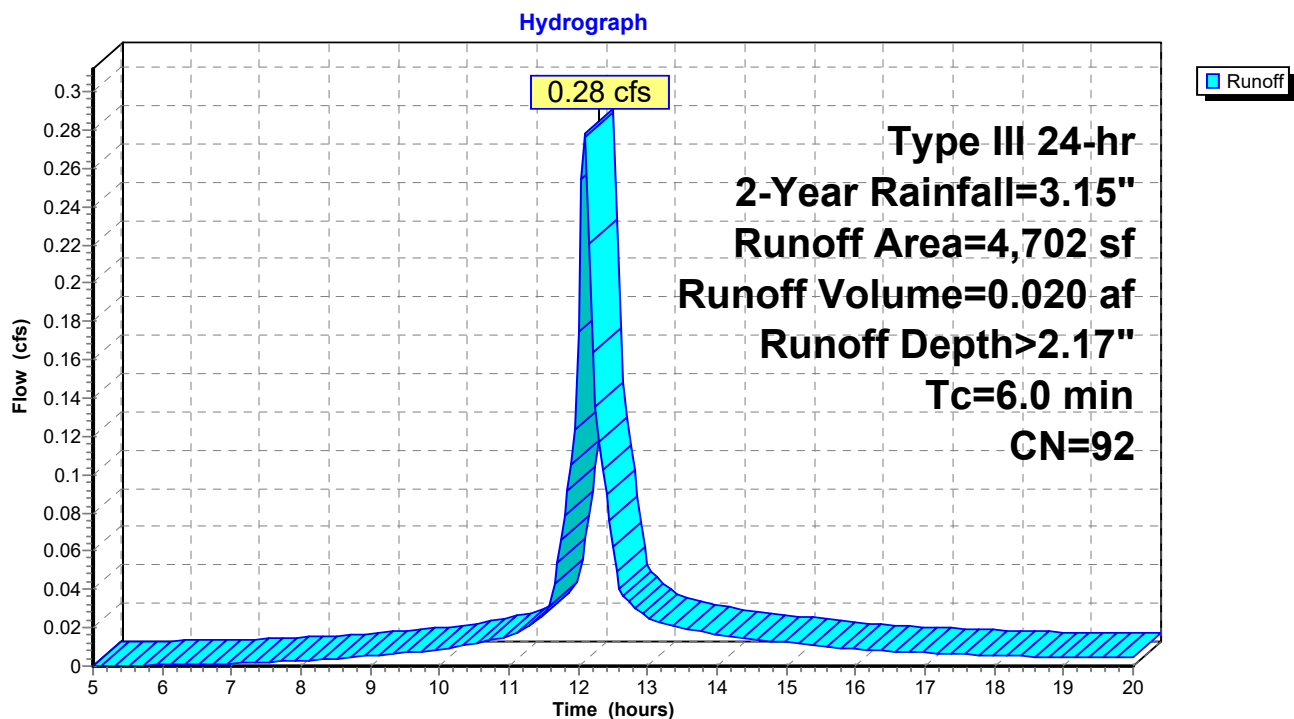
Summary for Subcatchment 154S: P3XX

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

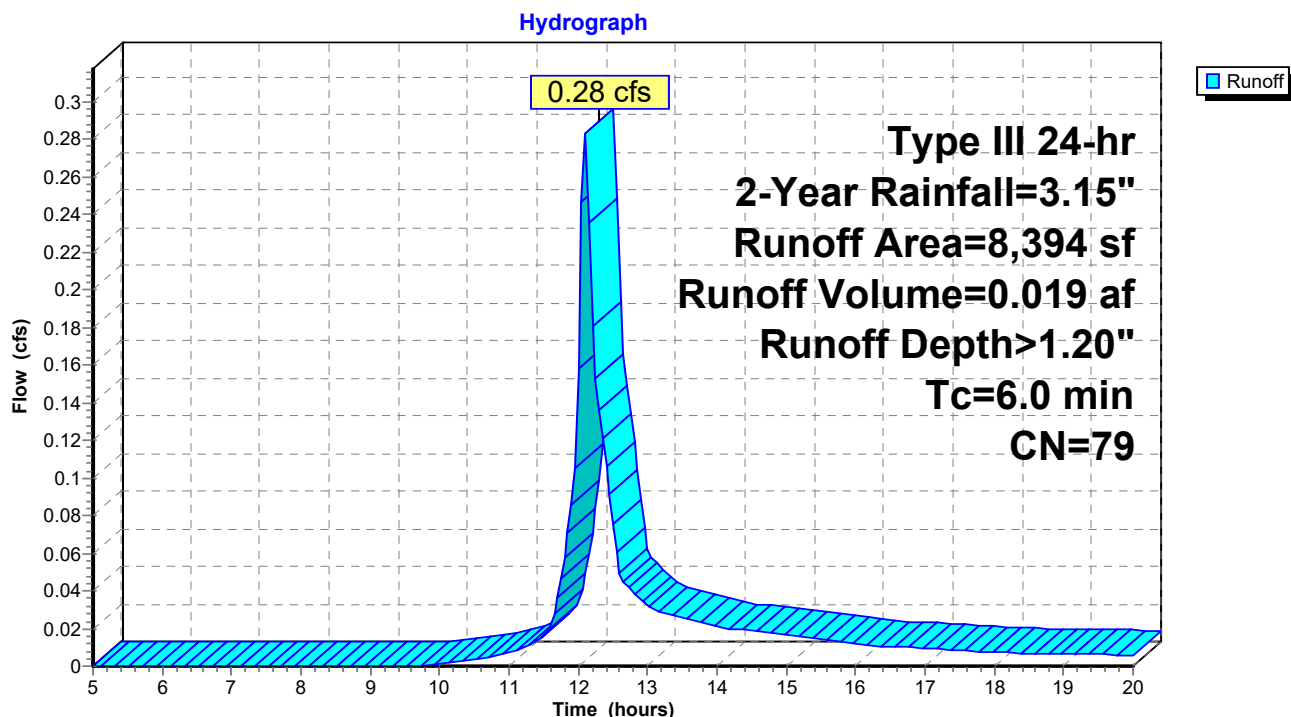
Runoff = 0.28 cfs @ 12.10 hrs, Volume= 0.019 af, Depth> 1.20"
Routed to Pond 163P : CB 14

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
2,716	39	>75% Grass cover, Good, HSG A
2,023	98	Unconnected roofs, HSG A
3,655	98	Paved parking, HSG A
8,394	79	Weighted Average
2,716		32.36% Pervious Area
5,678		67.64% Impervious Area
2,023		35.63% 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

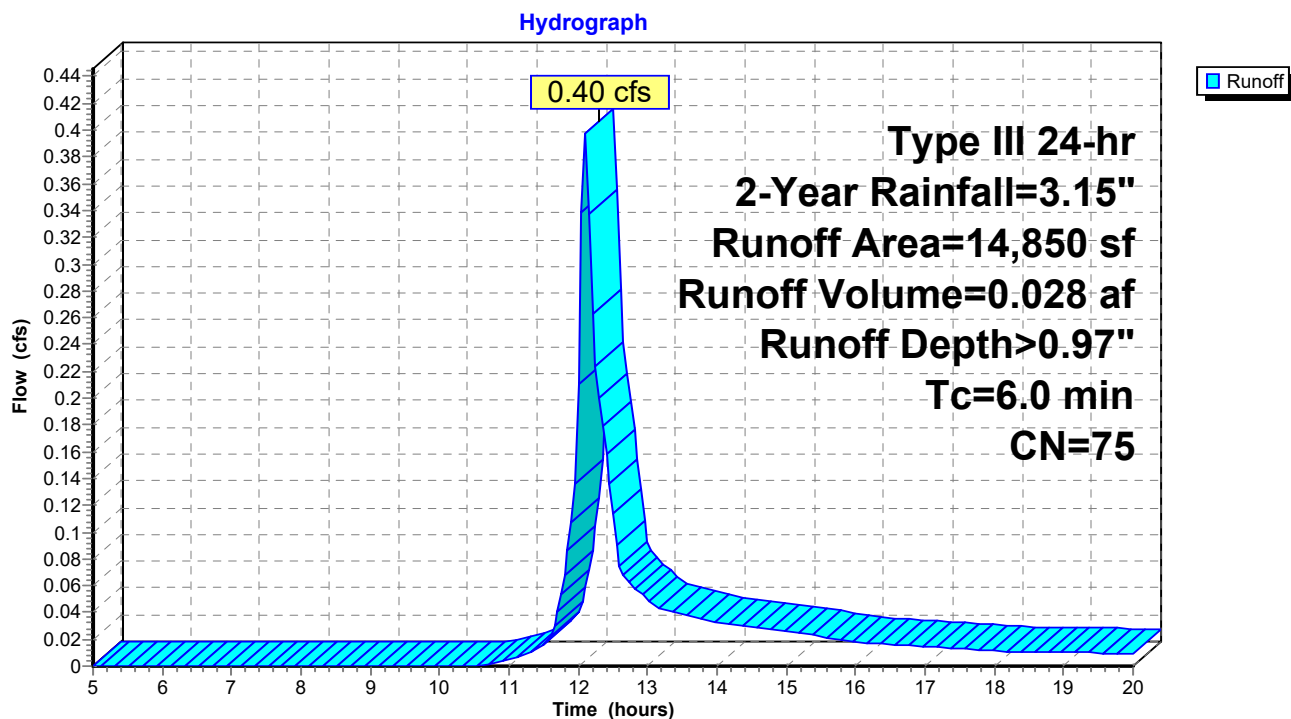
Runoff = 0.40 cfs @ 12.10 hrs, Volume= 0.028 af, Depth> 0.97"
Routed to Pond 162P : CB 15

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
5,829	39	>75% Grass cover, Good, HSG A
3,884	98	Unconnected roofs, HSG A
5,137	98	Paved parking, HSG A
14,850	75	Weighted Average
5,829		39.25% Pervious Area
9,021		60.75% Impervious Area
3,884		43.06% 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

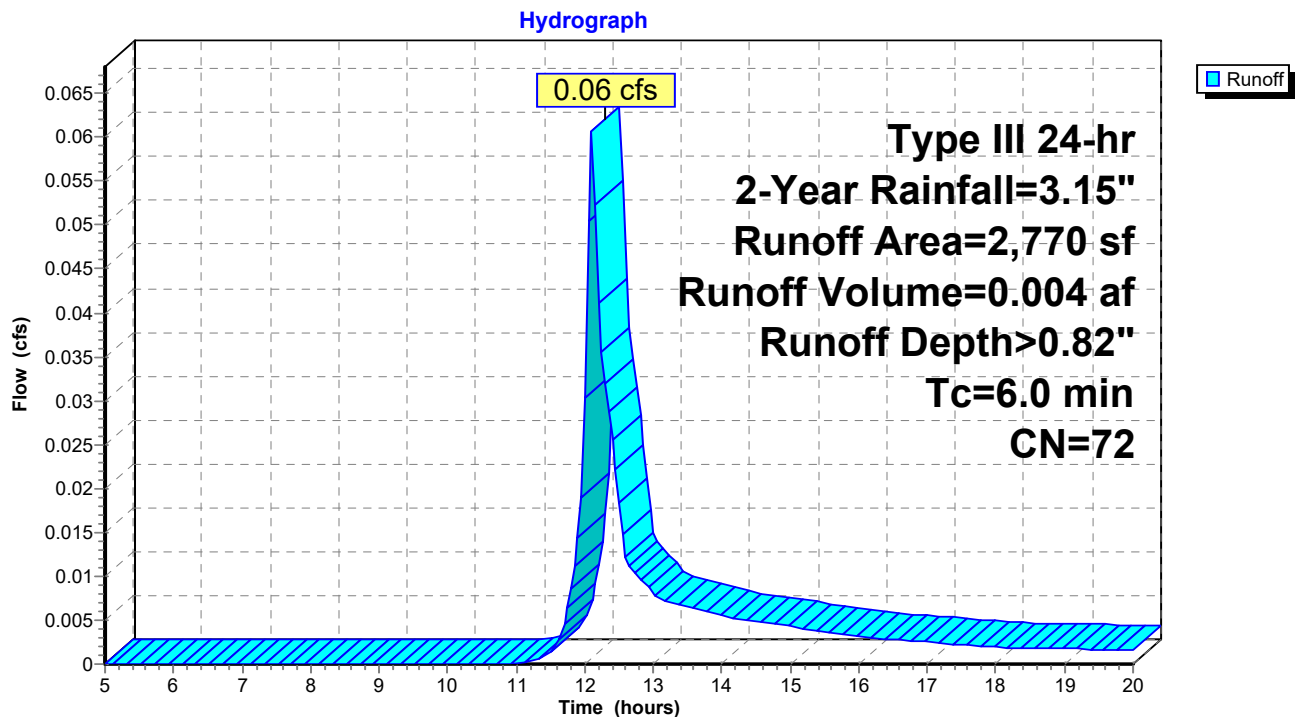
Runoff = 0.06 cfs @ 12.10 hrs, Volume= 0.004 af, Depth> 0.82"
Routed to Pond 168P : CB 11

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
1,232	39	>75% Grass cover, Good, HSG A
1,538	98	Paved parking, HSG A
2,770	72	Weighted Average
1,232		44.48% Pervious Area
1,538		55.52% 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

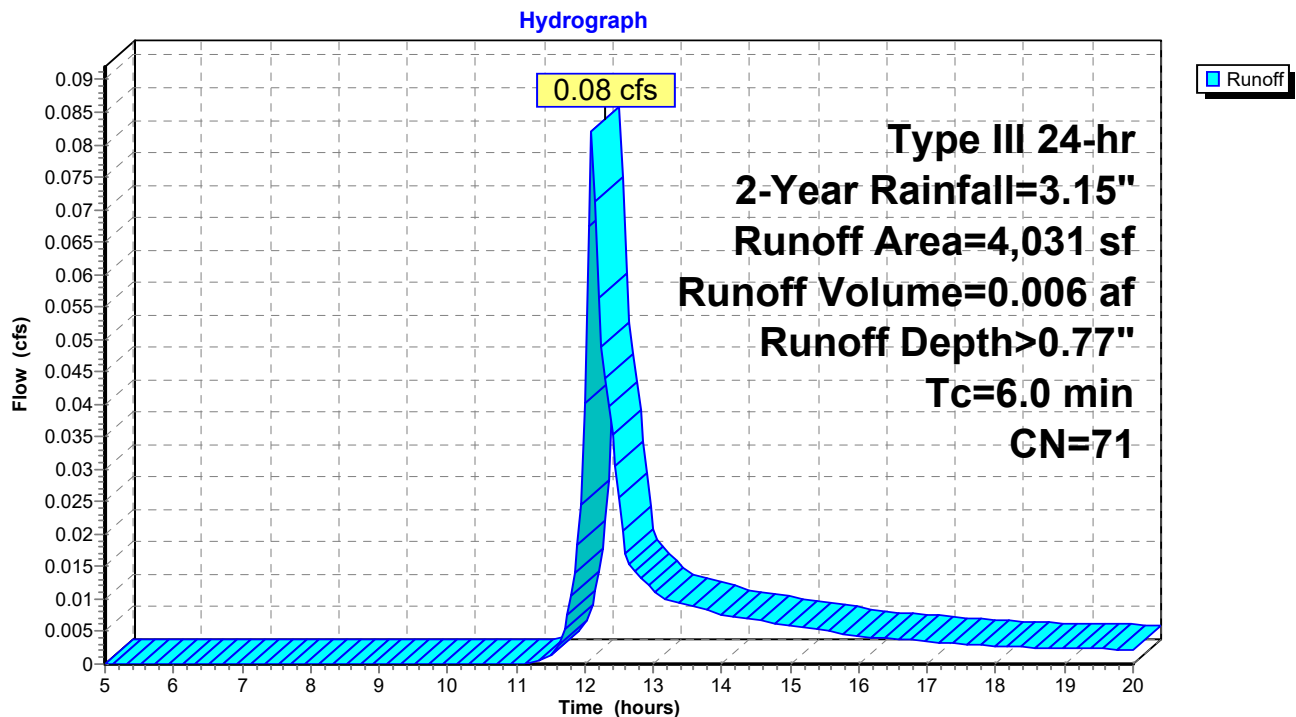
Runoff = 0.08 cfs @ 12.10 hrs, Volume= 0.006 af, Depth> 0.77"
Routed to Pond 167P : CB 10

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
1,859	39	>75% Grass cover, Good, HSG A
2,172	98	Paved parking, HSG A
4,031	71	Weighted Average
1,859		46.12% Pervious Area
2,172		53.88% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 166S: P3EEE



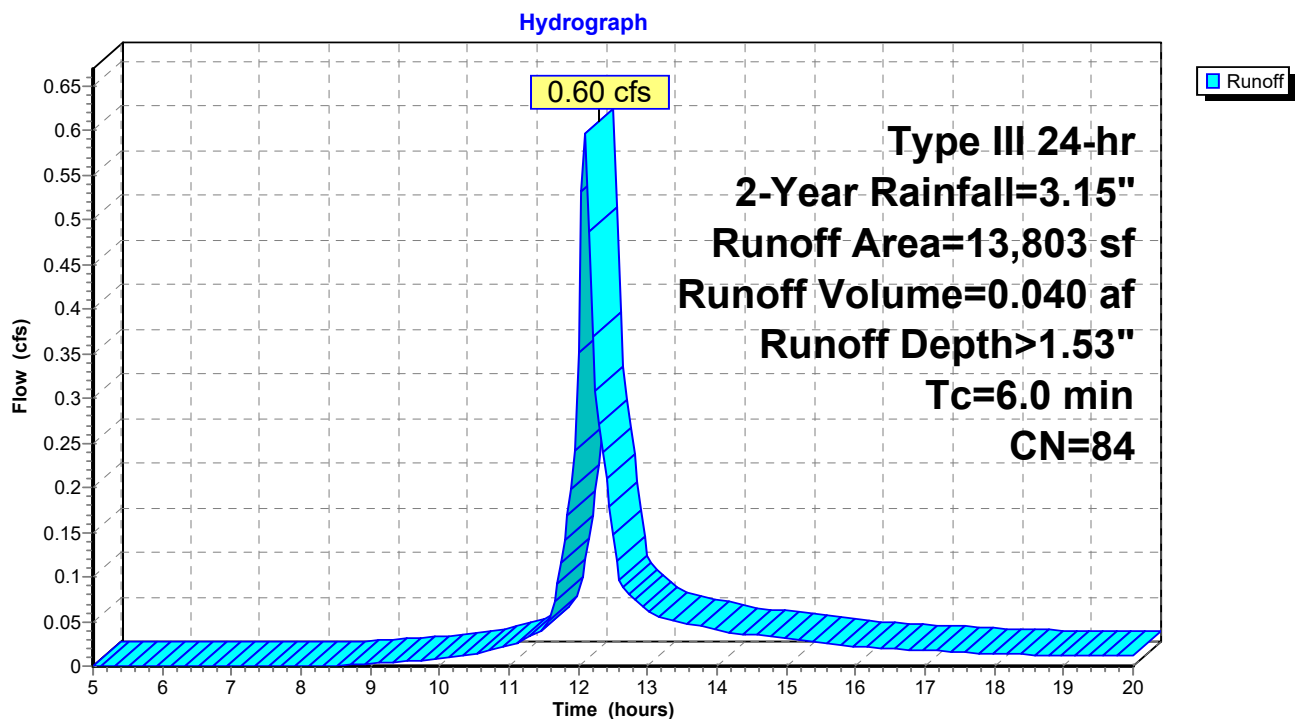
Summary for Subcatchment 170S: P3JJJ

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

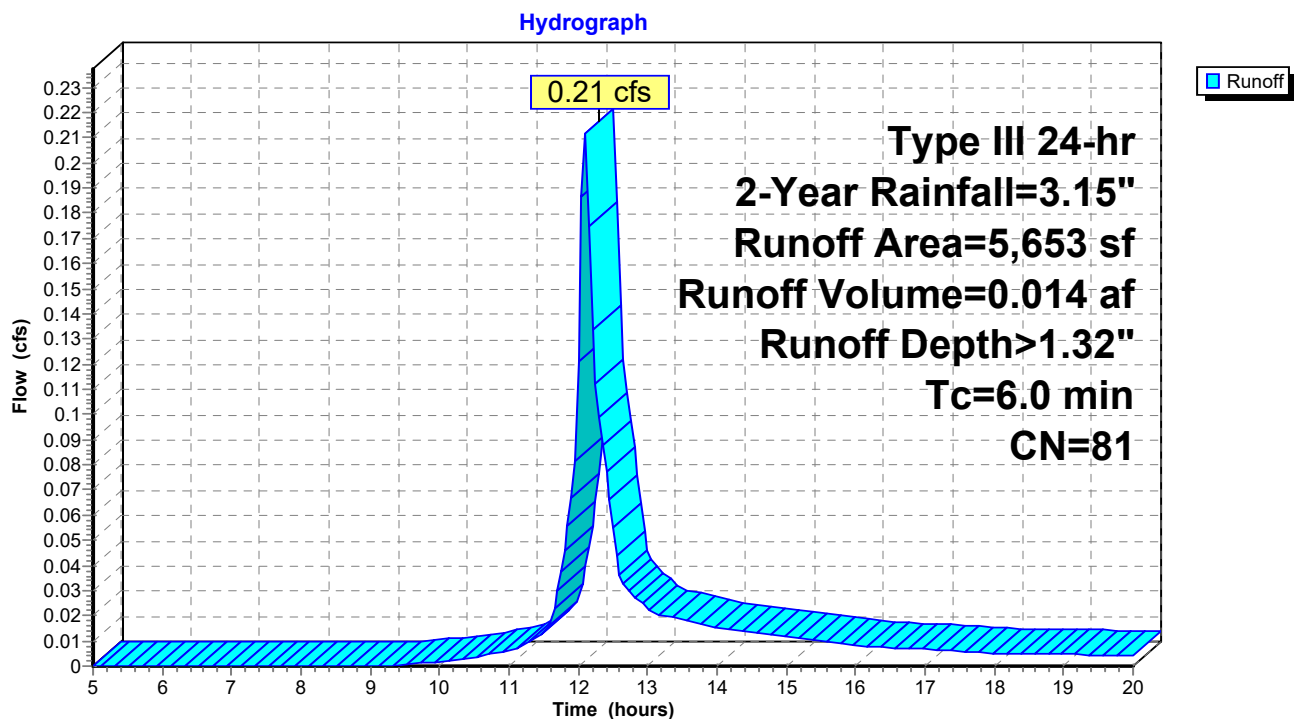
Runoff = 0.21 cfs @ 12.10 hrs, Volume= 0.014 af, Depth> 1.32"
Routed to Pond 173P : CB 17

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

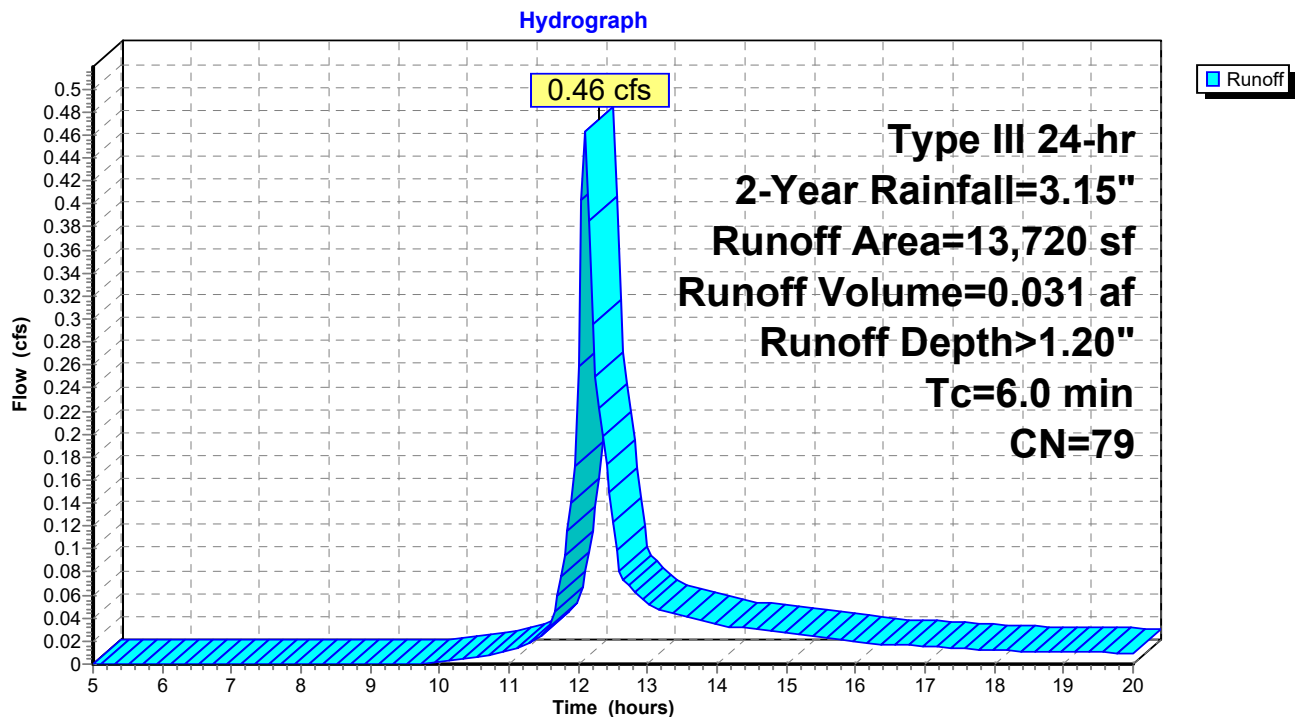
Runoff = 0.46 cfs @ 12.10 hrs, Volume= 0.031 af, Depth> 1.20"
Routed to Pond 177P : CB 13

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
4,306	39	>75% Grass cover, Good, HSG A
2,982	98	Unconnected roofs, HSG A
6,432	98	Paved parking, HSG A
13,720	79	Weighted Average
4,306		31.38% Pervious Area
9,414		68.62% Impervious Area
2,982		31.68% 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

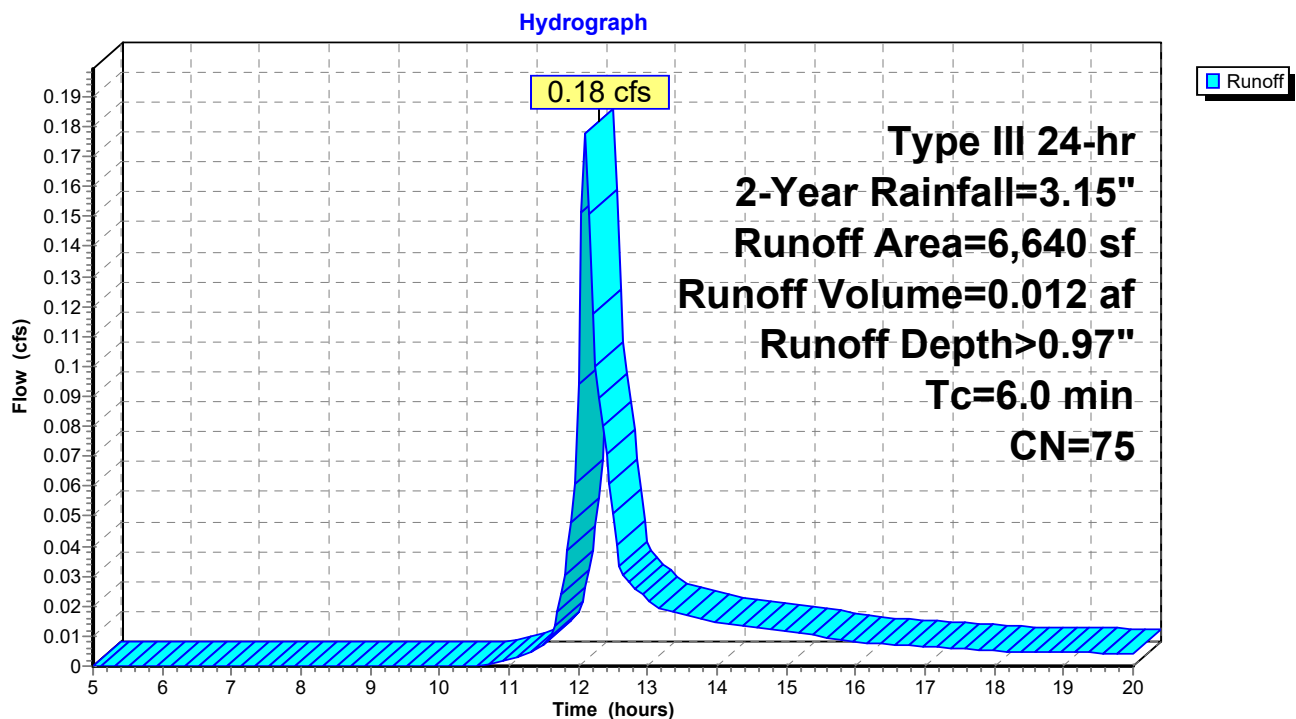
Runoff = 0.18 cfs @ 12.10 hrs, Volume= 0.012 af, Depth> 0.97"
Routed to Pond 178P : CB 12

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

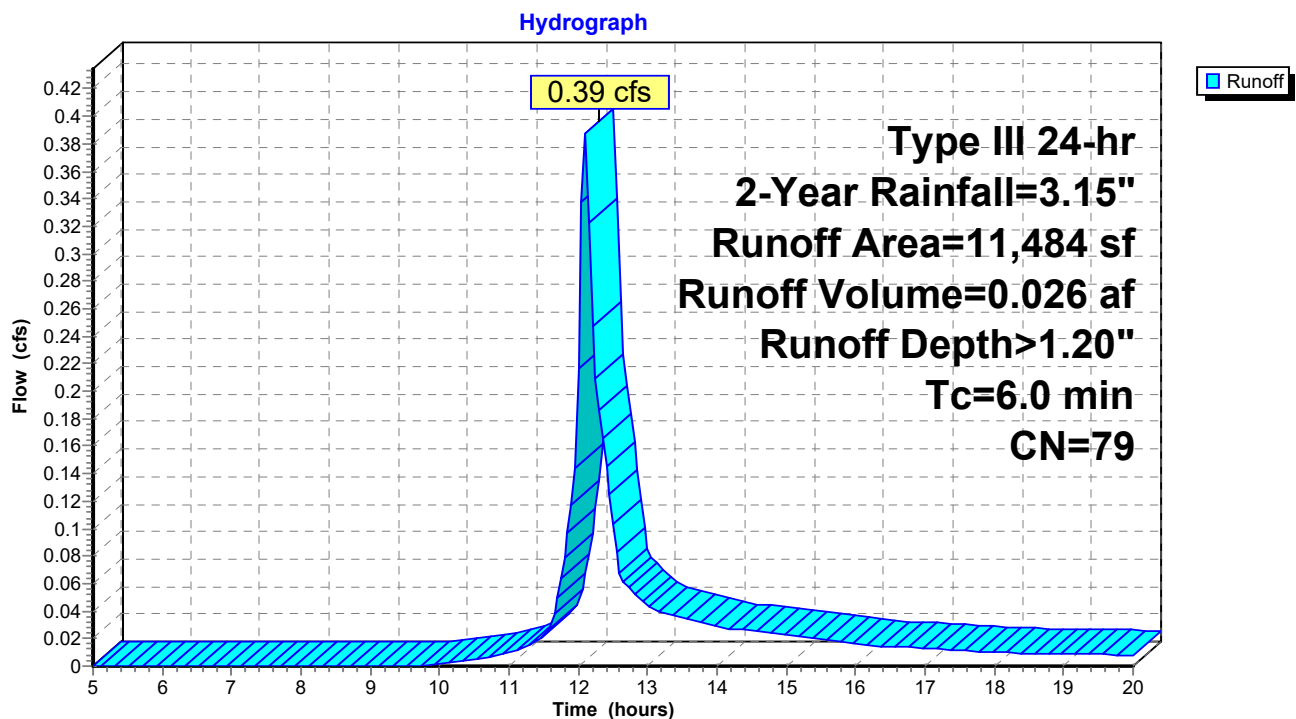
Runoff = 0.39 cfs @ 12.10 hrs, Volume= 0.026 af, Depth> 1.20"
Routed to Pond 61P : CB 8

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
3,669	39	>75% Grass cover, Good, HSG A
2,297	98	Unconnected roofs, HSG A
5,518	98	Paved parking, HSG A
11,484	79	Weighted Average
3,669		31.95% Pervious Area
7,815		68.05% Impervious Area
2,297		29.39% 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

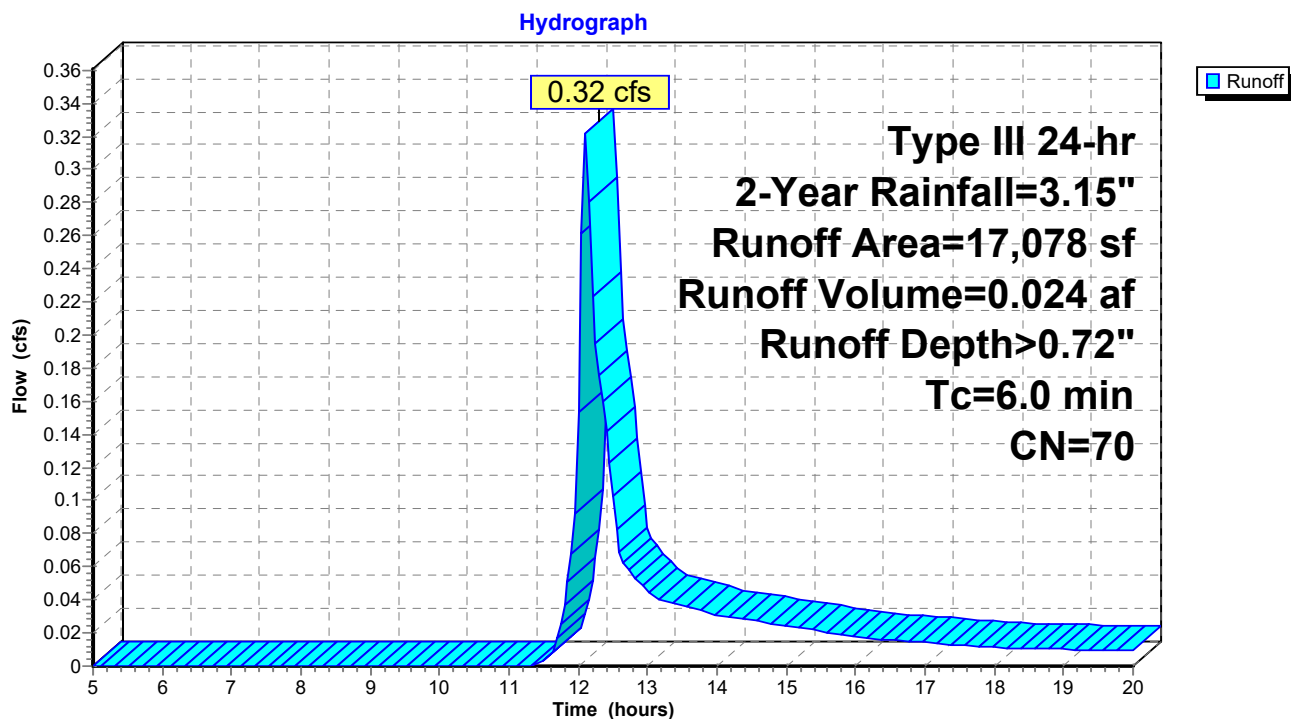
Runoff = 0.32 cfs @ 12.10 hrs, Volume= 0.024 af, Depth> 0.72"
Routed to Pond 170P : CB 9

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
8,004	39	>75% Grass cover, Good, HSG A
2,930	98	Unconnected roofs, HSG A
6,144	98	Paved parking, HSG A
17,078	70	Weighted Average
8,004		46.87% Pervious Area
9,074		53.13% Impervious Area
2,930		32.29% 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

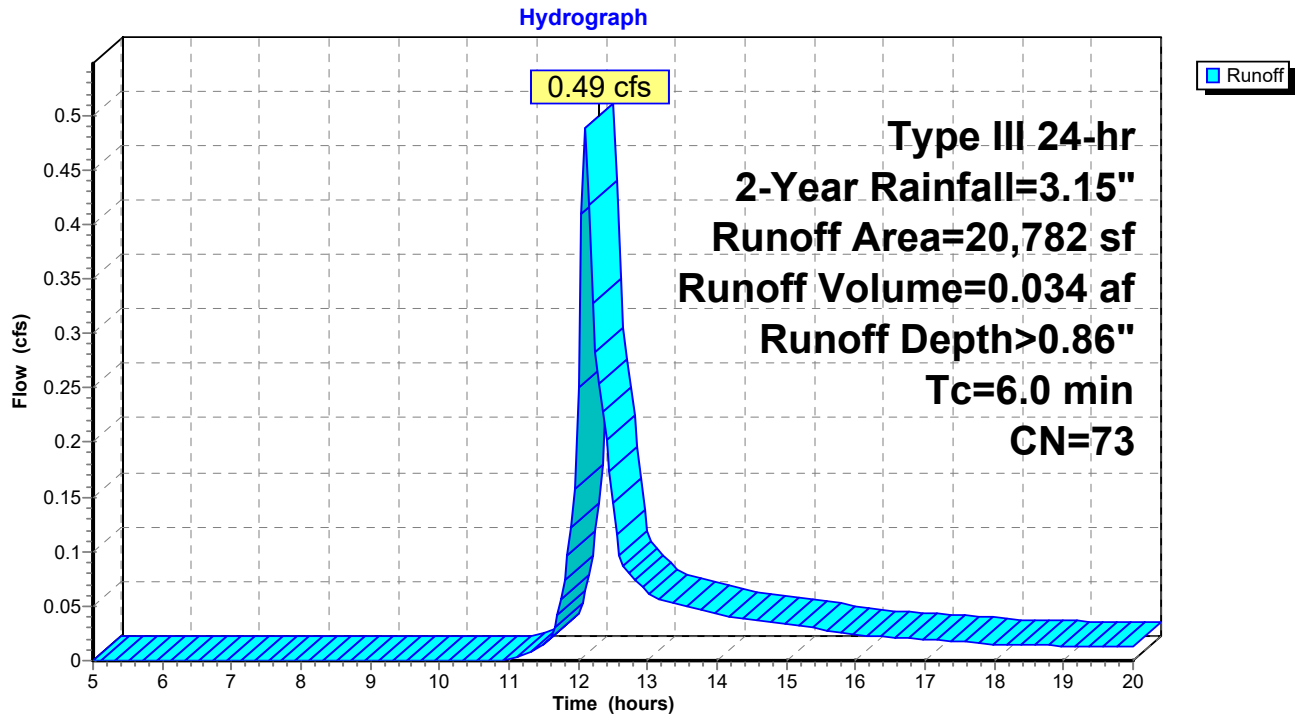
Runoff = 0.49 cfs @ 12.10 hrs, Volume= 0.034 af, Depth> 0.86"
Routed to Pond 176P : CB 6

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
7,773	39	>75% Grass cover, Good, HSG A
4,781	98	Unconnected roofs, HSG A
1,003	30	Woods, Good, HSG A
7,225	98	Paved parking, HSG A
20,782	73	Weighted Average
8,776		42.23% Pervious Area
12,006		57.77% Impervious Area
4,781		39.82% 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

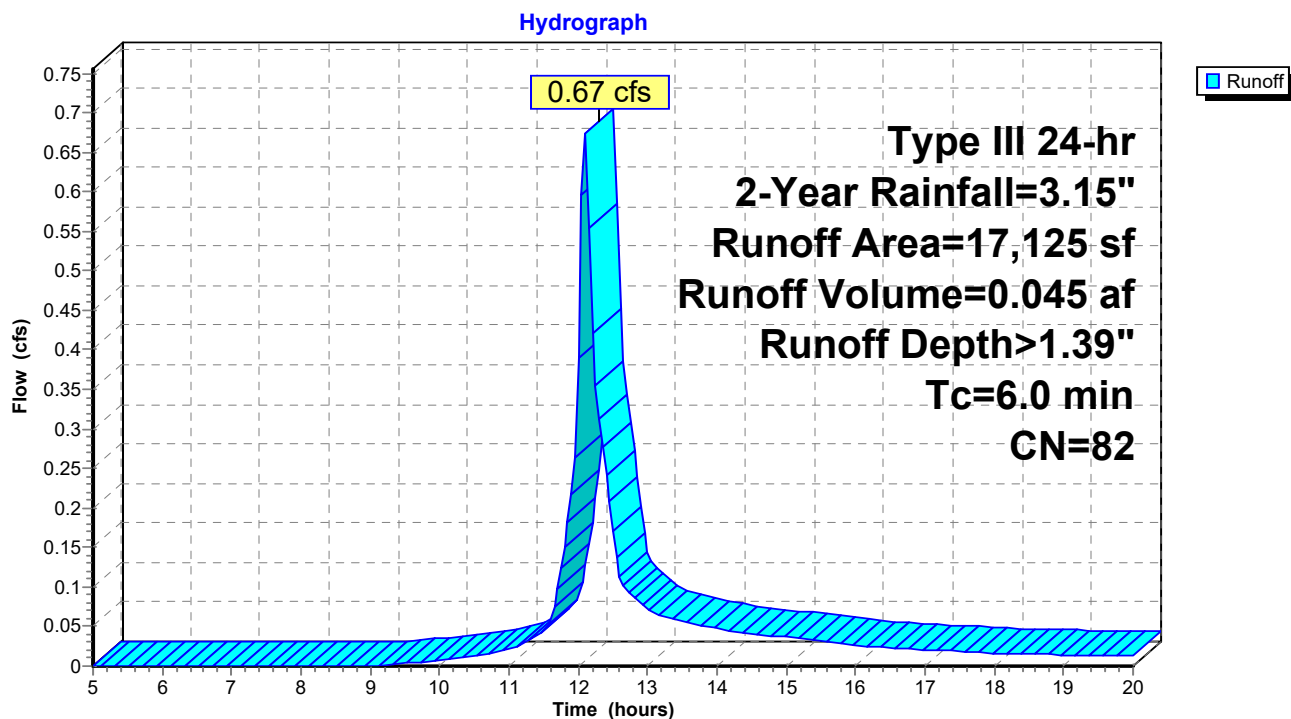
Runoff = 0.67 cfs @ 12.09 hrs, Volume= 0.045 af, Depth> 1.39"
Routed to Pond 182P : CB 7

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
4,596	39	>75% Grass cover, Good, HSG A
4,760	98	Unconnected roofs, HSG A
7,769	98	Paved parking, HSG A
17,125	82	Weighted Average
4,596		26.84% Pervious Area
12,529		73.16% Impervious Area
4,760		37.99% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 185S: P3PPP



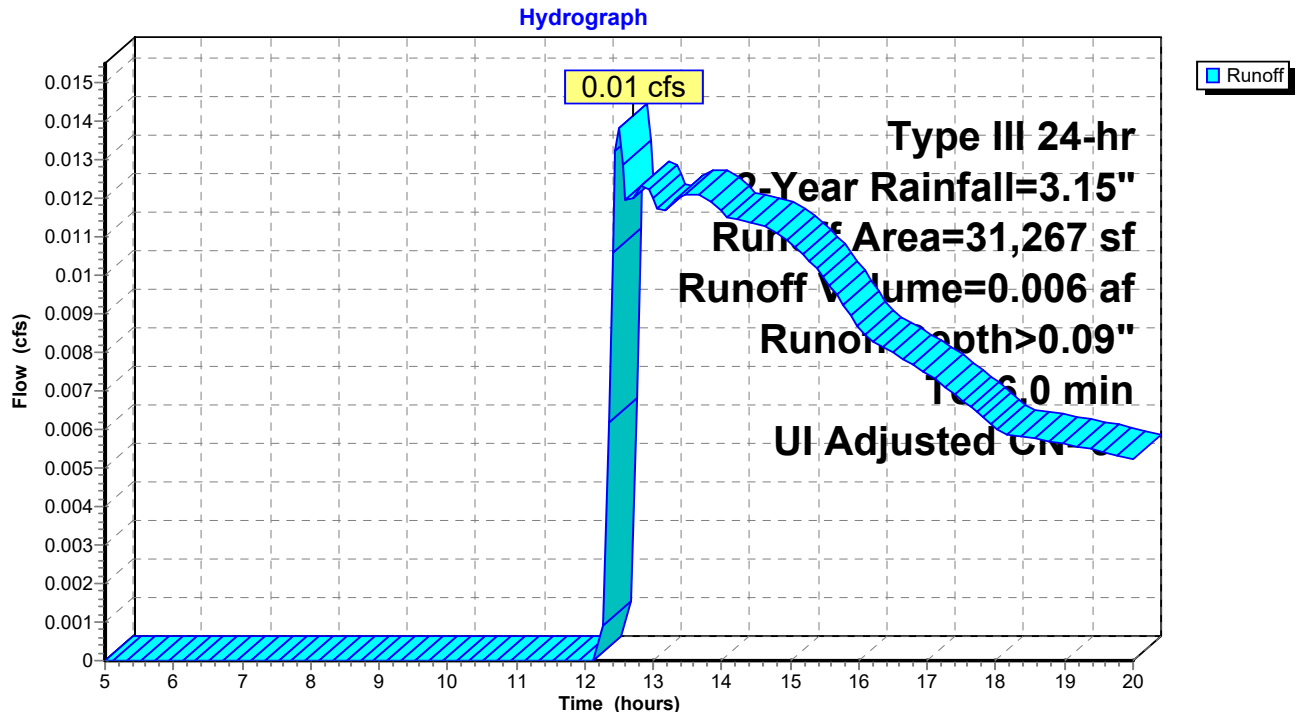
Summary for Subcatchment 186S: P3QQQ

Runoff = 0.01 cfs @ 12.49 hrs, Volume= 0.006 af, Depth> 0.09"
 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	Adj	Description
6,277	39		>75% Grass cover, Good, HSG A
1,710	98		Unconnected roofs, HSG A
15,990	30		Woods, Good, HSG A
7,290	98		Paved parking, HSG A
31,267	51	50	Weighted Average, UI Adjusted
22,267			71.22% Pervious Area
9,000			28.78% Impervious Area
1,710			19.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 186S: P3QQQ

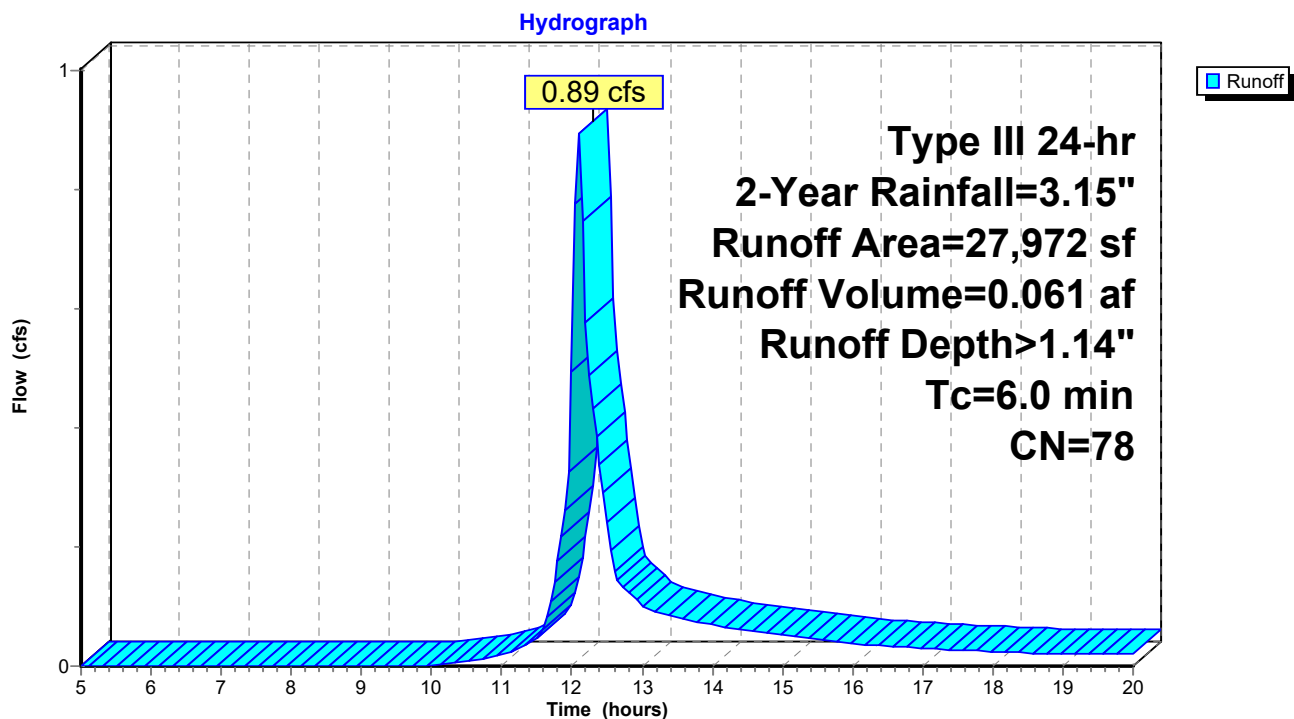
Summary for Subcatchment 187S: P3RRR

Runoff = 0.89 cfs @ 12.10 hrs, Volume= 0.061 af, Depth> 1.14"
 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 2-Year Rainfall=3.15"

Area (sf)	CN	Description
9,668	39	>75% Grass cover, Good, HSG A
5,407	98	Unconnected roofs, HSG A
12,897	98	Paved parking, HSG A
27,972	78	Weighted Average
9,668		34.56% Pervious Area
18,304		65.44% Impervious Area
5,407		29.54% 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)

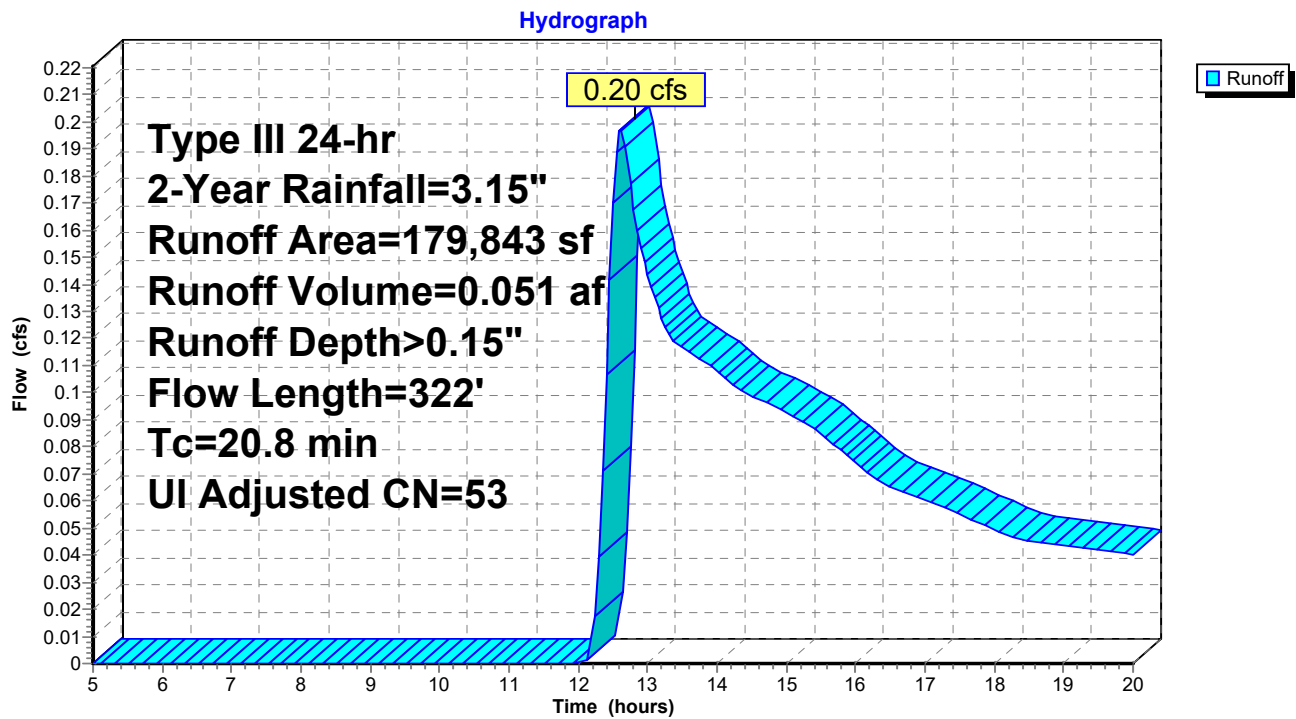
Runoff = 0.20 cfs @ 12.62 hrs, Volume= 0.051 af, Depth> 0.15"
Routed to Link 188L : DP 3

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		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
4.3	272	0.0450	1.06		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.8	322	Total			

Subcatchment 189S: (new Subcat)



Summary for Subcatchment 190S: (new Subcat)

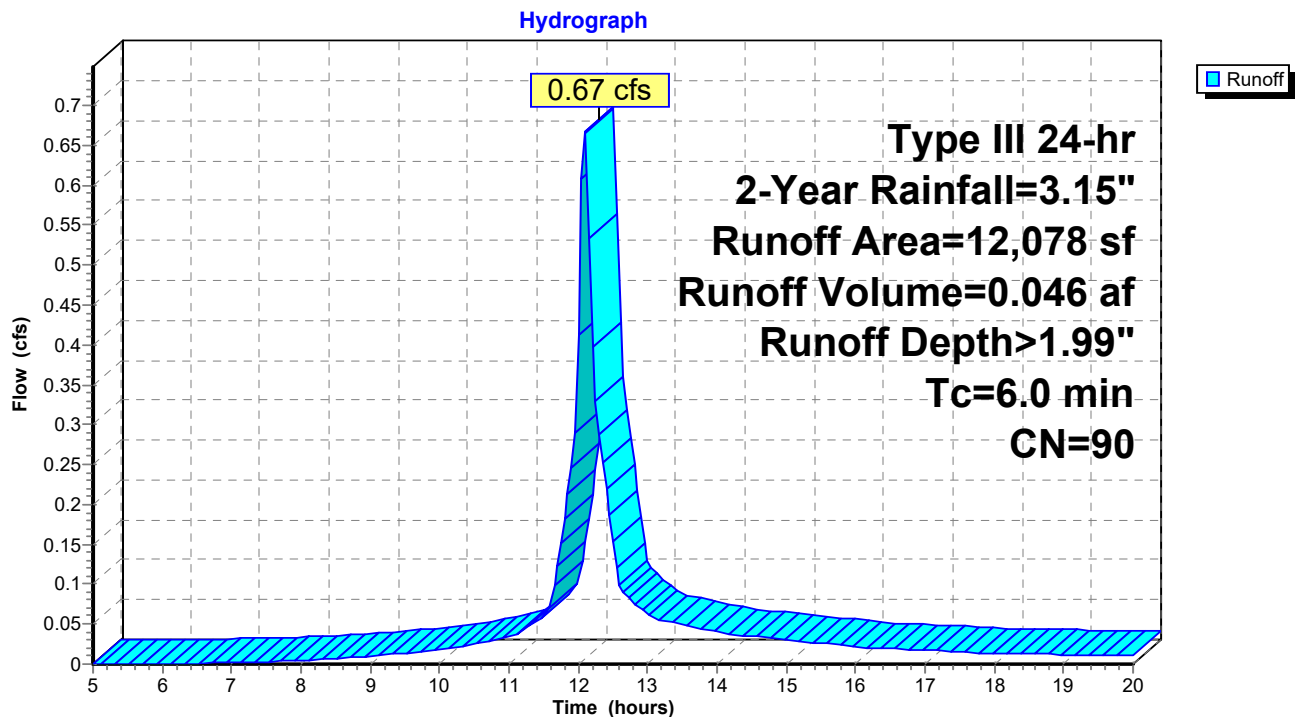
Runoff = 0.67 cfs @ 12.09 hrs, Volume= 0.046 af, Depth> 1.99"
Routed to Pond 191P : CB 42

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

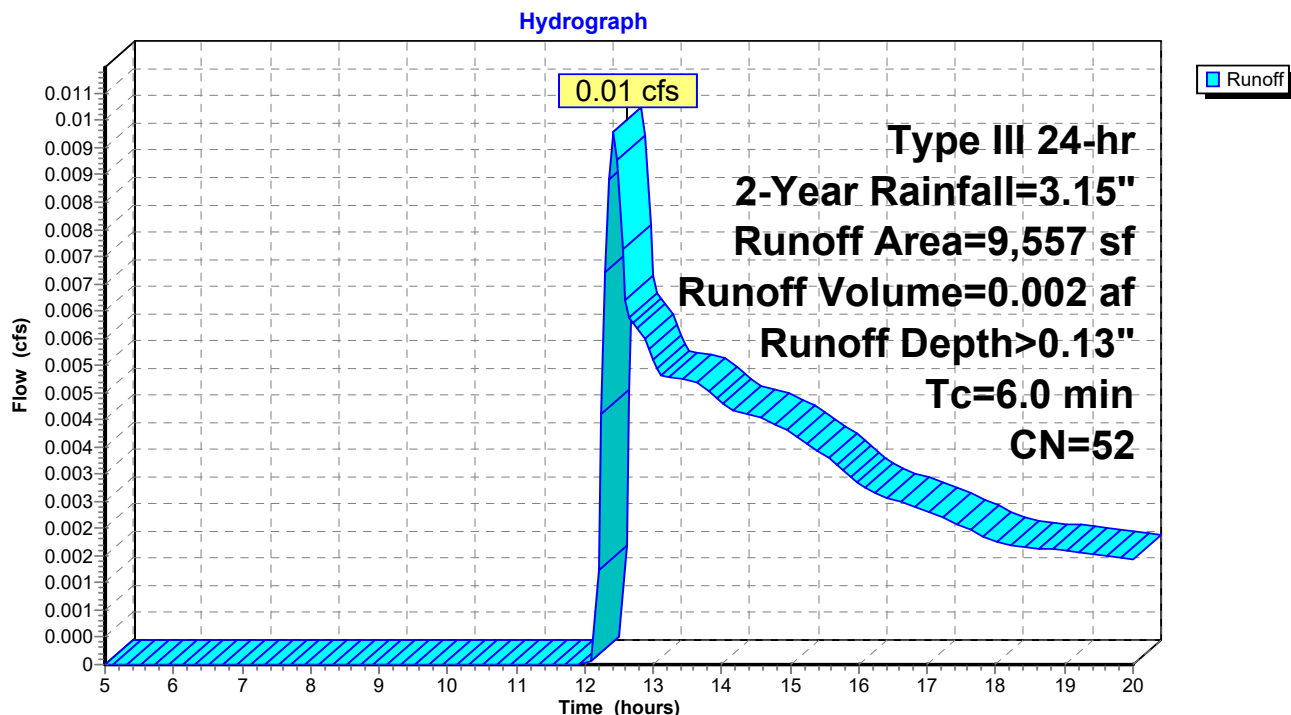
Runoff = 0.01 cfs @ 12.42 hrs, Volume= 0.002 af, Depth> 0.13"
Routed to Pond 193P : CB 1

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
1,342	39	>75% Grass cover, Good, HSG A
5,306	30	Woods, Good, HSG A
2,909	98	Paved parking, HSG A
9,557	52	Weighted Average
6,648		69.56% Pervious Area
2,909		30.44% 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

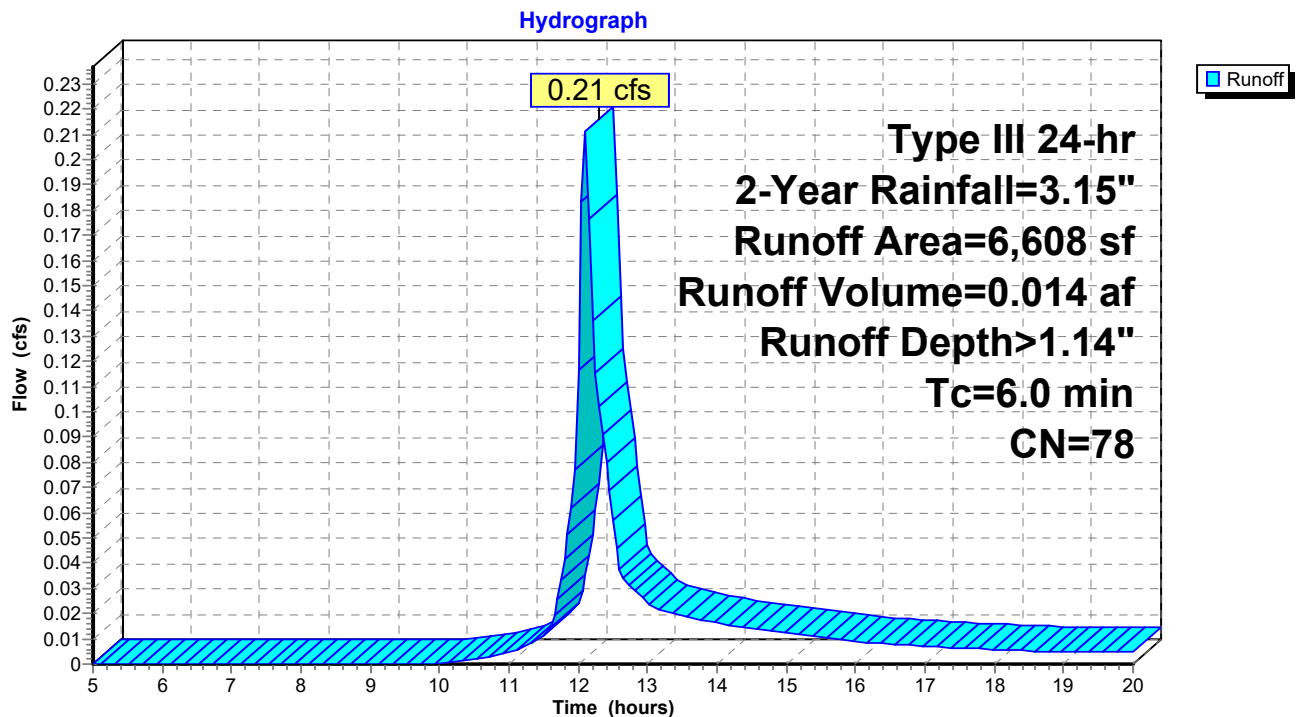
Runoff = 0.21 cfs @ 12.10 hrs, Volume= 0.014 af, Depth> 1.14"
Routed to Pond 194P : CB 2

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
2,225	39	>75% Grass cover, Good, HSG A
4,383	98	Paved parking, HSG A
6,608	78	Weighted Average
2,225		33.67% Pervious Area
4,383		66.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 192S: P3TTT



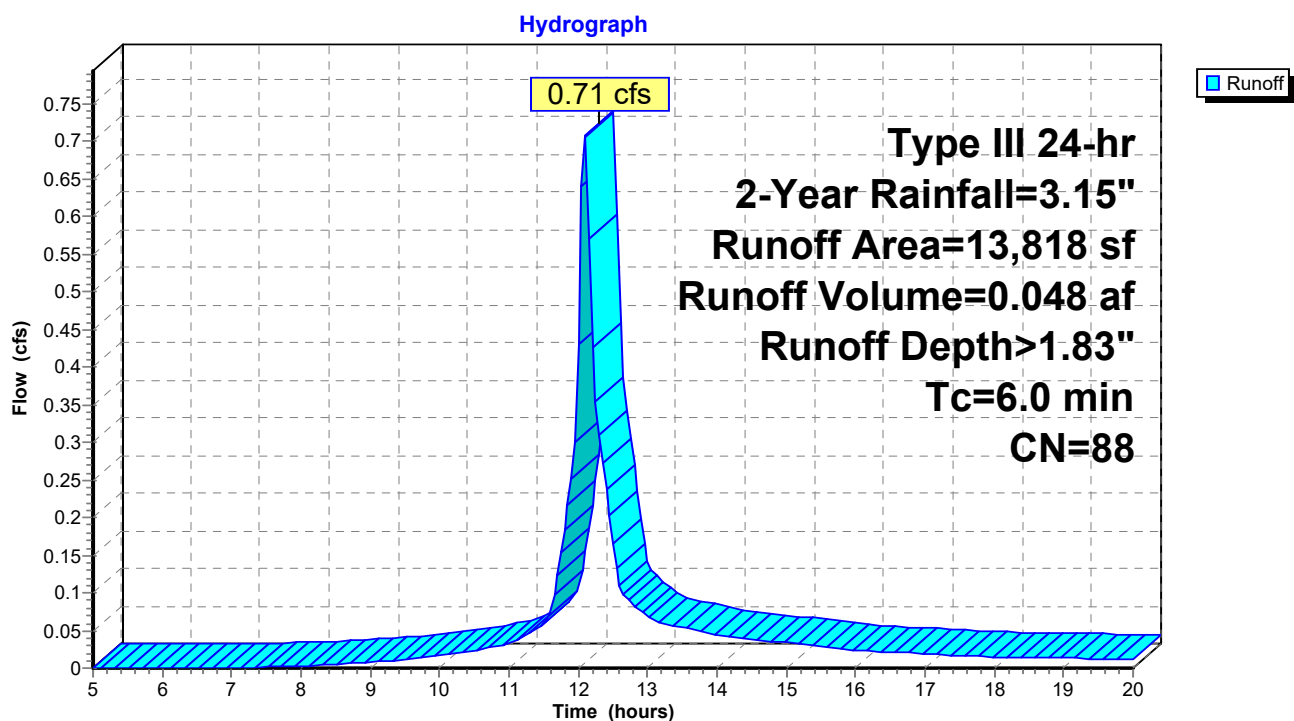
Summary for Subcatchment 195S: P3UUU

Runoff = 0.71 cfs @ 12.09 hrs, Volume= 0.048 af, Depth> 1.83"
 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
2,404	39	>75% Grass cover, Good, HSG A
4,975	98	Unconnected roofs, HSG A
6,439	98	Paved parking, HSG A
13,818	88	Weighted Average
2,404		17.40% Pervious Area
11,414		82.60% Impervious Area
4,975		43.59% 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

[45] Hint: Runoff=Zero

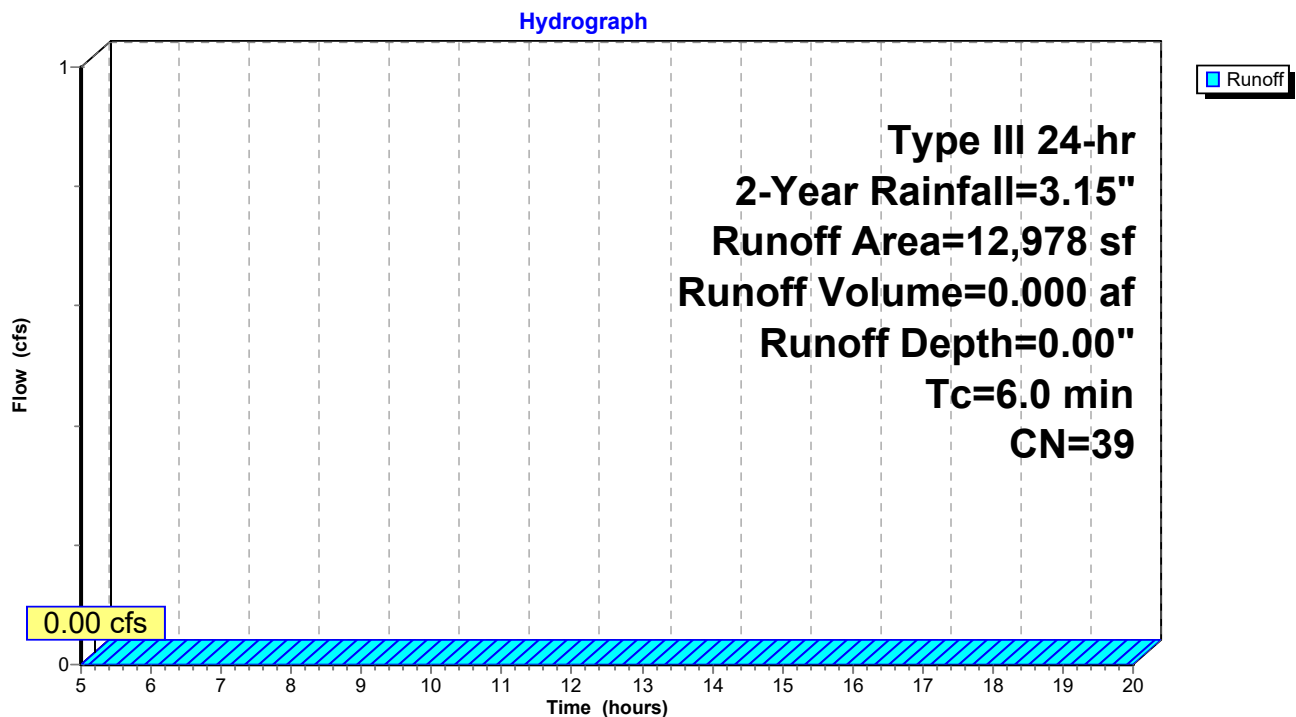
Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Pond 197P : Inf. Basin 1

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
12,978	39	>75% Grass cover, Good, HSG A
12,978		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)

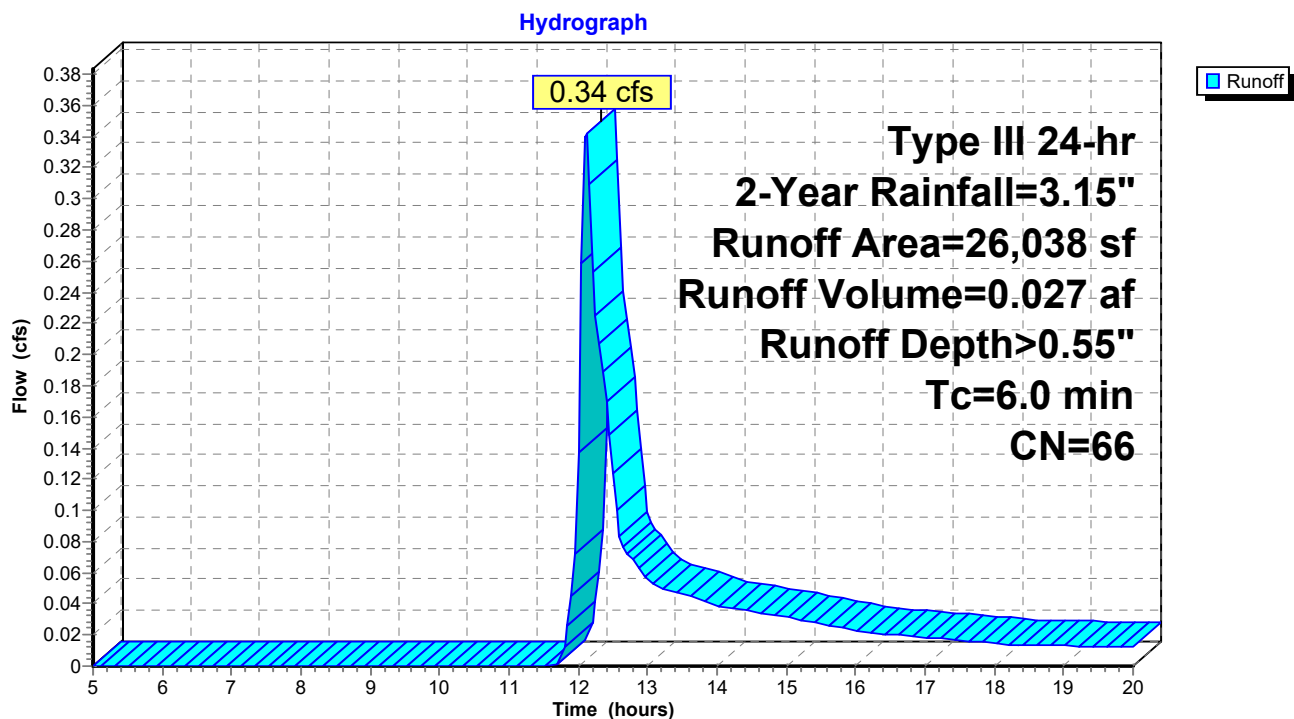
Runoff = 0.34 cfs @ 12.11 hrs, Volume= 0.027 af, Depth> 0.55"
Routed to Pond 201P : Sub. Inf. 3

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)

[45] Hint: Runoff=Zero

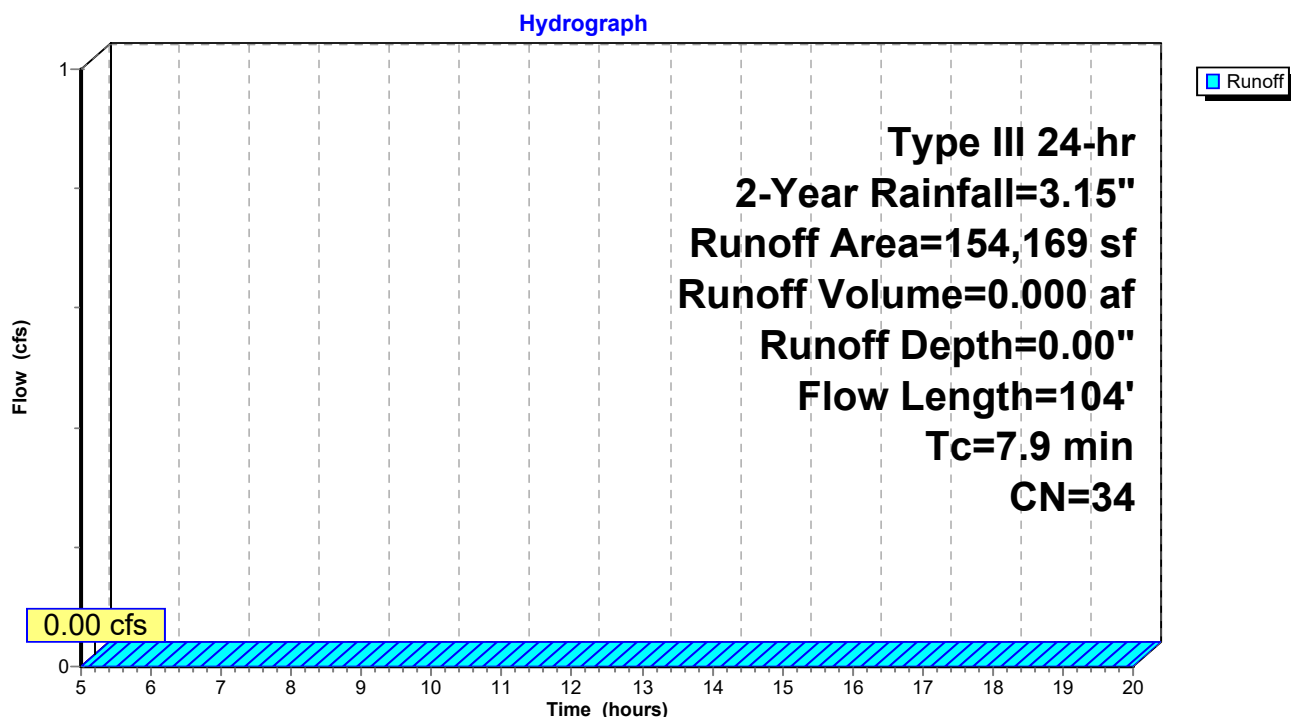
Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"
Routed to Link 203L : 3A

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	Description
94,353	30	Woods, Good, HSG A
57,796	39	>75% Grass cover, Good, HSG A
2,020	98	Unconnected roofs, HSG A
154,169	34	Weighted Average
152,149		98.69% Pervious Area
2,020		1.31% Impervious Area
2,020		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, Grass: Short n= 0.150 P2= 3.10"
0.4	54	0.1200	2.42		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
7.9	104	Total			

Subcatchment 204S: (new Subcat)



Summary for Pond 15P: Inf. Basin 5

[82] Warning: Early inflow requires earlier time span

[79] Warning: Submerged Pond 38P Primary device # 1 INLET by 0.02'

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	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (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'	1.020 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 52.00'
#2	Primary	57.00'	18.0" Round Culvert L= 67.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.00' / 52.50' S= 0.0672 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#3	Device 2	58.75'	4.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 2	59.80'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 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)

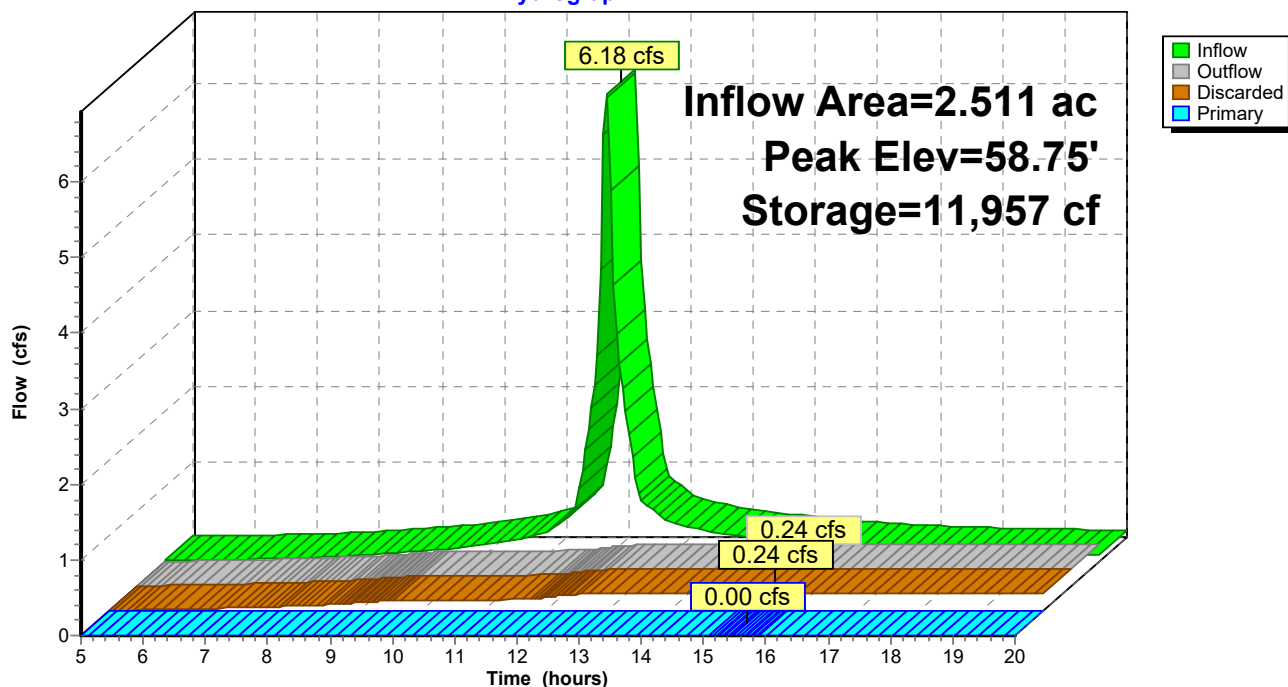
↑ **2=Culvert** (Passes 0.00 cfs of 6.73 cfs potential flow)

↑ **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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.53' (Flood elevation advised)

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

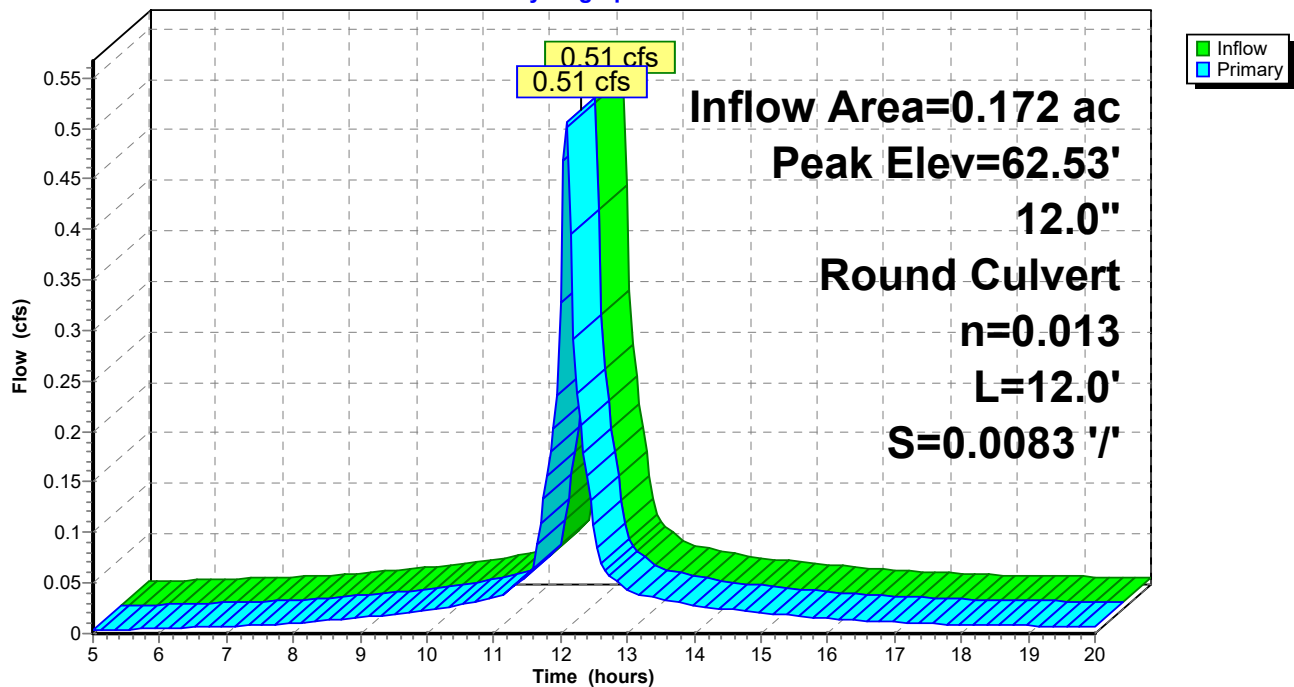
Device	Routing	Invert	Outlet Devices
#1	Primary	62.10'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.10' / 62.00' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

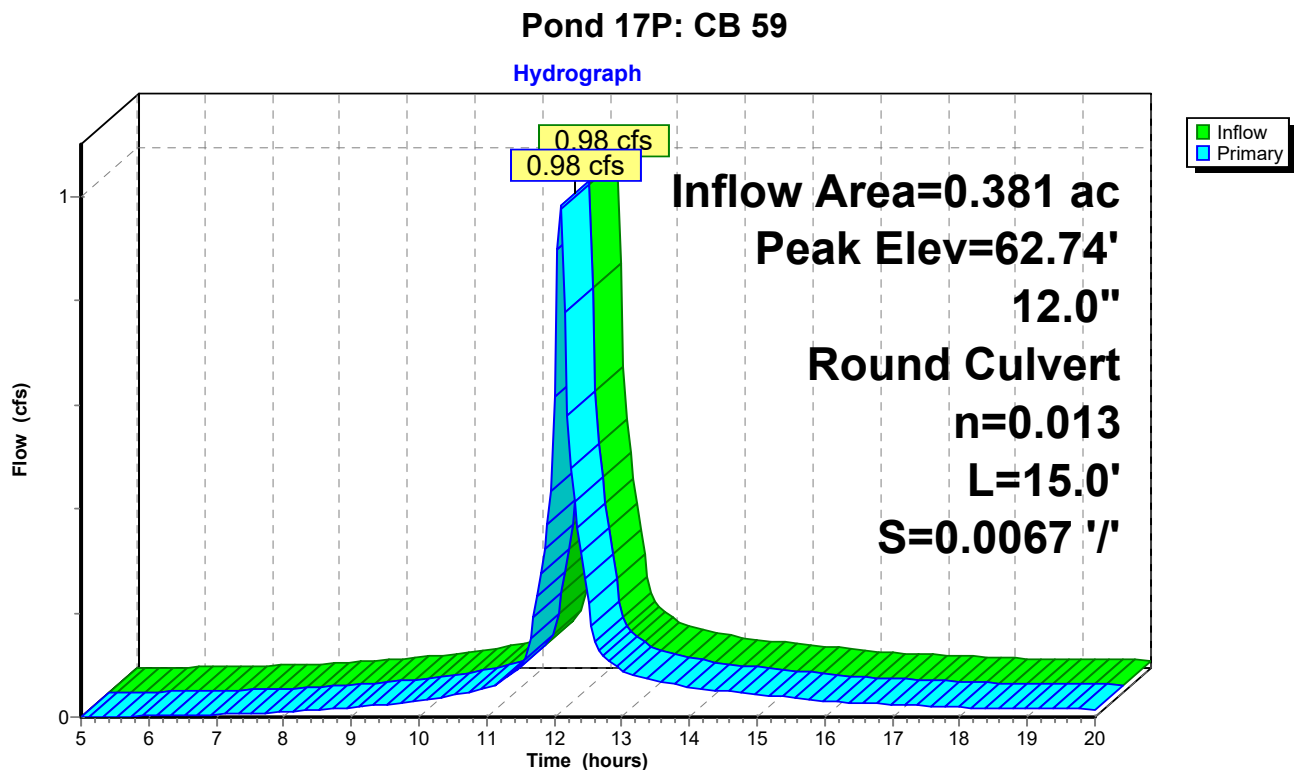
[57] Hint: Peaked at 62.74' (Flood elevation advised)

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'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.10' / 62.00' S= 0.0067 ' / ' Cc= 0.900 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)



Summary for Pond 18P: CB 63

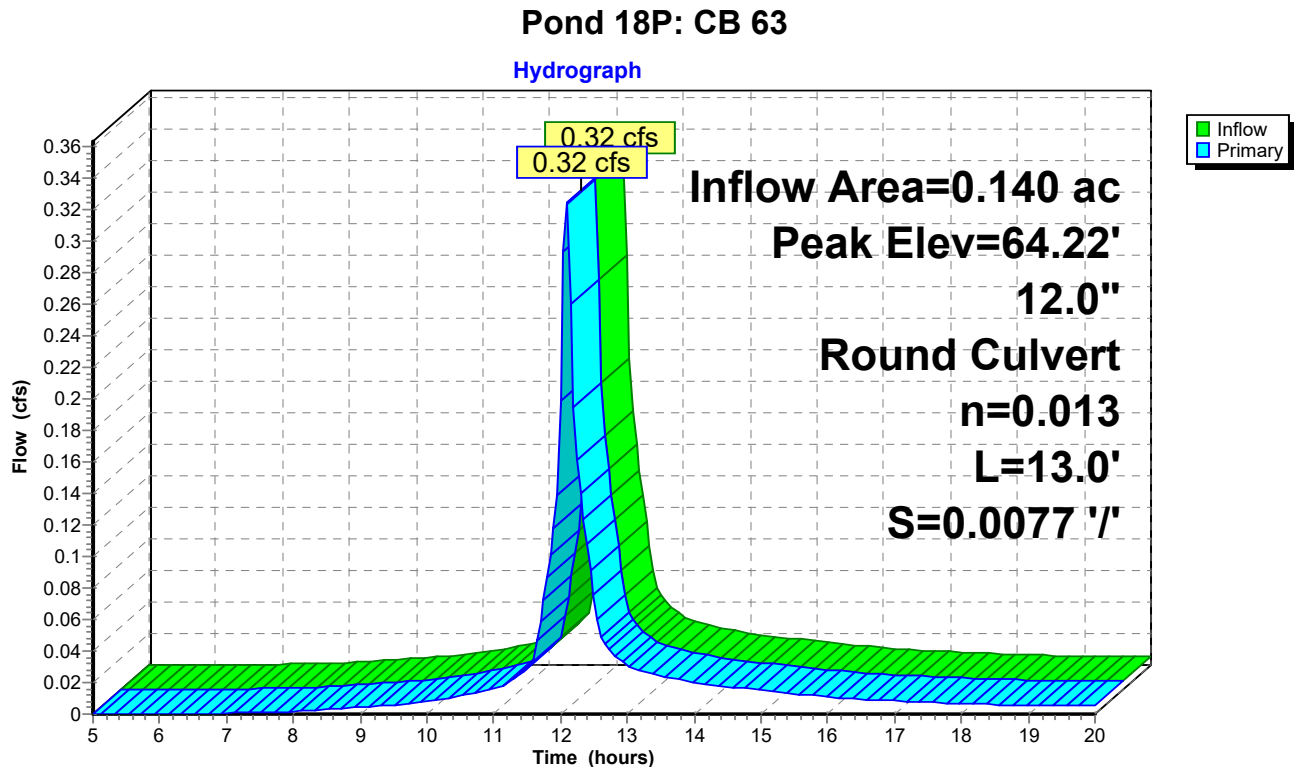
[57] Hint: Peaked at 64.22' (Flood elevation advised)

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'	12.0" Round Culvert L= 13.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 63.88' / 63.78' S= 0.0077 ' S Cc= 0.900 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)



Summary for Pond 19P: CB 62

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.12' (Flood elevation advised)

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

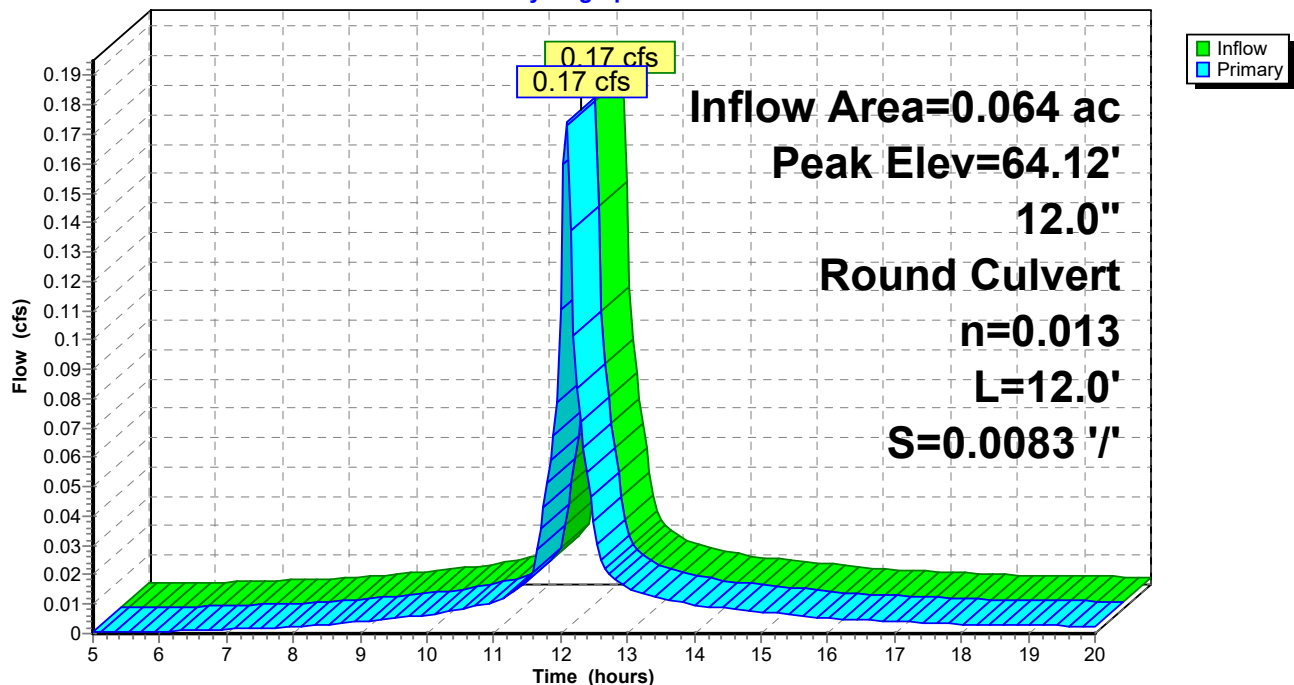
Device	Routing	Invert	Outlet Devices
#1	Primary	63.88'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 63.88' / 63.78' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.70' (Flood elevation advised)

[81] Warning: Exceeded Pond 16P by 0.17' @ 12.10 hrs

[79] Warning: Submerged Pond 17P Primary device # 1 INLET by 0.59'

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

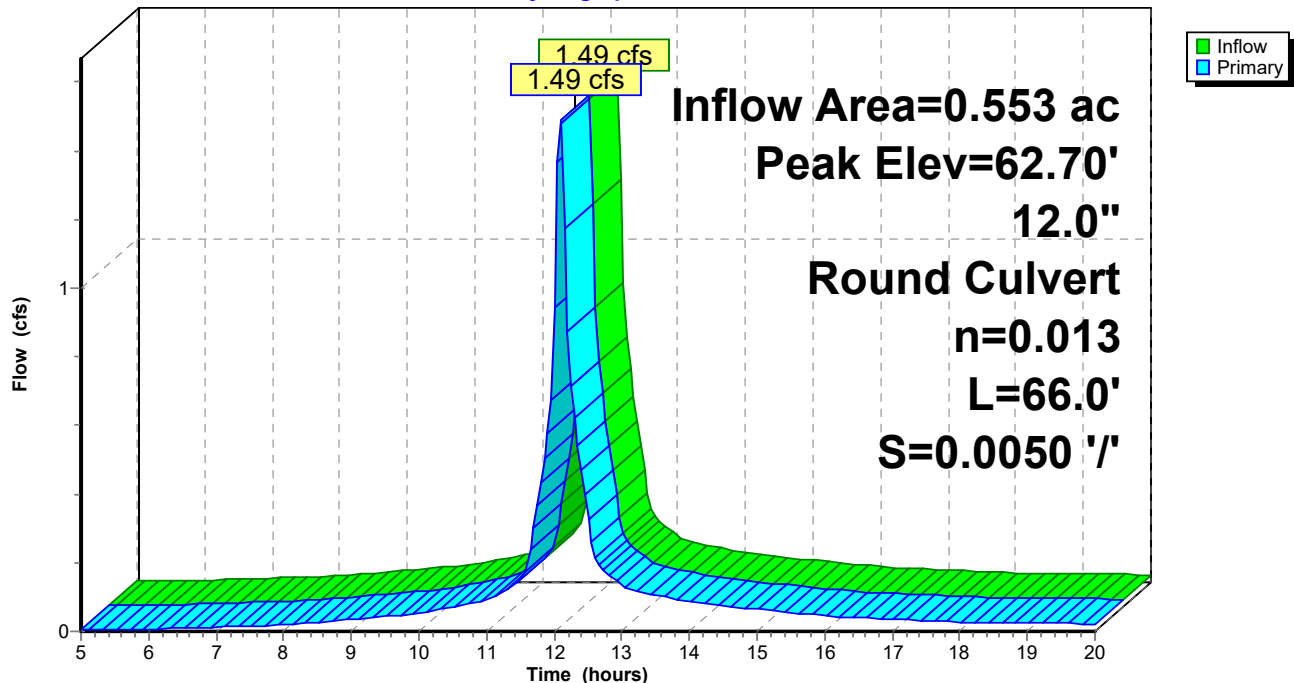
Device	Routing	Invert	Outlet Devices
#1	Primary	61.90'	12.0" Round Culvert L= 66.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.90' / 61.57' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.26' (Flood elevation advised)

[79] Warning: Submerged Pond 20P Primary device # 1 INLET by 0.36'

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

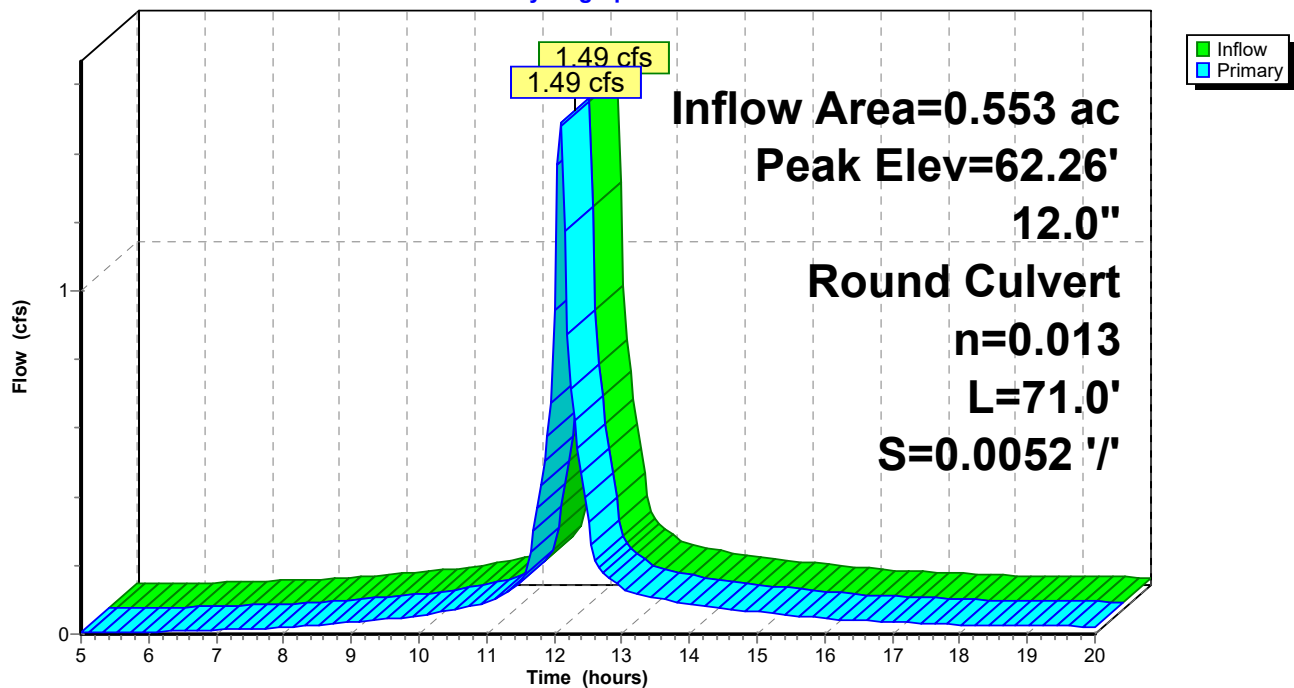
Device	Routing	Invert	Outlet Devices
#1	Primary	61.47'	12.0" Round Culvert L= 71.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.47' / 61.10' S= 0.0052 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.56' (Flood elevation advised)

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

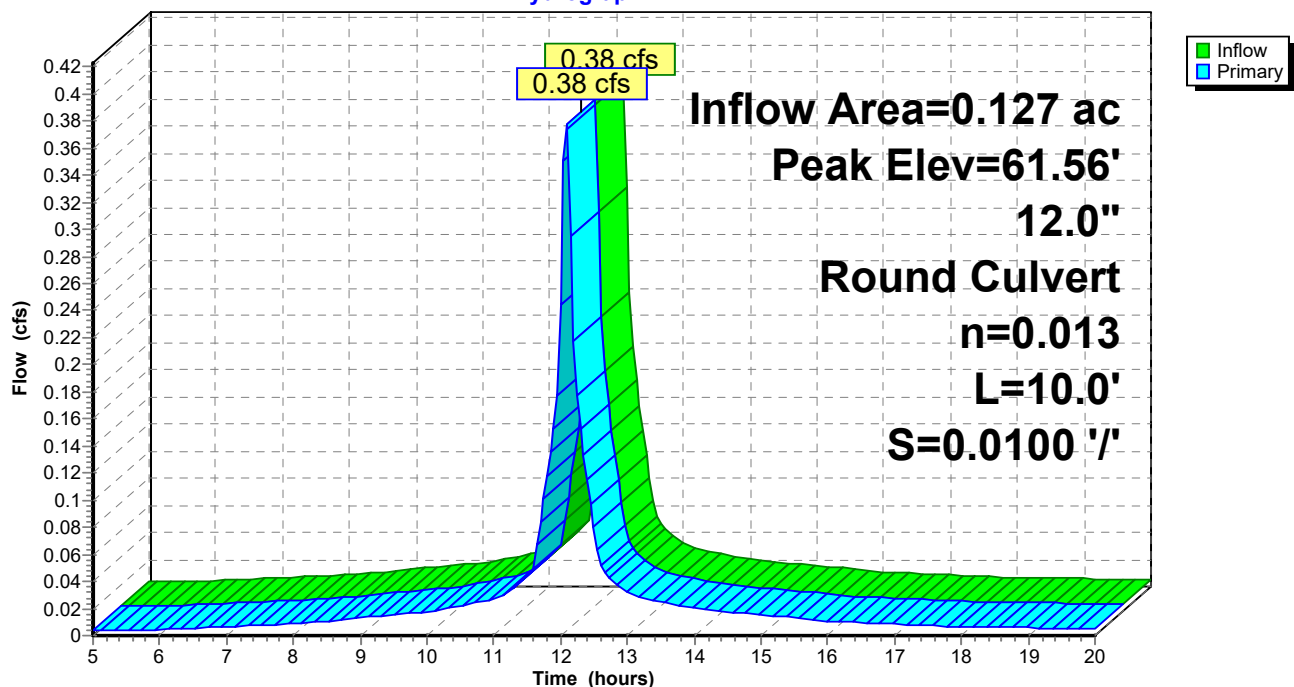
Device	Routing	Invert	Outlet Devices
#1	Primary	61.20'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.20' / 61.10' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.78' (Flood elevation advised)

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

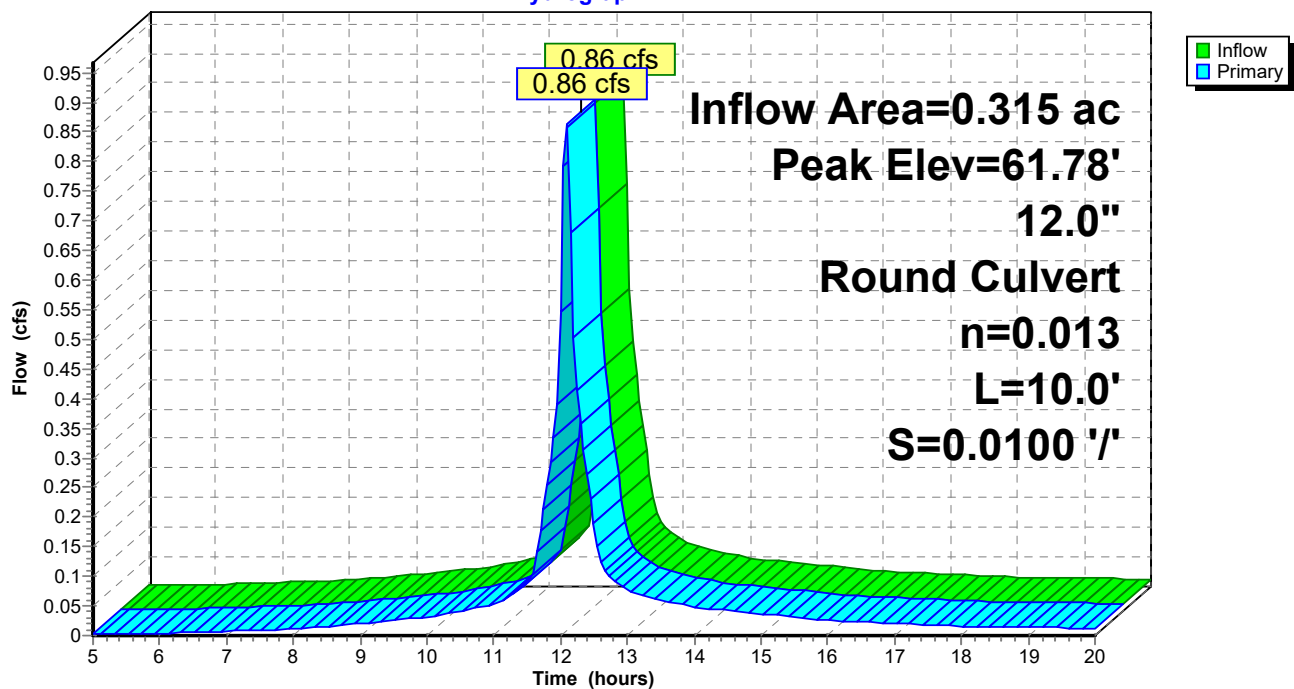
Device	Routing	Invert	Outlet Devices
#1	Primary	61.20'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.20' / 61.10' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.88' (Flood elevation advised)

[79] Warning: Submerged Pond 21P Primary device # 1 INLET by 0.41'

[81] Warning: Exceeded Pond 22P by 0.32' @ 12.10 hrs

[81] Warning: Exceeded Pond 23P by 0.10' @ 12.10 hrs

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

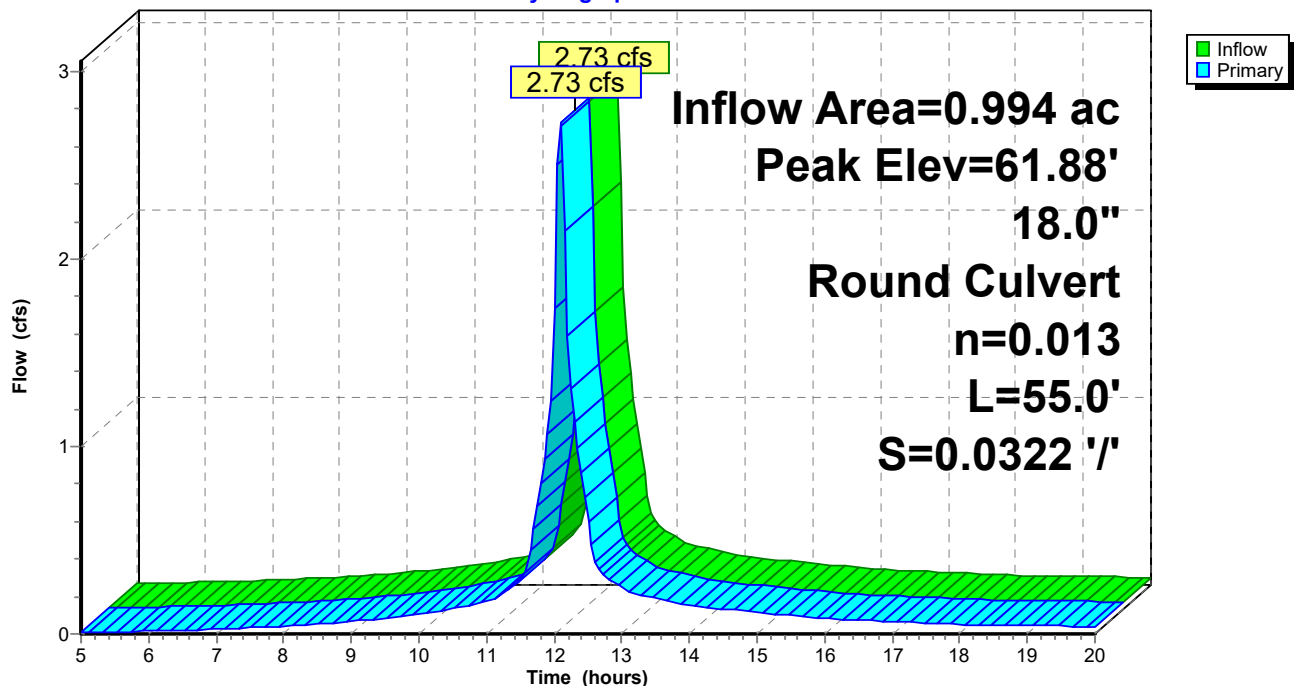
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 61.88' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.00'	18.0" Round Culvert L= 55.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.00' / 59.23' S= 0.0322 '/' Cc= 0.900 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

[57] Hint: Peaked at 64.08' (Flood elevation advised)

[79] Warning: Submerged Pond 18P Primary device # 1 INLET by 0.20'

[79] Warning: Submerged Pond 19P Primary device # 1 INLET by 0.20'

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

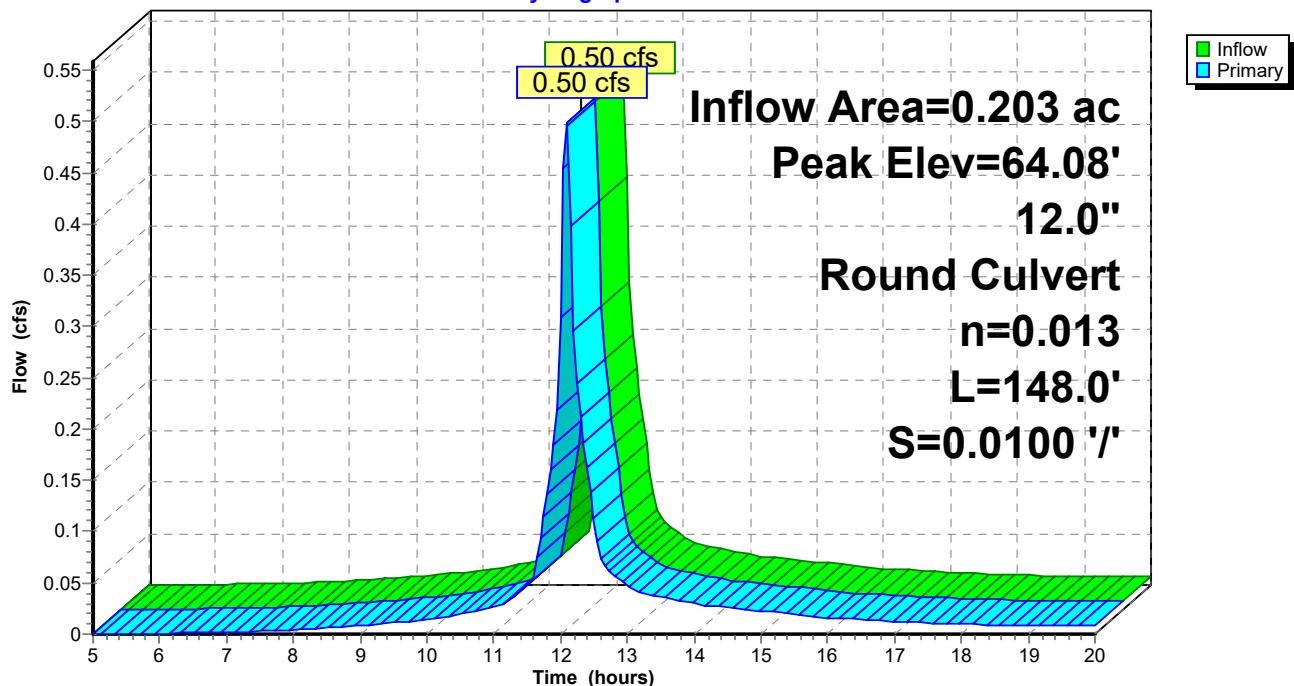
Device	Routing	Invert	Outlet Devices
#1	Primary	63.68'	12.0" Round Culvert L= 148.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 63.68' / 62.20' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 62.80' (Flood elevation advised)

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

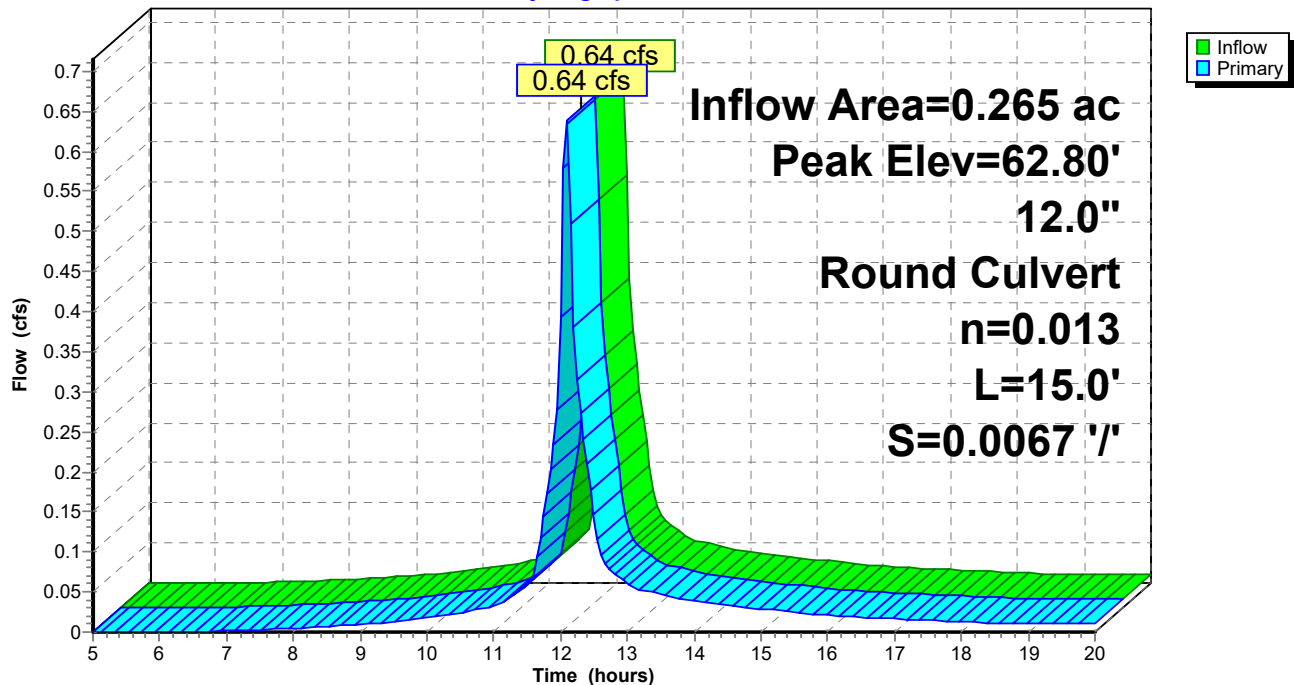
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 62.80' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	62.30'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.30' / 62.20' S= 0.0067 '/' Cc= 0.900 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

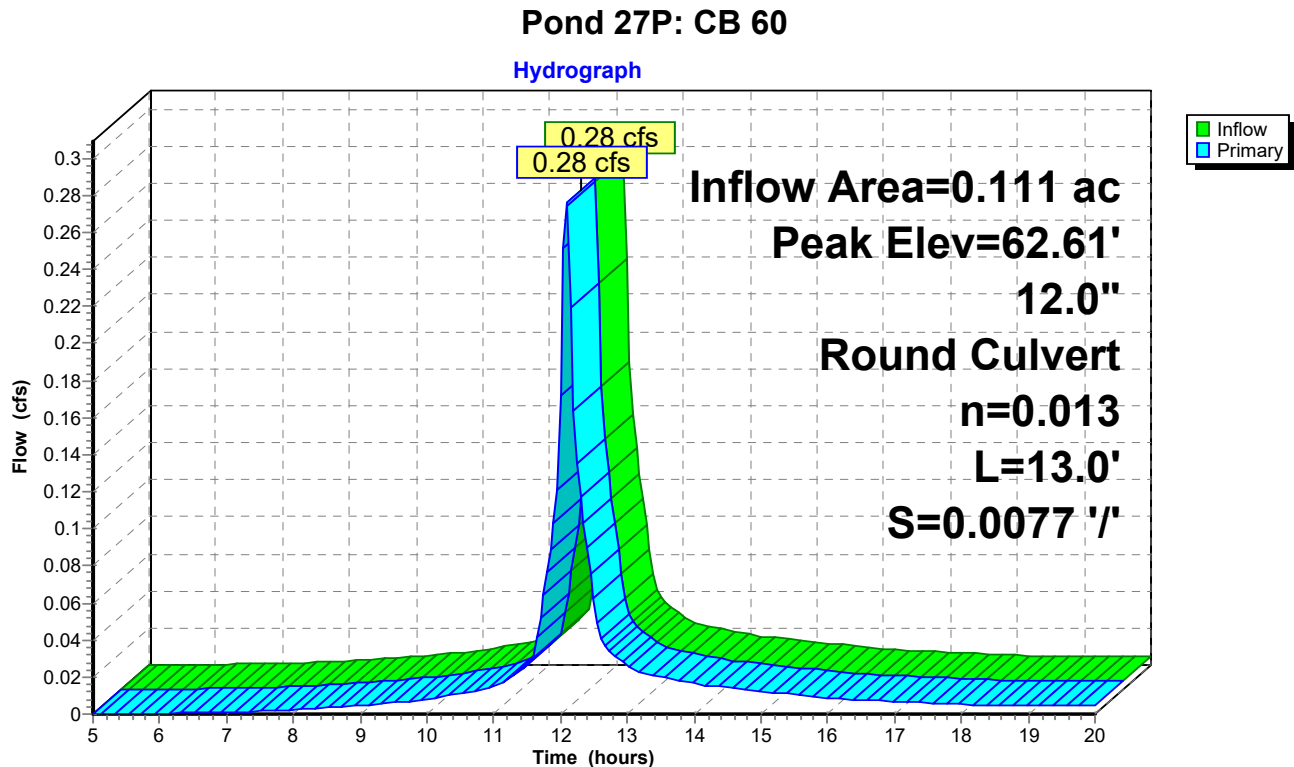
[57] Hint: Peaked at 62.61' (Flood elevation advised)

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'	12.0" Round Culvert L= 13.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.30' / 62.20' S= 0.0077 '/' Cc= 0.900 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)



Summary for Pond 28P: DMH 44

[57] Hint: Peaked at 62.83' (Flood elevation advised)

[79] Warning: Submerged Pond 25P Primary device # 1 OUTLET by 0.63'

[81] Warning: Exceeded Pond 26P by 0.03' @ 12.10 hrs

[81] Warning: Exceeded Pond 27P by 0.22' @ 12.10 hrs

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

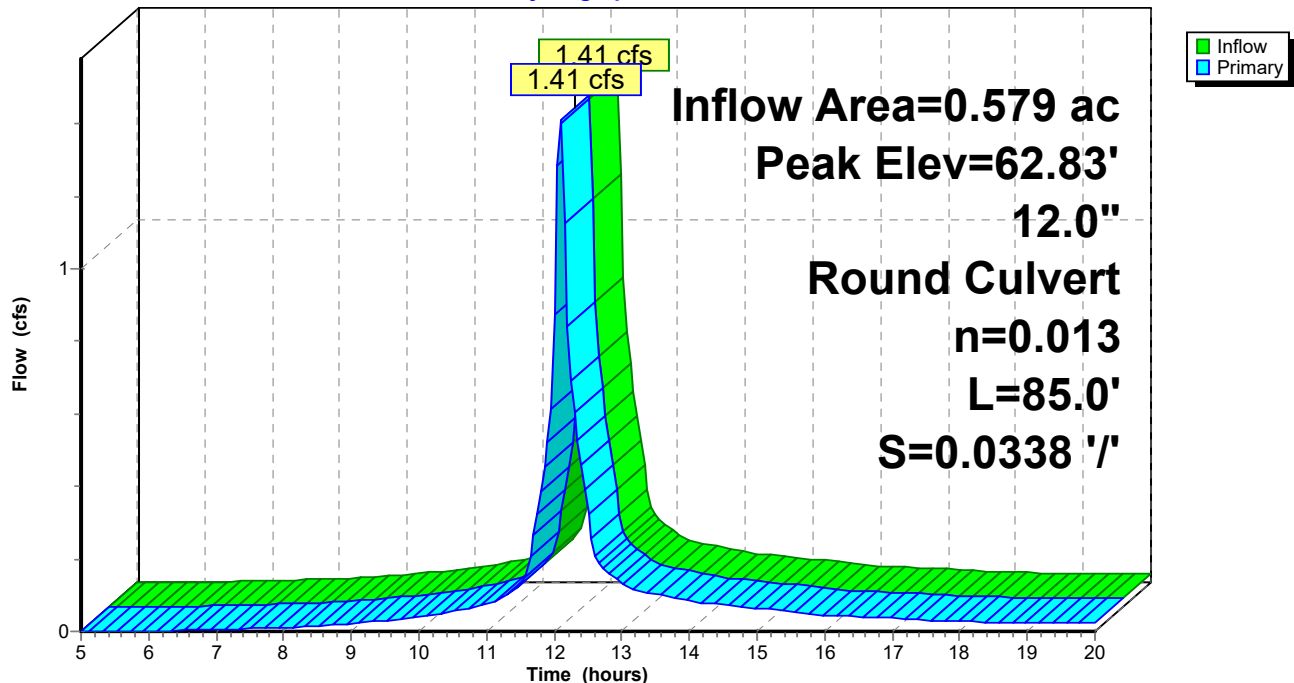
Device	Routing	Invert	Outlet Devices
#1	Primary	62.10'	12.0" Round Culvert L= 85.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.10' / 59.23' S= 0.0338 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.15' (Flood elevation advised)

[79] Warning: Submerged Pond 24P Primary device # 1 OUTLET by 0.92'

[79] Warning: Submerged Pond 28P Primary device # 1 OUTLET by 0.92'

[79] Warning: Submerged Pond 30P Primary device # 1 OUTLET by 0.92'

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

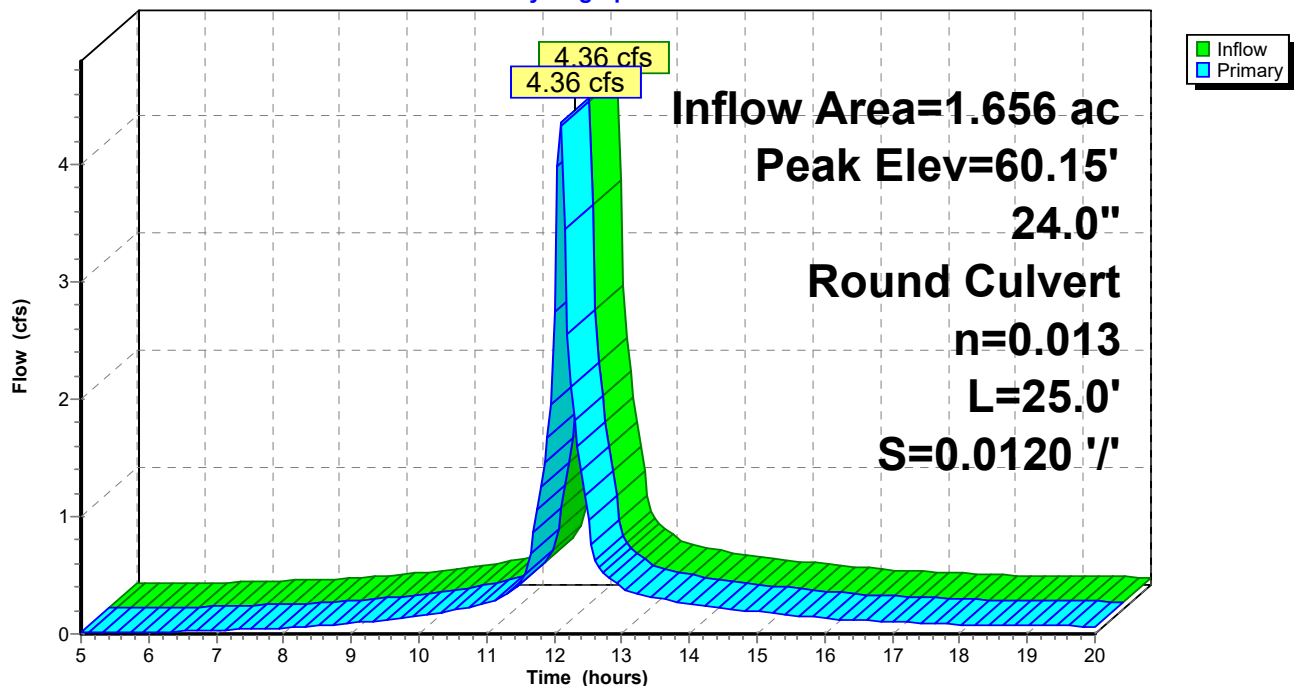
Device	Routing	Invert	Outlet Devices
#1	Primary	59.13'	24.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.13' / 58.83' S= 0.0120 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.49' (Flood elevation advised)

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

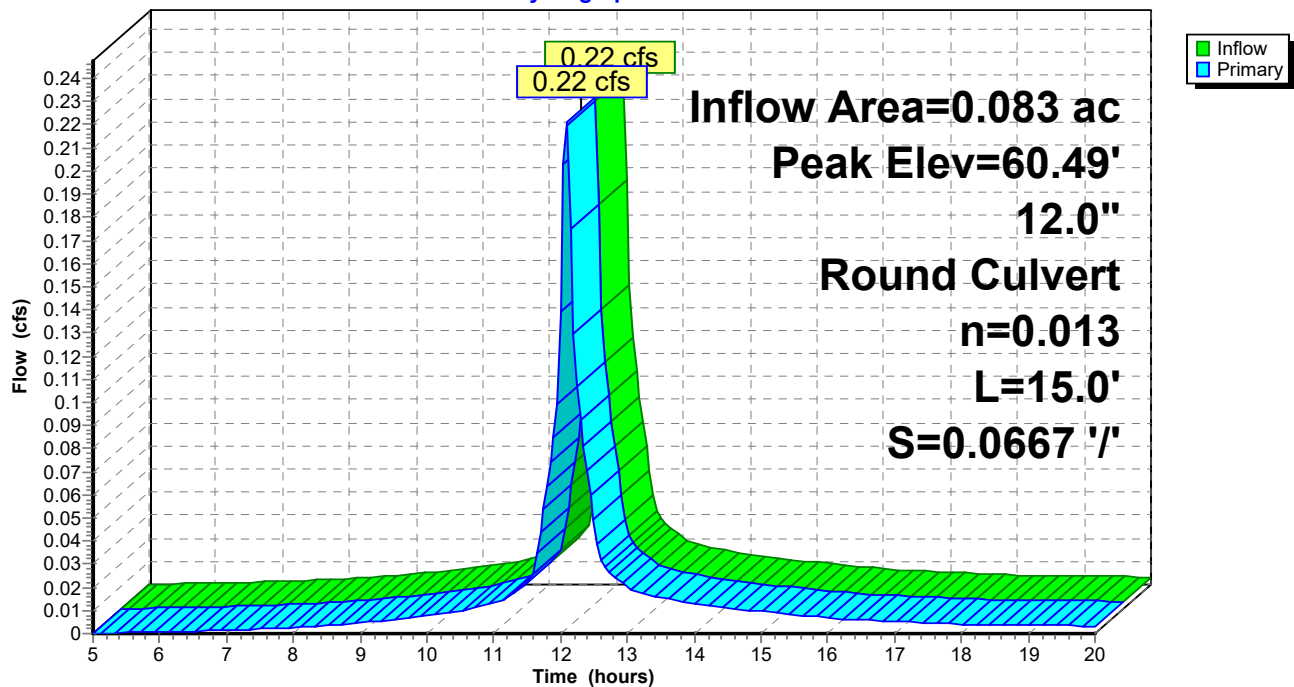
Device	Routing	Invert	Outlet Devices
#1	Primary	60.23'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.23' / 59.23' S= 0.0667 ' S= 0.0667 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.50' (Flood elevation advised)

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

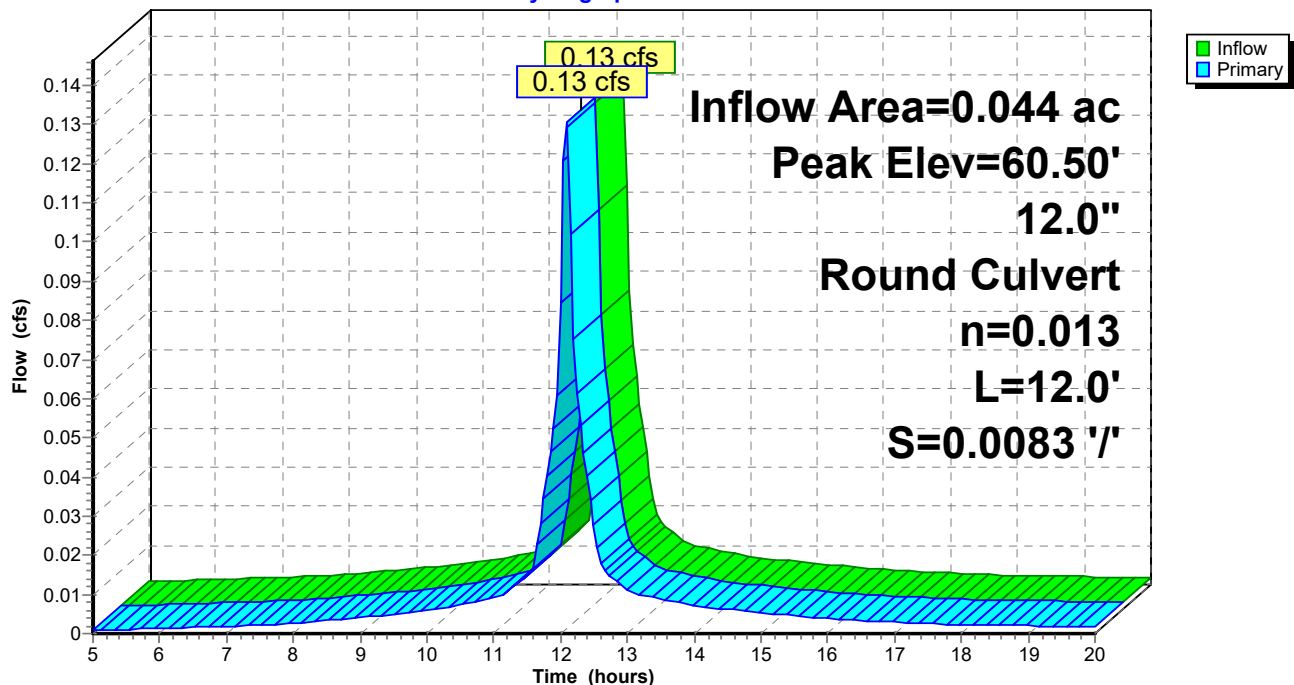
Device	Routing	Invert	Outlet Devices
#1	Primary	60.30'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.30' / 60.20' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.77' (Flood elevation advised)

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

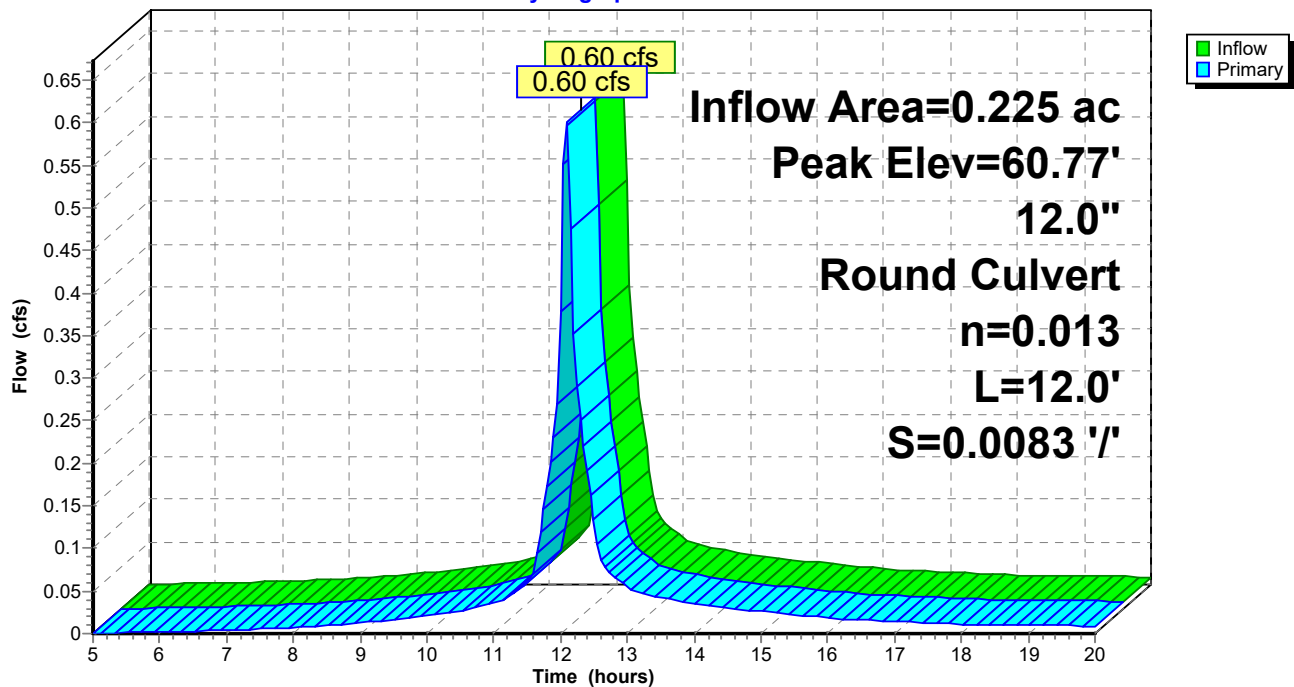
Device	Routing	Invert	Outlet Devices
#1	Primary	60.30'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.30' / 60.20' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.96' (Flood elevation advised)

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

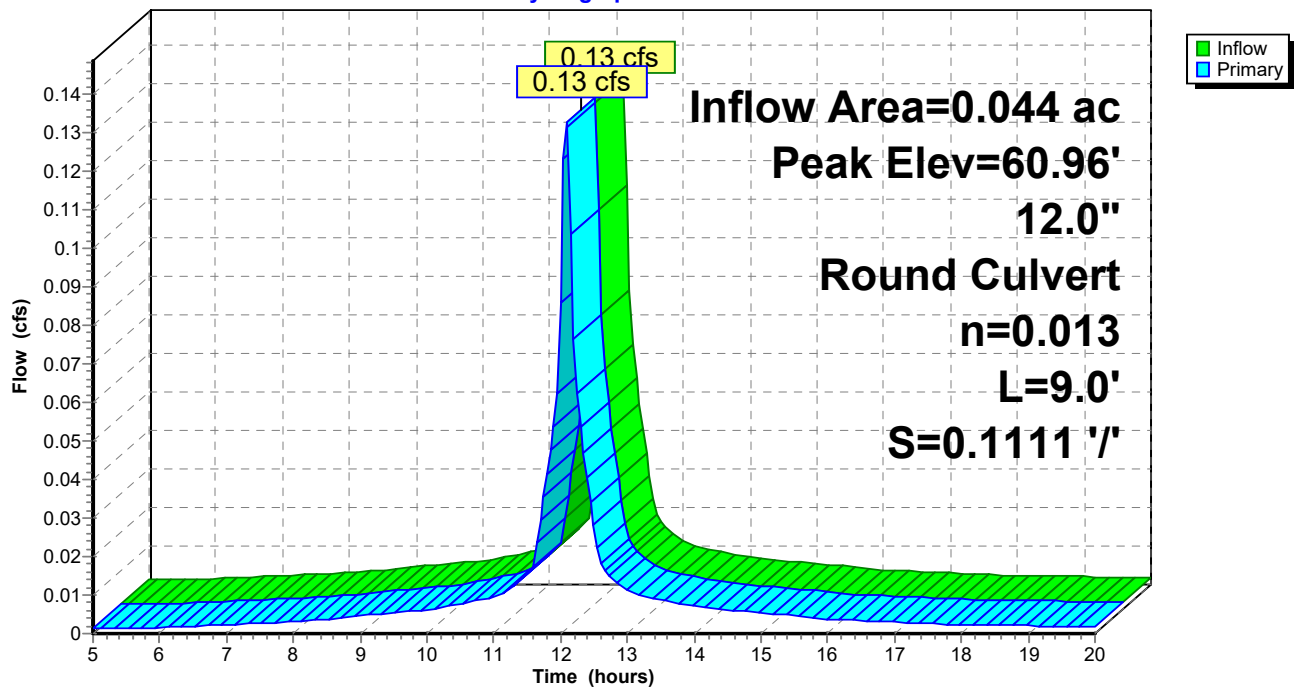
Device	Routing	Invert	Outlet Devices
#1	Primary	60.76'	12.0" Round Culvert L= 9.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.76' / 59.76' S= 0.1111 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.62' (Flood elevation advised)

[81] Warning: Exceeded Pond 31P by 0.12' @ 12.10 hrs

[79] Warning: Submerged Pond 32P Primary device # 1 INLET by 0.32'

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

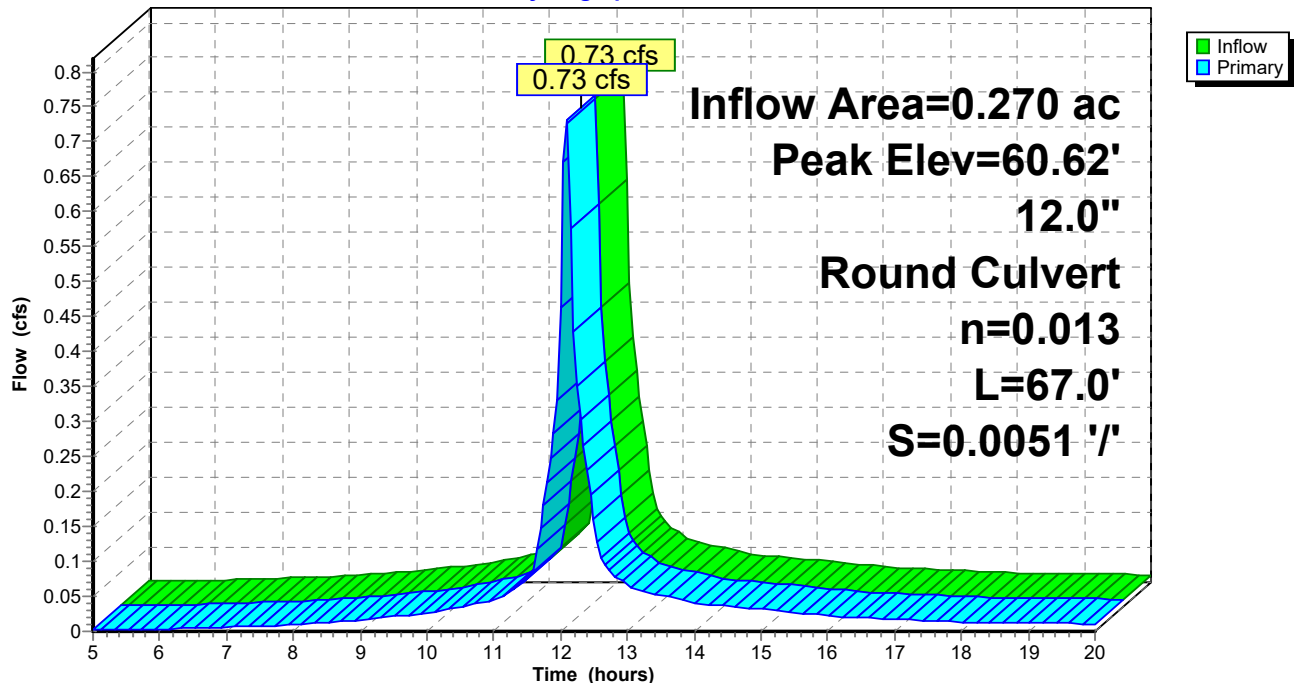
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.62' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	60.10'	12.0" Round Culvert L= 67.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.10' / 59.76' S= 0.0051 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.24' (Flood elevation advised)

[79] Warning: Submerged Pond 33P Primary device # 1 OUTLET by 0.48'

[79] Warning: Submerged Pond 34P Primary device # 1 INLET by 0.14'

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

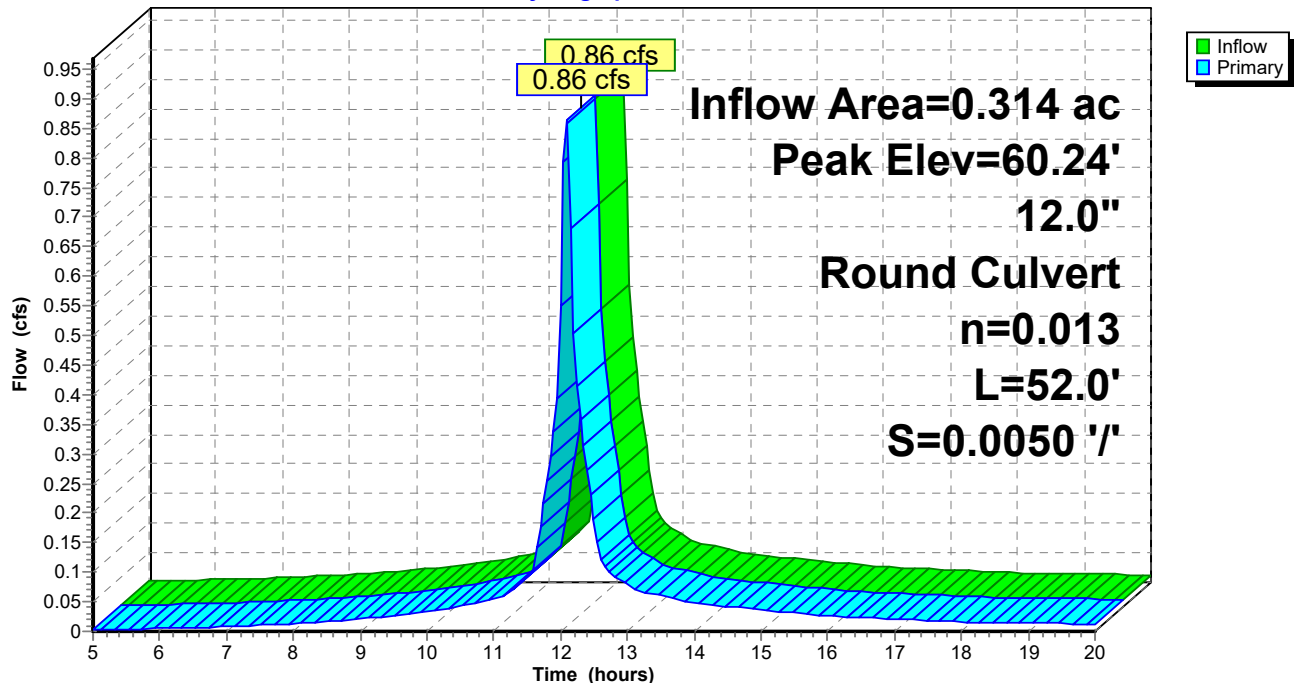
Device	Routing	Invert	Outlet Devices
#1	Primary	59.66'	12.0" Round Culvert L= 52.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.66' / 59.40' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.64' (Flood elevation advised)

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

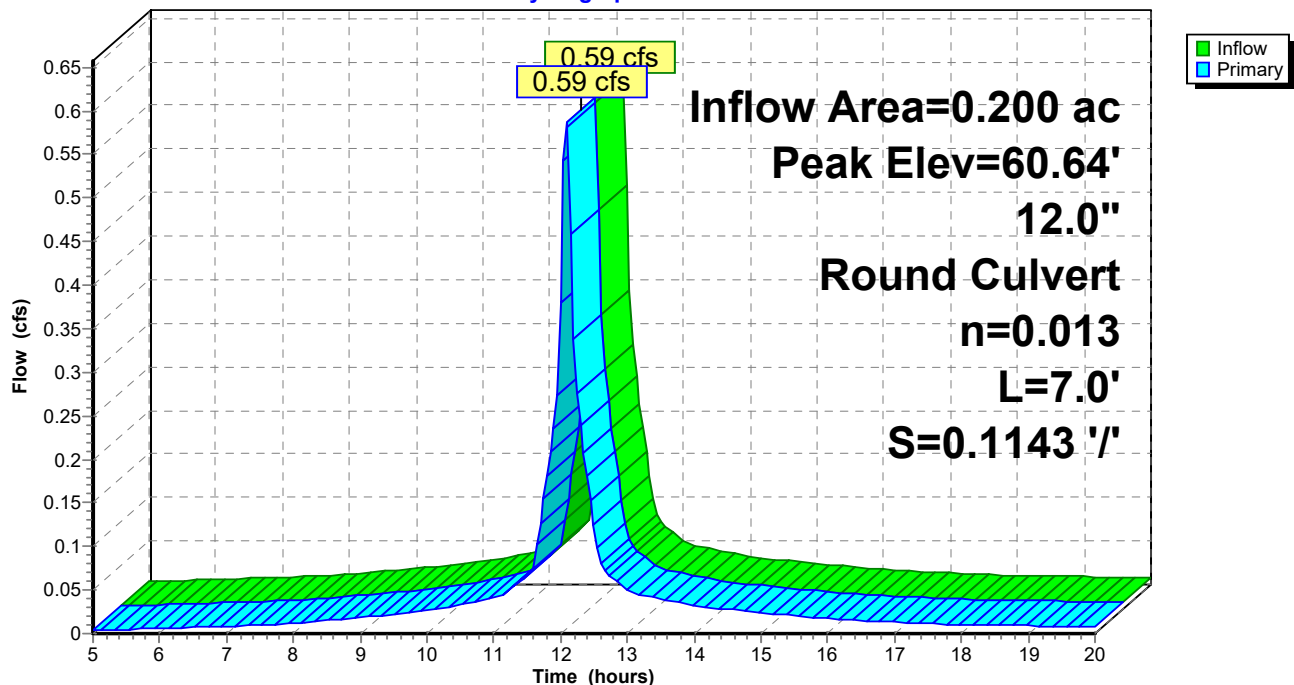
Device	Routing	Invert	Outlet Devices
#1	Primary	60.20'	12.0" Round Culvert L= 7.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.20' / 59.40' S= 0.1143 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.07' (Flood elevation advised)

[79] Warning: Submerged Pond 35P Primary device # 1 INLET by 0.41'

[79] Warning: Submerged Pond 36P Primary device # 1 OUTLET by 0.67'

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

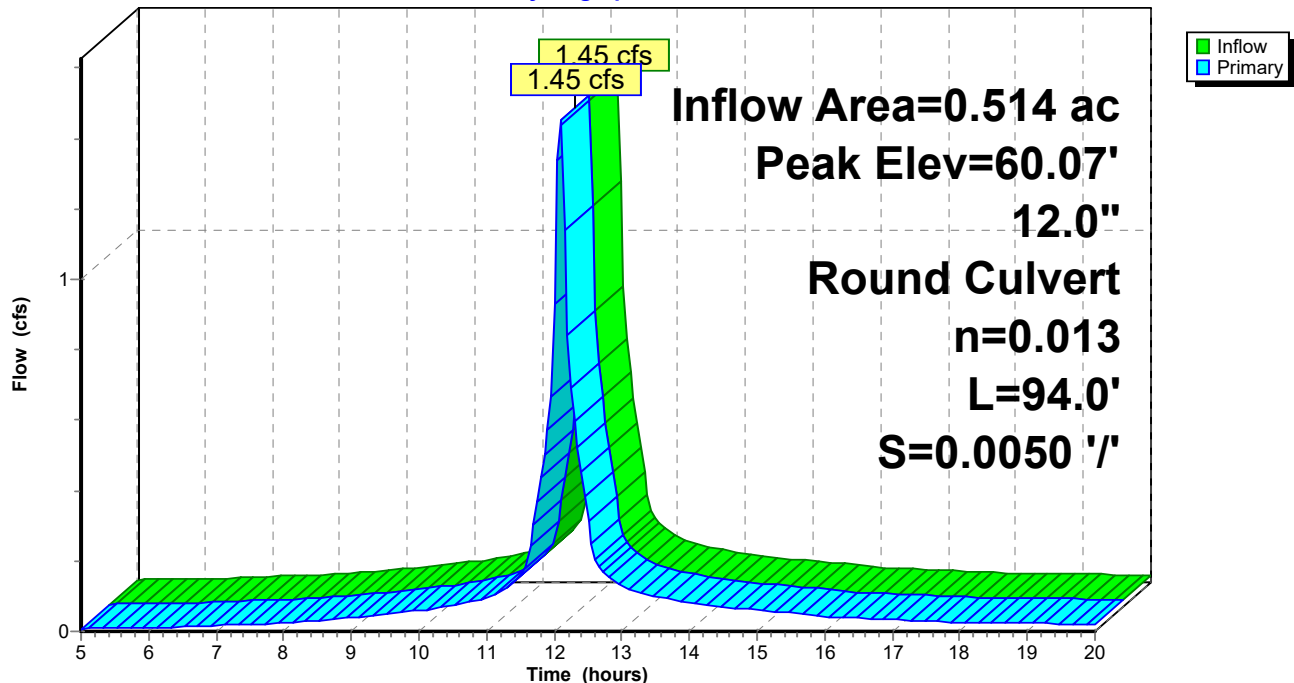
Device	Routing	Invert	Outlet Devices
#1	Primary	59.30'	12.0" Round Culvert L= 94.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.30' / 58.83' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.93' (Flood elevation advised)

[79] Warning: Submerged Pond 29P Primary device # 1 INLET by 0.80'

[79] Warning: Submerged Pond 37P Primary device # 1 INLET by 0.63'

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

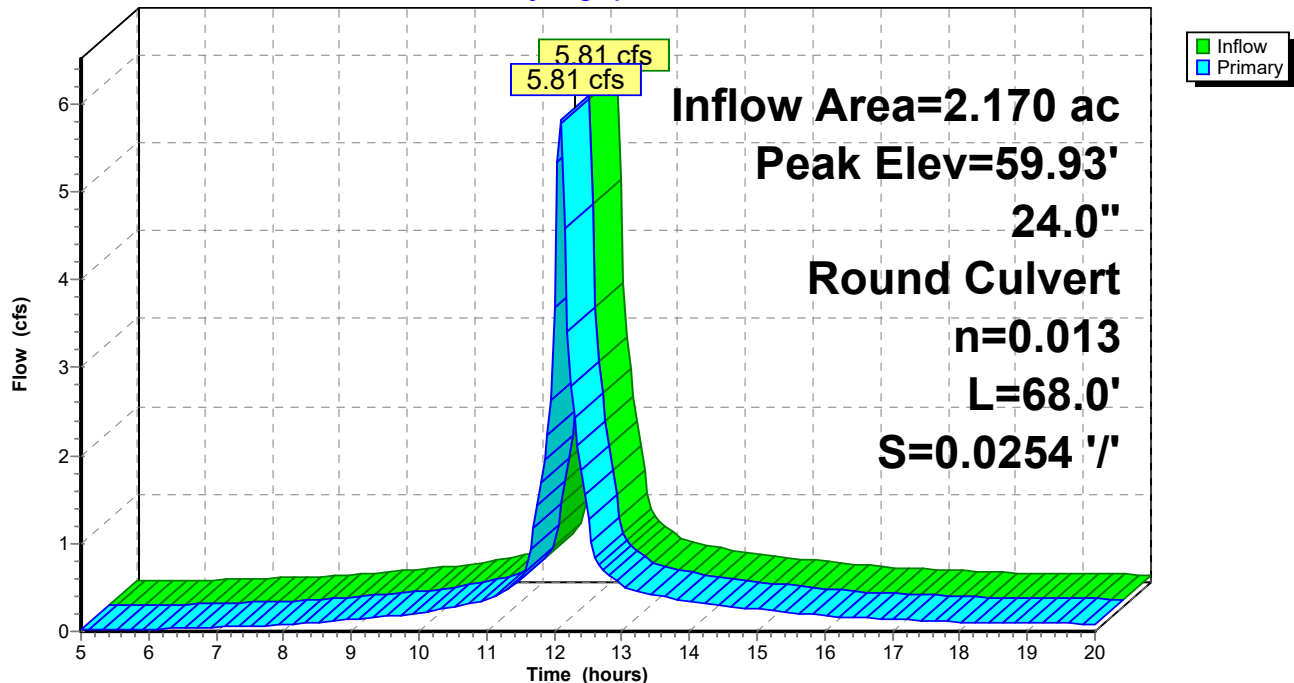
Device	Routing	Invert	Outlet Devices
#1	Primary	58.73'	24.0" Round Culvert L= 68.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.73' / 57.00' S= 0.0254 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.64' (Flood elevation advised)

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

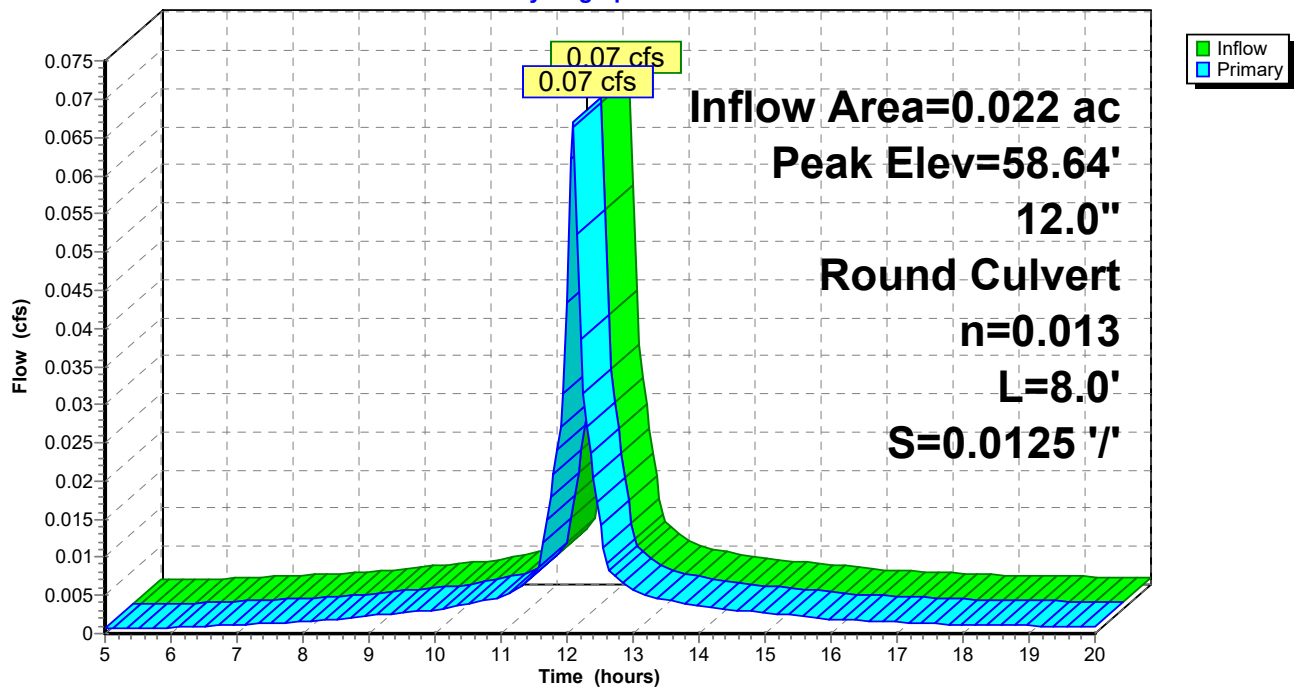
Device	Routing	Invert	Outlet Devices
#1	Primary	58.50'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.50' / 58.40' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

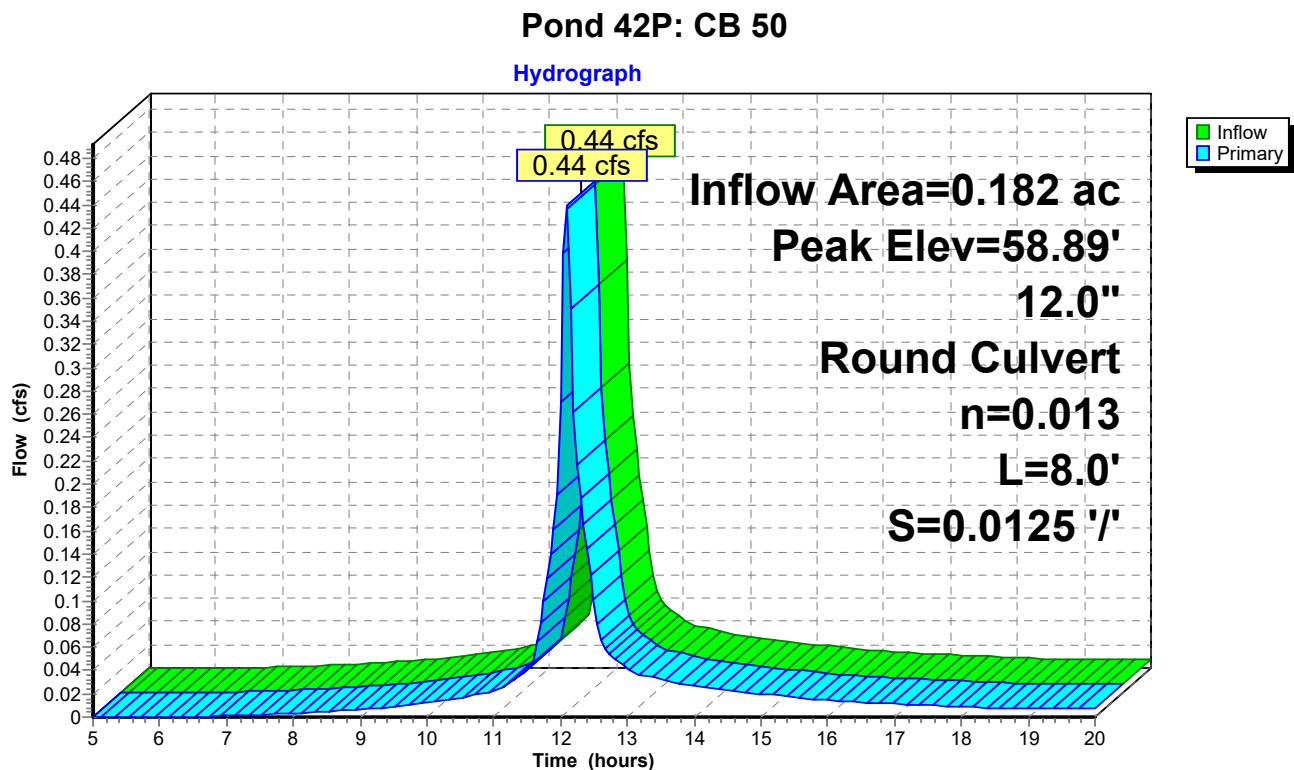
[57] Hint: Peaked at 58.89' (Flood elevation advised)

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'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.50' / 58.40' S= 0.0125 '/' Cc= 0.900 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)



Summary for Pond 43P: DMH 35

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.70' (Flood elevation advised)

[81] Warning: Exceeded Pond 41P by 0.06' @ 12.10 hrs

[79] Warning: Submerged Pond 42P Primary device # 1 INLET by 0.20'

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

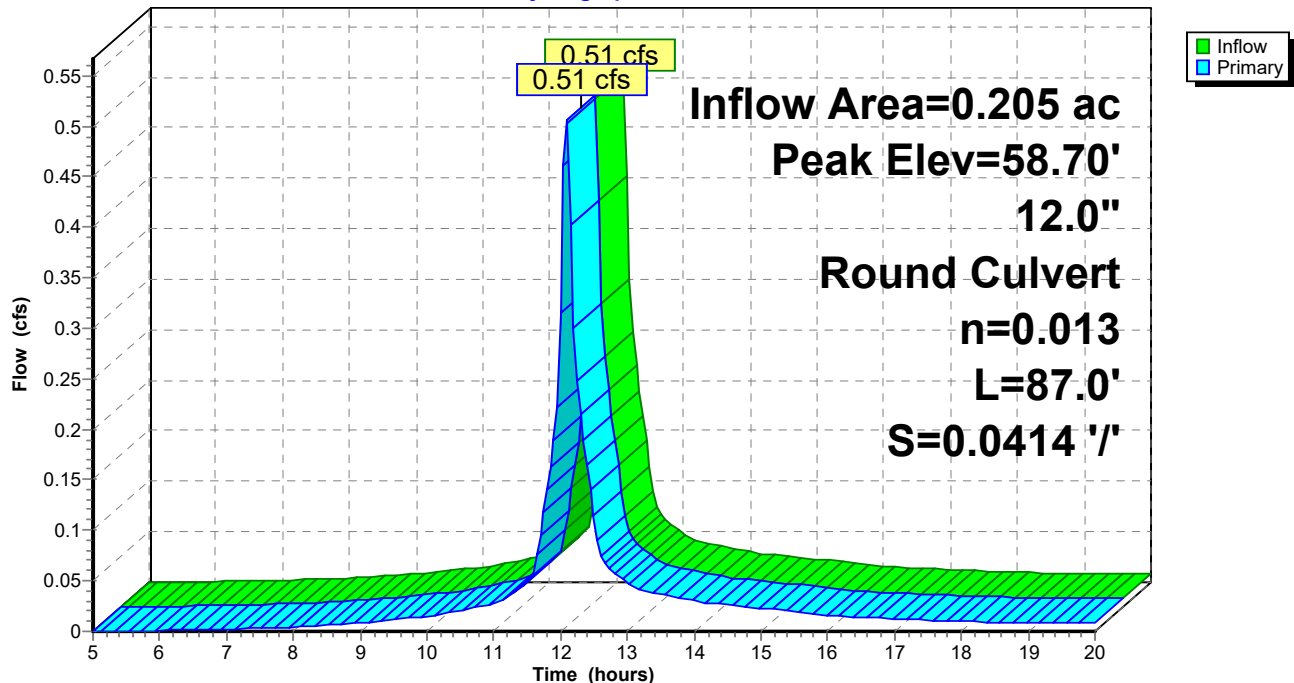
Device	Routing	Invert	Outlet Devices
#1	Primary	58.30'	12.0" Round Culvert L= 87.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.30' / 54.70' S= 0.0414 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 55.29' (Flood elevation advised)

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

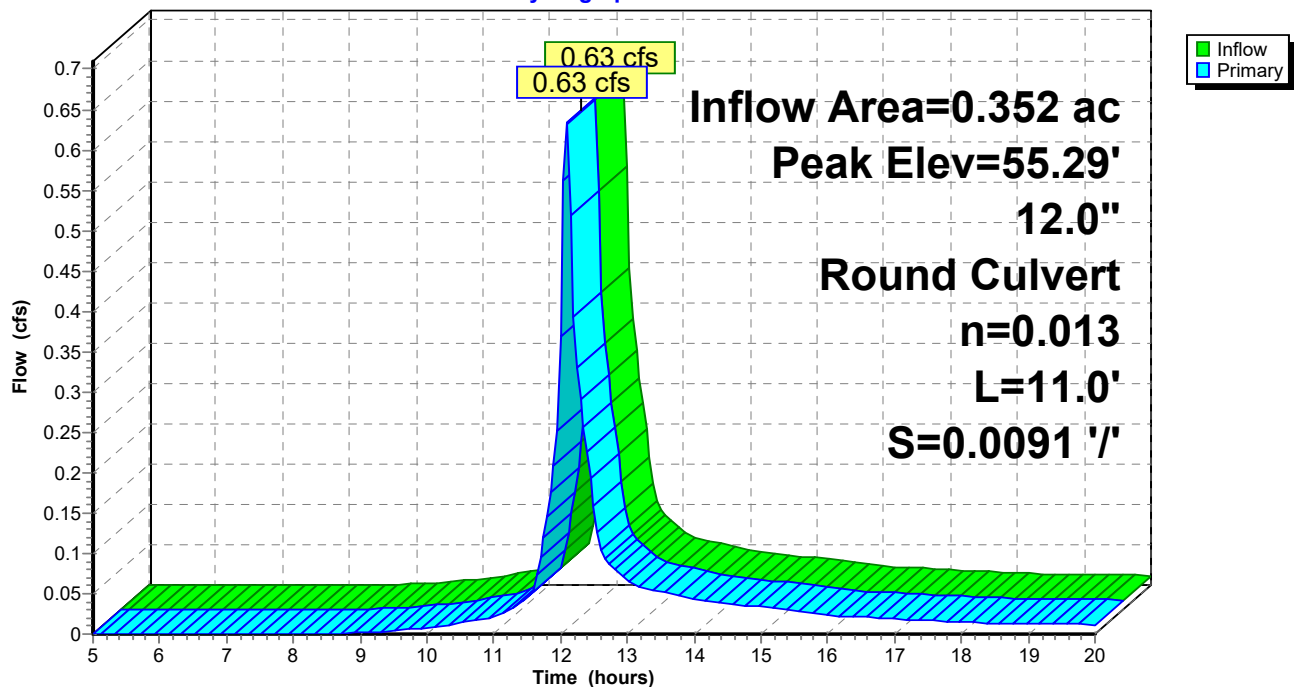
Device	Routing	Invert	Outlet Devices
#1	Primary	54.80'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.80' / 54.70' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 55.15' (Flood elevation advised)

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

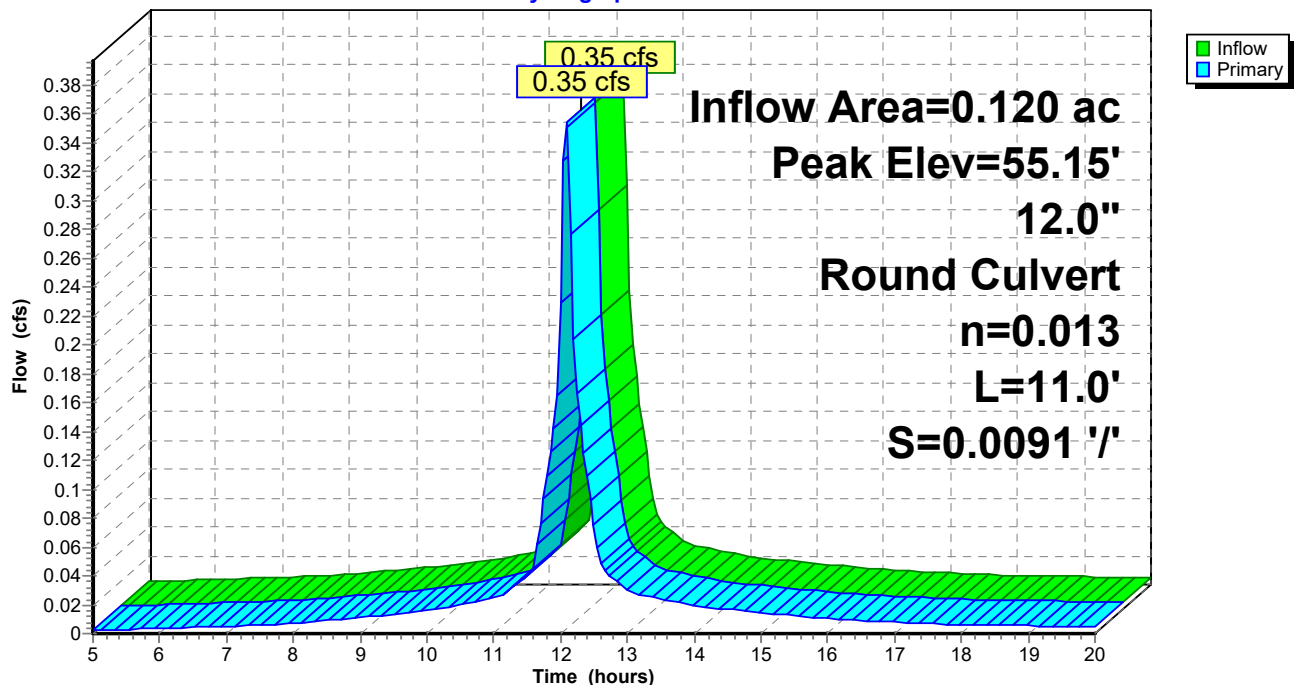
Device	Routing	Invert	Outlet Devices
#1	Primary	54.80'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.80' / 54.70' S= 0.0091 ' S= 0.0091 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 55.21' (Flood elevation advised)

[79] Warning: Submerged Pond 46P Primary device # 1 INLET by 0.41'

[81] Warning: Exceeded Pond 47P by 0.06' @ 12.10 hrs

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

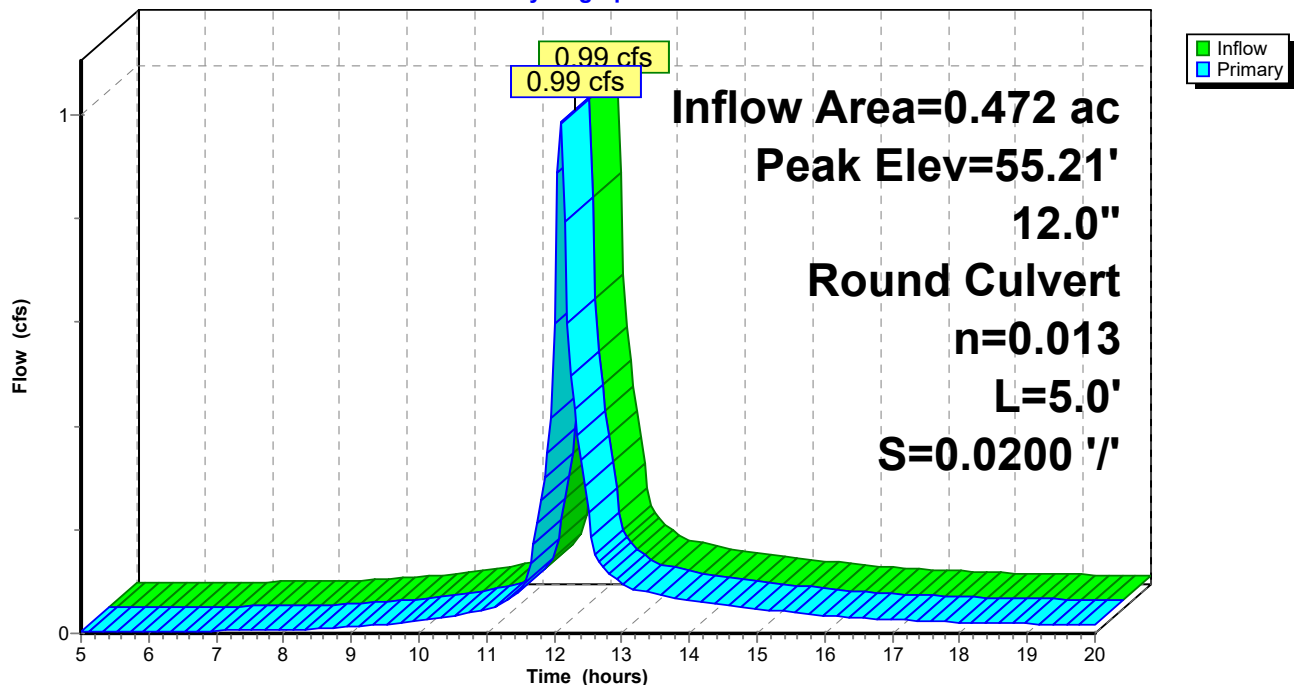
Device	Routing	Invert	Outlet Devices
#1	Primary	54.60'	12.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0200 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 48P by 1.32' @ 15.25 hrs

[81] Warning: Exceeded Pond 206P by 1.40' @ 15.40 hrs

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	55.25'W x 58.58'L x 3.00'H Field A 0.223 af Overall - 0.111 af Embedded = 0.112 af x 40.0% Voids
#2A	54.50'	0.111 af	ADS_StormTech SC-740 b +Cap x 104 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 104 Chambers in 13 Rows 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'	1.020 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 50.00'
#2	Primary	54.00'	12.0" Round Culvert L= 76.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.00' / 51.50' S= 0.0329 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	56.00'	4.0" Vert. Orifice/Grate X 3.00 C= 0.600 Limited to weir flow at low heads
#4	Device 2	56.80'	4.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#5	Primary	54.00'	12.0" Round Culvert L= 76.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.00' / 51.00' S= 0.0395 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#6	Device 5	56.80'	4.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#7	Device 5	56.00'	4.0" Vert. Orifice/Grate X 3.00 C= 0.600 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 13 rows = 69.0 cf

8 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 58.58' Row Length

13 Rows x 51.0" Wide = 55.25' Base Width

6.0" Stone Base + 30.0" Chamber Height = 3.00' Field Height

104 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 13 Rows = 4,846.8 cf Chamber Storage

9,709.1 cf Field - 4,846.8 cf Chambers = 4,862.3 cf Stone x 40.0% Voids = 1,944.9 cf Stone Storage

Chamber Storage + Stone Storage = 6,791.7 cf = 0.156 af

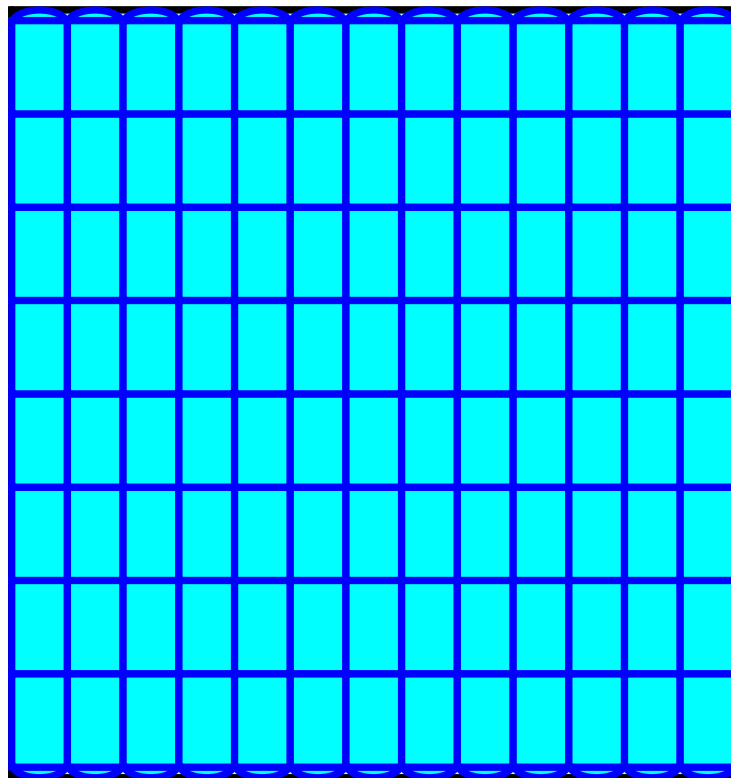
Overall Storage Efficiency = 70.0%

Overall System Size = 58.58' x 55.25' x 3.00'

104 Chambers

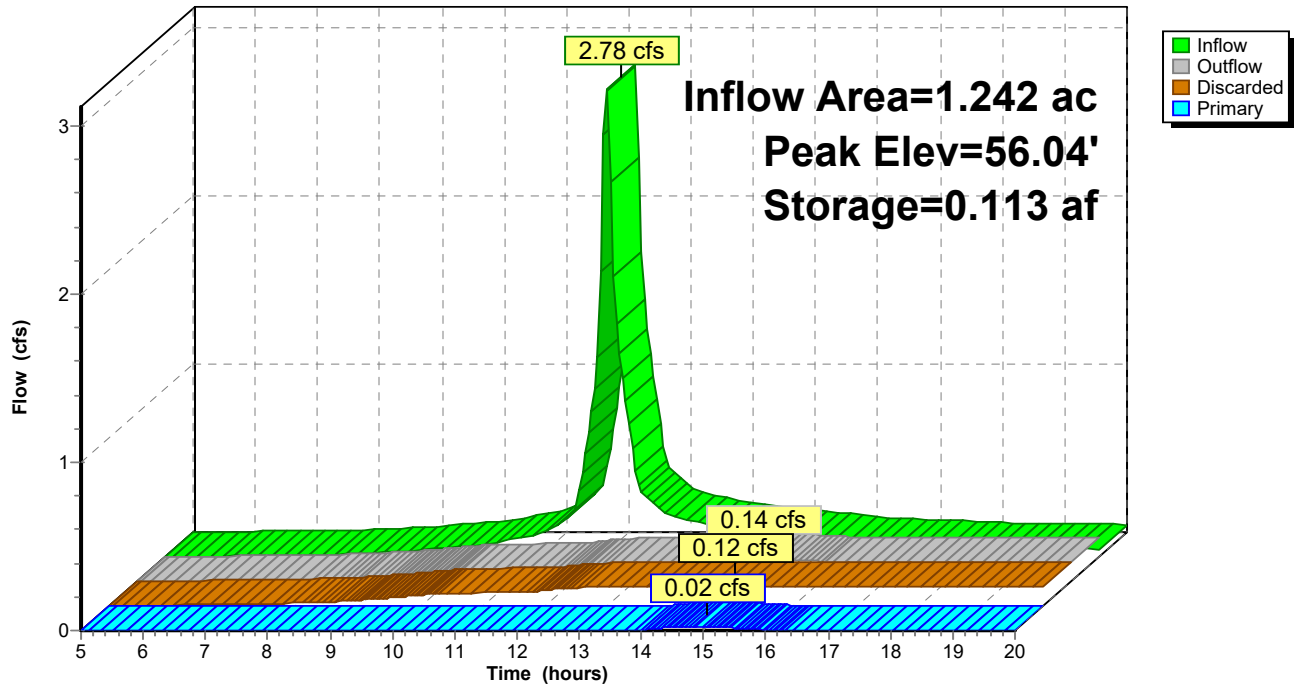
359.6 cy Field

180.1 cy Stone



Pond 49P: Sub. Inf. 4

Hydrograph



Summary for Pond 52P: CB 20

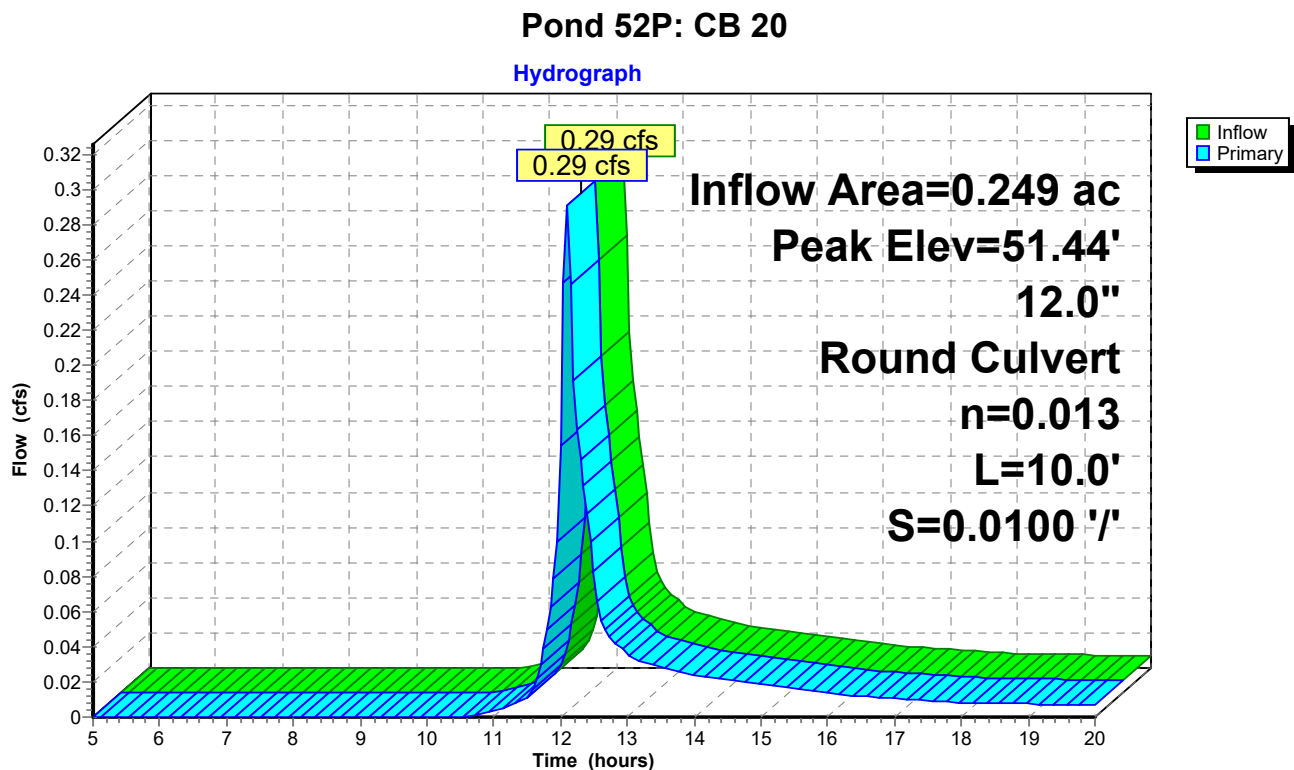
[57] Hint: Peaked at 51.44' (Flood elevation advised)

Inflow Area = 0.249 ac, 61.75% Impervious, Inflow Depth > 0.97" 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 54P : DMH 15

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 51.44' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	51.13'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.13' / 51.03' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.29 cfs @ 12.10 hrs HW=51.44' (Free Discharge)
 1=Culvert (Barrel Controls 0.29 cfs @ 2.10 fps)



Summary for Pond 53P: CB 21

[57] Hint: Peaked at 51.58' (Flood elevation advised)

Inflow Area = 0.346 ac, 71.48% Impervious, Inflow Depth > 1.32" for 2-Year event
 Inflow = 0.56 cfs @ 12.10 hrs, Volume= 0.038 af
 Outflow = 0.56 cfs @ 12.10 hrs, Volume= 0.038 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.56 cfs @ 12.10 hrs, Volume= 0.038 af
 Routed to Pond 54P : DMH 15

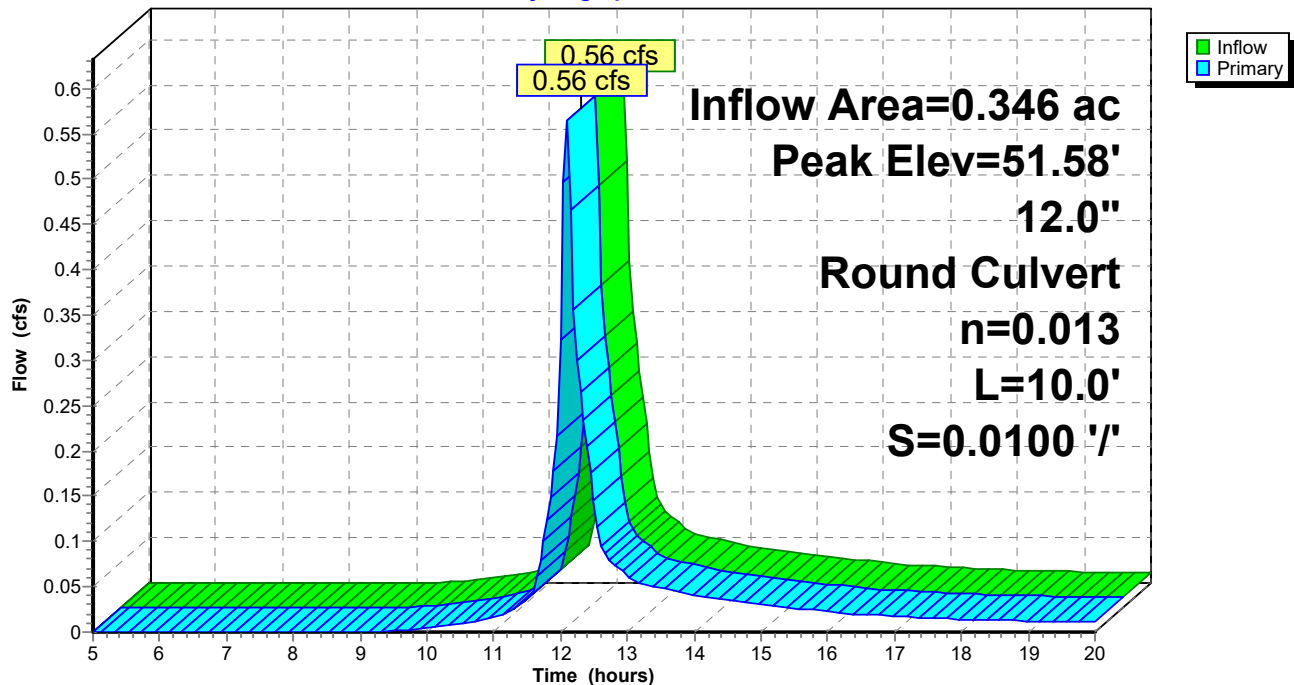
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 51.58' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	51.13'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.13' / 51.03' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.56 cfs @ 12.10 hrs HW=51.58' (Free Discharge)
 1=Culvert (Barrel Controls 0.56 cfs @ 2.40 fps)

Pond 53P: CB 21

Hydrograph



Summary for Pond 54P: DMH 15

[57] Hint: Peaked at 51.50' (Flood elevation advised)

[81] Warning: Exceeded Pond 52P by 0.06' @ 12.10 hrs

[79] Warning: Submerged Pond 53P Primary device # 1 INLET by 0.37'

Inflow Area = 0.595 ac, 67.40% Impervious, Inflow Depth > 1.17" for 2-Year event
 Inflow = 0.85 cfs @ 12.10 hrs, Volume= 0.058 af
 Outflow = 0.85 cfs @ 12.10 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.85 cfs @ 12.10 hrs, Volume= 0.058 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= 51.50' @ 12.10 hrs

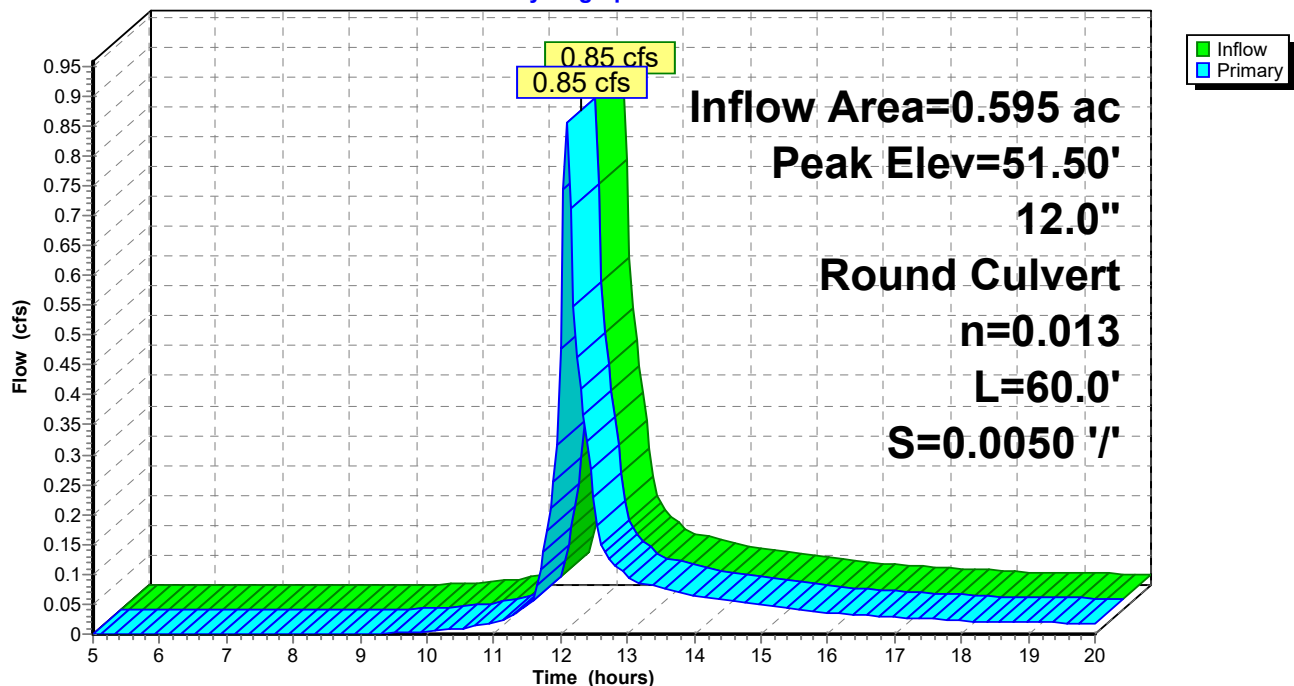
Device	Routing	Invert	Outlet Devices
#1	Primary	50.93'	12.0" Round Culvert L= 60.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.93' / 50.63' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.85 cfs @ 12.10 hrs HW=51.50' (Free Discharge)

↑1=Culvert (Barrel Controls 0.85 cfs @ 2.65 fps)

Pond 54P: DMH 15

Hydrograph



Summary for Pond 55P: DMH 16

[57] Hint: Peaked at 51.07' (Flood elevation advised)

[79] Warning: Submerged Pond 54P Primary device # 1 INLET by 0.14'

Inflow Area = 0.595 ac, 67.40% Impervious, Inflow Depth > 1.17" for 2-Year event
 Inflow = 0.85 cfs @ 12.10 hrs, Volume= 0.058 af
 Outflow = 0.85 cfs @ 12.10 hrs, Volume= 0.058 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.85 cfs @ 12.10 hrs, Volume= 0.058 af
 Routed to Pond 56P : Inf. Basin 4

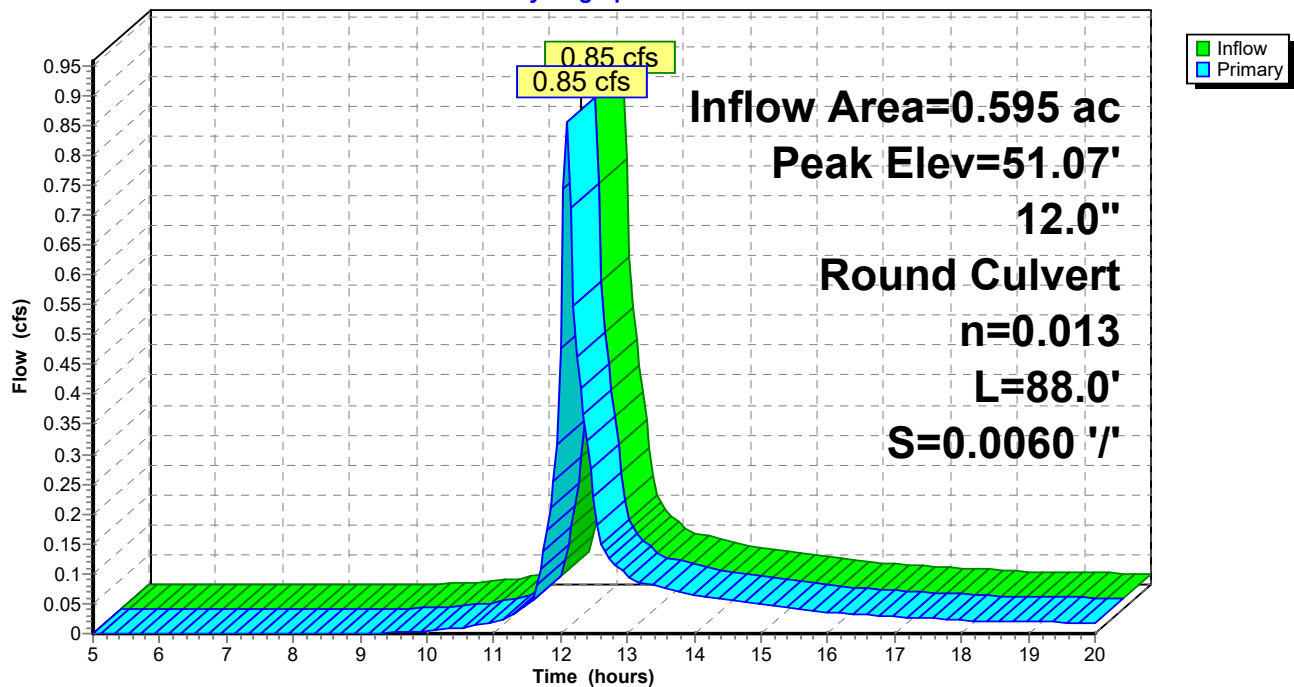
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 51.07' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.53'	12.0" Round Culvert L= 88.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.53' / 50.00' S= 0.0060 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.85 cfs @ 12.10 hrs HW=51.07' (Free Discharge)
 1=Culvert (Barrel Controls 0.85 cfs @ 2.85 fps)

Pond 55P: DMH 16

Hydrograph



Summary for Pond 56P: Inf. Basin 4

[79] Warning: Submerged Pond 55P Primary device # 1 OUTLET by 0.39'

Inflow Area = 0.971 ac, 43.64% Impervious, Inflow Depth > 0.72" for 2-Year event
 Inflow = 0.85 cfs @ 12.10 hrs, Volume= 0.058 af
 Outflow = 0.33 cfs @ 12.39 hrs, Volume= 0.058 af, Atten= 62%, Lag= 17.8 min
 Discarded = 0.33 cfs @ 12.39 hrs, Volume= 0.058 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= 50.39' @ 12.39 hrs Surf.Area= 1,482 sf Storage= 475 cf

Plug-Flow detention time= 10.7 min calculated for 0.058 af (100% of inflow)
 Center-of-Mass det. time= 10.1 min (817.0 - 806.9)

Volume	Invert	Avail.Storage	Storage Description
#1	50.00'	11,770 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (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'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 48.00'
#2	Secondary	53.50'	6.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Discarded OutFlow Max=0.33 cfs @ 12.39 hrs HW=50.38' (Free Discharge)

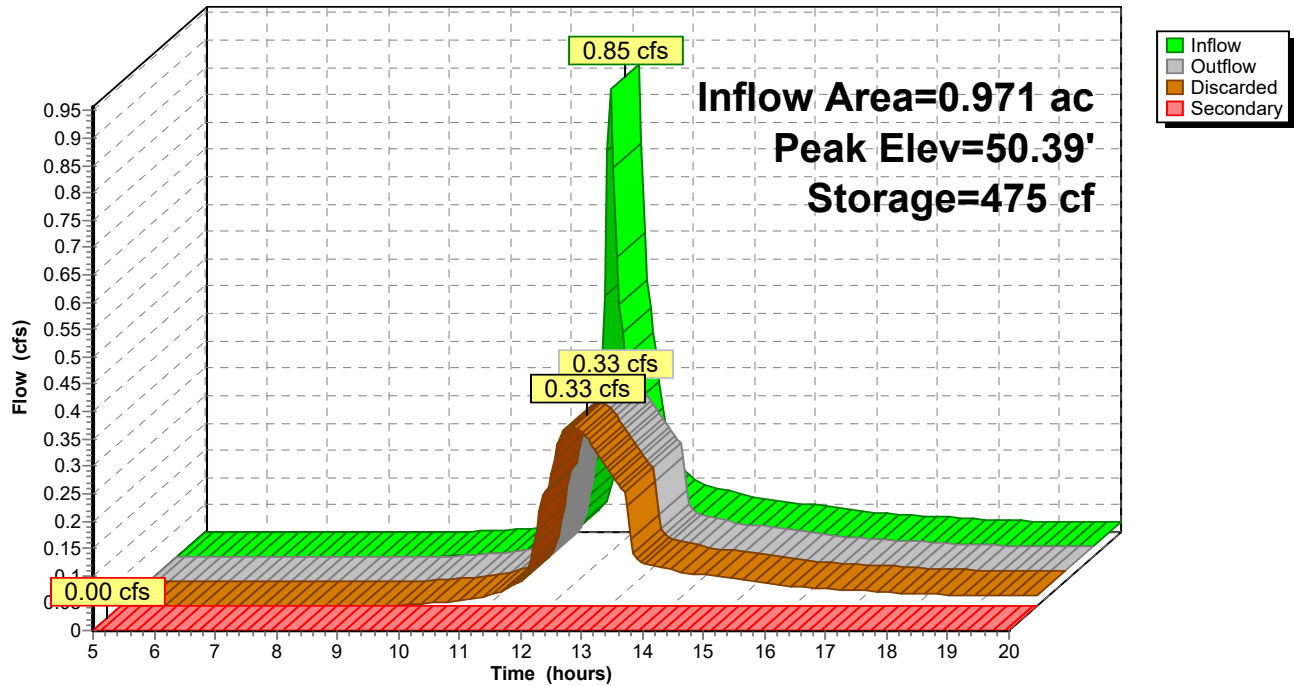
↑**1=Exfiltration** (Controls 0.33 cfs)

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

[81] Warning: Exceeded Pond 208P by 0.84' @ 19.95 hrs

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 = 2.10 cfs @ 12.30 hrs, Volume= 0.204 af, Atten= 57%, Lag= 12.8 min
 Primary = 2.10 cfs @ 12.30 hrs, Volume= 0.204 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' @ 12.30 hrs Surf.Area= 0.127 ac Storage= 0.158 af

Plug-Flow detention time= 144.7 min calculated for 0.204 af (61% of inflow)
 Center-of-Mass det. time= 71.0 min (844.4 - 773.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	60.00'	0.113 af	53.75'W x 103.30'L x 3.50'H Field A 0.446 af Overall - 0.164 af Embedded = 0.282 af x 40.0% Voids
#2A	60.50'	0.164 af	ADS_StormTech SC-740 b +Cap x 154 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 154 Chambers in 11 Rows Cap Storage= 2.7 cf x 2 x 11 rows = 58.4 cf
		0.277 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	60.00'	18.0" Round Culvert L= 29.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.00' / 56.00' S= 0.1379 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	60.50'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	61.50'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)

Primary OutFlow Max=2.09 cfs @ 12.30 hrs HW=61.79' (Free Discharge)

1=Culvert (Passes 2.09 cfs of 6.87 cfs potential flow)

2=Orifice/Grate (Orifice Controls 0.03 cfs @ 5.39 fps)

3=Sharp-Crested Rectangular Weir (Weir Controls 2.06 cfs @ 1.78 fps)

Pond 60P: Sub. Det. 1 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 11 rows = 58.4 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

14 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 101.30' Row Length +12.0" End Stone x 2 = 103.30' Base Length

11 Rows x 51.0" Wide + 6.0" Spacing x 10 + 12.0" Side Stone x 2 = 53.75' Base Width

6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

154 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 11 Rows = 7,133.2 cf Chamber Storage

19,432.7 cf Field - 7,133.2 cf Chambers = 12,299.5 cf Stone x 40.0% Voids = 4,919.8 cf Stone Storage

Chamber Storage + Stone Storage = 12,053.0 cf = 0.277 af

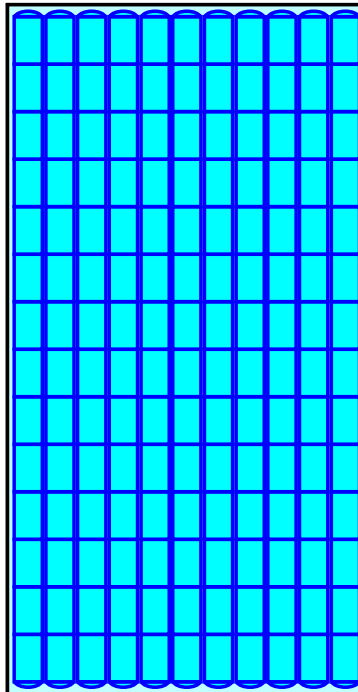
Overall Storage Efficiency = 62.0%

Overall System Size = 103.30' x 53.75' x 3.50'

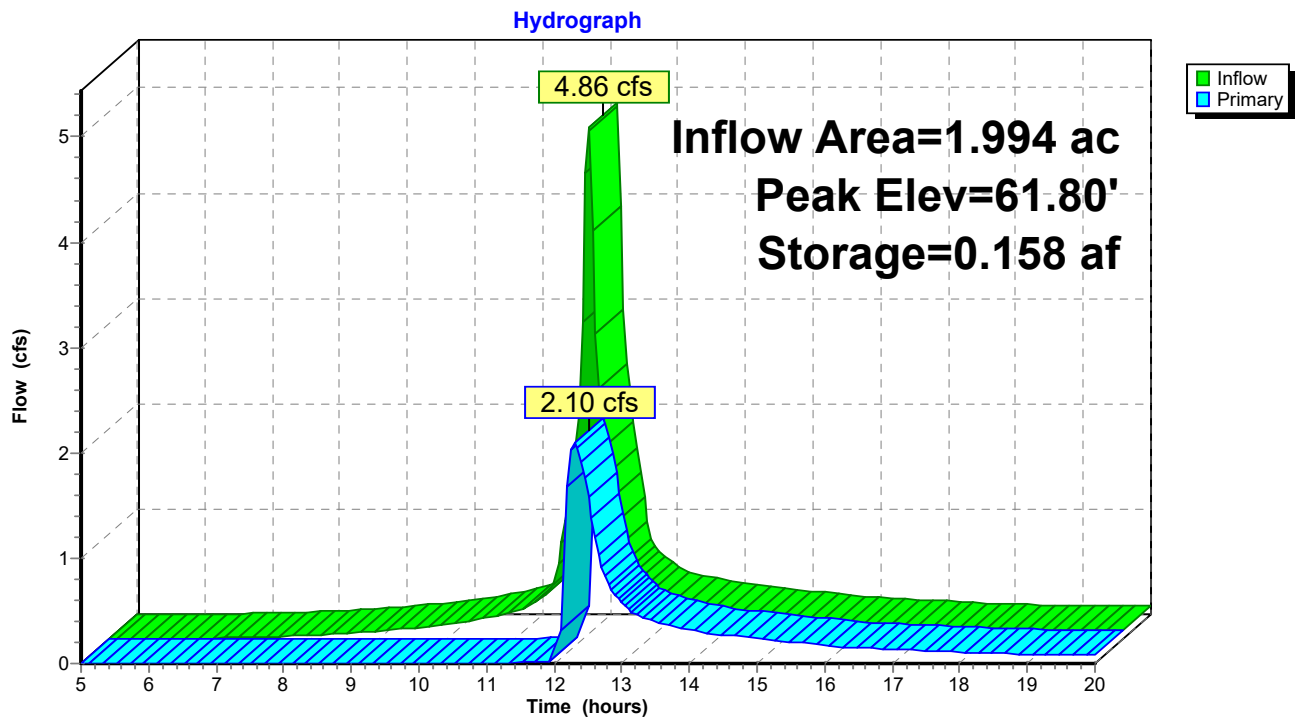
154 Chambers

719.7 cy Field

455.5 cy Stone



Pond 60P: Sub. Det. 1



Summary for Pond 61P: CB 8

[57] Hint: Peaked at 48.68' (Flood elevation advised)

Inflow Area = 0.264 ac, 68.05% Impervious, Inflow Depth > 1.20" 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 171P : DMH 6

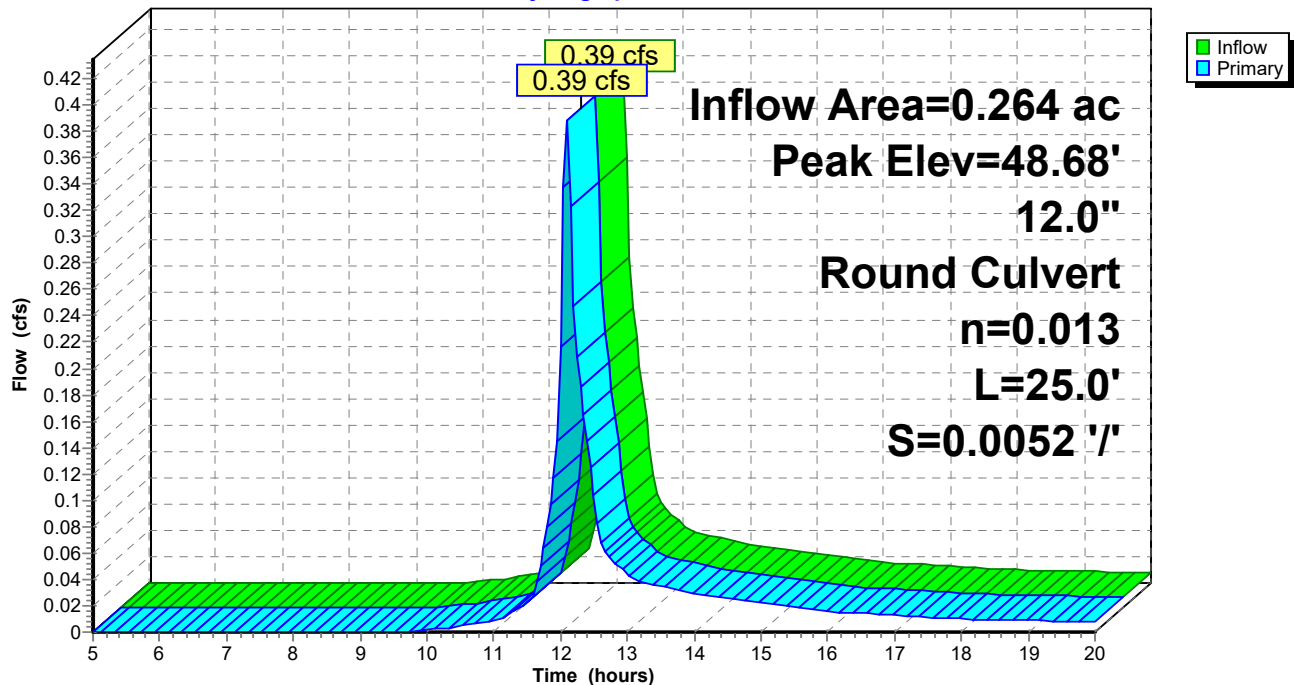
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 48.68' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	48.30'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.30' / 48.17' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.38 cfs @ 12.10 hrs HW=48.68' (Free Discharge)
 1=Culvert (Barrel Controls 0.38 cfs @ 2.10 fps)

Pond 61P: CB 8

Hydrograph



Summary for Pond 62P: CB 66

[57] Hint: Peaked at 60.85' (Flood elevation advised)

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

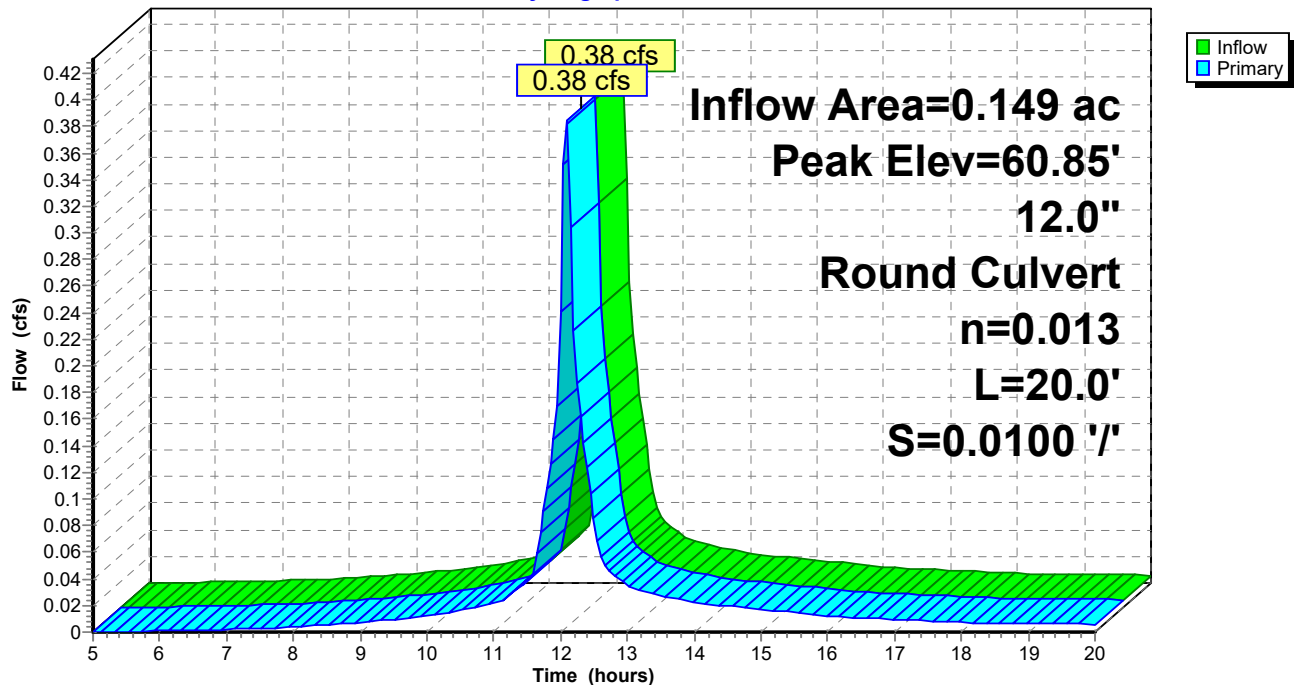
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 60.85' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	60.50'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.50' / 60.30' S= 0.0100 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.77' (Flood elevation advised)

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

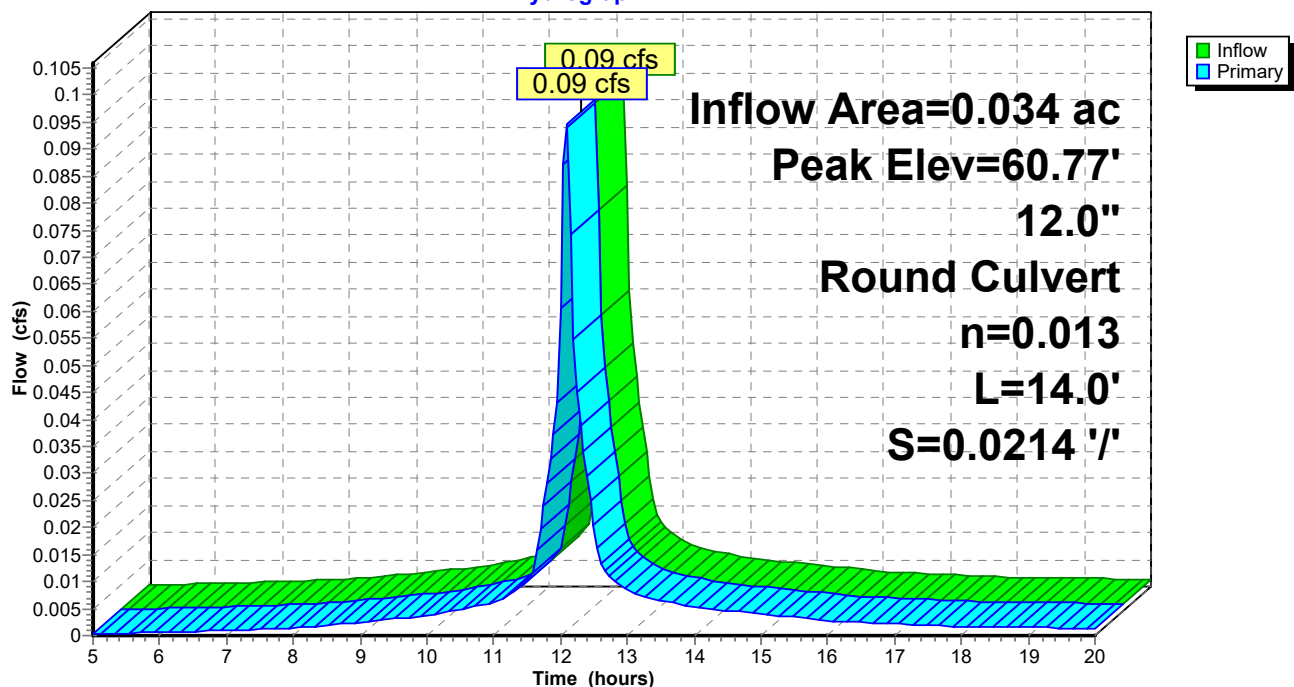
Device	Routing	Invert	Outlet Devices
#1	Primary	60.60'	12.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.60' / 60.30' S= 0.0214 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 60.88' (Flood elevation advised)
 [81] Warning: Exceeded Pond 62P by 0.03' @ 12.10 hrs
 [81] Warning: Exceeded Pond 63P by 0.11' @ 12.10 hrs
 [79] Warning: Submerged Pond 75P Primary device # 1 INLET by 0.08'

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

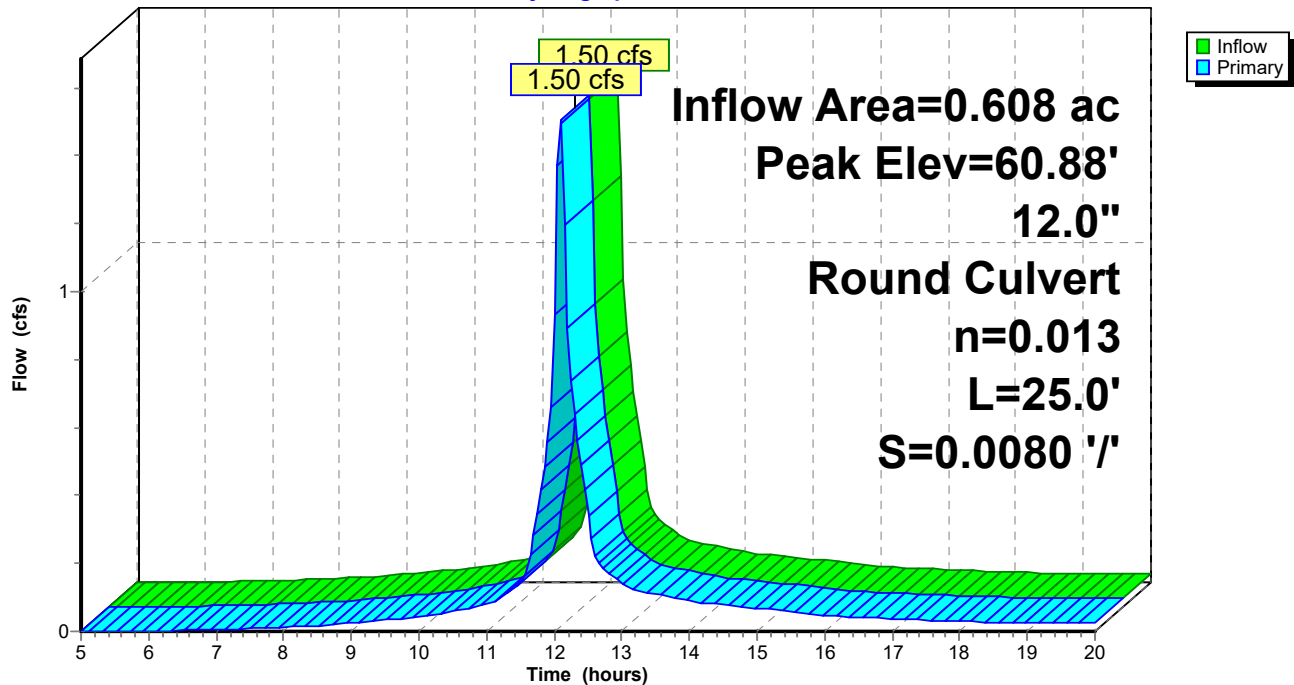
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 60.88' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	60.10'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.10' / 59.90' S= 0.0080 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.19' (Flood elevation advised)

[79] Warning: Submerged Pond 66P Primary device # 1 INLET by 0.29'

[79] Warning: Submerged Pond 67P Primary device # 1 INLET by 0.29'

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

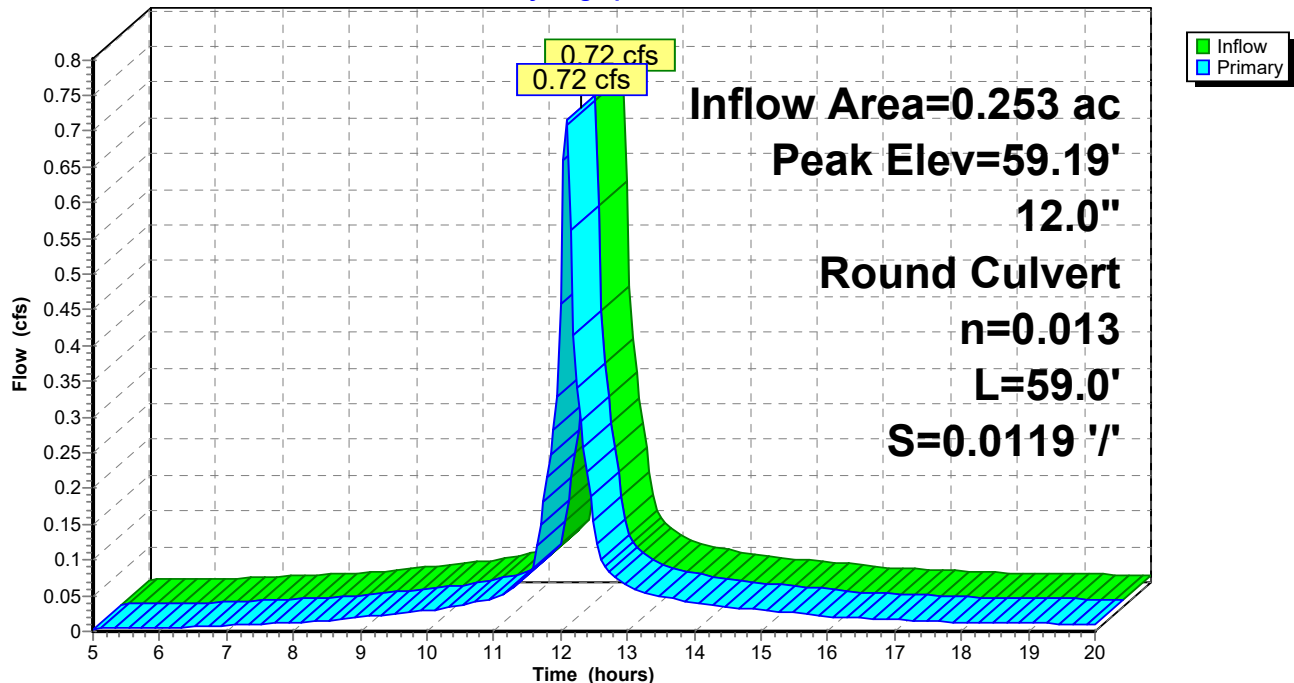
Device	Routing	Invert	Outlet Devices
#1	Primary	58.70'	12.0" Round Culvert L= 59.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.70' / 58.00' S= 0.0119 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.30' (Flood elevation advised)

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

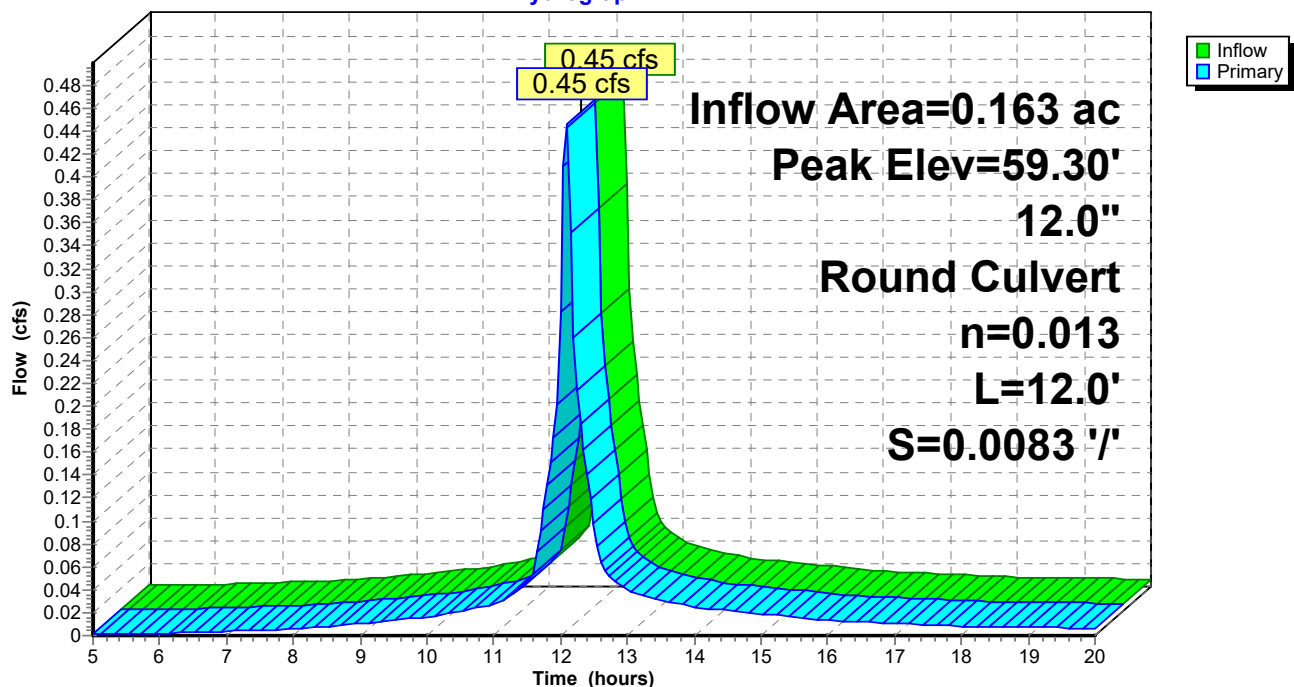
Device	Routing	Invert	Outlet Devices
#1	Primary	58.90'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.90' / 58.80' S= 0.0083 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.20' (Flood elevation advised)

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

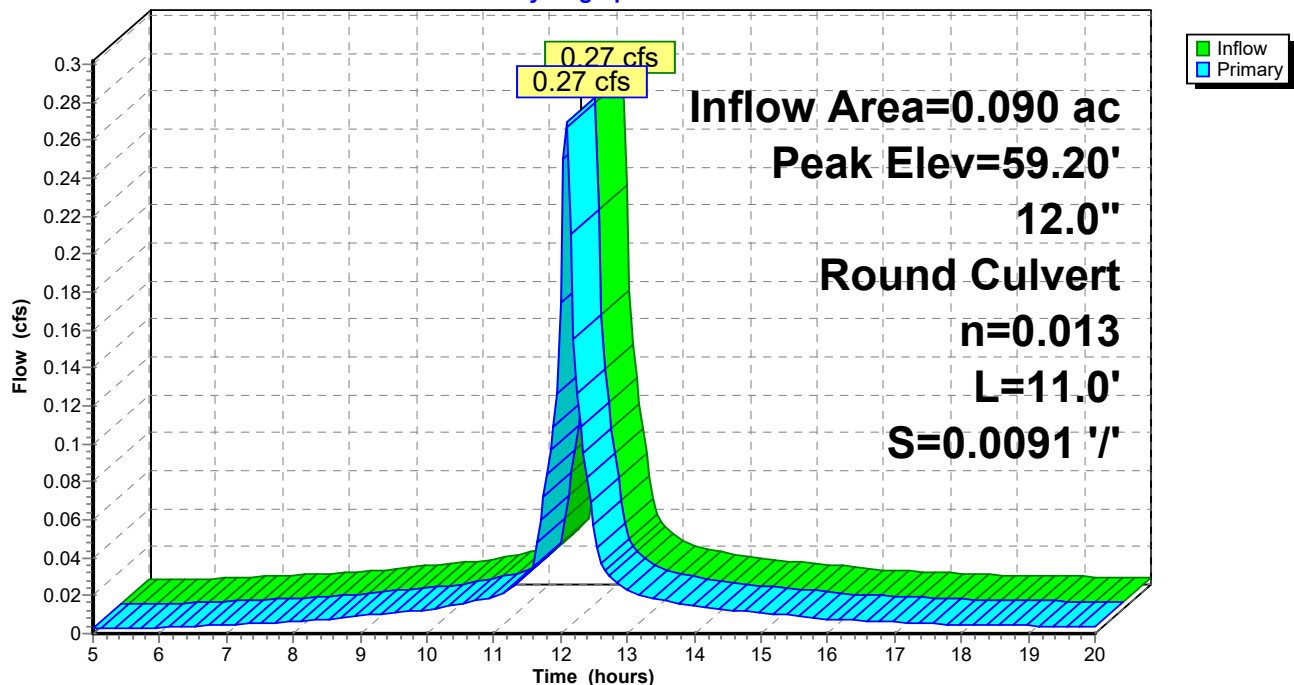
Device	Routing	Invert	Outlet Devices
#1	Primary	58.90'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.90' / 58.80' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[81] Warning: Exceeded Pond 207P by 0.77' @ 15.60 hrs

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	24.83'W x 74.40'L x 2.33'H Field A 0.099 af Overall - 0.024 af Embedded = 0.075 af x 40.0% Voids
#2A	59.80'	0.024 af	ADS_StormTech SC-310 +Cap x 70 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 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'	1.020 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 56.00'
#2	Primary	59.30'	12.0" Round Culvert L= 71.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.30' / 57.00' S= 0.0324 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	60.80'	4.0' long Sharp-Crested Vee/Trap Weir 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)

Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf

Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

10 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 72.40' Row Length +12.0" End Stone x 2 =
74.40' Base Length

7 Rows x 34.0" Wide + 6.0" Spacing x 6 + 12.0" Side Stone x 2 = 24.83' Base Width

6.0" Stone Base + 16.0" Chamber Height + 6.0" Stone Cover = 2.33' Field Height

70 Chambers x 14.7 cf = 1,031.9 cf Chamber Storage

4,311.1 cf Field - 1,031.9 cf Chambers = 3,279.1 cf Stone x 40.0% Voids = 1,311.7 cf Stone Storage

Chamber Storage + Stone Storage = 2,343.6 cf = 0.054 af

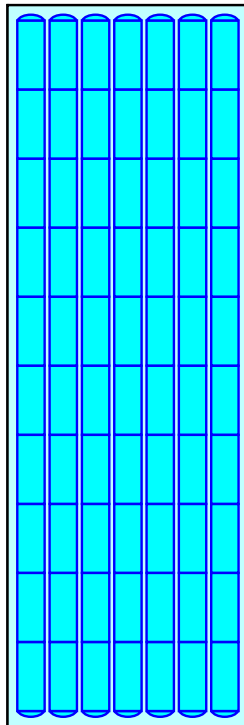
Overall Storage Efficiency = 54.4%

Overall System Size = 74.40' x 24.83' x 2.33'

70 Chambers

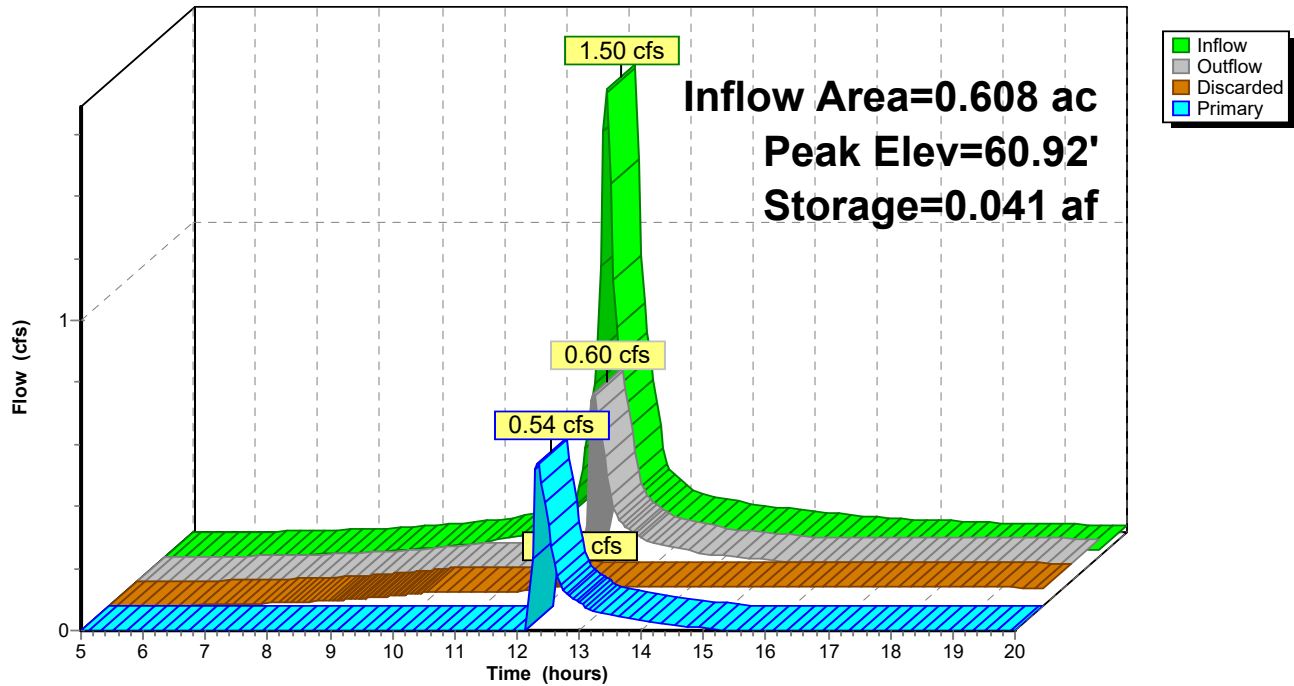
159.7 cy Field

121.4 cy Stone



Pond 68P: Sub. Inf. 5

Hydrograph



Summary for Pond 69P: CB 72

[57] Hint: Peaked at 61.95' (Flood elevation advised)

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

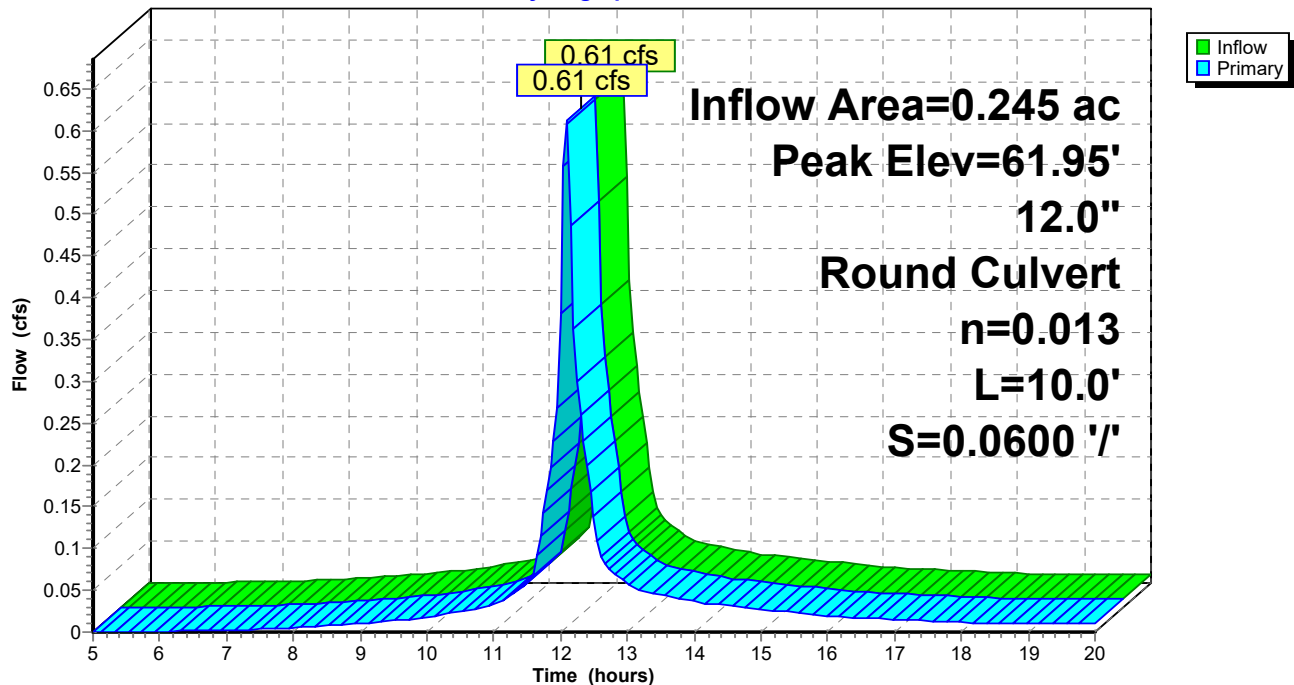
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 61.95' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.50' / 60.90' S= 0.0600 '/ Cc= 0.900 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

[57] Hint: Peaked at 61.85' (Flood elevation advised)

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

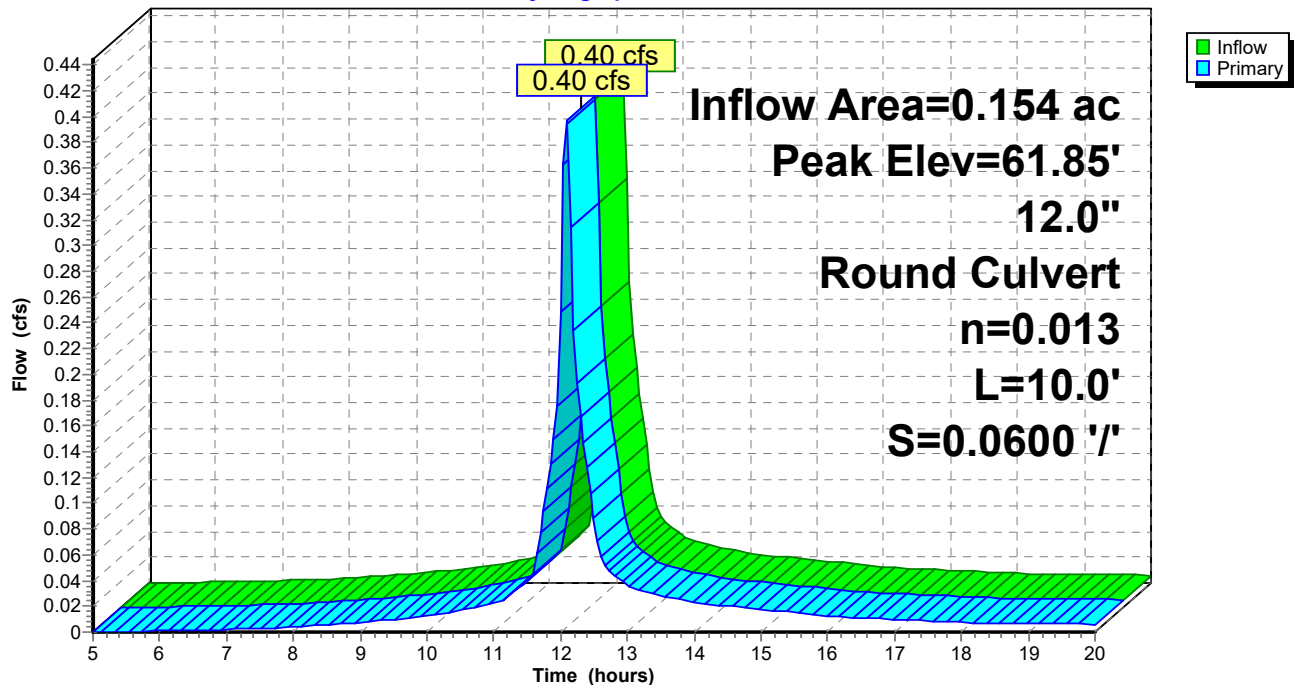
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 61.85' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.50' / 60.90' S= 0.0600 '/ Cc= 0.900 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

[57] Hint: Peaked at 61.42' (Flood elevation advised)

[79] Warning: Submerged Pond 69P Primary device # 1 OUTLET by 0.52'

[79] Warning: Submerged Pond 70P Primary device # 1 OUTLET by 0.52'

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

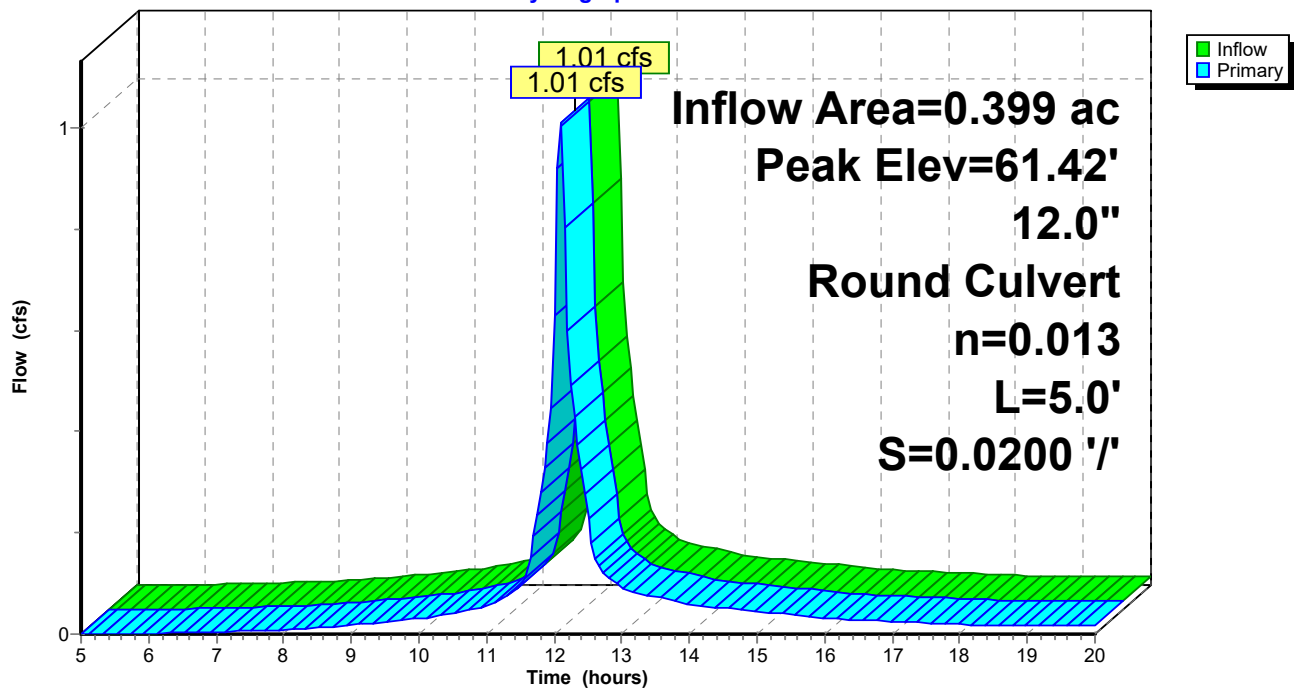
Device	Routing	Invert	Outlet Devices
#1	Primary	60.80'	12.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.80' / 60.70' S= 0.0200 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[81] Warning: Exceeded Pond 71P by 0.65' @ 12.60 hrs

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	38.17'W x 38.80'L x 2.33'H Field A 0.079 af Overall - 0.019 af Embedded = 0.061 af x 40.0% Voids
#2A	60.70'	0.019 af	ADS_StormTech SC-310 +Cap x 55 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 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'	1.020 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 58.10'
#2	Primary	60.20'	12.0" Round Culvert L= 32.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.20' / 57.00' S= 0.1000 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	61.50'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 2	62.20'	4.0' long Sharp-Crested Vee/Trap Weir 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)

Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf

Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

5 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 36.80' Row Length +12.0" End Stone x 2 = 38.80' Base Length

11 Rows x 34.0" Wide + 6.0" Spacing x 10 + 12.0" Side Stone x 2 = 38.17' Base Width

6.0" Stone Base + 16.0" Chamber Height + 6.0" Stone Cover = 2.33' Field Height

55 Chambers x 14.7 cf = 810.8 cf Chamber Storage

3,455.4 cf Field - 810.8 cf Chambers = 2,644.5 cf Stone x 40.0% Voids = 1,057.8 cf Stone Storage

Chamber Storage + Stone Storage = 1,868.6 cf = 0.043 af

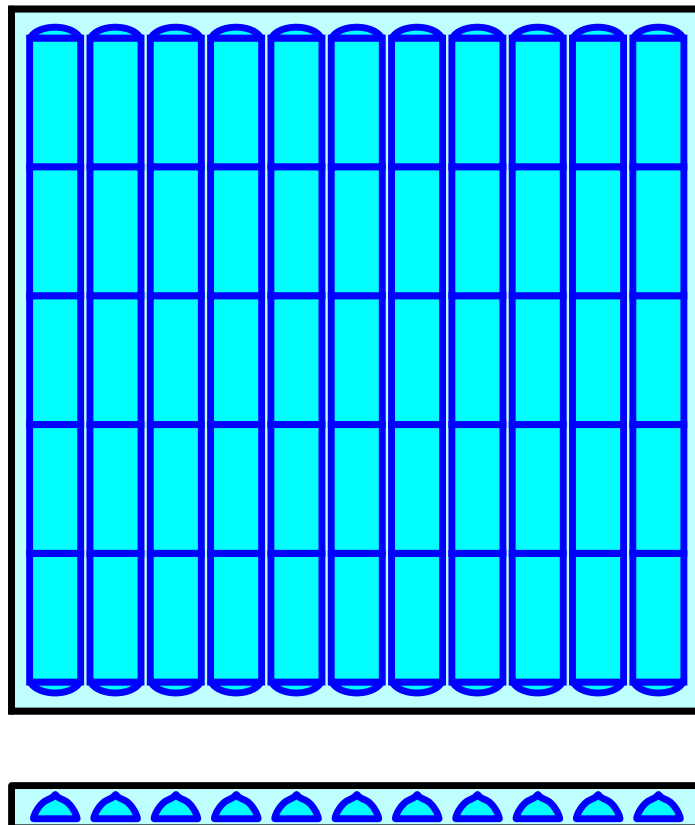
Overall Storage Efficiency = 54.1%

Overall System Size = 38.80' x 38.17' x 2.33'

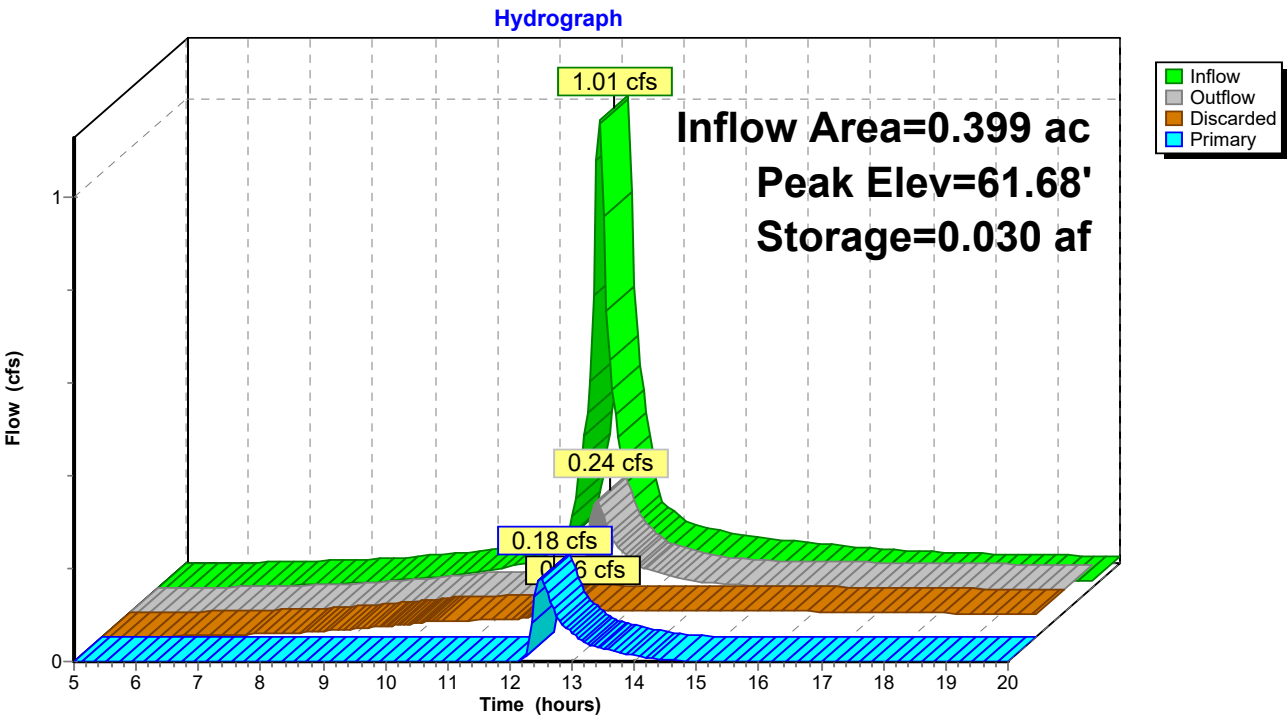
55 Chambers

128.0 cy Field

97.9 cy Stone



Pond 72P: Sub. Inf. 7



Summary for Pond 73P: CB 64

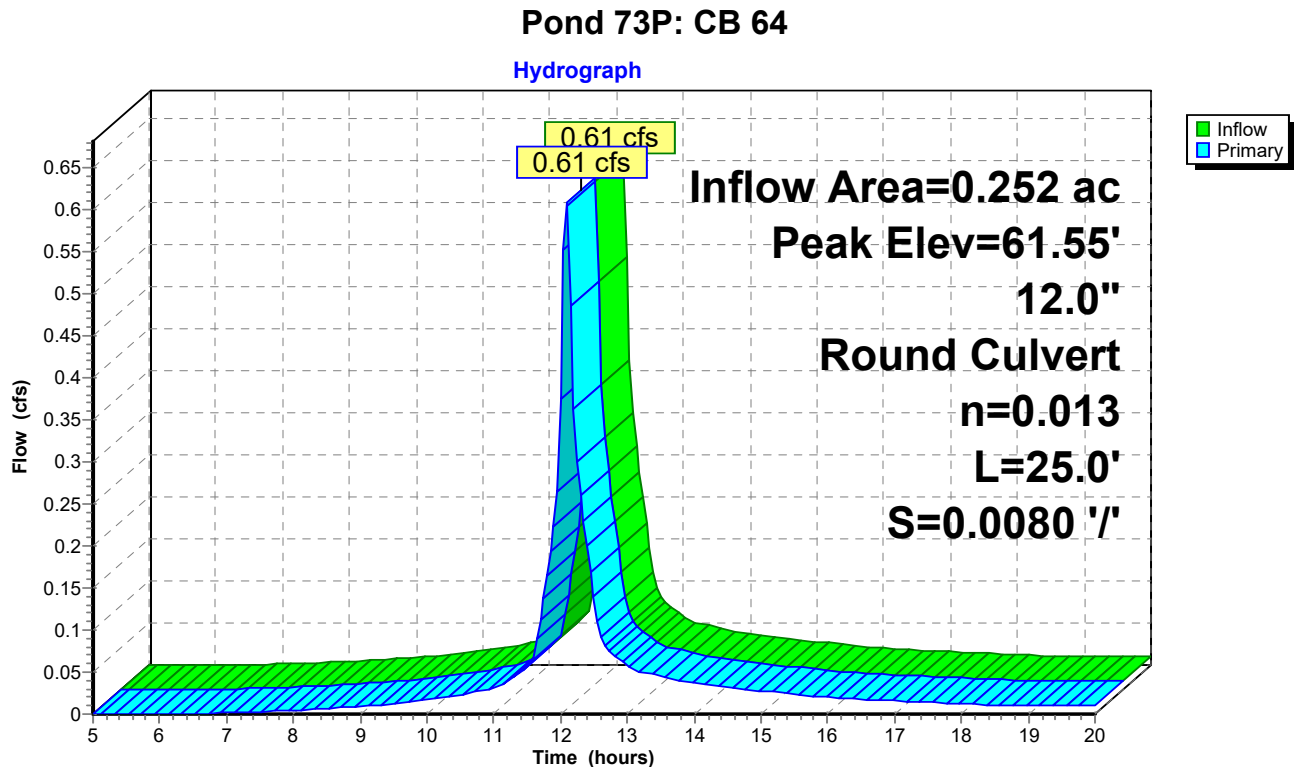
[57] Hint: Peaked at 61.55' (Flood elevation advised)

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'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.10' / 60.90' S= 0.0080 '/ Cc= 0.900 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)



Summary for Pond 74P: CB 65

[57] Hint: Peaked at 61.46' (Flood elevation advised)

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

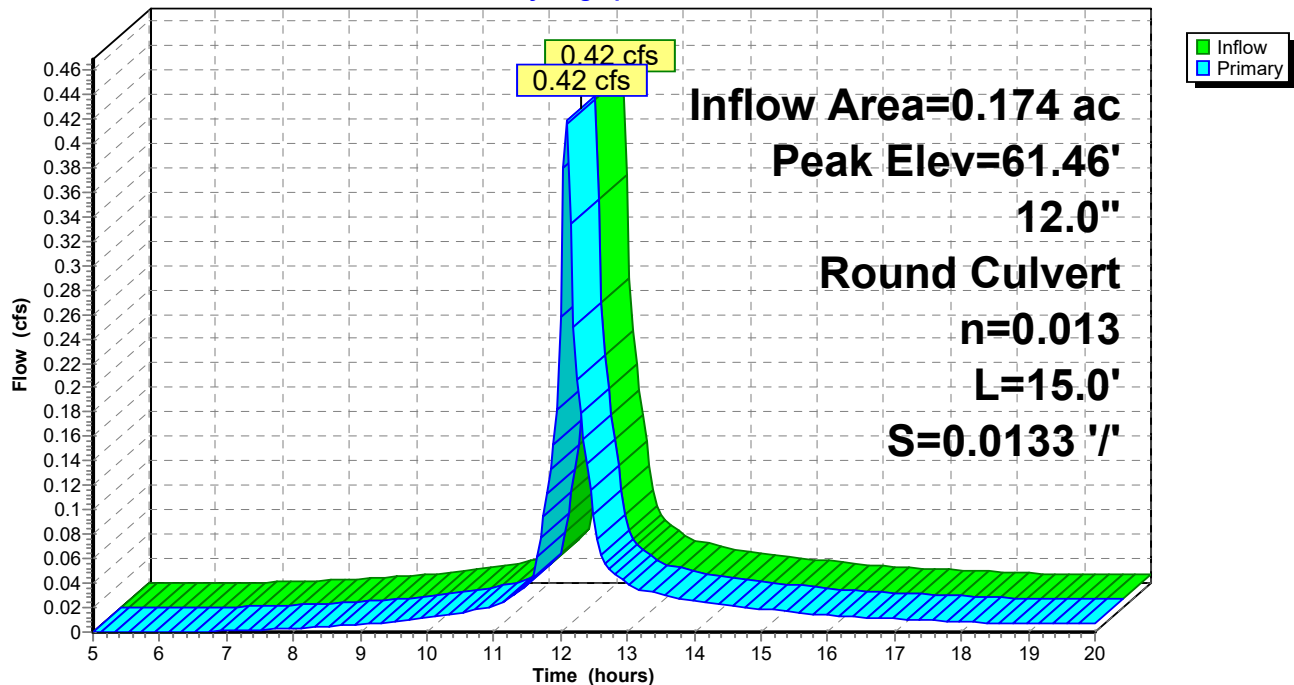
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 61.46' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.10'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.10' / 60.90' S= 0.0133 '/ Cc= 0.900 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)
 ↑=Culvert (Inlet Controls 0.41 cfs @ 1.61 fps)

Pond 74P: CB 65

Hydrograph



Summary for Pond 75P: DMH 46

[57] Hint: Peaked at 61.42' (Flood elevation advised)

[79] Warning: Submerged Pond 73P Primary device # 1 INLET by 0.32'

[79] Warning: Submerged Pond 74P Primary device # 1 INLET by 0.32'

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

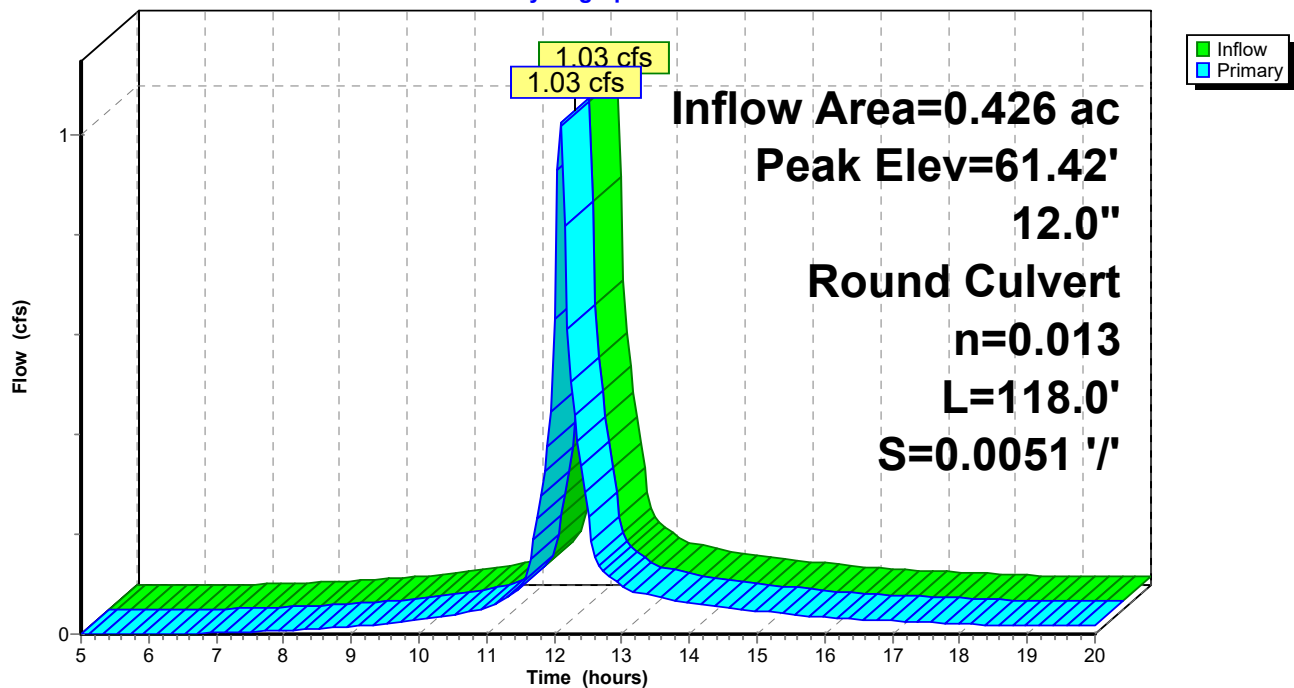
Device	Routing	Invert	Outlet Devices
#1	Primary	60.80'	12.0" Round Culvert L= 118.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.80' / 60.20' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 58.59' (Flood elevation advised)

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

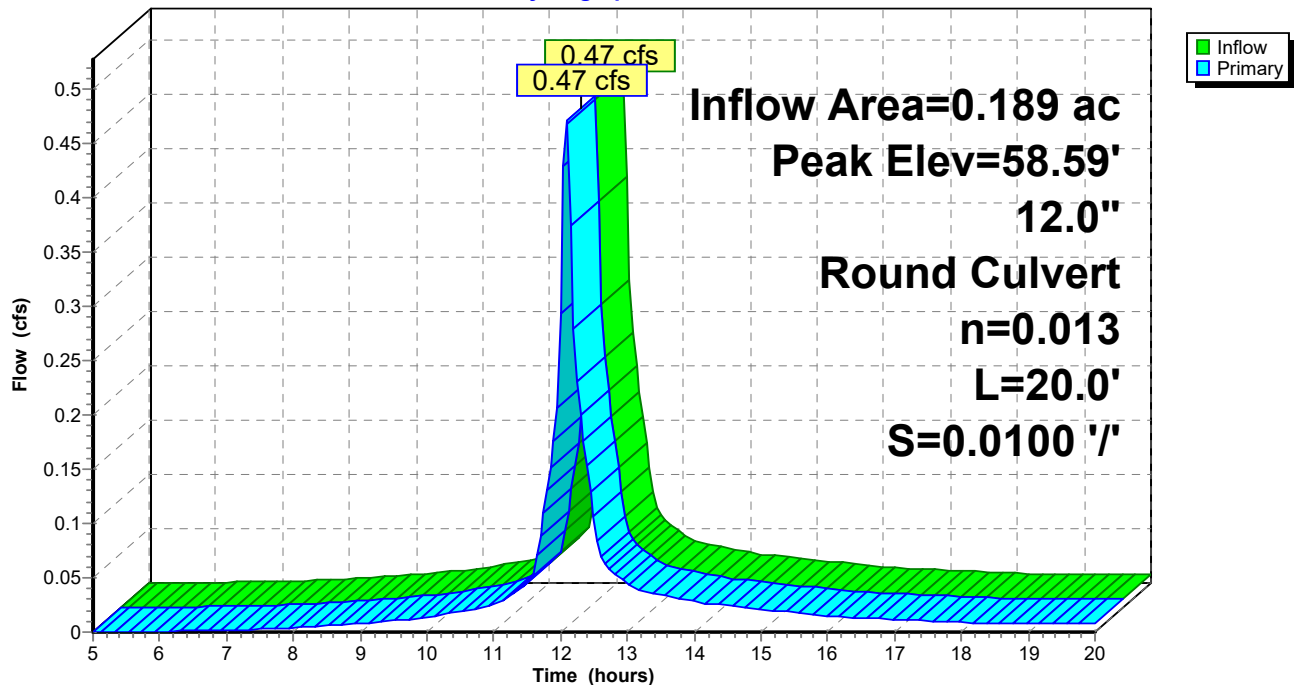
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 58.59' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	58.20'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.20' / 58.00' S= 0.0100 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.49' (Flood elevation advised)

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

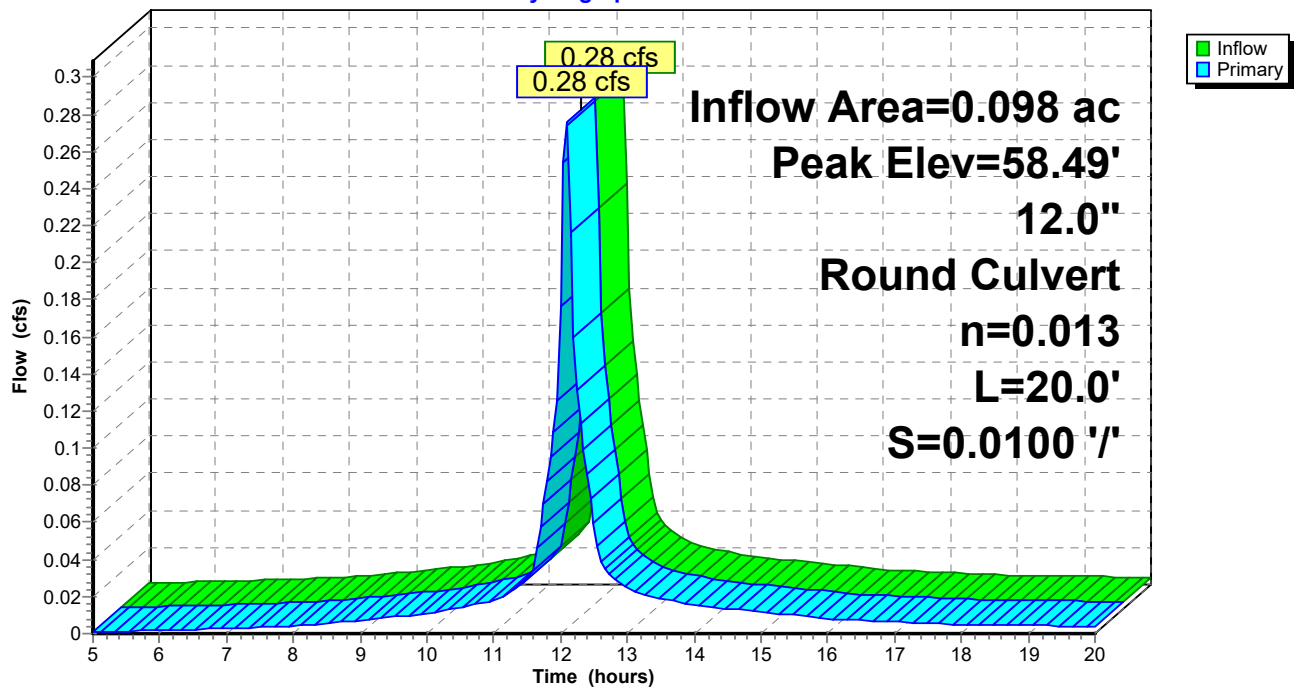
Device	Routing	Invert	Outlet Devices
#1	Primary	58.20'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.20' / 58.00' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.54' (Flood elevation advised)

[79] Warning: Submerged Pond 65P Primary device # 1 OUTLET by 0.54'

[79] Warning: Submerged Pond 76P Primary device # 1 INLET by 0.34'

[81] Warning: Exceeded Pond 77P by 0.05' @ 12.10 hrs

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

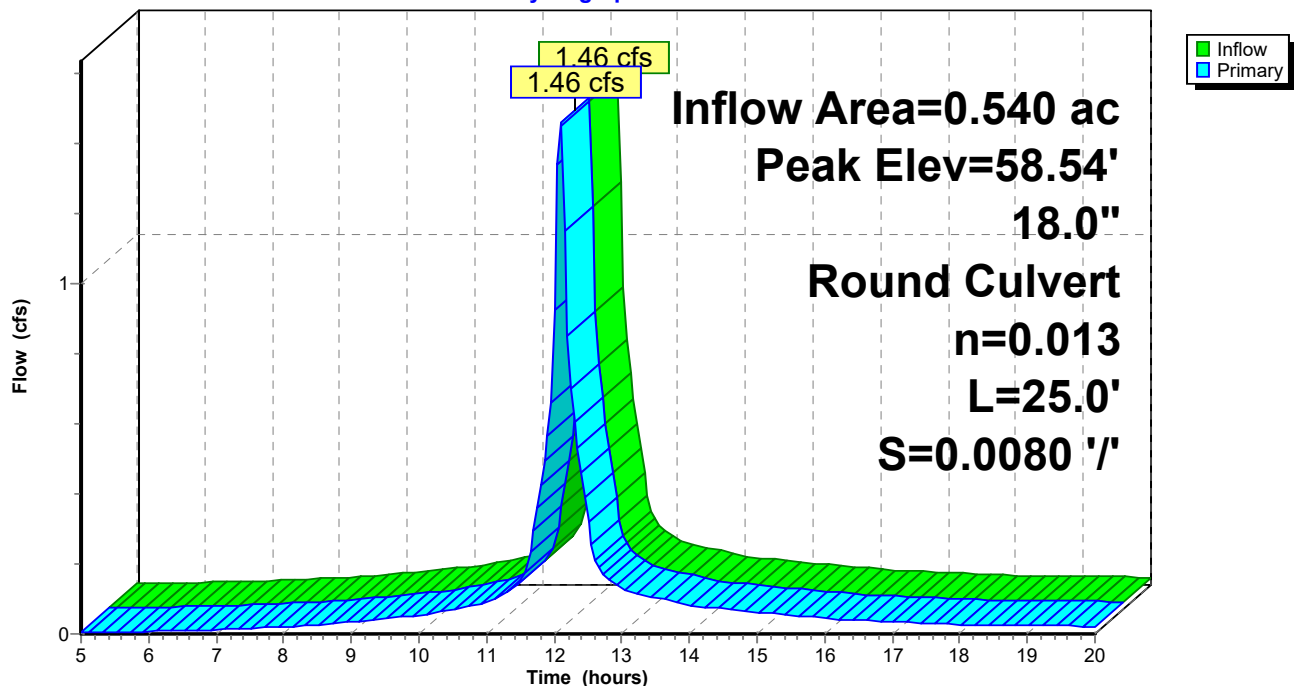
Device	Routing	Invert	Outlet Devices
#1	Primary	57.90'	18.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.90' / 57.70' S= 0.0080 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.34' (Flood elevation advised)

[79] Warning: Submerged Pond 78P Primary device # 1 INLET by 0.44'

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

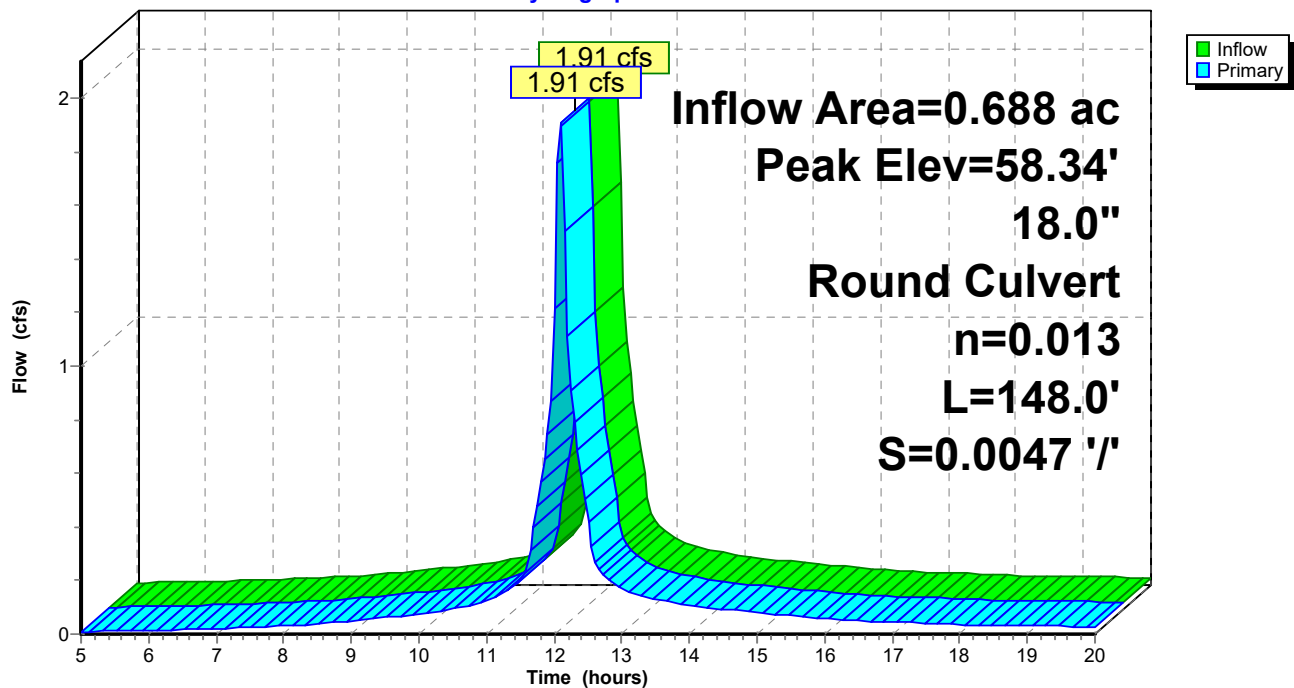
Device	Routing	Invert	Outlet Devices
#1	Primary	57.60'	18.0" Round Culvert L= 148.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.60' / 56.91' S= 0.0047 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 57.54' (Flood elevation advised)

[79] Warning: Submerged Pond 79P Primary device # 1 OUTLET by 0.63'

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

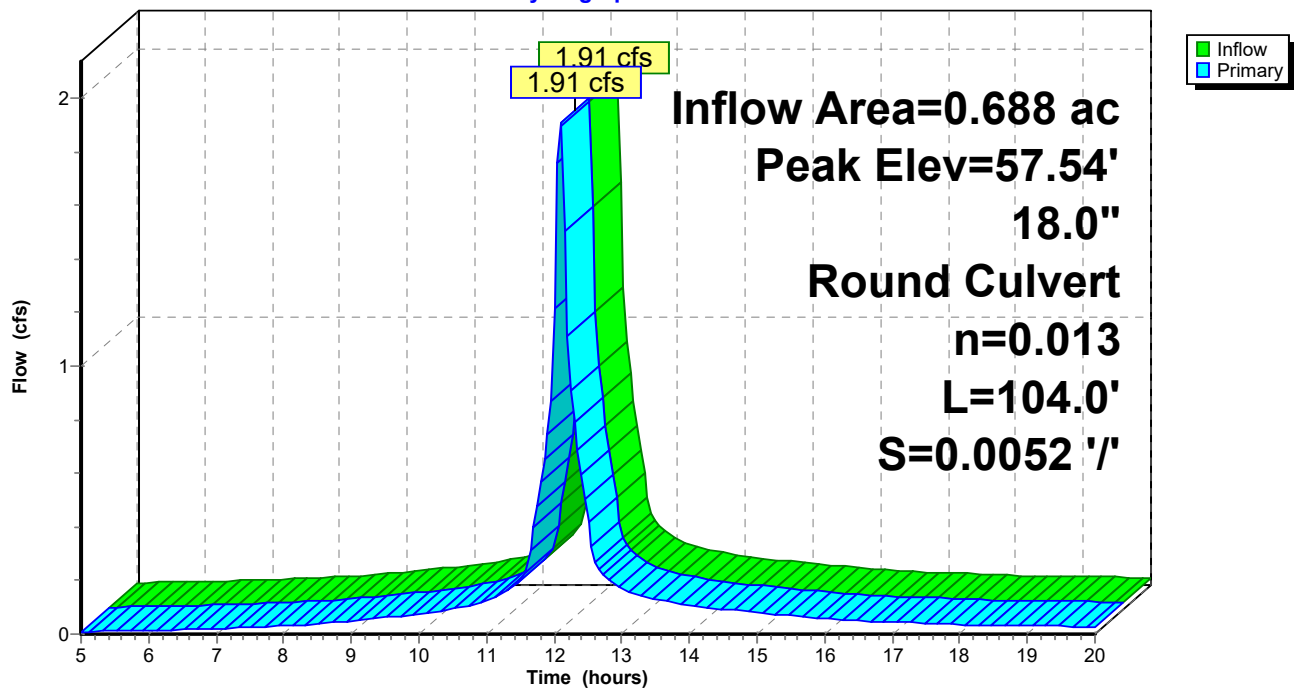
Device	Routing	Invert	Outlet Devices
#1	Primary	56.81'	18.0" Round Culvert L= 104.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 56.81' / 56.27' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 56.89' (Flood elevation advised)

[79] Warning: Submerged Pond 80P Primary device # 1 INLET by 0.08'

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

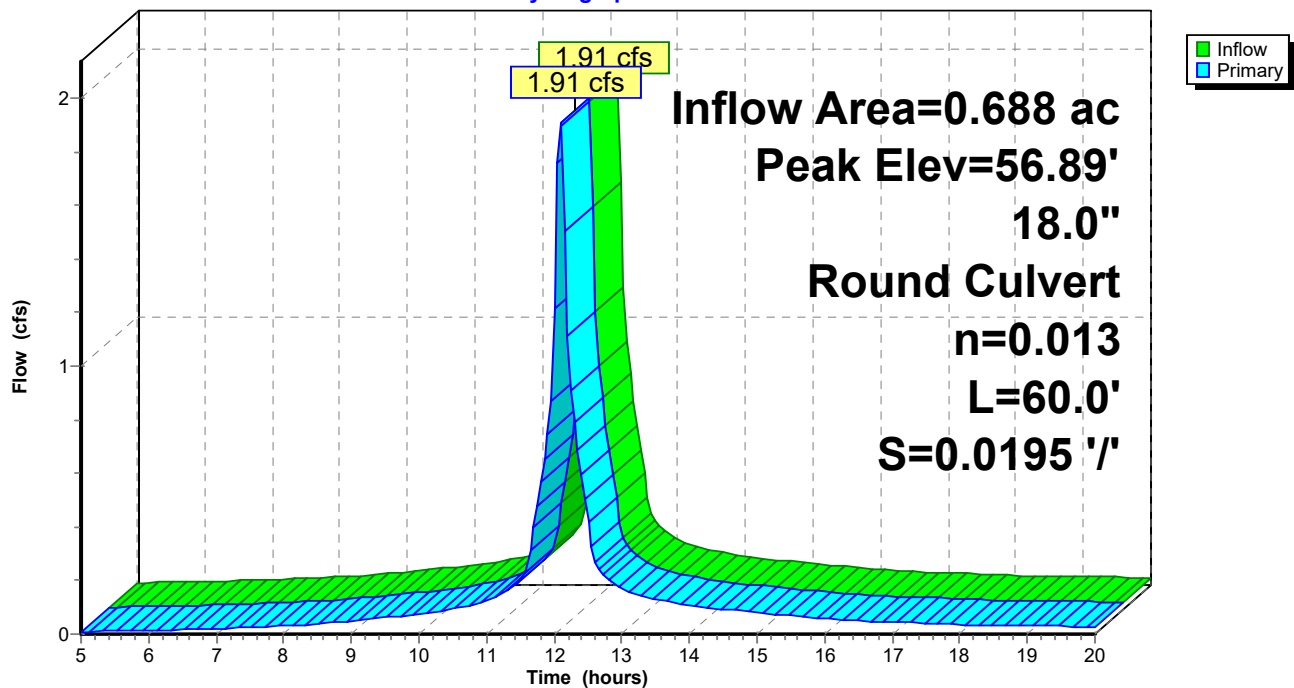
Device	Routing	Invert	Outlet Devices
#1	Primary	56.17'	18.0" Round Culvert L= 60.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 56.17' / 55.00' S= 0.0195 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 81P by 0.06' @ 12.60 hrs

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	Custom Stage Data (Prismatic) Listed below (Recalc)

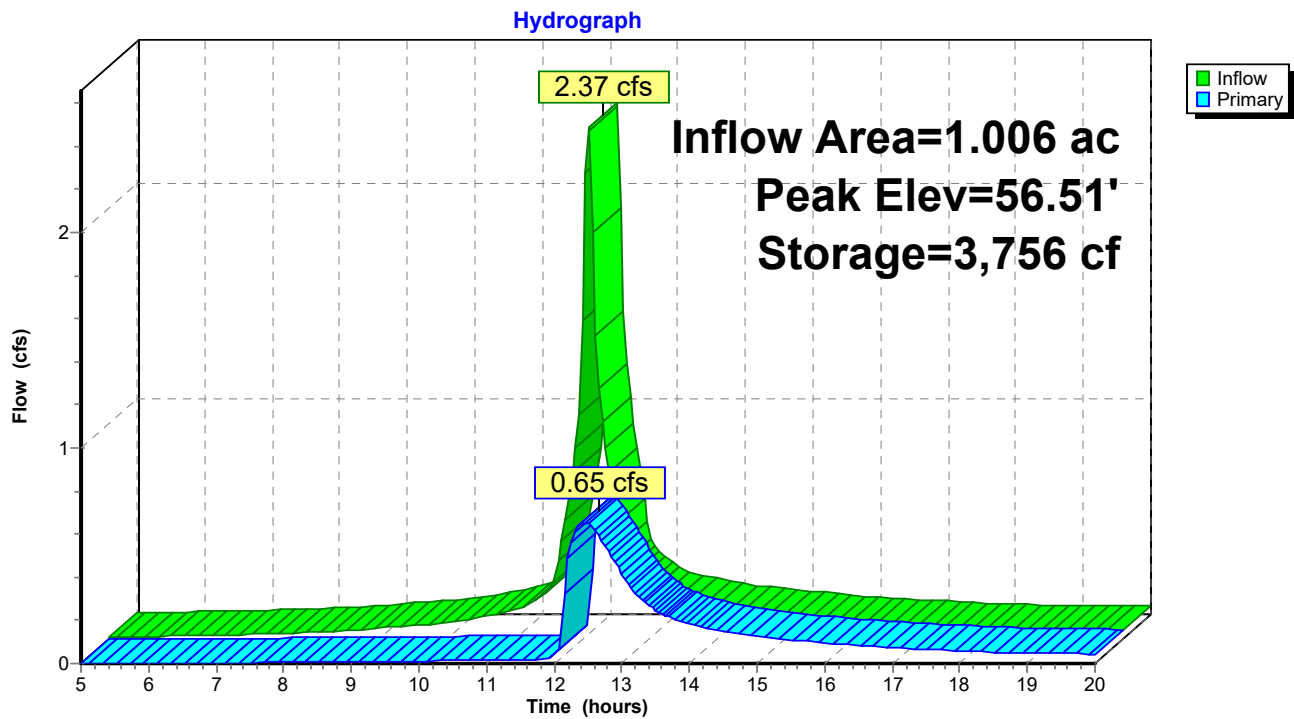
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
55.00	1,981	0	0
56.00	2,646	2,314	2,314
57.00	3,368	3,007	5,321
58.00	4,146	3,757	9,078
59.00	4,980	4,563	13,641

Device	Routing	Invert	Outlet Devices
#1	Primary	55.00'	12.0" Round Culvert L= 52.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 55.00' / 54.00' S= 0.0192 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	55.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	56.10'	4.0" Vert. Orifice/Grate X 3.00 C= 0.600 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

[57] Hint: Peaked at 58.38' (Flood elevation advised)

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

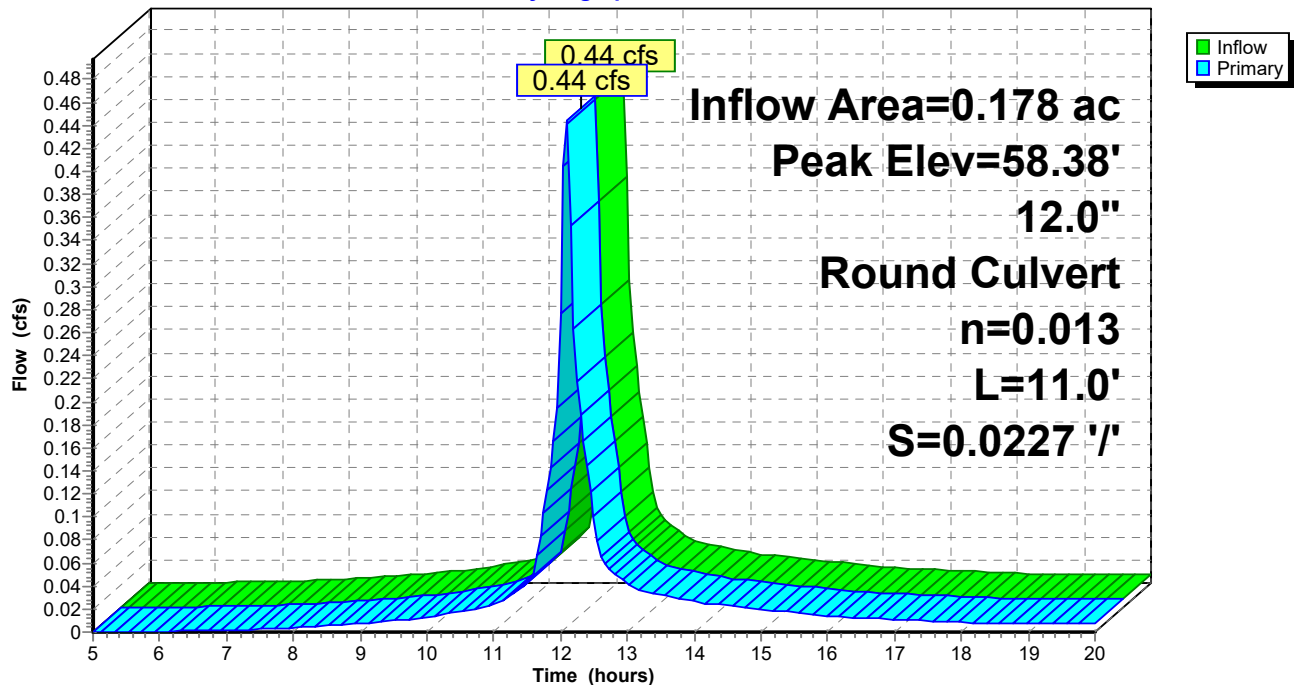
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 58.38' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	58.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.00' / 57.75' S= 0.0227 ' / ' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.40' (Flood elevation advised)

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

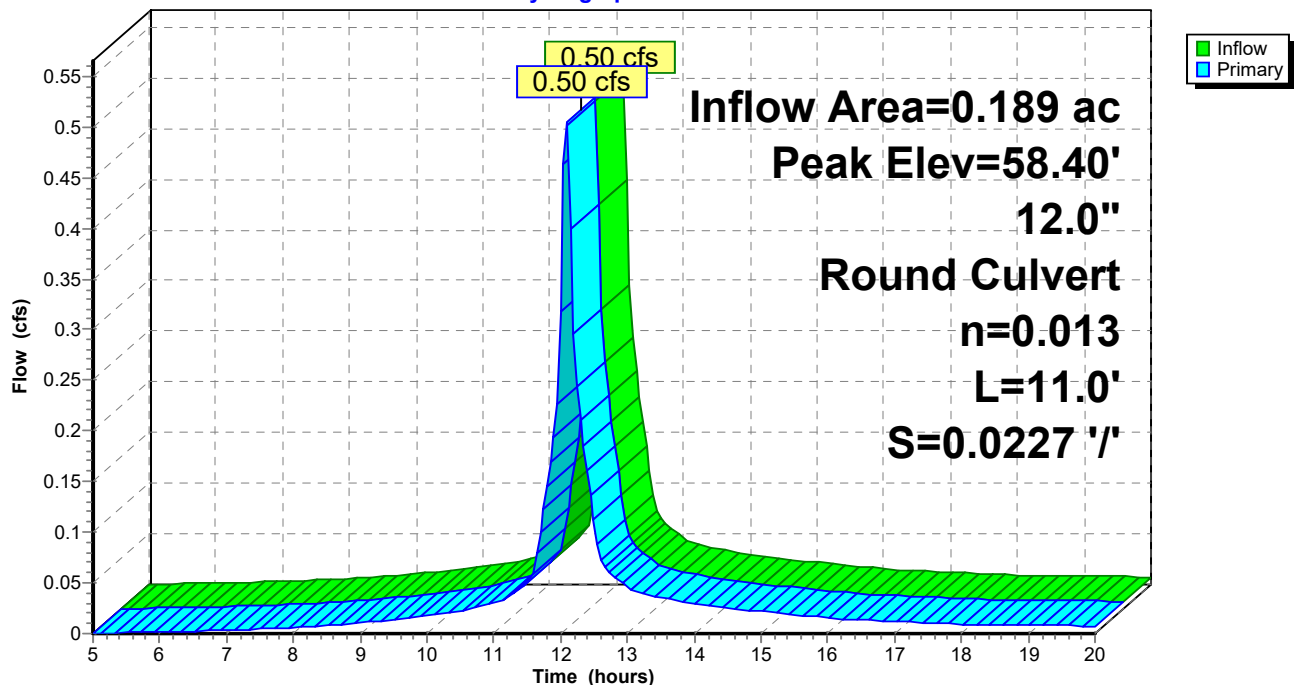
Device	Routing	Invert	Outlet Devices
#1	Primary	58.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.00' / 57.75' S= 0.0227 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 58.26' (Flood elevation advised)

[79] Warning: Submerged Pond 83P Primary device # 1 INLET by 0.26'

[79] Warning: Submerged Pond 84P Primary device # 1 INLET by 0.26'

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

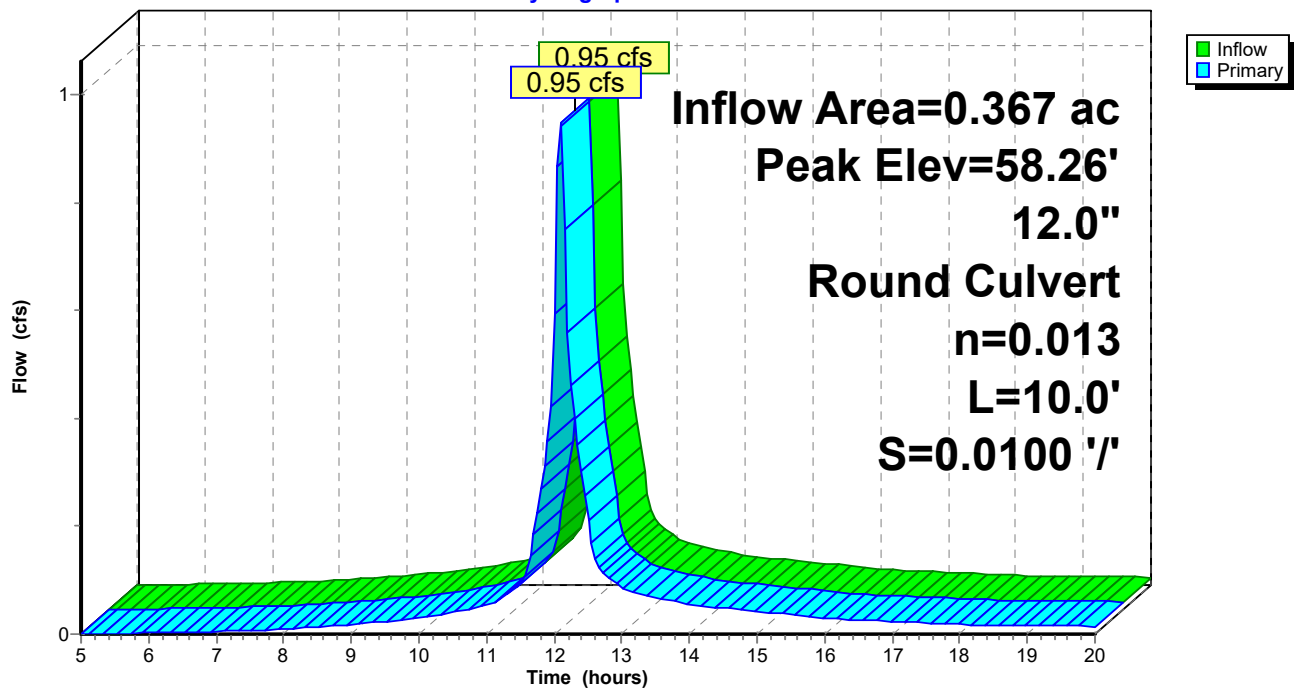
Device	Routing	Invert	Outlet Devices
#1	Primary	57.65'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.65' / 57.55' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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



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	30.00'W x 53.46'L x 3.50'H Field A 0.129 af Overall - 0.045 af Embedded = 0.084 af x 40.0% Voids
#2A	61.50'	0.045 af	ADS_StormTech SC-740 b +Cap x 42 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 42 Chambers in 6 Rows 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'	1.020 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 59.00'
#2	Primary	61.00'	12.0" Round Culvert L= 105.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.00' / 57.00' S= 0.0381 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	62.50'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 2	63.50'	4.0' long Sharp-Crested Vee/Trap Weir 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 6 rows = 31.9 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

7 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 51.46' Row Length +12.0" End Stone x 2 = 53.46' Base Length

6 Rows x 51.0" Wide + 6.0" Spacing x 5 + 12.0" Side Stone x 2 = 30.00' Base Width

6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

42 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 6 Rows = 1,961.3 cf Chamber Storage

5,613.0 cf Field - 1,961.3 cf Chambers = 3,651.6 cf Stone x 40.0% Voids = 1,460.6 cf Stone Storage

Chamber Storage + Stone Storage = 3,422.0 cf = 0.079 af

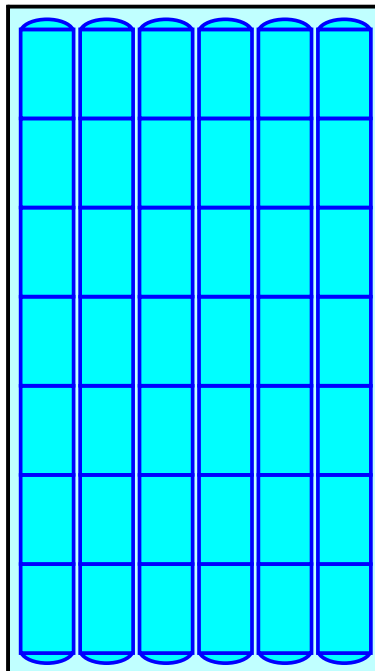
Overall Storage Efficiency = 61.0%

Overall System Size = 53.46' x 30.00' x 3.50'

42 Chambers

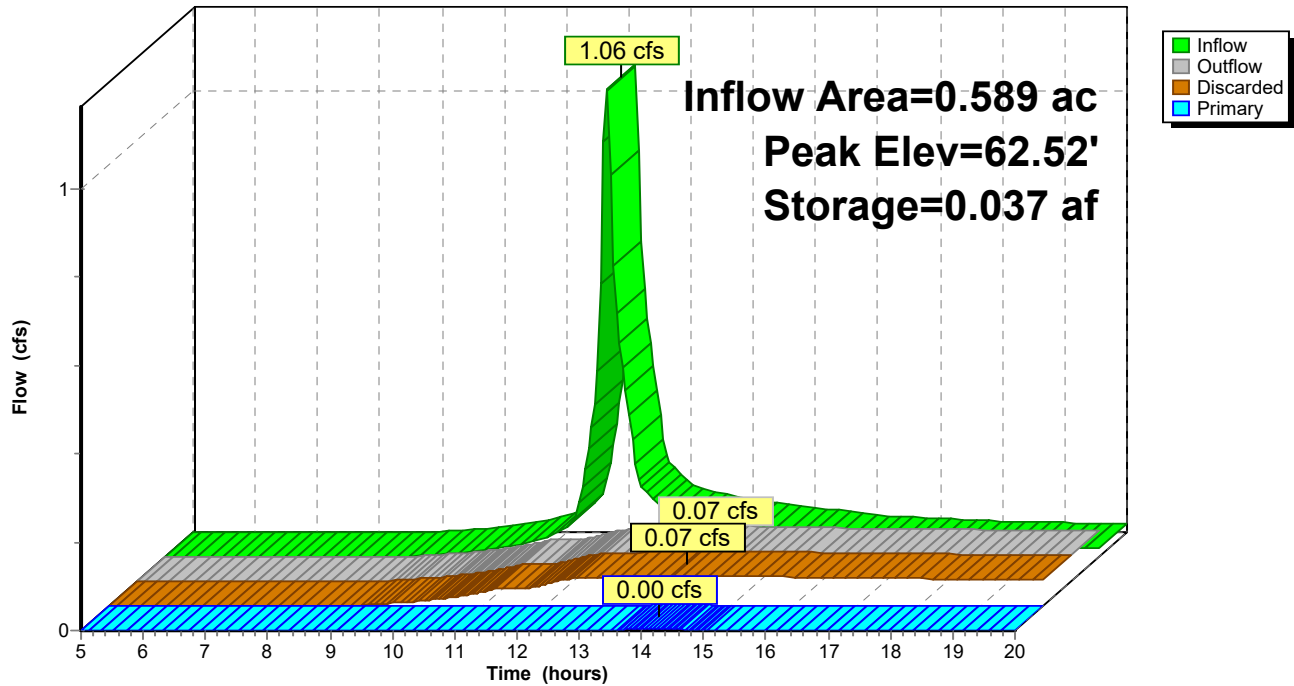
207.9 cy Field

135.2 cy Stone



Pond 86P: Sub. Inf. 6

Hydrograph



Summary for Pond 87P: CB 85

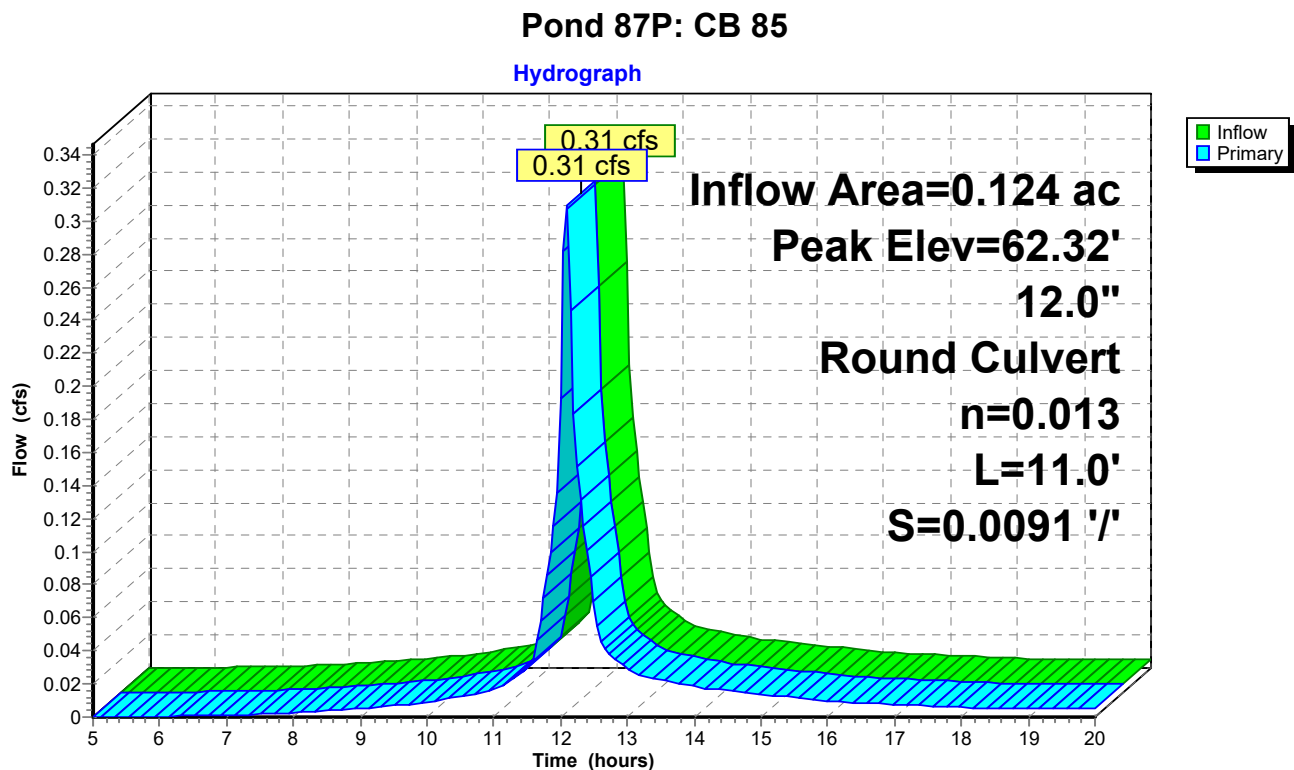
[57] Hint: Peaked at 62.32' (Flood elevation advised)

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'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.00' / 61.90' S= 0.0091 '/' Cc= 0.900 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)



Summary for Pond 88P: CB 84

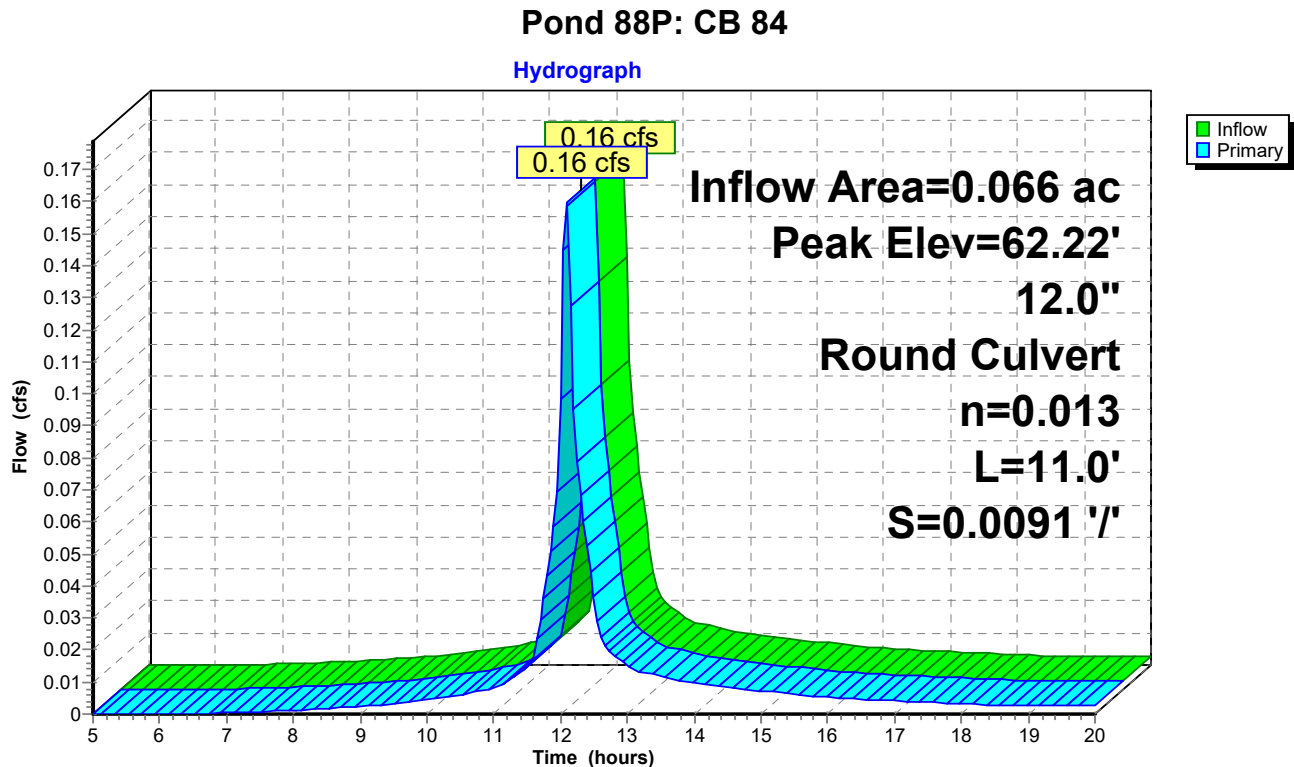
[57] Hint: Peaked at 62.22' (Flood elevation advised)

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'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.00' / 61.90' S= 0.0091 ' / ' Cc= 0.900 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)



Summary for Pond 89P: CB 74

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.71' (Flood elevation advised)

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

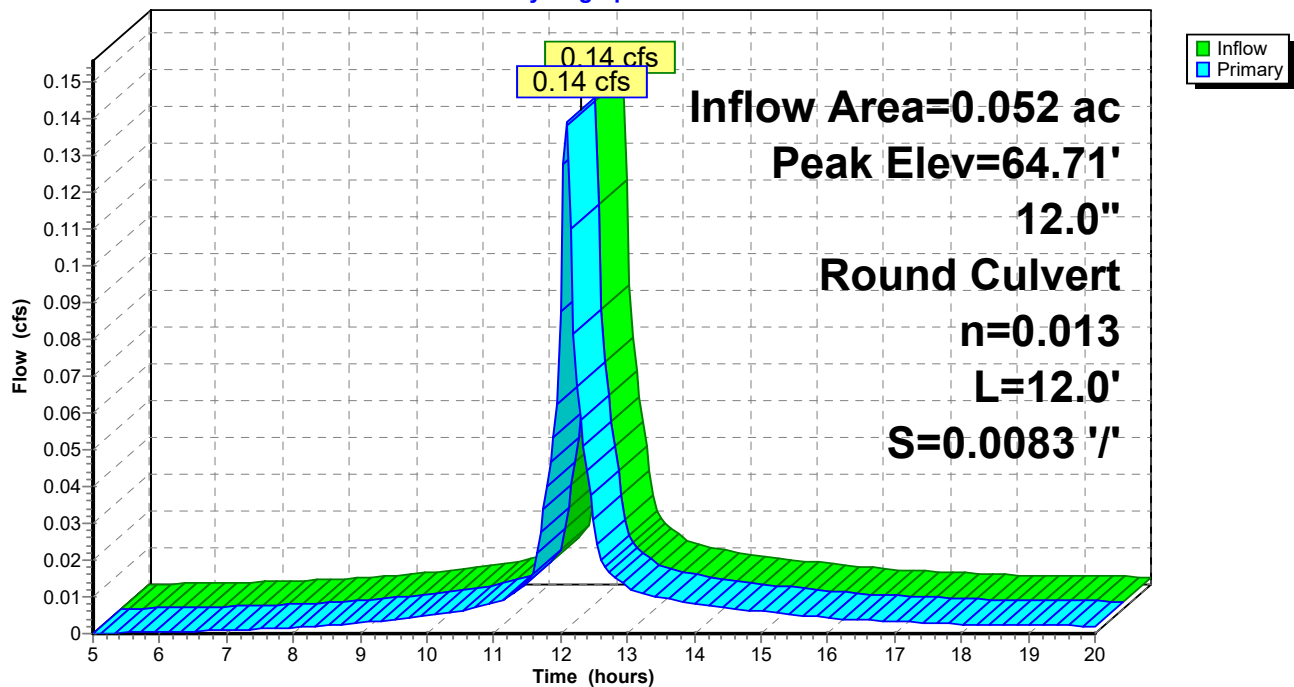
Device	Routing	Invert	Outlet Devices
#1	Primary	64.50'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 64.50' / 64.40' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 64.80' (Flood elevation advised)

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

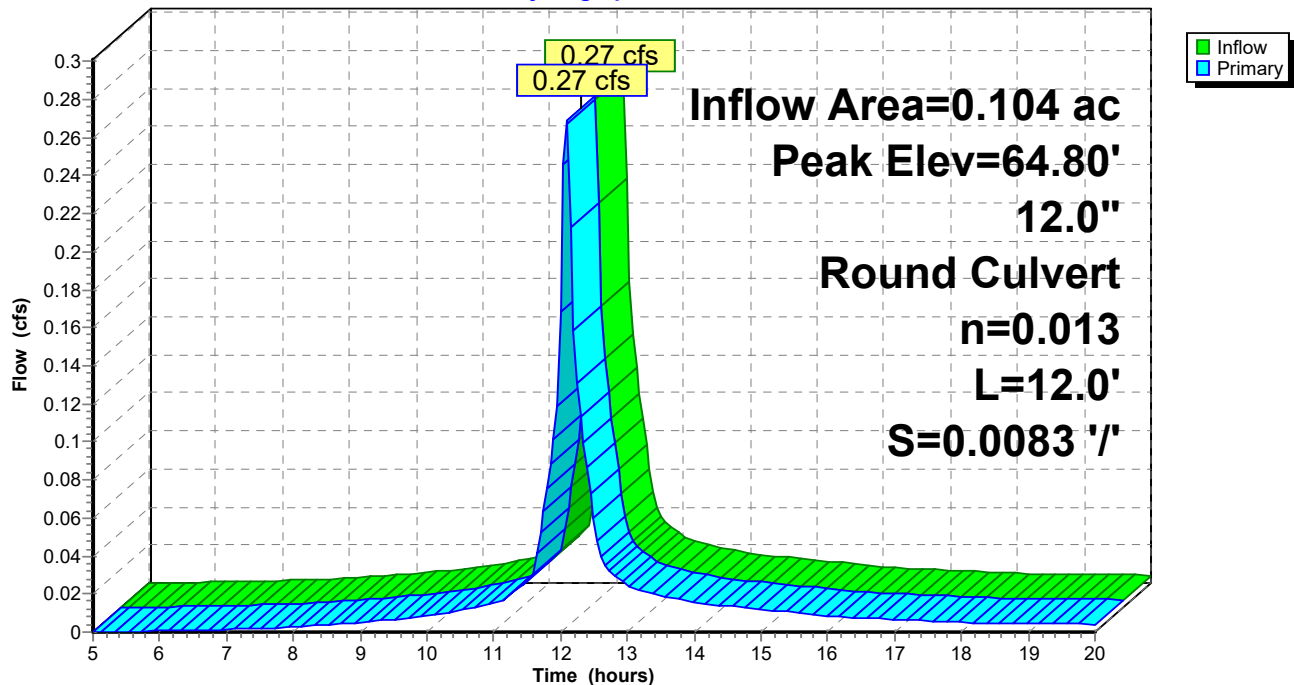
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 64.80' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	64.50'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 64.50' / 64.40' S= 0.0083 '/ Cc= 0.900 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

[57] Hint: Peaked at 64.66' (Flood elevation advised)

[79] Warning: Submerged Pond 89P Primary device # 1 INLET by 0.16'

[79] Warning: Submerged Pond 90P Primary device # 1 INLET by 0.16'

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

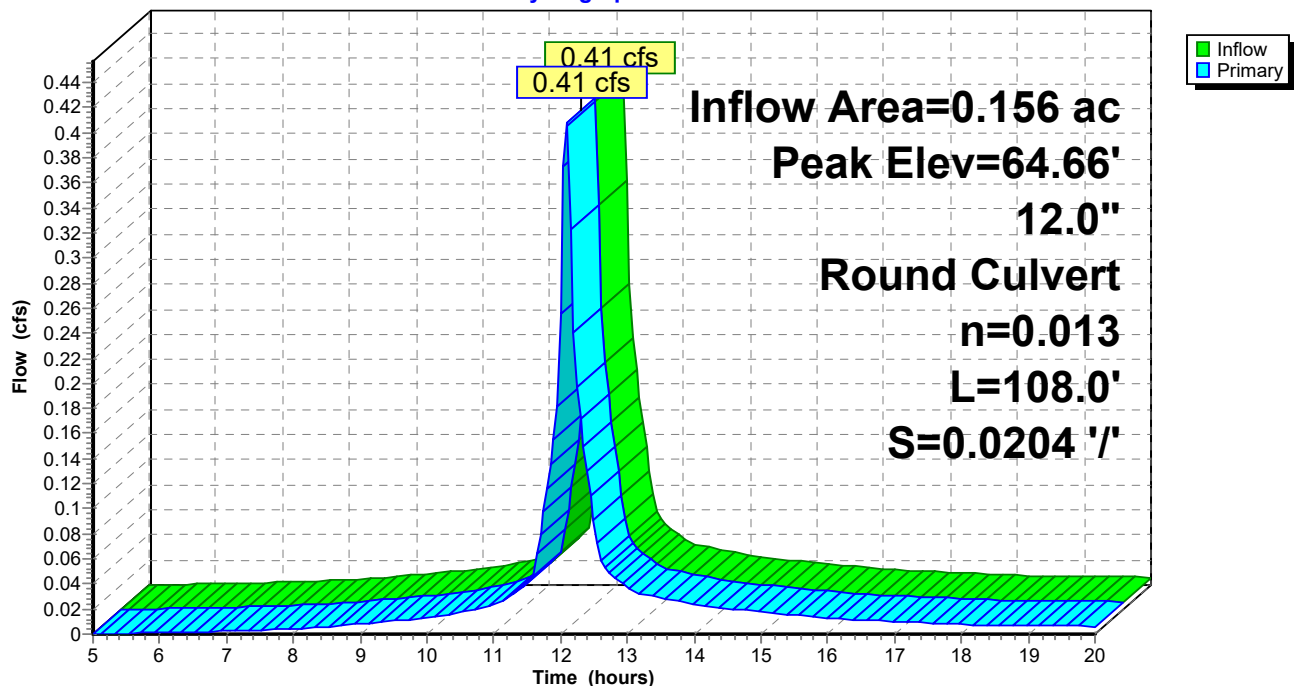
Device	Routing	Invert	Outlet Devices
#1	Primary	64.30'	12.0" Round Culvert L= 108.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 64.30' / 62.10' S= 0.0204 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 62.19' (Flood elevation advised)

[79] Warning: Submerged Pond 87P Primary device # 1 INLET by 0.19'

[79] Warning: Submerged Pond 88P Primary device # 1 INLET by 0.19'

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

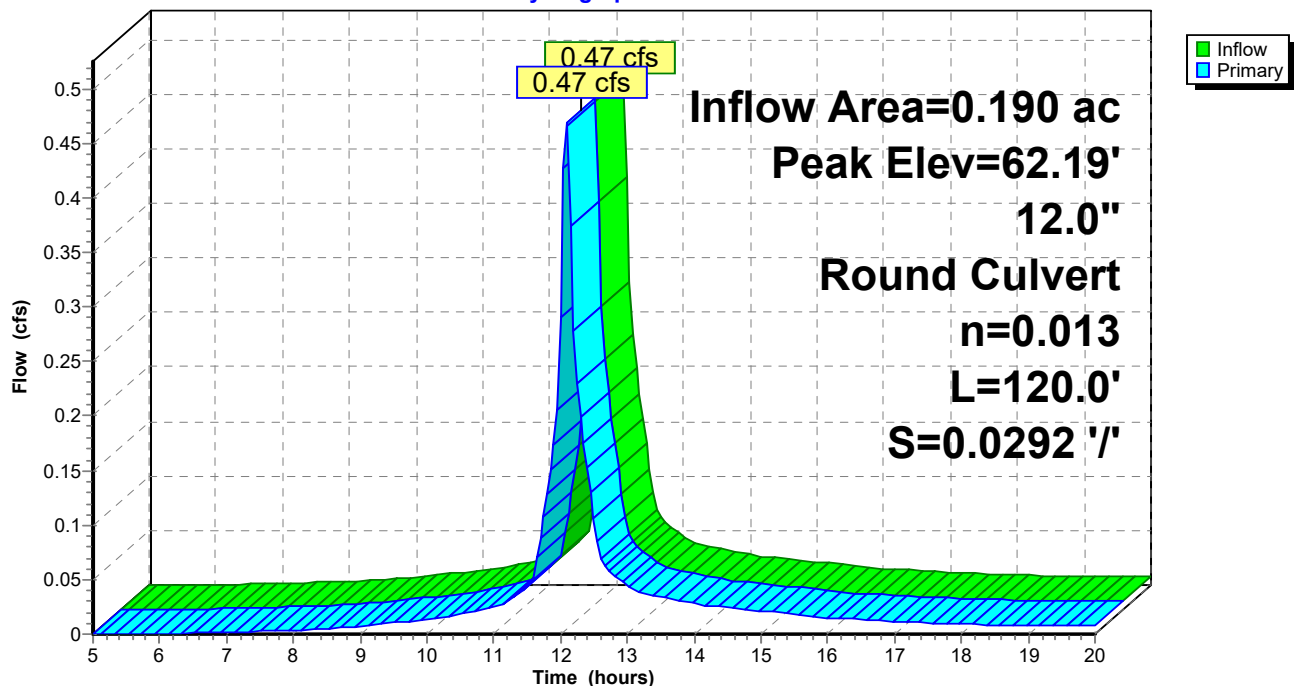
Device	Routing	Invert	Outlet Devices
#1	Primary	61.80'	12.0" Round Culvert L= 120.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.80' / 58.30' S= 0.0292 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 59.05' (Flood elevation advised)

[79] Warning: Submerged Pond 92P Primary device # 1 OUTLET by 0.75'

[79] Warning: Submerged Pond 98P Primary device # 1 OUTLET by 0.75'

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

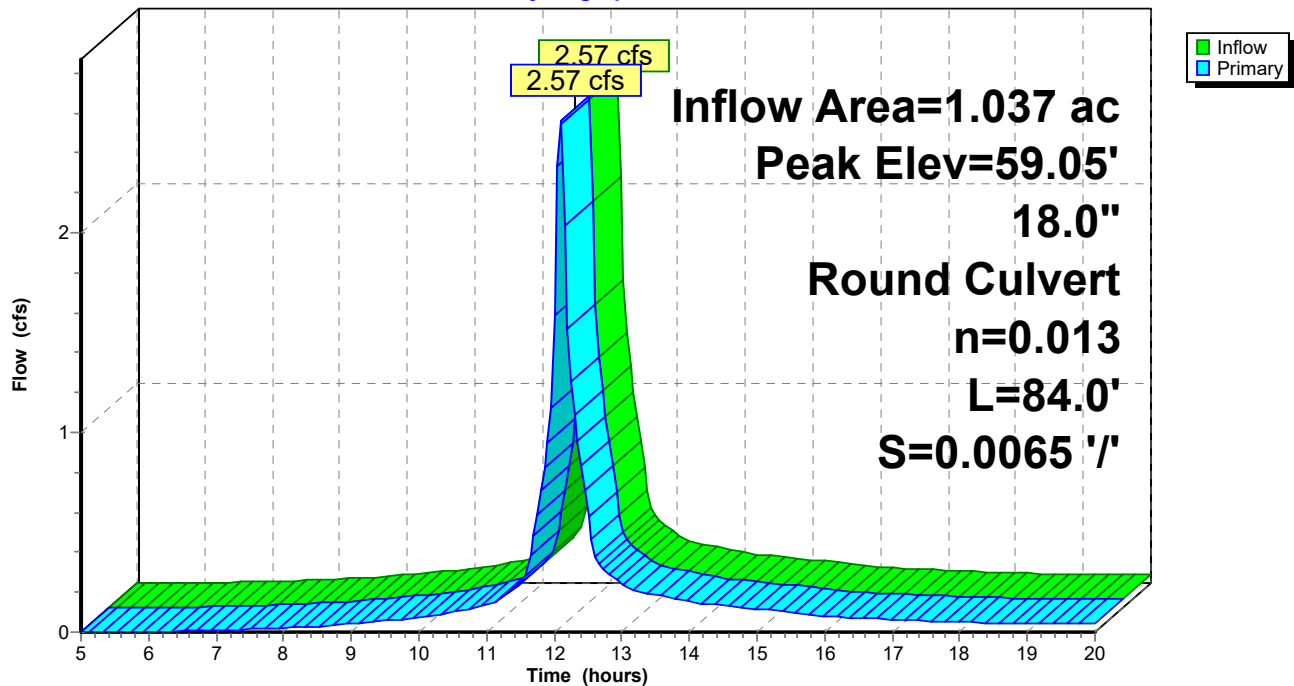
Device	Routing	Invert	Outlet Devices
#1	Primary	58.20'	18.0" Round Culvert L= 84.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.20' / 57.65' S= 0.0065 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[57] Hint: Peaked at 63.08' (Flood elevation advised)

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

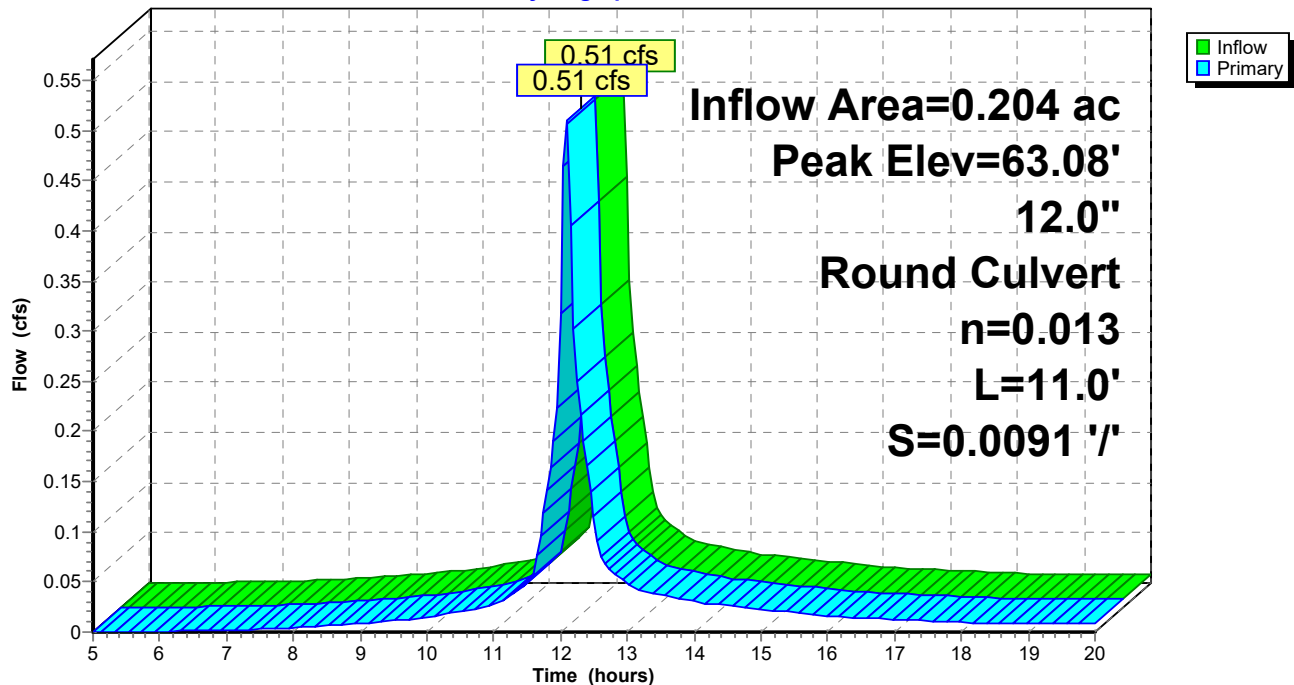
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 63.08' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	62.65'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.65' / 62.55' S= 0.0091 '/' Cc= 0.900 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

[57] Hint: Peaked at 63.00' (Flood elevation advised)

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

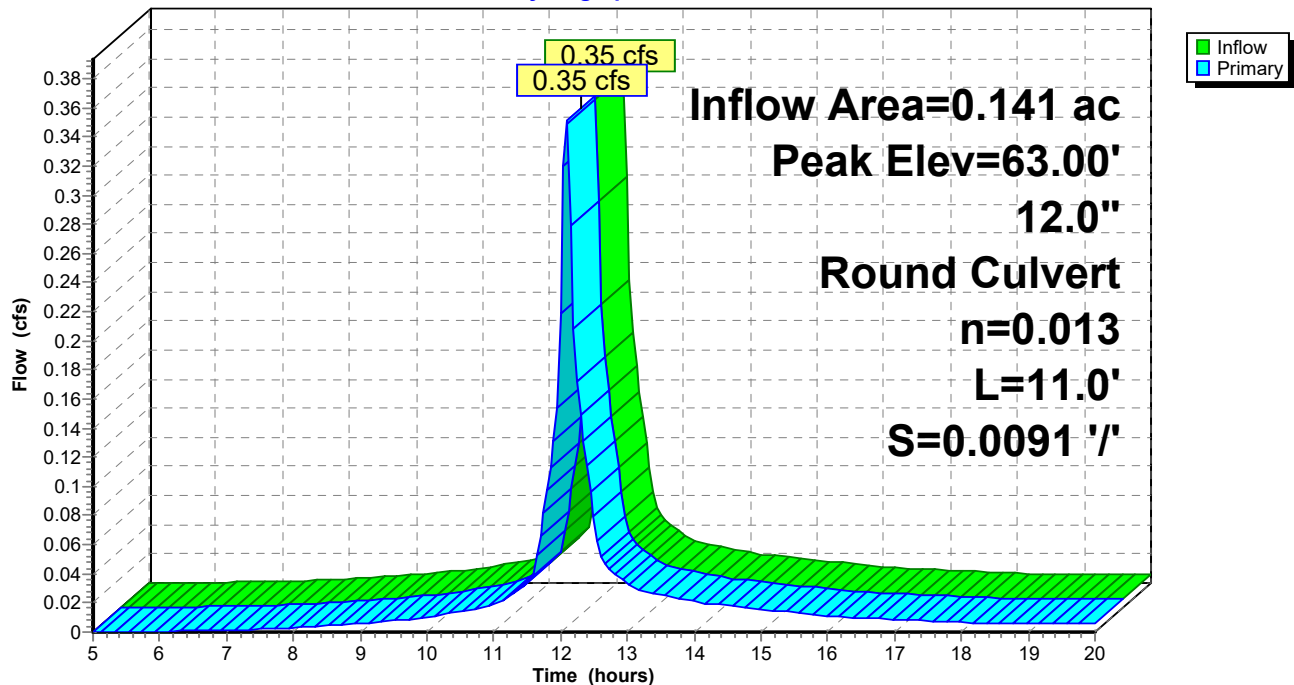
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 63.00' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	62.65'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.65' / 62.55' S= 0.0091 '/' Cc= 0.900 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

[57] Hint: Peaked at 62.91' (Flood elevation advised)

[79] Warning: Submerged Pond 91P Primary device # 1 OUTLET by 0.81'

[79] Warning: Submerged Pond 94P Primary device # 1 INLET by 0.26'

[79] Warning: Submerged Pond 95P Primary device # 1 INLET by 0.26'

[79] Warning: Submerged Pond 101P Primary device # 1 INLET by 0.12'

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

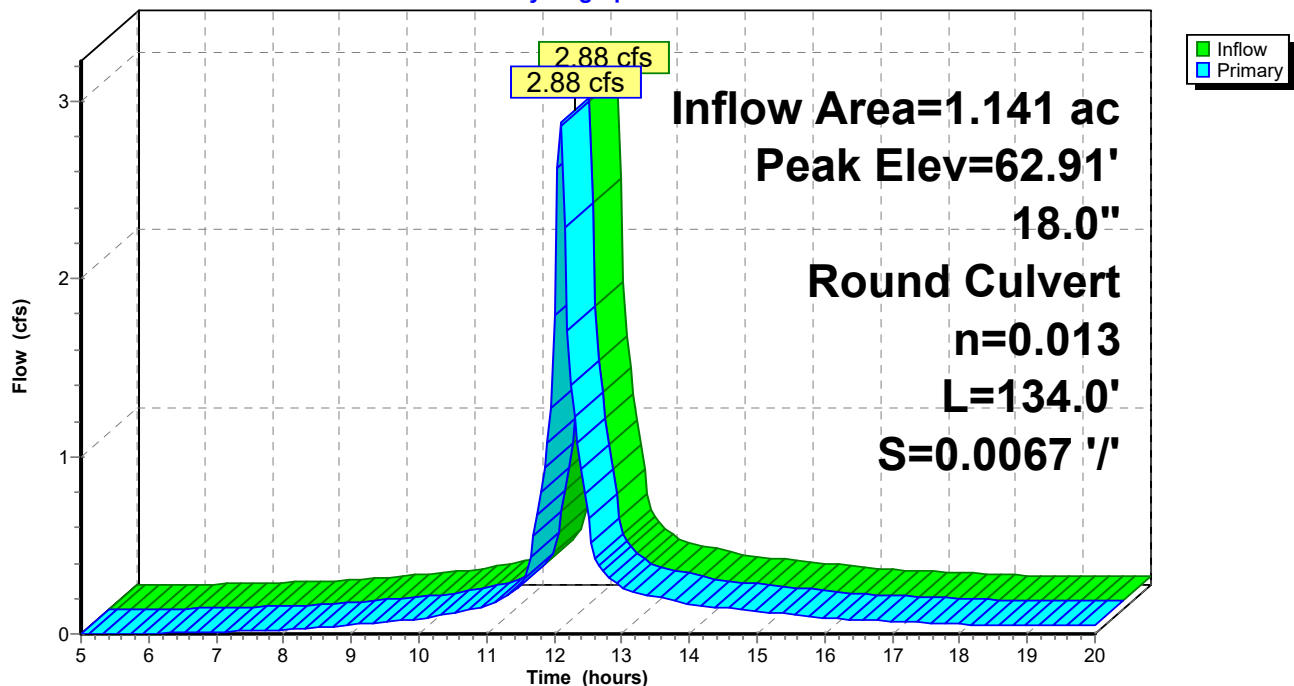
Device	Routing	Invert	Outlet Devices
#1	Primary	62.00'	18.0" Round Culvert L= 134.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.00' / 61.10' S= 0.0067 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[81] Warning: Exceeded Pond 85P by 2.63' @ 19.95 hrs

[81] Warning: Exceeded Pond 209P by 2.64' @ 19.95 hrs

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	66.00'W x 58.00'L x 5.71'H Field A 0.502 af Overall - 0.467 af Embedded = 0.035 af x 40.0% Voids
#2A	57.54'	0.367 af	Shea Leaching Chamber 8x14x5.7 x 32 Inside #1 Inside= 84.0"W x 60.0"H => 38.46 sf x 13.00'L = 500.0 cf Outside= 96.0"W x 68.0"H => 45.36 sf x 14.00'L = 635.0 cf 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'	18.0" Round Culvert L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.50' / 53.00' S= 0.1500 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	57.50'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	60.50'	2.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 1	61.70'	4.0' long Sharp-Crested Rectangular Weir 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 - Chamber Wizard Field A

Chamber Model = Shea Leaching Chamber 8x14x5.7 (Shea Galley)

Inside= 84.0"W x 60.0"H => 38.46 sf x 13.00'L = 500.0 cf

Outside= 96.0"W x 68.0"H => 45.36 sf x 14.00'L = 635.0 cf

4 Chambers/Row x 14.00' Long = 56.00' Row Length +12.0" End Stone x 2 = 58.00' Base Length

8 Rows x 96.0" Wide + 12.0" Side Stone x 2 = 66.00' Base Width

0.5" Stone Base + 68.0" Chamber Height = 5.71' Field Height

32 Chambers x 500.0 cf = 16,000.0 cf Chamber Storage

32 Chambers x 635.0 cf = 20,321.3 cf Displacement

21,864.3 cf Field - 20,321.3 cf Chambers = 1,543.0 cf Stone x 40.0% Voids = 617.2 cf Stone Storage

Chamber Storage + Stone Storage = 16,617.2 cf = 0.381 af

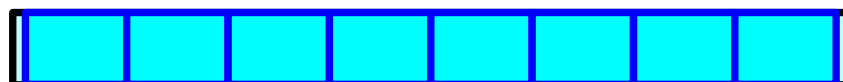
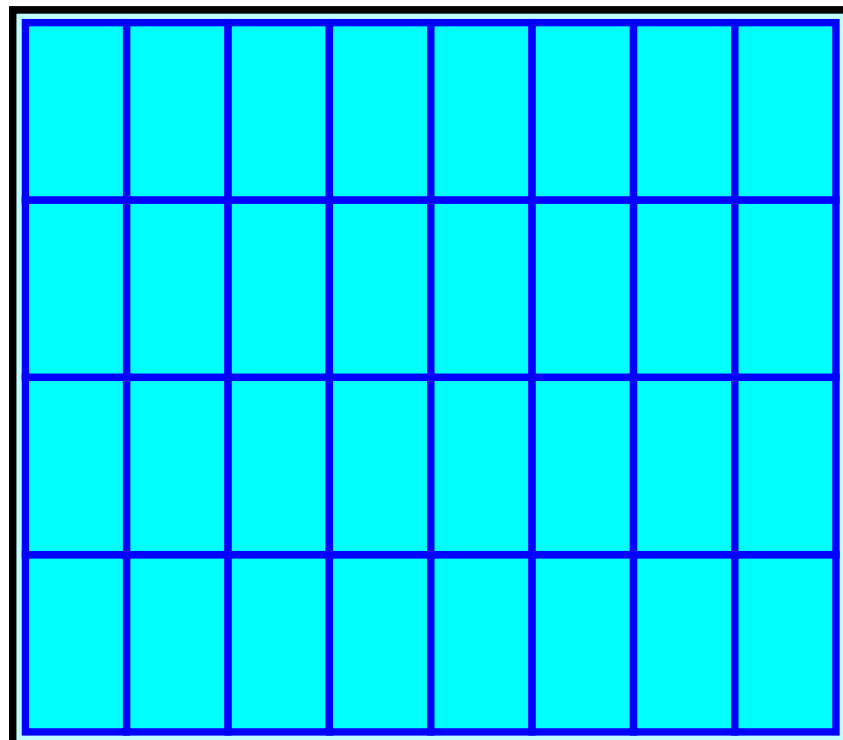
Overall Storage Efficiency = 76.0%

Overall System Size = 58.00' x 66.00' x 5.71'

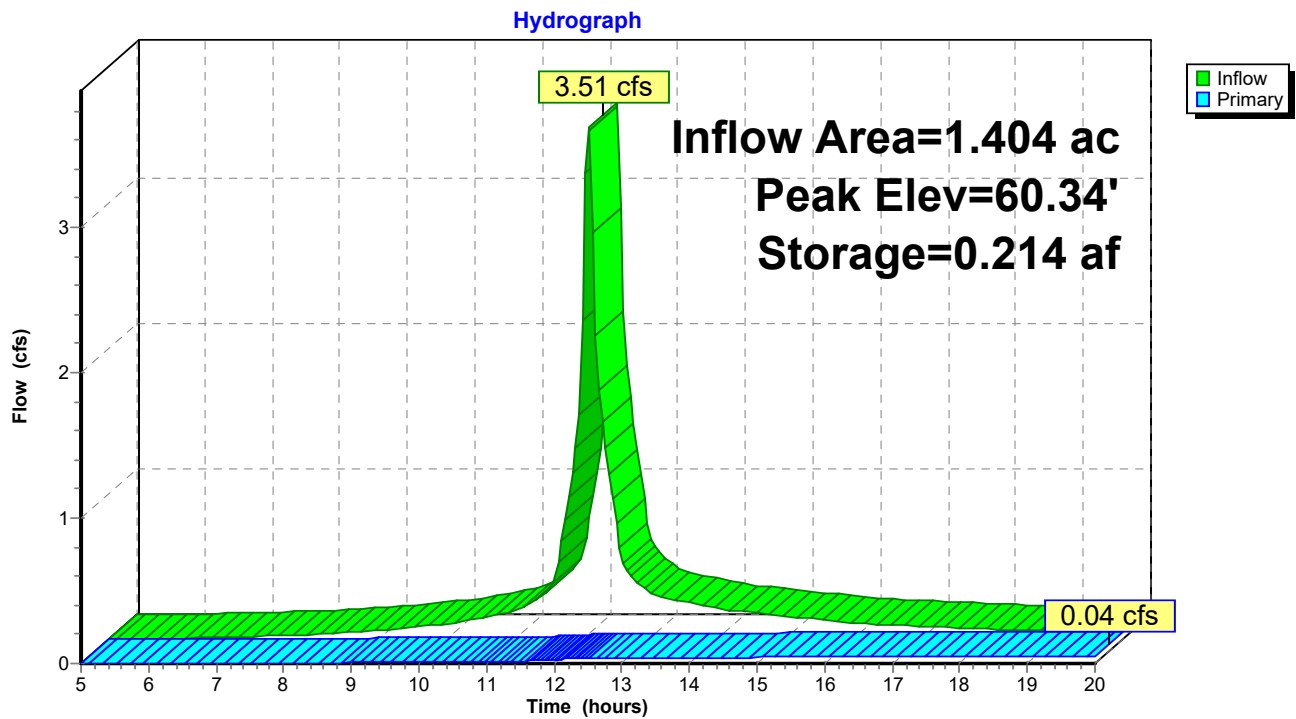
32 Chambers

809.8 cy Field

57.1 cy Stone



Pond 97P: Sub. Det. 2



Summary for Pond 98P: DMH 61

[57] Hint: Peaked at 60.56' (Flood elevation advised)

[79] Warning: Submerged Pond 106P Primary device # 1 OUTLET by 0.66'

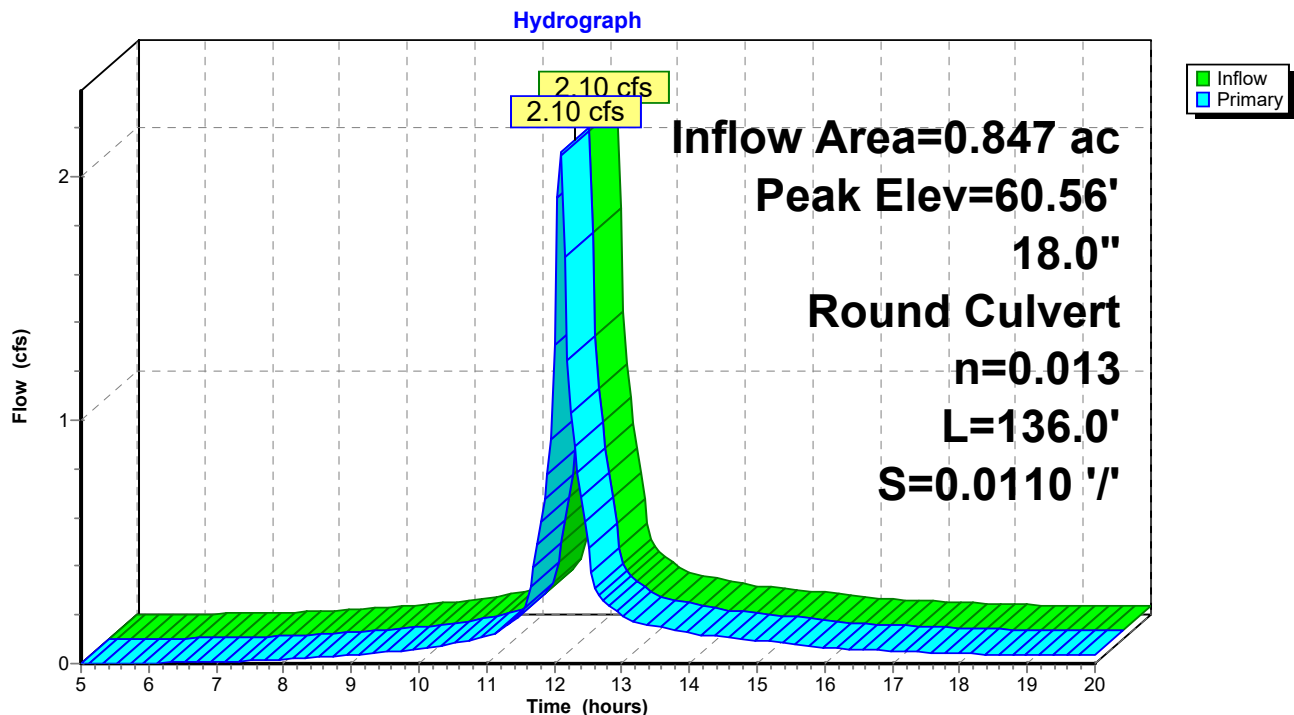
Inflow Area = 0.847 ac, 70.52% Impervious, Inflow Depth > 2.07" for 2-Year event
 Inflow = 2.10 cfs @ 12.09 hrs, Volume= 0.146 af
 Outflow = 2.10 cfs @ 12.09 hrs, Volume= 0.146 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.10 cfs @ 12.09 hrs, Volume= 0.146 af
 Routed to Pond 93P : DMH 62

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'	18.0" Round Culvert L= 136.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.80' / 58.30' S= 0.0110 '/ Cc= 0.900 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



Summary for Pond 99P: CB 81

[57] Hint: Peaked at 63.47' (Flood elevation advised)

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

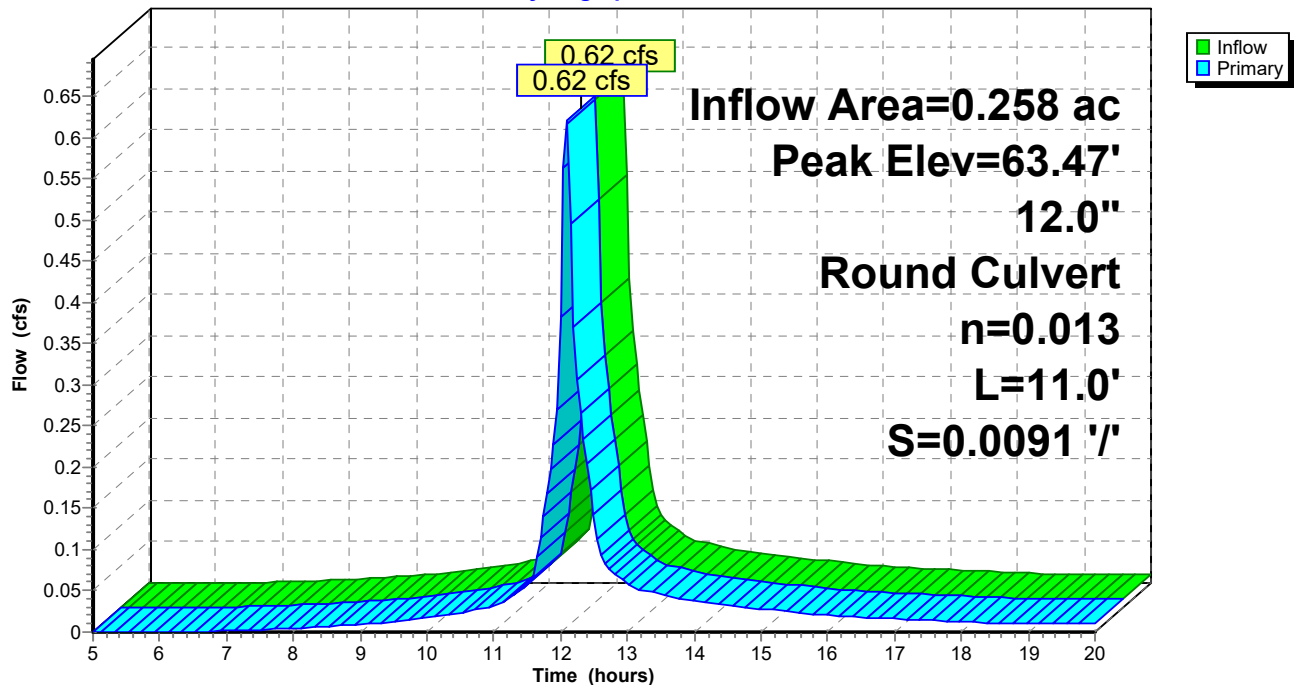
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 63.47' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	62.99'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.99' / 62.89' S= 0.0091 '/ Cc= 0.900 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

[57] Hint: Peaked at 63.62' (Flood elevation advised)

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

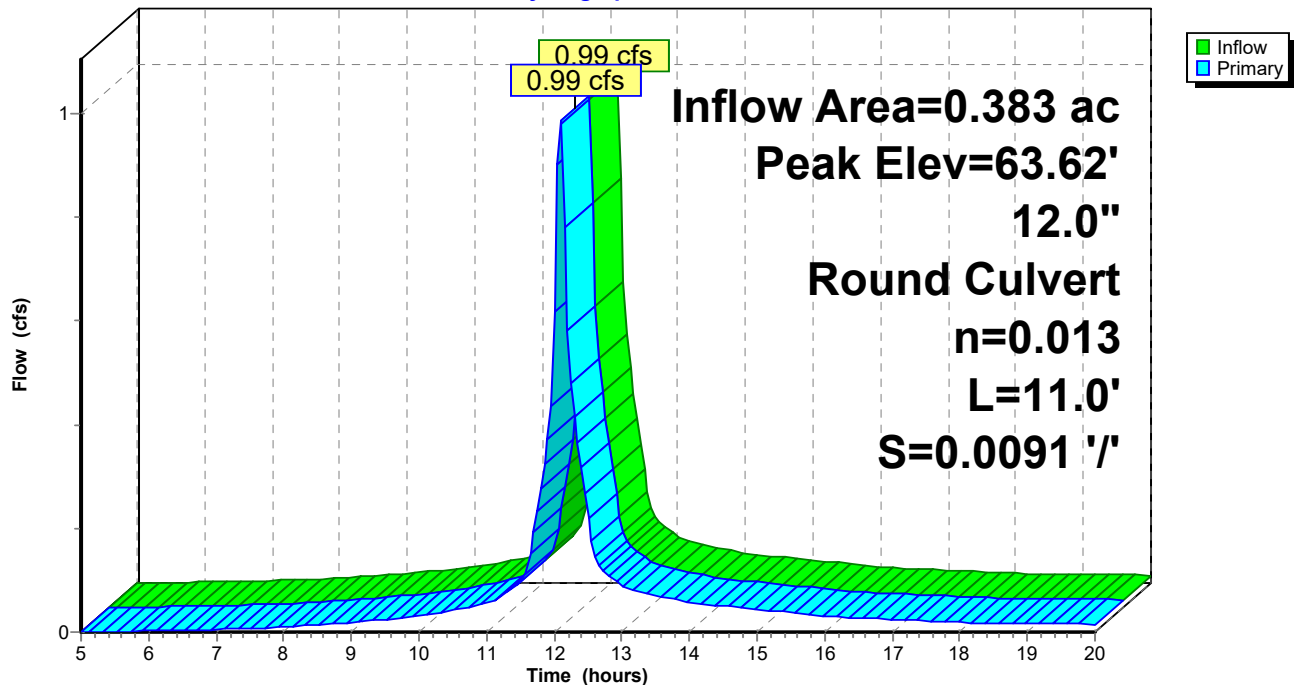
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 63.62' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	62.99'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.99' / 62.89' S= 0.0091 '/ Cc= 0.900 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

[57] Hint: Peaked at 63.45' (Flood elevation advised)

[79] Warning: Submerged Pond 99P Primary device # 1 INLET by 0.46'

[79] Warning: Submerged Pond 100P Primary device # 1 INLET by 0.46'

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

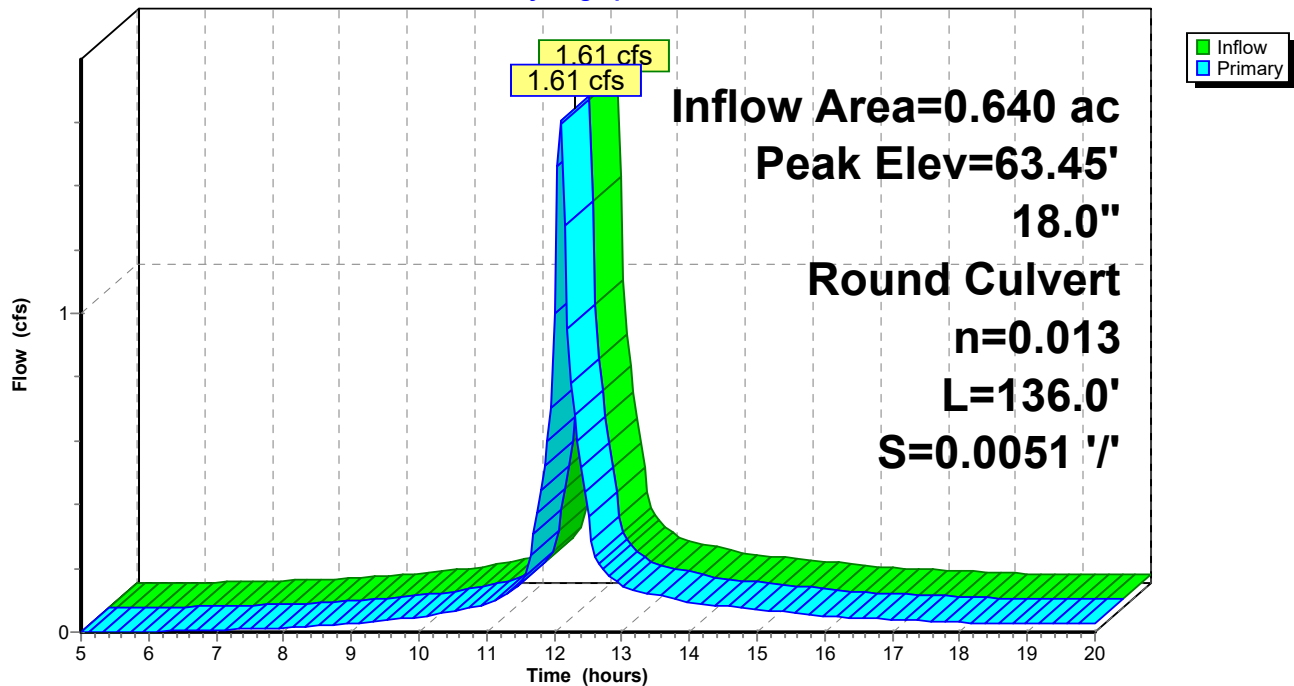
Device	Routing	Invert	Outlet Devices
#1	Primary	62.79'	18.0" Round Culvert L= 136.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.79' / 62.10' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[57] Hint: Peaked at 61.80' (Flood elevation advised)

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

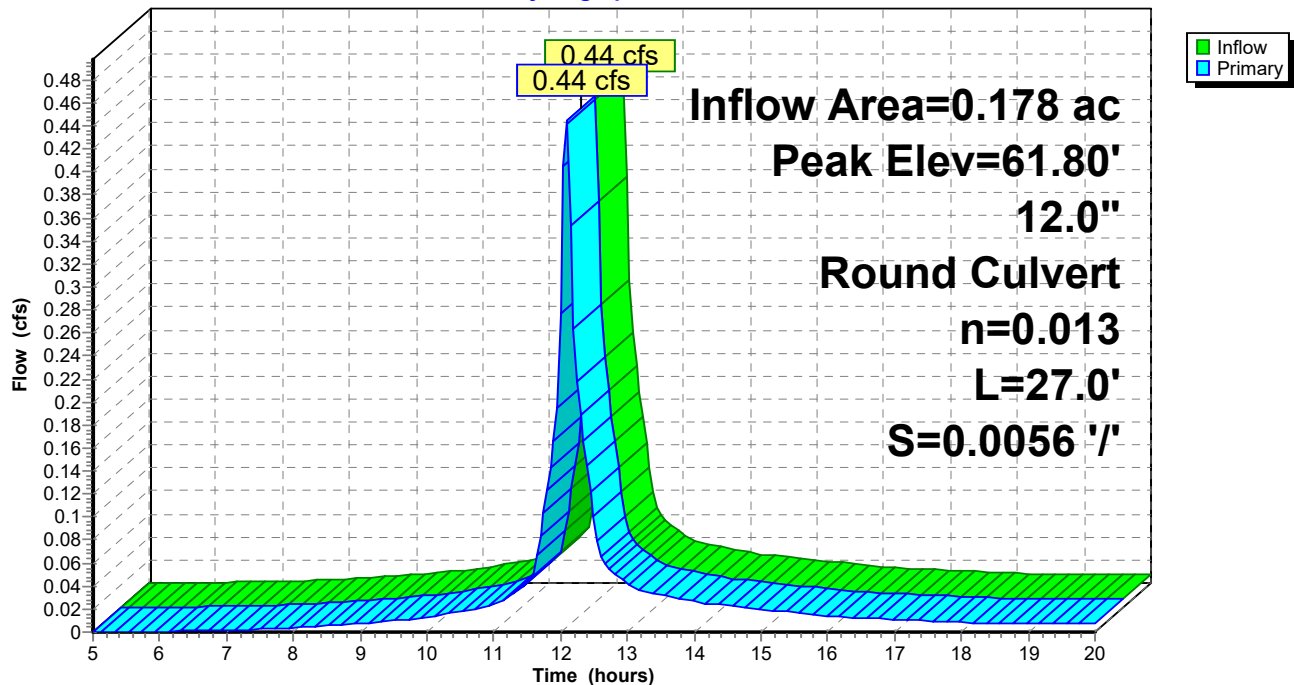
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 61.80' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.40'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.40' / 61.25' S= 0.0056 '/ Cc= 0.900 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

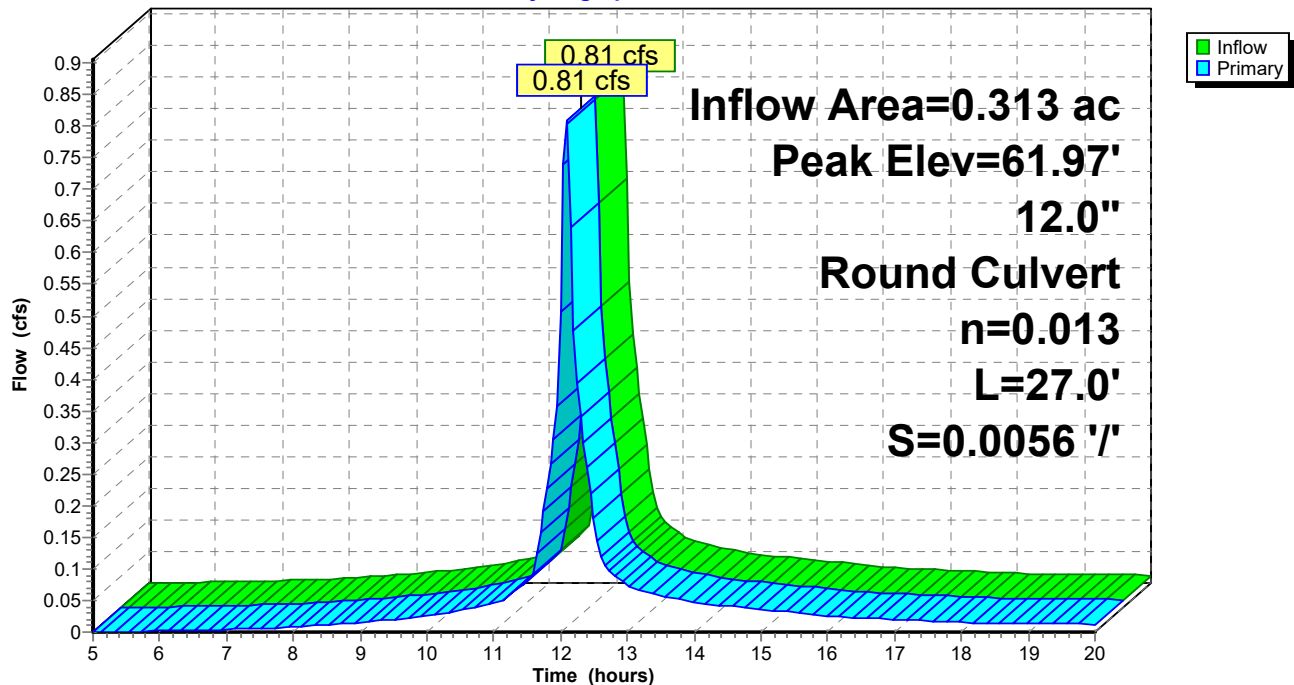
[57] Hint: Peaked at 61.97' (Flood elevation advised)

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'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.40' / 61.25' S= 0.0056 '/ Cc= 0.900 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

[57] Hint: Peaked at 61.55' (Flood elevation advised)

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

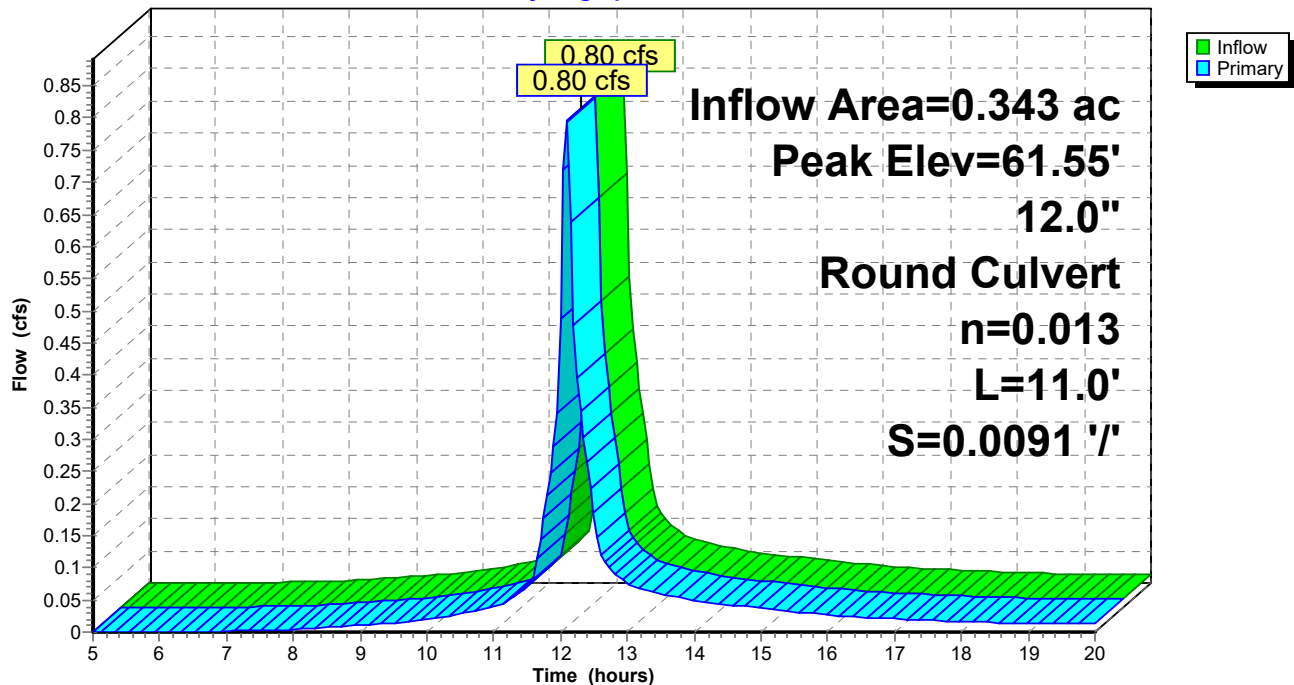
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 61.55' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.00' / 60.90' S= 0.0091 '/' Cc= 0.900 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

