SITE PLAN & SUBDIVISION FOR
SOUTH BLOOMING GROVE BUSINESS PARK

VILLAGE OF SOUTH BLOOMING GROVE
ORANGE COUNTY, NEW YORK

STORMWATER POLLUTION
PREVENTION PLAN NARRATIVE

PREPARED FOR:

- ROUTE 208 HOLDINGS, LLC
- VILLAGE OF SOUTH BLOOMING GROVE
- NYS DEPT. OF ENVIRONMENTAL CONSERVATION

September 20, 2021

PREPARED BY:

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PROJECT: 17-010

SWPPP Preparer Certification 9/20/21

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-15-002. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

Michael A. Morgante
N.Y.S.P.E. License # 78577

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1. PROJECT INFORMATION

1.1 Project Name and Location

Site Plan & Subdivision for South Blooming Grove Business Park
1 Rieger Drive
Monroe, NY 10950

1.2 Property Owner Name and Address

Route 208 Holdings, LLC
199 Lee Ave PMB 103
Brooklyn, NY 11211

1.3 Project Operator Name and Address

Route 208 Holdings, LLC
199 Lee Ave PMB 103
Brooklyn, NY 11211

1.4 SWPPP Municipality

Village of South Blooming Grove
811 NY-208
Monroe, NY 10950

1.5 SWPPP Reviewer

Fusco Engineering & Land Surveying, P.C.
233 E Main St.
Middletown, NY 10940

2. INTRODUCTION

2.1. Project Description

The site is located at 1 Rieger Drive, near the intersection of NYS Route 208, in the Village of South Blooming Grove, New York. The tax map designation for the Village of South Blooming Grove Parcels is 223-1-2 (38.41 acres) & 223-1-4 (3.72 acres). The tax map designation for the Town of Blooming Grove Parcel is 53-1-20 (0.47 acres). The general land use in the nearby vicinity of the project site is the ORI & RR Zoning Districts. It is also proposed to remove the lot lines between these parcels as part of this project.

The existing commercial office park has been in this location for many decades with adjacent properties that include some residential dwellings. The current site is served by an existing well and a sewage pump station that conveys flows to a force main located on Museum Village Road.

The portion of the site that is proposed for development is characterized by a northwesterly sloping topography that descends from the eastern portion of the site. Topography on the site reflects the local surrounding topography.

The soils on the property were identified using the soil classifications from the USDA Web Soil Survey Program. The site soils consist primarily of the Hoosic (HoB & HoD) series, the Hollis (HLC) series, Riverhead series (RhA), the Swartswood Series (SwB & SXC) and Rock Outcrop (RMD). A majority of the site development will occur within the Hoosic series soils that consist of gravelly sandy loam which are somewhat excessively drained. The deep test pit logs that were performed confirm this soil type and the results have been included on the project drawings. The approximate soil boundaries and types are shown on the attached Pre & Post Development Drainage Analysis Maps.

The proposed project consists of two four story buildings each with a building height of 57 feet and a footprint of 26,000 SF for a total floor area of 260,000 SF. The site is located in the ORI zoning district. Proposed uses include mixed office and retail. On-site parking is proposed with connection to municipal water & sewer. A stormwater drainage system will attenuate & treat post development stormwater flows. A portion of the parking lies within several overlay districts, there is an ACOE wetland on site as well as a 100-year flood zone associated with Satterly Creek. The site is also currently served by municipal sewer which the proposed project will require connection to and on-site wells will be developed for water supply. The proposed development will disturb more than one acre of soil, therefore, the stormwater management plan has been developed in accordance with the requirements of the current SPDES General Permit for Stormwater Discharges from Construction Activity NYS GP-0-15-002.

2.2. Project Disturbance Area

Total Project Property Area: 42.60 Acres
Total Disturbed Area: 9.50 Acres
Existing Impervious Area: 0.86 Acres
Proposed Impervious Area: 7.20 Acres

2.3. Cultural Resources Investigation

The New York State Historic Preservation Office (SHPO) online CRIS tool indicates that the project site is not located in close proximity or adjacent to any sensitive archeological site(s).

2.4. Existing Drainage Patterns

Generally, the pre-development site conditions are best described as a mixture of grass, woods and impervious surface. There are several watersheds within the existing site that drain to the existing lower topographic area associated with Satterly Creek located in the central portion of site. The Watersheds and the associated Stormwater Design Points (DP) are shown on the attached Pre-Development Analysis Map.

2.5. Proposed Drainage Patterns

The pre-development watershed boundaries are very similar to the post development condition. The proposed commercial buildings are located within watershed. The addition of the impervious surface increases post-developed runoff and pollutants in these watersheds.

3. STORMWATER MANAGEMENT

3.1. General

In general, increased imperviousness can change the volume and rate of runoff as well as the amount of suspended or dissolved substances entering local streams. In some cases, a change in the quantity of impervious surfaces can change the distribution of water in each area, affecting local water bodies, wetlands and associated fauna and flora. The project design includes measures to reduce the level of runoff and pollutants in post-development runoff in compliance with New York State DEC requirements. This will be achieved by the installation of ADS Stormtech Chambers that will recharge stormwater runoff into the groundwater supply.

3.2. Stormwater Quantity

The drainage report has been prepared to analyze the impact of stormwater runoff at the major discharge points (DP) on the property. The impact of the proposed development on existing drainage patterns was evaluated for both the pre and post development conditions.

Information and data to prepare this report was obtained from the following sources:

- Topographic, Boundary and Planimetric information from Clearpoint Services, LLC.
- Site Plan & Subdivision for South Blooming Grove Business Park as prepared by Arden Consulting Engineers, PLLC.
- The site soil information from USDA Web Soil Survey.
- Site evaluations as carried out by personnel from Arden Consulting Engineers, PLLC.

The TR-55 method was used to determine the pre-development and post-development runoff rates at the design points (DP) identified on the property, which is illustrated on the attached drawings entitled Pre Development Stormwater Analysis and Post Development Stormwater Analysis.

Drainage summaries have been shown on Table 1, which outline the runoff volume from the 1, 10 and 100 year storm events in the pre-development and post-development conditions, using a Type III storm distribution as evidenced by storm distribution boundaries found in the TR-55 publication. The 24-hour rainfall values used for each storm occurrence were taken from the NYSDEC Stormwater Design Manual as listed below:

1 year storm = 2.60 in.
10 year storm = 4.75 in
100 year storm = 8.5 in

Details of the proposed stormwater facilities have been included on Pre & Post Development Drainage Analysis Maps and the project drawings. The Pre and Post Development Analysis Maps have been prepared to illustrate existing drainage areas and their configuration following construction on the site.

It is the overall goal of the SWPPP to provide for proper drainage control on a quality and quantity basis. The plan has been prepared so there will be no negative effect on downstream properties.

The hydrologic characteristics of the pre-development site conditions were modeled using HydroCAD computer software. The model analyzes watershed conditions and provides hydrograph generation and routing based on the Natural Resources Conservation Service (NRCS) Technical Release 55 (TR-55) procedures. These procedures consider the land cover and use on site, the underlying soils, the general topography and local rainfall distribution to model stormwater runoff volumes and flow rates resulting from the site.

3.3. Increase in Stormwater Runoff Rates

Table 1 below compares the pre- and post-development runoff calculations.

Table 1
Pre- vs. Post-Development Runoff to DP1 (cfs)

Storm Frequency	Runoff (Pre)	Runoff (Post)
1 year	3.09	0.00
10 year	14.56	9.98
100 year	26.89	21.90

The post-development rates of runoff are less than the existing condition. This requirement meets the standards of the SPDES General Permit for Stormwater Discharges.

4. STORMWATER QUALITY

4.1. Impervious Surfaces

The impervious cover used in this analysis represents the land use as described and shown on the project plans. The supporting calculations are presented in the HydroCAD model in the Appendix located at the end of this report.

The New York State DEC requires the use of "Unified Stormwater Sizing Criteria" to ensure that water quality, channel erosion reduction, overbank flood protection and safe conveyance of extreme storms is achieved (New York State Stormwater Management Design Manual, January 2015). Water quality volume criteria is based on the following formula:
WQv = [(P)(Rv)(A)]/12

where:

WQv = water quality volume (in acre-feet)
P = 90% rainfall event number (in inches)
Rv =0.05 + 0.009(I), where I is percent impervious cover, and
A =site area in acres

Using this formula for calculating water quality volumes, the following required water quality volumes (WQv) were calculated for the watershed. Suitable area and storage volume are provided in the proposed stormwater facilities to meet water quality goals as defined by the New York State DEC.

Runoff Reduction Volume (RRv) is the reduction of the total WQv by application of green infrastructure techniques and SMPs to replicate pre-development hydrology. The WQv required is 39,123 cf while the minimum RRv is 9,627 cf as determined using the NYSDEC worksheet that can be found in Appendix B. The various ADS Stormtech outlet structure weirs have been set at elevations above the respective inverts thereby storing an associated volume of water. This volume will retain and recharge the stormwater runoff similar to an infiltration facility and therefore meets the WQv and RRv requirements. A conservative percolation rate of 3 inches per hour was used to model infiltration rates. Without the use of stormwater quality management practices, the proposed project would result in an increase in the loadings of various chemical constituents to the receiving waters, potentially impairing the quality of those waters within the watershed.

Runoff from impervious surfaces related to roadways and parking lots poses a potential increase in road and vehicle-related contaminants in the stormwater diverted to treatment facilities. These include hydrocarbons derived primarily from crankcase oil drippings and un-combusted exhaust hydrocarbons. Furthermore, roadway runoff contains detectable levels of heavy and trace metal contaminants such as lead, zinc, copper, chromium and nickel. These types of potential impacts require appropriate mitigation measures to limit impacts to existing water quality. Stormwater runoff will ultimately discharge as shown on the Post Development Stormwater Analysis Map. The facilities were designed to attenuate and bypass the 10 and 100 year rain event.

4.2. Sources of Pollutants

The New York State DEC lists several potential pollutants and their sources to be considered during site design. Nutrients, sediment, bacteria and various other components can potentially contribute to the reduction of water quality and impacts to downstream receiving waters and habitat for water dependent species.

Many of these constituents, i.e., nitrogen, phosphorus, bacteria and others, are expected to be accounted for in the capture and treatment of the water quality volume. The DEC guidelines have established that if the water quality volume from impervious surfaces is treated, the water quality goals of the State are met. A primary source of nutrients, i.e., the use of fertilizers, is discussed below.

Sediments are typically associated with runoff from un-stabilized sites or are the result of erosion in watercourses that cannot handle the velocity of stormwater flows. They can also result from the sanding of impervious surfaces during winter storm events. Un-stabilized sediments can be transported via storm flows to receiving wetlands and watercourses, altering the soil-water-air interface in wetlands and burying established vegetation. The current proposal will a sedimentation basin and an infiltration basin that will encourage infiltration of flows carrying un-stabilized sediments.

Thermal impacts, i.e., the increase in water temperature caused by the process of water running off of parking lots, roofs and other impervious surfaces that are heated by the sun, are of greatest concern in areas where a site is directly tributary to a Class B creek. Satterly Creek is a Class C stream. Furthermore, the majority of the site runoff will be treated by means of retention and infiltration using the ADS Stormtech SC-740 Chambers. Based on this information, no special consideration was given to moderating the temperature of stormwater leaving the site.

4.3. Use of Fertilizers and Pesticides

The applicant proposes the use of a variety of construction and maintenance techniques reflecting best management practices in order to limit impacts of stormwater runoff. No fertilizers containing phosphorous will be utilized in order to limit pollutants from the project to the maximum extent possible.

Phosphorus from fertilizer runs off lawns via stormwater and can enter surface waters and ground water, both of which can reach other water bodies. Using phosphorus-free lawn fertilizers is one step that will be taken to protect water quality. The project sponsor therefore proposes that any fertilizers used during construction will be phosphorus-free.

These combined systems have been designed to treat the NYSDEC water quality volume, and control peak flow runoff rates from the 10- and 100-year storm events.

5. PERFORMANCE CRITERIA

The following paragraphs and bullets describe the required performance criteria for the proposed

Stormwater Management Practices (SMP's).

5.1. Stormtech SC-740 Chambers

The StormTech SC-740 is a subsurface chamber that allows the storage of large volumes of stormwater at reasonably shallow depths. The calculations shown in the Appendix include the volume within the chambers and stone voids (StormTech assumes a porosity of 40%). The systems were designed to treat the increase impervious surface associated with the proposed development.

The chambers are hydraulically connected via the stone that is placed between all of the chambers so that as each unit/row fills with runoff, the adjacent unit/row fills also. As a result, it is not required for each manifold to connect to each row of chambers. The cross hatching at the inlet points to the bottom chambers represents a woven geotextile fabric, to be provided as scour protection. To provide pretreatment, the StormTech SC-740 Isolator Row has been proposed and is depicted as the hatched row in the project drawings. The isolator row is a single chamber row, wrapped in non-woven geo-synthetic fabric which filters out sediment, oils, and other impurities typically found in the runoff of initial stages of a rain event. ADS/StormTech recommends that inspection ports only serve a purpose if they are installed on Isolator Rows, since the system is designed such that the majority of sediment should be trapped and stored in the Isolator Row until regular maintenance is performed. Since non-Isolator Rows do not experience sedimentation, there is no need for inspection ports.

The system was designed to meet or exceed the WQv and RRv requirements set forth by the NYSDEC. The proposed design exceeds the minimum required RRv required for this project.

The intent of this system is to meet the required RRv and WQv for the proposed project site and provide peak attenuation. This stormwater management system will control peak discharges and provide storage for attenuation of the 1, 10, and 100-year storms. The SC-740 system's low profile ensures a three (3) foot separation to groundwater as required per the design manual.

6. EROSION & SEDIMENT CONTROL

6.1. General

During construction of the Project, extensive erosion and sediment control consisting of vegetative and structural measures will be implemented. These practices will be included in the final plans and will show the location and details of these controls. Among the techniques to be utilized are:

1. Staked haybales and silt fences around the downhill perimeter of the construction.
2. A stabilized construction entrance installed at the access point to the site.
3. Temporary seeding of all disturbed areas if they will remain bare for more than three weeks.
4. Permanent seeding and mulching as soon as possible after final grading.
5. Water spray for dust control.
6. The plans will indicate the proposed controls to be implemented during construction. However, adjustment of these controls may be required to accommodate localized field conditions.

7. Disturbed areas will be permanently stabilized by establishing a permanent vegetative cover. The exposed area will receive a minimum of 4 inch topsoil prior to seeding.

7. MAINTENANCE OF STORMWATER MANAGEMENT FACILITIES

7.1. General

The storm water management facilities shall be maintained by the Owner of the Project during and after construction. All storm water management facilities shall be routinely inspected and any necessary repairs made immediately in order to maintain all practices as designed. The Contractor and Owner shall utilize good housekeeping methods for all litter and debris that is generated during construction. This shall include for example, placing all wastes in a dumpster on a daily basis and emptying dumpsters on a regular basis. It is also recommended to store any chemicals that are utilized during construction in a safe place according to manufacturer's safety data sheets (MSDS).

8. SUMMARY

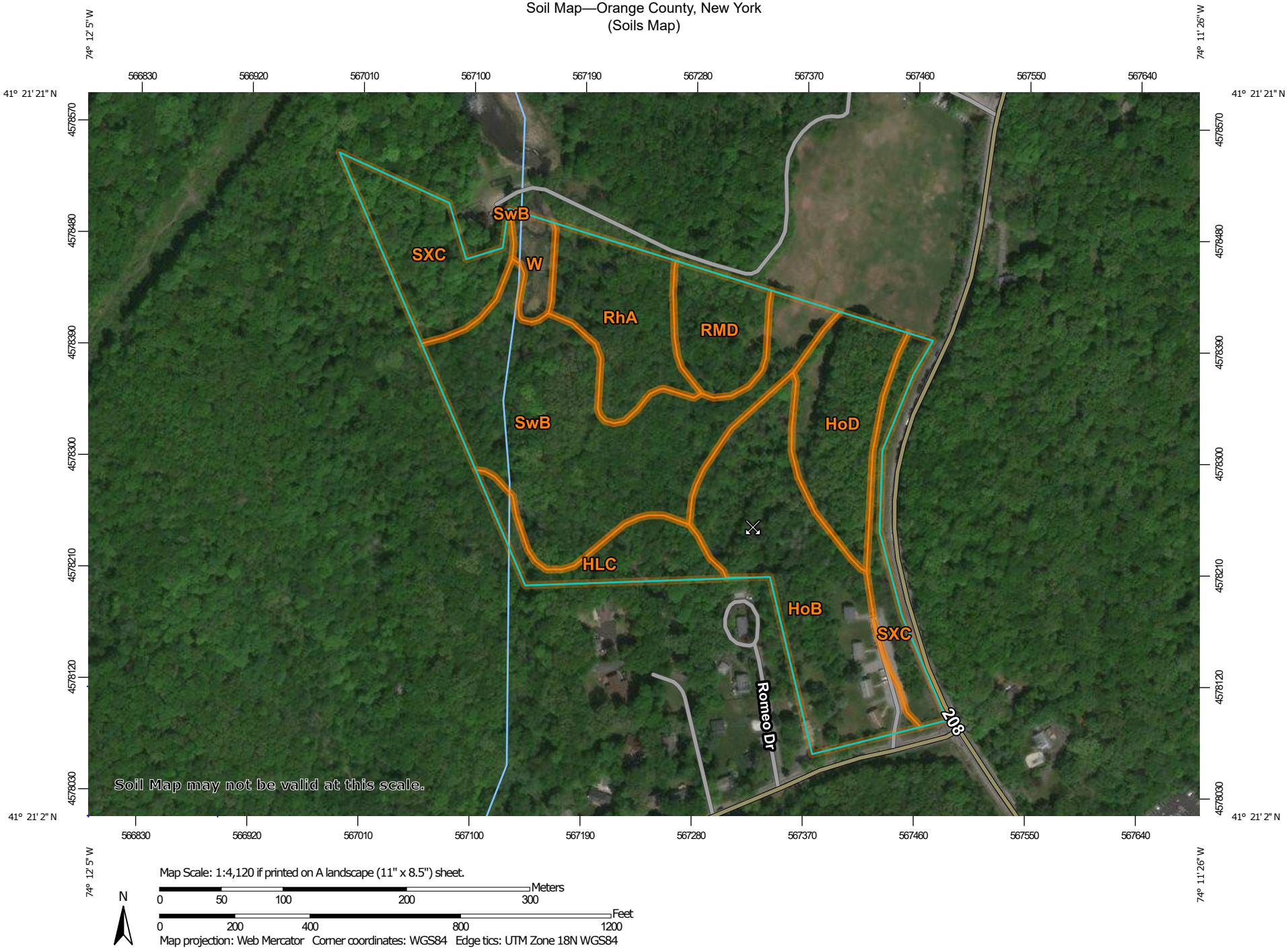
8.1. General

Drainage from the proposed impervious surfaces will be collected by the proposed Stormtech SC-740 chambers. The Soil Conservation Service TR-55 method has been utilized to evaluate the changes in stormwater runoff rates as a result of development of the site. The storm drainage system has been designed to collect and convey stormwater in a manner that would provide no increase in stormwater runoff rates downstream from the property. On-site retention, attenuation and water quality treatment via the use of the Stormtech Chambers is necessary and has been provided to mitigate the increases in stormwater runoff rates and pollutants that would otherwise impact downstream conditions.

The proposed project has also been designed to minimize the extent of proposed grading and disturbance. The construction activity on the site will therefore not result in additional pollutant loadings and post development runoff to downstream water bodies. The proposed erosion and sediment control practices will prevent the erosion and sediment deposits to downstream properties.

APPENDIX A

Soil Map—Orange County, New York
(Soils Map)



Map Scale: 1:4,120 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 18N WGS84

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: Orange County, New York
Survey Area Data: Version 21, Jun 11, 2020

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

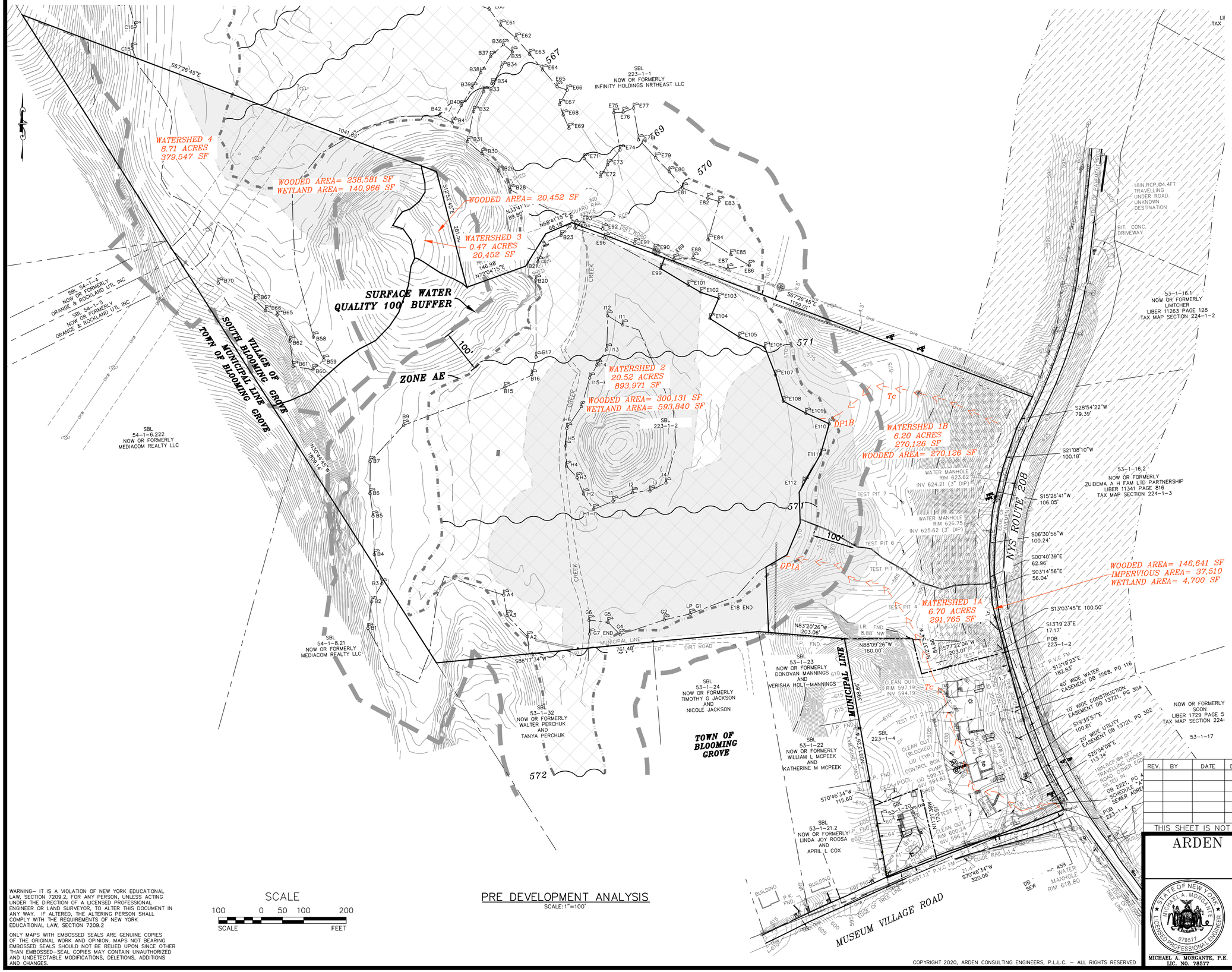
Date(s) aerial images were photographed: Oct 7, 2013—Feb 26, 2017

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
HLC	Hollis soils, sloping	1.6	5.9%
HoB	Hoosic gravelly sandy loam, 3 to 8 percent slopes	5.7	21.0%
HoD	Hoosic gravelly sandy loam, 15 to 25 percent slopes	2.8	10.5%
RhA	Riverhead sandy loam, 0 to 3 percent slopes	2.8	10.3%
RMD	Rock outcrop-Farmington complex, hilly	1.7	6.2%
SwB	Swartswood gravelly loam, 3 to 8 percent slopes	8.1	29.9%
SXC	Swartswood and Mardin soils, sloping, very stony	3.8	14.0%
W	Water	0.6	2.2%
Totals for Area of Interest		**26.9**	**100.0%**

APPENDIX B



SCALE
100 0 50 100 200
SCALE FEET

PRE DEVELOPMENT ANALYSIS
SCALE: 1"=100'

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LIC. NO. 78577

SITE PLAN AND LOT LINE CHANGE FOR
SBG BUSINESS PARK
MUSEUM VILLAGE ROAD – VILLAGE OF SOUTH BLOOMING GROVE
ORANGE COUNTY, N.Y

PRE DEVELOPMENT ANALYSIS

JOB#: 17-010
SCALE: AS NOTED
DATE: 11/5/20
DRAWN: MM
CHECKED: MM
SHEET NO. 01 of 02

POST DEVELOPMENT ANALYSIS

SCALE: 1"=100'

SCALE

100 0 50 100 200

SCALE FEET

LEGEND:

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING ADJACENT PROPERTY LINE
- EXISTING CREEK
- EXISTING ELECTRIC METER
- EXISTING STONE WALL
- EXISTING SOIL LINE
- APPROXIMATE FLOOD PLANE BOUNDARY ZONE X
- APPROXIMATE FLOOD PLANE BOUNDARY ZONE AE
- EXISTING EASEMENT
- EXISTING GUARD DRAIL
- EXISTING HEADWALL
- OVERHEAD TRANS LINE
- EXISTING POLE
- EXSITING UTILITY POLE
- EXISTING LIGHT
- EXISTING
- EXISTING MAIL BOX
- EXISTING WETLAND MARKER
- EXISTING WATER VALVE
- EXISTING POST
- EXISTING SIGN
- EXISTING TREE
- EXISTING STRUCTURE
- EXISTING SIGNIFICANT BIOLOGICAL OVERLAY
- SCENIC GATEWAYS OVERLAY
- SCENIC VIEWSHED OVERLAY
- WETLAND AREA
- 100 YEAR FLOOD ZONE
- 100 FOOT SURFACE WATER OVERLAY BUFFER
- PROPOSED SETBACK
- PROPOSED BUILDING
- PROPOSED EDGE OF PAVEMENT
- PROPOSED SIDEWALK
- PROPOSED ADA PARKING
- PROPOSED TRAFFIC DIRECTION
- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- PROPOSED CATCHBASIN
- PROPOSED DRAINAGE PIPE
- PROPOSED RETAINING WALL

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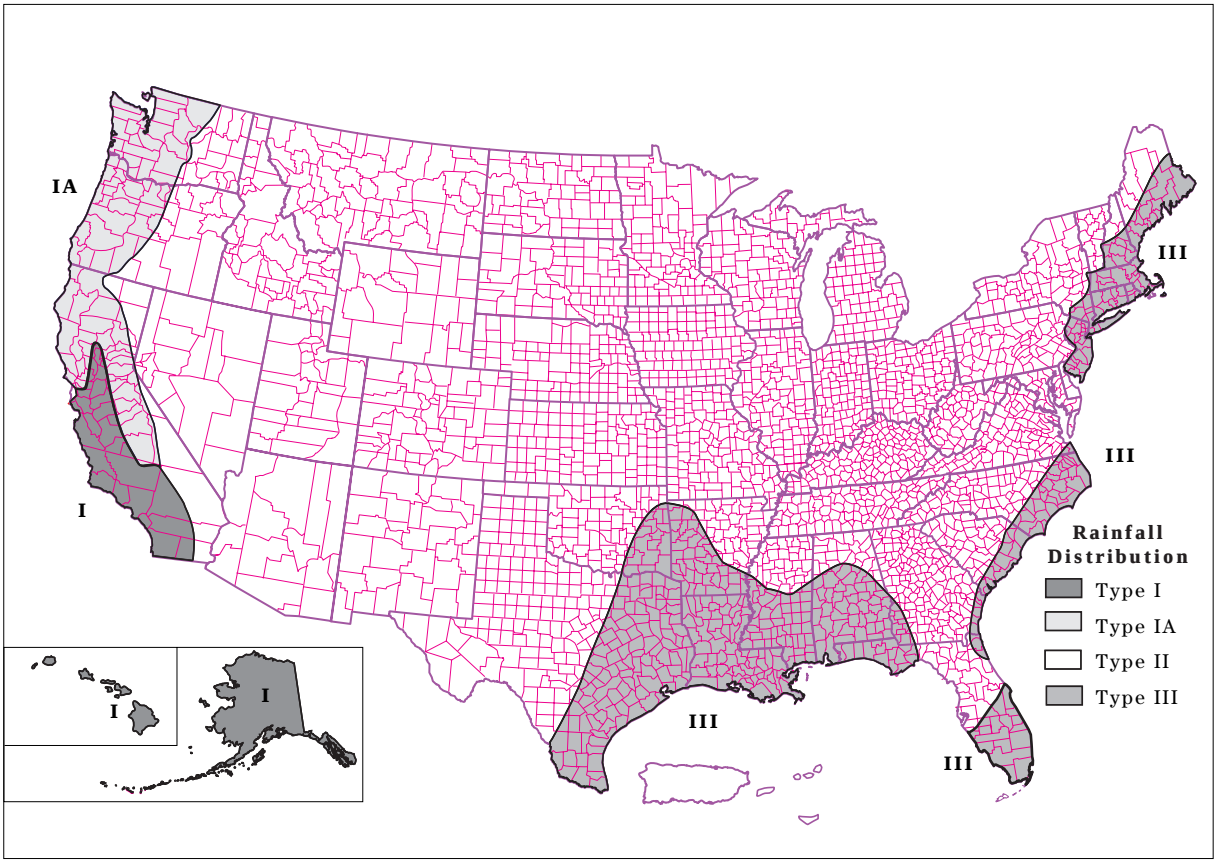
SITE PLAN AND LOT LINE CHANGE FOR
SBG BUSINESS PARK
MUSEUM VILLAGE ROAD – VILLAGE OF SOUTH BLOOMING GROVE
ORANGE COUNTY, N.Y

POST DEVELOPMENT ANALYSIS

JOB#:	17-010
SCALE:	AS NOTED
DATE:	11/5/20
DRAWN:	MM
CHECKED:	MM
SHEET NO.	02 of 02

Figure B-2 Approximate geographic boundaries for NRCS (SCS) rainfall distributions



Rainfall data sources

This section lists the most current 24-hour rainfall data published by the National Weather Service (NWS) for various parts of the country. Because NWS Technical Paper 40 (TP-40) is out of print, the 24-hour rainfall maps for areas east of the 105th meridian are included here as figures B-3 through B-8. For the area generally west of the 105th meridian, TP-40 has been superseded by NOAA Atlas 2, the Precipitation-Frequency Atlas of the Western United States, published by the National Ocean and Atmospheric Administration.

East of 105th meridian

Hershfield, D.M. 1961. Rainfall frequency atlas of the United States for durations from 30 minutes to 24 hours and return periods from 1 to 100 years. U.S. Dept. Commerce, Weather Bur. Tech. Pap. No. 40. Washington, DC. 155 p.

West of 105th meridian

Miller, J.F., R.H. Frederick, and R.J. Tracey. 1973. Precipitation-frequency atlas of the Western United States. Vol. I Montana; Vol. II, Wyoming; Vol III, Colorado; Vol. IV, New Mexico; Vol V, Idaho; Vol. VI, Utah; Vol. VII, Nevada; Vol. VIII, Arizona; Vol. IX, Washington; Vol. X, Oregon; Vol. XI, California. U.S. Dept. of Commerce, National Weather Service, NOAA Atlas 2. Silver Spring, MD.

Alaska

Miller, John F. 1963. Probable maximum precipitation and rainfall-frequency data for Alaska for areas to 400 square miles, durations to 24 hours and return periods from 1 to 100 years. U.S. Dept. of Commerce, Weather Bur. Tech. Pap. No. 47. Washington, DC. 69 p.

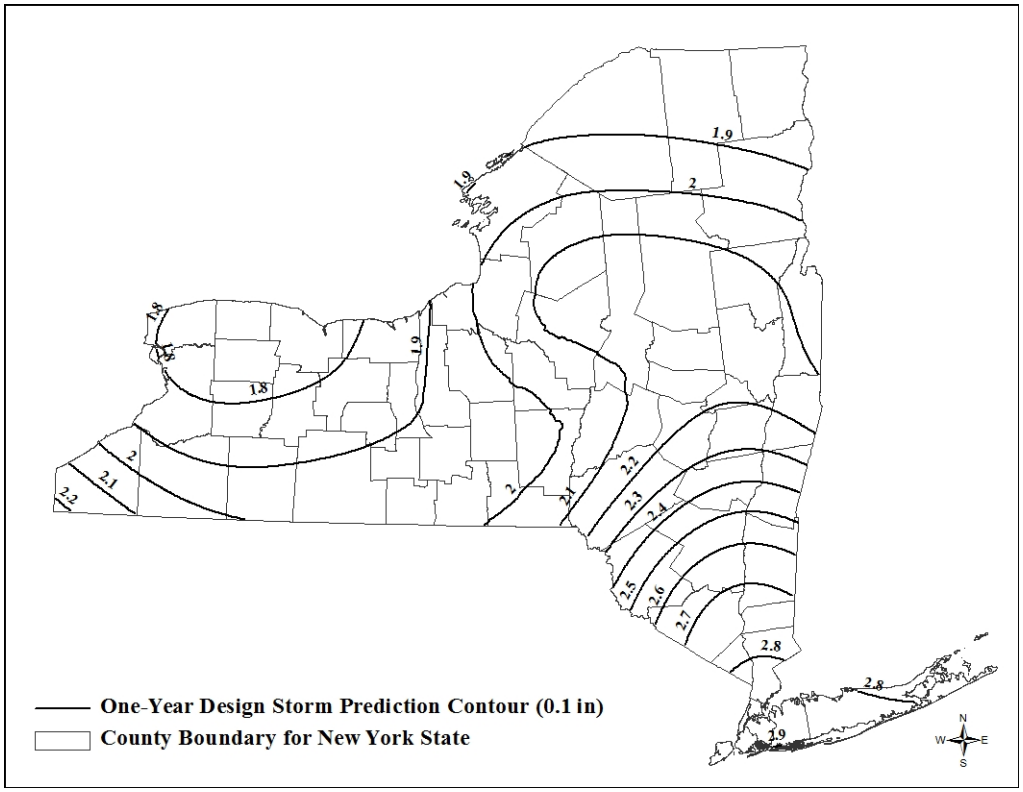
Hawaii

Weather Bureau. 1962. Rainfall-frequency atlas of the Hawaiian Islands for areas to 200 square miles, durations to 24 hours and return periods from 1 to 100 years. U.S. Dept. Commerce, Weather Bur. Tech. Pap. No. 43. Washington, DC. 60 p.

Puerto Rico and Virgin Islands

Weather Bureau. 1961. Generalized estimates of probable maximum precipitation and rainfall-frequency data for Puerto Rico and Virgin Islands for areas to 400 square miles, durations to 24 hours, and return periods from 1 to 100 years. U.S. Dept. Commerce, Weather Bur. Tech. Pap. No. 42. Washington, DC. 94 P.

Figure 4.2: One-Year Design Storm in New York State (NYSDEC, 2013)



Section 4.5 Overbank Flood Control Criteria (Q_p)

The primary purpose of the overbank flood control sizing criterion is to prevent an increase in the frequency and magnitude of out-of-bank flooding generated by urban development (i.e., flow events that exceed the bankfull capacity of the channel, and therefore must spill over into the floodplain).

Overbank control requires storage to attenuate the post development 10-year, 24-hour peak discharge rate (Q_p) to predevelopment rates.

The overbank flood control requirement (Q_p) does not apply in certain conditions, including:

- The site discharges directly tidal waters or fifth order (fifth downstream) or larger streams. Refer to Section 4.3 for instructions.
- A downstream analysis reveals that overbank control is not needed (see section 4.10).

Basis for Design of Overbank Flood Control

When addressing the overbank flooding design criteria, the following represent the minimum basis for design:

- TR-55 and TR-20 (or approved equivalent) will be used to determine peak discharge rates.

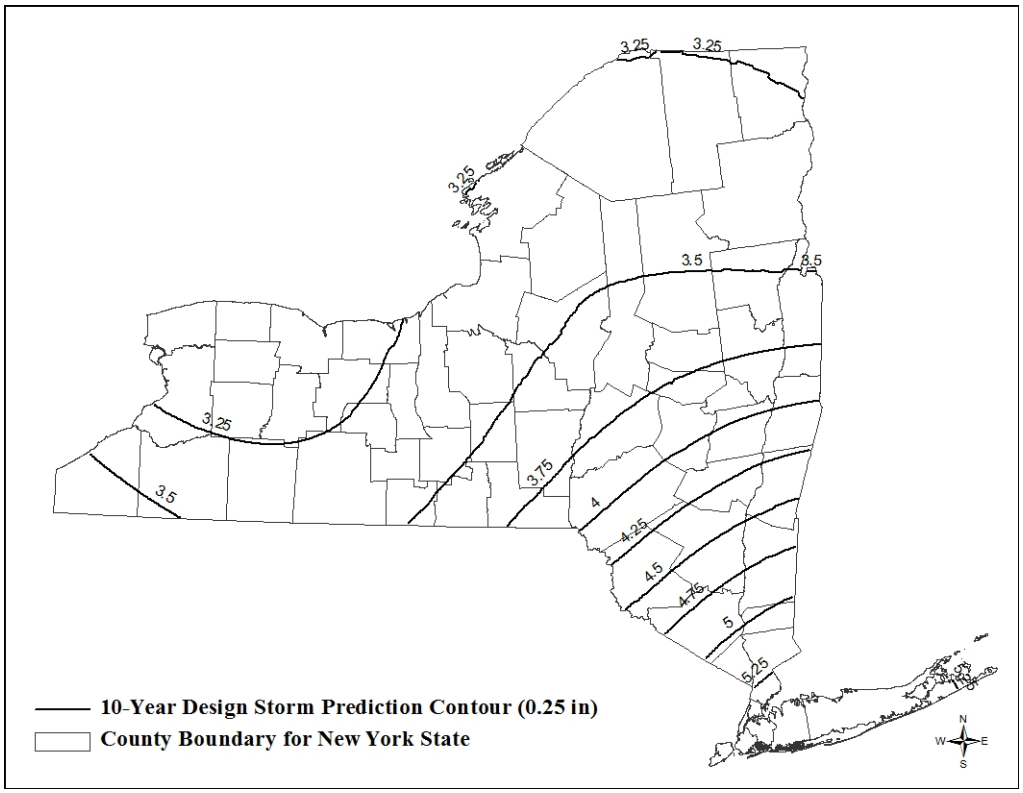
- When the predevelopment land use is agriculture, the curve number for the pre-developed condition shall be “taken as meadow”.

- Off-site areas should be modeled as "present condition" for the 10-year storm event.

- Figure 4.3 indicates the depth of rainfall (24 hour) associated with the 10-year storm event throughout the State of New York.

- The length of overland flow used in t_c calculations is limited to no more than 150 feet for predevelopment conditions and 100 feet for post development conditions. On areas of extremely flat terrain (<1% average slope), this maximum distance is extended to 250 feet for predevelopment conditions and 150 feet for post development conditions.

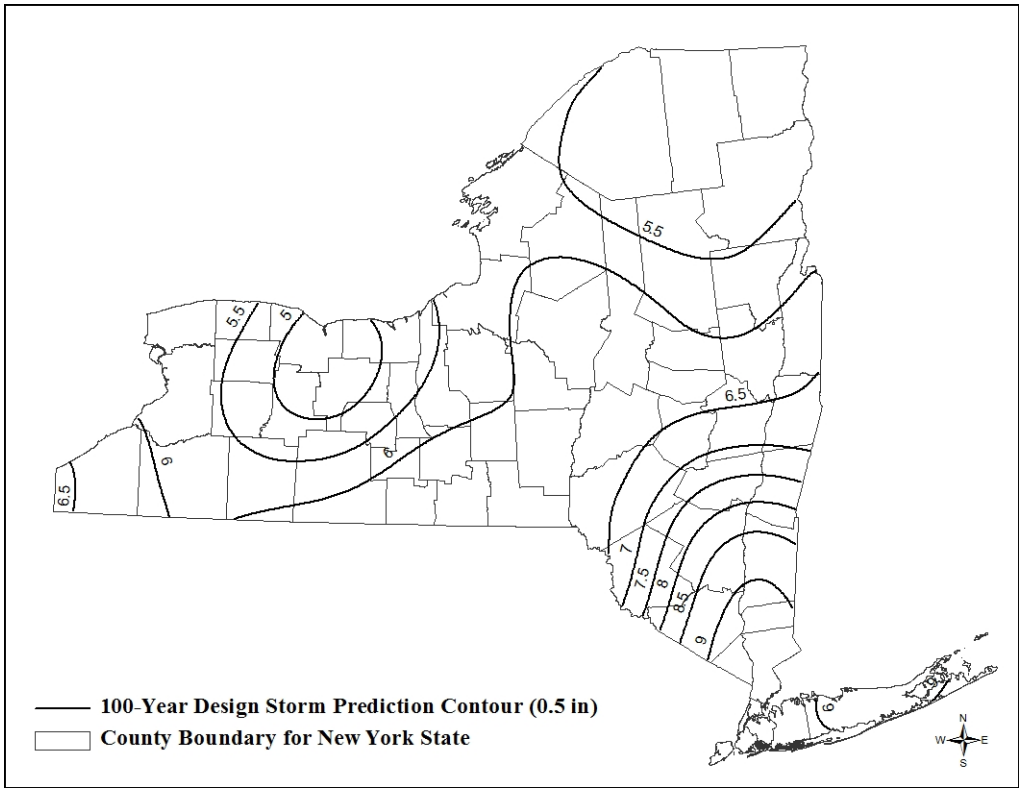
Figure 4.3: Ten-Year Design Storm in New York State (NYSDEC, 2013)



- When determining the storage required to reduce 100-year flood peaks, model off-site areas under current conditions.

- When determining storage required to safely pass the 100-year flood, model off-site areas under ultimate conditions.

Figure 4.4: One Hundred-Year Design Storm in New York State (NYSDEC, 2013)



Section 4.7 Alternative Method

New development causes changes to runoff volume, flow rates, timing of runoff and, most importantly, habitat destruction and degradation of the physical and chemical quality of the receiving waterbody. Traditionally, event based design storms are used for evaluation of hydrology and sizing of stormwater management practices. With an increasing need for assessment of the long term effects of development and maintenance of pre-development hydrology, the necessity of continuous simulation modeling as an effective tool for analysis and evaluation of flow-duration, downstream quality, quantity, biological, and hydro-habitat sustainability has been acknowledged.

Version 1.8
Last Updated: 11/09/2015

Total Water Quality Volume Calculation
WQv(acre-feet) = [(P)(Rv)(A)] /12

Is this project subject to Chapter 10 of the NYS Design Manual (i.e. WQv is equal to post-development 1 year runoff volume)?.....	No

Design Point:	2A	
P=	1.30	*inch*

Manually enter P, Total Area and Impervious Cover.

Breakdown of Subcatchments

Catchment Number	Total Area *(Acres)*	Impervious Area *(Acres)*	Percent Impervious *%*	Rv	WQv *(ft^3)*	Description
1	5.65	4.36	77%	0.74	19,850	
2	1.66	1.30	78%	0.75	5,913	
3	2.60	1.62	62%	0.61	7,494	
4	3.08	0.07	2%	0.07	1,024	
5	20.52	0.00	0%	0.05	4,842	
6						
7						
8						
9						
10						
Subtotal (1-30)	33.51	7.35	22%	0.25	**39,123**	**Subtotal 1**
Total	33.51	7.35	22%	0.25	**39,123**	**Initial WQv**

Identify Runoff Reduction Techniques By Area

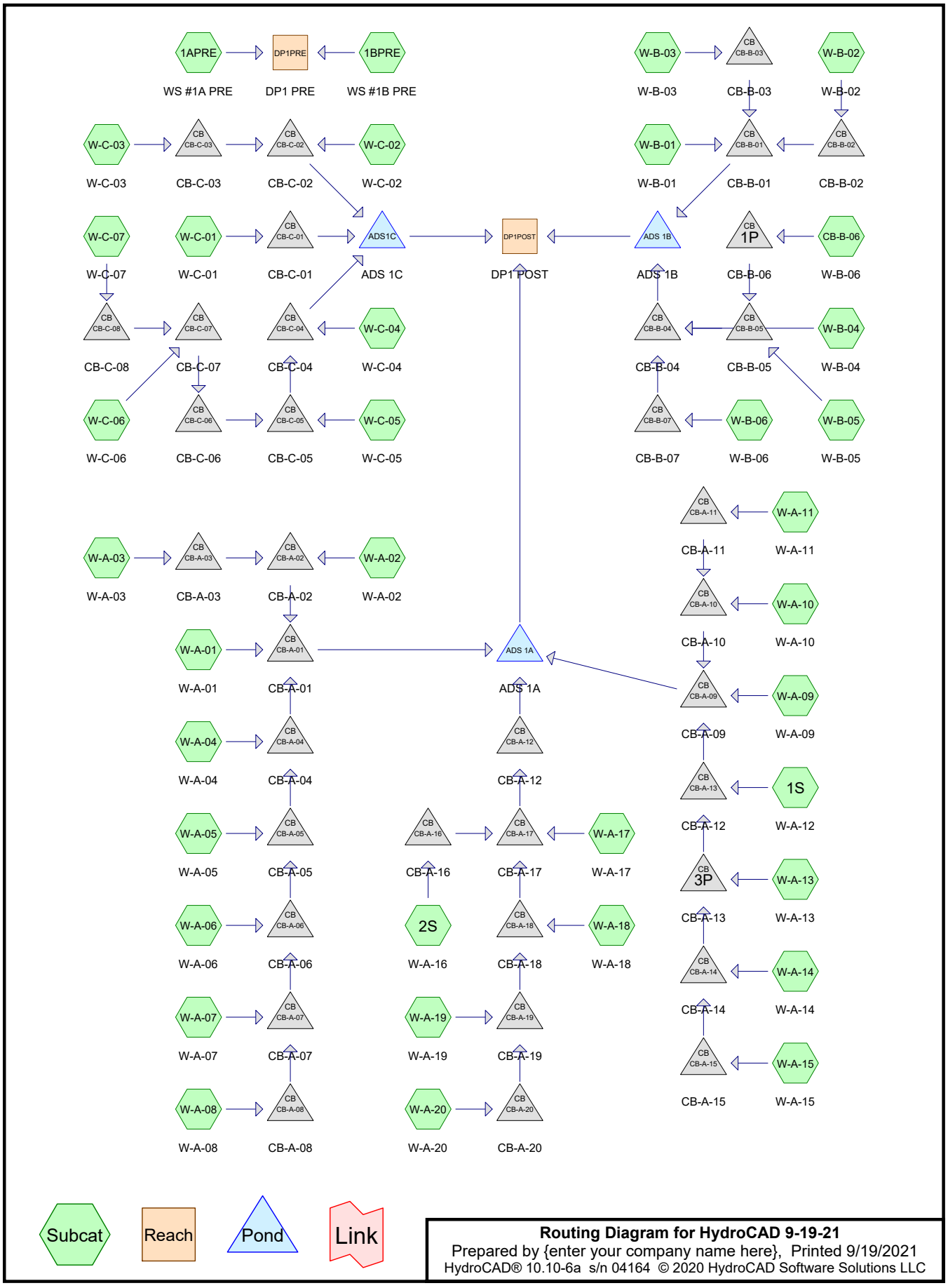
Technique	Total Contributing Area *(Acre)*	Contributing Impervious Area *(Acre)*	Notes
Conservation of Natural Areas	20.52	0.00	*minimum 10,000 sf*
Riparian Buffers	0.00	0.00	*maximum contributing length 75 feet to 150 feet*
Filter Strips	0.00	0.00	
Tree Planting	0.00	0.00	*Up to 100 sf directly connected impervious area may be subtracted per tree*
Total	**20.52**	**0.00**	

Recalculate WQv after application of Area Reduction Techniques

	Total Area *(Acres)*	Impervious Area *(Acres)*	Percent Impervious *%*	Runoff Coefficient Rv	WQv *(ft^3)*
"<<Initial WQv"	33.51	7.35	22%	0.25	39,123
Subtract Area	-20.52	0.00			
WQv adjusted after Area Reductions	**12.99**	**7.35**	57%	0.56	34,281
Disconnection of Rooftops		0.00			
Adjusted WQv after Area Reduction and Rooftop Disconnect	12.99	7.35	57%	0.56	**34,281**
WQv reduced by Area Reduction techniques					4,842

Minimum RRv

Enter the Soils Data for the site		
Soil Group	Acres	S
A		55%
B		40%
C	14.80	30%
D	**1.26**	20%
Total Area	16.06	
Calculate the Minimum RRv		
S =	**0.29**	
Impervious =	7.35	*acre*
Precipitation	1.3	*in*
Rv	0.95	
Minimum RRv	**9,627**	***ft3***
	0.22	af



Routing Diagram for HydroCAD 9-19-21

Prepared by {enter your company name here}, Printed 9/19/2021

Rainfall Events Listing (selected events)

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	1-Year	Type III 24-hr		Default	24.00	1	3.50	2
2	10-Year	Type III 24-hr		Default	24.00	1	6.00	2
3	90% Storm	Type III 24-hr		Default	24.00	1	1.20	2
4	100-Year	Type III 24-hr		Default	24.00	1	8.00	2

Area Listing (all nodes)

Area (sq-ft)	CN	Description (subcatchment-numbers)
115,382	61	>75% Grass cover, Good, HSG B (1S, 2S, CB-B-06, W-A-01, W-A-02, W-A-03, W-A-04, W-A-05, W-A-06, W-A-07, W-A-08, W-A-09, W-A-10, W-A-11, W-A-13, W-A-14, W-A-15, W-A-17, W-A-18, W-A-19, W-A-20, W-B-01, W-B-02, W-B-04, W-B-05, W-B-06, W-C-01, W-C-03, W-C-04, W-C-05, W-C-06, W-C-07)
6,906	98	Paved parking, HSG A (W-A-03, W-A-11)
303,961	98	Paved parking, HSG B (1S, 2S, CB-B-06, W-A-01, W-A-02, W-A-04, W-A-05, W-A-06, W-A-07, W-A-08, W-A-09, W-A-10, W-A-13, W-A-14, W-A-15, W-A-17, W-A-18, W-A-19, W-A-20, W-B-01, W-B-02, W-B-03, W-B-04, W-B-05, W-B-06, W-C-01, W-C-02, W-C-03, W-C-04, W-C-05, W-C-06, W-C-07)
37,510	98	Paved parking, HSG C (1APRE)
4,700	98	Water Surface, HSG C (1APRE)
416,767	55	Woods, Good, HSG B (1APRE, 1BPRE)
885,226	**73**	**TOTAL AREA**

Soil Listing (all nodes)

Area (sq-ft)	Soil Group	Subcatchment Numbers
6,906	HSG A	W-A-03, W-A-11
836,110	HSG B	1APRE, 1BPRE, 1S, 2S, CB-B-06, W-A-01, W-A-02, W-A-03, W-A-04, W-A-05, W-A-06, W-A-07, W-A-08, W-A-09, W-A-10, W-A-11, W-A-13, W-A-14, W-A-15, W-A-17, W-A-18, W-A-19, W-A-20, W-B-01, W-B-02, W-B-03, W-B-04, W-B-05, W-B-06, W-C-01, W-C-02, W-C-03, W-C-04, W-C-05, W-C-06, W-C-07
42,210	HSG C	1APRE
0	HSG D	
0	Other	
885,226		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (sq-ft)	HSG-B (sq-ft)	HSG-C (sq-ft)	HSG-D (sq-ft)	Other (sq-ft)	Total (sq-ft)	Ground Cover	Sub Num
0	115,382	0	0	0	115,382	>75% Grass cover, Good	
6,906	303,961	37,510	0	0	348,377	Paved parking	
0	0	4,700	0	0	4,700	Water Surface	
0	416,767	0	0	0	416,767	Woods, Good	
6,906	**836,110**	**42,210**	**0**	**0**	**885,226**	**TOTAL AREA**	

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)
1	1P	591.19	590.55	57.3	0.0112	0.012	0.0	15.0	0.0
2	3P	594.00	593.00	100.0	0.0100	0.012	0.0	12.0	0.0
3	ADS 1A	591.00	576.00	282.0	0.0532	0.013	0.0	15.0	0.0
4	ADS 1B	585.50	575.00	83.0	0.1265	0.013	0.0	15.0	0.0
5	ADS1C	587.00	576.00	80.0	0.1375	0.013	0.0	15.0	0.0
6	CB-A-01	591.85	591.00	11.4	0.0746	0.012	0.0	30.0	0.0
7	CB-A-02	594.04	593.14	140.4	0.0064	0.012	0.0	15.0	0.0
8	CB-A-03	594.54	594.04	100.0	0.0050	0.012	0.0	15.0	0.0
9	CB-A-04	594.66	593.34	159.6	0.0083	0.012	0.0	18.0	0.0
10	CB-A-05	595.16	594.66	100.0	0.0050	0.012	0.0	15.0	0.0
11	CB-A-06	595.90	595.16	100.0	0.0074	0.012	0.0	15.0	0.0
12	CB-A-07	596.21	595.90	61.9	0.0050	0.012	0.0	15.0	0.0
13	CB-A-08	596.50	596.21	57.9	0.0050	0.012	0.0	15.0	0.0
14	CB-A-09	593.14	591.00	11.4	0.1877	0.012	0.0	24.0	0.0
15	CB-A-10	594.70	593.42	140.4	0.0091	0.012	0.0	15.0	0.0
16	CB-A-11	595.20	594.70	100.0	0.0050	0.012	0.0	12.0	0.0
17	CB-A-12	593.00	591.00	159.6	0.0125	0.012	0.0	15.0	0.0
18	CB-A-13	593.00	591.37	159.6	0.0102	0.012	0.0	12.0	0.0
19	CB-A-14	594.66	594.00	65.8	0.0100	0.012	0.0	12.0	0.0
20	CB-A-15	596.13	594.66	84.0	0.0175	0.012	0.0	12.0	0.0
21	CB-A-16	594.23	593.85	77.0	0.0049	0.012	0.0	12.0	0.0
22	CB-A-17	593.85	593.53	62.9	0.0051	0.012	0.0	15.0	0.0
23	CB-A-18	596.00	595.00	99.5	0.0101	0.012	0.0	12.0	0.0
24	CB-A-19	596.32	596.00	65.1	0.0049	0.012	0.0	12.0	0.0
25	CB-A-20	598.58	596.62	85.2	0.0230	0.012	0.0	12.0	0.0
26	CB-B-01	586.10	586.00	7.1	0.0141	0.012	0.0	24.0	0.0
27	CB-B-02	590.61	587.10	175.5	0.0200	0.012	0.0	12.0	0.0
28	CB-B-03	593.94	587.10	136.8	0.0500	0.012	0.0	12.0	0.0
29	CB-B-04	587.43	587.33	6.9	0.0145	0.012	0.0	24.0	0.0
30	CB-B-05	590.05	587.68	118.2	0.0201	0.012	0.0	21.0	0.0
31	CB-B-07	591.57	587.42	92.8	0.0447	0.012	0.0	21.0	0.0
32	CB-C-01	588.67	588.59	16.9	0.0047	0.013	0.0	15.0	0.0
33	CB-C-02	592.13	592.01	23.9	0.0050	0.013	0.0	15.0	0.0
34	CB-C-03	594.89	592.57	116.0	0.0200	0.012	0.0	15.0	0.0
35	CB-C-04	590.42	590.00	37.7	0.0111	0.013	0.0	21.0	0.0
36	CB-C-05	591.69	590.61	217.7	0.0050	0.013	0.0	18.0	0.0
37	CB-C-06	592.59	591.69	179.7	0.0050	0.013	0.0	15.0	0.0
38	CB-C-07	592.86	592.59	54.4	0.0050	0.013	0.0	15.0	0.0
39	CB-C-08	593.38	592.86	103.0	0.0050	0.013	0.0	15.0	0.0

Time span=0.00-30.00 hrs, dt=0.01 hrs, 3001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1APRE: WS #1A PRE Runoff Area=188,851 sf 22.35% Impervious Runoff Depth=0.75"
Flow Length=1,105' Tc=21.1 min CN=65 Runoff=2.10 cfs 11,834 cf

Subcatchment 1BPRE: WS #1B PRE Runoff Area=270,126 sf 0.00% Impervious Runoff Depth=0.35"
Flow Length=468' Tc=11.2 min CN=55 Runoff=0.99 cfs 7,783 cf

Subcatchment 1S: W-A-12 Runoff Area=6,257 sf 93.29% Impervious Runoff Depth=3.05"
Tc=6.0 min CN=96 Runoff=0.47 cfs 1,588 cf

Subcatchment 2S: W-A-16 Runoff Area=6,918 sf 46.04% Impervious Runoff Depth=1.50"
Tc=6.0 min CN=78 Runoff=0.28 cfs 863 cf

Subcatchment CB-B-06: W-B-06 Runoff Area=3,067 sf 58.98% Impervious Runoff Depth=1.86"
Tc=6.0 min CN=83 Runoff=0.15 cfs 475 cf

Subcatchment W-A-01: W-A-01 Runoff Area=73,223 sf 98.64% Impervious Runoff Depth=3.15"
Tc=6.0 min CN=97 Runoff=5.65 cfs 19,248 cf

Subcatchment W-A-02: W-A-02 Runoff Area=7,038 sf 98.05% Impervious Runoff Depth=3.15"
Tc=6.0 min CN=97 Runoff=0.54 cfs 1,850 cf

Subcatchment W-A-03: W-A-03 Runoff Area=3,322 sf 92.69% Impervious Runoff Depth=2.94"
Tc=6.0 min CN=95 Runoff=0.25 cfs 814 cf

Subcatchment W-A-04: W-A-04 Runoff Area=7,387 sf 97.25% Impervious Runoff Depth=3.15"
Tc=6.0 min CN=97 Runoff=0.57 cfs 1,942 cf

Subcatchment W-A-05: W-A-05 Runoff Area=11,393 sf 75.02% Impervious Runoff Depth=2.36"
Tc=6.0 min CN=89 Runoff=0.72 cfs 2,238 cf

Subcatchment W-A-06: W-A-06 Runoff Area=2,838 sf 81.57% Impervious Runoff Depth=2.54"
Tc=6.0 min CN=91 Runoff=0.19 cfs 601 cf

Subcatchment W-A-07: W-A-07 Runoff Area=3,550 sf 97.15% Impervious Runoff Depth=3.15"
Tc=6.0 min CN=97 Runoff=0.27 cfs 933 cf

Subcatchment W-A-08: W-A-08 Runoff Area=7,547 sf 80.23% Impervious Runoff Depth=2.54"
Tc=6.0 min CN=91 Runoff=0.51 cfs 1,598 cf

Subcatchment W-A-09: W-A-09 Runoff Area=36,960 sf 59.69% Impervious Runoff Depth=1.86"
Tc=6.0 min CN=83 Runoff=1.85 cfs 5,724 cf

Subcatchment W-A-10: W-A-10 Runoff Area=15,963 sf 37.75% Impervious Runoff Depth=1.30"
Tc=6.0 min CN=75 Runoff=0.54 cfs 1,732 cf

Subcatchment W-A-11: W-A-11 Runoff Area=12,670 sf 30.21% Impervious Runoff Depth=1.12"
Tc=6.0 min CN=72 Runoff=0.36 cfs 1,183 cf

Subcatchment W-A-13: W-A-13 Runoff Area=4,003 sf 96.38% Impervious Runoff Depth=3.15"
Tc=6.0 min CN=97 Runoff=0.31 cfs 1,052 cf

Subcatchment W-A-14: W-A-14 Runoff Area=3,669 sf 93.27% Impervious Runoff Depth=3.05"
Tc=6.0 min CN=96 Runoff=0.28 cfs 931 cf

Subcatchment W-A-15: W-A-15 Runoff Area=5,303 sf 67.21% Impervious Runoff Depth=2.10"
Tc=6.0 min CN=86 Runoff=0.30 cfs 927 cf

Subcatchment W-A-17: W-A-17 Runoff Area=9,324 sf 51.51% Impervious Runoff Depth=1.64"
Tc=6.0 min CN=80 Runoff=0.41 cfs 1,271 cf

Subcatchment W-A-18: W-A-18 Runoff Area=7,541 sf 68.92% Impervious Runoff Depth=2.10"
Tc=6.0 min CN=86 Runoff=0.43 cfs 1,319 cf

Subcatchment W-A-19: W-A-19 Runoff Area=6,221 sf 70.71% Impervious Runoff Depth=2.18"
Tc=6.0 min CN=87 Runoff=0.36 cfs 1,131 cf

Subcatchment W-A-20: W-A-20 Runoff Area=5,191 sf 33.40% Impervious Runoff Depth=1.18"
Tc=6.0 min CN=73 Runoff=0.16 cfs 510 cf

Subcatchment W-B-01: W-B-01 Runoff Area=25,740 sf 89.98% Impervious Runoff Depth=2.84"
Tc=6.0 min CN=94 Runoff=1.87 cfs 6,082 cf

Subcatchment W-B-02: W-B-02 Runoff Area=5,845 sf 96.34% Impervious Runoff Depth=3.15"
Tc=6.0 min CN=97 Runoff=0.45 cfs 1,536 cf

Subcatchment W-B-03: W-B-03 Runoff Area=934 sf 100.00% Impervious Runoff Depth=3.27"
Tc=6.0 min CN=98 Runoff=0.07 cfs 254 cf

Subcatchment W-B-04: W-B-04 Runoff Area=26,304 sf 55.58% Impervious Runoff Depth=1.78"
Tc=6.0 min CN=82 Runoff=1.26 cfs 3,907 cf

Subcatchment W-B-05: W-B-05 Runoff Area=8,016 sf 48.75% Impervious Runoff Depth=1.57"
Tc=6.0 min CN=79 Runoff=0.34 cfs 1,046 cf

Subcatchment W-B-06: W-B-06 Runoff Area=45,556 sf 50.38% Impervious Runoff Depth=1.64"
Tc=6.0 min CN=80 Runoff=2.00 cfs 6,212 cf

Subcatchment W-C-01: W-C-01 Runoff Area=17,846 sf 86.77% Impervious Runoff Depth=2.73"
Tc=6.0 min CN=93 Runoff=1.26 cfs 4,067 cf

Subcatchment W-C-02: W-C-02 Runoff Area=5,168 sf 100.00% Impervious Runoff Depth=3.27"
Tc=6.0 min CN=98 Runoff=0.40 cfs 1,407 cf

Subcatchment W-C-03: W-C-03 Runoff Area=539 sf 30.98% Impervious Runoff Depth=1.12"
Tc=6.0 min CN=72 Runoff=0.02 cfs 50 cf

Subcatchment W-C-04: W-C-04 Runoff Area=20,838 sf 80.92% Impervious Runoff Depth=2.54"
Tc=6.0 min CN=91 Runoff=1.40 cfs 4,413 cf

Subcatchment W-C-05: W-C-05 Runoff Area=9,630 sf 59.82% Impervious Runoff Depth=1.86"
Tc=6.0 min CN=83 Runoff=0.48 cfs 1,491 cf

Subcatchment W-C-06: W-C-06 Runoff Area=1,145 sf 47.07% Impervious Runoff Depth=1.50"
Tc=6.0 min CN=78 Runoff=0.05 cfs 143 cf

Subcatchment W-C-07: W-C-07 Runoff Area=19,303 sf 83.90% Impervious Runoff Depth=2.64"
Tc=6.0 min CN=92 Runoff=1.33 cfs 4,241 cf

Reach DP1POST: DP1 POST Inflow=0.00 cfs 0 cf
Outflow=0.00 cfs 0 cf

Reach DP1PRE: DP1 PRE Inflow=3.09 cfs 19,617 cf
Outflow=3.09 cfs 19,617 cf

Pond 1P: CB-B-06 Peak Elev=591.37' Inflow=0.15 cfs 475 cf
15.0" Round Culvert n=0.012 L=57.3' S=0.0112 '/' Outflow=0.15 cfs 475 cf

Pond 3P: CB-A-13 Peak Elev=594.63' Inflow=0.89 cfs 2,911 cf
12.0" Round Culvert n=0.012 L=100.0' S=0.0100 '/' Outflow=0.89 cfs 2,911 cf

Pond ADS 1A: ADS 1A Peak Elev=591.52' Storage=15,277 cf Inflow=14.43 cfs 47,457 cf
Discarded=1.68 cfs 47,463 cf Primary=0.00 cfs 0 cf Outflow=1.68 cfs 47,463 cf

Pond ADS 1B: ADS 1B Peak Elev=586.31' Storage=7,143 cf Inflow=6.14 cfs 19,514 cf
Discarded=0.57 cfs 19,521 cf Primary=0.00 cfs 0 cf Outflow=0.57 cfs 19,521 cf

Pond ADS1C: ADS 1C Peak Elev=587.93' Storage=5,924 cf Inflow=4.94 cfs 15,813 cf
Discarded=0.43 cfs 17,057 cf Primary=0.00 cfs 0 cf Outflow=0.43 cfs 17,057 cf

Pond CB-A-01: CB-A-01 Peak Elev=593.05' Inflow=8.69 cfs 29,224 cf
30.0" Round Culvert n=0.012 L=11.4' S=0.0746 '/' Outflow=8.69 cfs 29,224 cf

Pond CB-A-02: CB-A-02 Peak Elev=594.48' Inflow=0.79 cfs 2,664 cf
15.0" Round Culvert n=0.012 L=140.4' S=0.0064 '/' Outflow=0.79 cfs 2,664 cf

Pond CB-A-03: CB-A-03 Peak Elev=594.83' Inflow=0.25 cfs 814 cf
15.0" Round Culvert n=0.012 L=100.0' S=0.0050 '/' Outflow=0.25 cfs 814 cf

Pond CB-A-04: CB-A-04 Peak Elev=595.35' Inflow=2.25 cfs 7,312 cf
18.0" Round Culvert n=0.012 L=159.6' S=0.0083 '/' Outflow=2.25 cfs 7,312 cf

Pond CB-A-05: CB-A-05 Peak Elev=595.91' Inflow=1.68 cfs 5,370 cf
15.0" Round Culvert n=0.012 L=100.0' S=0.0050 '/' Outflow=1.68 cfs 5,370 cf

Pond CB-A-06: CB-A-06 Peak Elev=596.45' Inflow=0.97 cfs 3,132 cf
15.0" Round Culvert n=0.012 L=100.0' S=0.0074 '/' Outflow=0.97 cfs 3,132 cf

Pond CB-A-07: CB-A-07 Peak Elev=596.74' Inflow=0.78 cfs 2,531 cf
15.0" Round Culvert n=0.012 L=61.9' S=0.0050 '/' Outflow=0.78 cfs 2,531 cf

Pond CB-A-08: CB-A-08 Peak Elev=596.94' Inflow=0.51 cfs 1,598 cf
15.0" Round Culvert n=0.012 L=57.9' S=0.0050 '/' Outflow=0.51 cfs 1,598 cf

Pond CB-A-09: CB-A-09 Peak Elev=594.00' Inflow=4.11 cfs 13,138 cf
24.0" Round Culvert n=0.012 L=11.4' S=0.1877 '/' Outflow=4.11 cfs 13,138 cf

Pond CB-A-10: CB-A-10 Peak Elev=595.15' Inflow=0.90 cfs 2,915 cf
15.0" Round Culvert n=0.012 L=140.4' S=0.0091 '/' Outflow=0.90 cfs 2,915 cf

Pond CB-A-11: CB-A-11 Peak Elev=595.57' Inflow=0.36 cfs 1,183 cf
12.0" Round Culvert n=0.012 L=100.0' S=0.0050 '/' Outflow=0.36 cfs 1,183 cf

Pond CB-A-12: CB-A-12 Peak Elev=593.62' Inflow=1.63 cfs 5,095 cf
15.0" Round Culvert n=0.012 L=159.6' S=0.0125 '/' Outflow=1.63 cfs 5,095 cf

Pond CB-A-13: CB-A-12 Peak Elev=594.25' Inflow=1.36 cfs 4,499 cf
12.0" Round Culvert n=0.012 L=159.6' S=0.0102 '/' Outflow=1.36 cfs 4,499 cf

Pond CB-A-14: CB-A-14 Peak Elev=595.09' Inflow=0.58 cfs 1,858 cf
12.0" Round Culvert n=0.012 L=65.8' S=0.0100 '/' Outflow=0.58 cfs 1,858 cf

Pond CB-A-15: CB-A-15 Peak Elev=596.40' Inflow=0.30 cfs 927 cf
12.0" Round Culvert n=0.012 L=84.0' S=0.0175 '/' Outflow=0.30 cfs 927 cf

Pond CB-A-16: CB-A-16 Peak Elev=594.67' Inflow=0.28 cfs 863 cf
12.0" Round Culvert n=0.012 L=77.0' S=0.0049 '/' Outflow=0.28 cfs 863 cf

Pond CB-A-17: CB-A-17 Peak Elev=594.56' Inflow=1.63 cfs 5,095 cf
15.0" Round Culvert n=0.012 L=62.9' S=0.0051 '/' Outflow=1.63 cfs 5,095 cf

Pond CB-A-18: CB-A-18 Peak Elev=596.50' Inflow=0.95 cfs 2,960 cf
12.0" Round Culvert n=0.012 L=99.5' S=0.0101 '/' Outflow=0.95 cfs 2,960 cf

Pond CB-A-19: CB-A-19 Peak Elev=596.78' Inflow=0.52 cfs 1,642 cf
12.0" Round Culvert n=0.012 L=65.1' S=0.0049 '/' Outflow=0.52 cfs 1,642 cf

Pond CB-A-20: CB-A-20 Peak Elev=598.77' Inflow=0.16 cfs 510 cf
12.0" Round Culvert n=0.012 L=85.2' S=0.0230 '/' Outflow=0.16 cfs 510 cf

Pond CB-B-01: CB-B-01 Peak Elev=586.84' Inflow=2.39 cfs 7,873 cf
24.0" Round Culvert n=0.012 L=7.1' S=0.0141 '/' Outflow=2.39 cfs 7,873 cf

Pond CB-B-02: CB-B-02 Peak Elev=590.94' Inflow=0.45 cfs 1,536 cf
12.0" Round Culvert n=0.012 L=175.5' S=0.0200 '/' Outflow=0.45 cfs 1,536 cf

Pond CB-B-03: CB-B-03 Peak Elev=594.07' Inflow=0.07 cfs 254 cf
12.0" Round Culvert n=0.012 L=136.8' S=0.0500 '/' Outflow=0.07 cfs 254 cf

Pond CB-B-04: CB-B-04 Peak Elev=588.39' Inflow=3.75 cfs 11,641 cf
24.0" Round Culvert n=0.012 L=6.9' S=0.0145 '/' Outflow=3.75 cfs 11,641 cf

Pond CB-B-05: CB-B-05 Peak Elev=590.34' Inflow=0.49 cfs 1,521 cf
21.0" Round Culvert n=0.012 L=118.2' S=0.0201 '/' Outflow=0.49 cfs 1,521 cf

Pond CB-B-07: CB-B-07 Peak Elev=592.18' Inflow=2.00 cfs 6,212 cf
21.0" Round Culvert n=0.012 L=92.8' S=0.0447 '/' Outflow=2.00 cfs 6,212 cf

Pond CB-C-01: CB-C-01 Peak Elev=589.33' Inflow=1.26 cfs 4,067 cf
15.0" Round Culvert n=0.013 L=16.9' S=0.0047 '/' Outflow=1.26 cfs 4,067 cf

Pond CB-C-02: CB-C-02 Peak Elev=592.49' Inflow=0.42 cfs 1,457 cf
15.0" Round Culvert n=0.013 L=23.9' S=0.0050 '/' Outflow=0.42 cfs 1,457 cf

Pond CB-C-03: CB-C-03 Peak Elev=594.95' Inflow=0.02 cfs 50 cf
15.0" Round Culvert n=0.012 L=116.0' S=0.0200 '/' Outflow=0.02 cfs 50 cf

Pond CB-C-04: CB-C-04 Peak Elev=591.25' Inflow=3.25 cfs 10,288 cf
21.0" Round Culvert n=0.013 L=37.7' S=0.0111 '/' Outflow=3.25 cfs 10,288 cf

Pond CB-C-05: CB-C-05 Peak Elev=592.41' Inflow=1.86 cfs 5,876 cf
18.0" Round Culvert n=0.013 L=217.7' S=0.0050 '/' Outflow=1.86 cfs 5,876 cf

Pond CB-C-06: CB-C-06 Peak Elev=593.27' Inflow=1.38 cfs 4,384 cf
15.0" Round Culvert n=0.013 L=179.7' S=0.0050 '/' Outflow=1.38 cfs 4,384 cf

Pond CB-C-07: CB-C-07 Peak Elev=593.59' Inflow=1.38 cfs 4,384 cf
15.0" Round Culvert n=0.013 L=54.4' S=0.0050 '/' Outflow=1.38 cfs 4,384 cf

Pond CB-C-08: CB-C-08 Peak Elev=594.08' Inflow=1.33 cfs 4,241 cf
15.0" Round Culvert n=0.013 L=103.0' S=0.0050 '/' Outflow=1.33 cfs 4,241 cf

Total Runoff Area = 885,226 sf Runoff Volume = 102,401 cf Average Runoff Depth = 1.39"
60.11% Pervious = 532,149 sf 39.89% Impervious = 353,077 sf

Summary for Subcatchment 1APRE: WS #1A PRE

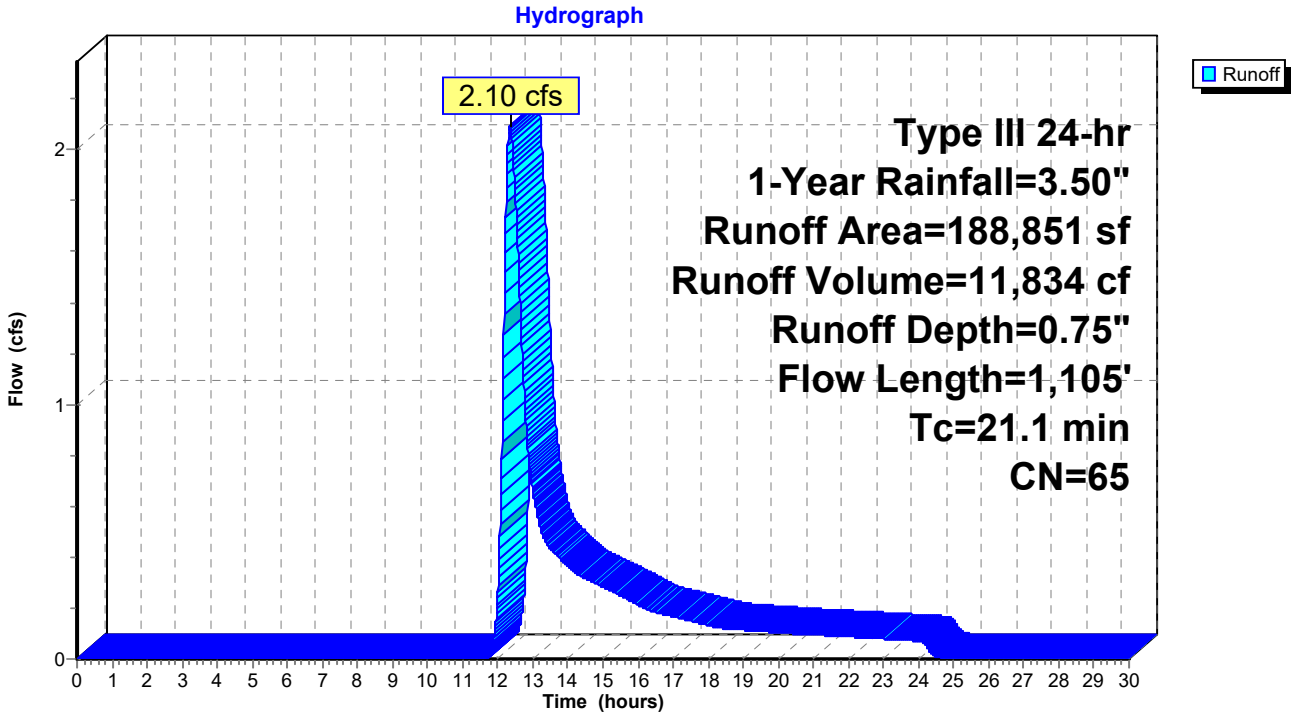
Runoff = 2.10 cfs @ 12.35 hrs, Volume= 11,834 cf, Depth= 0.75"
Routed to Reach DP1PRE : DP1 PRE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
146,641	55	Woods, Good, HSG B
37,510	98	Paved parking, HSG C
4,700	98	Water Surface, HSG C
188,851	65	Weighted Average
146,641		77.65% Pervious Area
42,210		22.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.5	100	0.0900	0.16		**Sheet Flow, SHEET FLOW BY 208 & MVR** Woods: Light underbrush n= 0.400 P2= 4.00"
4.3	545	0.0200	2.12		**Shallow Concentrated Flow, SHALLOW FLOW TO LAST OFFICE** Grassed Waterway Kv= 15.0 fps
6.3	460	0.0600	1.22		**Shallow Concentrated Flow, SHALLOW FLOW OFFICE TO DP1A** Woodland Kv= 5.0 fps
21.1	1,105	Total			

Subcatchment 1APRE: WS #1A PRE



Summary for Subcatchment 1BPRE: WS #1B PRE

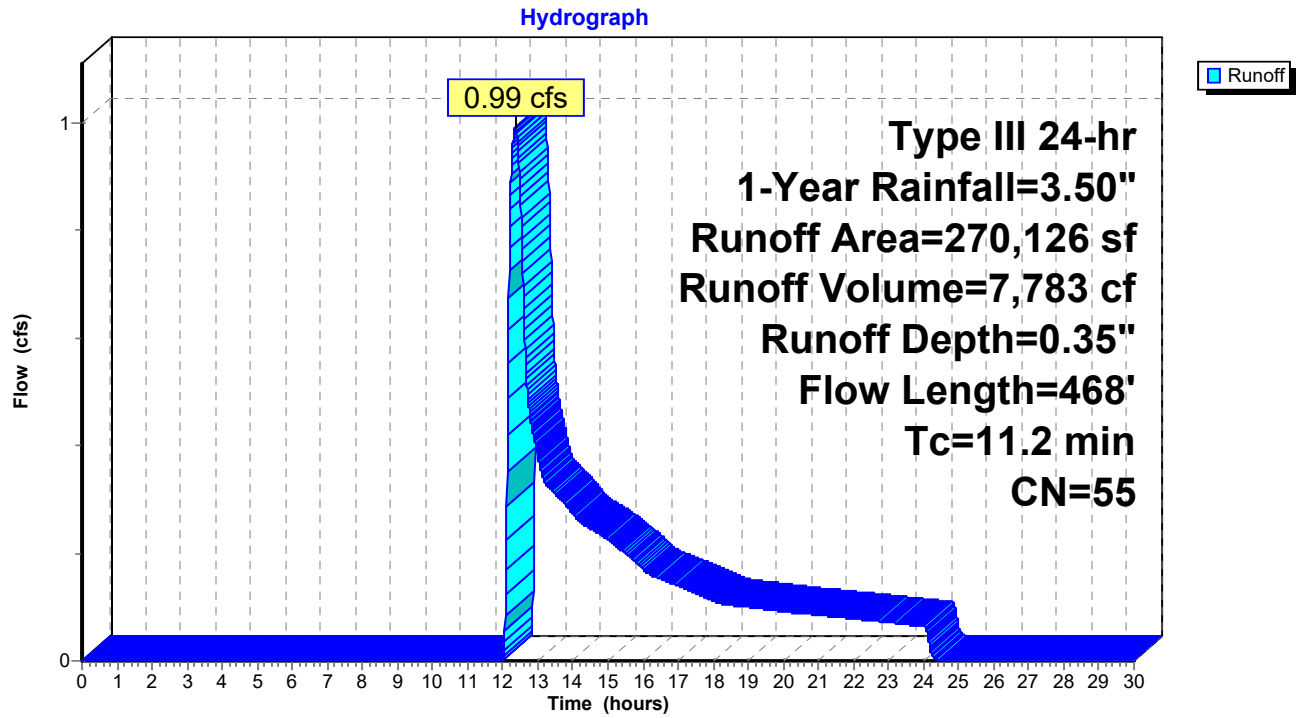
Runoff = 0.99 cfs @ 12.36 hrs, Volume= 7,783 cf, Depth= 0.35"
Routed to Reach DP1PRE : DP1 PRE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
270,126	55	Woods, Good, HSG B
270,126		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	100	0.2500	0.24		**Sheet Flow, SHEET FLOW BY 208** Woods: Light underbrush n= 0.400 P2= 4.00"
4.2	368	0.0870	1.47		**Shallow Concentrated Flow, SHALLOW FLOW TO DP1B** Woodland Kv= 5.0 fps
11.2	468	Total			

Subcatchment 1BPRE: WS #1B PRE



Summary for Subcatchment 1S: W-A-12

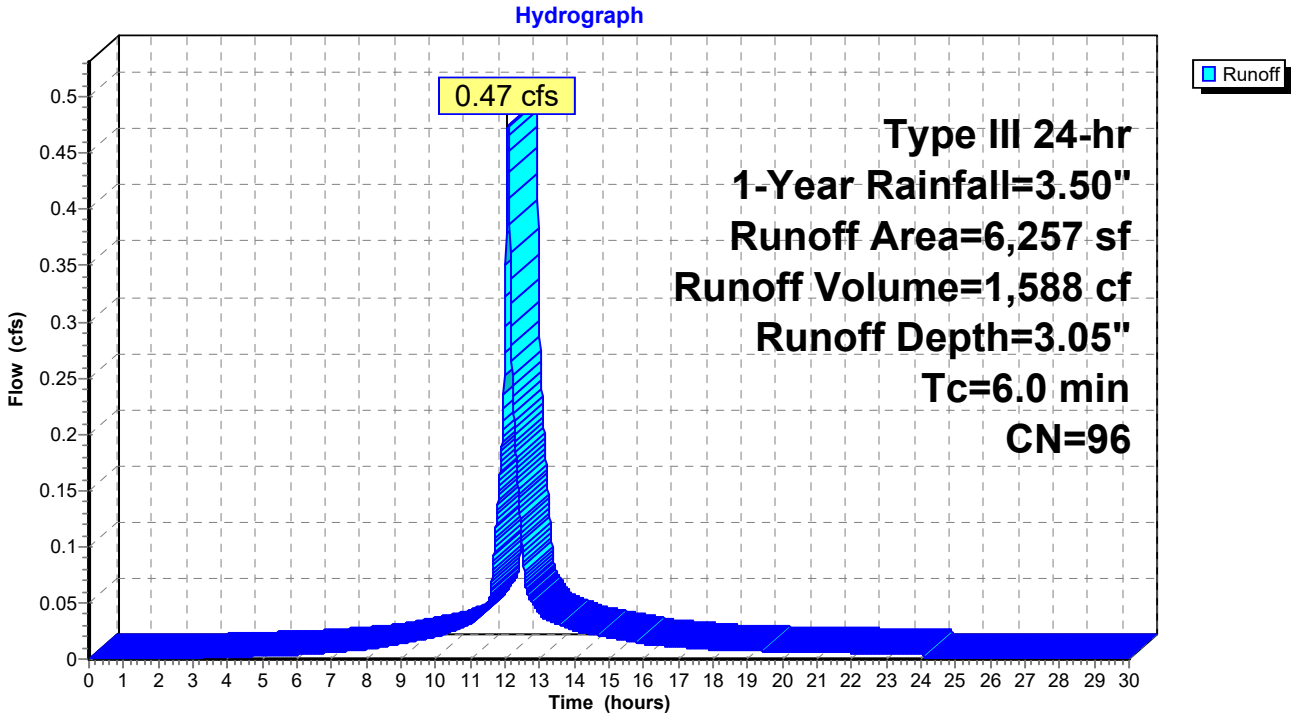
Runoff = 0.47 cfs @ 12.08 hrs, Volume= 1,588 cf, Depth= 3.05"
Routed to Pond CB-A-13 : CB-A-12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
420	61	>75% Grass cover, Good, HSG B
5,837	98	Paved parking, HSG B
6,257	96	Weighted Average
420		6.71% Pervious Area
5,837		93.29% Impervious Area

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

Subcatchment 1S: W-A-12



Summary for Subcatchment 2S: W-A-16

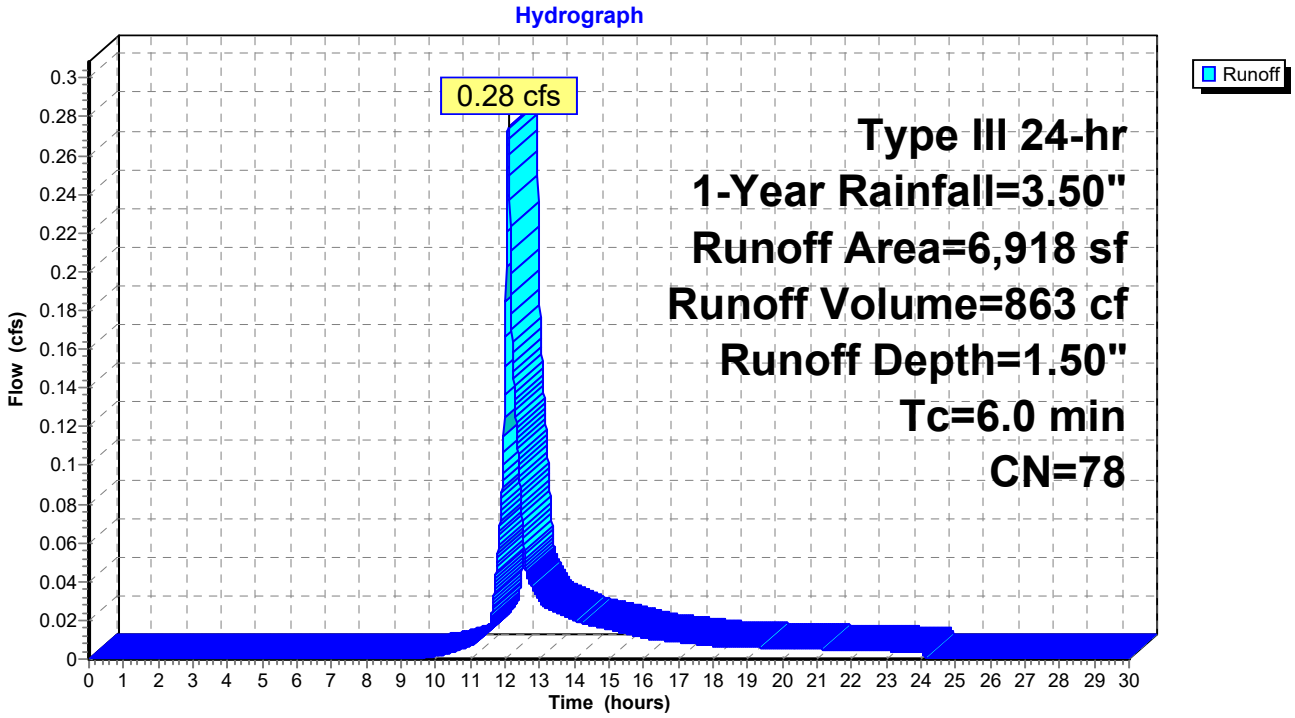
Runoff = 0.28 cfs @ 12.09 hrs, Volume= 863 cf, Depth= 1.50"
Routed to Pond CB-A-16 : CB-A-16

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
3,733	61	>75% Grass cover, Good, HSG B
3,185	98	Paved parking, HSG B
6,918	78	Weighted Average
3,733		53.96% Pervious Area
3,185		46.04% Impervious Area

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

Subcatchment 2S: W-A-16



Summary for Subcatchment CB-B-06: W-B-06

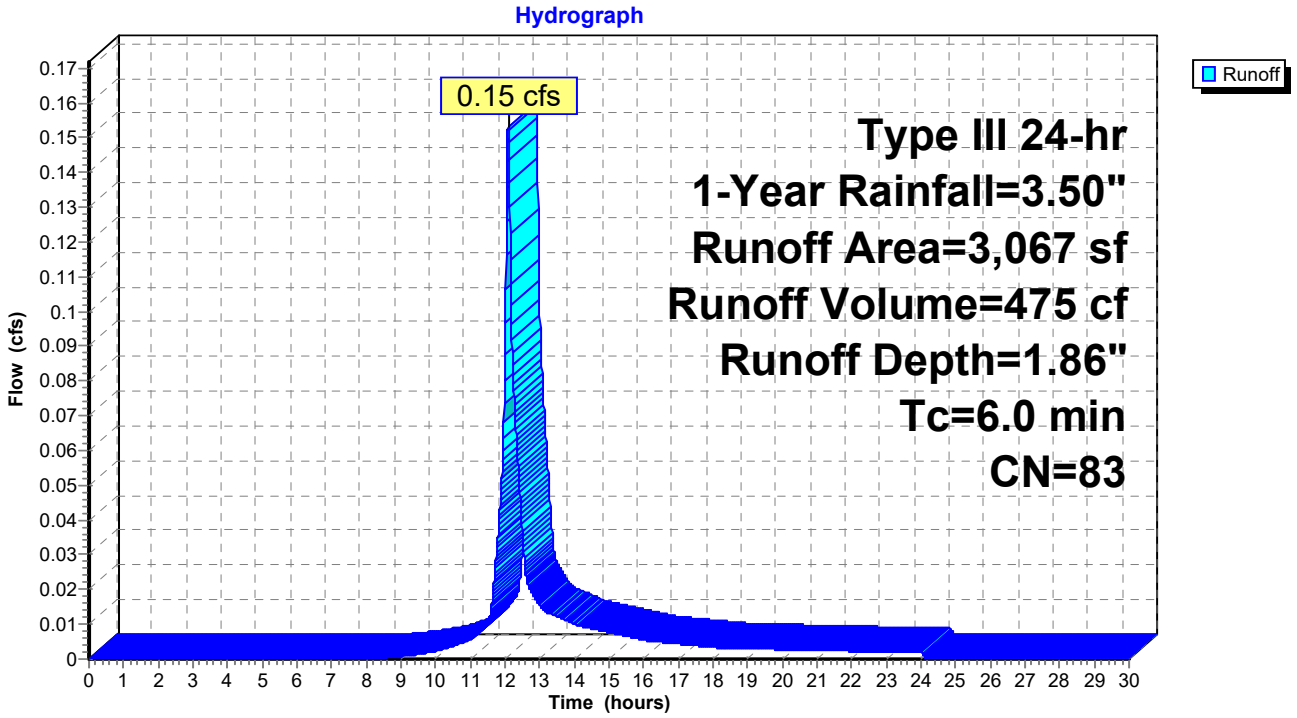
Runoff = 0.15 cfs @ 12.09 hrs, Volume= 475 cf, Depth= 1.86"
Routed to Pond 1P : CB-B-06

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
1,258	61	>75% Grass cover, Good, HSG B
1,809	98	Paved parking, HSG B
3,067	83	Weighted Average
1,258		41.02% Pervious Area
1,809		58.98% Impervious Area

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

Subcatchment CB-B-06: W-B-06



Summary for Subcatchment W-A-01: W-A-01

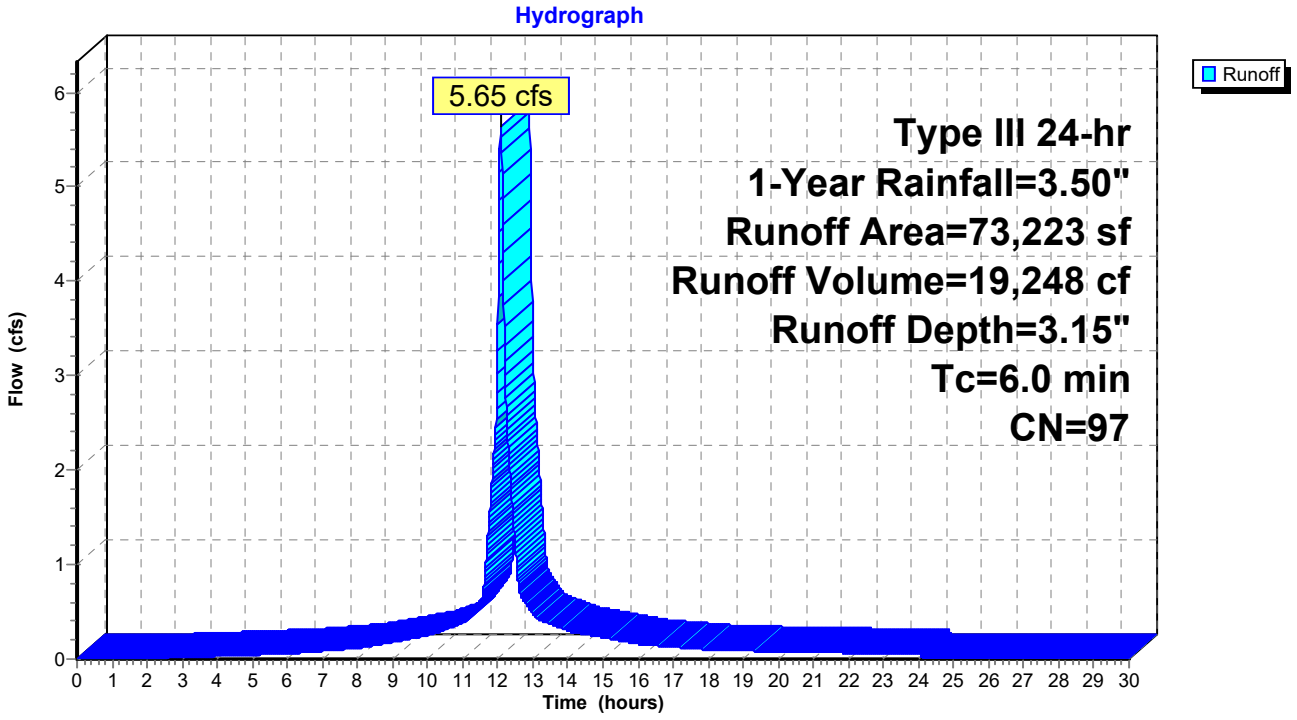
Runoff = 5.65 cfs @ 12.08 hrs, Volume= 19,248 cf, Depth= 3.15"
Routed to Pond CB-A-01 : CB-A-01

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
994	61	>75% Grass cover, Good, HSG B
72,229	98	Paved parking, HSG B
73,223	97	Weighted Average
994		1.36% Pervious Area
72,229		98.64% Impervious Area

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

Subcatchment W-A-01: W-A-01



Summary for Subcatchment W-A-02: W-A-02

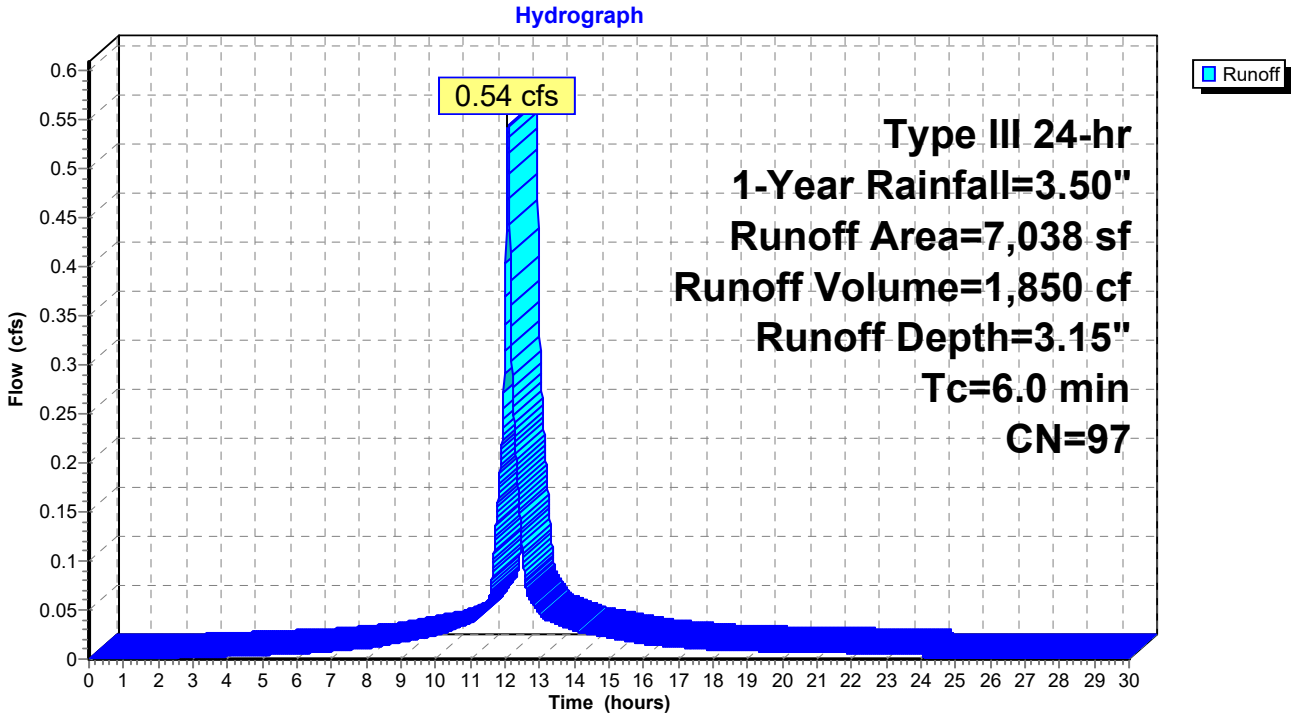
Runoff = 0.54 cfs @ 12.08 hrs, Volume= 1,850 cf, Depth= 3.15"
Routed to Pond CB-A-02 : CB-A-02

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
137	61	>75% Grass cover, Good, HSG B
6,901	98	Paved parking, HSG B
7,038	97	Weighted Average
137		1.95% Pervious Area
6,901		98.05% Impervious Area

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

Subcatchment W-A-02: W-A-02



Summary for Subcatchment W-A-03: W-A-03

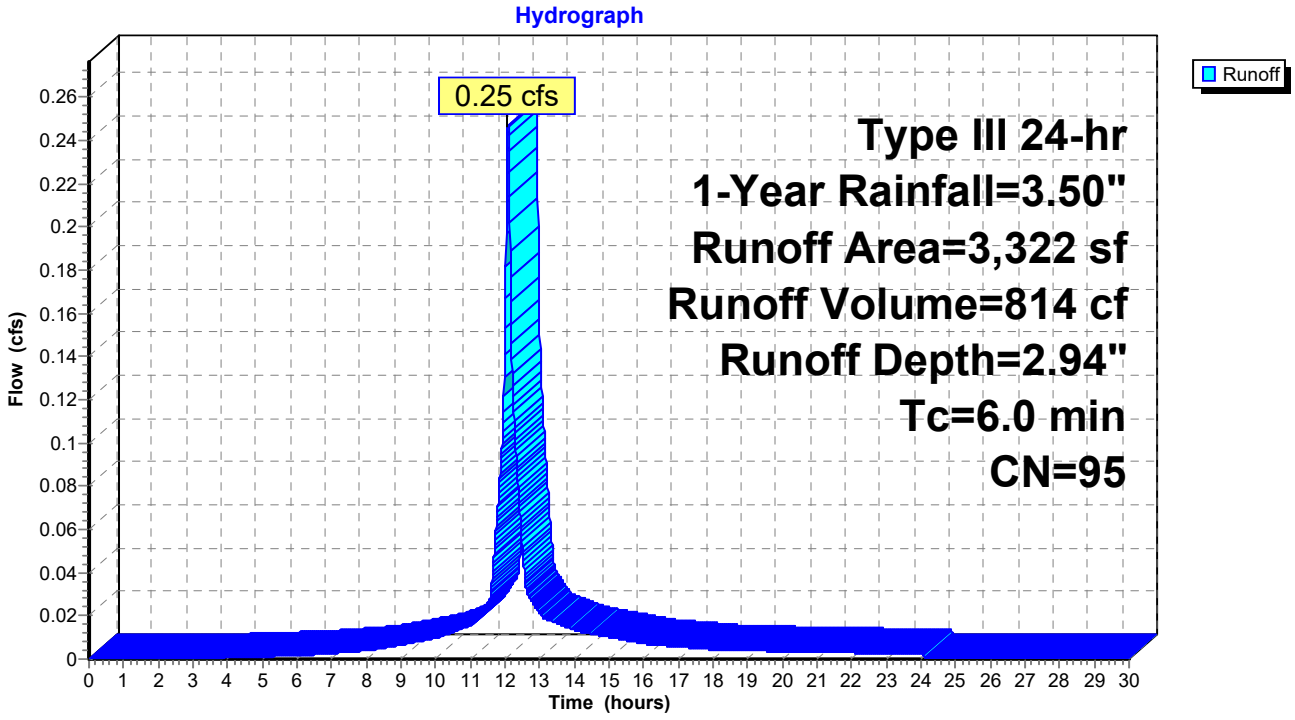
Runoff = 0.25 cfs @ 12.08 hrs, Volume= 814 cf, Depth= 2.94"
Routed to Pond CB-A-03 : CB-A-03

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
243	61	>75% Grass cover, Good, HSG B
3,079	98	Paved parking, HSG A
3,322	95	Weighted Average
243		7.31% Pervious Area
3,079		92.69% Impervious Area

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

Subcatchment W-A-03: W-A-03



Summary for Subcatchment W-A-04: W-A-04

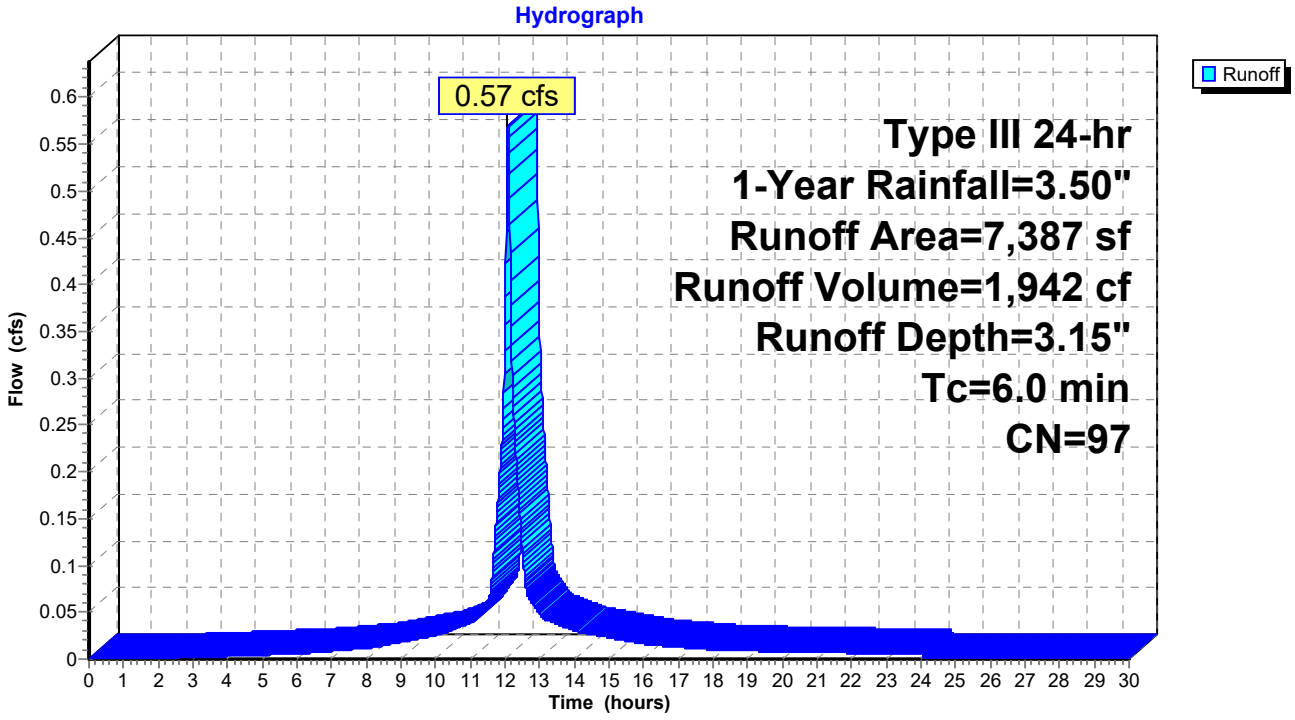
Runoff = 0.57 cfs @ 12.08 hrs, Volume= 1,942 cf, Depth= 3.15"
Routed to Pond CB-A-04 : CB-A-04

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
203	61	>75% Grass cover, Good, HSG B
7,184	98	Paved parking, HSG B
7,387	97	Weighted Average
203		2.75% Pervious Area
7,184		97.25% Impervious Area

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

Subcatchment W-A-04: W-A-04



Summary for Subcatchment W-A-05: W-A-05

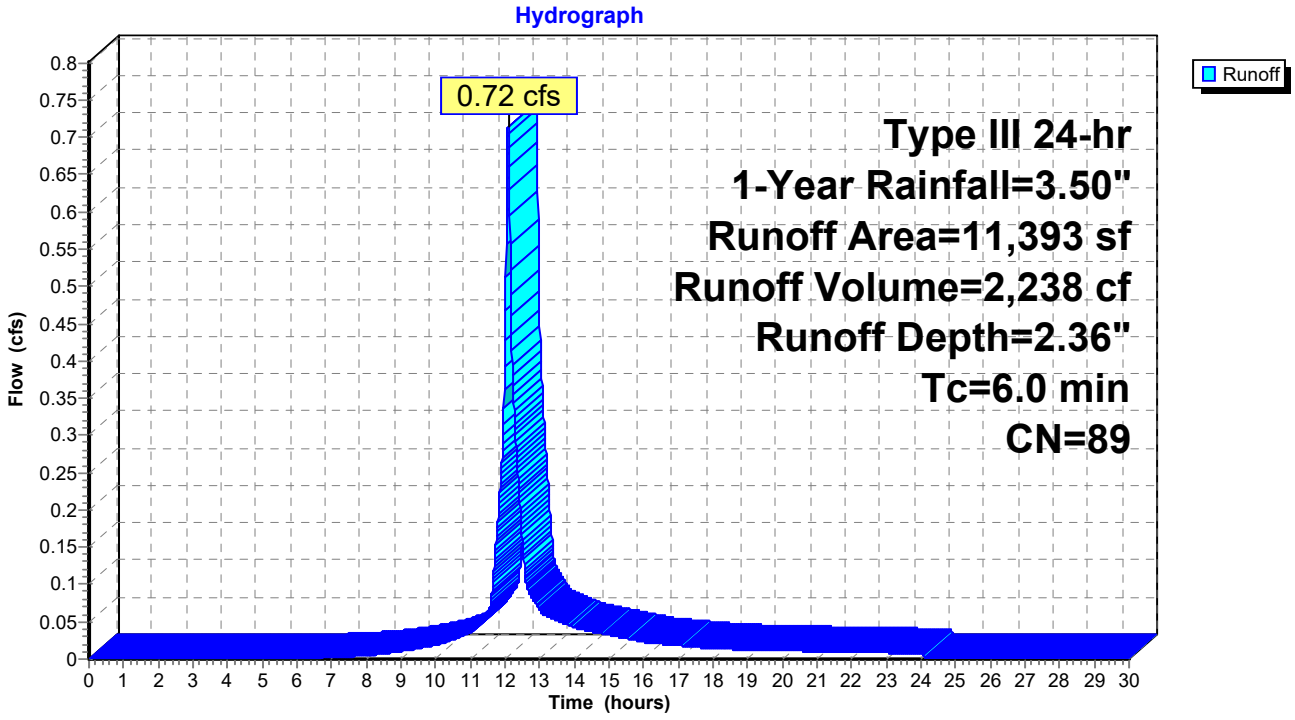
Runoff = 0.72 cfs @ 12.09 hrs, Volume= 2,238 cf, Depth= 2.36"
Routed to Pond CB-A-05 : CB-A-05

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
2,846	61	>75% Grass cover, Good, HSG B
8,547	98	Paved parking, HSG B
11,393	89	Weighted Average
2,846		24.98% Pervious Area
8,547		75.02% Impervious Area

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

Subcatchment W-A-05: W-A-05



Summary for Subcatchment W-A-06: W-A-06

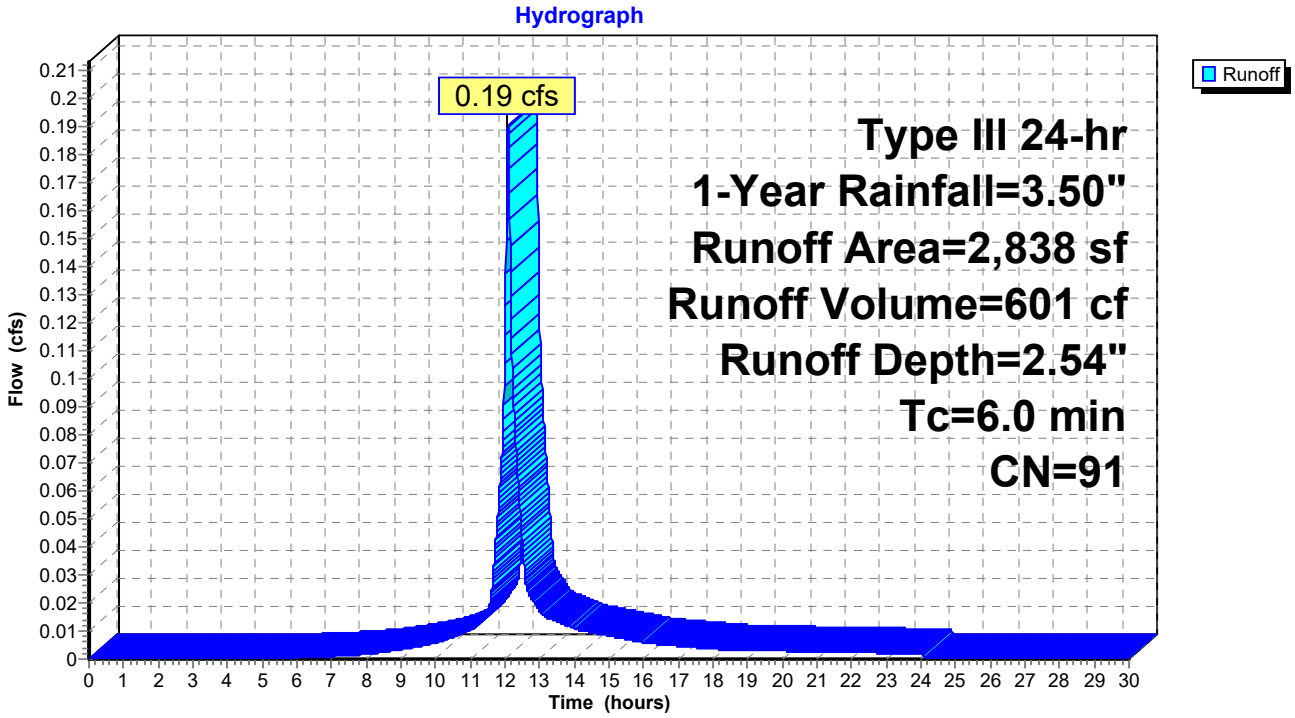
Runoff = 0.19 cfs @ 12.09 hrs, Volume= 601 cf, Depth= 2.54"
Routed to Pond CB-A-06 : CB-A-06

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
523	61	>75% Grass cover, Good, HSG B
2,315	98	Paved parking, HSG B
2,838	91	Weighted Average
523		18.43% Pervious Area
2,315		81.57% Impervious Area

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

Subcatchment W-A-06: W-A-06



Summary for Subcatchment W-A-07: W-A-07

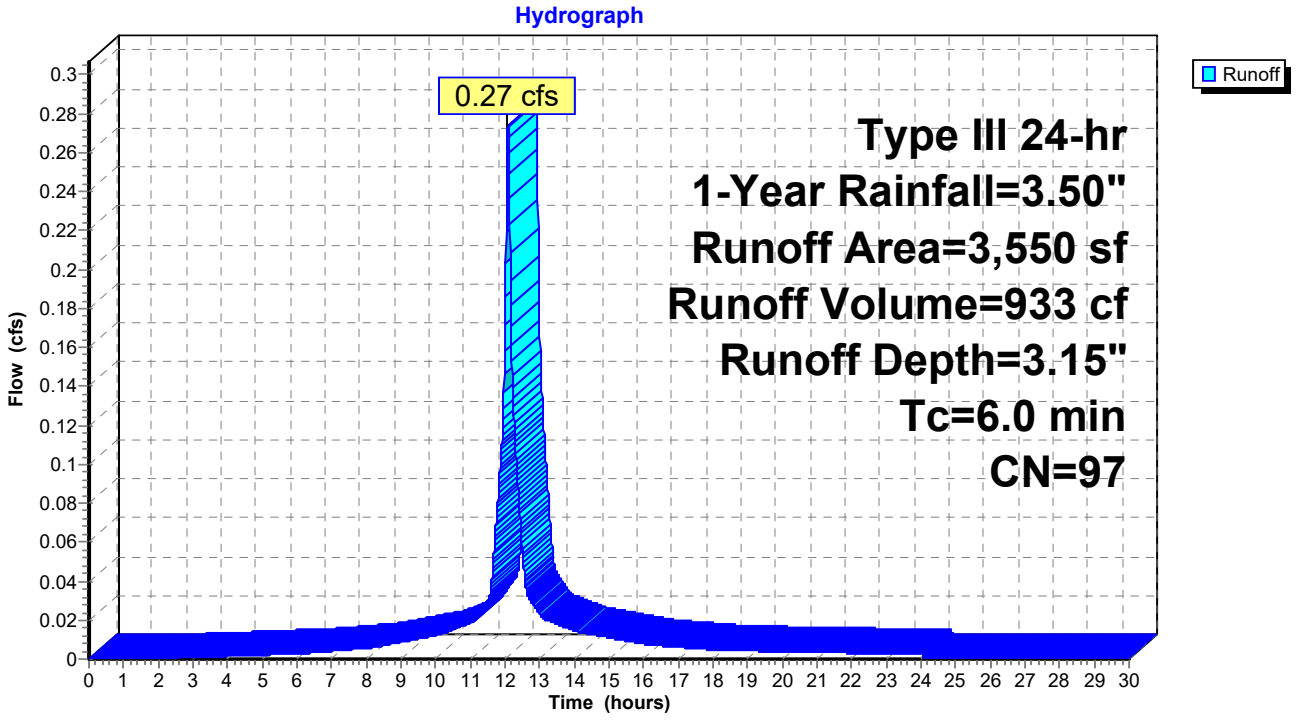
Runoff = 0.27 cfs @ 12.08 hrs, Volume= 933 cf, Depth= 3.15"
Routed to Pond CB-A-07 : CB-A-07

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
101	61	>75% Grass cover, Good, HSG B
3,449	98	Paved parking, HSG B
3,550	97	Weighted Average
101		2.85% Pervious Area
3,449		97.15% Impervious Area

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

Subcatchment W-A-07: W-A-07



Summary for Subcatchment W-A-08: W-A-08

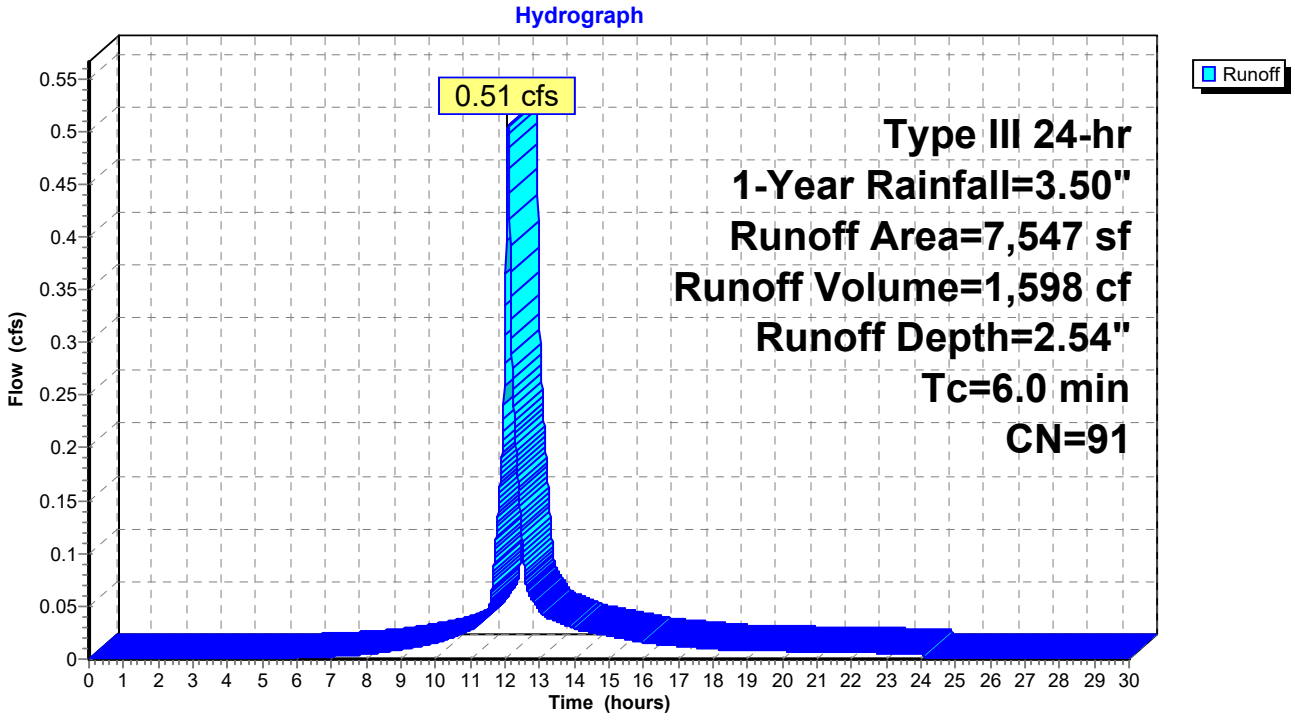
Runoff = 0.51 cfs @ 12.09 hrs, Volume= 1,598 cf, Depth= 2.54"
Routed to Pond CB-A-08 : CB-A-08

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
1,492	61	>75% Grass cover, Good, HSG B
6,055	98	Paved parking, HSG B
7,547	91	Weighted Average
1,492		19.77% Pervious Area
6,055		80.23% Impervious Area

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

Subcatchment W-A-08: W-A-08



Summary for Subcatchment W-A-09: W-A-09

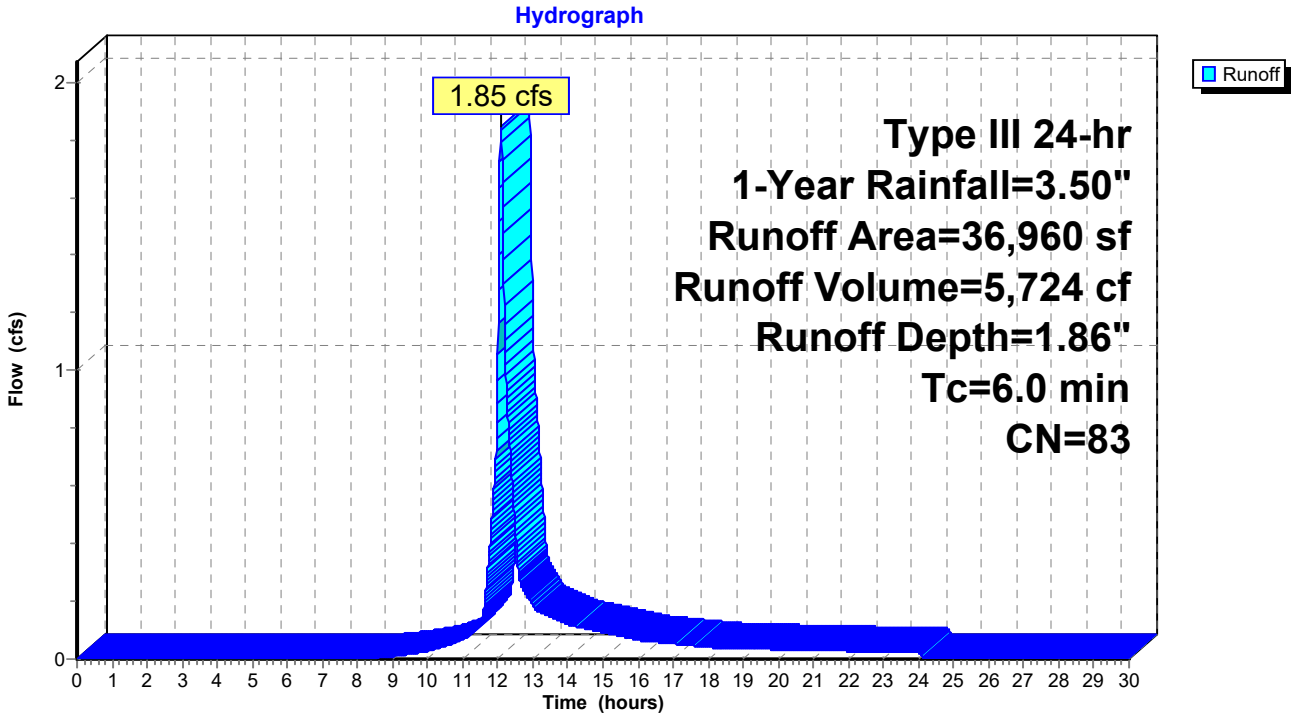
Runoff = 1.85 cfs @ 12.09 hrs, Volume= 5,724 cf, Depth= 1.86"
Routed to Pond CB-A-09 : CB-A-09

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
14,898	61	>75% Grass cover, Good, HSG B
22,062	98	Paved parking, HSG B
36,960	83	Weighted Average
14,898		40.31% Pervious Area
22,062		59.69% Impervious Area

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

Subcatchment W-A-09: W-A-09



Summary for Subcatchment W-A-10: W-A-10

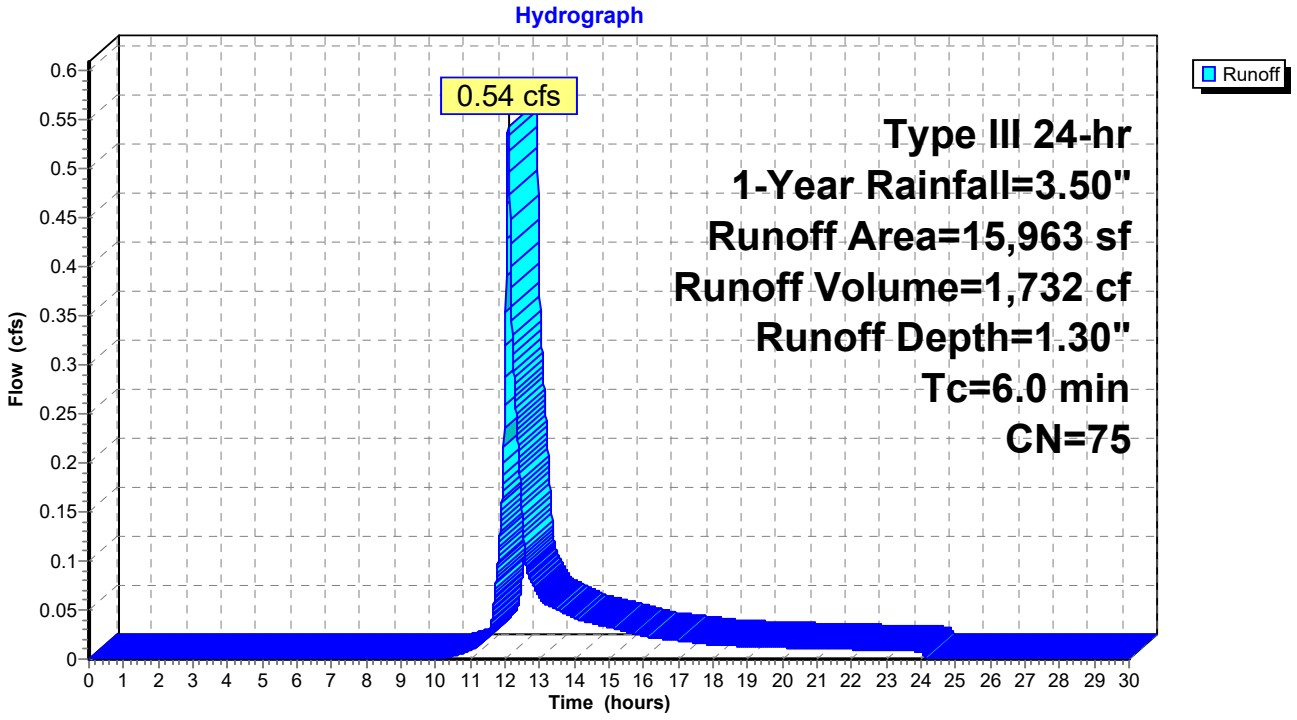
Runoff = 0.54 cfs @ 12.09 hrs, Volume= 1,732 cf, Depth= 1.30"
Routed to Pond CB-A-10 : CB-A-10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
9,937	61	>75% Grass cover, Good, HSG B
6,026	98	Paved parking, HSG B
15,963	75	Weighted Average
9,937		62.25% Pervious Area
6,026		37.75% Impervious Area

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

Subcatchment W-A-10: W-A-10



Summary for Subcatchment W-A-11: W-A-11

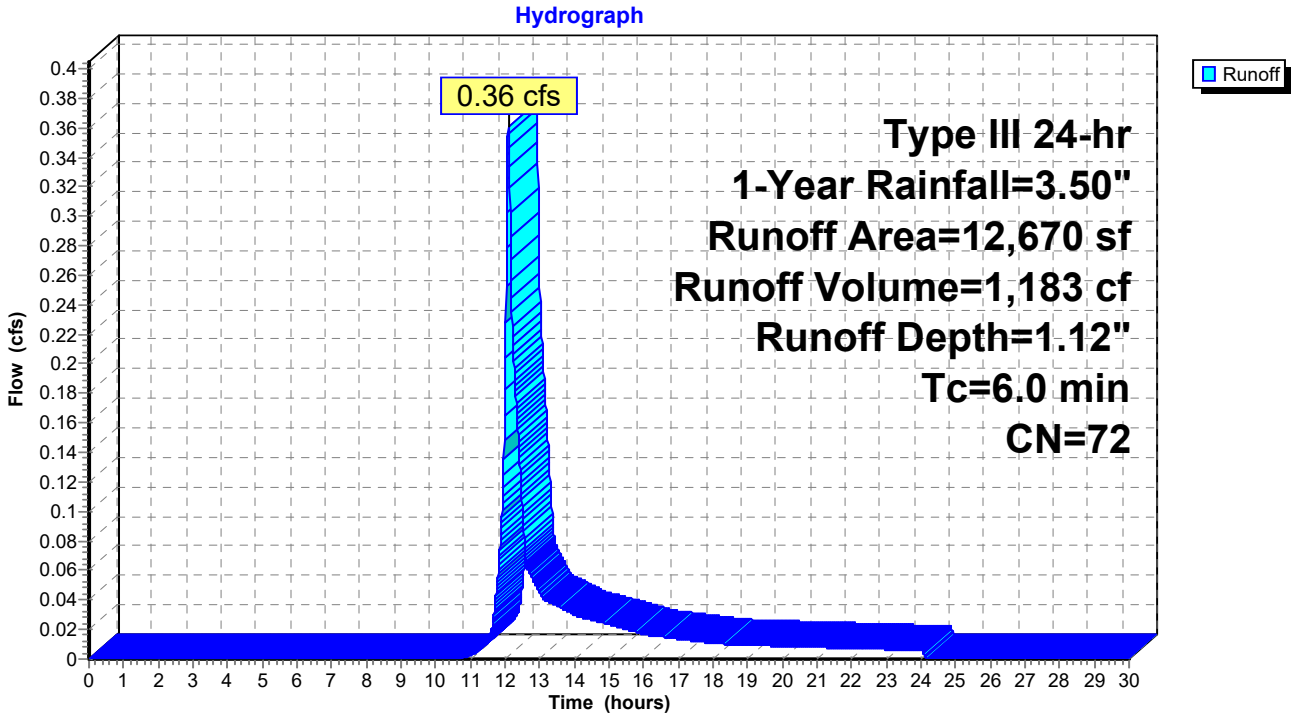
Runoff = 0.36 cfs @ 12.10 hrs, Volume= 1,183 cf, Depth= 1.12"
Routed to Pond CB-A-11 : CB-A-11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
8,843	61	>75% Grass cover, Good, HSG B
3,827	98	Paved parking, HSG A
12,670	72	Weighted Average
8,843		69.79% Pervious Area
3,827		30.21% Impervious Area

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

Subcatchment W-A-11: W-A-11



Summary for Subcatchment W-A-13: W-A-13

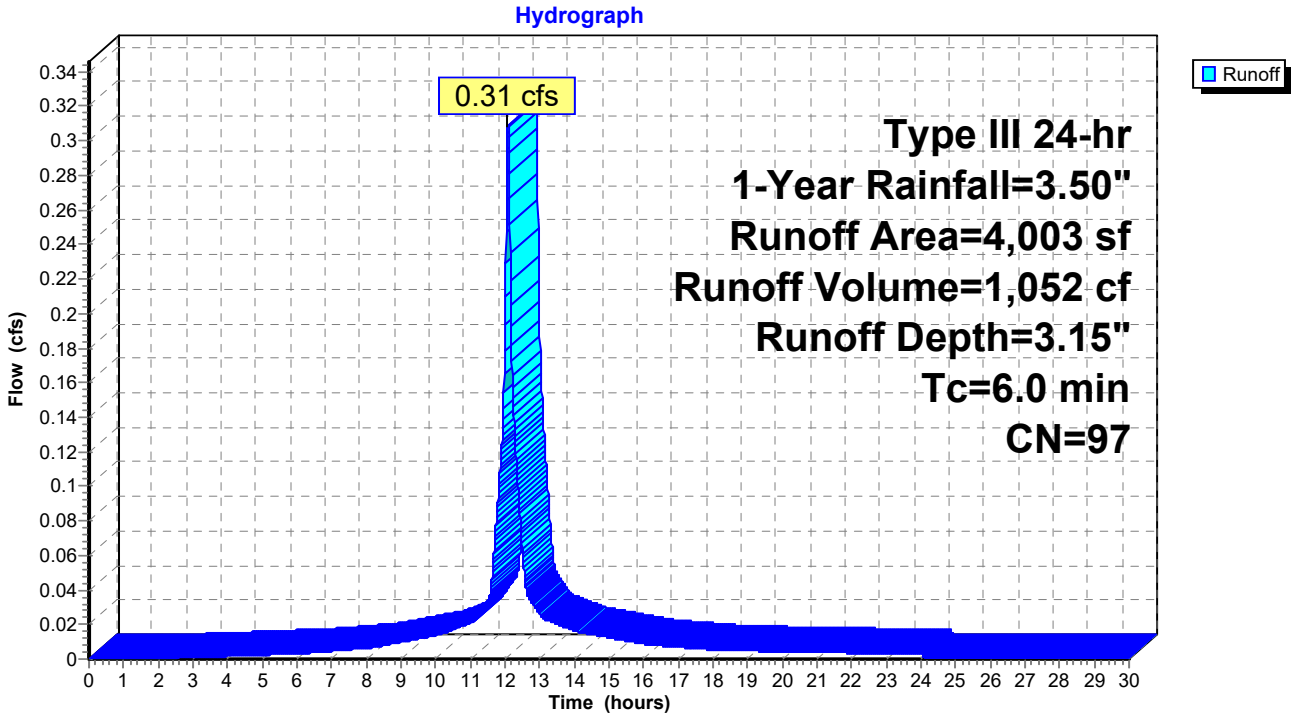
Runoff = 0.31 cfs @ 12.08 hrs, Volume= 1,052 cf, Depth= 3.15"
Routed to Pond 3P : CB-A-13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
145	61	>75% Grass cover, Good, HSG B
3,858	98	Paved parking, HSG B
4,003	97	Weighted Average
145		3.62% Pervious Area
3,858		96.38% Impervious Area

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

Subcatchment W-A-13: W-A-13



Summary for Subcatchment W-A-14: W-A-14

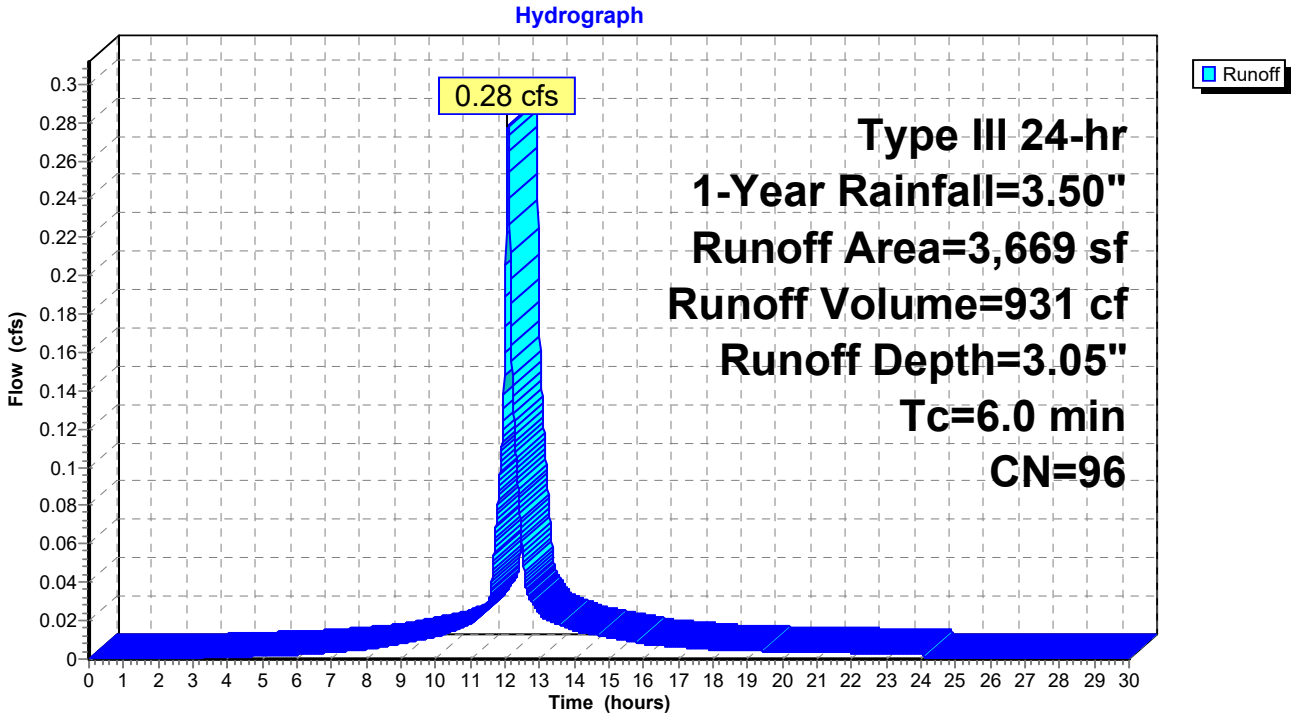
Runoff = 0.28 cfs @ 12.08 hrs, Volume= 931 cf, Depth= 3.05"
Routed to Pond CB-A-14 : CB-A-14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
247	61	>75% Grass cover, Good, HSG B
3,422	98	Paved parking, HSG B
3,669	96	Weighted Average
247		6.73% Pervious Area
3,422		93.27% Impervious Area

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

Subcatchment W-A-14: W-A-14



Summary for Subcatchment W-A-15: W-A-15

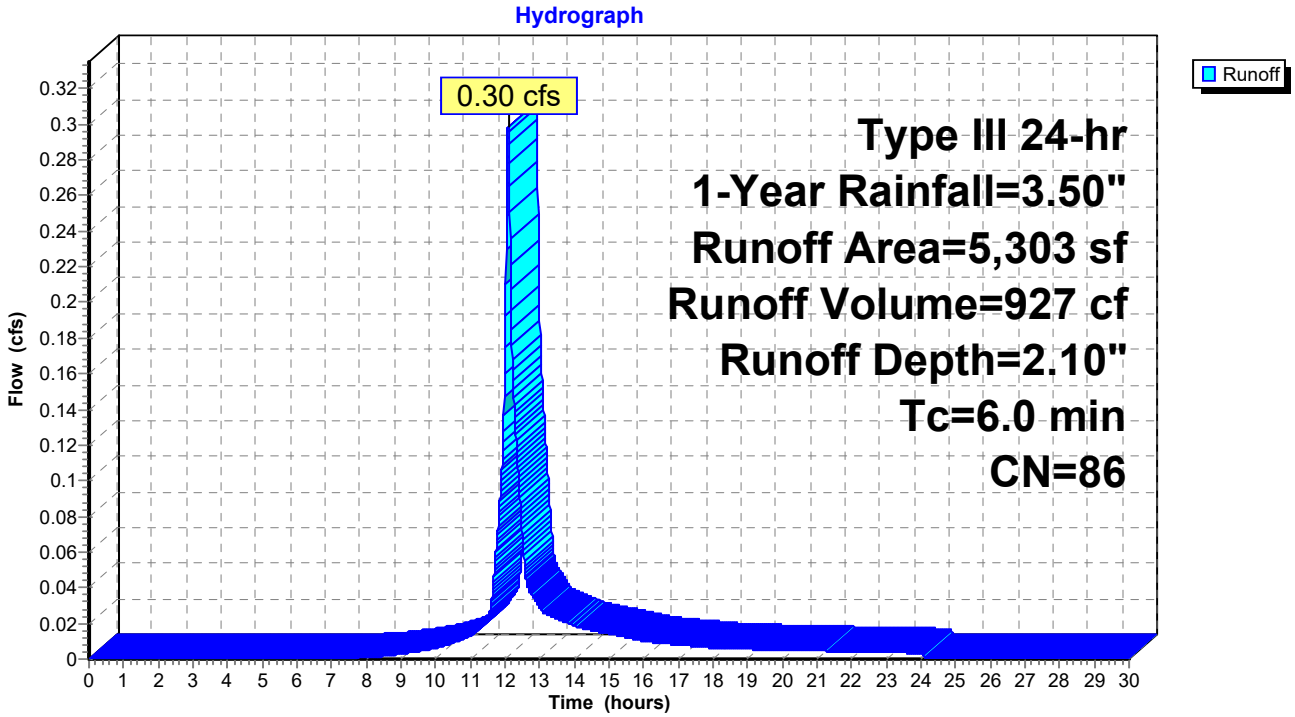
Runoff = 0.30 cfs @ 12.09 hrs, Volume= 927 cf, Depth= 2.10"
Routed to Pond CB-A-15 : CB-A-15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
1,739	61	>75% Grass cover, Good, HSG B
3,564	98	Paved parking, HSG B
5,303	86	Weighted Average
1,739		32.79% Pervious Area
3,564		67.21% Impervious Area

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

Subcatchment W-A-15: W-A-15



Summary for Subcatchment W-A-17: W-A-17

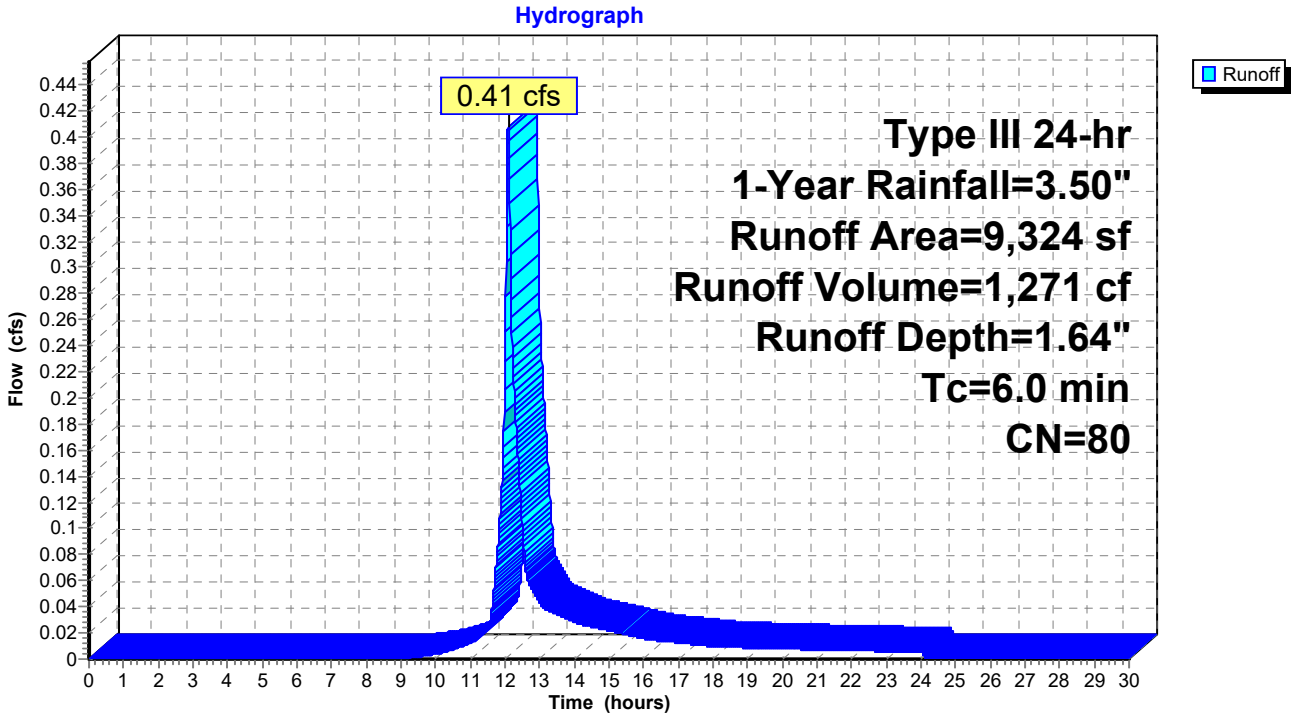
Runoff = 0.41 cfs @ 12.09 hrs, Volume= 1,271 cf, Depth= 1.64"
Routed to Pond CB-A-17 : CB-A-17

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
4,521	61	>75% Grass cover, Good, HSG B
4,803	98	Paved parking, HSG B
9,324	80	Weighted Average
4,521		48.49% Pervious Area
4,803		51.51% Impervious Area

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

Subcatchment W-A-17: W-A-17



Summary for Subcatchment W-A-18: W-A-18

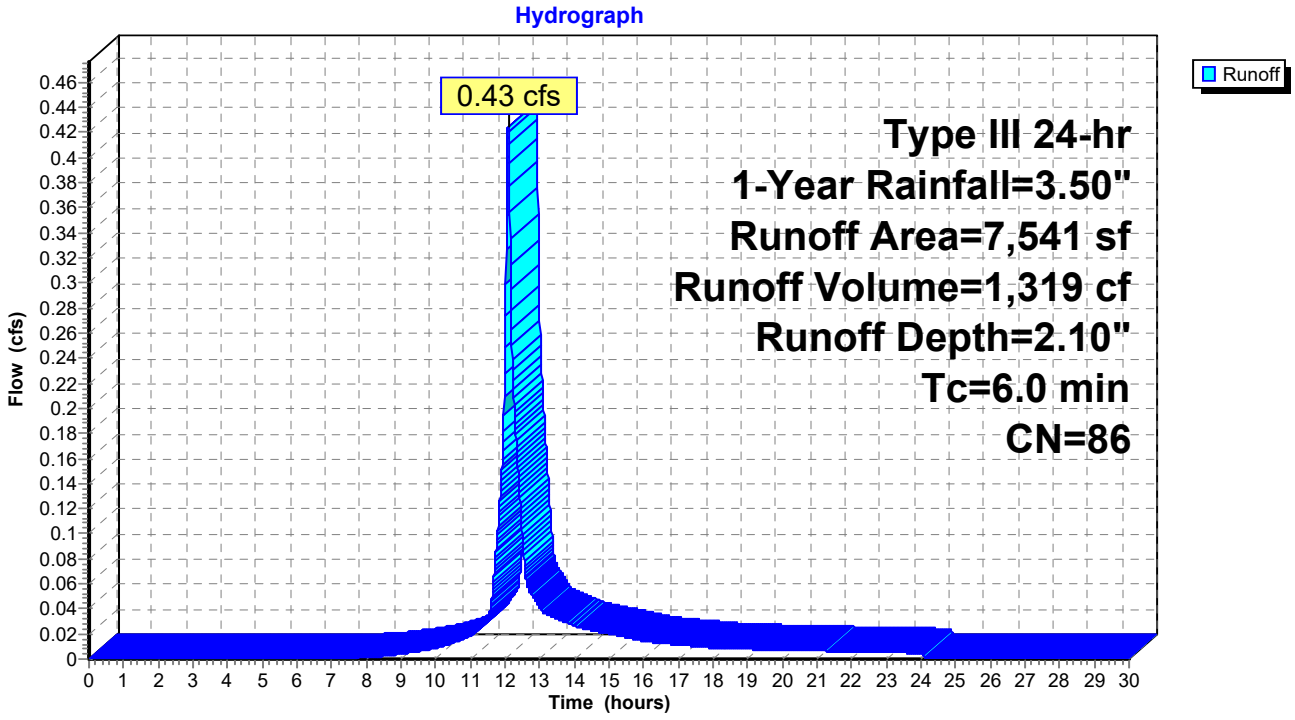
Runoff = 0.43 cfs @ 12.09 hrs, Volume= 1,319 cf, Depth= 2.10"
Routed to Pond CB-A-18 : CB-A-18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
2,344	61	>75% Grass cover, Good, HSG B
5,197	98	Paved parking, HSG B
7,541	86	Weighted Average
2,344		31.08% Pervious Area
5,197		68.92% Impervious Area

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

Subcatchment W-A-18: W-A-18



Summary for Subcatchment W-A-19: W-A-19

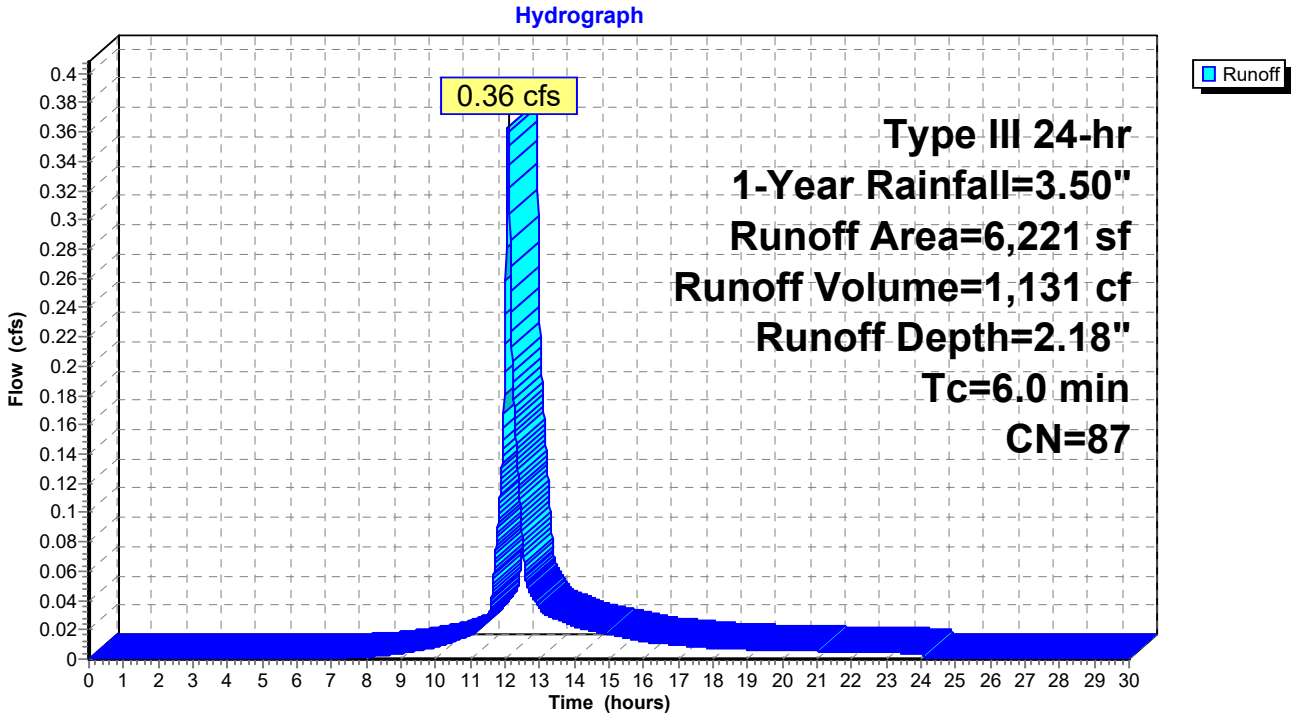
Runoff = 0.36 cfs @ 12.09 hrs, Volume= 1,131 cf, Depth= 2.18"
Routed to Pond CB-A-19 : CB-A-19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
1,822	61	>75% Grass cover, Good, HSG B
4,399	98	Paved parking, HSG B
6,221	87	Weighted Average
1,822		29.29% Pervious Area
4,399		70.71% Impervious Area

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

Subcatchment W-A-19: W-A-19



Summary for Subcatchment W-A-20: W-A-20

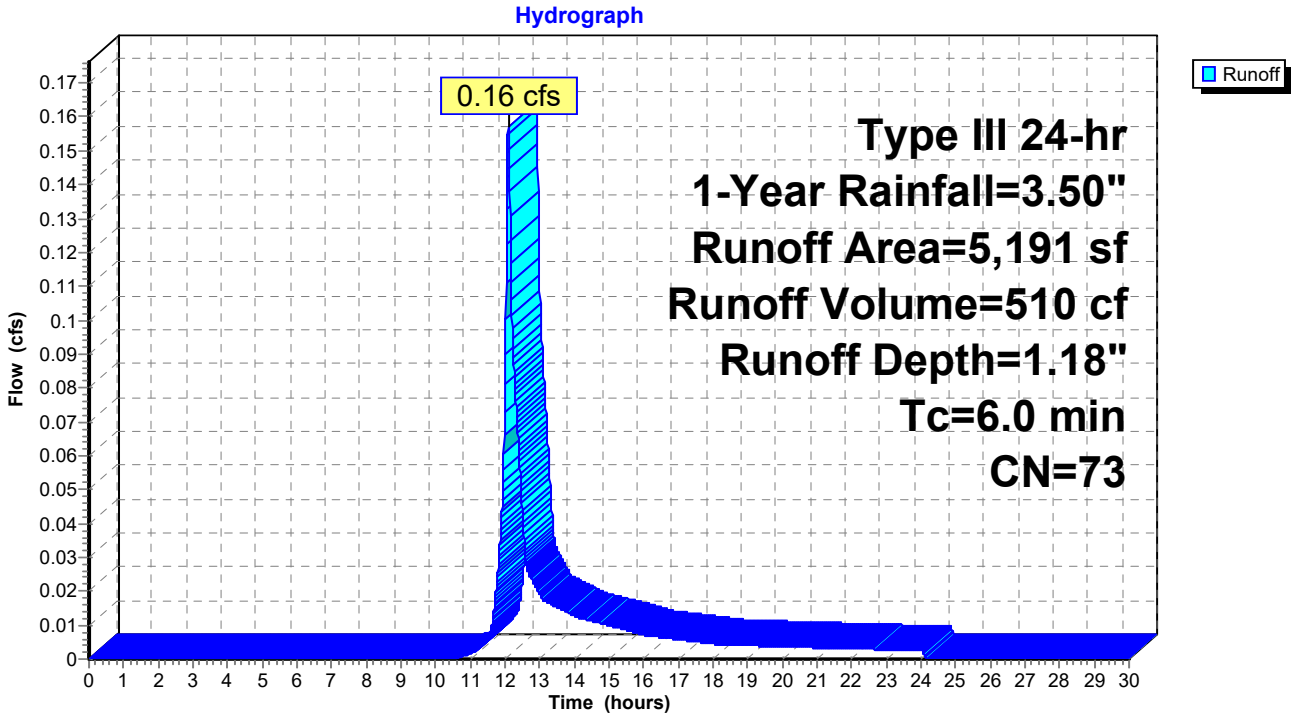
Runoff = 0.16 cfs @ 12.10 hrs, Volume= 510 cf, Depth= 1.18"
Routed to Pond CB-A-20 : CB-A-20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
3,457	61	>75% Grass cover, Good, HSG B
1,734	98	Paved parking, HSG B
5,191	73	Weighted Average
3,457		66.60% Pervious Area
1,734		33.40% Impervious Area

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

Subcatchment W-A-20: W-A-20



Summary for Subcatchment W-B-01: W-B-01

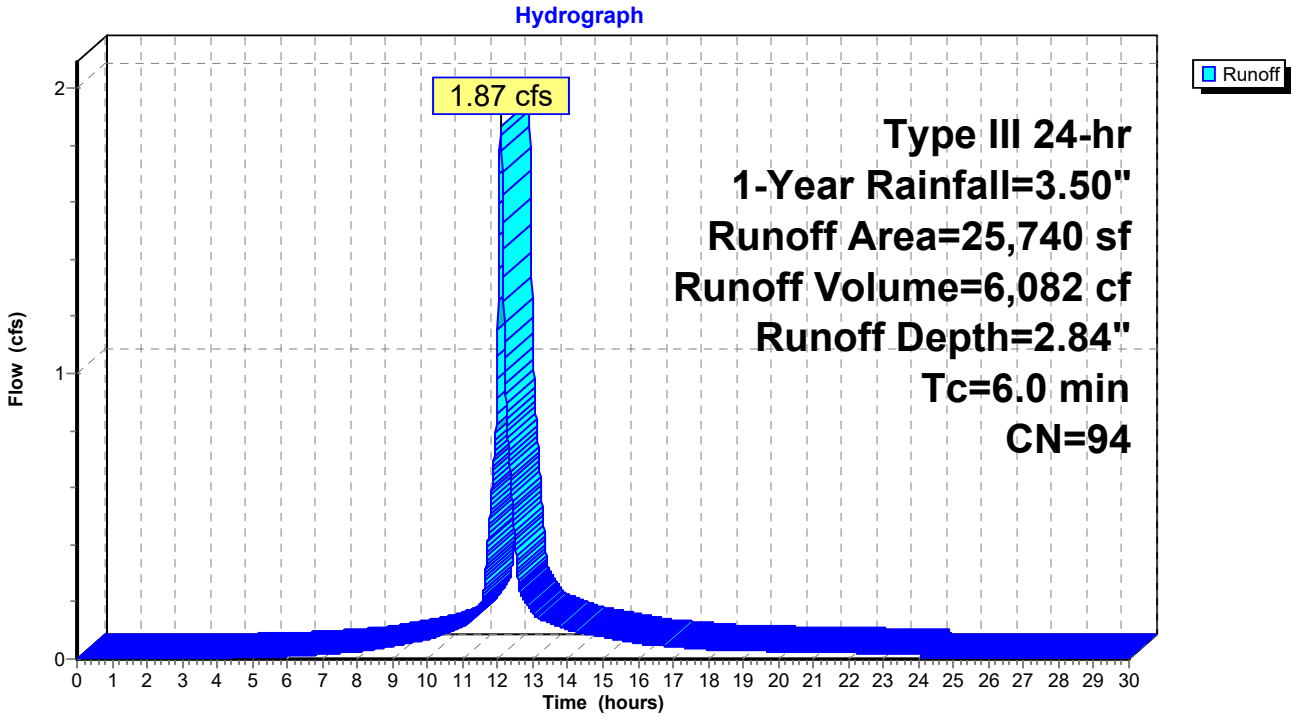
Runoff = 1.87 cfs @ 12.08 hrs, Volume= 6,082 cf, Depth= 2.84"
Routed to Pond CB-B-01 : CB-B-01

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
2,579	61	>75% Grass cover, Good, HSG B
23,161	98	Paved parking, HSG B
25,740	94	Weighted Average
2,579		10.02% Pervious Area
23,161		89.98% Impervious Area

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

Subcatchment W-B-01: W-B-01



Summary for Subcatchment W-B-02: W-B-02

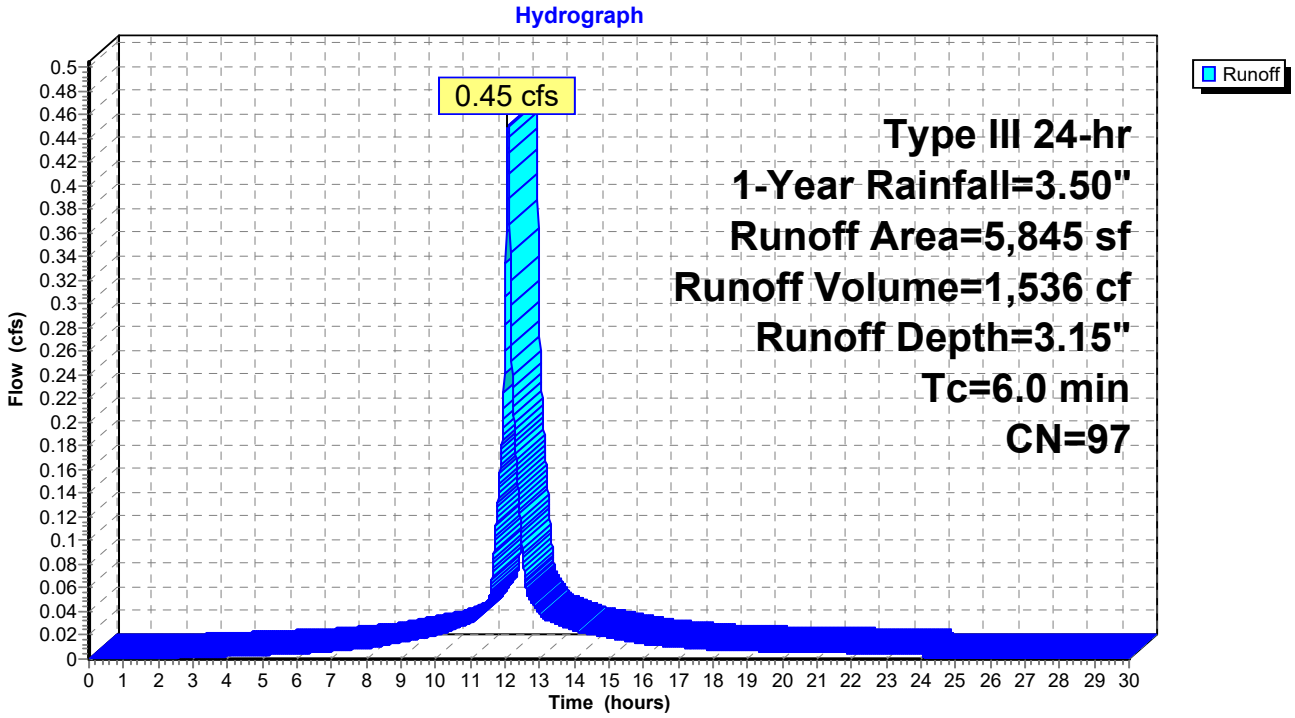
Runoff = 0.45 cfs @ 12.08 hrs, Volume= 1,536 cf, Depth= 3.15"
Routed to Pond CB-B-02 : CB-B-02

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
214	61	>75% Grass cover, Good, HSG B
5,631	98	Paved parking, HSG B
5,845	97	Weighted Average
214		3.66% Pervious Area
5,631		96.34% Impervious Area

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

Subcatchment W-B-02: W-B-02



Summary for Subcatchment W-B-03: W-B-03

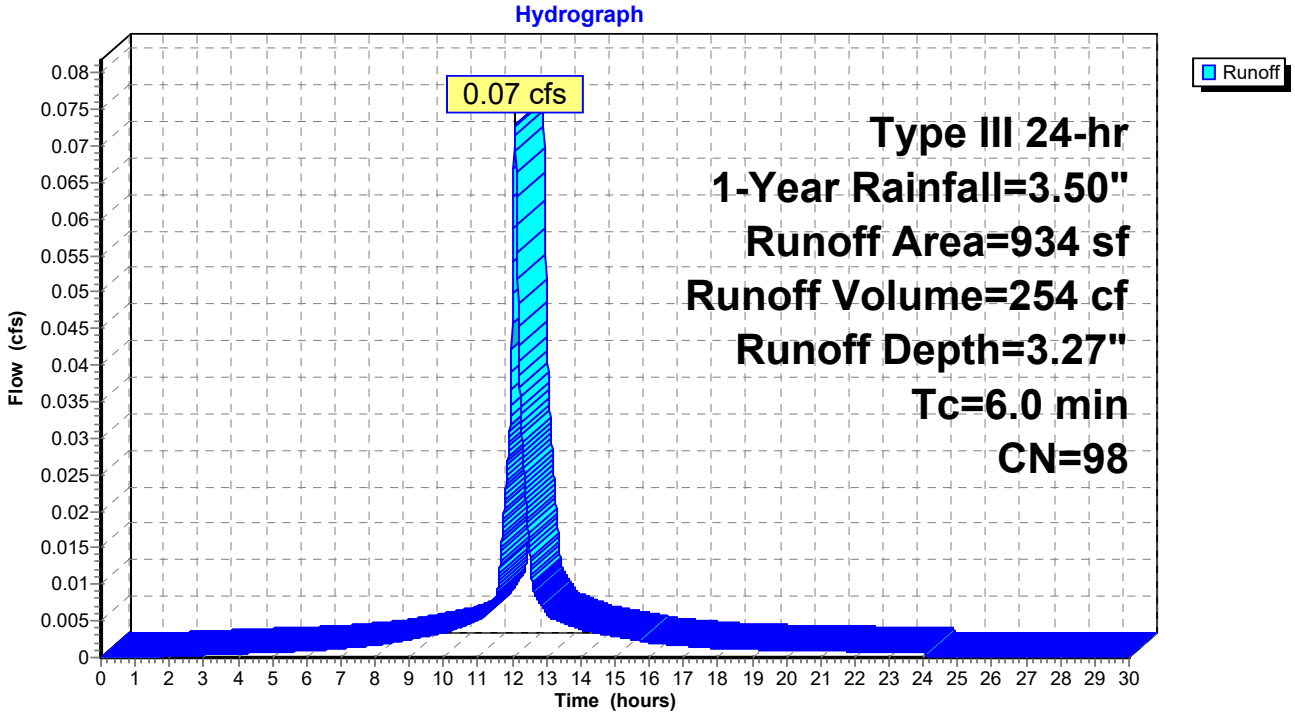
Runoff = 0.07 cfs @ 12.08 hrs, Volume= 254 cf, Depth= 3.27"
Routed to Pond CB-B-03 : CB-B-03

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
934	98	Paved parking, HSG B
934		100.00% Impervious Area

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

Subcatchment W-B-03: W-B-03



Summary for Subcatchment W-B-04: W-B-04

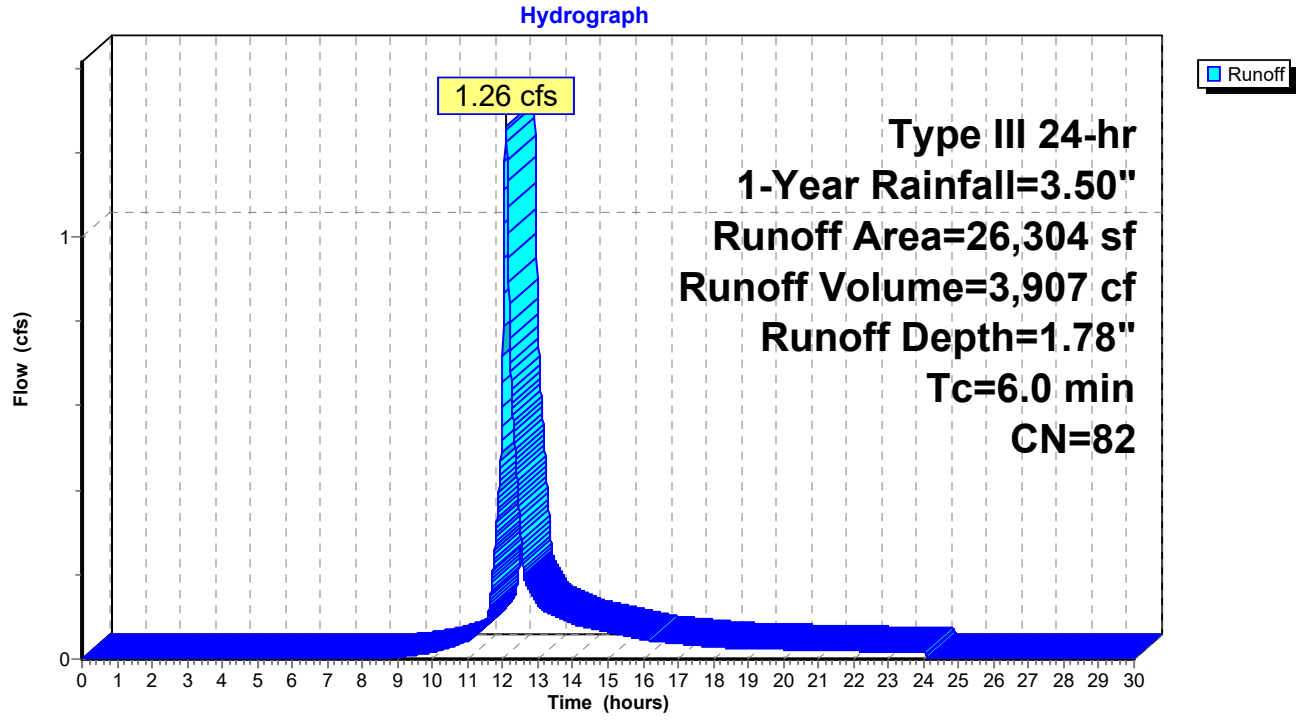
Runoff = 1.26 cfs @ 12.09 hrs, Volume= 3,907 cf, Depth= 1.78"
Routed to Pond CB-B-04 : CB-B-04

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
11,684	61	>75% Grass cover, Good, HSG B
14,620	98	Paved parking, HSG B
26,304	82	Weighted Average
11,684		44.42% Pervious Area
14,620		55.58% Impervious Area

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

Subcatchment W-B-04: W-B-04



Summary for Subcatchment W-B-05: W-B-05

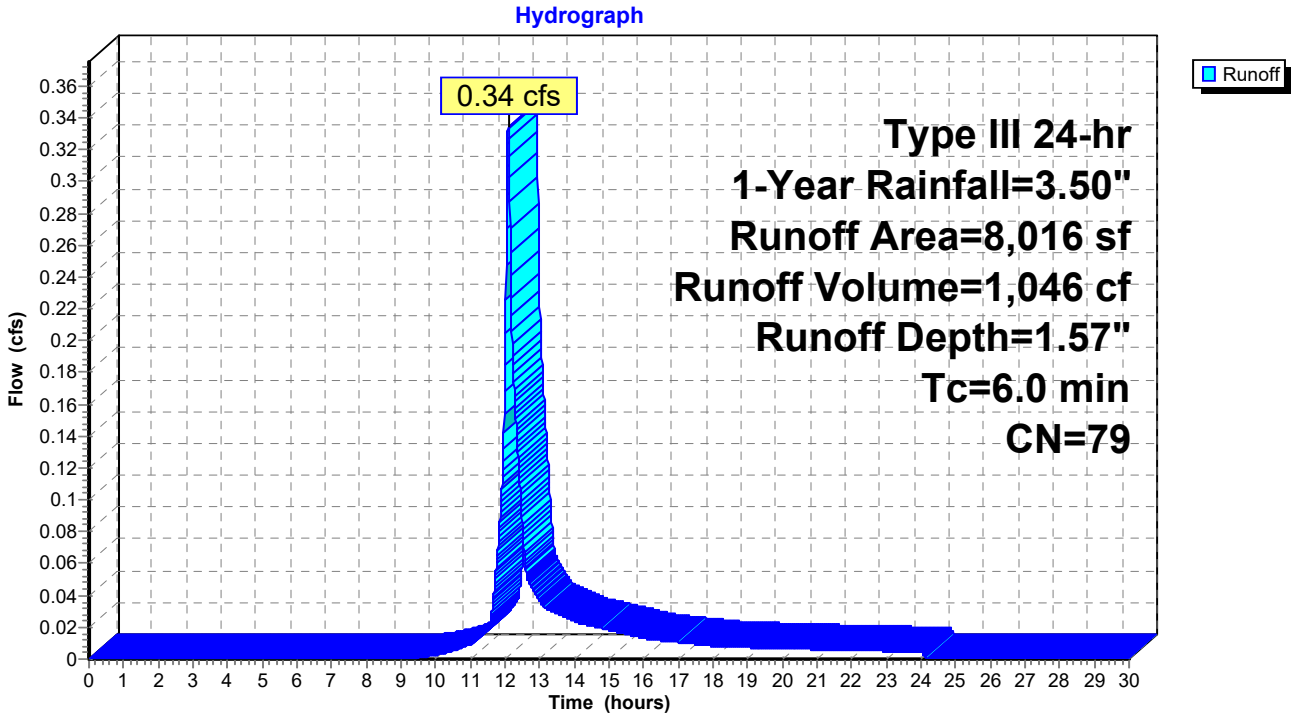
Runoff = 0.34 cfs @ 12.09 hrs, Volume= 1,046 cf, Depth= 1.57"
Routed to Pond CB-B-05 : CB-B-05

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
4,108	61	>75% Grass cover, Good, HSG B
3,908	98	Paved parking, HSG B
8,016	79	Weighted Average
4,108		51.25% Pervious Area
3,908		48.75% Impervious Area

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

Subcatchment W-B-05: W-B-05



Summary for Subcatchment W-B-06: W-B-06

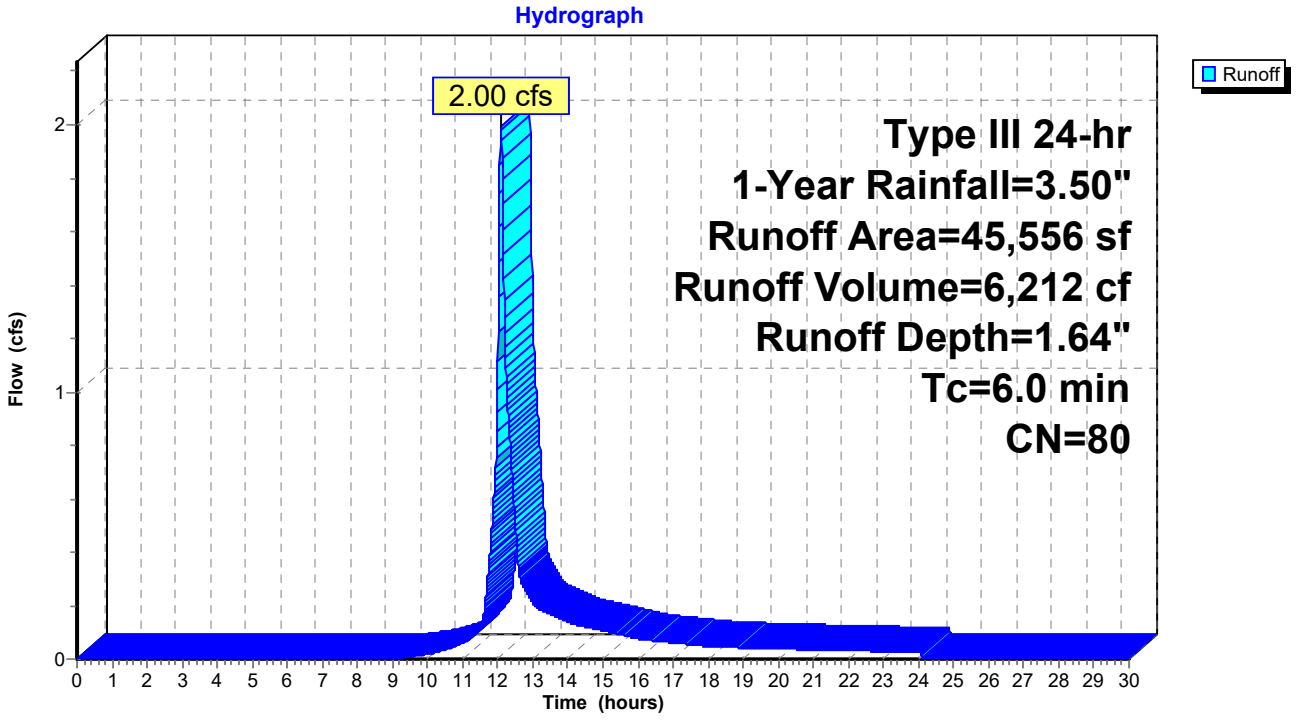
Runoff = 2.00 cfs @ 12.09 hrs, Volume= 6,212 cf, Depth= 1.64"
Routed to Pond CB-B-07 : CB-B-07

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
22,604	61	>75% Grass cover, Good, HSG B
22,952	98	Paved parking, HSG B
45,556	80	Weighted Average
22,604		49.62% Pervious Area
22,952		50.38% Impervious Area

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

Subcatchment W-B-06: W-B-06



Summary for Subcatchment W-C-01: W-C-01

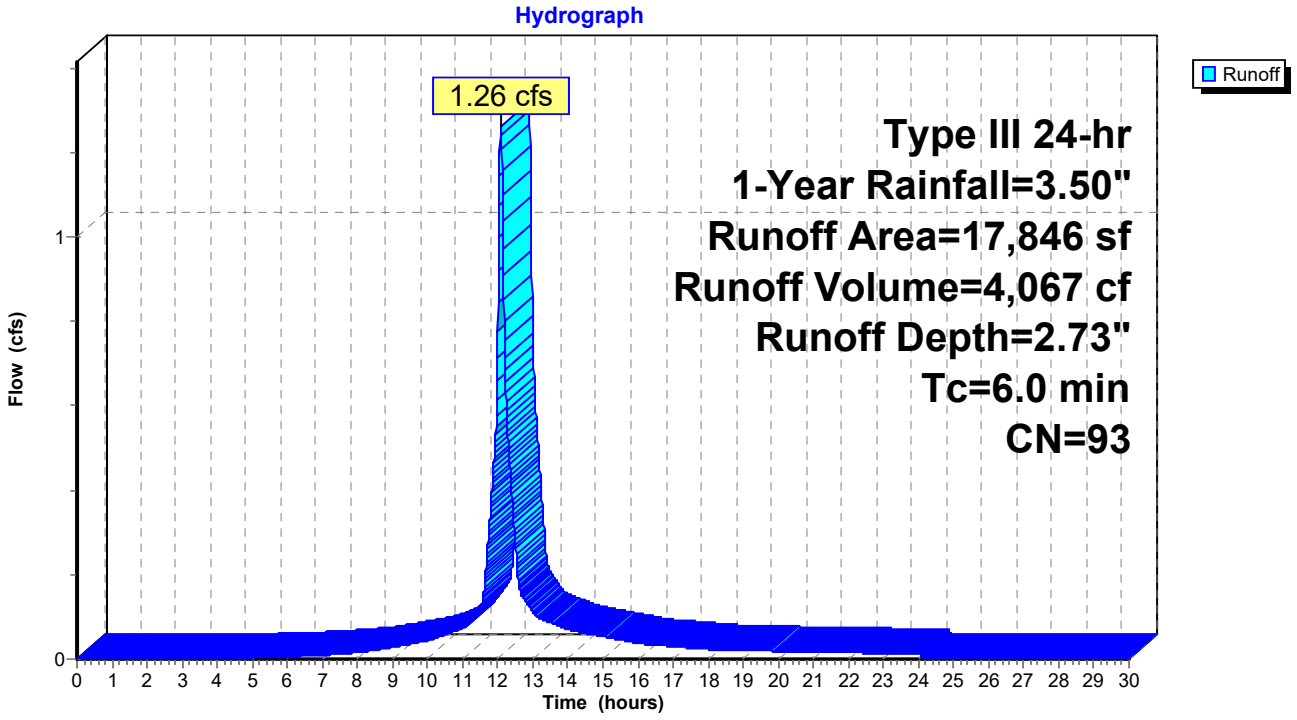
Runoff = 1.26 cfs @ 12.08 hrs, Volume= 4,067 cf, Depth= 2.73"
Routed to Pond CB-C-01 : CB-C-01

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
2,361	61	>75% Grass cover, Good, HSG B
15,485	98	Paved parking, HSG B
17,846	93	Weighted Average
2,361		13.23% Pervious Area
15,485		86.77% Impervious Area

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

Subcatchment W-C-01: W-C-01



Summary for Subcatchment W-C-02: W-C-02

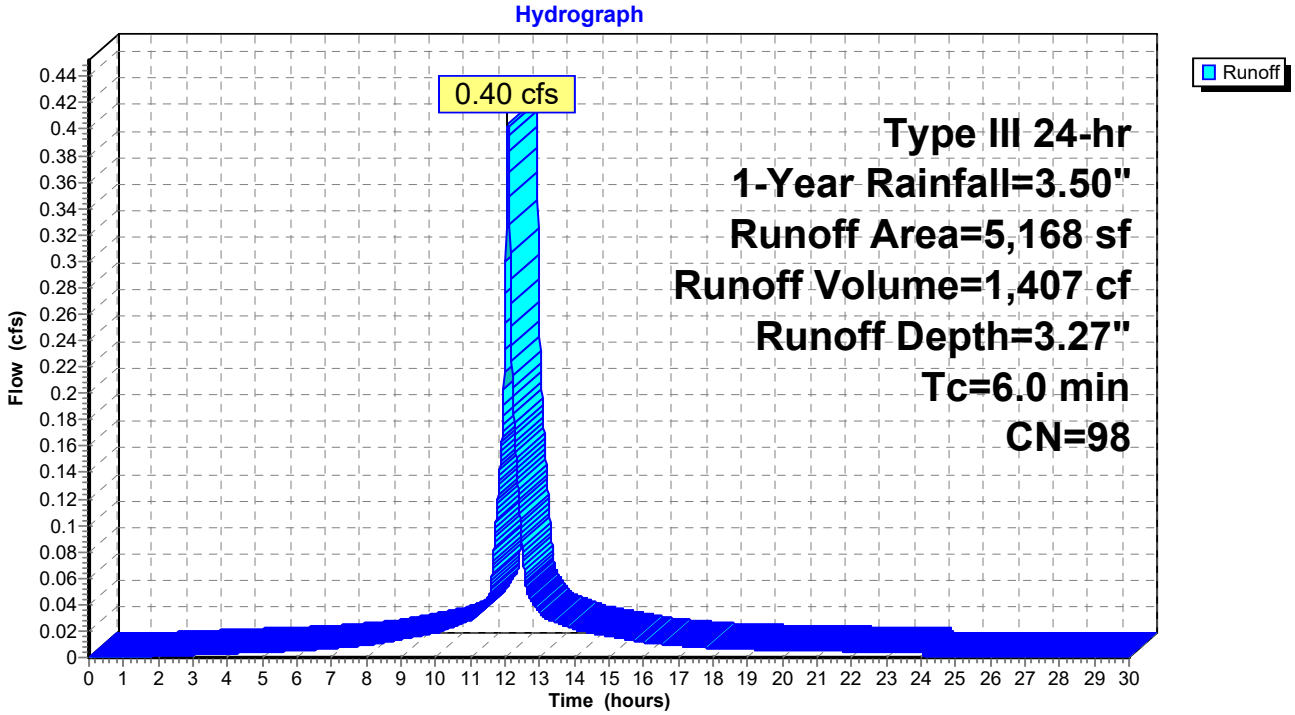
Runoff = 0.40 cfs @ 12.08 hrs, Volume= 1,407 cf, Depth= 3.27"
Routed to Pond CB-C-02 : CB-C-02

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
5,168	98	Paved parking, HSG B
5,168		100.00% Impervious Area

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

Subcatchment W-C-02: W-C-02



Summary for Subcatchment W-C-03: W-C-03

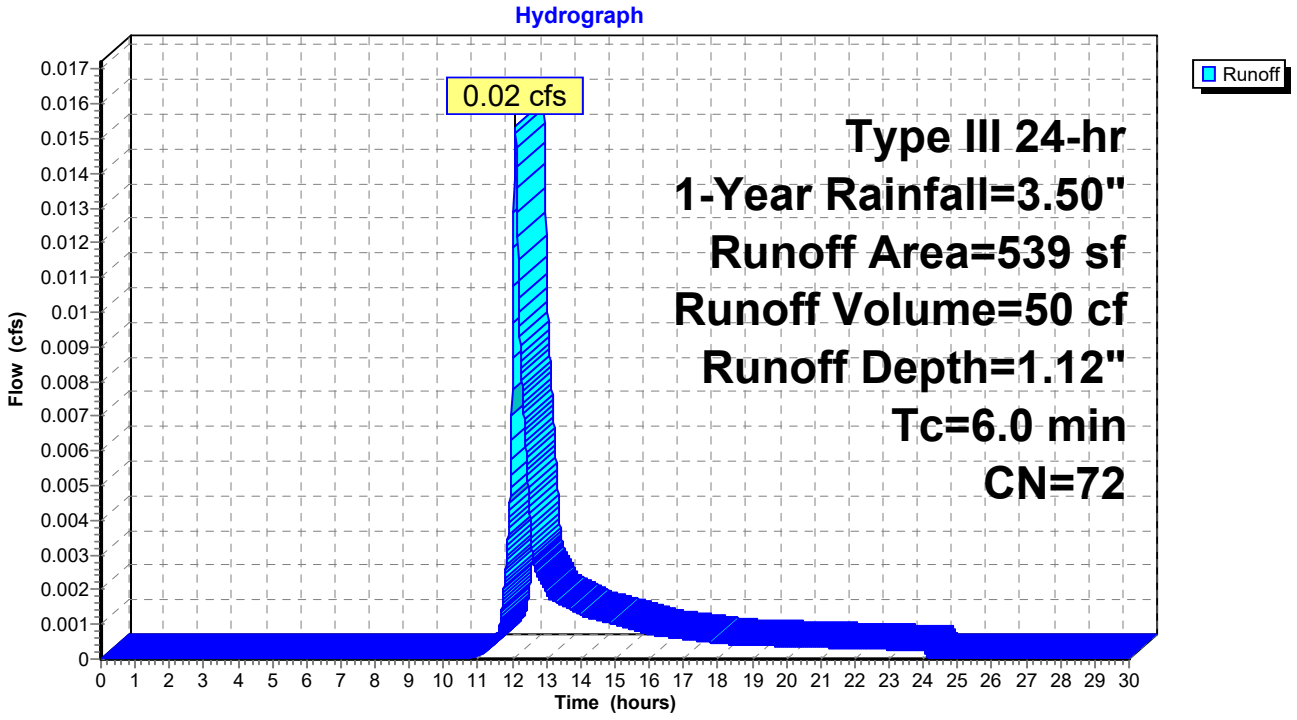
Runoff = 0.02 cfs @ 12.10 hrs, Volume= 50 cf, Depth= 1.12"
Routed to Pond CB-C-03 : CB-C-03

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
372	61	>75% Grass cover, Good, HSG B
167	98	Paved parking, HSG B
539	72	Weighted Average
372		69.02% Pervious Area
167		30.98% Impervious Area

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

Subcatchment W-C-03: W-C-03



Summary for Subcatchment W-C-04: W-C-04

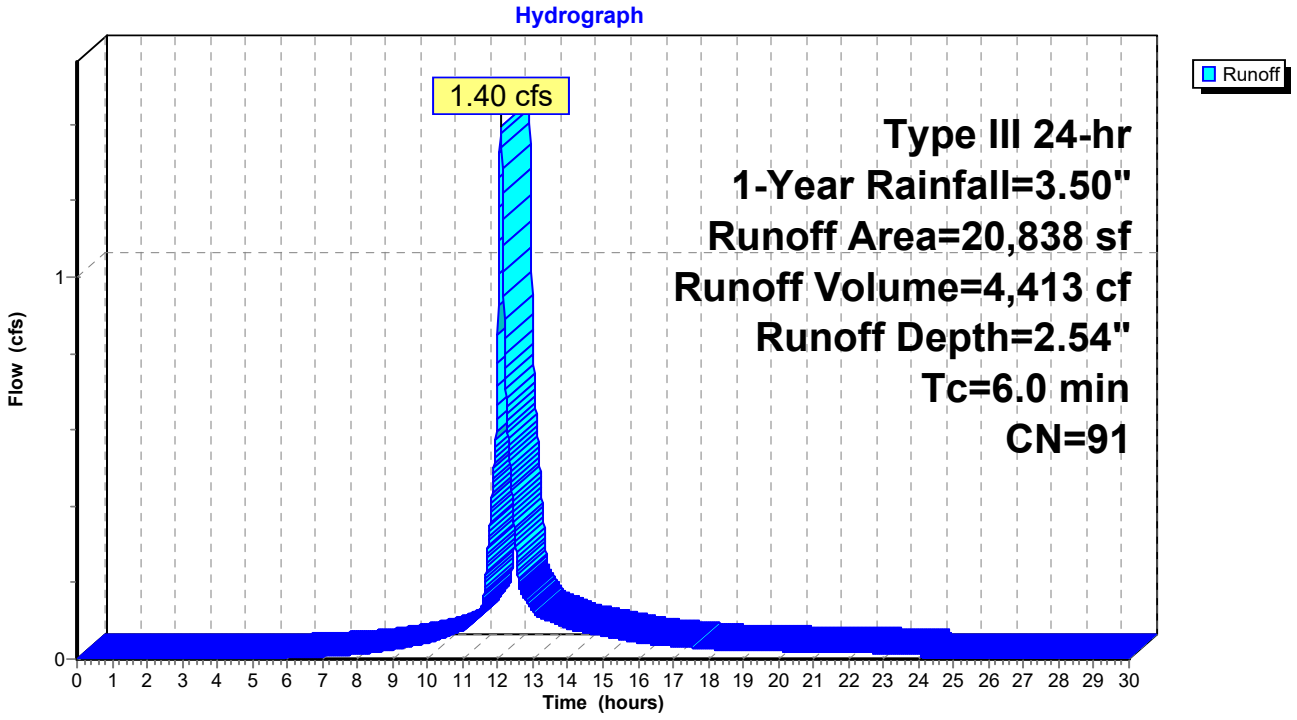
Runoff = 1.40 cfs @ 12.09 hrs, Volume= 4,413 cf, Depth= 2.54"
Routed to Pond CB-C-04 : CB-C-04

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
3,975	61	>75% Grass cover, Good, HSG B
16,863	98	Paved parking, HSG B
20,838	91	Weighted Average
3,975		19.08% Pervious Area
16,863		80.92% Impervious Area

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

Subcatchment W-C-04: W-C-04



Summary for Subcatchment W-C-05: W-C-05

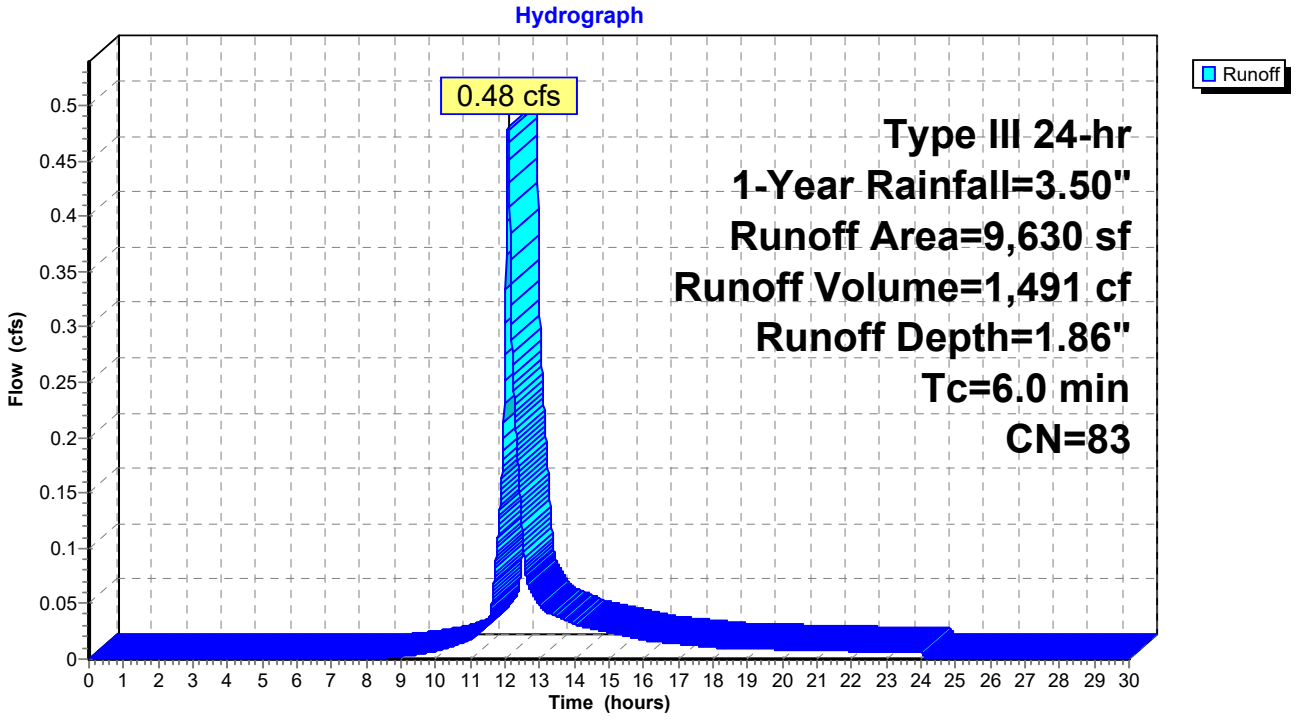
Runoff = 0.48 cfs @ 12.09 hrs, Volume= 1,491 cf, Depth= 1.86"
Routed to Pond CB-C-05 : CB-C-05

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
3,869	61	>75% Grass cover, Good, HSG B
5,761	98	Paved parking, HSG B
9,630	83	Weighted Average
3,869		40.18% Pervious Area
5,761		59.82% Impervious Area

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

Subcatchment W-C-05: W-C-05



Summary for Subcatchment W-C-06: W-C-06

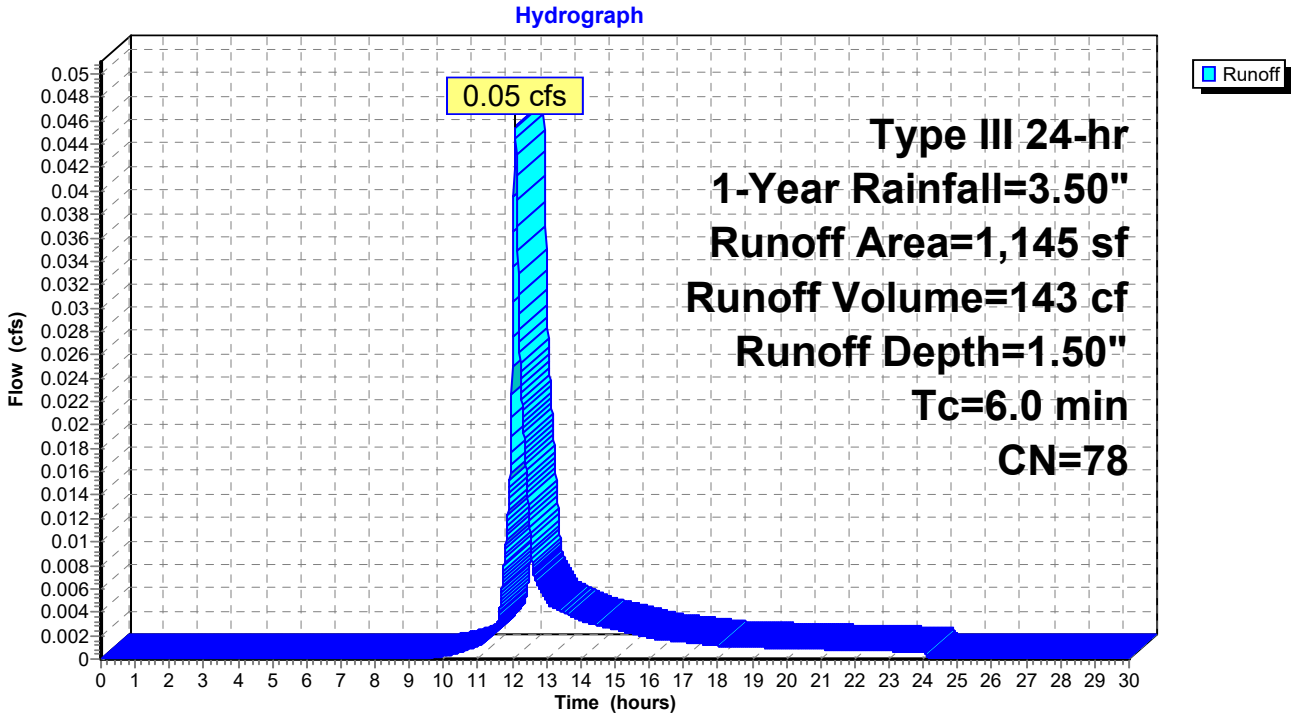
Runoff = 0.05 cfs @ 12.09 hrs, Volume= 143 cf, Depth= 1.50"
Routed to Pond CB-C-07 : CB-C-07

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
606	61	>75% Grass cover, Good, HSG B
539	98	Paved parking, HSG B
1,145	78	Weighted Average
606		52.93% Pervious Area
539		47.07% Impervious Area

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

Subcatchment W-C-06: W-C-06



Summary for Subcatchment W-C-07: W-C-07

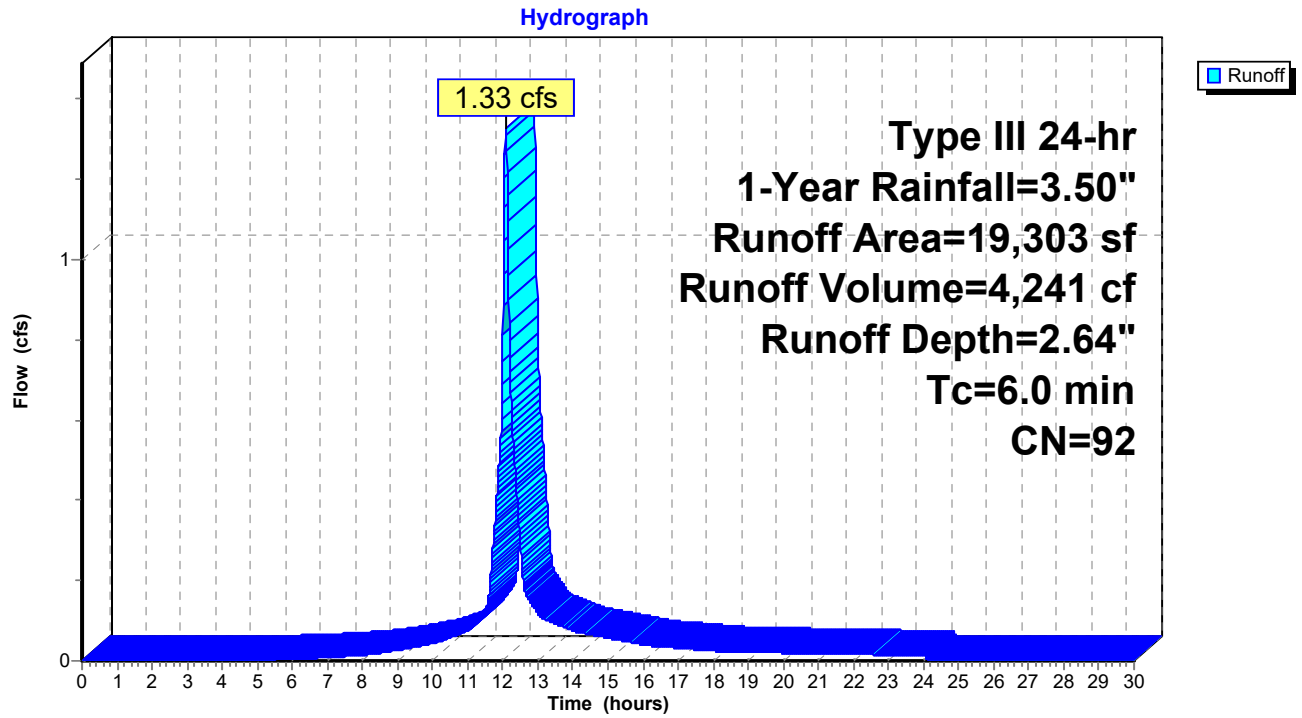
Runoff = 1.33 cfs @ 12.09 hrs, Volume= 4,241 cf, Depth= 2.64"
Routed to Pond CB-C-08 : CB-C-08

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-Year Rainfall=3.50"

Area (sf)	CN	Description
3,107	61	>75% Grass cover, Good, HSG B
16,196	98	Paved parking, HSG B
19,303	92	Weighted Average
3,107		16.10% Pervious Area
16,196		83.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**
5.0	0	Total, Increased to minimum Tc = 6.0 min			

Subcatchment W-C-07: W-C-07

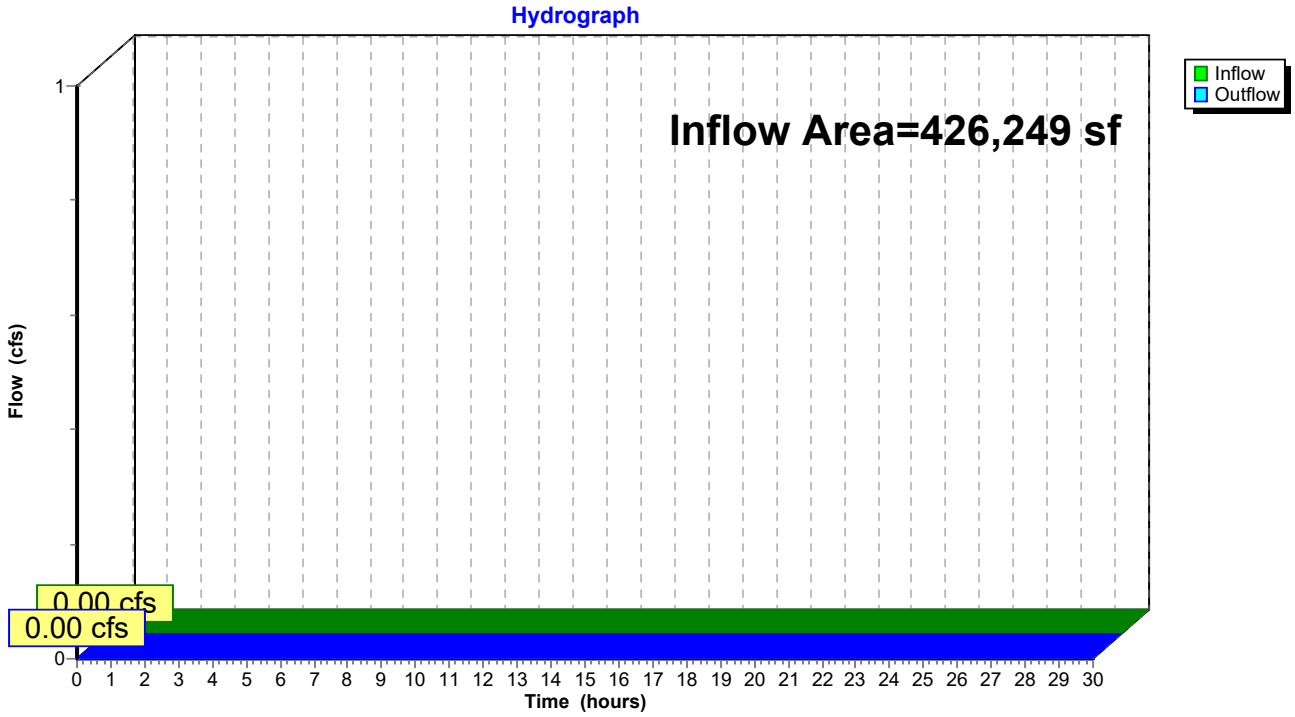


Summary for Reach DP1POST: DP1 POST

Inflow Area = 426,249 sf, 72.93% Impervious, Inflow Depth = 0.00" for 1-Year event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs

Reach DP1POST: DP1 POST

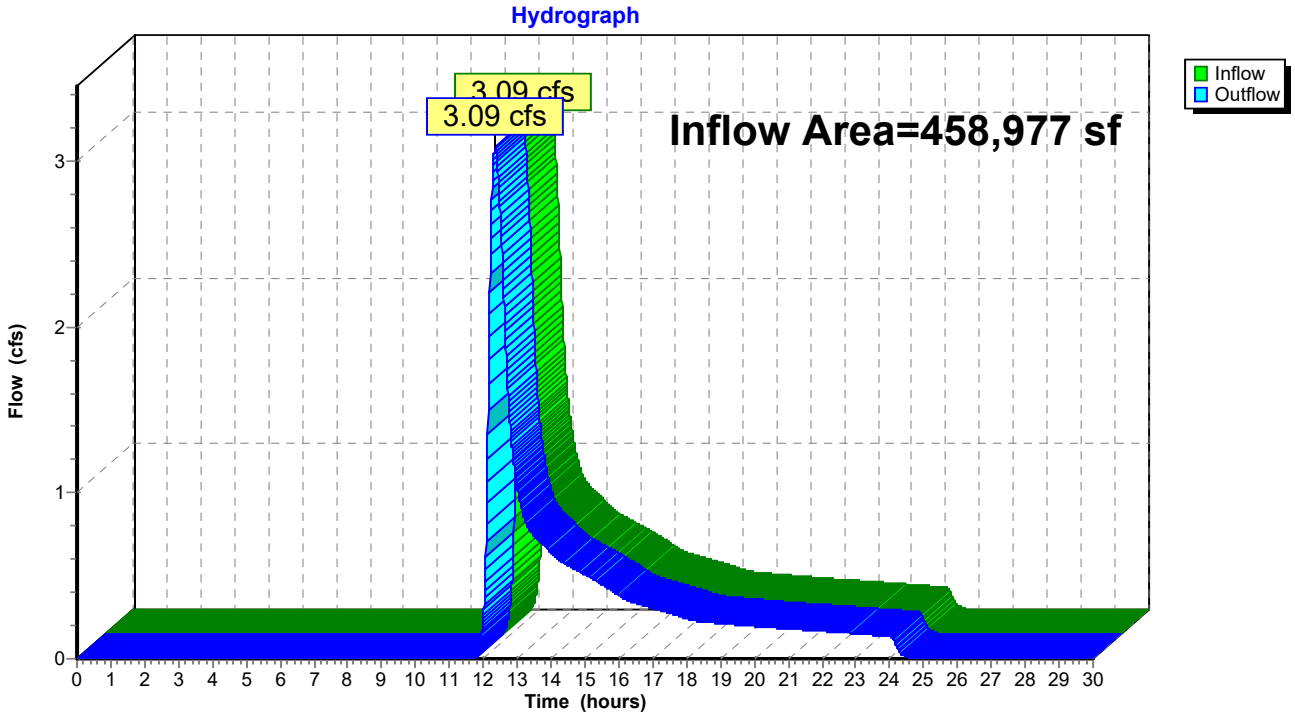


Summary for Reach DP1PRE: DP1 PRE

Inflow Area = 458,977 sf, 9.20% Impervious, Inflow Depth = 0.51" for 1-Year event
Inflow = 3.09 cfs @ 12.35 hrs, Volume= 19,617 cf
Outflow = 3.09 cfs @ 12.35 hrs, Volume= 19,617 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs

Reach DP1PRE: DP1 PRE



Summary for Pond 1P: CB-B-06

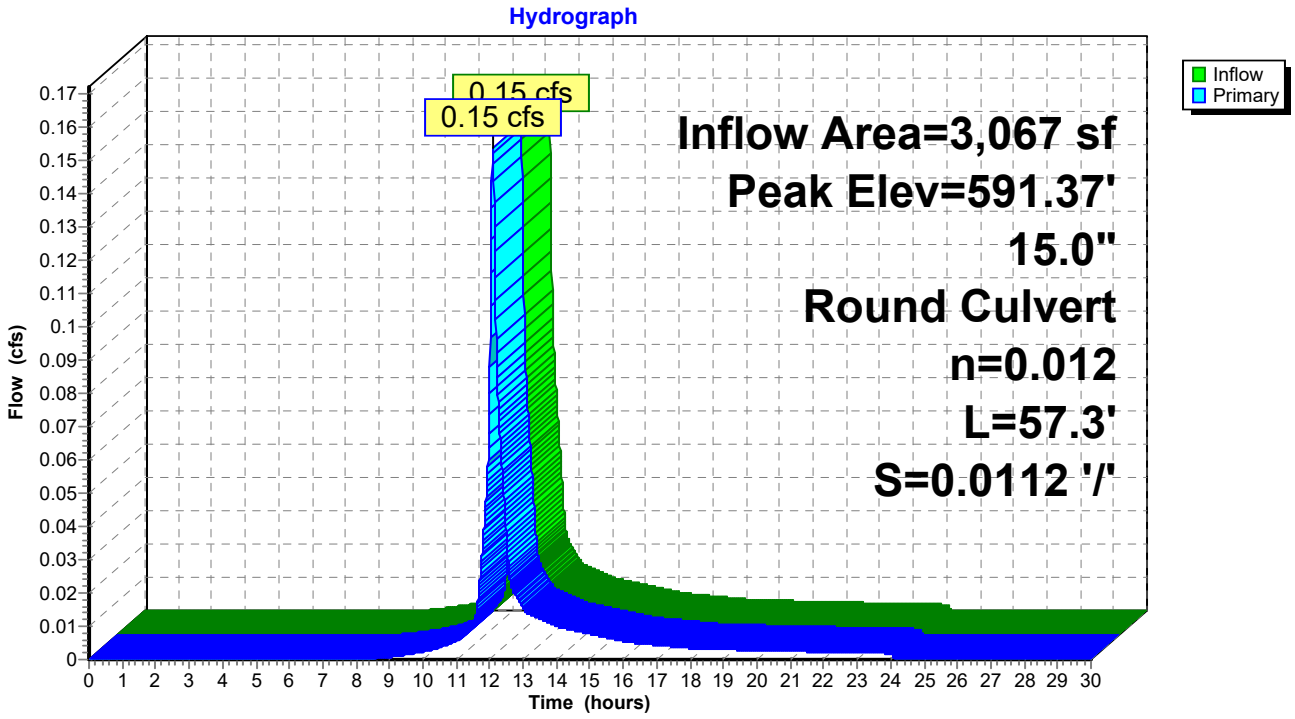
Inflow Area = 3,067 sf, 58.98% Impervious, Inflow Depth = 1.86" for 1-Year event
Inflow = 0.15 cfs @ 12.09 hrs, Volume= 475 cf
Outflow = 0.15 cfs @ 12.09 hrs, Volume= 475 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.15 cfs @ 12.09 hrs, Volume= 475 cf
Routed to Pond CB-B-05 : CB-B-05

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 591.37' @ 12.09 hrs
Flood Elev= 593.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	591.19'	**15.0" Round HDPE Round 15"** L= 57.3' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.19' / 590.55' S= 0.0112 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.15 cfs @ 12.09 hrs HW=591.37' TW=590.34' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Inlet Controls 0.15 cfs @ 1.44 fps)