[57] Hint: Peaked at 61.75' (Flood elevation advised)

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

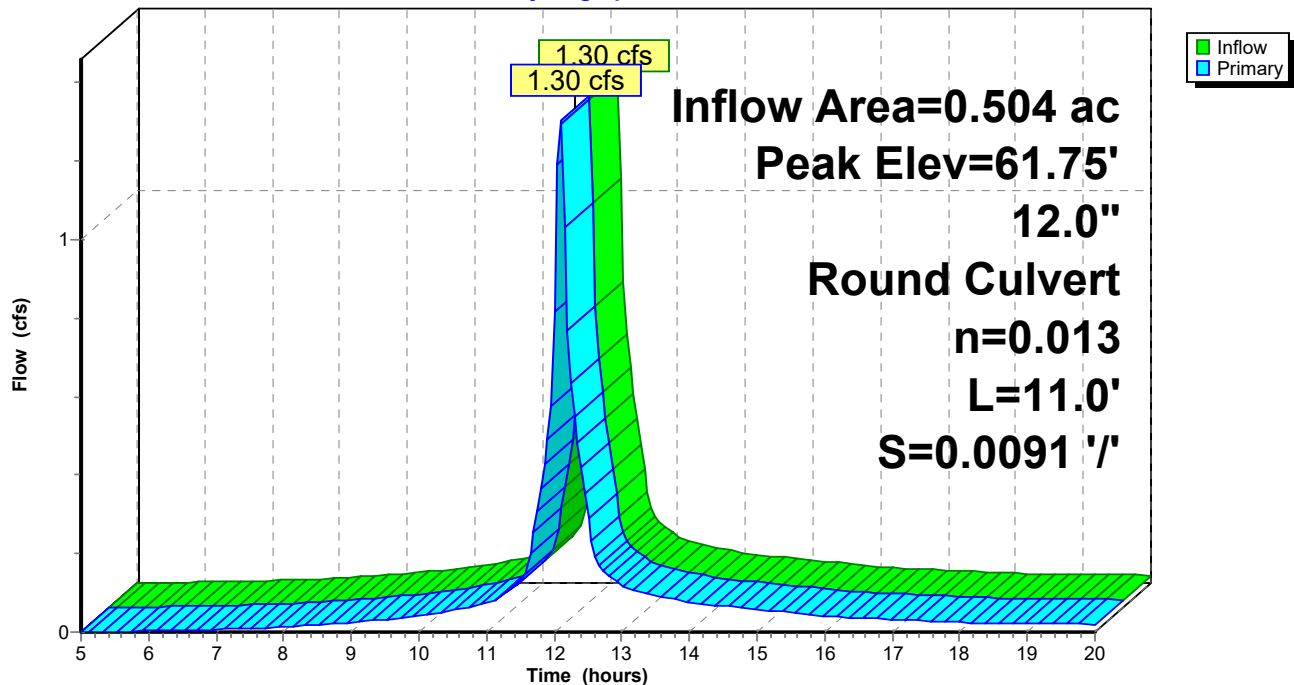
Device	Routing	Invert	Outlet Devices
#1	Primary	61.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.00' / 60.90' S= 0.0091 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 61.56' (Flood elevation advised)

[79] Warning: Submerged Pond 104P Primary device # 1 INLET by 0.56'

[79] Warning: Submerged Pond 105P Primary device # 1 INLET by 0.56'

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

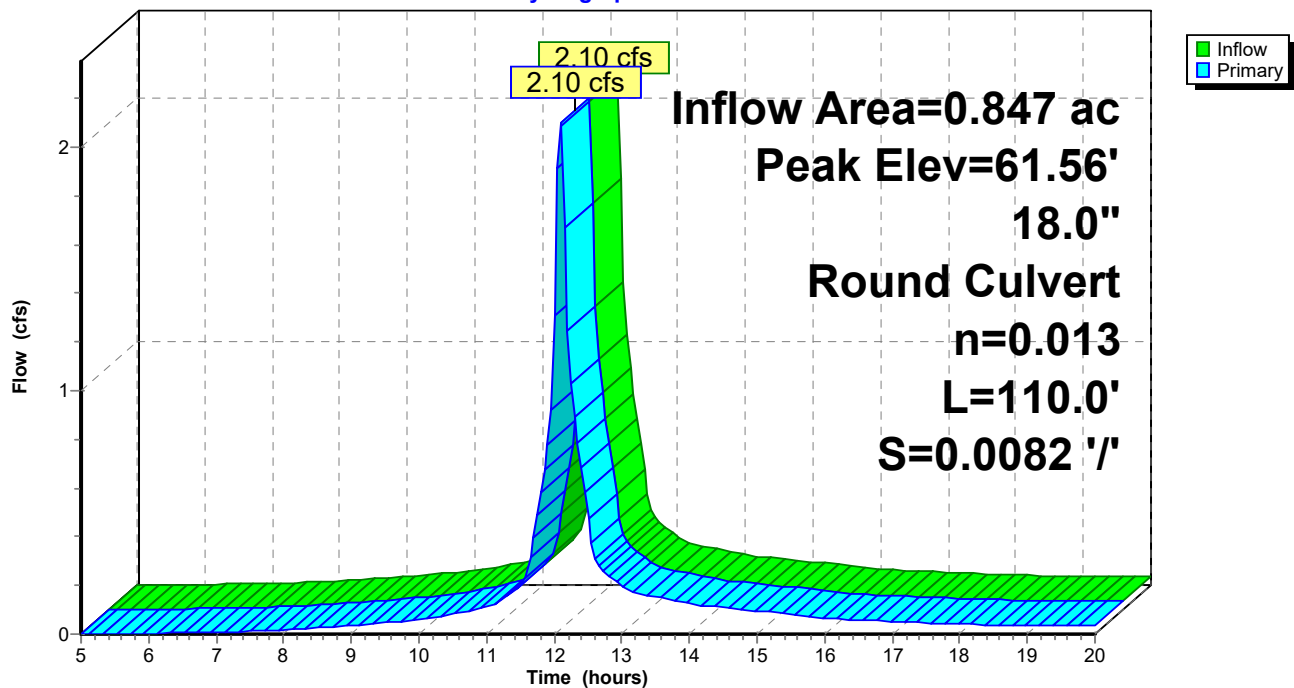
Device	Routing	Invert	Outlet Devices
#1	Primary	60.80'	18.0" Round Culvert L= 110.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.80' / 59.90' S= 0.0082 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[57] Hint: Peaked at 60.42' (Flood elevation advised)

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

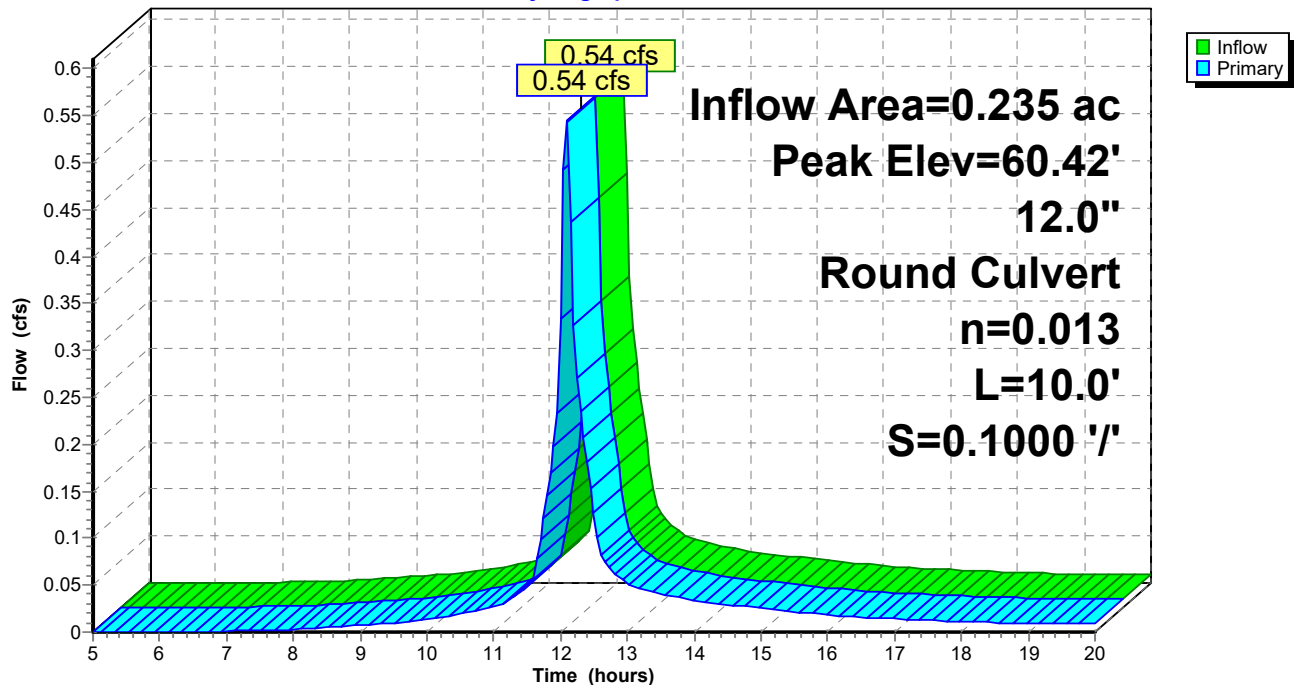
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 60.42' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	60.00'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.00' / 59.00' S= 0.1000 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.28' (Flood elevation advised)

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

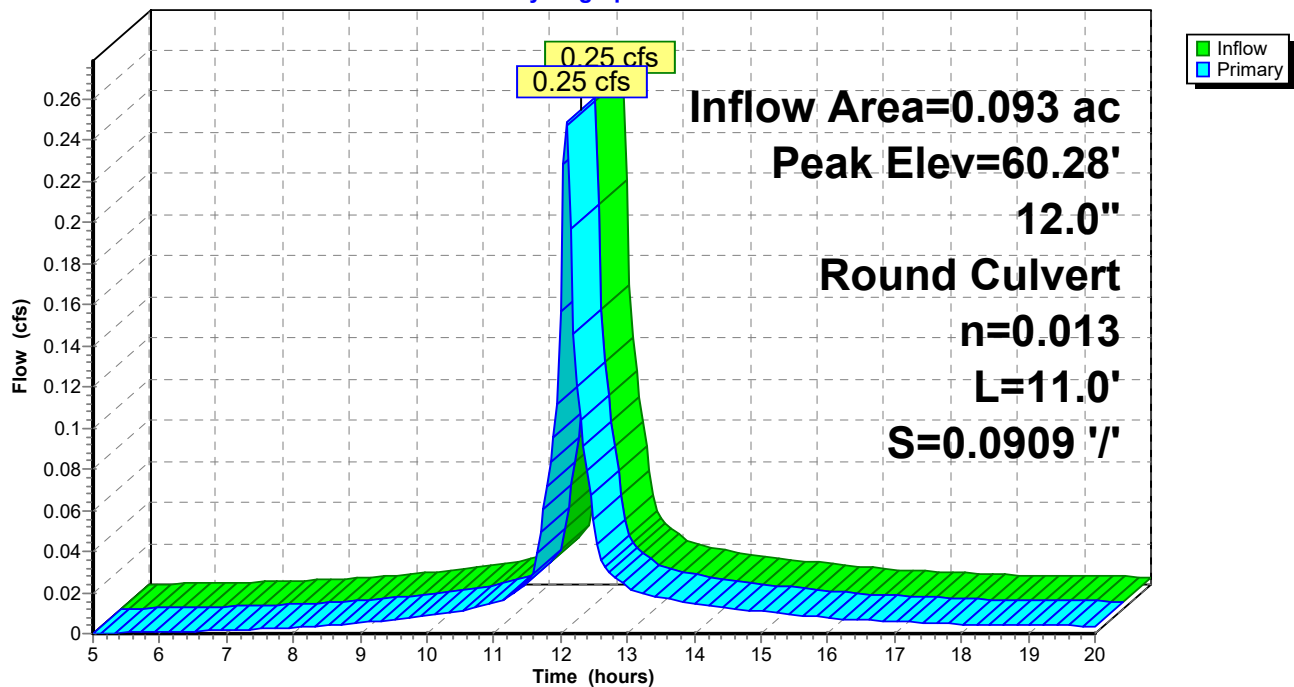
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 60.28' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	60.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.00' / 59.00' S= 0.0909 '/ Cc= 0.900 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

[57] Hint: Peaked at 62.07' (Flood elevation advised)

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

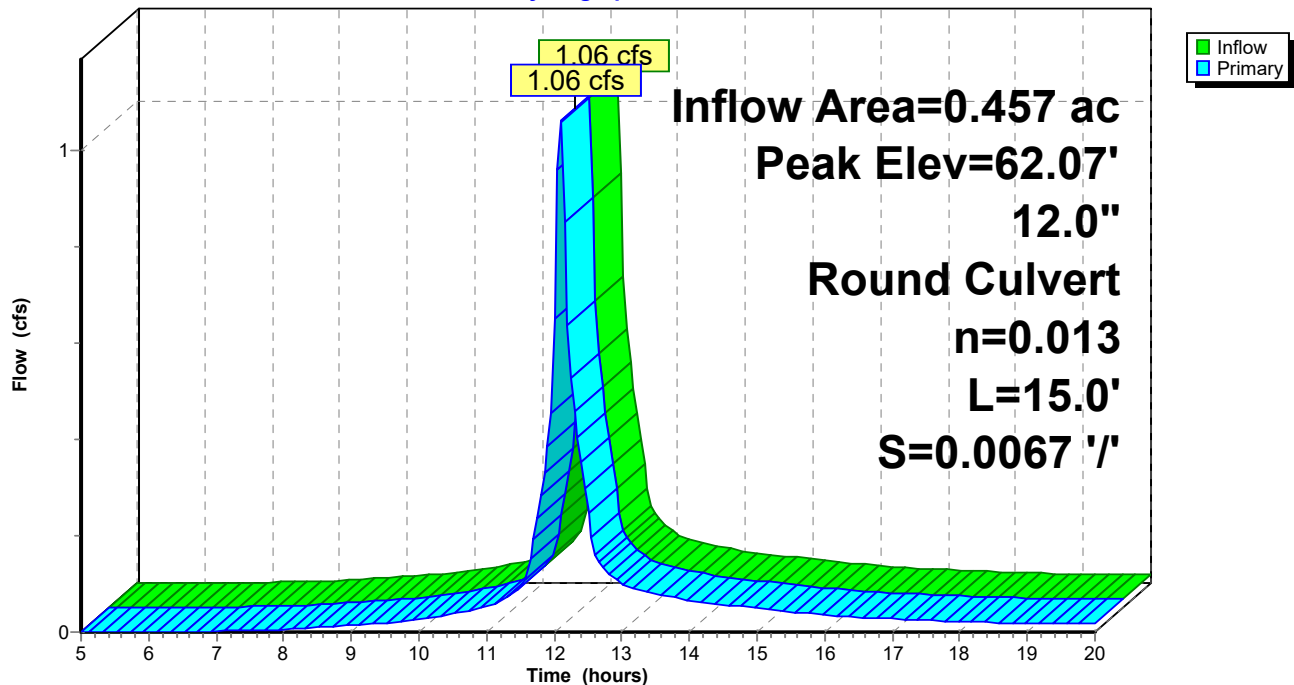
Device	Routing	Invert	Outlet Devices
#1	Primary	61.40'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.40' / 61.30' S= 0.0067 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 61.96' (Flood elevation advised)

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

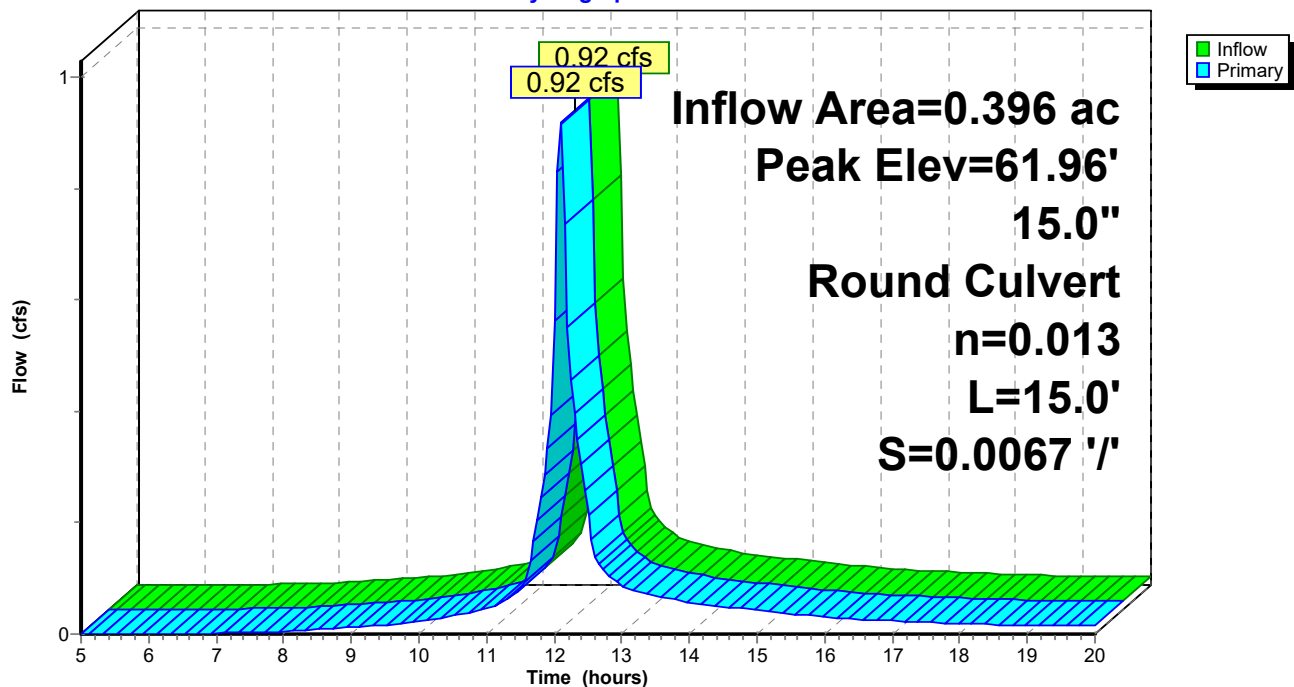
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 61.96' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.40'	15.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.40' / 61.30' S= 0.0067 '/' Cc= 0.900 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

[57] Hint: Peaked at 62.13' (Flood elevation advised)

[79] Warning: Submerged Pond 96P Primary device # 1 INLET by 0.12'

[81] Warning: Exceeded Pond 109P by 0.06' @ 12.10 hrs

[81] Warning: Exceeded Pond 110P by 0.16' @ 12.10 hrs

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

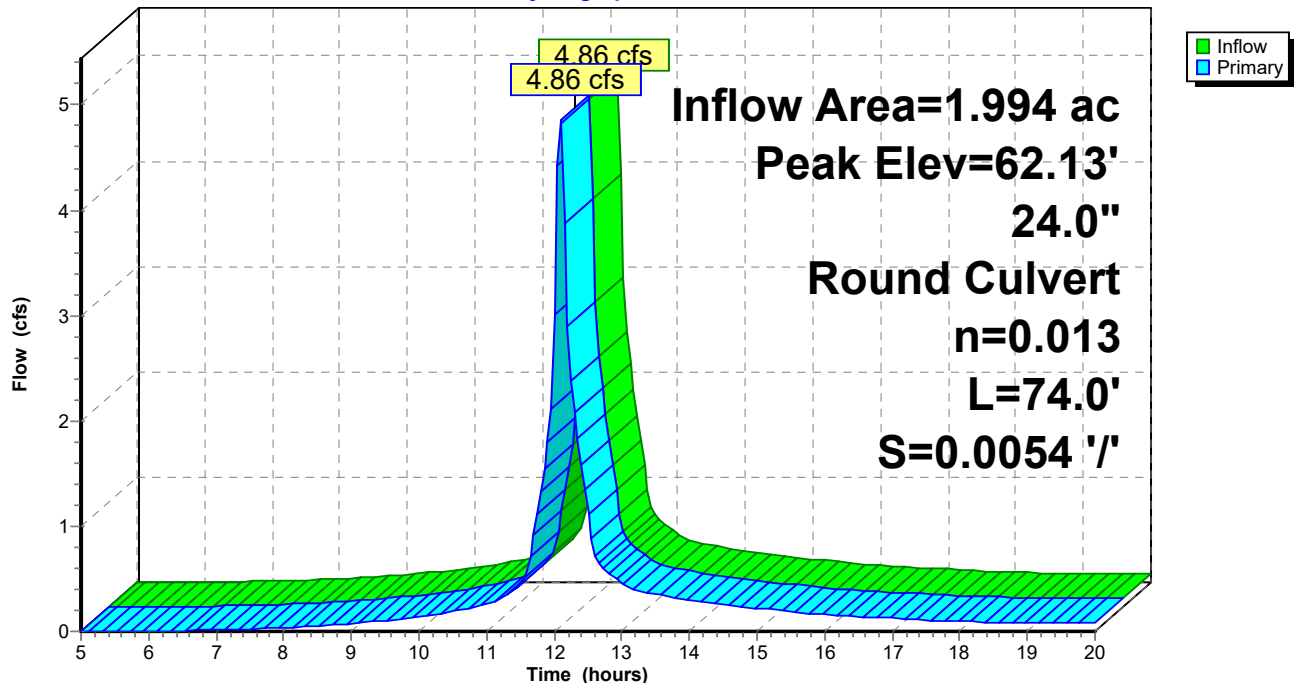
Device	Routing	Invert	Outlet Devices
#1	Primary	61.00'	24.0" Round Culvert L= 74.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.00' / 60.60' S= 0.0054 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

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

[57] Hint: Peaked at 58.06' (Flood elevation advised)

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

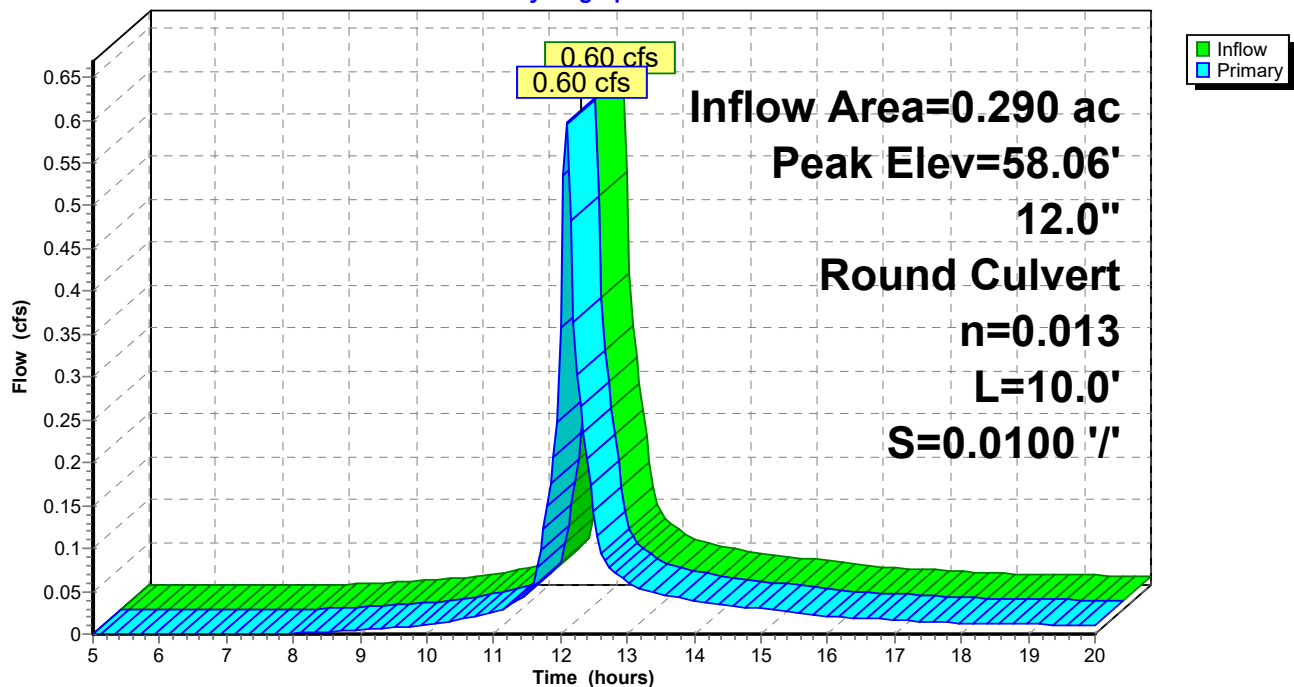
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 58.06' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	57.59'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.59' / 57.49' S= 0.0100 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.46' (Flood elevation advised)

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

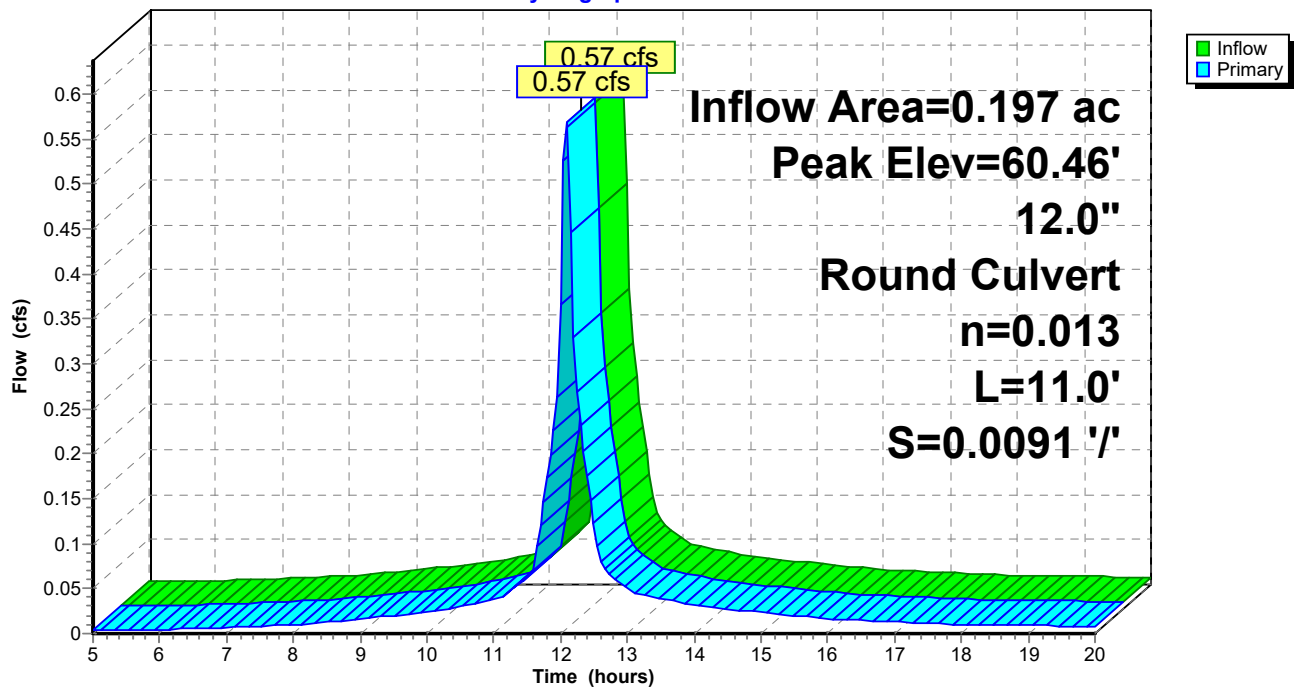
Device	Routing	Invert	Outlet Devices
#1	Primary	60.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.00' / 59.90' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.60' (Flood elevation advised)

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

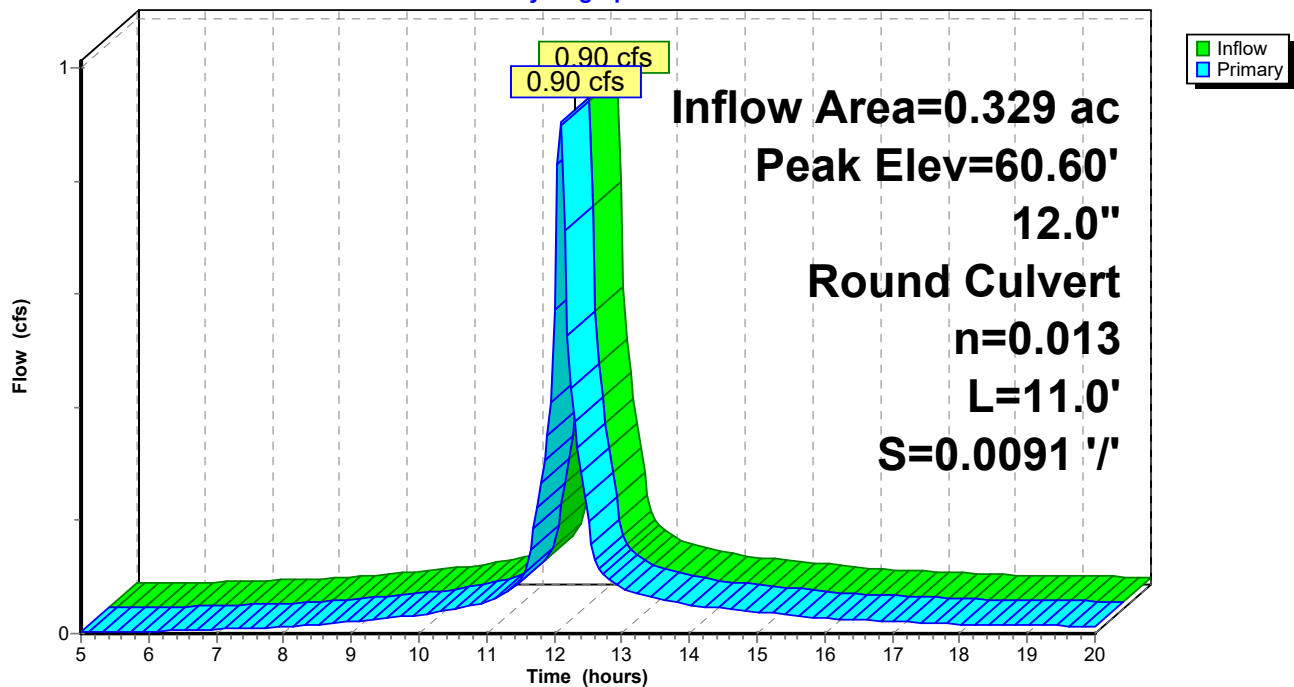
Device	Routing	Invert	Outlet Devices
#1	Primary	60.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.00' / 59.90' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 59.77' (Flood elevation advised)

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

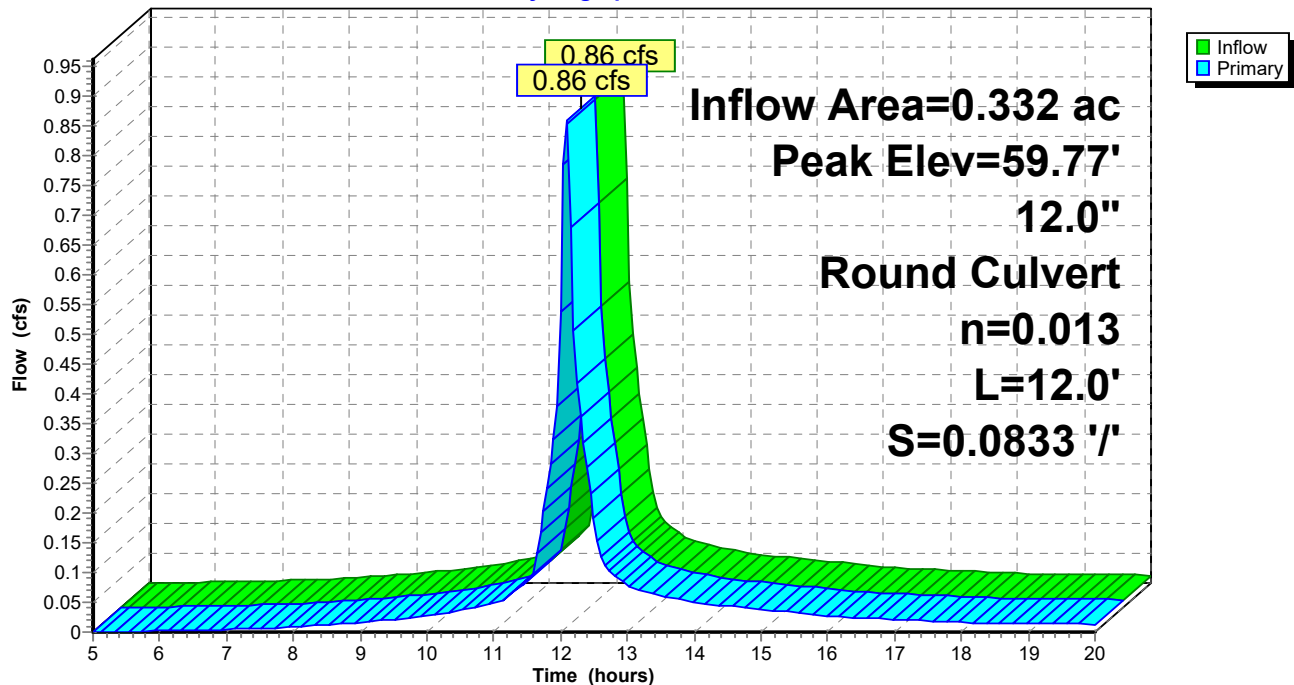
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 59.77' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	59.23'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.23' / 58.23' S= 0.0833 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.71' (Flood elevation advised)

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

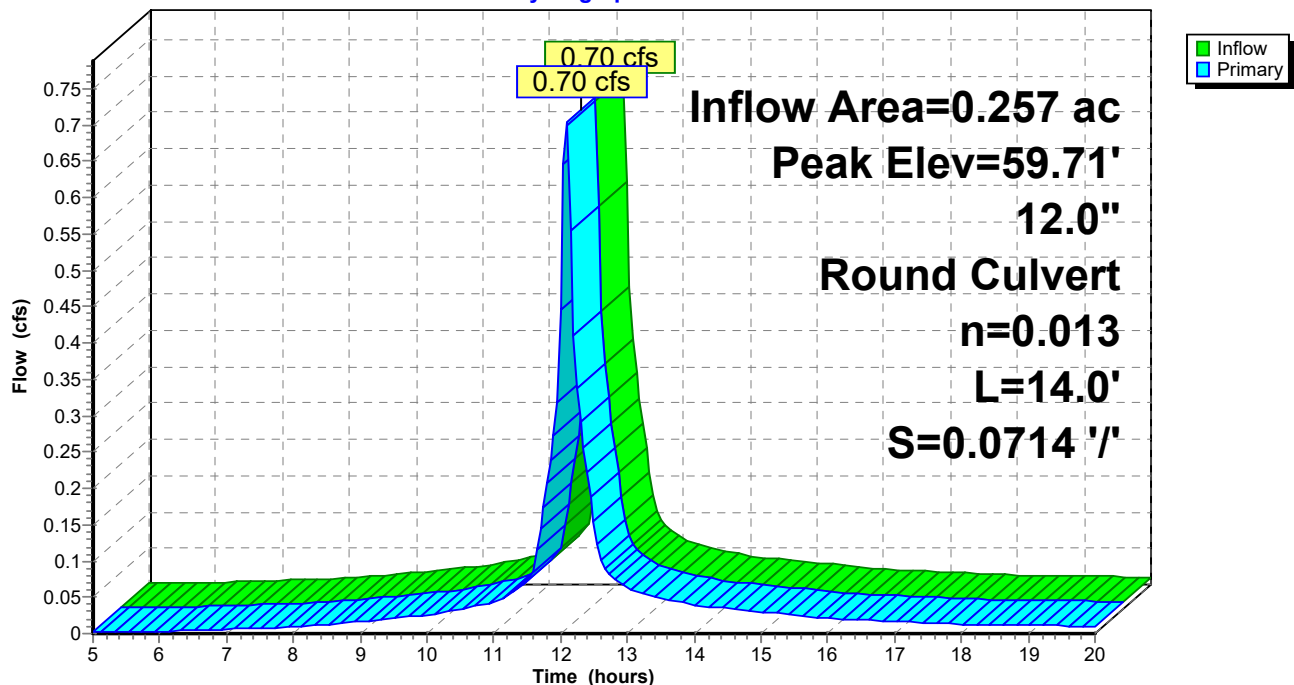
Device	Routing	Invert	Outlet Devices
#1	Primary	59.23'	12.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.23' / 58.23' S= 0.0714 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.16' (Flood elevation advised)

[79] Warning: Submerged Pond 118P Primary device # 1 INLET by 0.35'

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

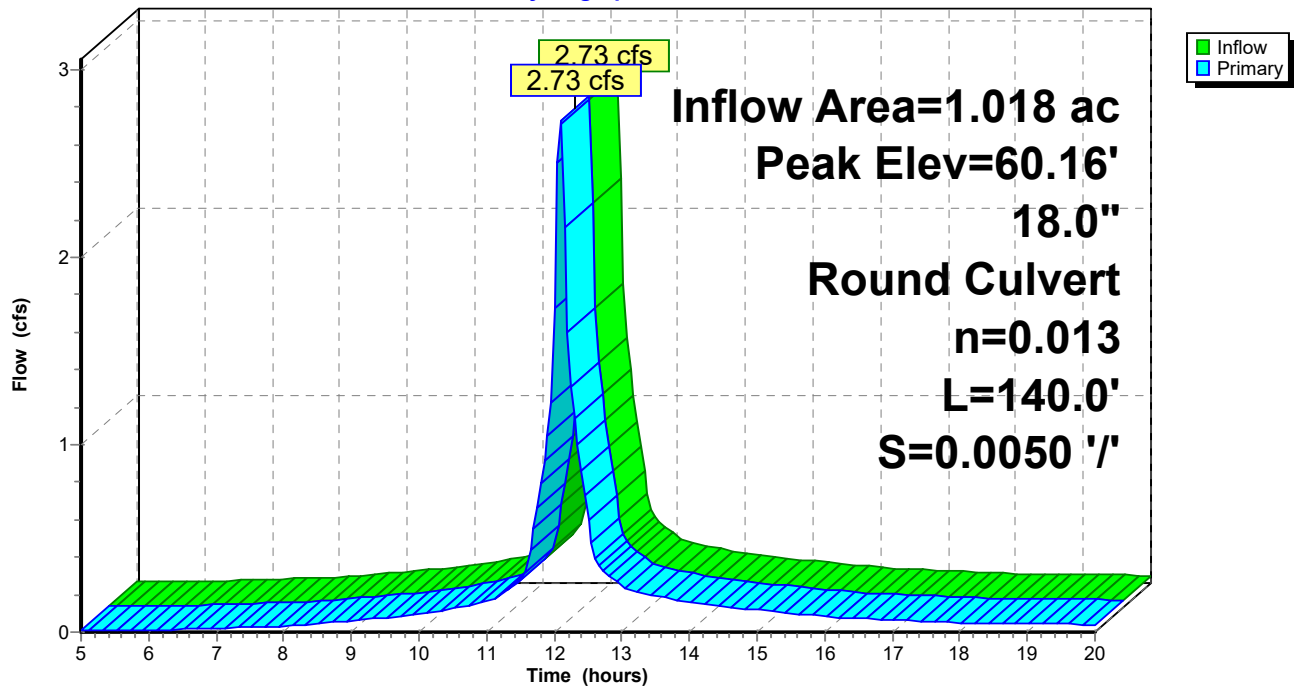
Device	Routing	Invert	Outlet Devices
#1	Primary	59.26'	18.0" Round Culvert L= 140.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.26' / 58.56' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.58' (Flood elevation advised)

[81] Warning: Exceeded Pond 113P by 0.12' @ 12.10 hrs

[79] Warning: Submerged Pond 114P Primary device # 1 INLET by 0.58'

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

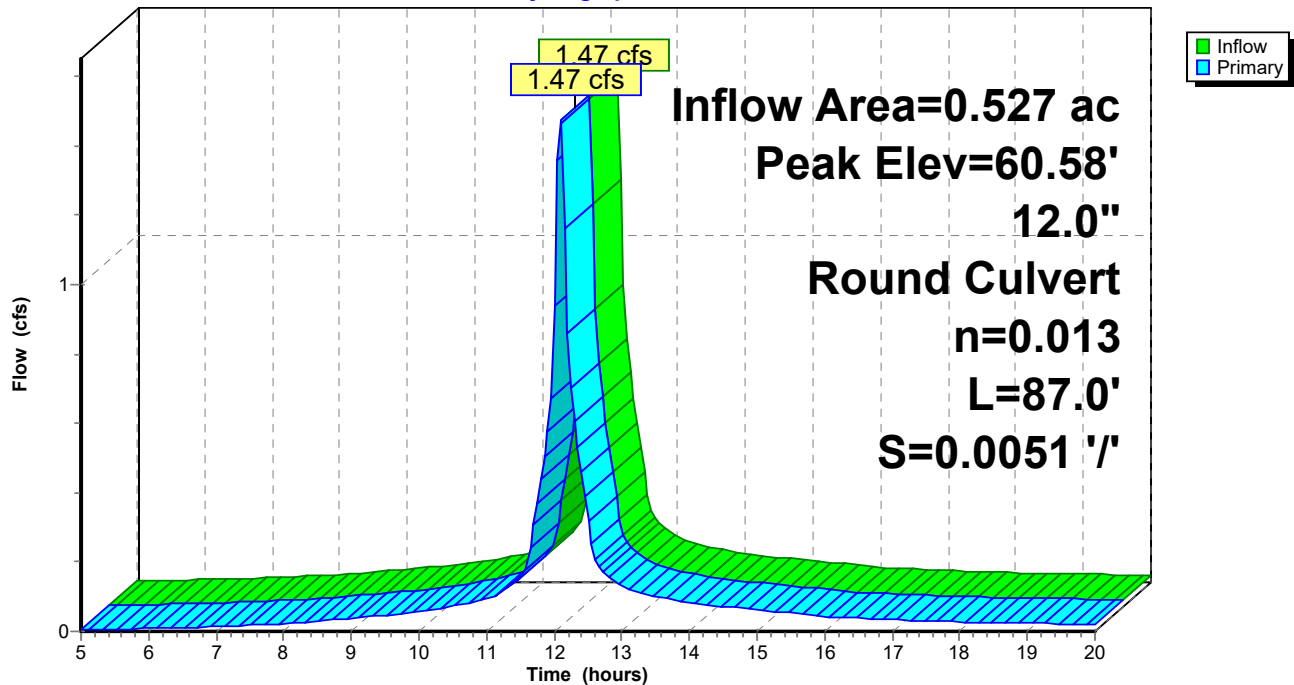
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.58' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	59.80'	12.0" Round Culvert L= 87.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.80' / 59.36' S= 0.0051 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.52' (Flood elevation advised)

[79] Warning: Submerged Pond 107P Primary device # 1 OUTLET by 0.52'

[79] Warning: Submerged Pond 108P Primary device # 1 OUTLET by 0.52'

[79] Warning: Submerged Pond 117P Primary device # 1 INLET by 0.26'

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

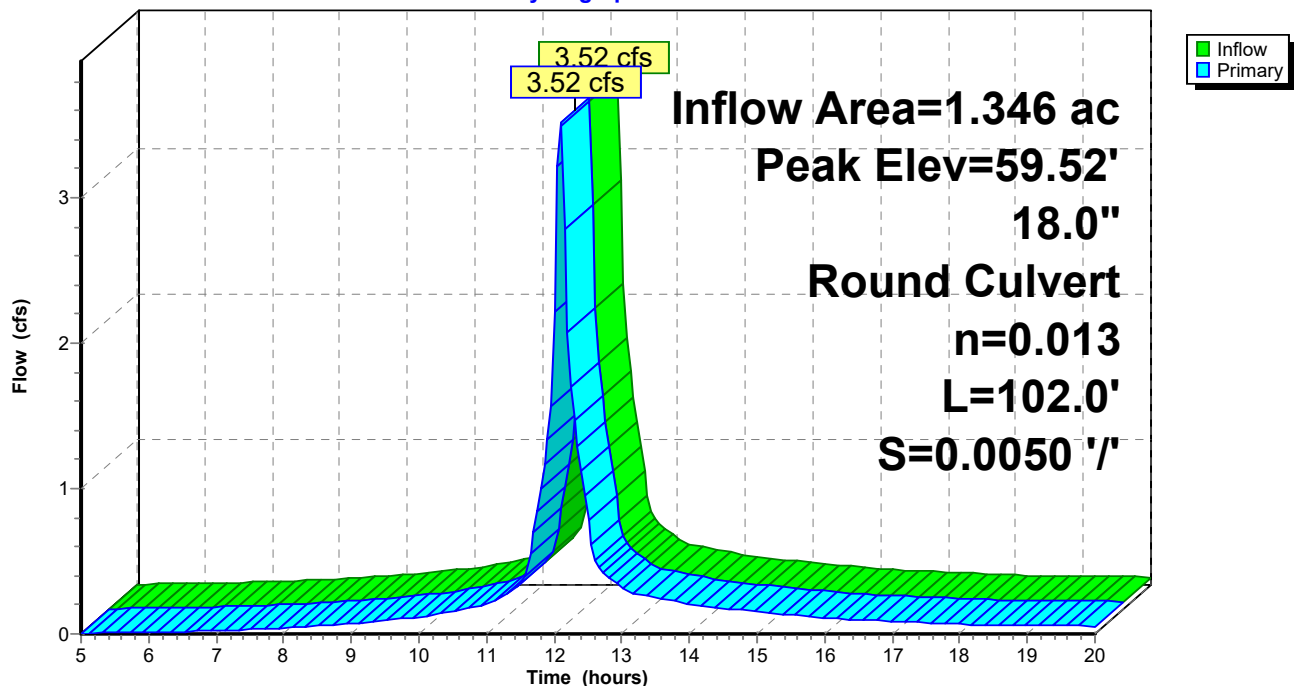
Device	Routing	Invert	Outlet Devices
#1	Primary	58.46'	18.0" Round Culvert L= 102.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.46' / 57.95' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.96' (Flood elevation advised)

[79] Warning: Submerged Pond 115P Primary device # 1 OUTLET by 0.73'

[79] Warning: Submerged Pond 116P Primary device # 1 OUTLET by 0.73'

[79] Warning: Submerged Pond 119P Primary device # 1 INLET by 0.50'

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

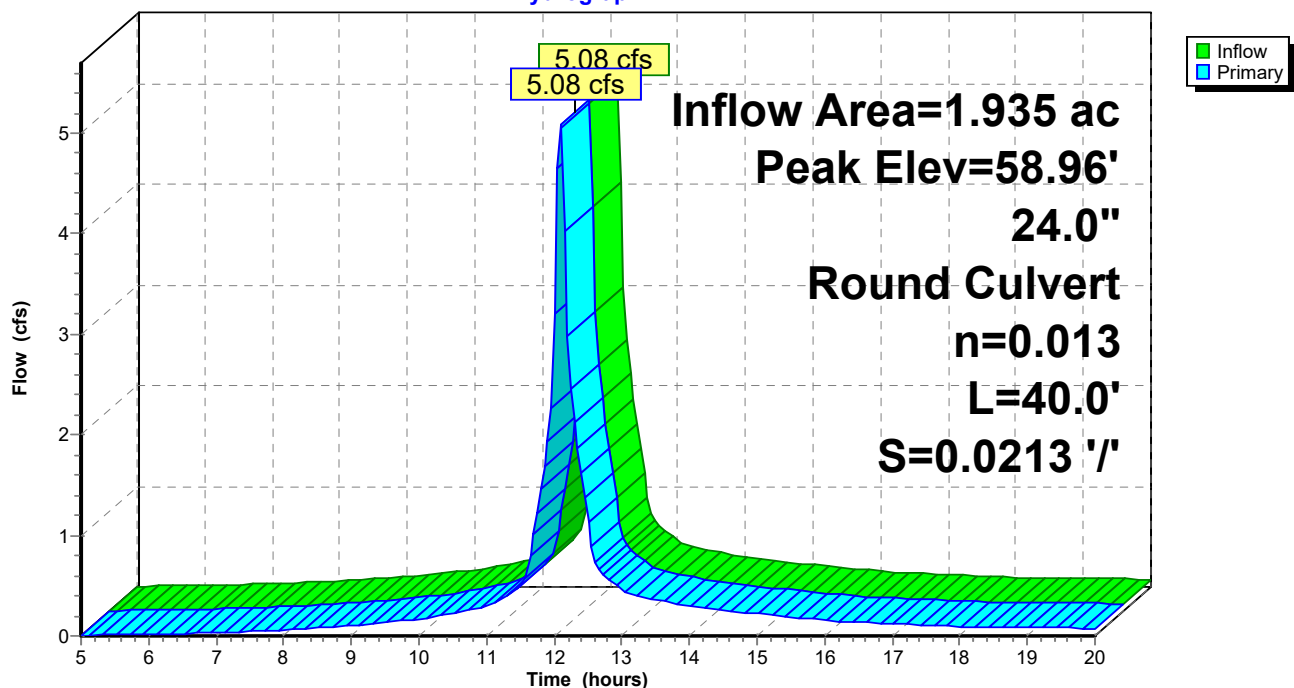
Device	Routing	Invert	Outlet Devices
#1	Primary	57.85'	24.0" Round Culvert L= 40.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.85' / 57.00' S= 0.0213 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

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 121P: Sub. Det. 3

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 210P by 1.18' @ 13.10 hrs

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 = 0.68 cfs @ 12.65 hrs, Volume= 0.165 af, Atten= 87%, Lag= 33.4 min
 Primary = 0.68 cfs @ 12.65 hrs, Volume= 0.165 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= 59.37' @ 12.65 hrs Surf.Area= 0.109 ac Storage= 0.221 af

Plug-Flow detention time= 206.7 min calculated for 0.164 af (46% of inflow)
 Center-of-Mass det. time= 117.2 min (880.8 - 763.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	57.00'	0.016 af	66.00'W x 72.00'L x 5.71'H Field A 0.623 af Overall - 0.583 af Embedded = 0.040 af x 40.0% Voids
#2A	57.04'	0.459 af	Shea Leaching Chamber 8x14x5.7 x 40 Inside #1 Inside= 84.0"W x 60.0"H => 38.46 sf x 13.00'L = 500.0 cf Outside= 96.0"W x 68.0"H => 45.36 sf x 14.00'L = 635.0 cf 40 Chambers in 8 Rows
0.475 af			Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	57.00'	18.0" Round Culvert L= 55.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.00' / 53.00' S= 0.0727 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	59.00'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#3	Device 1	60.80'	4.0' long Sharp-Crested Vee/Trap Weir Cv= 2.62 (C= 3.28)
#4	Device 1	57.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.68 cfs @ 12.65 hrs HW=59.37' (Free Discharge)

- 1=Culvert (Passes 0.68 cfs of 8.54 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.64 cfs @ 2.06 fps)
- 3=Sharp-Crested Vee/Trap Weir (Controls 0.00 cfs)
- 4=Orifice/Grate (Orifice Controls 0.04 cfs @ 7.34 fps)

Pond 121P: Sub. Det. 3 - Chamber Wizard Field A

Chamber Model = Shea Leaching Chamber 8x14x5.7 (Shea Galley)

Inside= 84.0"W x 60.0"H => 38.46 sf x 13.00'L = 500.0 cf

Outside= 96.0"W x 68.0"H => 45.36 sf x 14.00'L = 635.0 cf

5 Chambers/Row x 14.00' Long = 70.00' Row Length +12.0" End Stone x 2 = 72.00' Base Length

8 Rows x 96.0" Wide + 12.0" Side Stone x 2 = 66.00' Base Width

0.5" Stone Base + 68.0" Chamber Height = 5.71' Field Height

40 Chambers x 500.0 cf = 20,000.0 cf Chamber Storage

40 Chambers x 635.0 cf = 25,401.6 cf Displacement

27,141.8 cf Field - 25,401.6 cf Chambers = 1,740.2 cf Stone x 40.0% Voids = 696.1 cf Stone Storage

Chamber Storage + Stone Storage = 20,696.1 cf = 0.475 af

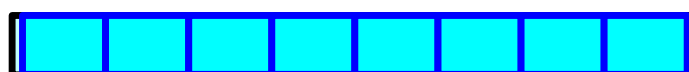
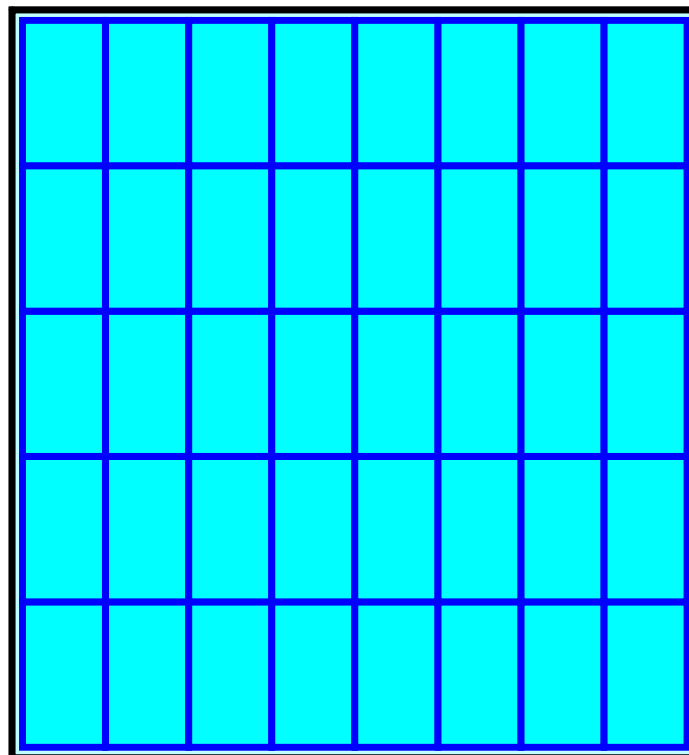
Overall Storage Efficiency = 76.3%

Overall System Size = 72.00' x 66.00' x 5.71'

40 Chambers

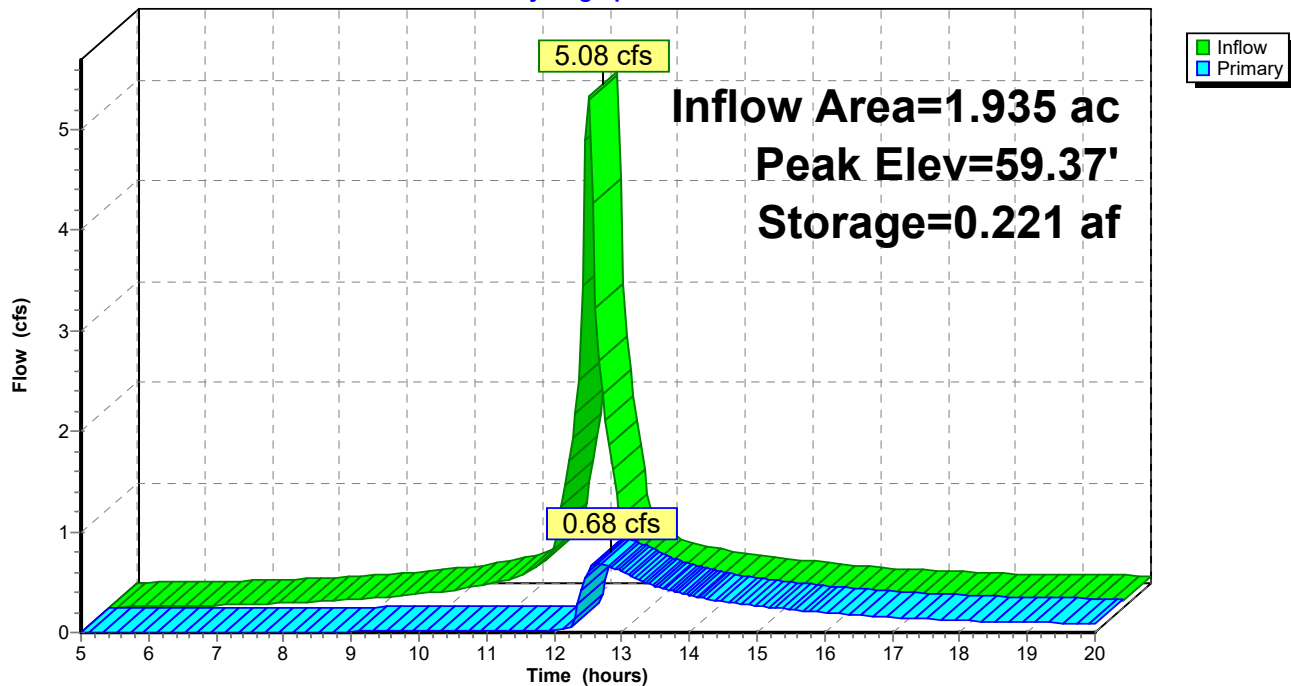
1,005.3 cy Field

64.5 cy Stone



Pond 121P: Sub. Det. 3

Hydrograph



Summary for Pond 122P: CB 46

[57] Hint: Peaked at 58.11' (Flood elevation advised)

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

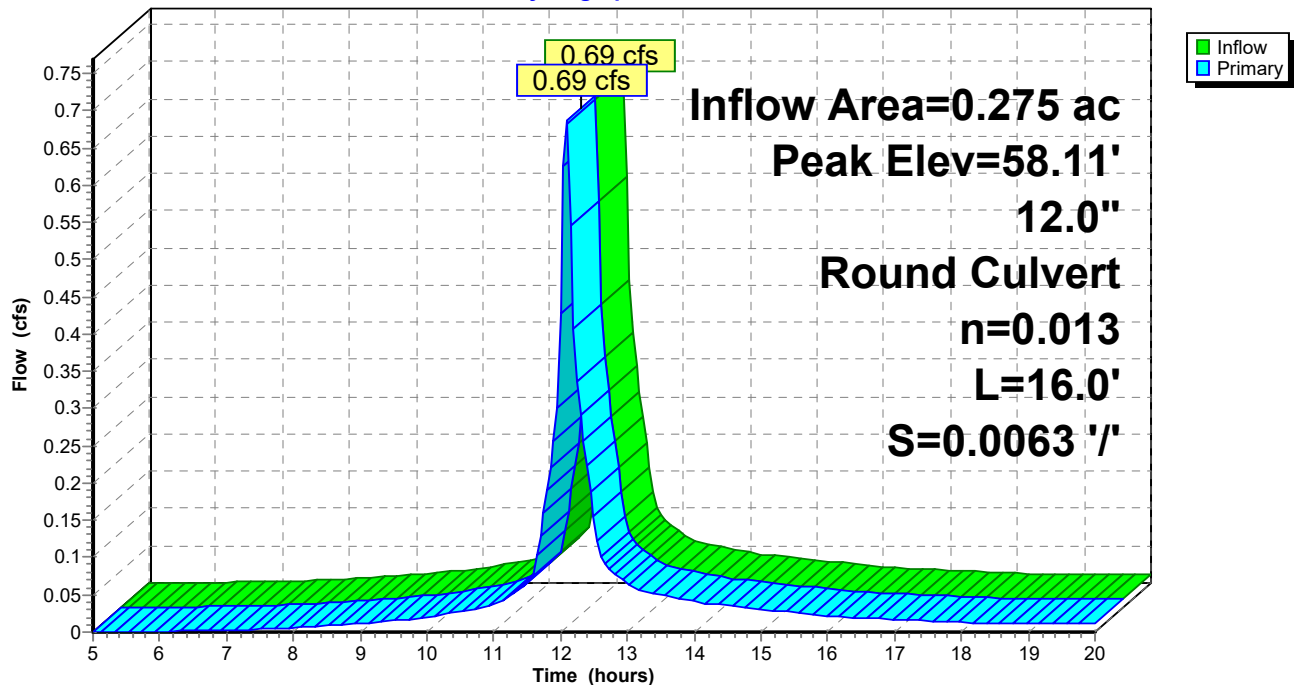
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 58.11' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	57.59'	12.0" Round Culvert L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.59' / 57.49' S= 0.0063 '/ Cc= 0.900 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

[57] Hint: Peaked at 57.97' (Flood elevation advised)

[79] Warning: Submerged Pond 112P Primary device # 1 INLET by 0.38'

[79] Warning: Submerged Pond 122P Primary device # 1 INLET by 0.38'

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

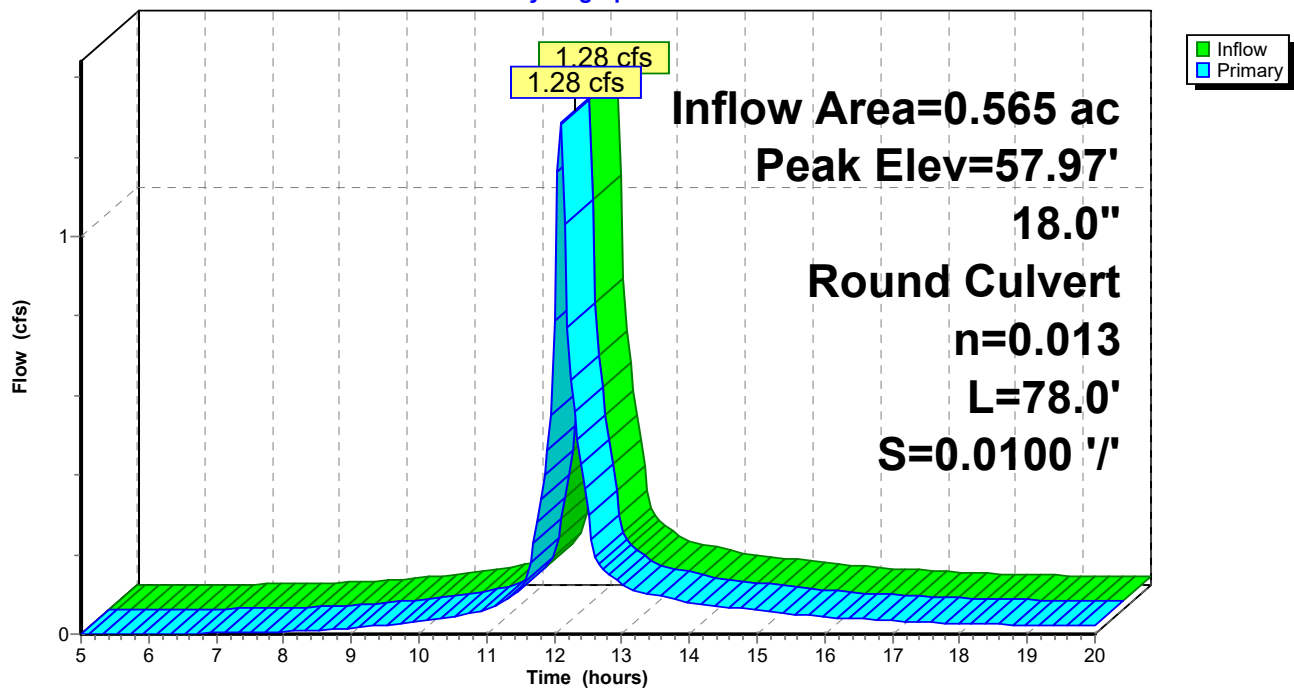
Device	Routing	Invert	Outlet Devices
#1	Primary	57.39'	18.0" Round Culvert L= 78.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.39' / 56.61' S= 0.0100 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[57] Hint: Peaked at 57.15' (Flood elevation advised)

[79] Warning: Submerged Pond 123P Primary device # 1 OUTLET by 0.54'

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

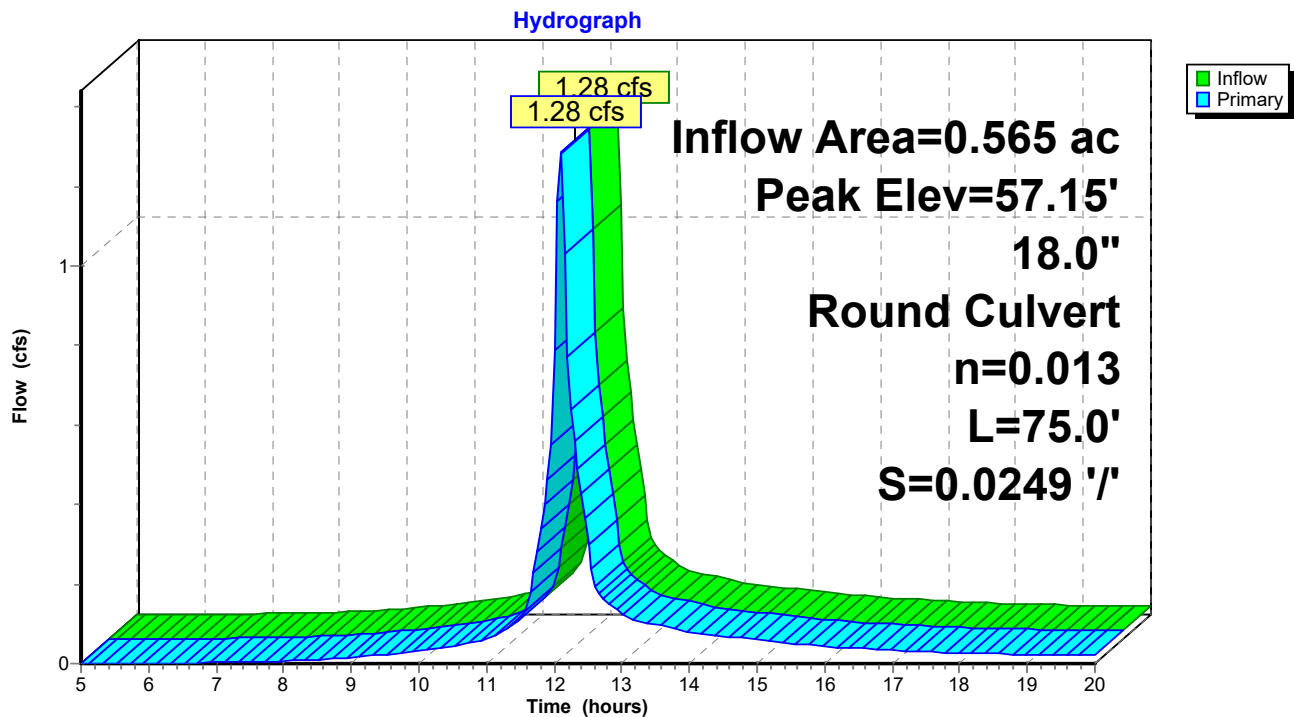
Peak Elev= 57.15' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	56.57'	18.0" Round Culvert L= 75.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 56.57' / 54.70' S= 0.0249 '/ Cc= 0.900 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



Summary for Pond 125P: CB 36

[57] Hint: Peaked at 54.82' (Flood elevation advised)

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

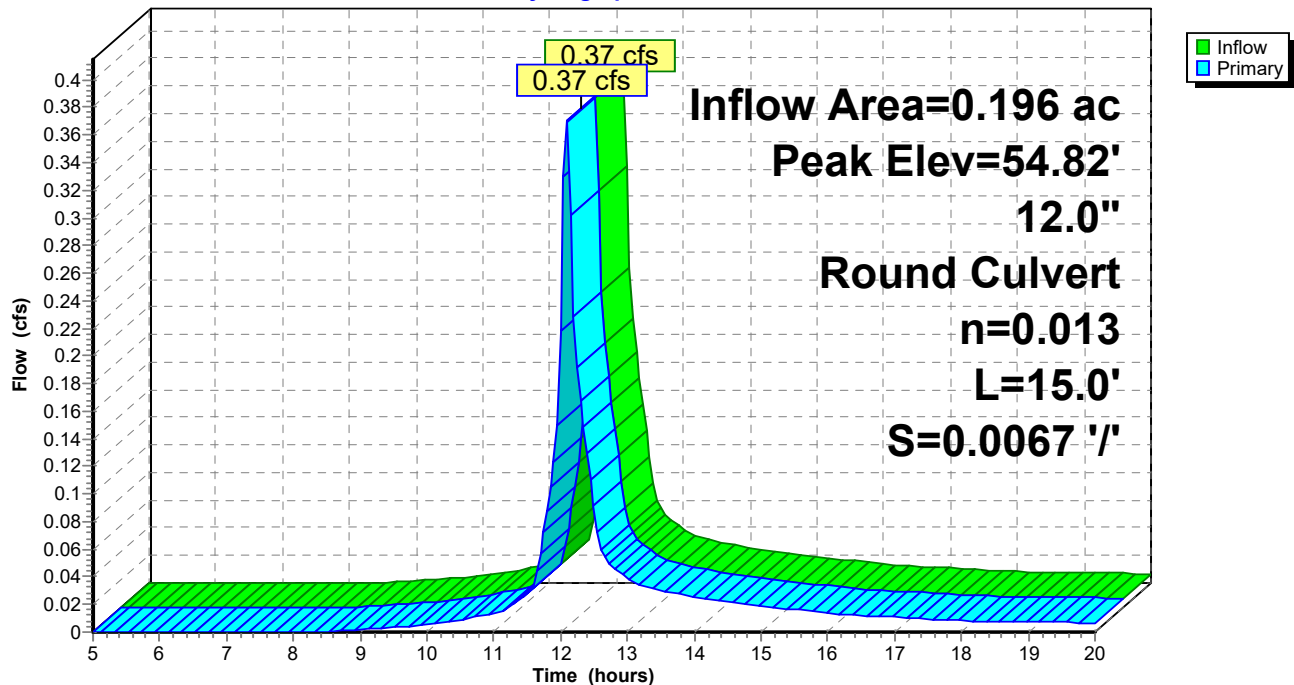
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.82' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.45'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.45' / 54.35' S= 0.0067 '/' Cc= 0.900 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

[57] Hint: Peaked at 54.86' (Flood elevation advised)

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

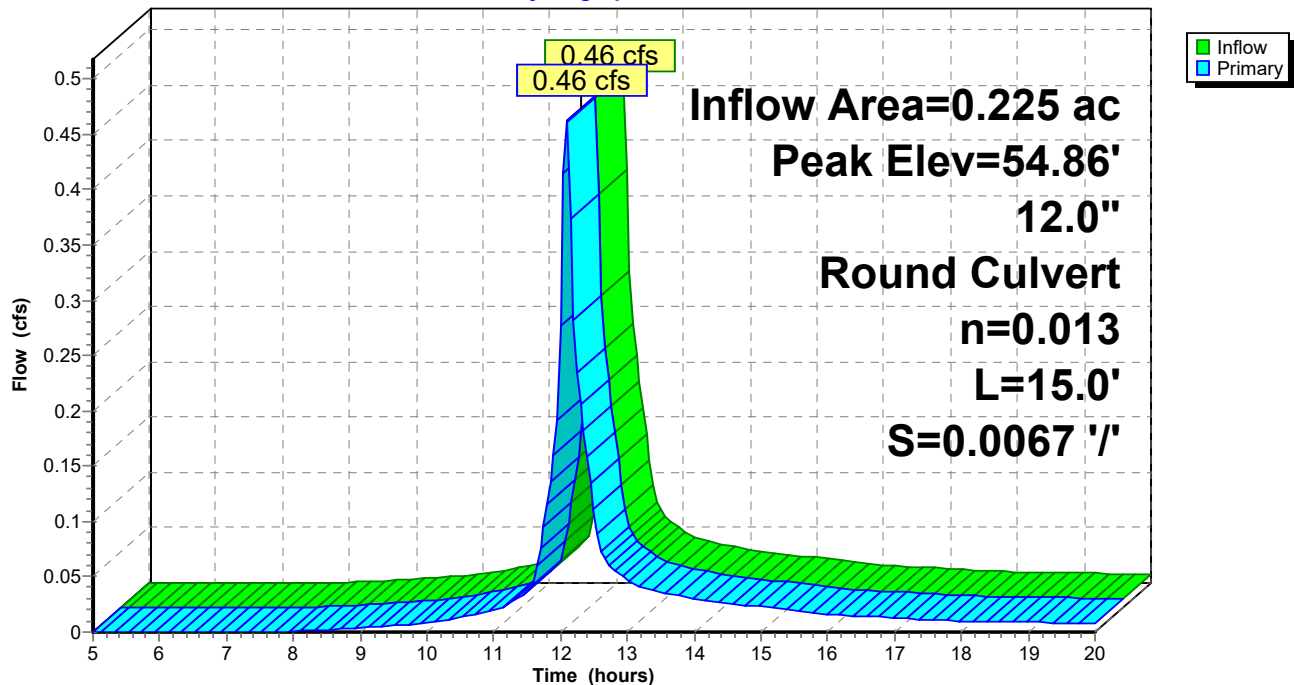
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.86' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.45'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.45' / 54.35' S= 0.0067 '/' Cc= 0.900 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

[57] Hint: Peaked at 54.78' (Flood elevation advised)

[79] Warning: Submerged Pond 125P Primary device # 1 INLET by 0.33'

[79] Warning: Submerged Pond 126P Primary device # 1 INLET by 0.33'

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

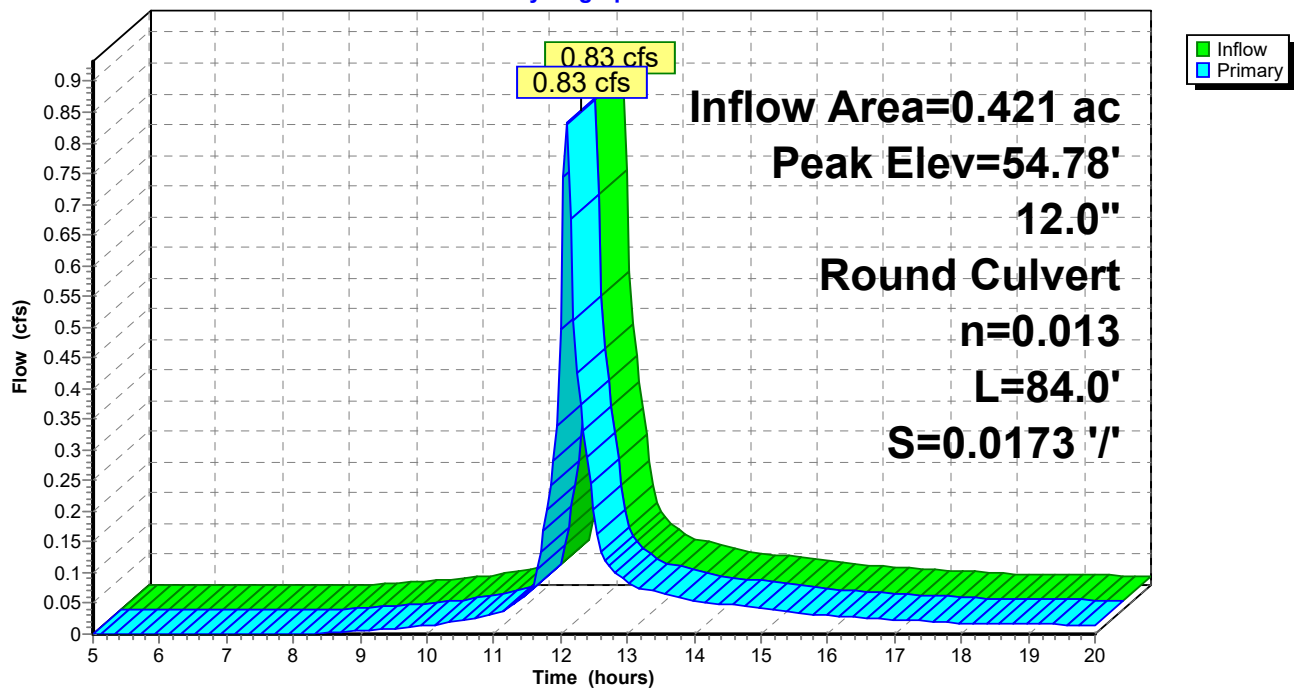
Device	Routing	Invert	Outlet Devices
#1	Primary	54.25'	12.0" Round Culvert L= 84.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.25' / 52.80' S= 0.0173 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 56.29' (Flood elevation advised)

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

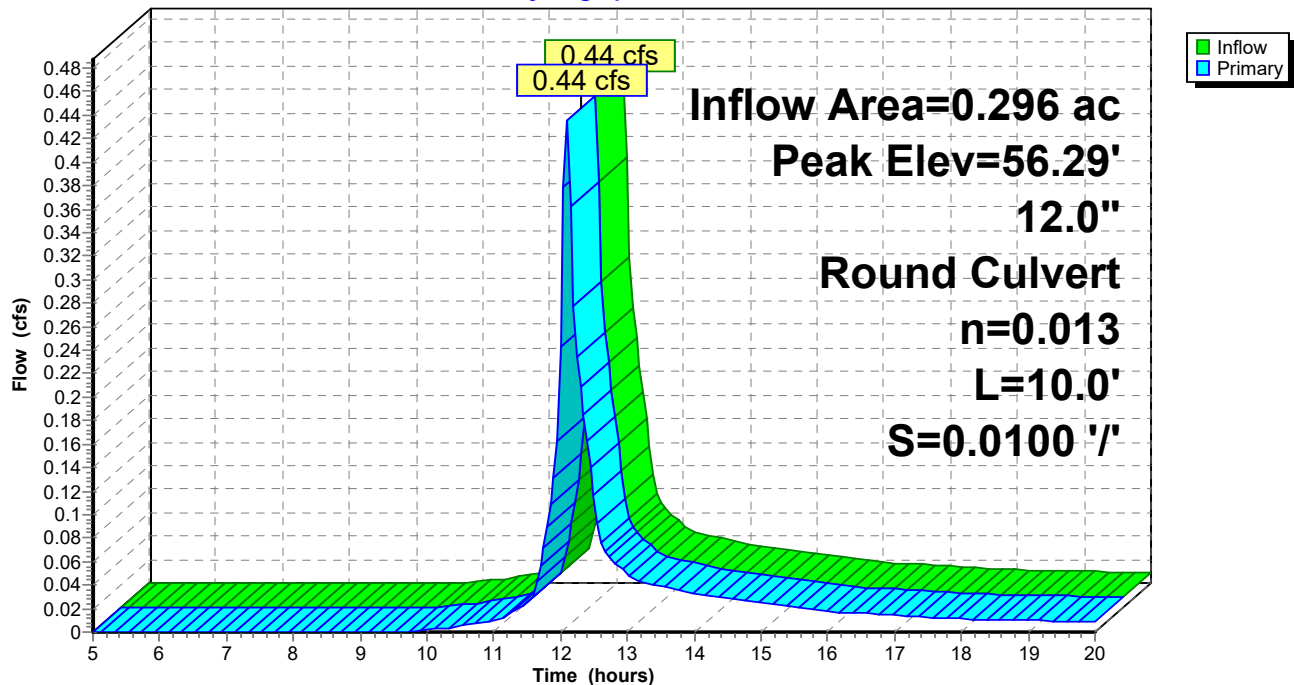
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 56.29' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	55.90'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 55.90' / 55.80' S= 0.0100 '/ Cc= 0.900 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

[57] Hint: Peaked at 54.34' (Flood elevation advised)

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

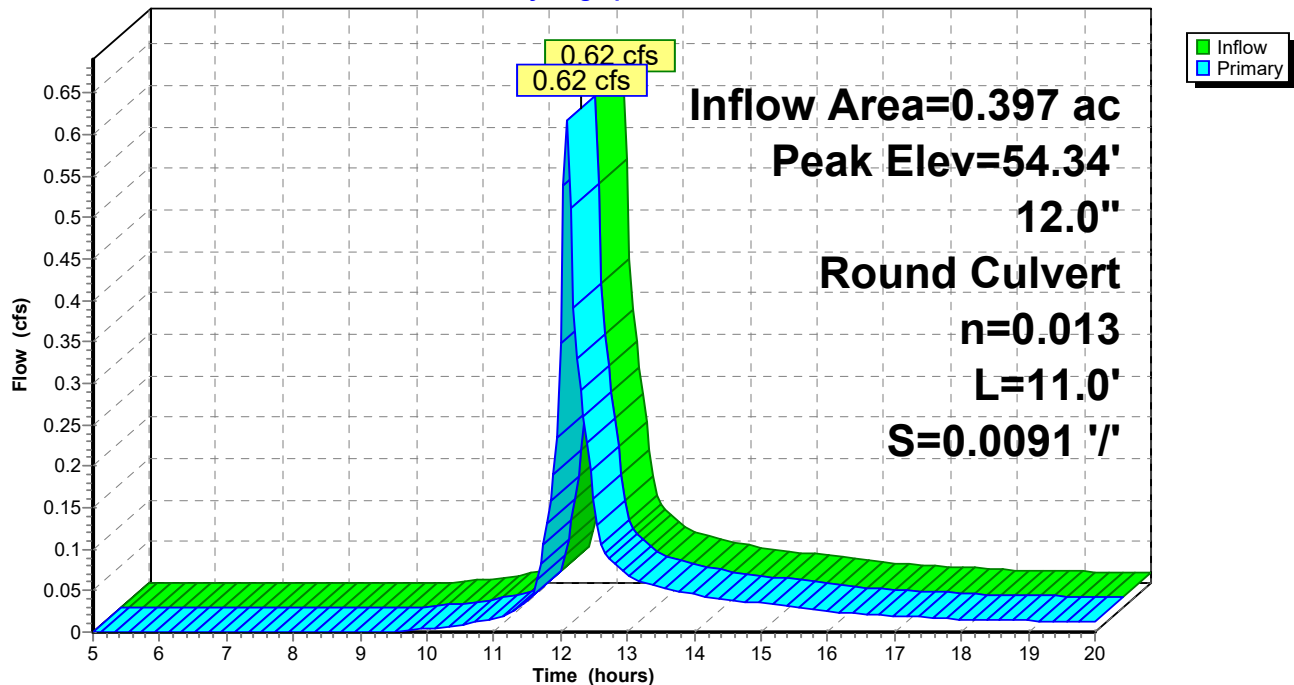
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.34' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.86'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.86' / 53.76' S= 0.0091 '/ Cc= 0.900 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

[57] Hint: Peaked at 54.66' (Flood elevation advised)

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

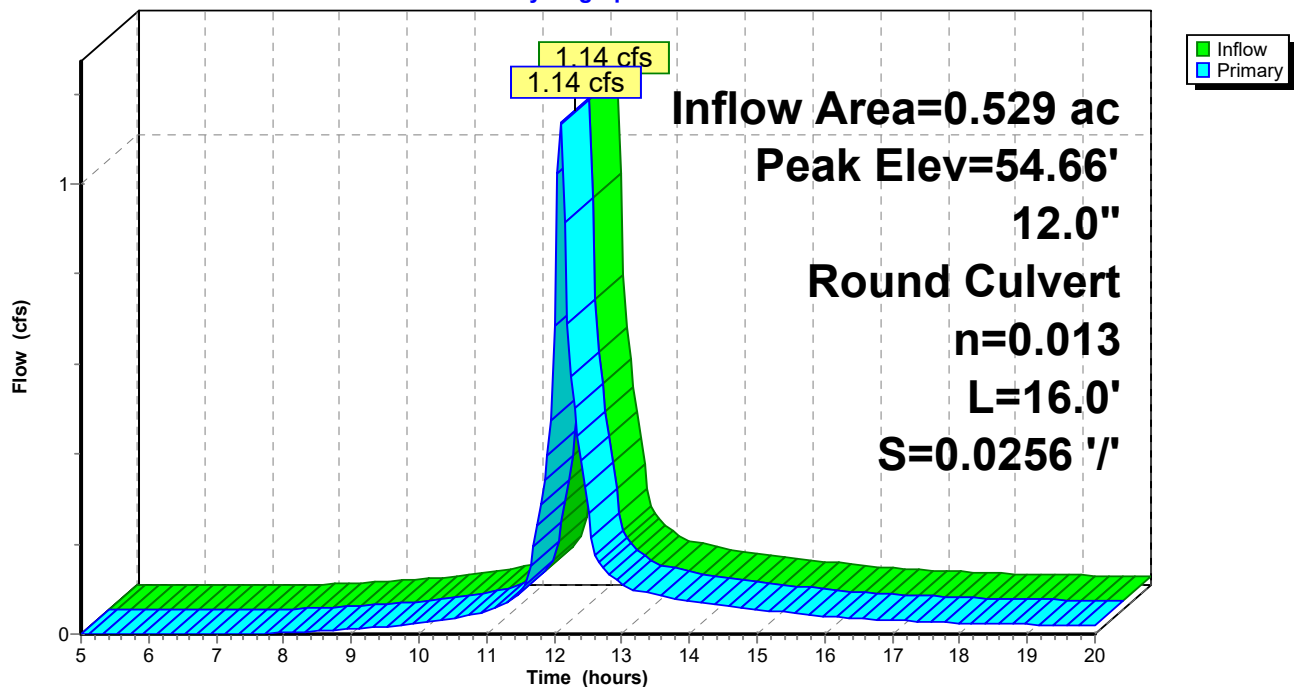
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.66' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.02'	12.0" Round Culvert L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.02' / 53.61' S= 0.0256 '/' Cc= 0.900 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

[57] Hint: Peaked at 54.27' (Flood elevation advised)

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

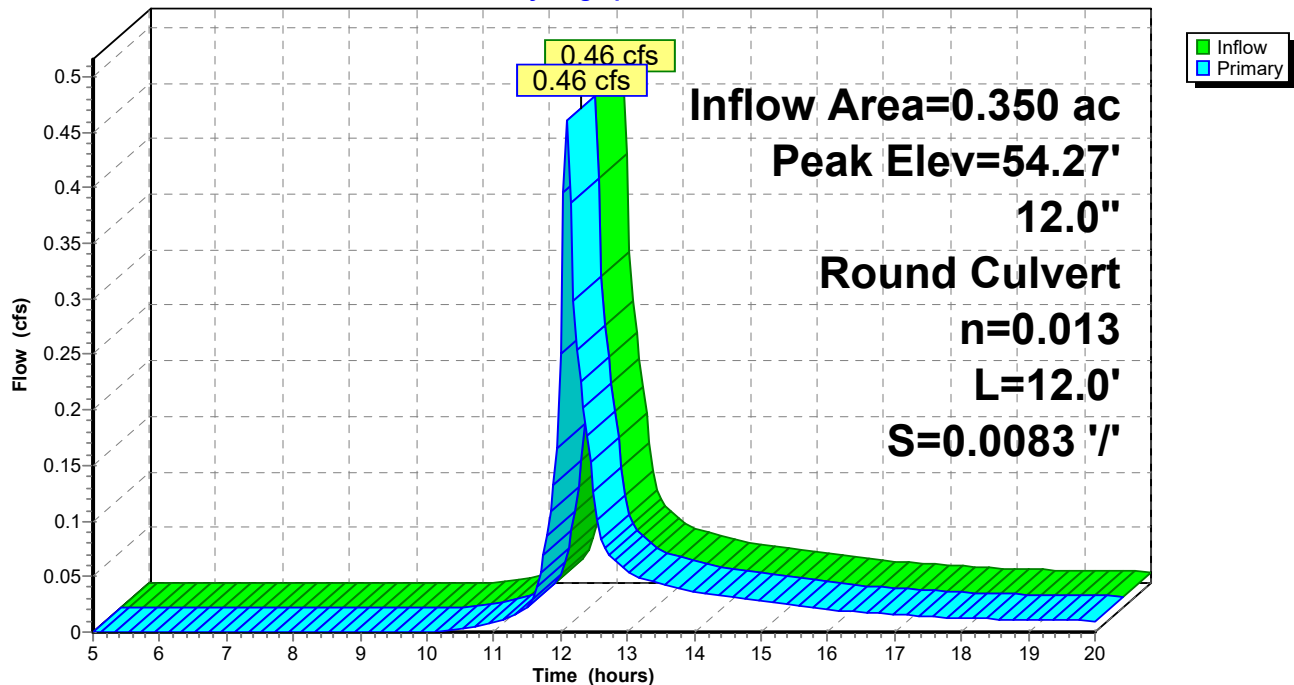
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.27' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.86'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.86' / 53.76' S= 0.0083 '/ Cc= 0.900 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

[57] Hint: Peaked at 54.05' (Flood elevation advised)

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

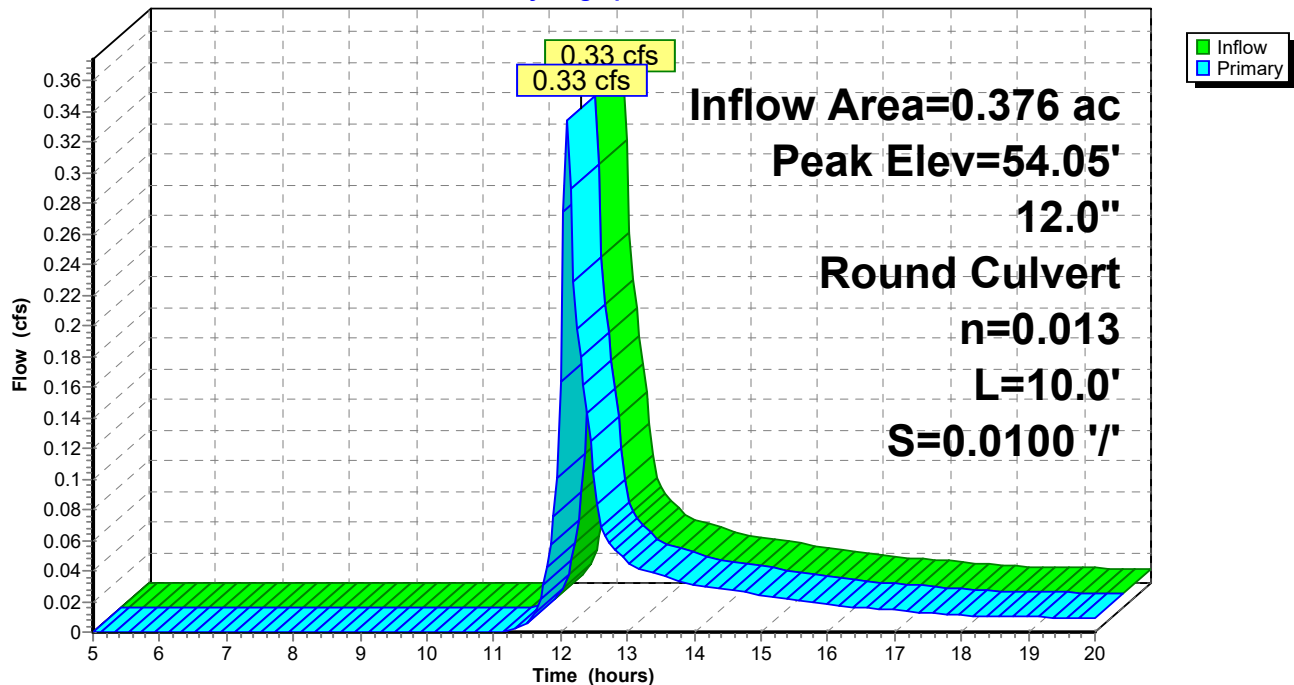
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.05' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.71'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.71' / 53.61' S= 0.0100 '/ Cc= 0.900 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

[57] Hint: Peaked at 54.43' (Flood elevation advised)

[79] Warning: Submerged Pond 130P Primary device # 1 INLET by 0.41'

[81] Warning: Exceeded Pond 132P by 0.39' @ 12.10 hrs

[81] Warning: Exceeded Pond 134P by 0.03' @ 12.10 hrs

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

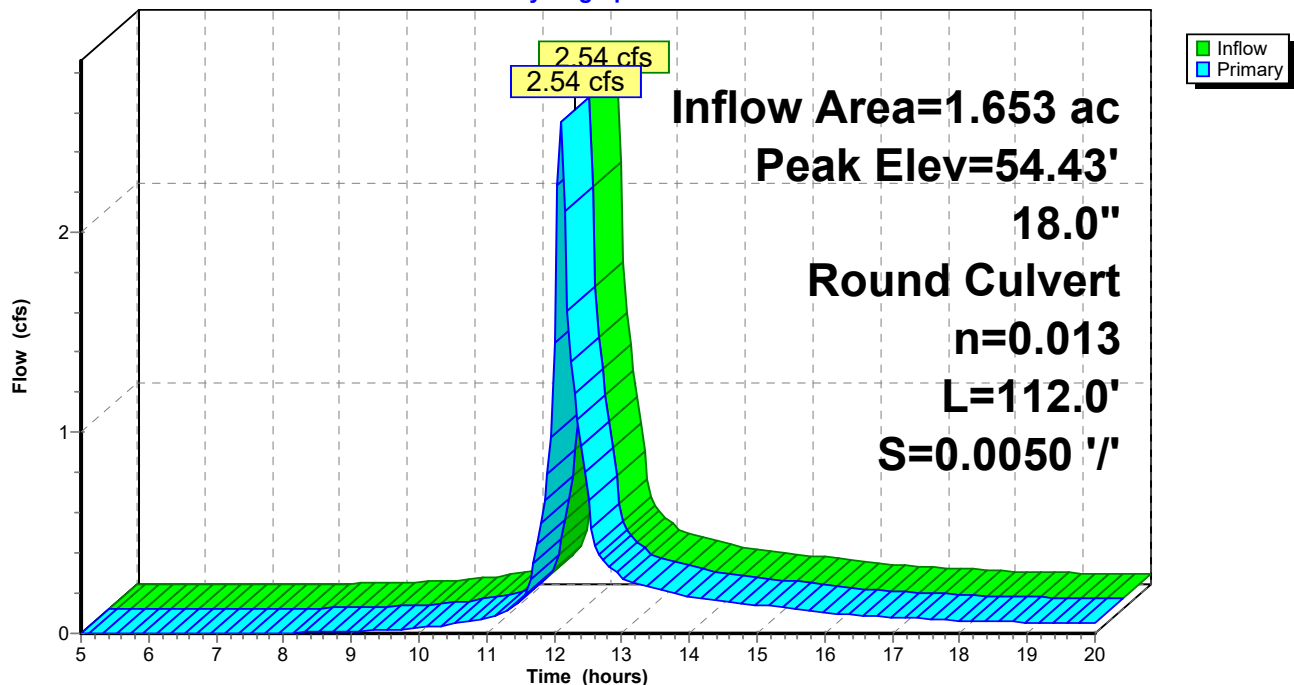
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 54.43' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.56'	18.0" Round Culvert L= 112.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.56' / 53.00' S= 0.0050 '/ Cc= 0.900 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**

Hydrograph



Summary for Pond 134P: DMH 25

[57] Hint: Peaked at 54.40' (Flood elevation advised)

[81] Warning: Exceeded Pond 129P by 0.06' @ 12.10 hrs

[81] Warning: Exceeded Pond 131P by 0.13' @ 12.10 hrs

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

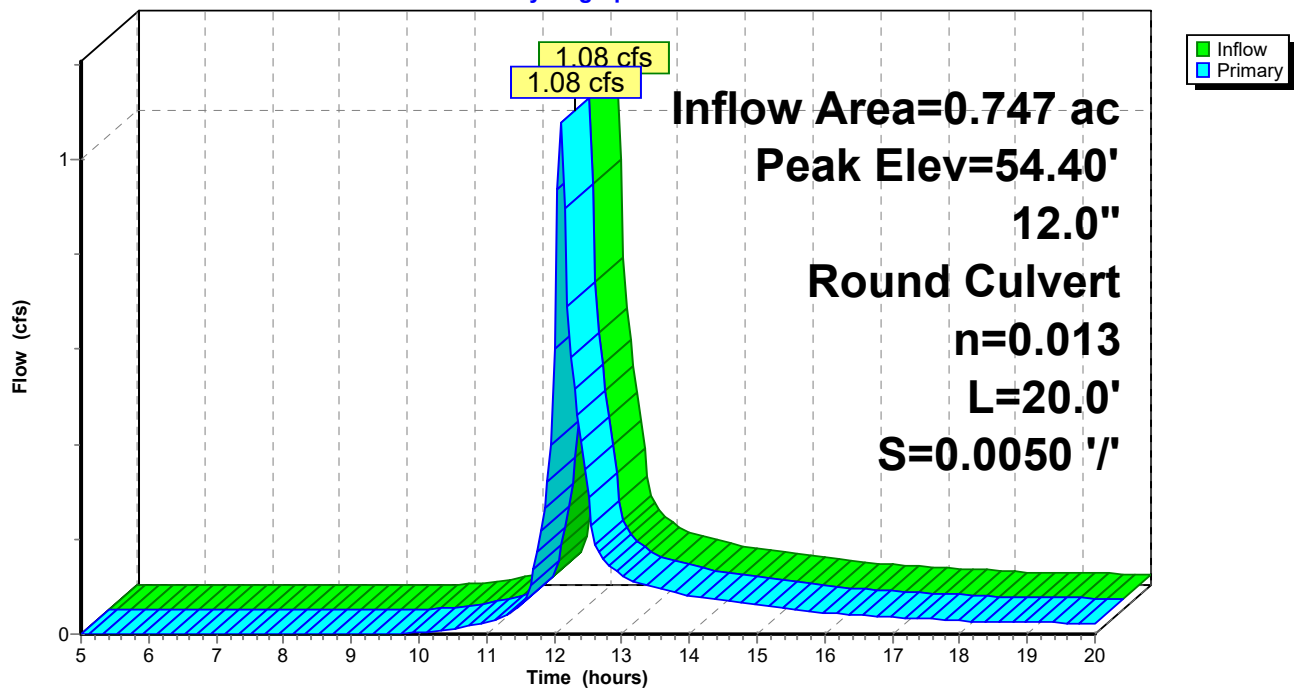
Device	Routing	Invert	Outlet Devices
#1	Primary	53.71'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.71' / 53.61' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[79] Warning: Submerged Pond 133P Primary device # 1 INLET by 0.31'

[81] Warning: Exceeded Pond 137P by 0.19' @ 12.60 hrs

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	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (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'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 51.00'
#2	Primary	53.00'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.00' / 52.00' S= 0.0400 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	56.40'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 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)

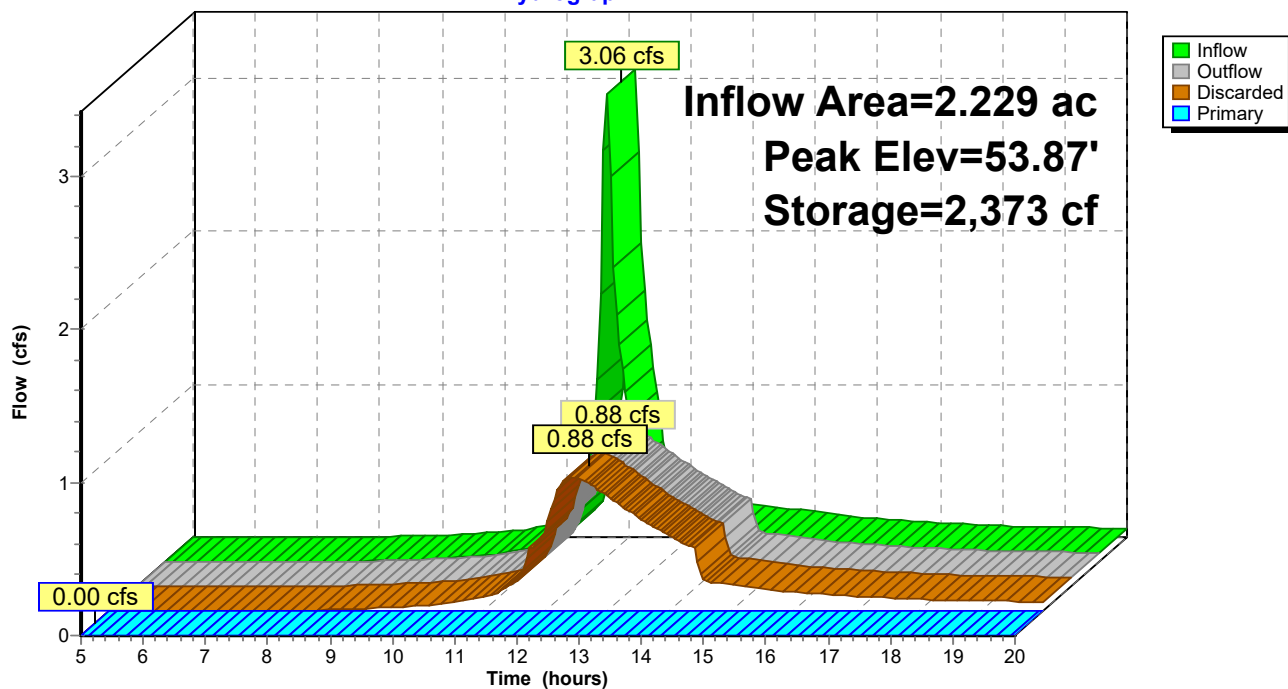
Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=53.00' (Free Discharge)

↑**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

[57] Hint: Peaked at 53.79' (Flood elevation advised)

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

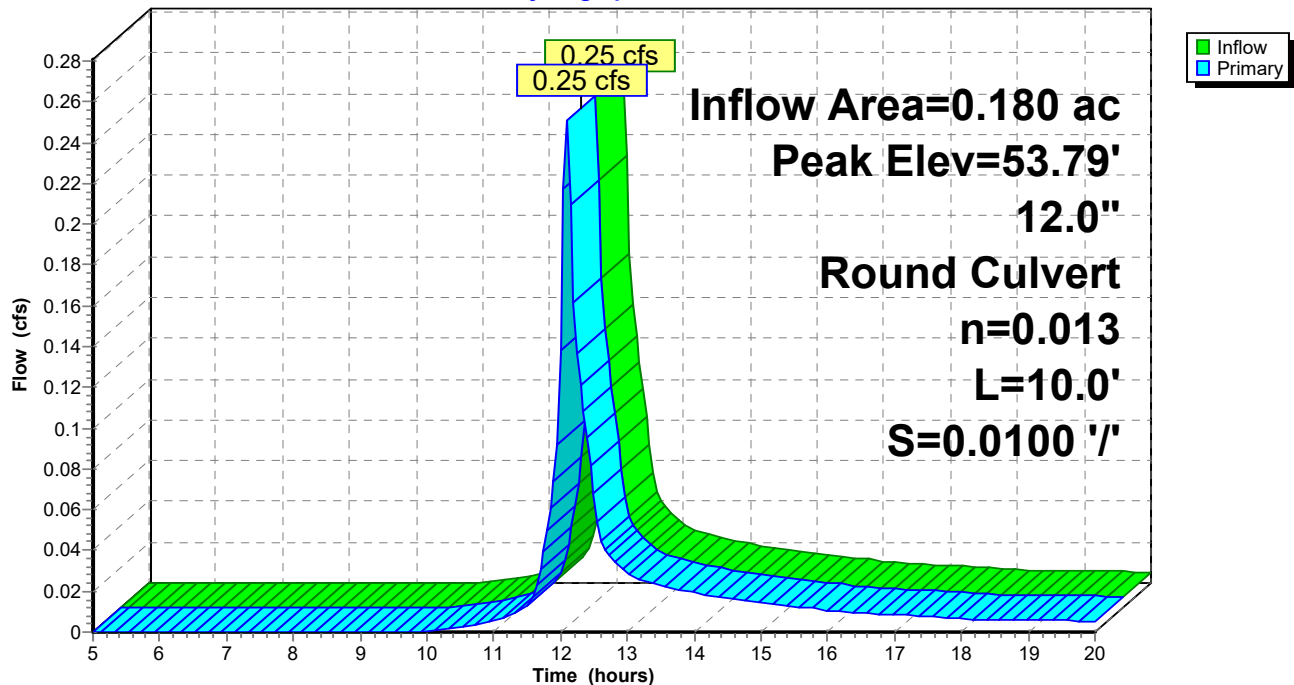
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 53.79' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.50' / 53.40' S= 0.0100 '/ Cc= 0.900 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

[57] Hint: Peaked at 53.91' (Flood elevation advised)

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

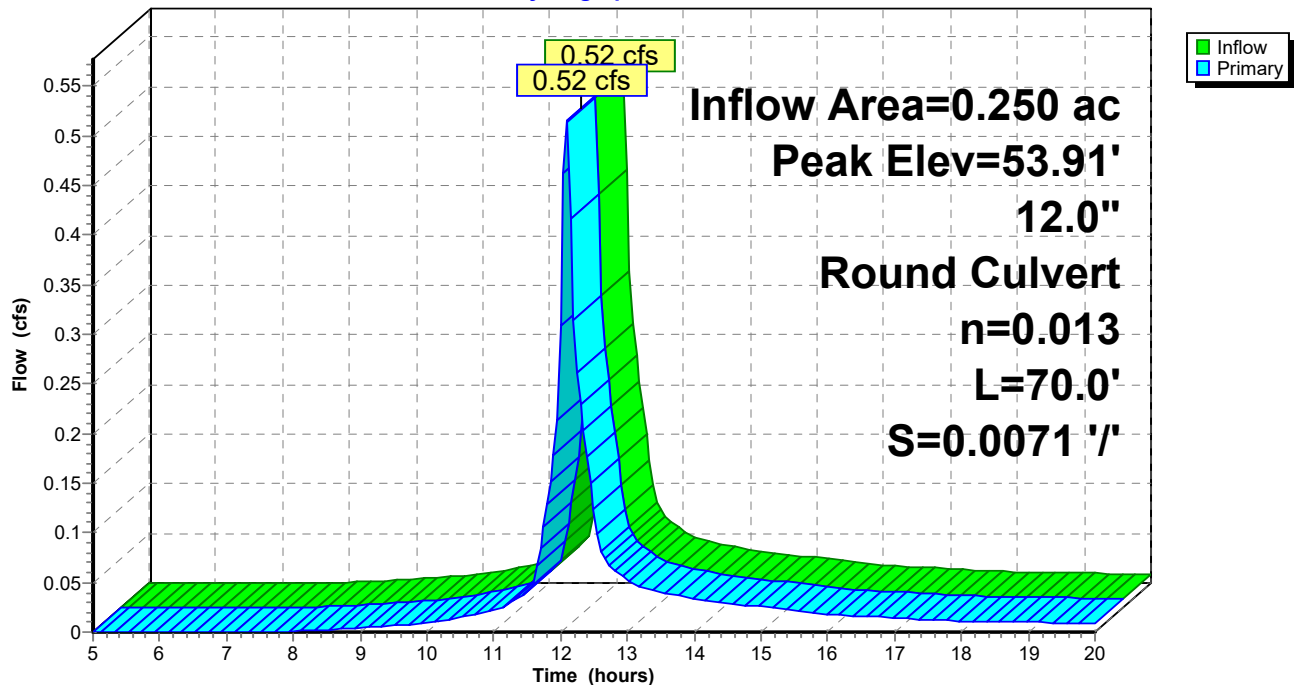
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 53.91' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.50'	12.0" Round Culvert L= 70.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.50' / 53.00' S= 0.0071 '/' Cc= 0.900 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

[57] Hint: Peaked at 53.78' (Flood elevation advised)

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

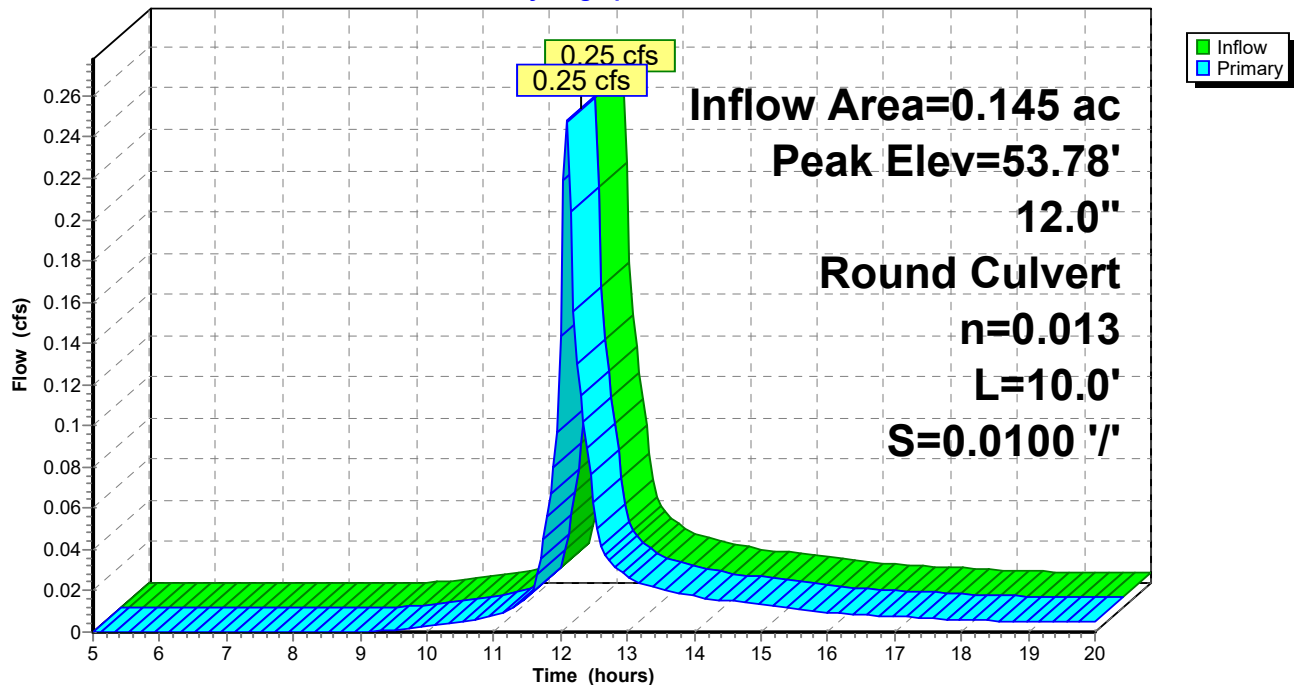
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 53.78' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.50' / 53.40' S= 0.0100 '/ Cc= 0.900 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

[57] Hint: Peaked at 53.72' (Flood elevation advised)

[79] Warning: Submerged Pond 136P Primary device # 1 INLET by 0.22'

[79] Warning: Submerged Pond 138P Primary device # 1 INLET by 0.22'

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

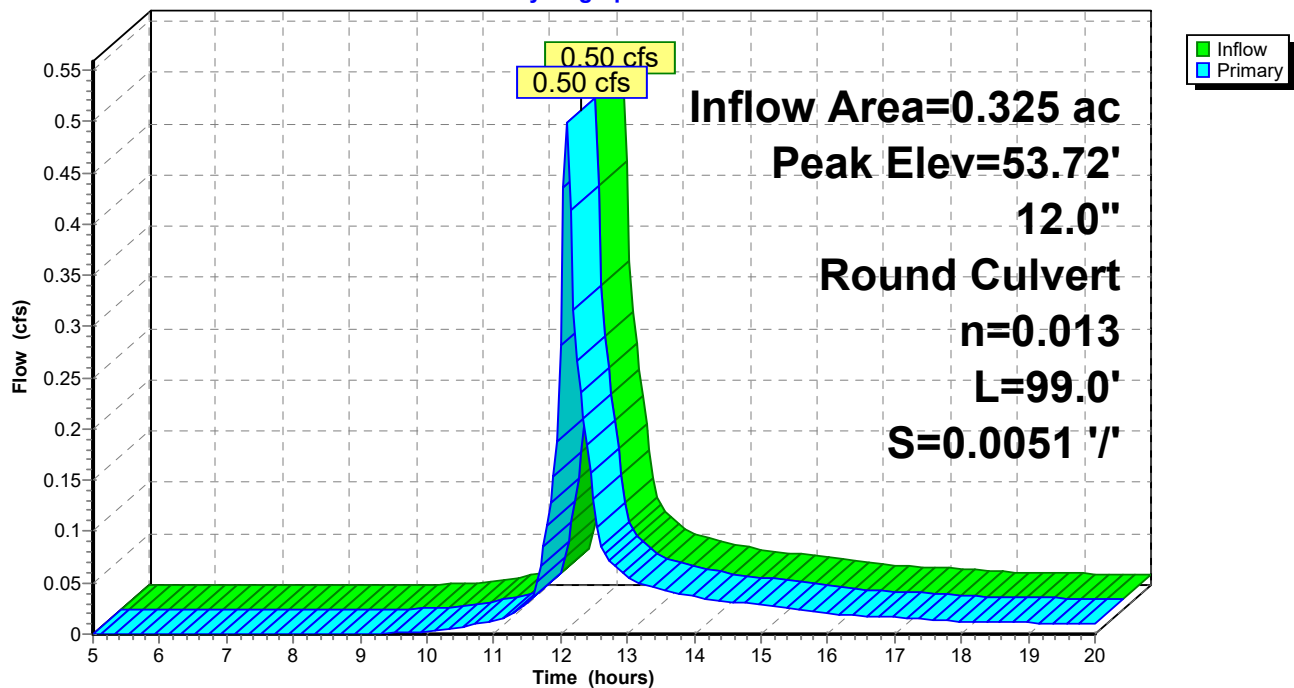
Device	Routing	Invert	Outlet Devices
#1	Primary	53.30'	12.0" Round Culvert L= 99.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.30' / 52.80' S= 0.0051 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 56.31' (Flood elevation advised)

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

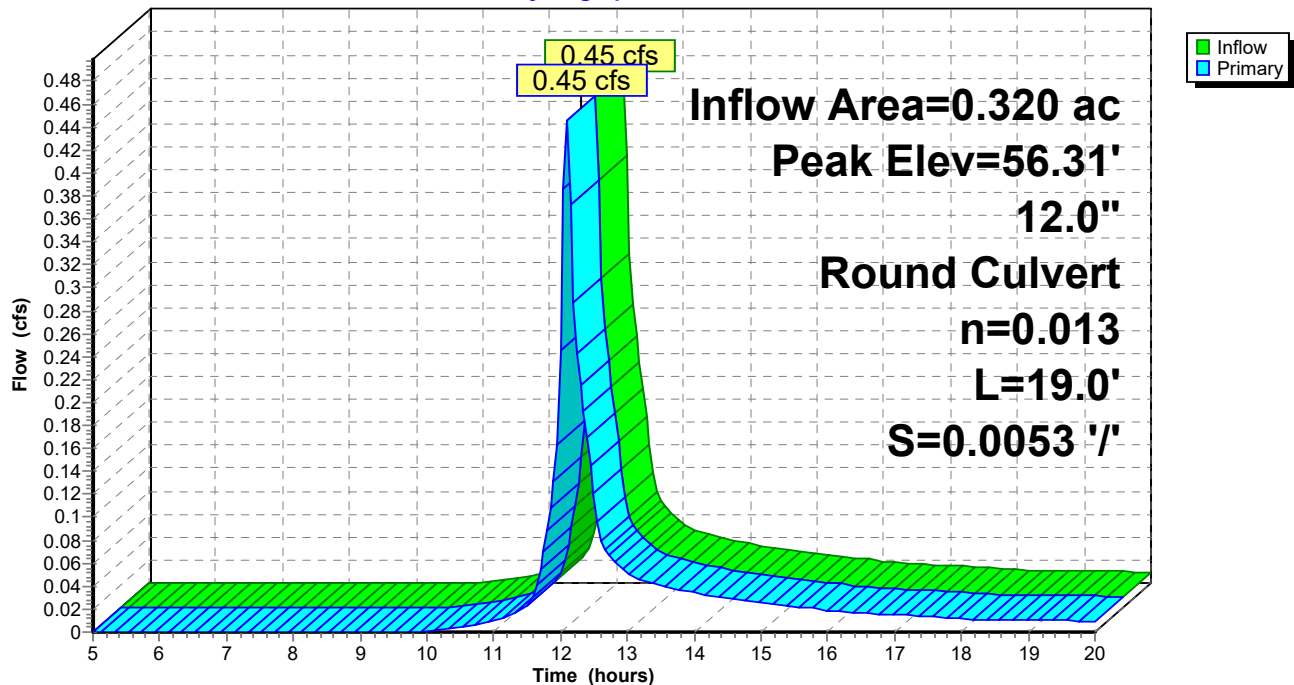
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 56.31' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	55.90'	12.0" Round Culvert L= 19.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 55.90' / 55.80' S= 0.0053 '/ Cc= 0.900 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

[57] Hint: Peaked at 56.25' (Flood elevation advised)

[79] Warning: Submerged Pond 128P Primary device # 1 INLET by 0.35'

[79] Warning: Submerged Pond 140P Primary device # 1 INLET by 0.35'

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

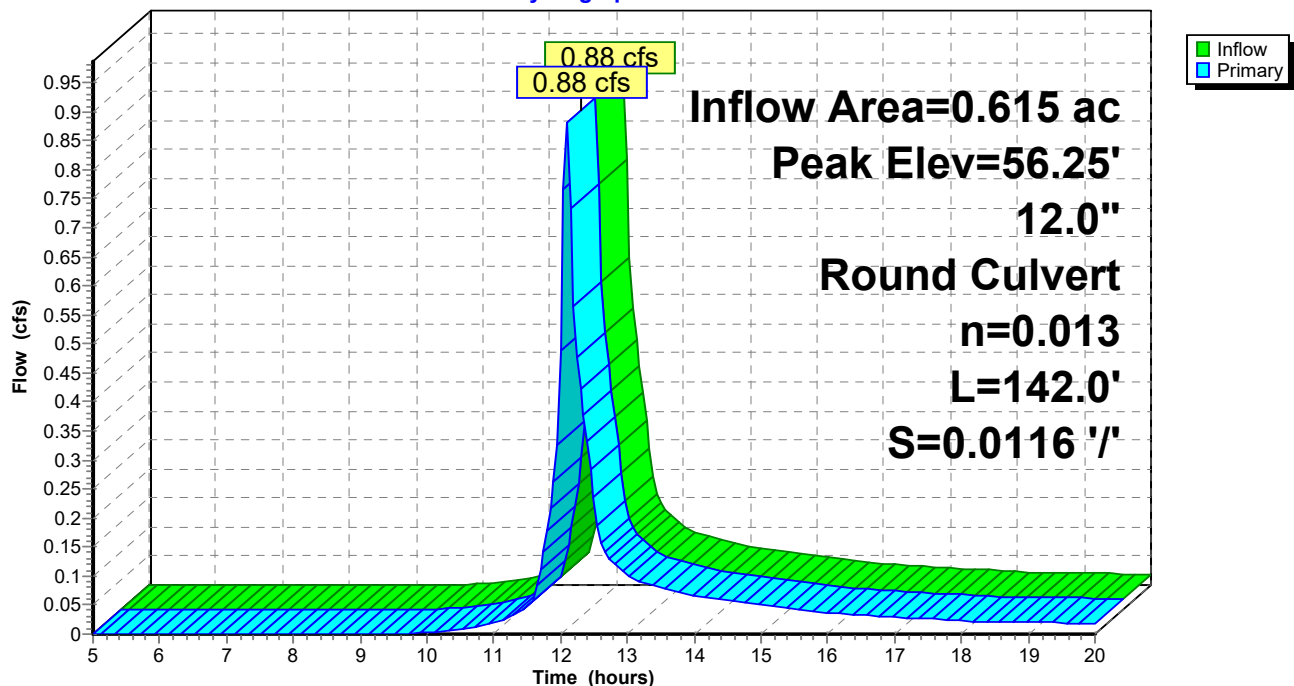
Device	Routing	Invert	Outlet Devices
#1	Primary	55.70'	12.0" Round Culvert L= 142.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 55.70' / 54.05' S= 0.0116 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 50.98' (Flood elevation advised)

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

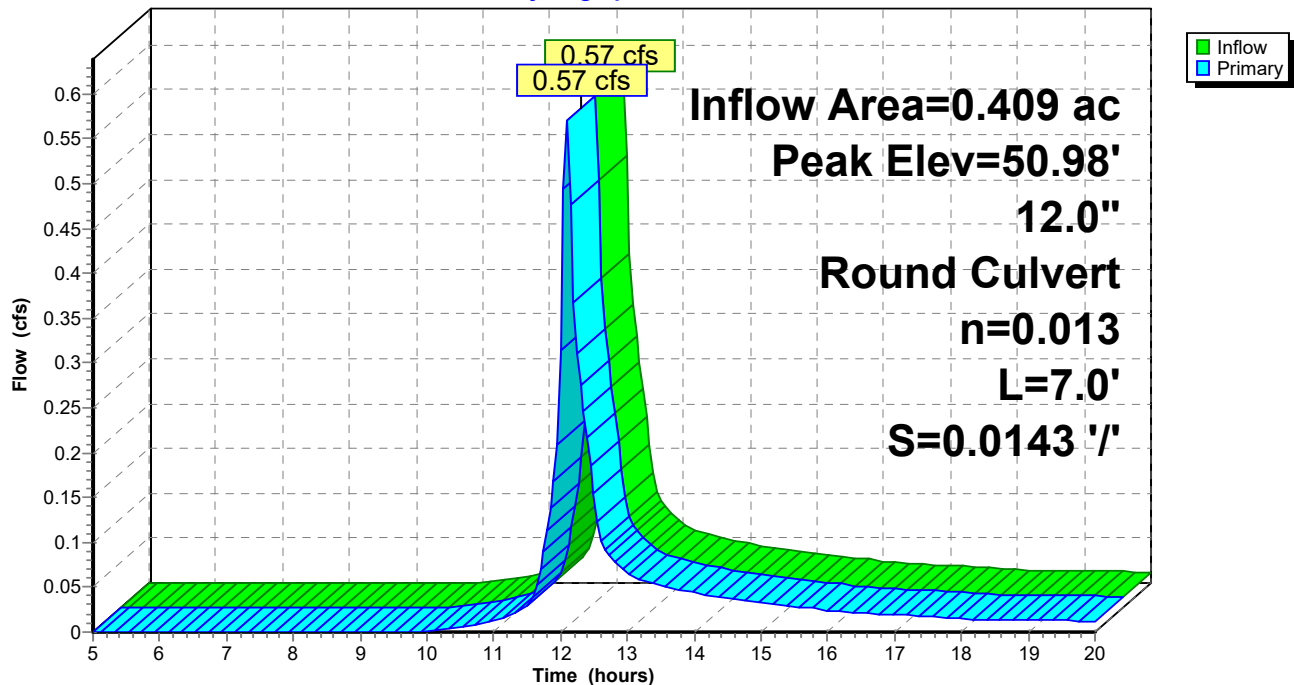
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 50.98' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.53'	12.0" Round Culvert L= 7.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.53' / 50.43' S= 0.0143 '/ Cc= 0.900 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

[57] Hint: Peaked at 51.08' (Flood elevation advised)

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

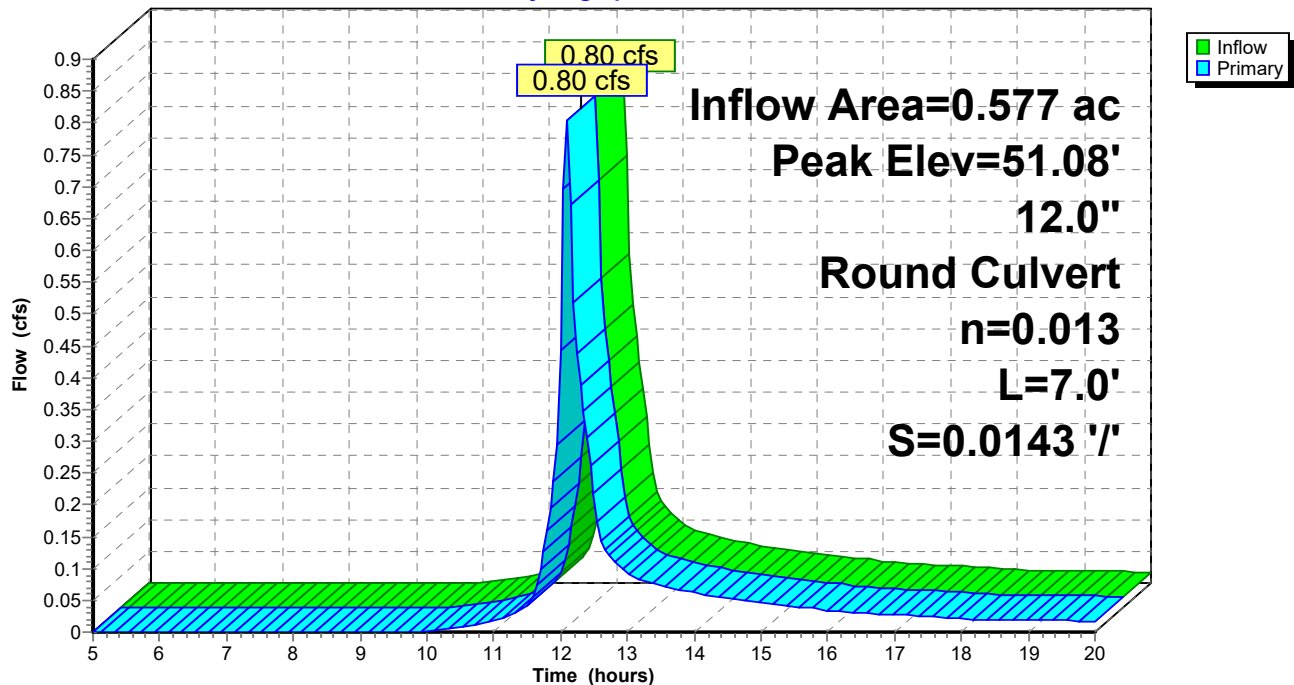
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 51.08' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.53'	12.0" Round Culvert L= 7.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.53' / 50.43' S= 0.0143 '/ Cc= 0.900 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

[57] Hint: Peaked at 51.08' (Flood elevation advised)

[81] Warning: Exceeded Pond 142P by 0.11' @ 12.10 hrs

[81] Warning: Exceeded Pond 143P by 0.01' @ 12.10 hrs

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

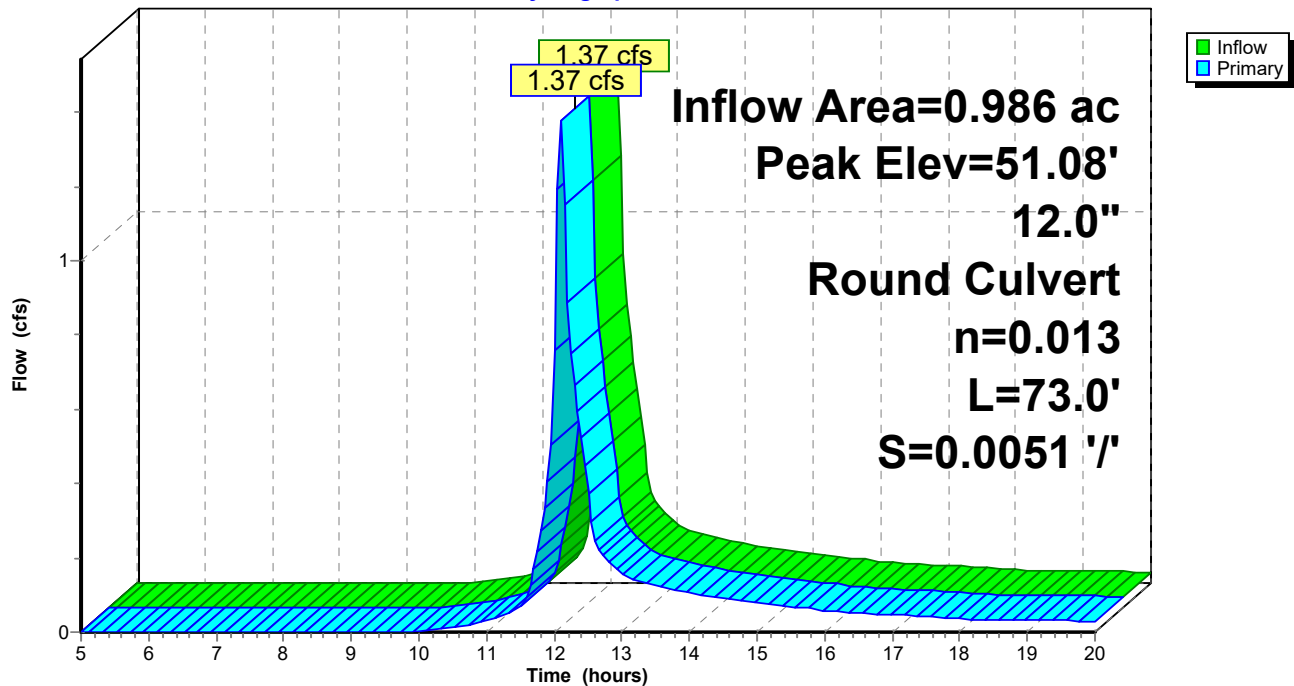
Device	Routing	Invert	Outlet Devices
#1	Primary	50.33'	12.0" Round Culvert L= 73.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.33' / 49.96' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 50.46' (Flood elevation advised)

[79] Warning: Submerged Pond 144P Primary device # 1 INLET by 0.13'

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

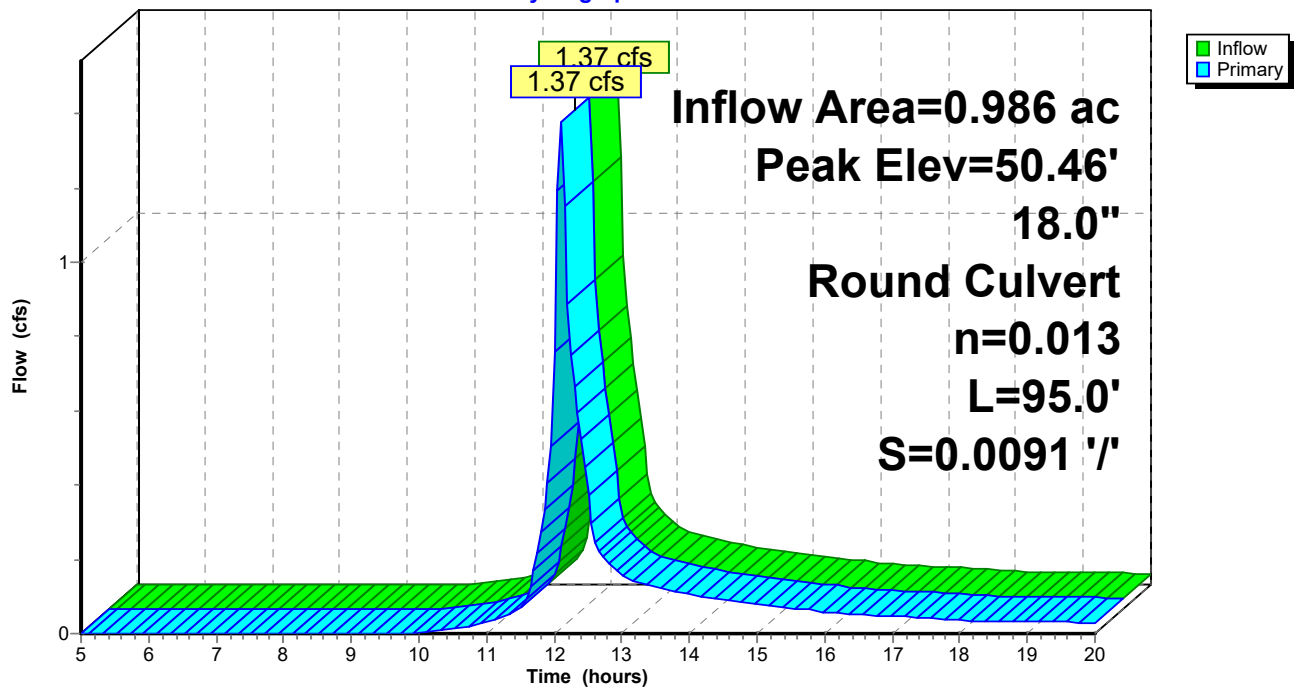
Device	Routing	Invert	Outlet Devices
#1	Primary	49.86'	18.0" Round Culvert L= 95.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 49.86' / 49.00' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[79] Warning: Submerged Pond 145P Primary device # 1 OUTLET by 0.73'

[79] Warning: Submerged Pond 148P Primary device # 1 OUTLET by 0.73'

[79] Warning: Submerged Pond 191P Primary device # 1 OUTLET by 0.73'

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	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (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

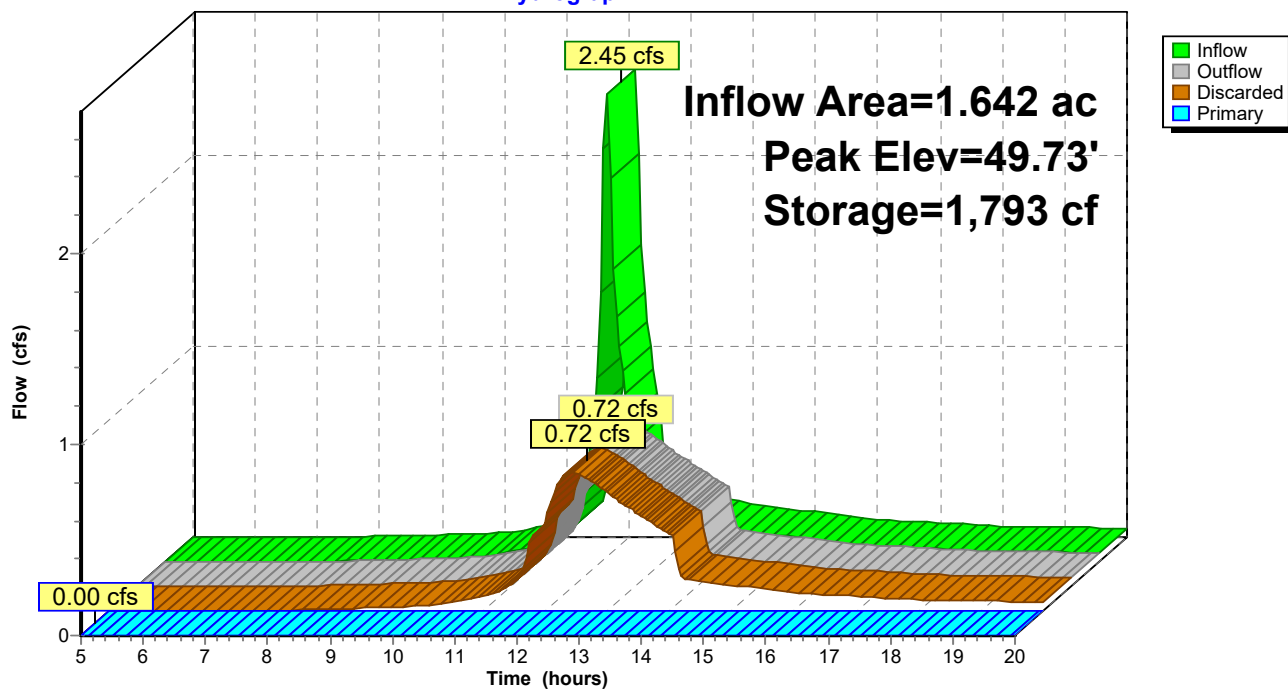
Device	Routing	Invert	Outlet Devices
#1	Discarded	49.00'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 47.00'
#2	Primary	49.00'	12.0" Round Culvert L= 42.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 49.00' / 45.00' S= 0.0952 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	52.20'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 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

[57] Hint: Peaked at 54.41' (Flood elevation advised)

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

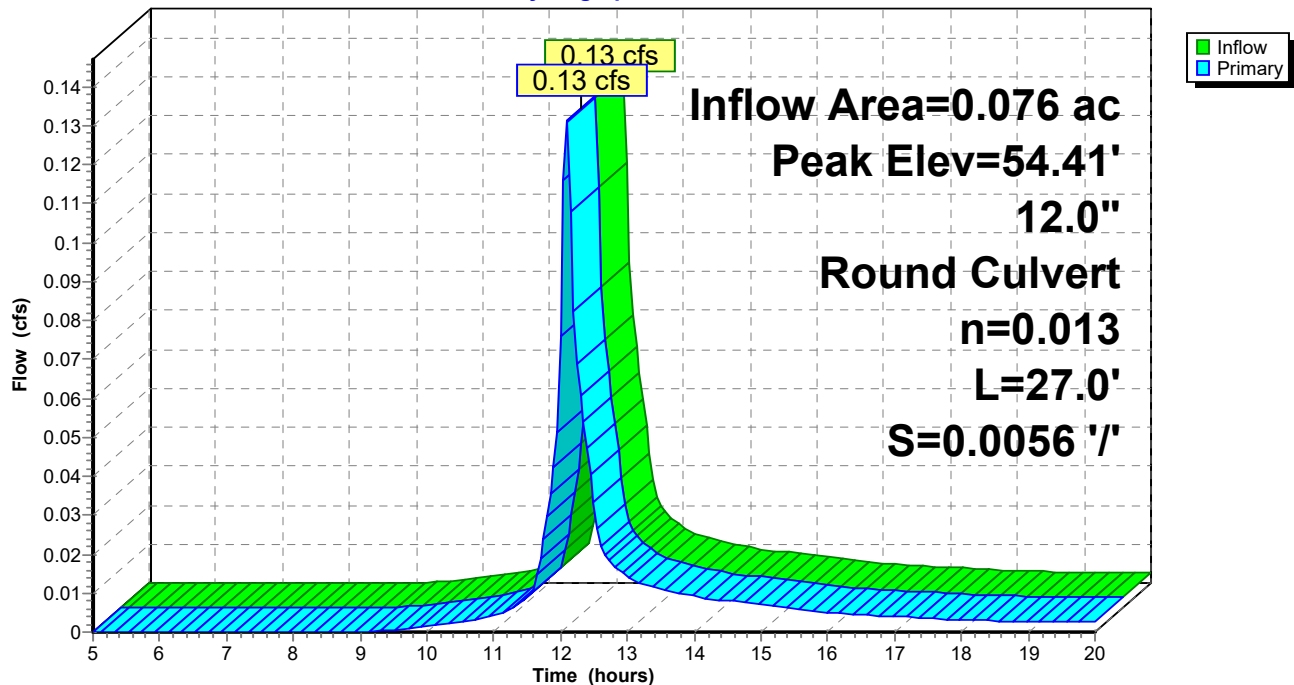
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.41' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.20'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.20' / 54.05' S= 0.0056 '/ Cc= 0.900 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

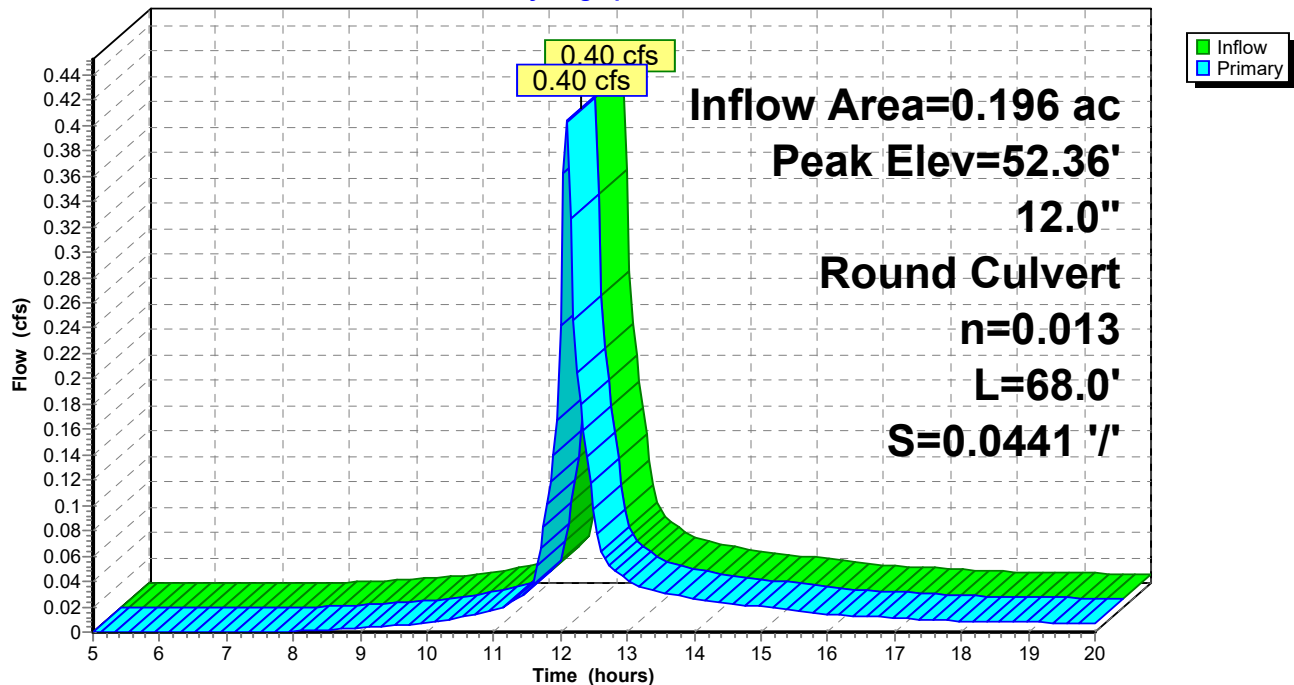
[57] Hint: Peaked at 52.36' (Flood elevation advised)

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'	12.0" Round Culvert L= 68.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.00' / 49.00' S= 0.0441 '/' Cc= 0.900 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

[57] Hint: Peaked at 54.41' (Flood elevation advised)

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

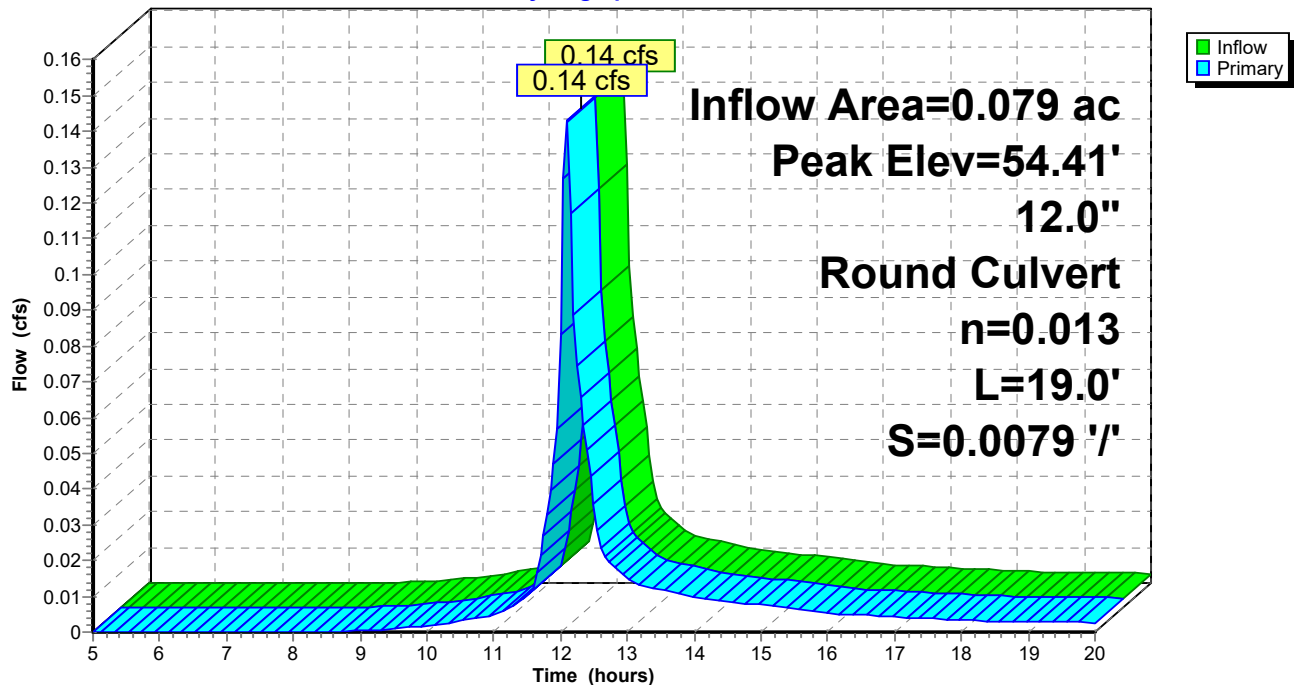
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.41' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.20'	12.0" Round Culvert L= 19.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.20' / 54.05' S= 0.0079 '/' Cc= 0.900 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

[57] Hint: Peaked at 54.59' (Flood elevation advised)

[79] Warning: Submerged Pond 141P Primary device # 1 OUTLET by 0.54'

[81] Warning: Exceeded Pond 147P by 0.18' @ 12.10 hrs

[81] Warning: Exceeded Pond 149P by 0.18' @ 12.10 hrs

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

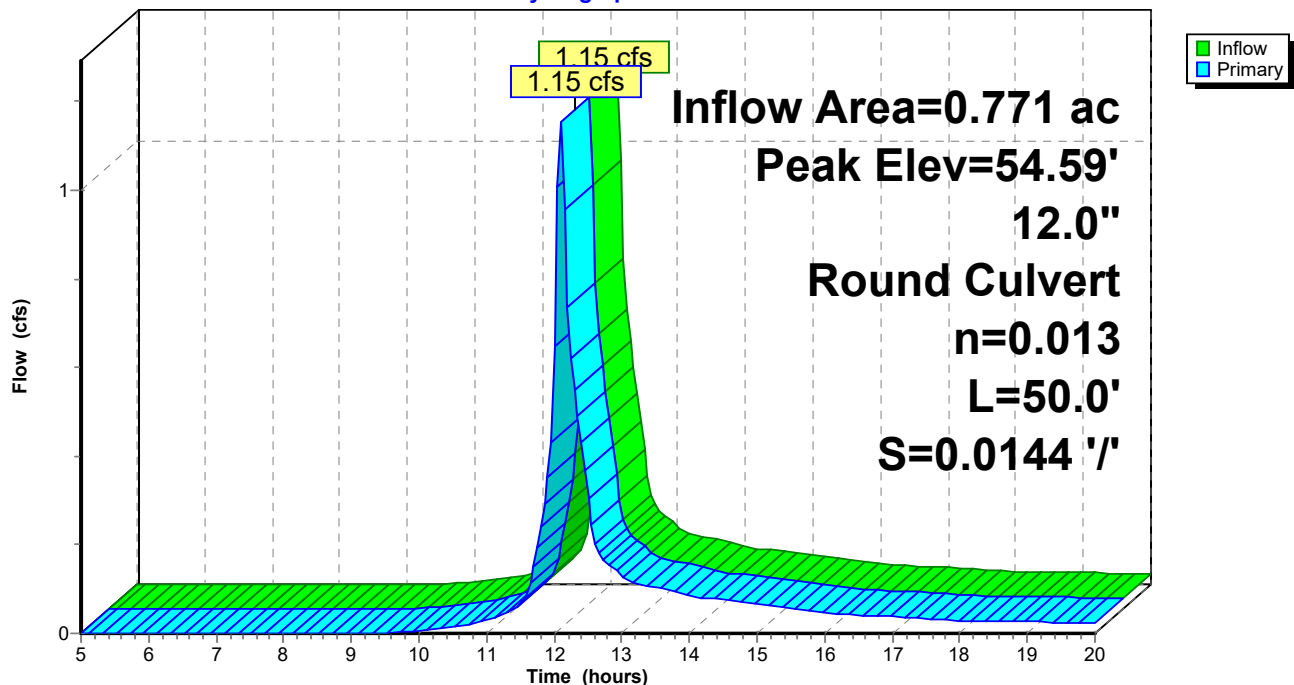
Device	Routing	Invert	Outlet Devices
#1	Primary	53.95'	12.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.95' / 53.23' S= 0.0144 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.14 cfs @ 12.10 hrs HW=54.59' (Free Discharge)

↑**1=Culvert** (Inlet Controls 1.14 cfs @ 2.15 fps)

Pond 150P: DMH 22

Hydrograph



Summary for Pond 151P: CB 22

[57] Hint: Peaked at 52.62' (Flood elevation advised)

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

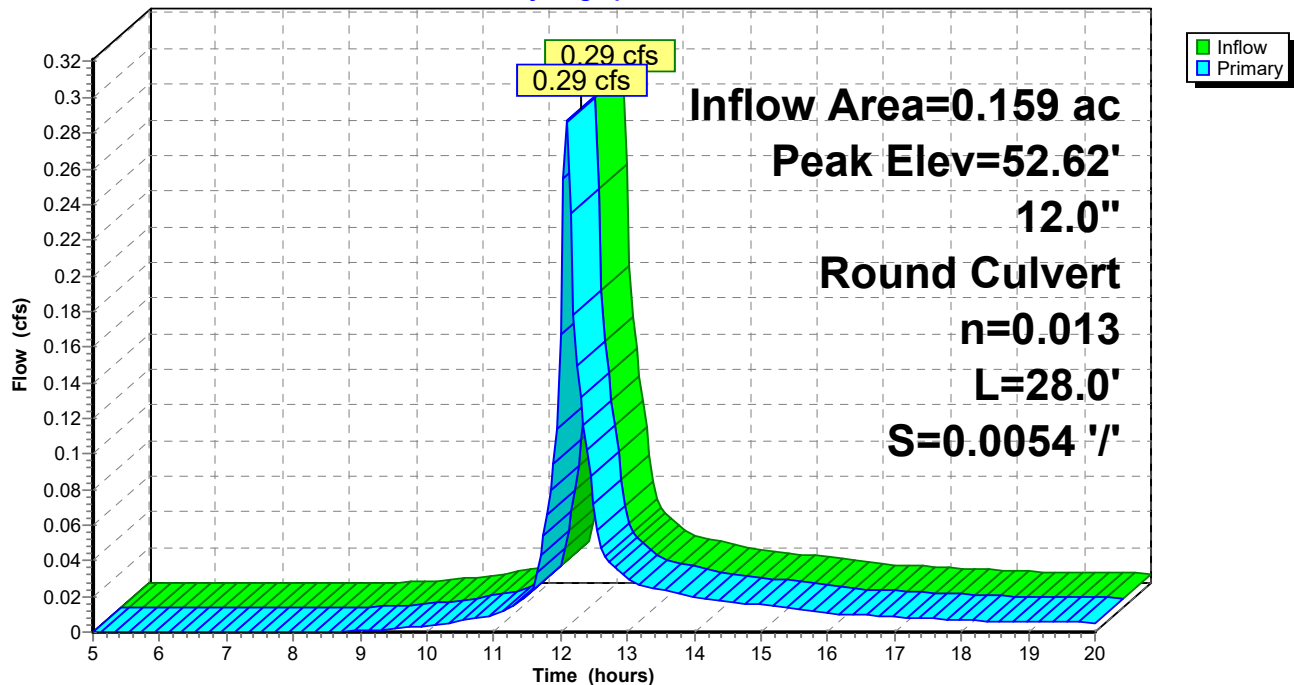
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 52.62' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	52.30'	12.0" Round Culvert L= 28.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.30' / 52.15' S= 0.0054 '/ Cc= 0.900 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

[57] Hint: Peaked at 52.62' (Flood elevation advised)

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

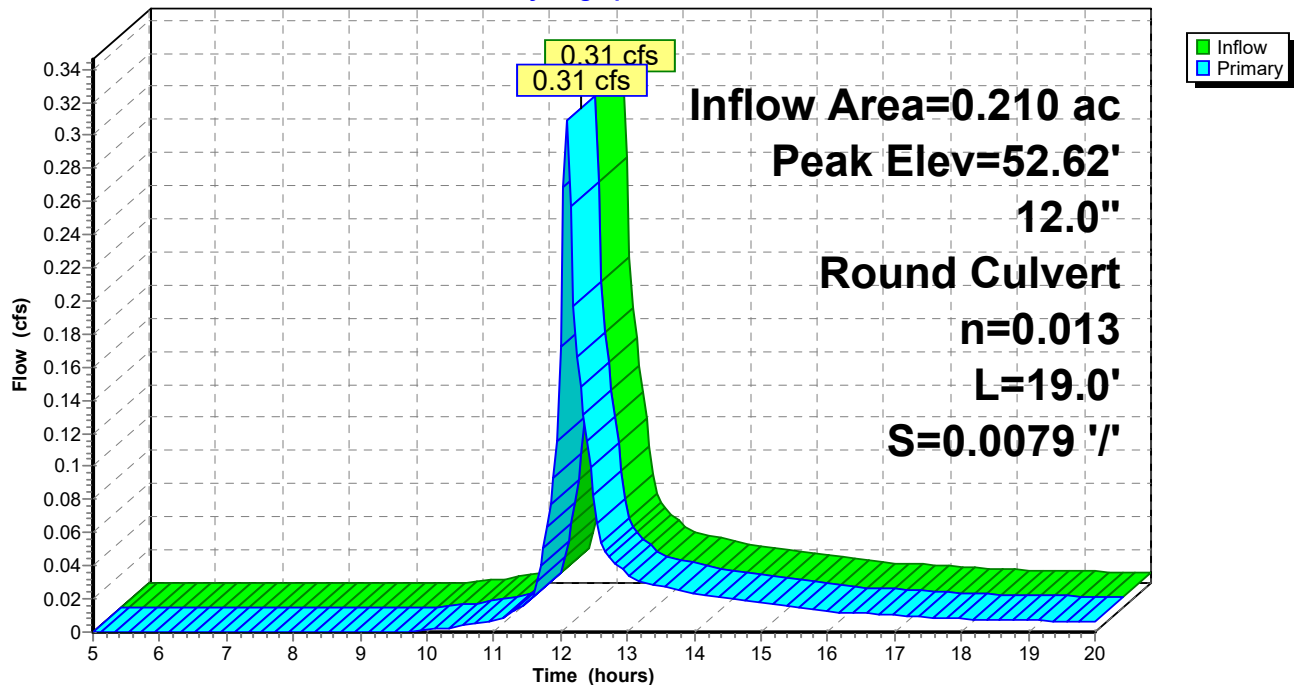
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 52.62' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	52.30'	12.0" Round Culvert L= 19.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.30' / 52.15' S= 0.0079 '/ Cc= 0.900 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

[57] Hint: Peaked at 52.99' (Flood elevation advised)

[81] Warning: Exceeded Pond 151P by 0.37' @ 12.10 hrs

[81] Warning: Exceeded Pond 152P by 0.37' @ 12.10 hrs

[79] Warning: Submerged Pond 161P Primary device # 1 OUTLET by 0.84'

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

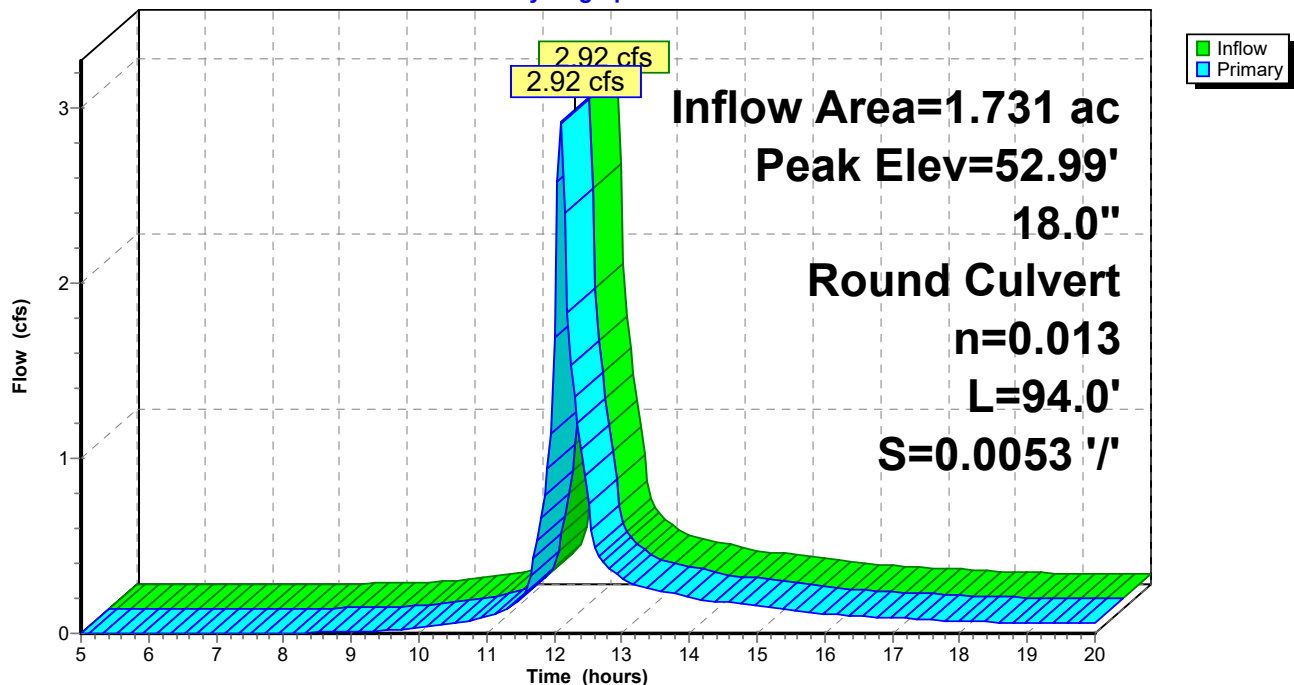
Device	Routing	Invert	Outlet Devices
#1	Primary	52.05'	18.0" Round Culvert L= 94.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.05' / 51.55' S= 0.0053 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

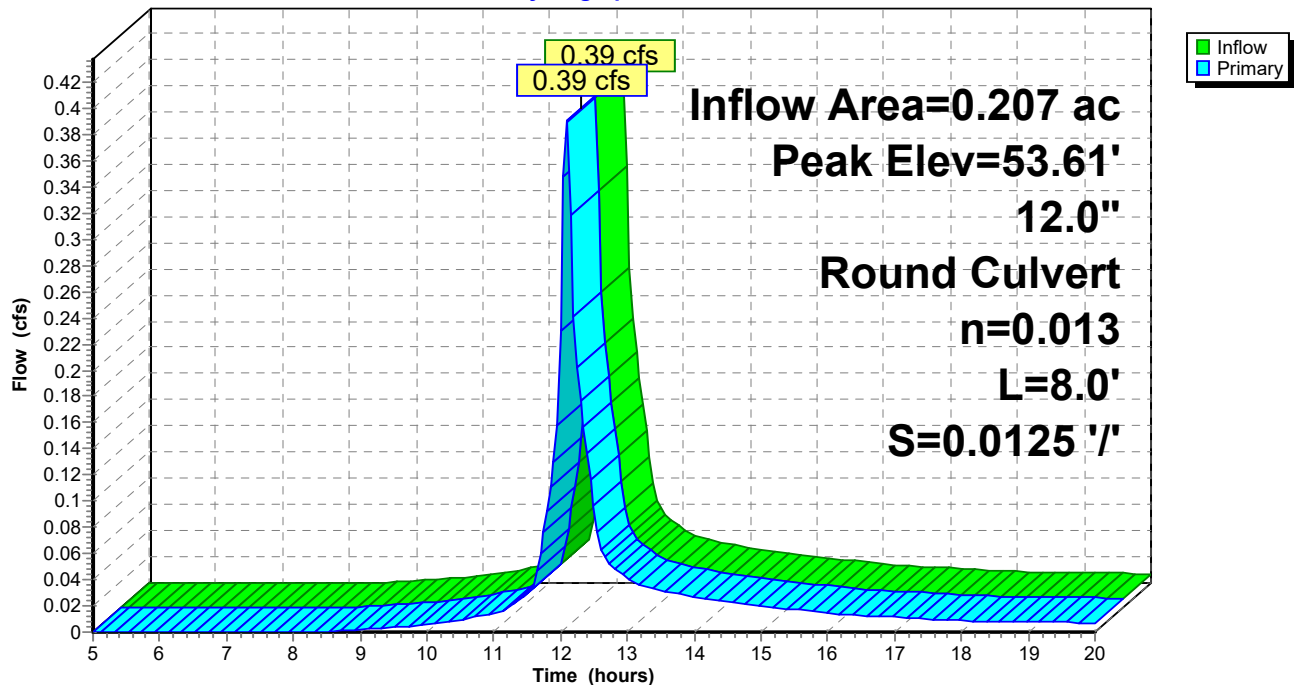
[57] Hint: Peaked at 53.61' (Flood elevation advised)

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'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.25' / 53.15' S= 0.0125 '/' Cc= 0.900 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

[57] Hint: Peaked at 54.97' (Flood elevation advised)

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

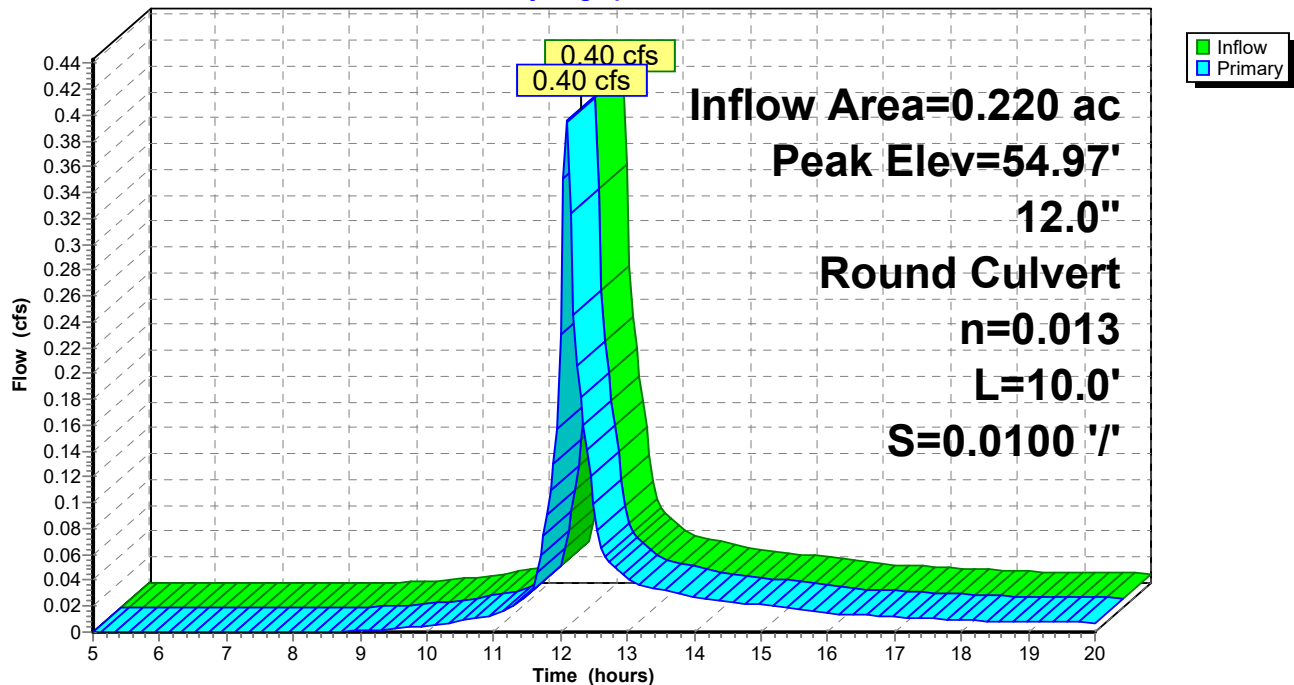
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.97' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.60'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0100 '/ Cc= 0.900 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

[57] Hint: Peaked at 54.90' (Flood elevation advised)

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

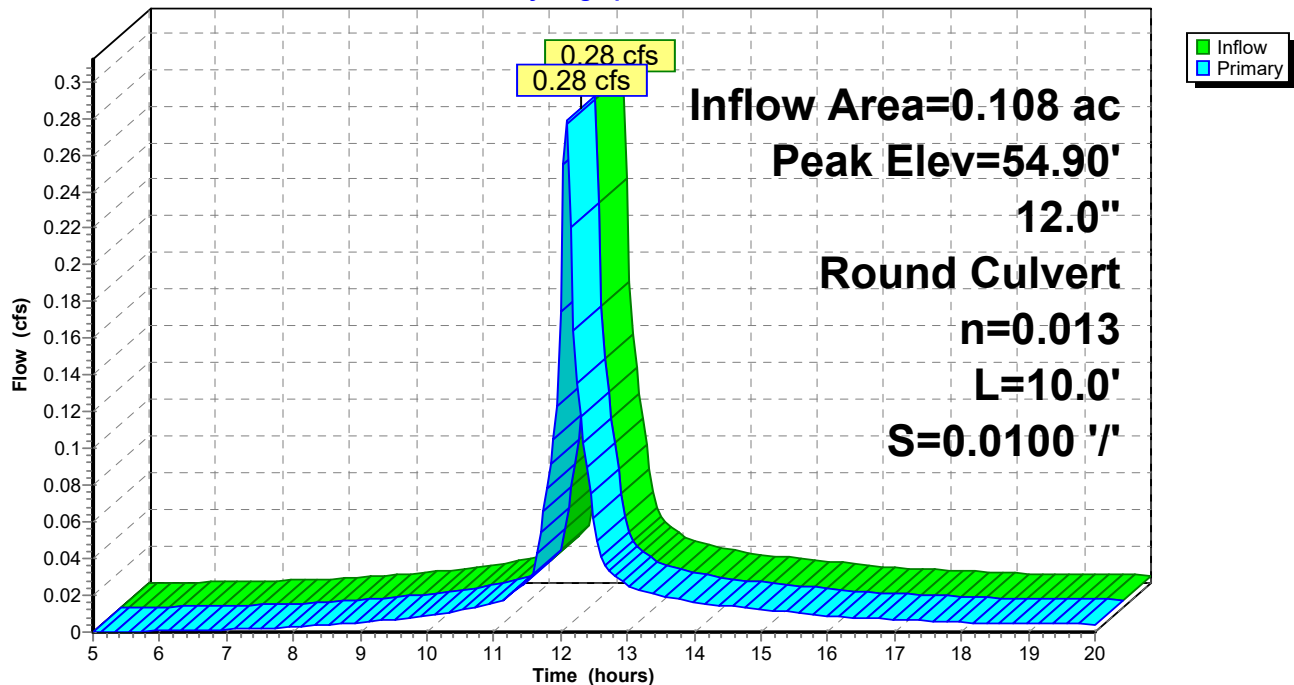
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.90' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.60'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0100 '/ Cc= 0.900 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

[57] Hint: Peaked at 54.87' (Flood elevation advised)

[79] Warning: Submerged Pond 155P Primary device # 1 INLET by 0.27'

[79] Warning: Submerged Pond 156P Primary device # 1 INLET by 0.27'

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

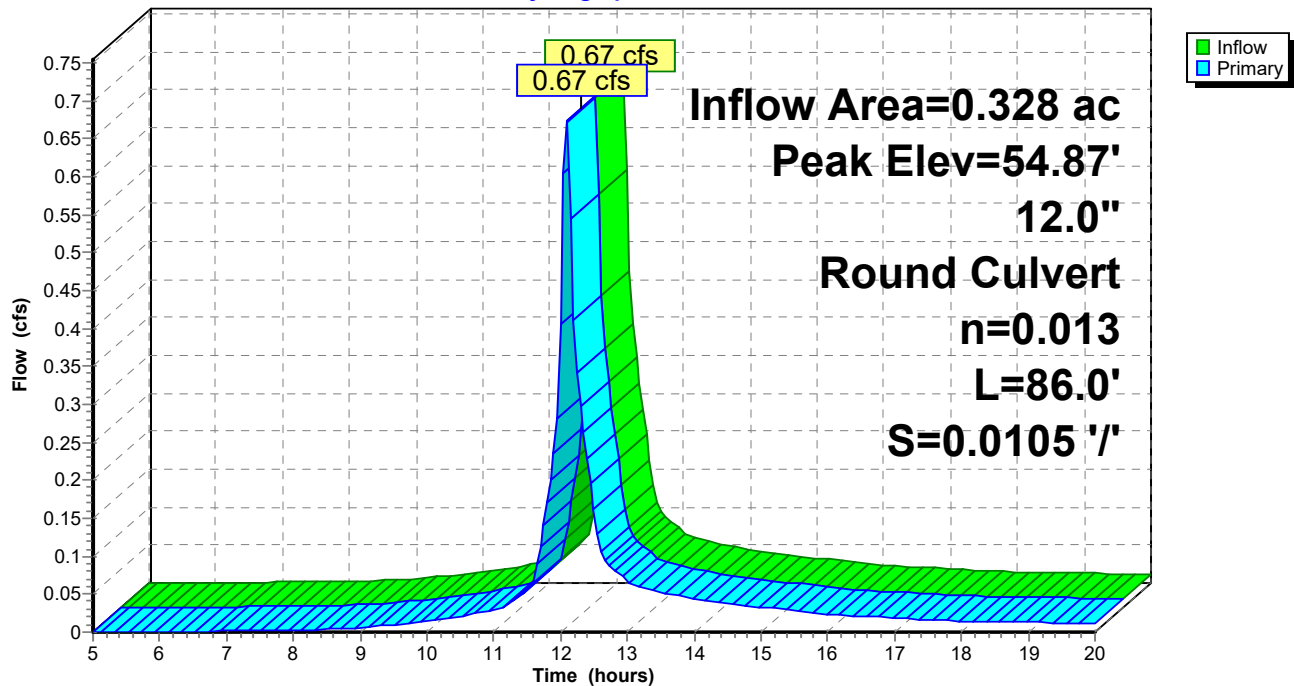
Device	Routing	Invert	Outlet Devices
#1	Primary	54.40'	12.0" Round Culvert L= 86.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.40' / 53.50' S= 0.0105 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 53.85' (Flood elevation advised)

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

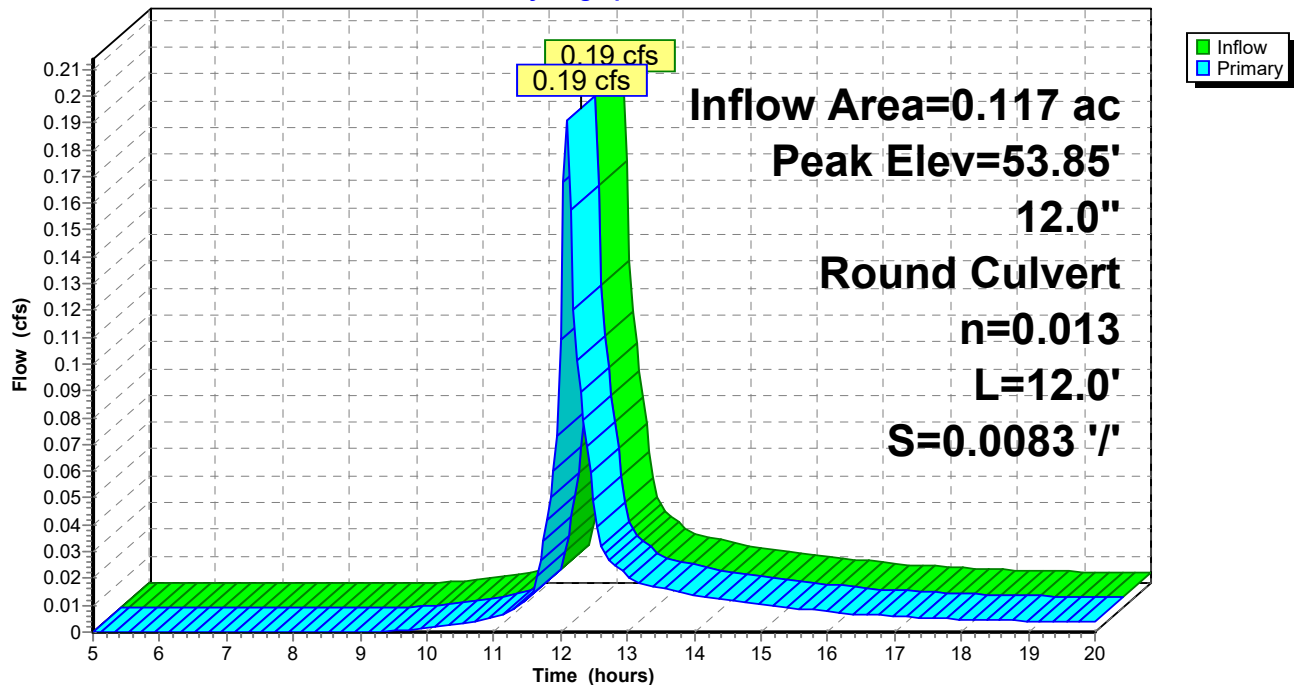
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 53.85' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.60'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.60' / 53.50' S= 0.0083 '/ Cc= 0.900 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

[57] Hint: Peaked at 53.92' (Flood elevation advised)

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

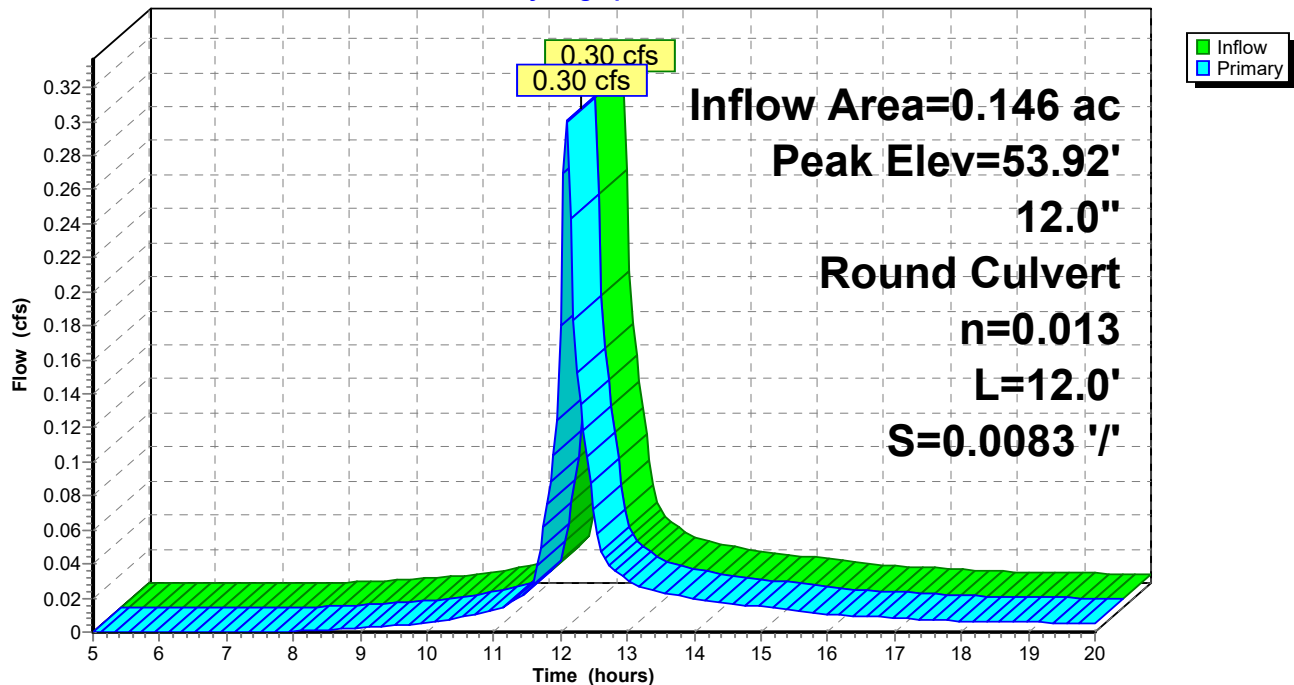
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 53.92' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.60'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.60' / 53.50' S= 0.0083 '/' Cc= 0.900 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

[57] Hint: Peaked at 54.10' (Flood elevation advised)

[79] Warning: Submerged Pond 157P Primary device # 1 OUTLET by 0.60'

[81] Warning: Exceeded Pond 158P by 0.25' @ 12.10 hrs

[81] Warning: Exceeded Pond 159P by 0.18' @ 12.10 hrs

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

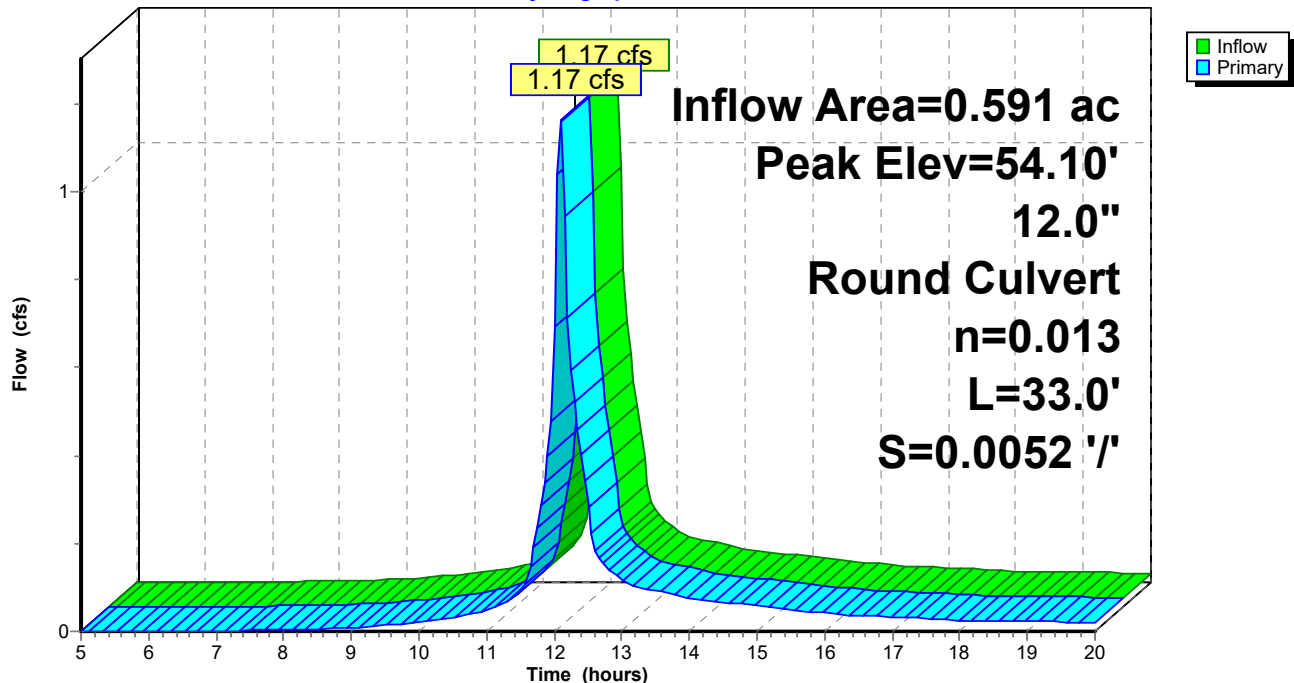
Device	Routing	Invert	Outlet Devices
#1	Primary	53.40'	12.0" Round Culvert L= 33.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.40' / 53.23' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 53.93' (Flood elevation advised)

[79] Warning: Submerged Pond 150P Primary device # 1 OUTLET by 0.70'

[79] Warning: Submerged Pond 160P Primary device # 1 INLET by 0.53'

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

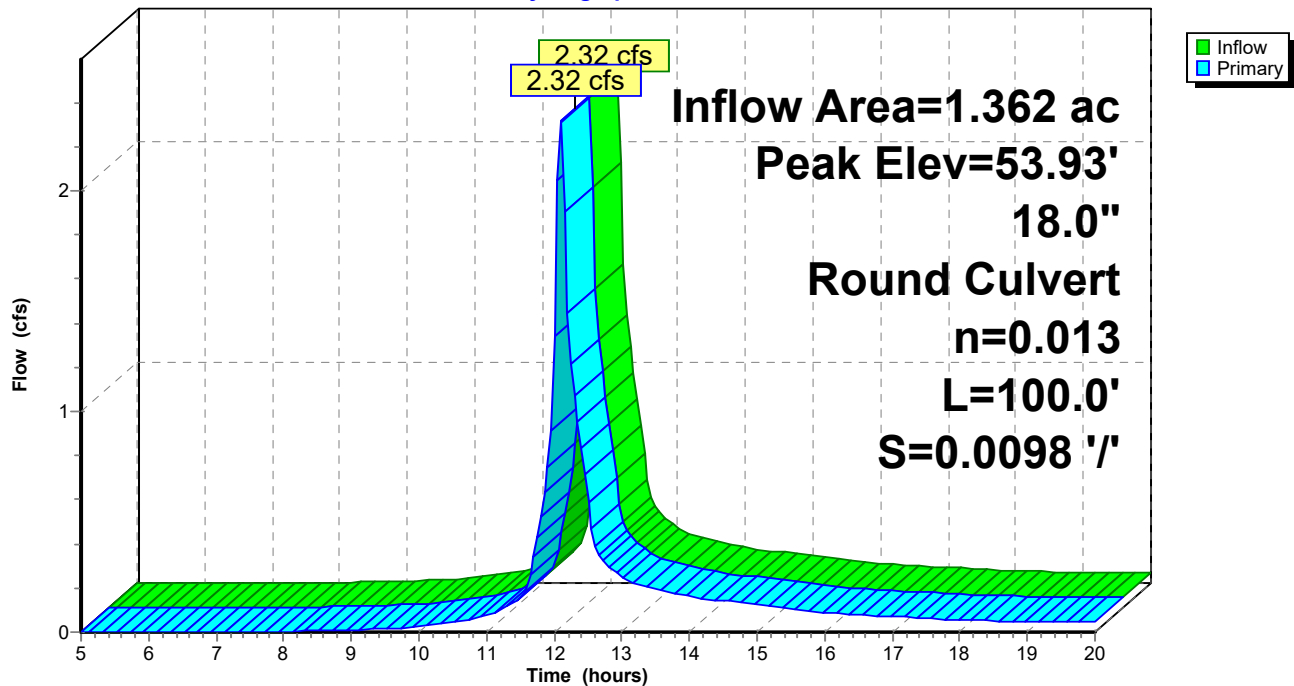
Device	Routing	Invert	Outlet Devices
#1	Primary	53.13'	18.0" Round Culvert L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.13' / 52.15' S= 0.0098 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[57] Hint: Peaked at 50.82' (Flood elevation advised)

Inflow Area = 0.341 ac, 60.75% Impervious, Inflow Depth > 0.97" for 2-Year event
 Inflow = 0.40 cfs @ 12.10 hrs, Volume= 0.028 af
 Outflow = 0.40 cfs @ 12.10 hrs, Volume= 0.028 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.40 cfs @ 12.10 hrs, Volume= 0.028 af
 Routed to Pond 164P : DMH 9

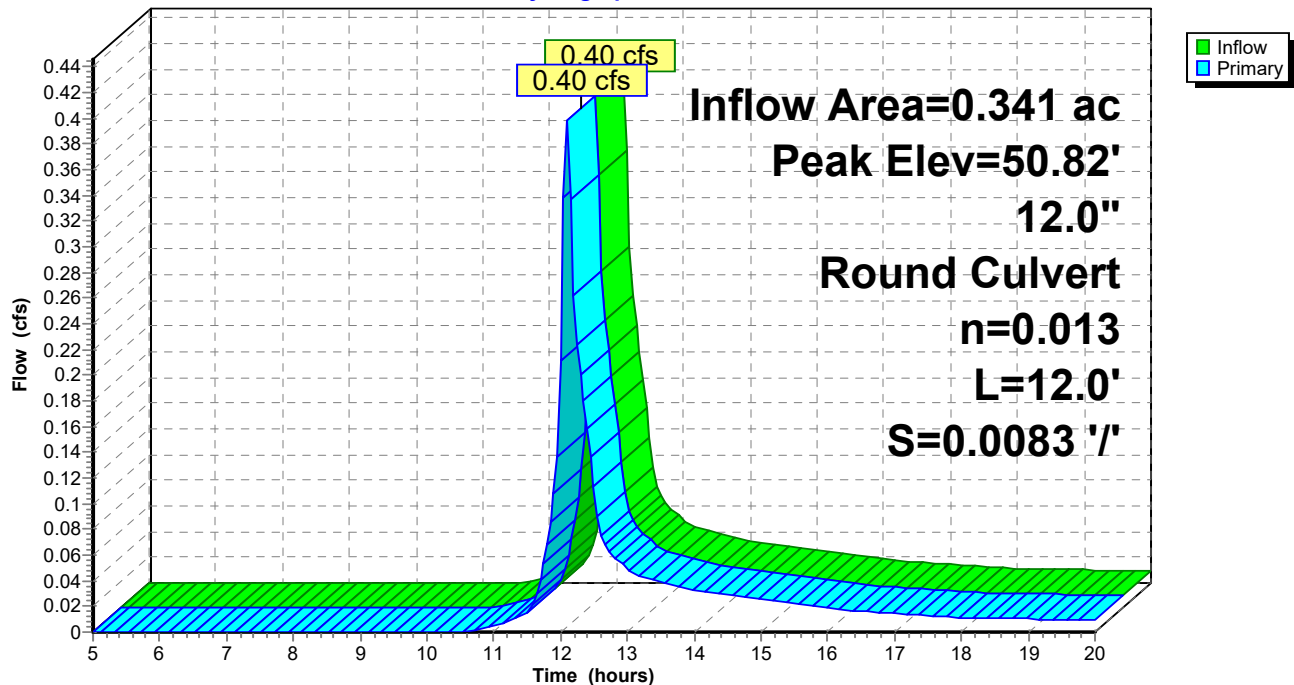
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 50.82' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.45'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.45' / 50.35' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.40 cfs @ 12.10 hrs HW=50.82' (Free Discharge)
 1=Culvert (Barrel Controls 0.40 cfs @ 2.20 fps)

Pond 162P: CB 15

Hydrograph



Summary for Pond 163P: CB 14

[57] Hint: Peaked at 50.78' (Flood elevation advised)

Inflow Area = 0.193 ac, 67.64% Impervious, Inflow Depth > 1.20" 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 164P : DMH 9

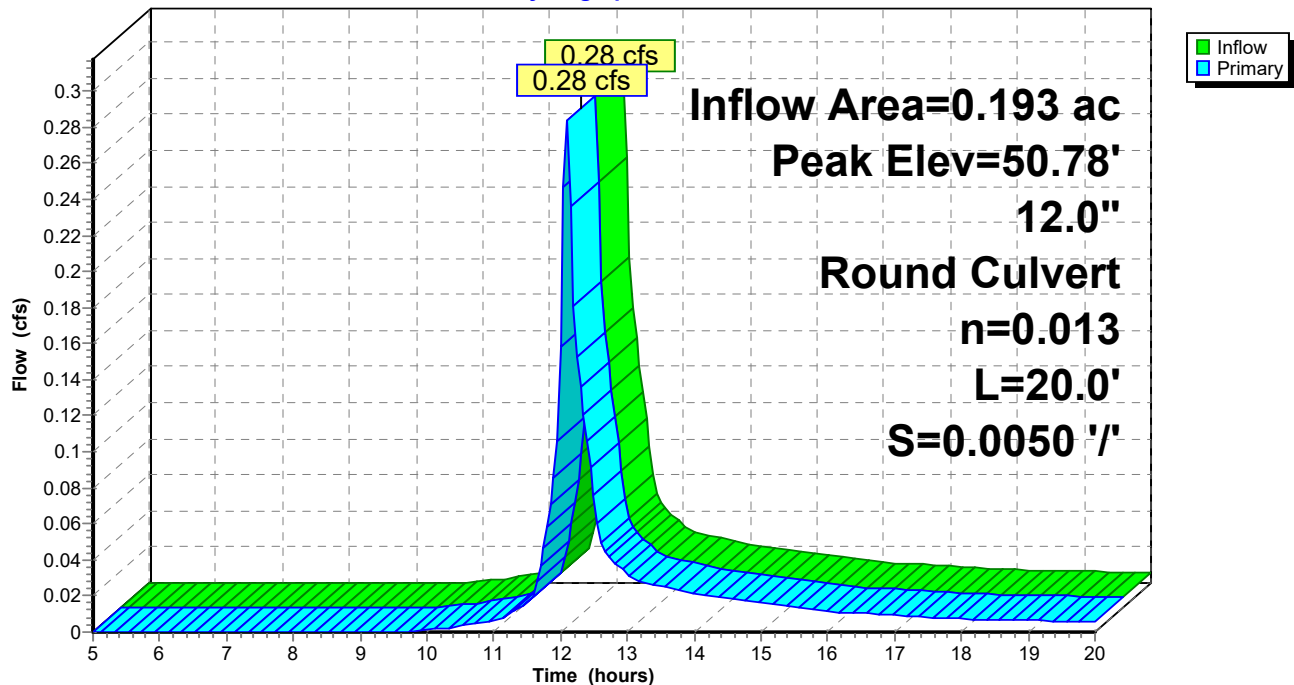
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 50.78' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.45'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.45' / 50.35' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.28 cfs @ 12.10 hrs HW=50.77' (Free Discharge)
 1=Culvert (Barrel Controls 0.28 cfs @ 1.90 fps)

Pond 163P: CB 14

Hydrograph



Summary for Pond 164P: DMH 9

[57] Hint: Peaked at 50.76' (Flood elevation advised)

[79] Warning: Submerged Pond 162P Primary device # 1 INLET by 0.31'

[79] Warning: Submerged Pond 163P Primary device # 1 INLET by 0.31'

Inflow Area = 0.534 ac, 63.24% Impervious, Inflow Depth > 1.05" for 2-Year event
 Inflow = 0.68 cfs @ 12.10 hrs, Volume= 0.047 af
 Outflow = 0.68 cfs @ 12.10 hrs, Volume= 0.047 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.68 cfs @ 12.10 hrs, Volume= 0.047 af
 Routed to Pond 180P : DMH 10

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 50.76' @ 12.10 hrs

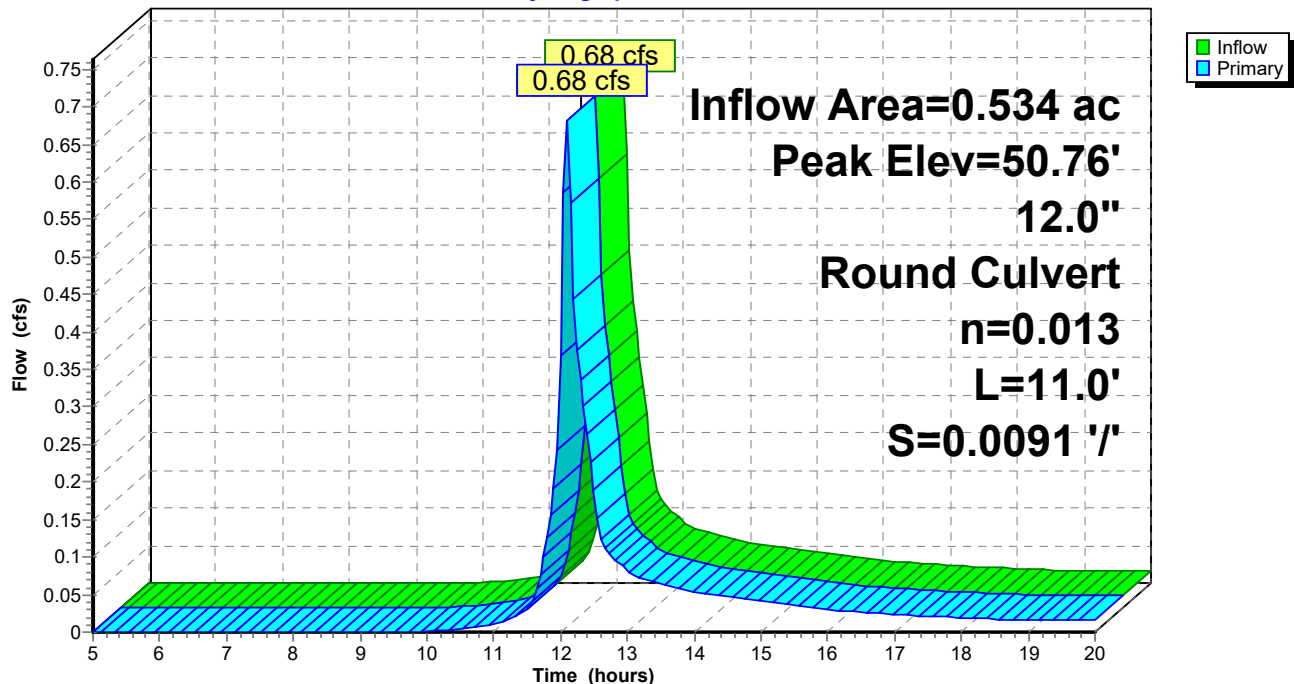
Device	Routing	Invert	Outlet Devices
#1	Primary	50.25'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.25' / 50.15' S= 0.0091 ' S= 0.0091 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.68 cfs @ 12.10 hrs HW=50.75' (Free Discharge)

↑1=Culvert (Barrel Controls 0.68 cfs @ 2.49 fps)

Pond 164P: DMH 9

Hydrograph



Summary for Pond 165P: CB 19

[57] Hint: Peaked at 53.56' (Flood elevation advised)

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

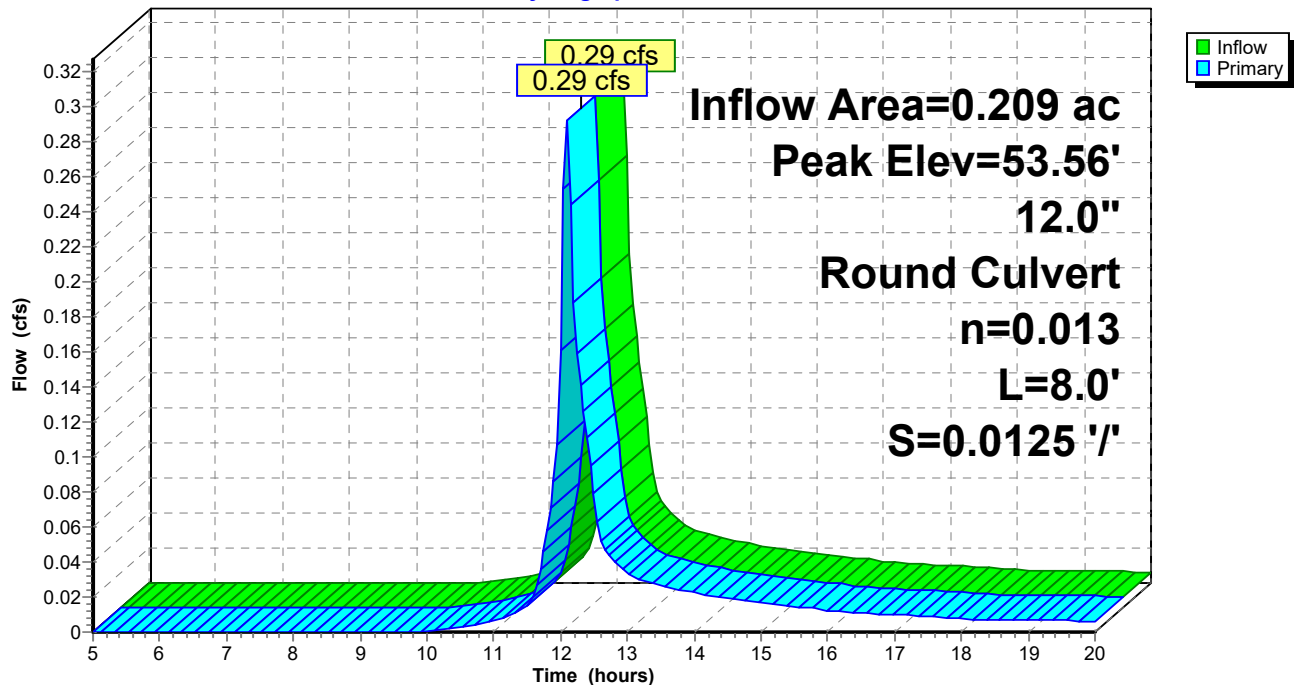
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 53.56' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.25'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.25' / 53.15' S= 0.0125 '/' Cc= 0.900 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

[57] Hint: Peaked at 52.66' (Flood elevation advised)

[81] Warning: Exceeded Pond 202P by 0.01' @ 12.10 hrs

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

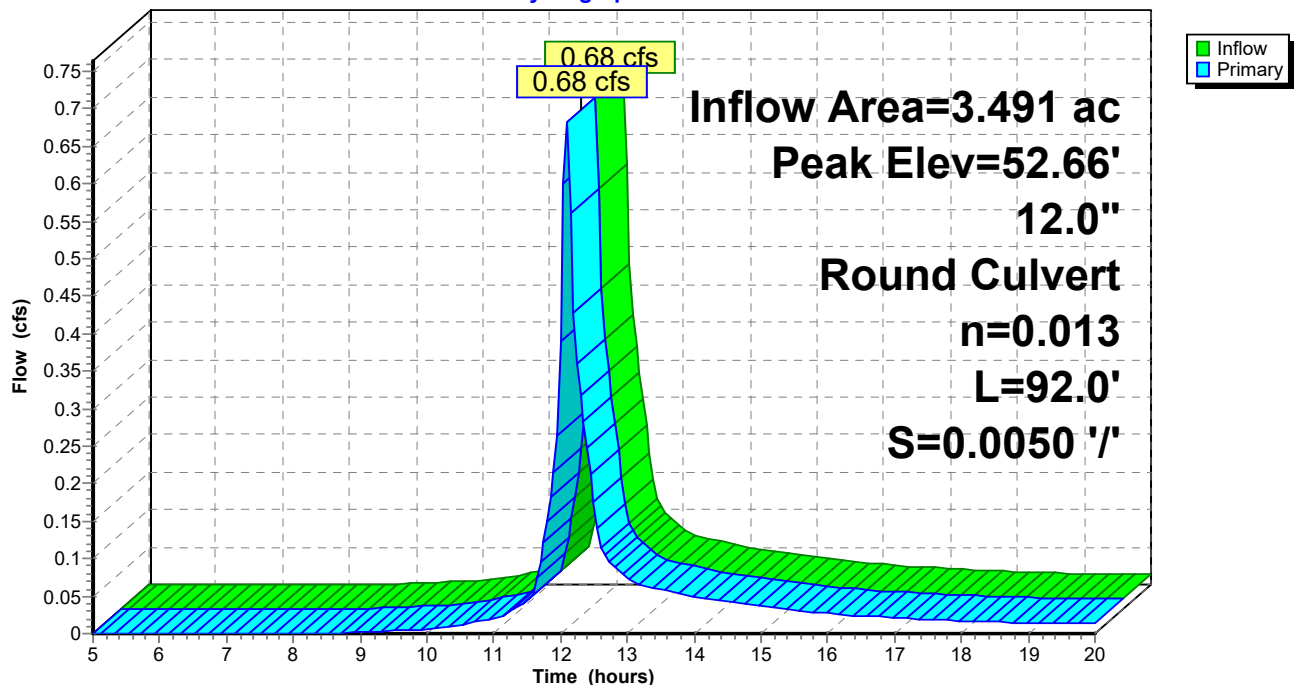
Device	Routing	Invert	Outlet Devices
#1	Primary	52.16'	12.0" Round Culvert L= 92.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.16' / 51.70' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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 10

[57] Hint: Peaked at 50.66' (Flood elevation advised)

Inflow Area = 0.093 ac, 53.88% Impervious, Inflow Depth > 0.77" for 2-Year event
 Inflow = 0.08 cfs @ 12.10 hrs, Volume= 0.006 af
 Outflow = 0.08 cfs @ 12.10 hrs, Volume= 0.006 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.08 cfs @ 12.10 hrs, Volume= 0.006 af
 Routed to Pond 181P : DMH

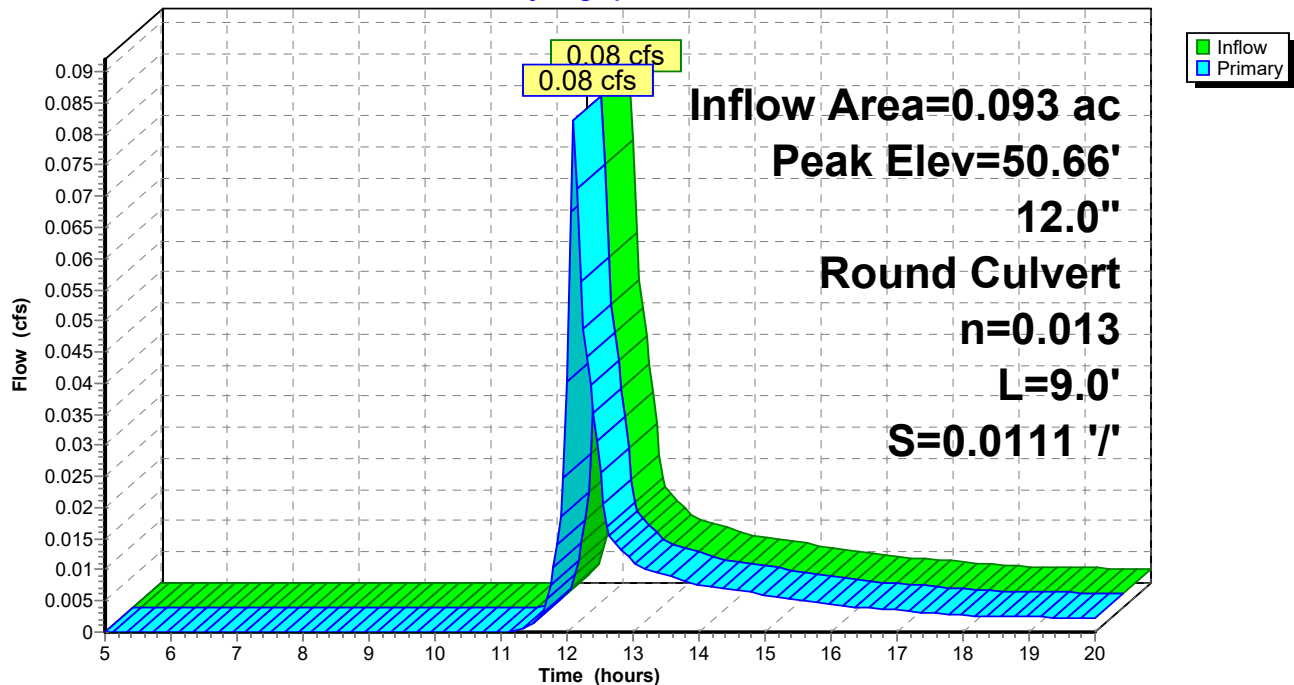
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 50.66' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.50'	12.0" Round Culvert L= 9.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.50' / 50.40' S= 0.0111 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.08 cfs @ 12.10 hrs HW=50.65' (Free Discharge)
 ↑1=Culvert (Inlet Controls 0.08 cfs @ 1.06 fps)

Pond 167P: CB 10

Hydrograph



Summary for Pond 168P: CB 11

[57] Hint: Peaked at 50.63' (Flood elevation advised)

Inflow Area = 0.064 ac, 55.52% Impervious, Inflow Depth > 0.82" for 2-Year event
 Inflow = 0.06 cfs @ 12.10 hrs, Volume= 0.004 af
 Outflow = 0.06 cfs @ 12.10 hrs, Volume= 0.004 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.06 cfs @ 12.10 hrs, Volume= 0.004 af
 Routed to Pond 181P : DMH

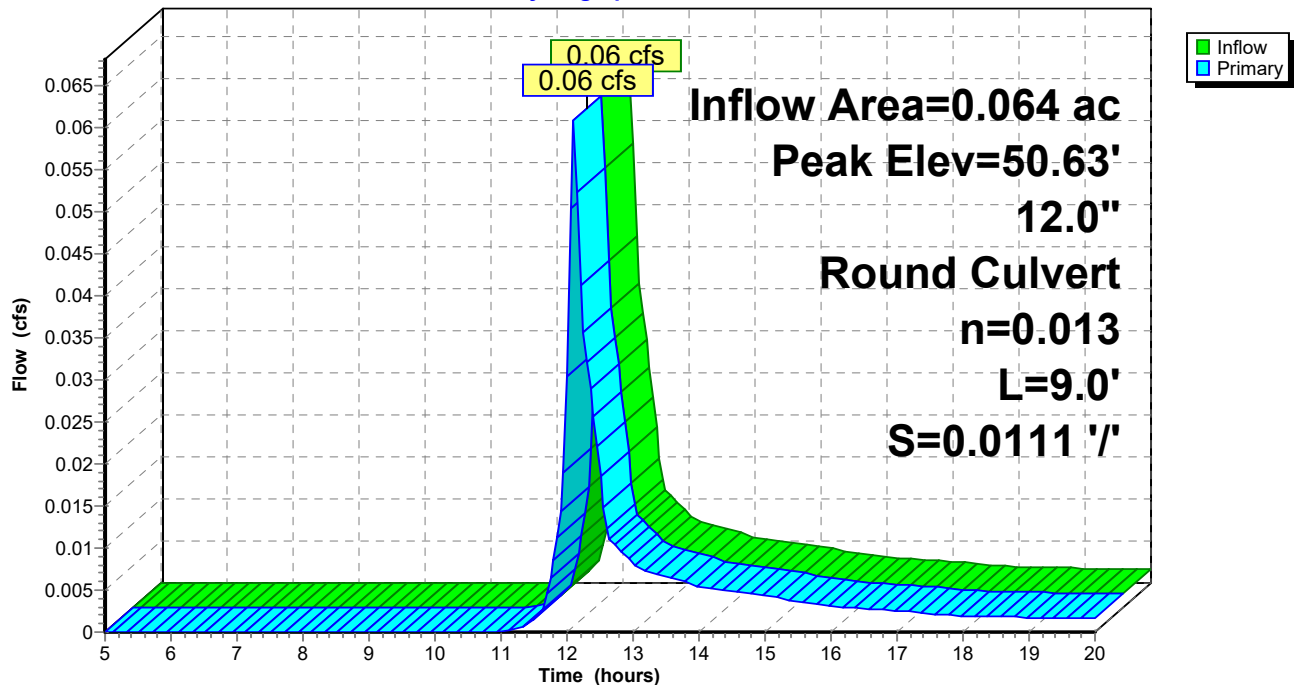
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 50.63' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.50'	12.0" Round Culvert L= 9.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.50' / 50.40' S= 0.0111 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.06 cfs @ 12.10 hrs HW=50.63' (Free Discharge)
 ↑1=Culvert (Inlet Controls 0.06 cfs @ 0.98 fps)

Pond 168P: CB 11

Hydrograph



Summary for Pond 169P: DMH 12

[57] Hint: Peaked at 52.09' (Flood elevation advised)

[79] Warning: Submerged Pond 166P Primary device # 1 OUTLET by 0.39'

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

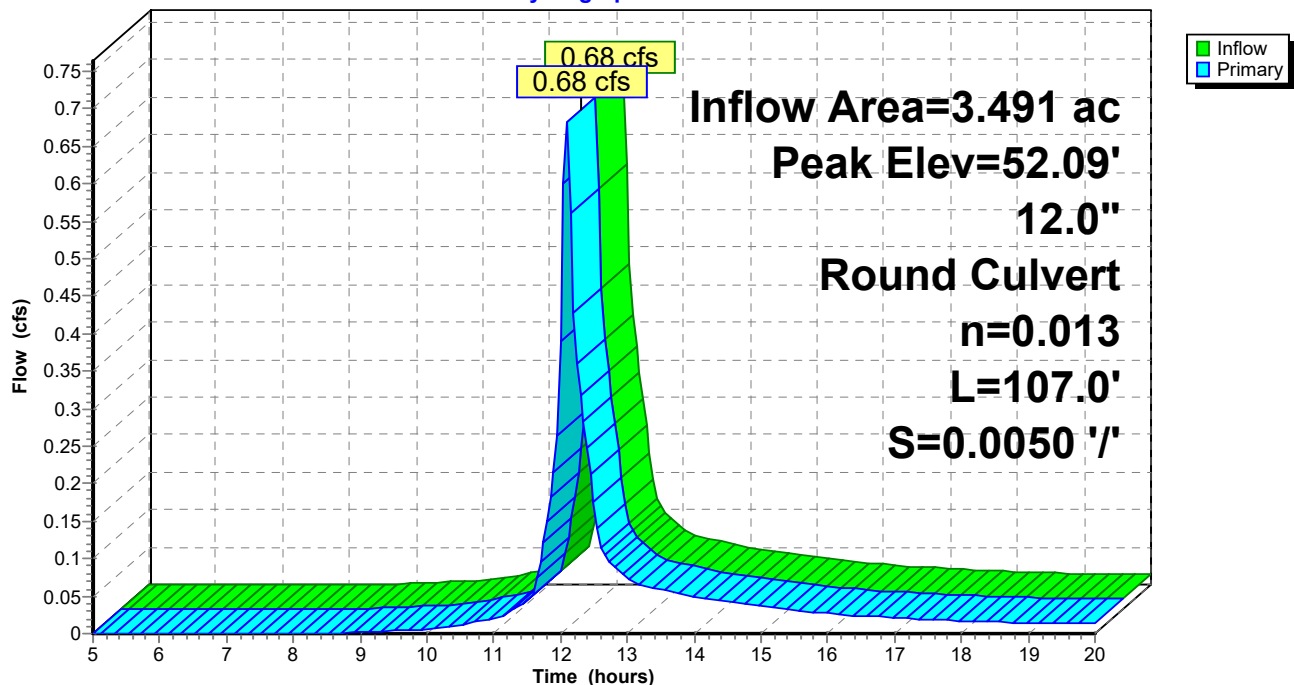
Device	Routing	Invert	Outlet Devices
#1	Primary	51.60'	12.0" Round Culvert L= 107.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.60' / 51.06' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 48.64' (Flood elevation advised)

Inflow Area = 0.392 ac, 53.13% Impervious, Inflow Depth > 0.72" for 2-Year event
 Inflow = 0.32 cfs @ 12.10 hrs, Volume= 0.024 af
 Outflow = 0.32 cfs @ 12.10 hrs, Volume= 0.024 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.32 cfs @ 12.10 hrs, Volume= 0.024 af
 Routed to Pond 171P : DMH 6

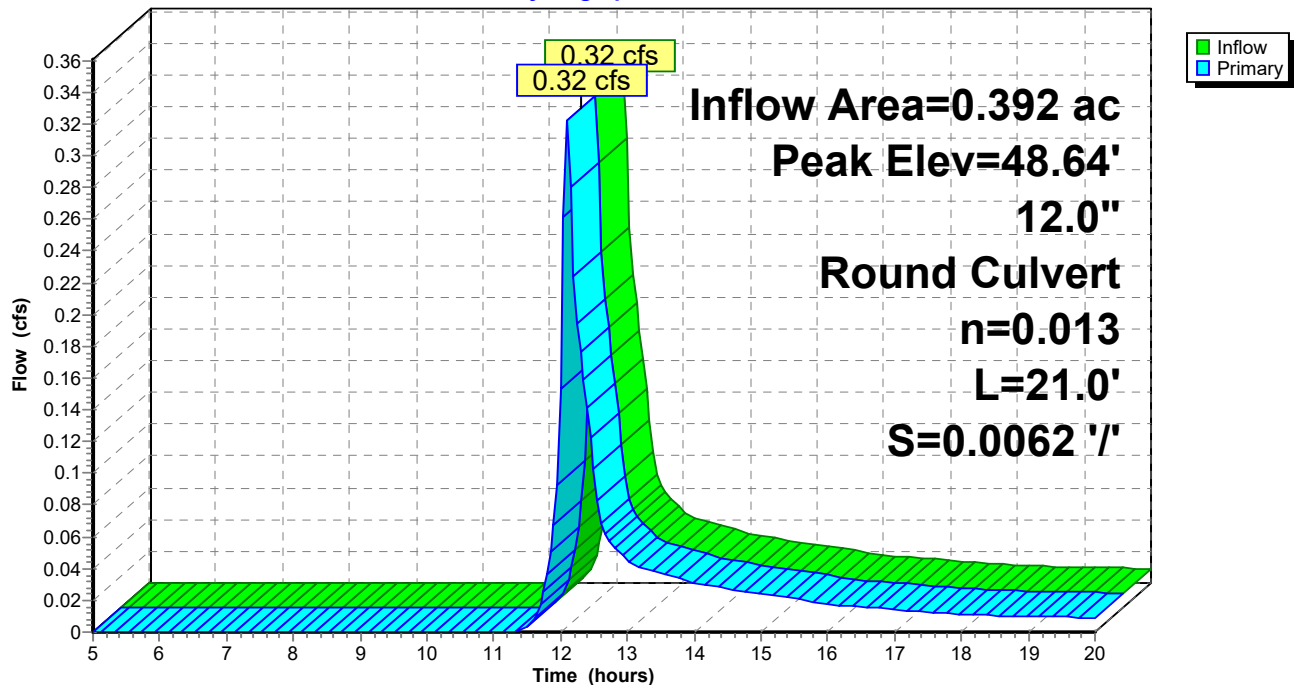
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 48.64' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	48.30'	12.0" Round Culvert L= 21.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.30' / 48.17' S= 0.0062 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.32 cfs @ 12.10 hrs HW=48.63' (Free Discharge)
 1=Culvert (Barrel Controls 0.32 cfs @ 2.06 fps)

Pond 170P: CB 9

Hydrograph



Summary for Pond 171P: DMH 6

[57] Hint: Peaked at 48.78' (Flood elevation advised)

[81] Warning: Exceeded Pond 61P by 0.10' @ 12.10 hrs

[81] Warning: Exceeded Pond 170P by 0.14' @ 12.10 hrs

[79] Warning: Submerged Pond 175P Primary device # 1 INLET by 0.51'

Inflow Area = 1.526 ac, 62.32% Impervious, Inflow Depth > 1.02" for 2-Year event
 Inflow = 1.87 cfs @ 12.10 hrs, Volume= 0.130 af
 Outflow = 1.87 cfs @ 12.10 hrs, Volume= 0.130 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.87 cfs @ 12.10 hrs, Volume= 0.130 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= 48.78' @ 12.10 hrs

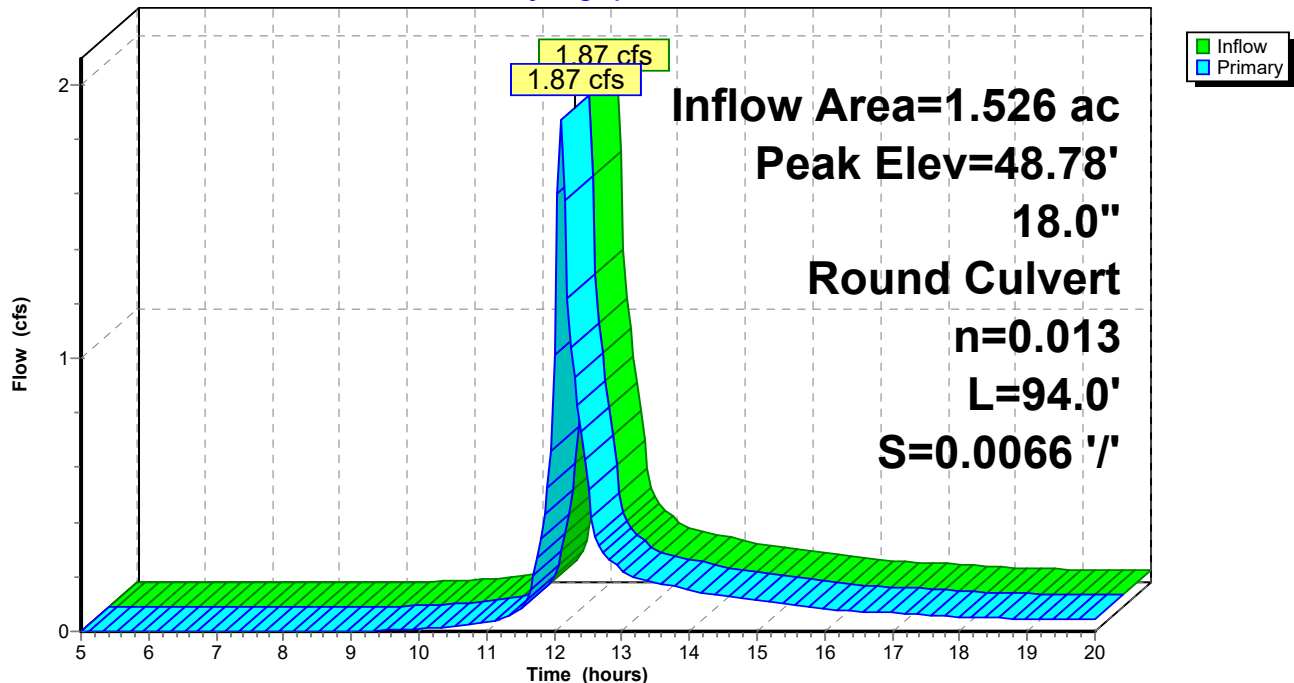
Device	Routing	Invert	Outlet Devices
#1	Primary	48.07'	18.0" Round Culvert L= 94.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.07' / 47.45' S= 0.0066 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=1.86 cfs @ 12.10 hrs HW=48.78' (Free Discharge)

↑**1=Culvert** (Inlet Controls 1.86 cfs @ 2.26 fps)

Pond 171P: DMH 6

Hydrograph



Summary for Pond 172P: CB 16

[57] Hint: Peaked at 52.36' (Flood elevation advised)

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

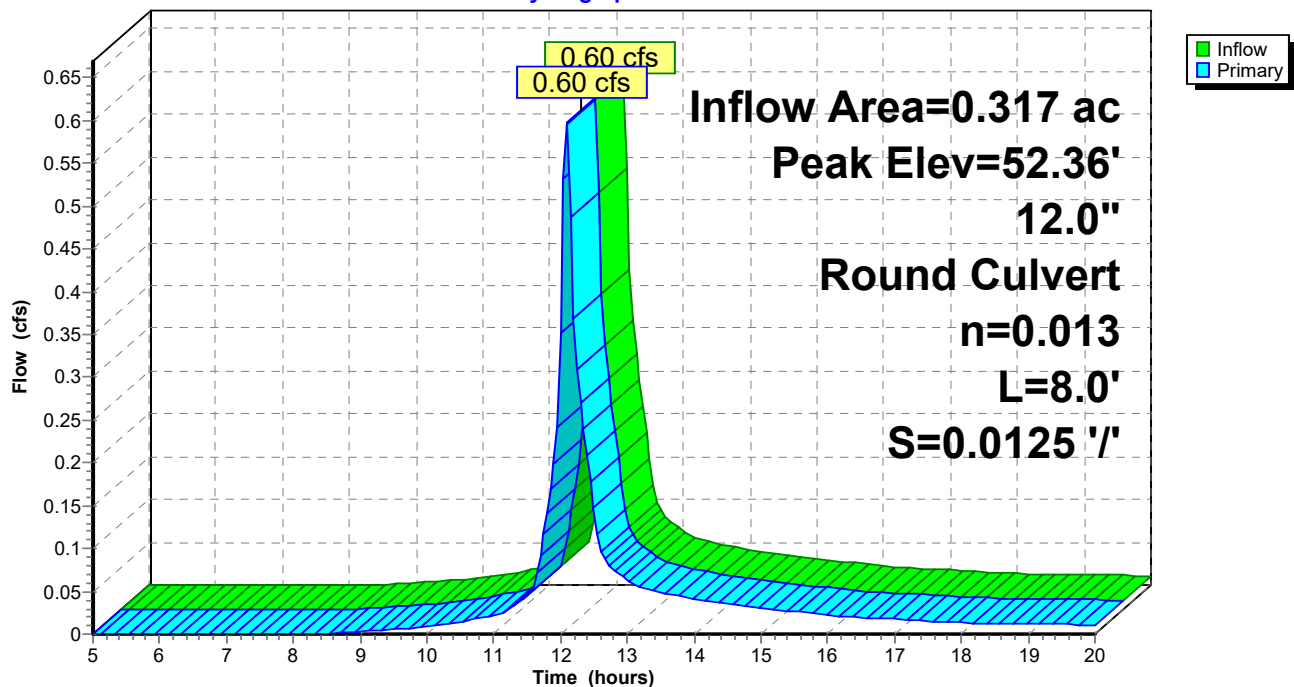
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 52.36' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	51.90'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.90' / 51.80' S= 0.0125 '/' Cc= 0.900 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

[57] Hint: Peaked at 52.16' (Flood elevation advised)

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

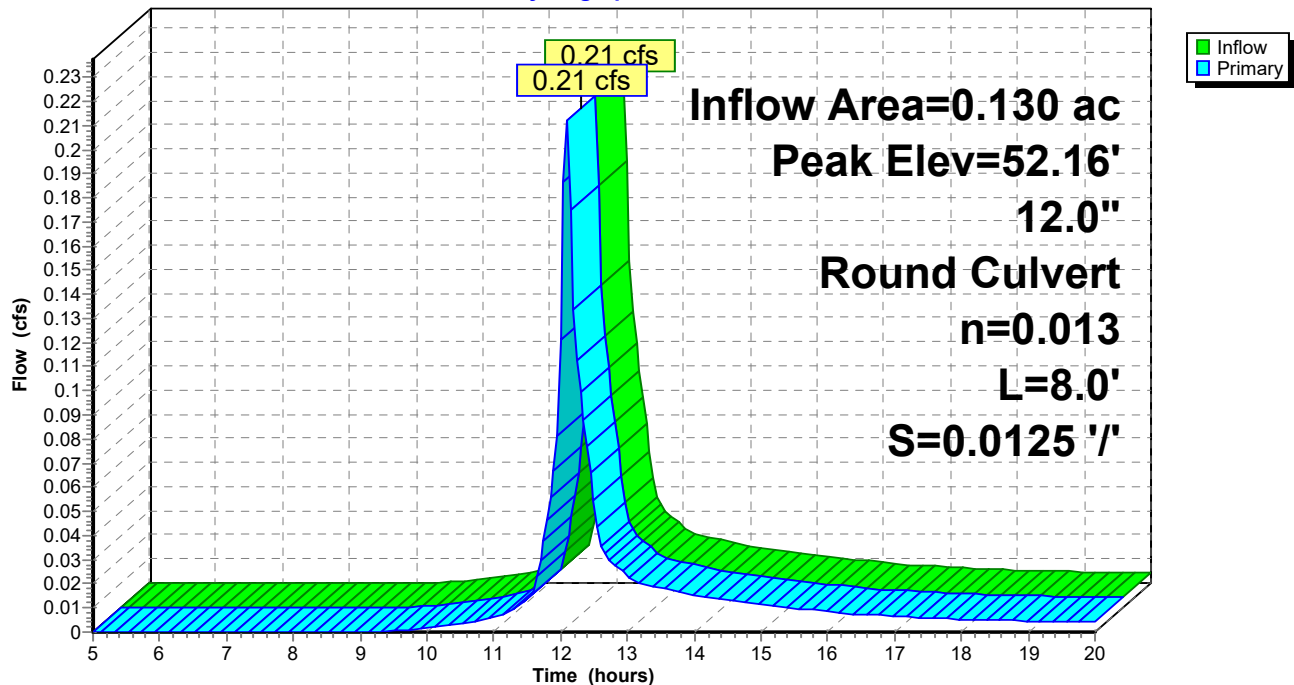
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 52.16' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	51.90'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.90' / 51.80' S= 0.0125 '/' Cc= 0.900 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

[57] Hint: Peaked at 51.60' (Flood elevation advised)

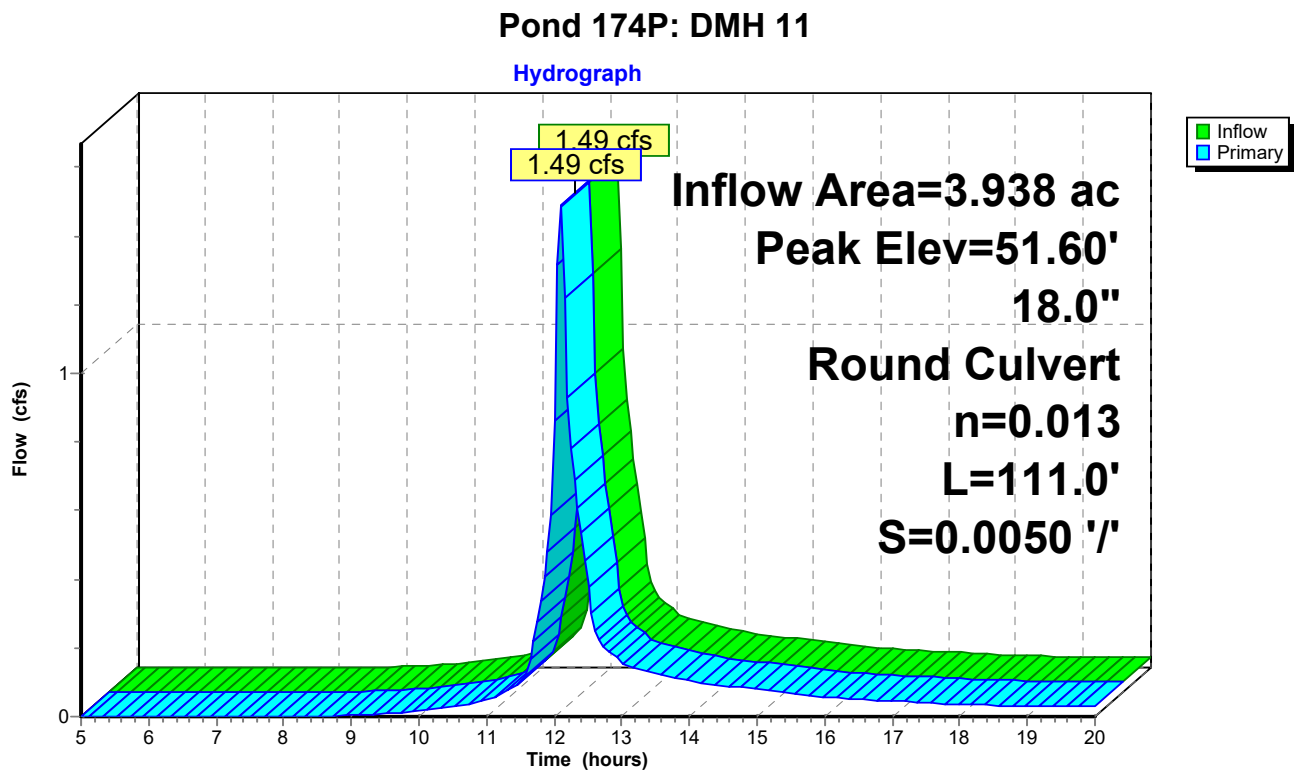
[79] Warning: Submerged Pond 169P Primary device # 1 OUTLET by 0.54'

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 179P : DMH 8

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 51.60' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.96'	18.0" Round Culvert L= 111.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.96' / 50.40' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=1.47 cfs @ 12.09 hrs HW=51.60' (Free Discharge)
 ↳ **1=Culvert** (Barrel Controls 1.47 cfs @ 3.03 fps)



Summary for Pond 175P: DMH 5

[57] Hint: Peaked at 48.97' (Flood elevation advised)

[81] Warning: Exceeded Pond 176P by 0.09' @ 12.10 hrs

[79] Warning: Submerged Pond 182P Primary device # 1 INLET by 0.50'

Inflow Area = 0.870 ac, 64.72% Impervious, Inflow Depth > 1.10" for 2-Year event
 Inflow = 1.16 cfs @ 12.10 hrs, Volume= 0.080 af
 Outflow = 1.16 cfs @ 12.10 hrs, Volume= 0.080 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.16 cfs @ 12.10 hrs, Volume= 0.080 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= 48.97' @ 12.10 hrs

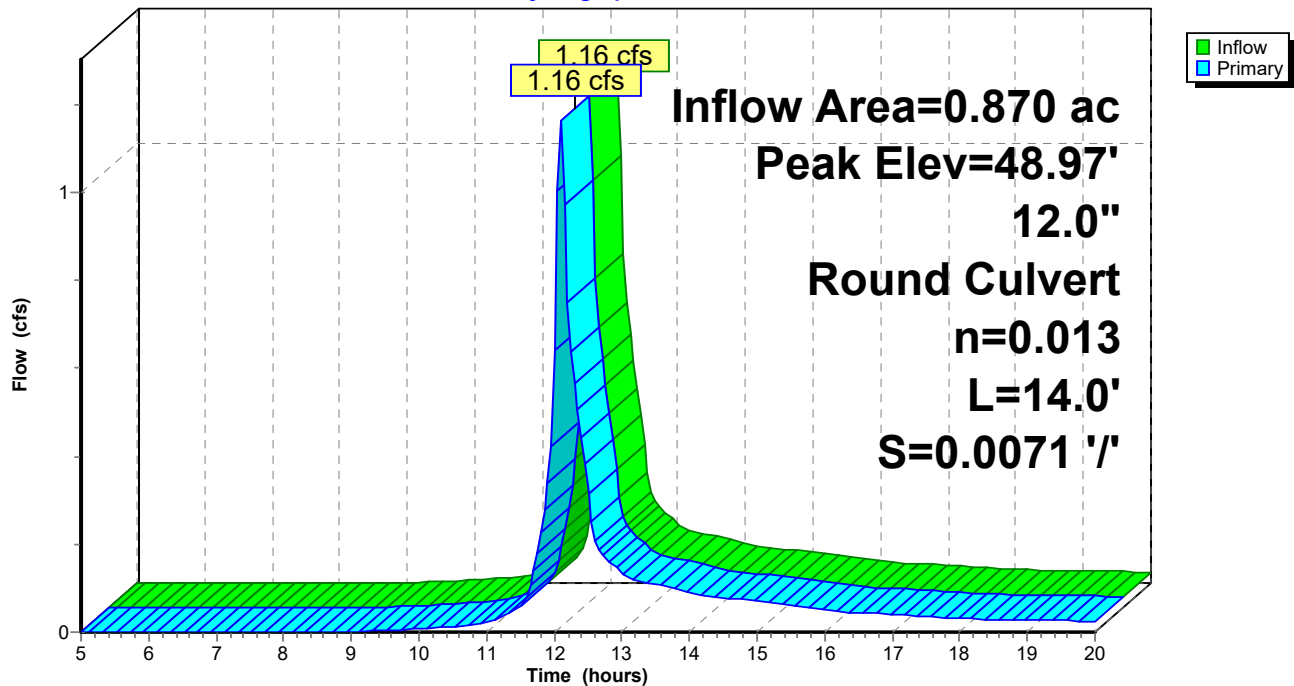
Device	Routing	Invert	Outlet Devices
#1	Primary	48.27'	12.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.27' / 48.17' S= 0.0071 ' S= 0.0071 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.15 cfs @ 12.10 hrs HW=48.97' (Free Discharge)

↑1=Culvert (Barrel Controls 1.15 cfs @ 2.76 fps)

Pond 175P: DMH 5

Hydrograph



Summary for Pond 176P: CB 6

[57] Hint: Peaked at 48.89' (Flood elevation advised)

Inflow Area = 0.477 ac, 57.77% Impervious, Inflow Depth > 0.86" for 2-Year event
 Inflow = 0.49 cfs @ 12.10 hrs, Volume= 0.034 af
 Outflow = 0.49 cfs @ 12.10 hrs, Volume= 0.034 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.49 cfs @ 12.10 hrs, Volume= 0.034 af
 Routed to Pond 175P : DMH 5

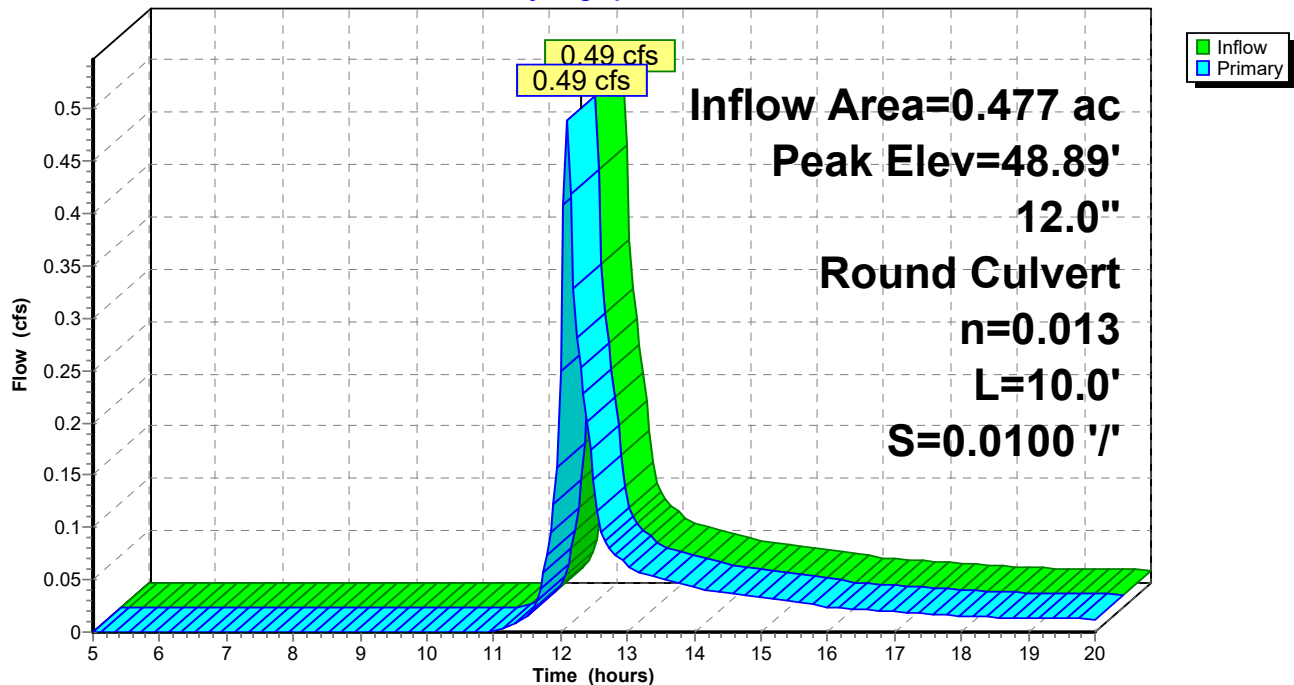
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 48.89' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	48.47'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.47' / 48.37' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.49 cfs @ 12.10 hrs HW=48.88' (Free Discharge)
 1=Culvert (Barrel Controls 0.49 cfs @ 2.34 fps)

Pond 176P: CB 6

Hydrograph



Summary for Pond 177P: CB 13

[57] Hint: Peaked at 50.90' (Flood elevation advised)

Inflow Area = 0.315 ac, 68.62% Impervious, Inflow Depth > 1.20" 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 179P : DMH 8

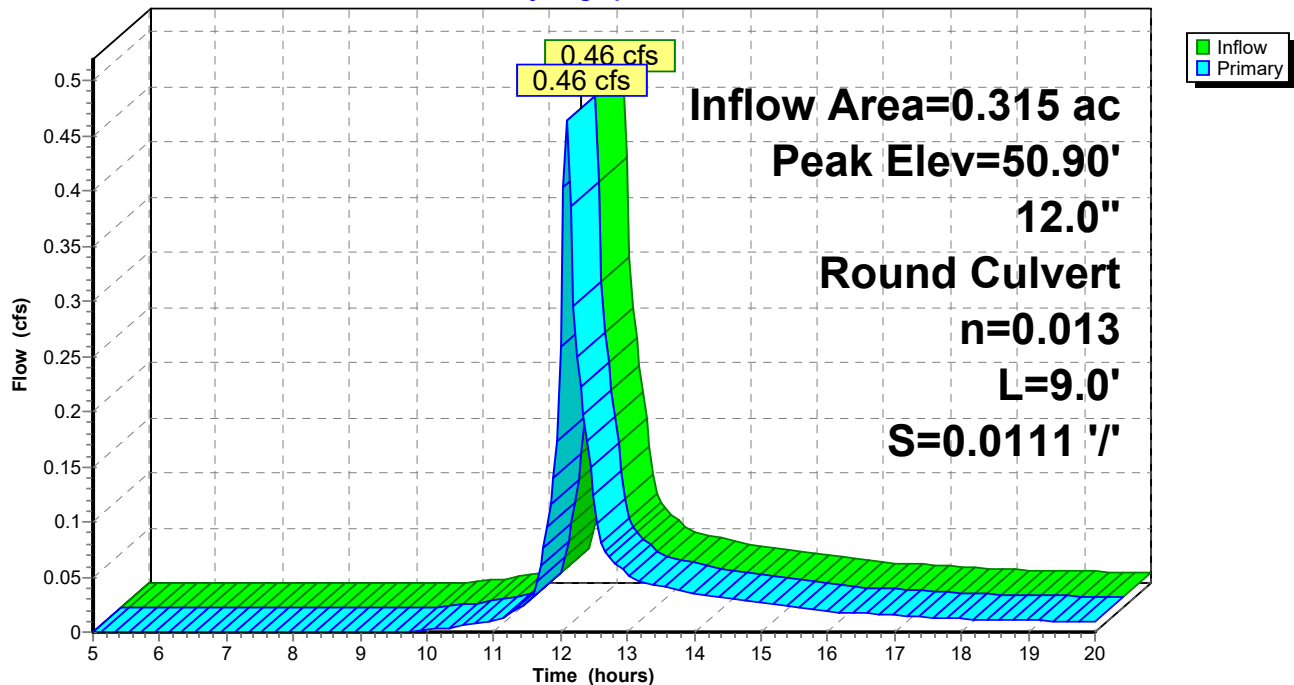
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 50.90' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.50'	12.0" Round Culvert L= 9.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.50' / 50.40' S= 0.0111 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.46 cfs @ 12.10 hrs HW=50.90' (Free Discharge)
 1=Culvert (Barrel Controls 0.46 cfs @ 2.33 fps)

Pond 177P: CB 13

Hydrograph



Summary for Pond 178P: CB 12

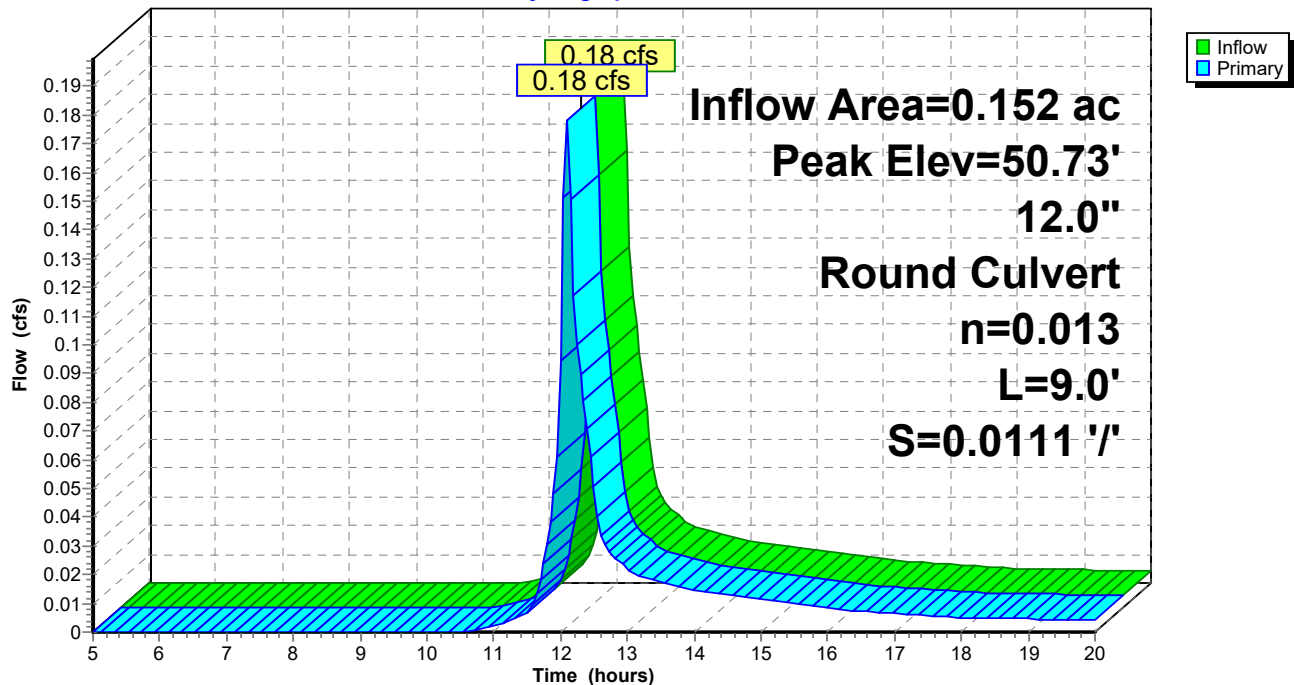
[57] Hint: Peaked at 50.73' (Flood elevation advised)

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= 50.73' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.50'	12.0" Round Culvert L= 9.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.50' / 50.40' S= 0.0111 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.18 cfs @ 12.10 hrs HW=50.73' (Free Discharge)
 1=Culvert (Barrel Controls 0.18 cfs @ 1.92 fps)

Pond 178P: CB 12**Hydrograph**

Summary for Pond 179P: DMH 8

[57] Hint: Peaked at 51.13' (Flood elevation advised)

[79] Warning: Submerged Pond 174P Primary device # 1 INLET by 0.17'

[81] Warning: Exceeded Pond 177P by 0.23' @ 12.10 hrs

[81] Warning: Exceeded Pond 178P by 0.39' @ 12.10 hrs

Inflow Area = 4.405 ac, 68.27% Impervious, Inflow Depth > 0.39" for 2-Year event
 Inflow = 2.13 cfs @ 12.10 hrs, Volume= 0.145 af
 Outflow = 2.13 cfs @ 12.10 hrs, Volume= 0.145 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.13 cfs @ 12.10 hrs, Volume= 0.145 af
 Routed to Pond 180P : DMH 10

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 51.13' @ 12.10 hrs

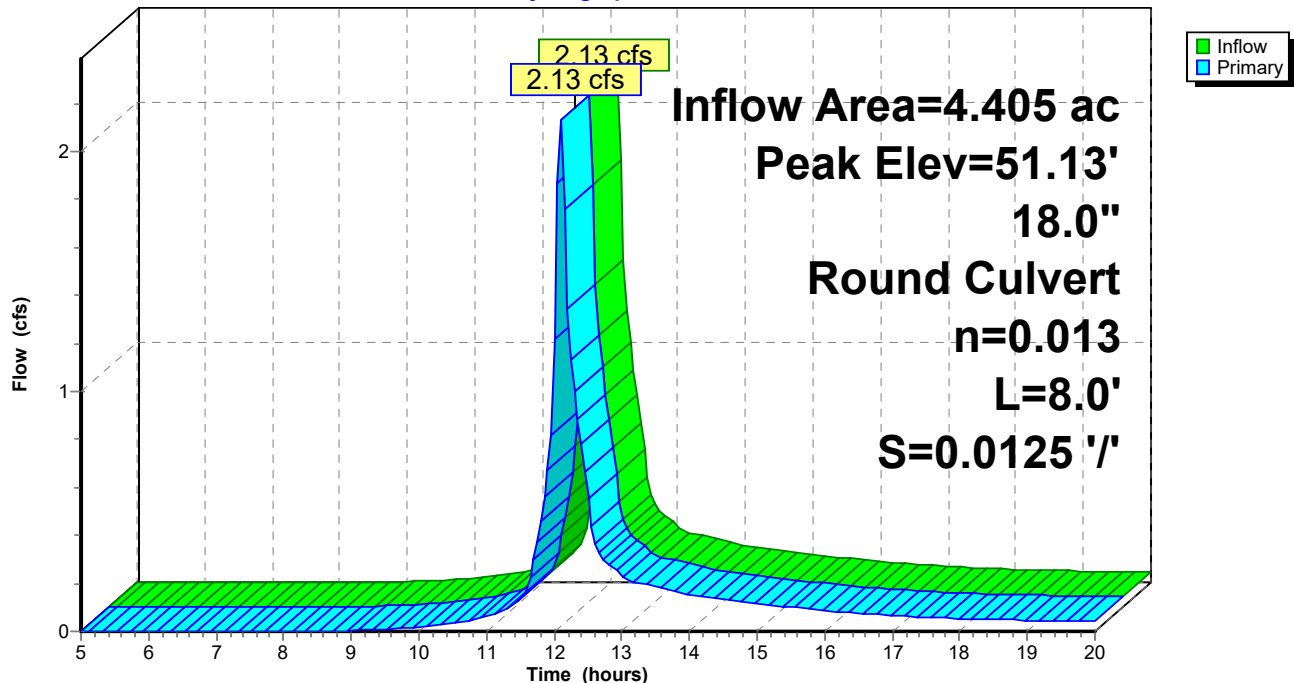
Device	Routing	Invert	Outlet Devices
#1	Primary	50.30'	18.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.30' / 50.20' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=2.11 cfs @ 12.10 hrs HW=51.12' (Free Discharge)

↑**1=Culvert** (Barrel Controls 2.11 cfs @ 3.08 fps)

Pond 179P: DMH 8

Hydrograph



Summary for Pond 180P: DMH 10

[57] Hint: Peaked at 50.98' (Flood elevation advised)

[81] Warning: Exceeded Pond 164P by 0.22' @ 12.10 hrs

[79] Warning: Submerged Pond 179P Primary device # 1 INLET by 0.67'

[81] Warning: Exceeded Pond 181P by 0.45' @ 12.10 hrs

Inflow Area = 5.095 ac, 67.32% Impervious, Inflow Depth > 0.47" for 2-Year event
 Inflow = 2.96 cfs @ 12.10 hrs, Volume= 0.201 af
 Outflow = 2.96 cfs @ 12.10 hrs, Volume= 0.201 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.96 cfs @ 12.10 hrs, Volume= 0.201 af
 Routed to Pond 192P : Sub. Inf. 1

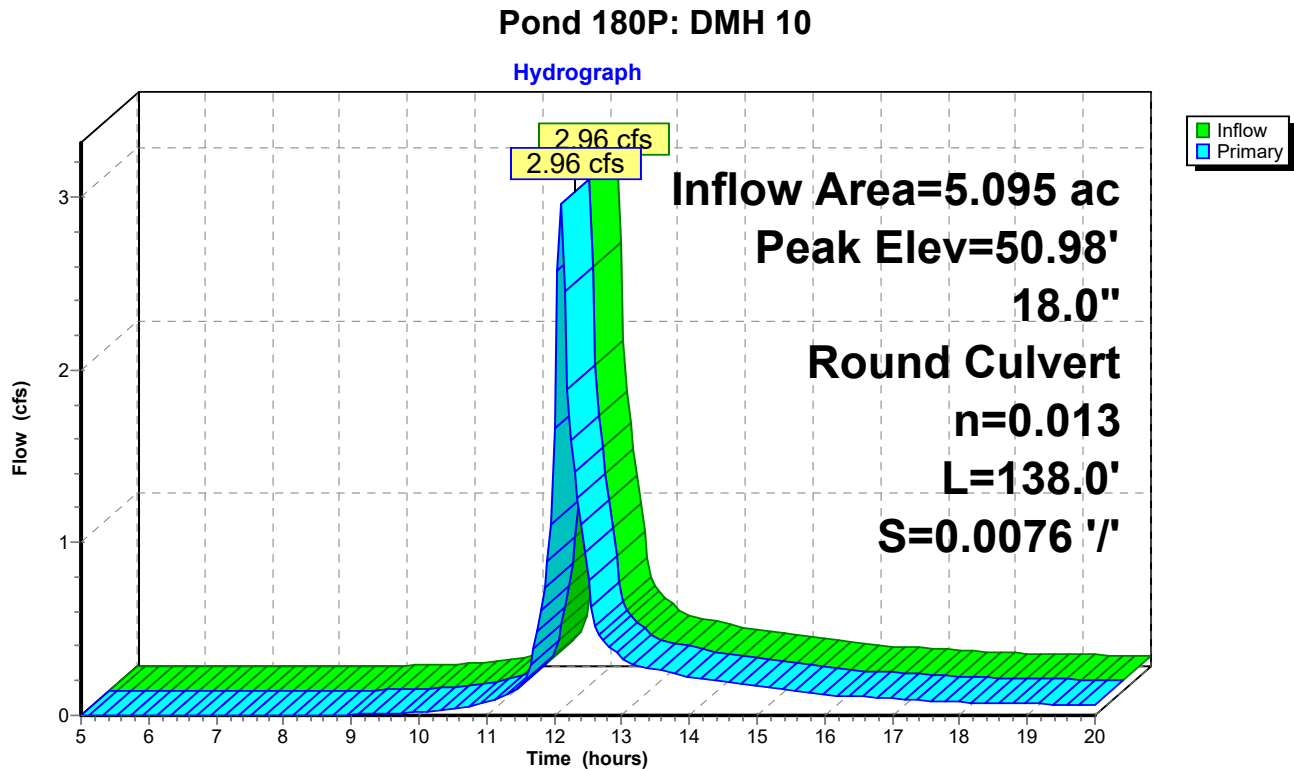
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 50.98' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.05'	18.0" Round Culvert L= 138.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.05' / 49.00' S= 0.0076 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=2.93 cfs @ 12.10 hrs HW=50.97' (Free Discharge)

↑1=Culvert (Inlet Controls 2.93 cfs @ 2.58 fps)



Summary for Pond 181P: DMH

[57] Hint: Peaked at 50.52' (Flood elevation advised)

[79] Warning: Submerged Pond 167P Primary device # 1 INLET by 0.02'

[79] Warning: Submerged Pond 168P Primary device # 1 INLET by 0.02'

Inflow Area = 0.156 ac, 54.55% Impervious, Inflow Depth > 0.79" for 2-Year event
 Inflow = 0.14 cfs @ 12.10 hrs, Volume= 0.010 af
 Outflow = 0.14 cfs @ 12.10 hrs, Volume= 0.010 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.14 cfs @ 12.10 hrs, Volume= 0.010 af
 Routed to Pond 180P : DMH 10

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 50.52' @ 12.10 hrs

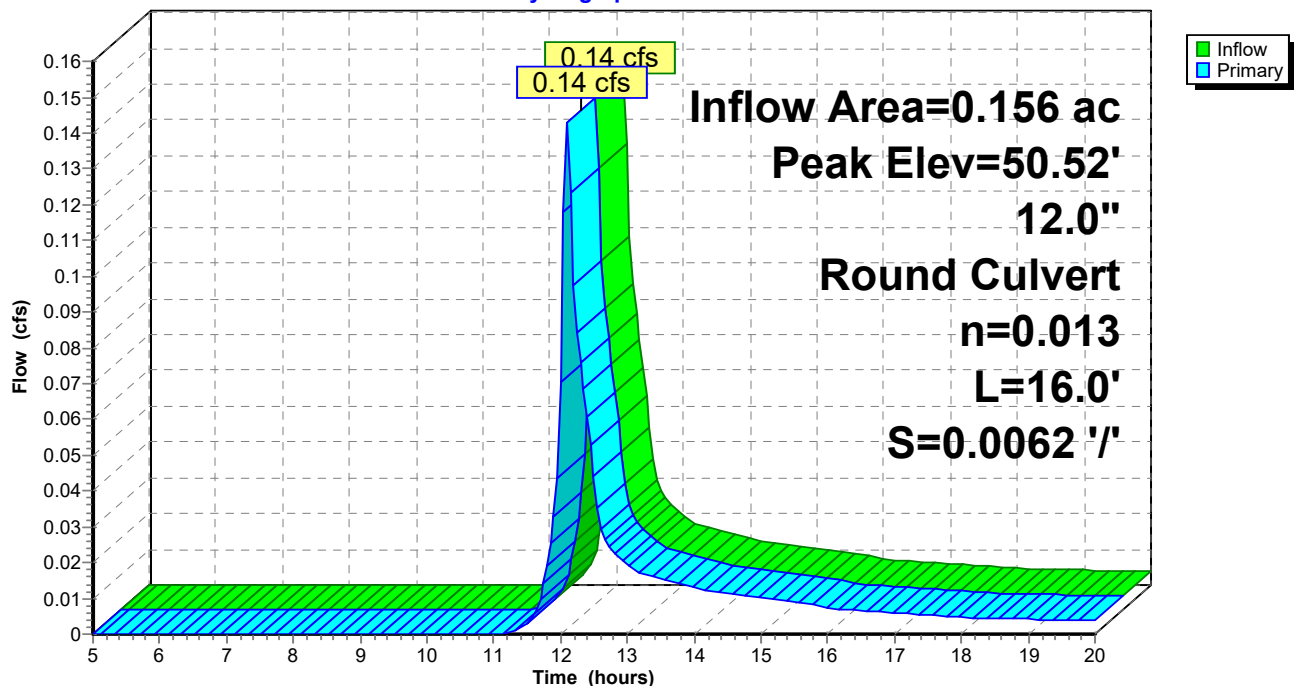
Device	Routing	Invert	Outlet Devices
#1	Primary	50.30'	12.0" Round Culvert L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.30' / 50.20' S= 0.0062 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.14 cfs @ 12.10 hrs HW=50.52' (Free Discharge)

↑1=Culvert (Barrel Controls 0.14 cfs @ 1.67 fps)

Pond 181P: DMH

Hydrograph



Summary for Pond 182P: CB 7

[57] Hint: Peaked at 48.97' (Flood elevation advised)

Inflow Area = 0.393 ac, 73.16% Impervious, Inflow Depth > 1.39" for 2-Year event
 Inflow = 0.67 cfs @ 12.09 hrs, Volume= 0.045 af
 Outflow = 0.67 cfs @ 12.09 hrs, Volume= 0.045 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.67 cfs @ 12.09 hrs, Volume= 0.045 af
 Routed to Pond 175P : DMH 5

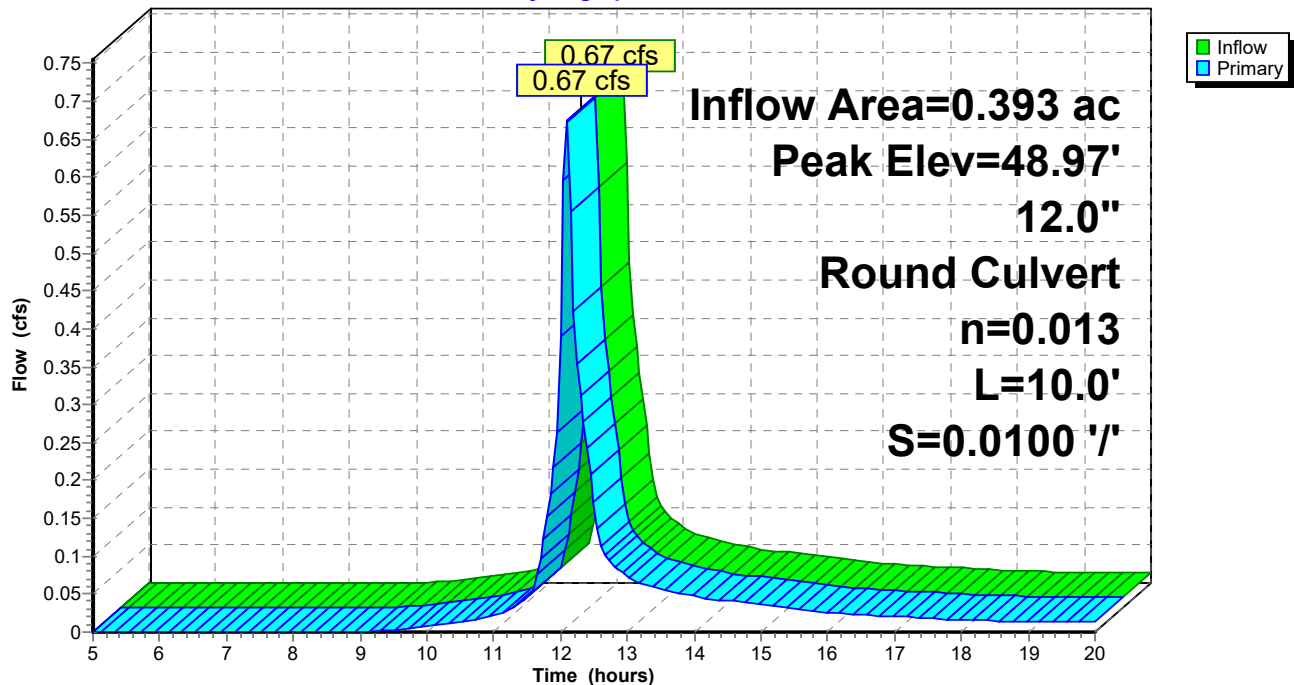
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 48.97' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	48.47'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.47' / 48.37' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.67 cfs @ 12.09 hrs HW=48.97' (Free Discharge)
 1=Culvert (Barrel Controls 0.67 cfs @ 2.50 fps)

Pond 182P: CB 7

Hydrograph



Summary for Pond 184P: DMH 4A

[57] Hint: Peaked at 49.35' (Flood elevation advised)

Inflow Area = 5.095 ac, 67.32% 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 185P : DMH

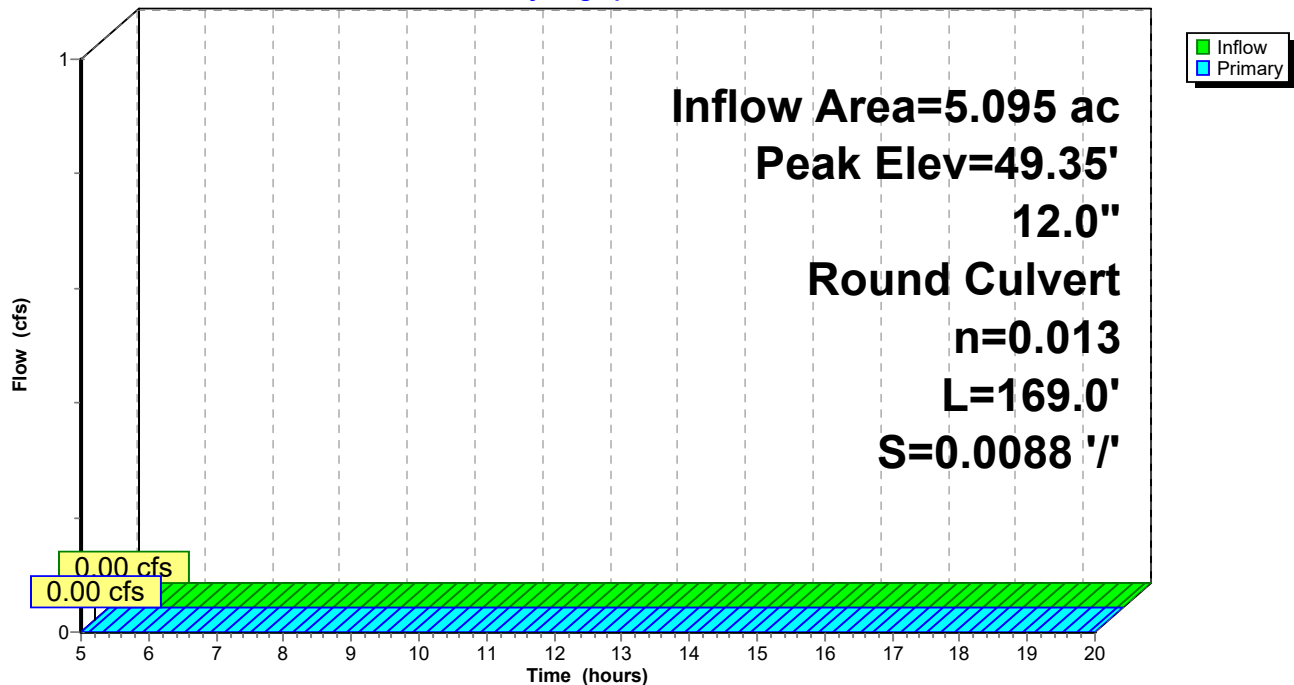
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 49.35' @ 5.00 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	49.35'	12.0" Round Culvert L= 169.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 49.35' / 47.87' S= 0.0088 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=49.35' (Free Discharge)
 1=Culvert (Controls 0.00 cfs)

Pond 184P: DMH 4A

Hydrograph



Summary for Pond 185P: DMH

[57] Hint: Peaked at 48.24' (Flood elevation advised)

[79] Warning: Submerged Pond 184P Primary device # 1 OUTLET by 0.36'

[79] Warning: Submerged Pond 196P Primary device # 1 INLET by 0.23'

Inflow Area = 5.412 ac, 68.22% Impervious, Inflow Depth > 0.11" for 2-Year event
 Inflow = 0.71 cfs @ 12.09 hrs, Volume= 0.048 af
 Outflow = 0.71 cfs @ 12.09 hrs, Volume= 0.048 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.71 cfs @ 12.09 hrs, Volume= 0.048 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= 48.24' @ 12.09 hrs

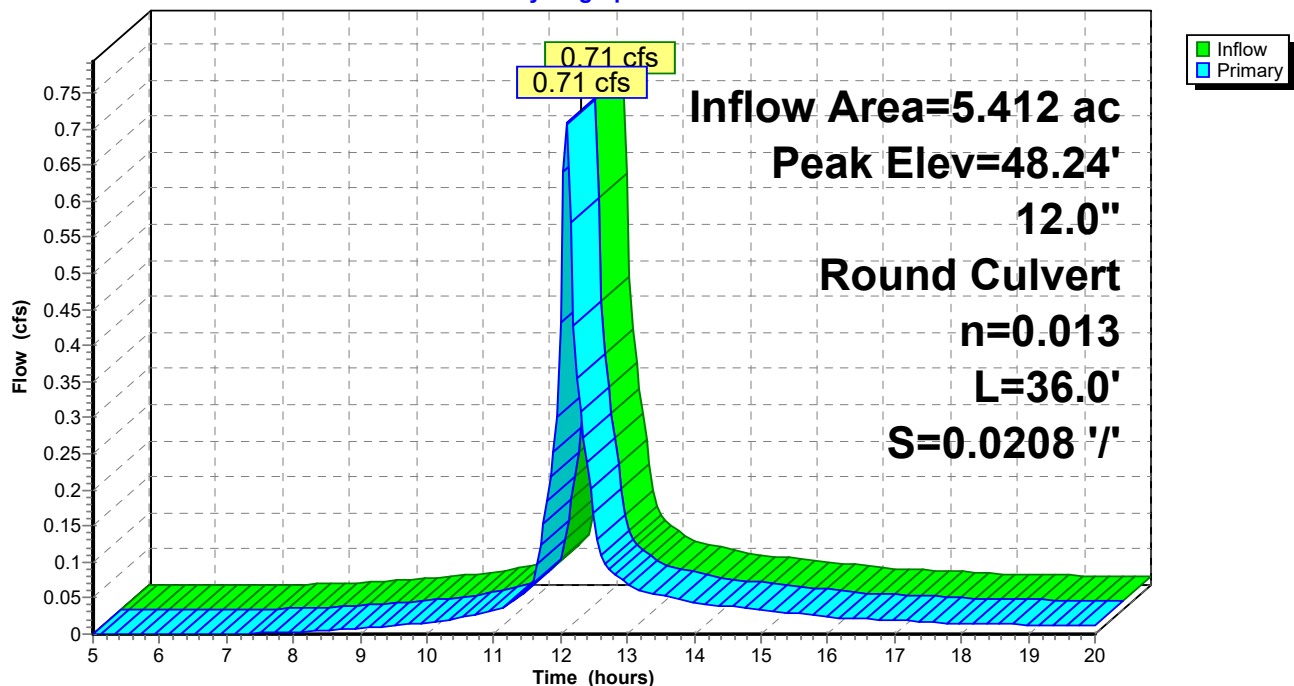
Device	Routing	Invert	Outlet Devices
#1	Primary	47.75'	12.0" Round Culvert L= 36.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.75' / 47.00' S= 0.0208 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.69 cfs @ 12.09 hrs HW=48.23' (Free Discharge)

↑**1=Culvert** (Inlet Controls 0.69 cfs @ 1.86 fps)

Pond 185P: DMH

Hydrograph



Summary for Pond 186P: Constructed Wetland 1

[81] Warning: Exceeded Pond 199P by 0.75' @ 19.95 hrs

[81] Warning: Exceeded Pond 200P by 0.35' @ 19.95 hrs

Inflow Area = 3.257 ac, 53.58% Impervious, Inflow Depth > 0.78" for 2-Year event
 Inflow = 2.98 cfs @ 12.10 hrs, Volume= 0.213 af
 Outflow = 0.03 cfs @ 20.00 hrs, Volume= 0.017 af, Atten= 99%, Lag= 474.1 min
 Primary = 0.03 cfs @ 20.00 hrs, Volume= 0.017 af
 Routed to Link 203L : 3A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 47.14' @ 20.00 hrs Surf.Area= 8,359 sf Storage= 8,537 cf

Plug-Flow detention time= 282.7 min calculated for 0.017 af (8% of inflow)
 Center-of-Mass det. time= 154.3 min (969.7 - 815.4)

Volume	Invert	Avail.Storage	Storage Description
#1	46.00'	38,996 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

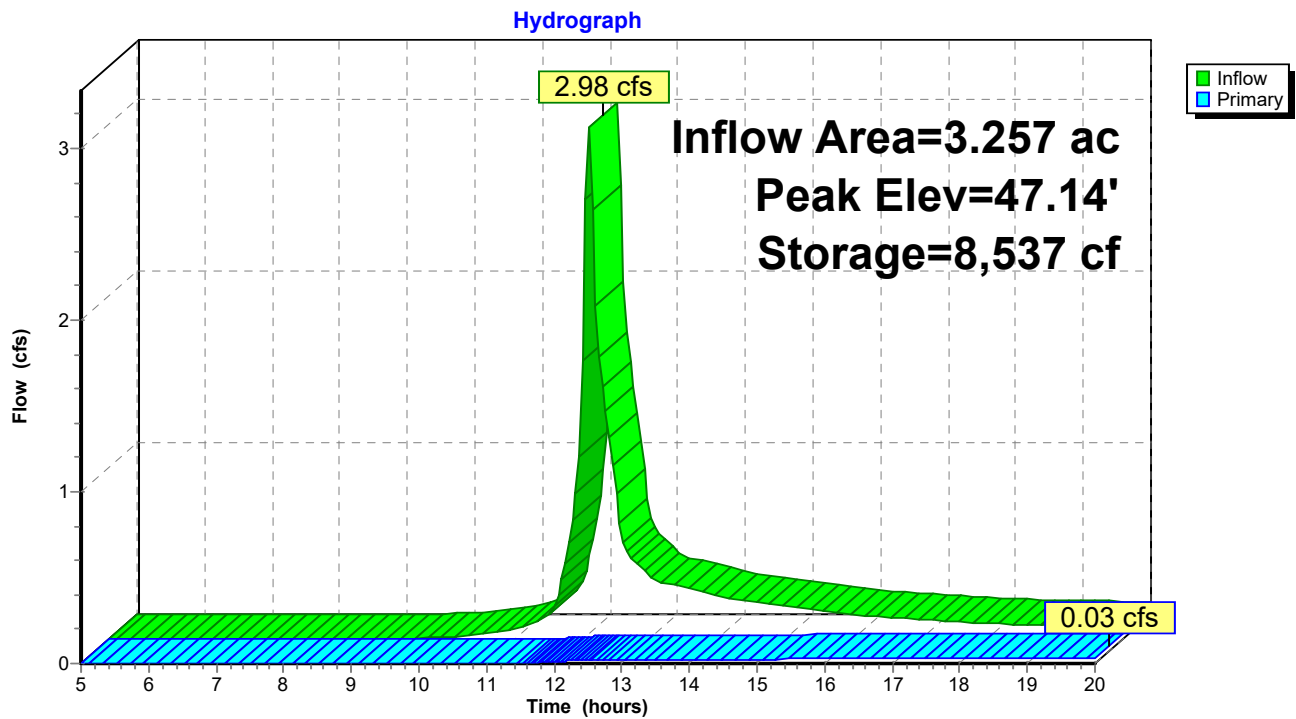
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
46.00	6,632	0	0
47.00	8,141	7,387	7,387
48.00	9,706	8,924	16,310
49.00	11,329	10,518	26,828
50.00	13,007	12,168	38,996

Device	Routing	Invert	Outlet Devices
#1	Primary	46.00'	12.0" Round Culvert L= 186.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 46.00' / 43.50' S= 0.0134 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	46.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	49.20'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.03 cfs @ 20.00 hrs HW=47.14' (Free Discharge)

1=Culvert (Passes 0.03 cfs of 2.39 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.03 cfs @ 5.04 fps)
 3=Orifice/Grate (Controls 0.00 cfs)

Pond 186P: Constructed Wetland 1



Summary for Pond 187P: Constructed Wetland 3

[79] Warning: Submerged Pond 60P Primary device # 1 OUTLET by 0.28'

Inflow Area = 1.994 ac, 68.75% Impervious, Inflow Depth > 1.23" for 2-Year event
 Inflow = 2.10 cfs @ 12.30 hrs, Volume= 0.204 af
 Outflow = 0.64 cfs @ 12.92 hrs, Volume= 0.142 af, Atten= 70%, Lag= 37.1 min
 Primary = 0.64 cfs @ 12.92 hrs, Volume= 0.142 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= 56.28' @ 12.92 hrs Surf.Area= 3,233 sf Storage= 3,340 cf

Plug-Flow detention time= 133.2 min calculated for 0.141 af (69% of inflow)
 Center-of-Mass det. time= 62.9 min (907.4 - 844.4)

Volume	Invert	Avail.Storage	Storage Description
#1	55.00'	10,466 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

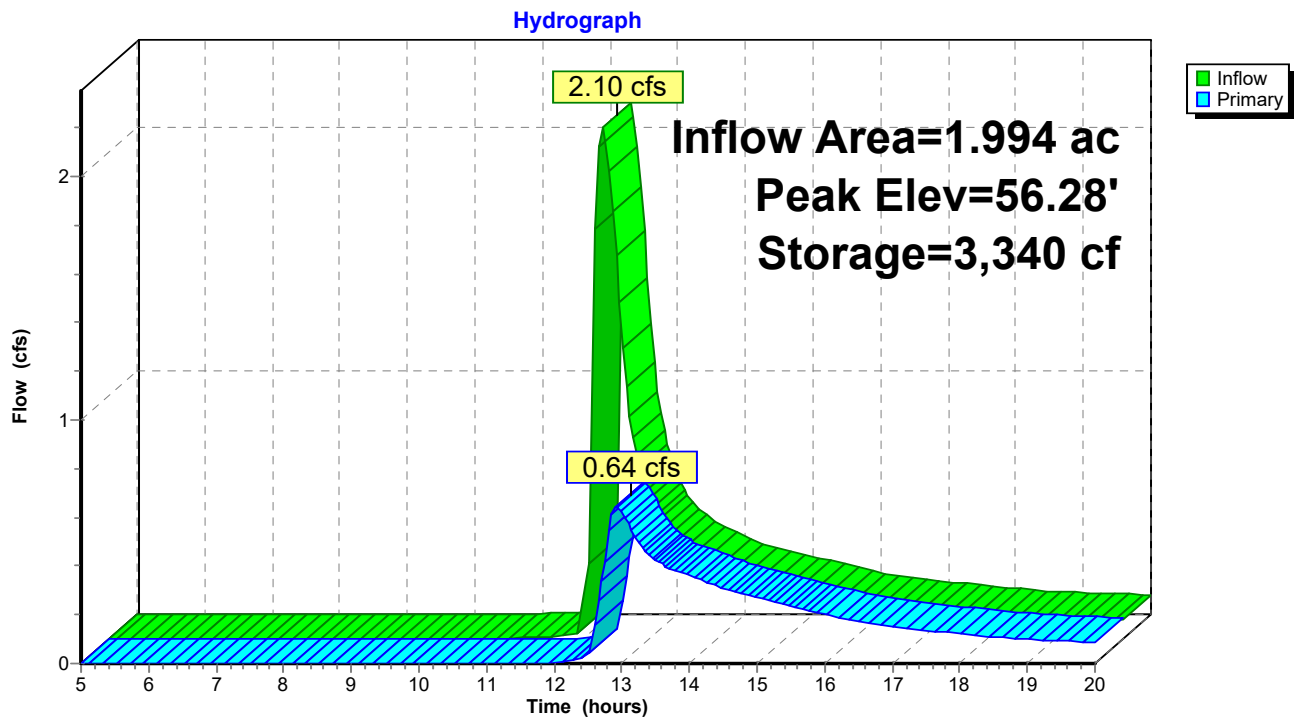
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
55.00	1,991	0	0
56.00	2,932	2,462	2,462
57.00	3,987	3,460	5,921
58.00	5,102	4,545	10,466

Device	Routing	Invert	Outlet Devices
#1	Primary	55.00'	24.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 55.00' / 54.00' S= 0.0500 ' S= 0.0500 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf
#2	Device 1	55.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	56.00'	4.0" Vert. Orifice/Grate X 3.00 C= 0.600 Limited to weir flow at low heads
#4	Device 1	56.25'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.63 cfs @ 12.92 hrs HW=56.28' (Free Discharge)

- 1=Culvert (Passes 0.63 cfs of 6.50 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.03 cfs @ 5.37 fps)
- 3=Orifice/Grate (Orifice Controls 0.43 cfs @ 1.82 fps)
- 4=Orifice/Grate (Weir Controls 0.17 cfs @ 0.61 fps)

Pond 187P: Constructed Wetland 3



Summary for Pond 188P: CB 3

[57] Hint: Peaked at 47.67' (Flood elevation advised)

Inflow Area = 0.718 ac, 28.78% Impervious, Inflow Depth > 0.09" for 2-Year event
 Inflow = 0.01 cfs @ 12.49 hrs, Volume= 0.006 af
 Outflow = 0.01 cfs @ 12.49 hrs, Volume= 0.006 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.01 cfs @ 12.49 hrs, Volume= 0.006 af
 Routed to Pond 190P : DMH 3

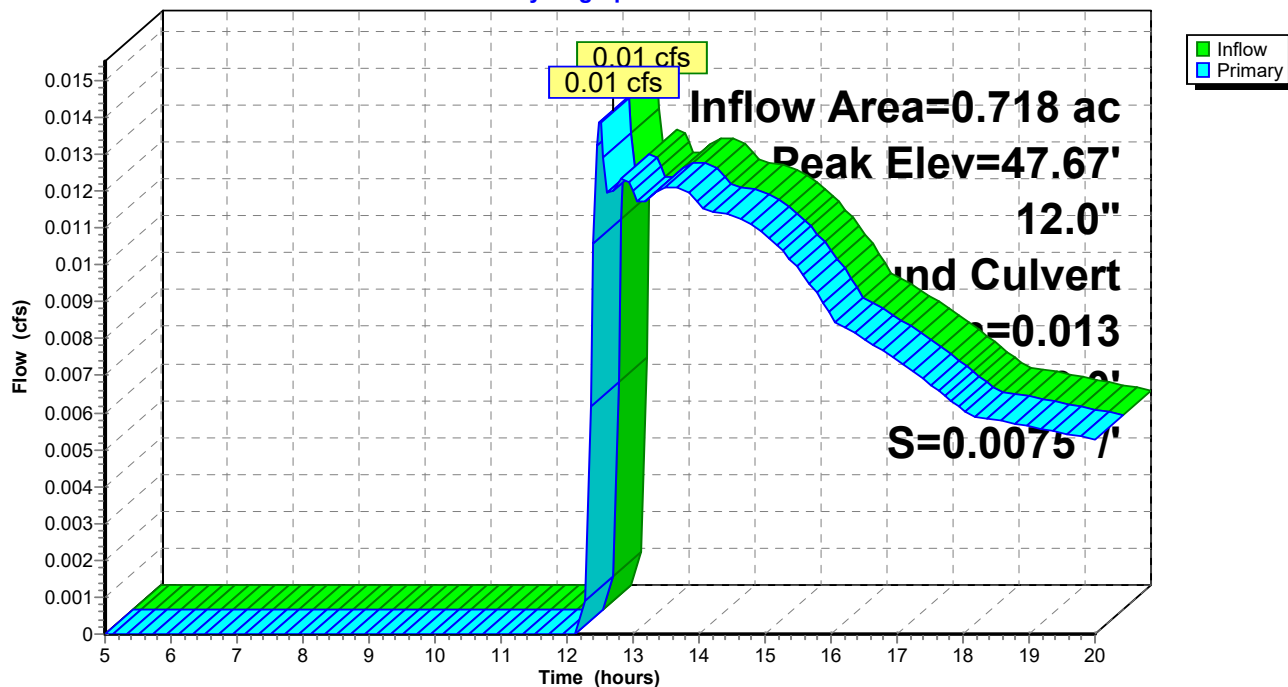
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 47.67' @ 12.49 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	47.60'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.60' / 47.45' S= 0.0075 ' S= 0.0075 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.01 cfs @ 12.49 hrs HW=47.67' (Free Discharge)
 1=Culvert (Barrel Controls 0.01 cfs @ 0.96 fps)

Pond 188P: CB 3

Hydrograph



Summary for Pond 189P: CB 4

[57] Hint: Peaked at 48.18' (Flood elevation advised)

Inflow Area = 0.642 ac, 65.44% Impervious, Inflow Depth > 1.14" for 2-Year event
 Inflow = 0.89 cfs @ 12.10 hrs, Volume= 0.061 af
 Outflow = 0.89 cfs @ 12.10 hrs, Volume= 0.061 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.89 cfs @ 12.10 hrs, Volume= 0.061 af
 Routed to Pond 190P : DMH 3

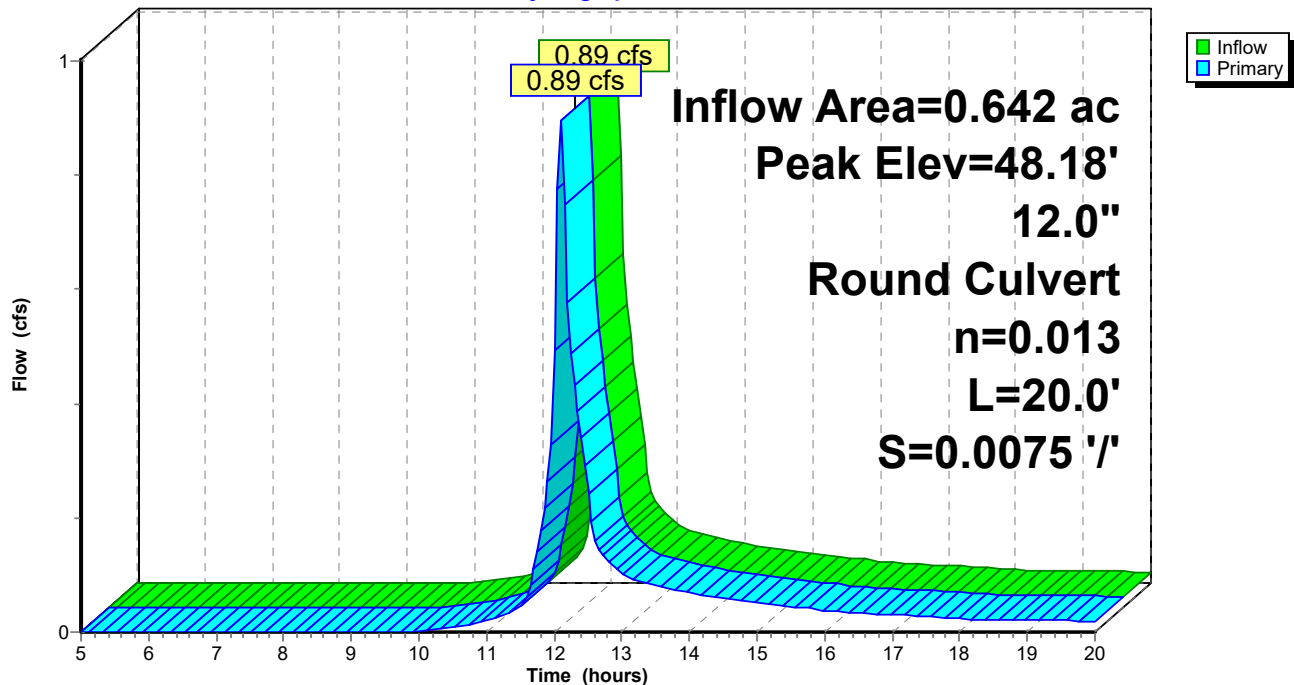
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 48.18' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	47.60'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.60' / 47.45' S= 0.0075 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.89 cfs @ 12.10 hrs HW=48.18' (Free Discharge)
 1=Culvert (Barrel Controls 0.89 cfs @ 2.70 fps)

Pond 189P: CB 4

Hydrograph



Summary for Pond 190P: DMH 3

[57] Hint: Peaked at 48.24' (Flood elevation advised)

[79] Warning: Submerged Pond 171P Primary device # 1 INLET by 0.17'

[81] Warning: Exceeded Pond 188P by 0.64' @ 12.10 hrs

[81] Warning: Exceeded Pond 189P by 0.06' @ 12.10 hrs

Inflow Area = 2.886 ac, 54.67% Impervious, Inflow Depth > 0.82" for 2-Year event
 Inflow = 2.77 cfs @ 12.10 hrs, Volume= 0.196 af
 Outflow = 2.77 cfs @ 12.10 hrs, Volume= 0.196 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.77 cfs @ 12.10 hrs, Volume= 0.196 af
 Routed to Pond 199P : DMH 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 48.24' @ 12.10 hrs

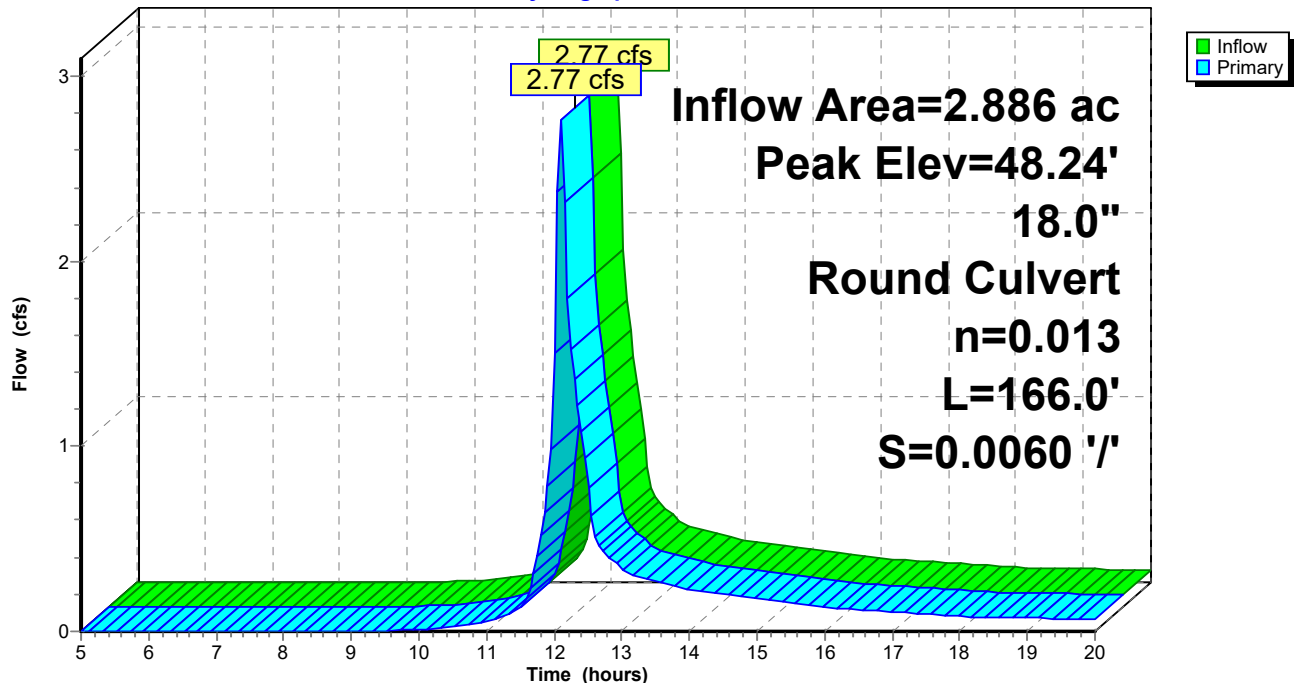
Device	Routing	Invert	Outlet Devices
#1	Primary	47.35'	18.0" Round Culvert L= 166.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.35' / 46.35' S= 0.0060 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=2.75 cfs @ 12.10 hrs HW=48.24' (Free Discharge)

↑**1=Culvert** (Inlet Controls 2.75 cfs @ 2.53 fps)

Pond 190P: DMH 3

Hydrograph



Summary for Pond 191P: CB 42

[57] Hint: Peaked at 50.97' (Flood elevation advised)

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

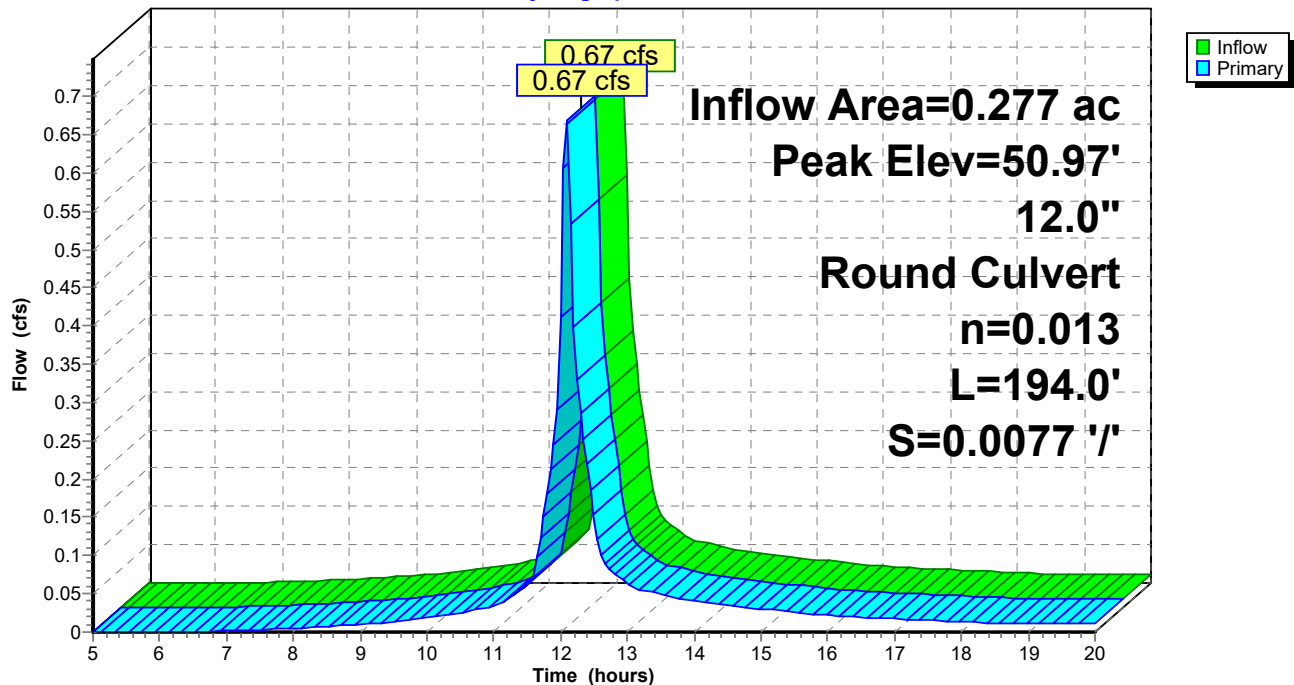
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 50.97' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.50'	12.0" Round Culvert L= 194.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.50' / 49.00' S= 0.0077 '/' Cc= 0.900 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. 1

[79] Warning: Submerged Pond 180P Primary device # 1 OUTLET by 0.01'

Inflow Area = 5.095 ac, 67.32% Impervious, Inflow Depth > 0.47" for 2-Year event
 Inflow = 2.96 cfs @ 12.10 hrs, Volume= 0.201 af
 Outflow = 1.31 cfs @ 12.33 hrs, Volume= 0.201 af, Atten= 56%, Lag= 14.2 min
 Discarded = 1.31 cfs @ 12.33 hrs, Volume= 0.201 af
 Primary = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af
 Routed to Pond 184P : DMH 4A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 49.01' @ 12.33 hrs Surf.Area= 0.125 ac Storage= 0.027 af

Plug-Flow detention time= 5.2 min calculated for 0.201 af (100% of inflow)
 Center-of-Mass det. time= 5.0 min (810.3 - 805.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	48.50'	0.111 af	72.75'W x 74.82'L x 3.50'H Field A 0.437 af Overall - 0.160 af Embedded = 0.277 af x 40.0% Voids
#2A	49.00'	0.160 af	ADS_StormTech SC-740 b +Cap x 150 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 150 Chambers in 15 Rows Cap Storage= 2.7 cf x 2 x 15 rows = 79.6 cf
0.271 af			Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	48.50'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 46.50'
#2	Primary	49.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 49.50' / 49.40' S= 0.0100 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Primary	51.00'	4.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=1.31 cfs @ 12.33 hrs HW=49.01' (Free Discharge)
 1=Exfiltration (Controls 1.31 cfs)

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=48.50' (Free Discharge)
 2=Culvert (Controls 0.00 cfs)
 3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Pond 192P: Sub. Inf. 1 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 15 rows = 79.6 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

10 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 72.82' Row Length +12.0" End Stone x 2 = 74.82' Base Length

15 Rows x 51.0" Wide + 6.0" Spacing x 14 + 12.0" Side Stone x 2 = 72.75' Base Width

6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

150 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 15 Rows = 6,970.7 cf Chamber Storage

19,050.2 cf Field - 6,970.7 cf Chambers = 12,079.5 cf Stone x 40.0% Voids = 4,831.8 cf Stone Storage

Chamber Storage + Stone Storage = 11,802.5 cf = 0.271 af

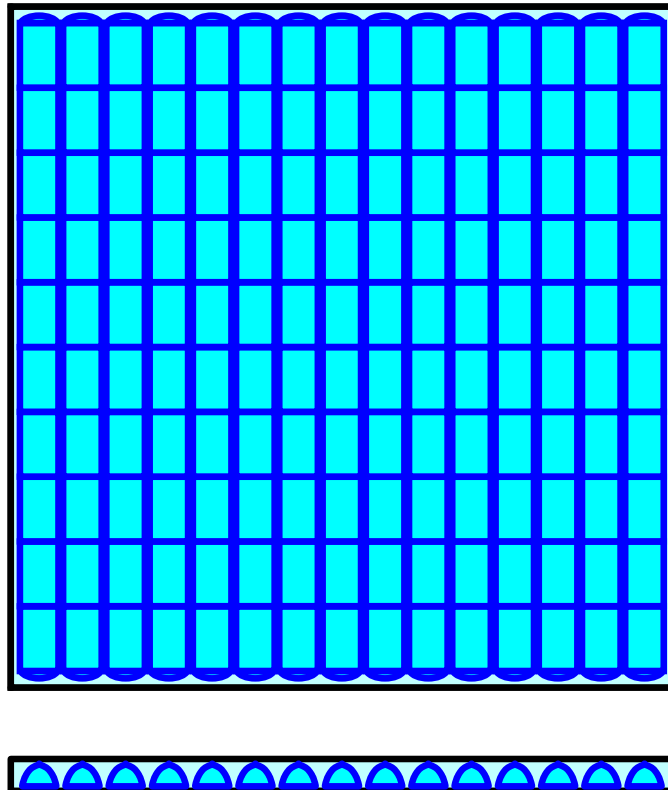
Overall Storage Efficiency = 62.0%

Overall System Size = 74.82' x 72.75' x 3.50'

150 Chambers

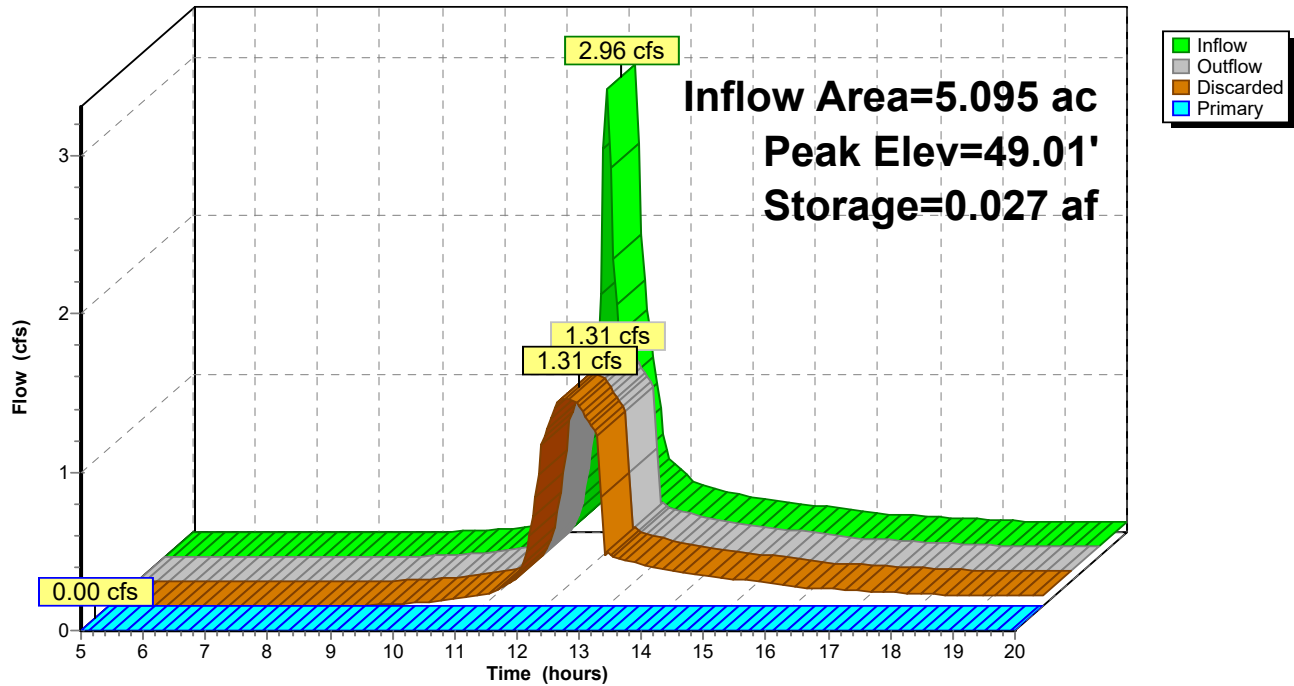
705.6 cy Field

447.4 cy Stone



Pond 192P: Sub. Inf. 1

Hydrograph



Summary for Pond 193P: CB 1

[57] Hint: Peaked at 47.06' (Flood elevation advised)

Inflow Area = 0.219 ac, 30.44% Impervious, Inflow Depth > 0.13" for 2-Year event
 Inflow = 0.01 cfs @ 12.42 hrs, Volume= 0.002 af
 Outflow = 0.01 cfs @ 12.42 hrs, Volume= 0.002 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.01 cfs @ 12.42 hrs, Volume= 0.002 af
 Routed to Pond 200P : DMH 1

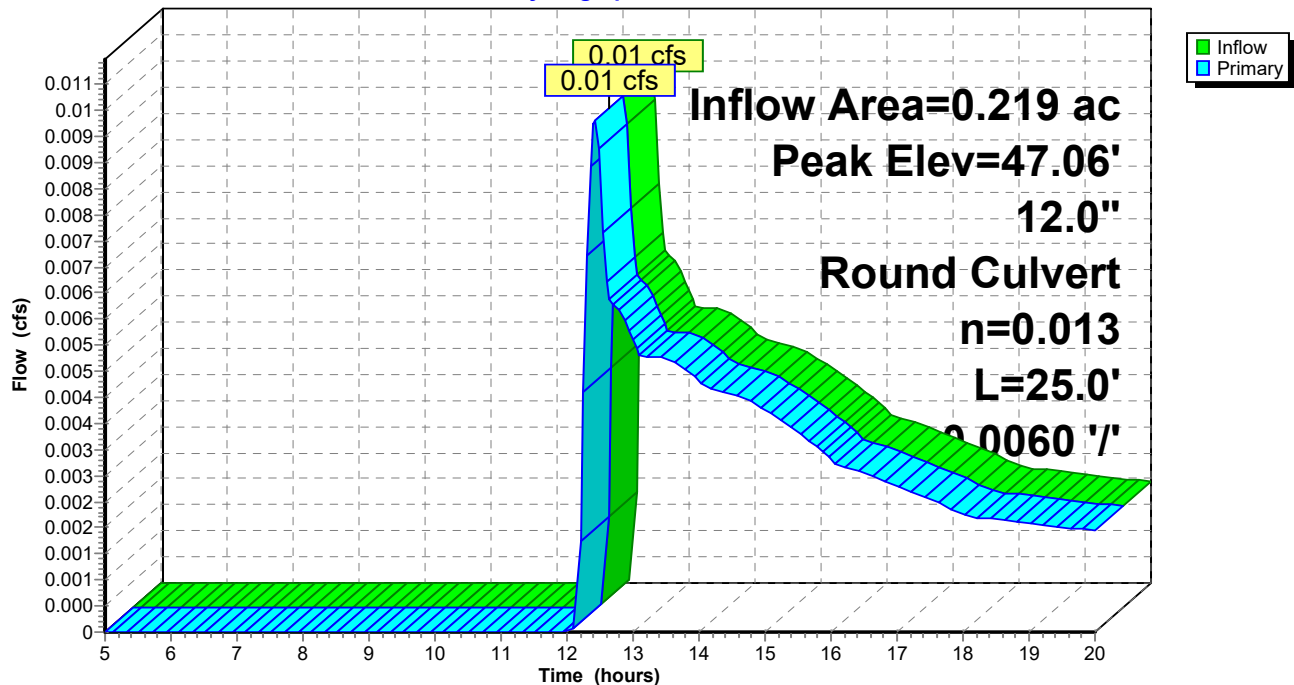
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 47.06' @ 12.42 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	47.00'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.00' / 46.85' S= 0.0060 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.01 cfs @ 12.42 hrs HW=47.06' (Free Discharge)
 1=Culvert (Barrel Controls 0.01 cfs @ 0.81 fps)

Pond 193P: CB 1

Hydrograph



Summary for Pond 194P: CB 2

[57] Hint: Peaked at 47.25' (Flood elevation advised)

Inflow Area = 0.152 ac, 66.33% Impervious, Inflow Depth > 1.14" 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 200P : DMH 1

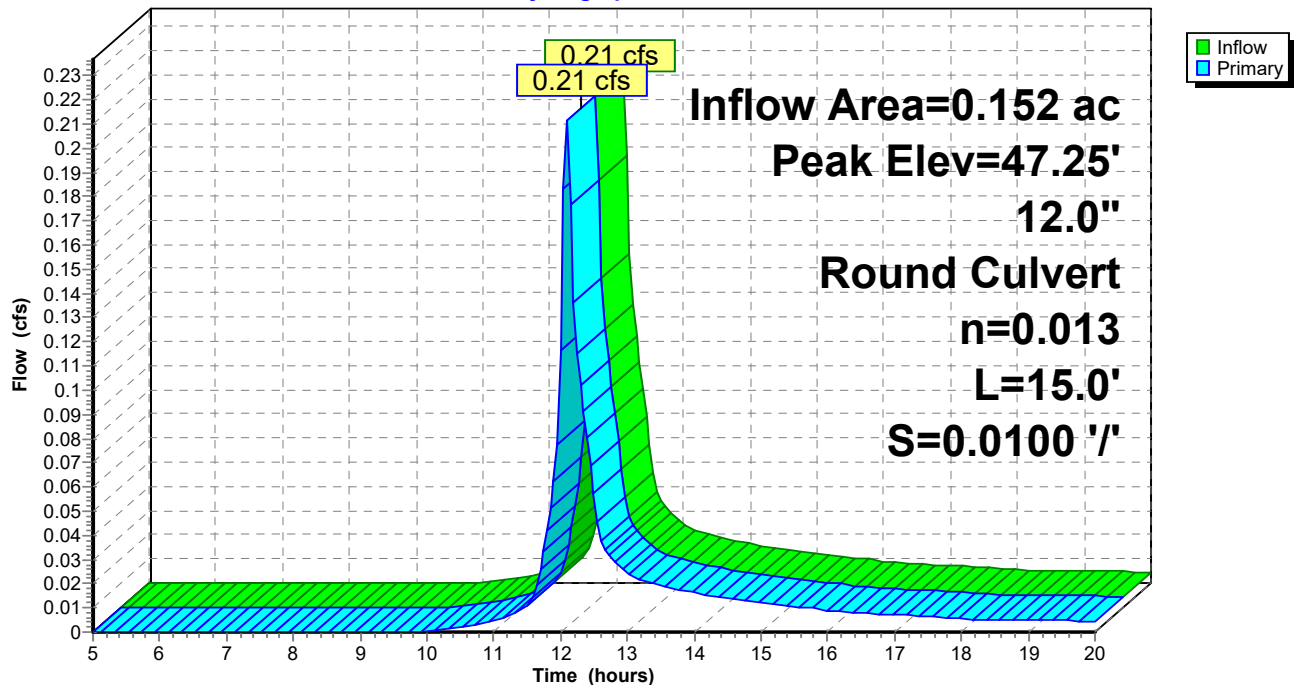
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 47.25' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	47.00'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.00' / 46.85' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.21 cfs @ 12.10 hrs HW=47.25' (Free Discharge)
 ↑1=Culvert (Inlet Controls 0.21 cfs @ 1.35 fps)

Pond 194P: CB 2

Hydrograph



Summary for Pond 195P: Constructed Wetland 4

[79] Warning: Submerged Pond 121P Primary device # 1 OUTLET by 1.78'

Inflow Area = 1.935 ac, 78.08% Impervious, Inflow Depth > 1.02" for 2-Year event
 Inflow = 0.68 cfs @ 12.65 hrs, Volume= 0.165 af
 Outflow = 0.31 cfs @ 14.47 hrs, Volume= 0.104 af, Atten= 54%, Lag= 109.6 min
 Primary = 0.31 cfs @ 14.47 hrs, Volume= 0.104 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= 54.78' @ 14.47 hrs Surf.Area= 2,211 sf Storage= 3,022 cf

Plug-Flow detention time= 165.2 min calculated for 0.104 af (63% of inflow)
 Center-of-Mass det. time= 81.7 min (962.5 - 880.8)

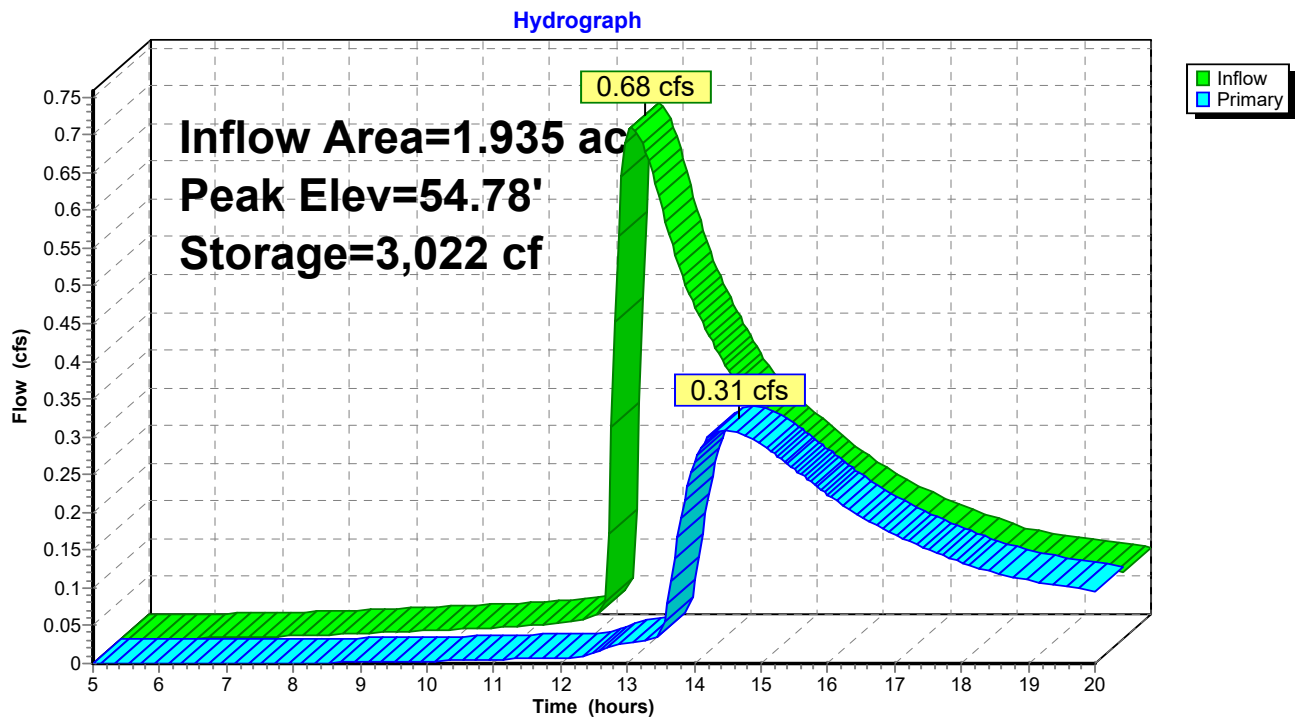
Volume	Invert	Avail.Storage	Storage Description
#1	53.00'	9,558 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
53.00	1,225	0	0
54.00	1,749	1,487	1,487
55.00	2,345	2,047	3,534
56.00	2,998	2,672	6,206
57.00	3,707	3,353	9,558

Device	Routing	Invert	Outlet Devices
#1	Primary	53.00'	18.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.00' / 52.00' S= 0.0200 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	53.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	54.50'	4.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 1	56.00'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#5	Device 1	55.25'	6.0" Vert. Orifice/Grate X 3.00 C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.31 cfs @ 14.47 hrs HW=54.78' (Free Discharge)

- 1=Culvert (Passes 0.31 cfs of 6.80 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.03 cfs @ 6.34 fps)
- 3=Orifice/Grate (Orifice Controls 0.28 cfs @ 1.79 fps)
- 4=Orifice/Grate (Controls 0.00 cfs)
- 5=Orifice/Grate (Controls 0.00 cfs)

Pond 195P: Constructed Wetland 4



Summary for Pond 196P: CB 5

[57] Hint: Peaked at 48.52' (Flood elevation advised)

Inflow Area = 0.317 ac, 82.60% Impervious, Inflow Depth > 1.83" for 2-Year event
 Inflow = 0.71 cfs @ 12.09 hrs, Volume= 0.048 af
 Outflow = 0.71 cfs @ 12.09 hrs, Volume= 0.048 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.71 cfs @ 12.09 hrs, Volume= 0.048 af
 Routed to Pond 185P : DMH

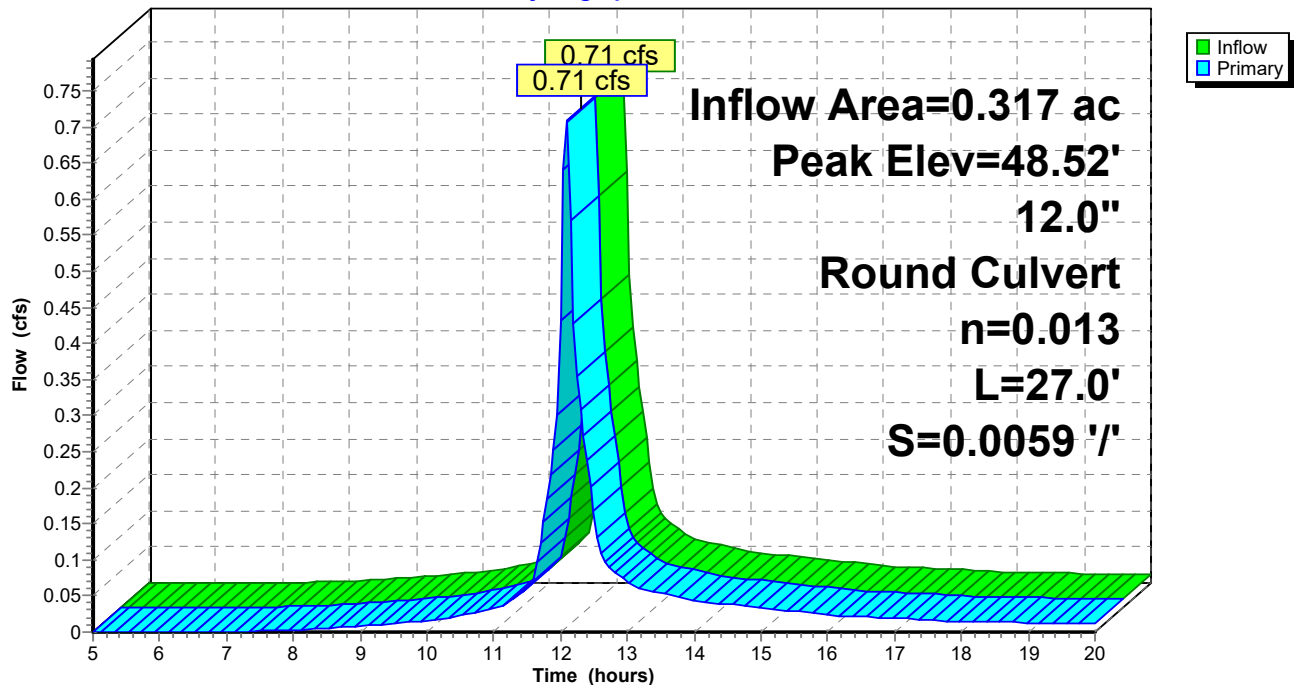
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 48.52' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	48.00'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.00' / 47.84' S= 0.0059 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.69 cfs @ 12.09 hrs HW=48.51' (Free Discharge)
 1=Culvert (Barrel Controls 0.69 cfs @ 2.49 fps)

Pond 196P: CB 5

Hydrograph



Summary for Pond 197P: Inf. Basin 1

[79] Warning: Submerged Pond 185P Primary device # 1 OUTLET by 0.06'

Inflow Area = 5.710 ac, 64.66% Impervious, Inflow Depth > 0.10" for 2-Year event
 Inflow = 0.71 cfs @ 12.09 hrs, Volume= 0.048 af
 Outflow = 0.53 cfs @ 12.17 hrs, Volume= 0.048 af, Atten= 26%, Lag= 4.4 min
 Discarded = 0.53 cfs @ 12.17 hrs, Volume= 0.048 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= 47.06' @ 12.17 hrs Surf.Area= 2,673 sf Storage= 147 cf

Plug-Flow detention time= 3.5 min calculated for 0.048 af (100% of inflow)
 Center-of-Mass det. time= 3.1 min (785.0 - 782.0)

Volume	Invert	Avail.Storage	Storage Description
#1	47.00'	19,356 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

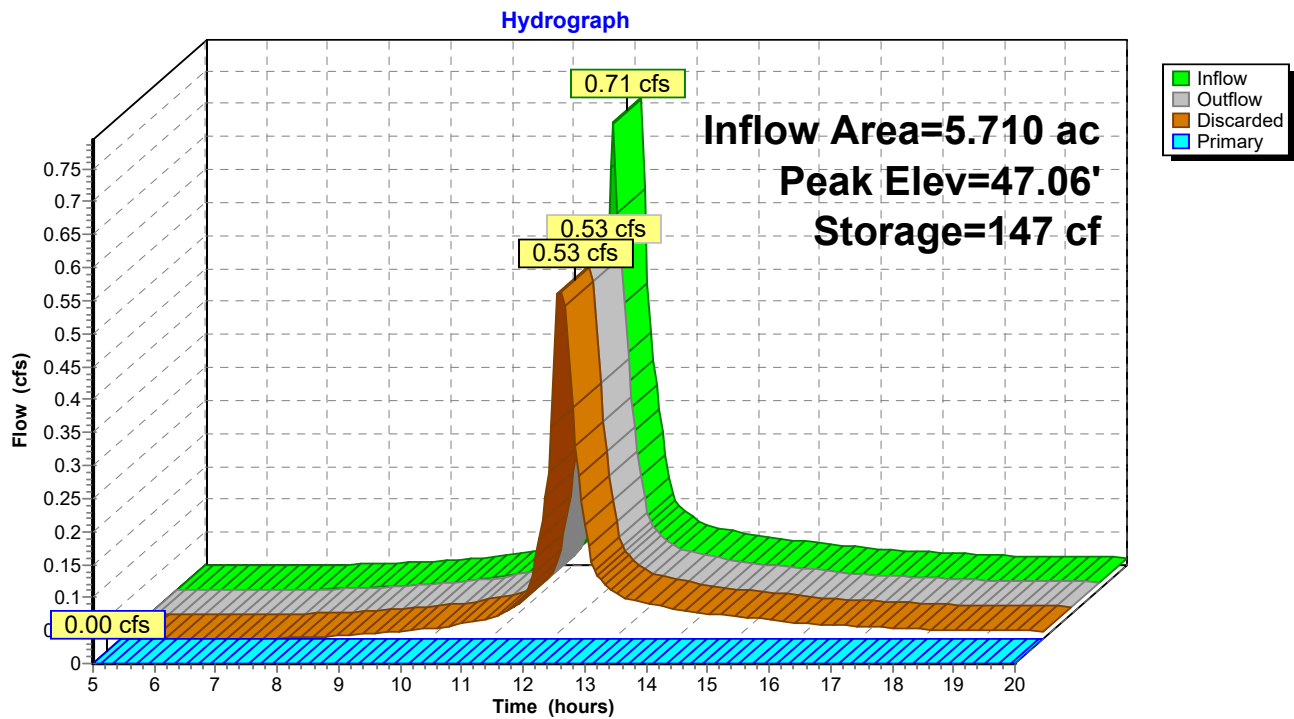
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
47.00	2,615	0	0
48.00	3,665	3,140	3,140
49.00	4,784	4,225	7,365
50.00	5,981	5,383	12,747
51.00	7,236	6,609	19,356

Device	Routing	Invert	Outlet Devices
#1	Discarded	47.00'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 45.00'
#2	Primary	47.00'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.00' / 43.50' S= 0.1400 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	50.35'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.53 cfs @ 12.17 hrs HW=47.05' (Free Discharge)
 ↑ **1=Exfiltration** (Controls 0.53 cfs)

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=47.00' (Free Discharge)
 ↑ **2=Culvert** (Controls 0.00 cfs)
 ↑ **3=Orifice/Grate** (Controls 0.00 cfs)

Pond 197P: Inf. Basin 1



Summary for Pond 198P: Sub. Inf. 2

[79] Warning: Submerged Pond 204P Primary device # 1 by 0.12'

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	30.00'W x 138.90'L x 3.50'H Field A 0.335 af Overall - 0.121 af Embedded = 0.214 af x 40.0% Voids
#2A	51.50'	0.121 af	ADS_StormTech SC-740 b +Cap x 114 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 114 Chambers in 6 Rows 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'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 50.00'
#2	Primary	52.75'	18.0" Round Culvert L= 10.0' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 52.75' / 52.65' S= 0.0100 '/ Cc= 0.900 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 6 rows = 31.9 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

19 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 136.90' Row Length +12.0" End Stone x 2 =
138.90' Base Length

6 Rows x 51.0" Wide + 6.0" Spacing x 5 + 12.0" Side Stone x 2 = 30.00' Base Width

6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

114 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 6 Rows = 5,269.0 cf Chamber Storage

14,584.2 cf Field - 5,269.0 cf Chambers = 9,315.1 cf Stone x 40.0% Voids = 3,726.1 cf Stone Storage

Chamber Storage + Stone Storage = 8,995.1 cf = 0.206 af

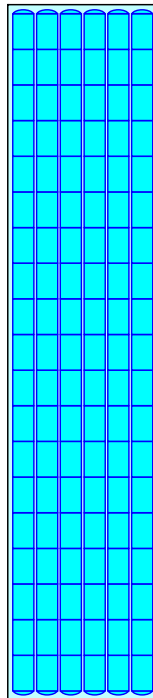
Overall Storage Efficiency = 61.7%

Overall System Size = 138.90' x 30.00' x 3.50'

114 Chambers

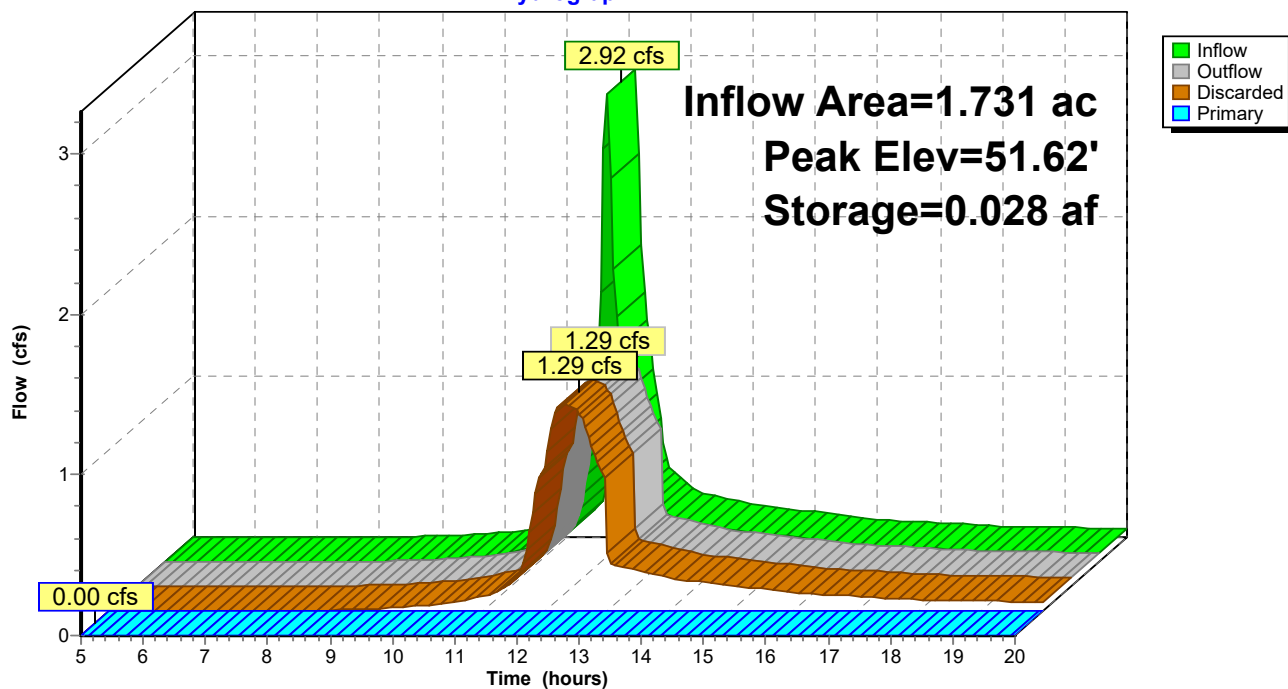
540.2 cy Field

345.0 cy Stone



Pond 198P: Sub. Inf. 2

Hydrograph



Summary for Pond 199P: DMH 2

[57] Hint: Peaked at 47.20' (Flood elevation advised)

[79] Warning: Submerged Pond 190P Primary device # 1 OUTLET by 0.85'

Inflow Area = 2.886 ac, 54.67% Impervious, Inflow Depth > 0.82" for 2-Year event
 Inflow = 2.77 cfs @ 12.10 hrs, Volume= 0.196 af
 Outflow = 2.77 cfs @ 12.10 hrs, Volume= 0.196 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.77 cfs @ 12.10 hrs, Volume= 0.196 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= 47.20' @ 12.10 hrs

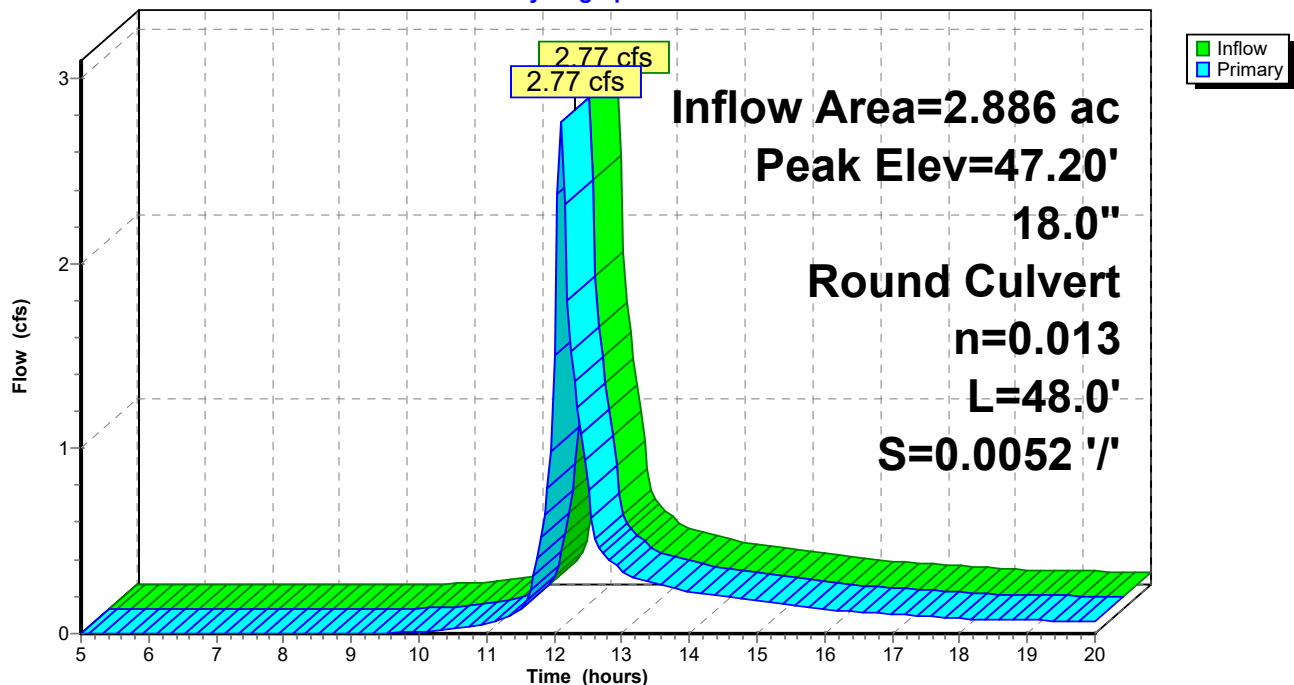
Device	Routing	Invert	Outlet Devices
#1	Primary	46.25'	18.0" Round Culvert L= 48.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 46.25' / 46.00' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=2.75 cfs @ 12.10 hrs HW=47.20' (Free Discharge)

↑1=Culvert (Barrel Controls 2.75 cfs @ 3.34 fps)

Pond 199P: DMH 2

Hydrograph



Summary for Pond 200P: DMH 1

[57] Hint: Peaked at 47.00' (Flood elevation advised)

[79] Warning: Submerged Pond 193P Primary device # 1 OUTLET by 0.15'

[79] Warning: Submerged Pond 194P Primary device # 1 OUTLET by 0.15'

Inflow Area = 0.371 ac, 45.11% Impervious, Inflow Depth > 0.54" for 2-Year event
 Inflow = 0.21 cfs @ 12.10 hrs, Volume= 0.017 af
 Outflow = 0.21 cfs @ 12.10 hrs, Volume= 0.017 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.21 cfs @ 12.10 hrs, Volume= 0.017 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= 47.00' @ 12.10 hrs

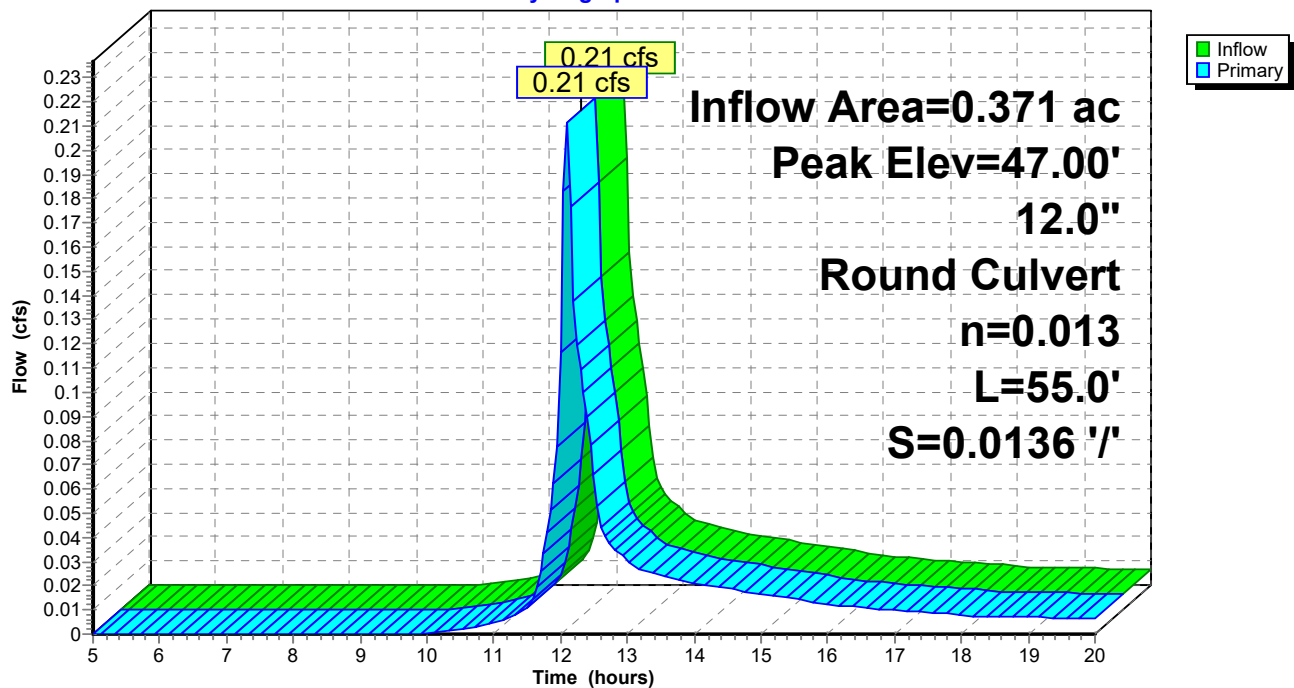
Device	Routing	Invert	Outlet Devices
#1	Primary	46.75'	12.0" Round Culvert L= 55.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 46.75' / 46.00' S= 0.0136 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.21 cfs @ 12.10 hrs HW=47.00' (Free Discharge)

↑1=Culvert (Inlet Controls 0.21 cfs @ 1.35 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	20.50'W x 167.38'L x 3.50'H Field A 0.276 af Overall - 0.098 af Embedded = 0.178 af x 40.0% Voids
#2A	52.50'	0.098 af	ADS_StormTech SC-740 b +Cap x 92 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 92 Chambers in 4 Rows 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'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 51.00'
#2	Primary	54.00'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.00' / 53.65' S= 0.0175 '/' Cc= 0.900 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 4 rows = 21.2 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

23 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 165.38' Row Length +12.0" End Stone x 2 = 167.38' Base Length

4 Rows x 51.0" Wide + 6.0" Spacing x 3 + 12.0" Side Stone x 2 = 20.50' Base Width

6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

92 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 4 Rows = 4,247.7 cf Chamber Storage

12,009.3 cf Field - 4,247.7 cf Chambers = 7,761.6 cf Stone x 40.0% Voids = 3,104.6 cf Stone Storage

Chamber Storage + Stone Storage = 7,352.3 cf = 0.169 af

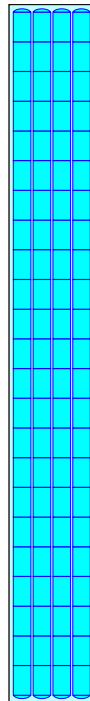
Overall Storage Efficiency = 61.2%

Overall System Size = 167.38' x 20.50' x 3.50'

92 Chambers

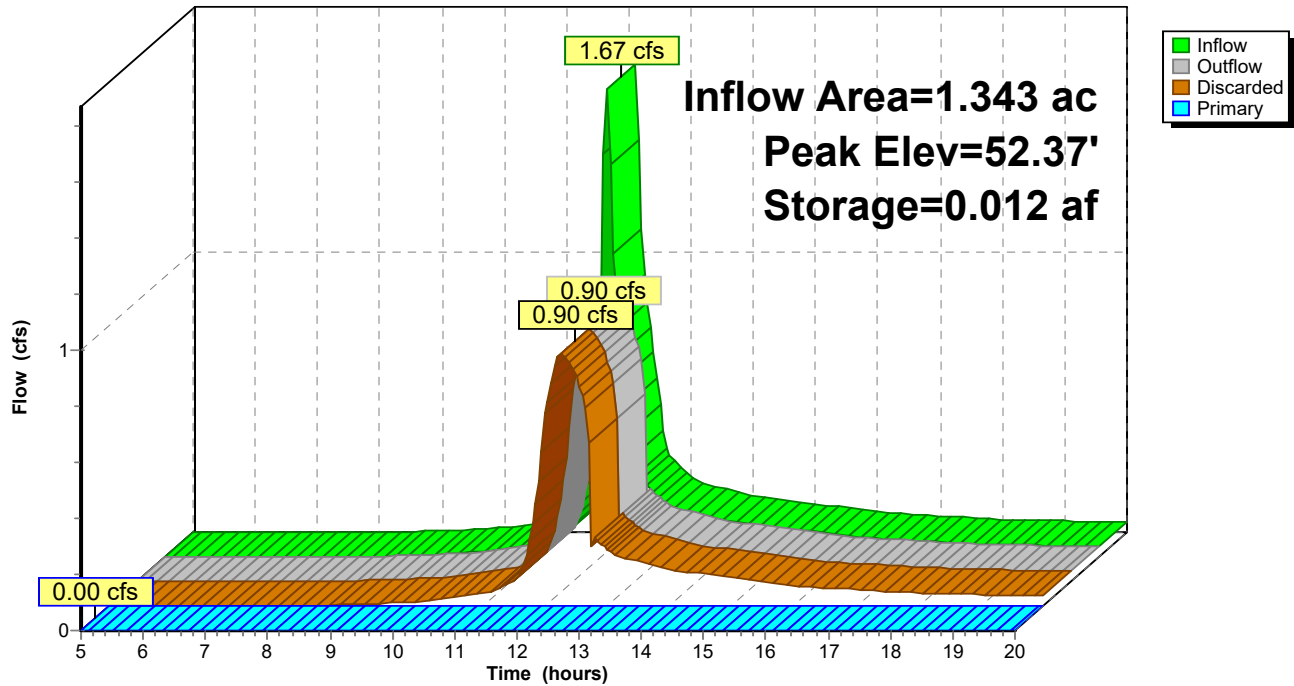
444.8 cy Field

287.5 cy Stone



Pond 201P: Sub. Inf. 3

Hydrograph



Summary for Pond 202P: DMH 14

[57] Hint: Peaked at 52.65' (Flood elevation advised)

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

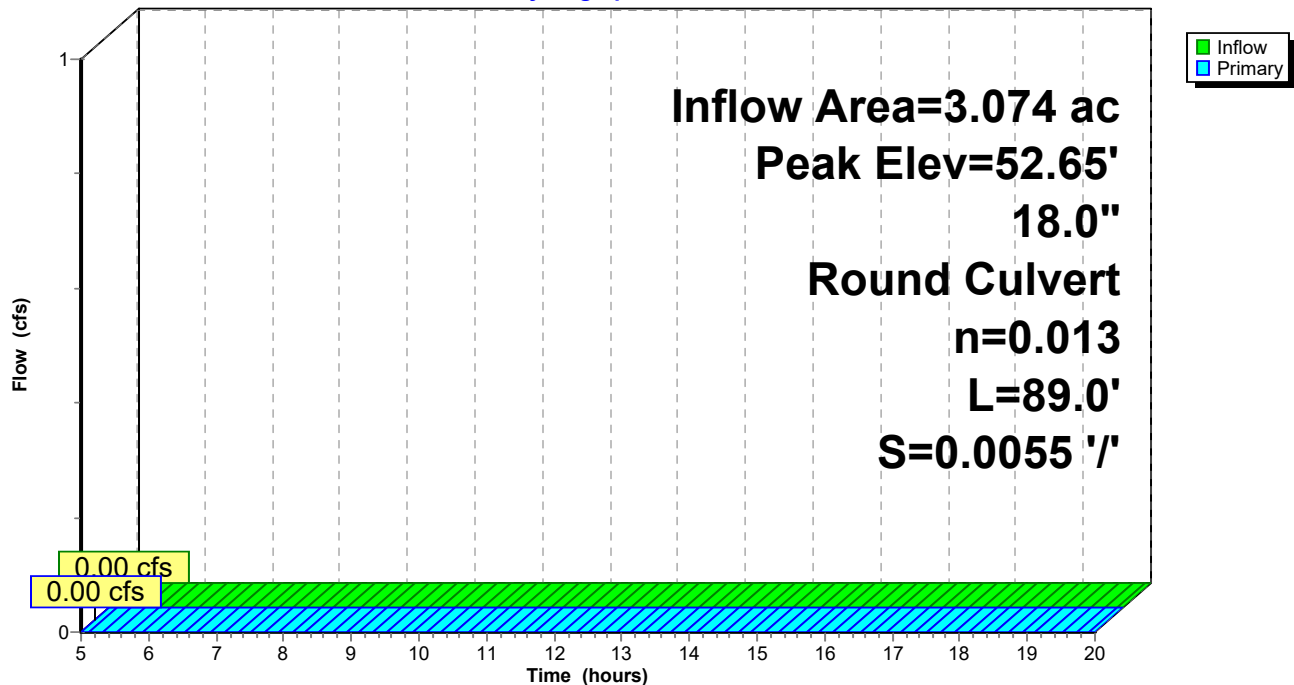
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 52.65' @ 5.00 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	52.65'	18.0" Round Culvert L= 89.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.65' / 52.16' S= 0.0055 '/' Cc= 0.900 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

[57] Hint: Peaked at 52.42' (Flood elevation advised)

[79] Warning: Submerged Pond 153P Primary device # 1 INLET by 0.37'

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

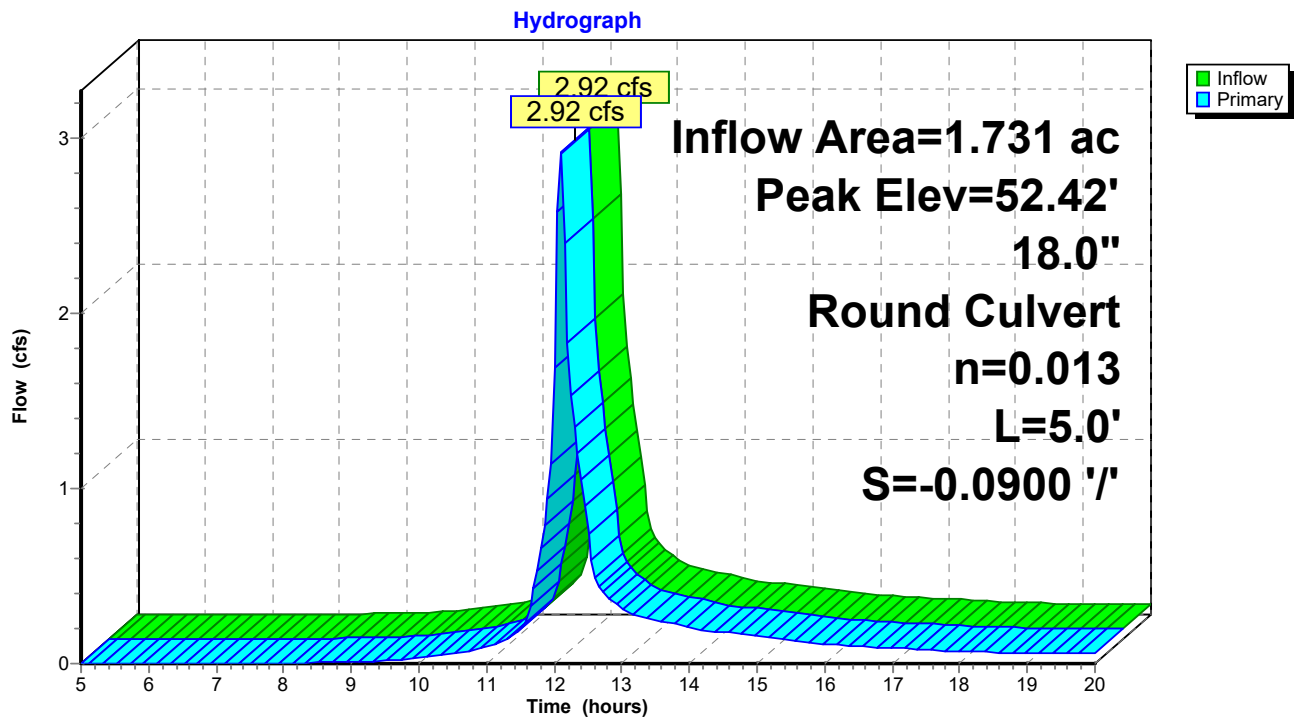
Peak Elev= 52.42' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	51.50'	18.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.05' / 51.50' S= -0.0900 '/' Cc= 0.900 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



Summary for Pond 205P: DMH 27

[57] Hint: Peaked at 53.47' (Flood elevation advised)

[79] Warning: Submerged Pond 127P Primary device # 1 OUTLET by 0.67'

[79] Warning: Submerged Pond 139P Primary device # 1 INLET by 0.17'

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

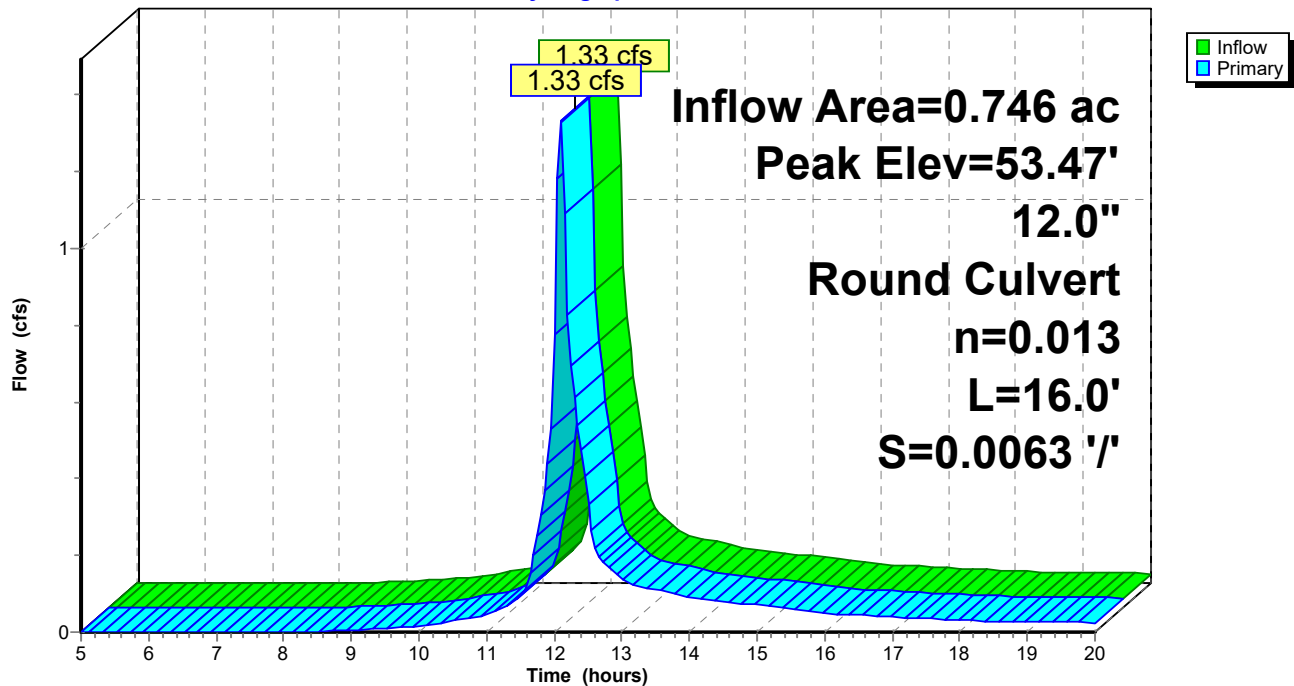
Device	Routing	Invert	Outlet Devices
#1	Primary	52.70'	12.0" Round Culvert L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.70' / 52.60' S= 0.0063 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

Hydrograph



Summary for Pond 206P: DMH 34

[57] Hint: Peaked at 55.19' (Flood elevation advised)

[79] Warning: Submerged Pond 43P Primary device # 1 OUTLET by 0.49'

[79] Warning: Submerged Pond 124P Primary device # 1 OUTLET by 0.49'

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

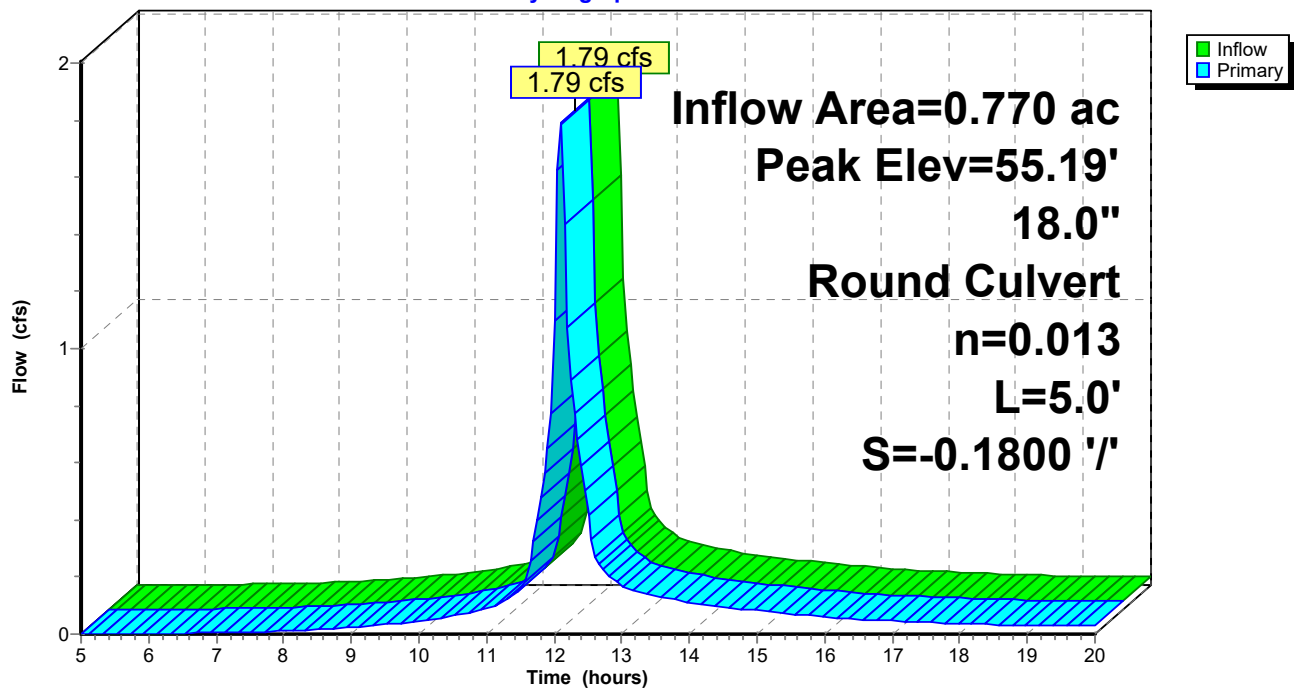
Device	Routing	Invert	Outlet Devices
#1	Primary	54.50'	18.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.60' / 54.50' S= -0.1800 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[57] Hint: Peaked at 60.70' (Flood elevation advised)

[79] Warning: Submerged Pond 64P Primary device # 1 INLET by 0.59'

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

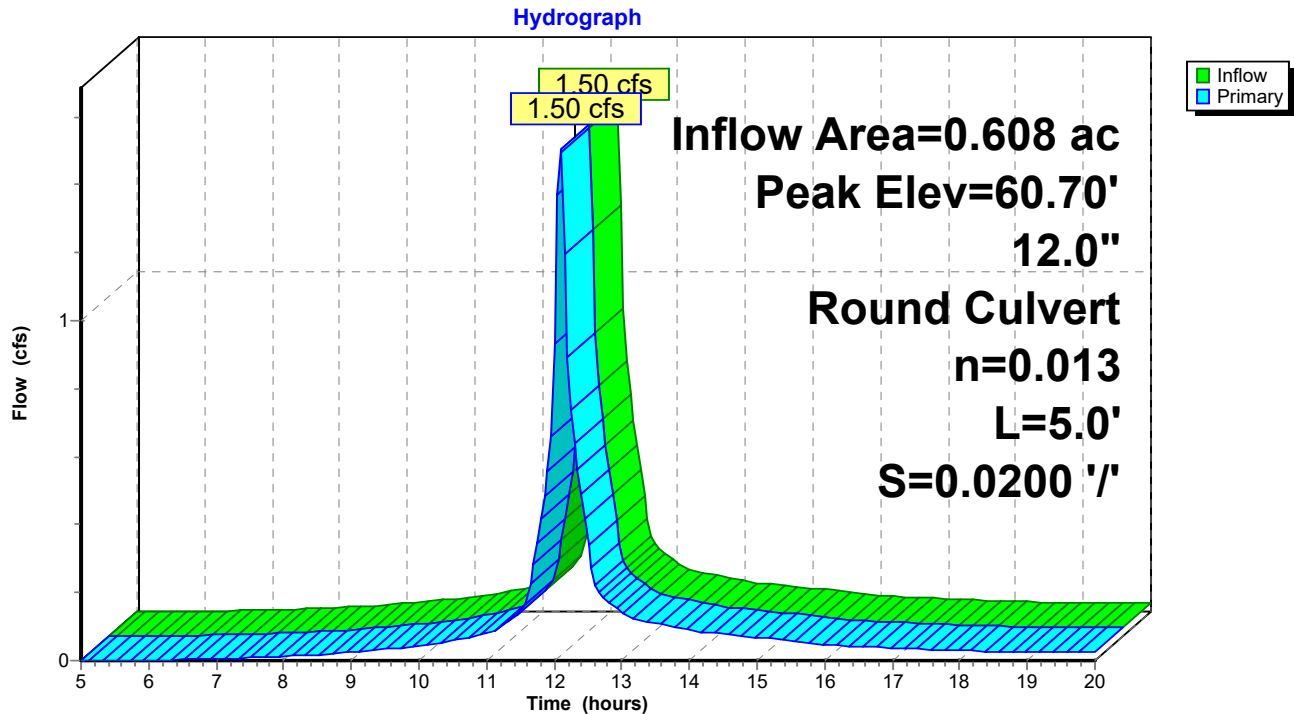
Peak Elev= 60.70' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	59.90'	12.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.90' / 59.80' S= 0.0200 '/ Cc= 0.900 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



Summary for Pond 208P: DMH 58

[57] Hint: Peaked at 61.78' (Flood elevation advised)