Pond 1P: CB-B-06



Summary for Pond 3P: CB-A-13

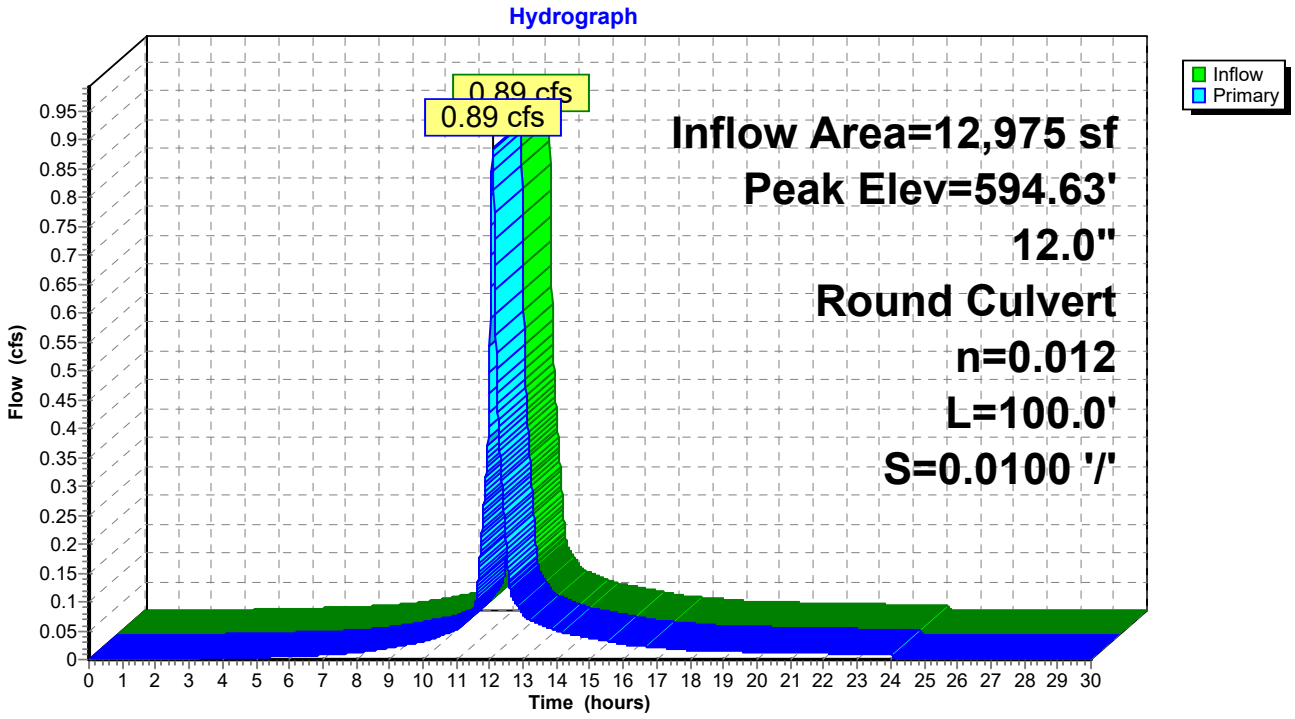
Inflow Area = 12,975 sf, 83.58% Impervious, Inflow Depth = 2.69" for 1-Year event
Inflow = 0.89 cfs @ 12.09 hrs, Volume= 2,911 cf
Outflow = 0.89 cfs @ 12.09 hrs, Volume= 2,911 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.89 cfs @ 12.09 hrs, Volume= 2,911 cf
Routed to Pond CB-A-13 : CB-A-12

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.63' @ 12.09 hrs
Flood Elev= 598.01'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.00'	**12.0" Round HDPE Round 12"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.00' / 593.00' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.87 cfs @ 12.09 hrs HW=594.63' TW=594.24' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 0.87 cfs @ 2.39 fps)

Pond 3P: CB-A-13



Summary for Pond ADS 1A: ADS 1A

Inflow Area = 236,318 sf, 75.18% Impervious, Inflow Depth = 2.41" for 1-Year event
Inflow = 14.43 cfs @ 12.09 hrs, Volume= 47,457 cf
Outflow = 1.68 cfs @ 12.76 hrs, Volume= 47,463 cf, Atten= 88%, Lag= 40.4 min
Discarded = 1.68 cfs @ 12.76 hrs, Volume= 47,463 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Reach DP1POST : DP1 POST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 591.52' @ 12.76 hrs Surf.Area= 24,105 sf Storage= 15,277 cf
Flood Elev= 593.50' Surf.Area= 24,105 sf Storage= 47,779 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 62.6 min (852.7 - 790.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	590.50'	21,177 cf	**44.25'W x 544.74'L x 3.50'H Field A** 84,366 cf Overall - 31,423 cf Embedded = 52,943 cf x 40.0% Voids
#2A	591.00'	31,423 cf	**ADS_StormTech SC-740 +Cap** x 684 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 684 Chambers in 9 Rows
		52,600 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	591.00'	**15.0" Round Culvert** L= 282.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.00' / 576.00' S= 0.0532 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf
#2	Device 1	592.50'	**5.0' 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
#3	Discarded	590.50'	**3.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 290.00'

Discarded OutFlow Max=1.68 cfs @ 12.76 hrs HW=591.52' (Free Discharge)
└**3=Exfiltration** (Controls 1.68 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=590.50' TW=0.00' (Dynamic Tailwater)
└**1=Culvert** (Controls 0.00 cfs)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond ADS 1A: ADS 1A - Chamber Wizard Field A

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

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

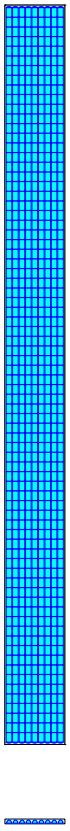
76 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 542.74' Row Length +12.0" End Stone x 2 = 544.74' Base Length
9 Rows x 51.0" Wide + 6.0" Spacing x 8 + 12.0" Side Stone x 2 = 44.25' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

684 Chambers x 45.9 cf = 31,423.0 cf Chamber Storage

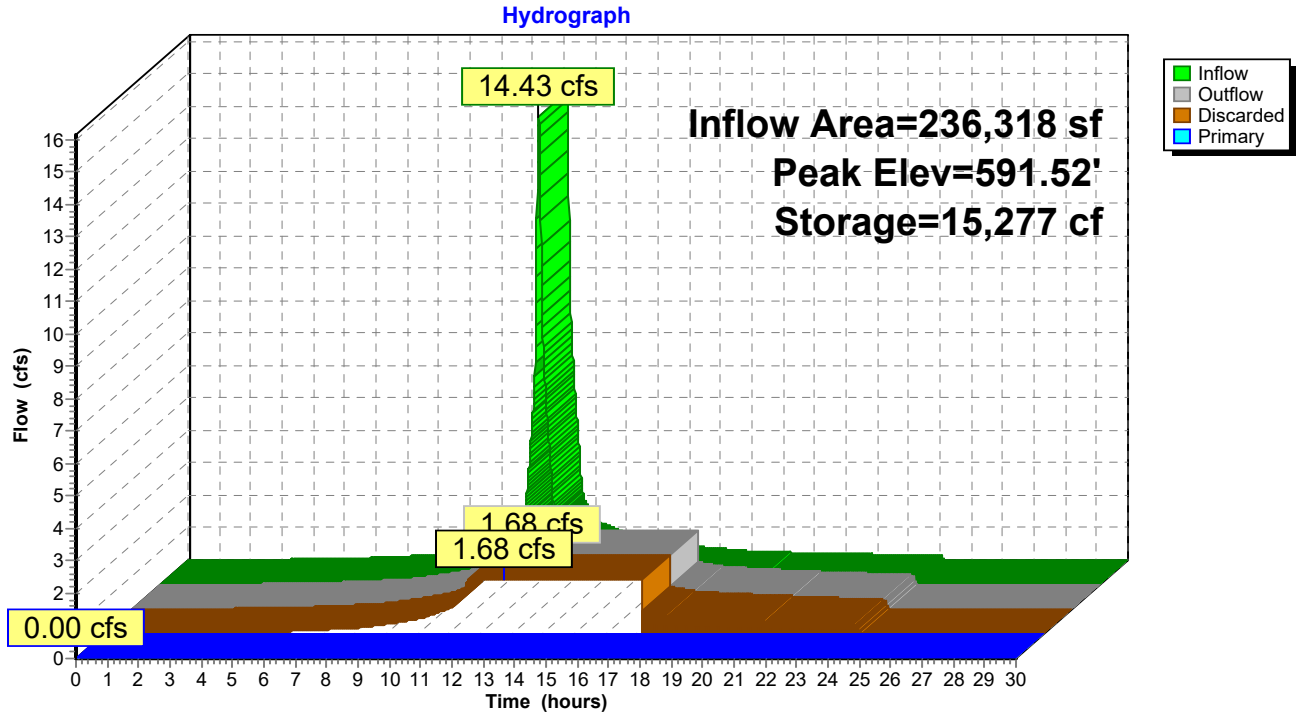
84,366.1 cf Field - 31,423.0 cf Chambers = 52,943.1 cf Stone x 40.0% Voids = 21,177.2 cf Stone Storage

Chamber Storage + Stone Storage = 52,600.2 cf = 1.208 af
Overall Storage Efficiency = 62.3%
Overall System Size = 544.74' x 44.25' x 3.50'

684 Chambers
3,124.7 cy Field
1,960.9 cy Stone



Pond ADS 1A: ADS 1A



Summary for Pond ADS 1B: ADS 1B

Inflow Area = 115,462 sf, 63.24% Impervious, Inflow Depth = 2.03" for 1-Year event
Inflow = 6.14 cfs @ 12.09 hrs, Volume= 19,514 cf
Outflow = 0.57 cfs @ 13.04 hrs, Volume= 19,521 cf, Atten= 91%, Lag= 57.1 min
Discarded = 0.57 cfs @ 13.04 hrs, Volume= 19,521 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Reach DP1POST : DP1 POST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 586.31' @ 13.04 hrs Surf.Area= 8,231 sf Storage= 7,143 cf
Flood Elev= 588.00' Surf.Area= 8,231 sf Storage= 16,245 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 100.5 min (913.7 - 813.1)

Volume	Invert	Avail.Storage	Storage Description
#1A	585.00'	7,279 cf	**53.75'W x 153.14'L x 3.50'H Field A** 28,809 cf Overall - 10,612 cf Embedded = 18,197 cf x 40.0% Voids
#2A	585.50'	10,612 cf	**ADS_StormTech SC-740 +Cap** x 231 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 231 Chambers in 11 Rows
		17,891 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	585.50'	**15.0" Round Culvert** L= 83.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 585.50' / 575.00' S= 0.1265 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	586.50'	**5.0' 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
#3	Discarded	585.00'	**3.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 290.00'

Discarded OutFlow Max=0.57 cfs @ 13.04 hrs HW=586.31' (Free Discharge)
↑**3=Exfiltration** (Controls 0.57 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=585.00' TW=0.00' (Dynamic Tailwater)
↑**1=Culvert** (Controls 0.00 cfs)
↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond ADS 1B: ADS 1B - Chamber Wizard Field A

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

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

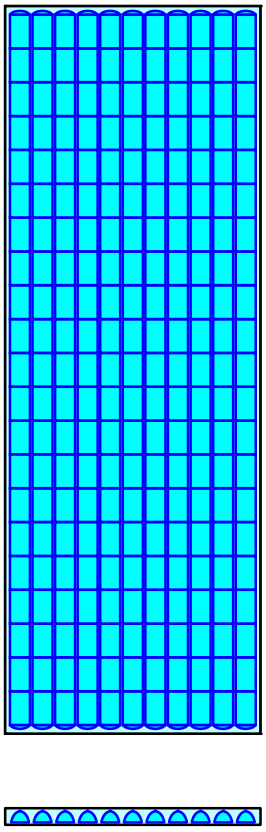
21 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 151.14' Row Length +12.0" End Stone x 2 = 153.14' Base Length
11 Rows x 51.0" Wide + 6.0" Spacing x 10 + 12.0" Side Stone x 2 = 53.75' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

231 Chambers x 45.9 cf = 10,612.1 cf Chamber Storage

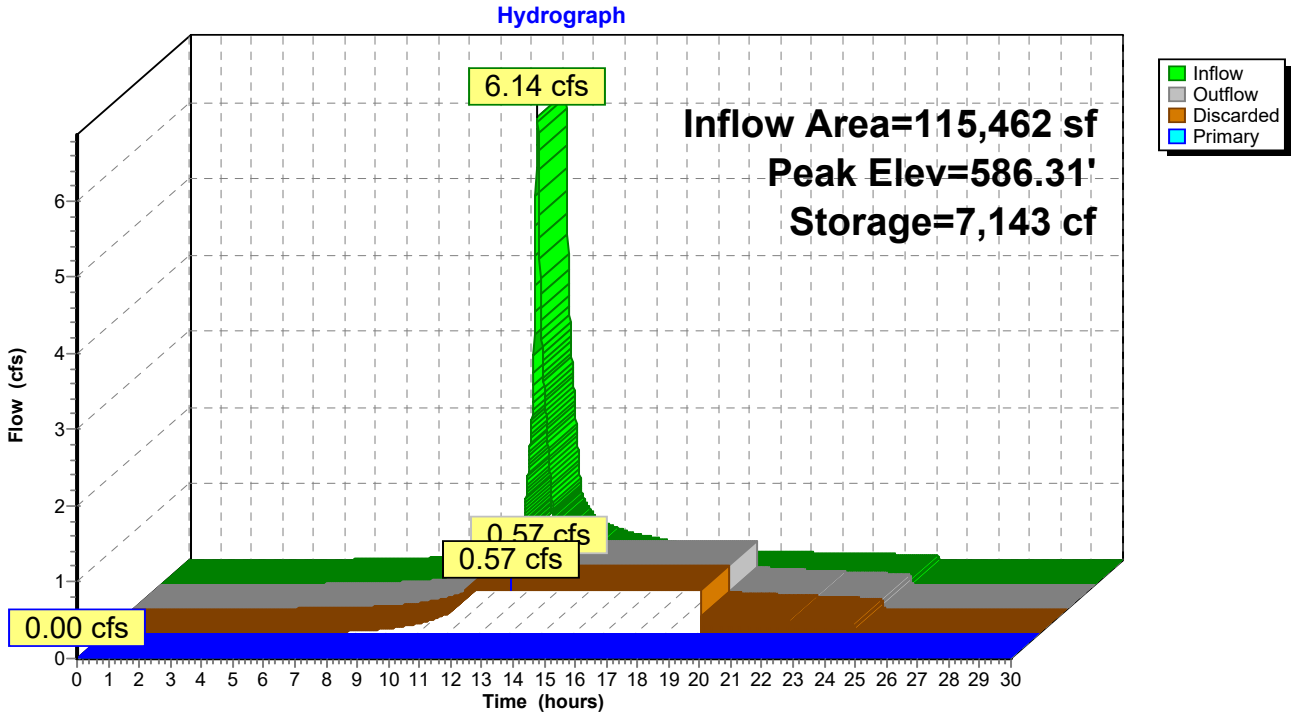
28,808.8 cf Field - 10,612.1 cf Chambers = 18,196.7 cf Stone x 40.0% Voids = 7,278.7 cf Stone Storage

Chamber Storage + Stone Storage = 17,890.8 cf = 0.411 af
Overall Storage Efficiency = 62.1%
Overall System Size = 153.14' x 53.75' x 3.50'

231 Chambers
1,067.0 cy Field
674.0 cy Stone



Pond ADS 1B: ADS 1B



Summary for Pond ADS1C: ADS 1C

Inflow Area = 74,469 sf, 80.81% Impervious, Inflow Depth = 2.55" for 1-Year event
Inflow = 4.94 cfs @ 12.09 hrs, Volume= 15,813 cf
Outflow = 0.43 cfs @ 13.03 hrs, Volume= 17,057 cf, Atten= 91%, Lag= 56.9 min
Discarded = 0.43 cfs @ 13.03 hrs, Volume= 17,057 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Reach DP1POST : DP1 POST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Starting Elev= 587.00' Surf.Area= 6,146 sf Storage= 1,229 cf
Peak Elev= 587.93' @ 13.03 hrs Surf.Area= 6,146 sf Storage= 5,924 cf (4,695 cf above start)
Flood Elev= 589.50' Surf.Area= 6,146 sf Storage= 12,089 cf (10,860 cf above start)

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 43.6 min (838.5 - 794.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	586.50'	5,462 cf	**44.25'W x 138.90'L x 3.50'H Field A** 21,512 cf Overall - 7,856 cf Embedded = 13,656 cf x 40.0% Voids
#2A	587.00'	7,856 cf	**ADS_StormTech SC-740 +Cap** x 171 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 171 Chambers in 9 Rows
		13,318 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	587.00'	**15.0" Round Culvert** L= 80.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 587.00' / 576.00' S= 0.1375 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	588.00'	**5.0' 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
#3	Discarded	586.50'	**3.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 290.00'

Discarded OutFlow Max=0.43 cfs @ 13.03 hrs HW=587.93' (Free Discharge)
└**3=Exfiltration** (Controls 0.43 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=587.00' TW=0.00' (Dynamic Tailwater)
└**1=Culvert** (Controls 0.00 cfs)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond ADS1C: ADS 1C - Chamber Wizard Field A

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

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

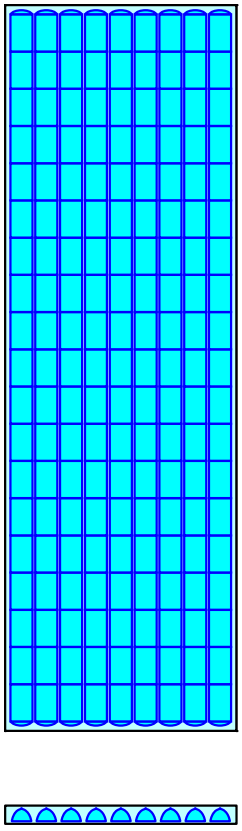
19 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 136.90' Row Length +12.0" End Stone x 2 = 138.90' Base Length
9 Rows x 51.0" Wide + 6.0" Spacing x 8 + 12.0" Side Stone x 2 = 44.25' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

171 Chambers x 45.9 cf = 7,855.7 cf Chamber Storage

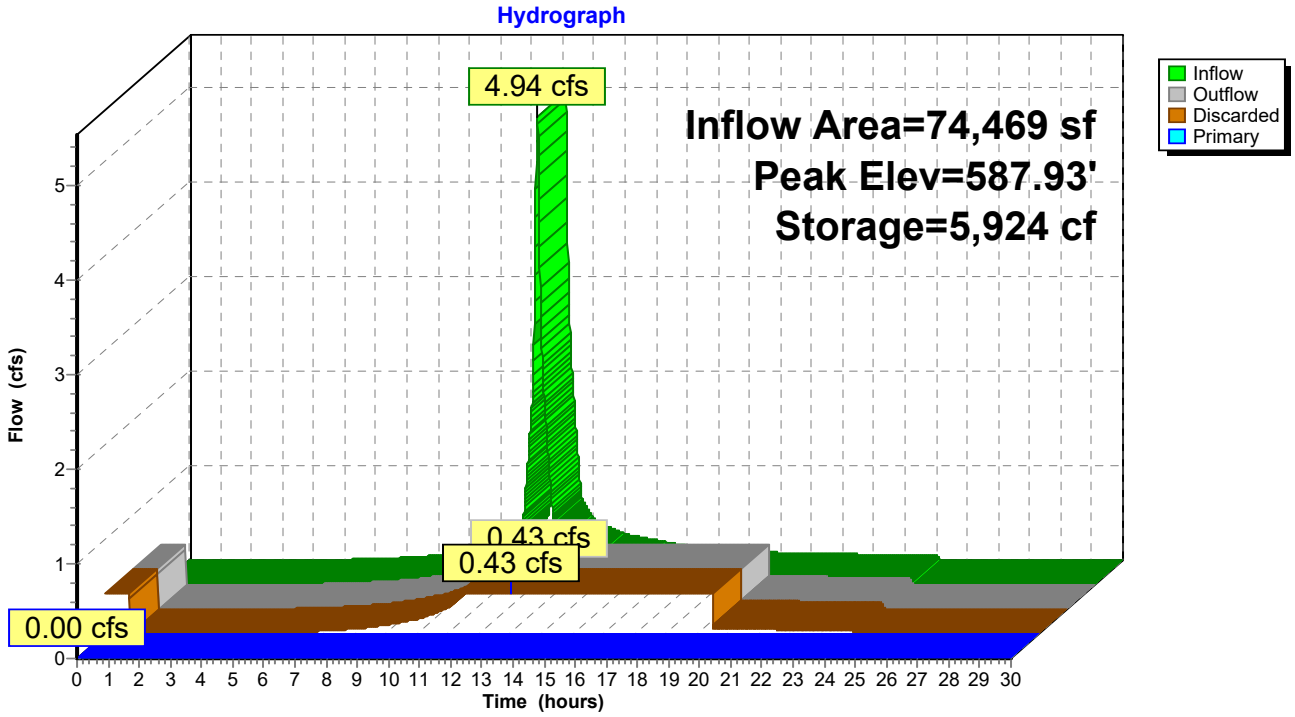
21,511.6 cf Field - 7,855.7 cf Chambers = 13,655.9 cf Stone x 40.0% Voids = 5,462.4 cf Stone Storage

Chamber Storage + Stone Storage = 13,318.1 cf = 0.306 af
Overall Storage Efficiency = 61.9%
Overall System Size = 138.90' x 44.25' x 3.50'

171 Chambers
796.7 cy Field
505.8 cy Stone



Pond ADS1C: ADS 1C



Summary for Pond CB-A-01: CB-A-01

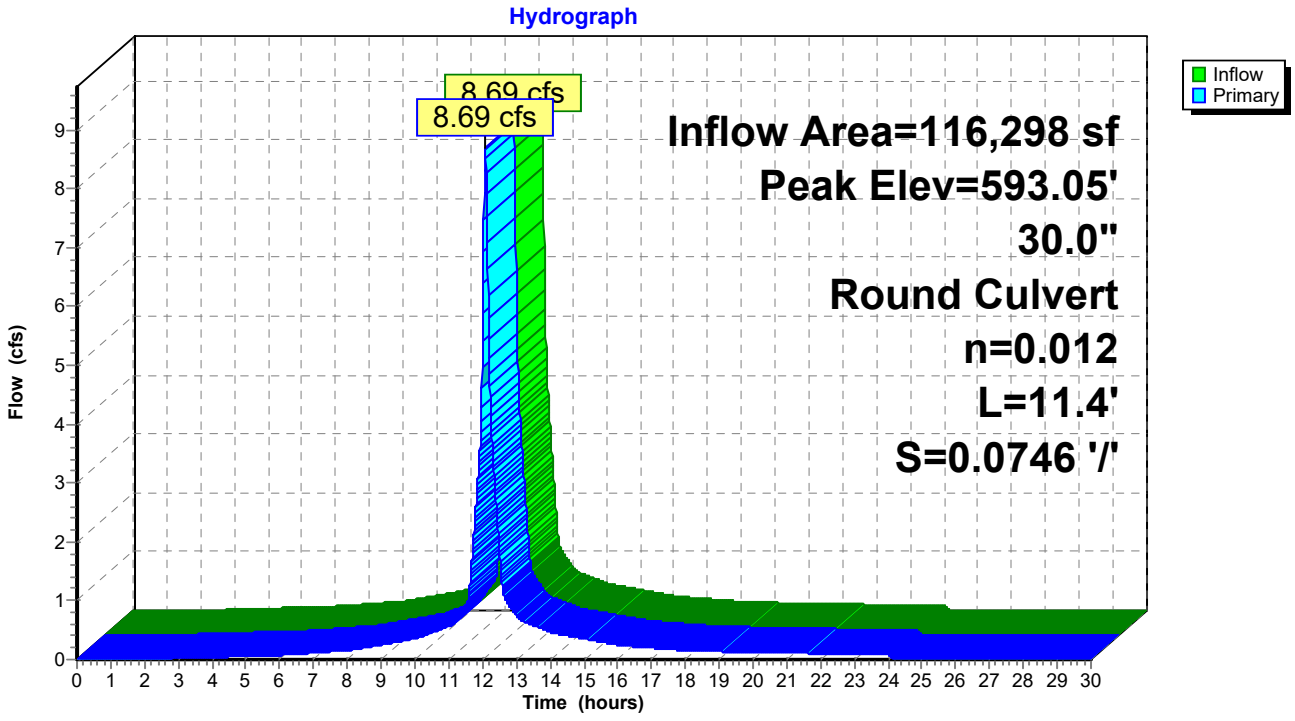
Inflow Area = 116,298 sf, 94.38% Impervious, Inflow Depth = 3.02" for 1-Year event
Inflow = 8.69 cfs @ 12.08 hrs, Volume= 29,224 cf
Outflow = 8.69 cfs @ 12.08 hrs, Volume= 29,224 cf, Atten= 0%, Lag= 0.0 min
Primary = 8.69 cfs @ 12.08 hrs, Volume= 29,224 cf
Routed to Pond ADS 1A : ADS 1A

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 593.05' @ 12.08 hrs
Flood Elev= 595.35'

Device	Routing	Invert	Outlet Devices
#1	Primary	591.85'	**30.0" Round HDPE Round 30"** L= 11.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.85' / 591.00' S= 0.0746 '/' Cc= 0.900 n= 0.012, Flow Area= 4.91 sf

Primary OutFlow Max=8.68 cfs @ 12.08 hrs HW=593.05' TW=591.09' (Dynamic Tailwater)
↑—**1=HDPE Round 30"** (Inlet Controls 8.68 cfs @ 3.73 fps)

Pond CB-A-01: CB-A-01



Summary for Pond CB-A-02: CB-A-02

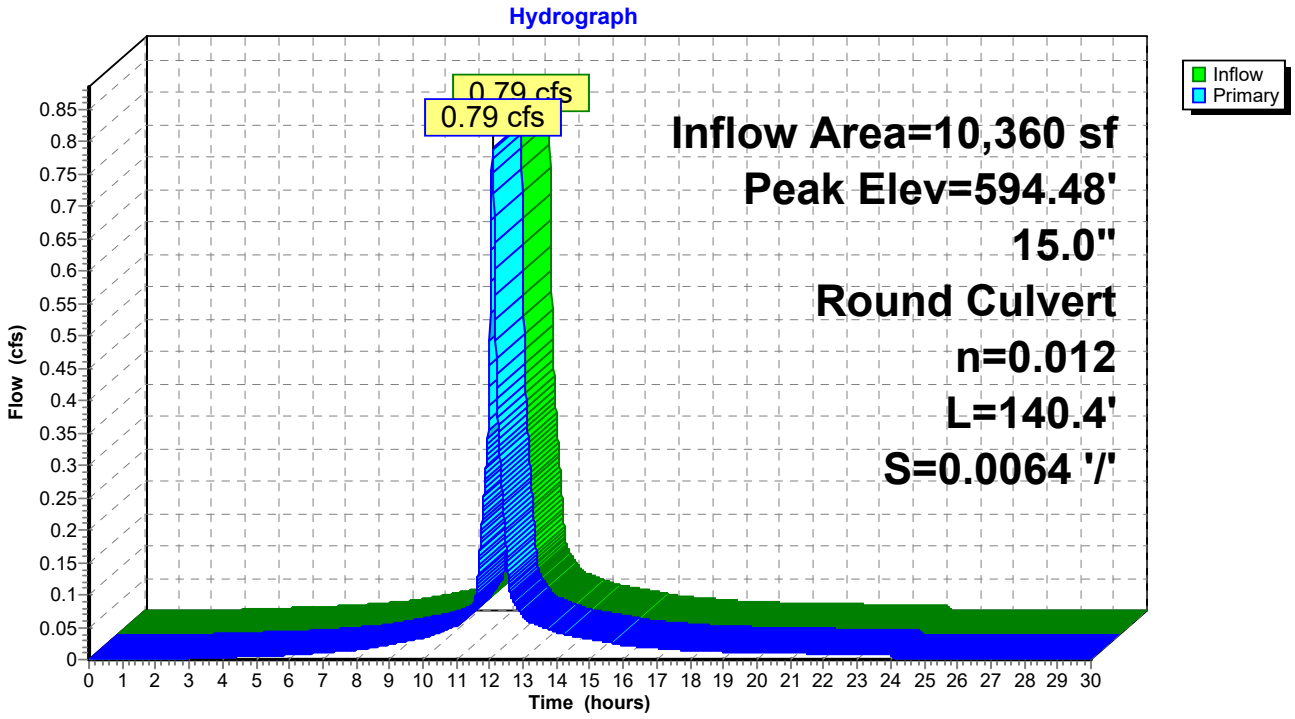
Inflow Area = 10,360 sf, 96.33% Impervious, Inflow Depth = 3.09" for 1-Year event
Inflow = 0.79 cfs @ 12.08 hrs, Volume= 2,664 cf
Outflow = 0.79 cfs @ 12.08 hrs, Volume= 2,664 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.79 cfs @ 12.08 hrs, Volume= 2,664 cf
Routed to Pond CB-A-01 : CB-A-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.48' @ 12.08 hrs
Flood Elev= 596.53'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.04'	**15.0" Round HDPE Round 15"** L= 140.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.04' / 593.14' S= 0.0064 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.79 cfs @ 12.08 hrs HW=594.48' TW=593.05' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 0.79 cfs @ 3.07 fps)

Pond CB-A-02: CB-A-02



Summary for Pond CB-A-03: CB-A-03

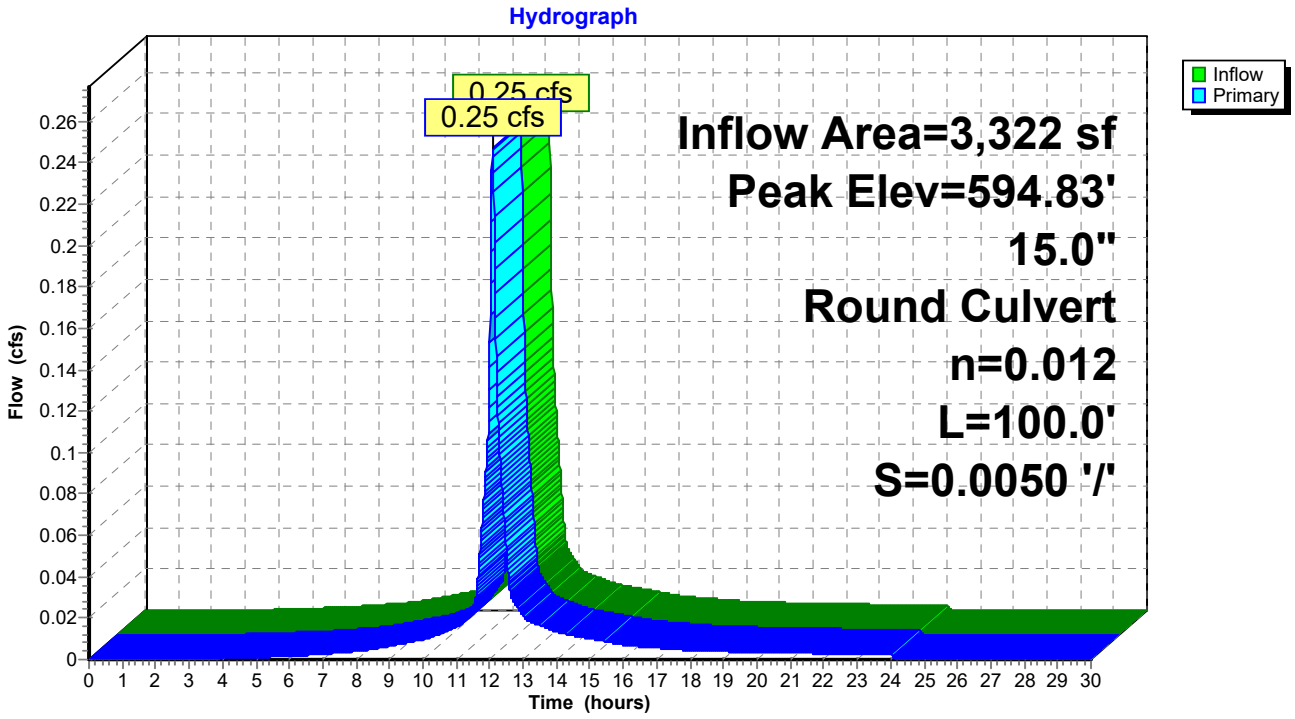
Inflow Area = 3,322 sf, 92.69% Impervious, Inflow Depth = 2.94" for 1-Year event
Inflow = 0.25 cfs @ 12.08 hrs, Volume= 814 cf
Outflow = 0.25 cfs @ 12.08 hrs, Volume= 814 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.25 cfs @ 12.08 hrs, Volume= 814 cf
Routed to Pond CB-A-02 : CB-A-02

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.83' @ 12.09 hrs
Flood Elev= 597.53'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.54'	**15.0" Round HDPE Round 15"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.54' / 594.04' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.25 cfs @ 12.08 hrs HW=594.83' TW=594.48' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 0.25 cfs @ 1.72 fps)

Pond CB-A-03: CB-A-03



Summary for Pond CB-A-04: CB-A-04

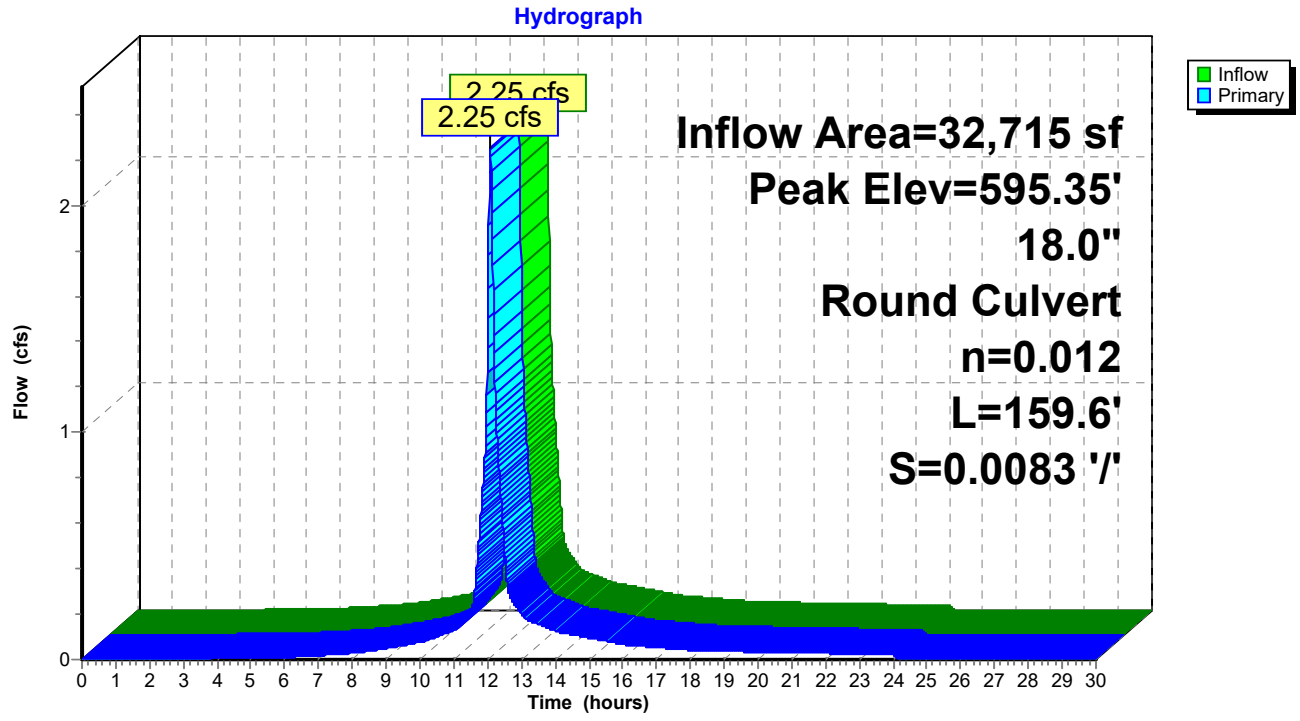
Inflow Area = 32,715 sf, 84.21% Impervious, Inflow Depth = 2.68" for 1-Year event
Inflow = 2.25 cfs @ 12.09 hrs, Volume= 7,312 cf
Outflow = 2.25 cfs @ 12.09 hrs, Volume= 7,312 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.25 cfs @ 12.09 hrs, Volume= 7,312 cf
Routed to Pond CB-A-01 : CB-A-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.35' @ 12.09 hrs
Flood Elev= 596.96'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.66'	**18.0" Round HDPE Round 18"** L= 159.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.66' / 593.34' S= 0.0083 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf

Primary OutFlow Max=2.25 cfs @ 12.09 hrs HW=595.35' TW=593.05' (Dynamic Tailwater)
1=HDPE Round 18" (Inlet Controls 2.25 cfs @ 2.83 fps)

Pond CB-A-04: CB-A-04



Summary for Pond CB-A-05: CB-A-05

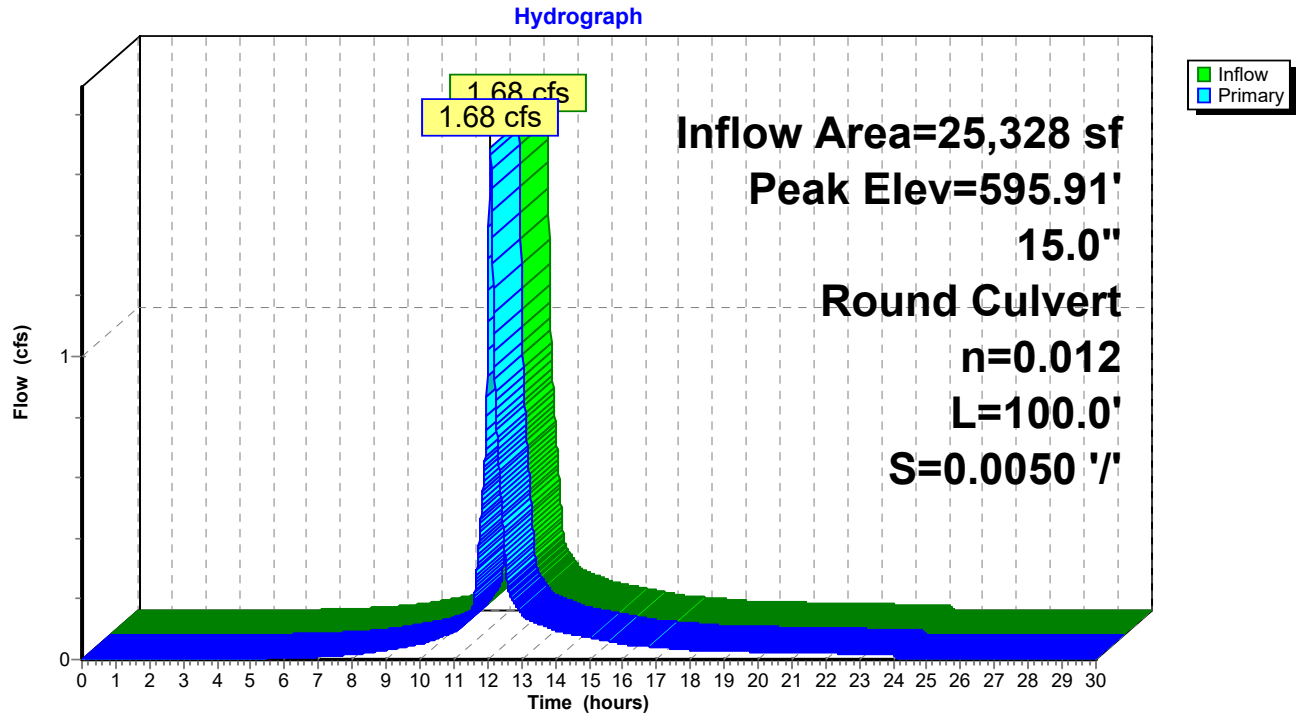
Inflow Area = 25,328 sf, 80.41% Impervious, Inflow Depth = 2.54" for 1-Year event
Inflow = 1.68 cfs @ 12.09 hrs, Volume= 5,370 cf
Outflow = 1.68 cfs @ 12.09 hrs, Volume= 5,370 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.68 cfs @ 12.09 hrs, Volume= 5,370 cf
Routed to Pond CB-A-04 : CB-A-04

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.91' @ 12.09 hrs
Flood Elev= 597.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	595.16'	**15.0" Round HDPE Round 15"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 595.16' / 594.66' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=1.68 cfs @ 12.09 hrs HW=595.91' TW=595.35' (Dynamic Tailwater)
1=HDPE Round 15" (Outlet Controls 1.68 cfs @ 3.13 fps)

Pond CB-A-05: CB-A-05



Summary for Pond CB-A-06: CB-A-06

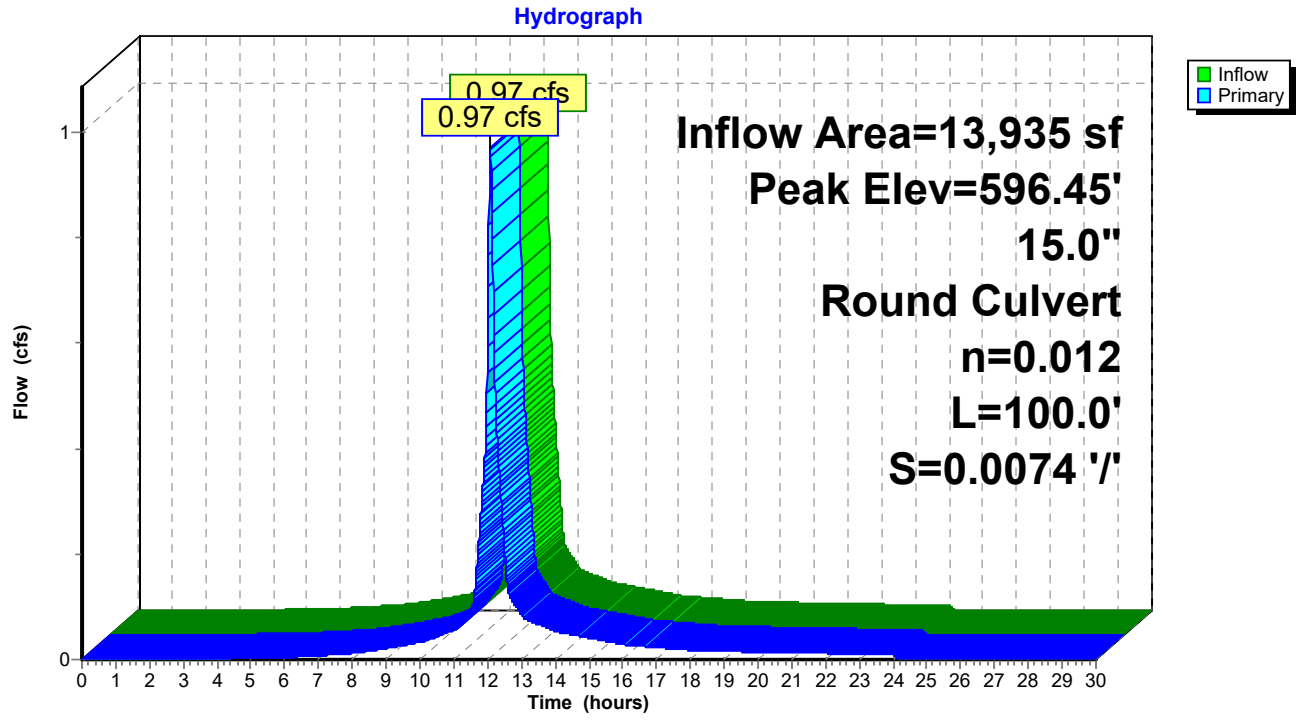
Inflow Area = 13,935 sf, 84.82% Impervious, Inflow Depth = 2.70" for 1-Year event
Inflow = 0.97 cfs @ 12.09 hrs, Volume= 3,132 cf
Outflow = 0.97 cfs @ 12.09 hrs, Volume= 3,132 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.97 cfs @ 12.09 hrs, Volume= 3,132 cf
Routed to Pond CB-A-05 : CB-A-05

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.45' @ 12.09 hrs
Flood Elev= 598.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	595.90'	**15.0" Round HDPE Round 15"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 595.90' / 595.16' S= 0.0074 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.96 cfs @ 12.09 hrs HW=596.44' TW=595.91' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 0.96 cfs @ 2.76 fps)

Pond CB-A-06: CB-A-06



Summary for Pond CB-A-07: CB-A-07

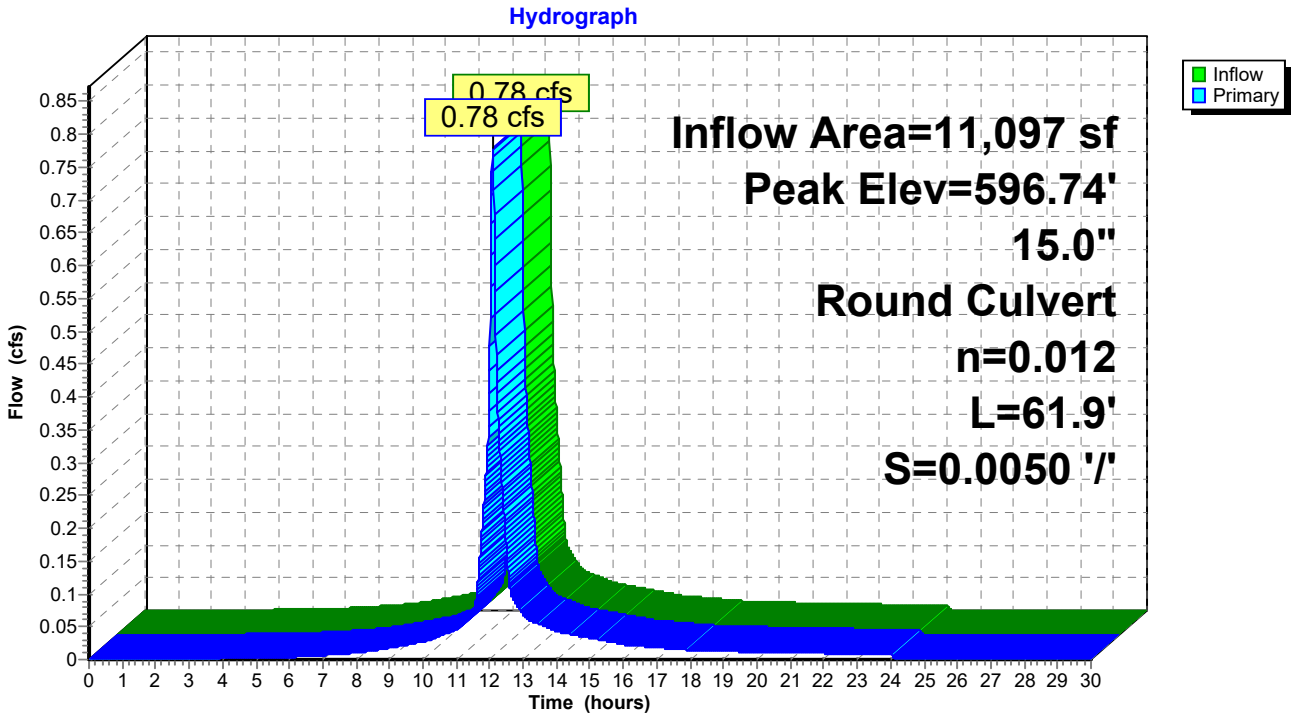
Inflow Area = 11,097 sf, 85.64% Impervious, Inflow Depth = 2.74" for 1-Year event
Inflow = 0.78 cfs @ 12.09 hrs, Volume= 2,531 cf
Outflow = 0.78 cfs @ 12.09 hrs, Volume= 2,531 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.78 cfs @ 12.09 hrs, Volume= 2,531 cf
Routed to Pond CB-A-06 : CB-A-06

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.74' @ 12.09 hrs
Flood Elev= 600.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.21'	**15.0" Round HDPE Round 15"** L= 61.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.21' / 595.90' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.77 cfs @ 12.09 hrs HW=596.73' TW=596.44' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 0.77 cfs @ 2.33 fps)

Pond CB-A-07: CB-A-07



Summary for Pond CB-A-08: CB-A-08

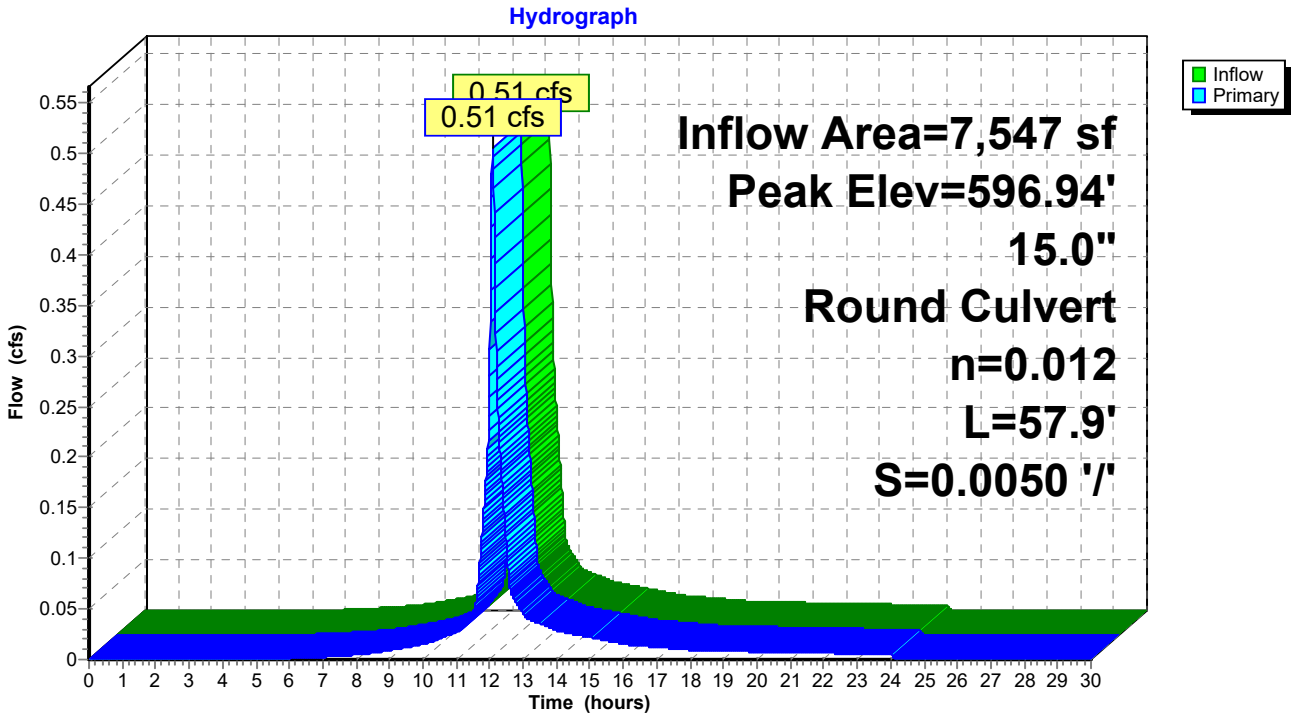
Inflow Area = 7,547 sf, 80.23% Impervious, Inflow Depth = 2.54" for 1-Year event
Inflow = 0.51 cfs @ 12.09 hrs, Volume= 1,598 cf
Outflow = 0.51 cfs @ 12.09 hrs, Volume= 1,598 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.51 cfs @ 12.09 hrs, Volume= 1,598 cf
Routed to Pond CB-A-07 : CB-A-07

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.94' @ 12.09 hrs
Flood Elev= 598.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.50'	**15.0" Round HDPE Round 15"** L= 57.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.50' / 596.21' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.50 cfs @ 12.09 hrs HW=596.94' TW=596.73' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 0.50 cfs @ 1.91 fps)

Pond CB-A-08: CB-A-08



Summary for Pond CB-A-09: CB-A-09

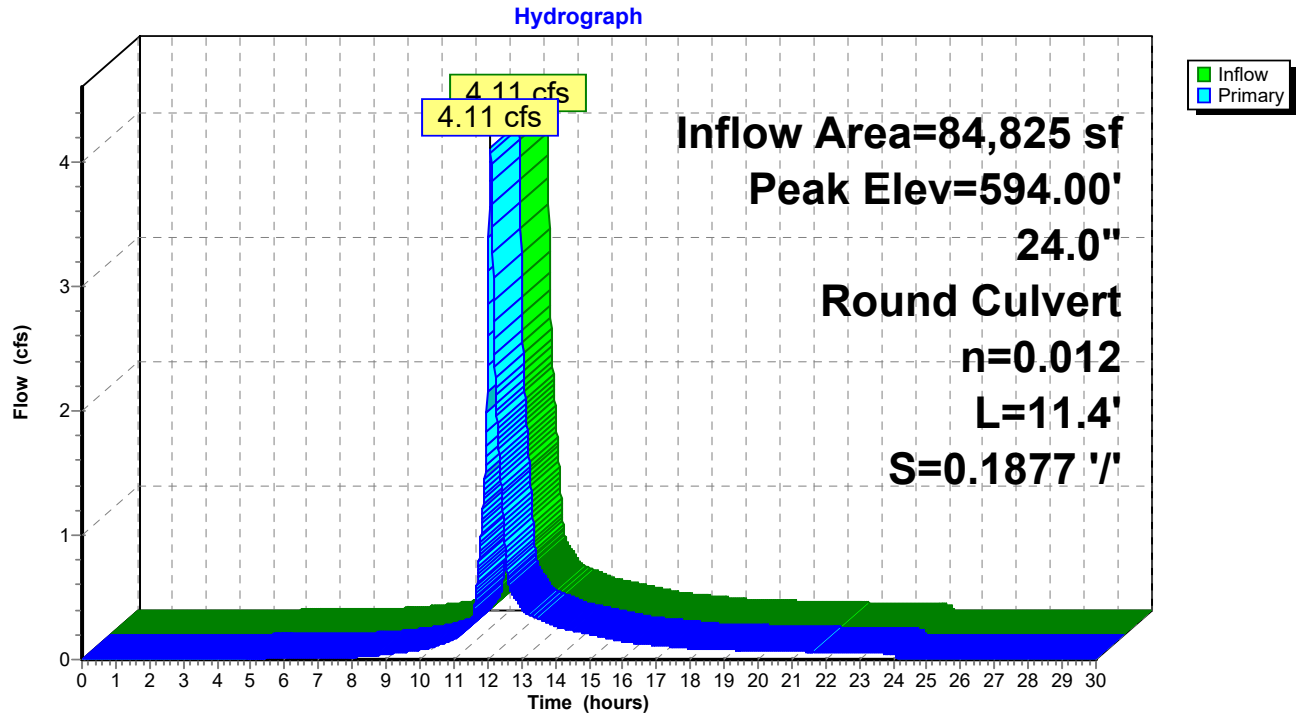
Inflow Area = 84,825 sf, 57.29% Impervious, Inflow Depth = 1.86" for 1-Year event
Inflow = 4.11 cfs @ 12.09 hrs, Volume= 13,138 cf
Outflow = 4.11 cfs @ 12.09 hrs, Volume= 13,138 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.11 cfs @ 12.09 hrs, Volume= 13,138 cf
Routed to Pond ADS 1A : ADS 1A

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.00' @ 12.09 hrs
Flood Elev= 595.44'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.14'	**24.0" Round HDPE Round 24"** L= 11.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.14' / 591.00' S= 0.1877 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf

Primary OutFlow Max=4.11 cfs @ 12.09 hrs HW=594.00' TW=591.10' (Dynamic Tailwater)
↑—**1=HDPE Round 24"** (Inlet Controls 4.11 cfs @ 3.16 fps)

Pond CB-A-09: CB-A-09



Summary for Pond CB-A-10: CB-A-10

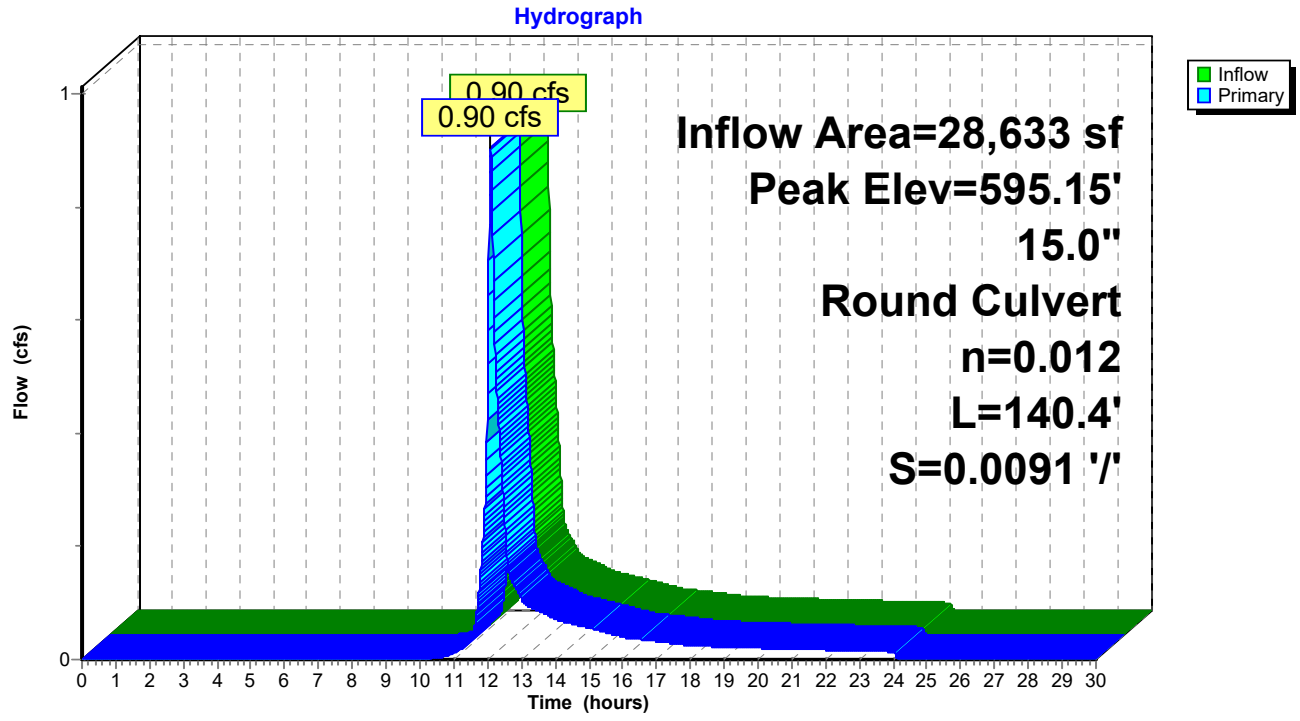
Inflow Area = 28,633 sf, 34.41% Impervious, Inflow Depth = 1.22" for 1-Year event
Inflow = 0.90 cfs @ 12.09 hrs, Volume= 2,915 cf
Outflow = 0.90 cfs @ 12.09 hrs, Volume= 2,915 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.90 cfs @ 12.09 hrs, Volume= 2,915 cf
Routed to Pond CB-A-09 : CB-A-09

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.15' @ 12.10 hrs
Flood Elev= 596.72'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.70'	**15.0" Round HDPE Round 15"** L= 140.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.70' / 593.42' S= 0.0091 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.90 cfs @ 12.09 hrs HW=595.15' TW=594.00' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 0.90 cfs @ 3.34 fps)

Pond CB-A-10: CB-A-10



Summary for Pond CB-A-11: CB-A-11

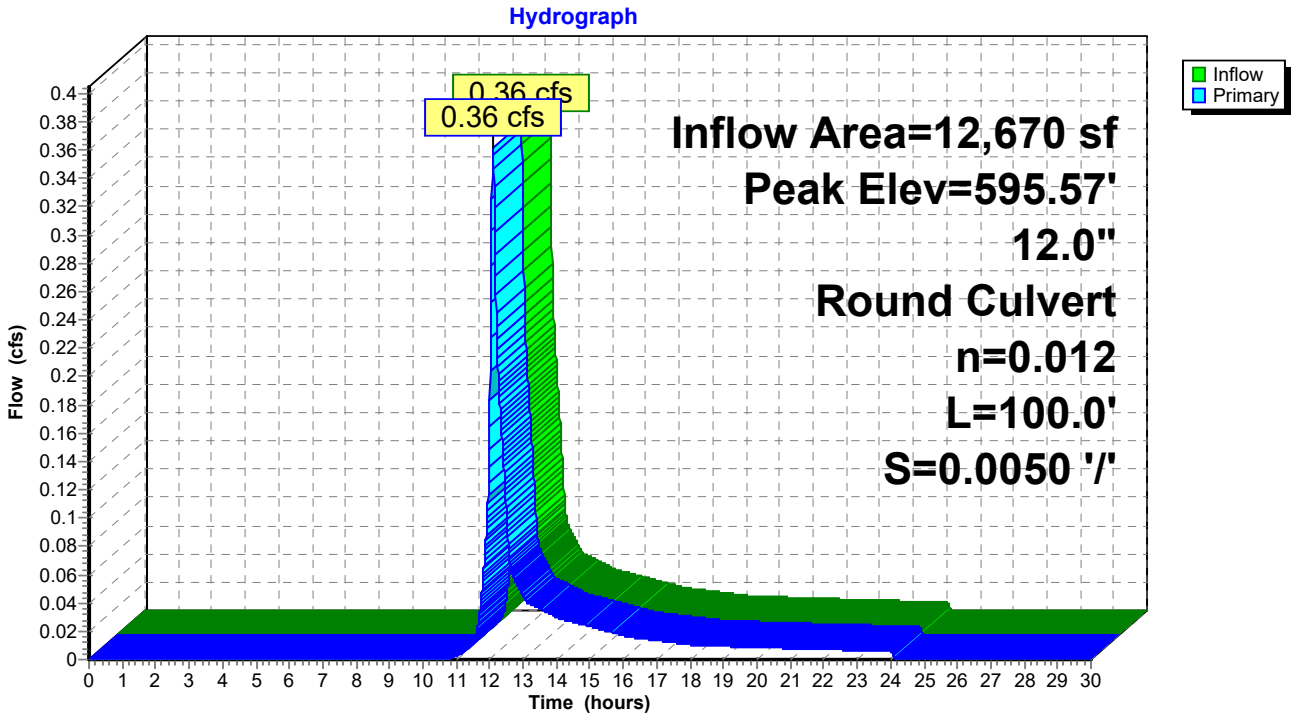
Inflow Area = 12,670 sf, 30.21% Impervious, Inflow Depth = 1.12" for 1-Year event
Inflow = 0.36 cfs @ 12.10 hrs, Volume= 1,183 cf
Outflow = 0.36 cfs @ 12.10 hrs, Volume= 1,183 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.36 cfs @ 12.10 hrs, Volume= 1,183 cf
Routed to Pond CB-A-10 : CB-A-10

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.57' @ 12.10 hrs
Flood Elev= 597.61'

Device	Routing	Invert	Outlet Devices
#1	Primary	595.20'	**12.0" Round HDPE Round 12"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 595.20' / 594.70' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.36 cfs @ 12.10 hrs HW=595.57' TW=595.15' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 0.36 cfs @ 2.04 fps)

Pond CB-A-11: CB-A-11



Summary for Pond CB-A-12: CB-A-12

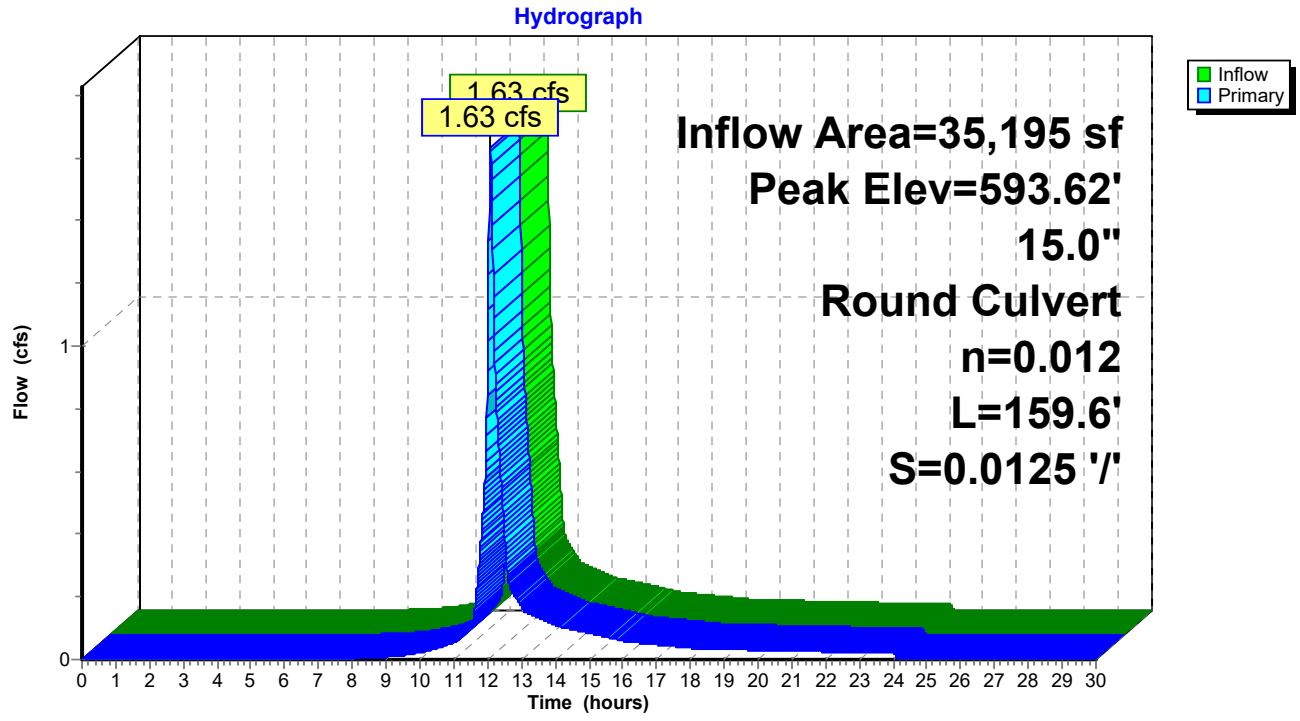
Inflow Area = 35,195 sf, 54.89% Impervious, Inflow Depth = 1.74" for 1-Year event
Inflow = 1.63 cfs @ 12.09 hrs, Volume= 5,095 cf
Outflow = 1.63 cfs @ 12.09 hrs, Volume= 5,095 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.63 cfs @ 12.09 hrs, Volume= 5,095 cf
Routed to Pond ADS 1A : ADS 1A

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 593.62' @ 12.09 hrs
Flood Elev= 597.01'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.00'	**15.0" Round HDPE Round 15"** L= 159.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.00' / 591.00' S= 0.0125 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=1.63 cfs @ 12.09 hrs HW=593.62' TW=591.10' (Dynamic Tailwater)
1=HDPE Round 15" (Inlet Controls 1.63 cfs @ 2.68 fps)

Pond CB-A-12: CB-A-12



Summary for Pond CB-A-13: CB-A-12

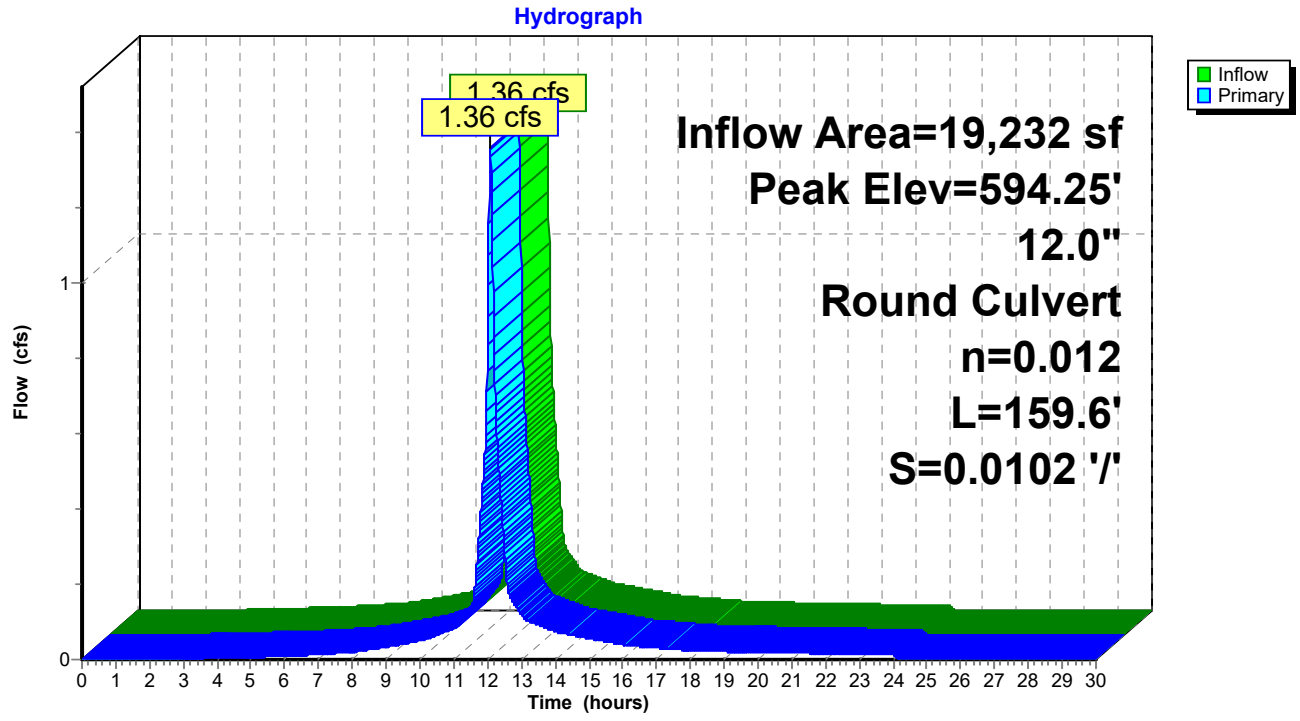
Inflow Area = 19,232 sf, 86.74% Impervious, Inflow Depth = 2.81" for 1-Year event
Inflow = 1.36 cfs @ 12.08 hrs, Volume= 4,499 cf
Outflow = 1.36 cfs @ 12.08 hrs, Volume= 4,499 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.36 cfs @ 12.08 hrs, Volume= 4,499 cf
Routed to Pond CB-A-09 : CB-A-09

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.25' @ 12.09 hrs
Flood Elev= 597.01'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.00'	**12.0" Round HDPE Round 12"** L= 159.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.00' / 591.37' S= 0.0102 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=1.34 cfs @ 12.08 hrs HW=594.24' TW=594.00' (Dynamic Tailwater)
↑**1=HDPE Round 12"** (Outlet Controls 1.34 cfs @ 1.76 fps)

Pond CB-A-13: CB-A-12



Summary for Pond CB-A-14: CB-A-14

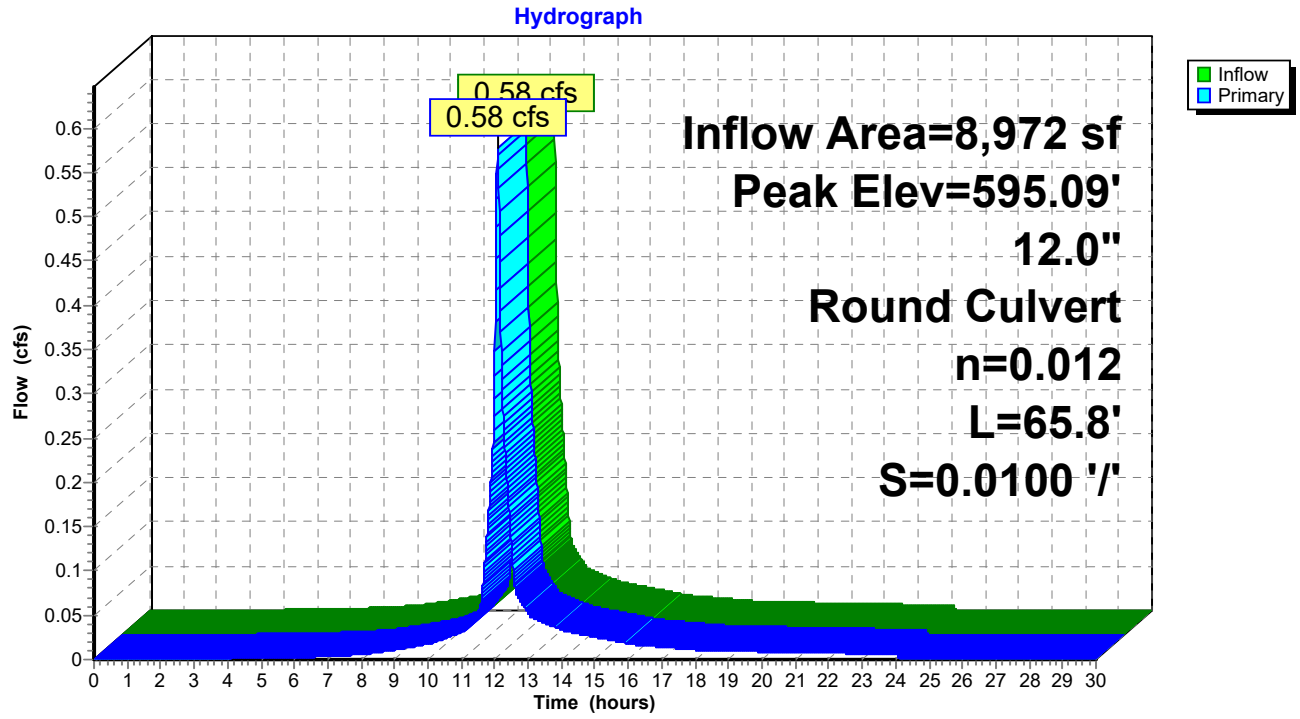
Inflow Area = 8,972 sf, 77.86% Impervious, Inflow Depth = 2.49" for 1-Year event
Inflow = 0.58 cfs @ 12.09 hrs, Volume= 1,858 cf
Outflow = 0.58 cfs @ 12.09 hrs, Volume= 1,858 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.58 cfs @ 12.09 hrs, Volume= 1,858 cf
Routed to Pond 3P : CB-A-13

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.09' @ 12.09 hrs
Flood Elev= 598.67'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.66'	**12.0" Round HDPE Round 12"** L= 65.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.66' / 594.00' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.57 cfs @ 12.09 hrs HW=595.09' TW=594.63' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 0.57 cfs @ 2.64 fps)

Pond CB-A-14: CB-A-14



Summary for Pond CB-A-15: CB-A-15

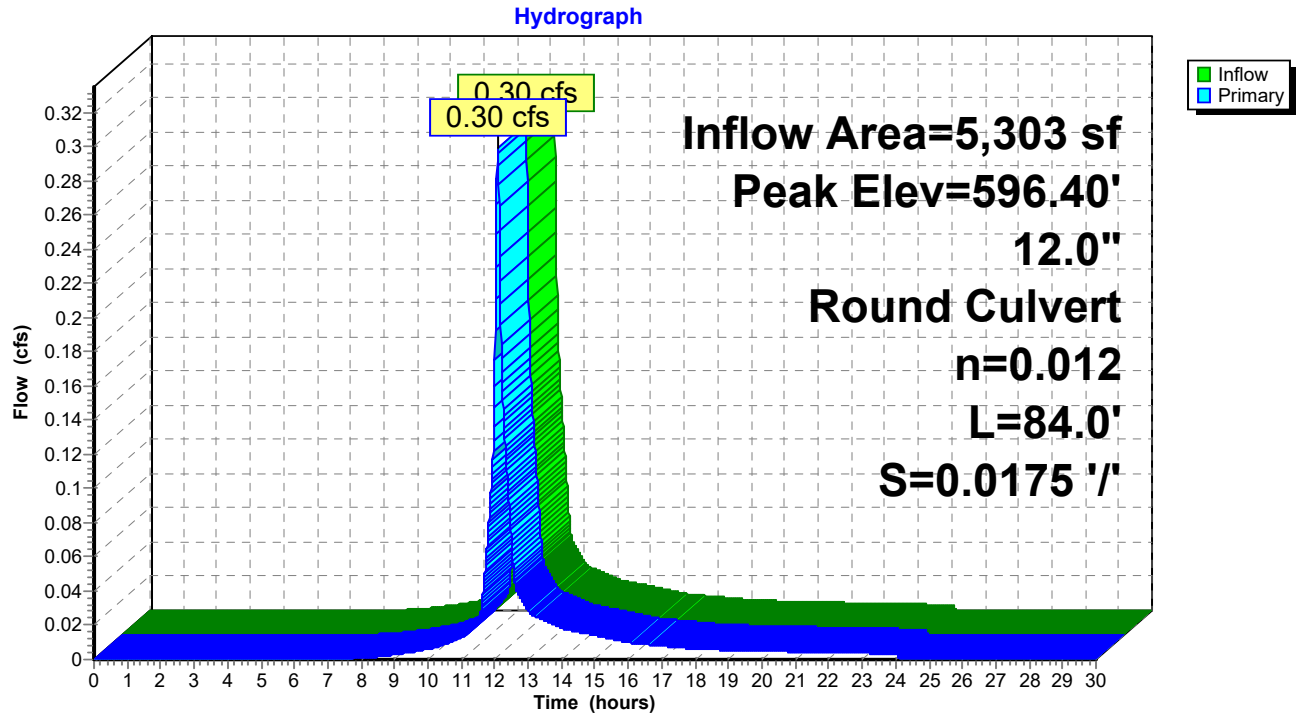
Inflow Area = 5,303 sf, 67.21% Impervious, Inflow Depth = 2.10" for 1-Year event
Inflow = 0.30 cfs @ 12.09 hrs, Volume= 927 cf
Outflow = 0.30 cfs @ 12.09 hrs, Volume= 927 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.30 cfs @ 12.09 hrs, Volume= 927 cf
Routed to Pond CB-A-14 : CB-A-14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.40' @ 12.09 hrs
Flood Elev= 600.14'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.13'	**12.0" Round HDPE Round 12"** L= 84.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.13' / 594.66' S= 0.0175 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.30 cfs @ 12.09 hrs HW=596.40' TW=595.09' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Inlet Controls 0.30 cfs @ 1.76 fps)

Pond CB-A-15: CB-A-15



Summary for Pond CB-A-16: CB-A-16

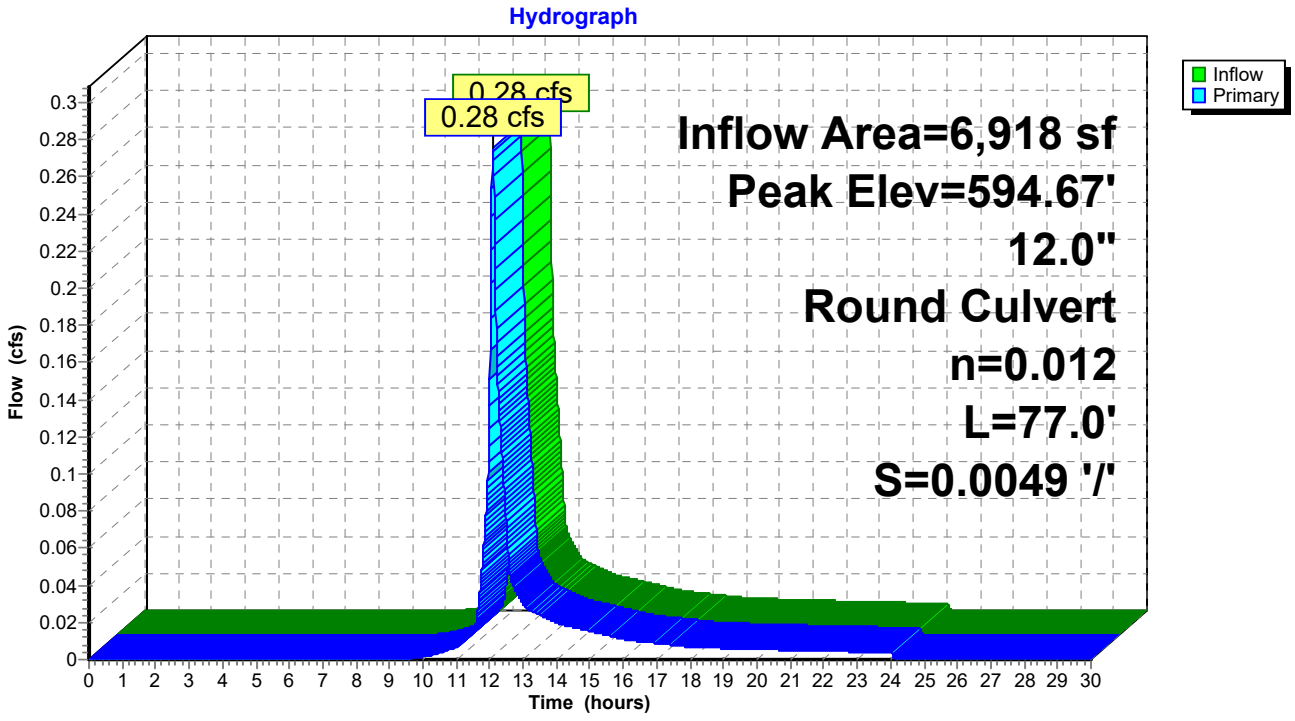
Inflow Area = 6,918 sf, 46.04% Impervious, Inflow Depth = 1.50" for 1-Year event
Inflow = 0.28 cfs @ 12.09 hrs, Volume= 863 cf
Outflow = 0.28 cfs @ 12.09 hrs, Volume= 863 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.28 cfs @ 12.09 hrs, Volume= 863 cf
Routed to Pond CB-A-17 : CB-A-17

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.67' @ 12.10 hrs
Flood Elev= 596.24'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.23'	**12.0" Round HDPE Round 12"** L= 77.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.23' / 593.85' S= 0.0049 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.27 cfs @ 12.09 hrs HW=594.66' TW=594.56' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 0.27 cfs @ 1.23 fps)

Pond CB-A-16: CB-A-16



Summary for Pond CB-A-17: CB-A-17

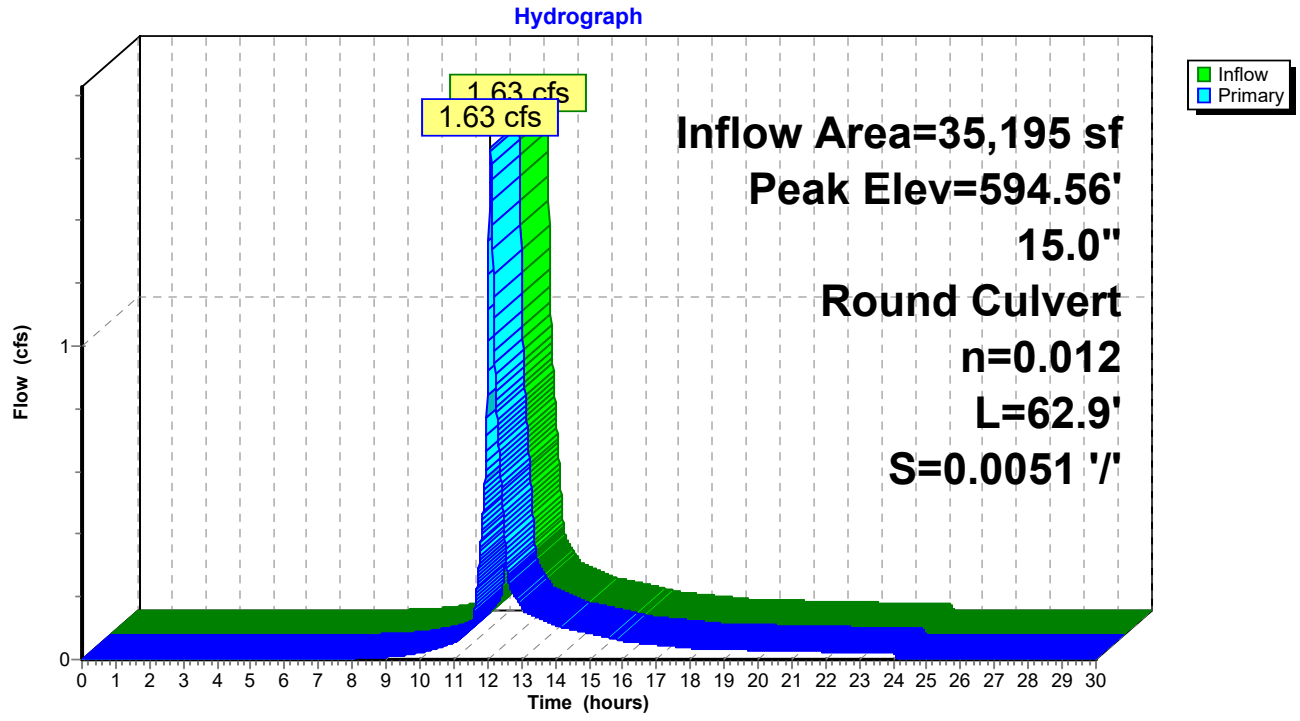
Inflow Area = 35,195 sf, 54.89% Impervious, Inflow Depth = 1.74" for 1-Year event
Inflow = 1.63 cfs @ 12.09 hrs, Volume= 5,095 cf
Outflow = 1.63 cfs @ 12.09 hrs, Volume= 5,095 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.63 cfs @ 12.09 hrs, Volume= 5,095 cf
Routed to Pond CB-A-12 : CB-A-12

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.56' @ 12.09 hrs
Flood Elev= 597.01'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.85'	**15.0" Round HDPE Round 15"** L= 62.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.85' / 593.53' S= 0.0051 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=1.63 cfs @ 12.09 hrs HW=594.56' TW=593.62' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 1.63 cfs @ 3.29 fps)

Pond CB-A-17: CB-A-17



Summary for Pond CB-A-18: CB-A-18

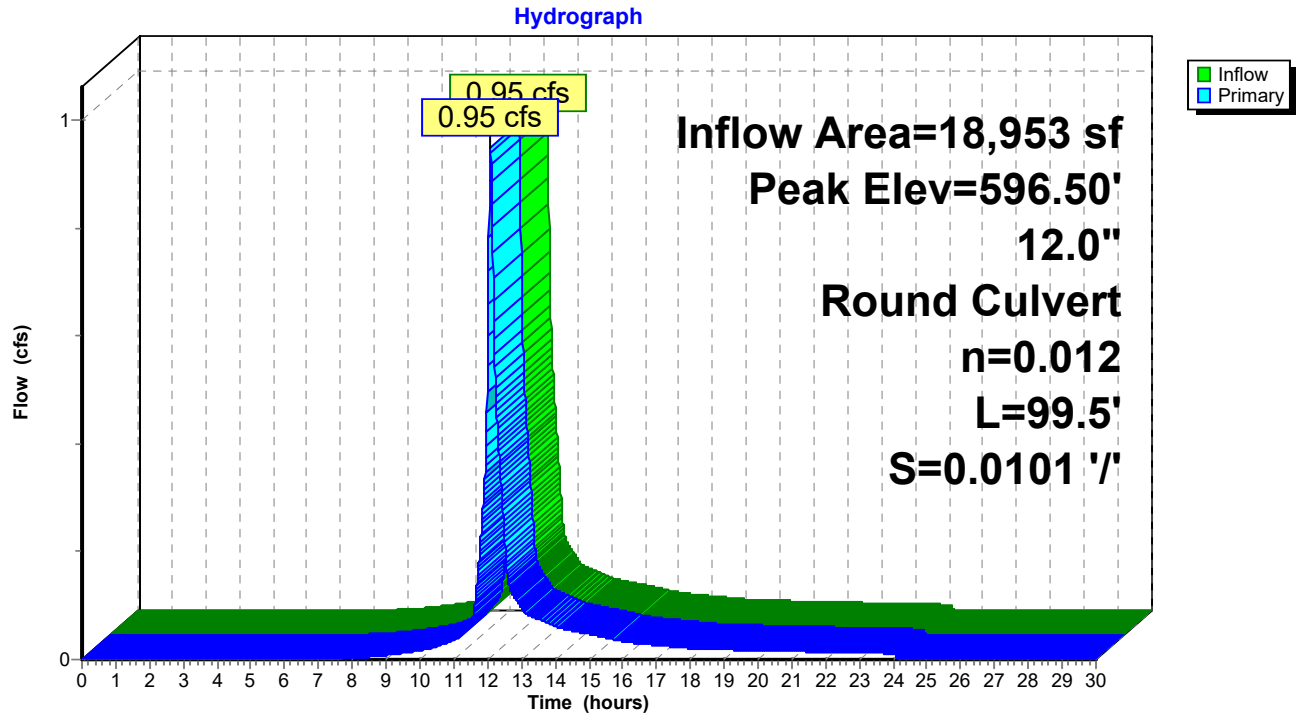
Inflow Area = 18,953 sf, 59.78% Impervious, Inflow Depth = 1.87" for 1-Year event
Inflow = 0.95 cfs @ 12.09 hrs, Volume= 2,960 cf
Outflow = 0.95 cfs @ 12.09 hrs, Volume= 2,960 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.95 cfs @ 12.09 hrs, Volume= 2,960 cf
Routed to Pond CB-A-17 : CB-A-17

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.50' @ 12.09 hrs
Flood Elev= 598.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.00'	**12.0" Round HDPE Round 12"** L= 99.5' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.00' / 595.00' S= 0.0101 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.95 cfs @ 12.09 hrs HW=596.50' TW=594.56' (Dynamic Tailwater)
1=HDPE Round 12" (Inlet Controls 0.95 cfs @ 2.41 fps)

Pond CB-A-18: CB-A-18



Summary for Pond CB-A-19: CB-A-19

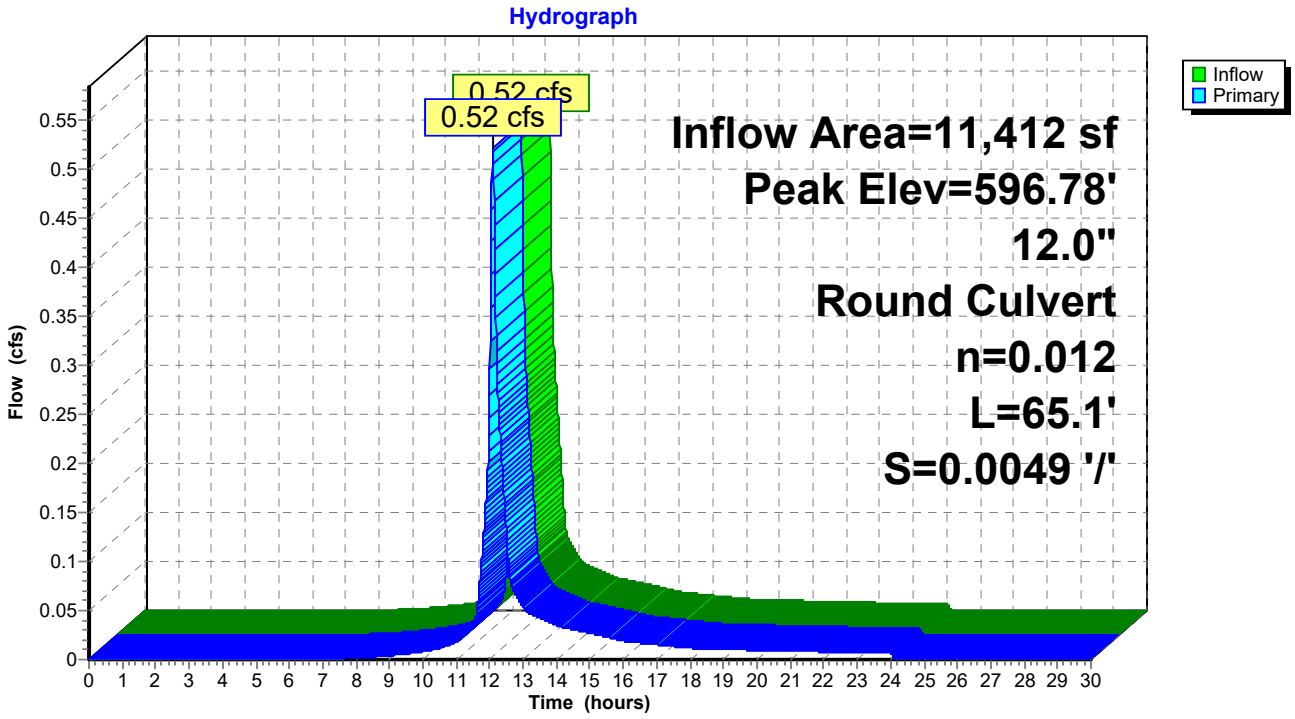
Inflow Area = 11,412 sf, 53.74% Impervious, Inflow Depth = 1.73" for 1-Year event
Inflow = 0.52 cfs @ 12.09 hrs, Volume= 1,642 cf
Outflow = 0.52 cfs @ 12.09 hrs, Volume= 1,642 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.52 cfs @ 12.09 hrs, Volume= 1,642 cf
Routed to Pond CB-A-18 : CB-A-18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.78' @ 12.09 hrs
Flood Elev= 598.65'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.32'	**12.0" Round HDPE Round 12"** L= 65.1' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.32' / 596.00' S= 0.0049 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.52 cfs @ 12.09 hrs HW=596.78' TW=596.50' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 0.52 cfs @ 2.14 fps)

Pond CB-A-19: CB-A-19



Summary for Pond CB-A-20: CB-A-20

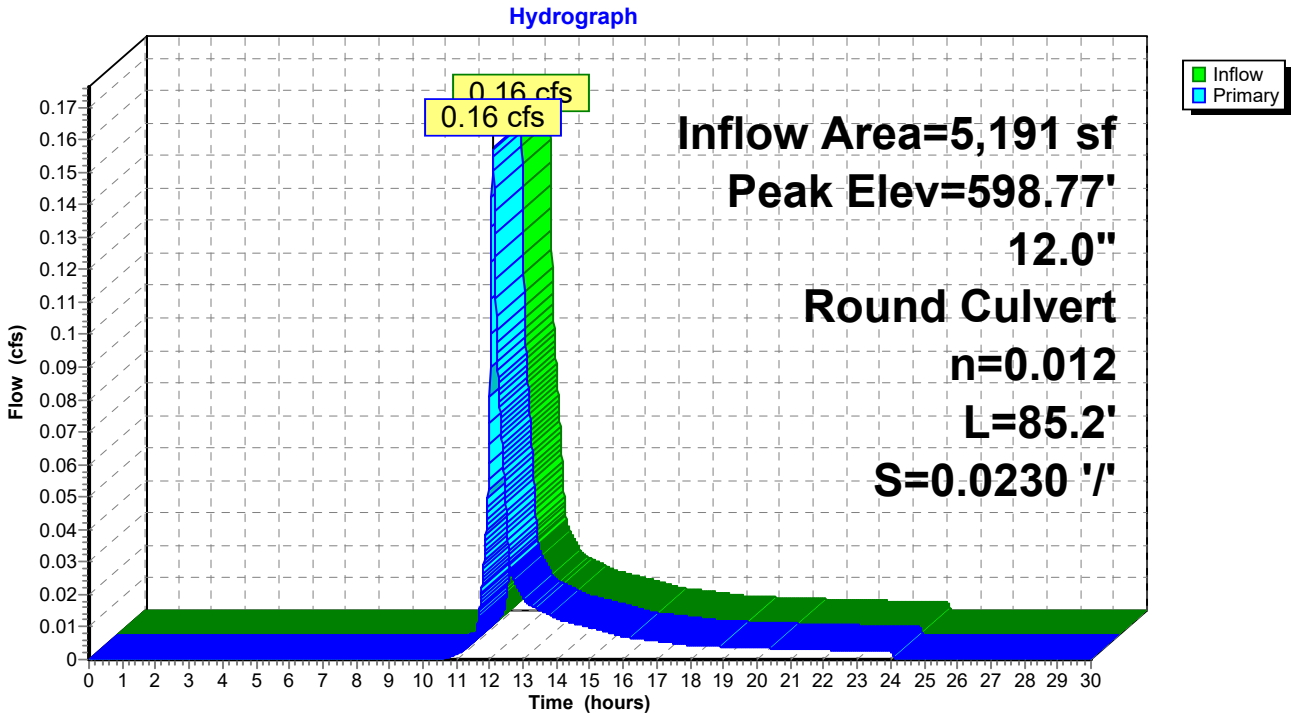
Inflow Area = 5,191 sf, 33.40% Impervious, Inflow Depth = 1.18" for 1-Year event
Inflow = 0.16 cfs @ 12.10 hrs, Volume= 510 cf
Outflow = 0.16 cfs @ 12.10 hrs, Volume= 510 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.16 cfs @ 12.10 hrs, Volume= 510 cf
Routed to Pond CB-A-19 : CB-A-19

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 598.77' @ 12.10 hrs
Flood Elev= 600.58'

Device	Routing	Invert	Outlet Devices
#1	Primary	598.58'	**12.0" Round HDPE Round 12"** L= 85.2' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 598.58' / 596.62' S= 0.0230 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.16 cfs @ 12.10 hrs HW=598.77' TW=596.78' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Inlet Controls 0.16 cfs @ 1.49 fps)

Pond CB-A-20: CB-A-20



Summary for Pond CB-B-01: CB-B-01

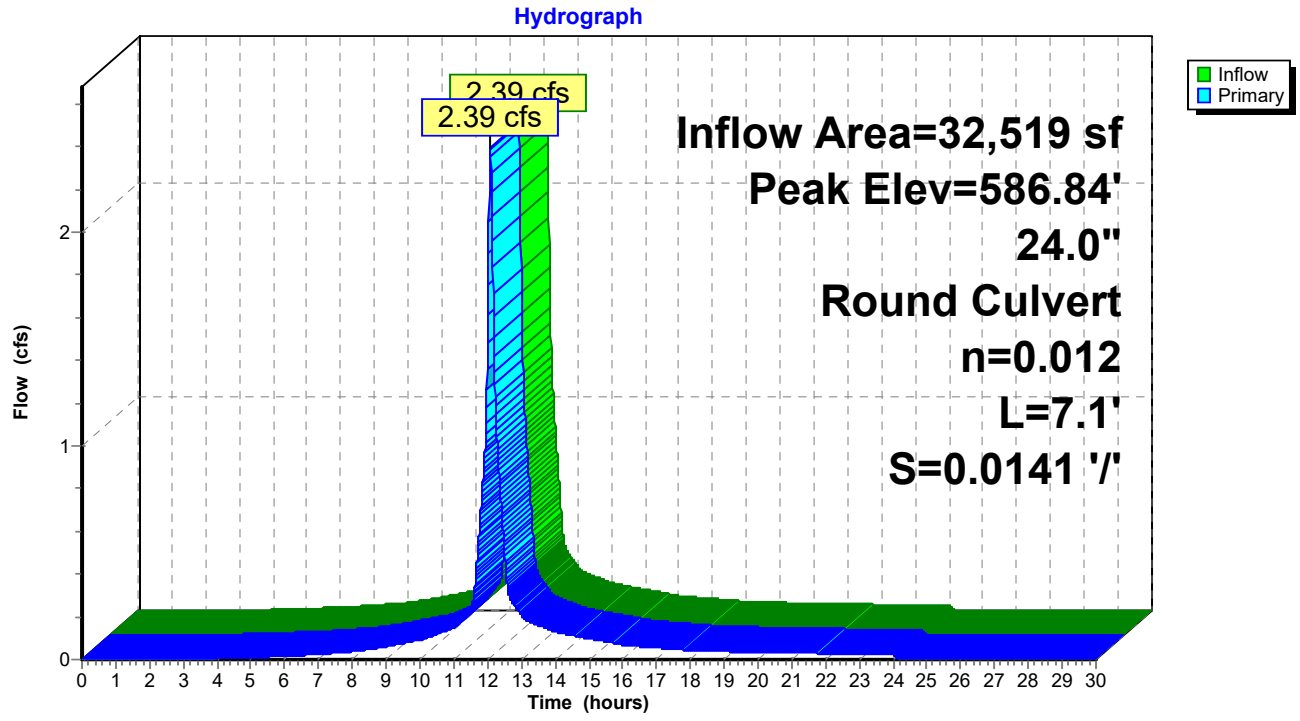
Inflow Area = 32,519 sf, 91.41% Impervious, Inflow Depth = 2.91" for 1-Year event
Inflow = 2.39 cfs @ 12.08 hrs, Volume= 7,873 cf
Outflow = 2.39 cfs @ 12.08 hrs, Volume= 7,873 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.39 cfs @ 12.08 hrs, Volume= 7,873 cf
Routed to Pond ADS 1B : ADS 1B

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 586.84' @ 12.08 hrs
Flood Elev= 589.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	586.10'	**24.0" Round HDPE Round 24"** L= 7.1' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 586.10' / 586.00' S= 0.0141 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf

Primary OutFlow Max=2.39 cfs @ 12.08 hrs HW=586.84' TW=585.68' (Dynamic Tailwater)
1=HDPE Round 24" (Barrel Controls 2.39 cfs @ 3.35 fps)

Pond CB-B-01: CB-B-01



Summary for Pond CB-B-02: CB-B-02

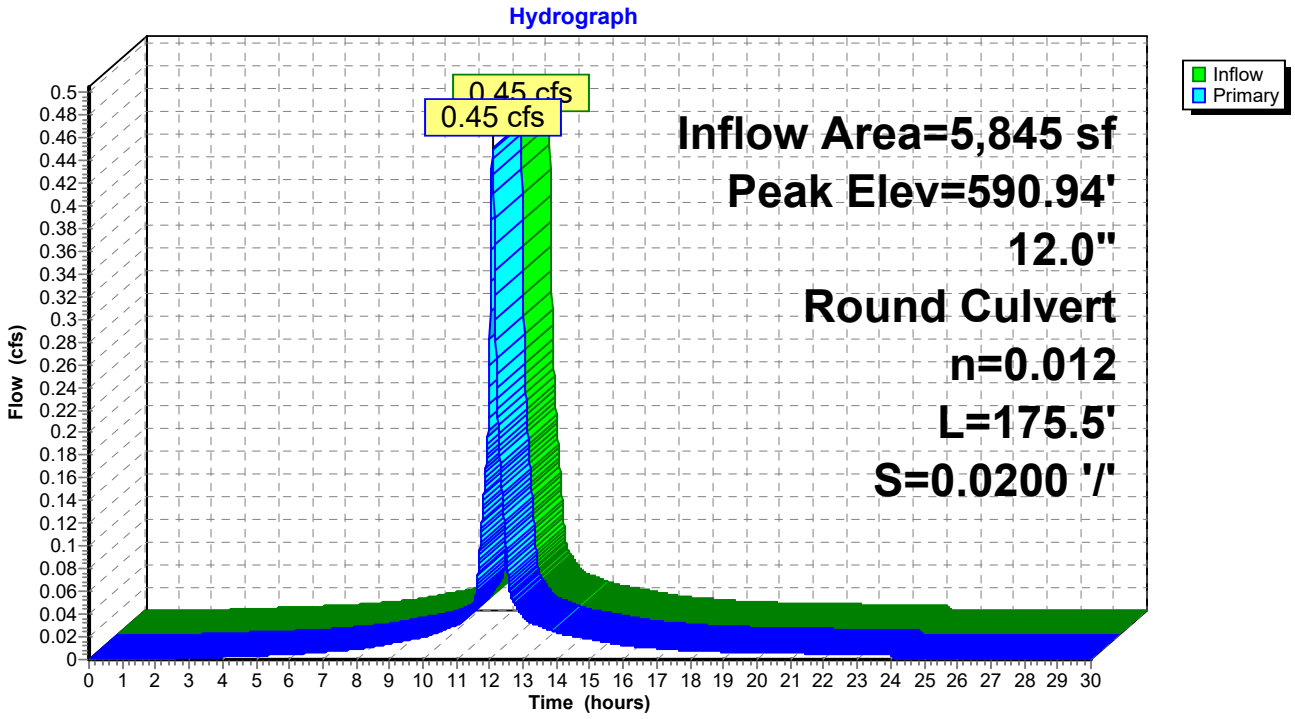
Inflow Area = 5,845 sf, 96.34% Impervious, Inflow Depth = 3.15" for 1-Year event
Inflow = 0.45 cfs @ 12.08 hrs, Volume= 1,536 cf
Outflow = 0.45 cfs @ 12.08 hrs, Volume= 1,536 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.45 cfs @ 12.08 hrs, Volume= 1,536 cf
Routed to Pond CB-B-01 : CB-B-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 590.94' @ 12.08 hrs
Flood Elev= 592.61'

Device	Routing	Invert	Outlet Devices
#1	Primary	590.61'	**12.0" Round HDPE Round 12"** L= 175.5' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 590.61' / 587.10' S= 0.0200 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.45 cfs @ 12.08 hrs HW=590.94' TW=586.84' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Inlet Controls 0.45 cfs @ 1.97 fps)

Pond CB-B-02: CB-B-02



Summary for Pond CB-B-03: CB-B-03

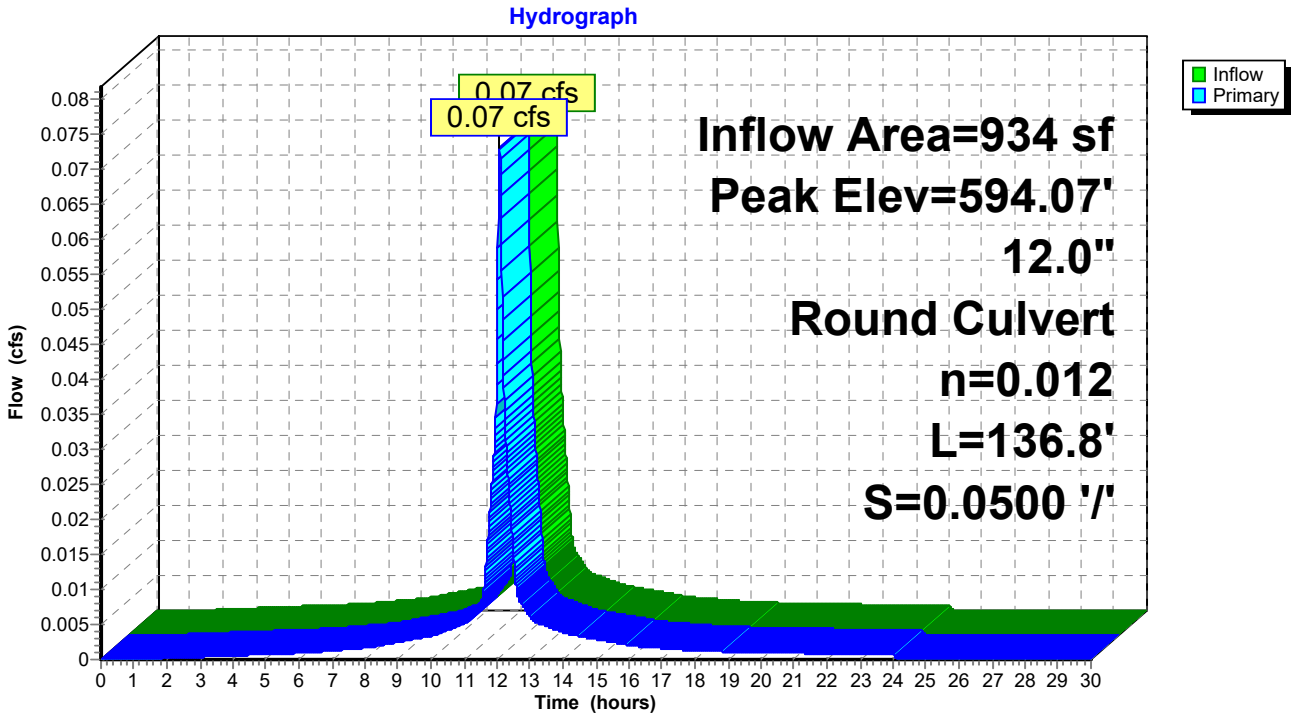
Inflow Area = 934 sf,100.00% Impervious, Inflow Depth = 3.27" for 1-Year event
Inflow = 0.07 cfs @ 12.08 hrs, Volume= 254 cf
Outflow = 0.07 cfs @ 12.08 hrs, Volume= 254 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.07 cfs @ 12.08 hrs, Volume= 254 cf
Routed to Pond CB-B-01 : CB-B-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.07' @ 12.08 hrs
Flood Elev= 595.94'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.94'	**12.0" Round HDPE Round 12"** L= 136.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.94' / 587.10' S= 0.0500 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.07 cfs @ 12.08 hrs HW=594.07' TW=586.84' (Dynamic Tailwater)
↑**1=HDPE Round 12"** (Inlet Controls 0.07 cfs @ 1.22 fps)

Pond CB-B-03: CB-B-03



Summary for Pond CB-B-04: CB-B-04

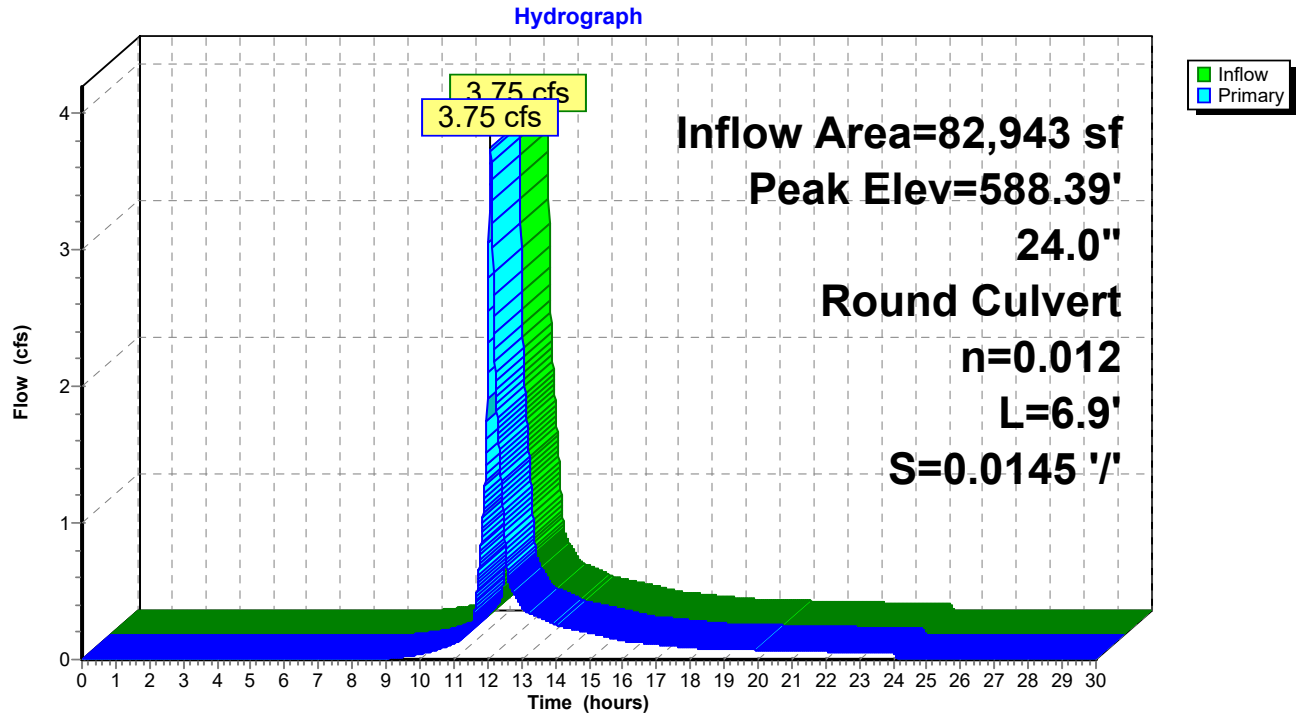
Inflow Area = 82,943 sf, 52.19% Impervious, Inflow Depth = 1.68" for 1-Year event
Inflow = 3.75 cfs @ 12.09 hrs, Volume= 11,641 cf
Outflow = 3.75 cfs @ 12.09 hrs, Volume= 11,641 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.75 cfs @ 12.09 hrs, Volume= 11,641 cf
Routed to Pond ADS 1B : ADS 1B

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 588.39' @ 12.09 hrs
Flood Elev= 590.44'

Device	Routing	Invert	Outlet Devices
#1	Primary	587.43'	**24.0" Round HDPE Round 24"** L= 6.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 587.43' / 587.33' S= 0.0145 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf

Primary OutFlow Max=3.74 cfs @ 12.09 hrs HW=588.39' TW=585.70' (Dynamic Tailwater)
1=HDPE Round 24" (Barrel Controls 3.74 cfs @ 3.69 fps)

Pond CB-B-04: CB-B-04



Summary for Pond CB-B-05: CB-B-05

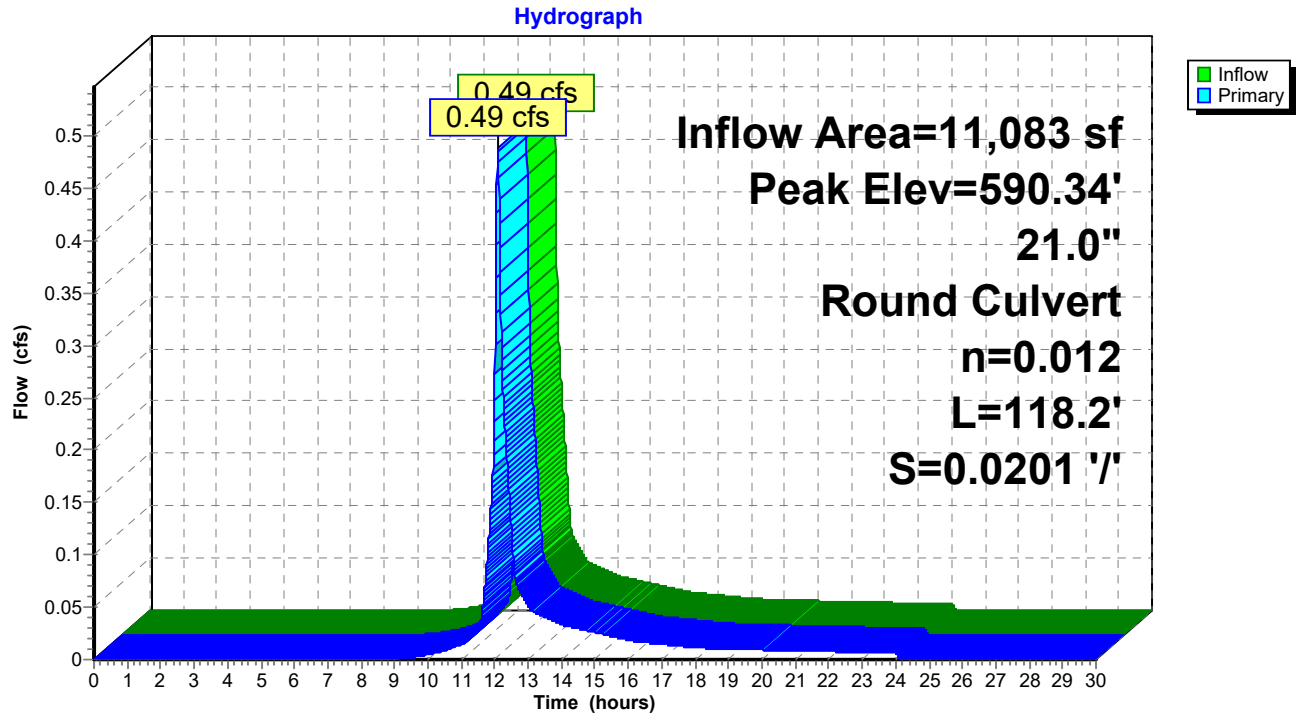
Inflow Area = 11,083 sf, 51.58% Impervious, Inflow Depth = 1.65" for 1-Year event
Inflow = 0.49 cfs @ 12.09 hrs, Volume= 1,521 cf
Outflow = 0.49 cfs @ 12.09 hrs, Volume= 1,521 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.49 cfs @ 12.09 hrs, Volume= 1,521 cf
Routed to Pond CB-B-04 : CB-B-04

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 590.34' @ 12.09 hrs
Flood Elev= 592.82'

Device	Routing	Invert	Outlet Devices
#1	Primary	590.05'	**21.0" Round HDPE Round 21"** L= 118.2' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 590.05' / 587.68' S= 0.0201 '/' Cc= 0.900 n= 0.012, Flow Area= 2.41 sf

Primary OutFlow Max=0.49 cfs @ 12.09 hrs HW=590.34' TW=588.39' (Dynamic Tailwater)
↑—**1=HDPE Round 21"** (Inlet Controls 0.49 cfs @ 1.84 fps)

Pond CB-B-05: CB-B-05



Summary for Pond CB-B-07: CB-B-07

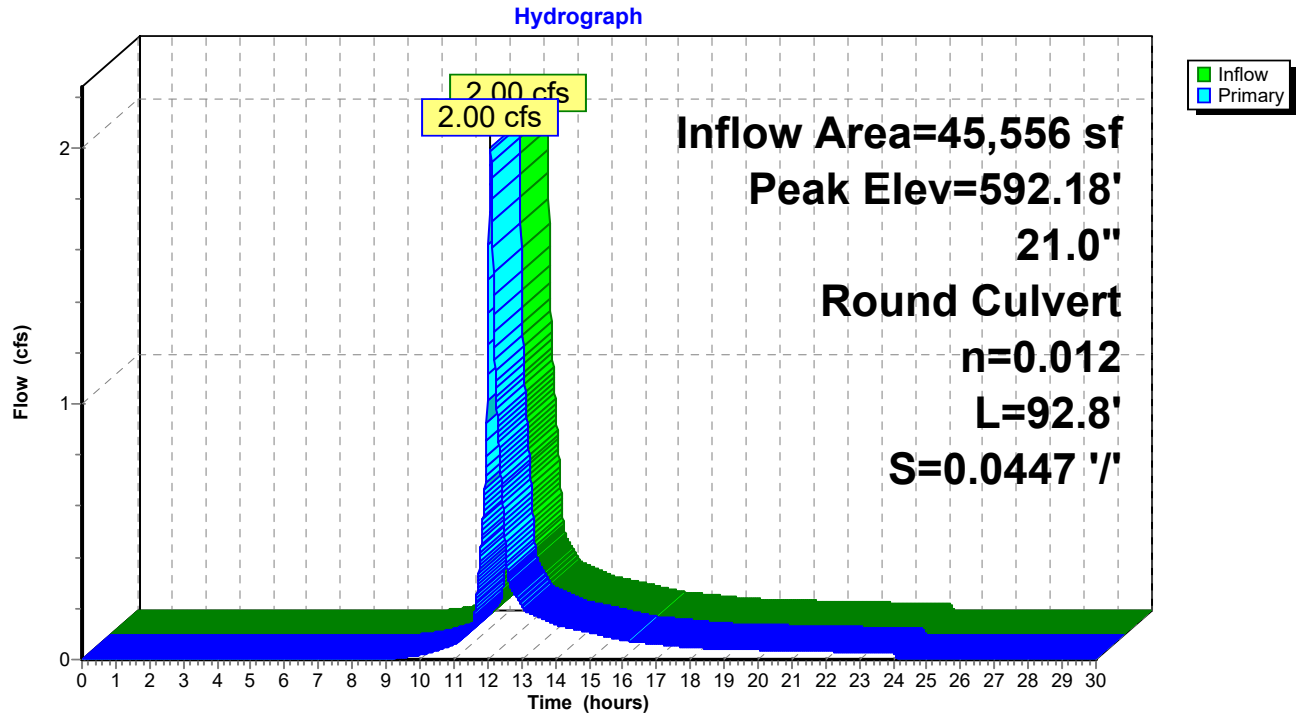
Inflow Area = 45,556 sf, 50.38% Impervious, Inflow Depth = 1.64" for 1-Year event
Inflow = 2.00 cfs @ 12.09 hrs, Volume= 6,212 cf
Outflow = 2.00 cfs @ 12.09 hrs, Volume= 6,212 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.00 cfs @ 12.09 hrs, Volume= 6,212 cf
Routed to Pond CB-B-04 : CB-B-04

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 592.18' @ 12.09 hrs
Flood Elev= 595.09'

Device	Routing	Invert	Outlet Devices
#1	Primary	591.57'	**21.0" Round HDPE Round 21"** L= 92.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.57' / 587.42' S= 0.0447 '/' Cc= 0.900 n= 0.012, Flow Area= 2.41 sf

Primary OutFlow Max=2.00 cfs @ 12.09 hrs HW=592.18' TW=588.39' (Dynamic Tailwater)
↑—**1=HDPE Round 21"** (Inlet Controls 2.00 cfs @ 2.66 fps)

Pond CB-B-07: CB-B-07



Summary for Pond CB-C-01: CB-C-01

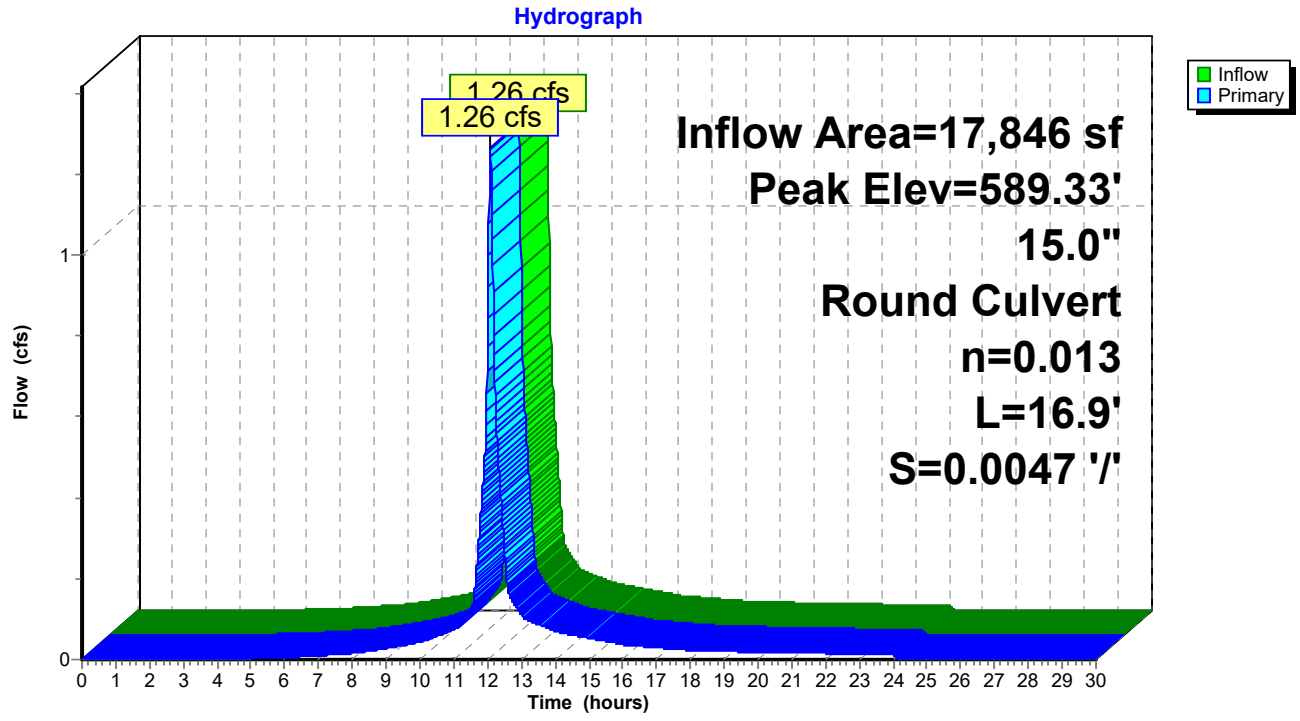
Inflow Area = 17,846 sf, 86.77% Impervious, Inflow Depth = 2.73" for 1-Year event
Inflow = 1.26 cfs @ 12.08 hrs, Volume= 4,067 cf
Outflow = 1.26 cfs @ 12.08 hrs, Volume= 4,067 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.26 cfs @ 12.08 hrs, Volume= 4,067 cf
Routed to Pond ADS1C : ADS 1C

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 589.33' @ 12.08 hrs
Flood Elev= 590.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	588.67'	**15.0" Round HDPE Round 15"** L= 16.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 588.67' / 588.59' S= 0.0047 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.26 cfs @ 12.08 hrs HW=589.33' TW=587.27' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 1.26 cfs @ 2.81 fps)

Pond CB-C-01: CB-C-01



Summary for Pond CB-C-02: CB-C-02

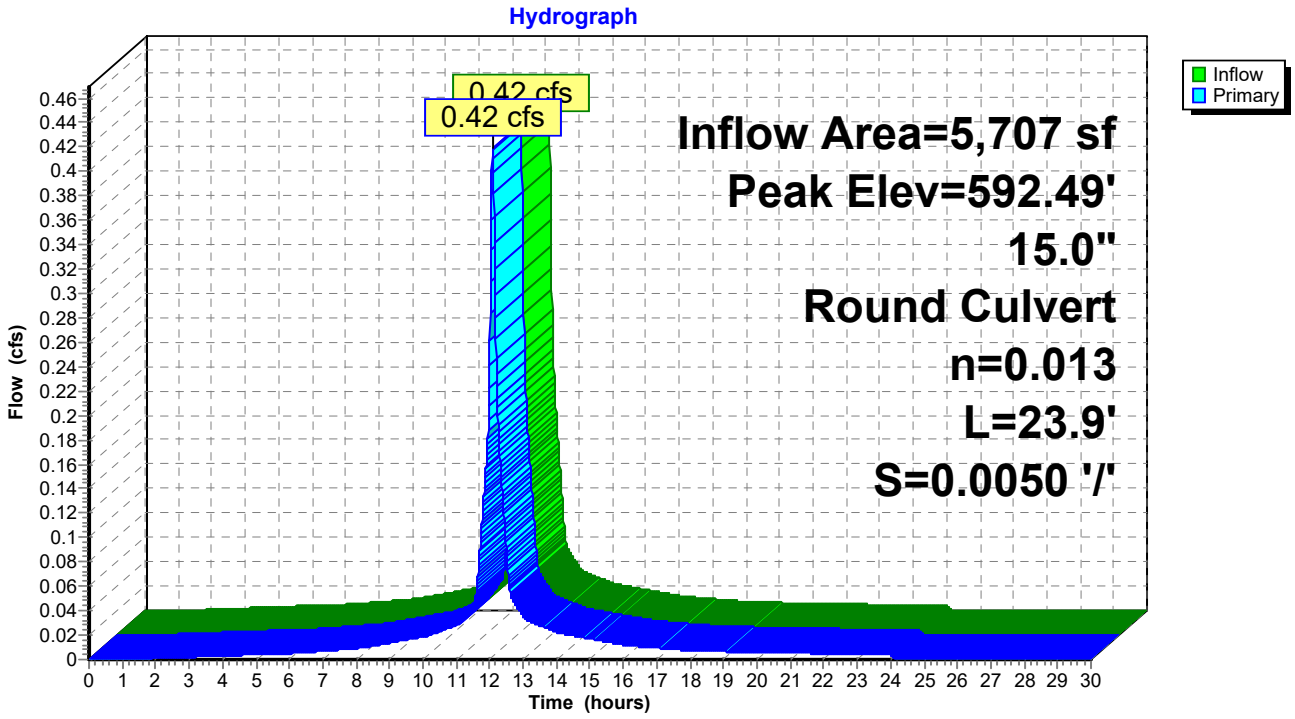
Inflow Area = 5,707 sf, 93.48% Impervious, Inflow Depth = 3.06" for 1-Year event
Inflow = 0.42 cfs @ 12.08 hrs, Volume= 1,457 cf
Outflow = 0.42 cfs @ 12.08 hrs, Volume= 1,457 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.42 cfs @ 12.08 hrs, Volume= 1,457 cf
Routed to Pond ADS1C : ADS 1C

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 592.49' @ 12.08 hrs
Flood Elev= 593.55'

Device	Routing	Invert	Outlet Devices
#1	Primary	592.13'	**15.0" Round HDPE Round 15"** L= 23.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.13' / 592.01' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=0.42 cfs @ 12.08 hrs HW=592.49' TW=587.27' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 0.42 cfs @ 2.17 fps)

Pond CB-C-02: CB-C-02



Summary for Pond CB-C-03: CB-C-03

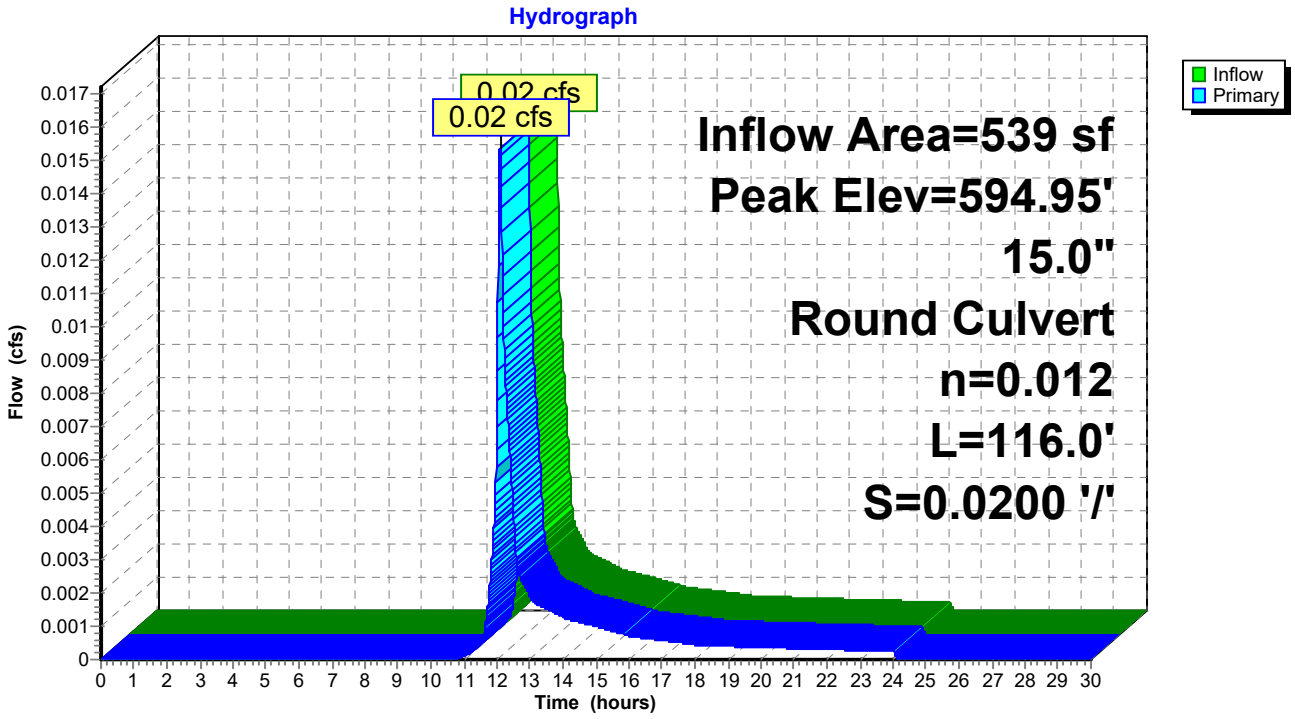
Inflow Area = 539 sf, 30.98% Impervious, Inflow Depth = 1.12" for 1-Year event
Inflow = 0.02 cfs @ 12.10 hrs, Volume= 50 cf
Outflow = 0.02 cfs @ 12.10 hrs, Volume= 50 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.02 cfs @ 12.10 hrs, Volume= 50 cf
Routed to Pond CB-C-02 : CB-C-02

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.95' @ 12.10 hrs
Flood Elev= 596.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.89'	**15.0" Round HDPE Round 15"** L= 116.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.89' / 592.57' S= 0.0200 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.02 cfs @ 12.10 hrs HW=594.95' TW=592.48' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Inlet Controls 0.02 cfs @ 0.80 fps)

Pond CB-C-03: CB-C-03



Summary for Pond CB-C-04: CB-C-04

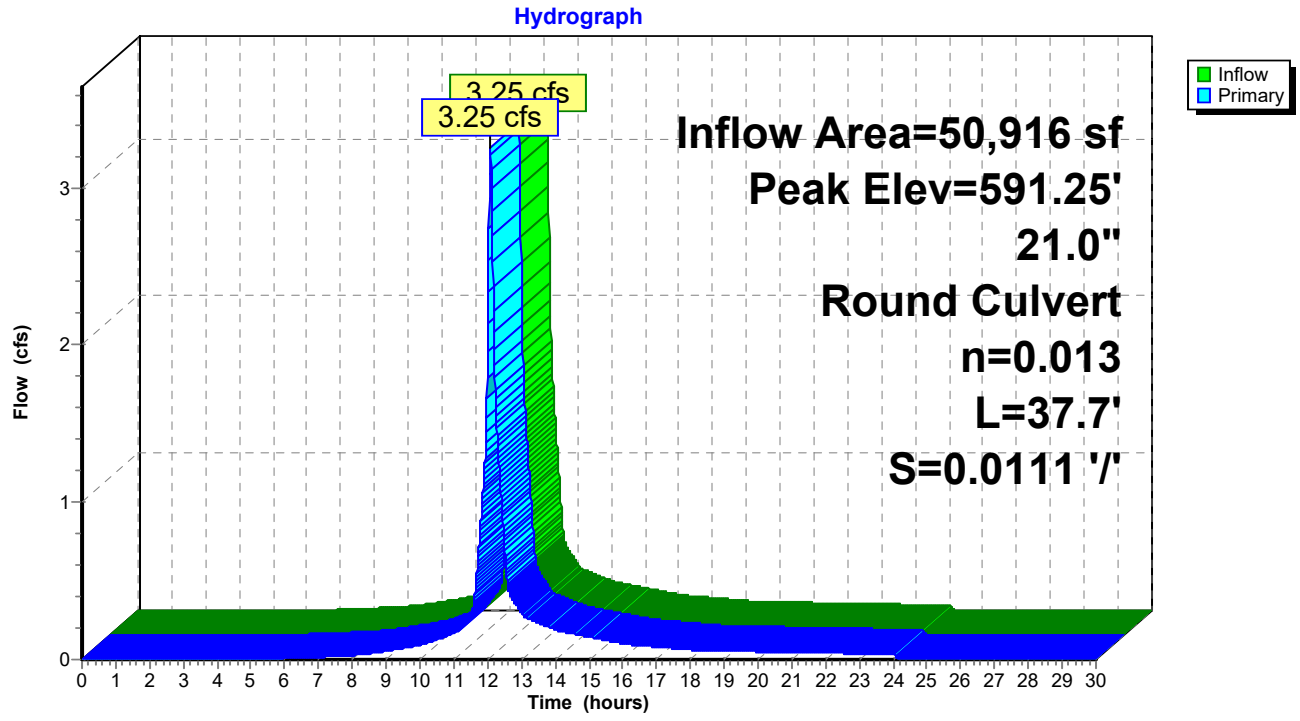
Inflow Area = 50,916 sf, 77.30% Impervious, Inflow Depth = 2.42" for 1-Year event
Inflow = 3.25 cfs @ 12.09 hrs, Volume= 10,288 cf
Outflow = 3.25 cfs @ 12.09 hrs, Volume= 10,288 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.25 cfs @ 12.09 hrs, Volume= 10,288 cf
Routed to Pond ADS1C : ADS 1C

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 591.25' @ 12.09 hrs
Flood Elev= 593.26'

Device	Routing	Invert	Outlet Devices
#1	Primary	590.42'	**21.0" Round HDPE Round 21"** L= 37.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 590.42' / 590.00' S= 0.0111 '/' Cc= 0.900 n= 0.013, Flow Area= 2.41 sf

Primary OutFlow Max=3.25 cfs @ 12.09 hrs HW=591.25' TW=587.27' (Dynamic Tailwater)
↑—**1=HDPE Round 21"** (Barrel Controls 3.25 cfs @ 4.22 fps)

Pond CB-C-04: CB-C-04



Summary for Pond CB-C-05: CB-C-05

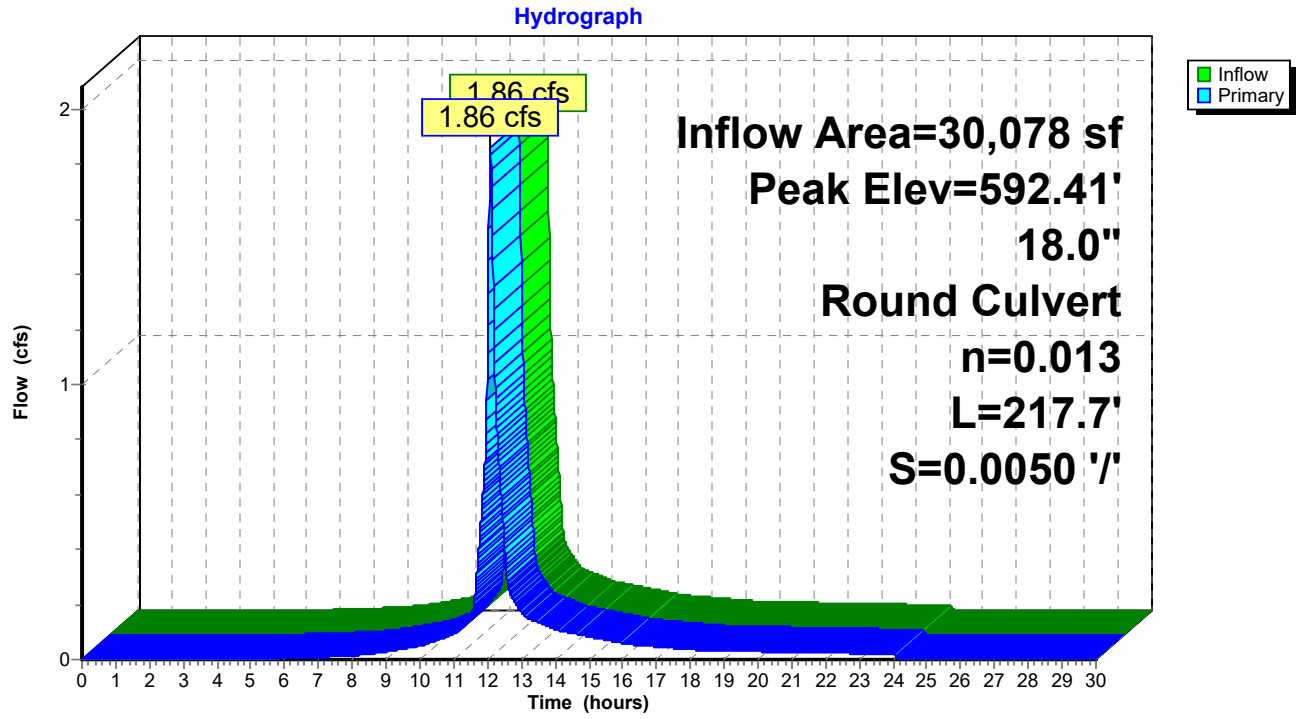
Inflow Area = 30,078 sf, 74.79% Impervious, Inflow Depth = 2.34" for 1-Year event
Inflow = 1.86 cfs @ 12.09 hrs, Volume= 5,876 cf
Outflow = 1.86 cfs @ 12.09 hrs, Volume= 5,876 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.86 cfs @ 12.09 hrs, Volume= 5,876 cf
Routed to Pond CB-C-04 : CB-C-04

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 592.41' @ 12.09 hrs
Flood Elev= 596.27'

Device	Routing	Invert	Outlet Devices
#1	Primary	591.69'	**18.0" Round HDPE Round 18"** L= 217.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.69' / 590.61' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=1.85 cfs @ 12.09 hrs HW=592.41' TW=591.25' (Dynamic Tailwater)
↑**1=HDPE Round 18"** (Outlet Controls 1.85 cfs @ 3.26 fps)

Pond CB-C-05: CB-C-05



Summary for Pond CB-C-06: CB-C-06

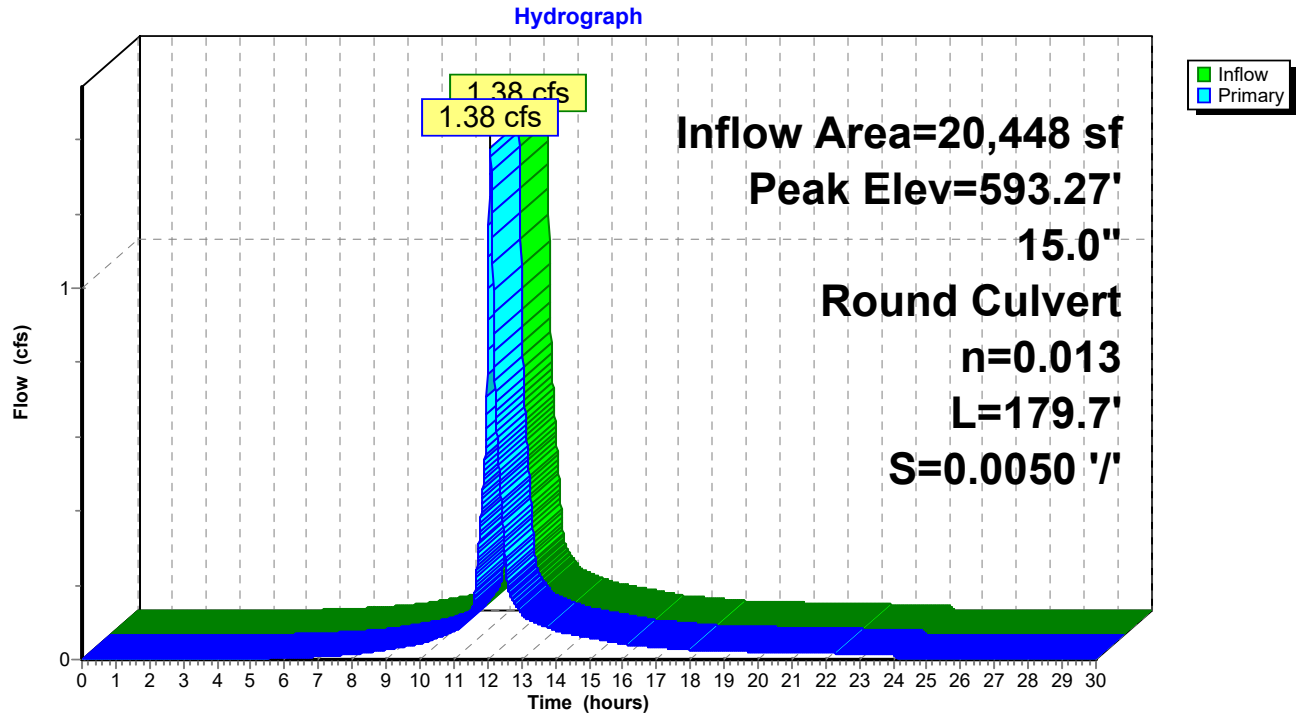
Inflow Area = 20,448 sf, 81.84% Impervious, Inflow Depth = 2.57" for 1-Year event
Inflow = 1.38 cfs @ 12.09 hrs, Volume= 4,384 cf
Outflow = 1.38 cfs @ 12.09 hrs, Volume= 4,384 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.38 cfs @ 12.09 hrs, Volume= 4,384 cf
Routed to Pond CB-C-05 : CB-C-05

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 593.27' @ 12.09 hrs
Flood Elev= 598.99'

Device	Routing	Invert	Outlet Devices
#1	Primary	592.59'	**15.0" Round HDPE Round 15"** L= 179.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.59' / 591.69' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.37 cfs @ 12.09 hrs HW=593.27' TW=592.41' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 1.37 cfs @ 2.91 fps)

Pond CB-C-06: CB-C-06



Summary for Pond CB-C-07: CB-C-07

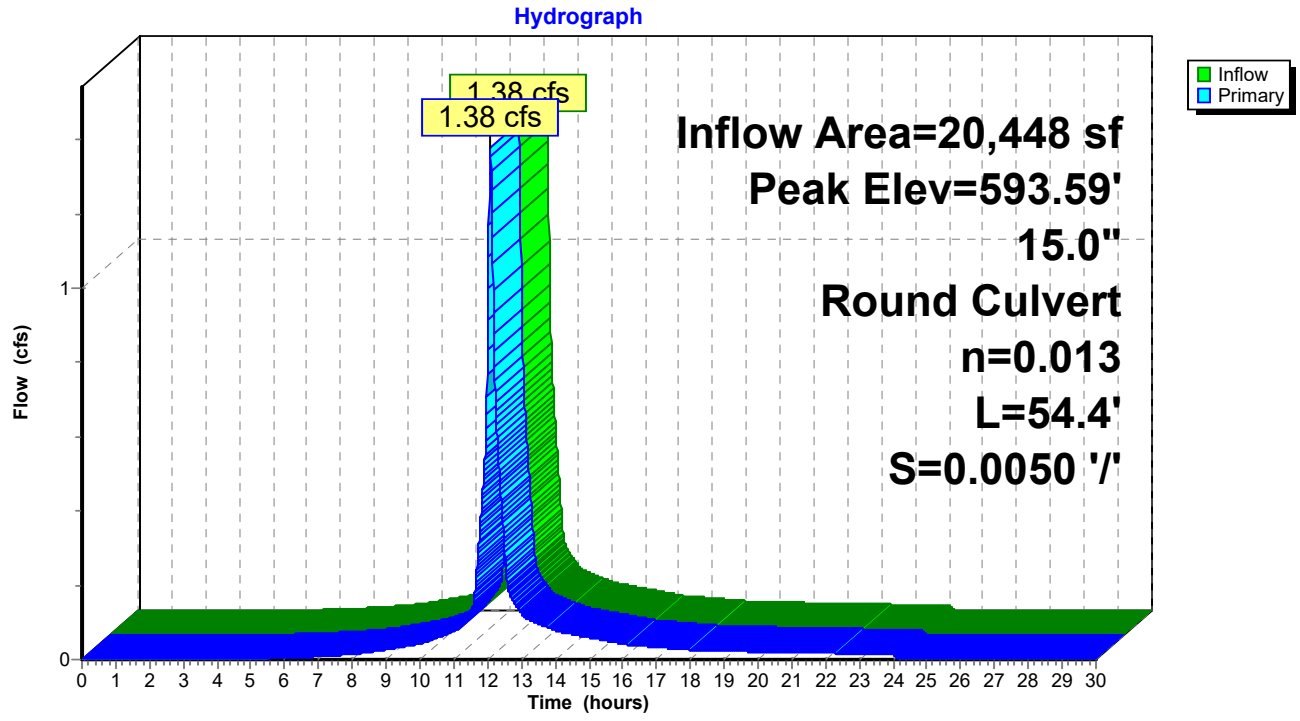
Inflow Area = 20,448 sf, 81.84% Impervious, Inflow Depth = 2.57" for 1-Year event
Inflow = 1.38 cfs @ 12.09 hrs, Volume= 4,384 cf
Outflow = 1.38 cfs @ 12.09 hrs, Volume= 4,384 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.38 cfs @ 12.09 hrs, Volume= 4,384 cf
Routed to Pond CB-C-06 : CB-C-06

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 593.59' @ 12.09 hrs
Flood Elev= 598.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	592.86'	**15.0" Round HDPE Round 15"** L= 54.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.86' / 592.59' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.36 cfs @ 12.09 hrs HW=593.59' TW=593.27' (Dynamic Tailwater)
1=HDPE Round 15" (Outlet Controls 1.36 cfs @ 2.65 fps)

Pond CB-C-07: CB-C-07



Summary for Pond CB-C-08: CB-C-08

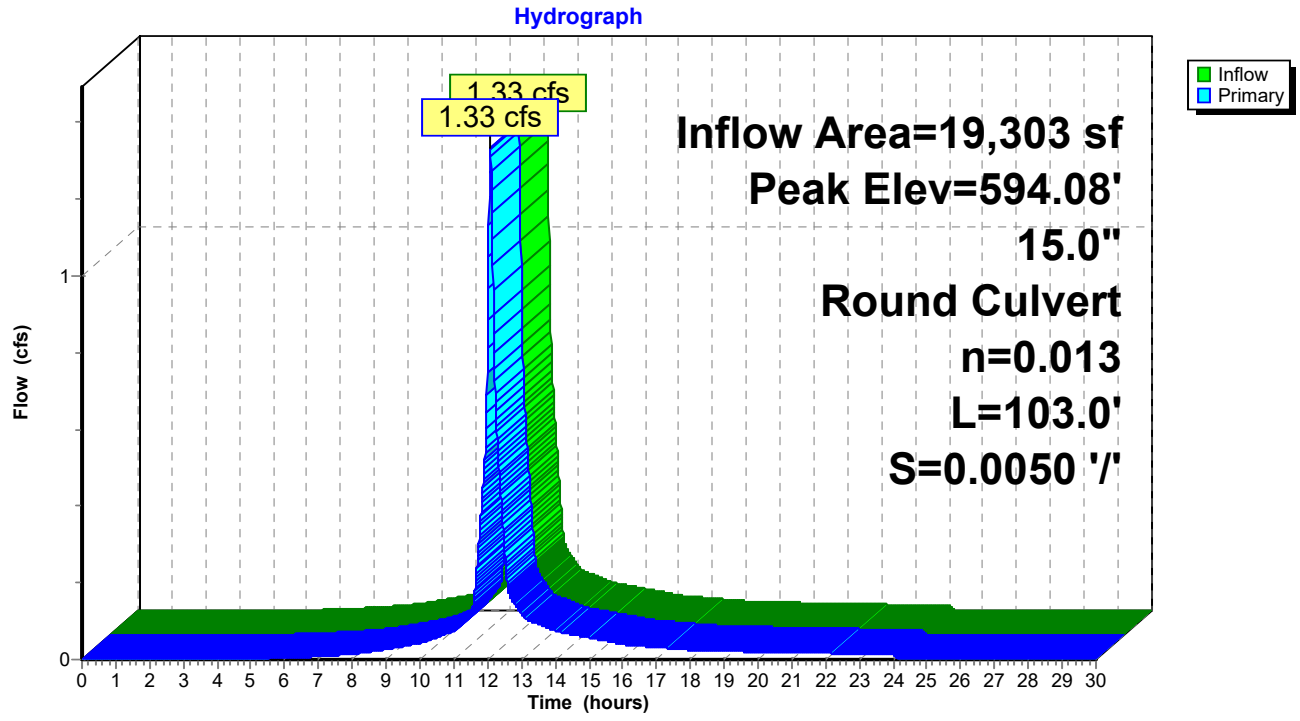
Inflow Area = 19,303 sf, 83.90% Impervious, Inflow Depth = 2.64" for 1-Year event
Inflow = 1.33 cfs @ 12.09 hrs, Volume= 4,241 cf
Outflow = 1.33 cfs @ 12.09 hrs, Volume= 4,241 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.33 cfs @ 12.09 hrs, Volume= 4,241 cf
Routed to Pond CB-C-07 : CB-C-07

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.08' @ 12.09 hrs
Flood Elev= 595.63'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.38'	**15.0" Round HDPE Round 15"** L= 103.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.38' / 592.86' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.32 cfs @ 12.09 hrs HW=594.08' TW=593.59' (Dynamic Tailwater)
1=HDPE Round 15" (Outlet Controls 1.32 cfs @ 2.70 fps)

Pond CB-C-08: CB-C-08



Time span=0.00-30.00 hrs, dt=0.01 hrs, 3001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1APRE: WS #1A PRE Runoff Area=188,851 sf 22.35% Impervious Runoff Depth=2.35"
Flow Length=1,105' Tc=21.1 min CN=65 Runoff=7.67 cfs 37,004 cf

Subcatchment 1BPRE: WS #1B PRE Runoff Area=270,126 sf 0.00% Impervious Runoff Depth=1.52"
Flow Length=468' Tc=11.2 min CN=55 Runoff=8.16 cfs 34,166 cf

Subcatchment 1S: W-A-12 Runoff Area=6,257 sf 93.29% Impervious Runoff Depth=5.53"
Tc=6.0 min CN=96 Runoff=0.83 cfs 2,882 cf

Subcatchment 2S: W-A-16 Runoff Area=6,918 sf 46.04% Impervious Runoff Depth=3.58"
Tc=6.0 min CN=78 Runoff=0.67 cfs 2,063 cf

Subcatchment CB-B-06: W-B-06 Runoff Area=3,067 sf 58.98% Impervious Runoff Depth=4.09"
Tc=6.0 min CN=83 Runoff=0.33 cfs 1,046 cf

Subcatchment W-A-01: W-A-01 Runoff Area=73,223 sf 98.64% Impervious Runoff Depth=5.64"
Tc=6.0 min CN=97 Runoff=9.83 cfs 34,440 cf

Subcatchment W-A-02: W-A-02 Runoff Area=7,038 sf 98.05% Impervious Runoff Depth=5.64"
Tc=6.0 min CN=97 Runoff=0.95 cfs 3,310 cf

Subcatchment W-A-03: W-A-03 Runoff Area=3,322 sf 92.69% Impervious Runoff Depth=5.41"
Tc=6.0 min CN=95 Runoff=0.44 cfs 1,498 cf

Subcatchment W-A-04: W-A-04 Runoff Area=7,387 sf 97.25% Impervious Runoff Depth=5.64"
Tc=6.0 min CN=97 Runoff=0.99 cfs 3,474 cf

Subcatchment W-A-05: W-A-05 Runoff Area=11,393 sf 75.02% Impervious Runoff Depth=4.74"
Tc=6.0 min CN=89 Runoff=1.39 cfs 4,496 cf

Subcatchment W-A-06: W-A-06 Runoff Area=2,838 sf 81.57% Impervious Runoff Depth=4.96"
Tc=6.0 min CN=91 Runoff=0.36 cfs 1,172 cf

Subcatchment W-A-07: W-A-07 Runoff Area=3,550 sf 97.15% Impervious Runoff Depth=5.64"
Tc=6.0 min CN=97 Runoff=0.48 cfs 1,670 cf

Subcatchment W-A-08: W-A-08 Runoff Area=7,547 sf 80.23% Impervious Runoff Depth=4.96"
Tc=6.0 min CN=91 Runoff=0.95 cfs 3,118 cf

Subcatchment W-A-09: W-A-09 Runoff Area=36,960 sf 59.69% Impervious Runoff Depth=4.09"
Tc=6.0 min CN=83 Runoff=4.02 cfs 12,601 cf

Subcatchment W-A-10: W-A-10 Runoff Area=15,963 sf 37.75% Impervious Runoff Depth=3.28"
Tc=6.0 min CN=75 Runoff=1.41 cfs 4,366 cf

Subcatchment W-A-11: W-A-11 Runoff Area=12,670 sf 30.21% Impervious Runoff Depth=2.99"
Tc=6.0 min CN=72 Runoff=1.02 cfs 3,160 cf

Subcatchment W-A-13: W-A-13 Runoff Area=4,003 sf 96.38% Impervious Runoff Depth=5.64"
Tc=6.0 min CN=97 Runoff=0.54 cfs 1,883 cf

Subcatchment W-A-14: W-A-14 Runoff Area=3,669 sf 93.27% Impervious Runoff Depth=5.53"
Tc=6.0 min CN=96 Runoff=0.49 cfs 1,690 cf

Subcatchment W-A-15: W-A-15 Runoff Area=5,303 sf 67.21% Impervious Runoff Depth=4.41"
Tc=6.0 min CN=86 Runoff=0.61 cfs 1,949 cf

Subcatchment W-A-17: W-A-17 Runoff Area=9,324 sf 51.51% Impervious Runoff Depth=3.78"
Tc=6.0 min CN=80 Runoff=0.95 cfs 2,938 cf

Subcatchment W-A-18: W-A-18 Runoff Area=7,541 sf 68.92% Impervious Runoff Depth=4.41"
Tc=6.0 min CN=86 Runoff=0.87 cfs 2,771 cf

Subcatchment W-A-19: W-A-19 Runoff Area=6,221 sf 70.71% Impervious Runoff Depth=4.52"
Tc=6.0 min CN=87 Runoff=0.73 cfs 2,342 cf

Subcatchment W-A-20: W-A-20 Runoff Area=5,191 sf 33.40% Impervious Runoff Depth=3.09"
Tc=6.0 min CN=73 Runoff=0.43 cfs 1,336 cf

Subcatchment W-B-01: W-B-01 Runoff Area=25,740 sf 89.98% Impervious Runoff Depth=5.30"
Tc=6.0 min CN=94 Runoff=3.37 cfs 11,361 cf

Subcatchment W-B-02: W-B-02 Runoff Area=5,845 sf 96.34% Impervious Runoff Depth=5.64"
Tc=6.0 min CN=97 Runoff=0.79 cfs 2,749 cf

Subcatchment W-B-03: W-B-03 Runoff Area=934 sf 100.00% Impervious Runoff Depth=5.76"
Tc=6.0 min CN=98 Runoff=0.13 cfs 448 cf

Subcatchment W-B-04: W-B-04 Runoff Area=26,304 sf 55.58% Impervious Runoff Depth=3.99"
Tc=6.0 min CN=82 Runoff=2.80 cfs 8,740 cf

Subcatchment W-B-05: W-B-05 Runoff Area=8,016 sf 48.75% Impervious Runoff Depth=3.68"
Tc=6.0 min CN=79 Runoff=0.79 cfs 2,458 cf

Subcatchment W-B-06: W-B-06 Runoff Area=45,556 sf 50.38% Impervious Runoff Depth=3.78"
Tc=6.0 min CN=80 Runoff=4.62 cfs 14,355 cf

Subcatchment W-C-01: W-C-01 Runoff Area=17,846 sf 86.77% Impervious Runoff Depth=5.18"
Tc=6.0 min CN=93 Runoff=2.31 cfs 7,707 cf

Subcatchment W-C-02: W-C-02 Runoff Area=5,168 sf 100.00% Impervious Runoff Depth=5.76"
Tc=6.0 min CN=98 Runoff=0.70 cfs 2,481 cf

Subcatchment W-C-03: W-C-03 Runoff Area=539 sf 30.98% Impervious Runoff Depth=2.99"
Tc=6.0 min CN=72 Runoff=0.04 cfs 134 cf

Subcatchment W-C-04: W-C-04 Runoff Area=20,838 sf 80.92% Impervious Runoff Depth=4.96"
Tc=6.0 min CN=91 Runoff=2.63 cfs 8,608 cf

Subcatchment W-C-05: W-C-05 Runoff Area=9,630 sf 59.82% Impervious Runoff Depth=4.09"
Tc=6.0 min CN=83 Runoff=1.05 cfs 3,283 cf

Subcatchment W-C-06: W-C-06 Runoff Area=1,145 sf 47.07% Impervious Runoff Depth=3.58"
Tc=6.0 min CN=78 Runoff=0.11 cfs 341 cf

Subcatchment W-C-07: W-C-07 Runoff Area=19,303 sf 83.90% Impervious Runoff Depth=5.07"
Tc=6.0 min CN=92 Runoff=2.47 cfs 8,155 cf

Reach DP1POST: DP1 POST Inflow=9.98 cfs 25,181 cf
Outflow=9.98 cfs 25,181 cf

Reach DP1PRE: DP1 PRE Inflow=14.56 cfs 71,170 cf
Outflow=14.56 cfs 71,170 cf

Pond 1P: CB-B-06 Peak Elev=591.46' Inflow=0.33 cfs 1,046 cf
15.0" Round Culvert n=0.012 L=57.3' S=0.0112 '/' Outflow=0.33 cfs 1,046 cf

Pond 3P: CB-A-13 Peak Elev=595.65' Inflow=1.64 cfs 5,521 cf
12.0" Round Culvert n=0.012 L=100.0' S=0.0100 '/' Outflow=1.64 cfs 5,521 cf

Pond ADS 1A: ADS 1A Peak Elev=592.68' Storage=36,844 cf Inflow=27.96 cfs 93,160 cf
Discarded=1.69 cfs 88,446 cf Primary=1.10 cfs 4,724 cf Outflow=2.79 cfs 93,170 cf

Pond ADS 1B: ADS 1B Peak Elev=587.01' Storage=11,532 cf Inflow=12.82 cfs 41,157 cf
Discarded=0.58 cfs 29,209 cf Primary=5.50 cfs 11,949 cf Outflow=6.07 cfs 41,158 cf

Pond ADS1C: ADS 1C Peak Elev=588.46' Storage=8,345 cf Inflow=9.31 cfs 30,711 cf
Discarded=0.43 cfs 23,451 cf Primary=4.59 cfs 8,507 cf Outflow=5.02 cfs 31,958 cf

Pond CB-A-01: CB-A-01 Peak Elev=593.52' Inflow=15.39 cfs 53,179 cf
30.0" Round Culvert n=0.012 L=11.4' S=0.0746 '/' Outflow=15.39 cfs 53,179 cf

Pond CB-A-02: CB-A-02 Peak Elev=594.63' Inflow=1.38 cfs 4,808 cf
15.0" Round Culvert n=0.012 L=140.4' S=0.0064 '/' Outflow=1.38 cfs 4,808 cf

Pond CB-A-03: CB-A-03 Peak Elev=594.95' Inflow=0.44 cfs 1,498 cf
15.0" Round Culvert n=0.012 L=100.0' S=0.0050 '/' Outflow=0.44 cfs 1,498 cf

Pond CB-A-04: CB-A-04 Peak Elev=595.65' Inflow=4.17 cfs 13,930 cf
18.0" Round Culvert n=0.012 L=159.6' S=0.0083 '/' Outflow=4.17 cfs 13,930 cf

Pond CB-A-05: CB-A-05 Peak Elev=596.28' Inflow=3.18 cfs 10,456 cf
15.0" Round Culvert n=0.012 L=100.0' S=0.0050 '/' Outflow=3.18 cfs 10,456 cf

Pond CB-A-06: CB-A-06 Peak Elev=596.73' Inflow=1.79 cfs 5,960 cf
15.0" Round Culvert n=0.012 L=100.0' S=0.0074 '/' Outflow=1.79 cfs 5,960 cf

Pond CB-A-07: CB-A-07 Peak Elev=597.00' Inflow=1.43 cfs 4,787 cf
15.0" Round Culvert n=0.012 L=61.9' S=0.0050 '/' Outflow=1.43 cfs 4,787 cf

Pond CB-A-08: CB-A-08 Peak Elev=597.18' Inflow=0.95 cfs 3,118 cf
15.0" Round Culvert n=0.012 L=57.9' S=0.0050 '/' Outflow=0.95 cfs 3,118 cf

Pond CB-A-09: CB-A-09 Peak Elev=594.49' Inflow=8.93 cfs 28,531 cf
24.0" Round Culvert n=0.012 L=11.4' S=0.1877 '/' Outflow=8.93 cfs 28,531 cf

Pond CB-A-10: CB-A-10 Peak Elev=595.53' Inflow=2.43 cfs 7,526 cf
15.0" Round Culvert n=0.012 L=140.4' S=0.0091 '/' Outflow=2.43 cfs 7,526 cf

Pond CB-A-11: CB-A-11 Peak Elev=595.90' Inflow=1.02 cfs 3,160 cf
12.0" Round Culvert n=0.012 L=100.0' S=0.0050 '/' Outflow=1.02 cfs 3,160 cf

Pond CB-A-12: CB-A-12 Peak Elev=594.01' Inflow=3.65 cfs 11,450 cf
15.0" Round Culvert n=0.012 L=159.6' S=0.0125 '/' Outflow=3.65 cfs 11,450 cf

Pond CB-A-13: CB-A-12 Peak Elev=595.37' Inflow=2.48 cfs 8,403 cf
12.0" Round Culvert n=0.012 L=159.6' S=0.0102 '/' Outflow=2.48 cfs 8,403 cf

Pond CB-A-14: CB-A-14 Peak Elev=595.76' Inflow=1.10 cfs 3,639 cf
12.0" Round Culvert n=0.012 L=65.8' S=0.0100 '/' Outflow=1.10 cfs 3,639 cf

Pond CB-A-15: CB-A-15 Peak Elev=596.52' Inflow=0.61 cfs 1,949 cf
12.0" Round Culvert n=0.012 L=84.0' S=0.0175 '/' Outflow=0.61 cfs 1,949 cf

Pond CB-A-16: CB-A-16 Peak Elev=595.09' Inflow=0.67 cfs 2,063 cf
12.0" Round Culvert n=0.012 L=77.0' S=0.0049 '/' Outflow=0.67 cfs 2,063 cf

Pond CB-A-17: CB-A-17 Peak Elev=595.02' Inflow=3.65 cfs 11,450 cf
15.0" Round Culvert n=0.012 L=62.9' S=0.0051 '/' Outflow=3.65 cfs 11,450 cf

Pond CB-A-18: CB-A-18 Peak Elev=596.80' Inflow=2.04 cfs 6,449 cf
12.0" Round Culvert n=0.012 L=99.5' S=0.0101 '/' Outflow=2.04 cfs 6,449 cf

Pond CB-A-19: CB-A-19 Peak Elev=597.09' Inflow=1.17 cfs 3,678 cf
12.0" Round Culvert n=0.012 L=65.1' S=0.0049 '/' Outflow=1.17 cfs 3,678 cf

Pond CB-A-20: CB-A-20 Peak Elev=598.91' Inflow=0.43 cfs 1,336 cf
12.0" Round Culvert n=0.012 L=85.2' S=0.0230 '/' Outflow=0.43 cfs 1,336 cf

Pond CB-B-01: CB-B-01 Peak Elev=587.13' Inflow=4.28 cfs 14,559 cf
24.0" Round Culvert n=0.012 L=7.1' S=0.0141 '/' Outflow=4.28 cfs 14,559 cf

Pond CB-B-02: CB-B-02 Peak Elev=591.06' Inflow=0.79 cfs 2,749 cf
12.0" Round Culvert n=0.012 L=175.5' S=0.0200 '/' Outflow=0.79 cfs 2,749 cf

Pond CB-B-03: CB-B-03 Peak Elev=594.11' Inflow=0.13 cfs 448 cf
12.0" Round Culvert n=0.012 L=136.8' S=0.0500 '/' Outflow=0.13 cfs 448 cf

Pond CB-B-04: CB-B-04 Peak Elev=588.99' Inflow=8.54 cfs 26,598 cf
24.0" Round Culvert n=0.012 L=6.9' S=0.0145 '/' Outflow=8.54 cfs 26,598 cf

Pond CB-B-05: CB-B-05 Peak Elev=590.50' Inflow=1.13 cfs 3,504 cf
21.0" Round Culvert n=0.012 L=118.2' S=0.0201 '/' Outflow=1.13 cfs 3,504 cf

Pond CB-B-07: CB-B-07 Peak Elev=592.54' Inflow=4.62 cfs 14,355 cf
21.0" Round Culvert n=0.012 L=92.8' S=0.0447 '/' Outflow=4.62 cfs 14,355 cf

Pond CB-C-01: CB-C-01 Peak Elev=589.60' Inflow=2.31 cfs 7,707 cf
15.0" Round Culvert n=0.013 L=16.9' S=0.0047 '/' Outflow=2.31 cfs 7,707 cf

Pond CB-C-02: CB-C-02 Peak Elev=592.61' Inflow=0.74 cfs 2,616 cf
15.0" Round Culvert n=0.013 L=23.9' S=0.0050 '/' Outflow=0.74 cfs 2,616 cf

Pond CB-C-03: CB-C-03 Peak Elev=594.98' Inflow=0.04 cfs 134 cf
15.0" Round Culvert n=0.012 L=116.0' S=0.0200 '/' Outflow=0.04 cfs 134 cf

Pond CB-C-04: CB-C-04 Peak Elev=591.66' Inflow=6.26 cfs 20,388 cf
21.0" Round Culvert n=0.013 L=37.7' S=0.0111 '/' Outflow=6.26 cfs 20,388 cf

Pond CB-C-05: CB-C-05 Peak Elev=592.77' Inflow=3.63 cfs 11,779 cf
18.0" Round Culvert n=0.013 L=217.7' S=0.0050 '/' Outflow=3.63 cfs 11,779 cf

Pond CB-C-06: CB-C-06 Peak Elev=593.61' Inflow=2.58 cfs 8,496 cf
15.0" Round Culvert n=0.013 L=179.7' S=0.0050 '/' Outflow=2.58 cfs 8,496 cf

Pond CB-C-07: CB-C-07 Peak Elev=593.96' Inflow=2.58 cfs 8,496 cf
15.0" Round Culvert n=0.013 L=54.4' S=0.0050 '/' Outflow=2.58 cfs 8,496 cf

Pond CB-C-08: CB-C-08 Peak Elev=594.44' Inflow=2.47 cfs 8,155 cf
15.0" Round Culvert n=0.013 L=103.0' S=0.0050 '/' Outflow=2.47 cfs 8,155 cf

Total Runoff Area = 885,226 sf Runoff Volume = 236,199 cf Average Runoff Depth = 3.20"
60.11% Pervious = 532,149 sf 39.89% Impervious = 353,077 sf

Summary for Subcatchment 1APRE: WS #1A PRE

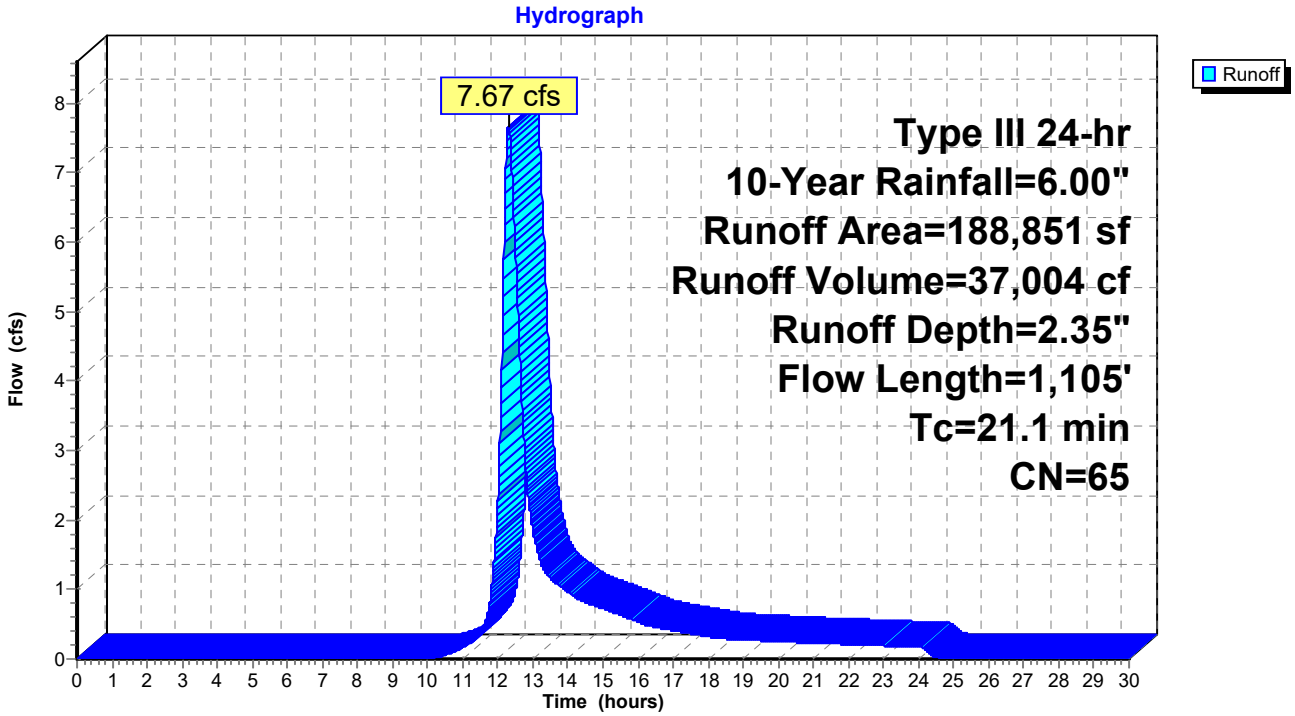
Runoff = 7.67 cfs @ 12.31 hrs, Volume= 37,004 cf, Depth= 2.35"
Routed to Reach DP1PRE : DP1 PRE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
146,641	55	Woods, Good, HSG B
37,510	98	Paved parking, HSG C
4,700	98	Water Surface, HSG C
188,851	65	Weighted Average
146,641		77.65% Pervious Area
42,210		22.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.5	100	0.0900	0.16		**Sheet Flow, SHEET FLOW BY 208 & MVR** Woods: Light underbrush n= 0.400 P2= 4.00"
4.3	545	0.0200	2.12		**Shallow Concentrated Flow, SHALLOW FLOW TO LAST OFFICE** Grassed Waterway Kv= 15.0 fps
6.3	460	0.0600	1.22		**Shallow Concentrated Flow, SHALLOW FLOW OFFICE TO DP1A** Woodland Kv= 5.0 fps
21.1	1,105	Total			

Subcatchment 1APRE: WS #1A PRE



Summary for Subcatchment 1BPRE: WS #1B PRE

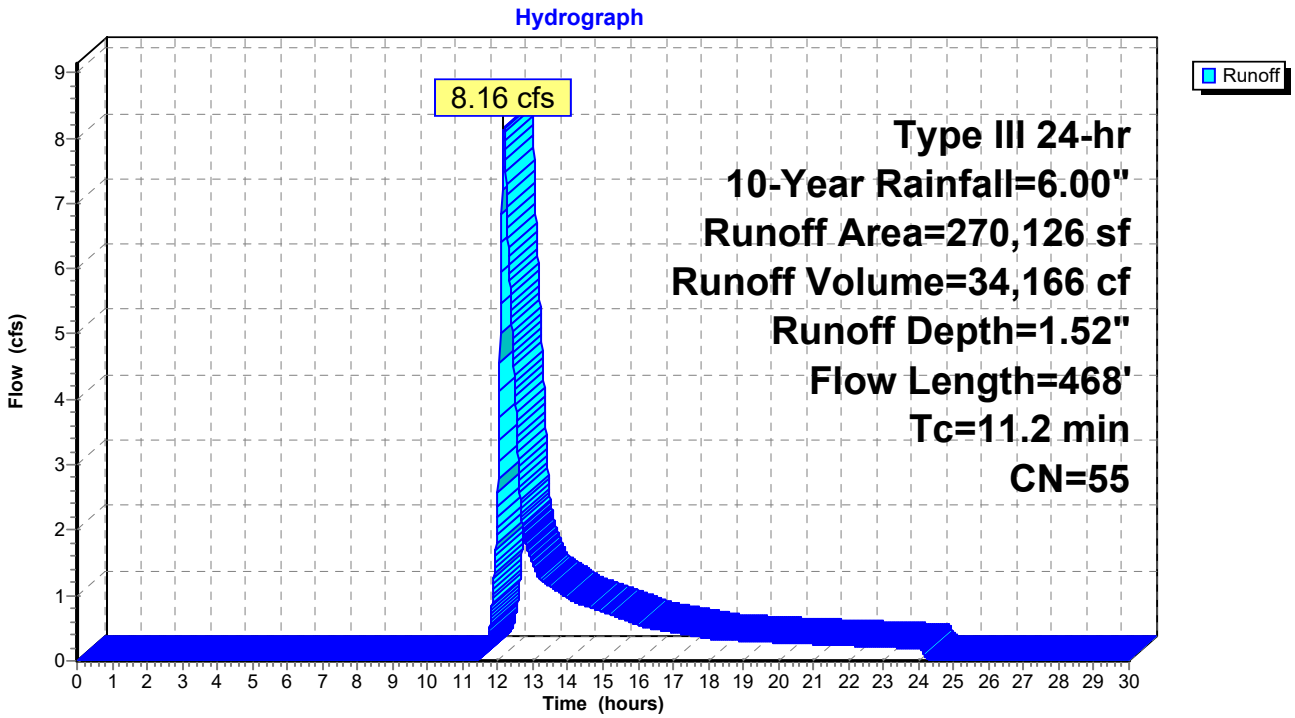
Runoff = 8.16 cfs @ 12.17 hrs, Volume= 34,166 cf, Depth= 1.52"
Routed to Reach DP1PRE : DP1 PRE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
270,126	55	Woods, Good, HSG B
270,126		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	100	0.2500	0.24		**Sheet Flow, SHEET FLOW BY 208** Woods: Light underbrush n= 0.400 P2= 4.00"
4.2	368	0.0870	1.47		**Shallow Concentrated Flow, SHALLOW FLOW TO DP1B** Woodland Kv= 5.0 fps
11.2	468	Total			

Subcatchment 1BPRE: WS #1B PRE



Summary for Subcatchment 1S: W-A-12

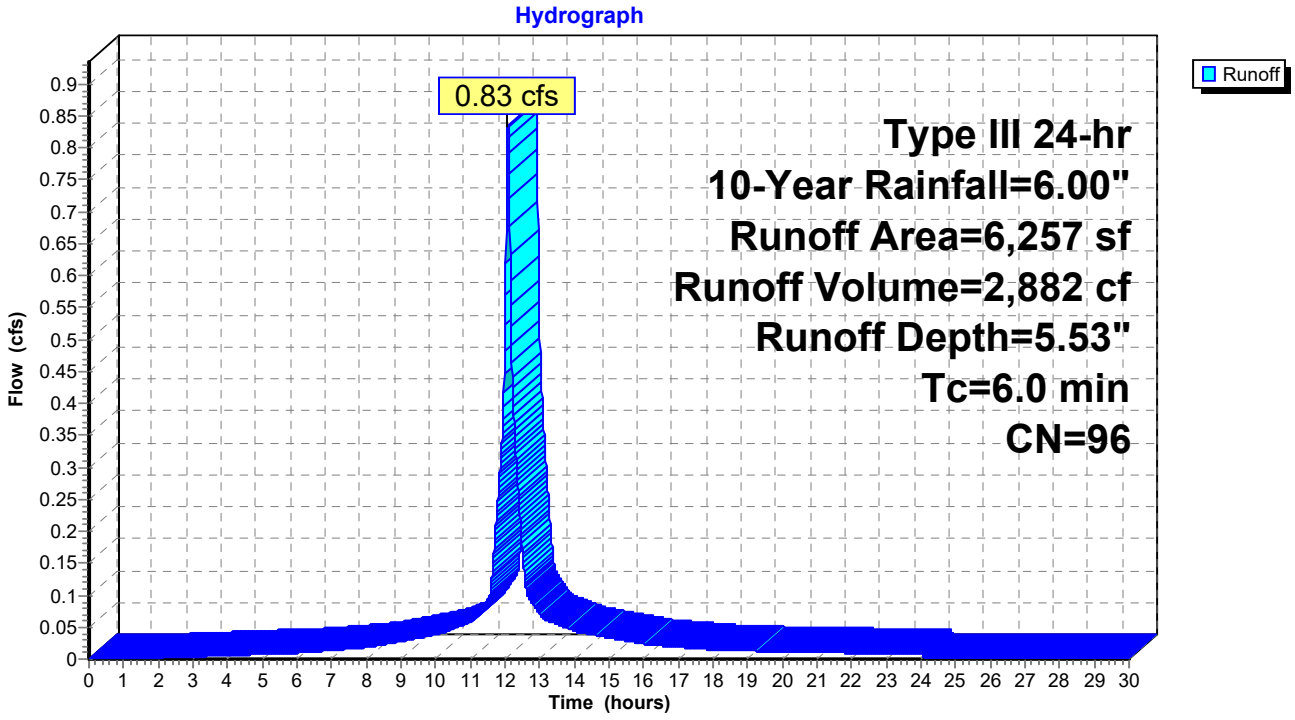
Runoff = 0.83 cfs @ 12.08 hrs, Volume= 2,882 cf, Depth= 5.53"
Routed to Pond CB-A-13 : CB-A-12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
420	61	>75% Grass cover, Good, HSG B
5,837	98	Paved parking, HSG B
6,257	96	Weighted Average
420		6.71% Pervious Area
5,837		93.29% Impervious Area

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

Subcatchment 1S: W-A-12



Summary for Subcatchment 2S: W-A-16

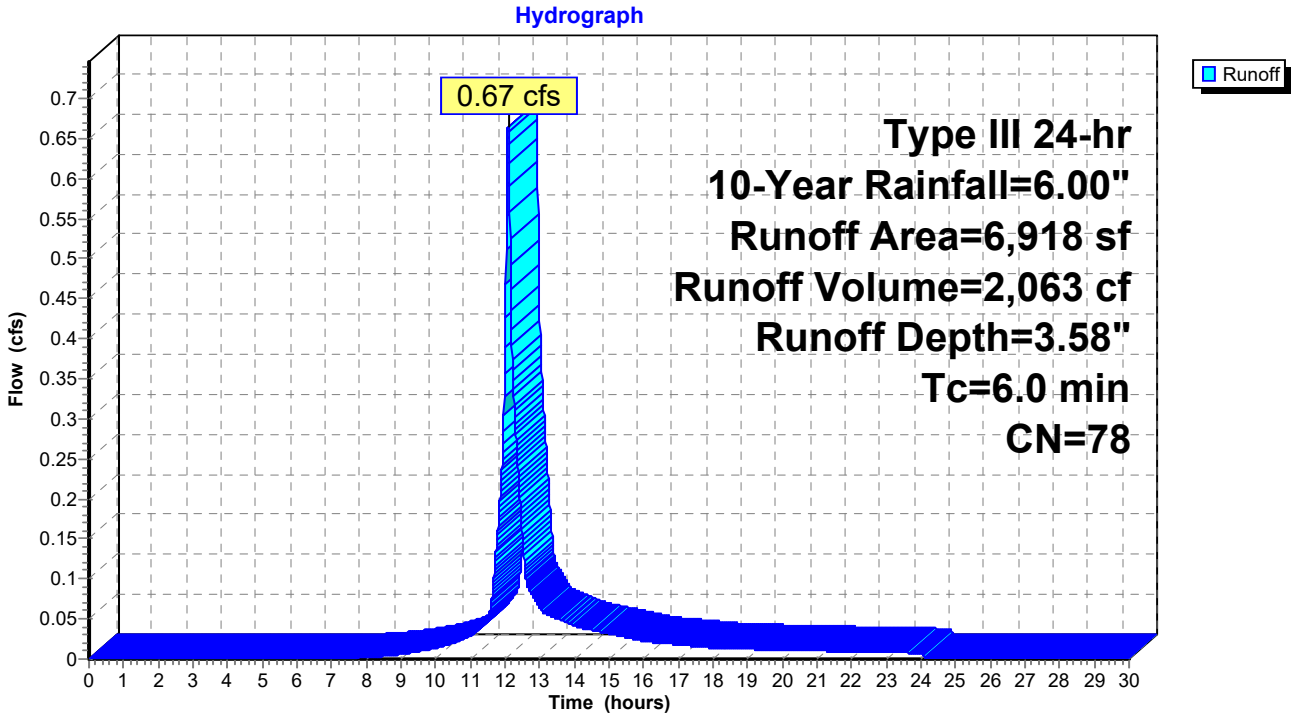
Runoff = 0.67 cfs @ 12.09 hrs, Volume= 2,063 cf, Depth= 3.58"
Routed to Pond CB-A-16 : CB-A-16

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
3,733	61	>75% Grass cover, Good, HSG B
3,185	98	Paved parking, HSG B
6,918	78	Weighted Average
3,733		53.96% Pervious Area
3,185		46.04% Impervious Area

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

Subcatchment 2S: W-A-16



Summary for Subcatchment CB-B-06: W-B-06

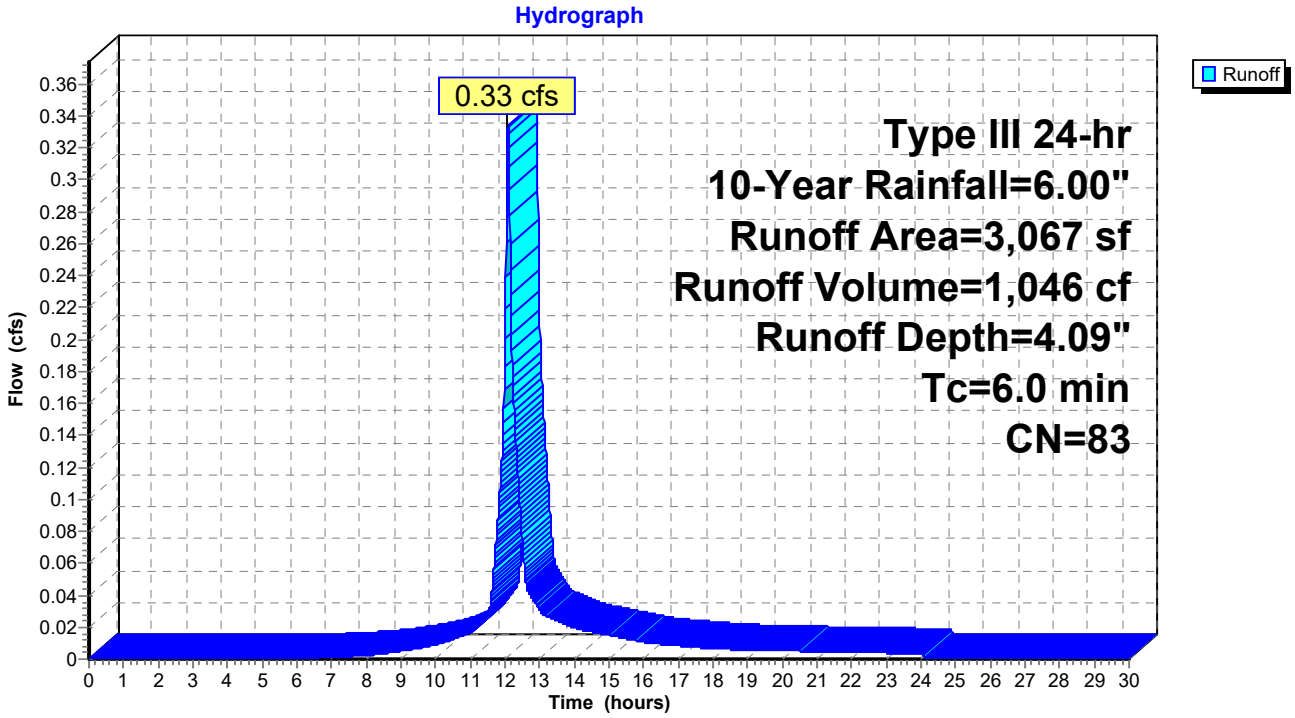
Runoff = 0.33 cfs @ 12.09 hrs, Volume= 1,046 cf, Depth= 4.09"
Routed to Pond 1P : CB-B-06

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
1,258	61	>75% Grass cover, Good, HSG B
1,809	98	Paved parking, HSG B
3,067	83	Weighted Average
1,258		41.02% Pervious Area
1,809		58.98% Impervious Area

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

Subcatchment CB-B-06: W-B-06



Summary for Subcatchment W-A-01: W-A-01

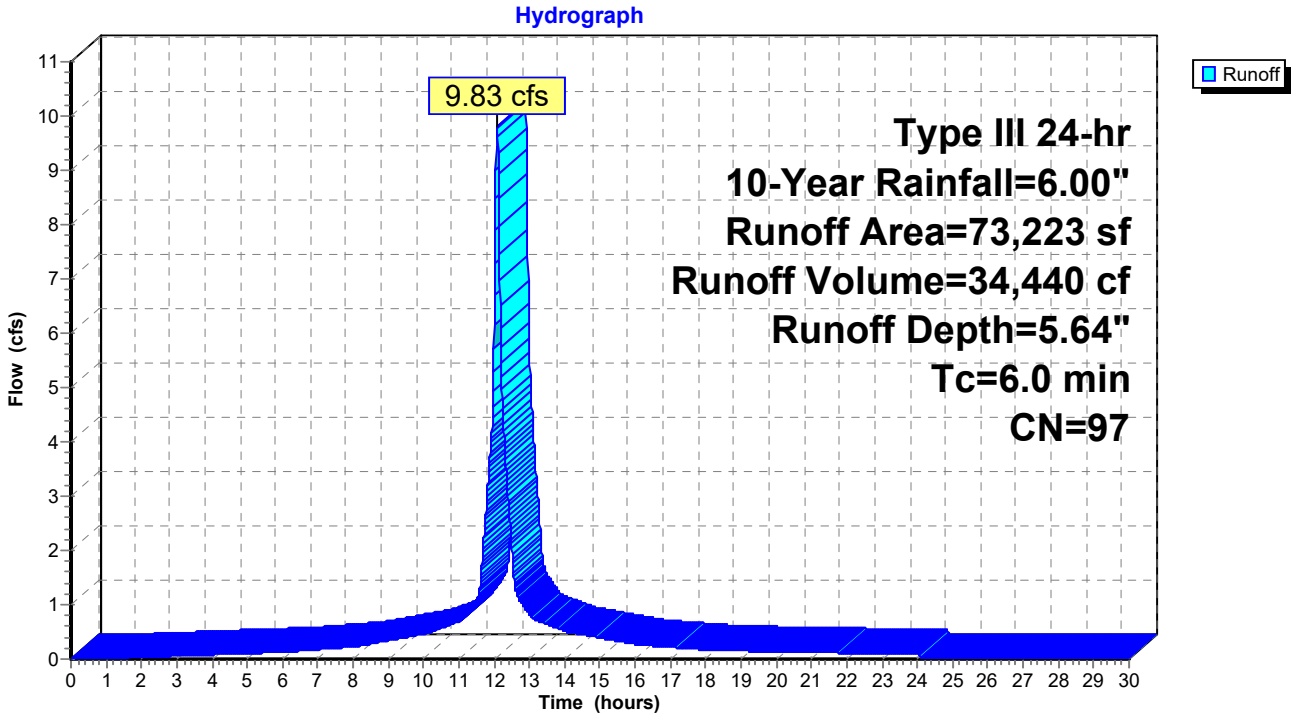
Runoff = 9.83 cfs @ 12.08 hrs, Volume= 34,440 cf, Depth= 5.64"
Routed to Pond CB-A-01 : CB-A-01

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
994	61	>75% Grass cover, Good, HSG B
72,229	98	Paved parking, HSG B
73,223	97	Weighted Average
994		1.36% Pervious Area
72,229		98.64% Impervious Area

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

Subcatchment W-A-01: W-A-01



Summary for Subcatchment W-A-02: W-A-02

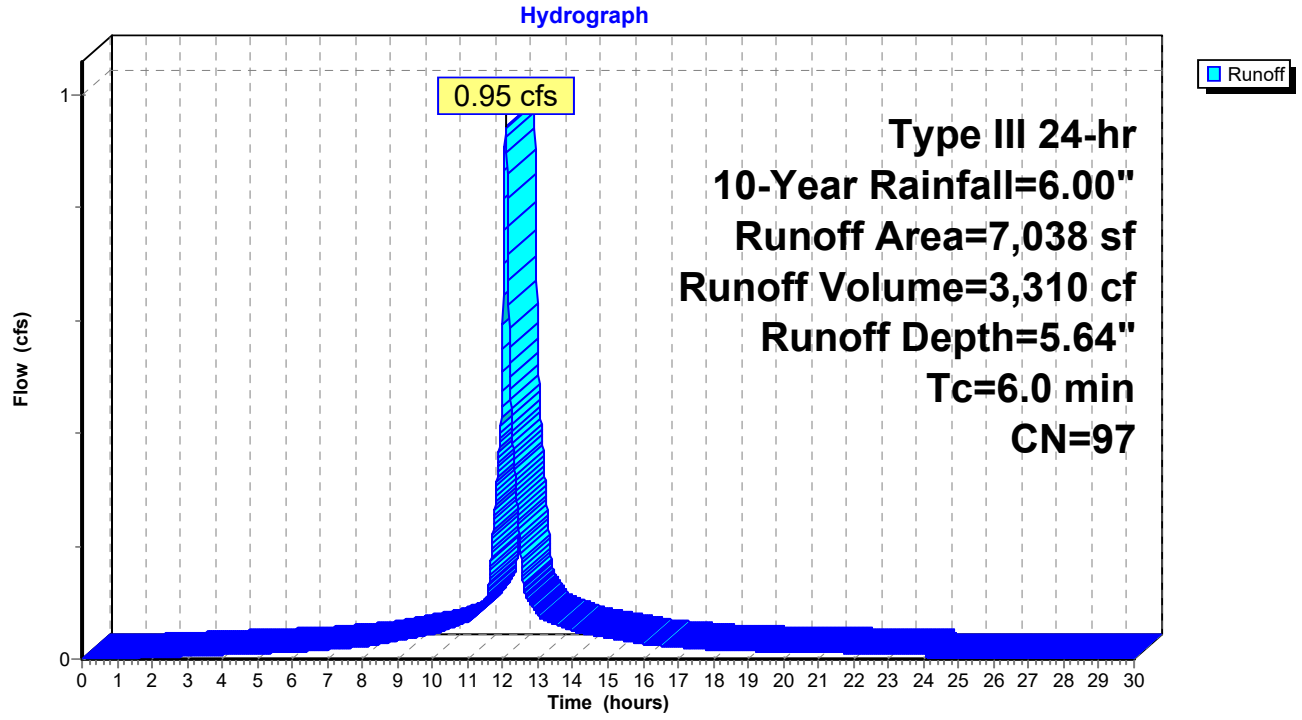
Runoff = 0.95 cfs @ 12.08 hrs, Volume= 3,310 cf, Depth= 5.64"
Routed to Pond CB-A-02 : CB-A-02

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
137	61	>75% Grass cover, Good, HSG B
6,901	98	Paved parking, HSG B
7,038	97	Weighted Average
137		1.95% Pervious Area
6,901		98.05% Impervious Area

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

Subcatchment W-A-02: W-A-02



Summary for Subcatchment W-A-03: W-A-03

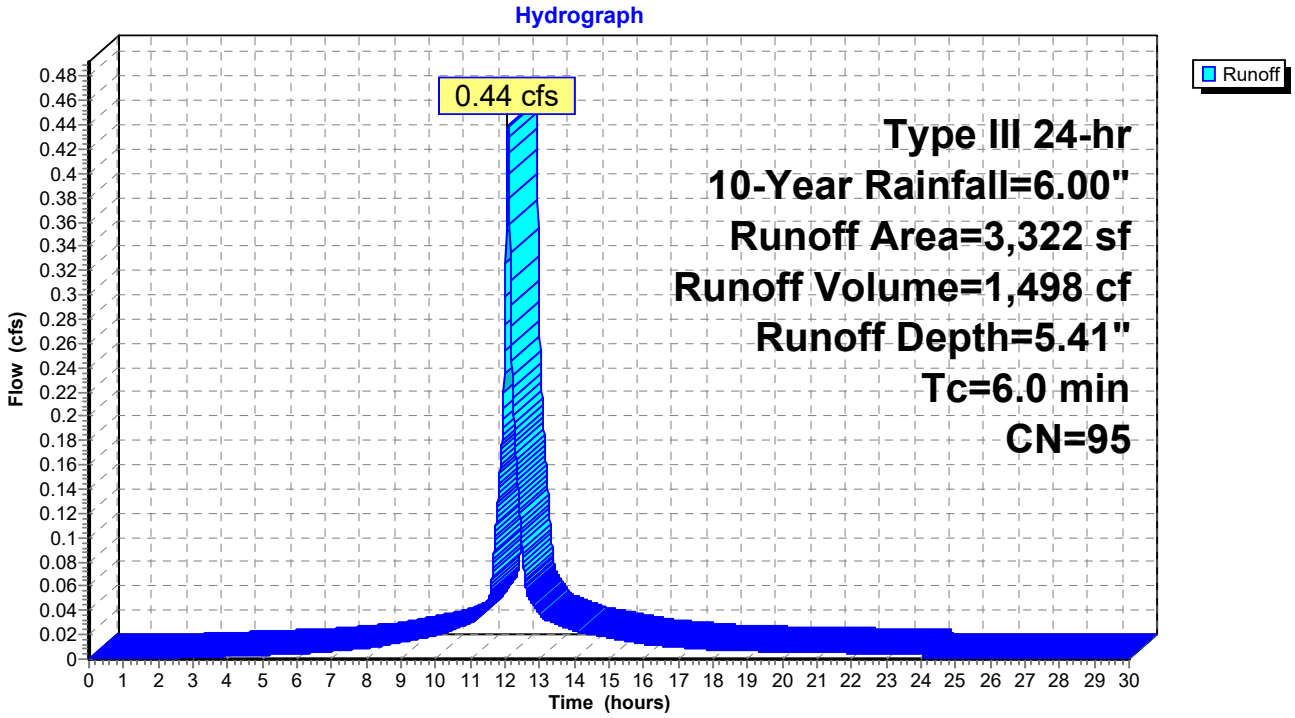
Runoff = 0.44 cfs @ 12.08 hrs, Volume= 1,498 cf, Depth= 5.41"
Routed to Pond CB-A-03 : CB-A-03

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
243	61	>75% Grass cover, Good, HSG B
3,079	98	Paved parking, HSG A
3,322	95	Weighted Average
243		7.31% Pervious Area
3,079		92.69% Impervious Area

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

Subcatchment W-A-03: W-A-03



Summary for Subcatchment W-A-04: W-A-04

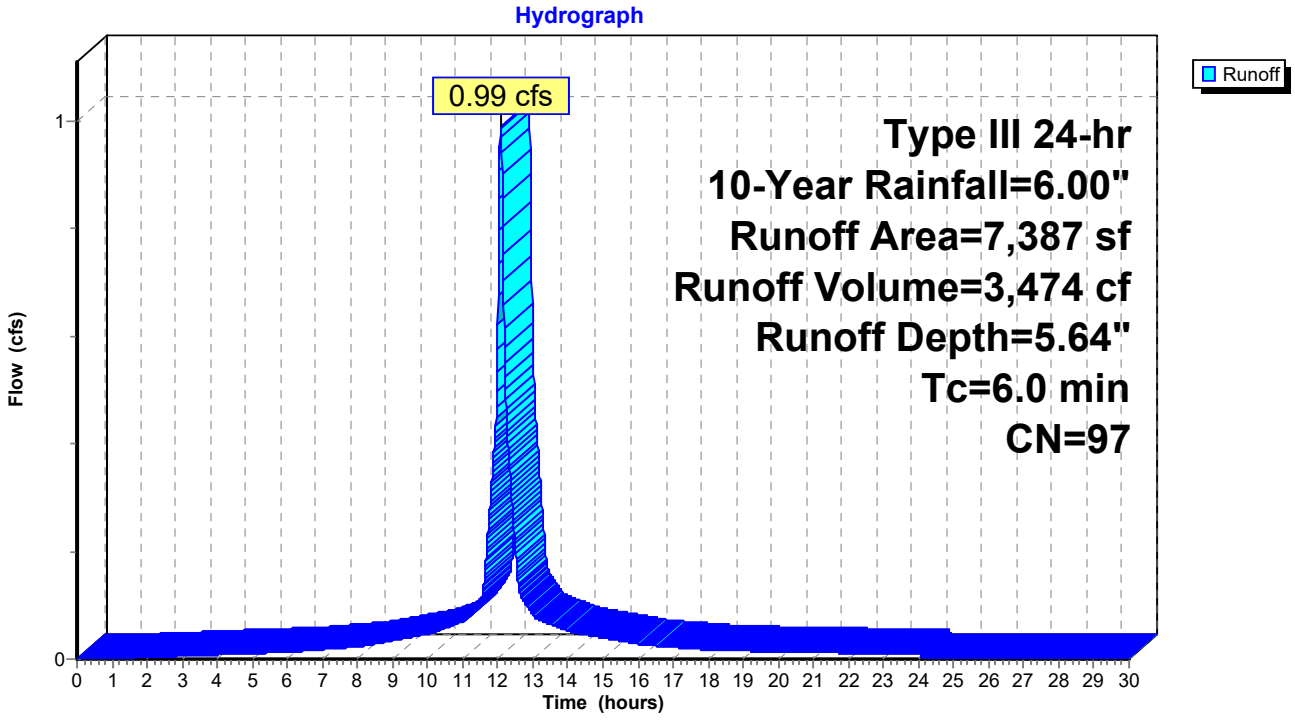
Runoff = 0.99 cfs @ 12.08 hrs, Volume= 3,474 cf, Depth= 5.64"
Routed to Pond CB-A-04 : CB-A-04

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
203	61	>75% Grass cover, Good, HSG B
7,184	98	Paved parking, HSG B
7,387	97	Weighted Average
203		2.75% Pervious Area
7,184		97.25% Impervious Area

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

Subcatchment W-A-04: W-A-04



Summary for Subcatchment W-A-05: W-A-05

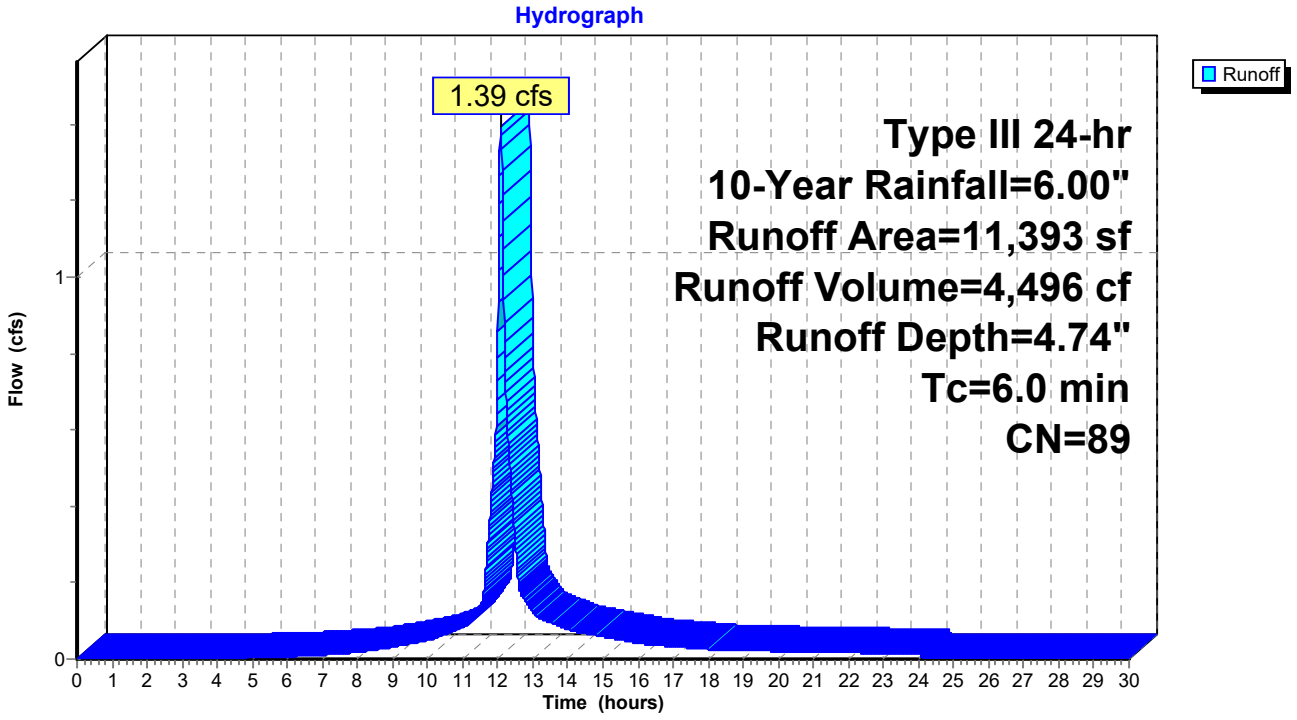
Runoff = 1.39 cfs @ 12.08 hrs, Volume= 4,496 cf, Depth= 4.74"
Routed to Pond CB-A-05 : CB-A-05

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
2,846	61	>75% Grass cover, Good, HSG B
8,547	98	Paved parking, HSG B
11,393	89	Weighted Average
2,846		24.98% Pervious Area
8,547		75.02% Impervious Area

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

Subcatchment W-A-05: W-A-05



Summary for Subcatchment W-A-06: W-A-06

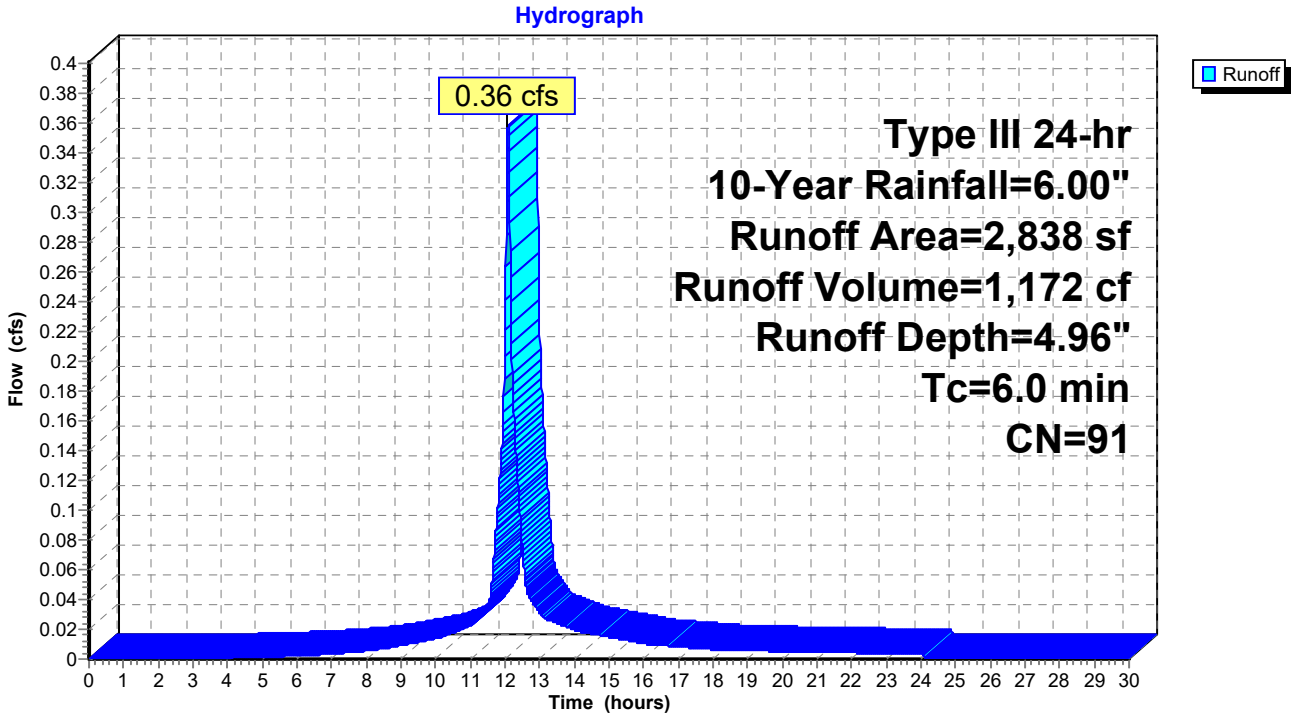
Runoff = 0.36 cfs @ 12.08 hrs, Volume= 1,172 cf, Depth= 4.96"
Routed to Pond CB-A-06 : CB-A-06

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
523	61	>75% Grass cover, Good, HSG B
2,315	98	Paved parking, HSG B
2,838	91	Weighted Average
523		18.43% Pervious Area
2,315		81.57% Impervious Area

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

Subcatchment W-A-06: W-A-06



Summary for Subcatchment W-A-07: W-A-07

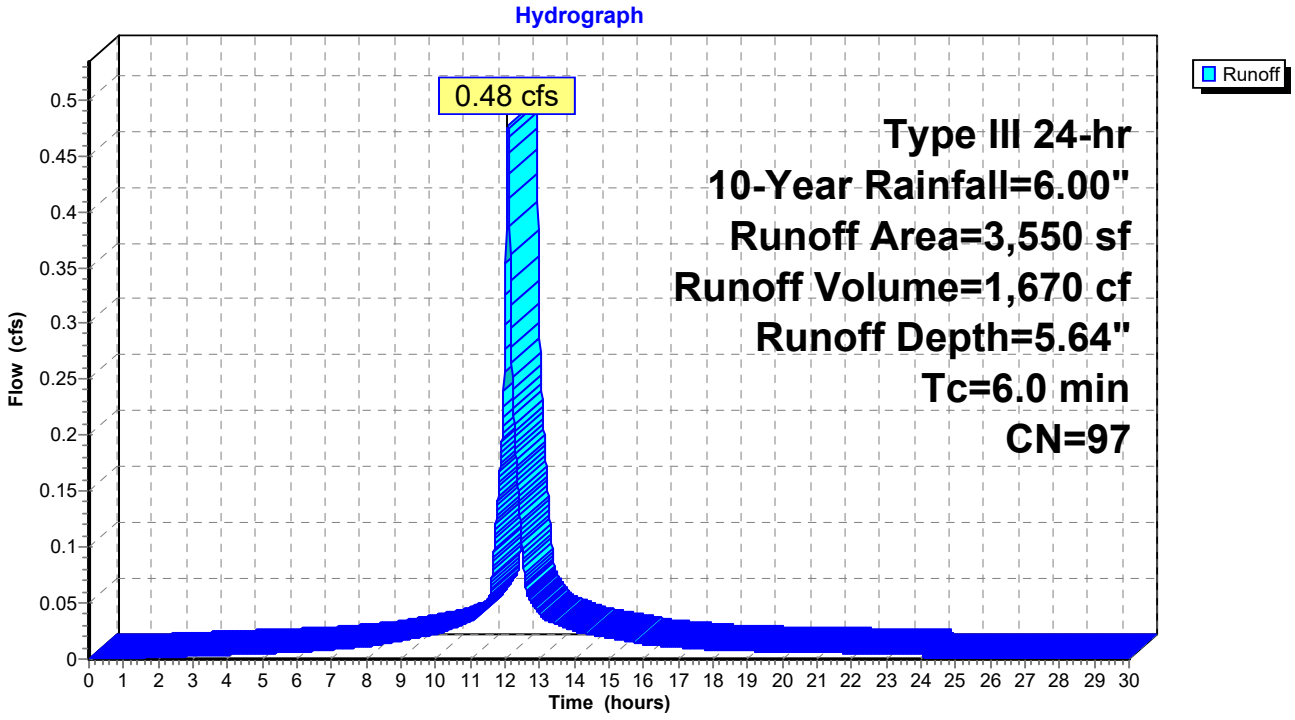
Runoff = 0.48 cfs @ 12.08 hrs, Volume= 1,670 cf, Depth= 5.64"
Routed to Pond CB-A-07 : CB-A-07