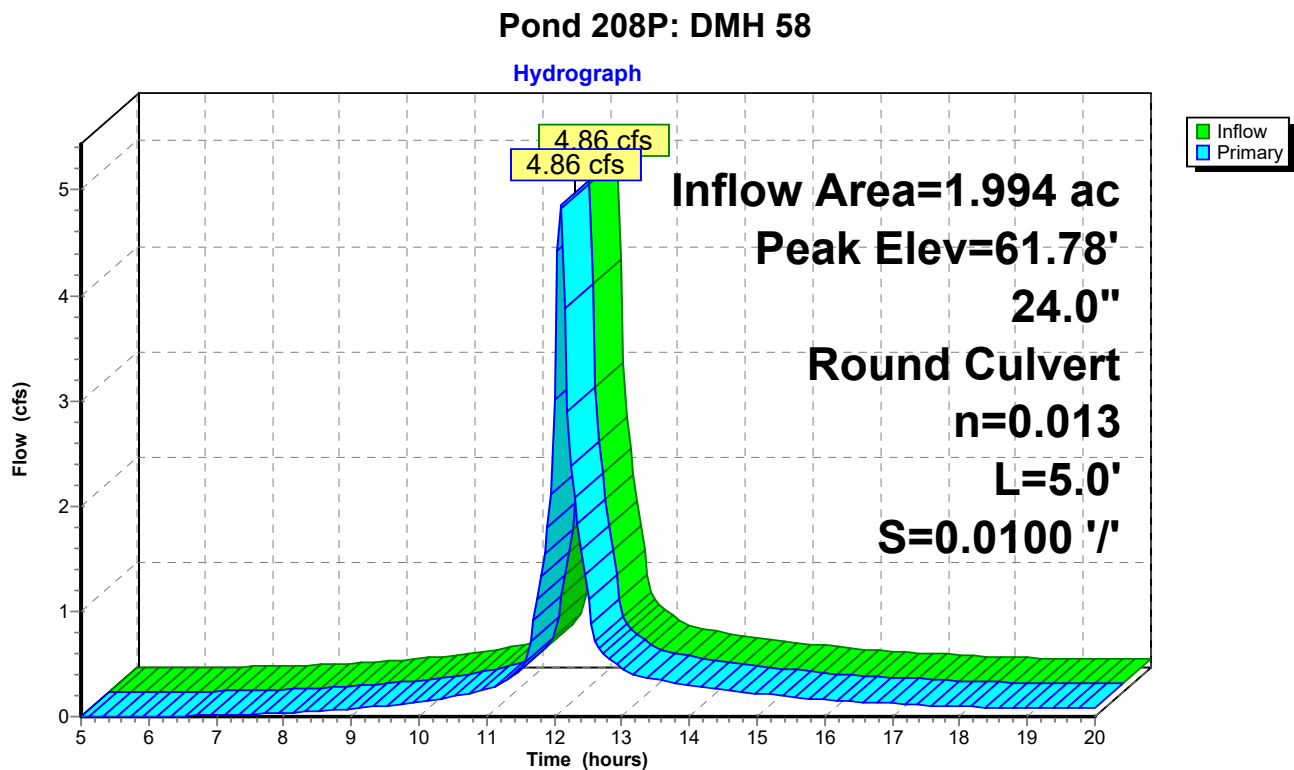
[79] Warning: Submerged Pond 111P Primary device # 1 INLET by 0.78'

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'	24.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.55' / 60.50' S= 0.0100 '/ Cc= 0.900 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)



Summary for Pond 209P: DMH 64

[57] Hint: Peaked at 58.56' (Flood elevation advised)

[79] Warning: Submerged Pond 93P Primary device # 1 INLET by 0.36'

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

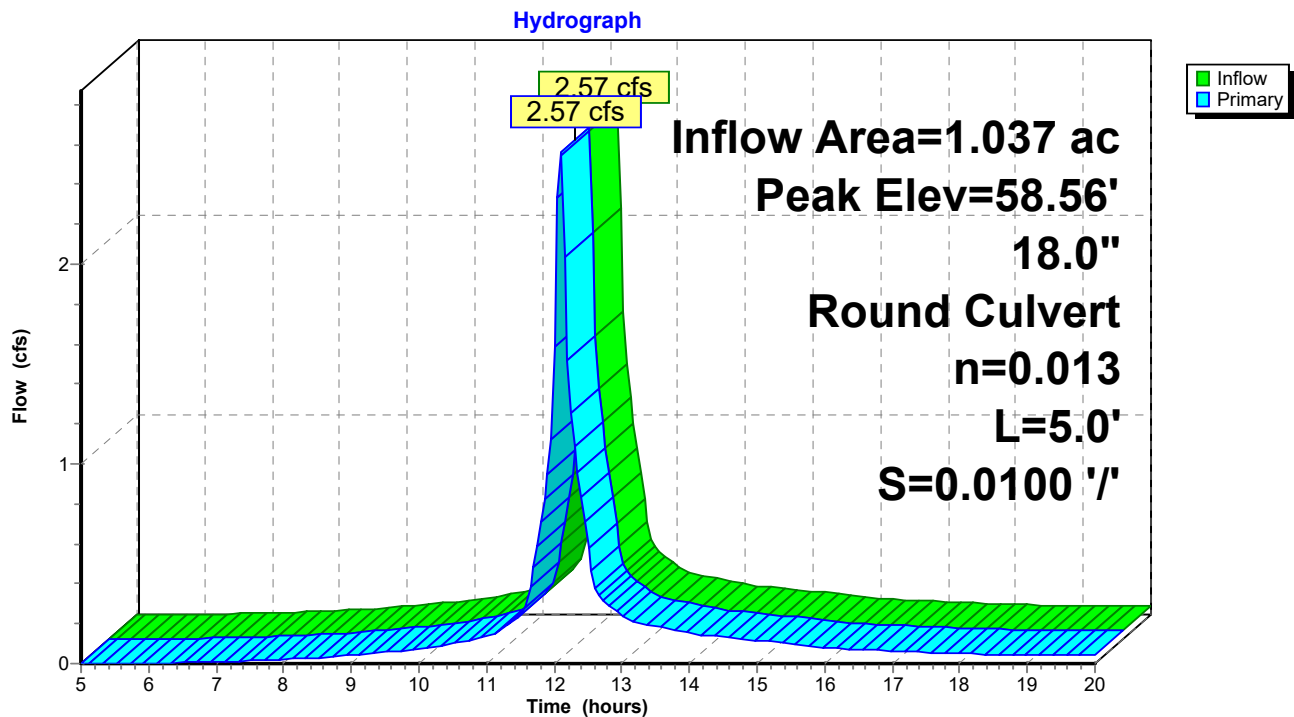
Peak Elev= 58.56' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	57.60'	18.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.60' / 57.55' S= 0.0100 '/ Cc= 0.900 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



Summary for Pond 210P: DMH 68

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.96' (Flood elevation advised)

[79] Warning: Submerged Pond 120P Primary device # 1 INLET by 1.11'

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 121P : Sub. Det. 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 58.96' @ 12.09 hrs

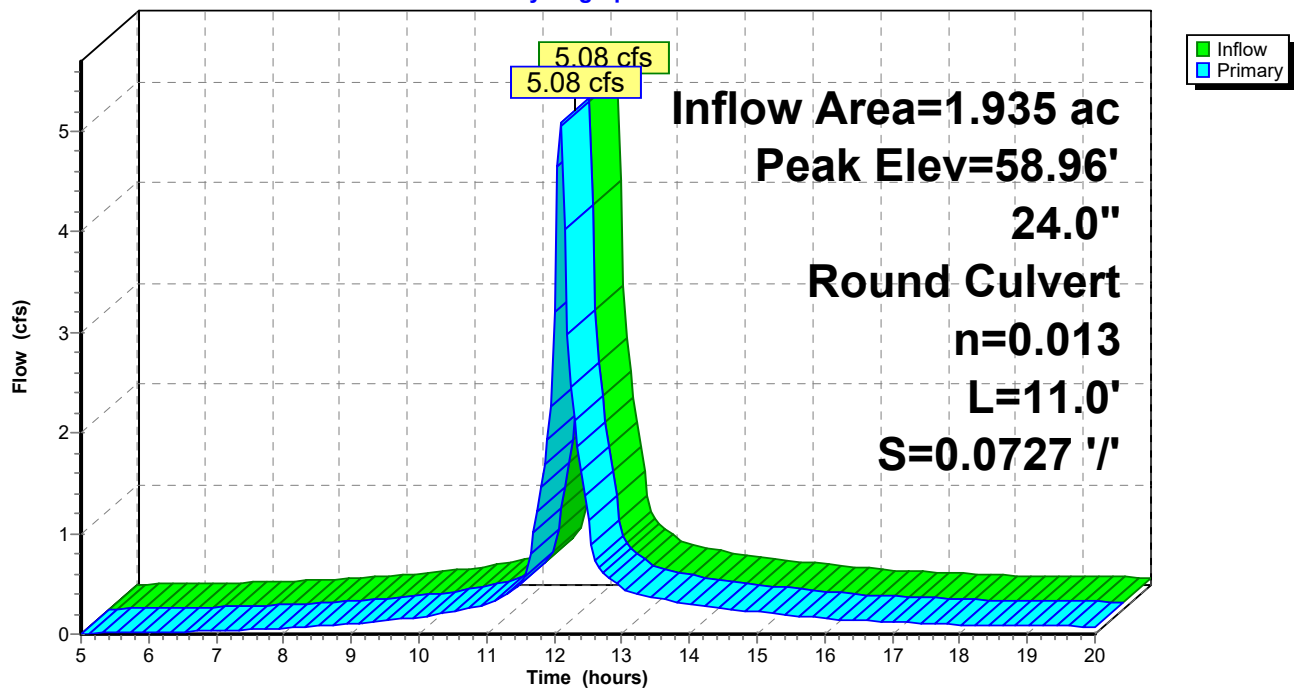
Device	Routing	Invert	Outlet Devices
#1	Primary	57.85'	24.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.85' / 57.05' S= 0.0727 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

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

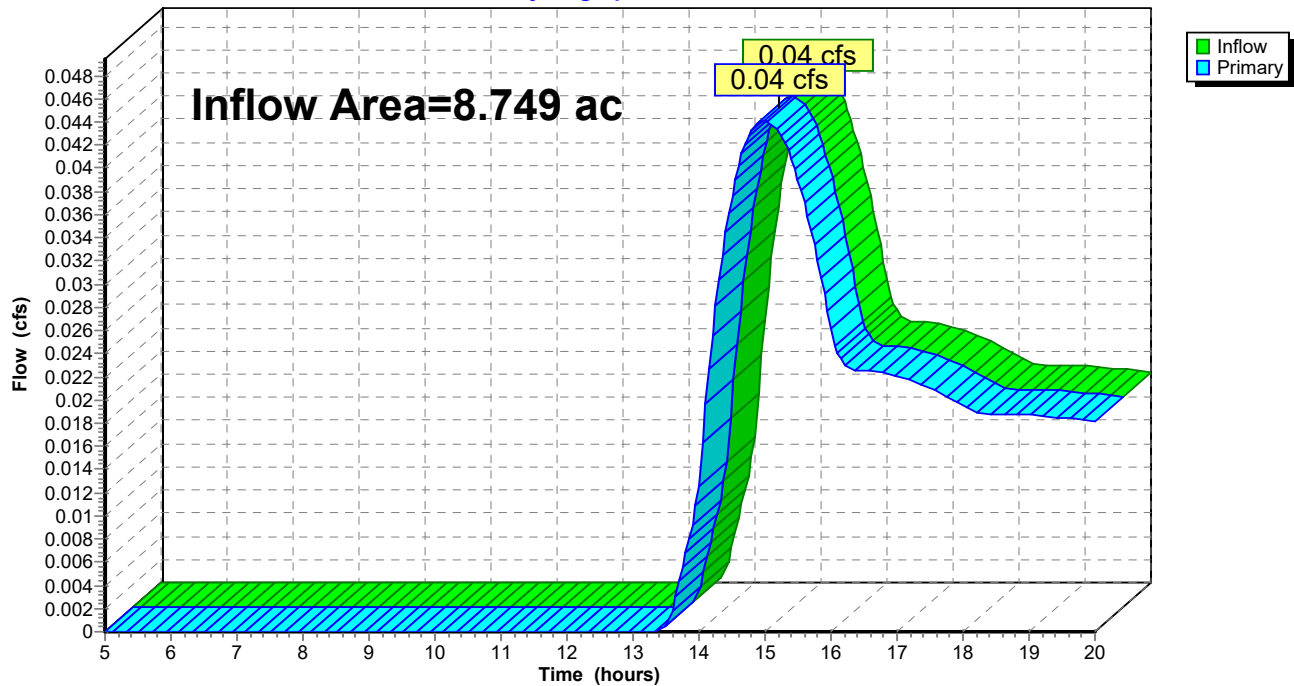
Hydrograph



Summary for 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

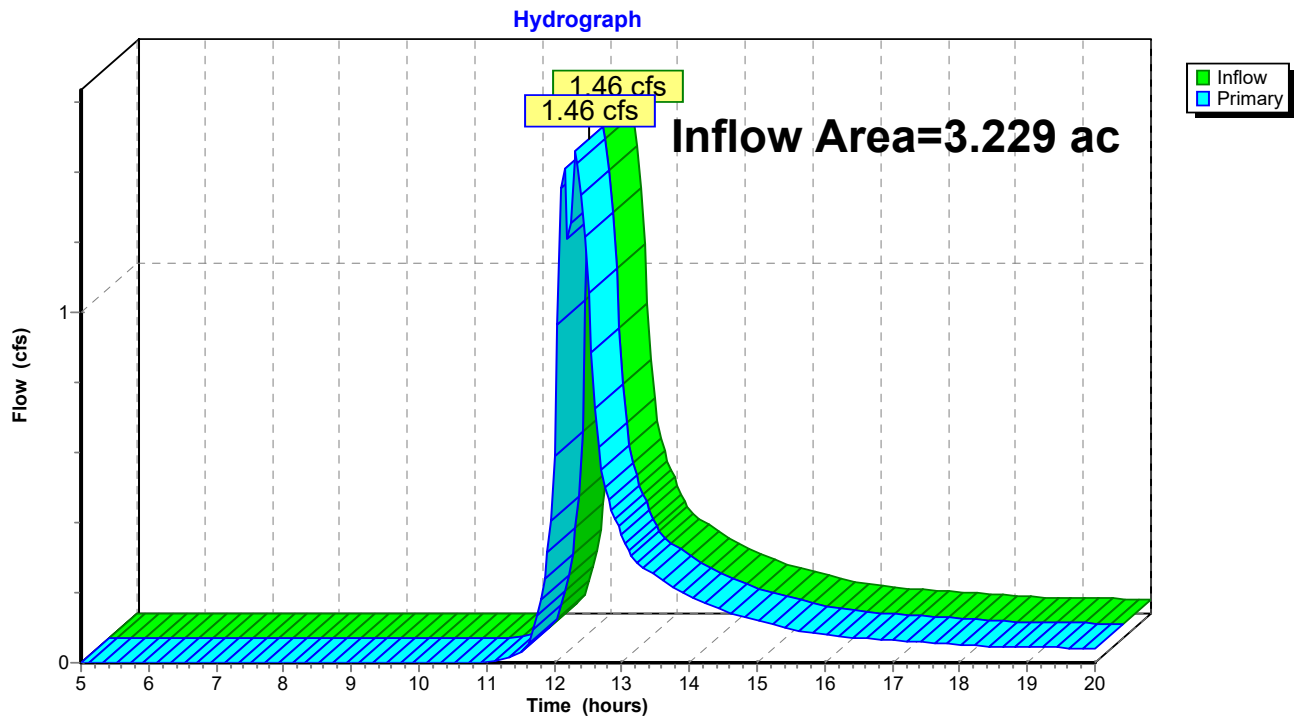
Link 59L: DP 1**Hydrograph**

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



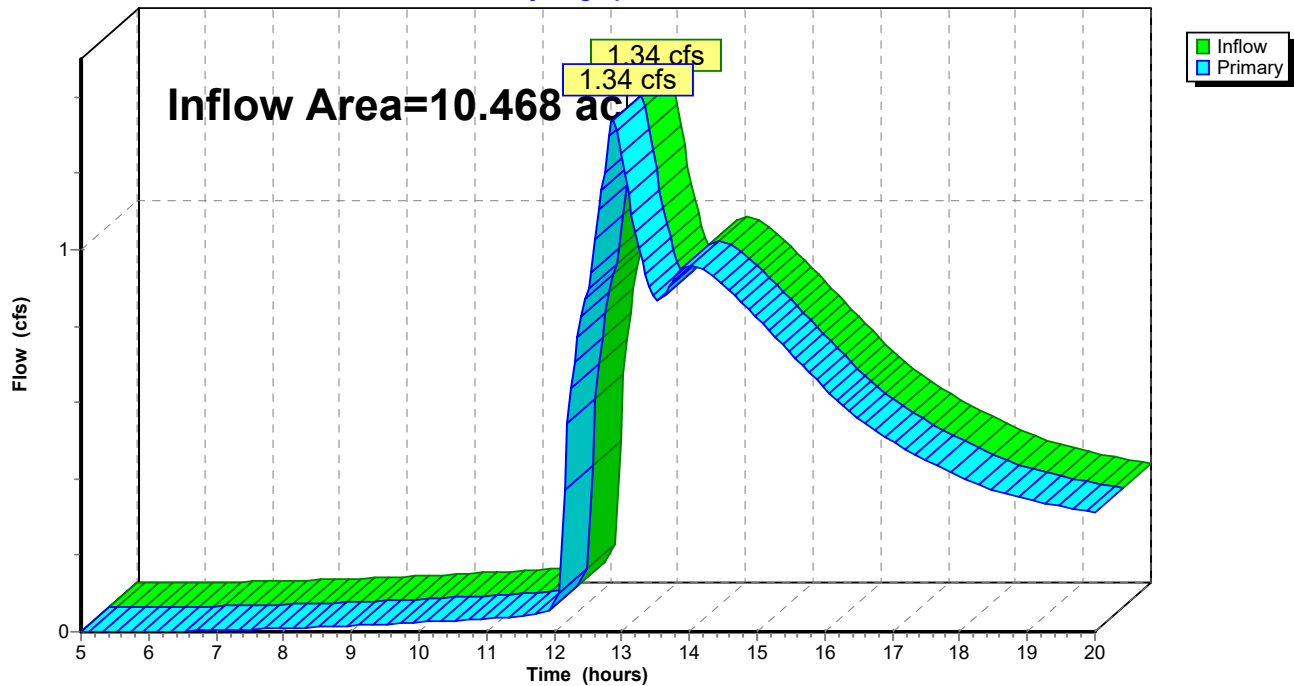
Summary for Link 188L: DP 3

Inflow Area = 10.468 ac, 46.25% Impervious, Inflow Depth > 0.50" for 2-Year event
 Inflow = 1.34 cfs @ 12.87 hrs, Volume= 0.437 af
 Primary = 1.34 cfs @ 12.87 hrs, Volume= 0.437 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



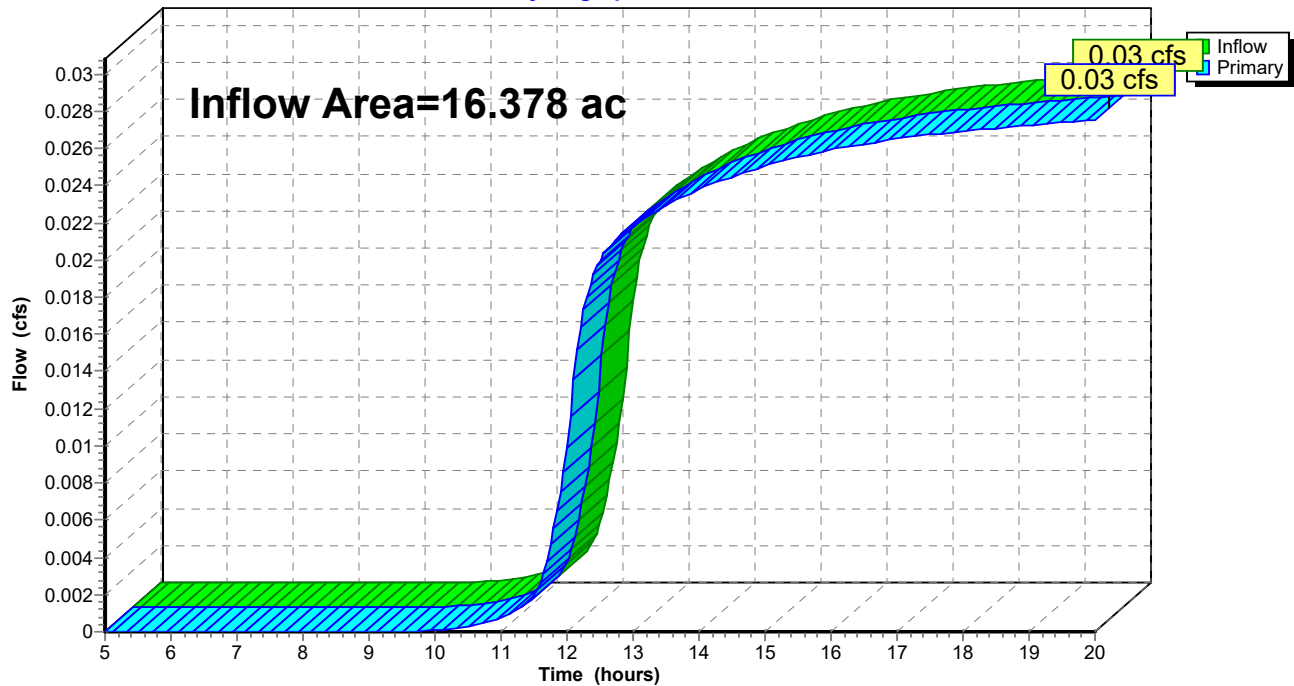
Summary for Link 203L: 3A

Inflow Area = 16.378 ac, 48.27% Impervious, Inflow Depth > 0.01" for 2-Year event
 Inflow = 0.03 cfs @ 20.00 hrs, Volume= 0.017 af
 Primary = 0.03 cfs @ 20.00 hrs, Volume= 0.017 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

Subcatchment1S: P1A	Runoff Area=7,501 sf 96.61% Impervious Runoff Depth>4.19" Tc=6.0 min CN=97 Runoff=0.79 cfs 0.060 af
Subcatchment2S: P1B	Runoff Area=16,584 sf 74.19% Impervious Runoff Depth>3.71" Tc=6.0 min CN=92 Runoff=1.63 cfs 0.118 af
Subcatchment3S: P1C	Runoff Area=6,087 sf 64.30% Impervious Runoff Depth>3.41" Tc=6.0 min CN=89 Runoff=0.56 cfs 0.040 af
Subcatchment4S: P1D	Runoff Area=2,767 sf 81.50% Impervious Runoff Depth>3.91" Tc=6.0 min CN=94 Runoff=0.28 cfs 0.021 af
Subcatchment5S: P1E	Runoff Area=11,538 sf 66.20% Impervious Runoff Depth>3.51" Tc=6.0 min CN=90 Runoff=1.09 cfs 0.077 af
Subcatchment6S: P1F	Runoff Area=4,817 sf 71.39% Impervious Runoff Depth>3.61" Tc=6.0 min CN=91 Runoff=0.46 cfs 0.033 af
Subcatchment7S: P1G	Runoff Area=5,511 sf 100.00% Impervious Runoff Depth>4.26" Tc=6.0 min CN=98 Runoff=0.58 cfs 0.045 af
Subcatchment8S: P1H	Runoff Area=13,713 sf 81.38% Impervious Runoff Depth>3.91" Tc=6.0 min CN=94 Runoff=1.39 cfs 0.102 af
Subcatchment9S: P1I	Runoff Area=3,616 sf 78.43% Impervious Runoff Depth>3.81" Tc=6.0 min CN=93 Runoff=0.36 cfs 0.026 af
Subcatchment10S: P1J	Runoff Area=1,937 sf 100.00% Impervious Runoff Depth>4.26" Tc=6.0 min CN=98 Runoff=0.21 cfs 0.016 af
Subcatchment11S: P1K	Runoff Area=1,936 sf 96.85% Impervious Runoff Depth>4.19" Tc=6.0 min CN=97 Runoff=0.20 cfs 0.016 af
Subcatchment12S: P1L	Runoff Area=9,821 sf 78.85% Impervious Runoff Depth>3.81" Tc=6.0 min CN=93 Runoff=0.98 cfs 0.072 af
Subcatchment13S: P1M	Runoff Area=8,699 sf 94.53% Impervious Runoff Depth>4.19" Tc=6.0 min CN=97 Runoff=0.91 cfs 0.070 af
Subcatchment14S: P1N	Runoff Area=14,865 sf 3.94% Impervious Runoff Depth>2.06" Tc=6.0 min UI Adjusted CN=74 Runoff=0.87 cfs 0.059 af
Subcatchment39S: P1P	Runoff Area=7,939 sf 66.96% Impervious Runoff Depth>3.51" Tc=6.0 min CN=90 Runoff=0.75 cfs 0.053 af
Subcatchment40S: P1O	Runoff Area=978 sf 100.00% Impervious Runoff Depth>4.26" Tc=6.0 min CN=98 Runoff=0.10 cfs 0.008 af

Subcatchment44S: P1R	Runoff Area=15,334 sf 70.58% Impervious Runoff Depth>2.83" Tc=6.0 min CN=83 Runoff=1.22 cfs 0.083 af
Subcatchment45S: P1Q	Runoff Area=5,247 sf 97.54% Impervious Runoff Depth>4.19" Tc=6.0 min CN=97 Runoff=0.55 cfs 0.042 af
Subcatchment50S: P1S	Runoff Area=15,055 sf 71.48% Impervious Runoff Depth>2.65" Tc=6.0 min CN=81 Runoff=1.13 cfs 0.076 af
Subcatchment51S: P1T	Runoff Area=10,844 sf 61.75% Impervious Runoff Depth>2.14" Tc=6.0 min CN=75 Runoff=0.66 cfs 0.044 af
Subcatchment57S: (new Subcat)	Runoff Area=16,396 sf 6.10% Impervious Runoff Depth>0.13" Flow Length=87' Tc=13.0 min UI Adjusted CN=39 Runoff=0.01 cfs 0.004 af
Subcatchment58S: P1AA	Runoff Area=217,595 sf 2.56% Impervious Runoff Depth>0.33" Flow Length=111' Tc=11.7 min UI Adjusted CN=45 Runoff=0.78 cfs 0.136 af
Subcatchment60S: P2C	Runoff Area=6,486 sf 73.97% Impervious Runoff Depth>3.71" Tc=6.0 min CN=92 Runoff=0.64 cfs 0.046 af
Subcatchment61S: P2D	Runoff Area=1,464 sf 87.02% Impervious Runoff Depth>4.00" Tc=6.0 min CN=95 Runoff=0.15 cfs 0.011 af
Subcatchment62S: P2J	Runoff Area=10,675 sf 72.86% Impervious Runoff Depth>3.61" Tc=6.0 min CN=91 Runoff=1.03 cfs 0.074 af
Subcatchment63S: P2K	Runoff Area=6,698 sf 76.98% Impervious Runoff Depth>3.71" Tc=6.0 min CN=92 Runoff=0.66 cfs 0.048 af
Subcatchment64S: P3L	Runoff Area=2,885 sf 66.55% Impervious Runoff Depth>3.51" Tc=6.0 min CN=90 Runoff=0.27 cfs 0.019 af
Subcatchment65S: P3M	Runoff Area=5,397 sf 69.69% Impervious Runoff Depth>3.61" Tc=6.0 min CN=91 Runoff=0.52 cfs 0.037 af
Subcatchment66S: P3N	Runoff Area=7,748 sf 72.79% Impervious Runoff Depth>3.61" Tc=6.0 min CN=91 Runoff=0.75 cfs 0.053 af
Subcatchment67S: P3O	Runoff Area=8,254 sf 78.29% Impervious Runoff Depth>3.81" Tc=6.0 min CN=93 Runoff=0.82 cfs 0.060 af
Subcatchment68S: P3P	Runoff Area=4,070 sf 80.29% Impervious Runoff Depth>3.81" Tc=6.0 min CN=93 Runoff=0.41 cfs 0.030 af
Subcatchment69S: P2E	Runoff Area=7,088 sf 82.69% Impervious Runoff Depth>3.91" Tc=6.0 min CN=94 Runoff=0.72 cfs 0.053 af
Subcatchment70S: P2F	Runoff Area=3,932 sf 100.00% Impervious Runoff Depth>4.26" Tc=6.0 min CN=98 Runoff=0.42 cfs 0.032 af
Subcatchment71S: P2A	Runoff Area=10,978 sf 65.83% Impervious Runoff Depth>3.51" Tc=6.0 min CN=90 Runoff=1.04 cfs 0.074 af

Subcatchment72S: P2B	Runoff Area=7,563 sf 65.05% Impervious Runoff Depth>3.51" Tc=6.0 min CN=90 Runoff=0.71 cfs 0.051 af
Subcatchment73S: P2G	Runoff Area=8,223 sf 71.07% Impervious Runoff Depth>3.61" Tc=6.0 min CN=91 Runoff=0.79 cfs 0.057 af
Subcatchment74S: P2H	Runoff Area=4,268 sf 95.31% Impervious Runoff Depth>4.00" Tc=6.0 min CN=95 Runoff=0.44 cfs 0.033 af
Subcatchment75S: P3Q	Runoff Area=10,219 sf 64.37% Impervious Runoff Depth>3.41" Tc=6.0 min CN=89 Runoff=0.94 cfs 0.067 af
Subcatchment76S: P3R	Runoff Area=13,649 sf 76.83% Impervious Runoff Depth>3.71" Tc=6.0 min CN=92 Runoff=1.34 cfs 0.097 af
Subcatchment77S: P3S	Runoff Area=7,757 sf 69.60% Impervious Runoff Depth>3.61" Tc=6.0 min CN=91 Runoff=0.75 cfs 0.054 af
Subcatchment78S: P1S	Runoff Area=12,630 sf 58.56% Impervious Runoff Depth>3.11" Tc=6.0 min CN=86 Runoff=1.09 cfs 0.075 af
Subcatchment79S: P1T	Runoff Area=11,982 sf 72.42% Impervious Runoff Depth>3.61" Tc=6.0 min CN=91 Runoff=1.15 cfs 0.083 af
Subcatchment80S: P3KK	Runoff Area=8,557 sf 76.76% Impervious Runoff Depth>2.92" Tc=6.0 min CN=84 Runoff=0.70 cfs 0.048 af
Subcatchment81S: P3LL	Runoff Area=9,785 sf 79.18% Impervious Runoff Depth>3.11" Tc=6.0 min CN=86 Runoff=0.84 cfs 0.058 af
Subcatchment82S: P3SS	Runoff Area=12,880 sf 67.55% Impervious Runoff Depth>2.48" Tc=6.0 min CN=79 Runoff=0.90 cfs 0.061 af
Subcatchment83S: P2I	Runoff Area=13,847 sf 51.48% Impervious Runoff Depth>2.48" Tc=6.0 min CN=79 Runoff=0.97 cfs 0.066 af
Subcatchment84S: P2AA	Runoff Area=71,125 sf 7.37% Impervious Runoff Depth>1.91" Flow Length=201' Tc=8.4 min UI Adjusted CN=72 Runoff=3.54 cfs 0.259 af
Subcatchment85S: (new Subcat)	Runoff Area=25,650 sf 36.87% Impervious Runoff Depth>2.83" Tc=6.0 min CN=83 Runoff=2.03 cfs 0.139 af
Subcatchment86S: P3TT	Runoff Area=13,926 sf 63.97% Impervious Runoff Depth>2.39" Tc=6.0 min CN=78 Runoff=0.94 cfs 0.064 af
Subcatchment87S: P3A	Runoff Area=2,273 sf 80.20% Impervious Runoff Depth>3.81" Tc=6.0 min CN=93 Runoff=0.23 cfs 0.017 af
Subcatchment88S: P3B	Runoff Area=4,538 sf 76.91% Impervious Runoff Depth>3.71" Tc=6.0 min CN=92 Runoff=0.45 cfs 0.032 af

Subcatchment89S: P3AAA	Runoff Area=6,945 sf 74.64% Impervious Runoff Depth>2.83" Tc=6.0 min CN=83 Runoff=0.55 cfs 0.038 af
Subcatchment90S: P3BBB	Runoff Area=9,141 sf 67.61% Impervious Runoff Depth>2.48" Tc=6.0 min CN=79 Runoff=0.64 cfs 0.043 af
Subcatchment91S: P3GGG	Runoff Area=9,122 sf 66.66% Impervious Runoff Depth>2.39" Tc=6.0 min CN=78 Runoff=0.62 cfs 0.042 af
Subcatchment92S: P3C	Runoff Area=6,128 sf 70.69% Impervious Runoff Depth>3.61" Tc=6.0 min CN=91 Runoff=0.59 cfs 0.042 af
Subcatchment93S: P3D	Runoff Area=8,893 sf 71.21% Impervious Runoff Depth>3.61" Tc=6.0 min CN=91 Runoff=0.86 cfs 0.061 af
Subcatchment94S: P3HHH	Runoff Area=9,026 sf 76.76% Impervious Runoff Depth>2.92" Tc=6.0 min CN=84 Runoff=0.74 cfs 0.050 af
Subcatchment95S: P2X	Runoff Area=6,460 sf 100.00% Impervious Runoff Depth>4.26" Tc=6.0 min CN=98 Runoff=0.68 cfs 0.053 af
Subcatchment97S: P3G	Runoff Area=16,665 sf 73.17% Impervious Runoff Depth>3.71" Tc=6.0 min CN=92 Runoff=1.64 cfs 0.118 af
Subcatchment98S: P3H	Runoff Area=11,218 sf 68.08% Impervious Runoff Depth>3.51" Tc=6.0 min CN=90 Runoff=1.06 cfs 0.075 af
Subcatchment102S: P3J	Runoff Area=14,925 sf 64.21% Impervious Runoff Depth>3.41" Tc=6.0 min CN=89 Runoff=1.38 cfs 0.097 af
Subcatchment103S: P3I	Runoff Area=21,963 sf 74.80% Impervious Runoff Depth>3.71" Tc=6.0 min CN=92 Runoff=2.16 cfs 0.156 af
Subcatchment107S: P3E	Runoff Area=17,242 sf 64.26% Impervious Runoff Depth>3.41" Tc=6.0 min CN=89 Runoff=1.59 cfs 0.112 af
Subcatchment108S: P3F	Runoff Area=19,891 sf 64.44% Impervious Runoff Depth>3.41" Tc=6.0 min CN=89 Runoff=1.84 cfs 0.130 af
Subcatchment109S: P3T	Runoff Area=11,178 sf 83.40% Impervious Runoff Depth>3.91" Tc=6.0 min CN=94 Runoff=1.13 cfs 0.084 af
Subcatchment110S: P3U	Runoff Area=14,474 sf 76.35% Impervious Runoff Depth>3.71" Tc=6.0 min CN=92 Runoff=1.42 cfs 0.103 af
Subcatchment111S: P3V	Runoff Area=14,345 sf 82.49% Impervious Runoff Depth>3.91" Tc=6.0 min CN=94 Runoff=1.46 cfs 0.107 af
Subcatchment112S: P3W	Runoff Area=8,601 sf 91.64% Impervious Runoff Depth>4.10" Tc=6.0 min CN=96 Runoff=0.90 cfs 0.067 af
Subcatchment125S: P3EE	Runoff Area=23,054 sf 81.18% Impervious Runoff Depth>3.21" Tc=6.0 min CN=87 Runoff=2.03 cfs 0.142 af

Subcatchment 126S: P3FF	Runoff Area=17,312 sf 70.10% Impervious Runoff Depth>2.56" Tc=6.0 min CN=80 Runoff=1.25 cfs 0.085 af
Subcatchment 127S: P3GG	Runoff Area=16,395 sf 53.54% Impervious Runoff Depth>1.83" Tc=6.0 min CN=71 Runoff=0.85 cfs 0.057 af
Subcatchment 128S: P3HH	Runoff Area=15,226 sf 63.87% Impervious Runoff Depth>2.31" Tc=6.0 min CN=77 Runoff=1.00 cfs 0.067 af
Subcatchment 129S: P3MM	Runoff Area=7,841 sf 66.23% Impervious Runoff Depth>2.39" Tc=6.0 min CN=78 Runoff=0.53 cfs 0.036 af
Subcatchment 130S: P3NN	Runoff Area=6,295 sf 72.58% Impervious Runoff Depth>2.74" Tc=6.0 min CN=82 Runoff=0.48 cfs 0.033 af
Subcatchment 136S: P3II	Runoff Area=10,900 sf 80.29% Impervious Runoff Depth>3.11" Tc=6.0 min CN=86 Runoff=0.94 cfs 0.065 af
Subcatchment 138S: P3JJ Flow Length=50' Slope=0.0100 '/	Runoff Area=14,214 sf 6.96% Impervious Runoff Depth>0.19" Tc=7.5 min UI Adjusted CN=41 Runoff=0.02 cfs 0.005 af
Subcatchment 140S: P3OO	Runoff Area=17,829 sf 65.98% Impervious Runoff Depth>2.39" Tc=6.0 min CN=78 Runoff=1.21 cfs 0.082 af
Subcatchment 141S: P3PP	Runoff Area=25,131 sf 66.17% Impervious Runoff Depth>2.39" Tc=6.0 min CN=78 Runoff=1.70 cfs 0.115 af
Subcatchment 142S: P3UU	Runoff Area=3,331 sf 72.53% Impervious Runoff Depth>2.74" Tc=6.0 min CN=82 Runoff=0.26 cfs 0.017 af
Subcatchment 143S: P3VV	Runoff Area=3,461 sf 73.82% Impervious Runoff Depth>2.83" Tc=6.0 min CN=83 Runoff=0.27 cfs 0.019 af
Subcatchment 147S: P3QQ	Runoff Area=8,544 sf 80.21% Impervious Runoff Depth>3.11" Tc=6.0 min CN=86 Runoff=0.74 cfs 0.051 af
Subcatchment 149S: P3RR Flow Length=50' Slope=0.0100 '/	Runoff Area=7,953 sf 10.10% Impervious Runoff Depth>0.22" Tc=7.5 min UI Adjusted CN=42 Runoff=0.01 cfs 0.003 af
Subcatchment 151S: P3ZZ	Runoff Area=6,359 sf 79.60% Impervious Runoff Depth>3.11" Tc=6.0 min CN=86 Runoff=0.55 cfs 0.038 af
Subcatchment 152S: P3YY	Runoff Area=5,089 sf 70.43% Impervious Runoff Depth>2.65" Tc=6.0 min CN=81 Runoff=0.38 cfs 0.026 af
Subcatchment 153S: P3WW	Runoff Area=9,574 sf 74.64% Impervious Runoff Depth>2.83" Tc=6.0 min CN=83 Runoff=0.76 cfs 0.052 af
Subcatchment 154S: P3XX	Runoff Area=4,702 sf 90.07% Impervious Runoff Depth>3.71" Tc=6.0 min CN=92 Runoff=0.46 cfs 0.033 af

Subcatchment155S: P3CCC	Runoff Area=8,394 sf 67.64% Impervious Runoff Depth>2.48" Tc=6.0 min CN=79 Runoff=0.59 cfs 0.040 af
Subcatchment156S: P3DDD	Runoff Area=14,850 sf 60.75% Impervious Runoff Depth>2.14" Tc=6.0 min CN=75 Runoff=0.90 cfs 0.061 af
Subcatchment165S: P3FFF	Runoff Area=2,770 sf 55.52% Impervious Runoff Depth>1.91" Tc=6.0 min CN=72 Runoff=0.15 cfs 0.010 af
Subcatchment166S: P3EEE	Runoff Area=4,031 sf 53.88% Impervious Runoff Depth>1.83" Tc=6.0 min CN=71 Runoff=0.21 cfs 0.014 af
Subcatchment170S: P3JJJ	Runoff Area=13,803 sf 75.85% Impervious Runoff Depth>2.92" Tc=6.0 min CN=84 Runoff=1.13 cfs 0.077 af
Subcatchment171S: P3III	Runoff Area=5,653 sf 71.18% Impervious Runoff Depth>2.65" Tc=6.0 min CN=81 Runoff=0.42 cfs 0.029 af
Subcatchment175S: P3KKK	Runoff Area=13,720 sf 68.62% Impervious Runoff Depth>2.48" Tc=6.0 min CN=79 Runoff=0.96 cfs 0.065 af
Subcatchment176S: P3LLL	Runoff Area=6,640 sf 60.77% Impervious Runoff Depth>2.14" Tc=6.0 min CN=75 Runoff=0.40 cfs 0.027 af
Subcatchment182S: P3MMM	Runoff Area=11,484 sf 68.05% Impervious Runoff Depth>2.48" Tc=6.0 min CN=79 Runoff=0.80 cfs 0.054 af
Subcatchment183S: P3NNN	Runoff Area=17,078 sf 53.13% Impervious Runoff Depth>1.76" Tc=6.0 min CN=70 Runoff=0.85 cfs 0.057 af
Subcatchment184S: P3OOO	Runoff Area=20,782 sf 57.77% Impervious Runoff Depth>1.99" Tc=6.0 min CN=73 Runoff=1.17 cfs 0.079 af
Subcatchment185S: P3PPP	Runoff Area=17,125 sf 73.16% Impervious Runoff Depth>2.74" Tc=6.0 min CN=82 Runoff=1.32 cfs 0.090 af
Subcatchment186S: P3QQQ	Runoff Area=31,267 sf 28.78% Impervious Runoff Depth>0.54" Tc=6.0 min UI Adjusted CN=50 Runoff=0.30 cfs 0.032 af
Subcatchment187S: P3RRR	Runoff Area=27,972 sf 65.44% Impervious Runoff Depth>2.39" Tc=6.0 min CN=78 Runoff=1.90 cfs 0.128 af
Subcatchment189S: (new Subcat)	Runoff Area=179,843 sf 4.59% Impervious Runoff Depth>0.68" Flow Length=322' Tc=20.8 min UI Adjusted CN=53 Runoff=1.82 cfs 0.236 af
Subcatchment190S: (new Subcat)	Runoff Area=12,078 sf 85.87% Impervious Runoff Depth>3.51" Tc=6.0 min CN=90 Runoff=1.14 cfs 0.081 af
Subcatchment191S: P3SSS	Runoff Area=9,557 sf 30.44% Impervious Runoff Depth>0.64" Tc=6.0 min CN=52 Runoff=0.13 cfs 0.012 af
Subcatchment192S: P3TTT	Runoff Area=6,608 sf 66.33% Impervious Runoff Depth>2.39" Tc=6.0 min CN=78 Runoff=0.45 cfs 0.030 af

Subcatchment195S: P3UUU	Runoff Area=13,818 sf 82.60% Impervious Runoff Depth>3.31" Tc=6.0 min CN=88 Runoff=1.25 cfs 0.087 af
Subcatchment198S: P3VVV	Runoff Area=12,978 sf 0.00% Impervious Runoff Depth>0.13" Tc=6.0 min CN=39 Runoff=0.01 cfs 0.003 af
Subcatchment202S: (new Subcat)	Runoff Area=26,038 sf 46.07% Impervious Runoff Depth>1.47" Tc=6.0 min CN=66 Runoff=1.06 cfs 0.073 af
Subcatchment204S: (new Subcat)	Runoff Area=154,169 sf 1.31% Impervious Runoff Depth>0.03" Flow Length=104' Tc=7.9 min CN=34 Runoff=0.02 cfs 0.008 af
Pond 15P: Inf. Basin 5	Peak Elev=59.53' Storage=18,210 cf Inflow=10.32 cfs 0.754 af Discarded=0.28 cfs 0.243 af Primary=0.66 cfs 0.229 af Outflow=0.94 cfs 0.471 af
Pond 16P: CB 58	Peak Elev=62.65' Inflow=0.79 cfs 0.060 af 12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.79 cfs 0.060 af
Pond 17P: CB 59	Peak Elev=62.97' Inflow=1.63 cfs 0.118 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=1.63 cfs 0.118 af
Pond 18P: CB 63	Peak Elev=64.34' Inflow=0.56 cfs 0.040 af 12.0" Round Culvert n=0.013 L=13.0' S=0.0077 '/' Outflow=0.56 cfs 0.040 af
Pond 19P: CB 62	Peak Elev=64.19' Inflow=0.28 cfs 0.021 af 12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.28 cfs 0.021 af
Pond 20P: DMH 43	Peak Elev=63.05' Inflow=2.42 cfs 0.178 af 12.0" Round Culvert n=0.013 L=66.0' S=0.0050 '/' Outflow=2.42 cfs 0.178 af
Pond 21P: DMH 42	Peak Elev=62.62' Inflow=2.42 cfs 0.178 af 12.0" Round Culvert n=0.013 L=71.0' S=0.0052 '/' Outflow=2.42 cfs 0.178 af
Pond 22P: CB 56	Peak Elev=61.66' Inflow=0.58 cfs 0.045 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.58 cfs 0.045 af
Pond 23P: CB 57	Peak Elev=61.97' Inflow=1.39 cfs 0.102 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=1.39 cfs 0.102 af
Pond 24P: DMH 41	Peak Elev=62.19' Inflow=4.39 cfs 0.325 af 18.0" Round Culvert n=0.013 L=55.0' S=0.0322 '/' Outflow=4.39 cfs 0.325 af
Pond 25P: DMH 45	Peak Elev=64.22' Inflow=0.84 cfs 0.060 af 12.0" Round Culvert n=0.013 L=148.0' S=0.0100 '/' Outflow=0.84 cfs 0.060 af
Pond 26P: CB 61	Peak Elev=62.98' Inflow=1.09 cfs 0.077 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=1.09 cfs 0.077 af
Pond 27P: CB 60	Peak Elev=62.71' Inflow=0.46 cfs 0.033 af 12.0" Round Culvert n=0.013 L=13.0' S=0.0077 '/' Outflow=0.46 cfs 0.033 af

Pond 28P: DMH 44

Peak Elev=63.24' Inflow=2.40 cfs 0.171 af
12.0" Round Culvert n=0.013 L=85.0' S=0.0338 ' Outflow=2.40 cfs 0.171 af

Pond 29P: DMH 40

Peak Elev=60.51' Inflow=7.15 cfs 0.523 af
24.0" Round Culvert n=0.013 L=25.0' S=0.0120 ' Outflow=7.15 cfs 0.523 af

Pond 30P: CB 55

Peak Elev=60.57' Inflow=0.36 cfs 0.026 af
12.0" Round Culvert n=0.013 L=15.0' S=0.0667 ' Outflow=0.36 cfs 0.026 af

Pond 31P: CB 51

Peak Elev=60.56' Inflow=0.20 cfs 0.016 af
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.20 cfs 0.016 af

Pond 32P: CB 52

Peak Elev=60.93' Inflow=0.98 cfs 0.072 af
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.98 cfs 0.072 af

Pond 33P: CB 53

Peak Elev=61.01' Inflow=0.21 cfs 0.016 af
12.0" Round Culvert n=0.013 L=9.0' S=0.1111 ' Outflow=0.21 cfs 0.016 af

Pond 34P: DMH 36

Peak Elev=60.79' Inflow=1.18 cfs 0.087 af
12.0" Round Culvert n=0.013 L=67.0' S=0.0051 ' Outflow=1.18 cfs 0.087 af

Pond 35P: DMH 37

Peak Elev=60.43' Inflow=1.39 cfs 0.103 af
12.0" Round Culvert n=0.013 L=52.0' S=0.0050 ' Outflow=1.39 cfs 0.103 af

Pond 36P: CB 54

Peak Elev=60.76' Inflow=0.91 cfs 0.070 af
12.0" Round Culvert n=0.013 L=7.0' S=0.1143 ' Outflow=0.91 cfs 0.070 af

Pond 37P: DMH 38

Peak Elev=60.39' Inflow=2.30 cfs 0.173 af
12.0" Round Culvert n=0.013 L=94.0' S=0.0050 ' Outflow=2.30 cfs 0.173 af

Pond 38P: DMH 39

Peak Elev=60.37' Inflow=9.45 cfs 0.695 af
24.0" Round Culvert n=0.013 L=68.0' S=0.0254 ' Outflow=9.45 cfs 0.695 af

Pond 41P: CB 49

Peak Elev=58.67' Inflow=0.10 cfs 0.008 af
12.0" Round Culvert n=0.013 L=8.0' S=0.0125 ' Outflow=0.10 cfs 0.008 af

Pond 42P: CB 50

Peak Elev=59.03' Inflow=0.75 cfs 0.053 af
12.0" Round Culvert n=0.013 L=8.0' S=0.0125 ' Outflow=0.75 cfs 0.053 af

Pond 43P: DMH 35

Peak Elev=58.84' Inflow=0.85 cfs 0.061 af
12.0" Round Culvert n=0.013 L=87.0' S=0.0414 ' Outflow=0.85 cfs 0.061 af

Pond 46P: CB 48

Peak Elev=55.51' Inflow=1.22 cfs 0.083 af
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=1.22 cfs 0.083 af

Pond 47P: CB 47

Peak Elev=55.25' Inflow=0.55 cfs 0.042 af
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=0.55 cfs 0.042 af

Pond 48P: DMH 33

Peak Elev=55.49' Inflow=1.77 cfs 0.125 af
12.0" Round Culvert n=0.013 L=5.0' S=0.0200 ' Outflow=1.77 cfs 0.125 af

Pond 49P: Sub. Inf. 4

Peak Elev=56.60' Storage=0.141 af Inflow=4.86 cfs 0.344 af
Discarded=0.13 cfs 0.109 af Primary=1.65 cfs 0.129 af Outflow=1.78 cfs 0.238 af

Pond 52P: CB 20	Peak Elev=51.62' Inflow=0.66 cfs 0.044 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=0.66 cfs 0.044 af
Pond 53P: CB 21	Peak Elev=51.81' Inflow=1.13 cfs 0.076 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=1.13 cfs 0.076 af
Pond 54P: DMH 15	Peak Elev=51.83' Inflow=1.78 cfs 0.121 af 12.0" Round Culvert n=0.013 L=60.0' S=0.0050 '/' Outflow=1.78 cfs 0.121 af
Pond 55P: DMH 16	Peak Elev=51.39' Inflow=1.78 cfs 0.121 af 12.0" Round Culvert n=0.013 L=88.0' S=0.0060 '/' Outflow=1.78 cfs 0.121 af
Pond 56P: Inf. Basin 4	Peak Elev=50.89' Storage=1,384 cf Inflow=1.78 cfs 0.125 af Discarded=0.53 cfs 0.125 af Secondary=0.00 cfs 0.000 af Outflow=0.53 cfs 0.125 af
Pond 60P: Sub. Det. 1	Peak Elev=62.16' Storage=0.191 af Inflow=8.25 cfs 0.588 af Outflow=6.77 cfs 0.454 af
Pond 61P: CB 8	Peak Elev=48.87' Inflow=0.80 cfs 0.054 af 12.0" Round Culvert n=0.013 L=25.0' S=0.0052 '/' Outflow=0.80 cfs 0.054 af
Pond 62P: CB 66	Peak Elev=60.96' Inflow=0.64 cfs 0.046 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0100 '/' Outflow=0.64 cfs 0.046 af
Pond 63P: CB 67	Peak Elev=60.81' Inflow=0.15 cfs 0.011 af 12.0" Round Culvert n=0.013 L=14.0' S=0.0214 '/' Outflow=0.15 cfs 0.011 af
Pond 64P: DMH 47	Peak Elev=61.32' Inflow=2.54 cfs 0.182 af 12.0" Round Culvert n=0.013 L=25.0' S=0.0080 '/' Outflow=2.54 cfs 0.182 af
Pond 65P: DMH 49	Peak Elev=59.34' Inflow=1.14 cfs 0.085 af 12.0" Round Culvert n=0.013 L=59.0' S=0.0119 '/' Outflow=1.14 cfs 0.085 af
Pond 66P: CB 68	Peak Elev=59.42' Inflow=0.72 cfs 0.053 af 12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.72 cfs 0.053 af
Pond 67P: CB 69	Peak Elev=59.28' Inflow=0.42 cfs 0.032 af 12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.42 cfs 0.032 af
Pond 68P: Sub. Inf. 5	Peak Elev=61.13' Storage=0.045 af Inflow=2.54 cfs 0.182 af Discarded=0.07 cfs 0.061 af Primary=2.44 cfs 0.086 af Outflow=2.51 cfs 0.147 af
Pond 69P: CB 72	Peak Elev=62.10' Inflow=1.03 cfs 0.074 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0600 '/' Outflow=1.03 cfs 0.074 af
Pond 70P: CB 73	Peak Elev=61.97' Inflow=0.66 cfs 0.048 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0600 '/' Outflow=0.66 cfs 0.048 af
Pond 71P: DMH 54	Peak Elev=61.66' Inflow=1.69 cfs 0.121 af 12.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=1.69 cfs 0.121 af

Pond 72P: Sub. Inf. 7	Peak Elev=62.10' Storage=0.037 af Inflow=1.69 cfs 0.121 af Discarded=0.07 cfs 0.053 af Primary=1.12 cfs 0.048 af Outflow=1.19 cfs 0.101 af
Pond 73P: CB 64	Peak Elev=61.72' Inflow=1.04 cfs 0.074 af 12.0" Round Culvert n=0.013 L=25.0' S=0.0080 '/' Outflow=1.04 cfs 0.074 af
Pond 74P: CB 65	Peak Elev=61.59' Inflow=0.71 cfs 0.051 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0133 '/' Outflow=0.71 cfs 0.051 af
Pond 75P: DMH 46	Peak Elev=61.66' Inflow=1.75 cfs 0.124 af 12.0" Round Culvert n=0.013 L=118.0' S=0.0051 '/' Outflow=1.75 cfs 0.124 af
Pond 76P: CB 70	Peak Elev=58.72' Inflow=0.79 cfs 0.057 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0100 '/' Outflow=0.79 cfs 0.057 af
Pond 77P: CB 71	Peak Elev=58.57' Inflow=0.44 cfs 0.033 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0100 '/' Outflow=0.44 cfs 0.033 af
Pond 78P: DMH 50	Peak Elev=58.75' Inflow=2.37 cfs 0.174 af 18.0" Round Culvert n=0.013 L=25.0' S=0.0080 '/' Outflow=2.37 cfs 0.174 af
Pond 79P: DMH 51	Peak Elev=58.57' Inflow=3.05 cfs 0.227 af 18.0" Round Culvert n=0.013 L=148.0' S=0.0047 '/' Outflow=3.05 cfs 0.227 af
Pond 80P: DMH 52	Peak Elev=57.78' Inflow=3.05 cfs 0.227 af 18.0" Round Culvert n=0.013 L=104.0' S=0.0052 '/' Outflow=3.05 cfs 0.227 af
Pond 81P: DMH 53	Peak Elev=57.11' Inflow=3.05 cfs 0.227 af 18.0" Round Culvert n=0.013 L=60.0' S=0.0195 '/' Outflow=3.05 cfs 0.227 af
Pond 82P: Constructed Wetland 2	Peak Elev=57.16' Storage=5,857 cf Inflow=4.02 cfs 0.293 af Outflow=1.23 cfs 0.229 af
Pond 83P: CB 86	Peak Elev=58.50' Inflow=0.75 cfs 0.053 af 12.0" Round Culvert n=0.013 L=11.0' S=0.0227 '/' Outflow=0.75 cfs 0.053 af
Pond 84P: CB 87	Peak Elev=58.53' Inflow=0.82 cfs 0.060 af 12.0" Round Culvert n=0.013 L=11.0' S=0.0227 '/' Outflow=0.82 cfs 0.060 af
Pond 85P: DMH 65	Peak Elev=58.49' Inflow=1.57 cfs 0.114 af 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

Pond 103P: CB 92

Peak Elev=62.17' Inflow=1.34 cfs 0.097 af
12.0" Round Culvert n=0.013 L=27.0' S=0.0056 ' Outflow=1.34 cfs 0.097 af

Pond 104P: CB 83

Peak Elev=61.77' Inflow=1.38 cfs 0.097 af
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=1.38 cfs 0.097 af

Pond 105P: CB 82

Peak Elev=62.04' Inflow=2.16 cfs 0.156 af
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=2.16 cfs 0.156 af

Pond 106P: DMH 60

Peak Elev=61.83' Inflow=3.54 cfs 0.253 af
18.0" Round Culvert n=0.013 L=110.0' S=0.0082 ' Outflow=3.54 cfs 0.253 af

Pond 107P: CB

Peak Elev=60.57' Inflow=0.94 cfs 0.067 af
12.0" Round Culvert n=0.013 L=10.0' S=0.1000 '/' Outflow=0.94 cfs 0.067 af

Pond 108P: CB 88

Peak Elev=60.36' Inflow=0.41 cfs 0.030 af
12.0" Round Culvert n=0.013 L=11.0' S=0.0909 '/' Outflow=0.41 cfs 0.030 af

Pond 109P: CB 79

Peak Elev=62.35' Inflow=1.84 cfs 0.130 af
12.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=1.84 cfs 0.130 af

Pond 110P: CB 78

Peak Elev=62.17' Inflow=1.59 cfs 0.112 af
15.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=1.59 cfs 0.112 af

Pond 111P: DMH 57

Peak Elev=62.56' Inflow=8.25 cfs 0.588 af
24.0" Round Culvert n=0.013 L=74.0' S=0.0054 '/' Outflow=8.25 cfs 0.588 af

Pond 112P: CB 45

Peak Elev=58.25' Inflow=1.09 cfs 0.075 af
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=1.09 cfs 0.075 af

Pond 113P: CB 95

Peak Elev=60.59' Inflow=0.90 cfs 0.067 af
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.90 cfs 0.067 af

Pond 114P: CB 94

Peak Elev=60.80' Inflow=1.46 cfs 0.107 af
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=1.46 cfs 0.107 af

Pond 115P: CB 91

Peak Elev=59.96' Inflow=1.42 cfs 0.103 af
12.0" Round Culvert n=0.013 L=12.0' S=0.0833 '/' Outflow=1.42 cfs 0.103 af

Pond 116P: CB 90

Peak Elev=59.87' Inflow=1.13 cfs 0.084 af
12.0" Round Culvert n=0.013 L=14.0' S=0.0714 '/' Outflow=1.13 cfs 0.084 af

Pond 117P: DMH 69

Peak Elev=60.47' Inflow=4.44 cfs 0.325 af
18.0" Round Culvert n=0.013 L=140.0' S=0.0050 '/' Outflow=4.44 cfs 0.325 af

Pond 118P: DMH 70

Peak Elev=60.92' Inflow=2.35 cfs 0.175 af
12.0" Round Culvert n=0.013 L=87.0' S=0.0051 '/' Outflow=2.35 cfs 0.175 af

Pond 119P: DMH 66

Peak Elev=59.95' Inflow=5.79 cfs 0.421 af
18.0" Round Culvert n=0.013 L=102.0' S=0.0050 '/' Outflow=5.79 cfs 0.421 af

Pond 120P: DMH 67

Peak Elev=59.35' Inflow=8.34 cfs 0.607 af
24.0" Round Culvert n=0.013 L=40.0' S=0.0213 '/' Outflow=8.34 cfs 0.607 af

Pond 121P: Sub. Det. 3

Peak Elev=60.46' Storage=0.324 af Inflow=8.34 cfs 0.607 af
Outflow=2.13 cfs 0.409 af

Pond 122P: CB 46

Peak Elev=58.30' Inflow=1.15 cfs 0.083 af
12.0" Round Culvert n=0.013 L=16.0' S=0.0063 '/' Outflow=1.15 cfs 0.083 af

Pond 123P: DMH 31

Peak Elev=58.18' Inflow=2.24 cfs 0.158 af
18.0" Round Culvert n=0.013 L=78.0' S=0.0100 '/' Outflow=2.24 cfs 0.158 af

Pond 124P: DMH 32

Peak Elev=57.36' Inflow=2.24 cfs 0.158 af
18.0" Round Culvert n=0.013 L=75.0' S=0.0249 '/' Outflow=2.24 cfs 0.158 af

Pond 125P: CB 36

Peak Elev=54.97' Inflow=0.70 cfs 0.048 af
12.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' Outflow=0.70 cfs 0.048 af

Pond 126P: CB 37

Peak Elev=55.03' Inflow=0.84 cfs 0.058 af
12.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' Outflow=0.84 cfs 0.058 af

Pond 127P: DMH 26

Peak Elev=55.02' Inflow=1.54 cfs 0.106 af
12.0" Round Culvert n=0.013 L=84.0' S=0.0173 ' Outflow=1.54 cfs 0.106 af

Pond 128P: CB 30

Peak Elev=56.49' Inflow=0.90 cfs 0.061 af
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=0.90 cfs 0.061 af

Pond 129P: CB 34

Peak Elev=54.59' Inflow=1.25 cfs 0.085 af
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=1.25 cfs 0.085 af

Pond 130P: CB 32

Peak Elev=54.98' Inflow=2.03 cfs 0.142 af
12.0" Round Culvert n=0.013 L=16.0' S=0.0256 ' Outflow=2.03 cfs 0.142 af

Pond 131P: CB 35

Peak Elev=54.50' Inflow=1.00 cfs 0.067 af
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=1.00 cfs 0.067 af

Pond 132P: CB 33

Peak Elev=54.28' Inflow=0.85 cfs 0.057 af
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=0.85 cfs 0.057 af

Pond 133P: DMH 24

Peak Elev=54.91' Inflow=5.13 cfs 0.351 af
18.0" Round Culvert n=0.013 L=112.0' S=0.0050 ' Outflow=5.13 cfs 0.351 af

Pond 134P: DMH 25

Peak Elev=54.83' Inflow=2.25 cfs 0.152 af
12.0" Round Culvert n=0.013 L=20.0' S=0.0050 ' Outflow=2.25 cfs 0.152 af

Pond 135P: Inf. Basin 3

Peak Elev=54.67' Storage=5,734 cf Inflow=6.07 cfs 0.421 af
Discarded=1.46 cfs 0.421 af Primary=0.00 cfs 0.000 af Outflow=1.46 cfs 0.421 af

Pond 136P: CB 38

Peak Elev=53.94' Inflow=0.53 cfs 0.036 af
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=0.53 cfs 0.036 af

Pond 137P: CB

Peak Elev=54.07' Inflow=0.94 cfs 0.065 af
12.0" Round Culvert n=0.013 L=70.0' S=0.0071 ' Outflow=0.94 cfs 0.065 af

Pond 138P: CB 39

Peak Elev=53.91' Inflow=0.48 cfs 0.033 af
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=51.05' Inflow=0.90 cfs 0.061 af
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=0.90 cfs 0.061 af

Pond 163P: CB 14

Peak Elev=50.94' Inflow=0.59 cfs 0.040 af
12.0" Round Culvert n=0.013 L=20.0' S=0.0050 '/' Outflow=0.59 cfs 0.040 af

Pond 164P: DMH 9

Peak Elev=51.06' Inflow=1.49 cfs 0.101 af
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=1.49 cfs 0.101 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 10

Peak Elev=50.76' Inflow=0.21 cfs 0.014 af
12.0" Round Culvert n=0.013 L=9.0' S=0.0111 '/' Outflow=0.21 cfs 0.014 af

Pond 168P: CB 11

Peak Elev=50.71' Inflow=0.15 cfs 0.010 af
12.0" Round Culvert n=0.013 L=9.0' S=0.0111 '/' Outflow=0.15 cfs 0.010 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=48.88' Inflow=0.85 cfs 0.057 af
12.0" Round Culvert n=0.013 L=21.0' S=0.0062 '/' Outflow=0.85 cfs 0.057 af

Pond 171P: DMH 6

Peak Elev=49.21' Inflow=4.14 cfs 0.281 af
18.0" Round Culvert n=0.013 L=94.0' S=0.0066 '/' Outflow=4.14 cfs 0.281 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=51.90' Inflow=2.90 cfs 0.198 af
18.0" Round Culvert n=0.013 L=111.0' S=0.0050 '/' Outflow=2.90 cfs 0.198 af

Pond 175P: DMH 5

Peak Elev=49.46' Inflow=2.49 cfs 0.169 af
12.0" Round Culvert n=0.013 L=14.0' S=0.0071 '/' Outflow=2.49 cfs 0.169 af

Pond 176P: CB 6

Peak Elev=49.16' Inflow=1.17 cfs 0.079 af
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=1.17 cfs 0.079 af

Pond 177P: CB 13

Peak Elev=51.11' Inflow=0.96 cfs 0.065 af
12.0" Round Culvert n=0.013 L=9.0' S=0.0111 ' Outflow=0.96 cfs 0.065 af

Pond 178P: CB 12

Peak Elev=50.87' Inflow=0.40 cfs 0.027 af
12.0" Round Culvert n=0.013 L=9.0' S=0.0111 ' Outflow=0.40 cfs 0.027 af

Pond 179P: DMH 8

Peak Elev=51.56' Inflow=4.27 cfs 0.290 af
18.0" Round Culvert n=0.013 L=8.0' S=0.0125 ' Outflow=4.27 cfs 0.290 af

Pond 180P: DMH 10

Peak Elev=51.63' Inflow=6.12 cfs 0.415 af
18.0" Round Culvert n=0.013 L=138.0' S=0.0076 ' Outflow=6.12 cfs 0.415 af

Pond 181P: DMH

Peak Elev=50.66' Inflow=0.36 cfs 0.024 af
12.0" Round Culvert n=0.013 L=16.0' S=0.0062 ' Outflow=0.36 cfs 0.024 af

Pond 182P: CB 7

Peak Elev=49.22' Inflow=1.32 cfs 0.090 af
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=1.32 cfs 0.090 af

Pond 184P: DMH 4A

Peak Elev=49.57' Inflow=0.16 cfs 0.004 af
12.0" Round Culvert n=0.013 L=169.0' S=0.0088 ' Outflow=0.16 cfs 0.004 af

Pond 185P: DMH

Peak Elev=48.43' Inflow=1.25 cfs 0.092 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0208 ' Outflow=1.25 cfs 0.092 af

Pond 186P: Constructed Wetland 1

Peak Elev=48.36' Storage=19,900 cf Inflow=6.87 cfs 0.483 af
Outflow=0.04 cfs 0.026 af

Pond 187P: Constructed Wetland 3

Peak Elev=56.57' Storage=4,306 cf Inflow=6.77 cfs 0.454 af
Outflow=5.58 cfs 0.389 af

Pond 188P: CB 3

Peak Elev=47.91' Inflow=0.30 cfs 0.032 af
12.0" Round Culvert n=0.013 L=20.0' S=0.0075 ' Outflow=0.30 cfs 0.032 af

Pond 189P: CB 4

Peak Elev=48.54' Inflow=1.90 cfs 0.128 af
12.0" Round Culvert n=0.013 L=20.0' S=0.0075 ' Outflow=1.90 cfs 0.128 af

Pond 190P: DMH 3

Peak Elev=48.98' Inflow=6.31 cfs 0.441 af
18.0" Round Culvert n=0.013 L=166.0' S=0.0060 ' Outflow=6.31 cfs 0.441 af

Pond 191P: CB 42

Peak Elev=51.14' Inflow=1.14 cfs 0.081 af
12.0" Round Culvert n=0.013 L=194.0' S=0.0077 ' Outflow=1.14 cfs 0.081 af

Pond 192P: Sub. Inf. 1

Peak Elev=49.72' Storage=0.099 af Inflow=6.12 cfs 0.415 af
Discarded=1.68 cfs 0.411 af Primary=0.16 cfs 0.004 af Outflow=1.83 cfs 0.415 af

Pond 193P: CB 1

Peak Elev=47.20' Inflow=0.13 cfs 0.012 af
12.0" Round Culvert n=0.013 L=25.0' S=0.0060 ' Outflow=0.13 cfs 0.012 af

Pond 194P: CB 2

Peak Elev=47.38' Inflow=0.45 cfs 0.030 af
12.0" Round Culvert n=0.013 L=15.0' S=0.0100 ' Outflow=0.45 cfs 0.030 af

Pond 195P: Constructed Wetland 4

Peak Elev=55.58' Storage=4,995 cf Inflow=2.13 cfs 0.409 af
Outflow=1.64 cfs 0.346 af

Pond 196P: CB 5

Peak Elev=48.73' Inflow=1.25 cfs 0.087 af
12.0" Round Culvert n=0.013 L=27.0' S=0.0059 '/' Outflow=1.25 cfs 0.087 af

Pond 197P: Inf. Basin 1

Peak Elev=47.19' Storage=505 cf Inflow=1.25 cfs 0.095 af
Discarded=0.59 cfs 0.095 af Primary=0.00 cfs 0.000 af Outflow=0.59 cfs 0.095 af

Pond 198P: Sub. Inf. 2

Peak Elev=52.38' Storage=0.088 af Inflow=5.72 cfs 0.391 af
Discarded=1.90 cfs 0.391 af Primary=0.00 cfs 0.000 af Outflow=1.90 cfs 0.391 af

Pond 199P: DMH 2

Peak Elev=47.89' Inflow=6.31 cfs 0.441 af
18.0" Round Culvert n=0.013 L=48.0' S=0.0052 '/' Outflow=6.31 cfs 0.441 af

Pond 200P: DMH 1

Peak Elev=47.18' Inflow=0.57 cfs 0.042 af
12.0" Round Culvert n=0.013 L=55.0' S=0.0136 '/' Outflow=0.57 cfs 0.042 af

Pond 201P: Sub. Inf. 3

Peak Elev=53.00' Storage=0.048 af Inflow=3.61 cfs 0.248 af
Discarded=1.31 cfs 0.248 af Primary=0.00 cfs 0.000 af Outflow=1.31 cfs 0.248 af

Pond 202P: DMH 14

Peak Elev=52.65' Inflow=0.00 cfs 0.000 af
18.0" Round Culvert n=0.013 L=89.0' S=0.0055 '/' Outflow=0.00 cfs 0.000 af

Pond 204P: DMH 18

Peak Elev=52.96' Inflow=5.72 cfs 0.391 af
18.0" Round Culvert n=0.013 L=5.0' S=-0.0900 '/' Outflow=5.72 cfs 0.391 af

Pond 205P: DMH 27

Peak Elev=53.93' Inflow=2.56 cfs 0.175 af
12.0" Round Culvert n=0.013 L=16.0' S=0.0063 '/' Outflow=2.56 cfs 0.175 af

Pond 206P: DMH 34

Peak Elev=55.45' Inflow=3.09 cfs 0.219 af
18.0" Round Culvert n=0.013 L=5.0' S=-0.1800 '/' Outflow=3.09 cfs 0.219 af

Pond 207P: DMH 48

Peak Elev=61.12' Inflow=2.54 cfs 0.182 af
12.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=2.54 cfs 0.182 af

Pond 208P: DMH 58

Peak Elev=62.24' Inflow=8.25 cfs 0.588 af
24.0" Round Culvert n=0.013 L=5.0' S=0.0100 '/' Outflow=8.25 cfs 0.588 af

Pond 209P: DMH 64

Peak Elev=58.92' Inflow=4.33 cfs 0.310 af
18.0" Round Culvert n=0.013 L=5.0' S=0.0100 '/' Outflow=4.33 cfs 0.310 af

Pond 210P: DMH 68

Peak Elev=59.35' Inflow=8.34 cfs 0.607 af
24.0" Round Culvert n=0.013 L=11.0' S=0.0727 '/' Outflow=8.34 cfs 0.607 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=8.37 cfs 1.357 af
Primary=8.37 cfs 1.357 af

RH Post 8-11-25*Type III 24-hr 10-Year Rainfall=4.83"*

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Page 379

Link 203L: 3A

Inflow=0.06 cfs 0.034 af

Primary=0.06 cfs 0.034 af

Total Runoff Area = 39.794 ac Runoff Volume = 6.595 af Average Runoff Depth = 1.99"
57.30% Pervious = 22.803 ac 42.70% Impervious = 16.991 ac

Summary for Subcatchment 1S: P1A

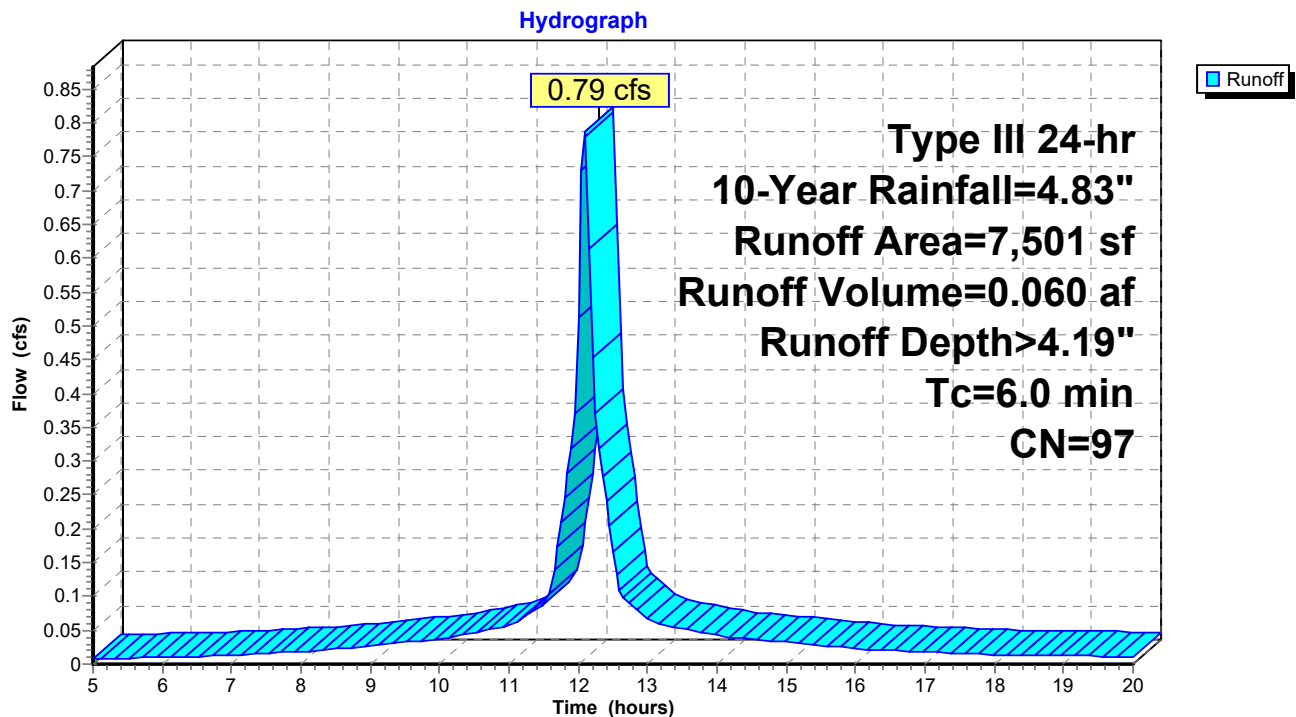
Runoff = 0.79 cfs @ 12.09 hrs, Volume= 0.060 af, Depth> 4.19"
Routed to Pond 16P : CB 58

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



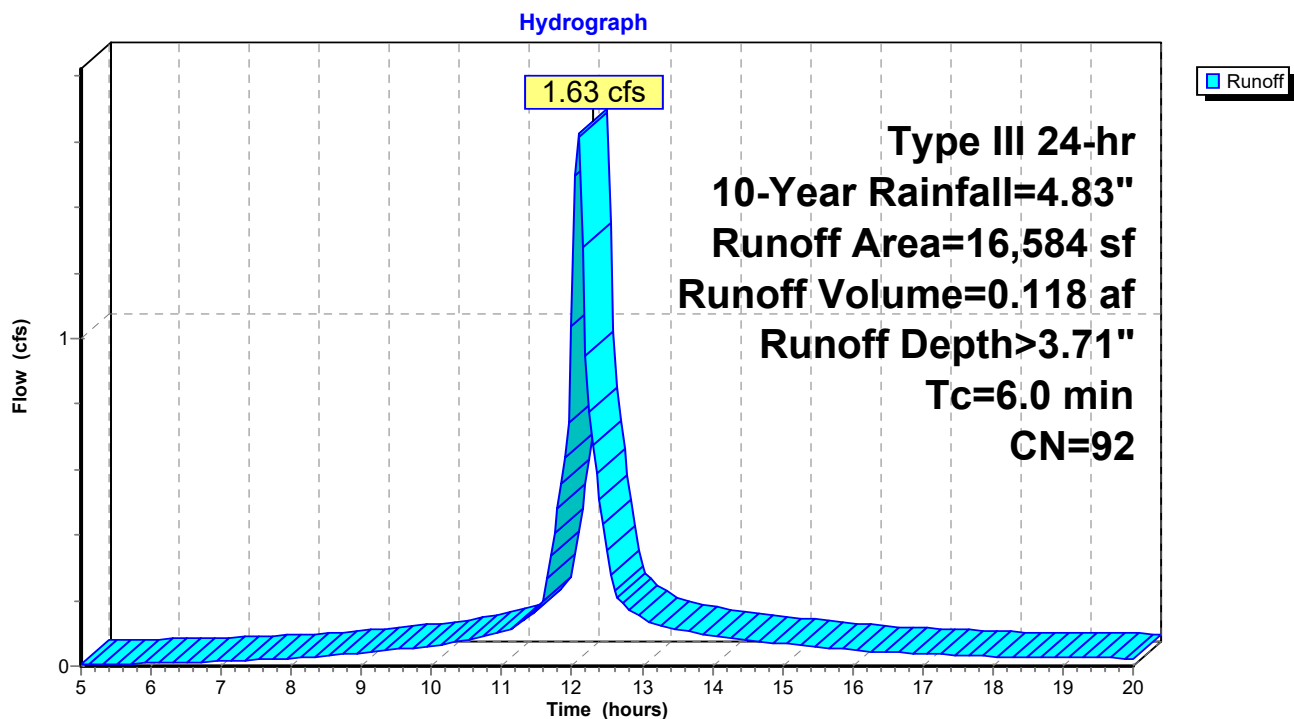
Summary for Subcatchment 2S: P1B

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

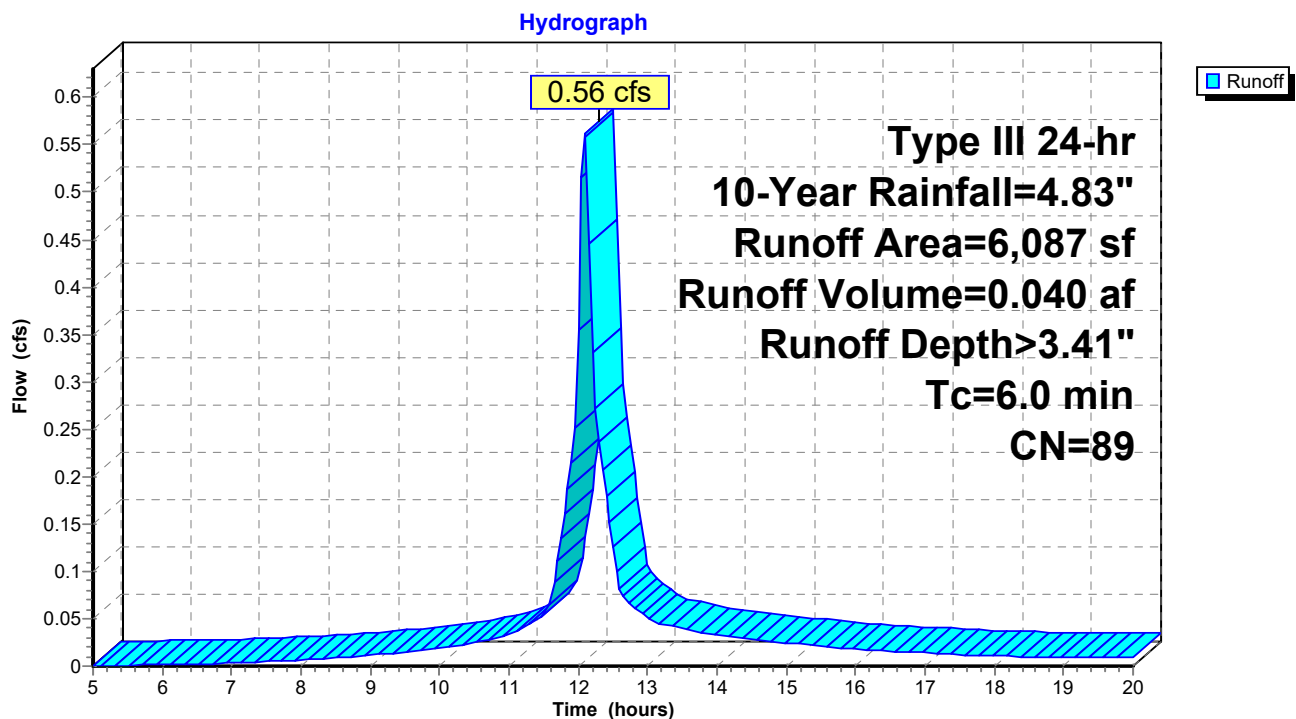
Runoff = 0.56 cfs @ 12.09 hrs, Volume= 0.040 af, Depth> 3.41"
Routed to Pond 18P : CB 63

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

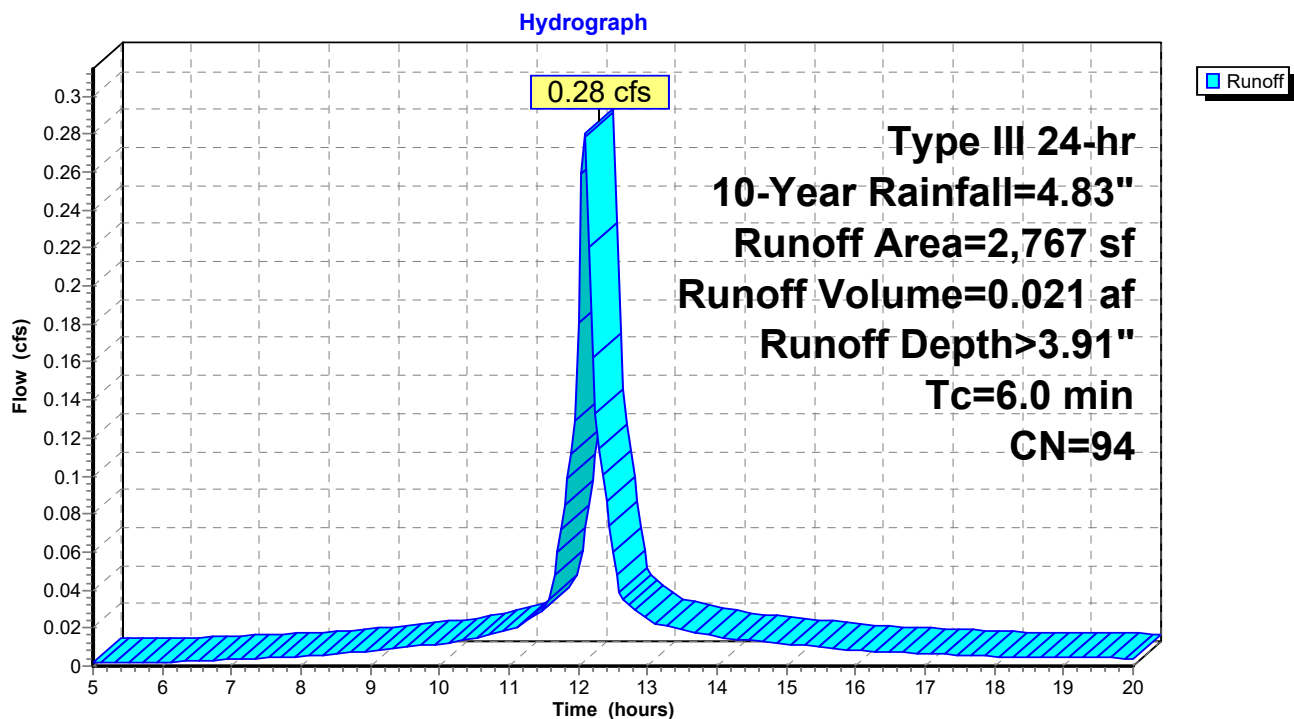
Runoff = 0.28 cfs @ 12.09 hrs, Volume= 0.021 af, Depth> 3.91"
Routed to Pond 19P : CB 62

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



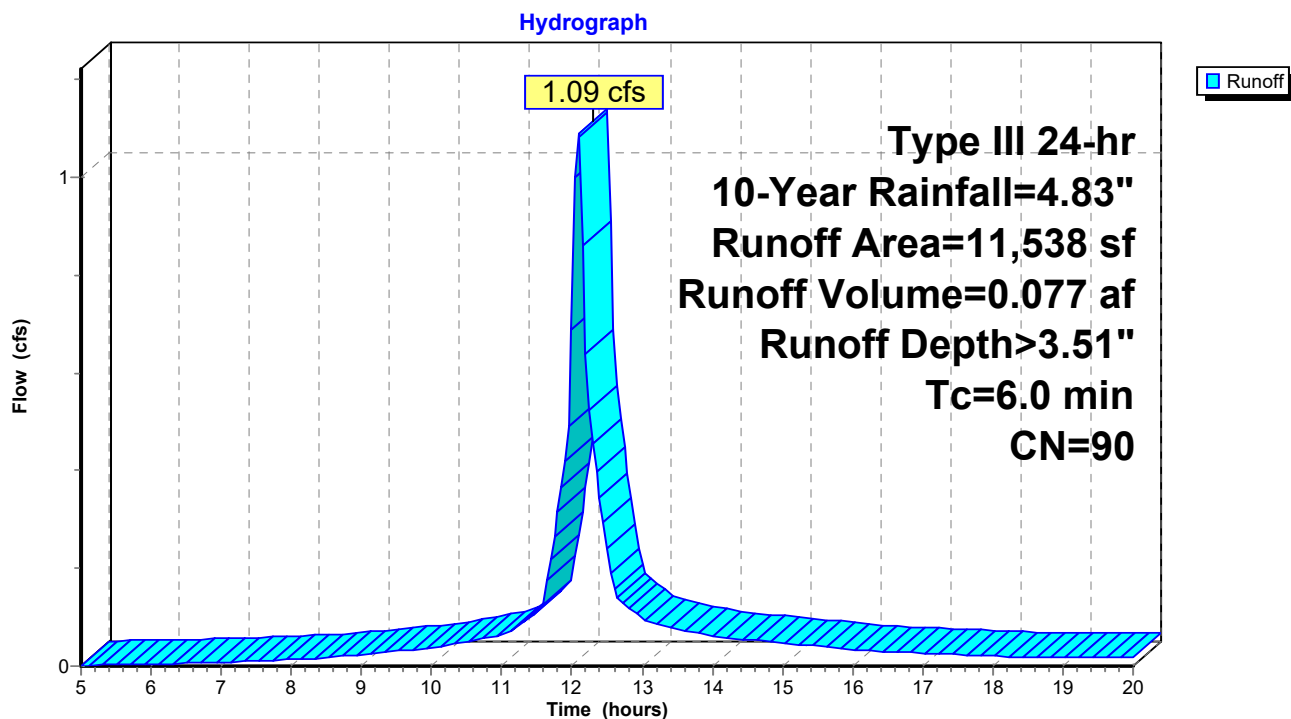
Summary for Subcatchment 5S: P1E

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

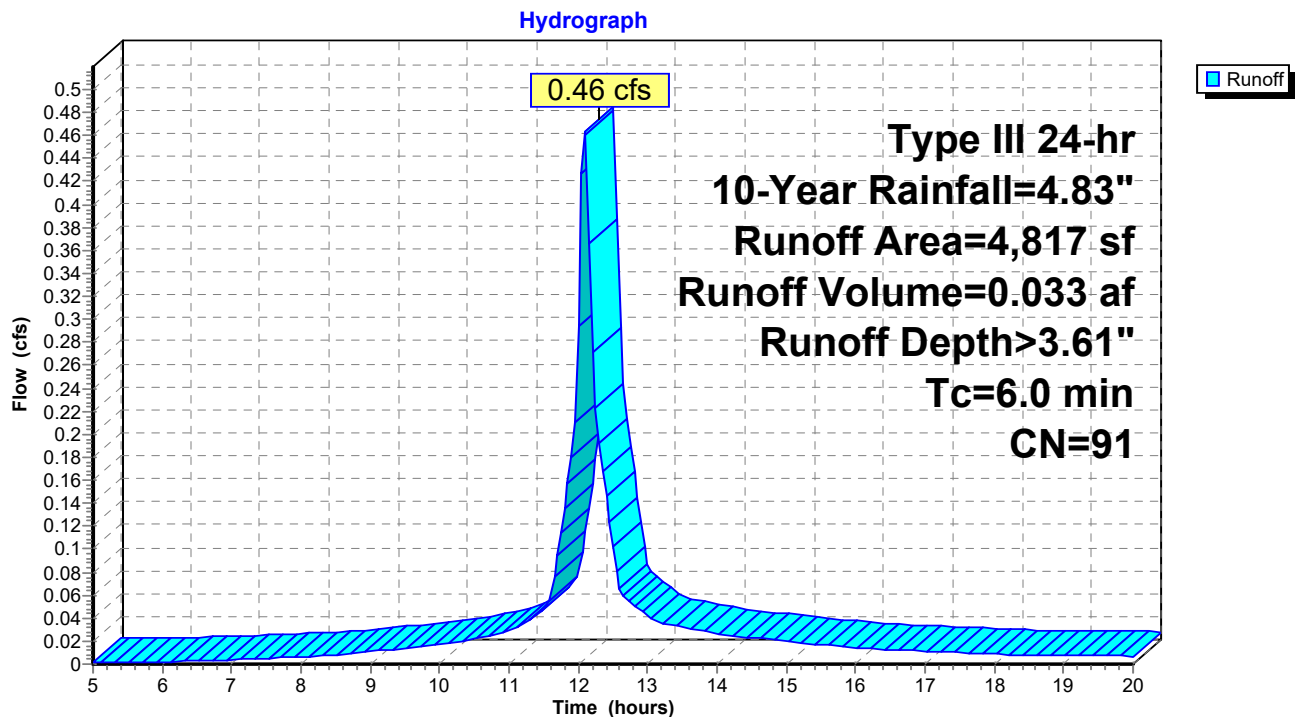
Runoff = 0.46 cfs @ 12.09 hrs, Volume= 0.033 af, Depth> 3.61"
Routed to Pond 27P : CB 60

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

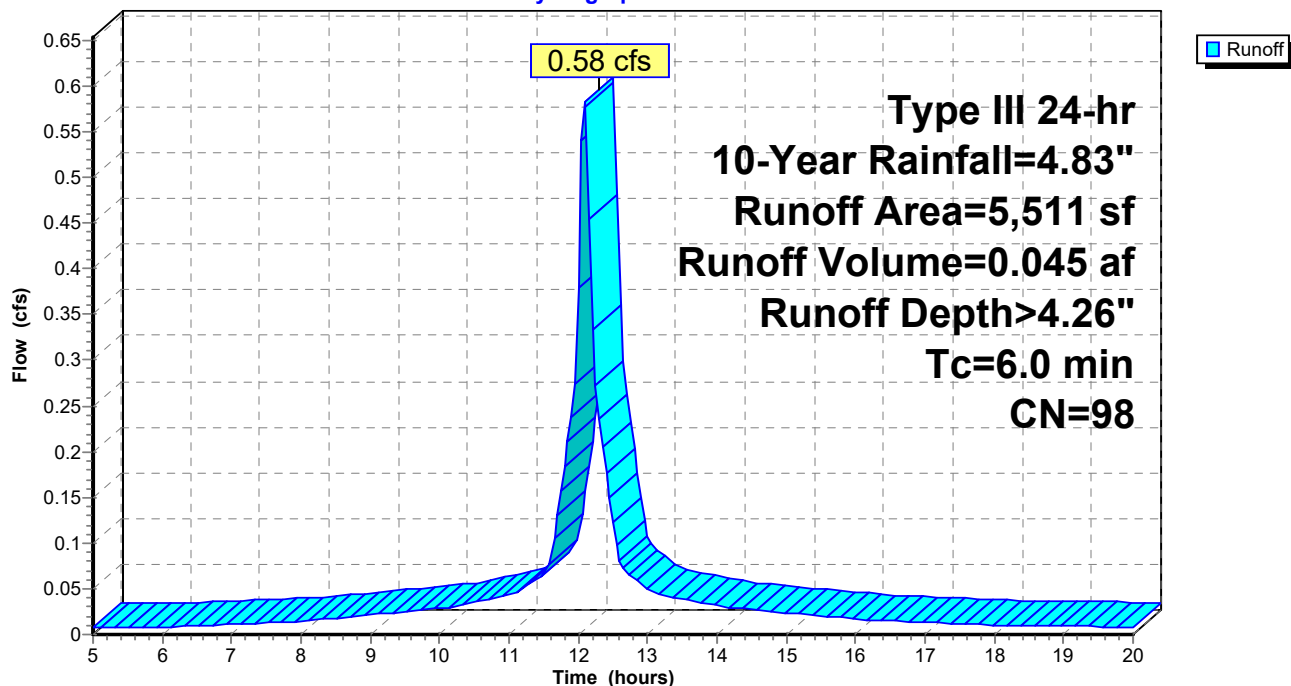
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.83"

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

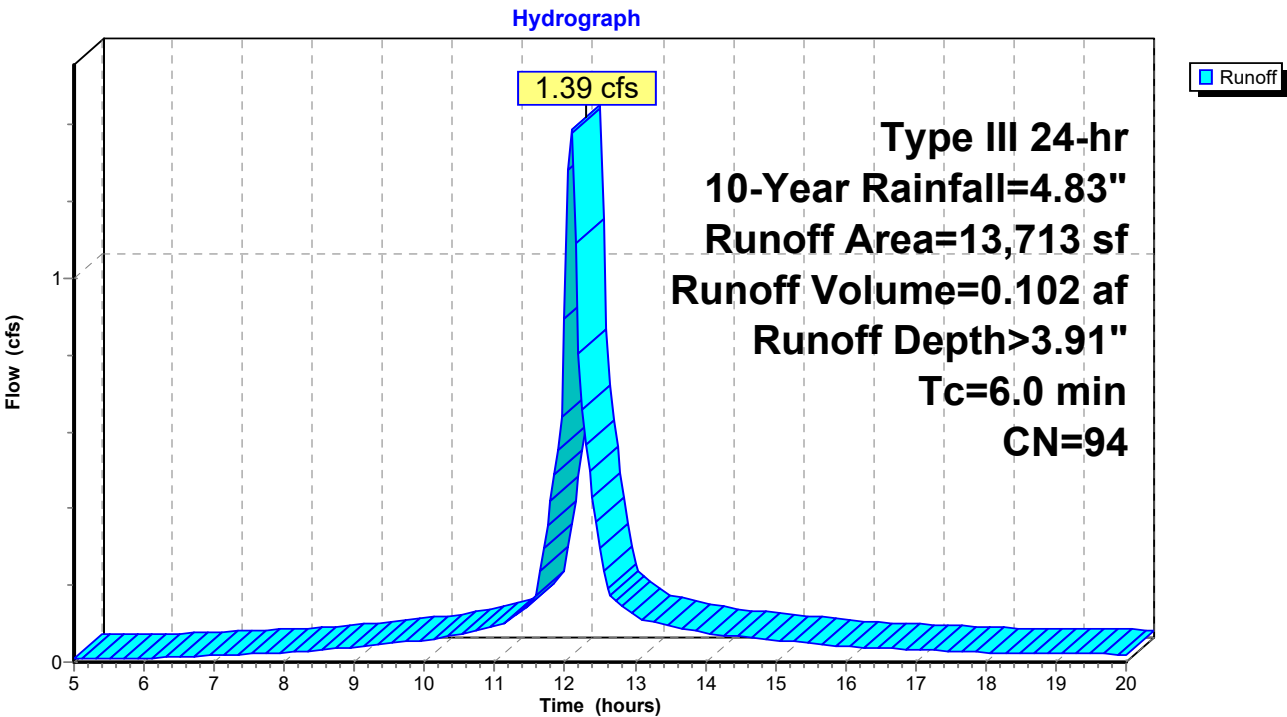
Runoff = 1.39 cfs @ 12.09 hrs, Volume= 0.102 af, Depth> 3.91"
Routed to Pond 23P : CB 57

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

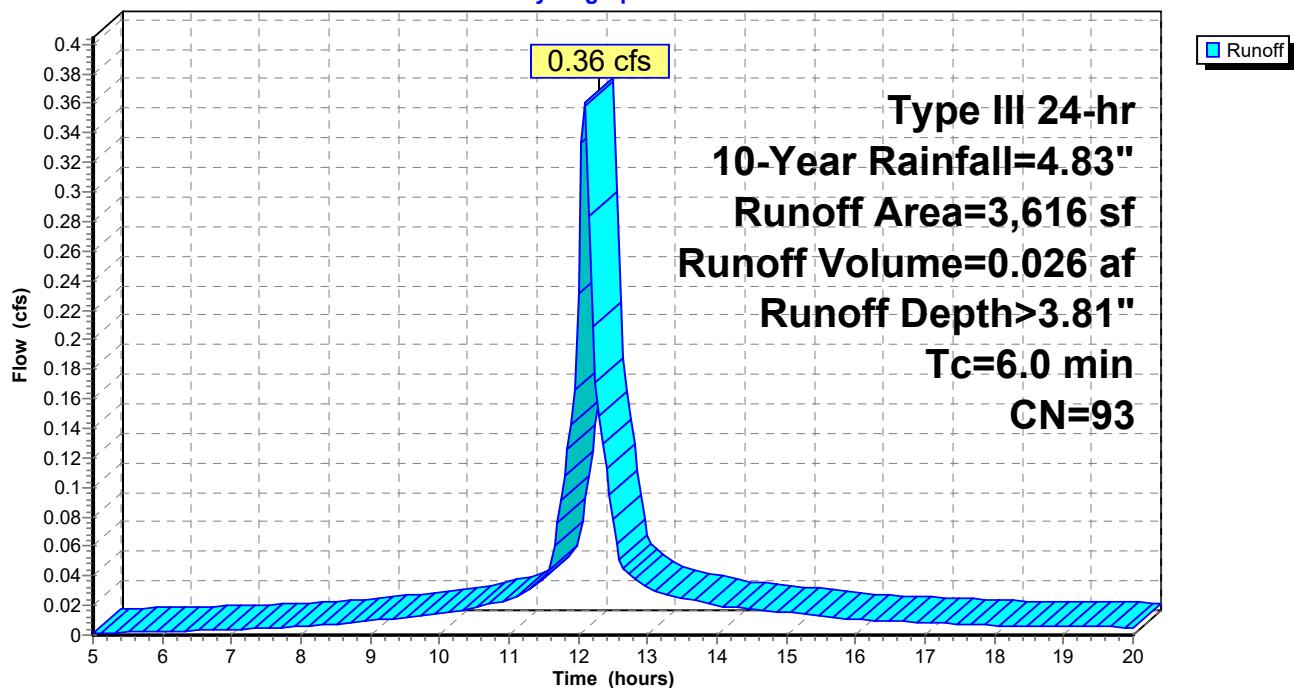
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.83"

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

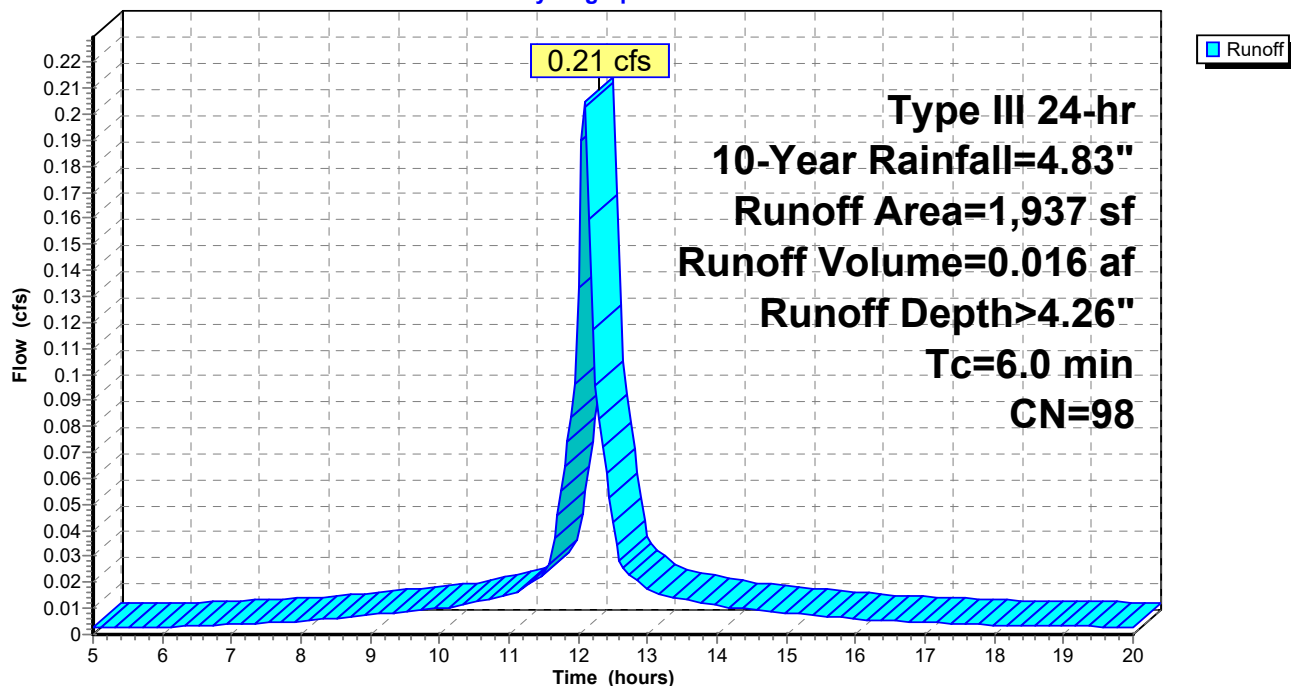
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.83"

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

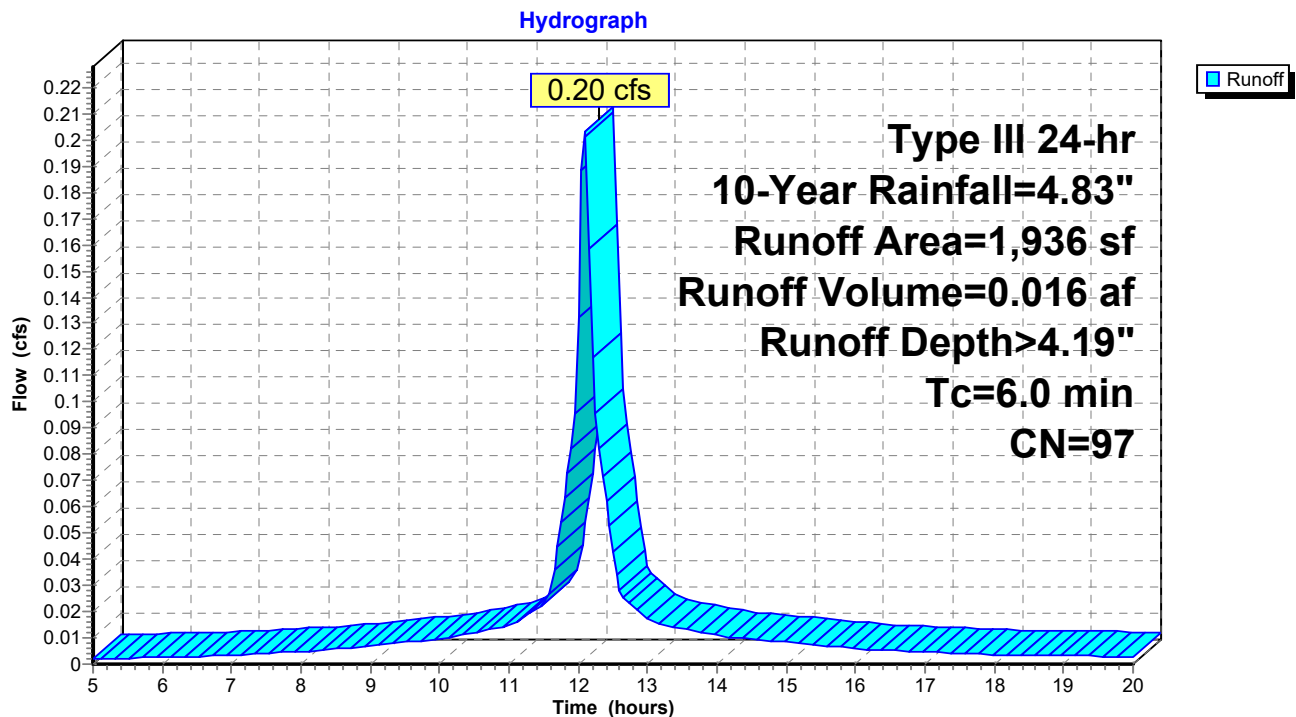
Runoff = 0.20 cfs @ 12.09 hrs, Volume= 0.016 af, Depth> 4.19"
Routed to Pond 31P : CB 51

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



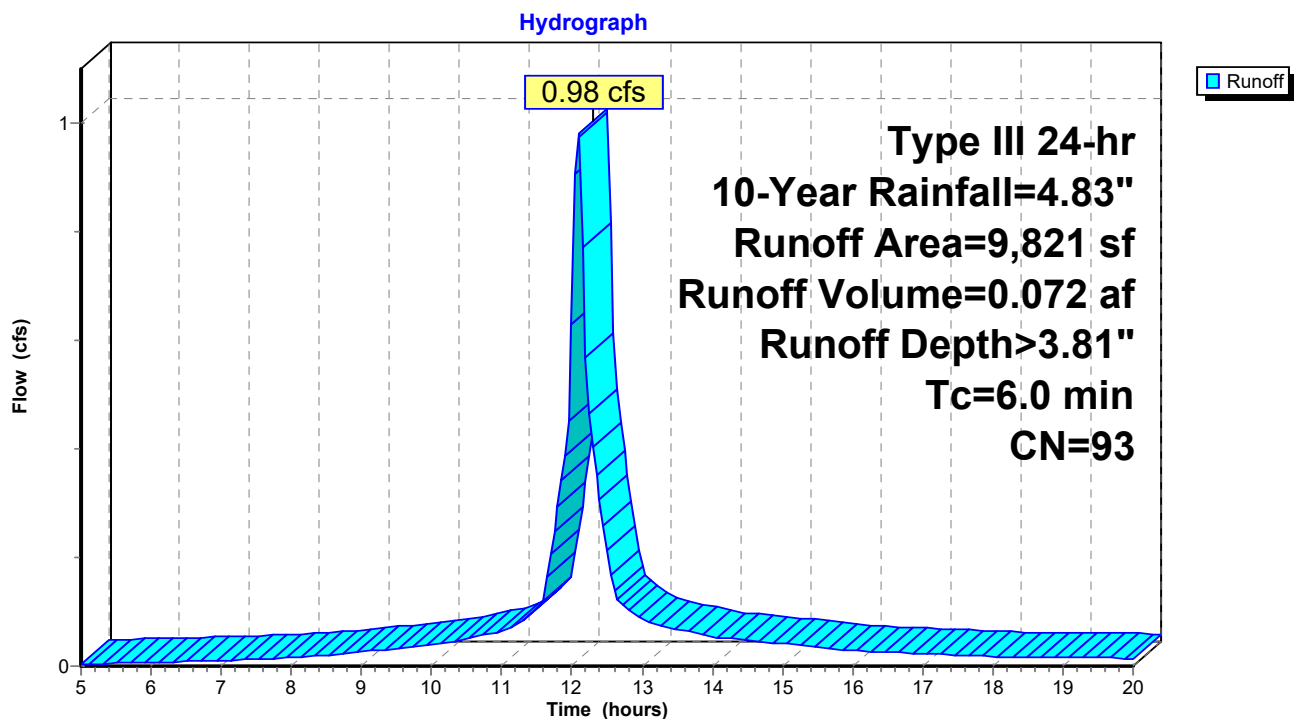
Summary for Subcatchment 12S: P1L

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

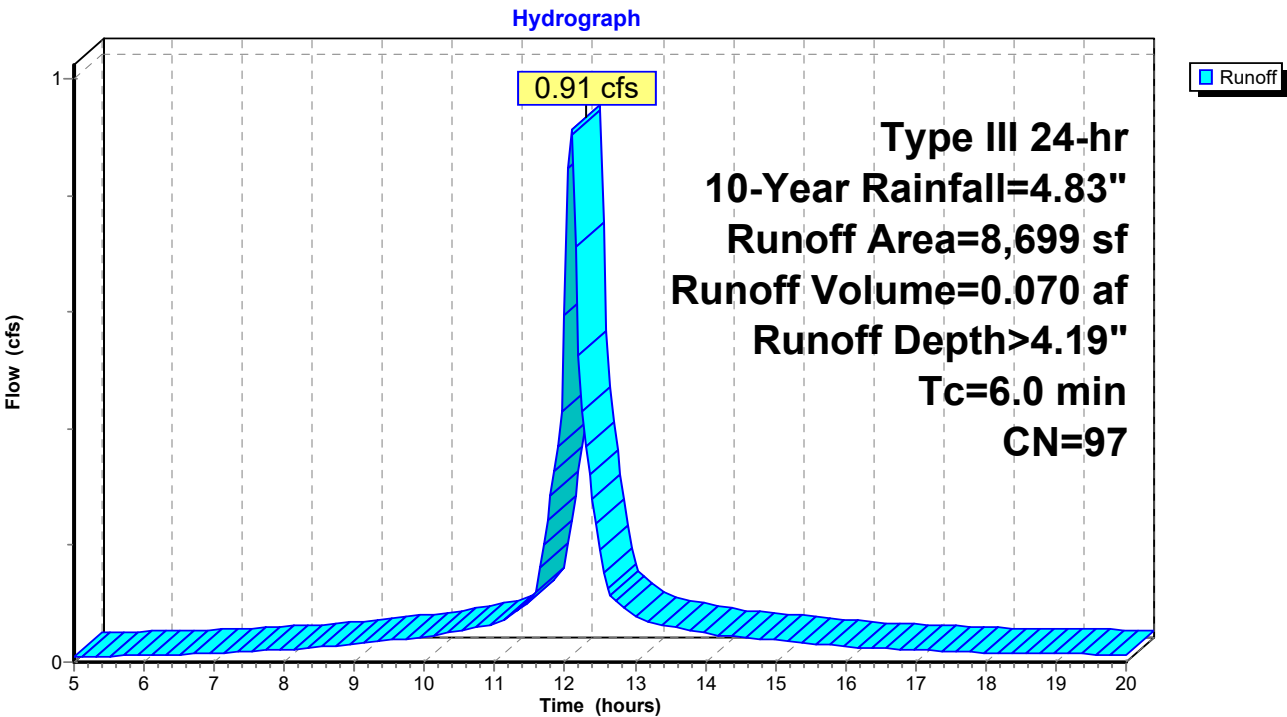
Runoff = 0.91 cfs @ 12.09 hrs, Volume= 0.070 af, Depth> 4.19"
Routed to Pond 36P : CB 54

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



Summary for Subcatchment 14S: P1N

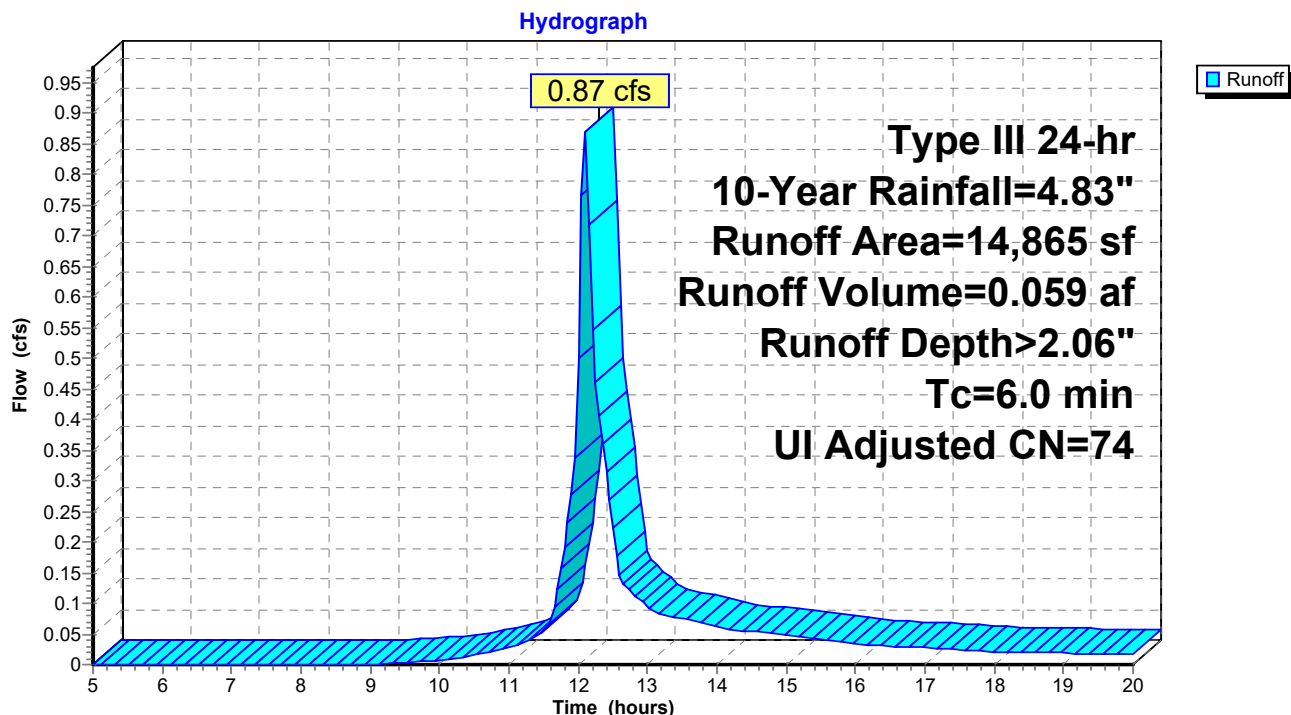
Runoff = 0.87 cfs @ 12.10 hrs, Volume= 0.059 af, Depth> 2.06"
Routed to Pond 15P : Inf. Basin 5

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



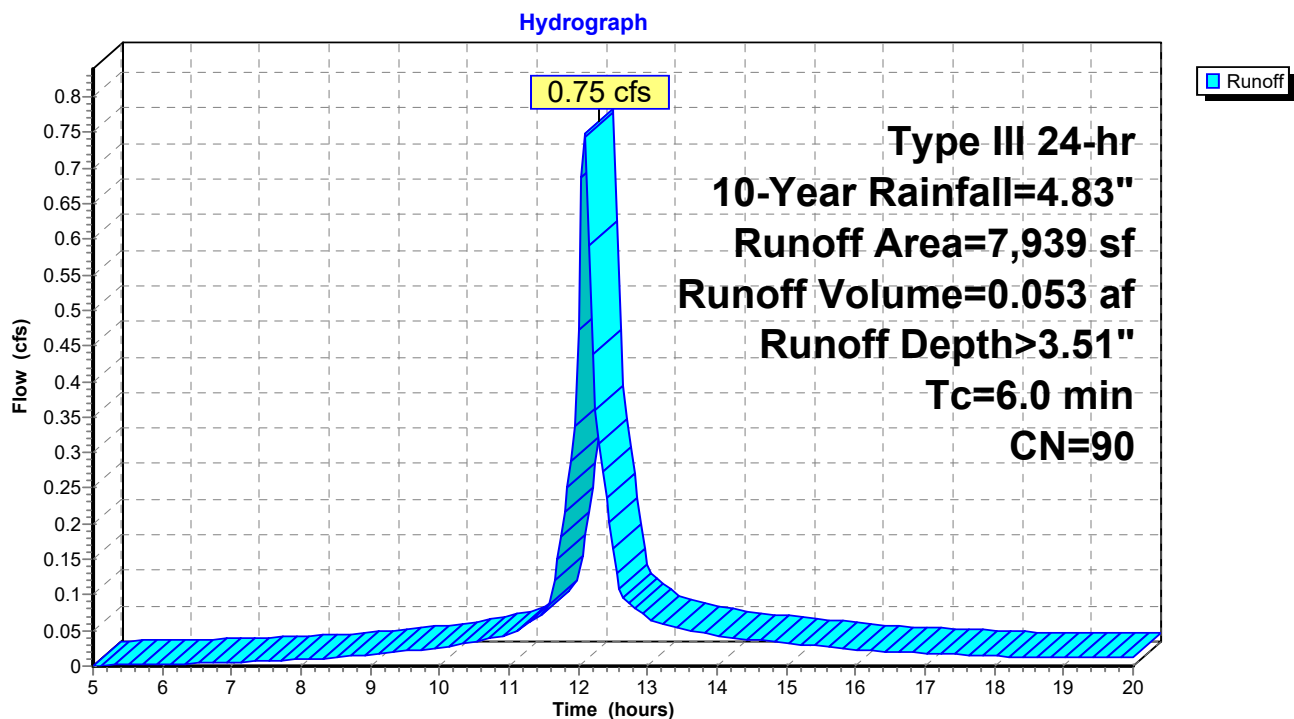
Summary for Subcatchment 39S: P1P

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

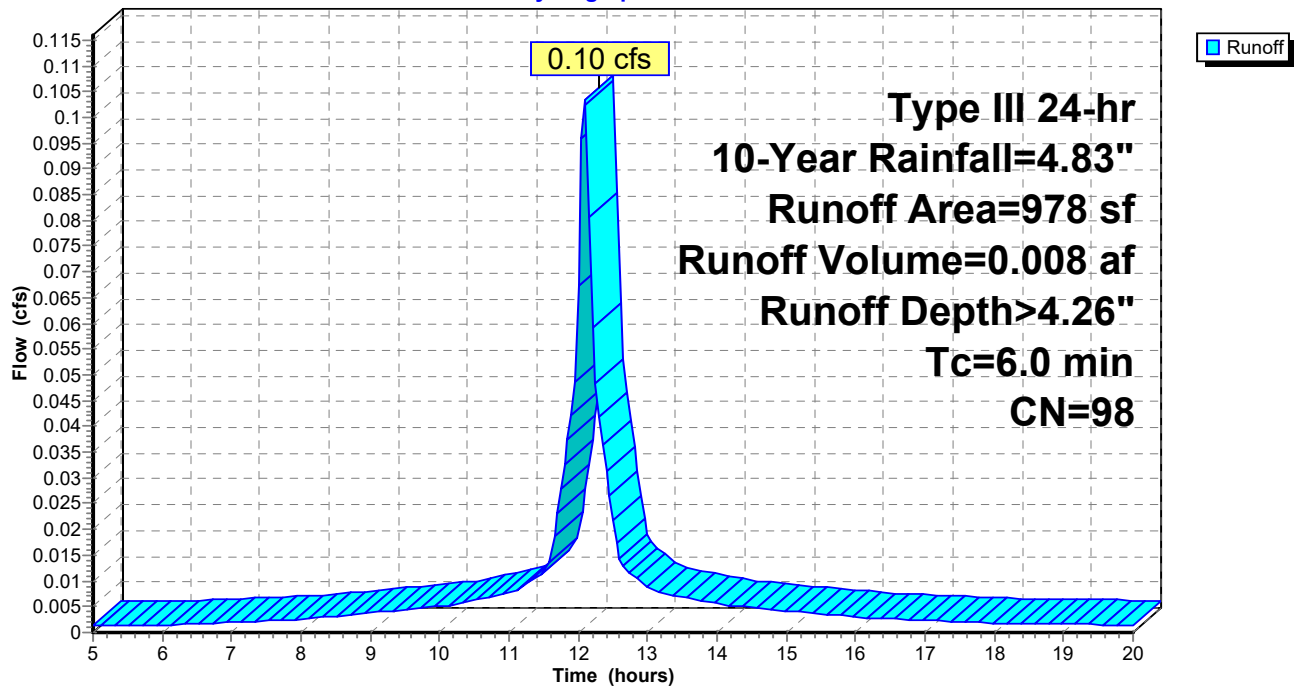
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.83"

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



Summary for Subcatchment 44S: P1R

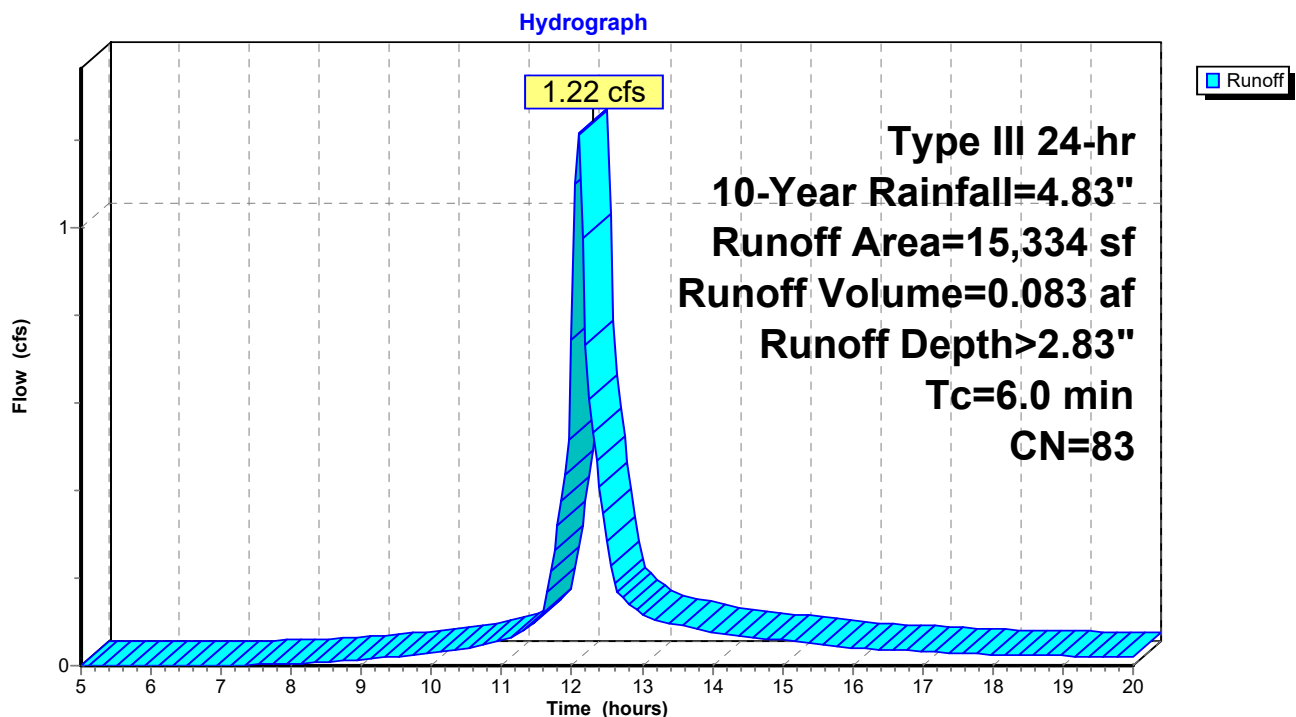
Runoff = 1.22 cfs @ 12.09 hrs, Volume= 0.083 af, Depth> 2.83"
Routed to Pond 46P : CB 48

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

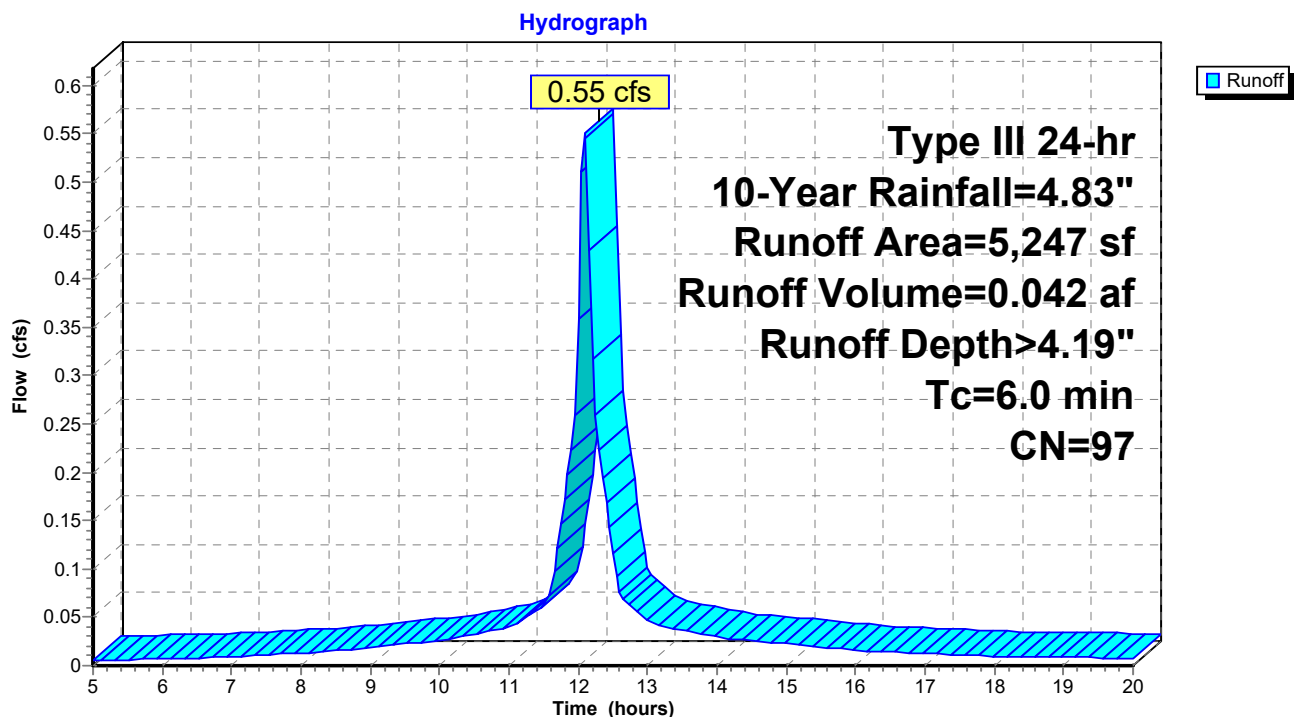
Runoff = 0.55 cfs @ 12.09 hrs, Volume= 0.042 af, Depth> 4.19"
Routed to Pond 47P : CB 47

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

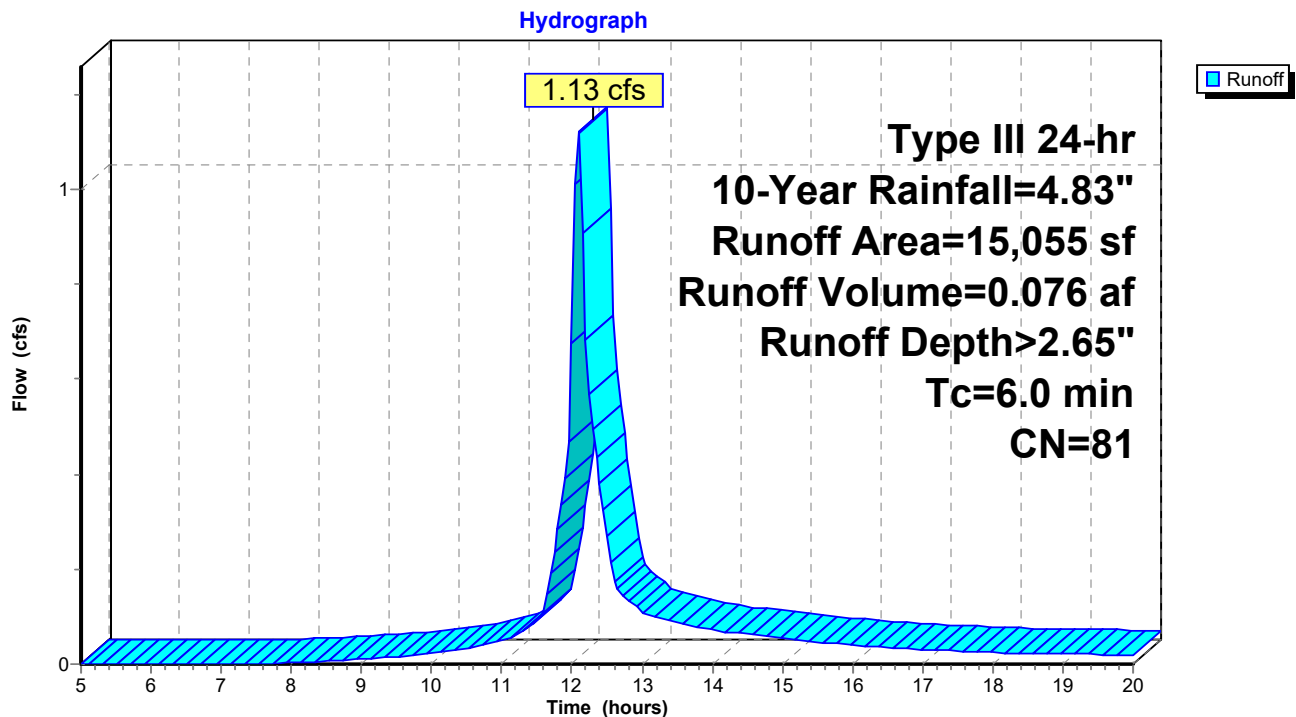
Runoff = 1.13 cfs @ 12.09 hrs, Volume= 0.076 af, Depth> 2.65"
Routed to Pond 53P : CB 21

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
4,736	98	Unconnected roofs, HSG A
4,294	39	>75% Grass cover, Good, HSG A
6,025	98	Paved parking, HSG A
15,055	81	Weighted Average
4,294		28.52% Pervious Area
10,761		71.48% Impervious Area
4,736		44.01% 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

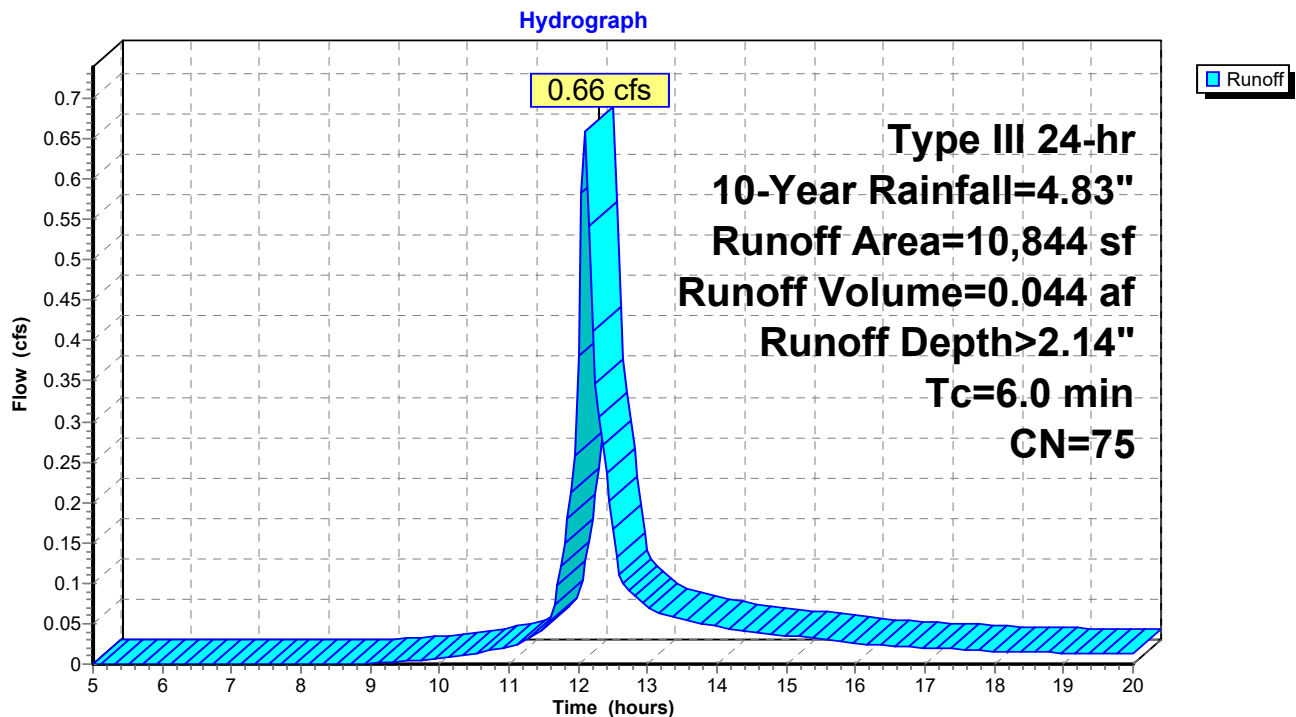
Runoff = 0.66 cfs @ 12.09 hrs, Volume= 0.044 af, Depth> 2.14"
Routed to Pond 52P : CB 20

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
4,148	39	>75% Grass cover, Good, HSG A
2,216	98	Unconnected roofs, HSG A
4,480	98	Paved parking, HSG A
10,844	75	Weighted Average
4,148		38.25% Pervious Area
6,696		61.75% Impervious Area
2,216		33.09% Unconnected

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= 0.004 af, Depth> 0.13"
Routed to Pond 56P : Inf. Basin 4

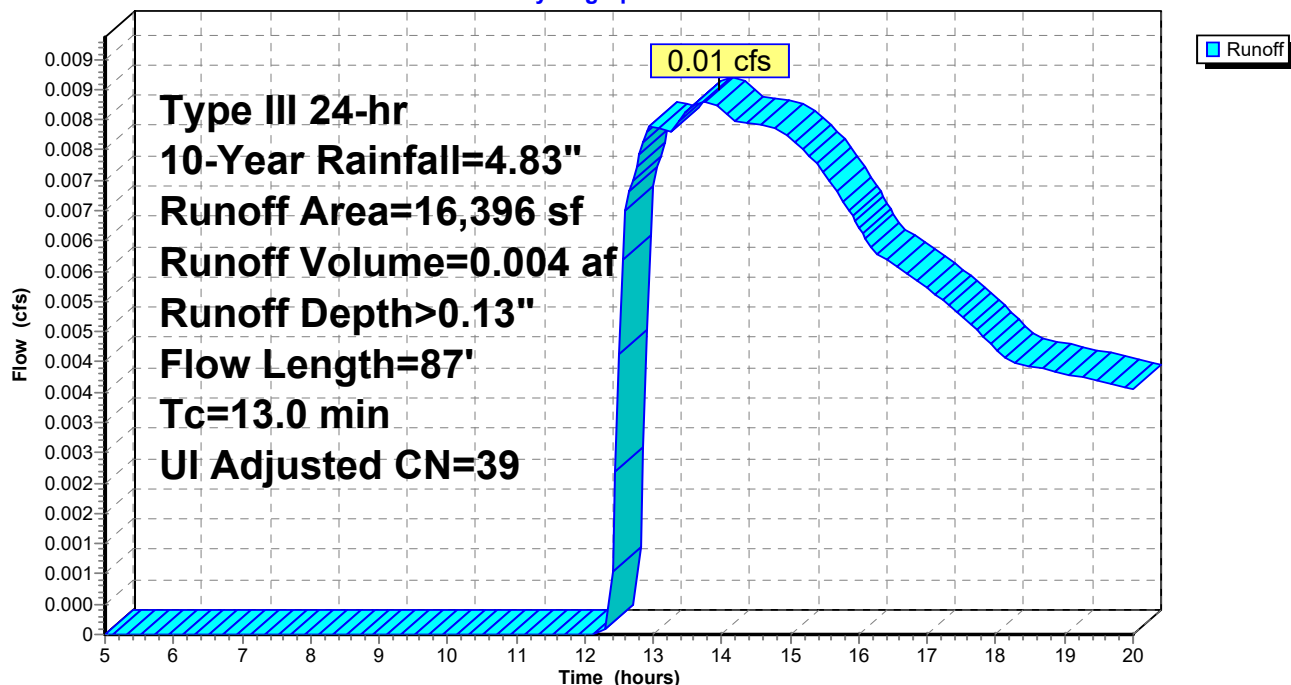
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.83"

Area (sf)	CN	Adj	Description
1,000	98		Unconnected roofs, HSG A
3,657	30		Woods, Good, HSG A
11,739	39		>75% Grass cover, Good, HSG A
16,396	41	39	Weighted Average, UI Adjusted
15,396			93.90% Pervious Area
1,000			6.10% Impervious Area
1,000			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.5	50	0.0200	0.07		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
0.5	37	0.0300	1.21		Shallow Concentrated Flow, 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

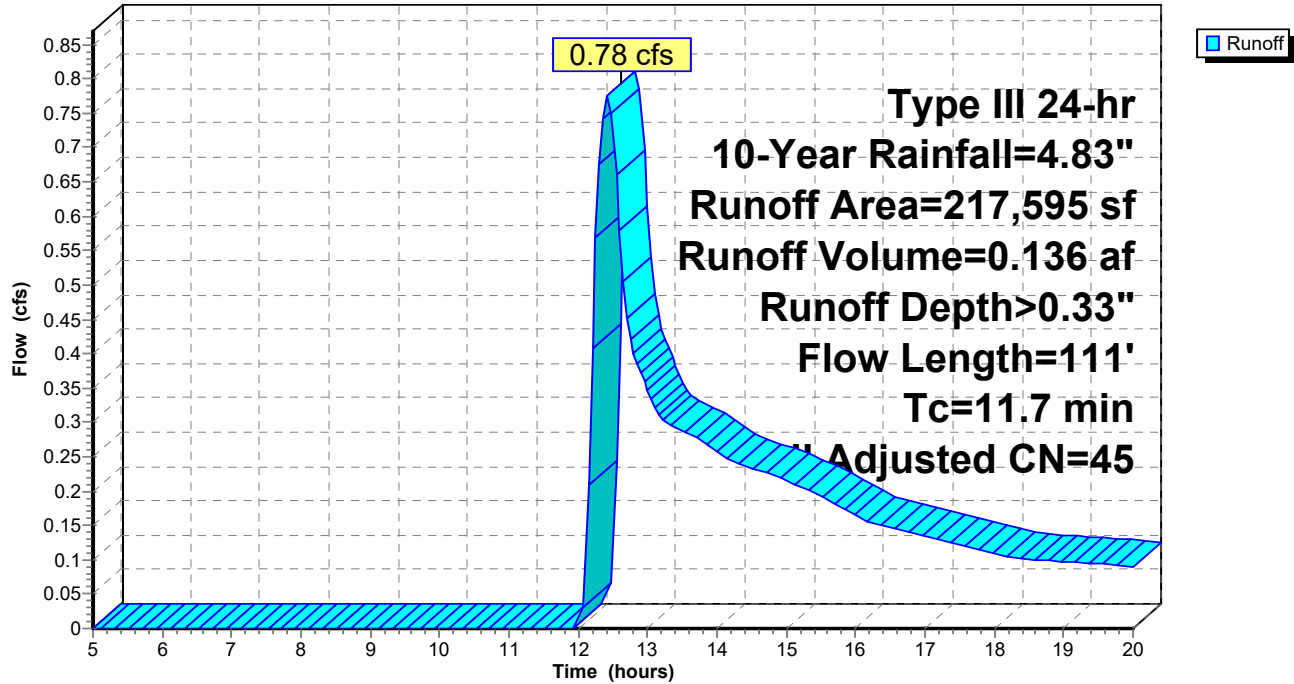
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.83"

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		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
1.0	61	0.0400	1.00		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
11.7	111	Total			

Subcatchment 58S: P1AA

Hydrograph



Summary for Subcatchment 60S: P2C

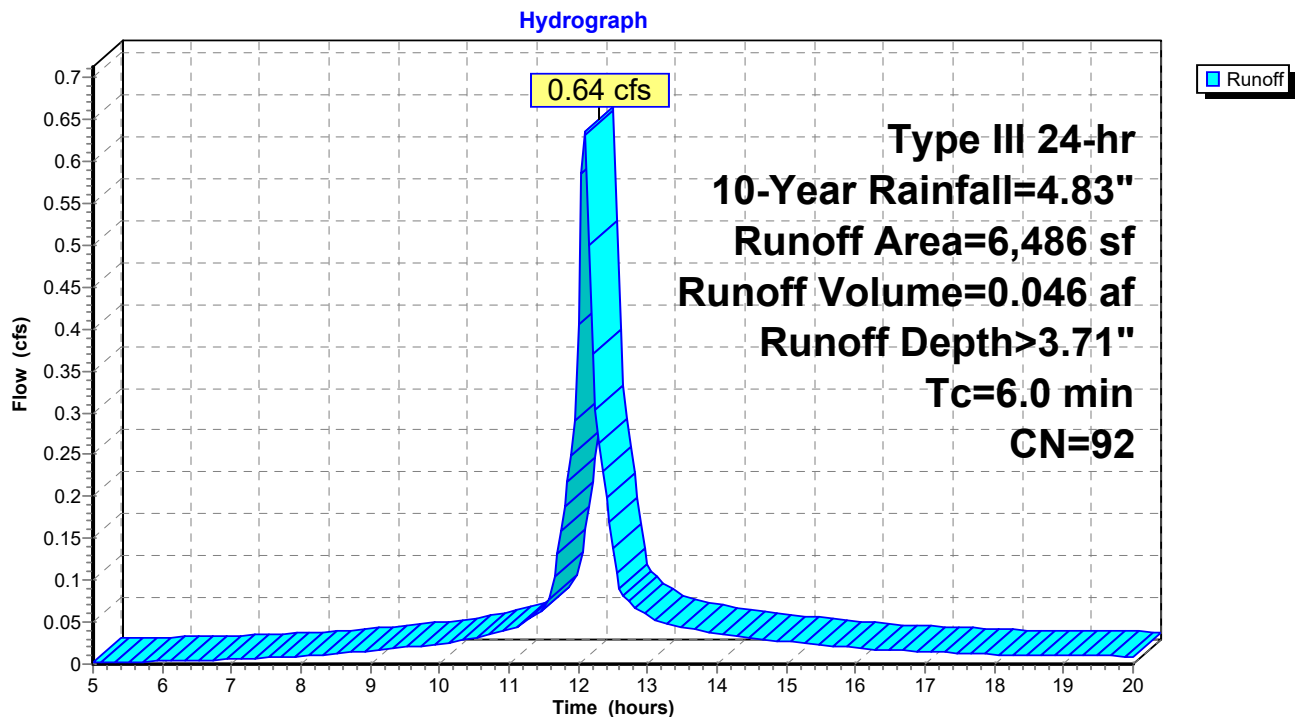
Runoff = 0.64 cfs @ 12.09 hrs, Volume= 0.046 af, Depth> 3.71"
Routed to Pond 62P : CB 66

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

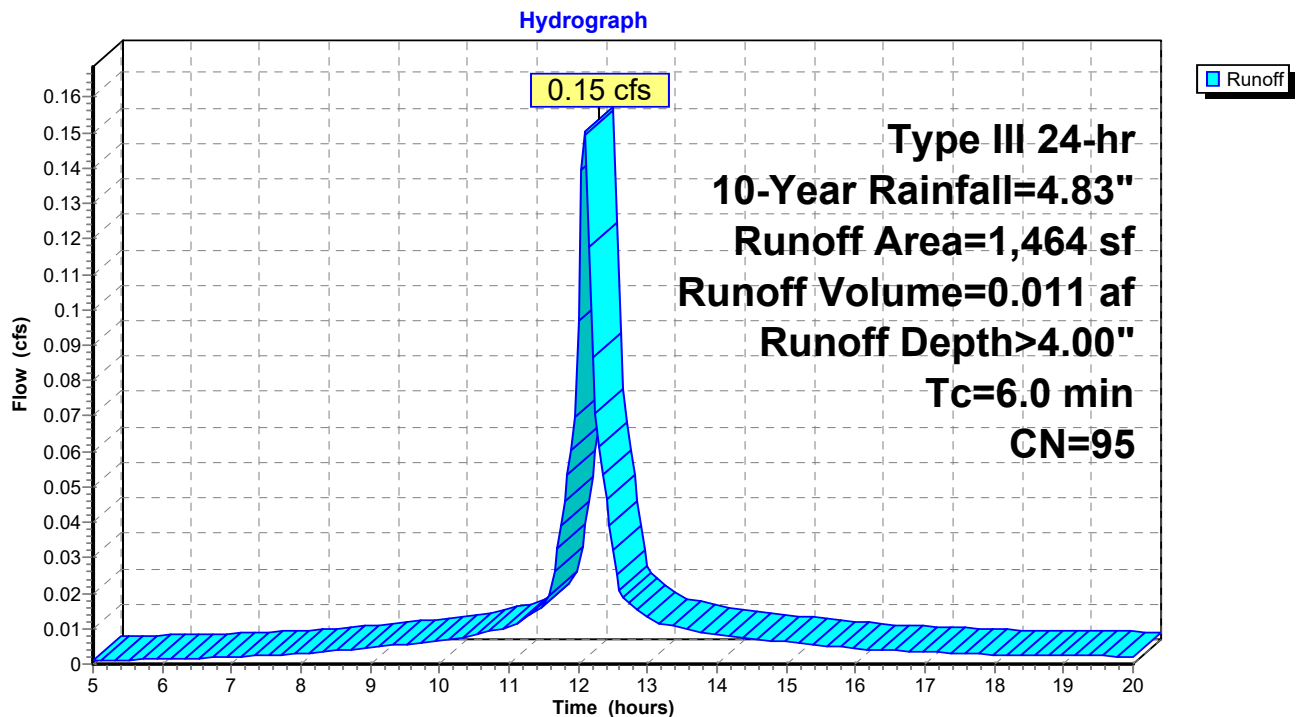
Runoff = 0.15 cfs @ 12.09 hrs, Volume= 0.011 af, Depth> 4.00"
Routed to Pond 63P : CB 67

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



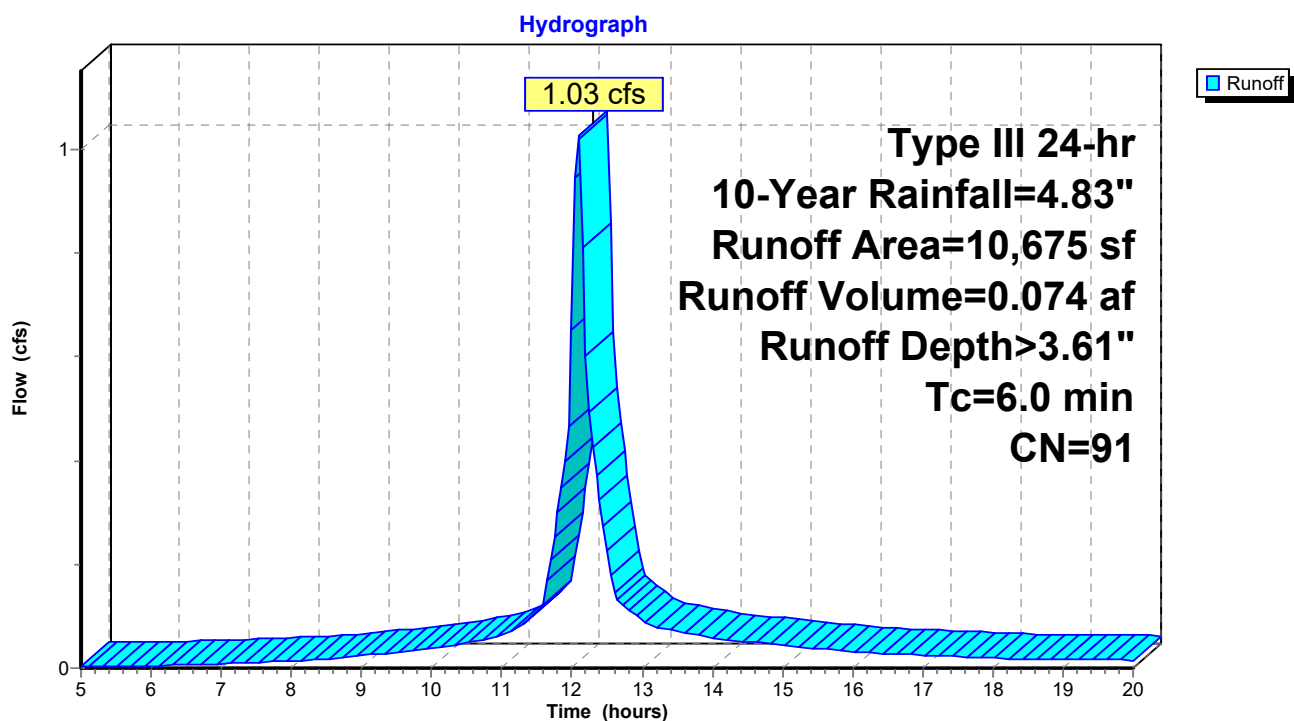
Summary for Subcatchment 62S: P2J

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

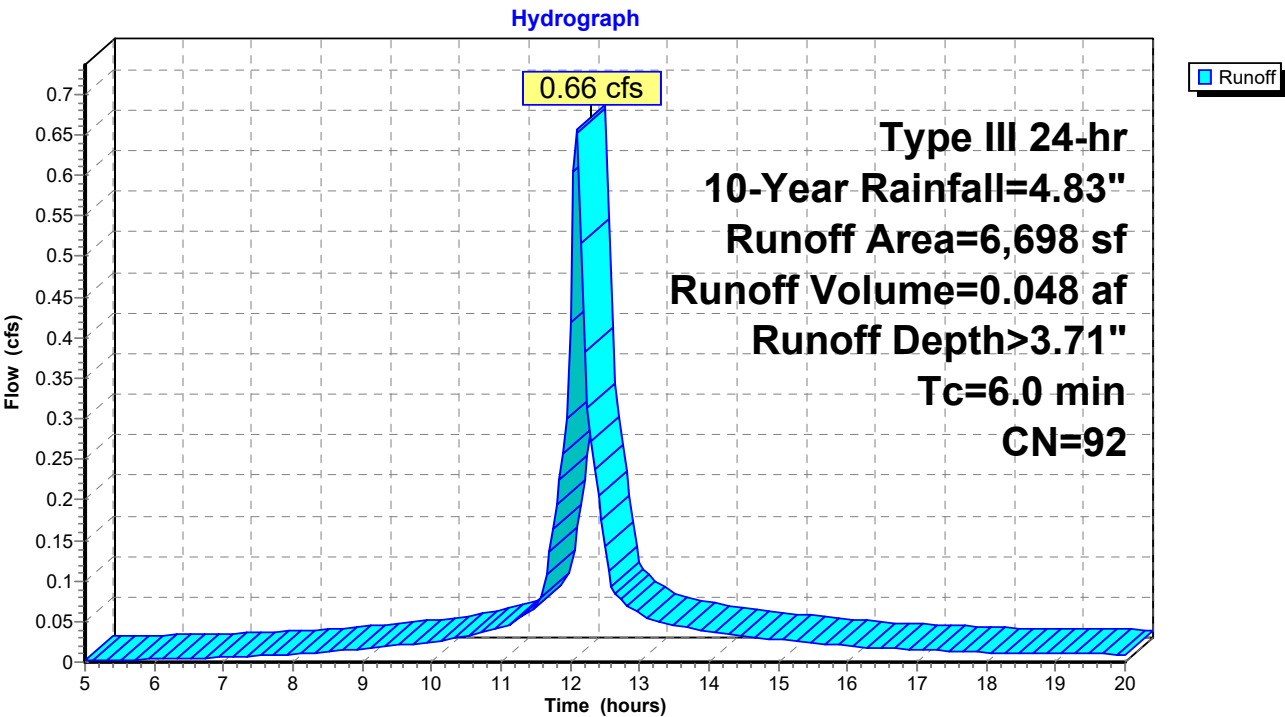
Runoff = 0.66 cfs @ 12.09 hrs, Volume= 0.048 af, Depth> 3.71"
Routed to Pond 70P : CB 73

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

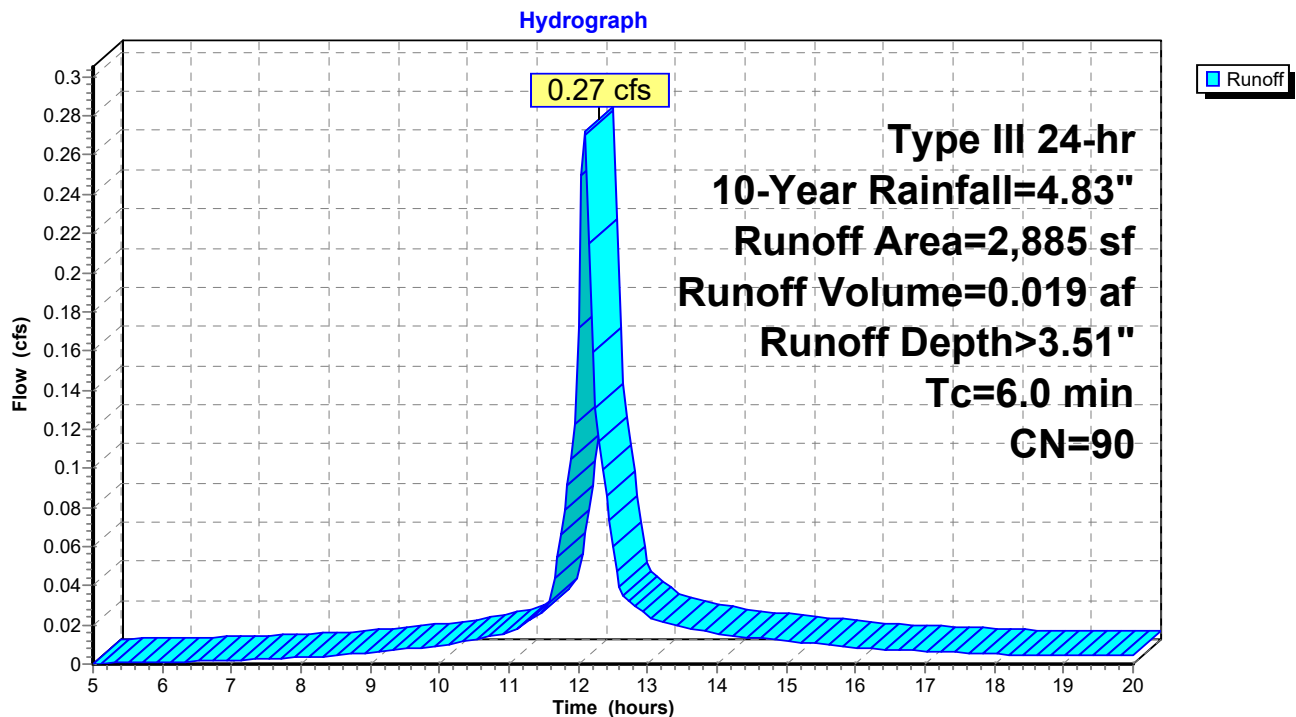
Runoff = 0.27 cfs @ 12.09 hrs, Volume= 0.019 af, Depth> 3.51"
Routed to Pond 88P : CB 84

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



Summary for Subcatchment 65S: P3M

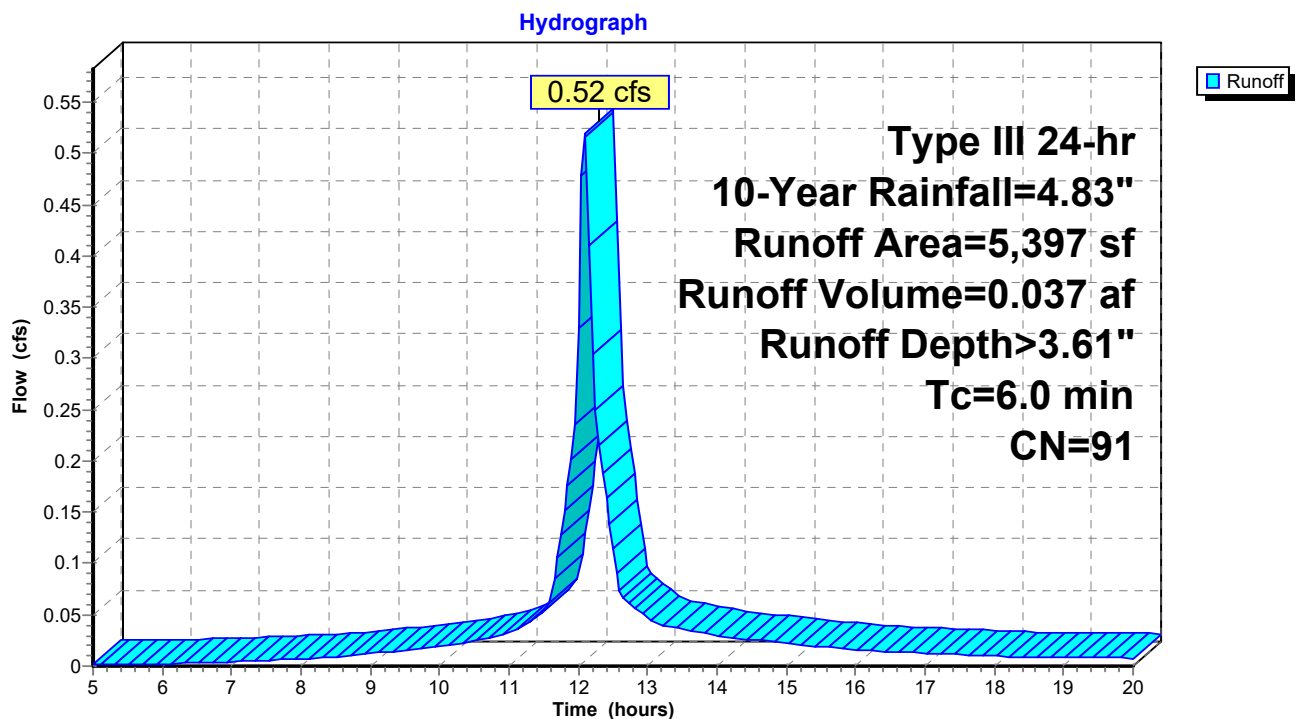
Runoff = 0.52 cfs @ 12.09 hrs, Volume= 0.037 af, Depth> 3.61"
Routed to Pond 87P : CB 85

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



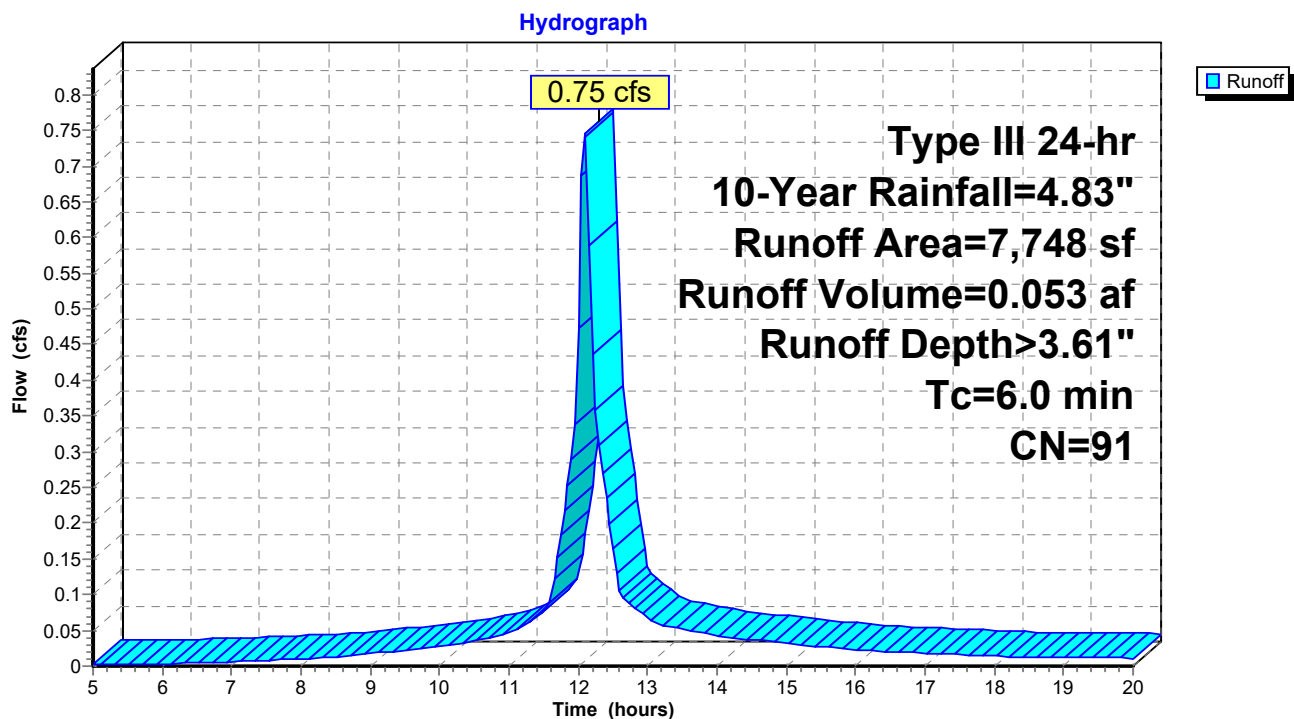
Summary for Subcatchment 66S: P3N

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

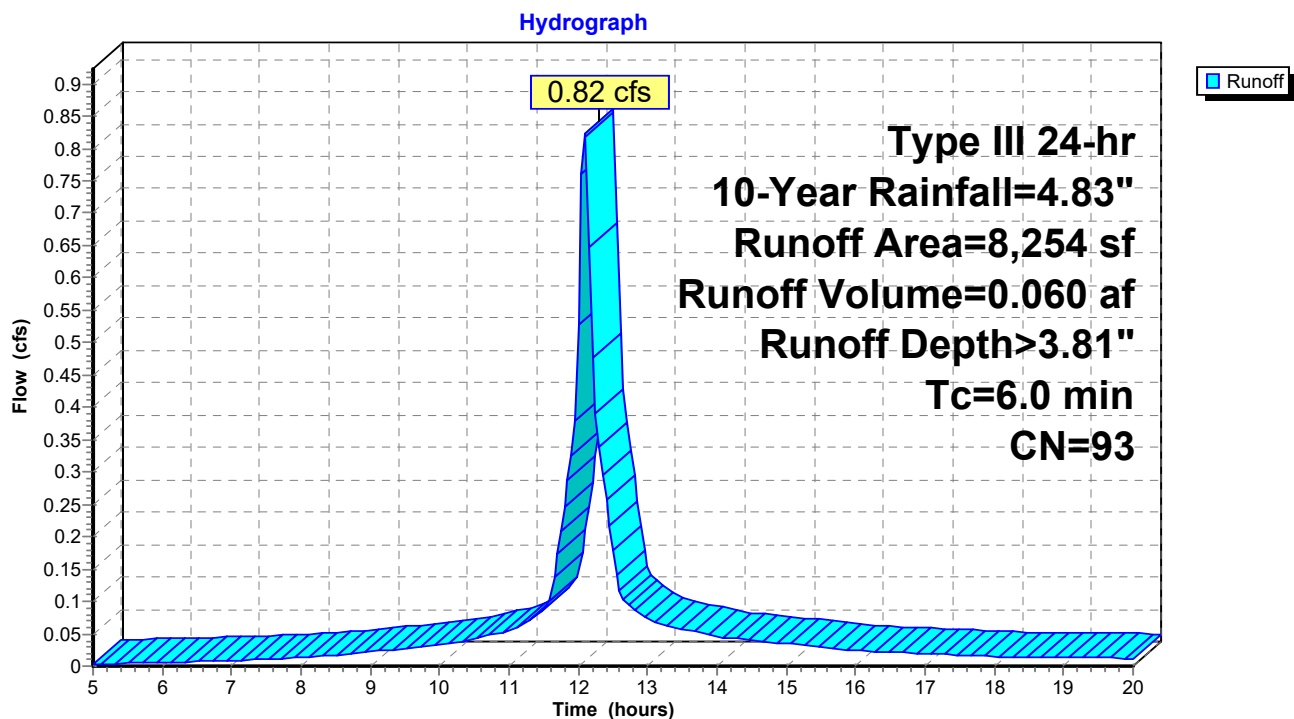
Summary for Subcatchment 67S: P3O

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

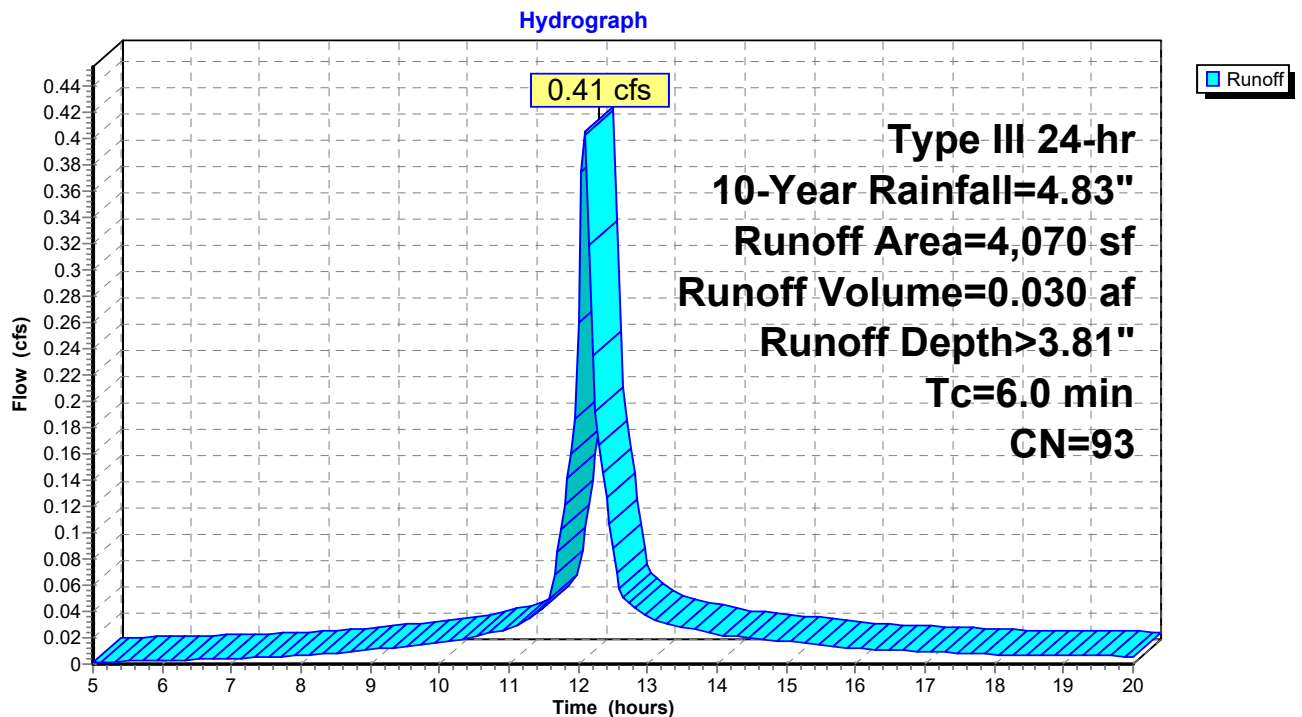
Runoff = 0.41 cfs @ 12.09 hrs, Volume= 0.030 af, Depth> 3.81"
Routed to Pond 108P : CB 88

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



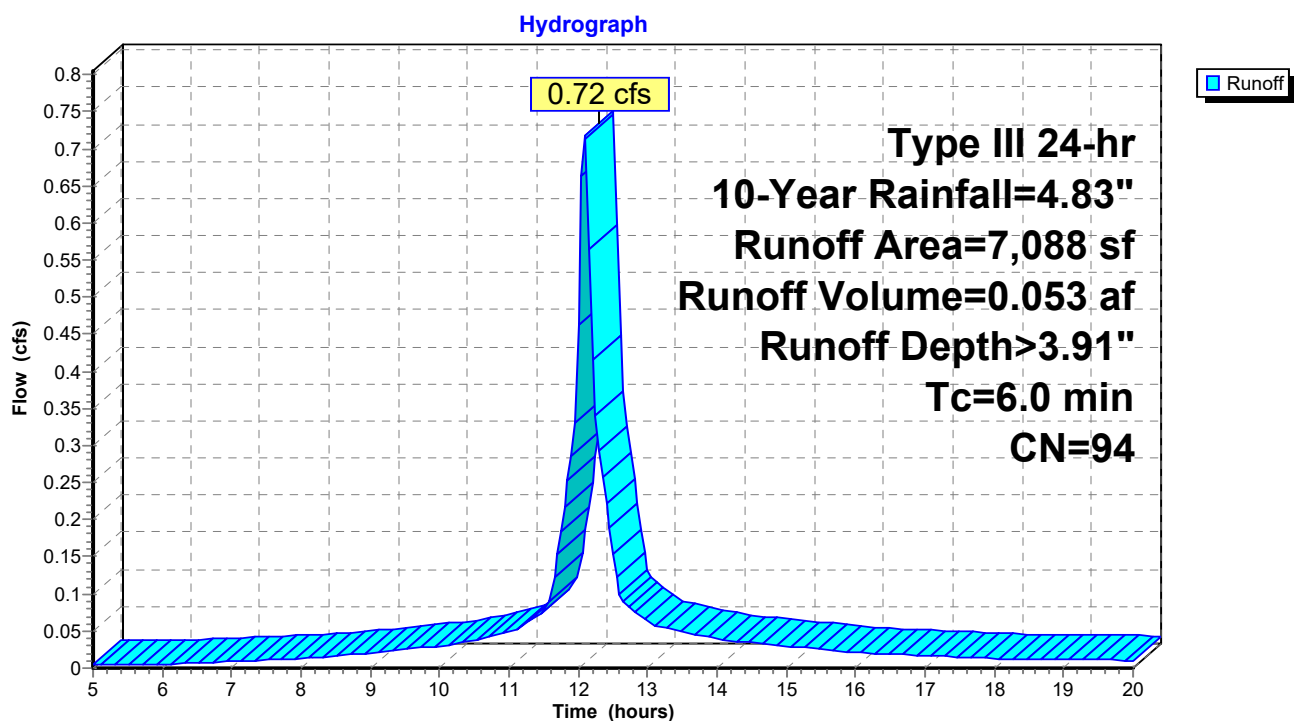
Summary for Subcatchment 69S: P2E

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

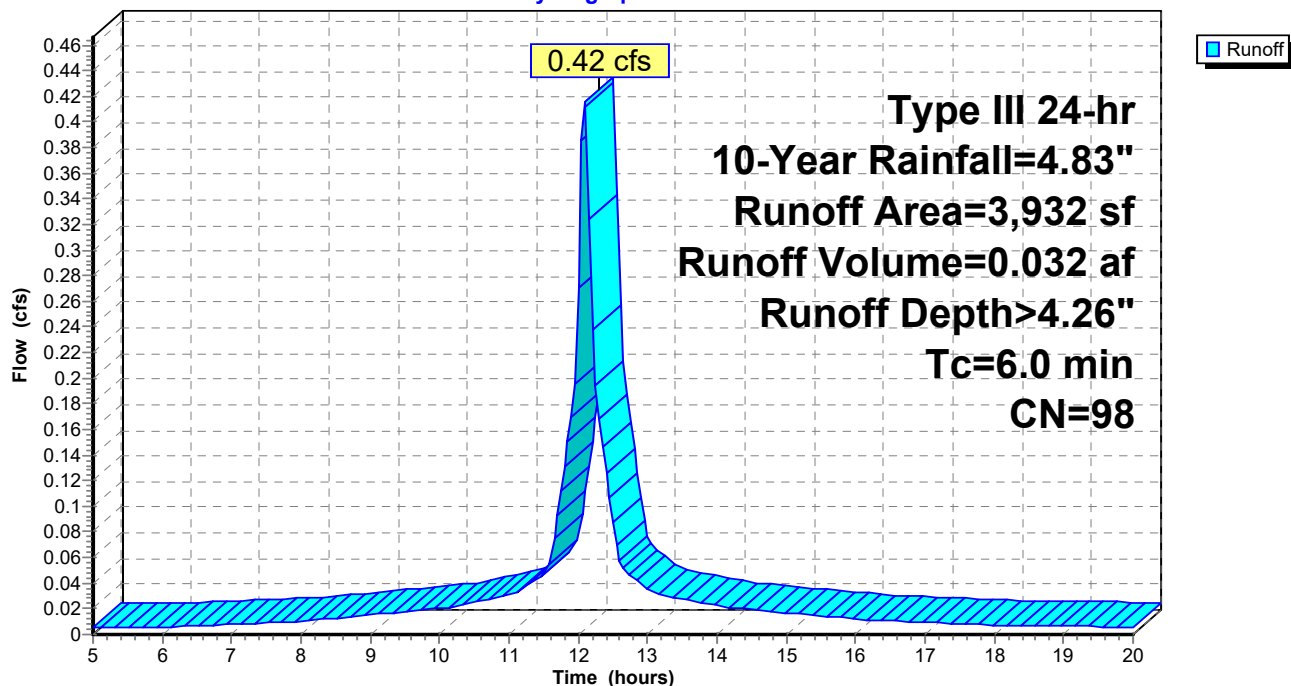
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.83"

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



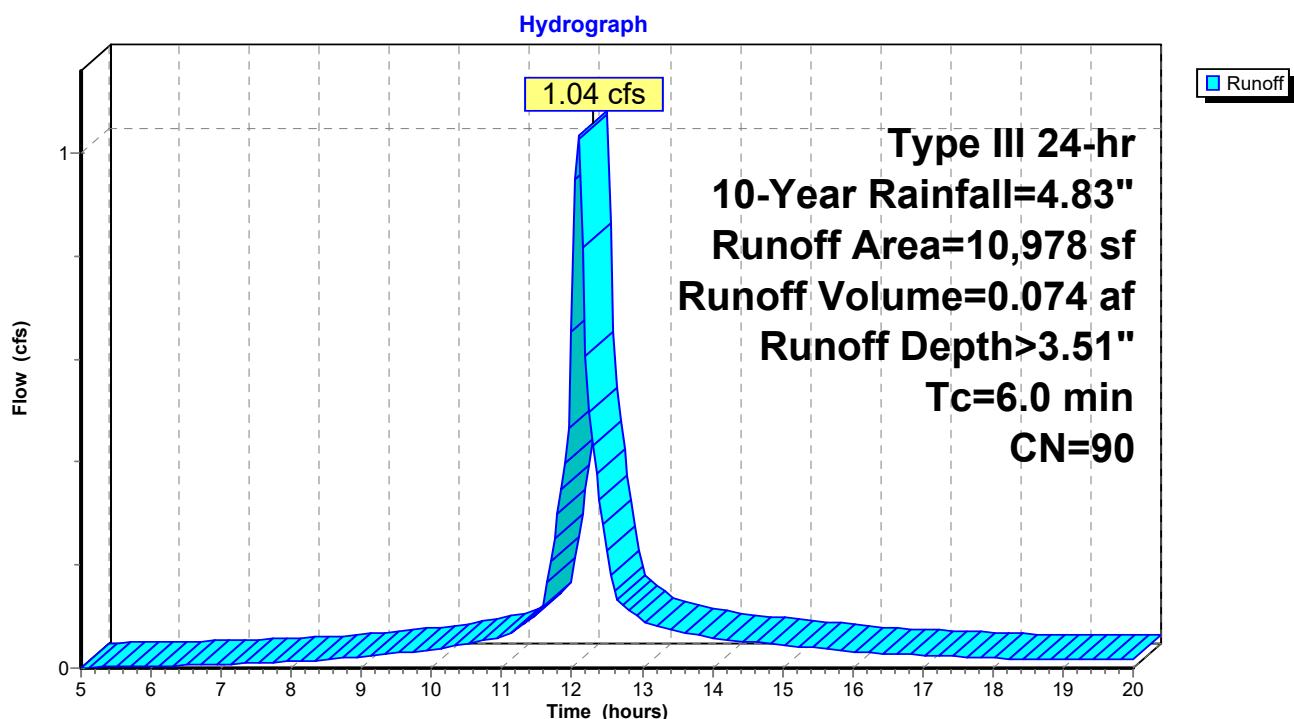
Summary for Subcatchment 71S: P2A

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

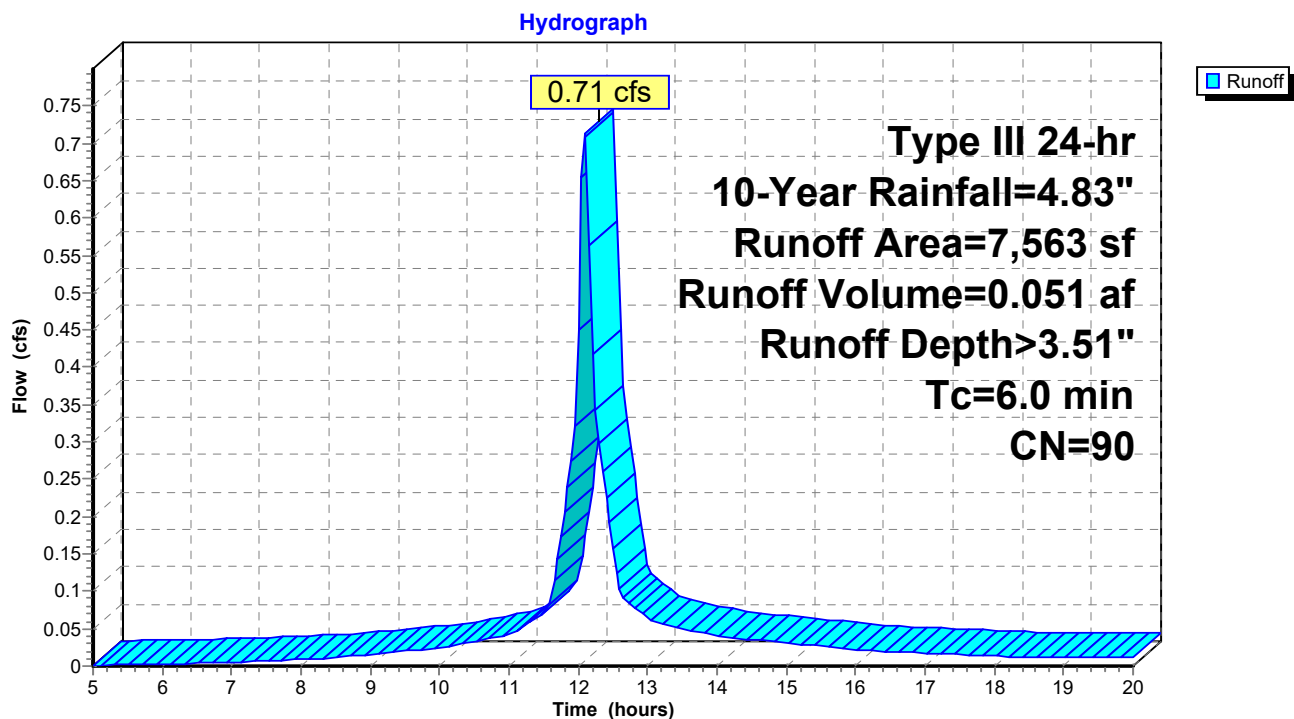
Runoff = 0.71 cfs @ 12.09 hrs, Volume= 0.051 af, Depth> 3.51"
Routed to Pond 74P : CB 65

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

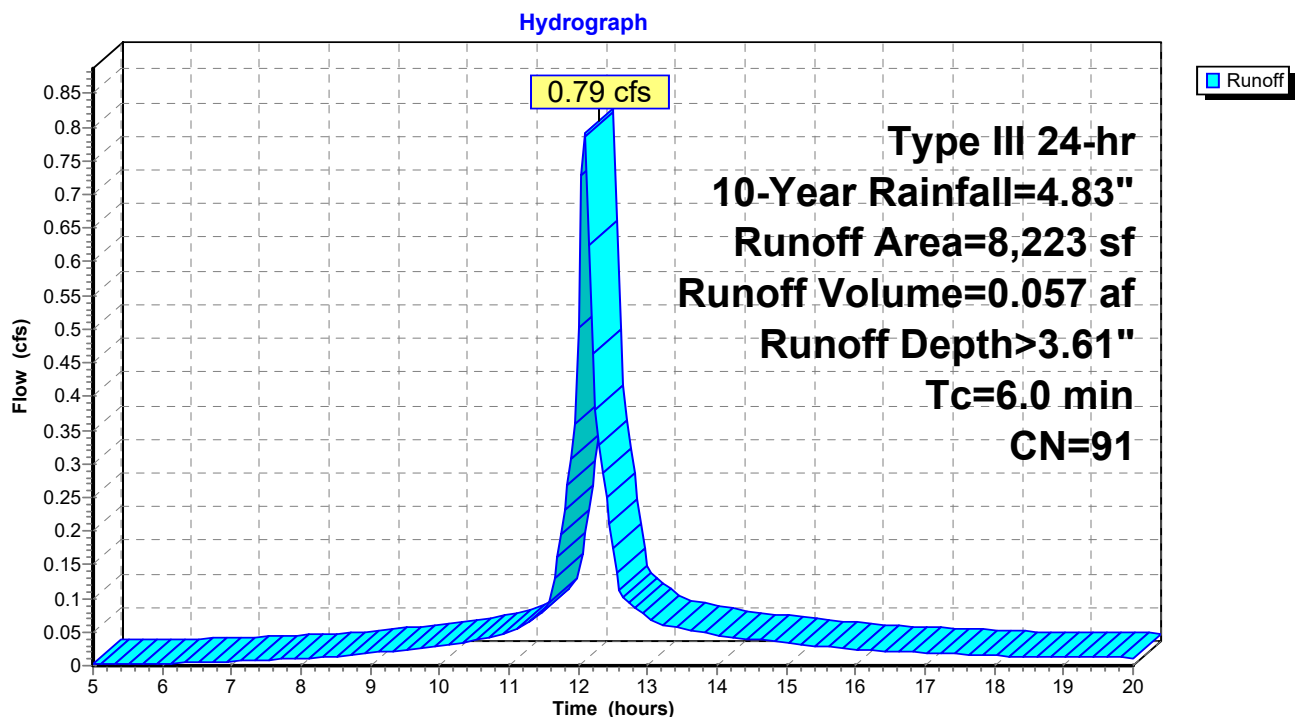
Runoff = 0.79 cfs @ 12.09 hrs, Volume= 0.057 af, Depth> 3.61"
Routed to Pond 76P : CB 70

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

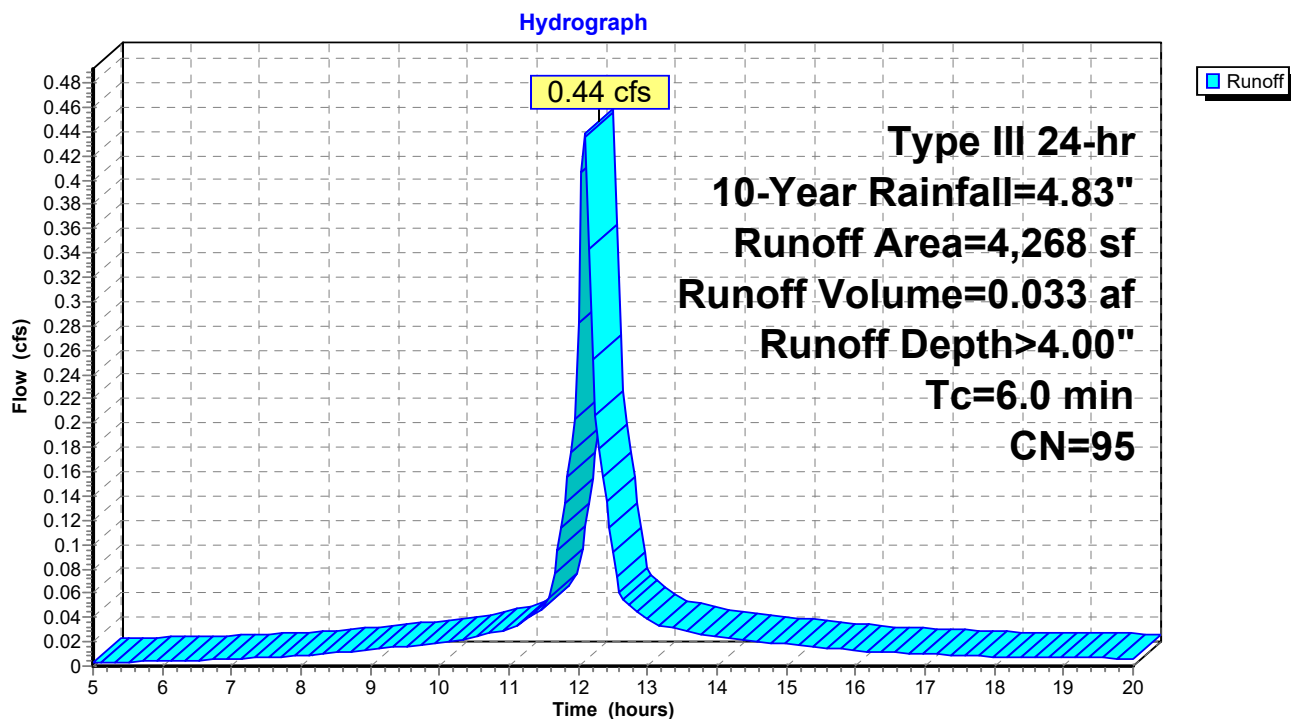
Runoff = 0.44 cfs @ 12.09 hrs, Volume= 0.033 af, Depth> 4.00"
Routed to Pond 77P : CB 71

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



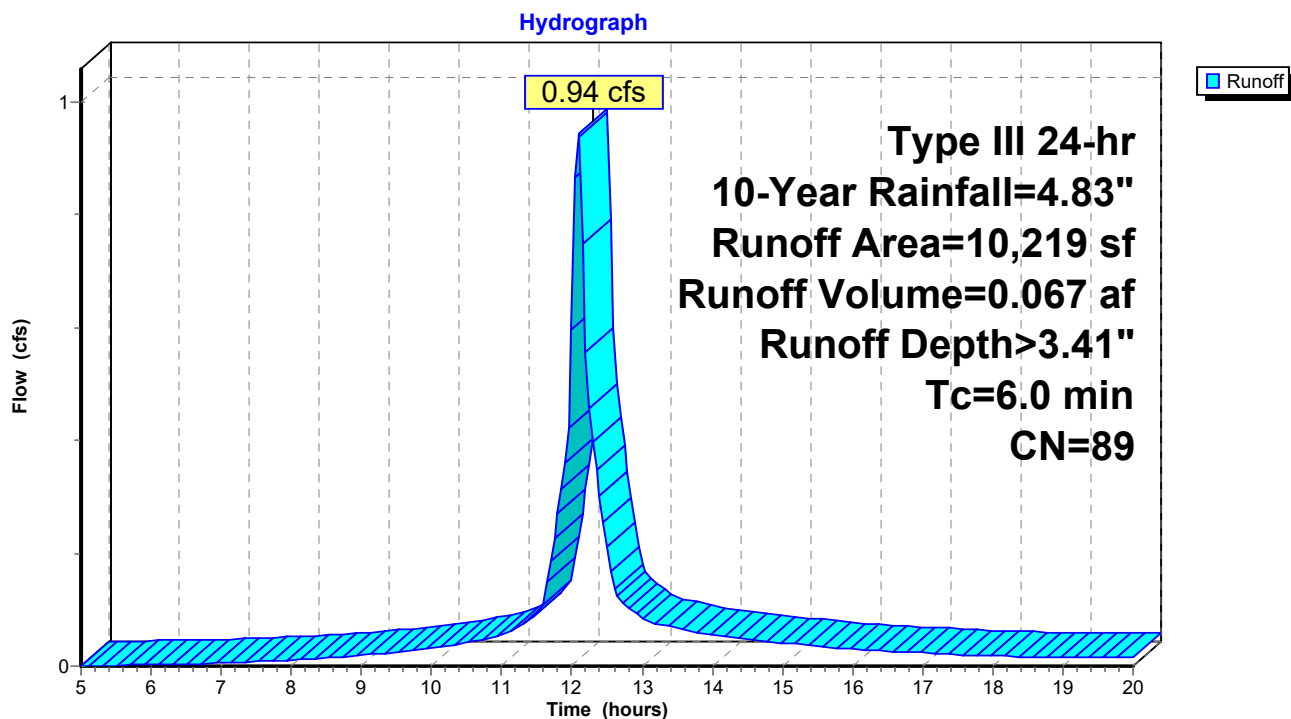
Summary for Subcatchment 75S: P3Q

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

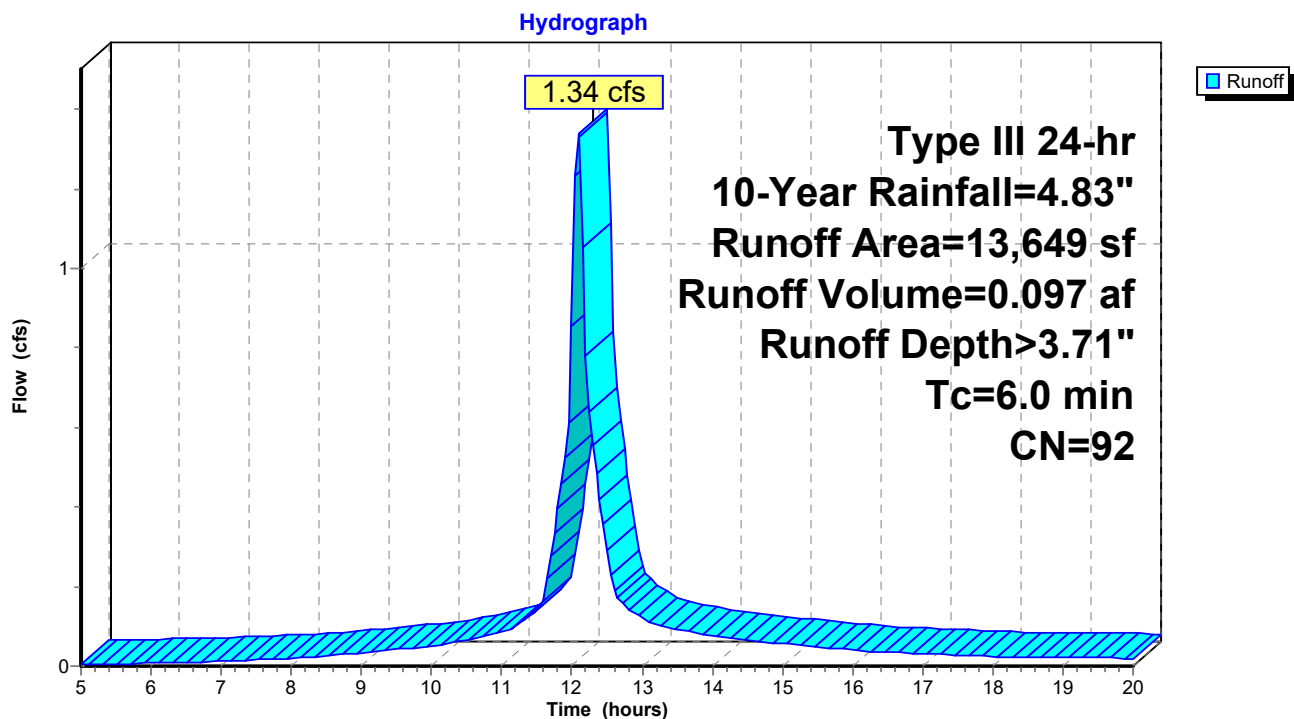
Summary for Subcatchment 76S: P3R

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

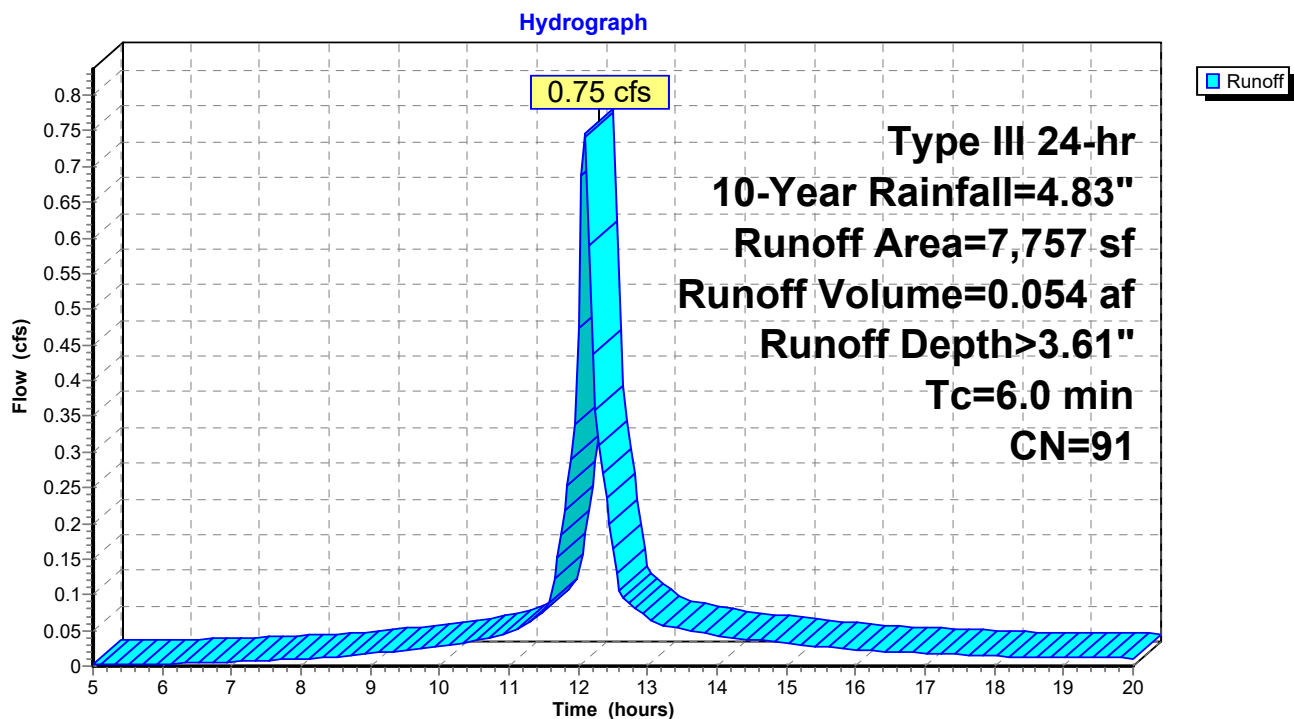
Summary for Subcatchment 77S: P3S

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

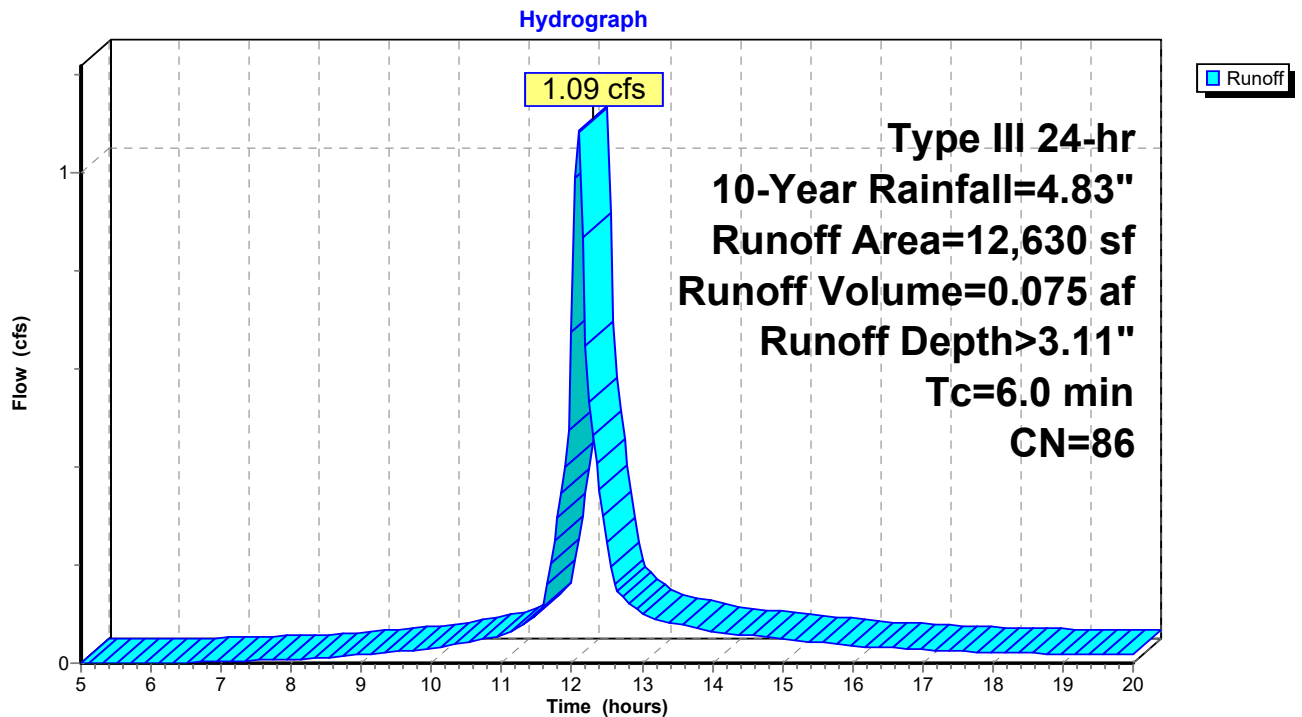
Runoff = 1.09 cfs @ 12.09 hrs, Volume= 0.075 af, Depth> 3.11"
Routed to Pond 112P : CB 45

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



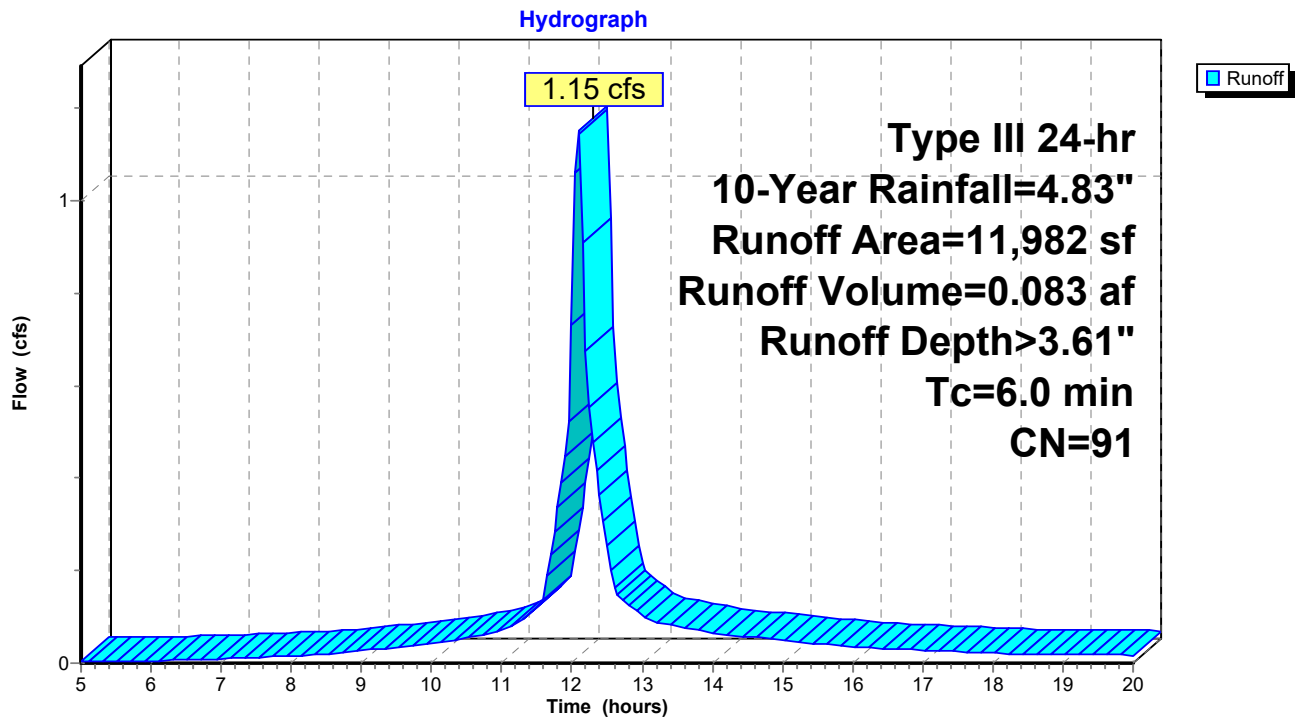
Summary for Subcatchment 79S: P1T

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

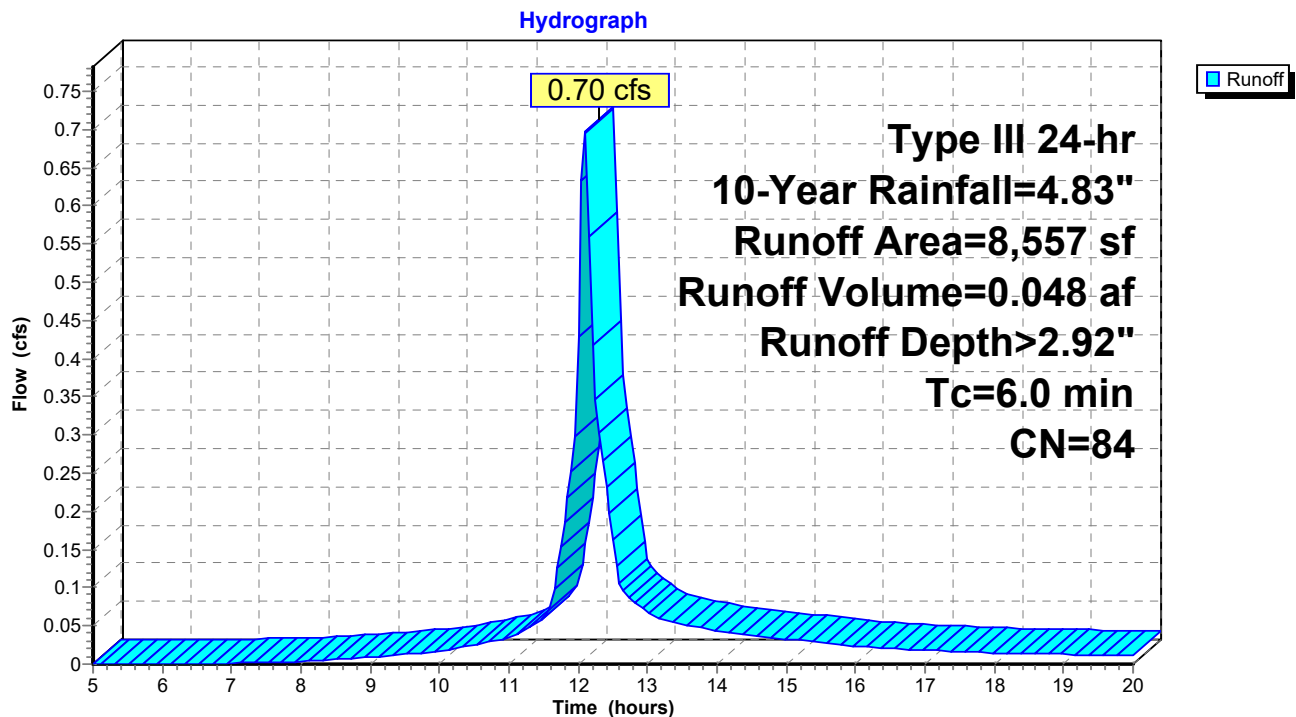
Runoff = 0.70 cfs @ 12.09 hrs, Volume= 0.048 af, Depth> 2.92"
Routed to Pond 125P : CB 36

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

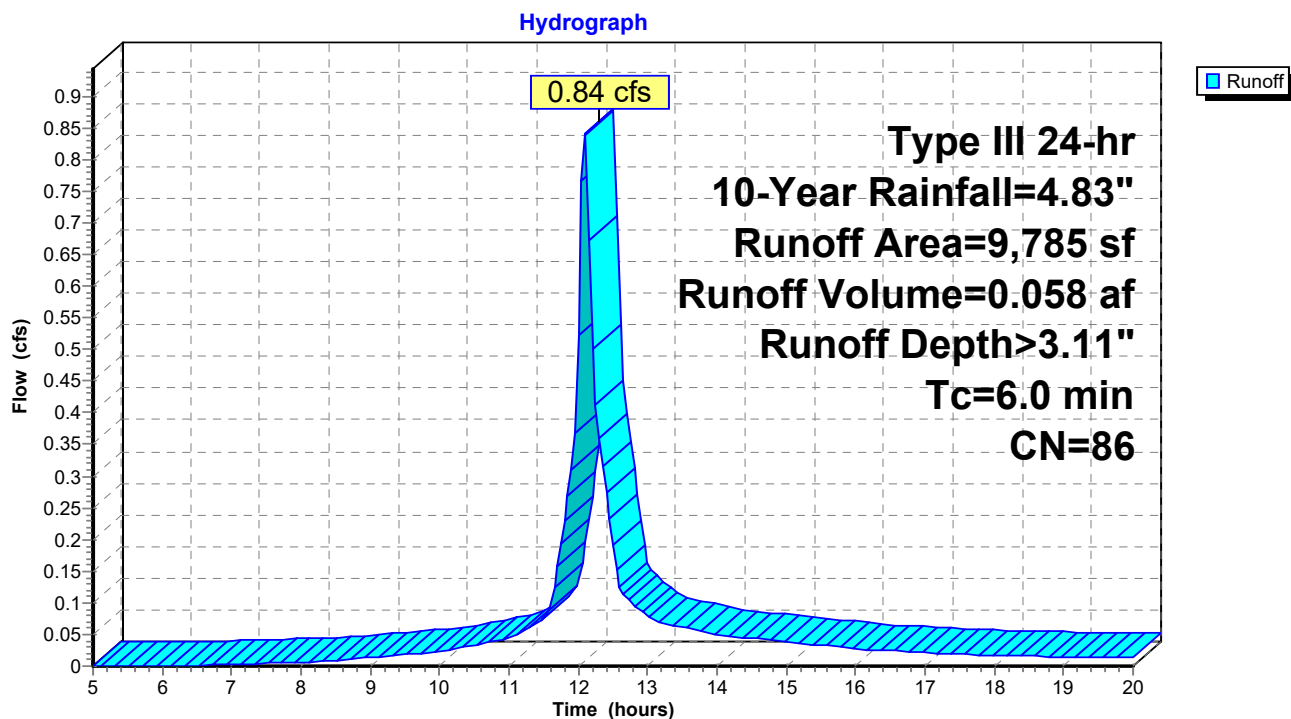
Runoff = 0.84 cfs @ 12.09 hrs, Volume= 0.058 af, Depth> 3.11"
Routed to Pond 126P : CB 37

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



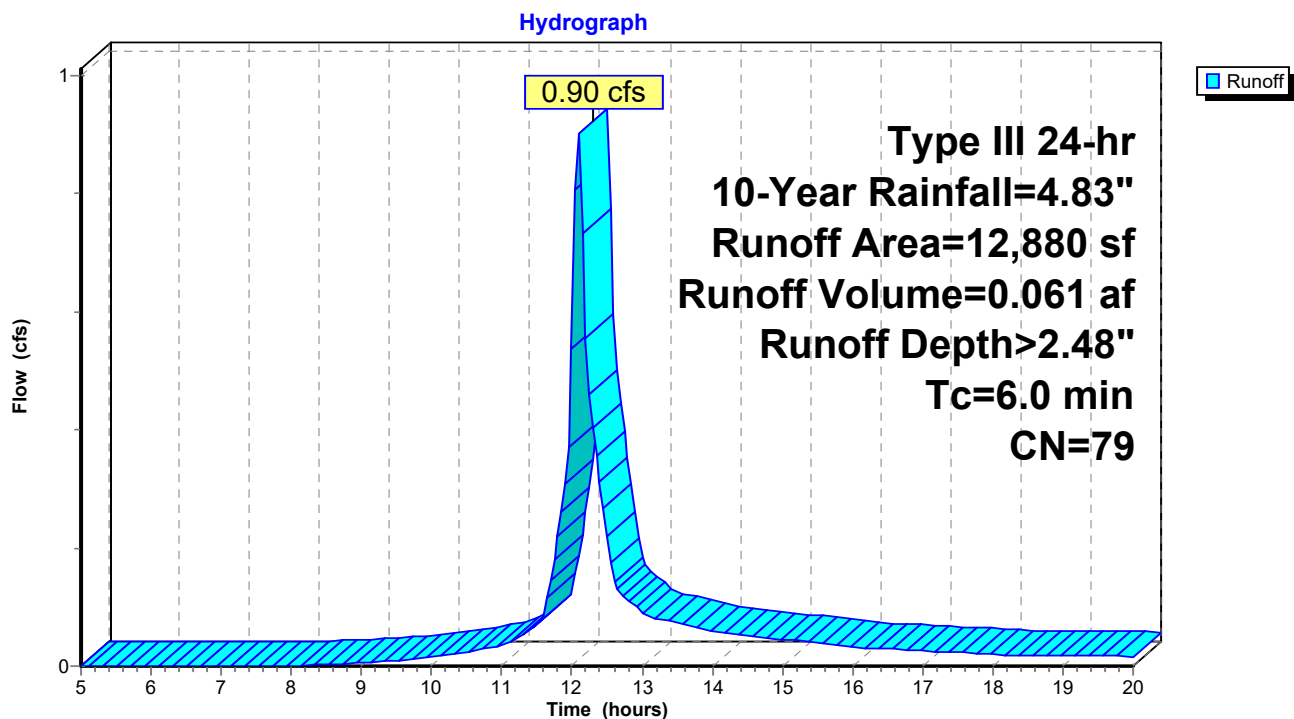
Summary for Subcatchment 82S: P3SS

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

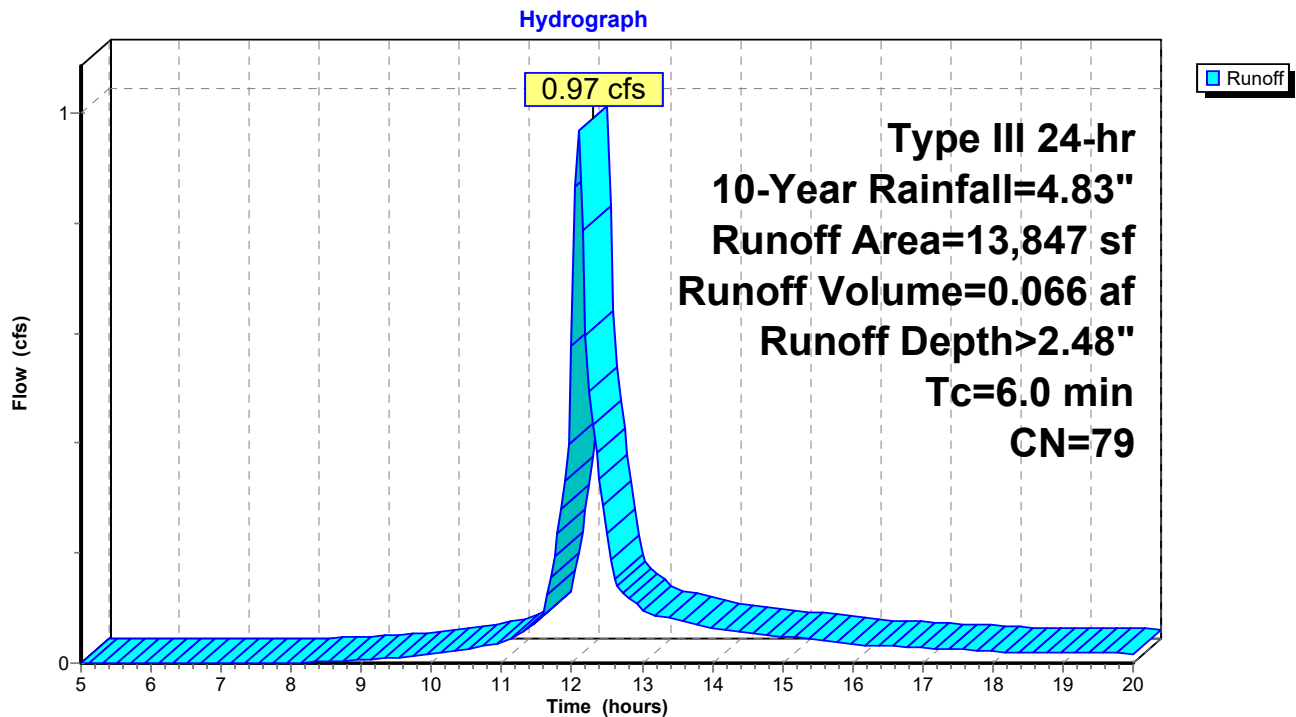
Runoff = 0.97 cfs @ 12.09 hrs, Volume= 0.066 af, Depth> 2.48"
 Routed to Pond 82P : Constructed Wetland 2

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

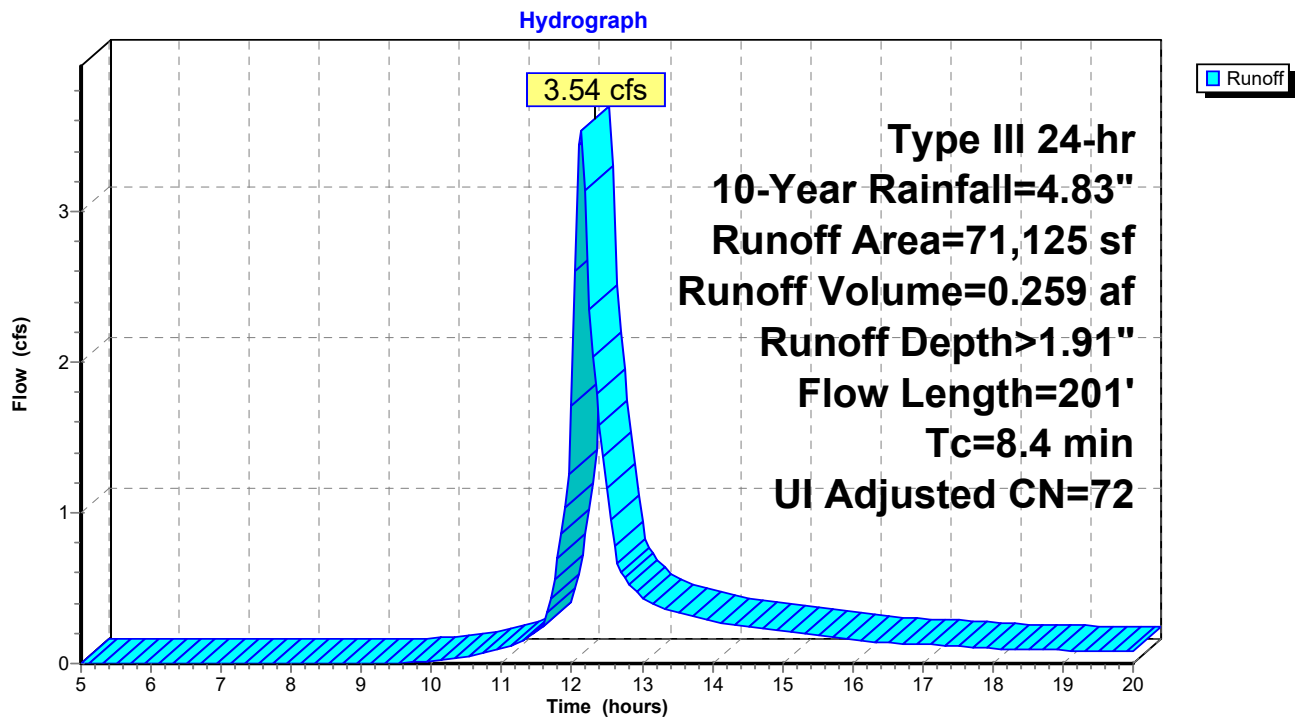
Runoff = 3.54 cfs @ 12.12 hrs, Volume= 0.259 af, Depth> 1.91"
 Routed to Link 60L : DP 2

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		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
1.4	68	0.0140	0.83		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.4	57	0.1200	2.42		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.9	26	0.0100	0.50		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
8.4	201	Total			

Subcatchment 84S: P2AA



Summary for Subcatchment 85S: (new Subcat)

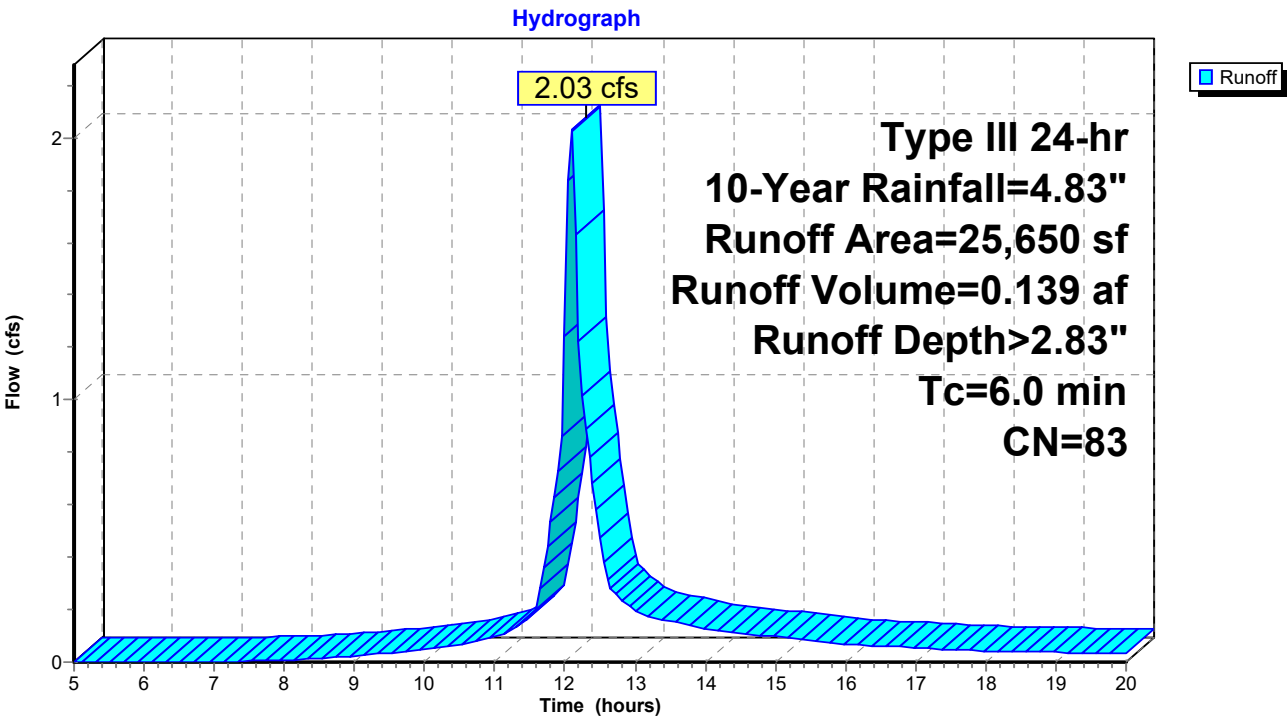
Runoff = 2.03 cfs @ 12.09 hrs, Volume= 0.139 af, Depth> 2.83"
Routed to Pond 86P : Sub. Inf. 6

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

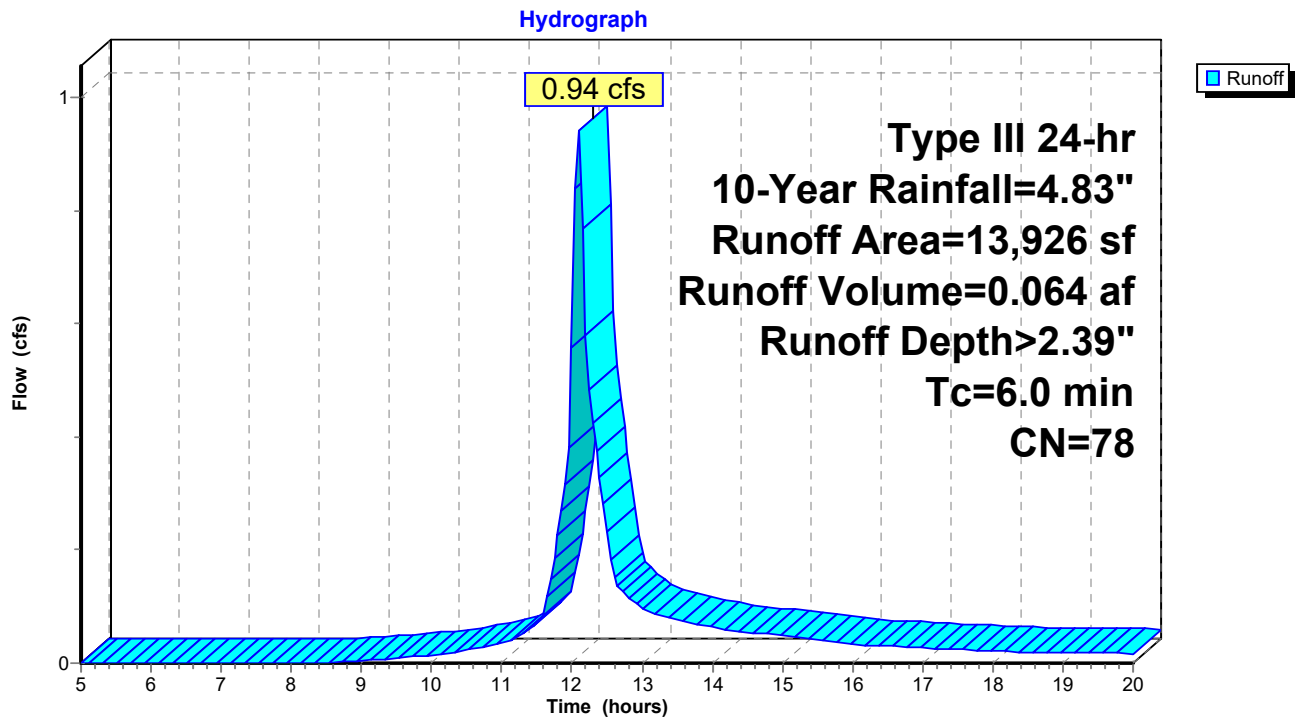
Runoff = 0.94 cfs @ 12.09 hrs, Volume= 0.064 af, Depth> 2.39"
 Routed to Pond 140P : CB 31

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

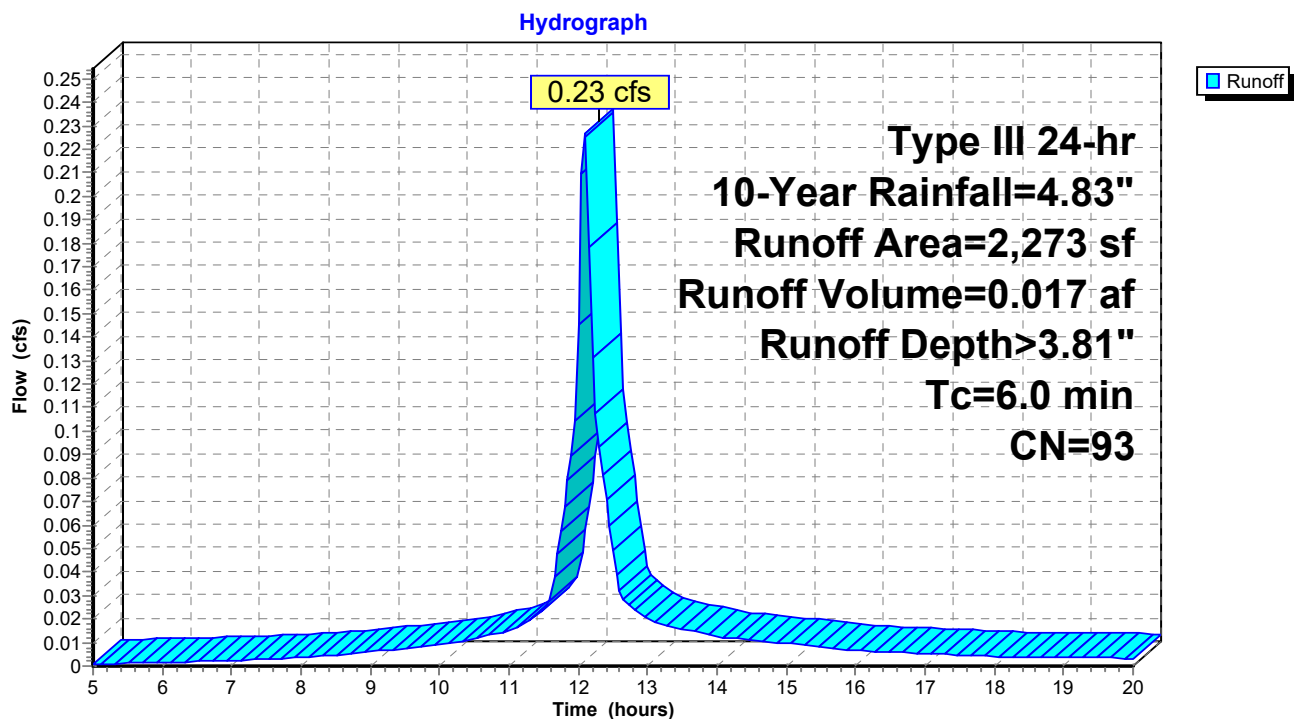
Runoff = 0.23 cfs @ 12.09 hrs, Volume= 0.017 af, Depth> 3.81"
Routed to Pond 89P : CB 74

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



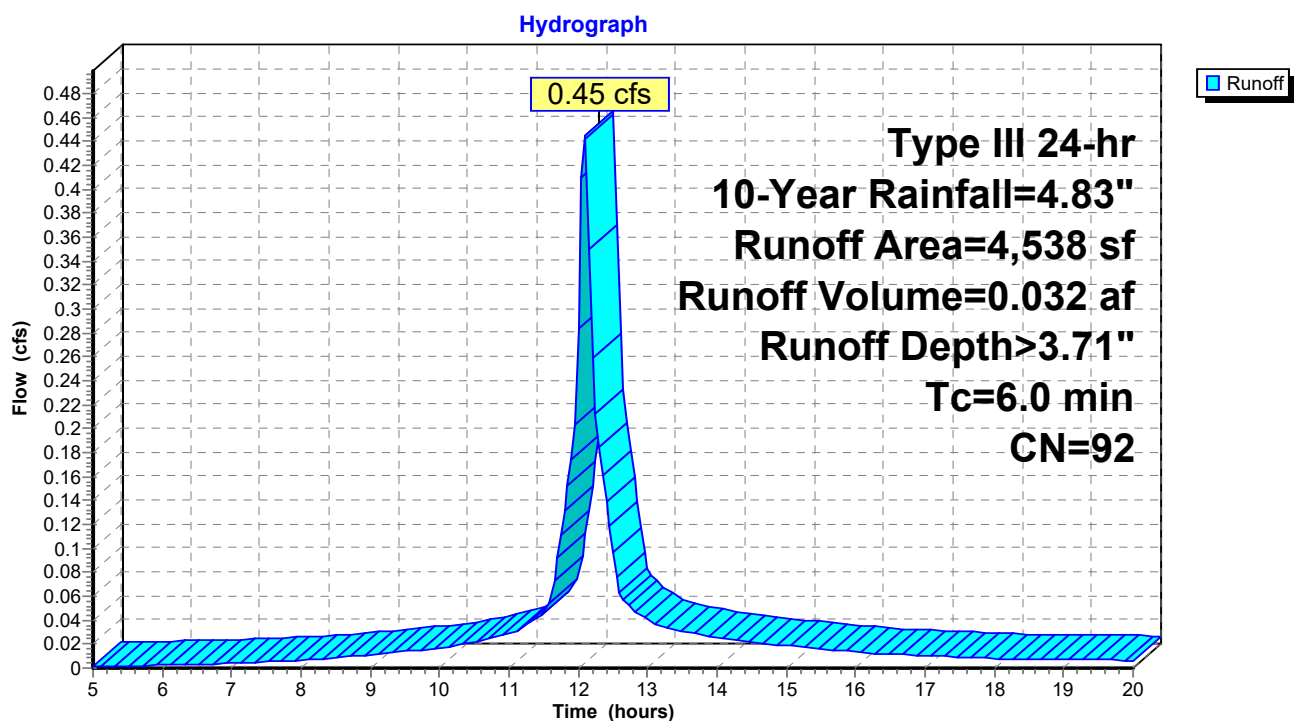
Summary for Subcatchment 88S: P3B

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

Summary for Subcatchment 89S: P3AAA

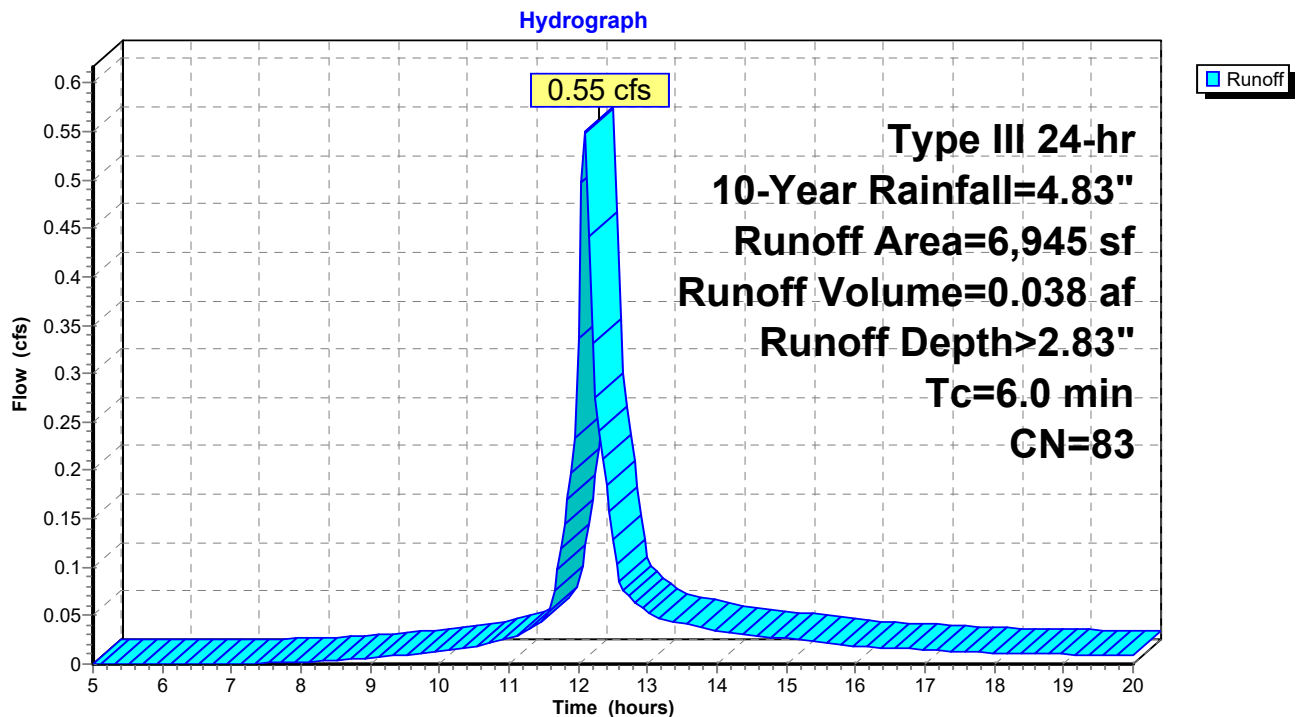
Runoff = 0.55 cfs @ 12.09 hrs, Volume= 0.038 af, Depth> 2.83"
Routed to Pond 151P : CB 22

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

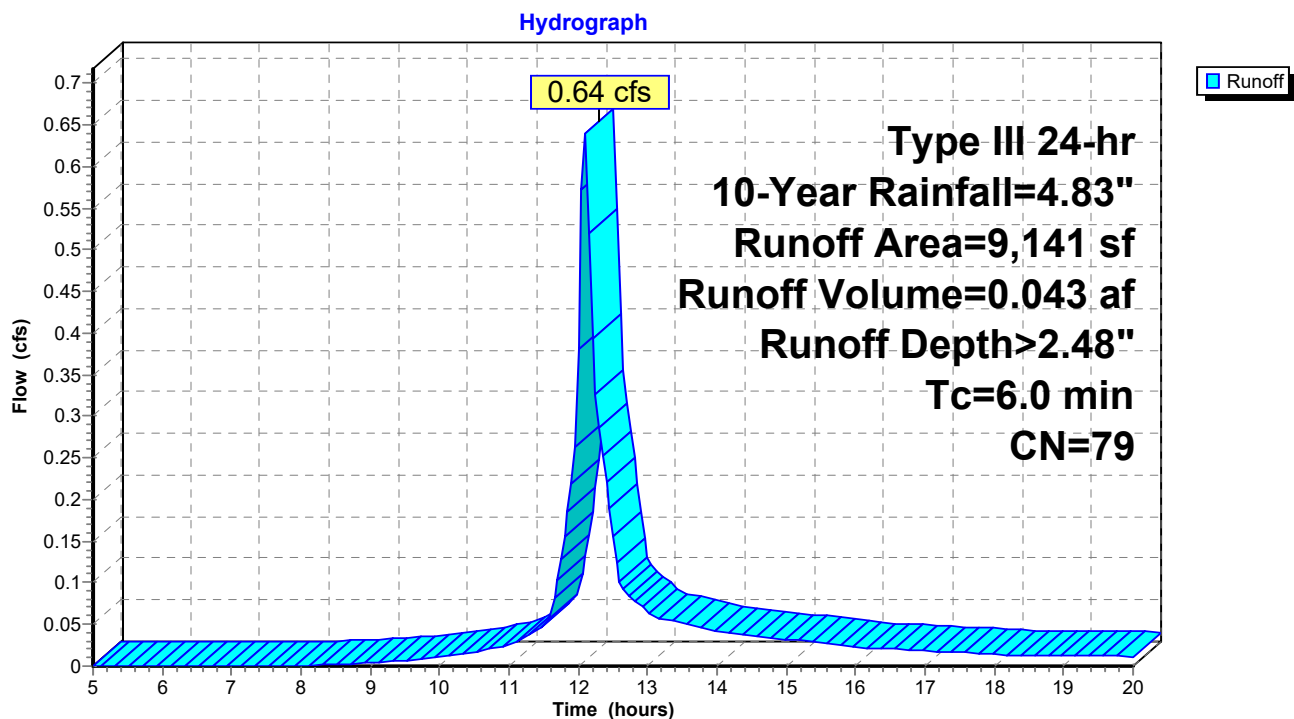
Runoff = 0.64 cfs @ 12.09 hrs, Volume= 0.043 af, Depth> 2.48"
Routed to Pond 152P : CB 23

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



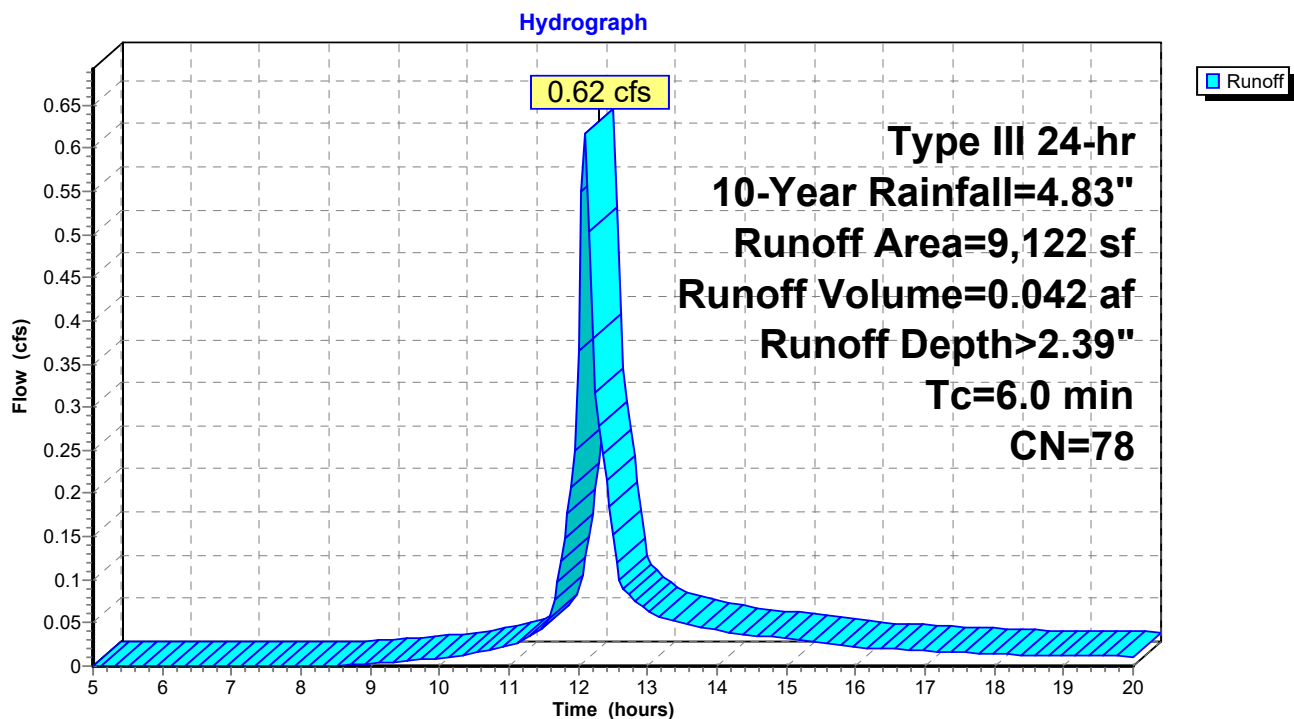
Summary for Subcatchment 91S: P3GGG

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

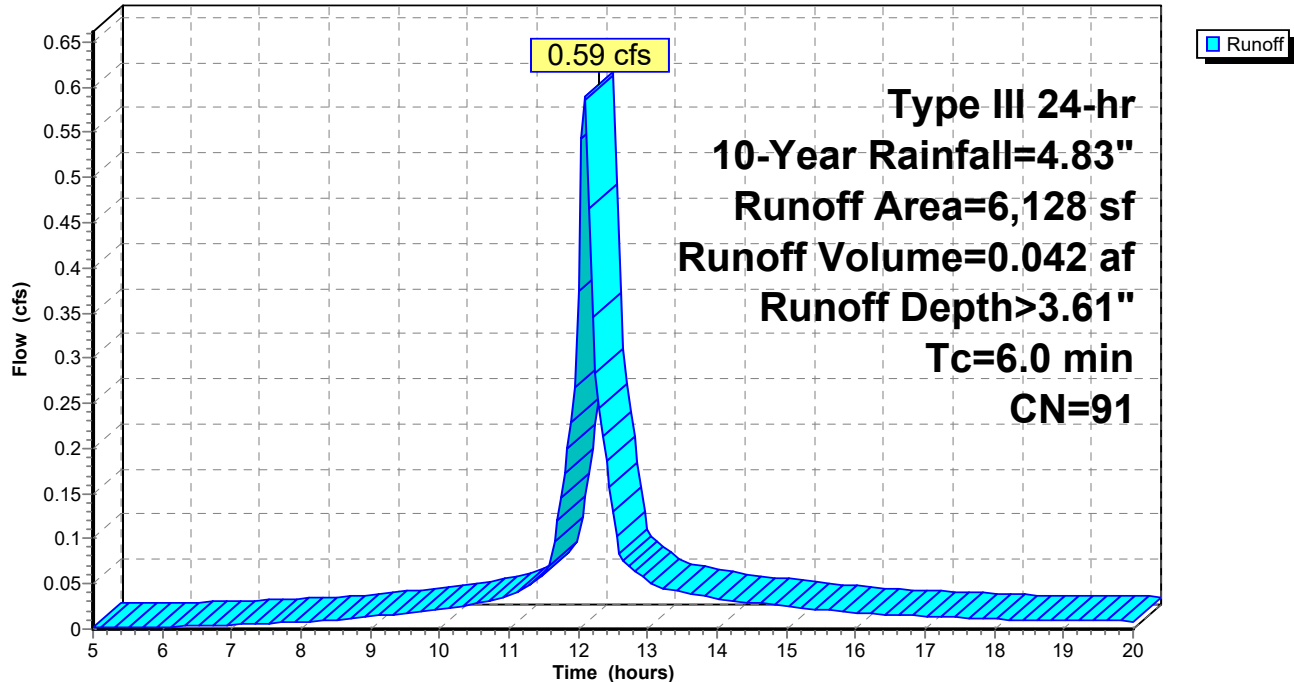
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.83"

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

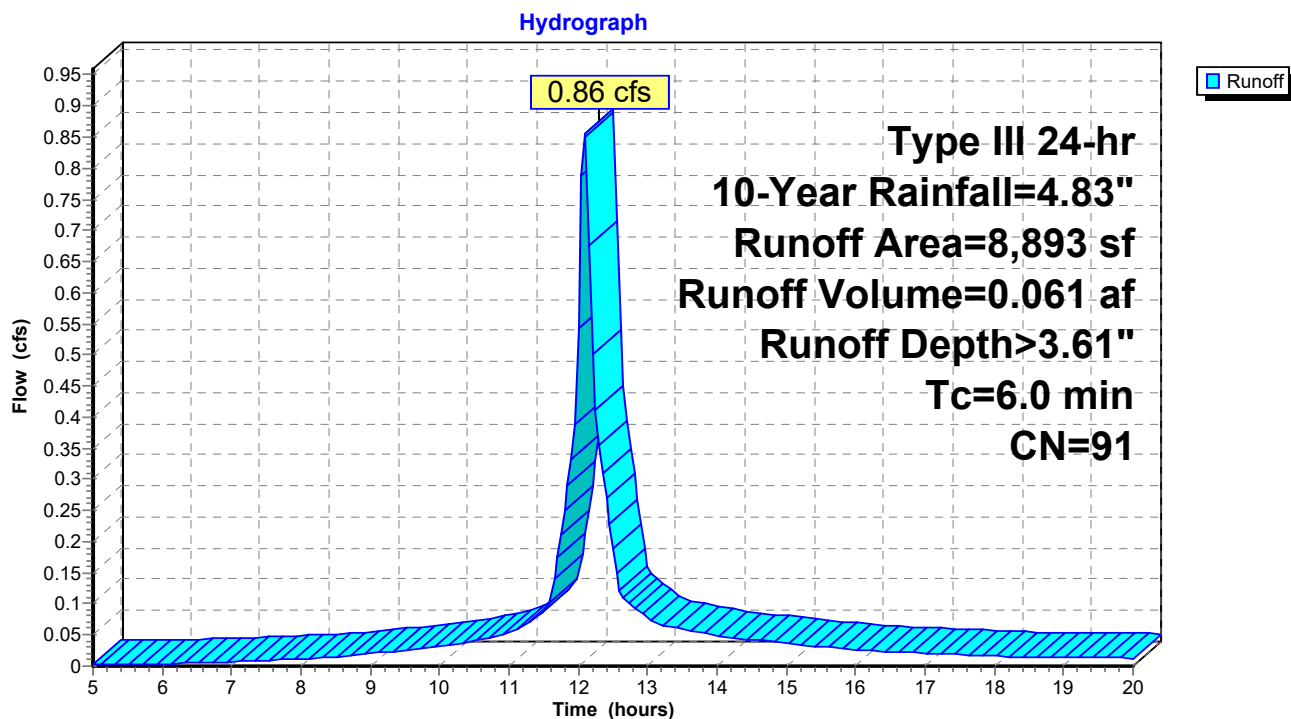
Runoff = 0.86 cfs @ 12.09 hrs, Volume= 0.061 af, Depth> 3.61"
Routed to Pond 94P : CB 77

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

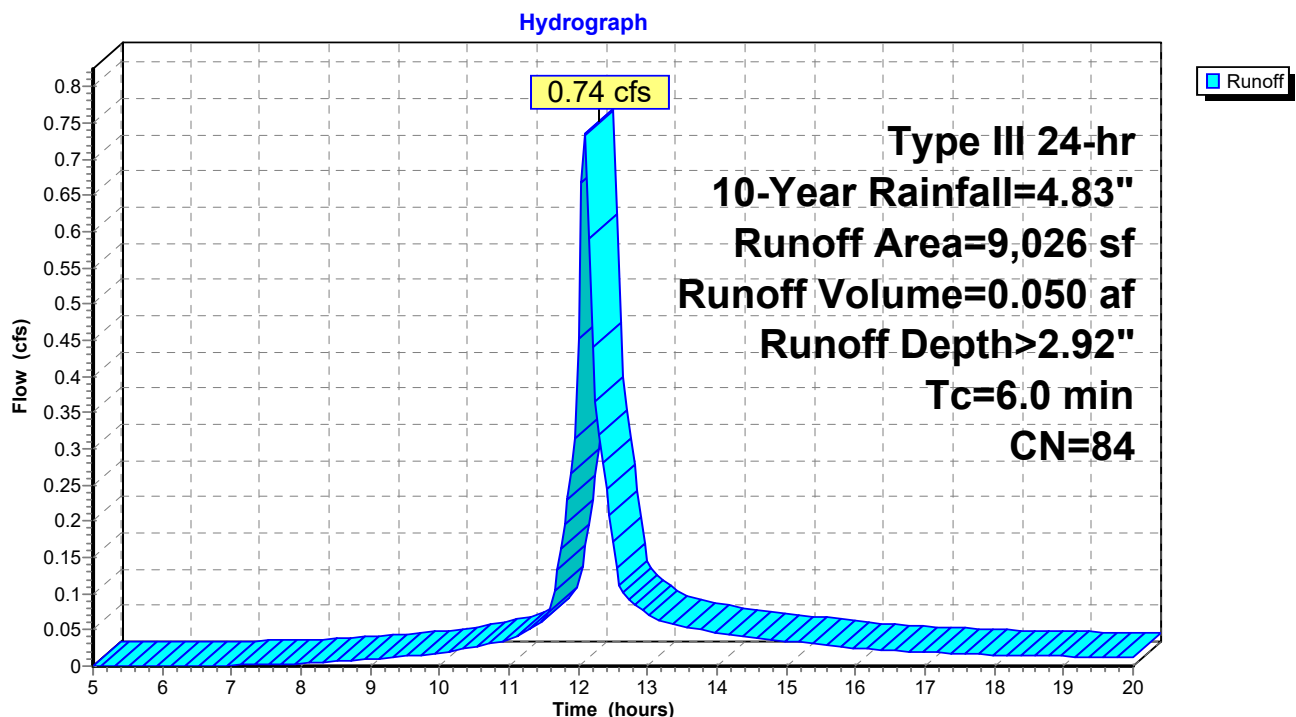
Runoff = 0.74 cfs @ 12.09 hrs, Volume= 0.050 af, Depth> 2.92"
Routed to Pond 154P : CB 18

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

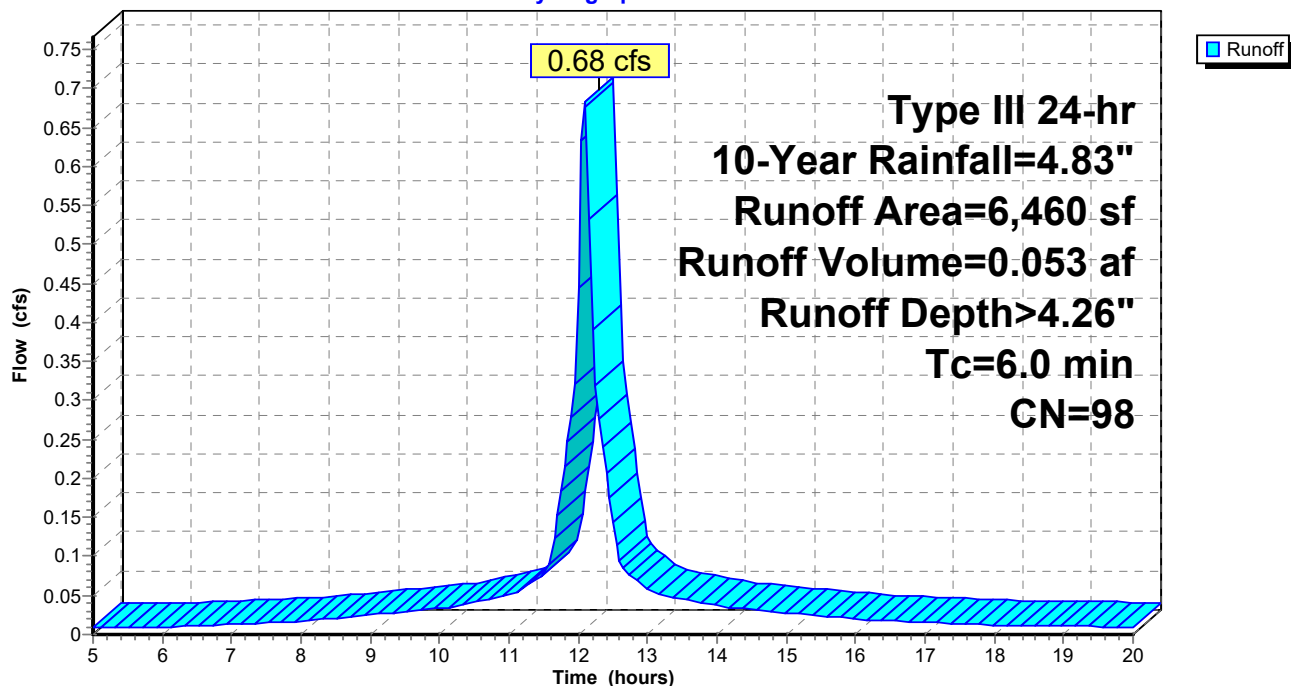
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.83"

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



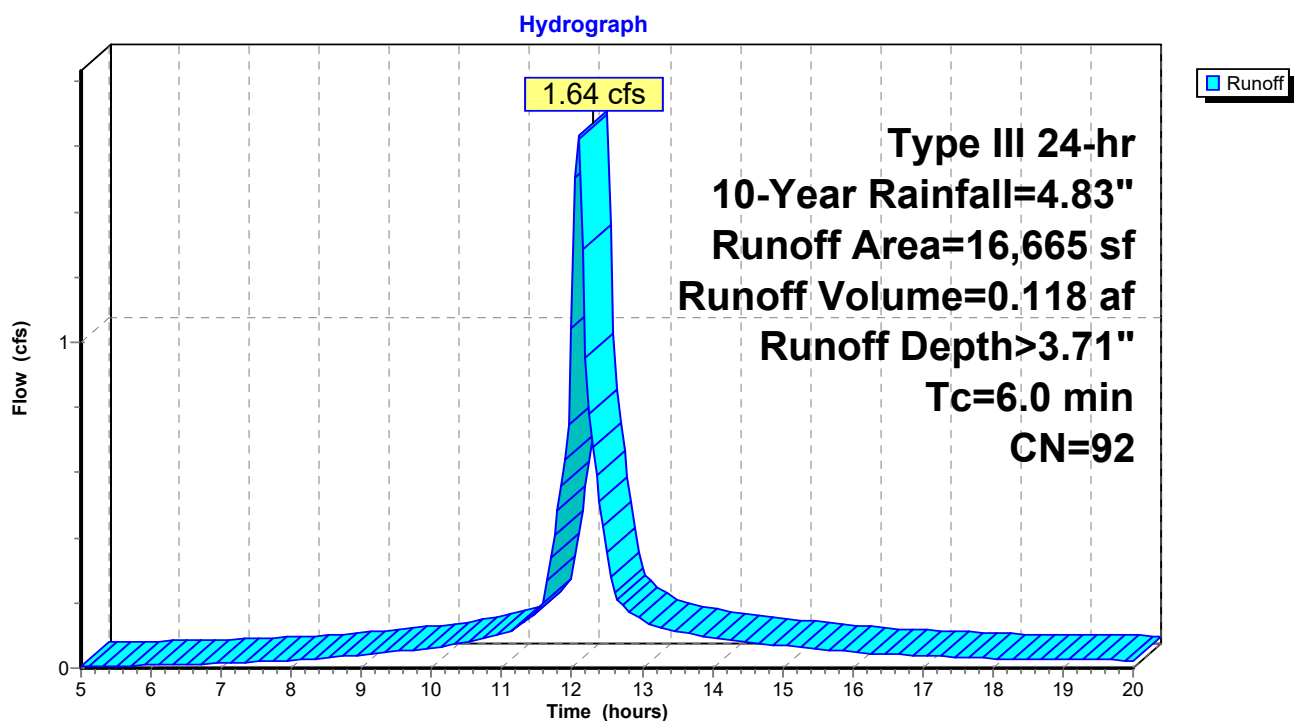
Summary for Subcatchment 97S: P3G

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

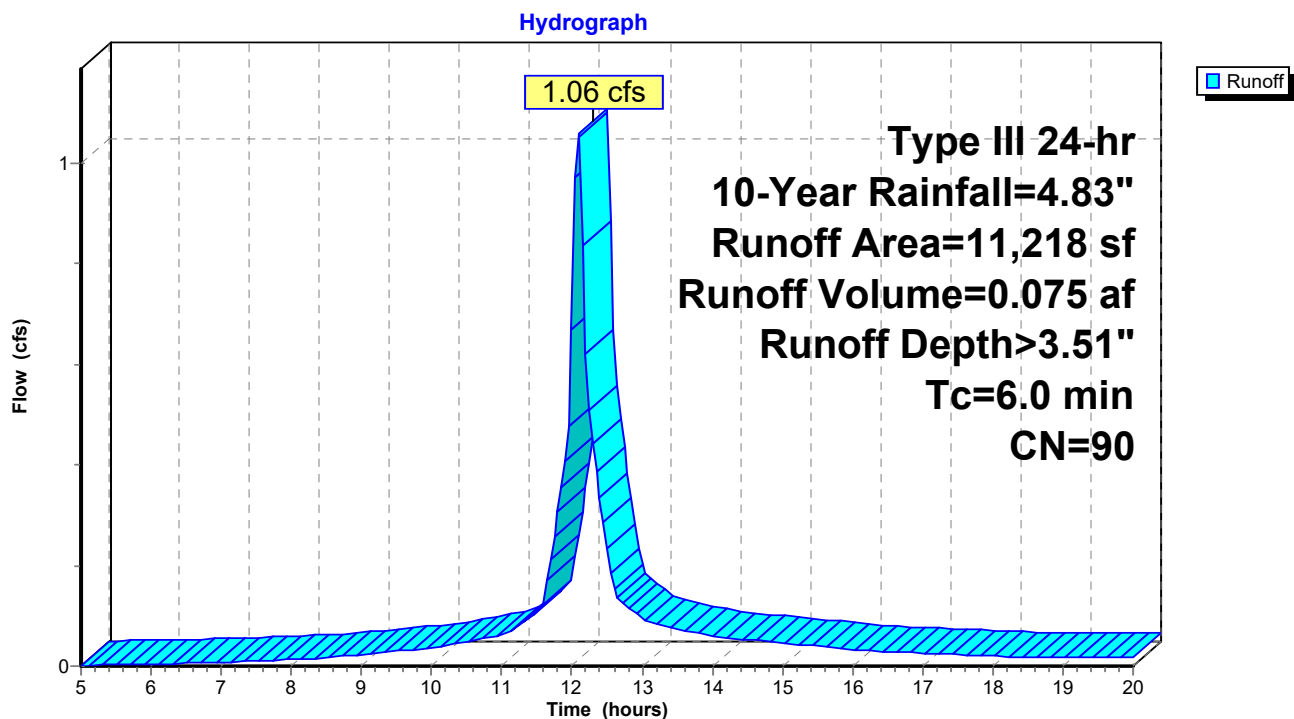
Summary for Subcatchment 98S: P3H

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

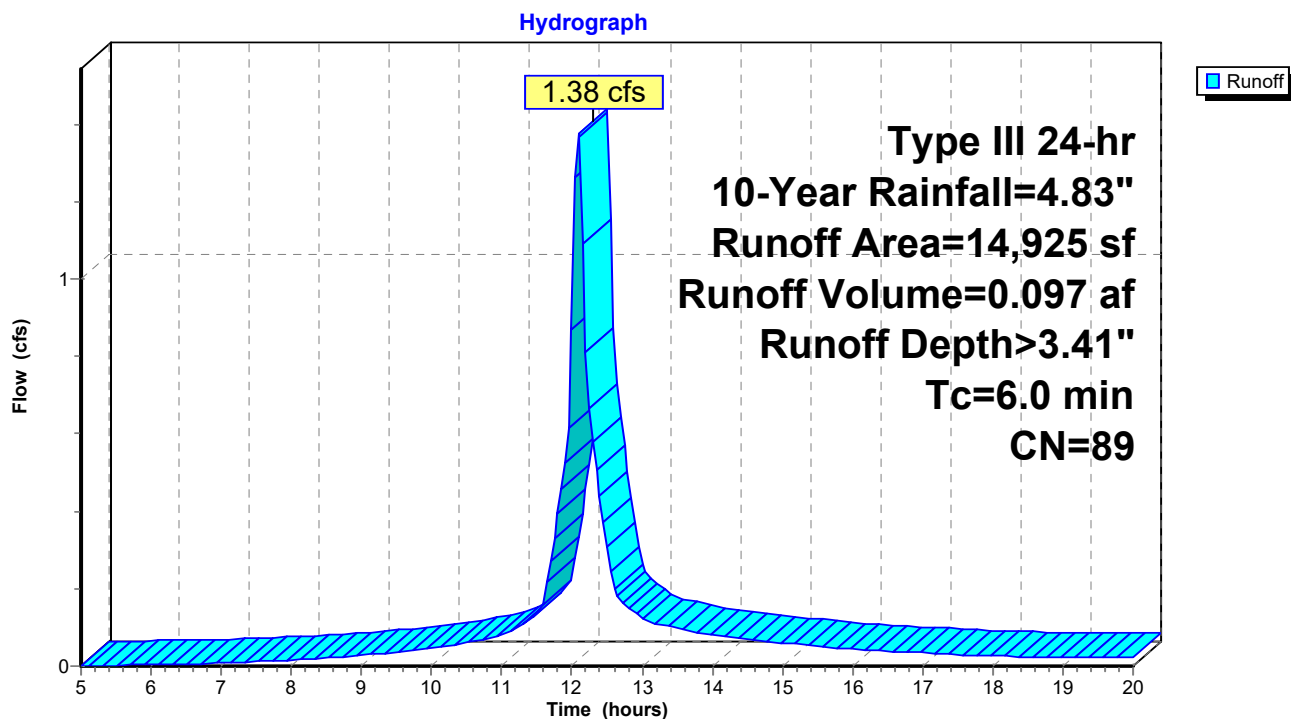
Runoff = 1.38 cfs @ 12.09 hrs, Volume= 0.097 af, Depth> 3.41"
Routed to Pond 104P : CB 83

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

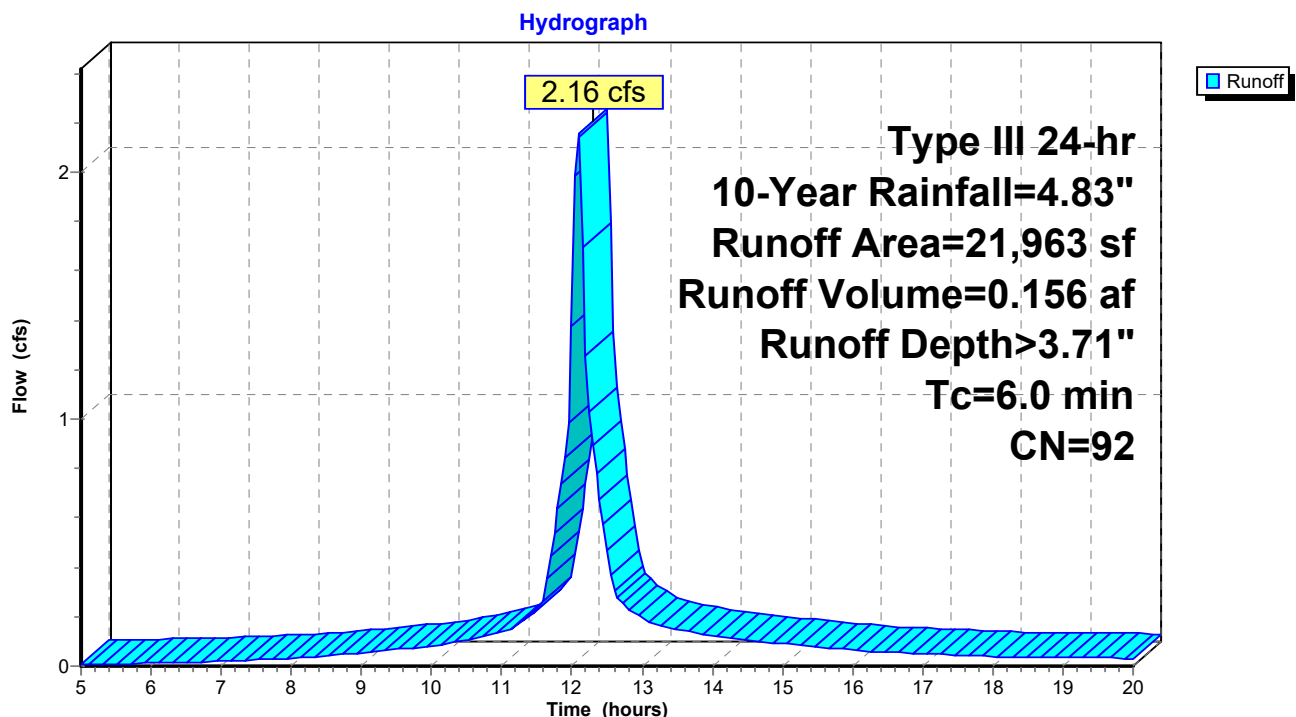
Runoff = 2.16 cfs @ 12.09 hrs, Volume= 0.156 af, Depth> 3.71"
Routed to Pond 105P : CB 82

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



Summary for Subcatchment 107S: P3E

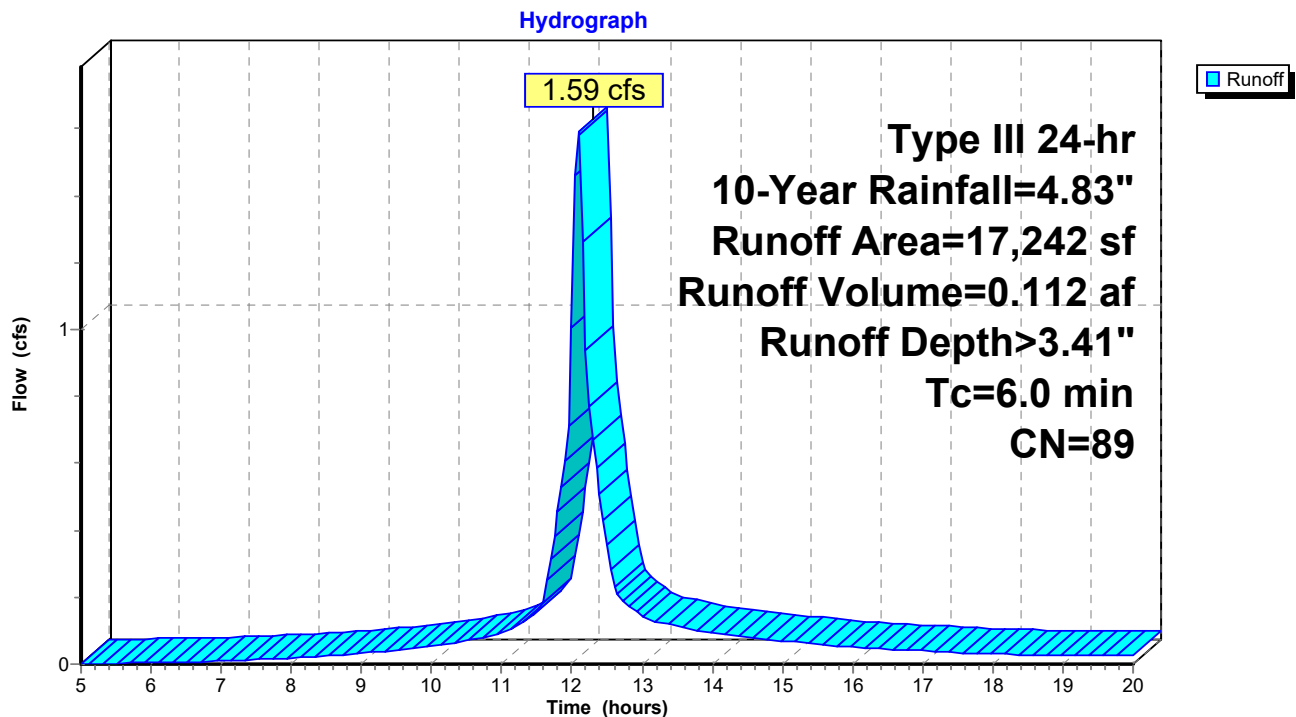
Runoff = 1.59 cfs @ 12.09 hrs, Volume= 0.112 af, Depth> 3.41"
Routed to Pond 110P : CB 78

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



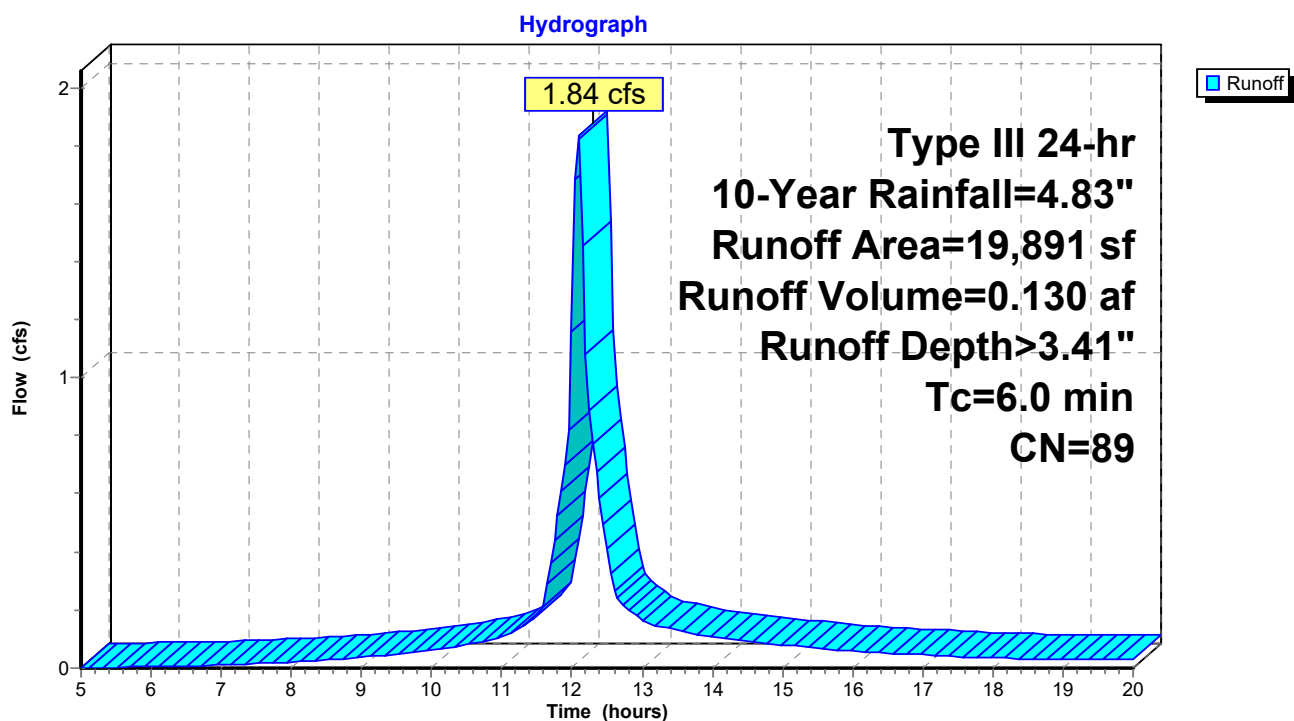
Summary for Subcatchment 108S: P3F

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

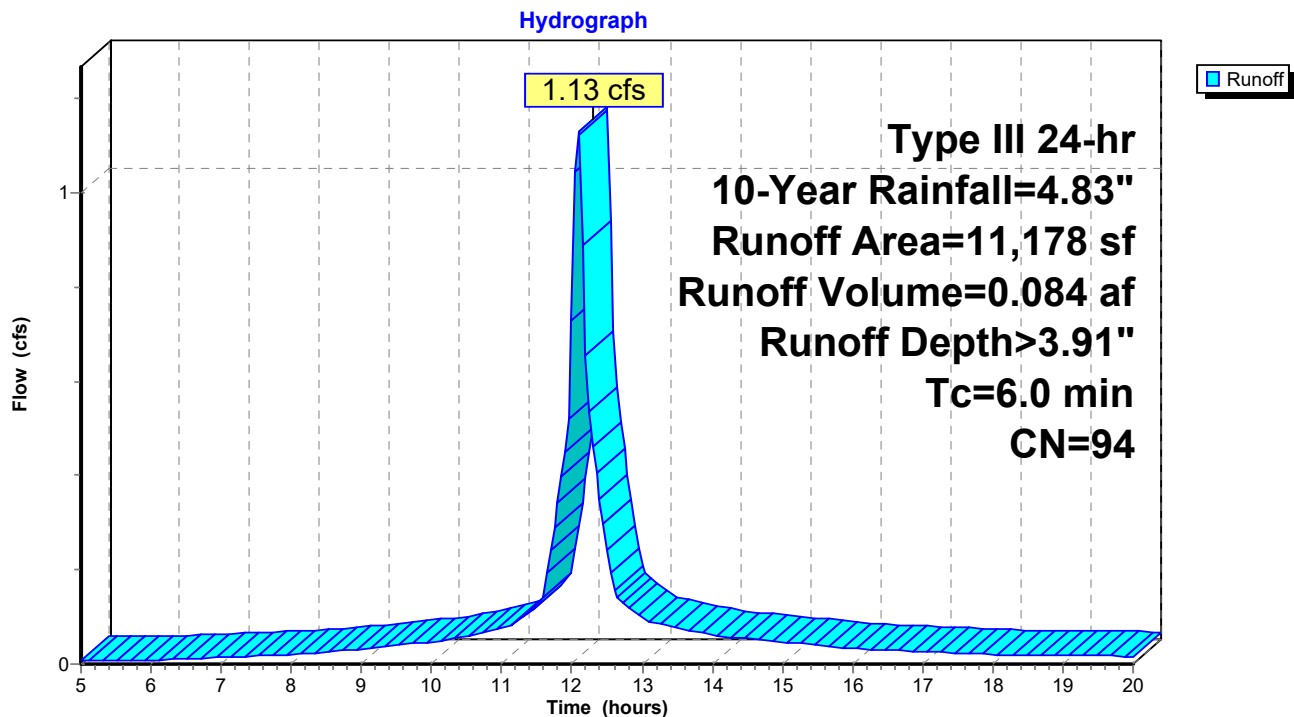
Runoff = 1.13 cfs @ 12.09 hrs, Volume= 0.084 af, Depth> 3.91"
Routed to Pond 116P : CB 90

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



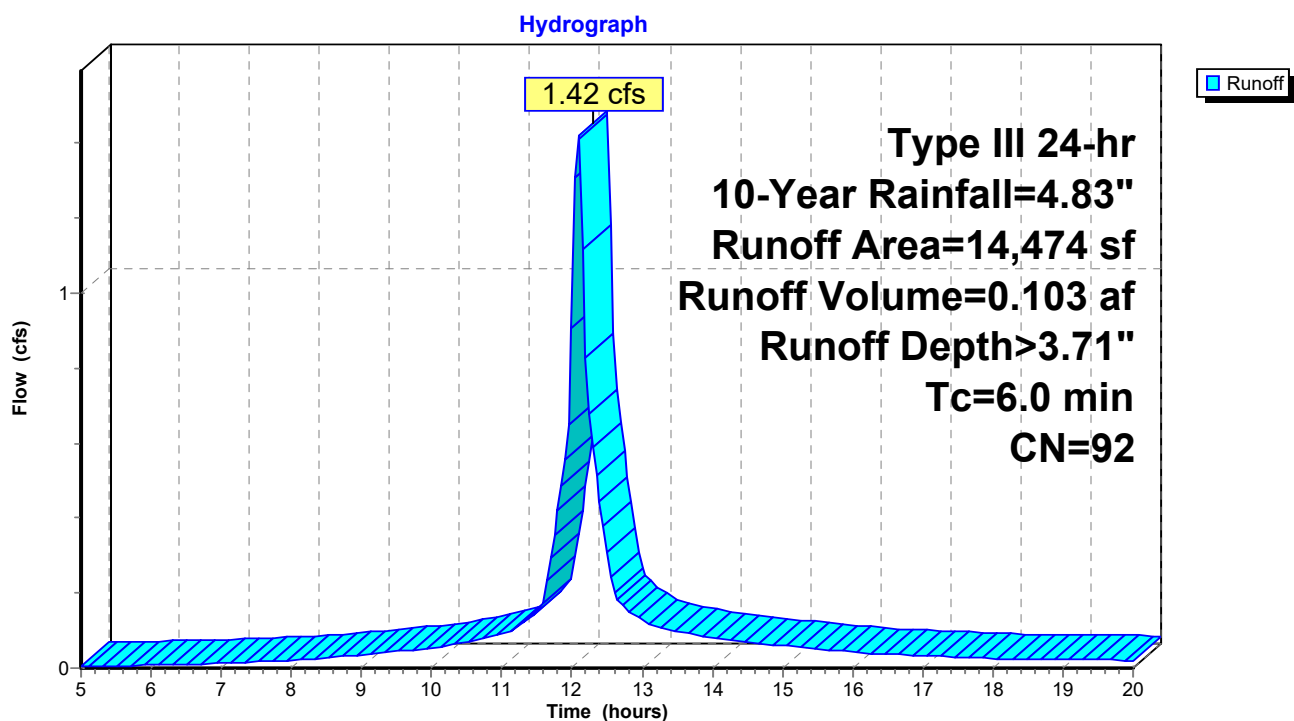
Summary for Subcatchment 110S: P3U

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

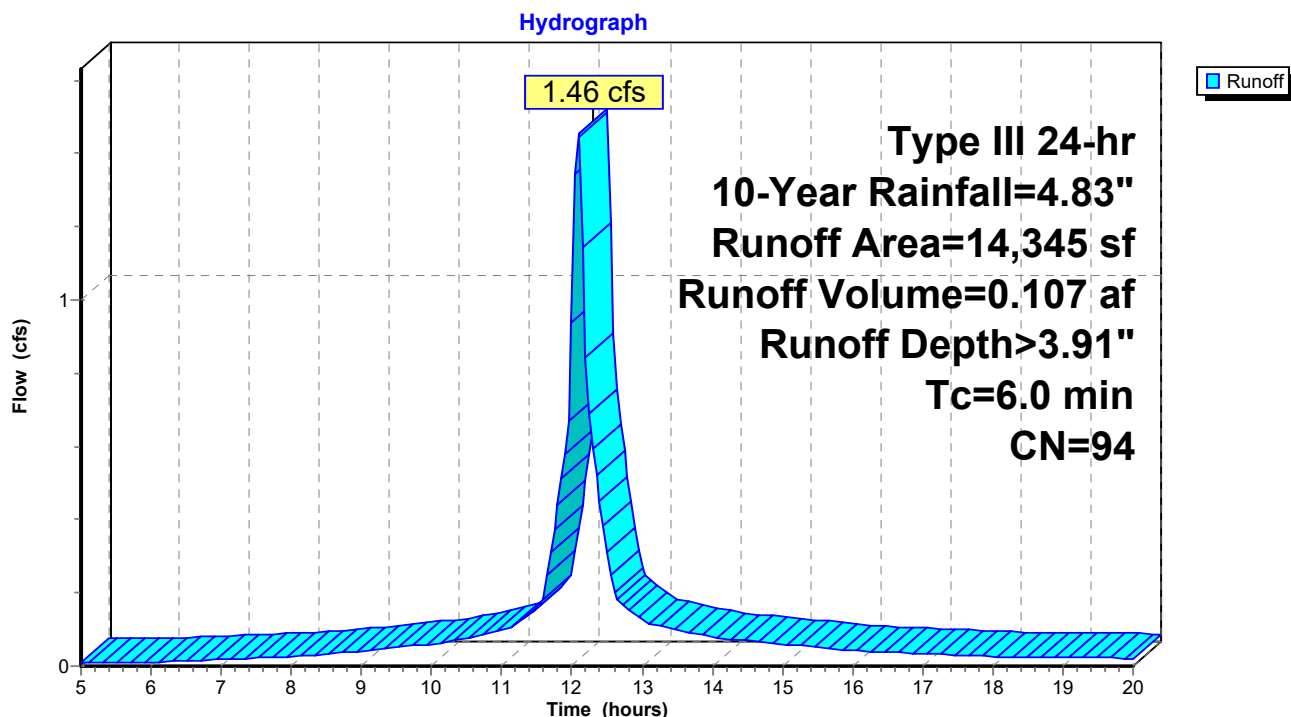
Runoff = 1.46 cfs @ 12.09 hrs, Volume= 0.107 af, Depth> 3.91"
Routed to Pond 114P : CB 94

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

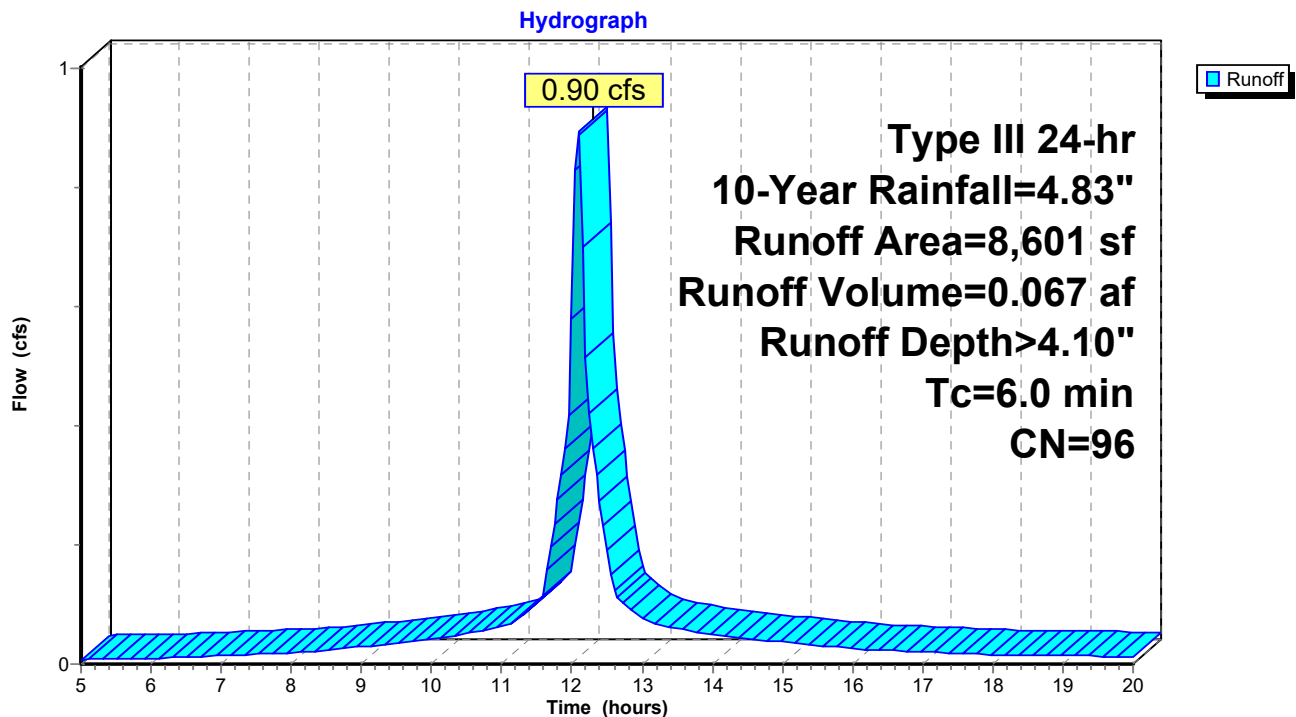
Runoff = 0.90 cfs @ 12.09 hrs, Volume= 0.067 af, Depth> 4.10"
Routed to Pond 113P : CB 95

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



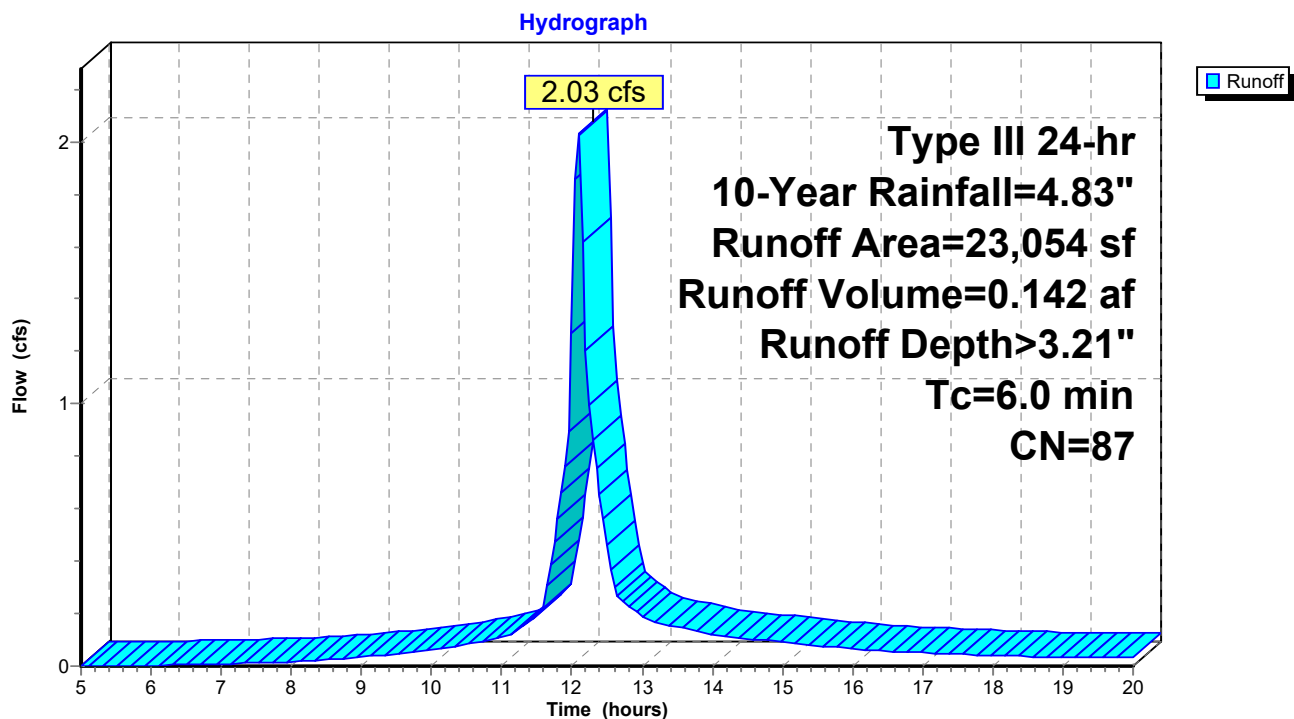
Summary for Subcatchment 125S: P3EE

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

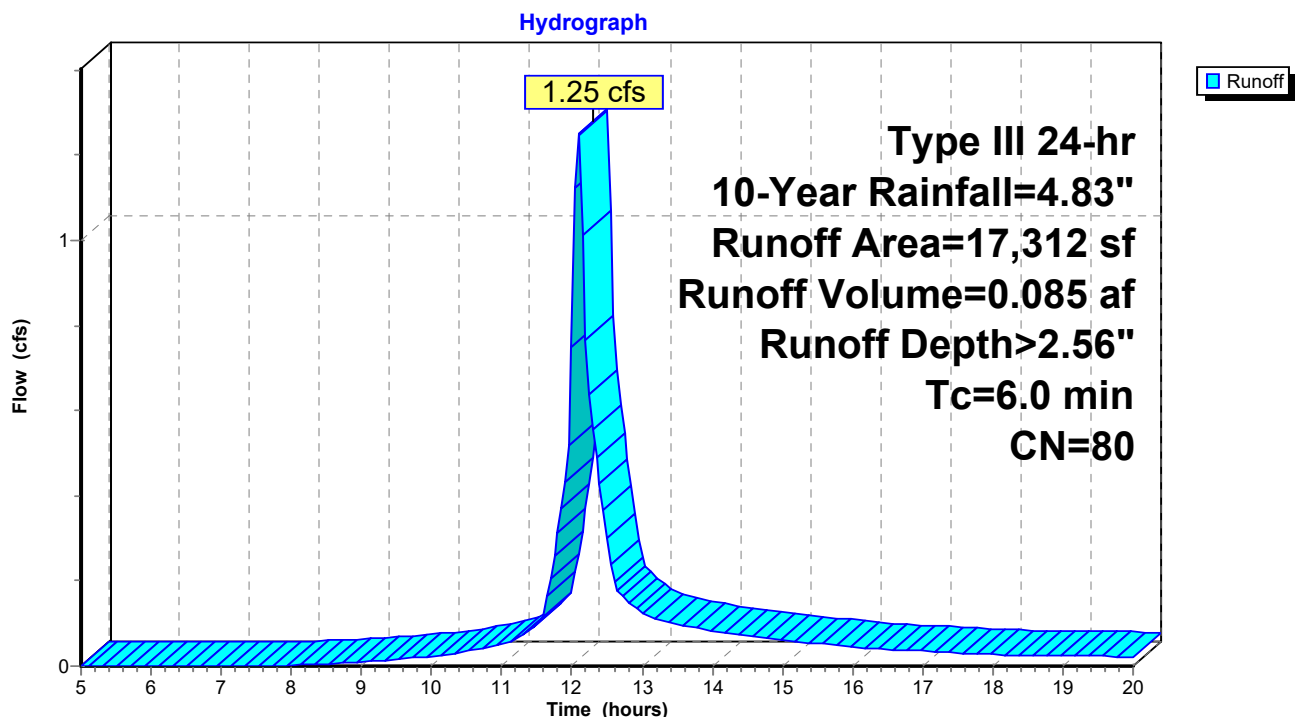
Runoff = 1.25 cfs @ 12.09 hrs, Volume= 0.085 af, Depth> 2.56"
Routed to Pond 129P : CB 34

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

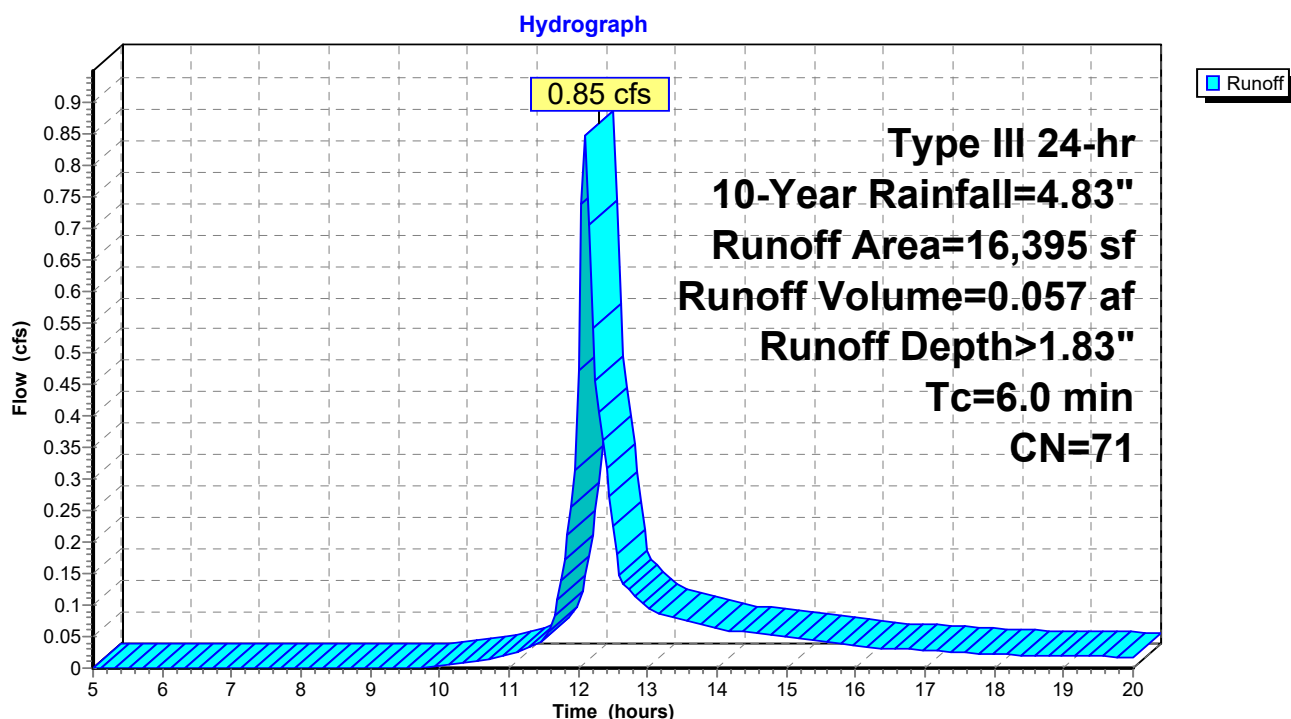
Runoff = 0.85 cfs @ 12.10 hrs, Volume= 0.057 af, Depth> 1.83"
Routed to Pond 132P : CB 33

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

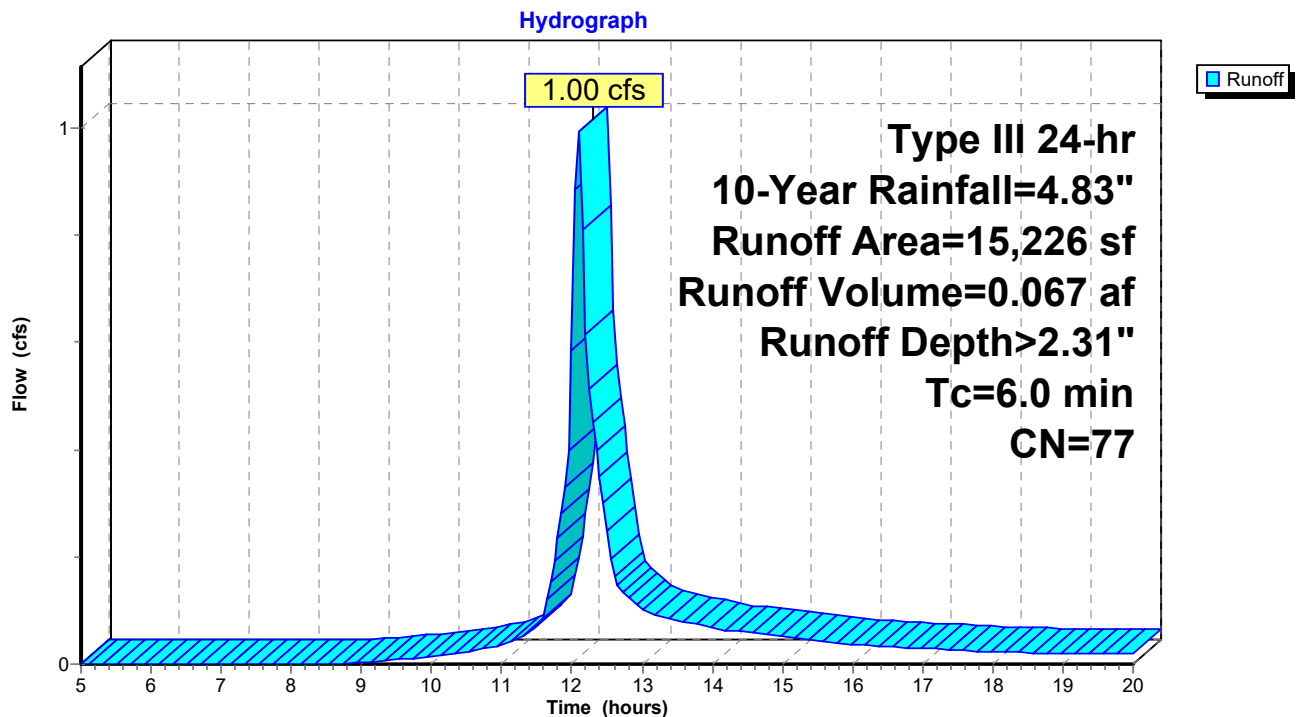
Runoff = 1.00 cfs @ 12.09 hrs, Volume= 0.067 af, Depth> 2.31"
Routed to Pond 131P : CB 35

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



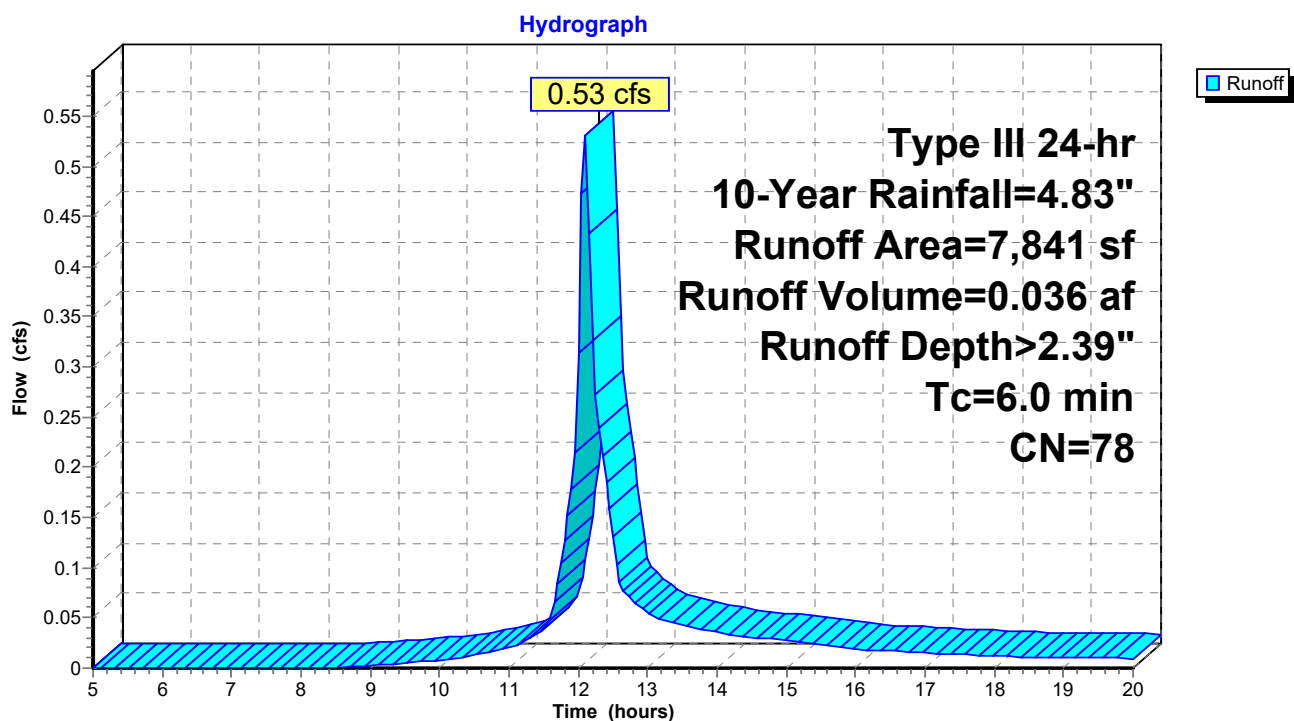
Summary for Subcatchment 129S: P3MM

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

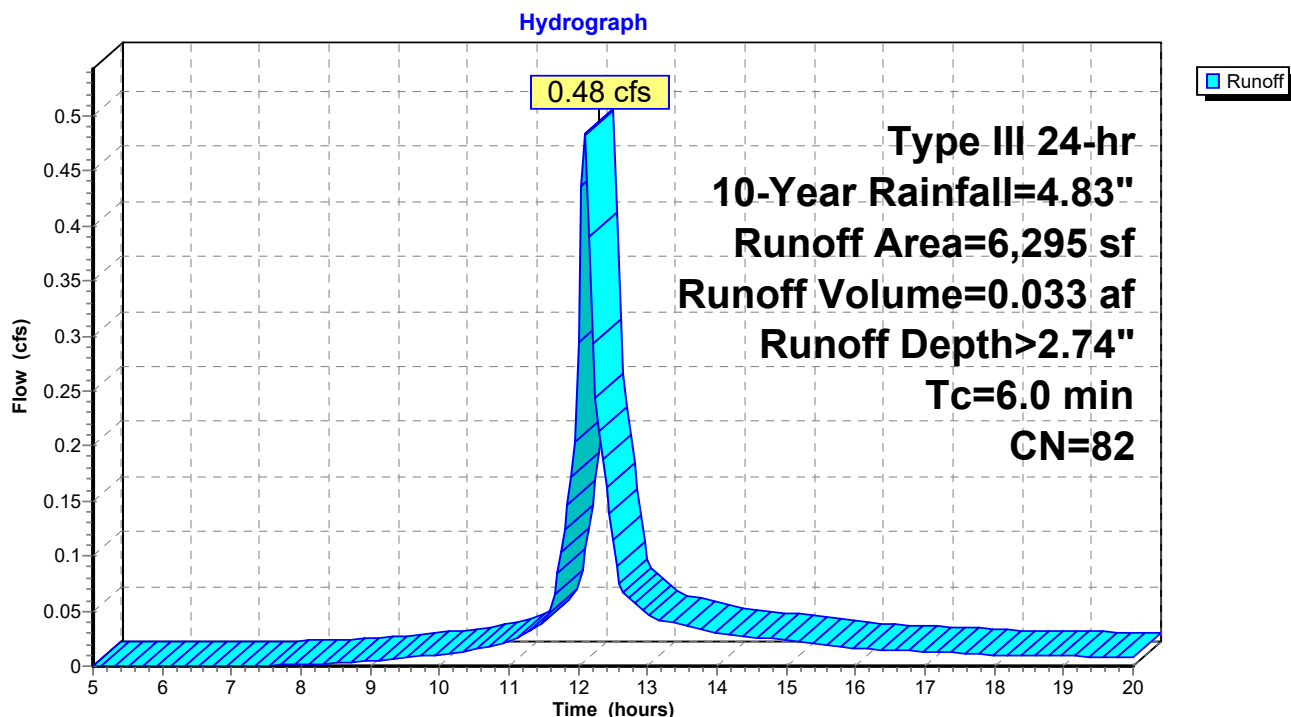
Runoff = 0.48 cfs @ 12.09 hrs, Volume= 0.033 af, Depth> 2.74"
Routed to Pond 138P : CB 39

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

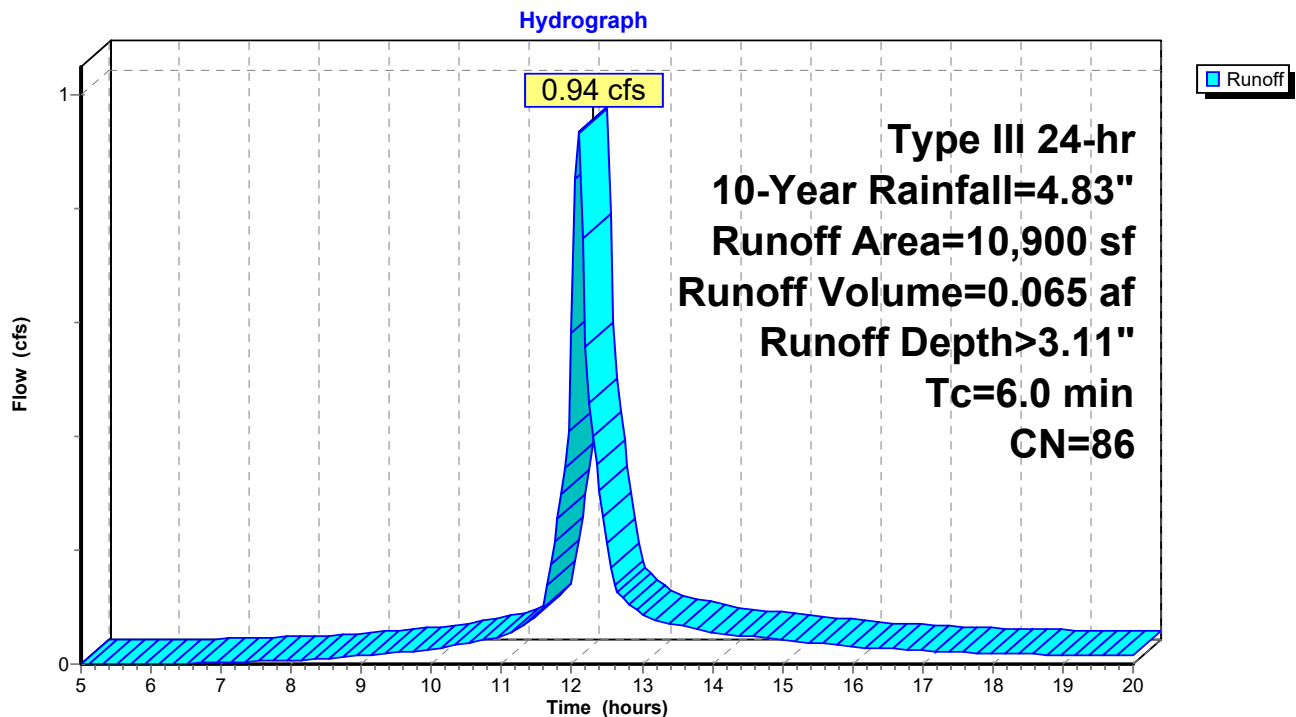
Runoff = 0.94 cfs @ 12.09 hrs, Volume= 0.065 af, Depth> 3.11"
Routed to Pond 137P : CB

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



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

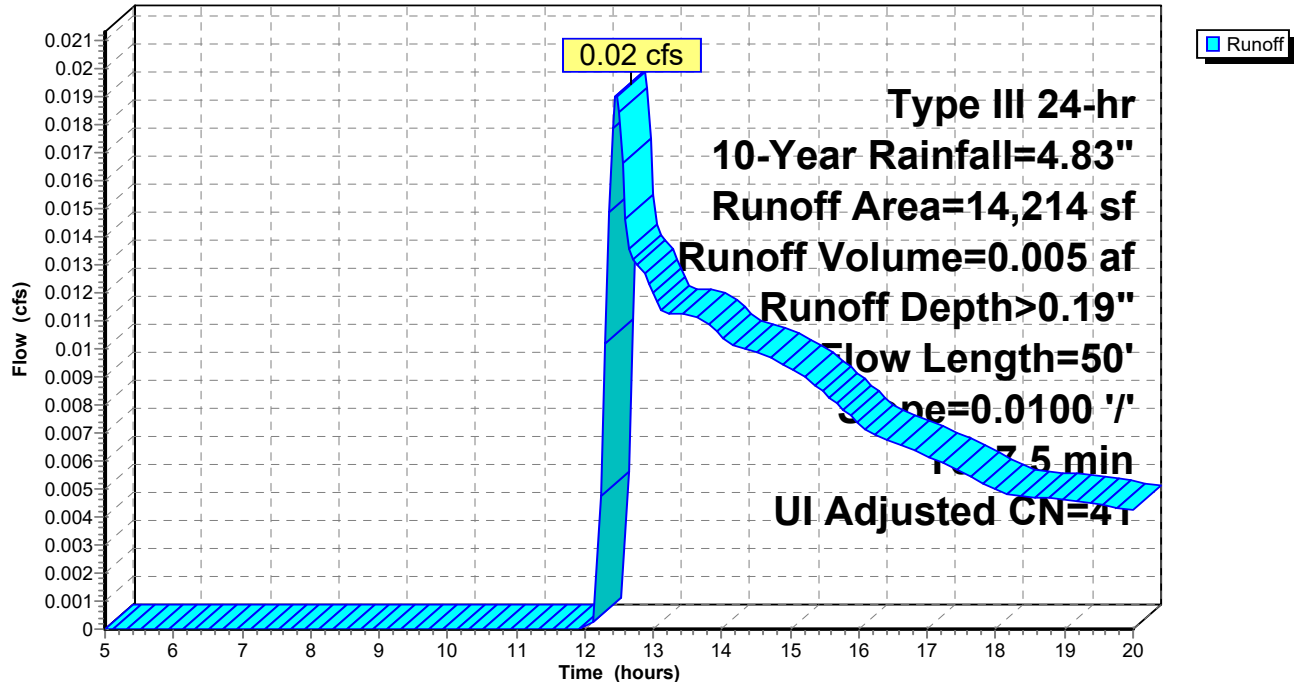
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=4.83"

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, Grass: Short n= 0.150 P2= 3.10"

Subcatchment 138S: P3JJ

Hydrograph



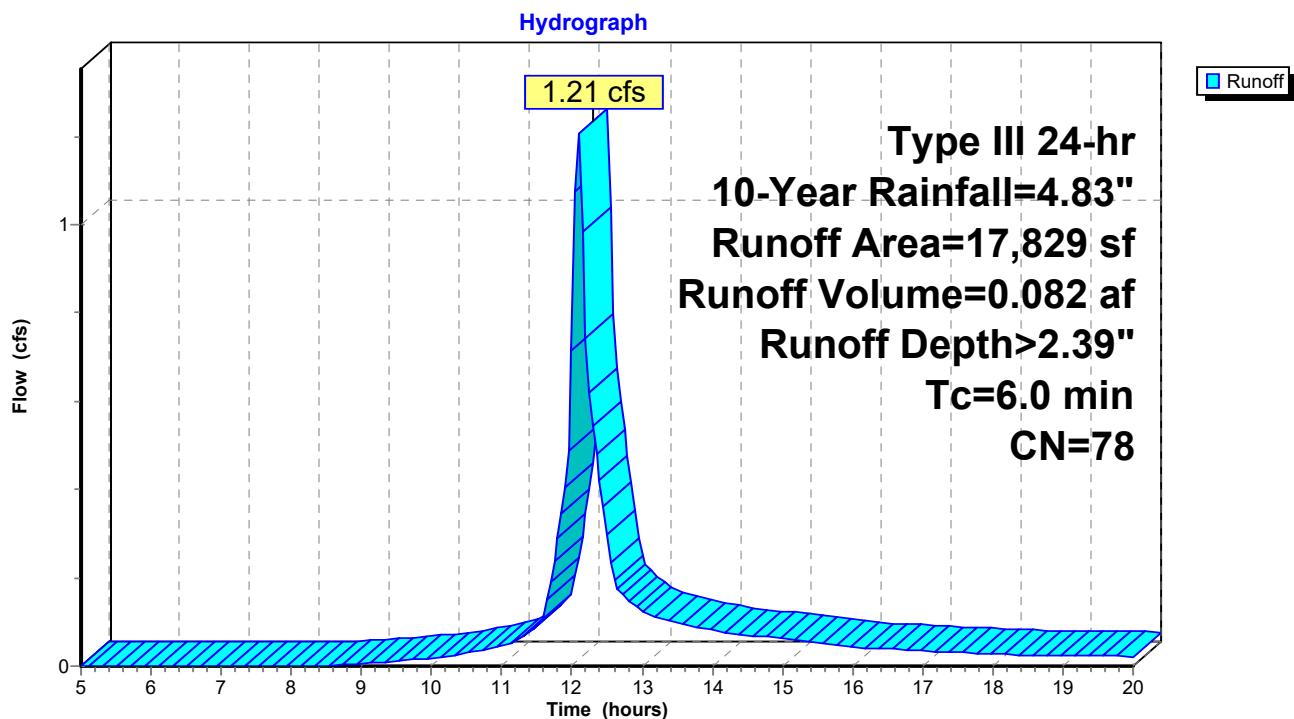
Summary for Subcatchment 140S: P300

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

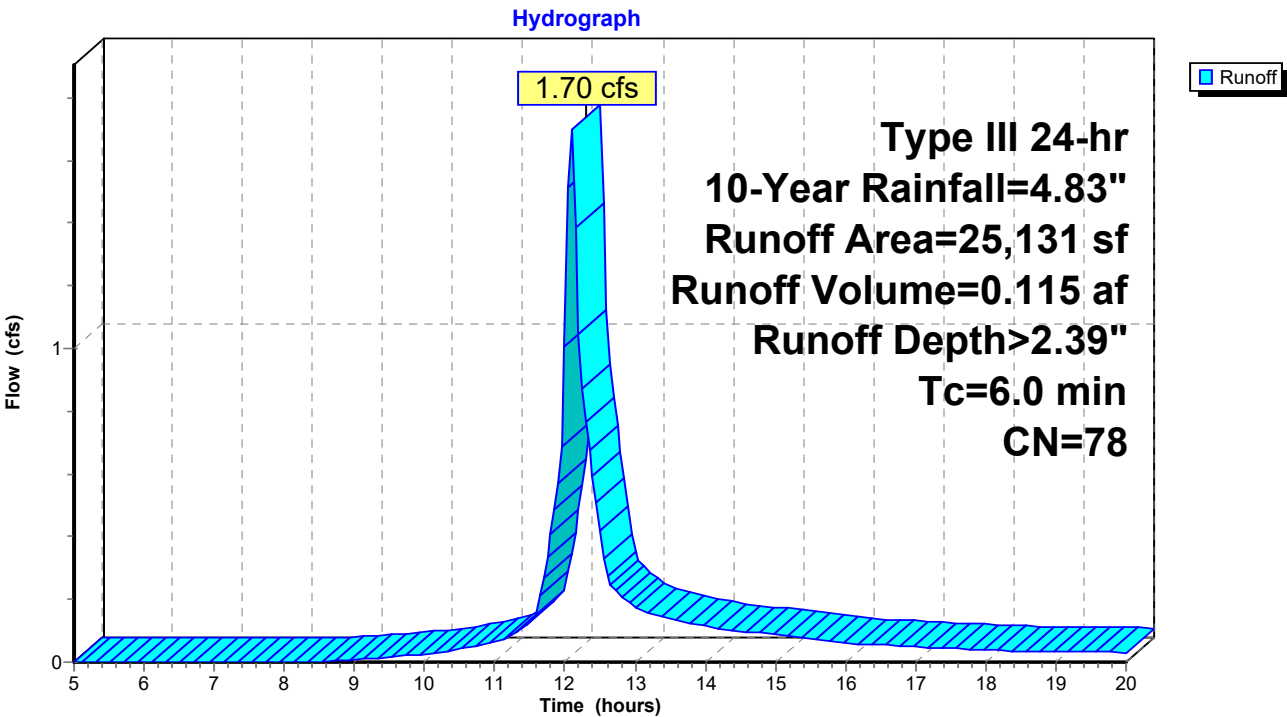
Runoff = 1.70 cfs @ 12.09 hrs, Volume= 0.115 af, Depth> 2.39"
Routed to Pond 143P : CB 41

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



Summary for Subcatchment 142S: P3UU

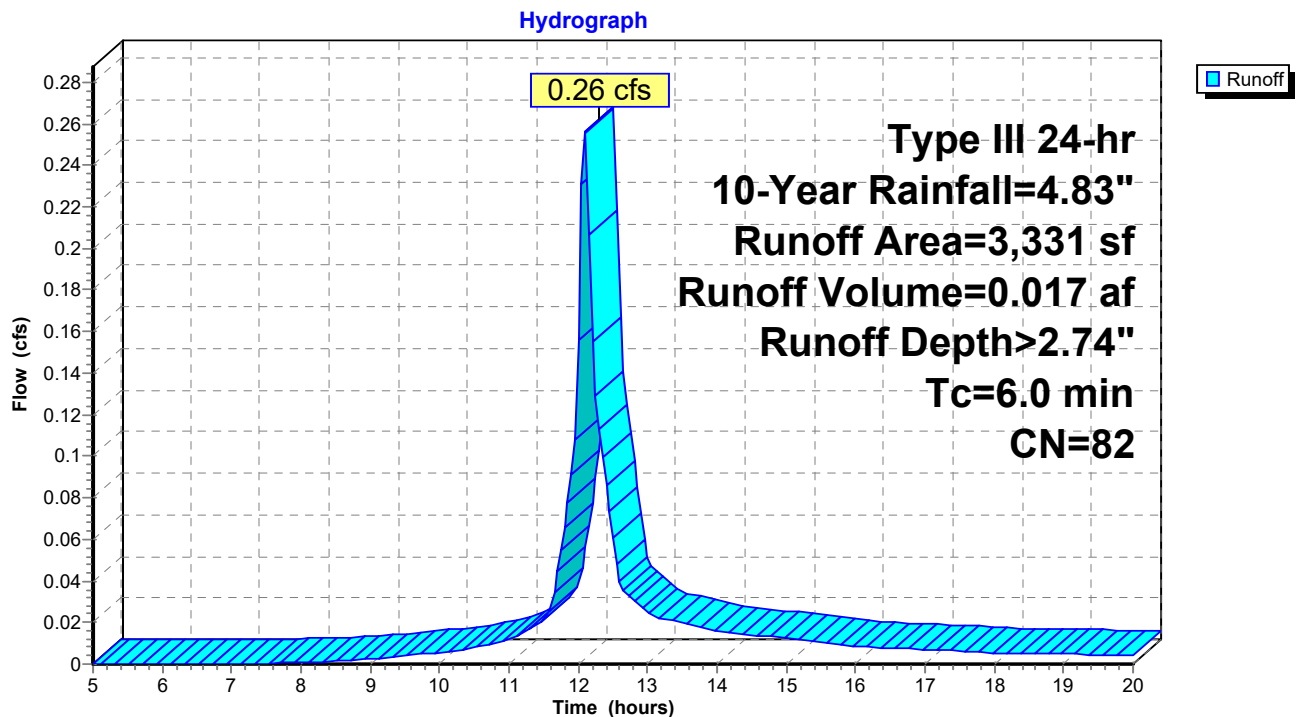
Runoff = 0.26 cfs @ 12.09 hrs, Volume= 0.017 af, Depth> 2.74"
Routed to Pond 147P : CB 28

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



Summary for Subcatchment 143S: P3VV

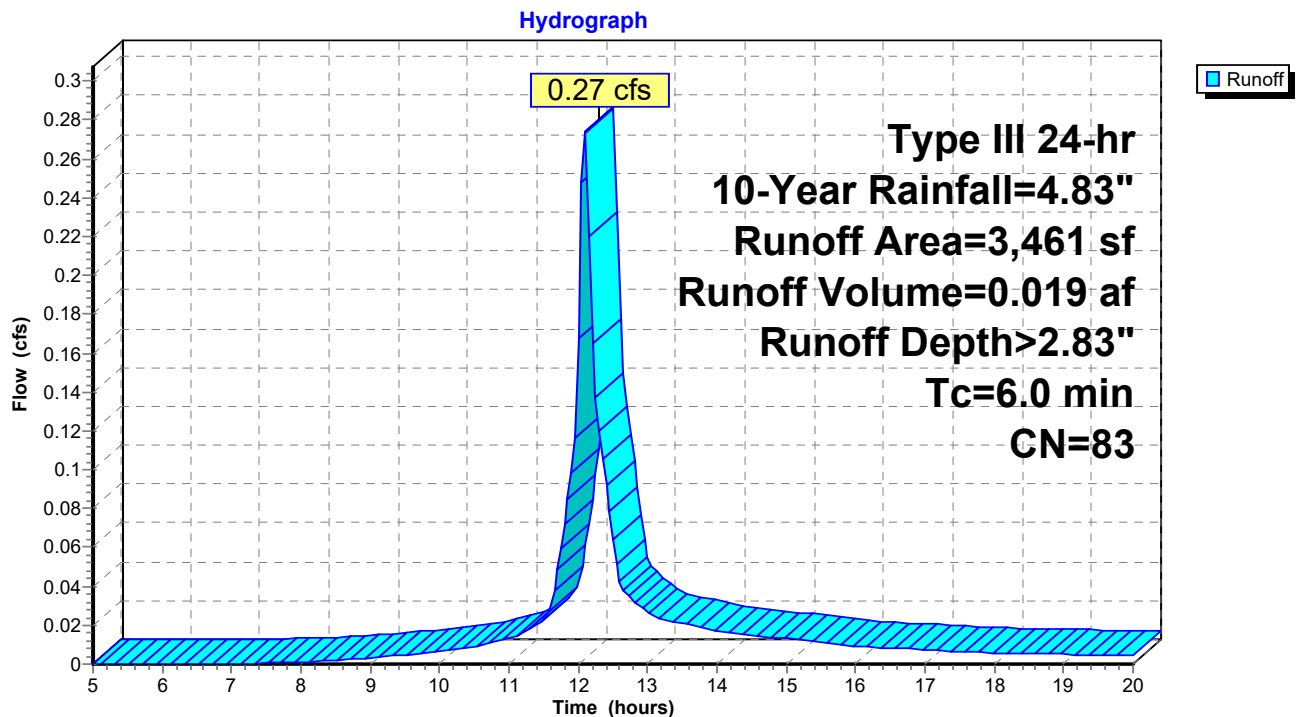
Runoff = 0.27 cfs @ 12.09 hrs, Volume= 0.019 af, Depth> 2.83"
Routed to Pond 149P : CB 29

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



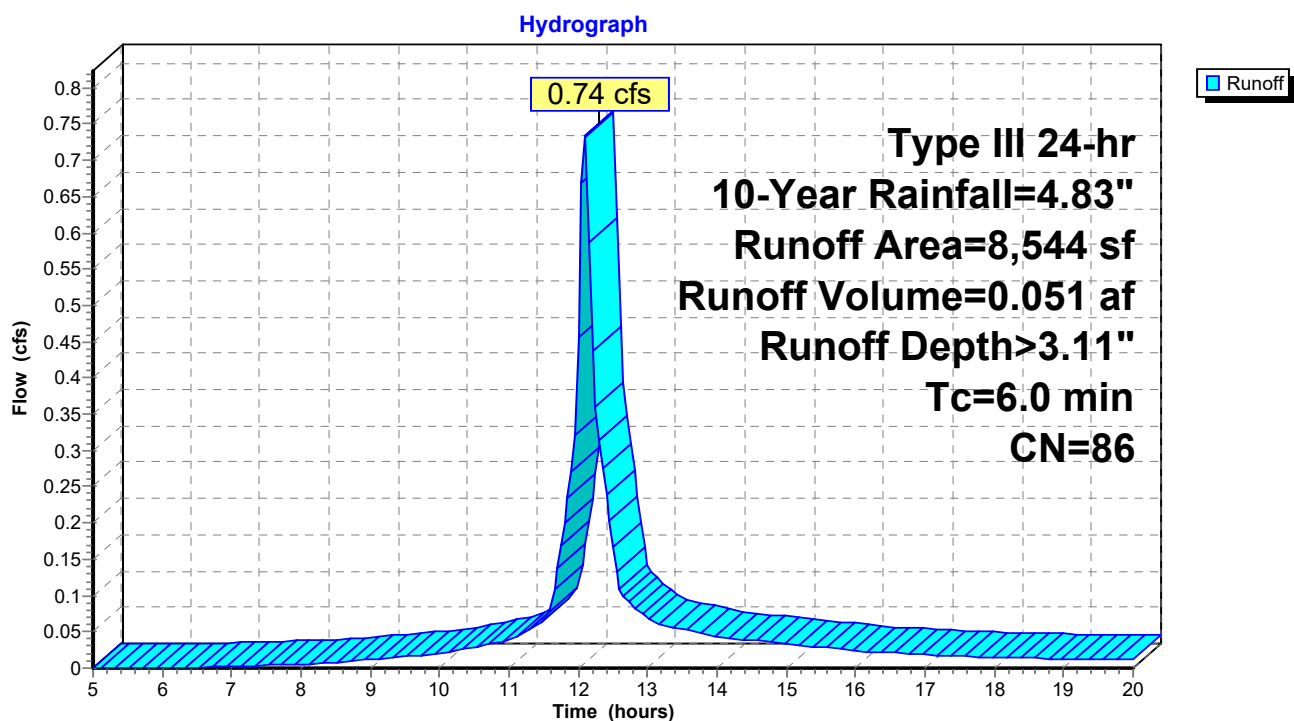
Summary for Subcatchment 147S: P3QQ

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

Summary for Subcatchment 149S: P3RR

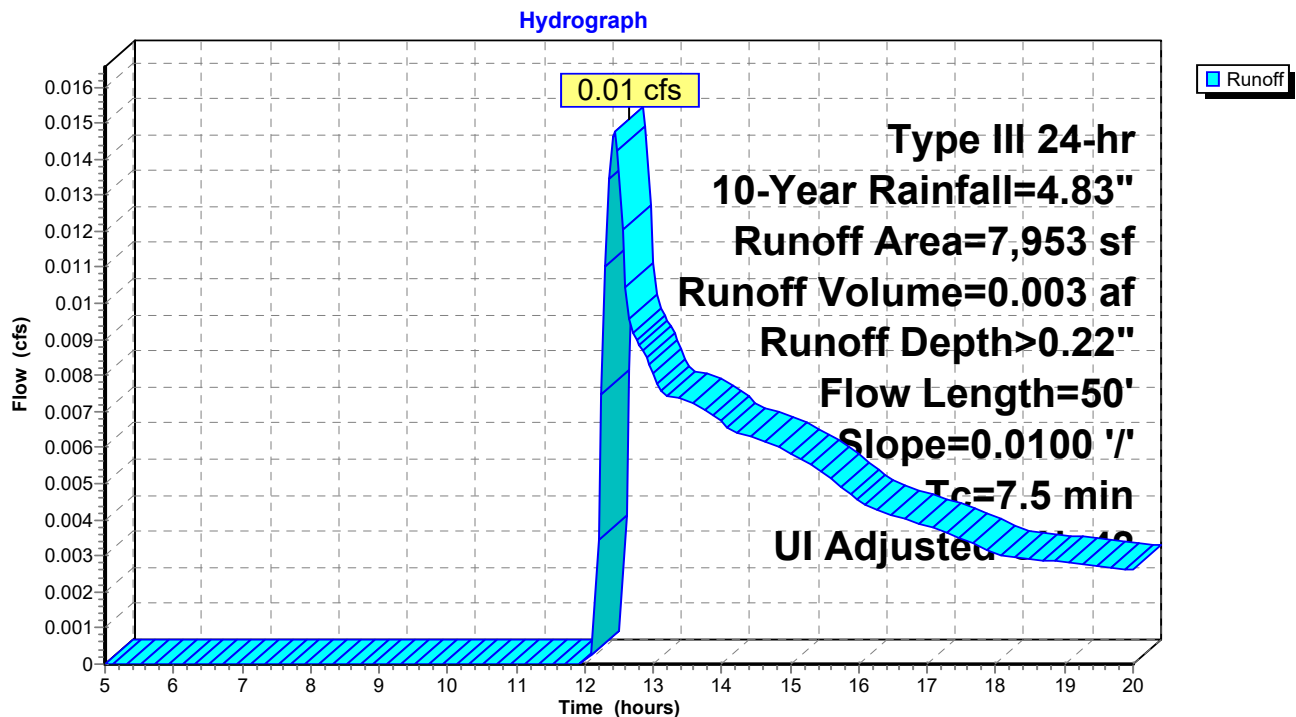
Runoff = 0.01 cfs @ 12.43 hrs, Volume= 0.003 af, Depth> 0.22"
Routed to Pond 146P : Inf. Basin 2

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, Grass: Short n= 0.150 P2= 3.10"

Subcatchment 149S: P3RR



Summary for Subcatchment 151S: P3ZZ

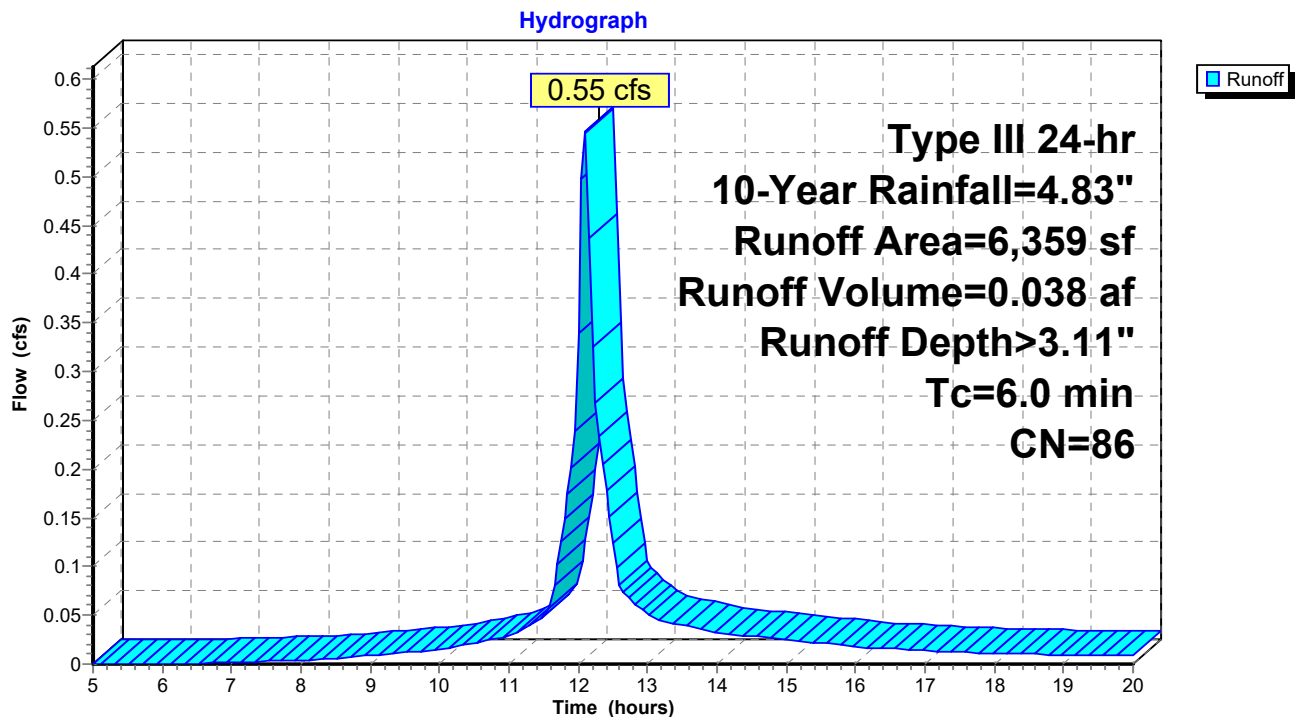
Runoff = 0.55 cfs @ 12.09 hrs, Volume= 0.038 af, Depth> 3.11"
Routed to Pond 159P : CB 25

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

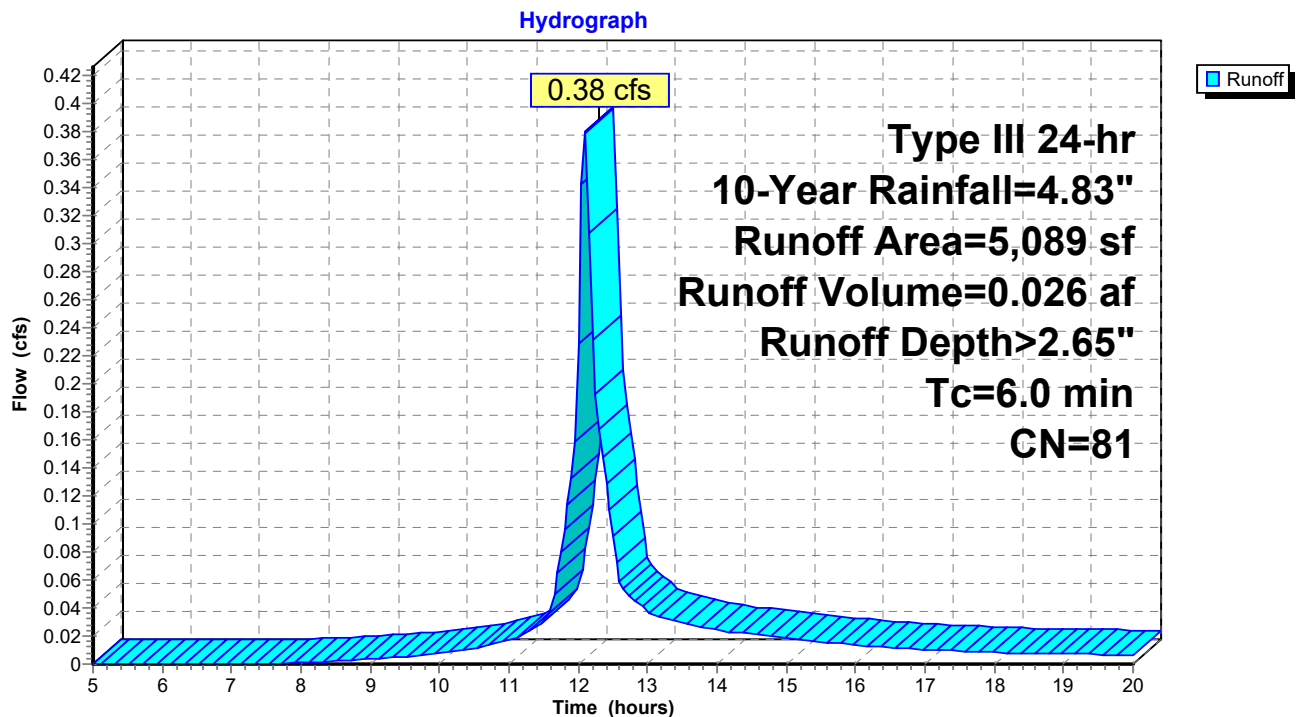
Runoff = 0.38 cfs @ 12.09 hrs, Volume= 0.026 af, Depth> 2.65"
Routed to Pond 158P : CB 24

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



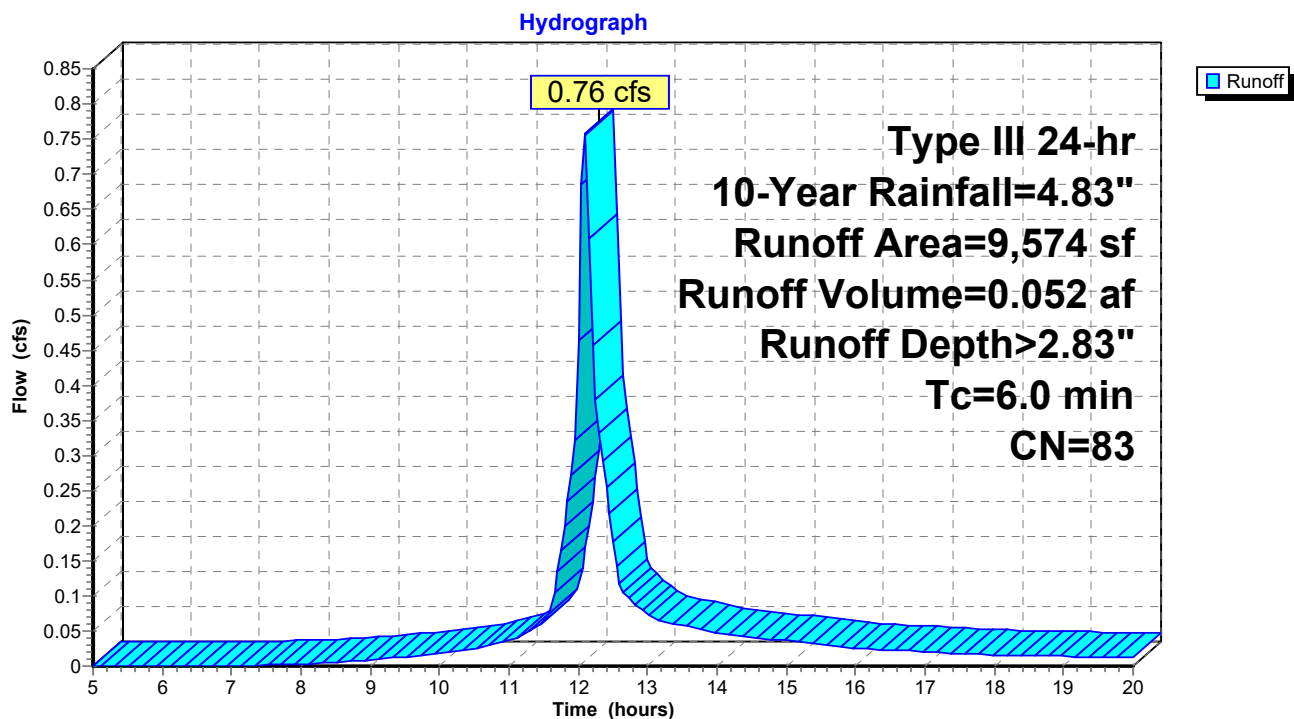
Summary for Subcatchment 153S: P3WW

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

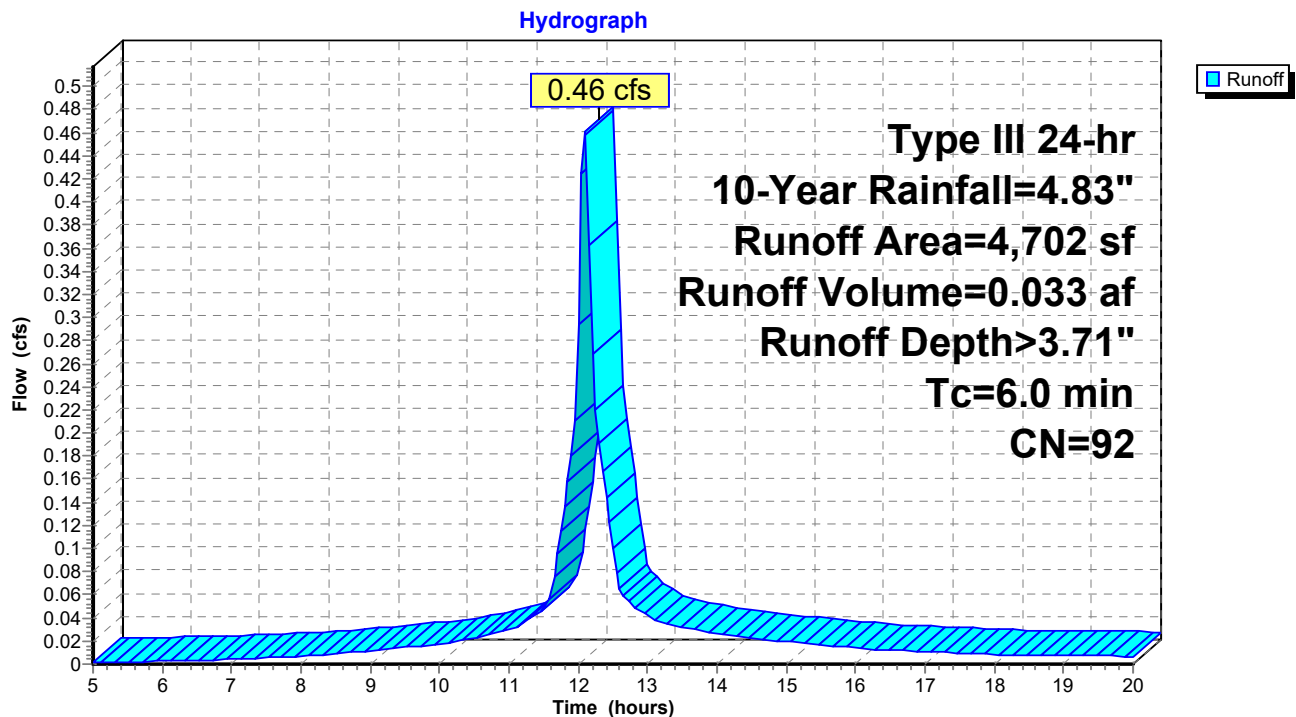
Runoff = 0.46 cfs @ 12.09 hrs, Volume= 0.033 af, Depth> 3.71"
Routed to Pond 156P : CB 26

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



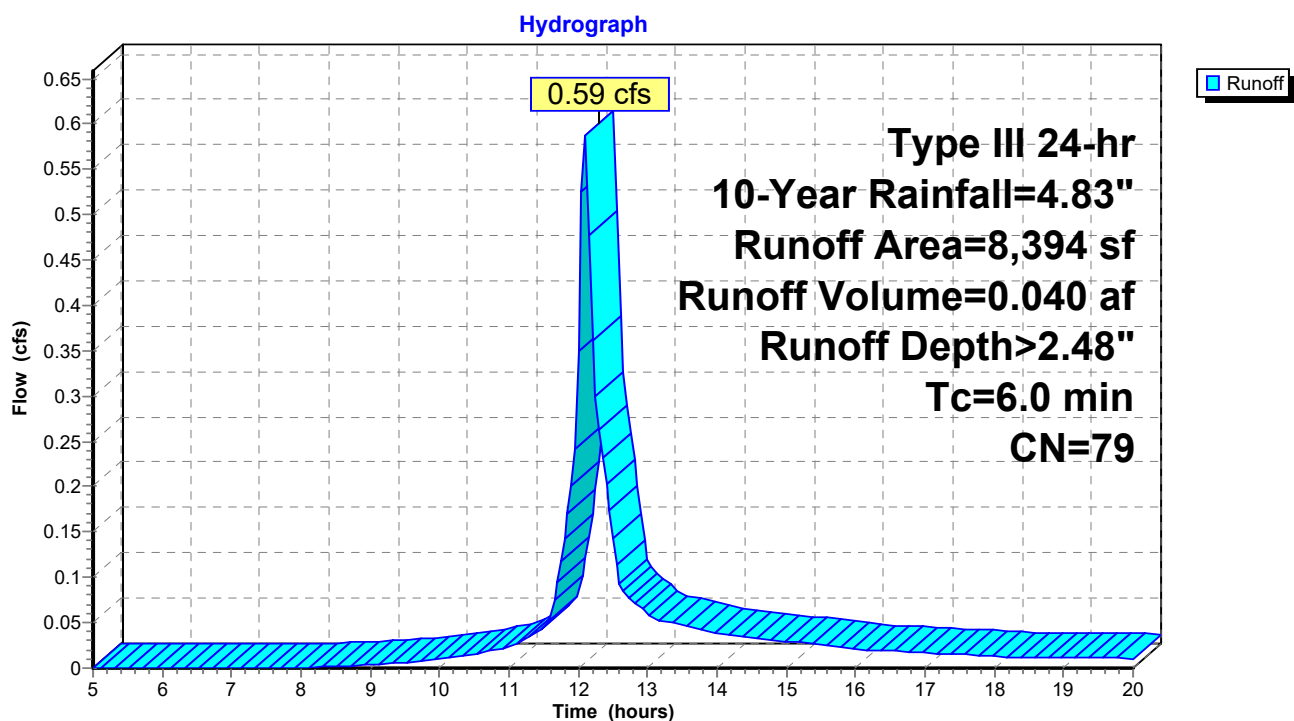
Summary for Subcatchment 155S: P3CCC

Runoff = 0.59 cfs @ 12.09 hrs, Volume= 0.040 af, Depth> 2.48"
 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
2,716	39	>75% Grass cover, Good, HSG A
2,023	98	Unconnected roofs, HSG A
3,655	98	Paved parking, HSG A
8,394	79	Weighted Average
2,716		32.36% Pervious Area
5,678		67.64% Impervious Area
2,023		35.63% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 155S: P3CCC

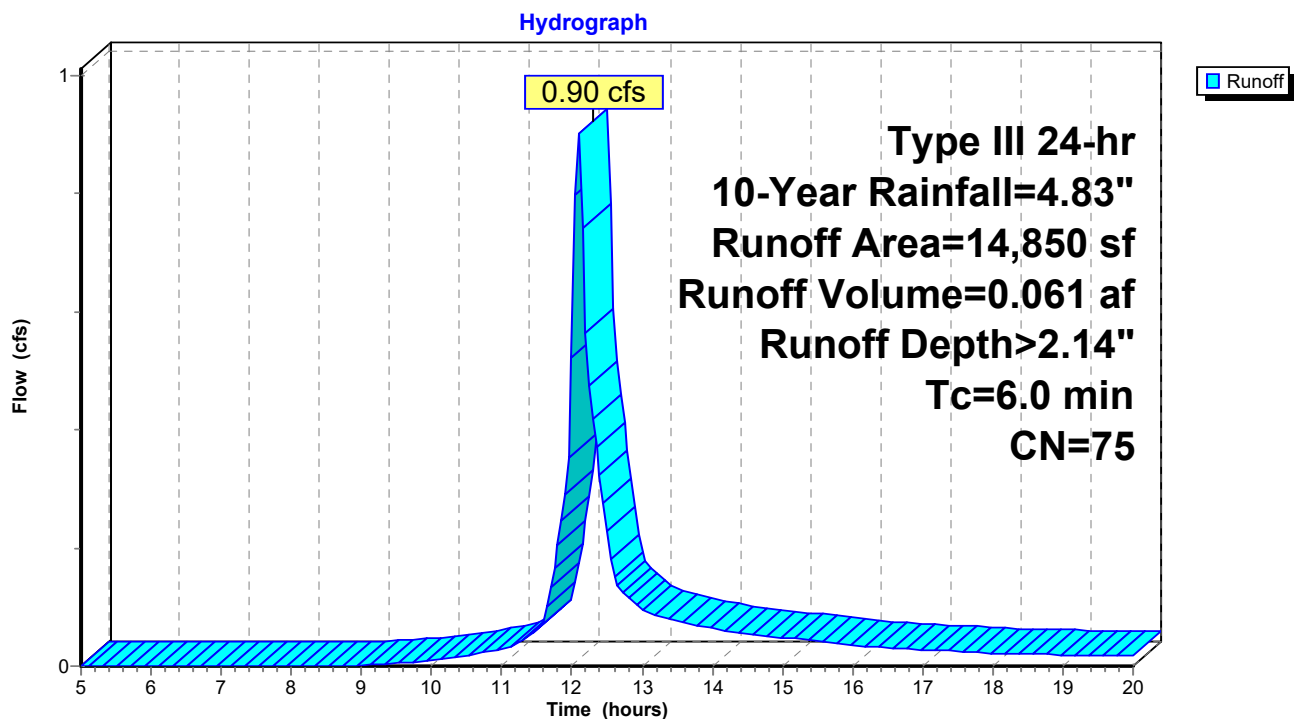
Summary for Subcatchment 156S: P3DDD

Runoff = 0.90 cfs @ 12.09 hrs, Volume= 0.061 af, Depth> 2.14"
 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
5,829	39	>75% Grass cover, Good, HSG A
3,884	98	Unconnected roofs, HSG A
5,137	98	Paved parking, HSG A
14,850	75	Weighted Average
5,829		39.25% Pervious Area
9,021		60.75% Impervious Area
3,884		43.06% 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

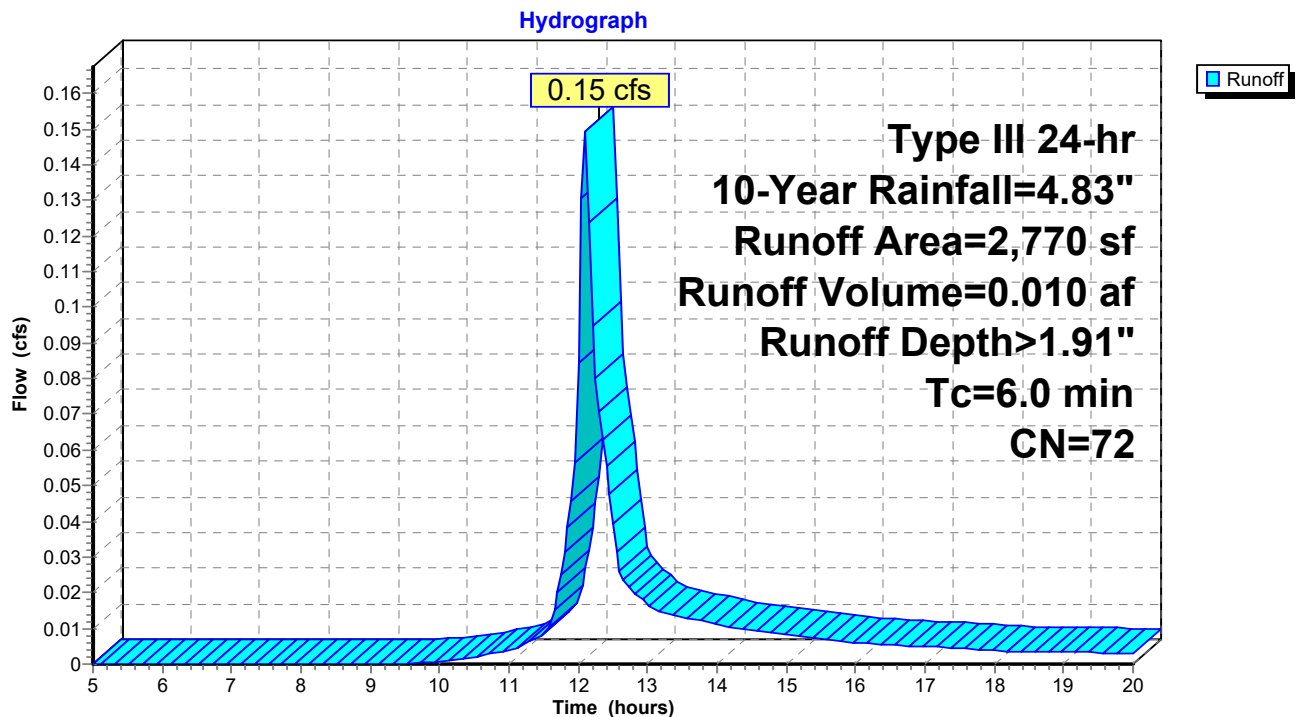
Runoff = 0.15 cfs @ 12.10 hrs, Volume= 0.010 af, Depth> 1.91"
Routed to Pond 168P : CB 11

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
1,232	39	>75% Grass cover, Good, HSG A
1,538	98	Paved parking, HSG A
2,770	72	Weighted Average
1,232		44.48% Pervious Area
1,538		55.52% 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

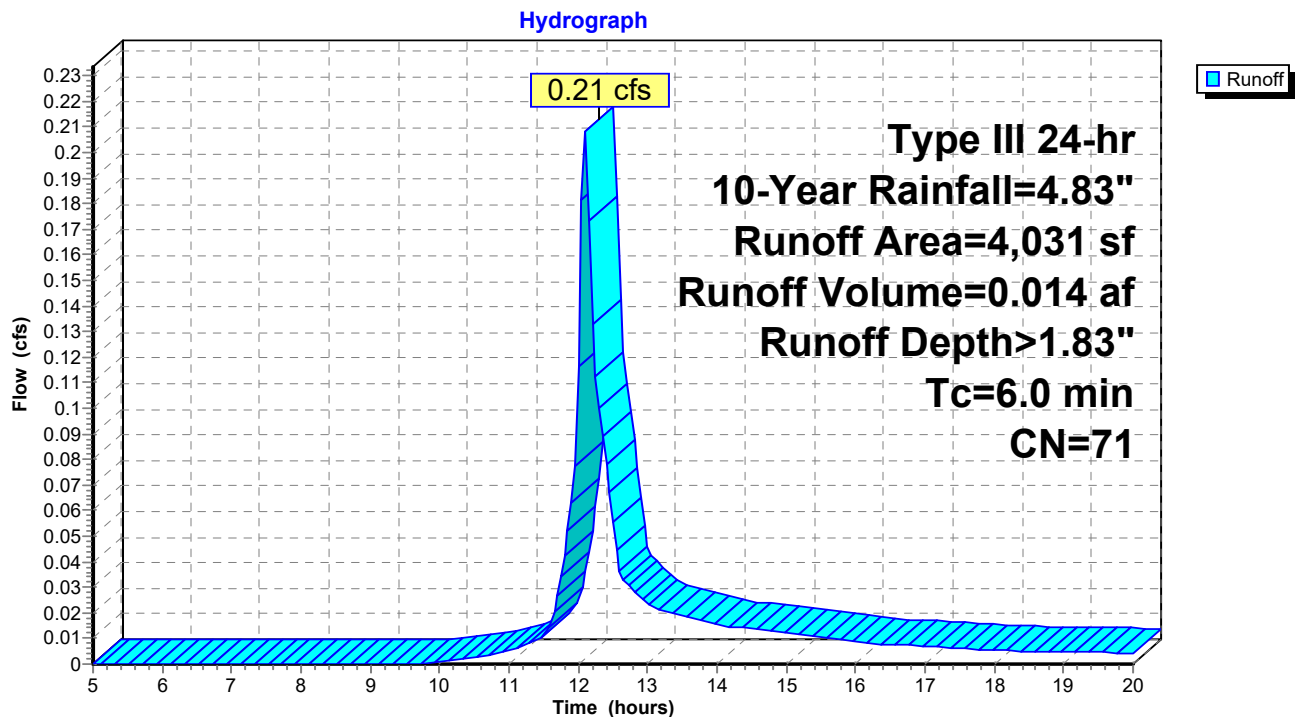
Runoff = 0.21 cfs @ 12.10 hrs, Volume= 0.014 af, Depth> 1.83"
Routed to Pond 167P : CB 10

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
1,859	39	>75% Grass cover, Good, HSG A
2,172	98	Paved parking, HSG A
4,031	71	Weighted Average
1,859		46.12% Pervious Area
2,172		53.88% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 166S: P3EEE