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
101	61	>75% Grass cover, Good, HSG B
3,449	98	Paved parking, HSG B
3,550	97	Weighted Average
101		2.85% Pervious Area
3,449		97.15% Impervious Area

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

Subcatchment W-A-07: W-A-07



Summary for Subcatchment W-A-08: W-A-08

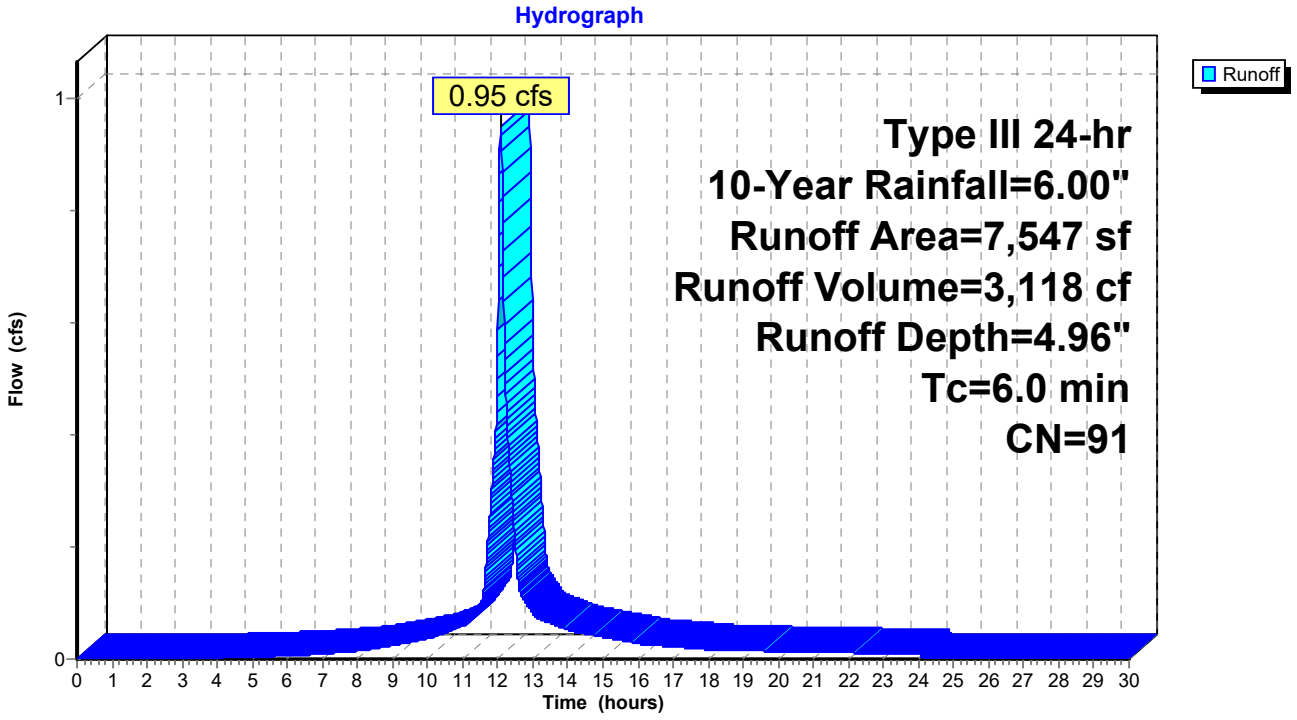
Runoff = 0.95 cfs @ 12.08 hrs, Volume= 3,118 cf, Depth= 4.96"
Routed to Pond CB-A-08 : CB-A-08

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
1,492	61	>75% Grass cover, Good, HSG B
6,055	98	Paved parking, HSG B
7,547	91	Weighted Average
1,492		19.77% Pervious Area
6,055		80.23% Impervious Area

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

Subcatchment W-A-08: W-A-08



Summary for Subcatchment W-A-09: W-A-09

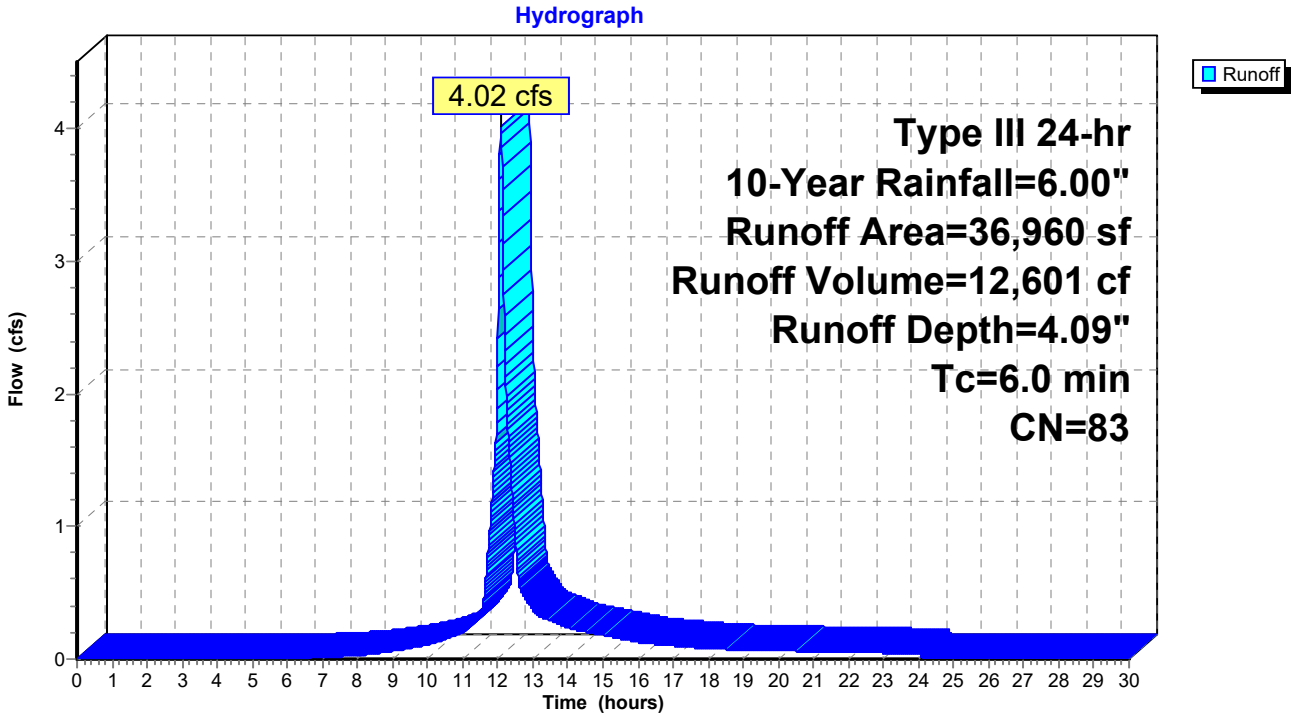
Runoff = 4.02 cfs @ 12.09 hrs, Volume= 12,601 cf, Depth= 4.09"
Routed to Pond CB-A-09 : CB-A-09

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
14,898	61	>75% Grass cover, Good, HSG B
22,062	98	Paved parking, HSG B
36,960	83	Weighted Average
14,898		40.31% Pervious Area
22,062		59.69% Impervious Area

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

Subcatchment W-A-09: W-A-09



Summary for Subcatchment W-A-10: W-A-10

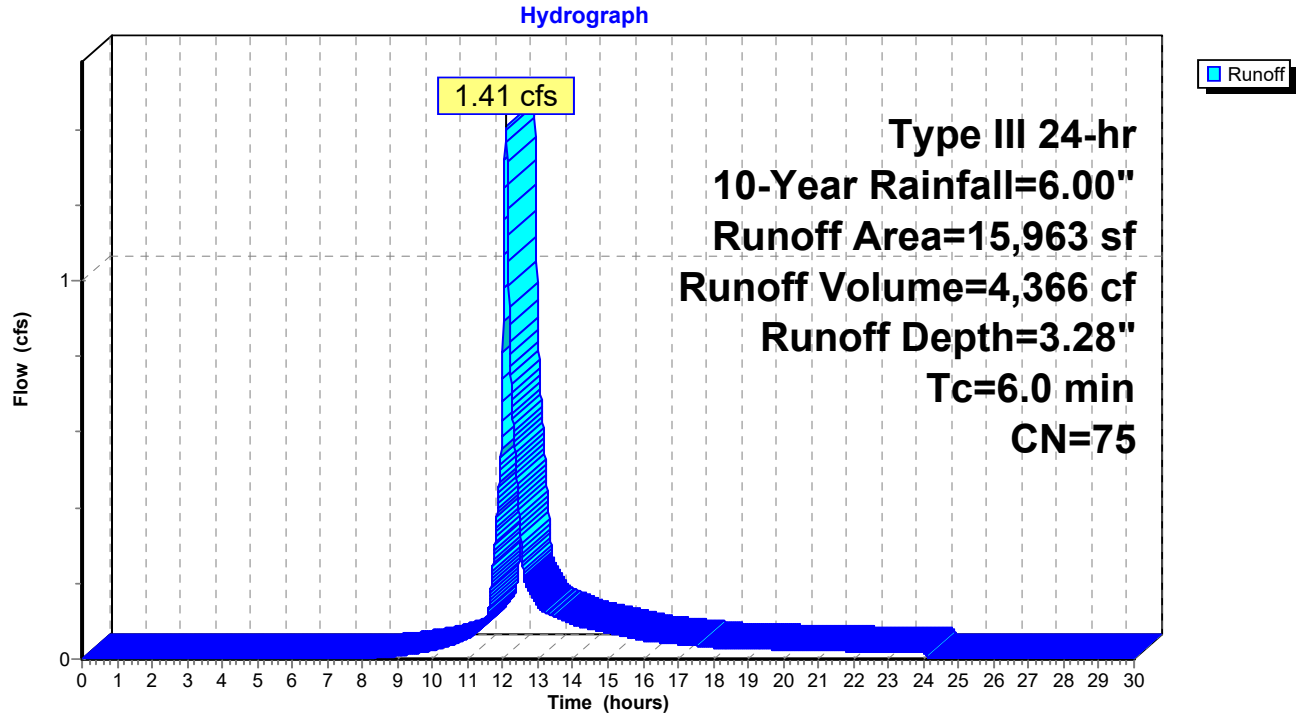
Runoff = 1.41 cfs @ 12.09 hrs, Volume= 4,366 cf, Depth= 3.28"
Routed to Pond CB-A-10 : CB-A-10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
9,937	61	>75% Grass cover, Good, HSG B
6,026	98	Paved parking, HSG B
15,963	75	Weighted Average
9,937		62.25% Pervious Area
6,026		37.75% Impervious Area

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

Subcatchment W-A-10: W-A-10



Summary for Subcatchment W-A-11: W-A-11

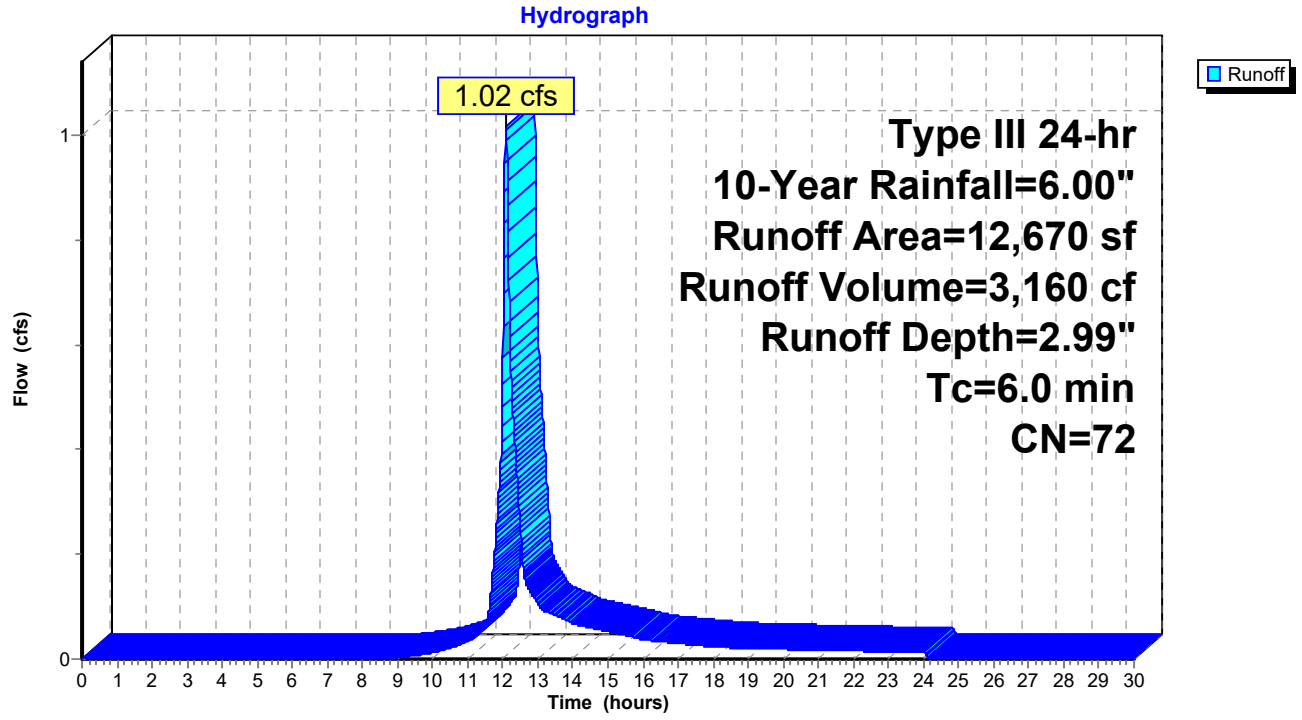
Runoff = 1.02 cfs @ 12.09 hrs, Volume= 3,160 cf, Depth= 2.99"
Routed to Pond CB-A-11 : CB-A-11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
8,843	61	>75% Grass cover, Good, HSG B
3,827	98	Paved parking, HSG A
12,670	72	Weighted Average
8,843		69.79% Pervious Area
3,827		30.21% Impervious Area

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

Subcatchment W-A-11: W-A-11



Summary for Subcatchment W-A-13: W-A-13

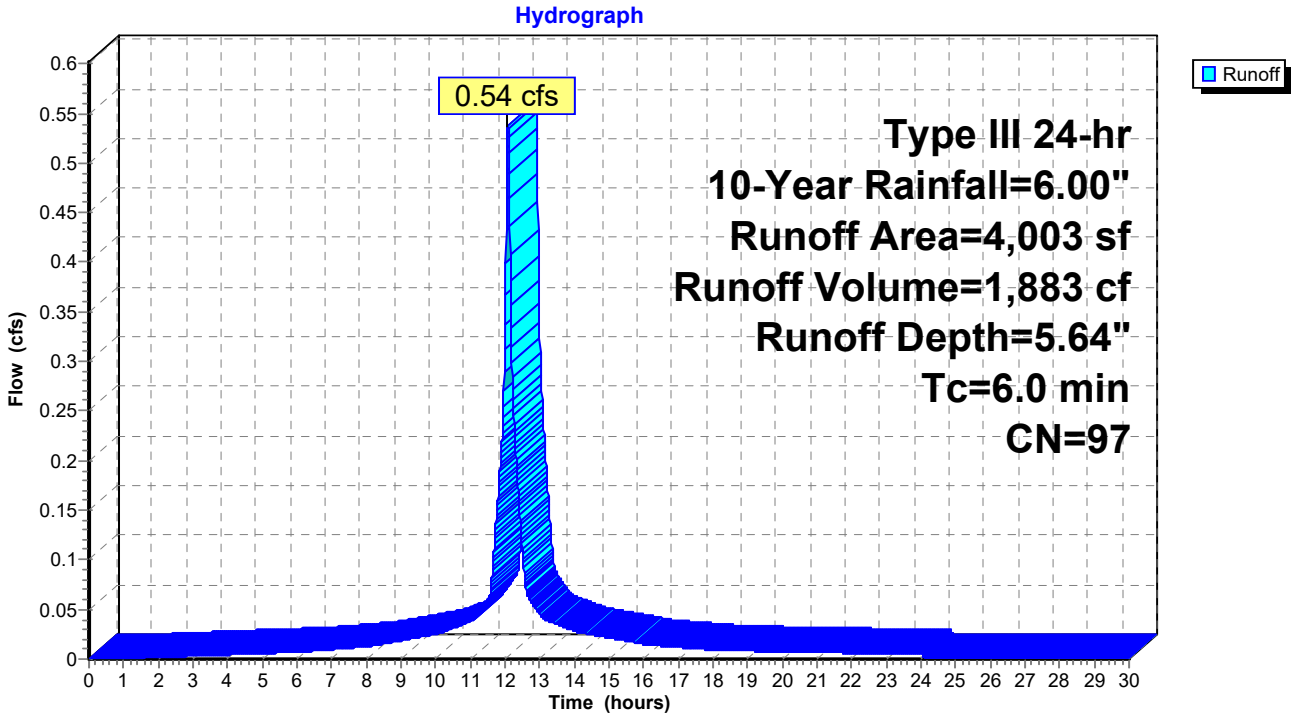
Runoff = 0.54 cfs @ 12.08 hrs, Volume= 1,883 cf, Depth= 5.64"
Routed to Pond 3P : CB-A-13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
145	61	>75% Grass cover, Good, HSG B
3,858	98	Paved parking, HSG B
4,003	97	Weighted Average
145		3.62% Pervious Area
3,858		96.38% Impervious Area

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

Subcatchment W-A-13: W-A-13



Summary for Subcatchment W-A-14: W-A-14

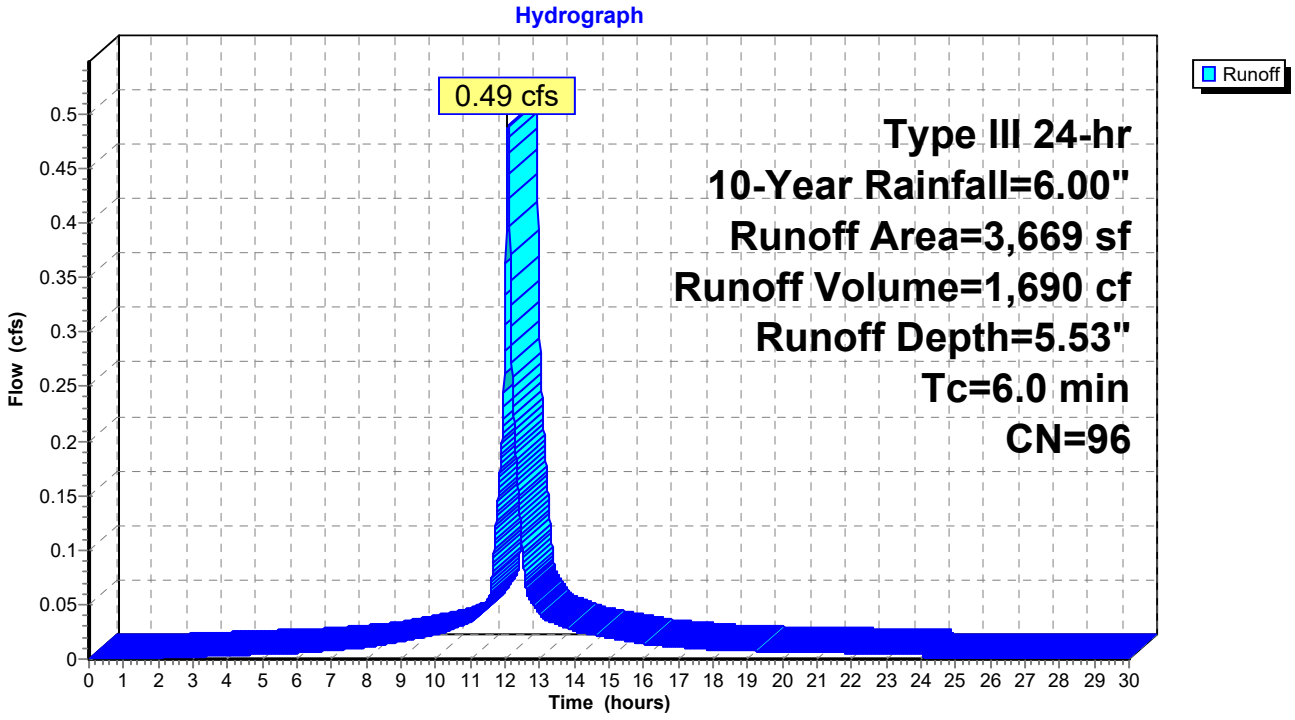
Runoff = 0.49 cfs @ 12.08 hrs, Volume= 1,690 cf, Depth= 5.53"
Routed to Pond CB-A-14 : CB-A-14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
247	61	>75% Grass cover, Good, HSG B
3,422	98	Paved parking, HSG B
3,669	96	Weighted Average
247		6.73% Pervious Area
3,422		93.27% Impervious Area

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

Subcatchment W-A-14: W-A-14



Summary for Subcatchment W-A-15: W-A-15

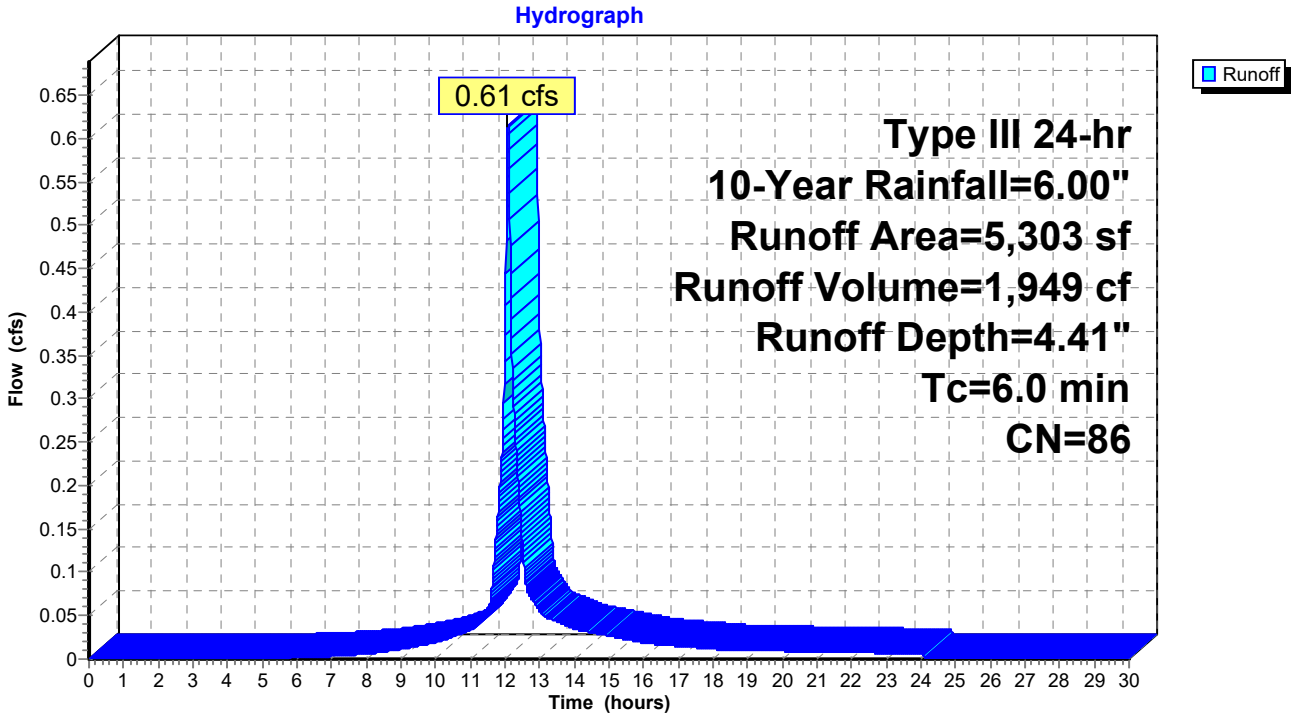
Runoff = 0.61 cfs @ 12.09 hrs, Volume= 1,949 cf, Depth= 4.41"
Routed to Pond CB-A-15 : CB-A-15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
1,739	61	>75% Grass cover, Good, HSG B
3,564	98	Paved parking, HSG B
5,303	86	Weighted Average
1,739		32.79% Pervious Area
3,564		67.21% Impervious Area

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

Subcatchment W-A-15: W-A-15



Summary for Subcatchment W-A-17: W-A-17

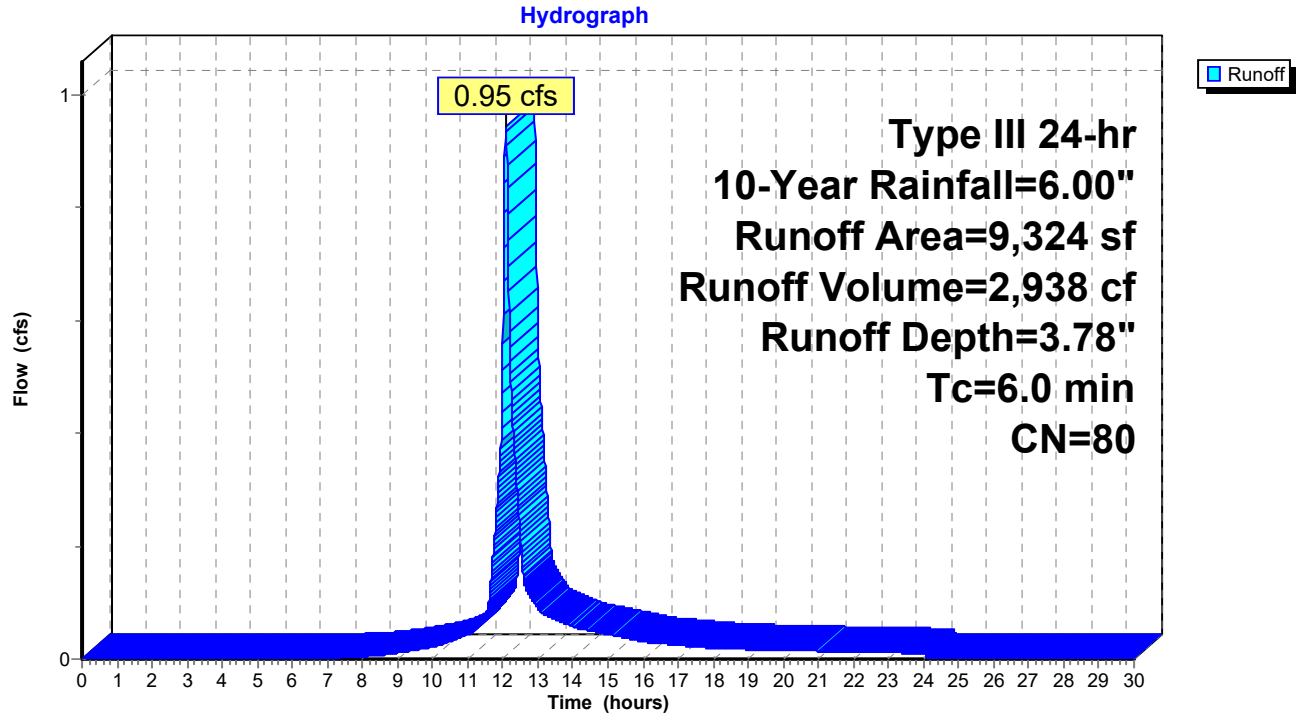
Runoff = 0.95 cfs @ 12.09 hrs, Volume= 2,938 cf, Depth= 3.78"
Routed to Pond CB-A-17 : CB-A-17

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
4,521	61	>75% Grass cover, Good, HSG B
4,803	98	Paved parking, HSG B
9,324	80	Weighted Average
4,521		48.49% Pervious Area
4,803		51.51% Impervious Area

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

Subcatchment W-A-17: W-A-17



Summary for Subcatchment W-A-18: W-A-18

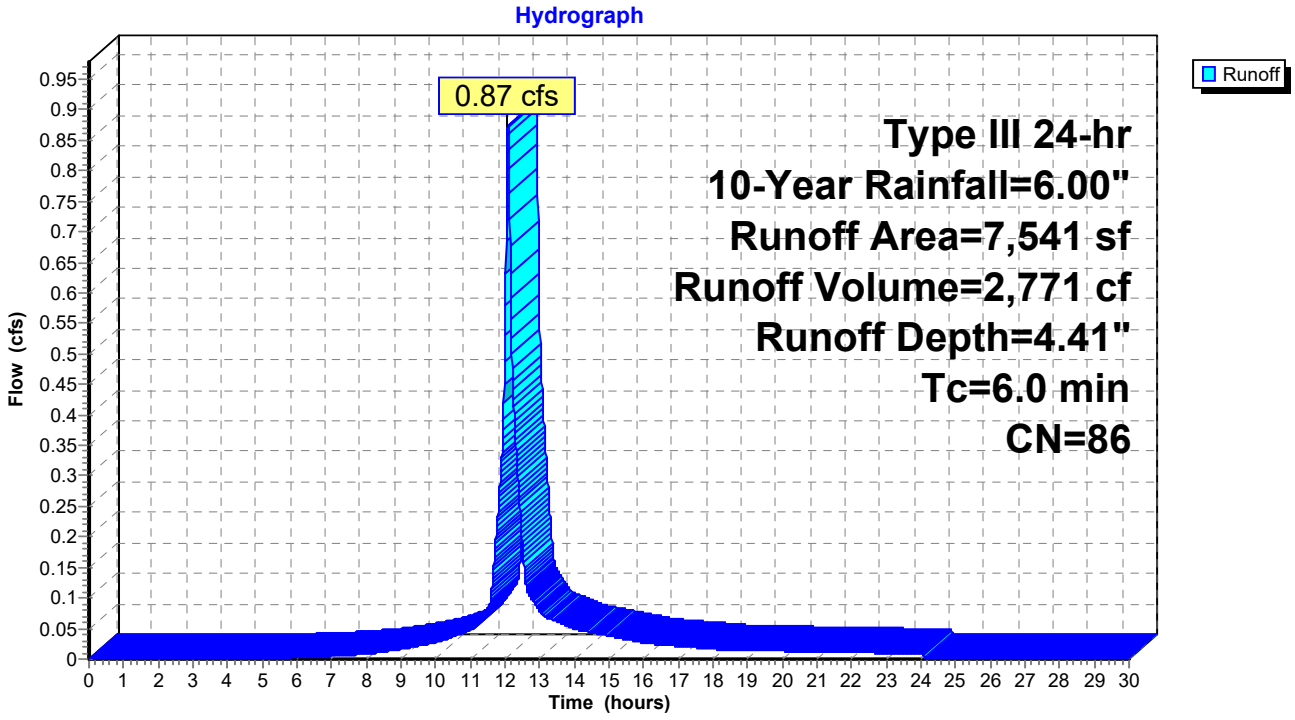
Runoff = 0.87 cfs @ 12.09 hrs, Volume= 2,771 cf, Depth= 4.41"
Routed to Pond CB-A-18 : CB-A-18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
2,344	61	>75% Grass cover, Good, HSG B
5,197	98	Paved parking, HSG B
7,541	86	Weighted Average
2,344		31.08% Pervious Area
5,197		68.92% Impervious Area

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

Subcatchment W-A-18: W-A-18



Summary for Subcatchment W-A-19: W-A-19

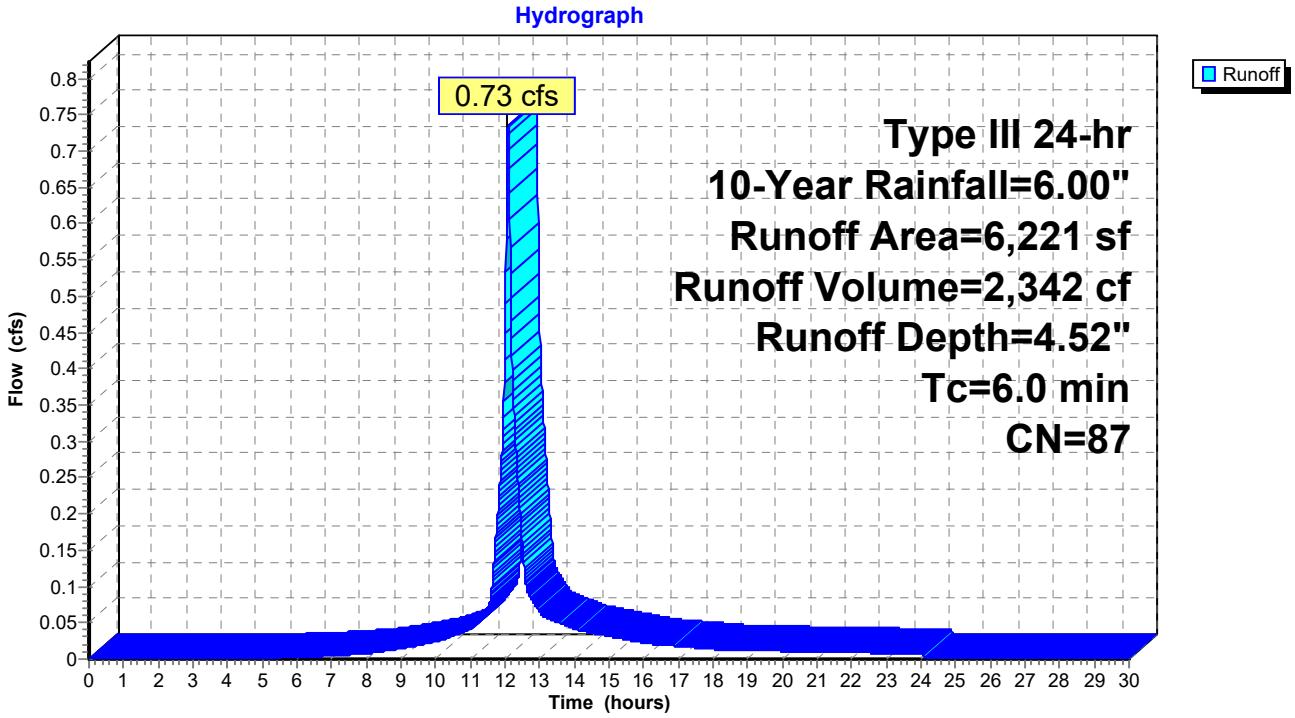
Runoff = 0.73 cfs @ 12.09 hrs, Volume= 2,342 cf, Depth= 4.52"
Routed to Pond CB-A-19 : CB-A-19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
1,822	61	>75% Grass cover, Good, HSG B
4,399	98	Paved parking, HSG B
6,221	87	Weighted Average
1,822		29.29% Pervious Area
4,399		70.71% Impervious Area

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

Subcatchment W-A-19: W-A-19



Summary for Subcatchment W-A-20: W-A-20

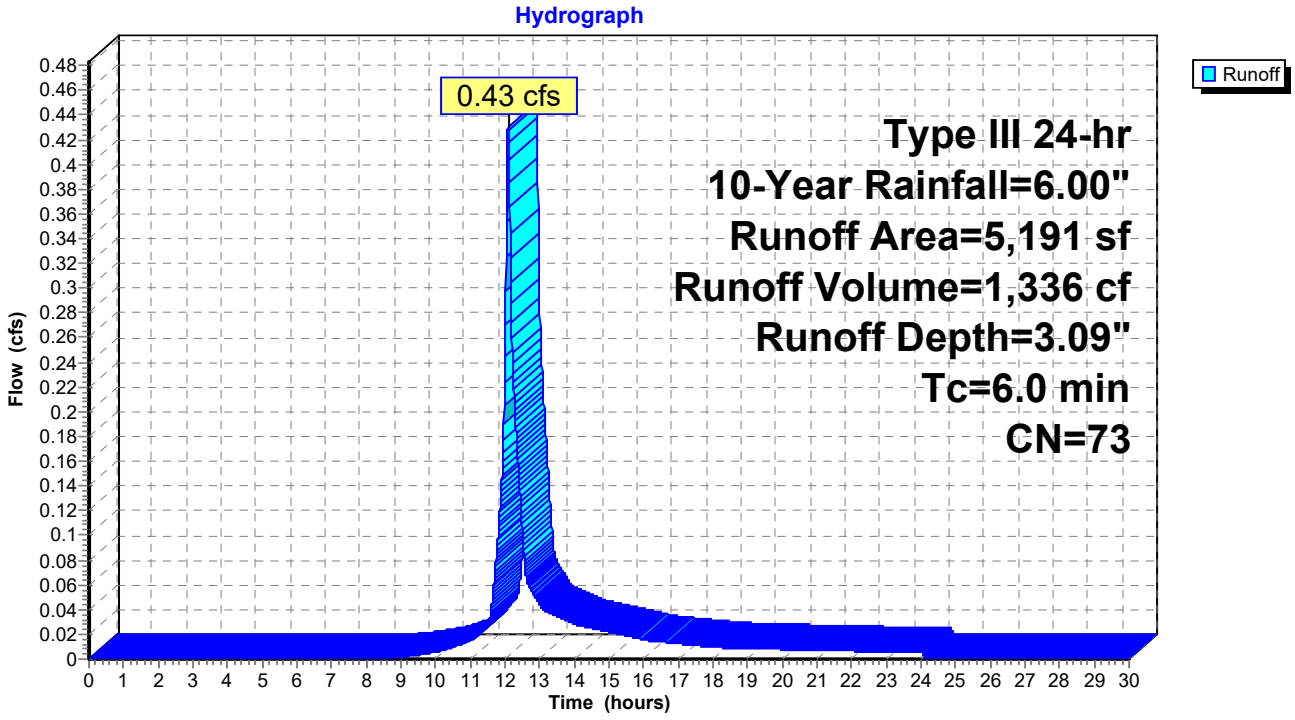
Runoff = 0.43 cfs @ 12.09 hrs, Volume= 1,336 cf, Depth= 3.09"
Routed to Pond CB-A-20 : CB-A-20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
3,457	61	>75% Grass cover, Good, HSG B
1,734	98	Paved parking, HSG B
5,191	73	Weighted Average
3,457		66.60% Pervious Area
1,734		33.40% Impervious Area

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

Subcatchment W-A-20: W-A-20



Summary for Subcatchment W-B-01: W-B-01

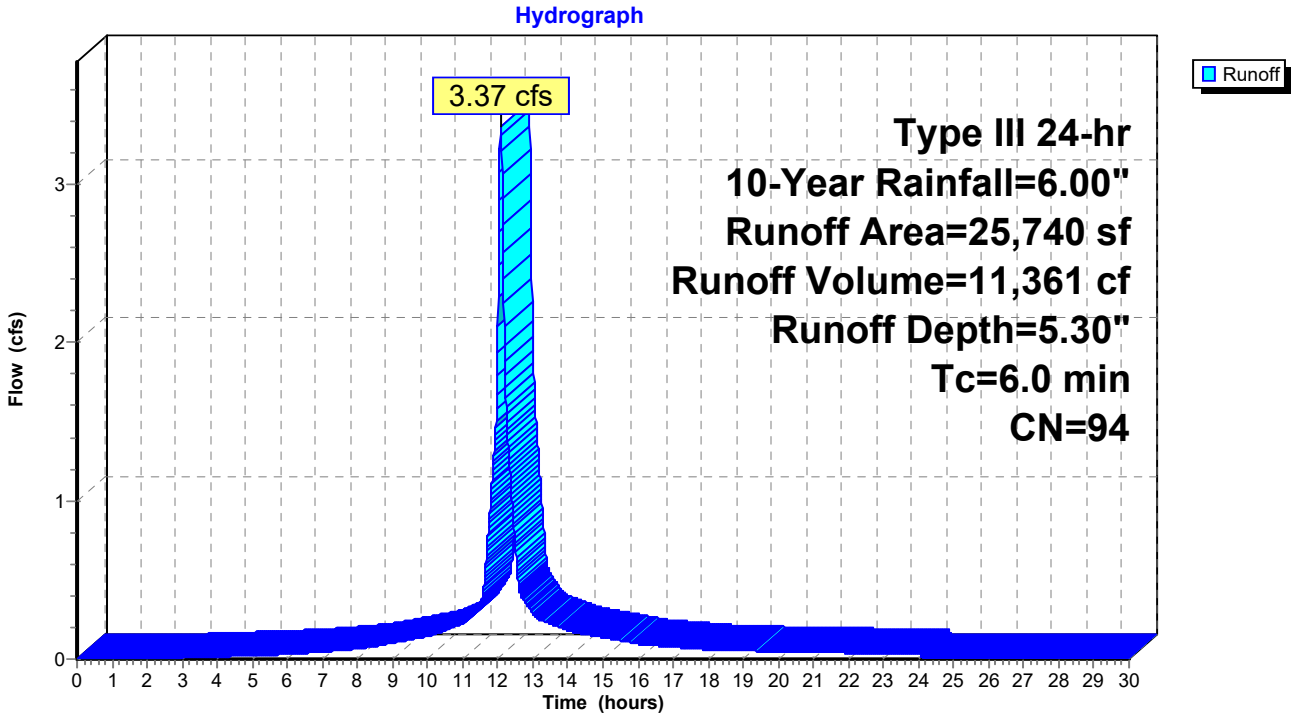
Runoff = 3.37 cfs @ 12.08 hrs, Volume= 11,361 cf, Depth= 5.30"
Routed to Pond CB-B-01 : CB-B-01

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
2,579	61	>75% Grass cover, Good, HSG B
23,161	98	Paved parking, HSG B
25,740	94	Weighted Average
2,579		10.02% Pervious Area
23,161		89.98% Impervious Area

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

Subcatchment W-B-01: W-B-01



Summary for Subcatchment W-B-02: W-B-02

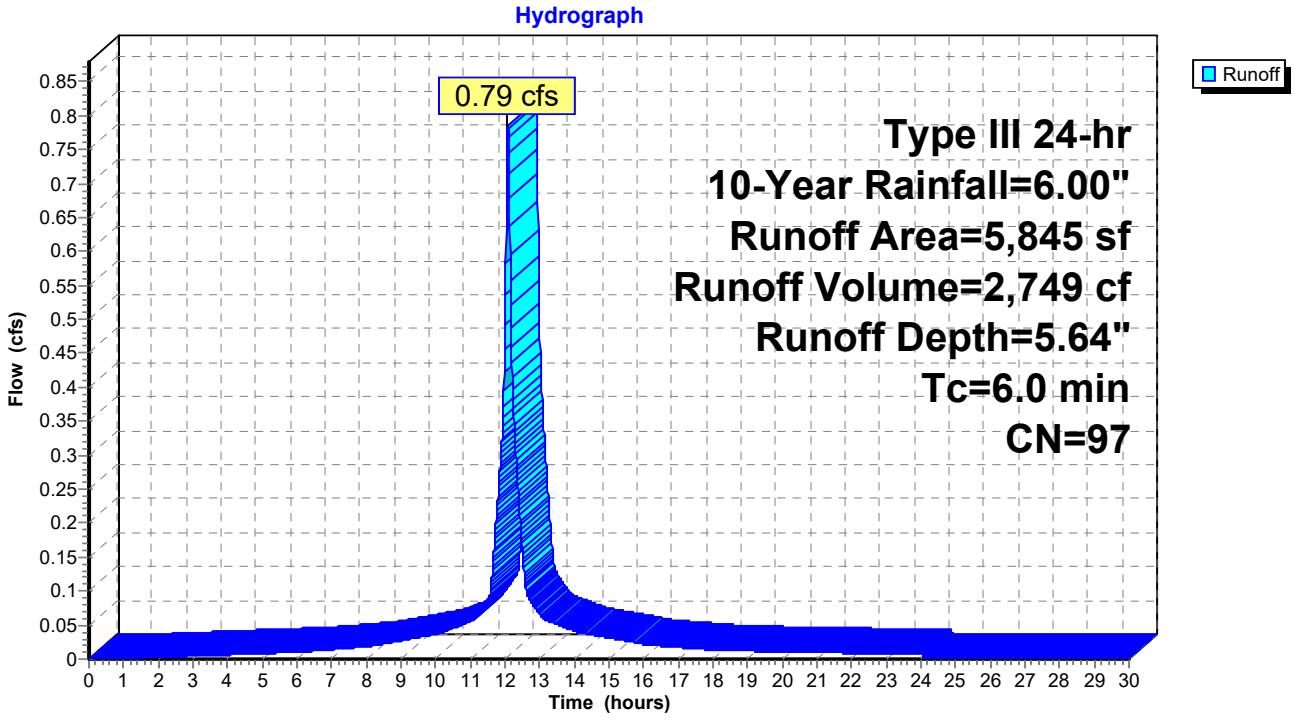
Runoff = 0.79 cfs @ 12.08 hrs, Volume= 2,749 cf, Depth= 5.64"
Routed to Pond CB-B-02 : CB-B-02

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
214	61	>75% Grass cover, Good, HSG B
5,631	98	Paved parking, HSG B
5,845	97	Weighted Average
214		3.66% Pervious Area
5,631		96.34% Impervious Area

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

Subcatchment W-B-02: W-B-02



Summary for Subcatchment W-B-03: W-B-03

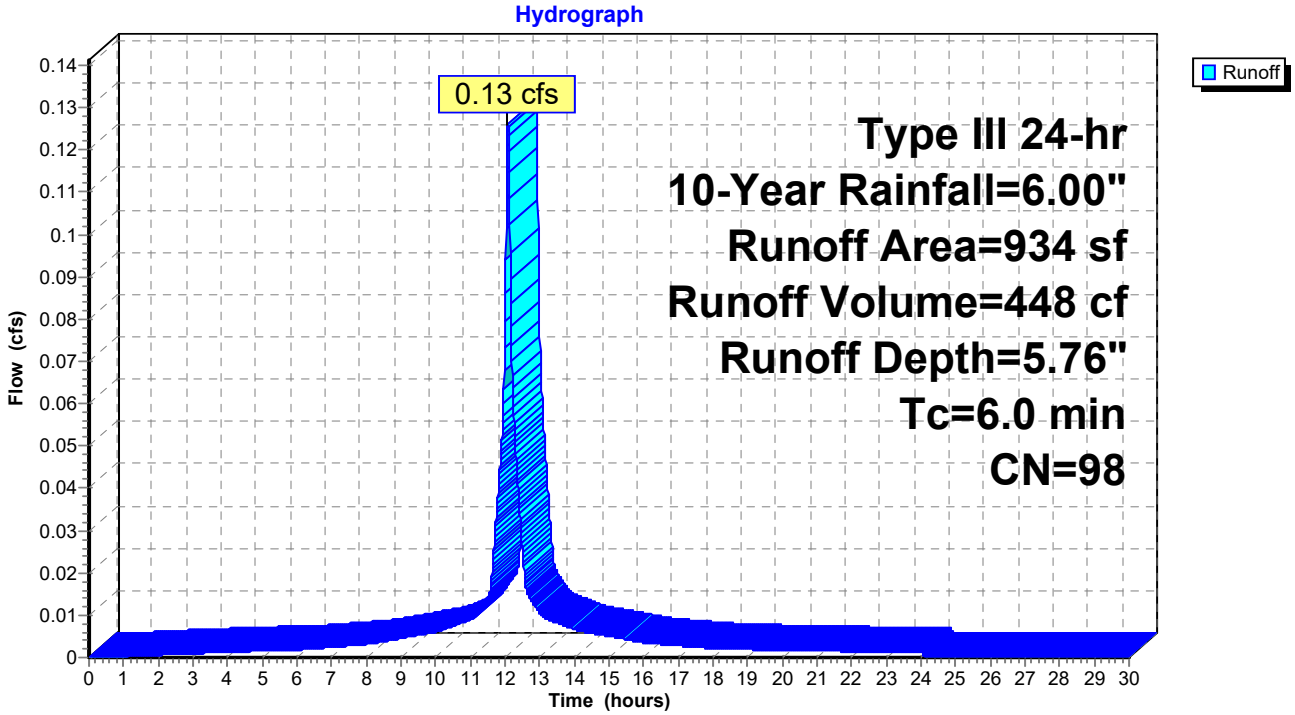
Runoff = 0.13 cfs @ 12.08 hrs, Volume= 448 cf, Depth= 5.76"
Routed to Pond CB-B-03 : CB-B-03

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
934	98	Paved parking, HSG B
934		100.00% Impervious Area

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

Subcatchment W-B-03: W-B-03



Summary for Subcatchment W-B-04: W-B-04

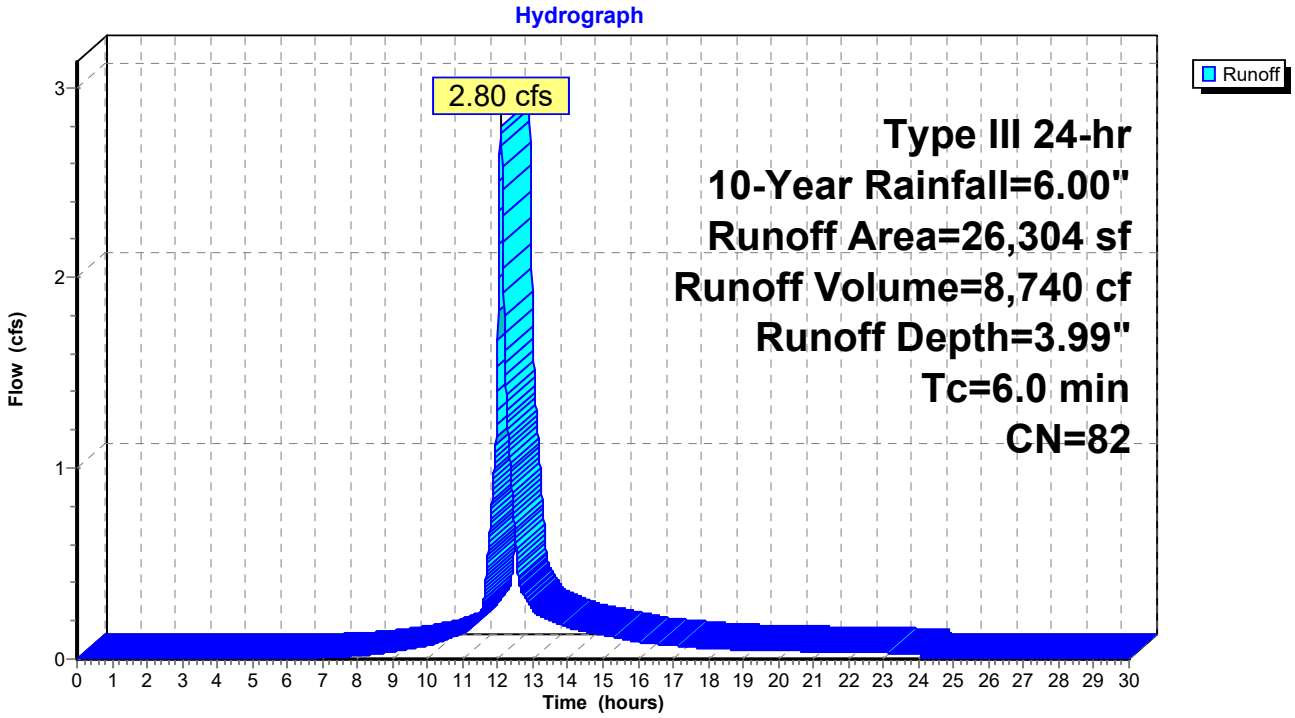
Runoff = 2.80 cfs @ 12.09 hrs, Volume= 8,740 cf, Depth= 3.99"
Routed to Pond CB-B-04 : CB-B-04

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
11,684	61	>75% Grass cover, Good, HSG B
14,620	98	Paved parking, HSG B
26,304	82	Weighted Average
11,684		44.42% Pervious Area
14,620		55.58% Impervious Area

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

Subcatchment W-B-04: W-B-04



Summary for Subcatchment W-B-05: W-B-05

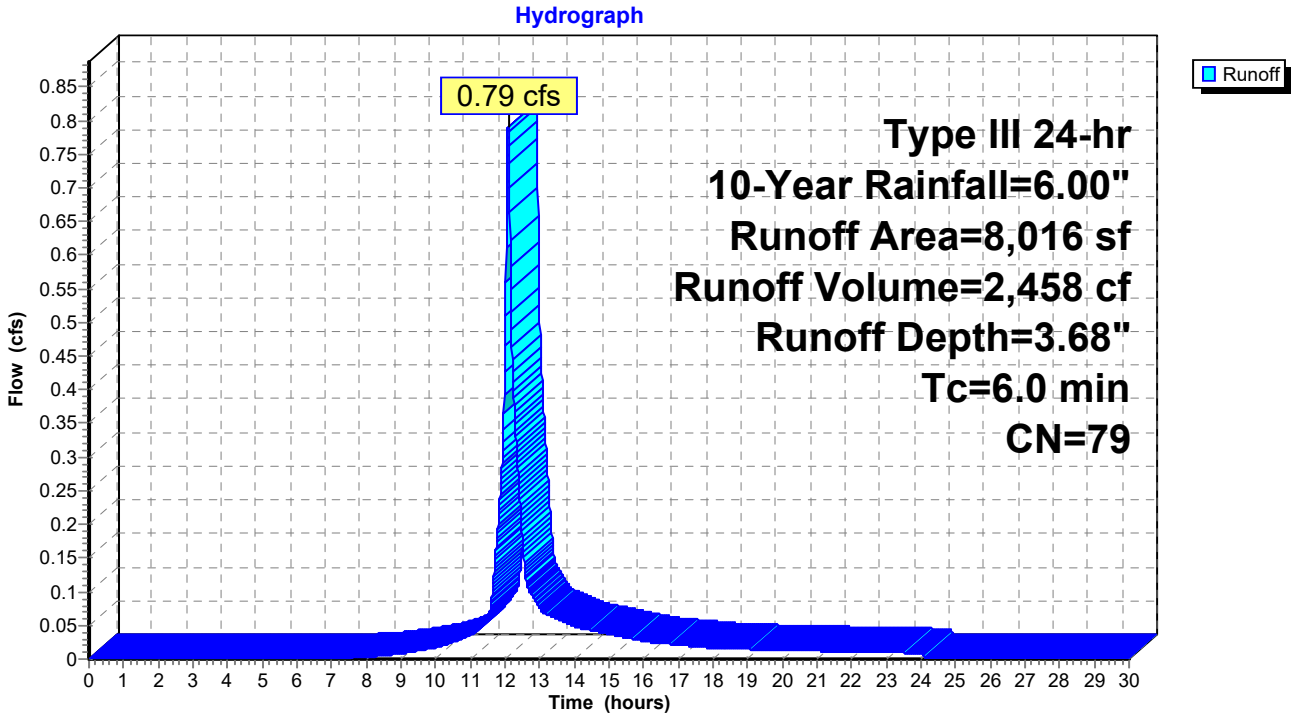
Runoff = 0.79 cfs @ 12.09 hrs, Volume= 2,458 cf, Depth= 3.68"
Routed to Pond CB-B-05 : CB-B-05

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
4,108	61	>75% Grass cover, Good, HSG B
3,908	98	Paved parking, HSG B
8,016	79	Weighted Average
4,108		51.25% Pervious Area
3,908		48.75% Impervious Area

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

Subcatchment W-B-05: W-B-05



Summary for Subcatchment W-B-06: W-B-06

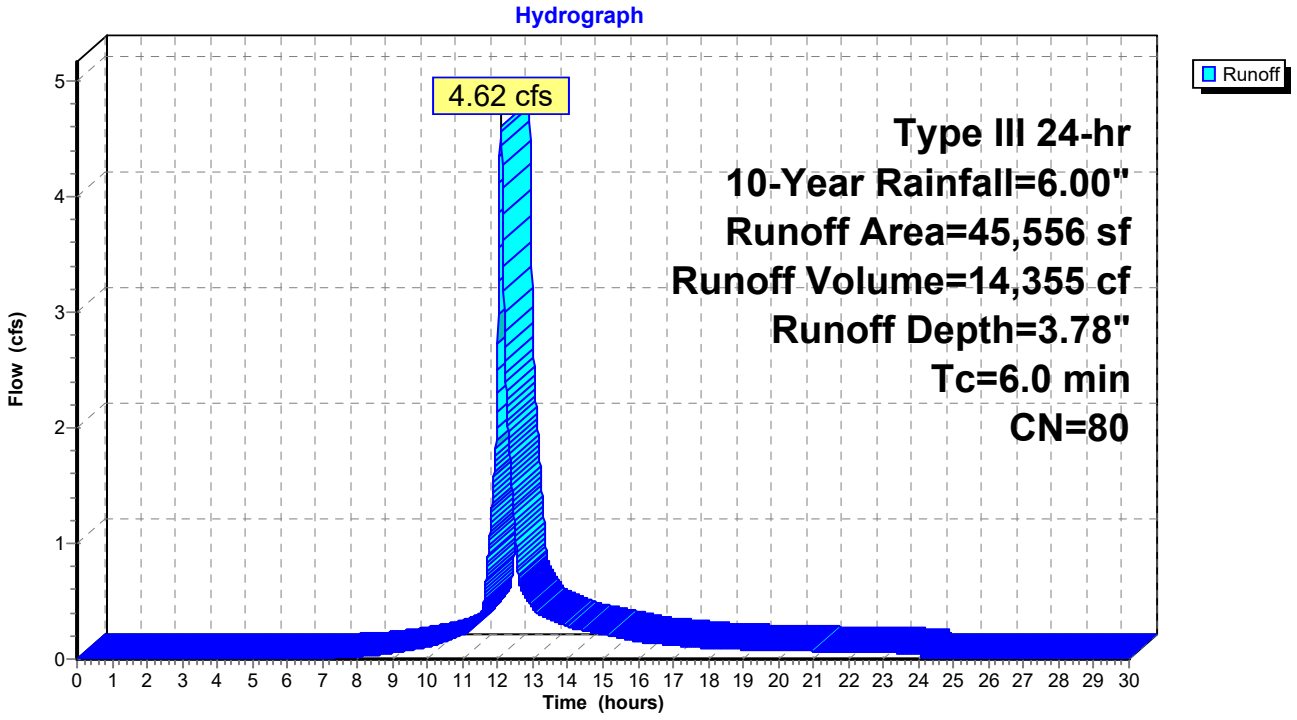
Runoff = 4.62 cfs @ 12.09 hrs, Volume= 14,355 cf, Depth= 3.78"
Routed to Pond CB-B-07 : CB-B-07

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
22,604	61	>75% Grass cover, Good, HSG B
22,952	98	Paved parking, HSG B
45,556	80	Weighted Average
22,604		49.62% Pervious Area
22,952		50.38% Impervious Area

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

Subcatchment W-B-06: W-B-06



Summary for Subcatchment W-C-01: W-C-01

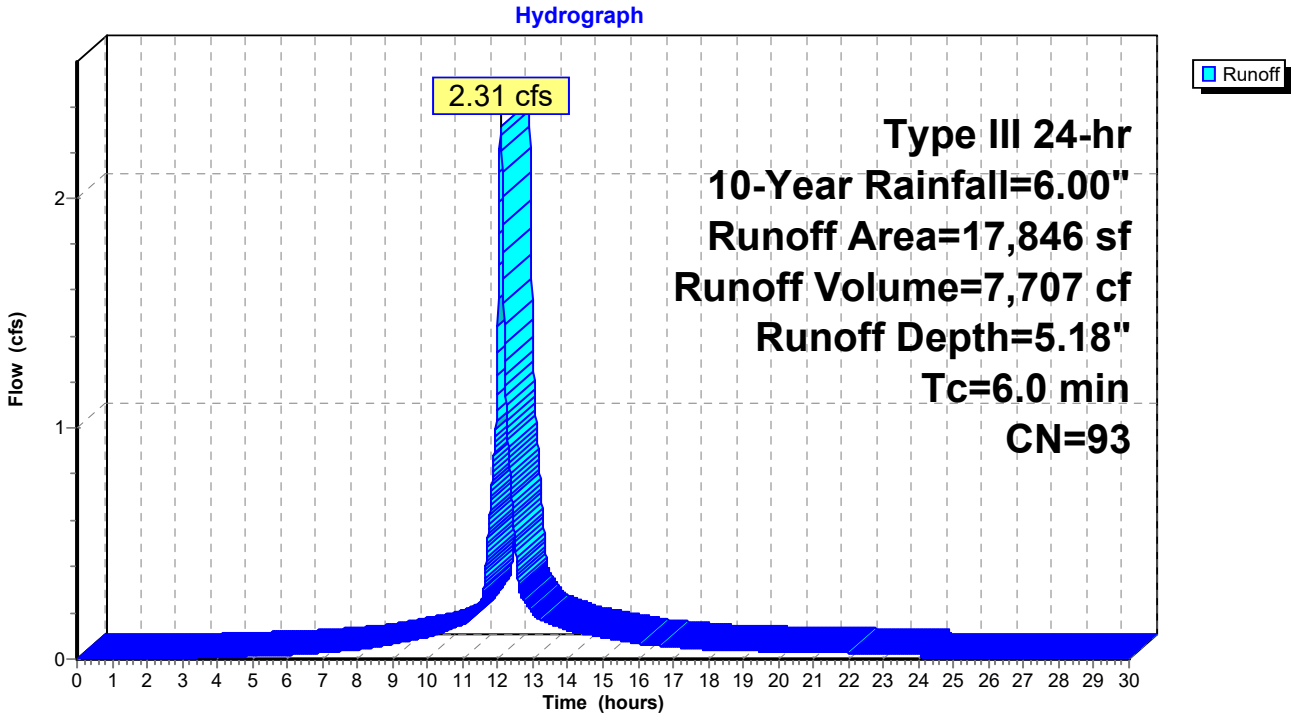
Runoff = 2.31 cfs @ 12.08 hrs, Volume= 7,707 cf, Depth= 5.18"
Routed to Pond CB-C-01 : CB-C-01

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
2,361	61	>75% Grass cover, Good, HSG B
15,485	98	Paved parking, HSG B
17,846	93	Weighted Average
2,361		13.23% Pervious Area
15,485		86.77% Impervious Area

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

Subcatchment W-C-01: W-C-01



Summary for Subcatchment W-C-02: W-C-02

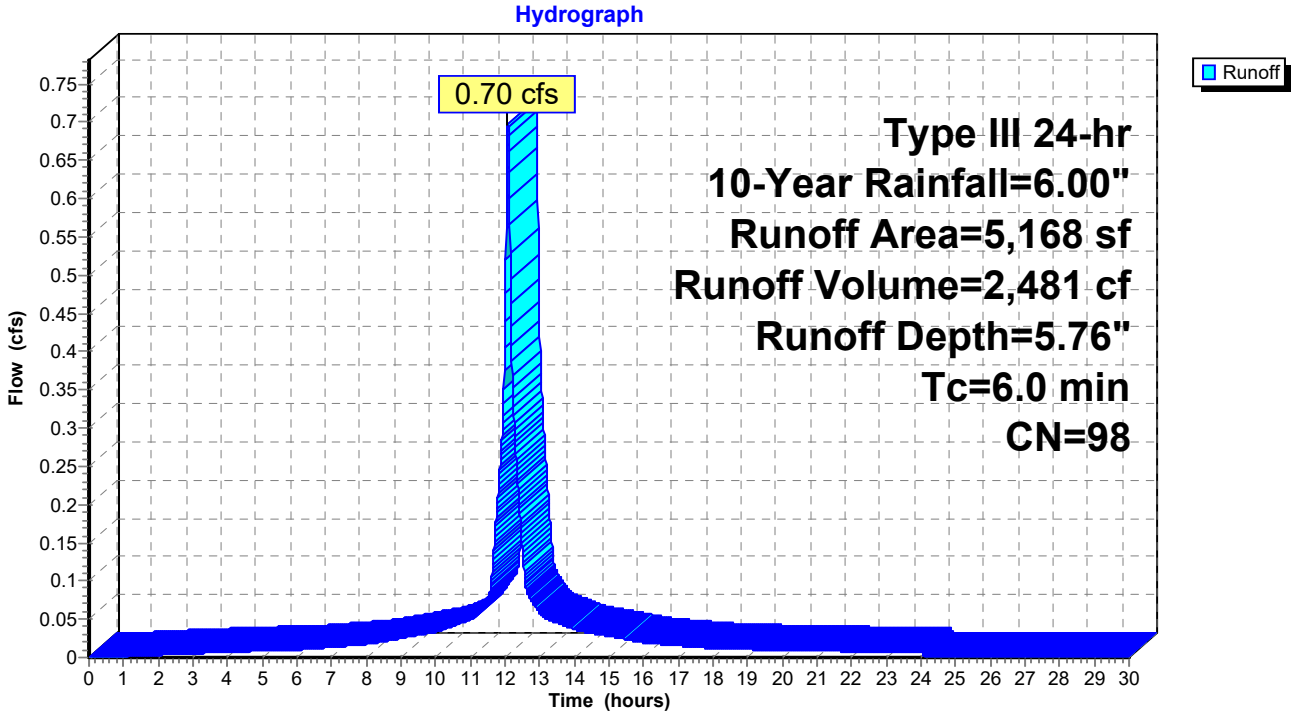
Runoff = 0.70 cfs @ 12.08 hrs, Volume= 2,481 cf, Depth= 5.76"
Routed to Pond CB-C-02 : CB-C-02

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
5,168	98	Paved parking, HSG B
5,168		100.00% Impervious Area

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

Subcatchment W-C-02: W-C-02



Summary for Subcatchment W-C-03: W-C-03

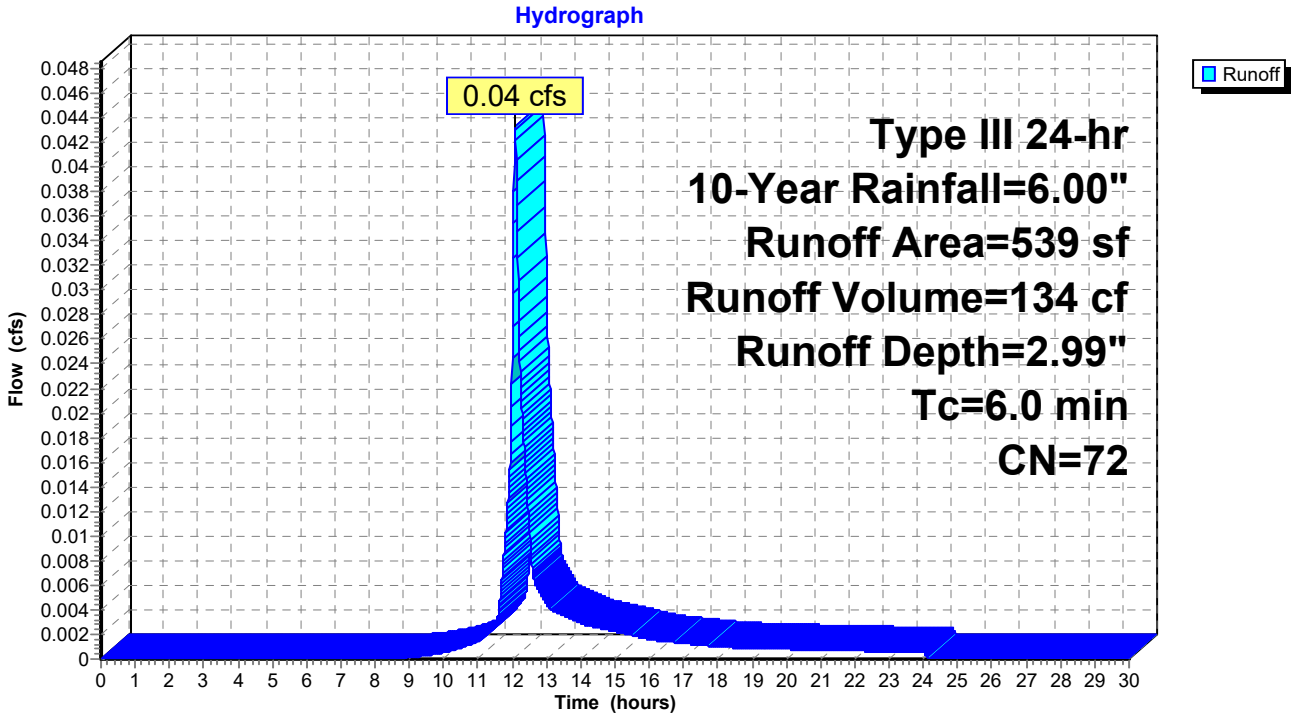
Runoff = 0.04 cfs @ 12.09 hrs, Volume= 134 cf, Depth= 2.99"
Routed to Pond CB-C-03 : CB-C-03

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
372	61	>75% Grass cover, Good, HSG B
167	98	Paved parking, HSG B
539	72	Weighted Average
372		69.02% Pervious Area
167		30.98% Impervious Area

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

Subcatchment W-C-03: W-C-03



Summary for Subcatchment W-C-04: W-C-04

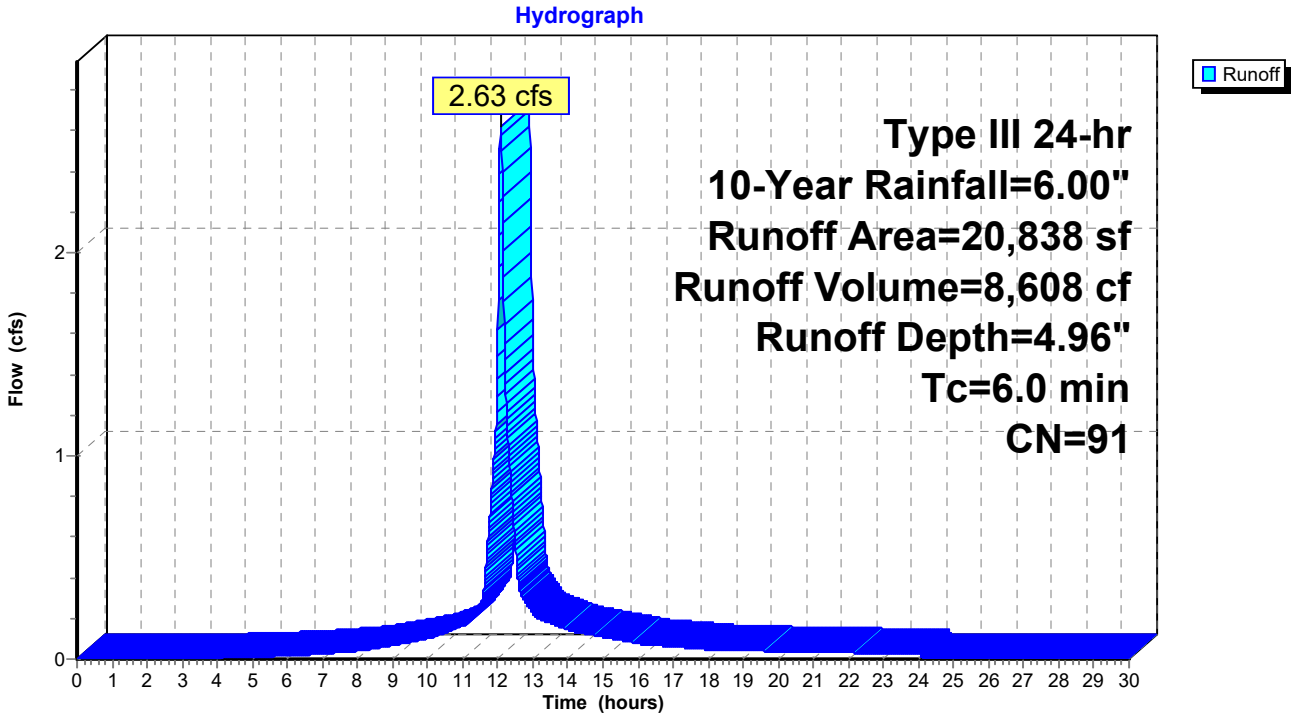
Runoff = 2.63 cfs @ 12.08 hrs, Volume= 8,608 cf, Depth= 4.96"
Routed to Pond CB-C-04 : CB-C-04

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
3,975	61	>75% Grass cover, Good, HSG B
16,863	98	Paved parking, HSG B
20,838	91	Weighted Average
3,975		19.08% Pervious Area
16,863		80.92% Impervious Area

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

Subcatchment W-C-04: W-C-04



Summary for Subcatchment W-C-05: W-C-05

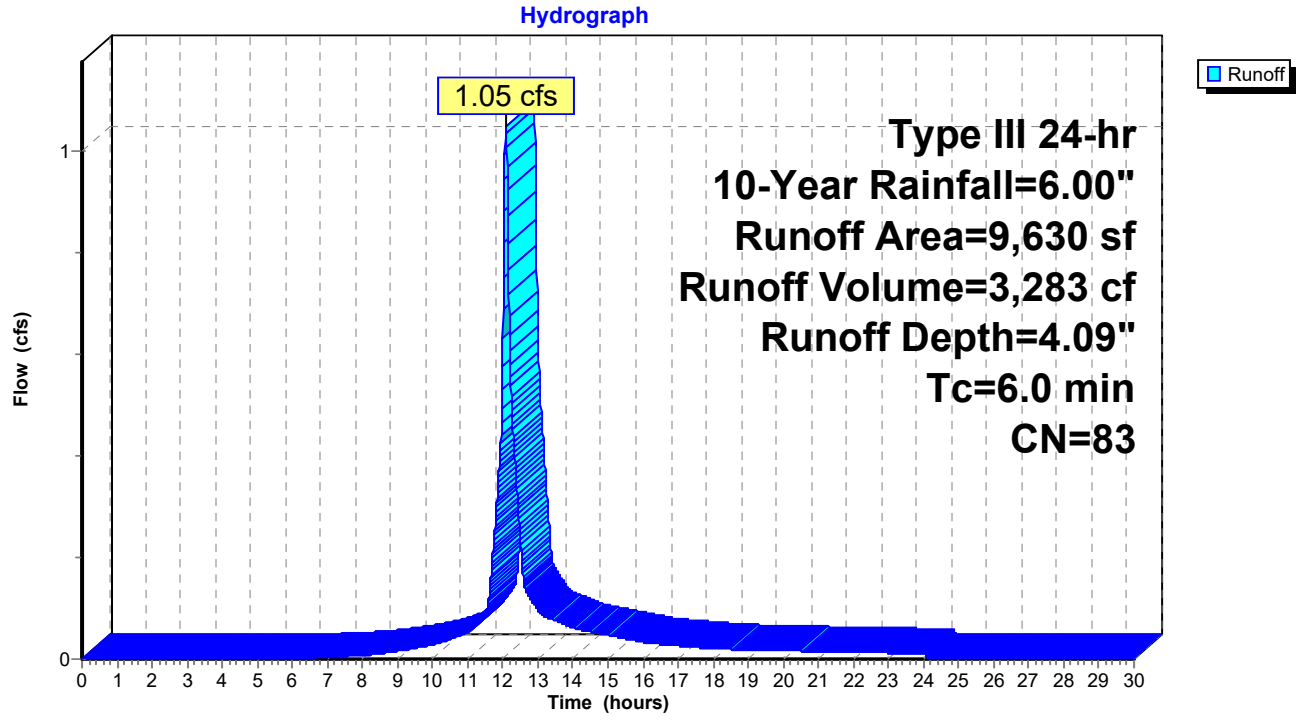
Runoff = 1.05 cfs @ 12.09 hrs, Volume= 3,283 cf, Depth= 4.09"
Routed to Pond CB-C-05 : CB-C-05

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
3,869	61	>75% Grass cover, Good, HSG B
5,761	98	Paved parking, HSG B
9,630	83	Weighted Average
3,869		40.18% Pervious Area
5,761		59.82% Impervious Area

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

Subcatchment W-C-05: W-C-05



Summary for Subcatchment W-C-06: W-C-06

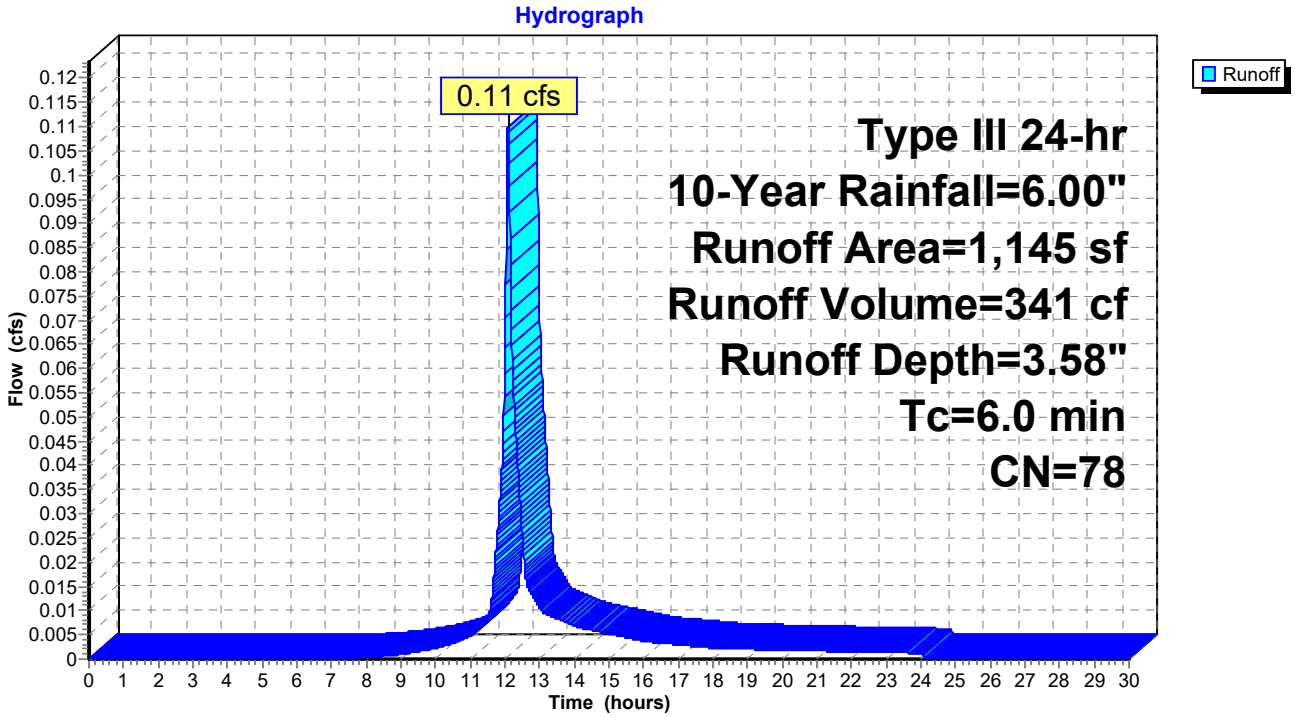
Runoff = 0.11 cfs @ 12.09 hrs, Volume= 341 cf, Depth= 3.58"
Routed to Pond CB-C-07 : CB-C-07

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
606	61	>75% Grass cover, Good, HSG B
539	98	Paved parking, HSG B
1,145	78	Weighted Average
606		52.93% Pervious Area
539		47.07% Impervious Area

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

Subcatchment W-C-06: W-C-06



Summary for Subcatchment W-C-07: W-C-07

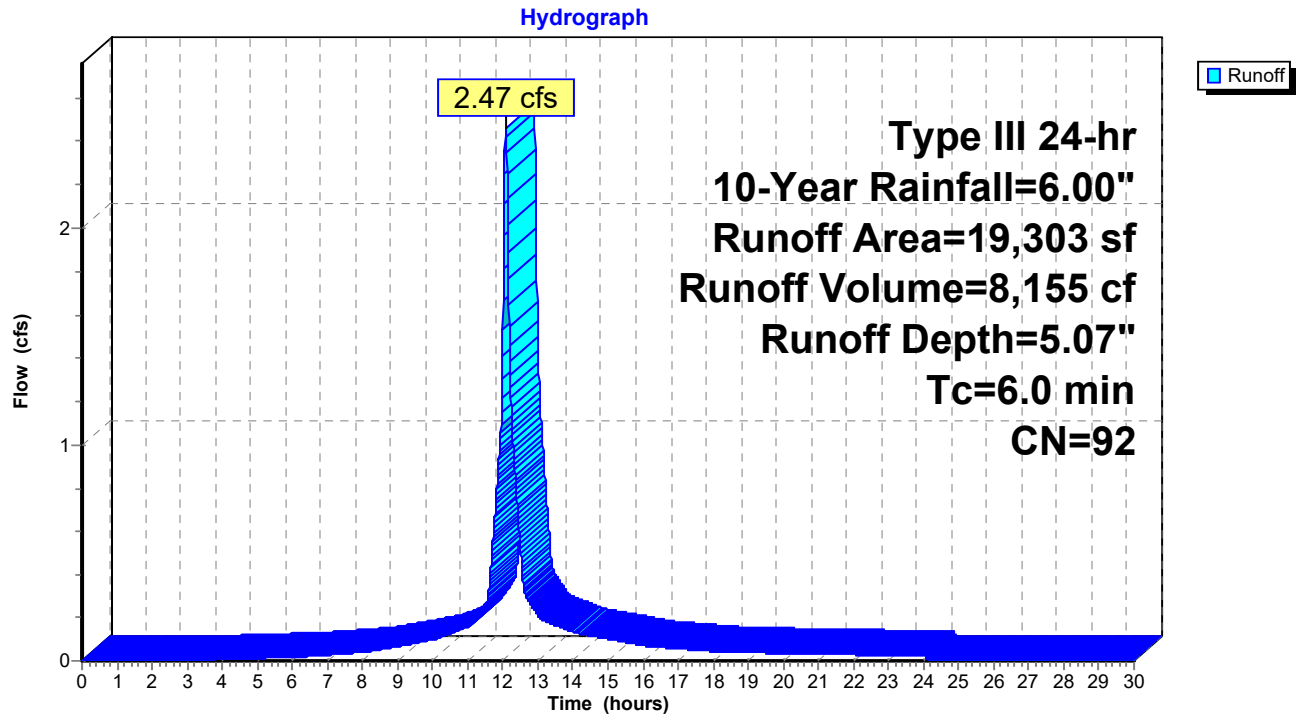
Runoff = 2.47 cfs @ 12.08 hrs, Volume= 8,155 cf, Depth= 5.07"
Routed to Pond CB-C-08 : CB-C-08

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-Year Rainfall=6.00"

Area (sf)	CN	Description
3,107	61	>75% Grass cover, Good, HSG B
16,196	98	Paved parking, HSG B
19,303	92	Weighted Average
3,107		16.10% Pervious Area
16,196		83.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**
5.0	0	Total, Increased to minimum Tc = 6.0 min			

Subcatchment W-C-07: W-C-07

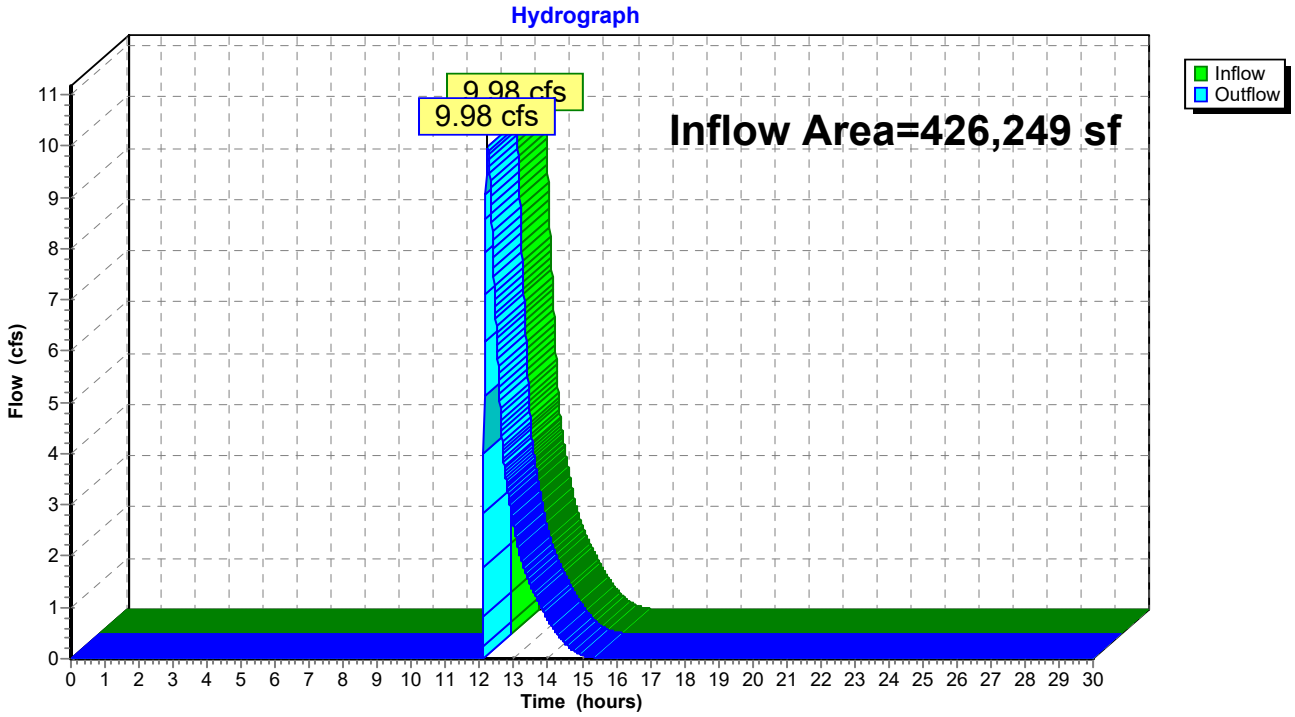


Summary for Reach DP1POST: DP1 POST

Inflow Area = 426,249 sf, 72.93% Impervious, Inflow Depth = 0.71" for 10-Year event
Inflow = 9.98 cfs @ 12.23 hrs, Volume= 25,181 cf
Outflow = 9.98 cfs @ 12.23 hrs, Volume= 25,181 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs

Reach DP1POST: DP1 POST

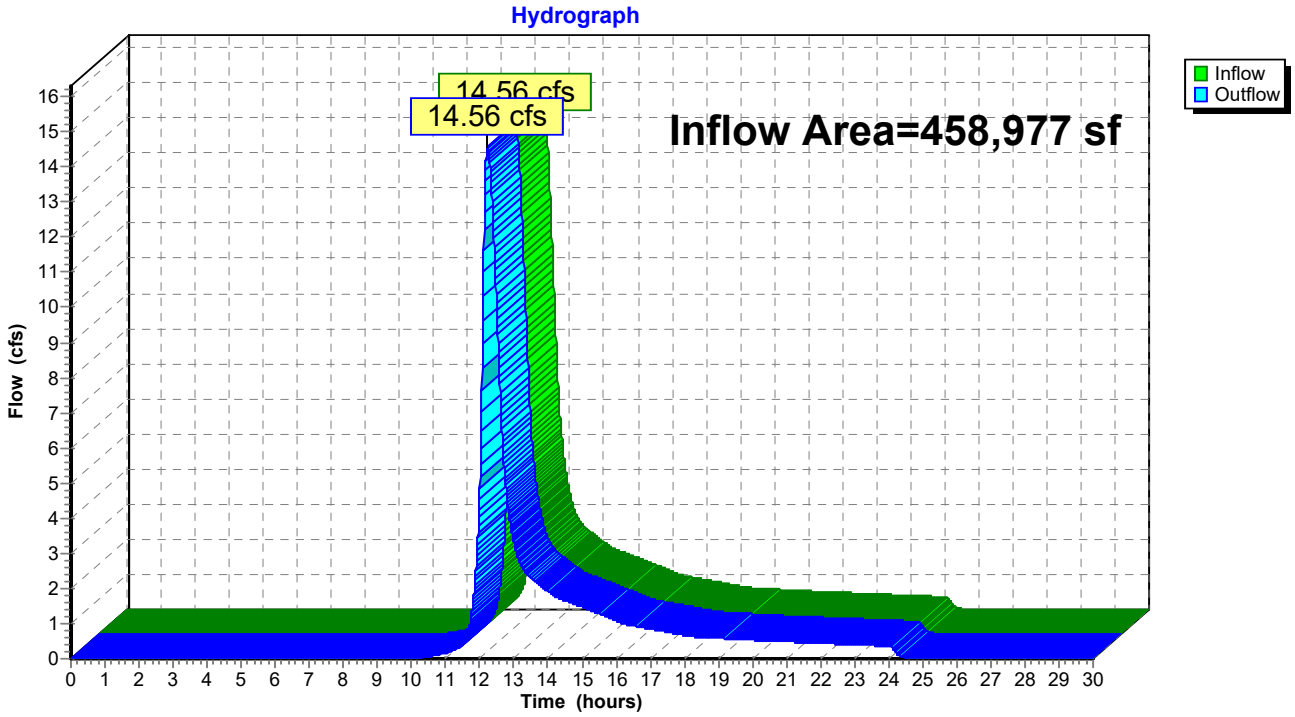


Summary for Reach DP1PRE: DP1 PRE

Inflow Area = 458,977 sf, 9.20% Impervious, Inflow Depth = 1.86" for 10-Year event
Inflow = 14.56 cfs @ 12.22 hrs, Volume= 71,170 cf
Outflow = 14.56 cfs @ 12.22 hrs, Volume= 71,170 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs

Reach DP1PRE: DP1 PRE



Summary for Pond 1P: CB-B-06

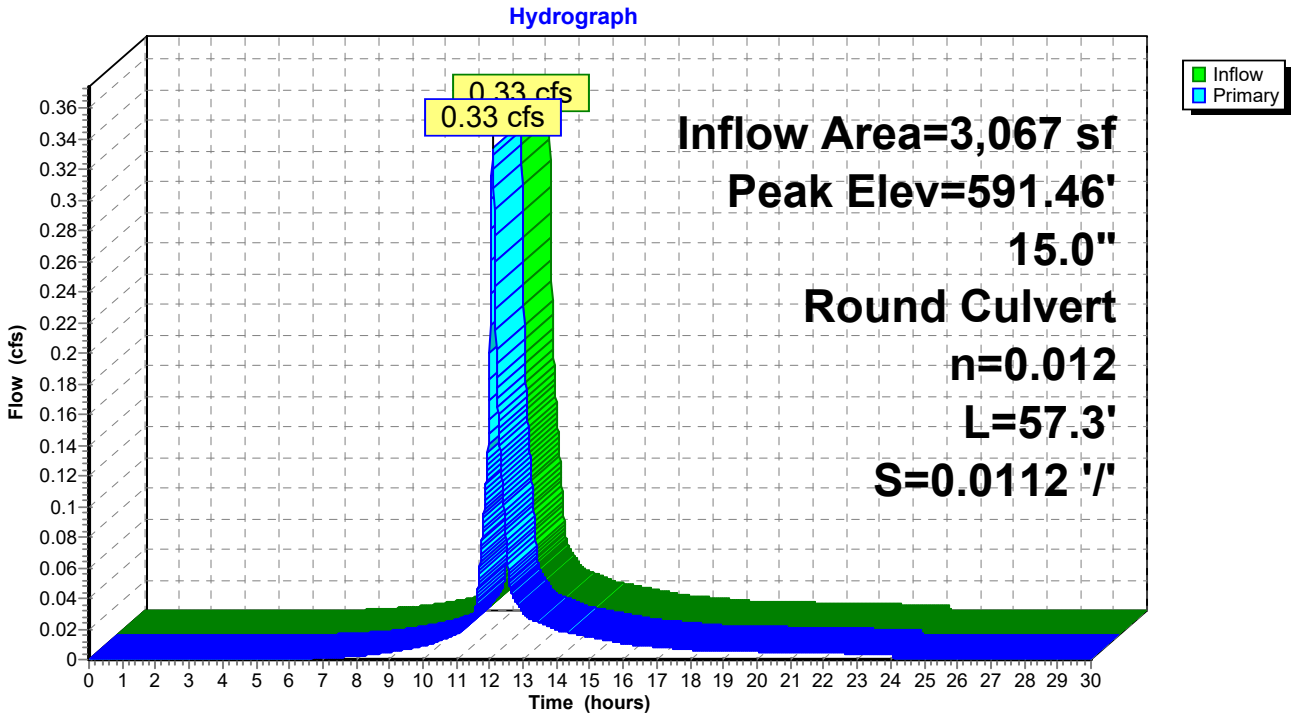
Inflow Area = 3,067 sf, 58.98% Impervious, Inflow Depth = 4.09" for 10-Year event
Inflow = 0.33 cfs @ 12.09 hrs, Volume= 1,046 cf
Outflow = 0.33 cfs @ 12.09 hrs, Volume= 1,046 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.33 cfs @ 12.09 hrs, Volume= 1,046 cf
Routed to Pond CB-B-05 : CB-B-05

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 591.46' @ 12.09 hrs
Flood Elev= 593.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	591.19'	**15.0" Round HDPE Round 15"** L= 57.3' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.19' / 590.55' S= 0.0112 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.33 cfs @ 12.09 hrs HW=591.46' TW=590.50' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Inlet Controls 0.33 cfs @ 1.75 fps)

Pond 1P: CB-B-06



Summary for Pond 3P: CB-A-13

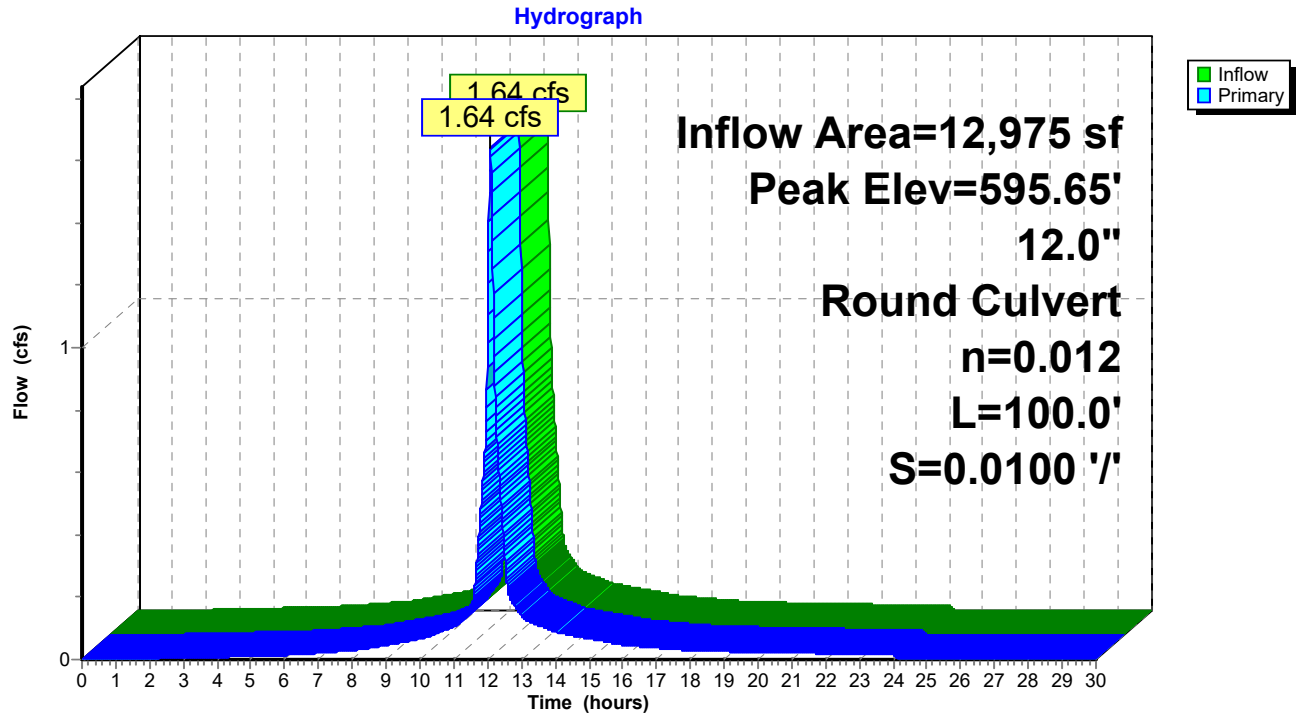
Inflow Area = 12,975 sf, 83.58% Impervious, Inflow Depth = 5.11" for 10-Year event
Inflow = 1.64 cfs @ 12.08 hrs, Volume= 5,521 cf
Outflow = 1.64 cfs @ 12.08 hrs, Volume= 5,521 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.64 cfs @ 12.08 hrs, Volume= 5,521 cf
Routed to Pond CB-A-13 : CB-A-12

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.65' @ 12.10 hrs
Flood Elev= 598.01'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.00'	**12.0" Round HDPE Round 12"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.00' / 593.00' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=1.53 cfs @ 12.08 hrs HW=595.61' TW=595.37' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 1.53 cfs @ 1.95 fps)

Pond 3P: CB-A-13



Summary for Pond ADS 1A: ADS 1A

Inflow Area = 236,318 sf, 75.18% Impervious, Inflow Depth = 4.73" for 10-Year event
Inflow = 27.96 cfs @ 12.09 hrs, Volume= 93,160 cf
Outflow = 2.79 cfs @ 12.89 hrs, Volume= 93,170 cf, Atten= 90%, Lag= 48.1 min
Discarded = 1.69 cfs @ 12.89 hrs, Volume= 88,446 cf
Primary = 1.10 cfs @ 12.89 hrs, Volume= 4,724 cf
Routed to Reach DP1POST : DP1 POST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 592.68' @ 12.89 hrs Surf.Area= 24,105 sf Storage= 36,844 cf
Flood Elev= 593.50' Surf.Area= 24,105 sf Storage= 47,779 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 164.2 min (941.4 - 777.2)

Volume	Invert	Avail.Storage	Storage Description
#1A	590.50'	21,177 cf	**44.25'W x 544.74'L x 3.50'H Field A** 84,366 cf Overall - 31,423 cf Embedded = 52,943 cf x 40.0% Voids
#2A	591.00'	31,423 cf	**ADS_StormTech SC-740 +Cap** x 684 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 684 Chambers in 9 Rows
		52,600 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	591.00'	**15.0" Round Culvert** L= 282.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.00' / 576.00' S= 0.0532 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf
#2	Device 1	592.50'	**5.0' 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
#3	Discarded	590.50'	**3.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 290.00'

Discarded OutFlow Max=1.69 cfs @ 12.89 hrs HW=592.68' (Free Discharge)
└**3=Exfiltration** (Controls 1.69 cfs)

Primary OutFlow Max=1.10 cfs @ 12.89 hrs HW=592.68' TW=0.00' (Dynamic Tailwater)
└**1=Culvert** (Passes 1.10 cfs of 6.08 cfs potential flow)
└**2=Broad-Crested Rectangular Weir** (Weir Controls 1.10 cfs @ 1.20 fps)

Pond ADS 1A: ADS 1A - Chamber Wizard Field A

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

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

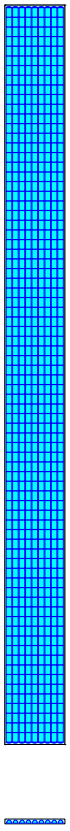
76 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 542.74' Row Length +12.0" End Stone x 2 = 544.74' Base Length
9 Rows x 51.0" Wide + 6.0" Spacing x 8 + 12.0" Side Stone x 2 = 44.25' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

684 Chambers x 45.9 cf = 31,423.0 cf Chamber Storage

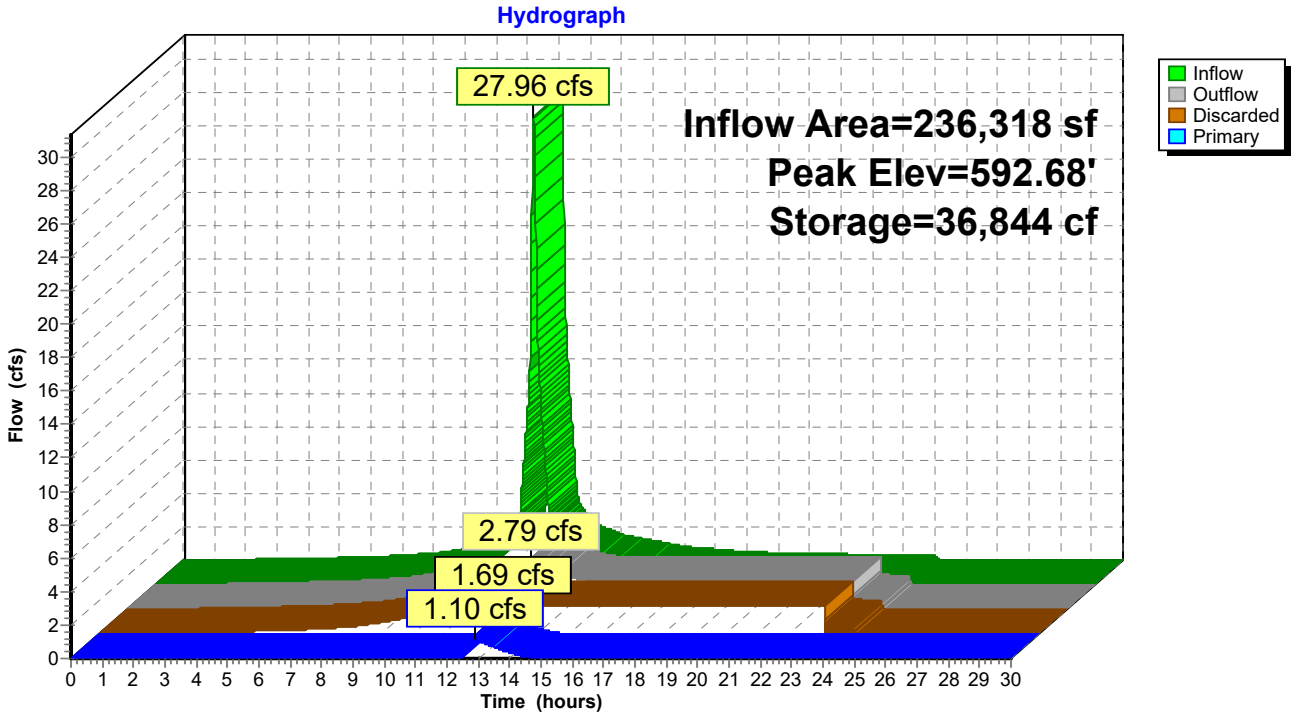
84,366.1 cf Field - 31,423.0 cf Chambers = 52,943.1 cf Stone x 40.0% Voids = 21,177.2 cf Stone Storage

Chamber Storage + Stone Storage = 52,600.2 cf = 1.208 af
Overall Storage Efficiency = 62.3%
Overall System Size = 544.74' x 44.25' x 3.50'

684 Chambers
3,124.7 cy Field
1,960.9 cy Stone



Pond ADS 1A: ADS 1A



Summary for Pond ADS 1B: ADS 1B

Inflow Area = 115,462 sf, 63.24% Impervious, Inflow Depth = 4.28" for 10-Year event
Inflow = 12.82 cfs @ 12.09 hrs, Volume= 41,157 cf
Outflow = 6.07 cfs @ 12.25 hrs, Volume= 41,158 cf, Atten= 53%, Lag= 10.0 min
Discarded = 0.58 cfs @ 12.25 hrs, Volume= 29,209 cf
Primary = 5.50 cfs @ 12.25 hrs, Volume= 11,949 cf
Routed to Reach DP1POST : DP1 POST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 587.01' @ 12.25 hrs Surf.Area= 8,231 sf Storage= 11,532 cf
Flood Elev= 588.00' Surf.Area= 8,231 sf Storage= 16,245 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 98.2 min (893.7 - 795.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	585.00'	7,279 cf	**53.75'W x 153.14'L x 3.50'H Field A** 28,809 cf Overall - 10,612 cf Embedded = 18,197 cf x 40.0% Voids
#2A	585.50'	10,612 cf	**ADS_StormTech SC-740 +Cap** x 231 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 231 Chambers in 11 Rows
		17,891 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	585.50'	**15.0" Round Culvert** L= 83.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 585.50' / 575.00' S= 0.1265 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	586.50'	**5.0' 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
#3	Discarded	585.00'	**3.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 290.00'

Discarded OutFlow Max=0.58 cfs @ 12.25 hrs HW=587.01' (Free Discharge)
└**3=Exfiltration** (Controls 0.58 cfs)

Primary OutFlow Max=5.49 cfs @ 12.25 hrs HW=587.01' TW=0.00' (Dynamic Tailwater)
└**1=Culvert** (Passes 5.49 cfs of 5.56 cfs potential flow)
└**2=Broad-Crested Rectangular Weir** (Weir Controls 5.49 cfs @ 2.15 fps)

Pond ADS 1B: ADS 1B - Chamber Wizard Field A

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

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

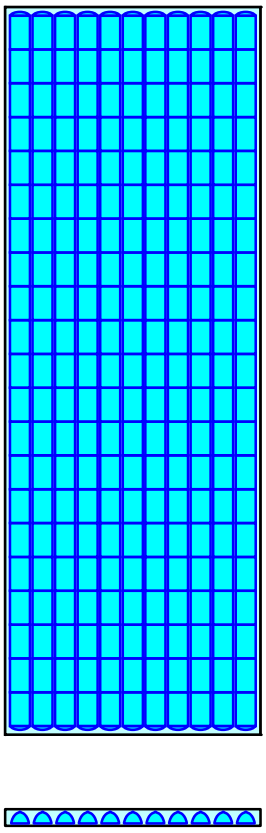
21 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 151.14' Row Length +12.0" End Stone x 2 = 153.14' Base Length
11 Rows x 51.0" Wide + 6.0" Spacing x 10 + 12.0" Side Stone x 2 = 53.75' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

231 Chambers x 45.9 cf = 10,612.1 cf Chamber Storage

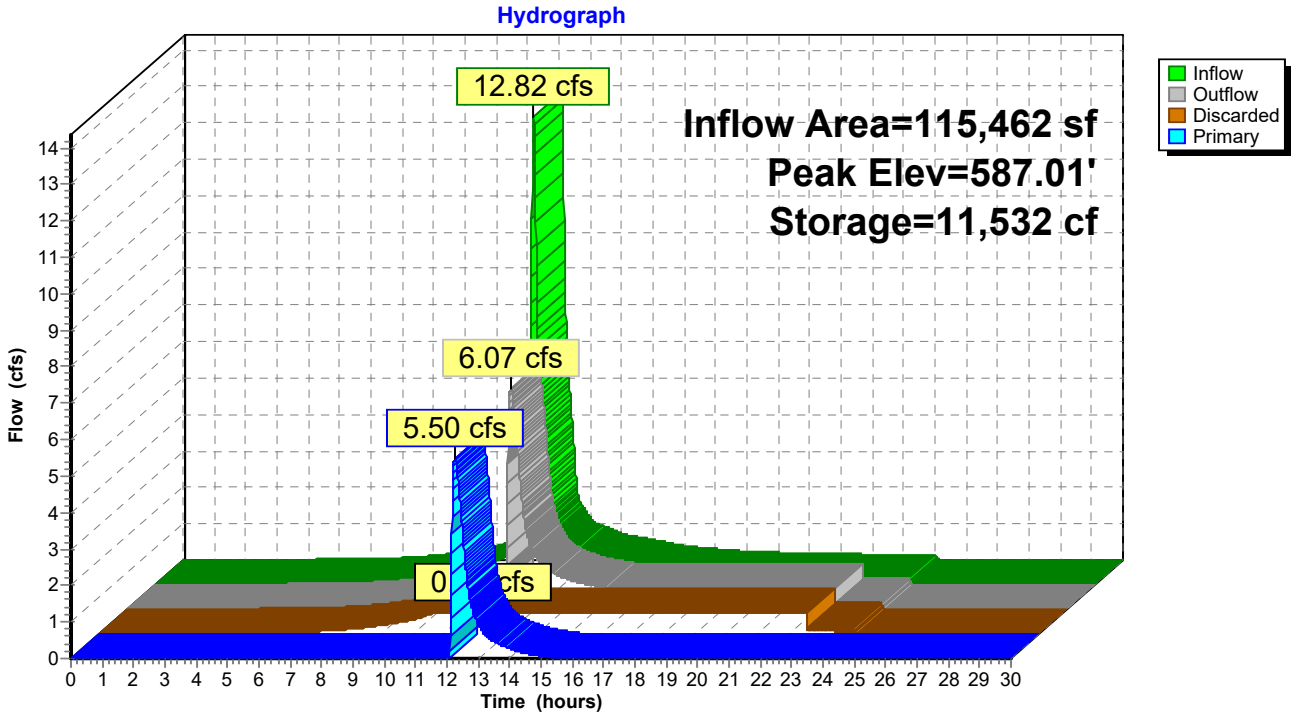
28,808.8 cf Field - 10,612.1 cf Chambers = 18,196.7 cf Stone x 40.0% Voids = 7,278.7 cf Stone Storage

Chamber Storage + Stone Storage = 17,890.8 cf = 0.411 af
Overall Storage Efficiency = 62.1%
Overall System Size = 153.14' x 53.75' x 3.50'

231 Chambers
1,067.0 cy Field
674.0 cy Stone



Pond ADS 1B: ADS 1B



Summary for Pond ADS1C: ADS 1C

Inflow Area = 74,469 sf, 80.81% Impervious, Inflow Depth = 4.95" for 10-Year event
Inflow = 9.31 cfs @ 12.08 hrs, Volume= 30,711 cf
Outflow = 5.02 cfs @ 12.21 hrs, Volume= 31,958 cf, Atten= 46%, Lag= 7.5 min
Discarded = 0.43 cfs @ 12.21 hrs, Volume= 23,451 cf
Primary = 4.59 cfs @ 12.21 hrs, Volume= 8,507 cf
Routed to Reach DP1POST : DP1 POST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Starting Elev= 587.00' Surf.Area= 6,146 sf Storage= 1,229 cf
Peak Elev= 588.46' @ 12.21 hrs Surf.Area= 6,146 sf Storage= 8,345 cf (7,116 cf above start)
Flood Elev= 589.50' Surf.Area= 6,146 sf Storage= 12,089 cf (10,860 cf above start)

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 59.7 min (838.1 - 778.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	586.50'	5,462 cf	**44.25'W x 138.90'L x 3.50'H Field A** 21,512 cf Overall - 7,856 cf Embedded = 13,656 cf x 40.0% Voids
#2A	587.00'	7,856 cf	**ADS_StormTech SC-740 +Cap** x 171 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 171 Chambers in 9 Rows
		13,318 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	587.00'	**15.0" Round Culvert** L= 80.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 587.00' / 576.00' S= 0.1375 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	588.00'	**5.0' 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
#3	Discarded	586.50'	**3.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 290.00'

Discarded OutFlow Max=0.43 cfs @ 12.21 hrs HW=588.46' (Free Discharge)
└**3=Exfiltration** (Controls 0.43 cfs)

Primary OutFlow Max=4.59 cfs @ 12.21 hrs HW=588.46' TW=0.00' (Dynamic Tailwater)
└**1=Culvert** (Passes 4.59 cfs of 5.39 cfs potential flow)
└**2=Broad-Crested Rectangular Weir** (Weir Controls 4.59 cfs @ 2.01 fps)

Pond ADS1C: ADS 1C - Chamber Wizard Field A

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

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

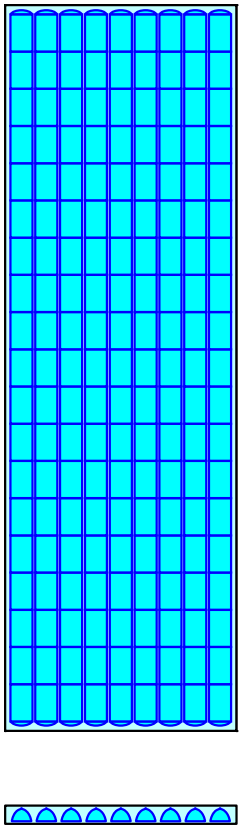
19 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 136.90' Row Length +12.0" End Stone x 2 = 138.90' Base Length
9 Rows x 51.0" Wide + 6.0" Spacing x 8 + 12.0" Side Stone x 2 = 44.25' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

171 Chambers x 45.9 cf = 7,855.7 cf Chamber Storage

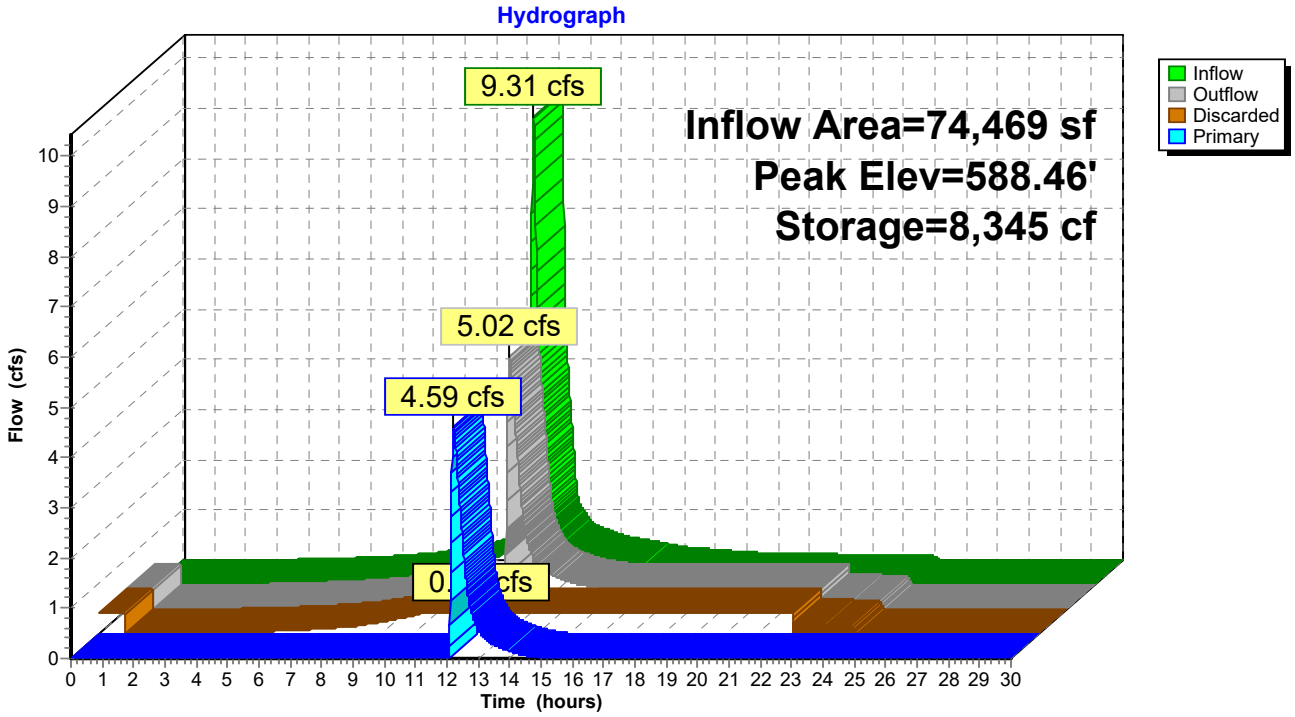
21,511.6 cf Field - 7,855.7 cf Chambers = 13,655.9 cf Stone x 40.0% Voids = 5,462.4 cf Stone Storage

Chamber Storage + Stone Storage = 13,318.1 cf = 0.306 af
Overall Storage Efficiency = 61.9%
Overall System Size = 138.90' x 44.25' x 3.50'

171 Chambers
796.7 cy Field
505.8 cy Stone



Pond ADS1C: ADS 1C



Summary for Pond CB-A-01: CB-A-01

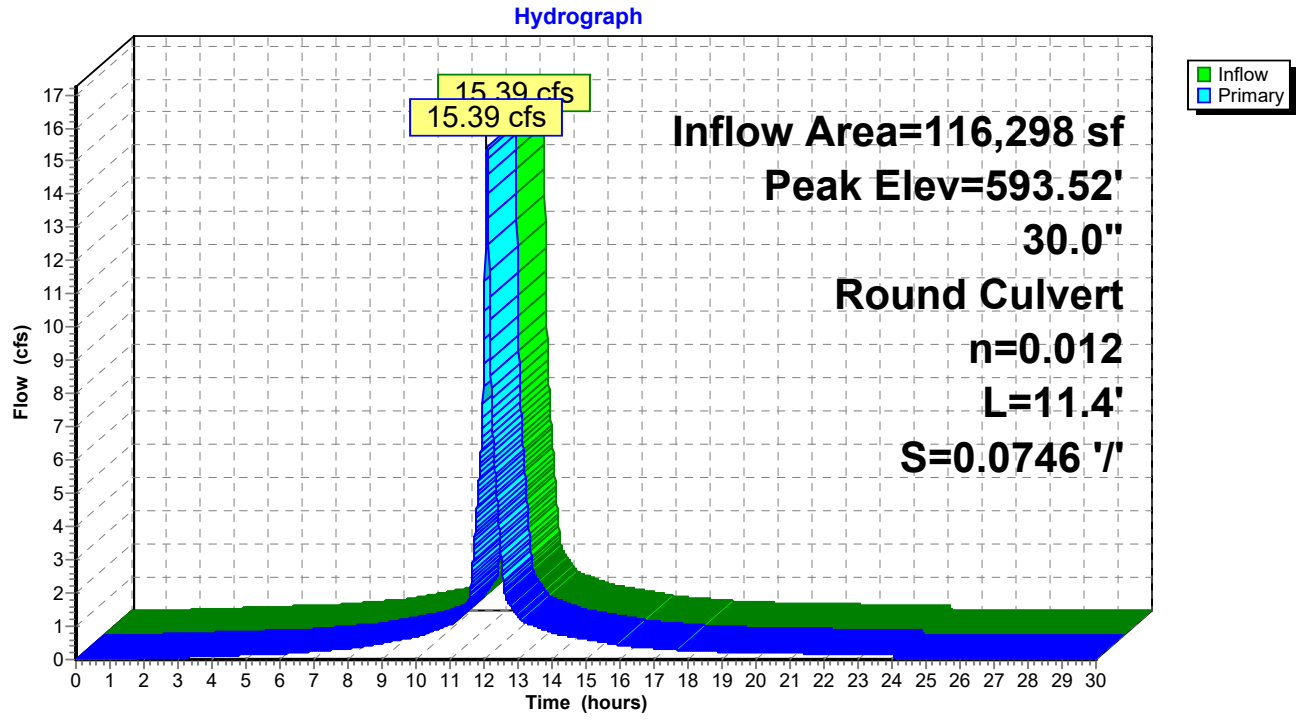
Inflow Area = 116,298 sf, 94.38% Impervious, Inflow Depth = 5.49" for 10-Year event
Inflow = 15.39 cfs @ 12.08 hrs, Volume= 53,179 cf
Outflow = 15.39 cfs @ 12.08 hrs, Volume= 53,179 cf, Atten= 0%, Lag= 0.0 min
Primary = 15.39 cfs @ 12.08 hrs, Volume= 53,179 cf
Routed to Pond ADS 1A : ADS 1A

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 593.52' @ 12.08 hrs
Flood Elev= 595.35'

Device	Routing	Invert	Outlet Devices
#1	Primary	591.85'	**30.0" Round HDPE Round 30"** L= 11.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.85' / 591.00' S= 0.0746 '/' Cc= 0.900 n= 0.012, Flow Area= 4.91 sf

Primary OutFlow Max=15.37 cfs @ 12.08 hrs HW=593.52' TW=591.63' (Dynamic Tailwater)
↑—**1=HDPE Round 30"** (Inlet Controls 15.37 cfs @ 4.40 fps)

Pond CB-A-01: CB-A-01



Summary for Pond CB-A-02: CB-A-02

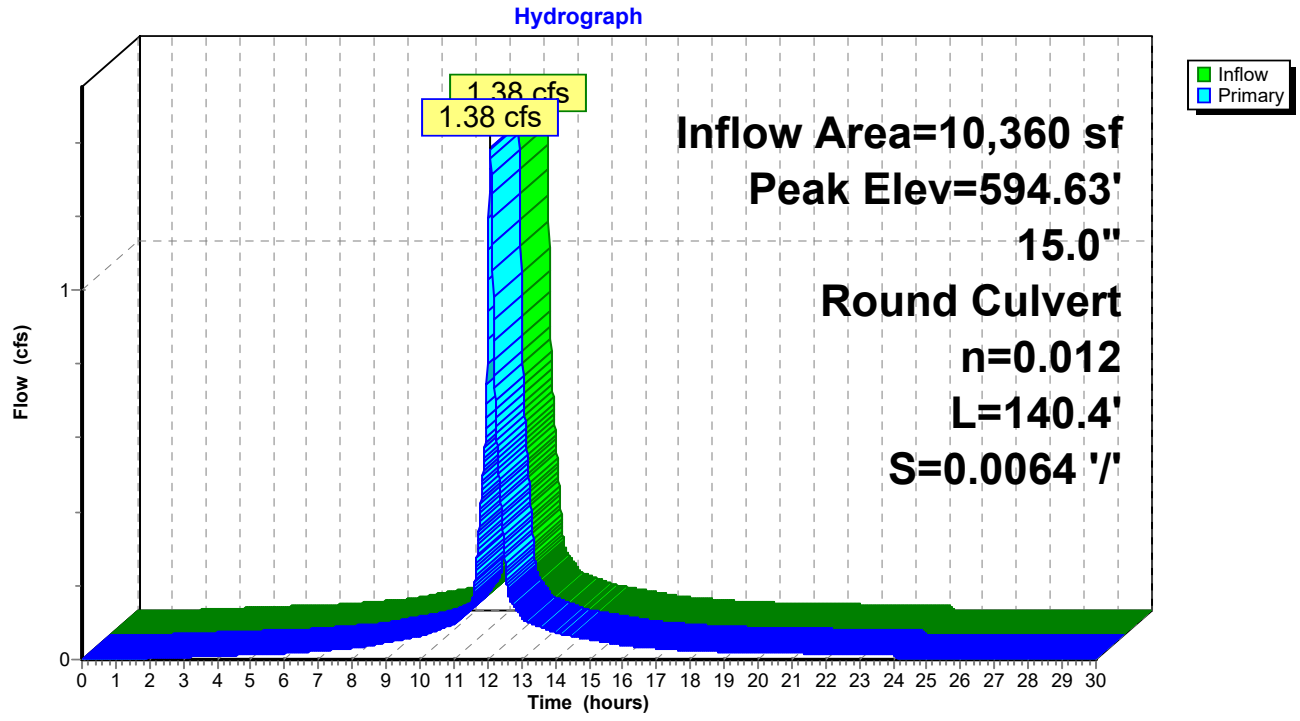
Inflow Area = 10,360 sf, 96.33% Impervious, Inflow Depth = 5.57" for 10-Year event
Inflow = 1.38 cfs @ 12.08 hrs, Volume= 4,808 cf
Outflow = 1.38 cfs @ 12.08 hrs, Volume= 4,808 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.38 cfs @ 12.08 hrs, Volume= 4,808 cf
Routed to Pond CB-A-01 : CB-A-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.63' @ 12.08 hrs
Flood Elev= 596.53'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.04'	**15.0" Round HDPE Round 15"** L= 140.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.04' / 593.14' S= 0.0064 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=1.38 cfs @ 12.08 hrs HW=594.63' TW=593.52' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 1.38 cfs @ 3.54 fps)

Pond CB-A-02: CB-A-02



Summary for Pond CB-A-03: CB-A-03

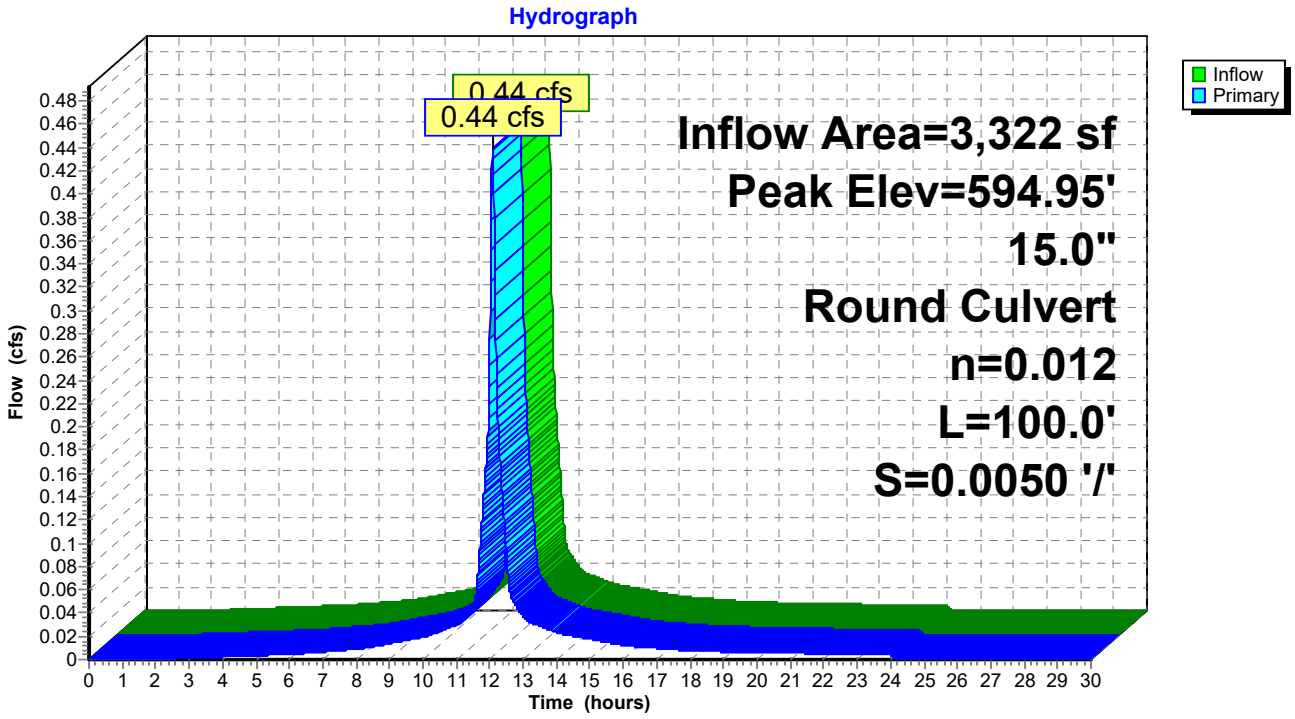
Inflow Area = 3,322 sf, 92.69% Impervious, Inflow Depth = 5.41" for 10-Year event
Inflow = 0.44 cfs @ 12.08 hrs, Volume= 1,498 cf
Outflow = 0.44 cfs @ 12.08 hrs, Volume= 1,498 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.44 cfs @ 12.08 hrs, Volume= 1,498 cf
Routed to Pond CB-A-02 : CB-A-02

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.95' @ 12.09 hrs
Flood Elev= 597.53'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.54'	**15.0" Round HDPE Round 15"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.54' / 594.04' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.44 cfs @ 12.08 hrs HW=594.95' TW=594.63' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 0.44 cfs @ 1.89 fps)

Pond CB-A-03: CB-A-03



Summary for Pond CB-A-04: CB-A-04

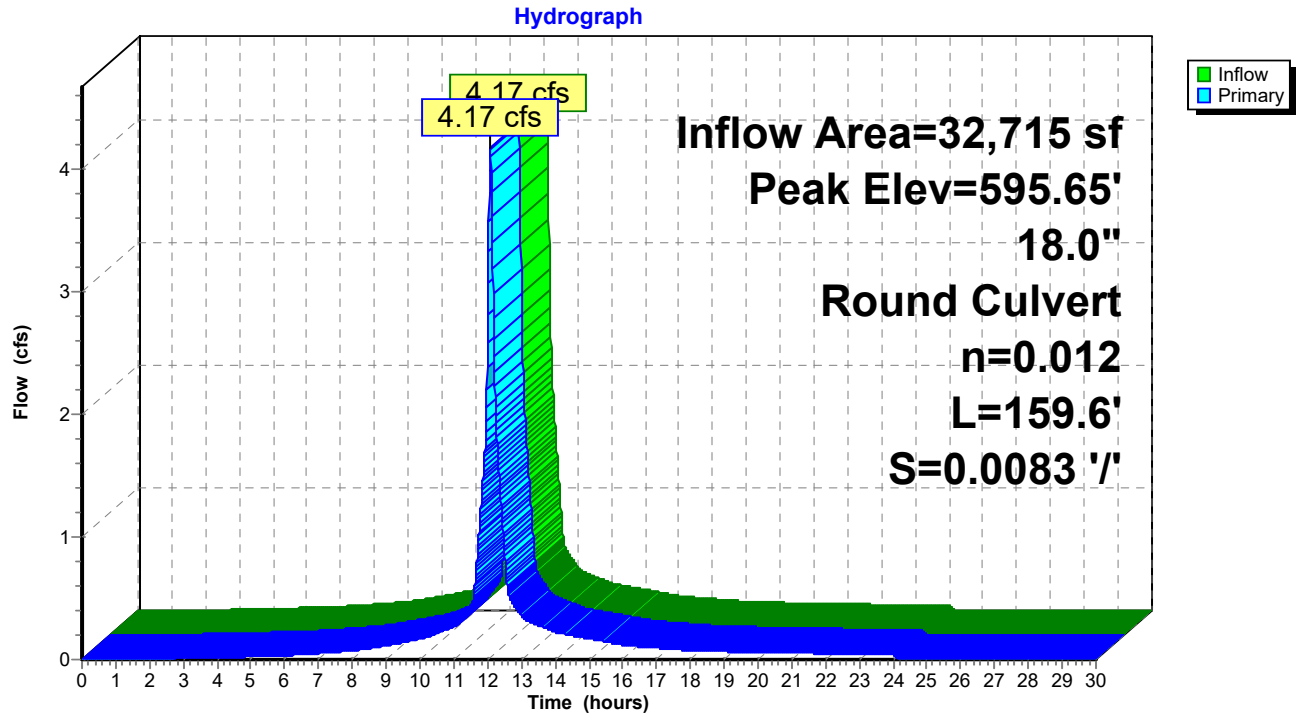
Inflow Area = 32,715 sf, 84.21% Impervious, Inflow Depth = 5.11" for 10-Year event
Inflow = 4.17 cfs @ 12.08 hrs, Volume= 13,930 cf
Outflow = 4.17 cfs @ 12.08 hrs, Volume= 13,930 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.17 cfs @ 12.08 hrs, Volume= 13,930 cf
Routed to Pond CB-A-01 : CB-A-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.65' @ 12.08 hrs
Flood Elev= 596.96'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.66'	**18.0" Round HDPE Round 18"** L= 159.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.66' / 593.34' S= 0.0083 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf

Primary OutFlow Max=4.17 cfs @ 12.08 hrs HW=595.65' TW=593.52' (Dynamic Tailwater)
↑—**1=HDPE Round 18"** (Inlet Controls 4.17 cfs @ 3.38 fps)

Pond CB-A-04: CB-A-04



Summary for Pond CB-A-05: CB-A-05

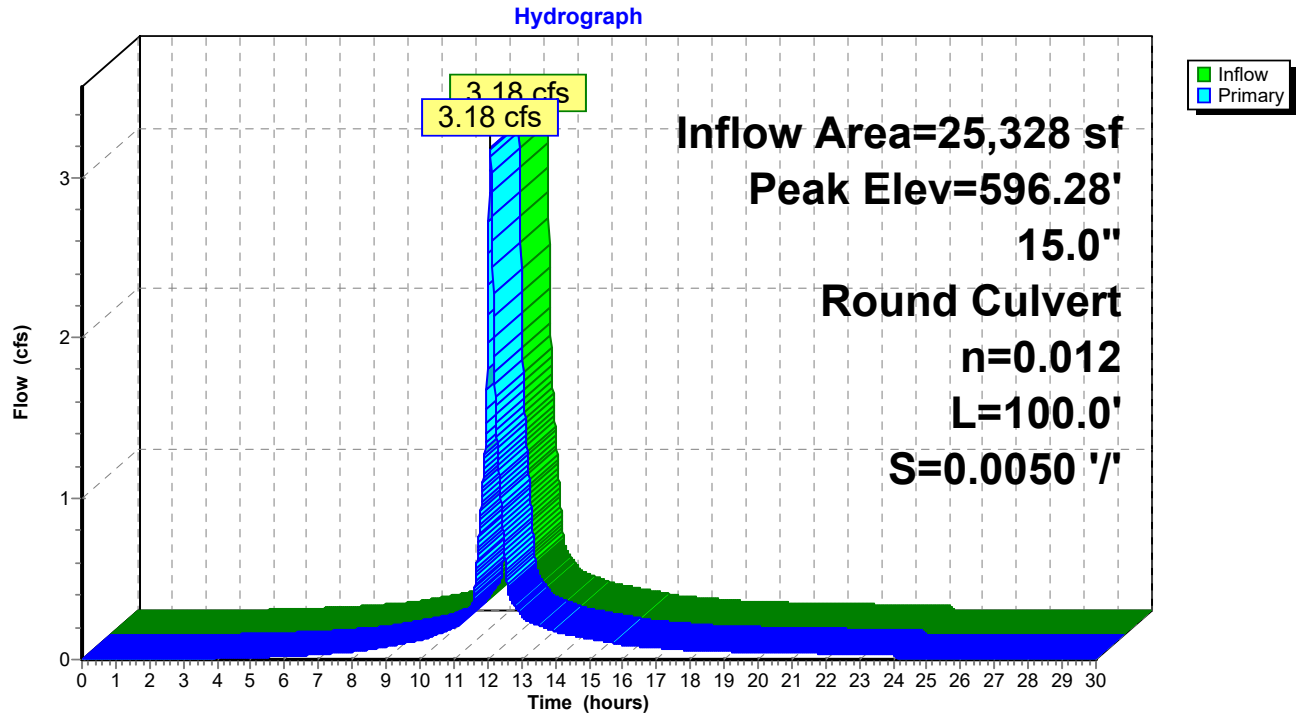
Inflow Area = 25,328 sf, 80.41% Impervious, Inflow Depth = 4.95" for 10-Year event
Inflow = 3.18 cfs @ 12.08 hrs, Volume= 10,456 cf
Outflow = 3.18 cfs @ 12.08 hrs, Volume= 10,456 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.18 cfs @ 12.08 hrs, Volume= 10,456 cf
Routed to Pond CB-A-04 : CB-A-04

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.28' @ 12.09 hrs
Flood Elev= 597.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	595.16'	**15.0" Round HDPE Round 15"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 595.16' / 594.66' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=3.16 cfs @ 12.08 hrs HW=596.28' TW=595.65' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 3.16 cfs @ 3.61 fps)

Pond CB-A-05: CB-A-05



Summary for Pond CB-A-06: CB-A-06

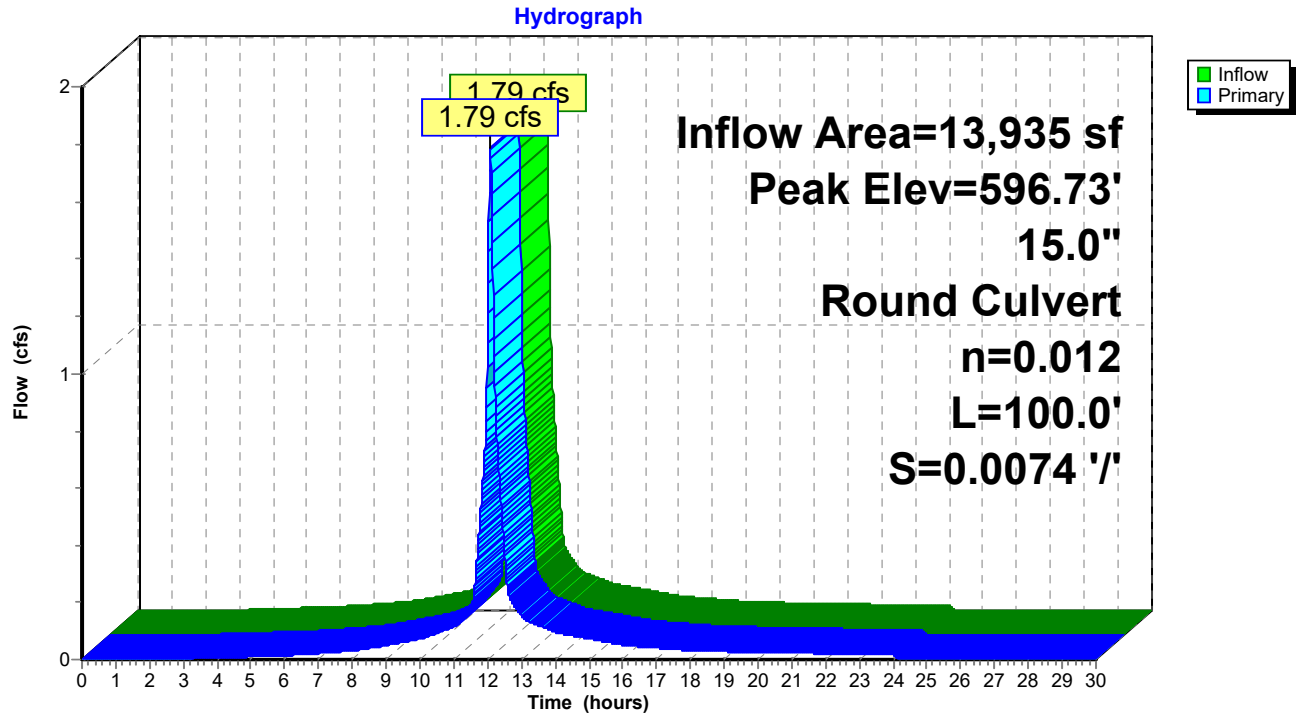
Inflow Area = 13,935 sf, 84.82% Impervious, Inflow Depth = 5.13" for 10-Year event
Inflow = 1.79 cfs @ 12.08 hrs, Volume= 5,960 cf
Outflow = 1.79 cfs @ 12.08 hrs, Volume= 5,960 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.79 cfs @ 12.08 hrs, Volume= 5,960 cf
Routed to Pond CB-A-05 : CB-A-05

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.73' @ 12.09 hrs
Flood Elev= 598.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	595.90'	**15.0" Round HDPE Round 15"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 595.90' / 595.16' S= 0.0074 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=1.76 cfs @ 12.08 hrs HW=596.73' TW=596.28' (Dynamic Tailwater)
↳**1=HDPE Round 15"** (Outlet Controls 1.76 cfs @ 2.89 fps)

Pond CB-A-06: CB-A-06



Summary for Pond CB-A-07: CB-A-07

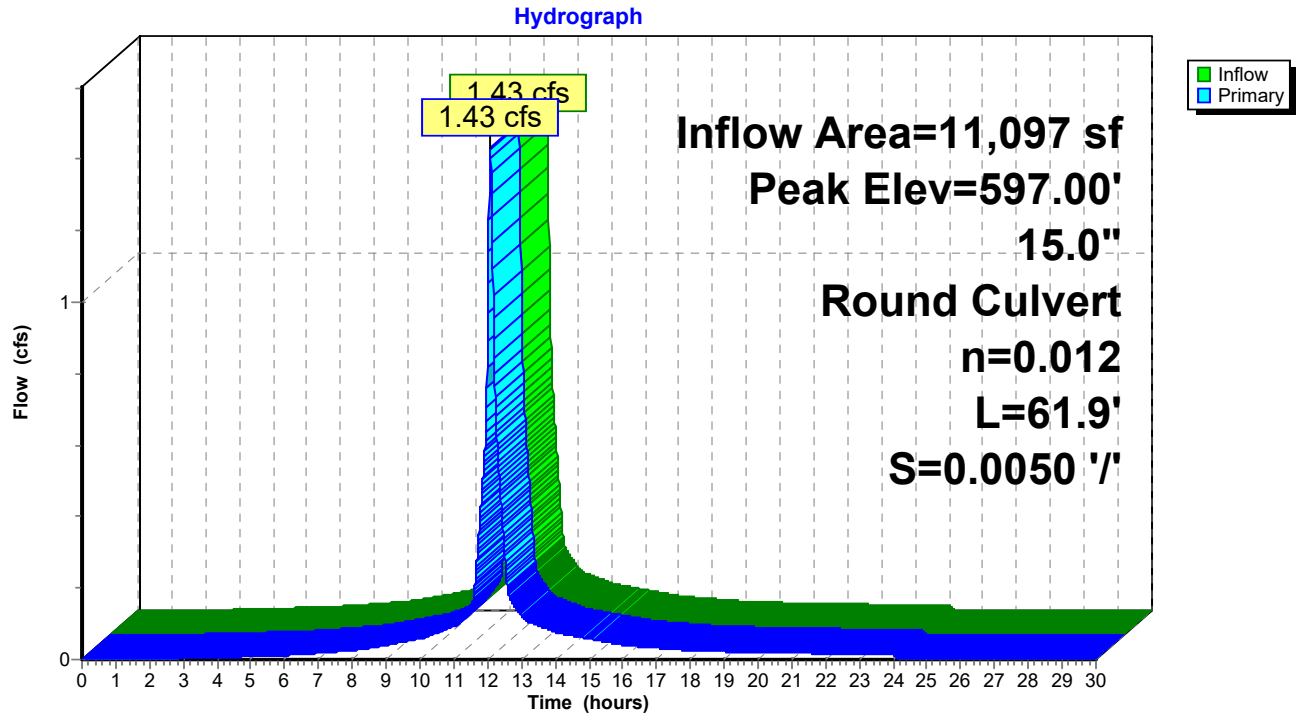
Inflow Area = 11,097 sf, 85.64% Impervious, Inflow Depth = 5.18" for 10-Year event
Inflow = 1.43 cfs @ 12.08 hrs, Volume= 4,787 cf
Outflow = 1.43 cfs @ 12.08 hrs, Volume= 4,787 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.43 cfs @ 12.08 hrs, Volume= 4,787 cf
Routed to Pond CB-A-06 : CB-A-06

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 597.00' @ 12.09 hrs
Flood Elev= 600.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.21'	**15.0" Round HDPE Round 15"** L= 61.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.21' / 595.90' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=1.40 cfs @ 12.08 hrs HW=596.99' TW=596.73' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 1.40 cfs @ 2.46 fps)

Pond CB-A-07: CB-A-07



Summary for Pond CB-A-08: CB-A-08

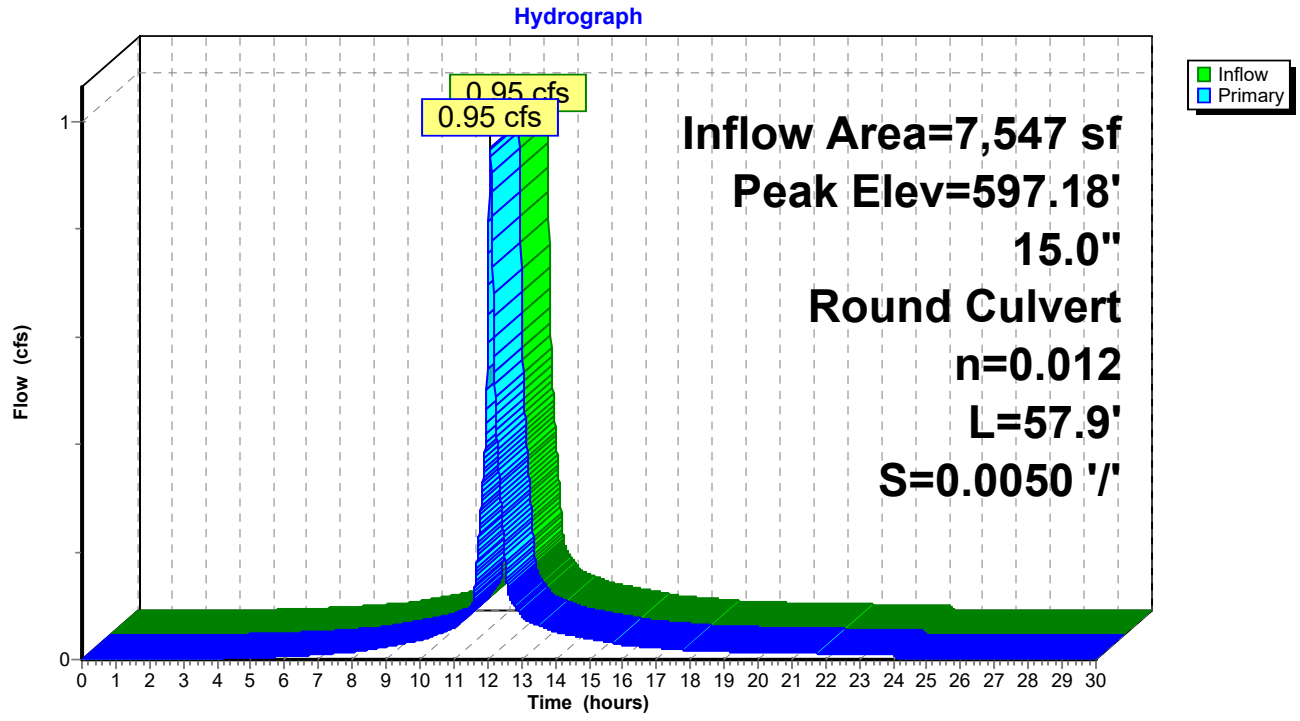
Inflow Area = 7,547 sf, 80.23% Impervious, Inflow Depth = 4.96" for 10-Year event
Inflow = 0.95 cfs @ 12.08 hrs, Volume= 3,118 cf
Outflow = 0.95 cfs @ 12.08 hrs, Volume= 3,118 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.95 cfs @ 12.08 hrs, Volume= 3,118 cf
Routed to Pond CB-A-07 : CB-A-07

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 597.18' @ 12.10 hrs
Flood Elev= 598.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.50'	**15.0" Round HDPE Round 15"** L= 57.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.50' / 596.21' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.92 cfs @ 12.08 hrs HW=597.17' TW=596.99' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 0.92 cfs @ 1.99 fps)

Pond CB-A-08: CB-A-08



Summary for Pond CB-A-09: CB-A-09

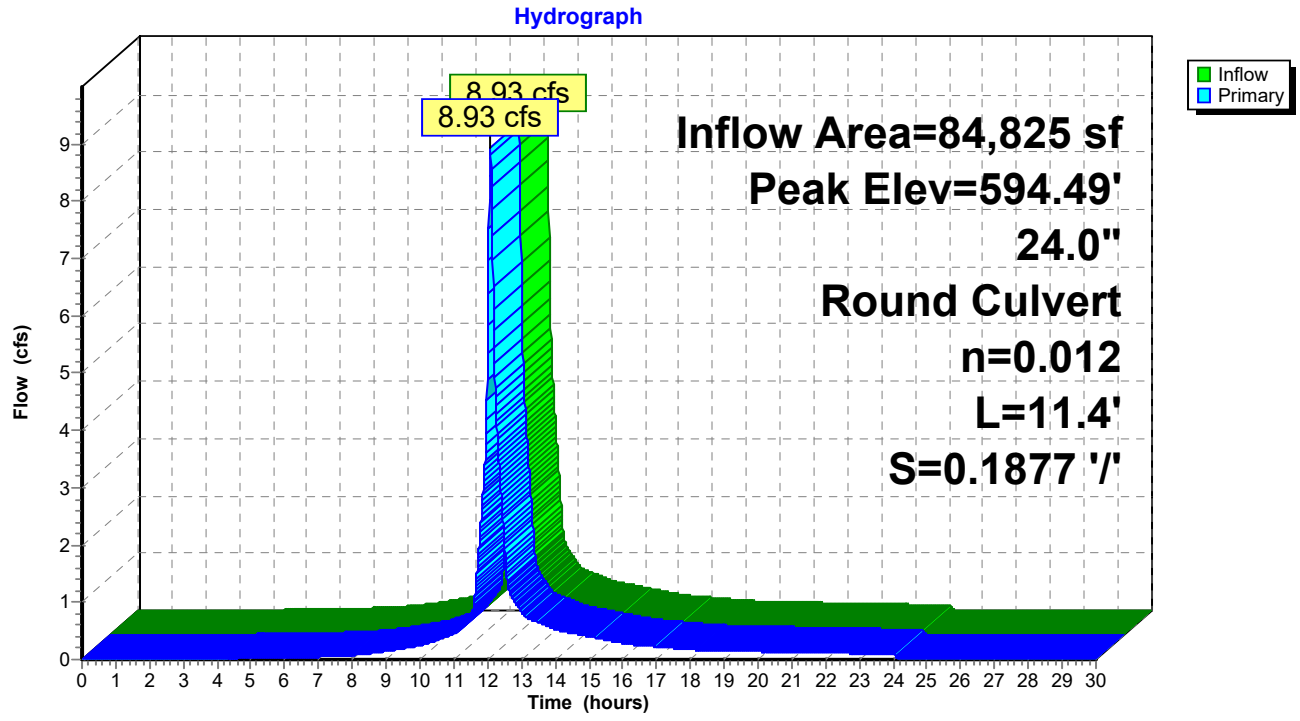
Inflow Area = 84,825 sf, 57.29% Impervious, Inflow Depth = 4.04" for 10-Year event
Inflow = 8.93 cfs @ 12.09 hrs, Volume= 28,531 cf
Outflow = 8.93 cfs @ 12.09 hrs, Volume= 28,531 cf, Atten= 0%, Lag= 0.0 min
Primary = 8.93 cfs @ 12.09 hrs, Volume= 28,531 cf
Routed to Pond ADS 1A : ADS 1A

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.49' @ 12.09 hrs
Flood Elev= 595.44'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.14'	**24.0" Round HDPE Round 24"** L= 11.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.14' / 591.00' S= 0.1877 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf

Primary OutFlow Max=8.91 cfs @ 12.09 hrs HW=594.49' TW=591.65' (Dynamic Tailwater)
1=HDPE Round 24" (Inlet Controls 8.91 cfs @ 3.95 fps)

Pond CB-A-09: CB-A-09



Summary for Pond CB-A-10: CB-A-10

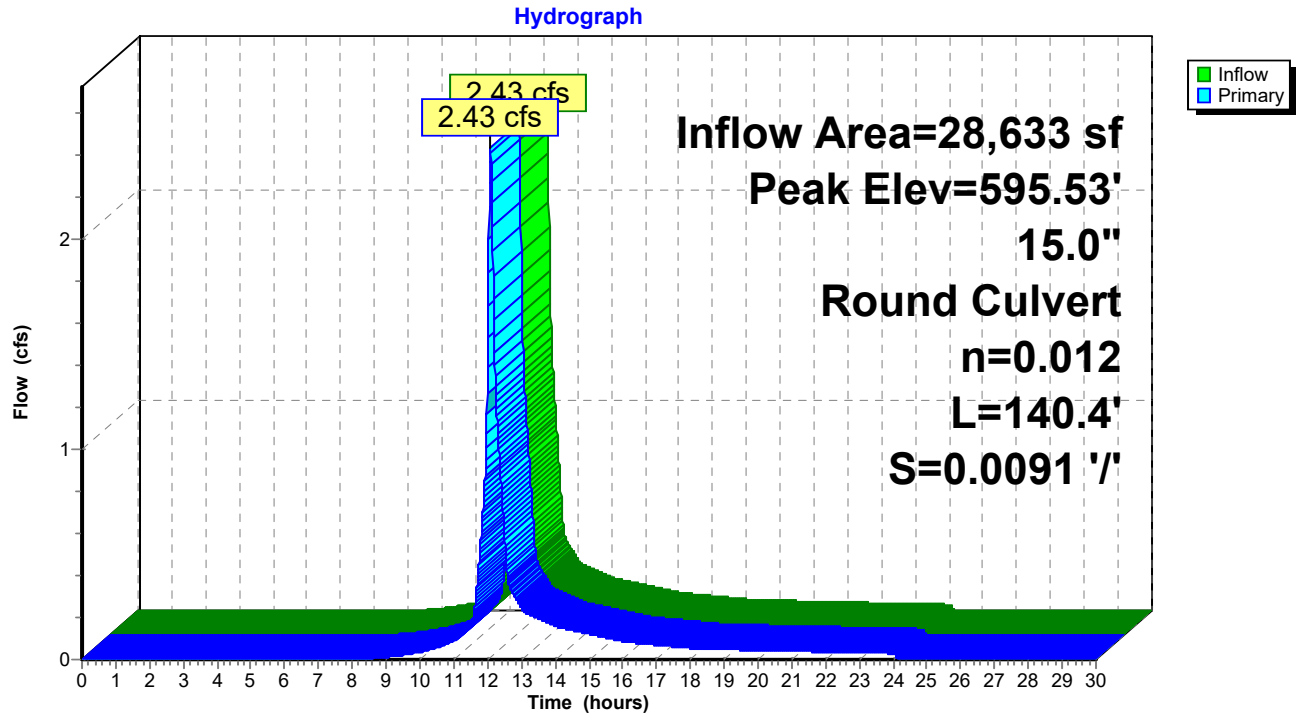
Inflow Area = 28,633 sf, 34.41% Impervious, Inflow Depth = 3.15" for 10-Year event
Inflow = 2.43 cfs @ 12.09 hrs, Volume= 7,526 cf
Outflow = 2.43 cfs @ 12.09 hrs, Volume= 7,526 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.43 cfs @ 12.09 hrs, Volume= 7,526 cf
Routed to Pond CB-A-09 : CB-A-09

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.53' @ 12.09 hrs
Flood Elev= 596.72'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.70'	**15.0" Round HDPE Round 15"** L= 140.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.70' / 593.42' S= 0.0091 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=2.43 cfs @ 12.09 hrs HW=595.53' TW=594.49' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 2.43 cfs @ 3.96 fps)

Pond CB-A-10: CB-A-10



Summary for Pond CB-A-11: CB-A-11

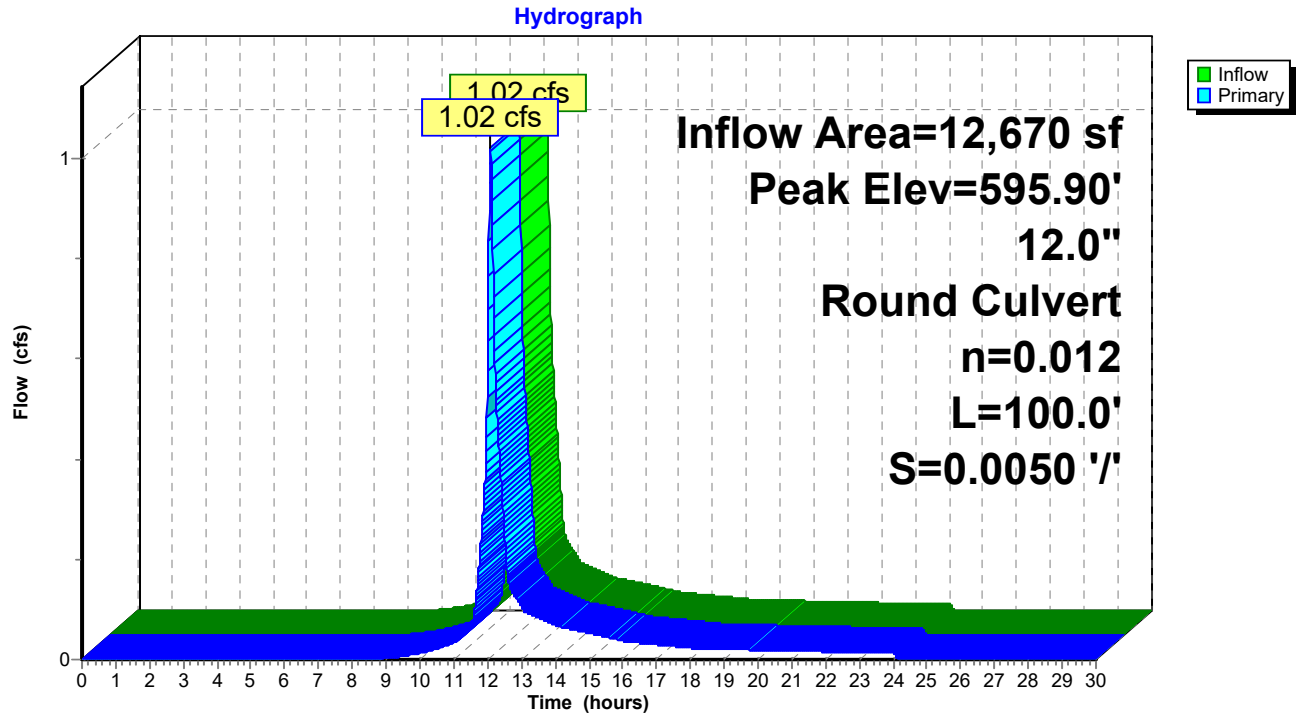
Inflow Area = 12,670 sf, 30.21% Impervious, Inflow Depth = 2.99" for 10-Year event
Inflow = 1.02 cfs @ 12.09 hrs, Volume= 3,160 cf
Outflow = 1.02 cfs @ 12.09 hrs, Volume= 3,160 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.02 cfs @ 12.09 hrs, Volume= 3,160 cf
Routed to Pond CB-A-10 : CB-A-10

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.90' @ 12.10 hrs
Flood Elev= 597.61'

Device	Routing	Invert	Outlet Devices
#1	Primary	595.20'	**12.0" Round HDPE Round 12"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 595.20' / 594.70' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=1.01 cfs @ 12.09 hrs HW=595.90' TW=595.53' (Dynamic Tailwater)
1=HDPE Round 12" (Outlet Controls 1.01 cfs @ 2.42 fps)

Pond CB-A-11: CB-A-11



Summary for Pond CB-A-12: CB-A-12

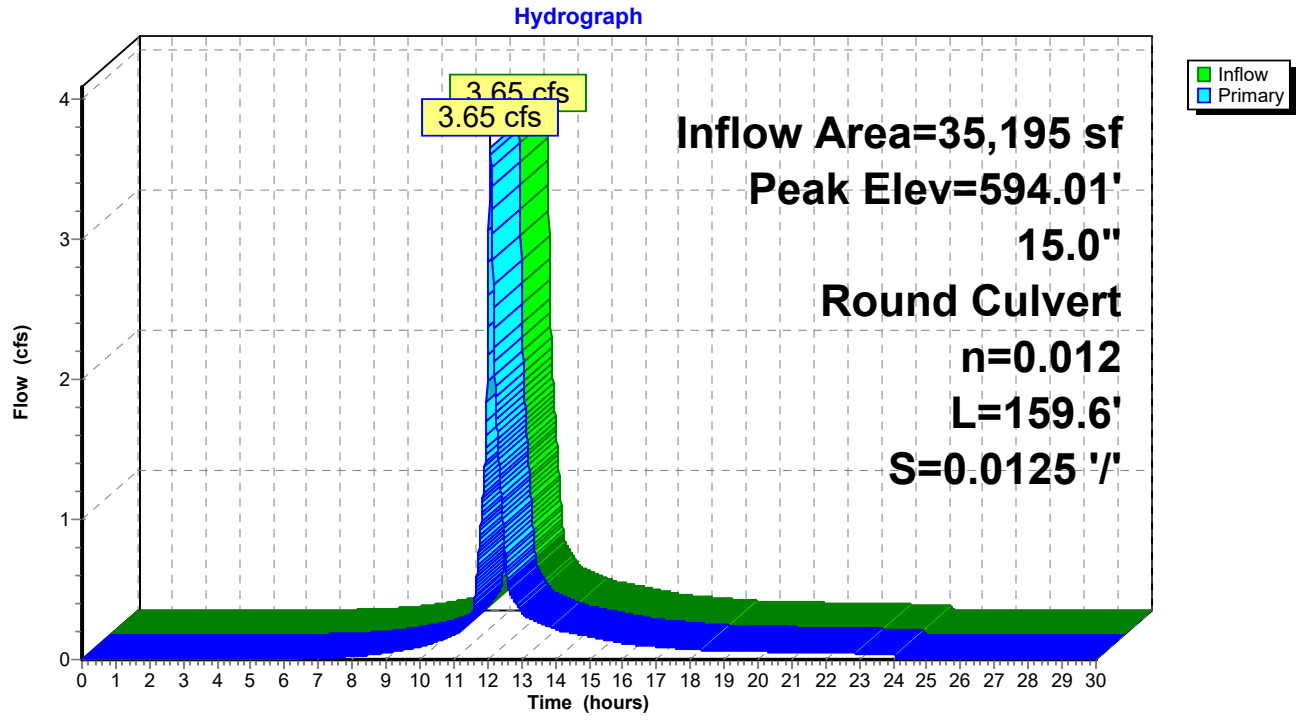
Inflow Area = 35,195 sf, 54.89% Impervious, Inflow Depth = 3.90" for 10-Year event
Inflow = 3.65 cfs @ 12.09 hrs, Volume= 11,450 cf
Outflow = 3.65 cfs @ 12.09 hrs, Volume= 11,450 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.65 cfs @ 12.09 hrs, Volume= 11,450 cf
Routed to Pond ADS 1A : ADS 1A

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.01' @ 12.09 hrs
Flood Elev= 597.01'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.00'	**15.0" Round HDPE Round 15"** L= 159.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.00' / 591.00' S= 0.0125 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=3.65 cfs @ 12.09 hrs HW=594.01' TW=591.65' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Inlet Controls 3.65 cfs @ 3.42 fps)

Pond CB-A-12: CB-A-12



Summary for Pond CB-A-13: CB-A-12

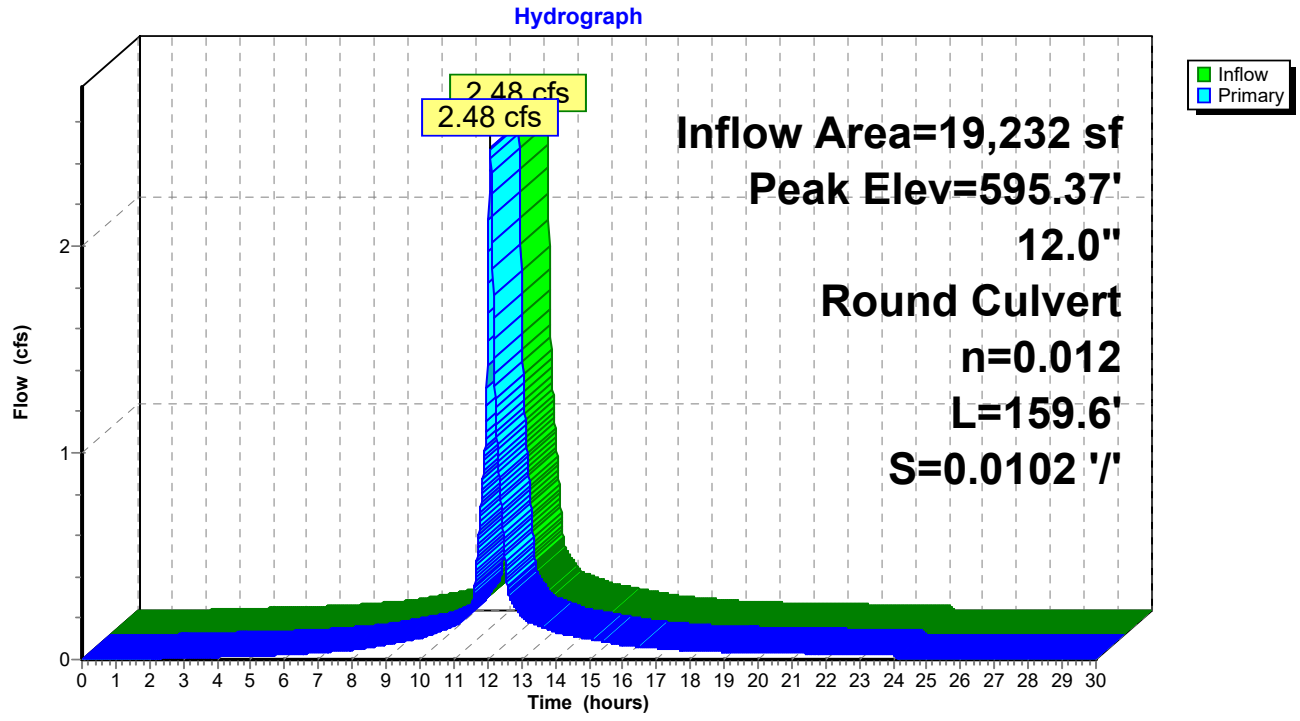
Inflow Area = 19,232 sf, 86.74% Impervious, Inflow Depth = 5.24" for 10-Year event
Inflow = 2.48 cfs @ 12.08 hrs, Volume= 8,403 cf
Outflow = 2.48 cfs @ 12.08 hrs, Volume= 8,403 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.48 cfs @ 12.08 hrs, Volume= 8,403 cf
Routed to Pond CB-A-09 : CB-A-09

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.37' @ 12.09 hrs
Flood Elev= 597.01'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.00'	**12.0" Round HDPE Round 12"** L= 159.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.00' / 591.37' S= 0.0102 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=2.46 cfs @ 12.08 hrs HW=595.37' TW=594.49' (Dynamic Tailwater)
1=HDPE Round 12" (Outlet Controls 2.46 cfs @ 3.13 fps)

Pond CB-A-13: CB-A-12



Summary for Pond CB-A-14: CB-A-14

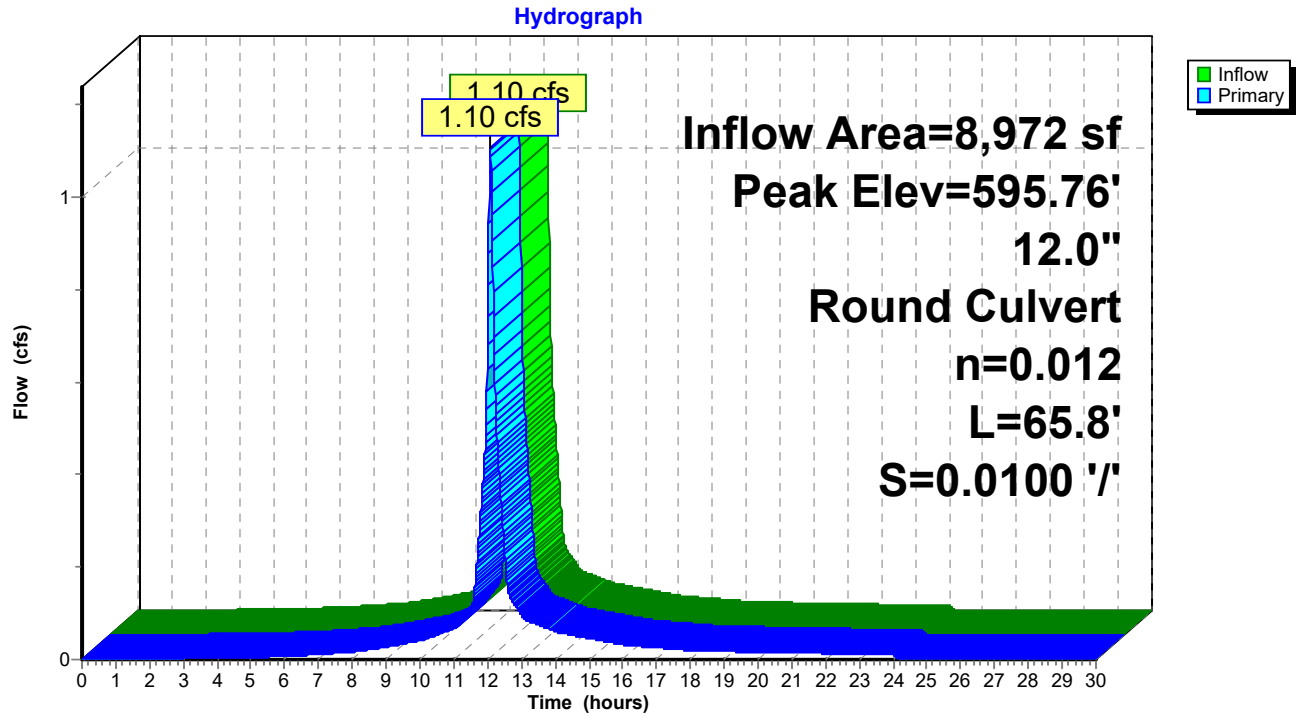
Inflow Area = 8,972 sf, 77.86% Impervious, Inflow Depth = 4.87" for 10-Year event
Inflow = 1.10 cfs @ 12.08 hrs, Volume= 3,639 cf
Outflow = 1.10 cfs @ 12.08 hrs, Volume= 3,639 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.10 cfs @ 12.08 hrs, Volume= 3,639 cf
Routed to Pond 3P : CB-A-13

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.76' @ 12.10 hrs
Flood Elev= 598.67'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.66'	**12.0" Round HDPE Round 12"** L= 65.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.66' / 594.00' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.72 cfs @ 12.08 hrs HW=595.67' TW=595.62' (Dynamic Tailwater)
↑**1=HDPE Round 12"** (Outlet Controls 0.72 cfs @ 1.13 fps)

Pond CB-A-14: CB-A-14



Summary for Pond CB-A-15: CB-A-15

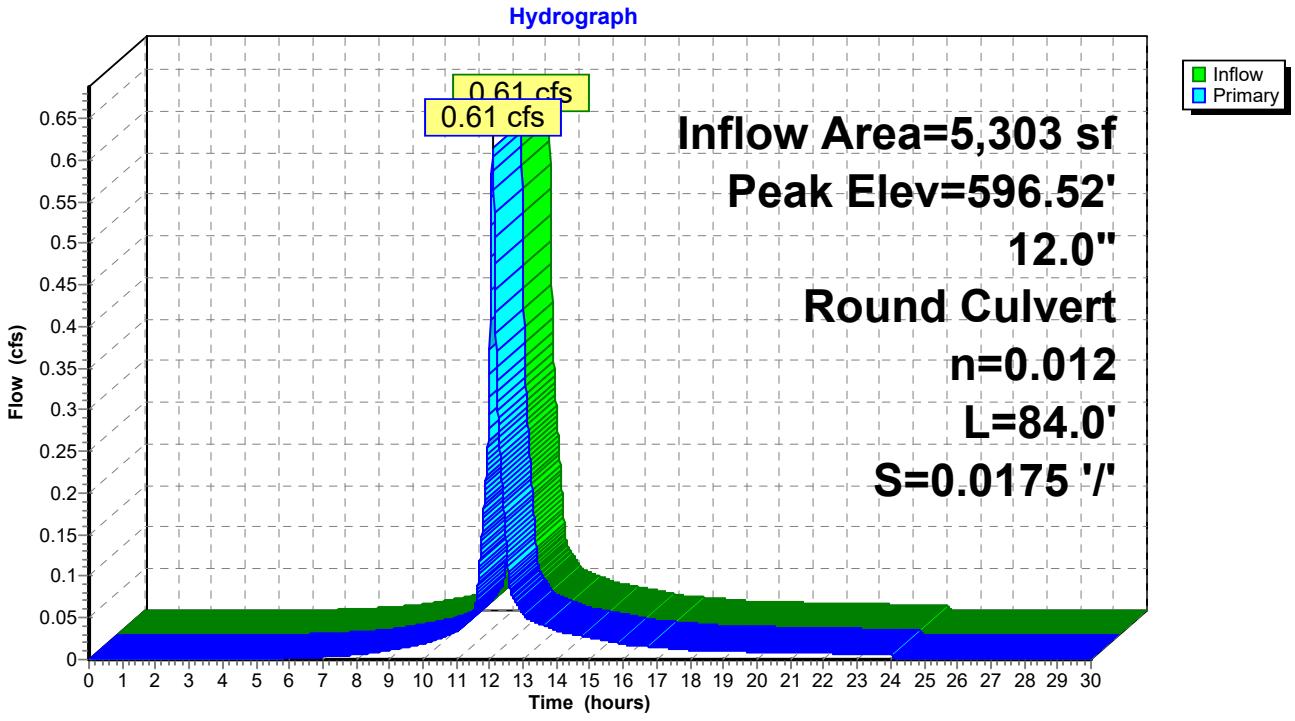
Inflow Area = 5,303 sf, 67.21% Impervious, Inflow Depth = 4.41" for 10-Year event
Inflow = 0.61 cfs @ 12.09 hrs, Volume= 1,949 cf
Outflow = 0.61 cfs @ 12.09 hrs, Volume= 1,949 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.61 cfs @ 12.09 hrs, Volume= 1,949 cf
Routed to Pond CB-A-14 : CB-A-14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.52' @ 12.09 hrs
Flood Elev= 600.14'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.13'	**12.0" Round HDPE Round 12"** L= 84.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.13' / 594.66' S= 0.0175 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.61 cfs @ 12.09 hrs HW=596.52' TW=595.68' (Dynamic Tailwater)
1=HDPE Round 12" (Inlet Controls 0.61 cfs @ 2.14 fps)

Pond CB-A-15: CB-A-15



Summary for Pond CB-A-16: CB-A-16

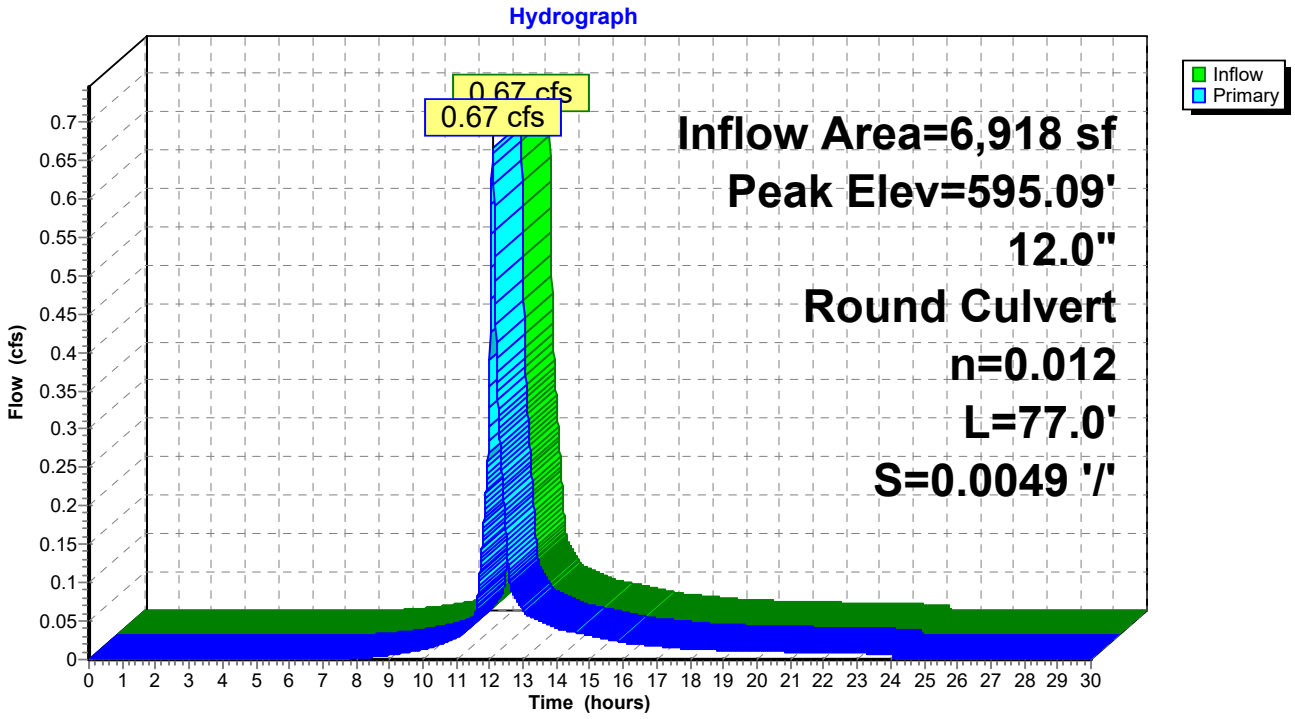
Inflow Area = 6,918 sf, 46.04% Impervious, Inflow Depth = 3.58" for 10-Year event
Inflow = 0.67 cfs @ 12.09 hrs, Volume= 2,063 cf
Outflow = 0.67 cfs @ 12.09 hrs, Volume= 2,063 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.67 cfs @ 12.09 hrs, Volume= 2,063 cf
Routed to Pond CB-A-17 : CB-A-17

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.09' @ 12.10 hrs
Flood Elev= 596.24'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.23'	**12.0" Round HDPE Round 12"** L= 77.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.23' / 593.85' S= 0.0049 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.64 cfs @ 12.09 hrs HW=595.09' TW=595.02' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 0.64 cfs @ 1.20 fps)

Pond CB-A-16: CB-A-16



Summary for Pond CB-A-17: CB-A-17

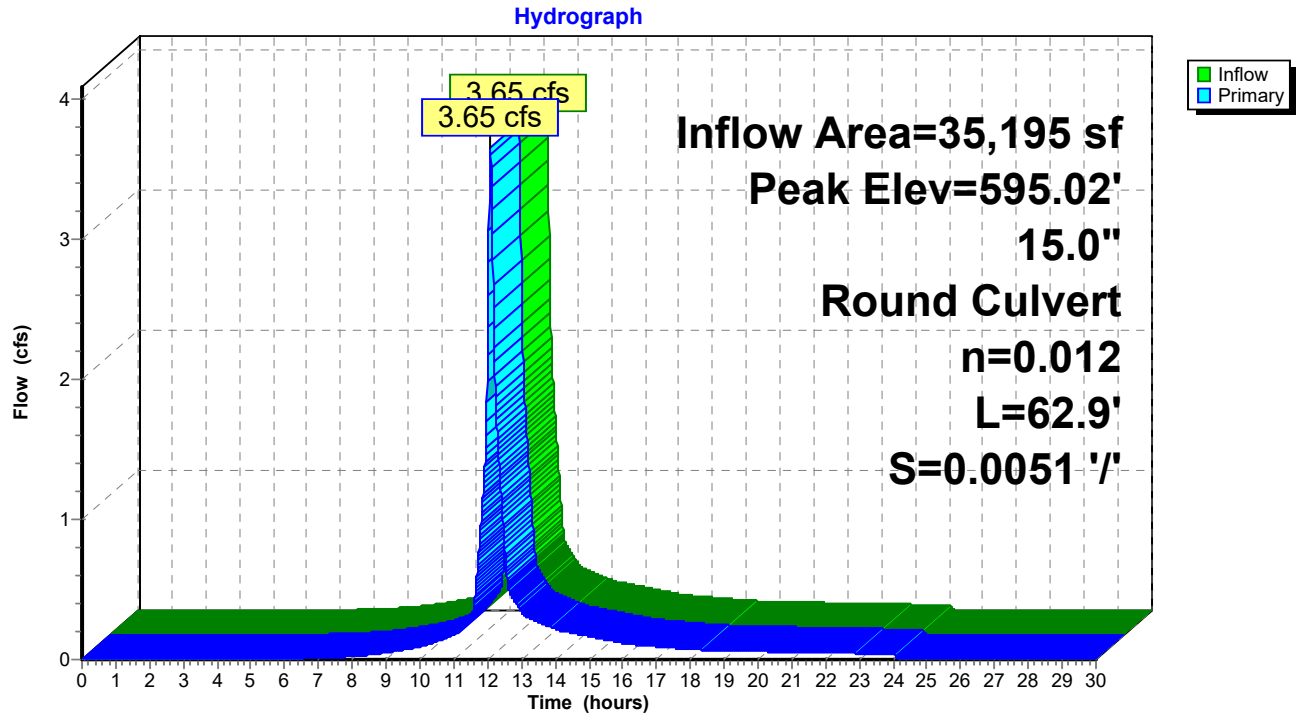
Inflow Area = 35,195 sf, 54.89% Impervious, Inflow Depth = 3.90" for 10-Year event
Inflow = 3.65 cfs @ 12.09 hrs, Volume= 11,450 cf
Outflow = 3.65 cfs @ 12.09 hrs, Volume= 11,450 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.65 cfs @ 12.09 hrs, Volume= 11,450 cf
Routed to Pond CB-A-12 : CB-A-12

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.02' @ 12.09 hrs
Flood Elev= 597.01'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.85'	**15.0" Round HDPE Round 15"** L= 62.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.85' / 593.53' S= 0.0051 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=3.65 cfs @ 12.09 hrs HW=595.02' TW=594.01' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 3.65 cfs @ 3.97 fps)

Pond CB-A-17: CB-A-17



Summary for Pond CB-A-18: CB-A-18

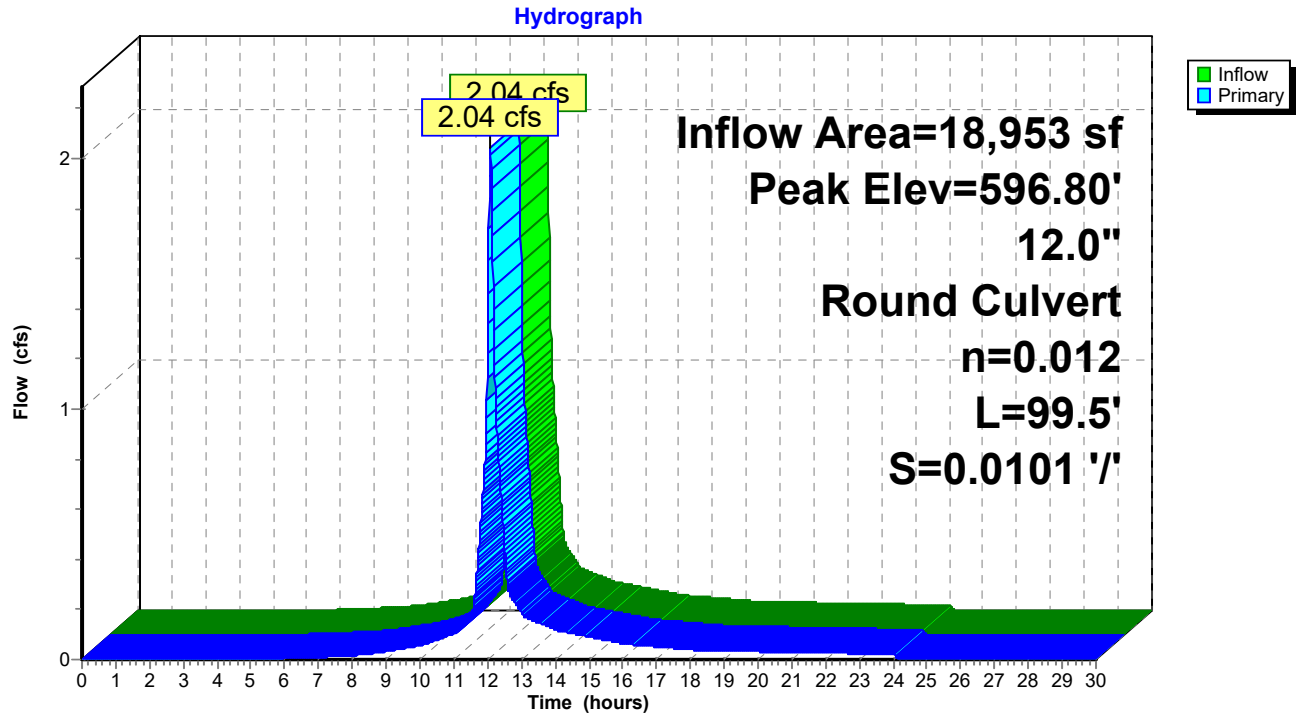
Inflow Area = 18,953 sf, 59.78% Impervious, Inflow Depth = 4.08" for 10-Year event
Inflow = 2.04 cfs @ 12.09 hrs, Volume= 6,449 cf
Outflow = 2.04 cfs @ 12.09 hrs, Volume= 6,449 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.04 cfs @ 12.09 hrs, Volume= 6,449 cf
Routed to Pond CB-A-17 : CB-A-17

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.80' @ 12.09 hrs
Flood Elev= 598.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.00'	**12.0" Round HDPE Round 12"** L= 99.5' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.00' / 595.00' S= 0.0101 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=2.04 cfs @ 12.09 hrs HW=596.80' TW=595.02' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Inlet Controls 2.04 cfs @ 3.04 fps)

Pond CB-A-18: CB-A-18



Summary for Pond CB-A-19: CB-A-19

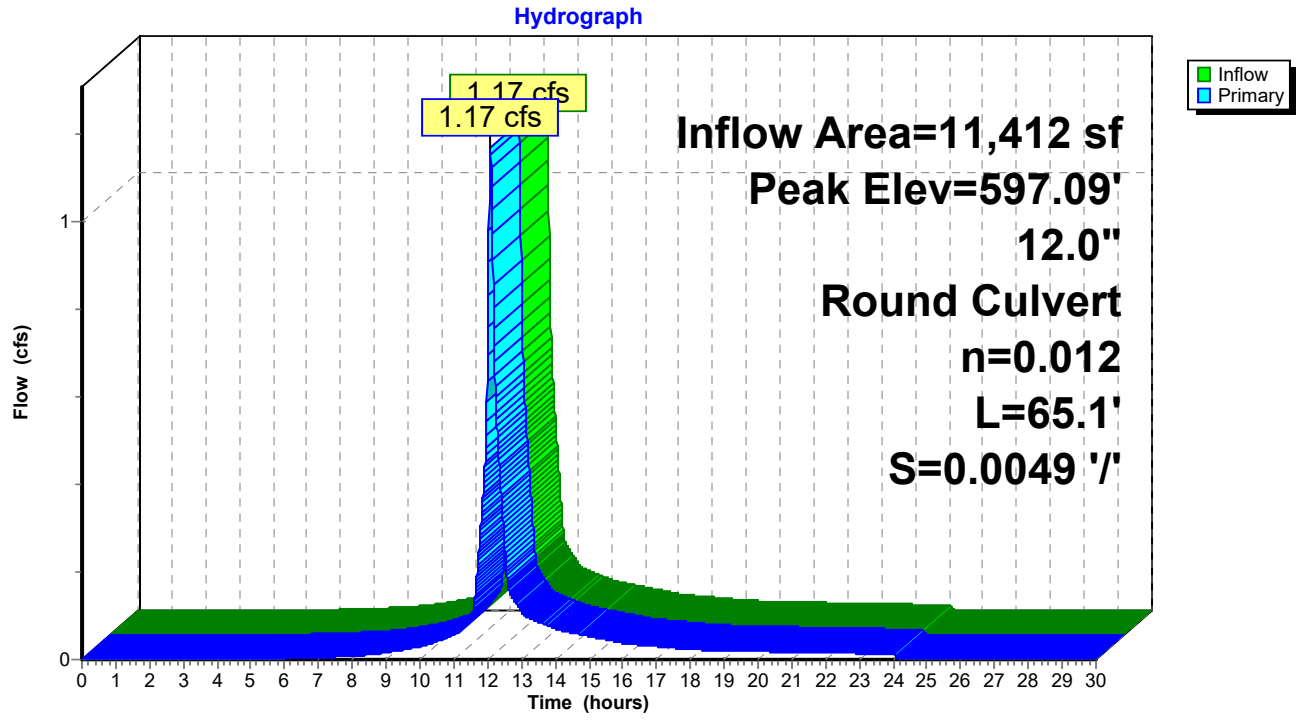
Inflow Area = 11,412 sf, 53.74% Impervious, Inflow Depth = 3.87" for 10-Year event
Inflow = 1.17 cfs @ 12.09 hrs, Volume= 3,678 cf
Outflow = 1.17 cfs @ 12.09 hrs, Volume= 3,678 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.17 cfs @ 12.09 hrs, Volume= 3,678 cf
Routed to Pond CB-A-18 : CB-A-18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 597.09' @ 12.09 hrs
Flood Elev= 598.65'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.32'	**12.0" Round HDPE Round 12"** L= 65.1' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.32' / 596.00' S= 0.0049 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=1.16 cfs @ 12.09 hrs HW=597.09' TW=596.80' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 1.16 cfs @ 2.47 fps)

Pond CB-A-19: CB-A-19



Summary for Pond CB-A-20: CB-A-20

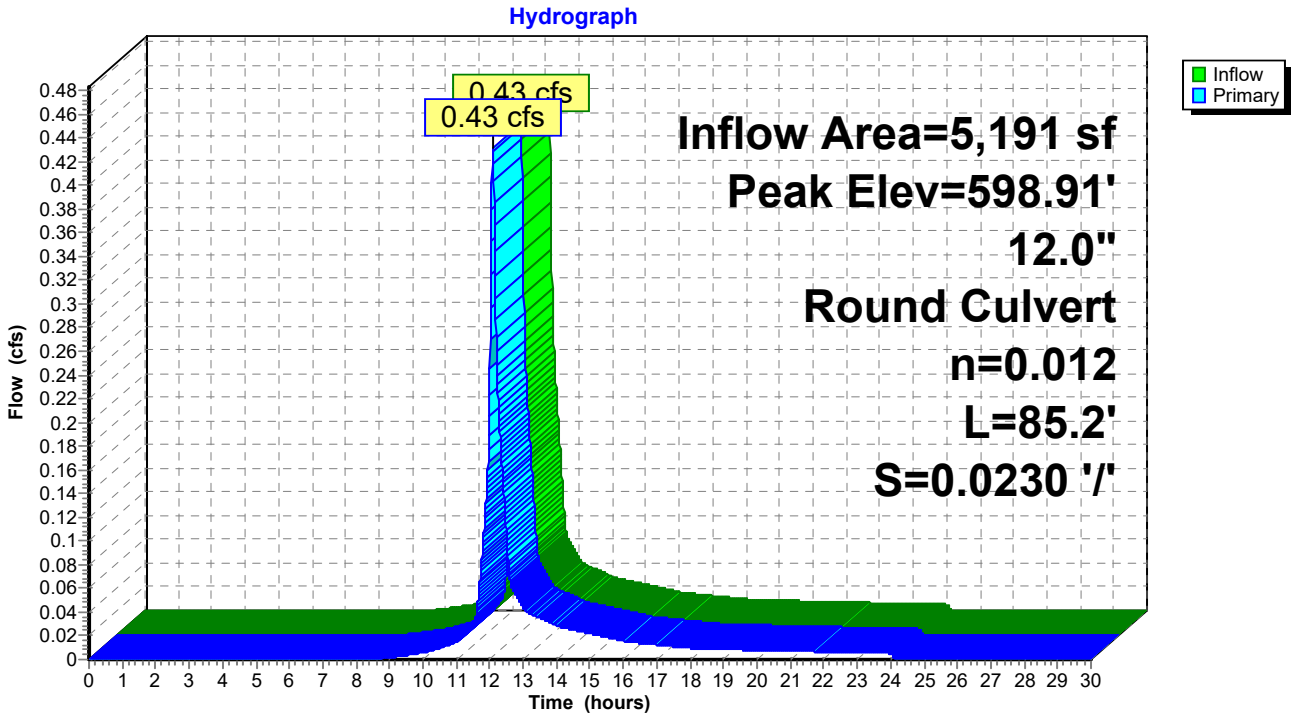
Inflow Area = 5,191 sf, 33.40% Impervious, Inflow Depth = 3.09" for 10-Year event
Inflow = 0.43 cfs @ 12.09 hrs, Volume= 1,336 cf
Outflow = 0.43 cfs @ 12.09 hrs, Volume= 1,336 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.43 cfs @ 12.09 hrs, Volume= 1,336 cf
Routed to Pond CB-A-19 : CB-A-19

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 598.91' @ 12.09 hrs
Flood Elev= 600.58'

Device	Routing	Invert	Outlet Devices
#1	Primary	598.58'	**12.0" Round HDPE Round 12"** L= 85.2' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 598.58' / 596.62' S= 0.0230 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.43 cfs @ 12.09 hrs HW=598.91' TW=597.09' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Inlet Controls 0.43 cfs @ 1.94 fps)

Pond CB-A-20: CB-A-20



Summary for Pond CB-B-01: CB-B-01

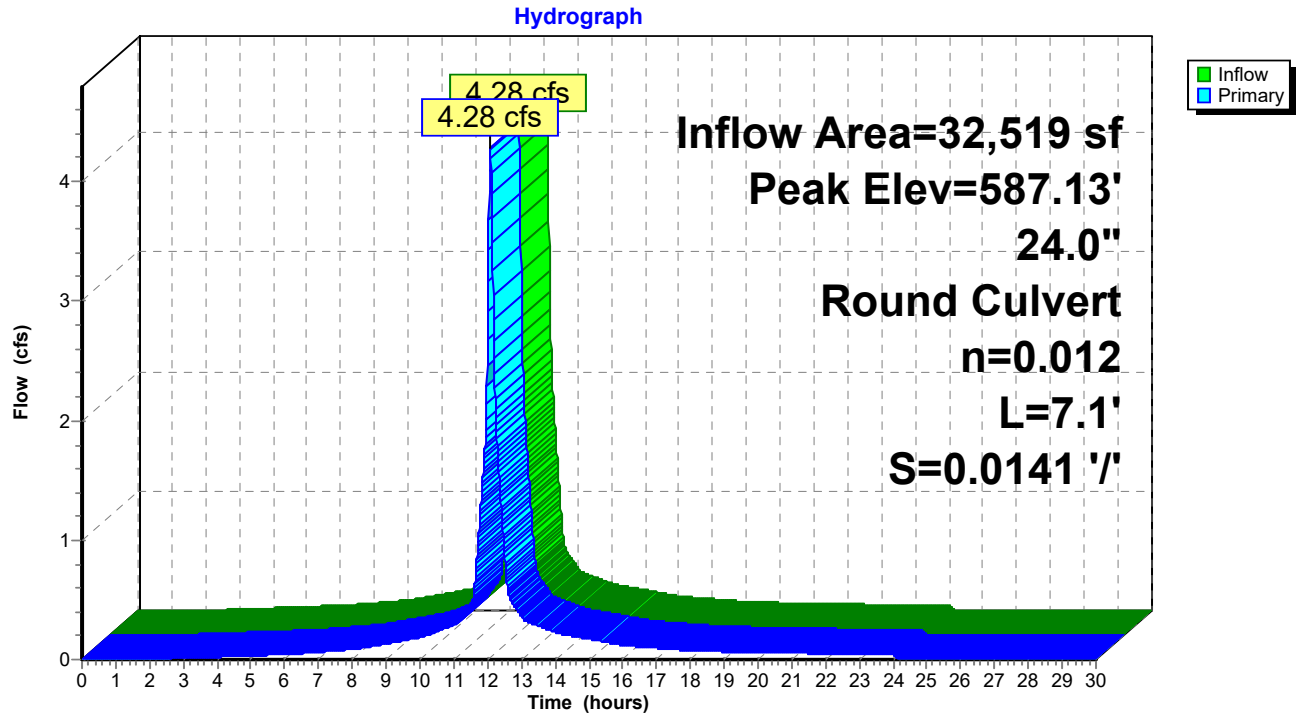
Inflow Area = 32,519 sf, 91.41% Impervious, Inflow Depth = 5.37" for 10-Year event
Inflow = 4.28 cfs @ 12.08 hrs, Volume= 14,559 cf
Outflow = 4.28 cfs @ 12.08 hrs, Volume= 14,559 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.28 cfs @ 12.08 hrs, Volume= 14,559 cf
Routed to Pond ADS 1B : ADS 1B

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 587.13' @ 12.08 hrs
Flood Elev= 589.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	586.10'	**24.0" Round HDPE Round 24"** L= 7.1' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 586.10' / 586.00' S= 0.0141 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf

Primary OutFlow Max=4.28 cfs @ 12.08 hrs HW=587.13' TW=586.51' (Dynamic Tailwater)
1=HDPE Round 24" (Barrel Controls 4.28 cfs @ 3.80 fps)

Pond CB-B-01: CB-B-01



Summary for Pond CB-B-02: CB-B-02

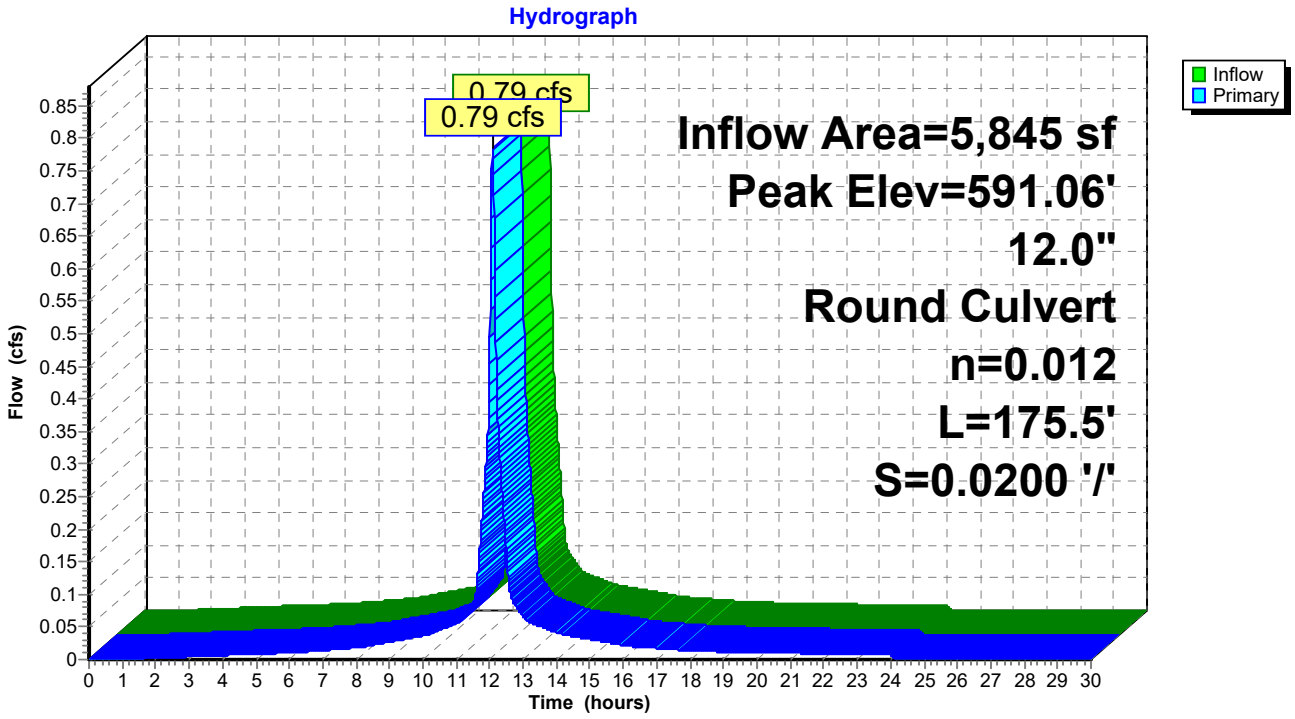
Inflow Area = 5,845 sf, 96.34% Impervious, Inflow Depth = 5.64" for 10-Year event
Inflow = 0.79 cfs @ 12.08 hrs, Volume= 2,749 cf
Outflow = 0.79 cfs @ 12.08 hrs, Volume= 2,749 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.79 cfs @ 12.08 hrs, Volume= 2,749 cf
Routed to Pond CB-B-01 : CB-B-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 591.06' @ 12.08 hrs
Flood Elev= 592.61'

Device	Routing	Invert	Outlet Devices
#1	Primary	590.61'	**12.0" Round HDPE Round 12"** L= 175.5' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 590.61' / 587.10' S= 0.0200 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.78 cfs @ 12.08 hrs HW=591.06' TW=587.13' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Inlet Controls 0.78 cfs @ 2.28 fps)

Pond CB-B-02: CB-B-02



Summary for Pond CB-B-03: CB-B-03

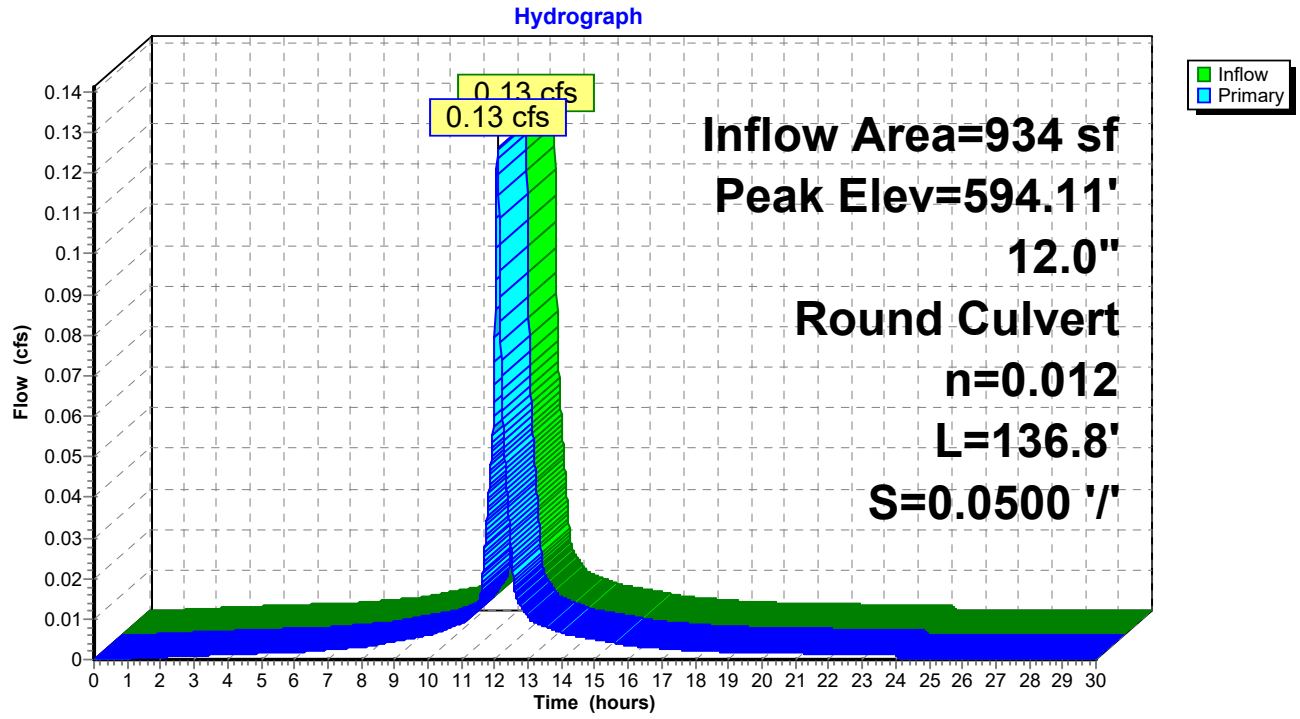
Inflow Area = 934 sf,100.00% Impervious, Inflow Depth = 5.76" for 10-Year event
Inflow = 0.13 cfs @ 12.08 hrs, Volume= 448 cf
Outflow = 0.13 cfs @ 12.08 hrs, Volume= 448 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.13 cfs @ 12.08 hrs, Volume= 448 cf
Routed to Pond CB-B-01 : CB-B-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.11' @ 12.08 hrs
Flood Elev= 595.94'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.94'	**12.0" Round HDPE Round 12"** L= 136.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.94' / 587.10' S= 0.0500 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.13 cfs @ 12.08 hrs HW=594.11' TW=587.13' (Dynamic Tailwater)
1=HDPE Round 12" (Inlet Controls 0.13 cfs @ 1.41 fps)

Pond CB-B-03: CB-B-03



Summary for Pond CB-B-04: CB-B-04

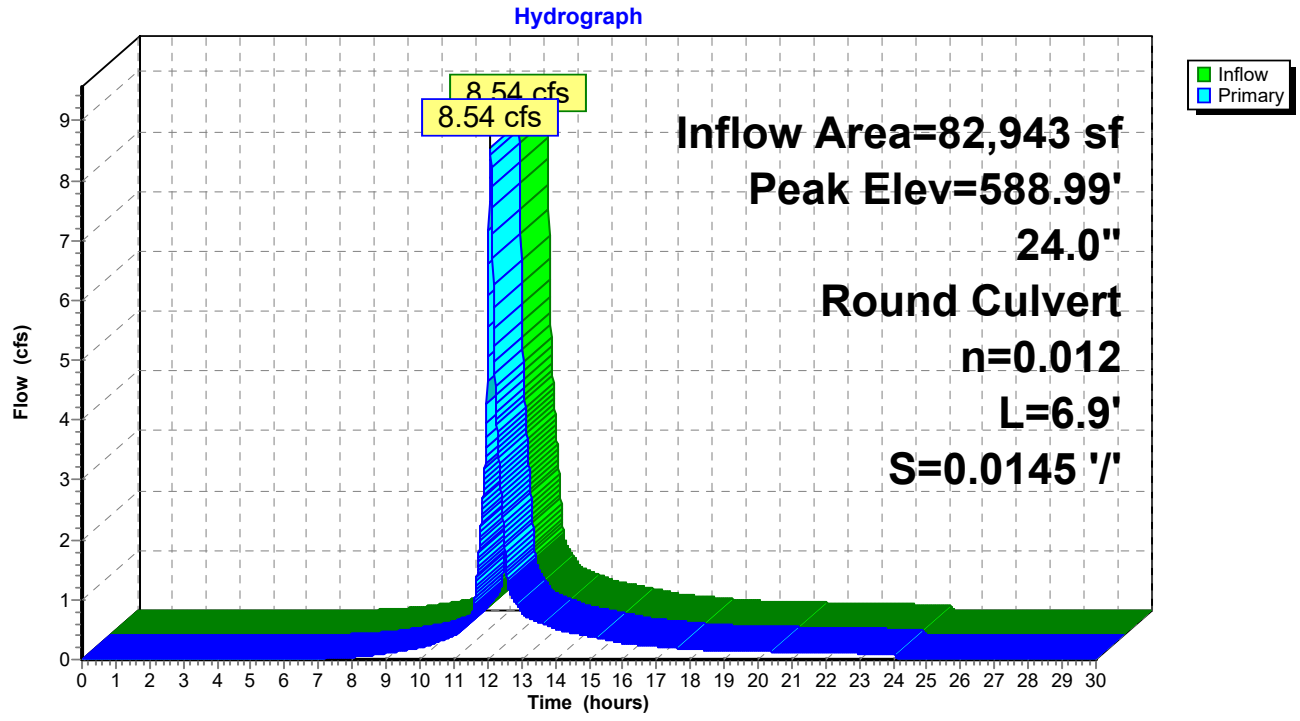
Inflow Area = 82,943 sf, 52.19% Impervious, Inflow Depth = 3.85" for 10-Year event
Inflow = 8.54 cfs @ 12.09 hrs, Volume= 26,598 cf
Outflow = 8.54 cfs @ 12.09 hrs, Volume= 26,598 cf, Atten= 0%, Lag= 0.0 min
Primary = 8.54 cfs @ 12.09 hrs, Volume= 26,598 cf
Routed to Pond ADS 1B : ADS 1B

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 588.99' @ 12.09 hrs
Flood Elev= 590.44'

Device	Routing	Invert	Outlet Devices
#1	Primary	587.43'	**24.0" Round HDPE Round 24"** L= 6.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 587.43' / 587.33' S= 0.0145 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf

Primary OutFlow Max=8.53 cfs @ 12.09 hrs HW=588.99' TW=586.54' (Dynamic Tailwater)
↑—**1=HDPE Round 24"** (Barrel Controls 8.53 cfs @ 4.48 fps)

Pond CB-B-04: CB-B-04



Summary for Pond CB-B-05: CB-B-05

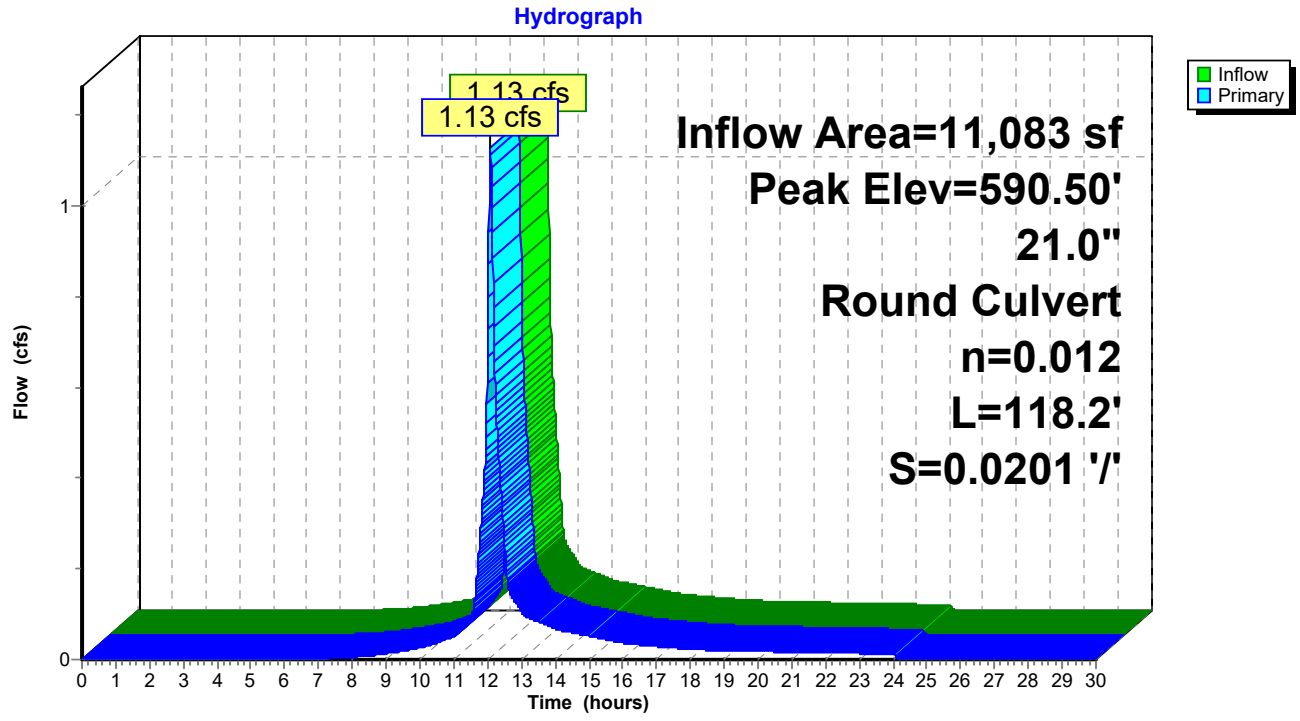
Inflow Area = 11,083 sf, 51.58% Impervious, Inflow Depth = 3.79" for 10-Year event
Inflow = 1.13 cfs @ 12.09 hrs, Volume= 3,504 cf
Outflow = 1.13 cfs @ 12.09 hrs, Volume= 3,504 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.13 cfs @ 12.09 hrs, Volume= 3,504 cf
Routed to Pond CB-B-04 : CB-B-04