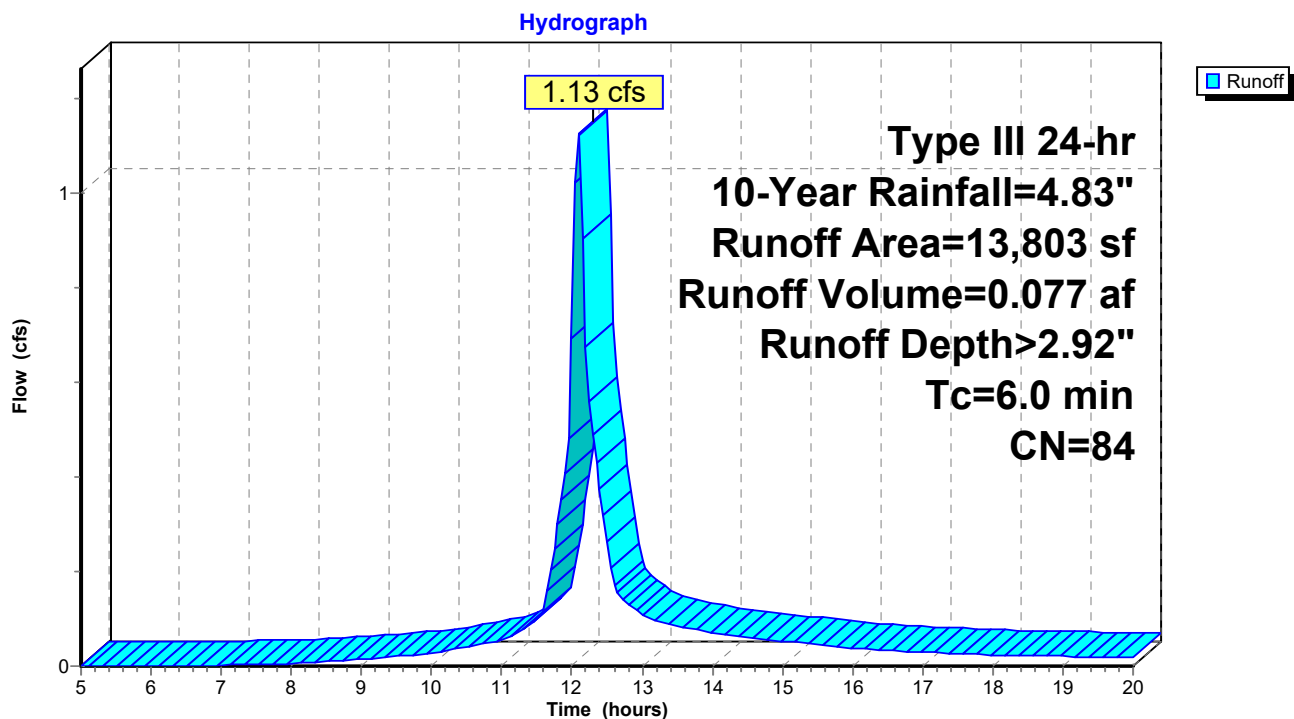
Summary for Subcatchment 170S: P3JJJ

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

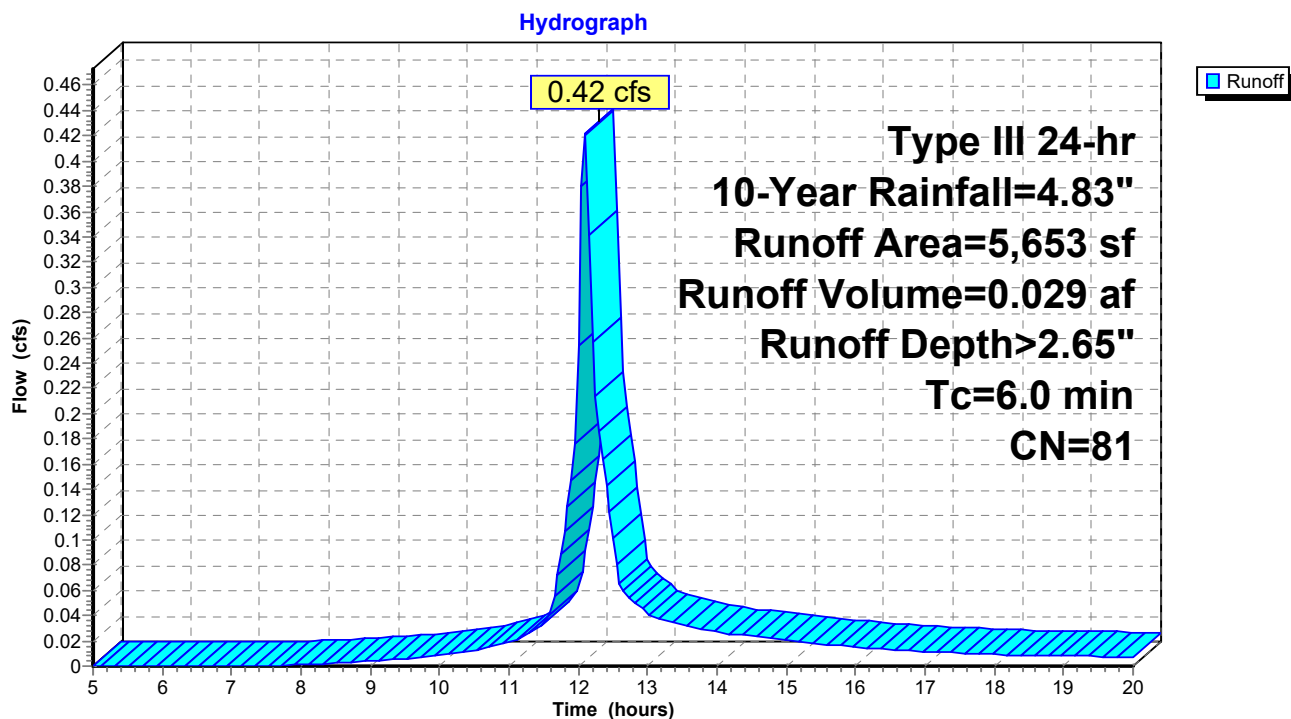
Runoff = 0.42 cfs @ 12.09 hrs, Volume= 0.029 af, Depth> 2.65"
Routed to Pond 173P : CB 17

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



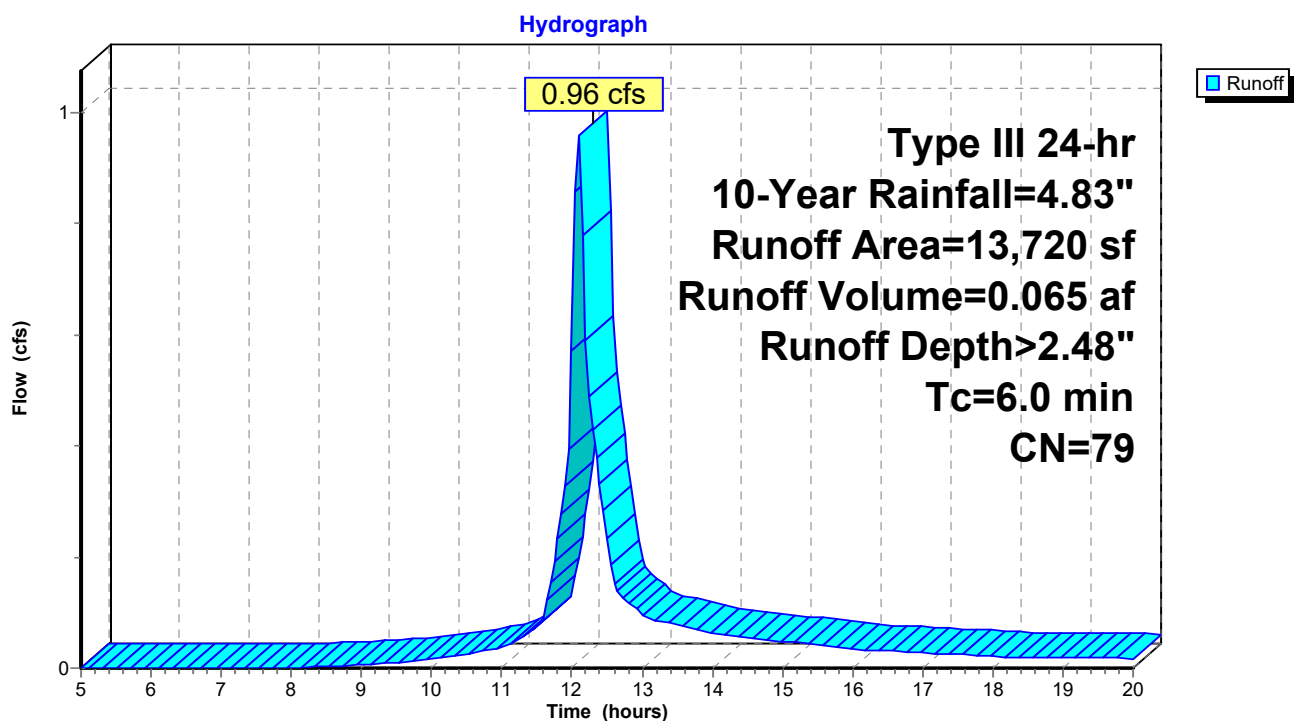
Summary for Subcatchment 175S: P3KKK

Runoff = 0.96 cfs @ 12.09 hrs, Volume= 0.065 af, Depth> 2.48"
 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
4,306	39	>75% Grass cover, Good, HSG A
2,982	98	Unconnected roofs, HSG A
6,432	98	Paved parking, HSG A
13,720	79	Weighted Average
4,306		31.38% Pervious Area
9,414		68.62% Impervious Area
2,982		31.68% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 175S: P3KKK

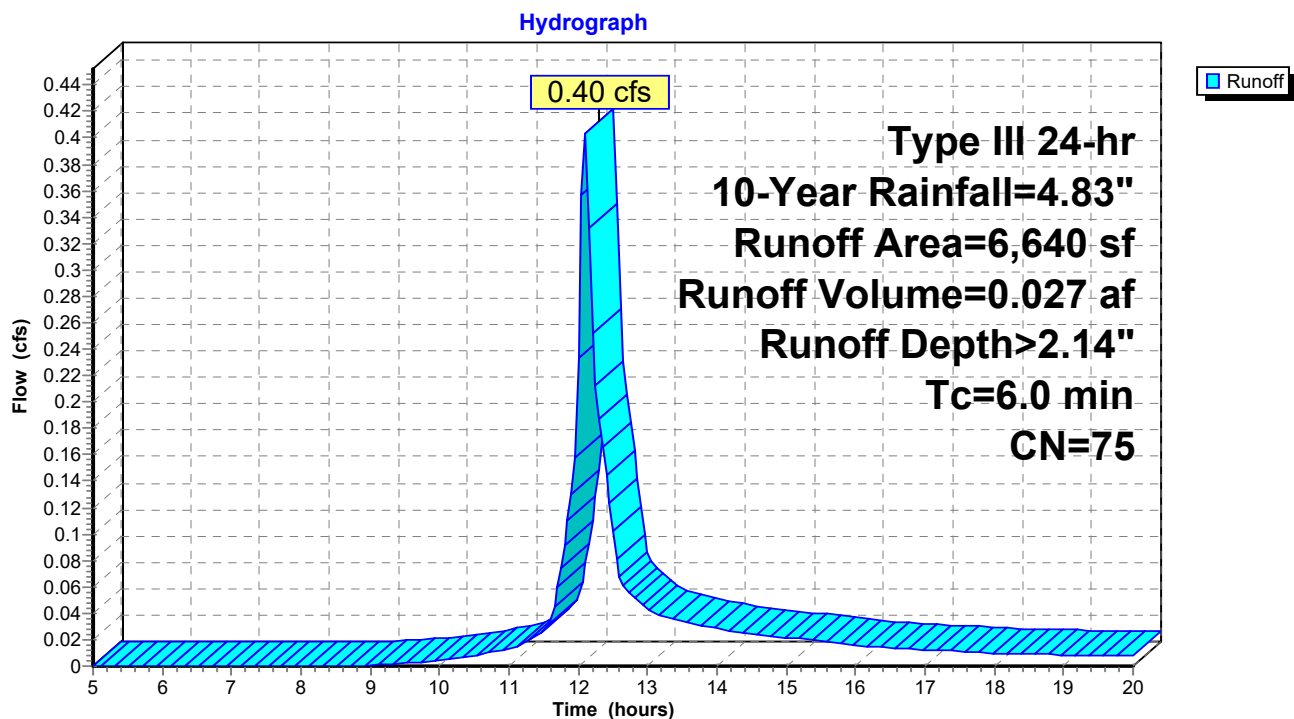
Summary for Subcatchment 176S: P3LLL

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

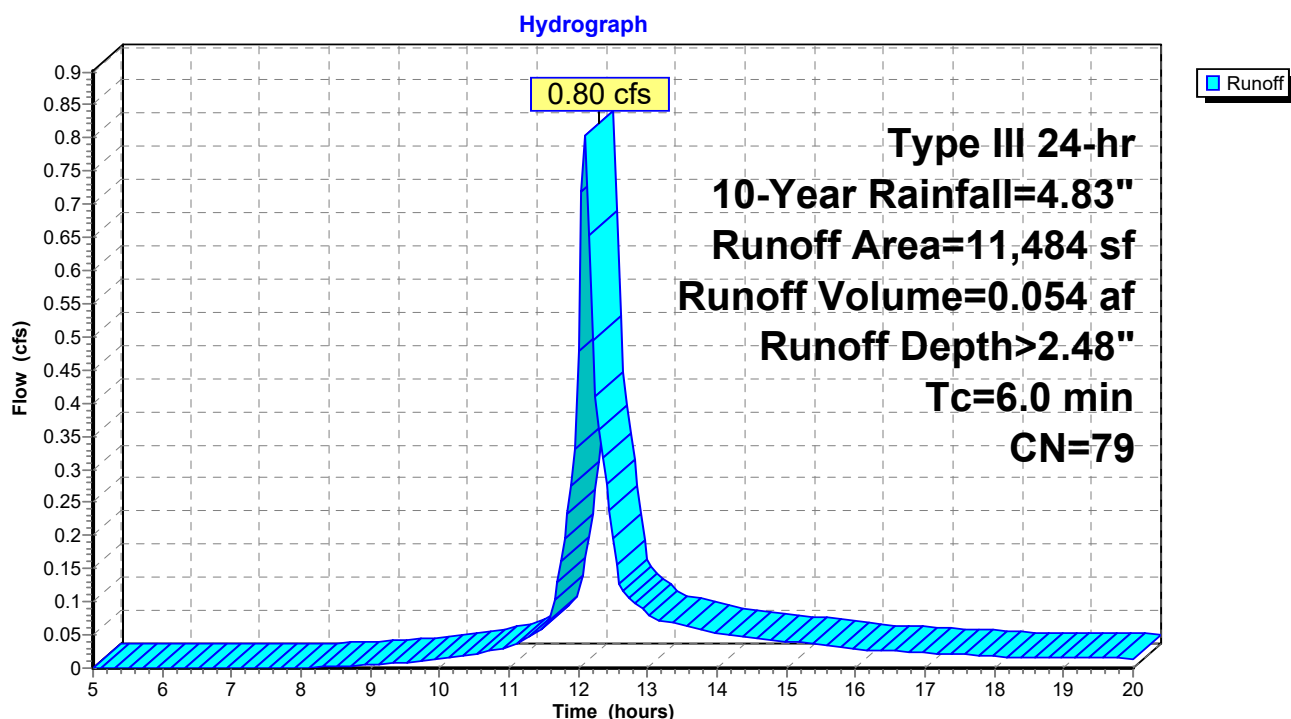
Runoff = 0.80 cfs @ 12.09 hrs, Volume= 0.054 af, Depth> 2.48"
Routed to Pond 61P : CB 8

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
3,669	39	>75% Grass cover, Good, HSG A
2,297	98	Unconnected roofs, HSG A
5,518	98	Paved parking, HSG A
11,484	79	Weighted Average
3,669		31.95% Pervious Area
7,815		68.05% Impervious Area
2,297		29.39% 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

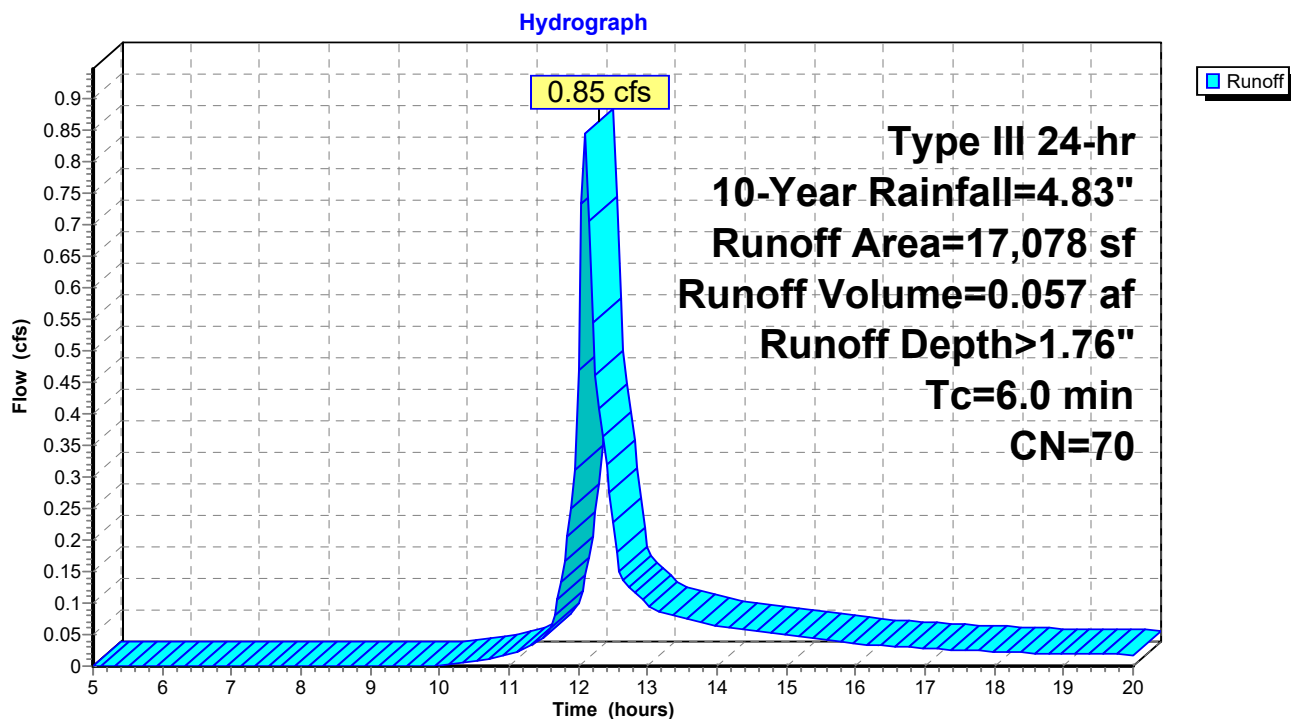
Runoff = 0.85 cfs @ 12.10 hrs, Volume= 0.057 af, Depth> 1.76"
Routed to Pond 170P : CB 9

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
8,004	39	>75% Grass cover, Good, HSG A
2,930	98	Unconnected roofs, HSG A
6,144	98	Paved parking, HSG A
17,078	70	Weighted Average
8,004		46.87% Pervious Area
9,074		53.13% Impervious Area
2,930		32.29% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 183S: P3NNN



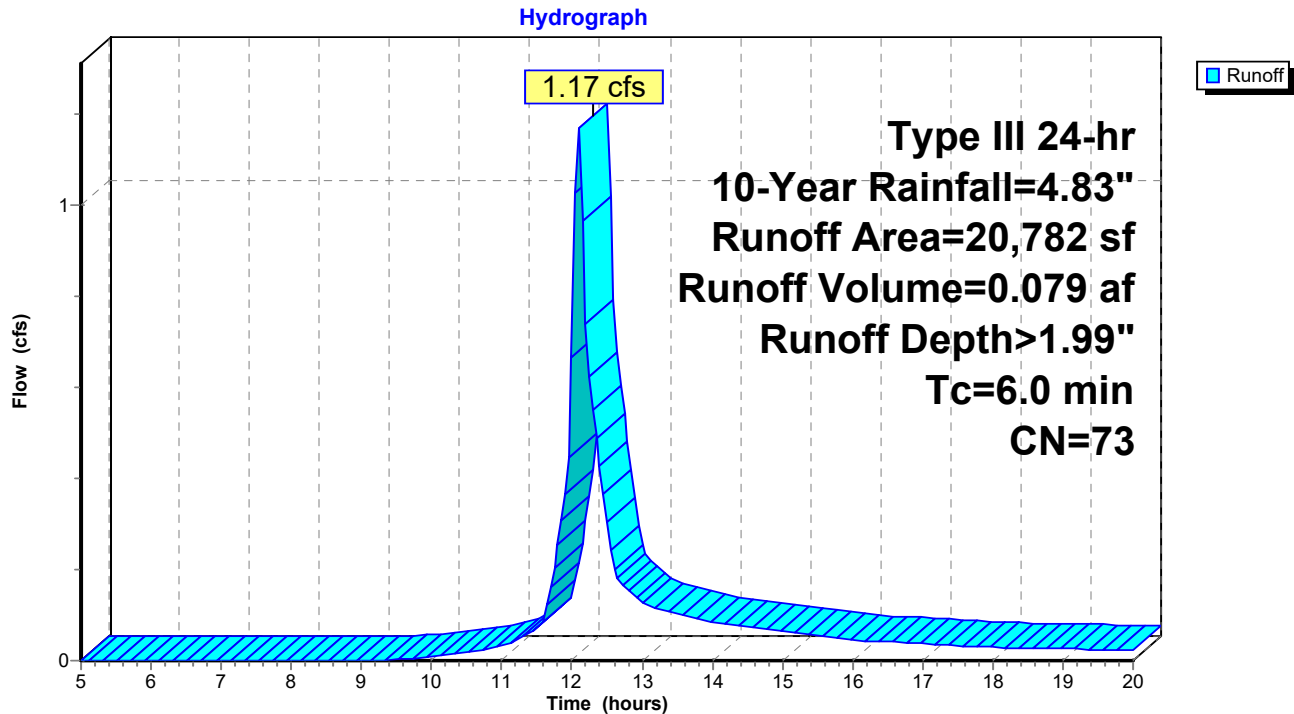
Summary for Subcatchment 184S: P3000

Runoff = 1.17 cfs @ 12.10 hrs, Volume= 0.079 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
7,773	39	>75% Grass cover, Good, HSG A
4,781	98	Unconnected roofs, HSG A
1,003	30	Woods, Good, HSG A
7,225	98	Paved parking, HSG A
20,782	73	Weighted Average
8,776		42.23% Pervious Area
12,006		57.77% Impervious Area
4,781		39.82% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 184S: P3000

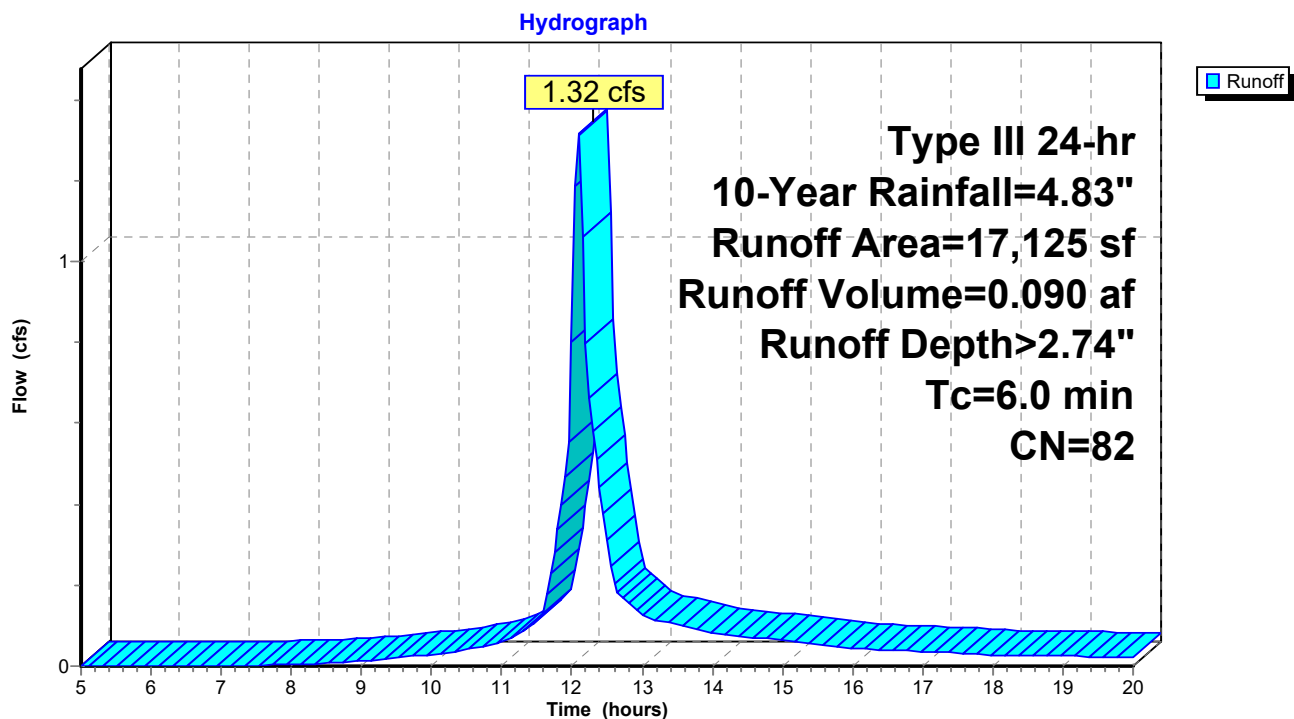
Summary for Subcatchment 185S: P3PPP

Runoff = 1.32 cfs @ 12.09 hrs, Volume= 0.090 af, Depth> 2.74"
 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
4,596	39	>75% Grass cover, Good, HSG A
4,760	98	Unconnected roofs, HSG A
7,769	98	Paved parking, HSG A
17,125	82	Weighted Average
4,596		26.84% Pervious Area
12,529		73.16% Impervious Area
4,760		37.99% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 185S: P3PPP

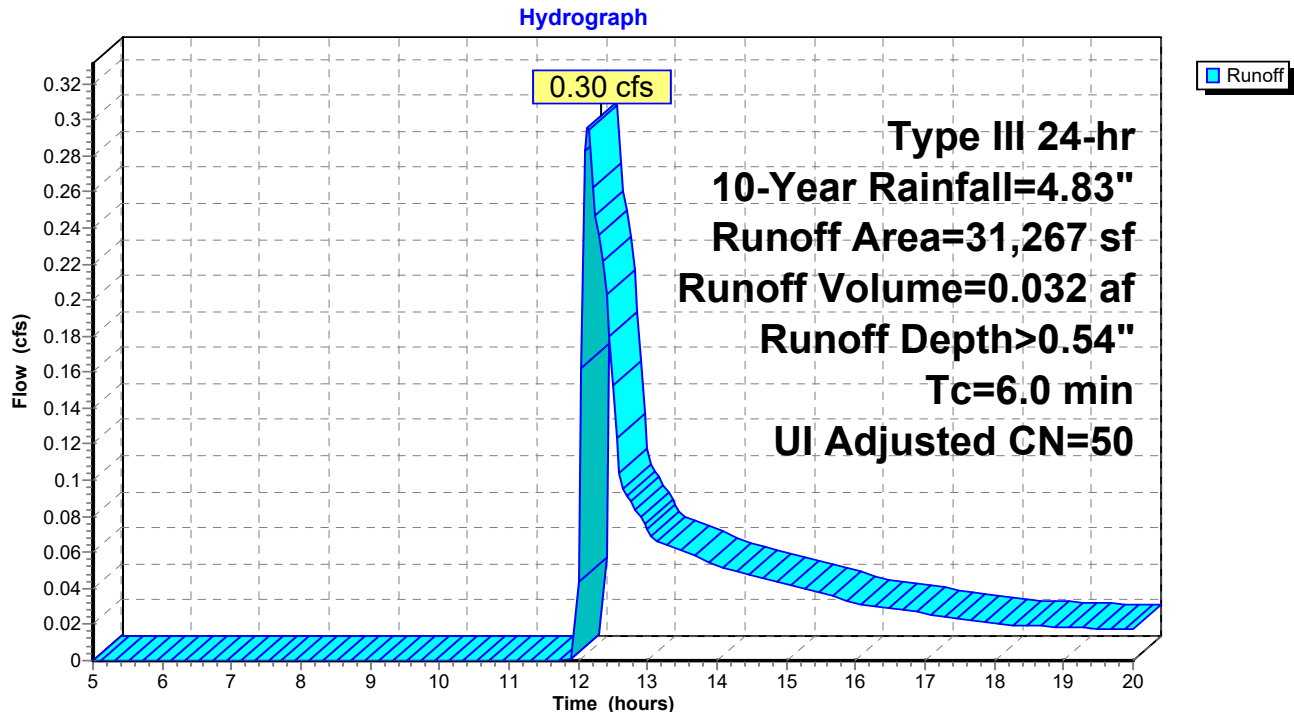
Summary for Subcatchment 186S: P3QQQ

Runoff = 0.30 cfs @ 12.14 hrs, Volume= 0.032 af, Depth> 0.54"
 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	Adj	Description
6,277	39		>75% Grass cover, Good, HSG A
1,710	98		Unconnected roofs, HSG A
15,990	30		Woods, Good, HSG A
7,290	98		Paved parking, HSG A
31,267	51	50	Weighted Average, UI Adjusted
22,267			71.22% Pervious Area
9,000			28.78% Impervious Area
1,710			19.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 186S: P3QQQ

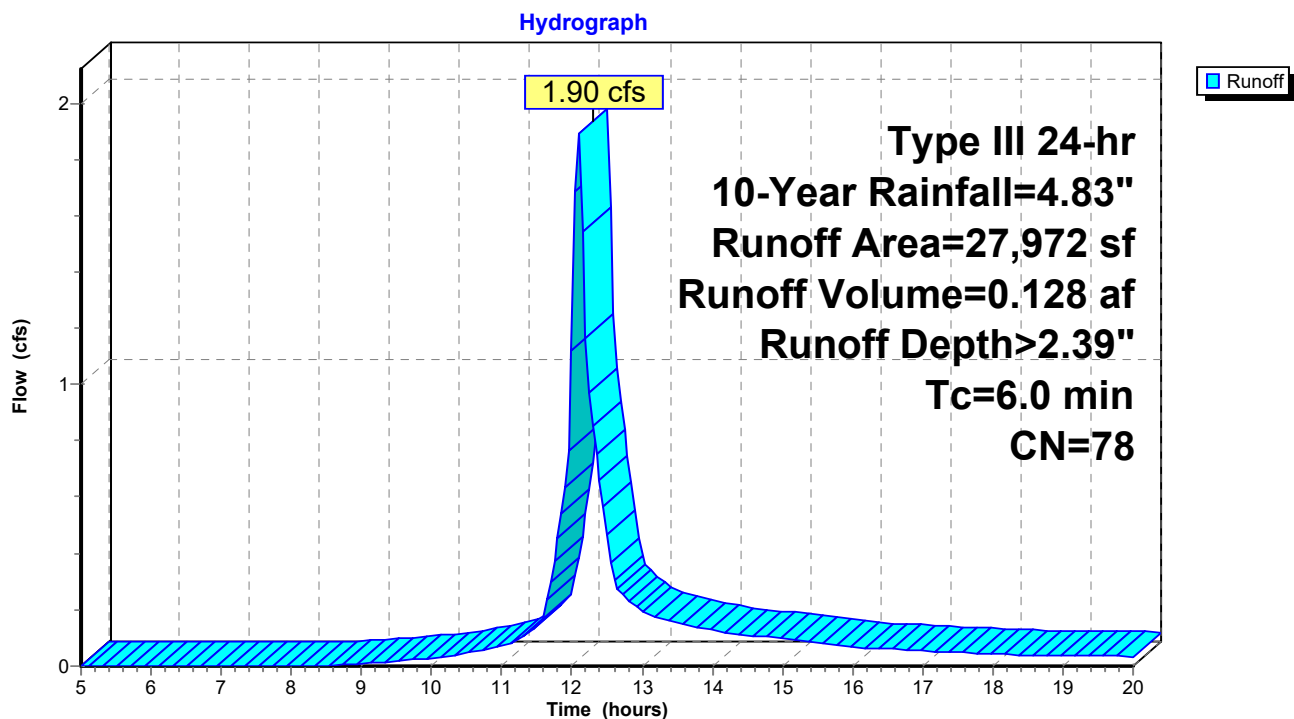
Summary for Subcatchment 187S: P3RRR

Runoff = 1.90 cfs @ 12.09 hrs, Volume= 0.128 af, Depth> 2.39"
 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
9,668	39	>75% Grass cover, Good, HSG A
5,407	98	Unconnected roofs, HSG A
12,897	98	Paved parking, HSG A
27,972	78	Weighted Average
9,668		34.56% Pervious Area
18,304		65.44% Impervious Area
5,407		29.54% 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)

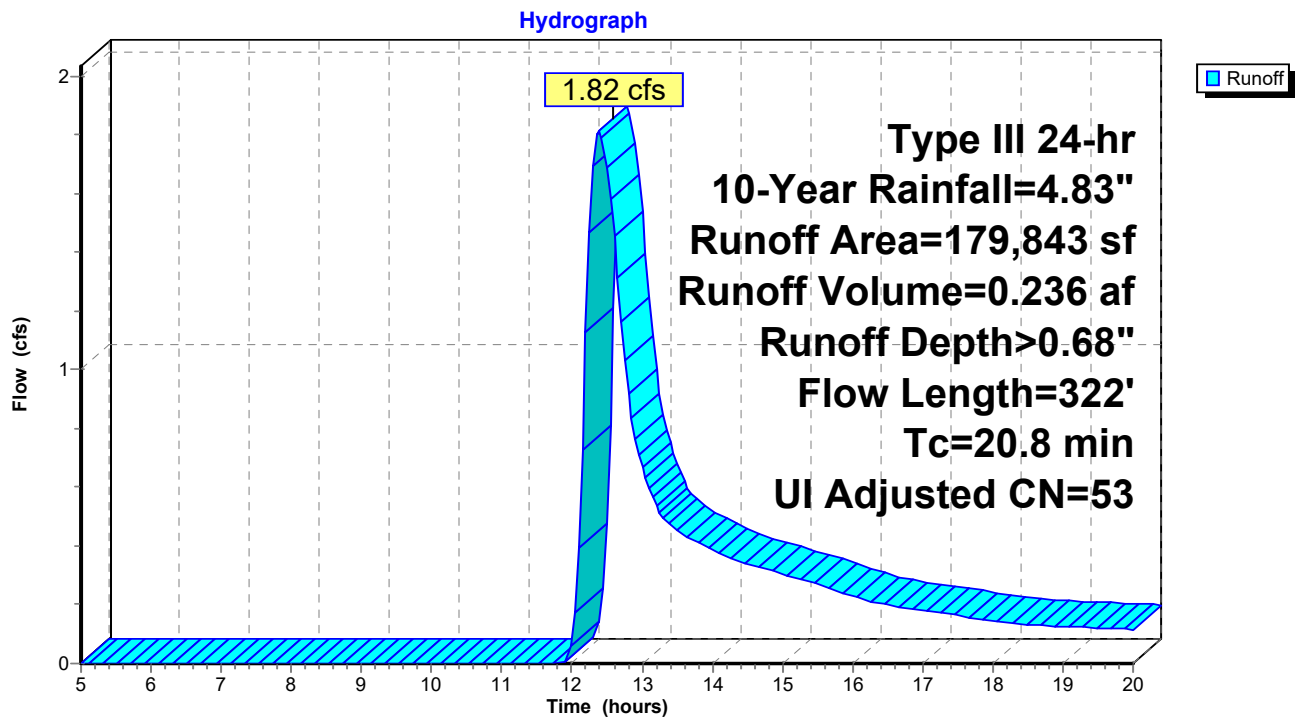
Runoff = 1.82 cfs @ 12.38 hrs, Volume= 0.236 af, Depth> 0.68"
 Routed to Link 188L : DP 3

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		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
4.3	272	0.0450	1.06		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.8	322	Total			

Subcatchment 189S: (new Subcat)



Summary for Subcatchment 190S: (new Subcat)

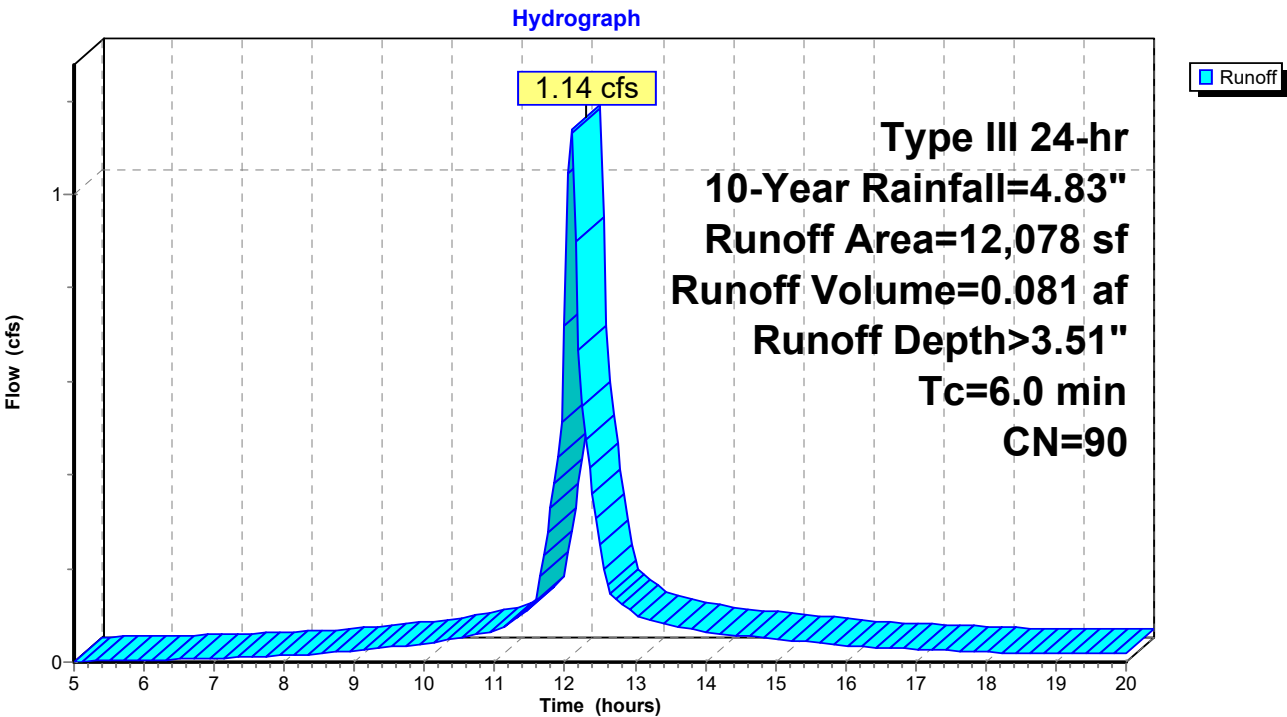
Runoff = 1.14 cfs @ 12.09 hrs, Volume= 0.081 af, Depth> 3.51"
Routed to Pond 191P : CB 42

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

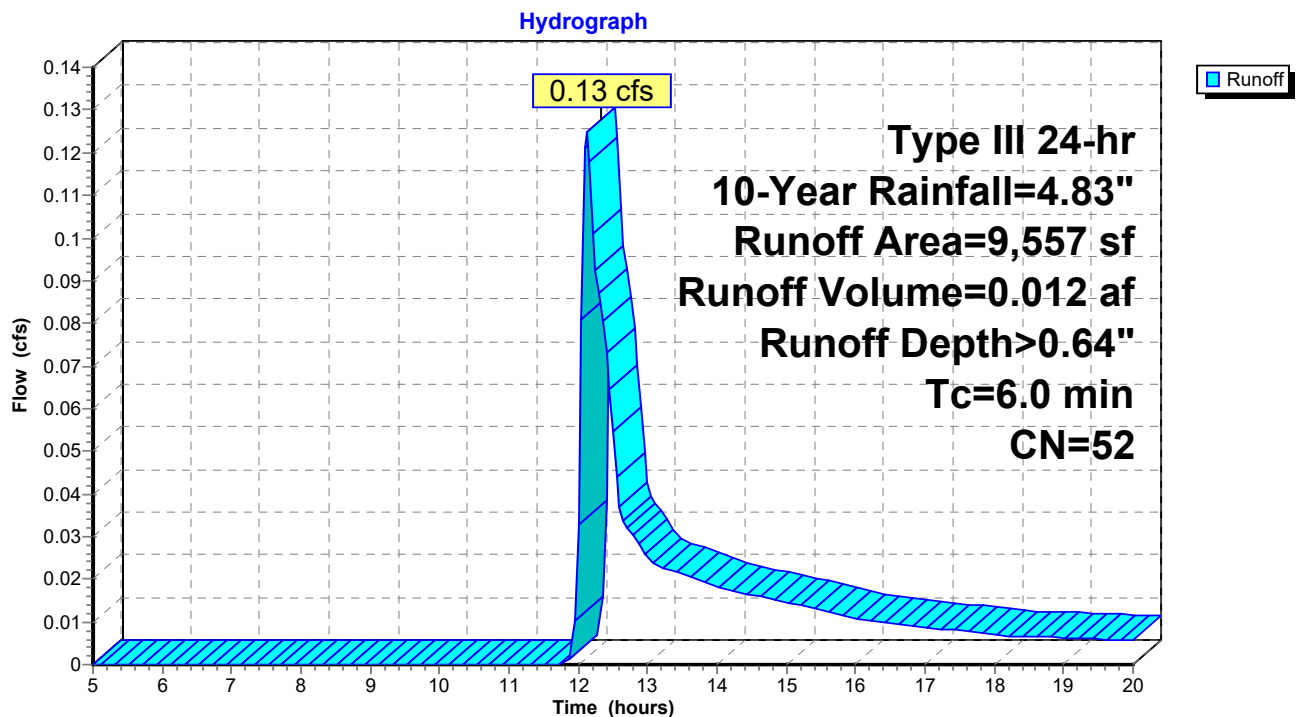
Runoff = 0.13 cfs @ 12.12 hrs, Volume= 0.012 af, Depth> 0.64"
Routed to Pond 193P : CB 1

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
1,342	39	>75% Grass cover, Good, HSG A
5,306	30	Woods, Good, HSG A
2,909	98	Paved parking, HSG A
9,557	52	Weighted Average
6,648		69.56% Pervious Area
2,909		30.44% 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

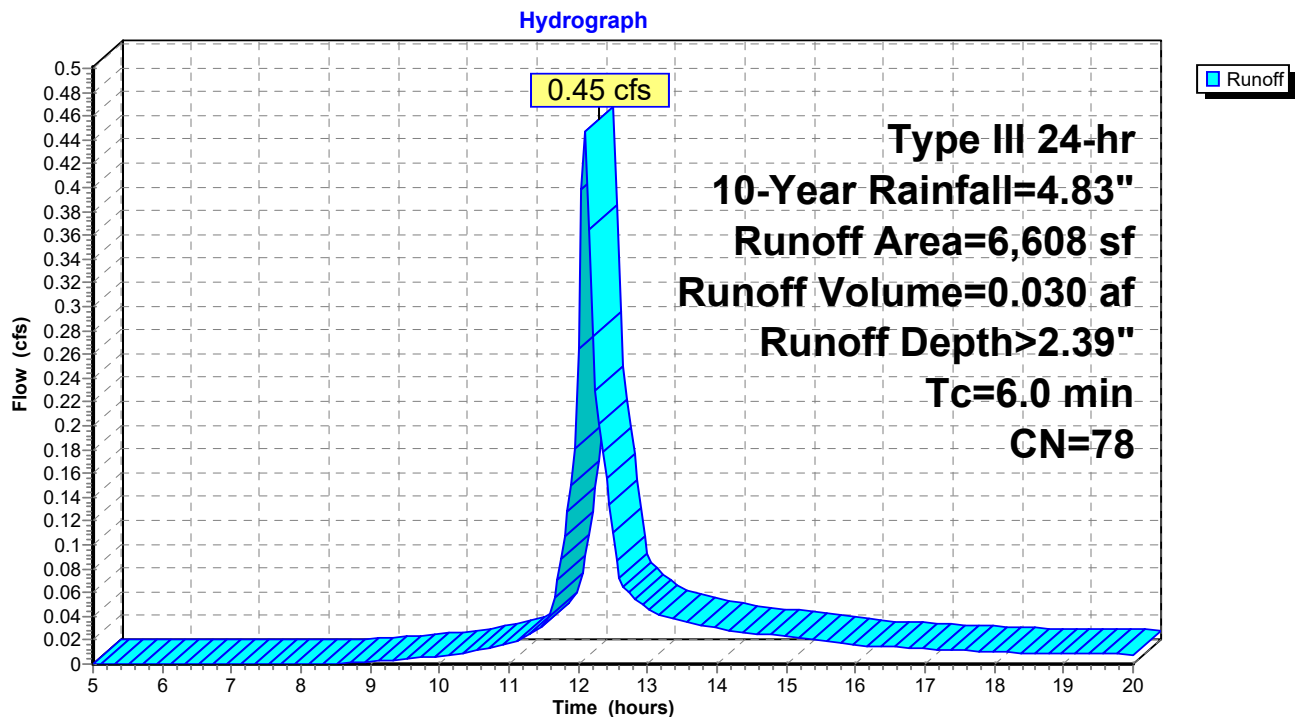
Runoff = 0.45 cfs @ 12.09 hrs, Volume= 0.030 af, Depth> 2.39"
Routed to Pond 194P : CB 2

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
2,225	39	>75% Grass cover, Good, HSG A
4,383	98	Paved parking, HSG A
6,608	78	Weighted Average
2,225		33.67% Pervious Area
4,383		66.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 192S: P3TTT



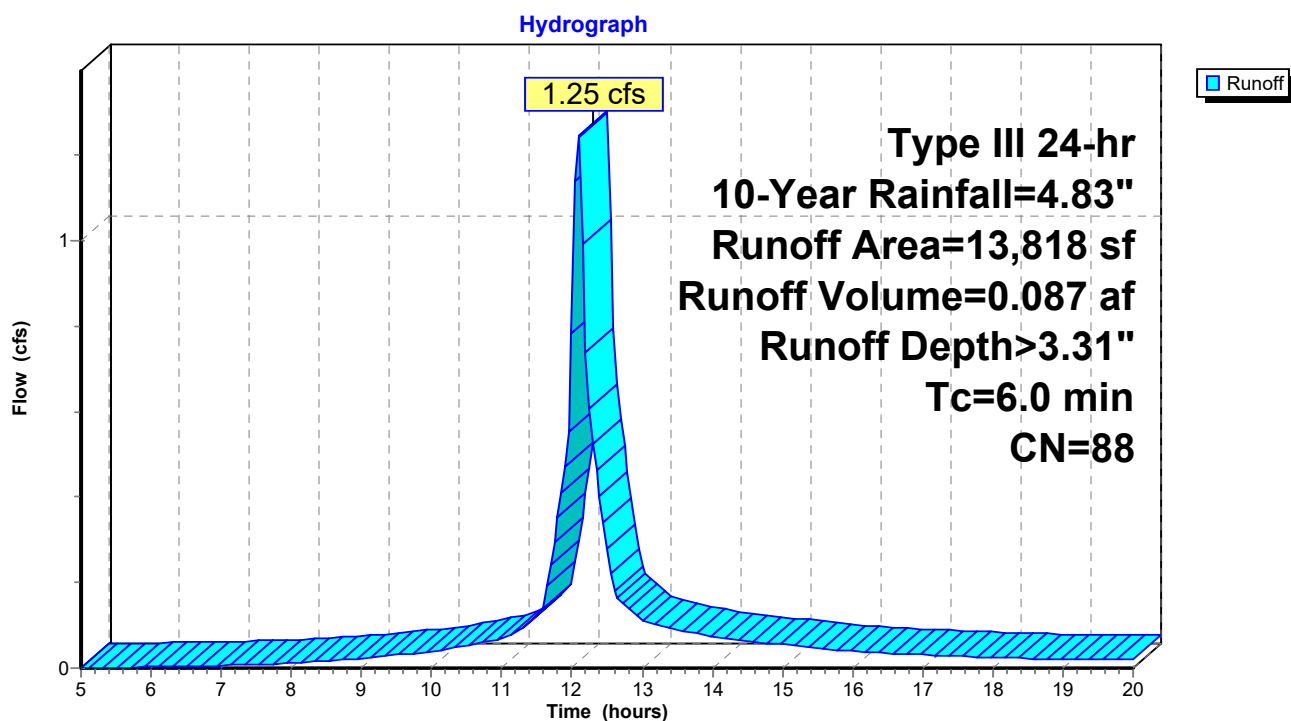
Summary for Subcatchment 195S: P3UUU

Runoff = 1.25 cfs @ 12.09 hrs, Volume= 0.087 af, Depth> 3.31"
 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
2,404	39	>75% Grass cover, Good, HSG A
4,975	98	Unconnected roofs, HSG A
6,439	98	Paved parking, HSG A
13,818	88	Weighted Average
2,404		17.40% Pervious Area
11,414		82.60% Impervious Area
4,975		43.59% 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

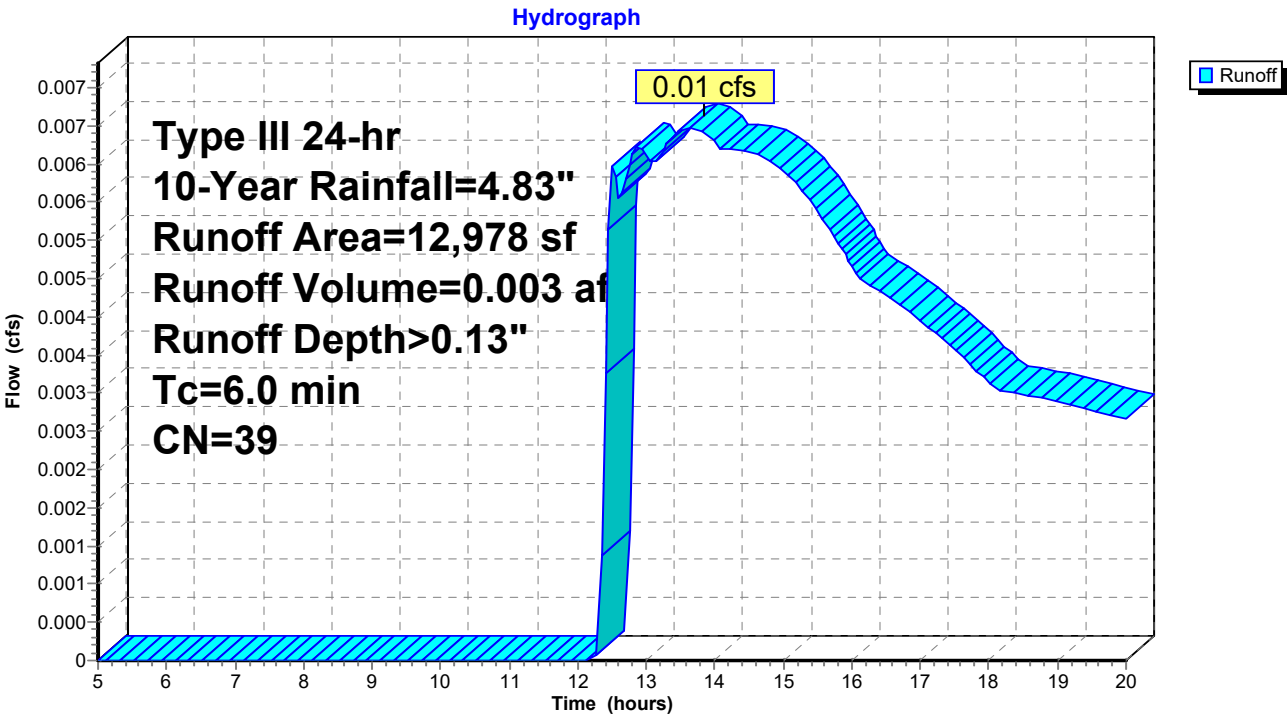
Runoff = 0.01 cfs @ 13.65 hrs, Volume= 0.003 af, Depth> 0.13"
Routed to Pond 197P : Inf. Basin 1

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
12,978	39	>75% Grass cover, Good, HSG A
12,978		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 198S: P3VVV



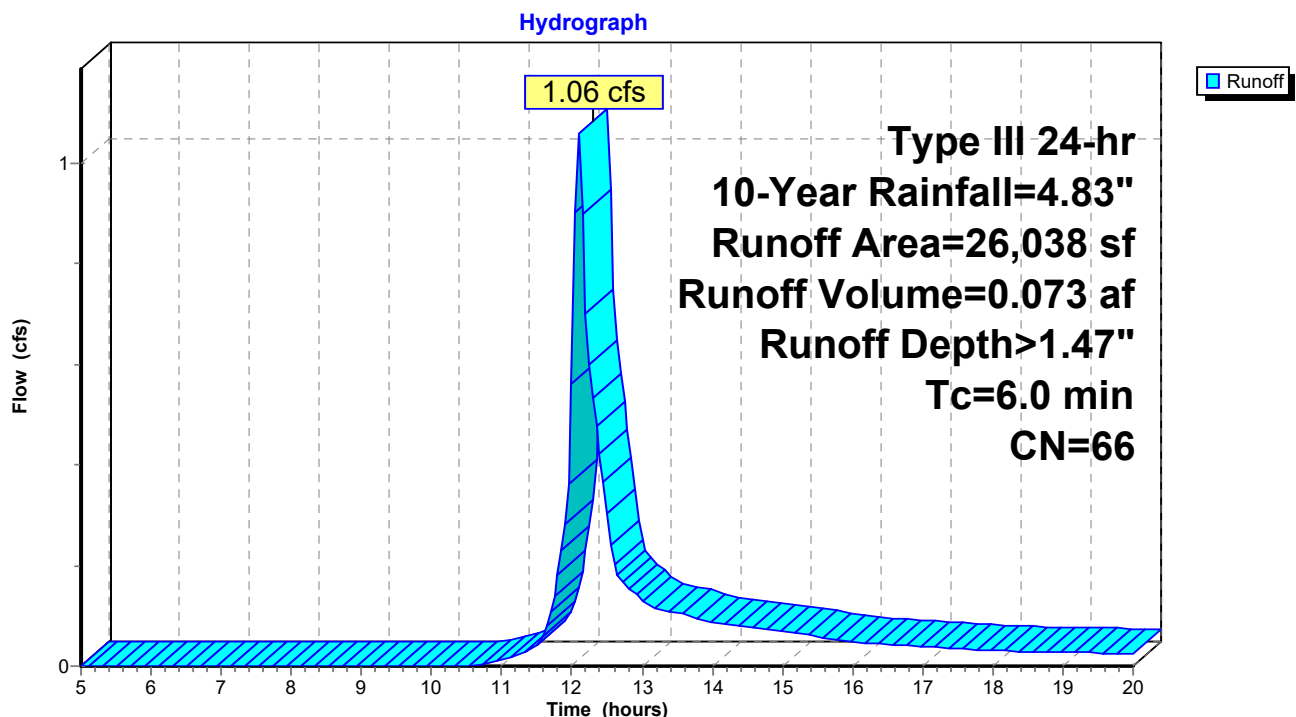
Summary for Subcatchment 202S: (new Subcat)

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)

Summary for Subcatchment 204S: (new Subcat)

Runoff = 0.02 cfs @ 16.80 hrs, Volume= 0.008 af, Depth> 0.03"
 Routed to Link 203L : 3A

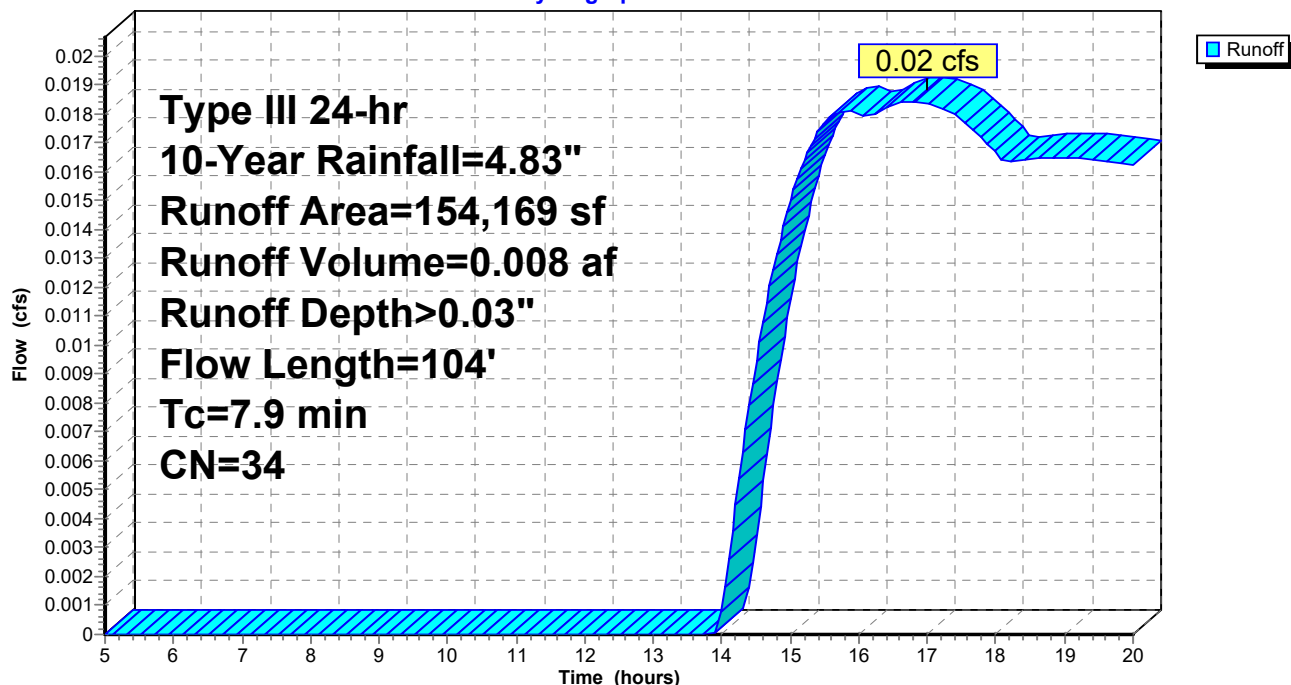
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 10-Year Rainfall=4.83"

Area (sf)	CN	Description
94,353	30	Woods, Good, HSG A
57,796	39	>75% Grass cover, Good, HSG A
2,020	98	Unconnected roofs, HSG A
154,169	34	Weighted Average
152,149		98.69% Pervious Area
2,020		1.31% Impervious Area
2,020		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, Grass: Short n= 0.150 P2= 3.10"
0.4	54	0.1200	2.42		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
7.9	104	Total			

Subcatchment 204S: (new Subcat)

Hydrograph



Summary for Pond 15P: Inf. Basin 5

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 38P by 0.40' @ 13.35 hrs

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	Custom Stage Data (Prismatic) Listed below (Recalc)

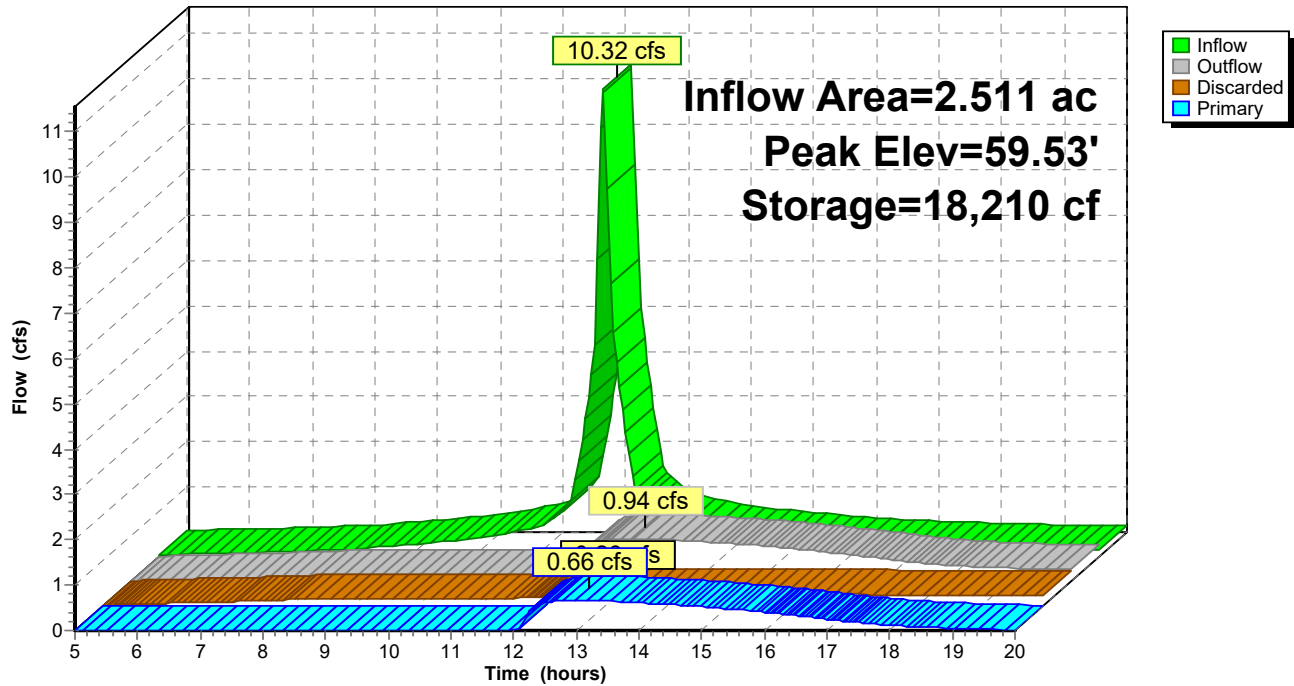
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
57.00	5,984	0	0
58.00	6,929	6,457	6,457
59.00	7,931	7,430	13,887
60.00	8,989	8,460	22,347
61.00	10,104	9,547	31,893

Device	Routing	Invert	Outlet Devices
#1	Discarded	57.00'	1.020 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 52.00'
#2	Primary	57.00'	18.0" Round Culvert L= 67.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.00' / 52.50' S= 0.0672 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#3	Device 2	58.75'	4.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 2	59.80'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.65' (Flood elevation advised)

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

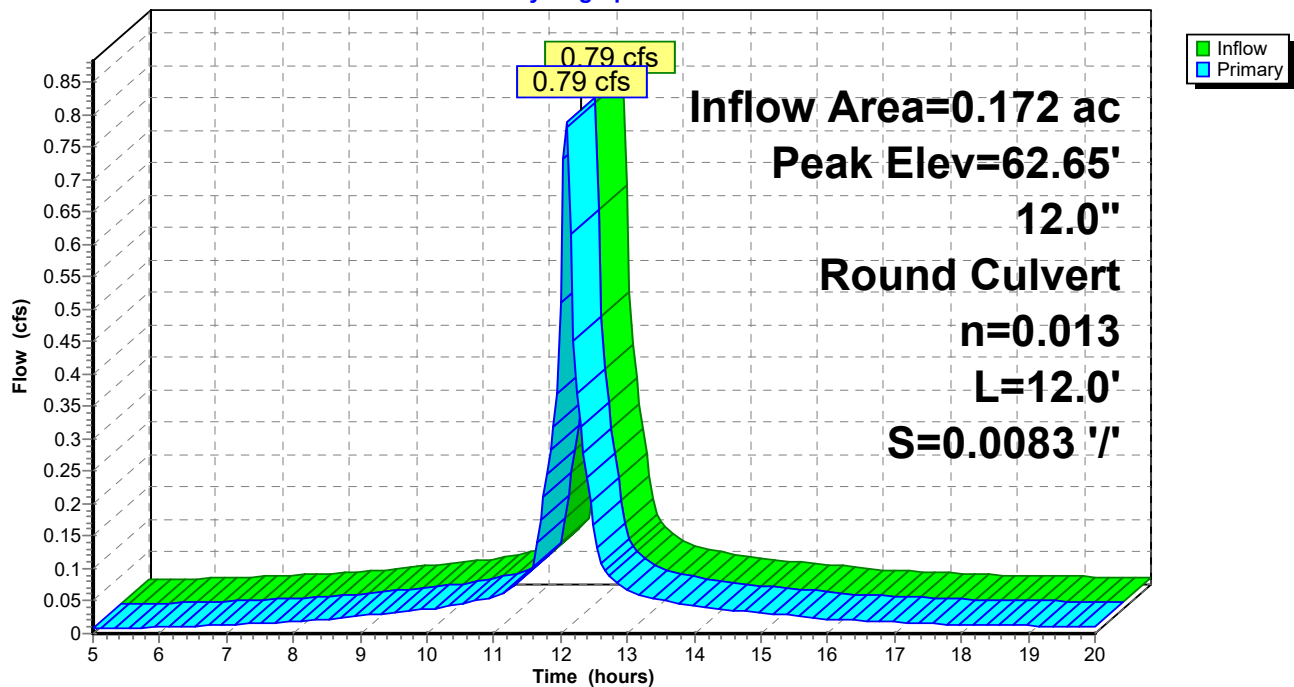
Device	Routing	Invert	Outlet Devices
#1	Primary	62.10'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.10' / 62.00' S= 0.0083 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.97' (Flood elevation advised)

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

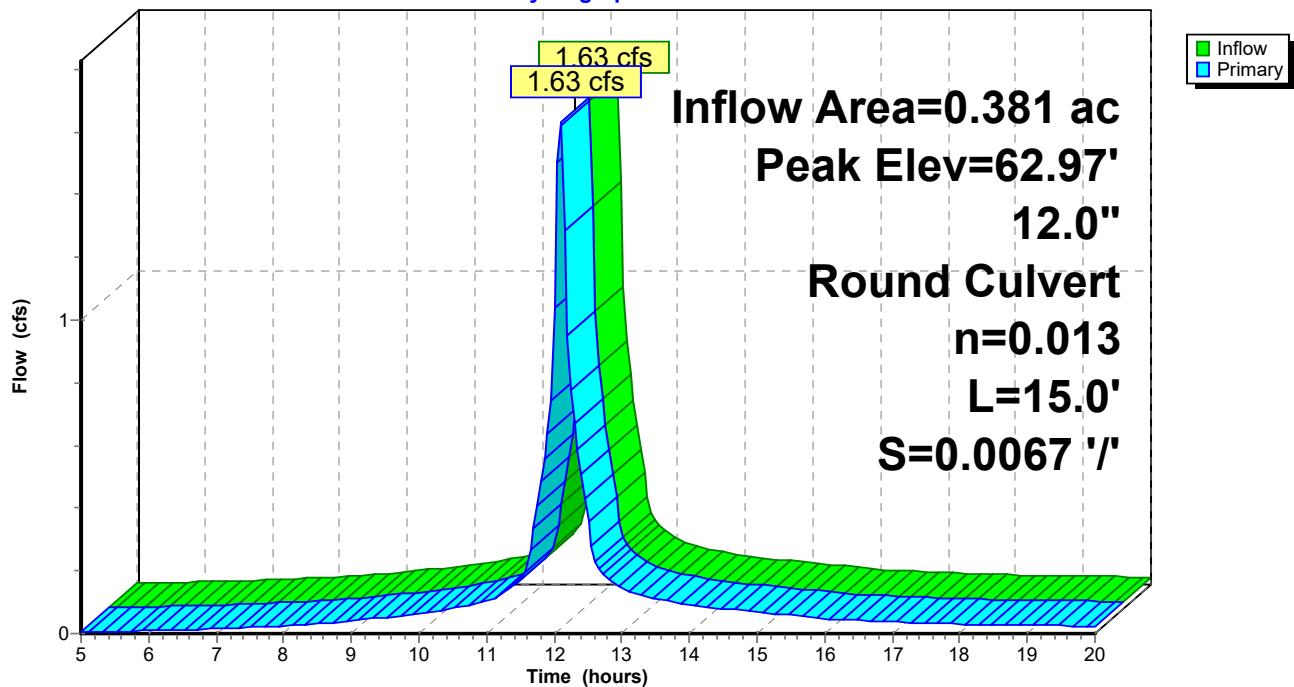
Device	Routing	Invert	Outlet Devices
#1	Primary	62.10'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.10' / 62.00' S= 0.0067 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.59 cfs @ 12.09 hrs HW=62.96' (Free Discharge)

↑=Culvert (Barrel Controls 1.59 cfs @ 2.97 fps)

Pond 17P: CB 59

Hydrograph



Summary for Pond 18P: CB 63

[57] Hint: Peaked at 64.34' (Flood elevation advised)

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

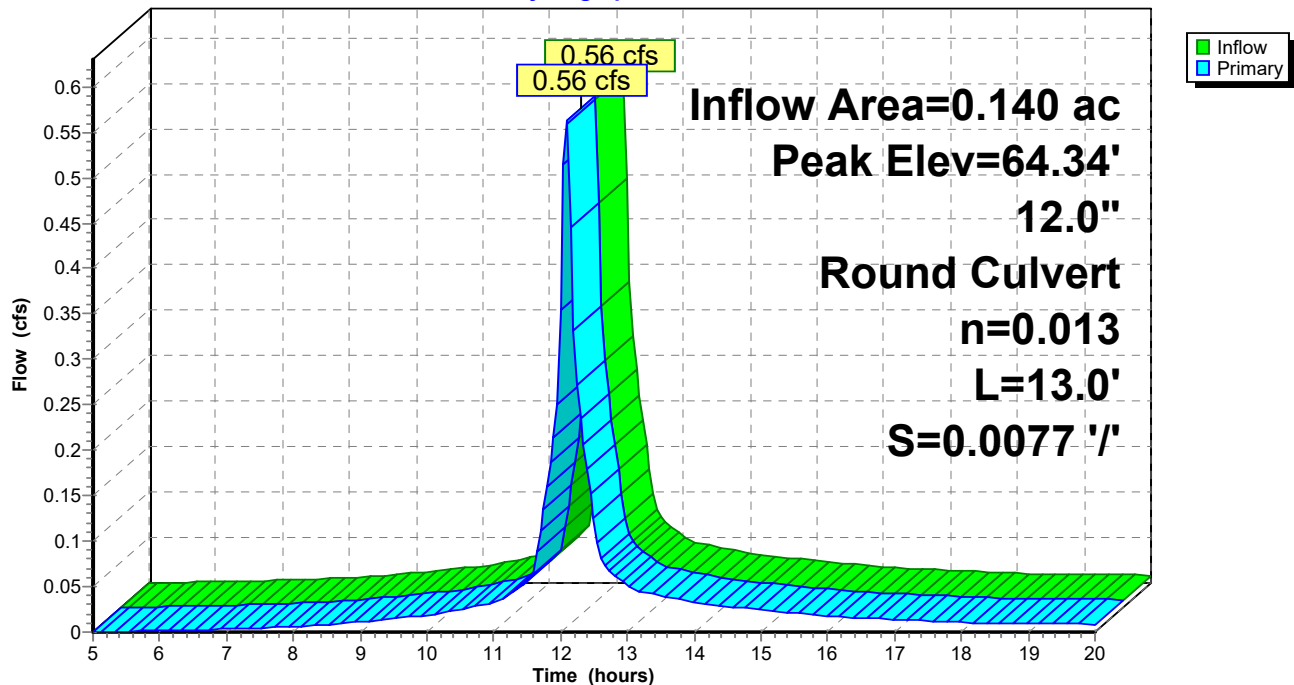
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 64.34' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	63.88'	12.0" Round Culvert L= 13.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 63.88' / 63.78' S= 0.0077 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.19' (Flood elevation advised)

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

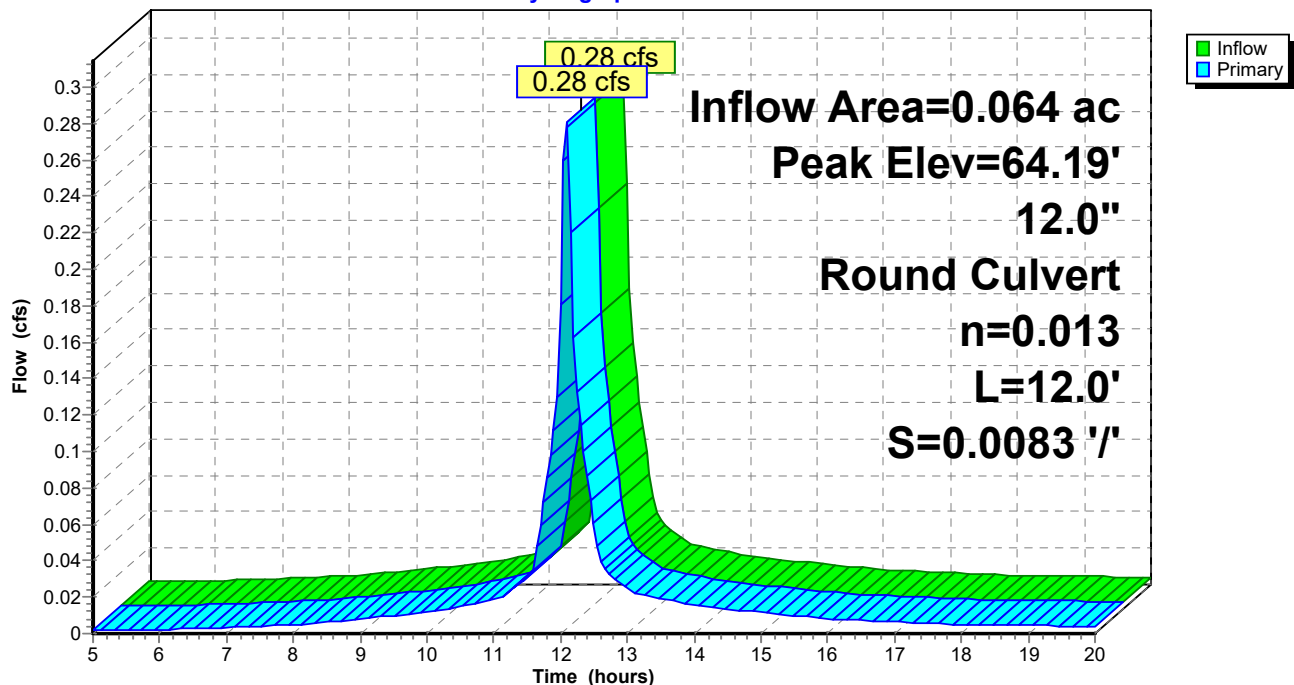
Device	Routing	Invert	Outlet Devices
#1	Primary	63.88'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 63.88' / 63.78' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.05' (Flood elevation advised)

[81] Warning: Exceeded Pond 16P by 0.39' @ 12.10 hrs

[81] Warning: Exceeded Pond 17P by 0.08' @ 12.10 hrs

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

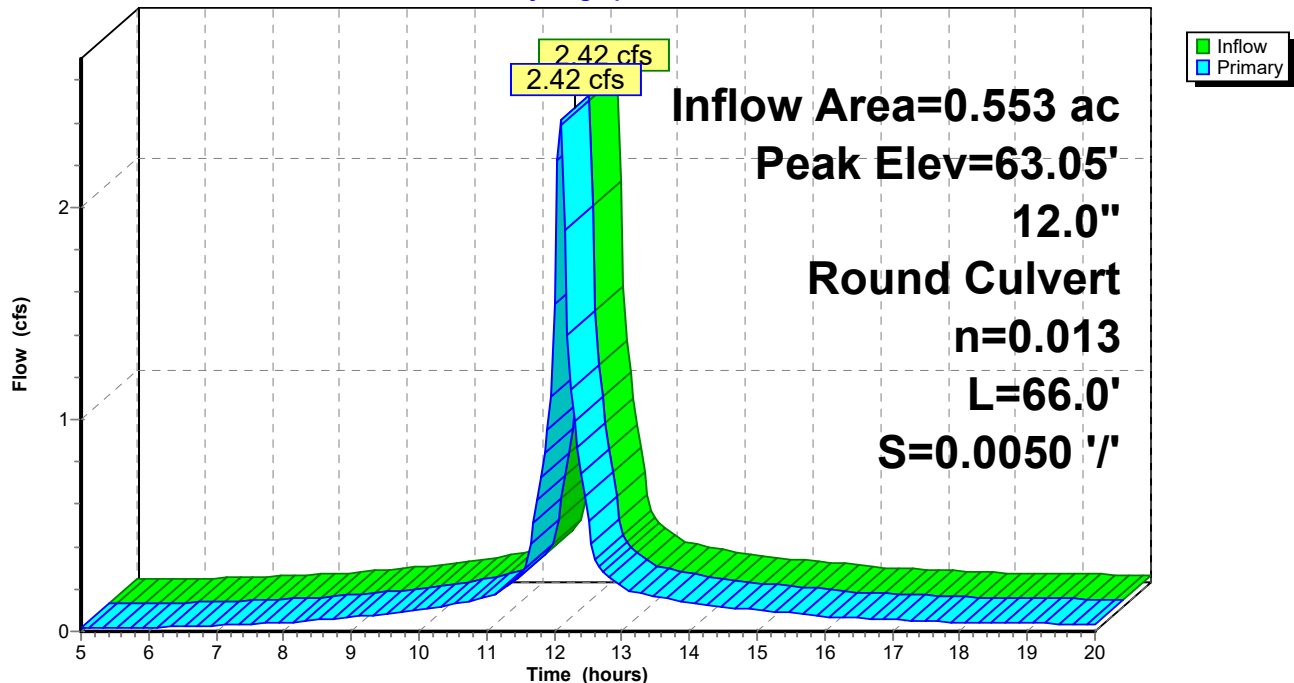
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 63.05' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.90'	12.0" Round Culvert L= 66.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.90' / 61.57' S= 0.0050 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.62' (Flood elevation advised)

[79] Warning: Submerged Pond 20P Primary device # 1 INLET by 0.71'

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

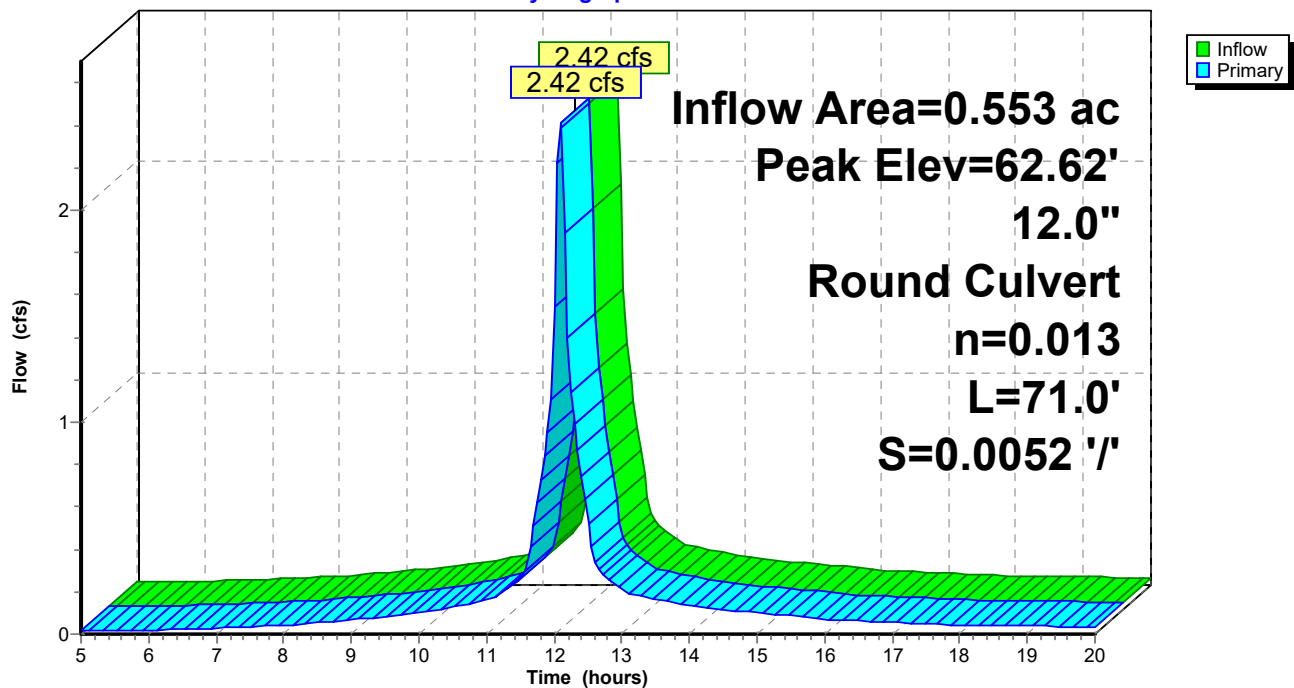
Device	Routing	Invert	Outlet Devices
#1	Primary	61.47'	12.0" Round Culvert L= 71.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.47' / 61.10' S= 0.0052 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.66' (Flood elevation advised)

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

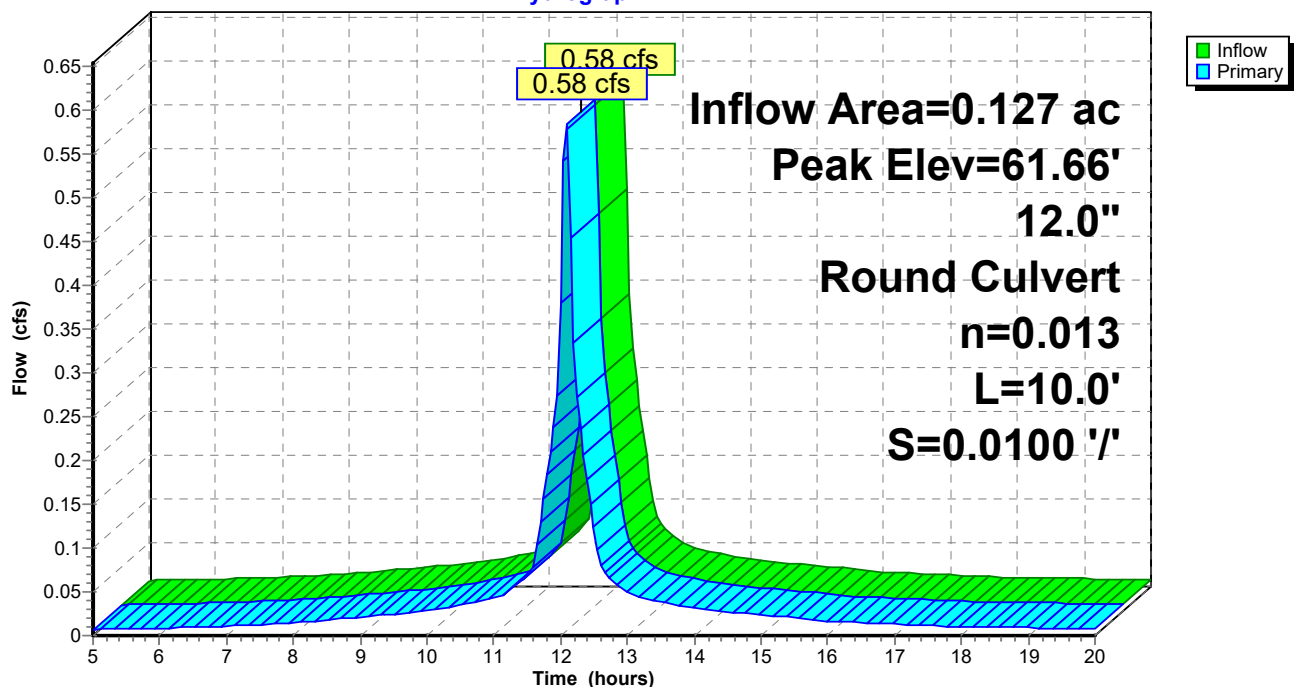
Device	Routing	Invert	Outlet Devices
#1	Primary	61.20'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.20' / 61.10' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.97' (Flood elevation advised)

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

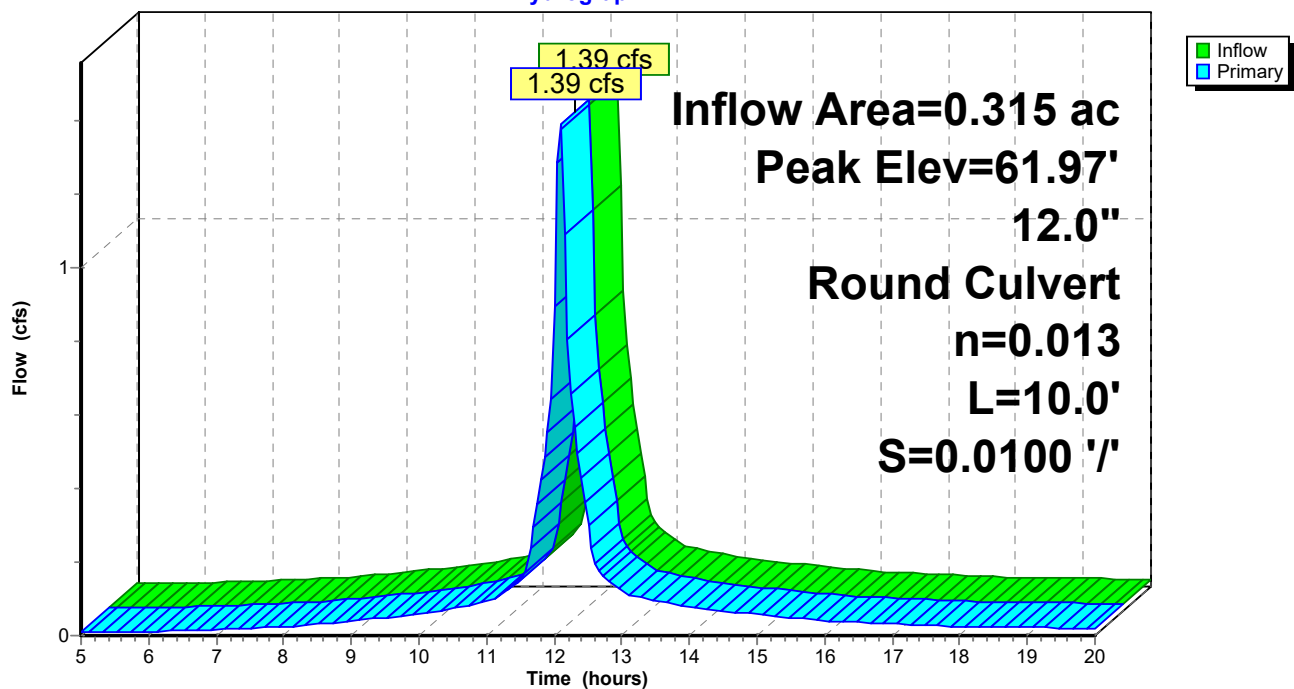
Device	Routing	Invert	Outlet Devices
#1	Primary	61.20'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.20' / 61.10' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.35 cfs @ 12.09 hrs HW=61.96' (Free Discharge)

↑=Culvert (Barrel Controls 1.35 cfs @ 2.93 fps)

Pond 23P: CB 57

Hydrograph



Summary for Pond 24P: DMH 41

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.19' (Flood elevation advised)

[79] Warning: Submerged Pond 21P Primary device # 1 INLET by 0.71'

[81] Warning: Exceeded Pond 22P by 0.52' @ 12.10 hrs

[81] Warning: Exceeded Pond 23P by 0.21' @ 12.10 hrs

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

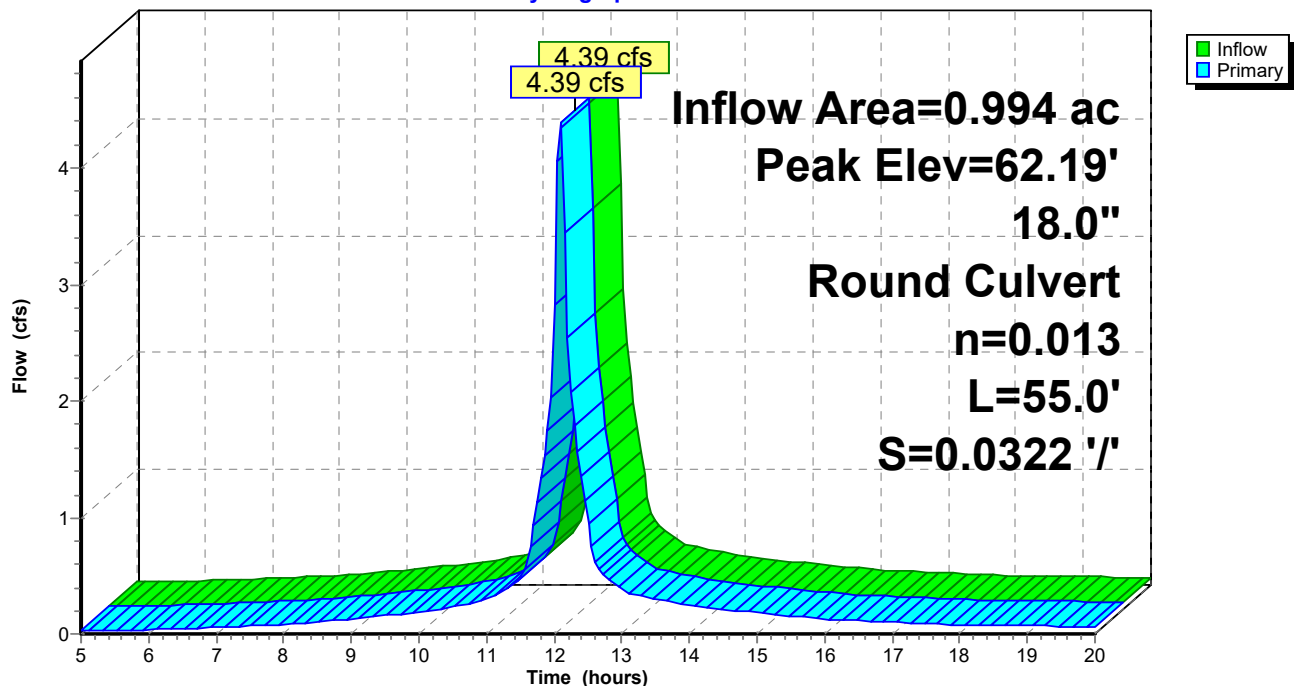
Device	Routing	Invert	Outlet Devices
#1	Primary	61.00'	18.0" Round Culvert L= 55.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.00' / 59.23' S= 0.0322 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.22' (Flood elevation advised)

[79] Warning: Submerged Pond 18P Primary device # 1 INLET by 0.33'

[81] Warning: Exceeded Pond 19P by 0.03' @ 12.10 hrs

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

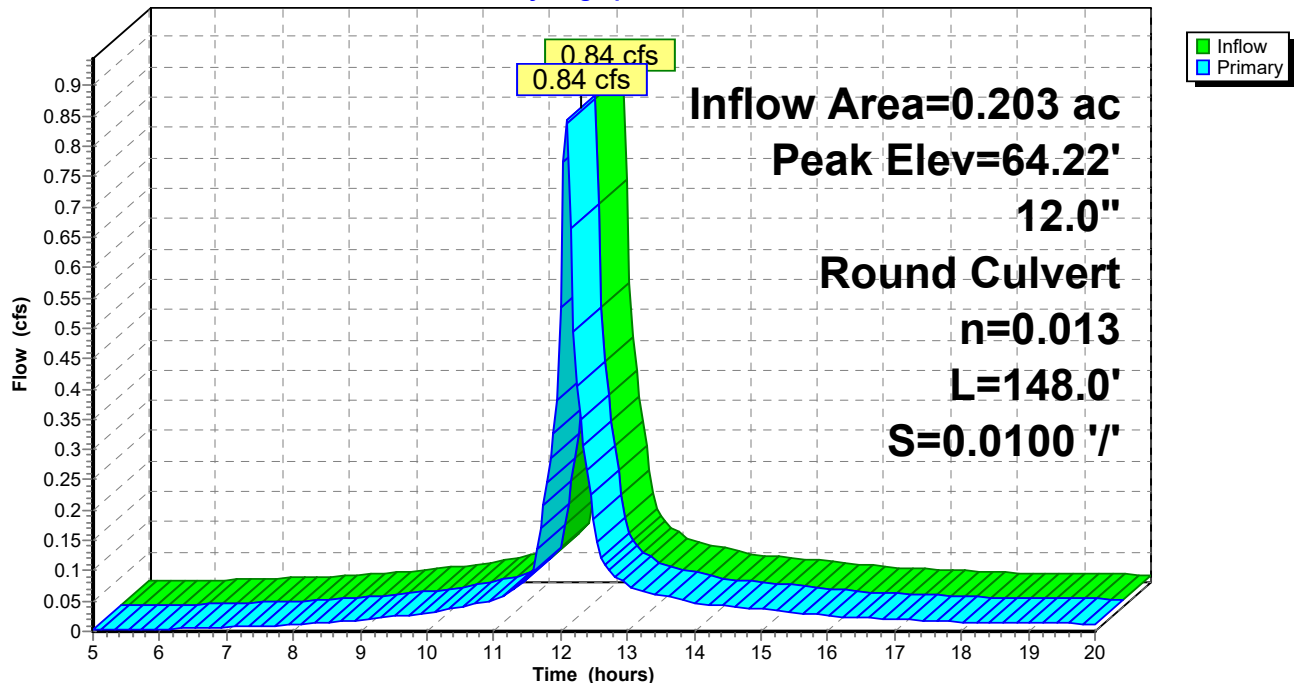
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 64.22' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	63.68'	12.0" Round Culvert L= 148.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 63.68' / 62.20' S= 0.0100 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.98' (Flood elevation advised)

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

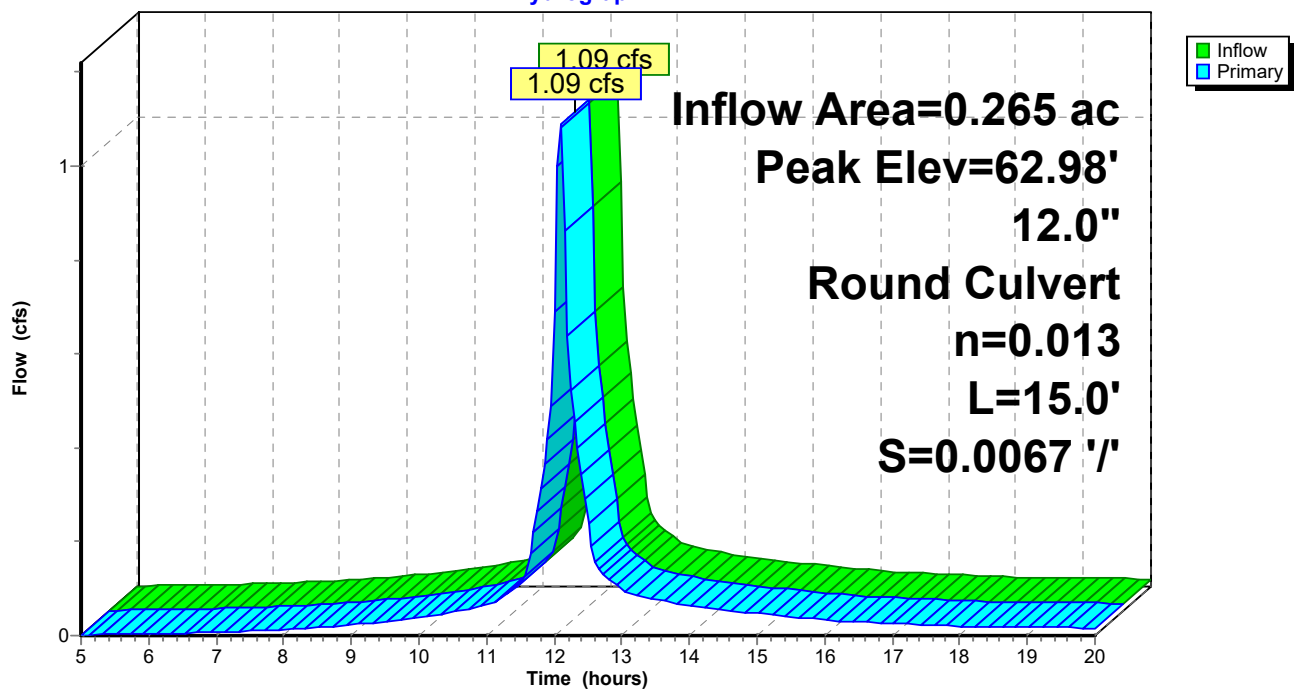
Device	Routing	Invert	Outlet Devices
#1	Primary	62.30'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.30' / 62.20' S= 0.0067 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.06 cfs @ 12.09 hrs HW=62.97' (Free Discharge)

↑=Culvert (Barrel Controls 1.06 cfs @ 2.69 fps)

Pond 26P: CB 61

Hydrograph



Summary for Pond 27P: CB 60

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.71' (Flood elevation advised)

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

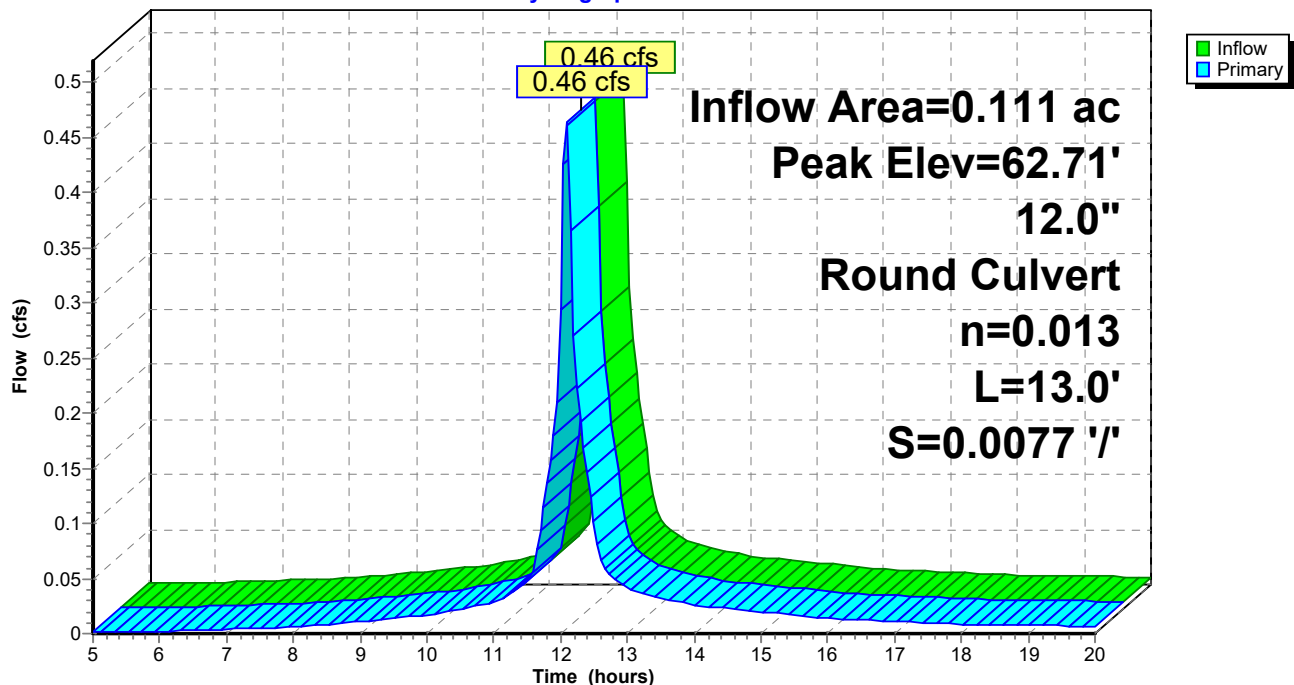
Device	Routing	Invert	Outlet Devices
#1	Primary	62.30'	12.0" Round Culvert L= 13.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.30' / 62.20' S= 0.0077 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.24' (Flood elevation advised)

[79] Warning: Submerged Pond 25P Primary device # 1 OUTLET by 1.04'

[81] Warning: Exceeded Pond 26P by 0.26' @ 12.10 hrs

[81] Warning: Exceeded Pond 27P by 0.53' @ 12.10 hrs

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

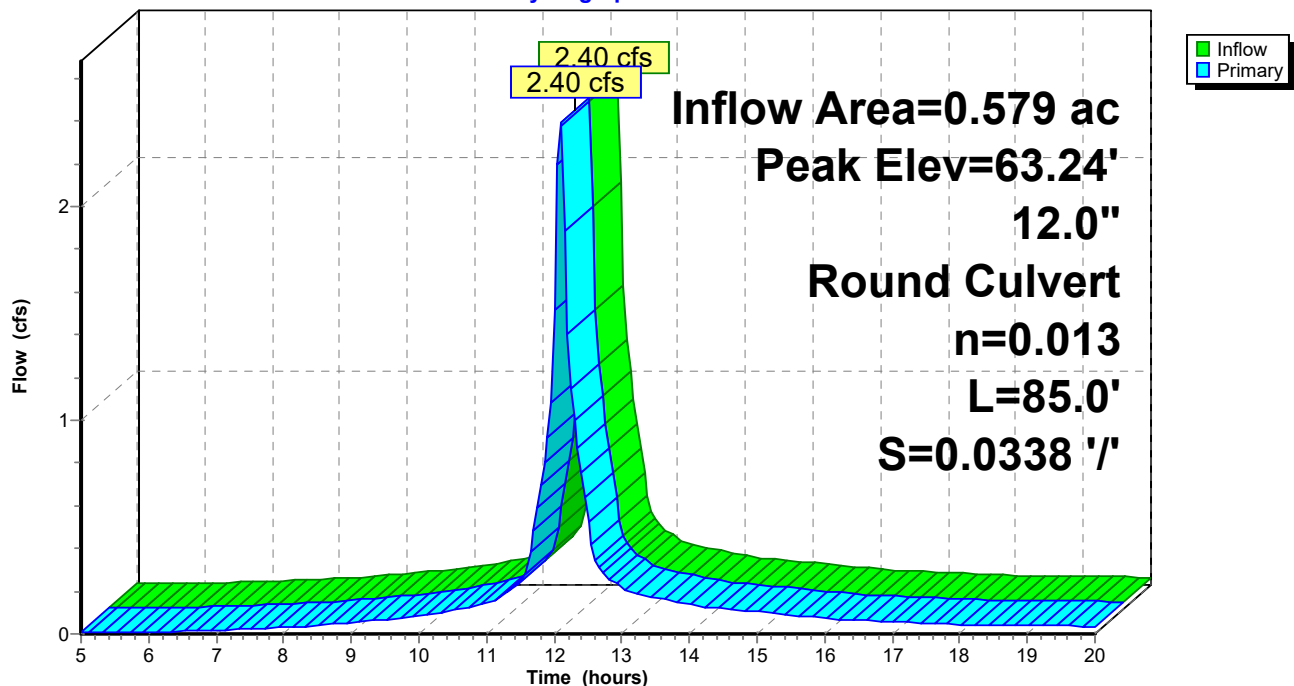
Device	Routing	Invert	Outlet Devices
#1	Primary	62.10'	12.0" Round Culvert L= 85.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.10' / 59.23' S= 0.0338 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.51' (Flood elevation advised)

[79] Warning: Submerged Pond 24P Primary device # 1 OUTLET by 1.28'

[79] Warning: Submerged Pond 28P Primary device # 1 OUTLET by 1.28'

[79] Warning: Submerged Pond 30P Primary device # 1 INLET by 0.28'

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

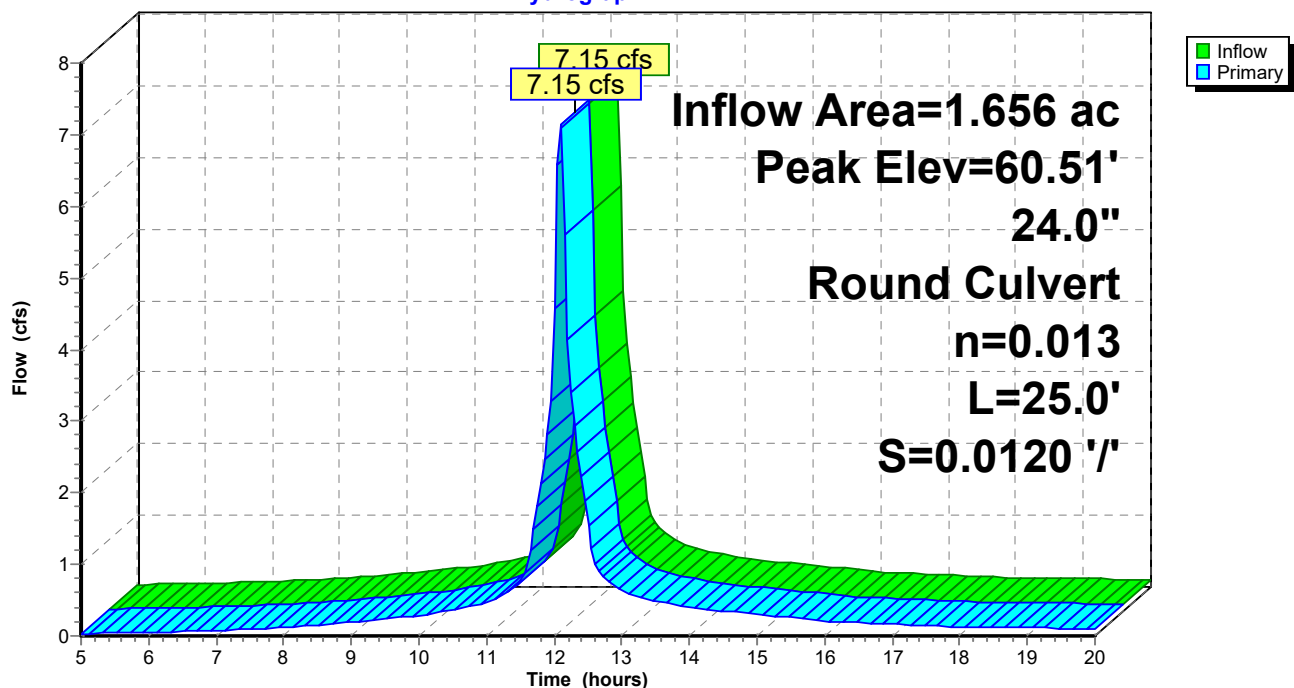
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.51' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	59.13'	24.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.13' / 58.83' S= 0.0120 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.57' (Flood elevation advised)

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

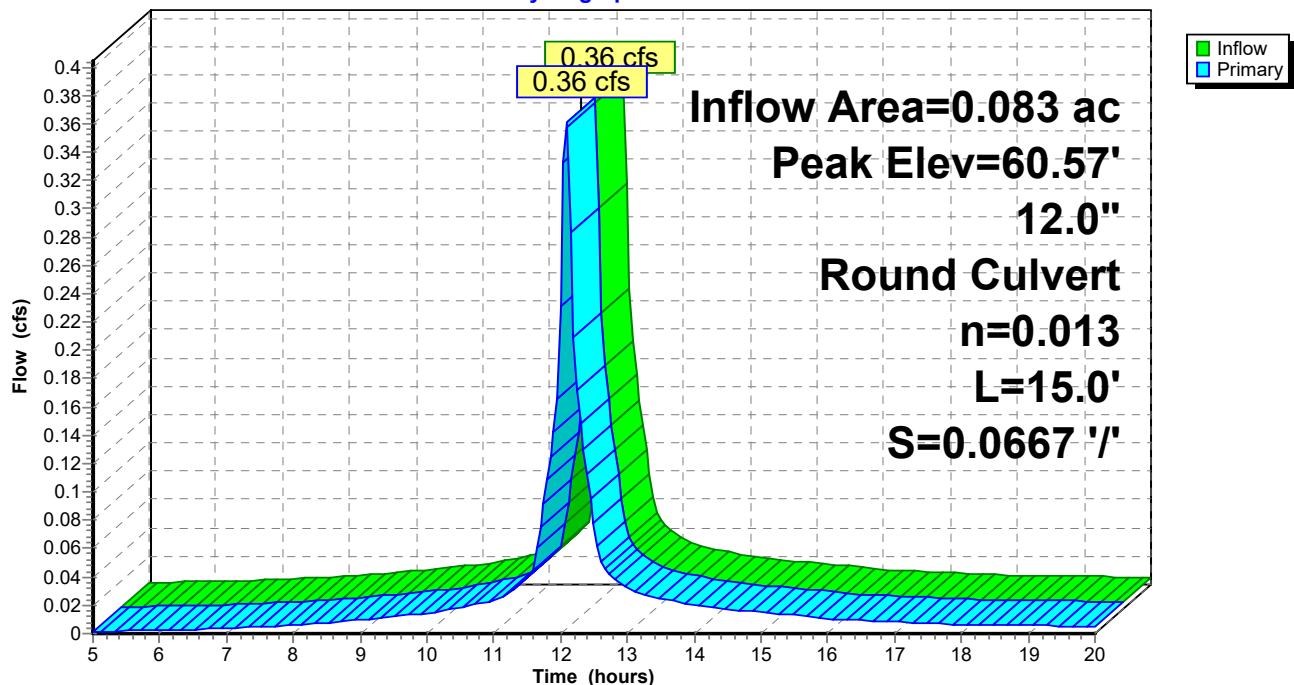
Device	Routing	Invert	Outlet Devices
#1	Primary	60.23'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.23' / 59.23' S= 0.0667 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.56' (Flood elevation advised)

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

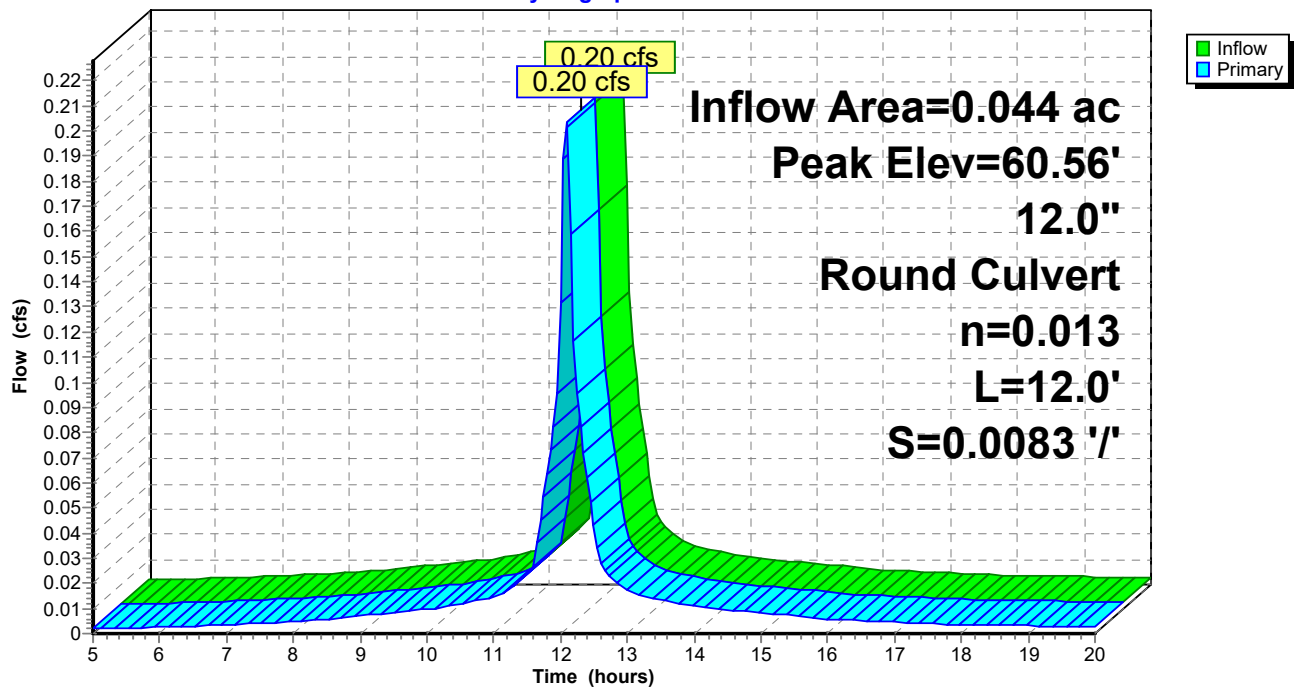
Device	Routing	Invert	Outlet Devices
#1	Primary	60.30'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.30' / 60.20' S= 0.0083 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.93' (Flood elevation advised)

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

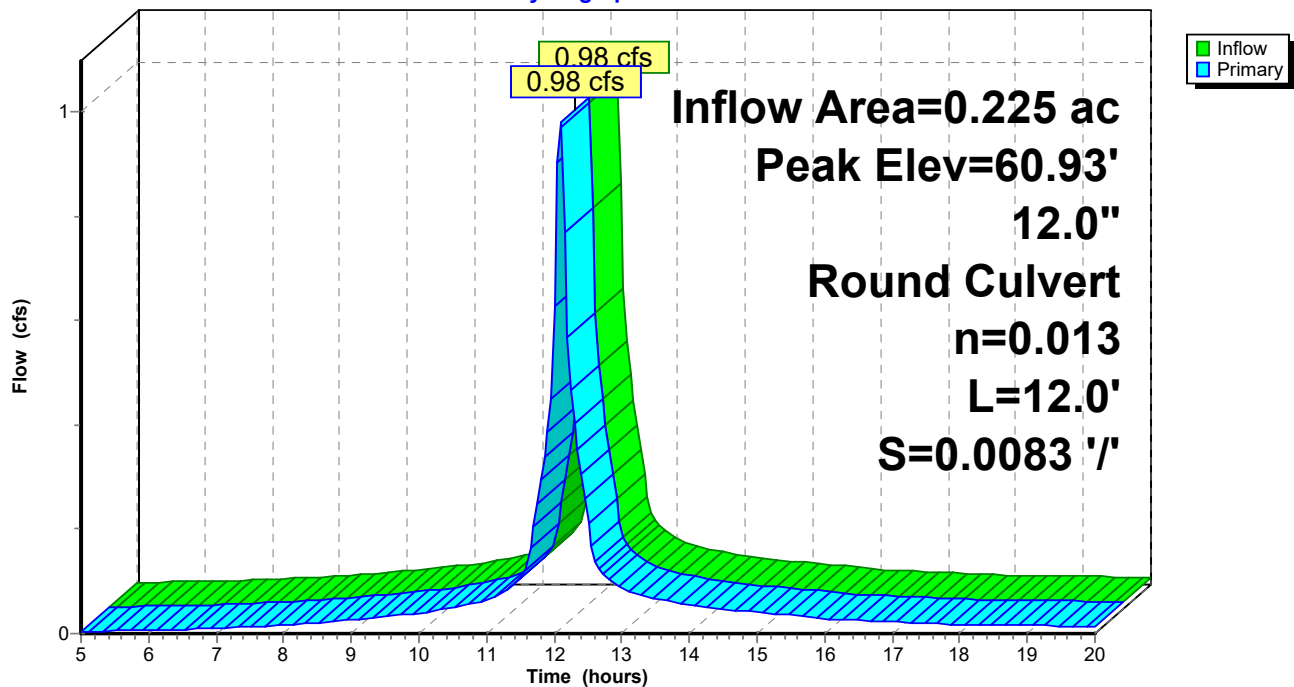
Device	Routing	Invert	Outlet Devices
#1	Primary	60.30'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.30' / 60.20' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.01' (Flood elevation advised)

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

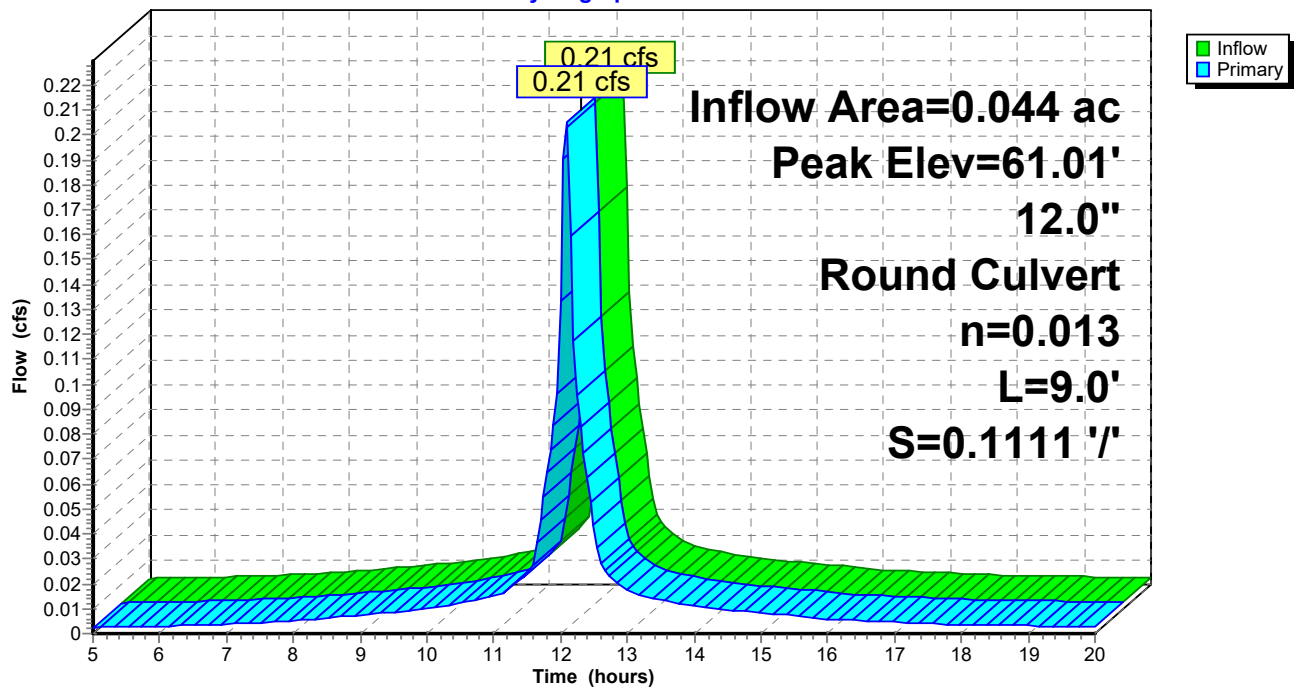
Device	Routing	Invert	Outlet Devices
#1	Primary	60.76'	12.0" Round Culvert L= 9.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.76' / 59.76' S= 0.1111 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.79' (Flood elevation advised)

[81] Warning: Exceeded Pond 31P by 0.23' @ 12.10 hrs

[79] Warning: Submerged Pond 32P Primary device # 1 INLET by 0.49'

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

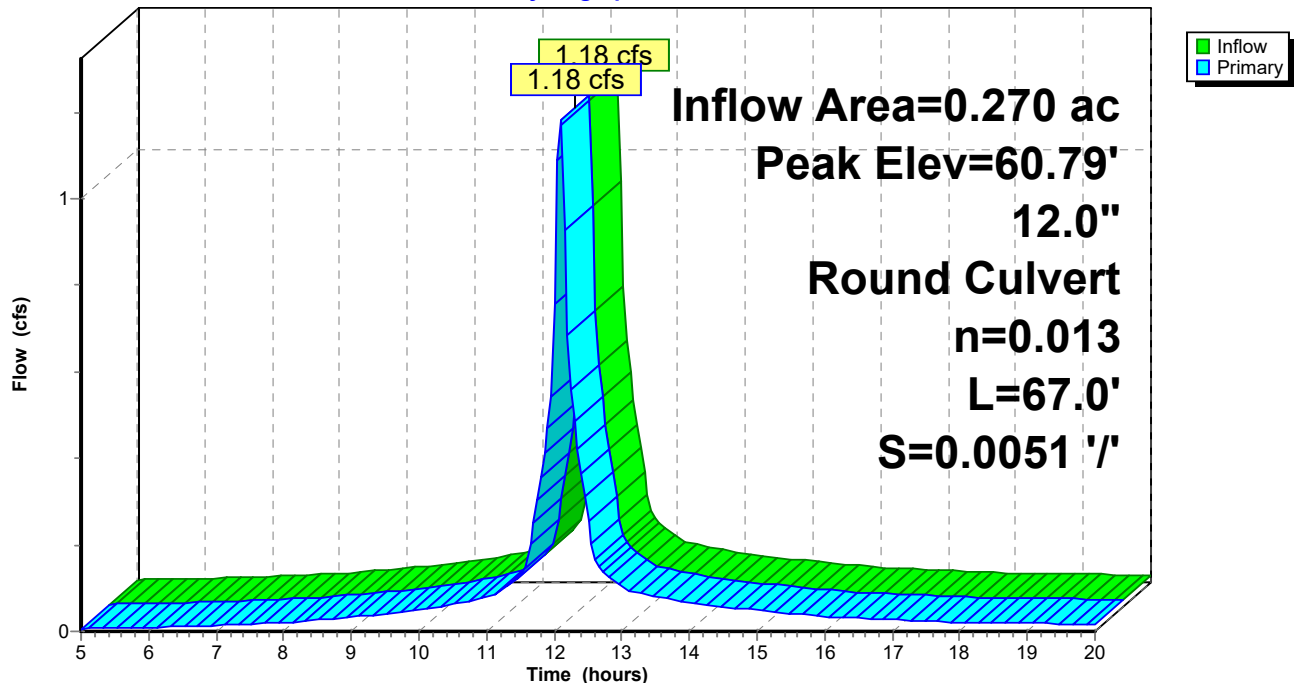
Device	Routing	Invert	Outlet Devices
#1	Primary	60.10'	12.0" Round Culvert L= 67.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.10' / 59.76' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.43' (Flood elevation advised)

[79] Warning: Submerged Pond 33P Primary device # 1 OUTLET by 0.67'

[79] Warning: Submerged Pond 34P Primary device # 1 INLET by 0.33'

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

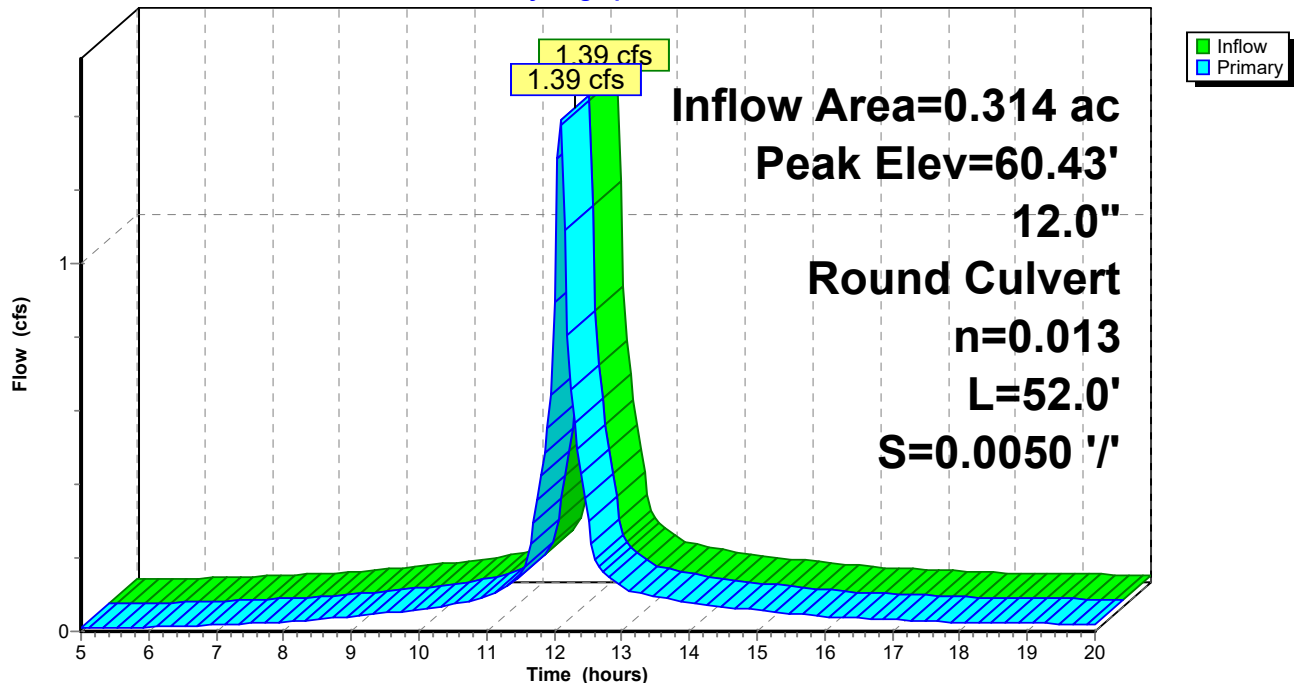
Device	Routing	Invert	Outlet Devices
#1	Primary	59.66'	12.0" Round Culvert L= 52.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.66' / 59.40' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.76' (Flood elevation advised)

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

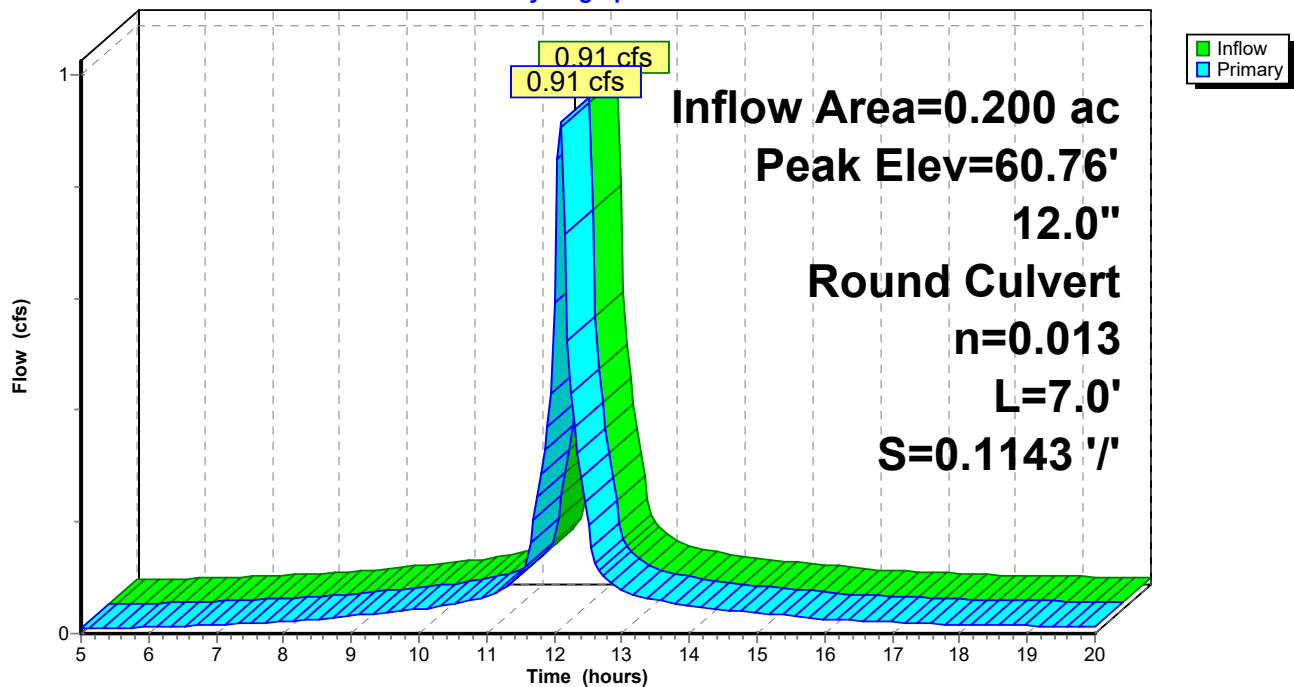
Device	Routing	Invert	Outlet Devices
#1	Primary	60.20'	12.0" Round Culvert L= 7.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.20' / 59.40' S= 0.1143 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.39' (Flood elevation advised)

[79] Warning: Submerged Pond 35P Primary device # 1 INLET by 0.72'

[79] Warning: Submerged Pond 36P Primary device # 1 INLET by 0.18'

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

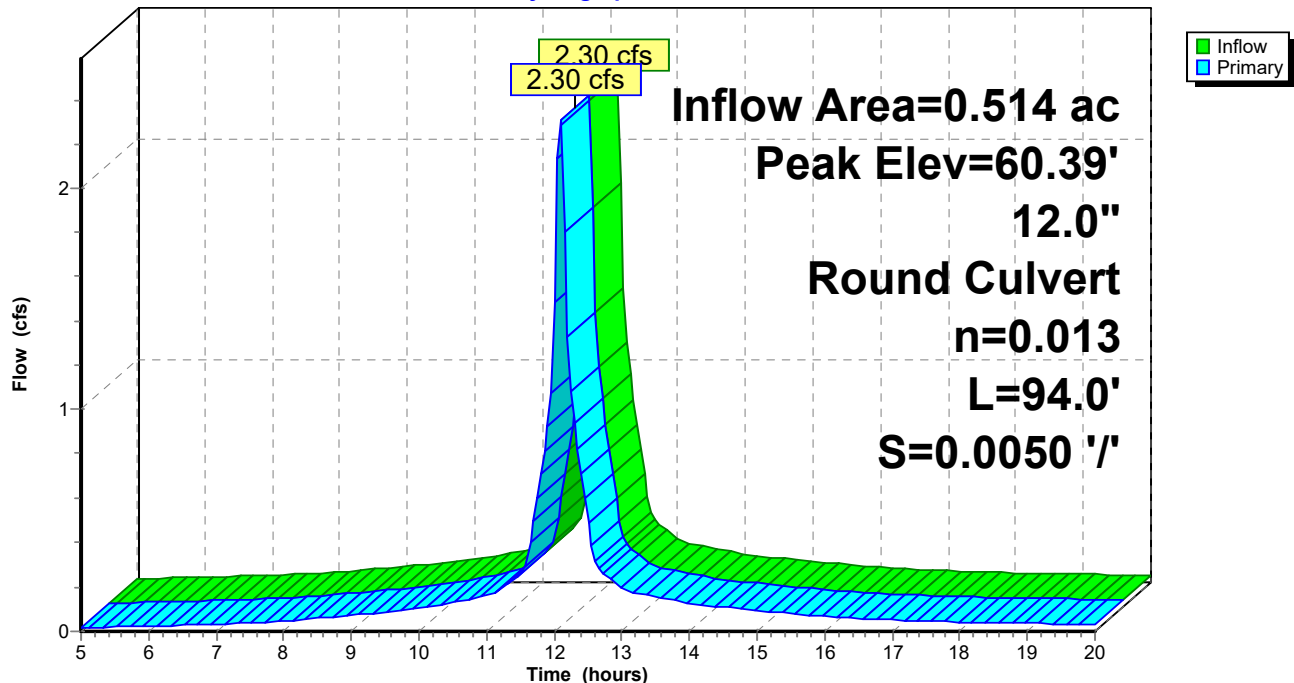
Device	Routing	Invert	Outlet Devices
#1	Primary	59.30'	12.0" Round Culvert L= 94.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.30' / 58.83' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.37' (Flood elevation advised)

[79] Warning: Submerged Pond 29P Primary device # 1 INLET by 1.23'

[79] Warning: Submerged Pond 37P Primary device # 1 INLET by 1.06'

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

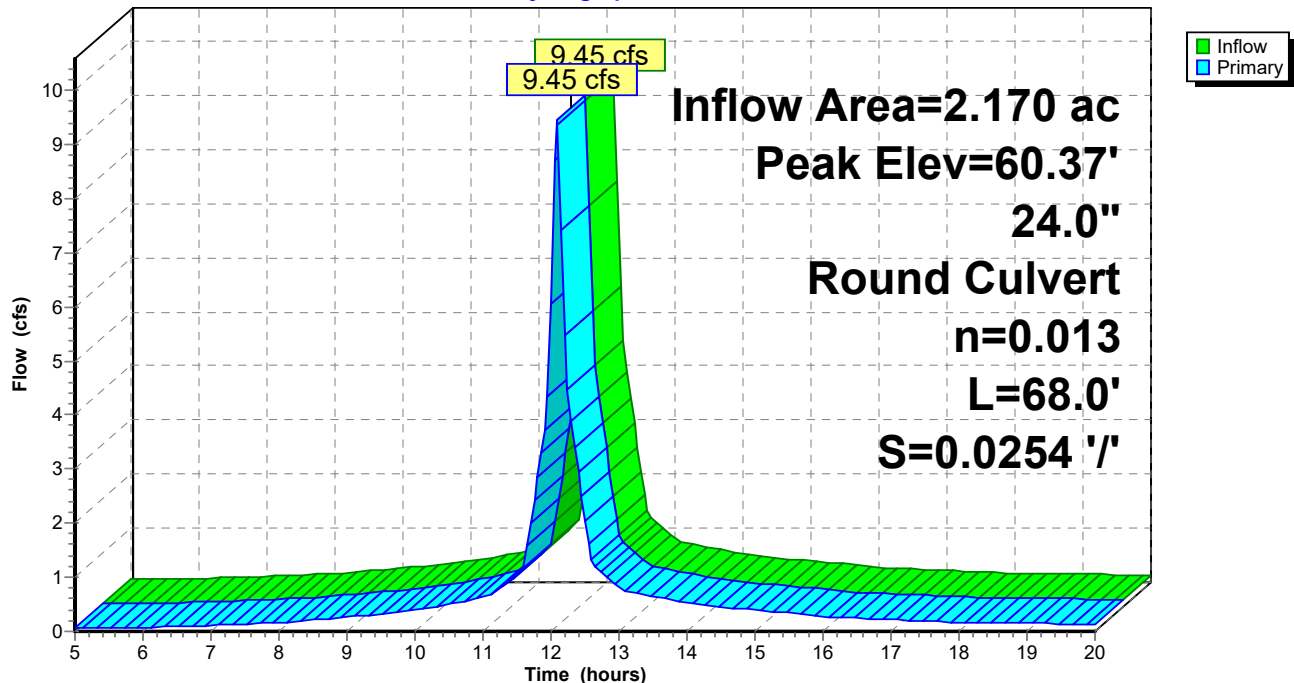
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.37' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	58.73'	24.0" Round Culvert L= 68.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.73' / 57.00' S= 0.0254 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.67' (Flood elevation advised)

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

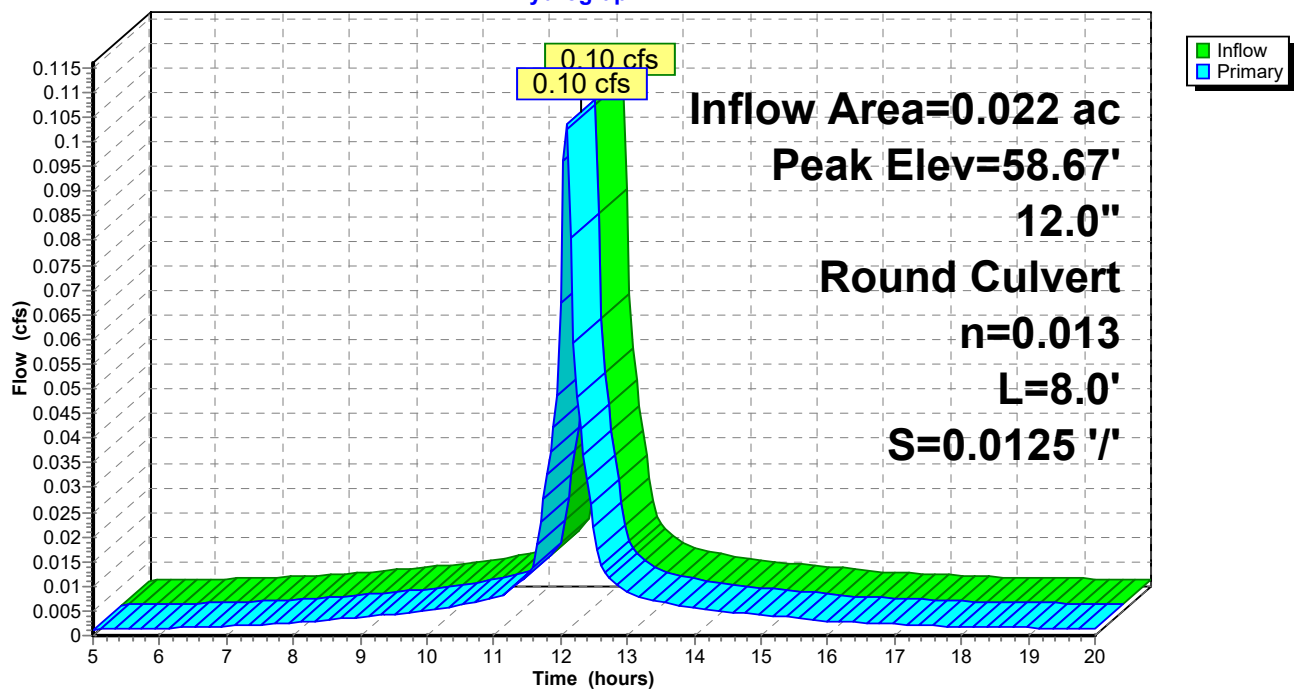
Device	Routing	Invert	Outlet Devices
#1	Primary	58.50'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.50' / 58.40' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.03' (Flood elevation advised)

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

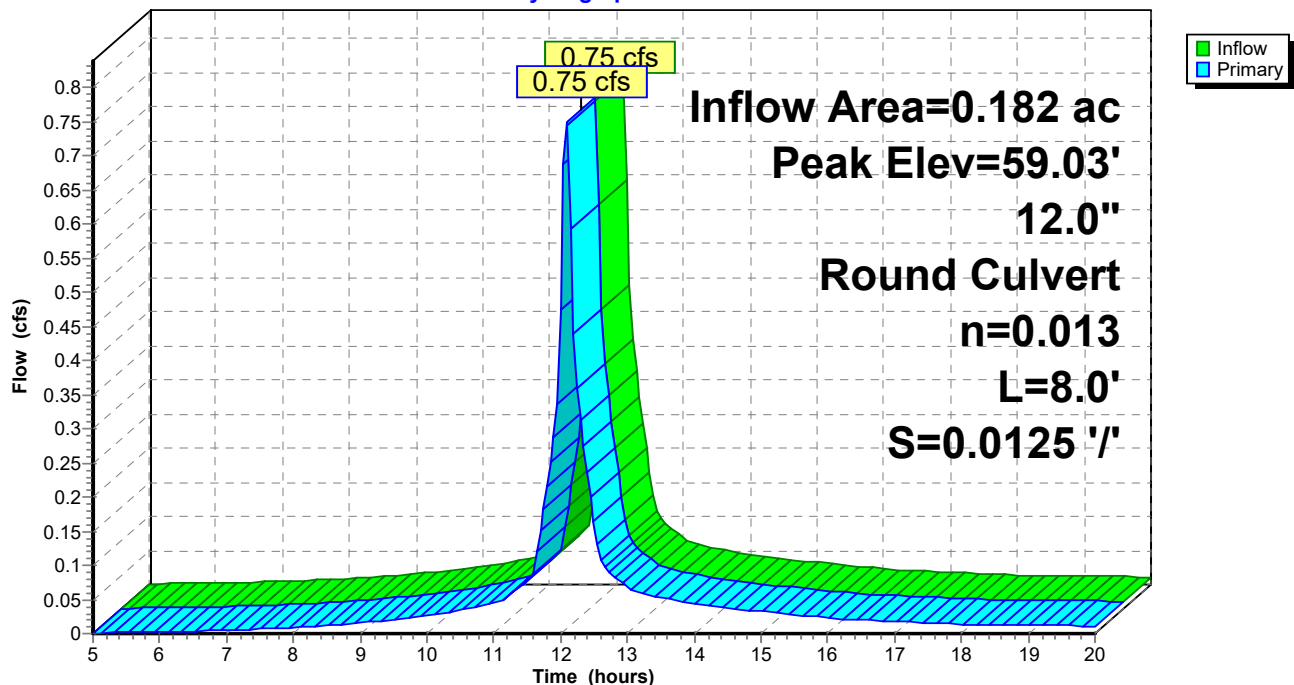
Device	Routing	Invert	Outlet Devices
#1	Primary	58.50'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.50' / 58.40' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.84' (Flood elevation advised)

[81] Warning: Exceeded Pond 41P by 0.16' @ 12.10 hrs

[79] Warning: Submerged Pond 42P Primary device # 1 INLET by 0.34'

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

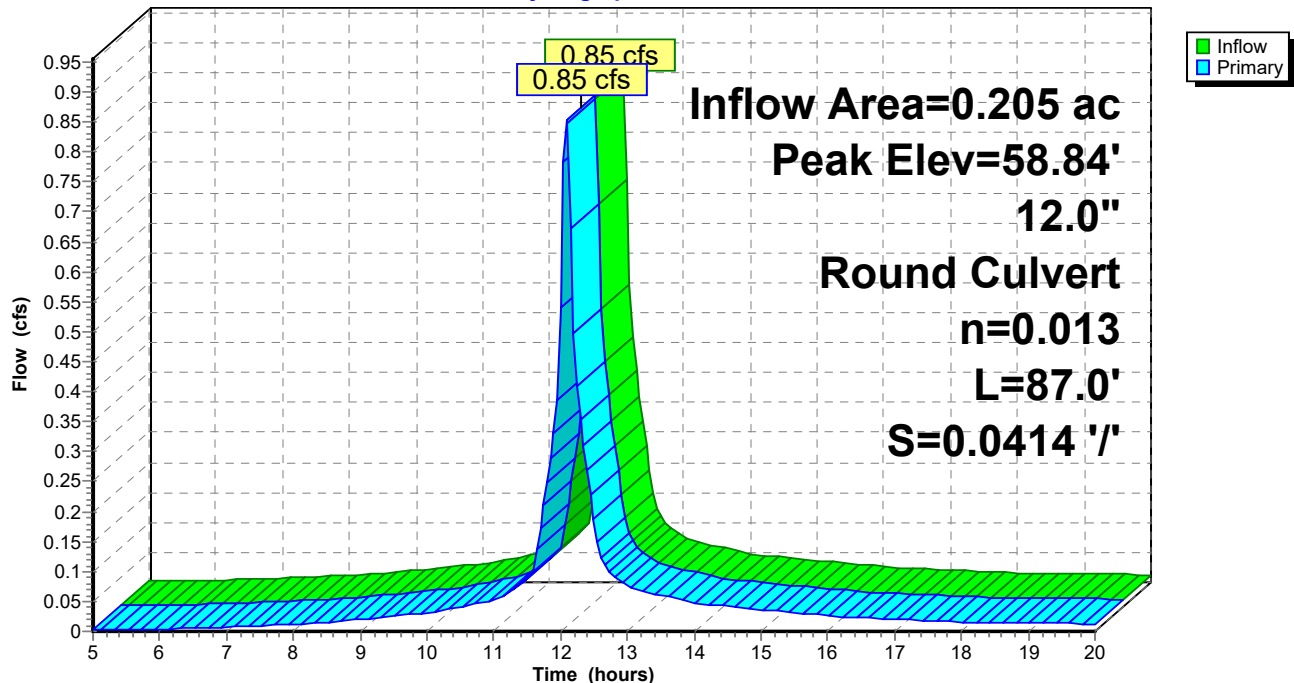
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 58.84' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	58.30'	12.0" Round Culvert L= 87.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.30' / 54.70' S= 0.0414 '/' Cc= 0.900 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

[57] Hint: Peaked at 55.51' (Flood elevation advised)

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

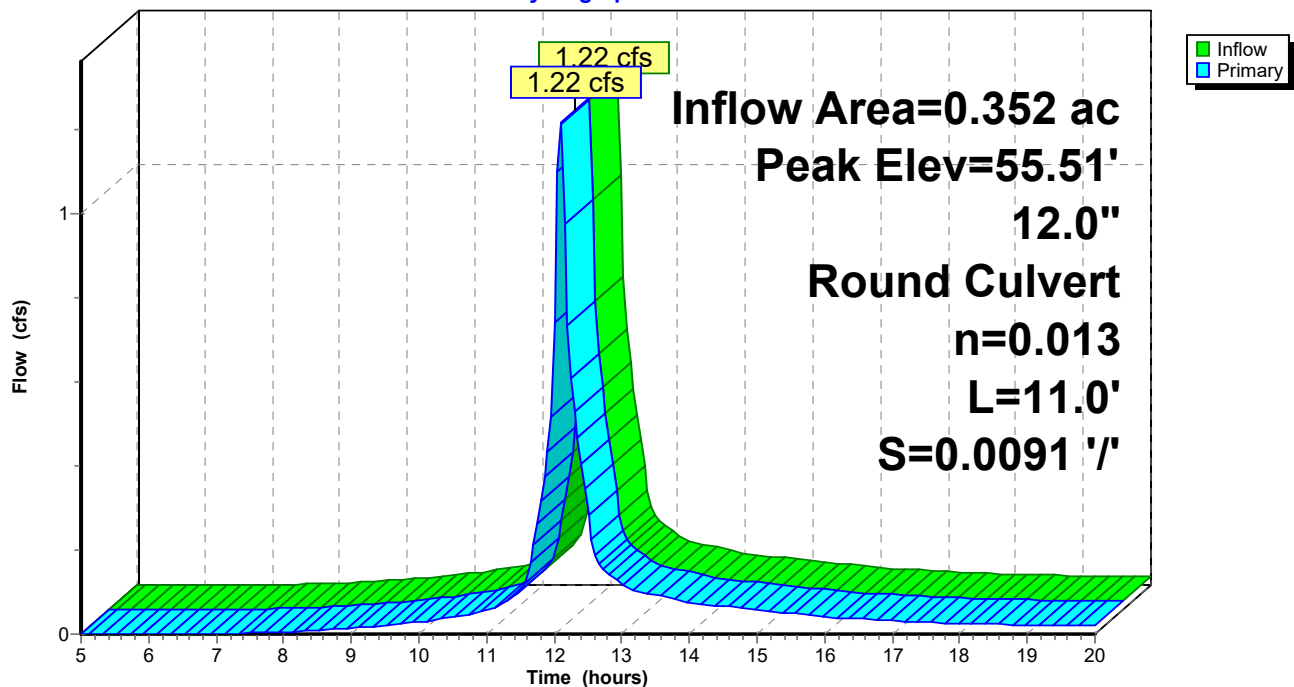
Device	Routing	Invert	Outlet Devices
#1	Primary	54.80'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.80' / 54.70' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 55.25' (Flood elevation advised)

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

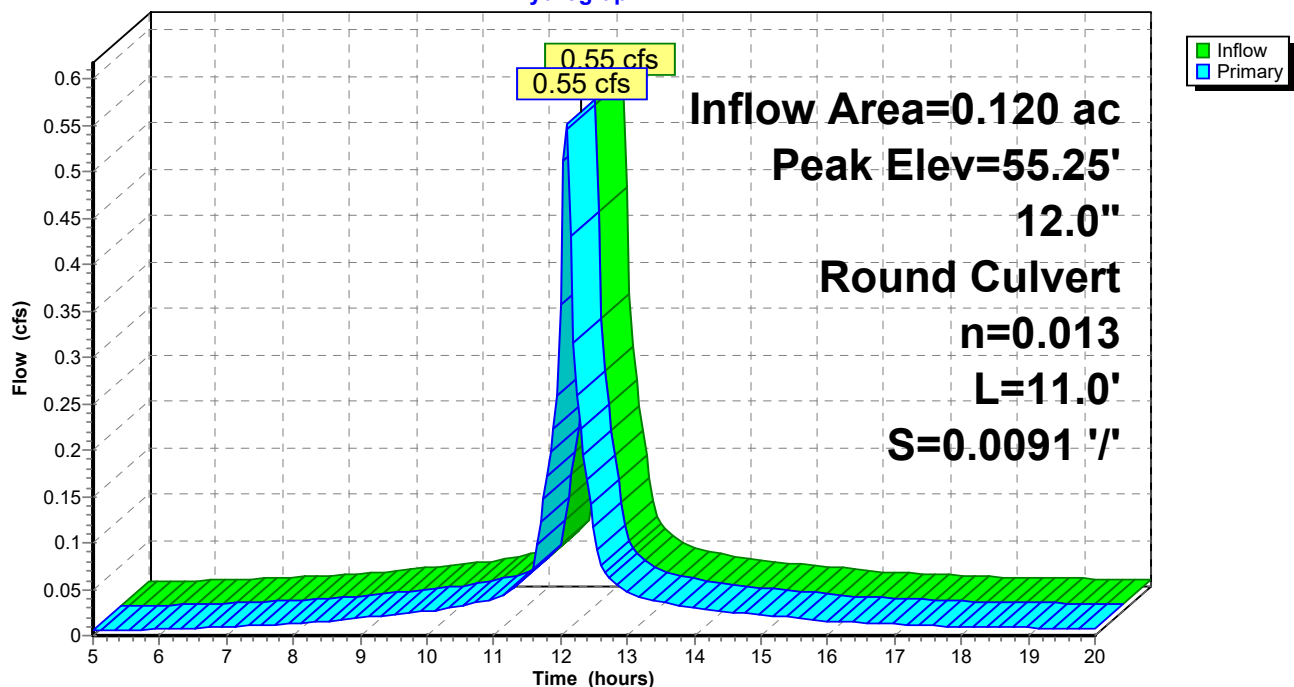
Device	Routing	Invert	Outlet Devices
#1	Primary	54.80'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.80' / 54.70' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 55.49' (Flood elevation advised)

[79] Warning: Submerged Pond 46P Primary device # 1 INLET by 0.68'

[81] Warning: Exceeded Pond 47P by 0.24' @ 12.10 hrs

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

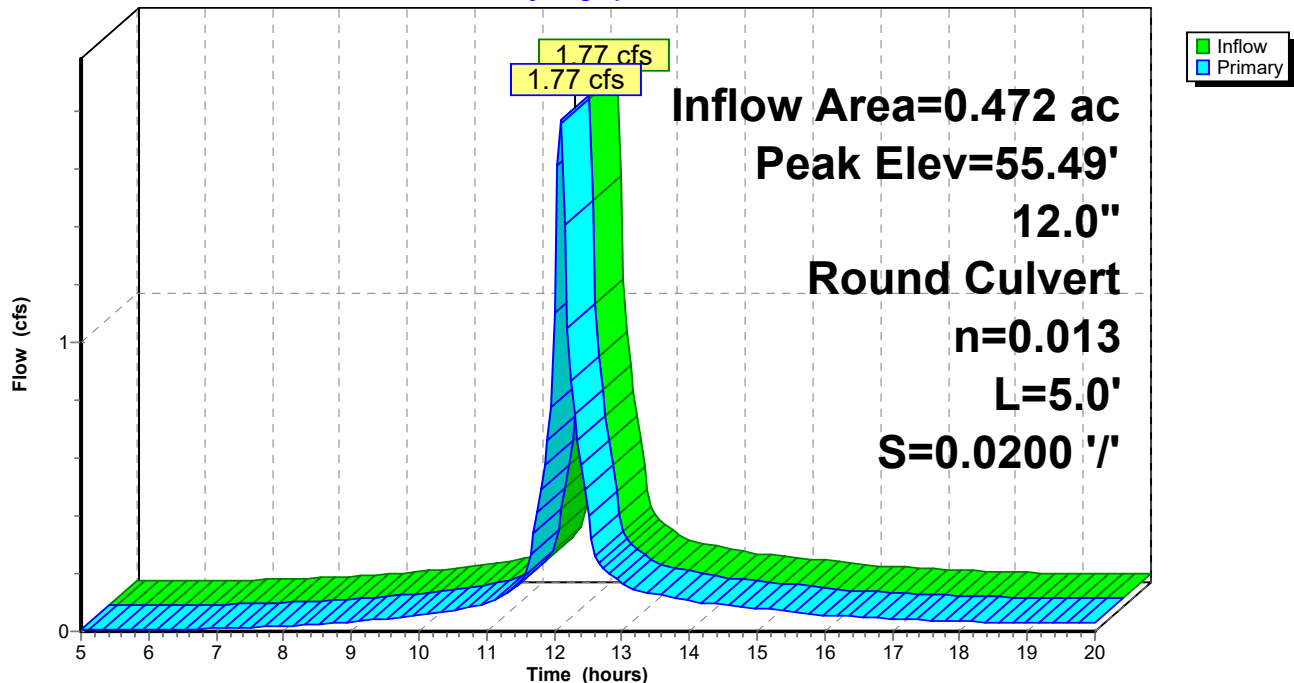
Device	Routing	Invert	Outlet Devices
#1	Primary	54.60'	12.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0200 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 48P by 1.56' @ 12.50 hrs

[81] Warning: Exceeded Pond 206P by 1.61' @ 12.50 hrs

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	55.25'W x 58.58'L x 3.00'H Field A 0.223 af Overall - 0.111 af Embedded = 0.112 af x 40.0% Voids
#2A	54.50'	0.111 af	ADS_StormTech SC-740 b +Cap x 104 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 104 Chambers in 13 Rows 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'	1.020 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 50.00'
#2	Primary	54.00'	12.0" Round Culvert L= 76.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.00' / 51.50' S= 0.0329 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	56.00'	4.0" Vert. Orifice/Grate X 3.00 C= 0.600 Limited to weir flow at low heads
#4	Device 2	56.80'	4.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#5	Primary	54.00'	12.0" Round Culvert L= 76.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.00' / 51.00' S= 0.0395 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#6	Device 5	56.80'	4.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#7	Device 5	56.00'	4.0" Vert. Orifice/Grate X 3.00 C= 0.600 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 13 rows = 69.0 cf

8 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 58.58' Row Length

13 Rows x 51.0" Wide = 55.25' Base Width

6.0" Stone Base + 30.0" Chamber Height = 3.00' Field Height

104 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 13 Rows = 4,846.8 cf Chamber Storage

9,709.1 cf Field - 4,846.8 cf Chambers = 4,862.3 cf Stone x 40.0% Voids = 1,944.9 cf Stone Storage

Chamber Storage + Stone Storage = 6,791.7 cf = 0.156 af

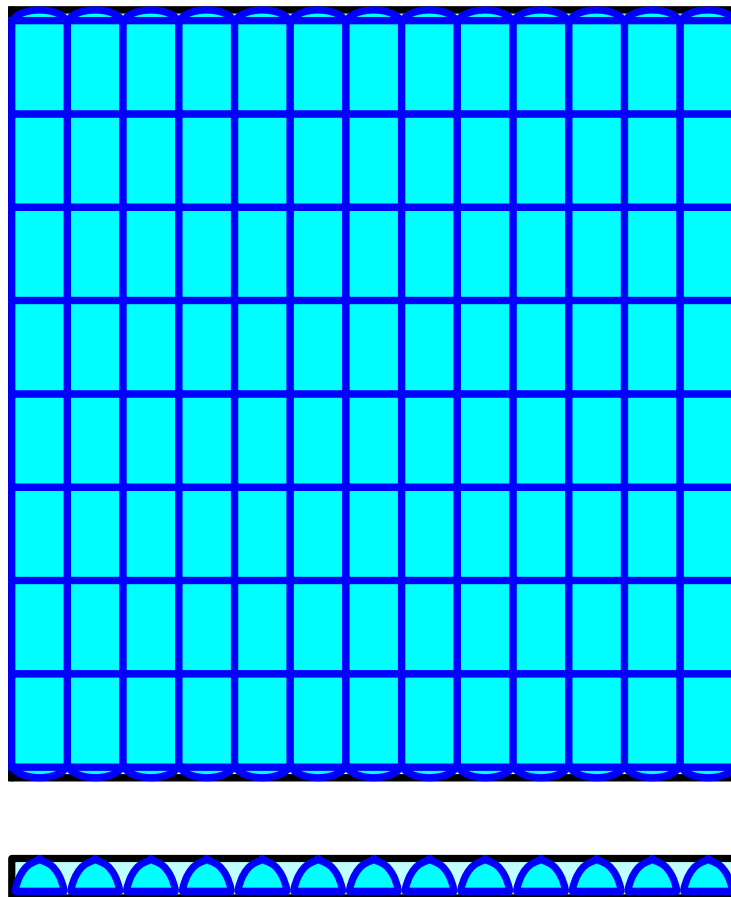
Overall Storage Efficiency = 70.0%

Overall System Size = 58.58' x 55.25' x 3.00'

104 Chambers

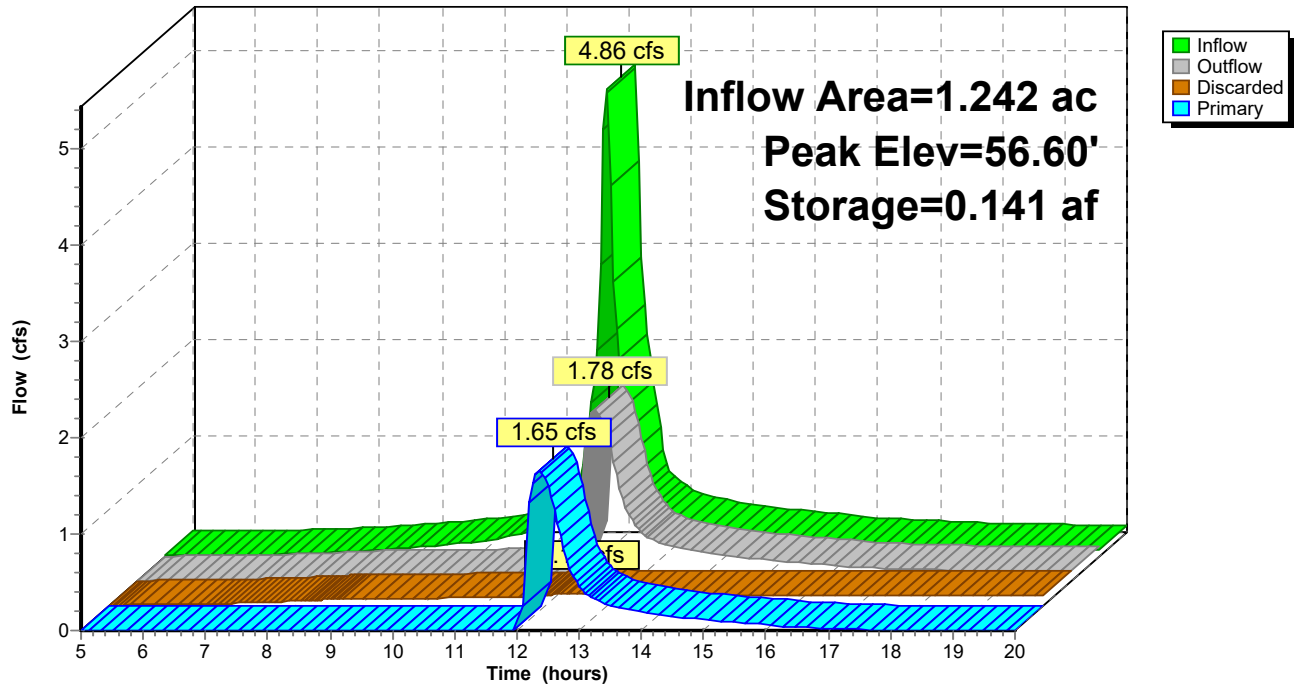
359.6 cy Field

180.1 cy Stone



Pond 49P: Sub. Inf. 4

Hydrograph



Summary for Pond 52P: CB 20

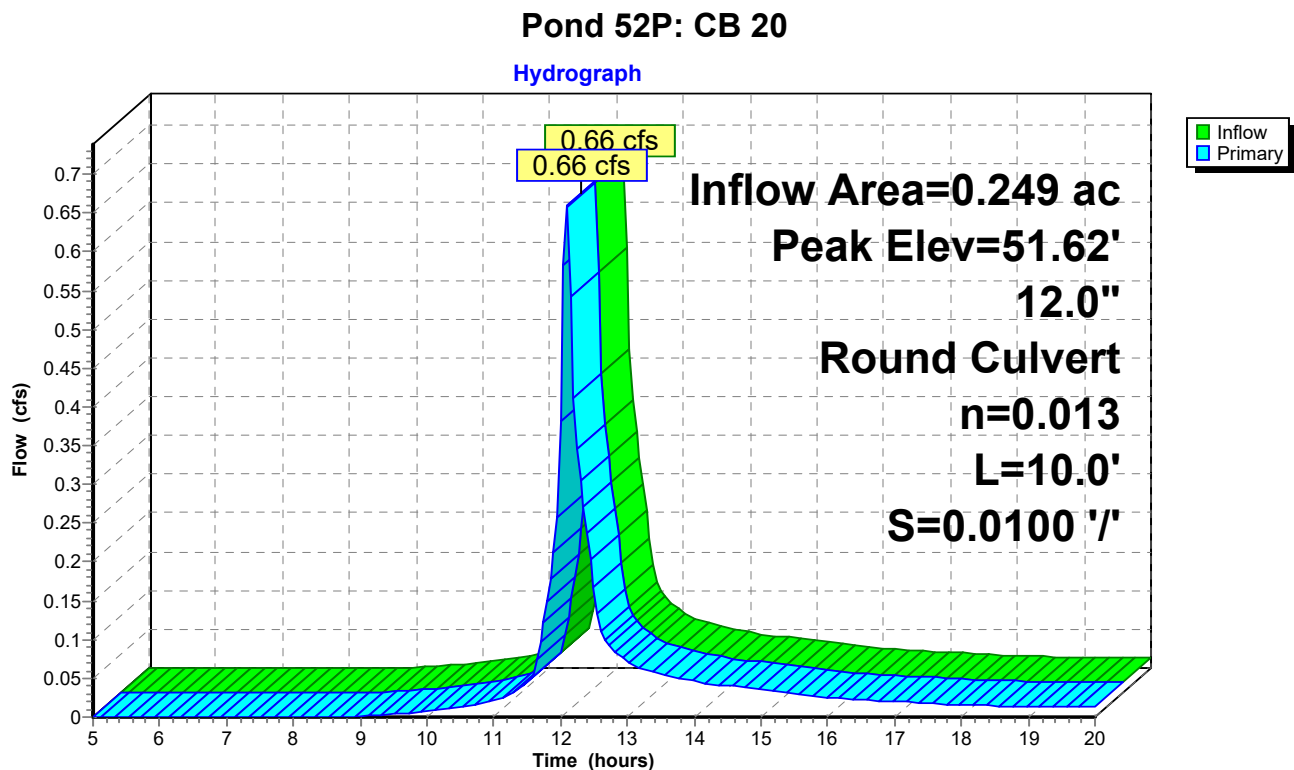
[57] Hint: Peaked at 51.62' (Flood elevation advised)

Inflow Area = 0.249 ac, 61.75% Impervious, Inflow Depth > 2.14" for 10-Year event
 Inflow = 0.66 cfs @ 12.09 hrs, Volume= 0.044 af
 Outflow = 0.66 cfs @ 12.09 hrs, Volume= 0.044 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.66 cfs @ 12.09 hrs, Volume= 0.044 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= 51.62' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	51.13'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.13' / 51.03' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.65 cfs @ 12.09 hrs HW=51.62' (Free Discharge)
 1=Culvert (Barrel Controls 0.65 cfs @ 2.48 fps)



Summary for Pond 53P: CB 21

[57] Hint: Peaked at 51.81' (Flood elevation advised)

Inflow Area = 0.346 ac, 71.48% Impervious, Inflow Depth > 2.65" for 10-Year event
 Inflow = 1.13 cfs @ 12.09 hrs, Volume= 0.076 af
 Outflow = 1.13 cfs @ 12.09 hrs, Volume= 0.076 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.13 cfs @ 12.09 hrs, Volume= 0.076 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= 51.81' @ 12.09 hrs

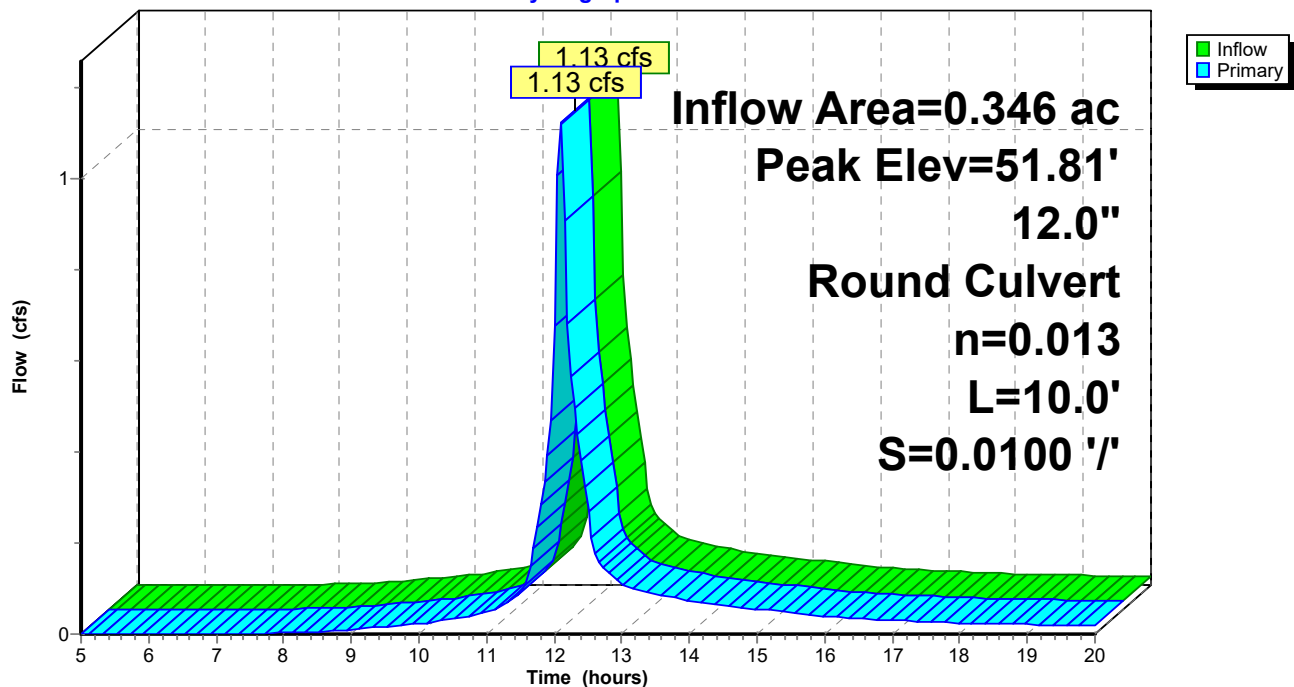
Device	Routing	Invert	Outlet Devices
#1	Primary	51.13'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.13' / 51.03' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.10 cfs @ 12.09 hrs HW=51.80' (Free Discharge)

1=Culvert (Barrel Controls 1.10 cfs @ 2.79 fps)

Pond 53P: CB 21

Hydrograph



Summary for Pond 54P: DMH 15

[57] Hint: Peaked at 51.83' (Flood elevation advised)

[81] Warning: Exceeded Pond 52P by 0.21' @ 12.10 hrs

[81] Warning: Exceeded Pond 53P by 0.03' @ 12.10 hrs

Inflow Area = 0.595 ac, 67.40% Impervious, Inflow Depth > 2.44" for 10-Year event
 Inflow = 1.78 cfs @ 12.09 hrs, Volume= 0.121 af
 Outflow = 1.78 cfs @ 12.09 hrs, Volume= 0.121 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.78 cfs @ 12.09 hrs, Volume= 0.121 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= 51.83' @ 12.09 hrs

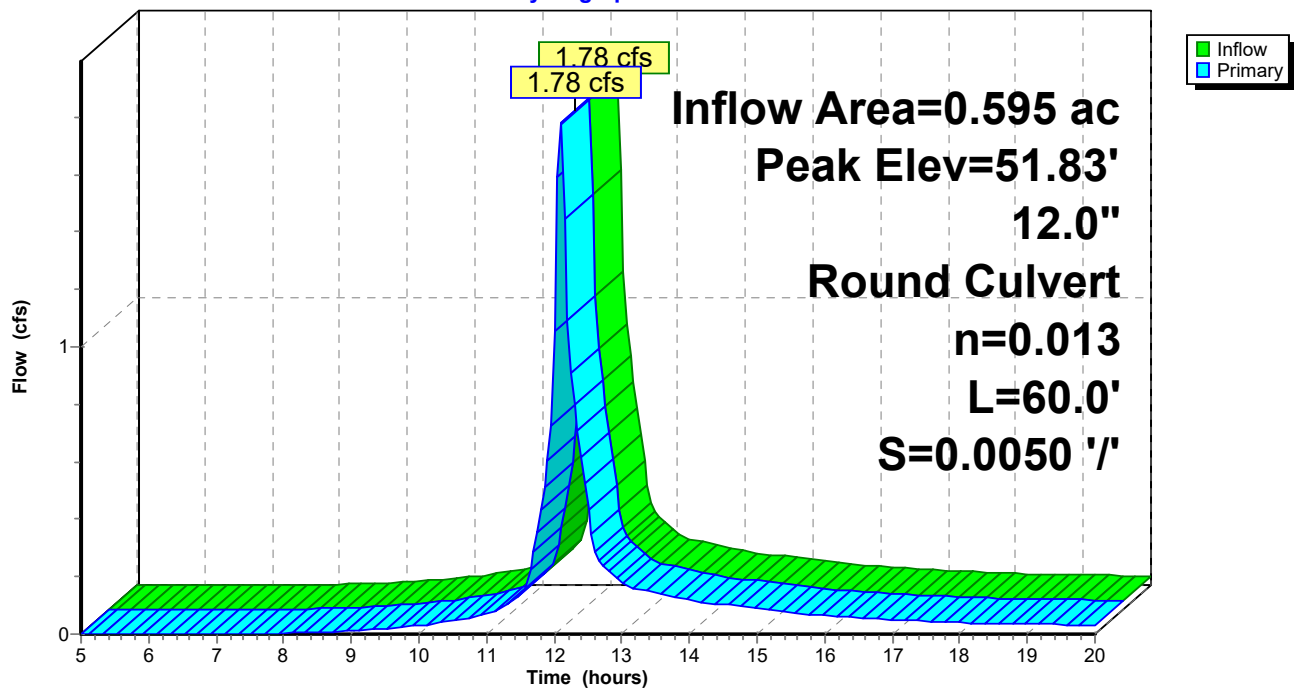
Device	Routing	Invert	Outlet Devices
#1	Primary	50.93'	12.0" Round Culvert L= 60.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.93' / 50.63' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.75 cfs @ 12.09 hrs HW=51.82' (Free Discharge)

↑1=Culvert (Barrel Controls 1.75 cfs @ 3.13 fps)

Pond 54P: DMH 15

Hydrograph



Summary for Pond 55P: DMH 16

[57] Hint: Peaked at 51.39' (Flood elevation advised)

[79] Warning: Submerged Pond 54P Primary device # 1 INLET by 0.46'

Inflow Area = 0.595 ac, 67.40% Impervious, Inflow Depth > 2.44" for 10-Year event
 Inflow = 1.78 cfs @ 12.09 hrs, Volume= 0.121 af
 Outflow = 1.78 cfs @ 12.09 hrs, Volume= 0.121 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.78 cfs @ 12.09 hrs, Volume= 0.121 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= 51.39' @ 12.09 hrs

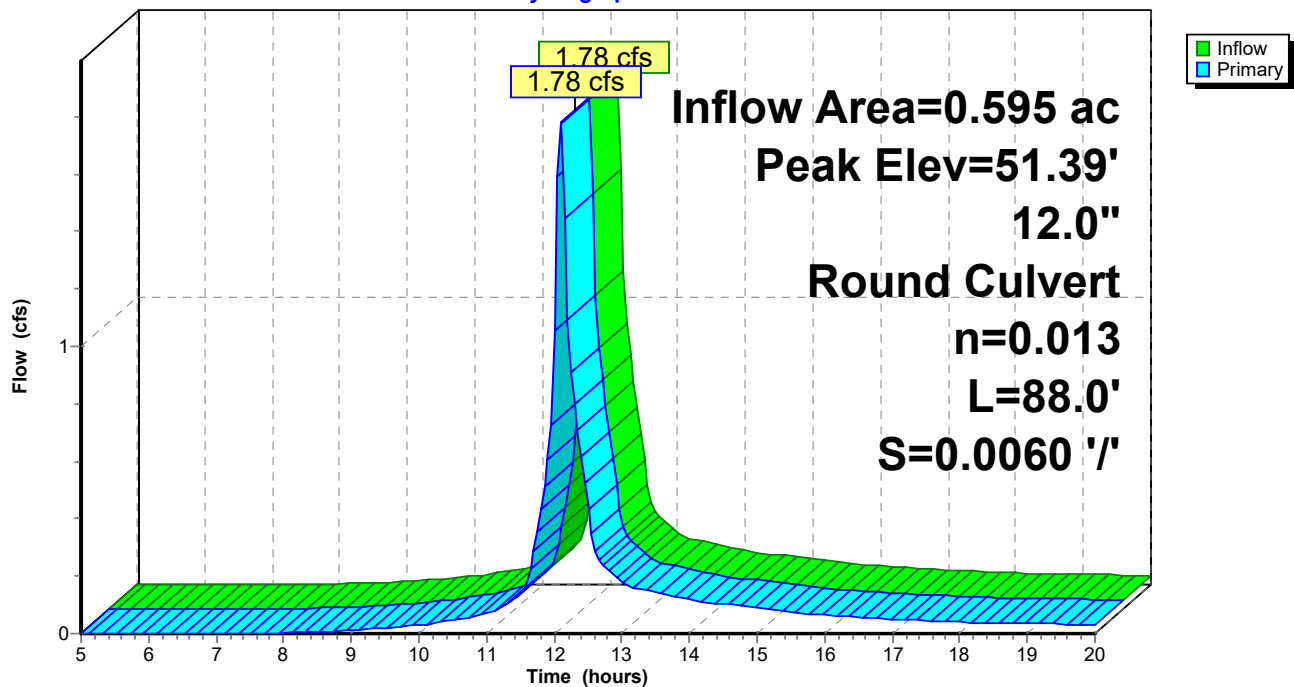
Device	Routing	Invert	Outlet Devices
#1	Primary	50.53'	12.0" Round Culvert L= 88.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.53' / 50.00' S= 0.0060 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.75 cfs @ 12.09 hrs HW=51.38' (Free Discharge)

↑1=Culvert (Inlet Controls 1.75 cfs @ 2.47 fps)

Pond 55P: DMH 16

Hydrograph



Summary for Pond 56P: Inf. Basin 4

[81] Warning: Exceeded Pond 55P by 0.03' @ 12.60 hrs

Inflow Area = 0.971 ac, 43.64% Impervious, Inflow Depth > 1.54" for 10-Year event
 Inflow = 1.78 cfs @ 12.09 hrs, Volume= 0.125 af
 Outflow = 0.53 cfs @ 12.45 hrs, Volume= 0.125 af, Atten= 70%, Lag= 21.4 min
 Discarded = 0.53 cfs @ 12.45 hrs, Volume= 0.125 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= 50.89' @ 12.45 hrs Surf.Area= 2,131 sf Storage= 1,384 cf

Plug-Flow detention time= 21.4 min calculated for 0.124 af (100% of inflow)
 Center-of-Mass det. time= 20.8 min (816.4 - 795.6)

Volume	Invert	Avail.Storage	Storage Description
#1	50.00'	11,770 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (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'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 48.00'
#2	Secondary	53.50'	6.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Discarded OutFlow Max=0.53 cfs @ 12.45 hrs HW=50.89' (Free Discharge)

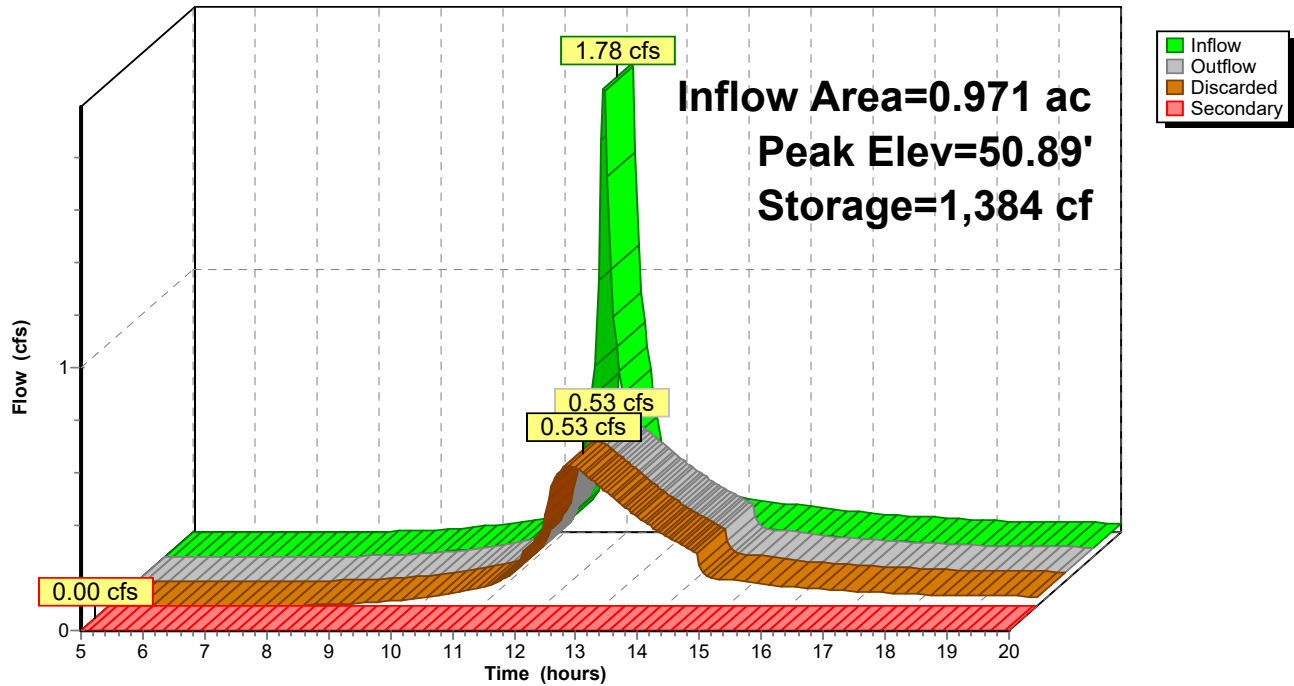
↑**1=Exfiltration** (Controls 0.53 cfs)

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

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 208P by 0.82' @ 19.95 hrs

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 = 6.77 cfs @ 12.15 hrs, Volume= 0.454 af, Atten= 18%, Lag= 3.8 min
 Primary = 6.77 cfs @ 12.15 hrs, Volume= 0.454 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= 62.16' @ 12.15 hrs Surf.Area= 0.127 ac Storage= 0.191 af

Plug-Flow detention time= 105.8 min calculated for 0.453 af (77% of inflow)
 Center-of-Mass det. time= 49.2 min (809.8 - 760.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	60.00'	0.113 af	53.75'W x 103.30'L x 3.50'H Field A 0.446 af Overall - 0.164 af Embedded = 0.282 af x 40.0% Voids
#2A	60.50'	0.164 af	ADS_StormTech SC-740 b +Cap x 154 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 154 Chambers in 11 Rows Cap Storage= 2.7 cf x 2 x 11 rows = 58.4 cf
0.277 af			Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	60.00'	18.0" Round Culvert L= 29.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.00' / 56.00' S= 0.1379 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	60.50'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	61.50'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)

Primary OutFlow Max=6.75 cfs @ 12.15 hrs HW=62.16' (Free Discharge)

1=Culvert (Passes 6.75 cfs of 7.96 cfs potential flow)

2=Orifice/Grate (Orifice Controls 0.03 cfs @ 6.12 fps)

3=Sharp-Crested Rectangular Weir (Weir Controls 6.72 cfs @ 2.65 fps)

Pond 60P: Sub. Det. 1 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 11 rows = 58.4 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

14 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 101.30' Row Length +12.0" End Stone x 2 = 103.30' Base Length

11 Rows x 51.0" Wide + 6.0" Spacing x 10 + 12.0" Side Stone x 2 = 53.75' Base Width

6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

154 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 11 Rows = 7,133.2 cf Chamber Storage

19,432.7 cf Field - 7,133.2 cf Chambers = 12,299.5 cf Stone x 40.0% Voids = 4,919.8 cf Stone Storage

Chamber Storage + Stone Storage = 12,053.0 cf = 0.277 af

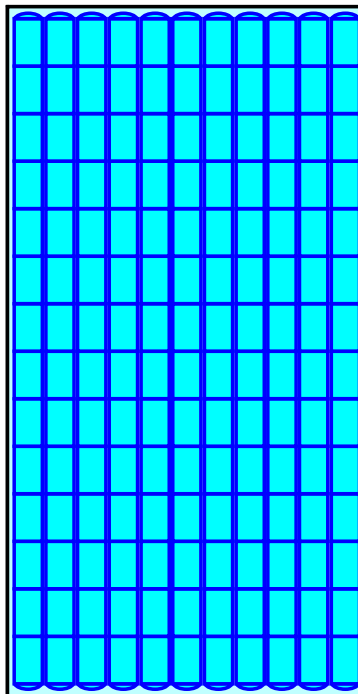
Overall Storage Efficiency = 62.0%

Overall System Size = 103.30' x 53.75' x 3.50'

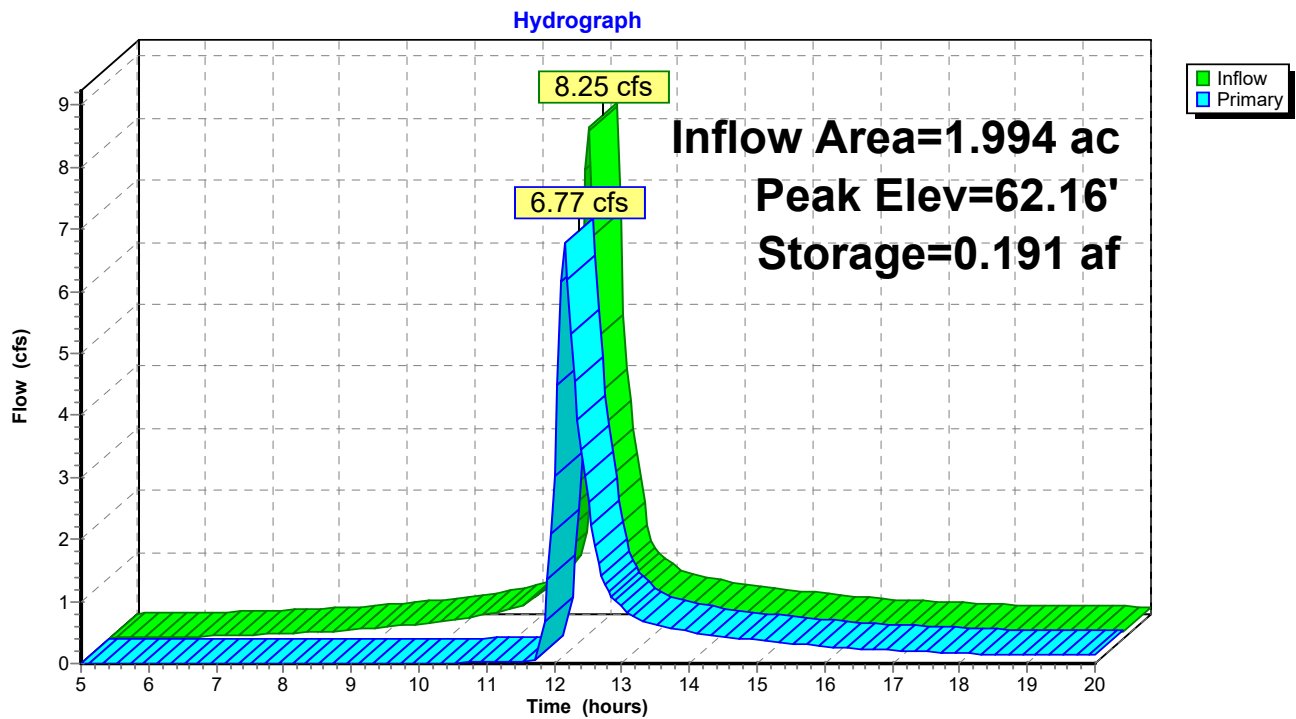
154 Chambers

719.7 cy Field

455.5 cy Stone



Pond 60P: Sub. Det. 1



Summary for Pond 61P: CB 8

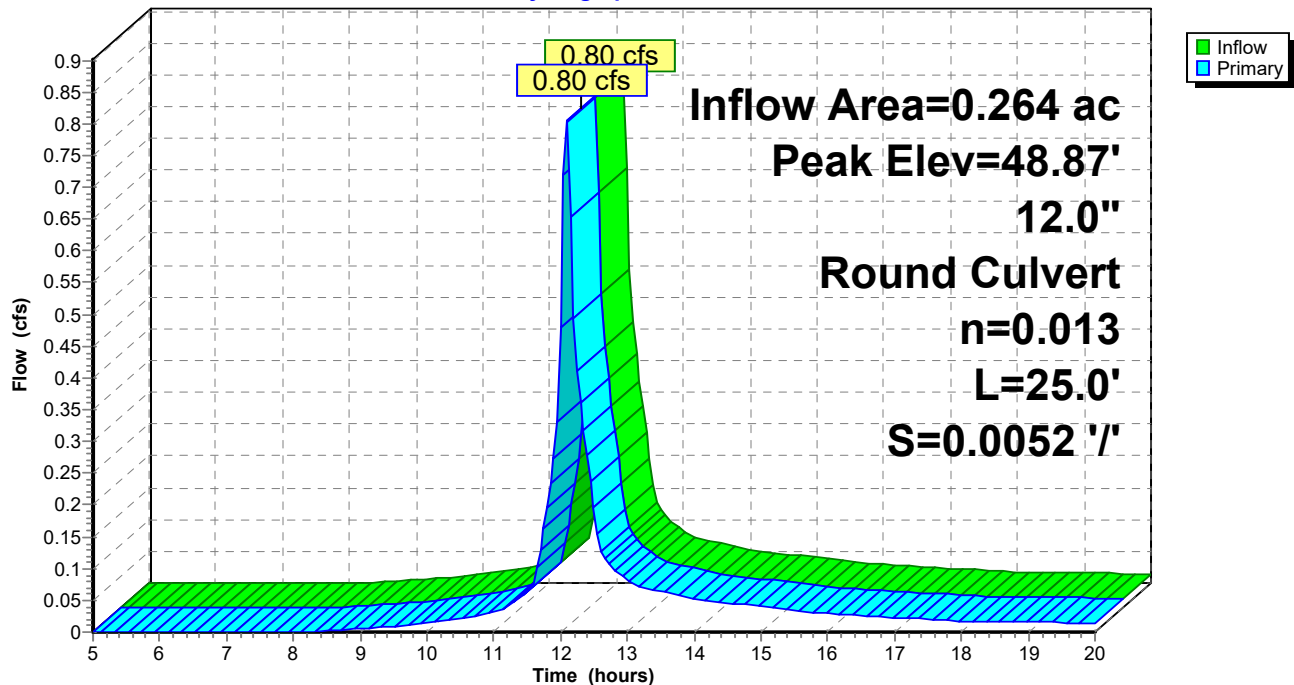
[57] Hint: Peaked at 48.87' (Flood elevation advised)

Inflow Area = 0.264 ac, 68.05% Impervious, Inflow Depth > 2.48" for 10-Year event
 Inflow = 0.80 cfs @ 12.09 hrs, Volume= 0.054 af
 Outflow = 0.80 cfs @ 12.09 hrs, Volume= 0.054 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.80 cfs @ 12.09 hrs, Volume= 0.054 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= 48.87' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	48.30'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.30' / 48.17' S= 0.0052 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.79 cfs @ 12.09 hrs HW=48.87' (Free Discharge)
 1=Culvert (Barrel Controls 0.79 cfs @ 2.49 fps)

Pond 61P: CB 8**Hydrograph**

Summary for Pond 62P: CB 66

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.96' (Flood elevation advised)

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

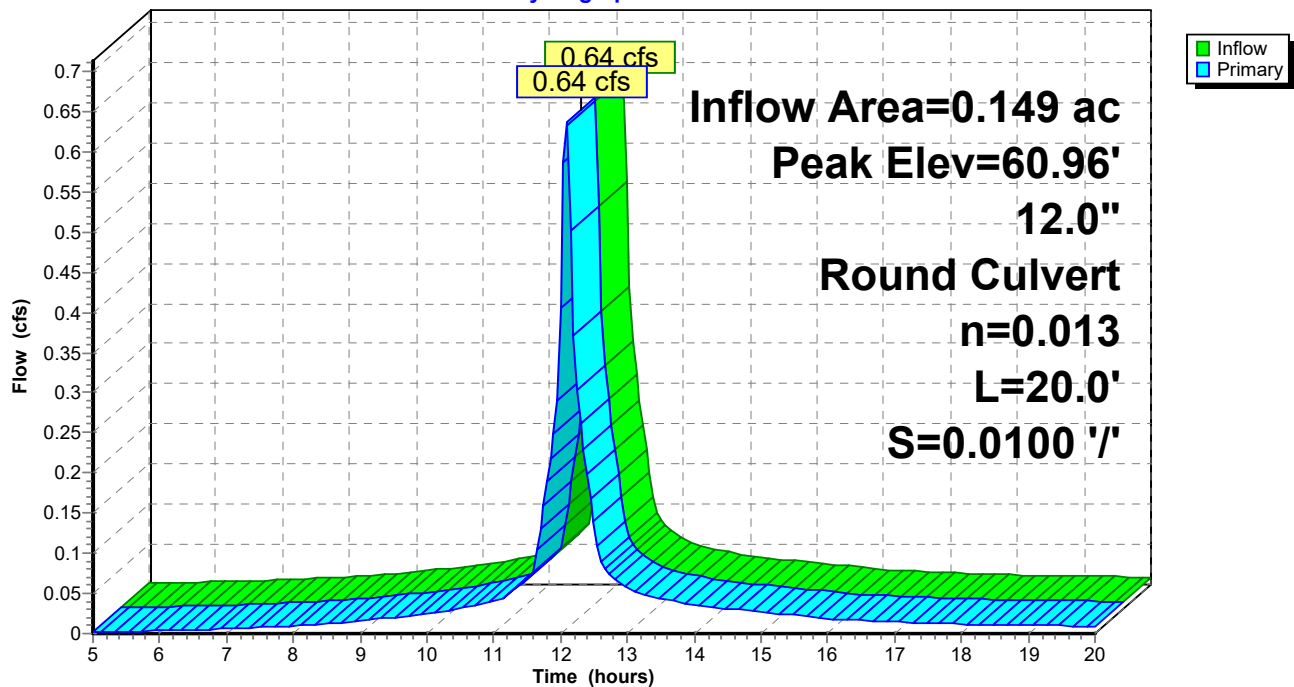
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 60.96' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	60.50'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.50' / 60.30' S= 0.0100 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.81' (Flood elevation advised)

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

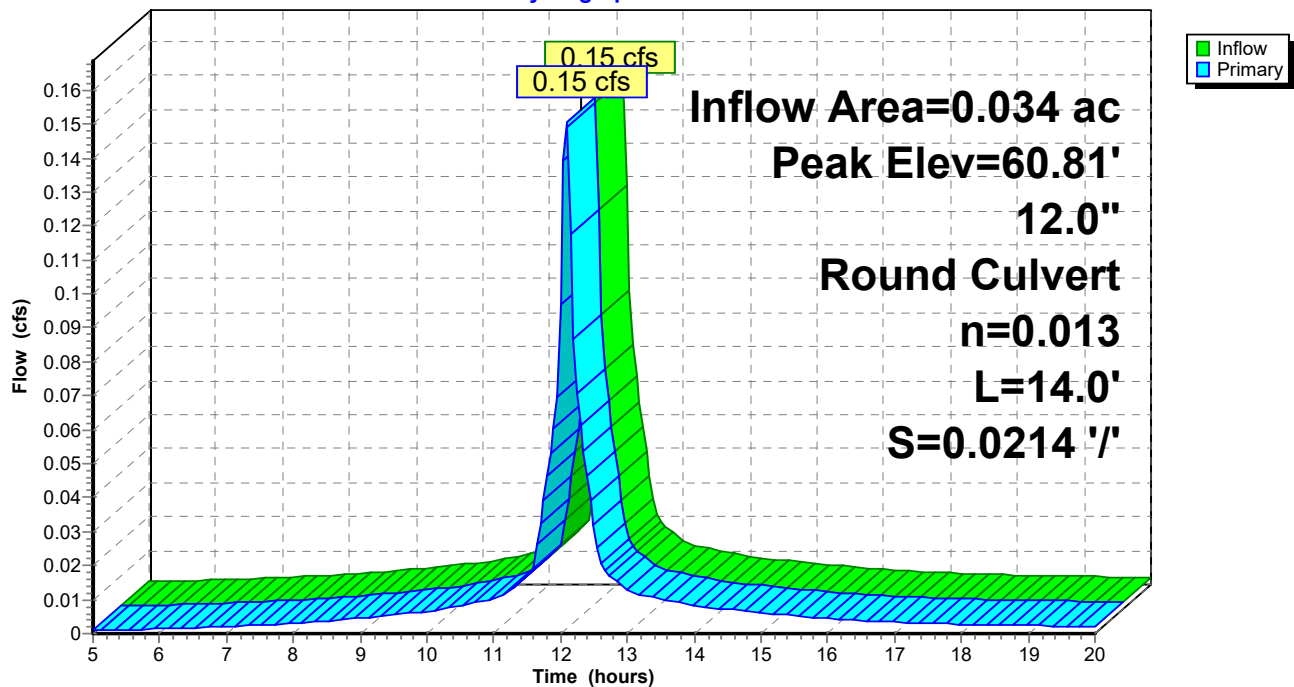
Device	Routing	Invert	Outlet Devices
#1	Primary	60.60'	12.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.60' / 60.30' S= 0.0214 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span
 [57] Hint: Peaked at 61.32' (Flood elevation advised)
 [81] Warning: Exceeded Pond 62P by 0.36' @ 12.10 hrs
 [81] Warning: Exceeded Pond 63P by 0.50' @ 12.10 hrs
 [79] Warning: Submerged Pond 75P Primary device # 1 INLET by 0.51'

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

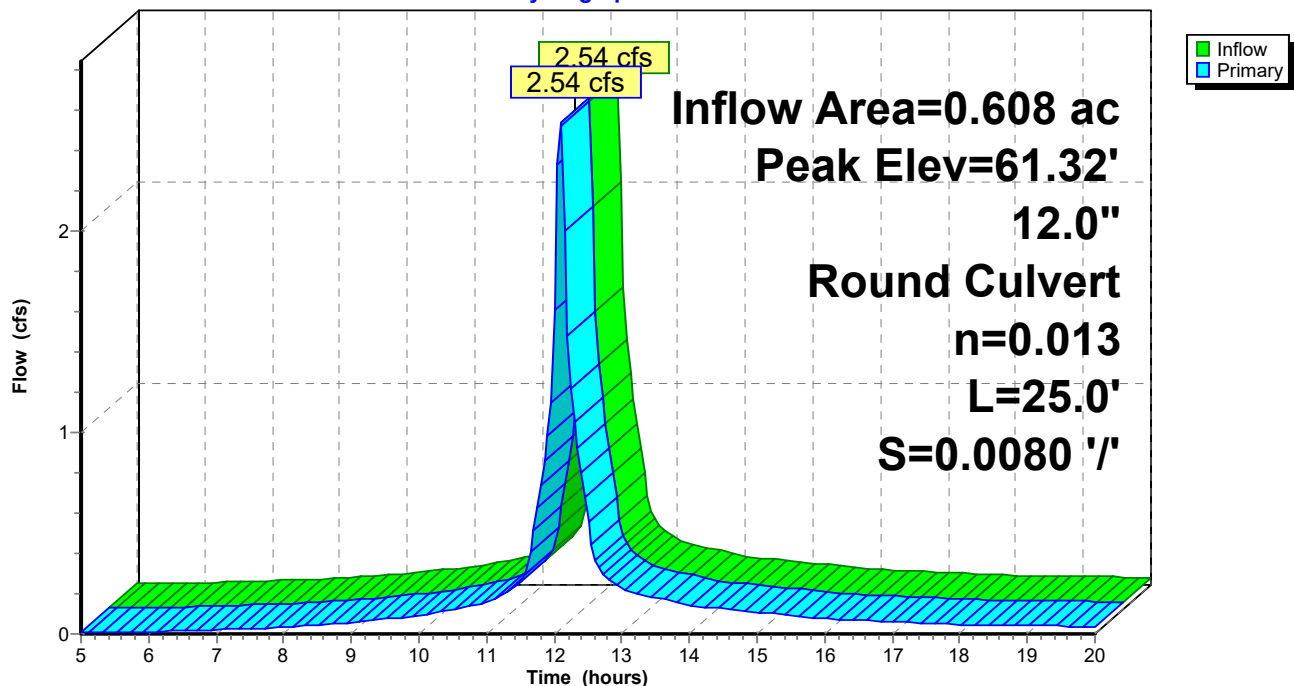
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 61.32' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	60.10'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.10' / 59.90' S= 0.0080 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.34' (Flood elevation advised)

[79] Warning: Submerged Pond 66P Primary device # 1 INLET by 0.43'

[81] Warning: Exceeded Pond 67P by 0.05' @ 12.10 hrs

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

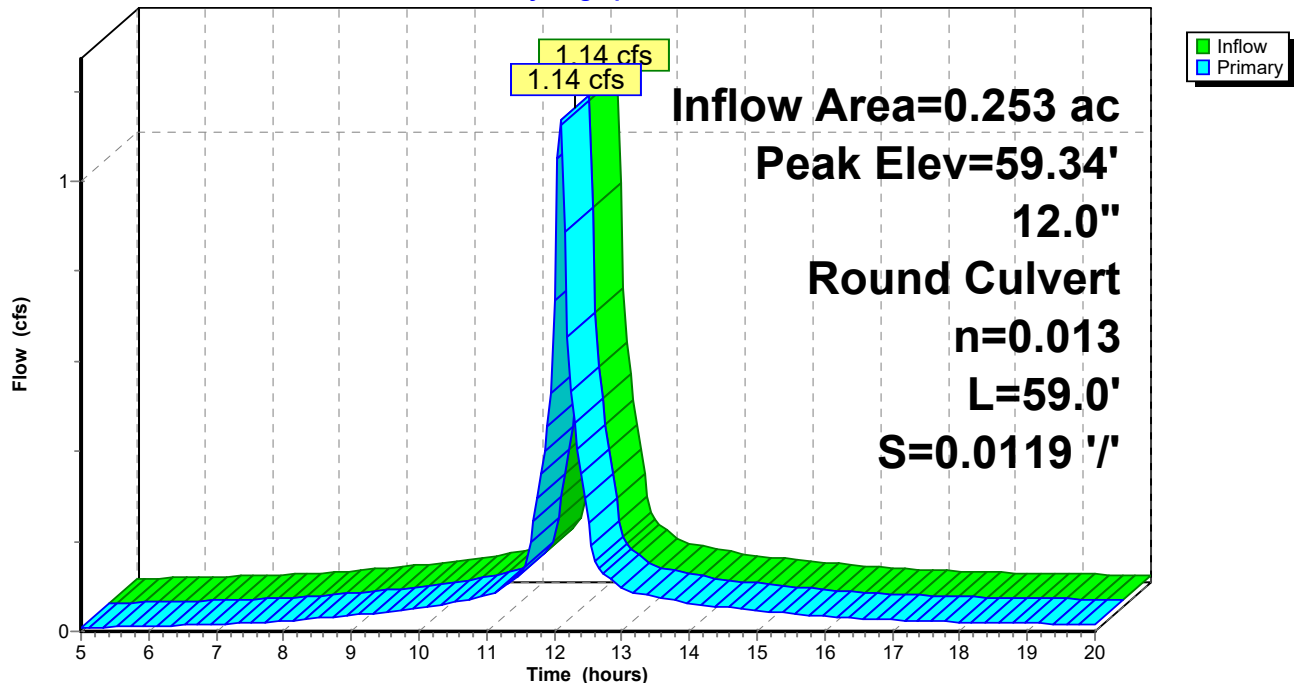
Device	Routing	Invert	Outlet Devices
#1	Primary	58.70'	12.0" Round Culvert L= 59.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.70' / 58.00' S= 0.0119 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.42' (Flood elevation advised)

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

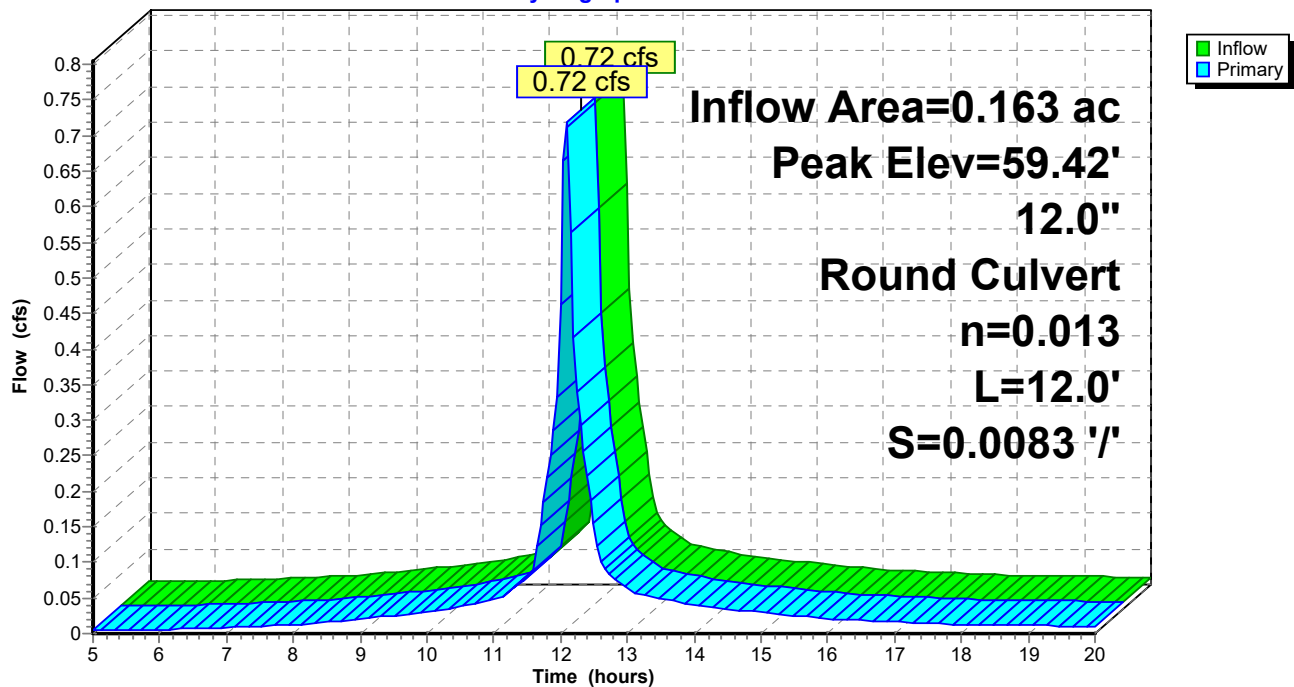
Device	Routing	Invert	Outlet Devices
#1	Primary	58.90'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.90' / 58.80' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.28' (Flood elevation advised)

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

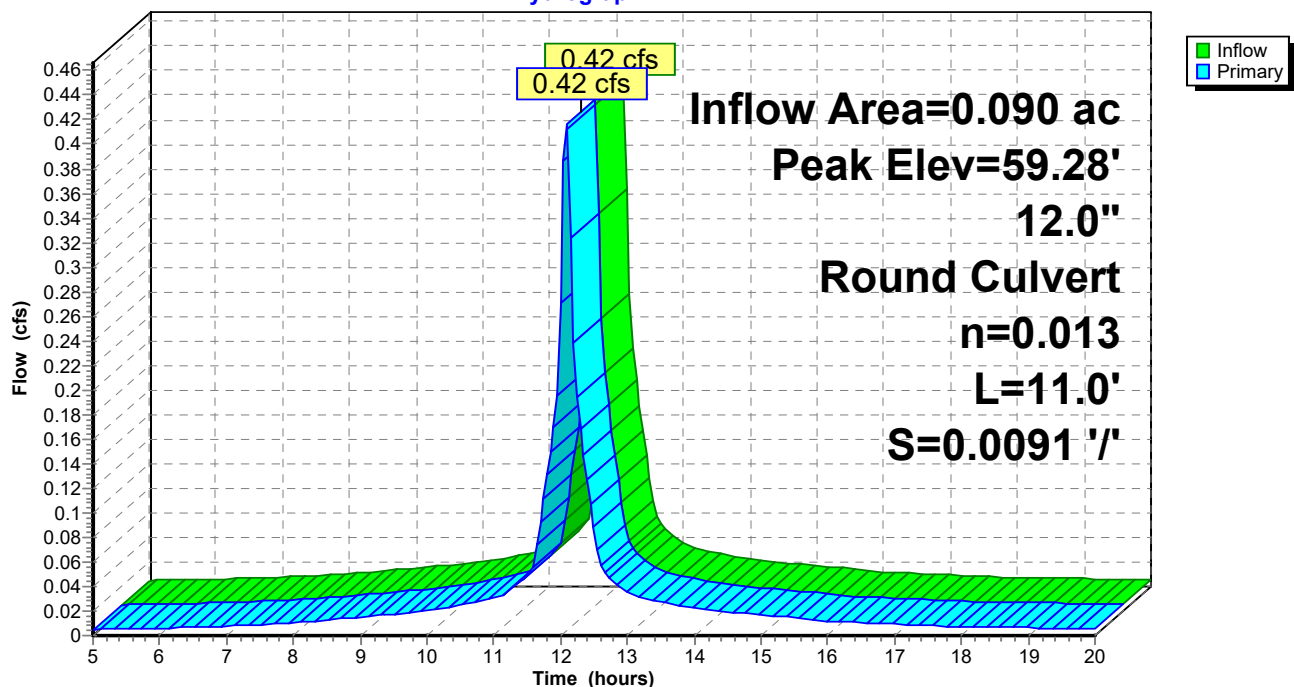
Device	Routing	Invert	Outlet Devices
#1	Primary	58.90'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.90' / 58.80' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 207P by 0.77' @ 17.15 hrs

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	24.83'W x 74.40'L x 2.33'H Field A 0.099 af Overall - 0.024 af Embedded = 0.075 af x 40.0% Voids
#2A	59.80'	0.024 af	ADS_StormTech SC-310 +Cap x 70 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 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'	1.020 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 56.00'
#2	Primary	59.30'	12.0" Round Culvert L= 71.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.30' / 57.00' S= 0.0324 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	60.80'	4.0' long Sharp-Crested Vee/Trap Weir 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)

Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf

Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

10 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 72.40' Row Length +12.0" End Stone x 2 =
74.40' Base Length

7 Rows x 34.0" Wide + 6.0" Spacing x 6 + 12.0" Side Stone x 2 = 24.83' Base Width

6.0" Stone Base + 16.0" Chamber Height + 6.0" Stone Cover = 2.33' Field Height

70 Chambers x 14.7 cf = 1,031.9 cf Chamber Storage

4,311.1 cf Field - 1,031.9 cf Chambers = 3,279.1 cf Stone x 40.0% Voids = 1,311.7 cf Stone Storage

Chamber Storage + Stone Storage = 2,343.6 cf = 0.054 af

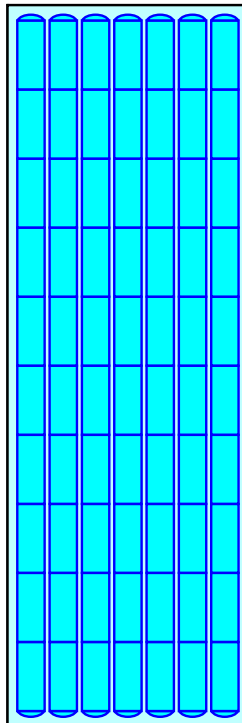
Overall Storage Efficiency = 54.4%

Overall System Size = 74.40' x 24.83' x 2.33'

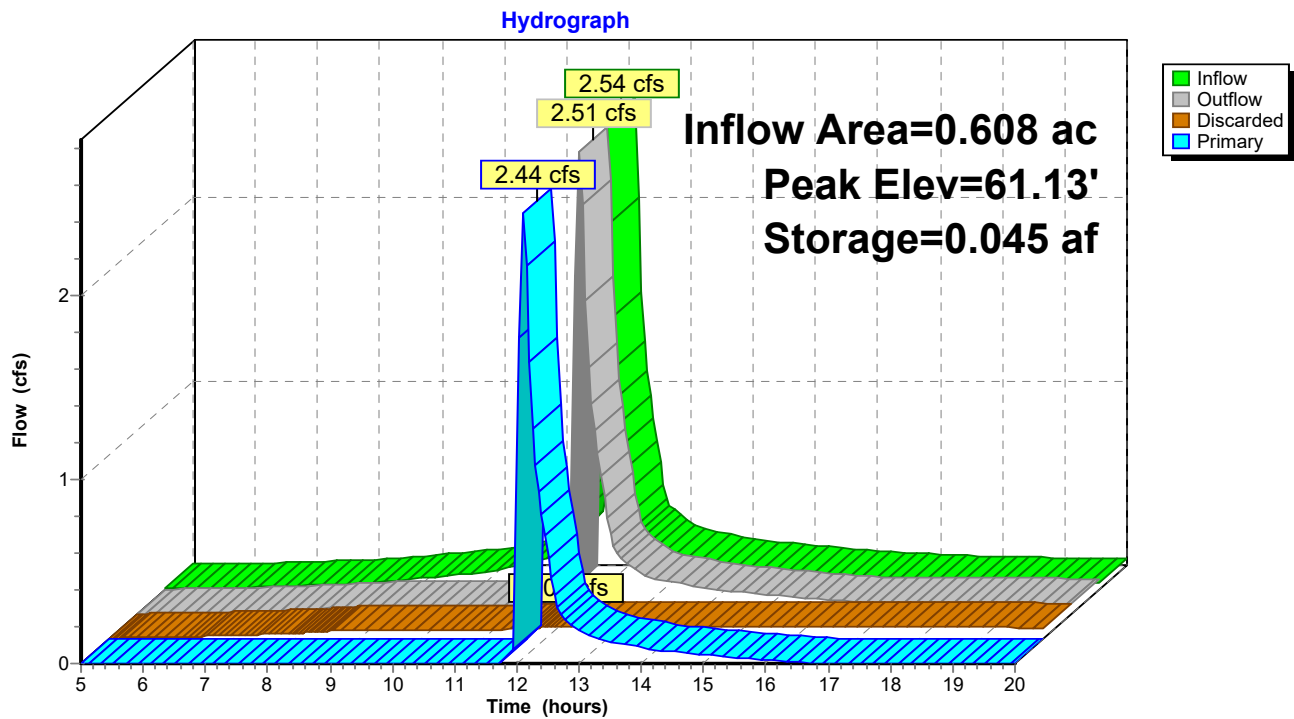
70 Chambers

159.7 cy Field

121.4 cy Stone



Pond 68P: Sub. Inf. 5



Summary for Pond 69P: CB 72

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.10' (Flood elevation advised)

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

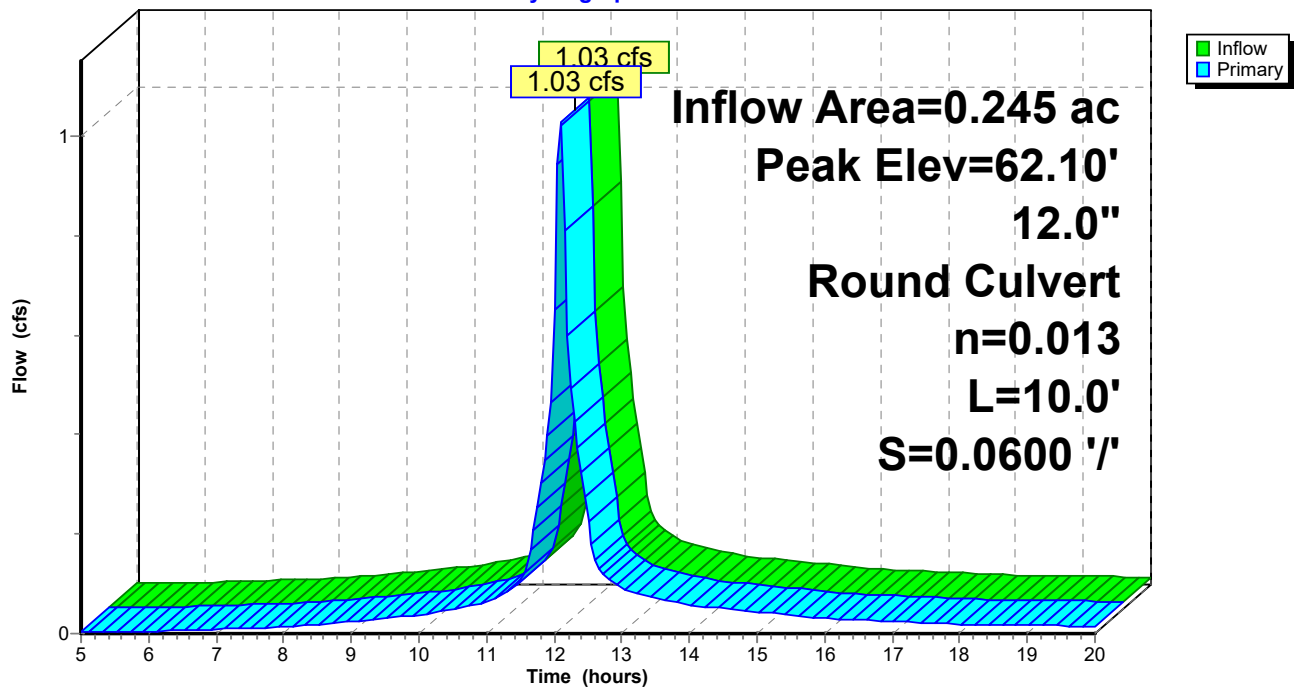
Device	Routing	Invert	Outlet Devices
#1	Primary	61.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.50' / 60.90' S= 0.0600 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.97' (Flood elevation advised)

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

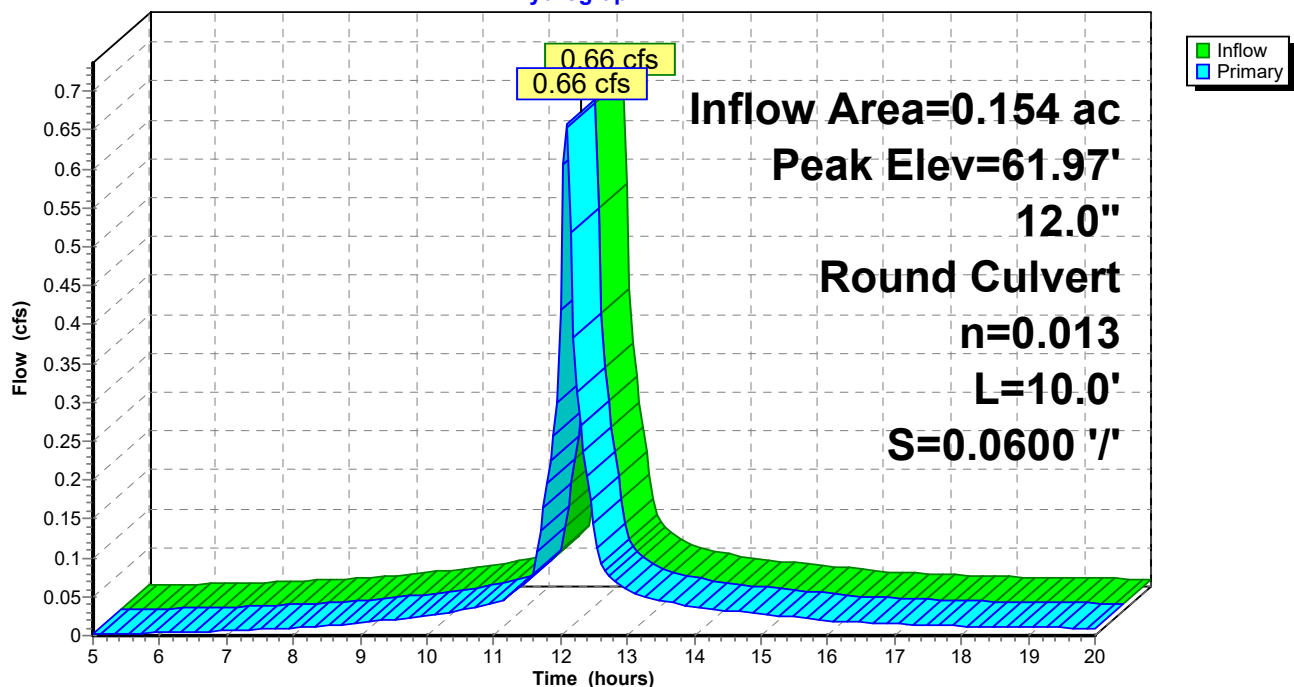
Device	Routing	Invert	Outlet Devices
#1	Primary	61.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.50' / 60.90' S= 0.0600 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.66' (Flood elevation advised)

[79] Warning: Submerged Pond 69P Primary device # 1 INLET by 0.15'

[79] Warning: Submerged Pond 70P Primary device # 1 INLET by 0.15'

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

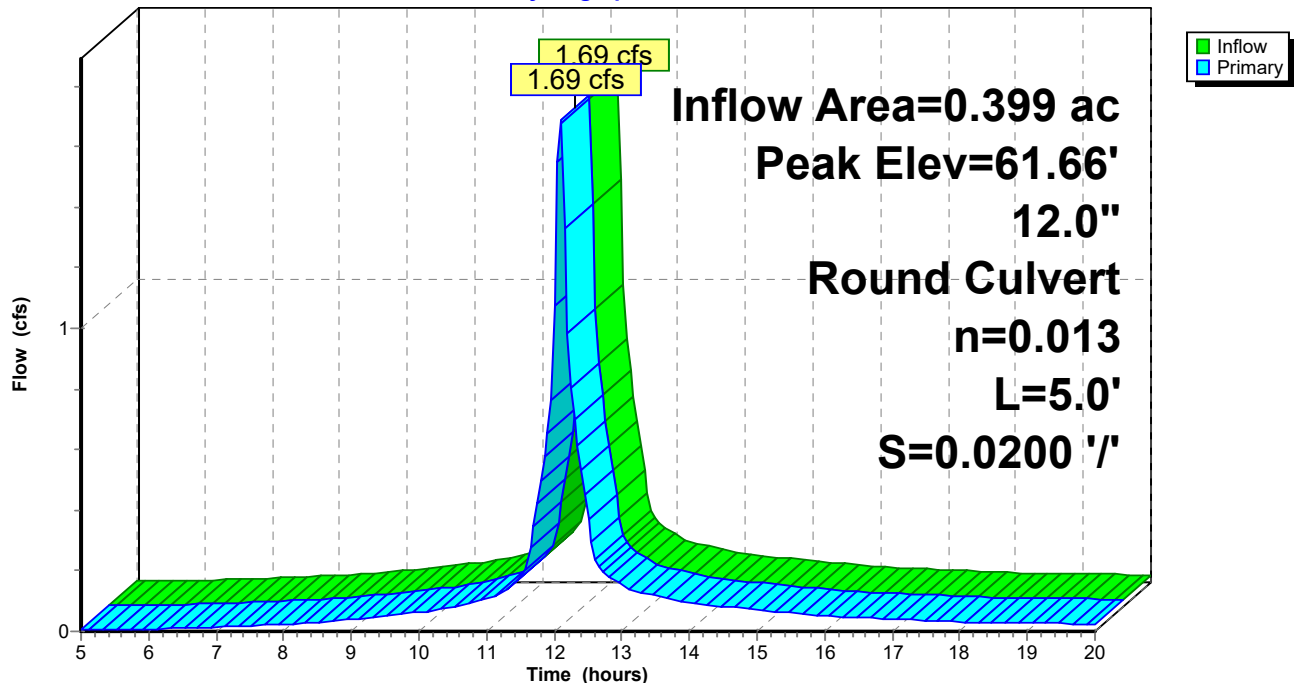
Device	Routing	Invert	Outlet Devices
#1	Primary	60.80'	12.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.80' / 60.70' S= 0.0200 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 71P by 0.68' @ 12.25 hrs

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	38.17'W x 38.80'L x 2.33'H Field A 0.079 af Overall - 0.019 af Embedded = 0.061 af x 40.0% Voids
#2A	60.70'	0.019 af	ADS_StormTech SC-310 +Cap x 55 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 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'	1.020 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 58.10'
#2	Primary	60.20'	12.0" Round Culvert L= 32.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.20' / 57.00' S= 0.1000 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	61.50'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 2	62.20'	4.0' long Sharp-Crested Vee/Trap Weir 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)

Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf

Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

5 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 36.80' Row Length +12.0" End Stone x 2 = 38.80' Base Length

11 Rows x 34.0" Wide + 6.0" Spacing x 10 + 12.0" Side Stone x 2 = 38.17' Base Width

6.0" Stone Base + 16.0" Chamber Height + 6.0" Stone Cover = 2.33' Field Height

55 Chambers x 14.7 cf = 810.8 cf Chamber Storage

3,455.4 cf Field - 810.8 cf Chambers = 2,644.5 cf Stone x 40.0% Voids = 1,057.8 cf Stone Storage

Chamber Storage + Stone Storage = 1,868.6 cf = 0.043 af

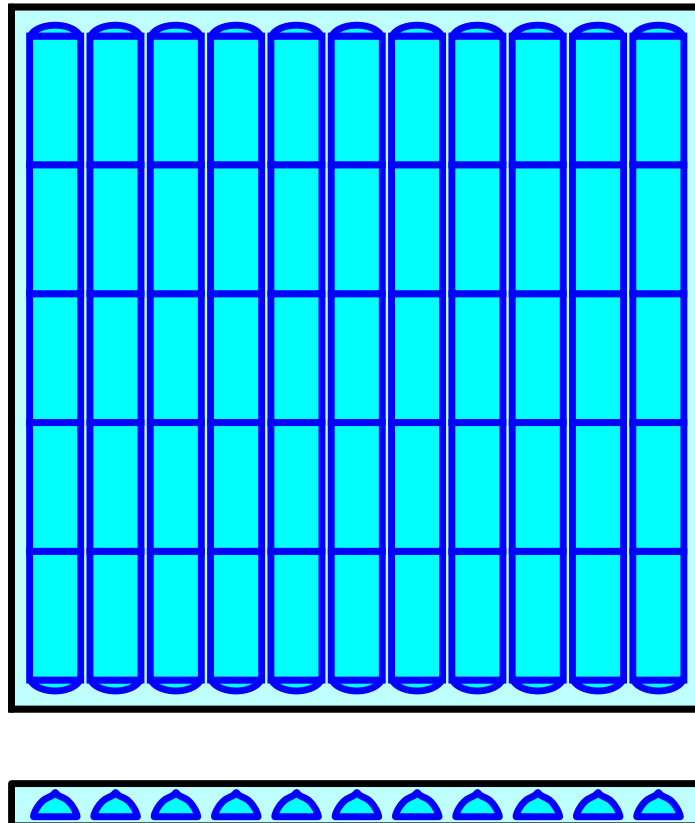
Overall Storage Efficiency = 54.1%

Overall System Size = 38.80' x 38.17' x 2.33'

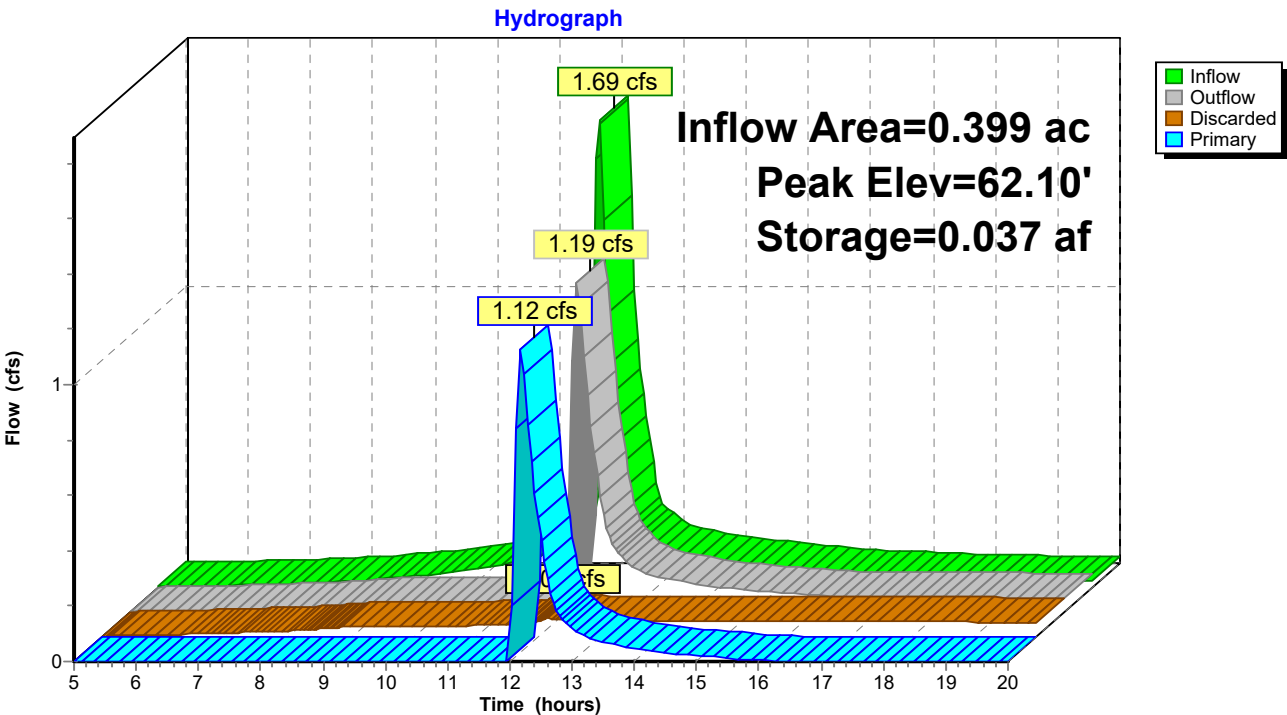
55 Chambers

128.0 cy Field

97.9 cy Stone



Pond 72P: Sub. Inf. 7



Summary for Pond 73P: CB 64

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.72' (Flood elevation advised)

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

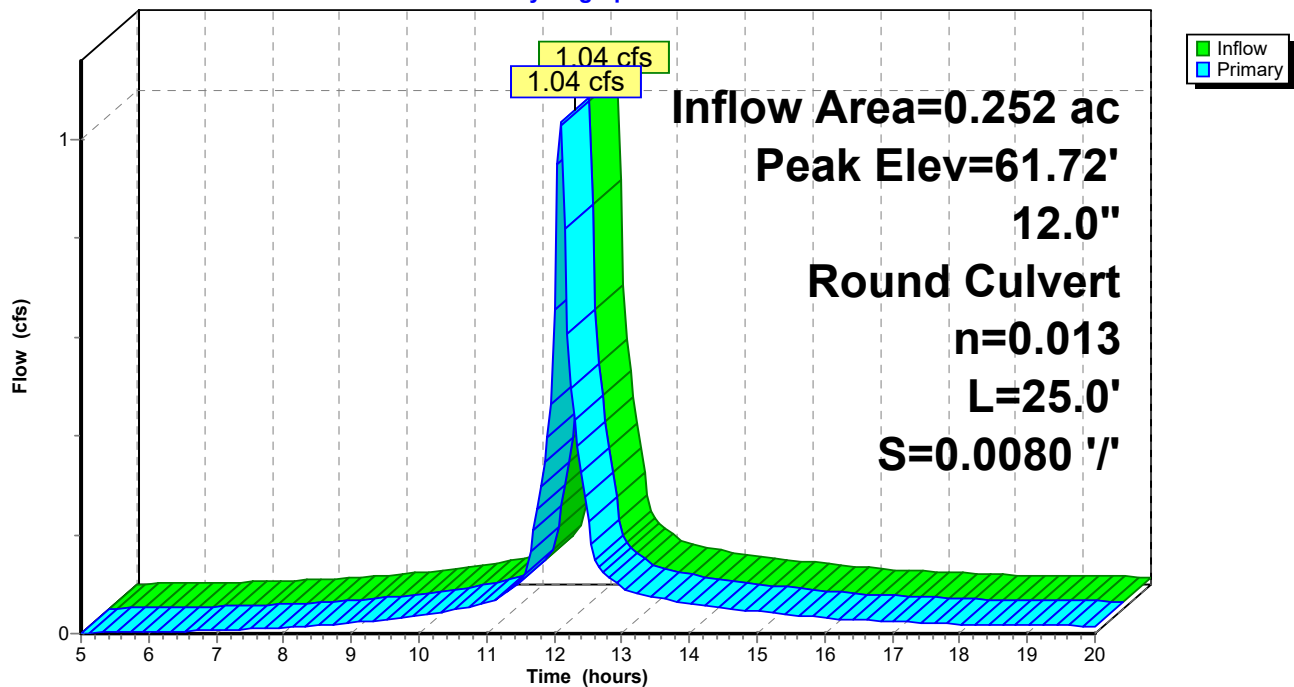
Device	Routing	Invert	Outlet Devices
#1	Primary	61.10'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.10' / 60.90' S= 0.0080 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.59' (Flood elevation advised)

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

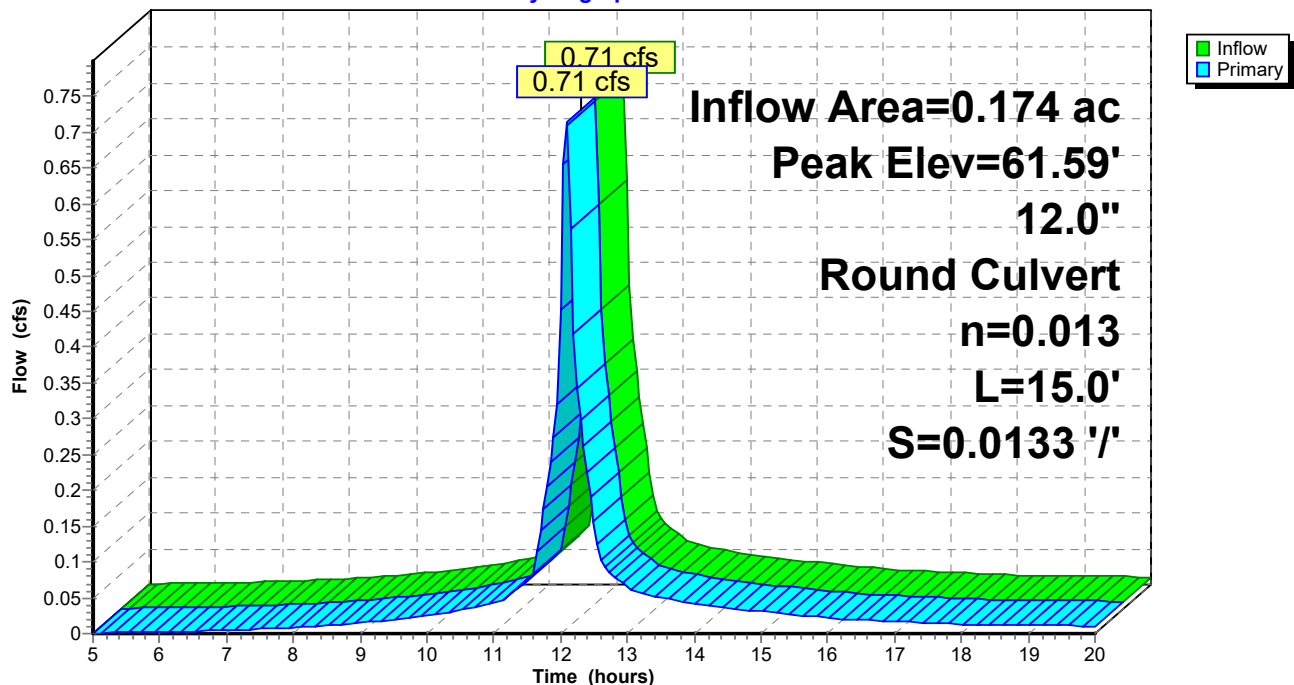
Device	Routing	Invert	Outlet Devices
#1	Primary	61.10'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.10' / 60.90' S= 0.0133 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.66' (Flood elevation advised)

[79] Warning: Submerged Pond 73P Primary device # 1 INLET by 0.56'

[81] Warning: Exceeded Pond 74P by 0.07' @ 12.10 hrs

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

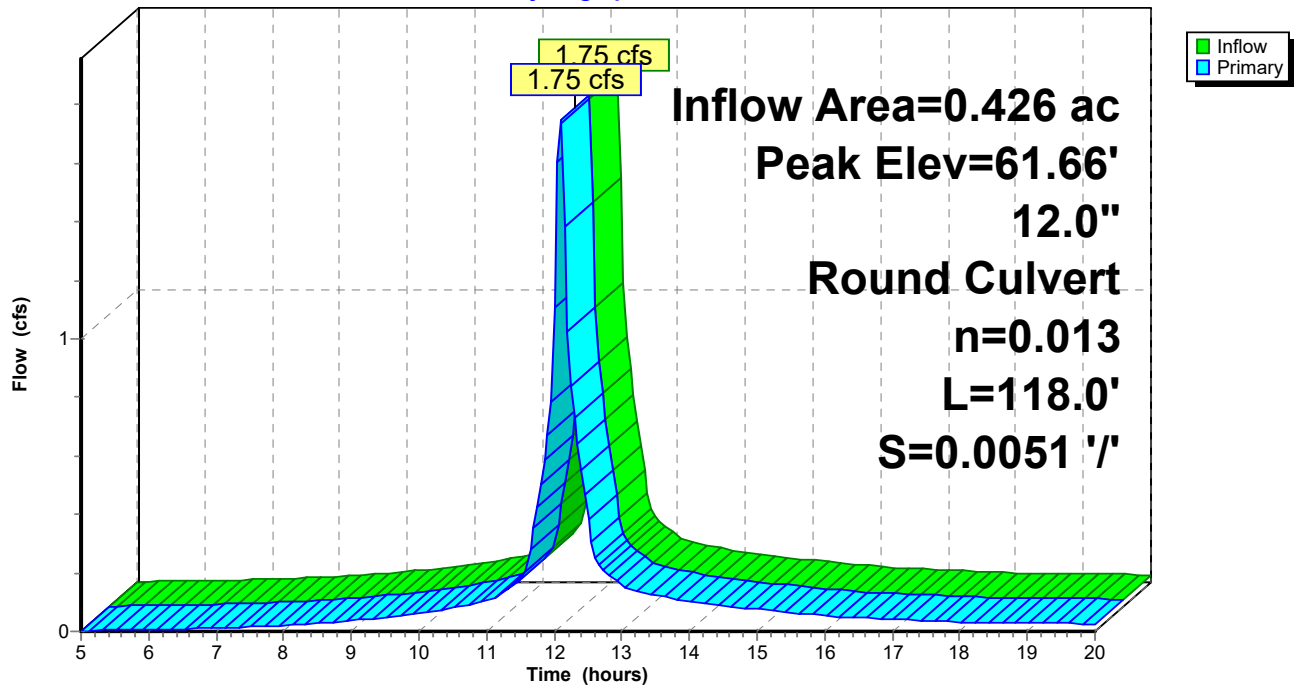
Device	Routing	Invert	Outlet Devices
#1	Primary	60.80'	12.0" Round Culvert L= 118.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.80' / 60.20' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.72' (Flood elevation advised)

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

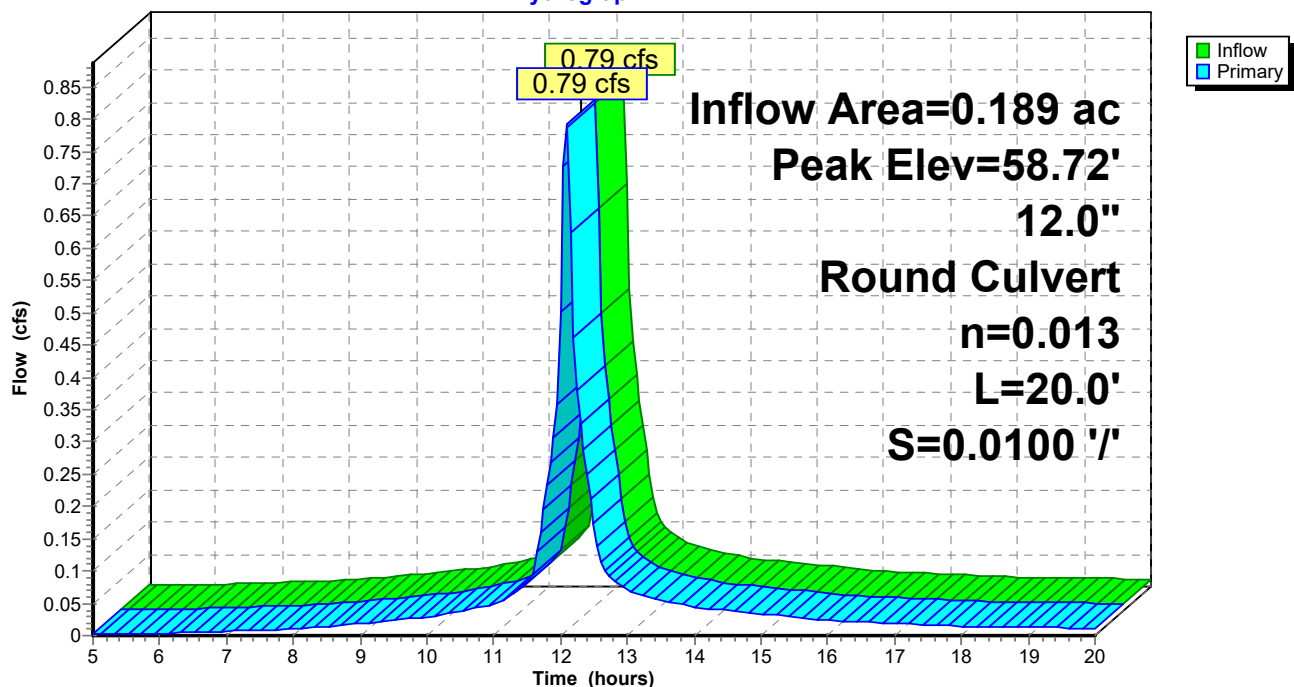
Device	Routing	Invert	Outlet Devices
#1	Primary	58.20'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.20' / 58.00' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.57' (Flood elevation advised)

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

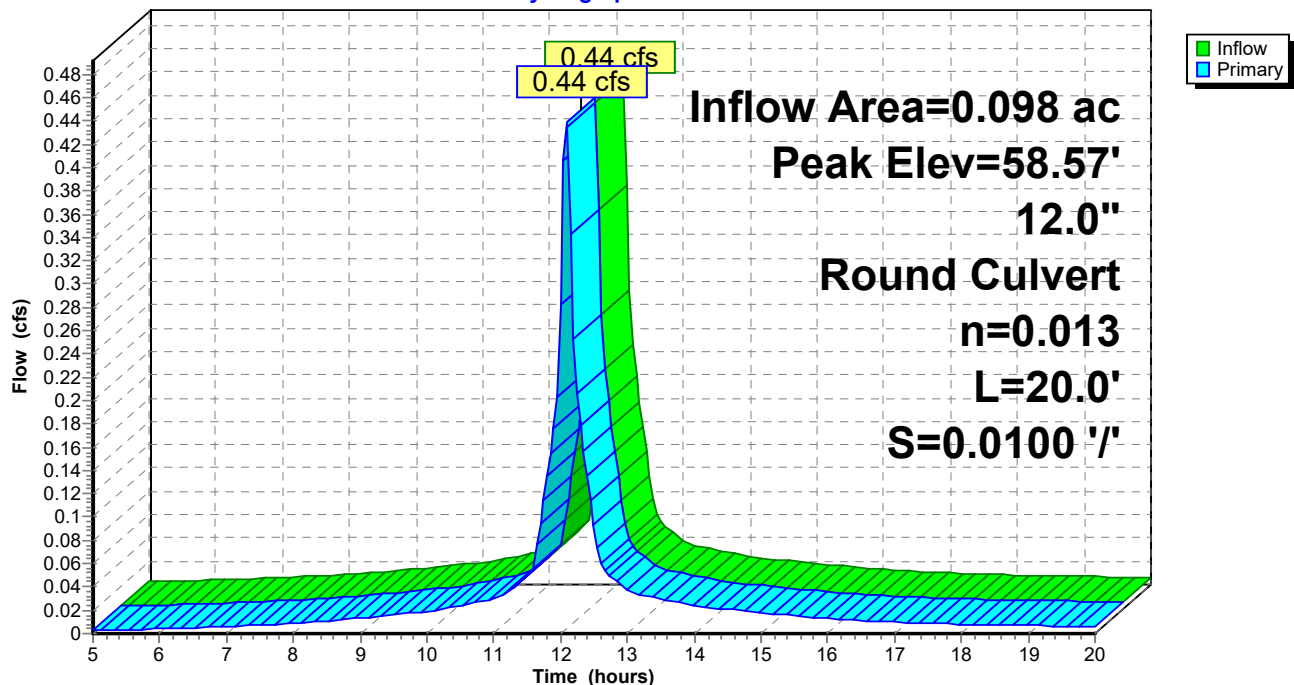
Device	Routing	Invert	Outlet Devices
#1	Primary	58.20'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.20' / 58.00' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.75' (Flood elevation advised)

[79] Warning: Submerged Pond 65P Primary device # 1 INLET by 0.05'

[81] Warning: Exceeded Pond 76P by 0.03' @ 12.10 hrs

[81] Warning: Exceeded Pond 77P by 0.17' @ 12.10 hrs

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

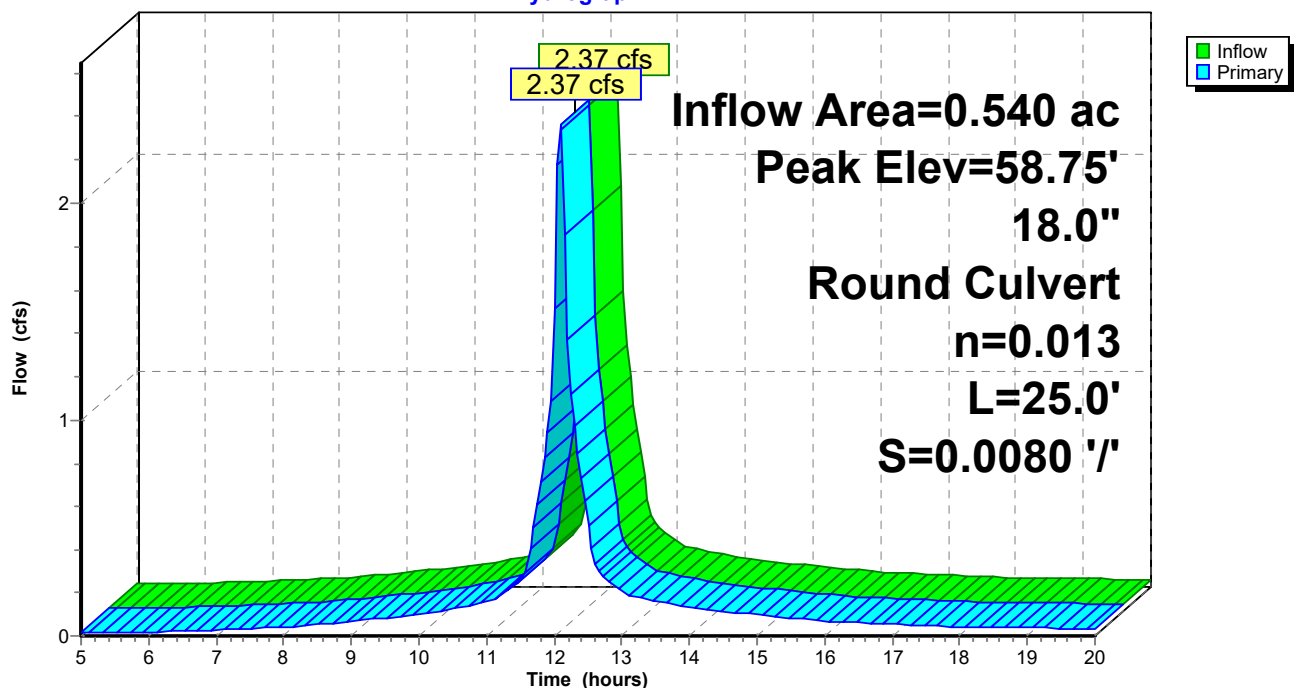
Device	Routing	Invert	Outlet Devices
#1	Primary	57.90'	18.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.90' / 57.70' S= 0.0080 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.57' (Flood elevation advised)

[79] Warning: Submerged Pond 78P Primary device # 1 INLET by 0.67'

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

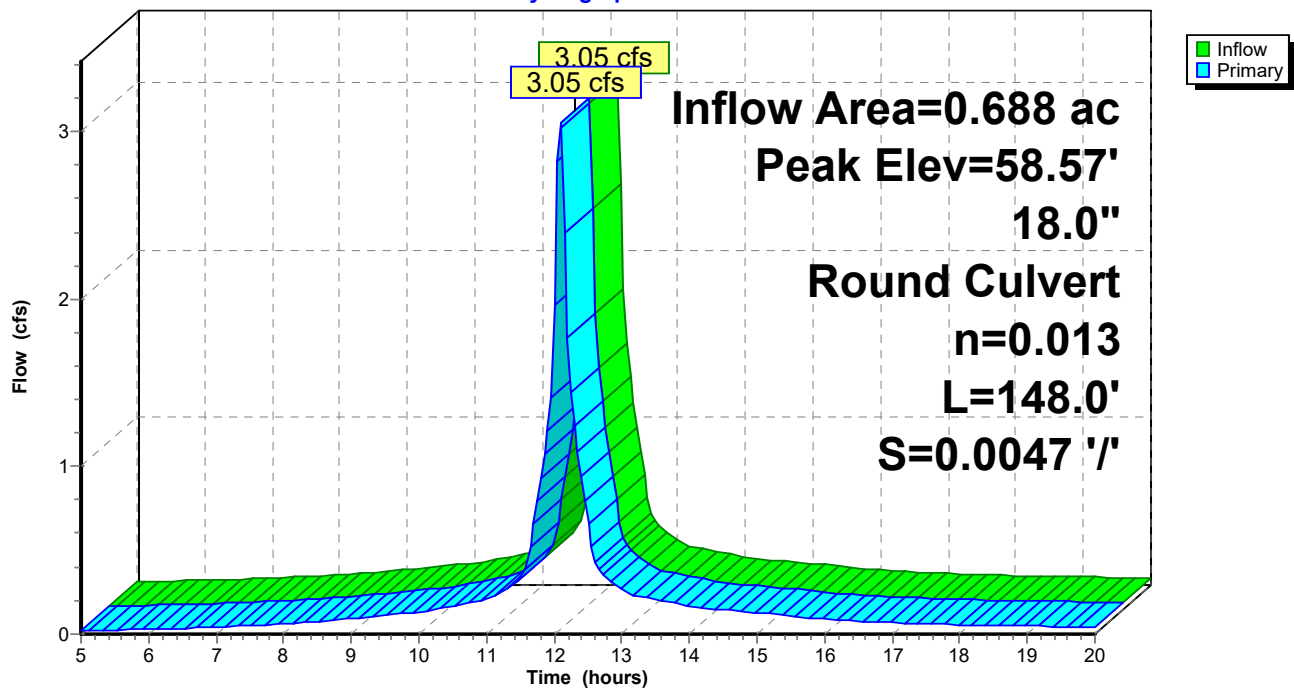
Device	Routing	Invert	Outlet Devices
#1	Primary	57.60'	18.0" Round Culvert L= 148.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.60' / 56.91' S= 0.0047 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 57.78' (Flood elevation advised)

[79] Warning: Submerged Pond 79P Primary device # 1 INLET by 0.17'

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

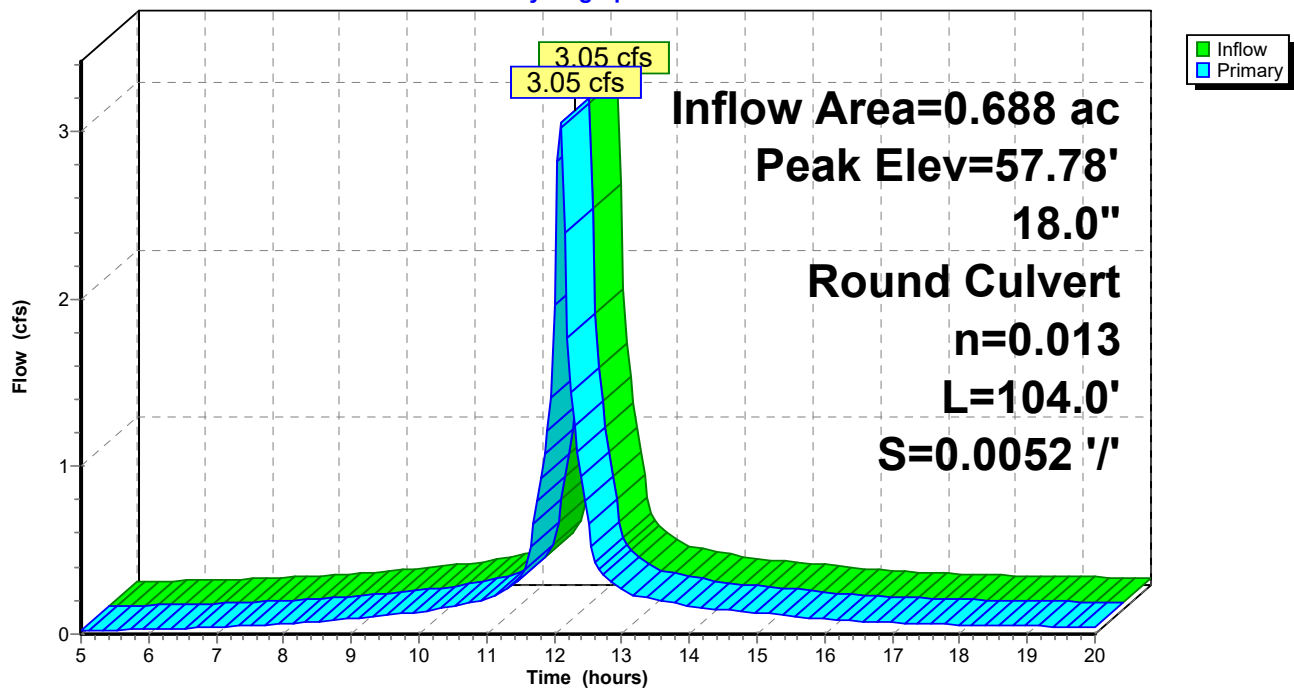
Device	Routing	Invert	Outlet Devices
#1	Primary	56.81'	18.0" Round Culvert L= 104.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 56.81' / 56.27' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 57.11' (Flood elevation advised)

[79] Warning: Submerged Pond 80P Primary device # 1 INLET by 0.30'

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

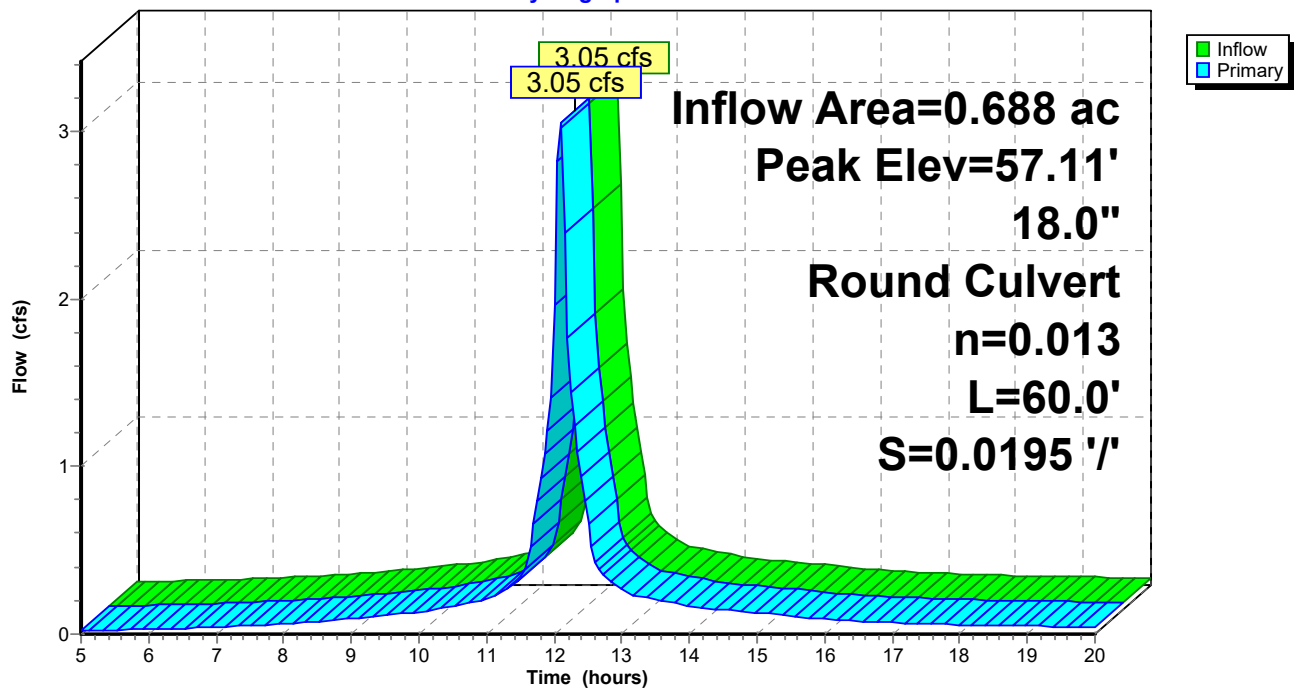
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 57.11' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	56.17'	18.0" Round Culvert L= 60.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 56.17' / 55.00' S= 0.0195 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 81P by 0.60' @ 12.60 hrs

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	Custom Stage Data (Prismatic) Listed below (Recalc)

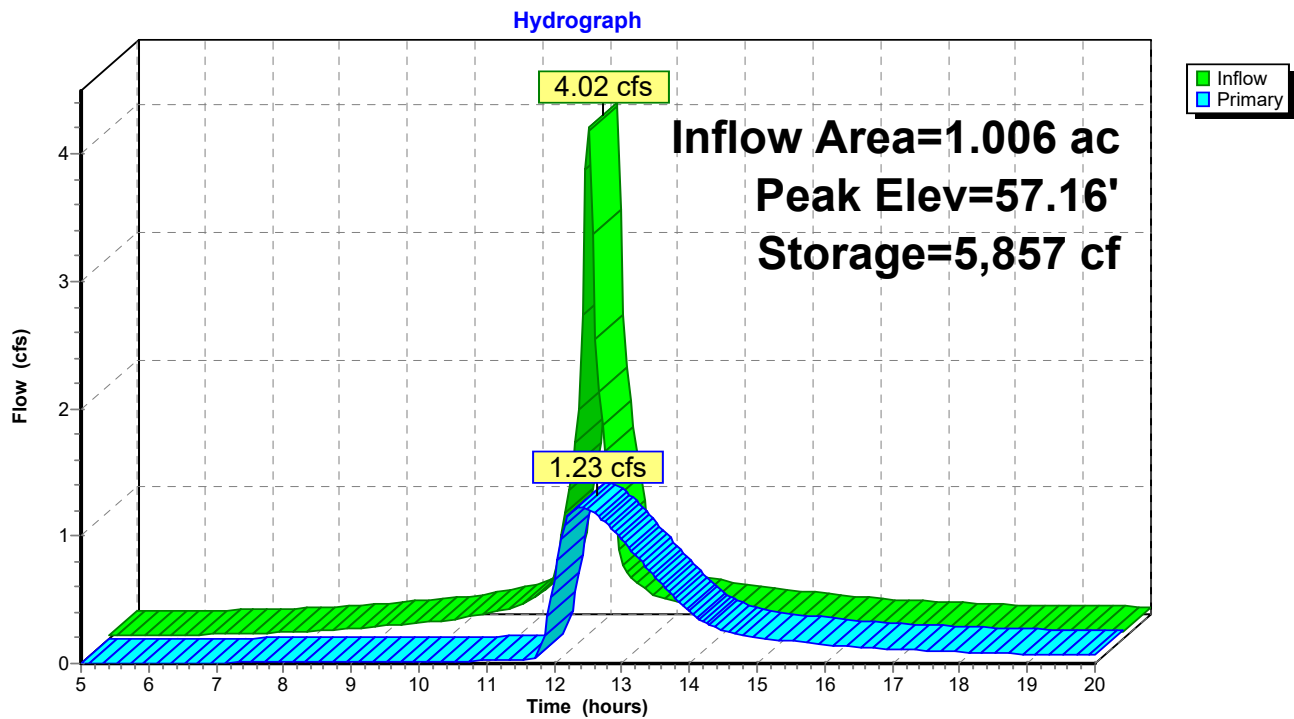
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
55.00	1,981	0	0
56.00	2,646	2,314	2,314
57.00	3,368	3,007	5,321
58.00	4,146	3,757	9,078
59.00	4,980	4,563	13,641

Device	Routing	Invert	Outlet Devices
#1	Primary	55.00'	12.0" Round Culvert L= 52.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 55.00' / 54.00' S= 0.0192 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	55.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	56.10'	4.0" Vert. Orifice/Grate X 3.00 C= 0.600 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.50' (Flood elevation advised)

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

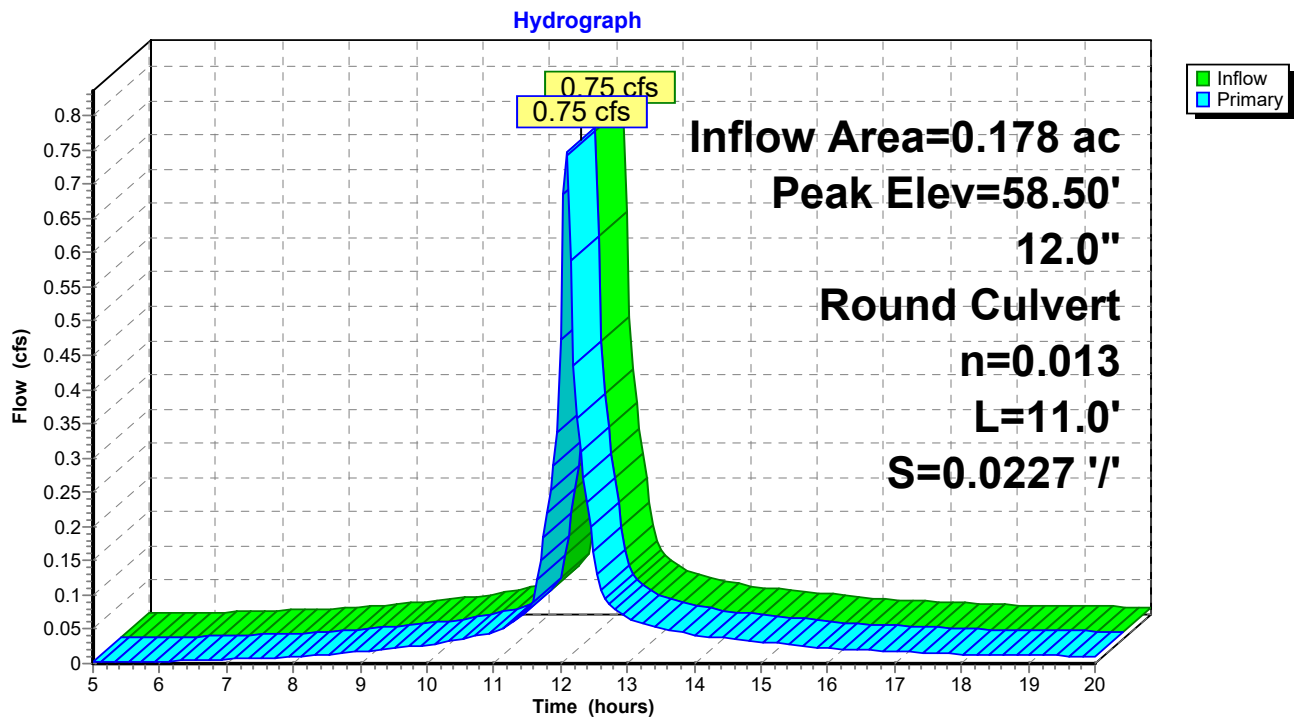
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 58.50' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	58.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.00' / 57.75' S= 0.0227 ' /' Cc= 0.900 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



Summary for Pond 84P: CB 87

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.53' (Flood elevation advised)

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

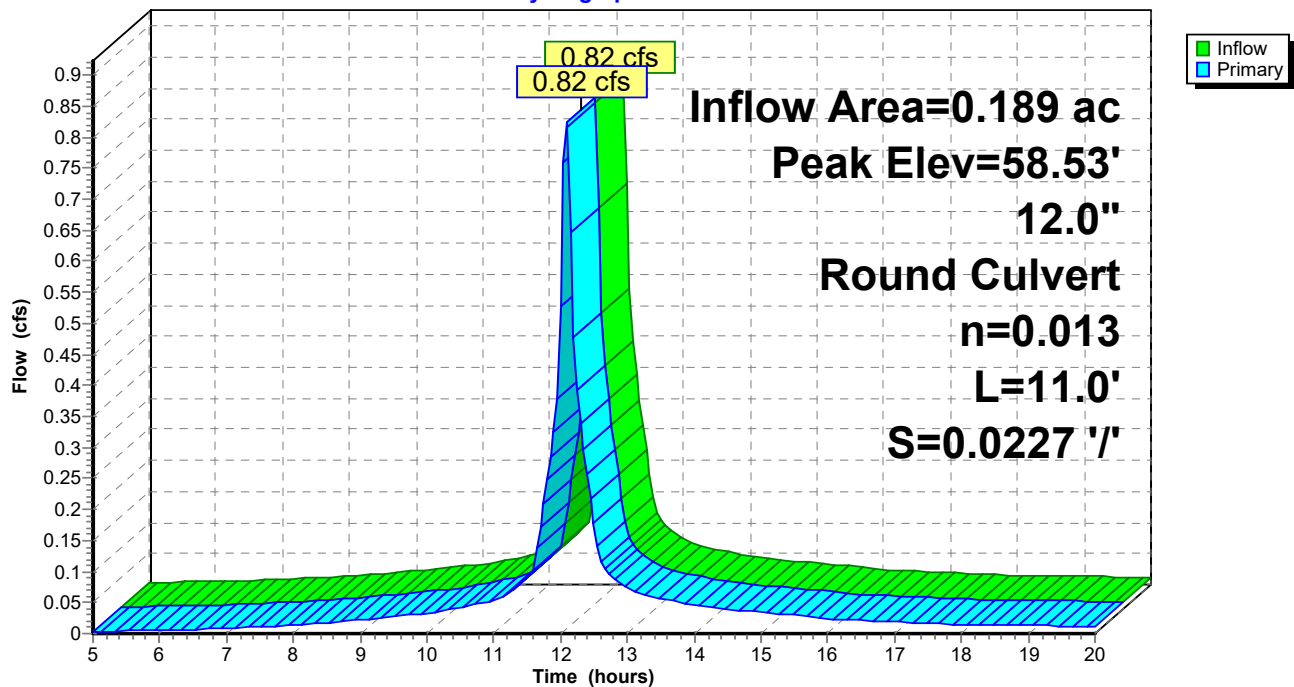
Device	Routing	Invert	Outlet Devices
#1	Primary	58.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.00' / 57.75' S= 0.0227 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.49' (Flood elevation advised)

[79] Warning: Submerged Pond 83P Primary device # 1 INLET by 0.48'

[79] Warning: Submerged Pond 84P Primary device # 1 INLET by 0.48'

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

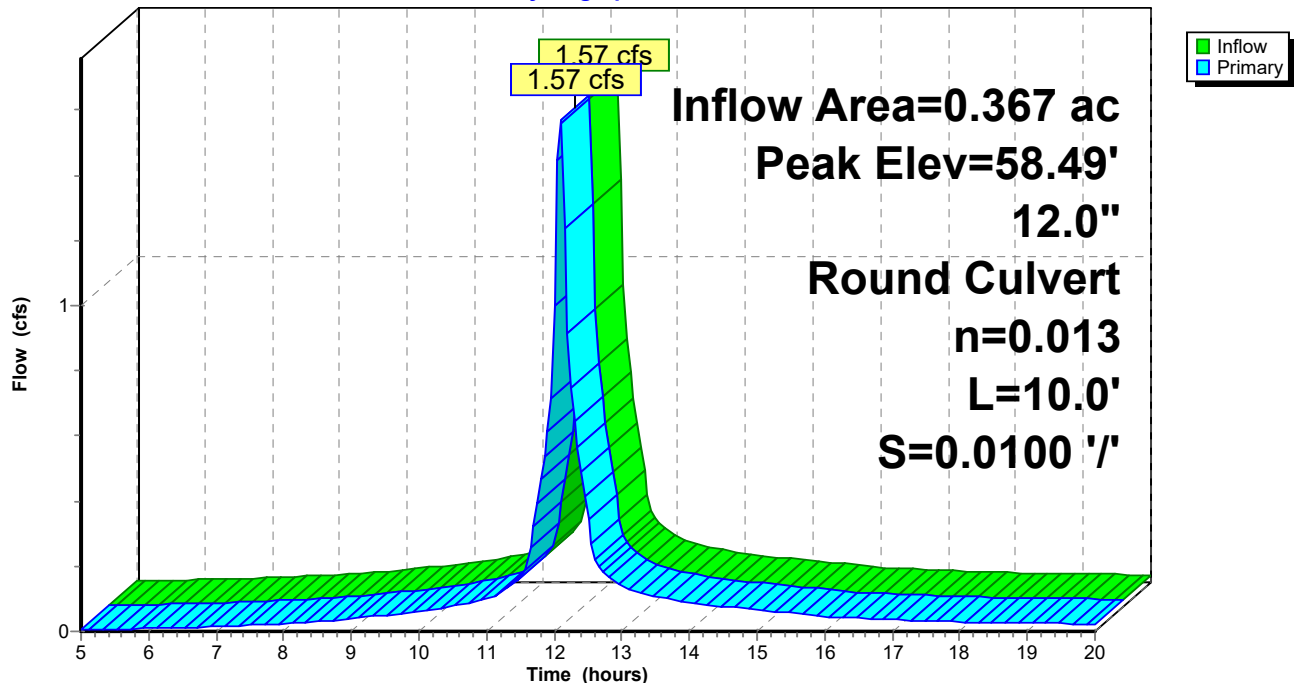
Device	Routing	Invert	Outlet Devices
#1	Primary	57.65'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.65' / 57.55' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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	30.00'W x 53.46'L x 3.50'H Field A 0.129 af Overall - 0.045 af Embedded = 0.084 af x 40.0% Voids
#2A	61.50'	0.045 af	ADS_StormTech SC-740 b +Cap x 42 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 42 Chambers in 6 Rows 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'	1.020 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 59.00'
#2	Primary	61.00'	12.0" Round Culvert L= 105.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.00' / 57.00' S= 0.0381 ' S= 0.0381 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	62.50'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 2	63.50'	4.0' long Sharp-Crested Vee/Trap Weir 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 6 rows = 31.9 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

7 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 51.46' Row Length +12.0" End Stone x 2 = 53.46' Base Length

6 Rows x 51.0" Wide + 6.0" Spacing x 5 + 12.0" Side Stone x 2 = 30.00' Base Width

6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

42 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 6 Rows = 1,961.3 cf Chamber Storage

5,613.0 cf Field - 1,961.3 cf Chambers = 3,651.6 cf Stone x 40.0% Voids = 1,460.6 cf Stone Storage

Chamber Storage + Stone Storage = 3,422.0 cf = 0.079 af

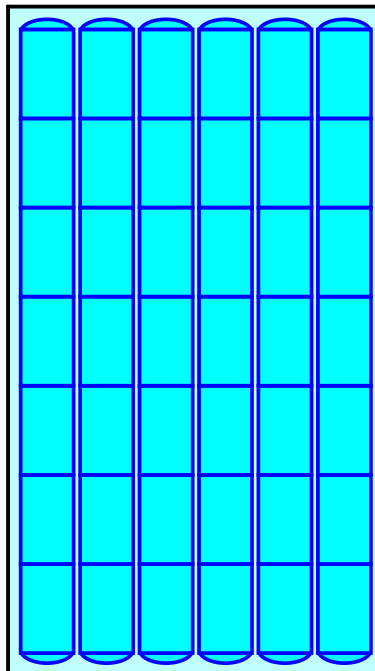
Overall Storage Efficiency = 61.0%

Overall System Size = 53.46' x 30.00' x 3.50'

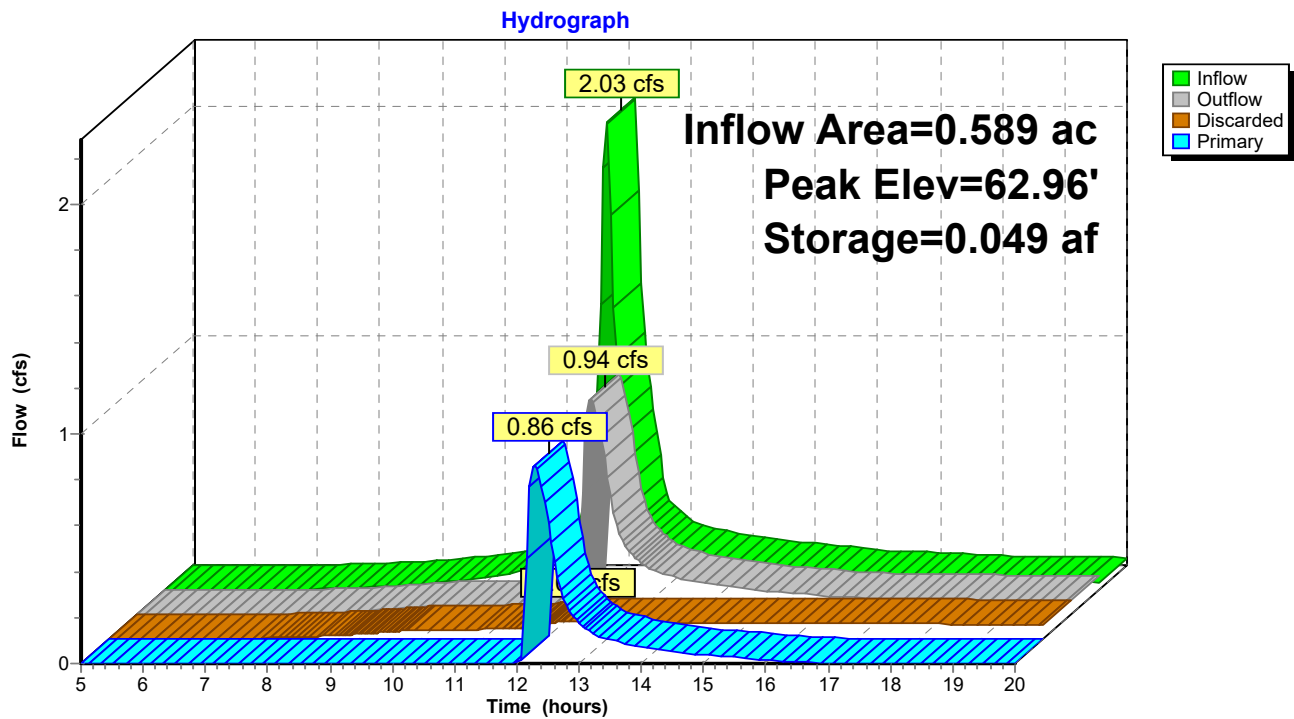
42 Chambers

207.9 cy Field

135.2 cy Stone



Pond 86P: Sub. Inf. 6



Summary for Pond 87P: CB 85

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.43' (Flood elevation advised)

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

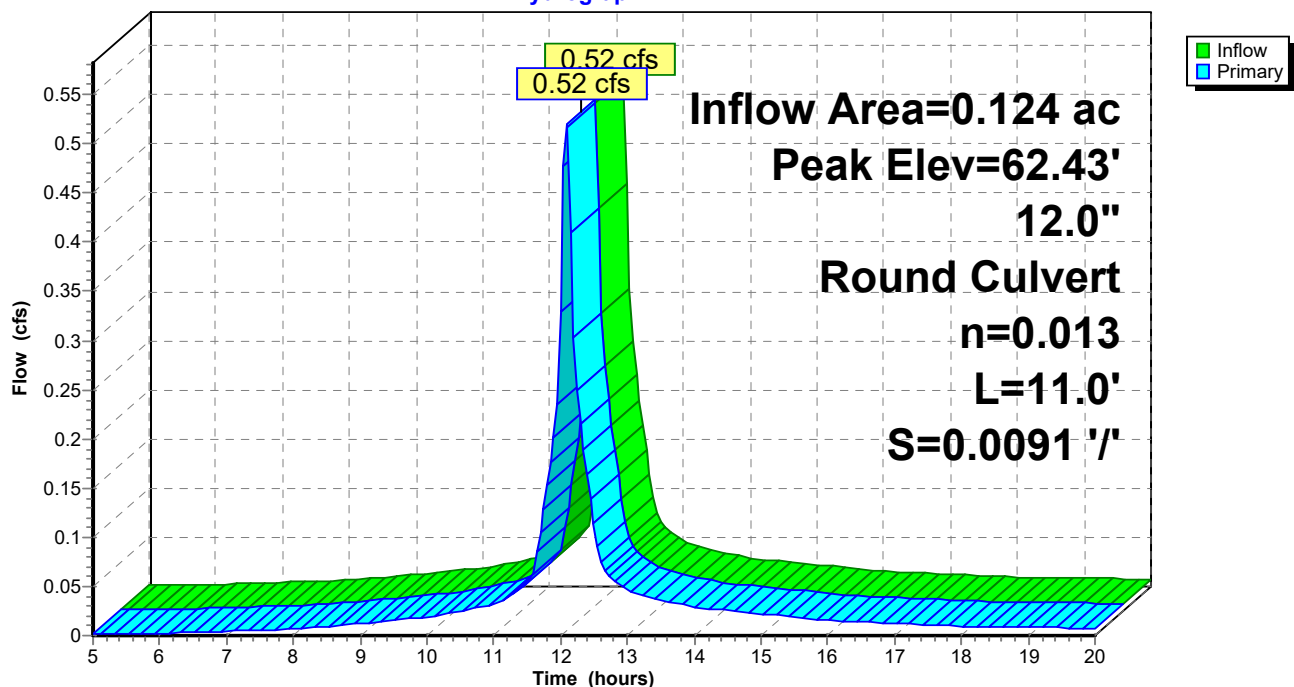
Device	Routing	Invert	Outlet Devices
#1	Primary	62.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.00' / 61.90' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.30' (Flood elevation advised)

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

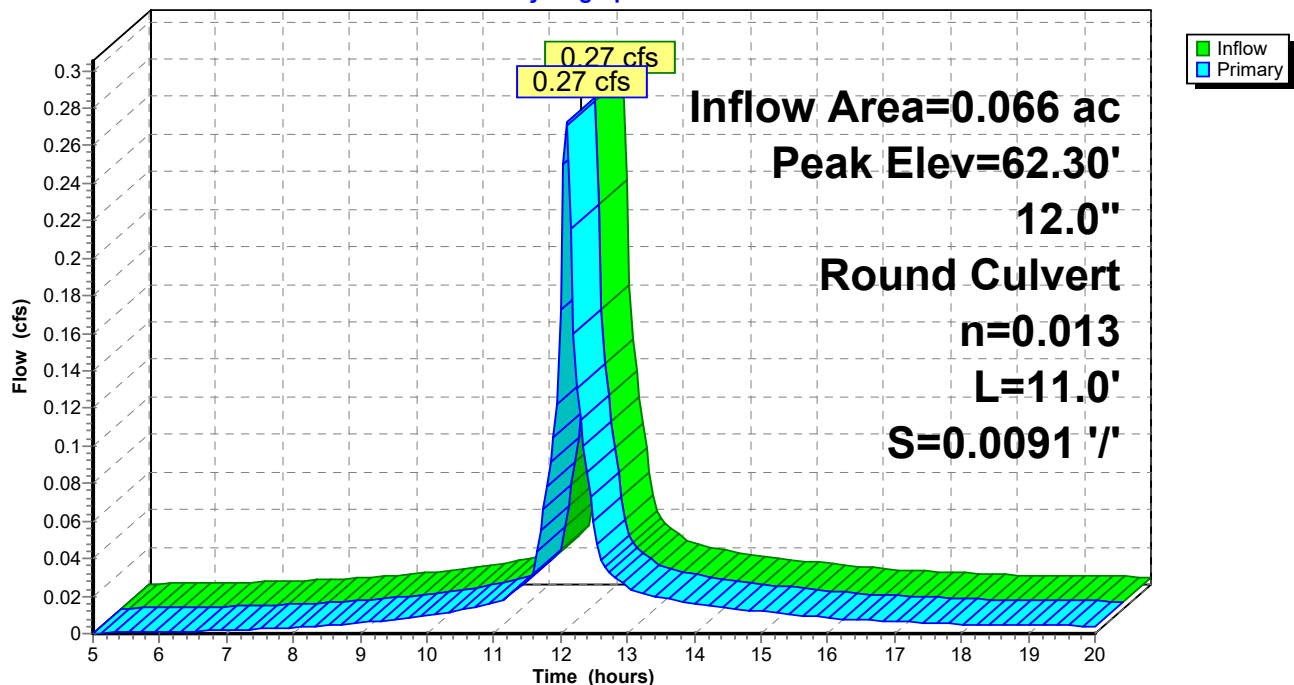
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 62.30' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	62.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.00' / 61.90' S= 0.0091 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.77' (Flood elevation advised)

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

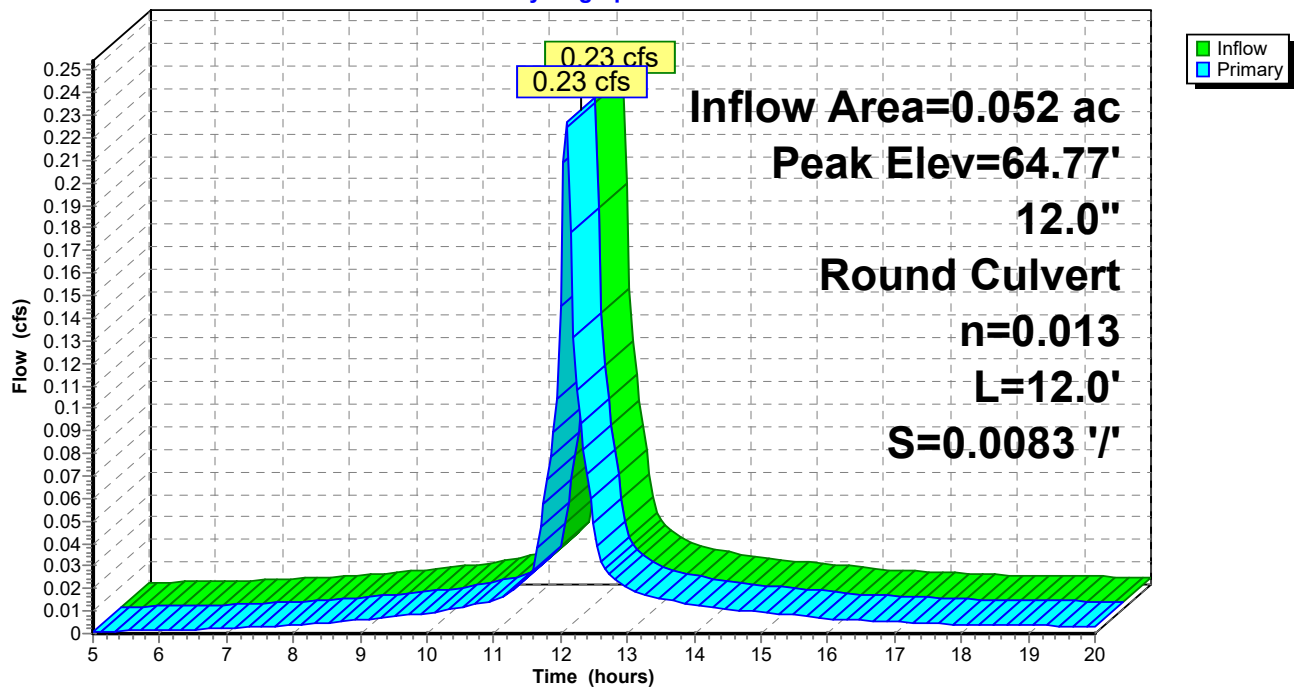
Device	Routing	Invert	Outlet Devices
#1	Primary	64.50'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 64.50' / 64.40' S= 0.0083 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.90' (Flood elevation advised)

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

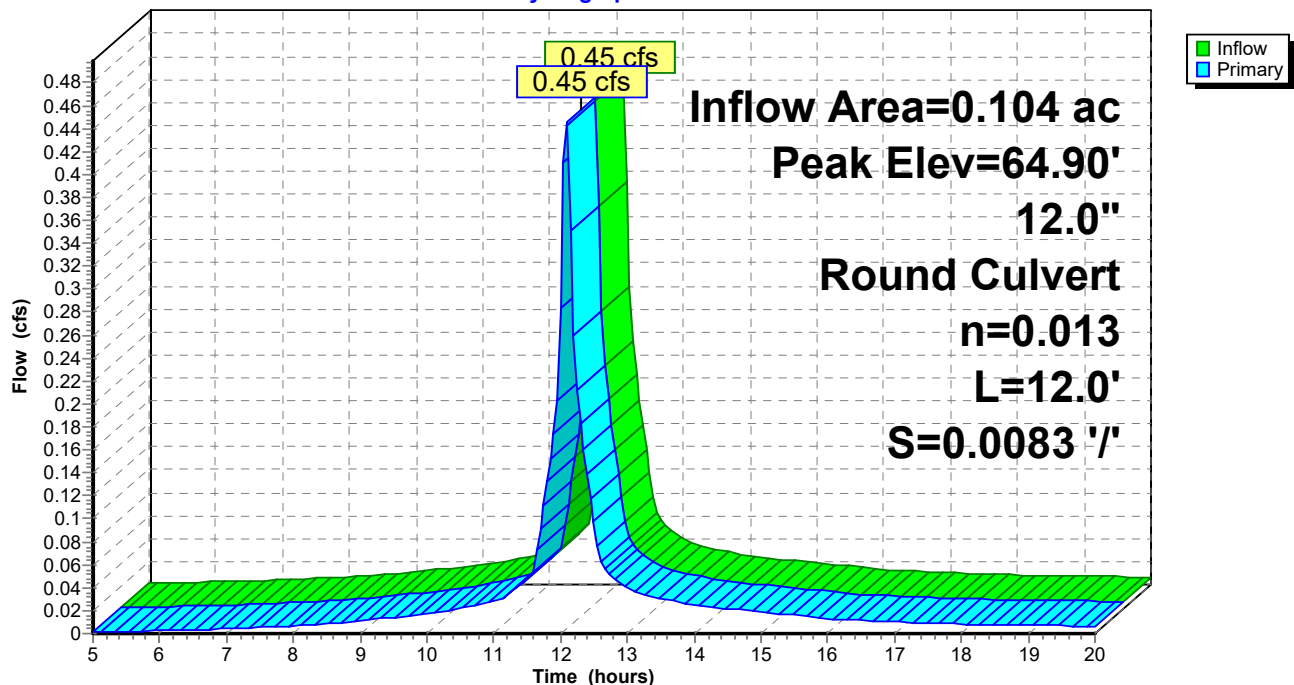
Device	Routing	Invert	Outlet Devices
#1	Primary	64.50'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 64.50' / 64.40' S= 0.0083 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.77' (Flood elevation advised)

[79] Warning: Submerged Pond 89P Primary device # 1 INLET by 0.27'

[79] Warning: Submerged Pond 90P Primary device # 1 INLET by 0.27'

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

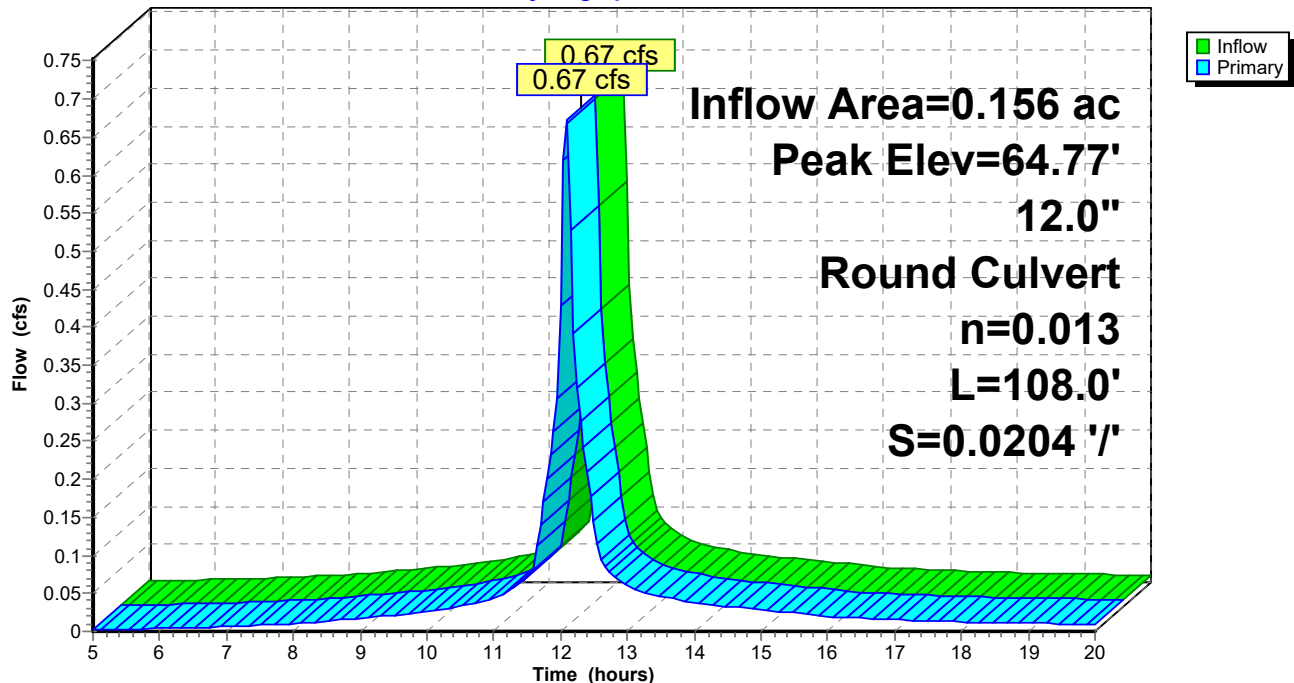
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 64.77' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	64.30'	12.0" Round Culvert L= 108.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 64.30' / 62.10' S= 0.0204 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.32' (Flood elevation advised)

[79] Warning: Submerged Pond 87P Primary device # 1 INLET by 0.32'

[81] Warning: Exceeded Pond 88P by 0.02' @ 12.10 hrs

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

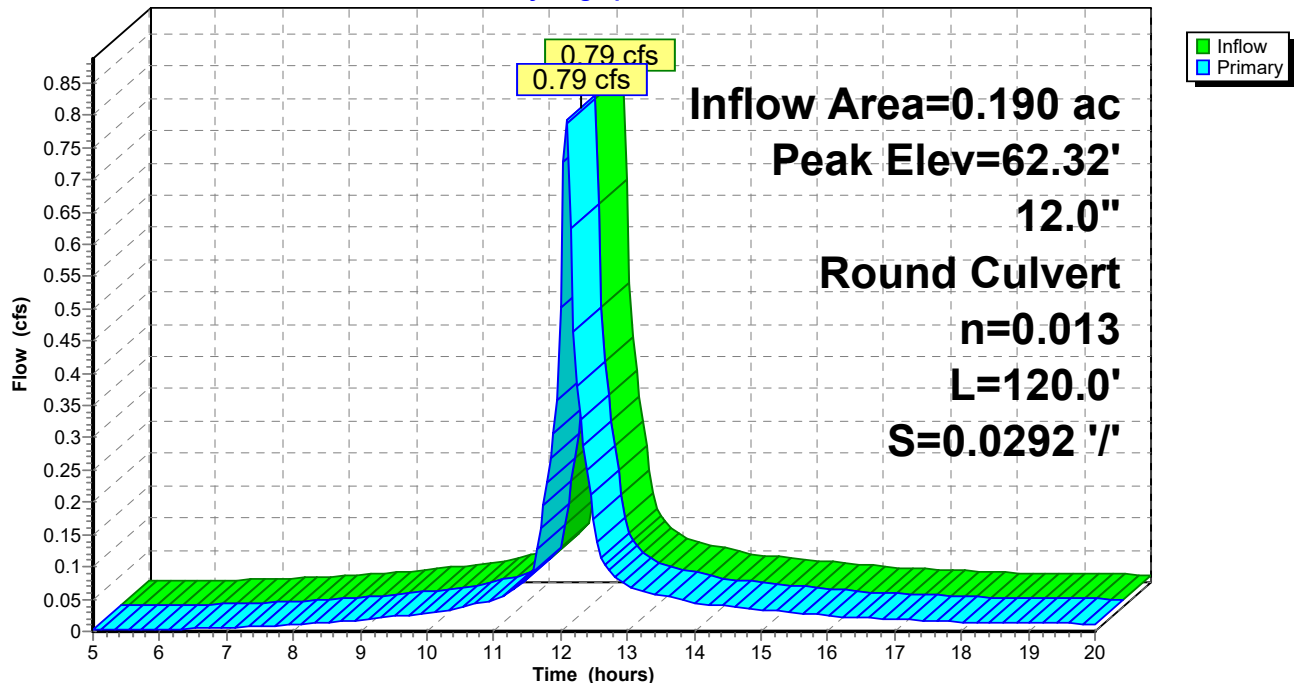
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 62.32' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.80'	12.0" Round Culvert L= 120.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.80' / 58.30' S= 0.0292 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.38' (Flood elevation advised)

[79] Warning: Submerged Pond 92P Primary device # 1 OUTLET by 1.07'

[79] Warning: Submerged Pond 98P Primary device # 1 OUTLET by 1.07'

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

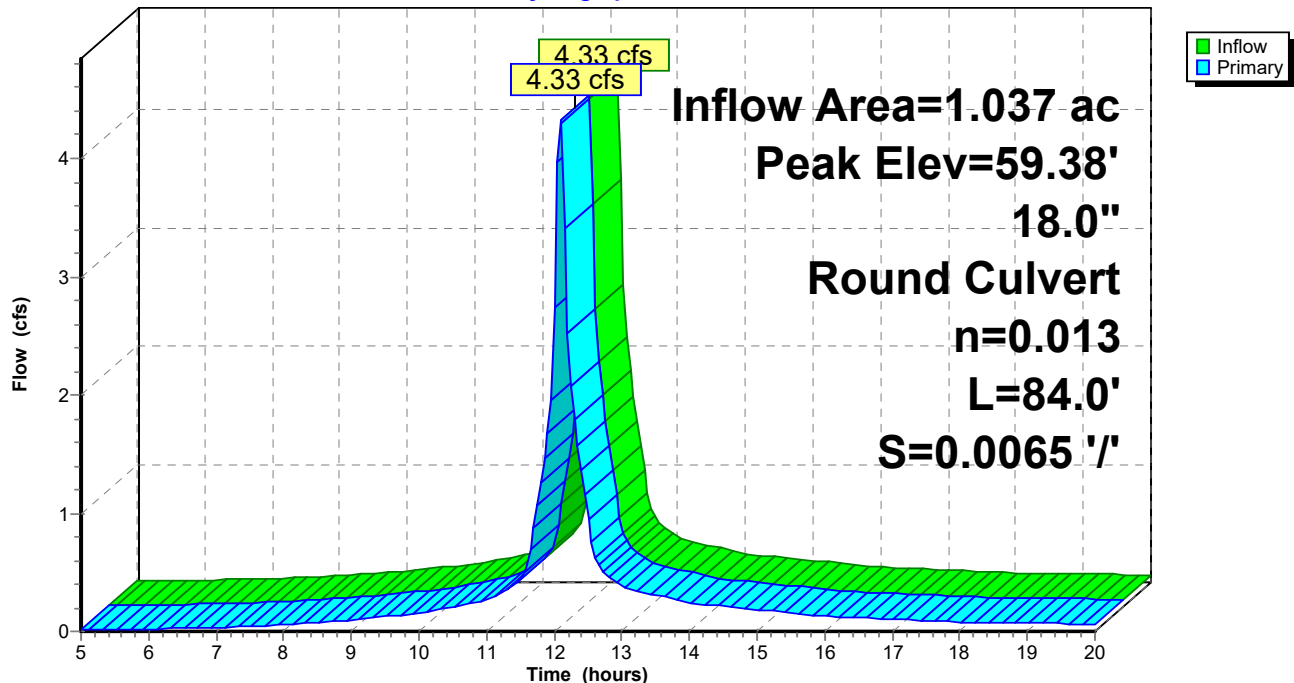
Device	Routing	Invert	Outlet Devices
#1	Primary	58.20'	18.0" Round Culvert L= 84.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.20' / 57.65' S= 0.0065 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.23' (Flood elevation advised)

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

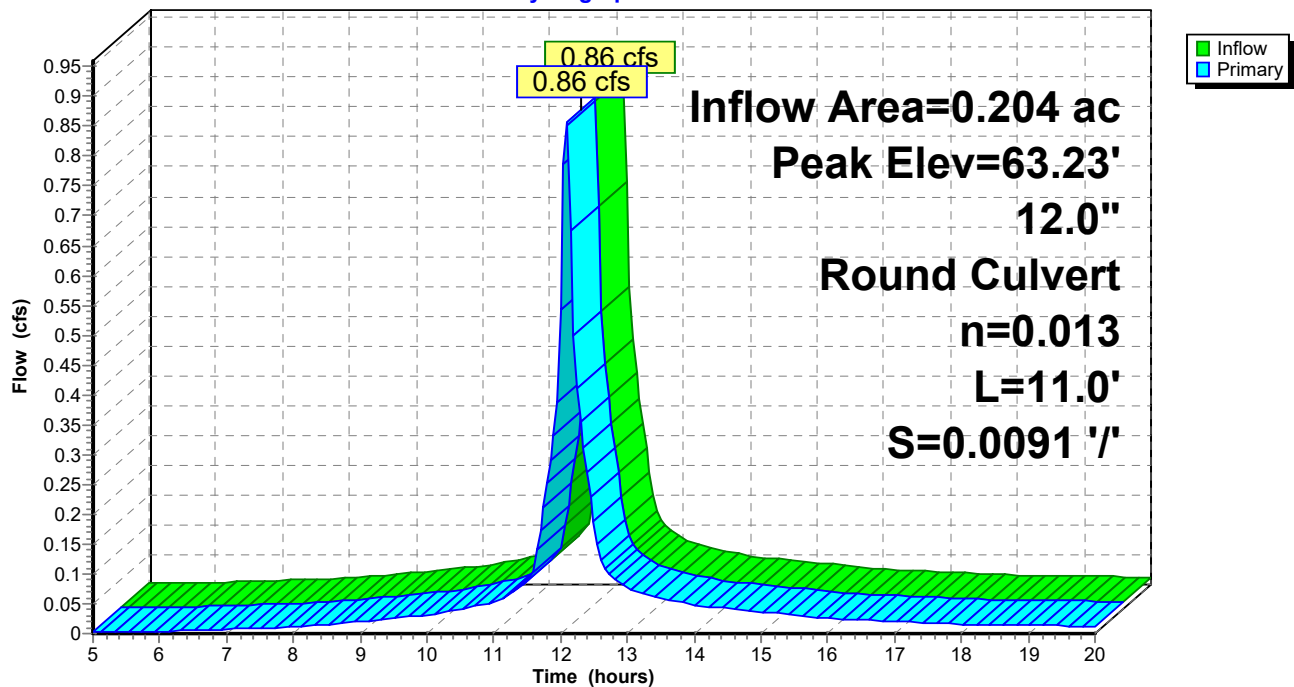
Device	Routing	Invert	Outlet Devices
#1	Primary	62.65'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.65' / 62.55' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.12' (Flood elevation advised)

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

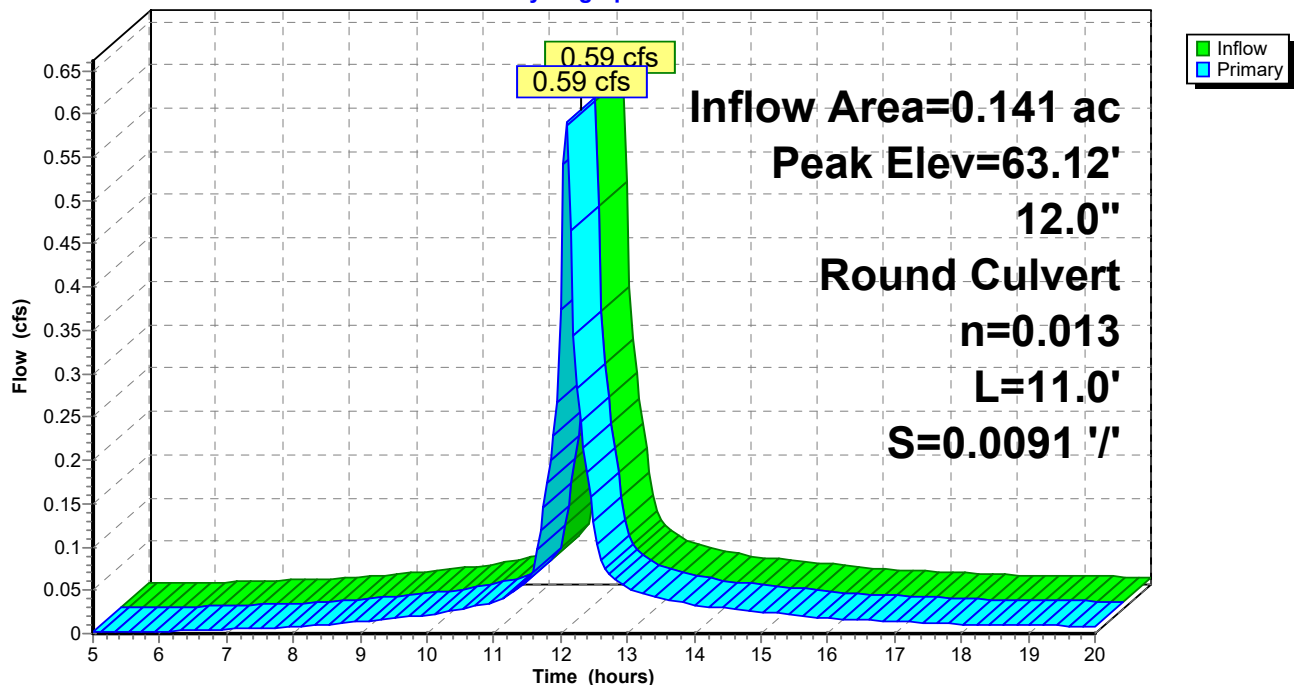
Device	Routing	Invert	Outlet Devices
#1	Primary	62.65'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.65' / 62.55' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.27' (Flood elevation advised)

[79] Warning: Submerged Pond 91P Primary device # 1 OUTLET by 1.16'

[81] Warning: Exceeded Pond 94P by 0.03' @ 12.10 hrs

[81] Warning: Exceeded Pond 95P by 0.15' @ 12.10 hrs

[79] Warning: Submerged Pond 101P Primary device # 1 INLET by 0.47'

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

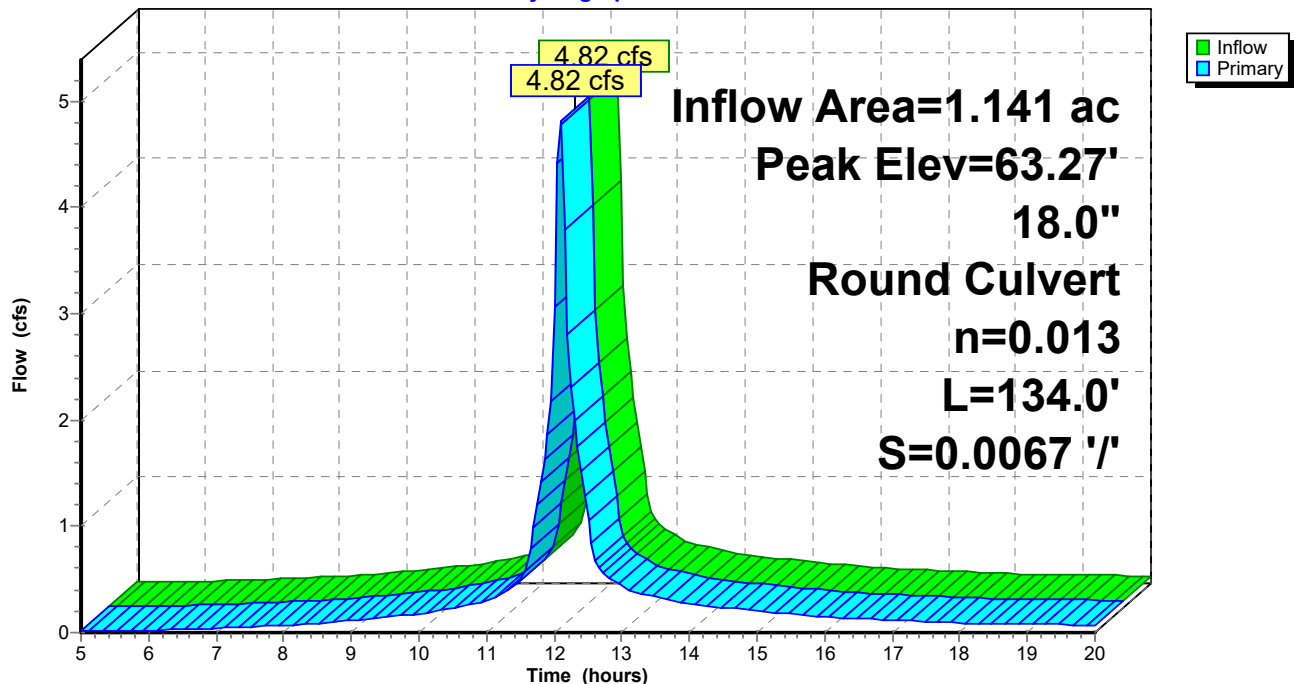
Device	Routing	Invert	Outlet Devices
#1	Primary	62.00'	18.0" Round Culvert L= 134.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.00' / 61.10' S= 0.0067 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 85P by 3.76' @ 15.20 hrs

[81] Warning: Exceeded Pond 209P by 3.73' @ 15.40 hrs

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	66.00'W x 58.00'L x 5.71'H Field A 0.502 af Overall - 0.467 af Embedded = 0.035 af x 40.0% Voids
#2A	57.54'	0.367 af	Shea Leaching Chamber 8x14x5.7 x 32 Inside #1 Inside= 84.0"W x 60.0"H => 38.46 sf x 13.00'L = 500.0 cf Outside= 96.0"W x 68.0"H => 45.36 sf x 14.00'L = 635.0 cf 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'	18.0" Round Culvert L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.50' / 53.00' S= 0.1500 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	57.50'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	60.50'	2.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 1	61.70'	4.0' long Sharp-Crested Rectangular Weir 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 - Chamber Wizard Field A

Chamber Model = Shea Leaching Chamber 8x14x5.7 (Shea Galley)

Inside= 84.0"W x 60.0"H => 38.46 sf x 13.00'L = 500.0 cf

Outside= 96.0"W x 68.0"H => 45.36 sf x 14.00'L = 635.0 cf

4 Chambers/Row x 14.00' Long = 56.00' Row Length +12.0" End Stone x 2 = 58.00' Base Length

8 Rows x 96.0" Wide + 12.0" Side Stone x 2 = 66.00' Base Width

0.5" Stone Base + 68.0" Chamber Height = 5.71' Field Height

32 Chambers x 500.0 cf = 16,000.0 cf Chamber Storage

32 Chambers x 635.0 cf = 20,321.3 cf Displacement

21,864.3 cf Field - 20,321.3 cf Chambers = 1,543.0 cf Stone x 40.0% Voids = 617.2 cf Stone Storage

Chamber Storage + Stone Storage = 16,617.2 cf = 0.381 af

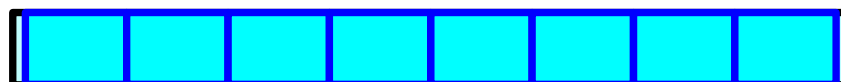
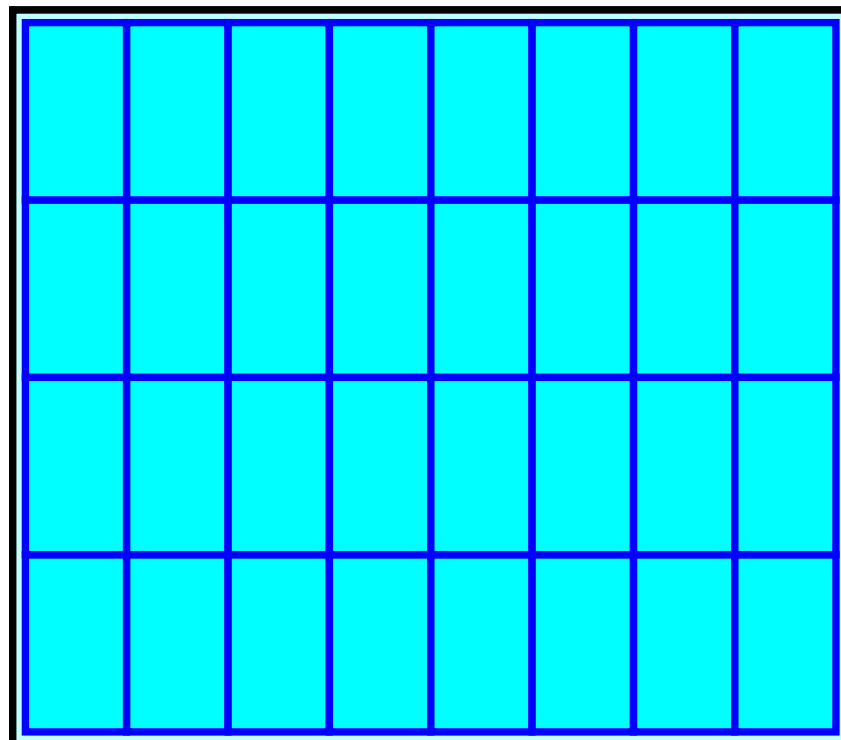
Overall Storage Efficiency = 76.0%

Overall System Size = 58.00' x 66.00' x 5.71'

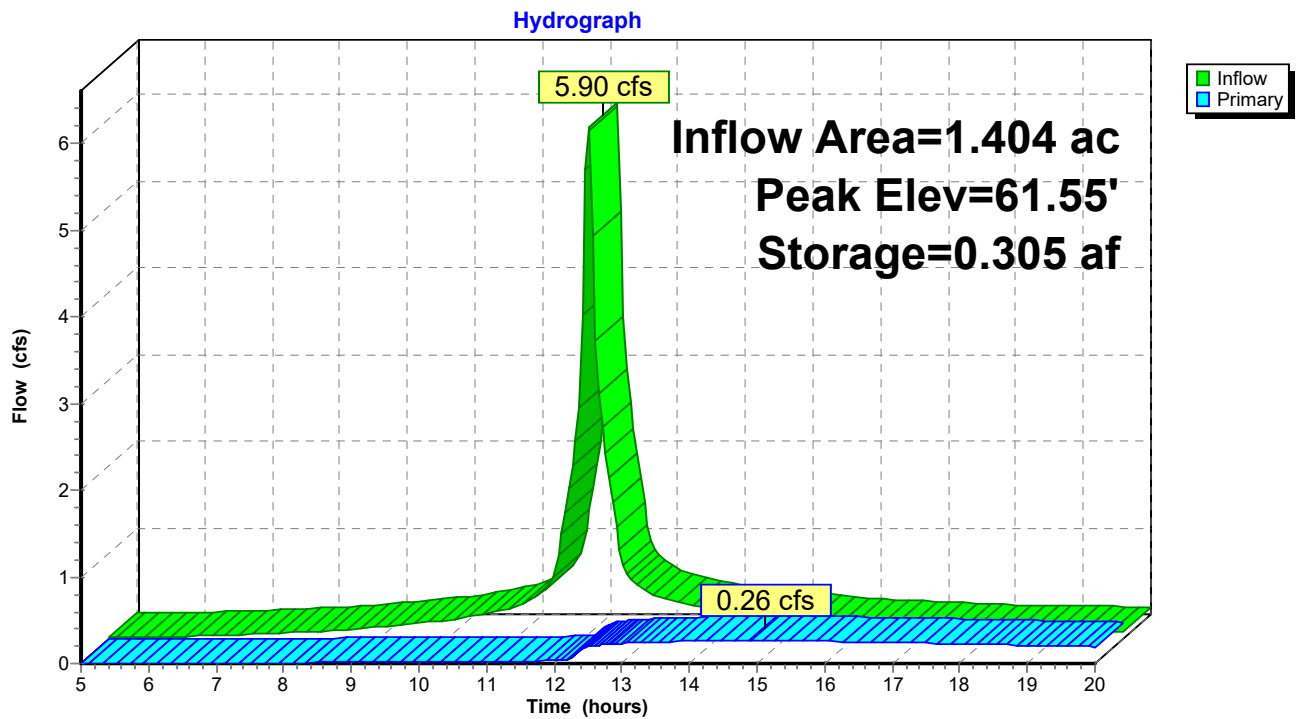
32 Chambers

809.8 cy Field

57.1 cy Stone



Pond 97P: Sub. Det. 2



Summary for Pond 98P: DMH 61

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.83' (Flood elevation advised)

[79] Warning: Submerged Pond 106P Primary device # 1 INLET by 0.03'

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

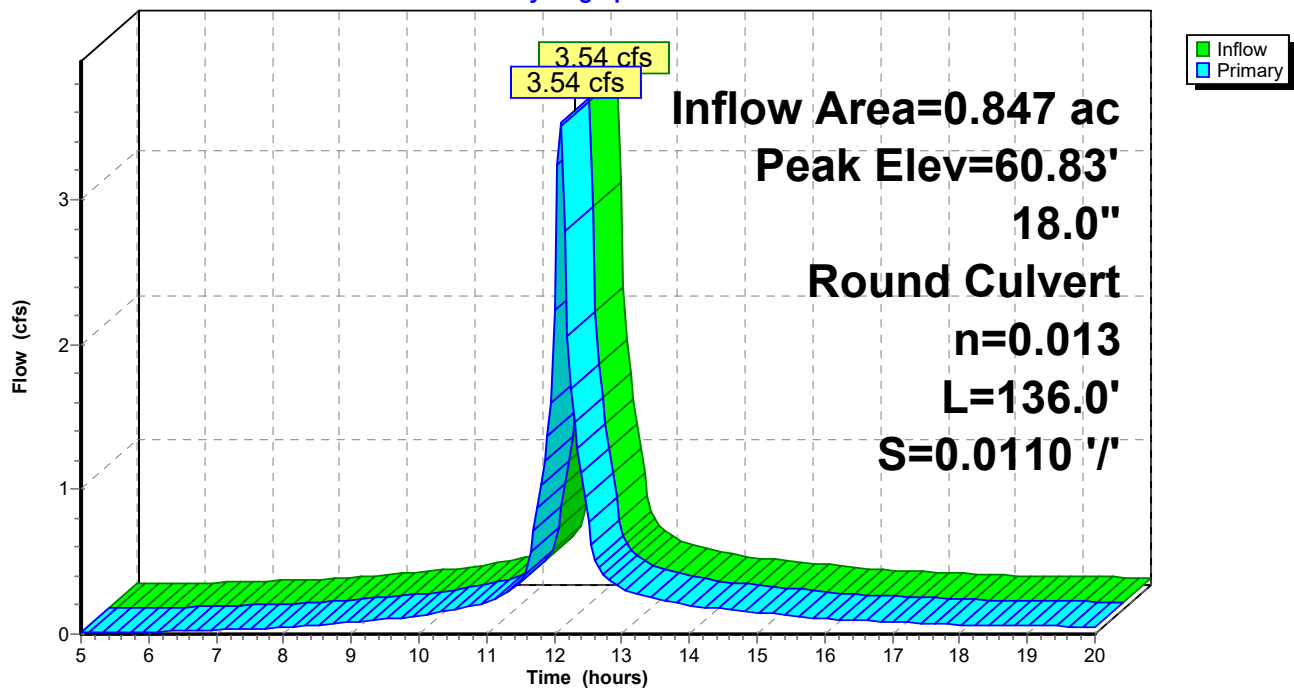
Device	Routing	Invert	Outlet Devices
#1	Primary	59.80'	18.0" Round Culvert L= 136.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.80' / 58.30' S= 0.0110 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.65' (Flood elevation advised)

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

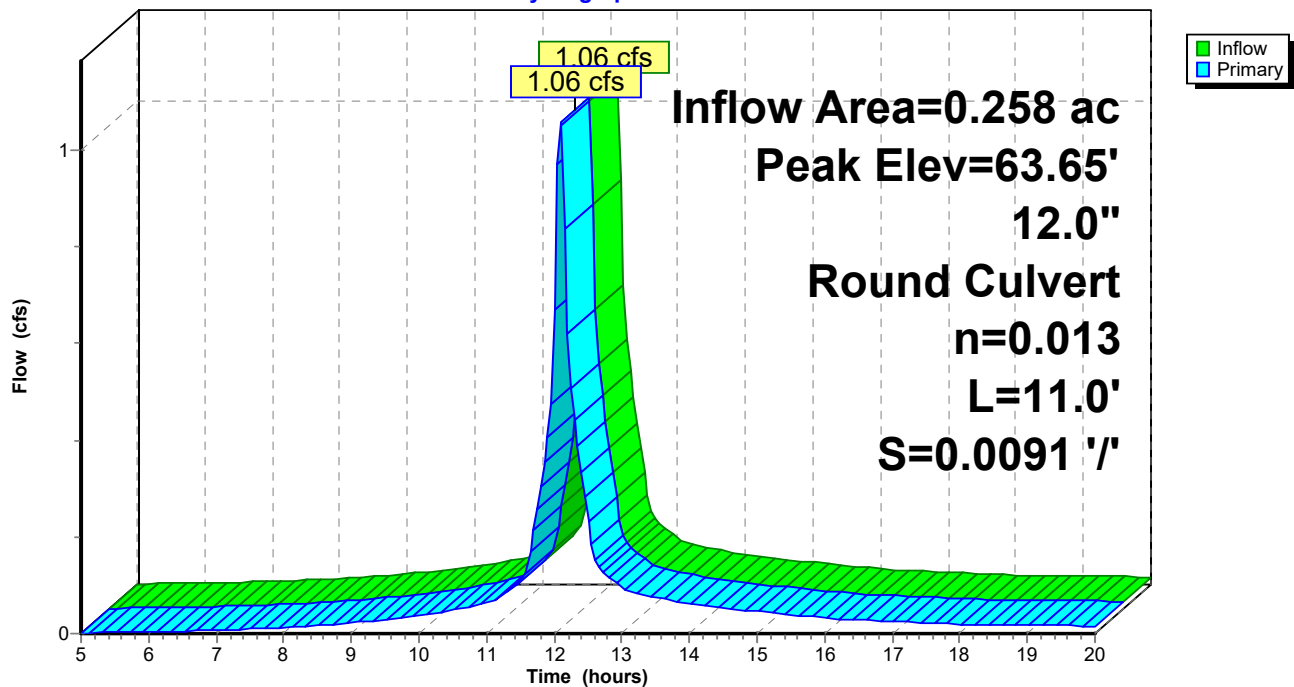
Device	Routing	Invert	Outlet Devices
#1	Primary	62.99'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.99' / 62.89' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.85' (Flood elevation advised)

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

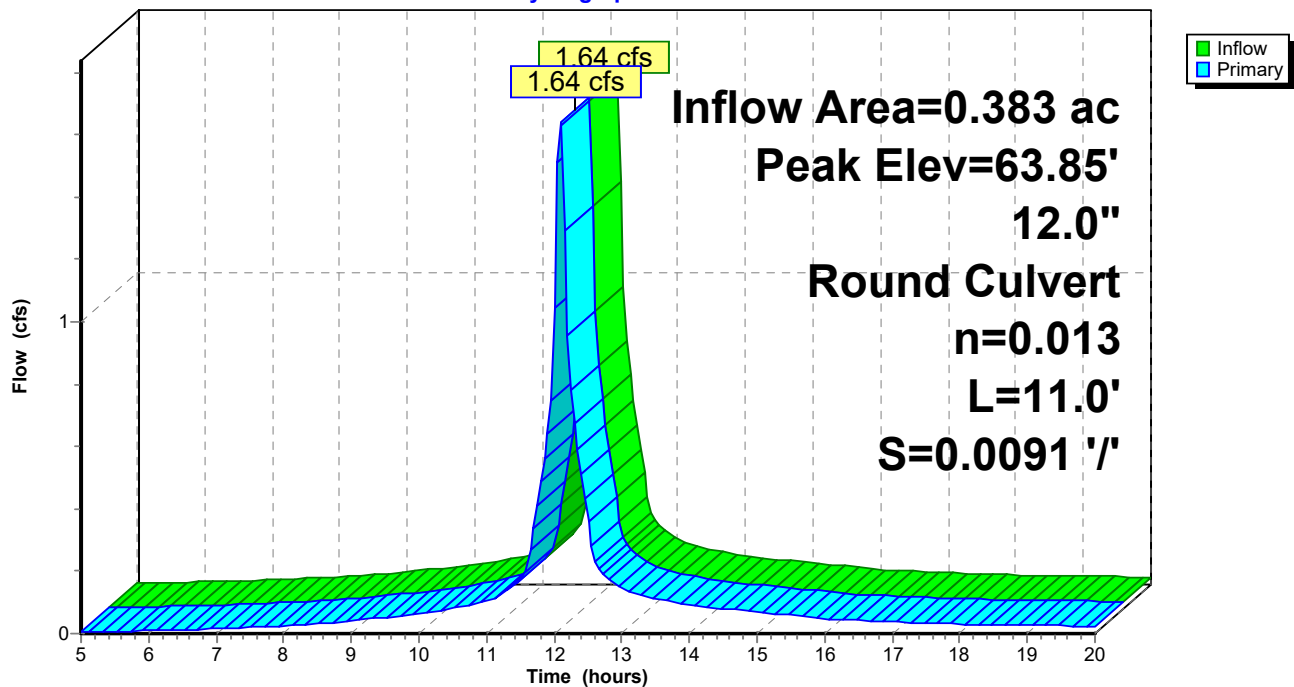
Device	Routing	Invert	Outlet Devices
#1	Primary	62.99'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.99' / 62.89' S= 0.0091 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.59 cfs @ 12.09 hrs HW=63.84' (Free Discharge)

↑=Culvert (Barrel Controls 1.59 cfs @ 3.03 fps)

Pond 100P: CB 80

Hydrograph



Summary for Pond 101P: DMH 59

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.68' (Flood elevation advised)

[81] Warning: Exceeded Pond 99P by 0.03' @ 12.10 hrs

[79] Warning: Submerged Pond 100P Primary device # 1 INLET by 0.69'

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

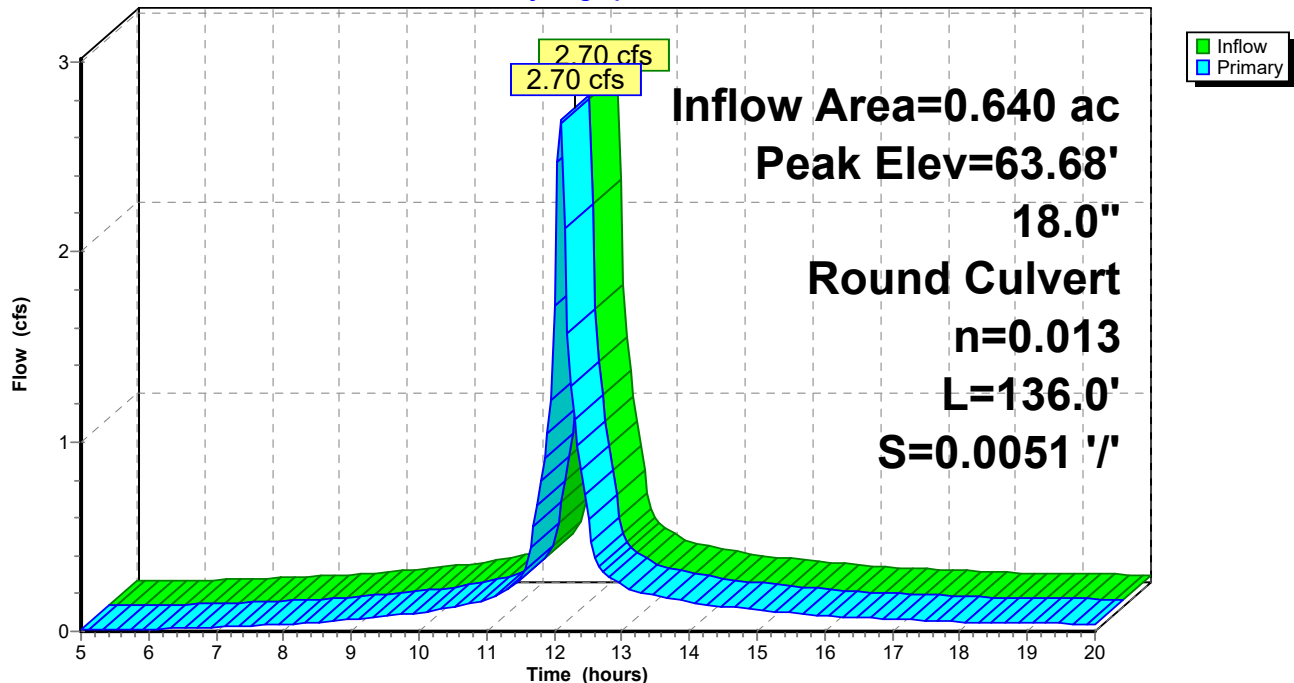
Device	Routing	Invert	Outlet Devices
#1	Primary	62.79'	18.0" Round Culvert L= 136.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.79' / 62.10' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.94' (Flood elevation advised)

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

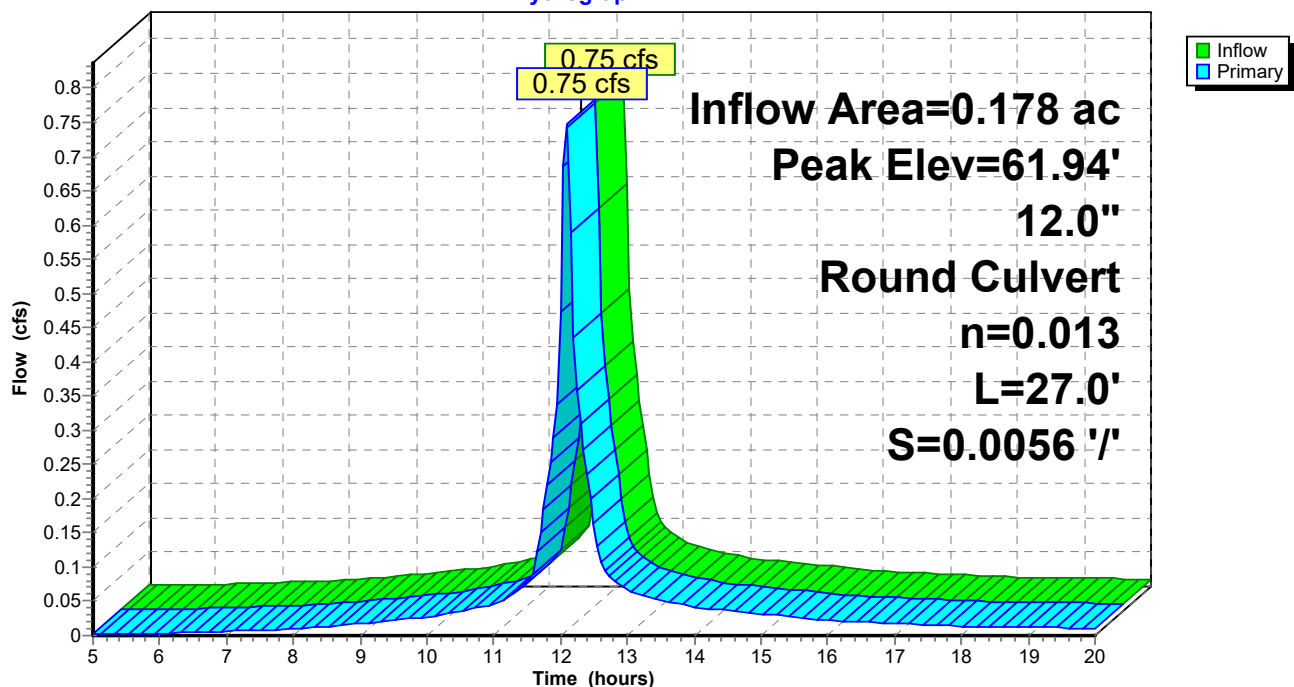
Device	Routing	Invert	Outlet Devices
#1	Primary	61.40'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.40' / 61.25' S= 0.0056 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.17' (Flood elevation advised)

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

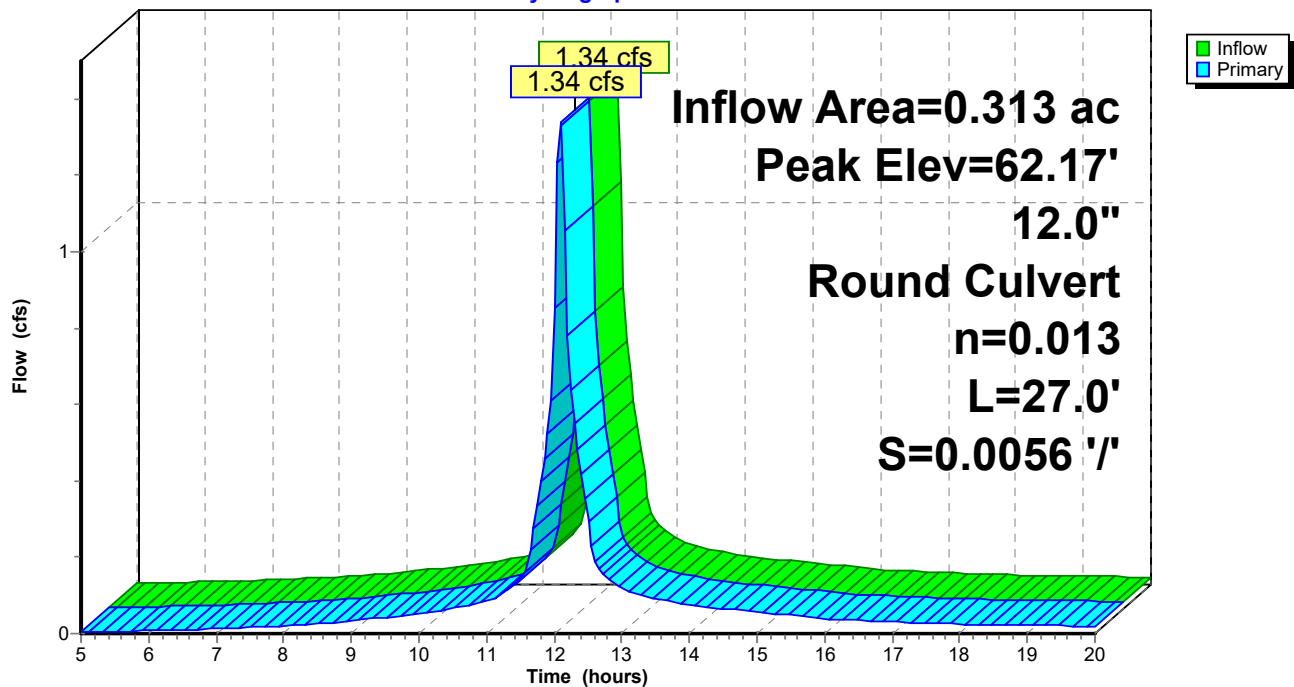
Device	Routing	Invert	Outlet Devices
#1	Primary	61.40'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.40' / 61.25' S= 0.0056 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.31 cfs @ 12.09 hrs HW=62.15' (Free Discharge)

↑=Culvert (Barrel Controls 1.31 cfs @ 2.86 fps)

Pond 103P: CB 92

Hydrograph



Summary for Pond 104P: CB 83

[57] Hint: Peaked at 61.77' (Flood elevation advised)

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

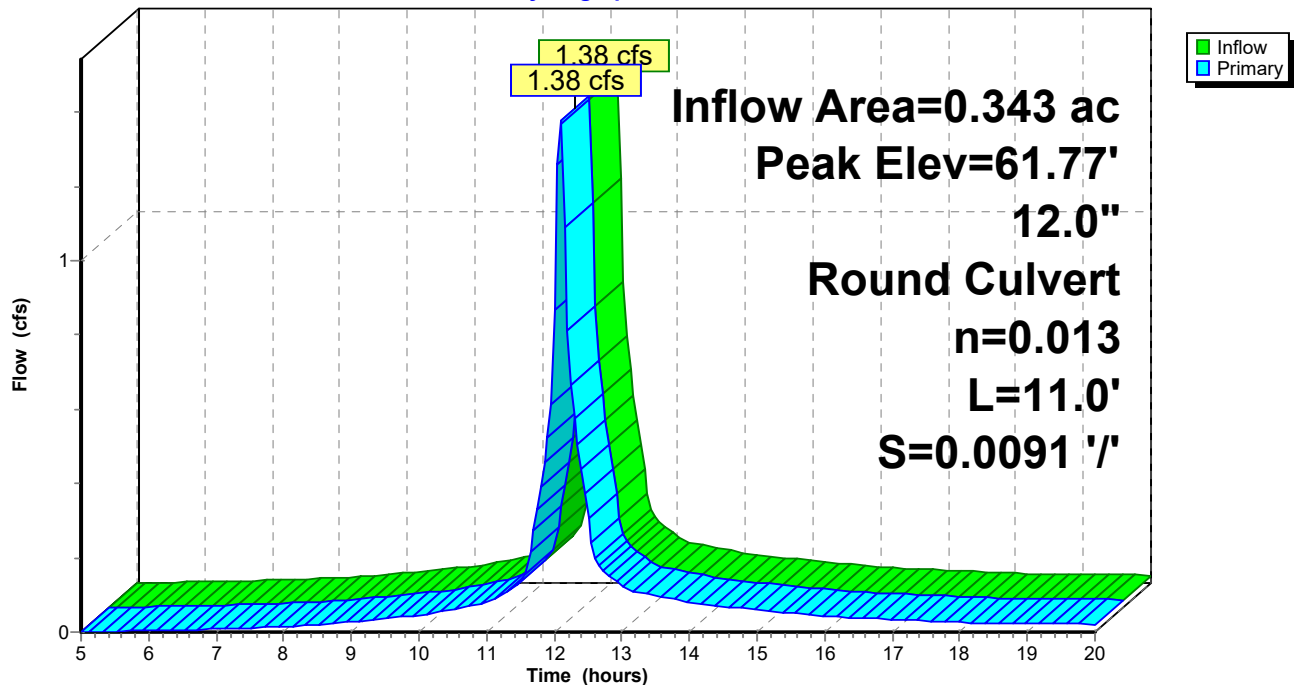
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 61.77' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.00' / 60.90' S= 0.0091 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.04' (Flood elevation advised)

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

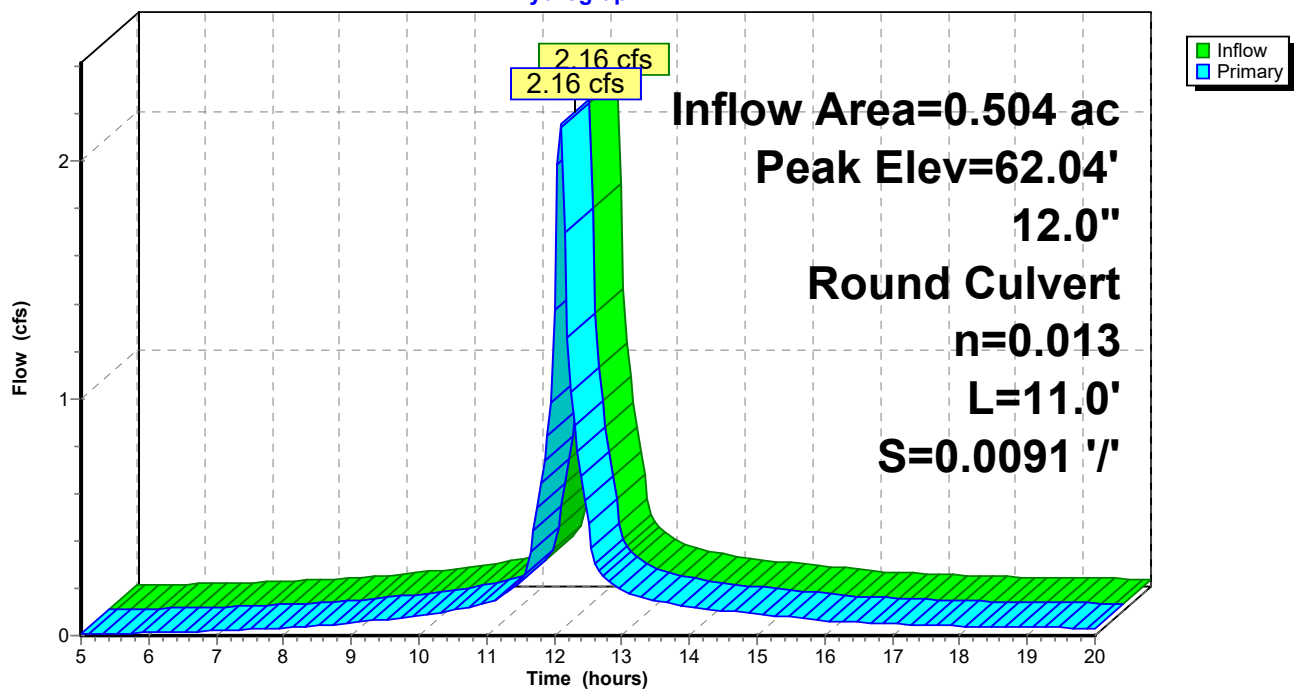
Device	Routing	Invert	Outlet Devices
#1	Primary	61.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.00' / 60.90' S= 0.0091 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.83' (Flood elevation advised)

[81] Warning: Exceeded Pond 104P by 0.06' @ 12.10 hrs

[79] Warning: Submerged Pond 105P Primary device # 1 INLET by 0.83'

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

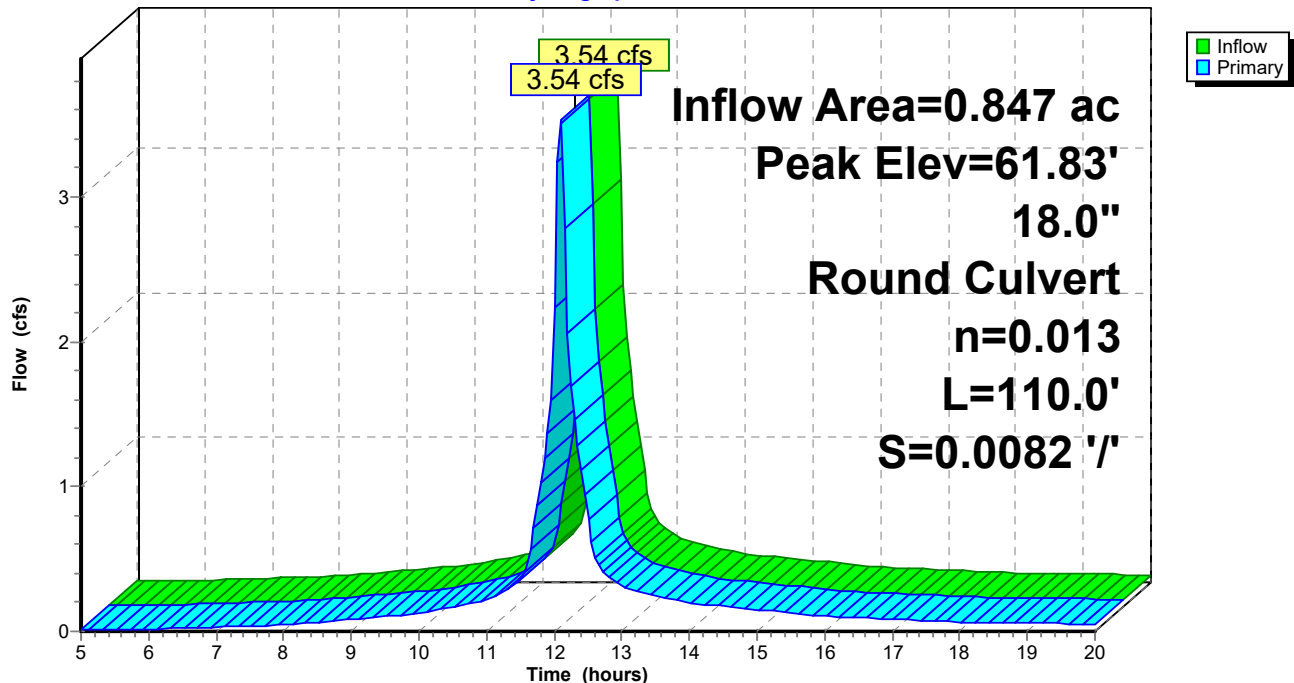
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 61.83' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	60.80'	18.0" Round Culvert L= 110.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.80' / 59.90' S= 0.0082 '/ Cc= 0.900 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

[57] Hint: Peaked at 60.57' (Flood elevation advised)

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

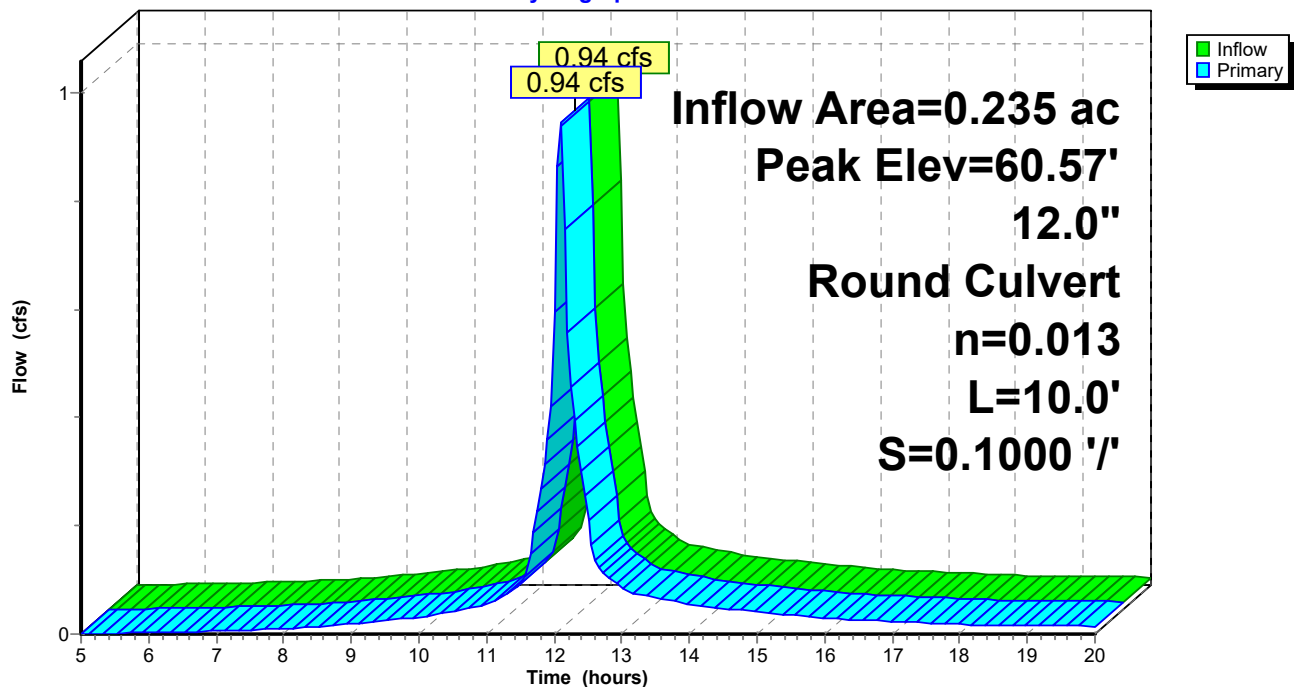
Device	Routing	Invert	Outlet Devices
#1	Primary	60.00'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.00' / 59.00' S= 0.1000 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.36' (Flood elevation advised)

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

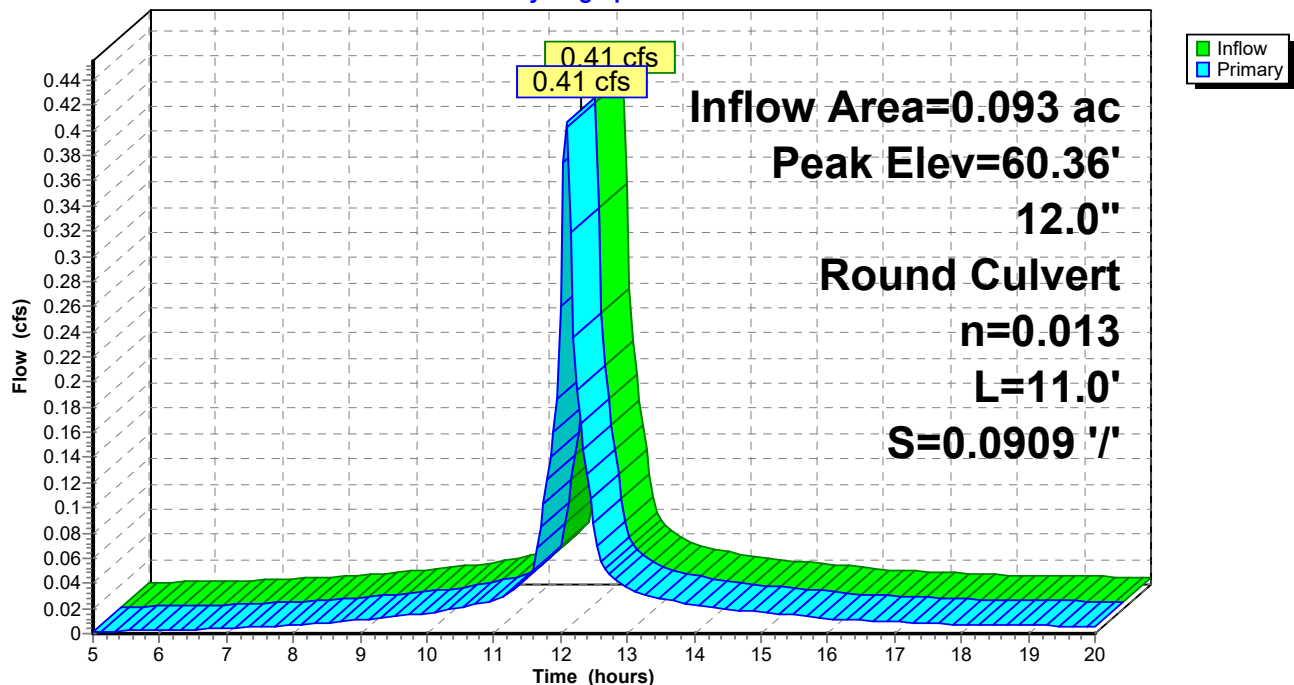
Device	Routing	Invert	Outlet Devices
#1	Primary	60.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.00' / 59.00' S= 0.0909 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

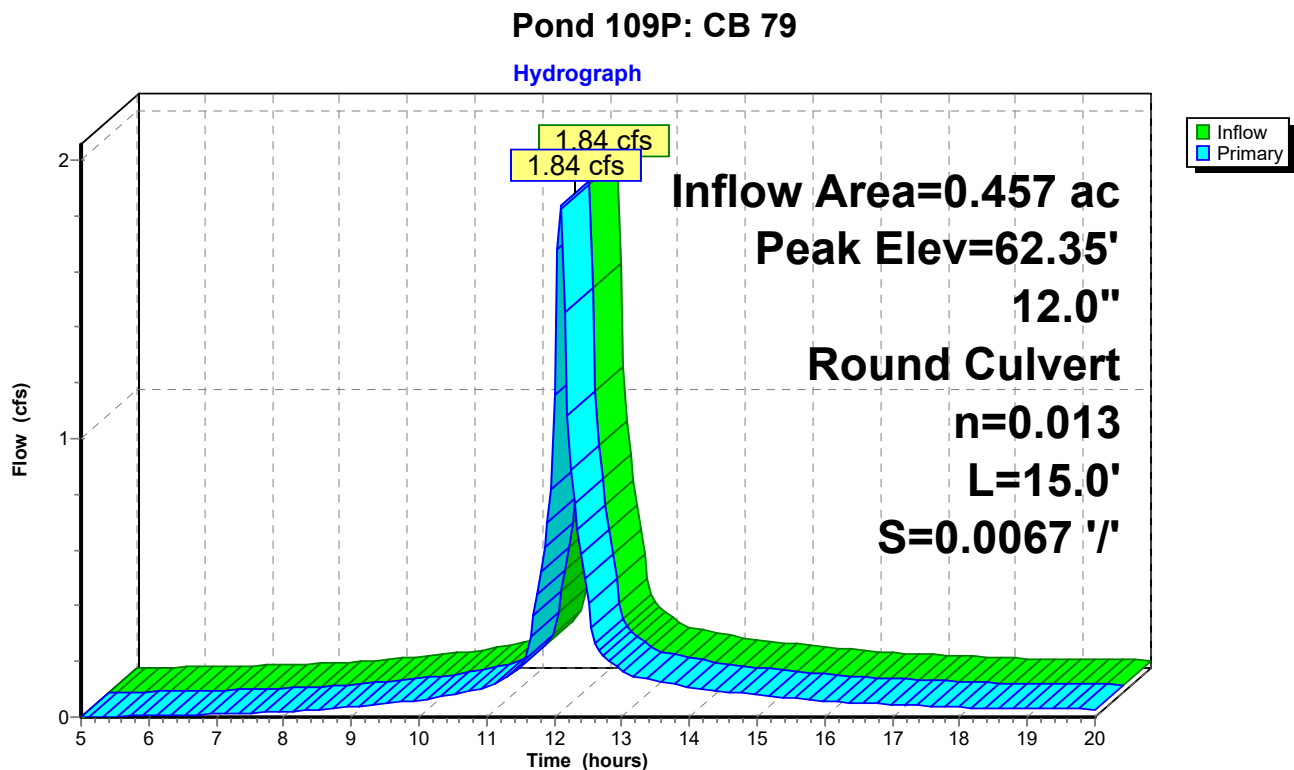
[57] Hint: Peaked at 62.35' (Flood elevation advised)

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'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.40' / 61.30' S= 0.0067 '/' Cc= 0.900 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)



Summary for Pond 110P: CB 78

[57] Hint: Peaked at 62.17' (Flood elevation advised)

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

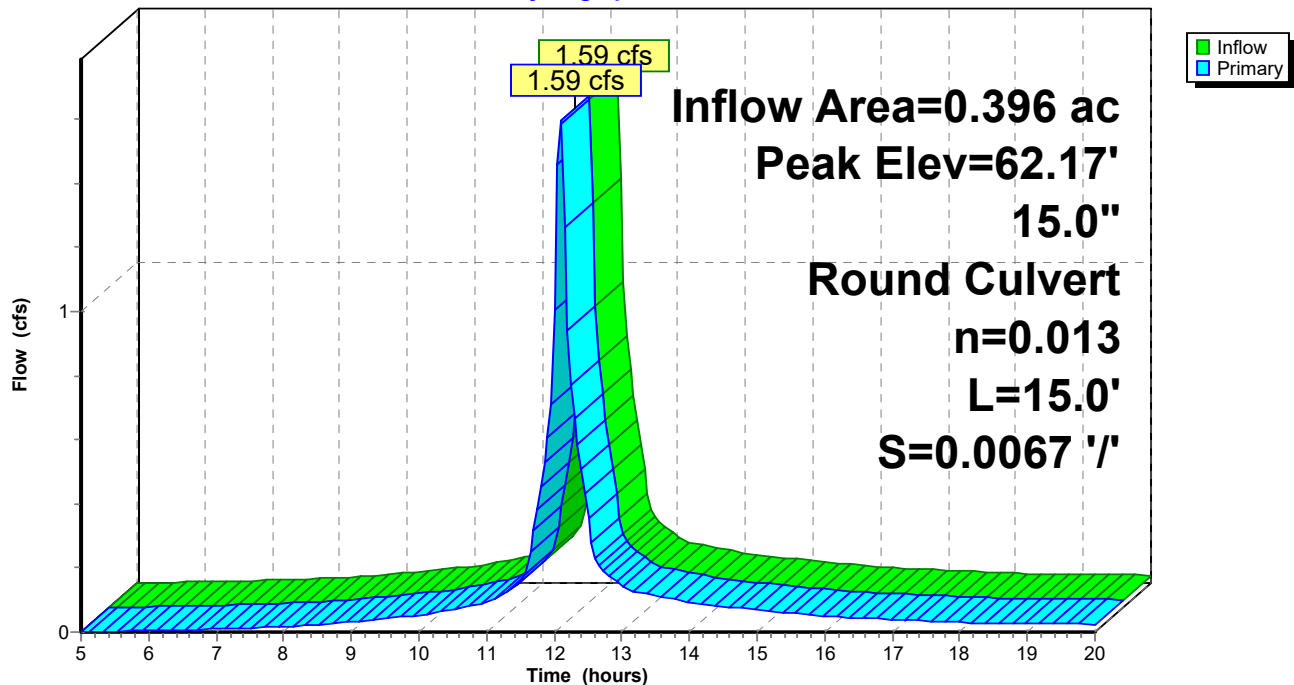
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 62.17' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.40'	15.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.40' / 61.30' S= 0.0067 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.56' (Flood elevation advised)

[79] Warning: Submerged Pond 96P Primary device # 1 INLET by 0.55'

[81] Warning: Exceeded Pond 109P by 0.21' @ 12.10 hrs

[81] Warning: Exceeded Pond 110P by 0.38' @ 12.10 hrs

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

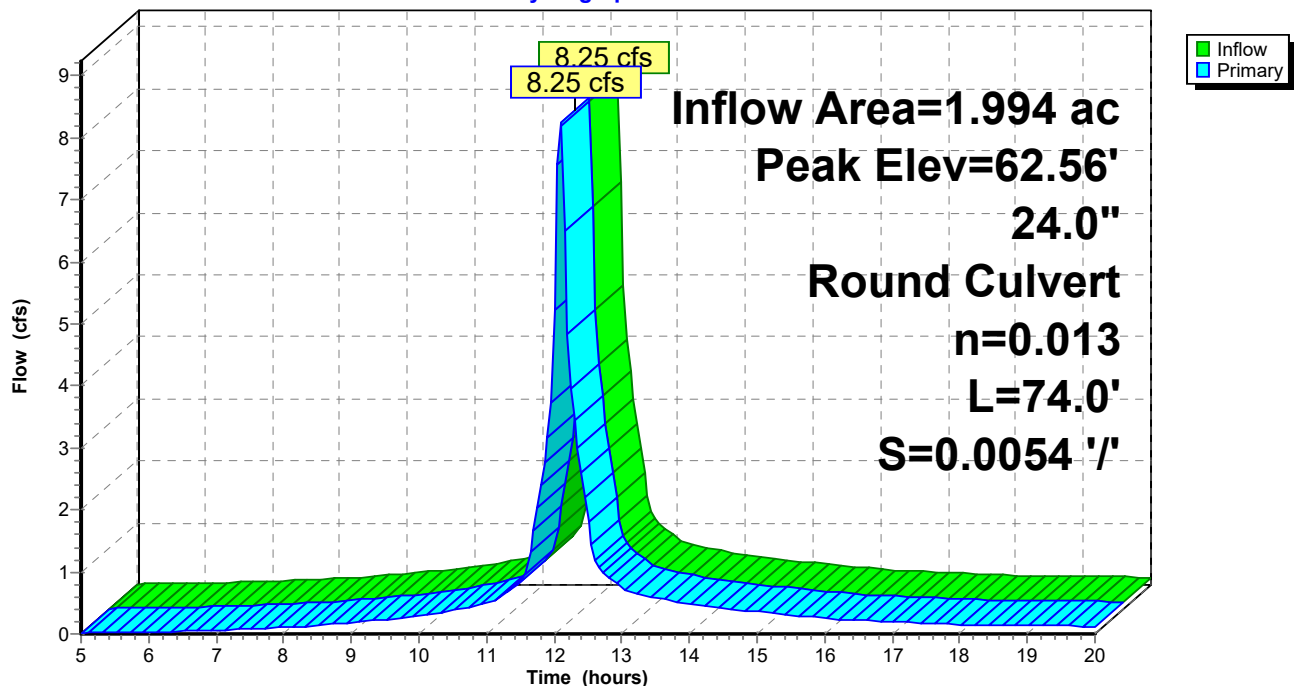
Device	Routing	Invert	Outlet Devices
#1	Primary	61.00'	24.0" Round Culvert L= 74.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.00' / 60.60' S= 0.0054 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

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

[57] Hint: Peaked at 58.25' (Flood elevation advised)

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

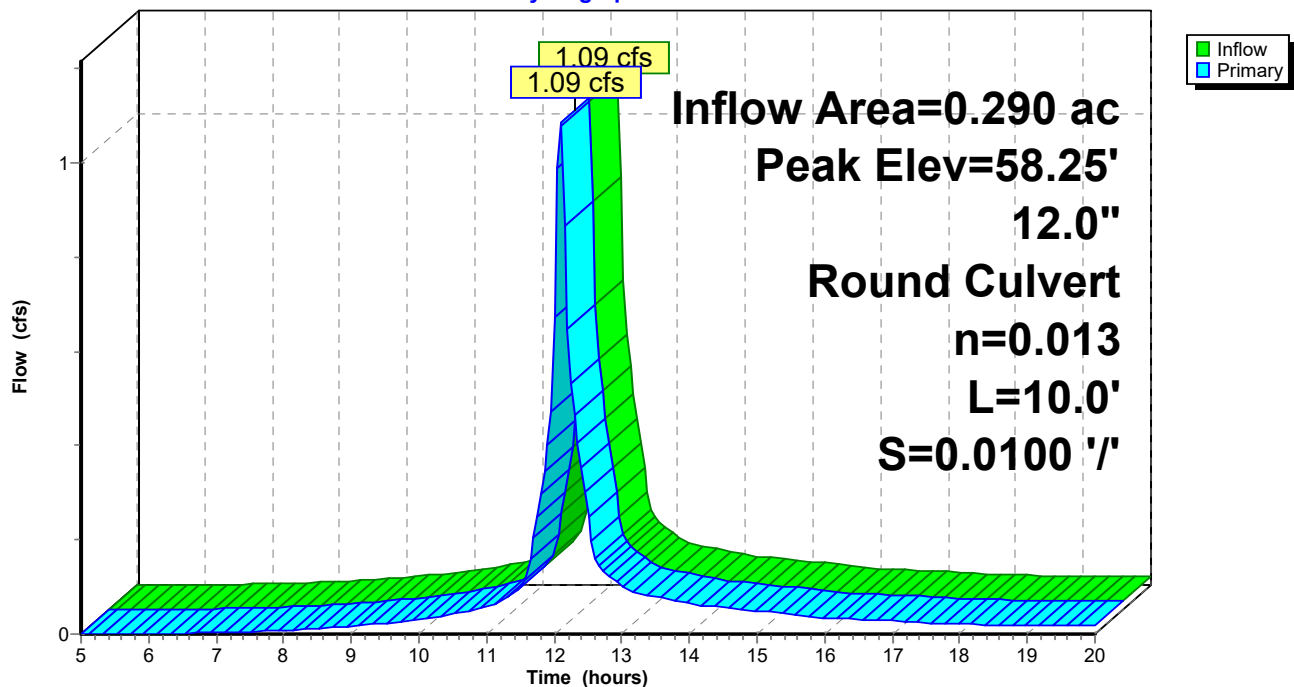
Device	Routing	Invert	Outlet Devices
#1	Primary	57.59'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.59' / 57.49' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.59' (Flood elevation advised)

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

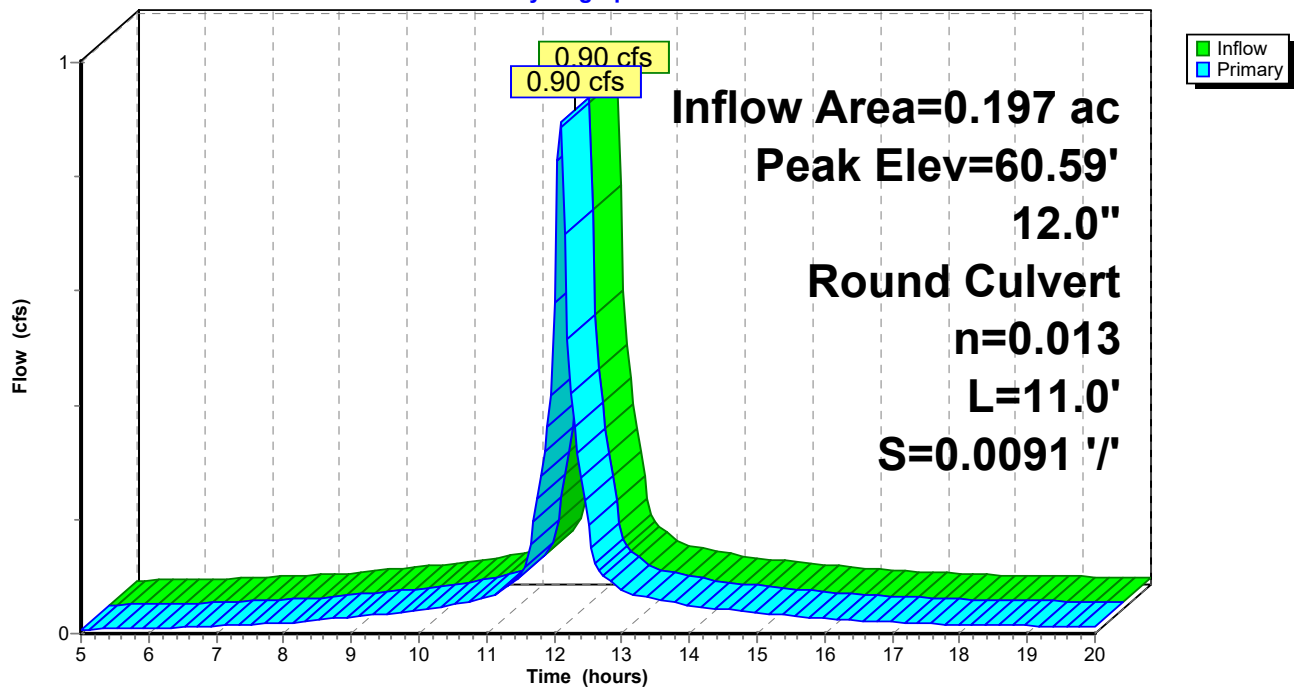
Device	Routing	Invert	Outlet Devices
#1	Primary	60.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.00' / 59.90' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.80' (Flood elevation advised)

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

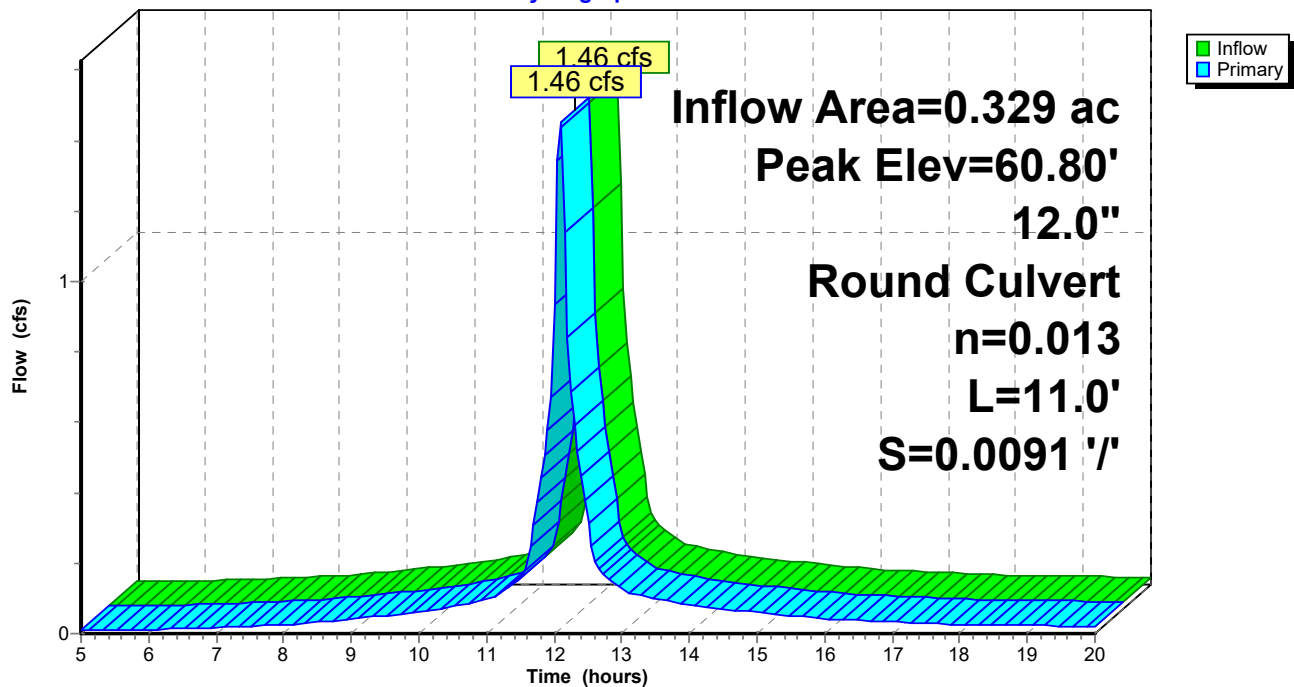
Device	Routing	Invert	Outlet Devices
#1	Primary	60.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.00' / 59.90' S= 0.0091 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.42 cfs @ 12.09 hrs HW=60.79' (Free Discharge)

↑=Culvert (Barrel Controls 1.42 cfs @ 2.94 fps)

Pond 114P: CB 94

Hydrograph



Summary for Pond 115P: CB 91

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.96' (Flood elevation advised)

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

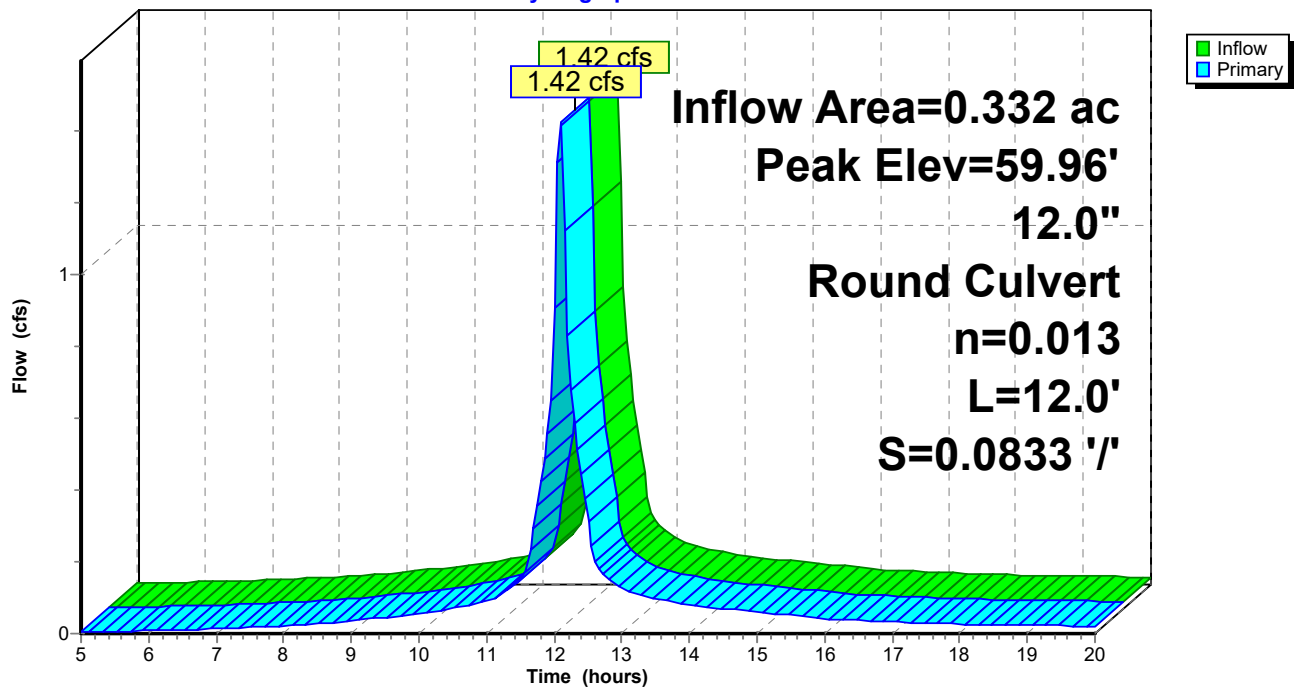
Device	Routing	Invert	Outlet Devices
#1	Primary	59.23'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.23' / 58.23' S= 0.0833 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.87' (Flood elevation advised)

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

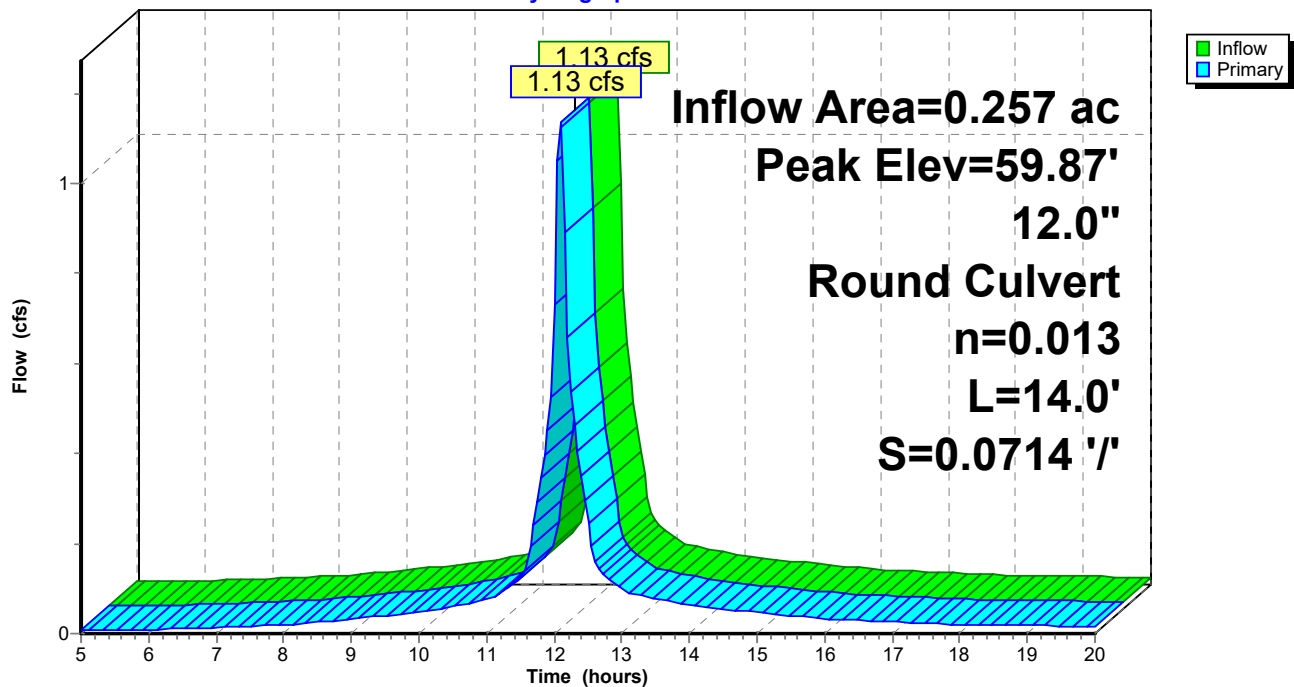
Device	Routing	Invert	Outlet Devices
#1	Primary	59.23'	12.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.23' / 58.23' S= 0.0714 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.47' (Flood elevation advised)

[79] Warning: Submerged Pond 118P Primary device # 1 INLET by 0.66'

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

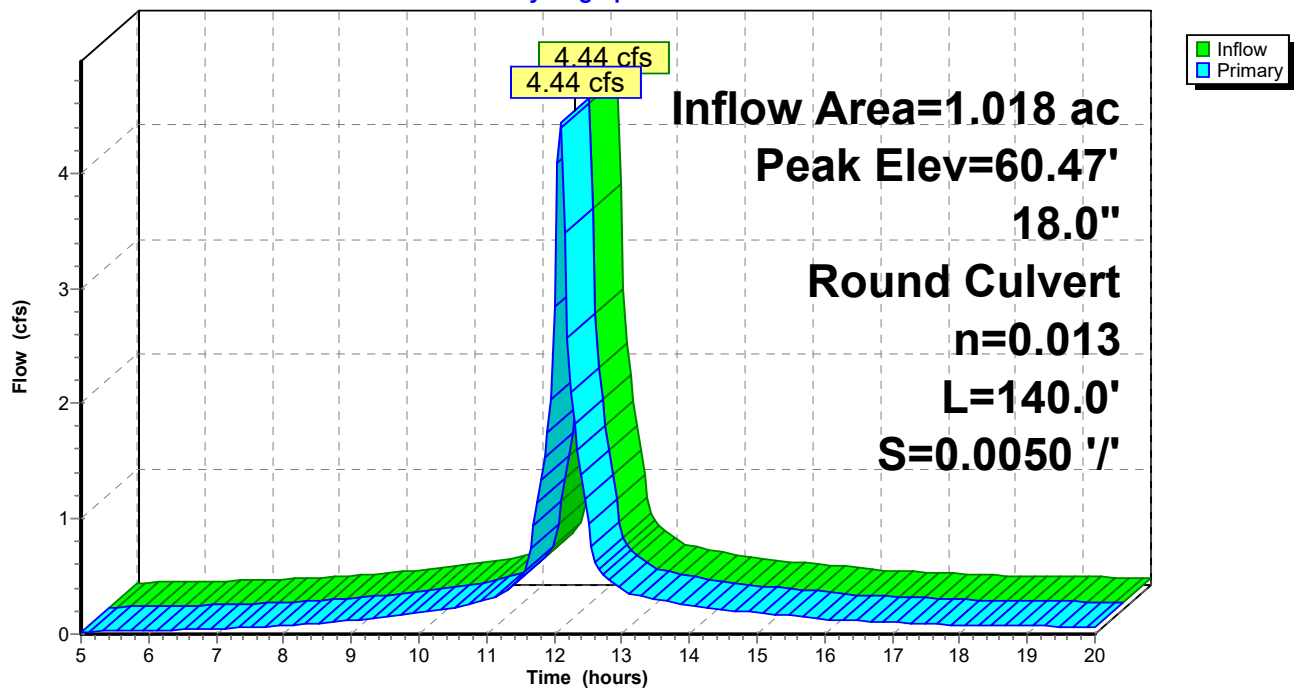
Device	Routing	Invert	Outlet Devices
#1	Primary	59.26'	18.0" Round Culvert L= 140.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.26' / 58.56' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.92' (Flood elevation advised)

[81] Warning: Exceeded Pond 113P by 0.32' @ 12.10 hrs

[81] Warning: Exceeded Pond 114P by 0.11' @ 12.10 hrs

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

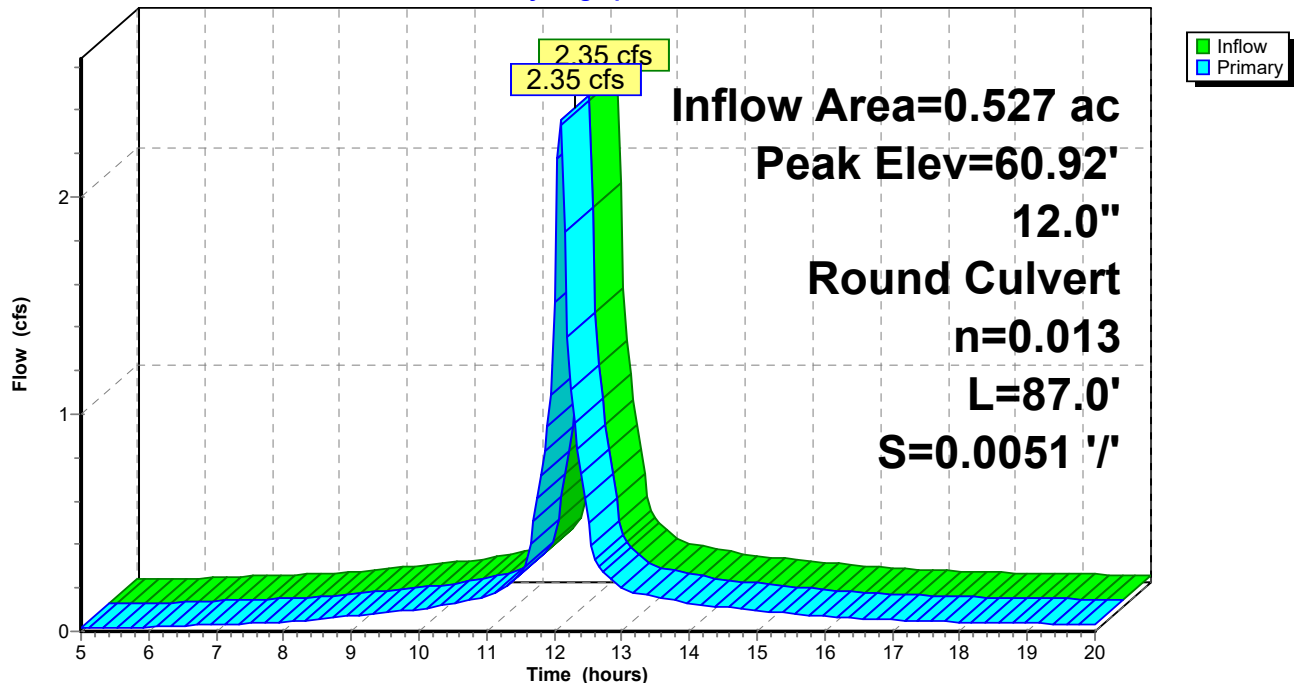
Device	Routing	Invert	Outlet Devices
#1	Primary	59.80'	12.0" Round Culvert L= 87.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.80' / 59.36' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.95' (Flood elevation advised)

[79] Warning: Submerged Pond 107P Primary device # 1 OUTLET by 0.94'

[79] Warning: Submerged Pond 108P Primary device # 1 OUTLET by 0.94'

[79] Warning: Submerged Pond 117P Primary device # 1 INLET by 0.68'

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

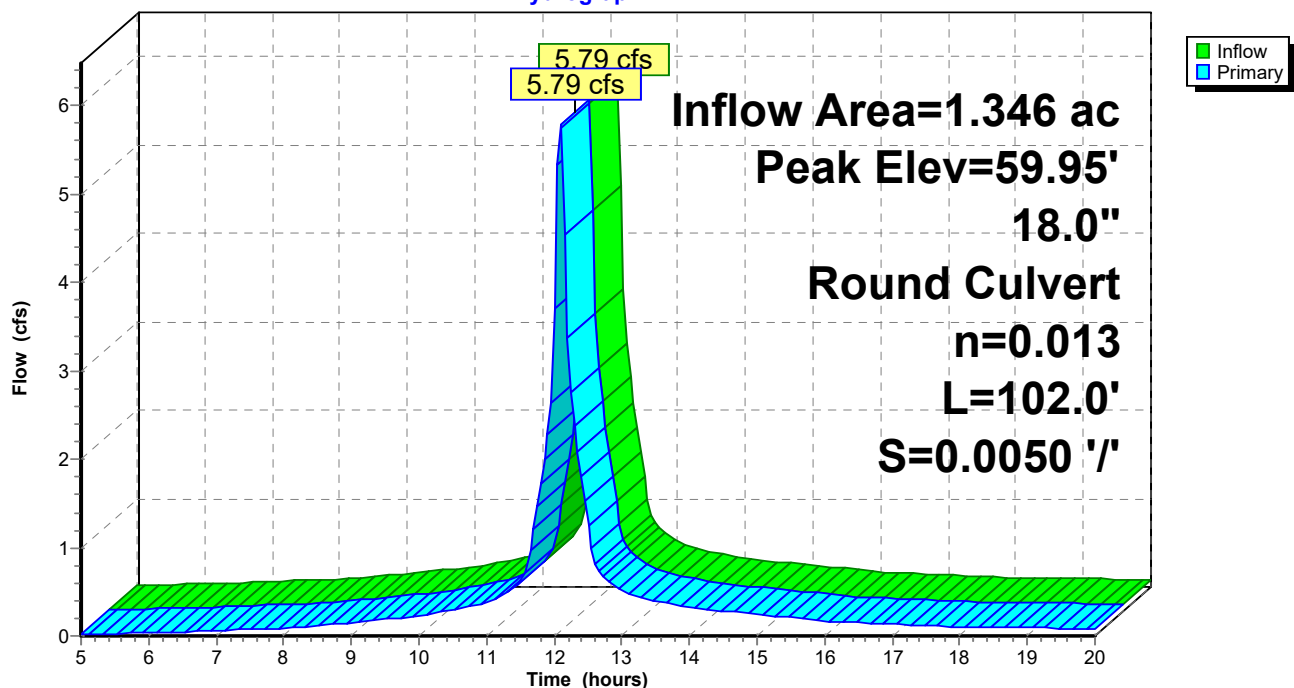
Device	Routing	Invert	Outlet Devices
#1	Primary	58.46'	18.0" Round Culvert L= 102.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.46' / 57.95' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.35' (Flood elevation advised)

[79] Warning: Submerged Pond 115P Primary device # 1 INLET by 0.11'

[79] Warning: Submerged Pond 116P Primary device # 1 INLET by 0.11'

[79] Warning: Submerged Pond 119P Primary device # 1 INLET by 0.88'

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

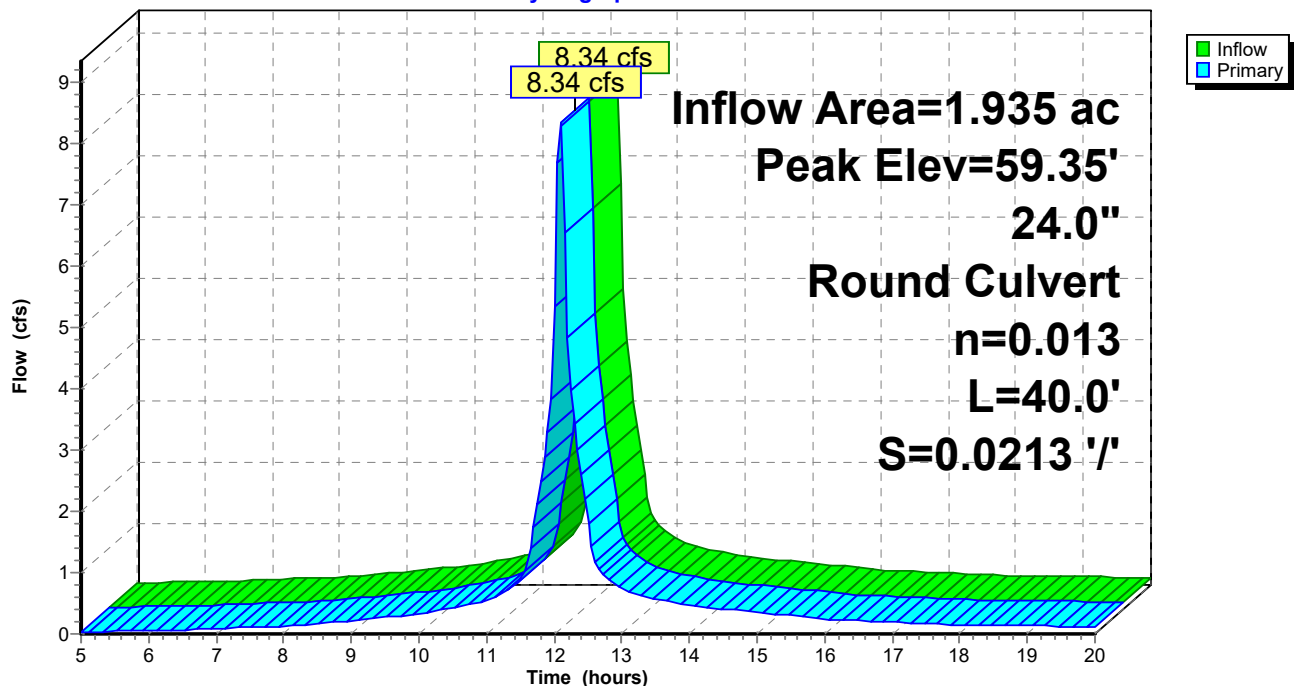
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 59.35' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	57.85'	24.0" Round Culvert L= 40.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.85' / 57.00' S= 0.0213 '/ Cc= 0.900 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 121P: Sub. Det. 3

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 210P by 2.05' @ 12.60 hrs

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 = 2.13 cfs @ 12.46 hrs, Volume= 0.409 af, Atten= 75%, Lag= 22.3 min
 Primary = 2.13 cfs @ 12.46 hrs, Volume= 0.409 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= 60.46' @ 12.46 hrs Surf.Area= 0.109 ac Storage= 0.324 af

Plug-Flow detention time= 154.7 min calculated for 0.409 af (67% of inflow)
 Center-of-Mass det. time= 85.1 min (838.1 - 753.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	57.00'	0.016 af	66.00'W x 72.00'L x 5.71'H Field A 0.623 af Overall - 0.583 af Embedded = 0.040 af x 40.0% Voids
#2A	57.04'	0.459 af	Shea Leaching Chamber 8x14x5.7 x 40 Inside #1 Inside= 84.0"W x 60.0"H => 38.46 sf x 13.00'L = 500.0 cf Outside= 96.0"W x 68.0"H => 45.36 sf x 14.00'L = 635.0 cf 40 Chambers in 8 Rows
		0.475 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	57.00'	18.0" Round Culvert L= 55.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.00' / 53.00' S= 0.0727 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	59.00'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#3	Device 1	60.80'	4.0' long Sharp-Crested Vee/Trap Weir Cv= 2.62 (C= 3.28)
#4	Device 1	57.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.13 cfs @ 12.46 hrs HW=60.46' (Free Discharge)

- 1=Culvert (Passes 2.13 cfs of 11.05 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 2.08 cfs @ 5.29 fps)
- 3=Sharp-Crested Vee/Trap Weir (Controls 0.00 cfs)
- 4=Orifice/Grate (Orifice Controls 0.05 cfs @ 8.90 fps)

Pond 121P: Sub. Det. 3 - Chamber Wizard Field A

Chamber Model = Shea Leaching Chamber 8x14x5.7 (Shea Galley)

Inside= 84.0"W x 60.0"H => 38.46 sf x 13.00'L = 500.0 cf

Outside= 96.0"W x 68.0"H => 45.36 sf x 14.00'L = 635.0 cf

5 Chambers/Row x 14.00' Long = 70.00' Row Length +12.0" End Stone x 2 = 72.00' Base Length

8 Rows x 96.0" Wide + 12.0" Side Stone x 2 = 66.00' Base Width

0.5" Stone Base + 68.0" Chamber Height = 5.71' Field Height

40 Chambers x 500.0 cf = 20,000.0 cf Chamber Storage

40 Chambers x 635.0 cf = 25,401.6 cf Displacement

27,141.8 cf Field - 25,401.6 cf Chambers = 1,740.2 cf Stone x 40.0% Voids = 696.1 cf Stone Storage

Chamber Storage + Stone Storage = 20,696.1 cf = 0.475 af

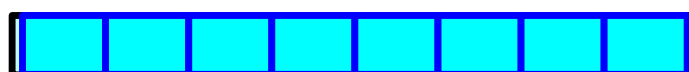
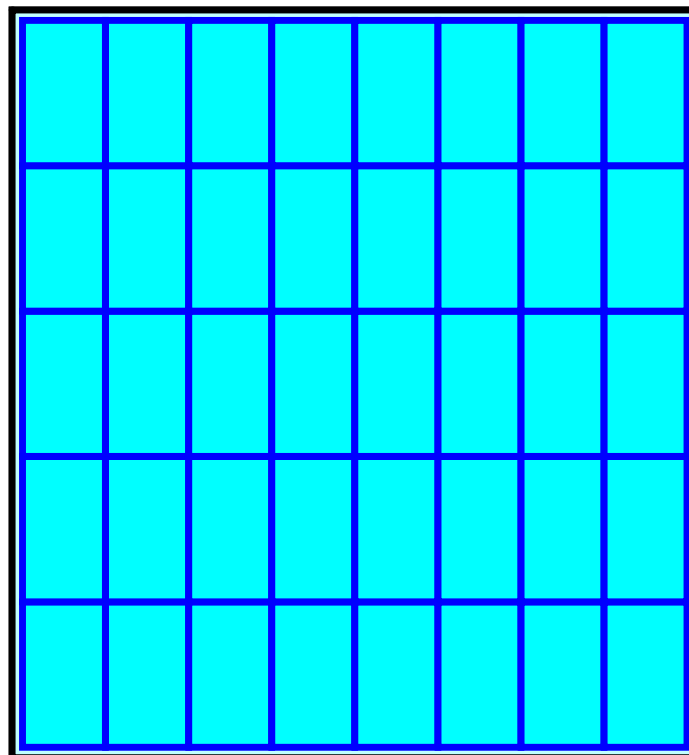
Overall Storage Efficiency = 76.3%

Overall System Size = 72.00' x 66.00' x 5.71'

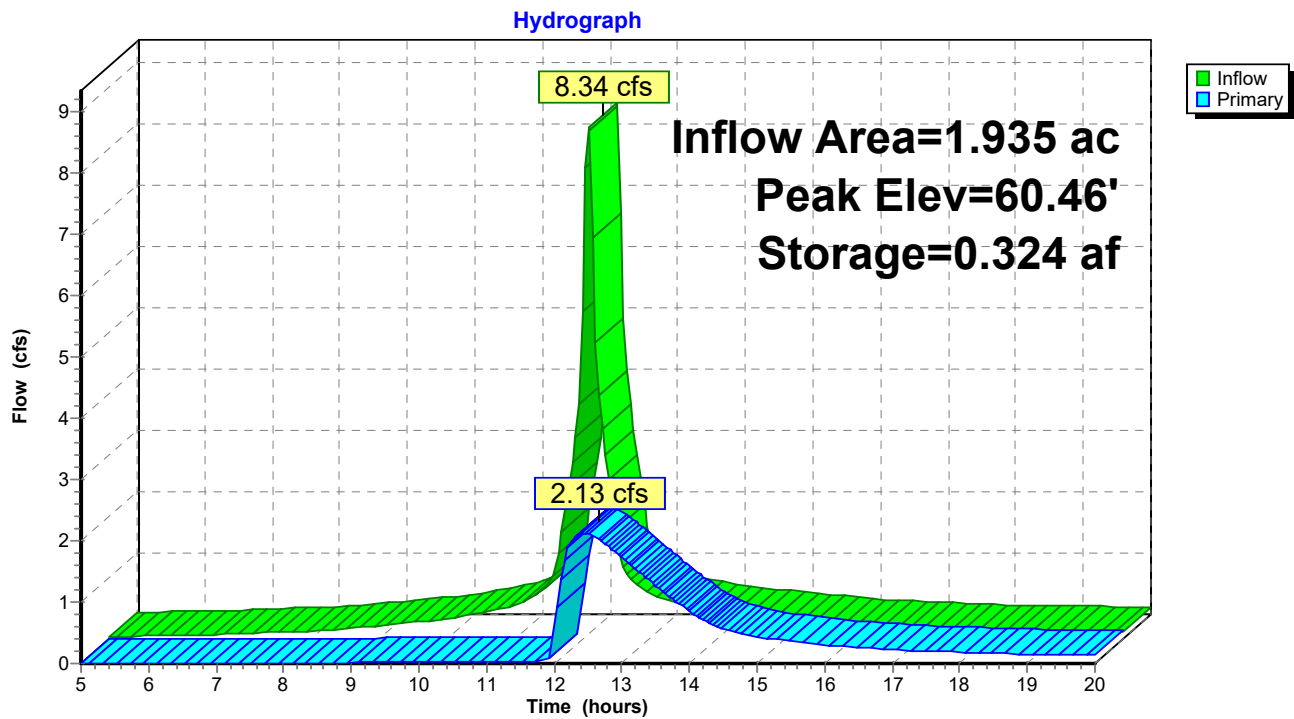
40 Chambers

1,005.3 cy Field

64.5 cy Stone



Pond 121P: Sub. Det. 3



Summary for Pond 122P: CB 46

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.30' (Flood elevation advised)

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

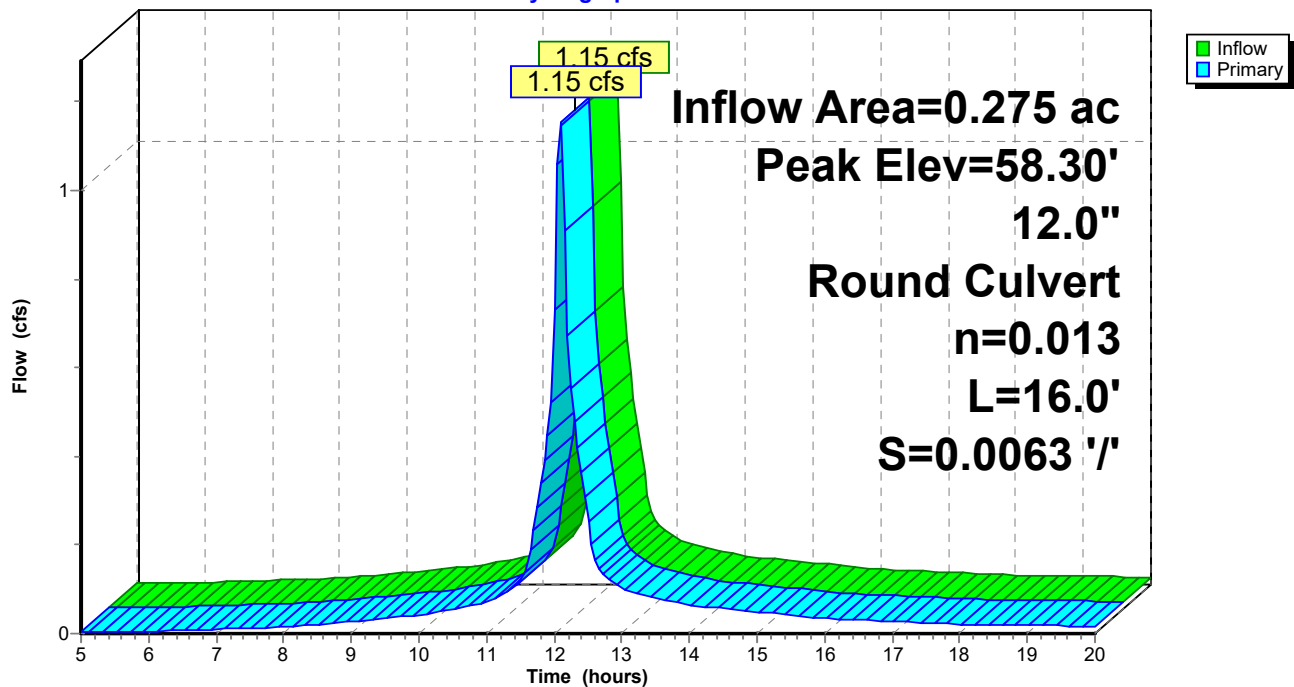
Device	Routing	Invert	Outlet Devices
#1	Primary	57.59'	12.0" Round Culvert L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.59' / 57.49' S= 0.0063 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.18' (Flood elevation advised)

[79] Warning: Submerged Pond 112P Primary device # 1 INLET by 0.58'

[79] Warning: Submerged Pond 122P Primary device # 1 INLET by 0.58'

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

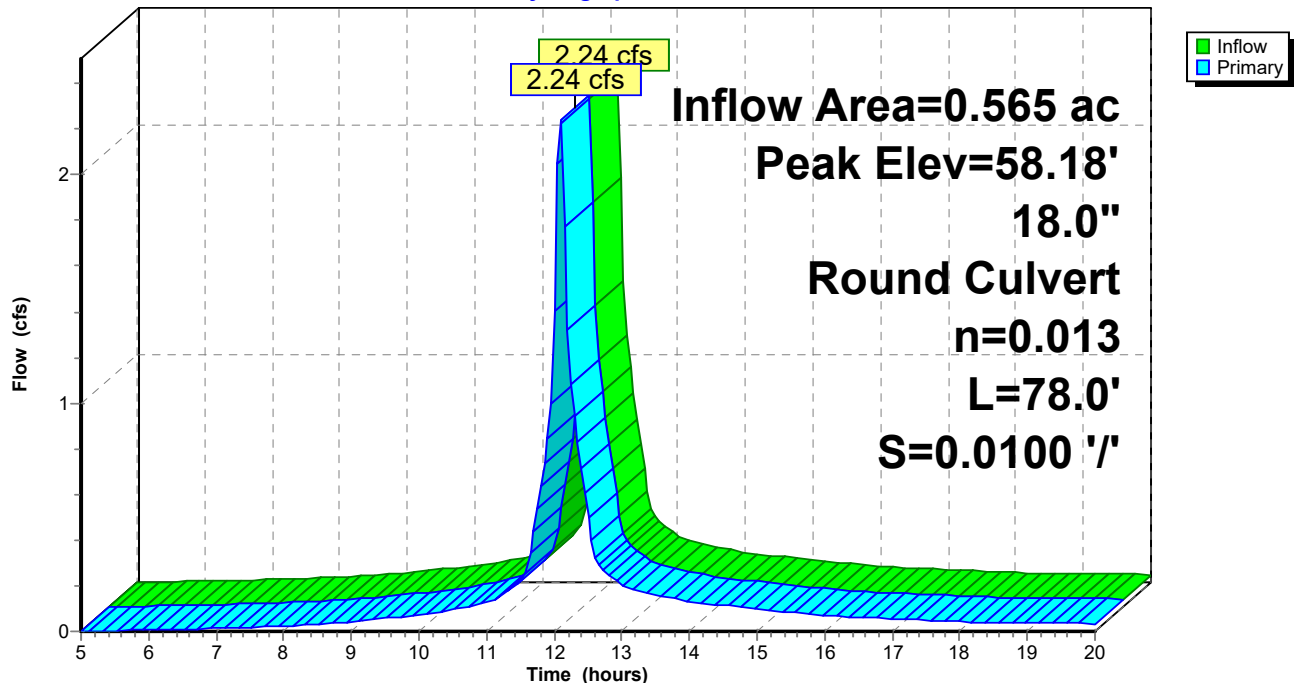
Device	Routing	Invert	Outlet Devices
#1	Primary	57.39'	18.0" Round Culvert L= 78.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.39' / 56.61' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 57.36' (Flood elevation advised)

[79] Warning: Submerged Pond 123P Primary device # 1 OUTLET by 0.74'

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

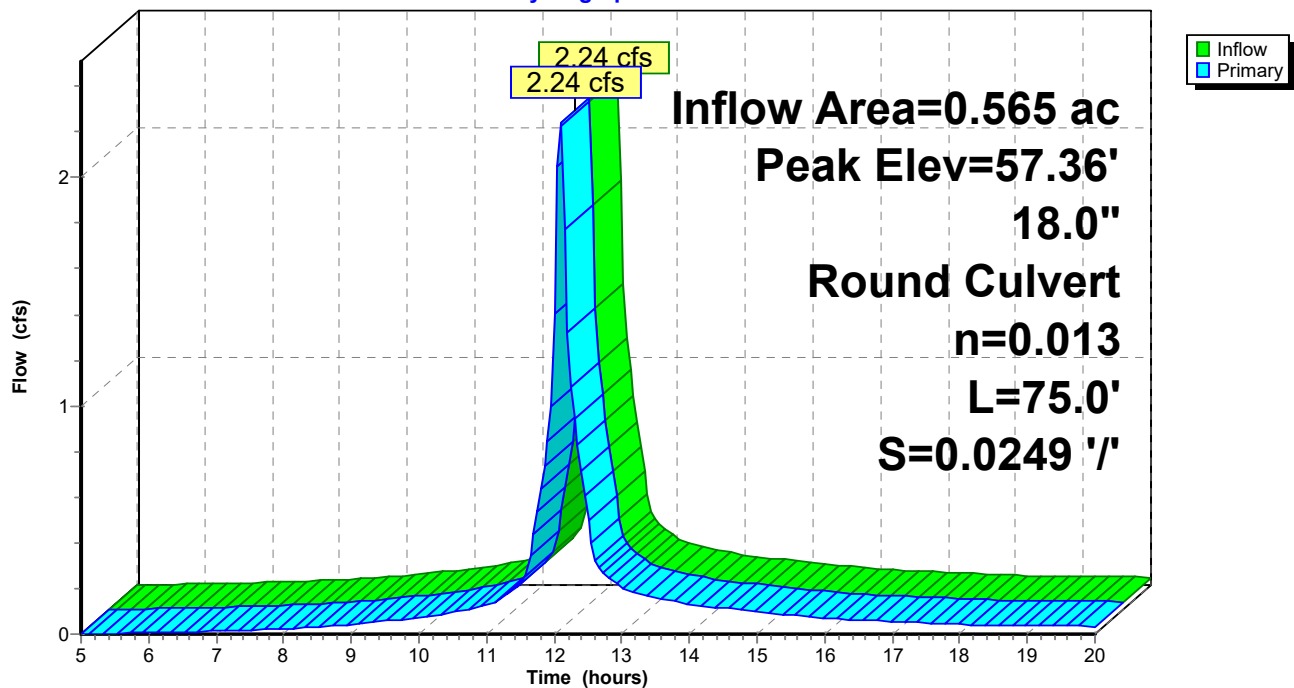
Device	Routing	Invert	Outlet Devices
#1	Primary	56.57'	18.0" Round Culvert L= 75.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 56.57' / 54.70' S= 0.0249 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[57] Hint: Peaked at 54.97' (Flood elevation advised)

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

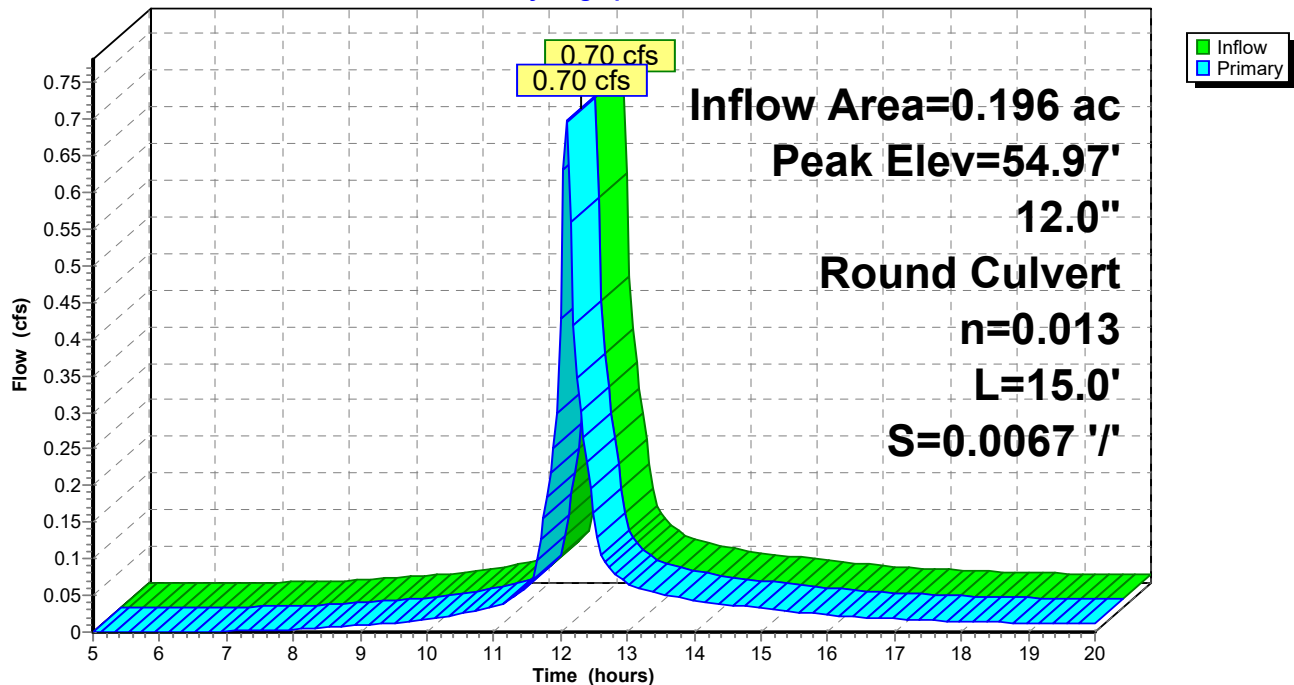
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.97' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.45'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.45' / 54.35' S= 0.0067 '/' Cc= 0.900 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

[57] Hint: Peaked at 55.03' (Flood elevation advised)

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

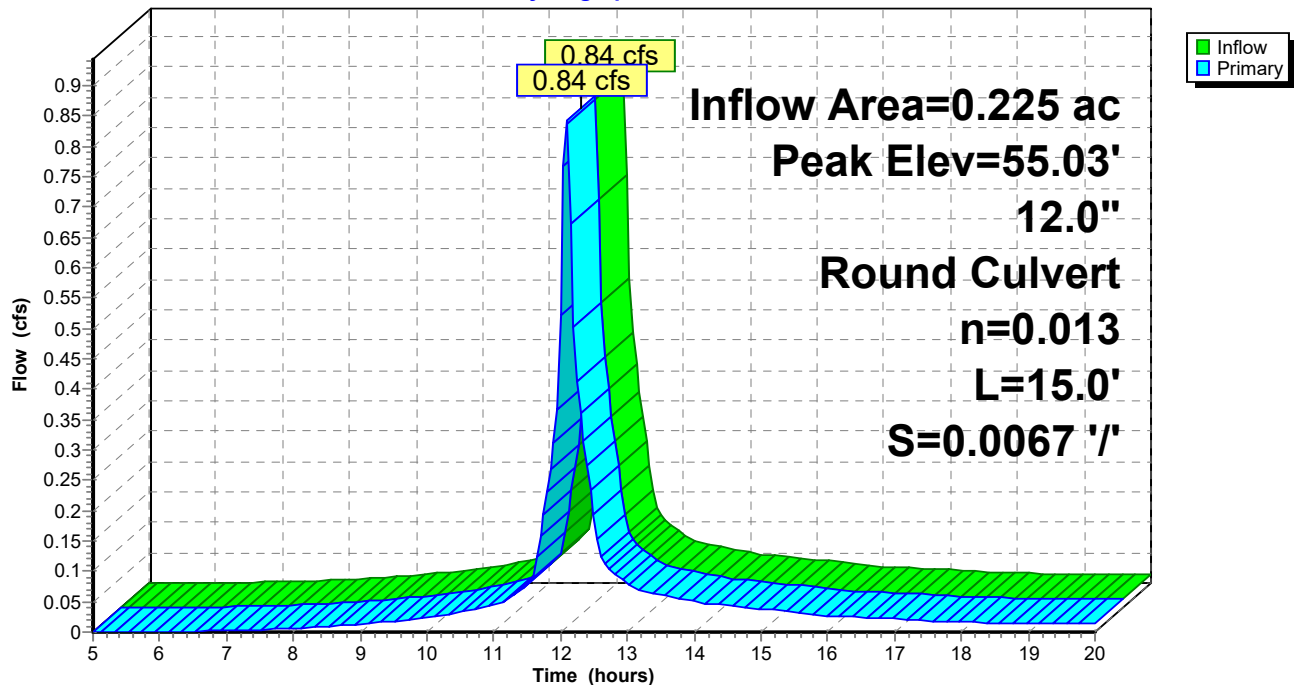
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 55.03' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.45'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.45' / 54.35' S= 0.0067 '/' Cc= 0.900 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

[57] Hint: Peaked at 55.02' (Flood elevation advised)

[81] Warning: Exceeded Pond 125P by 0.05' @ 12.10 hrs

[79] Warning: Submerged Pond 126P Primary device # 1 INLET by 0.57'

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

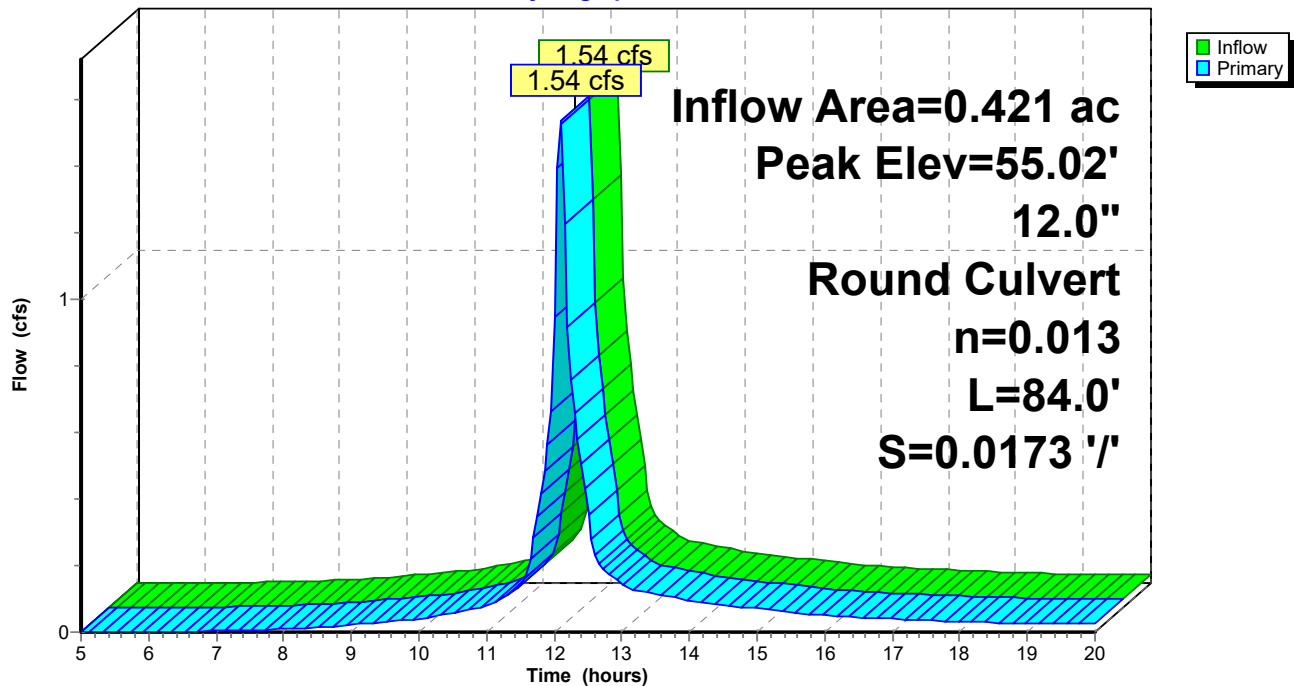
Device	Routing	Invert	Outlet Devices
#1	Primary	54.25'	12.0" Round Culvert L= 84.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.25' / 52.80' S= 0.0173 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.51 cfs @ 12.09 hrs HW=55.01' (Free Discharge)

↑1=Culvert (Inlet Controls 1.51 cfs @ 2.35 fps)

Pond 127P: DMH 26

Hydrograph



Summary for Pond 128P: CB 30

[57] Hint: Peaked at 56.49' (Flood elevation advised)

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

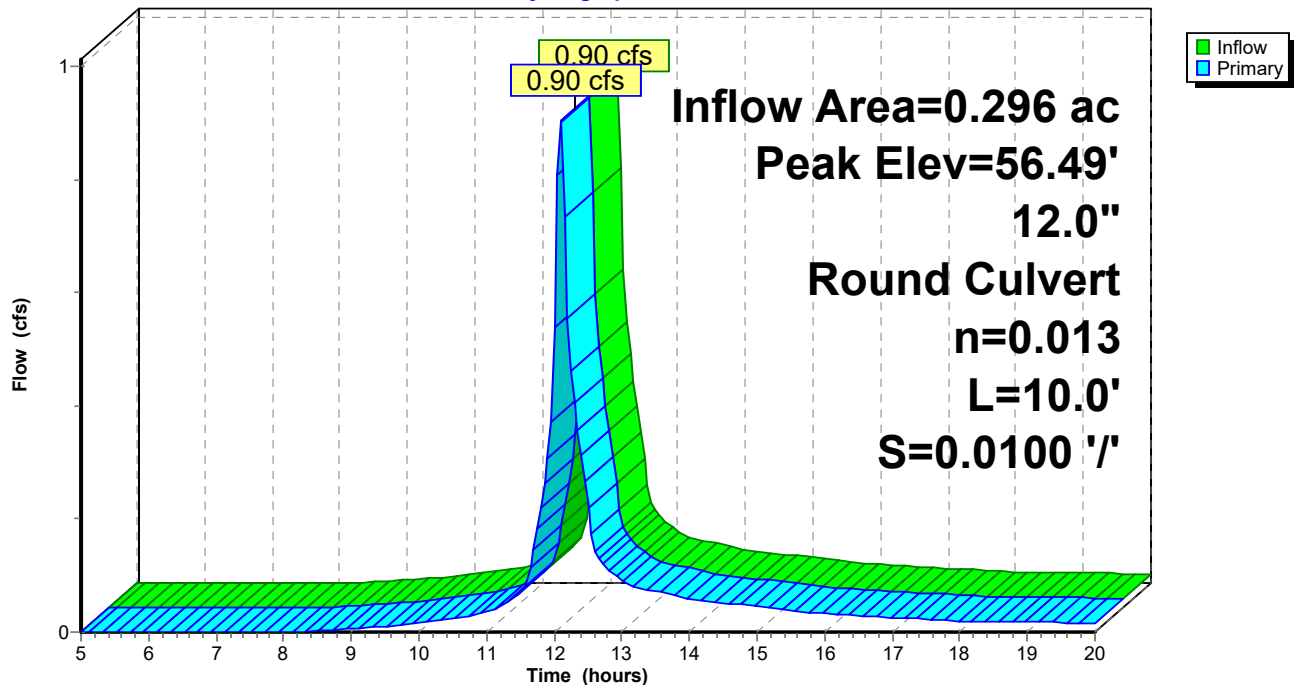
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 56.49' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	55.90'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 55.90' / 55.80' S= 0.0100 '/ Cc= 0.900 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

[57] Hint: Peaked at 54.59' (Flood elevation advised)

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

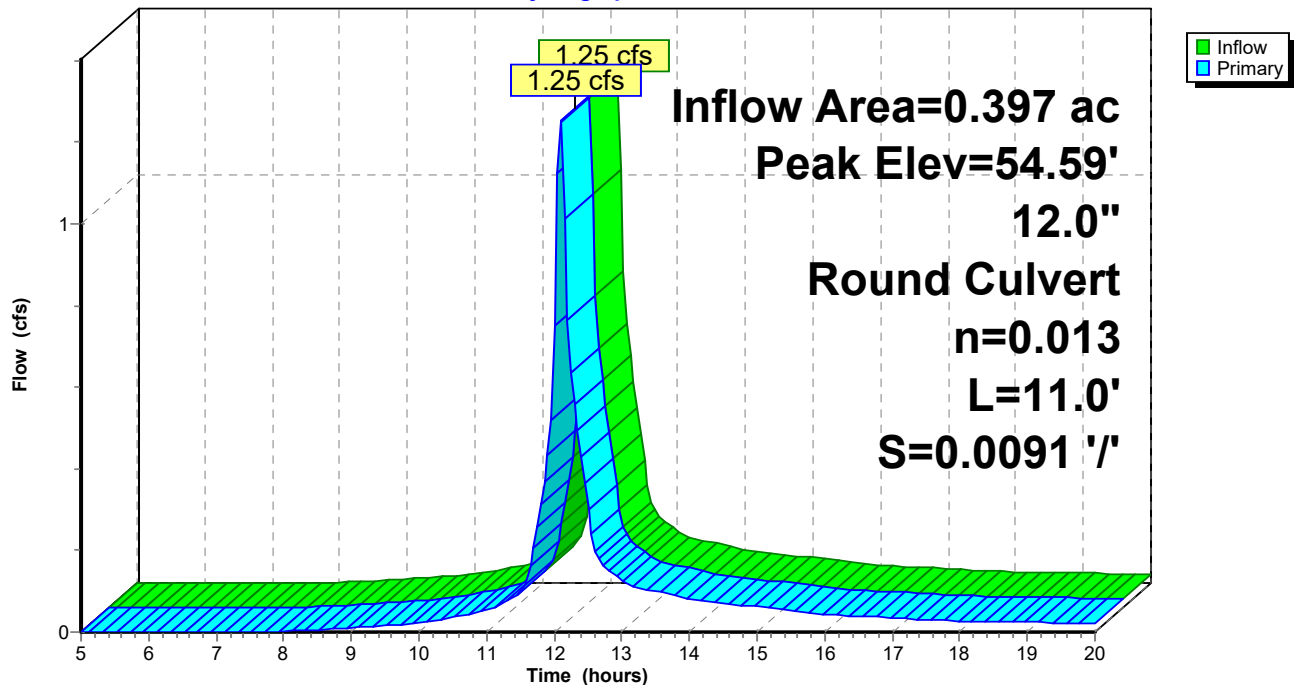
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.59' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.86'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.86' / 53.76' S= 0.0091 '/' Cc= 0.900 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

[57] Hint: Peaked at 54.98' (Flood elevation advised)

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

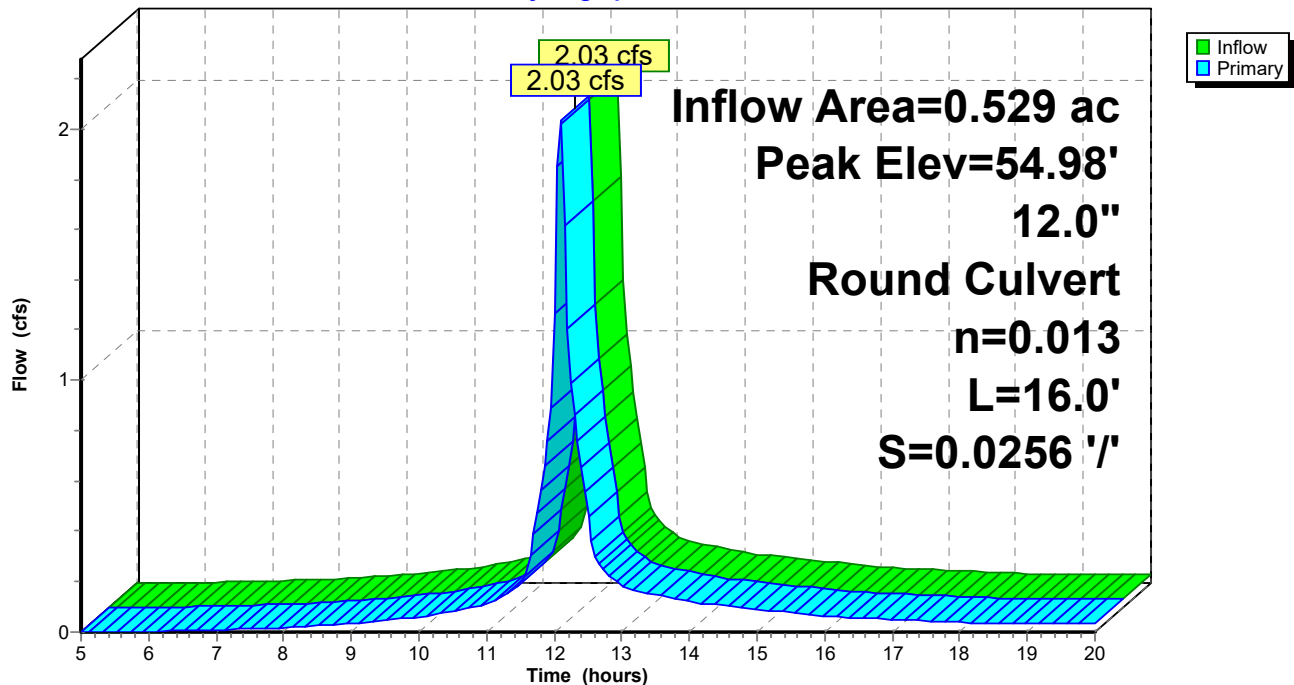
Device	Routing	Invert	Outlet Devices
#1	Primary	54.02'	12.0" Round Culvert L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.02' / 53.61' S= 0.0256 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 54.50' (Flood elevation advised)

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

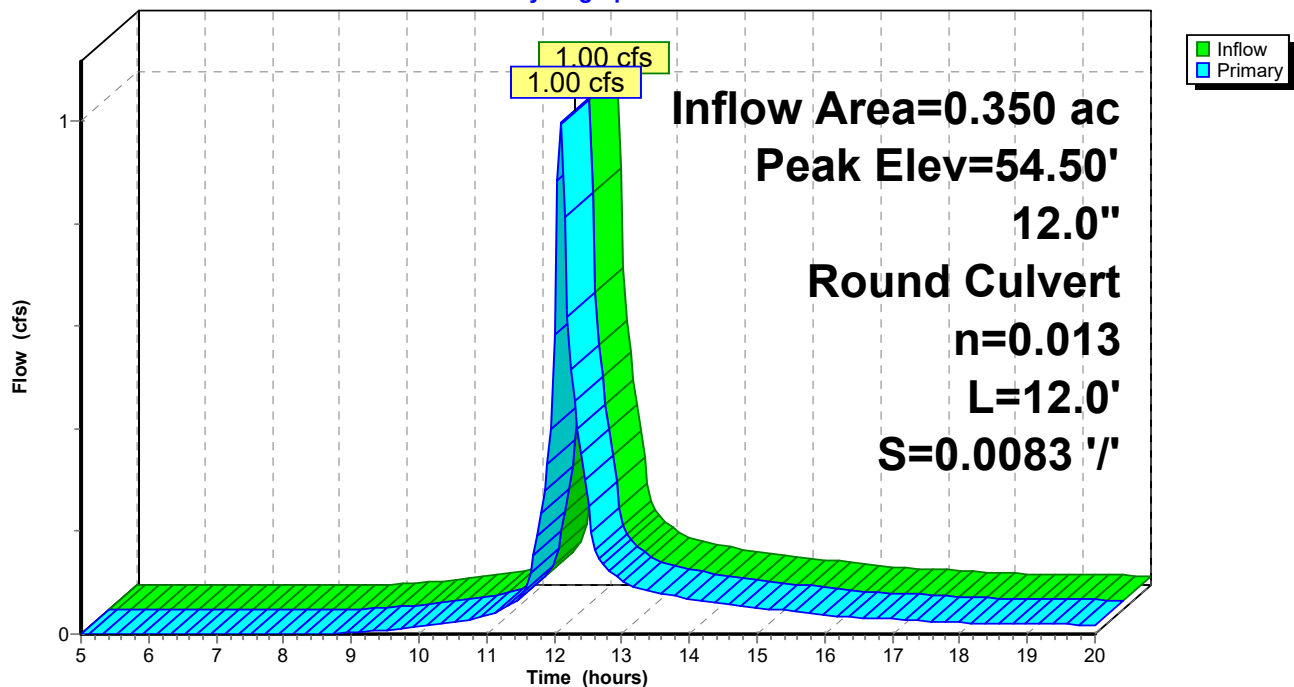
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.50' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.86'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.86' / 53.76' S= 0.0083 '/' Cc= 0.900 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

[57] Hint: Peaked at 54.28' (Flood elevation advised)

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

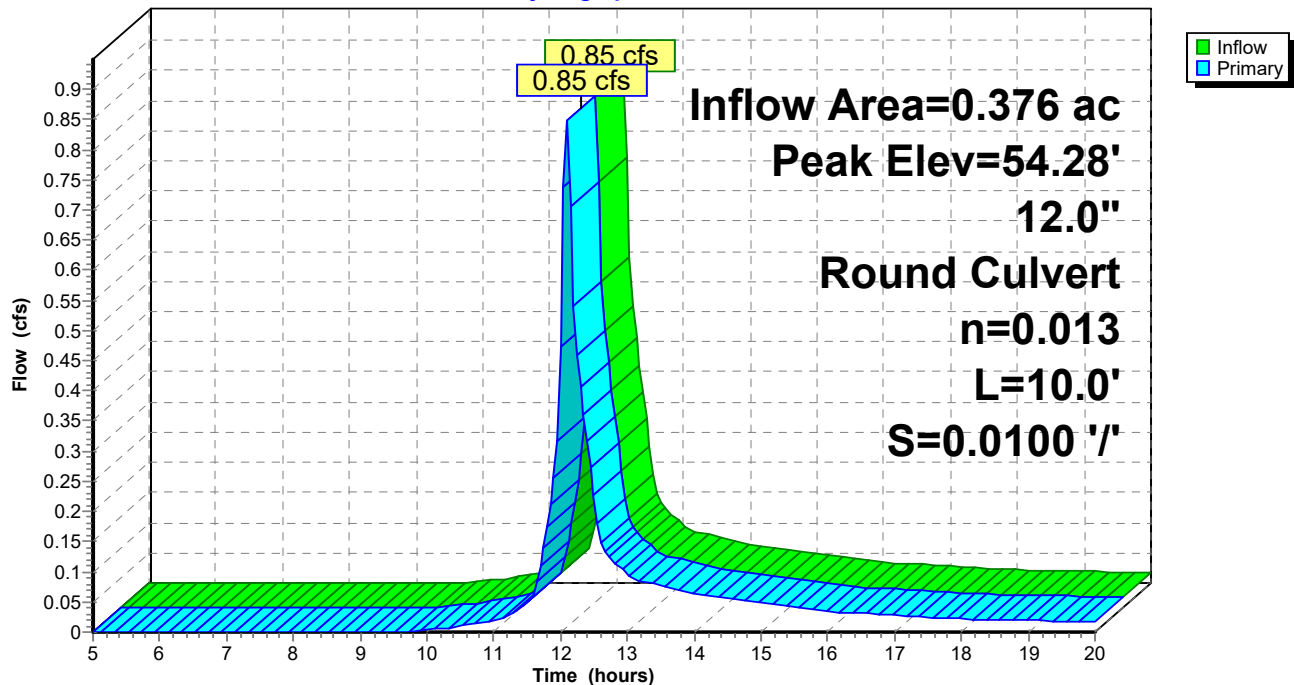
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.28' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.71'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.71' / 53.61' S= 0.0100 '/ Cc= 0.900 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

[57] Hint: Peaked at 54.91' (Flood elevation advised)

[79] Warning: Submerged Pond 130P Primary device # 1 INLET by 0.89'

[81] Warning: Exceeded Pond 132P by 0.63' @ 12.10 hrs

[81] Warning: Exceeded Pond 134P by 0.09' @ 12.10 hrs

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

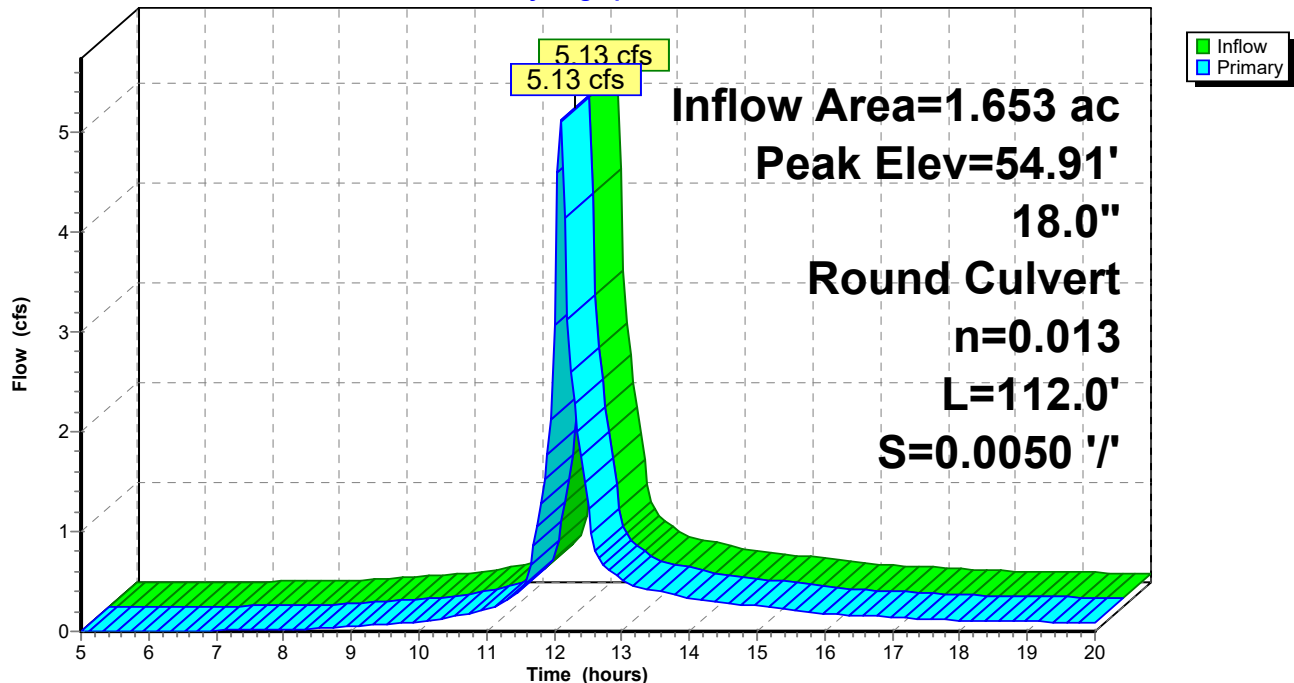
Device	Routing	Invert	Outlet Devices
#1	Primary	53.56'	18.0" Round Culvert L= 112.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.56' / 53.00' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[57] Hint: Peaked at 54.83' (Flood elevation advised)

[81] Warning: Exceeded Pond 129P by 0.24' @ 12.10 hrs

[81] Warning: Exceeded Pond 131P by 0.33' @ 12.10 hrs

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

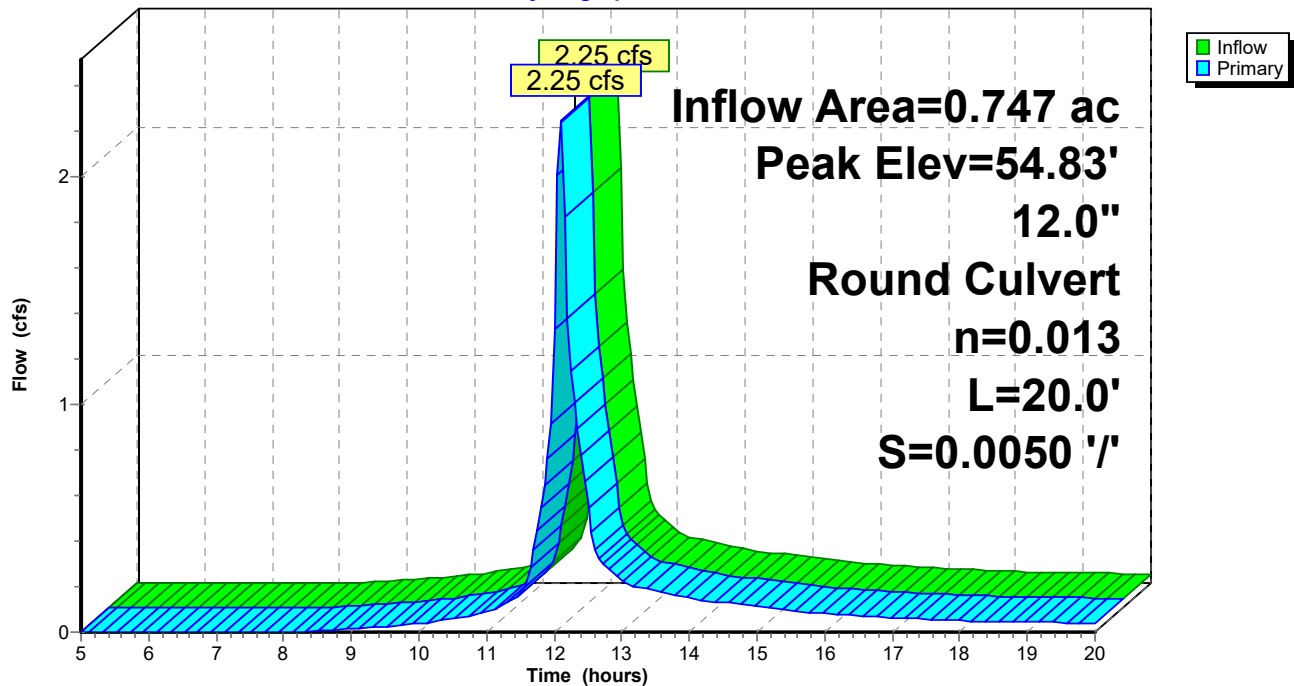
Device	Routing	Invert	Outlet Devices
#1	Primary	53.71'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.71' / 53.61' S= 0.0050 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[81] Warning: Exceeded Pond 133P by 0.63' @ 12.65 hrs

[81] Warning: Exceeded Pond 137P by 0.95' @ 12.60 hrs

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	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (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'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 51.00'
#2	Primary	53.00'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.00' / 52.00' S= 0.0400 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	56.40'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 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)

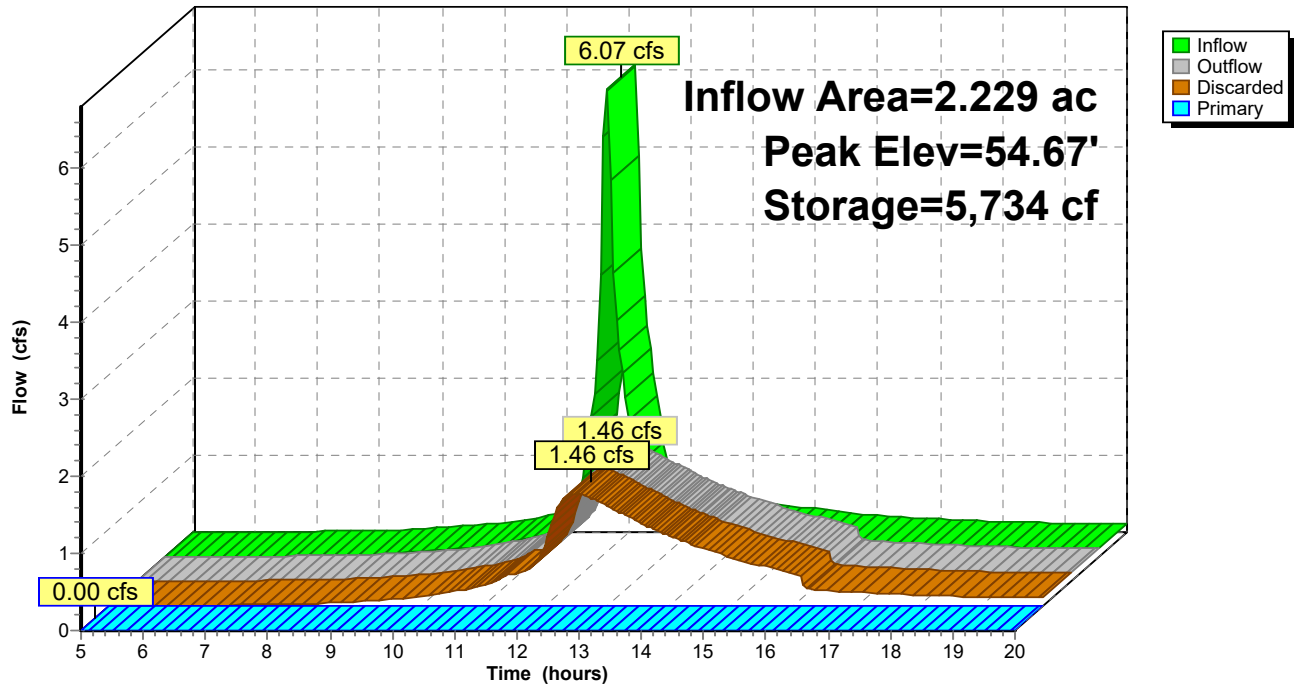
Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=53.00' (Free Discharge)

↑ **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

[57] Hint: Peaked at 53.94' (Flood elevation advised)

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

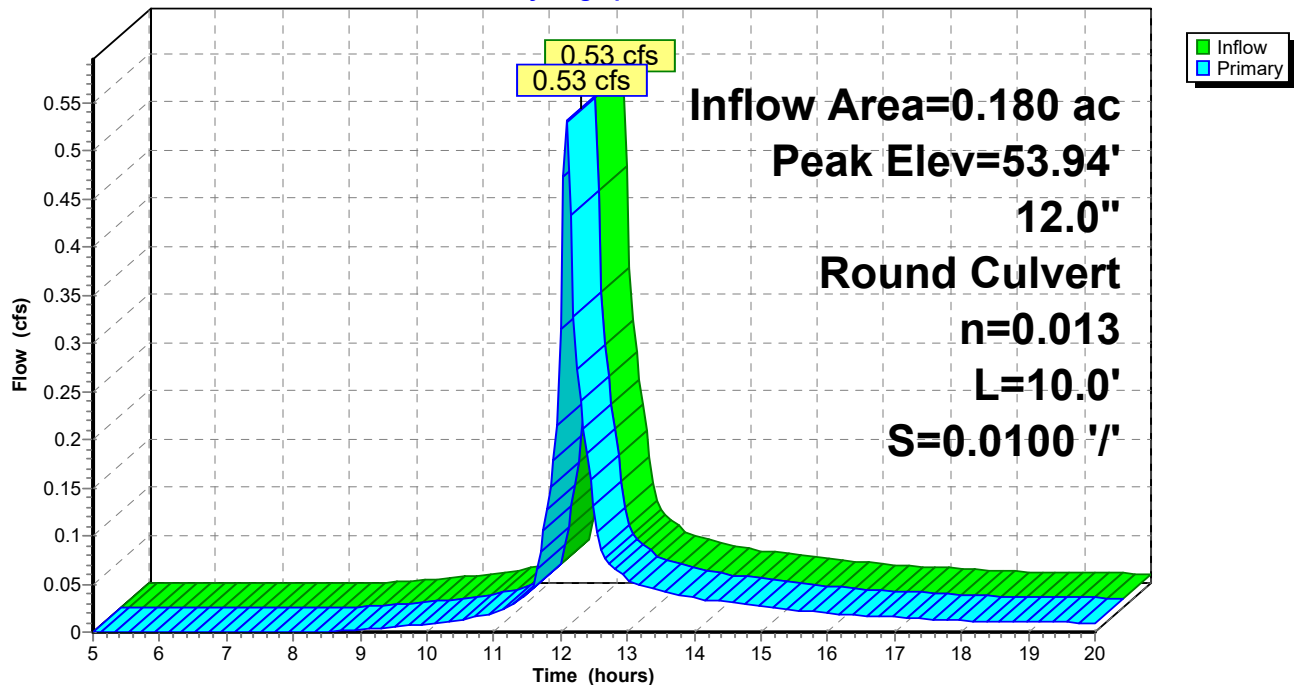
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 53.94' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.50' / 53.40' S= 0.0100 '/ Cc= 0.900 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

[57] Hint: Peaked at 54.07' (Flood elevation advised)

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

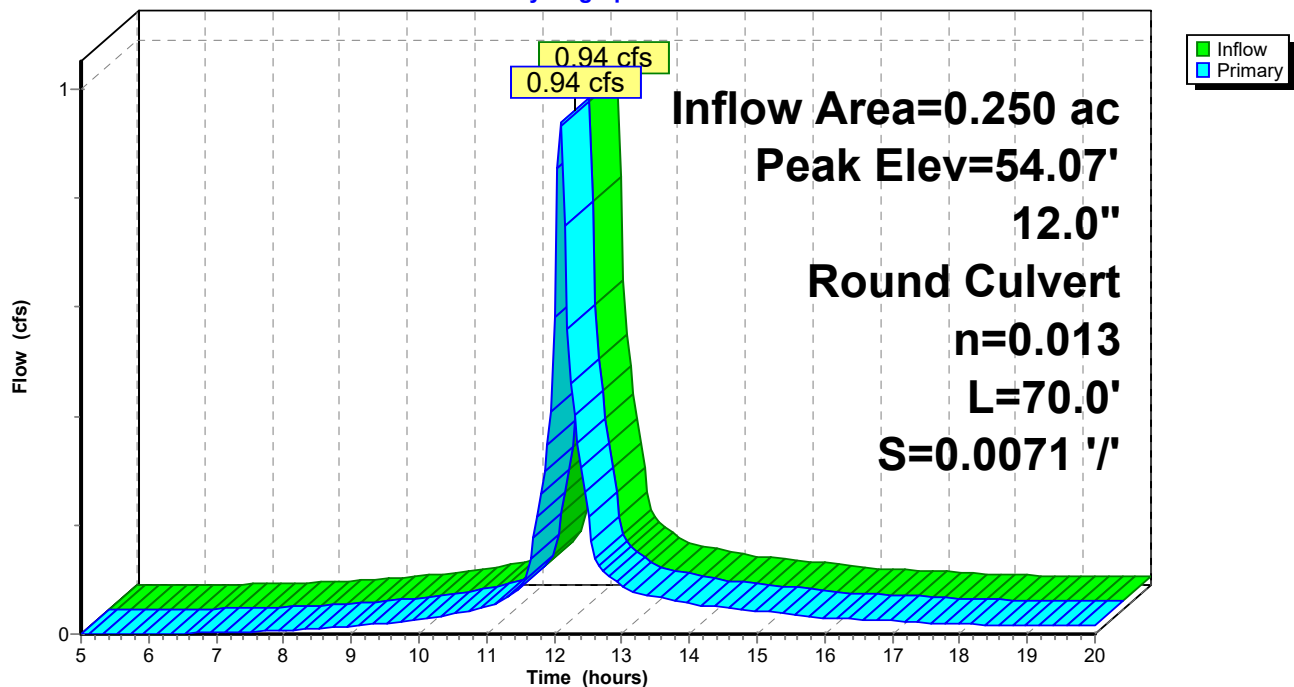
Device	Routing	Invert	Outlet Devices
#1	Primary	53.50'	12.0" Round Culvert L= 70.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.50' / 53.00' S= 0.0071 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.92 cfs @ 12.09 hrs HW=54.06' (Free Discharge)

↑1=Culvert (Inlet Controls 0.92 cfs @ 2.02 fps)

Pond 137P: CB

Hydrograph



Summary for Pond 138P: CB 39

[57] Hint: Peaked at 53.91' (Flood elevation advised)

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

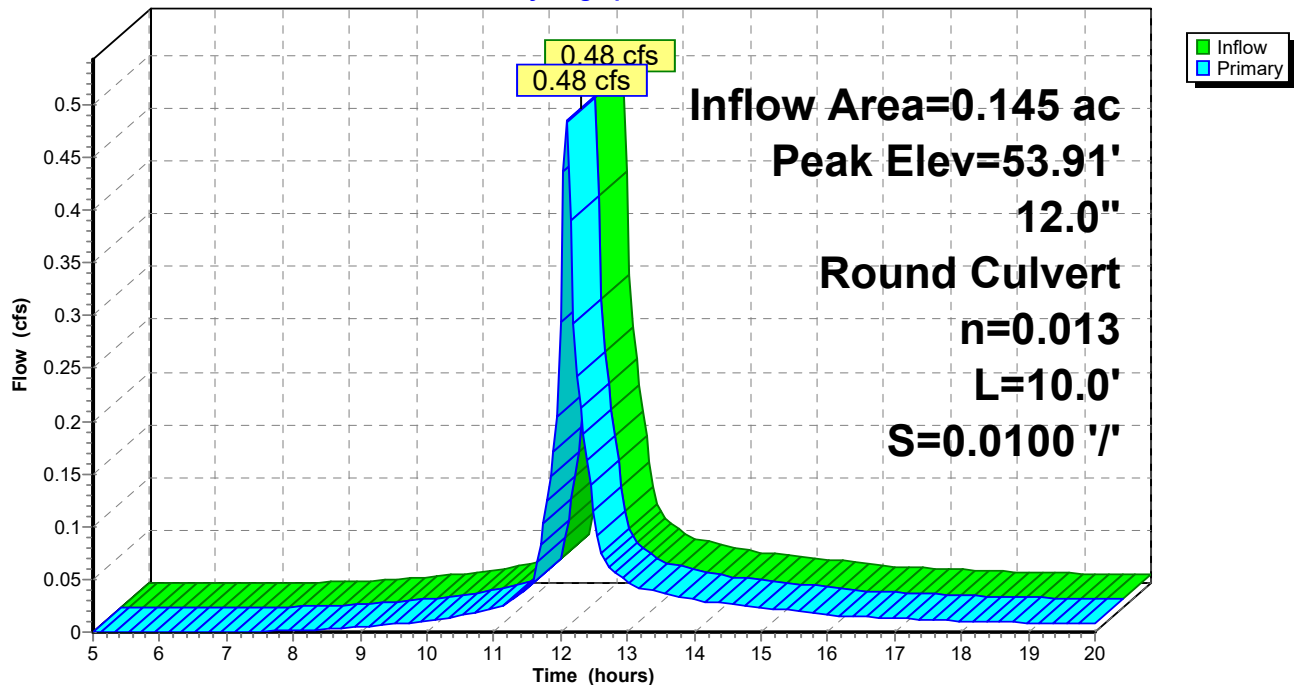
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 53.91' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.50' / 53.40' S= 0.0100 '/' Cc= 0.900 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

[57] Hint: Peaked at 53.92' (Flood elevation advised)

[79] Warning: Submerged Pond 136P Primary device # 1 INLET by 0.42'

[81] Warning: Exceeded Pond 138P by 0.01' @ 12.10 hrs

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

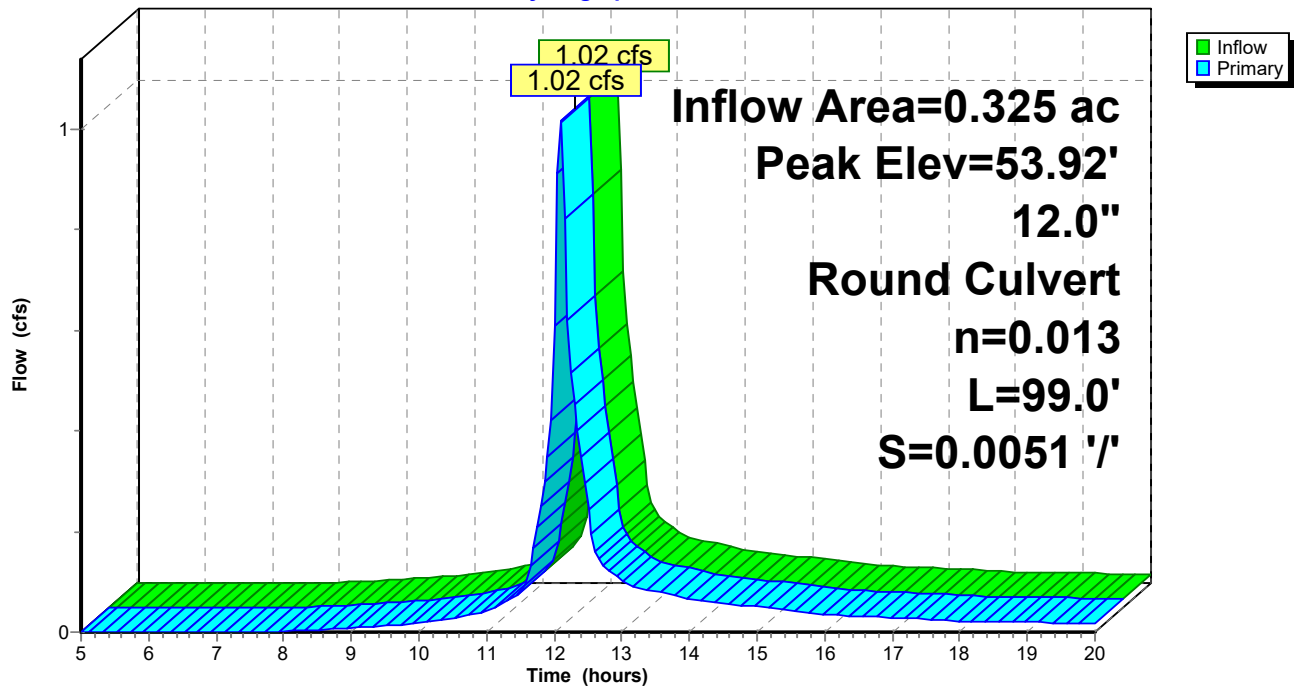
Device	Routing	Invert	Outlet Devices
#1	Primary	53.30'	12.0" Round Culvert L= 99.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.30' / 52.80' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 56.53' (Flood elevation advised)

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

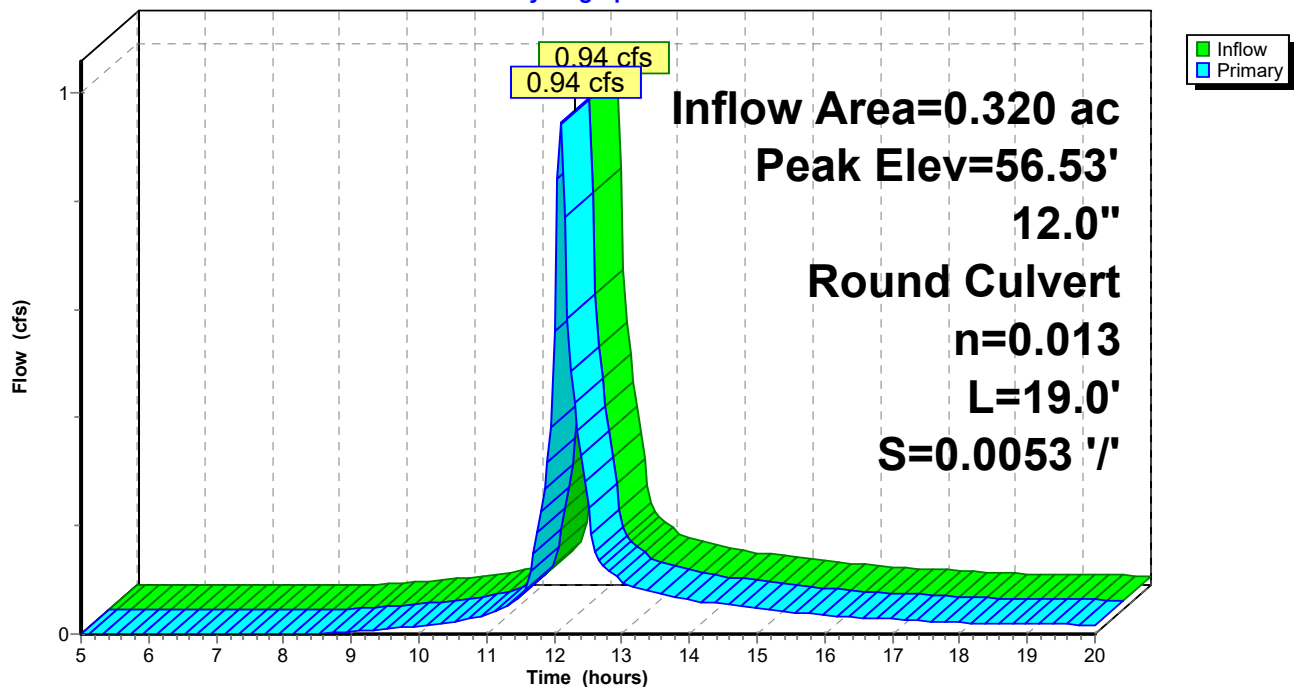
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 56.53' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	55.90'	12.0" Round Culvert L= 19.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 55.90' / 55.80' S= 0.0053 '/' Cc= 0.900 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

[57] Hint: Peaked at 56.58' (Flood elevation advised)

[81] Warning: Exceeded Pond 128P by 0.09' @ 12.10 hrs

[81] Warning: Exceeded Pond 140P by 0.05' @ 12.10 hrs

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

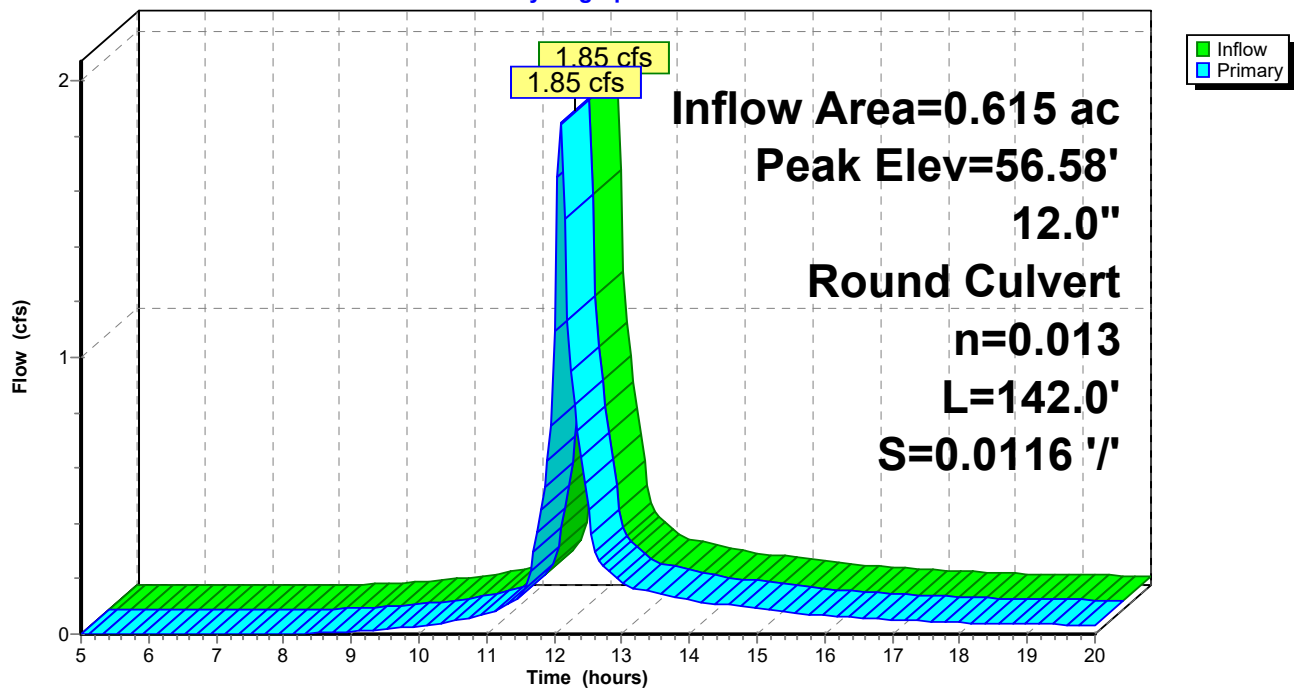
Device	Routing	Invert	Outlet Devices
#1	Primary	55.70'	12.0" Round Culvert L= 142.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 55.70' / 54.05' S= 0.0116 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 51.23' (Flood elevation advised)

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

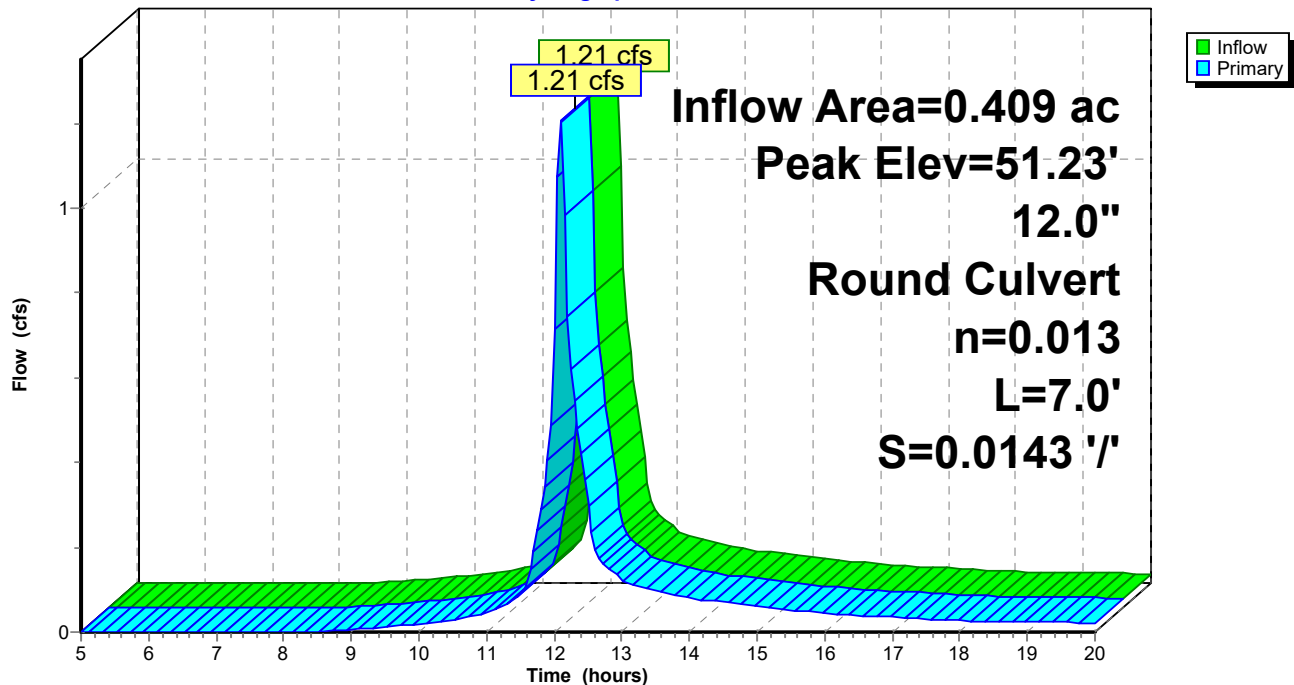
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 51.23' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.53'	12.0" Round Culvert L= 7.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.53' / 50.43' S= 0.0143 '/' Cc= 0.900 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

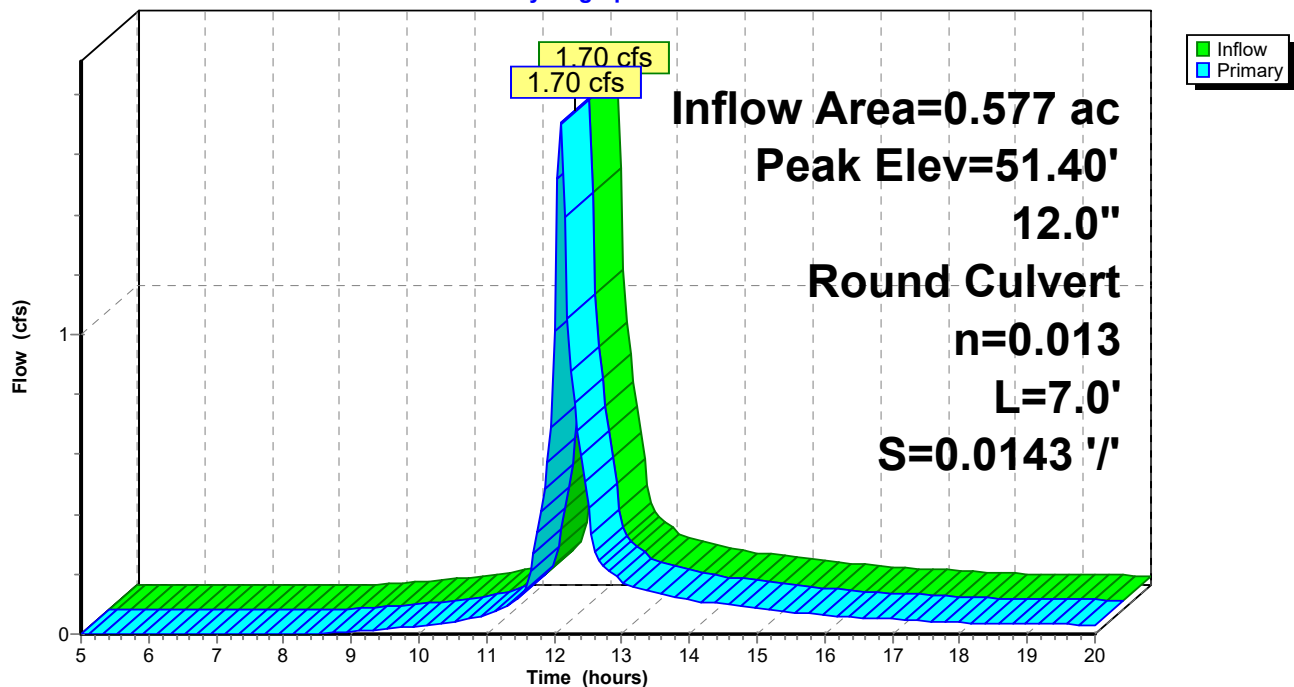
[57] Hint: Peaked at 51.40' (Flood elevation advised)

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'	12.0" Round Culvert L= 7.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.53' / 50.43' S= 0.0143 '/' Cc= 0.900 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

[57] Hint: Peaked at 51.85' (Flood elevation advised)

[81] Warning: Exceeded Pond 142P by 0.62' @ 12.10 hrs

[81] Warning: Exceeded Pond 143P by 0.45' @ 12.10 hrs

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

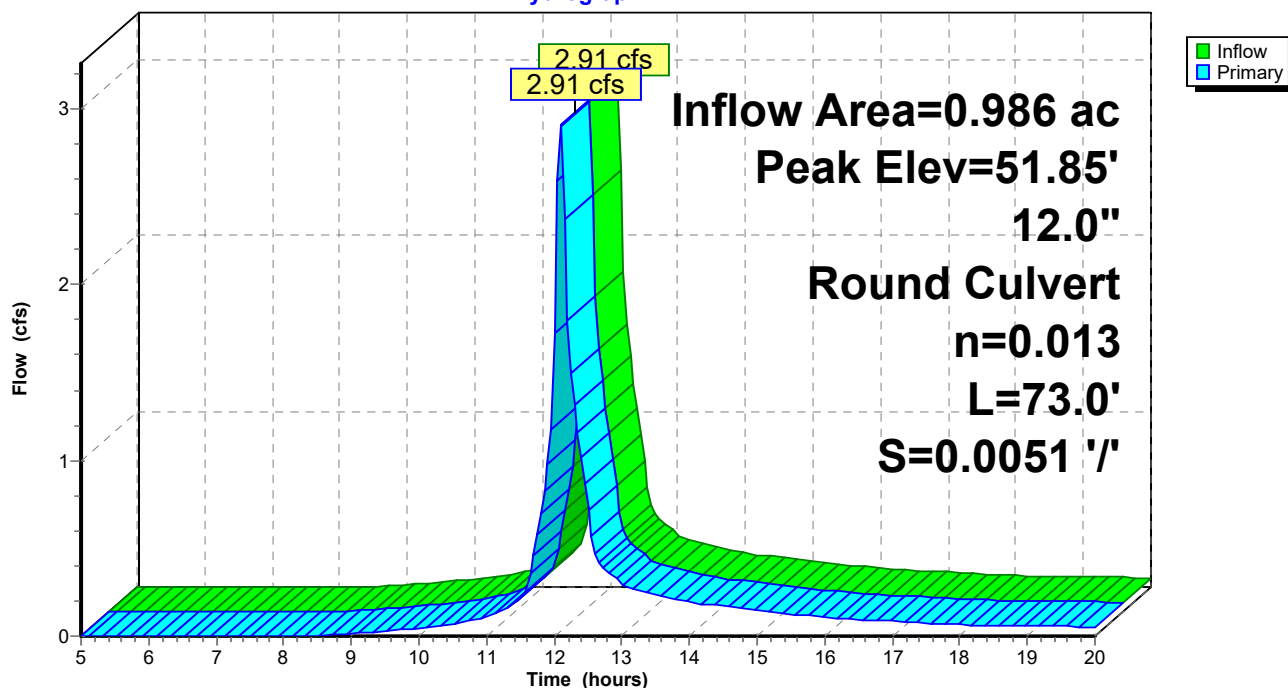
Device	Routing	Invert	Outlet Devices
#1	Primary	50.33'	12.0" Round Culvert L= 73.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.33' / 49.96' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 50.78' (Flood elevation advised)

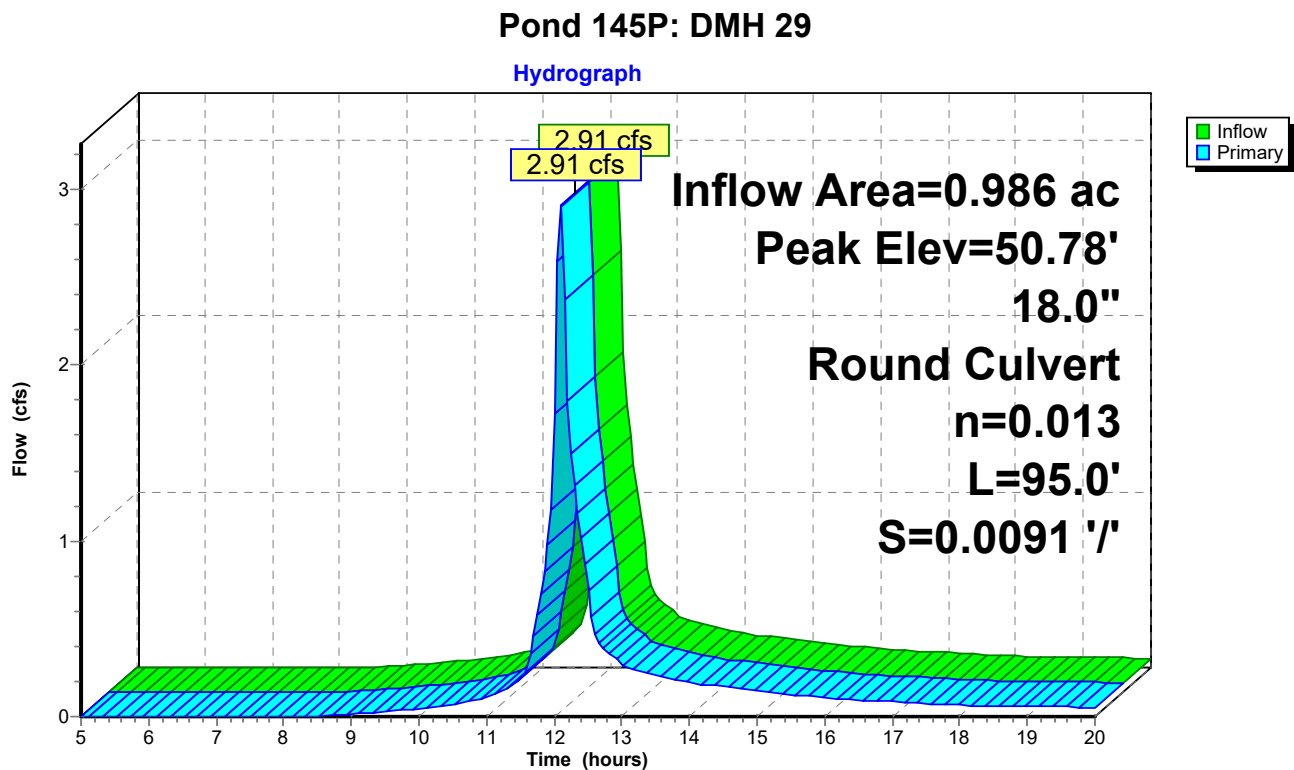
[79] Warning: Submerged Pond 144P Primary device # 1 INLET by 0.45'

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'	18.0" Round Culvert L= 95.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 49.86' / 49.00' S= 0.0091 '/' Cc= 0.900 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

[81] Warning: Exceeded Pond 145P by 0.29' @ 12.60 hrs

[79] Warning: Submerged Pond 148P Primary device # 1 OUTLET by 1.50'

[79] Warning: Submerged Pond 191P Primary device # 1 OUTLET by 1.50'

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	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (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

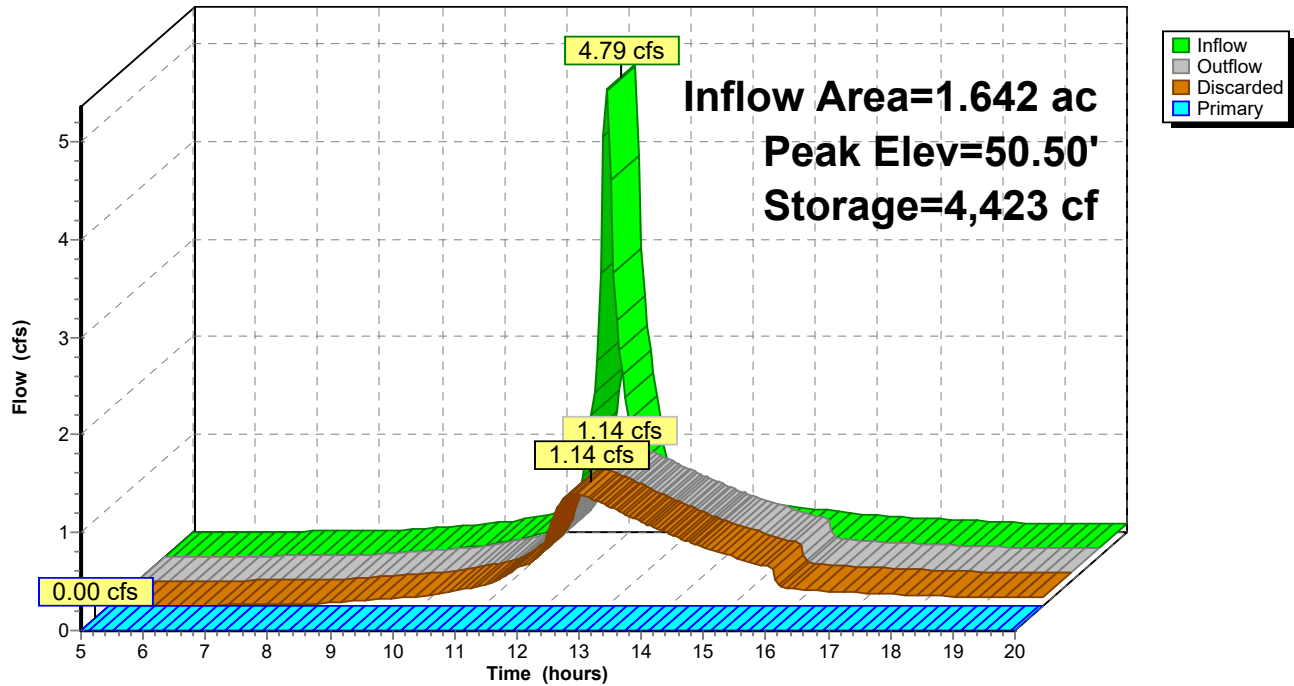
Device	Routing	Invert	Outlet Devices
#1	Discarded	49.00'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 47.00'
#2	Primary	49.00'	12.0" Round Culvert L= 42.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 49.00' / 45.00' S= 0.0952 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	52.20'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 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

[57] Hint: Peaked at 54.50' (Flood elevation advised)

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

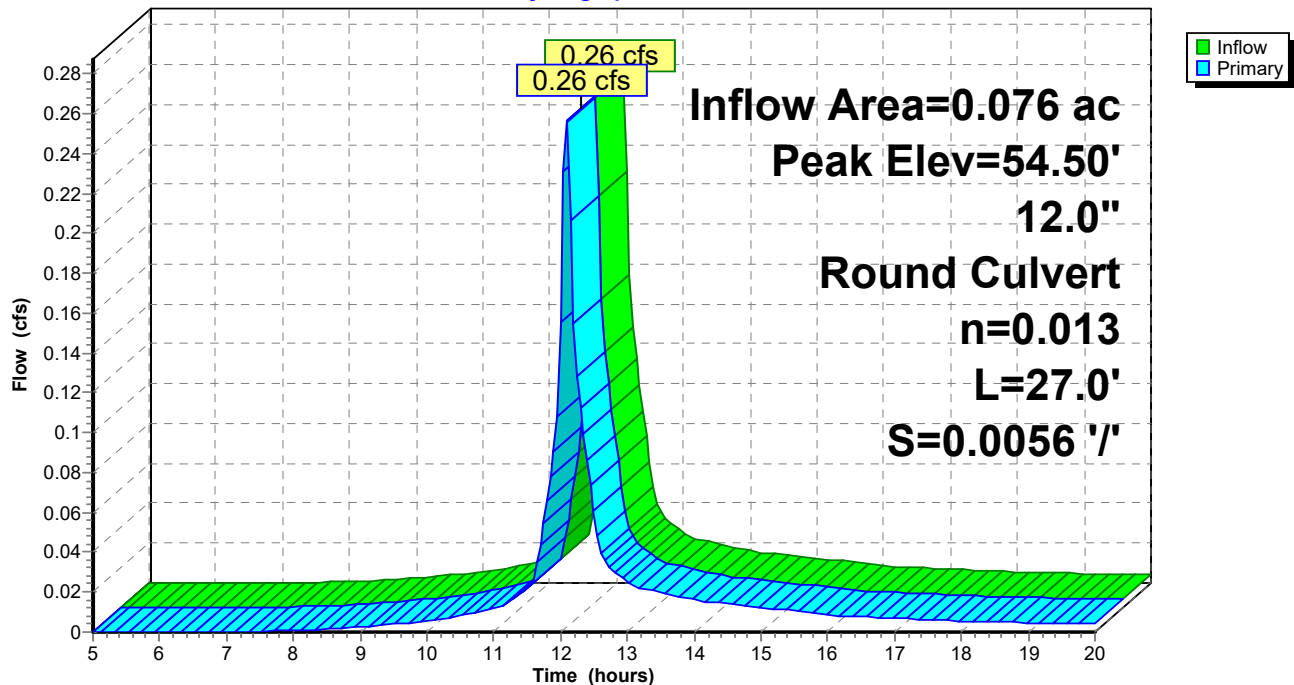
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.50' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.20'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.20' / 54.05' S= 0.0056 '/ Cc= 0.900 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

[57] Hint: Peaked at 52.50' (Flood elevation advised)

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

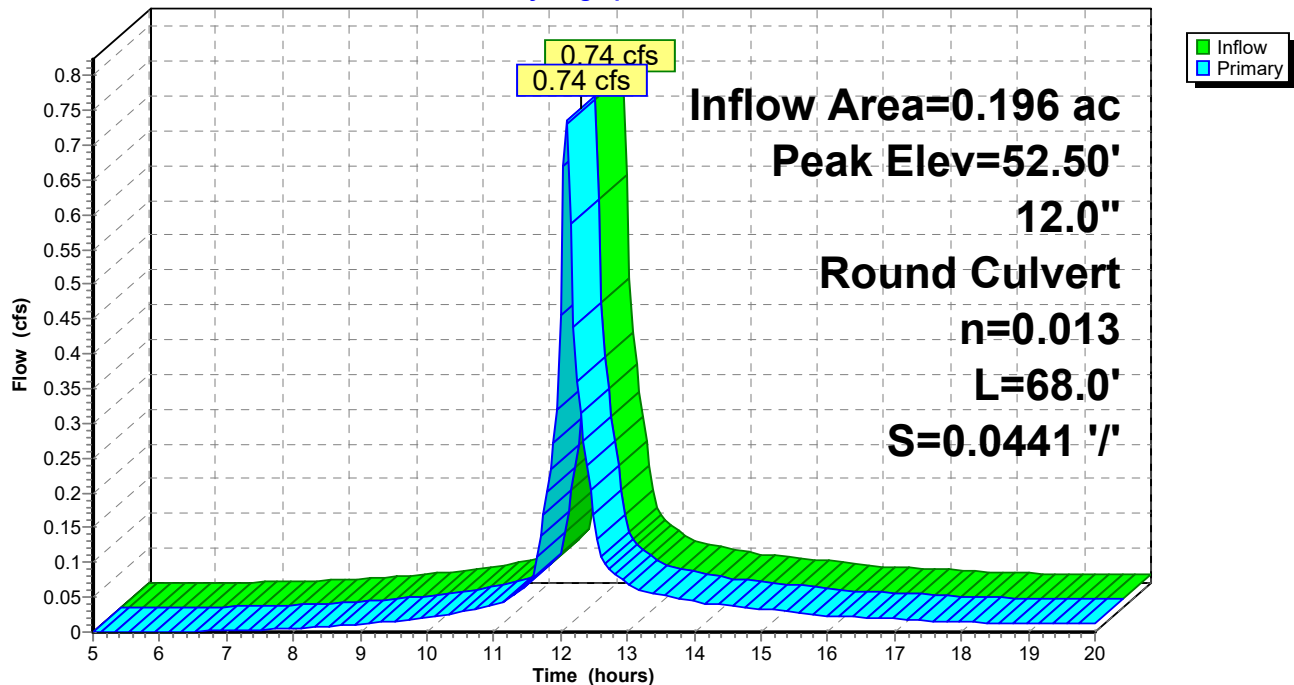
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 52.50' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	52.00'	12.0" Round Culvert L= 68.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.00' / 49.00' S= 0.0441 '/ Cc= 0.900 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

[57] Hint: Peaked at 54.50' (Flood elevation advised)

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

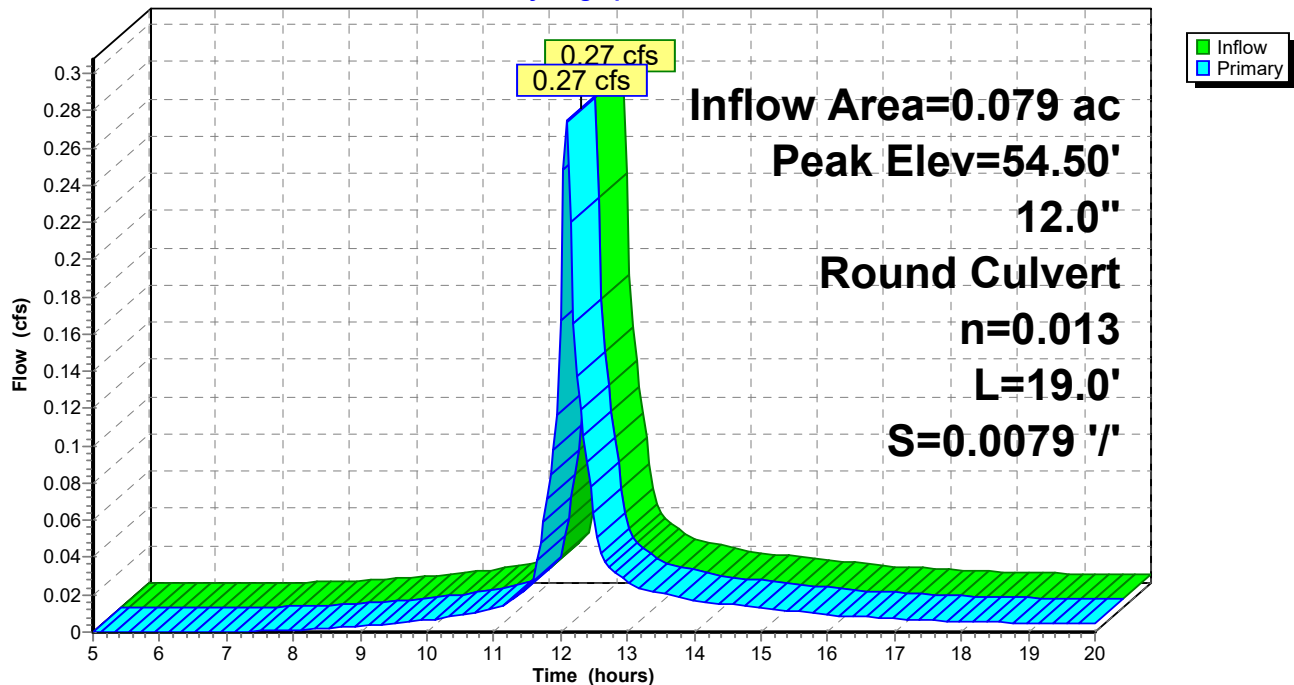
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.50' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.20'	12.0" Round Culvert L= 19.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.20' / 54.05' S= 0.0079 '/' Cc= 0.900 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

[57] Hint: Peaked at 55.08' (Flood elevation advised)

[79] Warning: Submerged Pond 141P Primary device # 1 OUTLET by 1.03'

[81] Warning: Exceeded Pond 147P by 0.58' @ 12.10 hrs

[81] Warning: Exceeded Pond 149P by 0.58' @ 12.10 hrs

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

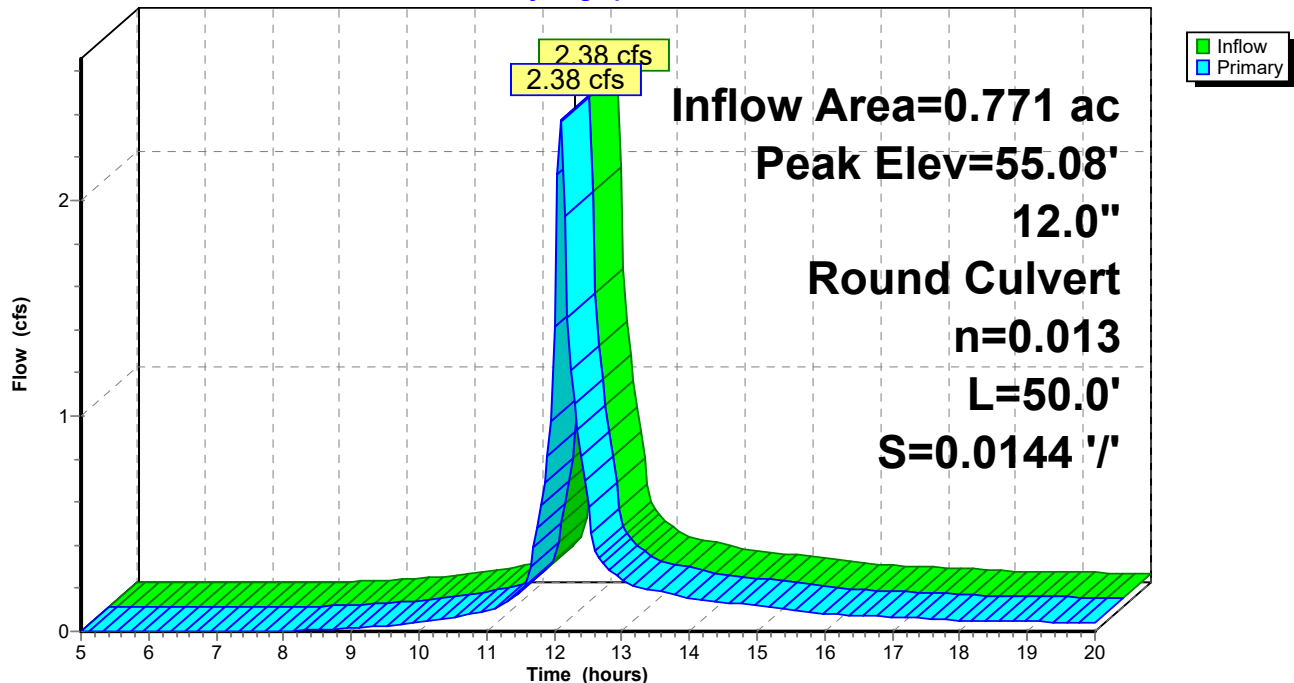
Device	Routing	Invert	Outlet Devices
#1	Primary	53.95'	12.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.95' / 53.23' S= 0.0144 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

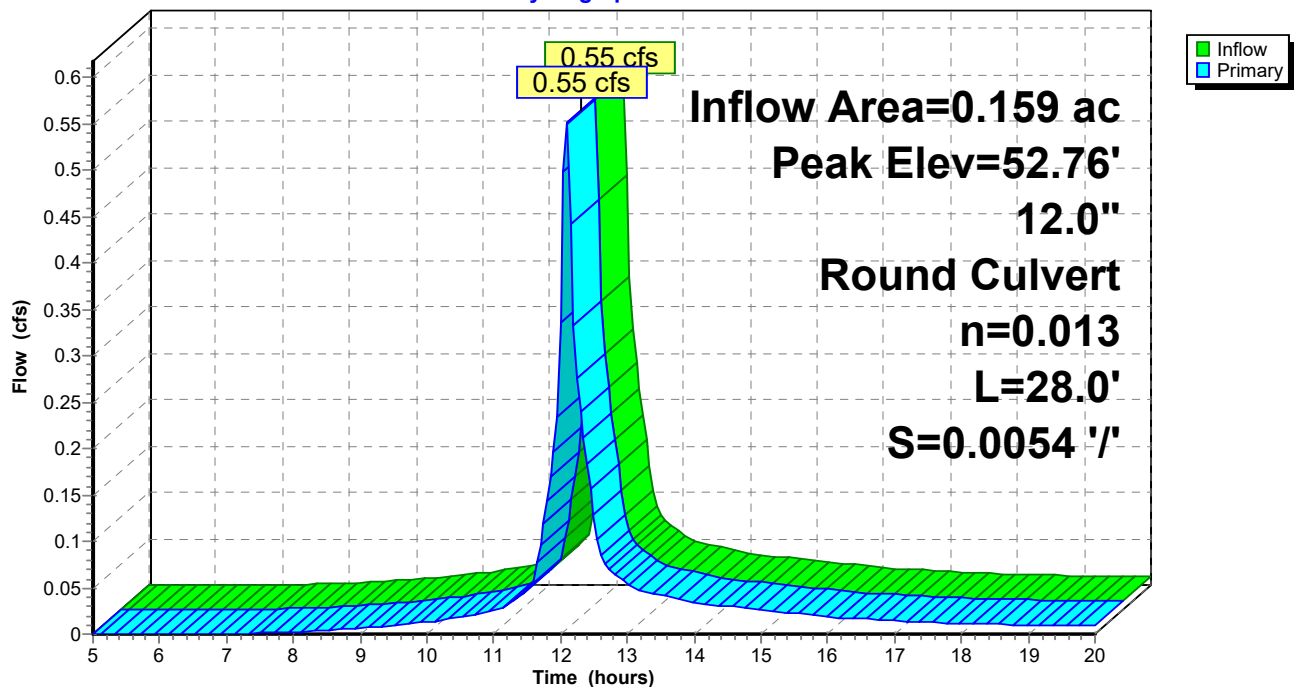
[57] Hint: Peaked at 52.76' (Flood elevation advised)

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'	12.0" Round Culvert L= 28.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.30' / 52.15' S= 0.0054 '/ Cc= 0.900 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

[57] Hint: Peaked at 52.78' (Flood elevation advised)

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

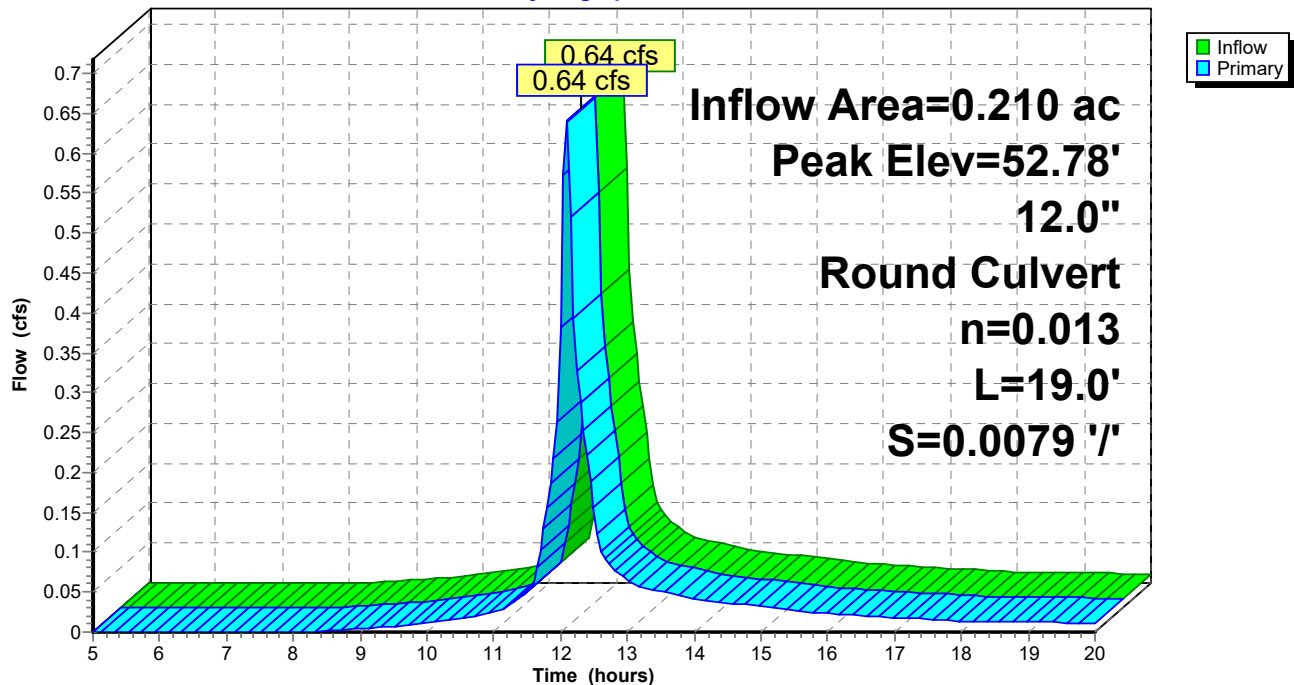
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 52.78' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	52.30'	12.0" Round Culvert L= 19.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.30' / 52.15' S= 0.0079 '/' Cc= 0.900 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

[57] Hint: Peaked at 53.51' (Flood elevation advised)
 [81] Warning: Exceeded Pond 151P by 0.75' @ 12.10 hrs
 [81] Warning: Exceeded Pond 152P by 0.73' @ 12.10 hrs
 [79] Warning: Submerged Pond 161P Primary device # 1 INLET by 0.38'

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

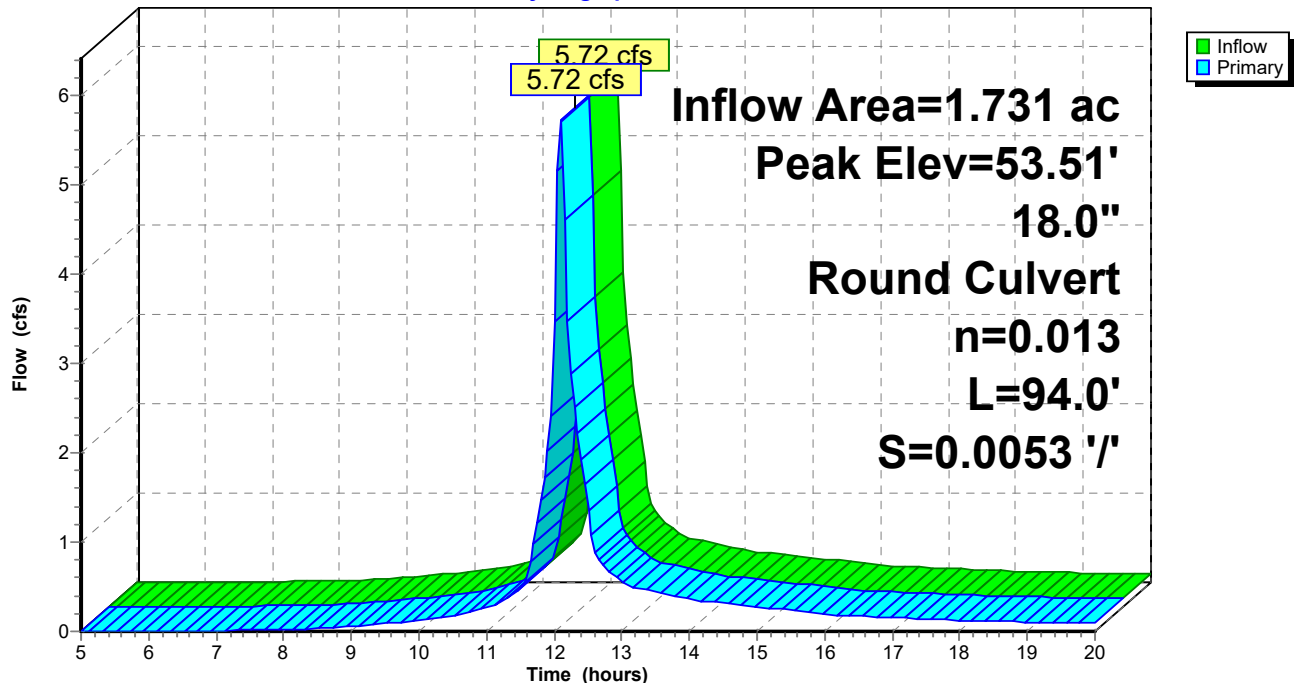
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 53.51' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	52.05'	18.0" Round Culvert L= 94.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.05' / 51.55' S= 0.0053 '/ Cc= 0.900 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

[57] Hint: Peaked at 53.77' (Flood elevation advised)

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

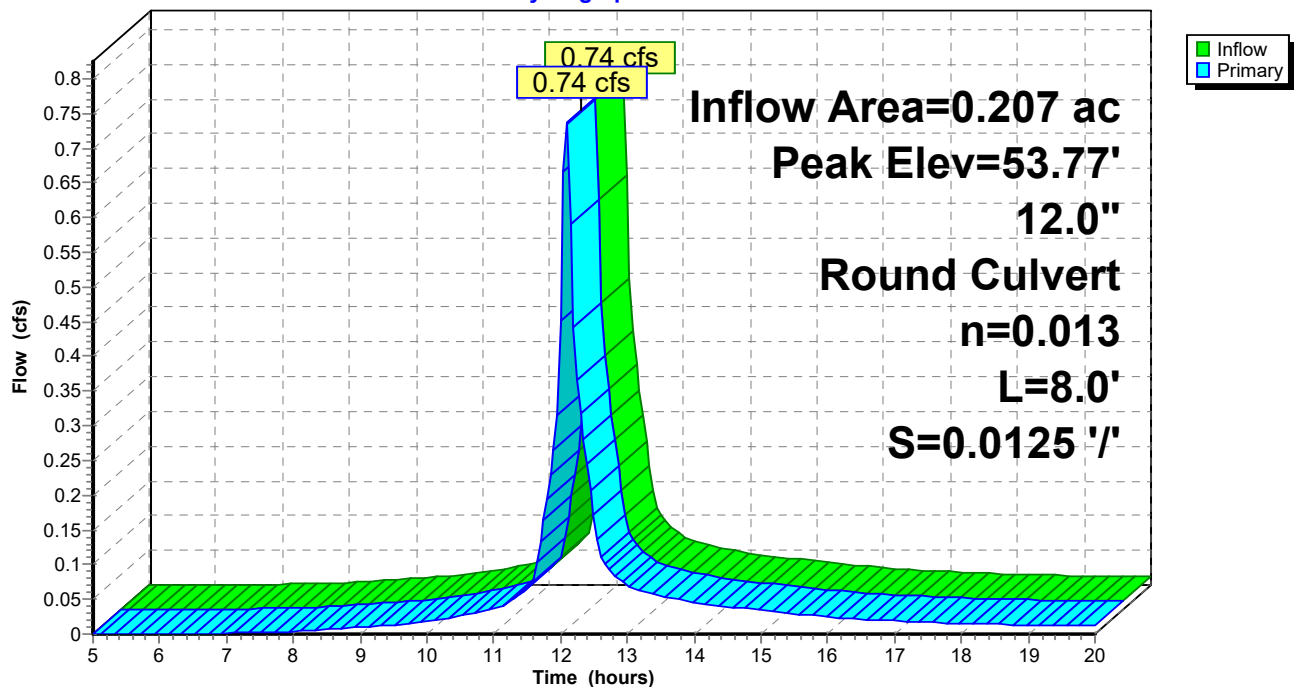
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 53.77' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.25'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.25' / 53.15' S= 0.0125 '/' Cc= 0.900 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

[57] Hint: Peaked at 55.14' (Flood elevation advised)

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

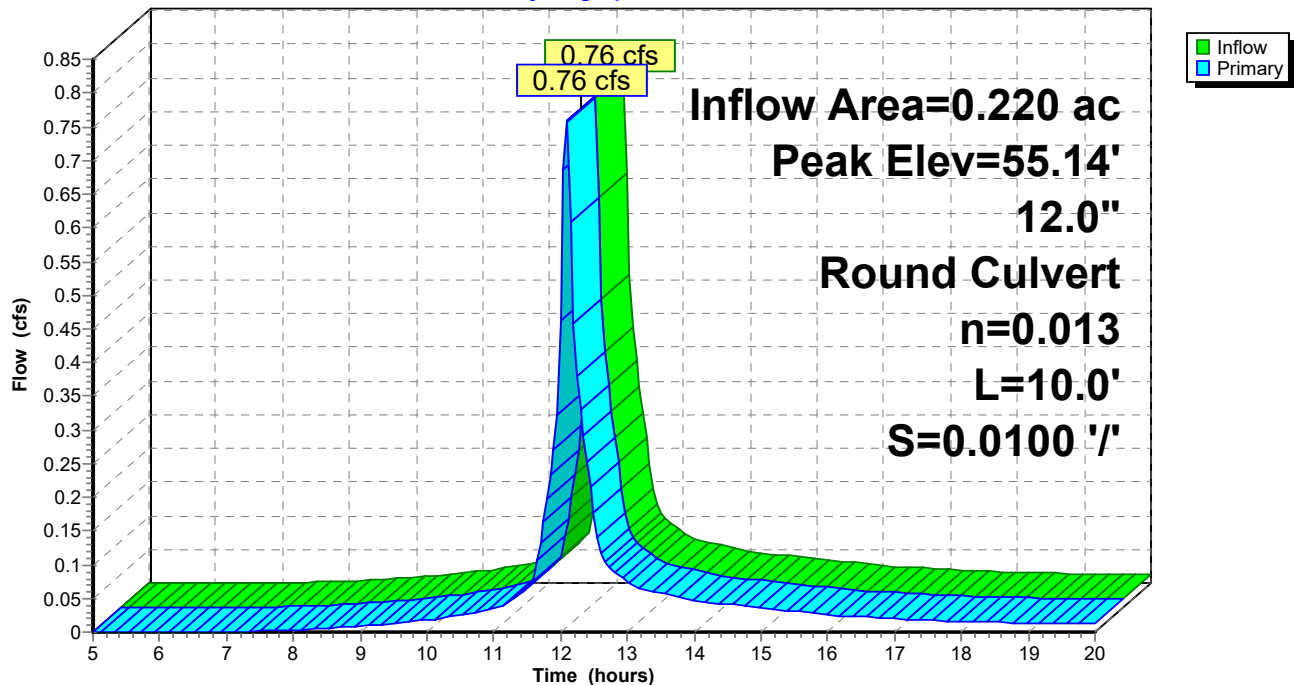
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 55.14' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.60'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0100 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 55.00' (Flood elevation advised)

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

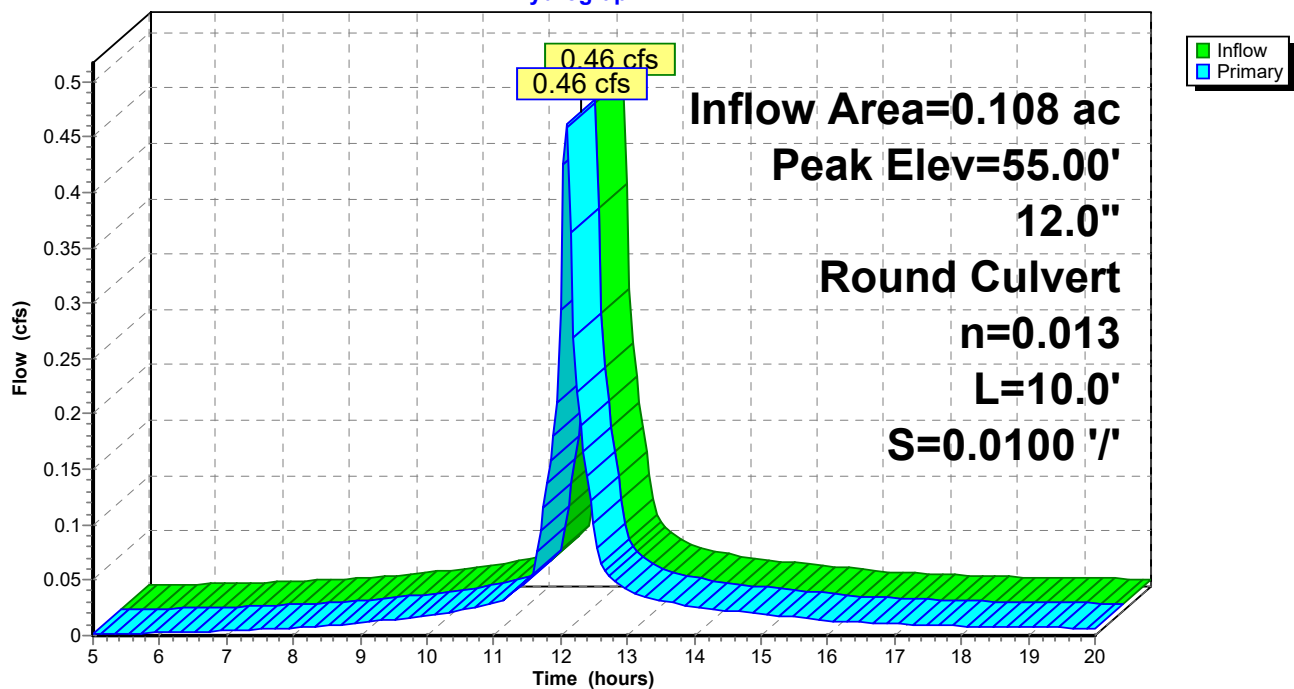
Device	Routing	Invert	Outlet Devices
#1	Primary	54.60'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 55.07' (Flood elevation advised)

[79] Warning: Submerged Pond 155P Primary device # 1 INLET by 0.46'

[81] Warning: Exceeded Pond 156P by 0.06' @ 12.10 hrs

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

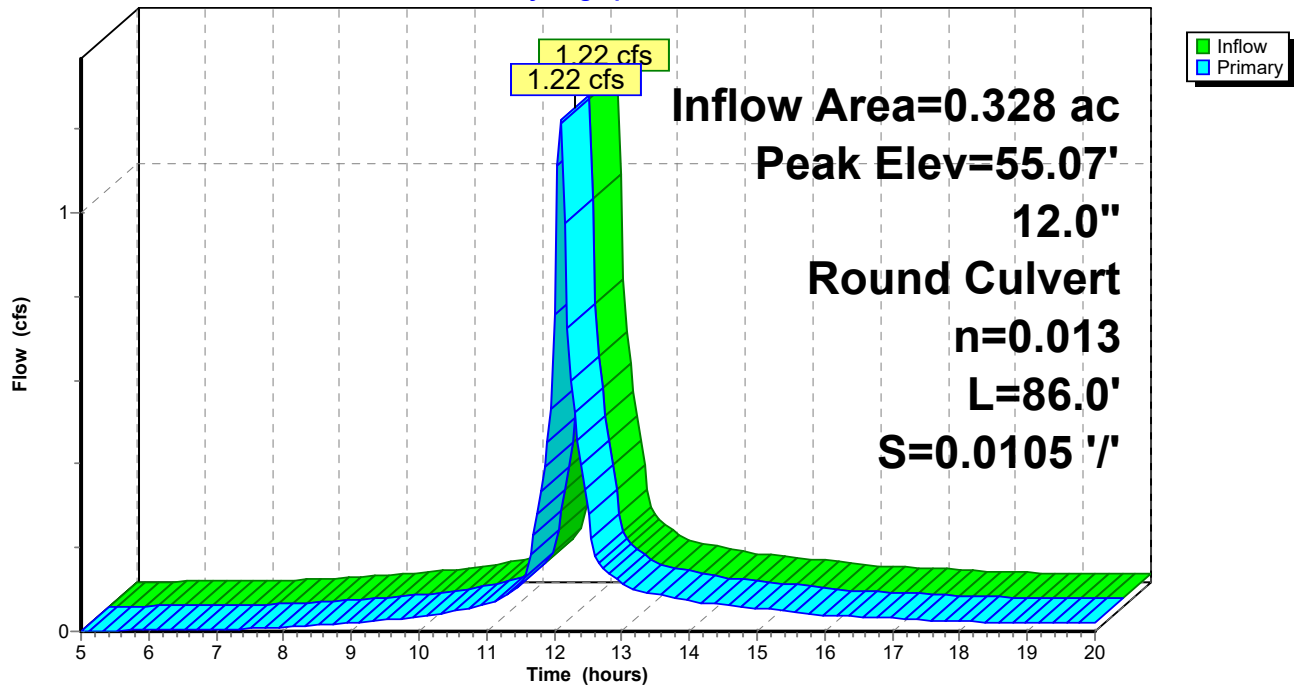
Device	Routing	Invert	Outlet Devices
#1	Primary	54.40'	12.0" Round Culvert L= 86.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.40' / 53.50' S= 0.0105 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

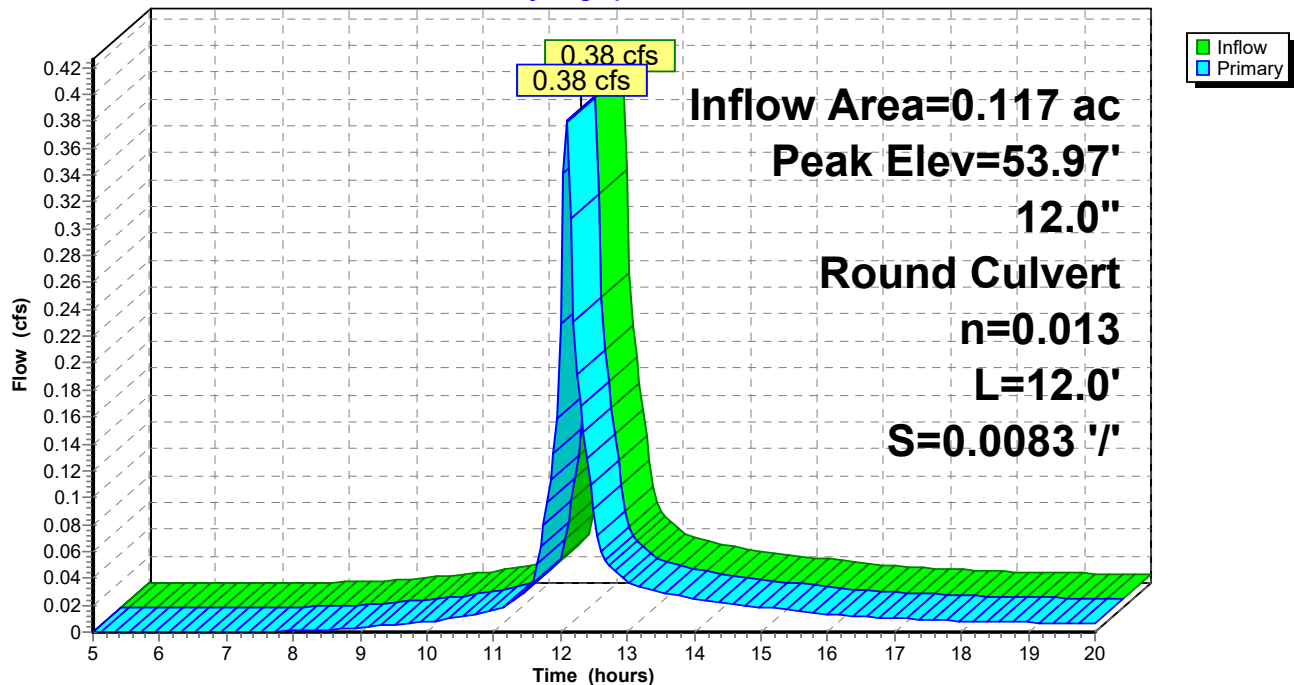
[57] Hint: Peaked at 53.97' (Flood elevation advised)

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'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.60' / 53.50' S= 0.0083 '/ S= 0.0083 '/ Cc= 0.900 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

[57] Hint: Peaked at 54.05' (Flood elevation advised)

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

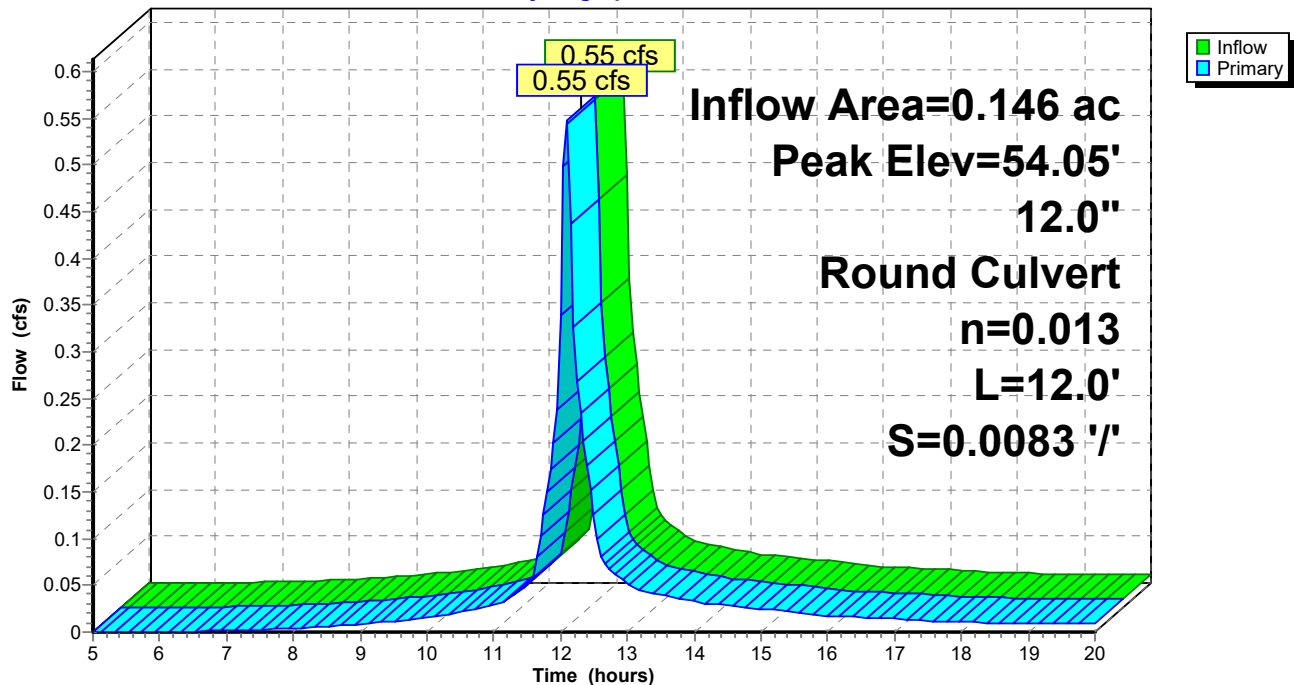
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.05' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.60'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.60' / 53.50' S= 0.0083 '/ Cc= 0.900 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

[57] Hint: Peaked at 54.46' (Flood elevation advised)

[79] Warning: Submerged Pond 157P Primary device # 1 INLET by 0.05'

[81] Warning: Exceeded Pond 158P by 0.49' @ 12.10 hrs

[81] Warning: Exceeded Pond 159P by 0.41' @ 12.10 hrs

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

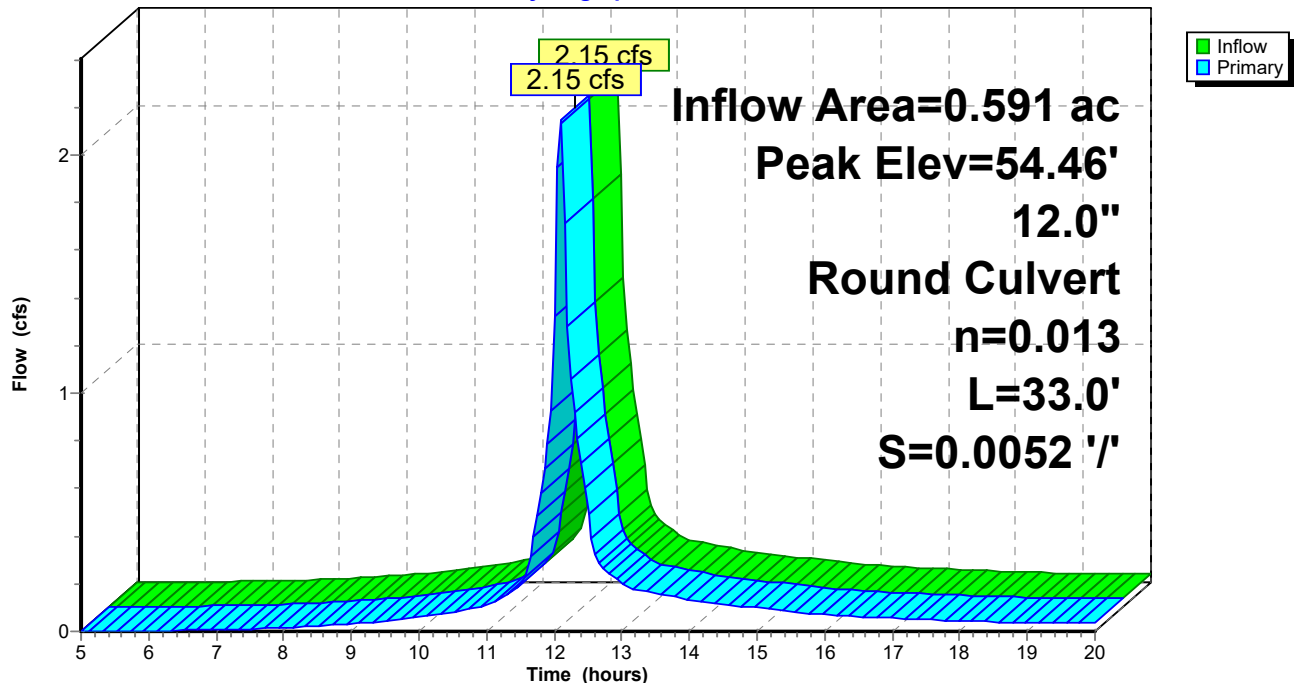
Device	Routing	Invert	Outlet Devices
#1	Primary	53.40'	12.0" Round Culvert L= 33.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.40' / 53.23' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 54.34' (Flood elevation advised)

[79] Warning: Submerged Pond 150P Primary device # 1 INLET by 0.39'

[79] Warning: Submerged Pond 160P Primary device # 1 INLET by 0.94'

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

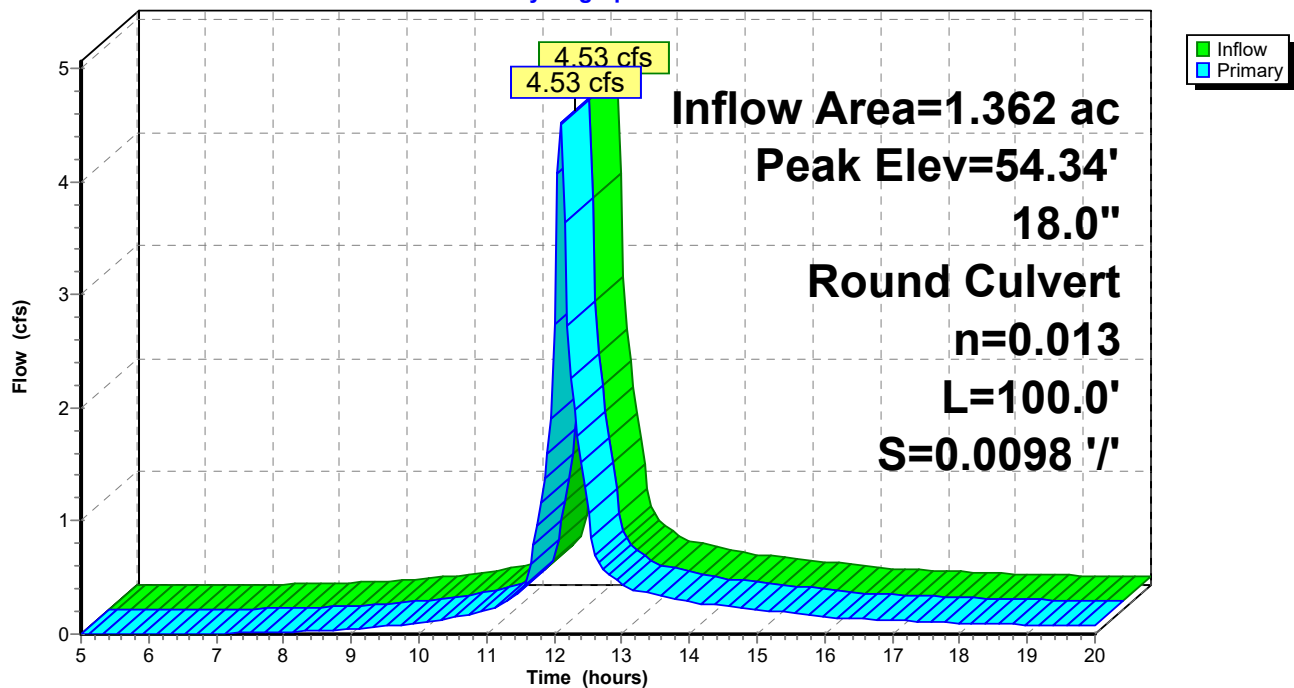
Device	Routing	Invert	Outlet Devices
#1	Primary	53.13'	18.0" Round Culvert L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.13' / 52.15' S= 0.0098 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[57] Hint: Peaked at 51.05' (Flood elevation advised)

Inflow Area = 0.341 ac, 60.75% Impervious, Inflow Depth > 2.14" 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 164P : DMH 9

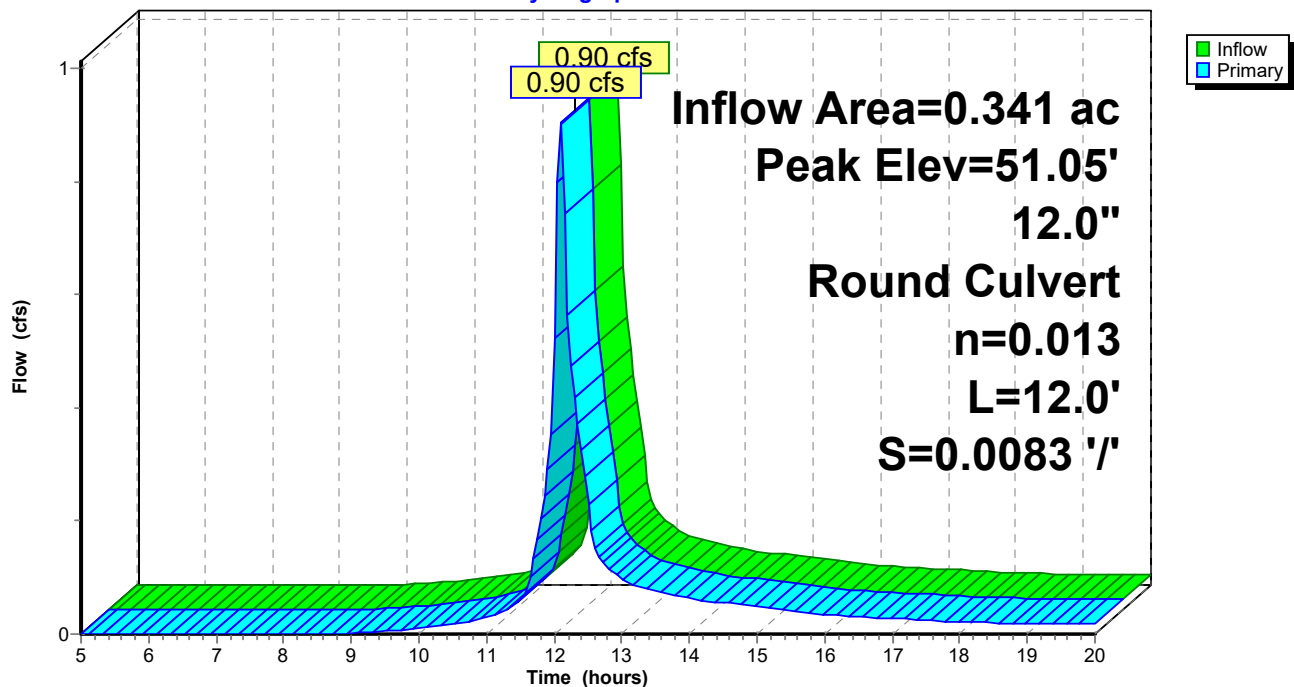
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 51.05' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.45'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.45' / 50.35' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.89 cfs @ 12.09 hrs HW=51.04' (Free Discharge)
 1=Culvert (Barrel Controls 0.89 cfs @ 2.63 fps)

Pond 162P: CB 15

Hydrograph



Summary for Pond 163P: CB 14

[57] Hint: Peaked at 50.94' (Flood elevation advised)

Inflow Area = 0.193 ac, 67.64% Impervious, Inflow Depth > 2.48" for 10-Year event
 Inflow = 0.59 cfs @ 12.09 hrs, Volume= 0.040 af
 Outflow = 0.59 cfs @ 12.09 hrs, Volume= 0.040 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.59 cfs @ 12.09 hrs, Volume= 0.040 af
 Routed to Pond 164P : DMH 9

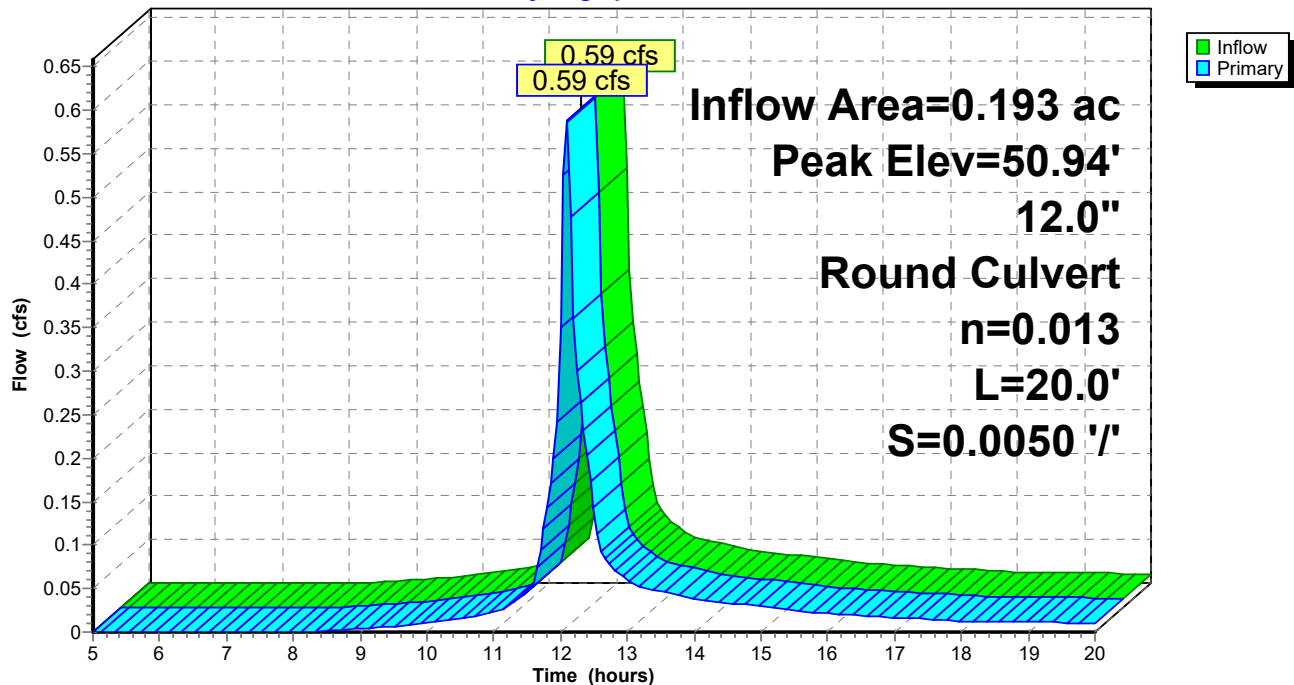
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 50.94' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.45'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.45' / 50.35' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.58 cfs @ 12.09 hrs HW=50.93' (Free Discharge)
 1=Culvert (Barrel Controls 0.58 cfs @ 2.27 fps)

Pond 163P: CB 14

Hydrograph



Summary for Pond 164P: DMH 9

[57] Hint: Peaked at 51.06' (Flood elevation advised)

[81] Warning: Exceeded Pond 162P by 0.01' @ 12.10 hrs

[81] Warning: Exceeded Pond 163P by 0.13' @ 12.10 hrs

Inflow Area = 0.534 ac, 63.24% Impervious, Inflow Depth > 2.26" for 10-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 180P : DMH 10

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 51.06' @ 12.09 hrs

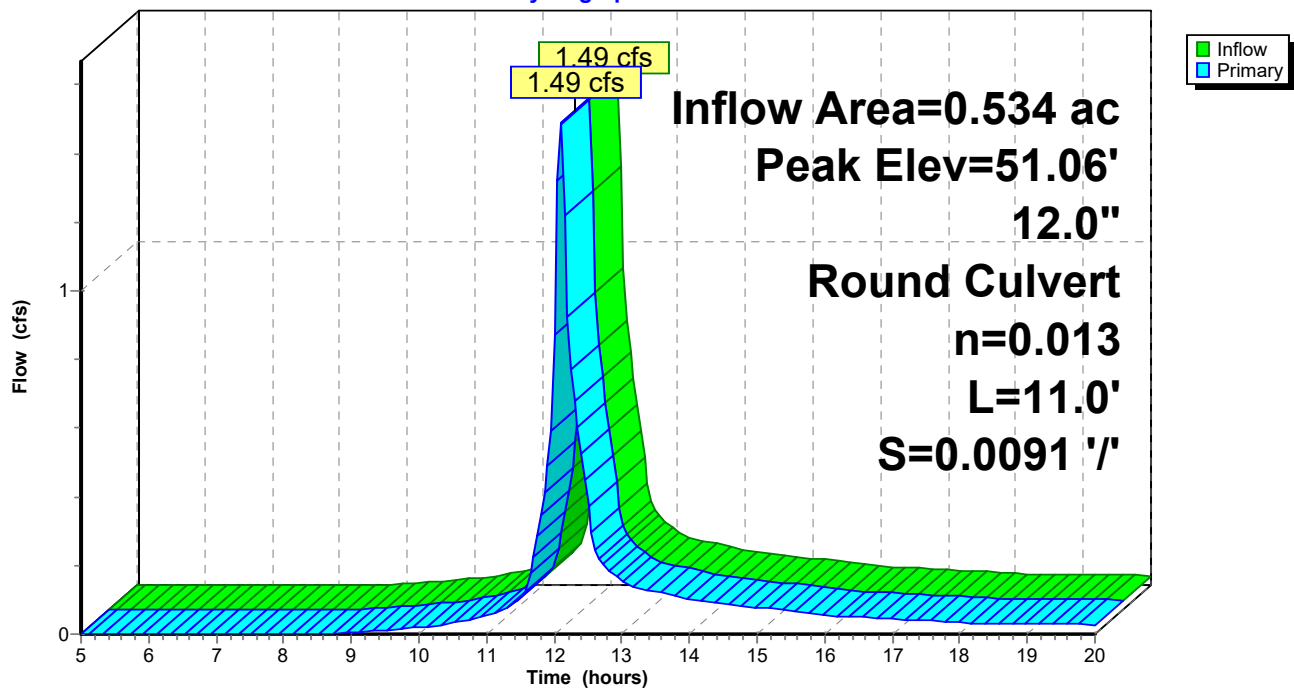
Device	Routing	Invert	Outlet Devices
#1	Primary	50.25'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.25' / 50.15' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.47 cfs @ 12.09 hrs HW=51.05' (Free Discharge)

↑1=Culvert (Barrel Controls 1.47 cfs @ 2.97 fps)

Pond 164P: DMH 9

Hydrograph



Summary for Pond 165P: CB 19

[57] Hint: Peaked at 53.72' (Flood elevation advised)

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

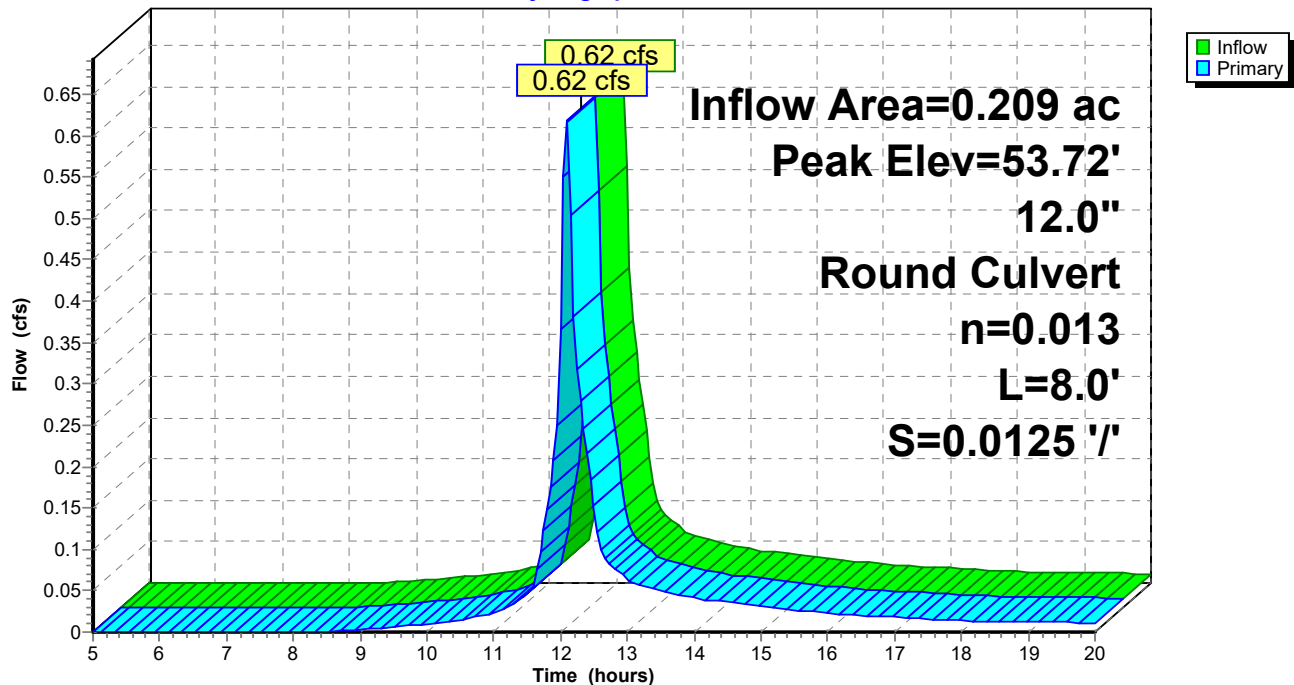
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 53.72' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.25'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.25' / 53.15' S= 0.0125 '/' Cc= 0.900 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

[57] Hint: Peaked at 52.90' (Flood elevation advised)

[81] Warning: Exceeded Pond 202P by 0.25' @ 12.10 hrs

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

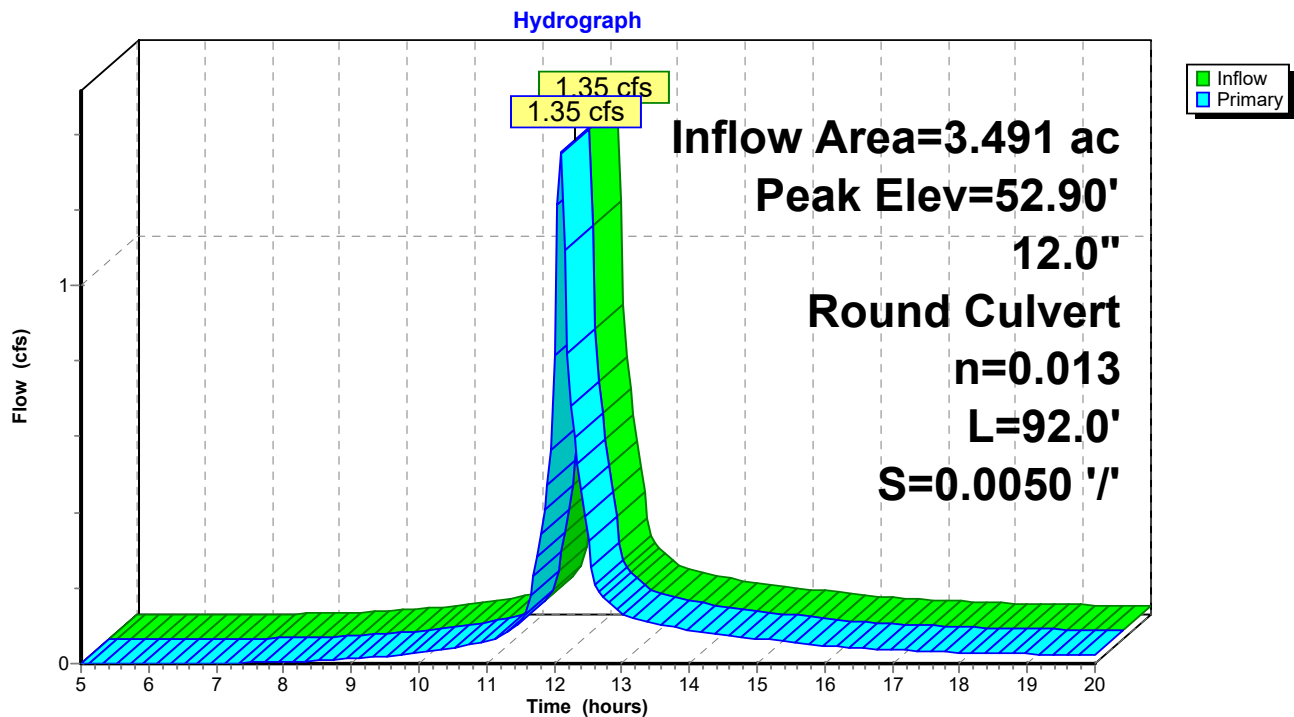
Peak Elev= 52.90' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	52.16'	12.0" Round Culvert L= 92.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.16' / 51.70' S= 0.0050 '/ Cc= 0.900 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



Summary for Pond 167P: CB 10

[57] Hint: Peaked at 50.76' (Flood elevation advised)

Inflow Area = 0.093 ac, 53.88% Impervious, Inflow Depth > 1.83" for 10-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 181P : DMH

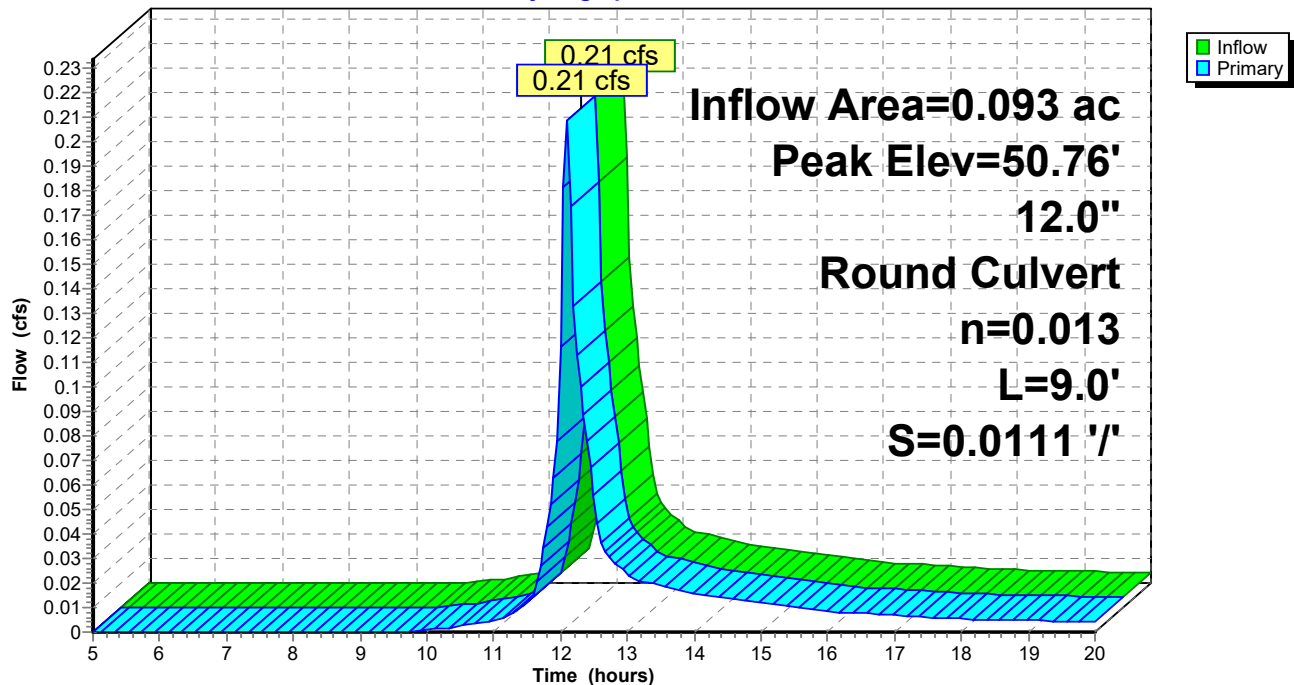
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 50.76' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.50'	12.0" Round Culvert L= 9.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.50' / 50.40' S= 0.0111 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.21 cfs @ 12.10 hrs HW=50.75' (Free Discharge)
 1=Culvert (Barrel Controls 0.21 cfs @ 1.98 fps)

Pond 167P: CB 10

Hydrograph



Summary for Pond 168P: CB 11

[57] Hint: Peaked at 50.71' (Flood elevation advised)

Inflow Area = 0.064 ac, 55.52% Impervious, Inflow Depth > 1.91" for 10-Year event
 Inflow = 0.15 cfs @ 12.10 hrs, Volume= 0.010 af
 Outflow = 0.15 cfs @ 12.10 hrs, Volume= 0.010 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.15 cfs @ 12.10 hrs, Volume= 0.010 af
 Routed to Pond 181P : DMH

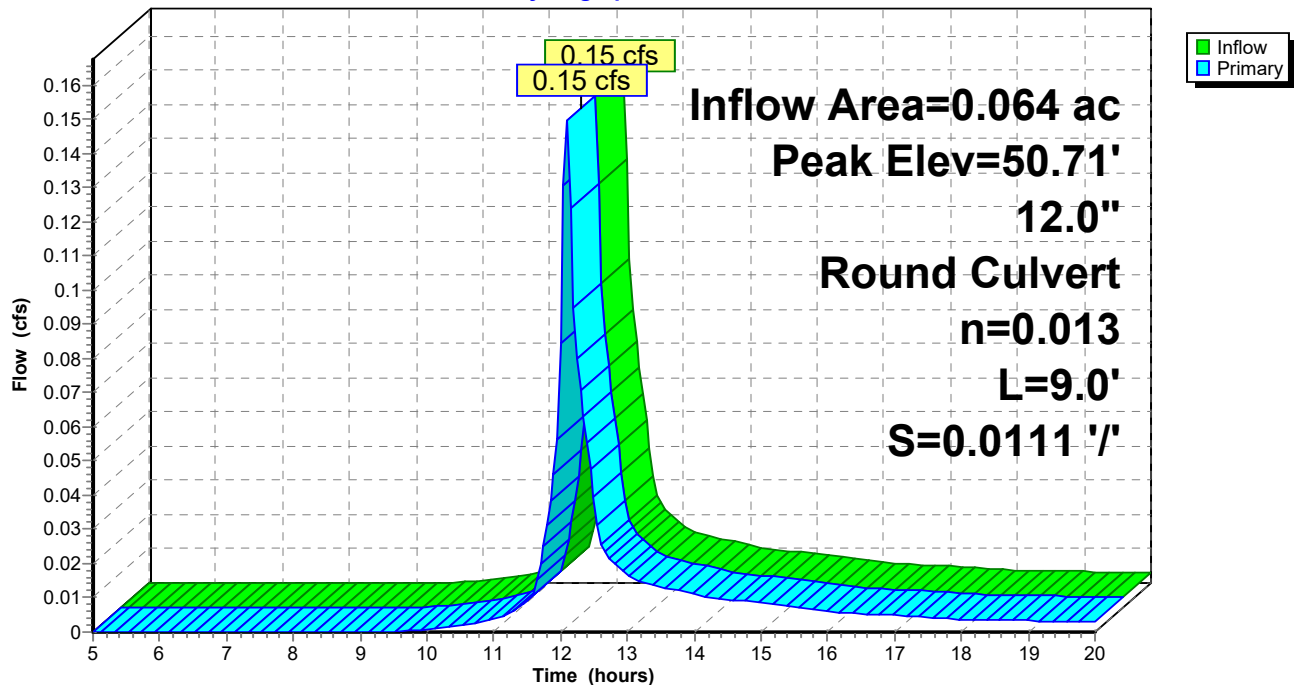
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 50.71' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.50'	12.0" Round Culvert L= 9.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.50' / 50.40' S= 0.0111 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.15 cfs @ 12.10 hrs HW=50.71' (Free Discharge)
 1=Culvert (Barrel Controls 0.15 cfs @ 1.85 fps)

Pond 168P: CB 11

Hydrograph



Summary for Pond 169P: DMH 12

[57] Hint: Peaked at 52.34' (Flood elevation advised)

[79] Warning: Submerged Pond 166P Primary device # 1 INLET by 0.17'

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

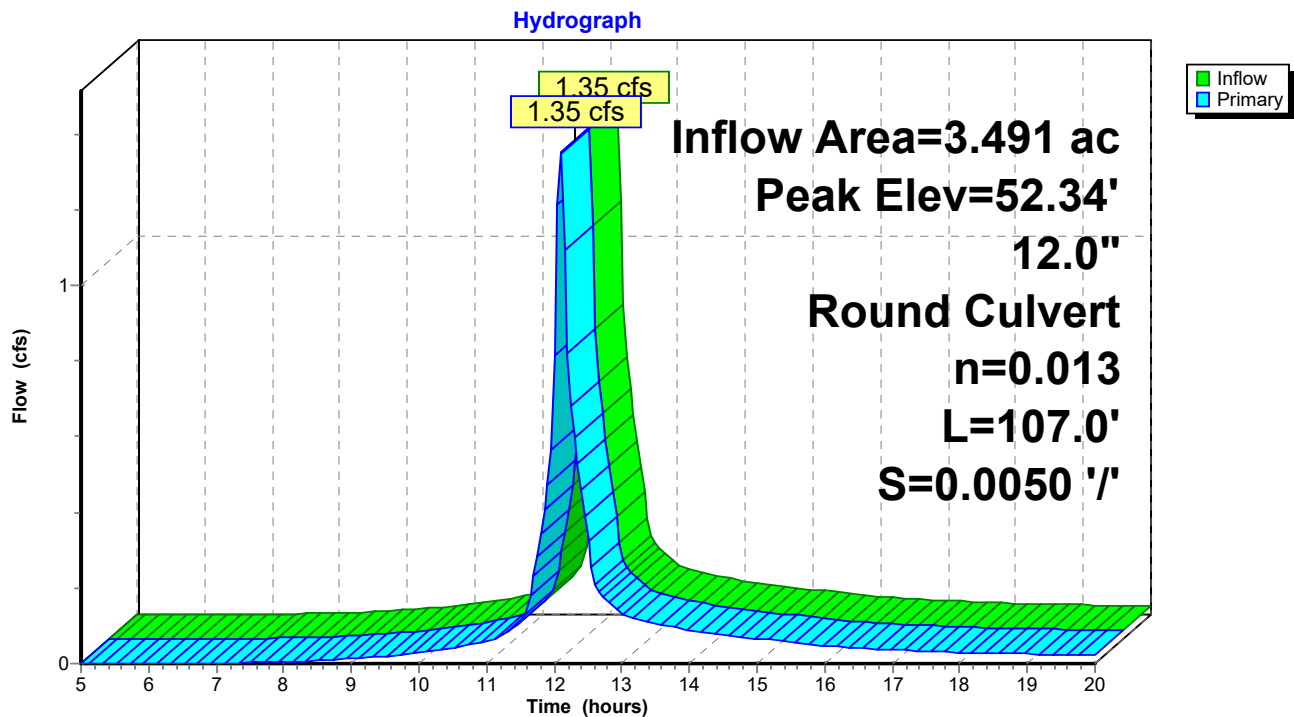
Peak Elev= 52.34' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	51.60'	12.0" Round Culvert L= 107.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.60' / 51.06' S= 0.0050 '/ Cc= 0.900 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



Summary for Pond 170P: CB 9

[57] Hint: Peaked at 48.88' (Flood elevation advised)

Inflow Area = 0.392 ac, 53.13% Impervious, Inflow Depth > 1.76" 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 171P : DMH 6

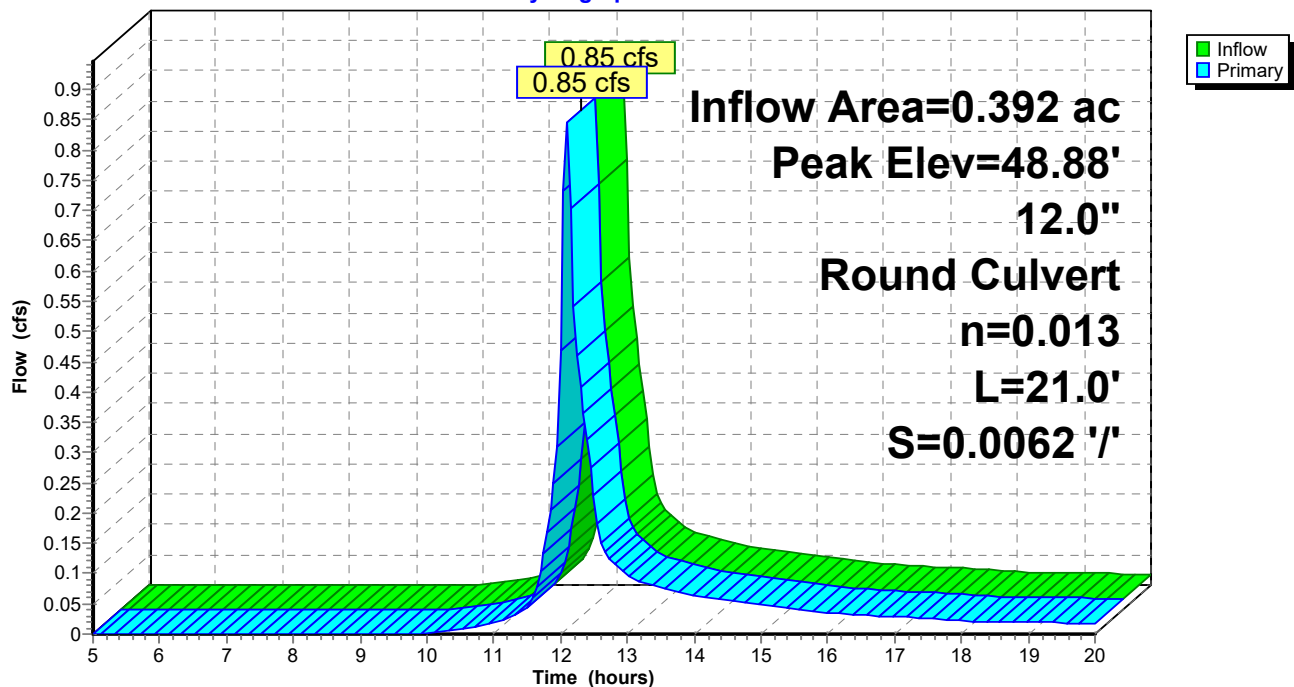
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 48.88' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	48.30'	12.0" Round Culvert L= 21.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.30' / 48.17' S= 0.0062 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.84 cfs @ 12.10 hrs HW=48.88' (Free Discharge)
 1=Culvert (Barrel Controls 0.84 cfs @ 2.58 fps)

Pond 170P: CB 9

Hydrograph



Summary for Pond 171P: DMH 6

[57] Hint: Peaked at 49.21' (Flood elevation advised)

[81] Warning: Exceeded Pond 61P by 0.34' @ 12.10 hrs

[81] Warning: Exceeded Pond 170P by 0.33' @ 12.10 hrs

[79] Warning: Submerged Pond 175P Primary device # 1 INLET by 0.94'

Inflow Area = 1.526 ac, 62.32% Impervious, Inflow Depth > 2.21" for 10-Year event
 Inflow = 4.14 cfs @ 12.09 hrs, Volume= 0.281 af
 Outflow = 4.14 cfs @ 12.09 hrs, Volume= 0.281 af, Atten= 0%, Lag= 0.0 min
 Primary = 4.14 cfs @ 12.09 hrs, Volume= 0.281 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= 49.21' @ 12.09 hrs

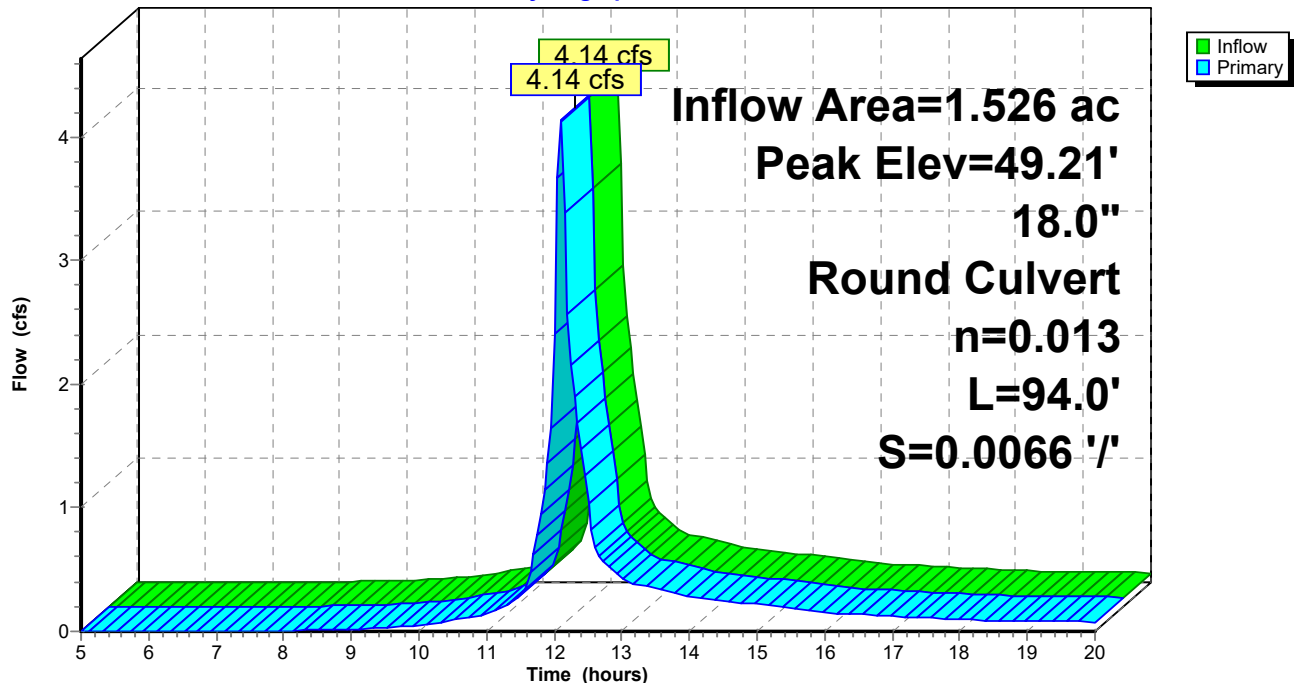
Device	Routing	Invert	Outlet Devices
#1	Primary	48.07'	18.0" Round Culvert L= 94.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.07' / 47.45' S= 0.0066 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=4.07 cfs @ 12.09 hrs HW=49.20' (Free Discharge)

↑1=Culvert (Inlet Controls 4.07 cfs @ 2.86 fps)

Pond 171P: DMH 6

Hydrograph



Summary for Pond 172P: CB 16

[57] Hint: Peaked at 52.57' (Flood elevation advised)

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

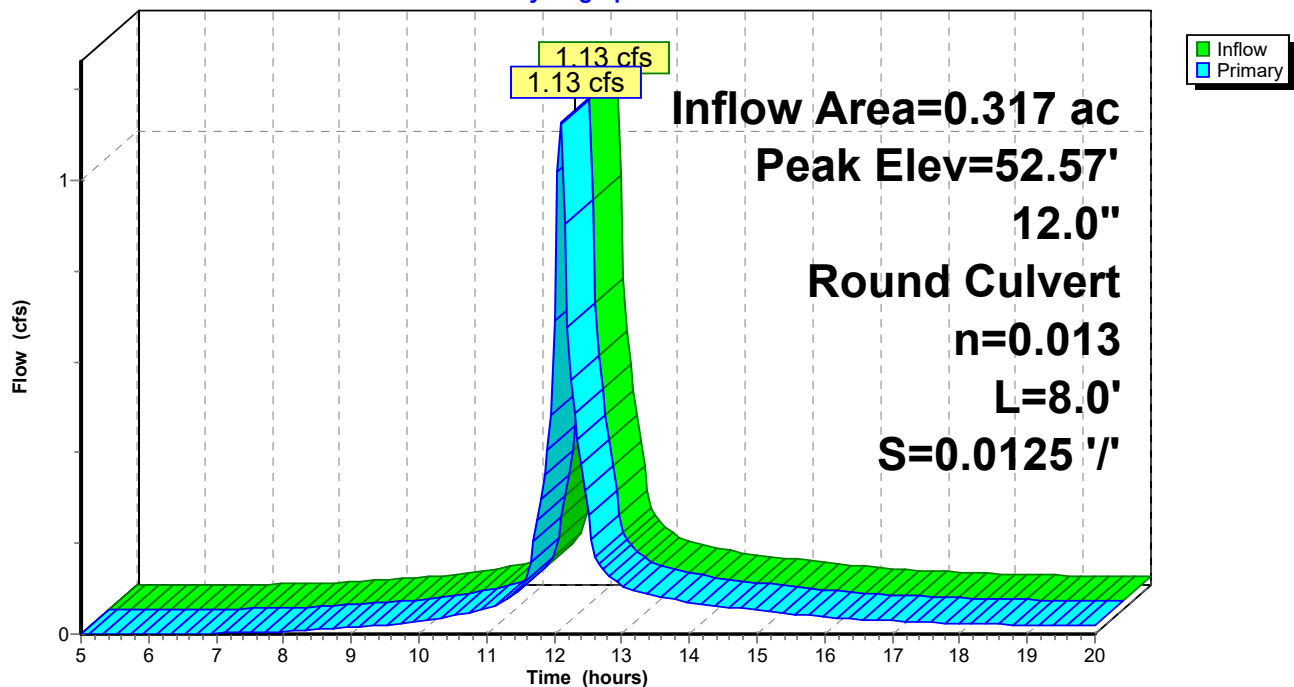
Device	Routing	Invert	Outlet Devices
#1	Primary	51.90'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.90' / 51.80' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 52.28' (Flood elevation advised)

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

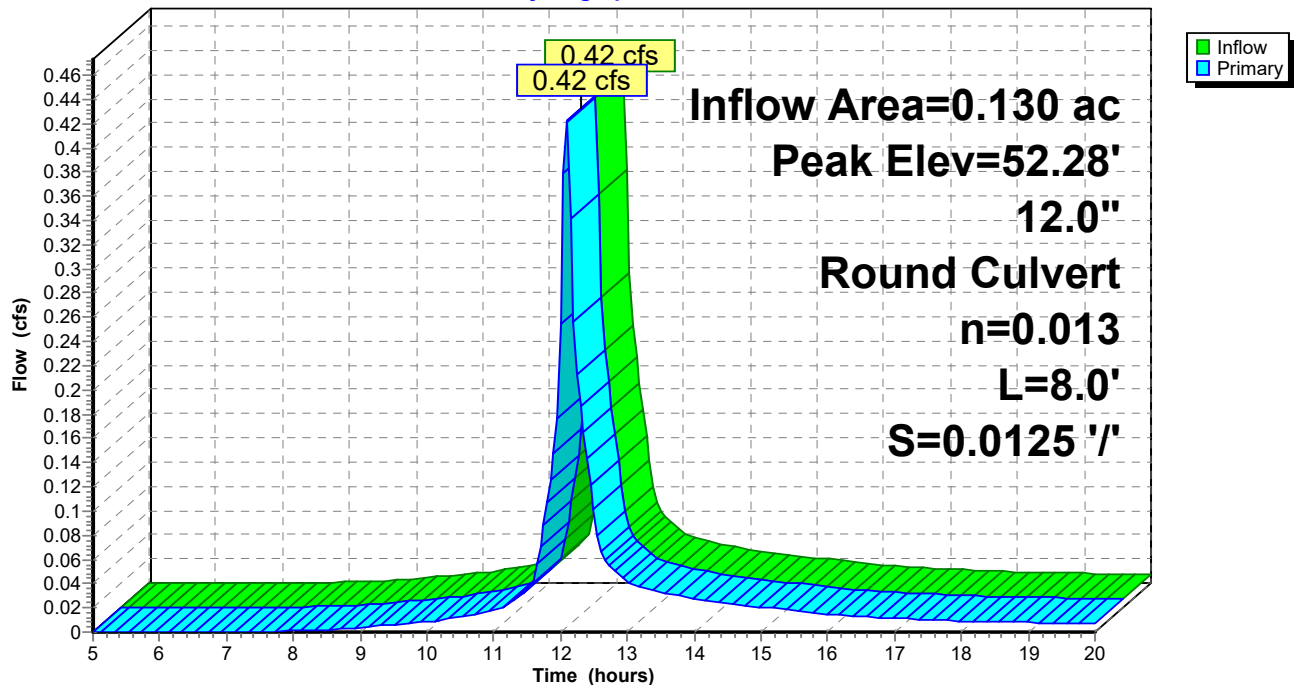
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 52.28' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	51.90'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.90' / 51.80' S= 0.0125 '/' Cc= 0.900 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

[57] Hint: Peaked at 51.90' (Flood elevation advised)

[79] Warning: Submerged Pond 169P Primary device # 1 INLET by 0.30'

[79] Warning: Submerged Pond 172P Primary device # 1 OUTLET by 0.10'

[79] Warning: Submerged Pond 173P Primary device # 1 OUTLET by 0.10'

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 179P : DMH 8

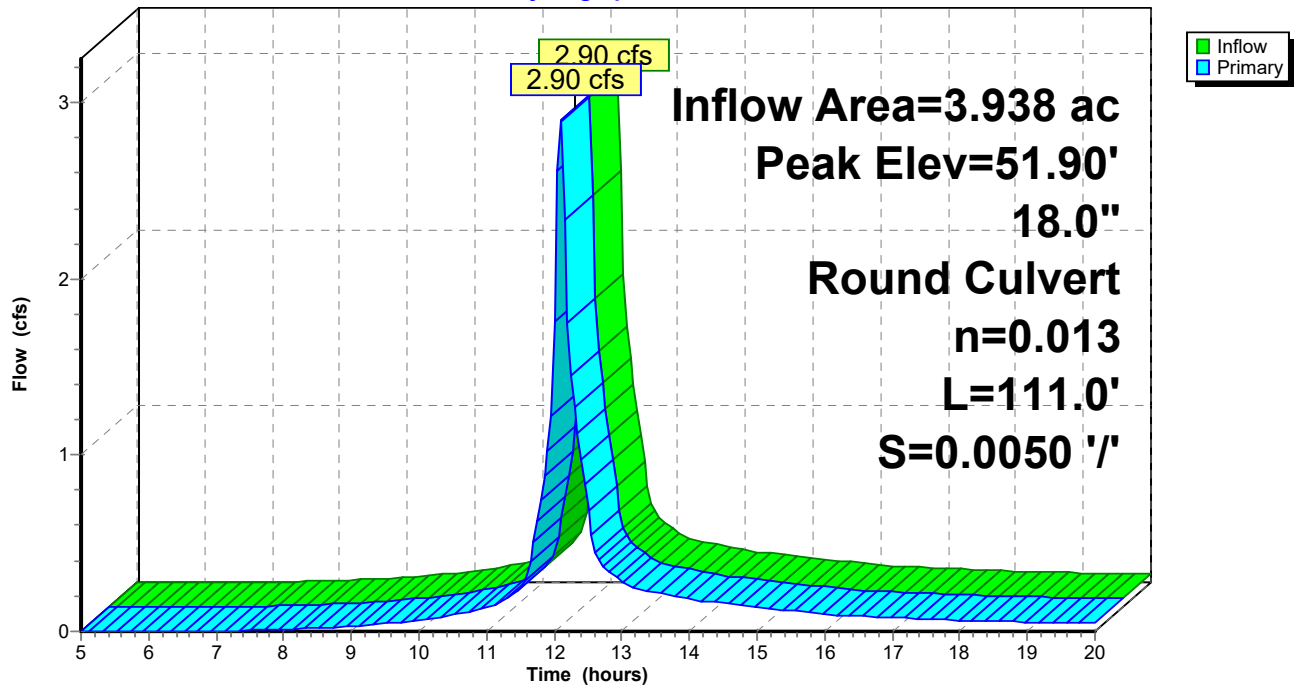
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 51.90' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.96'	18.0" Round Culvert L= 111.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.96' / 50.40' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=2.84 cfs @ 12.09 hrs HW=51.89' (Free Discharge)↑**1=Culvert** (Barrel Controls 2.84 cfs @ 3.54 fps)**Pond 174P: DMH 11**

Hydrograph



Summary for Pond 175P: DMH 5

[57] Hint: Peaked at 49.46' (Flood elevation advised)

[81] Warning: Exceeded Pond 176P by 0.30' @ 12.10 hrs

[81] Warning: Exceeded Pond 182P by 0.24' @ 12.10 hrs

Inflow Area = 0.870 ac, 64.72% Impervious, Inflow Depth > 2.33" for 10-Year event
 Inflow = 2.49 cfs @ 12.09 hrs, Volume= 0.169 af
 Outflow = 2.49 cfs @ 12.09 hrs, Volume= 0.169 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.49 cfs @ 12.09 hrs, Volume= 0.169 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= 49.46' @ 12.09 hrs

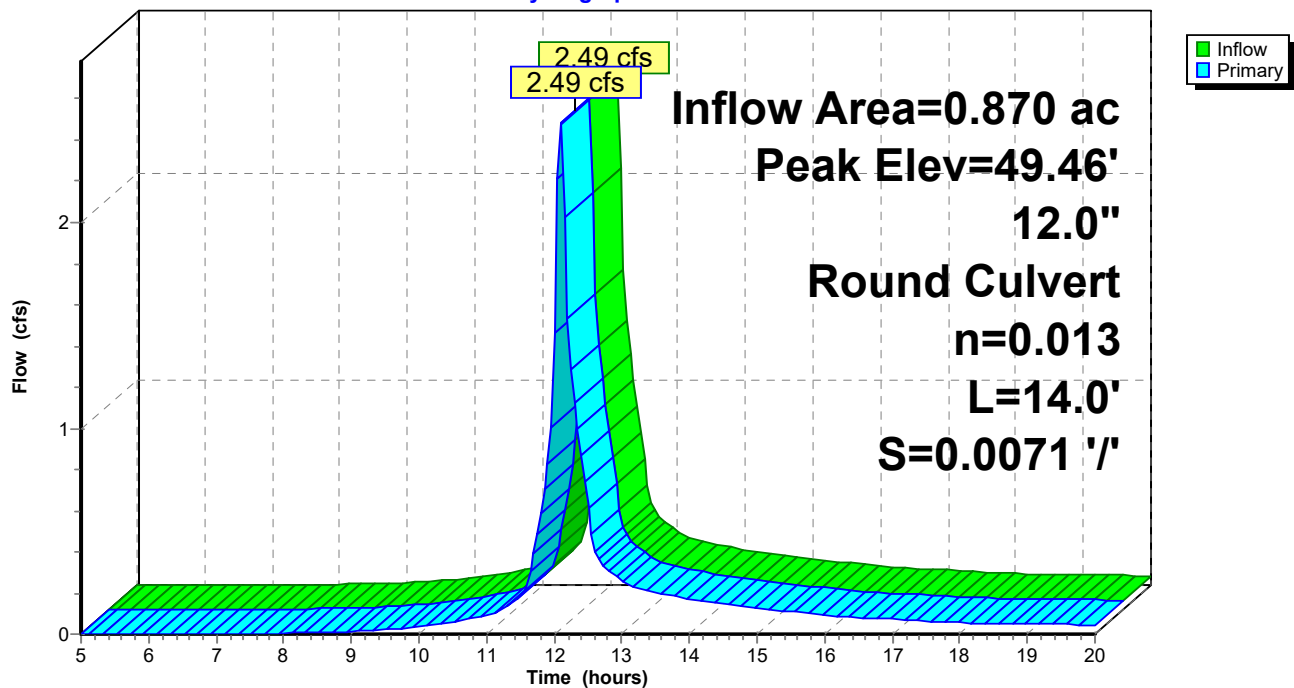
Device	Routing	Invert	Outlet Devices
#1	Primary	48.27'	12.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.27' / 48.17' S= 0.0071 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.45 cfs @ 12.09 hrs HW=49.45' (Free Discharge)

↑**1=Culvert** (Inlet Controls 2.45 cfs @ 3.13 fps)

Pond 175P: DMH 5

Hydrograph



Summary for Pond 176P: CB 6

[57] Hint: Peaked at 49.16' (Flood elevation advised)

Inflow Area = 0.477 ac, 57.77% Impervious, Inflow Depth > 1.99" for 10-Year event
 Inflow = 1.17 cfs @ 12.10 hrs, Volume= 0.079 af
 Outflow = 1.17 cfs @ 12.10 hrs, Volume= 0.079 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.17 cfs @ 12.10 hrs, Volume= 0.079 af
 Routed to Pond 175P : DMH 5

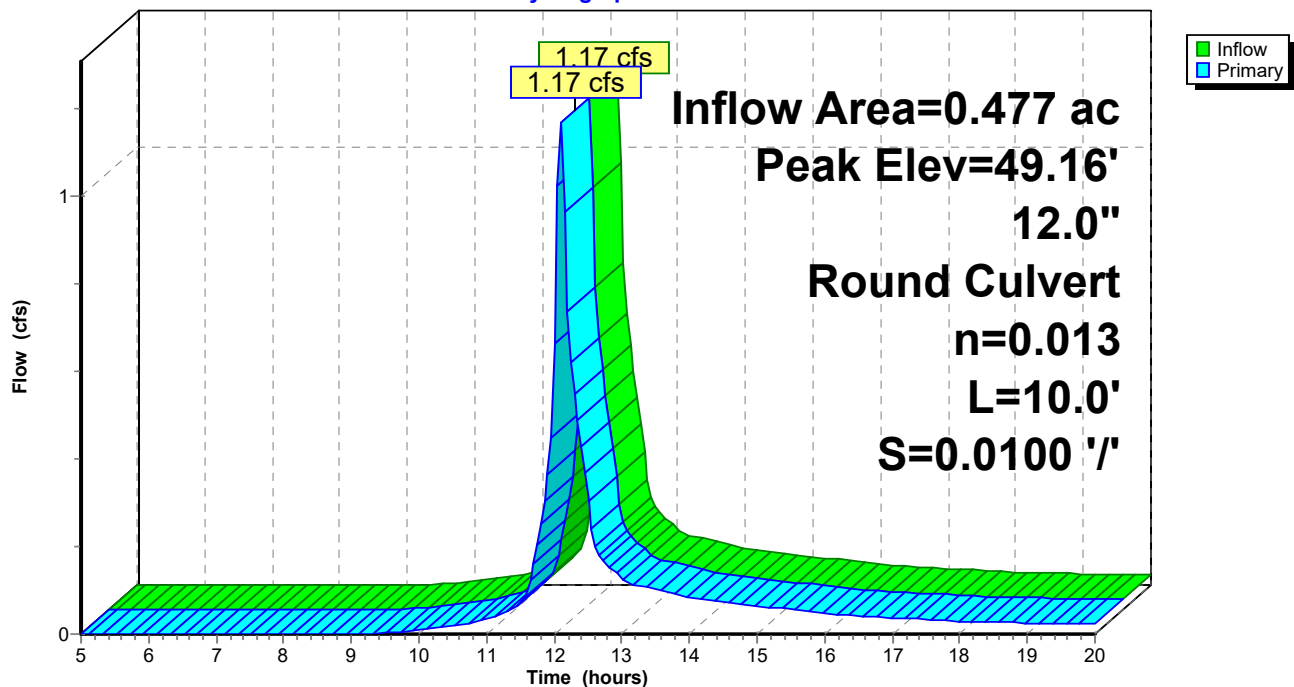
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 49.16' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	48.47'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.47' / 48.37' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.15 cfs @ 12.10 hrs HW=49.16' (Free Discharge)
 1=Culvert (Barrel Controls 1.15 cfs @ 2.82 fps)

Pond 176P: CB 6

Hydrograph



Summary for Pond 177P: CB 13

[57] Hint: Peaked at 51.11' (Flood elevation advised)

Inflow Area = 0.315 ac, 68.62% Impervious, Inflow Depth > 2.48" for 10-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 179P : DMH 8

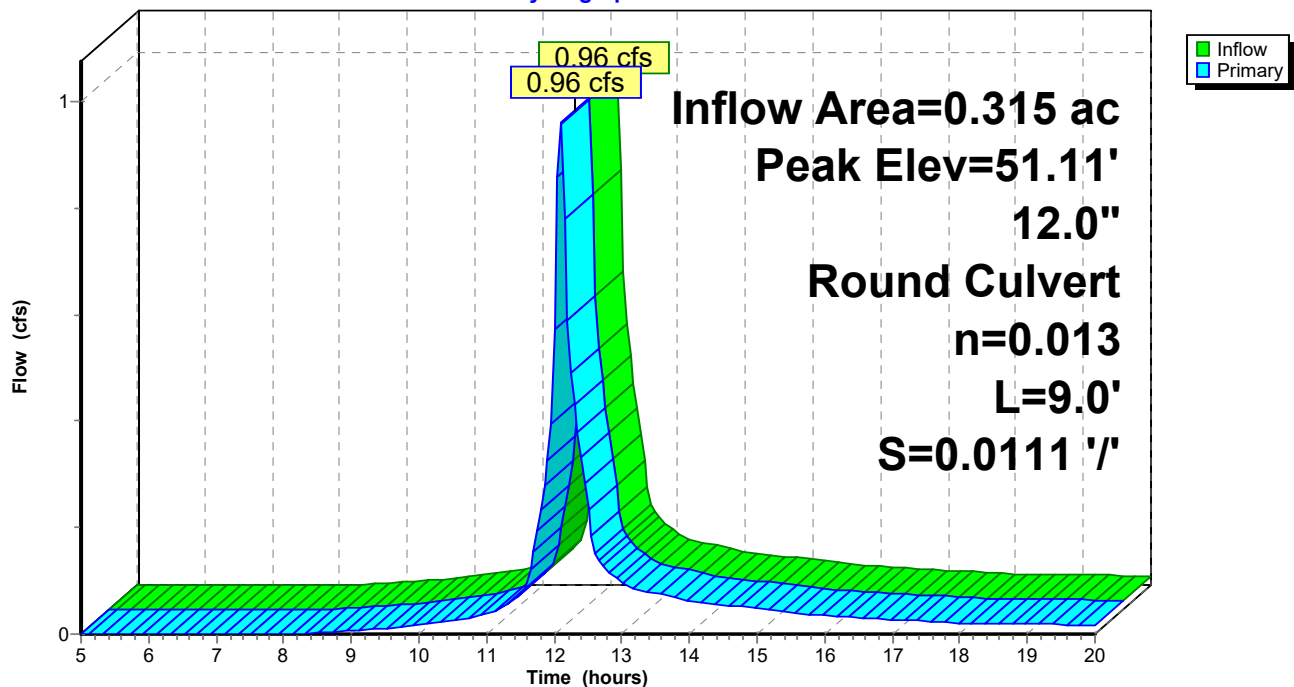
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 51.11' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.50'	12.0" Round Culvert L= 9.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.50' / 50.40' S= 0.0111 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.94 cfs @ 12.09 hrs HW=51.11' (Free Discharge)
 1=Culvert (Barrel Controls 0.94 cfs @ 2.71 fps)

Pond 177P: CB 13

Hydrograph



Summary for Pond 178P: CB 12

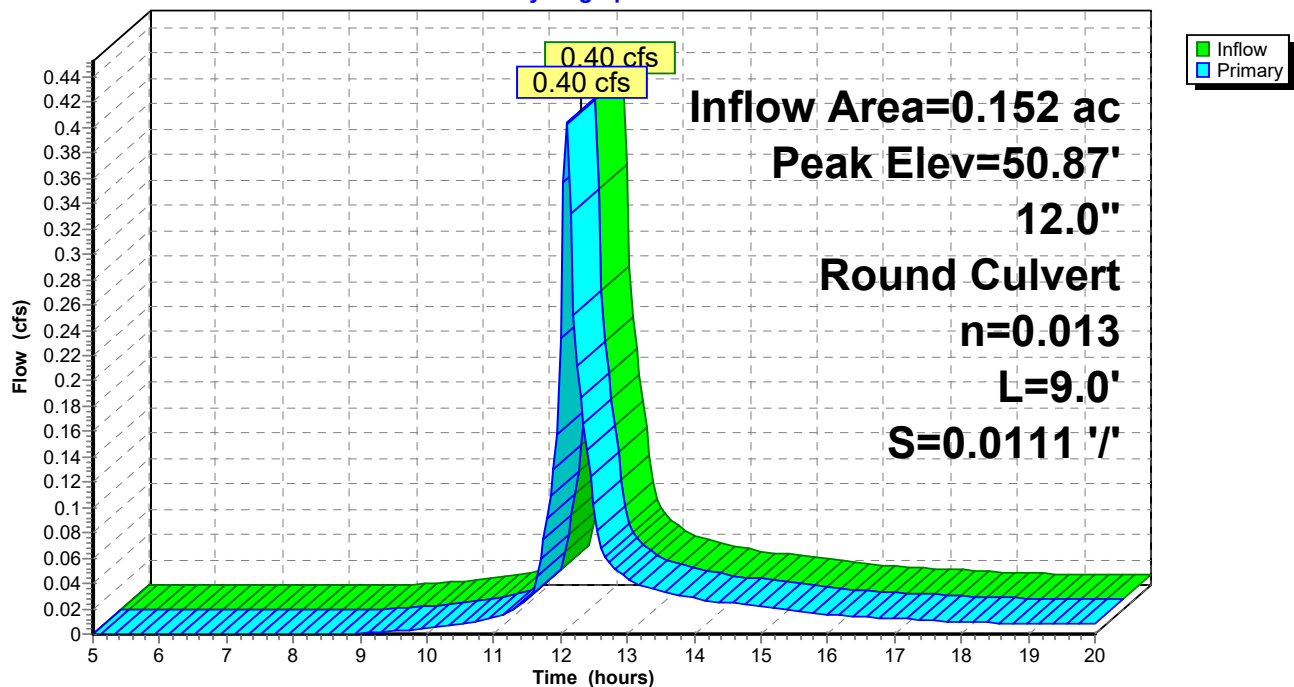
[57] Hint: Peaked at 50.87' (Flood elevation advised)

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= 50.87' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.50'	12.0" Round Culvert L= 9.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.50' / 50.40' S= 0.0111 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.40 cfs @ 12.09 hrs HW=50.87' (Free Discharge)
 1=Culvert (Barrel Controls 0.40 cfs @ 2.26 fps)

Pond 178P: CB 12**Hydrograph**

Summary for Pond 179P: DMH 8

[57] Hint: Peaked at 51.56' (Flood elevation advised)

[79] Warning: Submerged Pond 174P Primary device # 1 INLET by 0.60'

[81] Warning: Exceeded Pond 177P by 0.45' @ 12.10 hrs

[81] Warning: Exceeded Pond 178P by 0.69' @ 12.10 hrs

Inflow Area = 4.405 ac, 68.27% Impervious, Inflow Depth > 0.79" for 10-Year event
 Inflow = 4.27 cfs @ 12.09 hrs, Volume= 0.290 af
 Outflow = 4.27 cfs @ 12.09 hrs, Volume= 0.290 af, Atten= 0%, Lag= 0.0 min
 Primary = 4.27 cfs @ 12.09 hrs, Volume= 0.290 af
 Routed to Pond 180P : DMH 10

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 51.56' @ 12.09 hrs

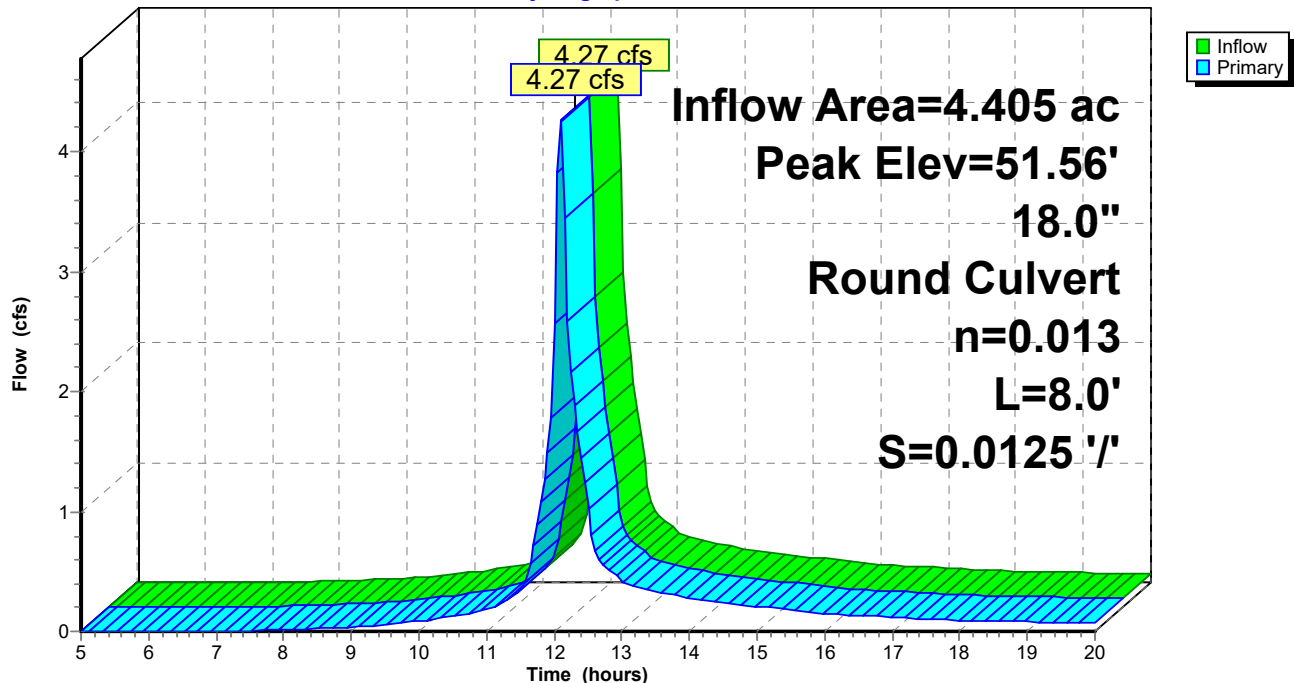
Device	Routing	Invert	Outlet Devices
#1	Primary	50.30'	18.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.30' / 50.20' S= 0.0125 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=4.19 cfs @ 12.09 hrs HW=51.55' (Free Discharge)

↑**1=Culvert** (Barrel Controls 4.19 cfs @ 3.62 fps)

Pond 179P: DMH 8

Hydrograph



Summary for Pond 180P: DMH 10

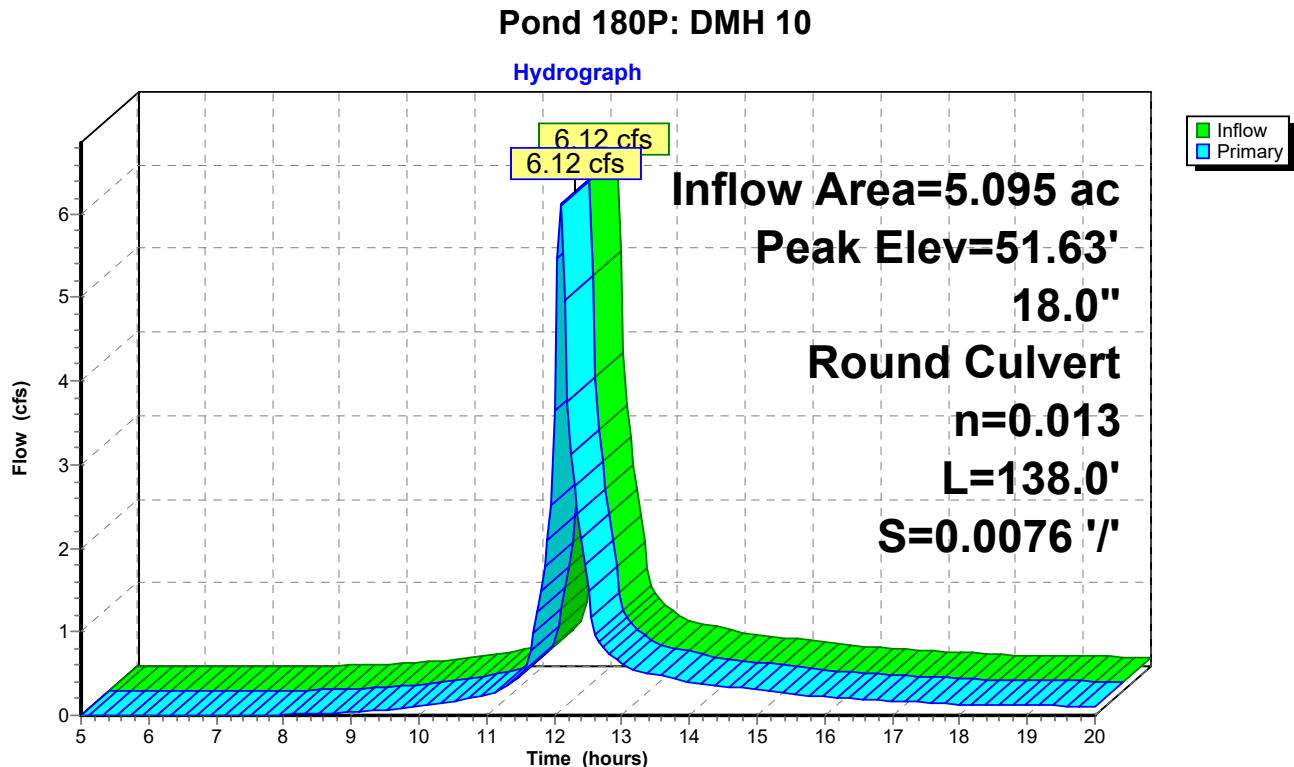
[57] Hint: Peaked at 51.63' (Flood elevation advised)
 [81] Warning: Exceeded Pond 164P by 0.56' @ 12.10 hrs
 [81] Warning: Exceeded Pond 179P by 0.07' @ 12.10 hrs
 [81] Warning: Exceeded Pond 181P by 0.96' @ 12.10 hrs

Inflow Area = 5.095 ac, 67.32% Impervious, Inflow Depth > 0.98" for 10-Year event
 Inflow = 6.12 cfs @ 12.09 hrs, Volume= 0.415 af
 Outflow = 6.12 cfs @ 12.09 hrs, Volume= 0.415 af, Atten= 0%, Lag= 0.0 min
 Primary = 6.12 cfs @ 12.09 hrs, Volume= 0.415 af
 Routed to Pond 192P : Sub. Inf. 1

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	50.05'	18.0" Round Culvert L= 138.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.05' / 49.00' S= 0.0076 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=6.01 cfs @ 12.09 hrs HW=51.60' (Free Discharge)
 ↑ **1=Culvert** (Inlet Controls 6.01 cfs @ 3.40 fps)



Summary for Pond 181P: DMH

[57] Hint: Peaked at 50.66' (Flood elevation advised)

[79] Warning: Submerged Pond 167P Primary device # 1 INLET by 0.16'

[79] Warning: Submerged Pond 168P Primary device # 1 INLET by 0.16'

Inflow Area = 0.156 ac, 54.55% Impervious, Inflow Depth > 1.86" for 10-Year event
 Inflow = 0.36 cfs @ 12.10 hrs, Volume= 0.024 af
 Outflow = 0.36 cfs @ 12.10 hrs, Volume= 0.024 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.36 cfs @ 12.10 hrs, Volume= 0.024 af
 Routed to Pond 180P : DMH 10

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 50.66' @ 12.10 hrs

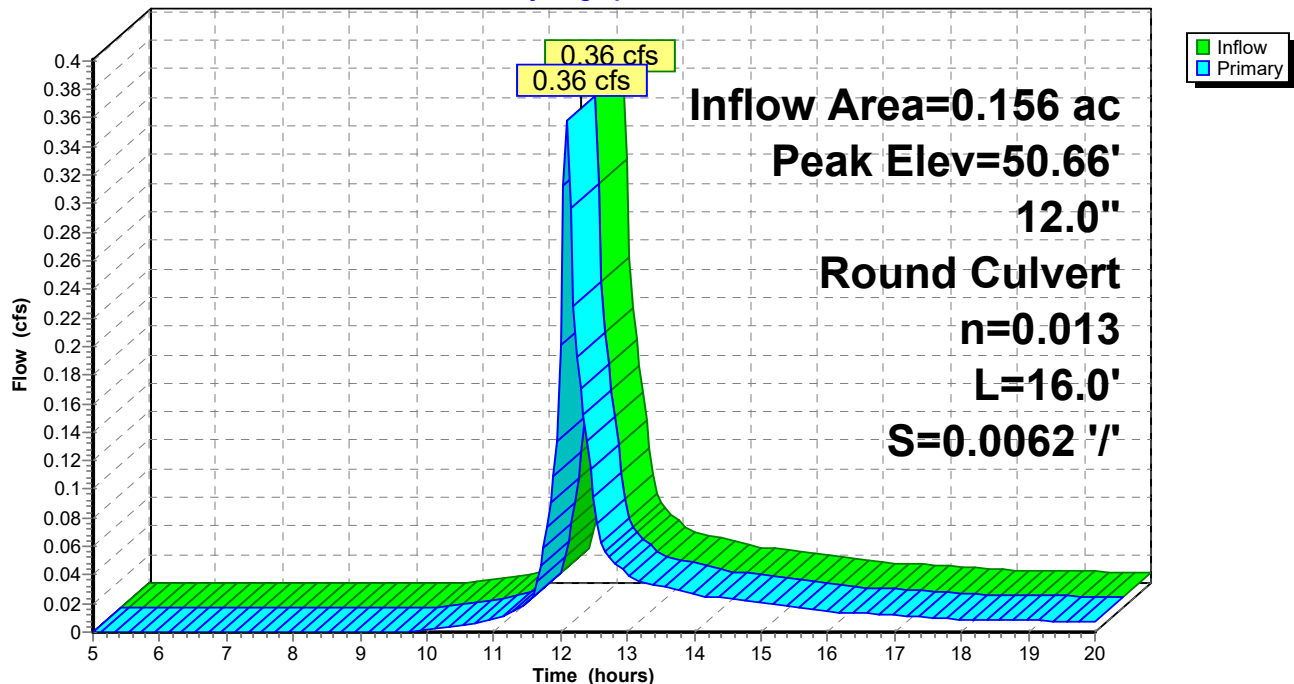
Device	Routing	Invert	Outlet Devices
#1	Primary	50.30'	12.0" Round Culvert L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.30' / 50.20' S= 0.0062 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.35 cfs @ 12.10 hrs HW=50.66' (Free Discharge)

↑1=Culvert (Barrel Controls 0.35 cfs @ 2.08 fps)

Pond 181P: DMH

Hydrograph



Summary for Pond 182P: CB 7

[57] Hint: Peaked at 49.22' (Flood elevation advised)

Inflow Area = 0.393 ac, 73.16% Impervious, Inflow Depth > 2.74" for 10-Year event
 Inflow = 1.32 cfs @ 12.09 hrs, Volume= 0.090 af
 Outflow = 1.32 cfs @ 12.09 hrs, Volume= 0.090 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.32 cfs @ 12.09 hrs, Volume= 0.090 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= 49.22' @ 12.09 hrs

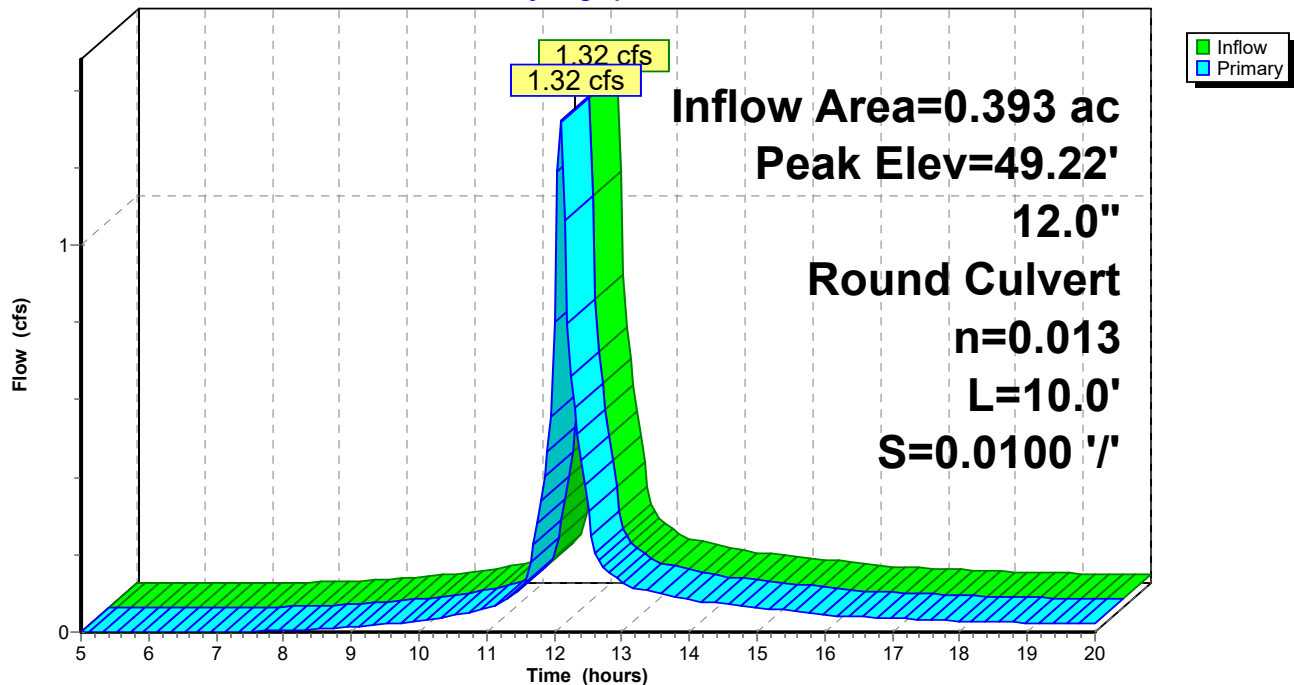
Device	Routing	Invert	Outlet Devices
#1	Primary	48.47'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.47' / 48.37' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.29 cfs @ 12.09 hrs HW=49.21' (Free Discharge)

1=Culvert (Barrel Controls 1.29 cfs @ 2.89 fps)

Pond 182P: CB 7

Hydrograph



Summary for Pond 184P: DMH 4A

[57] Hint: Peaked at 49.57' (Flood elevation advised)

[79] Warning: Submerged Pond 192P Primary device # 2 INLET by 0.07'

Inflow Area = 5.095 ac, 67.32% Impervious, Inflow Depth = 0.01" for 10-Year event
 Inflow = 0.16 cfs @ 12.45 hrs, Volume= 0.004 af
 Outflow = 0.16 cfs @ 12.45 hrs, Volume= 0.004 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.16 cfs @ 12.45 hrs, Volume= 0.004 af
 Routed to Pond 185P : DMH

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 49.57' @ 12.45 hrs

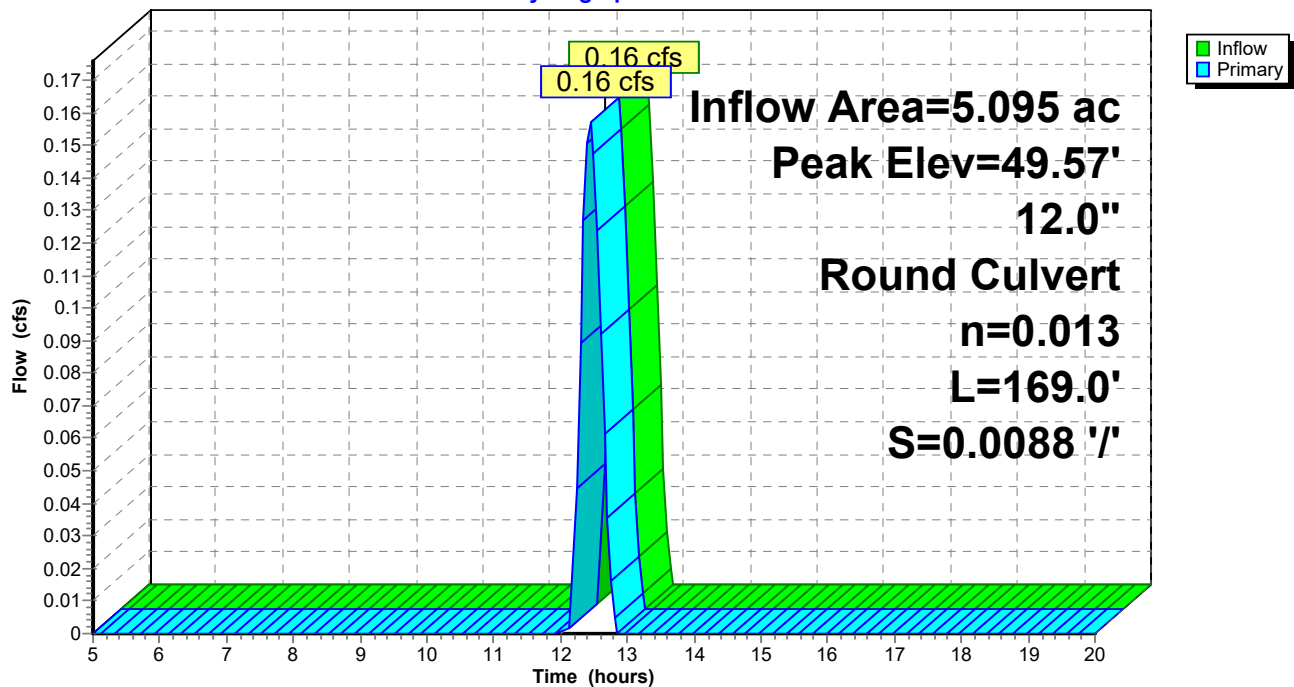
Device	Routing	Invert	Outlet Devices
#1	Primary	49.35'	12.0" Round Culvert L= 169.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 49.35' / 47.87' S= 0.0088 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.16 cfs @ 12.45 hrs HW=49.57' (Free Discharge)

↑1=Culvert (Inlet Controls 0.16 cfs @ 1.25 fps)

Pond 184P: DMH 4A

Hydrograph



Summary for Pond 185P: DMH

[57] Hint: Peaked at 48.43' (Flood elevation advised)

[79] Warning: Submerged Pond 184P Primary device # 1 OUTLET by 0.55'

[79] Warning: Submerged Pond 196P Primary device # 1 INLET by 0.42'

Inflow Area = 5.412 ac, 68.22% Impervious, Inflow Depth > 0.20" for 10-Year event
 Inflow = 1.25 cfs @ 12.09 hrs, Volume= 0.092 af
 Outflow = 1.25 cfs @ 12.09 hrs, Volume= 0.092 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.25 cfs @ 12.09 hrs, Volume= 0.092 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= 48.43' @ 12.09 hrs

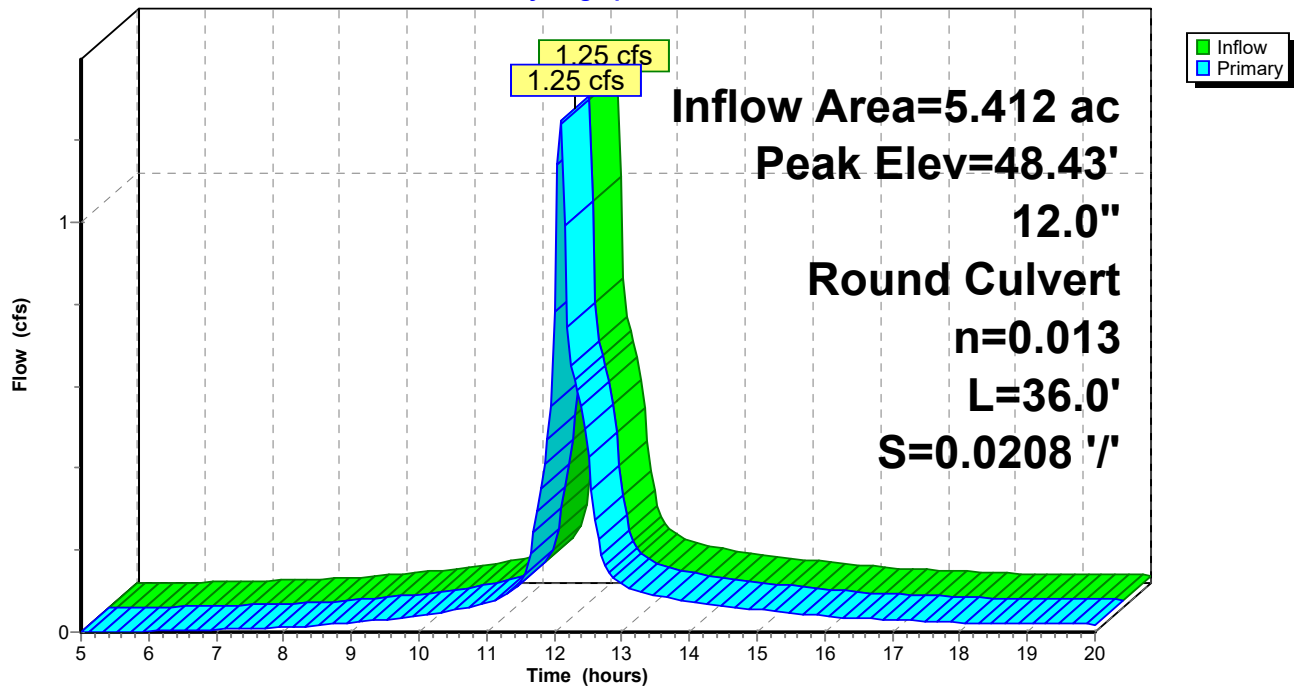
Device	Routing	Invert	Outlet Devices
#1	Primary	47.75'	12.0" Round Culvert L= 36.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.75' / 47.00' S= 0.0208 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.22 cfs @ 12.09 hrs HW=48.42' (Free Discharge)

↑**1=Culvert** (Inlet Controls 1.22 cfs @ 2.19 fps)

Pond 185P: DMH

Hydrograph



Summary for Pond 186P: Constructed Wetland 1

[81] Warning: Exceeded Pond 199P by 1.92' @ 19.95 hrs

[81] Warning: Exceeded Pond 200P by 1.54' @ 19.95 hrs

Inflow Area = 3.257 ac, 53.58% Impervious, Inflow Depth > 1.78" for 10-Year event
 Inflow = 6.87 cfs @ 12.10 hrs, Volume= 0.483 af
 Outflow = 0.04 cfs @ 20.00 hrs, Volume= 0.026 af, Atten= 99%, Lag= 474.2 min
 Primary = 0.04 cfs @ 20.00 hrs, Volume= 0.026 af
 Routed to Link 203L : 3A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 48.36' @ 20.00 hrs Surf.Area= 10,289 sf Storage= 19,900 cf

Plug-Flow detention time= 327.5 min calculated for 0.026 af (5% of inflow)
 Center-of-Mass det. time= 155.5 min (955.8 - 800.3)

Volume	Invert	Avail.Storage	Storage Description
#1	46.00'	38,996 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

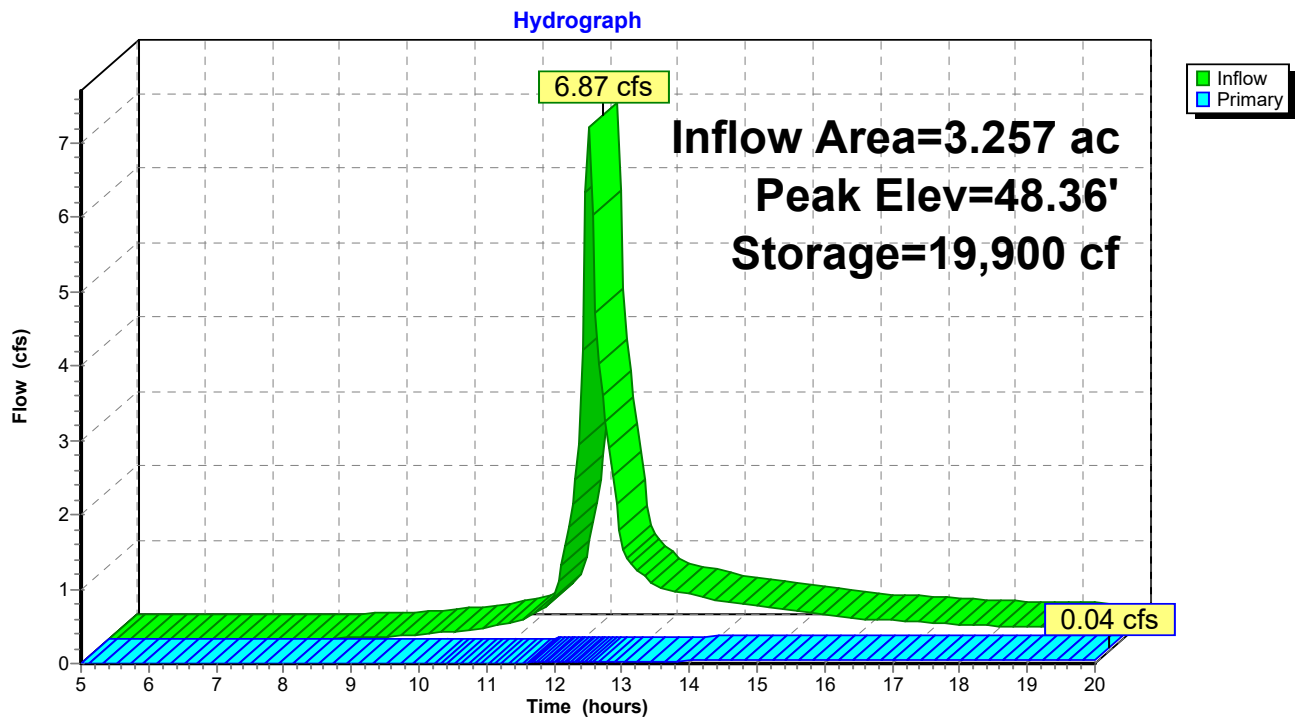
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
46.00	6,632	0	0
47.00	8,141	7,387	7,387
48.00	9,706	8,924	16,310
49.00	11,329	10,518	26,828
50.00	13,007	12,168	38,996

Device	Routing	Invert	Outlet Devices
#1	Primary	46.00'	12.0" Round Culvert L= 186.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 46.00' / 43.50' S= 0.0134 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	46.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	49.20'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.04 cfs @ 20.00 hrs HW=48.36' (Free Discharge)

- 1=Culvert (Passes 0.04 cfs of 4.07 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.04 cfs @ 7.33 fps)
- 3=Orifice/Grate (Controls 0.00 cfs)

Pond 186P: Constructed Wetland 1



Summary for Pond 187P: Constructed Wetland 3

[79] Warning: Submerged Pond 60P Primary device # 1 OUTLET by 0.57'

Inflow Area = 1.994 ac, 68.75% Impervious, Inflow Depth > 2.73" for 10-Year event
 Inflow = 6.77 cfs @ 12.15 hrs, Volume= 0.454 af
 Outflow = 5.58 cfs @ 12.25 hrs, Volume= 0.389 af, Atten= 18%, Lag= 5.9 min
 Primary = 5.58 cfs @ 12.25 hrs, Volume= 0.389 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' @ 12.25 hrs Surf.Area= 3,534 sf Storage= 4,306 cf

Plug-Flow detention time= 65.2 min calculated for 0.389 af (86% of inflow)
 Center-of-Mass det. time= 24.5 min (834.4 - 809.8)

Volume	Invert	Avail.Storage	Storage Description
#1	55.00'	10,466 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

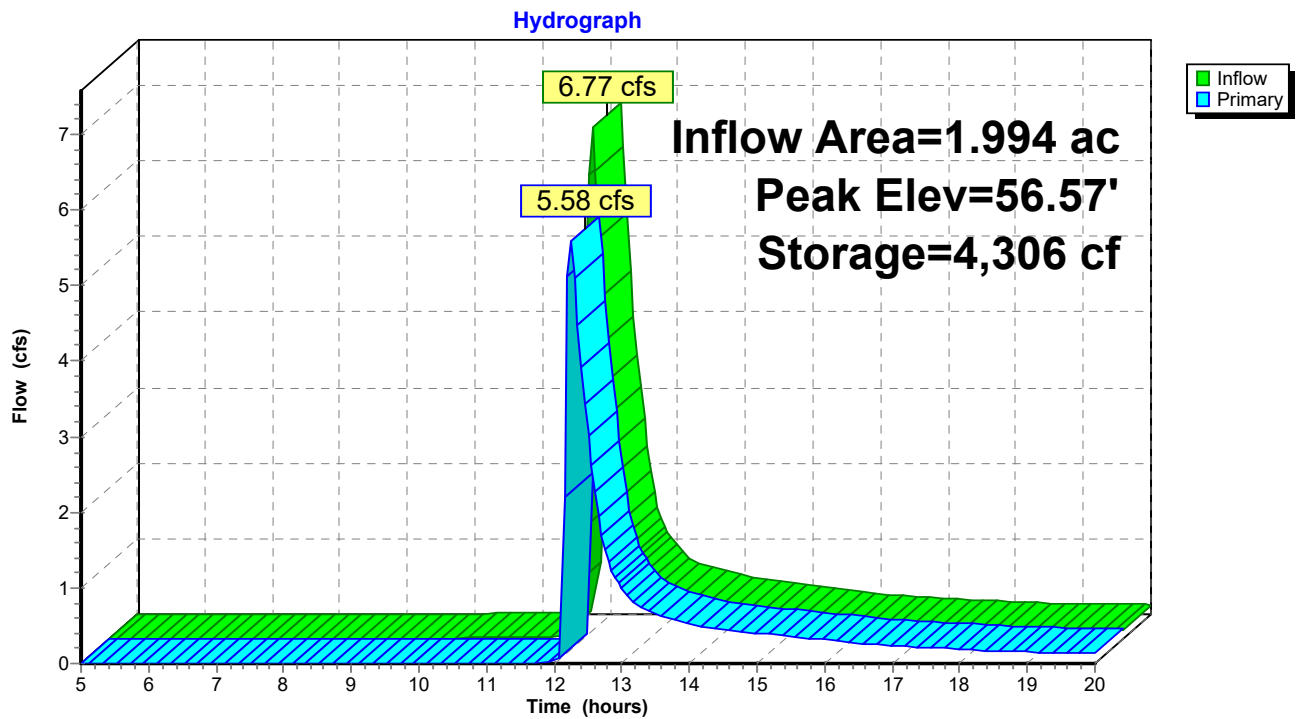
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
55.00	1,991	0	0
56.00	2,932	2,462	2,462
57.00	3,987	3,460	5,921
58.00	5,102	4,545	10,466

Device	Routing	Invert	Outlet Devices
#1	Primary	55.00'	24.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 55.00' / 54.00' S= 0.0500 ' S= 0.0500 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf
#2	Device 1	55.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	56.00'	4.0" Vert. Orifice/Grate X 3.00 C= 0.600 Limited to weir flow at low heads
#4	Device 1	56.25'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=5.57 cfs @ 12.25 hrs HW=56.57' (Free Discharge)

1=Culvert (Passes 5.57 cfs of 8.91 cfs potential flow)
 2=Orifice/Grate (Orifice Controls 0.03 cfs @ 5.95 fps)
 3=Orifice/Grate (Orifice Controls 0.80 cfs @ 3.06 fps)
 4=Orifice/Grate (Weir Controls 4.74 cfs @ 1.85 fps)

Pond 187P: Constructed Wetland 3



Summary for Pond 188P: CB 3

[57] Hint: Peaked at 47.91' (Flood elevation advised)

Inflow Area = 0.718 ac, 28.78% Impervious, Inflow Depth > 0.54" for 10-Year event
 Inflow = 0.30 cfs @ 12.14 hrs, Volume= 0.032 af
 Outflow = 0.30 cfs @ 12.14 hrs, Volume= 0.032 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.30 cfs @ 12.14 hrs, Volume= 0.032 af
 Routed to Pond 190P : DMH 3

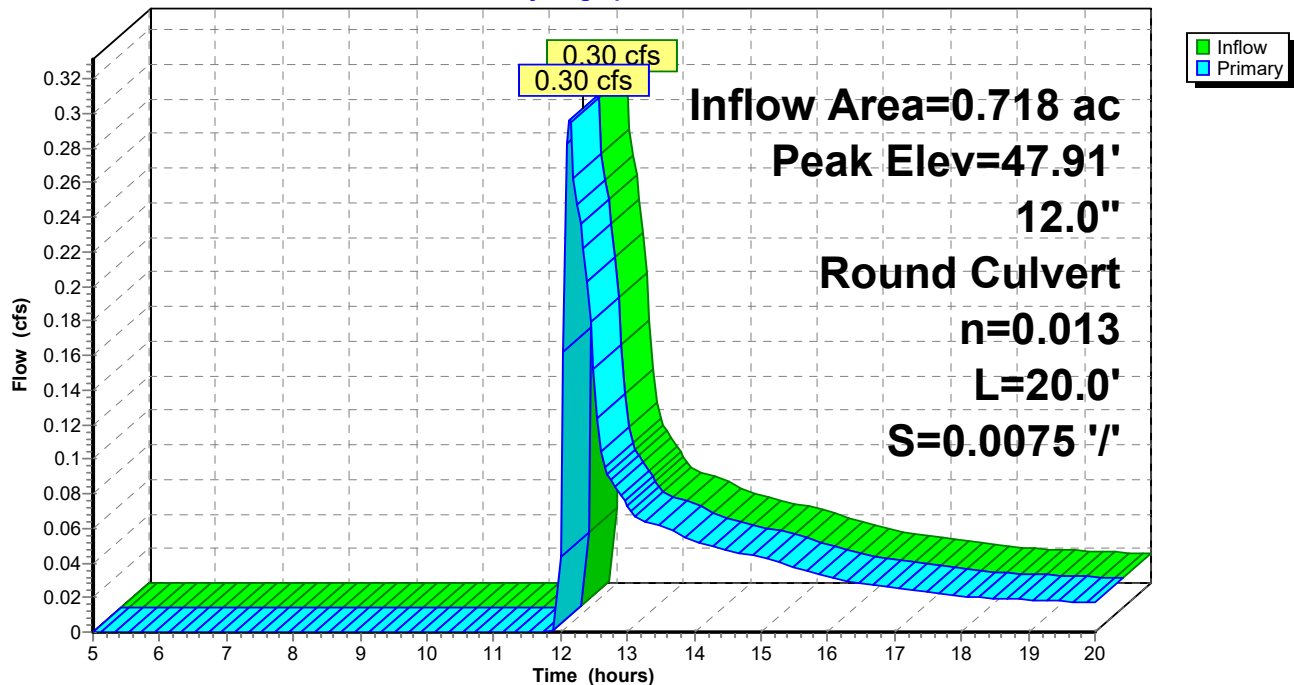
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 47.91' @ 12.14 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	47.60'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.60' / 47.45' S= 0.0075 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.29 cfs @ 12.14 hrs HW=47.91' (Free Discharge)
 ↳ **1=Culvert** (Barrel Controls 0.29 cfs @ 2.11 fps)

Pond 188P: CB 3

Hydrograph



Summary for Pond 189P: CB 4

[57] Hint: Peaked at 48.54' (Flood elevation advised)

Inflow Area = 0.642 ac, 65.44% Impervious, Inflow Depth > 2.39" for 10-Year event
 Inflow = 1.90 cfs @ 12.09 hrs, Volume= 0.128 af
 Outflow = 1.90 cfs @ 12.09 hrs, Volume= 0.128 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.90 cfs @ 12.09 hrs, Volume= 0.128 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= 48.54' @ 12.09 hrs

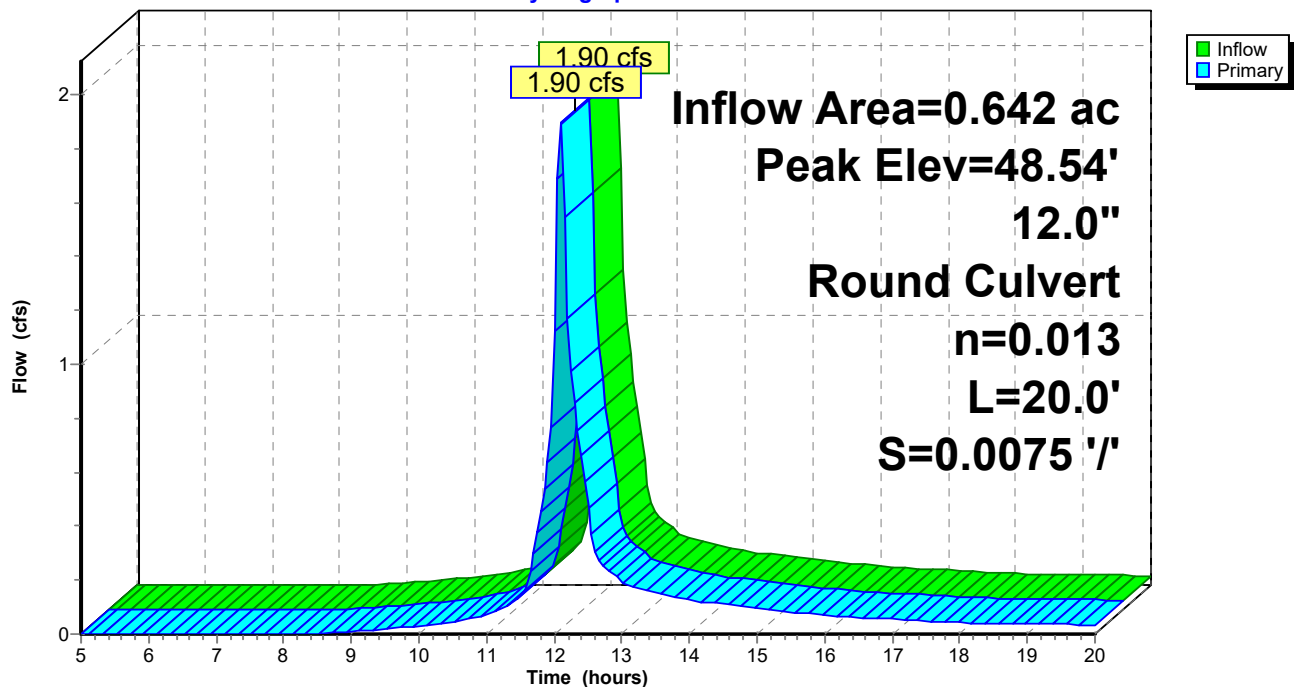
Device	Routing	Invert	Outlet Devices
#1	Primary	47.60'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.60' / 47.45' S= 0.0075 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.86 cfs @ 12.09 hrs HW=48.53' (Free Discharge)

1=Culvert (Barrel Controls 1.86 cfs @ 3.20 fps)

Pond 189P: CB 4

Hydrograph



Summary for Pond 190P: DMH 3

[57] Hint: Peaked at 48.98' (Flood elevation advised)

[79] Warning: Submerged Pond 171P Primary device # 1 INLET by 0.91'

[81] Warning: Exceeded Pond 188P by 1.08' @ 12.10 hrs

[81] Warning: Exceeded Pond 189P by 0.44' @ 12.10 hrs

Inflow Area = 2.886 ac, 54.67% Impervious, Inflow Depth > 1.83" for 10-Year event
 Inflow = 6.31 cfs @ 12.10 hrs, Volume= 0.441 af
 Outflow = 6.31 cfs @ 12.10 hrs, Volume= 0.441 af, Atten= 0%, Lag= 0.0 min
 Primary = 6.31 cfs @ 12.10 hrs, Volume= 0.441 af
 Routed to Pond 199P : DMH 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 48.98' @ 12.10 hrs

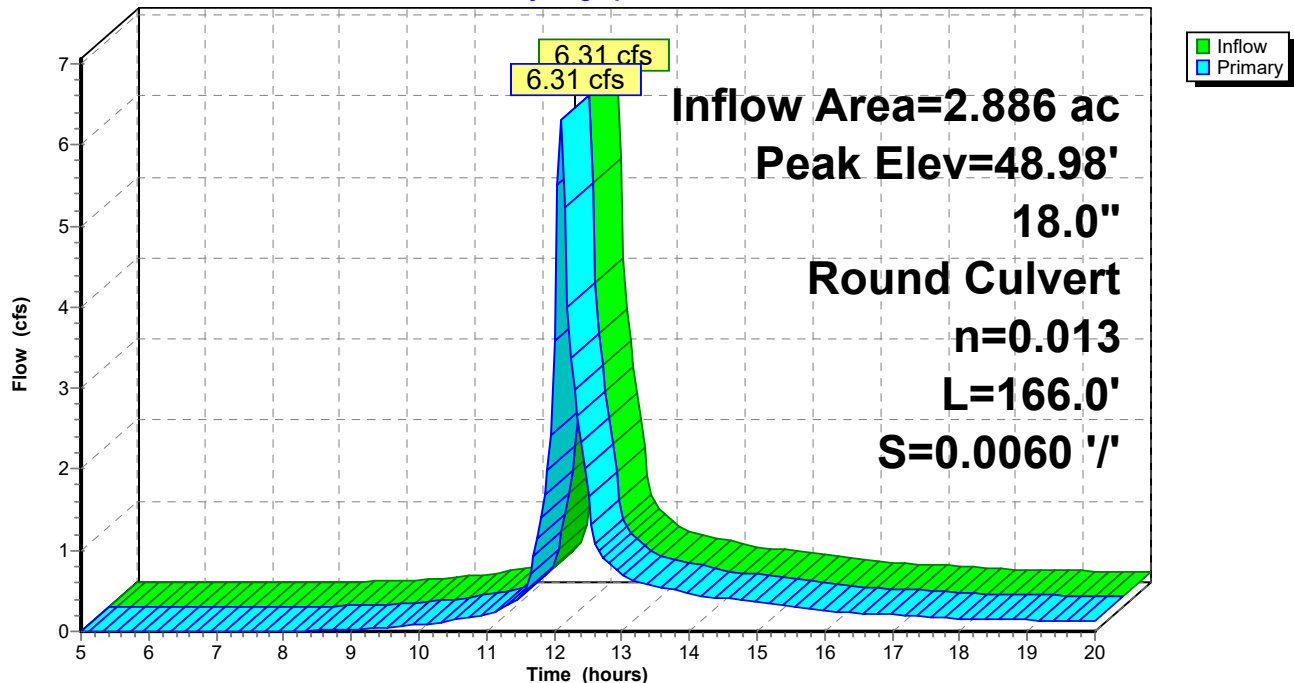
Device	Routing	Invert	Outlet Devices
#1	Primary	47.35'	18.0" Round Culvert L= 166.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.35' / 46.35' S= 0.0060 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=6.24 cfs @ 12.10 hrs HW=48.96' (Free Discharge)

↑**1=Culvert** (Inlet Controls 6.24 cfs @ 3.53 fps)

Pond 190P: DMH 3

Hydrograph



Summary for Pond 191P: CB 42

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 51.14' (Flood elevation advised)

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

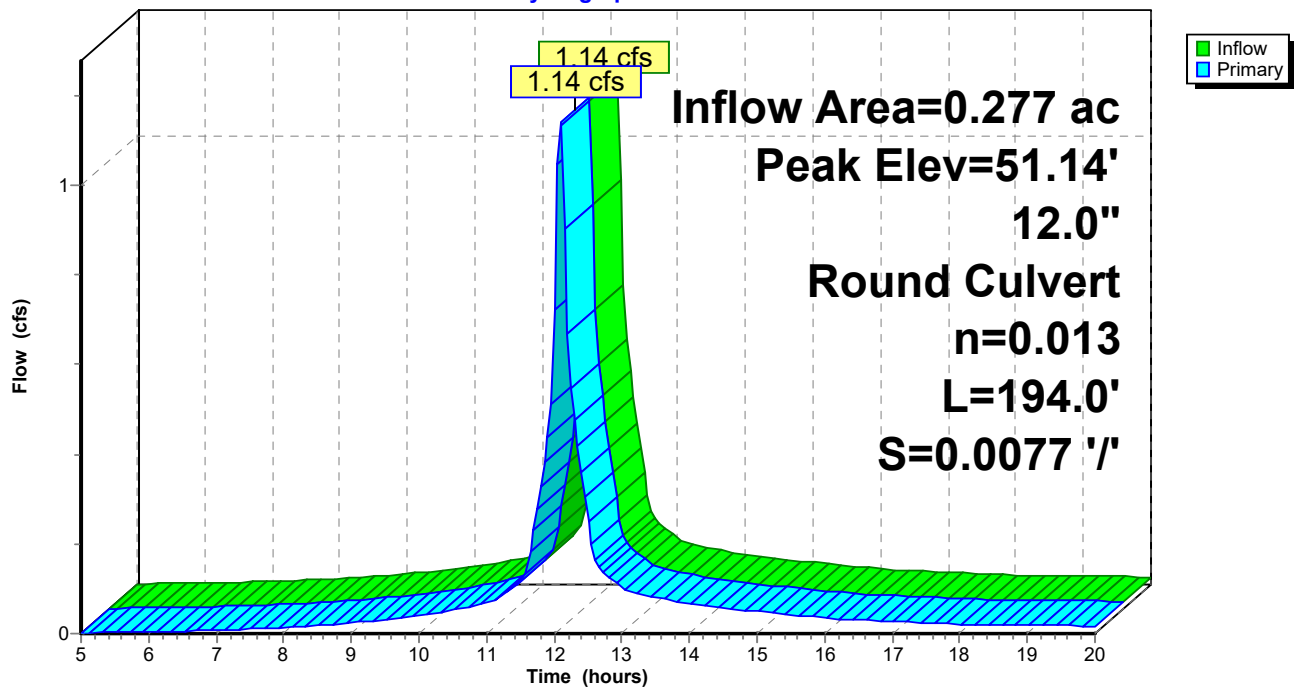
Device	Routing	Invert	Outlet Devices
#1	Primary	50.50'	12.0" Round Culvert L= 194.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.50' / 49.00' S= 0.0077 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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. 1

[79] Warning: Submerged Pond 180P Primary device # 1 OUTLET by 0.72'

Inflow Area = 5.095 ac, 67.32% Impervious, Inflow Depth > 0.98" for 10-Year event
 Inflow = 6.12 cfs @ 12.09 hrs, Volume= 0.415 af
 Outflow = 1.83 cfs @ 12.45 hrs, Volume= 0.415 af, Atten= 70%, Lag= 21.2 min
 Discarded = 1.68 cfs @ 12.45 hrs, Volume= 0.411 af
 Primary = 0.16 cfs @ 12.45 hrs, Volume= 0.004 af
 Routed to Pond 184P : DMH 4A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 49.72' @ 12.45 hrs Surf.Area= 0.125 ac Storage= 0.099 af

Plug-Flow detention time= 16.9 min calculated for 0.415 af (100% of inflow)
 Center-of-Mass det. time= 16.7 min (806.2 - 789.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	48.50'	0.111 af	72.75'W x 74.82'L x 3.50'H Field A 0.437 af Overall - 0.160 af Embedded = 0.277 af x 40.0% Voids
#2A	49.00'	0.160 af	ADS_StormTech SC-740 b +Cap x 150 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 150 Chambers in 15 Rows Cap Storage= 2.7 cf x 2 x 15 rows = 79.6 cf
0.271 af			Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	48.50'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 46.50'
#2	Primary	49.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 49.50' / 49.40' S= 0.0100 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Primary	51.00'	4.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=1.68 cfs @ 12.45 hrs HW=49.72' (Free Discharge)
 ↗ **1=Exfiltration** (Controls 1.68 cfs)

Primary OutFlow Max=0.16 cfs @ 12.45 hrs HW=49.72' (Free Discharge)
 ↗ **2=Culvert** (Barrel Controls 0.16 cfs @ 1.84 fps)
 ↗ **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond 192P: Sub. Inf. 1 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 15 rows = 79.6 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

10 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 72.82' Row Length +12.0" End Stone x 2 = 74.82' Base Length

15 Rows x 51.0" Wide + 6.0" Spacing x 14 + 12.0" Side Stone x 2 = 72.75' Base Width

6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

150 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 15 Rows = 6,970.7 cf Chamber Storage

19,050.2 cf Field - 6,970.7 cf Chambers = 12,079.5 cf Stone x 40.0% Voids = 4,831.8 cf Stone Storage

Chamber Storage + Stone Storage = 11,802.5 cf = 0.271 af

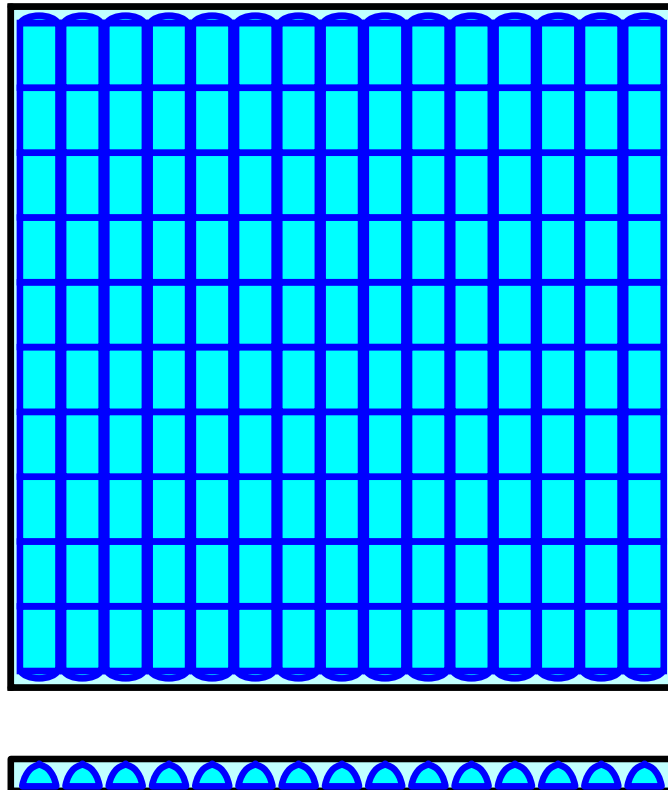
Overall Storage Efficiency = 62.0%

Overall System Size = 74.82' x 72.75' x 3.50'

150 Chambers

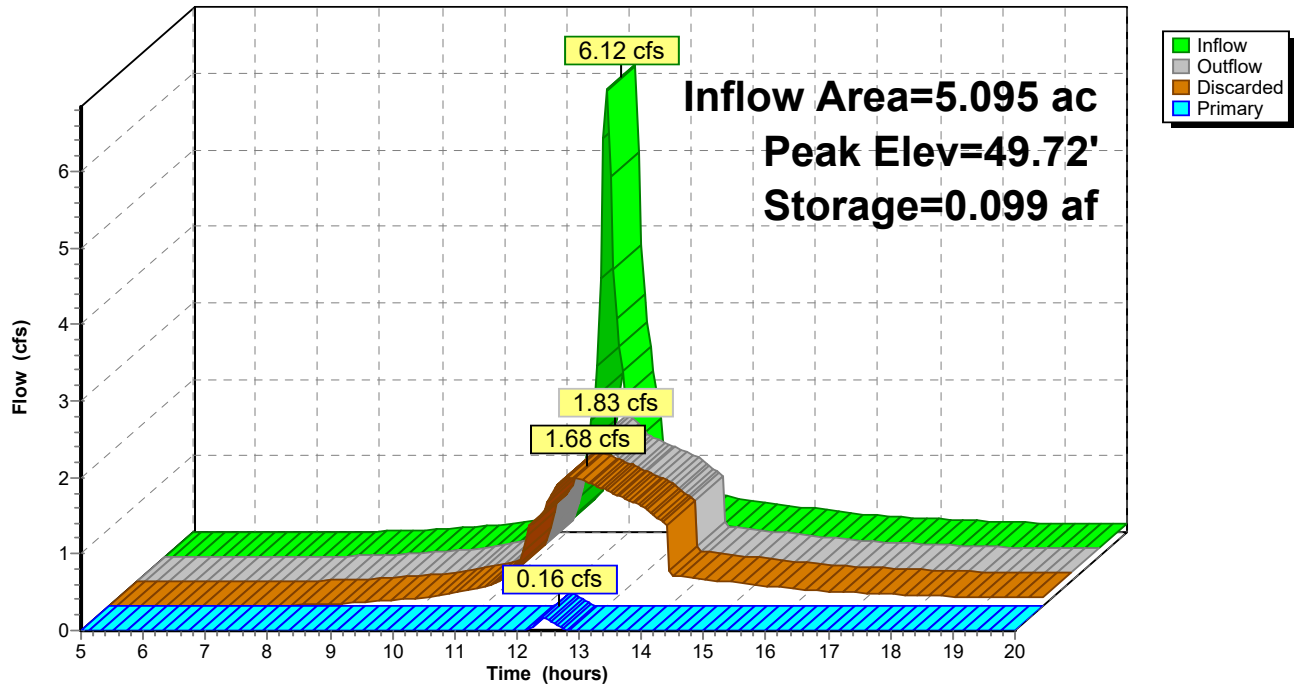
705.6 cy Field

447.4 cy Stone



Pond 192P: Sub. Inf. 1

Hydrograph



Summary for Pond 193P: CB 1

[57] Hint: Peaked at 47.20' (Flood elevation advised)

Inflow Area = 0.219 ac, 30.44% Impervious, Inflow Depth > 0.64" for 10-Year event
 Inflow = 0.13 cfs @ 12.12 hrs, Volume= 0.012 af
 Outflow = 0.13 cfs @ 12.12 hrs, Volume= 0.012 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.13 cfs @ 12.12 hrs, Volume= 0.012 af
 Routed to Pond 200P : DMH 1

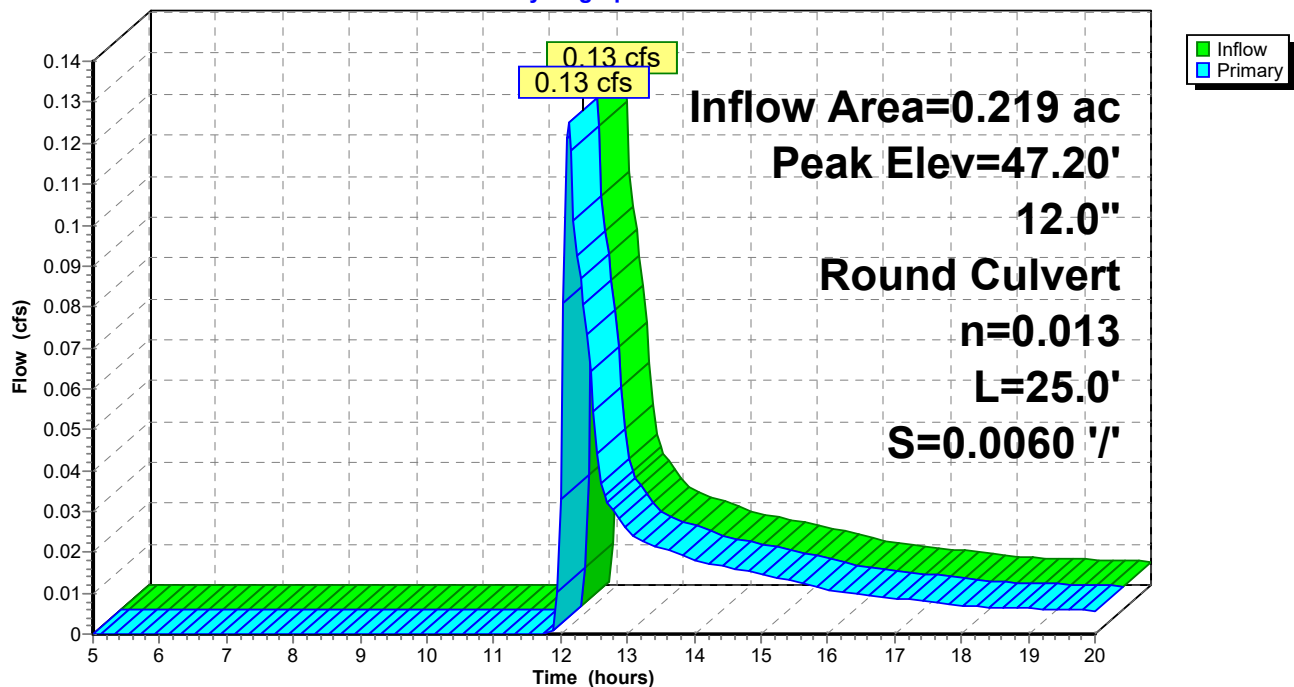
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 47.20' @ 12.12 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	47.00'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.00' / 46.85' S= 0.0060 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.12 cfs @ 12.12 hrs HW=47.20' (Free Discharge)
 1=Culvert (Barrel Controls 0.12 cfs @ 1.63 fps)

Pond 193P: CB 1

Hydrograph



Summary for Pond 194P: CB 2

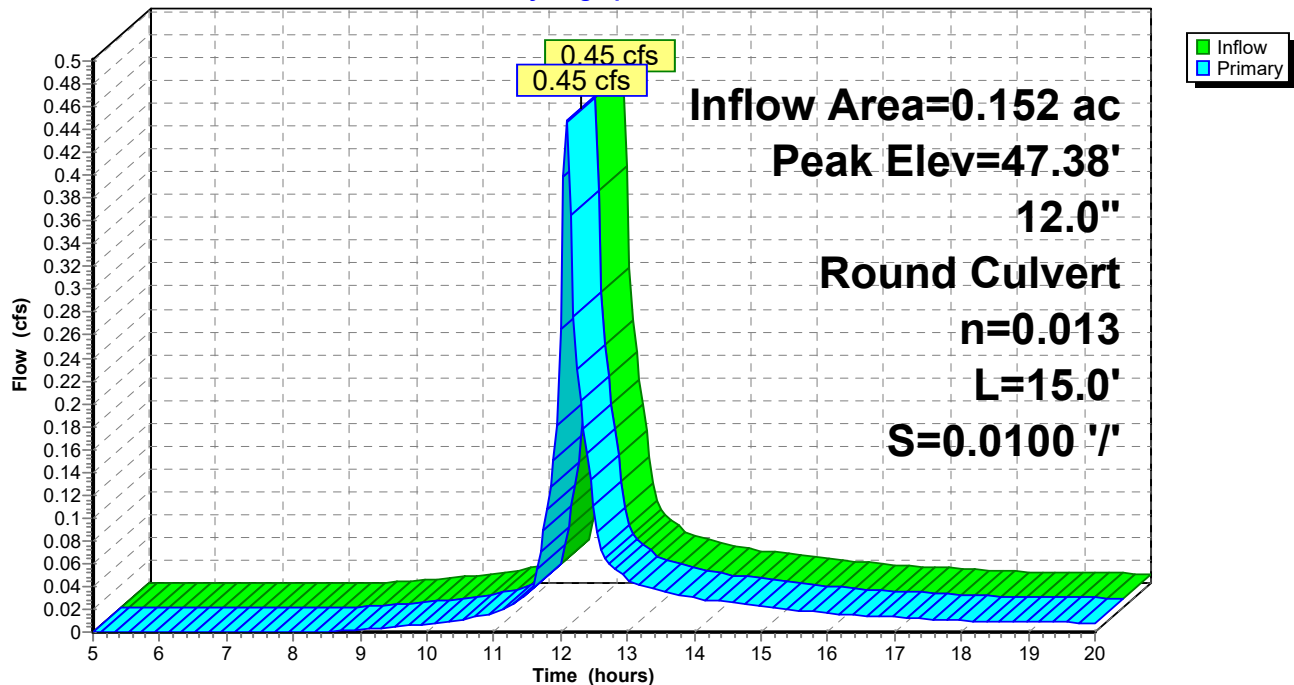
[57] Hint: Peaked at 47.38' (Flood elevation advised)

Inflow Area = 0.152 ac, 66.33% Impervious, Inflow Depth > 2.39" for 10-Year event
 Inflow = 0.45 cfs @ 12.09 hrs, Volume= 0.030 af
 Outflow = 0.45 cfs @ 12.09 hrs, Volume= 0.030 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.45 cfs @ 12.09 hrs, Volume= 0.030 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= 47.38' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	47.00'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.00' / 46.85' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.44 cfs @ 12.09 hrs HW=47.38' (Free Discharge)
 1=Culvert (Barrel Controls 0.44 cfs @ 2.40 fps)

Pond 194P: CB 2**Hydrograph**

Summary for Pond 195P: Constructed Wetland 4

[79] Warning: Submerged Pond 121P Primary device # 1 OUTLET by 2.58'

Inflow Area = 1.935 ac, 78.08% Impervious, Inflow Depth > 2.54" for 10-Year event
 Inflow = 2.13 cfs @ 12.46 hrs, Volume= 0.409 af
 Outflow = 1.64 cfs @ 13.11 hrs, Volume= 0.346 af, Atten= 23%, Lag= 38.8 min
 Primary = 1.64 cfs @ 13.11 hrs, Volume= 0.346 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= 55.58' @ 13.11 hrs Surf.Area= 2,722 sf Storage= 4,995 cf

Plug-Flow detention time= 85.6 min calculated for 0.345 af (84% of inflow)
 Center-of-Mass det. time= 44.8 min (882.9 - 838.1)

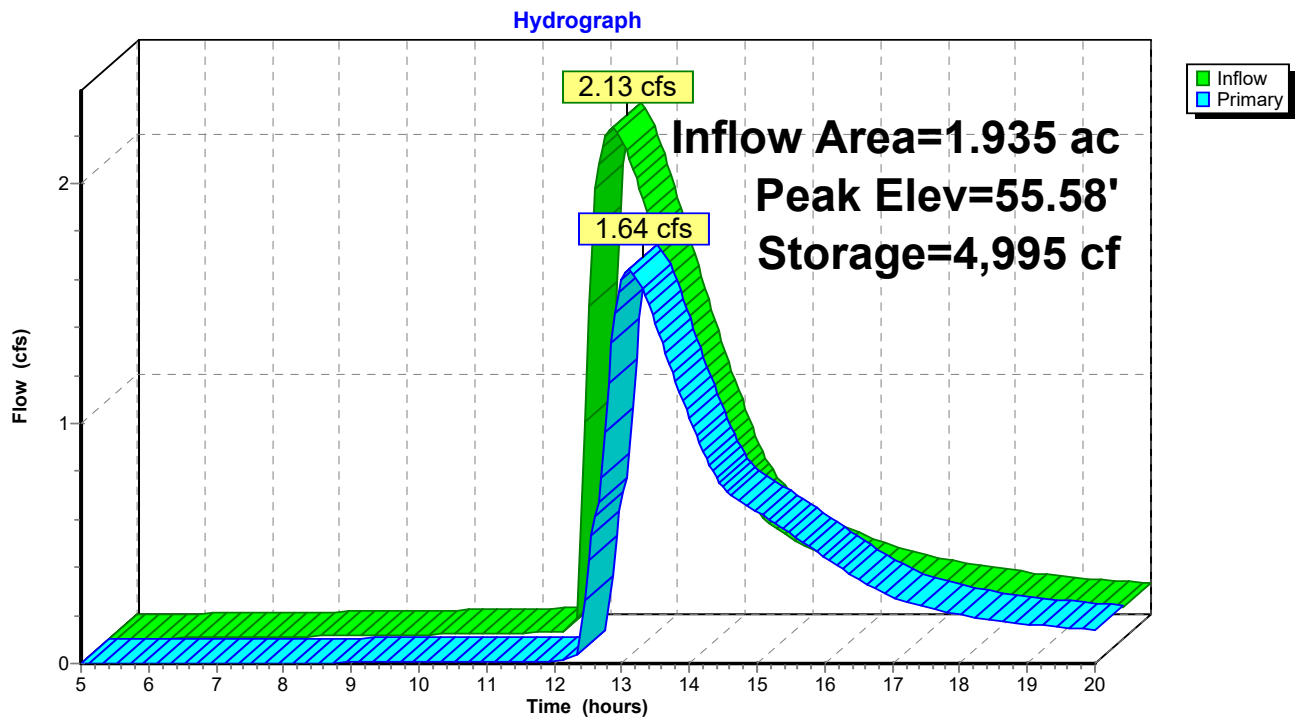
Volume	Invert	Avail.Storage	Storage Description
#1	53.00'	9,558 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
53.00	1,225	0	0
54.00	1,749	1,487	1,487
55.00	2,345	2,047	3,534
56.00	2,998	2,672	6,206
57.00	3,707	3,353	9,558

Device	Routing	Invert	Outlet Devices
#1	Primary	53.00'	18.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.00' / 52.00' S= 0.0200 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	53.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	54.50'	4.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 1	56.00'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#5	Device 1	55.25'	6.0" Vert. Orifice/Grate X 3.00 C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.64 cfs @ 13.11 hrs HW=55.58' (Free Discharge)

- 1=Culvert (Passes 1.64 cfs of 9.08 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 0.04 cfs @ 7.67 fps)
- 3=Orifice/Grate (Orifice Controls 0.80 cfs @ 4.59 fps)
- 4=Orifice/Grate (Controls 0.00 cfs)
- 5=Orifice/Grate (Orifice Controls 0.79 cfs @ 1.95 fps)

Pond 195P: Constructed Wetland 4



Summary for Pond 196P: CB 5

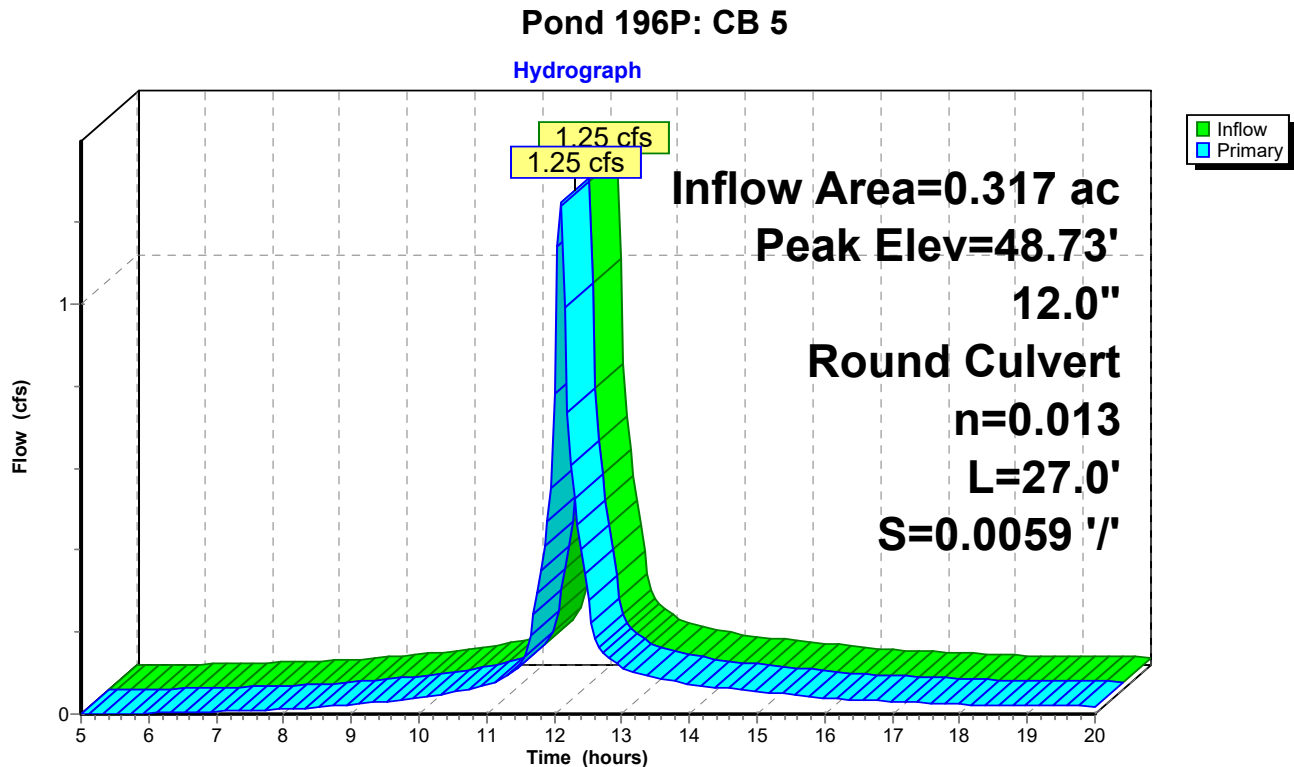
[57] Hint: Peaked at 48.73' (Flood elevation advised)

Inflow Area = 0.317 ac, 82.60% Impervious, Inflow Depth > 3.31" for 10-Year event
 Inflow = 1.25 cfs @ 12.09 hrs, Volume= 0.087 af
 Outflow = 1.25 cfs @ 12.09 hrs, Volume= 0.087 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.25 cfs @ 12.09 hrs, Volume= 0.087 af
 Routed to Pond 185P : DMH

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'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.00' / 47.84' S= 0.0059 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.22 cfs @ 12.09 hrs HW=48.72' (Free Discharge)
 1=Culvert (Barrel Controls 1.22 cfs @ 2.84 fps)



Summary for Pond 197P: Inf. Basin 1

[79] Warning: Submerged Pond 185P Primary device # 1 OUTLET by 0.19'

Inflow Area = 5.710 ac, 64.66% Impervious, Inflow Depth > 0.20" for 10-Year event
 Inflow = 1.25 cfs @ 12.09 hrs, Volume= 0.095 af
 Outflow = 0.59 cfs @ 12.35 hrs, Volume= 0.095 af, Atten= 53%, Lag= 15.9 min
 Discarded = 0.59 cfs @ 12.35 hrs, Volume= 0.095 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= 47.19' @ 12.35 hrs Surf.Area= 2,810 sf Storage= 505 cf

Plug-Flow detention time= 6.6 min calculated for 0.095 af (100% of inflow)
 Center-of-Mass det. time= 6.1 min (778.8 - 772.7)

Volume	Invert	Avail.Storage	Storage Description
#1	47.00'	19,356 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

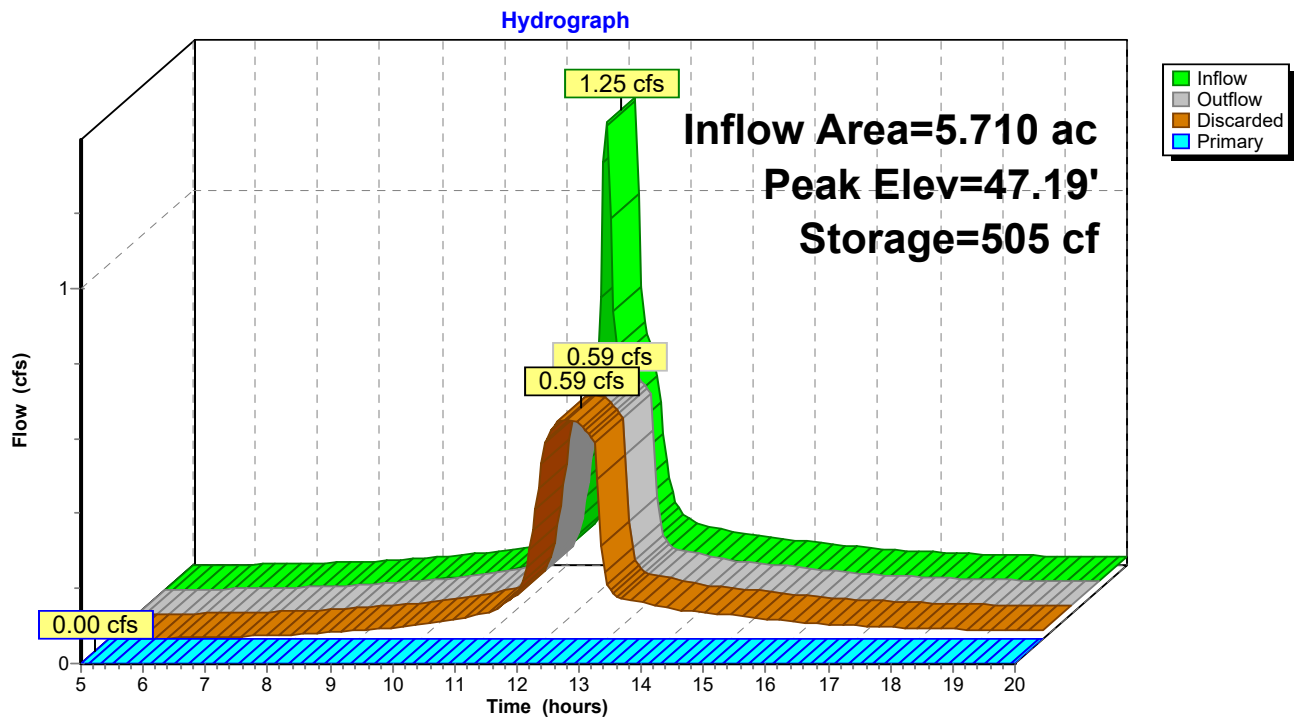
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
47.00	2,615	0	0
48.00	3,665	3,140	3,140
49.00	4,784	4,225	7,365
50.00	5,981	5,383	12,747
51.00	7,236	6,609	19,356

Device	Routing	Invert	Outlet Devices
#1	Discarded	47.00'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 45.00'
#2	Primary	47.00'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.00' / 43.50' S= 0.1400 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	50.35'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.59 cfs @ 12.35 hrs HW=47.19' (Free Discharge)
 ↑ **1=Exfiltration** (Controls 0.59 cfs)

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=47.00' (Free Discharge)
 ↑ **2=Culvert** (Passes 0.00 cfs of 0.00 cfs potential flow)
 ↑ **3=Orifice/Grate** (Controls 0.00 cfs)

Pond 197P: Inf. Basin 1



Summary for Pond 198P: Sub. Inf. 2

[81] Warning: Exceeded Pond 204P by 0.30' @ 12.60 hrs

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	30.00'W x 138.90'L x 3.50'H Field A 0.335 af Overall - 0.121 af Embedded = 0.214 af x 40.0% Voids
#2A	51.50'	0.121 af	ADS_StormTech SC-740 b +Cap x 114 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 114 Chambers in 6 Rows 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'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 50.00'
#2	Primary	52.75'	18.0" Round Culvert L= 10.0' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 52.75' / 52.65' S= 0.0100 '/ Cc= 0.900 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 6 rows = 31.9 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

19 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 136.90' Row Length +12.0" End Stone x 2 = 138.90' Base Length

6 Rows x 51.0" Wide + 6.0" Spacing x 5 + 12.0" Side Stone x 2 = 30.00' Base Width

6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

114 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 6 Rows = 5,269.0 cf Chamber Storage

14,584.2 cf Field - 5,269.0 cf Chambers = 9,315.1 cf Stone x 40.0% Voids = 3,726.1 cf Stone Storage

Chamber Storage + Stone Storage = 8,995.1 cf = 0.206 af

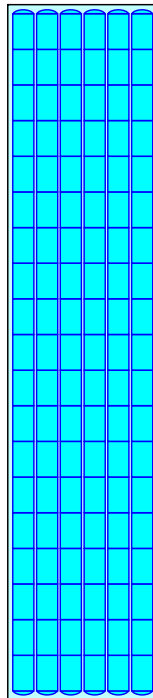
Overall Storage Efficiency = 61.7%

Overall System Size = 138.90' x 30.00' x 3.50'

114 Chambers

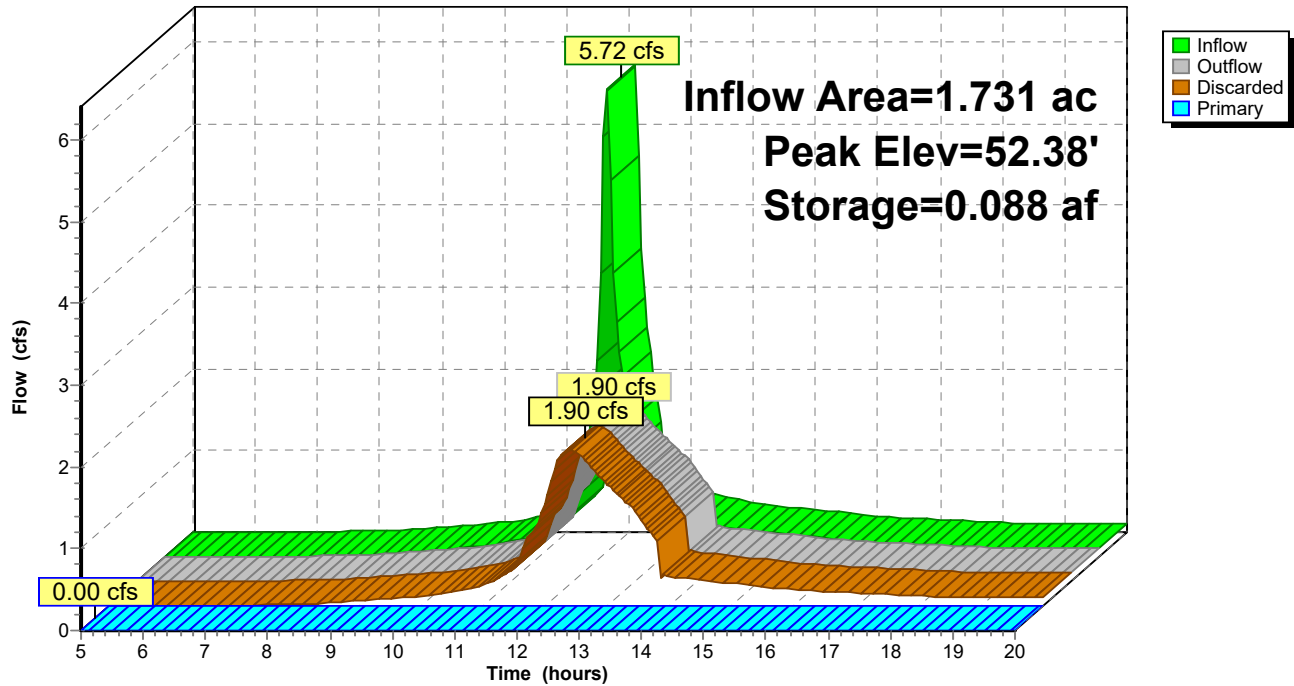
540.2 cy Field

345.0 cy Stone



Pond 198P: Sub. Inf. 2

Hydrograph



Summary for Pond 199P: DMH 2

[57] Hint: Peaked at 47.89' (Flood elevation advised)

[79] Warning: Submerged Pond 190P Primary device # 1 INLET by 0.54'

Inflow Area = 2.886 ac, 54.67% Impervious, Inflow Depth > 1.83" for 10-Year event
 Inflow = 6.31 cfs @ 12.10 hrs, Volume= 0.441 af
 Outflow = 6.31 cfs @ 12.10 hrs, Volume= 0.441 af, Atten= 0%, Lag= 0.0 min
 Primary = 6.31 cfs @ 12.10 hrs, Volume= 0.441 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= 47.89' @ 12.10 hrs

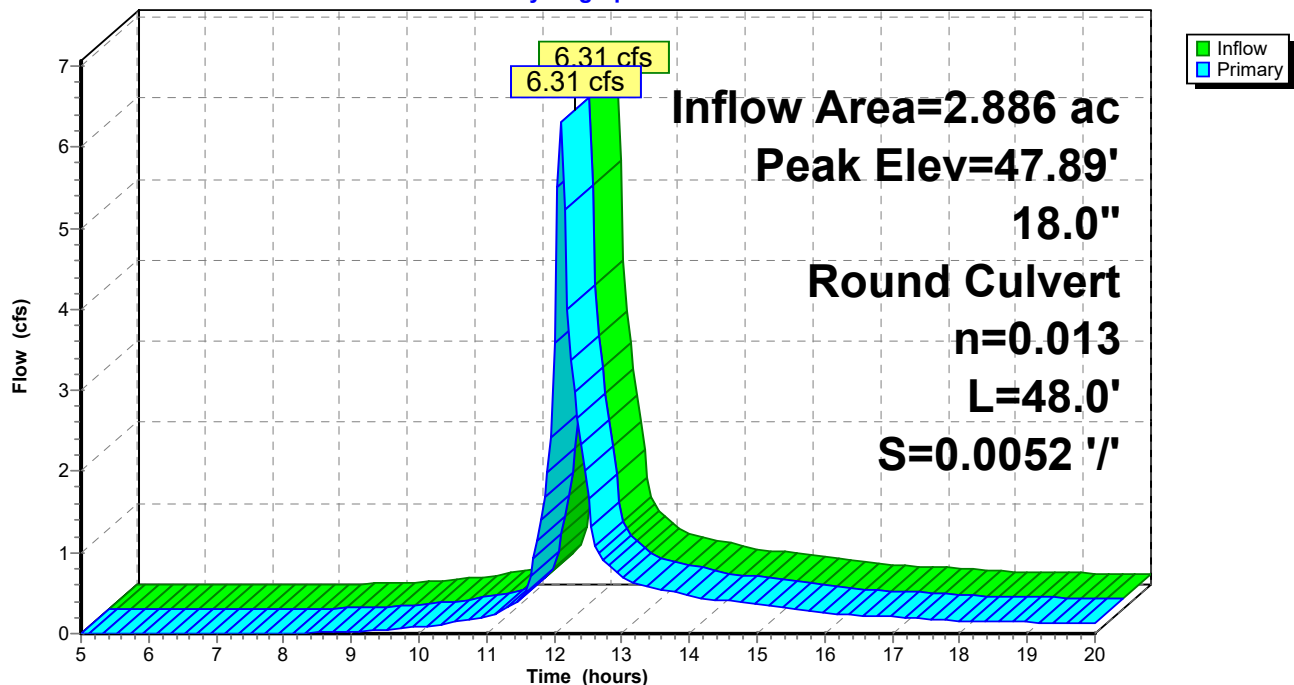
Device	Routing	Invert	Outlet Devices
#1	Primary	46.25'	18.0" Round Culvert L= 48.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 46.25' / 46.00' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=6.24 cfs @ 12.10 hrs HW=47.88' (Free Discharge)

↑1=Culvert (Barrel Controls 6.24 cfs @ 4.05 fps)

Pond 199P: DMH 2

Hydrograph



Summary for Pond 200P: DMH 1

[57] Hint: Peaked at 47.18' (Flood elevation advised)

[79] Warning: Submerged Pond 193P Primary device # 1 INLET by 0.18'

[79] Warning: Submerged Pond 194P Primary device # 1 INLET by 0.18'

Inflow Area = 0.371 ac, 45.11% Impervious, Inflow Depth > 1.36" for 10-Year event
 Inflow = 0.57 cfs @ 12.10 hrs, Volume= 0.042 af
 Outflow = 0.57 cfs @ 12.10 hrs, Volume= 0.042 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.57 cfs @ 12.10 hrs, Volume= 0.042 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= 47.18' @ 12.10 hrs

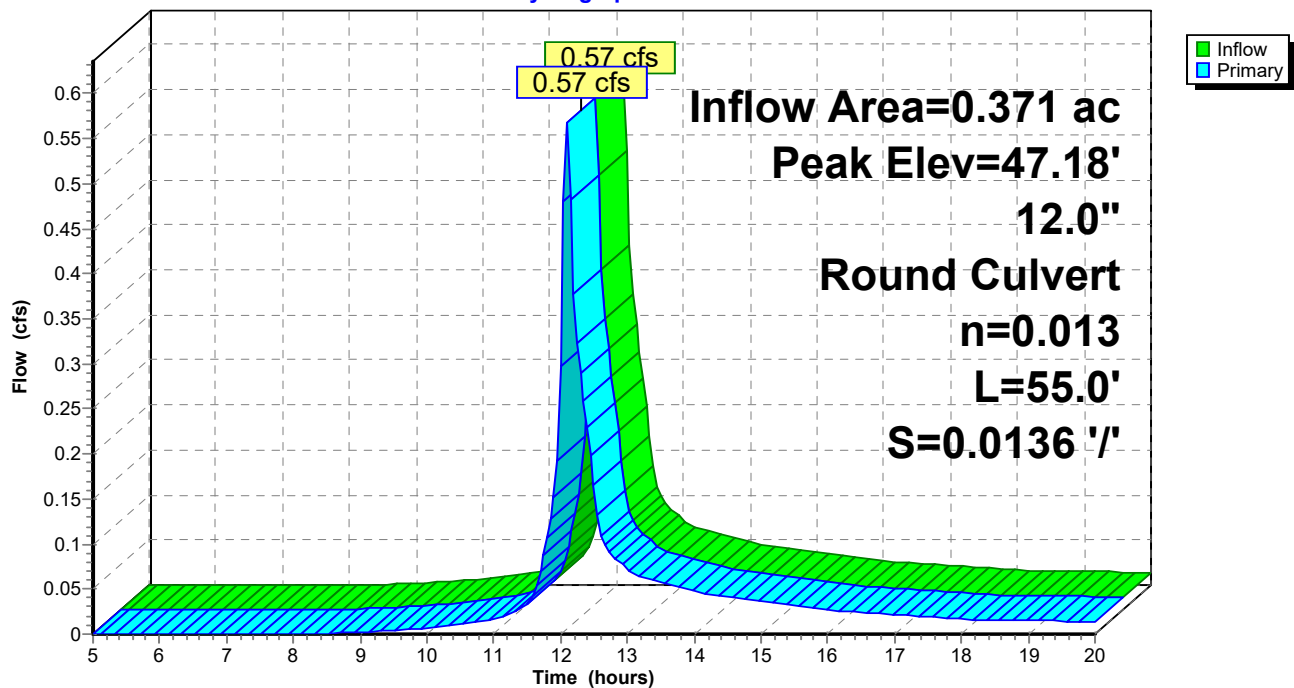
Device	Routing	Invert	Outlet Devices
#1	Primary	46.75'	12.0" Round Culvert L= 55.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 46.75' / 46.00' S= 0.0136 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.57 cfs @ 12.10 hrs HW=47.18' (Free Discharge)

↑1=Culvert (Inlet Controls 0.57 cfs @ 1.76 fps)

Pond 200P: DMH 1

Hydrograph



Summary for Pond 201P: Sub. Inf. 3

[79] Warning: Submerged Pond 205P Primary device # 1 INLET by 0.30'

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	20.50'W x 167.38'L x 3.50'H Field A 0.276 af Overall - 0.098 af Embedded = 0.178 af x 40.0% Voids
#2A	52.50'	0.098 af	ADS_StormTech SC-740 b +Cap x 92 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 92 Chambers in 4 Rows 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'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 51.00'
#2	Primary	54.00'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.00' / 53.65' S= 0.0175 '/' Cc= 0.900 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 4 rows = 21.2 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

23 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 165.38' Row Length +12.0" End Stone x 2 = 167.38' Base Length

4 Rows x 51.0" Wide + 6.0" Spacing x 3 + 12.0" Side Stone x 2 = 20.50' Base Width

6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

92 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 4 Rows = 4,247.7 cf Chamber Storage

12,009.3 cf Field - 4,247.7 cf Chambers = 7,761.6 cf Stone x 40.0% Voids = 3,104.6 cf Stone Storage

Chamber Storage + Stone Storage = 7,352.3 cf = 0.169 af

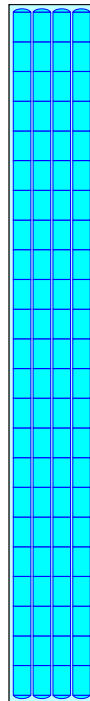
Overall Storage Efficiency = 61.2%

Overall System Size = 167.38' x 20.50' x 3.50'

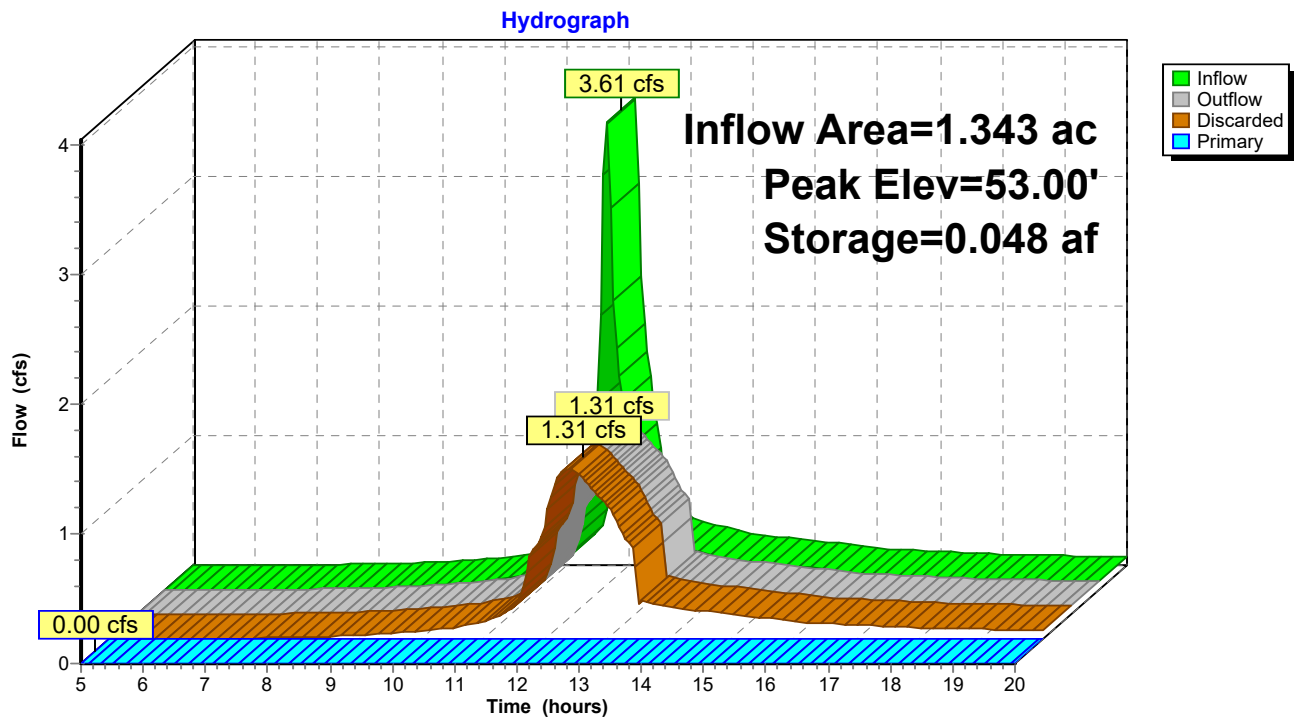
92 Chambers

444.8 cy Field

287.5 cy Stone



Pond 201P: Sub. Inf. 3



Summary for Pond 202P: DMH 14

[57] Hint: Peaked at 52.65' (Flood elevation advised)

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

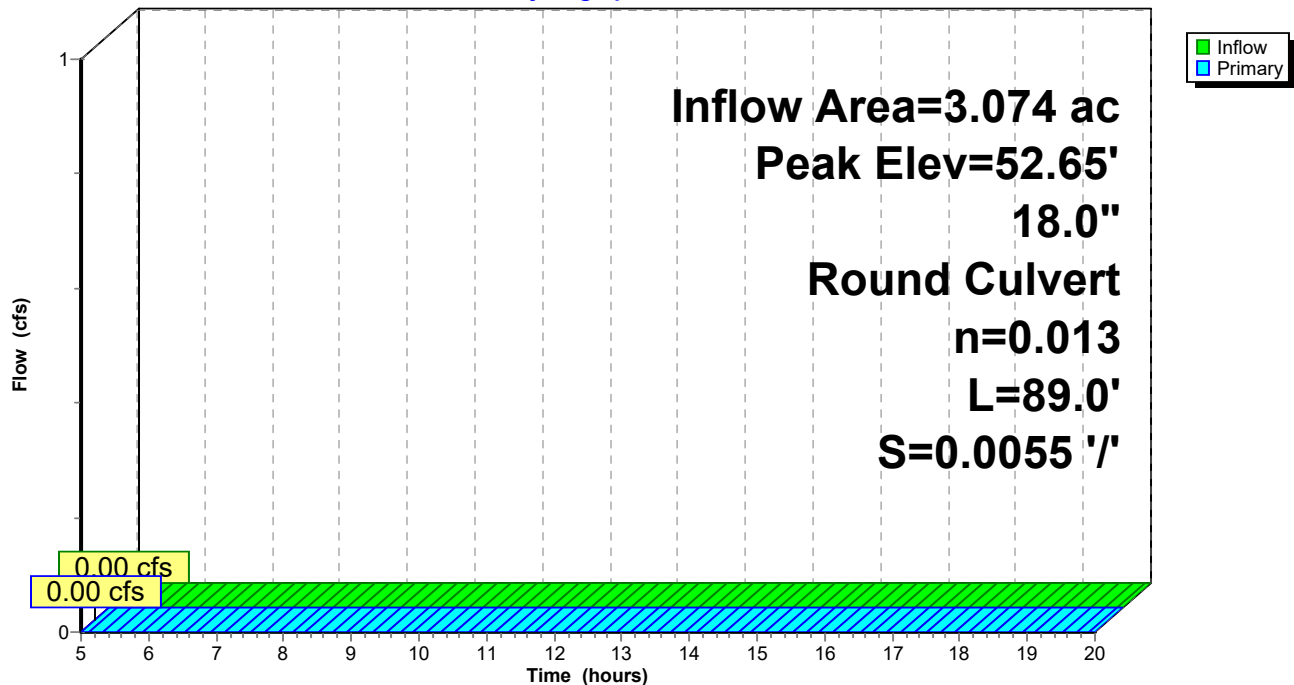
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 52.65' @ 5.00 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	52.65'	18.0" Round Culvert L= 89.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.65' / 52.16' S= 0.0055 '/ Cc= 0.900 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

[57] Hint: Peaked at 52.96' (Flood elevation advised)

[79] Warning: Submerged Pond 153P Primary device # 1 INLET by 0.91'

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

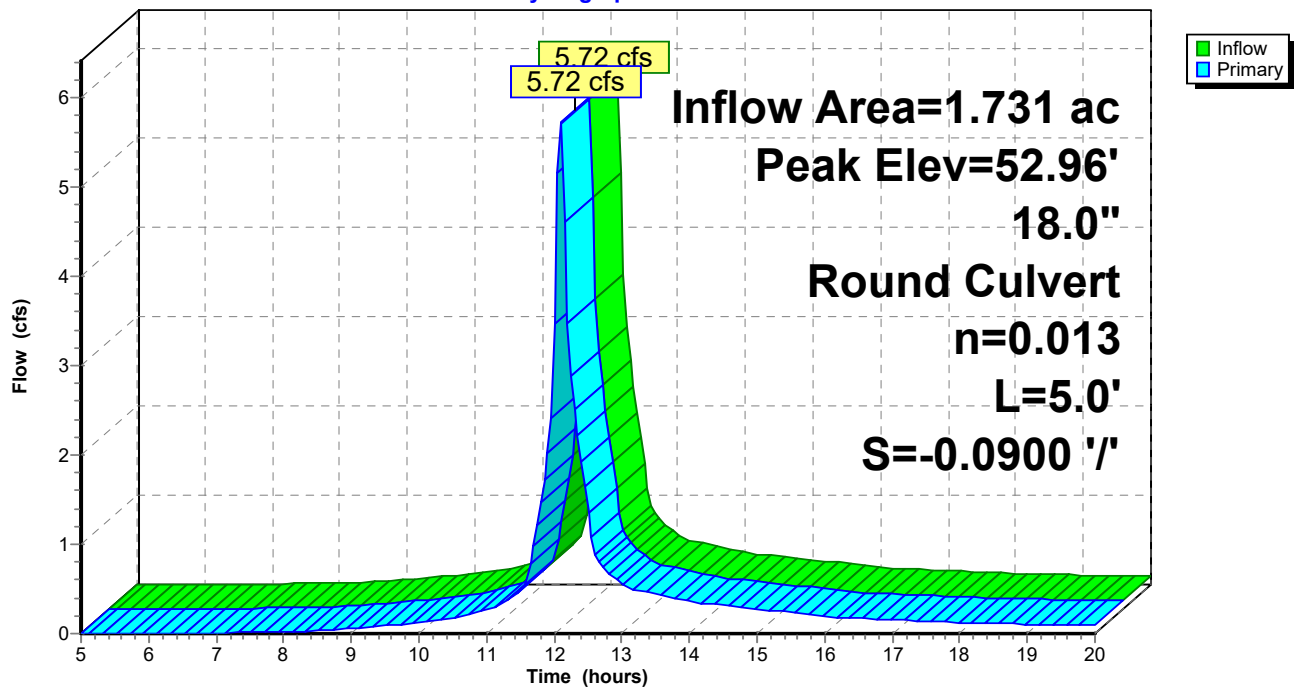
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 52.96' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	51.50'	18.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.05' / 51.50' S= -0.0900 '/' Cc= 0.900 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

[57] Hint: Peaked at 53.93' (Flood elevation advised)

[79] Warning: Submerged Pond 127P Primary device # 1 OUTLET by 1.13'

[81] Warning: Exceeded Pond 139P by 0.01' @ 12.10 hrs

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

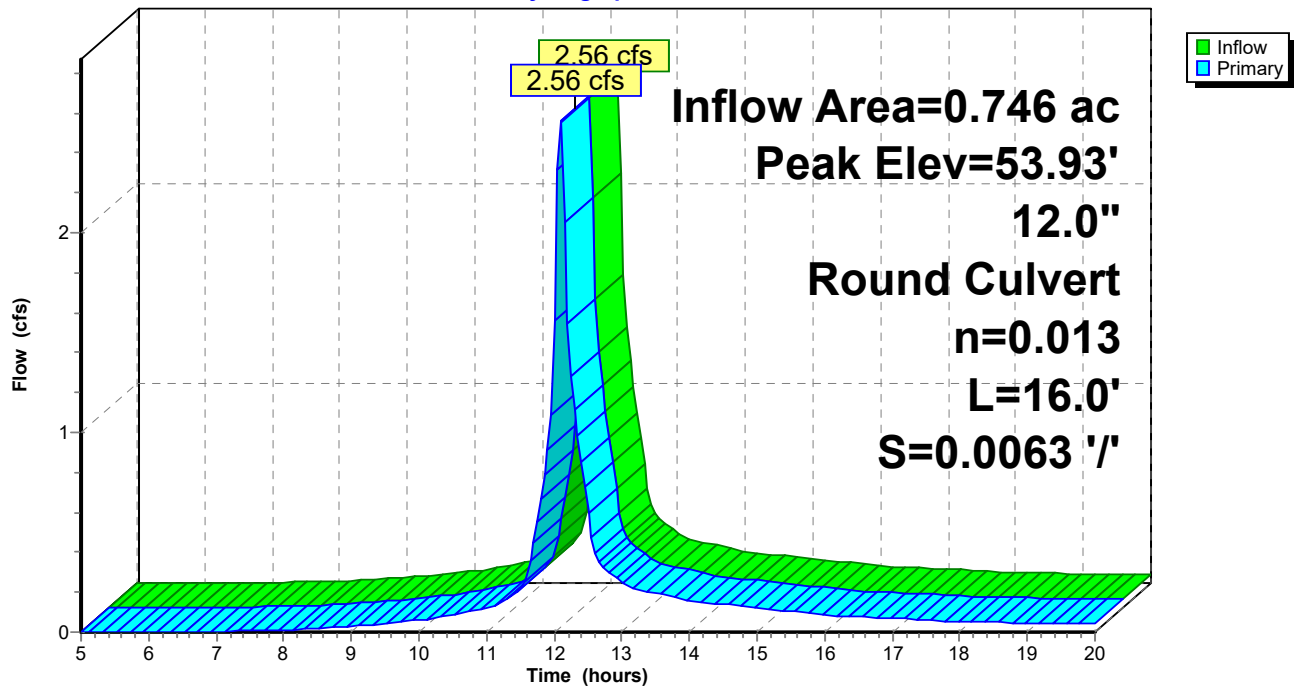
Device	Routing	Invert	Outlet Devices
#1	Primary	52.70'	12.0" Round Culvert L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.70' / 52.60' S= 0.0063 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

Hydrograph



Summary for Pond 206P: DMH 34

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 55.45' (Flood elevation advised)

[79] Warning: Submerged Pond 43P Primary device # 1 OUTLET by 0.75'

[79] Warning: Submerged Pond 124P Primary device # 1 OUTLET by 0.75'

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

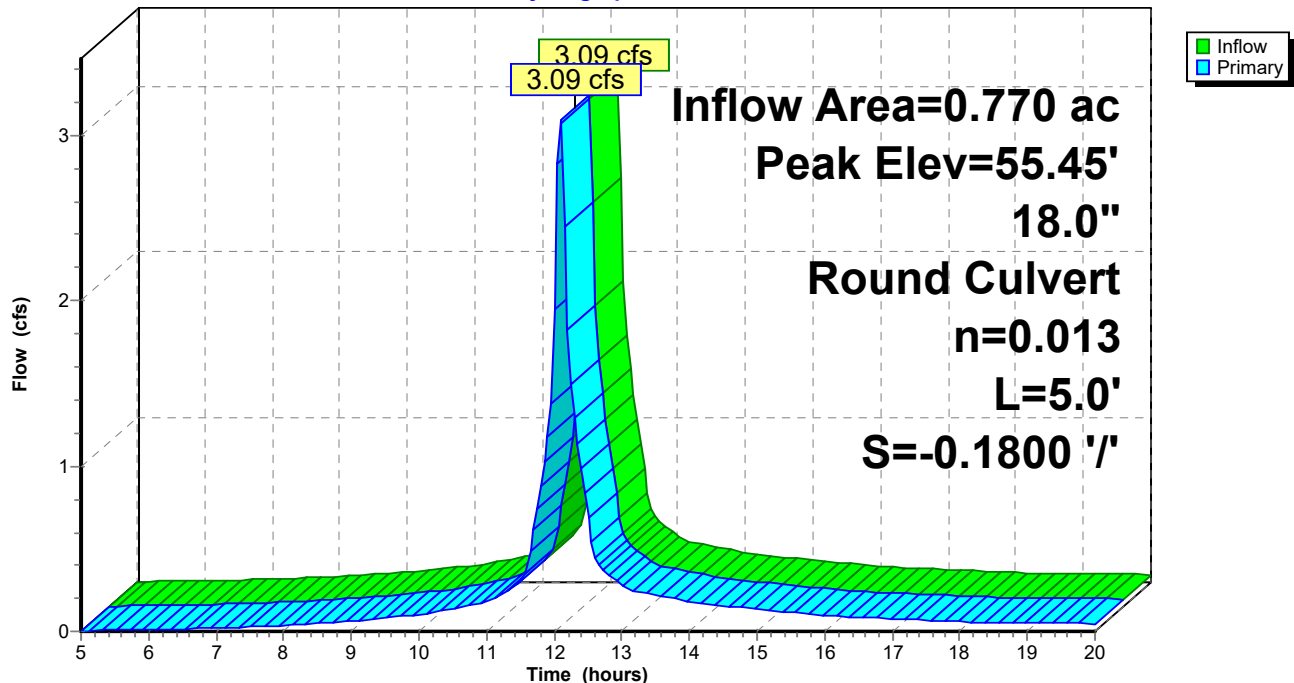
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 55.45' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.50'	18.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.60' / 54.50' S= -0.1800 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.12' (Flood elevation advised)

[79] Warning: Submerged Pond 64P Primary device # 1 INLET by 1.01'

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

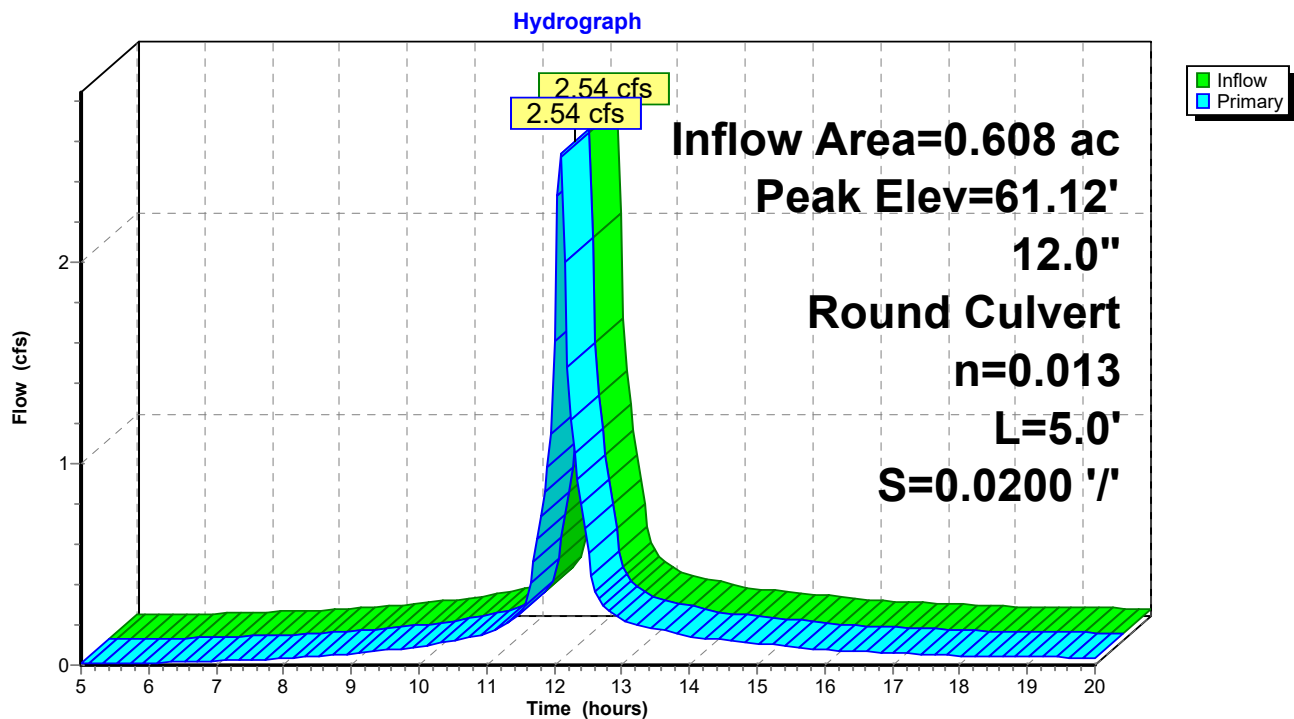
Peak Elev= 61.12' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	59.90'	12.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.90' / 59.80' S= 0.0200 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.24' (Flood elevation advised)

[79] Warning: Submerged Pond 111P Primary device # 1 INLET by 1.23'

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

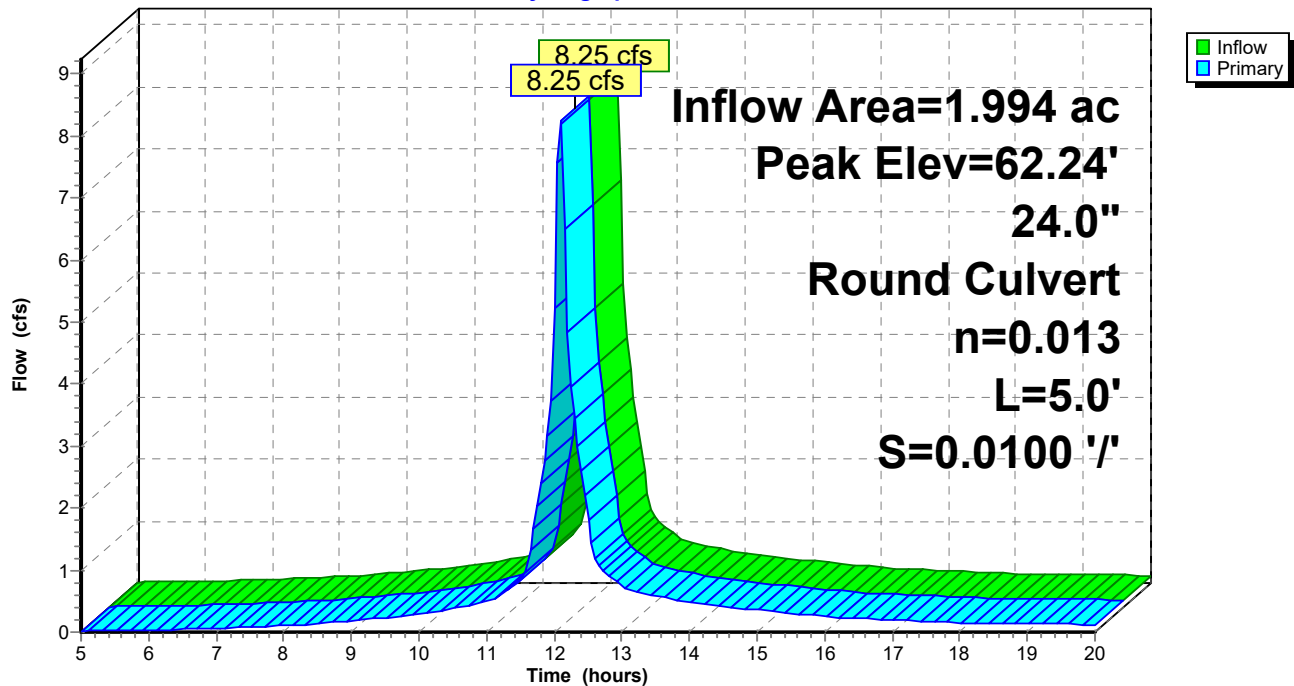
Device	Routing	Invert	Outlet Devices
#1	Primary	60.55'	24.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.55' / 60.50' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.92' (Flood elevation advised)

[79] Warning: Submerged Pond 93P Primary device # 1 INLET by 0.71'

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

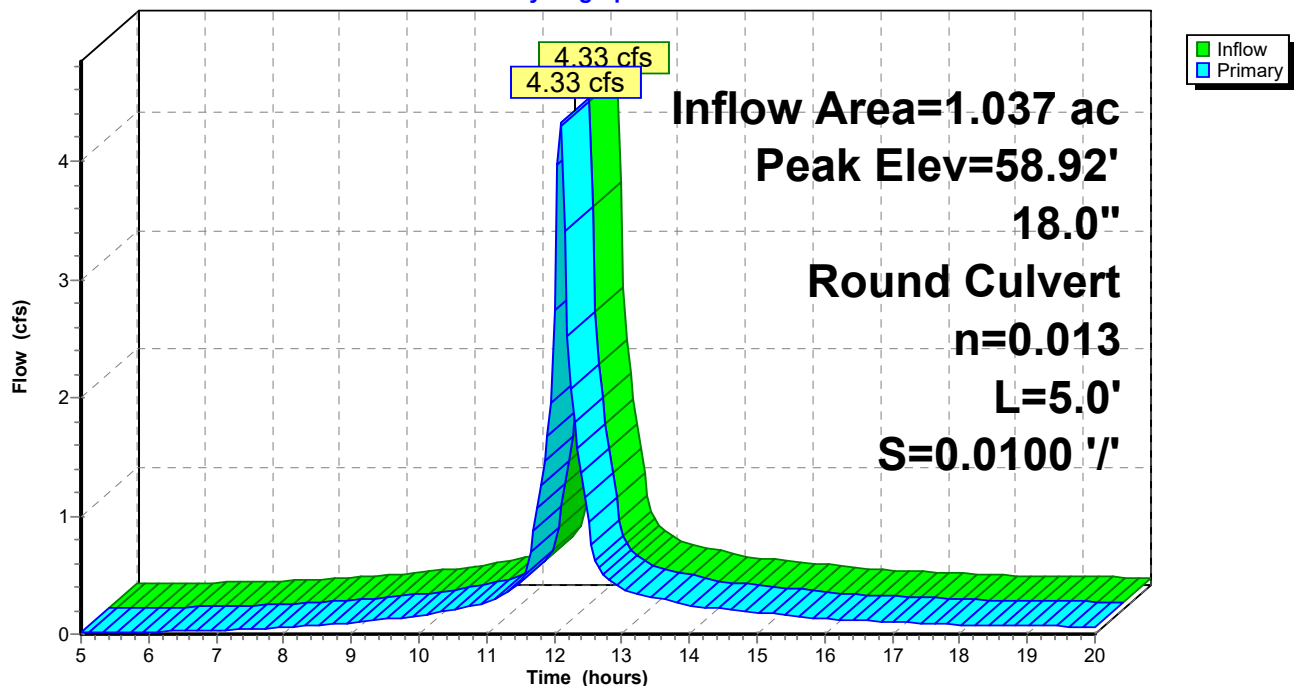
Device	Routing	Invert	Outlet Devices
#1	Primary	57.60'	18.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.60' / 57.55' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.35' (Flood elevation advised)

[79] Warning: Submerged Pond 120P Primary device # 1 INLET by 1.49'

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 121P : Sub. Det. 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 59.35' @ 12.09 hrs

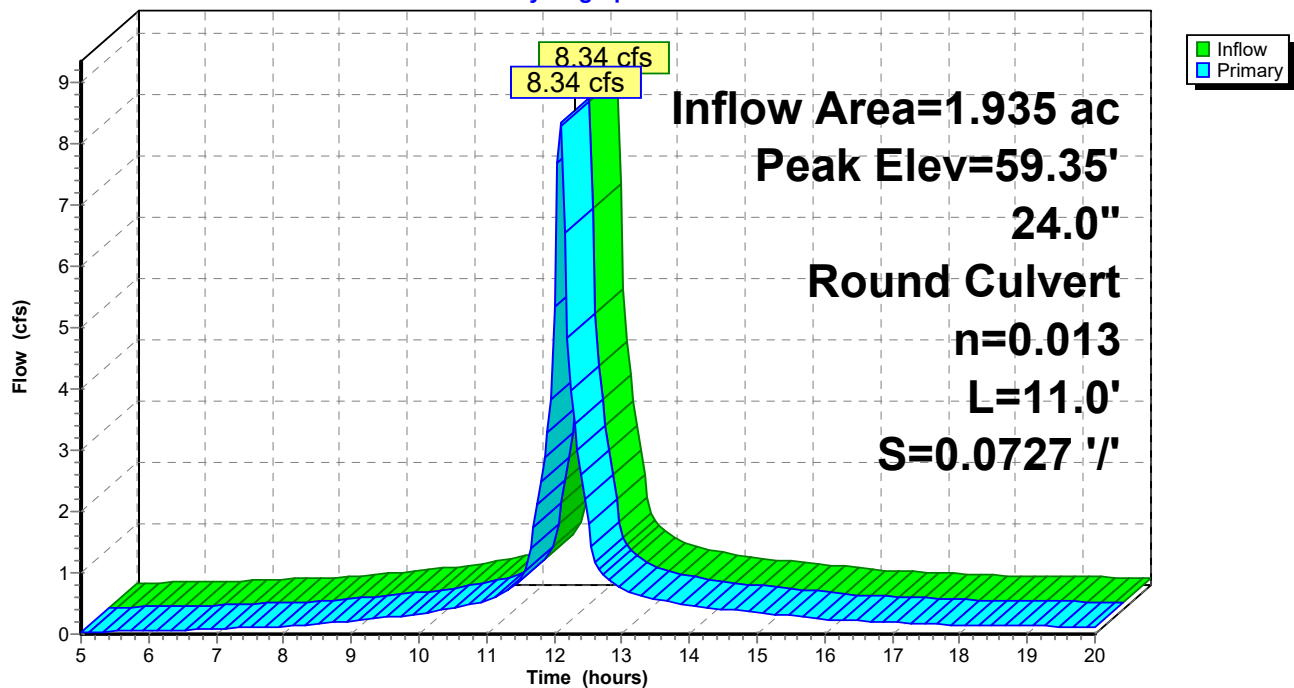
Device	Routing	Invert	Outlet Devices
#1	Primary	57.85'	24.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.85' / 57.05' S= 0.0727 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

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

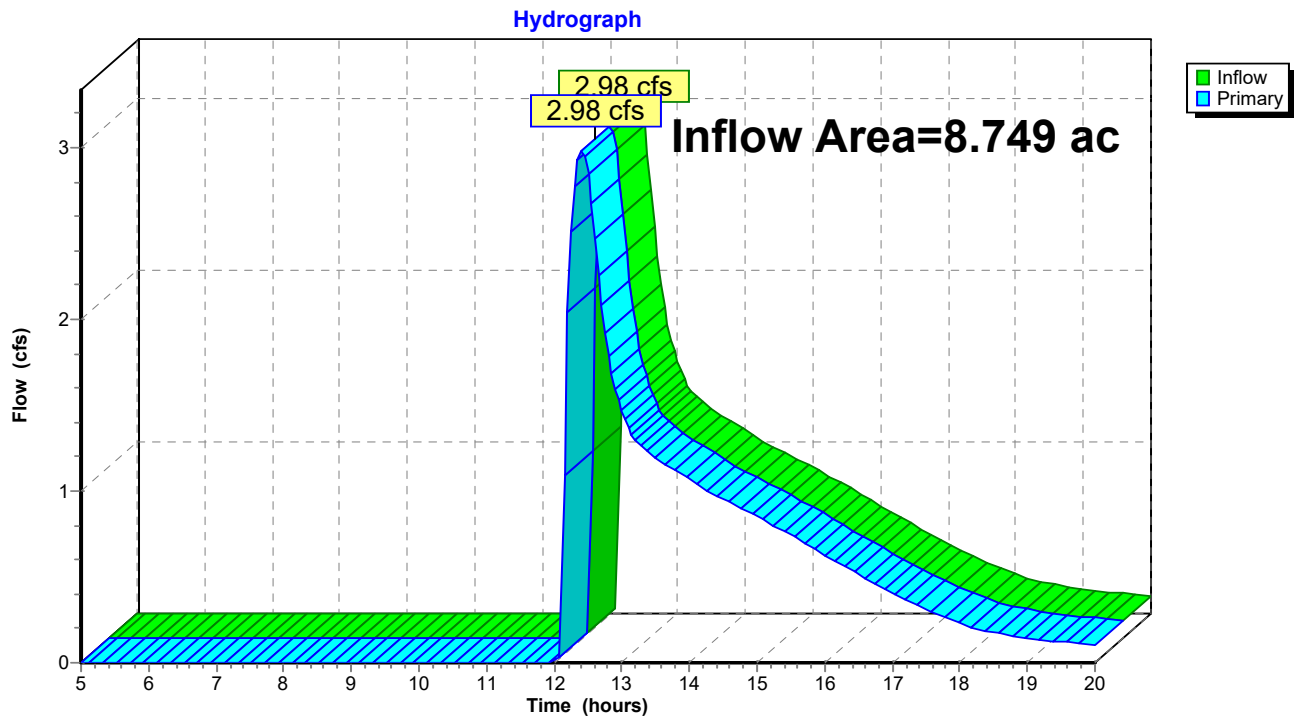


Summary for Link 59L: DP 1

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

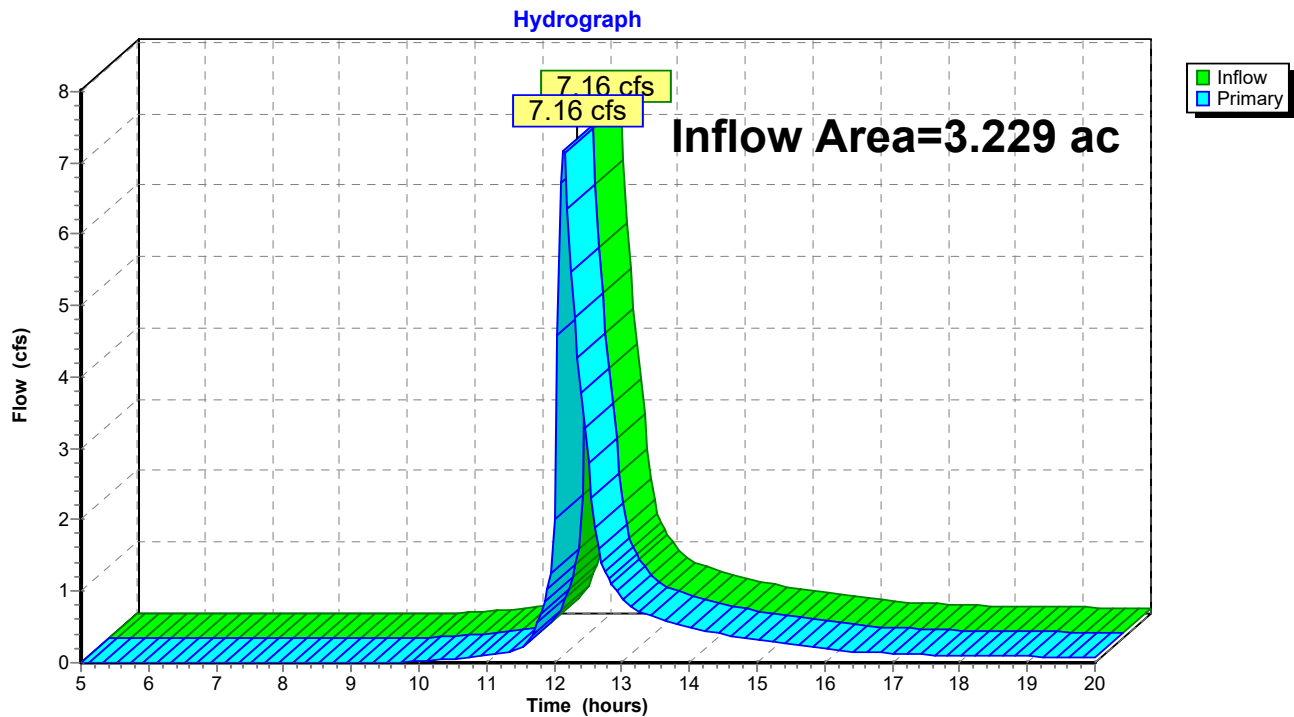


Summary for Link 60L: DP 2

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



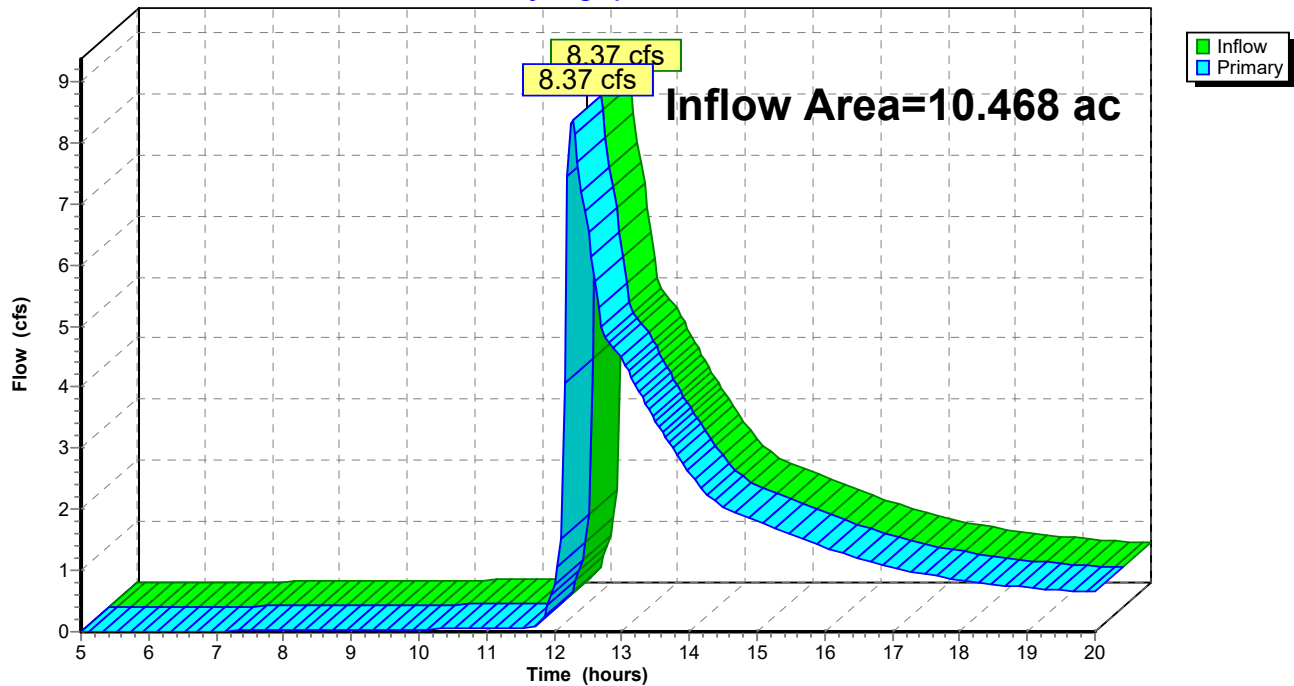
Summary for Link 188L: DP 3

Inflow Area = 10.468 ac, 46.25% Impervious, Inflow Depth > 1.56" for 10-Year event
 Inflow = 8.37 cfs @ 12.27 hrs, Volume= 1.357 af
 Primary = 8.37 cfs @ 12.27 hrs, Volume= 1.357 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