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 590.50' @ 12.09 hrs
Flood Elev= 592.82'

Device	Routing	Invert	Outlet Devices
#1	Primary	590.05'	**21.0" Round HDPE Round 21"** L= 118.2' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 590.05' / 587.68' S= 0.0201 '/' Cc= 0.900 n= 0.012, Flow Area= 2.41 sf

Primary OutFlow Max=1.12 cfs @ 12.09 hrs HW=590.50' TW=588.99' (Dynamic Tailwater)
1=HDPE Round 21" (Inlet Controls 1.12 cfs @ 2.29 fps)

Pond CB-B-05: CB-B-05



Summary for Pond CB-B-07: CB-B-07

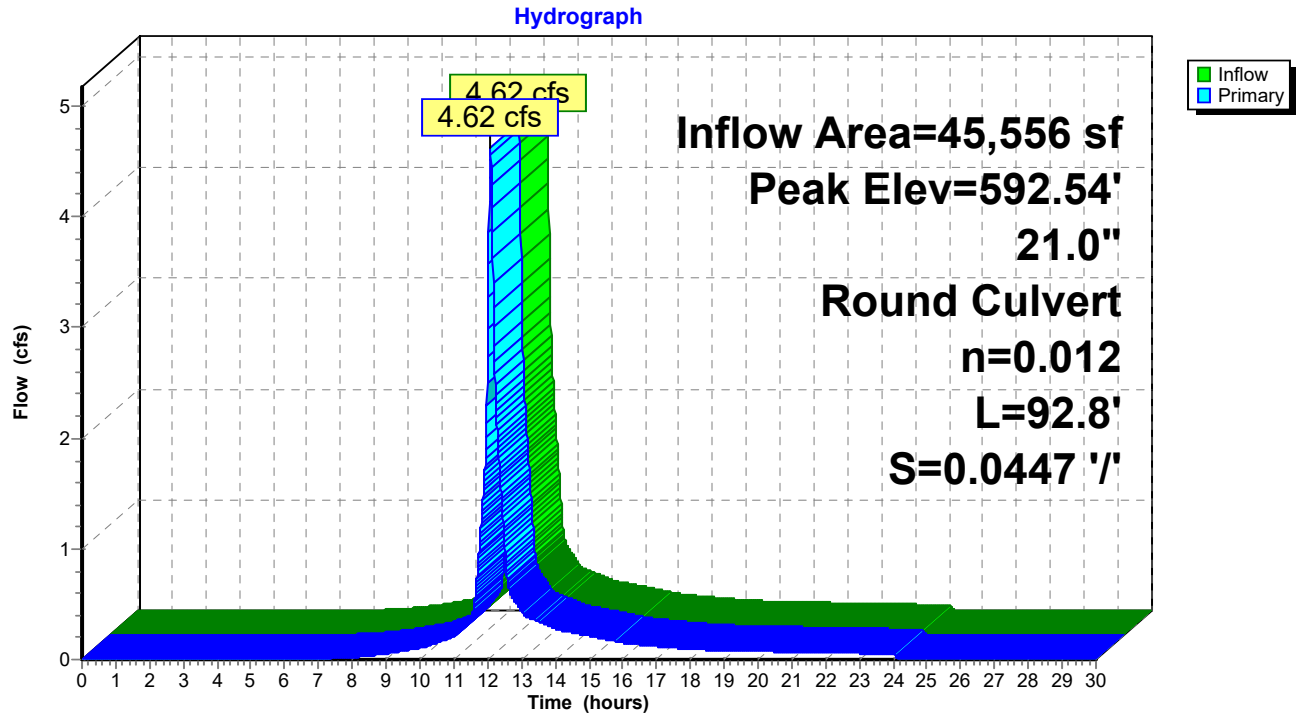
Inflow Area = 45,556 sf, 50.38% Impervious, Inflow Depth = 3.78" for 10-Year event
Inflow = 4.62 cfs @ 12.09 hrs, Volume= 14,355 cf
Outflow = 4.62 cfs @ 12.09 hrs, Volume= 14,355 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.62 cfs @ 12.09 hrs, Volume= 14,355 cf
Routed to Pond CB-B-04 : CB-B-04

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 592.54' @ 12.09 hrs
Flood Elev= 595.09'

Device	Routing	Invert	Outlet Devices
#1	Primary	591.57'	**21.0" Round HDPE Round 21"** L= 92.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.57' / 587.42' S= 0.0447 '/' Cc= 0.900 n= 0.012, Flow Area= 2.41 sf

Primary OutFlow Max=4.61 cfs @ 12.09 hrs HW=592.54' TW=588.99' (Dynamic Tailwater)
↑—**1=HDPE Round 21"** (Inlet Controls 4.61 cfs @ 3.36 fps)

Pond CB-B-07: CB-B-07



Summary for Pond CB-C-01: CB-C-01

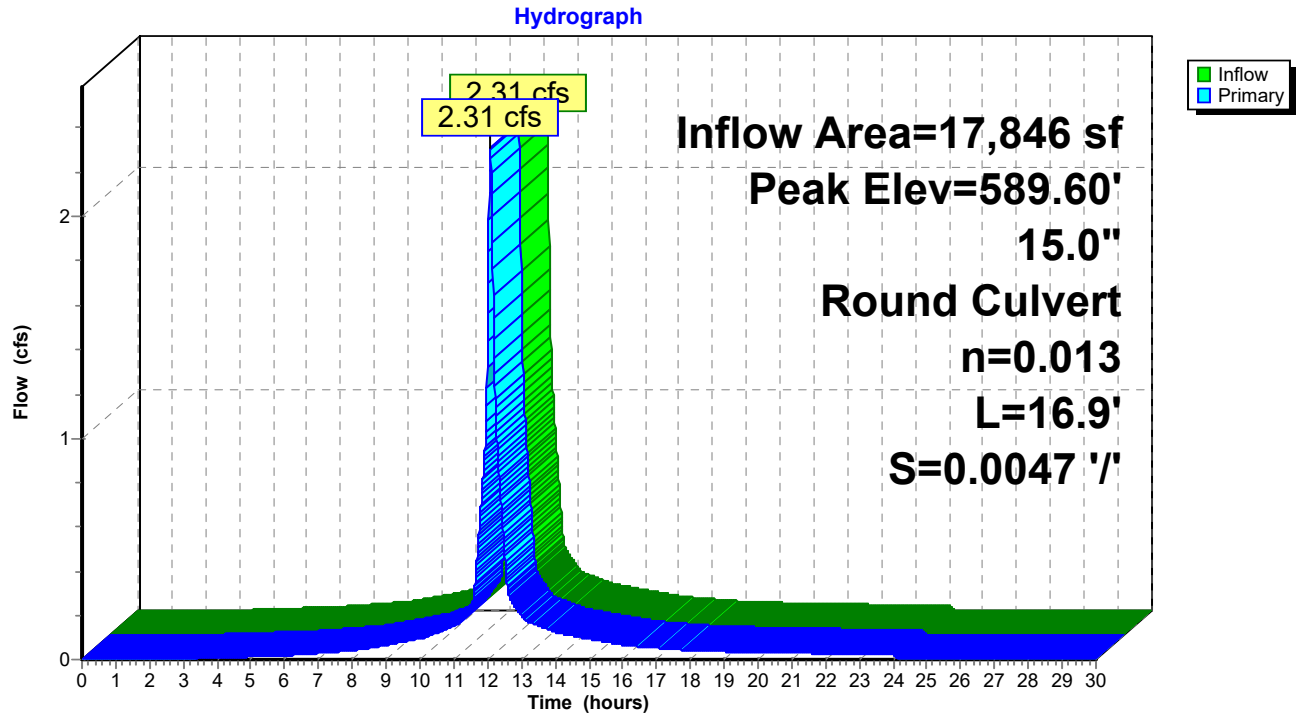
Inflow Area = 17,846 sf, 86.77% Impervious, Inflow Depth = 5.18" for 10-Year event
Inflow = 2.31 cfs @ 12.08 hrs, Volume= 7,707 cf
Outflow = 2.31 cfs @ 12.08 hrs, Volume= 7,707 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.31 cfs @ 12.08 hrs, Volume= 7,707 cf
Routed to Pond ADS1C : ADS 1C

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 589.60' @ 12.08 hrs
Flood Elev= 590.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	588.67'	**15.0" Round HDPE Round 15"** L= 16.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 588.67' / 588.59' S= 0.0047 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.31 cfs @ 12.08 hrs HW=589.60' TW=588.09' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 2.31 cfs @ 3.29 fps)

Pond CB-C-01: CB-C-01



Summary for Pond CB-C-02: CB-C-02

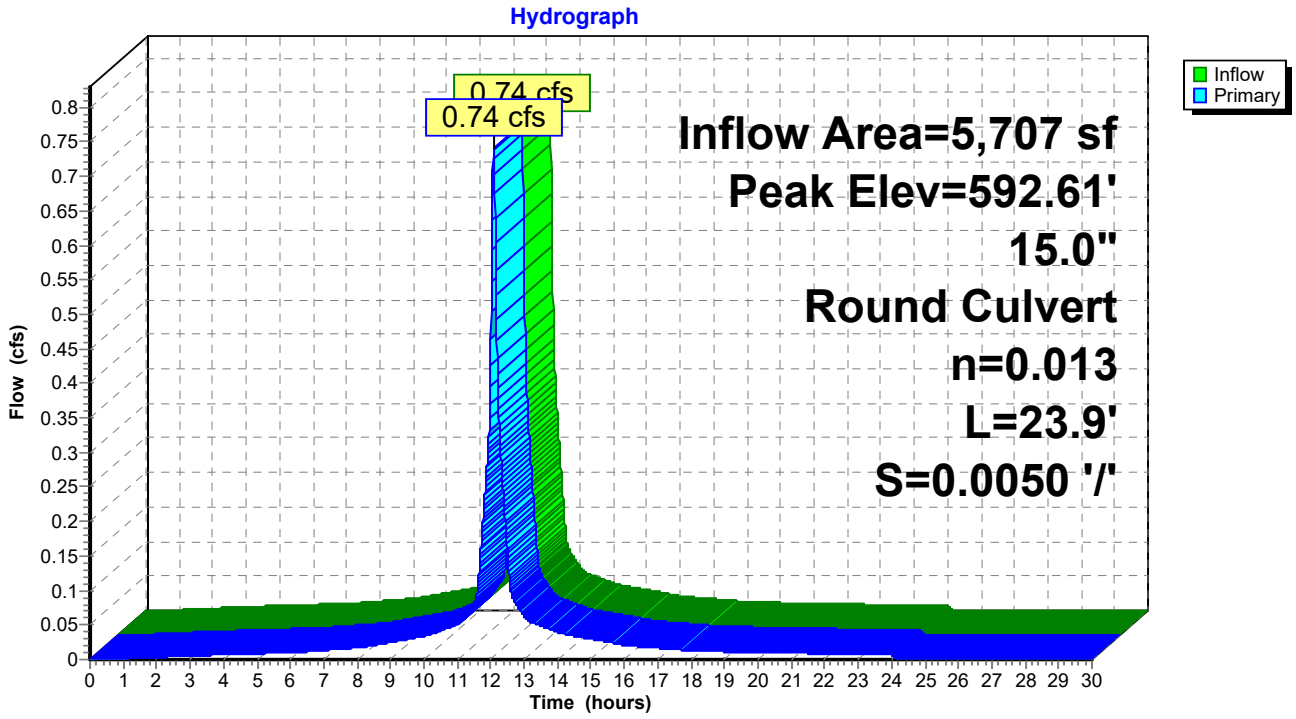
Inflow Area = 5,707 sf, 93.48% Impervious, Inflow Depth = 5.50" for 10-Year event
Inflow = 0.74 cfs @ 12.08 hrs, Volume= 2,616 cf
Outflow = 0.74 cfs @ 12.08 hrs, Volume= 2,616 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.74 cfs @ 12.08 hrs, Volume= 2,616 cf
Routed to Pond ADS1C : ADS 1C

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 592.61' @ 12.08 hrs
Flood Elev= 593.55'

Device	Routing	Invert	Outlet Devices
#1	Primary	592.13'	**15.0" Round HDPE Round 15"** L= 23.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.13' / 592.01' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=0.74 cfs @ 12.08 hrs HW=592.61' TW=588.09' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 0.74 cfs @ 2.51 fps)

Pond CB-C-02: CB-C-02



Summary for Pond CB-C-03: CB-C-03

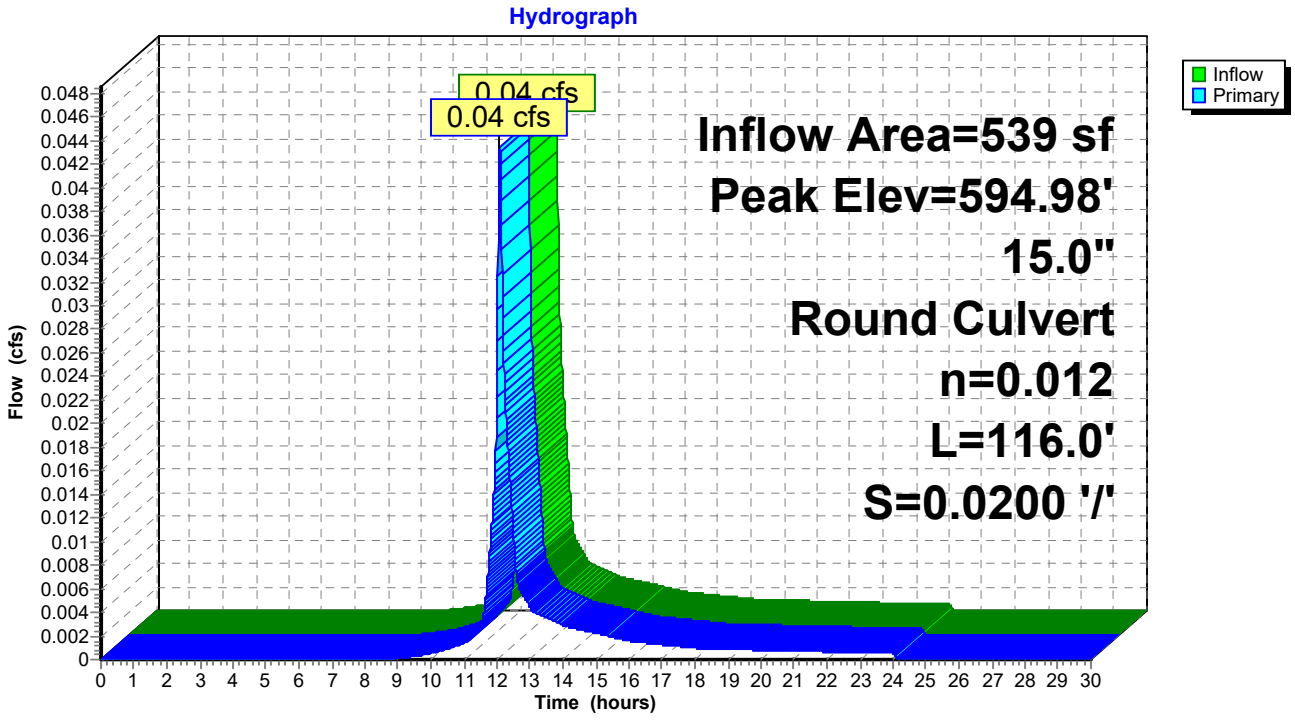
Inflow Area = 539 sf, 30.98% Impervious, Inflow Depth = 2.99" for 10-Year event
Inflow = 0.04 cfs @ 12.09 hrs, Volume= 134 cf
Outflow = 0.04 cfs @ 12.09 hrs, Volume= 134 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.04 cfs @ 12.09 hrs, Volume= 134 cf
Routed to Pond CB-C-02 : CB-C-02

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.98' @ 12.09 hrs
Flood Elev= 596.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.89'	**15.0" Round HDPE Round 15"** L= 116.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.89' / 592.57' S= 0.0200 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.04 cfs @ 12.09 hrs HW=594.98' TW=592.61' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Inlet Controls 0.04 cfs @ 1.04 fps)

Pond CB-C-03: CB-C-03



Summary for Pond CB-C-04: CB-C-04

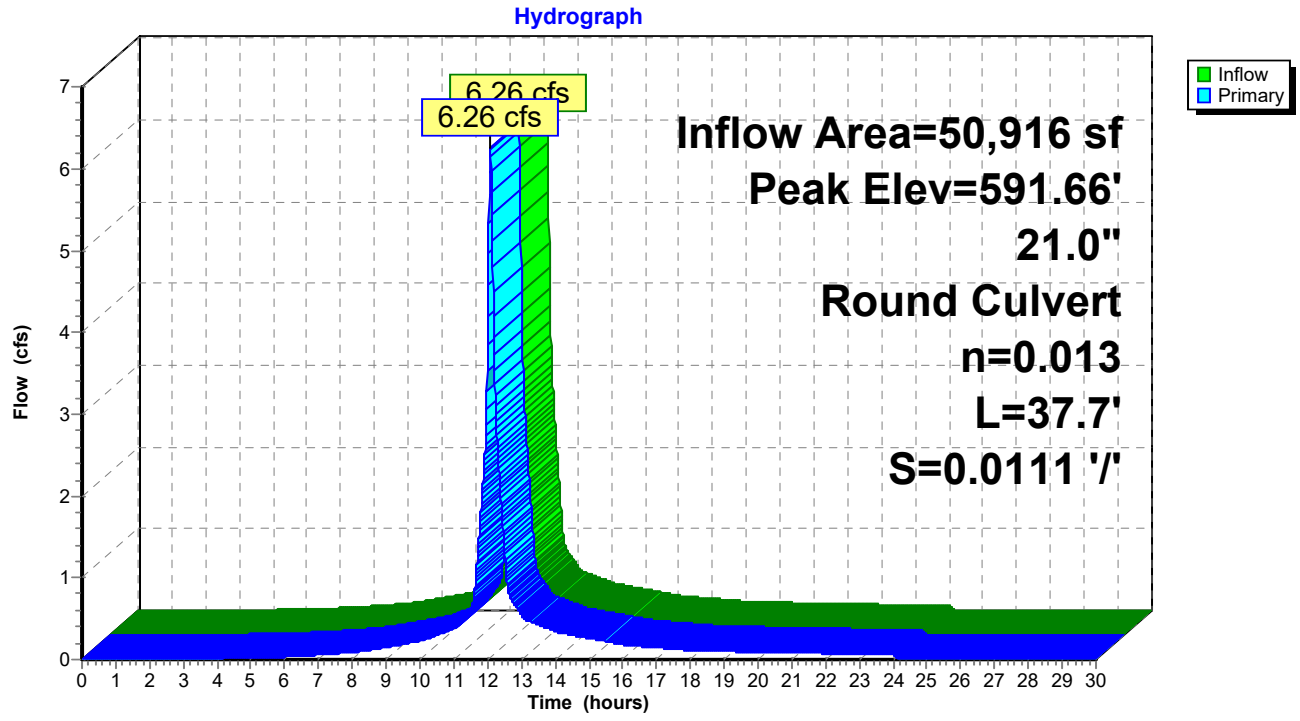
Inflow Area = 50,916 sf, 77.30% Impervious, Inflow Depth = 4.81" for 10-Year event
Inflow = 6.26 cfs @ 12.08 hrs, Volume= 20,388 cf
Outflow = 6.26 cfs @ 12.08 hrs, Volume= 20,388 cf, Atten= 0%, Lag= 0.0 min
Primary = 6.26 cfs @ 12.08 hrs, Volume= 20,388 cf
Routed to Pond ADS1C : ADS 1C

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 591.66' @ 12.08 hrs
Flood Elev= 593.26'

Device	Routing	Invert	Outlet Devices
#1	Primary	590.42'	**21.0" Round HDPE Round 21"** L= 37.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 590.42' / 590.00' S= 0.0111 '/' Cc= 0.900 n= 0.013, Flow Area= 2.41 sf

Primary OutFlow Max=6.24 cfs @ 12.08 hrs HW=591.66' TW=588.10' (Dynamic Tailwater)
↑—**1=HDPE Round 21"** (Barrel Controls 6.24 cfs @ 4.81 fps)

Pond CB-C-04: CB-C-04



Summary for Pond CB-C-05: CB-C-05

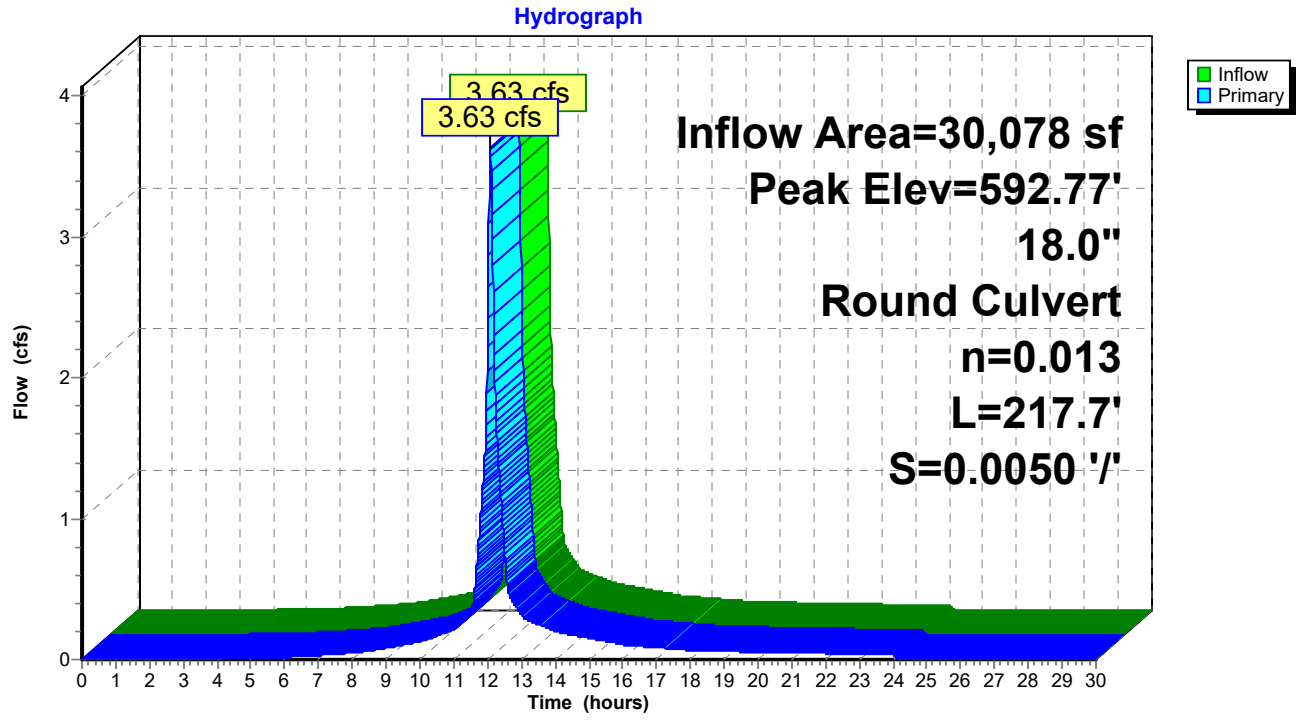
Inflow Area = 30,078 sf, 74.79% Impervious, Inflow Depth = 4.70" for 10-Year event
Inflow = 3.63 cfs @ 12.08 hrs, Volume= 11,779 cf
Outflow = 3.63 cfs @ 12.08 hrs, Volume= 11,779 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.63 cfs @ 12.08 hrs, Volume= 11,779 cf
Routed to Pond CB-C-04 : CB-C-04

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 592.77' @ 12.09 hrs
Flood Elev= 596.27'

Device	Routing	Invert	Outlet Devices
#1	Primary	591.69'	**18.0" Round HDPE Round 18"** L= 217.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.69' / 590.61' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=3.61 cfs @ 12.08 hrs HW=592.77' TW=591.66' (Dynamic Tailwater)
1=HDPE Round 18" (Outlet Controls 3.61 cfs @ 3.70 fps)

Pond CB-C-05: CB-C-05



Summary for Pond CB-C-06: CB-C-06

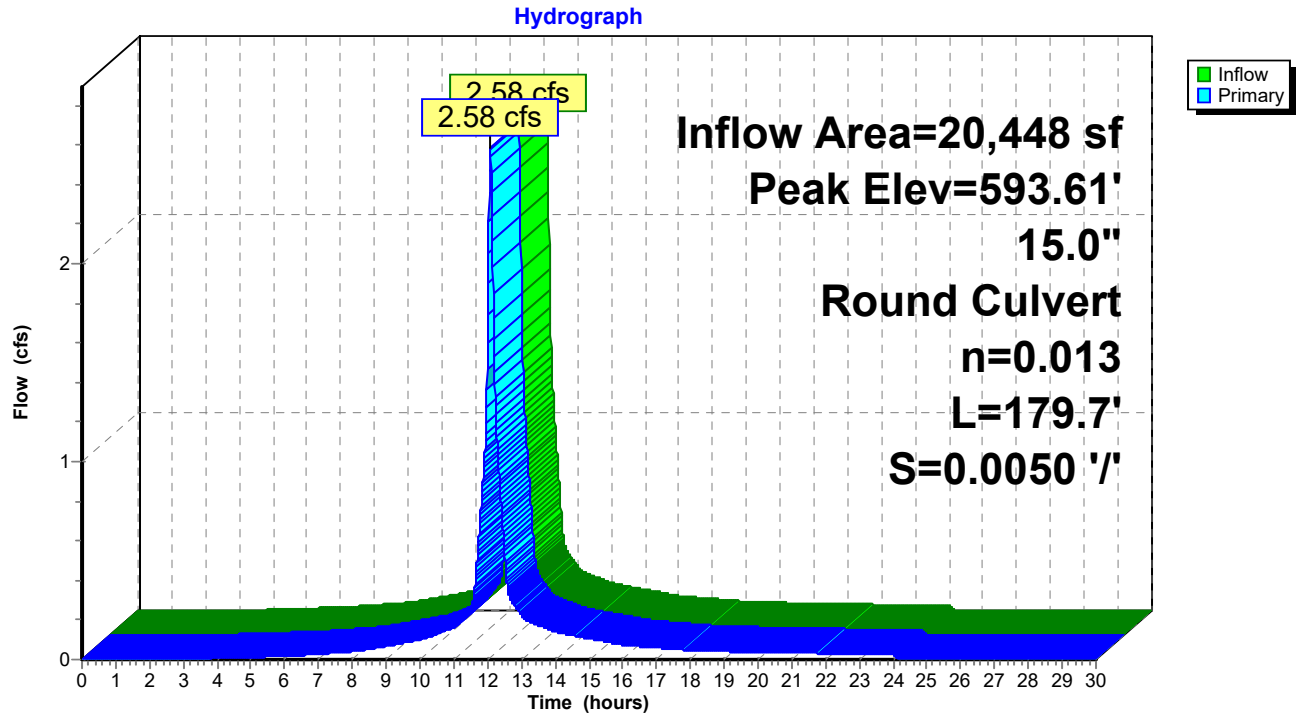
Inflow Area = 20,448 sf, 81.84% Impervious, Inflow Depth = 4.99" for 10-Year event
Inflow = 2.58 cfs @ 12.08 hrs, Volume= 8,496 cf
Outflow = 2.58 cfs @ 12.08 hrs, Volume= 8,496 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.58 cfs @ 12.08 hrs, Volume= 8,496 cf
Routed to Pond CB-C-05 : CB-C-05

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 593.61' @ 12.09 hrs
Flood Elev= 598.99'

Device	Routing	Invert	Outlet Devices
#1	Primary	592.59'	**15.0" Round HDPE Round 15"** L= 179.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.59' / 591.69' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.56 cfs @ 12.08 hrs HW=593.61' TW=592.77' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 2.56 cfs @ 3.25 fps)

Pond CB-C-06: CB-C-06



Summary for Pond CB-C-07: CB-C-07

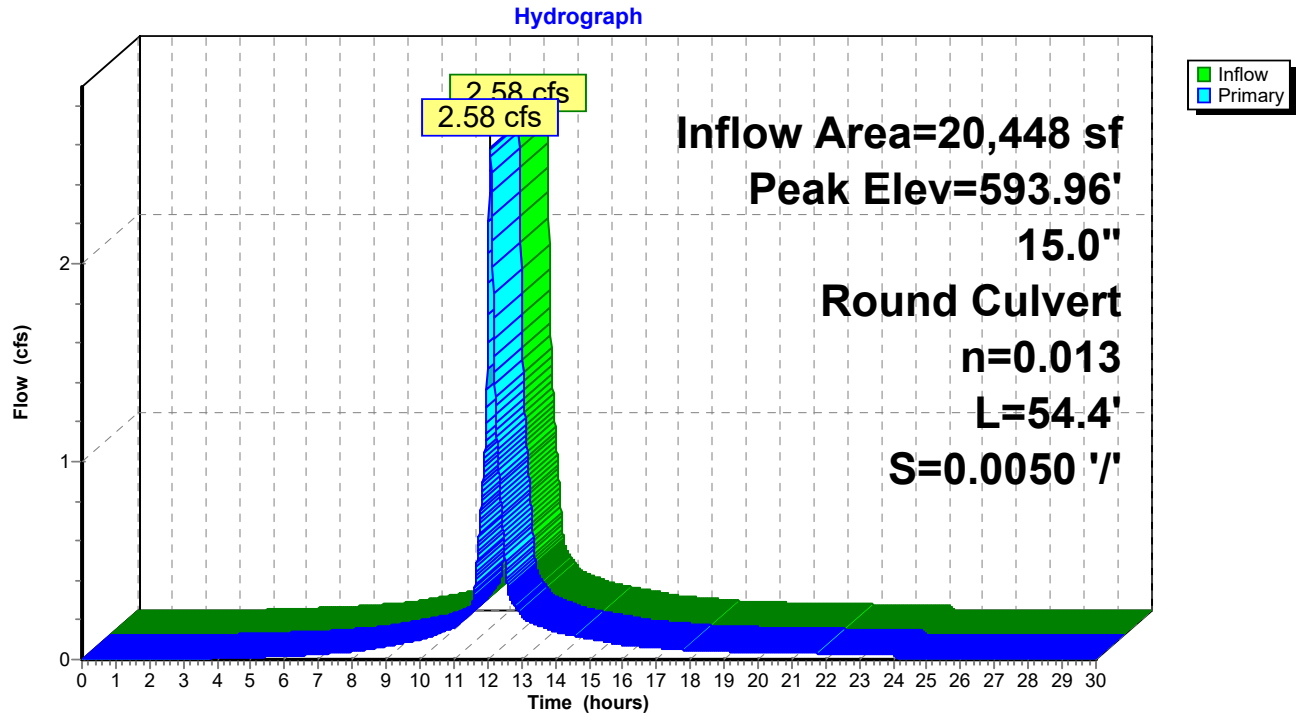
Inflow Area = 20,448 sf, 81.84% Impervious, Inflow Depth = 4.99" for 10-Year event
Inflow = 2.58 cfs @ 12.08 hrs, Volume= 8,496 cf
Outflow = 2.58 cfs @ 12.08 hrs, Volume= 8,496 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.58 cfs @ 12.08 hrs, Volume= 8,496 cf
Routed to Pond CB-C-06 : CB-C-06

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 593.96' @ 12.09 hrs
Flood Elev= 598.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	592.86'	**15.0" Round HDPE Round 15"** L= 54.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.86' / 592.59' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.54 cfs @ 12.08 hrs HW=593.96' TW=593.61' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 2.54 cfs @ 2.96 fps)

Pond CB-C-07: CB-C-07



Summary for Pond CB-C-08: CB-C-08

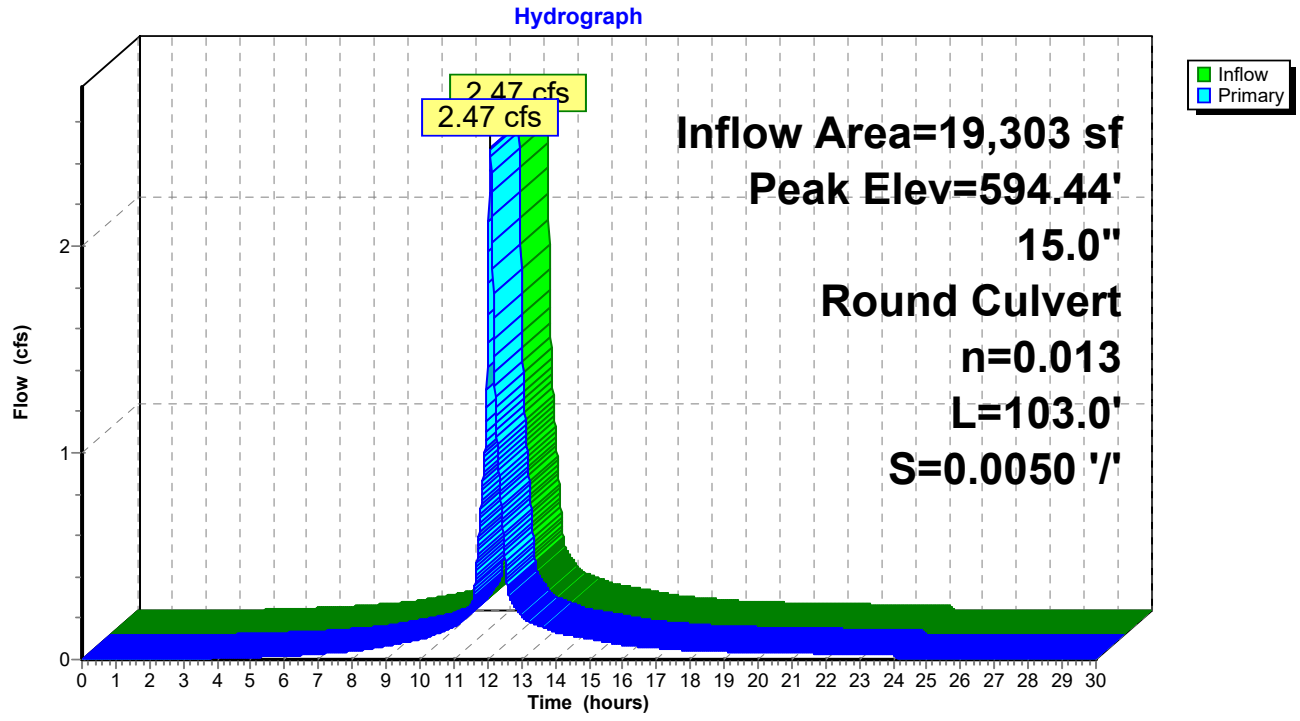
Inflow Area = 19,303 sf, 83.90% Impervious, Inflow Depth = 5.07" for 10-Year event
Inflow = 2.47 cfs @ 12.08 hrs, Volume= 8,155 cf
Outflow = 2.47 cfs @ 12.08 hrs, Volume= 8,155 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.47 cfs @ 12.08 hrs, Volume= 8,155 cf
Routed to Pond CB-C-07 : CB-C-07

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.44' @ 12.09 hrs
Flood Elev= 595.63'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.38'	**15.0" Round HDPE Round 15"** L= 103.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.38' / 592.86' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=2.43 cfs @ 12.08 hrs HW=594.44' TW=593.96' (Dynamic Tailwater)
↑**1=HDPE Round 15"** (Outlet Controls 2.43 cfs @ 2.96 fps)

Pond CB-C-08: CB-C-08



Time span=0.00-30.00 hrs, dt=0.01 hrs, 3001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1APRE: WS #1A PRE Runoff Area=188,851 sf 22.35% Impervious Runoff Depth=0.00"
Flow Length=1,105' Tc=21.1 min CN=65 Runoff=0.00 cfs 43 cf

Subcatchment 1BPRE: WS #1B PRE Runoff Area=270,126 sf 0.00% Impervious Runoff Depth=0.00"
Flow Length=468' Tc=11.2 min CN=55 Runoff=0.00 cfs 0 cf

Subcatchment 1S: W-A-12 Runoff Area=6,257 sf 93.29% Impervious Runoff Depth=0.81"
Tc=6.0 min CN=96 Runoff=0.14 cfs 424 cf

Subcatchment 2S: W-A-16 Runoff Area=6,918 sf 46.04% Impervious Runoff Depth=0.12"
Tc=6.0 min CN=78 Runoff=0.01 cfs 67 cf

Subcatchment CB-B-06: W-B-06 Runoff Area=3,067 sf 58.98% Impervious Runoff Depth=0.22"
Tc=6.0 min CN=83 Runoff=0.01 cfs 56 cf

Subcatchment W-A-01: W-A-01 Runoff Area=73,223 sf 98.64% Impervious Runoff Depth=0.89"
Tc=6.0 min CN=97 Runoff=1.72 cfs 5,461 cf

Subcatchment W-A-02: W-A-02 Runoff Area=7,038 sf 98.05% Impervious Runoff Depth=0.89"
Tc=6.0 min CN=97 Runoff=0.17 cfs 525 cf

Subcatchment W-A-03: W-A-03 Runoff Area=3,322 sf 92.69% Impervious Runoff Depth=0.74"
Tc=6.0 min CN=95 Runoff=0.07 cfs 205 cf

Subcatchment W-A-04: W-A-04 Runoff Area=7,387 sf 97.25% Impervious Runoff Depth=0.89"
Tc=6.0 min CN=97 Runoff=0.17 cfs 551 cf

Subcatchment W-A-05: W-A-05 Runoff Area=11,393 sf 75.02% Impervious Runoff Depth=0.41"
Tc=6.0 min CN=89 Runoff=0.12 cfs 394 cf

Subcatchment W-A-06: W-A-06 Runoff Area=2,838 sf 81.57% Impervious Runoff Depth=0.50"
Tc=6.0 min CN=91 Runoff=0.04 cfs 119 cf

Subcatchment W-A-07: W-A-07 Runoff Area=3,550 sf 97.15% Impervious Runoff Depth=0.89"
Tc=6.0 min CN=97 Runoff=0.08 cfs 265 cf

Subcatchment W-A-08: W-A-08 Runoff Area=7,547 sf 80.23% Impervious Runoff Depth=0.50"
Tc=6.0 min CN=91 Runoff=0.10 cfs 317 cf

Subcatchment W-A-09: W-A-09 Runoff Area=36,960 sf 59.69% Impervious Runoff Depth=0.22"
Tc=6.0 min CN=83 Runoff=0.17 cfs 678 cf

Subcatchment W-A-10: W-A-10 Runoff Area=15,963 sf 37.75% Impervious Runoff Depth=0.07"
Tc=6.0 min CN=75 Runoff=0.01 cfs 98 cf

Subcatchment W-A-11: W-A-11 Runoff Area=12,670 sf 30.21% Impervious Runoff Depth=0.04"
Tc=6.0 min CN=72 Runoff=0.00 cfs 44 cf

Subcatchment W-A-13: W-A-13 Runoff Area=4,003 sf 96.38% Impervious Runoff Depth=0.89"
Tc=6.0 min CN=97 Runoff=0.09 cfs 299 cf

Subcatchment W-A-14: W-A-14 Runoff Area=3,669 sf 93.27% Impervious Runoff Depth=0.81"
Tc=6.0 min CN=96 Runoff=0.08 cfs 249 cf

Subcatchment W-A-15: W-A-15 Runoff Area=5,303 sf 67.21% Impervious Runoff Depth=0.31"
Tc=6.0 min CN=86 Runoff=0.04 cfs 135 cf

Subcatchment W-A-17: W-A-17 Runoff Area=9,324 sf 51.51% Impervious Runoff Depth=0.15"
Tc=6.0 min CN=80 Runoff=0.02 cfs 119 cf

Subcatchment W-A-18: W-A-18 Runoff Area=7,541 sf 68.92% Impervious Runoff Depth=0.31"
Tc=6.0 min CN=86 Runoff=0.06 cfs 192 cf

Subcatchment W-A-19: W-A-19 Runoff Area=6,221 sf 70.71% Impervious Runoff Depth=0.34"
Tc=6.0 min CN=87 Runoff=0.05 cfs 176 cf

Subcatchment W-A-20: W-A-20 Runoff Area=5,191 sf 33.40% Impervious Runoff Depth=0.05"
Tc=6.0 min CN=73 Runoff=0.00 cfs 22 cf

Subcatchment W-B-01: W-B-01 Runoff Area=25,740 sf 89.98% Impervious Runoff Depth=0.67"
Tc=6.0 min CN=94 Runoff=0.47 cfs 1,442 cf

Subcatchment W-B-02: W-B-02 Runoff Area=5,845 sf 96.34% Impervious Runoff Depth=0.89"
Tc=6.0 min CN=97 Runoff=0.14 cfs 436 cf

Subcatchment W-B-03: W-B-03 Runoff Area=934 sf 100.00% Impervious Runoff Depth=0.99"
Tc=6.0 min CN=98 Runoff=0.02 cfs 77 cf

Subcatchment W-B-04: W-B-04 Runoff Area=26,304 sf 55.58% Impervious Runoff Depth=0.20"
Tc=6.0 min CN=82 Runoff=0.10 cfs 429 cf

Subcatchment W-B-05: W-B-05 Runoff Area=8,016 sf 48.75% Impervious Runoff Depth=0.13"
Tc=6.0 min CN=79 Runoff=0.01 cfs 90 cf

Subcatchment W-B-06: W-B-06 Runoff Area=45,556 sf 50.38% Impervious Runoff Depth=0.15"
Tc=6.0 min CN=80 Runoff=0.11 cfs 581 cf

Subcatchment W-C-01: W-C-01 Runoff Area=17,846 sf 86.77% Impervious Runoff Depth=0.61"
Tc=6.0 min CN=93 Runoff=0.29 cfs 909 cf

Subcatchment W-C-02: W-C-02 Runoff Area=5,168 sf 100.00% Impervious Runoff Depth=0.99"
Tc=6.0 min CN=98 Runoff=0.13 cfs 424 cf

Subcatchment W-C-03: W-C-03 Runoff Area=539 sf 30.98% Impervious Runoff Depth=0.04"
Tc=6.0 min CN=72 Runoff=0.00 cfs 2 cf

Subcatchment W-C-04: W-C-04 Runoff Area=20,838 sf 80.92% Impervious Runoff Depth=0.50"
Tc=6.0 min CN=91 Runoff=0.28 cfs 876 cf

Subcatchment W-C-05: W-C-05 Runoff Area=9,630 sf 59.82% Impervious Runoff Depth=0.22"
Tc=6.0 min CN=83 Runoff=0.04 cfs 177 cf

Subcatchment W-C-06: W-C-06 Runoff Area=1,145 sf 47.07% Impervious Runoff Depth=0.12"
Tc=6.0 min CN=78 Runoff=0.00 cfs 11 cf

Subcatchment W-C-07: W-C-07 Runoff Area=19,303 sf 83.90% Impervious Runoff Depth=0.56"
Tc=6.0 min CN=92 Runoff=0.29 cfs 893 cf

Reach DP1POST: DP1 POST Inflow=0.00 cfs 0 cf
Outflow=0.00 cfs 0 cf

Reach DP1PRE: DP1 PRE Inflow=0.00 cfs 43 cf
Outflow=0.00 cfs 43 cf

Pond 1P: CB-B-06 Peak Elev=591.24' Inflow=0.01 cfs 56 cf
15.0" Round Culvert n=0.012 L=57.3' S=0.0112 '/' Outflow=0.01 cfs 56 cf

Pond 3P: CB-A-13 Peak Elev=594.24' Inflow=0.21 cfs 682 cf
12.0" Round Culvert n=0.012 L=100.0' S=0.0100 '/' Outflow=0.21 cfs 682 cf

Pond ADS 1A: ADS 1A Peak Elev=590.57' Storage=646 cf Inflow=3.11 cfs 10,338 cf
Discarded=1.67 cfs 10,343 cf Primary=0.00 cfs 0 cf Outflow=1.67 cfs 10,343 cf

Pond ADS 1B: ADS 1B Peak Elev=585.03' Storage=97 cf Inflow=0.84 cfs 3,111 cf
Discarded=0.57 cfs 3,112 cf Primary=0.00 cfs 0 cf Outflow=0.57 cfs 3,112 cf

Pond ADS1C: ADS 1C Peak Elev=587.00' Storage=1,229 cf Inflow=1.03 cfs 3,292 cf
Discarded=0.43 cfs 4,540 cf Primary=0.00 cfs 0 cf Outflow=0.43 cfs 4,540 cf

Pond CB-A-01: CB-A-01 Peak Elev=592.46' Inflow=2.46 cfs 7,836 cf
30.0" Round Culvert n=0.012 L=11.4' S=0.0746 '/' Outflow=2.46 cfs 7,836 cf

Pond CB-A-02: CB-A-02 Peak Elev=594.27' Inflow=0.23 cfs 730 cf
15.0" Round Culvert n=0.012 L=140.4' S=0.0064 '/' Outflow=0.23 cfs 730 cf

Pond CB-A-03: CB-A-03 Peak Elev=594.68' Inflow=0.07 cfs 205 cf
15.0" Round Culvert n=0.012 L=100.0' S=0.0050 '/' Outflow=0.07 cfs 205 cf

Pond CB-A-04: CB-A-04 Peak Elev=594.98' Inflow=0.52 cfs 1,646 cf
18.0" Round Culvert n=0.012 L=159.6' S=0.0083 '/' Outflow=0.52 cfs 1,646 cf

Pond CB-A-05: CB-A-05 Peak Elev=595.48' Inflow=0.34 cfs 1,095 cf
15.0" Round Culvert n=0.012 L=100.0' S=0.0050 '/' Outflow=0.34 cfs 1,095 cf

Pond CB-A-06: CB-A-06 Peak Elev=596.13' Inflow=0.22 cfs 701 cf
15.0" Round Culvert n=0.012 L=100.0' S=0.0074 '/' Outflow=0.22 cfs 701 cf

Pond CB-A-07: CB-A-07 Peak Elev=596.44' Inflow=0.18 cfs 582 cf
15.0" Round Culvert n=0.012 L=61.9' S=0.0050 '/' Outflow=0.18 cfs 582 cf

Pond CB-A-08: CB-A-08 Peak Elev=596.68' Inflow=0.10 cfs 317 cf
15.0" Round Culvert n=0.012 L=57.9' S=0.0050 '/' Outflow=0.10 cfs 317 cf

Pond CB-A-09: CB-A-09 Peak Elev=593.43' Inflow=0.51 cfs 1,926 cf
24.0" Round Culvert n=0.012 L=11.4' S=0.1877 '/' Outflow=0.51 cfs 1,926 cf

Pond CB-A-10: CB-A-10 Peak Elev=594.75' Inflow=0.01 cfs 142 cf
15.0" Round Culvert n=0.012 L=140.4' S=0.0091 '/' Outflow=0.01 cfs 142 cf

Pond CB-A-11: CB-A-11 Peak Elev=595.23' Inflow=0.00 cfs 44 cf
12.0" Round Culvert n=0.012 L=100.0' S=0.0050 '/' Outflow=0.00 cfs 44 cf

Pond CB-A-12: CB-A-12 Peak Elev=593.17' Inflow=0.14 cfs 576 cf
15.0" Round Culvert n=0.012 L=159.6' S=0.0125 '/' Outflow=0.14 cfs 576 cf

Pond CB-A-13: CB-A-12 Peak Elev=593.56' Inflow=0.35 cfs 1,106 cf
12.0" Round Culvert n=0.012 L=159.6' S=0.0102 '/' Outflow=0.35 cfs 1,106 cf

Pond CB-A-14: CB-A-14 Peak Elev=594.83' Inflow=0.12 cfs 384 cf
12.0" Round Culvert n=0.012 L=65.8' S=0.0100 '/' Outflow=0.12 cfs 384 cf

Pond CB-A-15: CB-A-15 Peak Elev=596.22' Inflow=0.04 cfs 135 cf
12.0" Round Culvert n=0.012 L=84.0' S=0.0175 '/' Outflow=0.04 cfs 135 cf

Pond CB-A-16: CB-A-16 Peak Elev=594.29' Inflow=0.01 cfs 67 cf
12.0" Round Culvert n=0.012 L=77.0' S=0.0049 '/' Outflow=0.01 cfs 67 cf

Pond CB-A-17: CB-A-17 Peak Elev=594.04' Inflow=0.14 cfs 576 cf
15.0" Round Culvert n=0.012 L=62.9' S=0.0051 '/' Outflow=0.14 cfs 576 cf

Pond CB-A-18: CB-A-18 Peak Elev=596.16' Inflow=0.11 cfs 390 cf
12.0" Round Culvert n=0.012 L=99.5' S=0.0101 '/' Outflow=0.11 cfs 390 cf

Pond CB-A-19: CB-A-19 Peak Elev=596.45' Inflow=0.05 cfs 198 cf
12.0" Round Culvert n=0.012 L=65.1' S=0.0049 '/' Outflow=0.05 cfs 198 cf

Pond CB-A-20: CB-A-20 Peak Elev=598.60' Inflow=0.00 cfs 22 cf
12.0" Round Culvert n=0.012 L=85.2' S=0.0230 '/' Outflow=0.00 cfs 22 cf

Pond CB-B-01: CB-B-01 Peak Elev=586.45' Inflow=0.63 cfs 1,955 cf
24.0" Round Culvert n=0.012 L=7.1' S=0.0141 '/' Outflow=0.63 cfs 1,955 cf

Pond CB-B-02: CB-B-02 Peak Elev=590.79' Inflow=0.14 cfs 436 cf
12.0" Round Culvert n=0.012 L=175.5' S=0.0200 '/' Outflow=0.14 cfs 436 cf

Pond CB-B-03: CB-B-03 Peak Elev=594.01' Inflow=0.02 cfs 77 cf
12.0" Round Culvert n=0.012 L=136.8' S=0.0500 '/' Outflow=0.02 cfs 77 cf

Pond CB-B-04: CB-B-04 Peak Elev=587.63' Inflow=0.23 cfs 1,157 cf
24.0" Round Culvert n=0.012 L=6.9' S=0.0145 '/' Outflow=0.23 cfs 1,157 cf

Pond CB-B-05: CB-B-05 Peak Elev=590.12' Inflow=0.03 cfs 146 cf
21.0" Round Culvert n=0.012 L=118.2' S=0.0201 '/' Outflow=0.03 cfs 146 cf

Pond CB-B-07: CB-B-07 Peak Elev=591.71' Inflow=0.11 cfs 581 cf
21.0" Round Culvert n=0.012 L=92.8' S=0.0447 '/' Outflow=0.11 cfs 581 cf

Pond CB-C-01: CB-C-01 Peak Elev=588.97' Inflow=0.29 cfs 909 cf
15.0" Round Culvert n=0.013 L=16.9' S=0.0047 '/' Outflow=0.29 cfs 909 cf

Pond CB-C-02: CB-C-02 Peak Elev=592.33' Inflow=0.13 cfs 426 cf
15.0" Round Culvert n=0.013 L=23.9' S=0.0050 '/' Outflow=0.13 cfs 426 cf

Pond CB-C-03: CB-C-03 Peak Elev=594.89' Inflow=0.00 cfs 2 cf
15.0" Round Culvert n=0.012 L=116.0' S=0.0200 '/' Outflow=0.00 cfs 2 cf

Pond CB-C-04: CB-C-04 Peak Elev=590.75' Inflow=0.61 cfs 1,957 cf
21.0" Round Culvert n=0.013 L=37.7' S=0.0111 '/' Outflow=0.61 cfs 1,957 cf

Pond CB-C-05: CB-C-05 Peak Elev=591.98' Inflow=0.33 cfs 1,081 cf
18.0" Round Culvert n=0.013 L=217.7' S=0.0050 '/' Outflow=0.33 cfs 1,081 cf

Pond CB-C-06: CB-C-06 Peak Elev=592.88' Inflow=0.29 cfs 905 cf
15.0" Round Culvert n=0.013 L=179.7' S=0.0050 '/' Outflow=0.29 cfs 905 cf

Pond CB-C-07: CB-C-07 Peak Elev=593.16' Inflow=0.29 cfs 905 cf
15.0" Round Culvert n=0.013 L=54.4' S=0.0050 '/' Outflow=0.29 cfs 905 cf

Pond CB-C-08: CB-C-08 Peak Elev=593.68' Inflow=0.29 cfs 893 cf
15.0" Round Culvert n=0.013 L=103.0' S=0.0050 '/' Outflow=0.29 cfs 893 cf

Total Runoff Area = 885,226 sf Runoff Volume = 16,785 cf Average Runoff Depth = 0.23"
60.11% Pervious = 532,149 sf 39.89% Impervious = 353,077 sf

Summary for Subcatchment 1APRE: WS #1A PRE

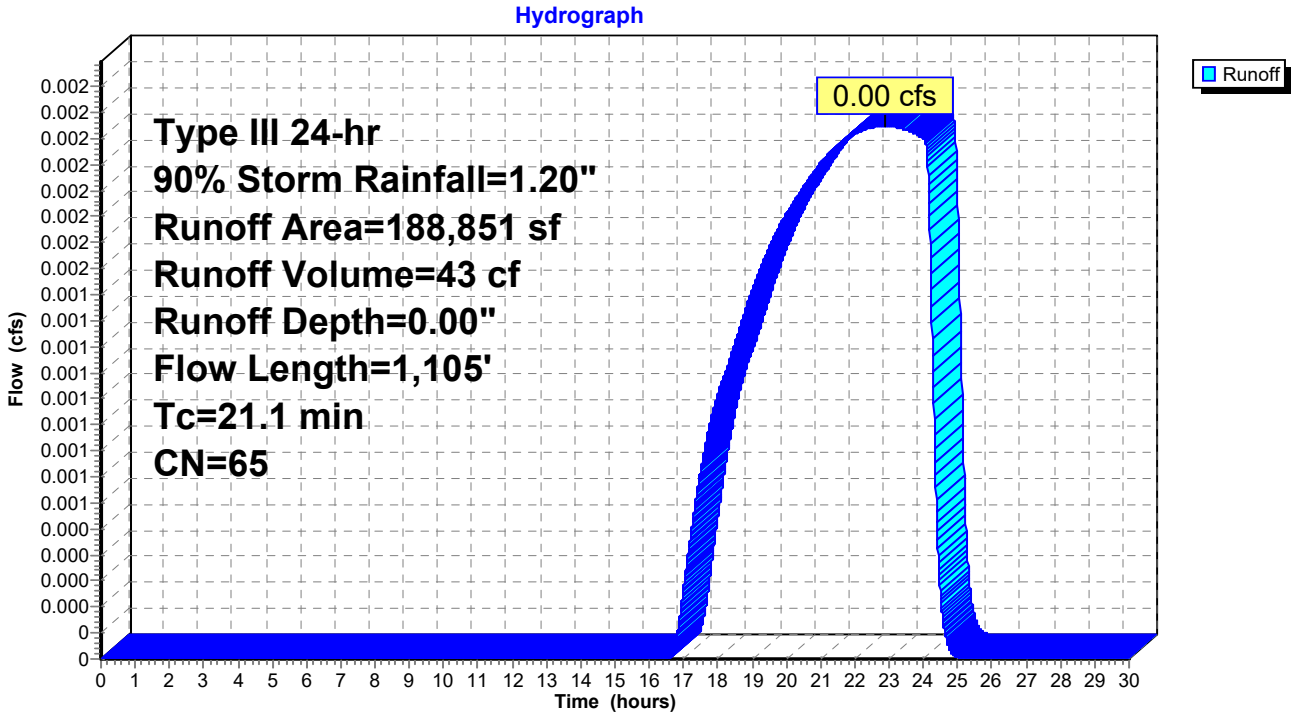
Runoff = 0.00 cfs @ 22.86 hrs, Volume= 43 cf, Depth= 0.00"
Routed to Reach DP1PRE : DP1 PRE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
146,641	55	Woods, Good, HSG B
37,510	98	Paved parking, HSG C
4,700	98	Water Surface, HSG C
188,851	65	Weighted Average
146,641		77.65% Pervious Area
42,210		22.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.5	100	0.0900	0.16		**Sheet Flow, SHEET FLOW BY 208 & MVR** Woods: Light underbrush n= 0.400 P2= 4.00"
4.3	545	0.0200	2.12		**Shallow Concentrated Flow, SHALLOW FLOW TO LAST OFFICE** Grassed Waterway Kv= 15.0 fps
6.3	460	0.0600	1.22		**Shallow Concentrated Flow, SHALLOW FLOW OFFICE TO DP1A** Woodland Kv= 5.0 fps
21.1	1,105	Total			

Subcatchment 1APRE: WS #1A PRE



Summary for Subcatchment 1BPRE: WS #1B PRE

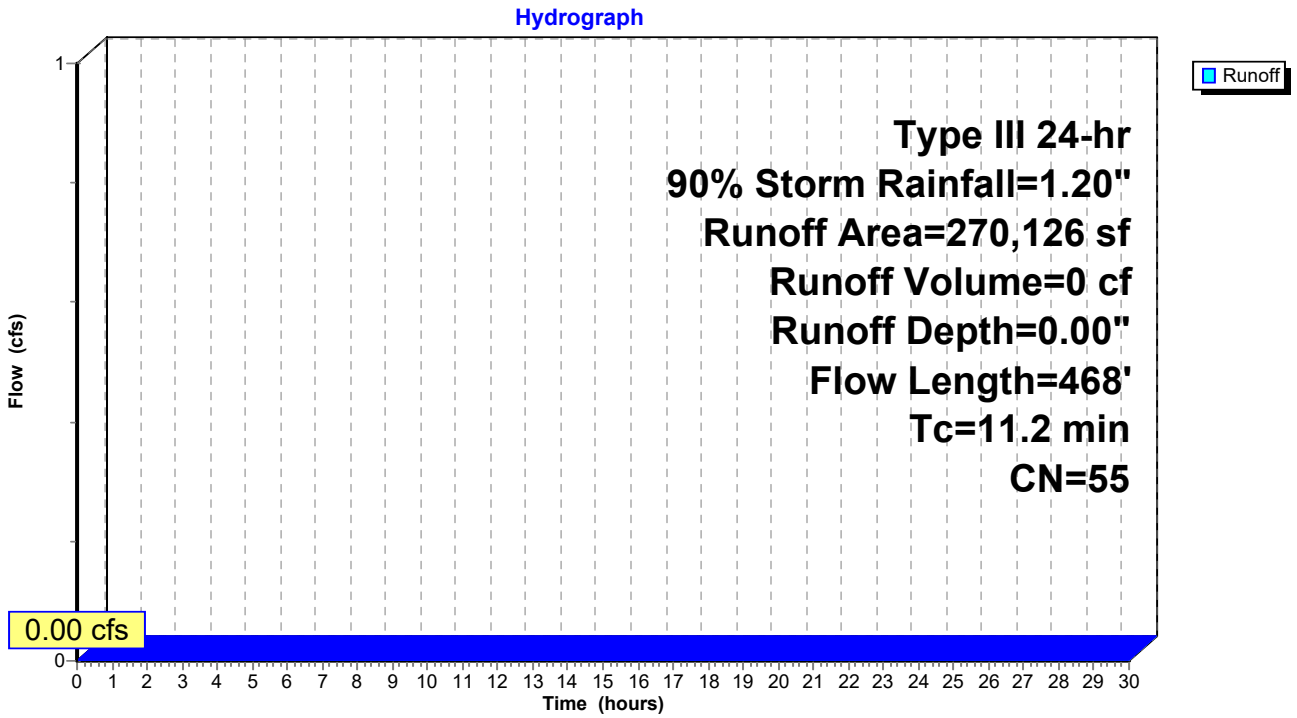
Runoff = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Depth= 0.00"
Routed to Reach DP1PRE : DP1 PRE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
270,126	55	Woods, Good, HSG B
270,126		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	100	0.2500	0.24		**Sheet Flow, SHEET FLOW BY 208** Woods: Light underbrush n= 0.400 P2= 4.00"
4.2	368	0.0870	1.47		**Shallow Concentrated Flow, SHALLOW FLOW TO DP1B** Woodland Kv= 5.0 fps
11.2	468	Total			

Subcatchment 1BPRE: WS #1B PRE



Summary for Subcatchment 1S: W-A-12

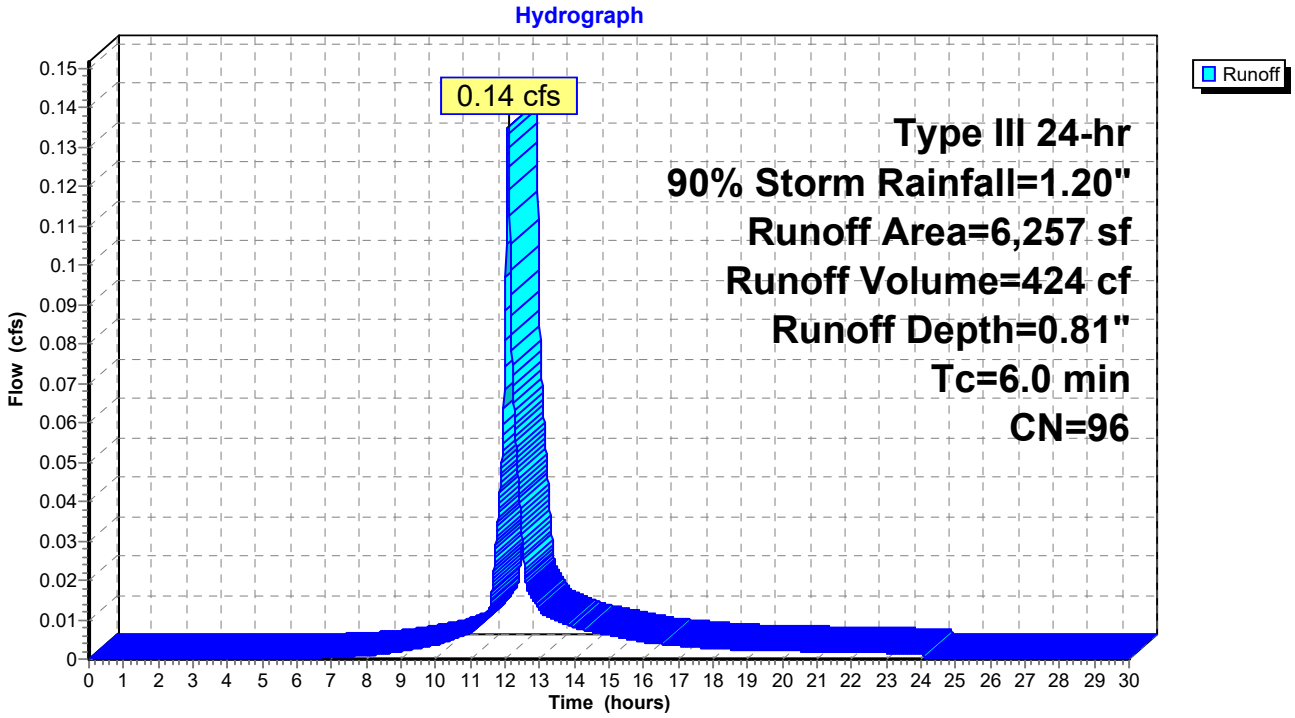
Runoff = 0.14 cfs @ 12.09 hrs, Volume= 424 cf, Depth= 0.81"
Routed to Pond CB-A-13 : CB-A-12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
420	61	>75% Grass cover, Good, HSG B
5,837	98	Paved parking, HSG B
6,257	96	Weighted Average
420		6.71% Pervious Area
5,837		93.29% Impervious Area

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

Subcatchment 1S: W-A-12



Summary for Subcatchment 2S: W-A-16

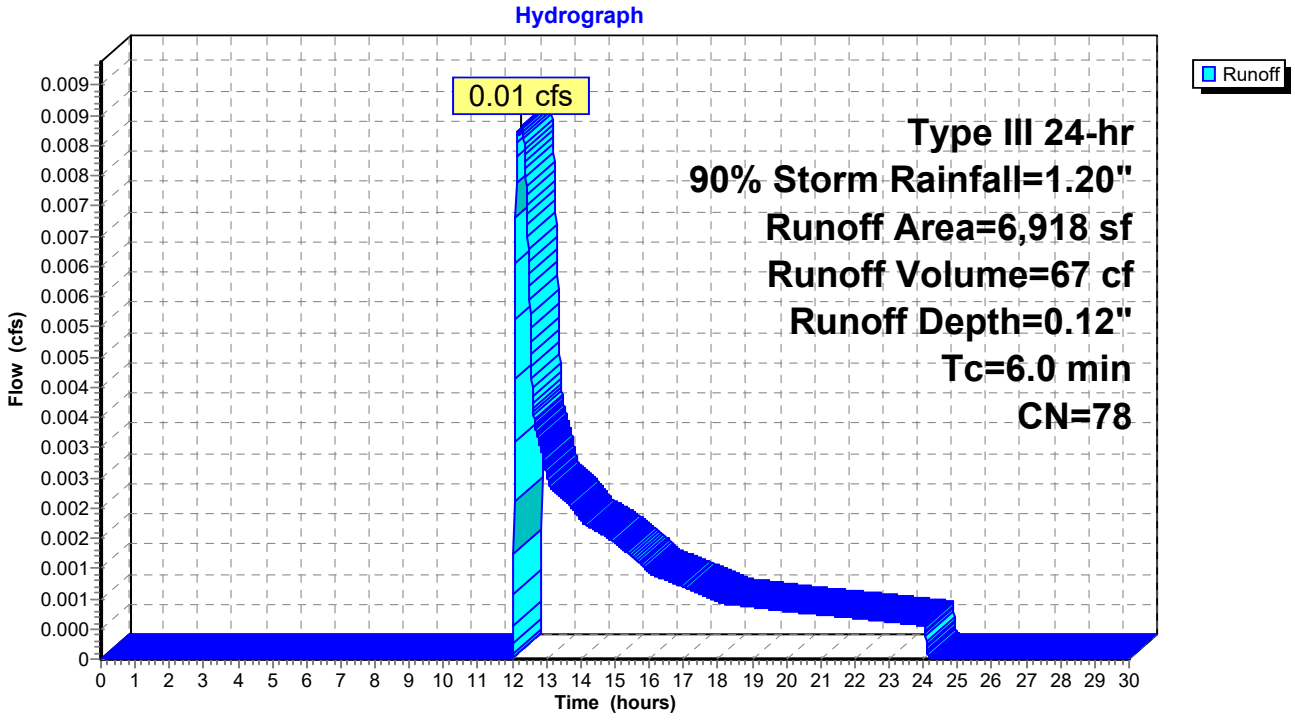
Runoff = 0.01 cfs @ 12.28 hrs, Volume= 67 cf, Depth= 0.12"
Routed to Pond CB-A-16 : CB-A-16

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
3,733	61	>75% Grass cover, Good, HSG B
3,185	98	Paved parking, HSG B
6,918	78	Weighted Average
3,733		53.96% Pervious Area
3,185		46.04% Impervious Area

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

Subcatchment 2S: W-A-16



Summary for Subcatchment CB-B-06: W-B-06

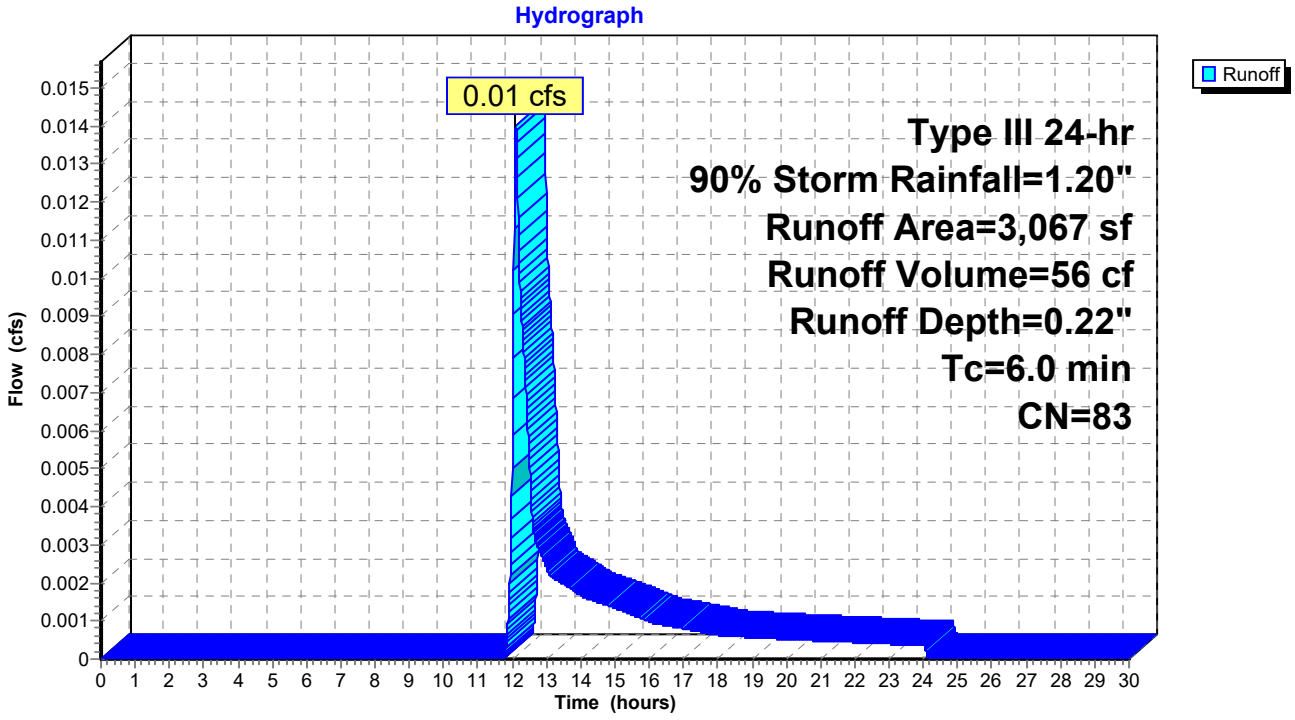
Runoff = 0.01 cfs @ 12.11 hrs, Volume= 56 cf, Depth= 0.22"
Routed to Pond 1P : CB-B-06

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
1,258	61	>75% Grass cover, Good, HSG B
1,809	98	Paved parking, HSG B
3,067	83	Weighted Average
1,258		41.02% Pervious Area
1,809		58.98% Impervious Area

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

Subcatchment CB-B-06: W-B-06



Summary for Subcatchment W-A-01: W-A-01

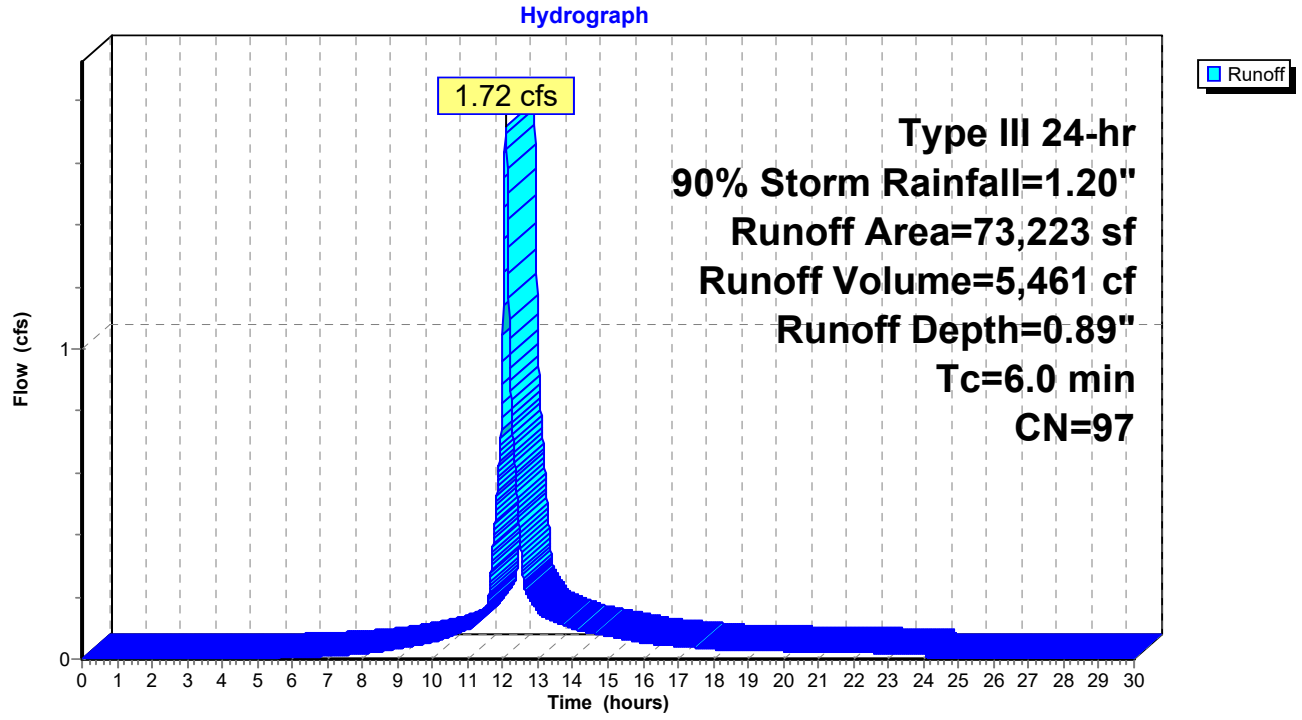
Runoff = 1.72 cfs @ 12.09 hrs, Volume= 5,461 cf, Depth= 0.89"
Routed to Pond CB-A-01 : CB-A-01

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
994	61	>75% Grass cover, Good, HSG B
72,229	98	Paved parking, HSG B
73,223	97	Weighted Average
994		1.36% Pervious Area
72,229		98.64% Impervious Area

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

Subcatchment W-A-01: W-A-01



Summary for Subcatchment W-A-02: W-A-02

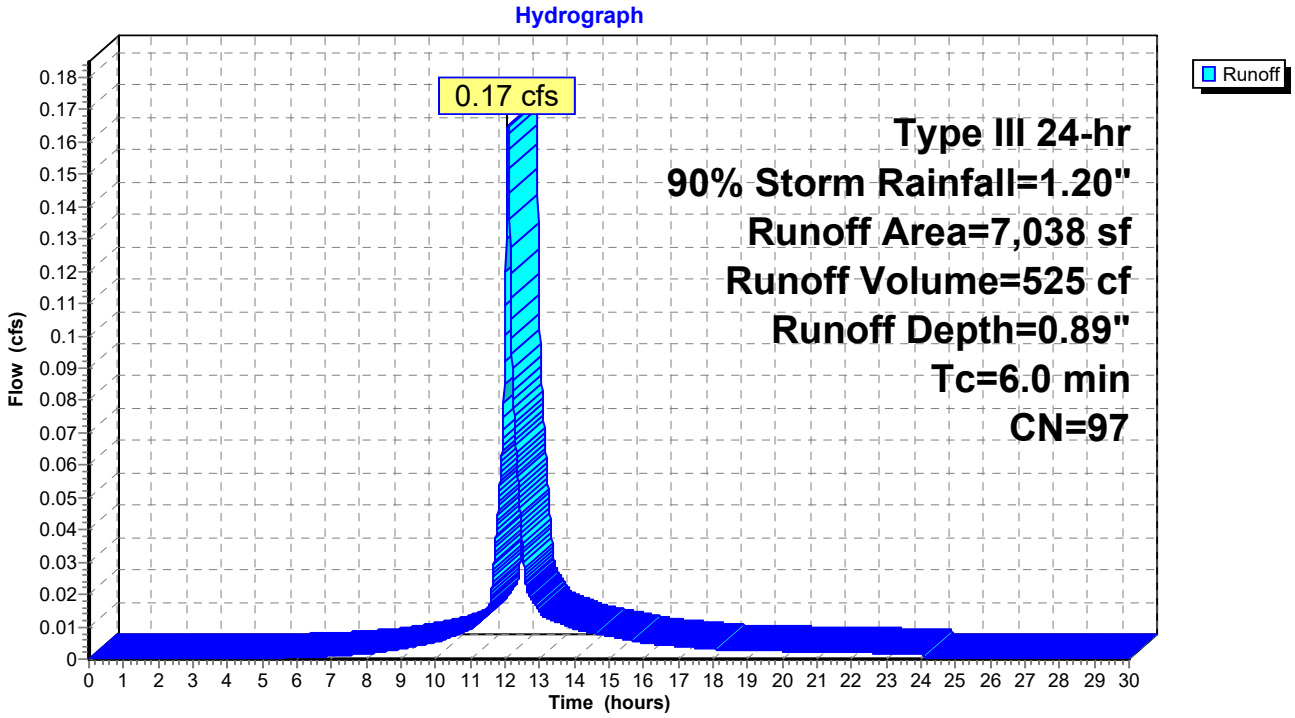
Runoff = 0.17 cfs @ 12.09 hrs, Volume= 525 cf, Depth= 0.89"
Routed to Pond CB-A-02 : CB-A-02

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
137	61	>75% Grass cover, Good, HSG B
6,901	98	Paved parking, HSG B
7,038	97	Weighted Average
137		1.95% Pervious Area
6,901		98.05% Impervious Area

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

Subcatchment W-A-02: W-A-02



Summary for Subcatchment W-A-03: W-A-03

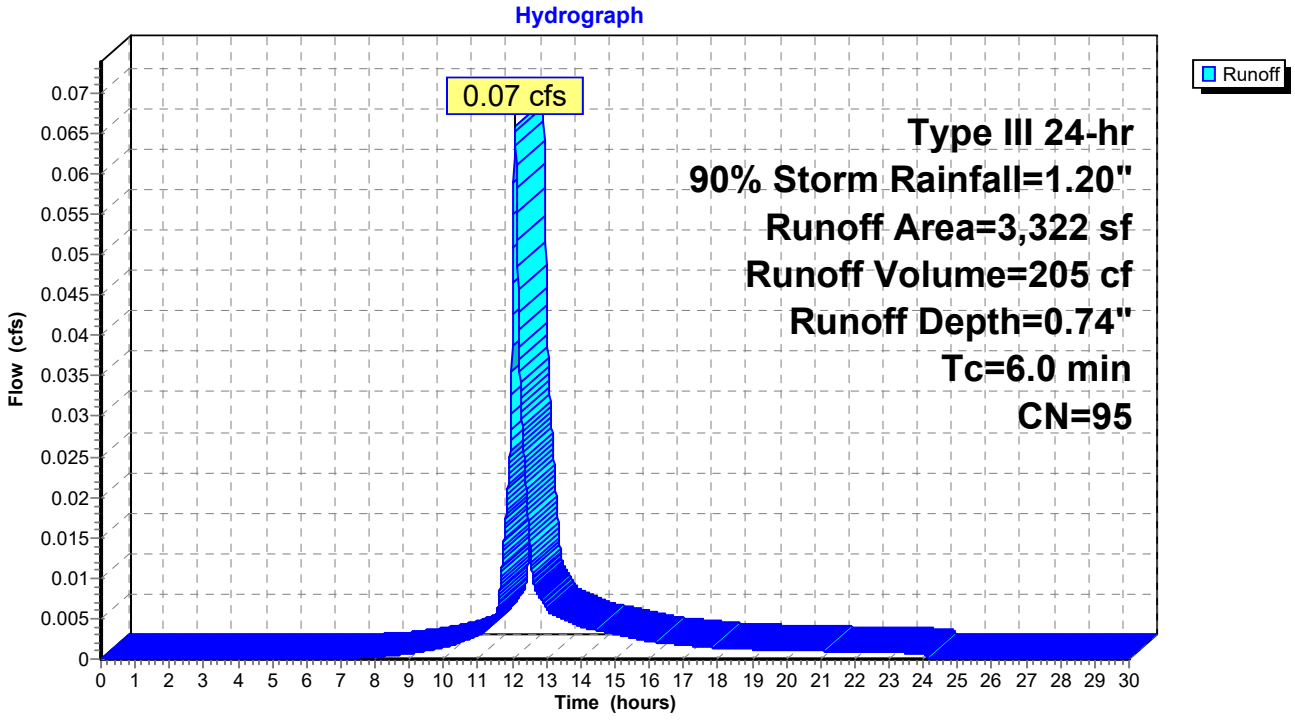
Runoff = 0.07 cfs @ 12.09 hrs, Volume= 205 cf, Depth= 0.74"
Routed to Pond CB-A-03 : CB-A-03

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
243	61	>75% Grass cover, Good, HSG B
3,079	98	Paved parking, HSG A
3,322	95	Weighted Average
243		7.31% Pervious Area
3,079		92.69% Impervious Area

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

Subcatchment W-A-03: W-A-03



Summary for Subcatchment W-A-04: W-A-04

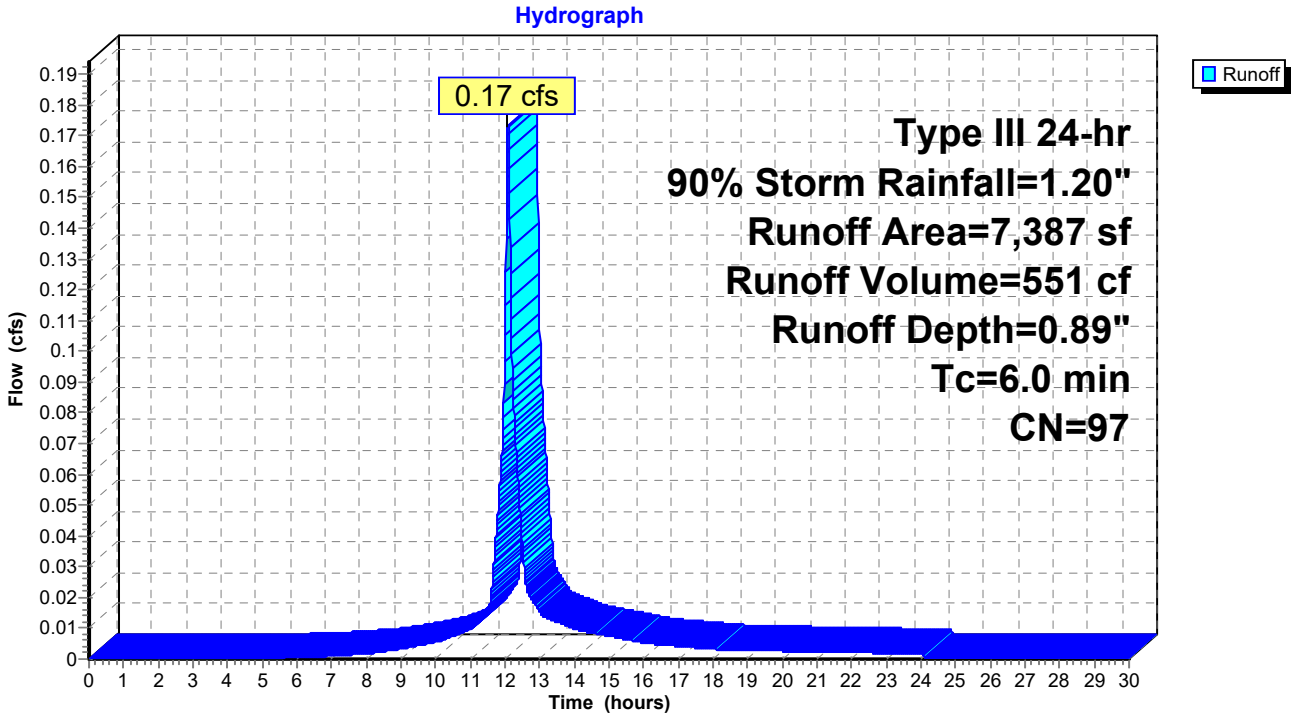
Runoff = 0.17 cfs @ 12.09 hrs, Volume= 551 cf, Depth= 0.89"
Routed to Pond CB-A-04 : CB-A-04

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
203	61	>75% Grass cover, Good, HSG B
7,184	98	Paved parking, HSG B
7,387	97	Weighted Average
203		2.75% Pervious Area
7,184		97.25% Impervious Area

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

Subcatchment W-A-04: W-A-04



Summary for Subcatchment W-A-05: W-A-05

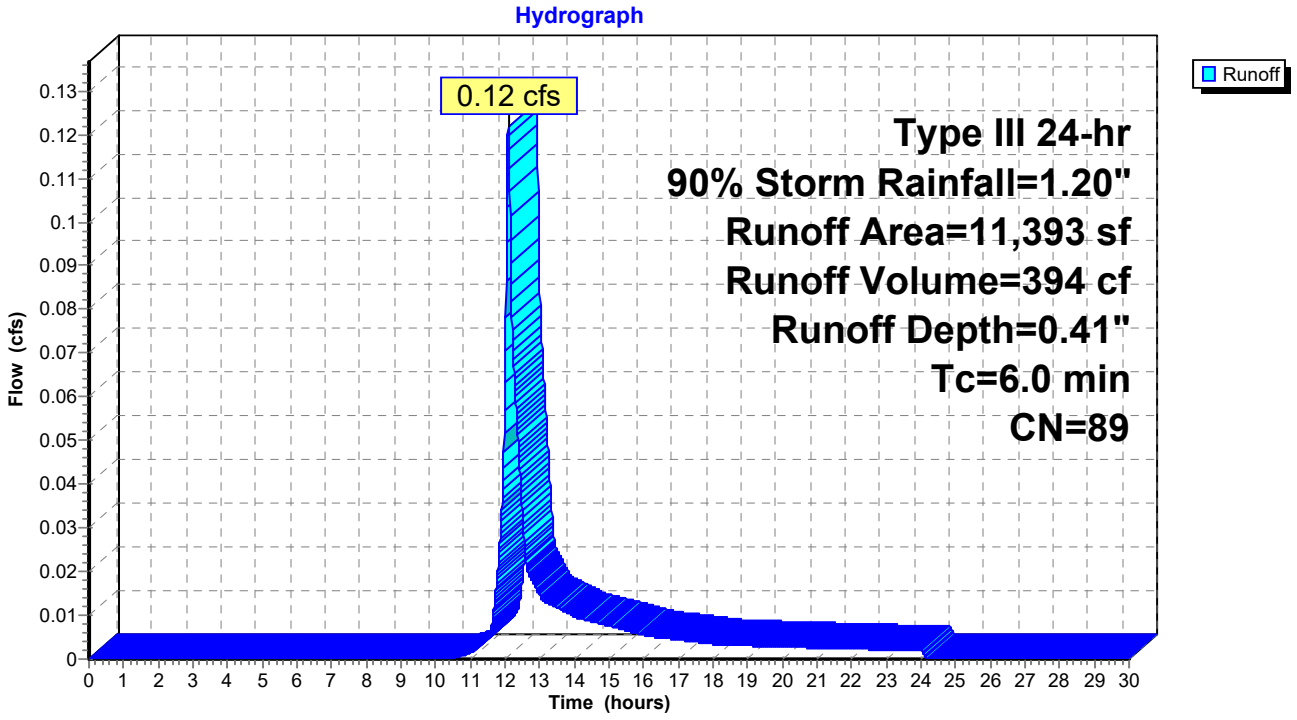
Runoff = 0.12 cfs @ 12.09 hrs, Volume= 394 cf, Depth= 0.41"
Routed to Pond CB-A-05 : CB-A-05

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
2,846	61	>75% Grass cover, Good, HSG B
8,547	98	Paved parking, HSG B
11,393	89	Weighted Average
2,846		24.98% Pervious Area
8,547		75.02% Impervious Area

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

Subcatchment W-A-05: W-A-05



Summary for Subcatchment W-A-06: W-A-06

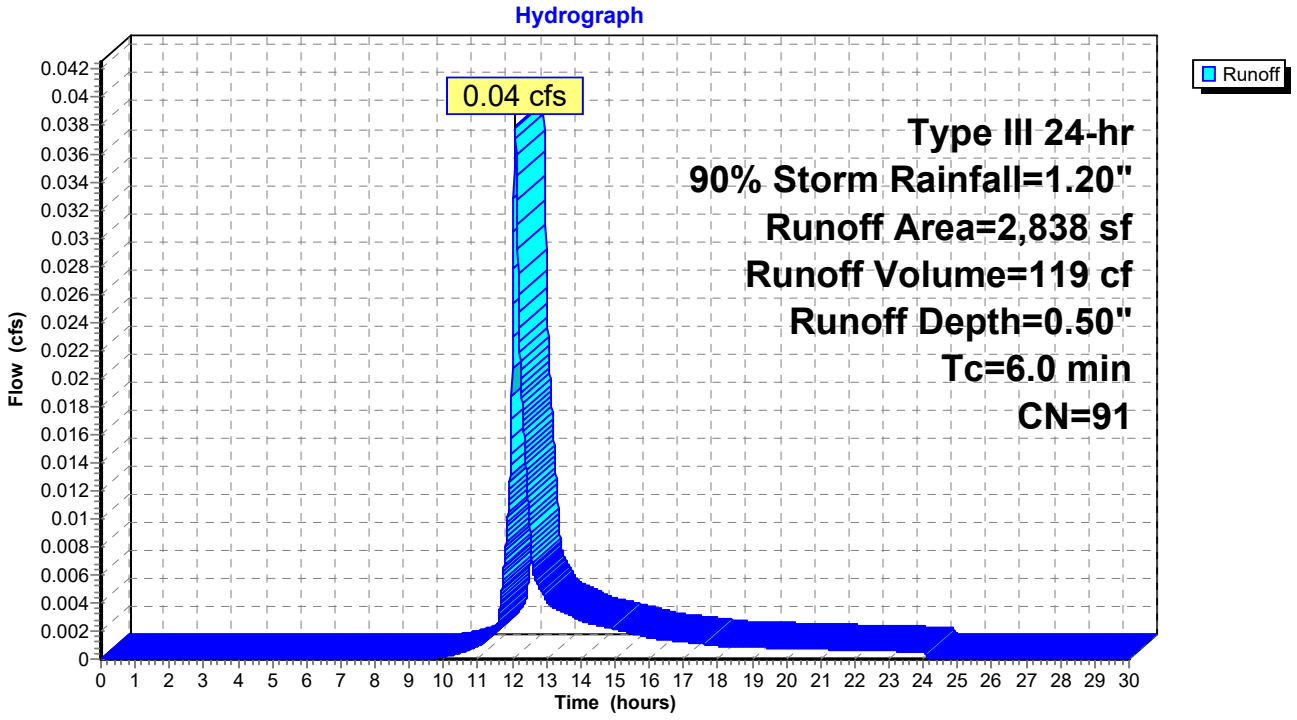
Runoff = 0.04 cfs @ 12.09 hrs, Volume= 119 cf, Depth= 0.50"
Routed to Pond CB-A-06 : CB-A-06

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
523	61	>75% Grass cover, Good, HSG B
2,315	98	Paved parking, HSG B
2,838	91	Weighted Average
523		18.43% Pervious Area
2,315		81.57% Impervious Area

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

Subcatchment W-A-06: W-A-06



Summary for Subcatchment W-A-07: W-A-07

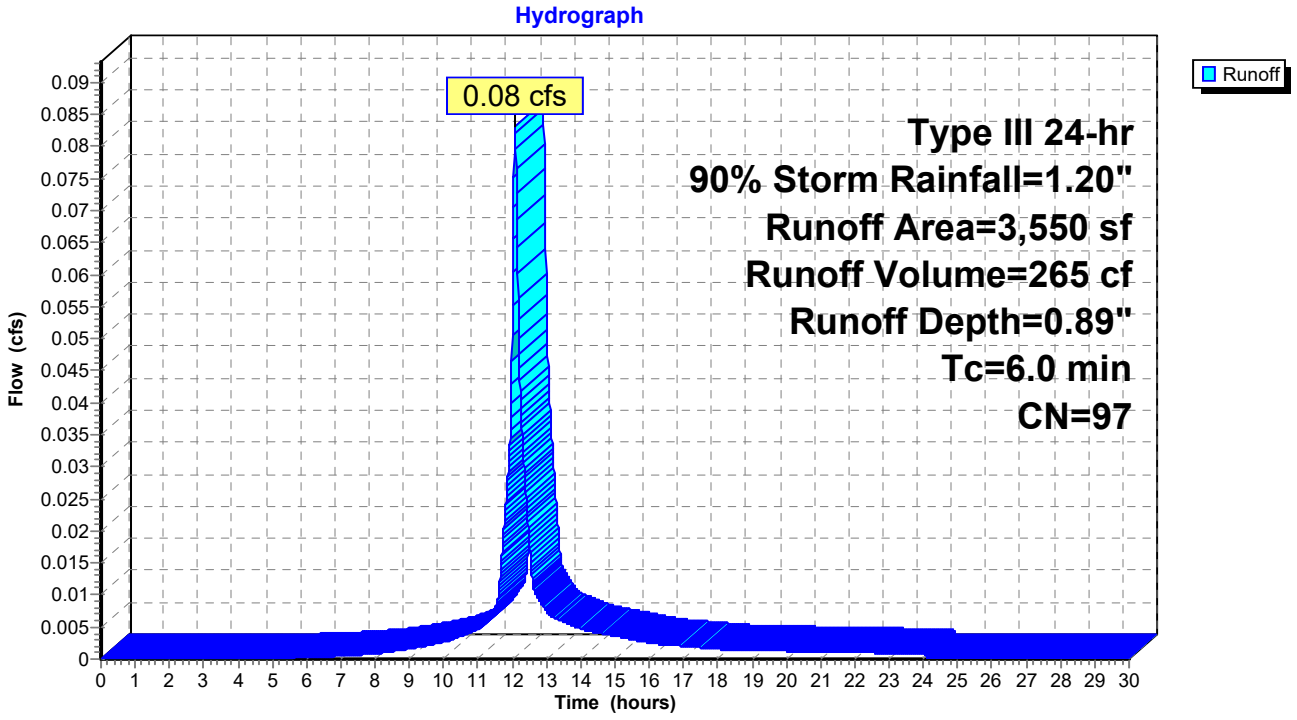
Runoff = 0.08 cfs @ 12.09 hrs, Volume= 265 cf, Depth= 0.89"
Routed to Pond CB-A-07 : CB-A-07

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
101	61	>75% Grass cover, Good, HSG B
3,449	98	Paved parking, HSG B
3,550	97	Weighted Average
101		2.85% Pervious Area
3,449		97.15% Impervious Area

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

Subcatchment W-A-07: W-A-07



Summary for Subcatchment W-A-08: W-A-08

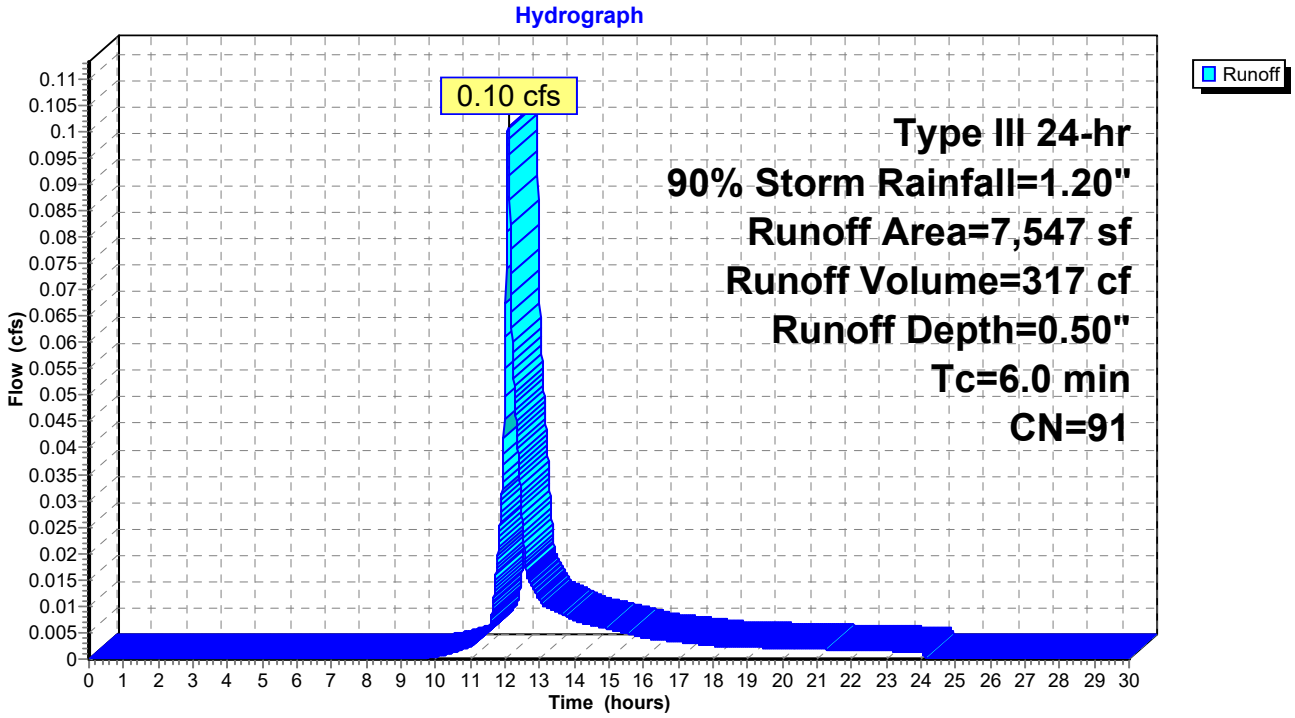
Runoff = 0.10 cfs @ 12.09 hrs, Volume= 317 cf, Depth= 0.50"
Routed to Pond CB-A-08 : CB-A-08

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
1,492	61	>75% Grass cover, Good, HSG B
6,055	98	Paved parking, HSG B
7,547	91	Weighted Average
1,492		19.77% Pervious Area
6,055		80.23% Impervious Area

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

Subcatchment W-A-08: W-A-08



Summary for Subcatchment W-A-09: W-A-09

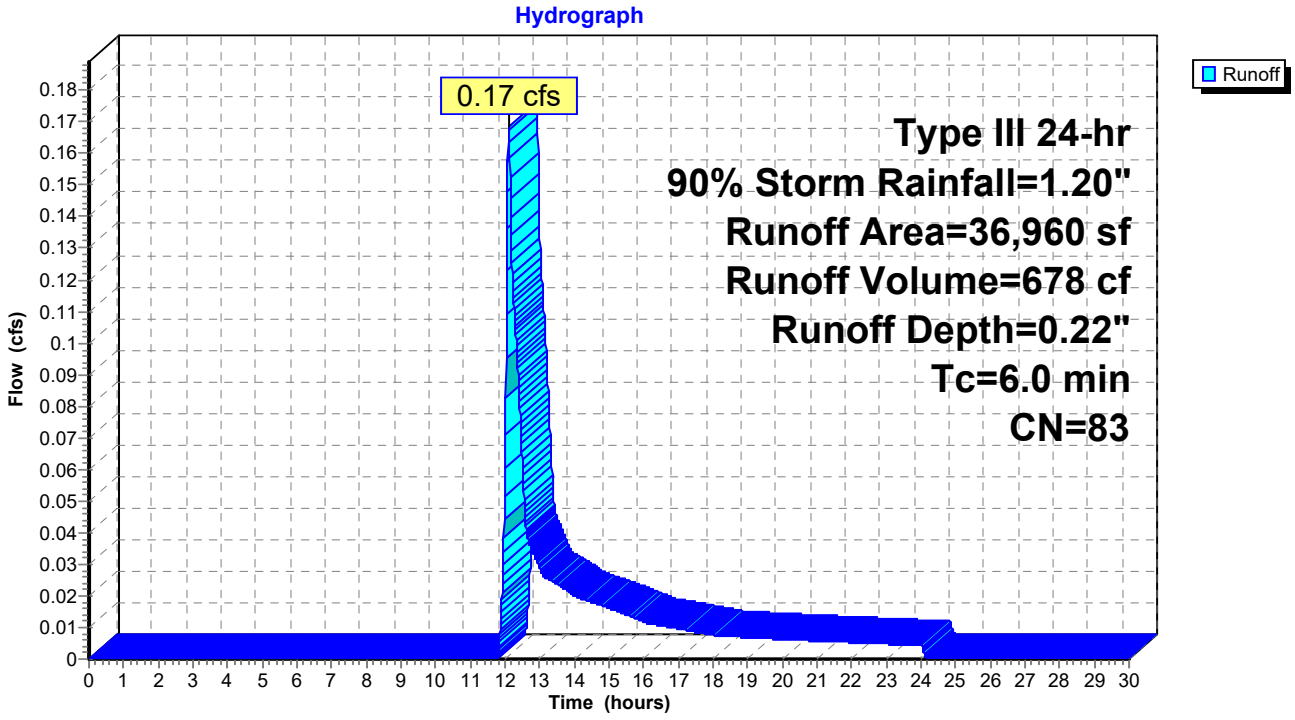
Runoff = 0.17 cfs @ 12.11 hrs, Volume= 678 cf, Depth= 0.22"
Routed to Pond CB-A-09 : CB-A-09

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
14,898	61	>75% Grass cover, Good, HSG B
22,062	98	Paved parking, HSG B
36,960	83	Weighted Average
14,898		40.31% Pervious Area
22,062		59.69% Impervious Area

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

Subcatchment W-A-09: W-A-09



Summary for Subcatchment W-A-10: W-A-10

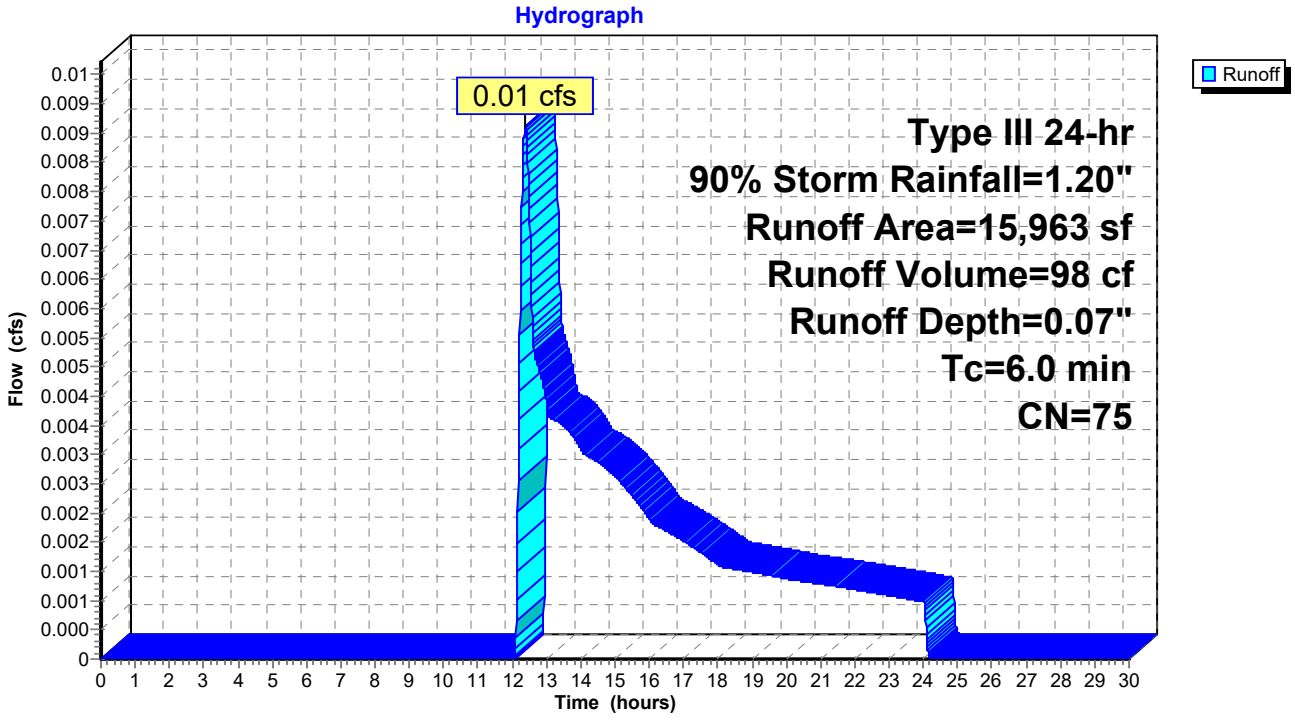
Runoff = 0.01 cfs @ 12.38 hrs, Volume= 98 cf, Depth= 0.07"
Routed to Pond CB-A-10 : CB-A-10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
9,937	61	>75% Grass cover, Good, HSG B
6,026	98	Paved parking, HSG B
15,963	75	Weighted Average
9,937		62.25% Pervious Area
6,026		37.75% Impervious Area