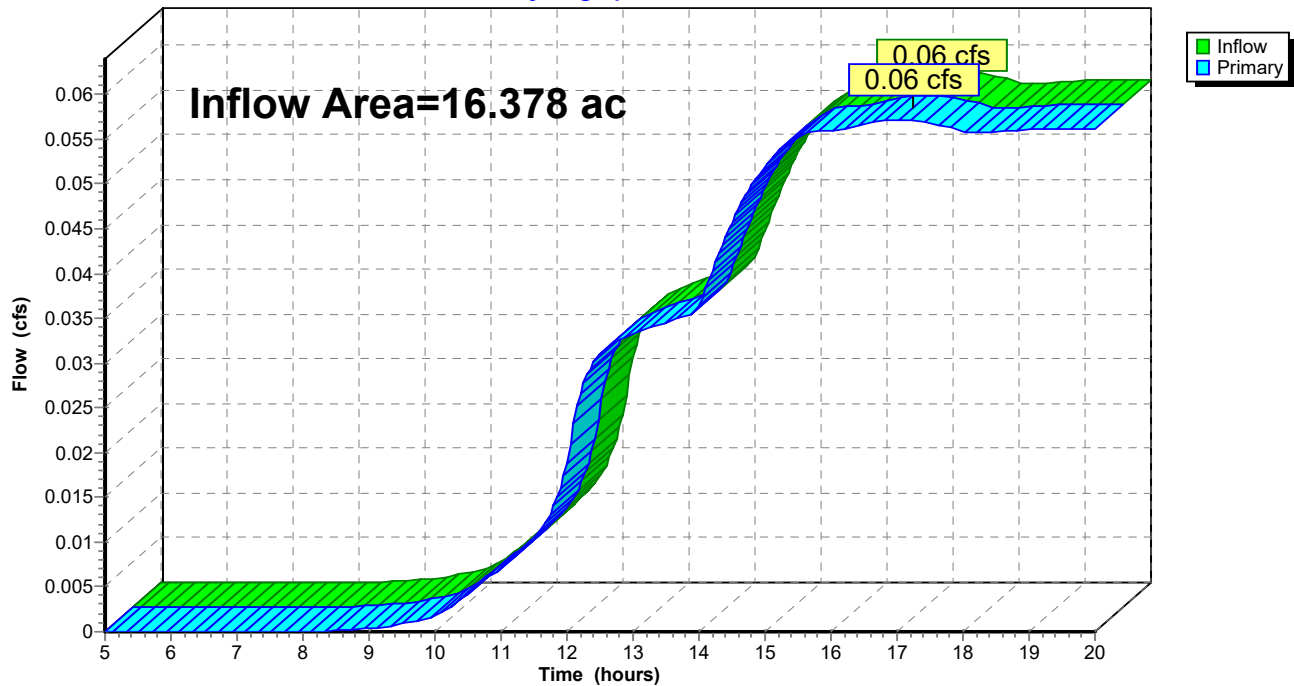
Summary for Link 203L: 3A

Inflow Area = 16.378 ac, 48.27% Impervious, Inflow Depth > 0.02" for 10-Year event
Inflow = 0.06 cfs @ 17.02 hrs, Volume= 0.034 af
Primary = 0.06 cfs @ 17.02 hrs, Volume= 0.034 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

Subcatchment1S: P1A	Runoff Area=7,501 sf 96.61% Impervious Runoff Depth>7.94" Tc=6.0 min CN=97 Runoff=1.47 cfs 0.114 af
Subcatchment2S: P1B	Runoff Area=16,584 sf 74.19% Impervious Runoff Depth>7.50" Tc=6.0 min CN=92 Runoff=3.18 cfs 0.238 af
Subcatchment3S: P1C	Runoff Area=6,087 sf 64.30% Impervious Runoff Depth>7.18" Tc=6.0 min CN=89 Runoff=1.14 cfs 0.084 af
Subcatchment4S: P1D	Runoff Area=2,767 sf 81.50% Impervious Runoff Depth>7.69" Tc=6.0 min CN=94 Runoff=0.54 cfs 0.041 af
Subcatchment5S: P1E	Runoff Area=11,538 sf 66.20% Impervious Runoff Depth>7.29" Tc=6.0 min CN=90 Runoff=2.18 cfs 0.161 af
Subcatchment6S: P1F	Runoff Area=4,817 sf 71.39% Impervious Runoff Depth>7.40" Tc=6.0 min CN=91 Runoff=0.92 cfs 0.068 af
Subcatchment7S: P1G	Runoff Area=5,511 sf 100.00% Impervious Runoff Depth>8.00" Tc=6.0 min CN=98 Runoff=1.08 cfs 0.084 af
Subcatchment8S: P1H	Runoff Area=13,713 sf 81.38% Impervious Runoff Depth>7.69" Tc=6.0 min CN=94 Runoff=2.66 cfs 0.202 af
Subcatchment9S: P1I	Runoff Area=3,616 sf 78.43% Impervious Runoff Depth>7.60" Tc=6.0 min CN=93 Runoff=0.70 cfs 0.053 af
Subcatchment10S: P1J	Runoff Area=1,937 sf 100.00% Impervious Runoff Depth>8.00" Tc=6.0 min CN=98 Runoff=0.38 cfs 0.030 af
Subcatchment11S: P1K	Runoff Area=1,936 sf 96.85% Impervious Runoff Depth>7.94" Tc=6.0 min CN=97 Runoff=0.38 cfs 0.029 af
Subcatchment12S: P1L	Runoff Area=9,821 sf 78.85% Impervious Runoff Depth>7.60" Tc=6.0 min CN=93 Runoff=1.89 cfs 0.143 af
Subcatchment13S: P1M	Runoff Area=8,699 sf 94.53% Impervious Runoff Depth>7.94" Tc=6.0 min CN=97 Runoff=1.71 cfs 0.132 af
Subcatchment14S: P1N	Runoff Area=14,865 sf 3.94% Impervious Runoff Depth>5.42" Tc=6.0 min UI Adjusted CN=74 Runoff=2.25 cfs 0.154 af
Subcatchment39S: P1P	Runoff Area=7,939 sf 66.96% Impervious Runoff Depth>7.29" Tc=6.0 min CN=90 Runoff=1.50 cfs 0.111 af
Subcatchment40S: P1O	Runoff Area=978 sf 100.00% Impervious Runoff Depth>8.00" Tc=6.0 min CN=98 Runoff=0.19 cfs 0.015 af

Subcatchment44S: P1R	Runoff Area=15,334 sf 70.58% Impervious Runoff Depth>6.50" Tc=6.0 min CN=83 Runoff=2.68 cfs 0.191 af
Subcatchment45S: P1Q	Runoff Area=5,247 sf 97.54% Impervious Runoff Depth>7.94" Tc=6.0 min CN=97 Runoff=1.03 cfs 0.080 af
Subcatchment50S: P1S	Runoff Area=15,055 sf 71.48% Impervious Runoff Depth>6.26" Tc=6.0 min CN=81 Runoff=2.56 cfs 0.180 af
Subcatchment51S: P1T	Runoff Area=10,844 sf 61.75% Impervious Runoff Depth>5.54" Tc=6.0 min CN=75 Runoff=1.67 cfs 0.115 af
Subcatchment57S: (new Subcat)	Runoff Area=16,396 sf 6.10% Impervious Runoff Depth>1.39" Flow Length=87' Tc=13.0 min UI Adjusted CN=39 Runoff=0.41 cfs 0.044 af
Subcatchment58S: P1AA	Runoff Area=217,595 sf 2.56% Impervious Runoff Depth>2.03" Flow Length=111' Tc=11.7 min UI Adjusted CN=45 Runoff=9.49 cfs 0.844 af
Subcatchment60S: P2C	Runoff Area=6,486 sf 73.97% Impervious Runoff Depth>7.50" Tc=6.0 min CN=92 Runoff=1.24 cfs 0.093 af
Subcatchment61S: P2D	Runoff Area=1,464 sf 87.02% Impervious Runoff Depth>7.78" Tc=6.0 min CN=95 Runoff=0.29 cfs 0.022 af
Subcatchment62S: P2J	Runoff Area=10,675 sf 72.86% Impervious Runoff Depth>7.40" Tc=6.0 min CN=91 Runoff=2.03 cfs 0.151 af
Subcatchment63S: P2K	Runoff Area=6,698 sf 76.98% Impervious Runoff Depth>7.50" Tc=6.0 min CN=92 Runoff=1.28 cfs 0.096 af
Subcatchment64S: P3L	Runoff Area=2,885 sf 66.55% Impervious Runoff Depth>7.29" Tc=6.0 min CN=90 Runoff=0.54 cfs 0.040 af
Subcatchment65S: P3M	Runoff Area=5,397 sf 69.69% Impervious Runoff Depth>7.40" Tc=6.0 min CN=91 Runoff=1.03 cfs 0.076 af
Subcatchment66S: P3N	Runoff Area=7,748 sf 72.79% Impervious Runoff Depth>7.40" Tc=6.0 min CN=91 Runoff=1.47 cfs 0.110 af
Subcatchment67S: P3O	Runoff Area=8,254 sf 78.29% Impervious Runoff Depth>7.60" Tc=6.0 min CN=93 Runoff=1.59 cfs 0.120 af
Subcatchment68S: P3P	Runoff Area=4,070 sf 80.29% Impervious Runoff Depth>7.60" Tc=6.0 min CN=93 Runoff=0.78 cfs 0.059 af
Subcatchment69S: P2E	Runoff Area=7,088 sf 82.69% Impervious Runoff Depth>7.69" Tc=6.0 min CN=94 Runoff=1.37 cfs 0.104 af
Subcatchment70S: P2F	Runoff Area=3,932 sf 100.00% Impervious Runoff Depth>8.00" Tc=6.0 min CN=98 Runoff=0.77 cfs 0.060 af
Subcatchment71S: P2A	Runoff Area=10,978 sf 65.83% Impervious Runoff Depth>7.29" Tc=6.0 min CN=90 Runoff=2.07 cfs 0.153 af

Subcatchment72S: P2B	Runoff Area=7,563 sf 65.05% Impervious Runoff Depth>7.29" Tc=6.0 min CN=90 Runoff=1.43 cfs 0.106 af
Subcatchment73S: P2G	Runoff Area=8,223 sf 71.07% Impervious Runoff Depth>7.40" Tc=6.0 min CN=91 Runoff=1.56 cfs 0.116 af
Subcatchment74S: P2H	Runoff Area=4,268 sf 95.31% Impervious Runoff Depth>7.78" Tc=6.0 min CN=95 Runoff=0.83 cfs 0.064 af
Subcatchment75S: P3Q	Runoff Area=10,219 sf 64.37% Impervious Runoff Depth>7.18" Tc=6.0 min CN=89 Runoff=1.91 cfs 0.140 af
Subcatchment76S: P3R	Runoff Area=13,649 sf 76.83% Impervious Runoff Depth>7.50" Tc=6.0 min CN=92 Runoff=2.61 cfs 0.196 af
Subcatchment77S: P3S	Runoff Area=7,757 sf 69.60% Impervious Runoff Depth>7.40" Tc=6.0 min CN=91 Runoff=1.48 cfs 0.110 af
Subcatchment78S: P1S	Runoff Area=12,630 sf 58.56% Impervious Runoff Depth>6.85" Tc=6.0 min CN=86 Runoff=2.29 cfs 0.165 af
Subcatchment79S: P1T	Runoff Area=11,982 sf 72.42% Impervious Runoff Depth>7.40" Tc=6.0 min CN=91 Runoff=2.28 cfs 0.170 af
Subcatchment80S: P3KK	Runoff Area=8,557 sf 76.76% Impervious Runoff Depth>6.62" Tc=6.0 min CN=84 Runoff=1.52 cfs 0.108 af
Subcatchment81S: P3LL	Runoff Area=9,785 sf 79.18% Impervious Runoff Depth>6.85" Tc=6.0 min CN=86 Runoff=1.78 cfs 0.128 af
Subcatchment82S: P3SS	Runoff Area=12,880 sf 67.55% Impervious Runoff Depth>6.02" Tc=6.0 min CN=79 Runoff=2.13 cfs 0.148 af
Subcatchment83S: P2I	Runoff Area=13,847 sf 51.48% Impervious Runoff Depth>6.02" Tc=6.0 min CN=79 Runoff=2.29 cfs 0.159 af
Subcatchment84S: P2AA	Runoff Area=71,125 sf 7.37% Impervious Runoff Depth>5.17" Flow Length=201' Tc=8.4 min UI Adjusted CN=72 Runoff=9.59 cfs 0.704 af
Subcatchment85S: (new Subcat)	Runoff Area=25,650 sf 36.87% Impervious Runoff Depth>6.50" Tc=6.0 min CN=83 Runoff=4.49 cfs 0.319 af
Subcatchment86S: P3TT	Runoff Area=13,926 sf 63.97% Impervious Runoff Depth>5.90" Tc=6.0 min CN=78 Runoff=2.26 cfs 0.157 af
Subcatchment87S: P3A	Runoff Area=2,273 sf 80.20% Impervious Runoff Depth>7.60" Tc=6.0 min CN=93 Runoff=0.44 cfs 0.033 af
Subcatchment88S: P3B	Runoff Area=4,538 sf 76.91% Impervious Runoff Depth>7.50" Tc=6.0 min CN=92 Runoff=0.87 cfs 0.065 af

Subcatchment89S: P3AAA	Runoff Area=6,945 sf 74.64% Impervious Runoff Depth>6.50" Tc=6.0 min CN=83 Runoff=1.21 cfs 0.086 af
Subcatchment90S: P3BBB	Runoff Area=9,141 sf 67.61% Impervious Runoff Depth>6.02" Tc=6.0 min CN=79 Runoff=1.51 cfs 0.105 af
Subcatchment91S: P3GGG	Runoff Area=9,122 sf 66.66% Impervious Runoff Depth>5.90" Tc=6.0 min CN=78 Runoff=1.48 cfs 0.103 af
Subcatchment92S: P3C	Runoff Area=6,128 sf 70.69% Impervious Runoff Depth>7.40" Tc=6.0 min CN=91 Runoff=1.17 cfs 0.087 af
Subcatchment93S: P3D	Runoff Area=8,893 sf 71.21% Impervious Runoff Depth>7.40" Tc=6.0 min CN=91 Runoff=1.69 cfs 0.126 af
Subcatchment94S: P3HHH	Runoff Area=9,026 sf 76.76% Impervious Runoff Depth>6.62" Tc=6.0 min CN=84 Runoff=1.60 cfs 0.114 af
Subcatchment95S: P2X	Runoff Area=6,460 sf 100.00% Impervious Runoff Depth>8.00" Tc=6.0 min CN=98 Runoff=1.27 cfs 0.099 af
Subcatchment97S: P3G	Runoff Area=16,665 sf 73.17% Impervious Runoff Depth>7.50" Tc=6.0 min CN=92 Runoff=3.19 cfs 0.239 af
Subcatchment98S: P3H	Runoff Area=11,218 sf 68.08% Impervious Runoff Depth>7.29" Tc=6.0 min CN=90 Runoff=2.12 cfs 0.157 af
Subcatchment102S: P3J	Runoff Area=14,925 sf 64.21% Impervious Runoff Depth>7.18" Tc=6.0 min CN=89 Runoff=2.79 cfs 0.205 af
Subcatchment103S: P3I	Runoff Area=21,963 sf 74.80% Impervious Runoff Depth>7.50" Tc=6.0 min CN=92 Runoff=4.21 cfs 0.315 af
Subcatchment107S: P3E	Runoff Area=17,242 sf 64.26% Impervious Runoff Depth>7.18" Tc=6.0 min CN=89 Runoff=3.22 cfs 0.237 af
Subcatchment108S: P3F	Runoff Area=19,891 sf 64.44% Impervious Runoff Depth>7.18" Tc=6.0 min CN=89 Runoff=3.72 cfs 0.273 af
Subcatchment109S: P3T	Runoff Area=11,178 sf 83.40% Impervious Runoff Depth>7.69" Tc=6.0 min CN=94 Runoff=2.17 cfs 0.165 af
Subcatchment110S: P3U	Runoff Area=14,474 sf 76.35% Impervious Runoff Depth>7.50" Tc=6.0 min CN=92 Runoff=2.77 cfs 0.208 af
Subcatchment111S: P3V	Runoff Area=14,345 sf 82.49% Impervious Runoff Depth>7.69" Tc=6.0 min CN=94 Runoff=2.78 cfs 0.211 af
Subcatchment112S: P3W	Runoff Area=8,601 sf 91.64% Impervious Runoff Depth>7.86" Tc=6.0 min CN=96 Runoff=1.68 cfs 0.129 af
Subcatchment125S: P3EE	Runoff Area=23,054 sf 81.18% Impervious Runoff Depth>6.96" Tc=6.0 min CN=87 Runoff=4.23 cfs 0.307 af

Subcatchment 126S: P3FF	Runoff Area=17,312 sf 70.10% Impervious Runoff Depth>6.14" Tc=6.0 min CN=80 Runoff=2.90 cfs 0.203 af
Subcatchment 127S: P3GG	Runoff Area=16,395 sf 53.54% Impervious Runoff Depth>5.06" Tc=6.0 min CN=71 Runoff=2.33 cfs 0.159 af
Subcatchment 128S: P3HH	Runoff Area=15,226 sf 63.87% Impervious Runoff Depth>5.78" Tc=6.0 min CN=77 Runoff=2.43 cfs 0.168 af
Subcatchment 129S: P3MM	Runoff Area=7,841 sf 66.23% Impervious Runoff Depth>5.90" Tc=6.0 min CN=78 Runoff=1.27 cfs 0.088 af
Subcatchment 130S: P3NN	Runoff Area=6,295 sf 72.58% Impervious Runoff Depth>6.38" Tc=6.0 min CN=82 Runoff=1.09 cfs 0.077 af
Subcatchment 136S: P3II	Runoff Area=10,900 sf 80.29% Impervious Runoff Depth>6.85" Tc=6.0 min CN=86 Runoff=1.98 cfs 0.143 af
Subcatchment 138S: P3JJ Flow Length=50' Slope=0.0100 '/'	Runoff Area=14,214 sf 6.96% Impervious Runoff Depth>1.60" Tc=7.5 min UI Adjusted CN=41 Runoff=0.51 cfs 0.044 af
Subcatchment 140S: P3OO	Runoff Area=17,829 sf 65.98% Impervious Runoff Depth>5.90" Tc=6.0 min CN=78 Runoff=2.90 cfs 0.201 af
Subcatchment 141S: P3PP	Runoff Area=25,131 sf 66.17% Impervious Runoff Depth>5.90" Tc=6.0 min CN=78 Runoff=4.08 cfs 0.284 af
Subcatchment 142S: P3UU	Runoff Area=3,331 sf 72.53% Impervious Runoff Depth>6.38" Tc=6.0 min CN=82 Runoff=0.57 cfs 0.041 af
Subcatchment 143S: P3VV	Runoff Area=3,461 sf 73.82% Impervious Runoff Depth>6.50" Tc=6.0 min CN=83 Runoff=0.61 cfs 0.043 af
Subcatchment 147S: P3QQ	Runoff Area=8,544 sf 80.21% Impervious Runoff Depth>6.85" Tc=6.0 min CN=86 Runoff=1.55 cfs 0.112 af
Subcatchment 149S: P3RR Flow Length=50' Slope=0.0100 '/'	Runoff Area=7,953 sf 10.10% Impervious Runoff Depth>1.71" Tc=7.5 min UI Adjusted CN=42 Runoff=0.31 cfs 0.026 af
Subcatchment 151S: P3ZZ	Runoff Area=6,359 sf 79.60% Impervious Runoff Depth>6.85" Tc=6.0 min CN=86 Runoff=1.15 cfs 0.083 af
Subcatchment 152S: P3YY	Runoff Area=5,089 sf 70.43% Impervious Runoff Depth>6.26" Tc=6.0 min CN=81 Runoff=0.87 cfs 0.061 af
Subcatchment 153S: P3WW	Runoff Area=9,574 sf 74.64% Impervious Runoff Depth>6.50" Tc=6.0 min CN=83 Runoff=1.67 cfs 0.119 af
Subcatchment 154S: P3XX	Runoff Area=4,702 sf 90.07% Impervious Runoff Depth>7.50" Tc=6.0 min CN=92 Runoff=0.90 cfs 0.067 af

Subcatchment 155S: P3CCC	Runoff Area=8,394 sf 67.64% Impervious Runoff Depth>6.02" Tc=6.0 min CN=79 Runoff=1.39 cfs 0.097 af
Subcatchment 156S: P3DDD	Runoff Area=14,850 sf 60.75% Impervious Runoff Depth>5.54" Tc=6.0 min CN=75 Runoff=2.29 cfs 0.157 af
Subcatchment 165S: P3FFF	Runoff Area=2,770 sf 55.52% Impervious Runoff Depth>5.18" Tc=6.0 min CN=72 Runoff=0.40 cfs 0.027 af
Subcatchment 166S: P3EEE	Runoff Area=4,031 sf 53.88% Impervious Runoff Depth>5.06" Tc=6.0 min CN=71 Runoff=0.57 cfs 0.039 af
Subcatchment 170S: P3JJJ	Runoff Area=13,803 sf 75.85% Impervious Runoff Depth>6.62" Tc=6.0 min CN=84 Runoff=2.45 cfs 0.175 af
Subcatchment 171S: P3III	Runoff Area=5,653 sf 71.18% Impervious Runoff Depth>6.26" Tc=6.0 min CN=81 Runoff=0.96 cfs 0.068 af
Subcatchment 175S: P3KKK	Runoff Area=13,720 sf 68.62% Impervious Runoff Depth>6.02" Tc=6.0 min CN=79 Runoff=2.26 cfs 0.158 af
Subcatchment 176S: P3LLL	Runoff Area=6,640 sf 60.77% Impervious Runoff Depth>5.54" Tc=6.0 min CN=75 Runoff=1.02 cfs 0.070 af
Subcatchment 182S: P3MMM	Runoff Area=11,484 sf 68.05% Impervious Runoff Depth>6.02" Tc=6.0 min CN=79 Runoff=1.90 cfs 0.132 af
Subcatchment 183S: P3NNN	Runoff Area=17,078 sf 53.13% Impervious Runoff Depth>4.94" Tc=6.0 min CN=70 Runoff=2.38 cfs 0.161 af
Subcatchment 184S: P3OOO	Runoff Area=20,782 sf 57.77% Impervious Runoff Depth>5.30" Tc=6.0 min CN=73 Runoff=3.08 cfs 0.211 af
Subcatchment 185S: P3PPP	Runoff Area=17,125 sf 73.16% Impervious Runoff Depth>6.38" Tc=6.0 min CN=82 Runoff=2.96 cfs 0.209 af
Subcatchment 186S: P3QQQ	Runoff Area=31,267 sf 28.78% Impervious Runoff Depth>2.59" Tc=6.0 min UI Adjusted CN=50 Runoff=2.22 cfs 0.155 af
Subcatchment 187S: P3RRR	Runoff Area=27,972 sf 65.44% Impervious Runoff Depth>5.90" Tc=6.0 min CN=78 Runoff=4.54 cfs 0.316 af
Subcatchment 189S: (new Subcat)	Runoff Area=179,843 sf 4.59% Impervious Runoff Depth>2.92" Flow Length=322' Tc=20.8 min UI Adjusted CN=53 Runoff=9.84 cfs 1.003 af
Subcatchment 190S: (new Subcat)	Runoff Area=12,078 sf 85.87% Impervious Runoff Depth>7.29" Tc=6.0 min CN=90 Runoff=2.28 cfs 0.168 af
Subcatchment 191S: P3SSS	Runoff Area=9,557 sf 30.44% Impervious Runoff Depth>2.82" Tc=6.0 min CN=52 Runoff=0.75 cfs 0.052 af
Subcatchment 192S: P3TTT	Runoff Area=6,608 sf 66.33% Impervious Runoff Depth>5.90" Tc=6.0 min CN=78 Runoff=1.07 cfs 0.075 af

Subcatchment195S: P3UUU	Runoff Area=13,818 sf 82.60% Impervious Runoff Depth>7.07" Tc=6.0 min CN=88 Runoff=2.56 cfs 0.187 af
Subcatchment198S: P3VVV	Runoff Area=12,978 sf 0.00% Impervious Runoff Depth>1.39" Tc=6.0 min CN=39 Runoff=0.41 cfs 0.035 af
Subcatchment202S: (new Subcat)	Runoff Area=26,038 sf 46.07% Impervious Runoff Depth>4.46" Tc=6.0 min CN=66 Runoff=3.29 cfs 0.222 af
Subcatchment204S: (new Subcat)	Runoff Area=154,169 sf 1.31% Impervious Runoff Depth>0.90" Flow Length=104' Tc=7.9 min CN=34 Runoff=2.05 cfs 0.266 af
Pond 15P: Inf. Basin 5	Peak Elev=60.48' Storage=26,758 cf Inflow=20.47 cfs 1.532 af Discarded=0.35 cfs 0.287 af Primary=11.09 cfs 0.927 af Outflow=11.44 cfs 1.213 af
Pond 16P: CB 58	Peak Elev=62.91' Inflow=1.47 cfs 0.114 af 12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=1.47 cfs 0.114 af
Pond 17P: CB 59	Peak Elev=63.73' Inflow=3.18 cfs 0.238 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' Outflow=3.18 cfs 0.238 af
Pond 18P: CB 63	Peak Elev=64.57' Inflow=1.14 cfs 0.084 af 12.0" Round Culvert n=0.013 L=13.0' S=0.0077 ' Outflow=1.14 cfs 0.084 af
Pond 19P: CB 62	Peak Elev=64.32' Inflow=0.54 cfs 0.041 af 12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.54 cfs 0.041 af
Pond 20P: DMH 43	Peak Elev=64.82' Inflow=4.65 cfs 0.352 af 12.0" Round Culvert n=0.013 L=66.0' S=0.0050 ' Outflow=4.65 cfs 0.352 af
Pond 21P: DMH 42	Peak Elev=64.39' Inflow=4.65 cfs 0.352 af 12.0" Round Culvert n=0.013 L=71.0' S=0.0052 ' Outflow=4.65 cfs 0.352 af
Pond 22P: CB 56	Peak Elev=61.86' Inflow=1.08 cfs 0.084 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=1.08 cfs 0.084 af
Pond 23P: CB 57	Peak Elev=62.49' Inflow=2.66 cfs 0.202 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=2.66 cfs 0.202 af
Pond 24P: DMH 41	Peak Elev=63.31' Inflow=8.39 cfs 0.638 af 18.0" Round Culvert n=0.013 L=55.0' S=0.0322 ' Outflow=8.39 cfs 0.638 af
Pond 25P: DMH 45	Peak Elev=64.50' Inflow=1.68 cfs 0.124 af 12.0" Round Culvert n=0.013 L=148.0' S=0.0100 ' Outflow=1.68 cfs 0.124 af
Pond 26P: CB 61	Peak Elev=63.37' Inflow=2.18 cfs 0.161 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0067 ' Outflow=2.18 cfs 0.161 af
Pond 27P: CB 60	Peak Elev=62.91' Inflow=0.92 cfs 0.068 af 12.0" Round Culvert n=0.013 L=13.0' S=0.0077 ' Outflow=0.92 cfs 0.068 af

Pond 28P: DMH 44

Peak Elev=65.14' Inflow=4.77 cfs 0.354 af
 12.0" Round Culvert n=0.013 L=85.0' S=0.0338 ' Outflow=4.77 cfs 0.354 af

Pond 29P: DMH 40

Peak Elev=61.47' Inflow=13.86 cfs 1.044 af
 24.0" Round Culvert n=0.013 L=25.0' S=0.0120 ' Outflow=13.86 cfs 1.044 af

Pond 30P: CB 55

Peak Elev=60.71' Inflow=0.70 cfs 0.053 af
 12.0" Round Culvert n=0.013 L=15.0' S=0.0667 ' Outflow=0.70 cfs 0.053 af

Pond 31P: CB 51

Peak Elev=60.67' Inflow=0.38 cfs 0.029 af
 12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.38 cfs 0.029 af

Pond 32P: CB 52

Peak Elev=61.25' Inflow=1.89 cfs 0.143 af
 12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=1.89 cfs 0.143 af

Pond 33P: CB 53

Peak Elev=61.11' Inflow=0.38 cfs 0.030 af
 12.0" Round Culvert n=0.013 L=9.0' S=0.1111 ' Outflow=0.38 cfs 0.030 af

Pond 34P: DMH 36

Peak Elev=61.18' Inflow=2.27 cfs 0.172 af
 12.0" Round Culvert n=0.013 L=67.0' S=0.0051 ' Outflow=2.27 cfs 0.172 af

Pond 35P: DMH 37

Peak Elev=61.02' Inflow=2.66 cfs 0.202 af
 12.0" Round Culvert n=0.013 L=52.0' S=0.0050 ' Outflow=2.66 cfs 0.202 af

Pond 36P: CB 54

Peak Elev=61.03' Inflow=1.71 cfs 0.132 af
 12.0" Round Culvert n=0.013 L=7.0' S=0.1143 ' Outflow=1.71 cfs 0.132 af

Pond 37P: DMH 38

Peak Elev=62.15' Inflow=4.36 cfs 0.334 af
 12.0" Round Culvert n=0.013 L=94.0' S=0.0050 ' Outflow=4.36 cfs 0.334 af

Pond 38P: DMH 39

Peak Elev=62.05' Inflow=18.22 cfs 1.378 af
 24.0" Round Culvert n=0.013 L=68.0' S=0.0254 ' Outflow=18.22 cfs 1.378 af

Pond 41P: CB 49

Peak Elev=58.74' Inflow=0.19 cfs 0.015 af
 12.0" Round Culvert n=0.013 L=8.0' S=0.0125 ' Outflow=0.19 cfs 0.015 af

Pond 42P: CB 50

Peak Elev=59.30' Inflow=1.50 cfs 0.111 af
 12.0" Round Culvert n=0.013 L=8.0' S=0.0125 ' Outflow=1.50 cfs 0.111 af

Pond 43P: DMH 35

Peak Elev=59.12' Inflow=1.69 cfs 0.126 af
 12.0" Round Culvert n=0.013 L=87.0' S=0.0414 ' Outflow=1.69 cfs 0.126 af

Pond 46P: CB 48

Peak Elev=56.10' Inflow=2.68 cfs 0.191 af
 12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=2.68 cfs 0.191 af

Pond 47P: CB 47

Peak Elev=55.45' Inflow=1.03 cfs 0.080 af
 12.0" Round Culvert n=0.013 L=11.0' S=0.0091 ' Outflow=1.03 cfs 0.080 af

Pond 48P: DMH 33

Peak Elev=56.64' Inflow=3.71 cfs 0.270 af
 12.0" Round Culvert n=0.013 L=5.0' S=0.0200 ' Outflow=3.71 cfs 0.270 af

Pond 49P: Sub. Inf. 4

Peak Elev=57.27' Storage=0.156 af Inflow=9.97 cfs 0.731 af
 Discarded=0.14 cfs 0.128 af Primary=9.99 cfs 0.490 af Outflow=10.13 cfs 0.618 af

Pond 52P: CB 20	Peak Elev=52.00' Inflow=1.67 cfs 0.115 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=1.67 cfs 0.115 af
Pond 53P: CB 21	Peak Elev=52.36' Inflow=2.56 cfs 0.180 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=2.56 cfs 0.180 af
Pond 54P: DMH 15	Peak Elev=53.43' Inflow=4.23 cfs 0.295 af 12.0" Round Culvert n=0.013 L=60.0' S=0.0050 '/' Outflow=4.23 cfs 0.295 af
Pond 55P: DMH 16	Peak Elev=53.10' Inflow=4.23 cfs 0.295 af 12.0" Round Culvert n=0.013 L=88.0' S=0.0060 '/' Outflow=4.23 cfs 0.295 af
Pond 56P: Inf. Basin 4	Peak Elev=52.18' Storage=4,819 cf Inflow=4.45 cfs 0.339 af Discarded=1.00 cfs 0.338 af Secondary=0.00 cfs 0.000 af Outflow=1.00 cfs 0.338 af
Pond 60P: Sub. Det. 1	Peak Elev=63.25' Storage=0.264 af Inflow=16.42 cfs 1.217 af Outflow=10.62 cfs 1.081 af
Pond 61P: CB 8	Peak Elev=49.27' Inflow=1.90 cfs 0.132 af 12.0" Round Culvert n=0.013 L=25.0' S=0.0052 '/' Outflow=1.90 cfs 0.132 af
Pond 62P: CB 66	Peak Elev=61.18' Inflow=1.24 cfs 0.093 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0100 '/' Outflow=1.24 cfs 0.093 af
Pond 63P: CB 67	Peak Elev=60.90' Inflow=0.29 cfs 0.022 af 12.0" Round Culvert n=0.013 L=14.0' S=0.0214 '/' Outflow=0.29 cfs 0.022 af
Pond 64P: DMH 47	Peak Elev=63.42' Inflow=5.03 cfs 0.374 af 12.0" Round Culvert n=0.013 L=25.0' S=0.0080 '/' Outflow=5.03 cfs 0.374 af
Pond 65P: DMH 49	Peak Elev=59.71' Inflow=2.15 cfs 0.164 af 12.0" Round Culvert n=0.013 L=59.0' S=0.0119 '/' Outflow=2.15 cfs 0.164 af
Pond 66P: CB 68	Peak Elev=59.67' Inflow=1.37 cfs 0.104 af 12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=1.37 cfs 0.104 af
Pond 67P: CB 69	Peak Elev=59.45' Inflow=0.77 cfs 0.060 af 12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=0.77 cfs 0.060 af
Pond 68P: Sub. Inf. 5	Peak Elev=61.65' Storage=0.054 af Inflow=5.03 cfs 0.374 af Discarded=0.07 cfs 0.072 af Primary=4.07 cfs 0.263 af Outflow=4.14 cfs 0.335 af
Pond 69P: CB 72	Peak Elev=62.45' Inflow=2.03 cfs 0.151 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0600 '/' Outflow=2.03 cfs 0.151 af
Pond 70P: CB 73	Peak Elev=62.19' Inflow=1.28 cfs 0.096 af 12.0" Round Culvert n=0.013 L=10.0' S=0.0600 '/' Outflow=1.28 cfs 0.096 af
Pond 71P: DMH 54	Peak Elev=62.53' Inflow=3.31 cfs 0.247 af 12.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=3.31 cfs 0.247 af

Pond 72P: Sub. Inf. 7	Peak Elev=62.45' Storage=0.042 af Inflow=3.31 cfs 0.247 af Discarded=0.07 cfs 0.063 af Primary=3.21 cfs 0.158 af Outflow=3.28 cfs 0.221 af
Pond 73P: CB 64	Peak Elev=62.07' Inflow=2.07 cfs 0.153 af 12.0" Round Culvert n=0.013 L=25.0' S=0.0080 ' Outflow=2.07 cfs 0.153 af
Pond 74P: CB 65	Peak Elev=61.84' Inflow=1.43 cfs 0.106 af 12.0" Round Culvert n=0.013 L=15.0' S=0.0133 ' Outflow=1.43 cfs 0.106 af
Pond 75P: DMH 46	Peak Elev=62.92' Inflow=3.50 cfs 0.259 af 12.0" Round Culvert n=0.013 L=118.0' S=0.0051 ' Outflow=3.50 cfs 0.259 af
Pond 76P: CB 70	Peak Elev=58.99' Inflow=1.56 cfs 0.116 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0100 ' Outflow=1.56 cfs 0.116 af
Pond 77P: CB 71	Peak Elev=58.73' Inflow=0.83 cfs 0.064 af 12.0" Round Culvert n=0.013 L=20.0' S=0.0100 ' Outflow=0.83 cfs 0.064 af
Pond 78P: DMH 50	Peak Elev=59.17' Inflow=4.54 cfs 0.344 af 18.0" Round Culvert n=0.013 L=25.0' S=0.0080 ' Outflow=4.54 cfs 0.344 af
Pond 79P: DMH 51	Peak Elev=59.09' Inflow=5.82 cfs 0.443 af 18.0" Round Culvert n=0.013 L=148.0' S=0.0047 ' Outflow=5.82 cfs 0.443 af
Pond 80P: DMH 52	Peak Elev=58.30' Inflow=5.82 cfs 0.443 af 18.0" Round Culvert n=0.013 L=104.0' S=0.0052 ' Outflow=5.82 cfs 0.443 af
Pond 81P: DMH 53	Peak Elev=57.66' Inflow=5.82 cfs 0.443 af 18.0" Round Culvert n=0.013 L=60.0' S=0.0195 ' Outflow=5.82 cfs 0.443 af
Pond 82P: Constructed Wetland 2	Peak Elev=58.45' Storage=11,040 cf Inflow=8.10 cfs 0.603 af Outflow=1.91 cfs 0.536 af
Pond 83P: CB 86	Peak Elev=58.75' Inflow=1.47 cfs 0.110 af 12.0" Round Culvert n=0.013 L=11.0' S=0.0227 ' Outflow=1.47 cfs 0.110 af
Pond 84P: CB 87	Peak Elev=58.79' Inflow=1.59 cfs 0.120 af 12.0" Round Culvert n=0.013 L=11.0' S=0.0227 ' Outflow=1.59 cfs 0.120 af
Pond 85P: DMH 65	Peak Elev=59.20' Inflow=3.07 cfs 0.230 af 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

Pond 121P: Sub. Det. 3

Peak Elev=61.63' Storage=0.434 af Inflow=16.19 cfs 1.218 af
Outflow=12.84 cfs 1.014 af

Pond 122P: CB 46

Peak Elev=58.70' Inflow=2.28 cfs 0.170 af
12.0" Round Culvert n=0.013 L=16.0' S=0.0063 '/' Outflow=2.28 cfs 0.170 af

Pond 123P: DMH 31

Peak Elev=58.61' Inflow=4.57 cfs 0.335 af
18.0" Round Culvert n=0.013 L=78.0' S=0.0100 '/' Outflow=4.57 cfs 0.335 af

Pond 124P: DMH 32

Peak Elev=57.79' Inflow=4.57 cfs 0.335 af
18.0" Round Culvert n=0.013 L=75.0' S=0.0249 '/' Outflow=4.57 cfs 0.335 af

Pond 125P: CB 36

Peak Elev=55.28' Inflow=1.52 cfs 0.108 af
12.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=1.52 cfs 0.108 af

Pond 126P: CB 37

Peak Elev=55.37' Inflow=1.78 cfs 0.128 af
12.0" Round Culvert n=0.013 L=15.0' S=0.0067 '/' Outflow=1.78 cfs 0.128 af

Pond 127P: DMH 26

Peak Elev=55.96' Inflow=3.29 cfs 0.236 af
12.0" Round Culvert n=0.013 L=84.0' S=0.0173 '/' Outflow=3.29 cfs 0.236 af

Pond 128P: CB 30

Peak Elev=56.93' Inflow=2.13 cfs 0.148 af
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=2.13 cfs 0.148 af

Pond 129P: CB 34

Peak Elev=55.30' Inflow=2.90 cfs 0.203 af
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=2.90 cfs 0.203 af

Pond 130P: CB 32

Peak Elev=56.52' Inflow=4.23 cfs 0.307 af
12.0" Round Culvert n=0.013 L=16.0' S=0.0256 '/' Outflow=4.23 cfs 0.307 af

Pond 131P: CB 35

Peak Elev=55.02' Inflow=2.43 cfs 0.168 af
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=2.43 cfs 0.168 af

Pond 132P: CB 33

Peak Elev=54.82' Inflow=2.33 cfs 0.159 af
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=2.33 cfs 0.159 af

Pond 133P: DMH 24

Peak Elev=57.44' Inflow=11.89 cfs 0.837 af
18.0" Round Culvert n=0.013 L=112.0' S=0.0050 '/' Outflow=11.89 cfs 0.837 af

Pond 134P: DMH 25

Peak Elev=57.39' Inflow=5.33 cfs 0.372 af
12.0" Round Culvert n=0.013 L=20.0' S=0.0050 '/' Outflow=5.33 cfs 0.372 af

Pond 135P: Inf. Basin 3

Peak Elev=56.40' Storage=16,641 cf Inflow=14.34 cfs 1.024 af
Discarded=2.70 cfs 1.023 af Primary=0.00 cfs 0.000 af Outflow=2.70 cfs 1.023 af

Pond 136P: CB 38

Peak Elev=54.23' Inflow=1.27 cfs 0.088 af
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=1.27 cfs 0.088 af

Pond 137P: CB

Peak Elev=54.43' Inflow=1.98 cfs 0.143 af
12.0" Round Culvert n=0.013 L=70.0' S=0.0071 '/' Outflow=1.98 cfs 0.143 af

Pond 138P: CB 39

Peak Elev=54.16' Inflow=1.09 cfs 0.077 af
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

Pond 157P: DMH 21

Peak Elev=55.64' Inflow=2.58 cfs 0.186 af
12.0" Round Culvert n=0.013 L=86.0' S=0.0105 ' Outflow=2.58 cfs 0.186 af

Pond 158P: CB 24

Peak Elev=54.19' Inflow=0.87 cfs 0.061 af
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=0.87 cfs 0.061 af

Pond 159P: CB 25

Peak Elev=54.29' Inflow=1.15 cfs 0.083 af
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 ' Outflow=1.15 cfs 0.083 af

Pond 160P: DMH 20

Peak Elev=56.26' Inflow=4.60 cfs 0.331 af
12.0" Round Culvert n=0.013 L=33.0' S=0.0052 '/' Outflow=4.60 cfs 0.331 af

Pond 161P: DMH 19

Peak Elev=56.16' Inflow=10.16 cfs 0.720 af
18.0" Round Culvert n=0.013 L=100.0' S=0.0098 '/' Outflow=10.16 cfs 0.720 af

Pond 162P: CB 15

Peak Elev=51.54' Inflow=2.29 cfs 0.157 af
12.0" Round Culvert n=0.013 L=12.0' S=0.0083 '/' Outflow=2.29 cfs 0.157 af

Pond 163P: CB 14

Peak Elev=51.25' Inflow=1.39 cfs 0.097 af
12.0" Round Culvert n=0.013 L=20.0' S=0.0050 '/' Outflow=1.39 cfs 0.097 af

Pond 164P: DMH 9

Peak Elev=52.26' Inflow=3.67 cfs 0.254 af
12.0" Round Culvert n=0.013 L=11.0' S=0.0091 '/' Outflow=3.67 cfs 0.254 af

Pond 165P: CB 19

Peak Elev=54.05' Inflow=1.48 cfs 0.103 af
12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=1.48 cfs 0.103 af

Pond 166P: DMH 13

Peak Elev=60.75' Inflow=8.17 cfs 0.393 af
12.0" Round Culvert n=0.013 L=92.0' S=0.0050 '/' Outflow=8.17 cfs 0.393 af

Pond 167P: CB 10

Peak Elev=50.95' Inflow=0.57 cfs 0.039 af
12.0" Round Culvert n=0.013 L=9.0' S=0.0111 '/' Outflow=0.57 cfs 0.039 af

Pond 168P: CB 11

Peak Elev=50.87' Inflow=0.40 cfs 0.027 af
12.0" Round Culvert n=0.013 L=9.0' S=0.0111 '/' Outflow=0.40 cfs 0.027 af

Pond 169P: DMH 12

Peak Elev=60.90' Inflow=8.17 cfs 0.393 af
12.0" Round Culvert n=0.013 L=107.0' S=0.0050 '/' Outflow=8.17 cfs 0.393 af

Pond 170P: CB 9

Peak Elev=49.44' Inflow=2.38 cfs 0.161 af
12.0" Round Culvert n=0.013 L=21.0' S=0.0062 '/' Outflow=2.38 cfs 0.161 af

Pond 171P: DMH 6

Peak Elev=51.17' Inflow=10.31 cfs 0.713 af
18.0" Round Culvert n=0.013 L=94.0' S=0.0066 '/' Outflow=10.31 cfs 0.713 af

Pond 172P: CB 16

Peak Elev=53.07' Inflow=2.45 cfs 0.175 af
12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=2.45 cfs 0.175 af

Pond 173P: CB 17

Peak Elev=52.51' Inflow=0.96 cfs 0.068 af
12.0" Round Culvert n=0.013 L=8.0' S=0.0125 '/' Outflow=0.96 cfs 0.068 af

Pond 174P: DMH 11

Peak Elev=54.05' Inflow=10.28 cfs 0.636 af
18.0" Round Culvert n=0.013 L=111.0' S=0.0050 '/' Outflow=10.28 cfs 0.636 af

Pond 175P: DMH 5

Peak Elev=52.85' Inflow=6.04 cfs 0.420 af
12.0" Round Culvert n=0.013 L=14.0' S=0.0071 '/' Outflow=6.04 cfs 0.420 af

Pond 176P: CB 6

Peak Elev=50.03' Inflow=3.08 cfs 0.211 af
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 '/' Outflow=3.08 cfs 0.211 af

Pond 177P: CB 13

Peak Elev=51.57' Inflow=2.26 cfs 0.158 af
12.0" Round Culvert n=0.013 L=9.0' S=0.0111 ' Outflow=2.26 cfs 0.158 af

Pond 178P: CB 12

Peak Elev=51.14' Inflow=1.02 cfs 0.070 af
12.0" Round Culvert n=0.013 L=9.0' S=0.0111 ' Outflow=1.02 cfs 0.070 af

Pond 179P: DMH 8

Peak Elev=54.65' Inflow=12.75 cfs 0.864 af
18.0" Round Culvert n=0.013 L=8.0' S=0.0125 ' Outflow=12.75 cfs 0.864 af

Pond 180P: DMH 10

Peak Elev=56.89' Inflow=16.59 cfs 1.185 af
18.0" Round Culvert n=0.013 L=138.0' S=0.0076 ' Outflow=16.59 cfs 1.185 af

Pond 181P: DMH

Peak Elev=50.94' Inflow=0.98 cfs 0.066 af
12.0" Round Culvert n=0.013 L=16.0' S=0.0062 ' Outflow=0.98 cfs 0.066 af

Pond 182P: CB 7

Peak Elev=49.95' Inflow=2.96 cfs 0.209 af
12.0" Round Culvert n=0.013 L=10.0' S=0.0100 ' Outflow=2.96 cfs 0.209 af

Pond 184P: DMH 4A

Peak Elev=71.52' Inflow=11.18 cfs 0.379 af
12.0" Round Culvert n=0.013 L=169.0' S=0.0088 ' Outflow=11.18 cfs 0.379 af

Pond 185P: DMH

Peak Elev=65.58' Inflow=12.44 cfs 0.566 af
12.0" Round Culvert n=0.013 L=36.0' S=0.0208 ' Outflow=12.44 cfs 0.566 af

Pond 186P: Constructed Wetland 1

Peak Elev=49.47' Storage=32,347 cf Inflow=18.88 cfs 1.310 af
Outflow=3.74 cfs 0.628 af

Pond 187P: Constructed Wetland 3

Peak Elev=56.76' Storage=5,009 cf Inflow=10.62 cfs 1.081 af
Outflow=10.40 cfs 1.011 af

Pond 188P: CB 3

Peak Elev=48.65' Inflow=2.22 cfs 0.155 af
12.0" Round Culvert n=0.013 L=20.0' S=0.0075 ' Outflow=2.22 cfs 0.155 af

Pond 189P: CB 4

Peak Elev=50.41' Inflow=4.54 cfs 0.316 af
12.0" Round Culvert n=0.013 L=20.0' S=0.0075 ' Outflow=4.54 cfs 0.316 af

Pond 190P: DMH 3

Peak Elev=54.98' Inflow=17.06 cfs 1.184 af
18.0" Round Culvert n=0.013 L=166.0' S=0.0060 ' Outflow=17.06 cfs 1.184 af

Pond 191P: CB 42

Peak Elev=51.58' Inflow=2.28 cfs 0.168 af
12.0" Round Culvert n=0.013 L=194.0' S=0.0077 ' Outflow=2.28 cfs 0.168 af

Pond 192P: Sub. Inf. 1

Peak Elev=51.69' Storage=0.255 af Inflow=16.59 cfs 1.185 af
Discarded=2.70 cfs 0.805 af Primary=11.18 cfs 0.379 af Outflow=13.88 cfs 1.184 af

Pond 193P: CB 1

Peak Elev=47.54' Inflow=0.75 cfs 0.052 af
12.0" Round Culvert n=0.013 L=25.0' S=0.0060 ' Outflow=0.75 cfs 0.052 af

Pond 194P: CB 2

Peak Elev=47.64' Inflow=1.07 cfs 0.075 af
12.0" Round Culvert n=0.013 L=15.0' S=0.0100 ' Outflow=1.07 cfs 0.075 af

Pond 195P: Constructed Wetland 4

Peak Elev=56.46' Storage=7,671 cf Inflow=12.84 cfs 1.014 af
Outflow=11.47 cfs 0.946 af

Pond 196P: CB 5

Peak Elev=49.23' Inflow=2.56 cfs 0.187 af
12.0" Round Culvert n=0.013 L=27.0' S=0.0059 '/' Outflow=2.56 cfs 0.187 af

Pond 197P: Inf. Basin 1

Peak Elev=50.15' Storage=13,648 cf Inflow=12.72 cfs 0.601 af
Discarded=2.32 cfs 0.600 af Primary=0.00 cfs 0.000 af Outflow=2.32 cfs 0.600 af

Pond 198P: Sub. Inf. 2

Peak Elev=54.00' Storage=0.187 af Inflow=12.89 cfs 0.912 af
Discarded=3.19 cfs 0.779 af Primary=5.12 cfs 0.133 af Outflow=8.30 cfs 0.911 af

Pond 199P: DMH 2

Peak Elev=53.44' Inflow=17.06 cfs 1.184 af
18.0" Round Culvert n=0.013 L=48.0' S=0.0052 '/' Outflow=17.06 cfs 1.184 af

Pond 200P: DMH 1

Peak Elev=47.62' Inflow=1.82 cfs 0.126 af
12.0" Round Culvert n=0.013 L=55.0' S=0.0136 '/' Outflow=1.82 cfs 0.126 af

Pond 201P: Sub. Inf. 3

Peak Elev=54.79' Storage=0.146 af Inflow=8.94 cfs 0.624 af
Discarded=2.49 cfs 0.580 af Primary=1.59 cfs 0.044 af Outflow=4.08 cfs 0.624 af

Pond 202P: DMH 14

Peak Elev=54.31' Inflow=6.43 cfs 0.176 af
18.0" Round Culvert n=0.013 L=89.0' S=0.0055 '/' Outflow=6.43 cfs 0.176 af

Pond 204P: DMH 18

Peak Elev=55.92' Inflow=12.89 cfs 0.912 af
18.0" Round Culvert n=0.013 L=5.0' S=-0.0900 '/' Outflow=12.89 cfs 0.912 af

Pond 205P: DMH 27

Peak Elev=56.77' Inflow=5.65 cfs 0.402 af
12.0" Round Culvert n=0.013 L=16.0' S=0.0063 '/' Outflow=5.65 cfs 0.402 af

Pond 206P: DMH 34

Peak Elev=56.11' Inflow=6.26 cfs 0.461 af
18.0" Round Culvert n=0.013 L=5.0' S=-0.1800 '/' Outflow=6.26 cfs 0.461 af

Pond 207P: DMH 48

Peak Elev=63.22' Inflow=5.03 cfs 0.374 af
12.0" Round Culvert n=0.013 L=5.0' S=0.0200 '/' Outflow=5.03 cfs 0.374 af

Pond 208P: DMH 58

Peak Elev=63.43' Inflow=16.42 cfs 1.217 af
24.0" Round Culvert n=0.013 L=5.0' S=0.0100 '/' Outflow=16.42 cfs 1.217 af

Pond 209P: DMH 64

Peak Elev=59.97' Inflow=8.57 cfs 0.637 af
18.0" Round Culvert n=0.013 L=5.0' S=0.0100 '/' Outflow=8.57 cfs 0.637 af

Pond 210P: DMH 68

Peak Elev=60.68' Inflow=16.19 cfs 1.218 af
24.0" Round Culvert n=0.013 L=11.0' S=0.0727 '/' Outflow=16.19 cfs 1.218 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=40.37 cfs 4.063 af
Primary=40.37 cfs 4.063 af

RH Post 8-11-25

Prepared by Millennium Engineering, Inc

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Type III 24-hr 100-Year Rainfall=8.94"

Printed 8/12/2025

Page 727

Link 203L: 3A

Inflow=5.02 cfs 0.895 af

Primary=5.02 cfs 0.895 af

Total Runoff Area = 39.794 ac Runoff Volume = 16.153 af Average Runoff Depth = 4.87"
57.30% Pervious = 22.803 ac 42.70% Impervious = 16.991 ac

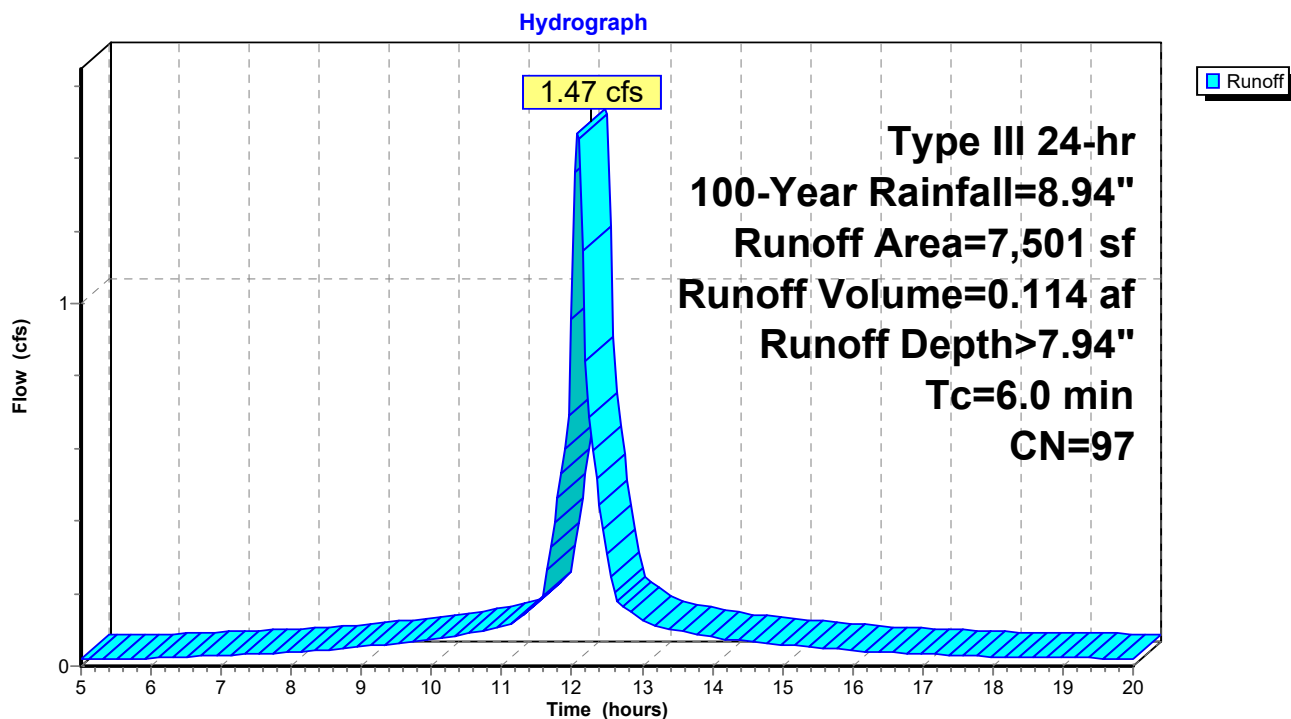
Summary for Subcatchment 1S: P1A

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

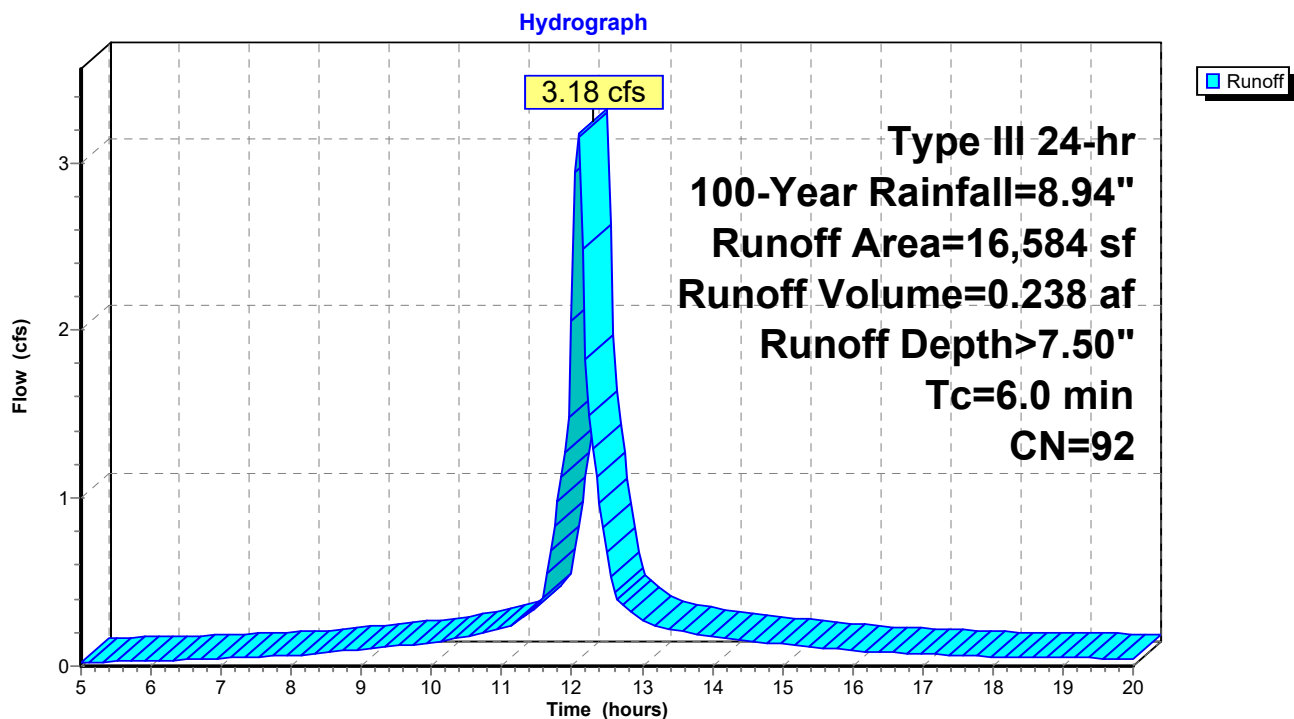
Summary for Subcatchment 2S: P1B

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

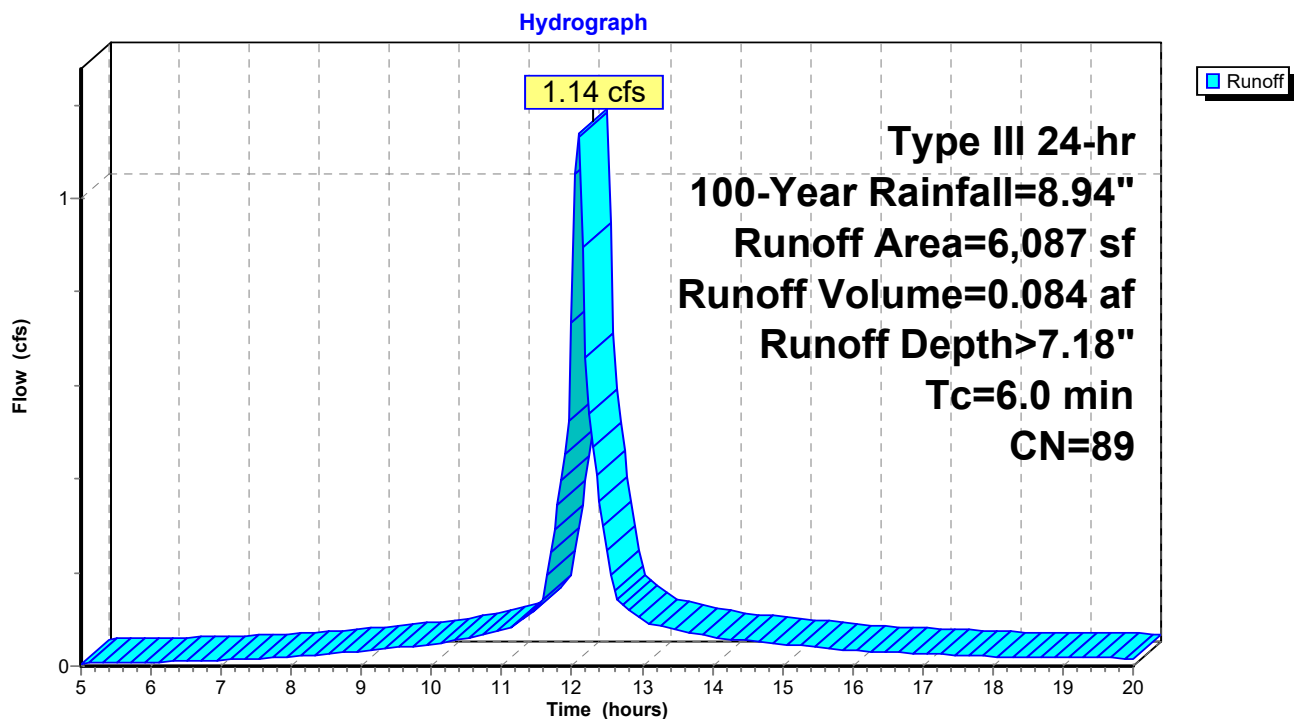
Summary for Subcatchment 3S: P1C

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 (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 3S: P1C

Summary for Subcatchment 4S: P1D

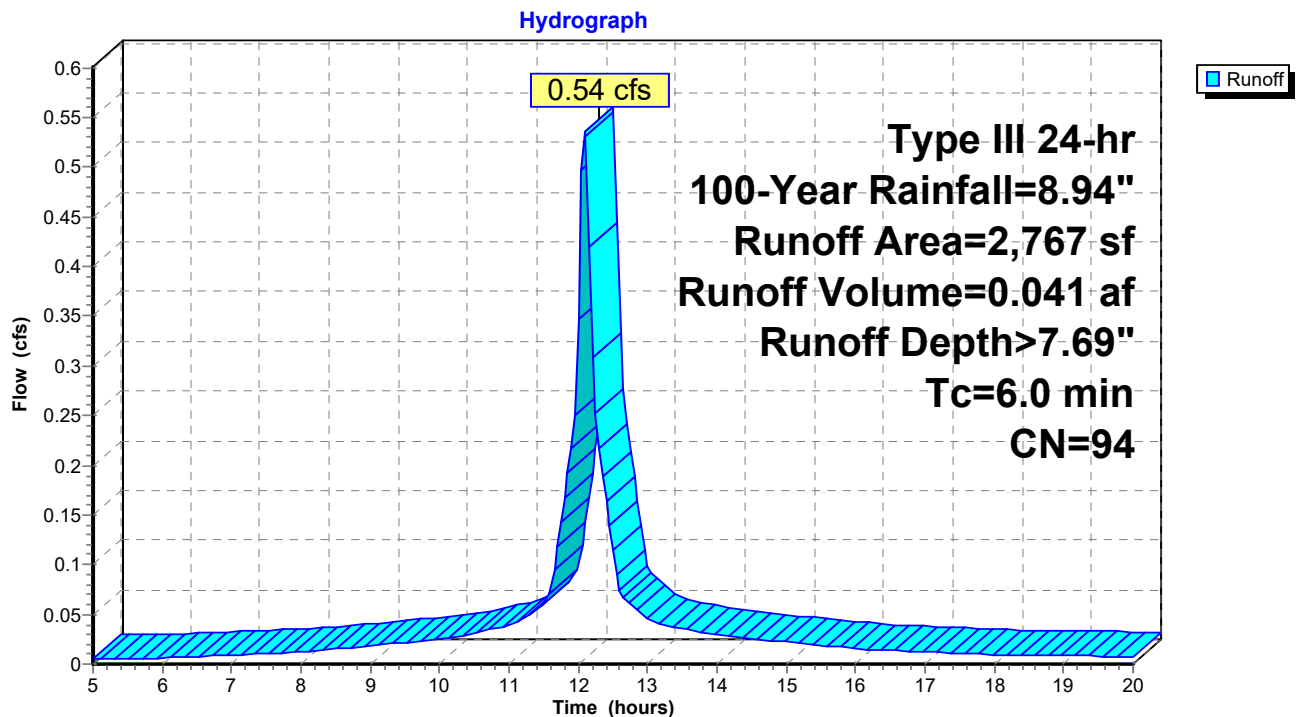
Runoff = 0.54 cfs @ 12.09 hrs, Volume= 0.041 af, Depth> 7.69"
Routed to Pond 19P : CB 62

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

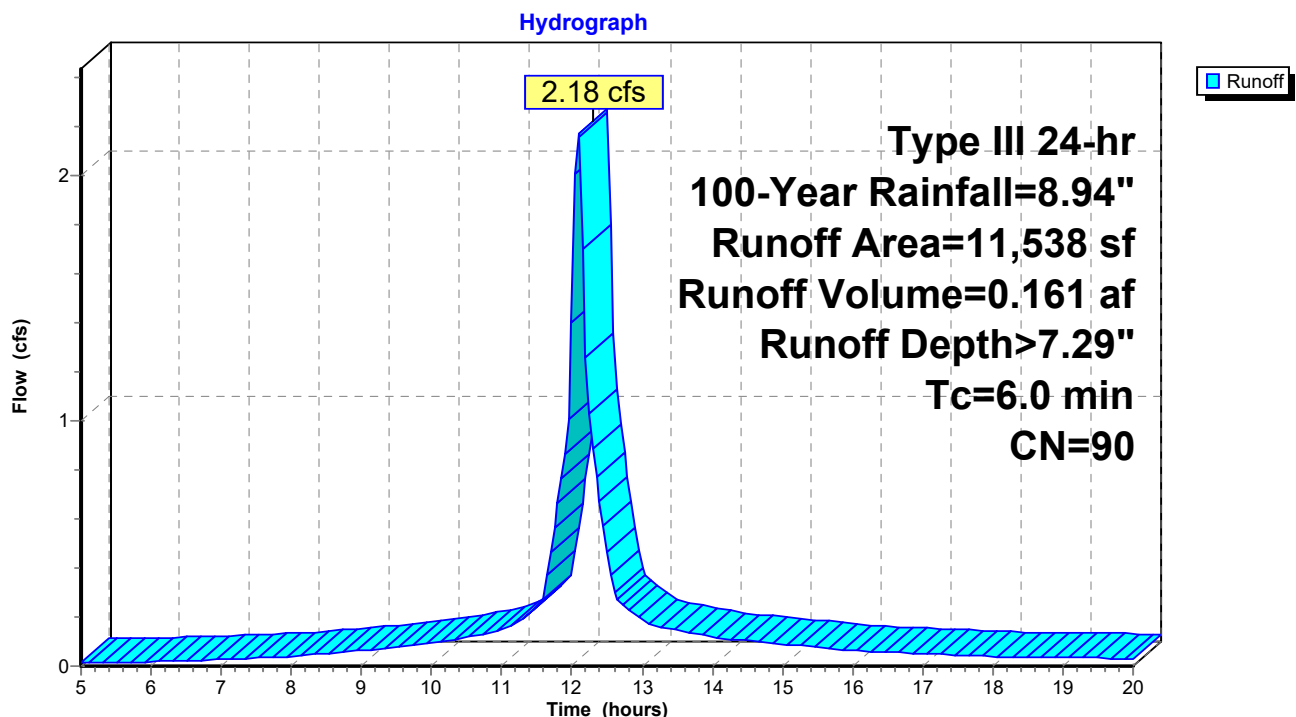
Runoff = 2.18 cfs @ 12.09 hrs, Volume= 0.161 af, Depth> 7.29"
Routed to Pond 26P : CB 61

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

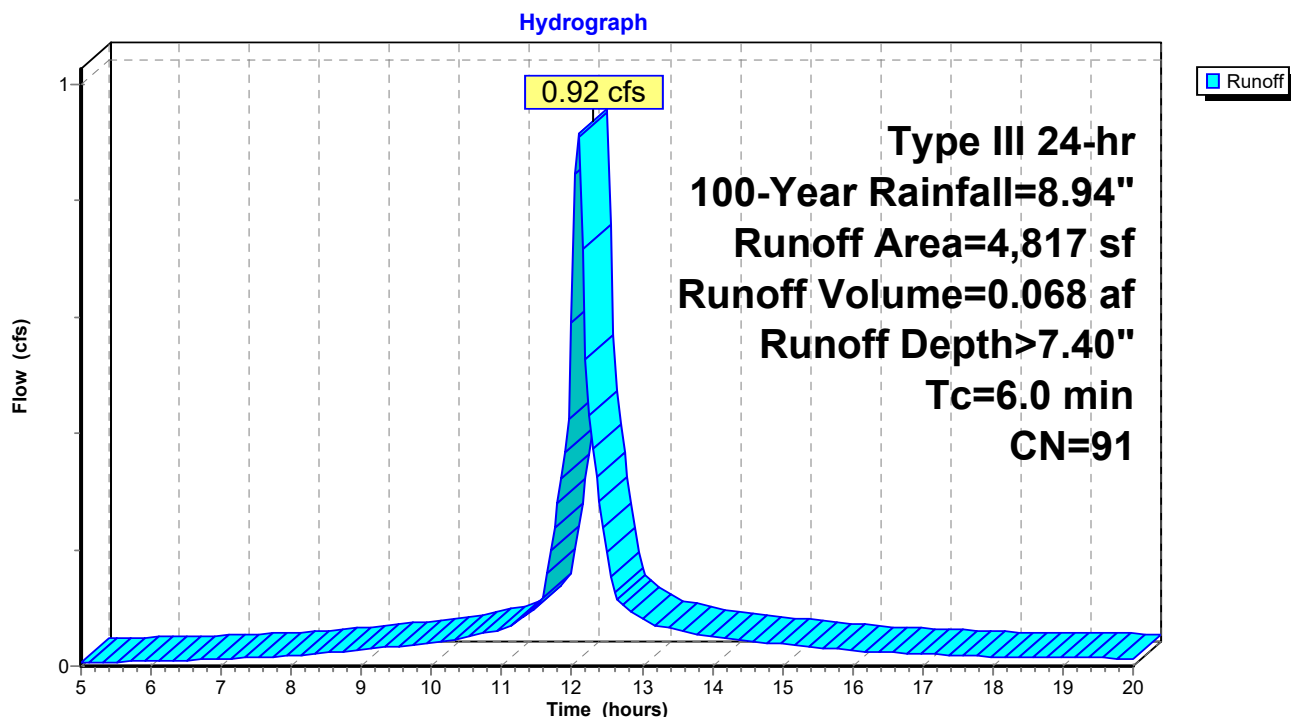
Runoff = 0.92 cfs @ 12.09 hrs, Volume= 0.068 af, Depth> 7.40"
Routed to Pond 27P : CB 60

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



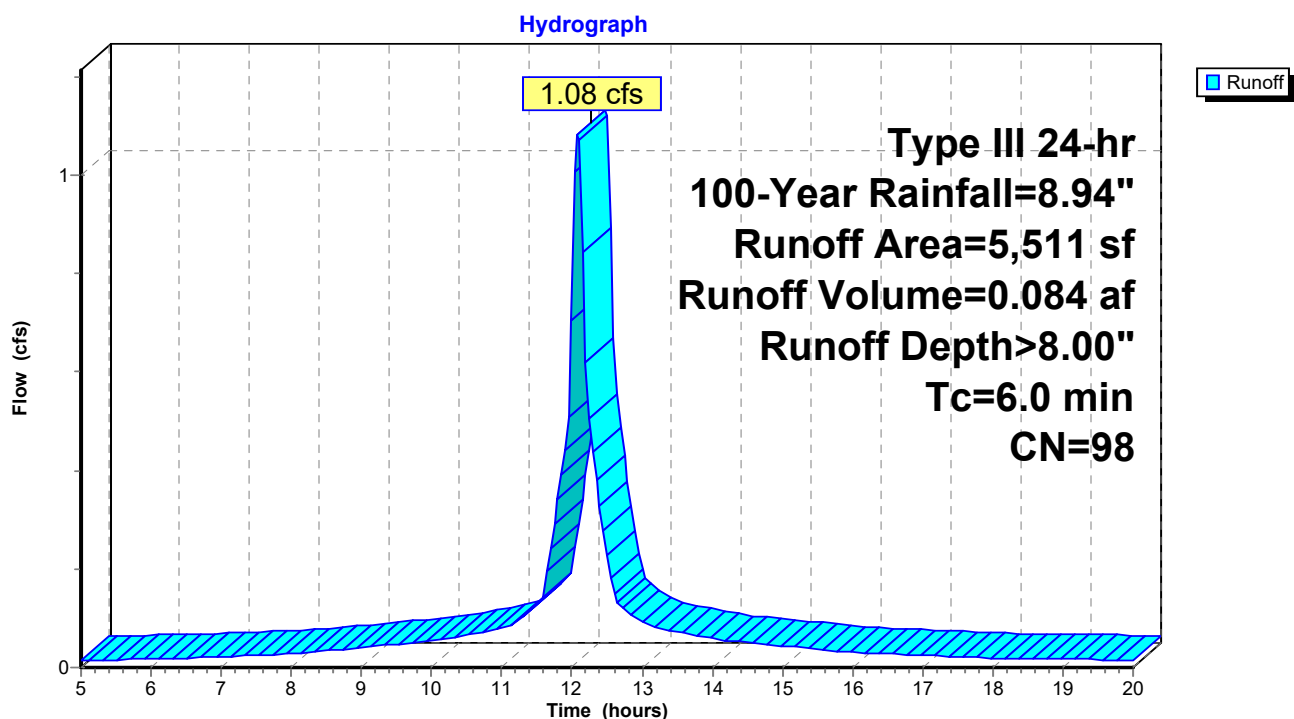
Summary for Subcatchment 7S: P1G

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

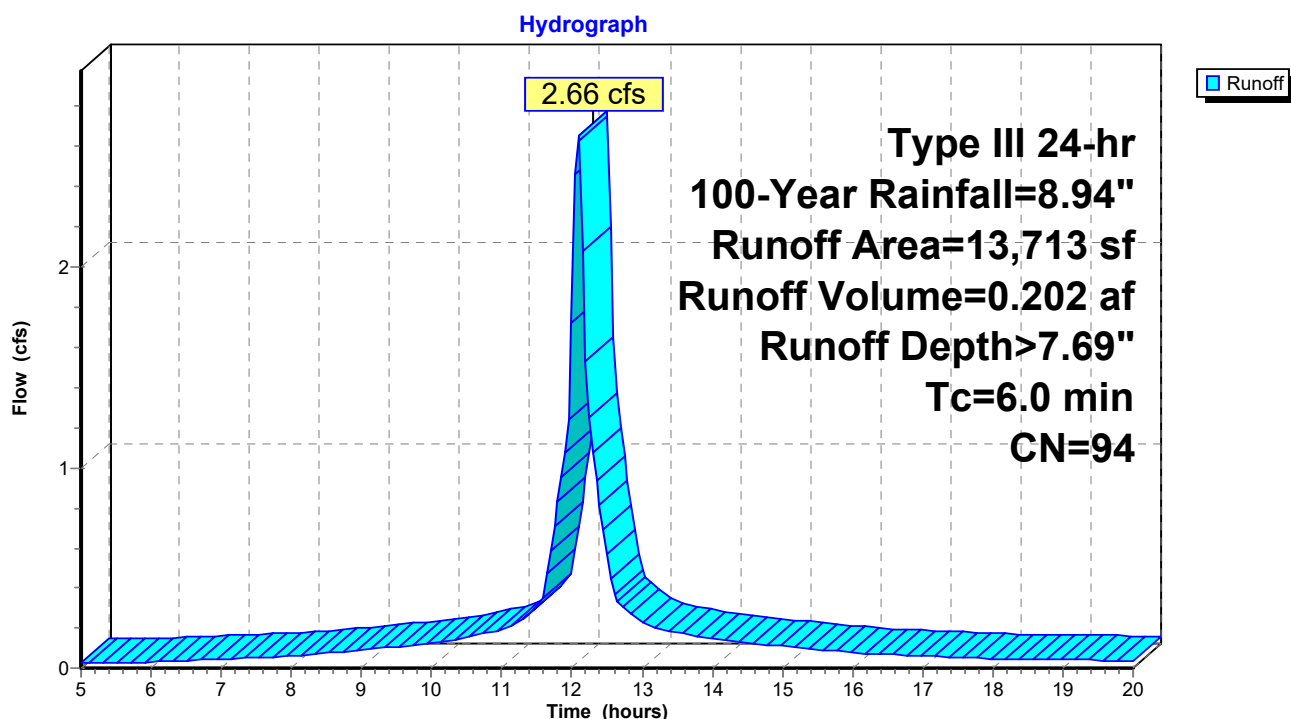
Summary for Subcatchment 8S: P1H

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

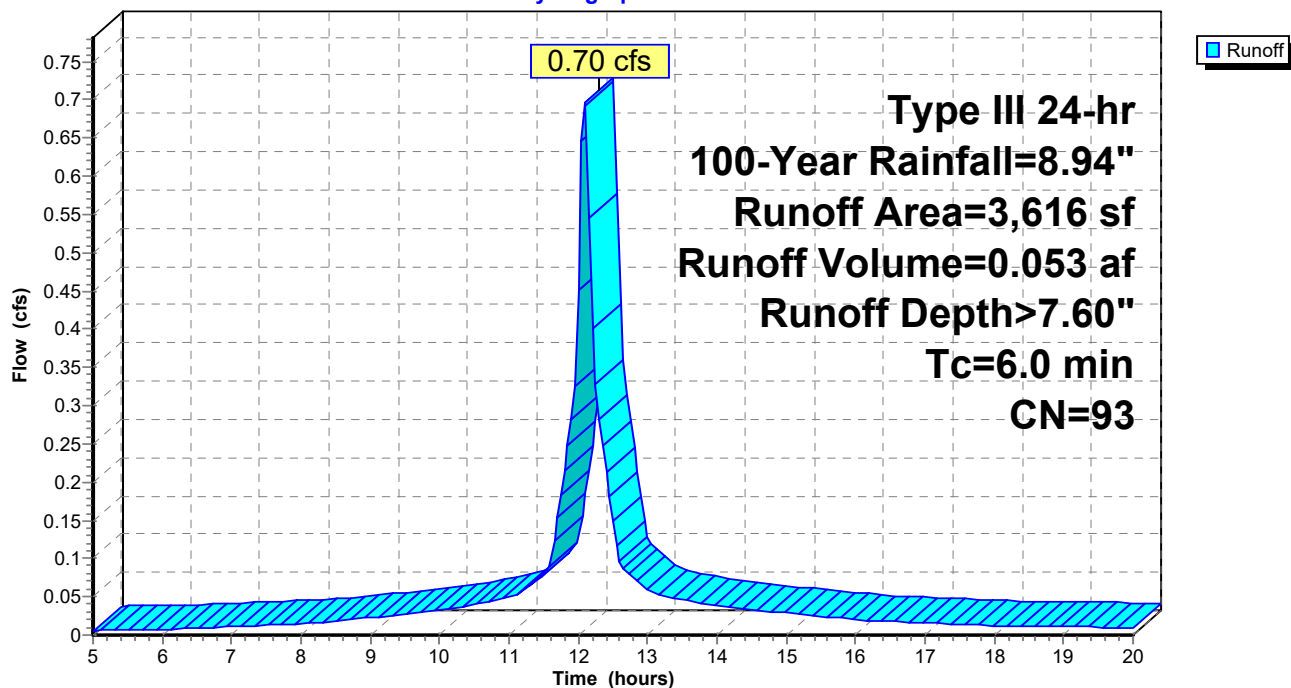
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=8.94"

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

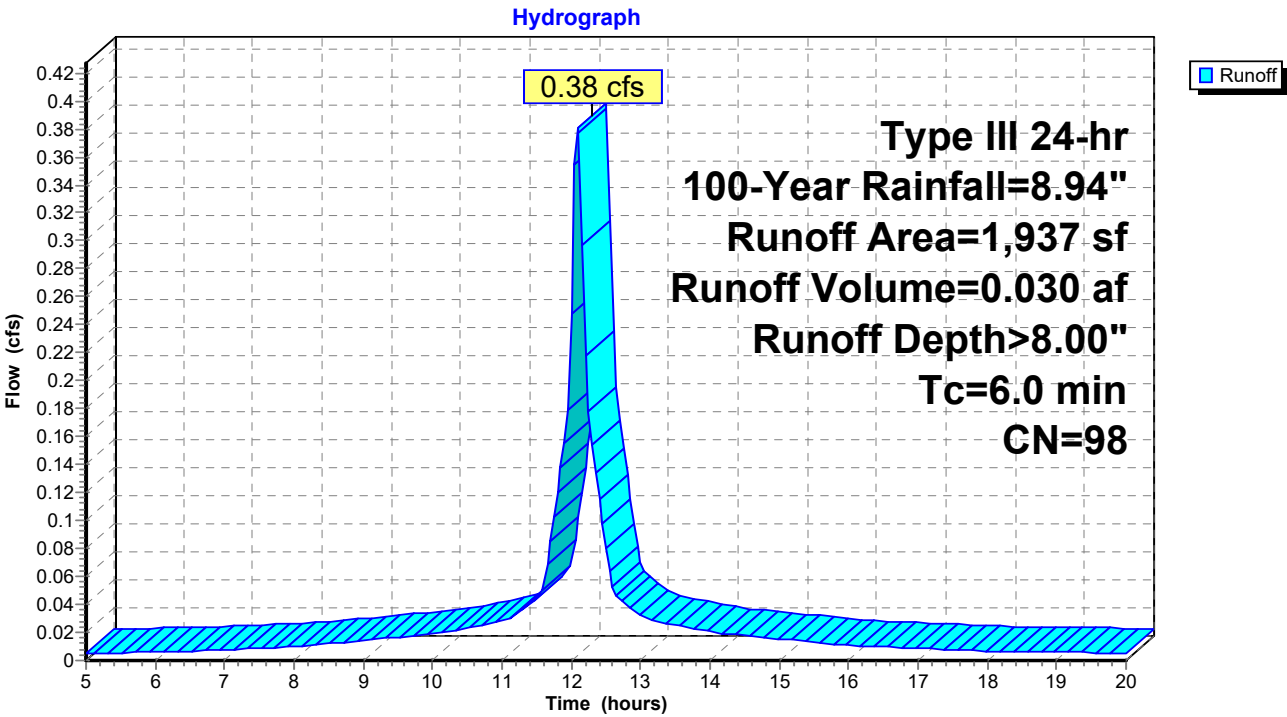
Runoff = 0.38 cfs @ 12.09 hrs, Volume= 0.030 af, Depth> 8.00"
Routed to Pond 33P : CB 53

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



Summary for Subcatchment 11S: P1K

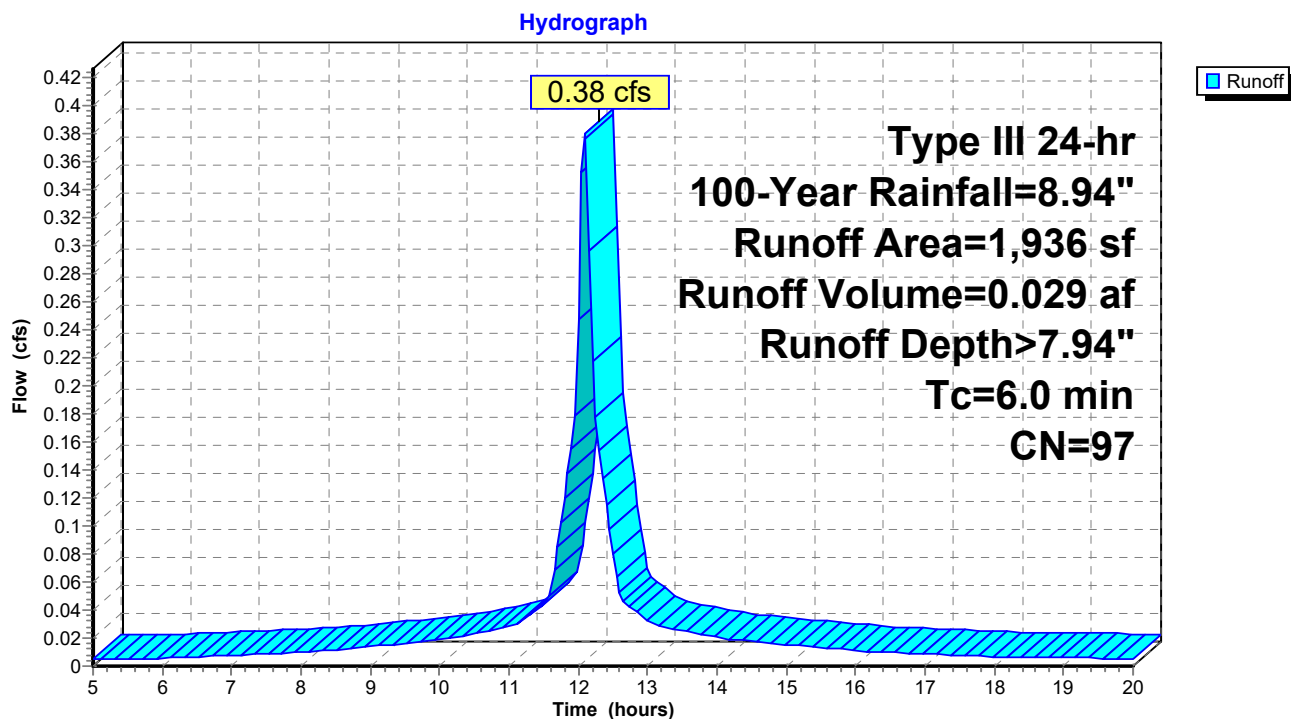
Runoff = 0.38 cfs @ 12.09 hrs, Volume= 0.029 af, Depth> 7.94"
Routed to Pond 31P : CB 51

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

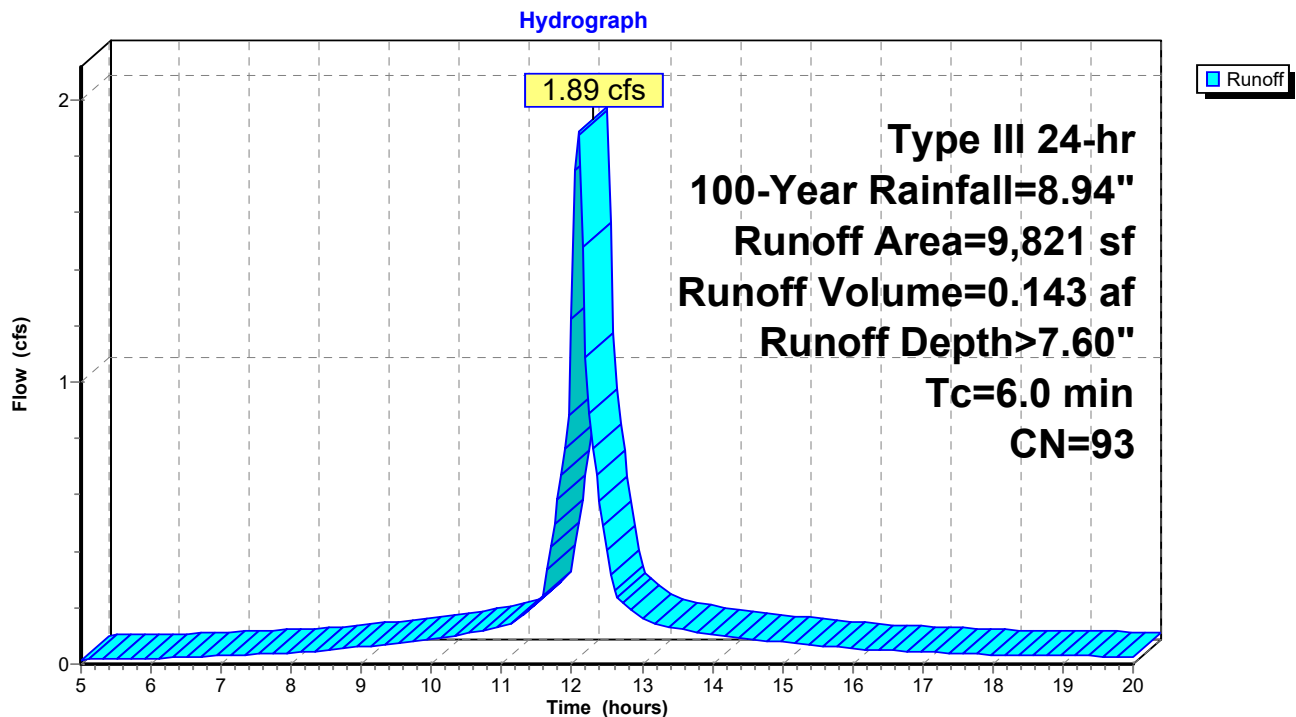
Runoff = 1.89 cfs @ 12.09 hrs, Volume= 0.143 af, Depth> 7.60"
Routed to Pond 32P : CB 52

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



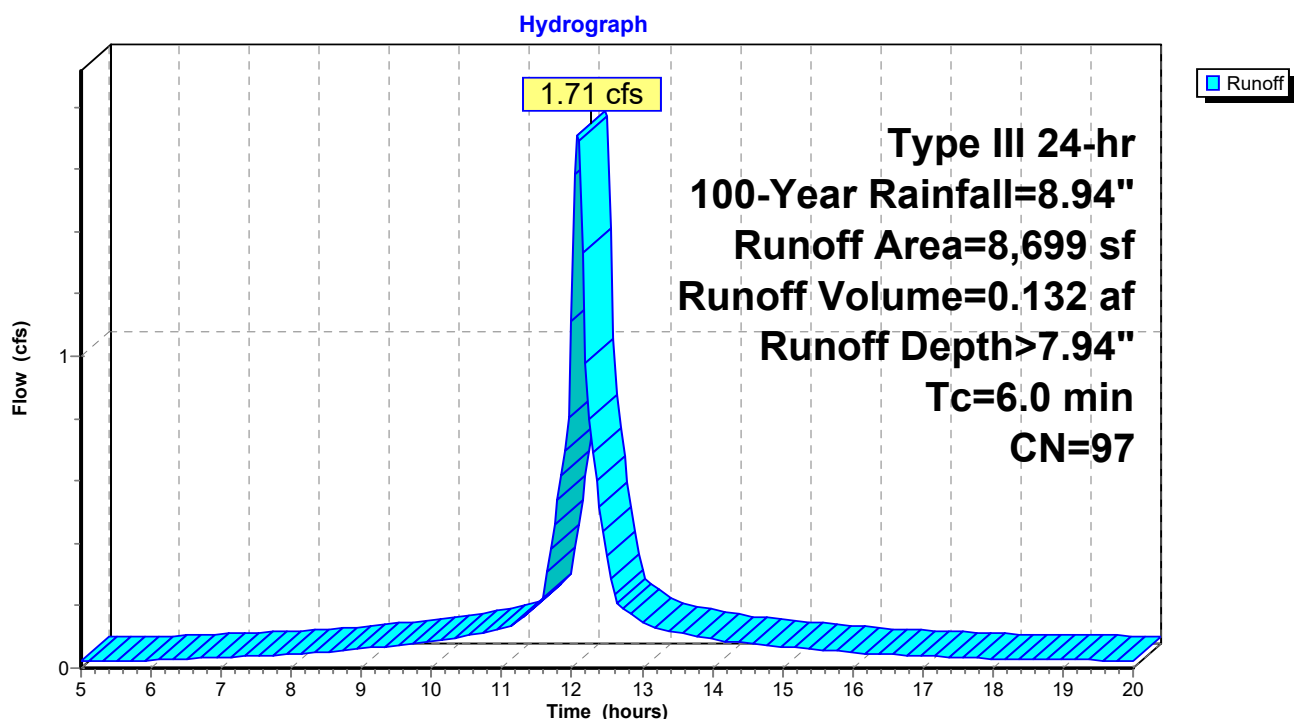
Summary for Subcatchment 13S: P1M

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

Summary for Subcatchment 14S: P1N

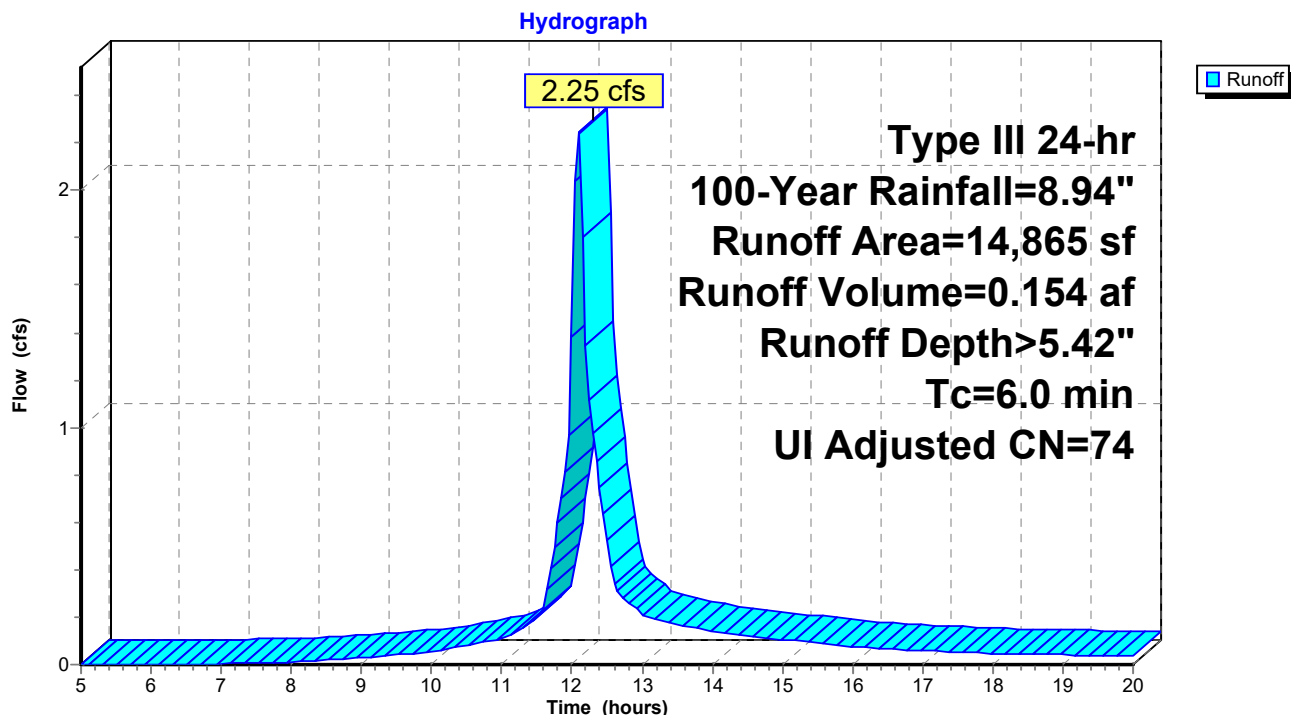
Runoff = 2.25 cfs @ 12.09 hrs, Volume= 0.154 af, Depth> 5.42"
Routed to Pond 15P : Inf. Basin 5

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



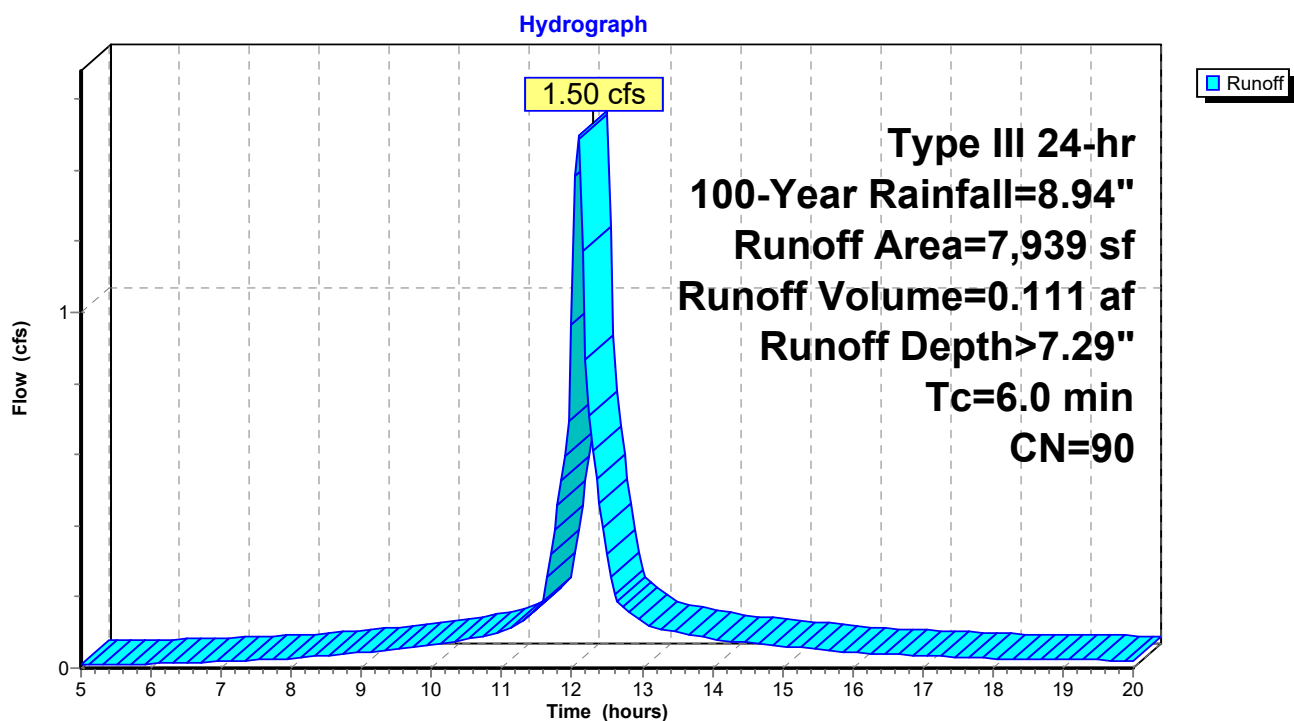
Summary for Subcatchment 39S: P1P

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

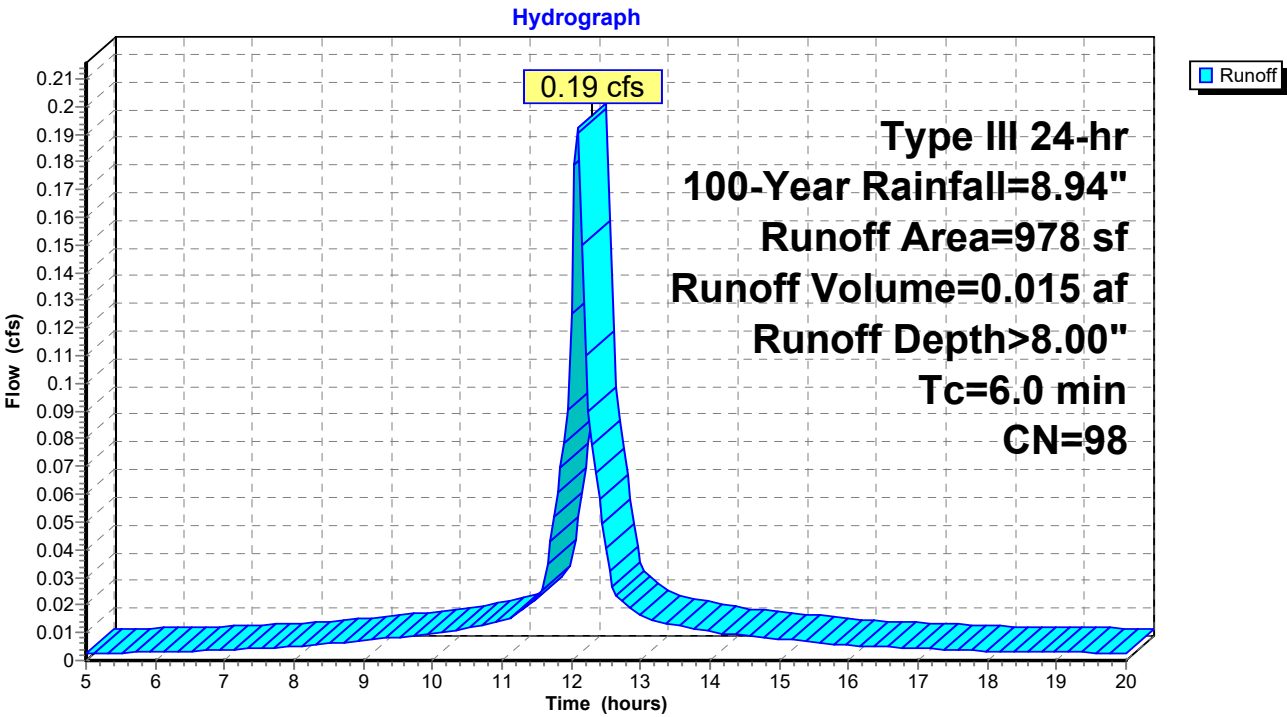
Runoff = 0.19 cfs @ 12.09 hrs, Volume= 0.015 af, Depth> 8.00"
Routed to Pond 41P : CB 49

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



Summary for Subcatchment 44S: P1R

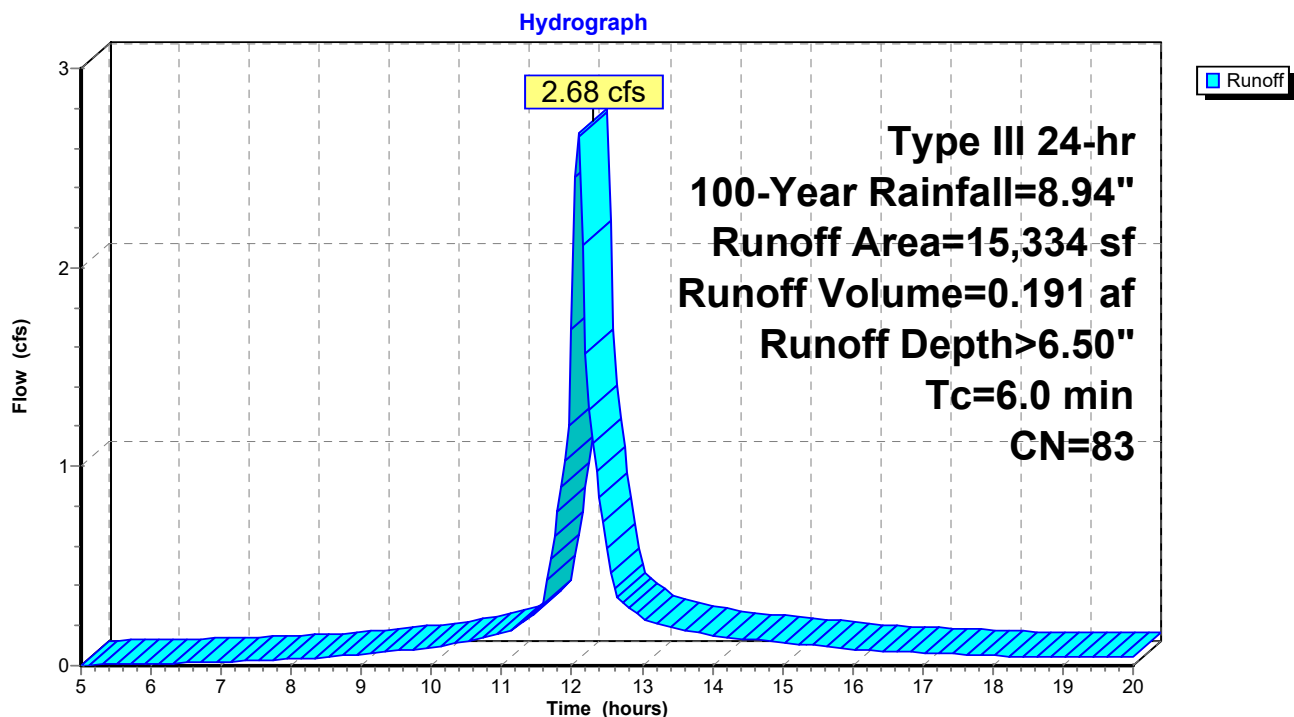
Runoff = 2.68 cfs @ 12.09 hrs, Volume= 0.191 af, Depth> 6.50"
Routed to Pond 46P : CB 48

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

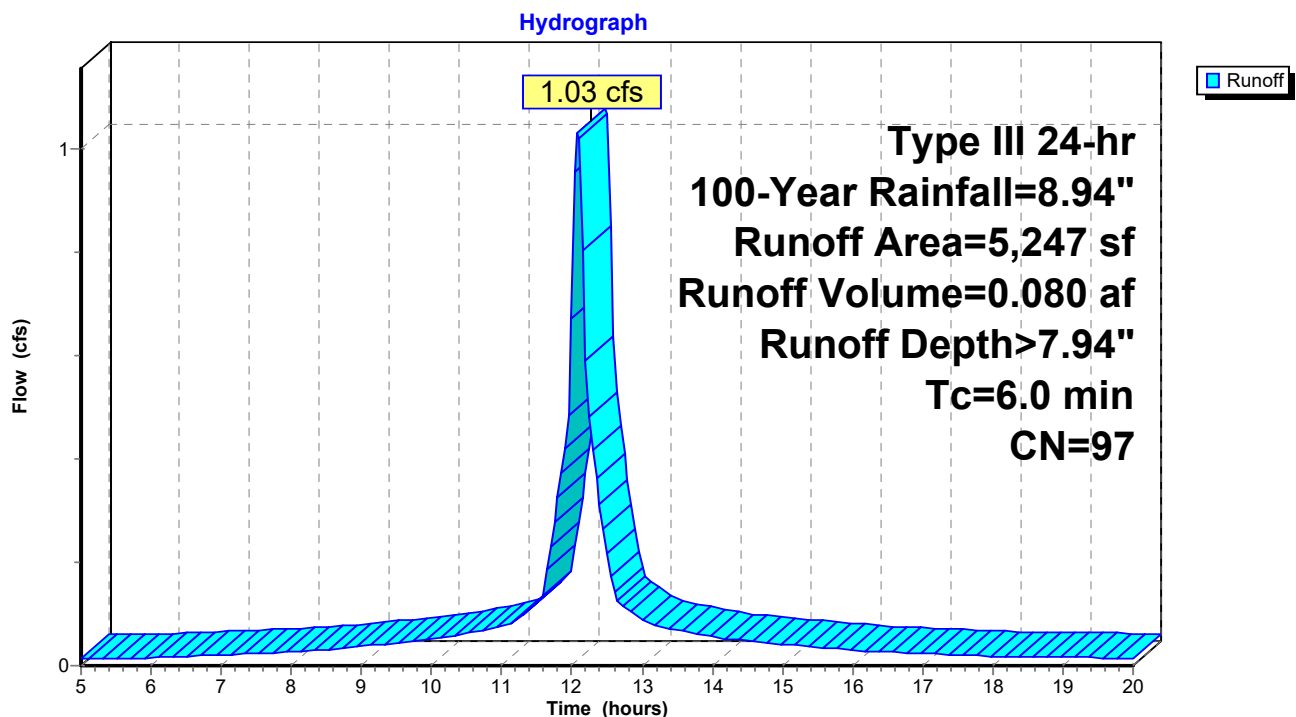
Runoff = 1.03 cfs @ 12.09 hrs, Volume= 0.080 af, Depth> 7.94"
Routed to Pond 47P : CB 47

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



Summary for Subcatchment 50S: P1S

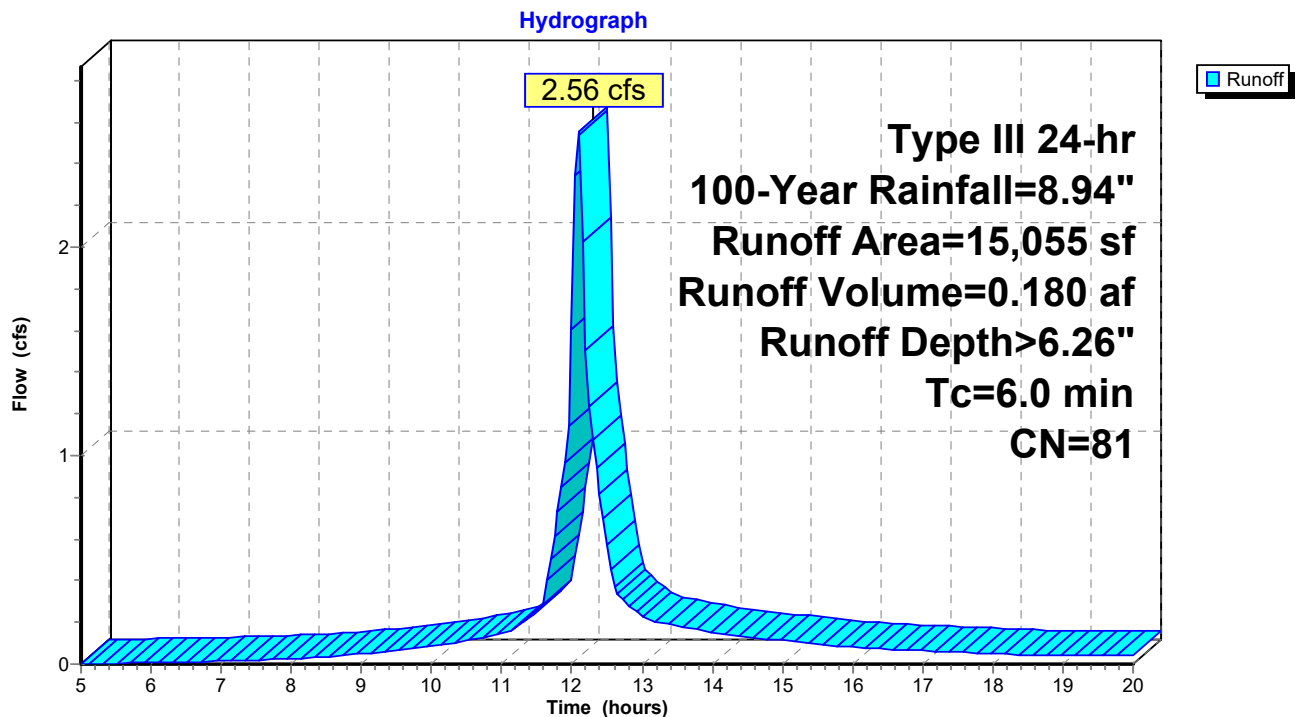
Runoff = 2.56 cfs @ 12.09 hrs, Volume= 0.180 af, Depth> 6.26"
Routed to Pond 53P : CB 21

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
4,736	98	Unconnected roofs, HSG A
4,294	39	>75% Grass cover, Good, HSG A
6,025	98	Paved parking, HSG A
15,055	81	Weighted Average
4,294		28.52% Pervious Area
10,761		71.48% Impervious Area
4,736		44.01% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 50S: P1S



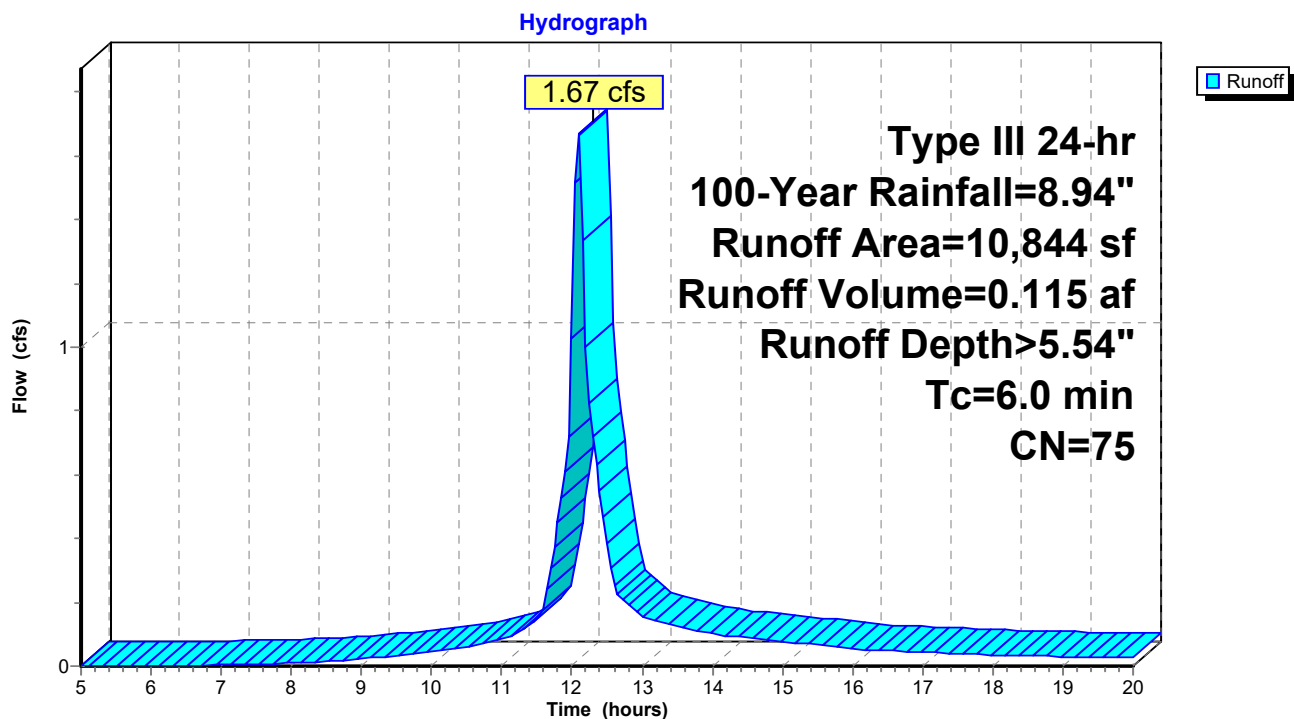
Summary for Subcatchment 51S: P1T

Runoff = 1.67 cfs @ 12.09 hrs, Volume= 0.115 af, Depth> 5.54"
 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
4,148	39	>75% Grass cover, Good, HSG A
2,216	98	Unconnected roofs, HSG A
4,480	98	Paved parking, HSG A
10,844	75	Weighted Average
4,148		38.25% Pervious Area
6,696		61.75% Impervious Area
2,216		33.09% Unconnected

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 = 0.41 cfs @ 12.23 hrs, Volume= 0.044 af, Depth> 1.39"
Routed to Pond 56P : Inf. Basin 4

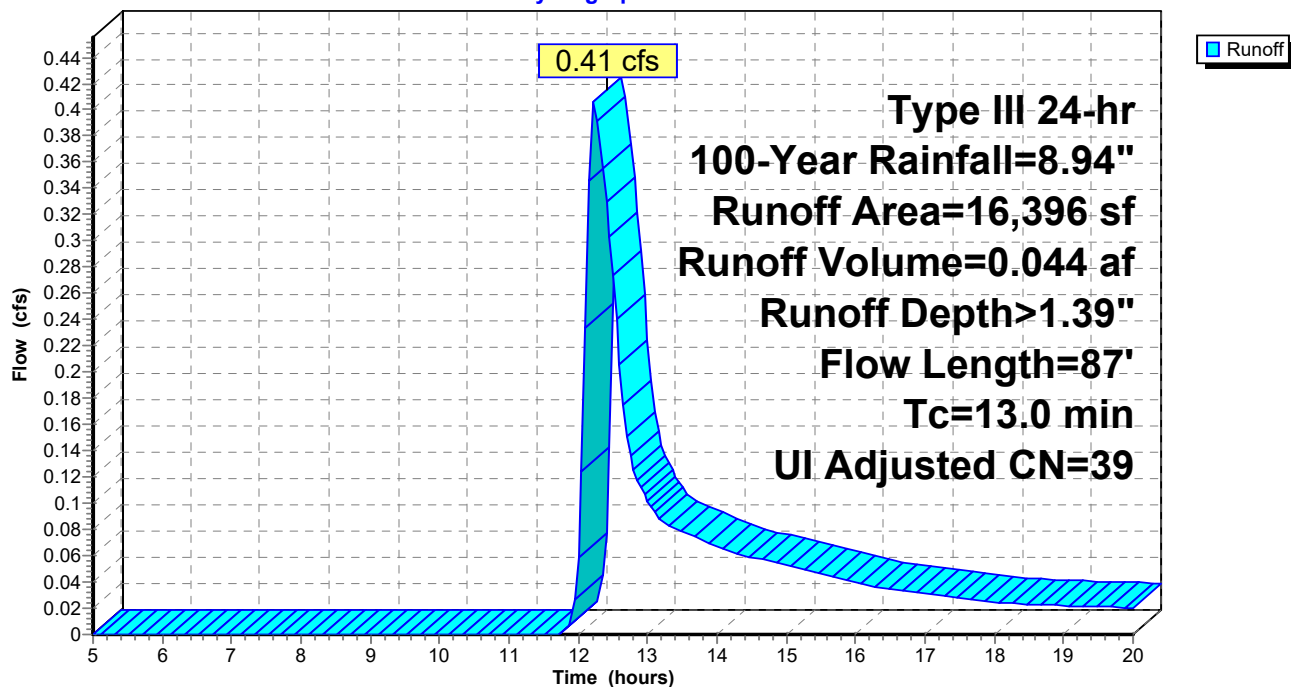
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=8.94"

Area (sf)	CN	Adj	Description
1,000	98		Unconnected roofs, HSG A
3,657	30		Woods, Good, HSG A
11,739	39		>75% Grass cover, Good, HSG A
16,396	41	39	Weighted Average, UI Adjusted
15,396			93.90% Pervious Area
1,000			6.10% Impervious Area
1,000			100.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.5	50	0.0200	0.07		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
0.5	37	0.0300	1.21		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
13.0	87	Total			

Subcatchment 57S: (new Subcat)

Hydrograph



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

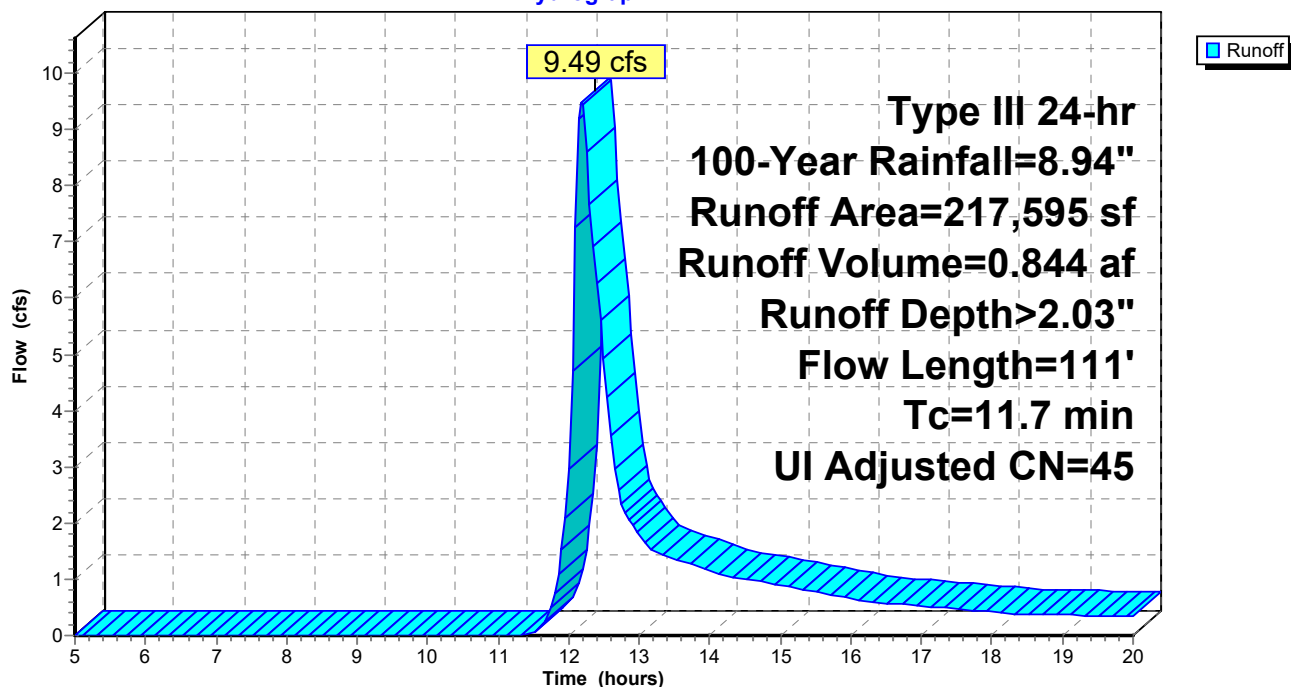
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100-Year Rainfall=8.94"

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		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
1.0	61	0.0400	1.00		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
11.7	111	Total			

Subcatchment 58S: P1AA

Hydrograph



Summary for Subcatchment 60S: P2C

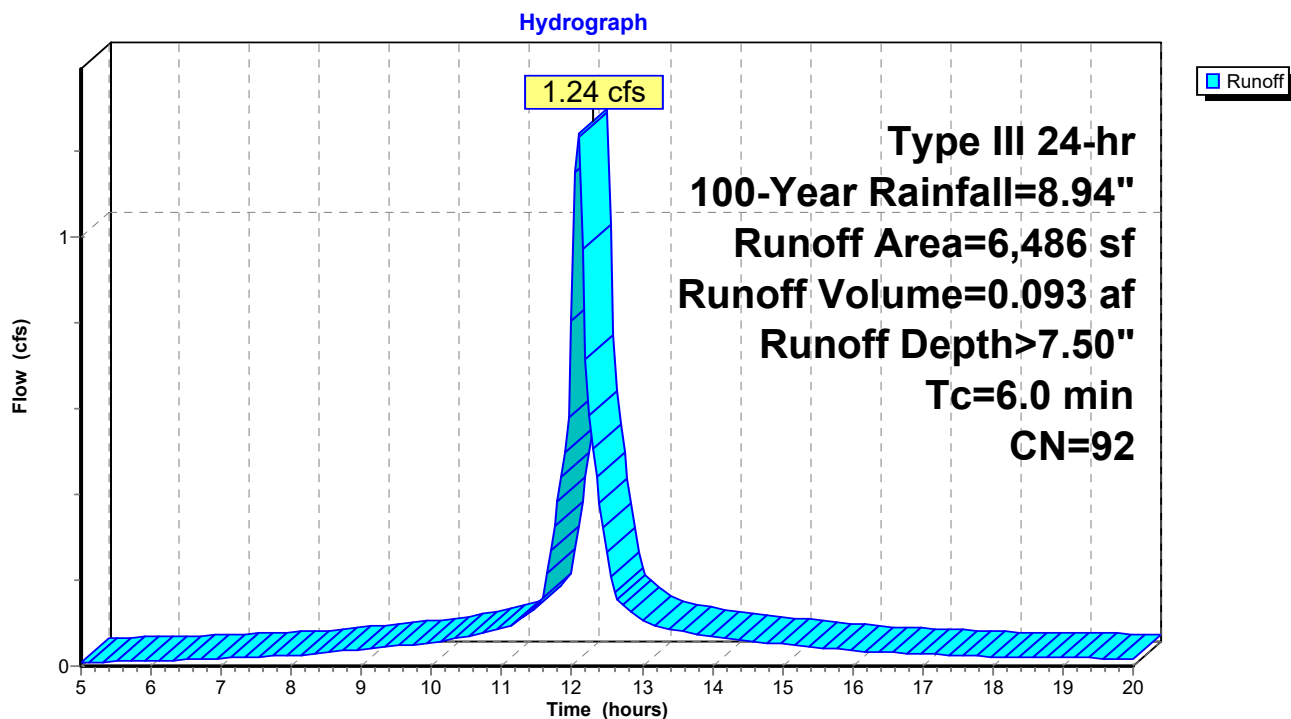
Runoff = 1.24 cfs @ 12.09 hrs, Volume= 0.093 af, Depth> 7.50"
Routed to Pond 62P : CB 66

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

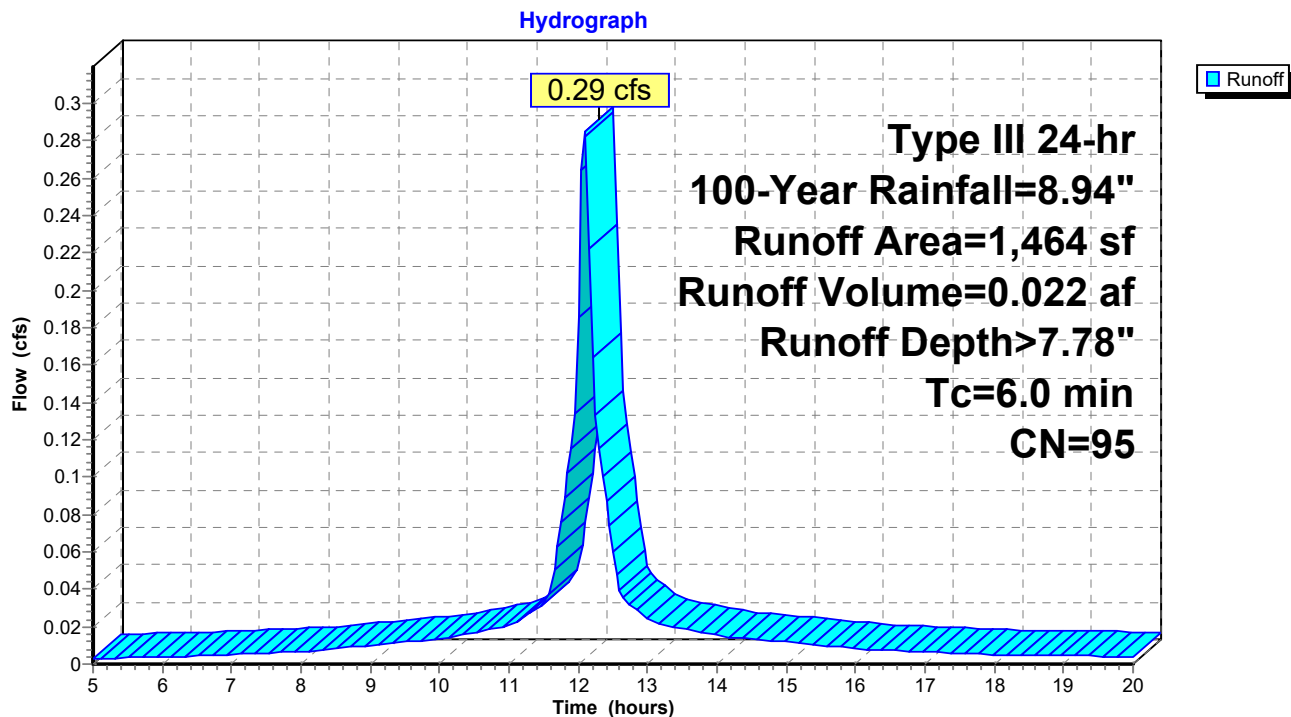
Runoff = 0.29 cfs @ 12.09 hrs, Volume= 0.022 af, Depth> 7.78"
Routed to Pond 63P : CB 67

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

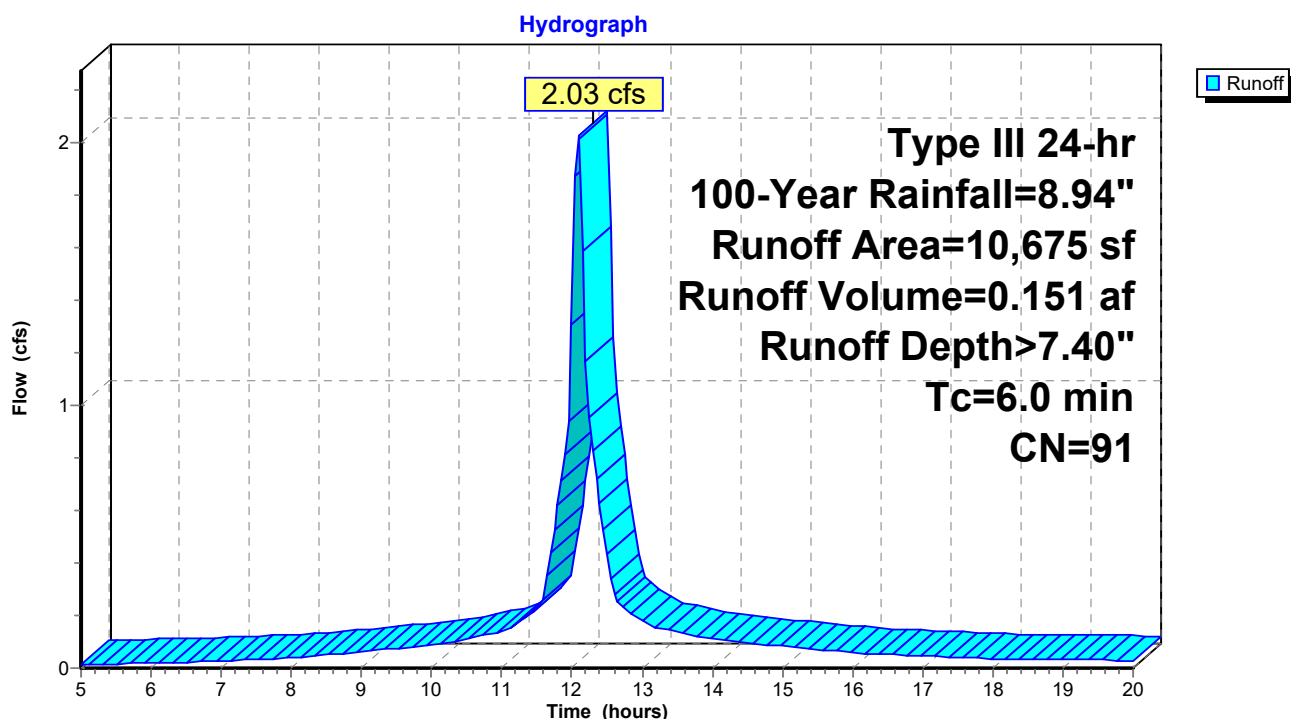
Runoff = 2.03 cfs @ 12.09 hrs, Volume= 0.151 af, Depth> 7.40"
Routed to Pond 69P : CB 72

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

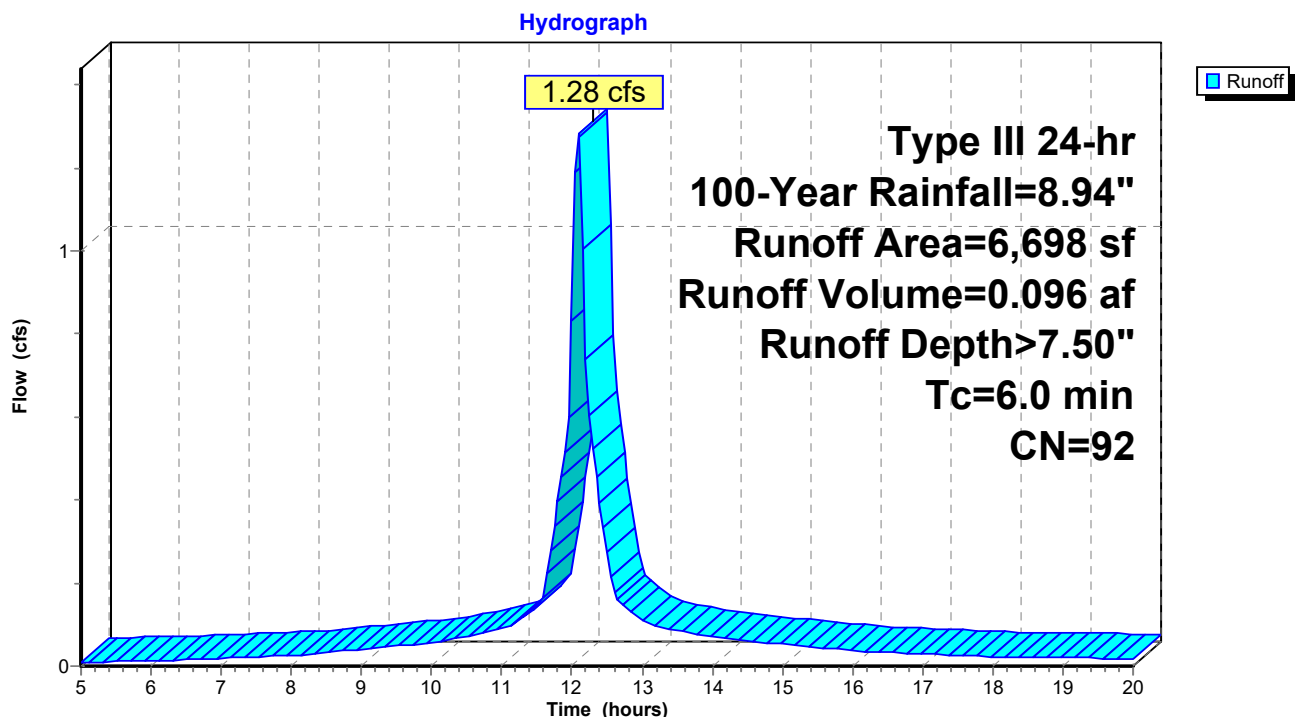
Runoff = 1.28 cfs @ 12.09 hrs, Volume= 0.096 af, Depth> 7.50"
Routed to Pond 70P : CB 73

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



Summary for Subcatchment 64S: P3L

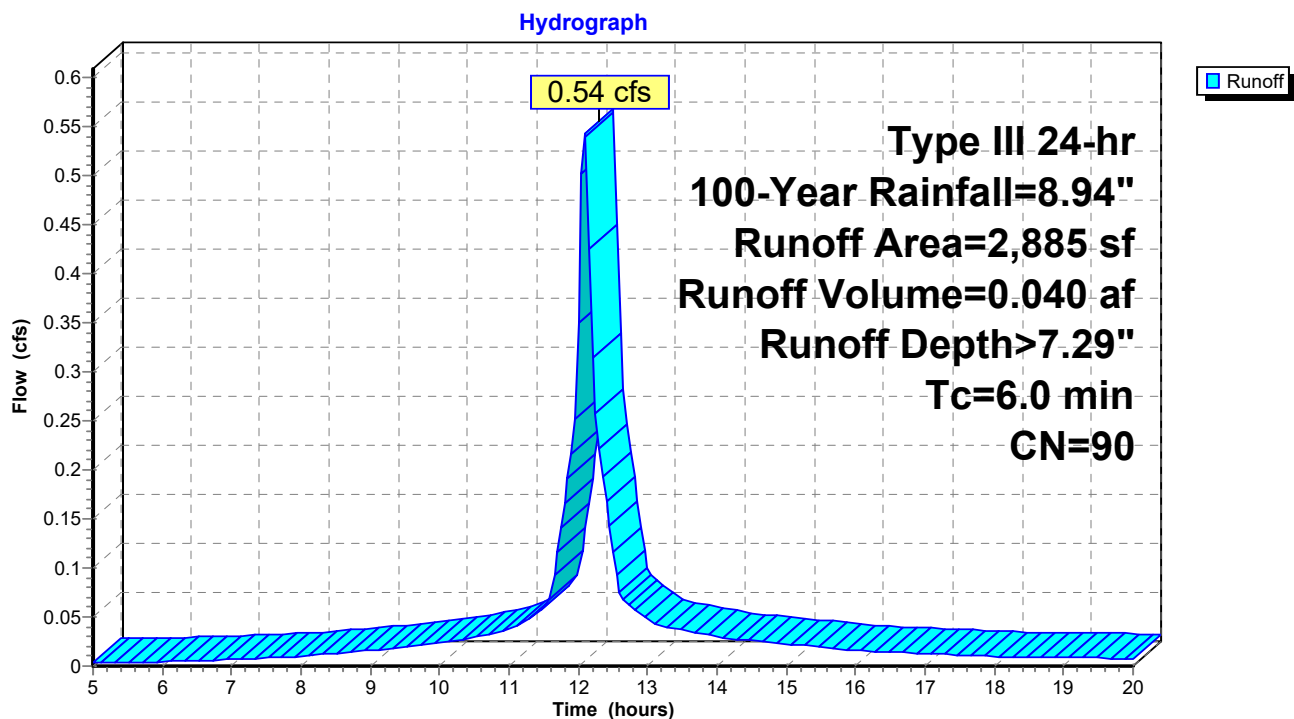
Runoff = 0.54 cfs @ 12.09 hrs, Volume= 0.040 af, Depth> 7.29"
Routed to Pond 88P : CB 84

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



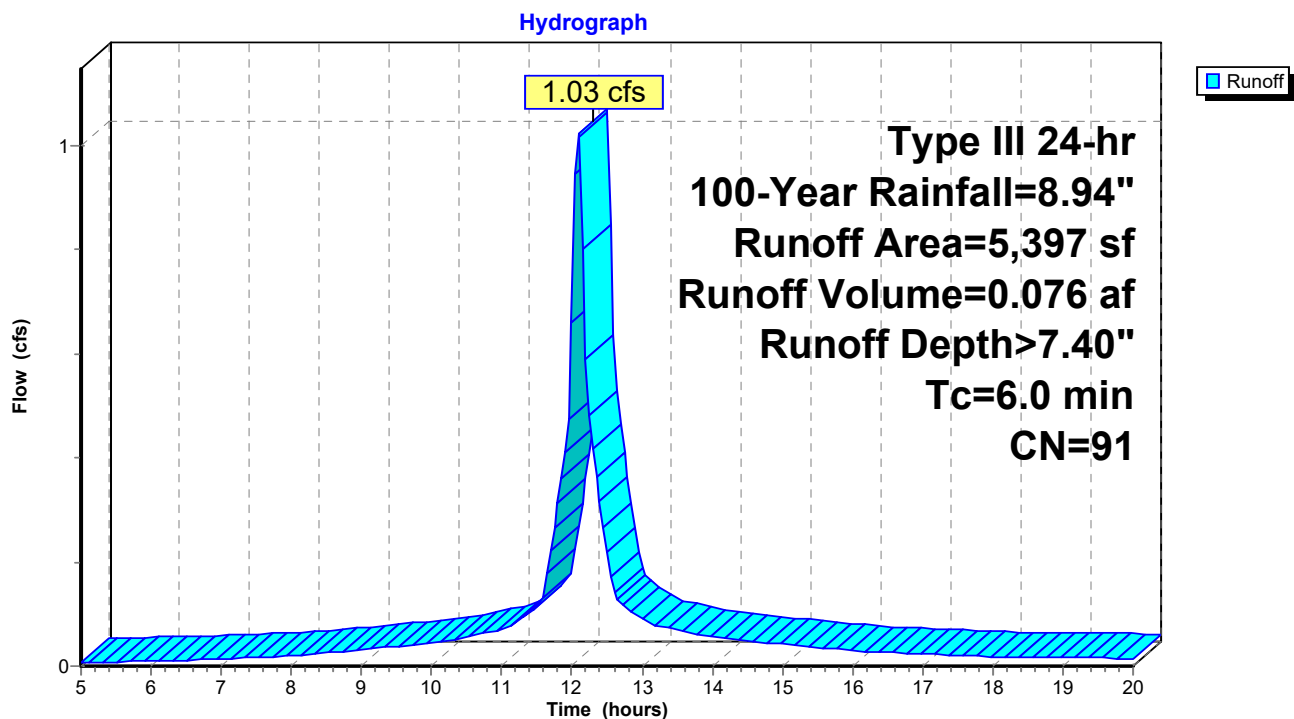
Summary for Subcatchment 65S: P3M

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

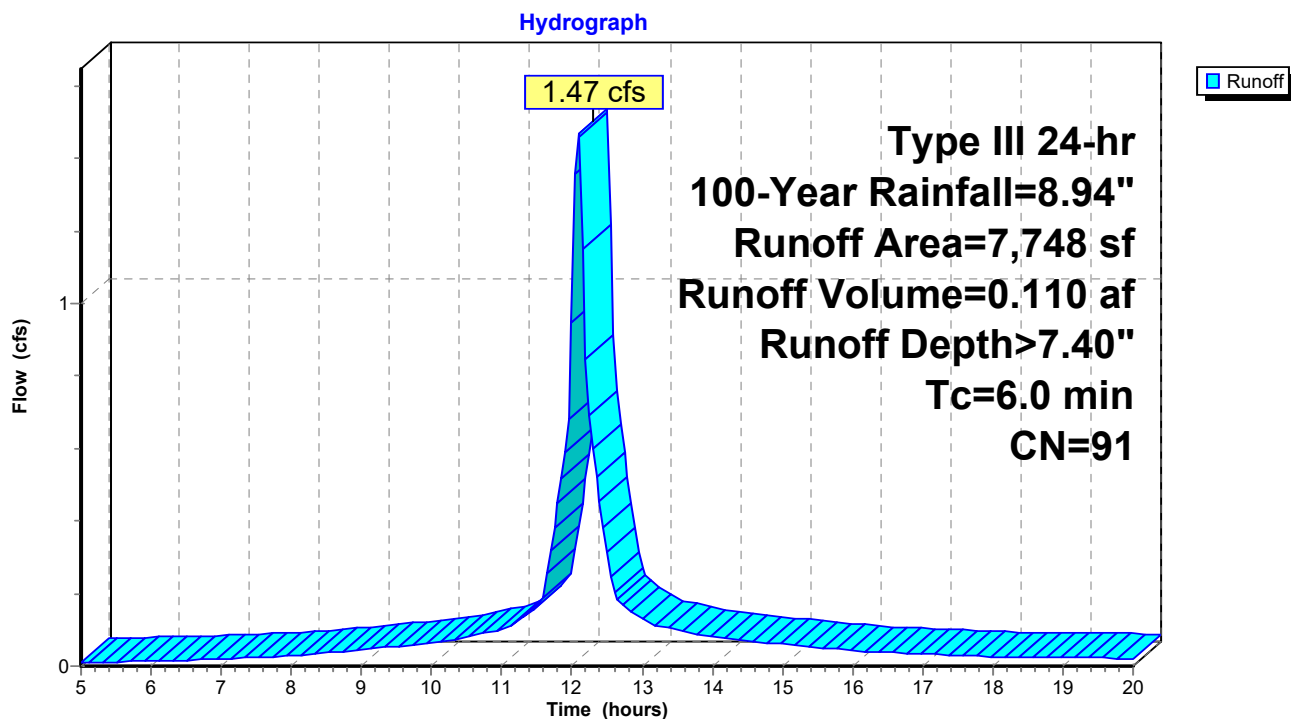
Summary for Subcatchment 66S: P3N

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

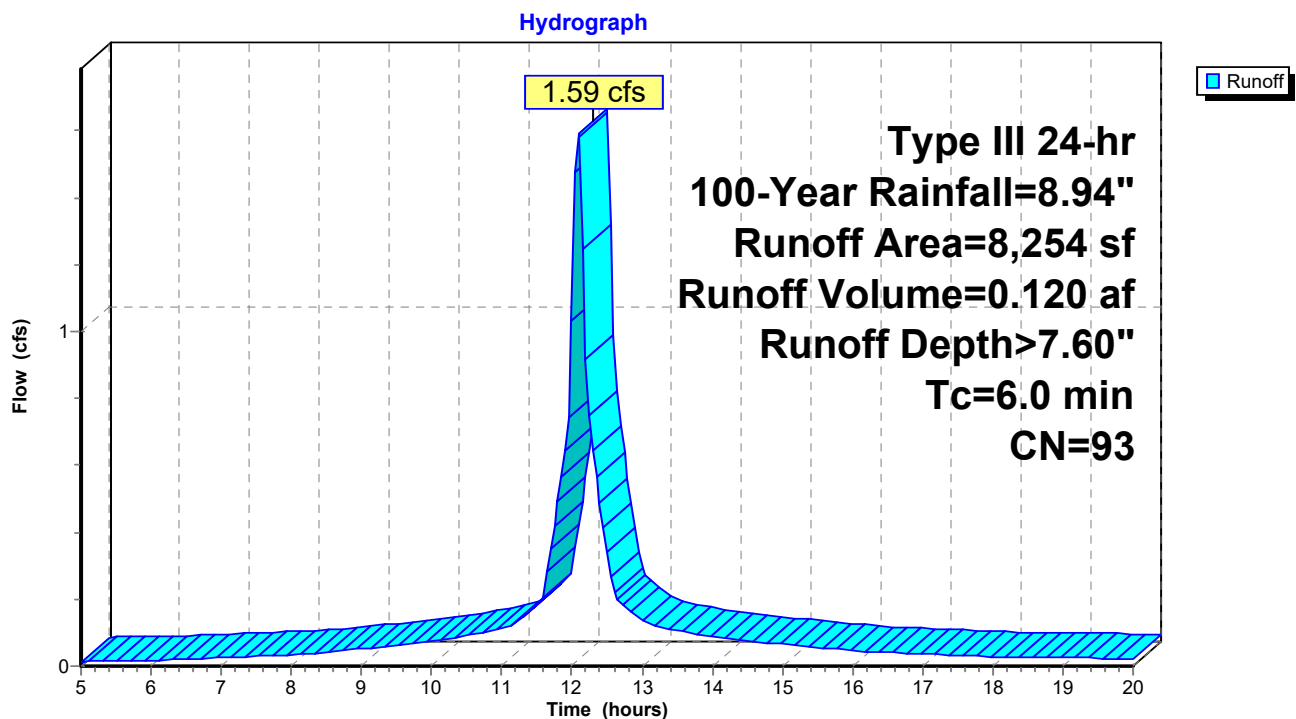
Summary for Subcatchment 67S: P3O

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

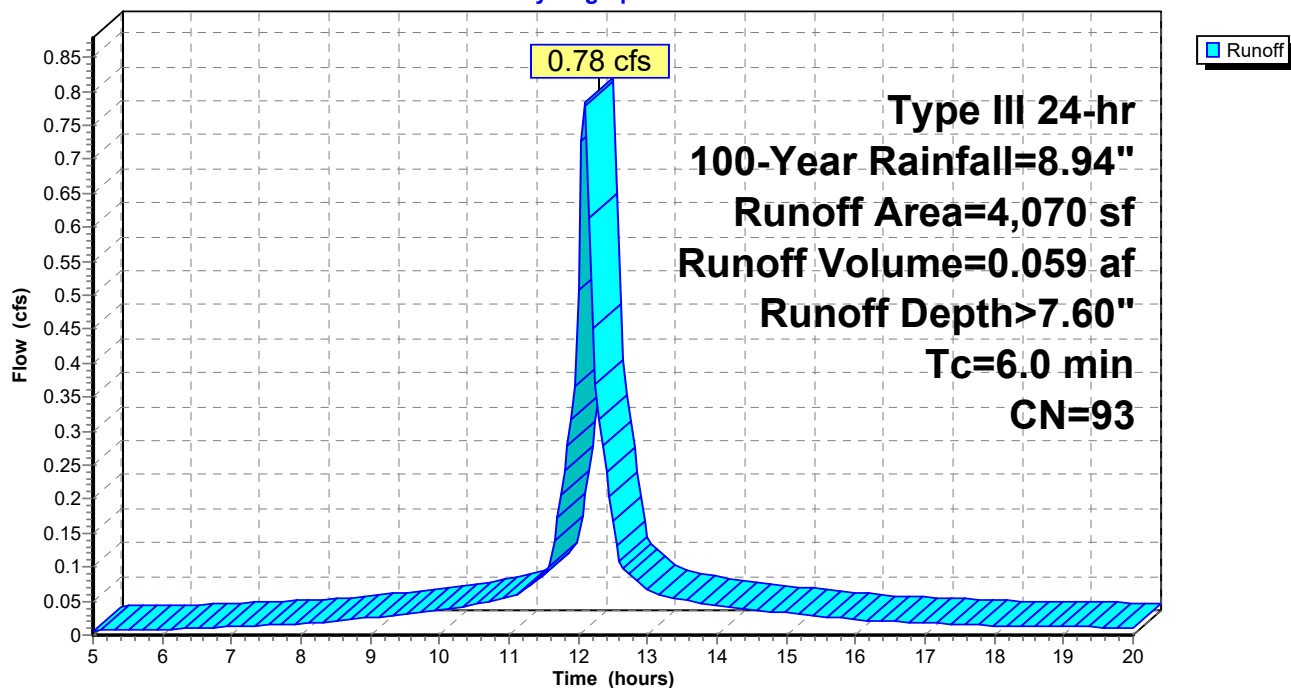
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=8.94"

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



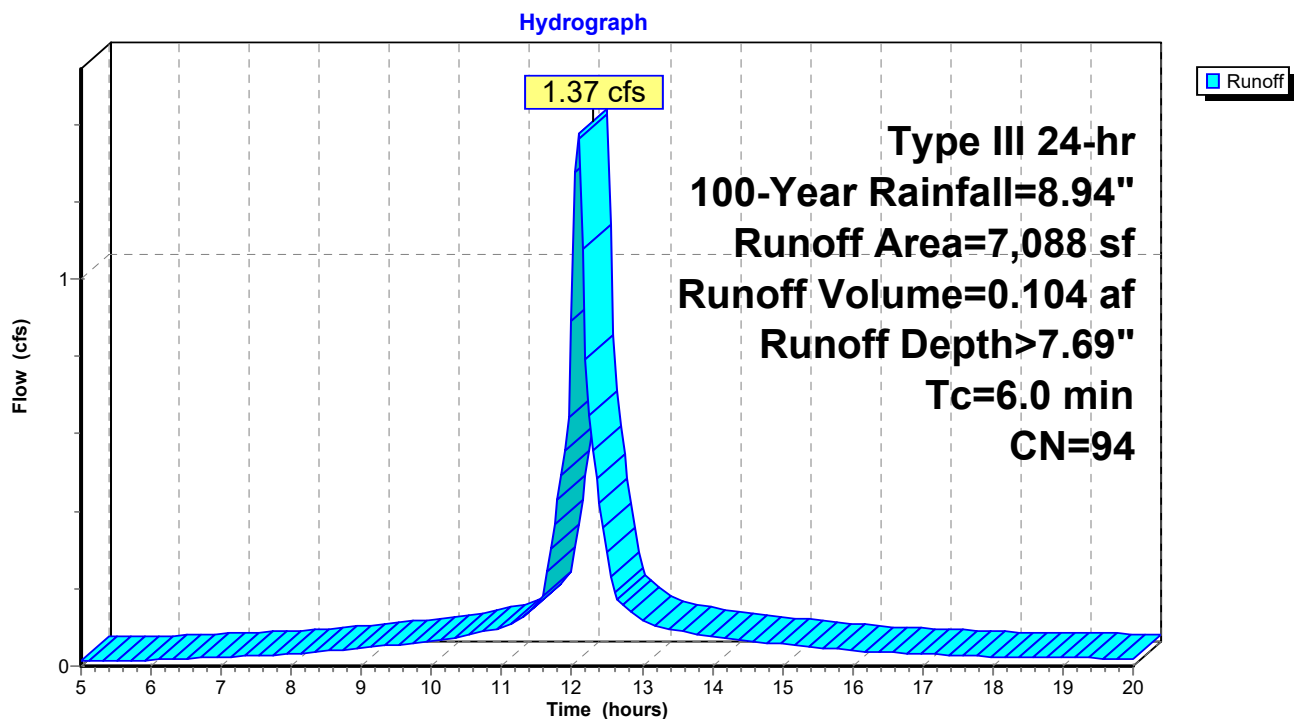
Summary for Subcatchment 69S: P2E

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

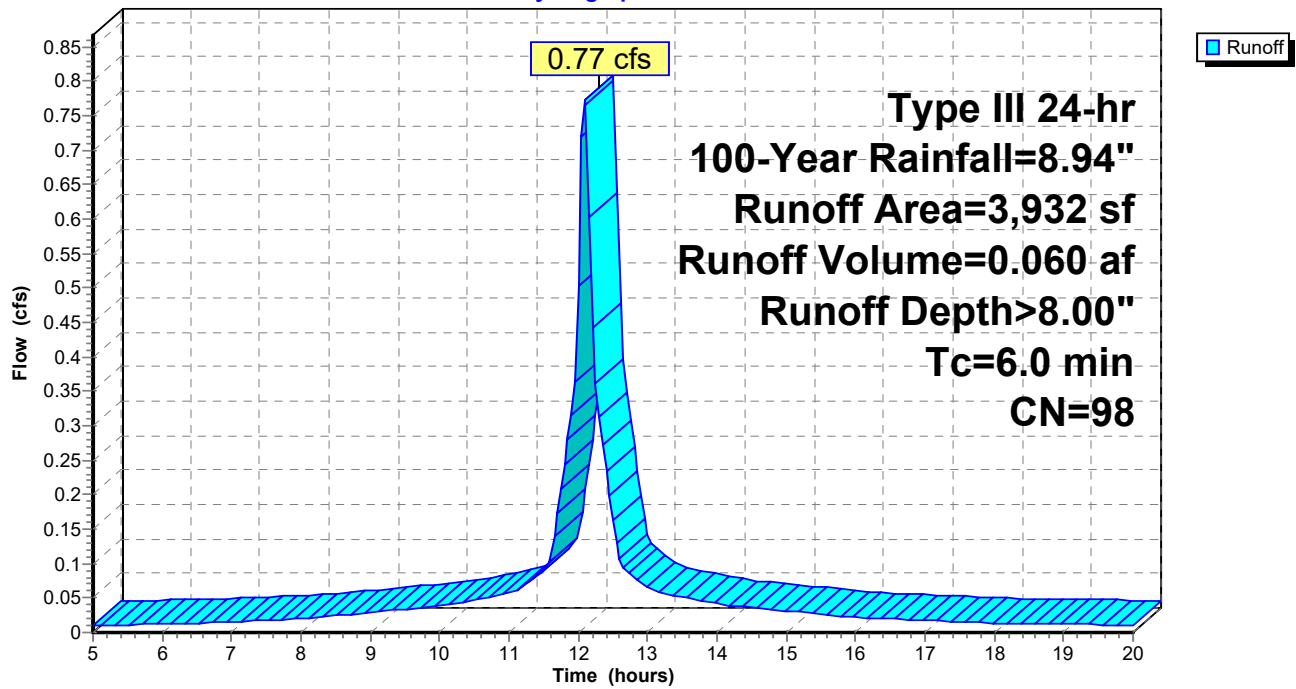
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=8.94"

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

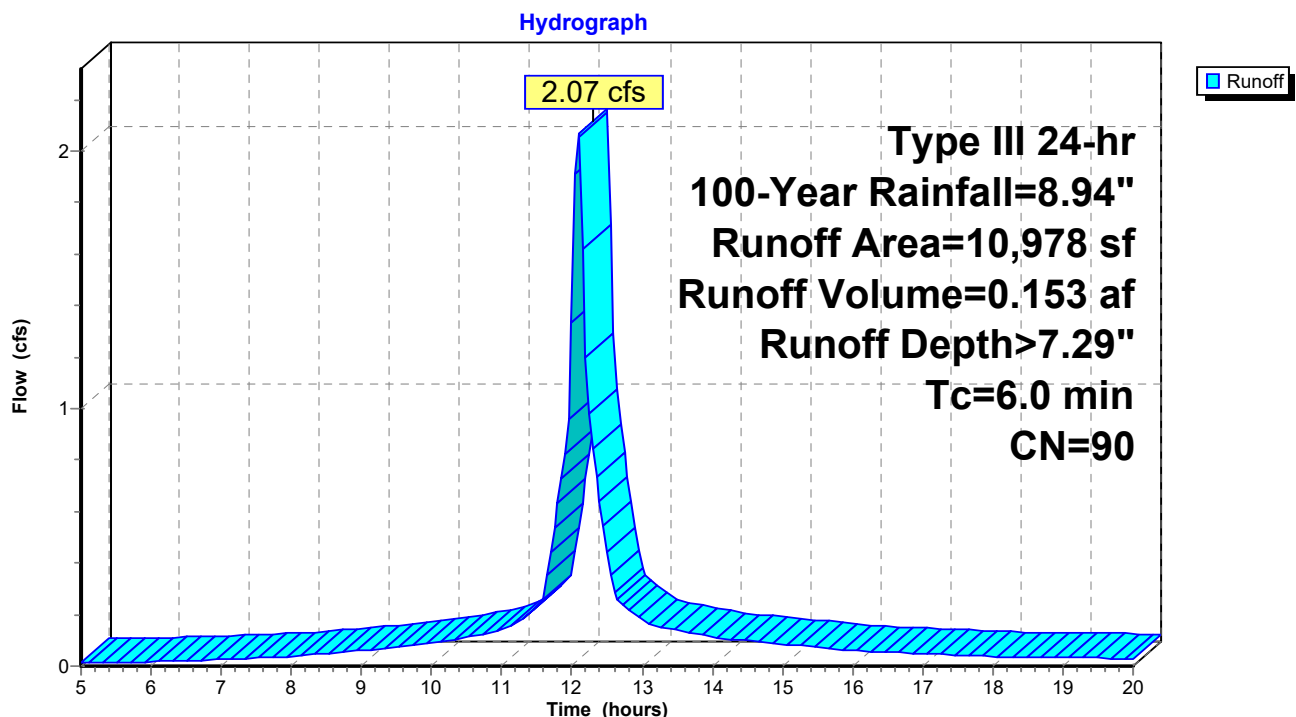
Runoff = 2.07 cfs @ 12.09 hrs, Volume= 0.153 af, Depth> 7.29"
Routed to Pond 73P : CB 64

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



Summary for Subcatchment 72S: P2B

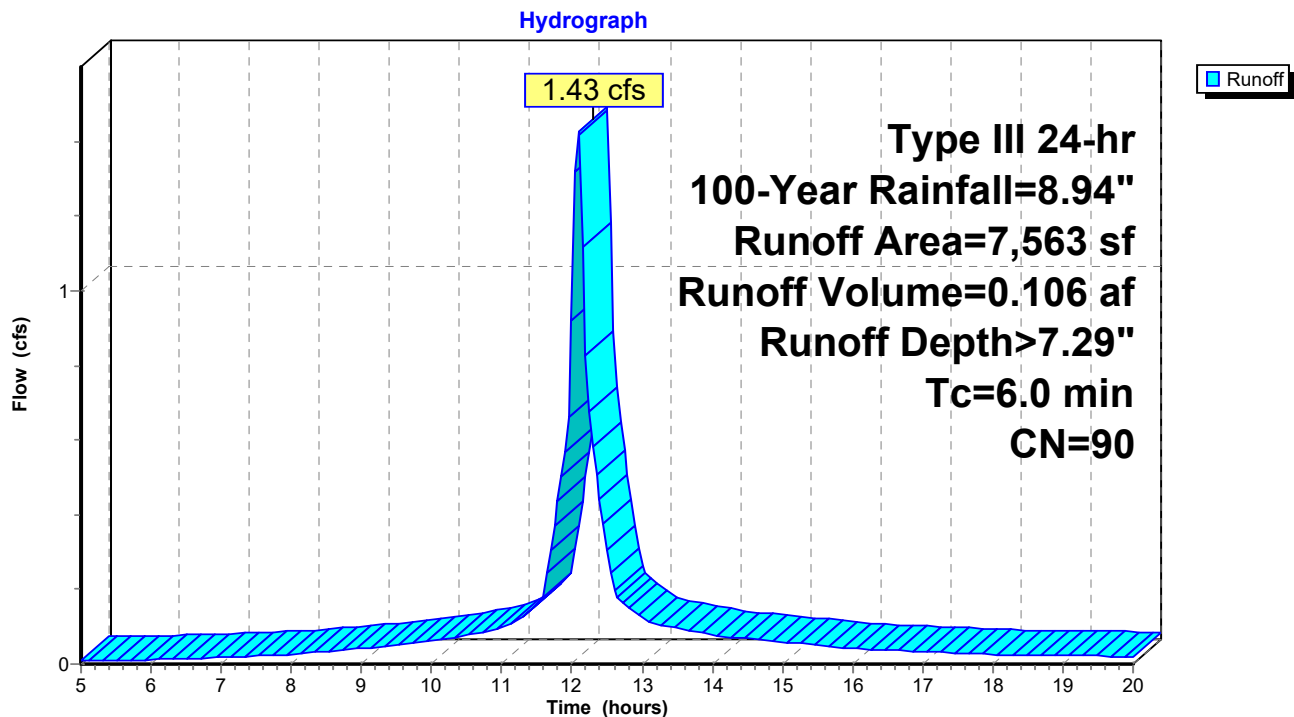
Runoff = 1.43 cfs @ 12.09 hrs, Volume= 0.106 af, Depth> 7.29"
Routed to Pond 74P : CB 65

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



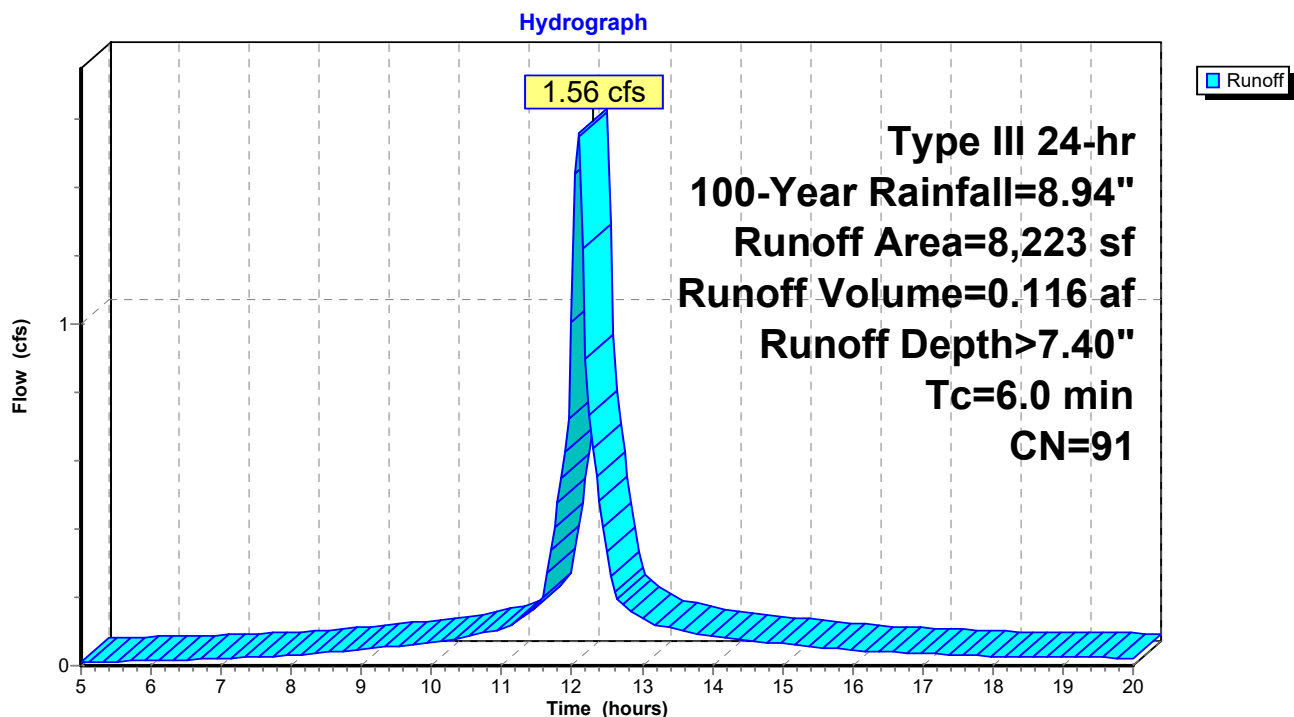
Summary for Subcatchment 73S: P2G

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

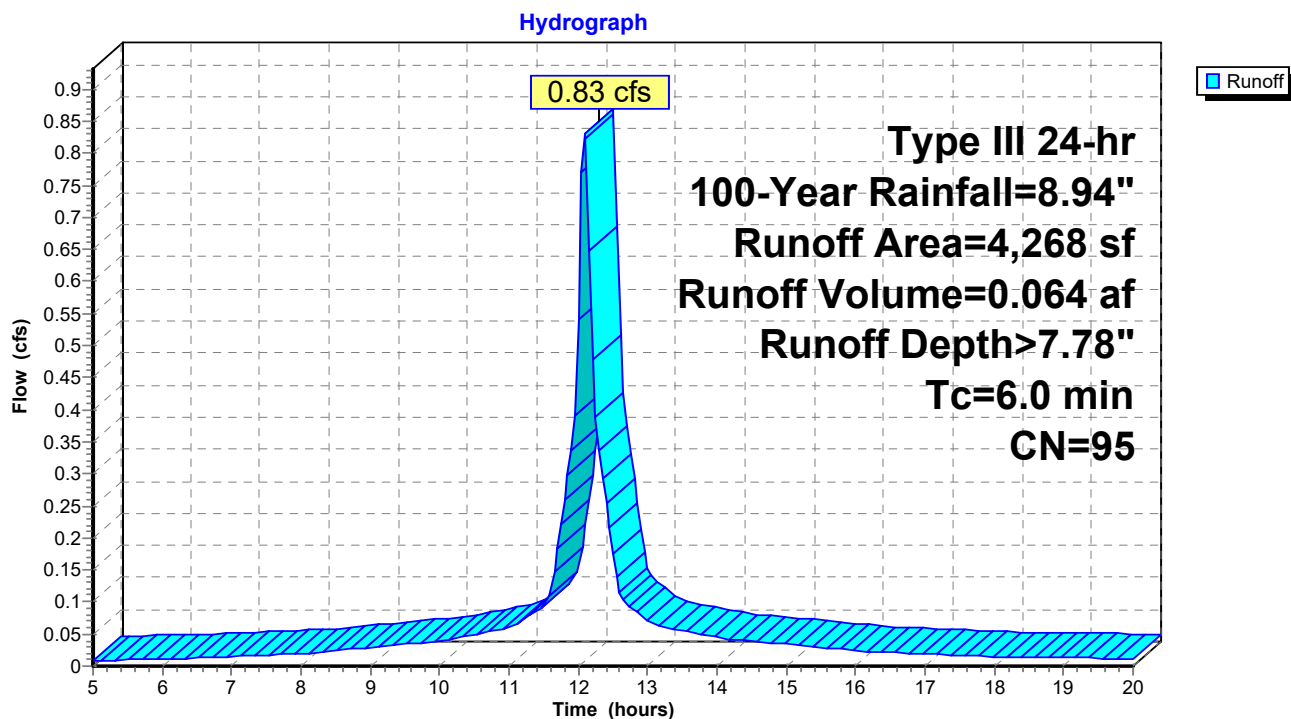
Runoff = 0.83 cfs @ 12.09 hrs, Volume= 0.064 af, Depth> 7.78"
Routed to Pond 77P : CB 71

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

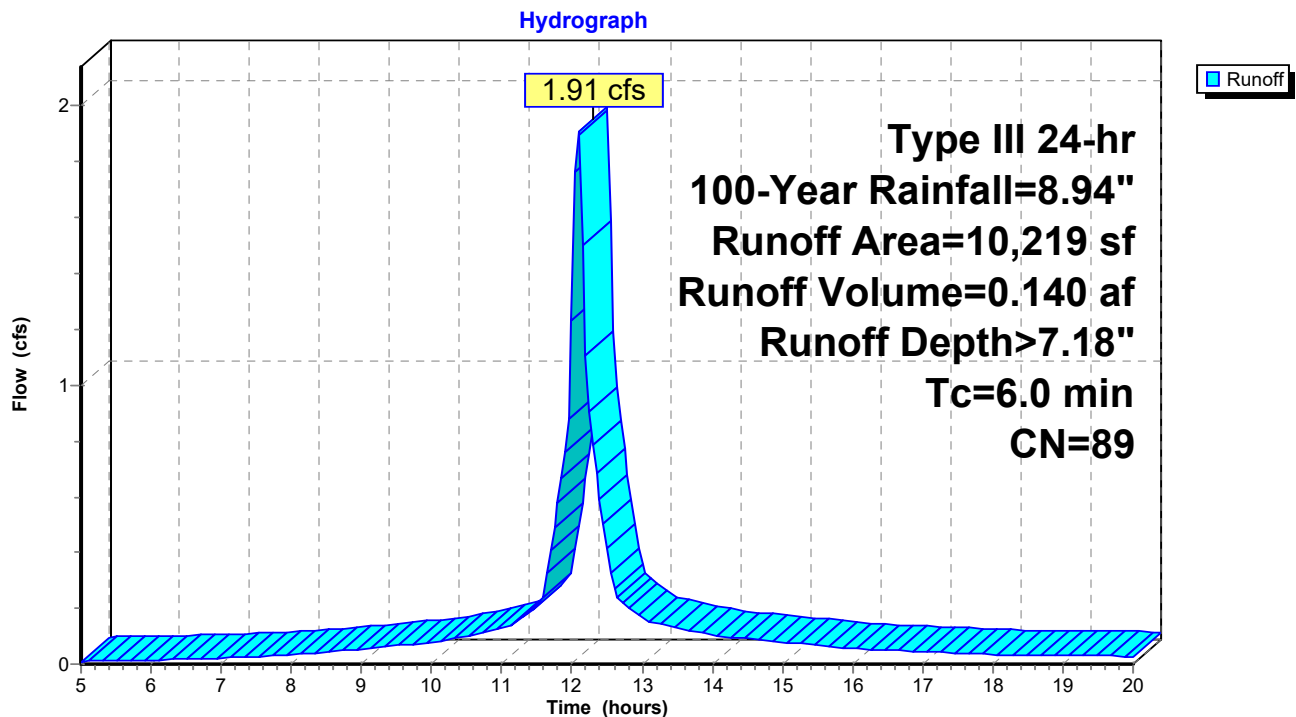
Runoff = 1.91 cfs @ 12.09 hrs, Volume= 0.140 af, Depth> 7.18"
Routed to Pond 107P : CB

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

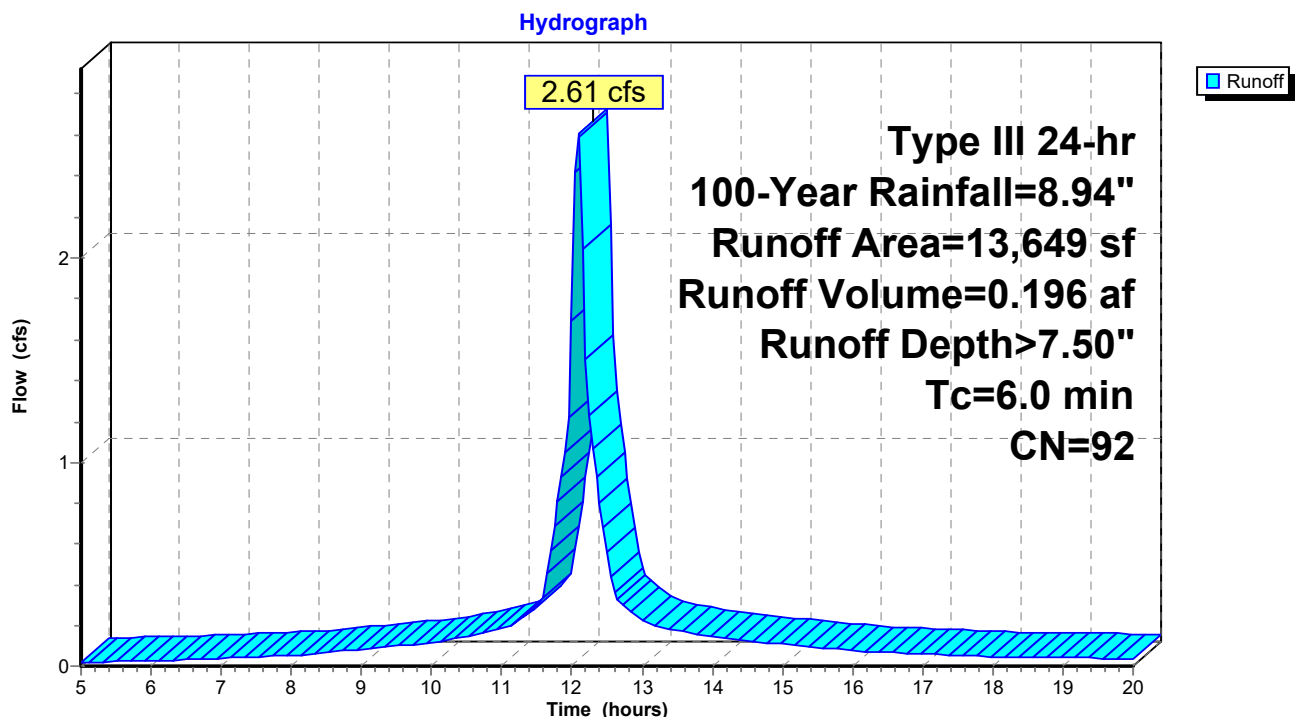
Runoff = 2.61 cfs @ 12.09 hrs, Volume= 0.196 af, Depth> 7.50"
Routed to Pond 103P : CB 92

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



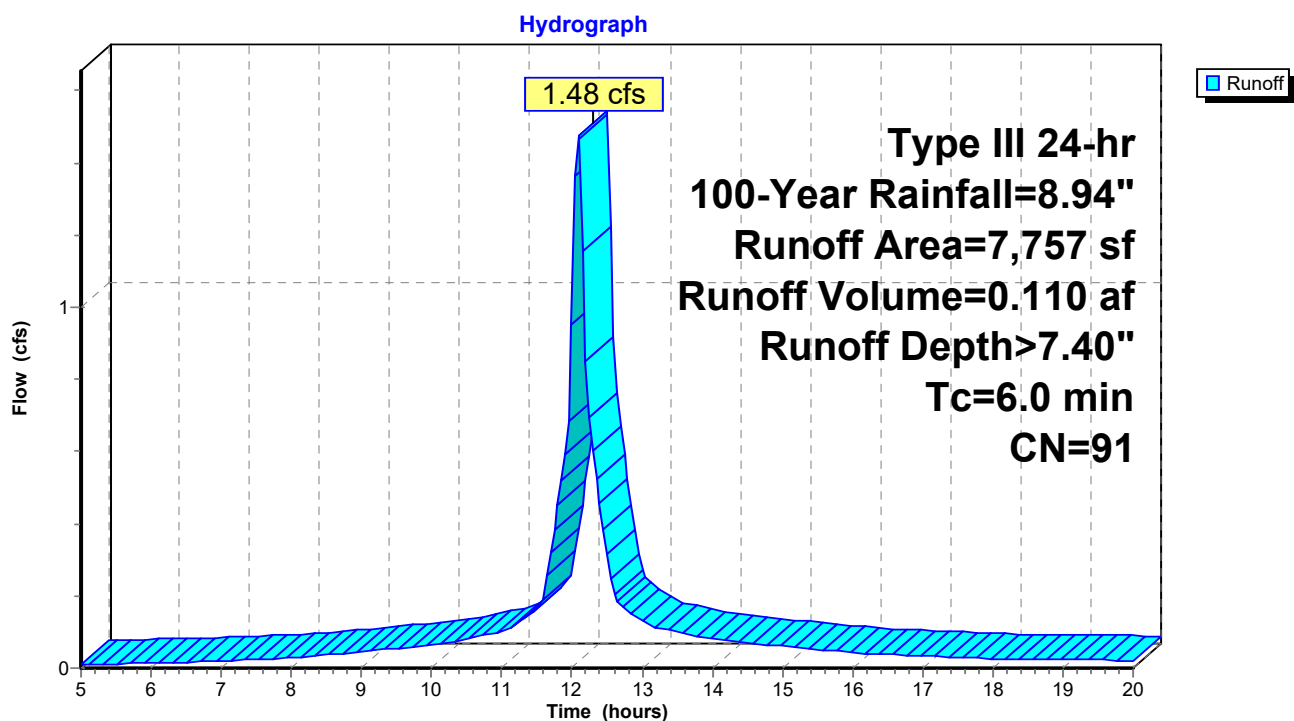
Summary for Subcatchment 77S: P3S

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

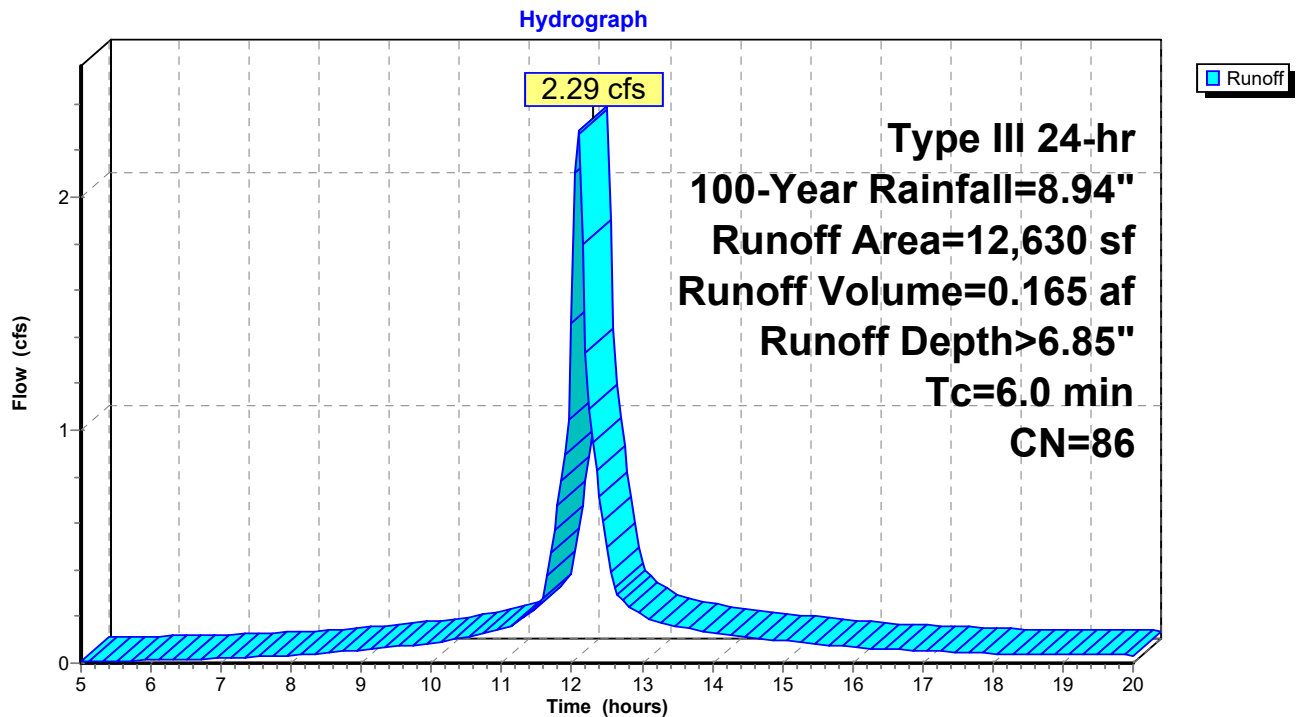
Runoff = 2.29 cfs @ 12.09 hrs, Volume= 0.165 af, Depth> 6.85"
Routed to Pond 112P : CB 45

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

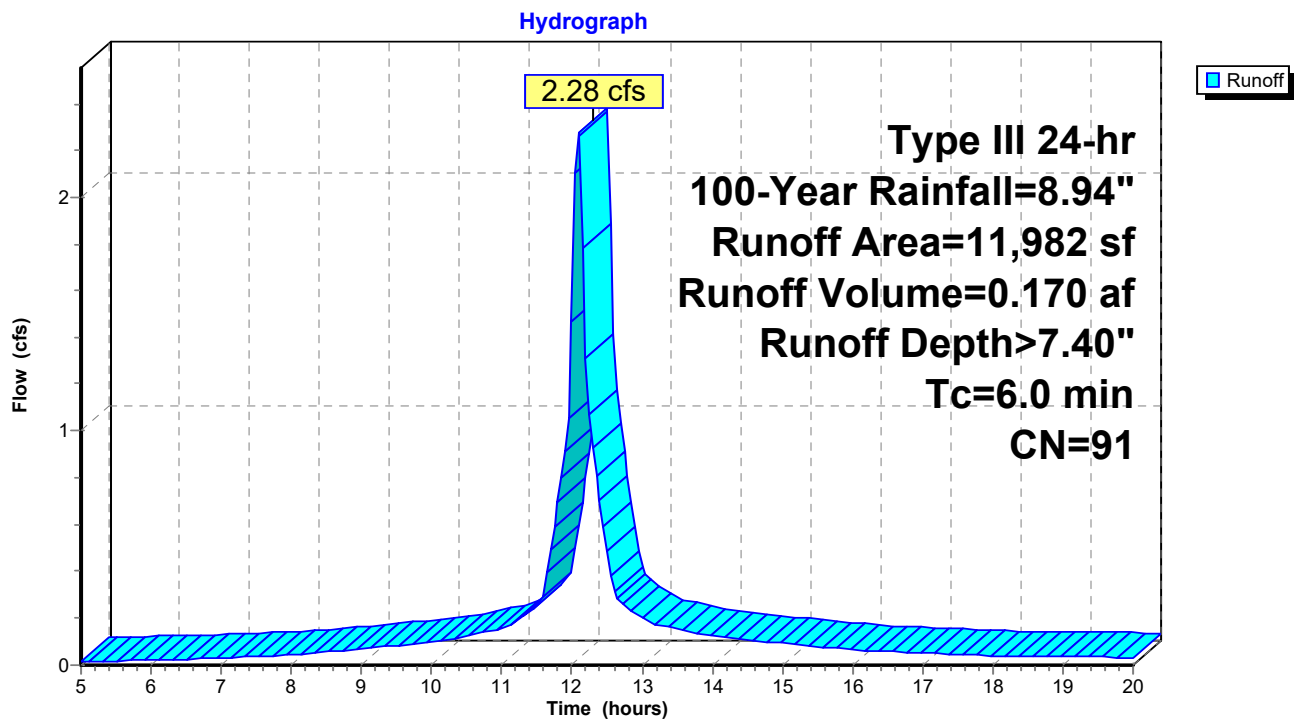
Runoff = 2.28 cfs @ 12.09 hrs, Volume= 0.170 af, Depth> 7.40"
Routed to Pond 122P : CB 46

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



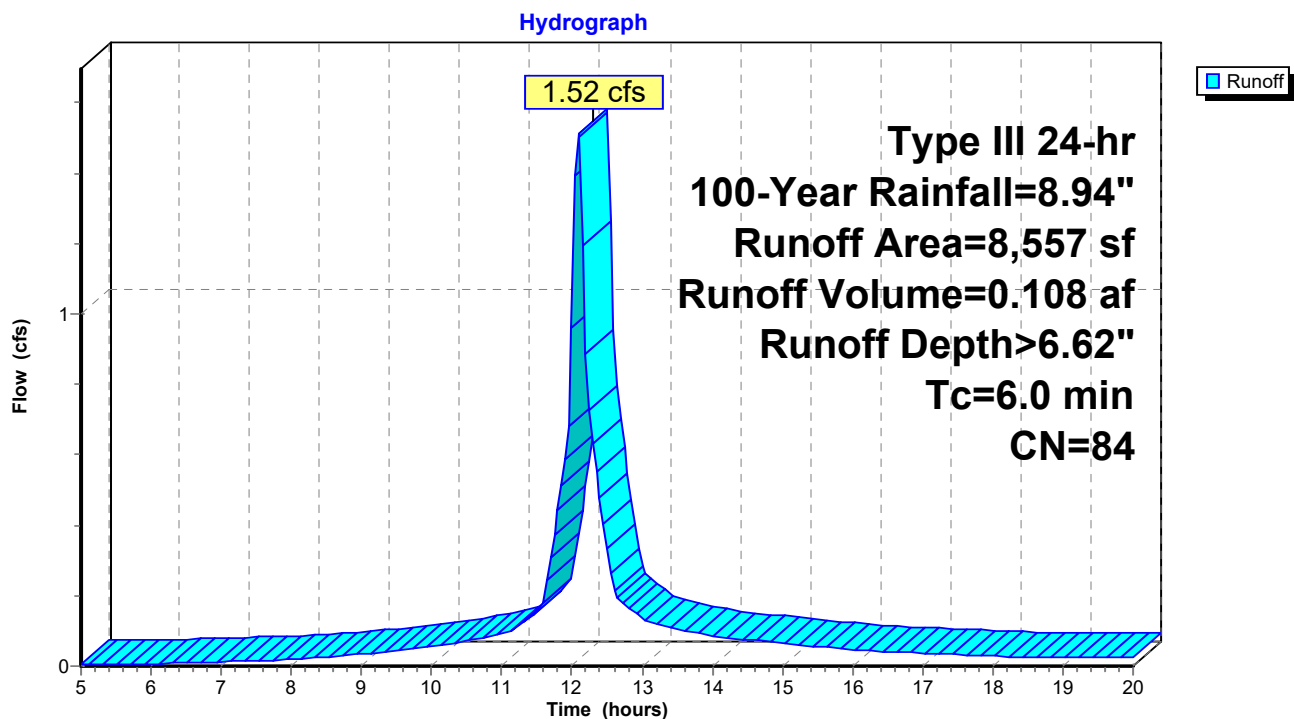
Summary for Subcatchment 80S: P3KK

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

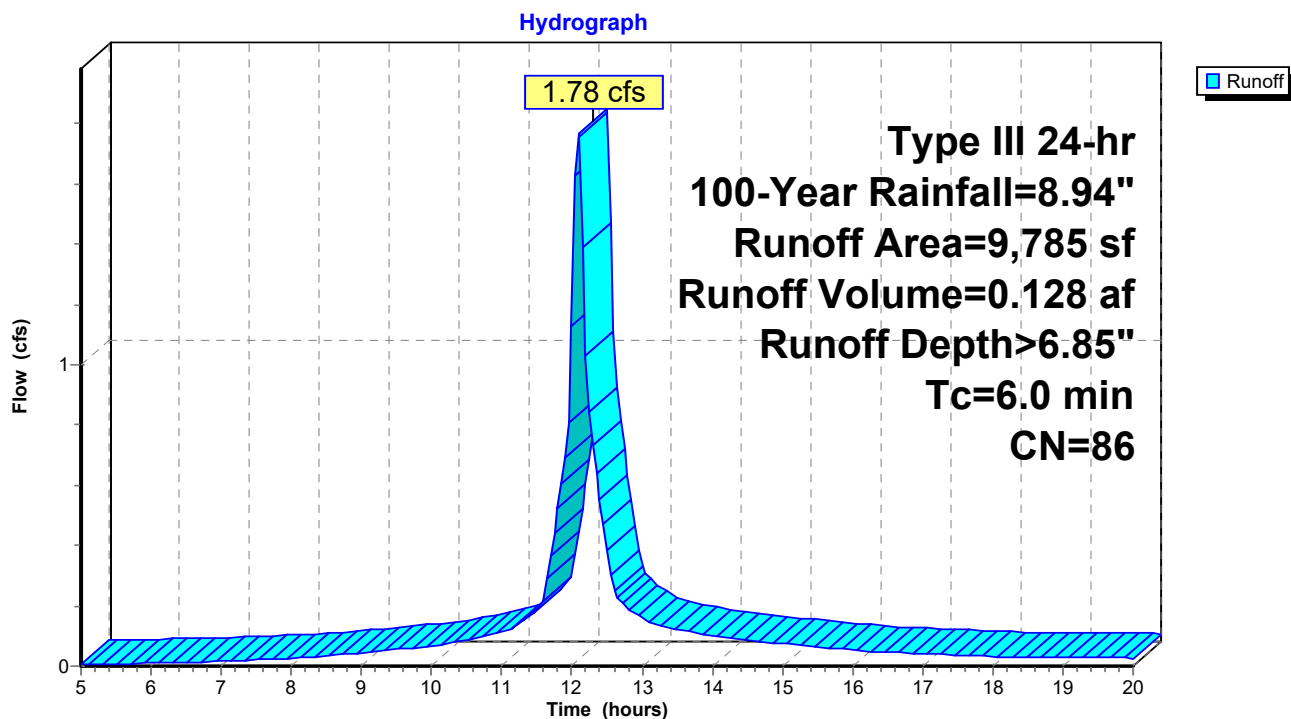
Runoff = 1.78 cfs @ 12.09 hrs, Volume= 0.128 af, Depth> 6.85"
Routed to Pond 126P : CB 37

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



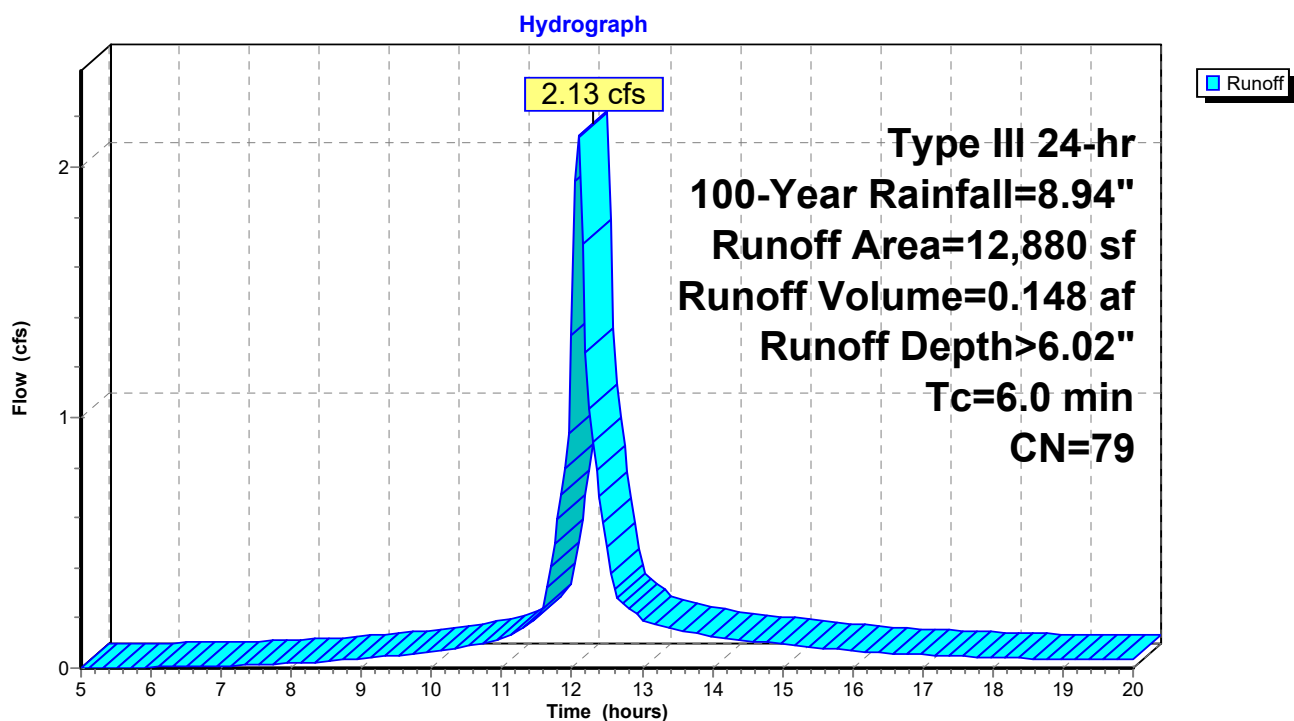
Summary for Subcatchment 82S: P3SS

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

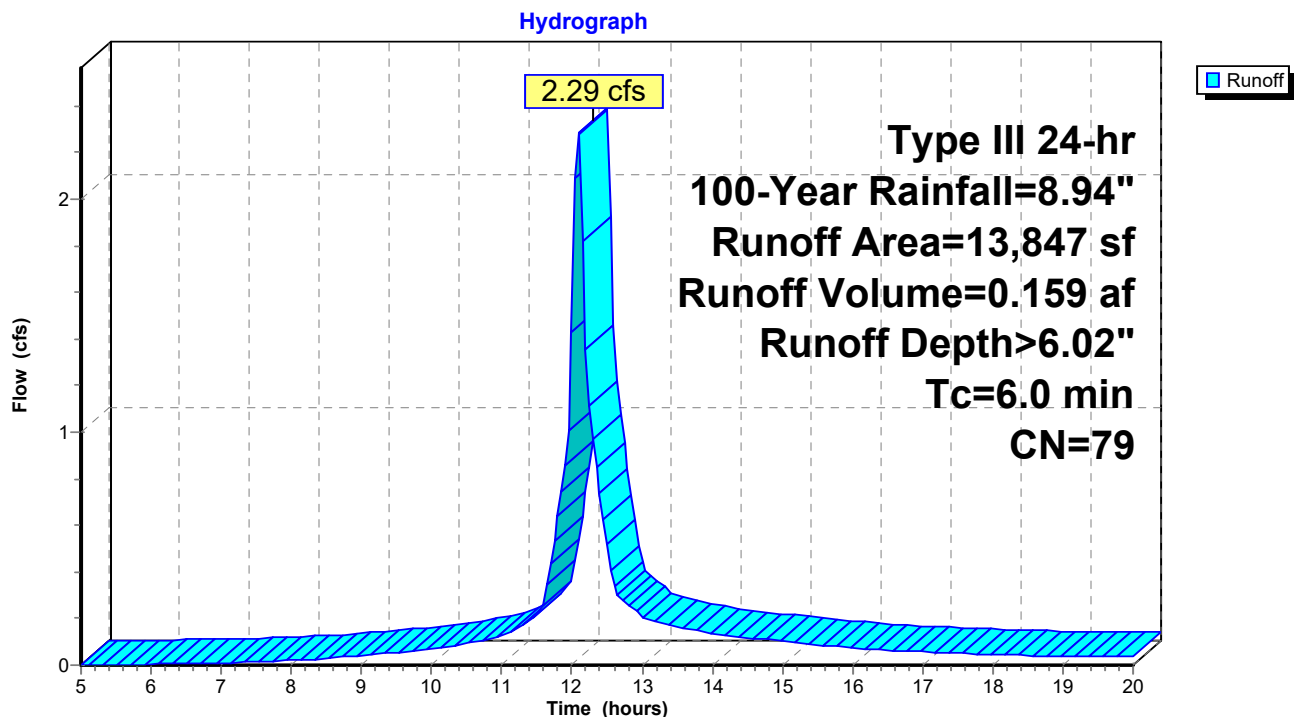
Runoff = 2.29 cfs @ 12.09 hrs, Volume= 0.159 af, Depth> 6.02"
 Routed to Pond 82P : Constructed Wetland 2

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



Summary for Subcatchment 84S: P2AA

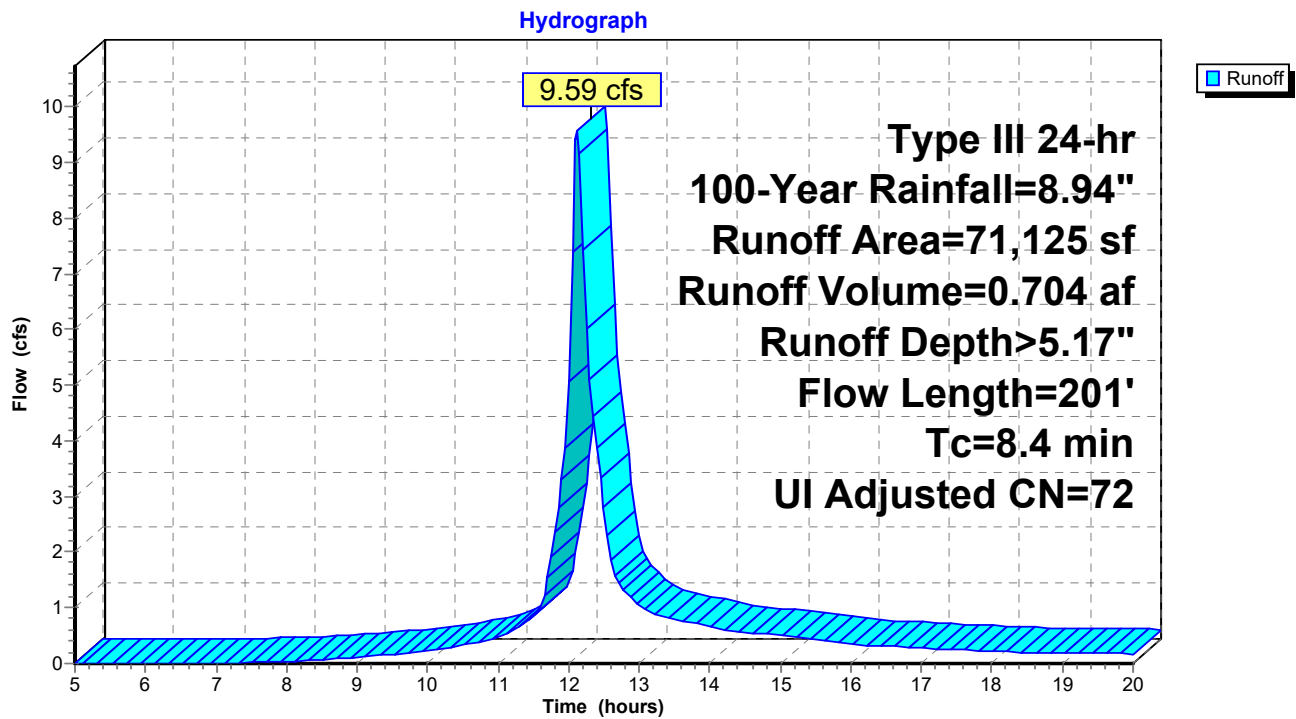
Runoff = 9.59 cfs @ 12.12 hrs, Volume= 0.704 af, Depth> 5.17"
 Routed to Link 60L : DP 2

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		Sheet Flow, Grass: Short n= 0.150 P2= 3.10"
1.4	68	0.0140	0.83		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.4	57	0.1200	2.42		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
0.9	26	0.0100	0.50		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
8.4	201	Total			

Subcatchment 84S: P2AA



Summary for Subcatchment 85S: (new Subcat)

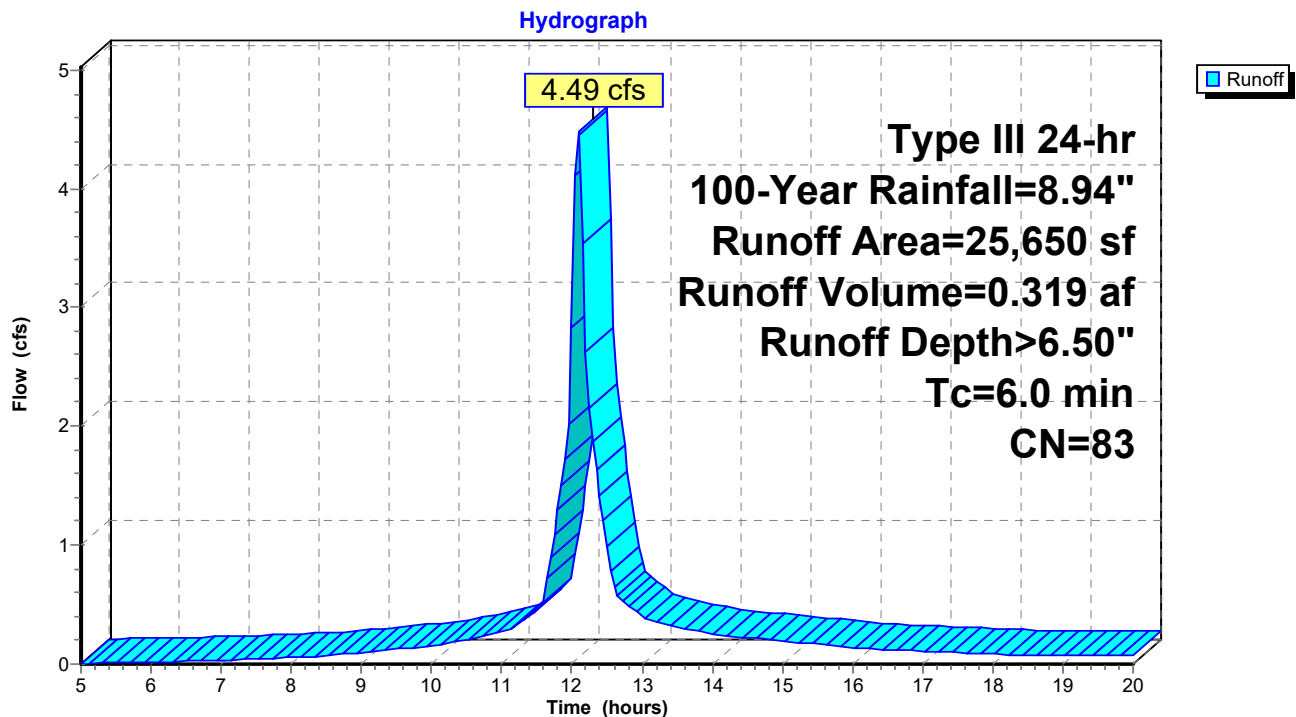
Runoff = 4.49 cfs @ 12.09 hrs, Volume= 0.319 af, Depth> 6.50"
Routed to Pond 86P : Sub. Inf. 6

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

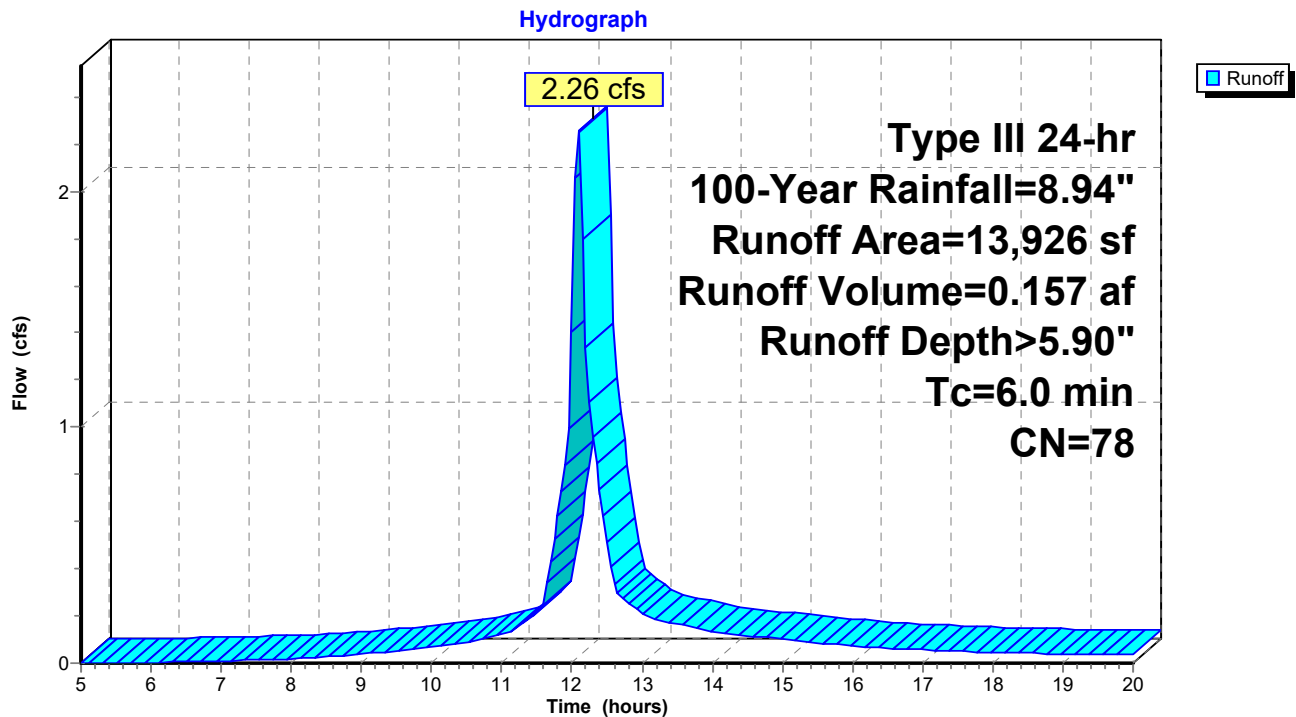
Runoff = 2.26 cfs @ 12.09 hrs, Volume= 0.157 af, Depth> 5.90"
Routed to Pond 140P : CB 31

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

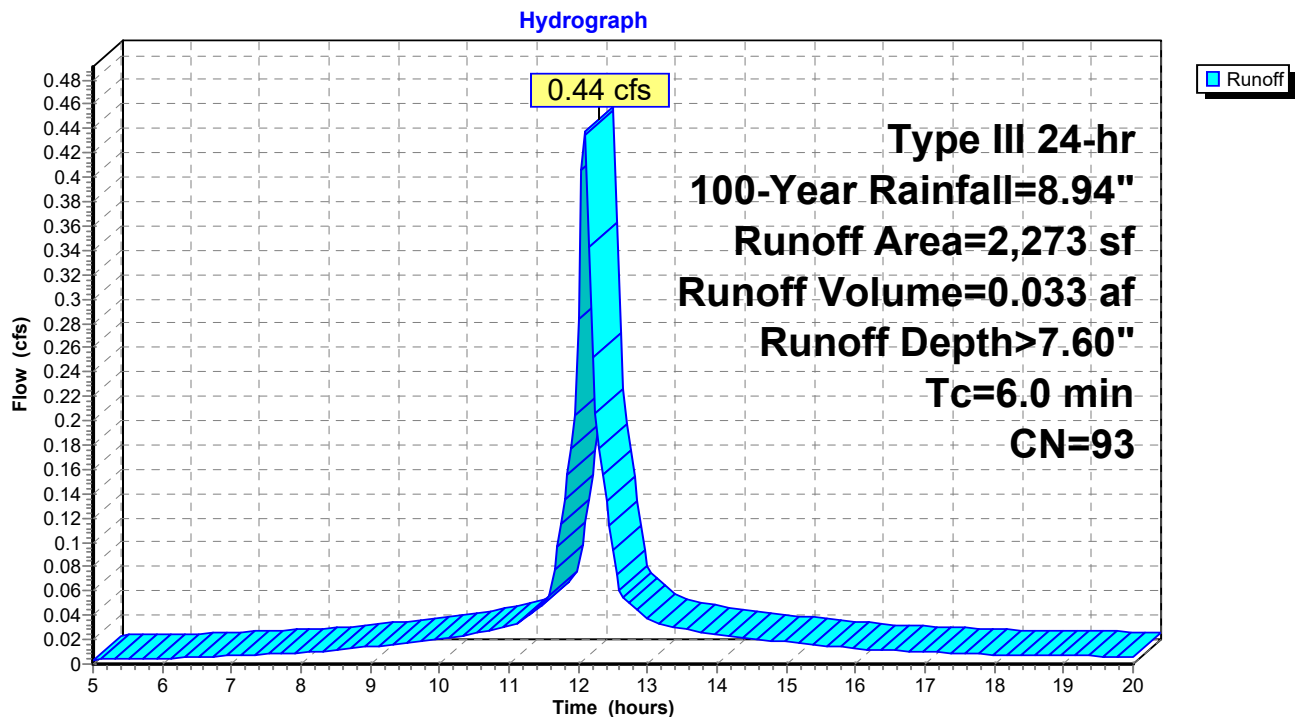
Runoff = 0.44 cfs @ 12.09 hrs, Volume= 0.033 af, Depth> 7.60"
Routed to Pond 89P : CB 74

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



Summary for Subcatchment 88S: P3B

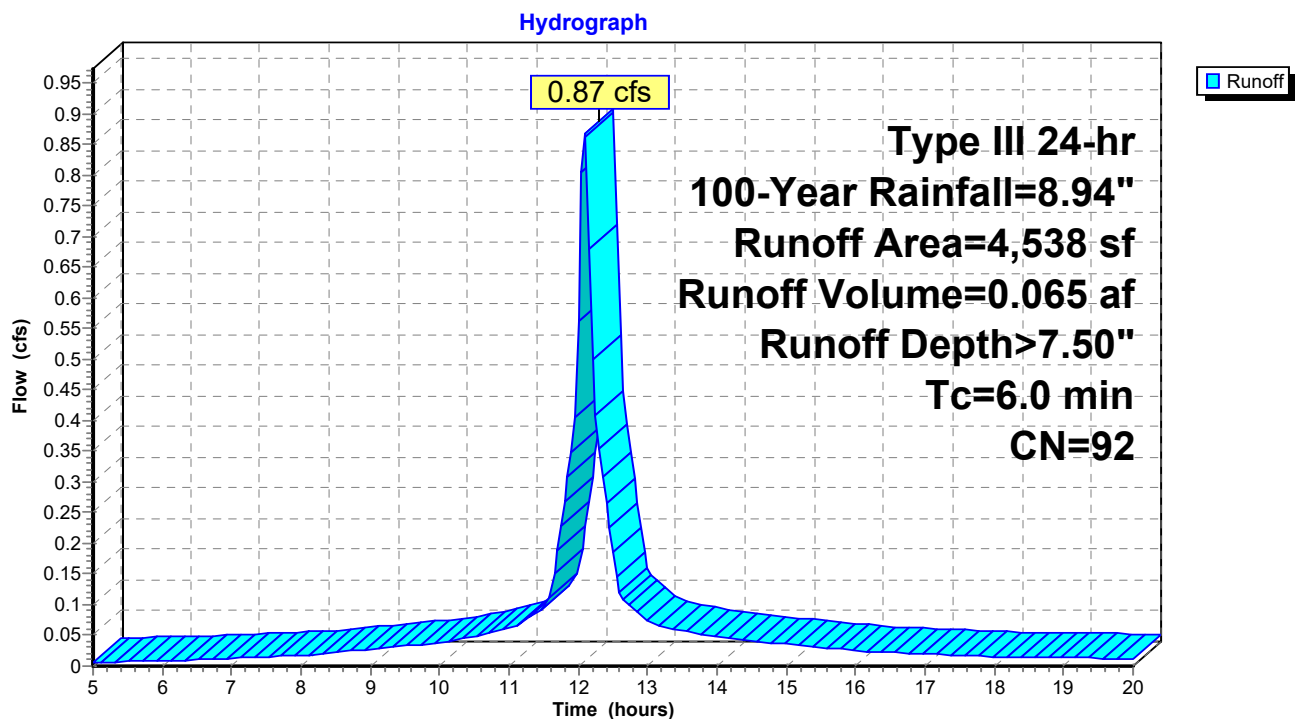
Runoff = 0.87 cfs @ 12.09 hrs, Volume= 0.065 af, Depth> 7.50"
Routed to Pond 90P : CB 75

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



Summary for Subcatchment 89S: P3AAA

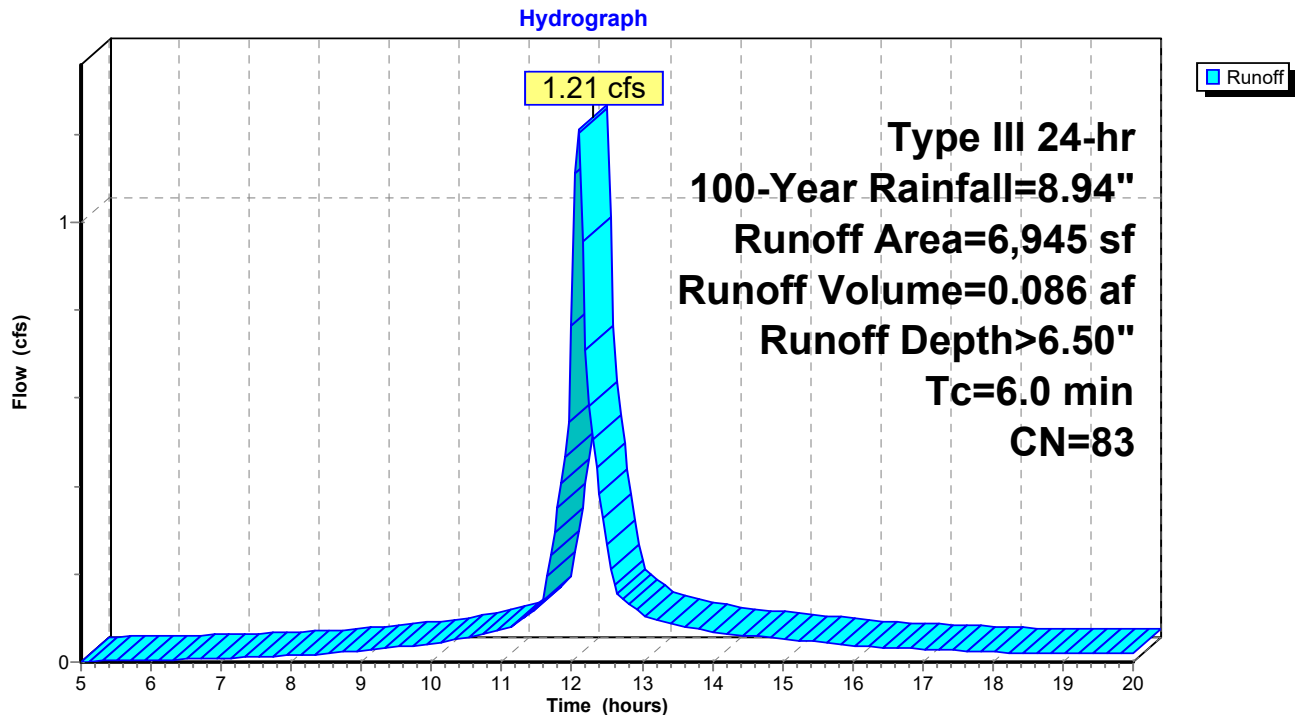
Runoff = 1.21 cfs @ 12.09 hrs, Volume= 0.086 af, Depth> 6.50"
Routed to Pond 151P : CB 22

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



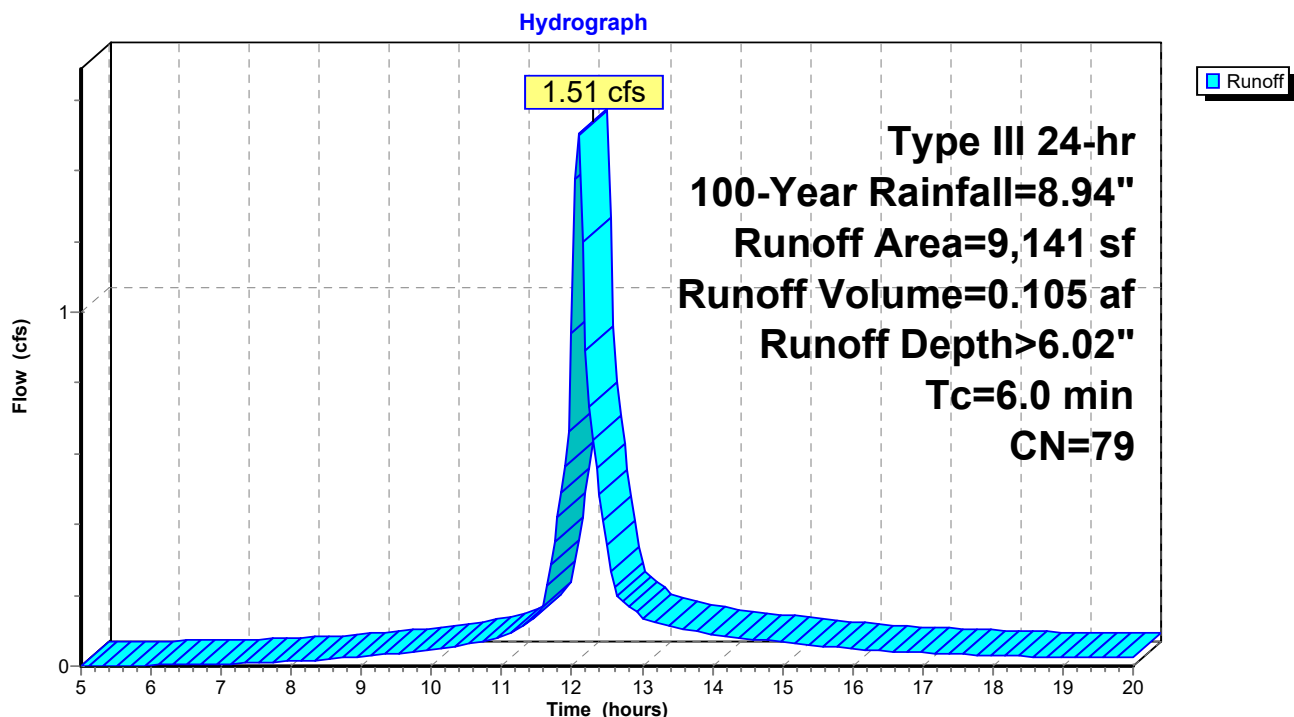
Summary for Subcatchment 90S: P3BBB

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

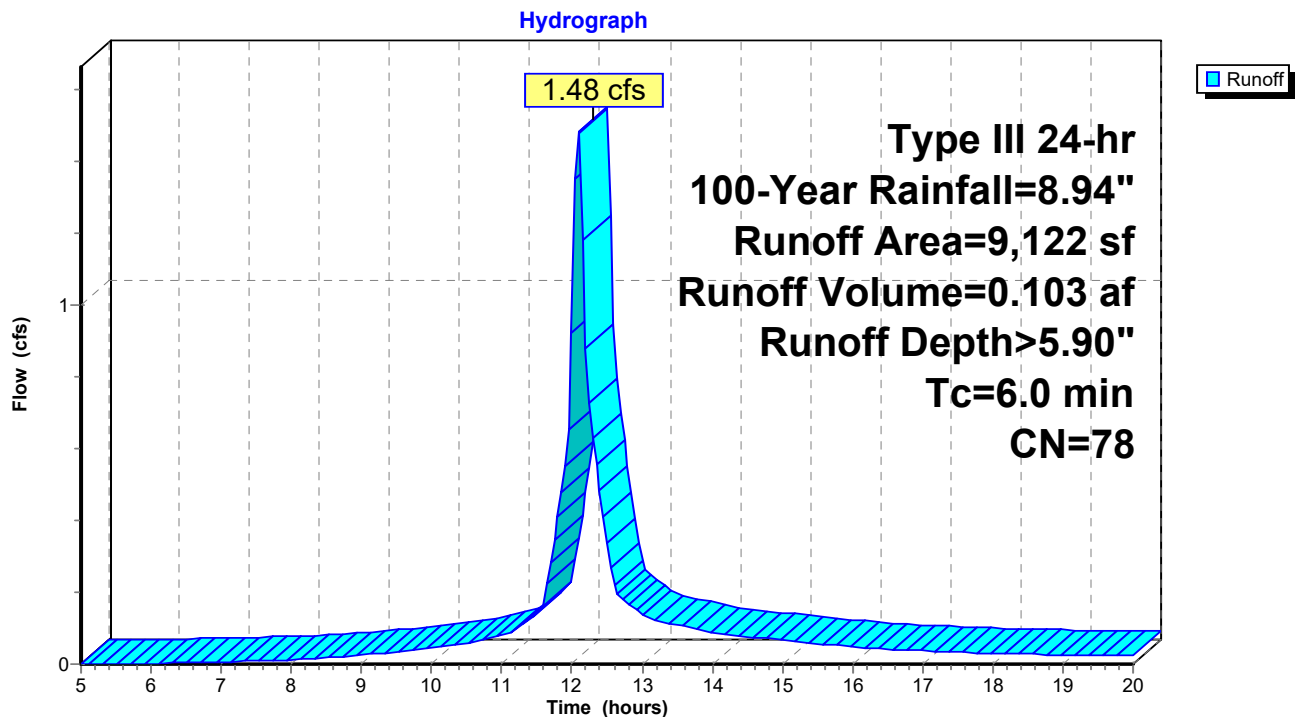
Runoff = 1.48 cfs @ 12.09 hrs, Volume= 0.103 af, Depth> 5.90"
Routed to Pond 165P : CB 19

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



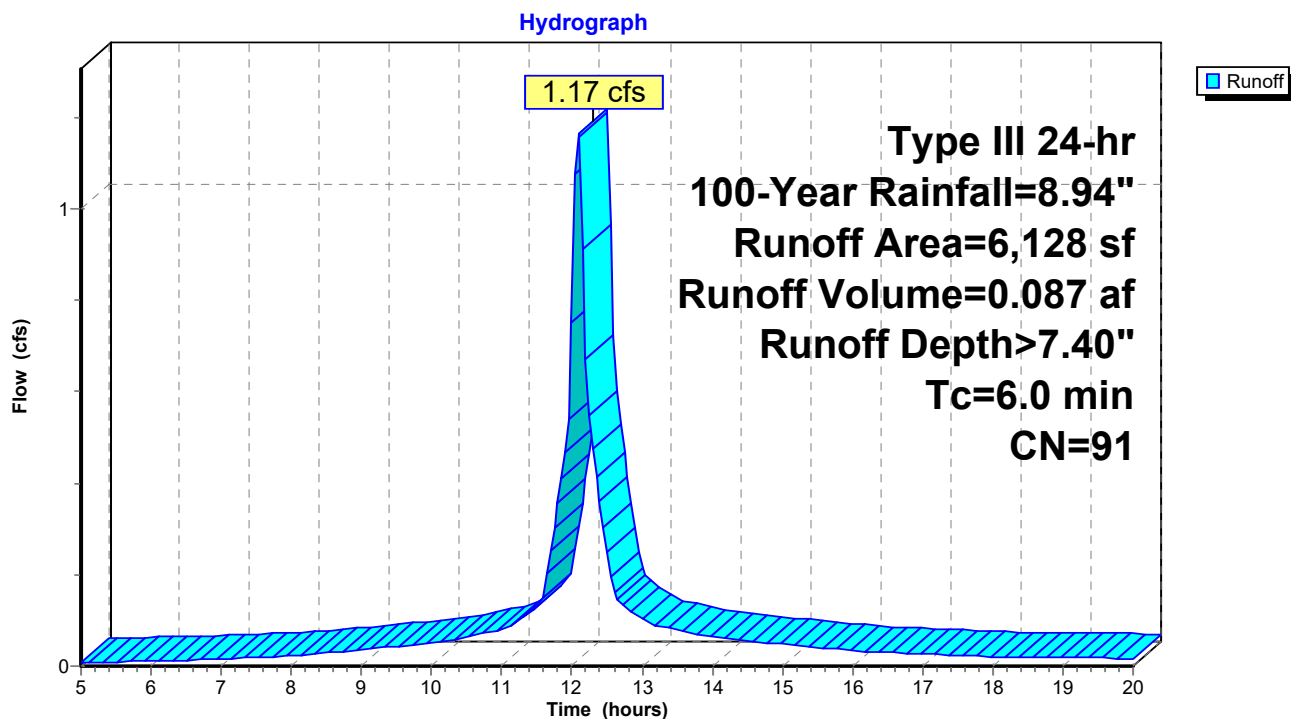
Summary for Subcatchment 92S: P3C

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

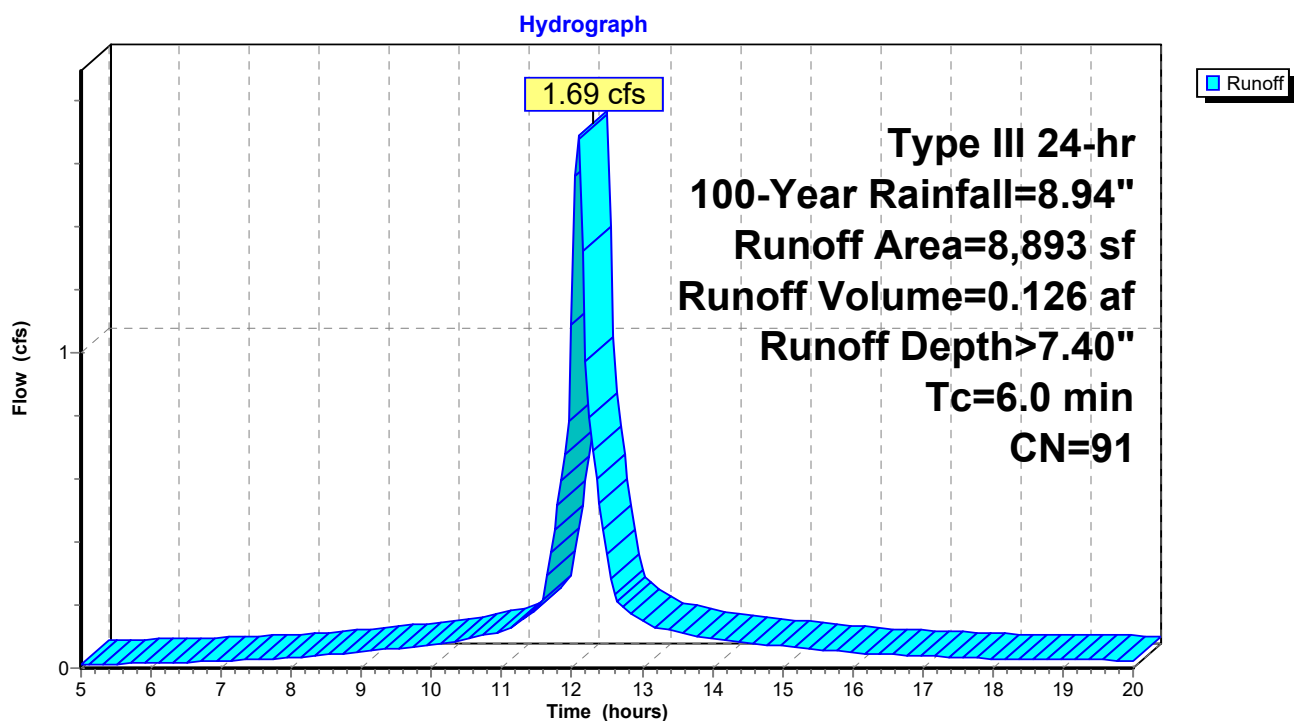
Summary for Subcatchment 93S: P3D

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

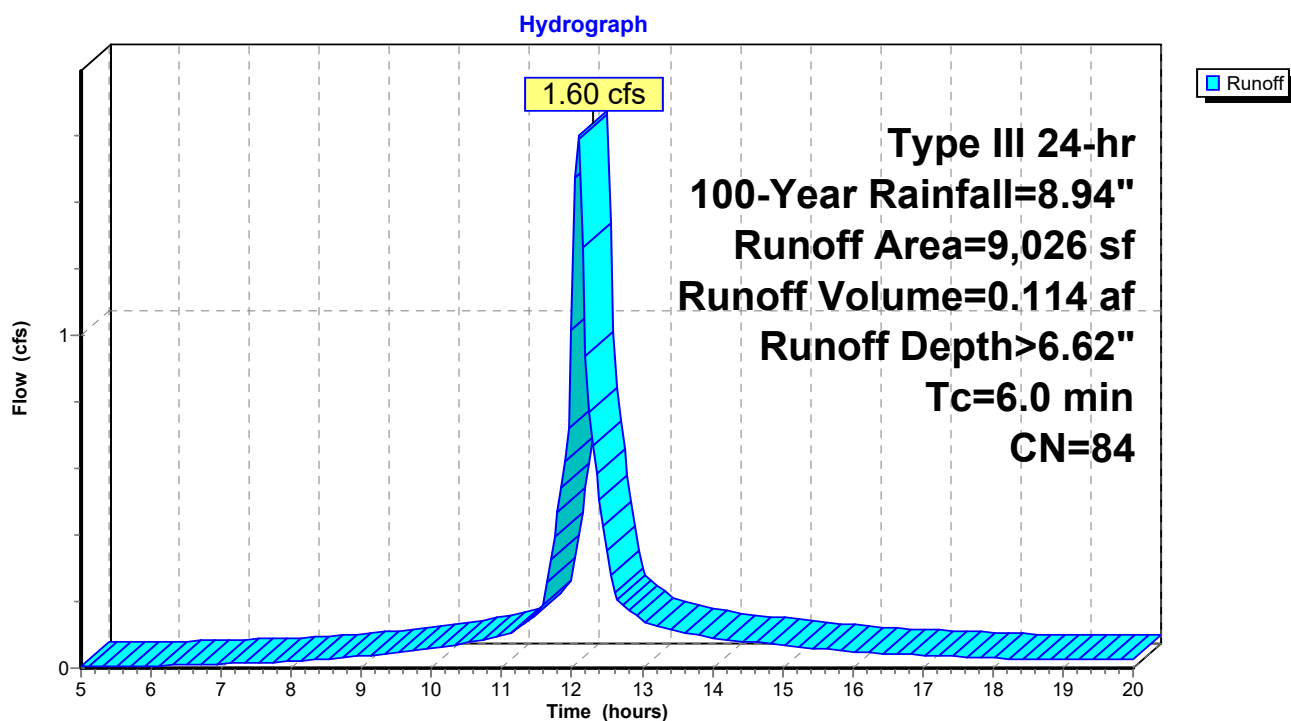
Summary for Subcatchment 94S: P3HHH

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

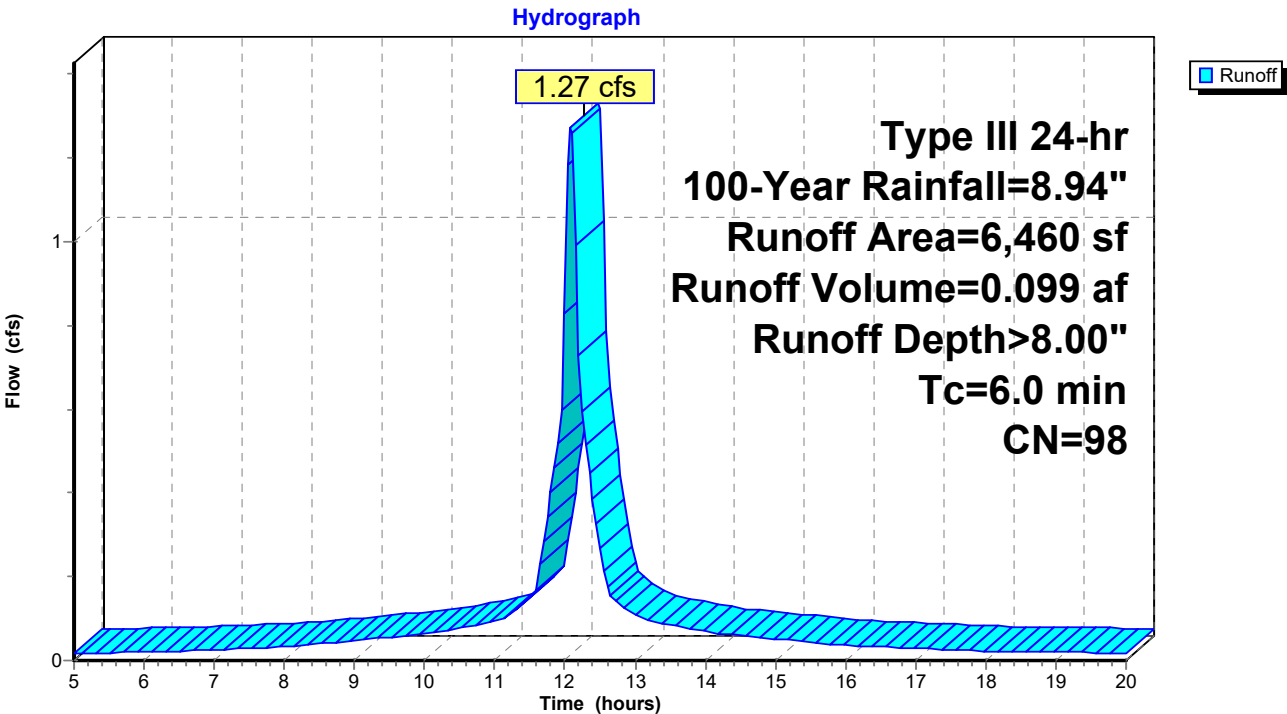
Runoff = 1.27 cfs @ 12.09 hrs, Volume= 0.099 af, Depth> 8.00"
Routed to Pond 79P : DMH 51

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



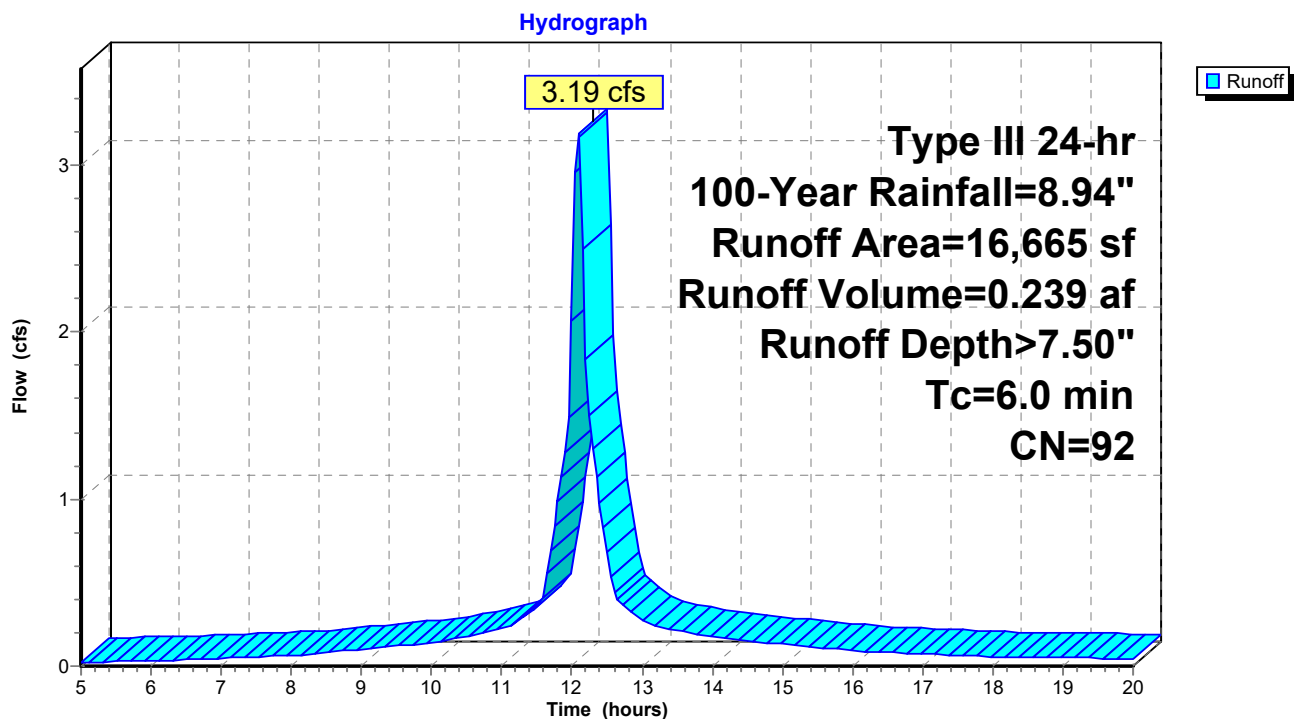
Summary for Subcatchment 97S: P3G

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

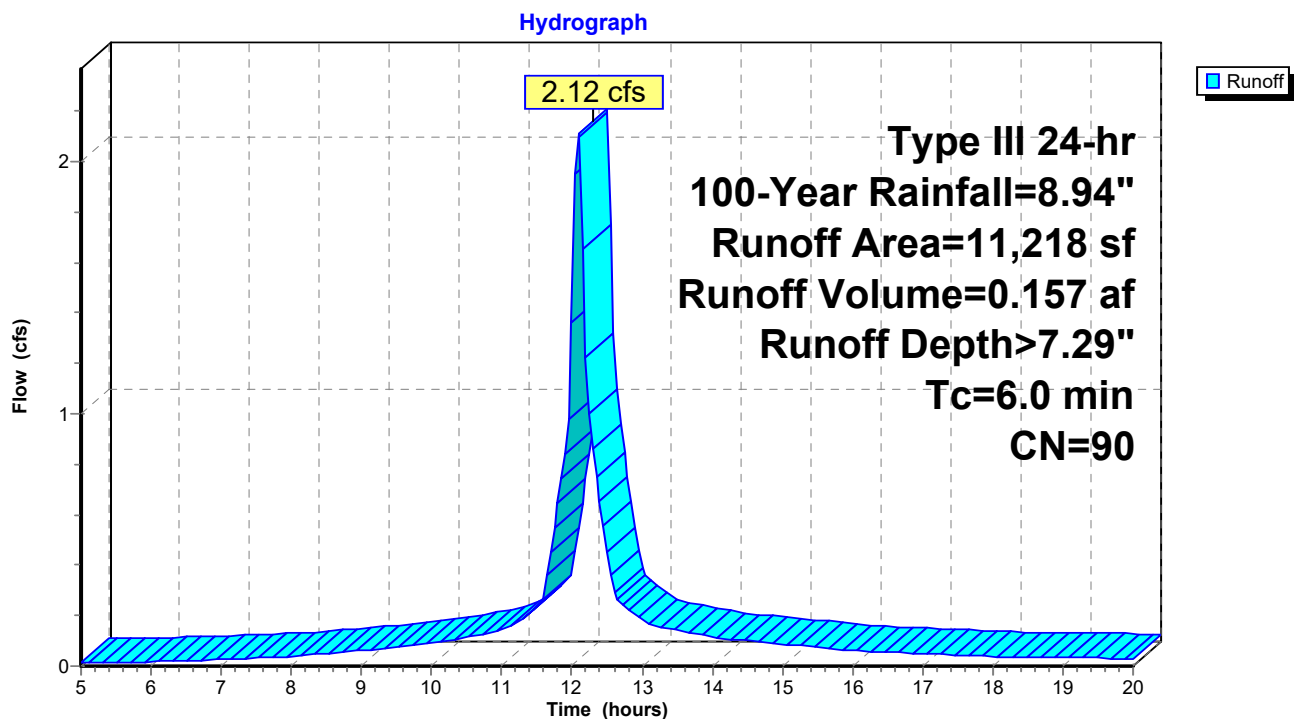
Summary for Subcatchment 98S: P3H

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

Summary for Subcatchment 102S: P3J

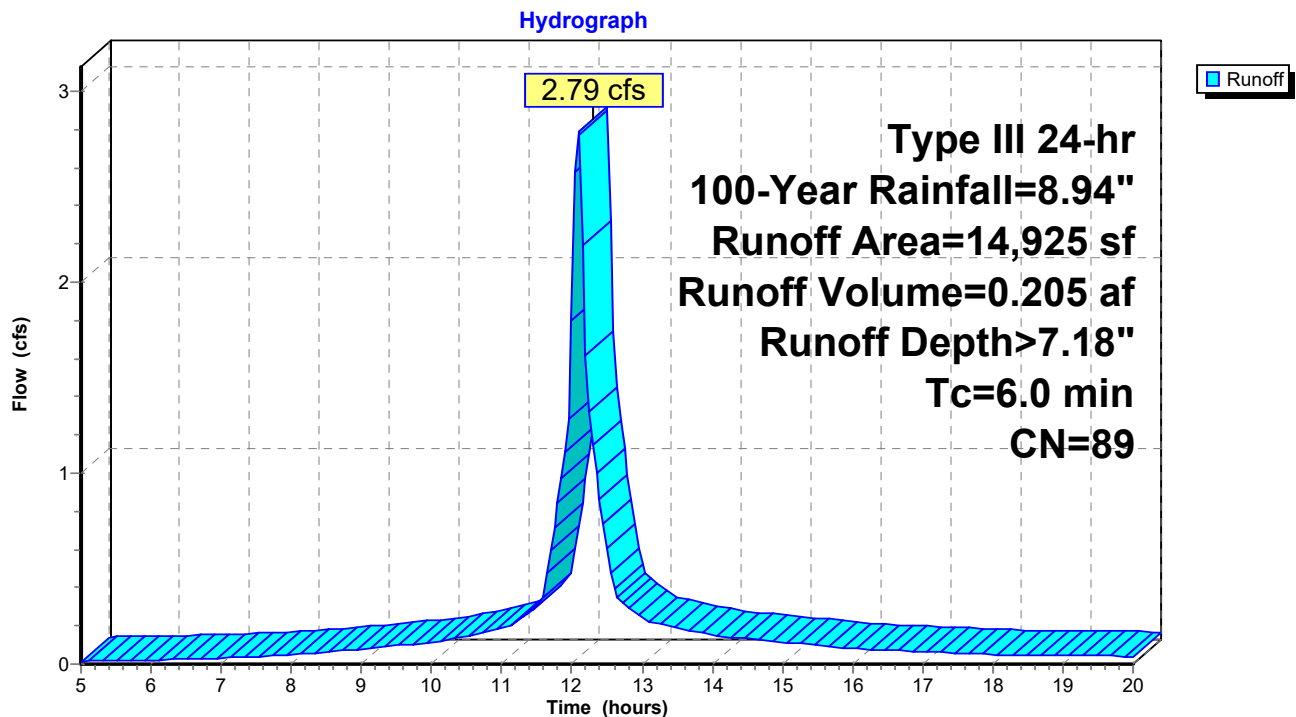
Runoff = 2.79 cfs @ 12.09 hrs, Volume= 0.205 af, Depth> 7.18"
Routed to Pond 104P : CB 83

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

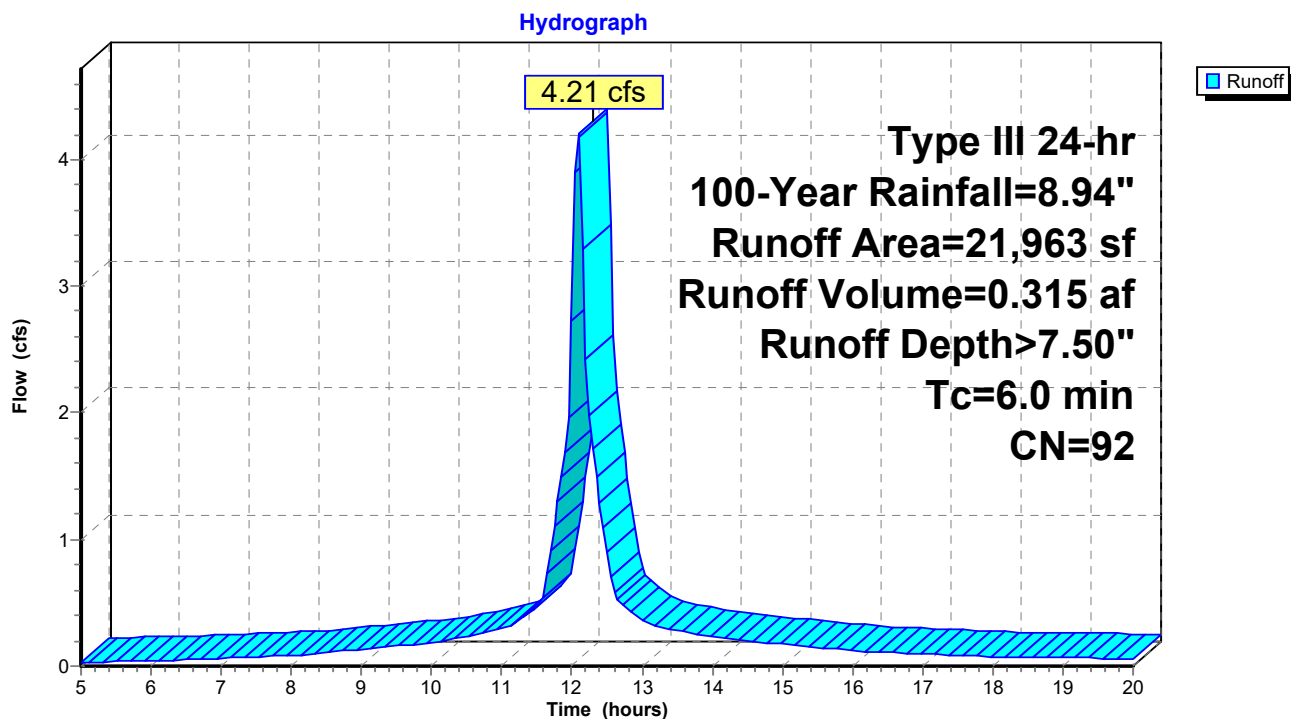
Runoff = 4.21 cfs @ 12.09 hrs, Volume= 0.315 af, Depth> 7.50"
Routed to Pond 105P : CB 82

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



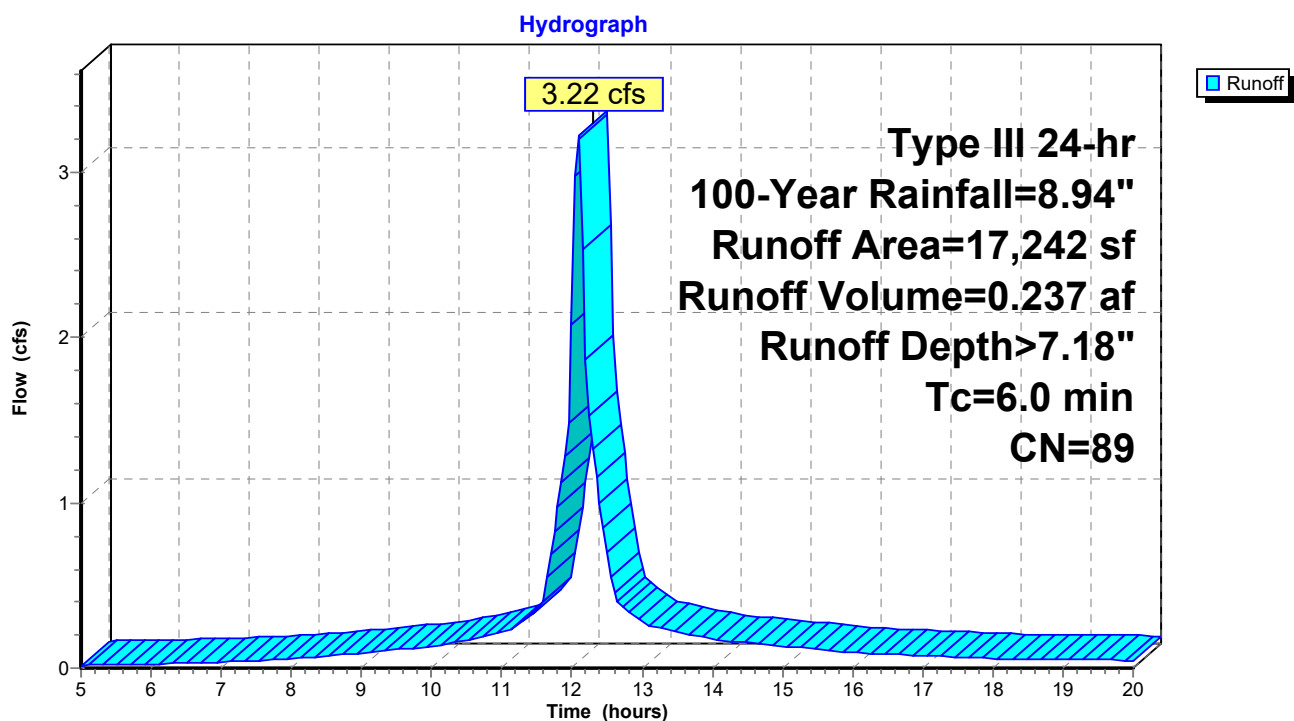
Summary for Subcatchment 107S: P3E

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

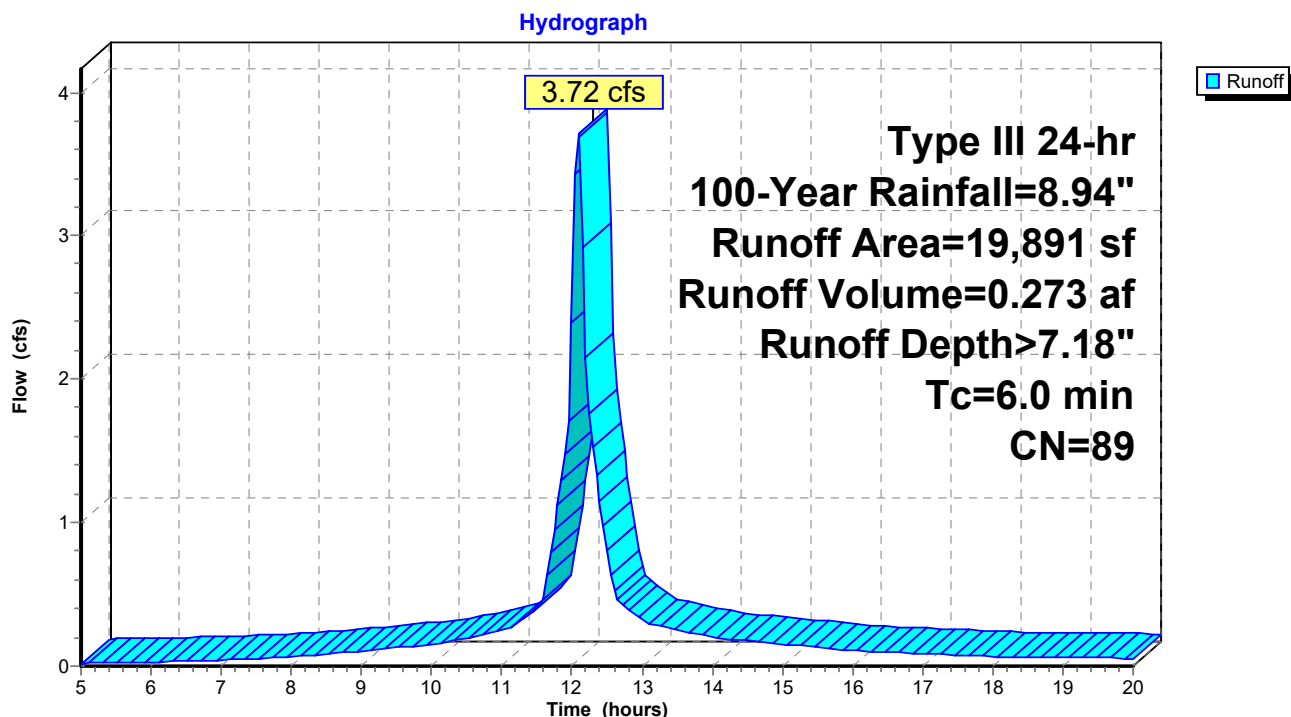
Runoff = 3.72 cfs @ 12.09 hrs, Volume= 0.273 af, Depth> 7.18"
Routed to Pond 109P : CB 79

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



Summary for Subcatchment 109S: P3T

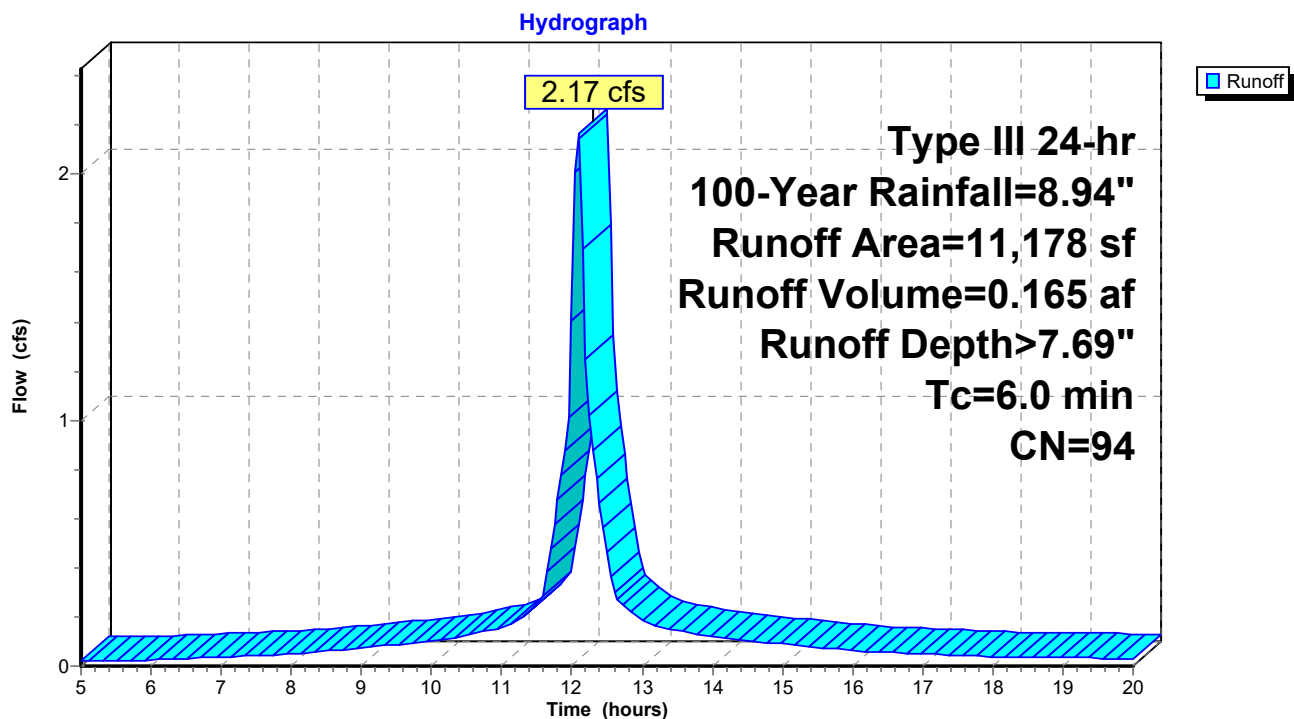
Runoff = 2.17 cfs @ 12.09 hrs, Volume= 0.165 af, Depth> 7.69"
Routed to Pond 116P : CB 90

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

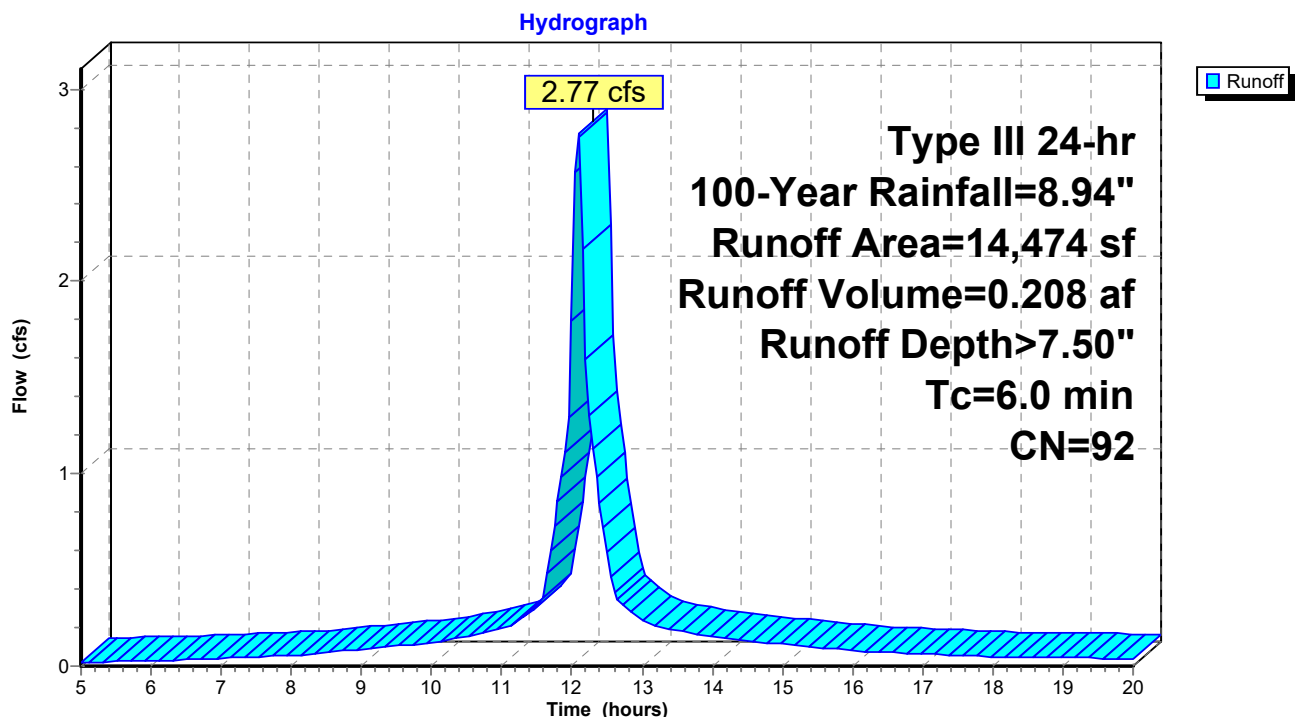
Runoff = 2.77 cfs @ 12.09 hrs, Volume= 0.208 af, Depth> 7.50"
Routed to Pond 115P : CB 91

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

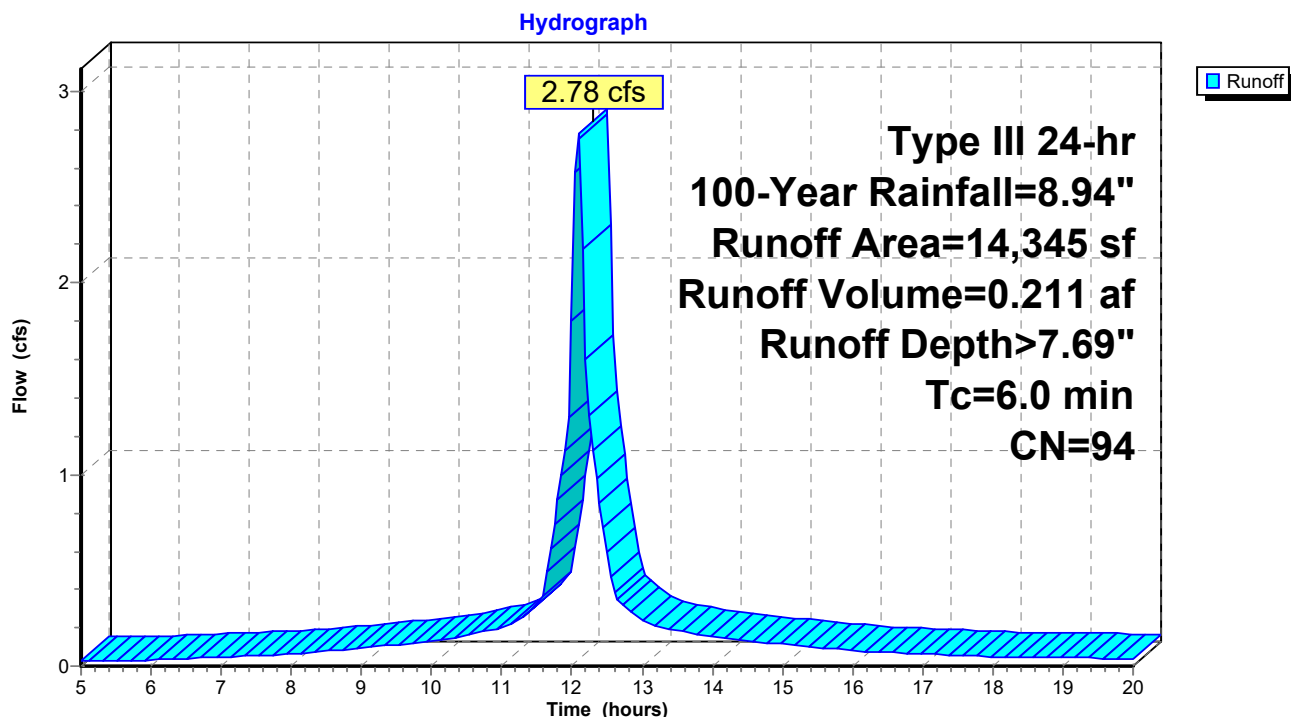
Runoff = 2.78 cfs @ 12.09 hrs, Volume= 0.211 af, Depth> 7.69"
Routed to Pond 114P : CB 94

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

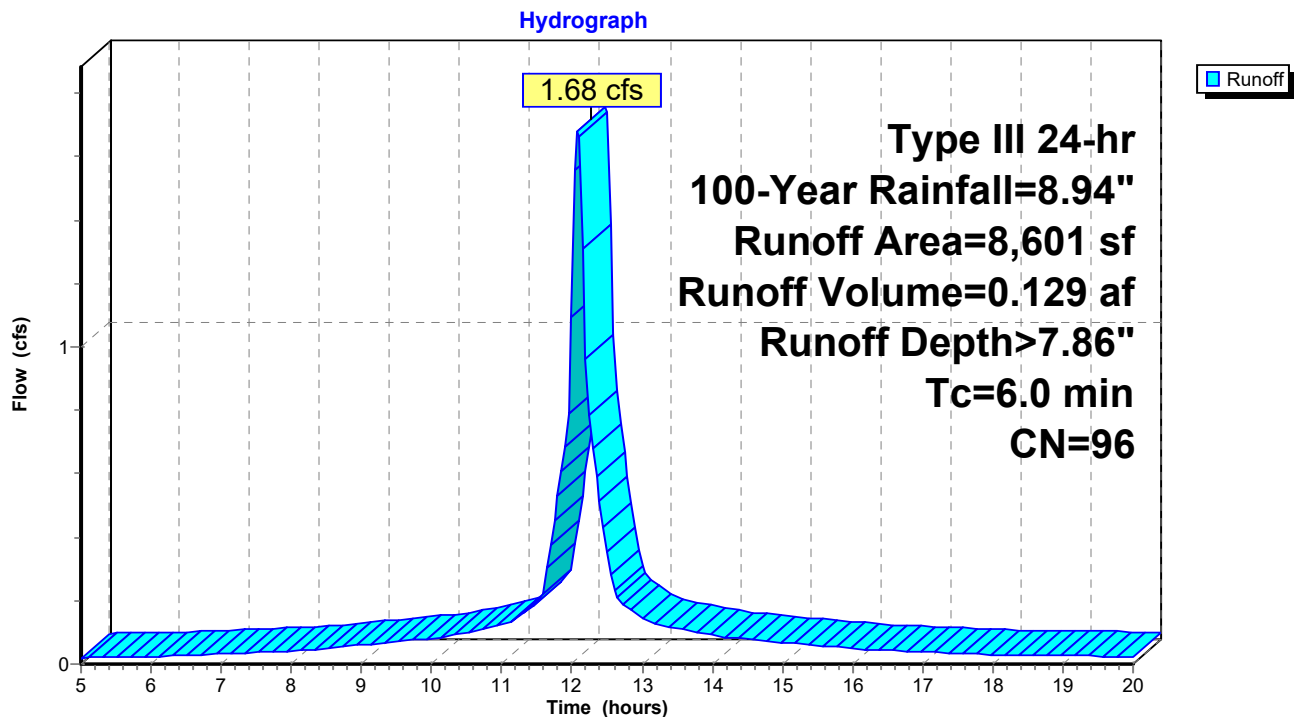
Runoff = 1.68 cfs @ 12.09 hrs, Volume= 0.129 af, Depth> 7.86"
Routed to Pond 113P : CB 95

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



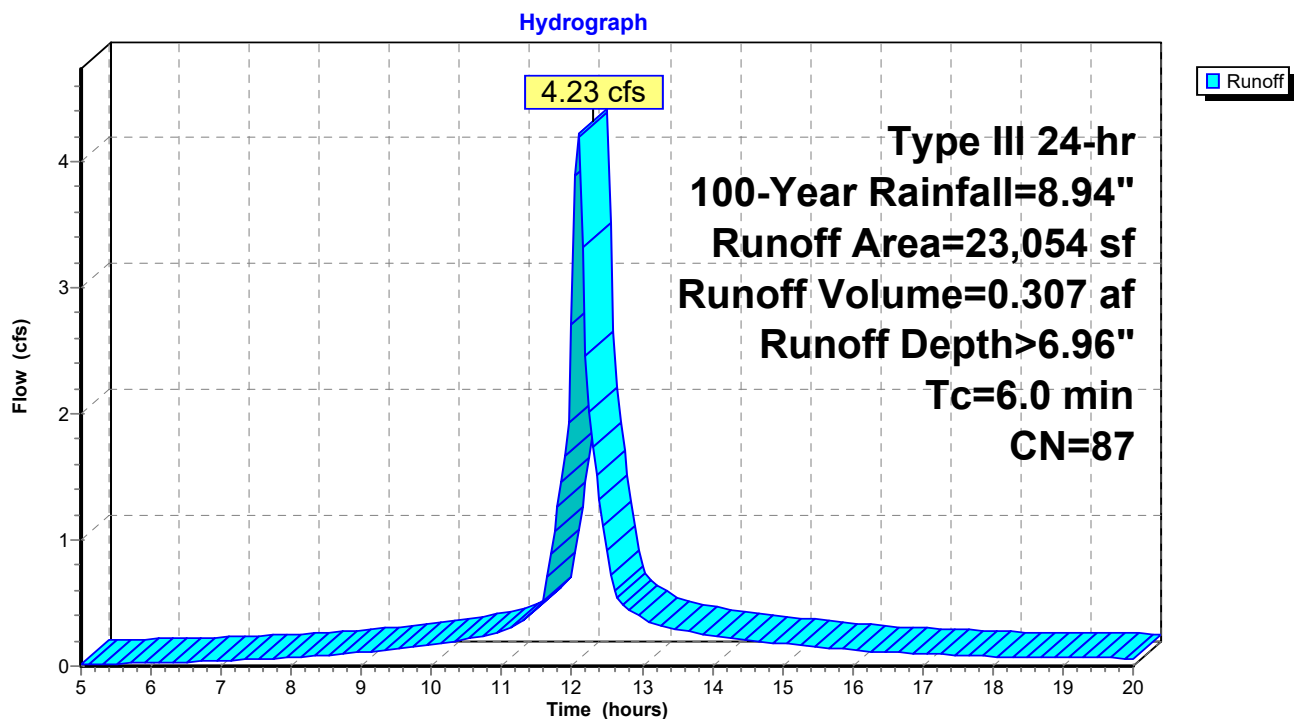
Summary for Subcatchment 125S: P3EE

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

Summary for Subcatchment 126S: P3FF

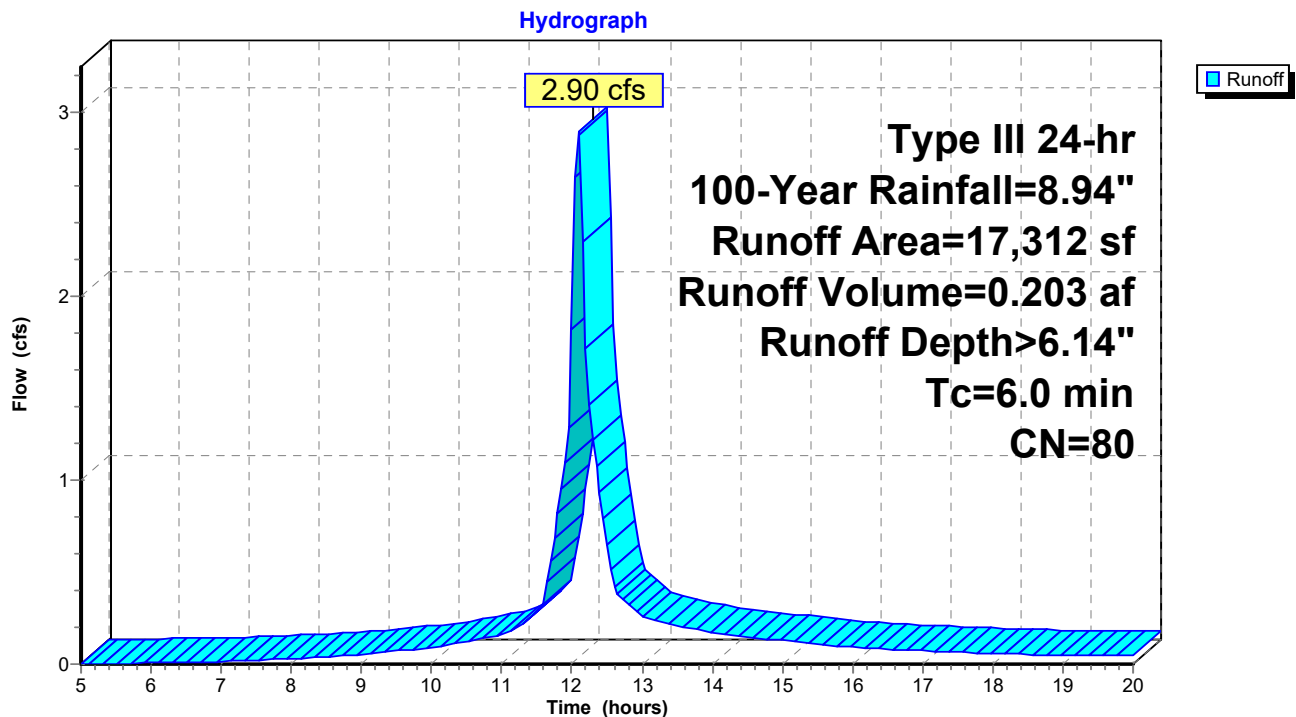
Runoff = 2.90 cfs @ 12.09 hrs, Volume= 0.203 af, Depth> 6.14"
Routed to Pond 129P : CB 34

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



Summary for Subcatchment 127S: P3GG

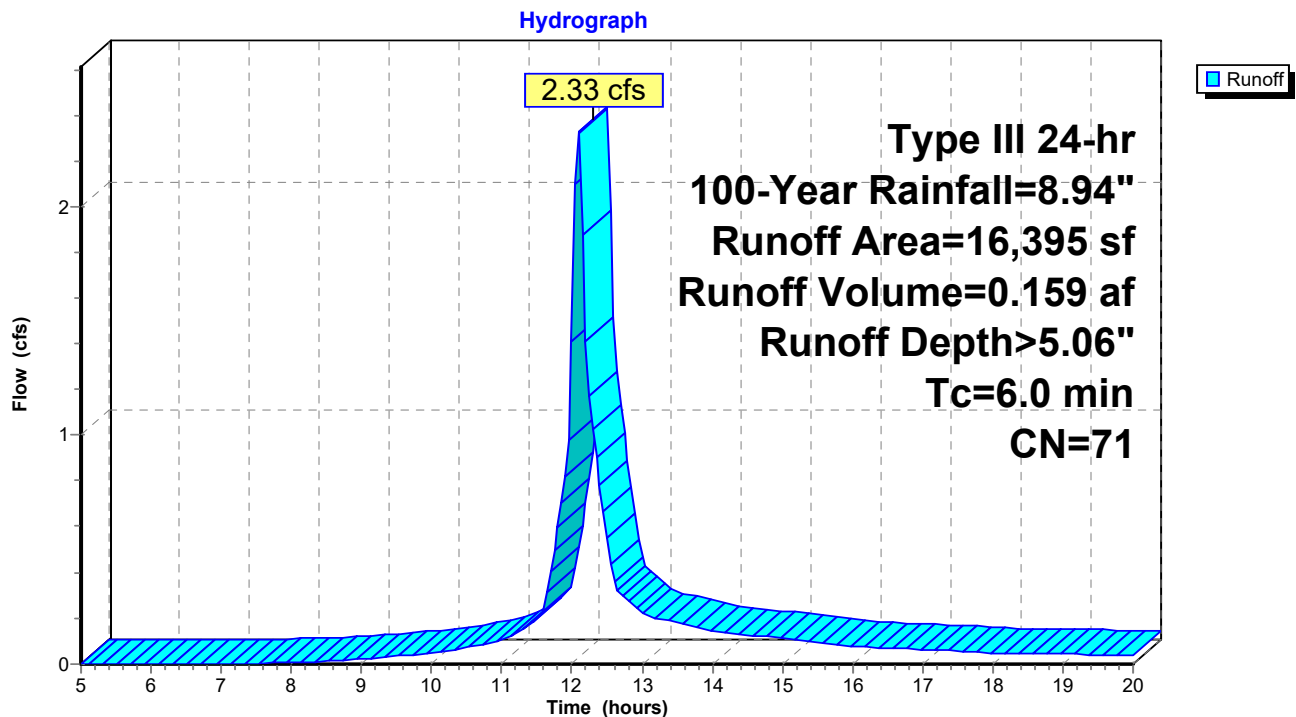
Runoff = 2.33 cfs @ 12.09 hrs, Volume= 0.159 af, Depth> 5.06"
Routed to Pond 132P : CB 33

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



Summary for Subcatchment 128S: P3HH

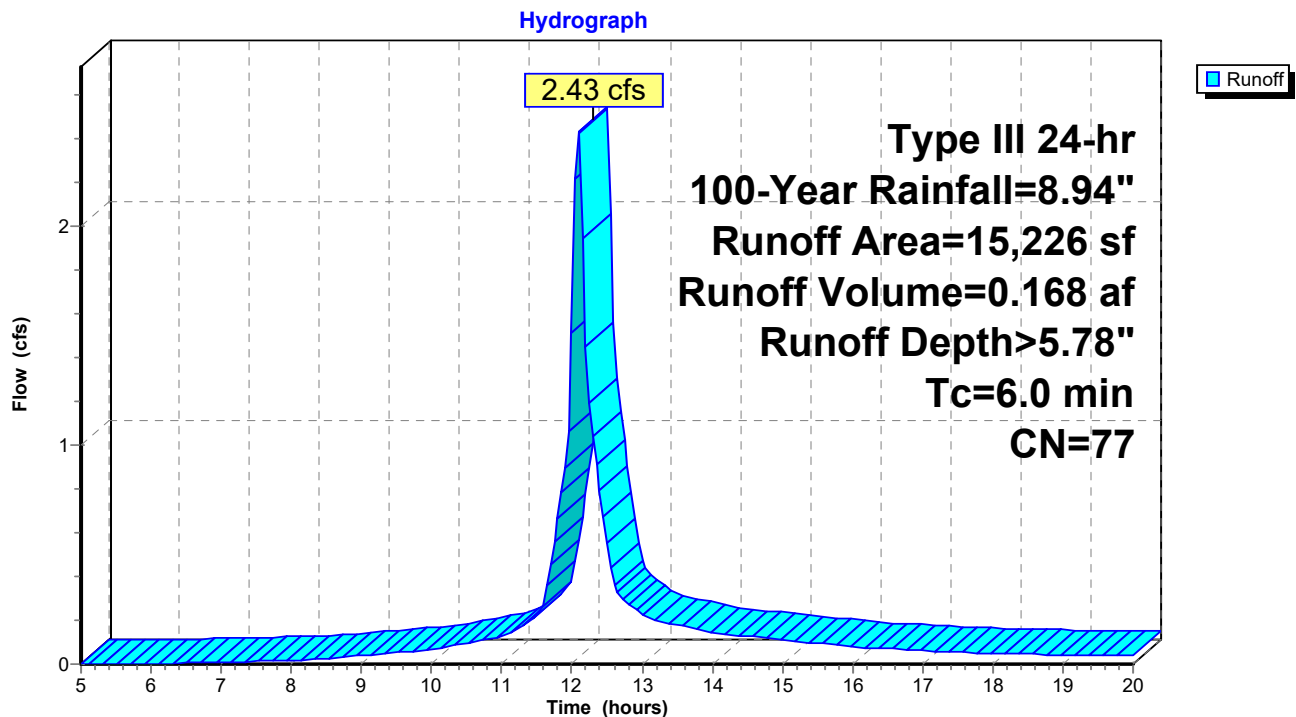
Runoff = 2.43 cfs @ 12.09 hrs, Volume= 0.168 af, Depth> 5.78"
Routed to Pond 131P : CB 35

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



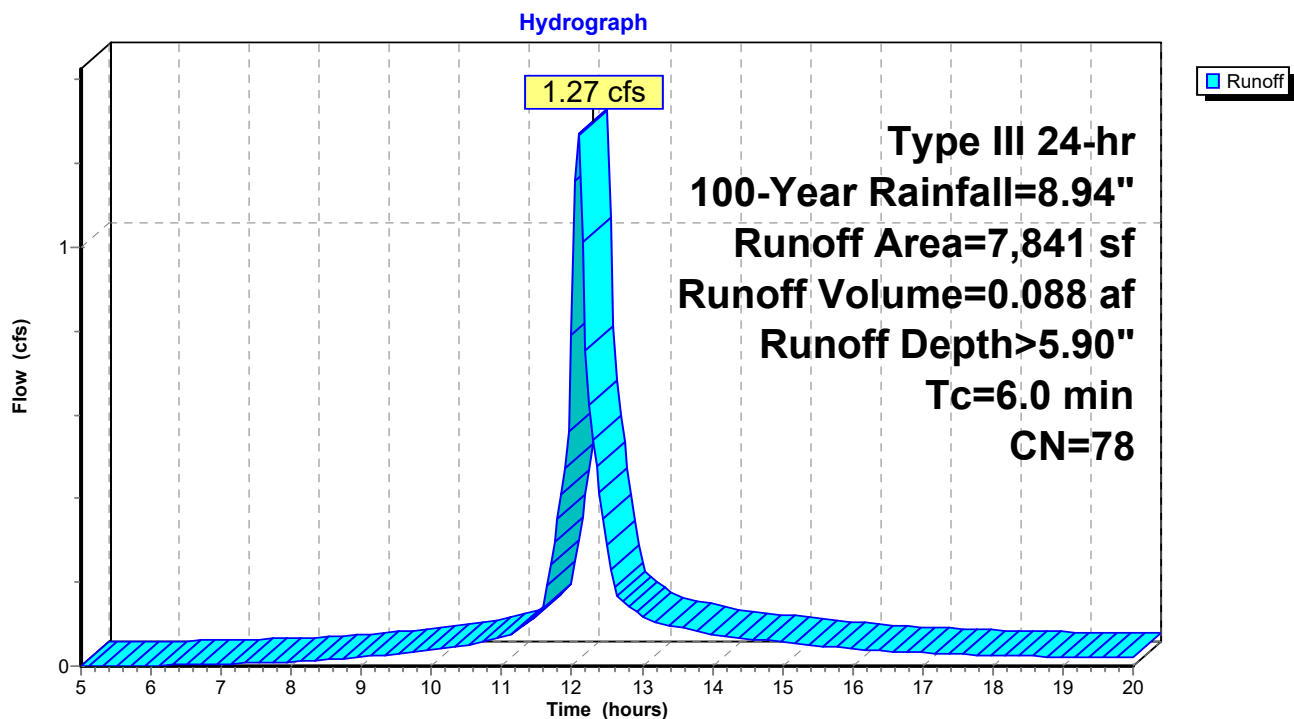
Summary for Subcatchment 129S: P3MM

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

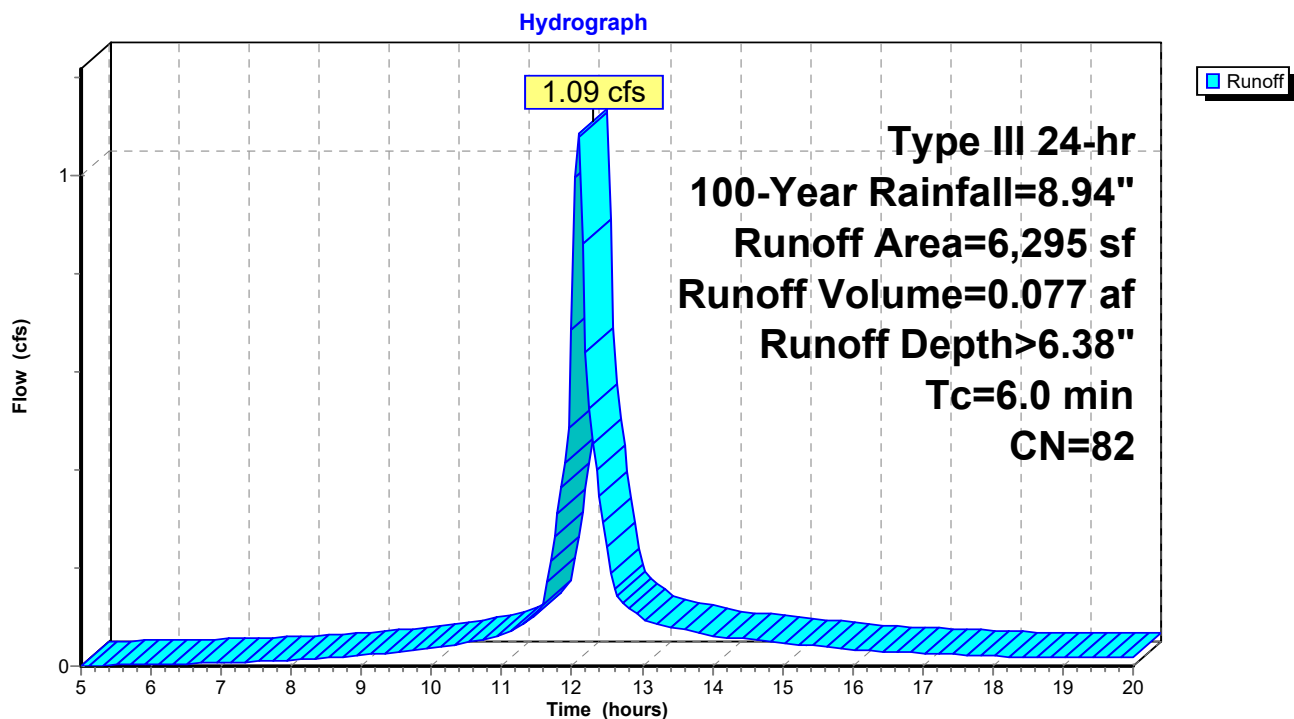
Summary for Subcatchment 130S: P3NN

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

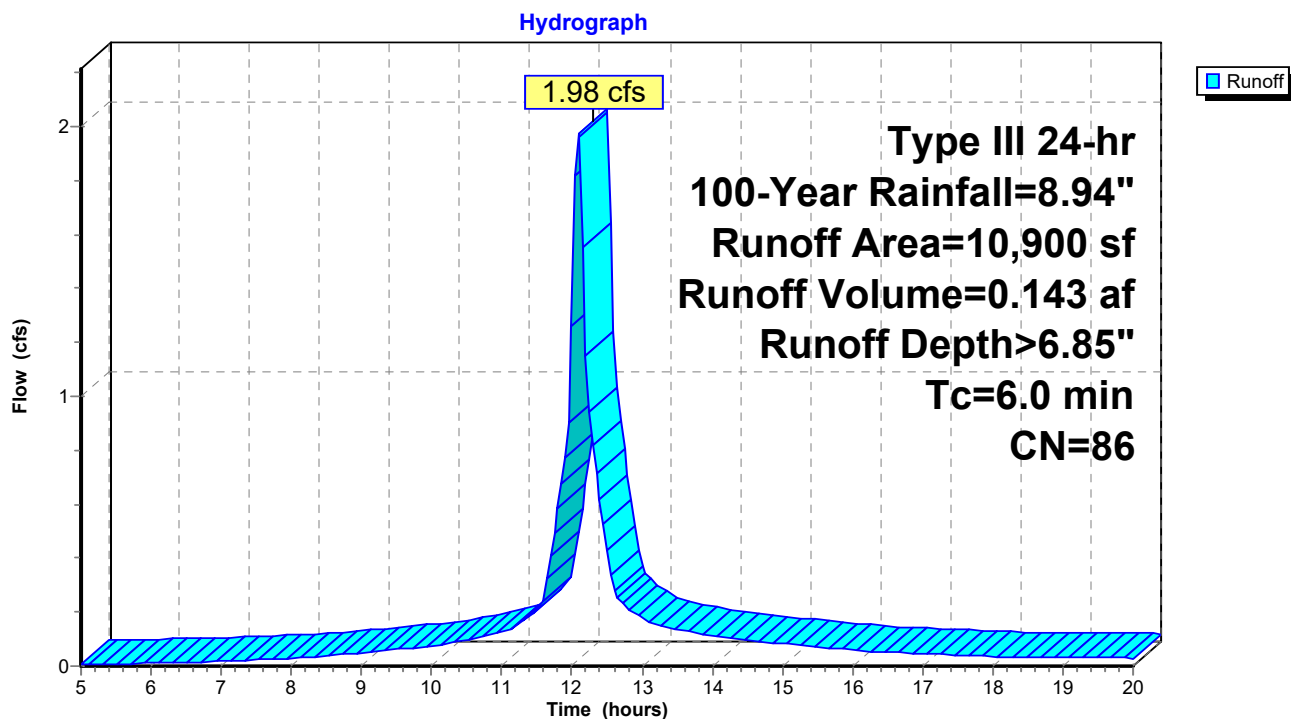
Summary for Subcatchment 136S: P3II

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

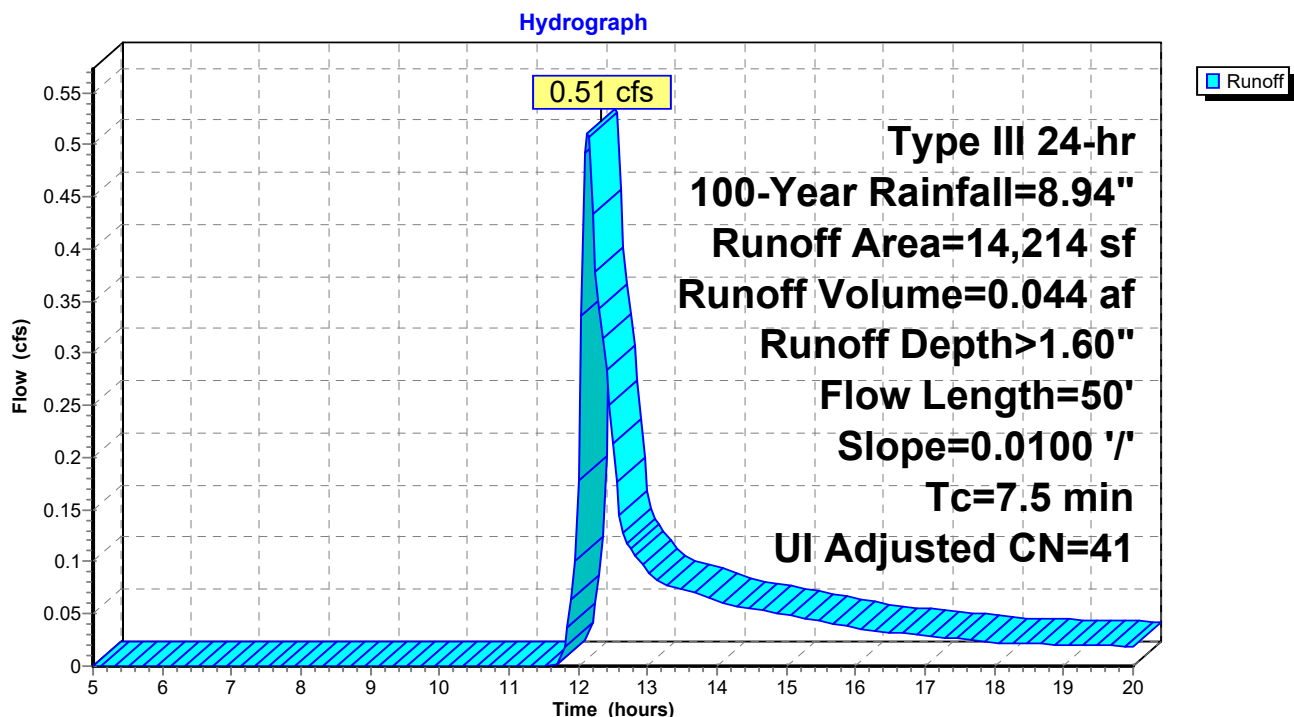
Runoff = 0.51 cfs @ 12.13 hrs, Volume= 0.044 af, Depth> 1.60"
Routed to Pond 135P : Inf. Basin 3

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, Grass: Short n= 0.150 P2= 3.10"

Subcatchment 138S: P3JJ



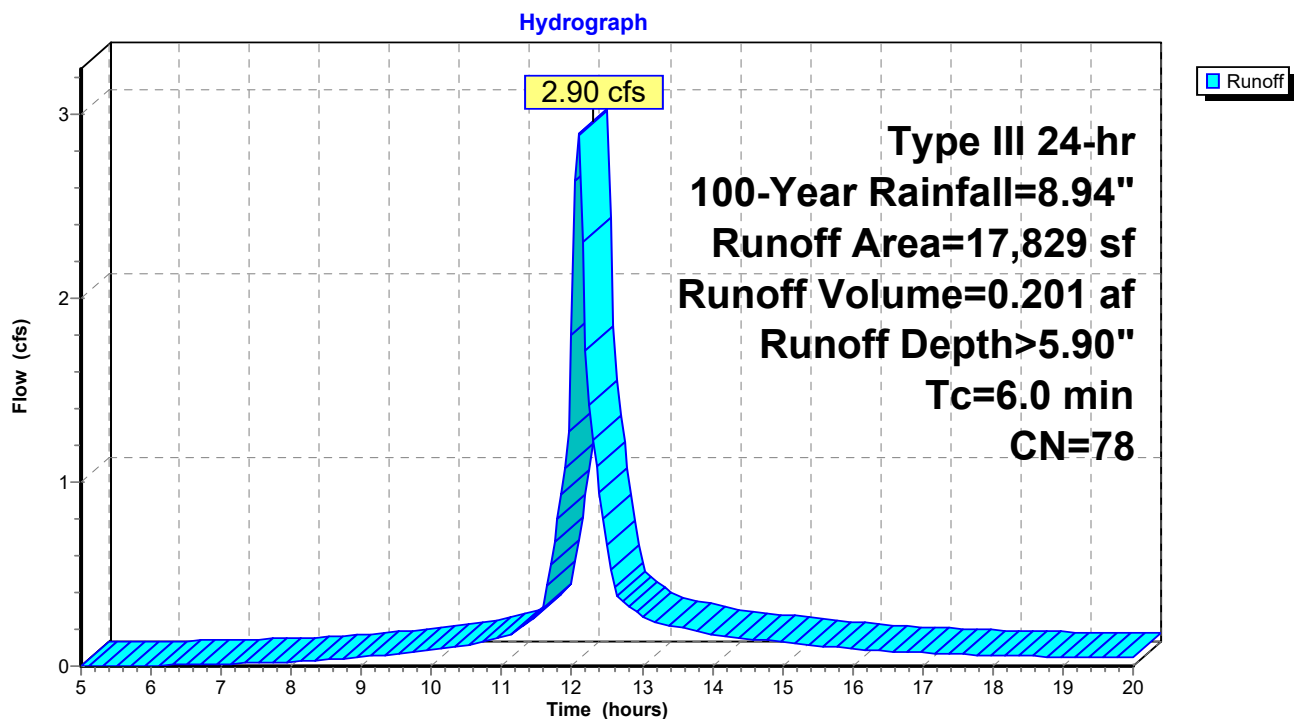
Summary for Subcatchment 140S: P300

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

Summary for Subcatchment 141S: P3PP

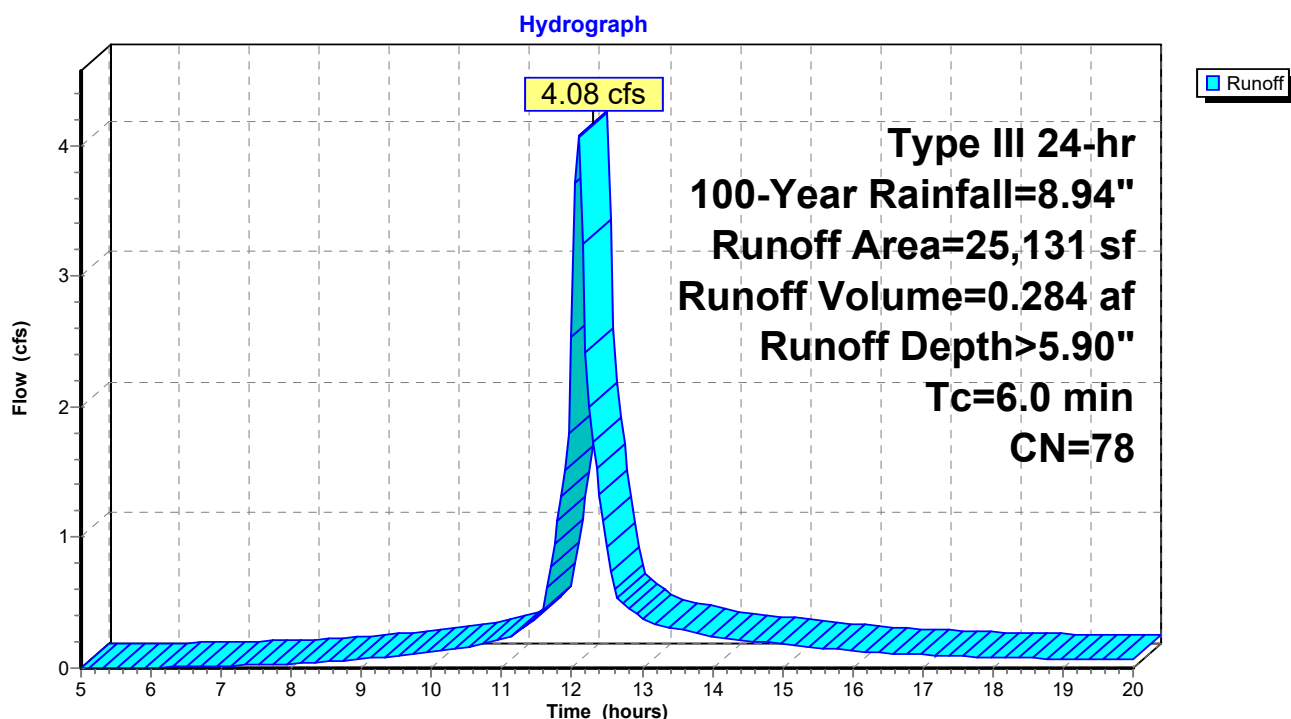
Runoff = 4.08 cfs @ 12.09 hrs, Volume= 0.284 af, Depth> 5.90"
Routed to Pond 143P : CB 41

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

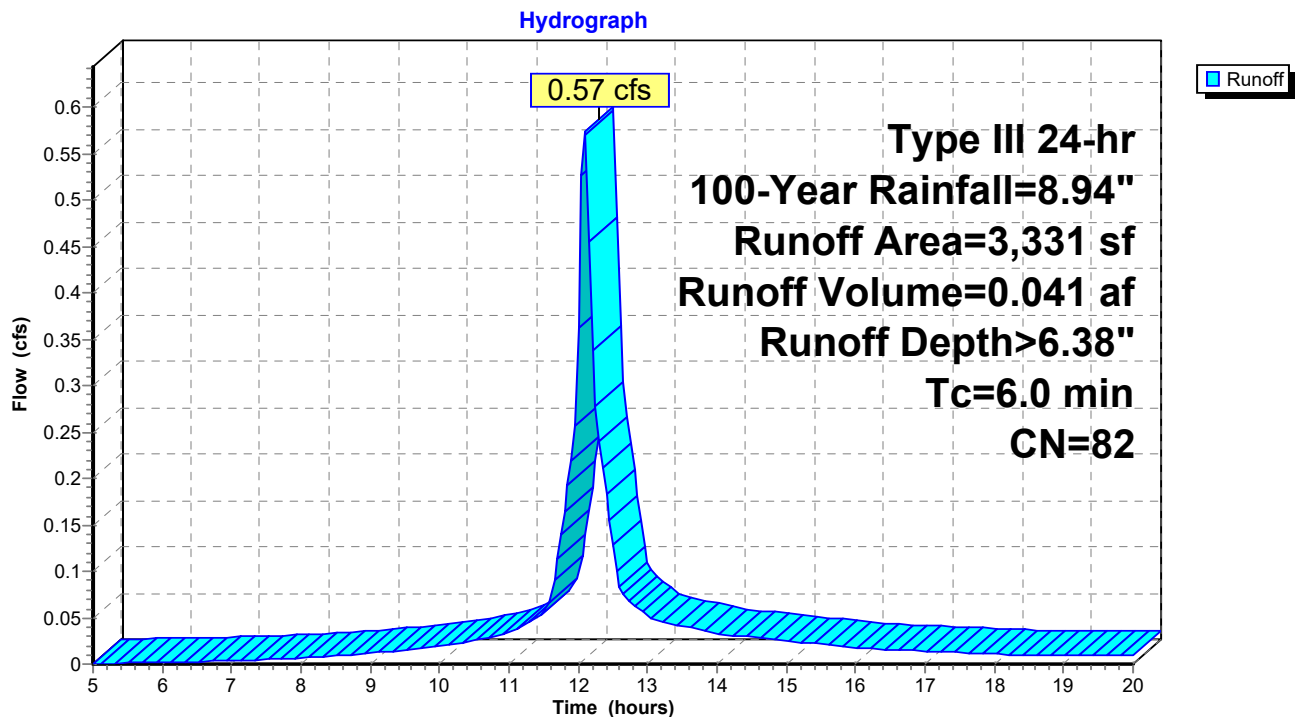
Runoff = 0.57 cfs @ 12.09 hrs, Volume= 0.041 af, Depth> 6.38"
Routed to Pond 147P : CB 28

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

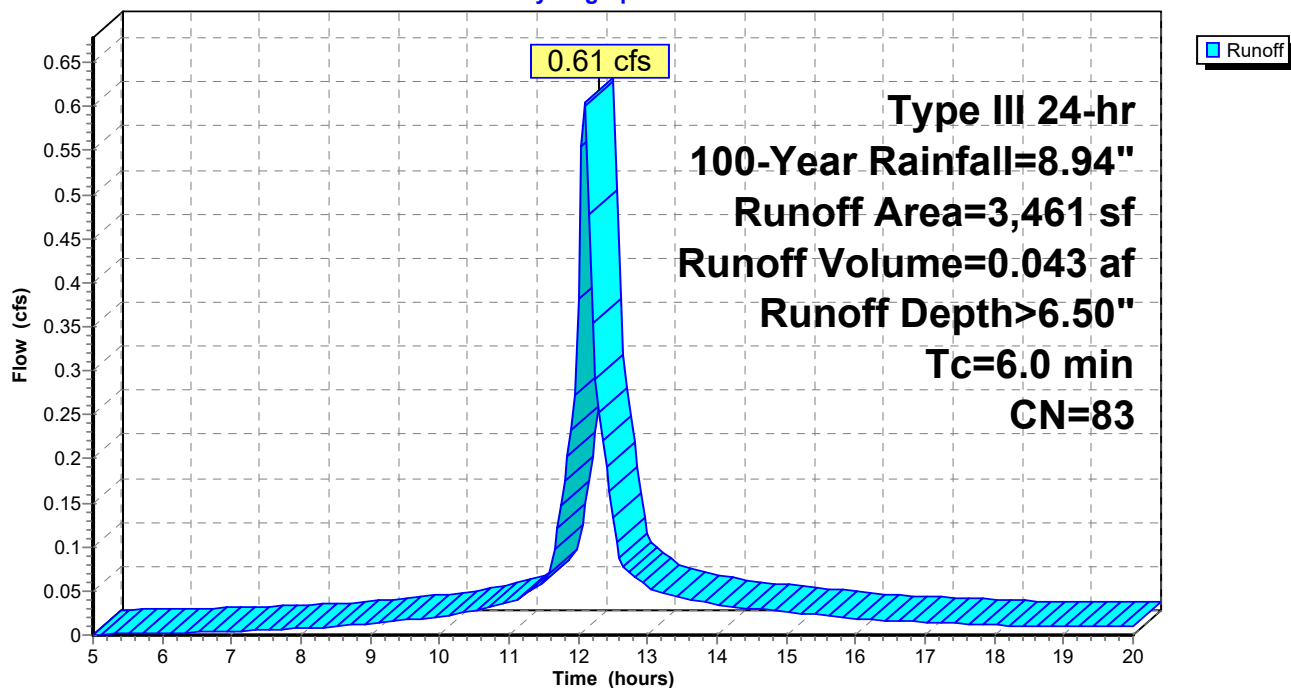
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=8.94"

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

Hydrograph



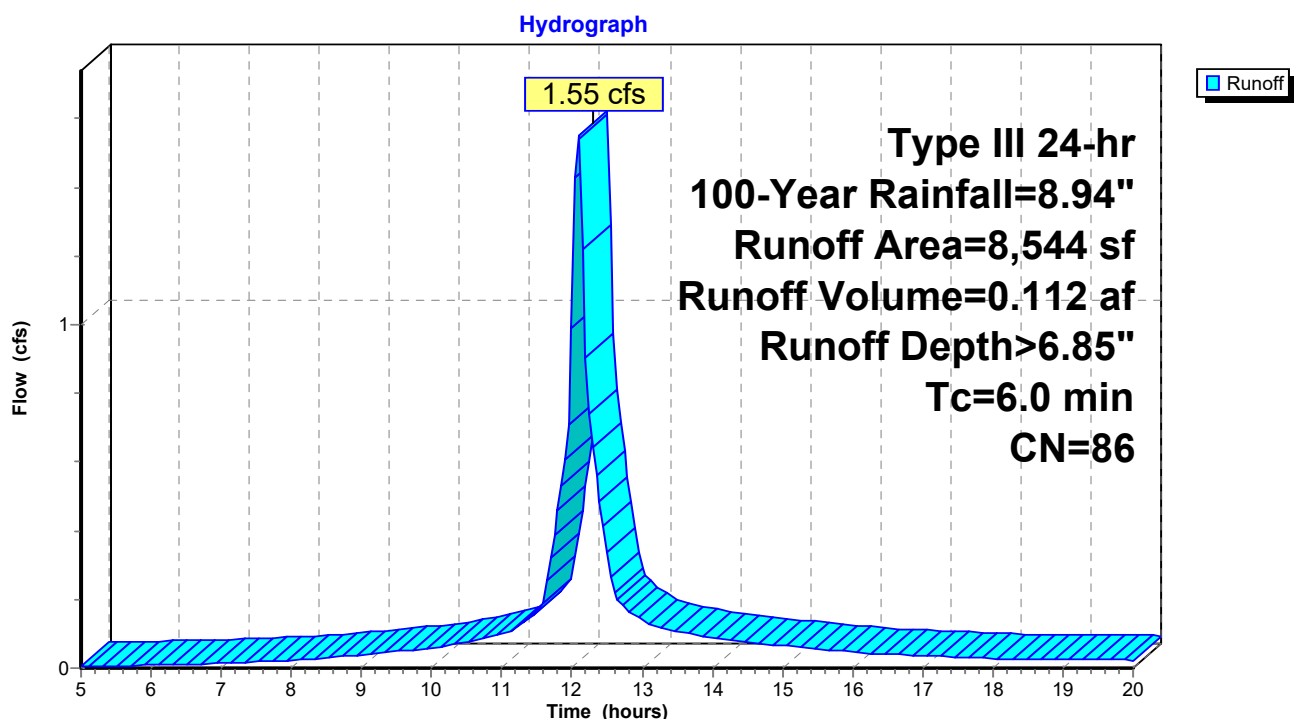
Summary for Subcatchment 147S: P3QQ

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

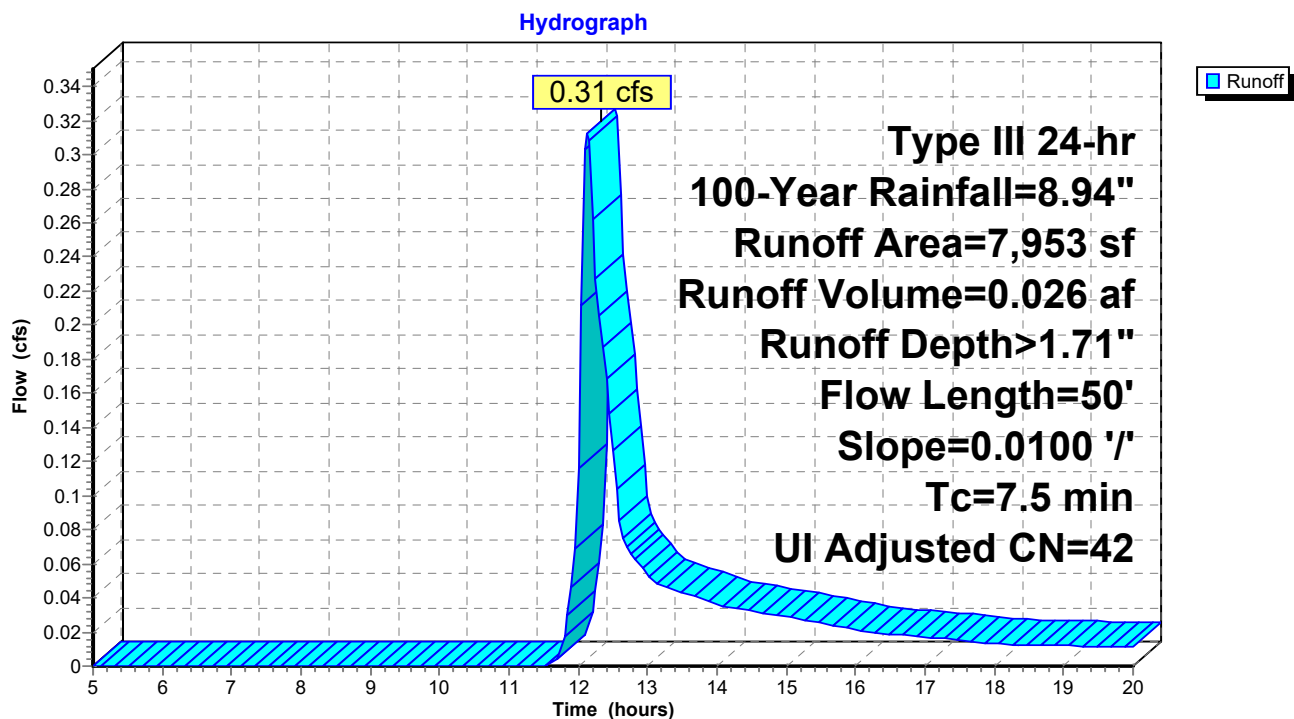
Summary for Subcatchment 149S: P3RR

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, Grass: Short n= 0.150 P2= 3.10"

Subcatchment 149S: P3RR

Summary for Subcatchment 151S: P3ZZ

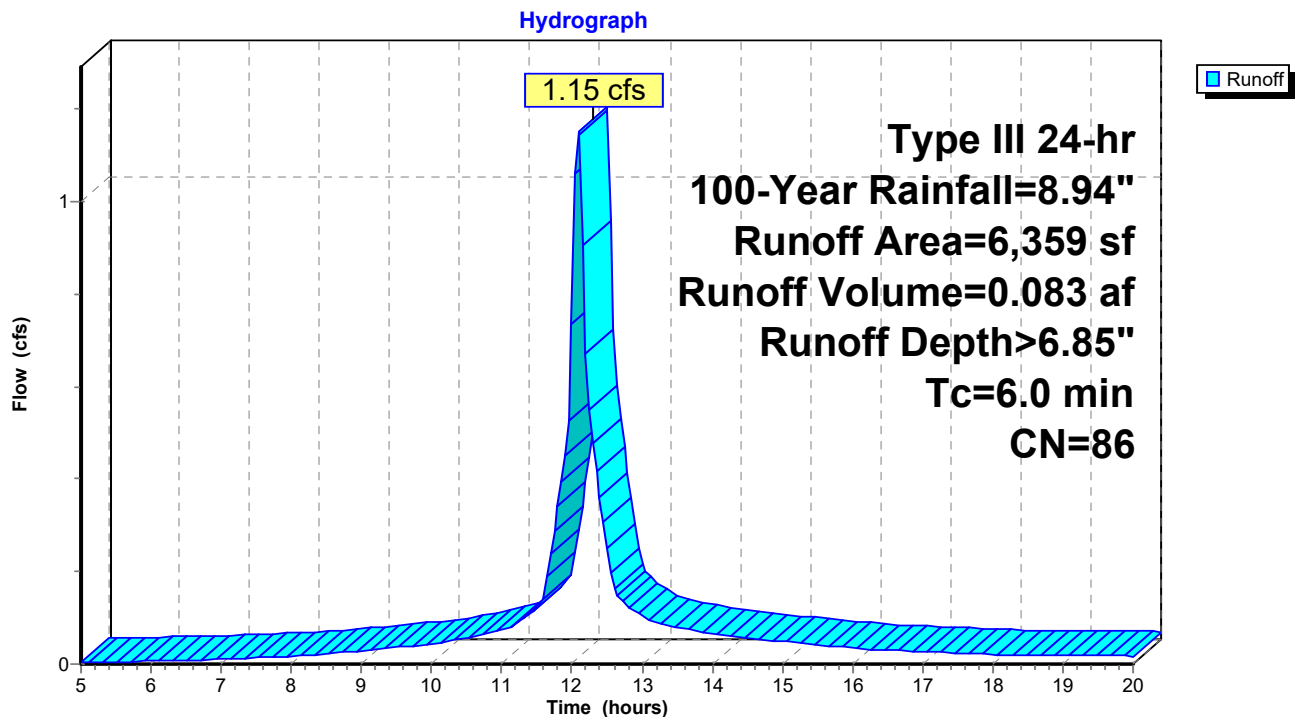
Runoff = 1.15 cfs @ 12.09 hrs, Volume= 0.083 af, Depth> 6.85"
Routed to Pond 159P : CB 25

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

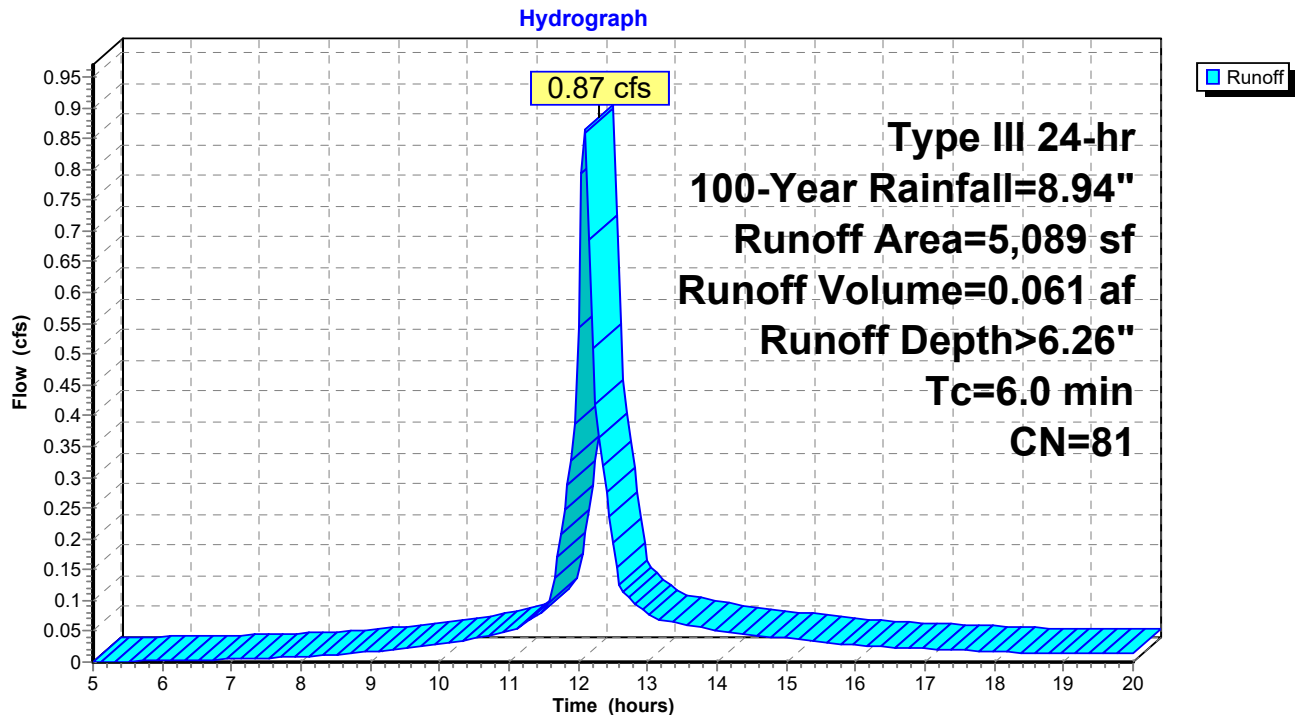
Runoff = 0.87 cfs @ 12.09 hrs, Volume= 0.061 af, Depth> 6.26"
Routed to Pond 158P : CB 24

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



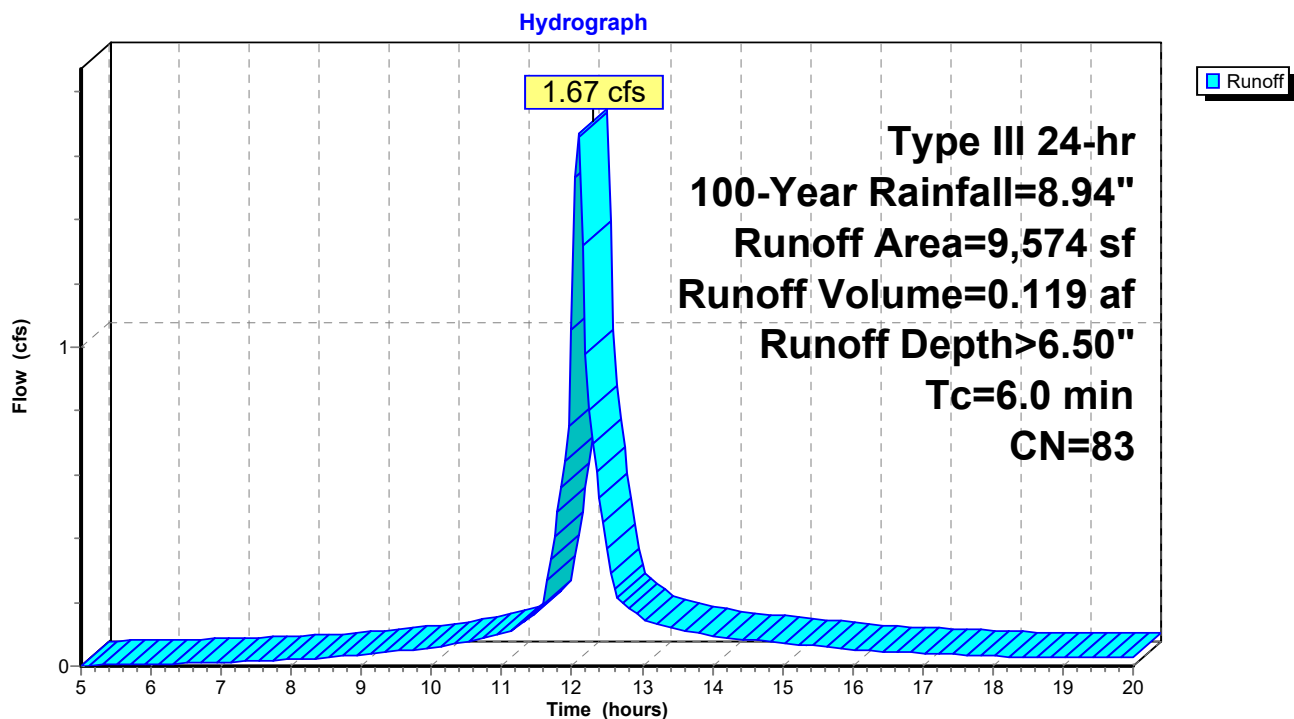
Summary for Subcatchment 153S: P3WW

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

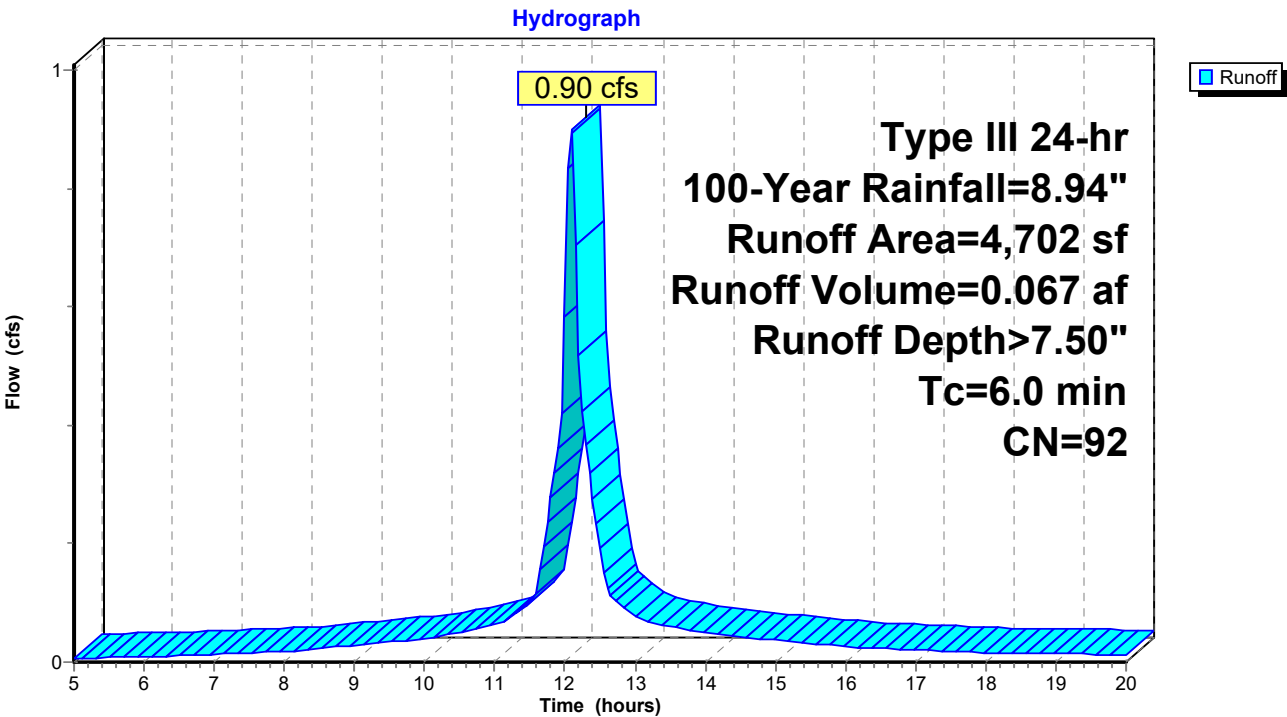
Runoff = 0.90 cfs @ 12.09 hrs, Volume= 0.067 af, Depth> 7.50"
Routed to Pond 156P : CB 26

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



Summary for Subcatchment 155S: P3CCC

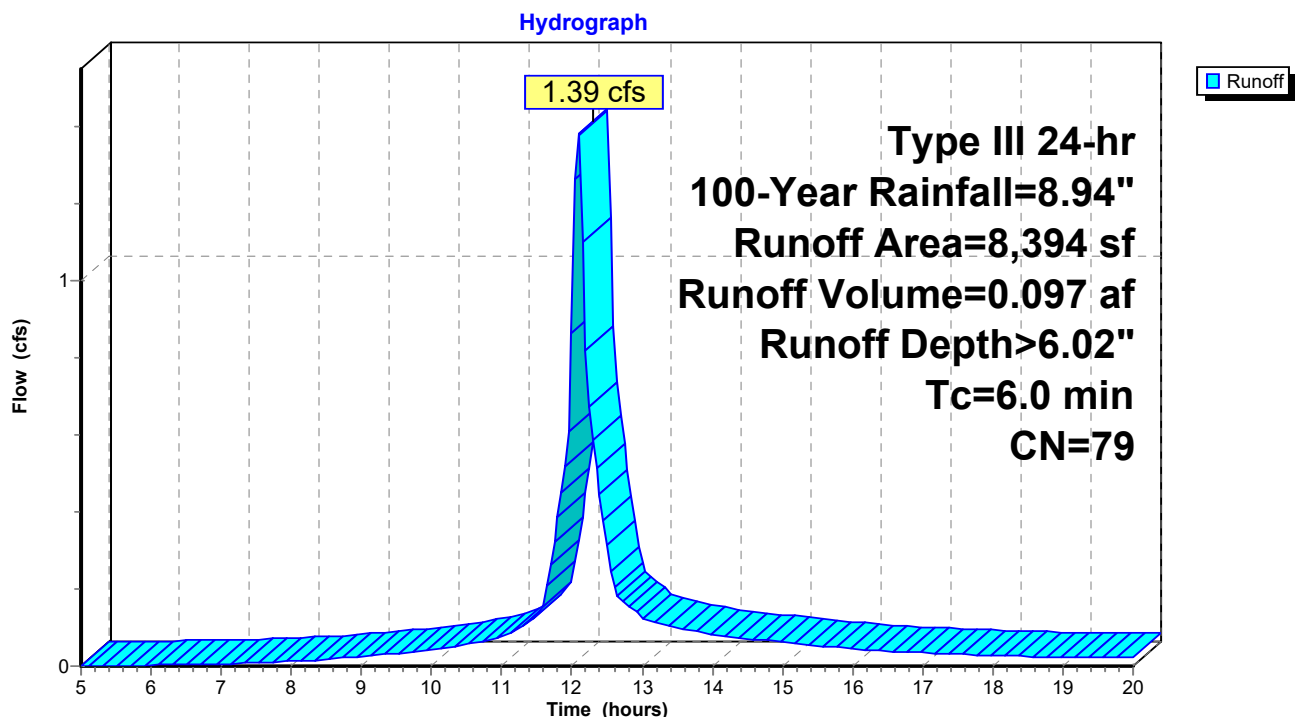
Runoff = 1.39 cfs @ 12.09 hrs, Volume= 0.097 af, Depth> 6.02"
Routed to Pond 163P : CB 14

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 100-Year Rainfall=8.94"

Area (sf)	CN	Description
2,716	39	>75% Grass cover, Good, HSG A
2,023	98	Unconnected roofs, HSG A
3,655	98	Paved parking, HSG A
8,394	79	Weighted Average
2,716		32.36% Pervious Area
5,678		67.64% Impervious Area
2,023		35.63% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 155S: P3CCC



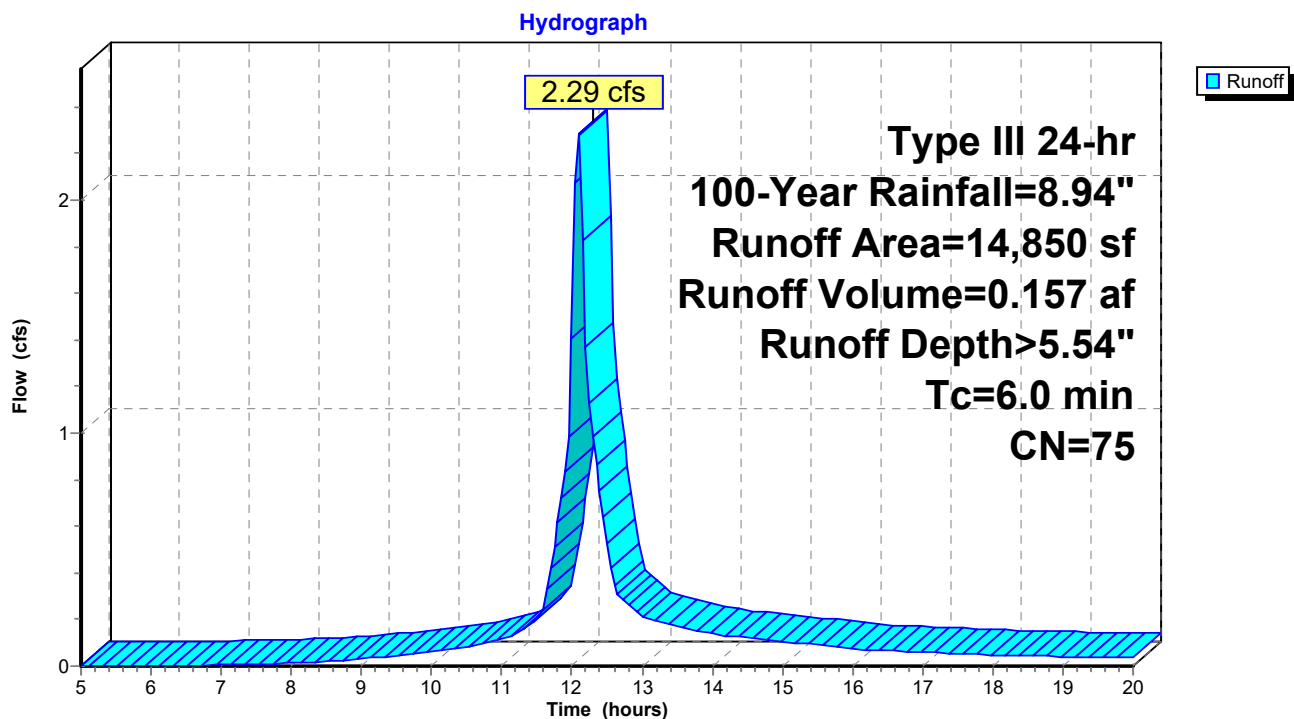
Summary for Subcatchment 156S: P3DDD

Runoff = 2.29 cfs @ 12.09 hrs, Volume= 0.157 af, Depth> 5.54"
 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
5,829	39	>75% Grass cover, Good, HSG A
3,884	98	Unconnected roofs, HSG A
5,137	98	Paved parking, HSG A
14,850	75	Weighted Average
5,829		39.25% Pervious Area
9,021		60.75% Impervious Area
3,884		43.06% 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

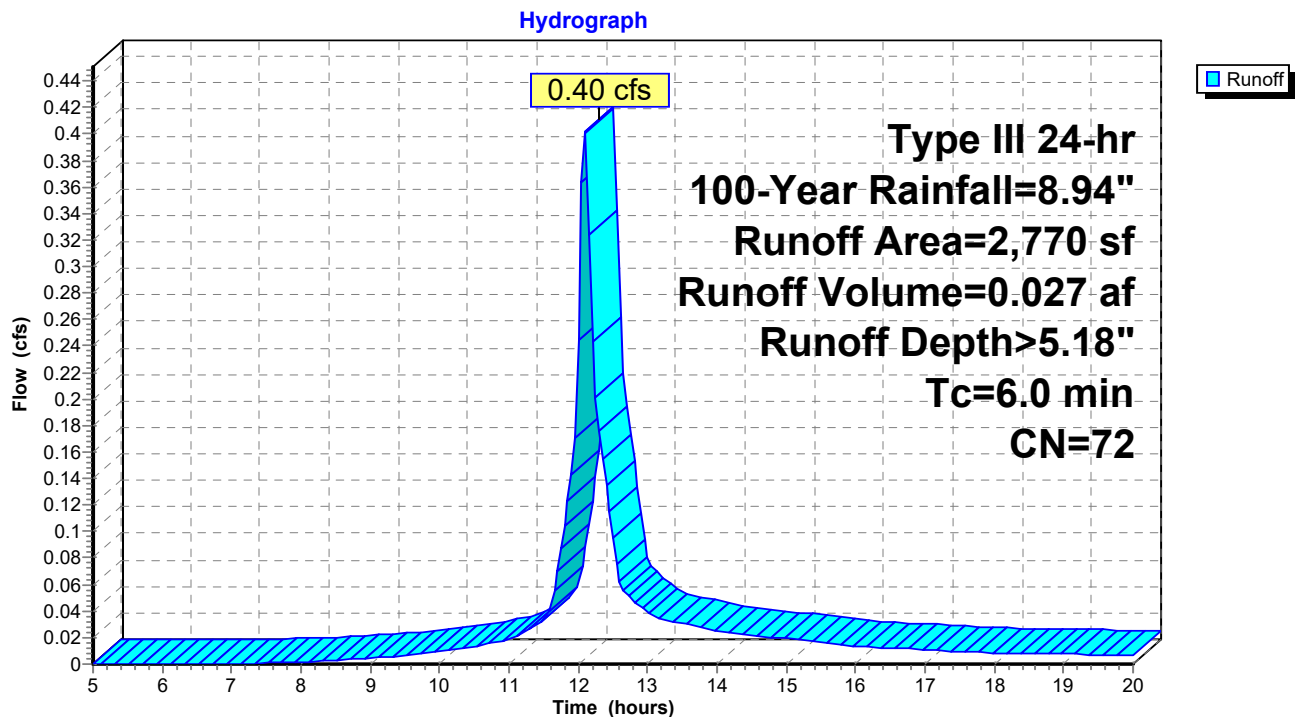
Runoff = 0.40 cfs @ 12.09 hrs, Volume= 0.027 af, Depth> 5.18"
Routed to Pond 168P : CB 11

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
1,232	39	>75% Grass cover, Good, HSG A
1,538	98	Paved parking, HSG A
2,770	72	Weighted Average
1,232		44.48% Pervious Area
1,538		55.52% 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

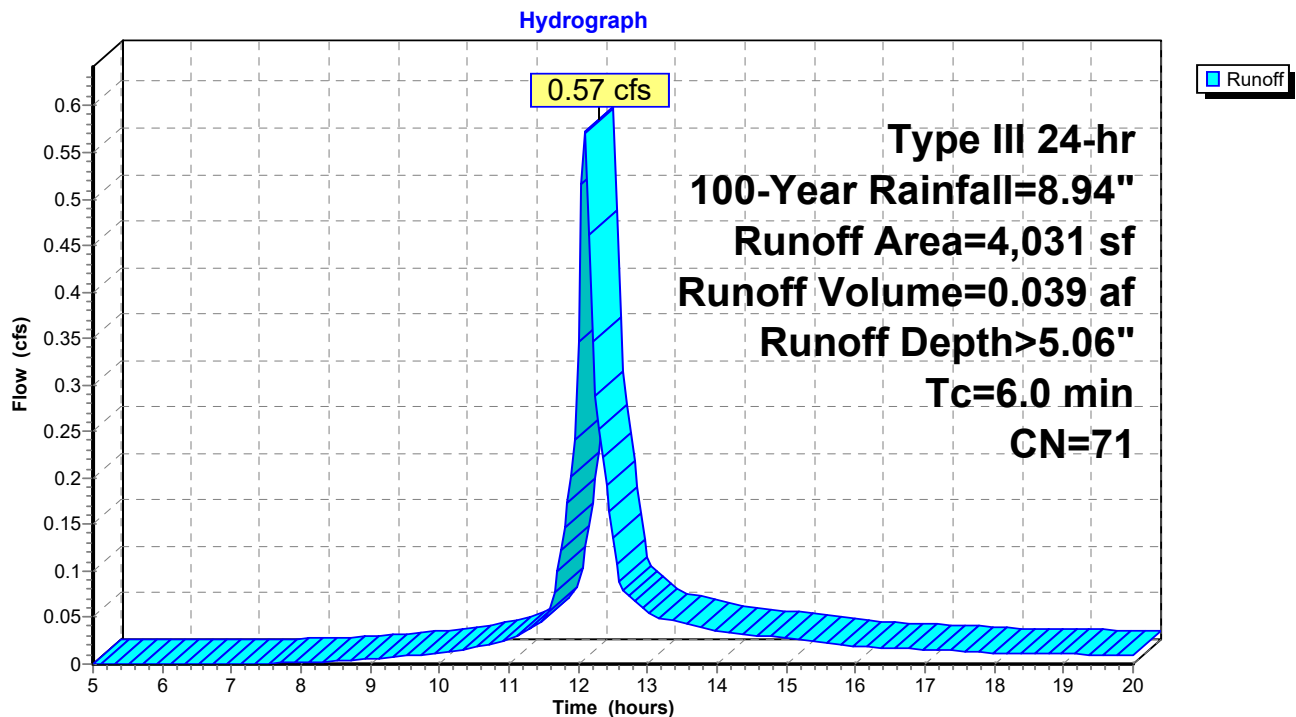
Runoff = 0.57 cfs @ 12.09 hrs, Volume= 0.039 af, Depth> 5.06"
Routed to Pond 167P : CB 10

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
1,859	39	>75% Grass cover, Good, HSG A
2,172	98	Paved parking, HSG A
4,031	71	Weighted Average
1,859		46.12% Pervious Area
2,172		53.88% Impervious Area

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

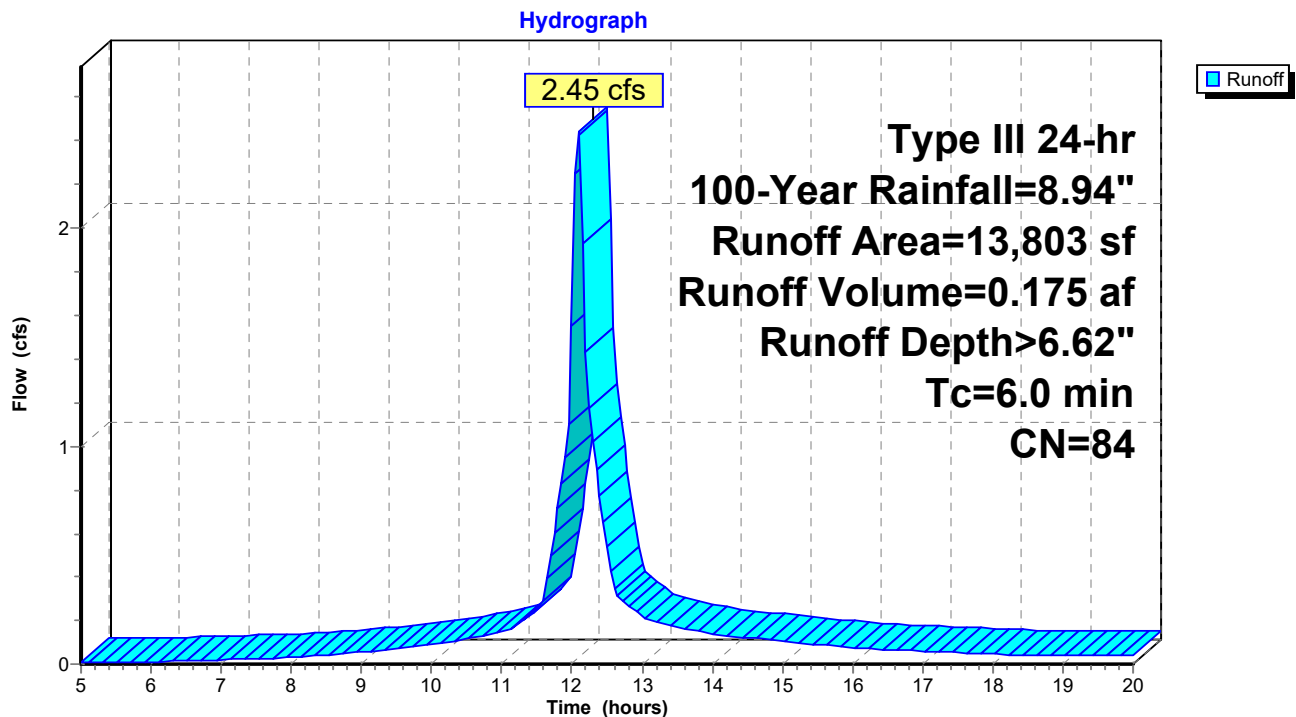
Runoff = 2.45 cfs @ 12.09 hrs, Volume= 0.175 af, Depth> 6.62"
Routed to Pond 172P : CB 16

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



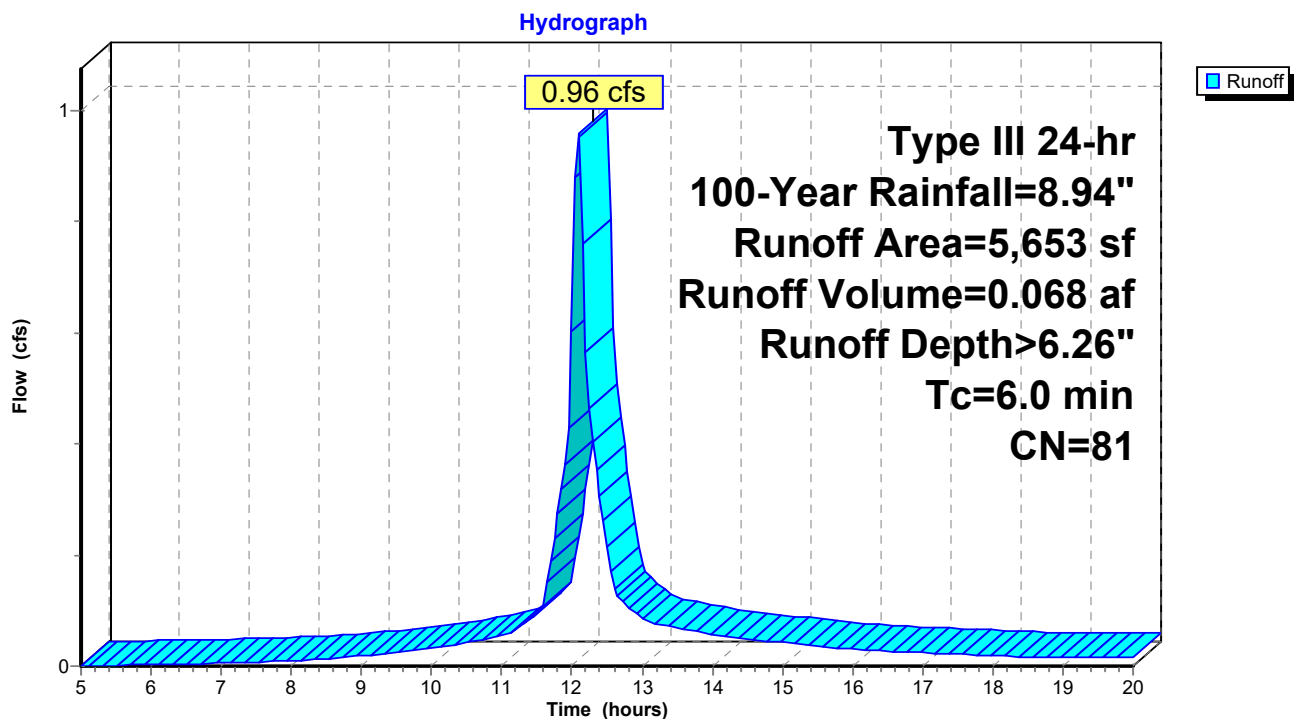
Summary for Subcatchment 171S: P3III

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

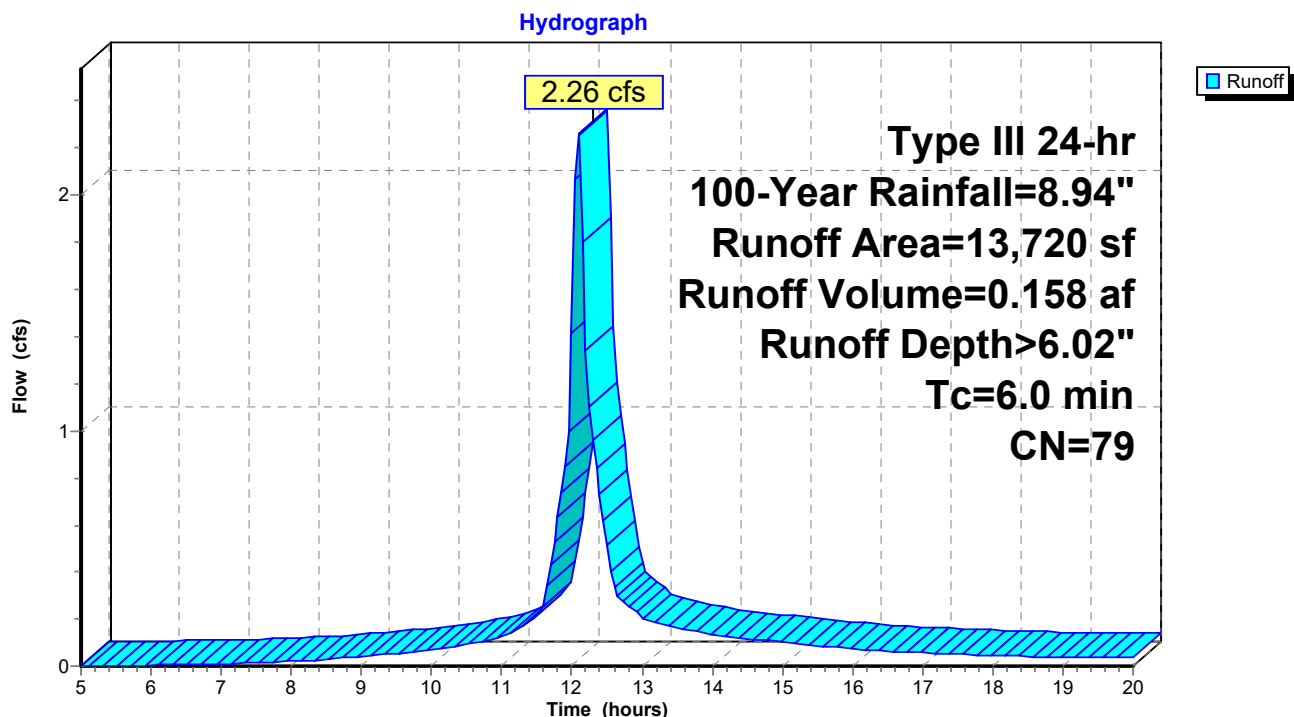
Summary for Subcatchment 175S: P3KKK

Runoff = 2.26 cfs @ 12.09 hrs, Volume= 0.158 af, Depth> 6.02"
 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
4,306	39	>75% Grass cover, Good, HSG A
2,982	98	Unconnected roofs, HSG A
6,432	98	Paved parking, HSG A
13,720	79	Weighted Average
4,306		31.38% Pervious Area
9,414		68.62% Impervious Area
2,982		31.68% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 175S: P3KKK

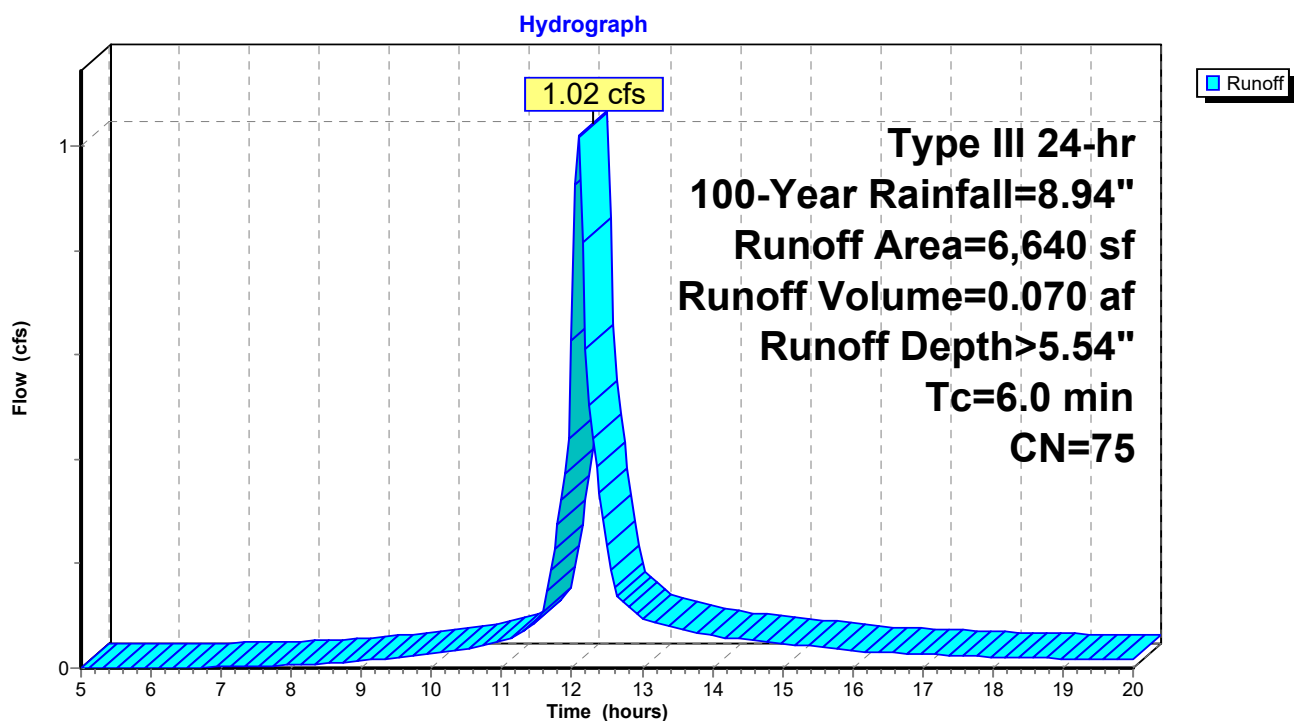
Summary for Subcatchment 176S: P3LLL

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

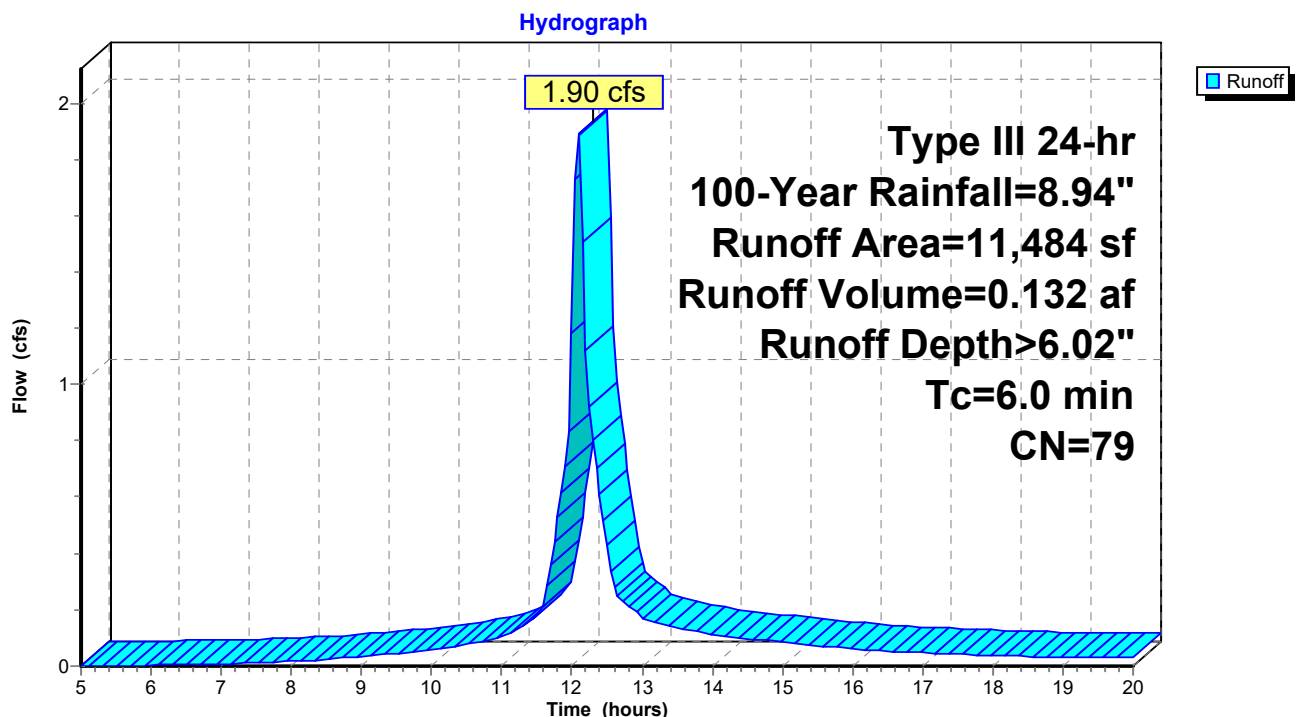
Runoff = 1.90 cfs @ 12.09 hrs, Volume= 0.132 af, Depth> 6.02"
Routed to Pond 61P : CB 8

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
3,669	39	>75% Grass cover, Good, HSG A
2,297	98	Unconnected roofs, HSG A
5,518	98	Paved parking, HSG A
11,484	79	Weighted Average
3,669		31.95% Pervious Area
7,815		68.05% Impervious Area
2,297		29.39% 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

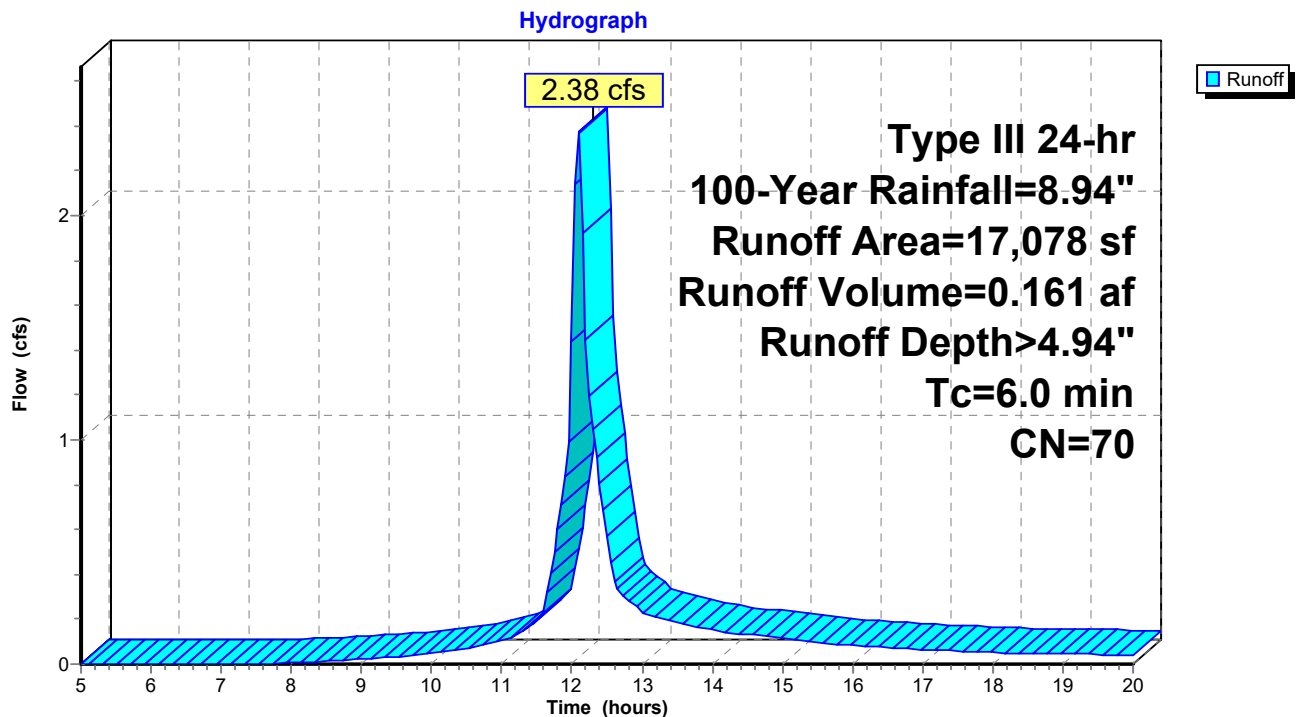
Runoff = 2.38 cfs @ 12.09 hrs, Volume= 0.161 af, Depth> 4.94"
Routed to Pond 170P : CB 9

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
8,004	39	>75% Grass cover, Good, HSG A
2,930	98	Unconnected roofs, HSG A
6,144	98	Paved parking, HSG A
17,078	70	Weighted Average
8,004		46.87% Pervious Area
9,074		53.13% Impervious Area
2,930		32.29% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 183S: P3NNN



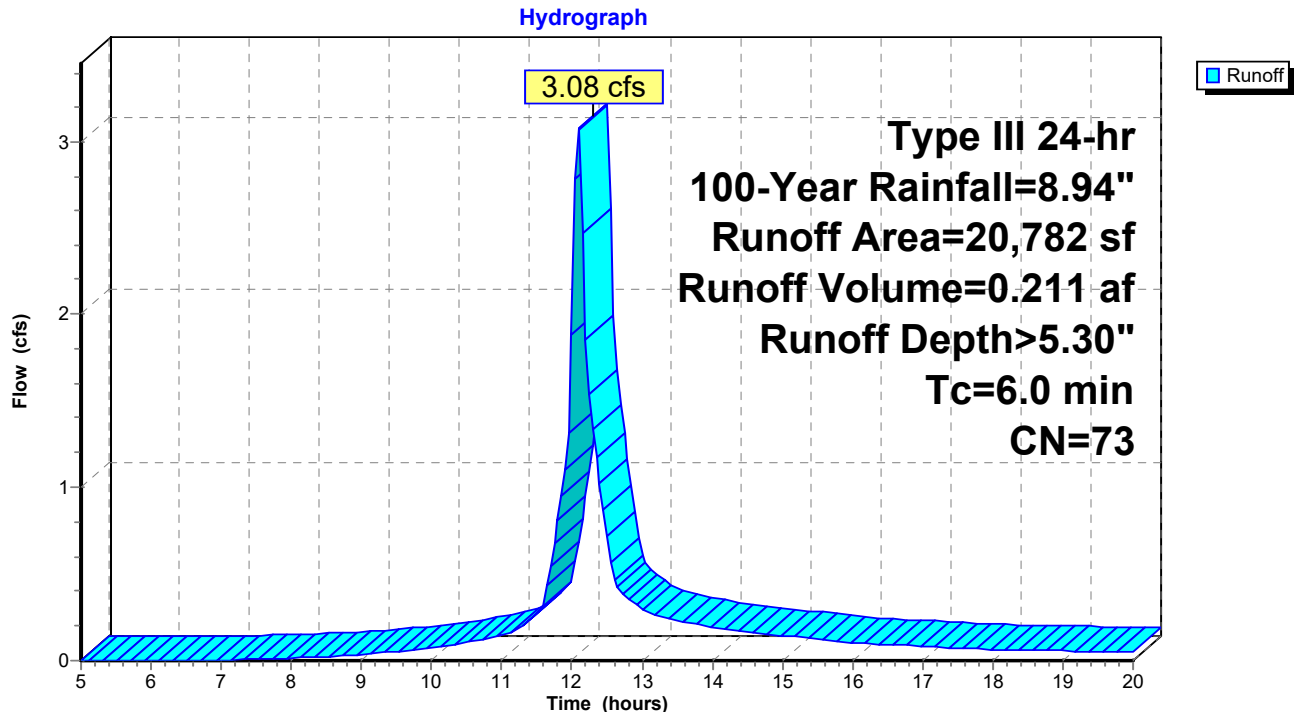
Summary for Subcatchment 184S: P3000

Runoff = 3.08 cfs @ 12.09 hrs, Volume= 0.211 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
7,773	39	>75% Grass cover, Good, HSG A
4,781	98	Unconnected roofs, HSG A
1,003	30	Woods, Good, HSG A
7,225	98	Paved parking, HSG A
20,782	73	Weighted Average
8,776		42.23% Pervious Area
12,006		57.77% Impervious Area
4,781		39.82% 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

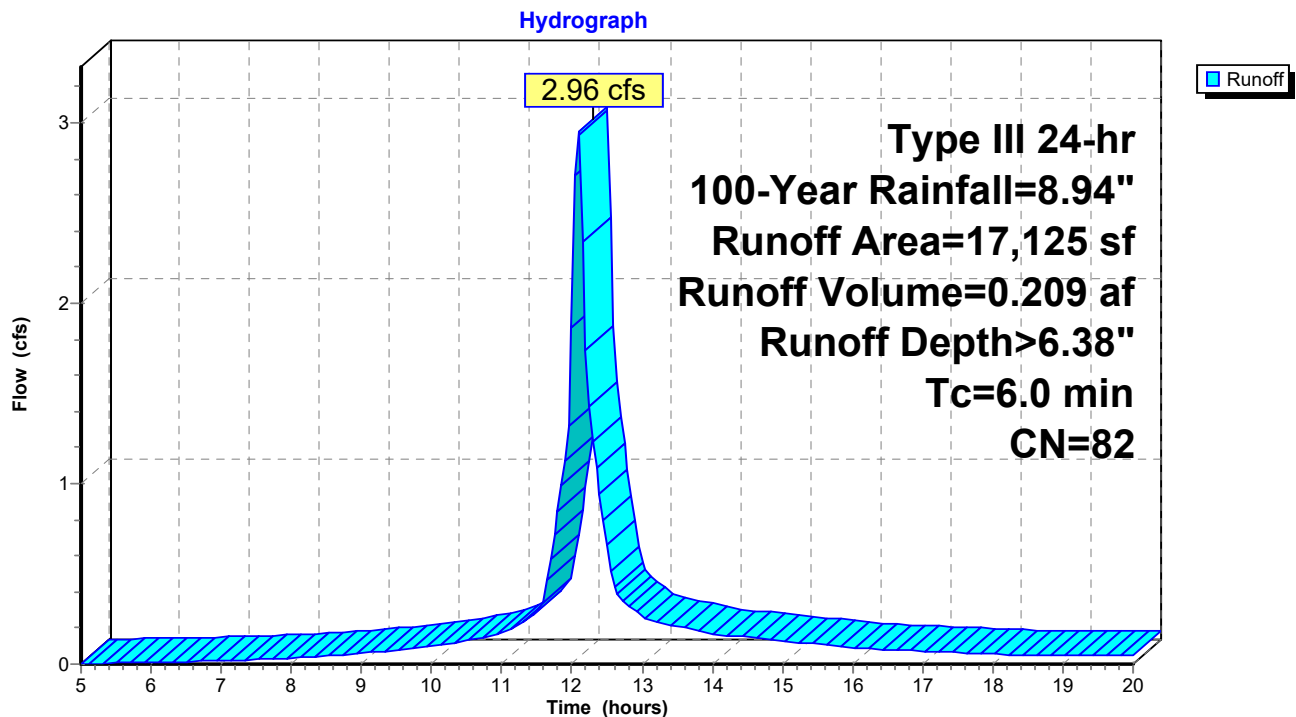
Runoff = 2.96 cfs @ 12.09 hrs, Volume= 0.209 af, Depth> 6.38"
Routed to Pond 182P : CB 7

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
4,596	39	>75% Grass cover, Good, HSG A
4,760	98	Unconnected roofs, HSG A
7,769	98	Paved parking, HSG A
17,125	82	Weighted Average
4,596		26.84% Pervious Area
12,529		73.16% Impervious Area
4,760		37.99% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 185S: P3PPP



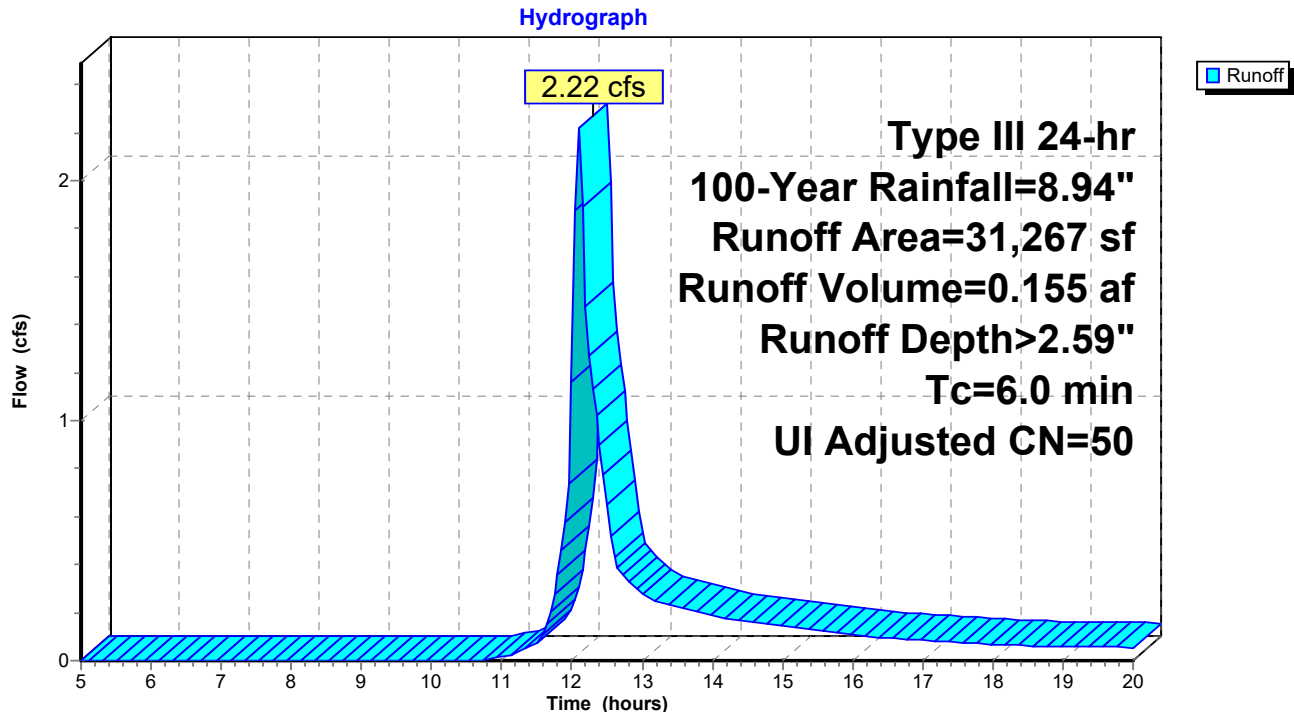
Summary for Subcatchment 186S: P3QQQ

Runoff = 2.22 cfs @ 12.10 hrs, Volume= 0.155 af, Depth> 2.59"
 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	Adj	Description
6,277	39		>75% Grass cover, Good, HSG A
1,710	98		Unconnected roofs, HSG A
15,990	30		Woods, Good, HSG A
7,290	98		Paved parking, HSG A
31,267	51	50	Weighted Average, UI Adjusted
22,267			71.22% Pervious Area
9,000			28.78% Impervious Area
1,710			19.00% Unconnected

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 186S: P3QQQ

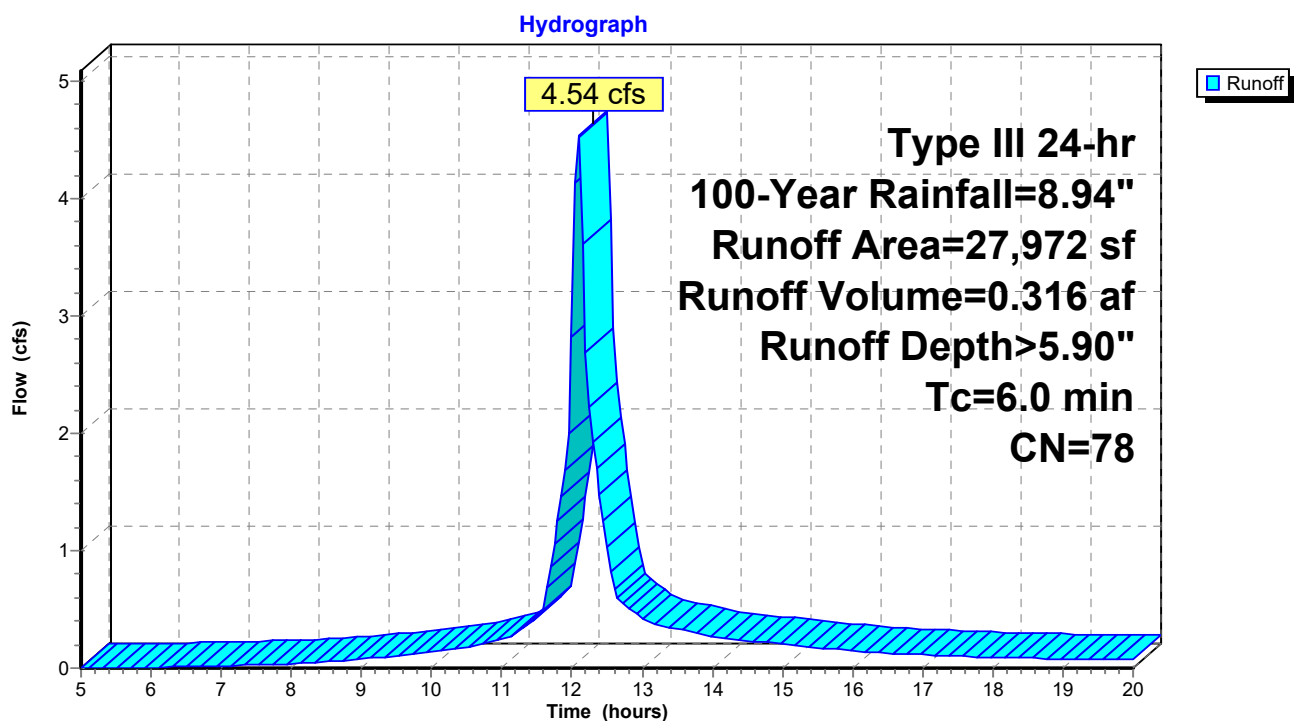
Summary for Subcatchment 187S: P3RRR

Runoff = 4.54 cfs @ 12.09 hrs, Volume= 0.316 af, Depth> 5.90"
 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
9,668	39	>75% Grass cover, Good, HSG A
5,407	98	Unconnected roofs, HSG A
12,897	98	Paved parking, HSG A
27,972	78	Weighted Average
9,668		34.56% Pervious Area
18,304		65.44% Impervious Area
5,407		29.54% 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)

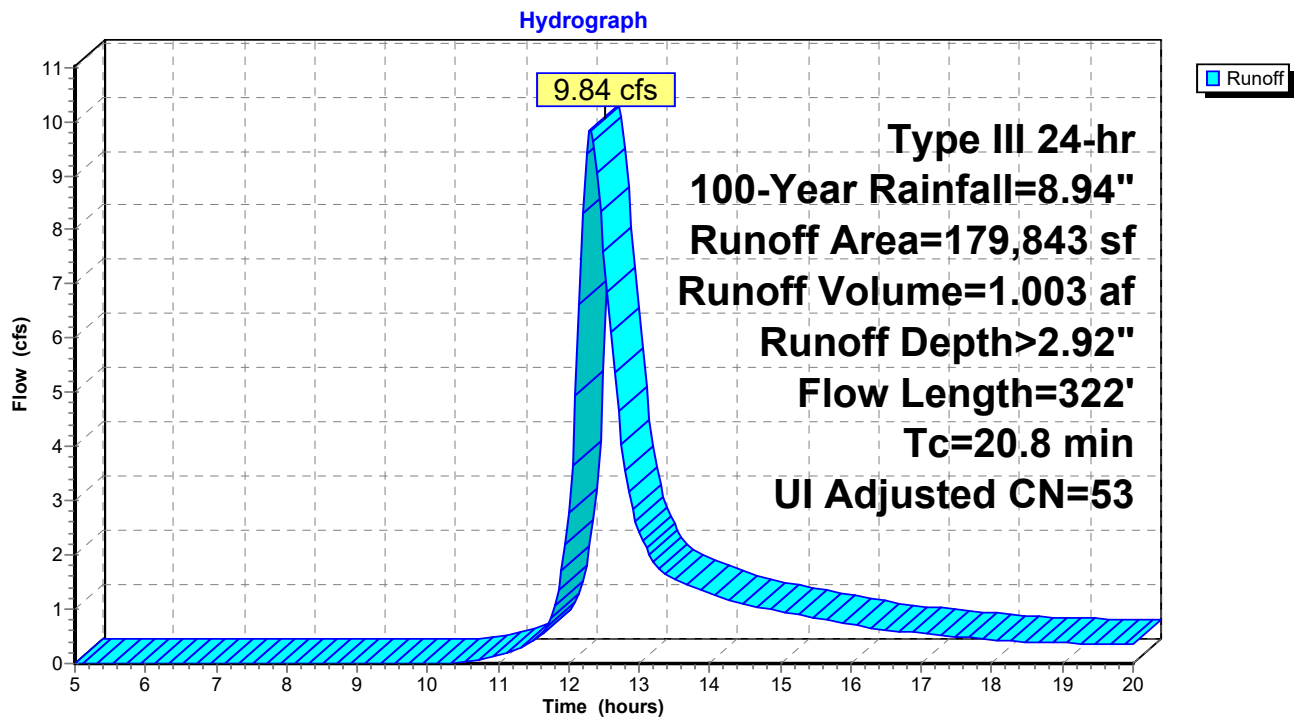
Runoff = 9.84 cfs @ 12.31 hrs, Volume= 1.003 af, Depth> 2.92"
 Routed to Link 188L : DP 3

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		Sheet Flow, Woods: Light underbrush n= 0.400 P2= 3.10"
4.3	272	0.0450	1.06		Shallow Concentrated Flow, Woodland Kv= 5.0 fps
20.8	322	Total			

Subcatchment 189S: (new Subcat)



Summary for Subcatchment 190S: (new Subcat)

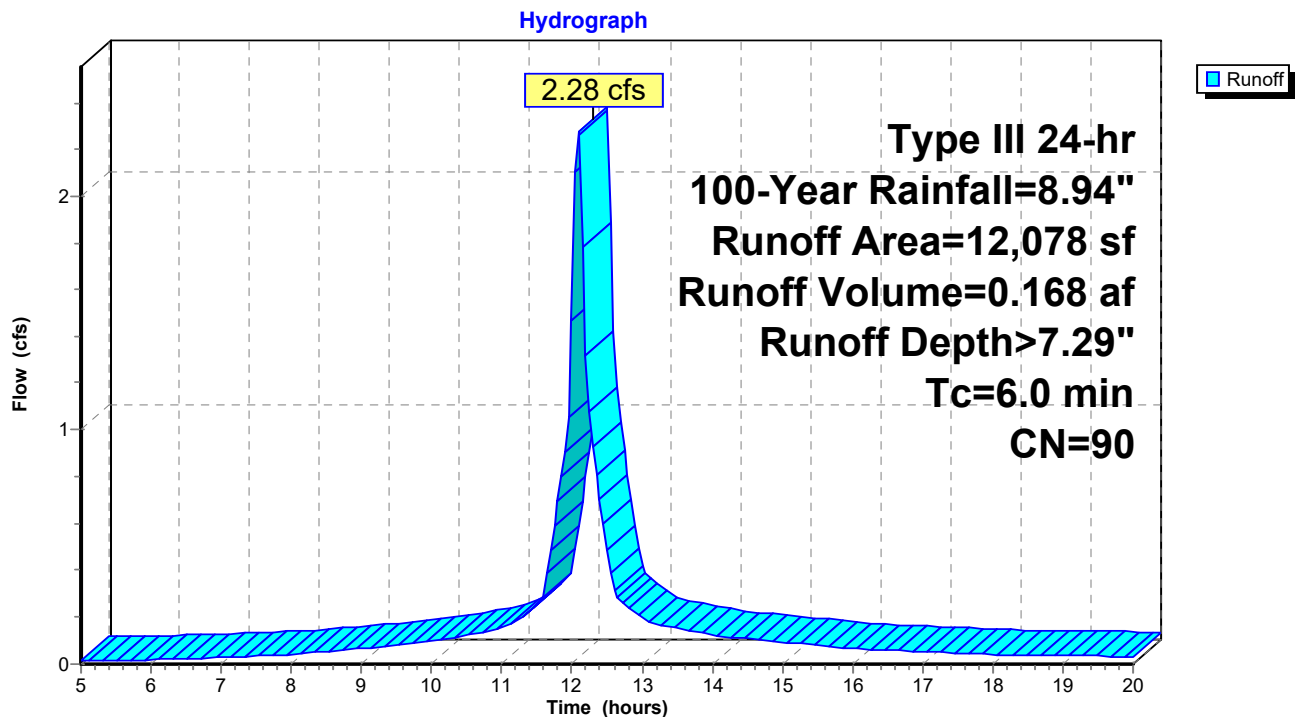
Runoff = 2.28 cfs @ 12.09 hrs, Volume= 0.168 af, Depth> 7.29"
Routed to Pond 191P : CB 42

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 (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

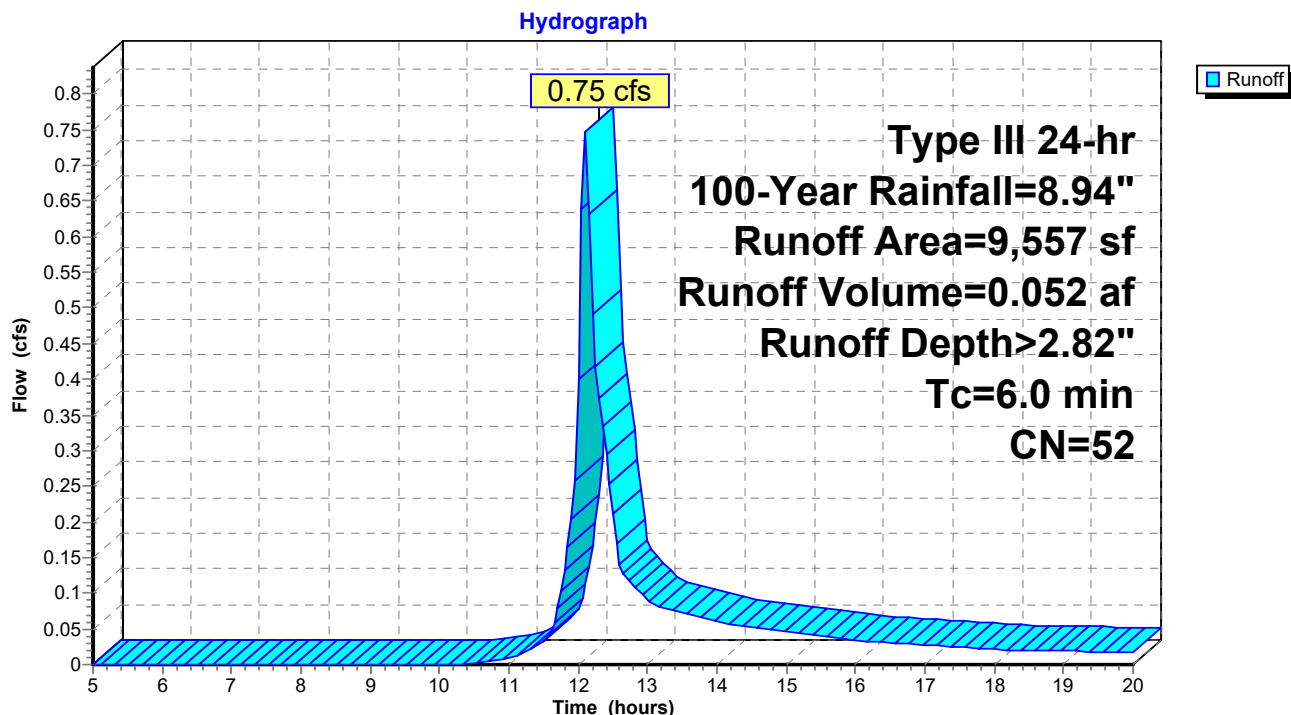
Runoff = 0.75 cfs @ 12.10 hrs, Volume= 0.052 af, Depth> 2.82"
Routed to Pond 193P : CB 1

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
1,342	39	>75% Grass cover, Good, HSG A
5,306	30	Woods, Good, HSG A
2,909	98	Paved parking, HSG A
9,557	52	Weighted Average
6,648		69.56% Pervious Area
2,909		30.44% 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

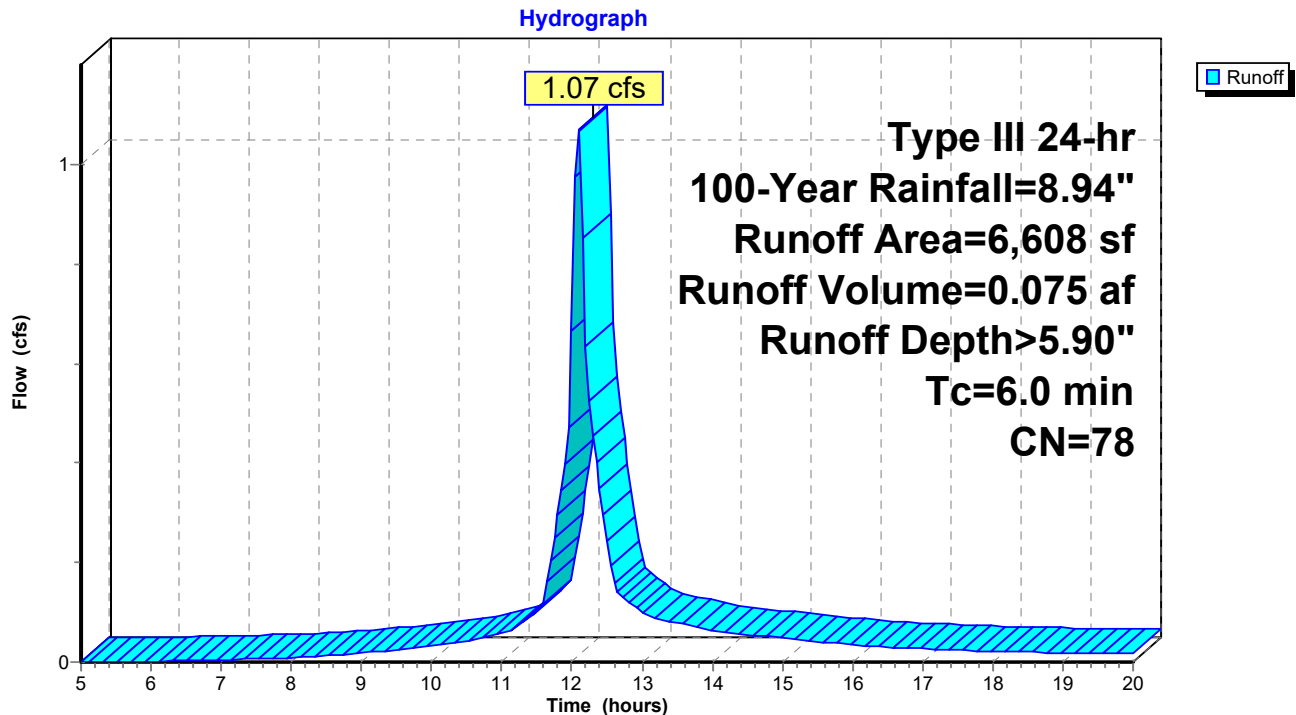
Runoff = 1.07 cfs @ 12.09 hrs, Volume= 0.075 af, Depth> 5.90"
Routed to Pond 194P : CB 2

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
2,225	39	>75% Grass cover, Good, HSG A
4,383	98	Paved parking, HSG A
6,608	78	Weighted Average
2,225		33.67% Pervious Area
4,383		66.33% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry,

Subcatchment 192S: P3TTT



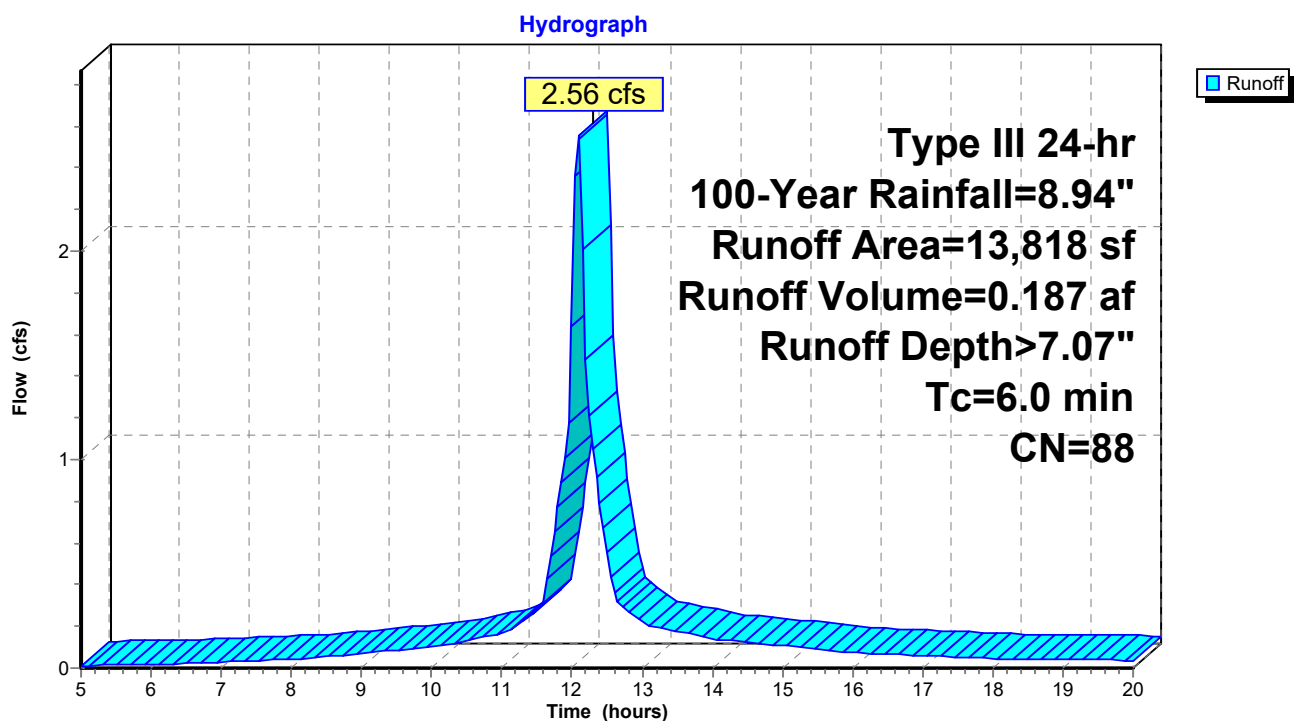
Summary for Subcatchment 195S: P3UUU

Runoff = 2.56 cfs @ 12.09 hrs, Volume= 0.187 af, Depth> 7.07"
 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
2,404	39	>75% Grass cover, Good, HSG A
4,975	98	Unconnected roofs, HSG A
6,439	98	Paved parking, HSG A
13,818	88	Weighted Average
2,404		17.40% Pervious Area
11,414		82.60% Impervious Area
4,975		43.59% 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 = 0.41 cfs @ 12.11 hrs, Volume= 0.035 af, Depth> 1.39"
 Routed to Pond 197P : Inf. Basin 1

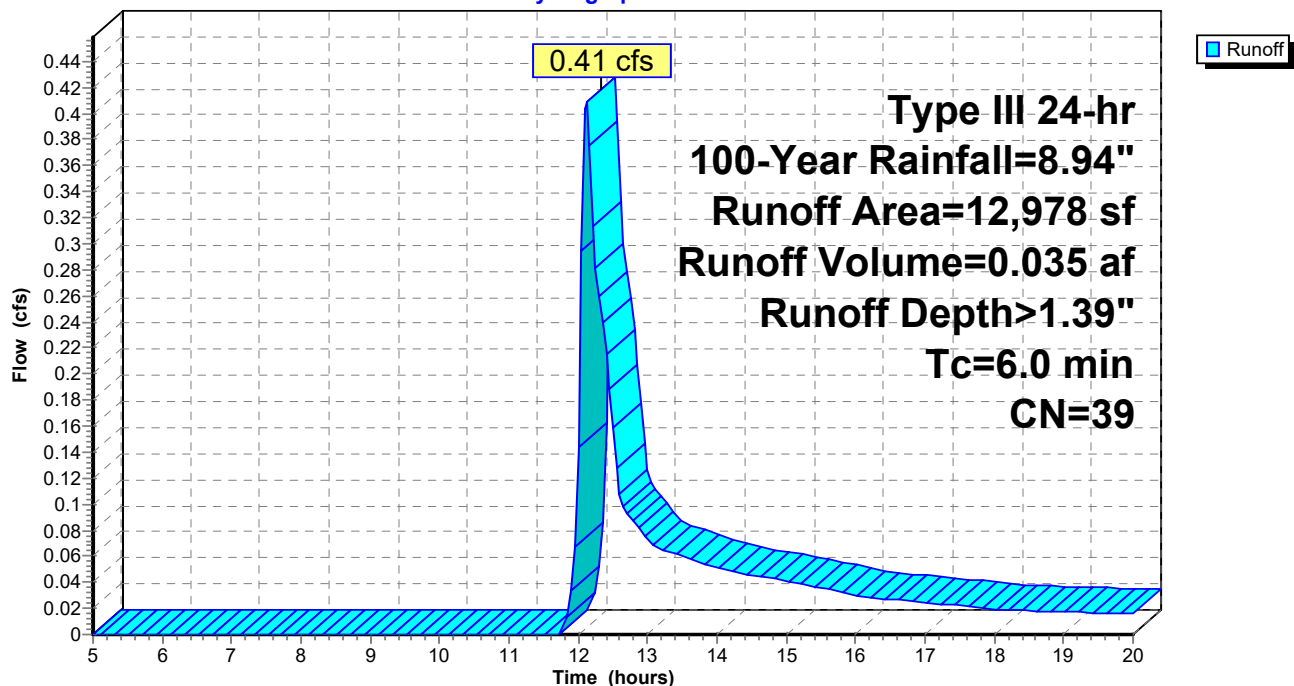
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Type III 24-hr 100-Year Rainfall=8.94"

Area (sf)	CN	Description
12,978	39	>75% Grass cover, Good, HSG A
12,978		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



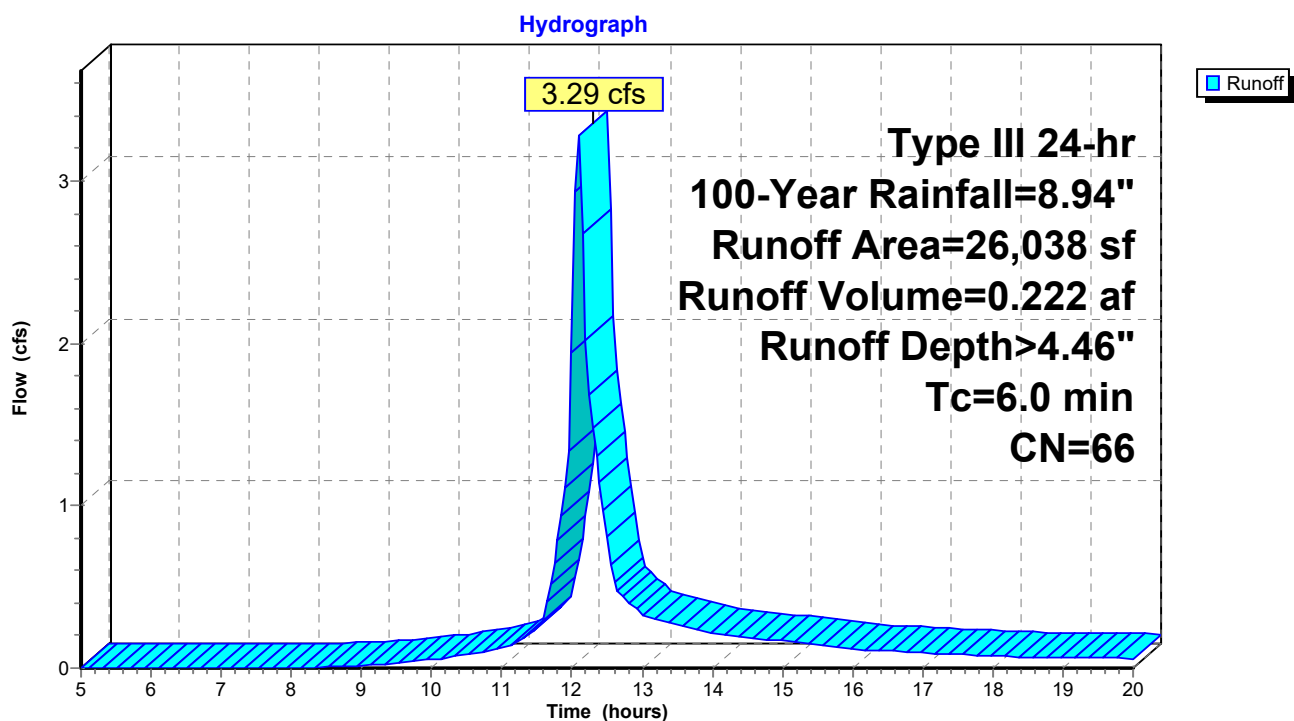
Summary for Subcatchment 202S: (new Subcat)

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)

Summary for Subcatchment 204S: (new Subcat)

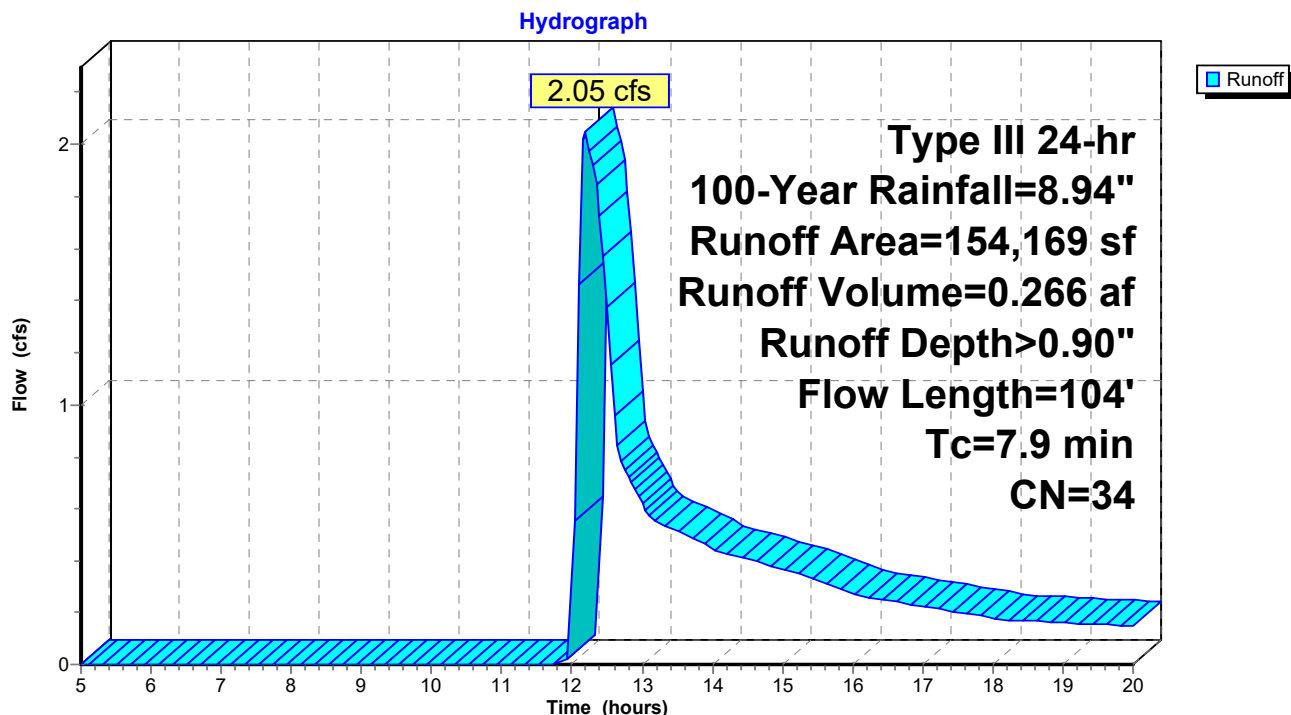
Runoff = 2.05 cfs @ 12.19 hrs, Volume= 0.266 af, Depth> 0.90"
Routed to Link 203L : 3A

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	Description
94,353	30	Woods, Good, HSG A
57,796	39	>75% Grass cover, Good, HSG A
2,020	98	Unconnected roofs, HSG A
154,169	34	Weighted Average
152,149		98.69% Pervious Area
2,020		1.31% Impervious Area
2,020		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, Grass: Short n= 0.150 P2= 3.10"
0.4	54	0.1200	2.42		Shallow Concentrated Flow, Short Grass Pasture Kv= 7.0 fps
7.9	104	Total			

Subcatchment 204S: (new Subcat)



Summary for Pond 15P: Inf. Basin 5

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 38P by 0.65' @ 14.15 hrs

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	Custom Stage Data (Prismatic) Listed below (Recalc)

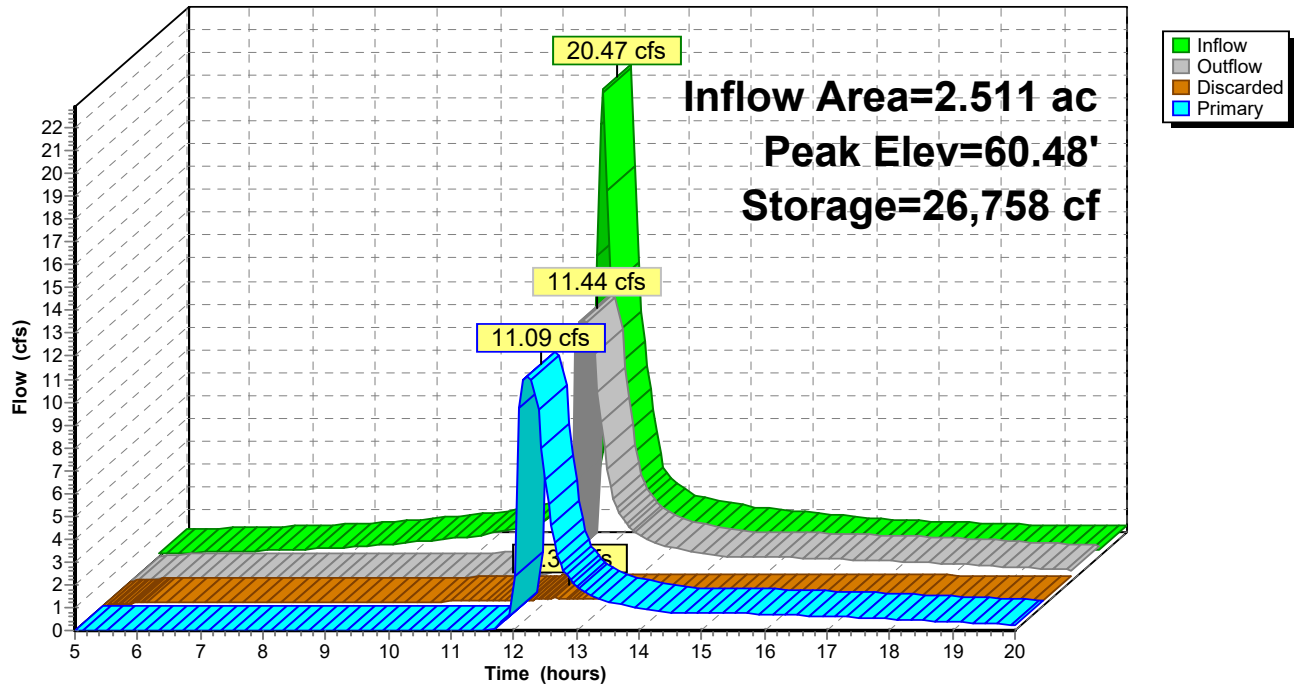
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
57.00	5,984	0	0
58.00	6,929	6,457	6,457
59.00	7,931	7,430	13,887
60.00	8,989	8,460	22,347
61.00	10,104	9,547	31,893

Device	Routing	Invert	Outlet Devices
#1	Discarded	57.00'	1.020 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 52.00'
#2	Primary	57.00'	18.0" Round Culvert L= 67.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.00' / 52.50' S= 0.0672 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#3	Device 2	58.75'	4.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 2	59.80'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 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

Hydrograph



Summary for Pond 16P: CB 58

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.91' (Flood elevation advised)

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

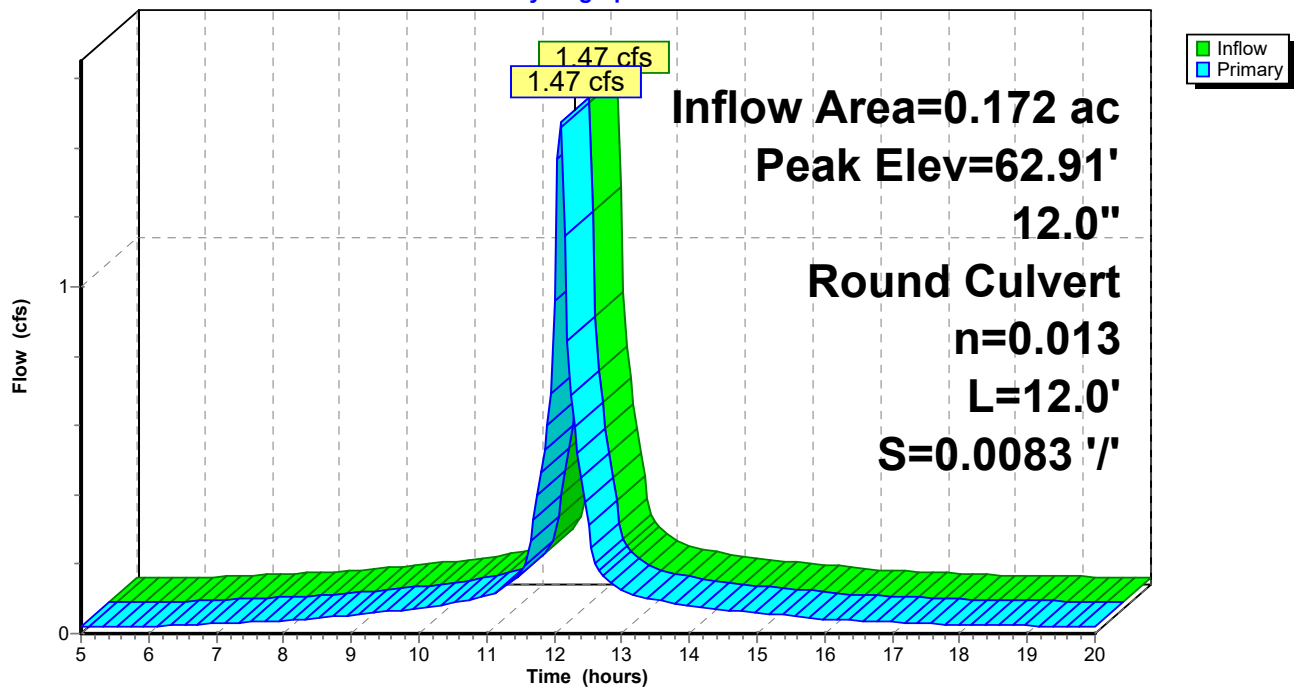
Device	Routing	Invert	Outlet Devices
#1	Primary	62.10'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.10' / 62.00' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.73' (Flood elevation advised)

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

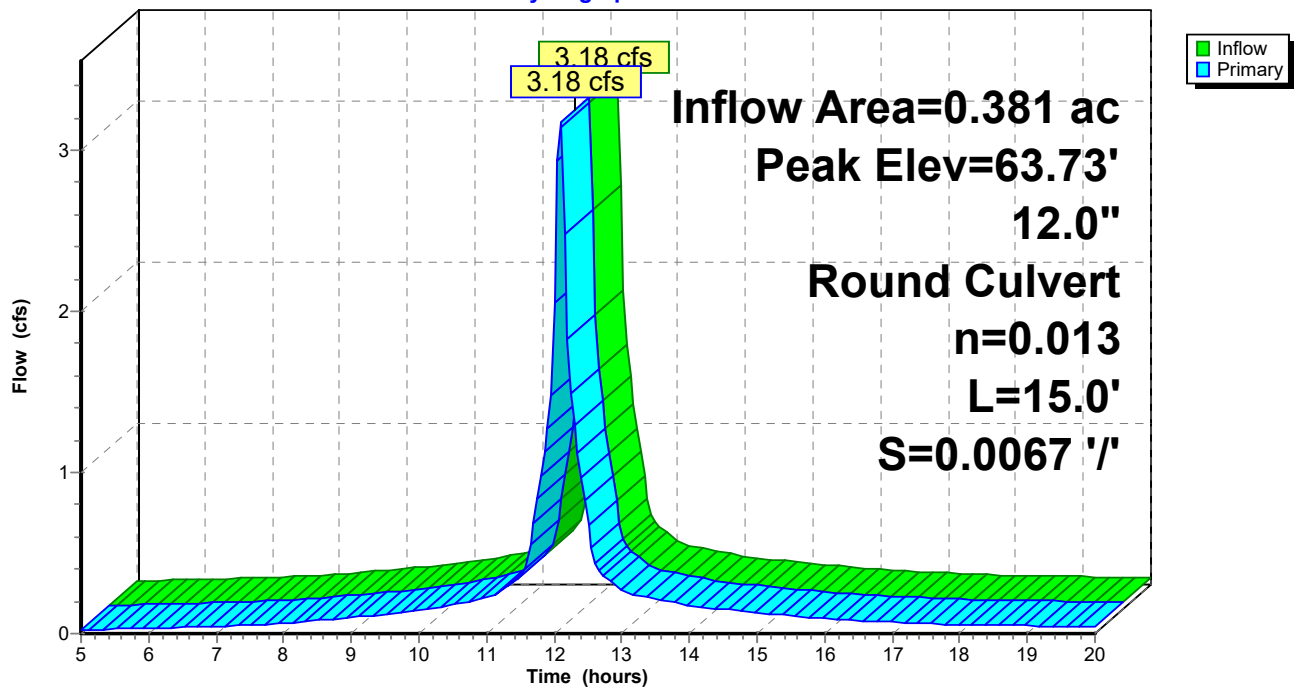
Device	Routing	Invert	Outlet Devices
#1	Primary	62.10'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.10' / 62.00' S= 0.0067 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.57' (Flood elevation advised)

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

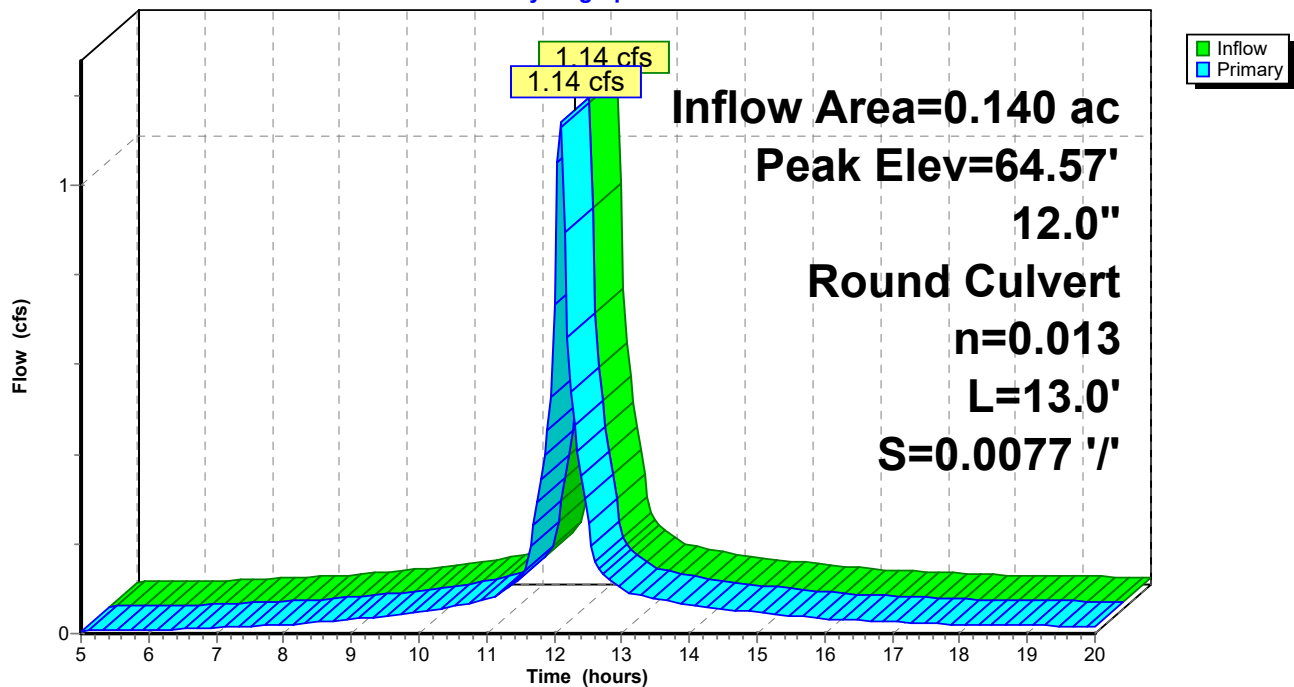
Device	Routing	Invert	Outlet Devices
#1	Primary	63.88'	12.0" Round Culvert L= 13.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 63.88' / 63.78' S= 0.0077 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.32' (Flood elevation advised)

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

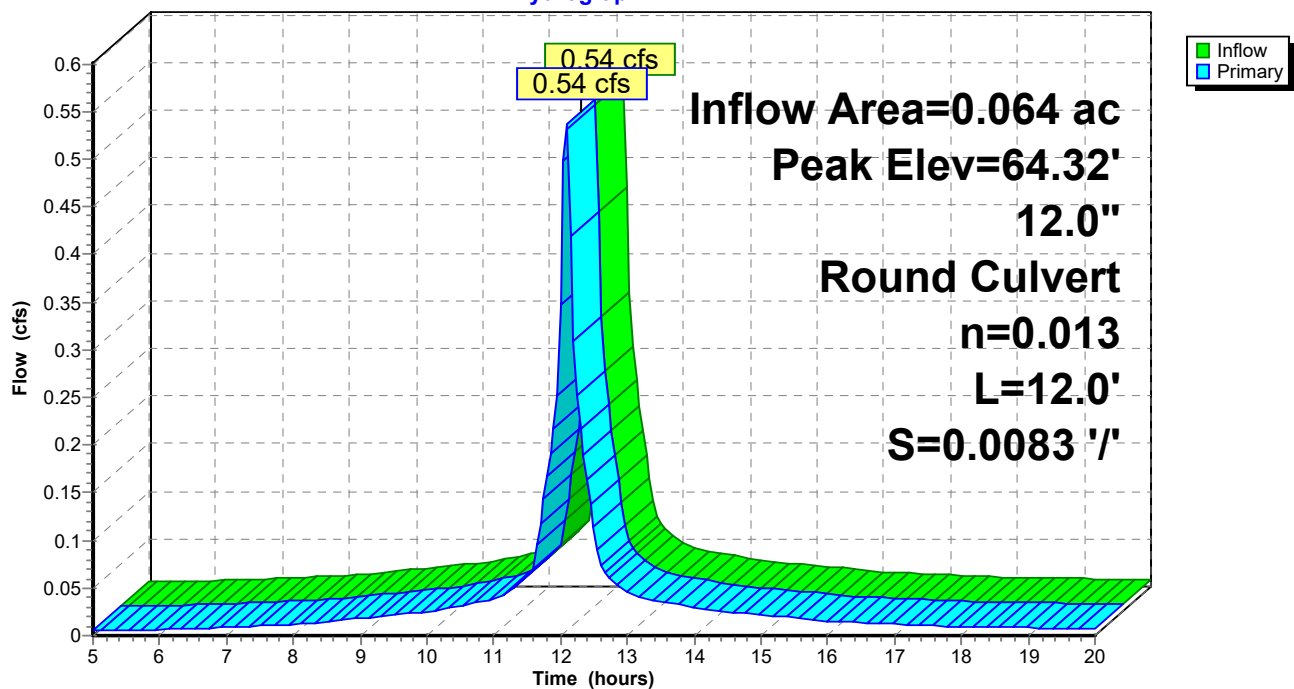
Device	Routing	Invert	Outlet Devices
#1	Primary	63.88'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 63.88' / 63.78' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.82' (Flood elevation advised)

[81] Warning: Exceeded Pond 16P by 1.88' @ 12.10 hrs

[81] Warning: Exceeded Pond 17P by 1.07' @ 12.10 hrs

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

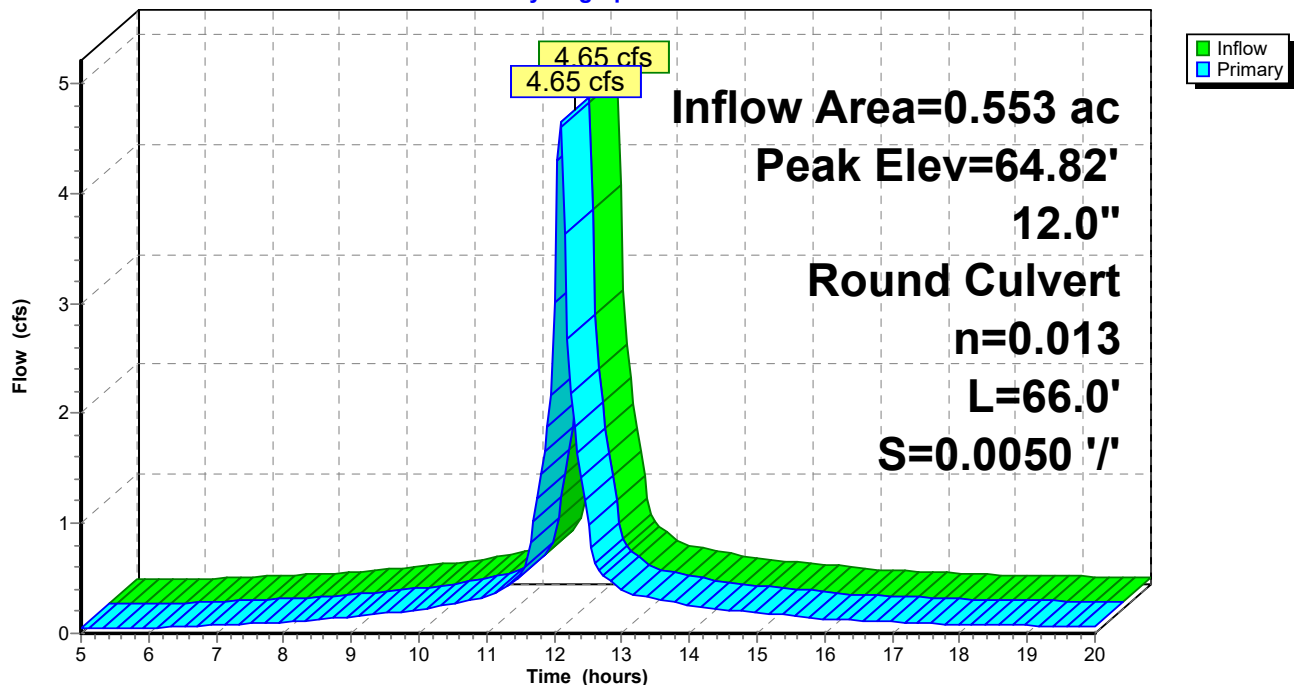
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 64.82' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.90'	12.0" Round Culvert L= 66.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.90' / 61.57' S= 0.0050 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.39' (Flood elevation advised)

[79] Warning: Submerged Pond 20P Primary device # 1 INLET by 2.45'

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

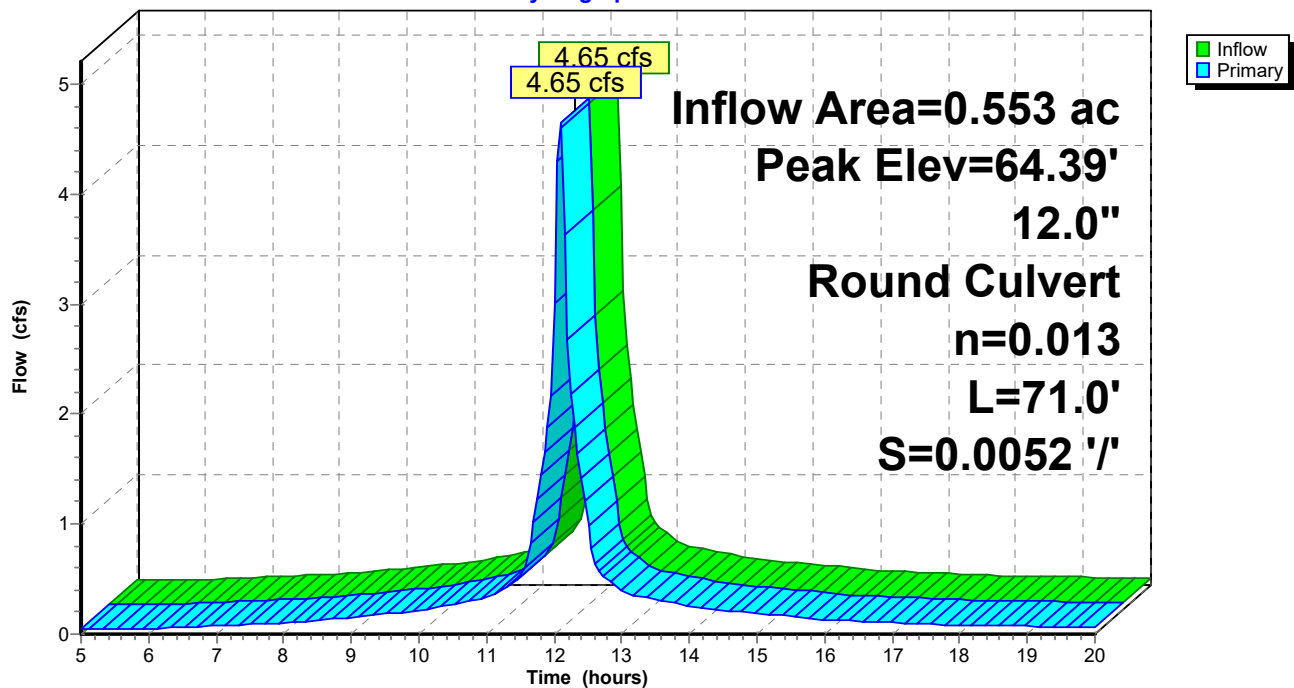
Device	Routing	Invert	Outlet Devices
#1	Primary	61.47'	12.0" Round Culvert L= 71.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.47' / 61.10' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.86' (Flood elevation advised)

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

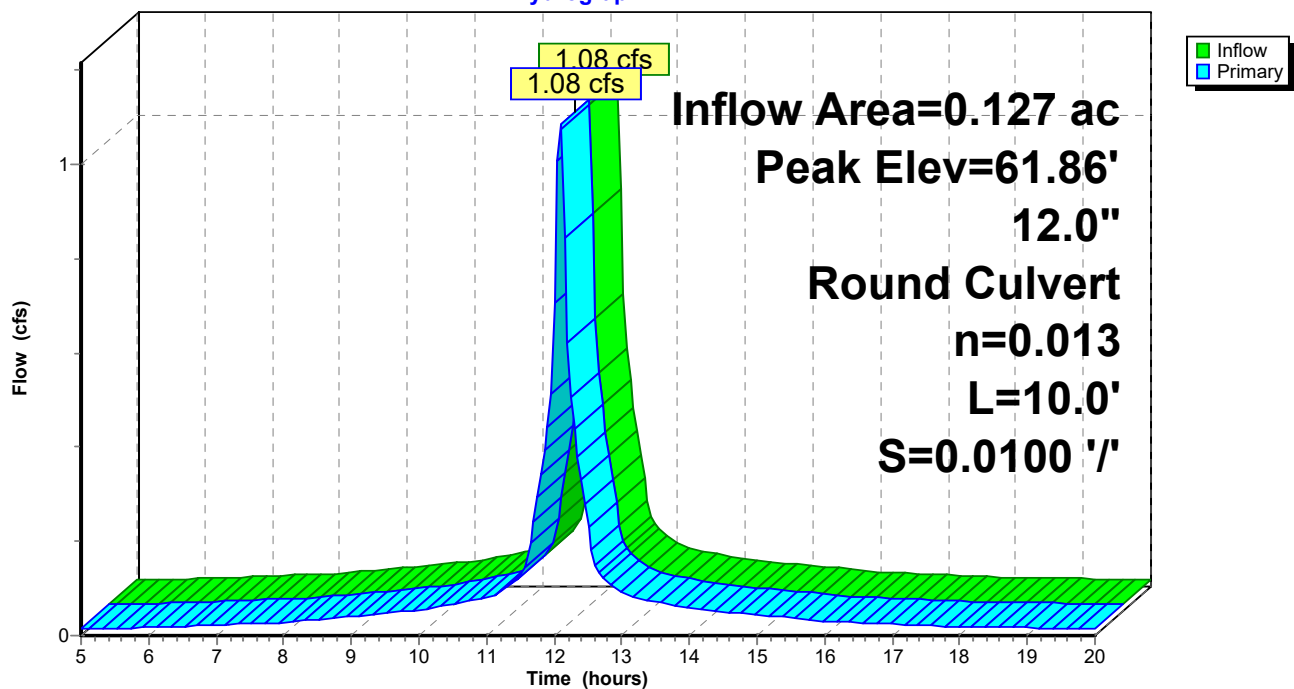
Device	Routing	Invert	Outlet Devices
#1	Primary	61.20'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.20' / 61.10' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.49' (Flood elevation advised)

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

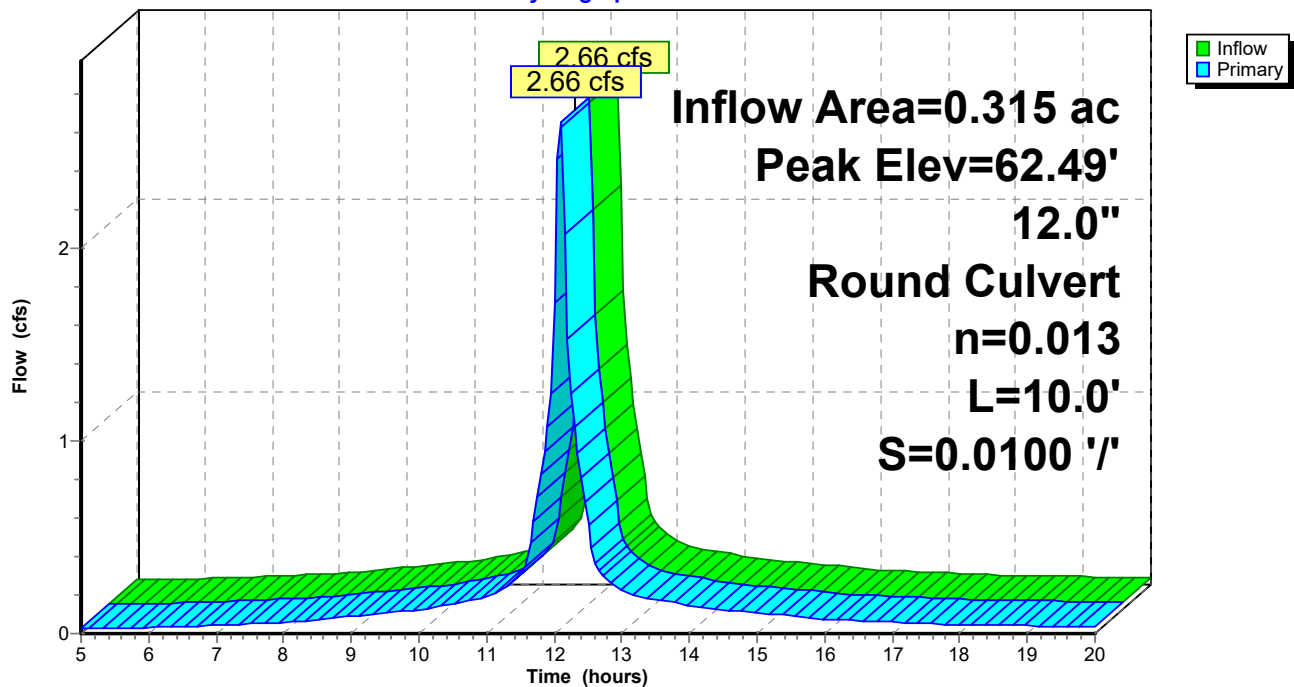
Device	Routing	Invert	Outlet Devices
#1	Primary	61.20'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.20' / 61.10' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.31' (Flood elevation advised)

[79] Warning: Submerged Pond 21P Primary device # 1 INLET by 1.81'

[81] Warning: Exceeded Pond 22P by 1.42' @ 12.10 hrs

[81] Warning: Exceeded Pond 23P by 0.80' @ 12.10 hrs

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

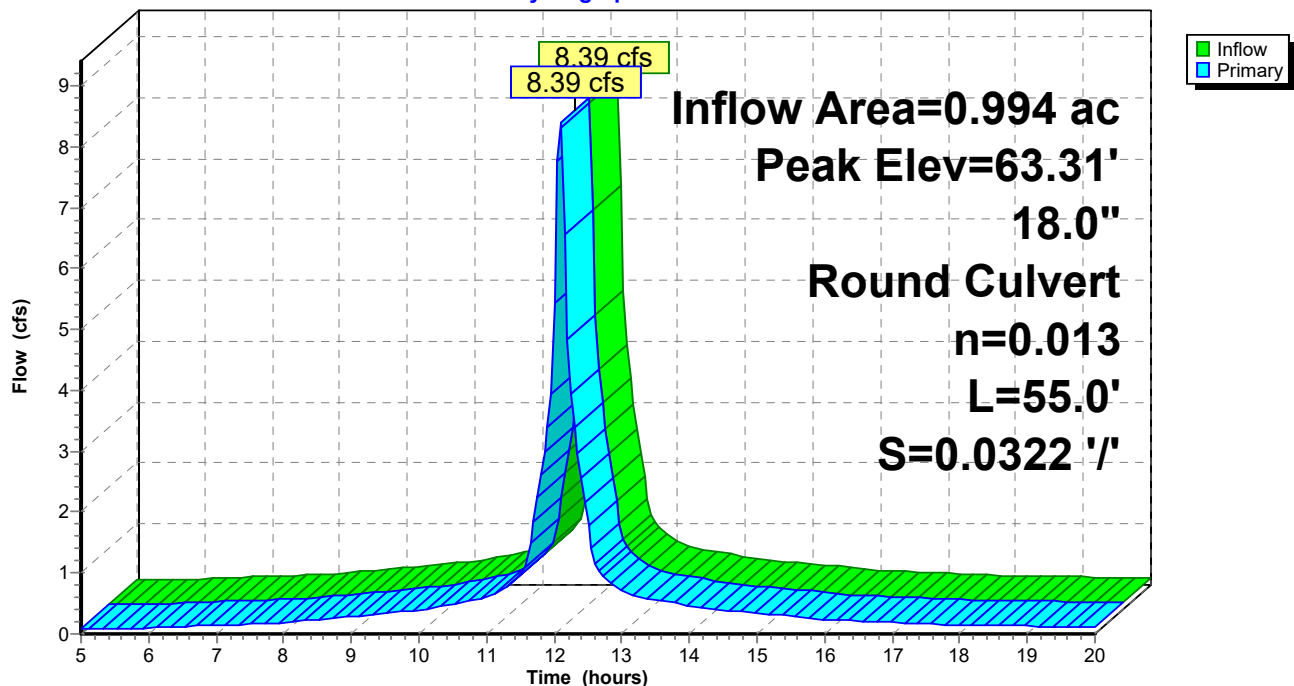
Device	Routing	Invert	Outlet Devices
#1	Primary	61.00'	18.0" Round Culvert L= 55.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.00' / 59.23' S= 0.0322 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.50' (Flood elevation advised)

[79] Warning: Submerged Pond 18P Primary device # 1 INLET by 0.61'

[81] Warning: Exceeded Pond 19P by 0.17' @ 12.10 hrs

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

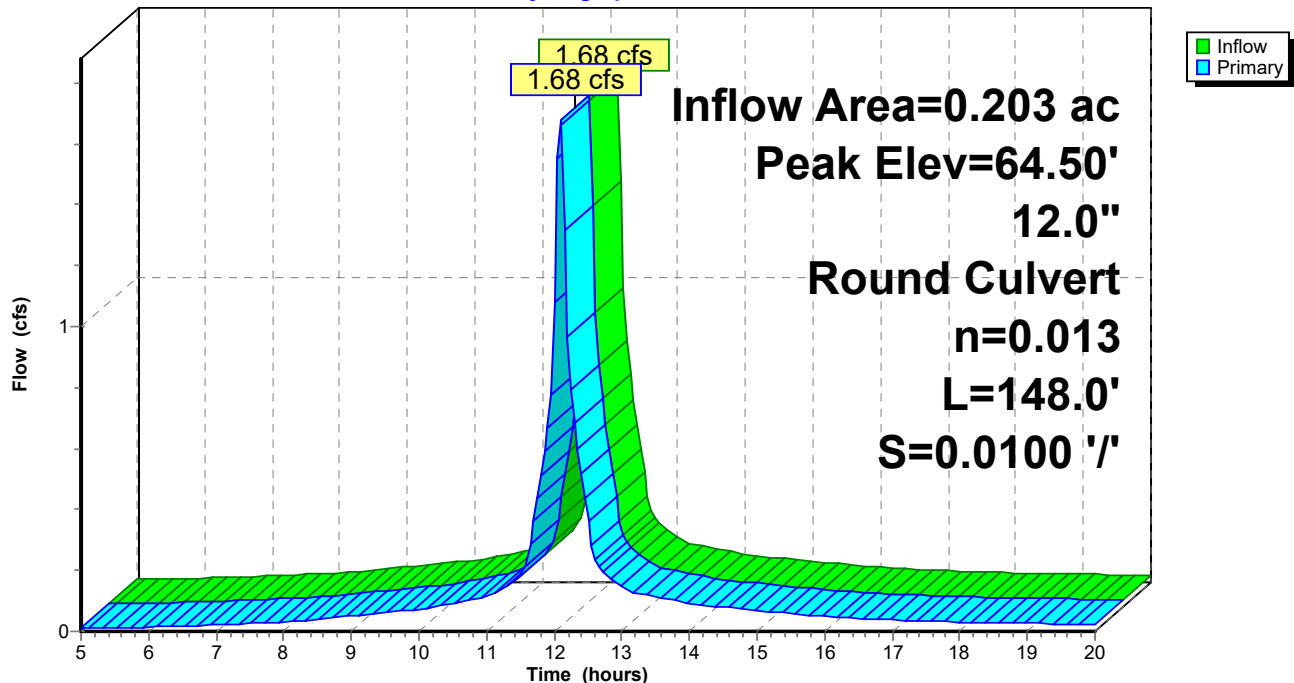
Device	Routing	Invert	Outlet Devices
#1	Primary	63.68'	12.0" Round Culvert L= 148.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 63.68' / 62.20' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.37' (Flood elevation advised)

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

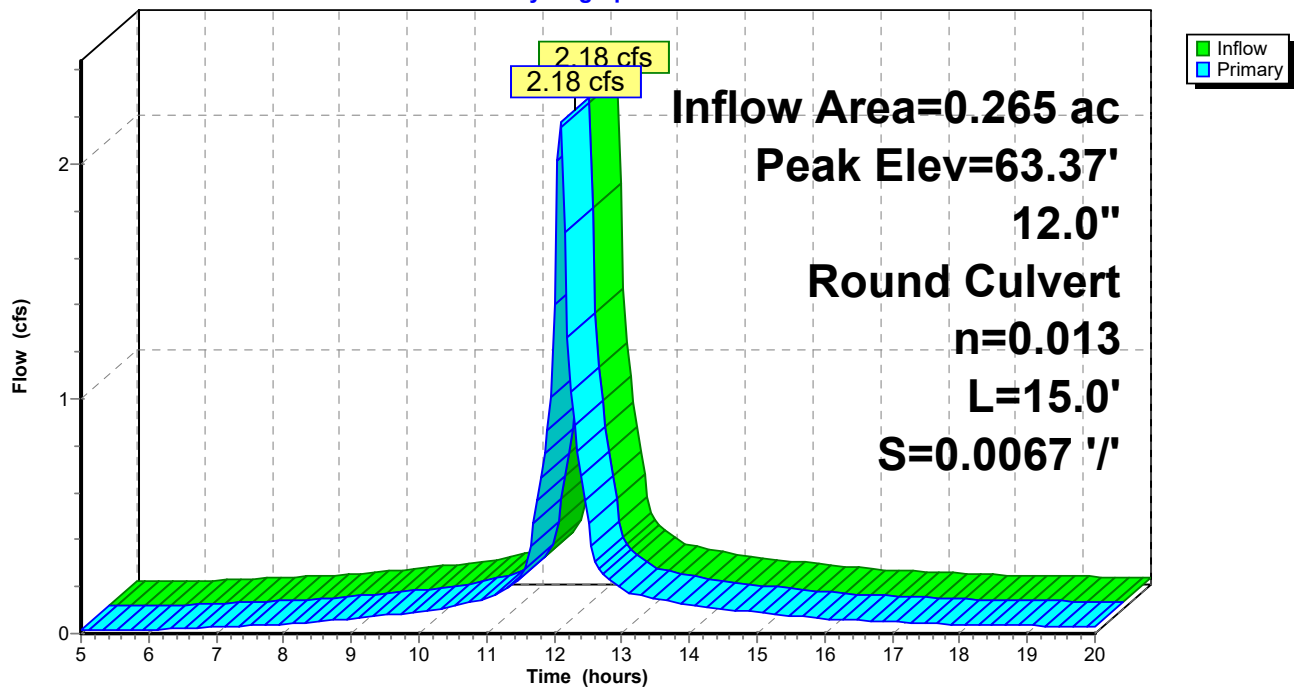
Device	Routing	Invert	Outlet Devices
#1	Primary	62.30'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.30' / 62.20' S= 0.0067 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.91' (Flood elevation advised)

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

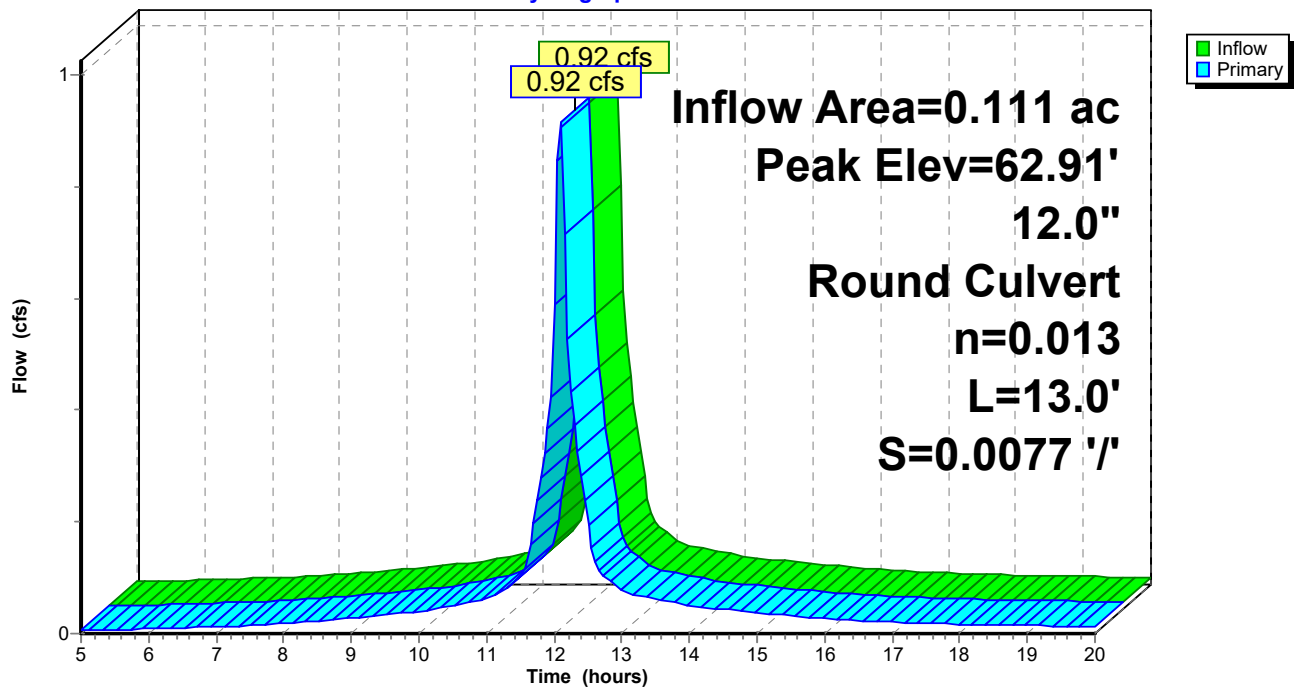
Device	Routing	Invert	Outlet Devices
#1	Primary	62.30'	12.0" Round Culvert L= 13.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.30' / 62.20' S= 0.0077 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 65.14' (Flood elevation advised)

[81] Warning: Exceeded Pond 25P by 0.61' @ 12.10 hrs

[81] Warning: Exceeded Pond 26P by 1.74' @ 12.10 hrs

[81] Warning: Exceeded Pond 27P by 2.20' @ 12.10 hrs

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

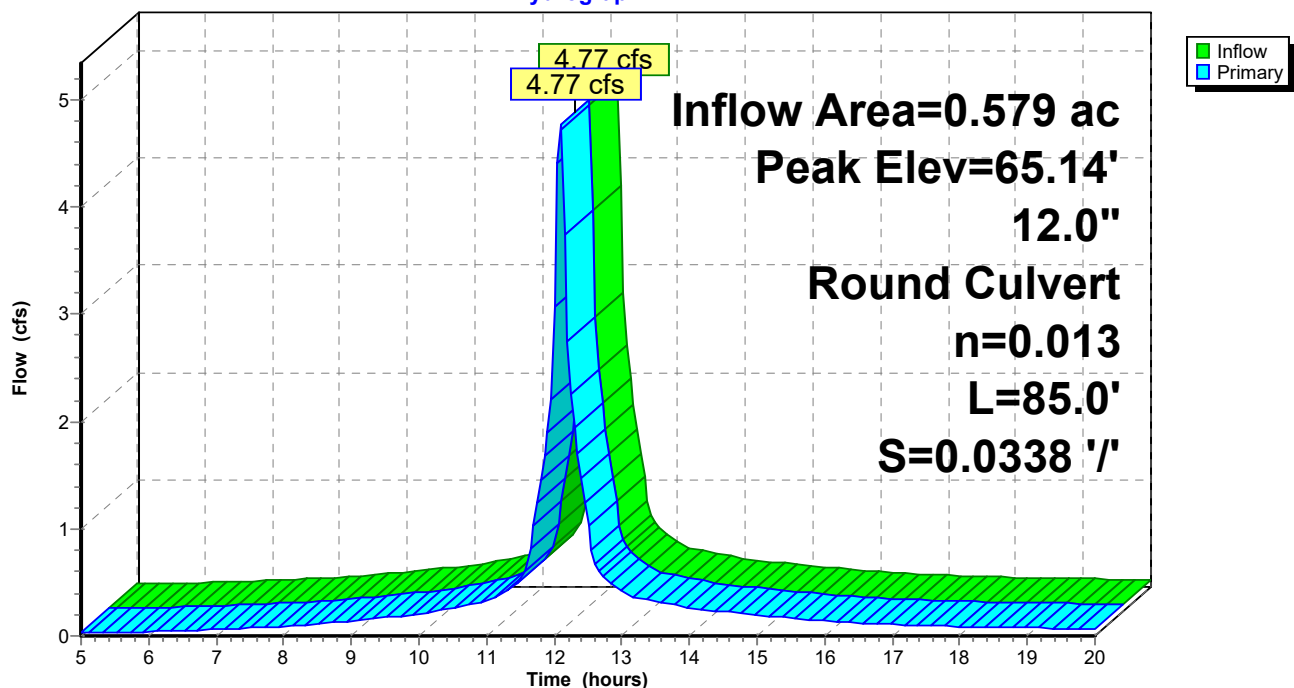
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 65.14' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	62.10'	12.0" Round Culvert L= 85.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.10' / 59.23' S= 0.0338 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.47' (Flood elevation advised)

[79] Warning: Submerged Pond 24P Primary device # 1 INLET by 0.45'

[79] Warning: Submerged Pond 28P Primary device # 1 OUTLET by 2.22'

[81] Warning: Exceeded Pond 30P by 0.74' @ 12.10 hrs

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

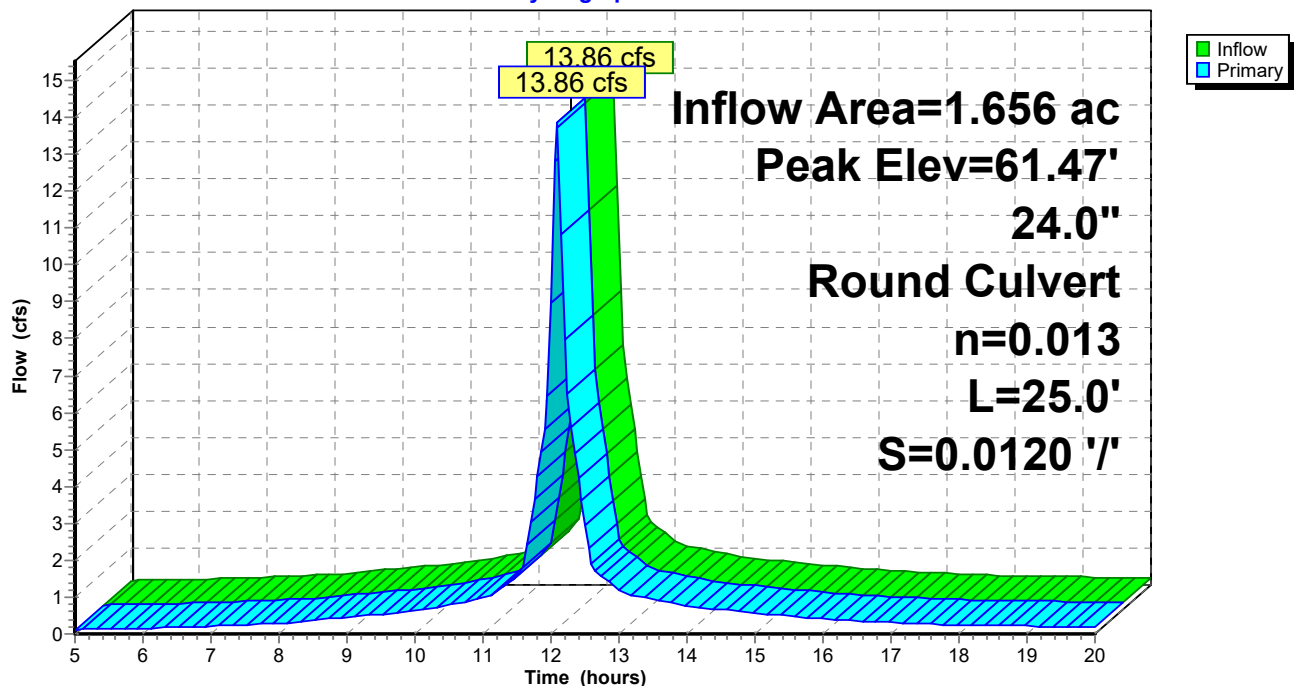
Device	Routing	Invert	Outlet Devices
#1	Primary	59.13'	24.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.13' / 58.83' S= 0.0120 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.71' (Flood elevation advised)

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

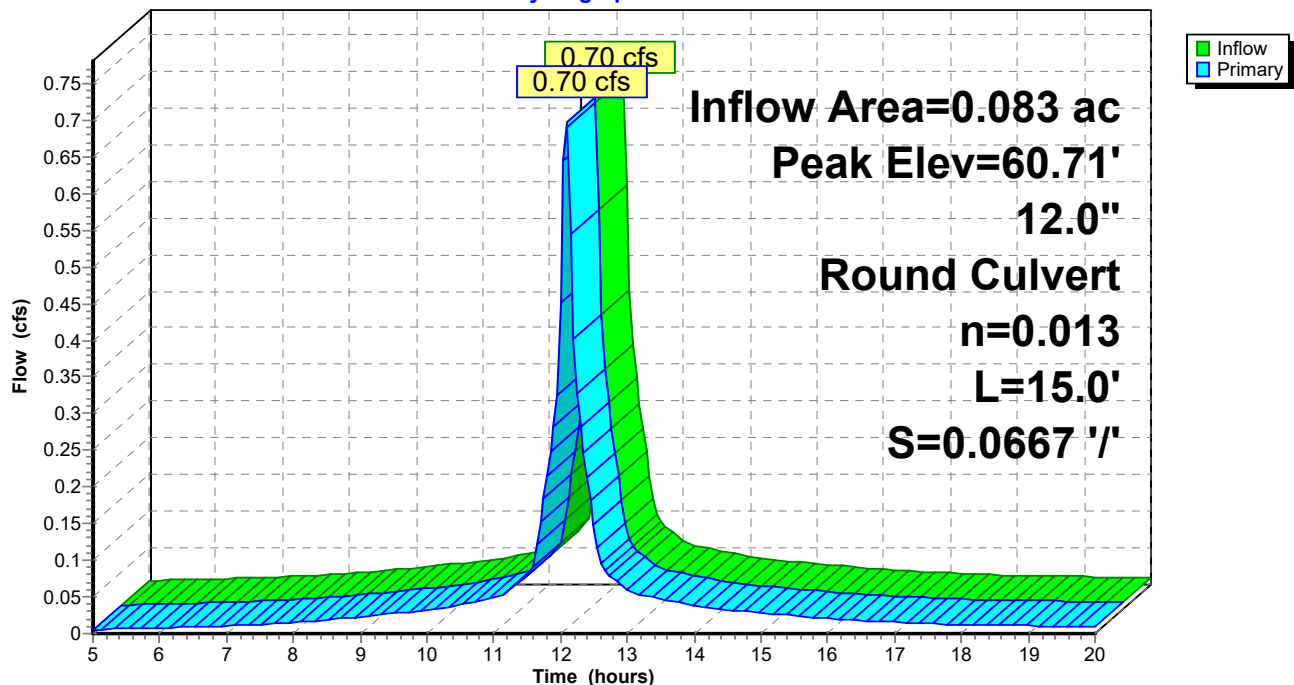
Device	Routing	Invert	Outlet Devices
#1	Primary	60.23'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.23' / 59.23' S= 0.0667 ' S= 0.0667 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.67' (Flood elevation advised)

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

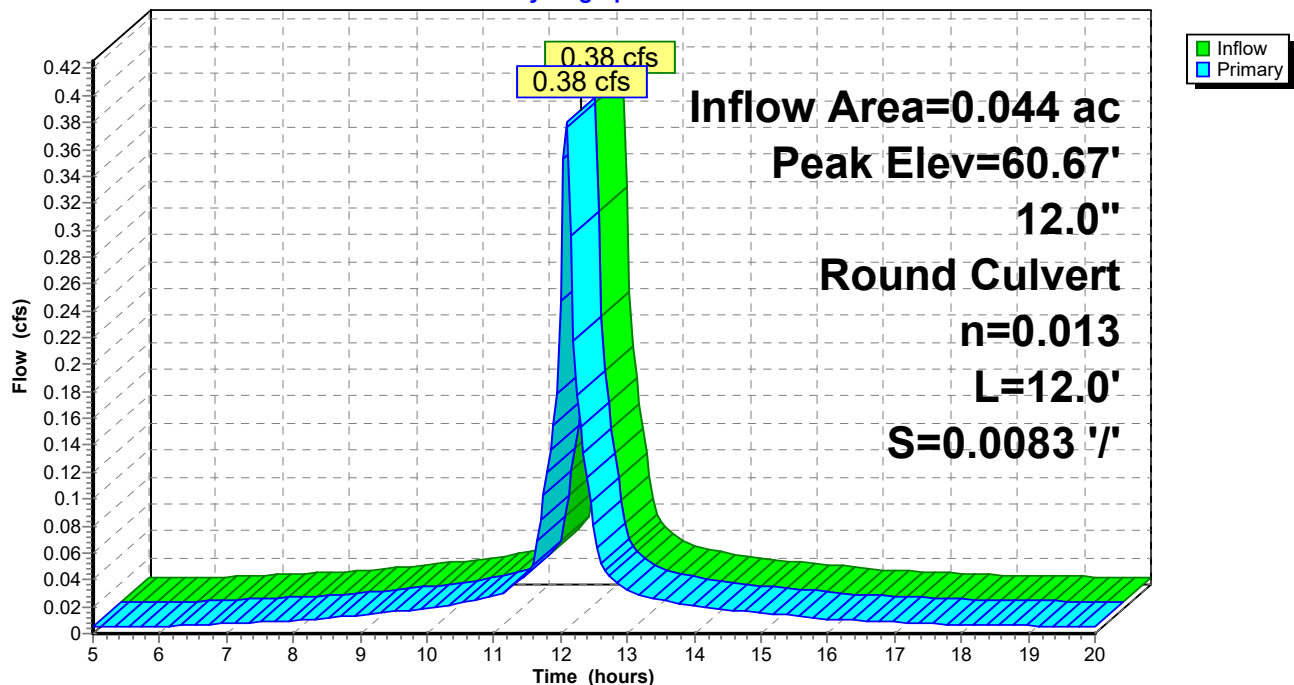
Device	Routing	Invert	Outlet Devices
#1	Primary	60.30'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.30' / 60.20' S= 0.0083 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.25' (Flood elevation advised)

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

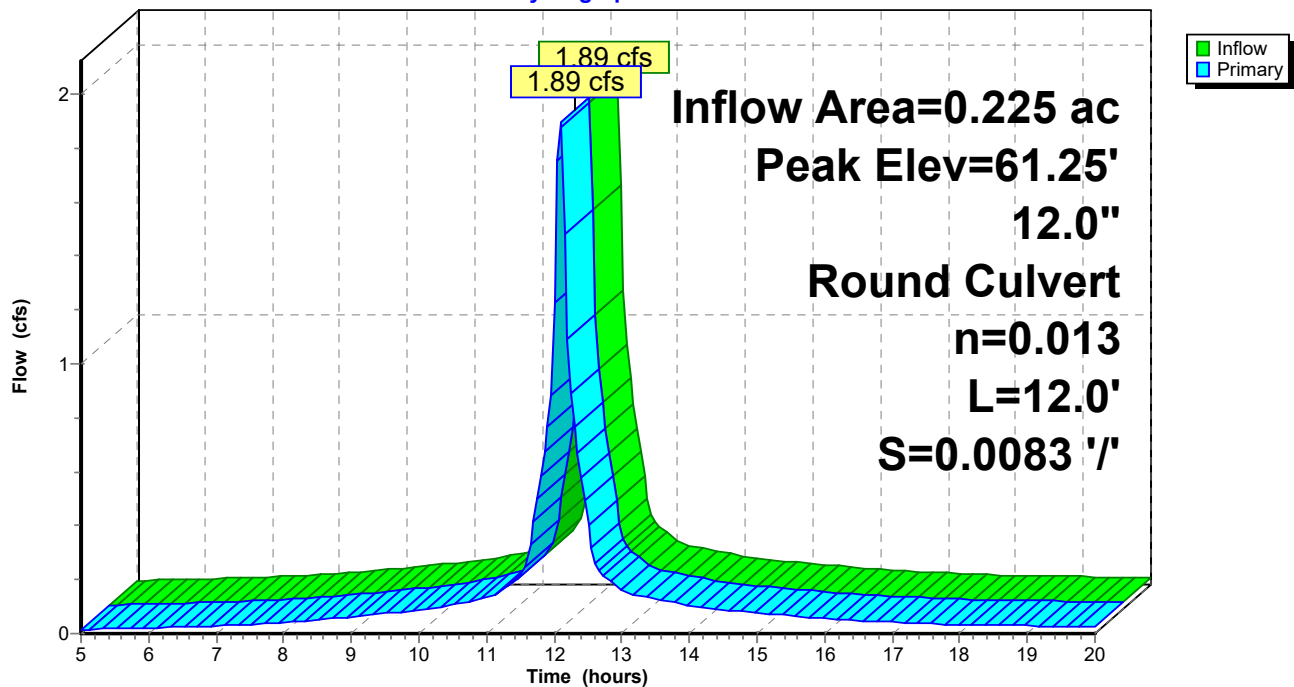
Device	Routing	Invert	Outlet Devices
#1	Primary	60.30'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.30' / 60.20' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.84 cfs @ 12.09 hrs HW=61.24' (Free Discharge)

↑=Culvert (Barrel Controls 1.84 cfs @ 3.13 fps)

Pond 32P: CB 52

Hydrograph



Summary for Pond 33P: CB 53

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.11' (Flood elevation advised)

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

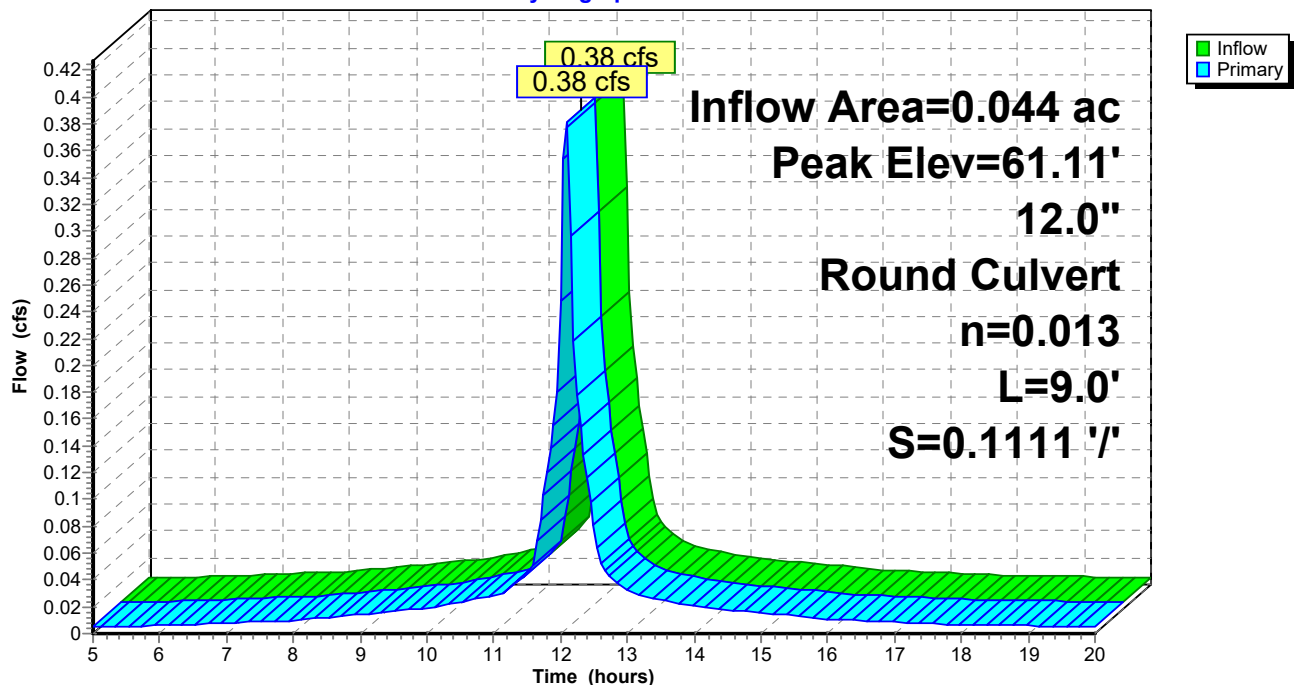
Device	Routing	Invert	Outlet Devices
#1	Primary	60.76'	12.0" Round Culvert L= 9.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.76' / 59.76' S= 0.1111 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.18' (Flood elevation advised)

[81] Warning: Exceeded Pond 31P by 0.51' @ 12.10 hrs

[79] Warning: Submerged Pond 32P Primary device # 1 INLET by 0.87'

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

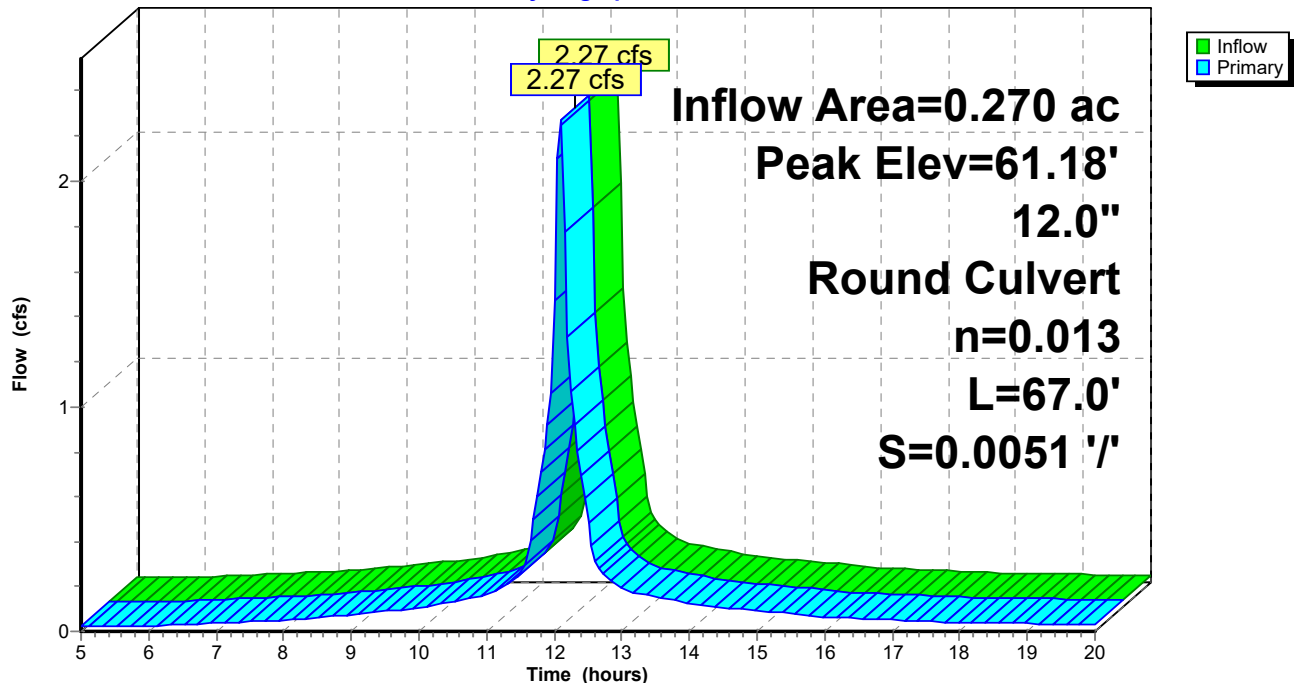
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 61.18' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	60.10'	12.0" Round Culvert L= 67.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.10' / 59.76' S= 0.0051 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.02' (Flood elevation advised)

[79] Warning: Submerged Pond 33P Primary device # 1 INLET by 0.25'

[79] Warning: Submerged Pond 34P Primary device # 1 INLET by 0.91'

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

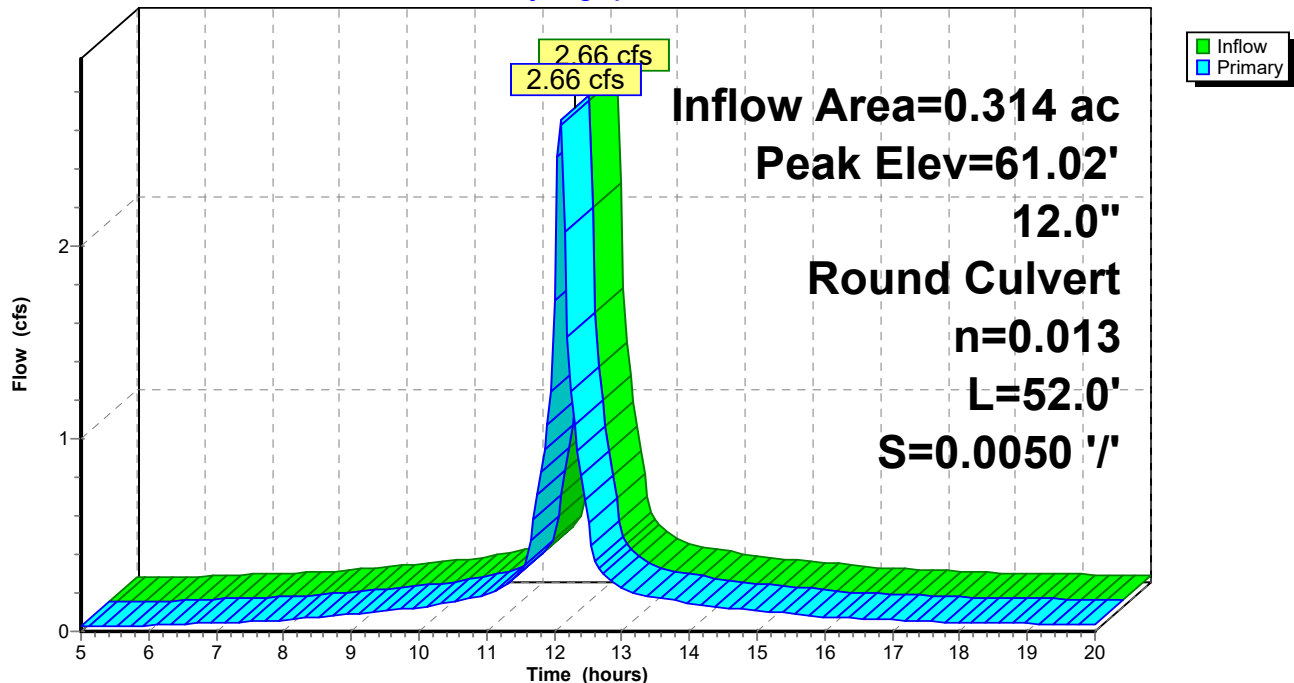
Device	Routing	Invert	Outlet Devices
#1	Primary	59.66'	12.0" Round Culvert L= 52.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.66' / 59.40' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.03' (Flood elevation advised)

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

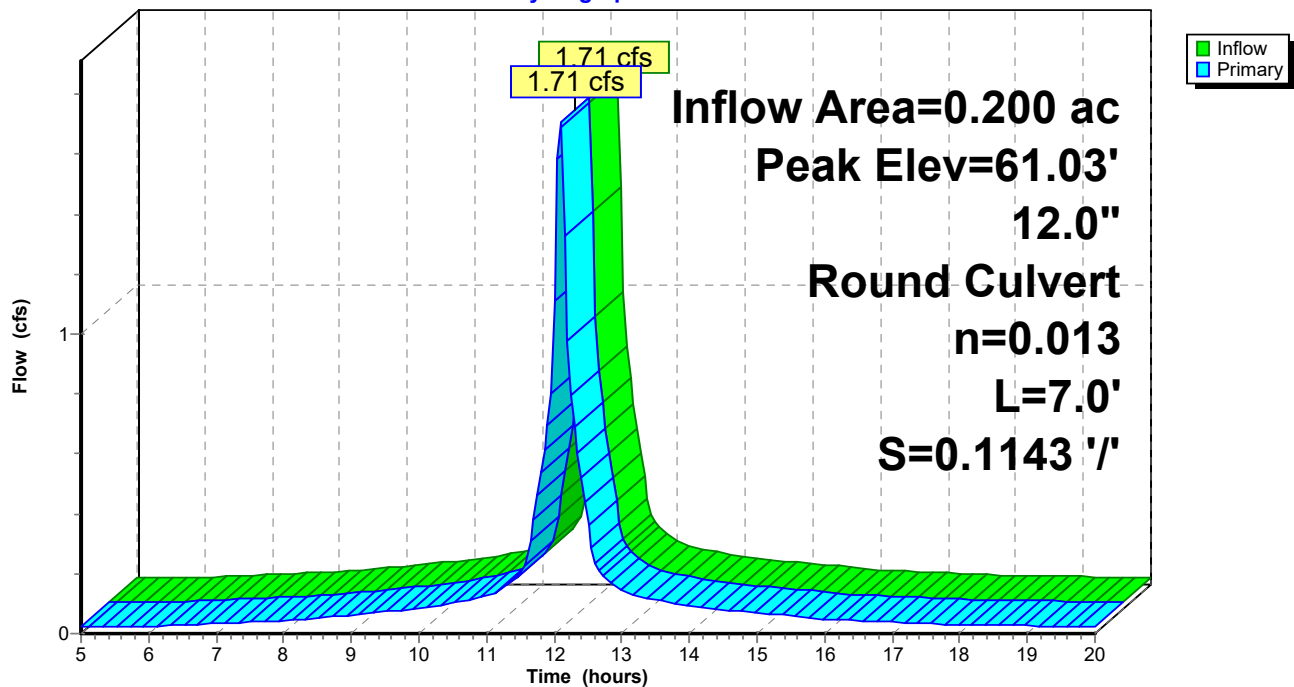
Device	Routing	Invert	Outlet Devices
#1	Primary	60.20'	12.0" Round Culvert L= 7.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.20' / 59.40' S= 0.1143 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.15' (Flood elevation advised)

[81] Warning: Exceeded Pond 35P by 1.09' @ 12.10 hrs

[81] Warning: Exceeded Pond 36P by 1.08' @ 12.10 hrs

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

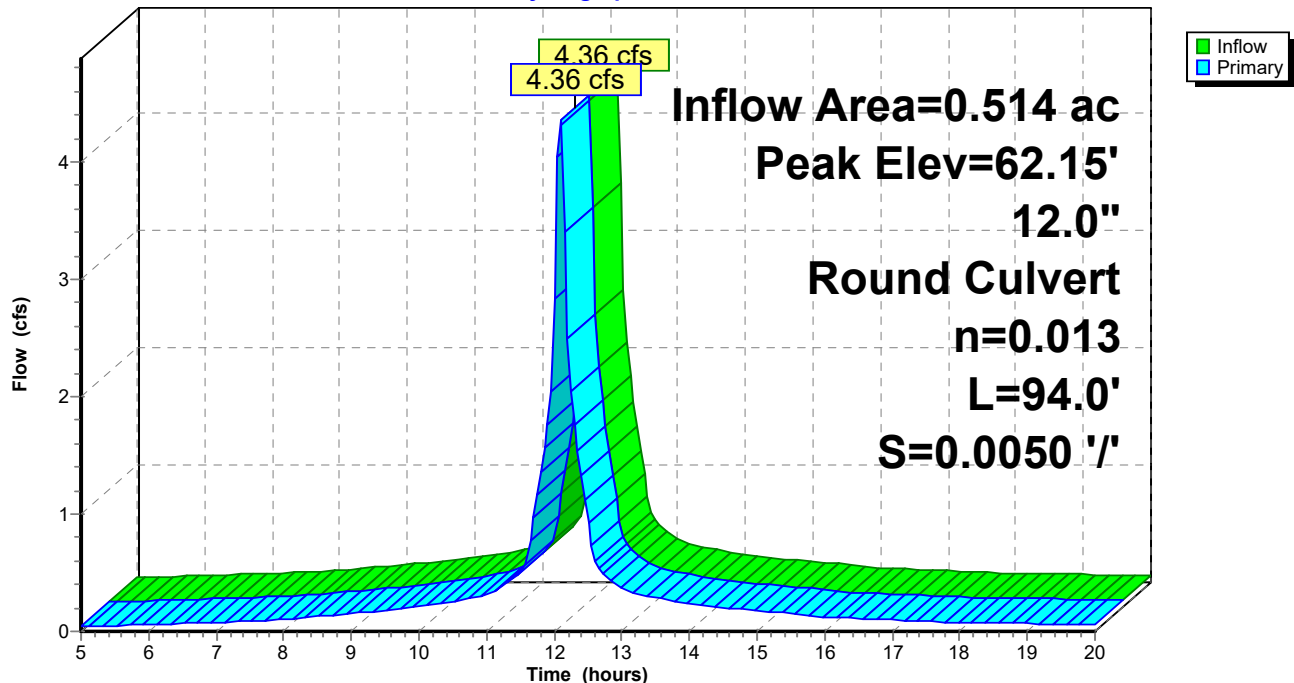
Device	Routing	Invert	Outlet Devices
#1	Primary	59.30'	12.0" Round Culvert L= 94.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.30' / 58.83' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.05' (Flood elevation advised)

[81] Warning: Exceeded Pond 29P by 0.56' @ 12.10 hrs

[79] Warning: Submerged Pond 37P Primary device # 1 INLET by 2.71'

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

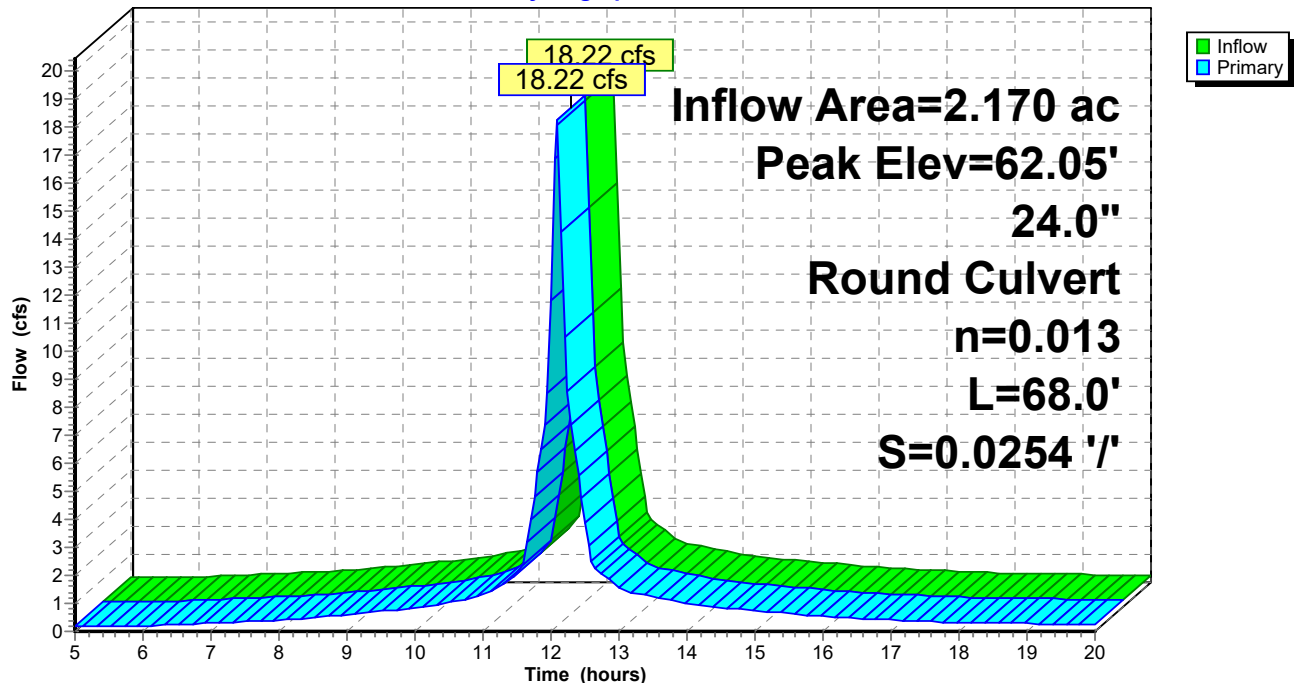
Device	Routing	Invert	Outlet Devices
#1	Primary	58.73'	24.0" Round Culvert L= 68.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.73' / 57.00' S= 0.0254 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.74' (Flood elevation advised)

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

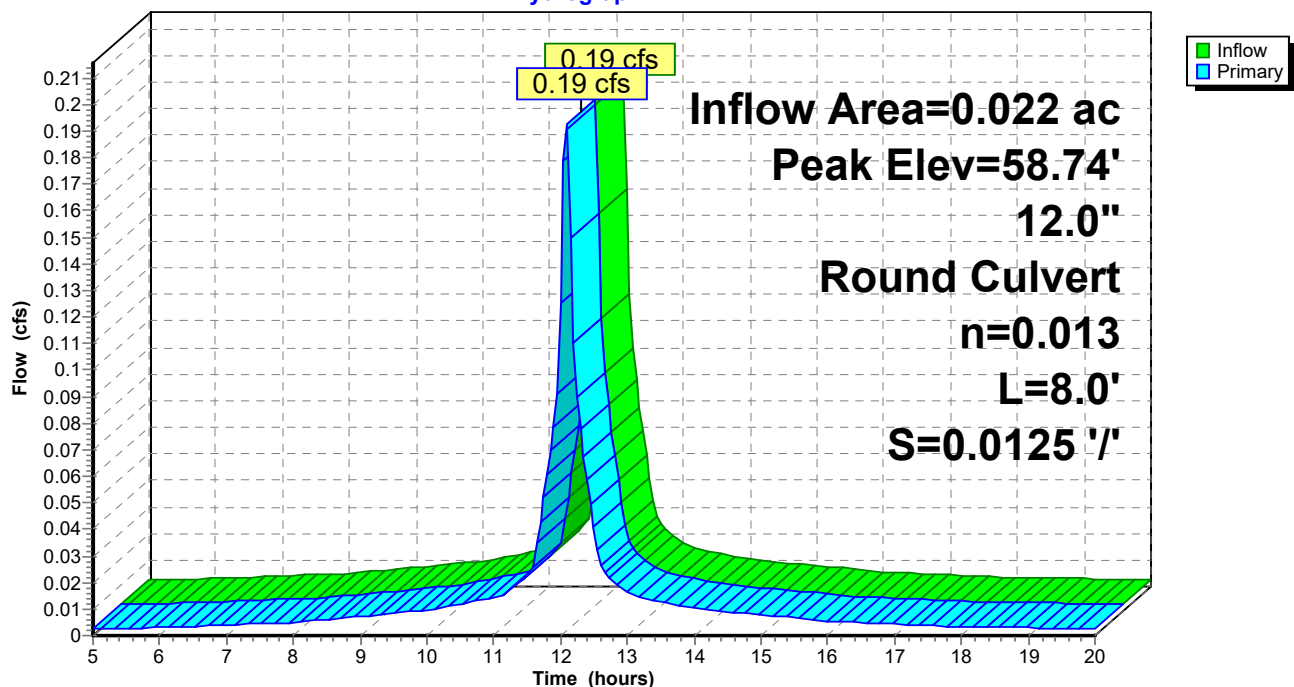
Device	Routing	Invert	Outlet Devices
#1	Primary	58.50'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.50' / 58.40' S= 0.0125 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.30' (Flood elevation advised)

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

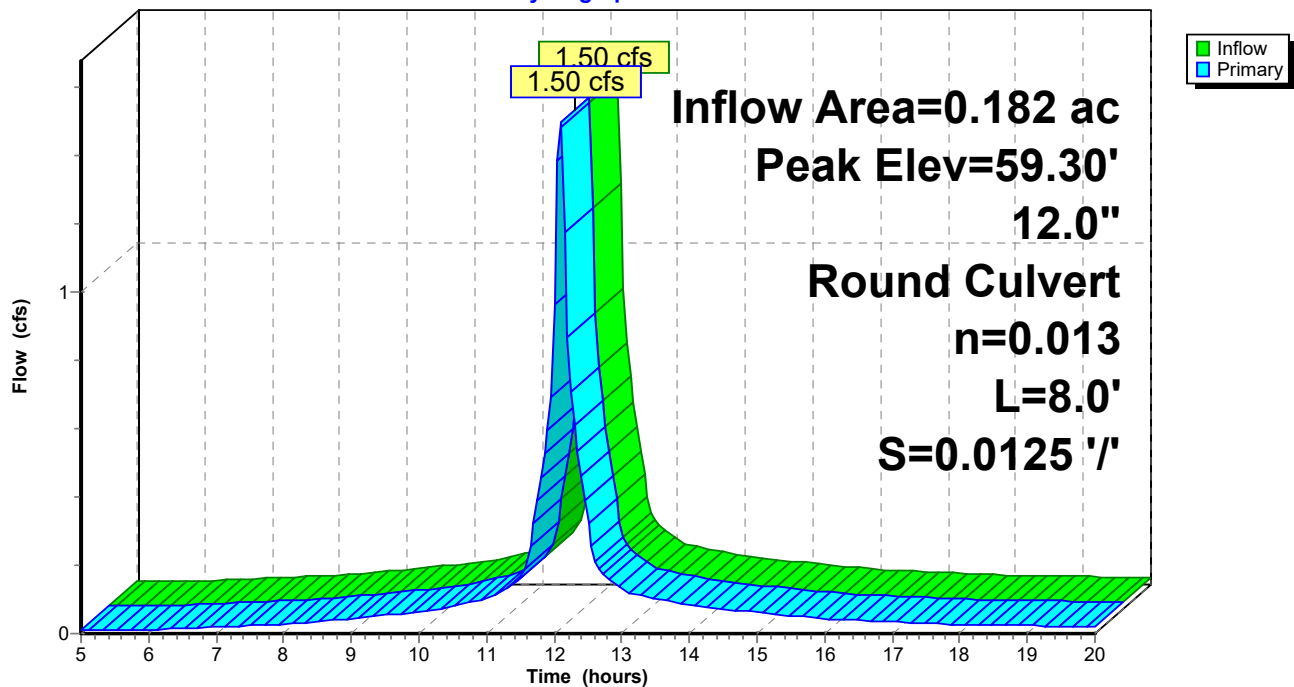
Device	Routing	Invert	Outlet Devices
#1	Primary	58.50'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.50' / 58.40' S= 0.0125 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.12' (Flood elevation advised)

[81] Warning: Exceeded Pond 41P by 0.38' @ 12.10 hrs

[79] Warning: Submerged Pond 42P Primary device # 1 INLET by 0.62'

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

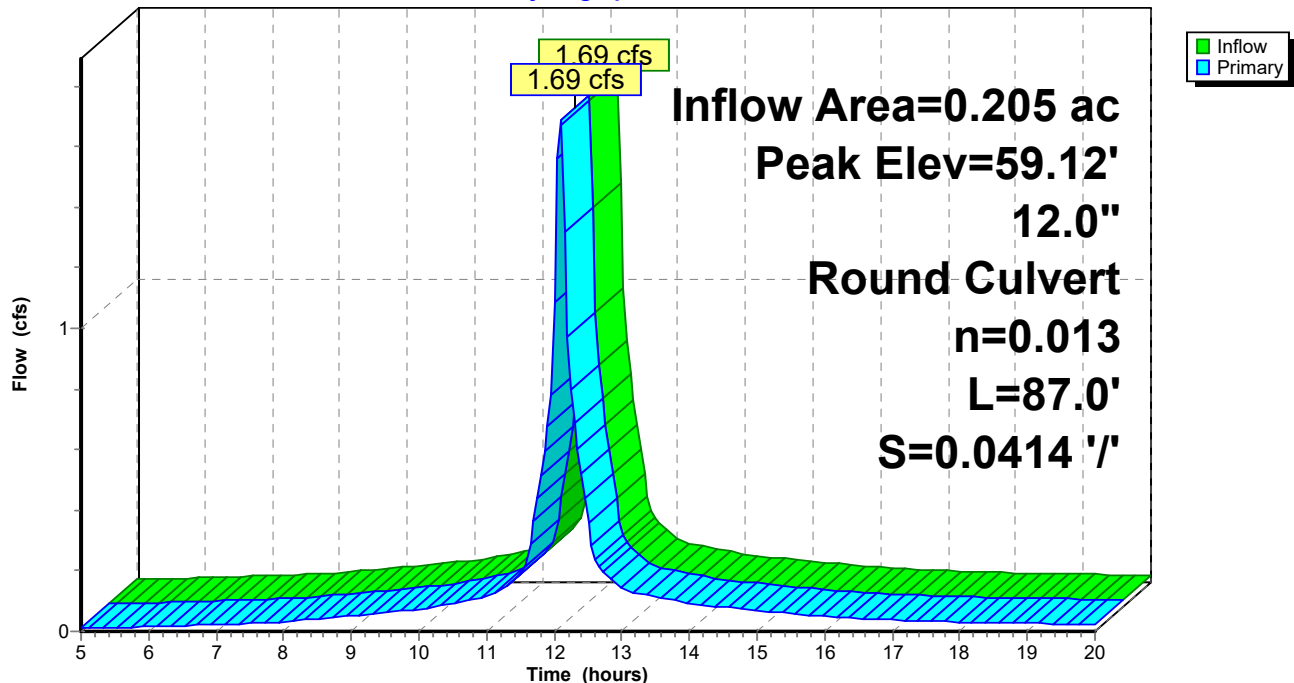
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 59.12' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	58.30'	12.0" Round Culvert L= 87.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.30' / 54.70' S= 0.0414 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 56.10' (Flood elevation advised)

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

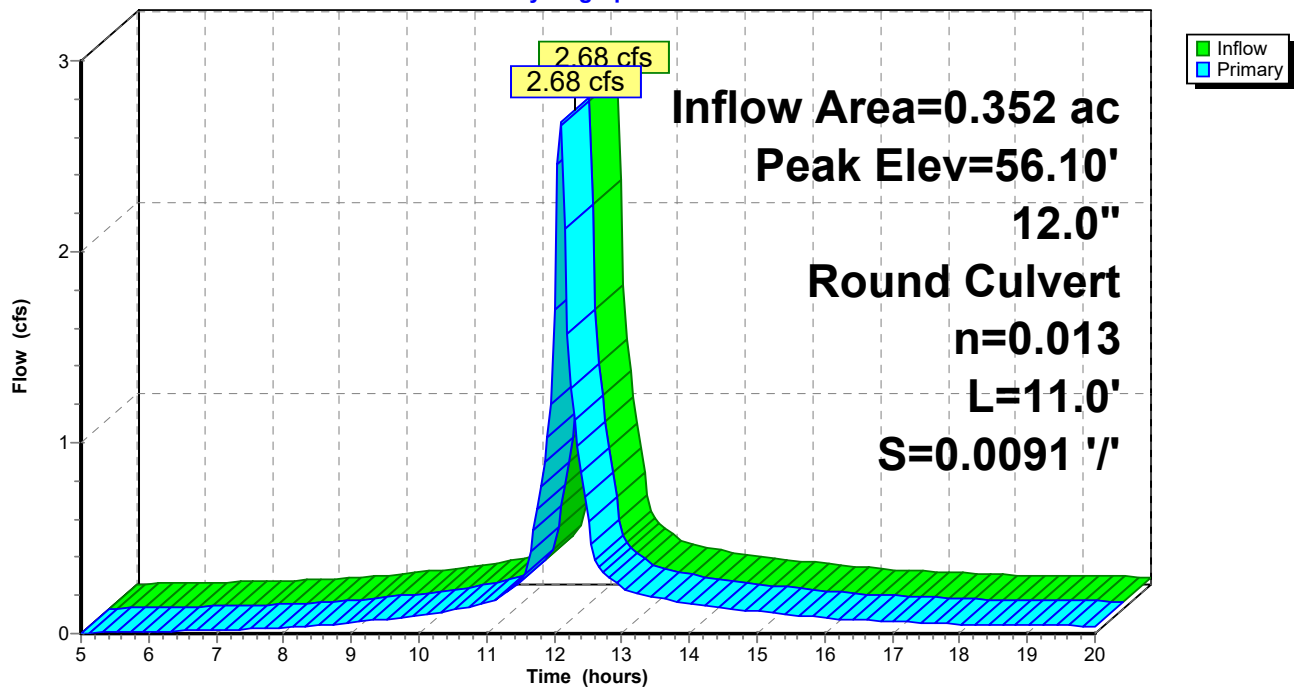
Device	Routing	Invert	Outlet Devices
#1	Primary	54.80'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.80' / 54.70' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 55.45' (Flood elevation advised)

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

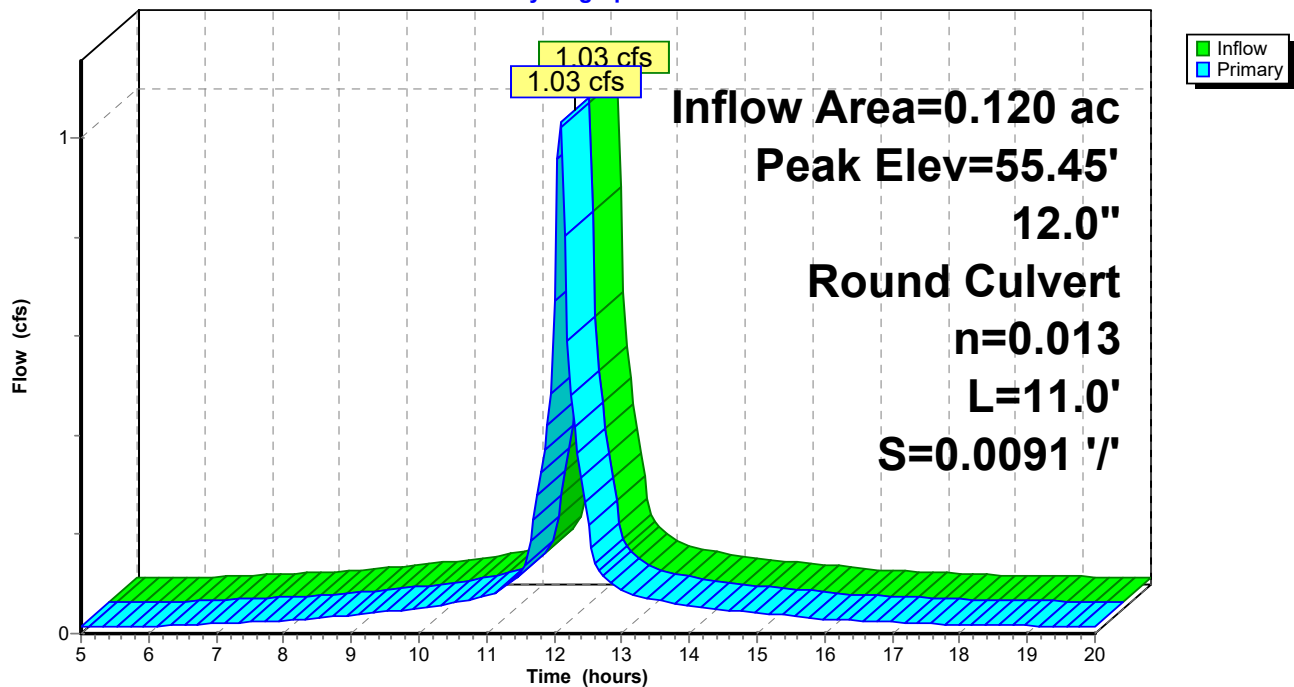
Device	Routing	Invert	Outlet Devices
#1	Primary	54.80'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.80' / 54.70' S= 0.0091 ' S= 0.0091 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 56.64' (Flood elevation advised)

[81] Warning: Exceeded Pond 46P by 0.53' @ 12.10 hrs

[81] Warning: Exceeded Pond 47P by 1.18' @ 12.10 hrs

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

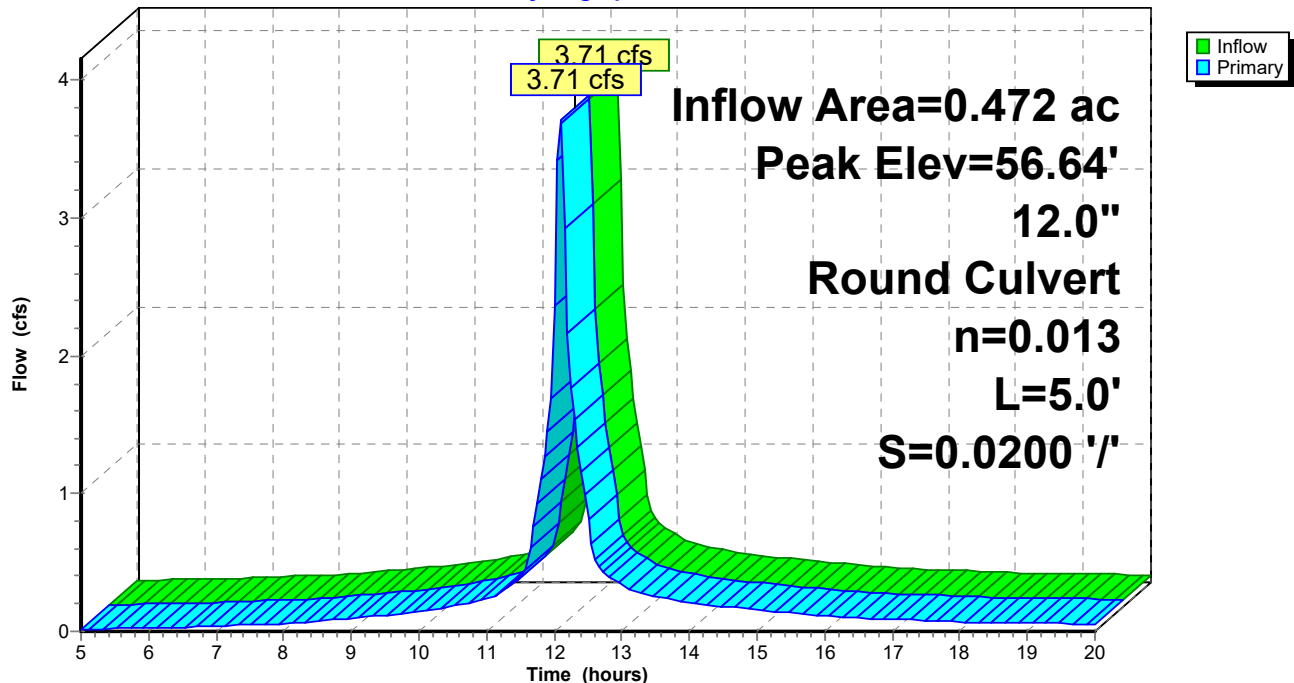
Device	Routing	Invert	Outlet Devices
#1	Primary	54.60'	12.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0200 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[93] Warning: Storage range exceeded by 0.27'

[88] Warning: Qout>Qin may require smaller dt or Finer Routing

[81] Warning: Exceeded Pond 48P by 1.73' @ 12.55 hrs

[81] Warning: Exceeded Pond 206P by 1.78' @ 12.55 hrs

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	55.25'W x 58.58'L x 3.00'H Field A 0.223 af Overall - 0.111 af Embedded = 0.112 af x 40.0% Voids
#2A	54.50'	0.111 af	ADS_StormTech SC-740 b +Cap x 104 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 104 Chambers in 13 Rows 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'	1.020 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 50.00'
#2	Primary	54.00'	12.0" Round Culvert L= 76.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.00' / 51.50' S= 0.0329 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	56.00'	4.0" Vert. Orifice/Grate X 3.00 C= 0.600 Limited to weir flow at low heads
#4	Device 2	56.80'	4.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32
#5	Primary	54.00'	12.0" Round Culvert L= 76.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.00' / 51.00' S= 0.0395 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#6	Device 5	56.80'	4.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

#7 Device 5 56.00' **4.0" Vert. Orifice/Grate X 3.00** C= 0.600
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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 13 rows = 69.0 cf

8 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 58.58' Row Length

13 Rows x 51.0" Wide = 55.25' Base Width

6.0" Stone Base + 30.0" Chamber Height = 3.00' Field Height

104 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 13 Rows = 4,846.8 cf Chamber Storage

9,709.1 cf Field - 4,846.8 cf Chambers = 4,862.3 cf Stone x 40.0% Voids = 1,944.9 cf Stone Storage

Chamber Storage + Stone Storage = 6,791.7 cf = 0.156 af

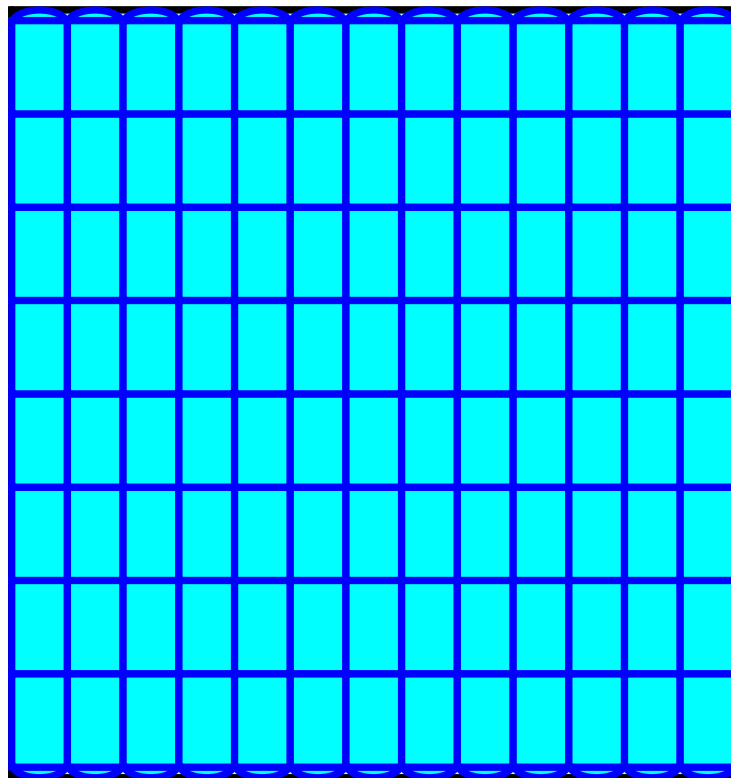
Overall Storage Efficiency = 70.0%

Overall System Size = 58.58' x 55.25' x 3.00'

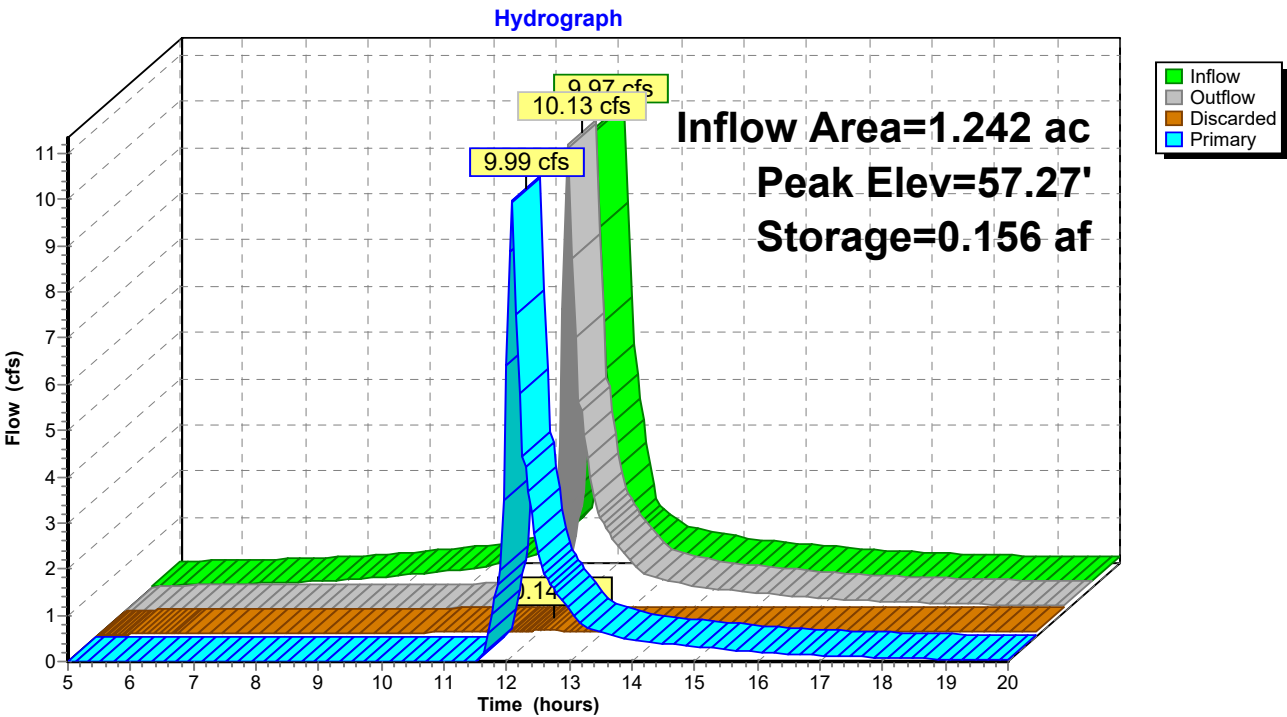
104 Chambers

359.6 cy Field

180.1 cy Stone



Pond 49P: Sub. Inf. 4



Summary for Pond 52P: CB 20

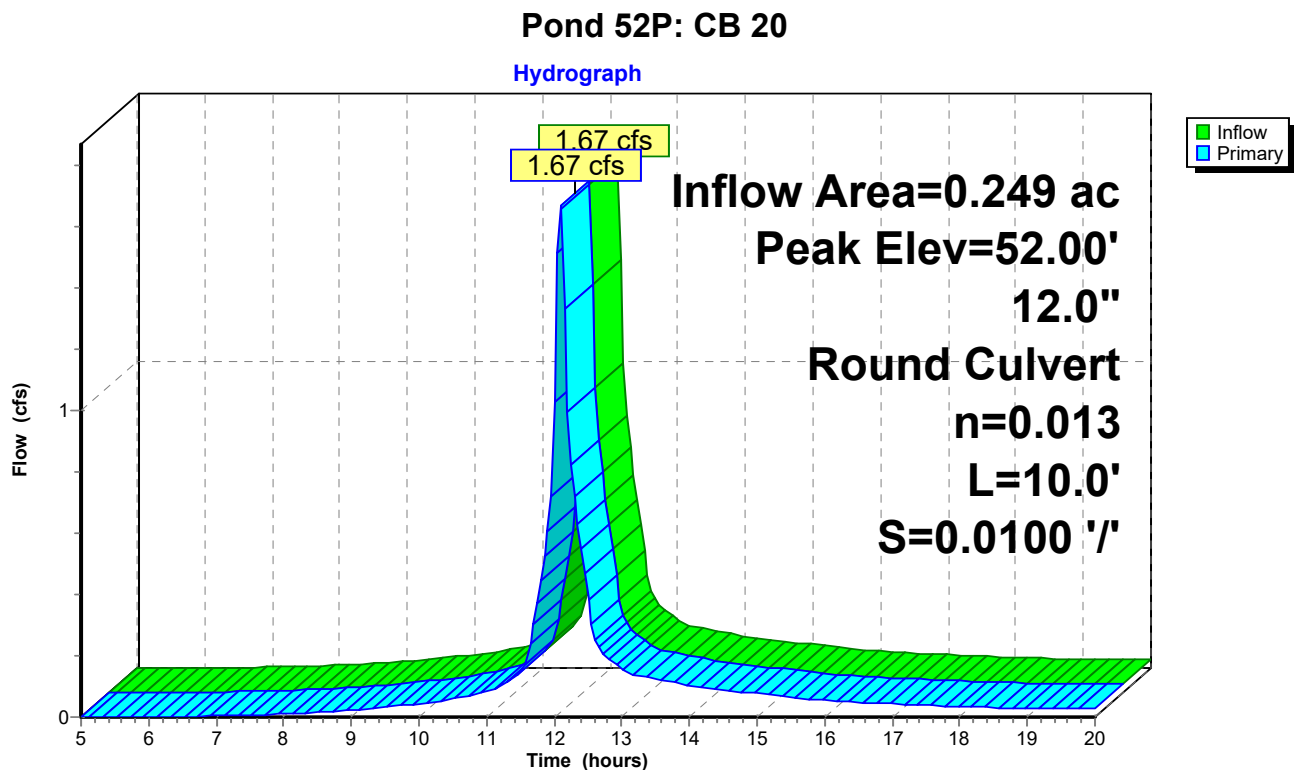
[57] Hint: Peaked at 52.00' (Flood elevation advised)

Inflow Area = 0.249 ac, 61.75% Impervious, Inflow Depth > 5.54" for 100-Year event
 Inflow = 1.67 cfs @ 12.09 hrs, Volume= 0.115 af
 Outflow = 1.67 cfs @ 12.09 hrs, Volume= 0.115 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.67 cfs @ 12.09 hrs, Volume= 0.115 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= 52.00' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	51.13'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.13' / 51.03' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.63 cfs @ 12.09 hrs HW=51.99' (Free Discharge)
 1=Culvert (Barrel Controls 1.63 cfs @ 3.06 fps)



Summary for Pond 53P: CB 21

[57] Hint: Peaked at 52.36' (Flood elevation advised)

Inflow Area = 0.346 ac, 71.48% Impervious, Inflow Depth > 6.26" for 100-Year event
 Inflow = 2.56 cfs @ 12.09 hrs, Volume= 0.180 af
 Outflow = 2.56 cfs @ 12.09 hrs, Volume= 0.180 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.56 cfs @ 12.09 hrs, Volume= 0.180 af
 Routed to Pond 54P : DMH 15

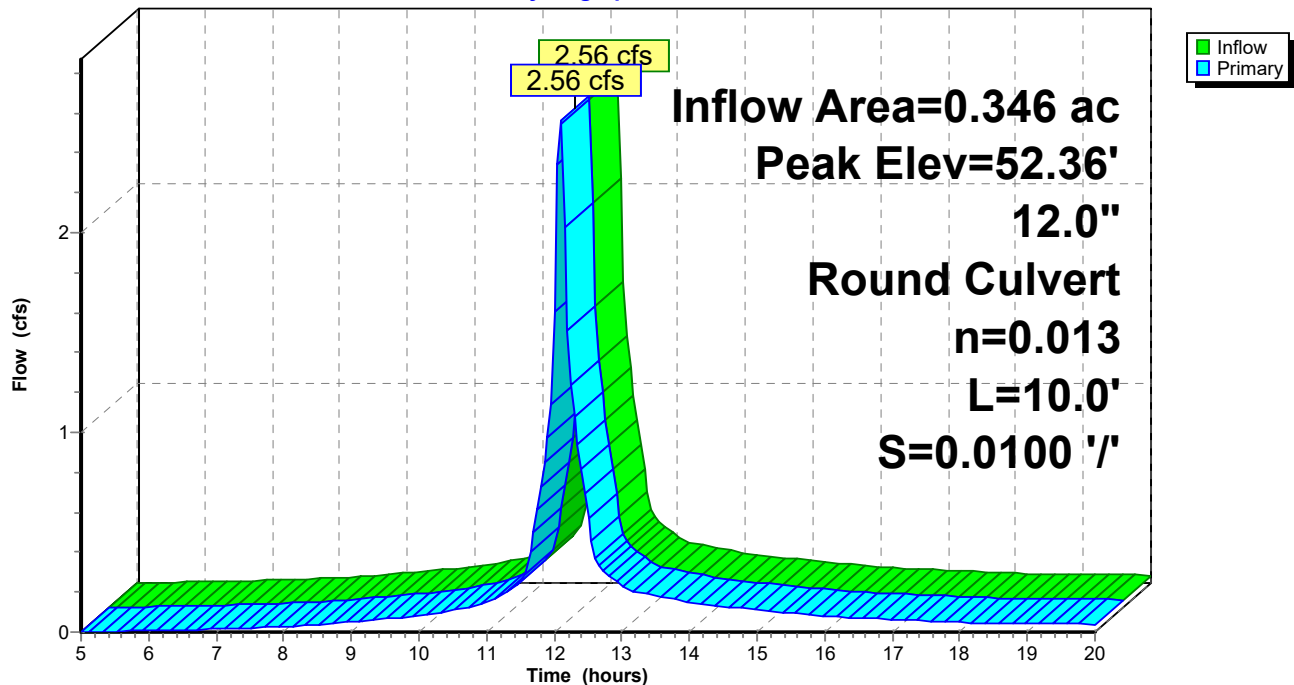
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 52.36' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	51.13'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.13' / 51.03' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.50 cfs @ 12.09 hrs HW=52.33' (Free Discharge)
 ↑1=Culvert (Inlet Controls 2.50 cfs @ 3.19 fps)

Pond 53P: CB 21

Hydrograph



Summary for Pond 54P: DMH 15

[57] Hint: Peaked at 53.43' (Flood elevation advised)

[81] Warning: Exceeded Pond 52P by 1.42' @ 12.10 hrs

[81] Warning: Exceeded Pond 53P by 1.06' @ 12.10 hrs

Inflow Area = 0.595 ac, 67.40% Impervious, Inflow Depth > 5.96" for 100-Year event
 Inflow = 4.23 cfs @ 12.09 hrs, Volume= 0.295 af
 Outflow = 4.23 cfs @ 12.09 hrs, Volume= 0.295 af, Atten= 0%, Lag= 0.0 min
 Primary = 4.23 cfs @ 12.09 hrs, Volume= 0.295 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= 53.43' @ 12.09 hrs

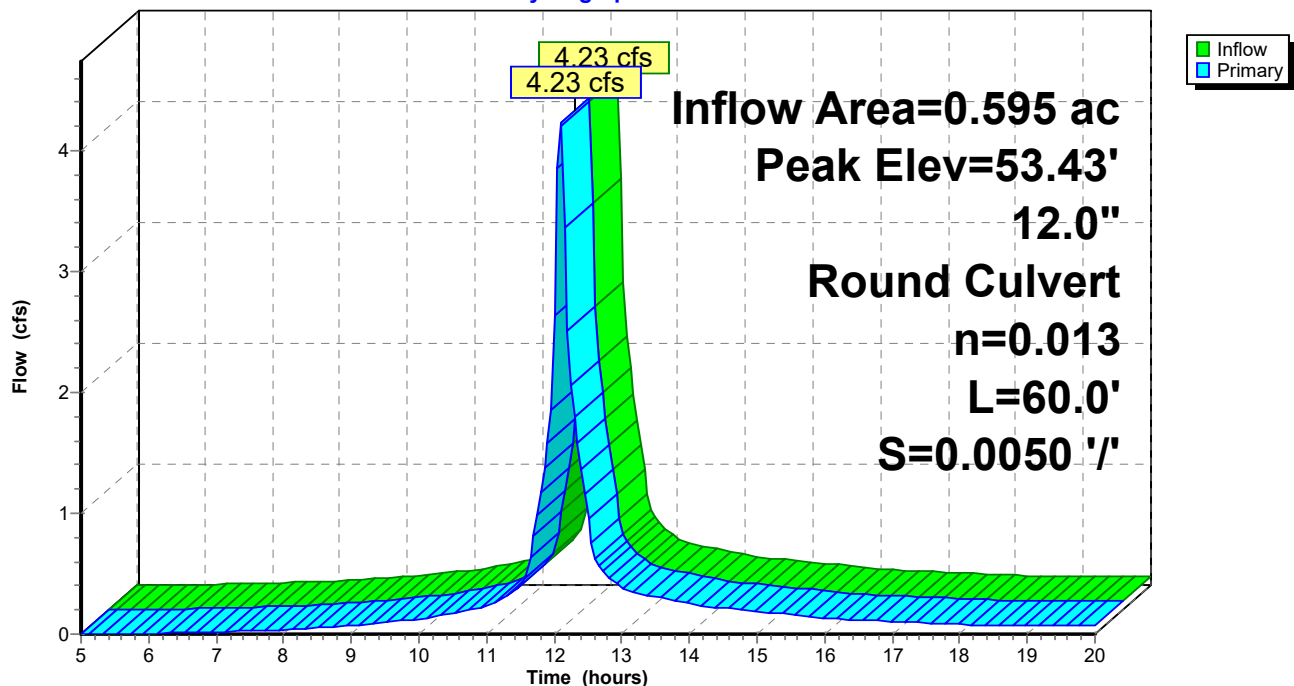
Device	Routing	Invert	Outlet Devices
#1	Primary	50.93'	12.0" Round Culvert L= 60.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.93' / 50.63' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=4.14 cfs @ 12.09 hrs HW=53.35' (Free Discharge)

↑**1=Culvert** (Inlet Controls 4.14 cfs @ 5.27 fps)

Pond 54P: DMH 15

Hydrograph



Summary for Pond 55P: DMH 16

[57] Hint: Peaked at 53.10' (Flood elevation advised)

[79] Warning: Submerged Pond 54P Primary device # 1 INLET by 2.15'

Inflow Area = 0.595 ac, 67.40% Impervious, Inflow Depth > 5.96" for 100-Year event
 Inflow = 4.23 cfs @ 12.09 hrs, Volume= 0.295 af
 Outflow = 4.23 cfs @ 12.09 hrs, Volume= 0.295 af, Atten= 0%, Lag= 0.0 min
 Primary = 4.23 cfs @ 12.09 hrs, Volume= 0.295 af
 Routed to Pond 56P : Inf. Basin 4

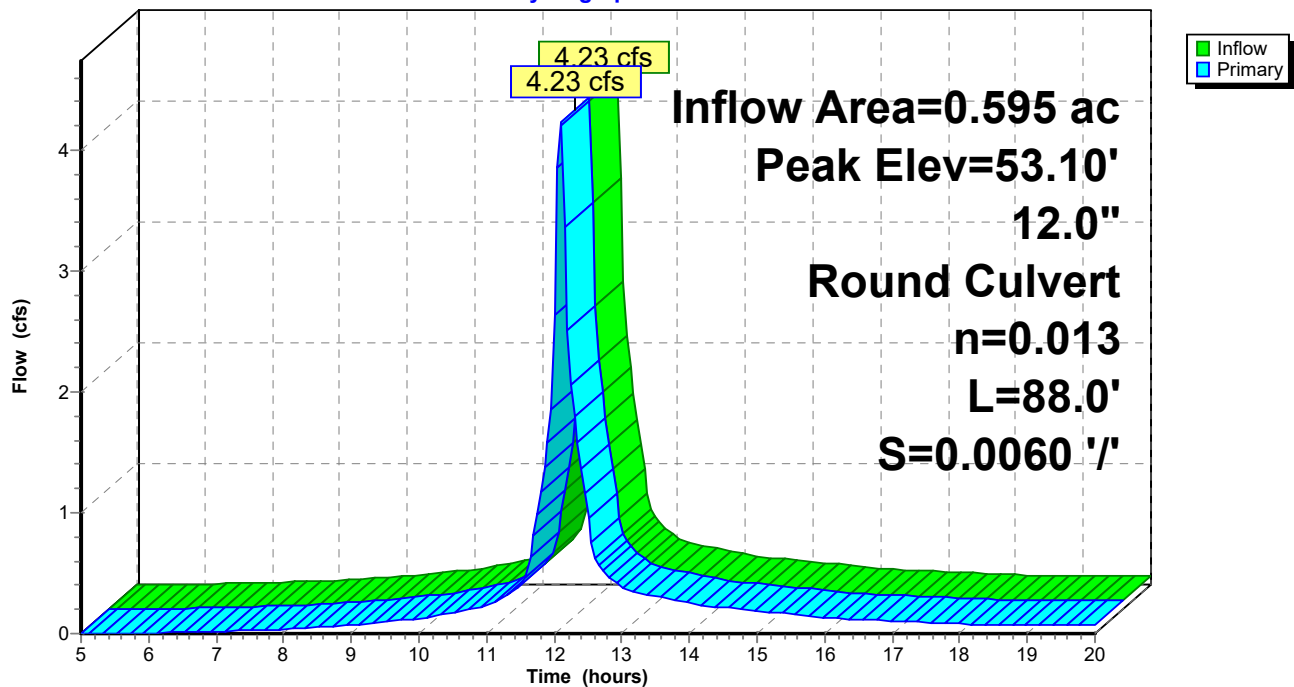
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 53.10' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.53'	12.0" Round Culvert L= 88.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.53' / 50.00' S= 0.0060 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=4.14 cfs @ 12.09 hrs HW=53.01' (Free Discharge)
 1=Culvert (Barrel Controls 4.14 cfs @ 5.27 fps)

Pond 55P: DMH 16

Hydrograph



Summary for Pond 56P: Inf. Basin 4

[81] Warning: Exceeded Pond 55P by 1.21' @ 12.65 hrs

Inflow Area = 0.971 ac, 43.64% Impervious, Inflow Depth > 4.19" for 100-Year event
 Inflow = 4.45 cfs @ 12.09 hrs, Volume= 0.339 af
 Outflow = 1.00 cfs @ 12.55 hrs, Volume= 0.338 af, Atten= 78%, Lag= 27.6 min
 Discarded = 1.00 cfs @ 12.55 hrs, Volume= 0.338 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= 52.18' @ 12.55 hrs Surf.Area= 3,122 sf Storage= 4,819 cf

Plug-Flow detention time= 46.8 min calculated for 0.337 af (100% of inflow)
 Center-of-Mass det. time= 46.2 min (826.5 - 780.4)

Volume	Invert	Avail.Storage	Storage Description
#1	50.00'	11,770 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (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'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 48.00'
#2	Secondary	53.50'	6.0' long x 6.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.37 2.51 2.70 2.68 2.68 2.67 2.65 2.65 2.65 2.65 2.66 2.66 2.67 2.69 2.72 2.76 2.83

Discarded OutFlow Max=1.00 cfs @ 12.55 hrs HW=52.18' (Free Discharge)

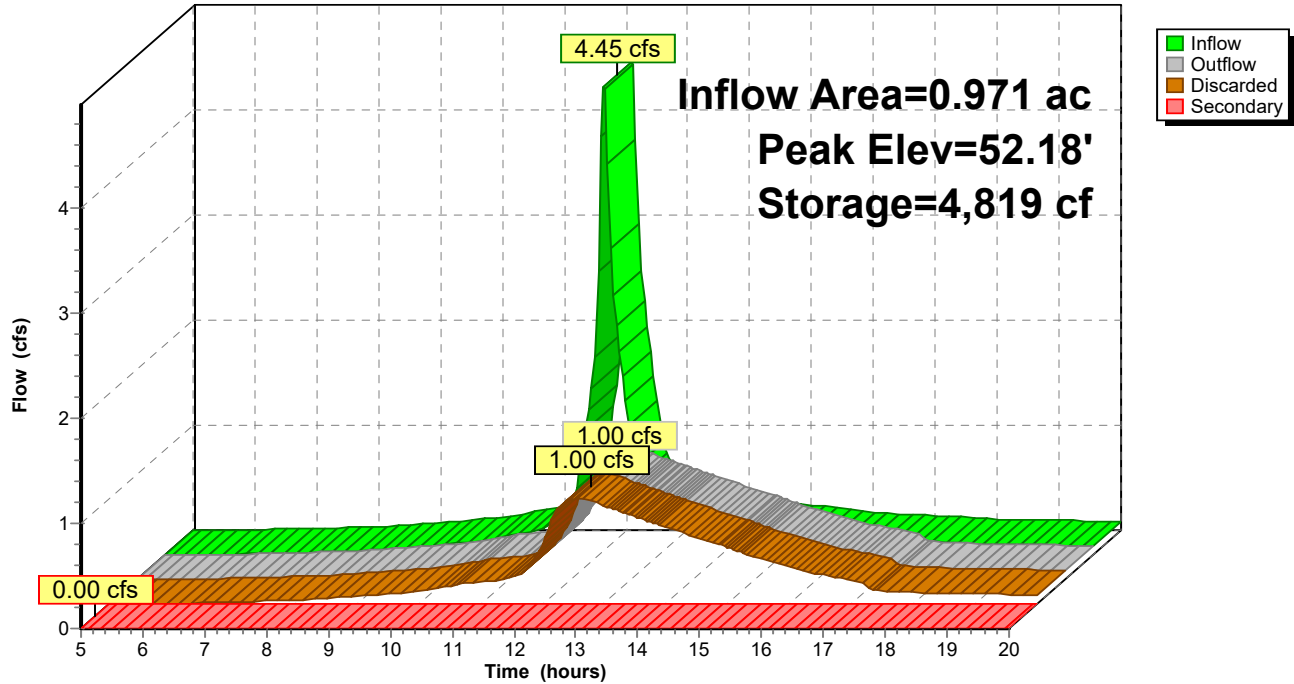
↑**1=Exfiltration** (Controls 1.00 cfs)

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

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 208P by 0.92' @ 12.25 hrs

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 = 10.62 cfs @ 12.19 hrs, Volume= 1.081 af, Atten= 35%, Lag= 6.0 min
 Primary = 10.62 cfs @ 12.19 hrs, Volume= 1.081 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= 63.25' @ 12.19 hrs Surf.Area= 0.127 ac Storage= 0.264 af

Plug-Flow detention time= 74.0 min calculated for 1.081 af (89% of inflow)
 Center-of-Mass det. time= 37.4 min (784.4 - 747.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	60.00'	0.113 af	53.75'W x 103.30'L x 3.50'H Field A 0.446 af Overall - 0.164 af Embedded = 0.282 af x 40.0% Voids
#2A	60.50'	0.164 af	ADS_StormTech SC-740 b +Cap x 154 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 154 Chambers in 11 Rows Cap Storage= 2.7 cf x 2 x 11 rows = 58.4 cf
0.277 af			Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	60.00'	18.0" Round Culvert L= 29.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.00' / 56.00' S= 0.1379 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	60.50'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	61.50'	4.0' long Sharp-Crested Rectangular Weir 2 End Contraction(s)

Primary OutFlow Max=10.58 cfs @ 12.19 hrs HW=63.23' (Free Discharge)

1=Culvert (Inlet Controls 10.58 cfs @ 5.99 fps)

2=Orifice/Grate (Passes < 0.04 cfs potential flow)

3=Sharp-Crested Rectangular Weir (Passes < 27.17 cfs potential flow)

Pond 60P: Sub. Det. 1 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 11 rows = 58.4 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

14 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 101.30' Row Length +12.0" End Stone x 2 = 103.30' Base Length

11 Rows x 51.0" Wide + 6.0" Spacing x 10 + 12.0" Side Stone x 2 = 53.75' Base Width

6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

154 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 11 Rows = 7,133.2 cf Chamber Storage

19,432.7 cf Field - 7,133.2 cf Chambers = 12,299.5 cf Stone x 40.0% Voids = 4,919.8 cf Stone Storage

Chamber Storage + Stone Storage = 12,053.0 cf = 0.277 af

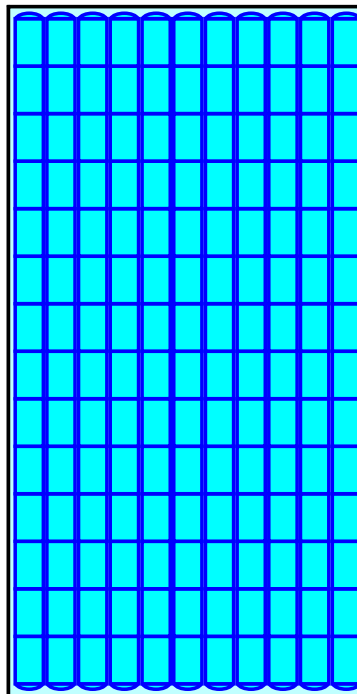
Overall Storage Efficiency = 62.0%

Overall System Size = 103.30' x 53.75' x 3.50'

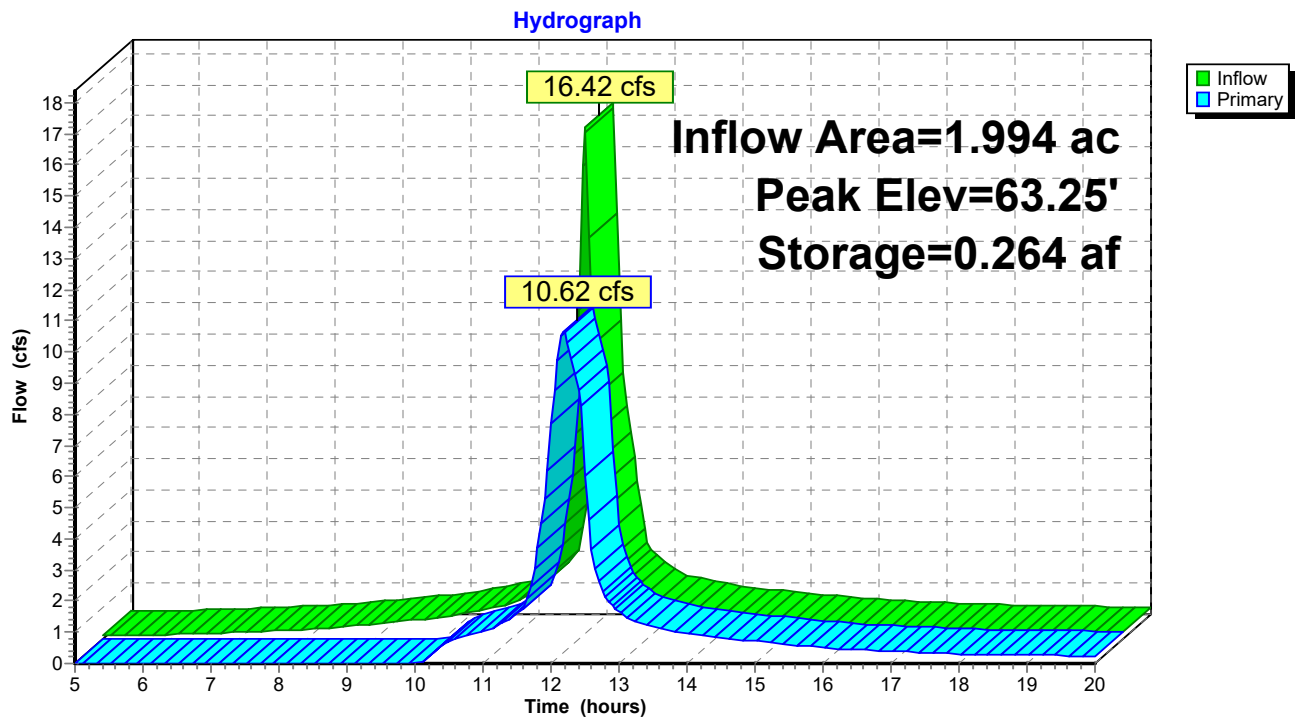
154 Chambers

719.7 cy Field

455.5 cy Stone



Pond 60P: Sub. Det. 1



Summary for Pond 61P: CB 8

[57] Hint: Peaked at 49.27' (Flood elevation advised)

Inflow Area = 0.264 ac, 68.05% Impervious, Inflow Depth > 6.02" for 100-Year event
 Inflow = 1.90 cfs @ 12.09 hrs, Volume= 0.132 af
 Outflow = 1.90 cfs @ 12.09 hrs, Volume= 0.132 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.90 cfs @ 12.09 hrs, Volume= 0.132 af
 Routed to Pond 171P : DMH 6

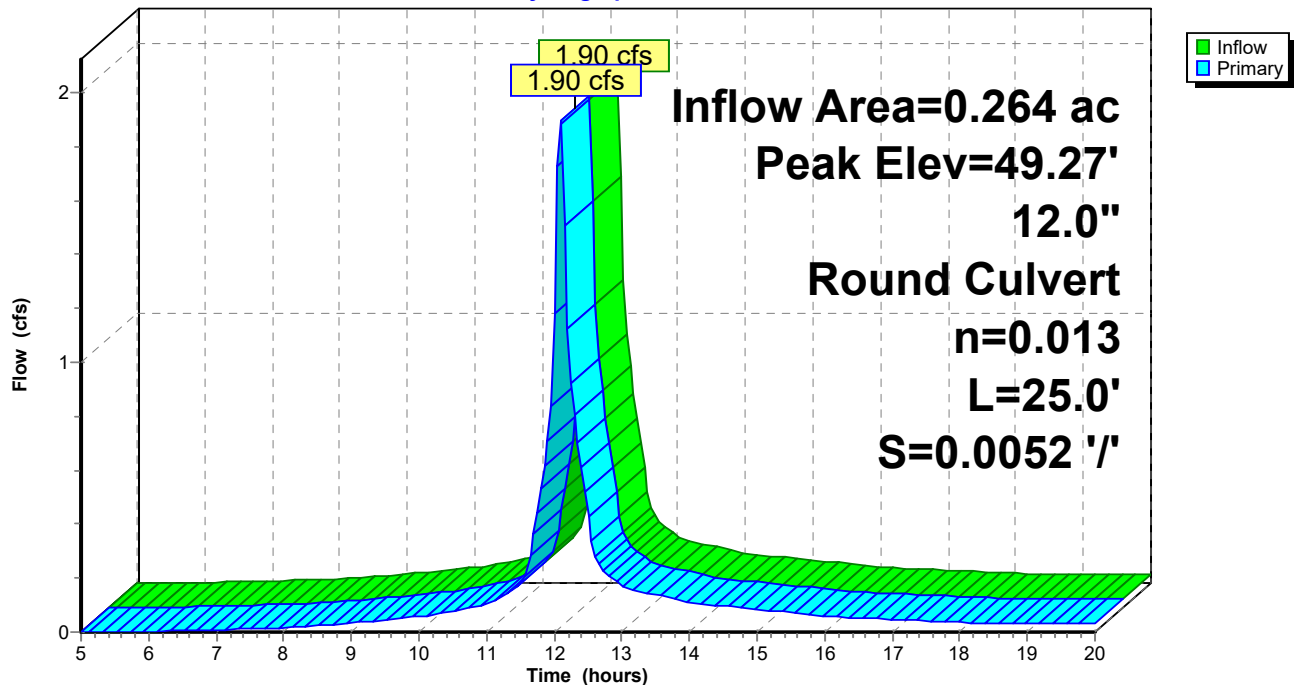
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 49.27' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	48.30'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.30' / 48.17' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.85 cfs @ 12.09 hrs HW=49.26' (Free Discharge)
 1=Culvert (Barrel Controls 1.85 cfs @ 3.07 fps)

Pond 61P: CB 8

Hydrograph



Summary for Pond 62P: CB 66

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.18' (Flood elevation advised)

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

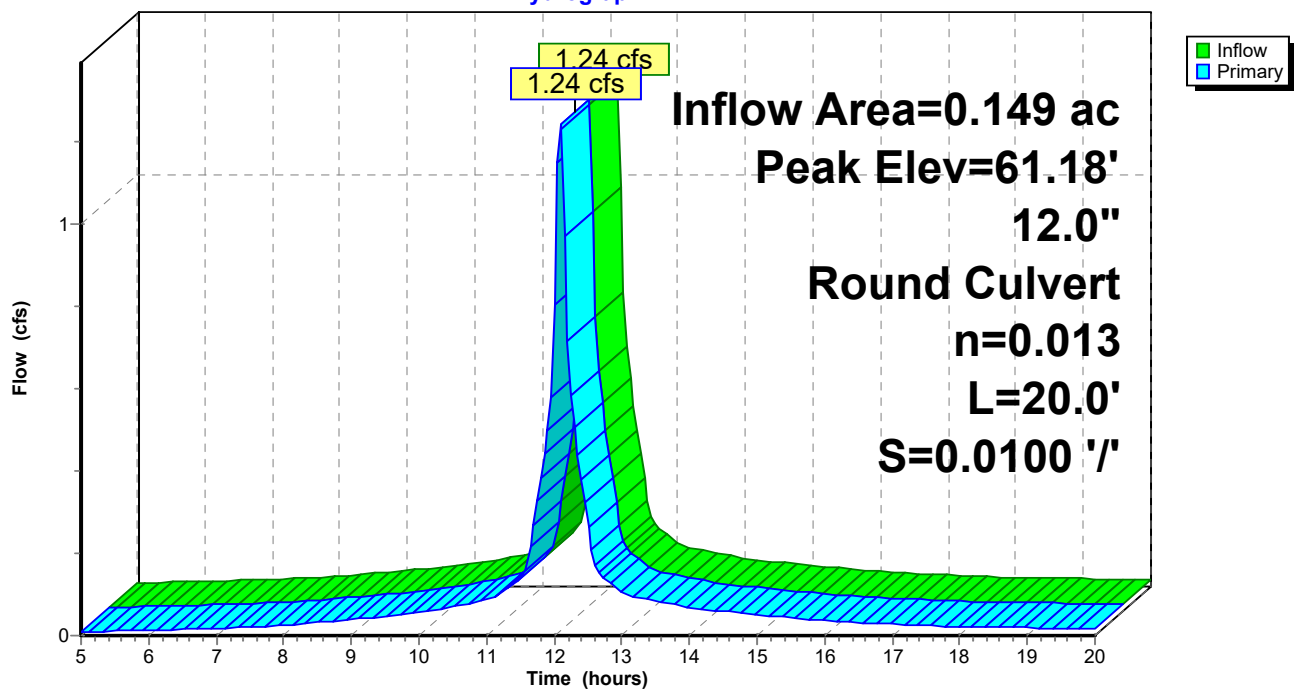
Device	Routing	Invert	Outlet Devices
#1	Primary	60.50'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.50' / 60.30' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.90' (Flood elevation advised)

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

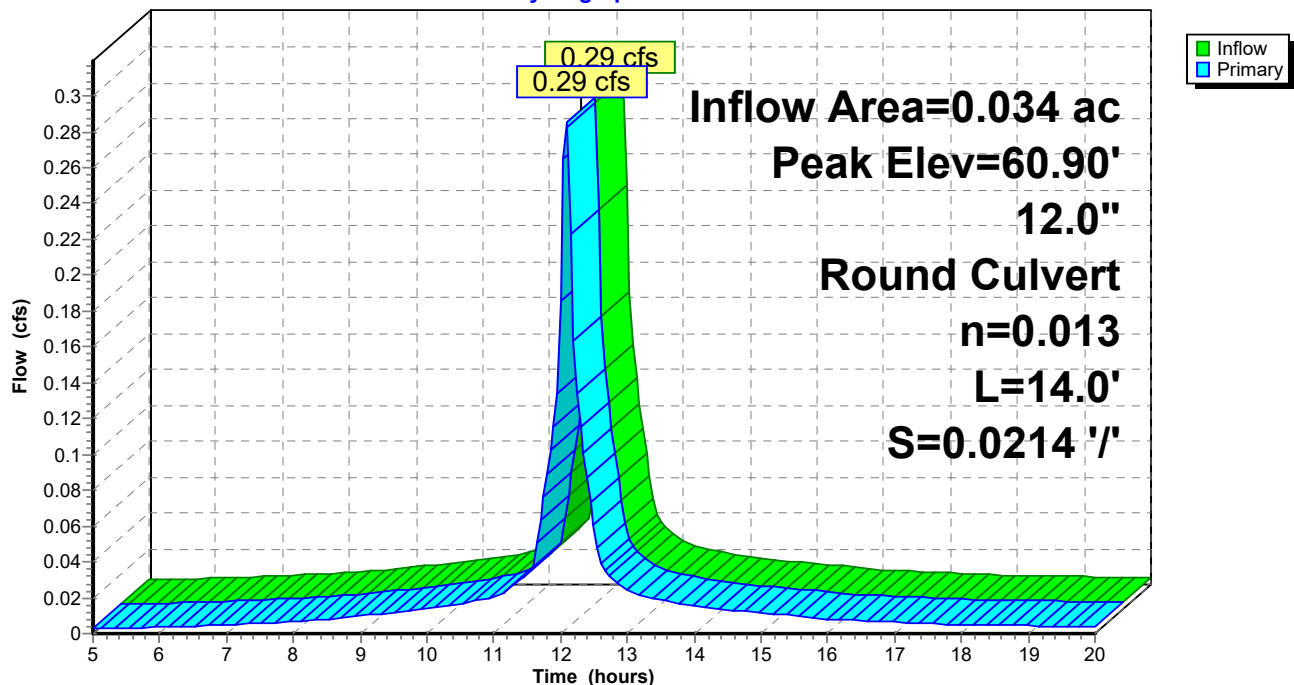
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 60.90' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	60.60'	12.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.60' / 60.30' S= 0.0214 '/' Cc= 0.900 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

Hydrograph



Summary for Pond 64P: DMH 47

[82] Warning: Early inflow requires earlier time span
 [57] Hint: Peaked at 63.42' (Flood elevation advised)
 [81] Warning: Exceeded Pond 62P by 2.21' @ 12.10 hrs
 [81] Warning: Exceeded Pond 63P by 2.49' @ 12.10 hrs
 [81] Warning: Exceeded Pond 75P by 0.49' @ 12.10 hrs

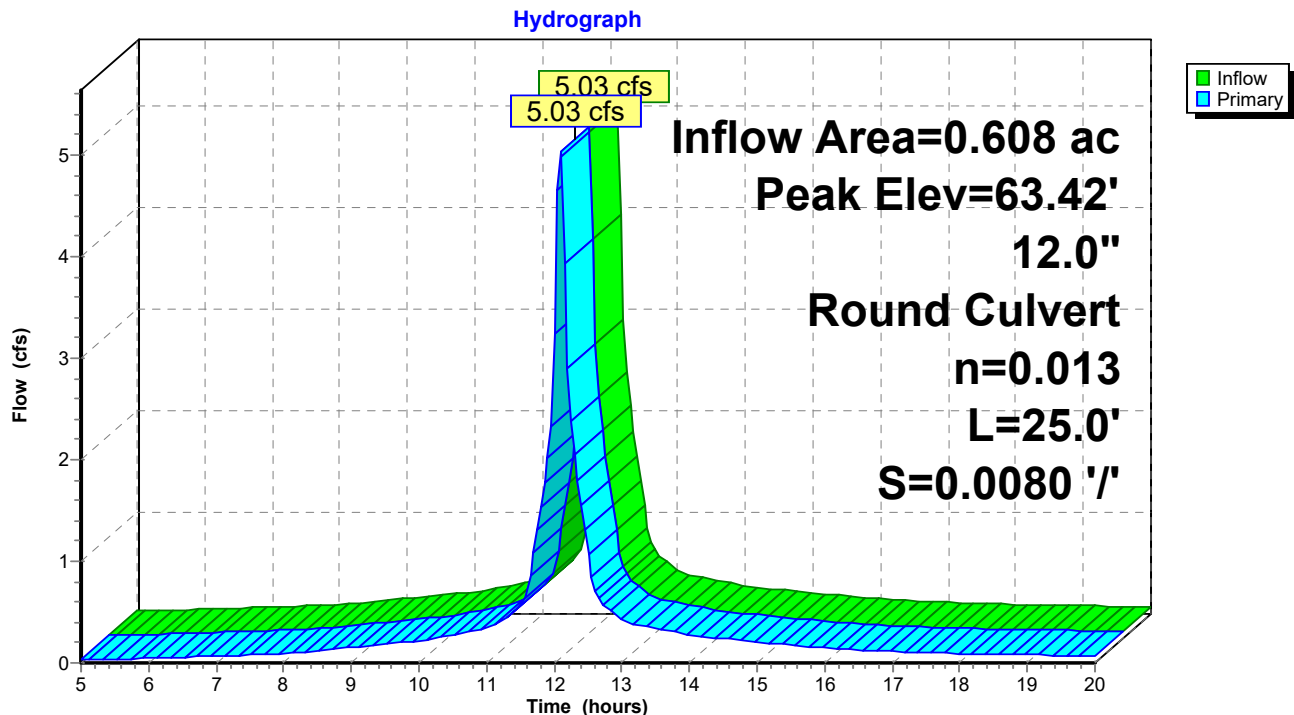
Inflow Area = 0.608 ac, 68.77% Impervious, Inflow Depth > 7.37" for 100-Year event
 Inflow = 5.03 cfs @ 12.09 hrs, Volume= 0.374 af
 Outflow = 5.03 cfs @ 12.09 hrs, Volume= 0.374 af, Atten= 0%, Lag= 0.0 min
 Primary = 5.03 cfs @ 12.09 hrs, Volume= 0.374 af
 Routed to Pond 207P : DMH 48

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'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.10' / 59.90' S= 0.0080 '/ Cc= 0.900 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



Summary for Pond 65P: DMH 49

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.71' (Flood elevation advised)

[81] Warning: Exceeded Pond 66P by 0.04' @ 12.10 hrs

[81] Warning: Exceeded Pond 67P by 0.27' @ 12.10 hrs

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

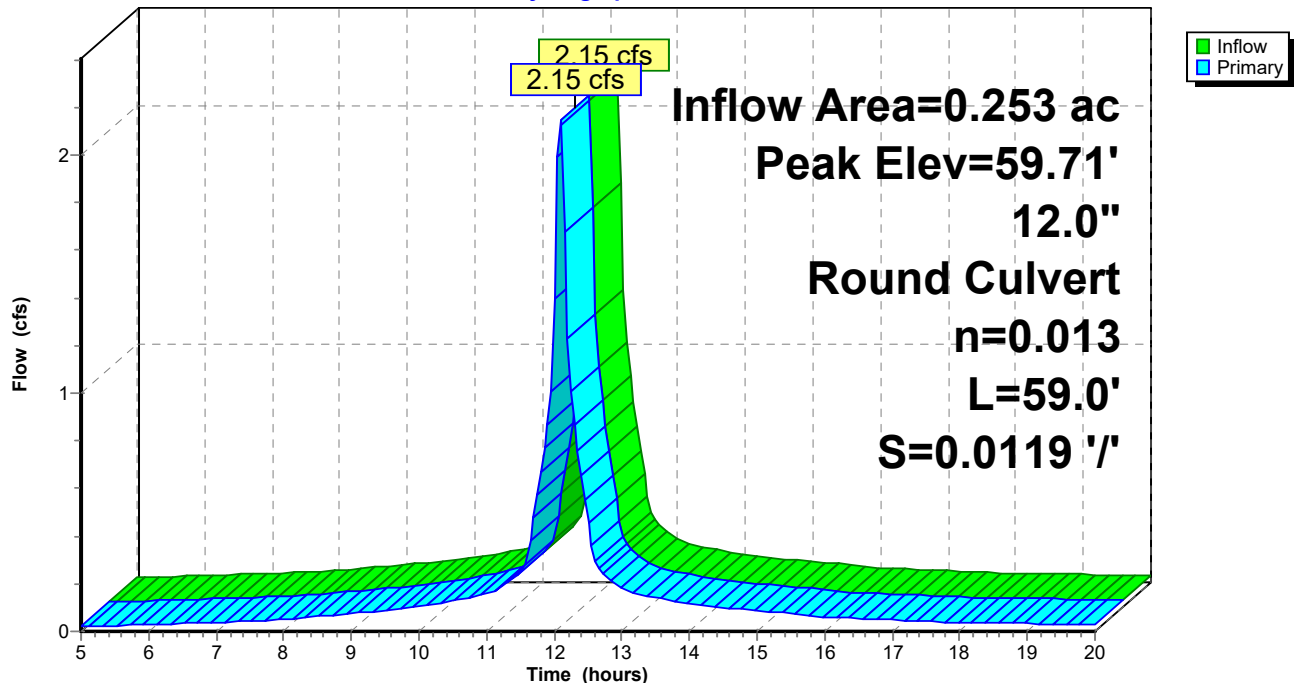
Device	Routing	Invert	Outlet Devices
#1	Primary	58.70'	12.0" Round Culvert L= 59.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.70' / 58.00' S= 0.0119 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.67' (Flood elevation advised)

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

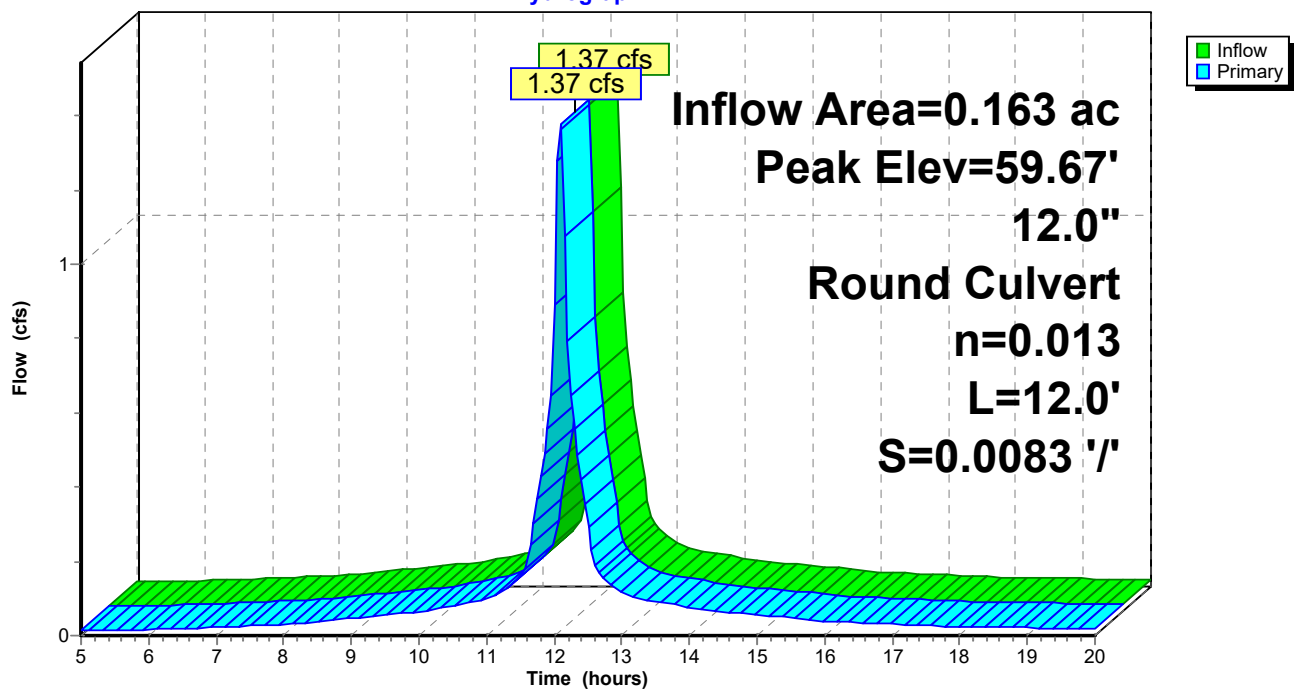
Device	Routing	Invert	Outlet Devices
#1	Primary	58.90'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.90' / 58.80' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.45' (Flood elevation advised)

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

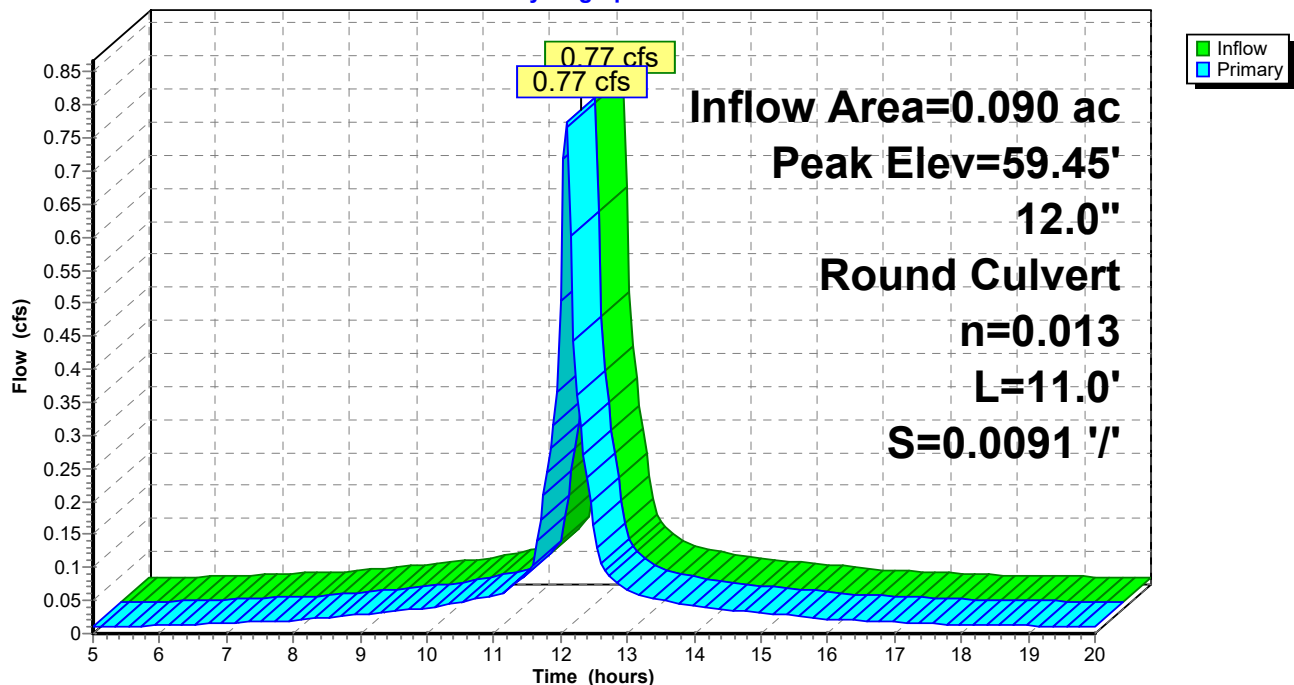
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 59.45' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	58.90'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.90' / 58.80' S= 0.0091 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[93] Warning: Storage range exceeded by 0.02'

[81] Warning: Exceeded Pond 207P by 0.76' @ 19.95 hrs

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	24.83'W x 74.40'L x 2.33'H Field A 0.099 af Overall - 0.024 af Embedded = 0.075 af x 40.0% Voids
#2A	59.80'	0.024 af	ADS_StormTech SC-310 +Cap x 70 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 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'	1.020 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 56.00'
#2	Primary	59.30'	12.0" Round Culvert L= 71.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.30' / 57.00' S= 0.0324 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	60.80'	4.0' long Sharp-Crested Vee/Trap Weir 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)

Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf

Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

10 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 72.40' Row Length +12.0" End Stone x 2 = 74.40' Base Length

7 Rows x 34.0" Wide + 6.0" Spacing x 6 + 12.0" Side Stone x 2 = 24.83' Base Width

6.0" Stone Base + 16.0" Chamber Height + 6.0" Stone Cover = 2.33' Field Height

70 Chambers x 14.7 cf = 1,031.9 cf Chamber Storage

4,311.1 cf Field - 1,031.9 cf Chambers = 3,279.1 cf Stone x 40.0% Voids = 1,311.7 cf Stone Storage

Chamber Storage + Stone Storage = 2,343.6 cf = 0.054 af

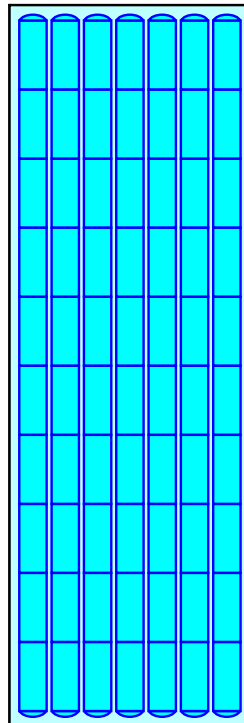
Overall Storage Efficiency = 54.4%

Overall System Size = 74.40' x 24.83' x 2.33'

70 Chambers

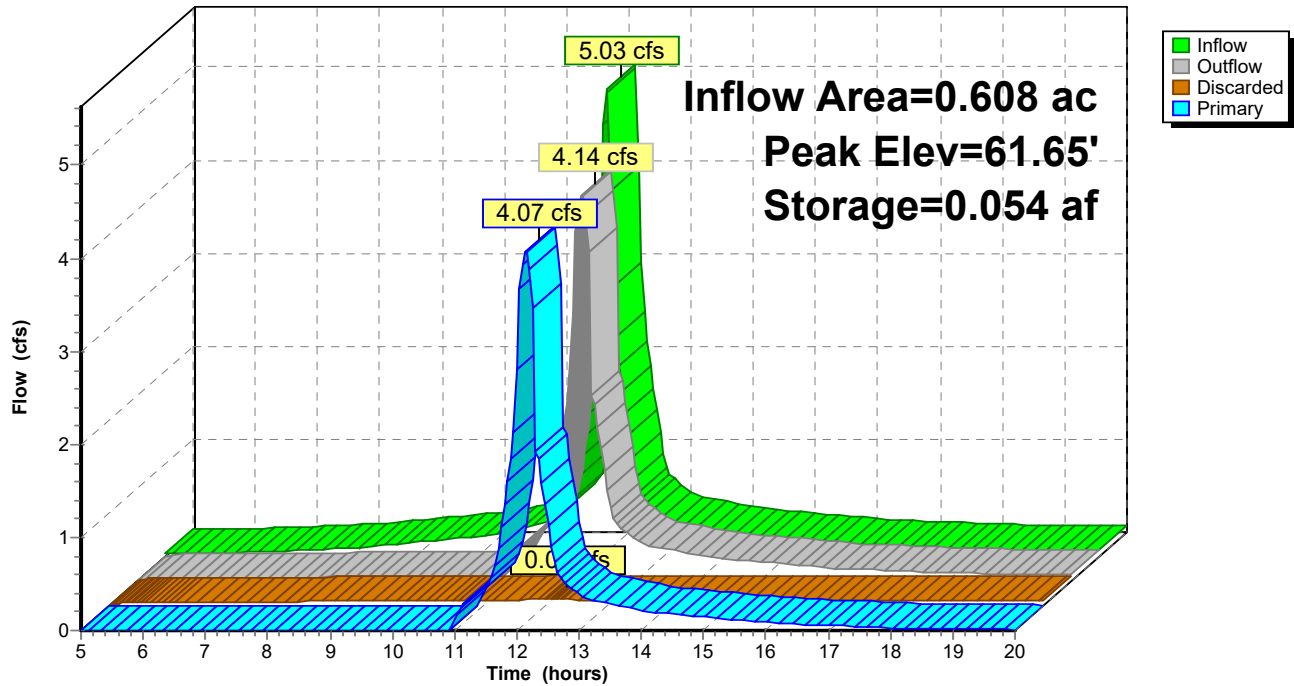
159.7 cy Field

121.4 cy Stone



Pond 68P: Sub. Inf. 5

Hydrograph



Summary for Pond 69P: CB 72

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.45' (Flood elevation advised)

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

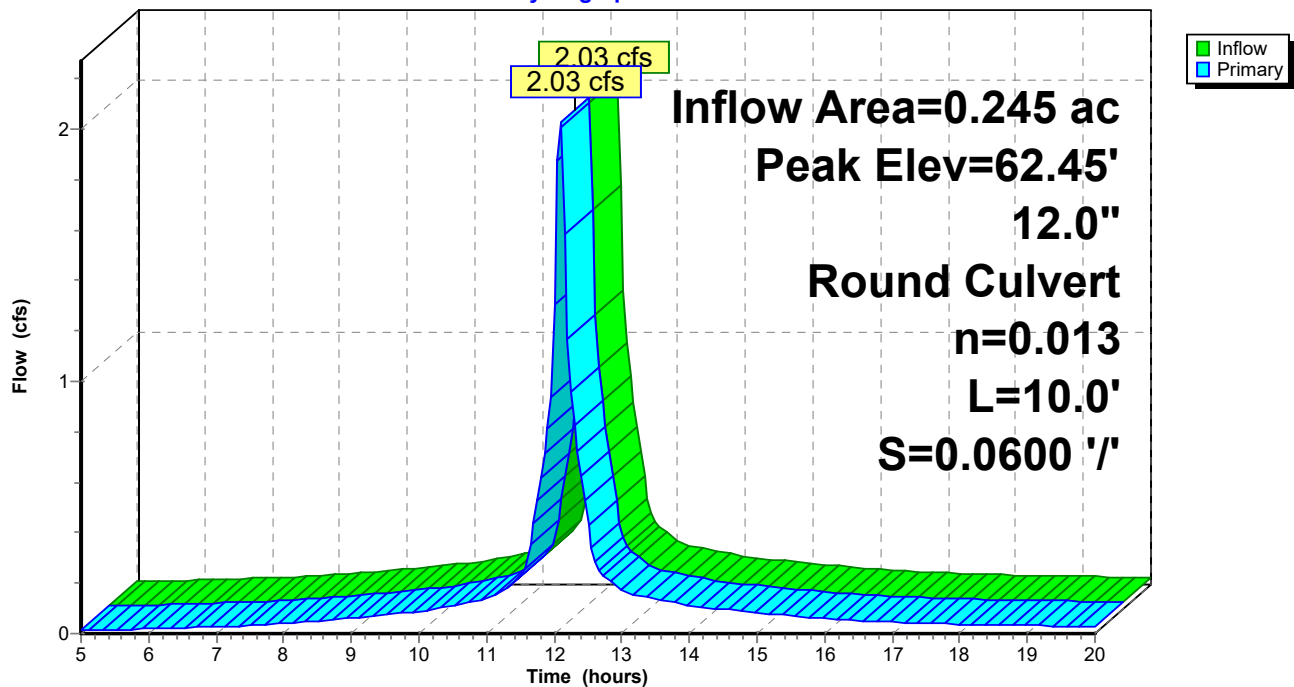
Device	Routing	Invert	Outlet Devices
#1	Primary	61.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.50' / 60.90' S= 0.0600 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.19' (Flood elevation advised)

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

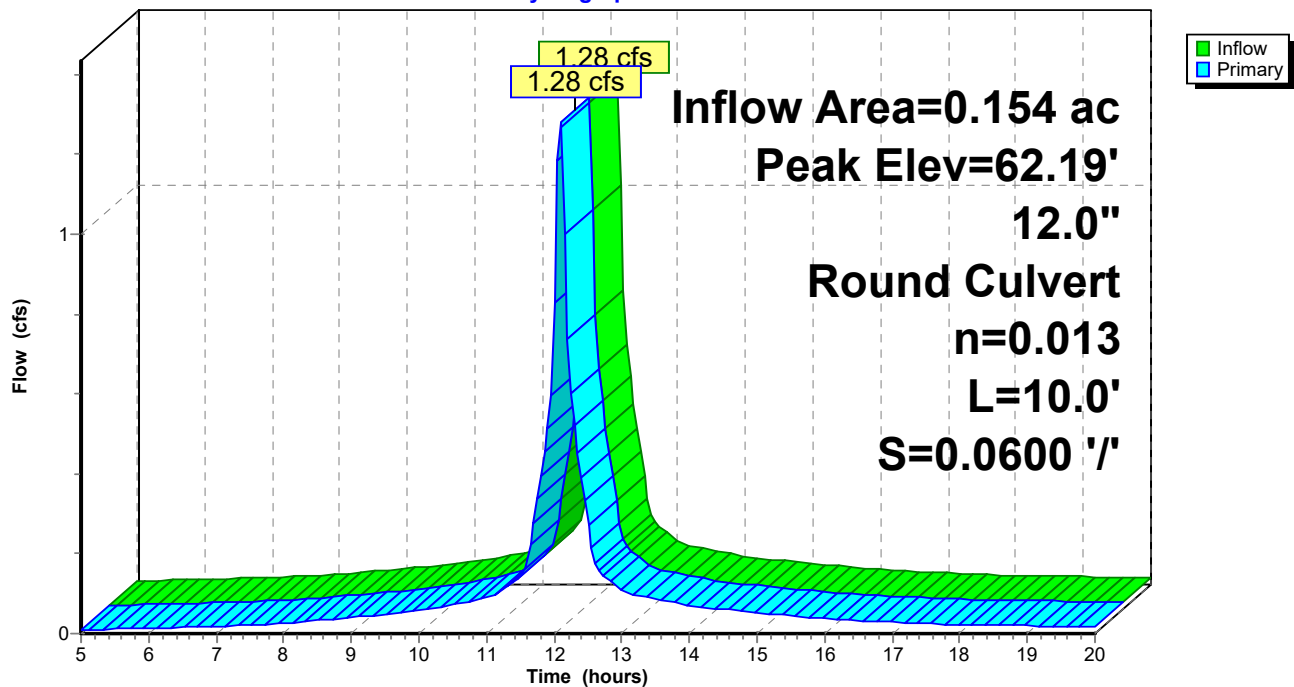
Device	Routing	Invert	Outlet Devices
#1	Primary	61.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.50' / 60.90' S= 0.0600 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.53' (Flood elevation advised)

[81] Warning: Exceeded Pond 69P by 0.06' @ 12.10 hrs

[81] Warning: Exceeded Pond 70P by 0.33' @ 12.10 hrs

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

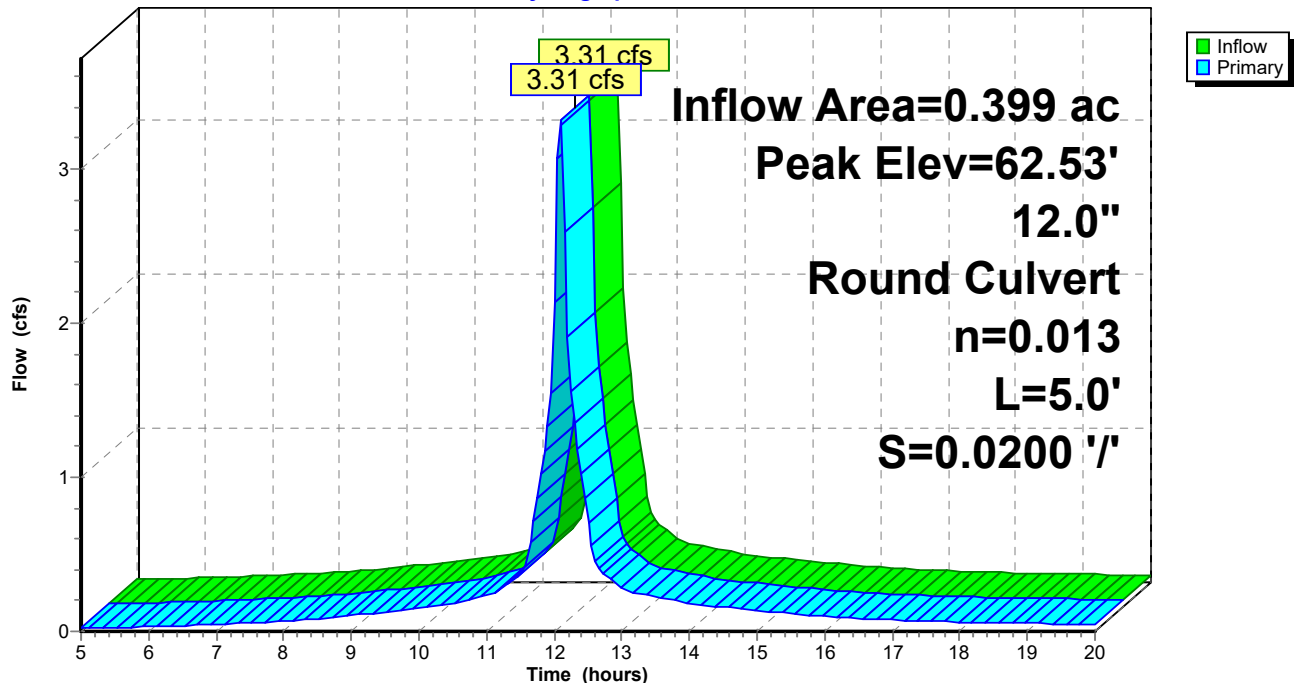
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 62.53' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	60.80'	12.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.80' / 60.70' S= 0.0200 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 71P by 0.71' @ 12.40 hrs

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	38.17'W x 38.80'L x 2.33'H Field A 0.079 af Overall - 0.019 af Embedded = 0.061 af x 40.0% Voids
#2A	60.70'	0.019 af	ADS_StormTech SC-310 +Cap x 55 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 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'	1.020 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 58.10'
#2	Primary	60.20'	12.0" Round Culvert L= 32.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.20' / 57.00' S= 0.1000 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	61.50'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 2	62.20'	4.0' long Sharp-Crested Vee/Trap Weir 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-310 +Cap (ADS StormTech® SC-310 with cap length)

Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf

Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap

34.0" Wide + 6.0" Spacing = 40.0" C-C Row Spacing

5 Chambers/Row x 7.12' Long +0.60' Cap Length x 2 = 36.80' Row Length +12.0" End Stone x 2 = 38.80' Base Length

11 Rows x 34.0" Wide + 6.0" Spacing x 10 + 12.0" Side Stone x 2 = 38.17' Base Width

6.0" Stone Base + 16.0" Chamber Height + 6.0" Stone Cover = 2.33' Field Height

55 Chambers x 14.7 cf = 810.8 cf Chamber Storage

3,455.4 cf Field - 810.8 cf Chambers = 2,644.5 cf Stone x 40.0% Voids = 1,057.8 cf Stone Storage

Chamber Storage + Stone Storage = 1,868.6 cf = 0.043 af

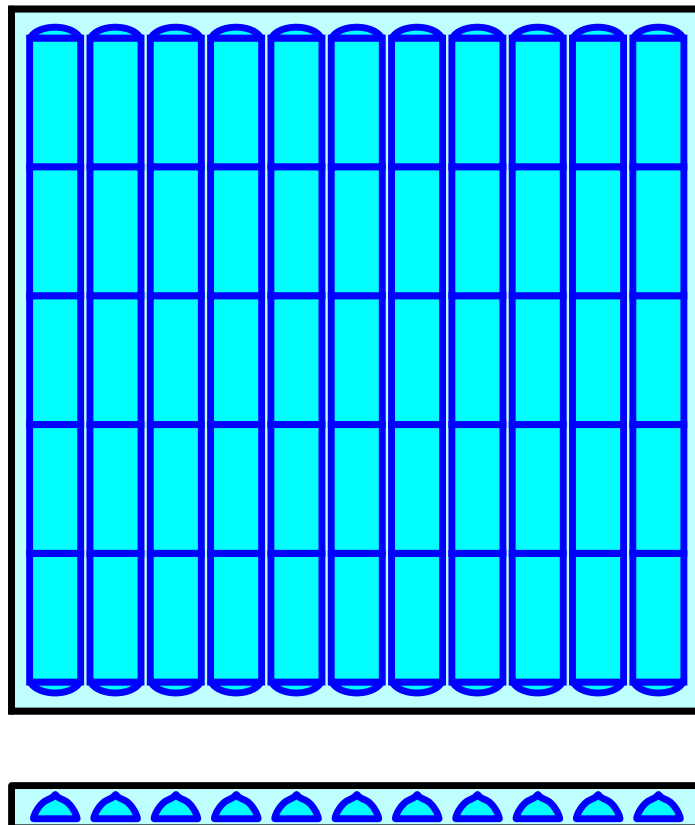
Overall Storage Efficiency = 54.1%

Overall System Size = 38.80' x 38.17' x 2.33'

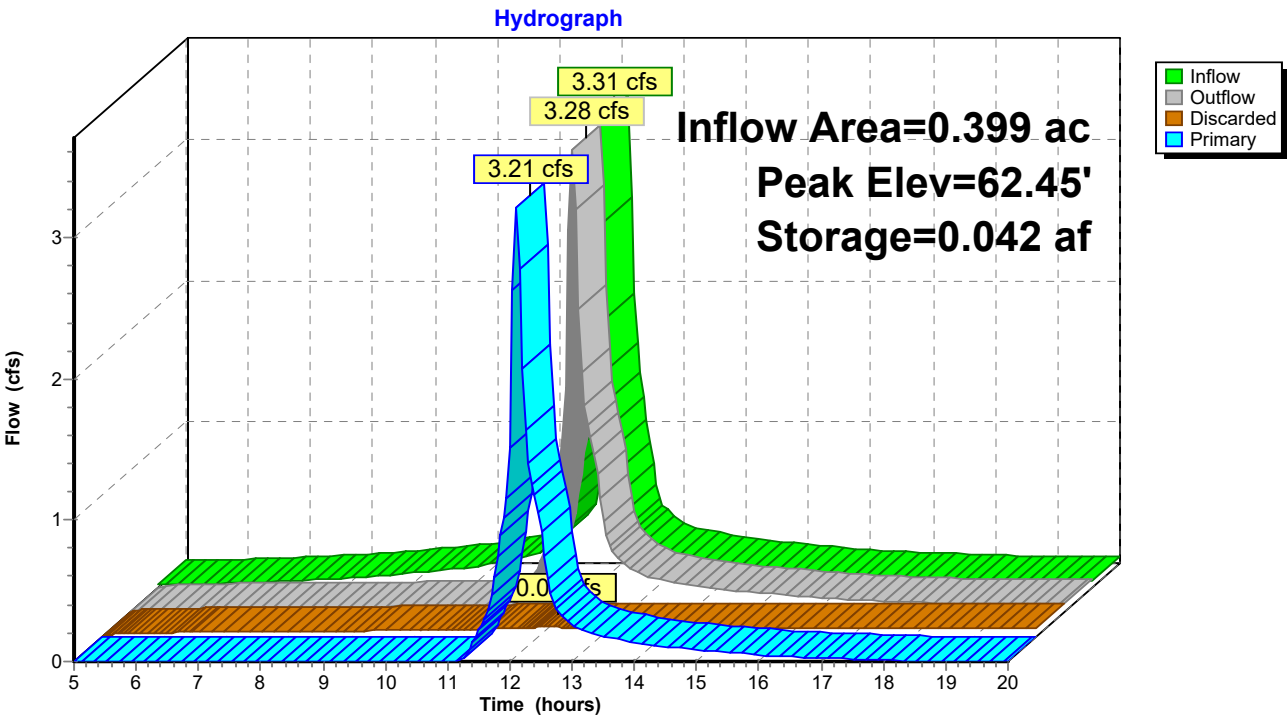
55 Chambers

128.0 cy Field

97.9 cy Stone



Pond 72P: Sub. Inf. 7



Summary for Pond 73P: CB 64

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.07' (Flood elevation advised)

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

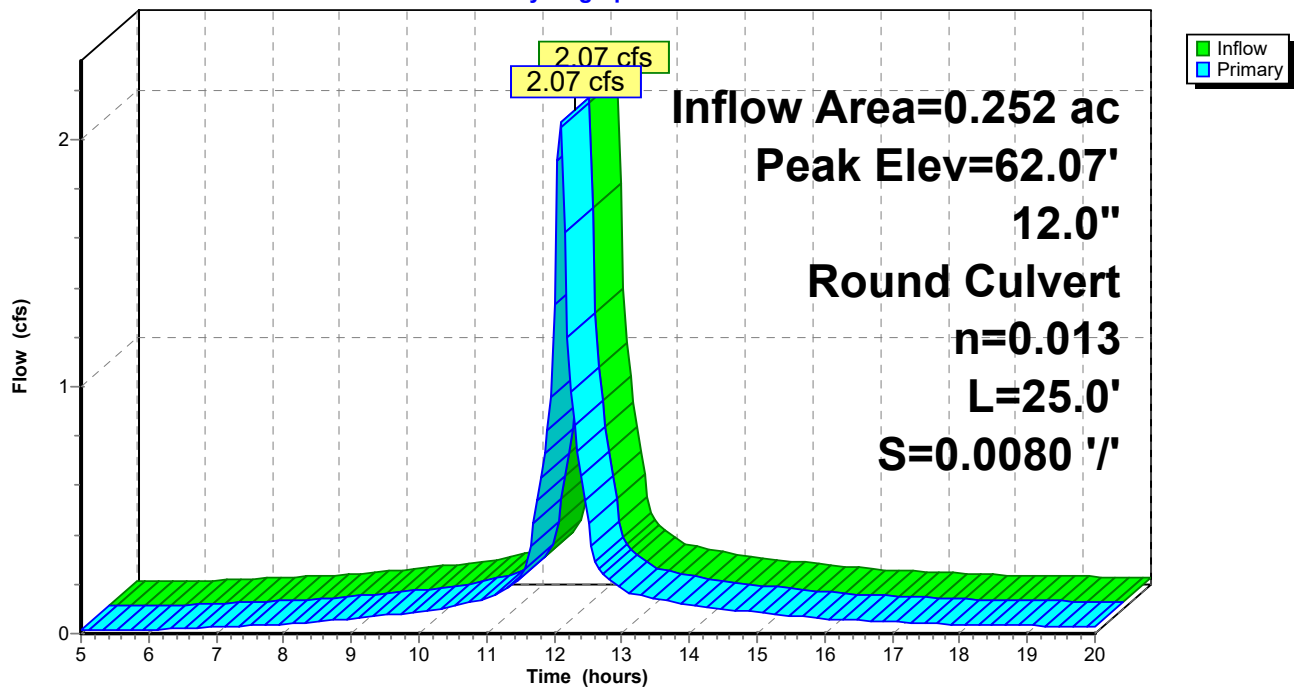
Device	Routing	Invert	Outlet Devices
#1	Primary	61.10'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.10' / 60.90' S= 0.0080 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.84' (Flood elevation advised)

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

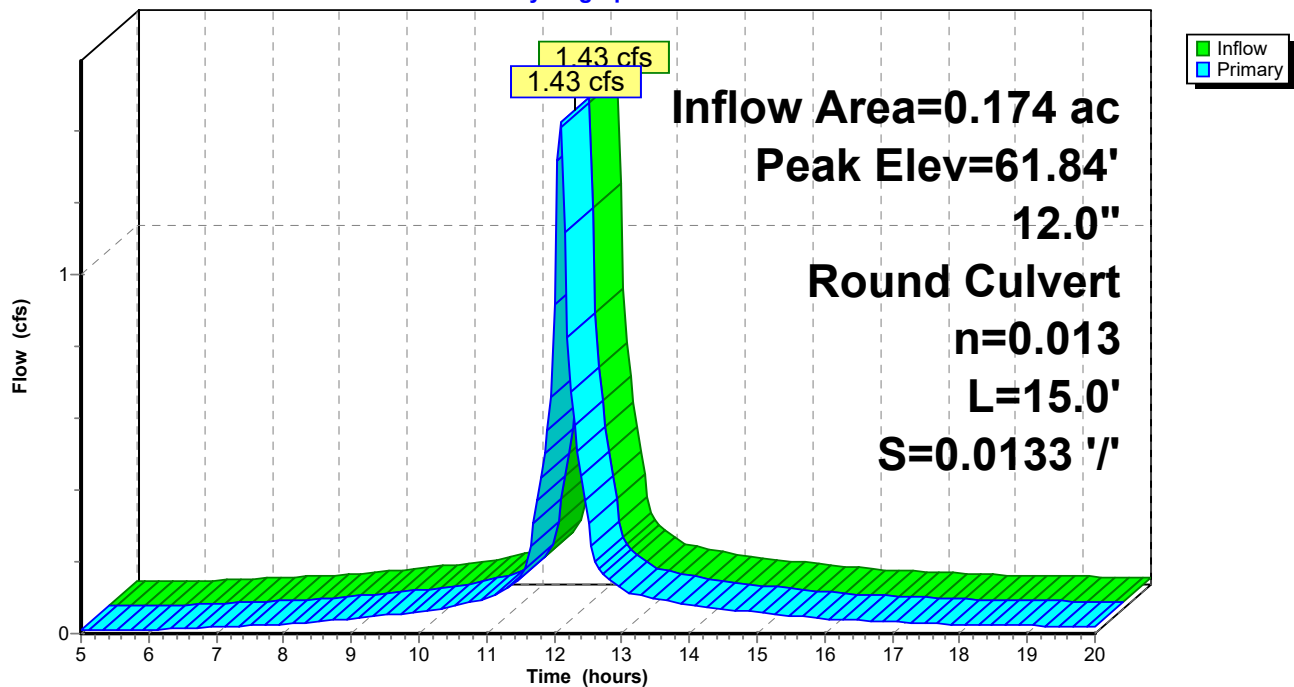
Device	Routing	Invert	Outlet Devices
#1	Primary	61.10'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.10' / 60.90' S= 0.0133 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.92' (Flood elevation advised)

[81] Warning: Exceeded Pond 73P by 0.83' @ 12.10 hrs

[81] Warning: Exceeded Pond 74P by 1.06' @ 12.10 hrs

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

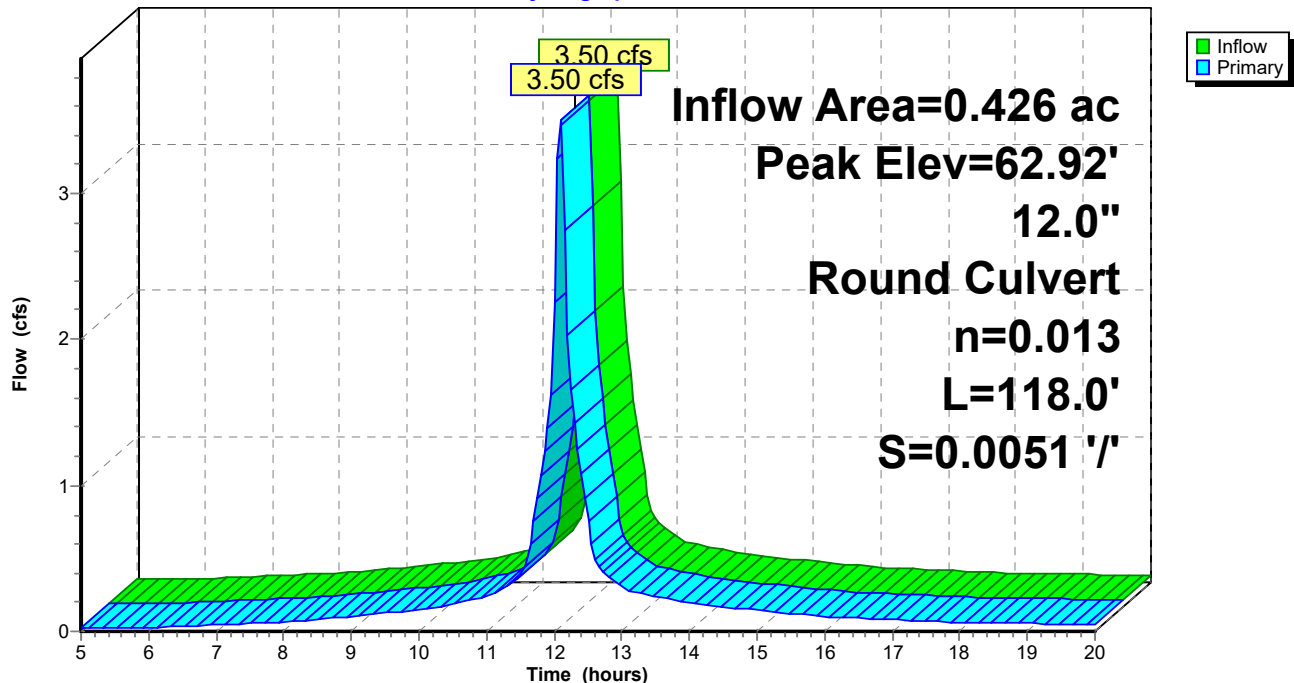
Device	Routing	Invert	Outlet Devices
#1	Primary	60.80'	12.0" Round Culvert L= 118.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.80' / 60.20' S= 0.0051 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.99' (Flood elevation advised)

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

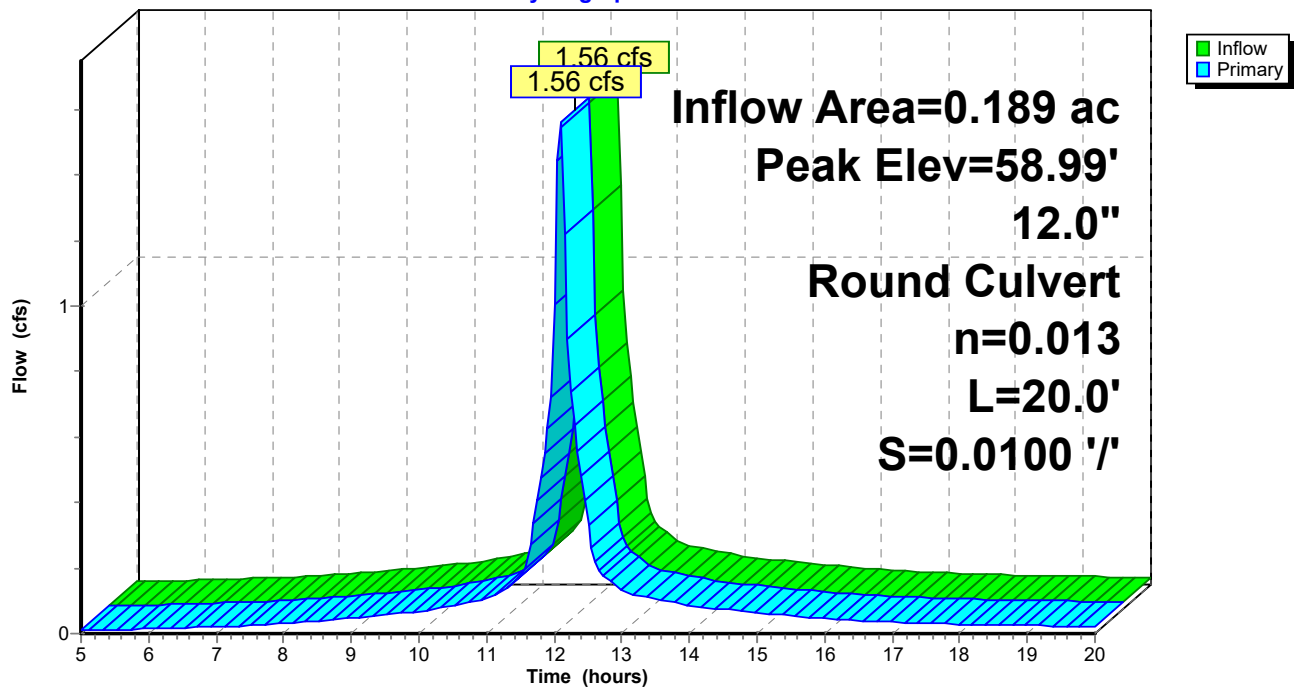
Device	Routing	Invert	Outlet Devices
#1	Primary	58.20'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.20' / 58.00' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.73' (Flood elevation advised)

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

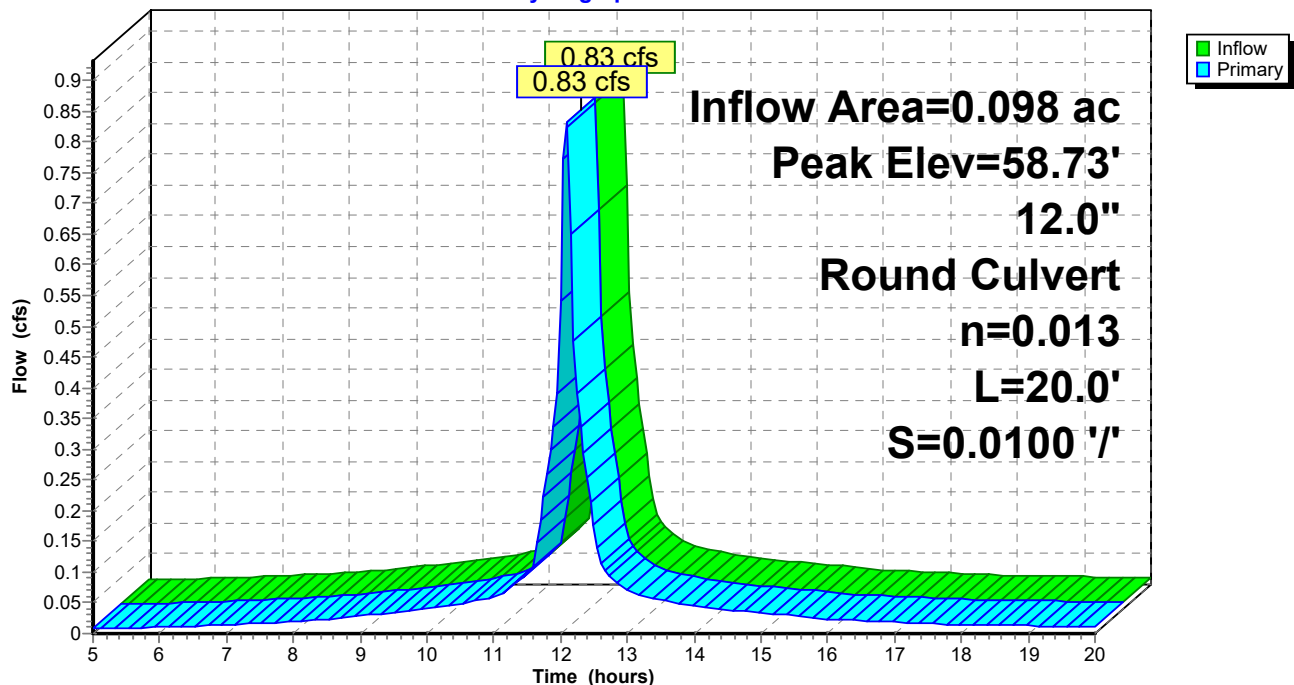
Device	Routing	Invert	Outlet Devices
#1	Primary	58.20'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.20' / 58.00' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.17' (Flood elevation advised)

[79] Warning: Submerged Pond 65P Primary device # 1 INLET by 0.47'

[81] Warning: Exceeded Pond 76P by 0.18' @ 12.10 hrs

[81] Warning: Exceeded Pond 77P by 0.44' @ 12.10 hrs

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

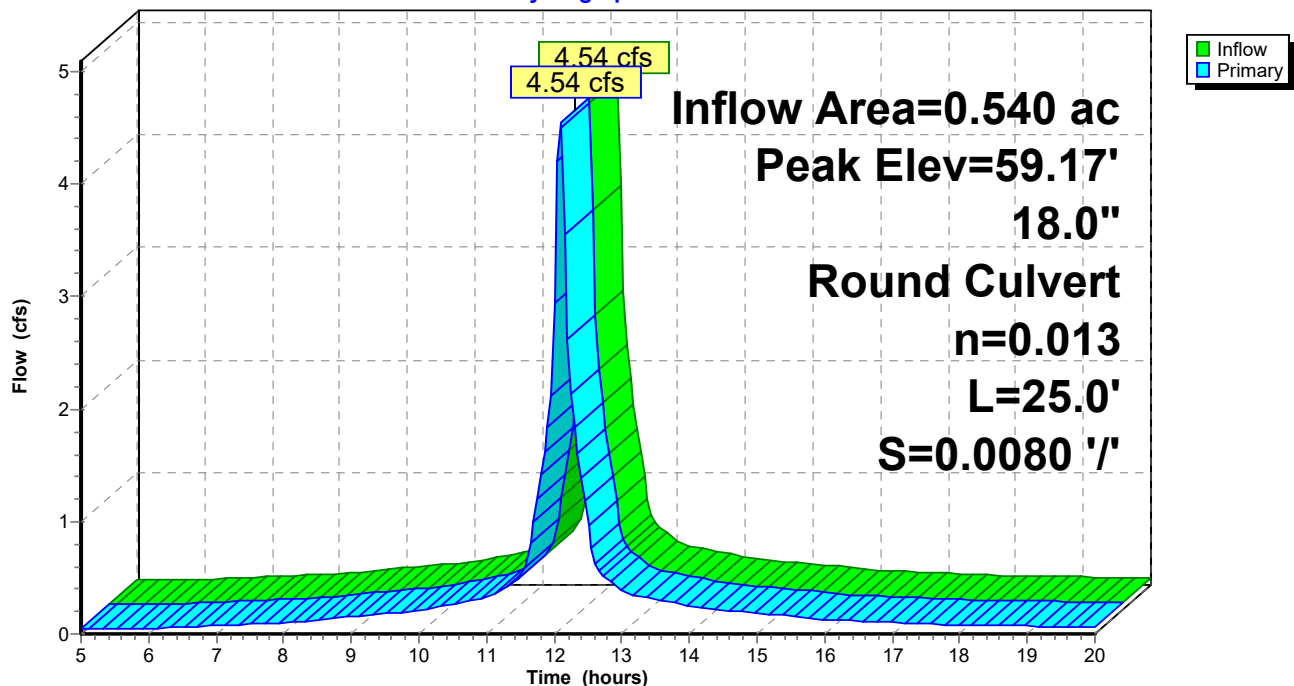
Device	Routing	Invert	Outlet Devices
#1	Primary	57.90'	18.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.90' / 57.70' S= 0.0080 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.09' (Flood elevation advised)

[79] Warning: Submerged Pond 78P Primary device # 1 INLET by 1.18'

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

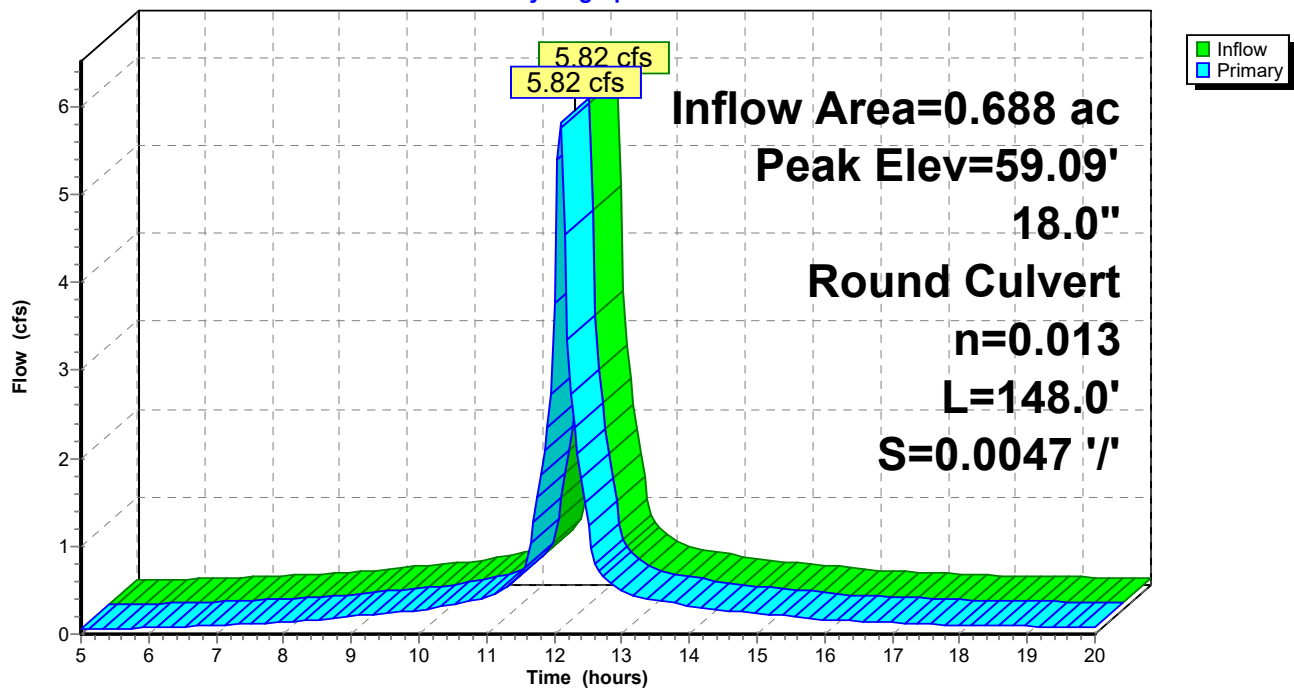
Device	Routing	Invert	Outlet Devices
#1	Primary	57.60'	18.0" Round Culvert L= 148.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.60' / 56.91' S= 0.0047 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.30' (Flood elevation advised)

[79] Warning: Submerged Pond 79P Primary device # 1 INLET by 0.69'

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

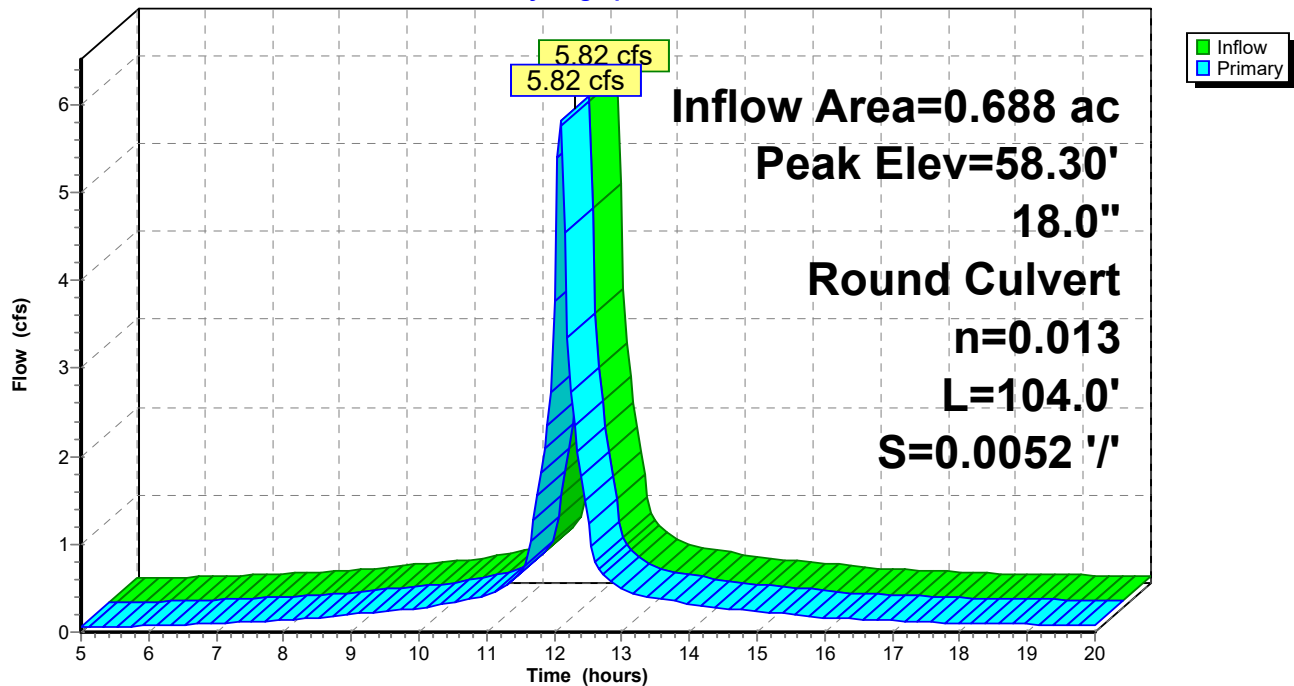
Device	Routing	Invert	Outlet Devices
#1	Primary	56.81'	18.0" Round Culvert L= 104.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 56.81' / 56.27' S= 0.0052 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 57.66' (Flood elevation advised)

[79] Warning: Submerged Pond 80P Primary device # 1 INLET by 0.84'

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

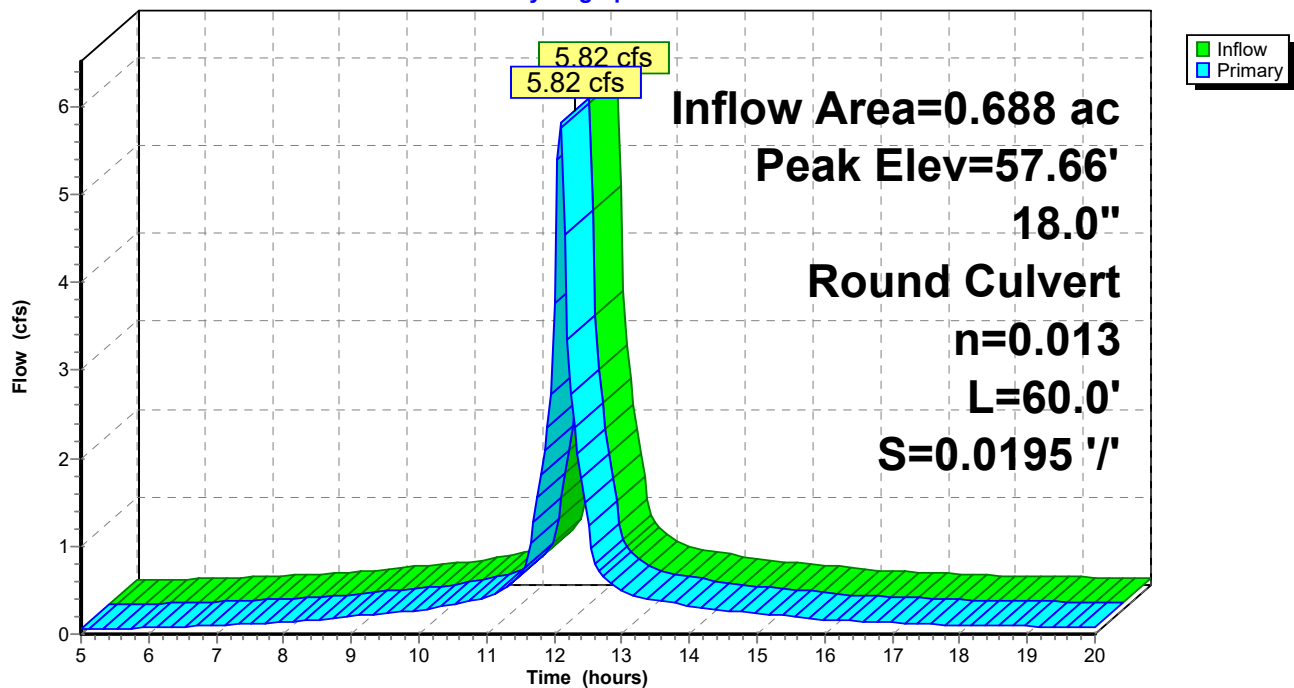
Device	Routing	Invert	Outlet Devices
#1	Primary	56.17'	18.0" Round Culvert L= 60.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 56.17' / 55.00' S= 0.0195 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 81P by 1.79' @ 12.60 hrs

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	Custom Stage Data (Prismatic) Listed below (Recalc)

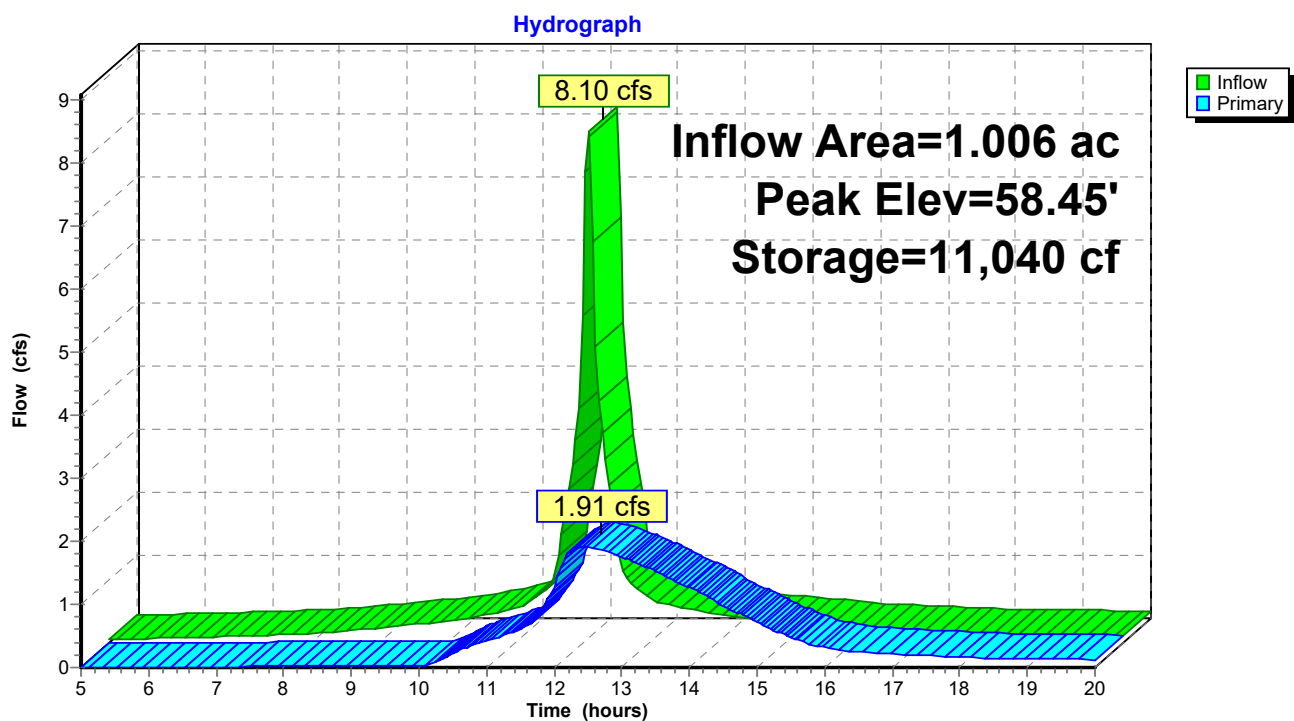
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
55.00	1,981	0	0
56.00	2,646	2,314	2,314
57.00	3,368	3,007	5,321
58.00	4,146	3,757	9,078
59.00	4,980	4,563	13,641

Device	Routing	Invert	Outlet Devices
#1	Primary	55.00'	12.0" Round Culvert L= 52.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 55.00' / 54.00' S= 0.0192 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	55.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	56.10'	4.0" Vert. Orifice/Grate X 3.00 C= 0.600 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.75' (Flood elevation advised)

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

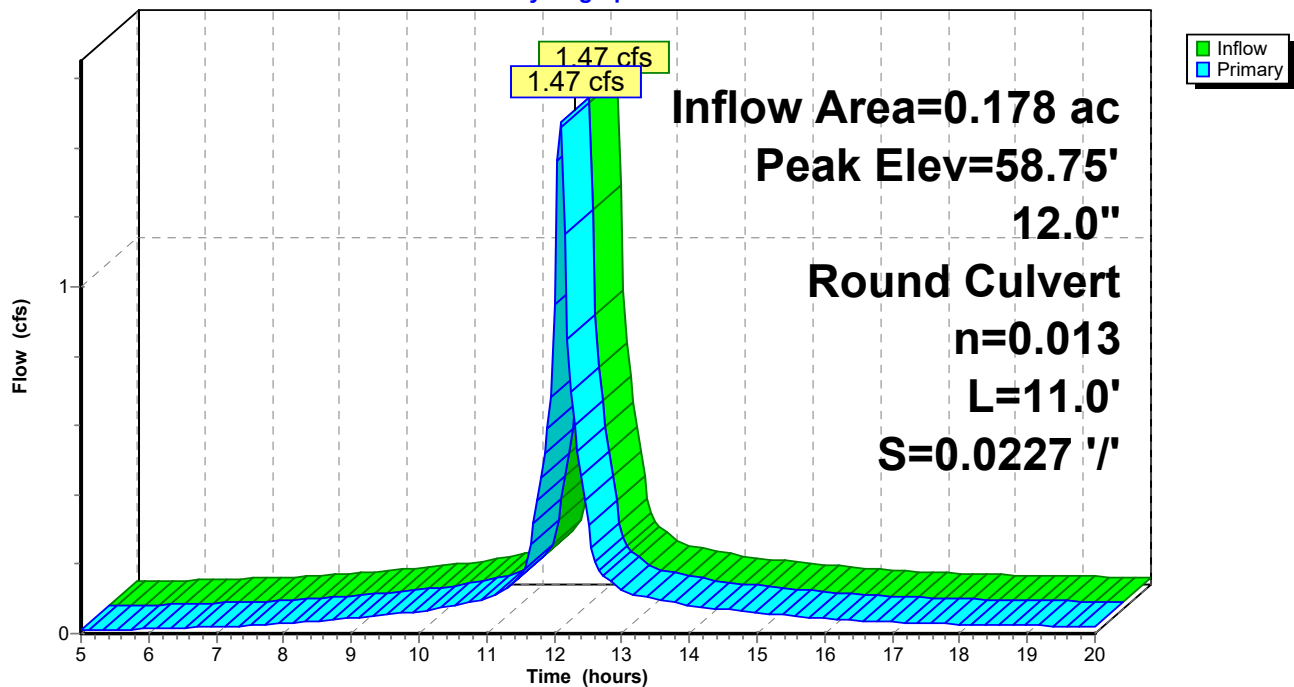
Device	Routing	Invert	Outlet Devices
#1	Primary	58.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.00' / 57.75' S= 0.0227 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.79' (Flood elevation advised)

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

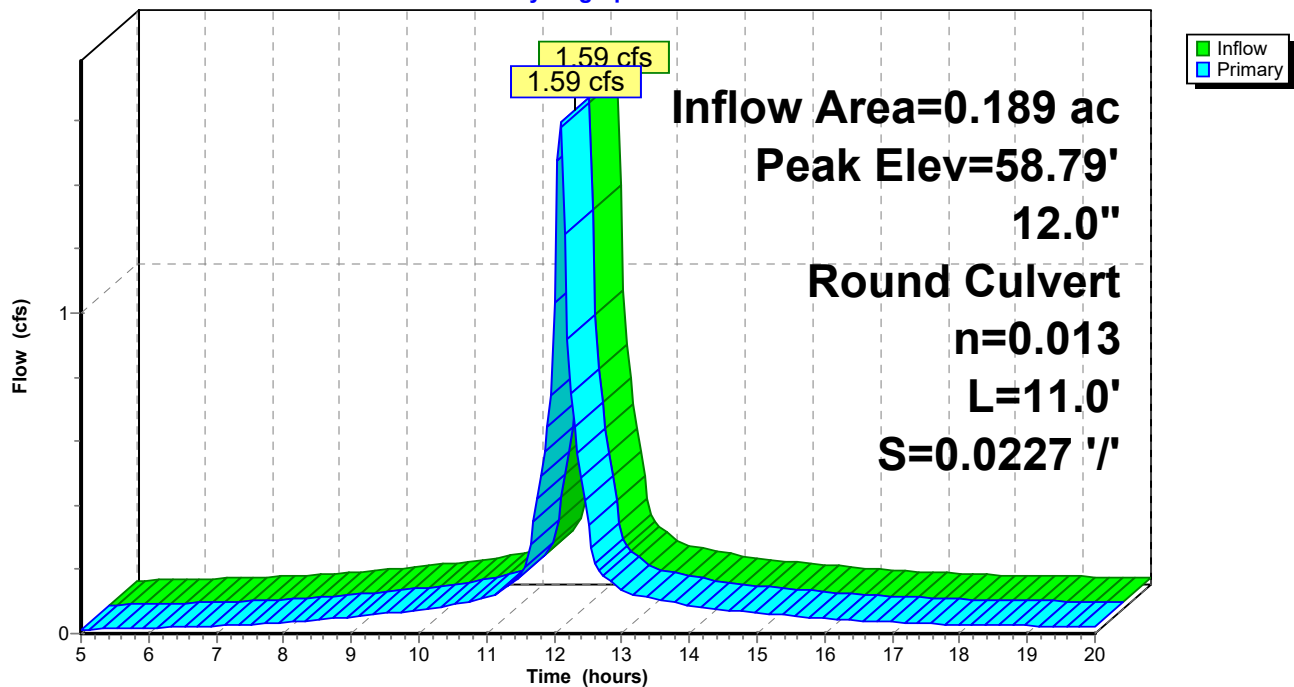
Device	Routing	Invert	Outlet Devices
#1	Primary	58.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.00' / 57.75' S= 0.0227 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.20' (Flood elevation advised)

[81] Warning: Exceeded Pond 83P by 0.44' @ 12.10 hrs

[81] Warning: Exceeded Pond 84P by 0.40' @ 12.10 hrs

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

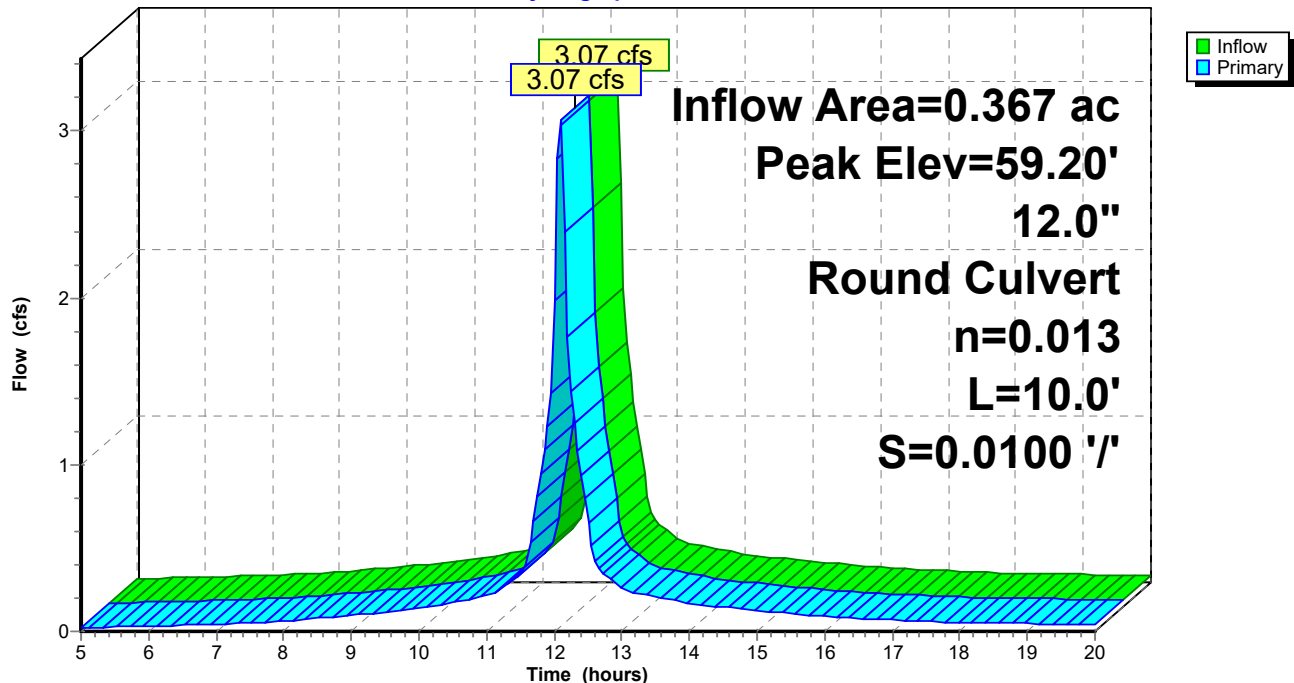
Device	Routing	Invert	Outlet Devices
#1	Primary	57.65'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.65' / 57.55' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[88] Warning: Qout>Qin may require smaller dt or Finer Routing

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	30.00'W x 53.46'L x 3.50'H Field A 0.129 af Overall - 0.045 af Embedded = 0.084 af x 40.0% Voids
#2A	61.50'	0.045 af	ADS_StormTech SC-740 b +Cap x 42 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 42 Chambers in 6 Rows 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'	1.020 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 59.00'
#2	Primary	61.00'	12.0" Round Culvert L= 105.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.00' / 57.00' S= 0.0381 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	62.50'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 2	63.50'	4.0' long Sharp-Crested Vee/Trap Weir 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 6 rows = 31.9 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

7 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 51.46' Row Length +12.0" End Stone x 2 = 53.46' Base Length

6 Rows x 51.0" Wide + 6.0" Spacing x 5 + 12.0" Side Stone x 2 = 30.00' Base Width

6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

42 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 6 Rows = 1,961.3 cf Chamber Storage

5,613.0 cf Field - 1,961.3 cf Chambers = 3,651.6 cf Stone x 40.0% Voids = 1,460.6 cf Stone Storage

Chamber Storage + Stone Storage = 3,422.0 cf = 0.079 af

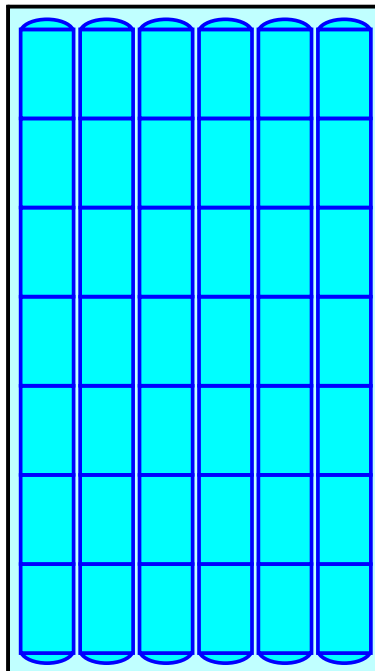
Overall Storage Efficiency = 61.0%

Overall System Size = 53.46' x 30.00' x 3.50'

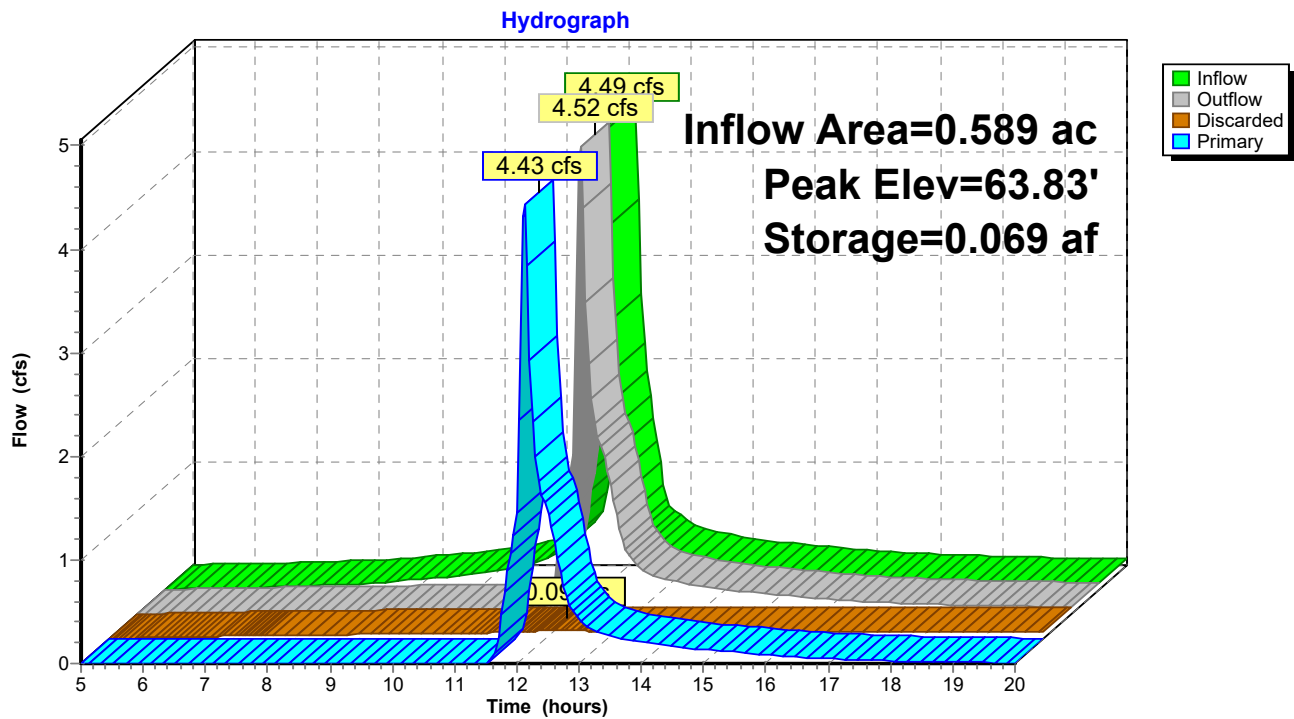
42 Chambers

207.9 cy Field

135.2 cy Stone



Pond 86P: Sub. Inf. 6



Summary for Pond 87P: CB 85

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.64' (Flood elevation advised)

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

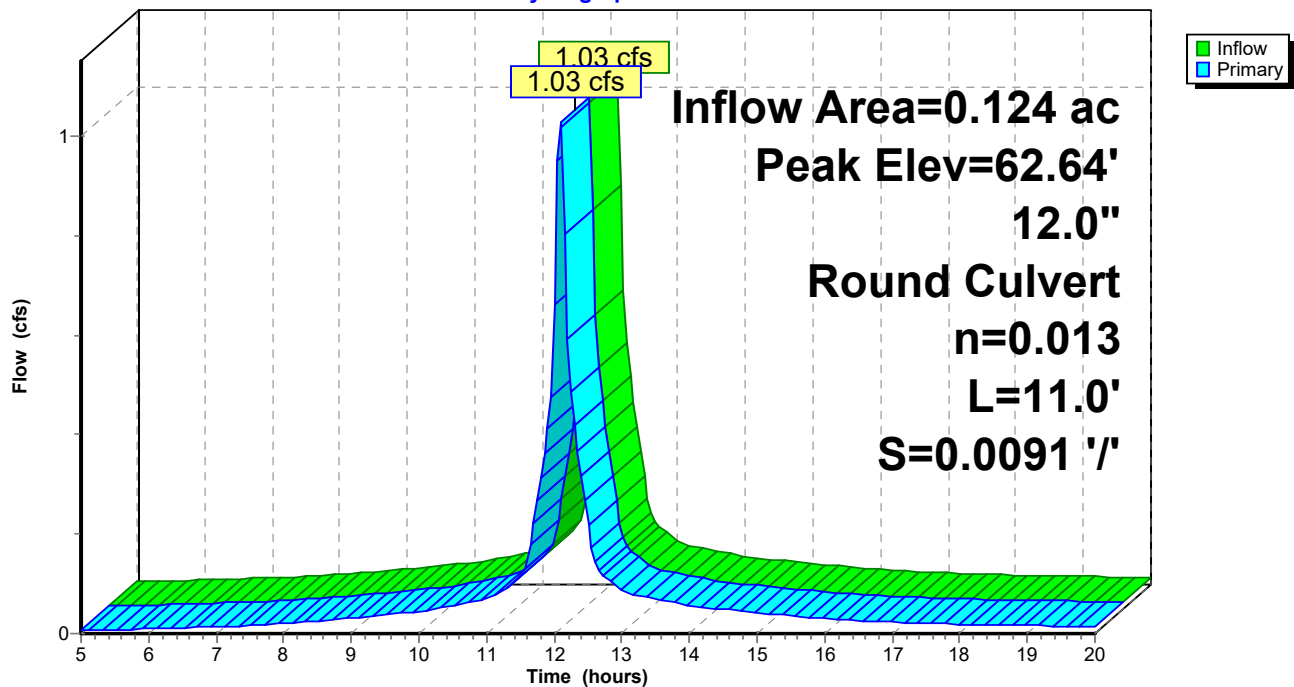
Device	Routing	Invert	Outlet Devices
#1	Primary	62.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.00' / 61.90' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.44' (Flood elevation advised)

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

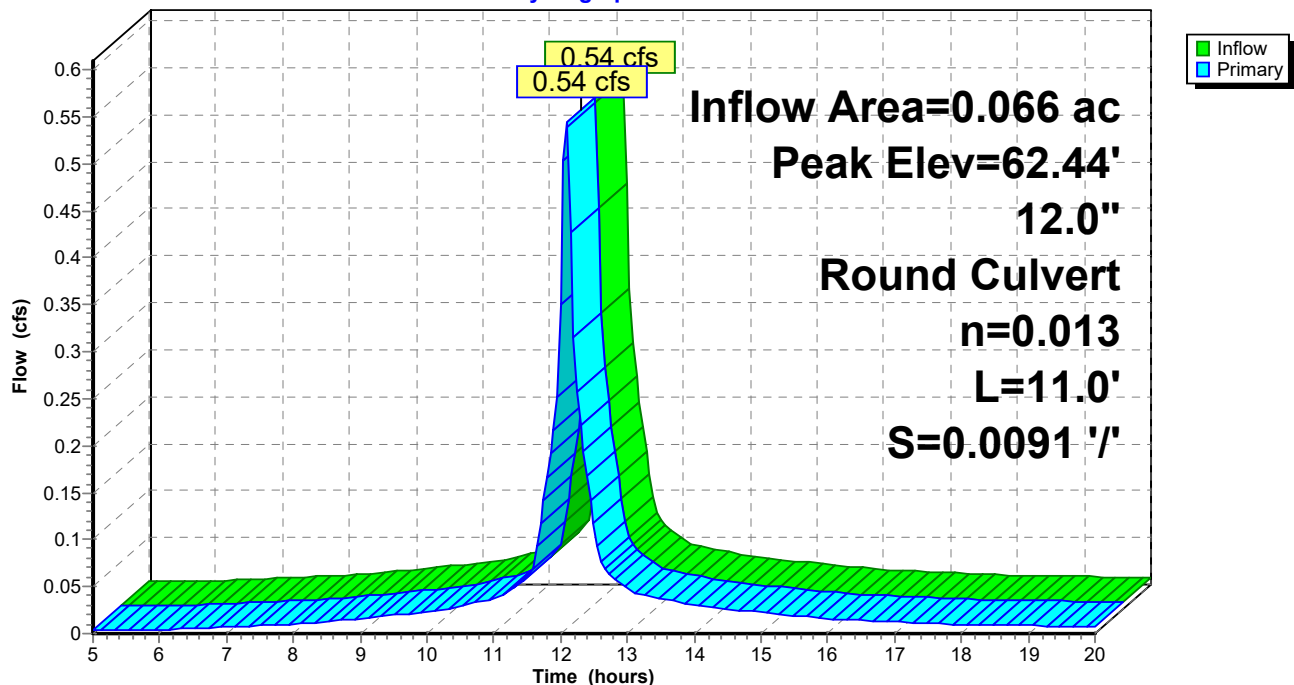
Device	Routing	Invert	Outlet Devices
#1	Primary	62.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.00' / 61.90' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.90' (Flood elevation advised)

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

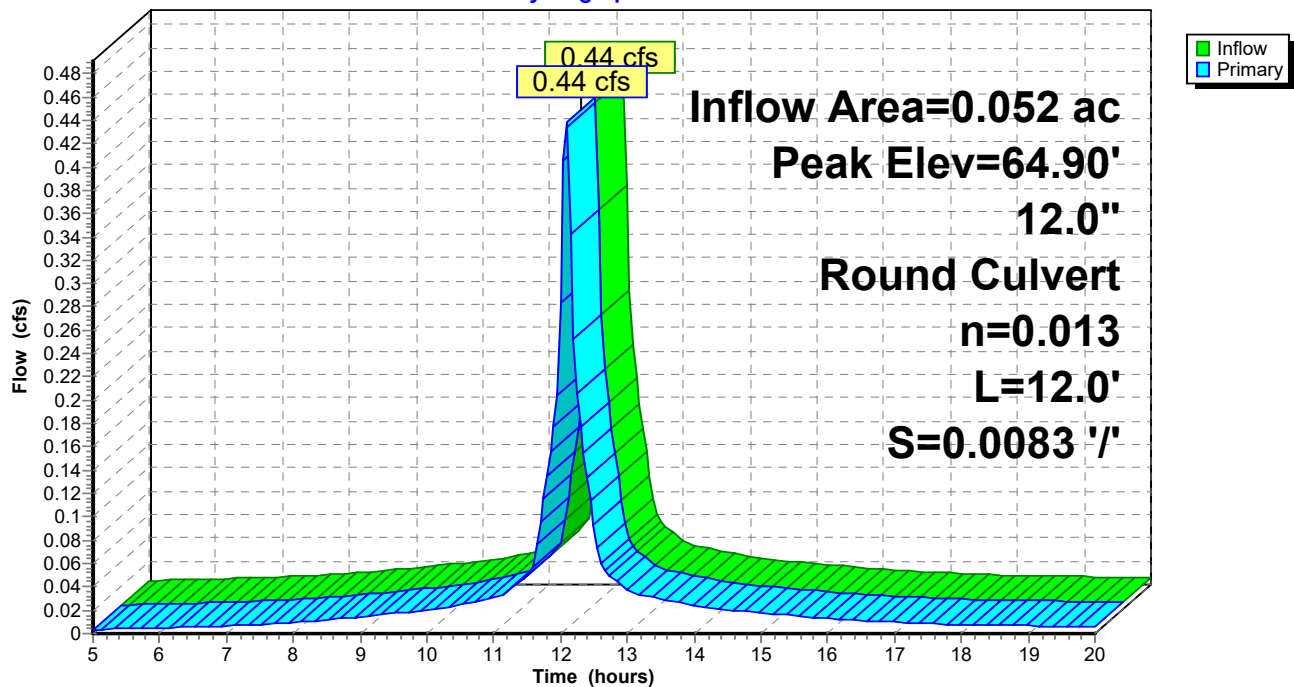
Device	Routing	Invert	Outlet Devices
#1	Primary	64.50'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 64.50' / 64.40' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 65.09' (Flood elevation advised)

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

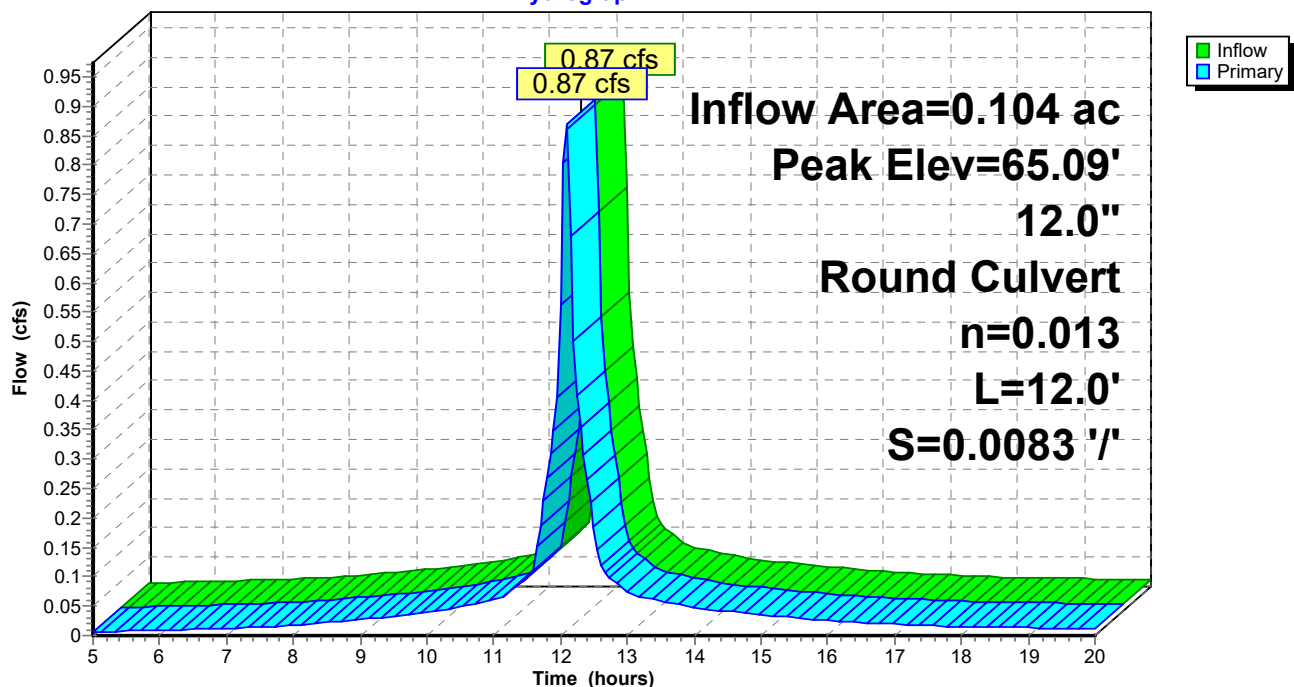
Device	Routing	Invert	Outlet Devices
#1	Primary	64.50'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 64.50' / 64.40' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 65.00' (Flood elevation advised)

[81] Warning: Exceeded Pond 89P by 0.10' @ 12.10 hrs

[79] Warning: Submerged Pond 90P Primary device # 1 INLET by 0.49'

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

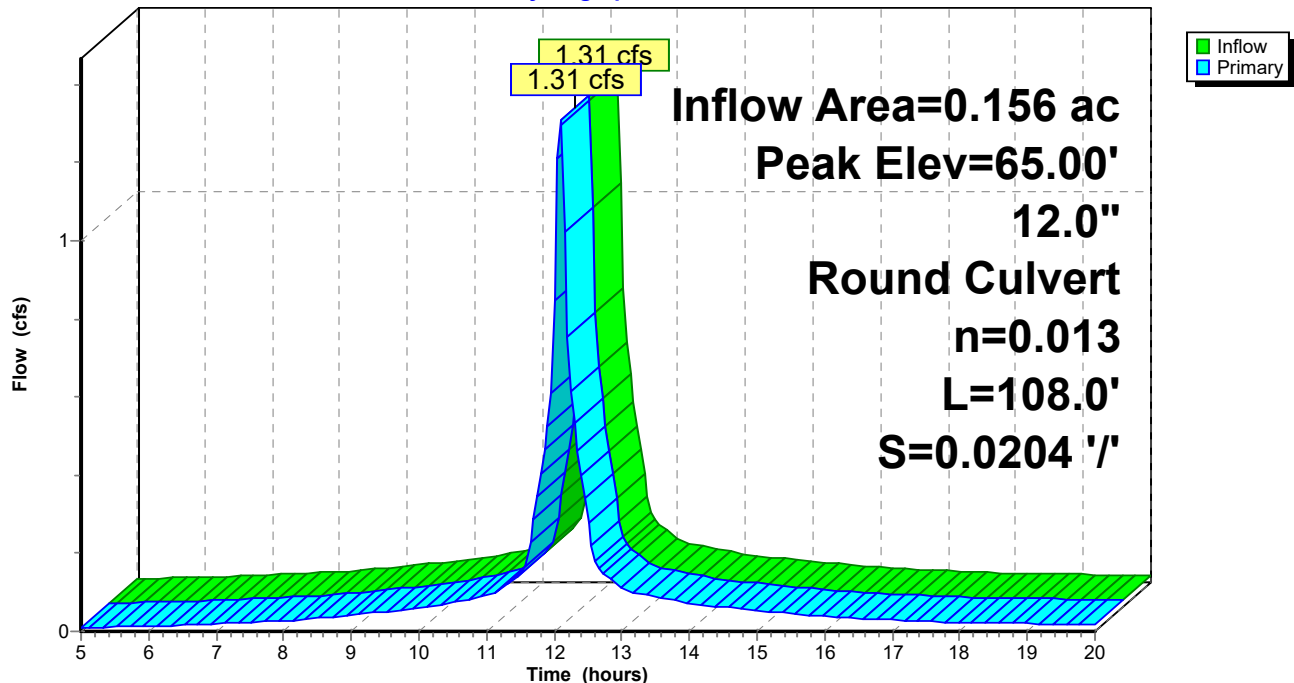
Device	Routing	Invert	Outlet Devices
#1	Primary	64.30'	12.0" Round Culvert L= 108.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 64.30' / 62.10' S= 0.0204 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.58' (Flood elevation advised)

[79] Warning: Submerged Pond 87P Primary device # 1 INLET by 0.58'

[81] Warning: Exceeded Pond 88P by 0.14' @ 12.10 hrs

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

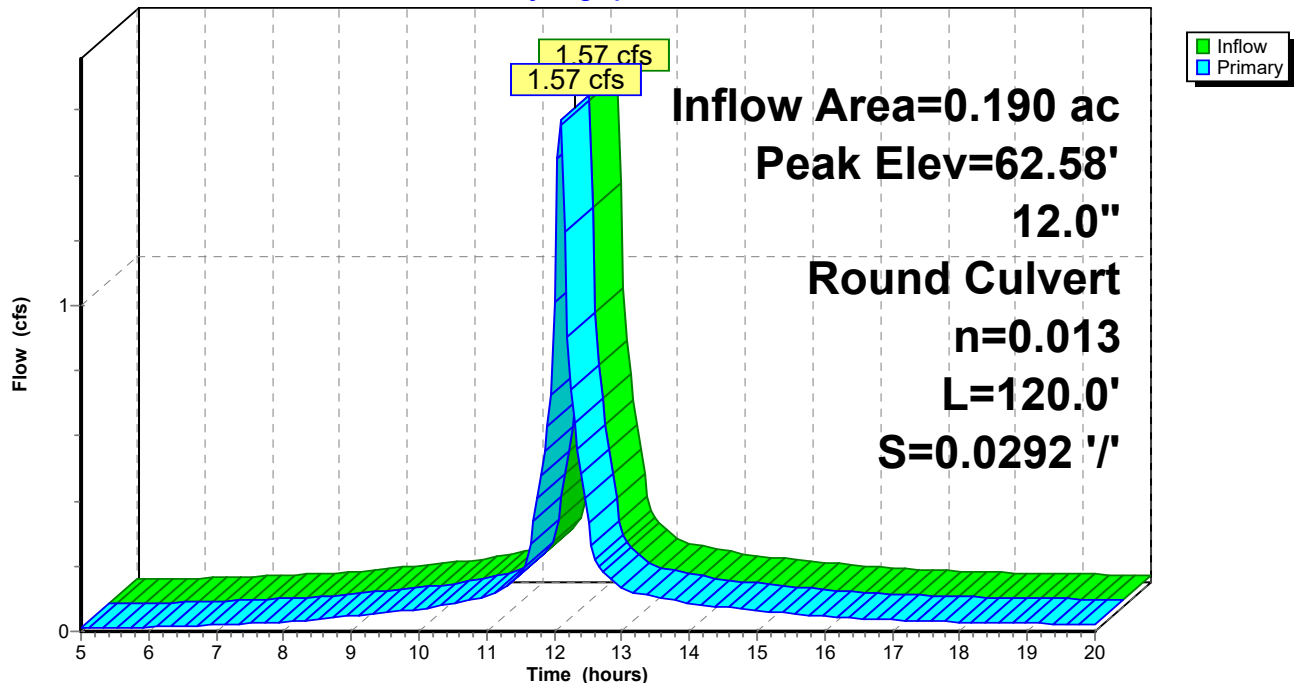
Device	Routing	Invert	Outlet Devices
#1	Primary	61.80'	12.0" Round Culvert L= 120.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.80' / 58.30' S= 0.0292 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.57' (Flood elevation advised)

[79] Warning: Submerged Pond 92P Primary device # 1 OUTLET by 2.25'

[79] Warning: Submerged Pond 98P Primary device # 1 INLET by 0.75'

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

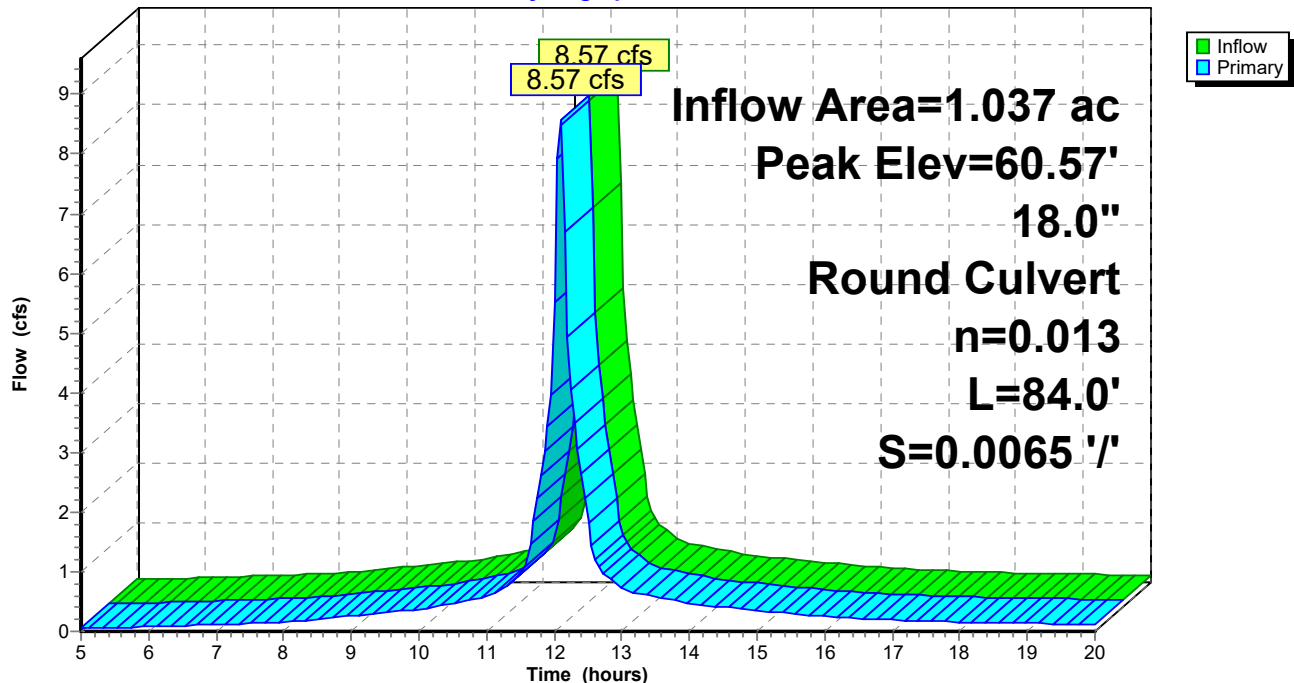
Device	Routing	Invert	Outlet Devices
#1	Primary	58.20'	18.0" Round Culvert L= 84.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.20' / 57.65' S= 0.0065 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.53' (Flood elevation advised)

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

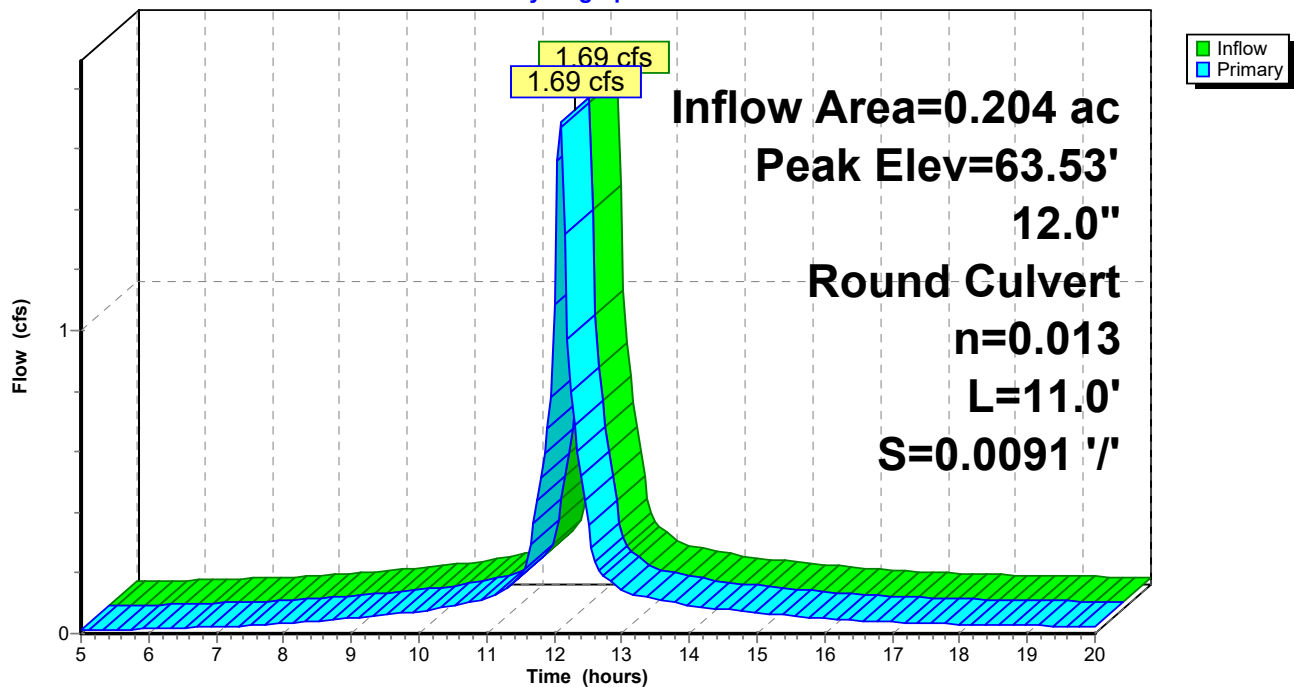
Device	Routing	Invert	Outlet Devices
#1	Primary	62.65'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.65' / 62.55' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.35' (Flood elevation advised)

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

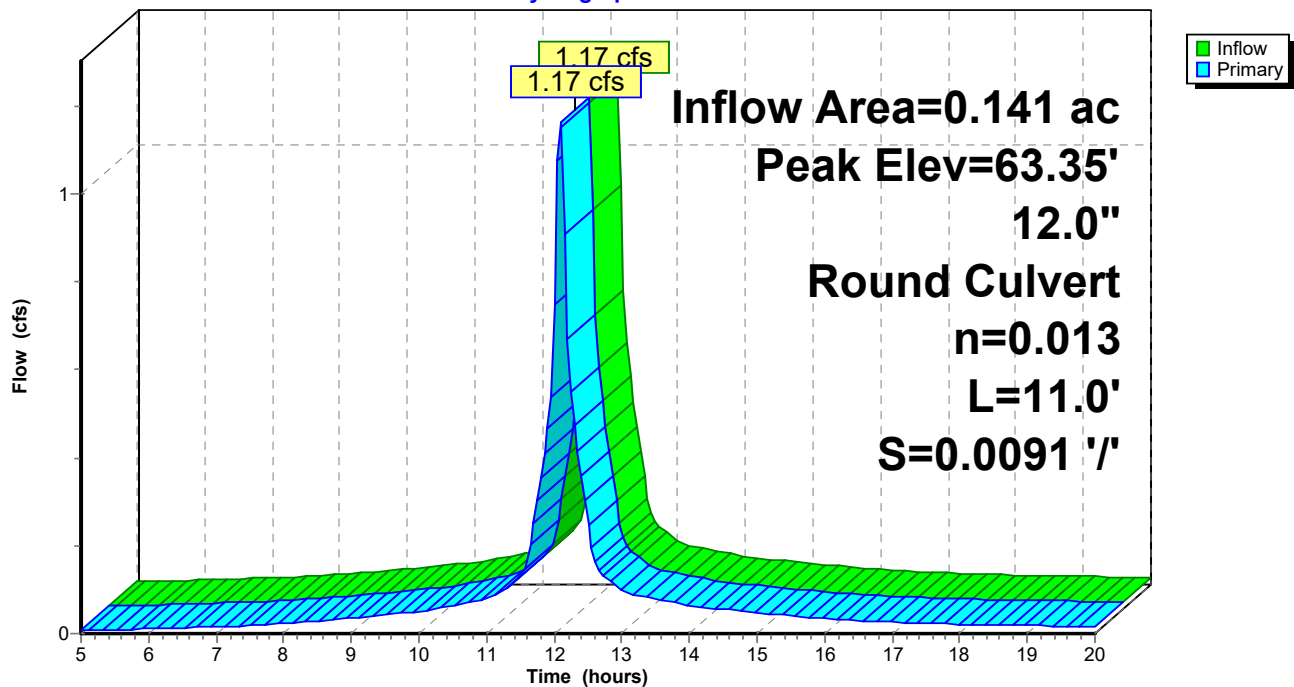
Device	Routing	Invert	Outlet Devices
#1	Primary	62.65'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.65' / 62.55' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.73' (Flood elevation advised)

[79] Warning: Submerged Pond 91P Primary device # 1 INLET by 0.40'

[81] Warning: Exceeded Pond 94P by 1.18' @ 12.10 hrs

[81] Warning: Exceeded Pond 95P by 1.36' @ 12.10 hrs

[81] Warning: Exceeded Pond 101P by 0.55' @ 12.10 hrs

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

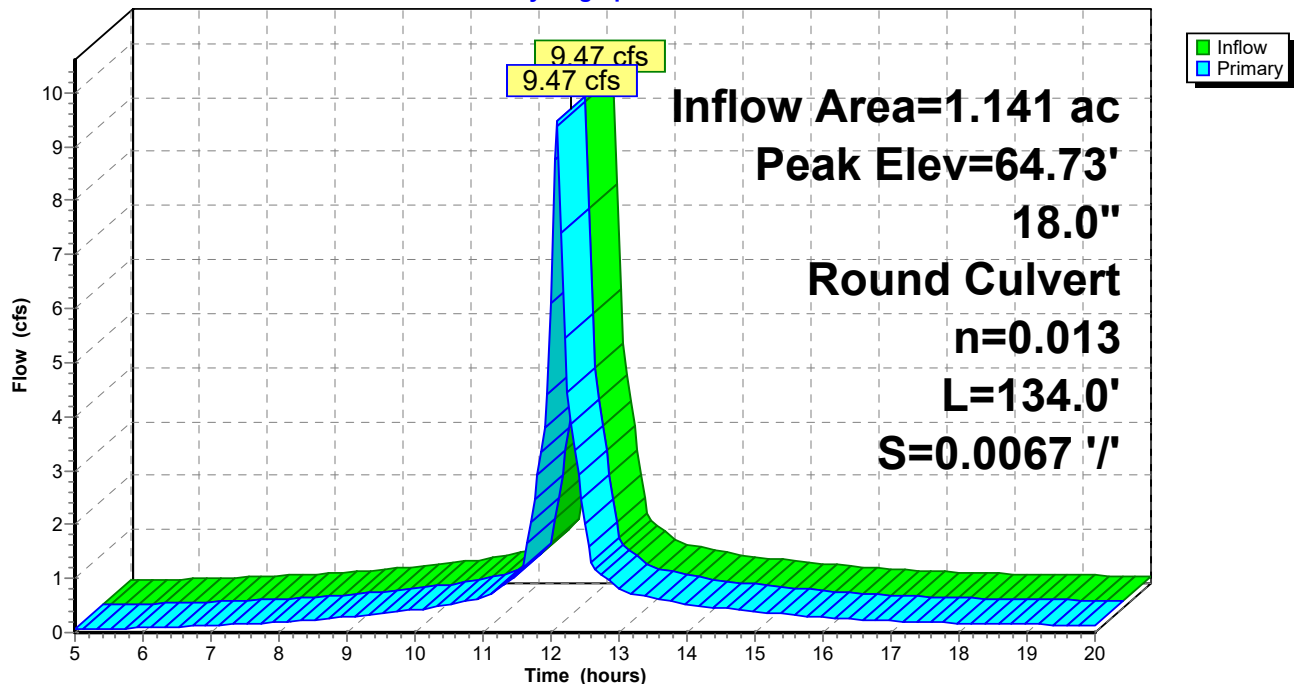
Device	Routing	Invert	Outlet Devices
#1	Primary	62.00'	18.0" Round Culvert L= 134.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.00' / 61.10' S= 0.0067 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 85P by 3.96' @ 12.60 hrs

[81] Warning: Exceeded Pond 209P by 3.88' @ 17.35 hrs

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	66.00'W x 58.00'L x 5.71'H Field A 0.502 af Overall - 0.467 af Embedded = 0.035 af x 40.0% Voids
#2A	57.54'	0.367 af	Shea Leaching Chamber 8x14x5.7 x 32 Inside #1 Inside= 84.0"W x 60.0"H => 38.46 sf x 13.00'L = 500.0 cf Outside= 96.0"W x 68.0"H => 45.36 sf x 14.00'L = 635.0 cf 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'	18.0" Round Culvert L= 30.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.50' / 53.00' S= 0.1500 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	57.50'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	60.50'	2.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 1	61.70'	4.0' long Sharp-Crested Rectangular Weir 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 - Chamber Wizard Field A

Chamber Model = Shea Leaching Chamber 8x14x5.7 (Shea Galley)

Inside= 84.0"W x 60.0"H => 38.46 sf x 13.00'L = 500.0 cf

Outside= 96.0"W x 68.0"H => 45.36 sf x 14.00'L = 635.0 cf

4 Chambers/Row x 14.00' Long = 56.00' Row Length +12.0" End Stone x 2 = 58.00' Base Length

8 Rows x 96.0" Wide + 12.0" Side Stone x 2 = 66.00' Base Width

0.5" Stone Base + 68.0" Chamber Height = 5.71' Field Height

32 Chambers x 500.0 cf = 16,000.0 cf Chamber Storage

32 Chambers x 635.0 cf = 20,321.3 cf Displacement

21,864.3 cf Field - 20,321.3 cf Chambers = 1,543.0 cf Stone x 40.0% Voids = 617.2 cf Stone Storage

Chamber Storage + Stone Storage = 16,617.2 cf = 0.381 af

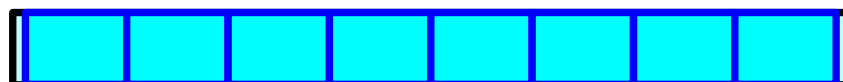
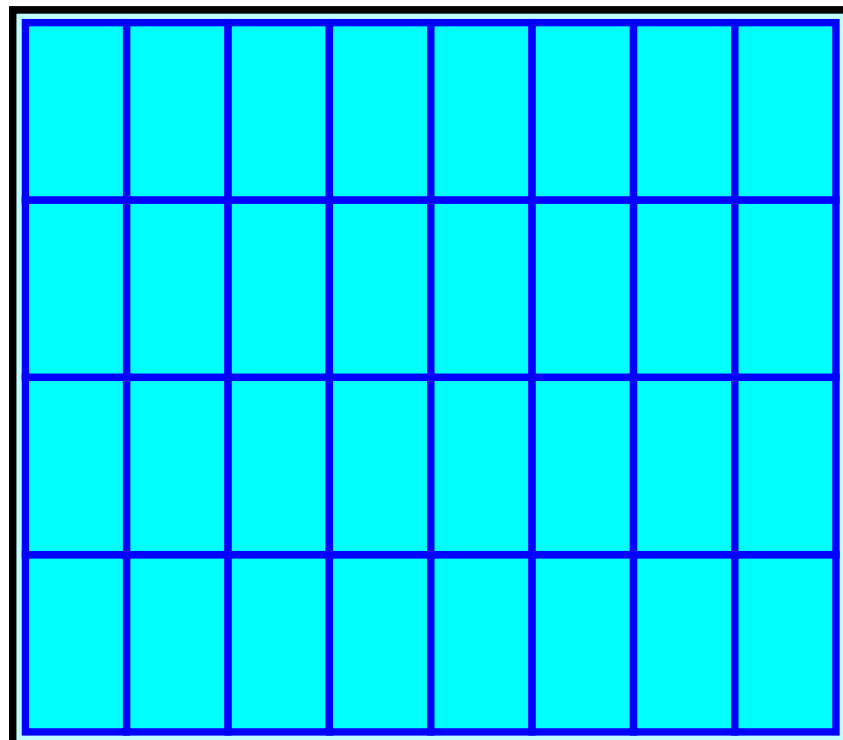
Overall Storage Efficiency = 76.0%

Overall System Size = 58.00' x 66.00' x 5.71'

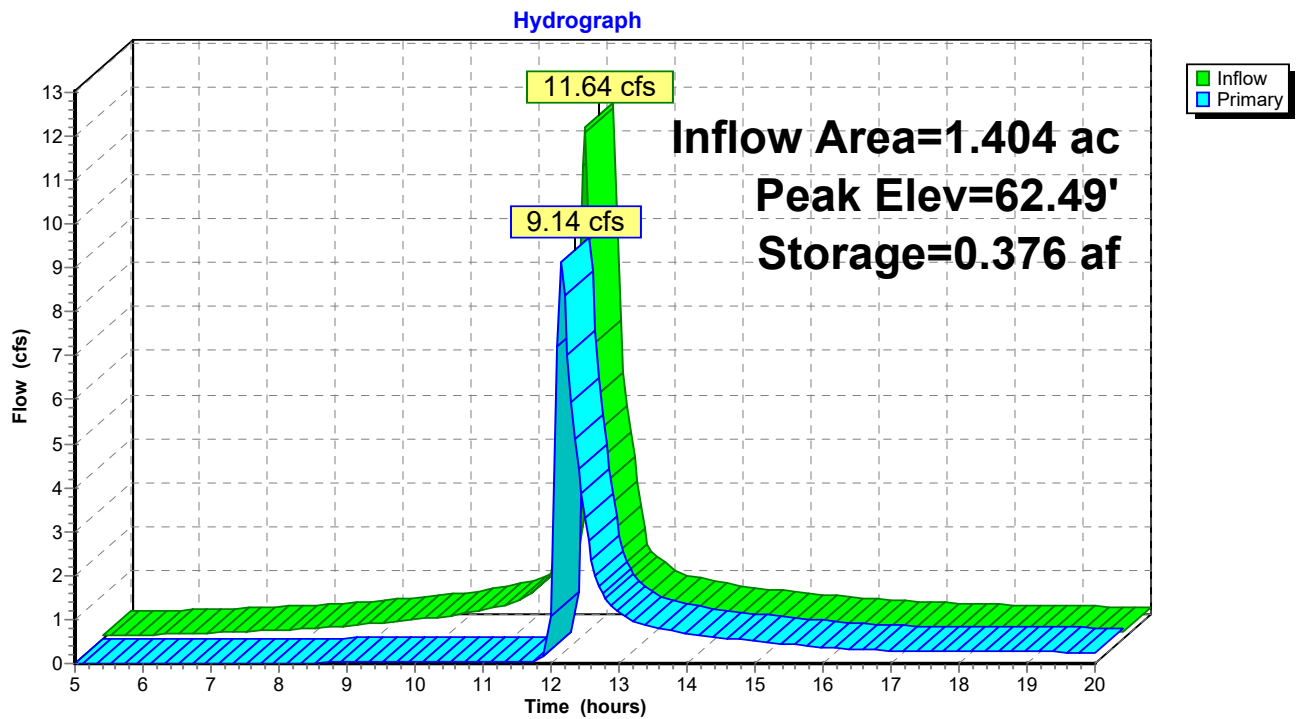
32 Chambers

809.8 cy Field

57.1 cy Stone



Pond 97P: Sub. Det. 2



Summary for Pond 98P: DMH 61

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.63' (Flood elevation advised)

[79] Warning: Submerged Pond 106P Primary device # 1 INLET by 0.82'

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

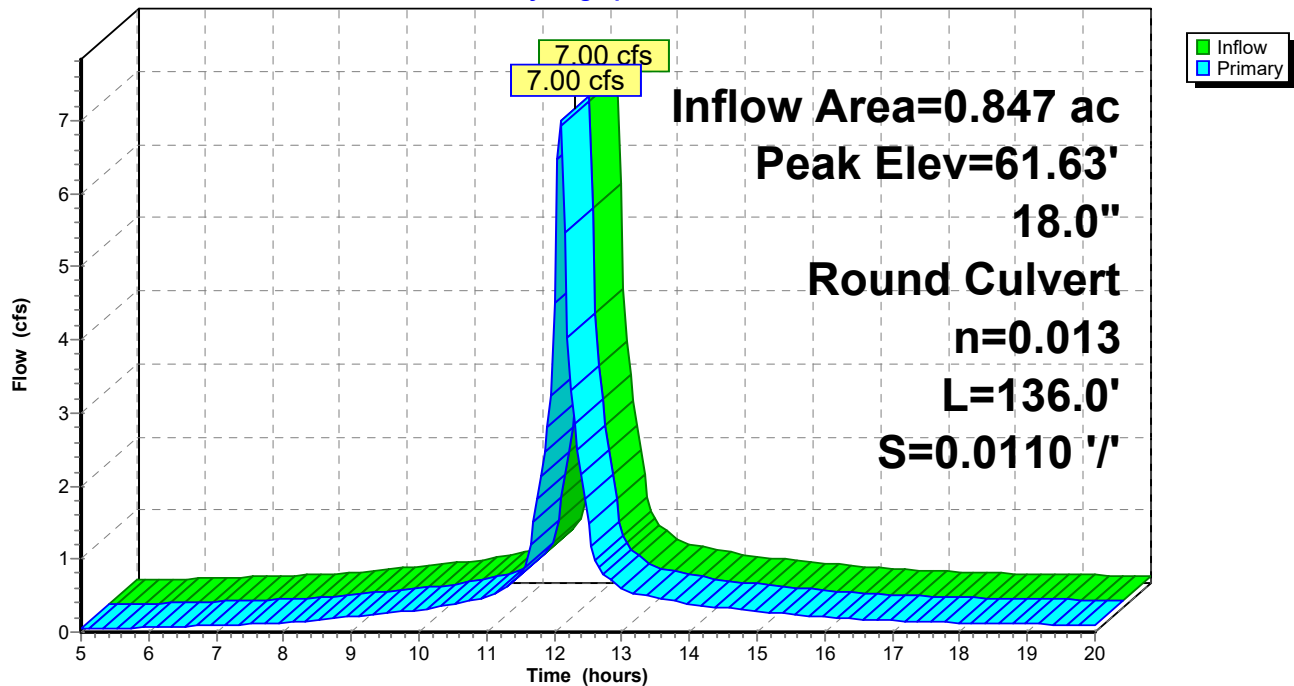
Device	Routing	Invert	Outlet Devices
#1	Primary	59.80'	18.0" Round Culvert L= 136.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.80' / 58.30' S= 0.0110 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.02' (Flood elevation advised)

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

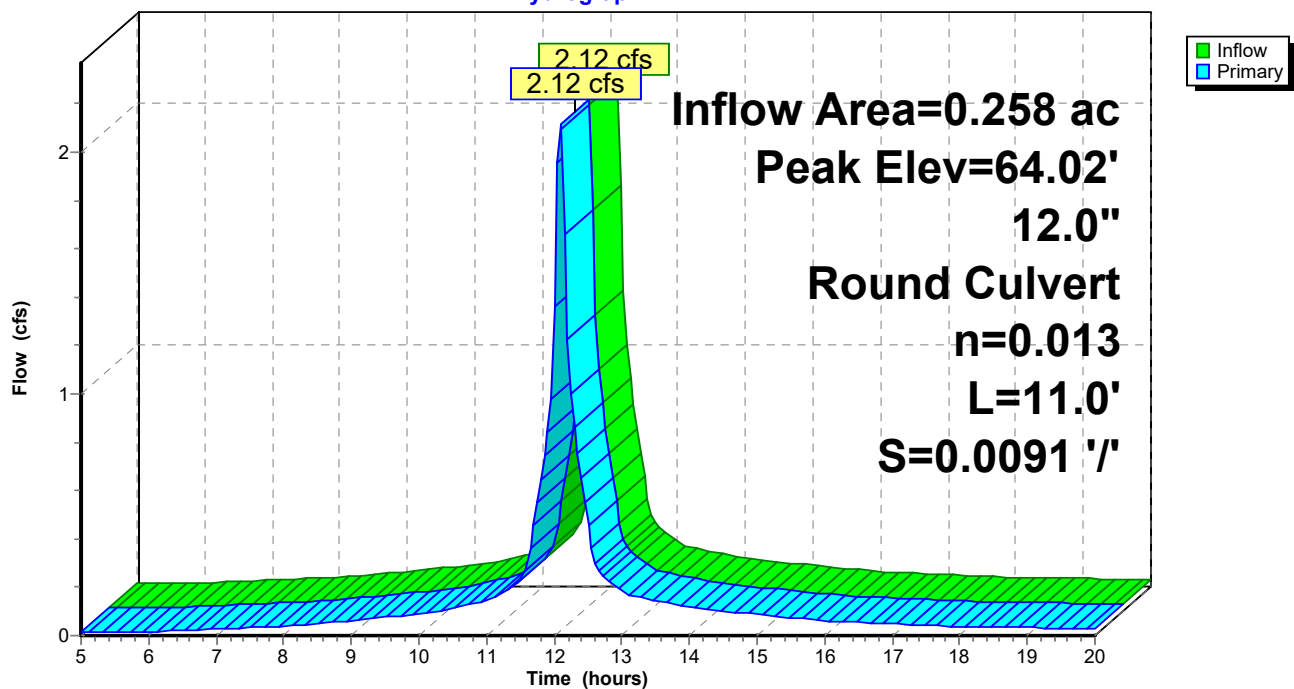
Device	Routing	Invert	Outlet Devices
#1	Primary	62.99'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.99' / 62.89' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.63' (Flood elevation advised)

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

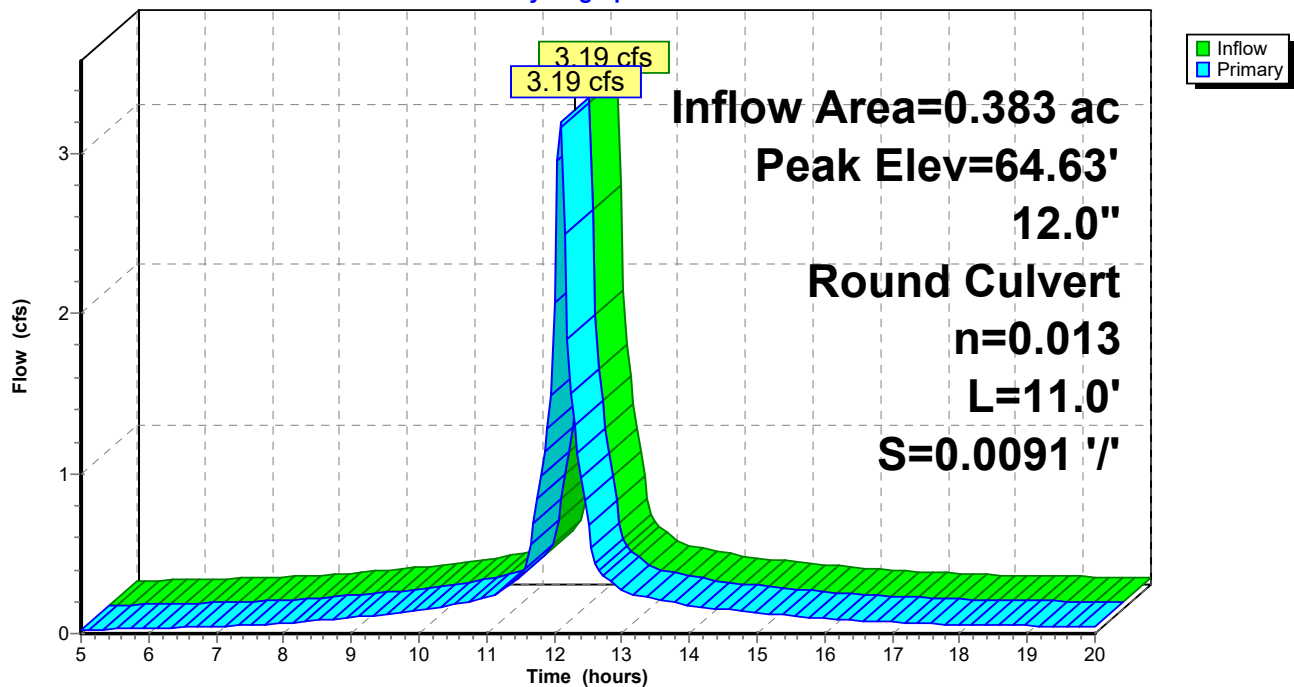
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 64.63' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	62.99'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.99' / 62.89' S= 0.0091 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 64.16' (Flood elevation advised)

[81] Warning: Exceeded Pond 99P by 0.14' @ 12.10 hrs

[79] Warning: Submerged Pond 100P Primary device # 1 INLET by 1.16'

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

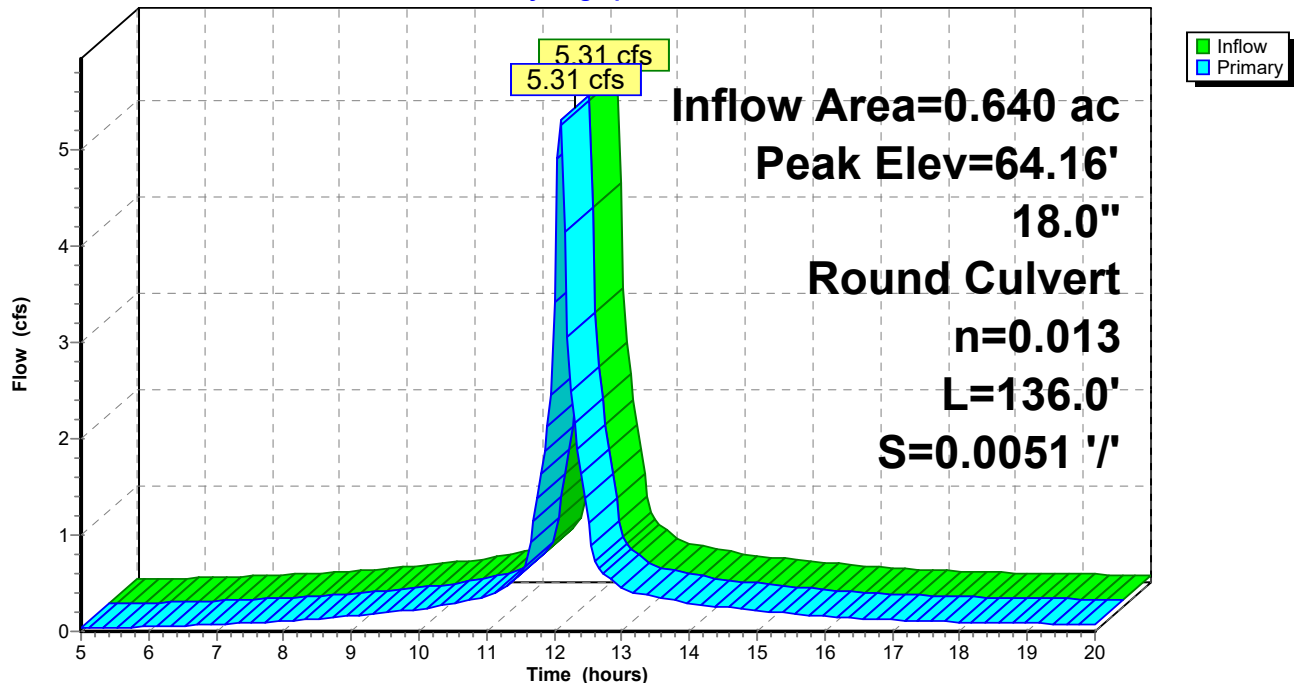
Device	Routing	Invert	Outlet Devices
#1	Primary	62.79'	18.0" Round Culvert L= 136.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 62.79' / 62.10' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.21' (Flood elevation advised)

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

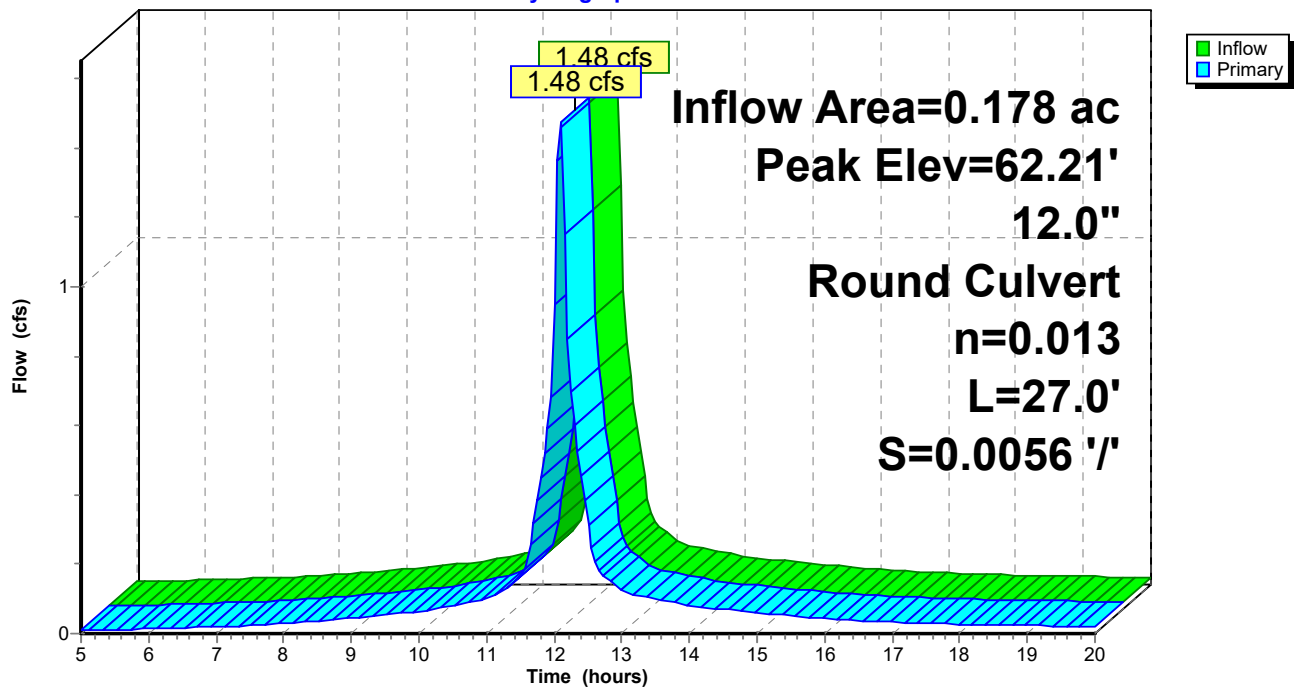
Device	Routing	Invert	Outlet Devices
#1	Primary	61.40'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.40' / 61.25' S= 0.0056 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.66' (Flood elevation advised)

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

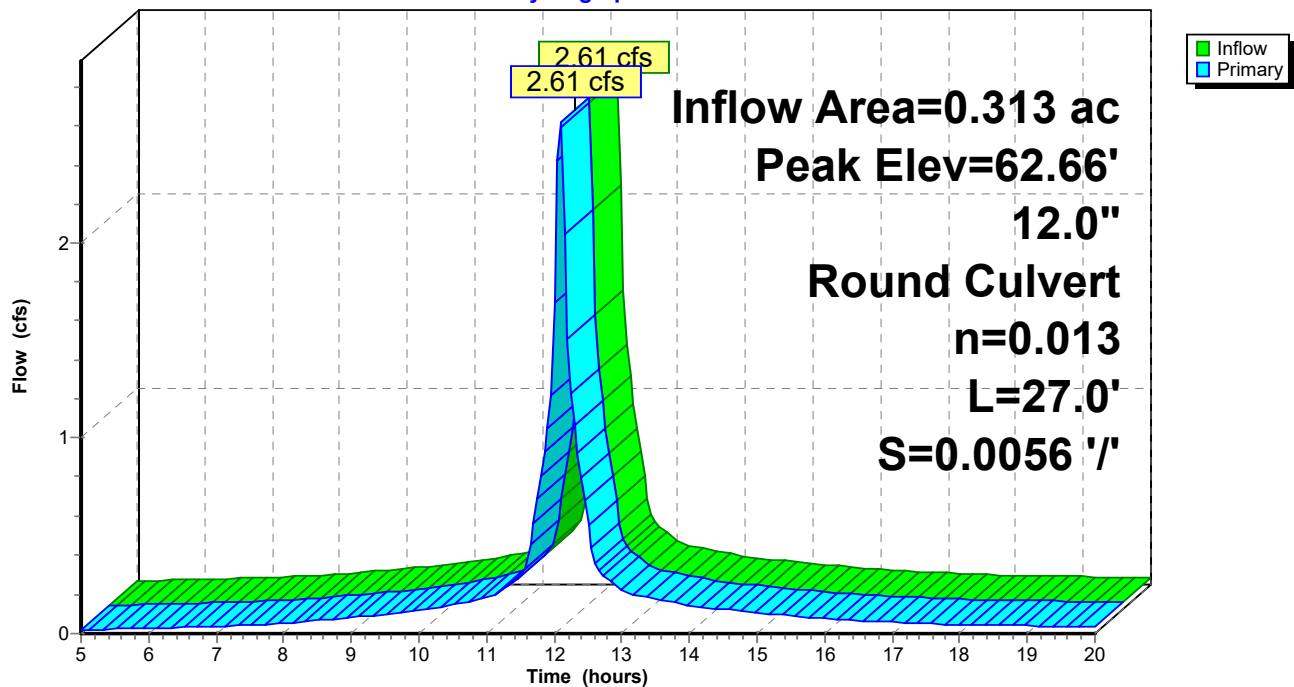
Device	Routing	Invert	Outlet Devices
#1	Primary	61.40'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.40' / 61.25' S= 0.0056 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.37' (Flood elevation advised)

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

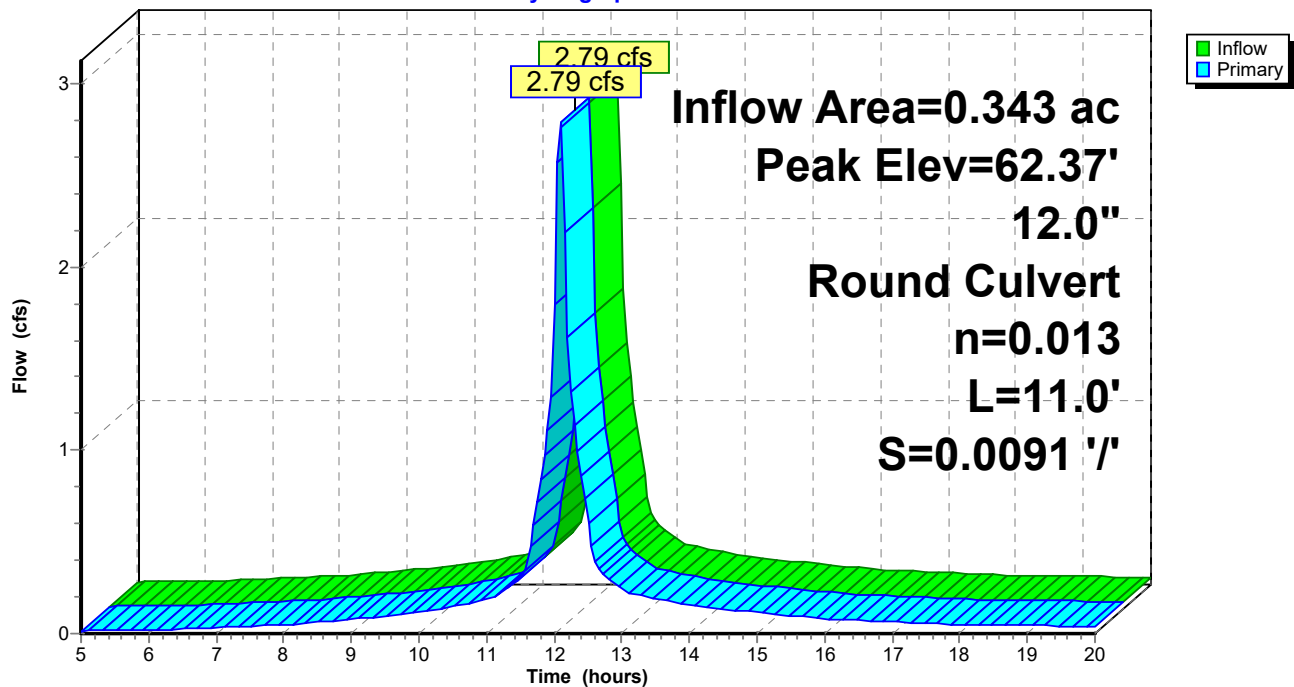
Device	Routing	Invert	Outlet Devices
#1	Primary	61.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.00' / 60.90' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.48' (Flood elevation advised)

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

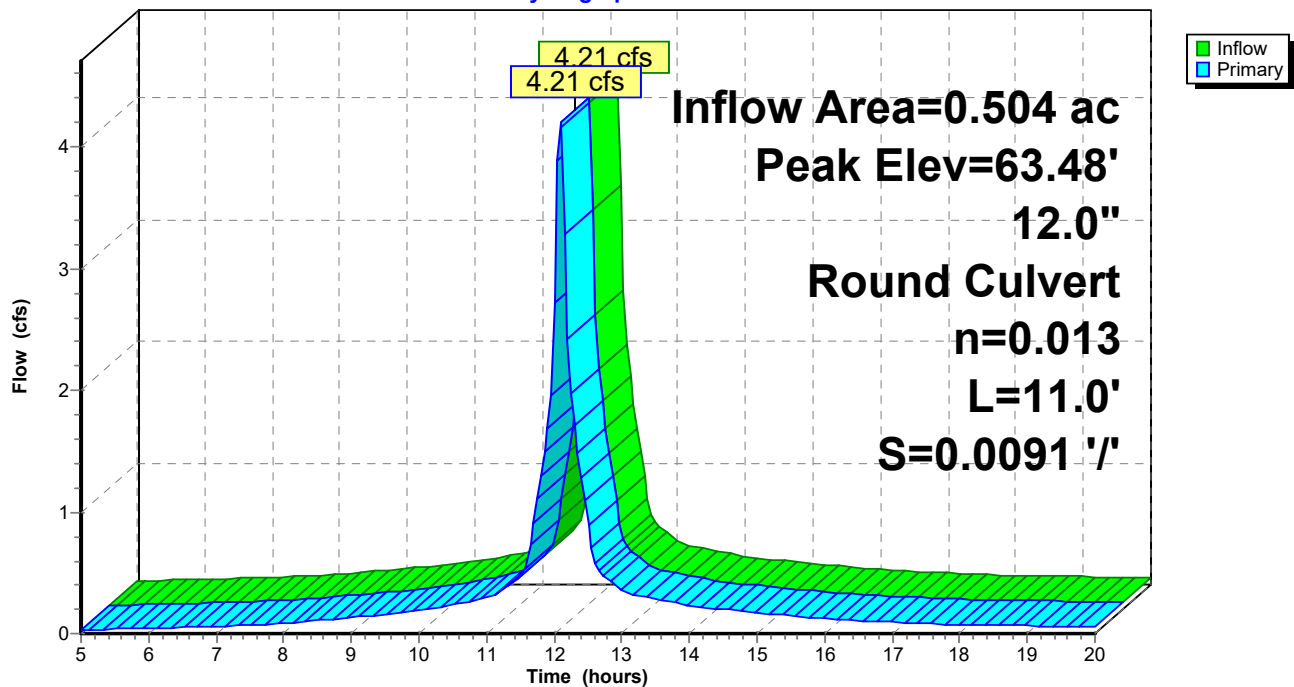
Device	Routing	Invert	Outlet Devices
#1	Primary	61.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.00' / 60.90' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.63' (Flood elevation advised)

[81] Warning: Exceeded Pond 104P by 0.26' @ 12.10 hrs

[79] Warning: Submerged Pond 105P Primary device # 1 INLET by 1.62'

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

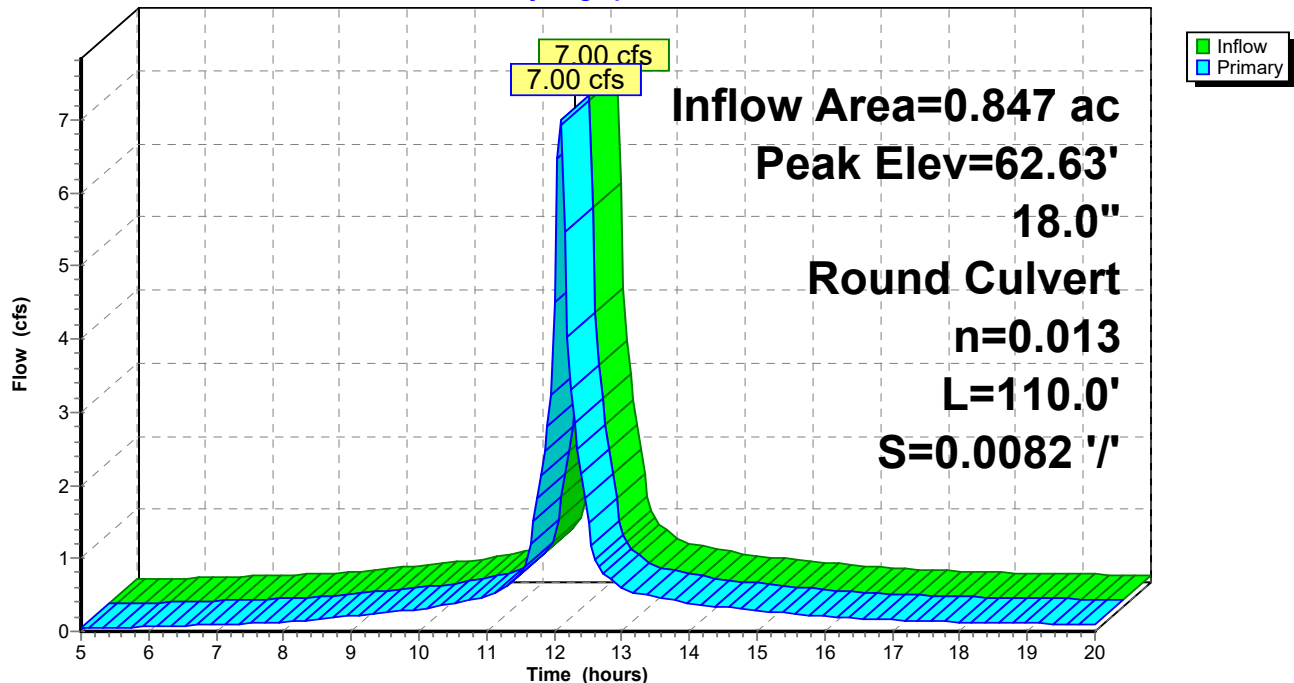
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 62.63' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	60.80'	18.0" Round Culvert L= 110.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.80' / 59.90' S= 0.0082 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.90' (Flood elevation advised)

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

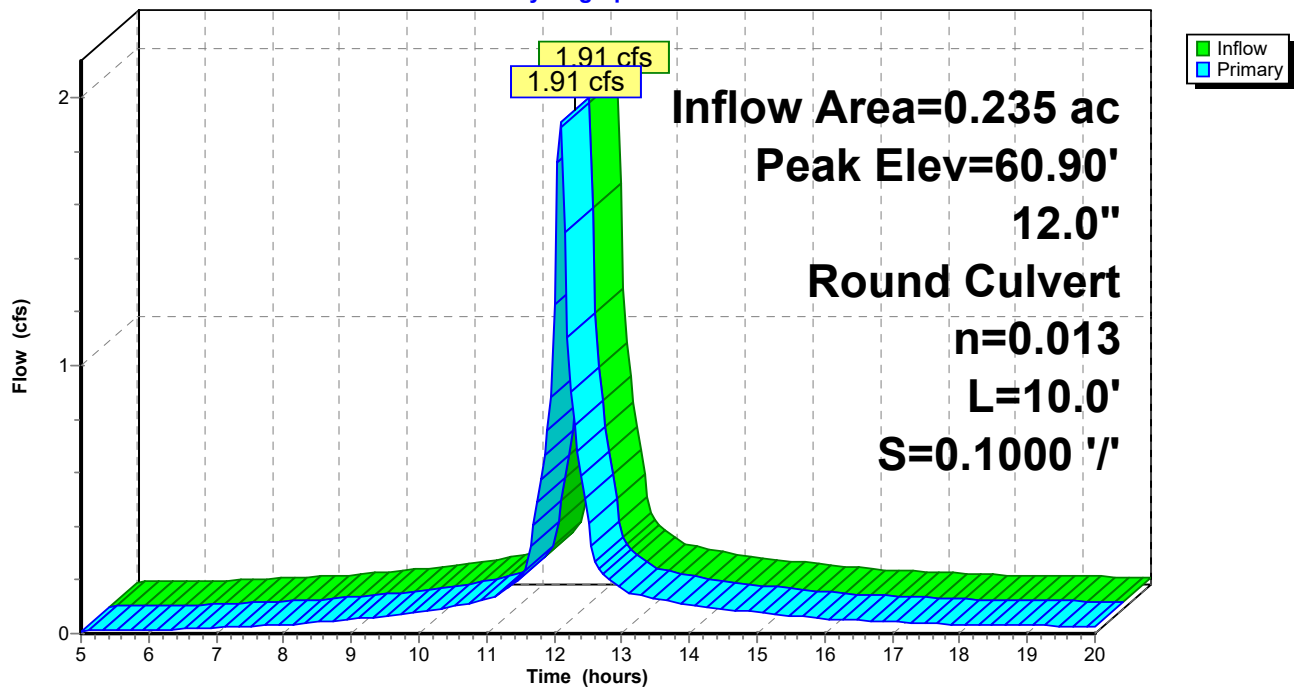
Device	Routing	Invert	Outlet Devices
#1	Primary	60.00'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.00' / 59.00' S= 0.1000 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.51' (Flood elevation advised)

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

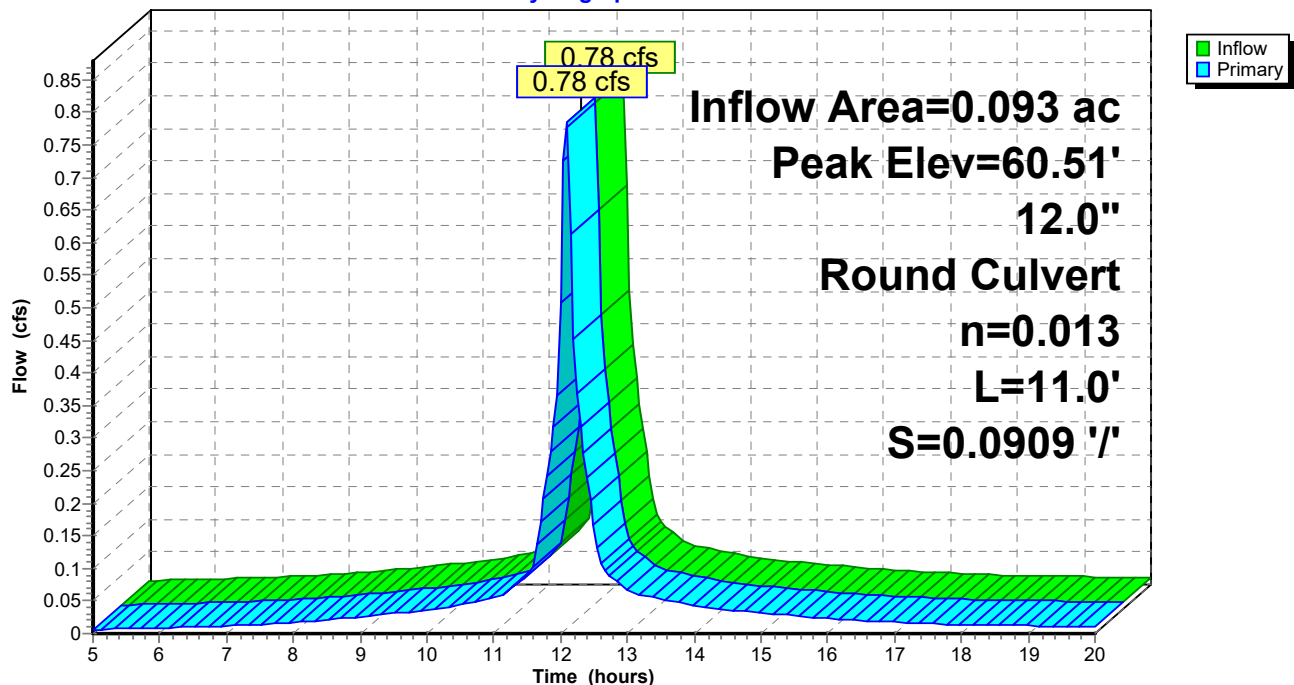
Device	Routing	Invert	Outlet Devices
#1	Primary	60.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.00' / 59.00' S= 0.0909 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.45' (Flood elevation advised)

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

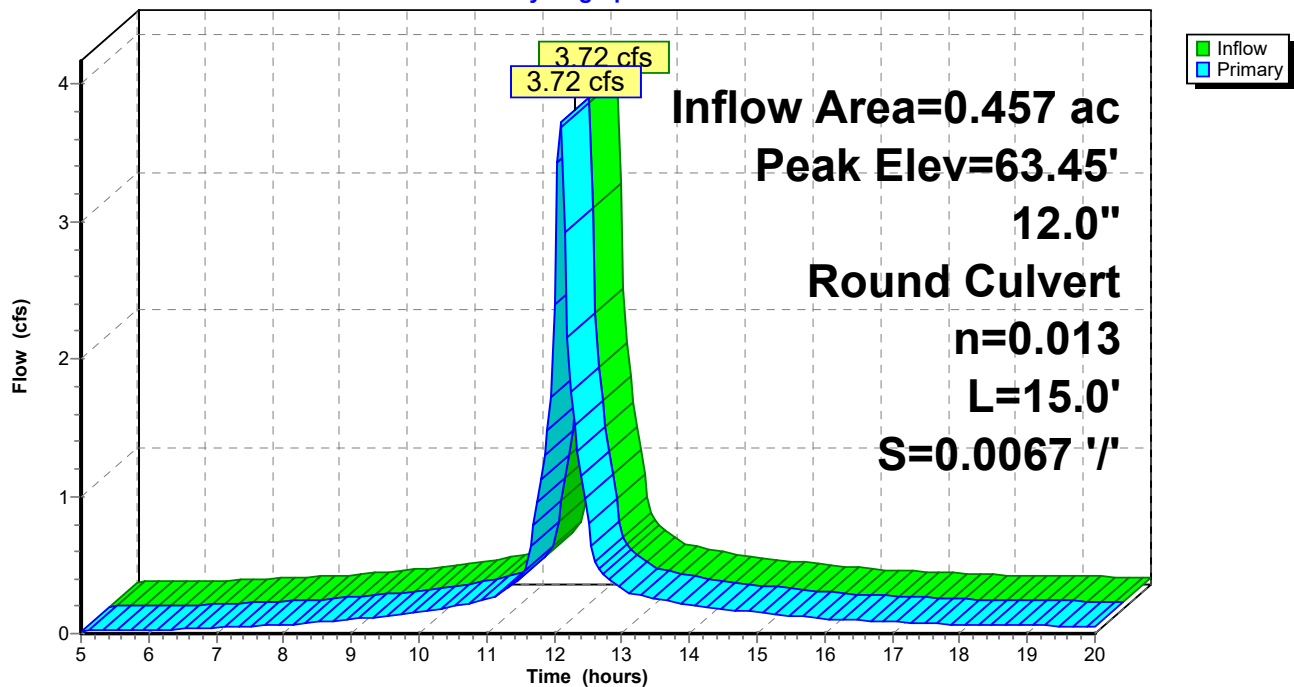
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 63.45' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	61.40'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.40' / 61.30' S= 0.0067 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.59' (Flood elevation advised)

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

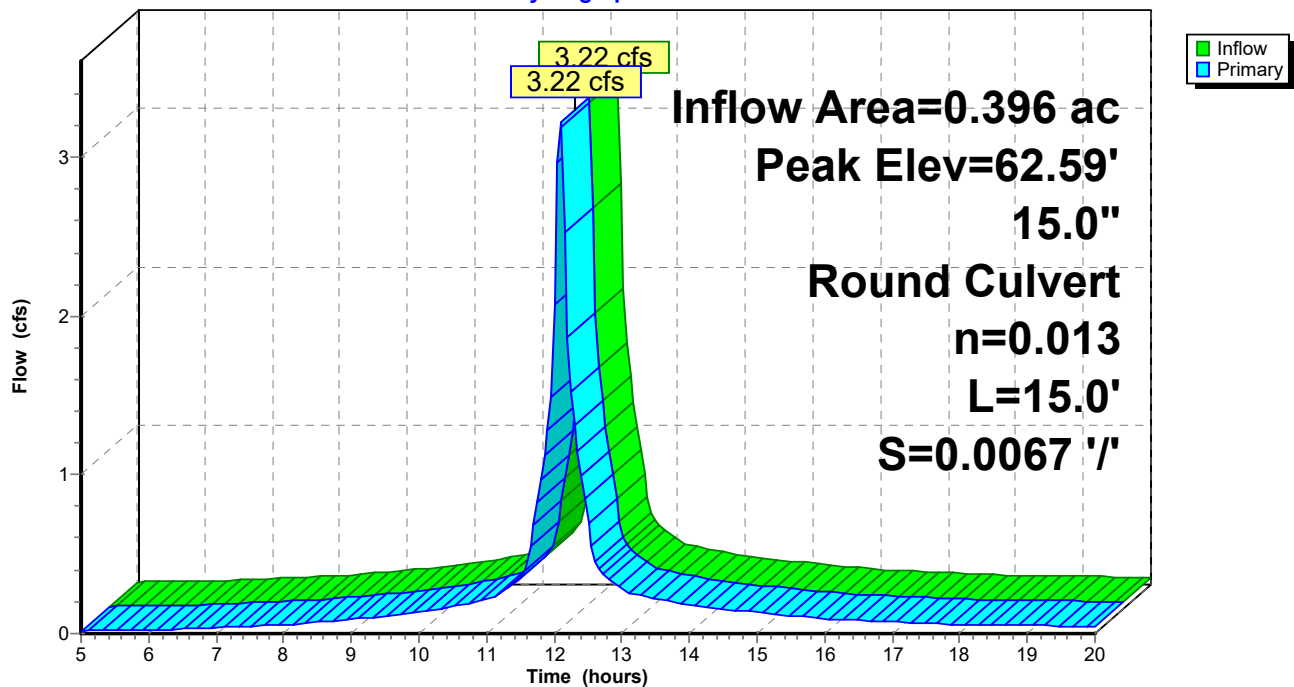
Device	Routing	Invert	Outlet Devices
#1	Primary	61.40'	15.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.40' / 61.30' S= 0.0067 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.88' (Flood elevation advised)

[79] Warning: Submerged Pond 96P Primary device # 1 INLET by 1.86'

[81] Warning: Exceeded Pond 109P by 0.43' @ 12.10 hrs

[81] Warning: Exceeded Pond 110P by 1.27' @ 12.10 hrs

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

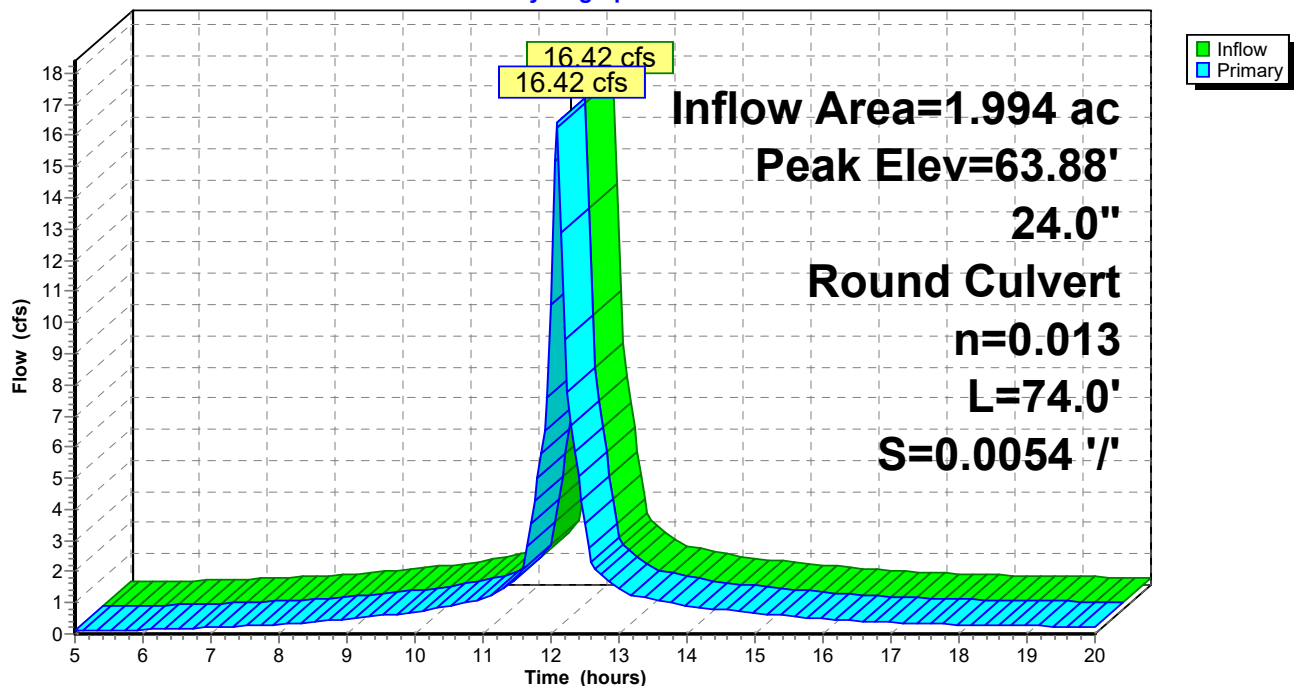
Device	Routing	Invert	Outlet Devices
#1	Primary	61.00'	24.0" Round Culvert L= 74.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 61.00' / 60.60' S= 0.0054 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

Primary OutFlow Max=16.00 cfs @ 12.09 hrs HW=63.79' (Free Discharge)

↑**1=Culvert** (Inlet Controls 16.00 cfs @ 5.09 hrs)

Pond 111P: DMH 57

Hydrograph



Summary for Pond 112P: CB 45

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.68' (Flood elevation advised)

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

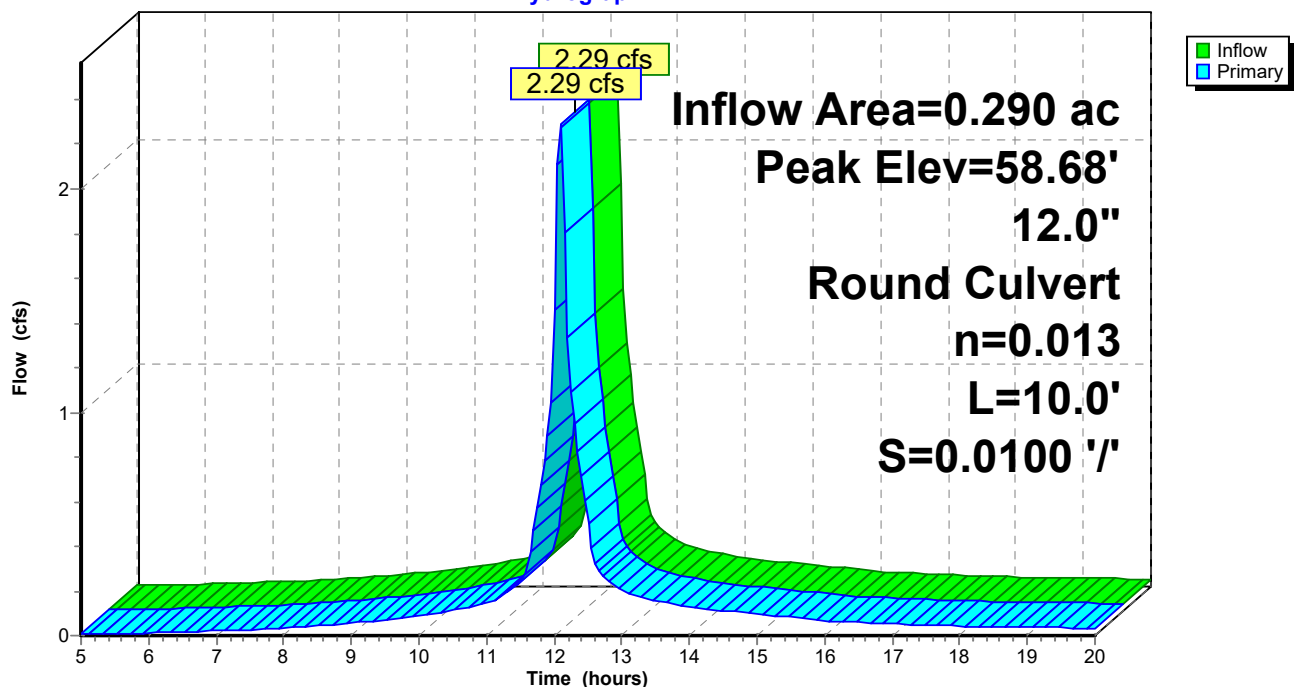
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 58.68' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	57.59'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.59' / 57.49' S= 0.0100 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.88' (Flood elevation advised)

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

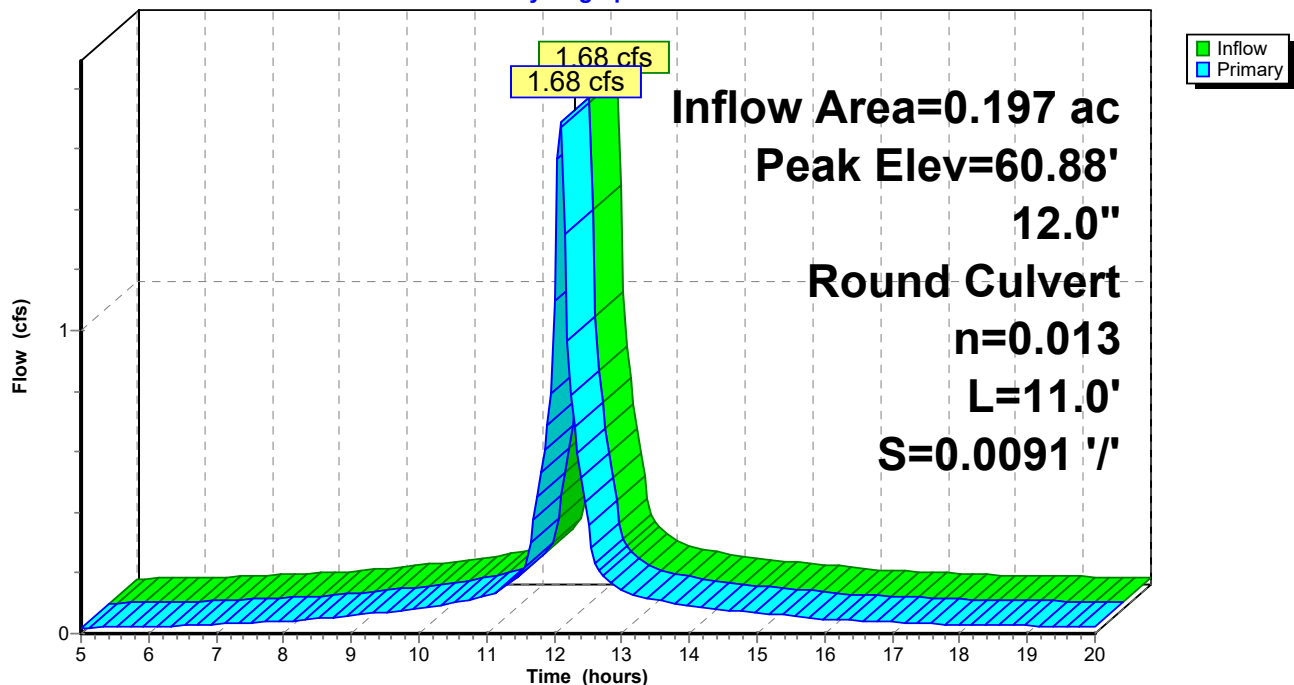
Device	Routing	Invert	Outlet Devices
#1	Primary	60.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.00' / 59.90' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.36' (Flood elevation advised)

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

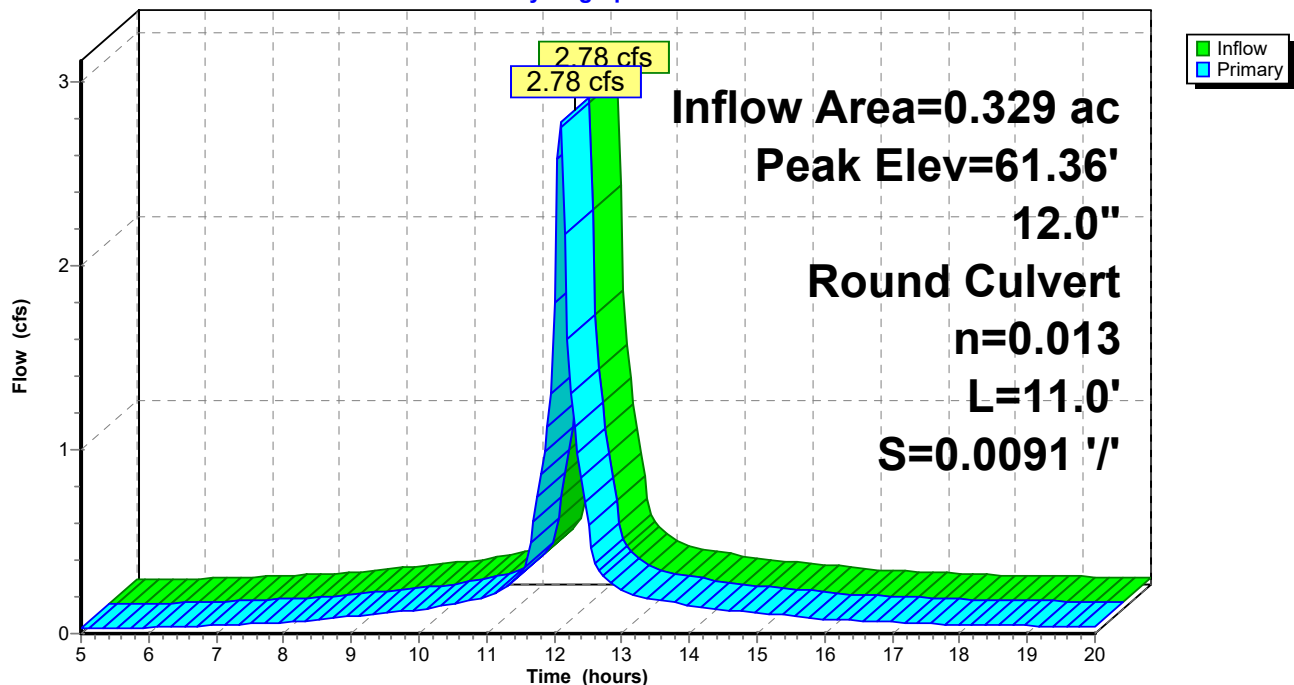
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 61.36' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	60.00'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.00' / 59.90' S= 0.0091 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.59' (Flood elevation advised)

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

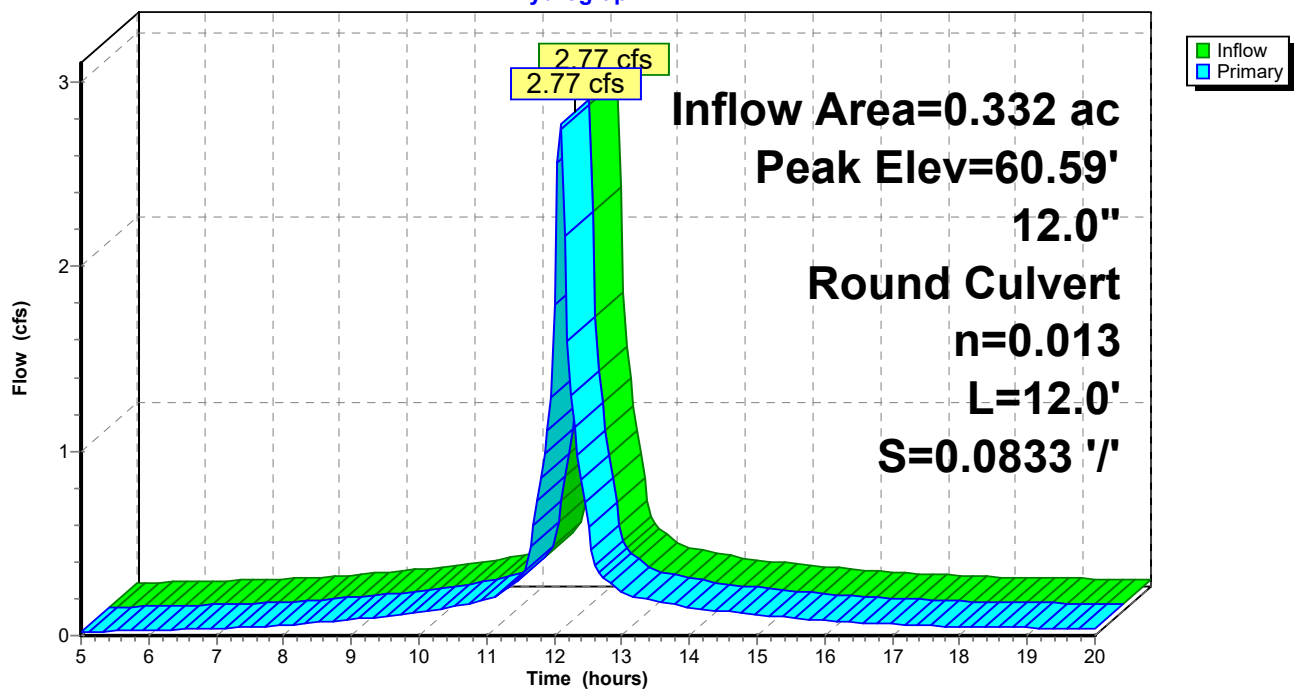
Device	Routing	Invert	Outlet Devices
#1	Primary	59.23'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.23' / 58.23' S= 0.0833 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.25' (Flood elevation advised)

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

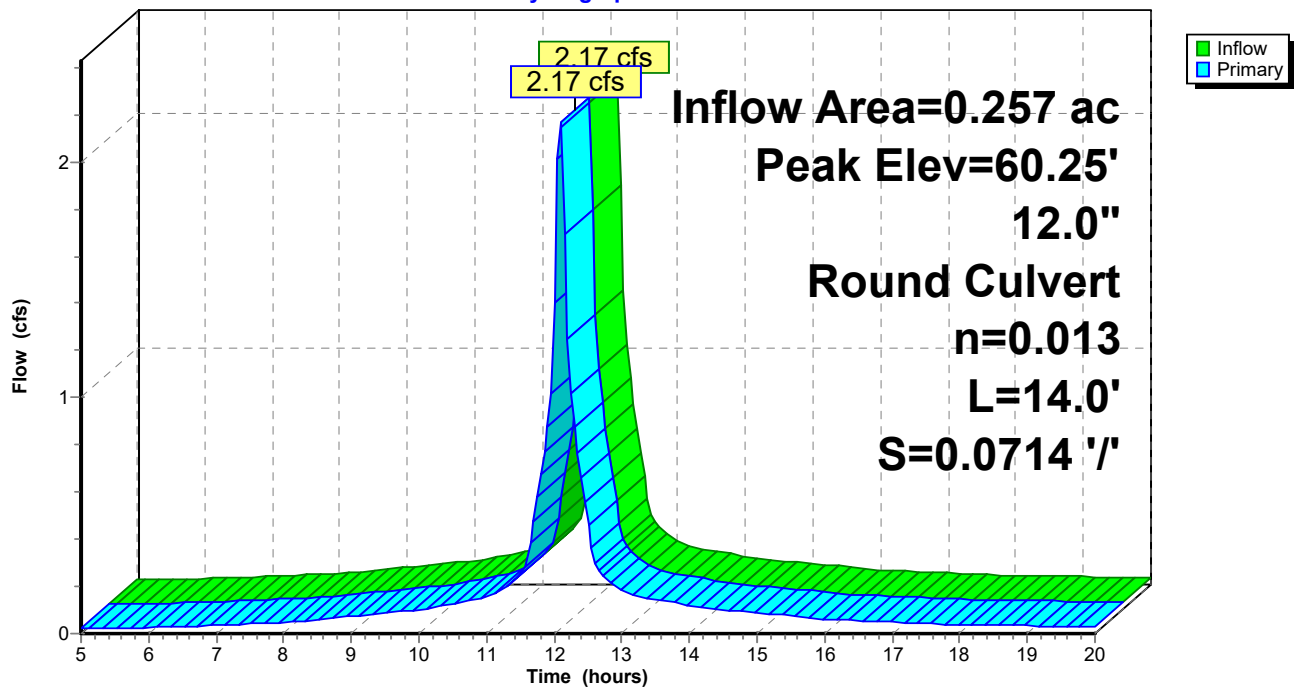
Device	Routing	Invert	Outlet Devices
#1	Primary	59.23'	12.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.23' / 58.23' S= 0.0714 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 61.68' (Flood elevation advised)

[79] Warning: Submerged Pond 102P Primary device # 1 INLET by 0.25'

[79] Warning: Submerged Pond 103P Primary device # 1 INLET by 0.25'

[79] Warning: Submerged Pond 118P Primary device # 1 INLET by 1.85'

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

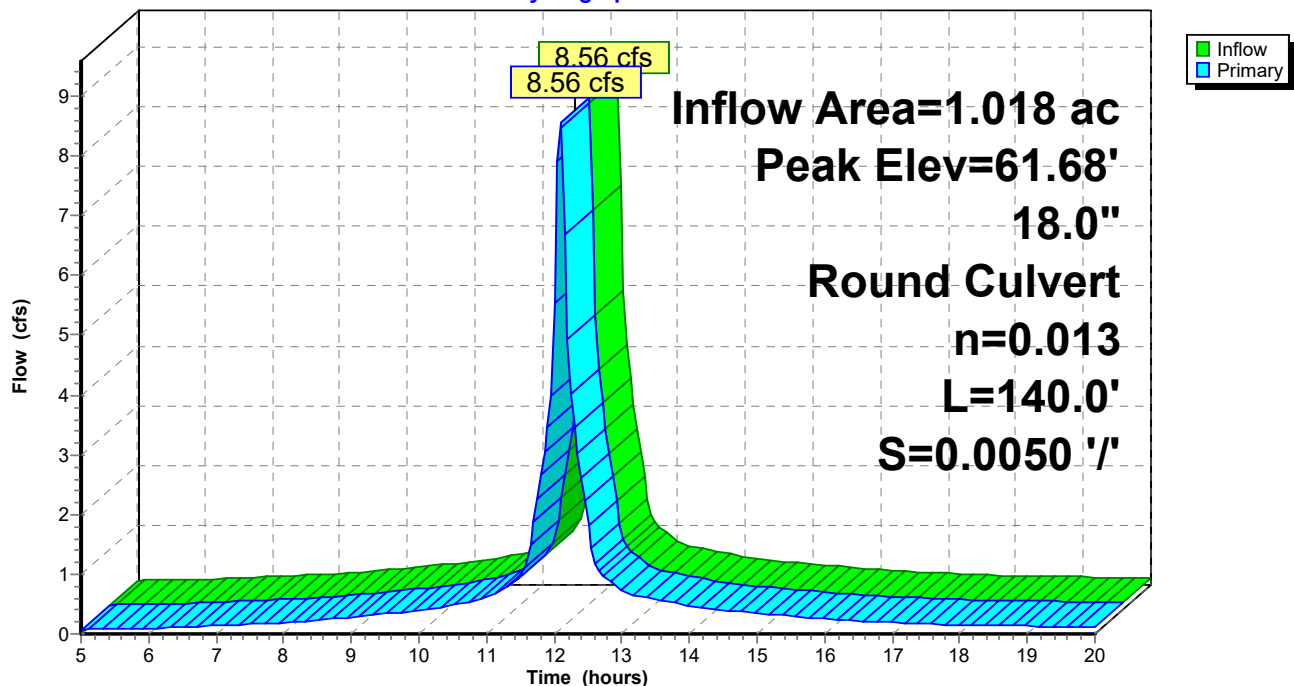
Device	Routing	Invert	Outlet Devices
#1	Primary	59.26'	18.0" Round Culvert L= 140.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.26' / 58.56' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.68' (Flood elevation advised)

[81] Warning: Exceeded Pond 113P by 1.77' @ 12.10 hrs

[81] Warning: Exceeded Pond 114P by 1.29' @ 12.10 hrs

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

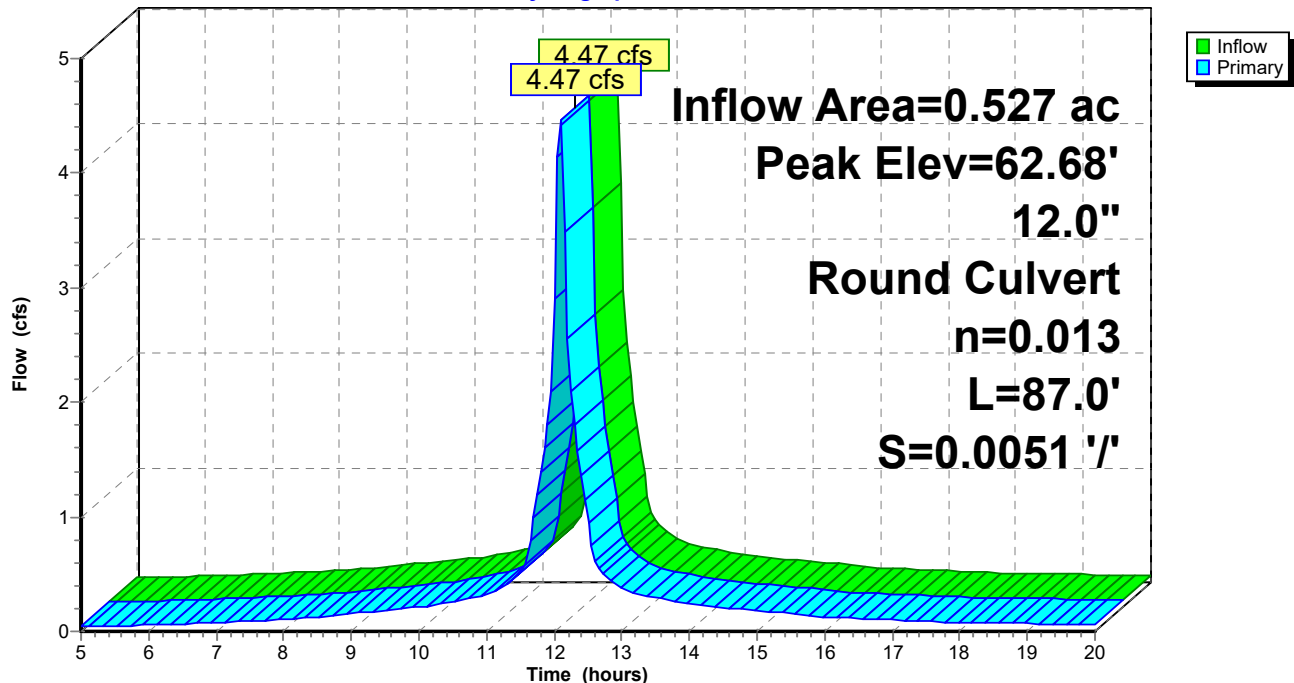
Device	Routing	Invert	Outlet Devices
#1	Primary	59.80'	12.0" Round Culvert L= 87.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.80' / 59.36' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 62.01' (Flood elevation advised)

[81] Warning: Exceeded Pond 107P by 1.06' @ 12.10 hrs

[81] Warning: Exceeded Pond 108P by 1.45' @ 12.10 hrs

[81] Warning: Exceeded Pond 117P by 0.31' @ 12.10 hrs

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

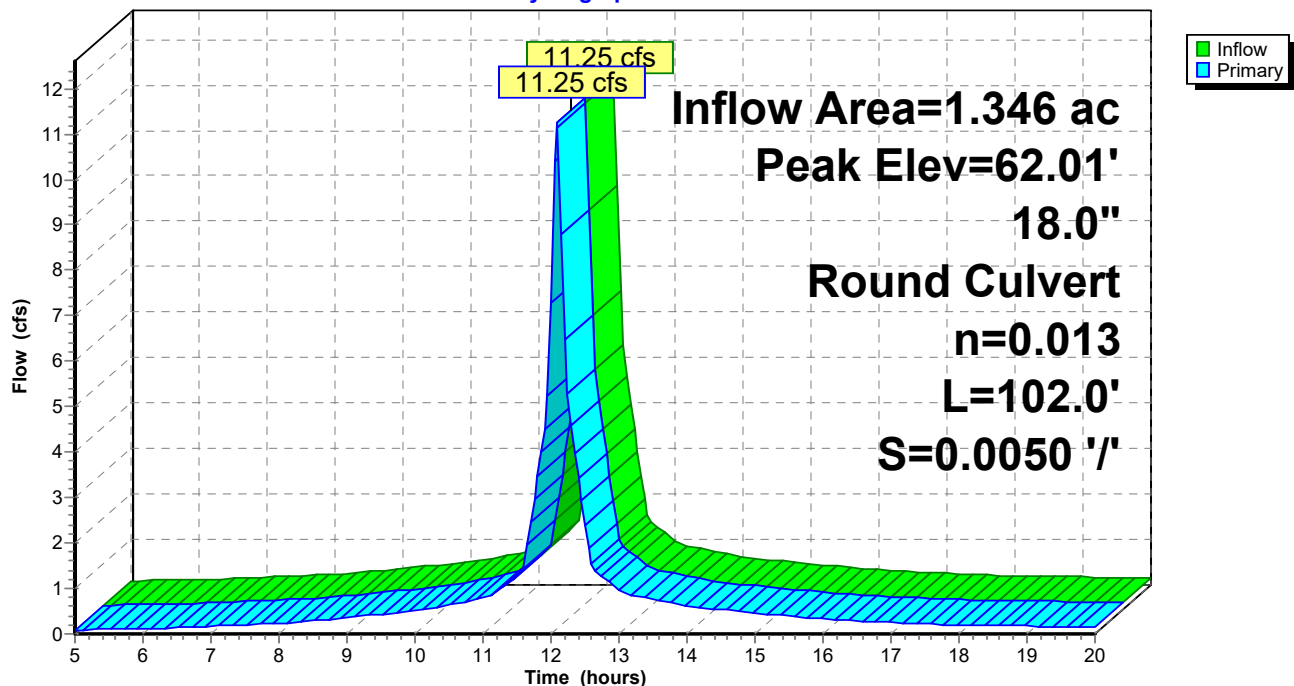
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 62.01' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	58.46'	18.0" Round Culvert L= 102.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 58.46' / 57.95' S= 0.0050 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span
 [57] Hint: Peaked at 60.68' (Flood elevation advised)
 [81] Warning: Exceeded Pond 115P by 0.08' @ 12.10 hrs
 [81] Warning: Exceeded Pond 116P by 0.41' @ 12.10 hrs
 [79] Warning: Submerged Pond 119P Primary device # 1 INLET by 2.19'

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

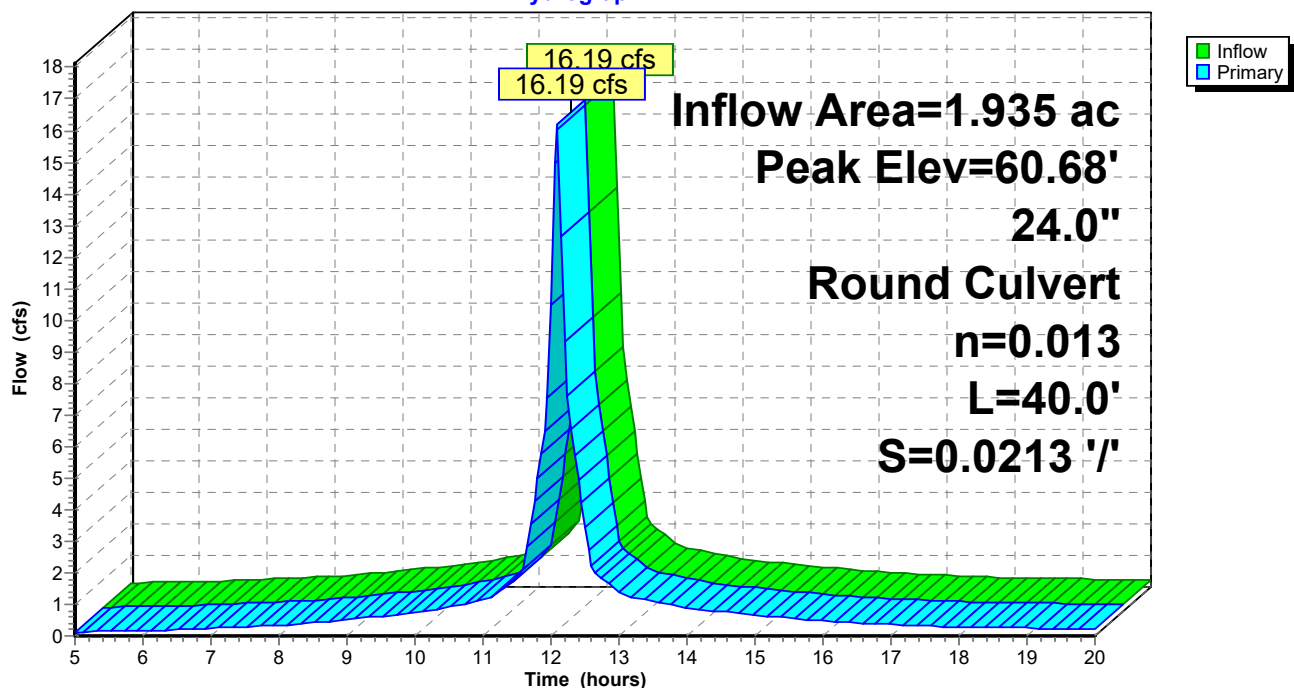
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 60.68' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	57.85'	24.0" Round Culvert L= 40.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.85' / 57.00' S= 0.0213 '/ Cc= 0.900 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 121P: Sub. Det. 3

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 210P by 2.43' @ 12.60 hrs

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 = 12.84 cfs @ 12.16 hrs, Volume= 1.014 af, Atten= 21%, Lag= 4.3 min
 Primary = 12.84 cfs @ 12.16 hrs, Volume= 1.014 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= 61.63' @ 12.16 hrs Surf.Area= 0.109 ac Storage= 0.434 af

Plug-Flow detention time= 113.0 min calculated for 1.010 af (83% of inflow)
 Center-of-Mass det. time= 65.1 min (807.6 - 742.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	57.00'	0.016 af	66.00'W x 72.00'L x 5.71'H Field A 0.623 af Overall - 0.583 af Embedded = 0.040 af x 40.0% Voids
#2A	57.04'	0.459 af	Shea Leaching Chamber 8x14x5.7 x 40 Inside #1 Inside= 84.0"W x 60.0"H => 38.46 sf x 13.00'L = 500.0 cf Outside= 96.0"W x 68.0"H => 45.36 sf x 14.00'L = 635.0 cf 40 Chambers in 8 Rows
		0.475 af	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	57.00'	18.0" Round Culvert L= 55.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.00' / 53.00' S= 0.0727 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	59.00'	6.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#3	Device 1	60.80'	4.0' long Sharp-Crested Vee/Trap Weir Cv= 2.62 (C= 3.28)
#4	Device 1	57.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=12.64 cfs @ 12.16 hrs HW=61.62' (Free Discharge)

- 1=Culvert (Passes 12.64 cfs of 13.21 cfs potential flow)
- 2=Orifice/Grate (Orifice Controls 2.91 cfs @ 7.41 fps)
- 3=Sharp-Crested Vee/Trap Weir (Weir Controls 9.67 cfs @ 2.96 fps)
- 4=Orifice/Grate (Orifice Controls 0.06 cfs @ 10.30 fps)

Pond 121P: Sub. Det. 3 - Chamber Wizard Field A

Chamber Model = Shea Leaching Chamber 8x14x5.7 (Shea Galley)

Inside= 84.0"W x 60.0"H => 38.46 sf x 13.00'L = 500.0 cf

Outside= 96.0"W x 68.0"H => 45.36 sf x 14.00'L = 635.0 cf

5 Chambers/Row x 14.00' Long = 70.00' Row Length +12.0" End Stone x 2 = 72.00' Base Length

8 Rows x 96.0" Wide + 12.0" Side Stone x 2 = 66.00' Base Width

0.5" Stone Base + 68.0" Chamber Height = 5.71' Field Height

40 Chambers x 500.0 cf = 20,000.0 cf Chamber Storage

40 Chambers x 635.0 cf = 25,401.6 cf Displacement

27,141.8 cf Field - 25,401.6 cf Chambers = 1,740.2 cf Stone x 40.0% Voids = 696.1 cf Stone Storage

Chamber Storage + Stone Storage = 20,696.1 cf = 0.475 af

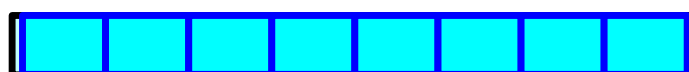
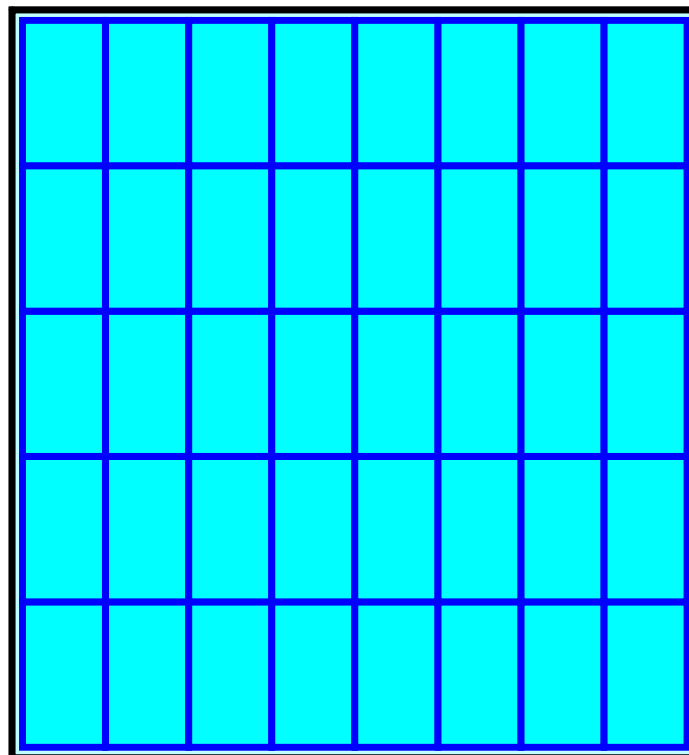
Overall Storage Efficiency = 76.3%

Overall System Size = 72.00' x 66.00' x 5.71'

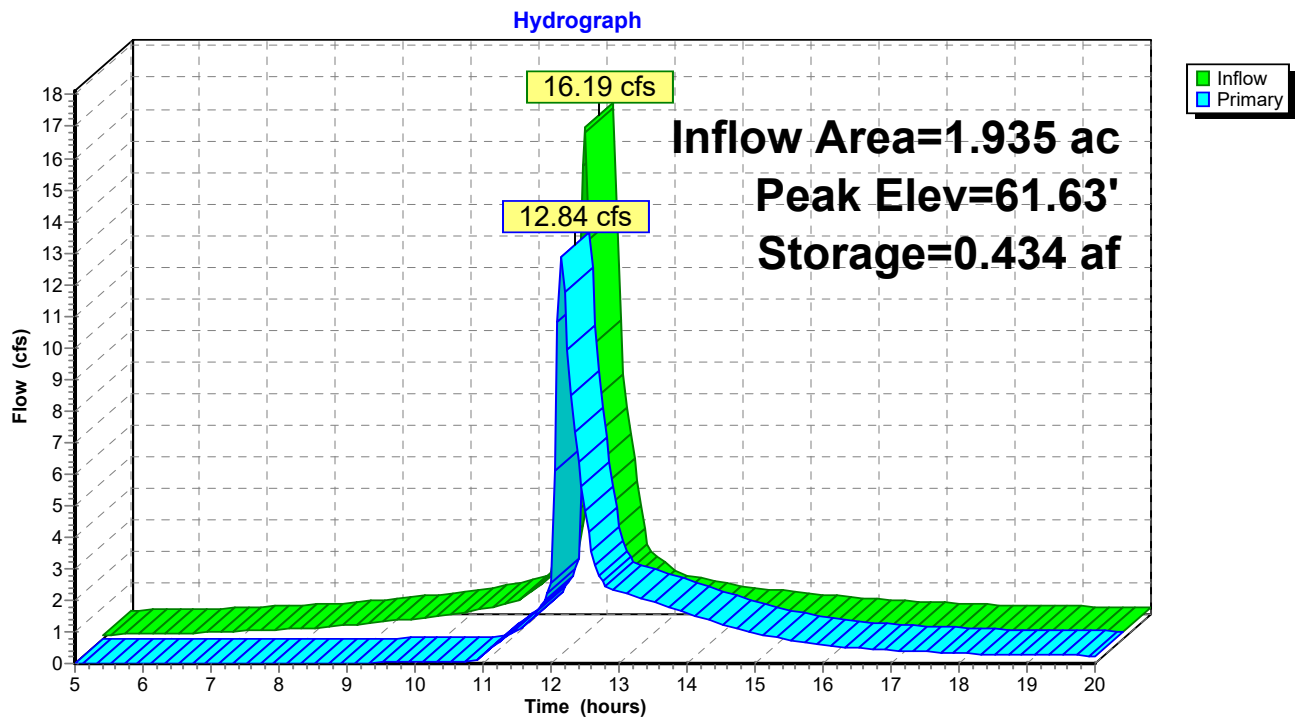
40 Chambers

1,005.3 cy Field

64.5 cy Stone



Pond 121P: Sub. Det. 3



Summary for Pond 122P: CB 46

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.70' (Flood elevation advised)

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

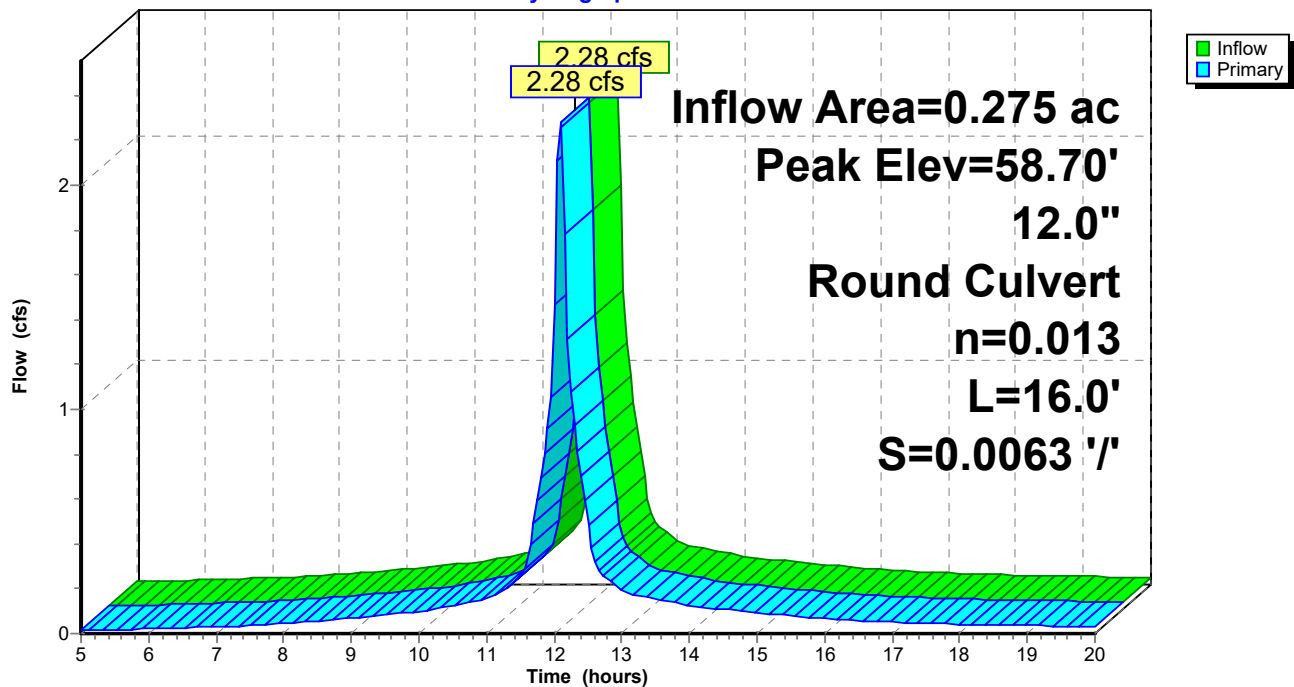
Device	Routing	Invert	Outlet Devices
#1	Primary	57.59'	12.0" Round Culvert L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.59' / 57.49' S= 0.0063 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 58.61' (Flood elevation advised)

[79] Warning: Submerged Pond 112P Primary device # 1 INLET by 1.01'

[79] Warning: Submerged Pond 122P Primary device # 1 INLET by 1.01'

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

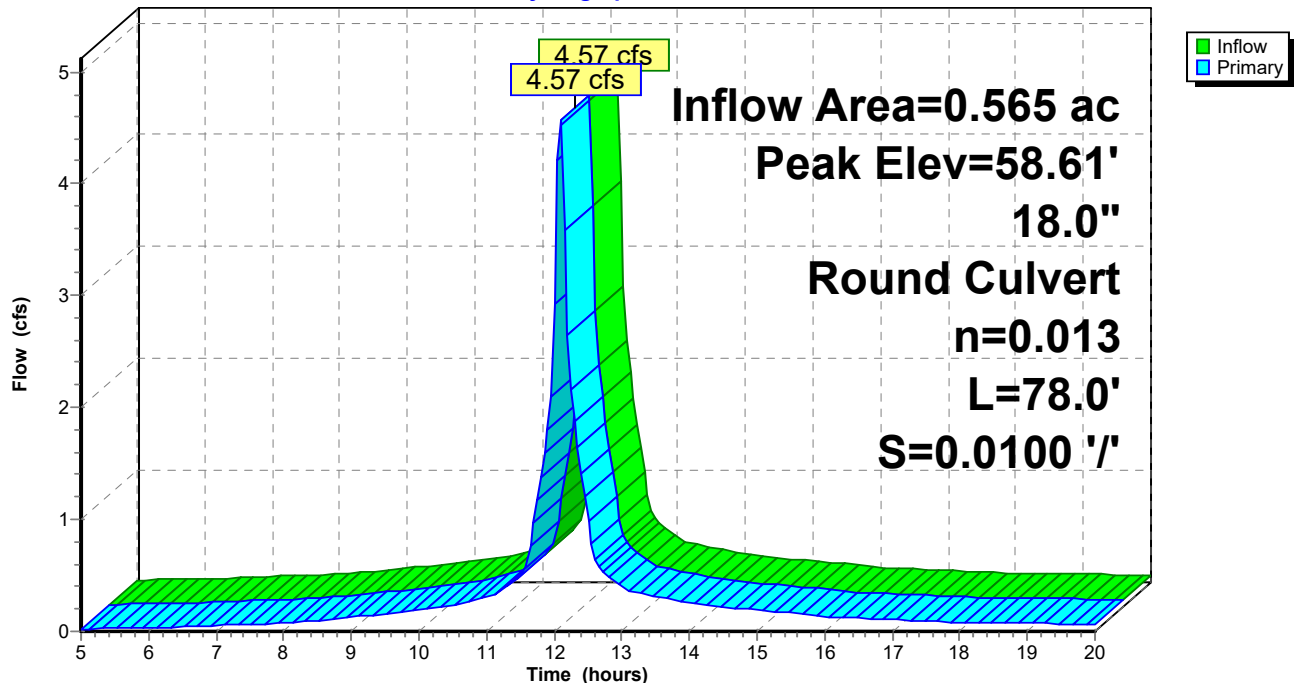
Device	Routing	Invert	Outlet Devices
#1	Primary	57.39'	18.0" Round Culvert L= 78.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.39' / 56.61' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 57.79' (Flood elevation advised)

[79] Warning: Submerged Pond 123P Primary device # 1 INLET by 0.39'

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

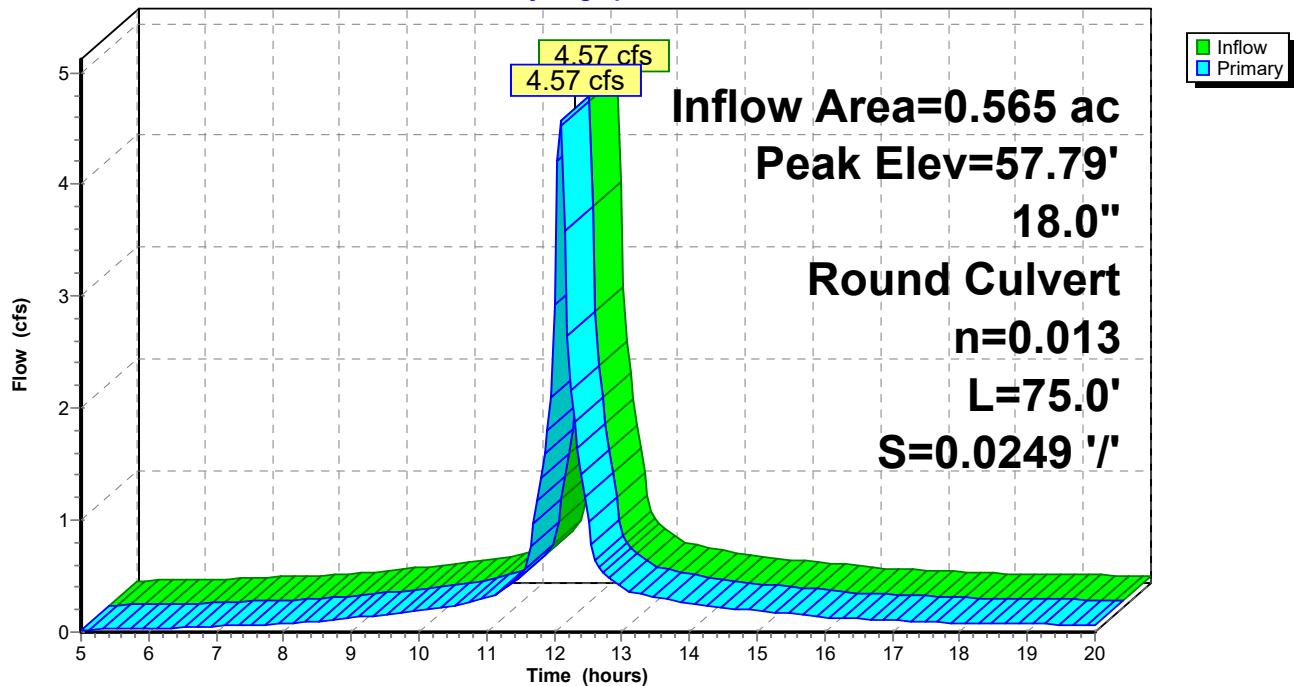
Device	Routing	Invert	Outlet Devices
#1	Primary	56.57'	18.0" Round Culvert L= 75.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 56.57' / 54.70' S= 0.0249 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 55.28' (Flood elevation advised)

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

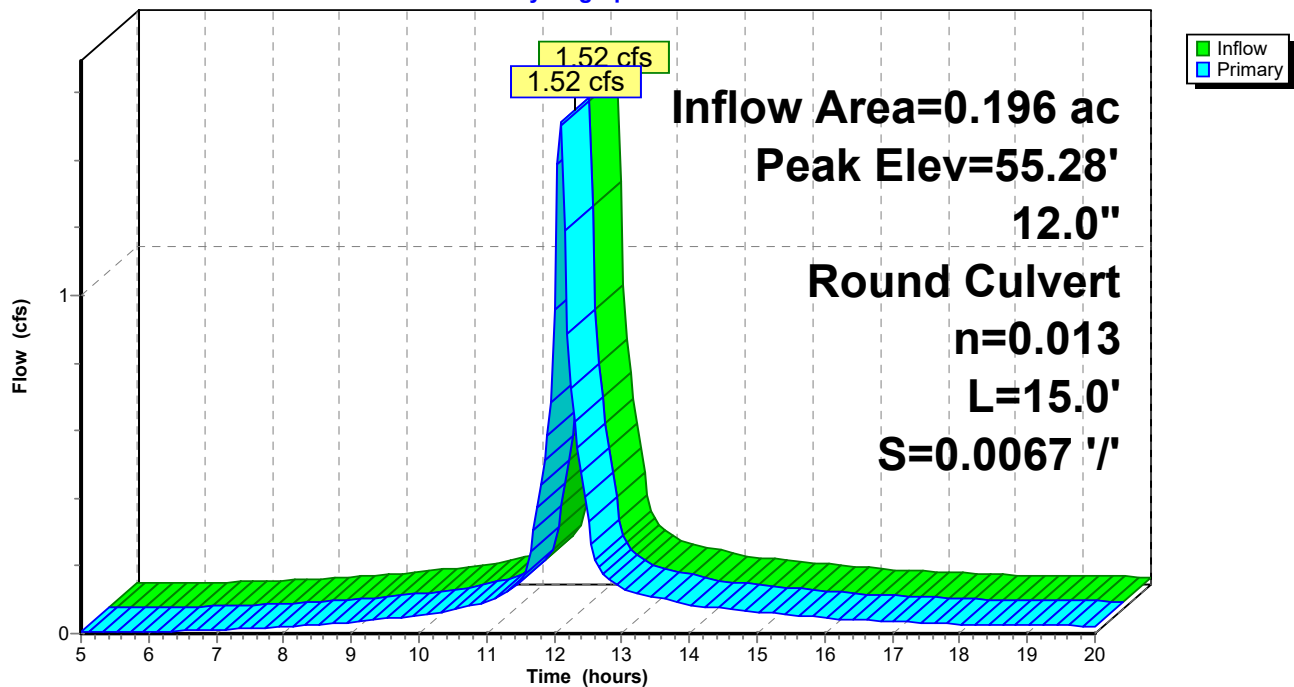
Device	Routing	Invert	Outlet Devices
#1	Primary	54.45'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.45' / 54.35' S= 0.0067 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 55.37' (Flood elevation advised)

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

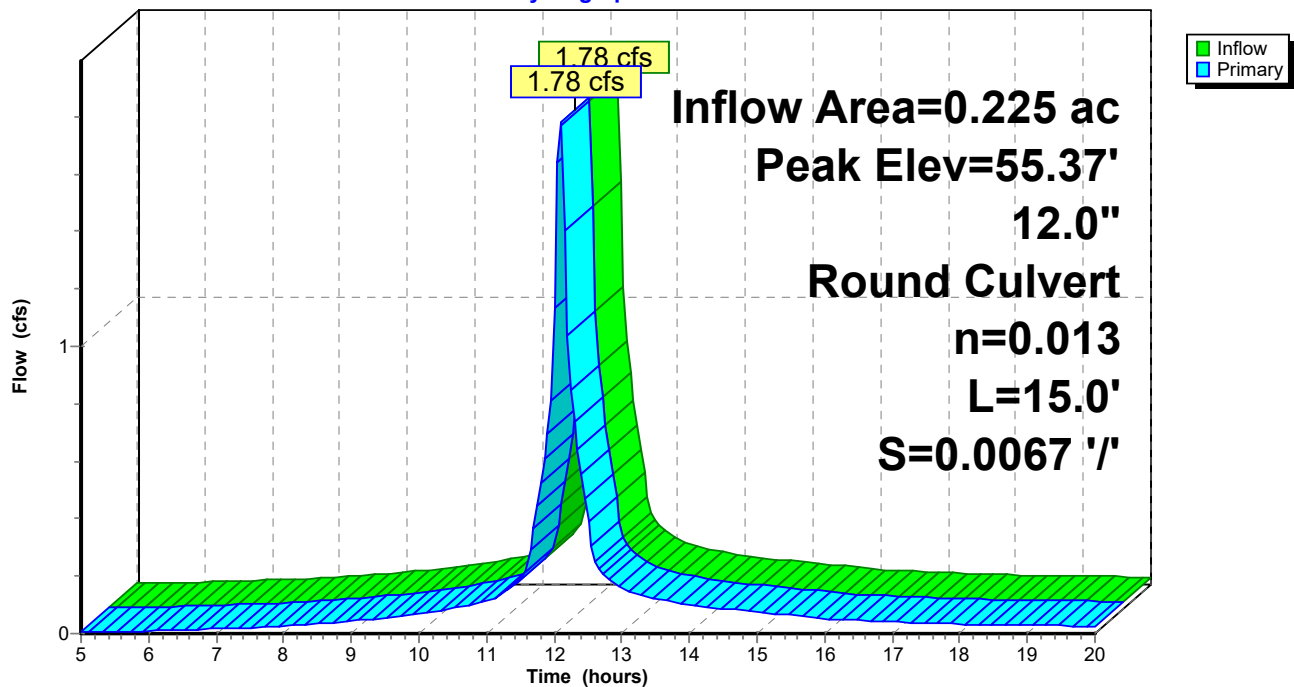
Device	Routing	Invert	Outlet Devices
#1	Primary	54.45'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.45' / 54.35' S= 0.0067 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.73 cfs @ 12.09 hrs HW=55.36' (Free Discharge)

↑=Culvert (Barrel Controls 1.73 cfs @ 3.04 fps)

Pond 126P: CB 37

Hydrograph



Summary for Pond 127P: DMH 26

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 55.96' (Flood elevation advised)

[81] Warning: Exceeded Pond 125P by 0.67' @ 12.10 hrs

[81] Warning: Exceeded Pond 126P by 0.58' @ 12.10 hrs

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

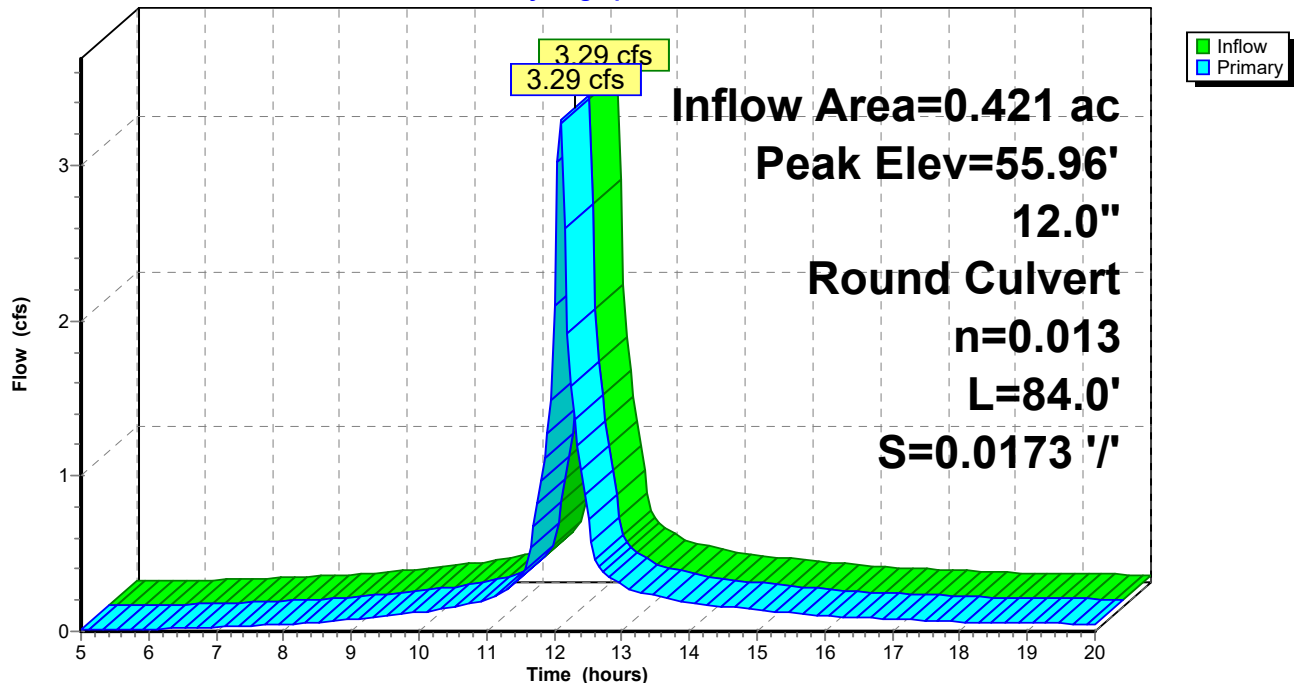
Device	Routing	Invert	Outlet Devices
#1	Primary	54.25'	12.0" Round Culvert L= 84.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.25' / 52.80' S= 0.0173 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 56.93' (Flood elevation advised)

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

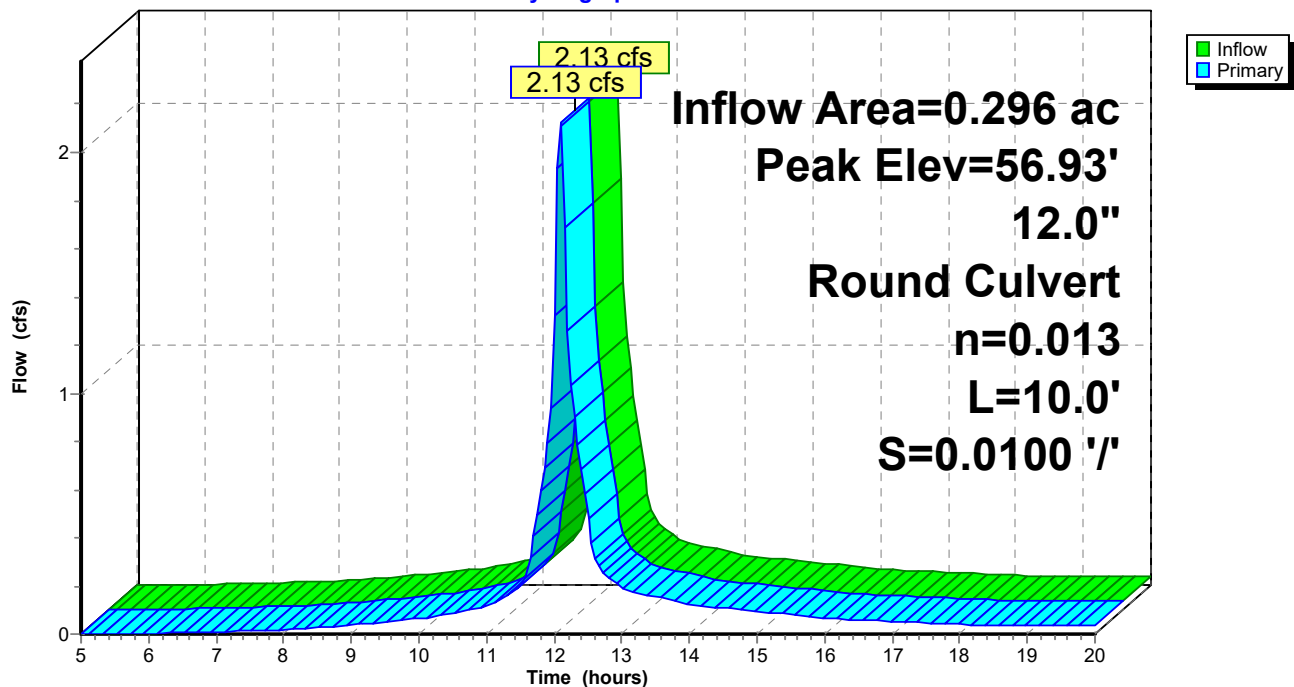
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 56.93' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	55.90'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 55.90' / 55.80' S= 0.0100 '/ Cc= 0.900 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

[57] Hint: Peaked at 55.30' (Flood elevation advised)

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

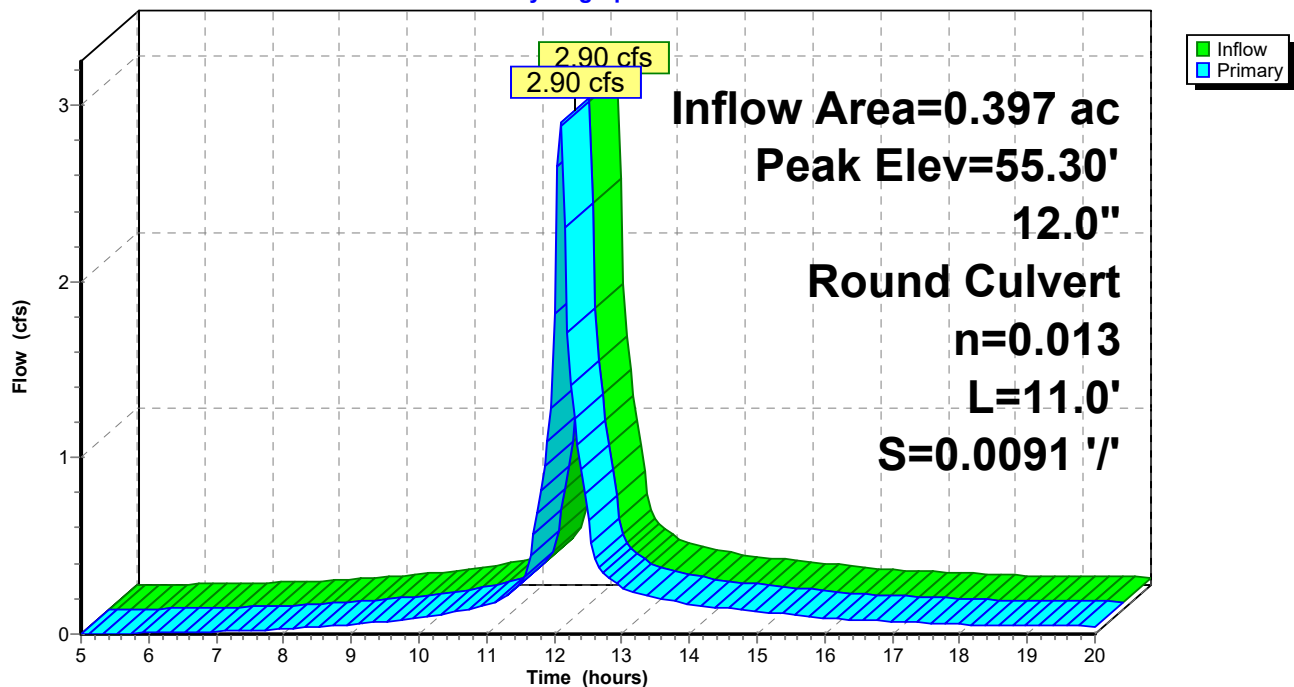
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 55.30' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.86'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.86' / 53.76' S= 0.0091 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 56.52' (Flood elevation advised)

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

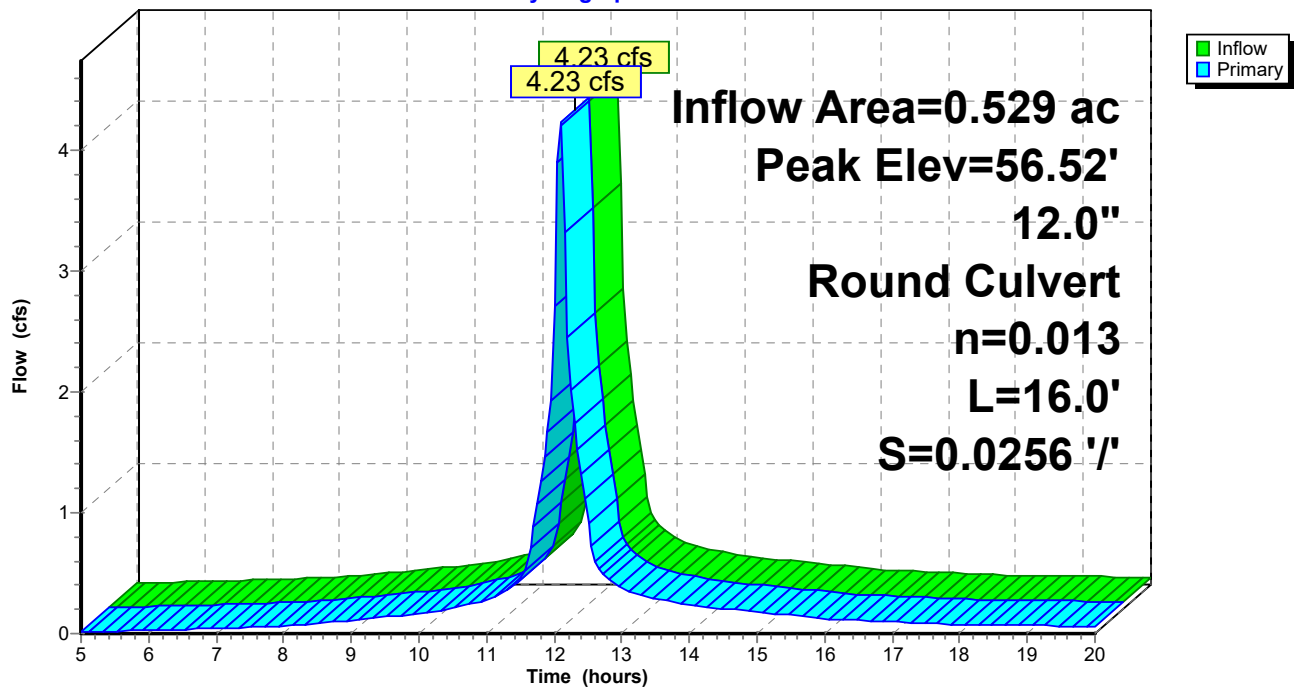
Device	Routing	Invert	Outlet Devices
#1	Primary	54.02'	12.0" Round Culvert L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.02' / 53.61' S= 0.0256 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 55.02' (Flood elevation advised)

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

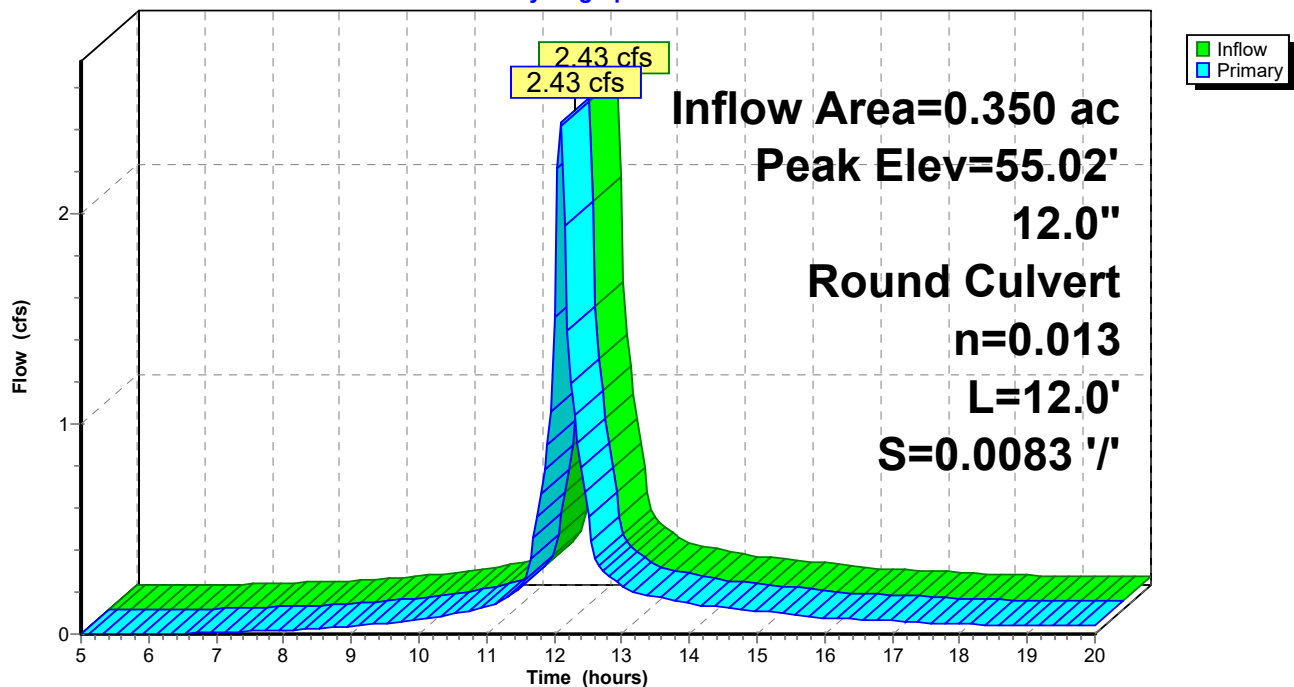
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 55.02' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.86'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.86' / 53.76' S= 0.0083 '/ Cc= 0.900 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

[57] Hint: Peaked at 54.82' (Flood elevation advised)

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

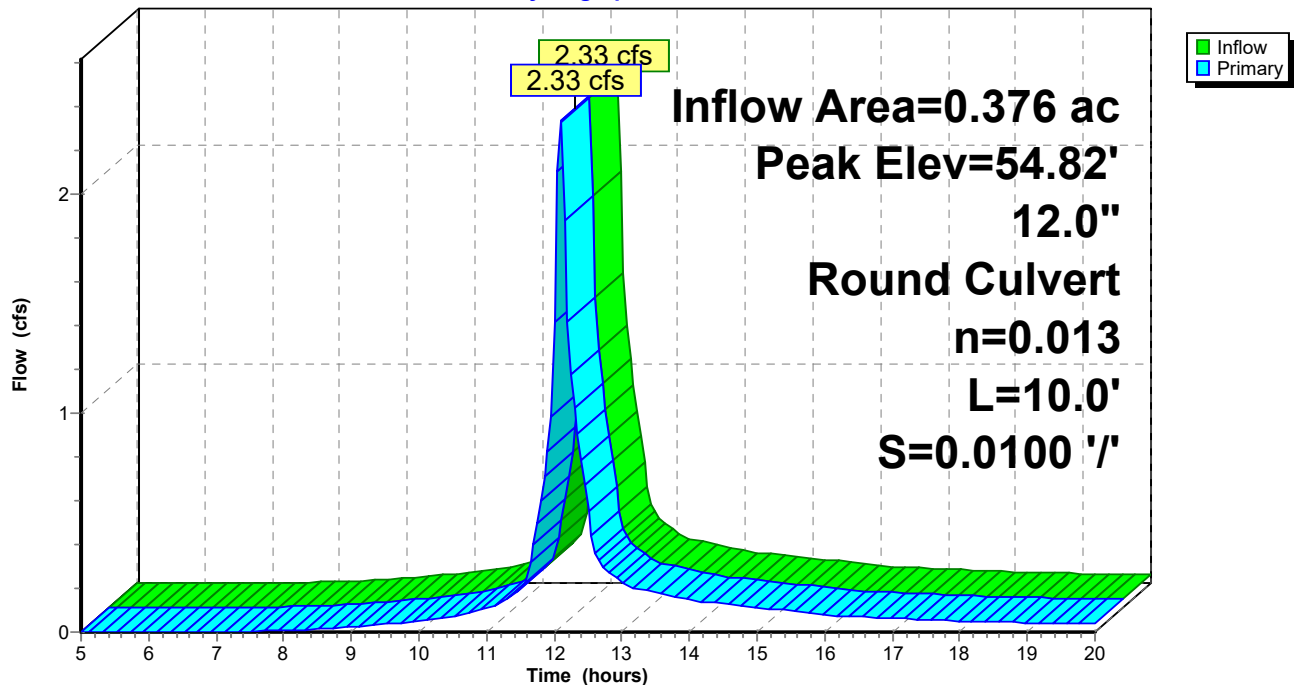
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.82' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.71'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.71' / 53.61' S= 0.0100 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 57.44' (Flood elevation advised)

[81] Warning: Exceeded Pond 130P by 0.91' @ 12.10 hrs

[81] Warning: Exceeded Pond 132P by 2.59' @ 12.10 hrs

[81] Warning: Exceeded Pond 134P by 0.09' @ 12.00 hrs

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

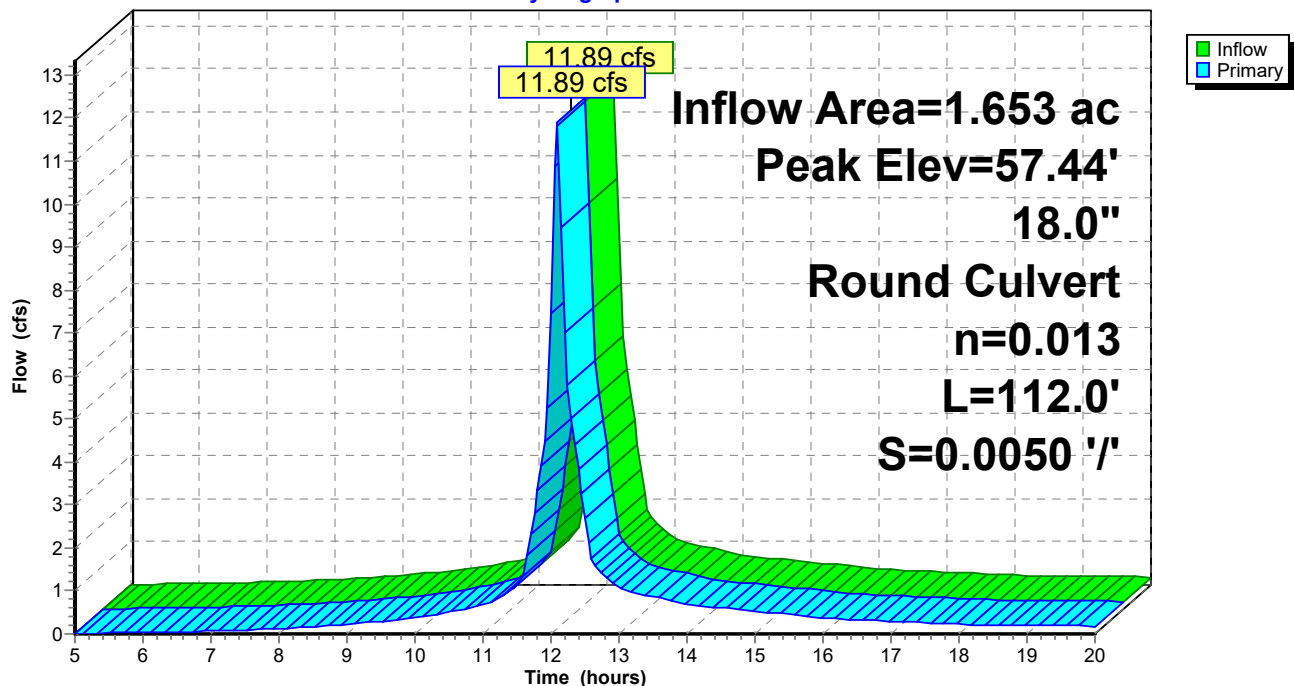
Device	Routing	Invert	Outlet Devices
#1	Primary	53.56'	18.0" Round Culvert L= 112.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.56' / 53.00' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[57] Hint: Peaked at 57.39' (Flood elevation advised)

[81] Warning: Exceeded Pond 129P by 2.07' @ 12.10 hrs

[81] Warning: Exceeded Pond 131P by 2.35' @ 12.10 hrs

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

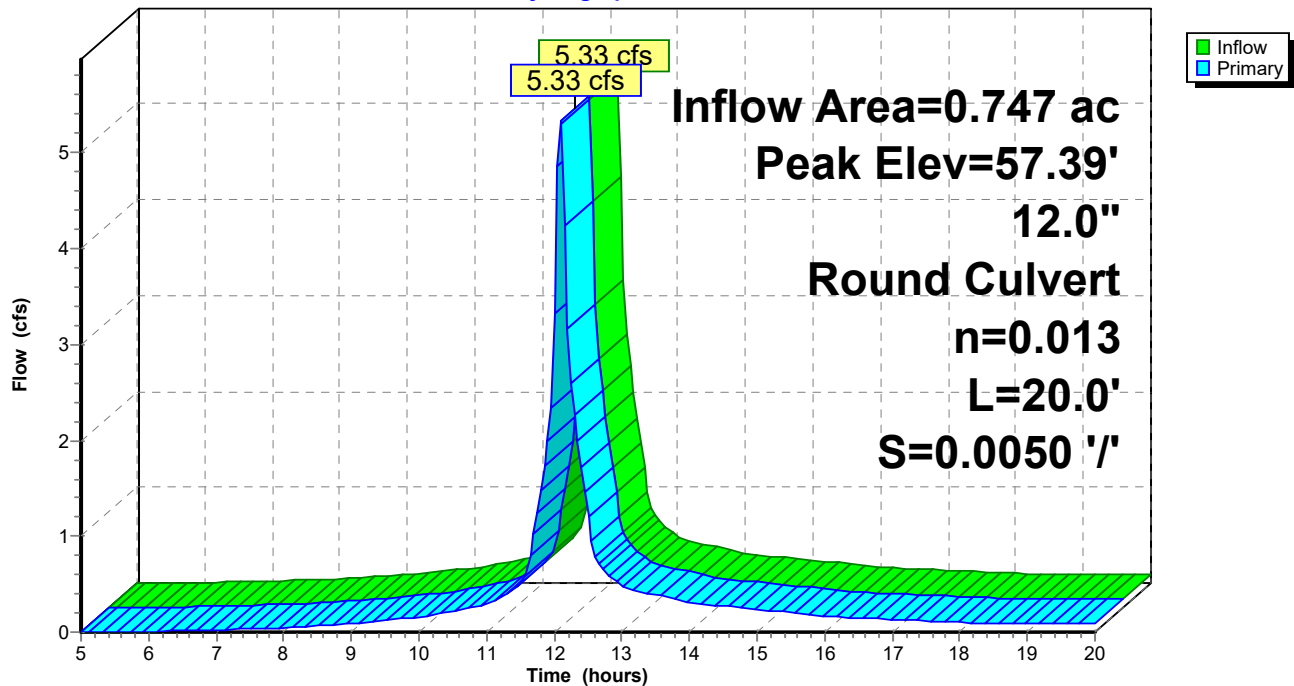
Device	Routing	Invert	Outlet Devices
#1	Primary	53.71'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.71' / 53.61' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 133P by 2.16' @ 12.70 hrs

[81] Warning: Exceeded Pond 137P by 2.60' @ 12.65 hrs

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	Custom Stage Data (Prismatic) Listed below (Recalc)

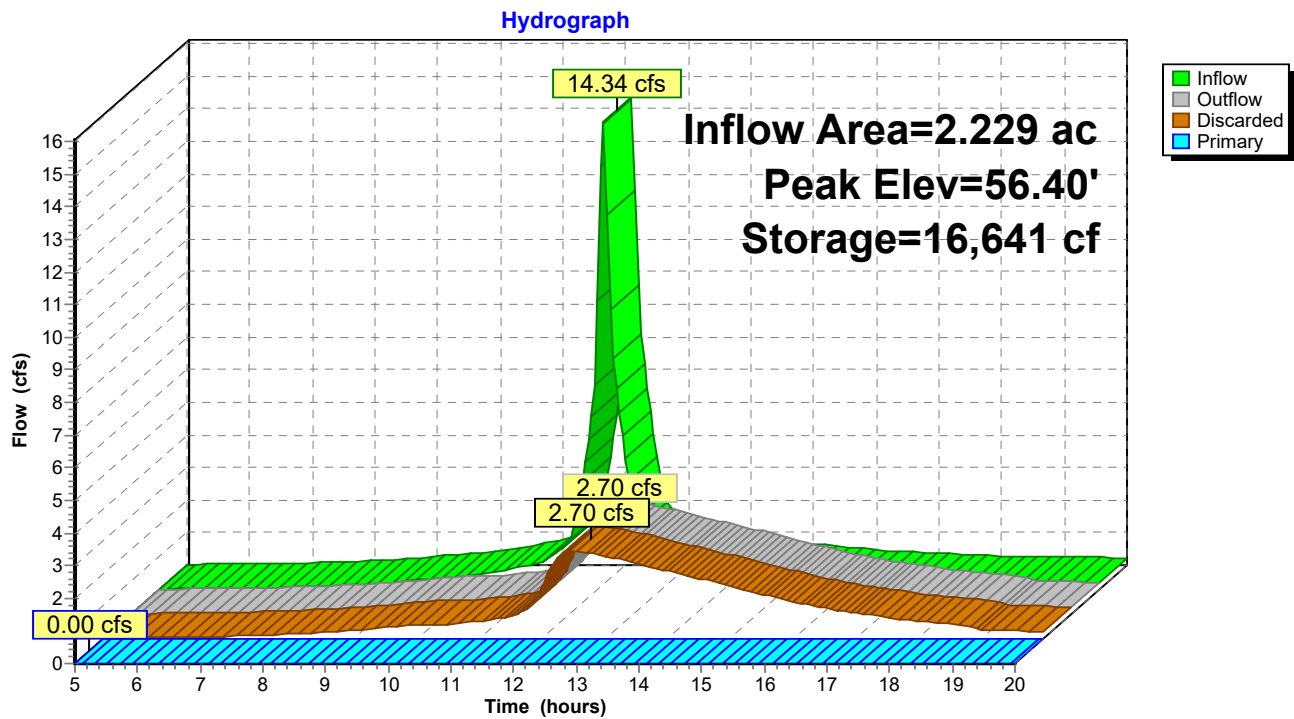
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
53.00	2,016	0	0
54.00	3,650	2,833	2,833
55.00	5,702	4,676	7,509
56.00	6,883	6,293	13,802
57.00	8,130	7,507	21,308

Device	Routing	Invert	Outlet Devices
#1	Discarded	53.00'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 51.00'
#2	Primary	53.00'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.00' / 52.00' S= 0.0400 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	56.40'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 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

[57] Hint: Peaked at 54.23' (Flood elevation advised)

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

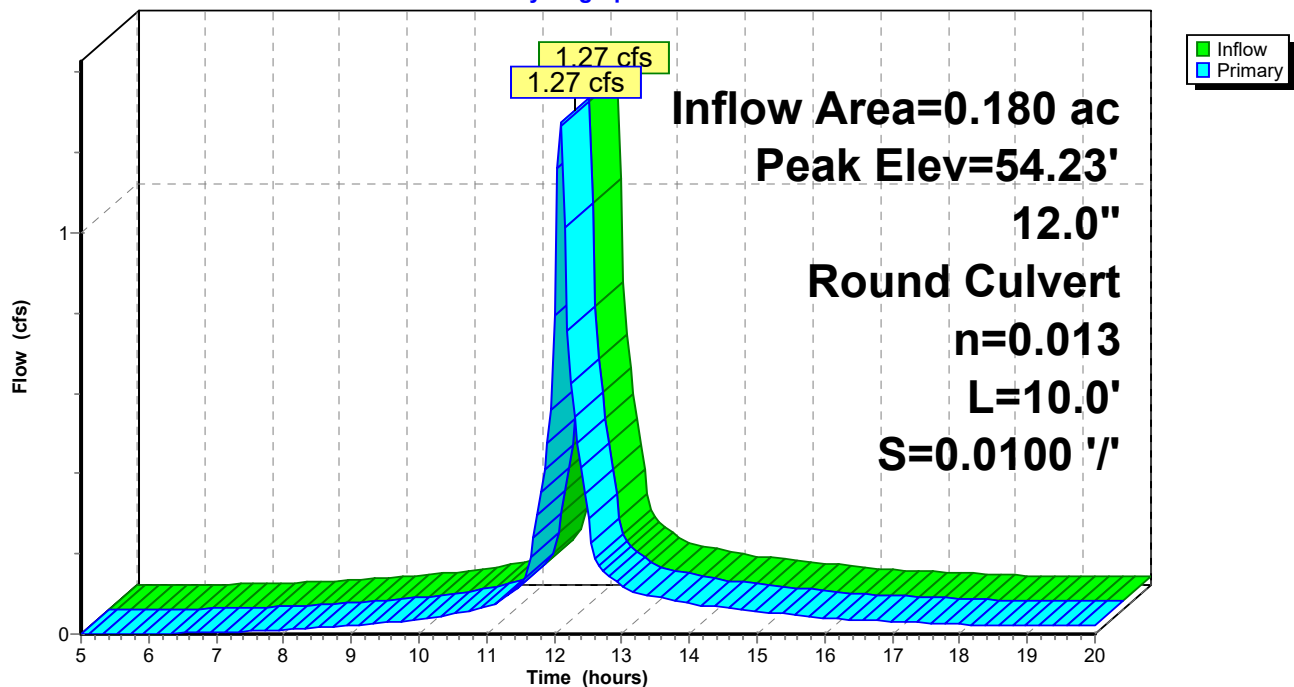
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.23' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.50' / 53.40' S= 0.0100 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 54.43' (Flood elevation advised)

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

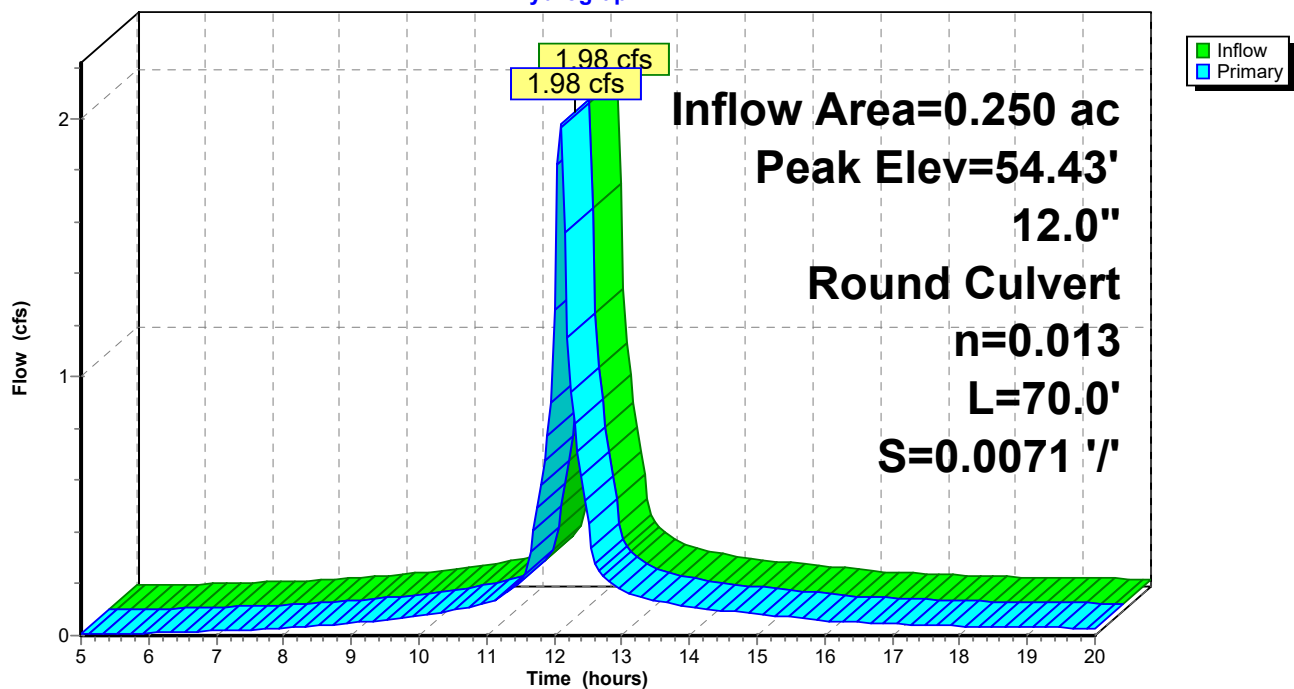
Device	Routing	Invert	Outlet Devices
#1	Primary	53.50'	12.0" Round Culvert L= 70.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.50' / 53.00' S= 0.0071 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 54.16' (Flood elevation advised)

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

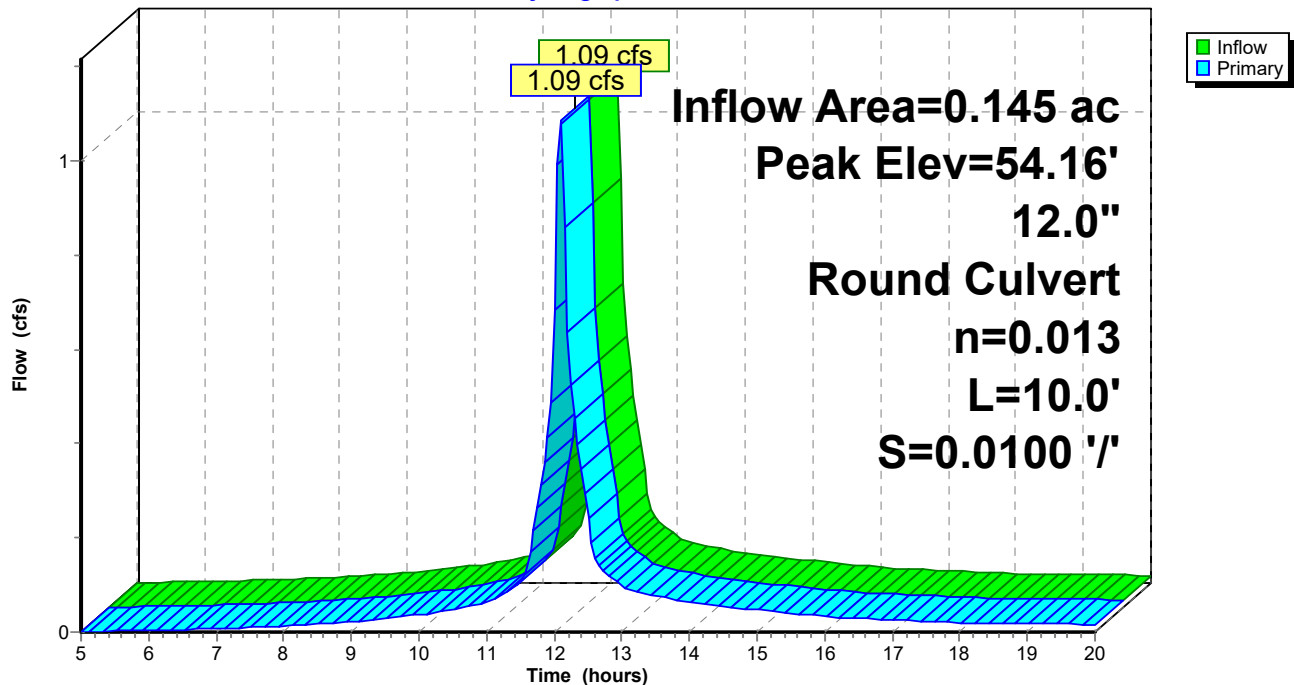
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.16' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.50' / 53.40' S= 0.0100 '/ Cc= 0.900 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

[57] Hint: Peaked at 54.42' (Flood elevation advised)

[81] Warning: Exceeded Pond 136P by 0.19' @ 12.10 hrs

[81] Warning: Exceeded Pond 138P by 0.26' @ 12.10 hrs

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

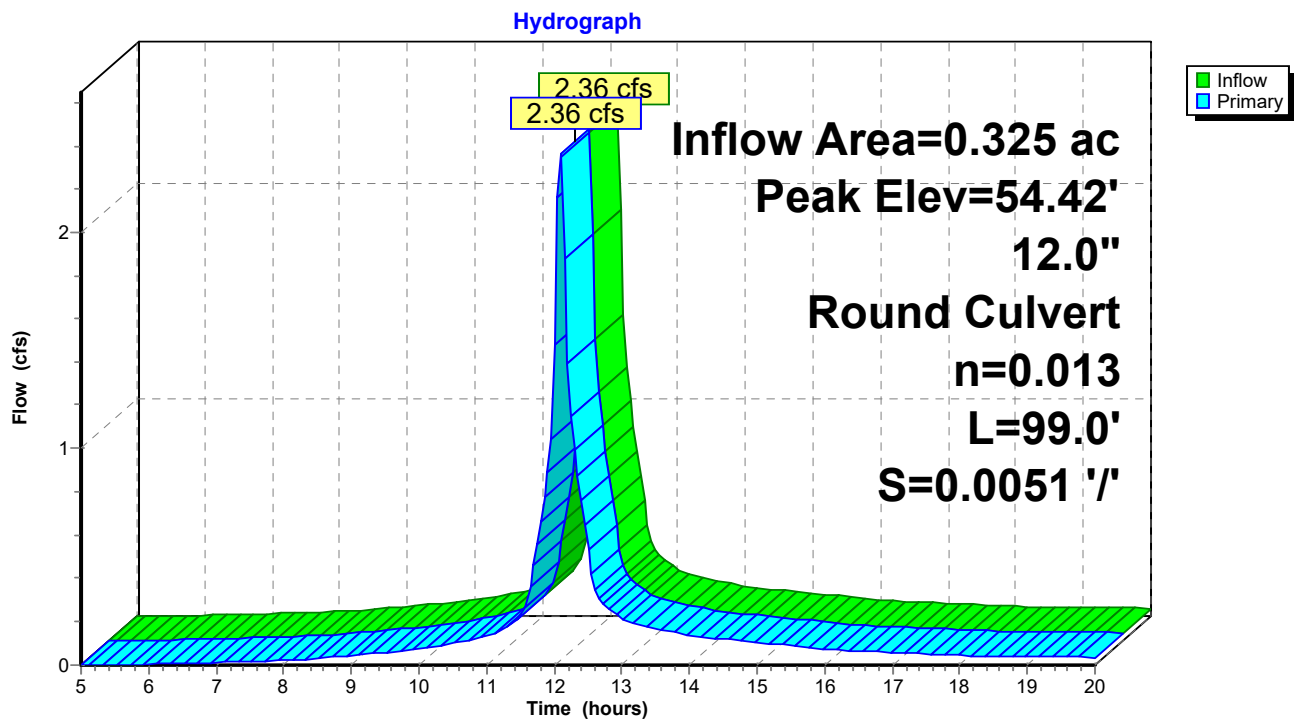
Peak Elev= 54.42' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.30'	12.0" Round Culvert L= 99.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.30' / 52.80' S= 0.0051 '/' Cc= 0.900 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



Summary for Pond 140P: CB 31

[57] Hint: Peaked at 57.02' (Flood elevation advised)

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

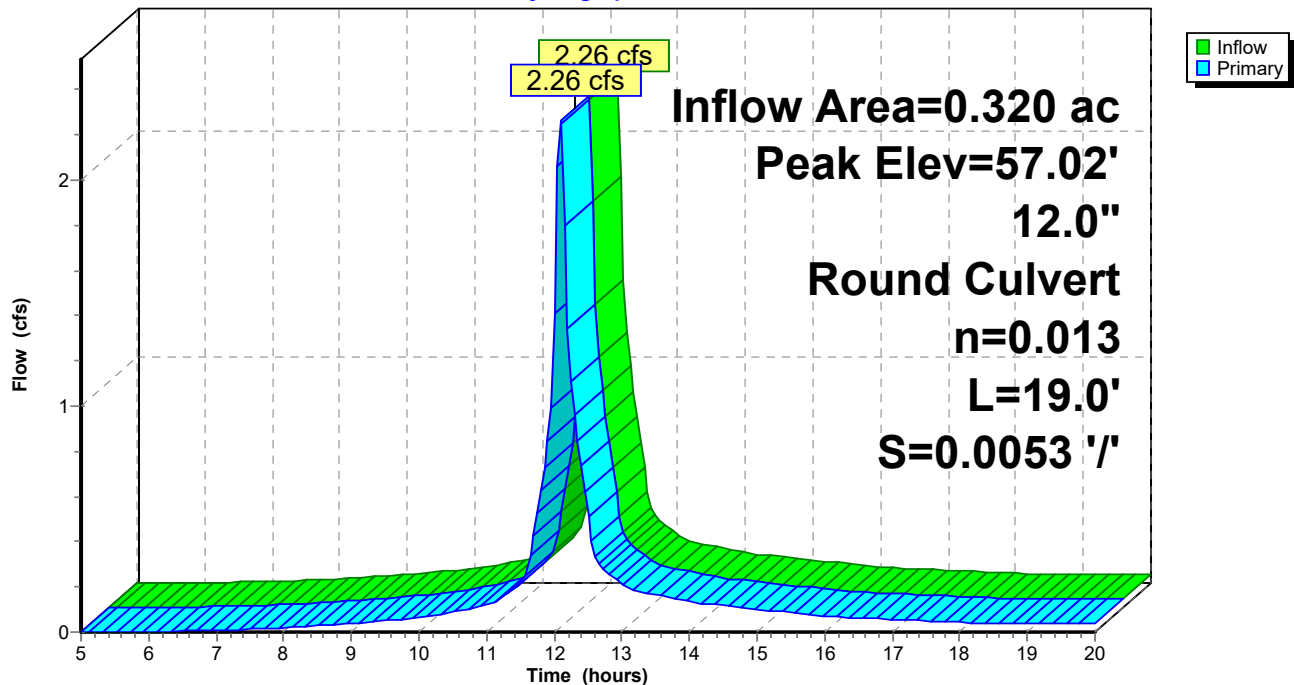
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 57.02' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	55.90'	12.0" Round Culvert L= 19.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 55.90' / 55.80' S= 0.0053 '/ Cc= 0.900 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

[57] Hint: Peaked at 58.36' (Flood elevation advised)

[81] Warning: Exceeded Pond 128P by 1.41' @ 12.10 hrs

[81] Warning: Exceeded Pond 140P by 1.32' @ 12.10 hrs

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

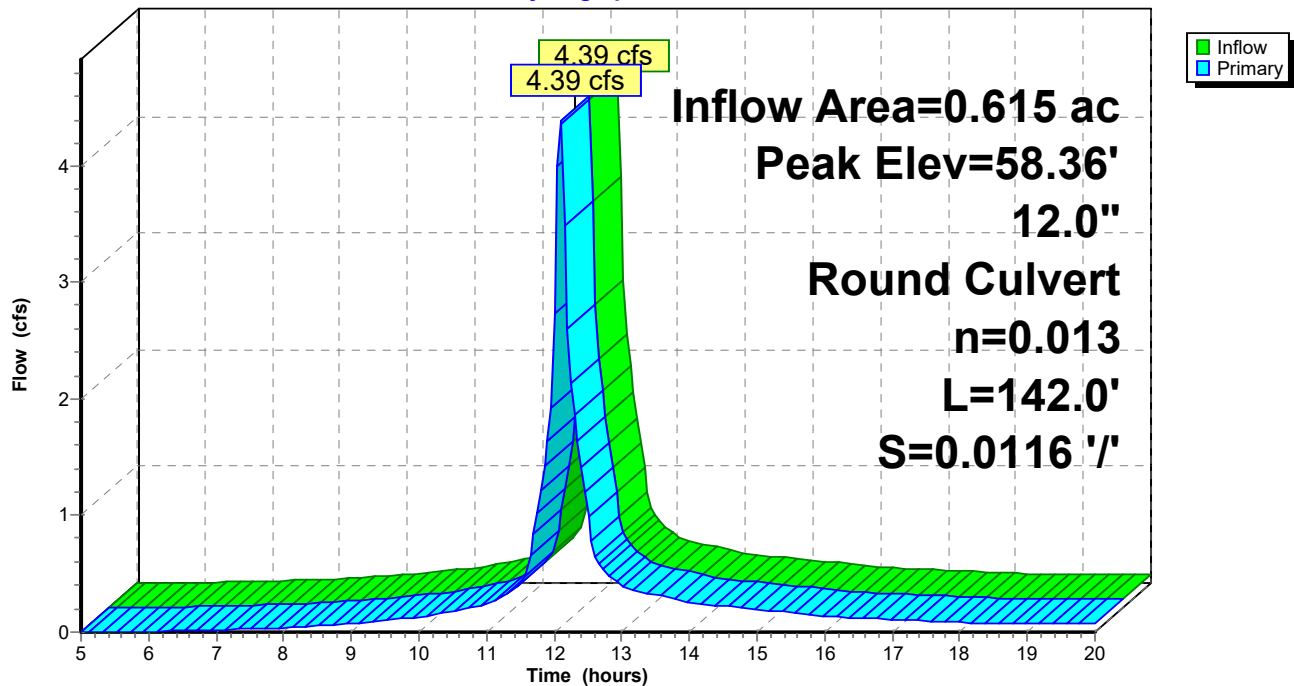
Device	Routing	Invert	Outlet Devices
#1	Primary	55.70'	12.0" Round Culvert L= 142.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 55.70' / 54.05' S= 0.0116 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 51.97' (Flood elevation advised)

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

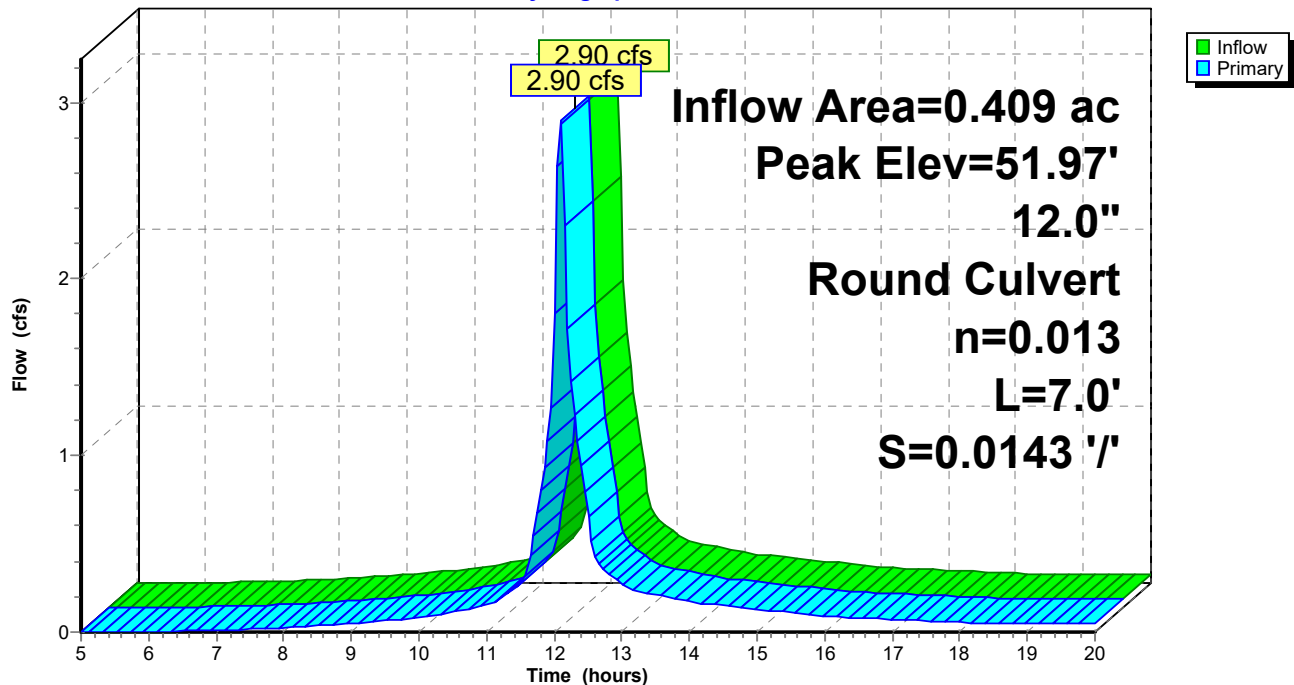
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 51.97' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.53'	12.0" Round Culvert L= 7.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.53' / 50.43' S= 0.0143 '/' Cc= 0.900 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

[57] Hint: Peaked at 52.90' (Flood elevation advised)

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

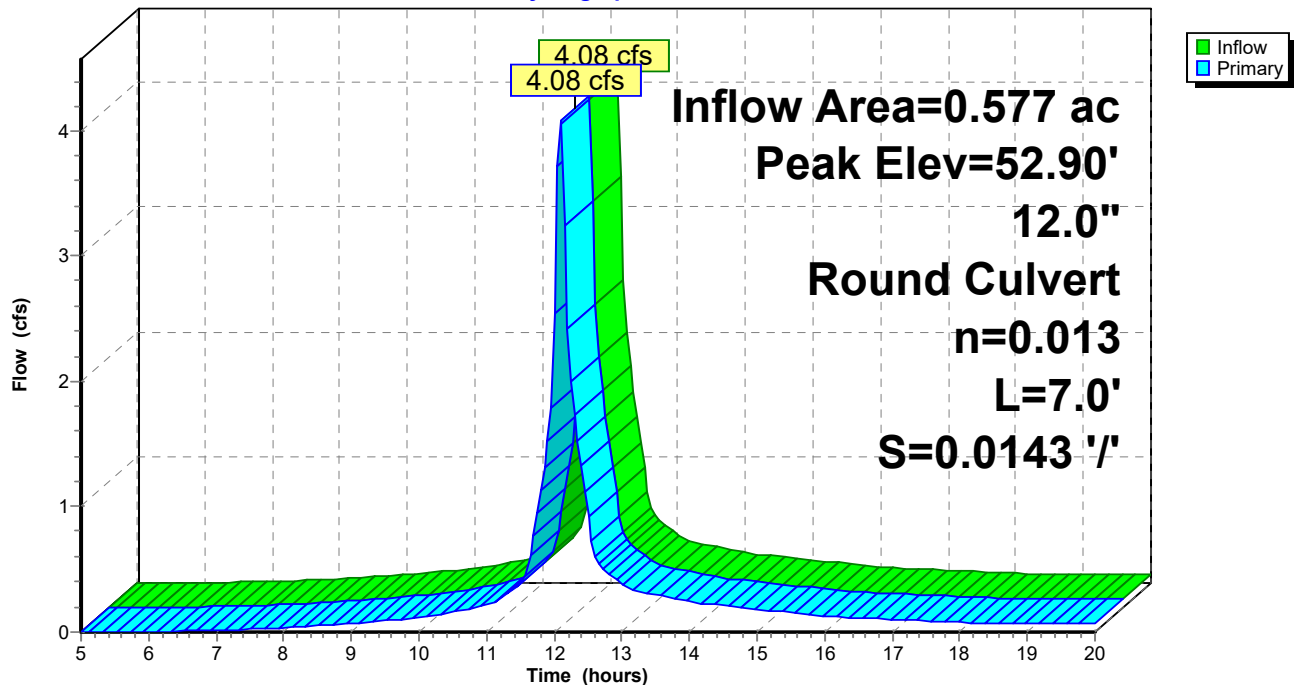
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 52.90' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.53'	12.0" Round Culvert L= 7.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.53' / 50.43' S= 0.0143 '/' Cc= 0.900 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

[57] Hint: Peaked at 56.28' (Flood elevation advised)

[81] Warning: Exceeded Pond 142P by 4.27' @ 12.10 hrs

[81] Warning: Exceeded Pond 143P by 3.35' @ 12.10 hrs

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

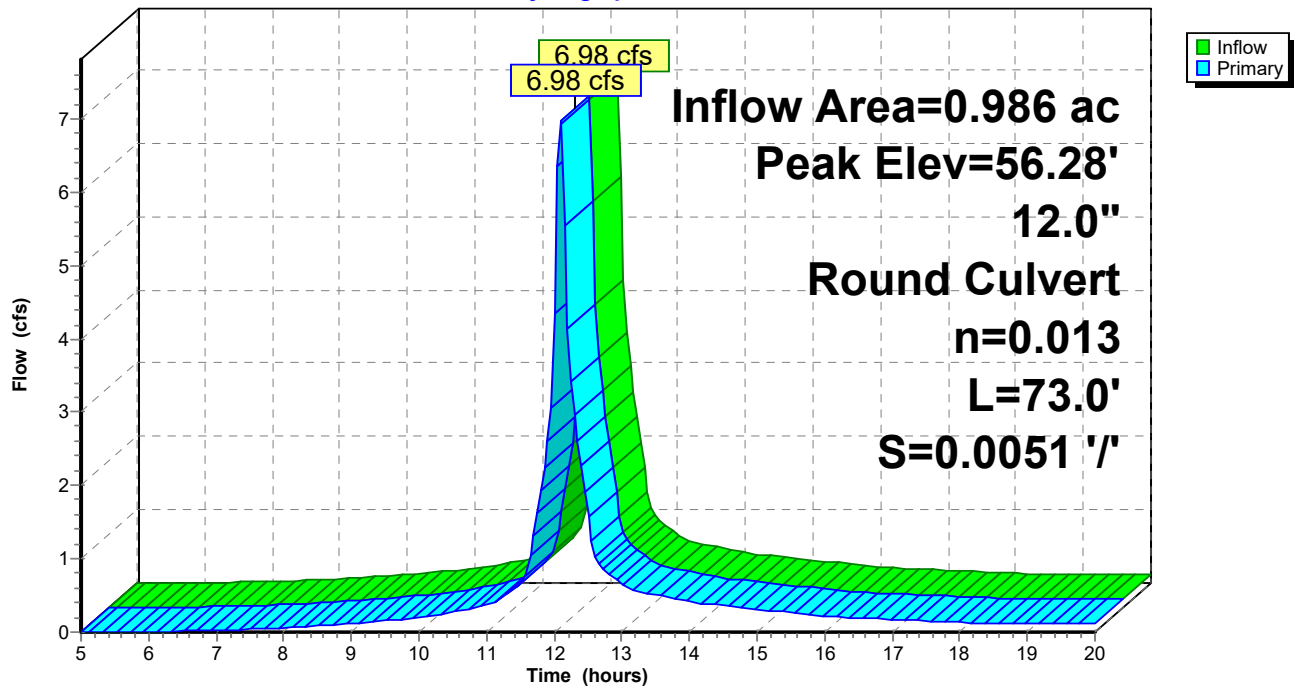
Device	Routing	Invert	Outlet Devices
#1	Primary	50.33'	12.0" Round Culvert L= 73.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.33' / 49.96' S= 0.0051 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 51.69' (Flood elevation advised)

[79] Warning: Submerged Pond 144P Primary device # 1 INLET by 1.35'

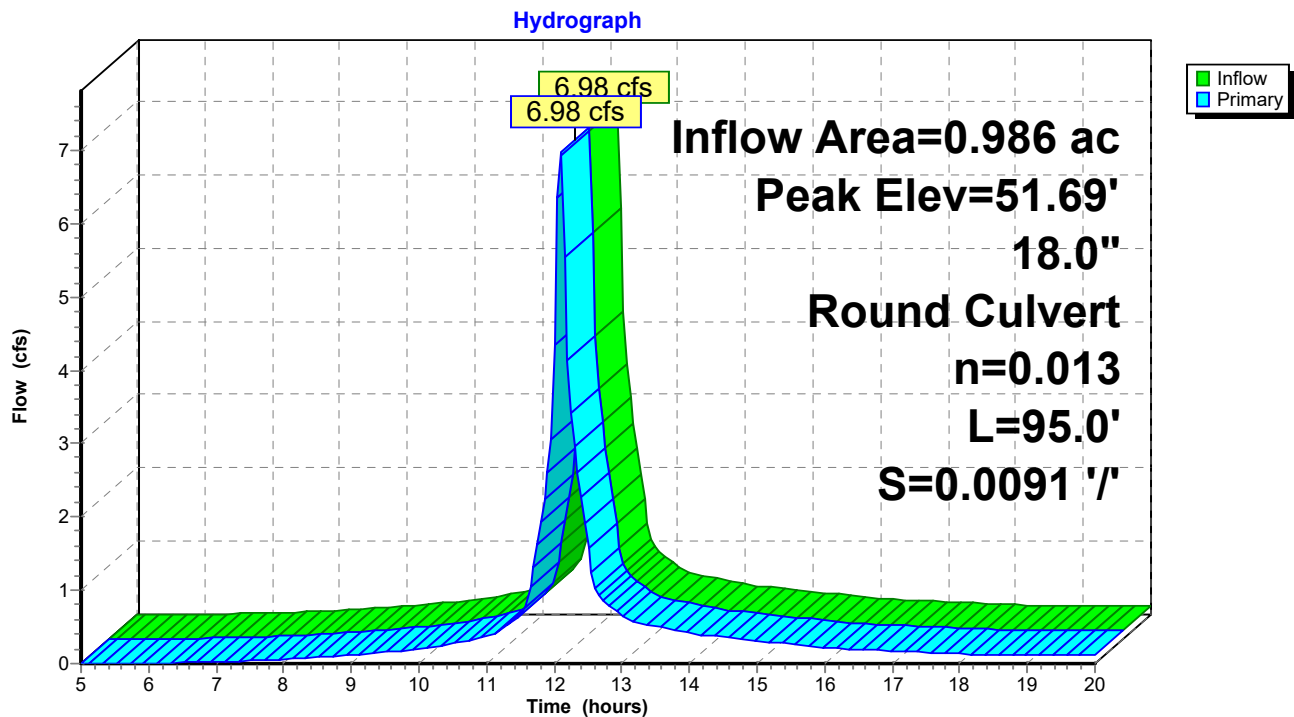
Inflow Area = 0.986 ac, 66.09% Impervious, Inflow Depth > 5.90" for 100-Year event
 Inflow = 6.98 cfs @ 12.09 hrs, Volume= 0.485 af
 Outflow = 6.98 cfs @ 12.09 hrs, Volume= 0.485 af, Atten= 0%, Lag= 0.0 min
 Primary = 6.98 cfs @ 12.09 hrs, Volume= 0.485 af
 Routed to Pond 146P : Inf. Basin 2

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'	18.0" Round Culvert L= 95.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 49.86' / 49.00' S= 0.0091 '/' Cc= 0.900 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



Summary for Pond 146P: Inf. Basin 2

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 145P by 1.75' @ 12.65 hrs

[79] Warning: Submerged Pond 148P Primary device # 1 INLET by 0.13'

[81] Warning: Exceeded Pond 191P by 1.30' @ 12.60 hrs

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	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (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'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 47.00'
#2	Primary	49.00'	12.0" Round Culvert L= 42.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 49.00' / 45.00' S= 0.0952 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	52.20'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 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)

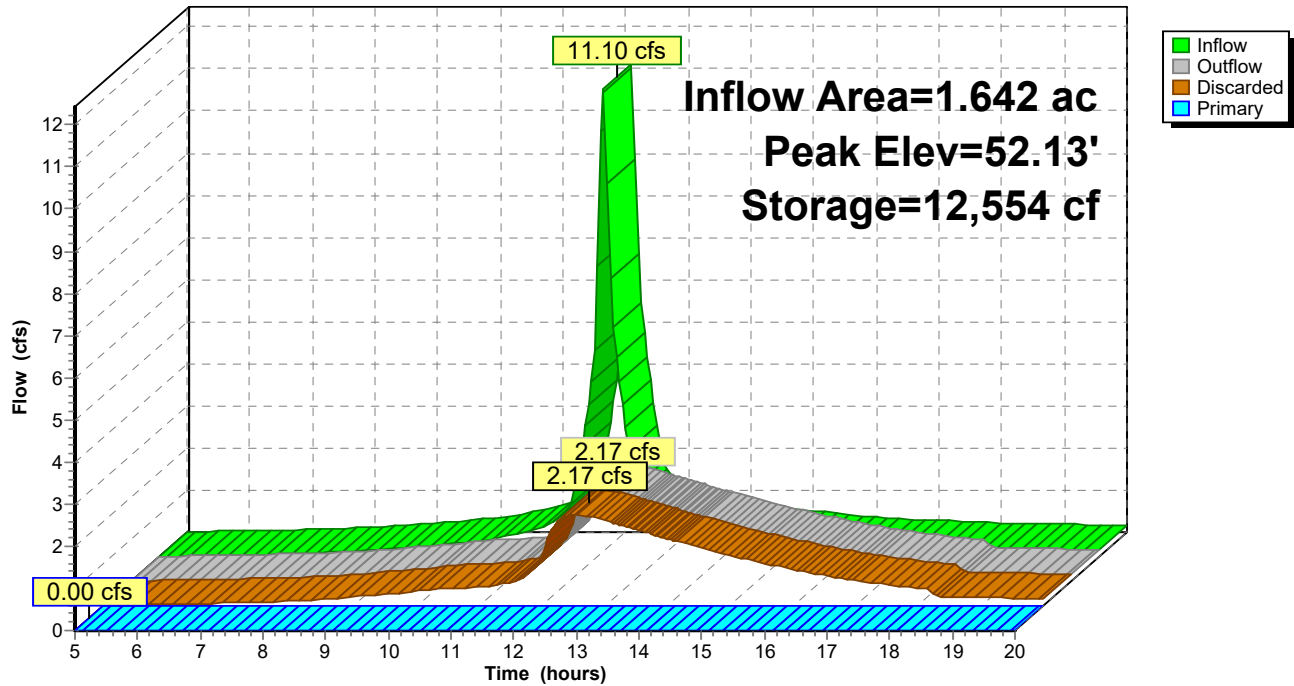
Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=49.00' (Free Discharge)

↑ **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

[57] Hint: Peaked at 54.67' (Flood elevation advised)

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

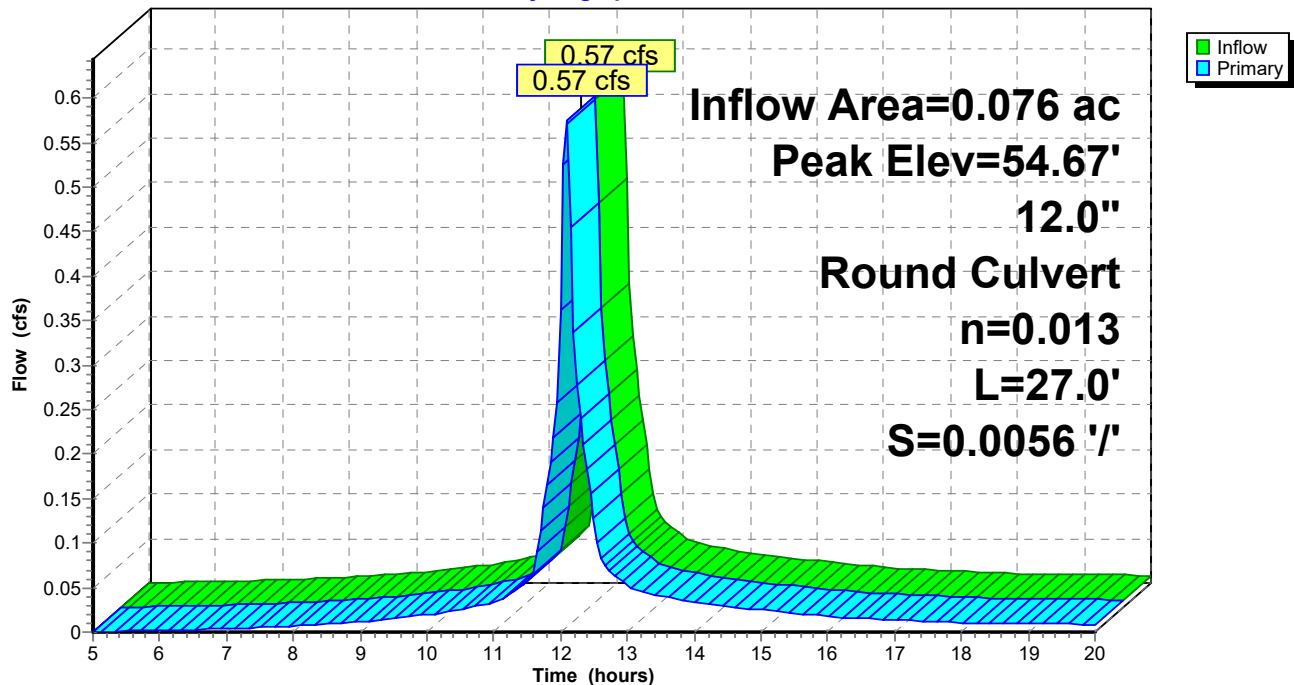
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.67' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	54.20'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.20' / 54.05' S= 0.0056 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 52.78' (Flood elevation advised)

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

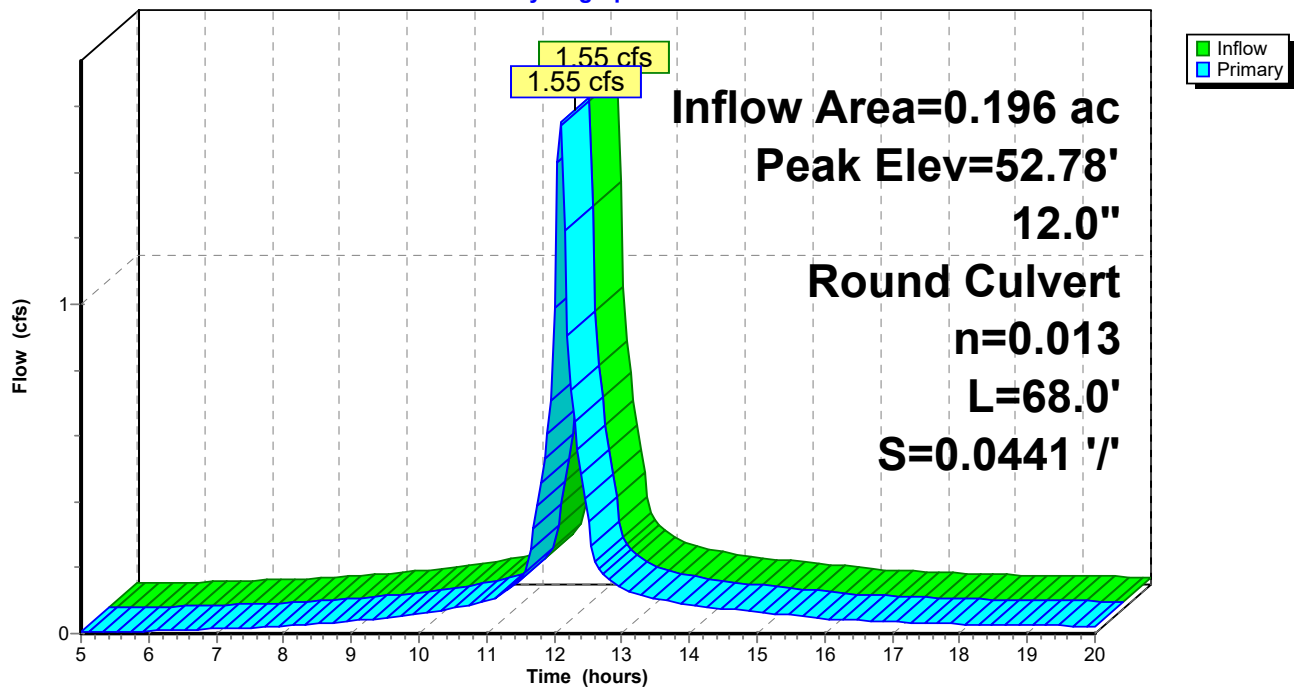
Device	Routing	Invert	Outlet Devices
#1	Primary	52.00'	12.0" Round Culvert L= 68.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.00' / 49.00' S= 0.0441 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 54.66' (Flood elevation advised)

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

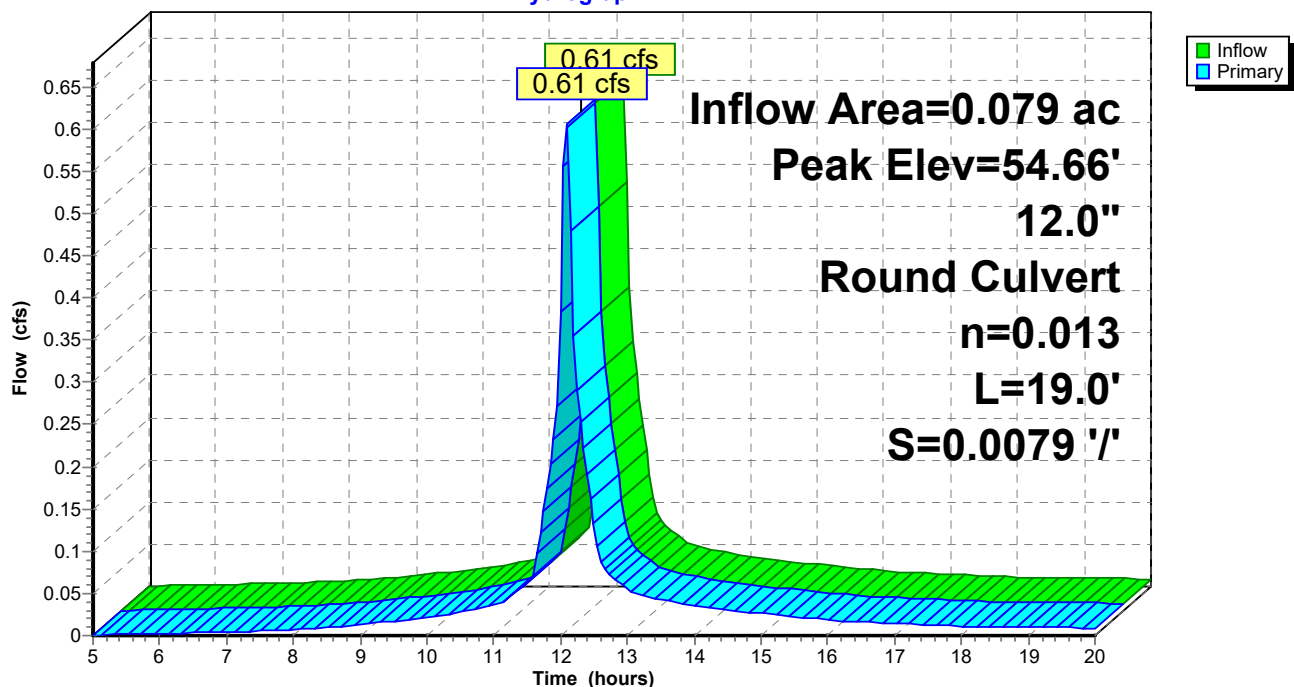
Device	Routing	Invert	Outlet Devices
#1	Primary	54.20'	12.0" Round Culvert L= 19.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.20' / 54.05' S= 0.0079 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 57.92' (Flood elevation advised)

[79] Warning: Submerged Pond 141P Primary device # 1 INLET by 2.19'

[81] Warning: Exceeded Pond 147P by 3.22' @ 12.10 hrs

[81] Warning: Exceeded Pond 149P by 3.22' @ 12.10 hrs

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

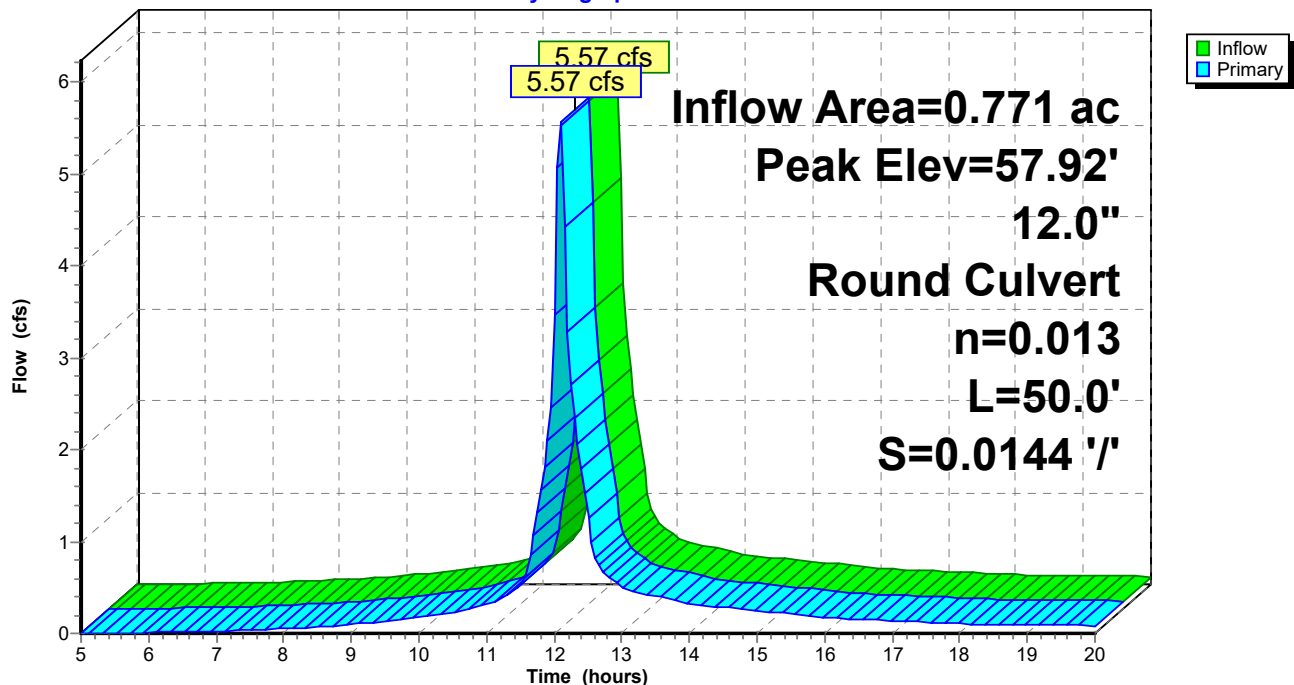
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 57.92' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.95'	12.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.95' / 53.23' S= 0.0144 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 53.02' (Flood elevation advised)

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

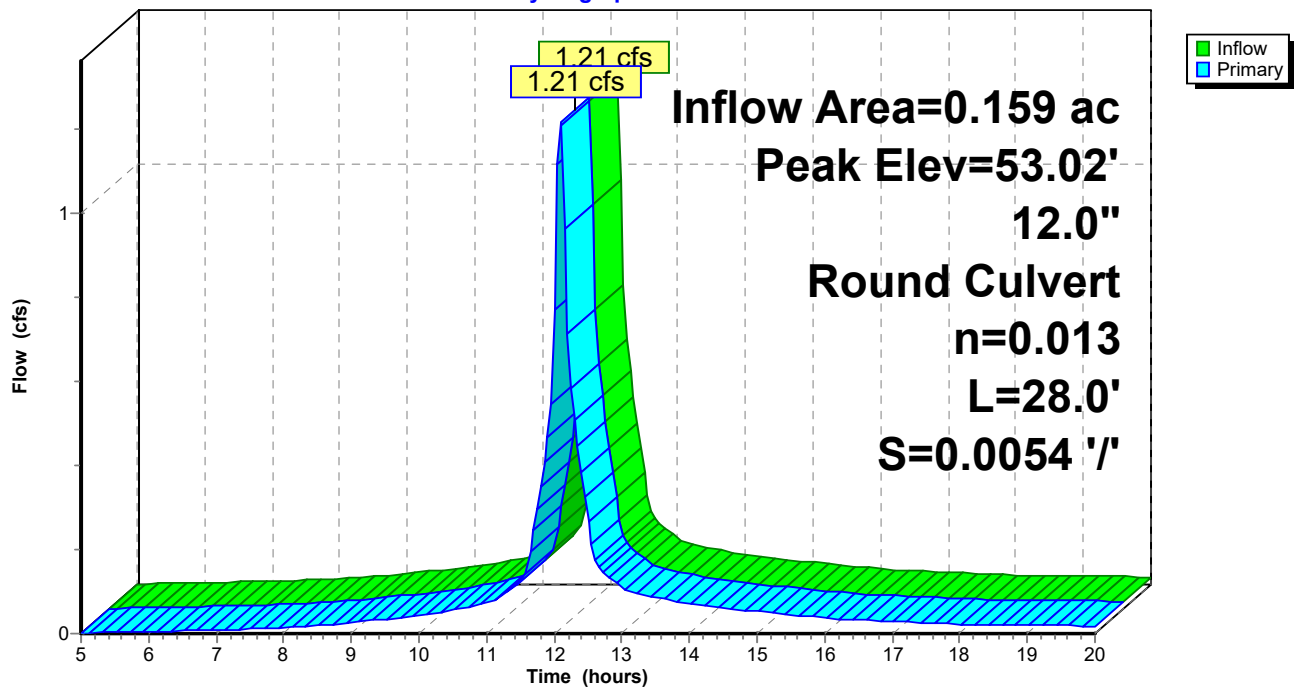
Device	Routing	Invert	Outlet Devices
#1	Primary	52.30'	12.0" Round Culvert L= 28.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.30' / 52.15' S= 0.0054 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 53.10' (Flood elevation advised)

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

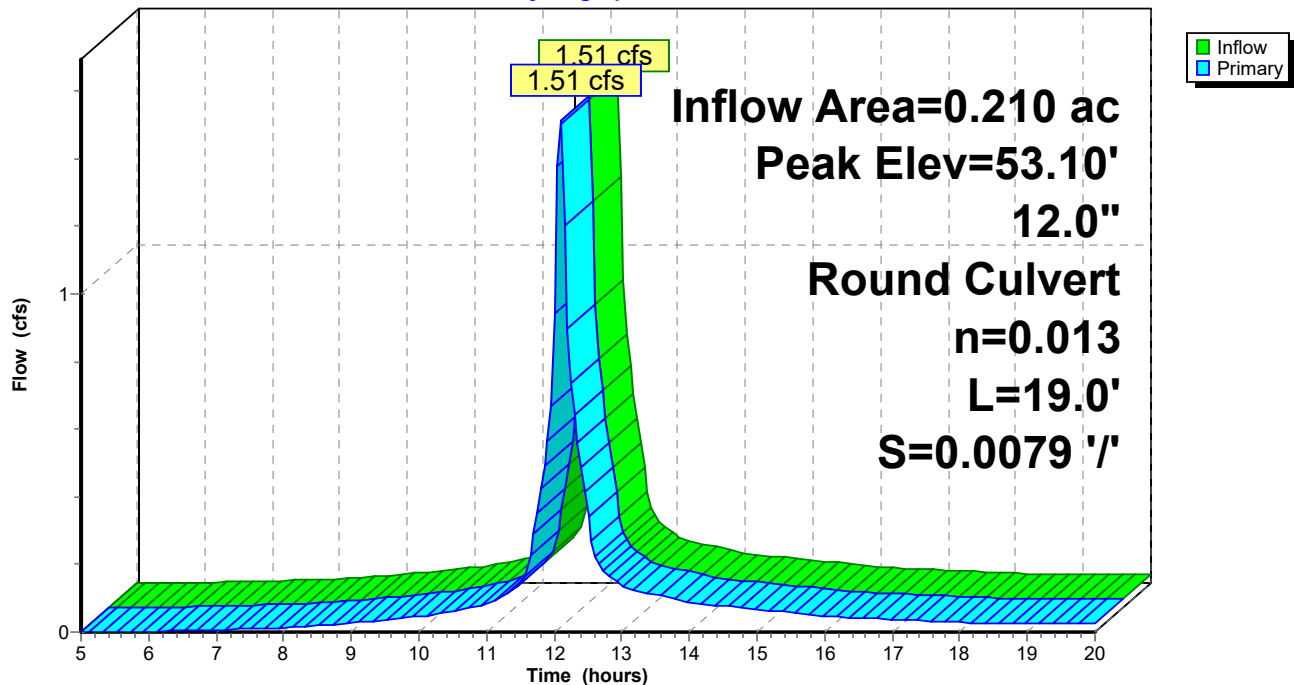
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 53.10' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	52.30'	12.0" Round Culvert L= 19.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.30' / 52.15' S= 0.0079 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span
 [57] Hint: Peaked at 56.47' (Flood elevation advised)
 [81] Warning: Exceeded Pond 151P by 3.41' @ 12.10 hrs
 [81] Warning: Exceeded Pond 152P by 3.33' @ 12.10 hrs
 [81] Warning: Exceeded Pond 161P by 0.29' @ 12.10 hrs

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

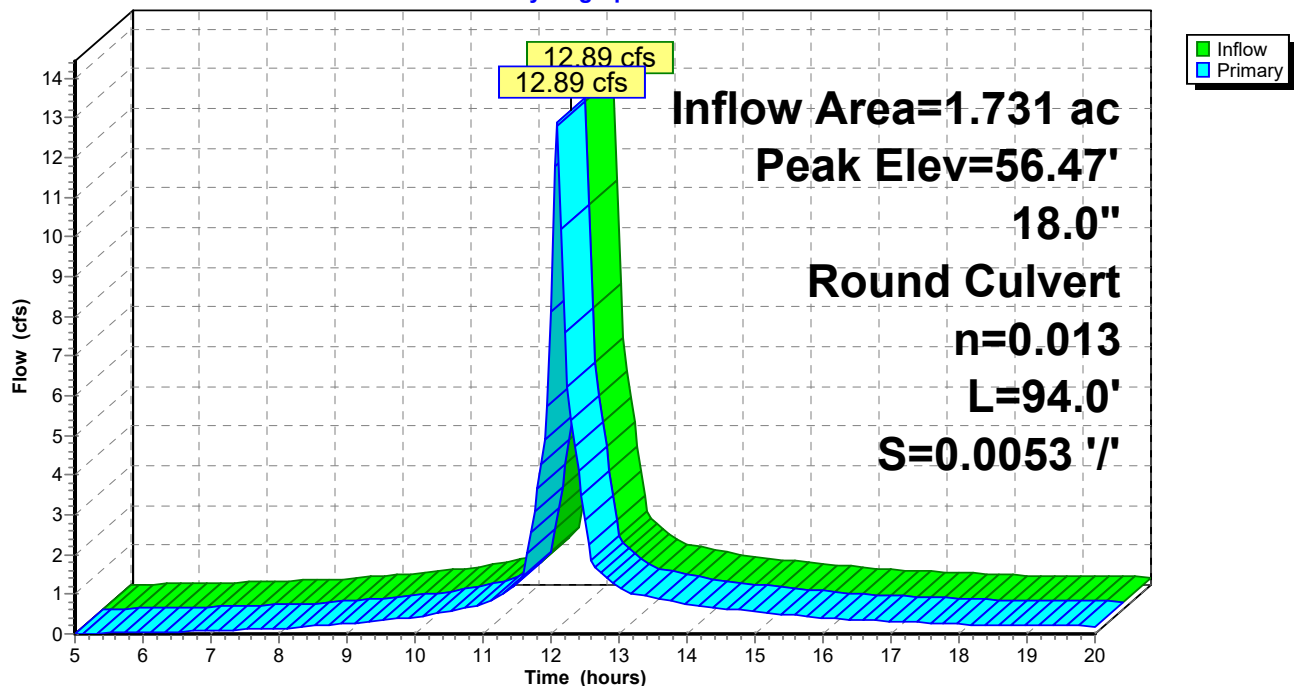
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 56.47' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	52.05'	18.0" Round Culvert L= 94.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.05' / 51.55' S= 0.0053 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 54.09' (Flood elevation advised)

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

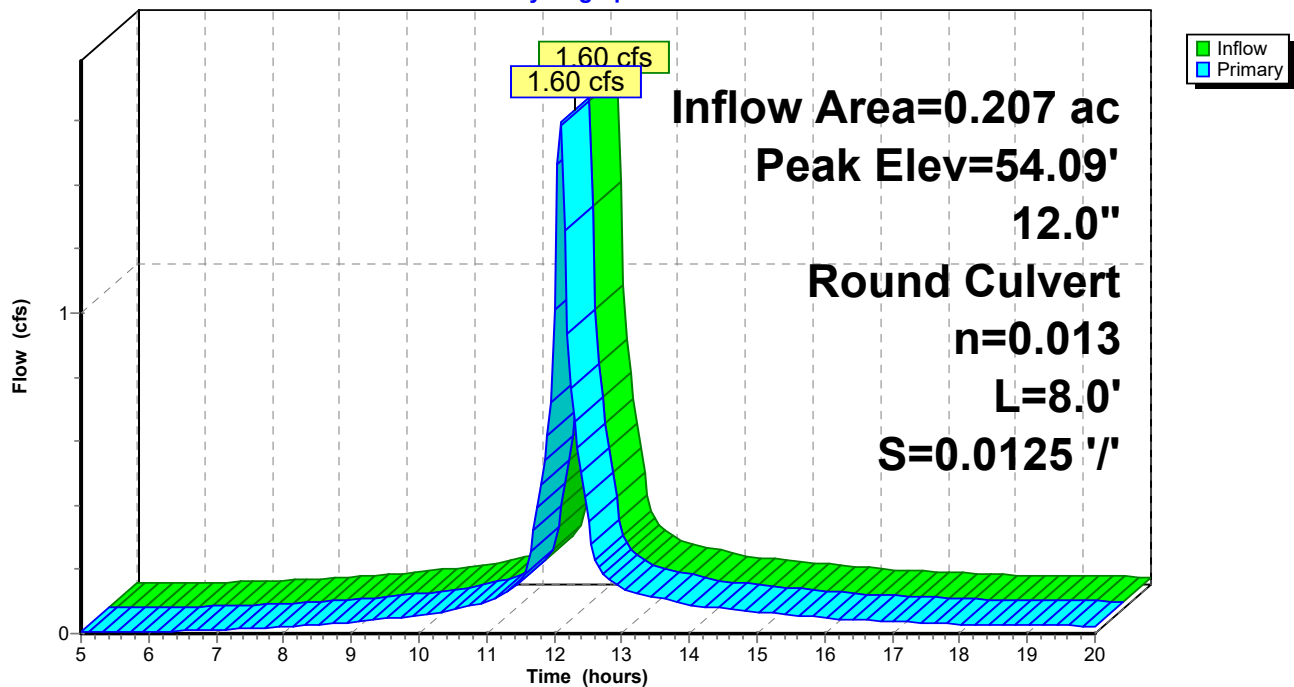
Device	Routing	Invert	Outlet Devices
#1	Primary	53.25'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.25' / 53.15' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 55.47' (Flood elevation advised)

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

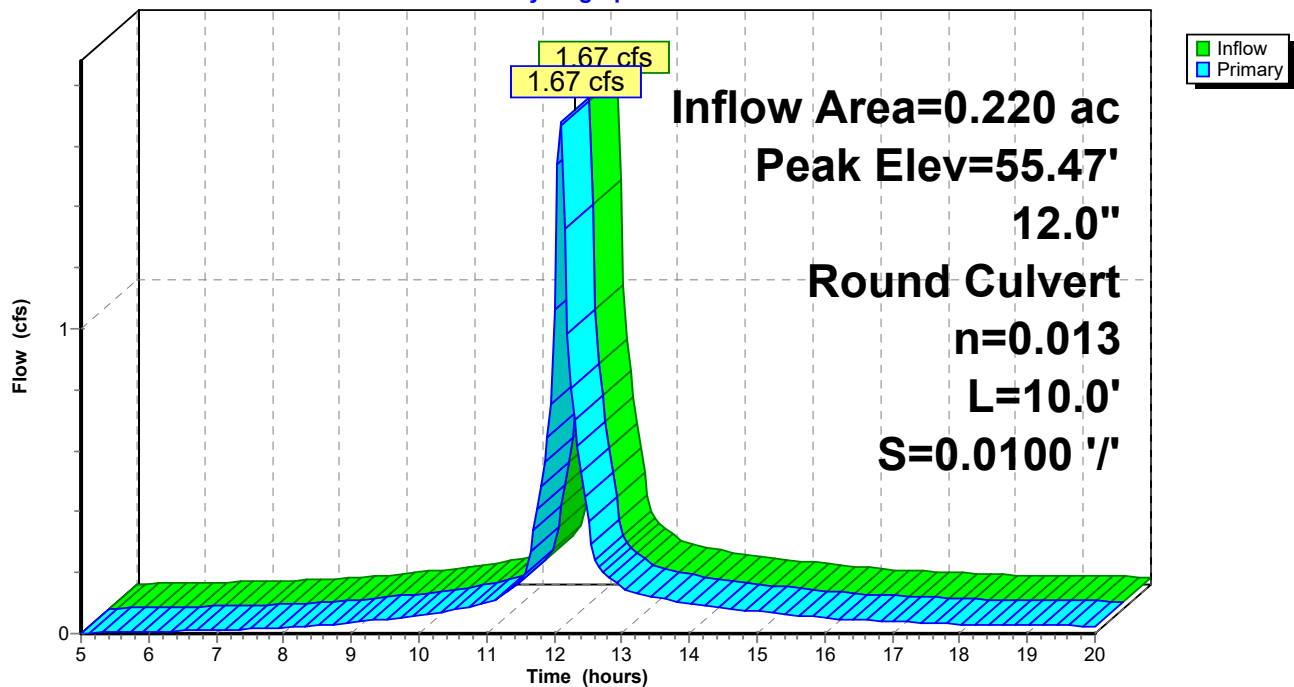
Device	Routing	Invert	Outlet Devices
#1	Primary	54.60'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 55.19' (Flood elevation advised)

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

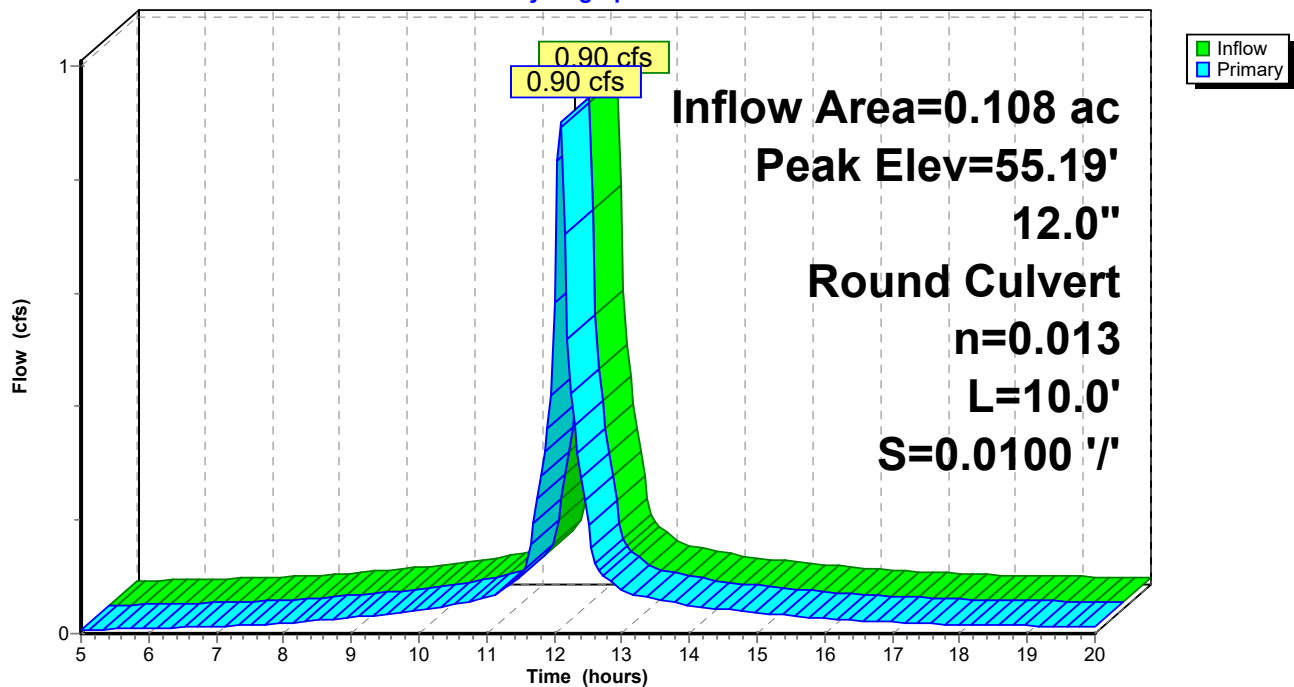
Device	Routing	Invert	Outlet Devices
#1	Primary	54.60'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.60' / 54.50' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 55.64' (Flood elevation advised)

[81] Warning: Exceeded Pond 155P by 0.17' @ 12.10 hrs

[81] Warning: Exceeded Pond 156P by 0.44' @ 12.10 hrs

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

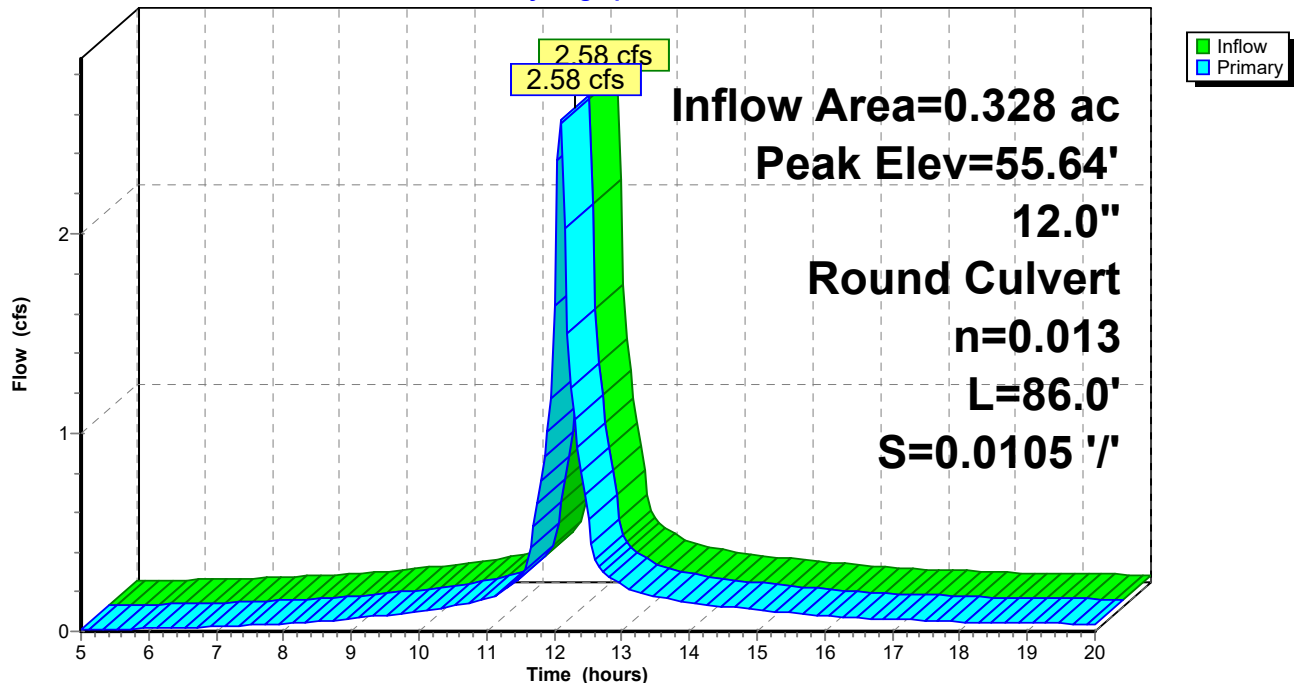
Device	Routing	Invert	Outlet Devices
#1	Primary	54.40'	12.0" Round Culvert L= 86.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.40' / 53.50' S= 0.0105 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

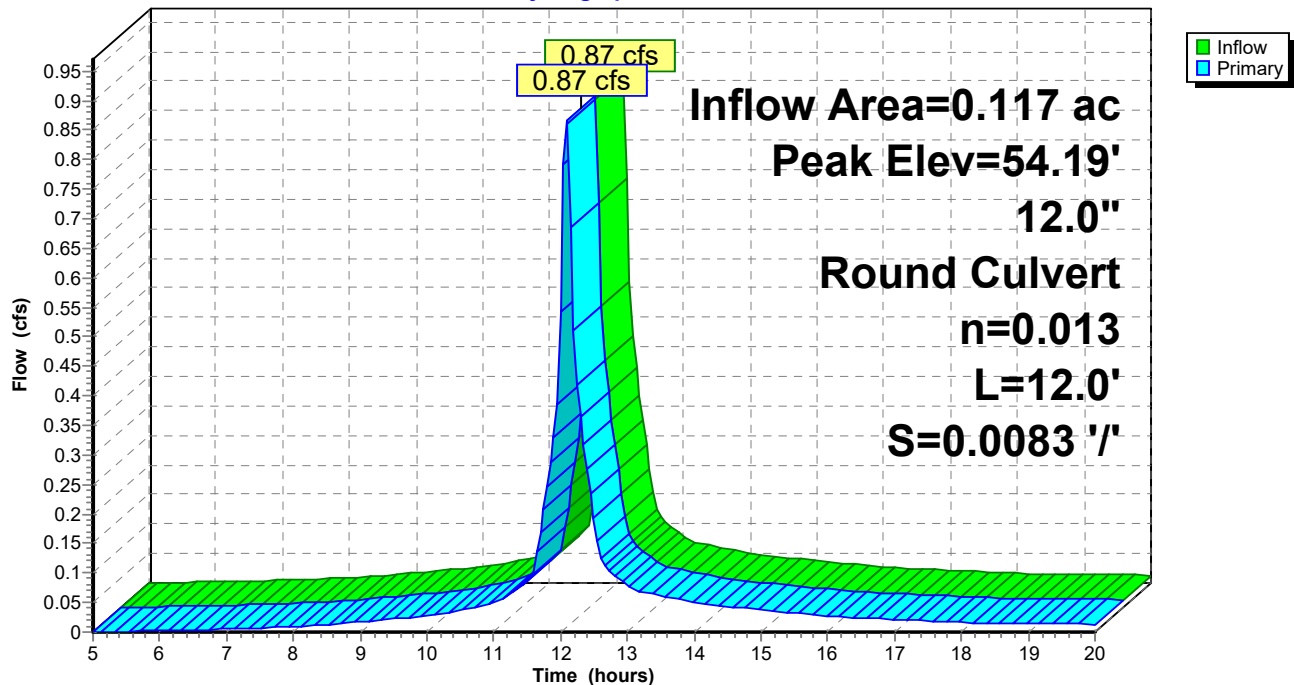
[57] Hint: Peaked at 54.19' (Flood elevation advised)

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'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.60' / 53.50' S= 0.0083 '/' Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 54.29' (Flood elevation advised)

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

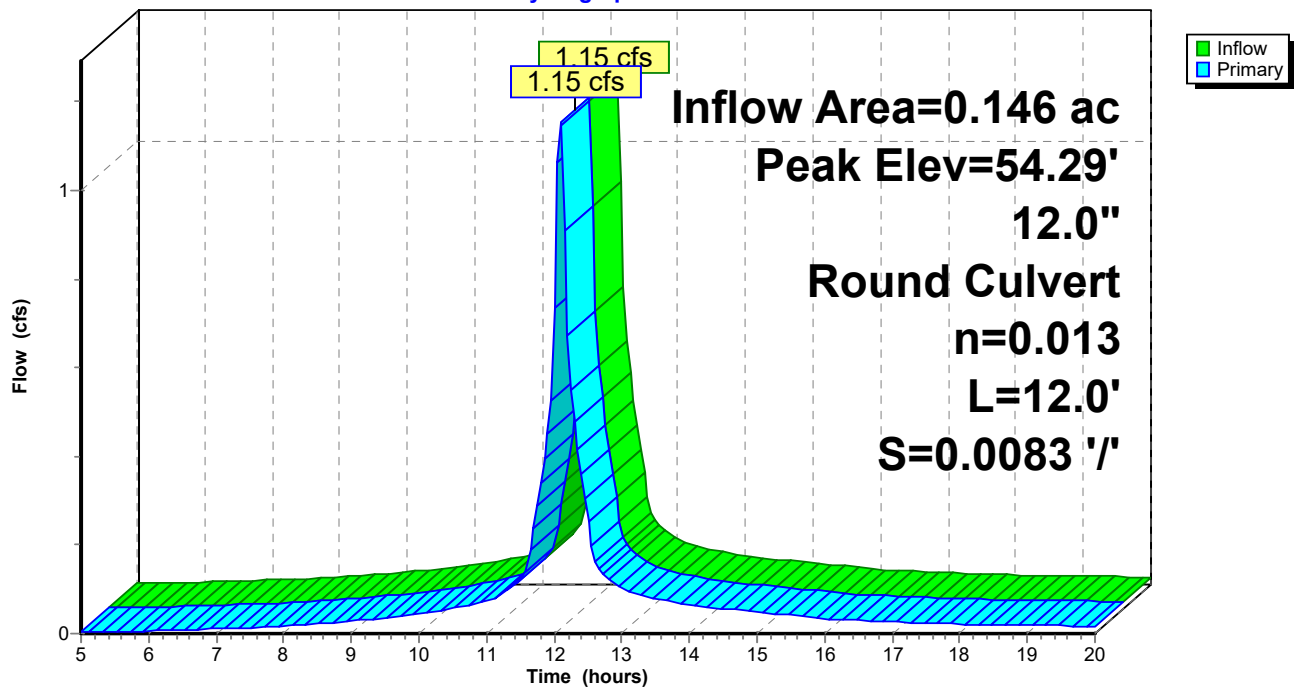
Device	Routing	Invert	Outlet Devices
#1	Primary	53.60'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.60' / 53.50' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 56.26' (Flood elevation advised)

[81] Warning: Exceeded Pond 157P by 0.60' @ 12.10 hrs

[81] Warning: Exceeded Pond 158P by 2.05' @ 12.10 hrs

[81] Warning: Exceeded Pond 159P by 1.94' @ 12.10 hrs

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

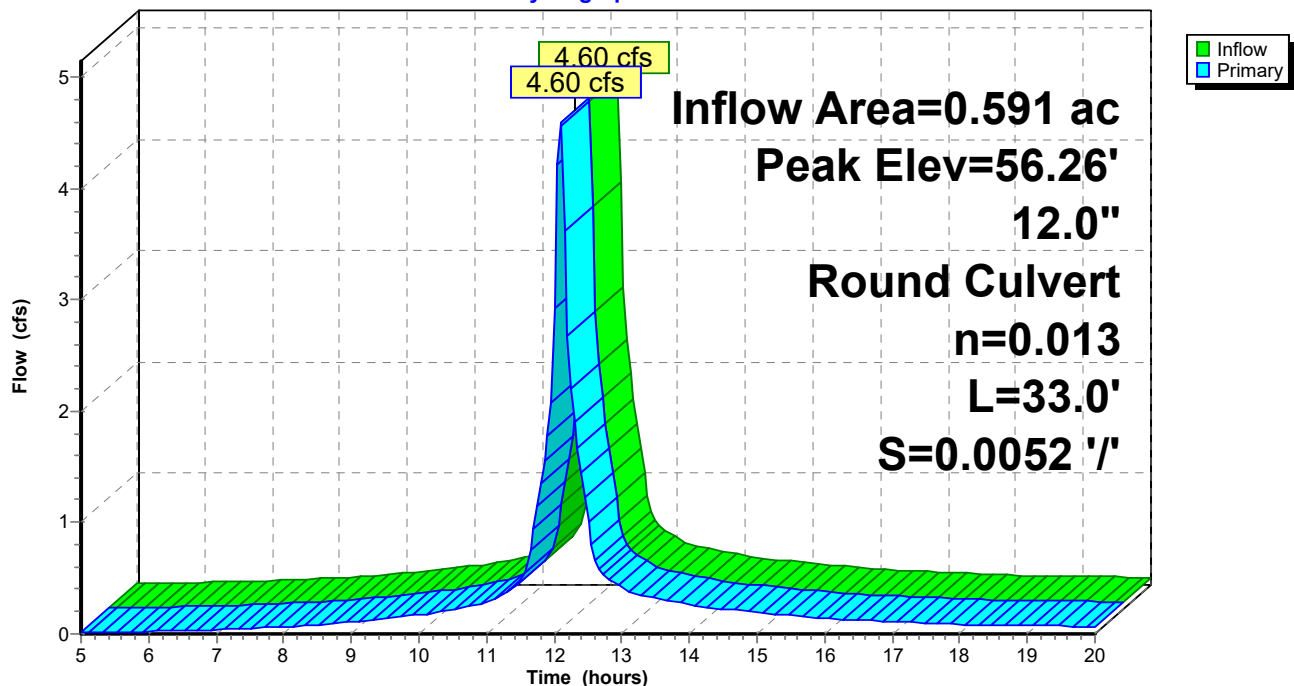
Device	Routing	Invert	Outlet Devices
#1	Primary	53.40'	12.0" Round Culvert L= 33.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.40' / 53.23' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 56.16' (Flood elevation advised)

[79] Warning: Submerged Pond 150P Primary device # 1 INLET by 2.19'

[79] Warning: Submerged Pond 160P Primary device # 1 INLET by 2.74'

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

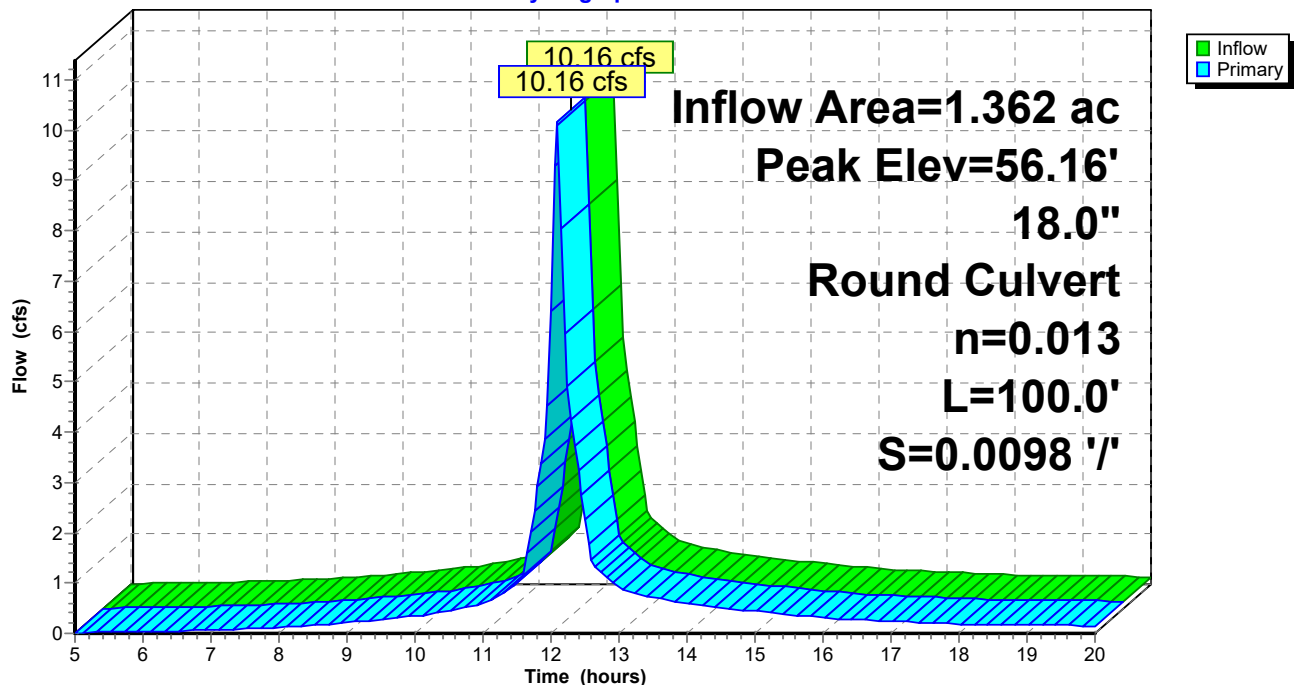
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 56.16' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.13'	18.0" Round Culvert L= 100.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.13' / 52.15' S= 0.0098 '/ Cc= 0.900 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

[57] Hint: Peaked at 51.54' (Flood elevation advised)

Inflow Area = 0.341 ac, 60.75% Impervious, Inflow Depth > 5.54" for 100-Year event
 Inflow = 2.29 cfs @ 12.09 hrs, Volume= 0.157 af
 Outflow = 2.29 cfs @ 12.09 hrs, Volume= 0.157 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.29 cfs @ 12.09 hrs, Volume= 0.157 af
 Routed to Pond 164P : DMH 9

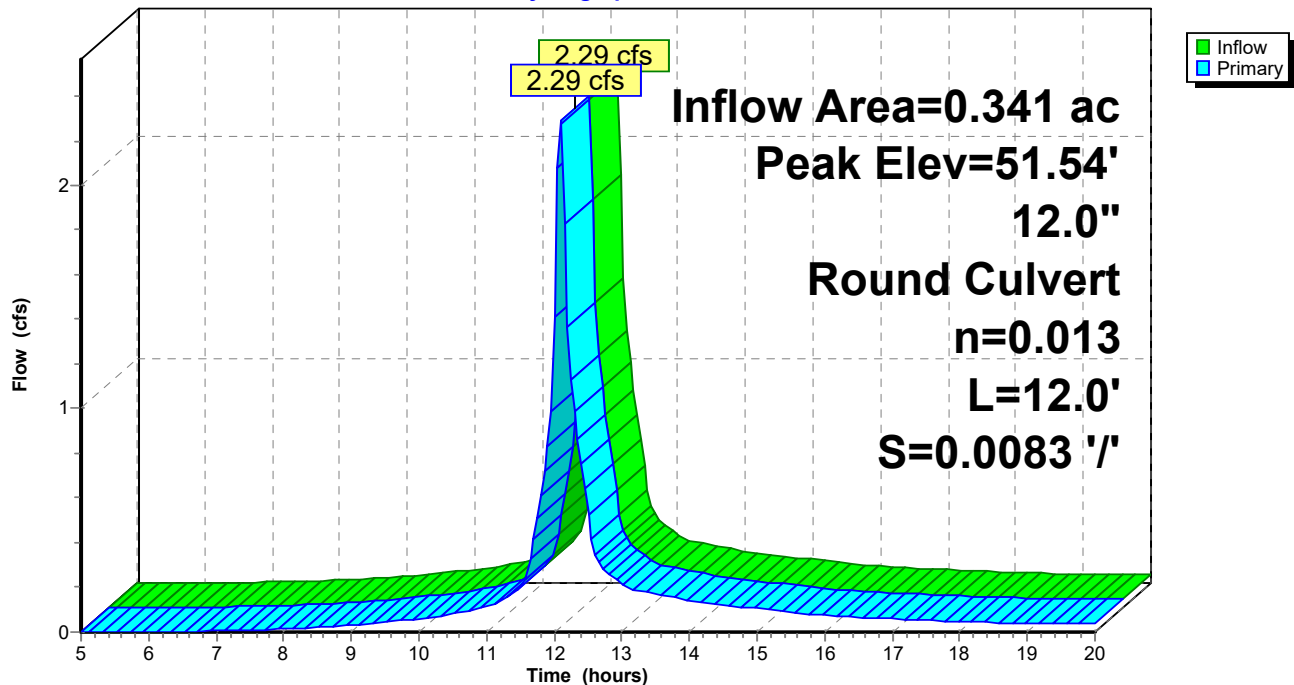
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 51.54' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.45'	12.0" Round Culvert L= 12.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.45' / 50.35' S= 0.0083 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.24 cfs @ 12.09 hrs HW=51.53' (Free Discharge)
 1=Culvert (Barrel Controls 2.24 cfs @ 3.30 fps)

Pond 162P: CB 15

Hydrograph



Summary for Pond 163P: CB 14

[57] Hint: Peaked at 51.25' (Flood elevation advised)

Inflow Area = 0.193 ac, 67.64% Impervious, Inflow Depth > 6.02" for 100-Year event
 Inflow = 1.39 cfs @ 12.09 hrs, Volume= 0.097 af
 Outflow = 1.39 cfs @ 12.09 hrs, Volume= 0.097 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.39 cfs @ 12.09 hrs, Volume= 0.097 af
 Routed to Pond 164P : DMH 9

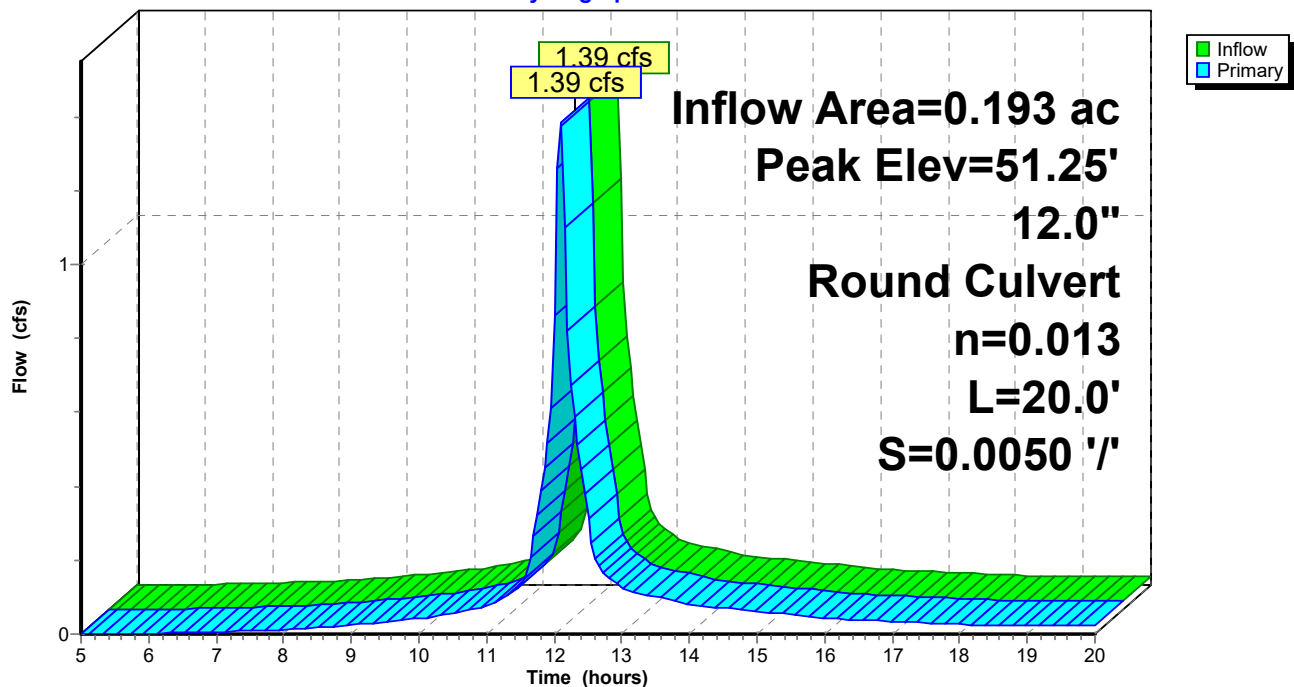
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 51.25' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.45'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.45' / 50.35' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.35 cfs @ 12.09 hrs HW=51.24' (Free Discharge)
 1=Culvert (Barrel Controls 1.35 cfs @ 2.80 fps)

Pond 163P: CB 14

Hydrograph



Summary for Pond 164P: DMH 9

[57] Hint: Peaked at 52.26' (Flood elevation advised)

[81] Warning: Exceeded Pond 162P by 0.71' @ 12.10 hrs

[81] Warning: Exceeded Pond 163P by 1.00' @ 12.10 hrs

Inflow Area = 0.534 ac, 63.24% Impervious, Inflow Depth > 5.71" for 100-Year event
 Inflow = 3.67 cfs @ 12.09 hrs, Volume= 0.254 af
 Outflow = 3.67 cfs @ 12.09 hrs, Volume= 0.254 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.67 cfs @ 12.09 hrs, Volume= 0.254 af
 Routed to Pond 180P : DMH 10

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 52.26' @ 12.09 hrs

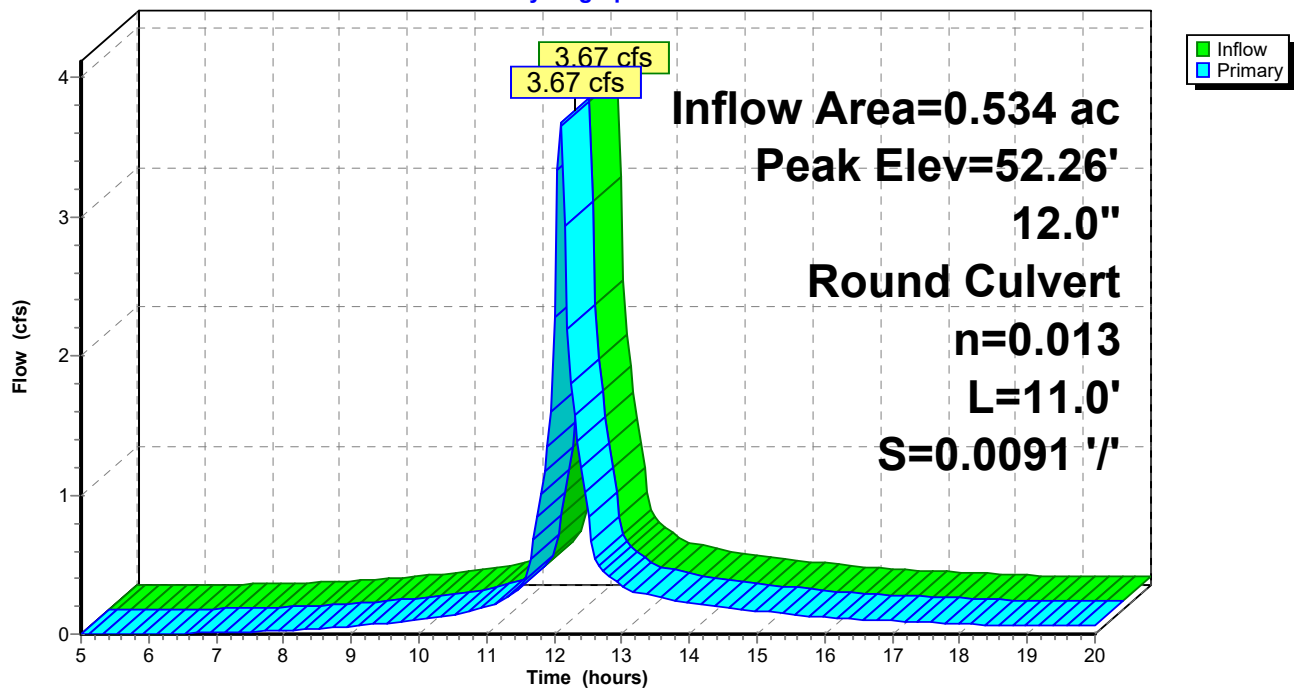
Device	Routing	Invert	Outlet Devices
#1	Primary	50.25'	12.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.25' / 50.15' S= 0.0091 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.59 cfs @ 12.09 hrs HW=52.20' (Free Discharge)

↑**1=Culvert** (Inlet Controls 3.59 cfs @ 4.58 fps)

Pond 164P: DMH 9

Hydrograph



Summary for Pond 165P: CB 19

[57] Hint: Peaked at 54.05' (Flood elevation advised)

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

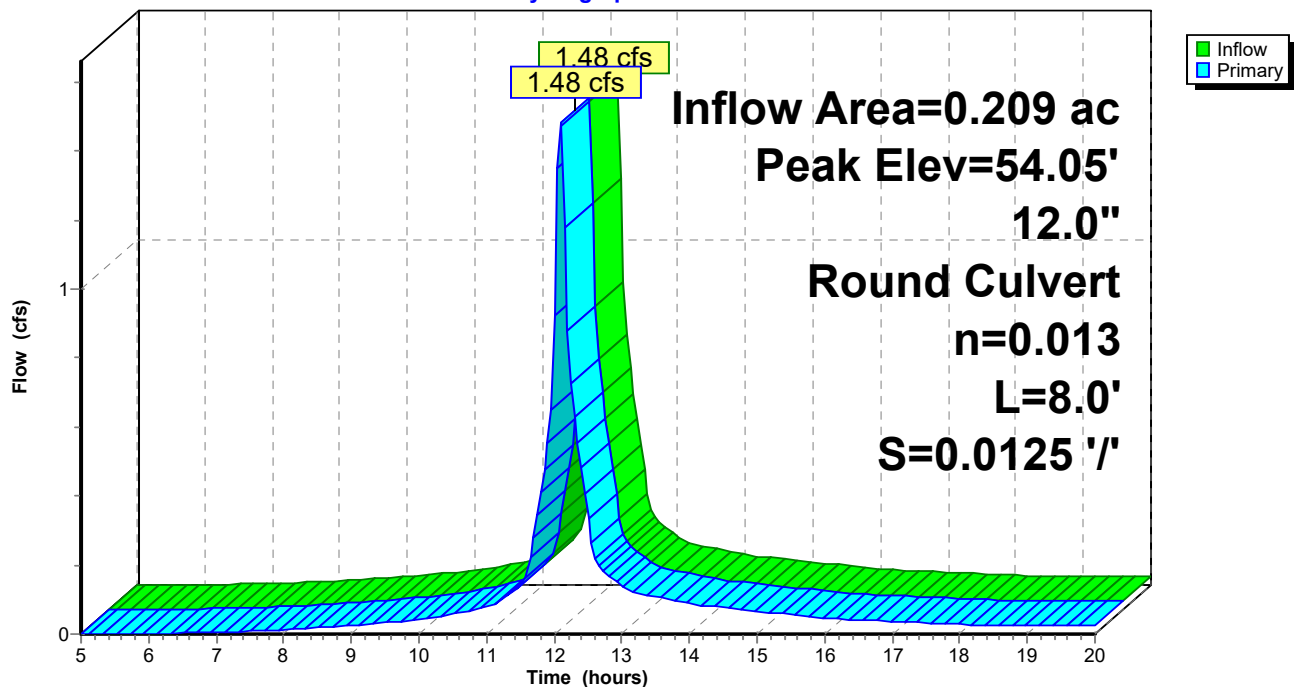
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.05' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	53.25'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.25' / 53.15' S= 0.0125 '/' Cc= 0.900 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

[57] Hint: Peaked at 60.75' (Flood elevation advised)

[81] Warning: Exceeded Pond 154P by 6.90' @ 12.20 hrs

[81] Warning: Exceeded Pond 165P by 6.92' @ 12.20 hrs

[81] Warning: Exceeded Pond 202P by 6.45' @ 12.20 hrs

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

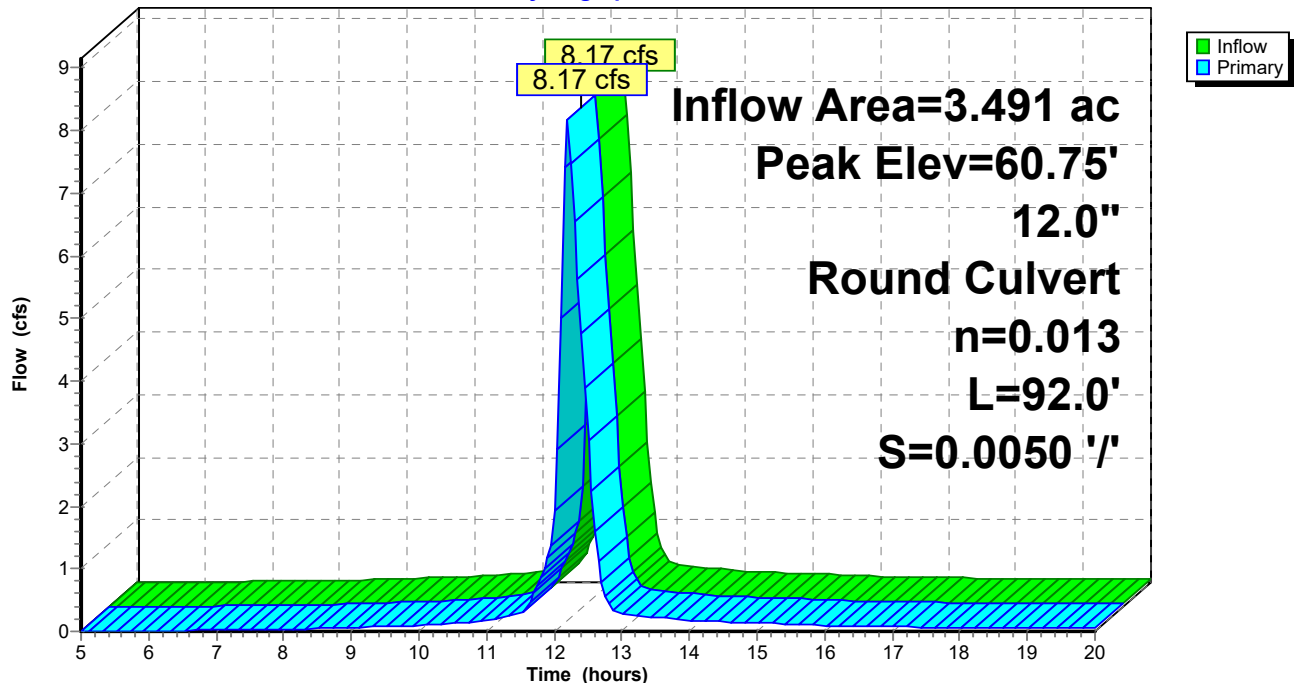
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.75' @ 12.20 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	52.16'	12.0" Round Culvert L= 92.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.16' / 51.70' S= 0.0050 '/ Cc= 0.900 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 10

[57] Hint: Peaked at 50.95' (Flood elevation advised)

Inflow Area = 0.093 ac, 53.88% Impervious, Inflow Depth > 5.06" for 100-Year event
 Inflow = 0.57 cfs @ 12.09 hrs, Volume= 0.039 af
 Outflow = 0.57 cfs @ 12.09 hrs, Volume= 0.039 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.57 cfs @ 12.09 hrs, Volume= 0.039 af
 Routed to Pond 181P : DMH

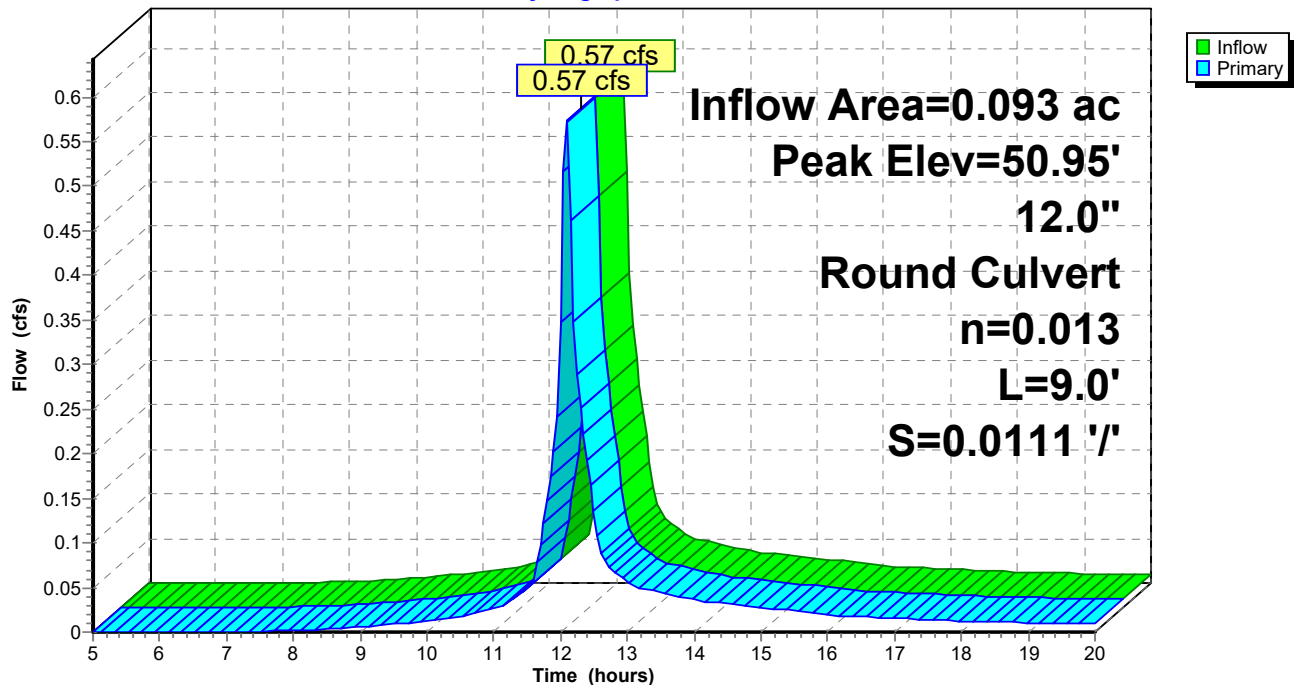
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 50.95' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.50'	12.0" Round Culvert L= 9.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.50' / 50.40' S= 0.0111 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.56 cfs @ 12.09 hrs HW=50.95' (Free Discharge)
 ↳ **1=Culvert** (Barrel Controls 0.56 cfs @ 2.43 fps)

Pond 167P: CB 10

Hydrograph



Summary for Pond 168P: CB 11

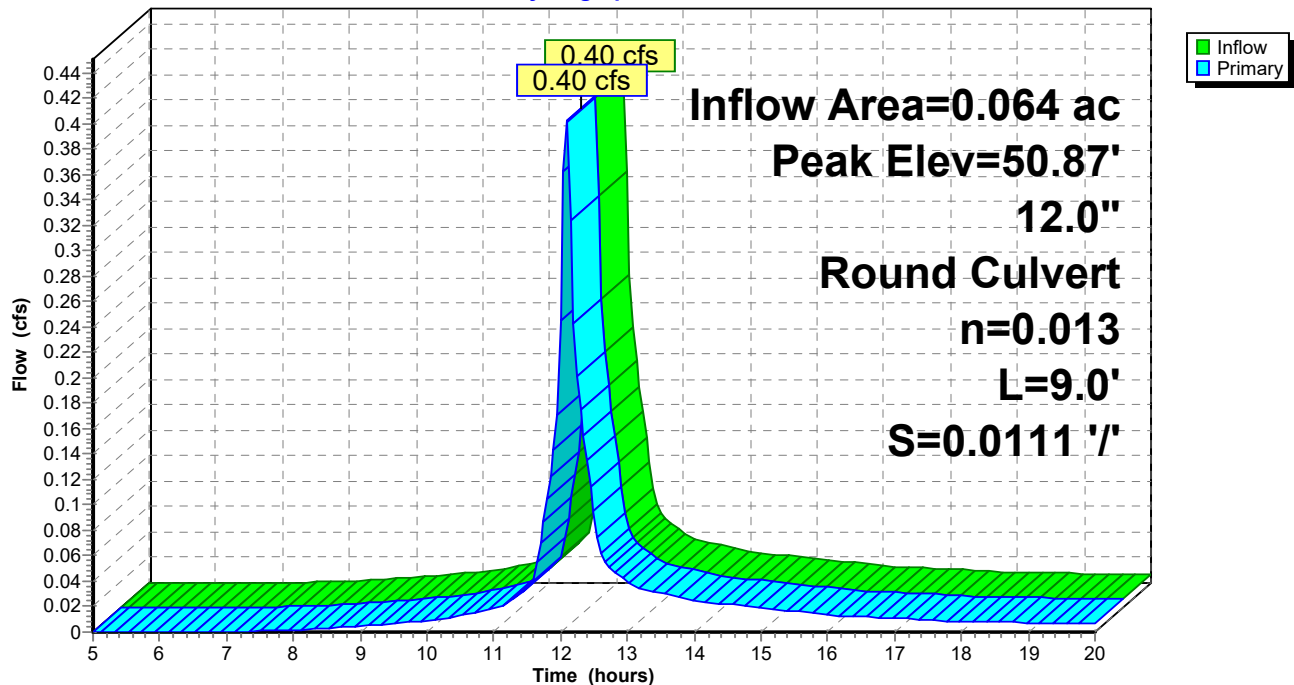
[57] Hint: Peaked at 50.87' (Flood elevation advised)

Inflow Area = 0.064 ac, 55.52% Impervious, Inflow Depth > 5.18" for 100-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 181P : DMH

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 50.87' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.50'	12.0" Round Culvert L= 9.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.50' / 50.40' S= 0.0111 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.39 cfs @ 12.09 hrs HW=50.87' (Free Discharge)
 1=Culvert (Barrel Controls 0.39 cfs @ 2.26 fps)

Pond 168P: CB 11**Hydrograph**

Summary for Pond 169P: DMH 12

[57] Hint: Peaked at 60.90' (Flood elevation advised)

[81] Warning: Exceeded Pond 166P by 0.15' @ 12.20 hrs

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

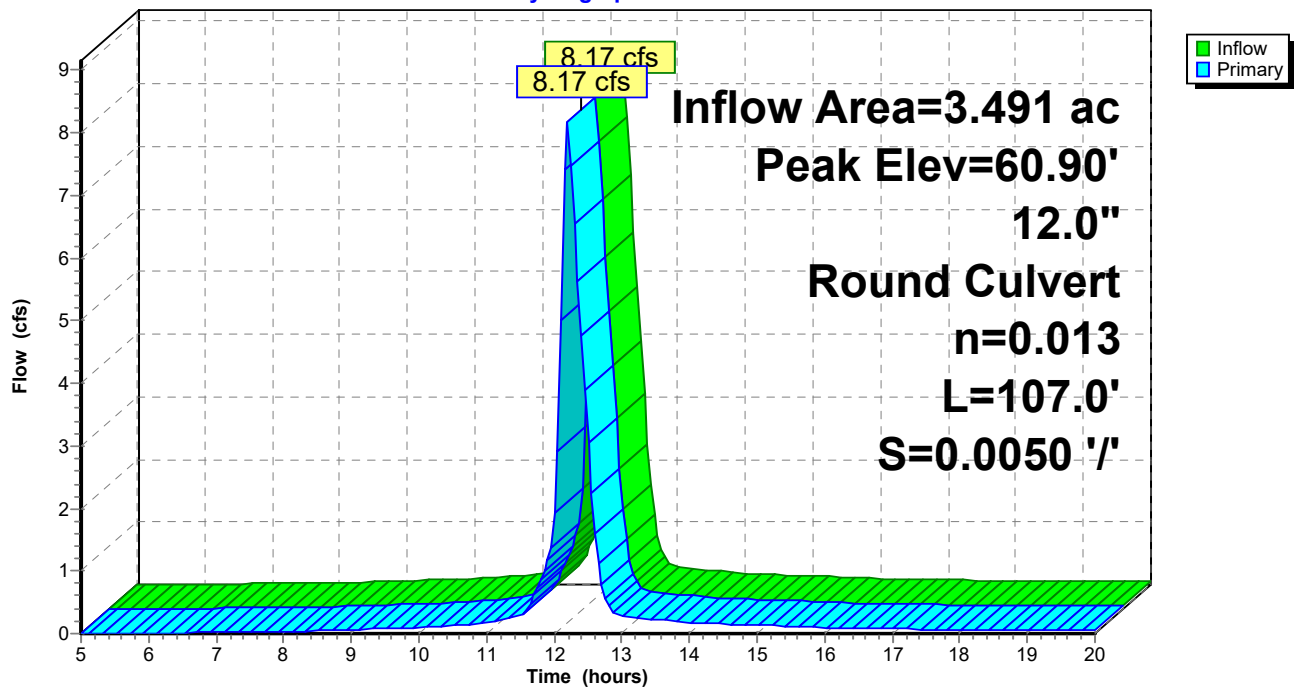
Device	Routing	Invert	Outlet Devices
#1	Primary	51.60'	12.0" Round Culvert L= 107.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.60' / 51.06' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 49.44' (Flood elevation advised)

Inflow Area = 0.392 ac, 53.13% Impervious, Inflow Depth > 4.94" for 100-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 171P : DMH 6

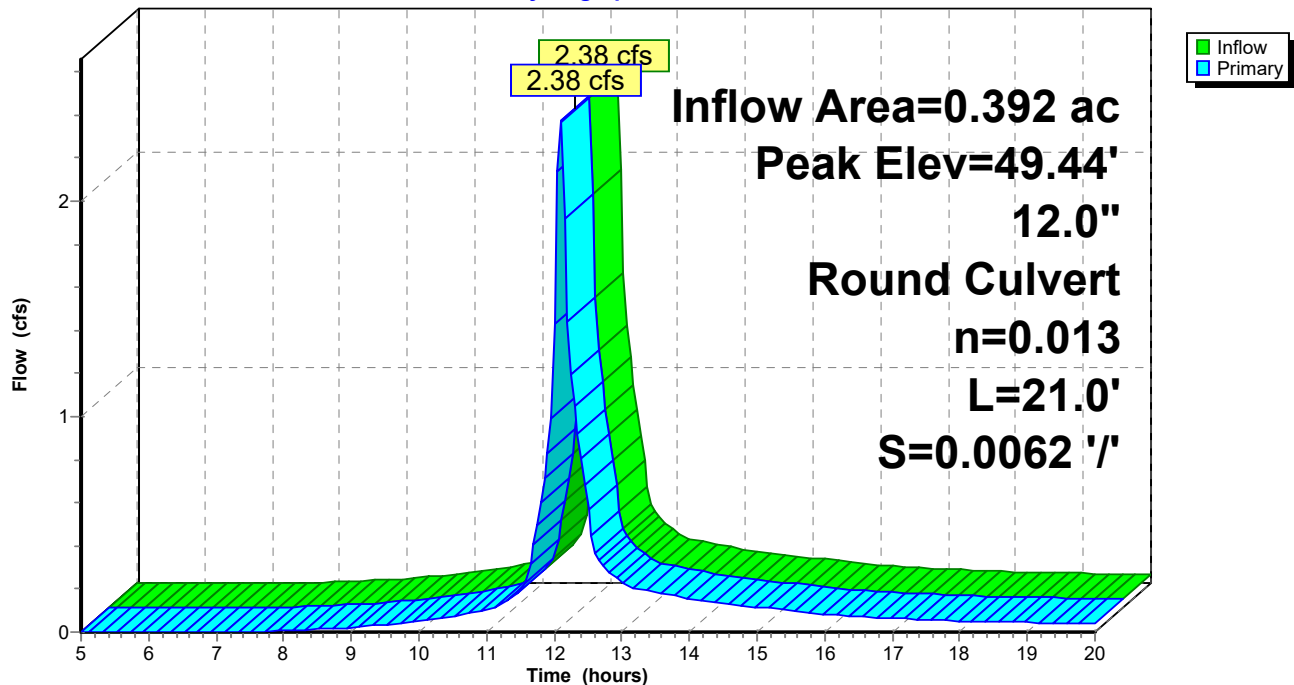
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 49.44' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	48.30'	12.0" Round Culvert L= 21.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.30' / 48.17' S= 0.0062 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.33 cfs @ 12.09 hrs HW=49.42' (Free Discharge)
 1=Culvert (Barrel Controls 2.33 cfs @ 3.31 fps)

Pond 170P: CB 9

Hydrograph



Summary for Pond 171P: DMH 6

[57] Hint: Peaked at 51.17' (Flood elevation advised)
 [81] Warning: Exceeded Pond 61P by 1.88' @ 12.10 hrs
 [81] Warning: Exceeded Pond 170P by 1.72' @ 12.10 hrs
 [79] Warning: Submerged Pond 175P Primary device # 1 INLET by 2.88'

Inflow Area = 1.526 ac, 62.32% Impervious, Inflow Depth > 5.61" for 100-Year event
 Inflow = 10.31 cfs @ 12.09 hrs, Volume= 0.713 af
 Outflow = 10.31 cfs @ 12.09 hrs, Volume= 0.713 af, Atten= 0%, Lag= 0.0 min
 Primary = 10.31 cfs @ 12.09 hrs, Volume= 0.713 af
 Routed to Pond 190P : DMH 3

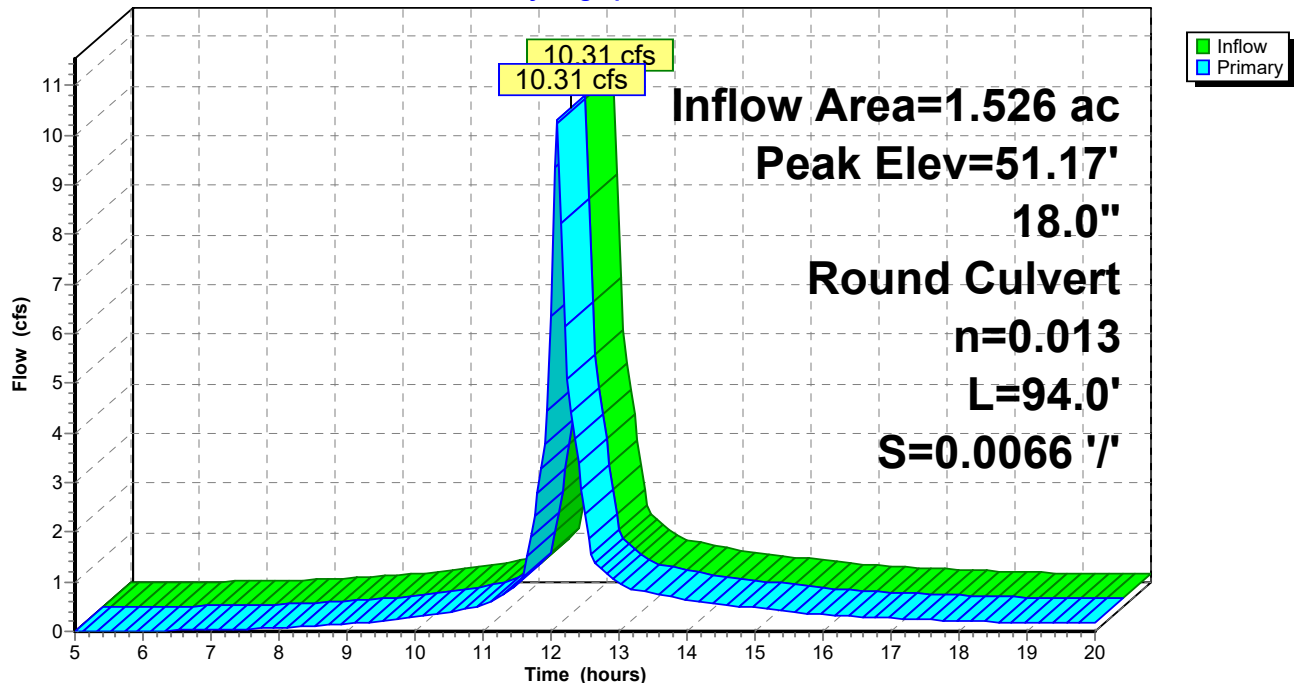
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 51.17' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	48.07'	18.0" Round Culvert L= 94.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.07' / 47.45' S= 0.0066 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=10.09 cfs @ 12.09 hrs HW=51.08' (Free Discharge)
 ↑ **1=Culvert** (Inlet Controls 10.09 cfs @ 5.71 fps)

Pond 171P: DMH 6

Hydrograph



Summary for Pond 172P: CB 16

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 53.07' (Flood elevation advised)

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

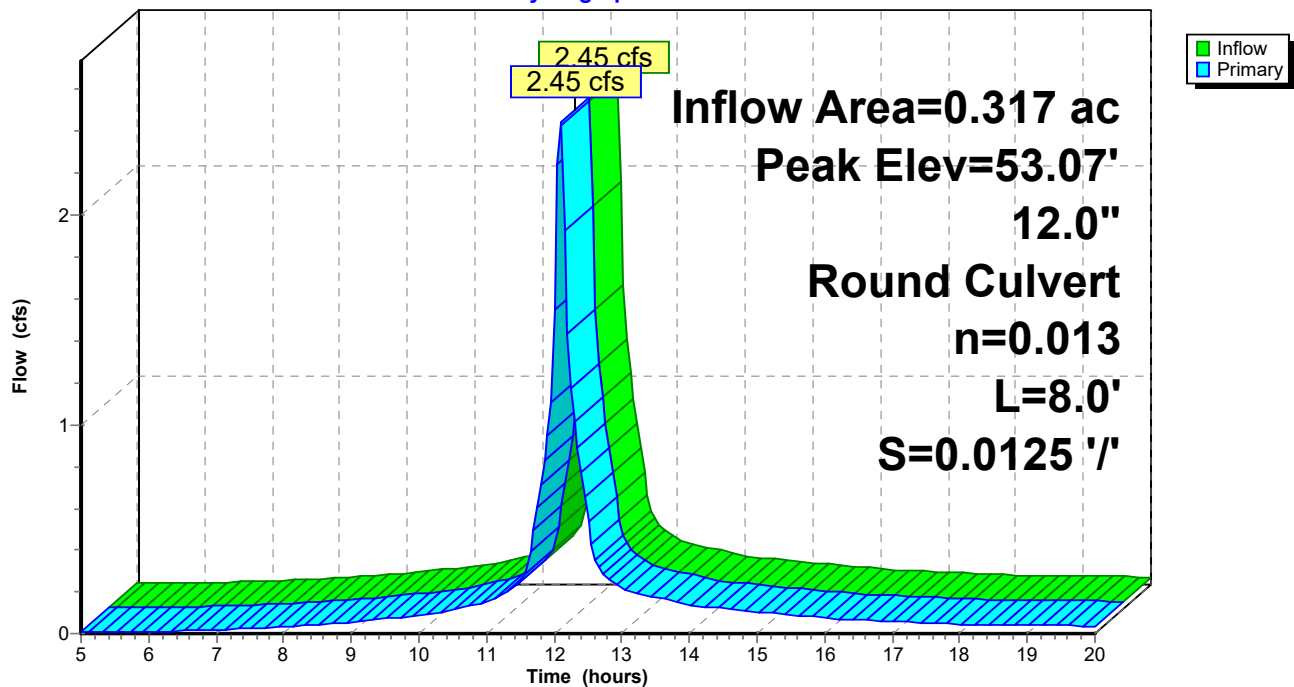
Device	Routing	Invert	Outlet Devices
#1	Primary	51.90'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.90' / 51.80' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[57] Hint: Peaked at 52.51' (Flood elevation advised)

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

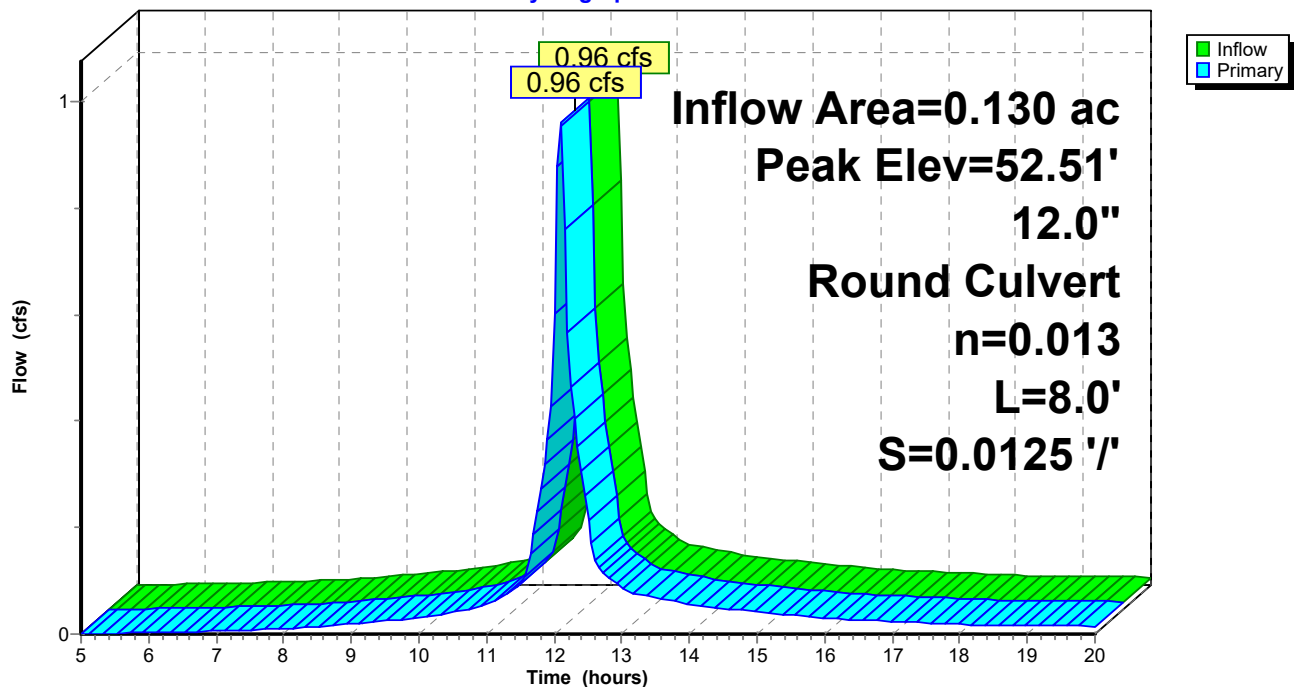
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 52.51' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	51.90'	12.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.90' / 51.80' S= 0.0125 '/' Cc= 0.900 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

[57] Hint: Peaked at 54.05' (Flood elevation advised)

[79] Warning: Submerged Pond 169P Primary device # 1 INLET by 2.40'

[81] Warning: Exceeded Pond 172P by 1.32' @ 12.20 hrs

[81] Warning: Exceeded Pond 173P by 1.65' @ 12.20 hrs

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 179P : DMH 8

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 54.05' @ 12.18 hrs

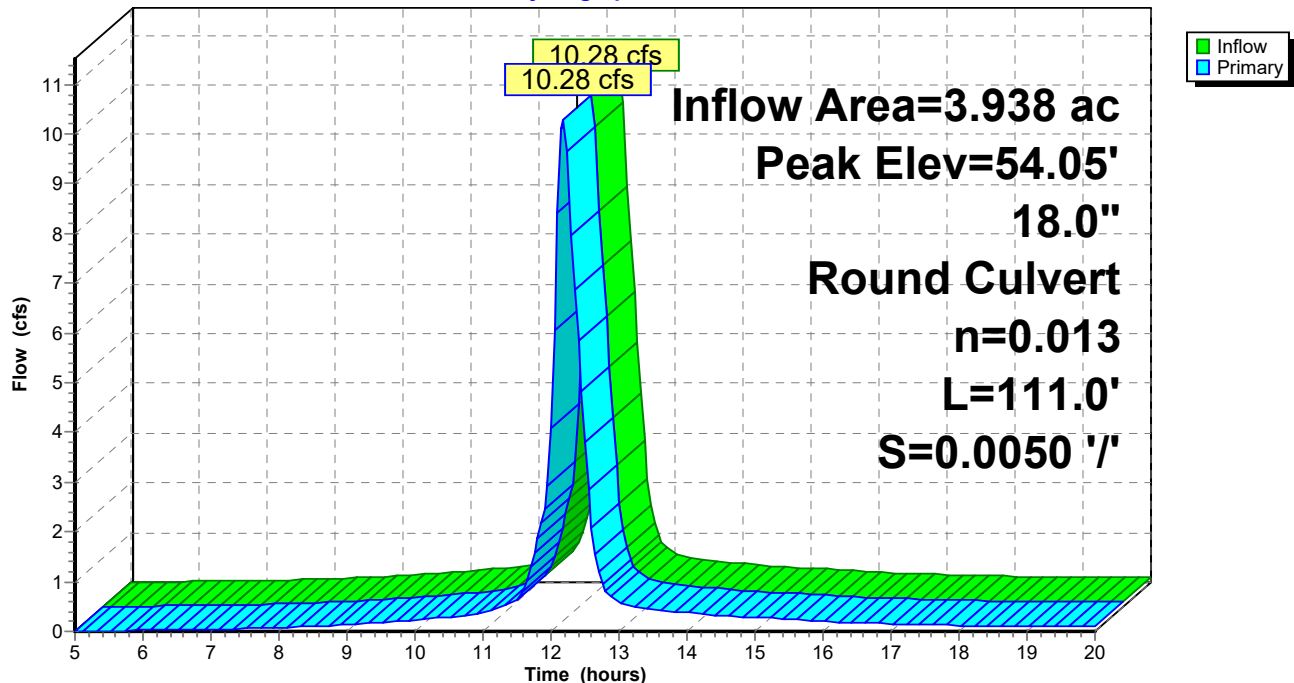
Device	Routing	Invert	Outlet Devices
#1	Primary	50.96'	18.0" Round Culvert L= 111.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.96' / 50.40' S= 0.0050 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[57] Hint: Peaked at 52.85' (Flood elevation advised)

[81] Warning: Exceeded Pond 176P by 2.79' @ 12.10 hrs

[81] Warning: Exceeded Pond 182P by 2.88' @ 12.10 hrs

Inflow Area = 0.870 ac, 64.72% Impervious, Inflow Depth > 5.79" for 100-Year event
 Inflow = 6.04 cfs @ 12.09 hrs, Volume= 0.420 af
 Outflow = 6.04 cfs @ 12.09 hrs, Volume= 0.420 af, Atten= 0%, Lag= 0.0 min
 Primary = 6.04 cfs @ 12.09 hrs, Volume= 0.420 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= 52.85' @ 12.09 hrs

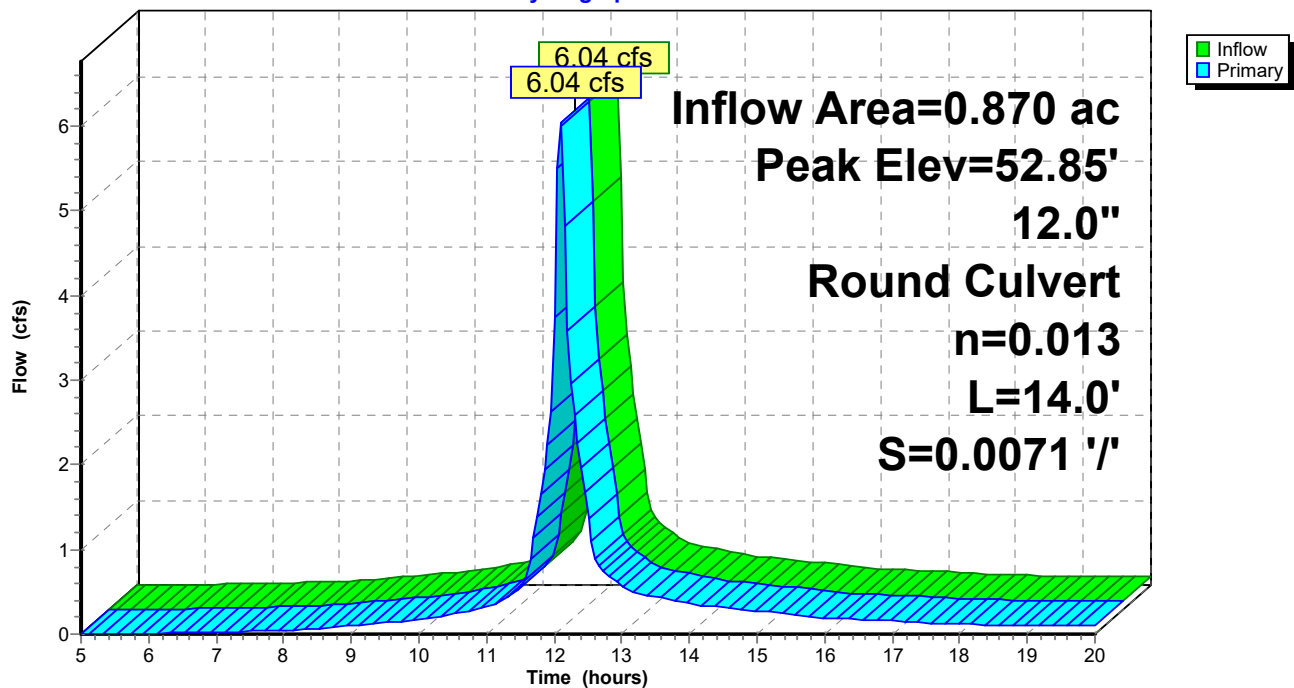
Device	Routing	Invert	Outlet Devices
#1	Primary	48.27'	12.0" Round Culvert L= 14.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.27' / 48.17' S= 0.0071 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=5.90 cfs @ 12.09 hrs HW=52.68' (Free Discharge)

↑**1=Culvert** (Inlet Controls 5.90 cfs @ 7.52 fps)

Pond 175P: DMH 5

Hydrograph



Summary for Pond 176P: CB 6

[57] Hint: Peaked at 50.03' (Flood elevation advised)

Inflow Area = 0.477 ac, 57.77% Impervious, Inflow Depth > 5.30" for 100-Year event
 Inflow = 3.08 cfs @ 12.09 hrs, Volume= 0.211 af
 Outflow = 3.08 cfs @ 12.09 hrs, Volume= 0.211 af, Atten= 0%, Lag= 0.0 min
 Primary = 3.08 cfs @ 12.09 hrs, Volume= 0.211 af
 Routed to Pond 175P : DMH 5

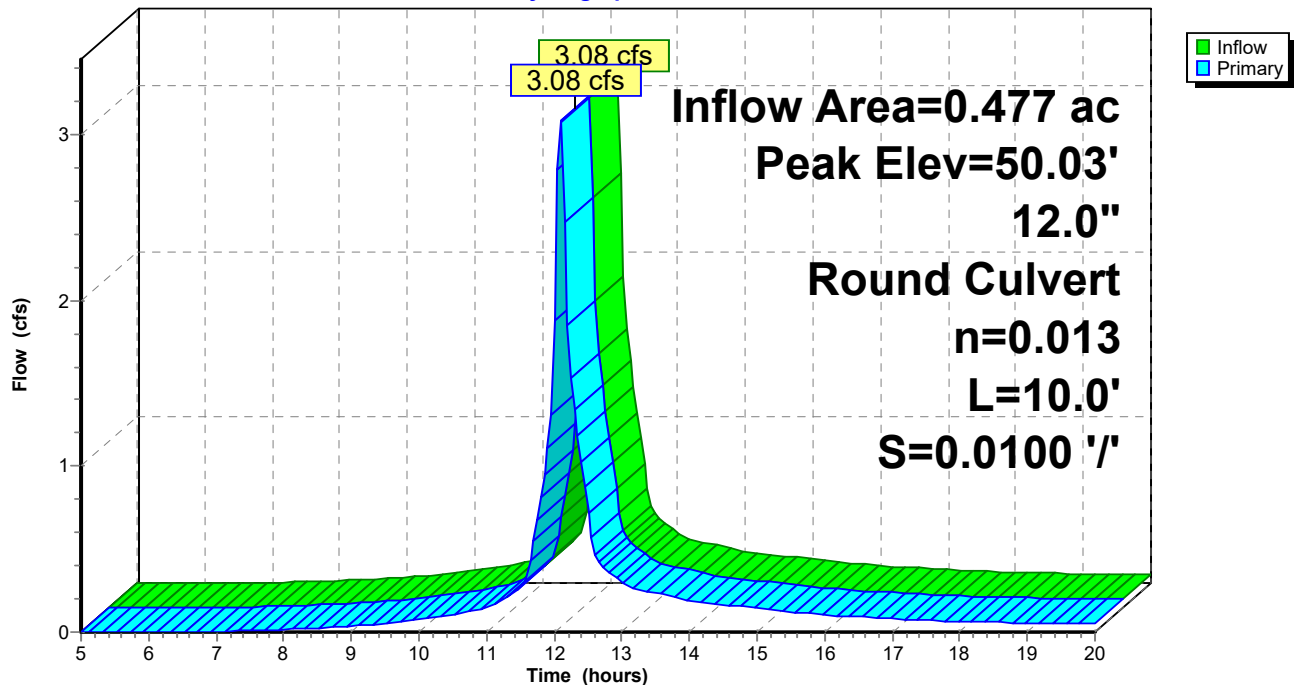
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 50.03' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	48.47'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.47' / 48.37' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.02 cfs @ 12.09 hrs HW=49.99' (Free Discharge)
 ↑1=Culvert (Inlet Controls 3.02 cfs @ 3.84 fps)

Pond 176P: CB 6

Hydrograph



Summary for Pond 177P: CB 13

[57] Hint: Peaked at 51.57' (Flood elevation advised)

Inflow Area = 0.315 ac, 68.62% Impervious, Inflow Depth > 6.02" for 100-Year event
 Inflow = 2.26 cfs @ 12.09 hrs, Volume= 0.158 af
 Outflow = 2.26 cfs @ 12.09 hrs, Volume= 0.158 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.26 cfs @ 12.09 hrs, Volume= 0.158 af
 Routed to Pond 179P : DMH 8

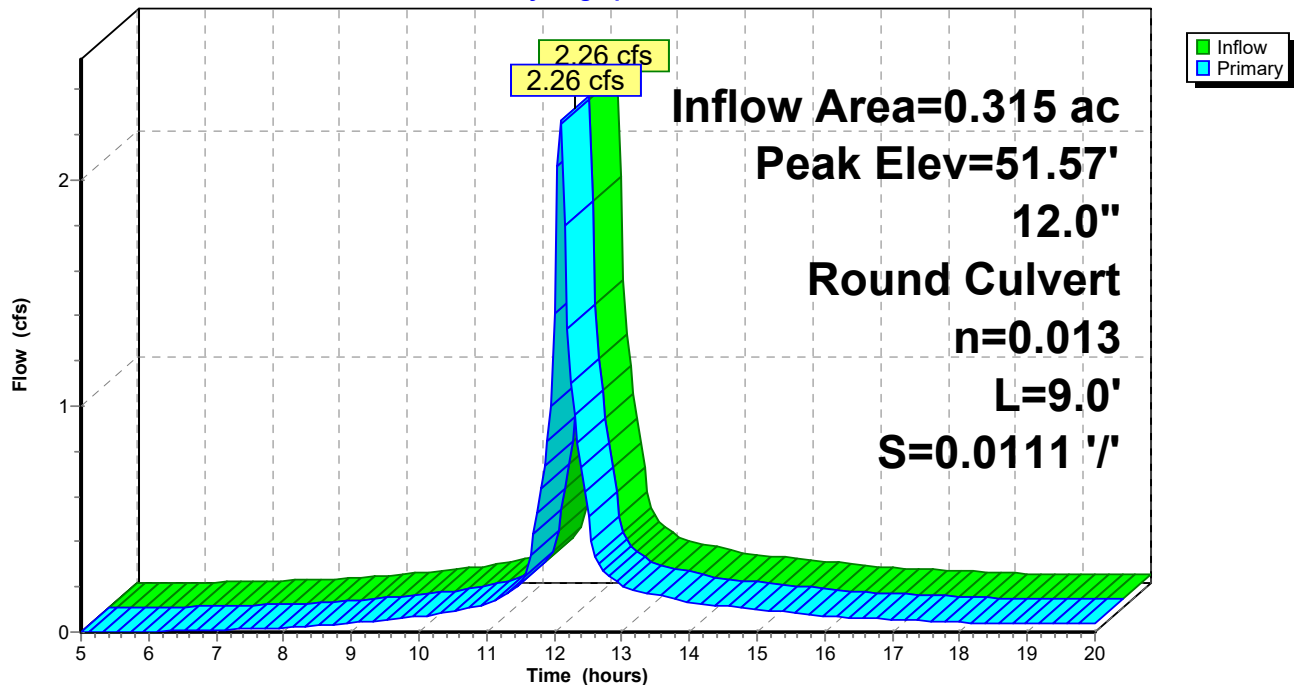
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 51.57' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.50'	12.0" Round Culvert L= 9.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.50' / 50.40' S= 0.0111 '/' Cc= 0.900 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 (Barrel Controls 2.22 cfs @ 3.33 fps)

Pond 177P: CB 13

Hydrograph



Summary for Pond 178P: CB 12

[57] Hint: Peaked at 51.14' (Flood elevation advised)

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

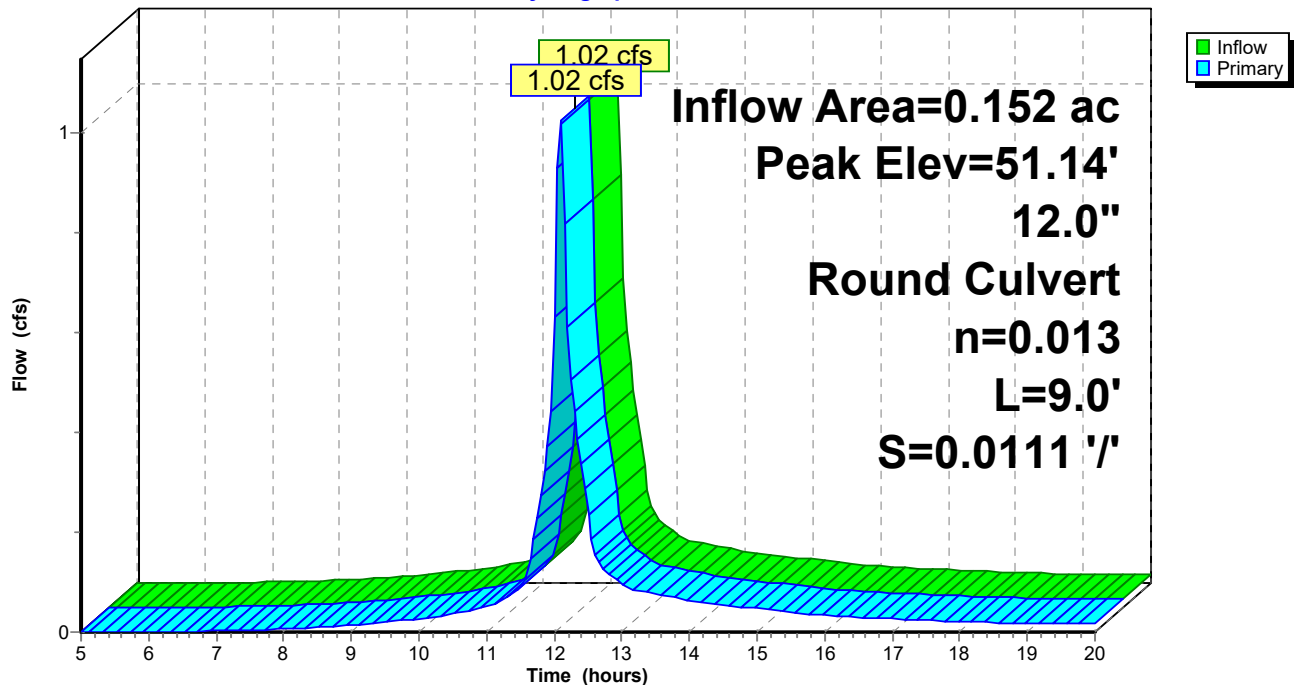
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 51.14' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.50'	12.0" Round Culvert L= 9.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.50' / 50.40' S= 0.0111 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.00 cfs @ 12.09 hrs HW=51.13' (Free Discharge)
 1=Culvert (Barrel Controls 1.00 cfs @ 2.75 fps)

Pond 178P: CB 12

Hydrograph



Summary for Pond 179P: DMH 8

[57] Hint: Peaked at 54.65' (Flood elevation advised)

[81] Warning: Exceeded Pond 174P by 0.79' @ 12.10 hrs

[81] Warning: Exceeded Pond 177P by 3.23' @ 12.15 hrs

[81] Warning: Exceeded Pond 178P by 3.58' @ 12.15 hrs

Inflow Area = 4.405 ac, 68.27% Impervious, Inflow Depth > 2.35" for 100-Year event
 Inflow = 12.75 cfs @ 12.16 hrs, Volume= 0.864 af
 Outflow = 12.75 cfs @ 12.16 hrs, Volume= 0.864 af, Atten= 0%, Lag= 0.0 min
 Primary = 12.75 cfs @ 12.16 hrs, Volume= 0.864 af
 Routed to Pond 180P : DMH 10

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 54.65' @ 12.16 hrs

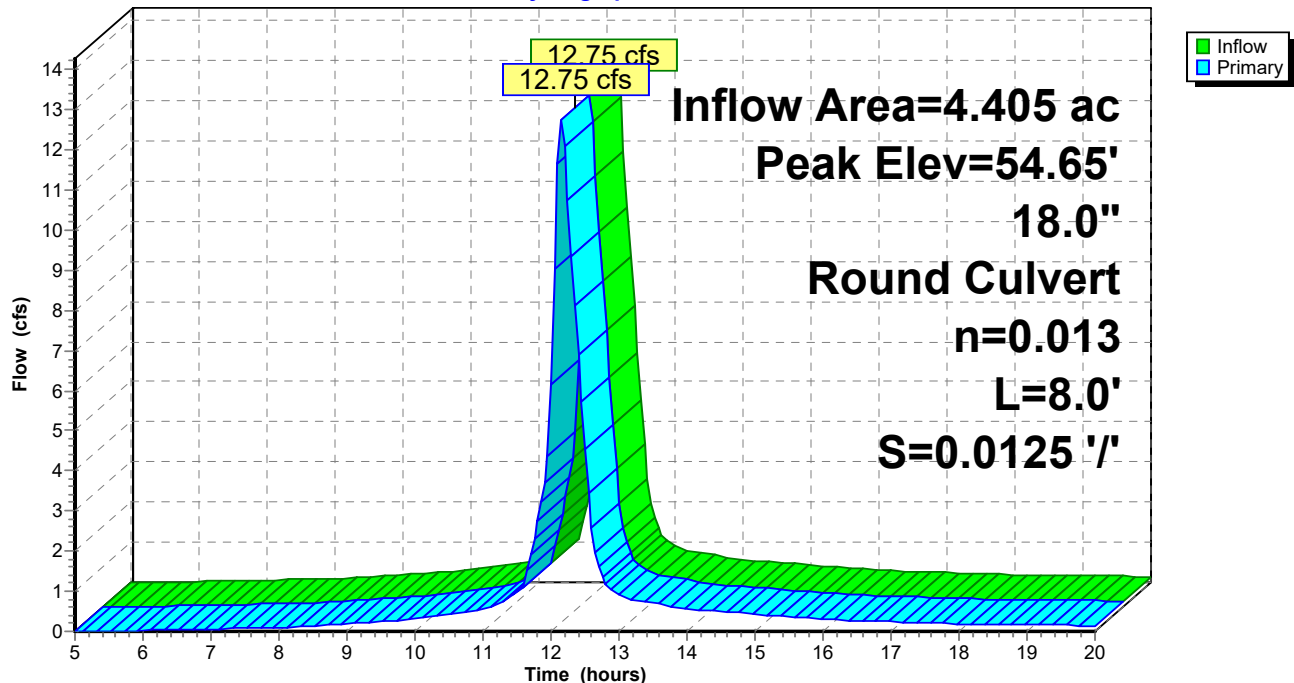
Device	Routing	Invert	Outlet Devices
#1	Primary	50.30'	18.0" Round Culvert L= 8.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.30' / 50.20' S= 0.0125 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=12.65 cfs @ 12.16 hrs HW=54.60' (Free Discharge)

↑**1=Culvert** (Inlet Controls 12.65 cfs @ 7.16 fps)

Pond 179P: DMH 8

Hydrograph



Summary for Pond 180P: DMH 10

[57] Hint: Peaked at 56.89' (Flood elevation advised)

[81] Warning: Exceeded Pond 164P by 5.08' @ 12.15 hrs

[81] Warning: Exceeded Pond 179P by 2.62' @ 12.10 hrs

[81] Warning: Exceeded Pond 181P by 5.93' @ 12.15 hrs

Inflow Area = 5.095 ac, 67.32% Impervious, Inflow Depth > 2.79" for 100-Year event
 Inflow = 16.59 cfs @ 12.13 hrs, Volume= 1.185 af
 Outflow = 16.59 cfs @ 12.13 hrs, Volume= 1.185 af, Atten= 0%, Lag= 0.0 min
 Primary = 16.59 cfs @ 12.13 hrs, Volume= 1.185 af
 Routed to Pond 192P : Sub. Inf. 1

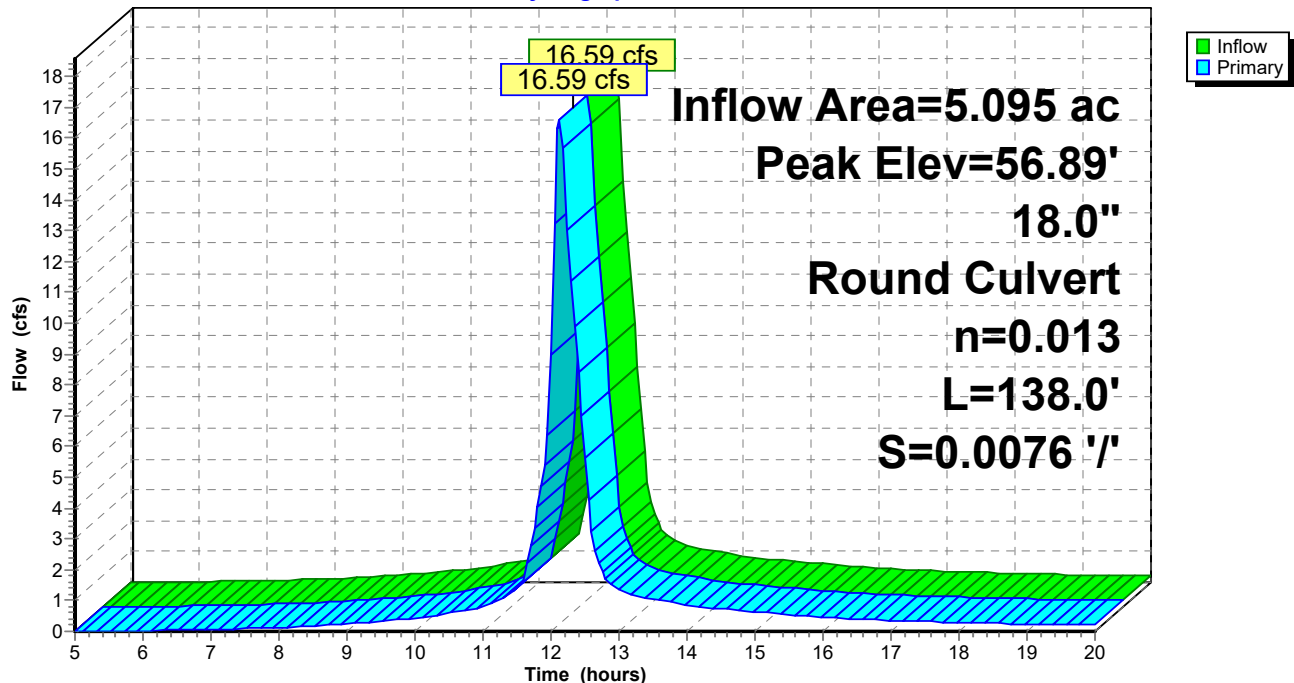
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 56.89' @ 12.13 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	50.05'	18.0" Round Culvert L= 138.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.05' / 49.00' S= 0.0076 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=16.39 cfs @ 12.13 hrs HW=56.75' (Free Discharge)↑**1=Culvert** (Inlet Controls 16.39 cfs @ 9.27 fps)**Pond 180P: DMH 10**

Hydrograph



Summary for Pond 181P: DMH

[57] Hint: Peaked at 50.94' (Flood elevation advised)

[79] Warning: Submerged Pond 167P Primary device # 1 INLET by 0.44'

[81] Warning: Exceeded Pond 168P by 0.07' @ 12.10 hrs

Inflow Area = 0.156 ac, 54.55% Impervious, Inflow Depth > 5.11" for 100-Year event
 Inflow = 0.98 cfs @ 12.09 hrs, Volume= 0.066 af
 Outflow = 0.98 cfs @ 12.09 hrs, Volume= 0.066 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.98 cfs @ 12.09 hrs, Volume= 0.066 af
 Routed to Pond 180P : DMH 10

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 50.94' @ 12.09 hrs

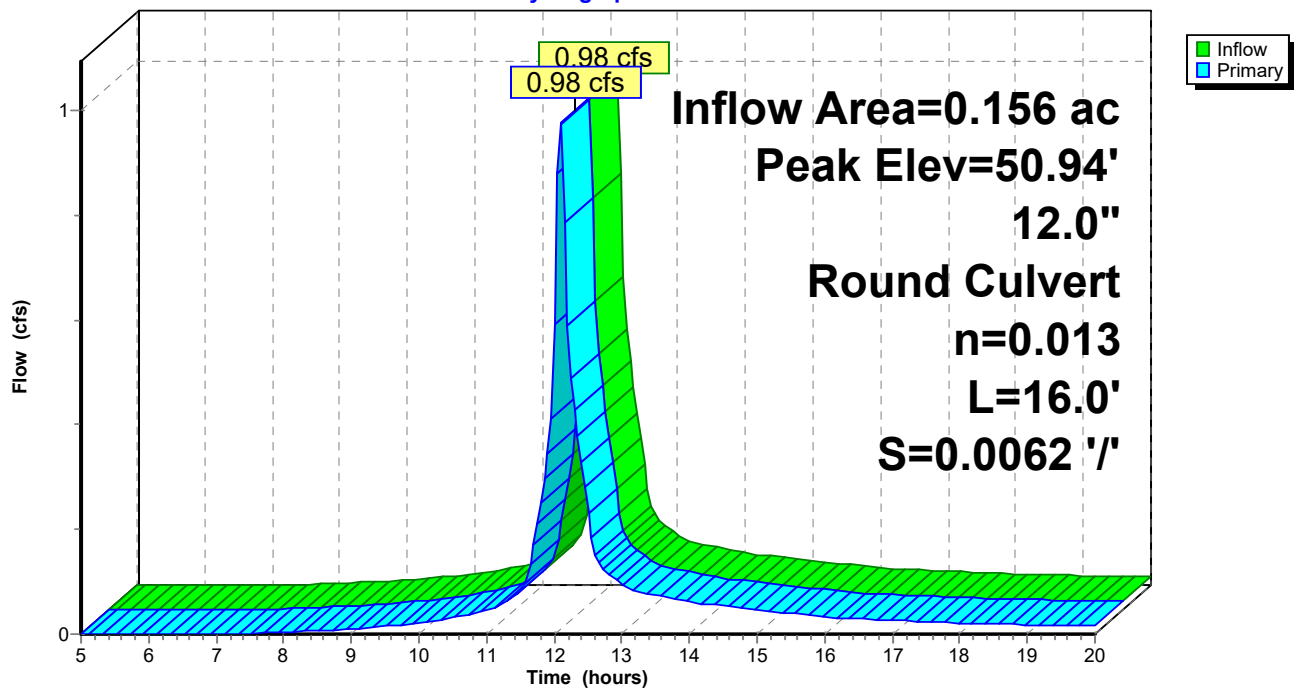
Device	Routing	Invert	Outlet Devices
#1	Primary	50.30'	12.0" Round Culvert L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.30' / 50.20' S= 0.0062 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.96 cfs @ 12.09 hrs HW=50.93' (Free Discharge)

↑1=Culvert (Barrel Controls 0.96 cfs @ 2.61 fps)

Pond 181P: DMH

Hydrograph



Summary for Pond 182P: CB 7

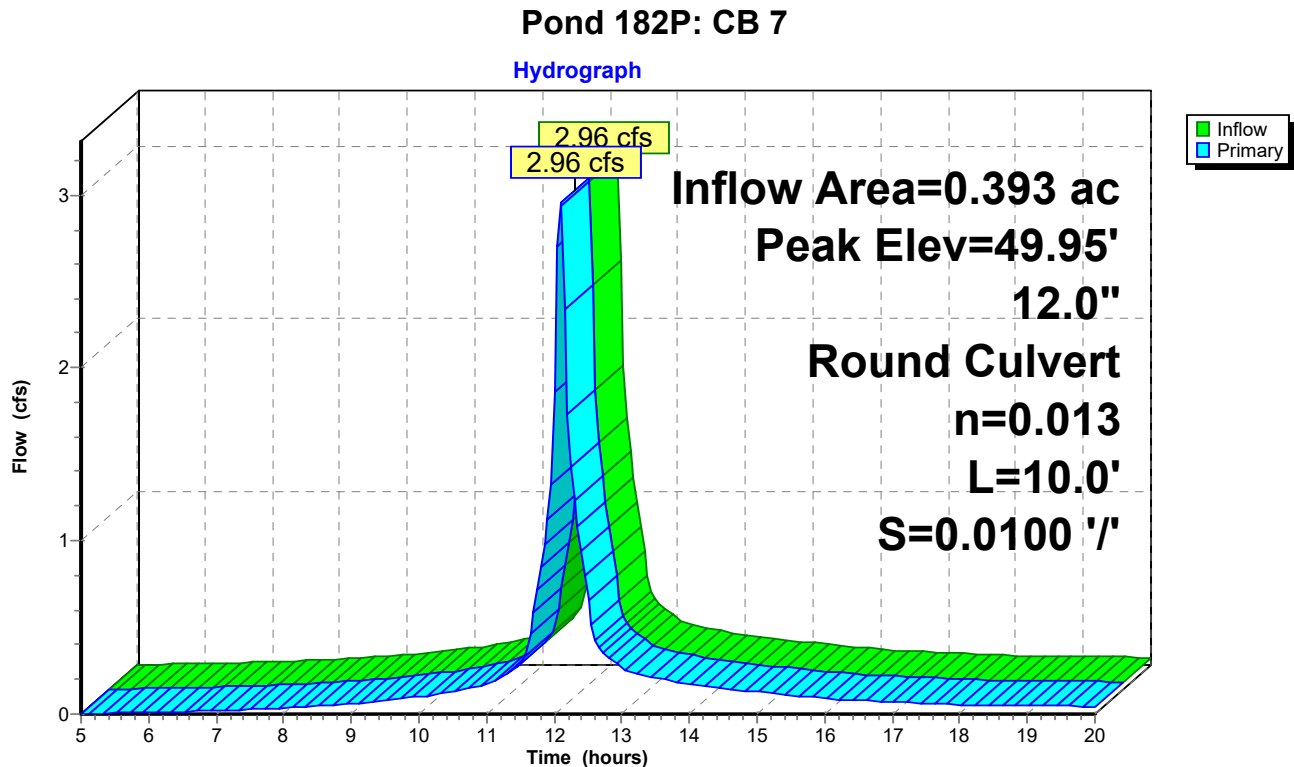
[57] Hint: Peaked at 49.95' (Flood elevation advised)

Inflow Area = 0.393 ac, 73.16% Impervious, Inflow Depth > 6.38" for 100-Year event
 Inflow = 2.96 cfs @ 12.09 hrs, Volume= 0.209 af
 Outflow = 2.96 cfs @ 12.09 hrs, Volume= 0.209 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.96 cfs @ 12.09 hrs, Volume= 0.209 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= 49.95' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	48.47'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.47' / 48.37' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.89 cfs @ 12.09 hrs HW=49.90' (Free Discharge)
 1=Culvert (Inlet Controls 2.89 cfs @ 3.67 fps)



Summary for Pond 184P: DMH 4A

[57] Hint: Peaked at 71.52' (Flood elevation advised)

[81] Warning: Exceeded Pond 192P by 19.76' @ 12.25 hrs

Inflow Area = 5.095 ac, 67.32% Impervious, Inflow Depth = 0.89" for 100-Year event
 Inflow = 11.18 cfs @ 12.24 hrs, Volume= 0.379 af
 Outflow = 11.18 cfs @ 12.24 hrs, Volume= 0.379 af, Atten= 0%, Lag= 0.0 min
 Primary = 11.18 cfs @ 12.24 hrs, Volume= 0.379 af
 Routed to Pond 185P : DMH

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 71.52' @ 12.24 hrs

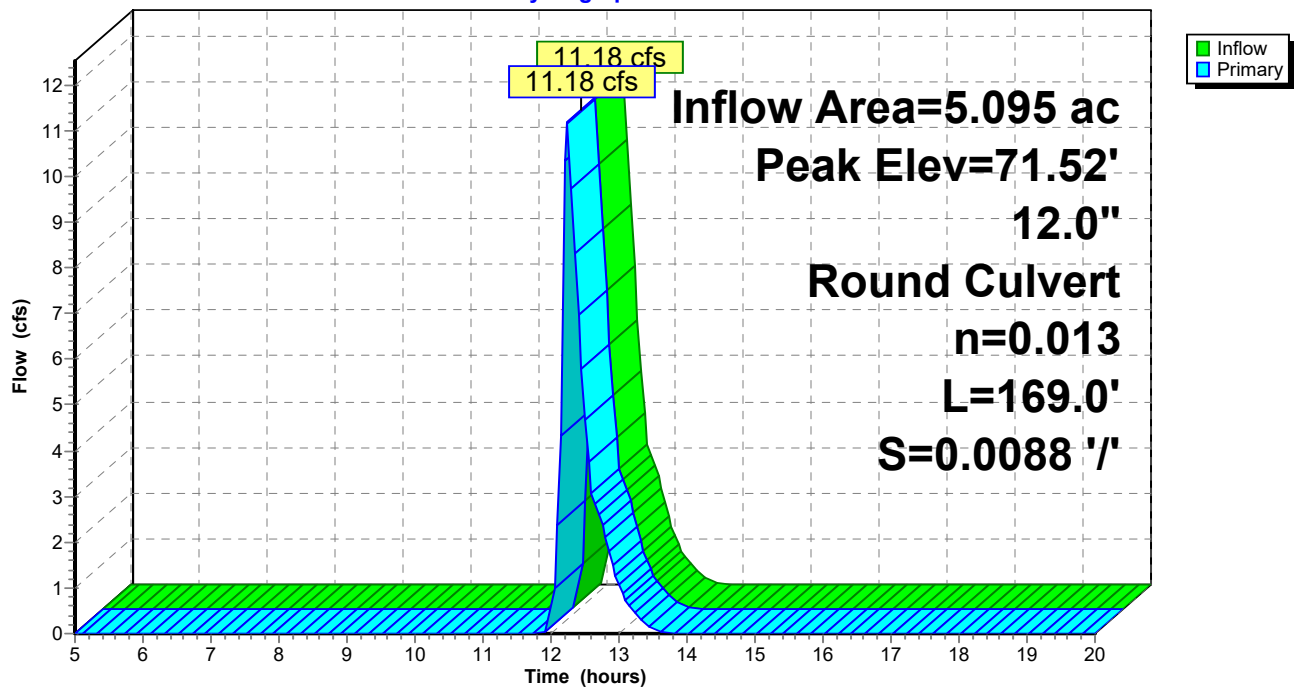
Device	Routing	Invert	Outlet Devices
#1	Primary	49.35'	12.0" Round Culvert L= 169.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 49.35' / 47.87' S= 0.0088 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=11.05 cfs @ 12.24 hrs HW=71.01' (Free Discharge)

↑1=Culvert (Barrel Controls 11.05 cfs @ 14.07 fps)

Pond 184P: DMH 4A

Hydrograph



Summary for Pond 185P: DMH

[57] Hint: Peaked at 65.58' (Flood elevation advised)

[81] Warning: Exceeded Pond 184P by 0.49' @ 12.15 hrs

[81] Warning: Exceeded Pond 196P by 16.71' @ 12.25 hrs

Inflow Area = 5.412 ac, 68.22% Impervious, Inflow Depth > 1.25" for 100-Year event
 Inflow = 12.44 cfs @ 12.24 hrs, Volume= 0.566 af
 Outflow = 12.44 cfs @ 12.24 hrs, Volume= 0.566 af, Atten= 0%, Lag= 0.0 min
 Primary = 12.44 cfs @ 12.24 hrs, Volume= 0.566 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= 65.58' @ 12.24 hrs

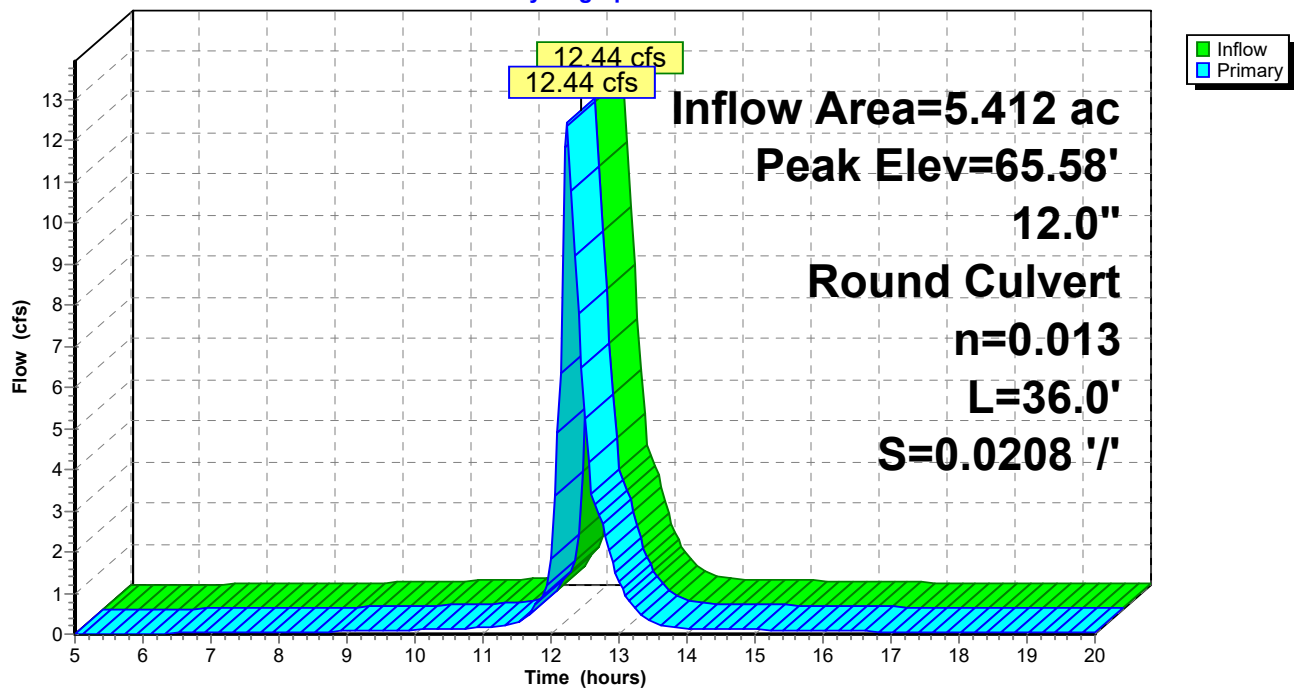
Device	Routing	Invert	Outlet Devices
#1	Primary	47.75'	12.0" Round Culvert L= 36.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.75' / 47.00' S= 0.0208 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=12.24 cfs @ 12.24 hrs HW=65.06' (Free Discharge)

↑**1=Culvert** (Inlet Controls 12.24 cfs @ 15.58 fps)

Pond 185P: DMH

Hydrograph



Summary for Pond 186P: Constructed Wetland 1

[81] Warning: Exceeded Pond 199P by 2.72' @ 19.95 hrs

[81] Warning: Exceeded Pond 200P by 2.42' @ 12.65 hrs

Inflow Area = 3.257 ac, 53.58% Impervious, Inflow Depth > 4.83" for 100-Year event
 Inflow = 18.88 cfs @ 12.09 hrs, Volume= 1.310 af
 Outflow = 3.74 cfs @ 12.55 hrs, Volume= 0.628 af, Atten= 80%, Lag= 27.3 min
 Primary = 3.74 cfs @ 12.55 hrs, Volume= 0.628 af
 Routed to Link 203L : 3A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 49.47' @ 12.55 hrs Surf.Area= 12,119 sf Storage= 32,347 cf

Plug-Flow detention time= 186.9 min calculated for 0.628 af (48% of inflow)
 Center-of-Mass det. time= 100.2 min (880.8 - 780.6)

Volume	Invert	Avail.Storage	Storage Description
#1	46.00'	38,996 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

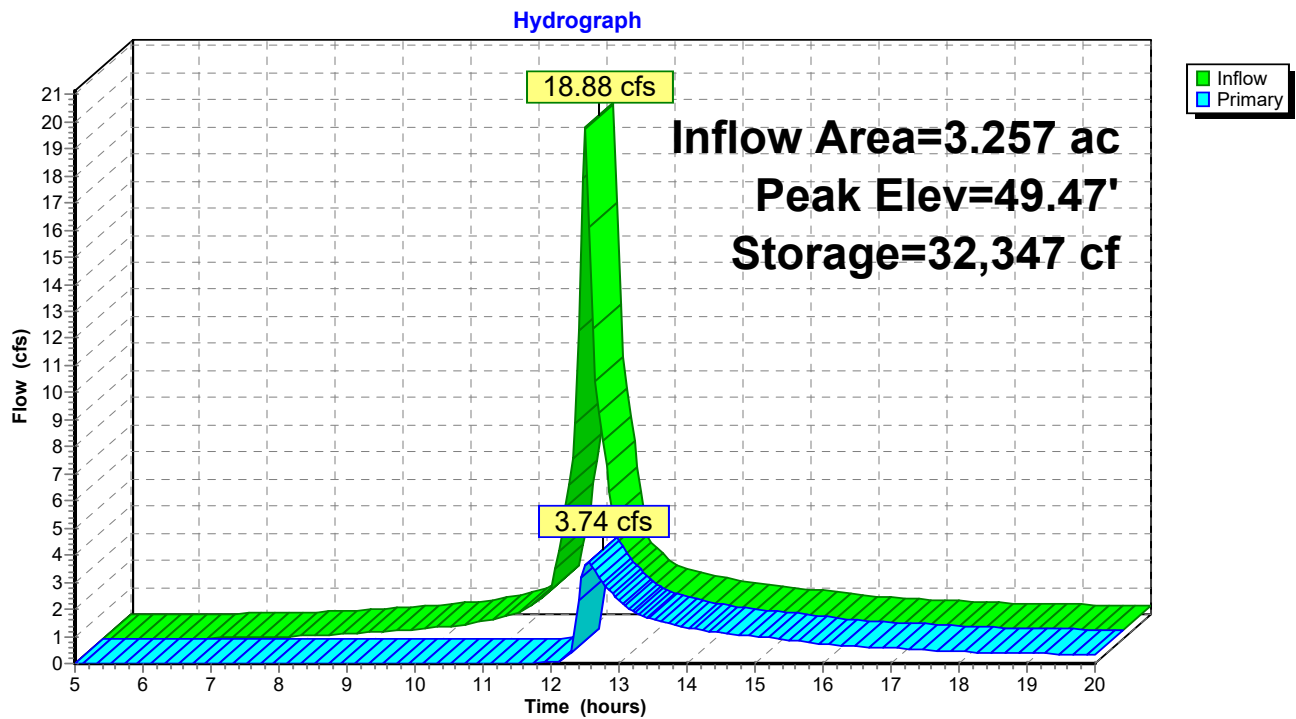
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
46.00	6,632	0	0
47.00	8,141	7,387	7,387
48.00	9,706	8,924	16,310
49.00	11,329	10,518	26,828
50.00	13,007	12,168	38,996

Device	Routing	Invert	Outlet Devices
#1	Primary	46.00'	12.0" Round Culvert L= 186.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 46.00' / 43.50' S= 0.0134 ' S= 0.0134 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#2	Device 1	46.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	49.20'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=3.73 cfs @ 12.55 hrs HW=49.47' (Free Discharge)

- ↑ **1=Culvert** (Passes 3.73 cfs of 5.05 cfs potential flow)
- ↑ **2=Orifice/Grate** (Orifice Controls 0.05 cfs @ 8.92 fps)
- ↑ **3=Orifice/Grate** (Weir Controls 3.68 cfs @ 1.70 fps)

Pond 186P: Constructed Wetland 1



Summary for Pond 187P: Constructed Wetland 3

[79] Warning: Submerged Pond 60P Primary device # 1 OUTLET by 0.76'

Inflow Area = 1.994 ac, 68.75% Impervious, Inflow Depth > 6.50" for 100-Year event
 Inflow = 10.62 cfs @ 12.19 hrs, Volume= 1.081 af
 Outflow = 10.40 cfs @ 12.24 hrs, Volume= 1.011 af, Atten= 2%, Lag= 3.0 min
 Primary = 10.40 cfs @ 12.24 hrs, Volume= 1.011 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= 56.76' @ 12.24 hrs Surf.Area= 3,738 sf Storage= 5,009 cf

Plug-Flow detention time= 36.2 min calculated for 1.008 af (93% of inflow)
 Center-of-Mass det. time= 14.7 min (799.1 - 784.4)

Volume	Invert	Avail.Storage	Storage Description
#1	55.00'	10,466 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

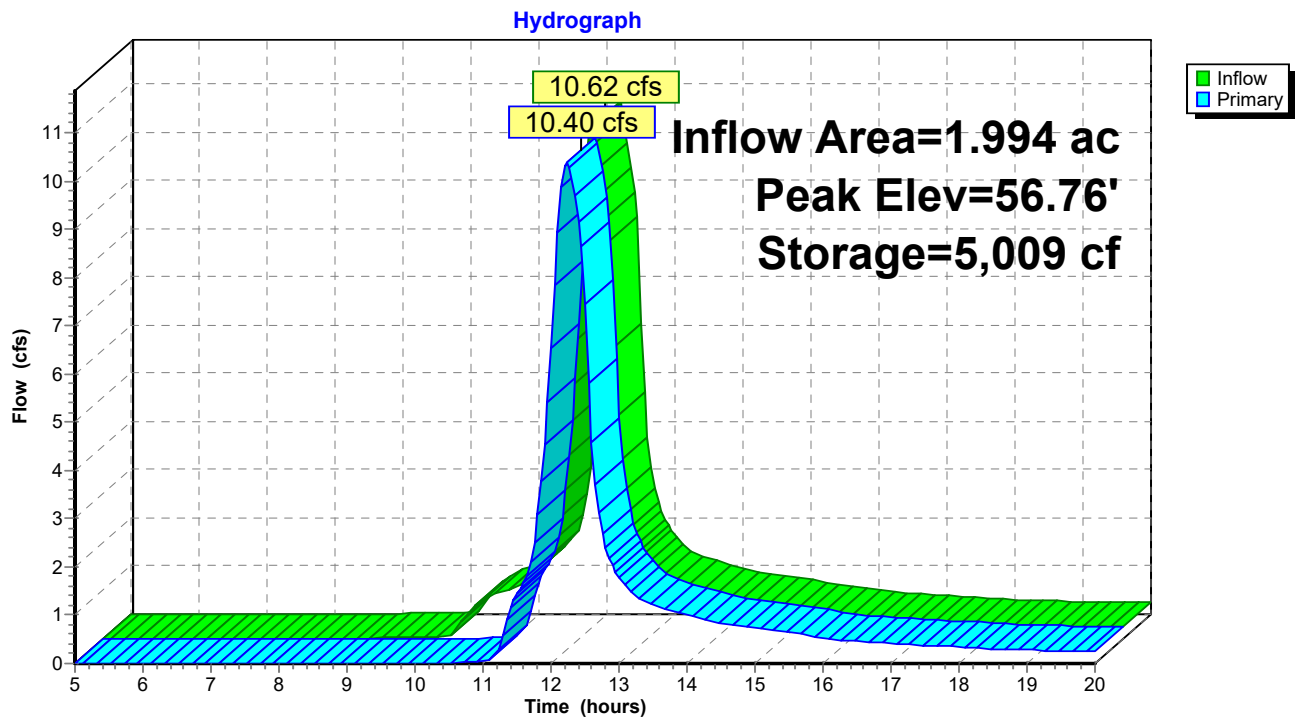
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
55.00	1,991	0	0
56.00	2,932	2,462	2,462
57.00	3,987	3,460	5,921
58.00	5,102	4,545	10,466

Device	Routing	Invert	Outlet Devices
#1	Primary	55.00'	24.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 55.00' / 54.00' S= 0.0500 ' S= 0.0500 ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf
#2	Device 1	55.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	56.00'	4.0" Vert. Orifice/Grate X 3.00 C= 0.600 Limited to weir flow at low heads
#4	Device 1	56.25'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=10.46 cfs @ 12.24 hrs HW=56.76' (Free Discharge)

- 1=Culvert (Inlet Controls 10.46 cfs @ 3.57 fps)
- 2=Orifice/Grate (Passes < 0.03 cfs potential flow)
- 3=Orifice/Grate (Passes < 0.97 cfs potential flow)
- 4=Orifice/Grate (Passes < 9.59 cfs potential flow)

Pond 187P: Constructed Wetland 3



Summary for Pond 188P: CB 3

[57] Hint: Peaked at 48.65' (Flood elevation advised)

Inflow Area = 0.718 ac, 28.78% Impervious, Inflow Depth > 2.59" for 100-Year event
 Inflow = 2.22 cfs @ 12.10 hrs, Volume= 0.155 af
 Outflow = 2.22 cfs @ 12.10 hrs, Volume= 0.155 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.22 cfs @ 12.10 hrs, Volume= 0.155 af
 Routed to Pond 190P : DMH 3

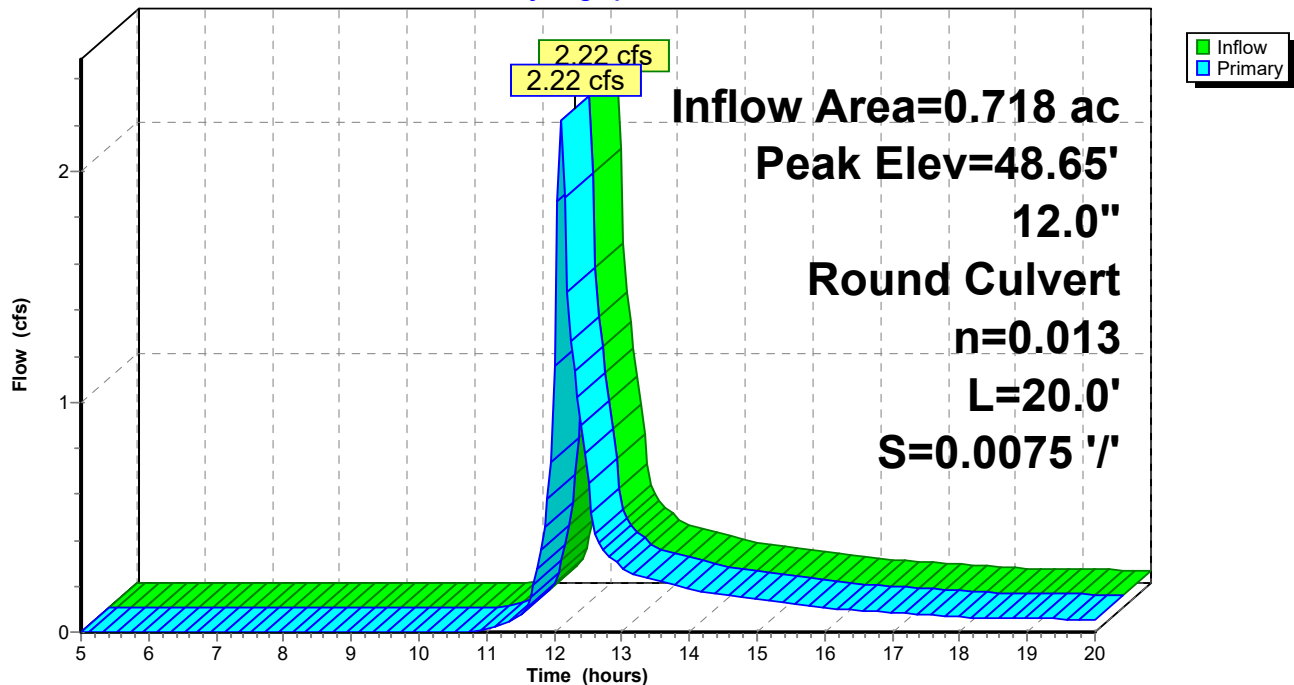
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 48.65' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	47.60'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.60' / 47.45' S= 0.0075 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.22 cfs @ 12.10 hrs HW=48.65' (Free Discharge)
 ↑1=Culvert (Inlet Controls 2.22 cfs @ 2.83 fps)

Pond 188P: CB 3

Hydrograph



Summary for Pond 189P: CB 4

[57] Hint: Peaked at 50.41' (Flood elevation advised)

Inflow Area = 0.642 ac, 65.44% Impervious, Inflow Depth > 5.90" for 100-Year event
 Inflow = 4.54 cfs @ 12.09 hrs, Volume= 0.316 af
 Outflow = 4.54 cfs @ 12.09 hrs, Volume= 0.316 af, Atten= 0%, Lag= 0.0 min
 Primary = 4.54 cfs @ 12.09 hrs, Volume= 0.316 af
 Routed to Pond 190P : DMH 3

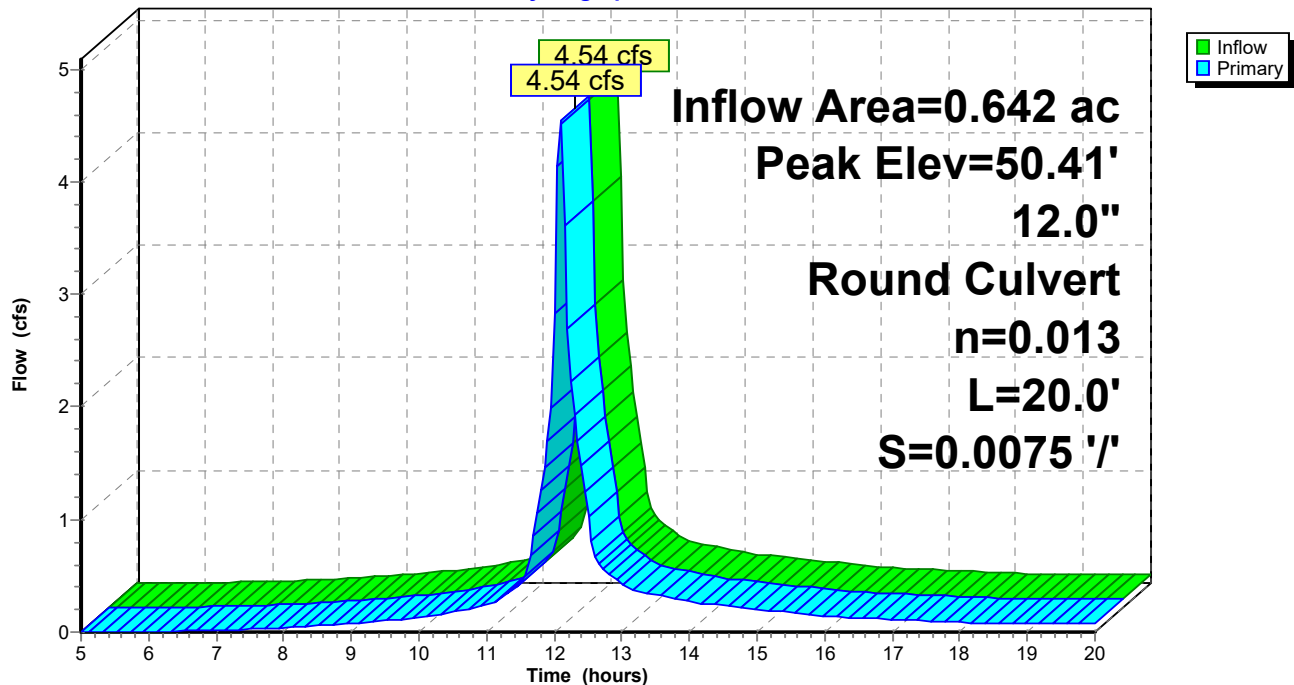
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 50.41' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	47.60'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.60' / 47.45' S= 0.0075 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=4.44 cfs @ 12.09 hrs HW=50.31' (Free Discharge)
 1=Culvert (Inlet Controls 4.44 cfs @ 5.66 fps)

Pond 189P: CB 4

Hydrograph



Summary for Pond 190P: DMH 3

[57] Hint: Peaked at 54.98' (Flood elevation advised)

[81] Warning: Exceeded Pond 171P by 3.79' @ 12.10 hrs

[81] Warning: Exceeded Pond 188P by 6.28' @ 12.10 hrs

[81] Warning: Exceeded Pond 189P by 4.55' @ 12.10 hrs

Inflow Area = 2.886 ac, 54.67% Impervious, Inflow Depth > 4.92" for 100-Year event
 Inflow = 17.06 cfs @ 12.09 hrs, Volume= 1.184 af
 Outflow = 17.06 cfs @ 12.09 hrs, Volume= 1.184 af, Atten= 0%, Lag= 0.0 min
 Primary = 17.06 cfs @ 12.09 hrs, Volume= 1.184 af
 Routed to Pond 199P : DMH 2

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 54.98' @ 12.09 hrs

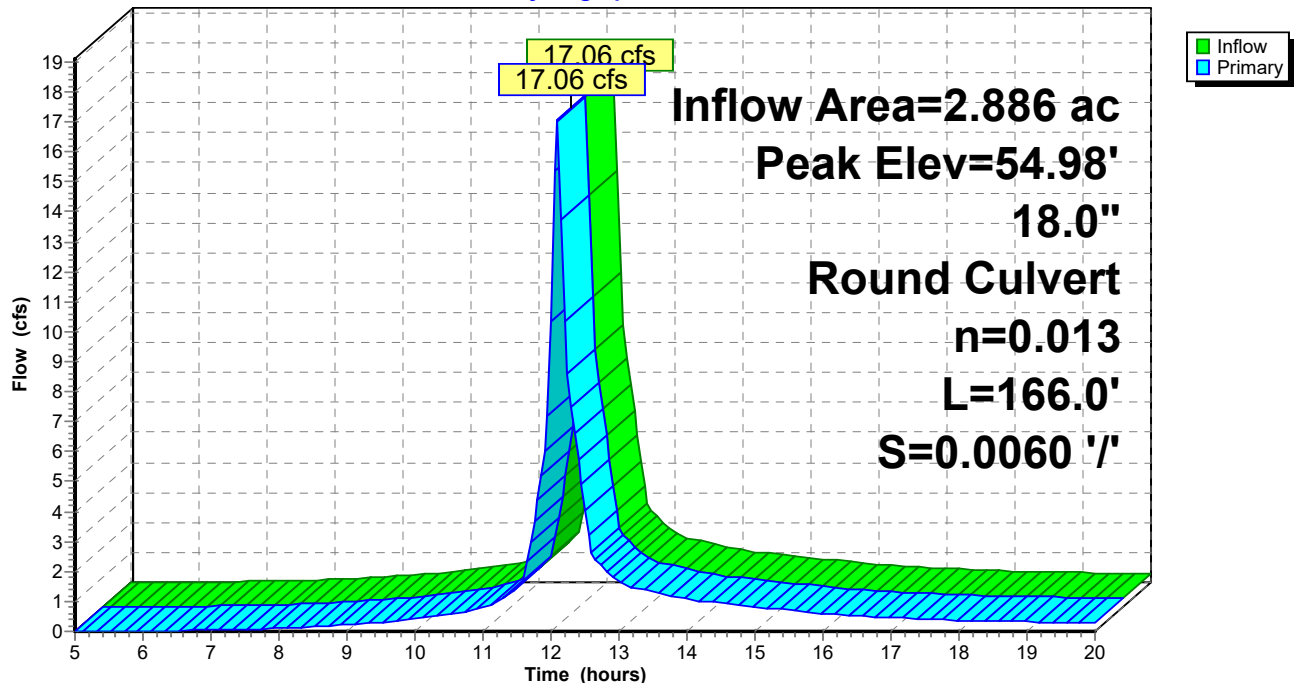
Device	Routing	Invert	Outlet Devices
#1	Primary	47.35'	18.0" Round Culvert L= 166.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.35' / 46.35' S= 0.0060 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=16.73 cfs @ 12.09 hrs HW=54.72' (Free Discharge)

↑1=Culvert (Barrel Controls 16.73 cfs @ 9.47 fps)

Pond 190P: DMH 3

Hydrograph



Summary for Pond 191P: CB 42

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 51.58' (Flood elevation advised)

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

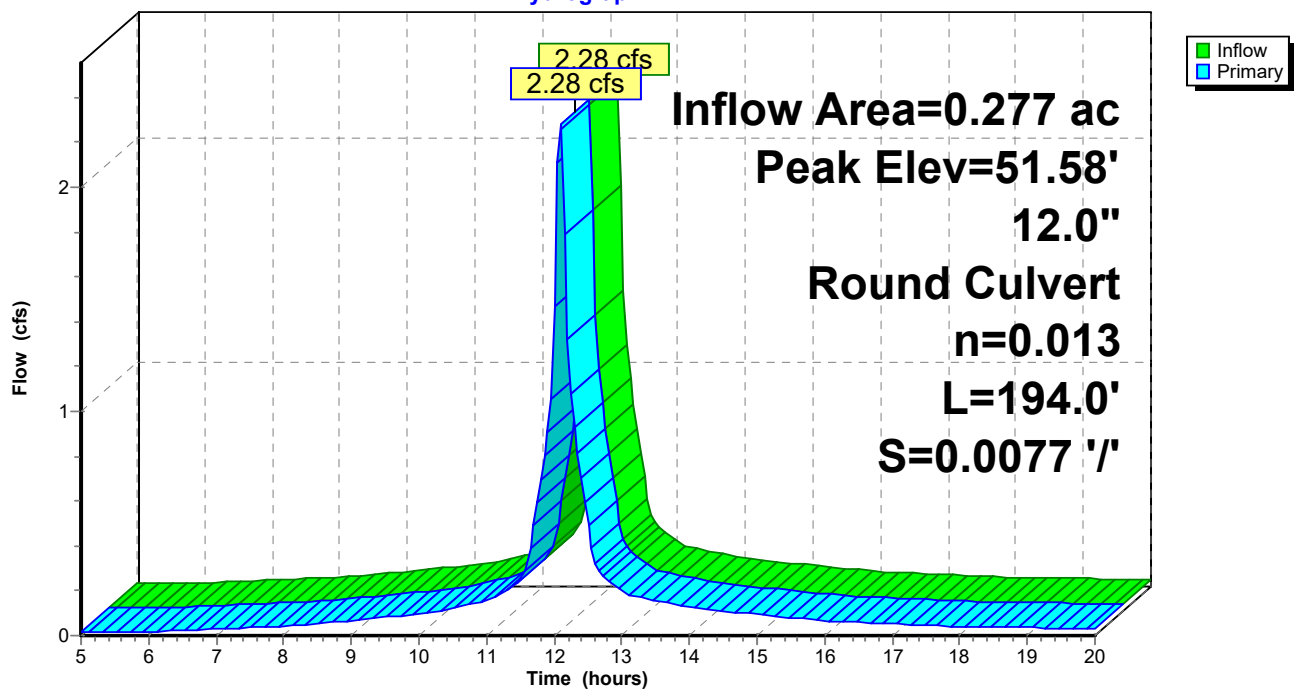
Device	Routing	Invert	Outlet Devices
#1	Primary	50.50'	12.0" Round Culvert L= 194.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 50.50' / 49.00' S= 0.0077 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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



Summary for Pond 192P: Sub. Inf. 1

[79] Warning: Submerged Pond 180P Primary device # 1 INLET by 1.64'

Inflow Area = 5.095 ac, 67.32% Impervious, Inflow Depth > 2.79" for 100-Year event
 Inflow = 16.59 cfs @ 12.13 hrs, Volume= 1.185 af
 Outflow = 13.88 cfs @ 12.24 hrs, Volume= 1.184 af, Atten= 16%, Lag= 6.8 min
 Discarded = 2.70 cfs @ 12.24 hrs, Volume= 0.805 af
 Primary = 11.18 cfs @ 12.24 hrs, Volume= 0.379 af
 Routed to Pond 184P : DMH 4A

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 51.69' @ 12.24 hrs Surf.Area= 0.125 ac Storage= 0.255 af

Plug-Flow detention time= 18.8 min calculated for 1.184 af (100% of inflow)
 Center-of-Mass det. time= 18.7 min (783.4 - 764.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	48.50'	0.111 af	72.75'W x 74.82'L x 3.50'H Field A 0.437 af Overall - 0.160 af Embedded = 0.277 af x 40.0% Voids
#2A	49.00'	0.160 af	ADS_StormTech SC-740 b +Cap x 150 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 150 Chambers in 15 Rows Cap Storage= 2.7 cf x 2 x 15 rows = 79.6 cf
0.271 af			Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Discarded	48.50'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 46.50'
#2	Primary	49.50'	12.0" Round Culvert L= 10.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 49.50' / 49.40' S= 0.0100 ' / ' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Primary	51.00'	4.0' long x 0.5' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 Coef. (English) 2.80 2.92 3.08 3.30 3.32

Discarded OutFlow Max=2.70 cfs @ 12.24 hrs HW=51.68' (Free Discharge)
 1=Exfiltration (Controls 2.70 cfs)

Primary OutFlow Max=11.04 cfs @ 12.24 hrs HW=51.68' (Free Discharge)
 2=Culvert (Inlet Controls 3.87 cfs @ 4.93 fps)
 3=Broad-Crested Rectangular Weir (Weir Controls 7.17 cfs @ 2.62 fps)

Pond 192P: Sub. Inf. 1 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 15 rows = 79.6 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

10 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 72.82' Row Length +12.0" End Stone x 2 = 74.82' Base Length

15 Rows x 51.0" Wide + 6.0" Spacing x 14 + 12.0" Side Stone x 2 = 72.75' Base Width

6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

150 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 15 Rows = 6,970.7 cf Chamber Storage

19,050.2 cf Field - 6,970.7 cf Chambers = 12,079.5 cf Stone x 40.0% Voids = 4,831.8 cf Stone Storage

Chamber Storage + Stone Storage = 11,802.5 cf = 0.271 af

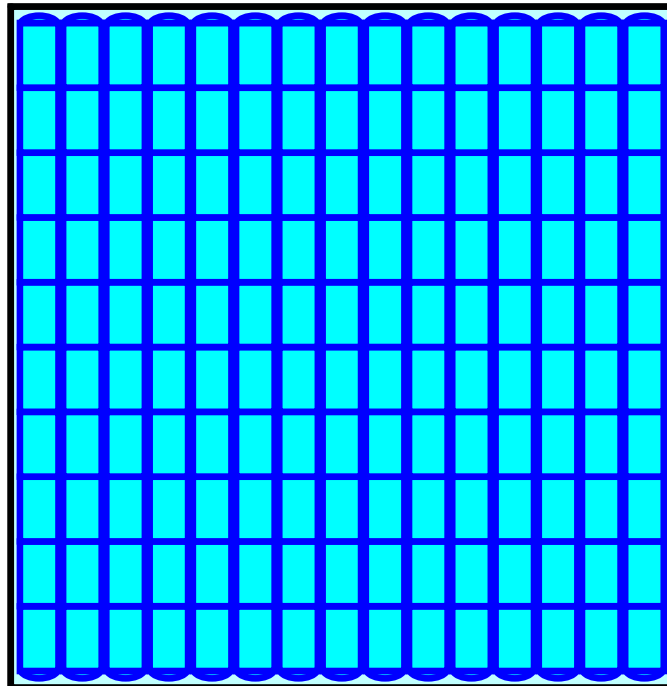
Overall Storage Efficiency = 62.0%

Overall System Size = 74.82' x 72.75' x 3.50'

150 Chambers

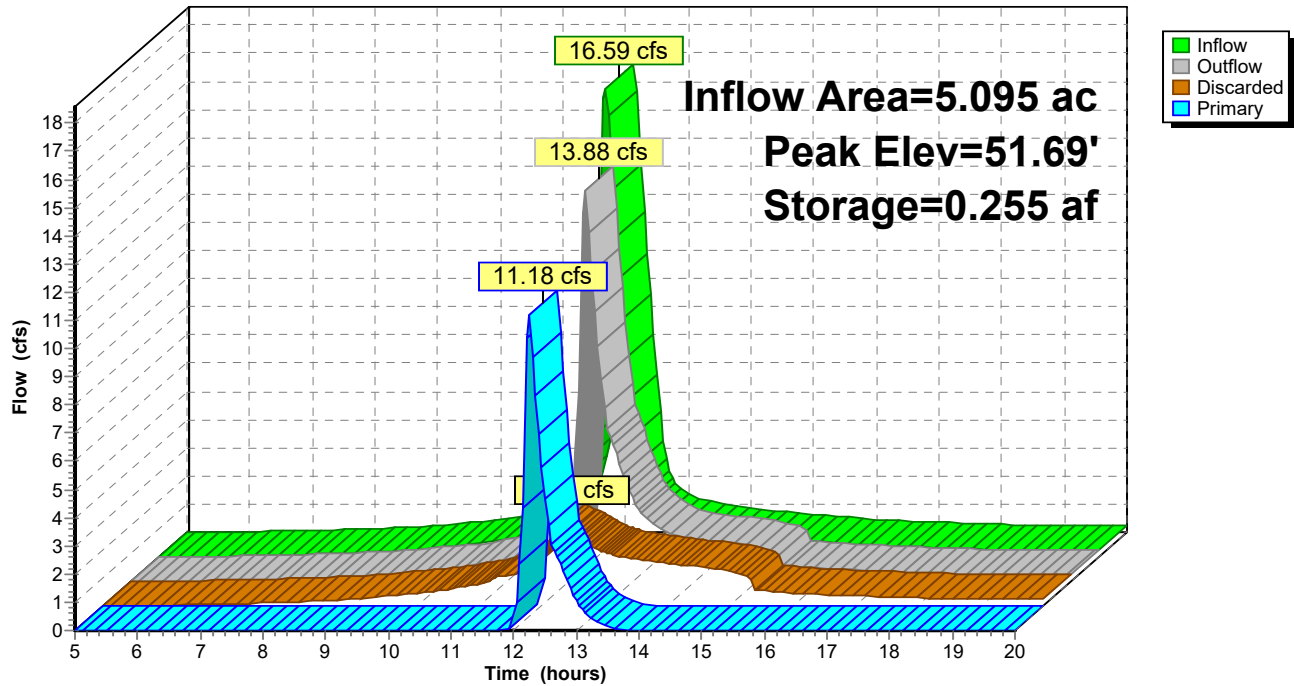
705.6 cy Field

447.4 cy Stone



Pond 192P: Sub. Inf. 1

Hydrograph



Summary for Pond 193P: CB 1

[57] Hint: Peaked at 47.54' (Flood elevation advised)

Inflow Area = 0.219 ac, 30.44% Impervious, Inflow Depth > 2.82" for 100-Year event
 Inflow = 0.75 cfs @ 12.10 hrs, Volume= 0.052 af
 Outflow = 0.75 cfs @ 12.10 hrs, Volume= 0.052 af, Atten= 0%, Lag= 0.0 min
 Primary = 0.75 cfs @ 12.10 hrs, Volume= 0.052 af
 Routed to Pond 200P : DMH 1

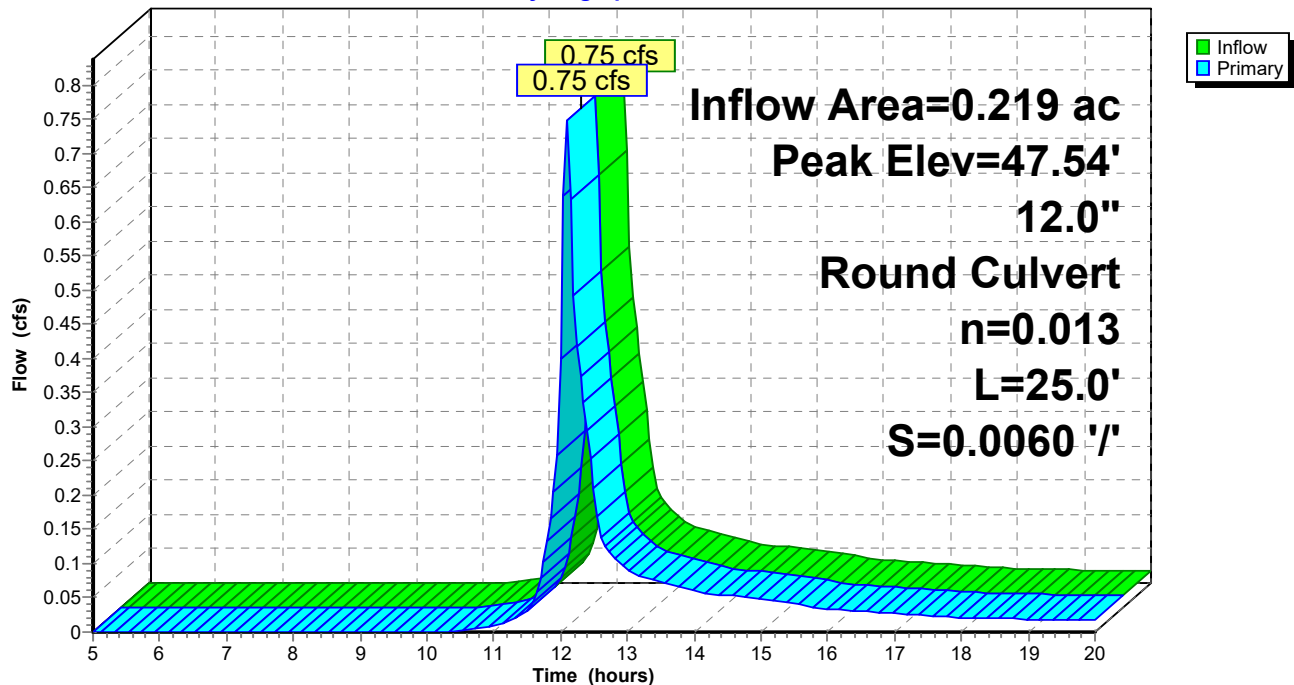
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 47.54' @ 12.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	47.00'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.00' / 46.85' S= 0.0060 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=0.75 cfs @ 12.10 hrs HW=47.54' (Free Discharge)
 1=Culvert (Barrel Controls 0.75 cfs @ 2.53 fps)

Pond 193P: CB 1

Hydrograph



Summary for Pond 194P: CB 2

[57] Hint: Peaked at 47.64' (Flood elevation advised)

Inflow Area = 0.152 ac, 66.33% Impervious, Inflow Depth > 5.90" for 100-Year event
 Inflow = 1.07 cfs @ 12.09 hrs, Volume= 0.075 af
 Outflow = 1.07 cfs @ 12.09 hrs, Volume= 0.075 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.07 cfs @ 12.09 hrs, Volume= 0.075 af
 Routed to Pond 200P : DMH 1

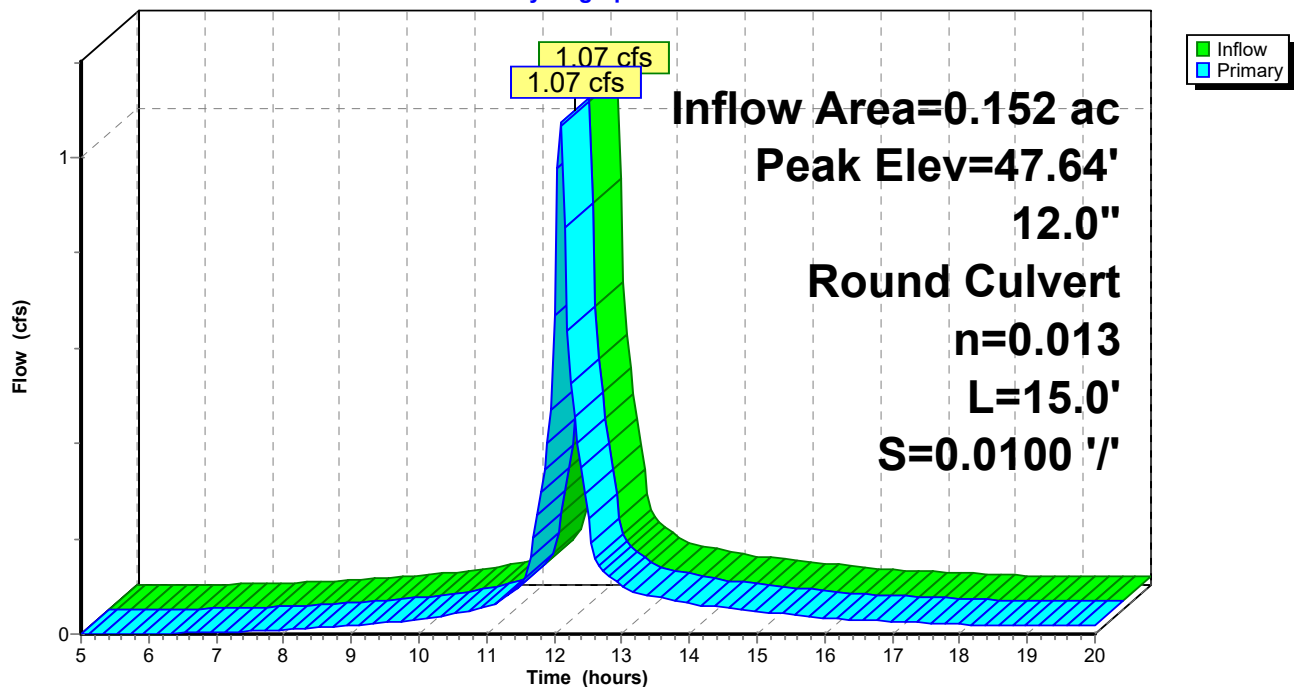
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
 Peak Elev= 47.64' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	47.00'	12.0" Round Culvert L= 15.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.00' / 46.85' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.05 cfs @ 12.09 hrs HW=47.63' (Free Discharge)
 1=Culvert (Barrel Controls 1.05 cfs @ 2.87 fps)

Pond 194P: CB 2

Hydrograph



Summary for Pond 195P: Constructed Wetland 4

[79] Warning: Submerged Pond 121P Primary device # 1 OUTLET by 3.44'

Inflow Area = 1.935 ac, 78.08% Impervious, Inflow Depth > 6.29" for 100-Year event
 Inflow = 12.84 cfs @ 12.16 hrs, Volume= 1.014 af
 Outflow = 11.47 cfs @ 12.22 hrs, Volume= 0.946 af, Atten= 11%, Lag= 4.0 min
 Primary = 11.47 cfs @ 12.22 hrs, Volume= 0.946 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= 56.46' @ 12.22 hrs Surf.Area= 3,327 sf Storage= 7,671 cf

Plug-Flow detention time= 47.1 min calculated for 0.943 af (93% of inflow)
 Center-of-Mass det. time= 25.9 min (833.4 - 807.6)

Volume	Invert	Avail.Storage	Storage Description
#1	53.00'	9,558 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

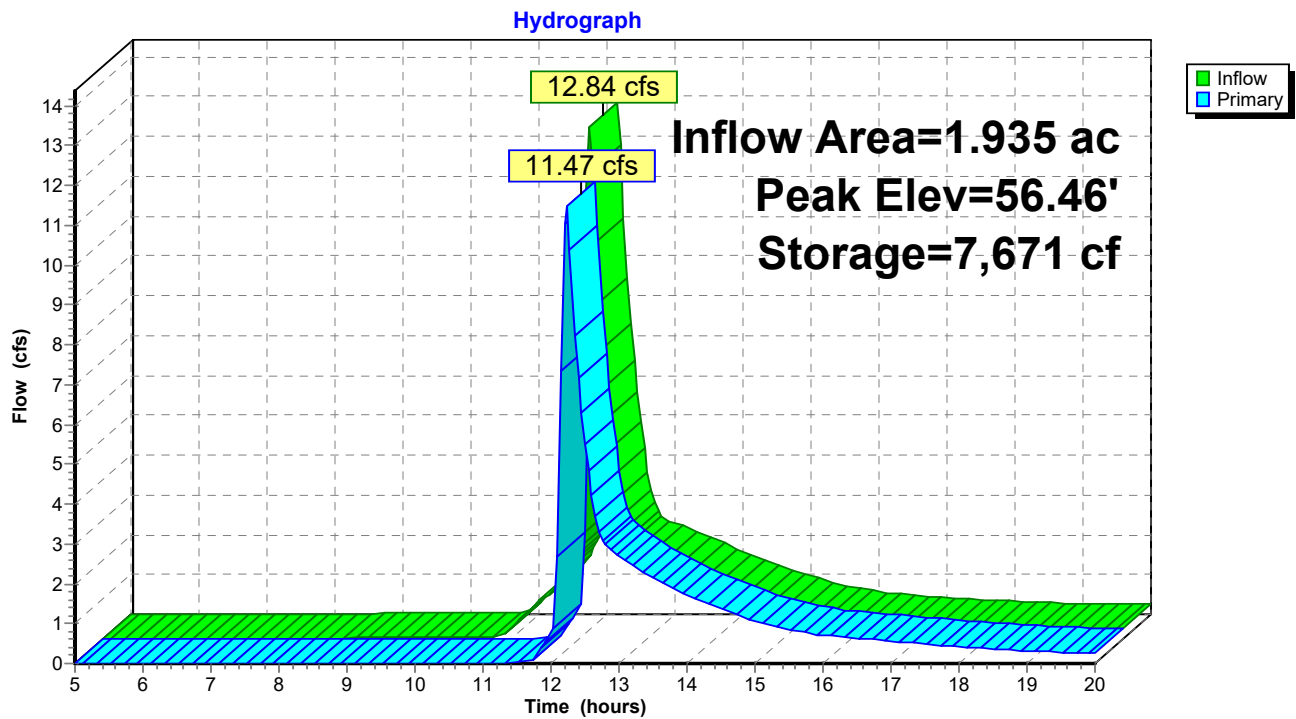
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
53.00	1,225	0	0
54.00	1,749	1,487	1,487
55.00	2,345	2,047	3,534
56.00	2,998	2,672	6,206
57.00	3,707	3,353	9,558

Device	Routing	Invert	Outlet Devices
#1	Primary	53.00'	18.0" Round Culvert L= 50.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.00' / 52.00' S= 0.0200 ' /' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf
#2	Device 1	53.00'	1.0" Vert. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#3	Device 1	54.50'	4.0" Vert. Orifice/Grate X 2.00 C= 0.600 Limited to weir flow at low heads
#4	Device 1	56.00'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads
#5	Device 1	55.25'	6.0" Vert. Orifice/Grate X 3.00 C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=11.02 cfs @ 12.22 hrs HW=56.44' (Free Discharge)

- 1=Culvert (Inlet Controls 11.02 cfs @ 6.24 fps)
- 2=Orifice/Grate (Passes < 0.05 cfs potential flow)
- 3=Orifice/Grate (Passes < 1.12 cfs potential flow)
- 4=Orifice/Grate (Passes < 7.66 cfs potential flow)
- 5=Orifice/Grate (Passes < 2.75 cfs potential flow)

Pond 195P: Constructed Wetland 4



Summary for Pond 196P: CB 5

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 49.23' (Flood elevation advised)

Inflow Area = 0.317 ac, 82.60% Impervious, Inflow Depth > 7.07" for 100-Year event
 Inflow = 2.56 cfs @ 12.09 hrs, Volume= 0.187 af
 Outflow = 2.56 cfs @ 12.09 hrs, Volume= 0.187 af, Atten= 0%, Lag= 0.0 min
 Primary = 2.56 cfs @ 12.09 hrs, Volume= 0.187 af
 Routed to Pond 185P : DMH

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 49.23' @ 12.09 hrs

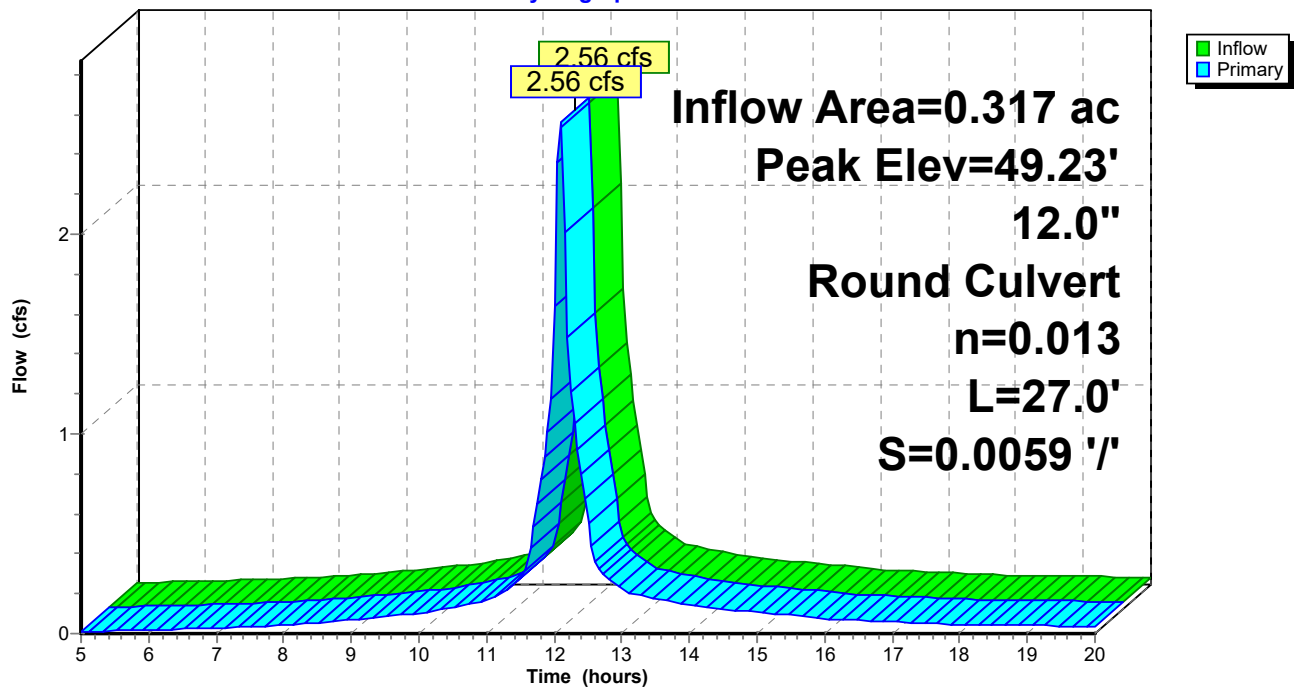
Device	Routing	Invert	Outlet Devices
#1	Primary	48.00'	12.0" Round Culvert L= 27.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 48.00' / 47.84' S= 0.0059 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.50 cfs @ 12.09 hrs HW=49.20' (Free Discharge)

↑1=Culvert (Inlet Controls 2.50 cfs @ 3.18 fps)

Pond 196P: CB 5

Hydrograph



Summary for Pond 197P: Inf. Basin 1

[81] Warning: Exceeded Pond 185P by 1.72' @ 13.15 hrs

Inflow Area = 5.710 ac, 64.66% Impervious, Inflow Depth > 1.26" for 100-Year event
 Inflow = 12.72 cfs @ 12.24 hrs, Volume= 0.601 af
 Outflow = 2.32 cfs @ 12.82 hrs, Volume= 0.600 af, Atten= 82%, Lag= 35.0 min
 Discarded = 2.32 cfs @ 12.82 hrs, Volume= 0.600 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= 50.15' @ 12.82 hrs Surf.Area= 6,167 sf Storage= 13,648 cf

Plug-Flow detention time= 66.5 min calculated for 0.600 af (100% of inflow)
 Center-of-Mass det. time= 66.3 min (820.3 - 754.0)

Volume	Invert	Avail.Storage	Storage Description
#1	47.00'	19,356 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
47.00	2,615	0	0
48.00	3,665	3,140	3,140
49.00	4,784	4,225	7,365
50.00	5,981	5,383	12,747
51.00	7,236	6,609	19,356

Device	Routing	Invert	Outlet Devices
#1	Discarded	47.00'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 45.00'
#2	Primary	47.00'	12.0" Round Culvert L= 25.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 47.00' / 43.50' S= 0.1400 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf
#3	Device 2	50.35'	24.0" x 24.0" Horiz. Orifice/Grate C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=2.32 cfs @ 12.82 hrs HW=50.15' (Free Discharge)
 ↑ **1=Exfiltration** (Controls 2.32 cfs)

Primary OutFlow Max=0.00 cfs @ 5.00 hrs HW=47.00' (Free Discharge)
 ↑ **2=Culvert** (Passes 0.00 cfs of 0.00 cfs potential flow)
 ↑ **3=Orifice/Grate** (Controls 0.00 cfs)

RH Post 8-11-25

Prepared by Millennium Engineering, Inc

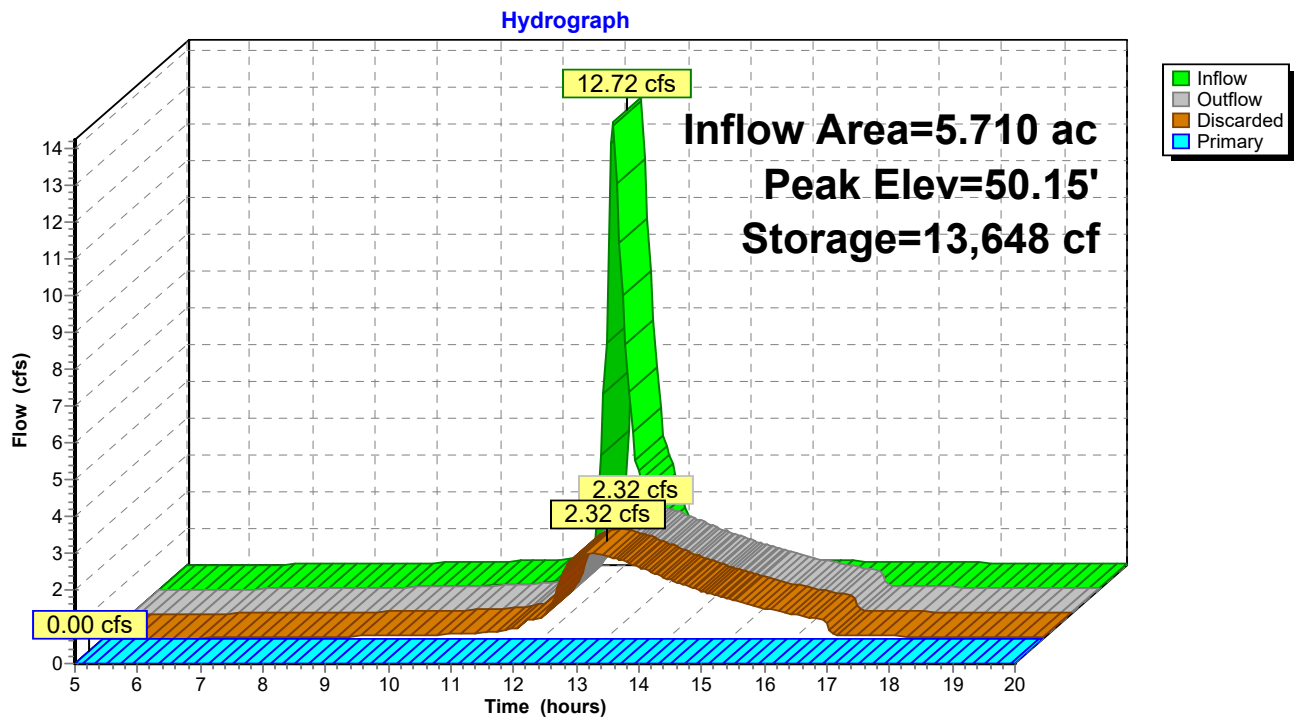
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Type III 24-hr 100-Year Rainfall=8.94"

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Page 1037

Pond 197P: Inf. Basin 1



Summary for Pond 198P: Sub. Inf. 2

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 204P by 0.99' @ 12.55 hrs

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	30.00'W x 138.90'L x 3.50'H Field A 0.335 af Overall - 0.121 af Embedded = 0.214 af x 40.0% Voids
#2A	51.50'	0.121 af	ADS_StormTech SC-740 b +Cap x 114 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 114 Chambers in 6 Rows 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'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 50.00'
#2	Primary	52.75'	18.0" Round Culvert L= 10.0' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 52.75' / 52.65' S= 0.0100 '/ Cc= 0.900 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 6 rows = 31.9 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

19 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 136.90' Row Length +12.0" End Stone x 2 = 138.90' Base Length

6 Rows x 51.0" Wide + 6.0" Spacing x 5 + 12.0" Side Stone x 2 = 30.00' Base Width

6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

114 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 6 Rows = 5,269.0 cf Chamber Storage

14,584.2 cf Field - 5,269.0 cf Chambers = 9,315.1 cf Stone x 40.0% Voids = 3,726.1 cf Stone Storage

Chamber Storage + Stone Storage = 8,995.1 cf = 0.206 af

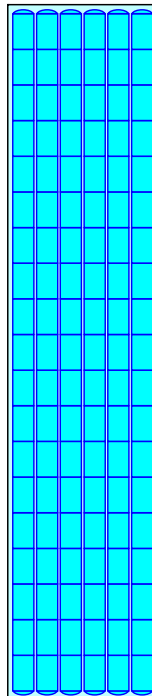
Overall Storage Efficiency = 61.7%

Overall System Size = 138.90' x 30.00' x 3.50'

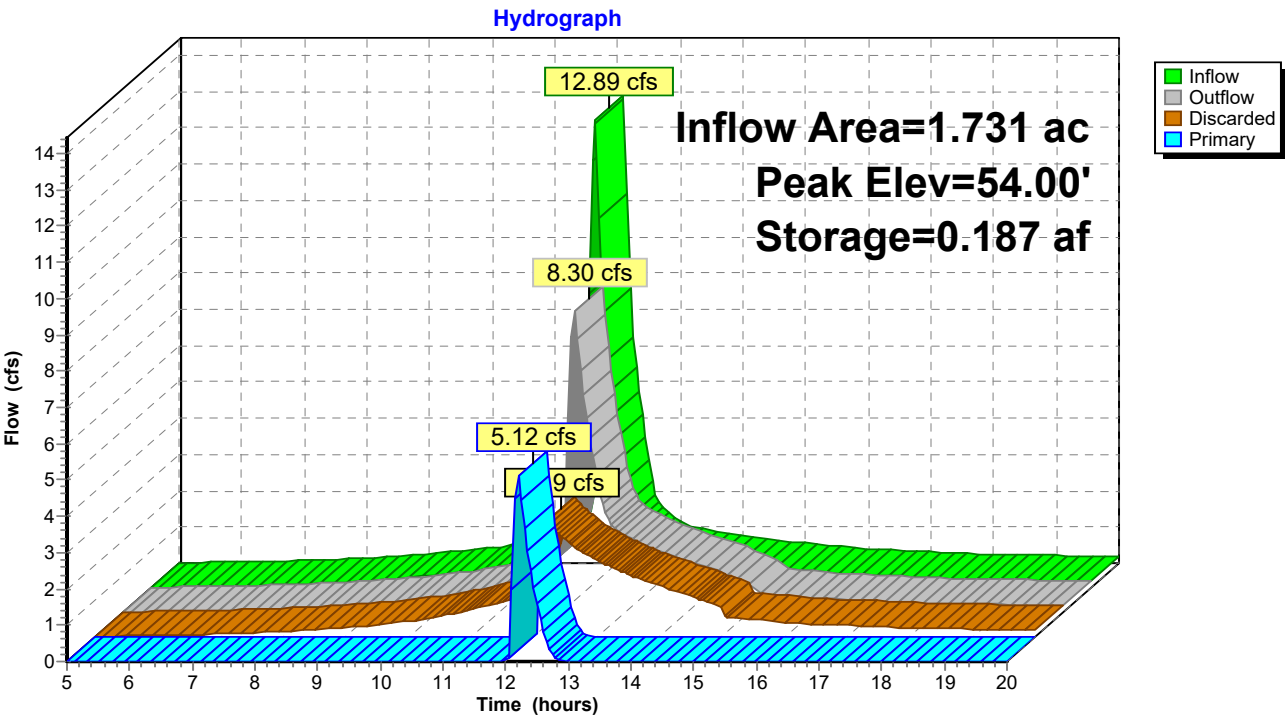
114 Chambers

540.2 cy Field

345.0 cy Stone



Pond 198P: Sub. Inf. 2



Summary for Pond 199P: DMH 2

[57] Hint: Peaked at 53.44' (Flood elevation advised)

[79] Warning: Submerged Pond 190P Primary device # 1 INLET by 6.05'

Inflow Area = 2.886 ac, 54.67% Impervious, Inflow Depth > 4.92" for 100-Year event
 Inflow = 17.06 cfs @ 12.09 hrs, Volume= 1.184 af
 Outflow = 17.06 cfs @ 12.09 hrs, Volume= 1.184 af, Atten= 0%, Lag= 0.0 min
 Primary = 17.06 cfs @ 12.09 hrs, Volume= 1.184 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= 53.44' @ 12.09 hrs

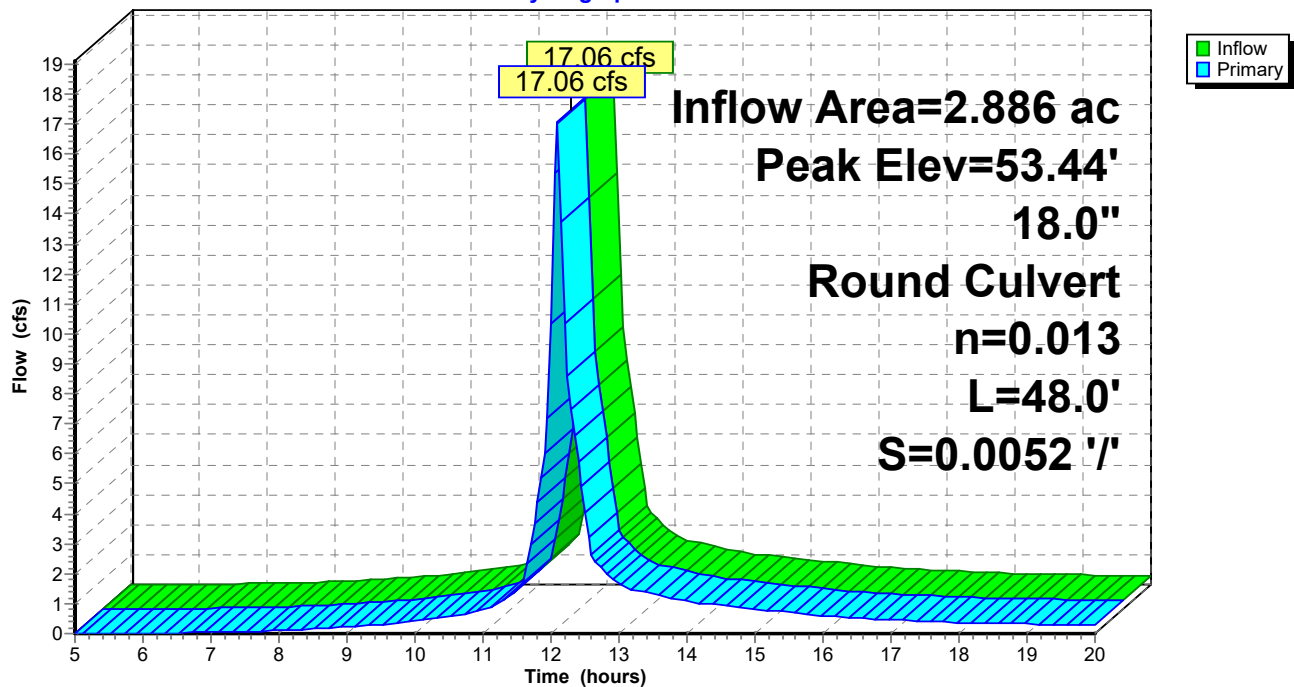
Device	Routing	Invert	Outlet Devices
#1	Primary	46.25'	18.0" Round Culvert L= 48.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 46.25' / 46.00' S= 0.0052 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

Primary OutFlow Max=16.73 cfs @ 12.09 hrs HW=53.21' (Free Discharge)

↑**1=Culvert** (Inlet Controls 16.73 cfs @ 9.47 fps)

Pond 199P: DMH 2

Hydrograph



Summary for Pond 200P: DMH 1

[57] Hint: Peaked at 47.62' (Flood elevation advised)

[81] Warning: Exceeded Pond 193P by 0.08' @ 12.10 hrs

[79] Warning: Submerged Pond 194P Primary device # 1 INLET by 0.62'

Inflow Area = 0.371 ac, 45.11% Impervious, Inflow Depth > 4.08" for 100-Year event
 Inflow = 1.82 cfs @ 12.09 hrs, Volume= 0.126 af
 Outflow = 1.82 cfs @ 12.09 hrs, Volume= 0.126 af, Atten= 0%, Lag= 0.0 min
 Primary = 1.82 cfs @ 12.09 hrs, Volume= 0.126 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= 47.62' @ 12.09 hrs

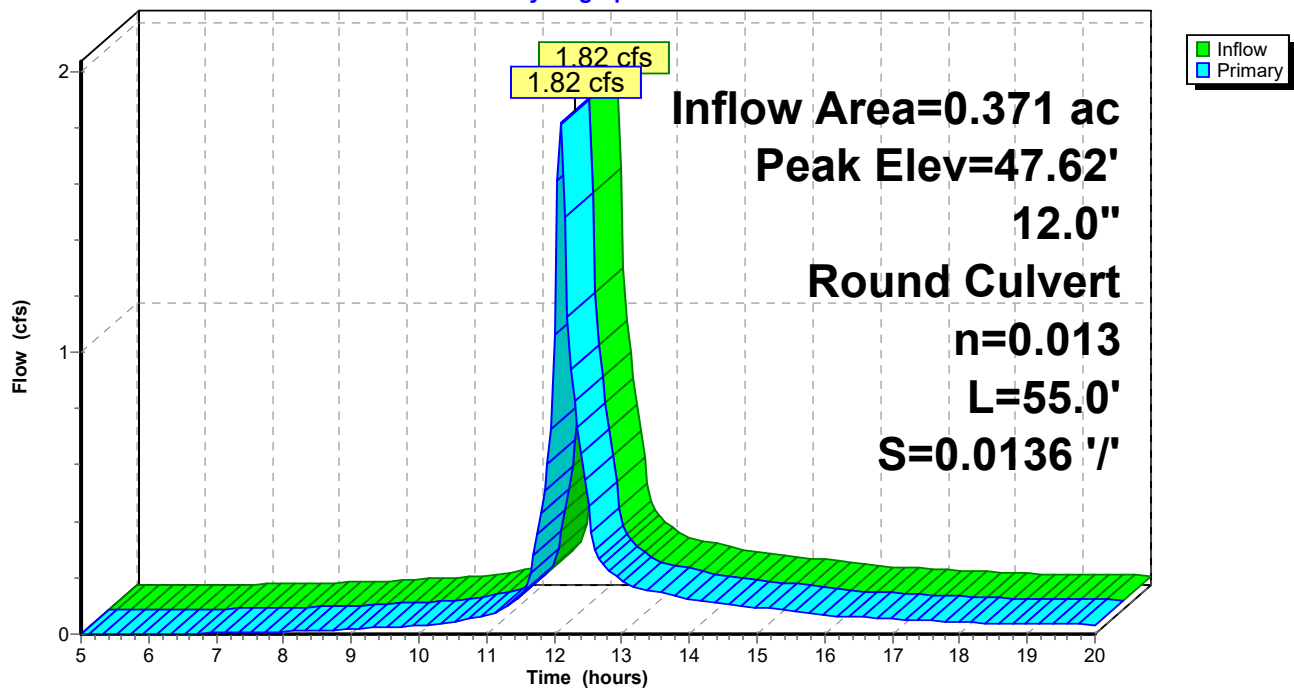
Device	Routing	Invert	Outlet Devices
#1	Primary	46.75'	12.0" Round Culvert L= 55.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 46.75' / 46.00' S= 0.0136 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.79 cfs @ 12.09 hrs HW=47.61' (Free Discharge)

↑**1=Culvert** (Inlet Controls 1.79 cfs @ 2.49 fps)

Pond 200P: DMH 1

Hydrograph



Summary for Pond 201P: Sub. Inf. 3

[82] Warning: Early inflow requires earlier time span

[81] Warning: Exceeded Pond 205P by 1.08' @ 12.55 hrs

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	20.50'W x 167.38'L x 3.50'H Field A 0.276 af Overall - 0.098 af Embedded = 0.178 af x 40.0% Voids
#2A	52.50'	0.098 af	ADS_StormTech SC-740 b +Cap x 92 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap 92 Chambers in 4 Rows 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'	8.270 in/hr Exfiltration over Surface area Conductivity to Groundwater Elevation = 51.00'
#2	Primary	54.00'	12.0" Round Culvert L= 20.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 54.00' / 53.65' S= 0.0175 '/' Cc= 0.900 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 - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 b +Cap (ADS StormTech® SC-740 with cap storage)

Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf

Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap

Cap Storage= 2.7 cf x 2 x 4 rows = 21.2 cf

51.0" Wide + 6.0" Spacing = 57.0" C-C Row Spacing

23 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 165.38' Row Length +12.0" End Stone x 2 = 167.38' Base Length

4 Rows x 51.0" Wide + 6.0" Spacing x 3 + 12.0" Side Stone x 2 = 20.50' Base Width

6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

92 Chambers x 45.9 cf + 2.7 cf Cap Volume x 2 x 4 Rows = 4,247.7 cf Chamber Storage

12,009.3 cf Field - 4,247.7 cf Chambers = 7,761.6 cf Stone x 40.0% Voids = 3,104.6 cf Stone Storage

Chamber Storage + Stone Storage = 7,352.3 cf = 0.169 af

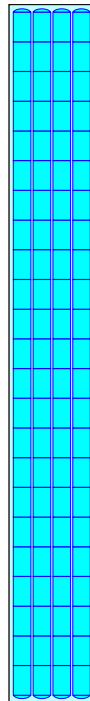
Overall Storage Efficiency = 61.2%

Overall System Size = 167.38' x 20.50' x 3.50'

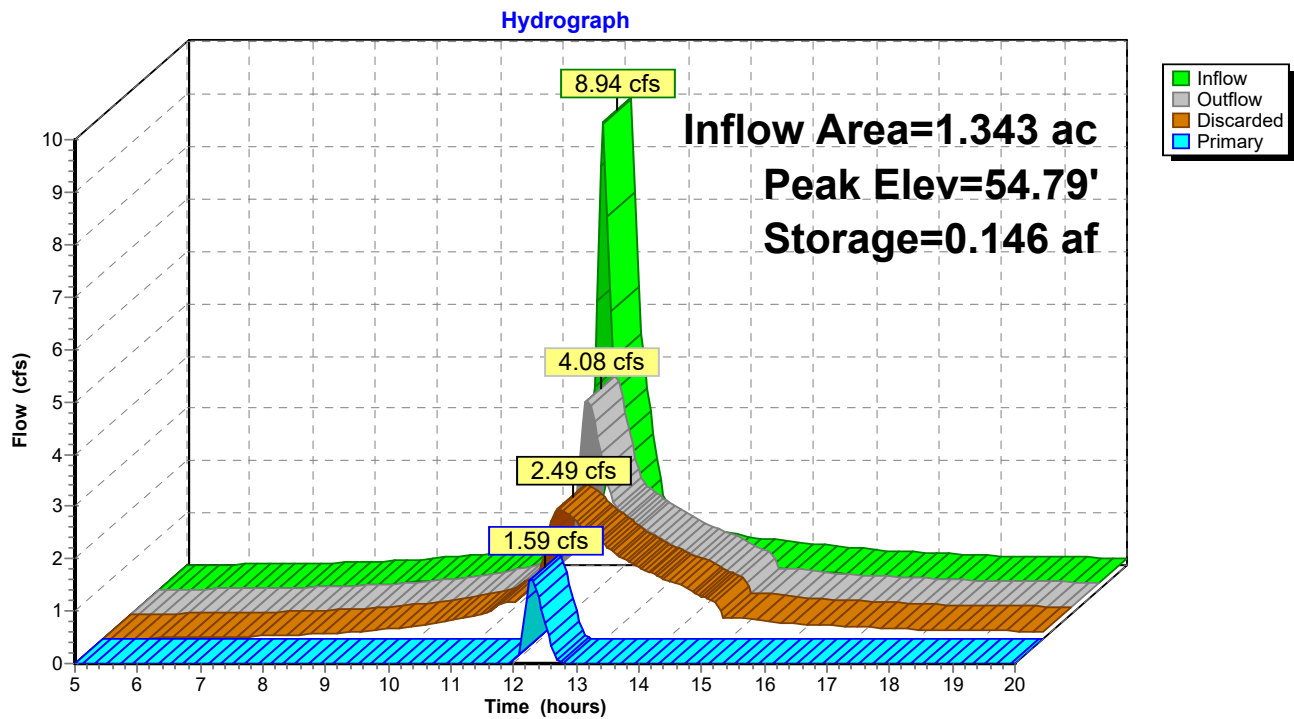
92 Chambers

444.8 cy Field

287.5 cy Stone



Pond 201P: Sub. Inf. 3



Summary for Pond 202P: DMH 14

[57] Hint: Peaked at 54.31' (Flood elevation advised)

[81] Warning: Exceeded Pond 198P by 0.31' @ 12.25 hrs

[79] Warning: Submerged Pond 201P Primary device # 2 INLET by 0.30'

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

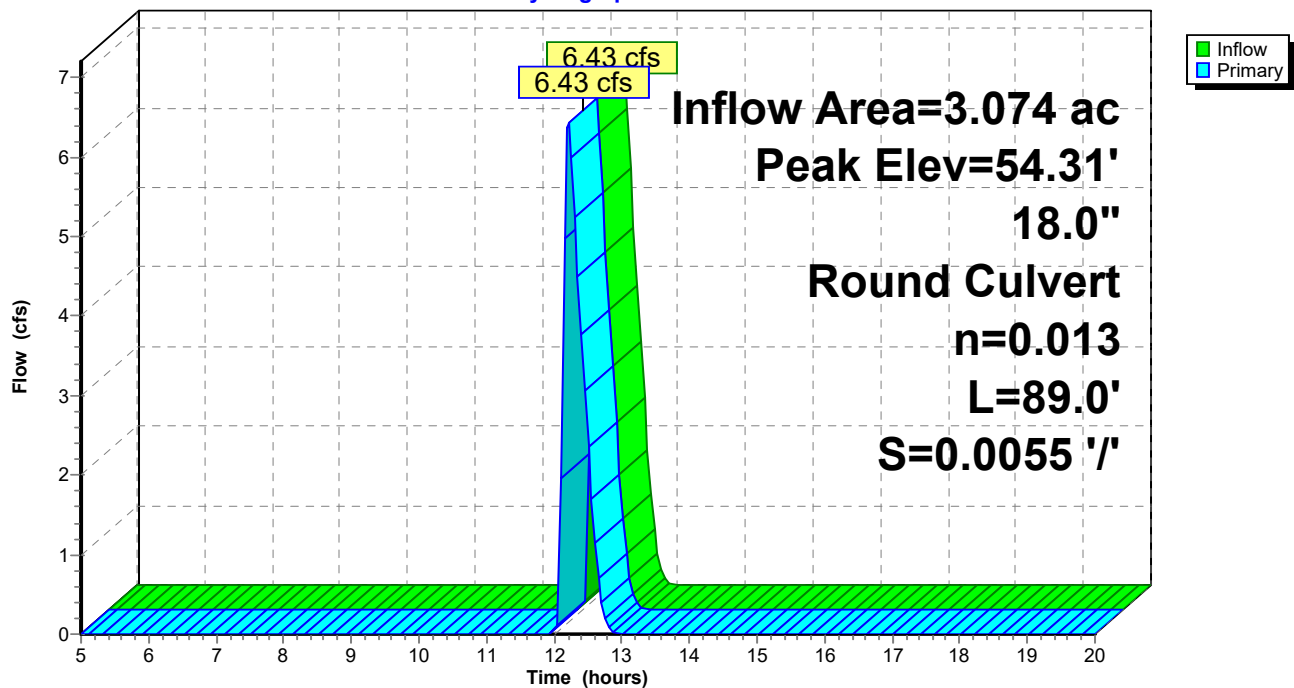
Device	Routing	Invert	Outlet Devices
#1	Primary	52.65'	18.0" Round Culvert L= 89.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.65' / 52.16' S= 0.0055 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 55.92' (Flood elevation advised)

[79] Warning: Submerged Pond 153P Primary device # 1 INLET by 3.83'

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

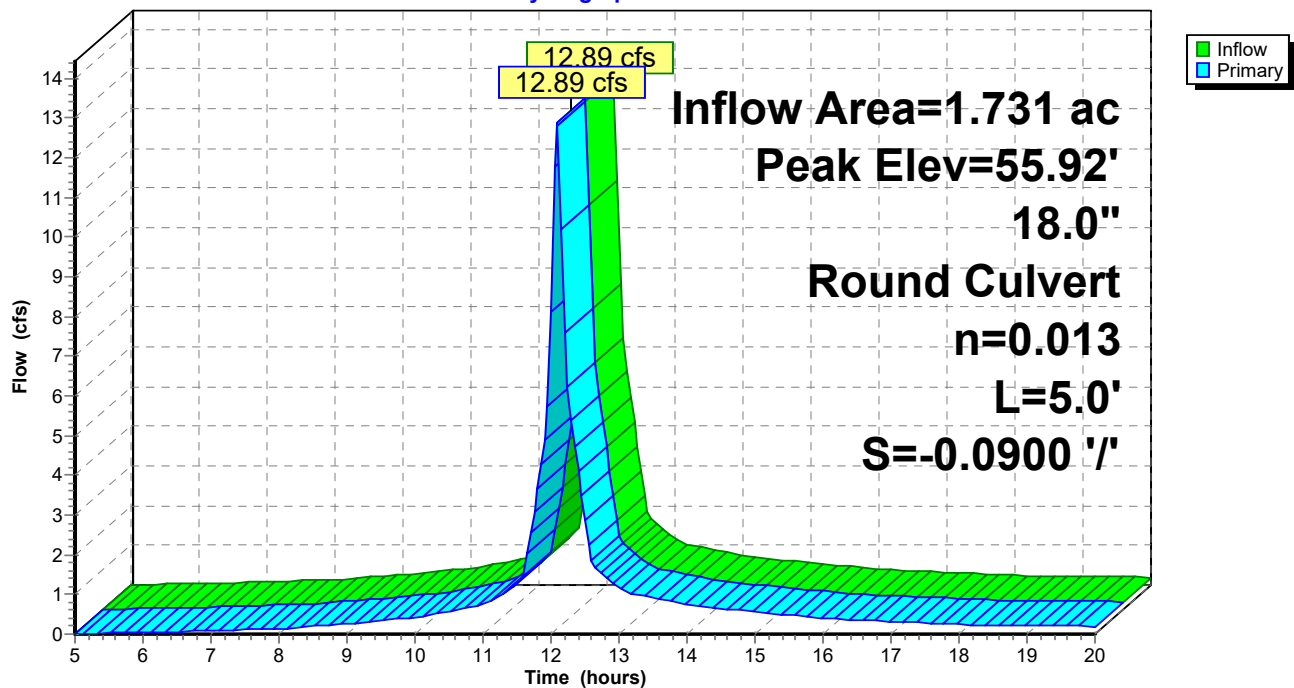
Device	Routing	Invert	Outlet Devices
#1	Primary	51.50'	18.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 51.05' / 51.50' S= -0.0900 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 56.77' (Flood elevation advised)

[81] Warning: Exceeded Pond 127P by 0.79' @ 12.10 hrs

[81] Warning: Exceeded Pond 139P by 2.31' @ 12.10 hrs

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

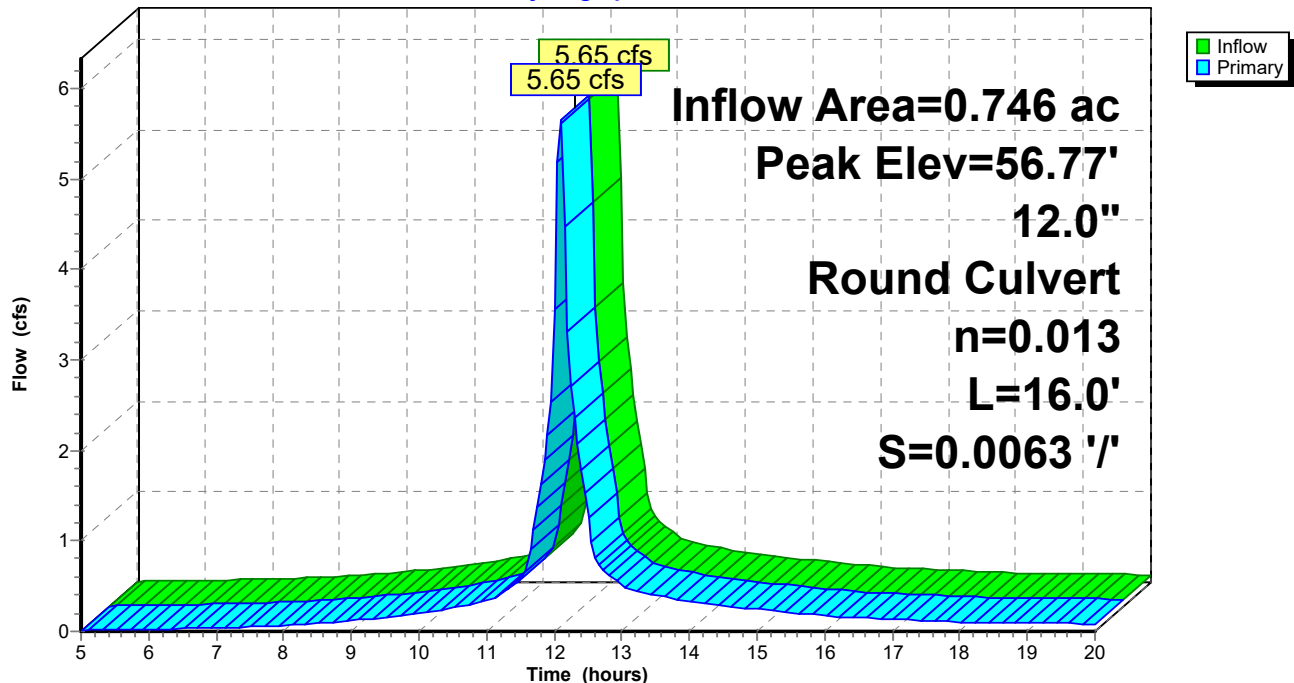
Device	Routing	Invert	Outlet Devices
#1	Primary	52.70'	12.0" Round Culvert L= 16.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 52.70' / 52.60' S= 0.0063 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 56.11' (Flood elevation advised)

[79] Warning: Submerged Pond 43P Primary device # 1 OUTLET by 1.40'

[79] Warning: Submerged Pond 124P Primary device # 1 OUTLET by 1.40'

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

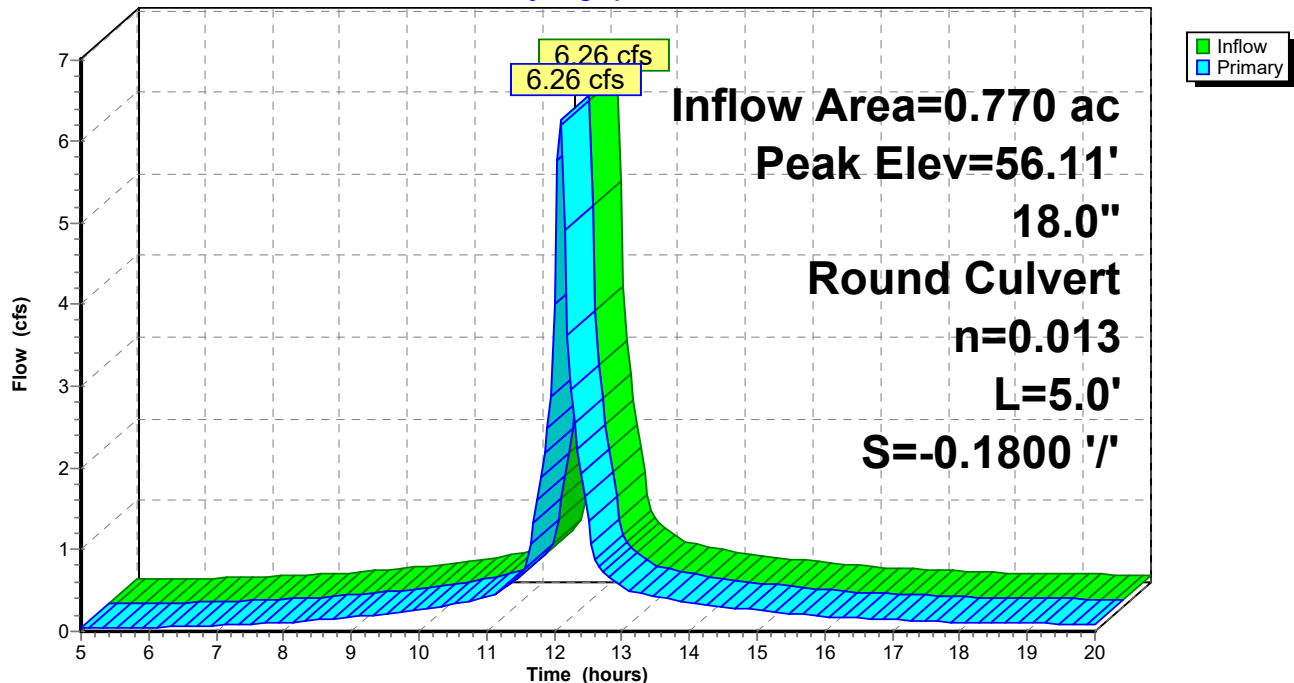
Device	Routing	Invert	Outlet Devices
#1	Primary	54.50'	18.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 53.60' / 54.50' S= -0.1800 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.22' (Flood elevation advised)

[79] Warning: Submerged Pond 64P Primary device # 1 INLET by 3.08'

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

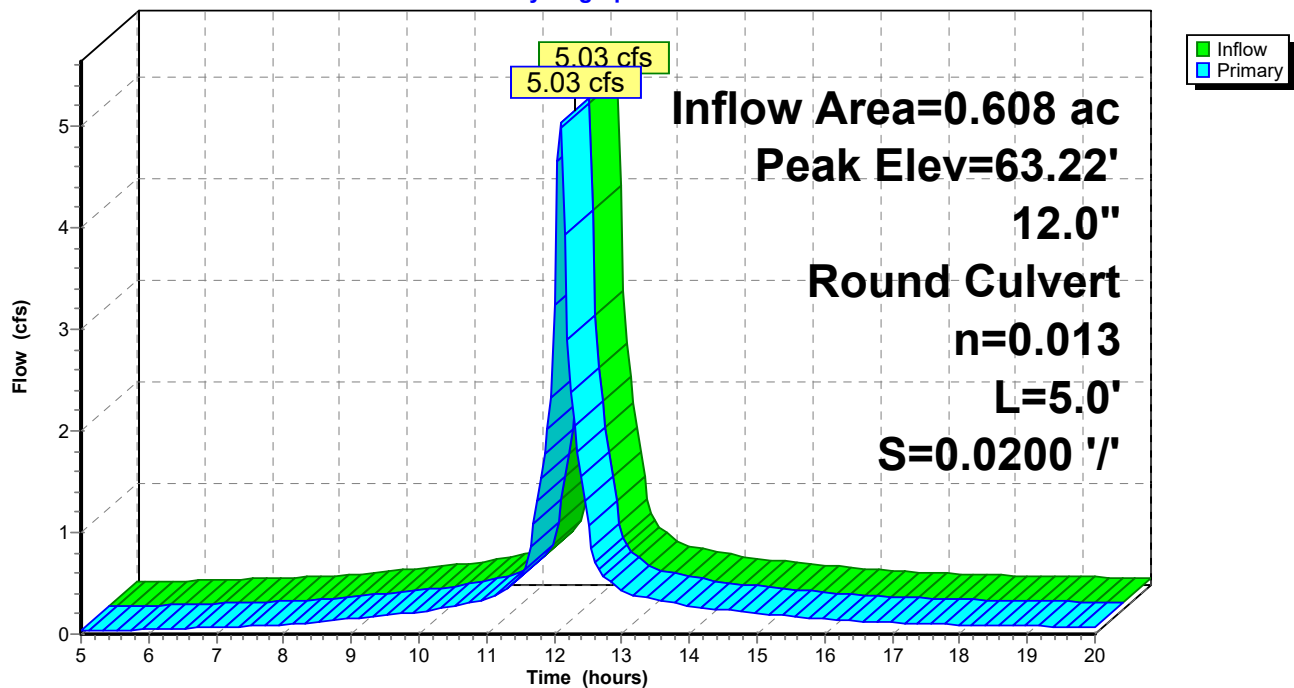
Device	Routing	Invert	Outlet Devices
#1	Primary	59.90'	12.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 59.90' / 59.80' S= 0.0200 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 63.43' (Flood elevation advised)

[79] Warning: Submerged Pond 111P Primary device # 1 INLET by 2.41'

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

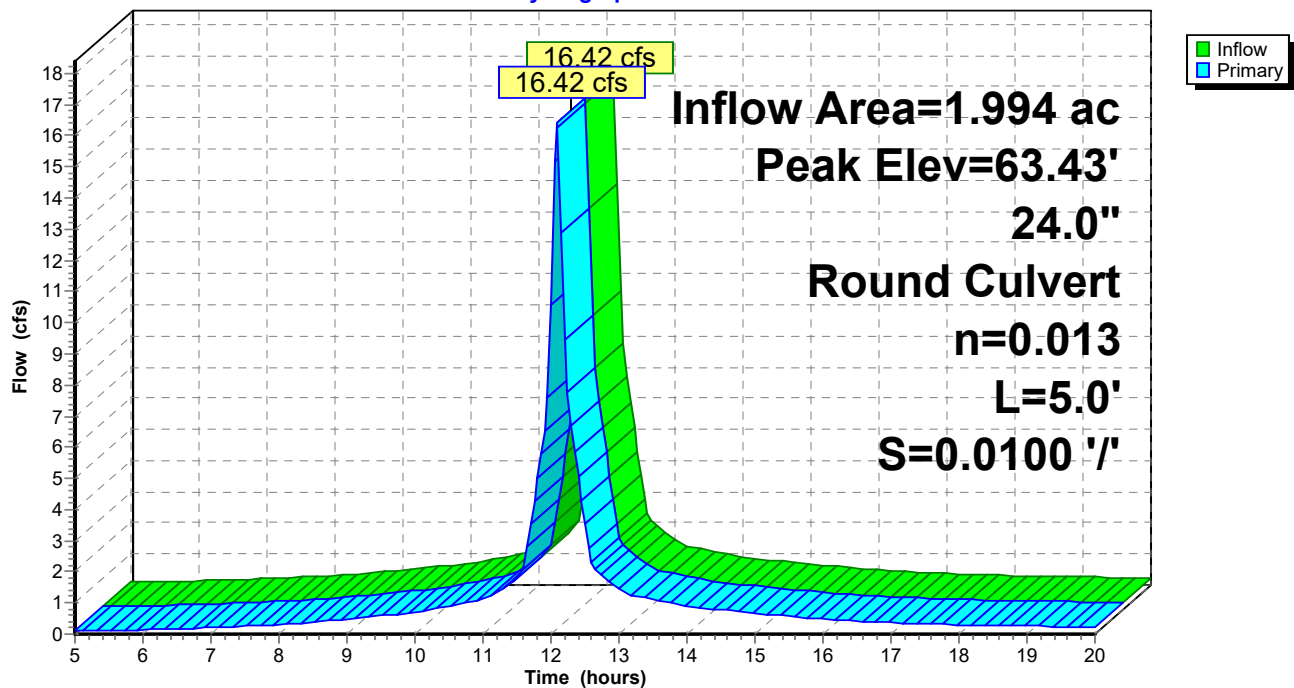
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 63.43' @ 12.09 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	60.55'	24.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 60.55' / 60.50' S= 0.0100 '/ Cc= 0.900 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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 59.97' (Flood elevation advised)

[79] Warning: Submerged Pond 93P Primary device # 1 INLET by 1.75'

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

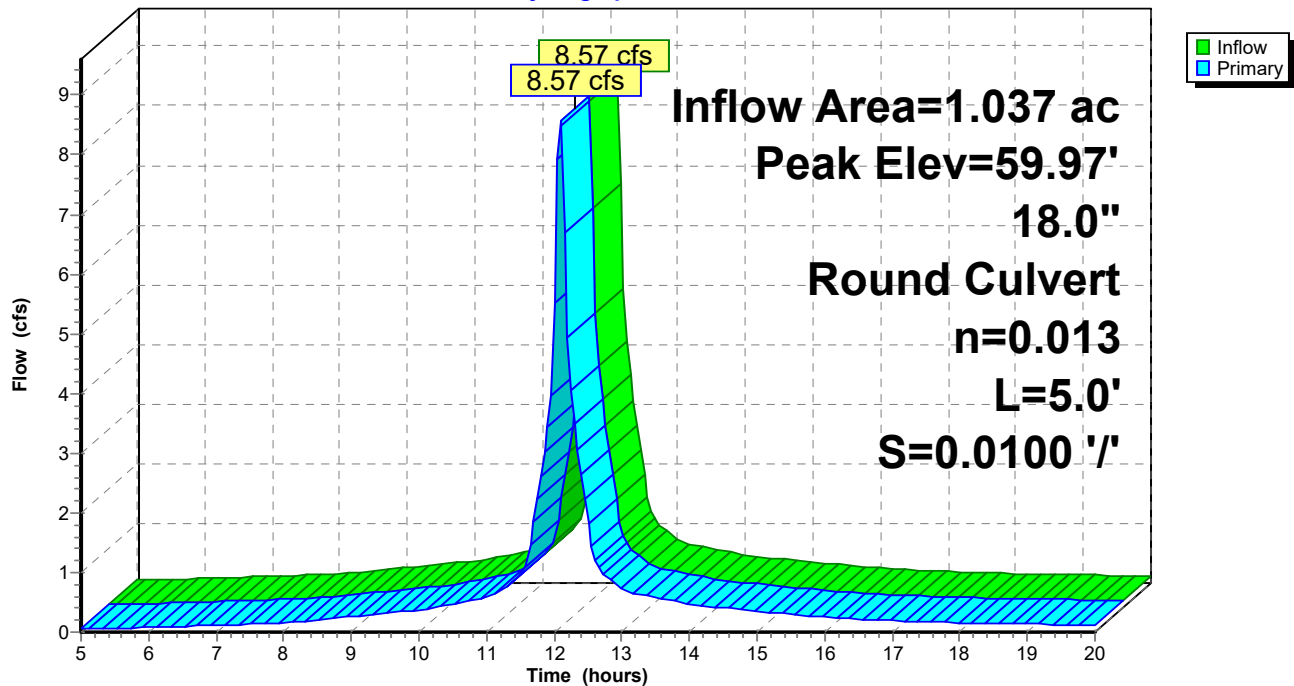
Device	Routing	Invert	Outlet Devices
#1	Primary	57.60'	18.0" Round Culvert L= 5.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.60' / 57.55' S= 0.0100 '/ Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.77 sf

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

[82] Warning: Early inflow requires earlier time span

[57] Hint: Peaked at 60.68' (Flood elevation advised)

[79] Warning: Submerged Pond 120P Primary device # 1 INLET by 2.80'

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 121P : Sub. Det. 3

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Peak Elev= 60.68' @ 12.09 hrs

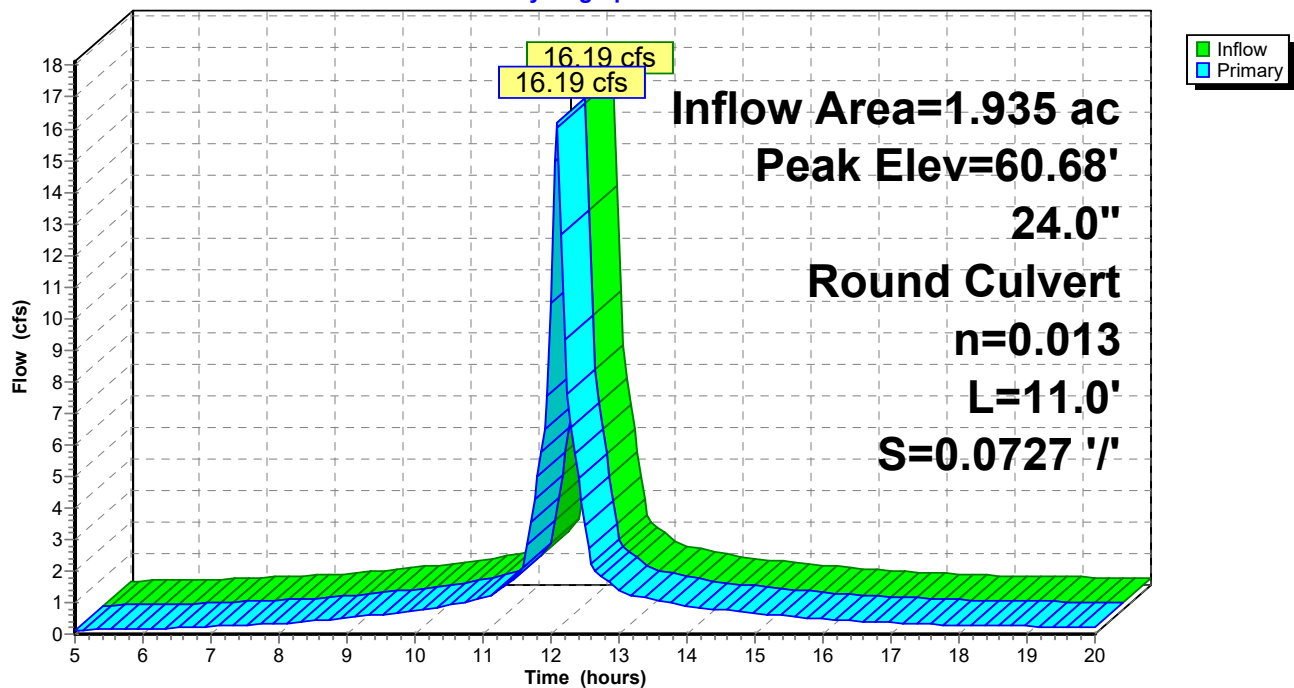
Device	Routing	Invert	Outlet Devices
#1	Primary	57.85'	24.0" Round Culvert L= 11.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 57.85' / 57.05' S= 0.0727 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 3.14 sf

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

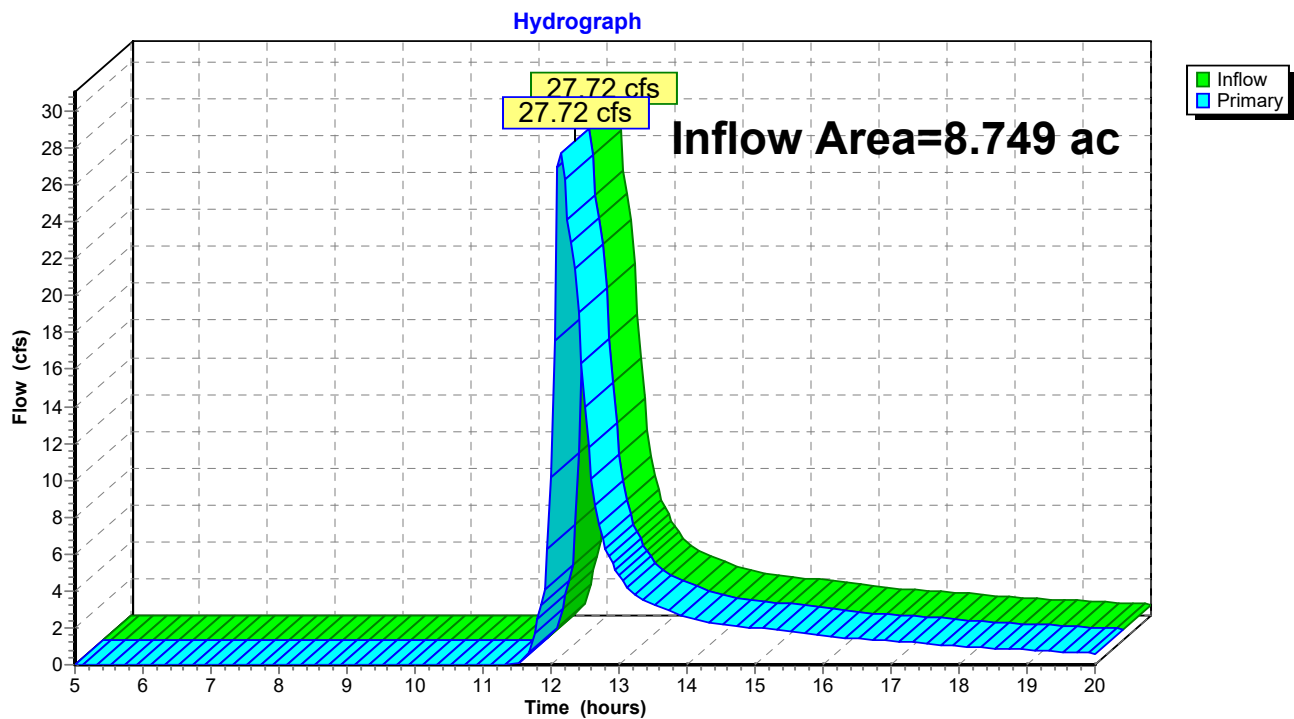
Hydrograph



Summary for 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

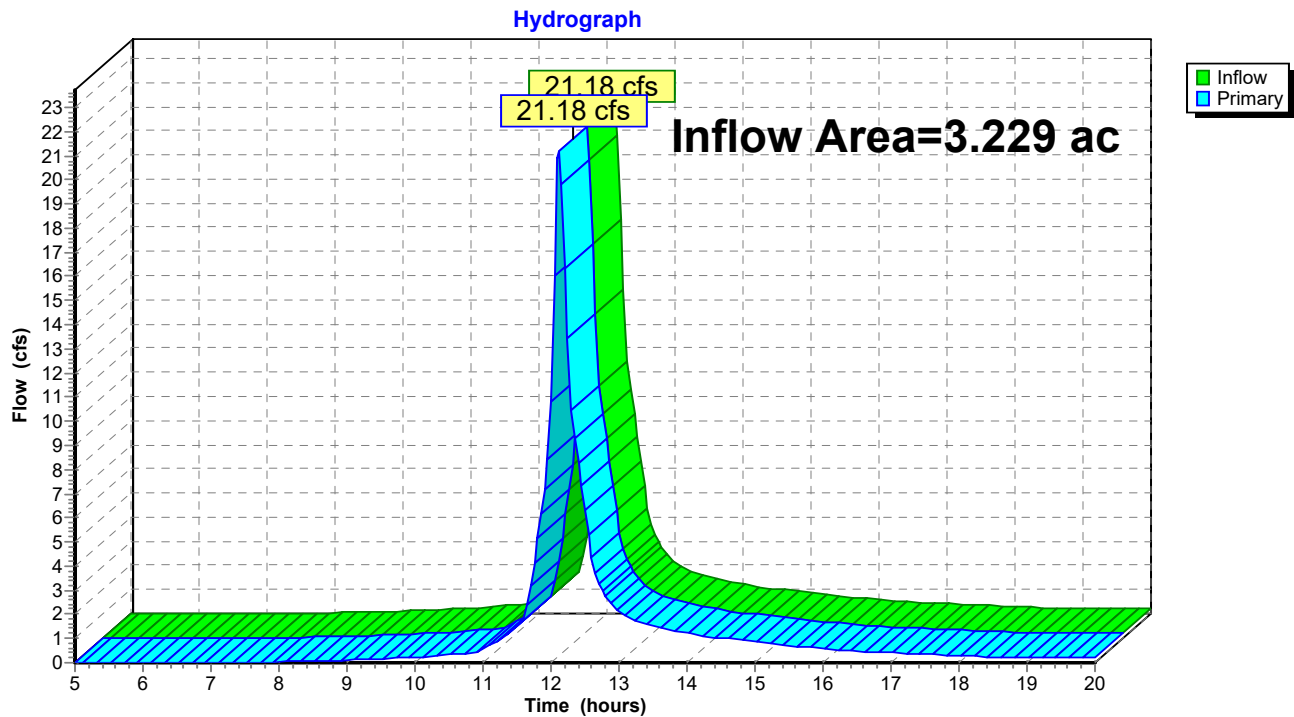
Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

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

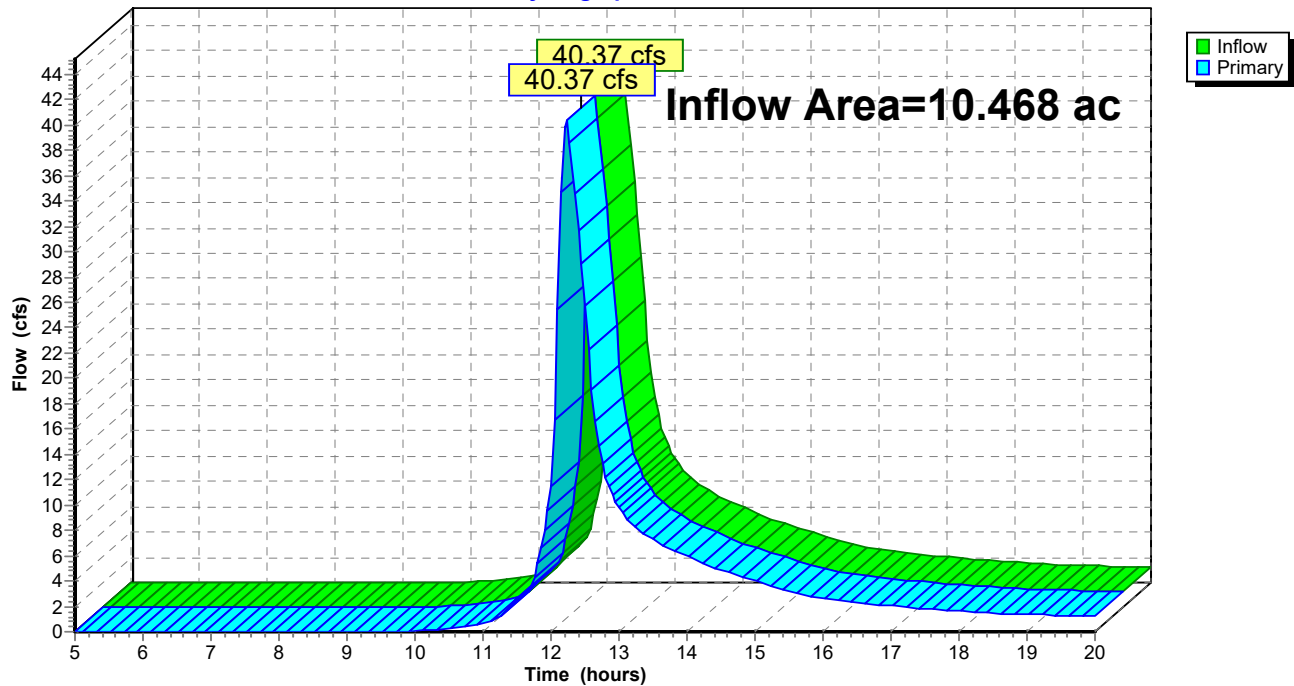
Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 60L: DP 2

Summary for Link 188L: DP 3

Inflow Area = 10.468 ac, 46.25% Impervious, Inflow Depth > 4.66" for 100-Year event
Inflow = 40.37 cfs @ 12.22 hrs, Volume= 4.063 af
Primary = 40.37 cfs @ 12.22 hrs, Volume= 4.063 af, Atten= 0%, Lag= 0.0 min

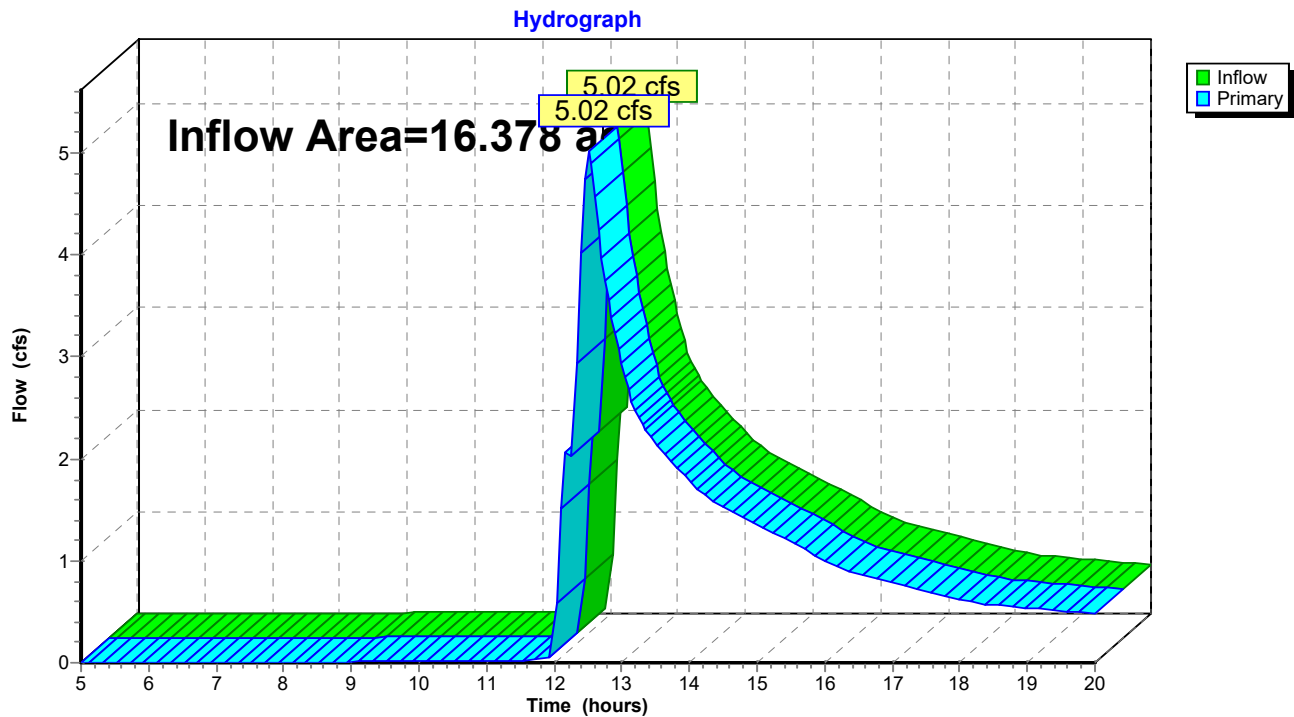
Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 188L: DP 3**Hydrograph**

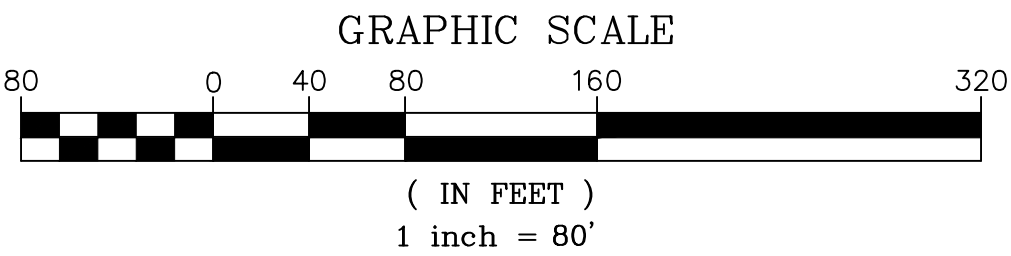
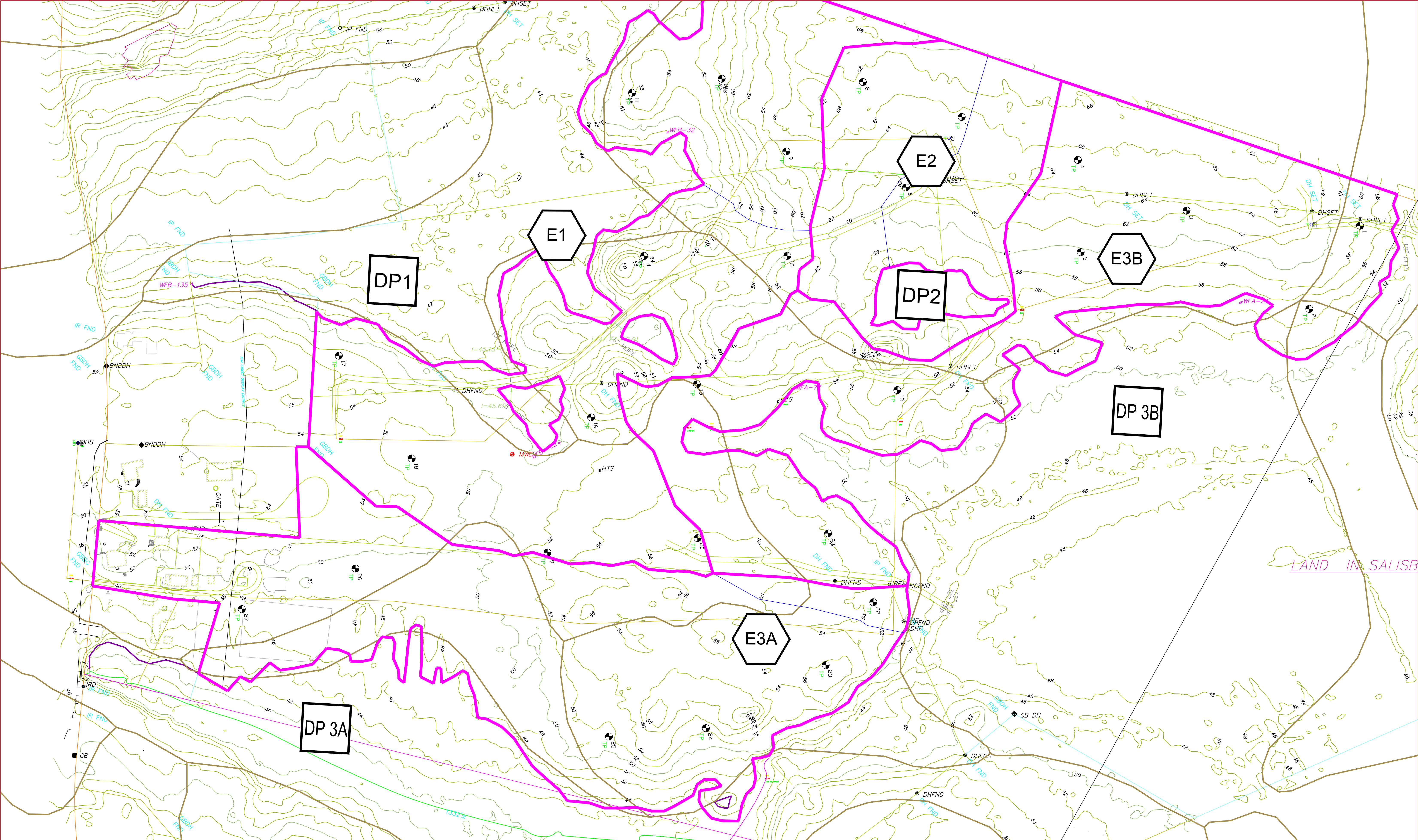
Summary for Link 203L: 3A

Inflow Area = 16.378 ac, 48.27% Impervious, Inflow Depth > 0.66" for 100-Year event
Inflow = 5.02 cfs @ 12.51 hrs, Volume= 0.895 af
Primary = 5.02 cfs @ 12.51 hrs, Volume= 0.895 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

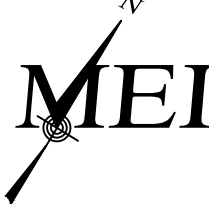
Link 203L: 3A

c. Watershed Maps



PREPARED FOR
DALE DEVELOPMENT, LLC
360 WASHINGTON STREET
RYE, NH 03870

NO.	DATE	DESCRIPTION	BY

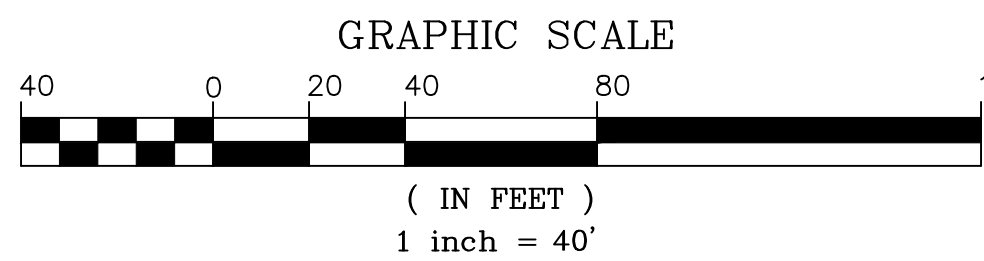
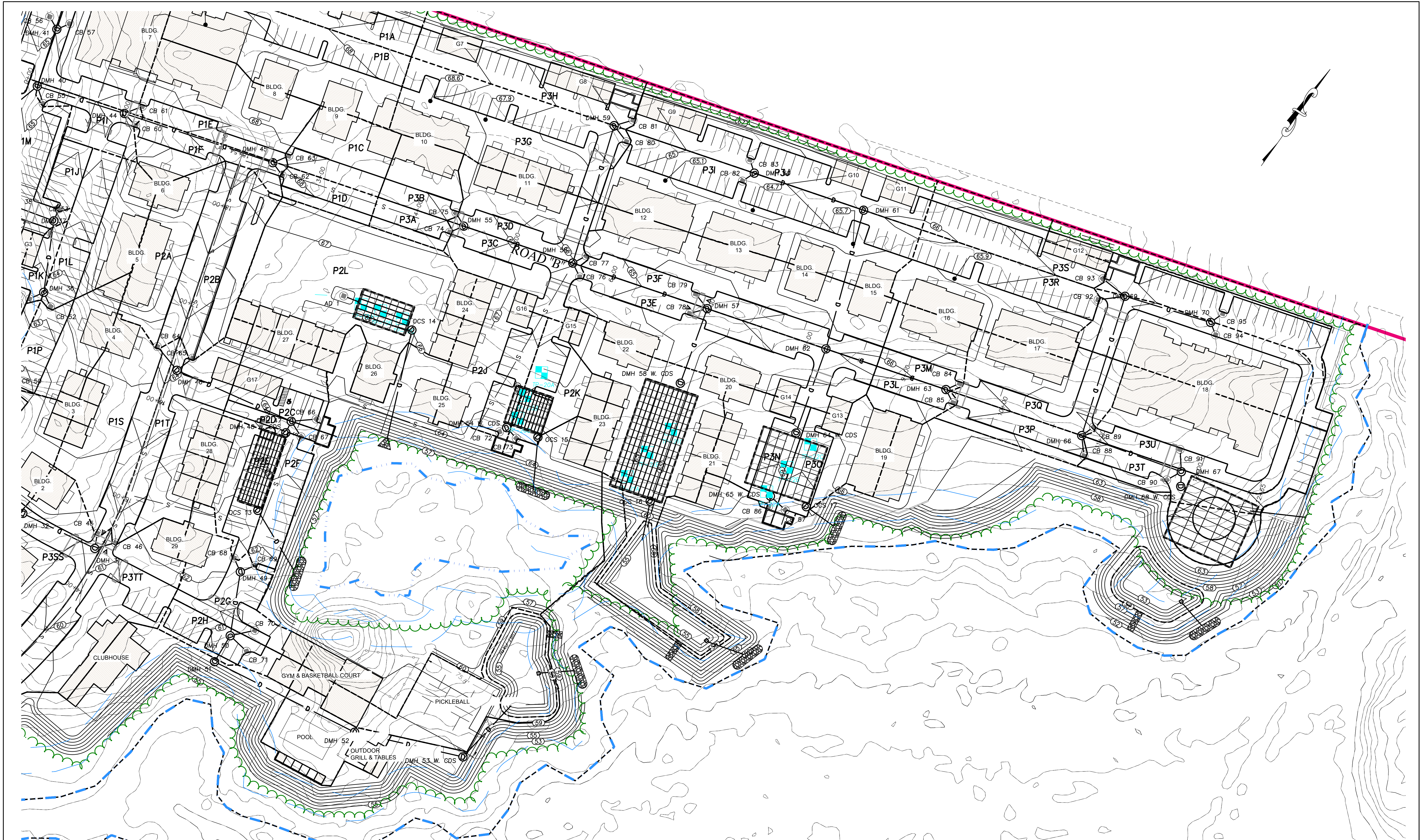


MILLENNIUM ENGINEERING, INC.
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

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**



PREPARED FOR

DALE DEVELOPMENT, LLC

360 WASHINGTON STREET
RYE, NH 03870

MEI **MILLENNIUM ENGINEERING, INC.**
ENGINEERING AND LAND SURVEYING
62 ELM ST. SALISBURY, MA 01952 (978) 463-8980
13 HAMPTON RD. EXETER, NH 03833 (603) 778-0528

SCALE: 1"=40'
DATE: AUG. 11, 2025

CALC. BY: J.T.M.
CHKD. BY: S.B.S.

PROJECT: M244407

ROCKY HILL MBTA COMMUNITY
IN
AMESBURY, MA
AT
ELM STREET

**POST-
DEVELOPMENT
WATERSHED
MAP**

SHEET: 4 OF 4