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

Subcatchment W-A-10: W-A-10



Summary for Subcatchment W-A-11: W-A-11

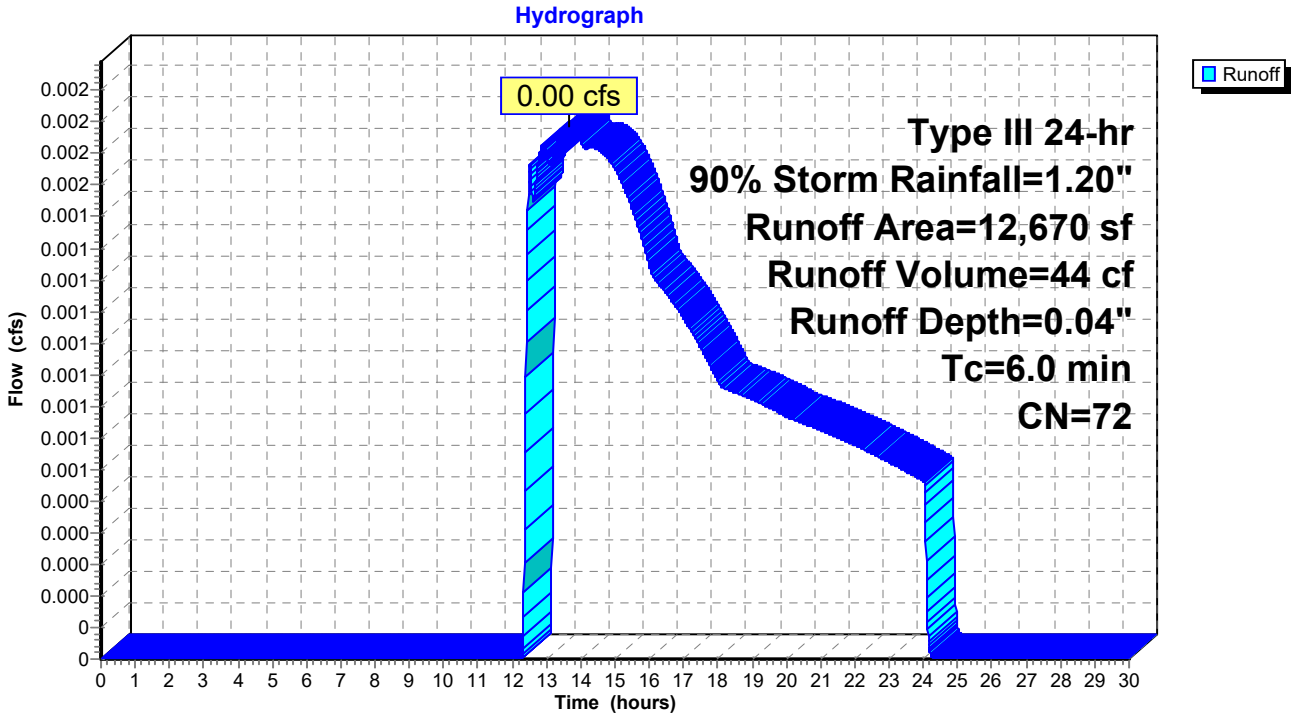
Runoff = 0.00 cfs @ 13.66 hrs, Volume= 44 cf, Depth= 0.04"
Routed to Pond CB-A-11 : CB-A-11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
8,843	61	>75% Grass cover, Good, HSG B
3,827	98	Paved parking, HSG A
12,670	72	Weighted Average
8,843		69.79% Pervious Area
3,827		30.21% Impervious Area

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

Subcatchment W-A-11: W-A-11



Summary for Subcatchment W-A-13: W-A-13

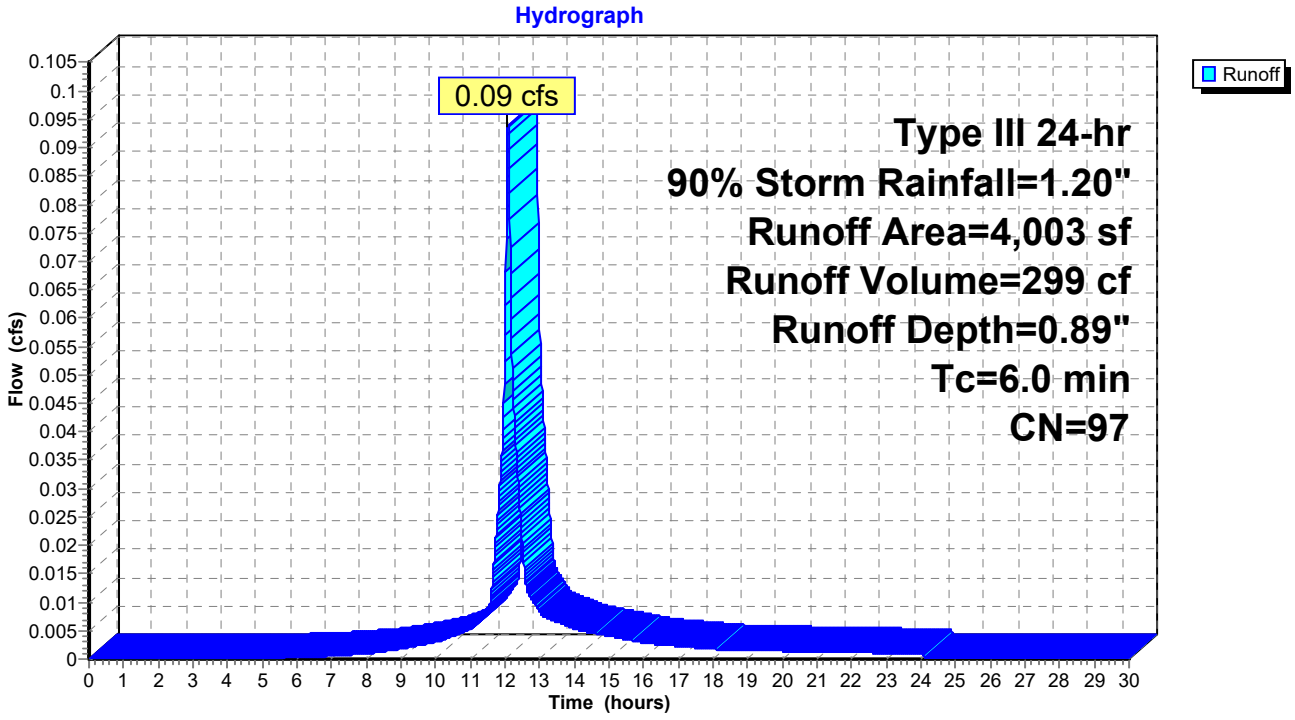
Runoff = 0.09 cfs @ 12.09 hrs, Volume= 299 cf, Depth= 0.89"
Routed to Pond 3P : CB-A-13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
145	61	>75% Grass cover, Good, HSG B
3,858	98	Paved parking, HSG B
4,003	97	Weighted Average
145		3.62% Pervious Area
3,858		96.38% Impervious Area

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

Subcatchment W-A-13: W-A-13



Summary for Subcatchment W-A-14: W-A-14

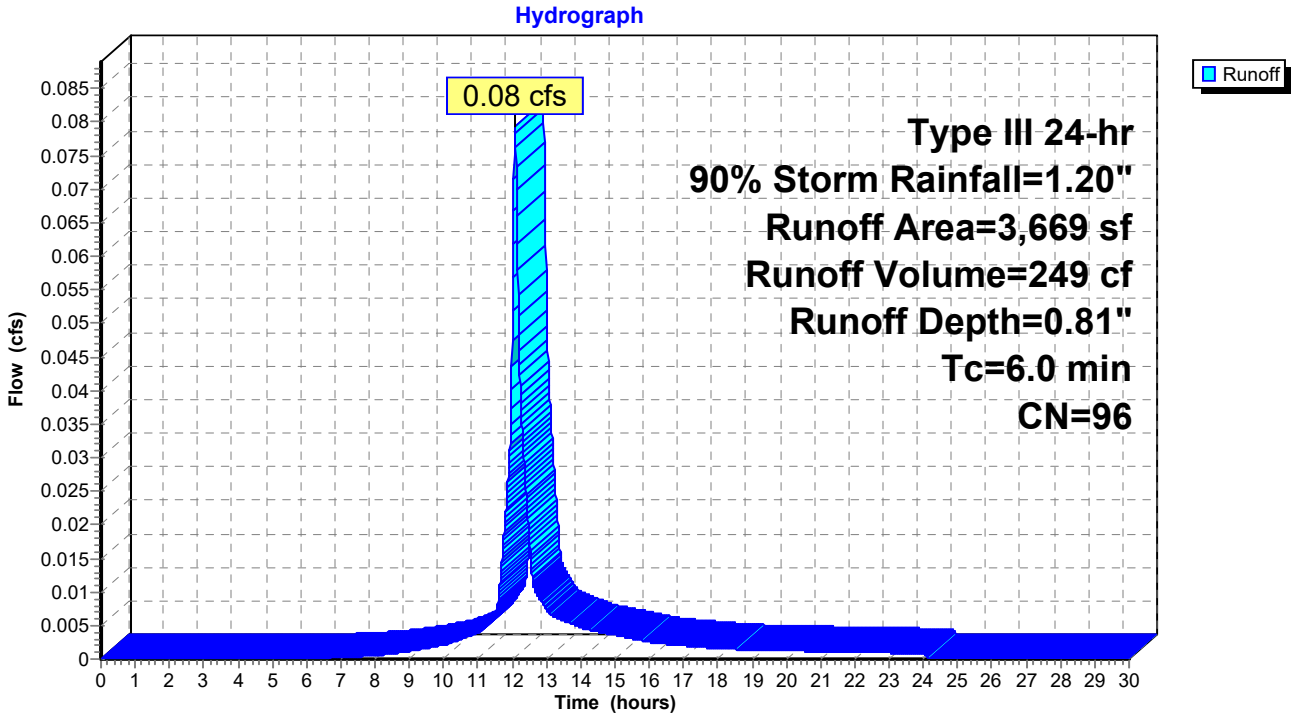
Runoff = 0.08 cfs @ 12.09 hrs, Volume= 249 cf, Depth= 0.81"
Routed to Pond CB-A-14 : CB-A-14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
247	61	>75% Grass cover, Good, HSG B
3,422	98	Paved parking, HSG B
3,669	96	Weighted Average
247		6.73% Pervious Area
3,422		93.27% Impervious Area

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

Subcatchment W-A-14: W-A-14



Summary for Subcatchment W-A-15: W-A-15

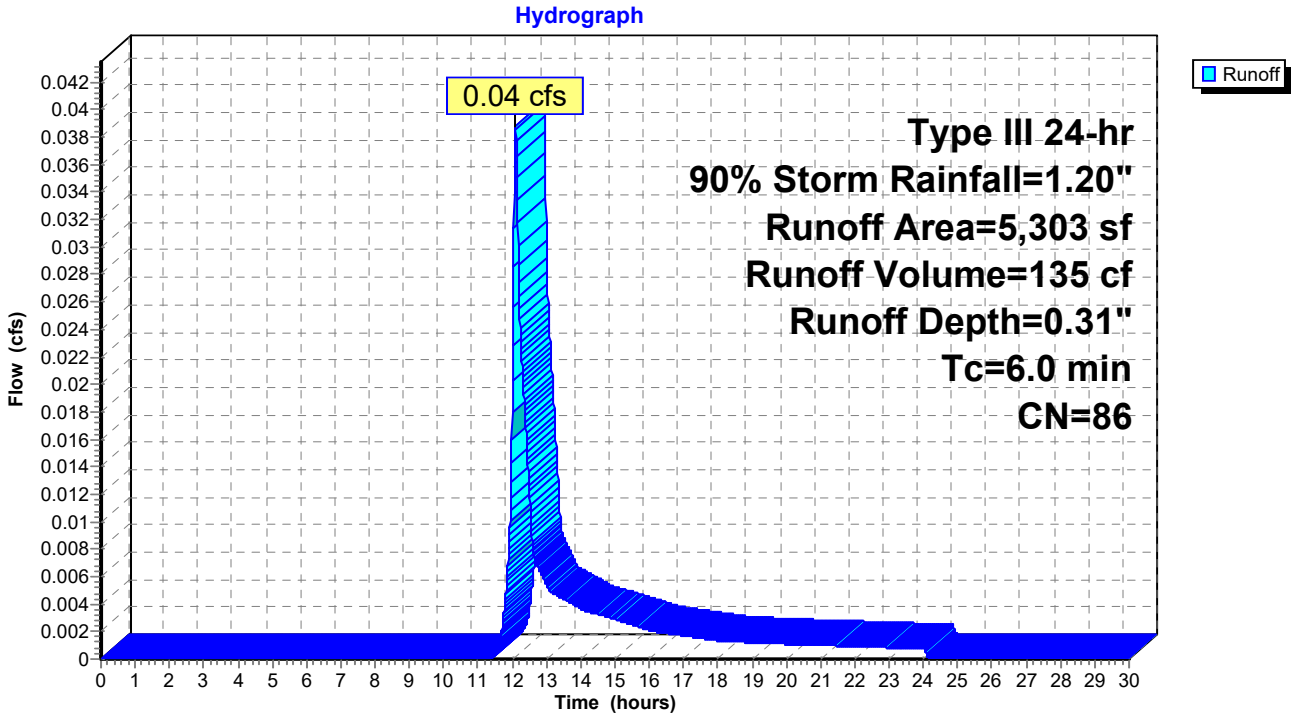
Runoff = 0.04 cfs @ 12.10 hrs, Volume= 135 cf, Depth= 0.31"
Routed to Pond CB-A-15 : CB-A-15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
1,739	61	>75% Grass cover, Good, HSG B
3,564	98	Paved parking, HSG B
5,303	86	Weighted Average
1,739		32.79% Pervious Area
3,564		67.21% Impervious Area

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

Subcatchment W-A-15: W-A-15



Summary for Subcatchment W-A-17: W-A-17

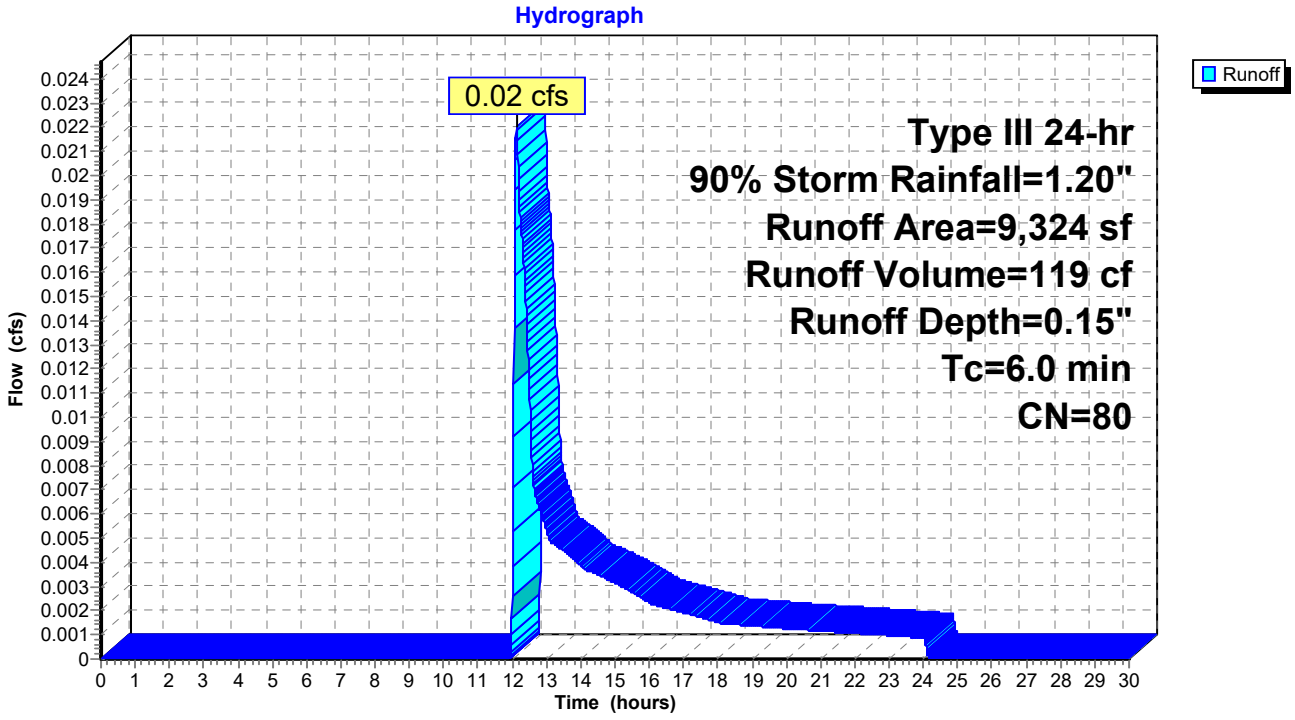
Runoff = 0.02 cfs @ 12.13 hrs, Volume= 119 cf, Depth= 0.15"
Routed to Pond CB-A-17 : CB-A-17

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
4,521	61	>75% Grass cover, Good, HSG B
4,803	98	Paved parking, HSG B
9,324	80	Weighted Average
4,521		48.49% Pervious Area
4,803		51.51% Impervious Area

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

Subcatchment W-A-17: W-A-17



Summary for Subcatchment W-A-18: W-A-18

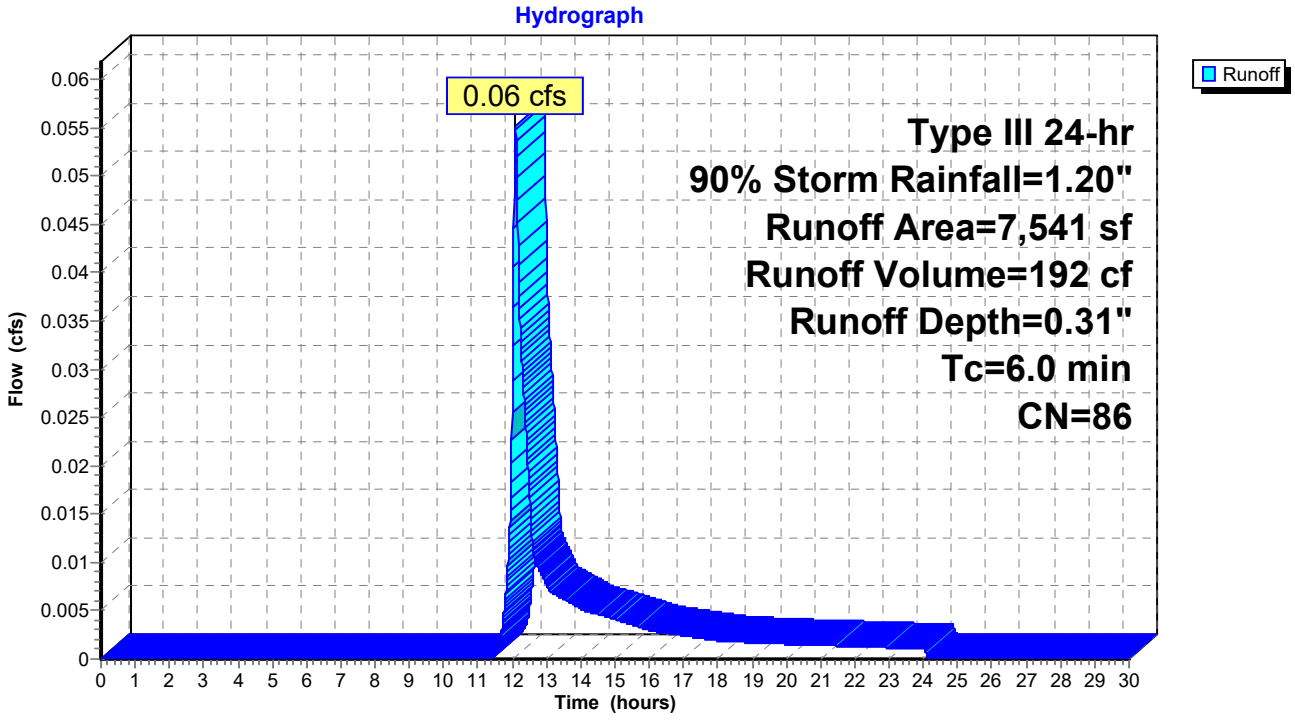
Runoff = 0.06 cfs @ 12.10 hrs, Volume= 192 cf, Depth= 0.31"
Routed to Pond CB-A-18 : CB-A-18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
2,344	61	>75% Grass cover, Good, HSG B
5,197	98	Paved parking, HSG B
7,541	86	Weighted Average
2,344		31.08% Pervious Area
5,197		68.92% Impervious Area

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

Subcatchment W-A-18: W-A-18



Summary for Subcatchment W-A-19: W-A-19

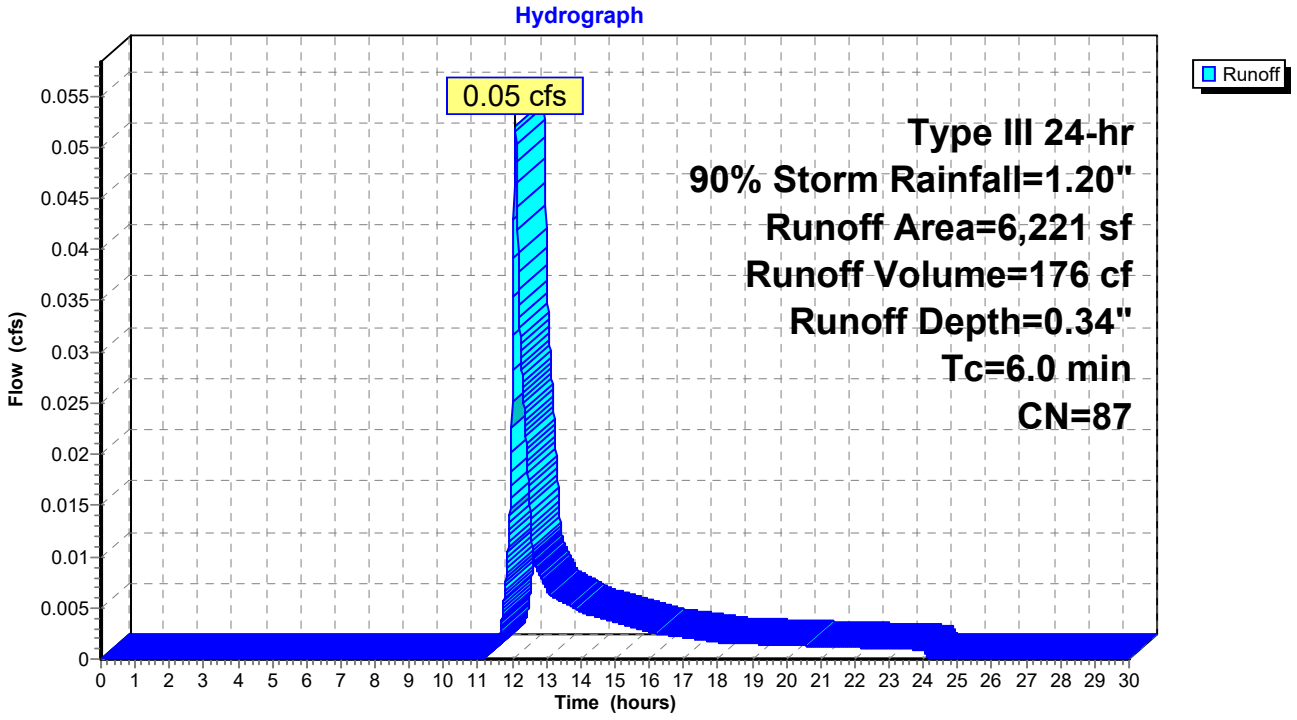
Runoff = 0.05 cfs @ 12.10 hrs, Volume= 176 cf, Depth= 0.34"
Routed to Pond CB-A-19 : CB-A-19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
1,822	61	>75% Grass cover, Good, HSG B
4,399	98	Paved parking, HSG B
6,221	87	Weighted Average
1,822		29.29% Pervious Area
4,399		70.71% Impervious Area

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

Subcatchment W-A-19: W-A-19



Summary for Subcatchment W-A-20: W-A-20

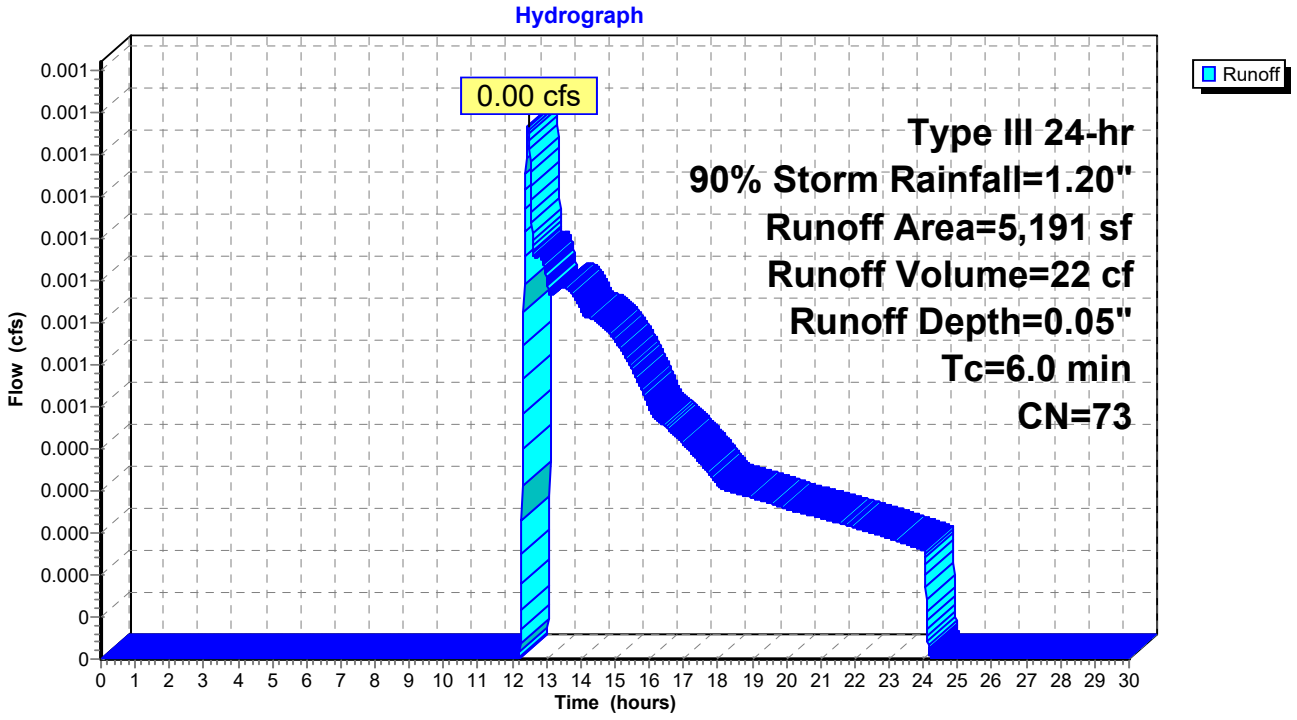
Runoff = 0.00 cfs @ 12.46 hrs, Volume= 22 cf, Depth= 0.05"
Routed to Pond CB-A-20 : CB-A-20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
3,457	61	>75% Grass cover, Good, HSG B
1,734	98	Paved parking, HSG B
5,191	73	Weighted Average
3,457		66.60% Pervious Area
1,734		33.40% Impervious Area

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

Subcatchment W-A-20: W-A-20



Summary for Subcatchment W-B-01: W-B-01

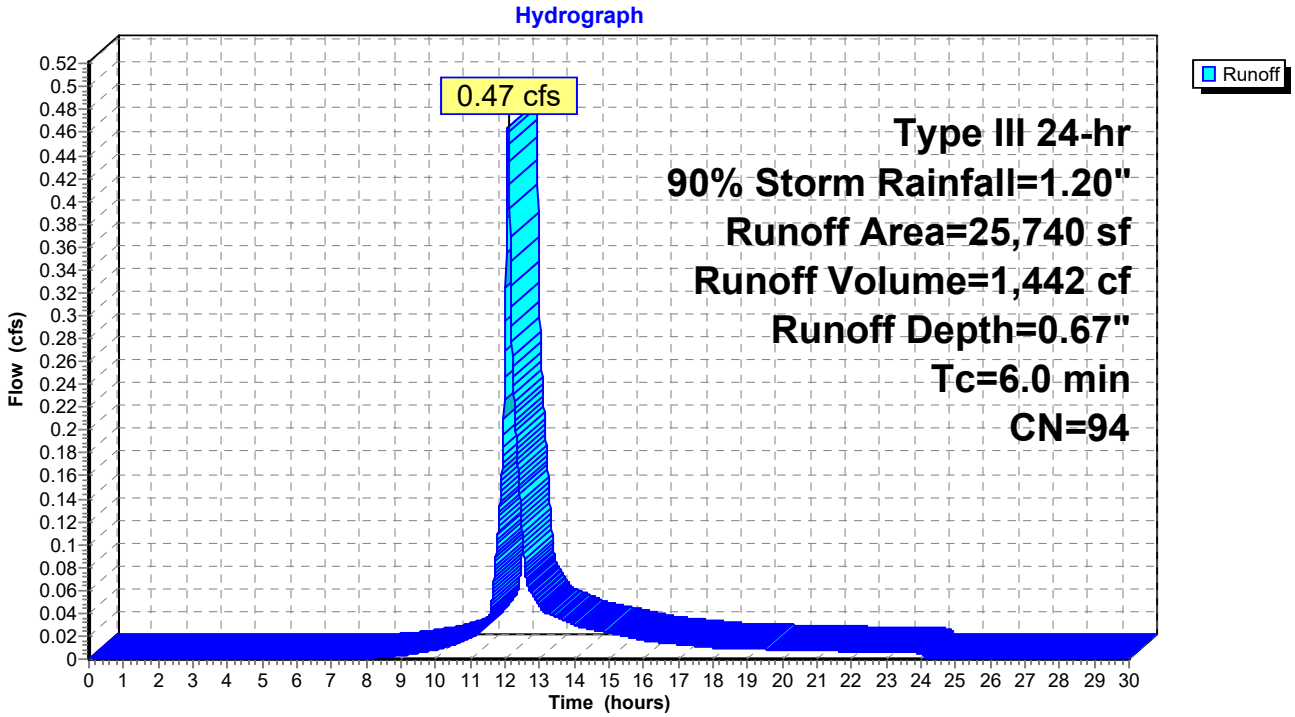
Runoff = 0.47 cfs @ 12.09 hrs, Volume= 1,442 cf, Depth= 0.67"
Routed to Pond CB-B-01 : CB-B-01

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
2,579	61	>75% Grass cover, Good, HSG B
23,161	98	Paved parking, HSG B
25,740	94	Weighted Average
2,579		10.02% Pervious Area
23,161		89.98% Impervious Area

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

Subcatchment W-B-01: W-B-01



Summary for Subcatchment W-B-02: W-B-02

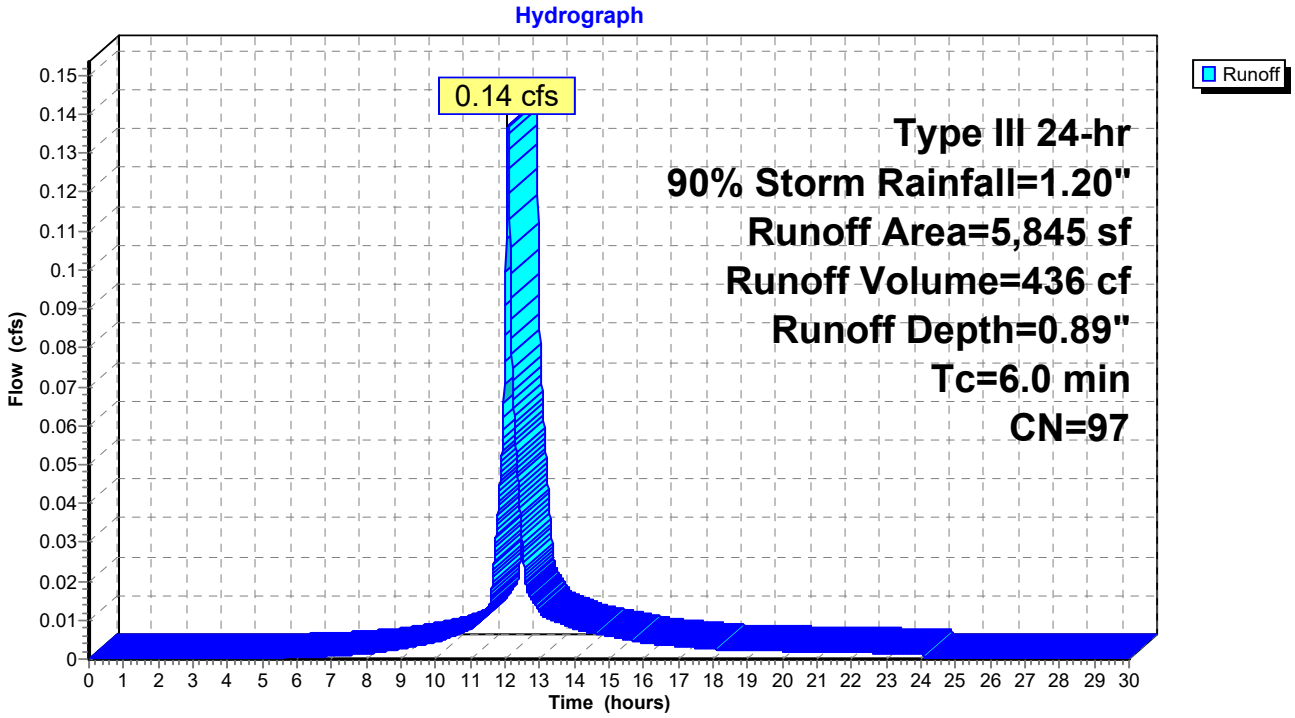
Runoff = 0.14 cfs @ 12.09 hrs, Volume= 436 cf, Depth= 0.89"
Routed to Pond CB-B-02 : CB-B-02

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
214	61	>75% Grass cover, Good, HSG B
5,631	98	Paved parking, HSG B
5,845	97	Weighted Average
214		3.66% Pervious Area
5,631		96.34% Impervious Area

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

Subcatchment W-B-02: W-B-02



Summary for Subcatchment W-B-03: W-B-03

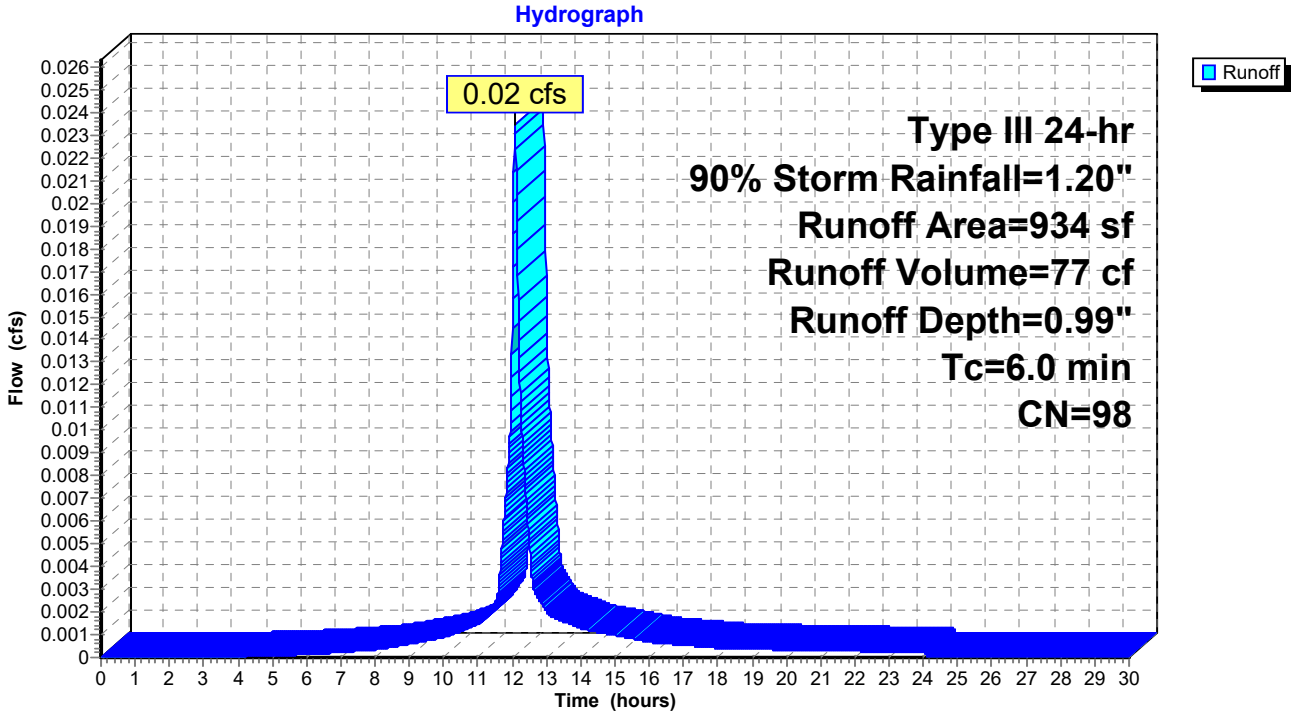
Runoff = 0.02 cfs @ 12.08 hrs, Volume= 77 cf, Depth= 0.99"
Routed to Pond CB-B-03 : CB-B-03

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
934	98	Paved parking, HSG B
934		100.00% Impervious Area

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

Subcatchment W-B-03: W-B-03



Summary for Subcatchment W-B-04: W-B-04

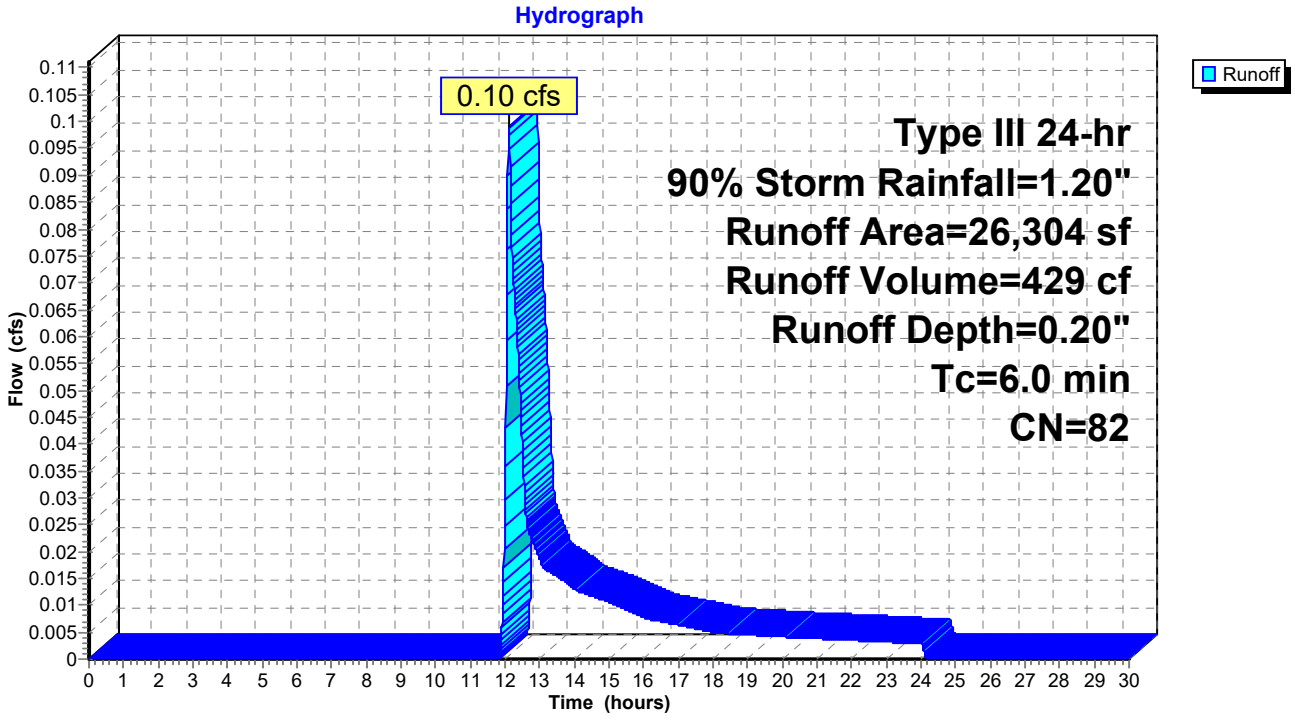
Runoff = 0.10 cfs @ 12.11 hrs, Volume= 429 cf, Depth= 0.20"
Routed to Pond CB-B-04 : CB-B-04

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
11,684	61	>75% Grass cover, Good, HSG B
14,620	98	Paved parking, HSG B
26,304	82	Weighted Average
11,684		44.42% Pervious Area
14,620		55.58% Impervious Area

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

Subcatchment W-B-04: W-B-04



Summary for Subcatchment W-B-05: W-B-05

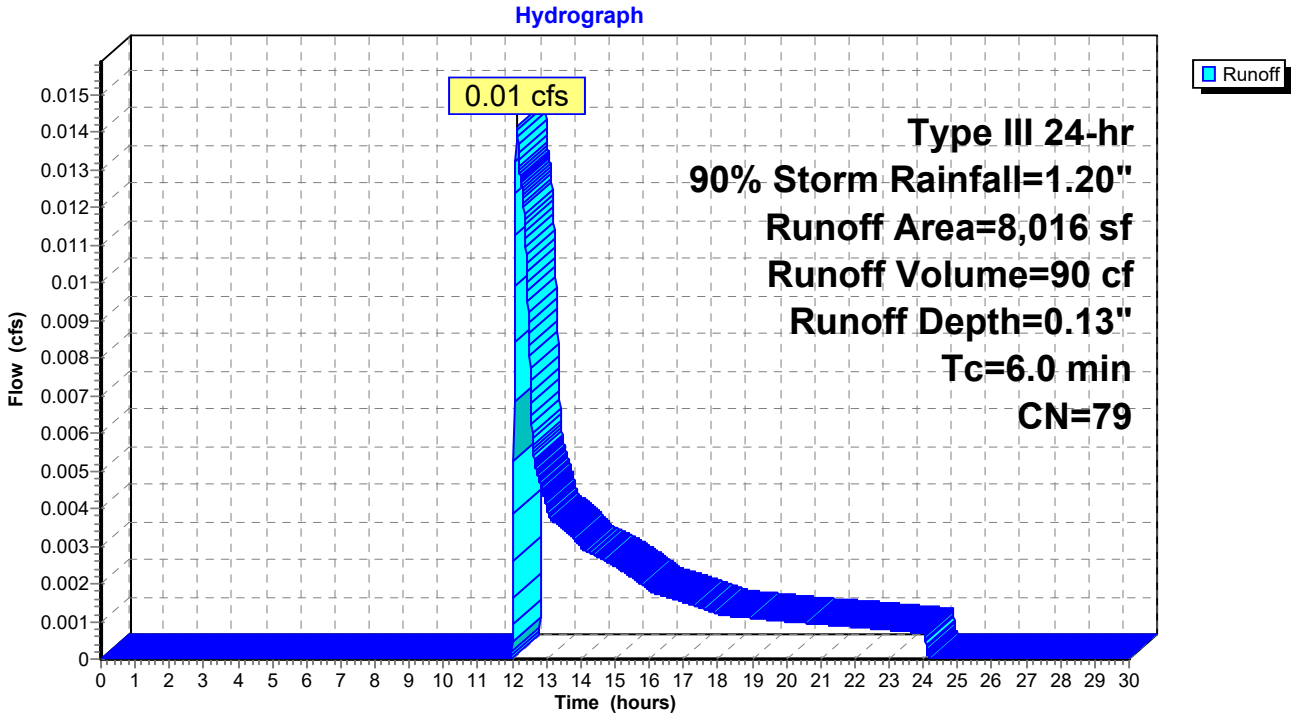
Runoff = 0.01 cfs @ 12.14 hrs, Volume= 90 cf, Depth= 0.13"
Routed to Pond CB-B-05 : CB-B-05

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
4,108	61	>75% Grass cover, Good, HSG B
3,908	98	Paved parking, HSG B
8,016	79	Weighted Average
4,108		51.25% Pervious Area
3,908		48.75% Impervious Area

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

Subcatchment W-B-05: W-B-05



Summary for Subcatchment W-B-06: W-B-06

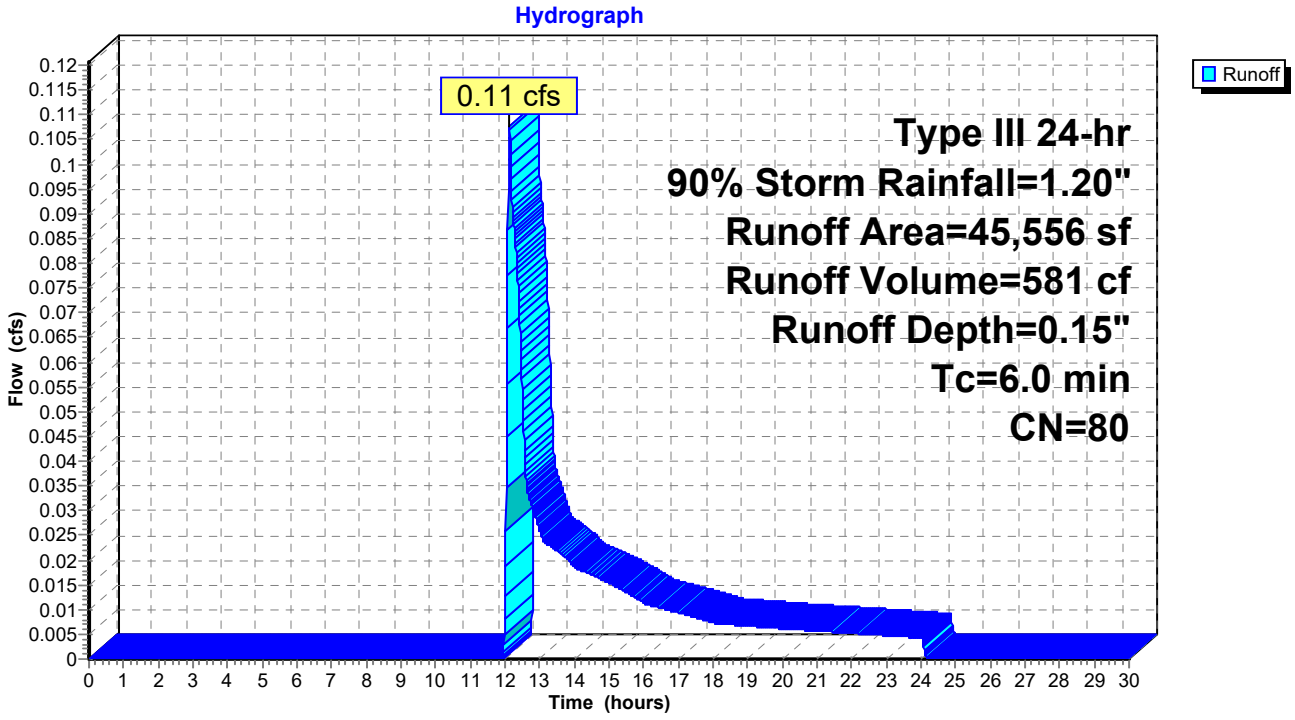
Runoff = 0.11 cfs @ 12.13 hrs, Volume= 581 cf, Depth= 0.15"
Routed to Pond CB-B-07 : CB-B-07

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
22,604	61	>75% Grass cover, Good, HSG B
22,952	98	Paved parking, HSG B
45,556	80	Weighted Average
22,604		49.62% Pervious Area
22,952		50.38% Impervious Area

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

Subcatchment W-B-06: W-B-06



Summary for Subcatchment W-C-01: W-C-01

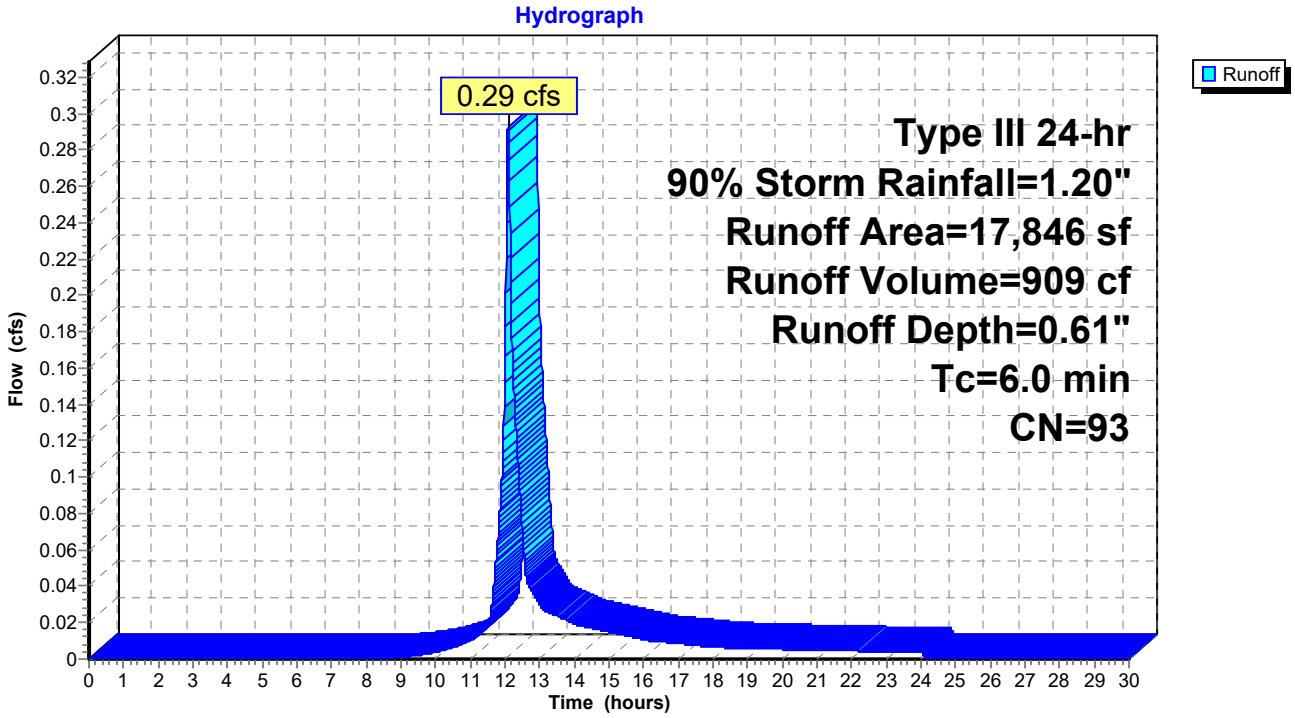
Runoff = 0.29 cfs @ 12.09 hrs, Volume= 909 cf, Depth= 0.61"
Routed to Pond CB-C-01 : CB-C-01

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
2,361	61	>75% Grass cover, Good, HSG B
15,485	98	Paved parking, HSG B
17,846	93	Weighted Average
2,361		13.23% Pervious Area
15,485		86.77% Impervious Area

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

Subcatchment W-C-01: W-C-01



Summary for Subcatchment W-C-02: W-C-02

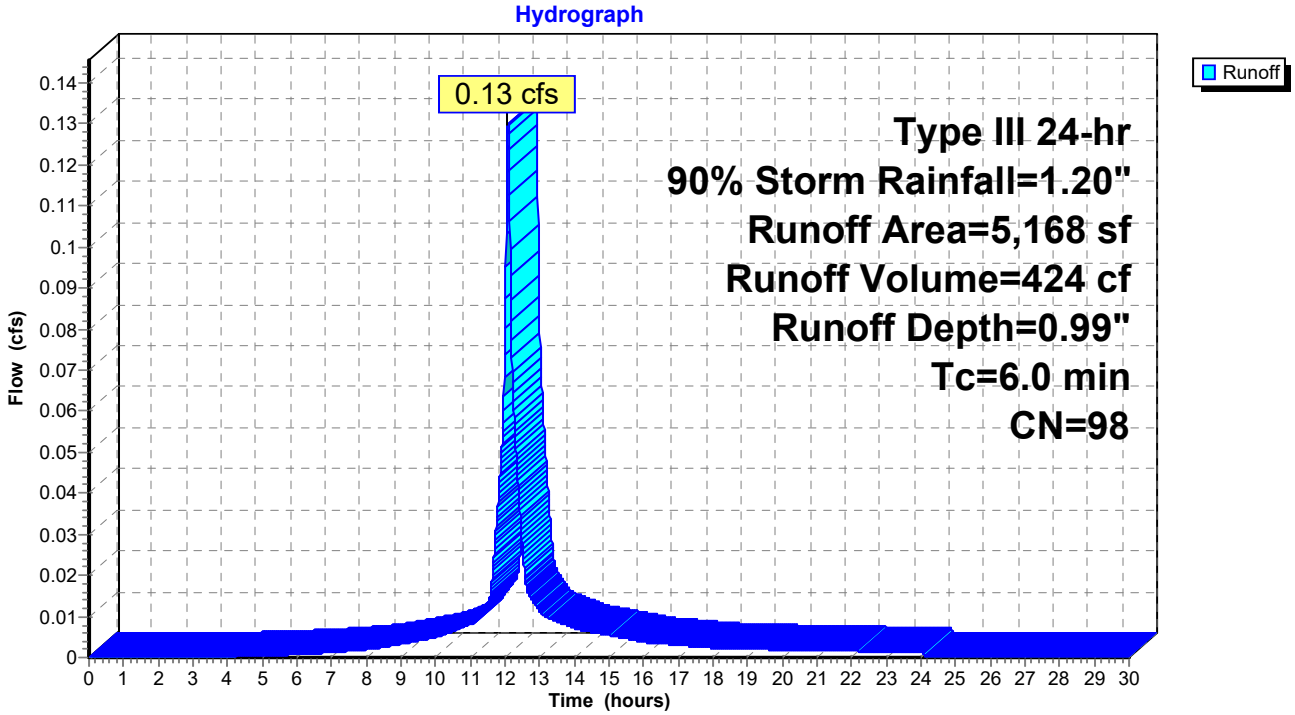
Runoff = 0.13 cfs @ 12.08 hrs, Volume= 424 cf, Depth= 0.99"
Routed to Pond CB-C-02 : CB-C-02

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
5,168	98	Paved parking, HSG B
5,168		100.00% Impervious Area

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

Subcatchment W-C-02: W-C-02



Summary for Subcatchment W-C-03: W-C-03

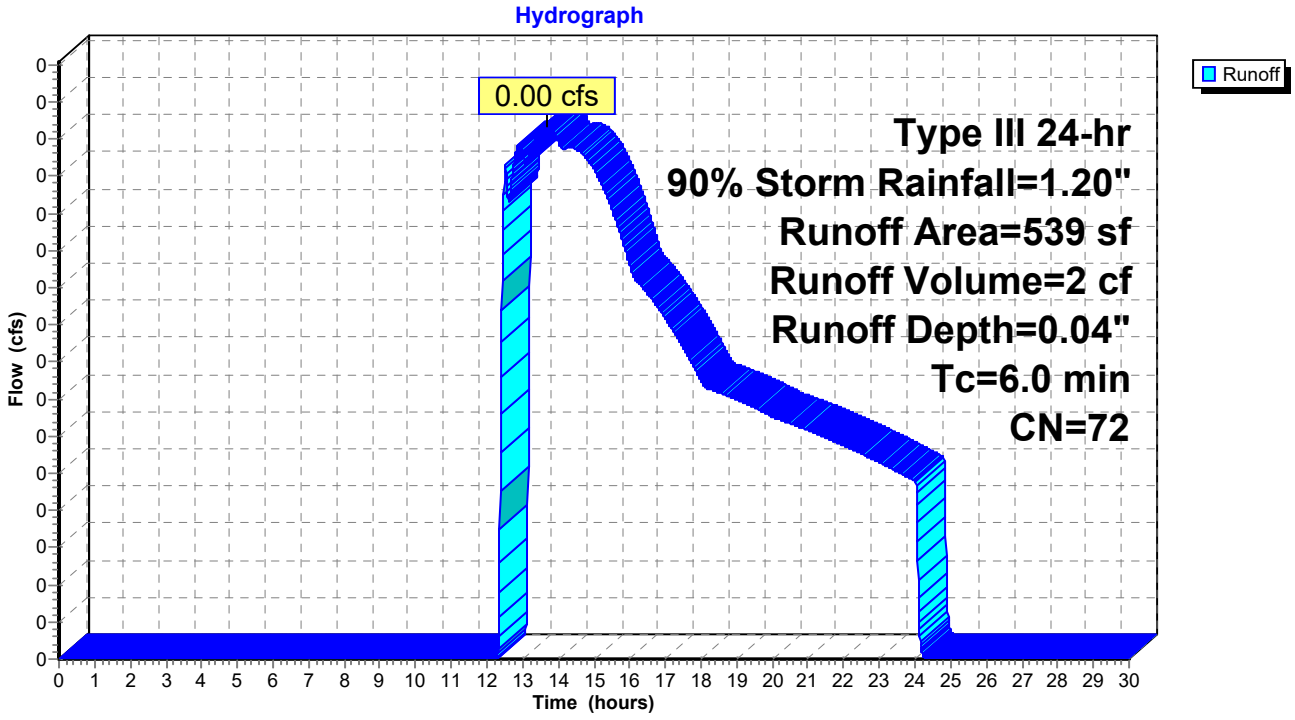
Runoff = 0.00 cfs @ 13.66 hrs, Volume= 2 cf, Depth= 0.04"
Routed to Pond CB-C-03 : CB-C-03

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
372	61	>75% Grass cover, Good, HSG B
167	98	Paved parking, HSG B
539	72	Weighted Average
372		69.02% Pervious Area
167		30.98% Impervious Area

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

Subcatchment W-C-03: W-C-03



Summary for Subcatchment W-C-04: W-C-04

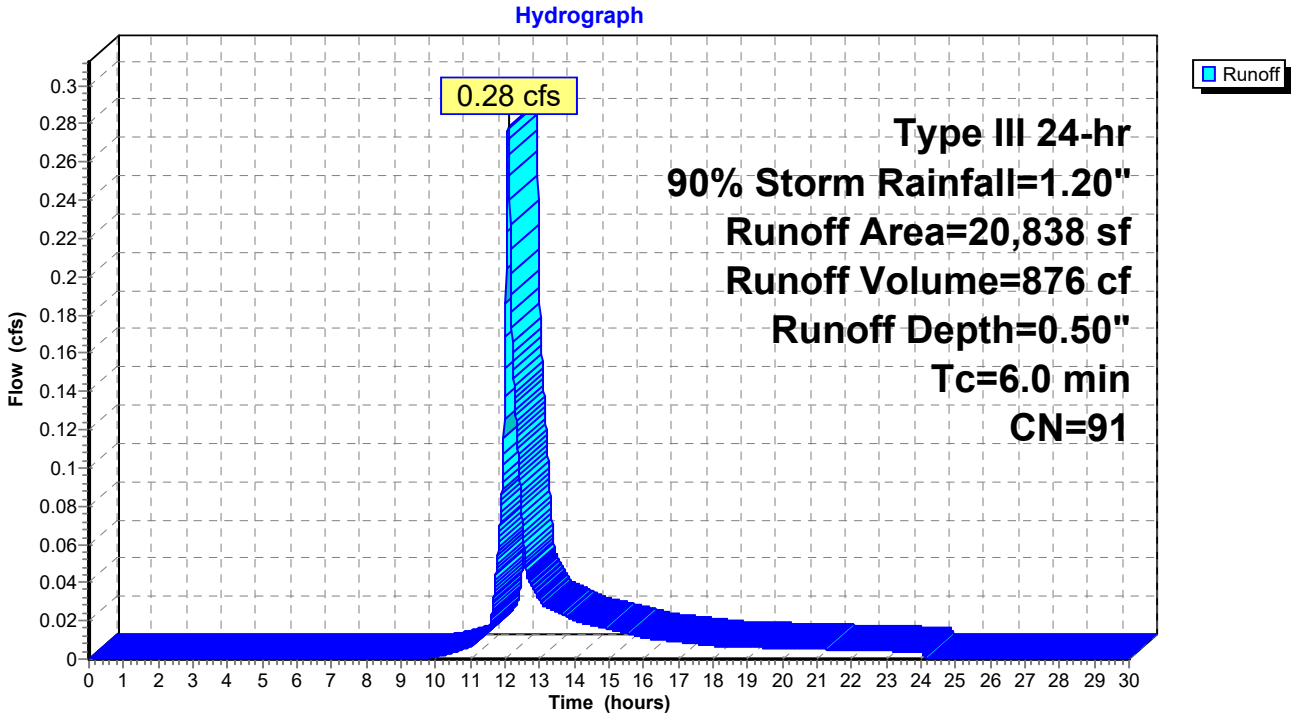
Runoff = 0.28 cfs @ 12.09 hrs, Volume= 876 cf, Depth= 0.50"
Routed to Pond CB-C-04 : CB-C-04

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
3,975	61	>75% Grass cover, Good, HSG B
16,863	98	Paved parking, HSG B
20,838	91	Weighted Average
3,975		19.08% Pervious Area
16,863		80.92% Impervious Area

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

Subcatchment W-C-04: W-C-04



Summary for Subcatchment W-C-05: W-C-05

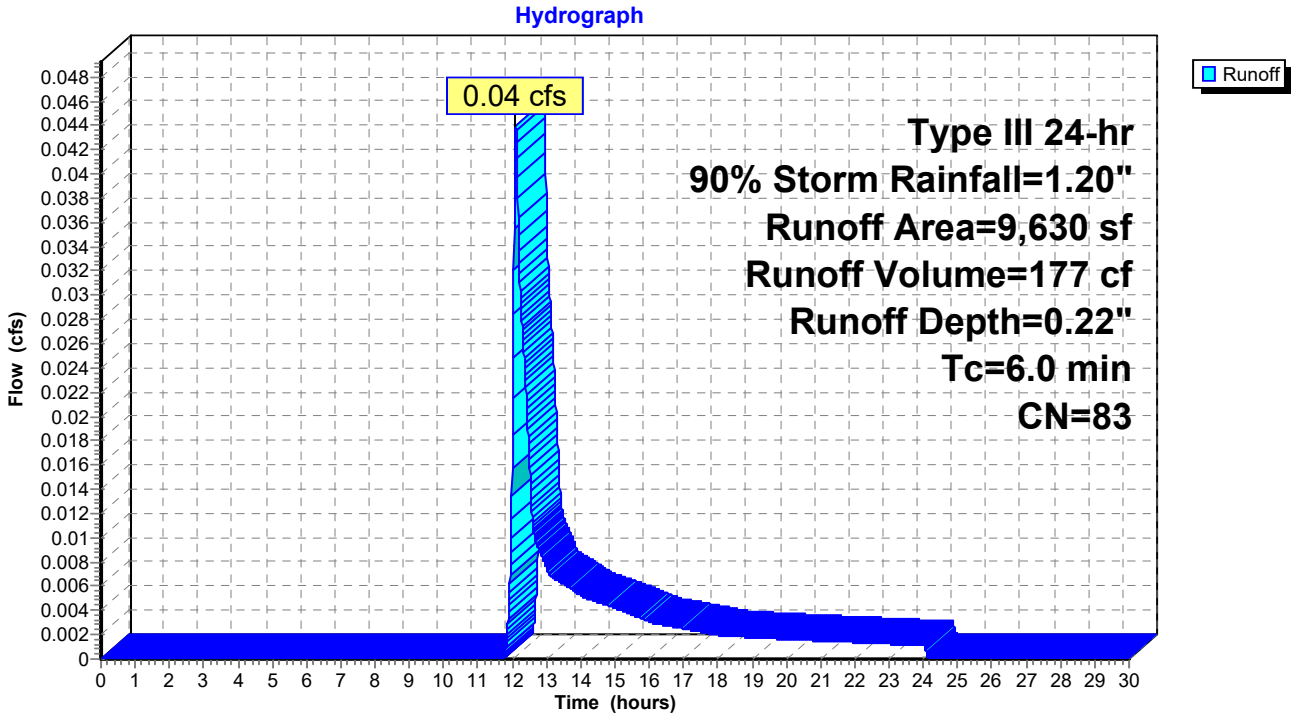
Runoff = 0.04 cfs @ 12.11 hrs, Volume= 177 cf, Depth= 0.22"
Routed to Pond CB-C-05 : CB-C-05

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
3,869	61	>75% Grass cover, Good, HSG B
5,761	98	Paved parking, HSG B
9,630	83	Weighted Average
3,869		40.18% Pervious Area
5,761		59.82% Impervious Area

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

Subcatchment W-C-05: W-C-05



Summary for Subcatchment W-C-06: W-C-06

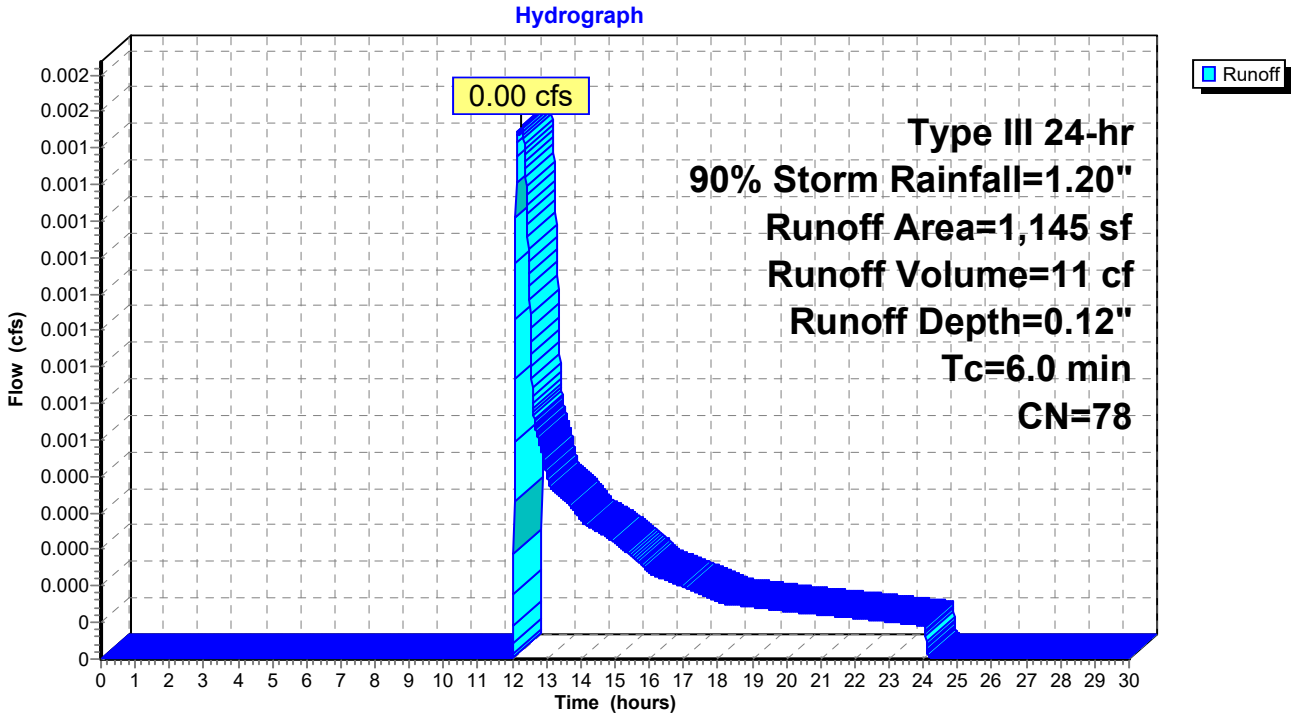
Runoff = 0.00 cfs @ 12.28 hrs, Volume= 11 cf, Depth= 0.12"
Routed to Pond CB-C-07 : CB-C-07

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
606	61	>75% Grass cover, Good, HSG B
539	98	Paved parking, HSG B
1,145	78	Weighted Average
606		52.93% Pervious Area
539		47.07% Impervious Area

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

Subcatchment W-C-06: W-C-06



Summary for Subcatchment W-C-07: W-C-07

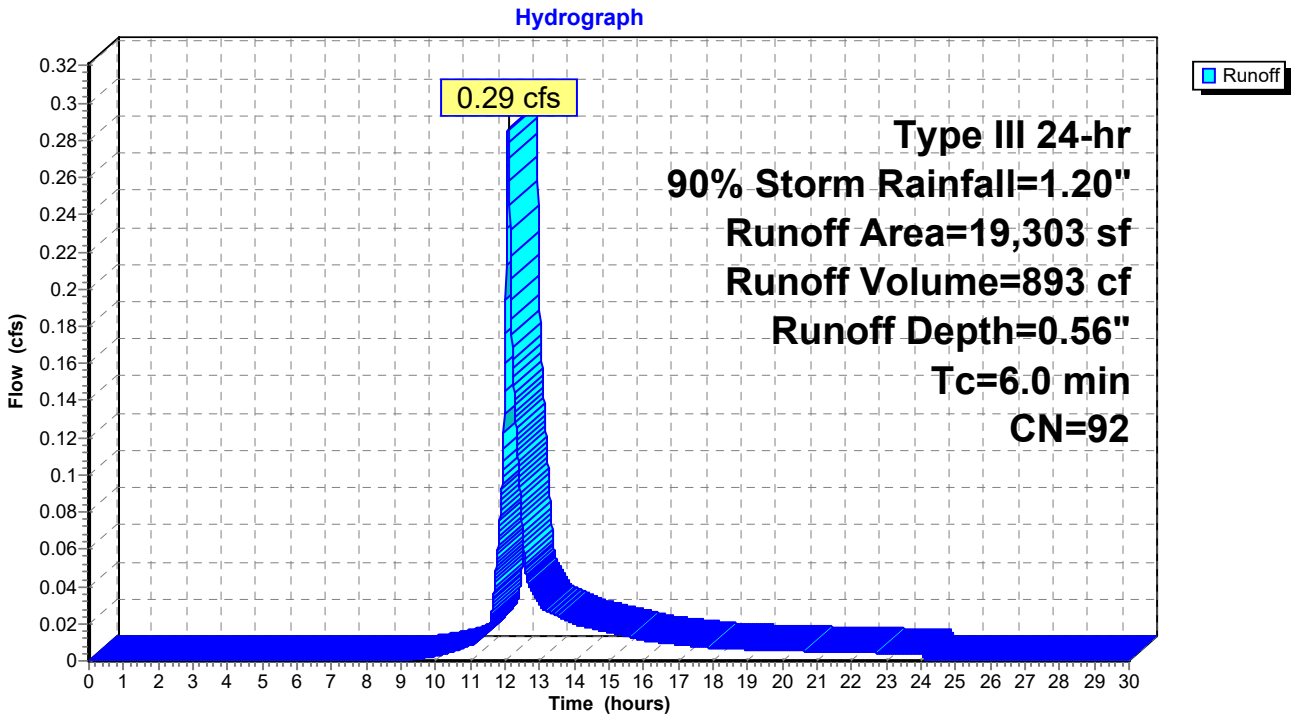
Runoff = 0.29 cfs @ 12.09 hrs, Volume= 893 cf, Depth= 0.56"
Routed to Pond CB-C-08 : CB-C-08

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 90% Storm Rainfall=1.20"

Area (sf)	CN	Description
3,107	61	>75% Grass cover, Good, HSG B
16,196	98	Paved parking, HSG B
19,303	92	Weighted Average
3,107		16.10% Pervious Area
16,196		83.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**
5.0	0	Total, Increased to minimum Tc = 6.0 min			

Subcatchment W-C-07: W-C-07

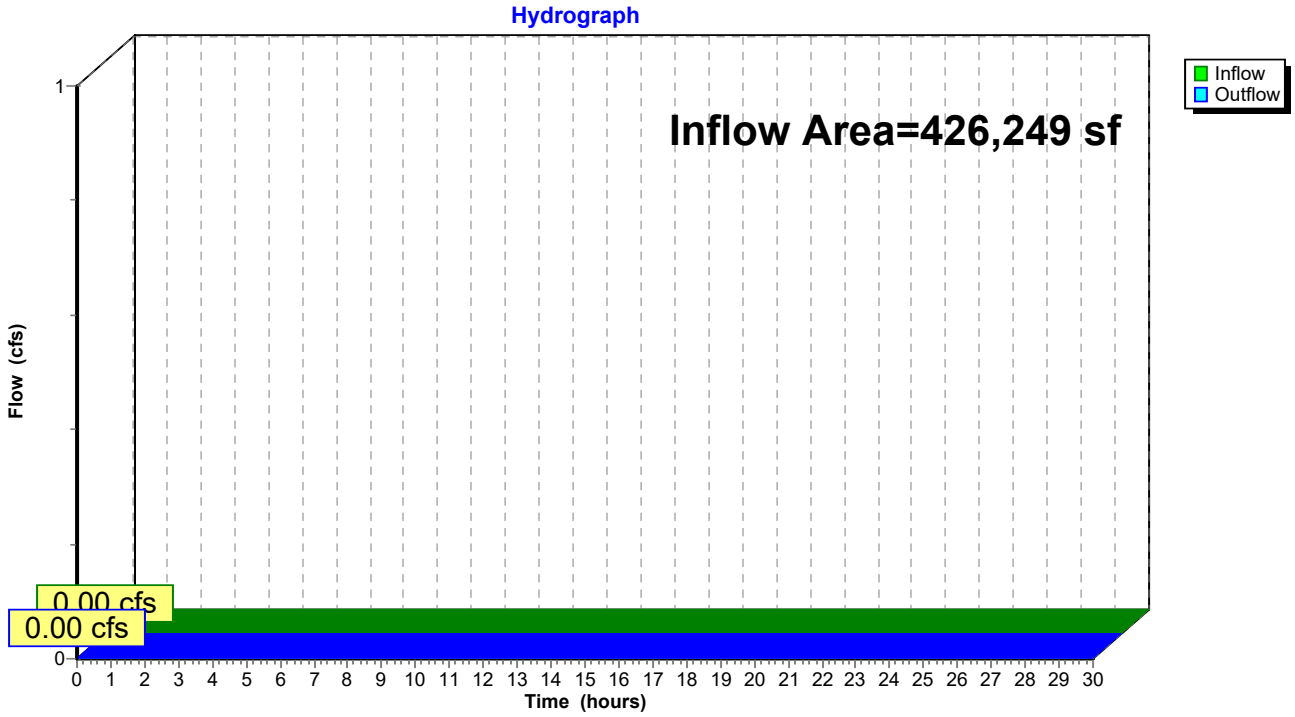


Summary for Reach DP1POST: DP1 POST

Inflow Area = 426,249 sf, 72.93% Impervious, Inflow Depth = 0.00" for 90% Storm event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs

Reach DP1POST: DP1 POST

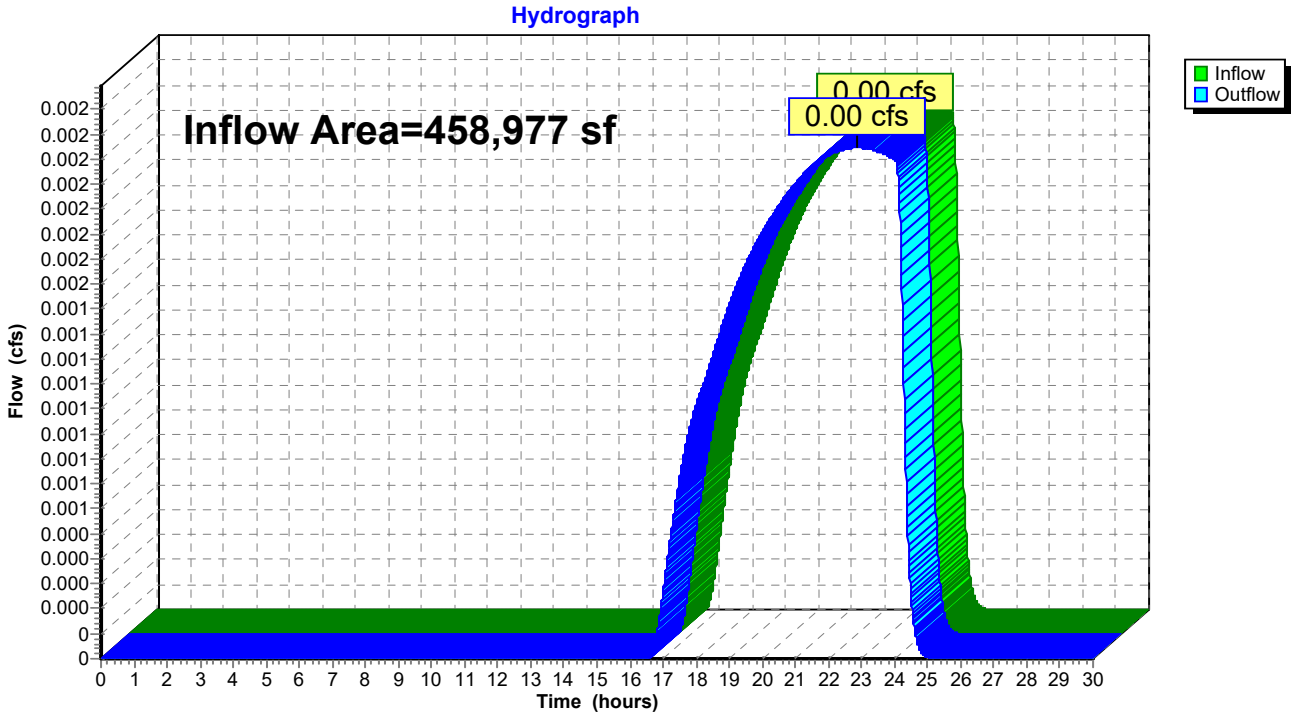


Summary for Reach DP1PRE: DP1 PRE

Inflow Area = 458,977 sf, 9.20% Impervious, Inflow Depth = 0.00" for 90% Storm event
Inflow = 0.00 cfs @ 22.86 hrs, Volume= 43 cf
Outflow = 0.00 cfs @ 22.86 hrs, Volume= 43 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs

Reach DP1PRE: DP1 PRE



Summary for Pond 1P: CB-B-06

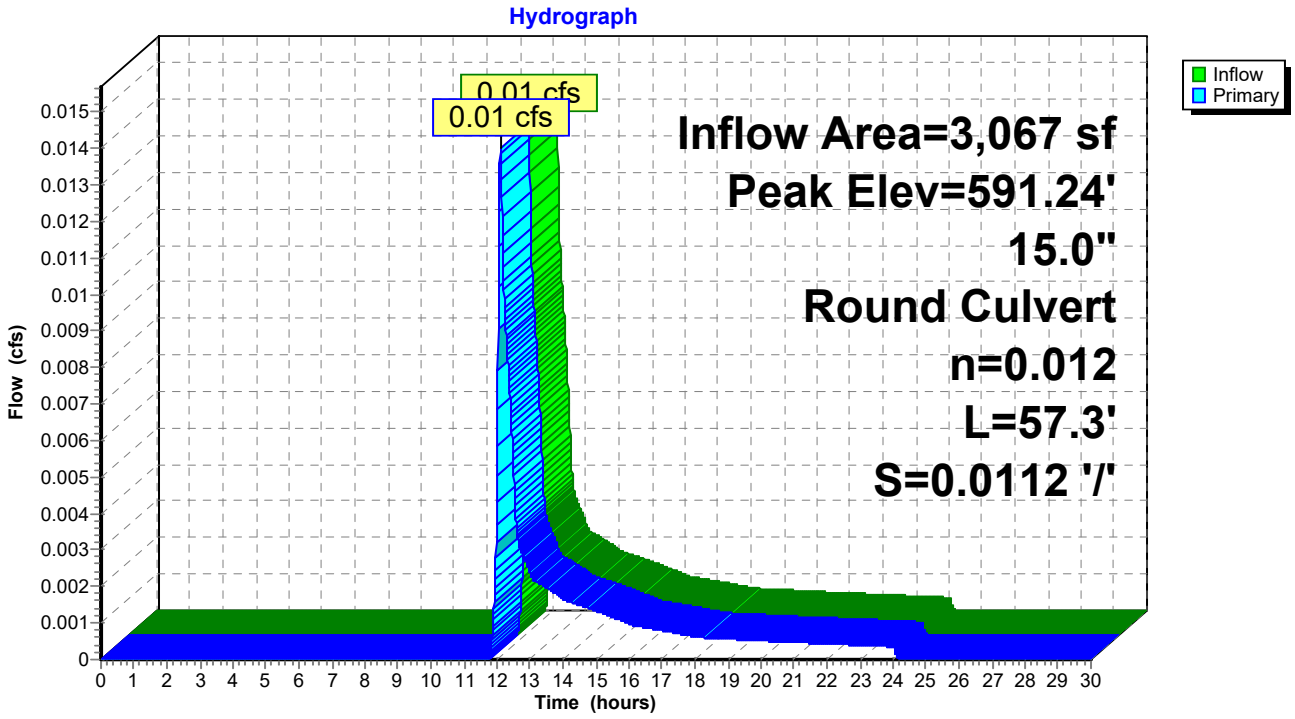
Inflow Area = 3,067 sf, 58.98% Impervious, Inflow Depth = 0.22" for 90% Storm event
Inflow = 0.01 cfs @ 12.11 hrs, Volume= 56 cf
Outflow = 0.01 cfs @ 12.11 hrs, Volume= 56 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.01 cfs @ 12.11 hrs, Volume= 56 cf
Routed to Pond CB-B-05 : CB-B-05

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 591.24' @ 12.11 hrs
Flood Elev= 593.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	591.19'	**15.0" Round HDPE Round 15"** L= 57.3' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.19' / 590.55' S= 0.0112 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.01 cfs @ 12.11 hrs HW=591.24' TW=590.12' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 0.01 cfs @ 1.15 fps)

Pond 1P: CB-B-06



Summary for Pond 3P: CB-A-13

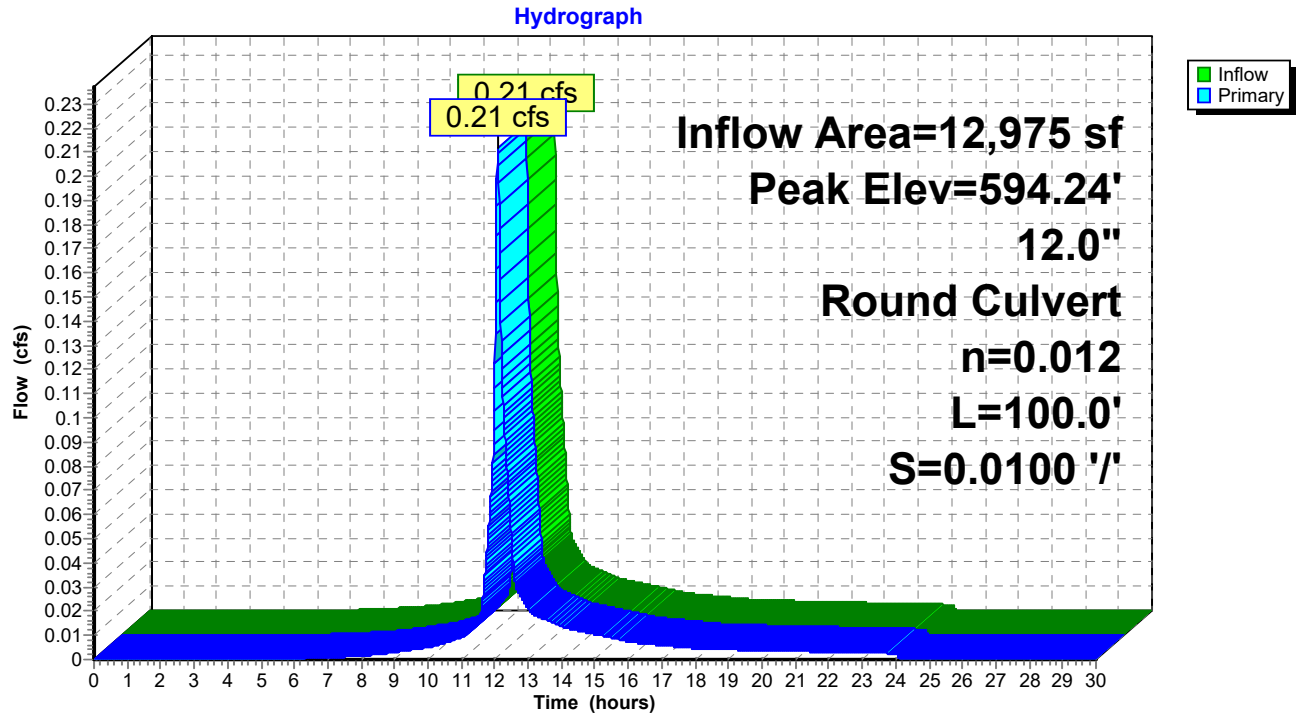
Inflow Area = 12,975 sf, 83.58% Impervious, Inflow Depth = 0.63" for 90% Storm event
Inflow = 0.21 cfs @ 12.09 hrs, Volume= 682 cf
Outflow = 0.21 cfs @ 12.09 hrs, Volume= 682 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.21 cfs @ 12.09 hrs, Volume= 682 cf
Routed to Pond CB-A-13 : CB-A-12

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.24' @ 12.09 hrs
Flood Elev= 598.01'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.00'	**12.0" Round HDPE Round 12"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.00' / 593.00' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.21 cfs @ 12.09 hrs HW=594.24' TW=593.55' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 0.21 cfs @ 2.17 fps)

Pond 3P: CB-A-13



Summary for Pond ADS 1A: ADS 1A

Inflow Area = 236,318 sf, 75.18% Impervious, Inflow Depth = 0.52" for 90% Storm event
Inflow = 3.11 cfs @ 12.09 hrs, Volume= 10,338 cf
Outflow = 1.67 cfs @ 12.23 hrs, Volume= 10,343 cf, Atten= 46%, Lag= 8.3 min
Discarded = 1.67 cfs @ 12.23 hrs, Volume= 10,343 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Reach DP1POST : DP1 POST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 590.57' @ 12.23 hrs Surf.Area= 24,105 sf Storage= 646 cf
Flood Elev= 593.50' Surf.Area= 24,105 sf Storage= 47,779 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 1.4 min (818.7 - 817.4)

Volume	Invert	Avail.Storage	Storage Description
#1A	590.50'	21,177 cf	**44.25'W x 544.74'L x 3.50'H Field A** 84,366 cf Overall - 31,423 cf Embedded = 52,943 cf x 40.0% Voids
#2A	591.00'	31,423 cf	**ADS_StormTech SC-740 +Cap** x 684 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 684 Chambers in 9 Rows
		52,600 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	591.00'	**15.0" Round Culvert** L= 282.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.00' / 576.00' S= 0.0532 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf
#2	Device 1	592.50'	**5.0' 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
#3	Discarded	590.50'	**3.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 290.00'

Discarded OutFlow Max=1.67 cfs @ 12.23 hrs HW=590.57' (Free Discharge)
└**3=Exfiltration** (Controls 1.67 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=590.50' TW=0.00' (Dynamic Tailwater)
└**1=Culvert** (Controls 0.00 cfs)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond ADS 1A: ADS 1A - Chamber Wizard Field A

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

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

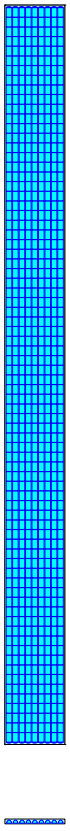
76 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 542.74' Row Length +12.0" End Stone x 2 = 544.74' Base Length
9 Rows x 51.0" Wide + 6.0" Spacing x 8 + 12.0" Side Stone x 2 = 44.25' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

684 Chambers x 45.9 cf = 31,423.0 cf Chamber Storage

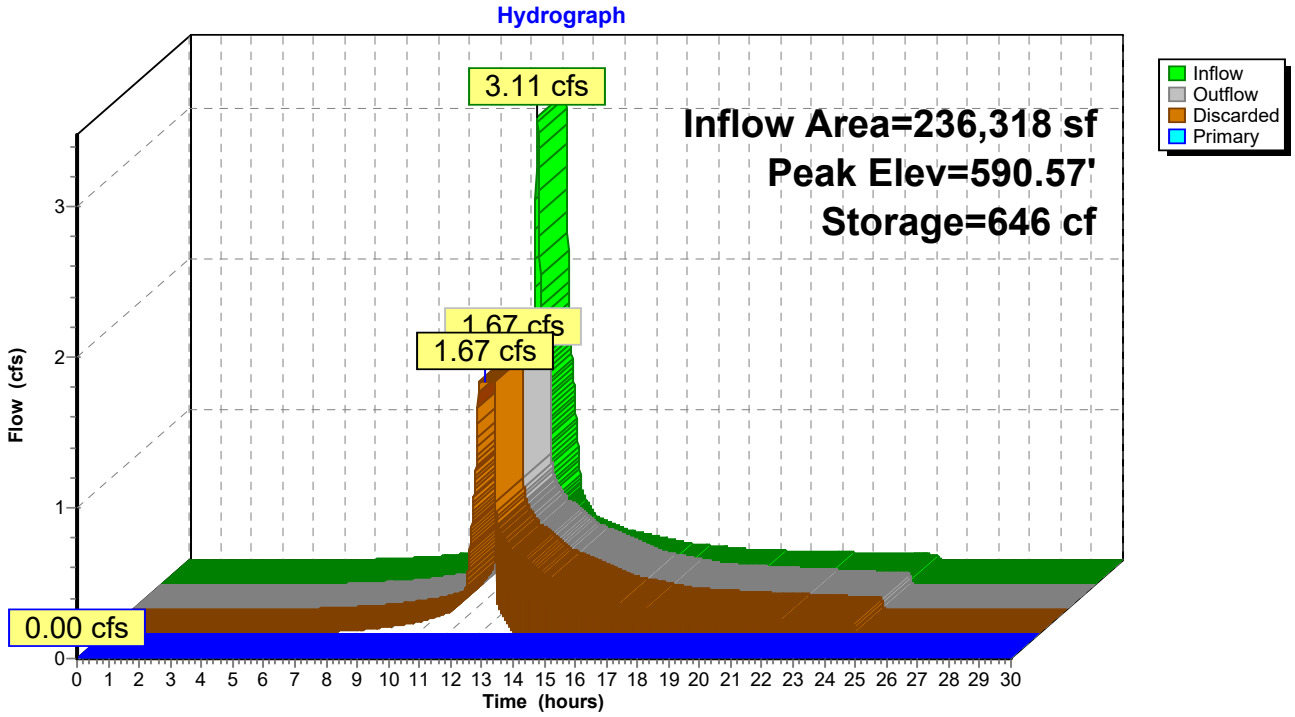
84,366.1 cf Field - 31,423.0 cf Chambers = 52,943.1 cf Stone x 40.0% Voids = 21,177.2 cf Stone Storage

Chamber Storage + Stone Storage = 52,600.2 cf = 1.208 af
Overall Storage Efficiency = 62.3%
Overall System Size = 544.74' x 44.25' x 3.50'

684 Chambers
3,124.7 cy Field
1,960.9 cy Stone



Pond ADS 1A: ADS 1A



Summary for Pond ADS 1B: ADS 1B

Inflow Area = 115,462 sf, 63.24% Impervious, Inflow Depth = 0.32" for 90% Storm event
Inflow = 0.84 cfs @ 12.10 hrs, Volume= 3,111 cf
Outflow = 0.57 cfs @ 12.20 hrs, Volume= 3,112 cf, Atten= 32%, Lag= 5.8 min
Discarded = 0.57 cfs @ 12.20 hrs, Volume= 3,112 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Reach DP1POST : DP1 POST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 585.03' @ 12.20 hrs Surf.Area= 8,231 sf Storage= 97 cf
Flood Elev= 588.00' Surf.Area= 8,231 sf Storage= 16,245 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 0.5 min (853.2 - 852.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	585.00'	7,279 cf	**53.75'W x 153.14'L x 3.50'H Field A** 28,809 cf Overall - 10,612 cf Embedded = 18,197 cf x 40.0% Voids
#2A	585.50'	10,612 cf	**ADS_StormTech SC-740 +Cap** x 231 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 231 Chambers in 11 Rows
		17,891 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	585.50'	**15.0" Round Culvert** L= 83.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 585.50' / 575.00' S= 0.1265 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	586.50'	**5.0' 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
#3	Discarded	585.00'	**3.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 290.00'

Discarded OutFlow Max=0.57 cfs @ 12.20 hrs HW=585.03' (Free Discharge)
↑**3=Exfiltration** (Controls 0.57 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=585.00' TW=0.00' (Dynamic Tailwater)
↑**1=Culvert** (Controls 0.00 cfs)
↑**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond ADS 1B: ADS 1B - Chamber Wizard Field A

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

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

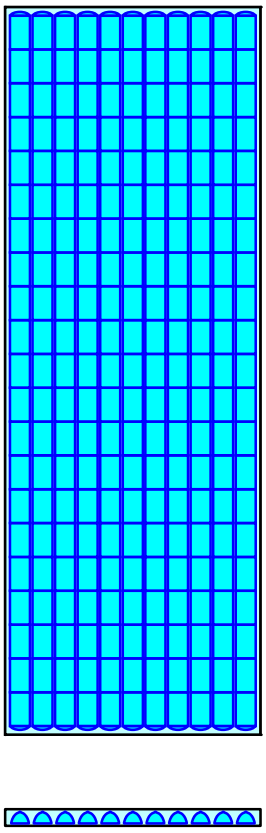
21 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 151.14' Row Length +12.0" End Stone x 2 = 153.14' Base Length
11 Rows x 51.0" Wide + 6.0" Spacing x 10 + 12.0" Side Stone x 2 = 53.75' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

231 Chambers x 45.9 cf = 10,612.1 cf Chamber Storage

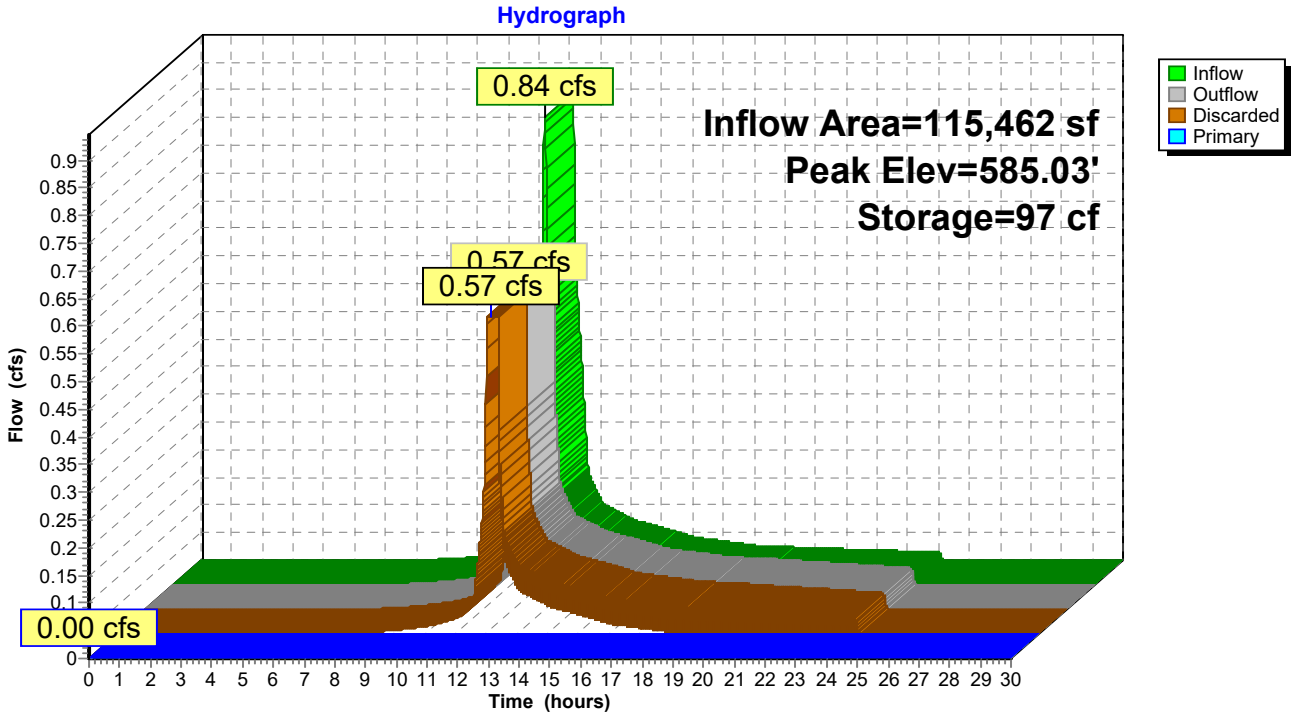
28,808.8 cf Field - 10,612.1 cf Chambers = 18,196.7 cf Stone x 40.0% Voids = 7,278.7 cf Stone Storage

Chamber Storage + Stone Storage = 17,890.8 cf = 0.411 af
Overall Storage Efficiency = 62.1%
Overall System Size = 153.14' x 53.75' x 3.50'

231 Chambers
1,067.0 cy Field
674.0 cy Stone



Pond ADS 1B: ADS 1B



Summary for Pond ADS1C: ADS 1C

Inflow Area = 74,469 sf, 80.81% Impervious, Inflow Depth = 0.53" for 90% Storm event
Inflow = 1.03 cfs @ 12.09 hrs, Volume= 3,292 cf
Outflow = 0.43 cfs @ 0.00 hrs, Volume= 4,540 cf, Atten= 59%, Lag= 0.0 min
Discarded = 0.43 cfs @ 0.00 hrs, Volume= 4,540 cf
Primary = 0.00 cfs @ 0.00 hrs, Volume= 0 cf
Routed to Reach DP1POST : DP1 POST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Starting Elev= 587.00' Surf.Area= 6,146 sf Storage= 1,229 cf
Peak Elev= 587.00' @ 0.00 hrs Surf.Area= 6,146 sf Storage= 1,229 cf
Flood Elev= 589.50' Surf.Area= 6,146 sf Storage= 12,089 cf (10,860 cf above start)

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= (not calculated: outflow precedes inflow)

Volume	Invert	Avail.Storage	Storage Description
#1A	586.50'	5,462 cf	**44.25'W x 138.90'L x 3.50'H Field A** 21,512 cf Overall - 7,856 cf Embedded = 13,656 cf x 40.0% Voids
#2A	587.00'	7,856 cf	**ADS_StormTech SC-740 +Cap** x 171 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 171 Chambers in 9 Rows
		13,318 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	587.00'	**15.0" Round Culvert** L= 80.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 587.00' / 576.00' S= 0.1375 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	588.00'	**5.0' 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
#3	Discarded	586.50'	**3.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 290.00'

Discarded OutFlow Max=0.43 cfs @ 0.00 hrs HW=587.00' (Free Discharge)
└**3=Exfiltration** (Controls 0.43 cfs)

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=587.00' TW=0.00' (Dynamic Tailwater)
└**1=Culvert** (Controls 0.00 cfs)
└**2=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Pond ADS1C: ADS 1C - Chamber Wizard Field A

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

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

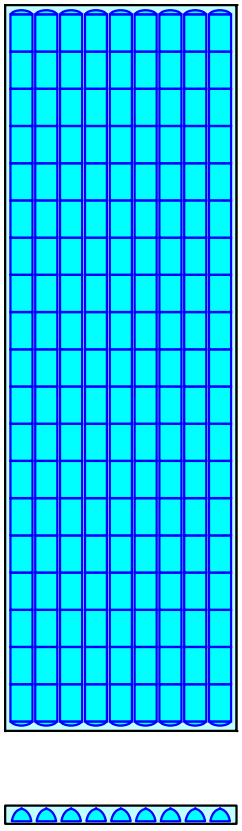
19 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 136.90' Row Length +12.0" End Stone x 2 = 138.90' Base Length
9 Rows x 51.0" Wide + 6.0" Spacing x 8 + 12.0" Side Stone x 2 = 44.25' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

171 Chambers x 45.9 cf = 7,855.7 cf Chamber Storage

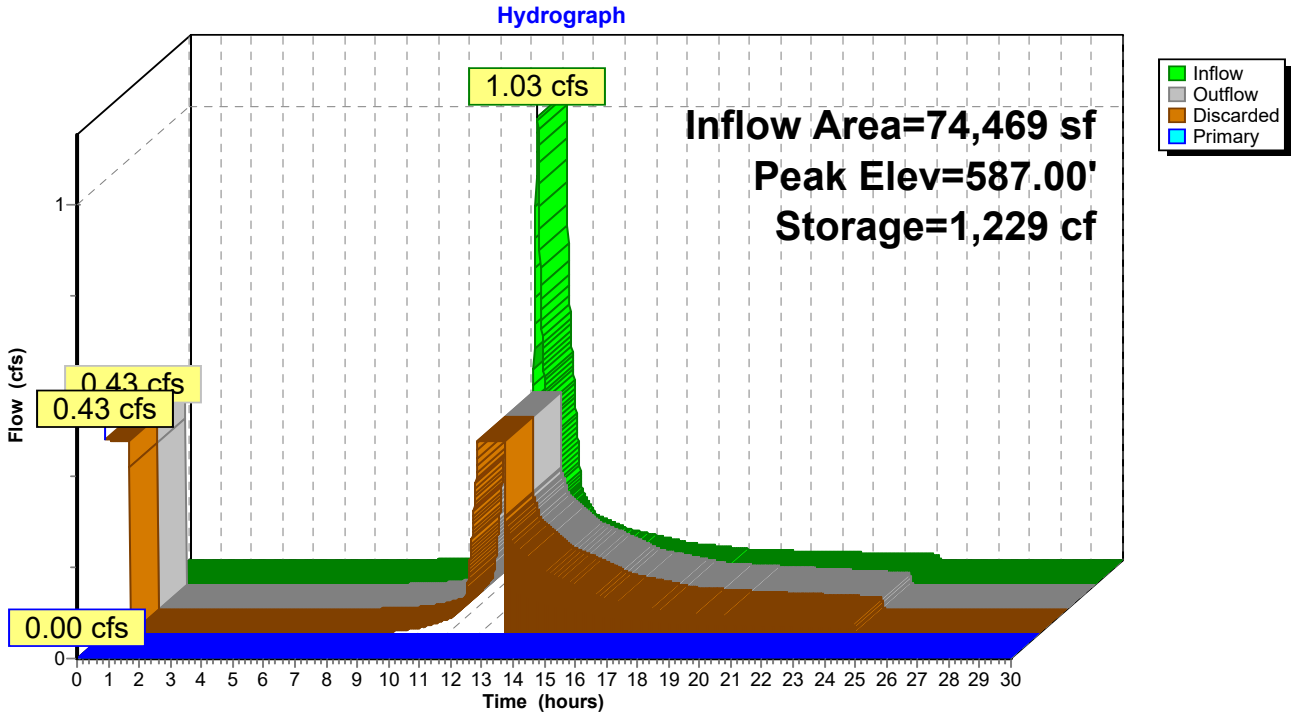
21,511.6 cf Field - 7,855.7 cf Chambers = 13,655.9 cf Stone x 40.0% Voids = 5,462.4 cf Stone Storage

Chamber Storage + Stone Storage = 13,318.1 cf = 0.306 af
Overall Storage Efficiency = 61.9%
Overall System Size = 138.90' x 44.25' x 3.50'

171 Chambers
796.7 cy Field
505.8 cy Stone



Pond ADS1C: ADS 1C



Summary for Pond CB-A-01: CB-A-01

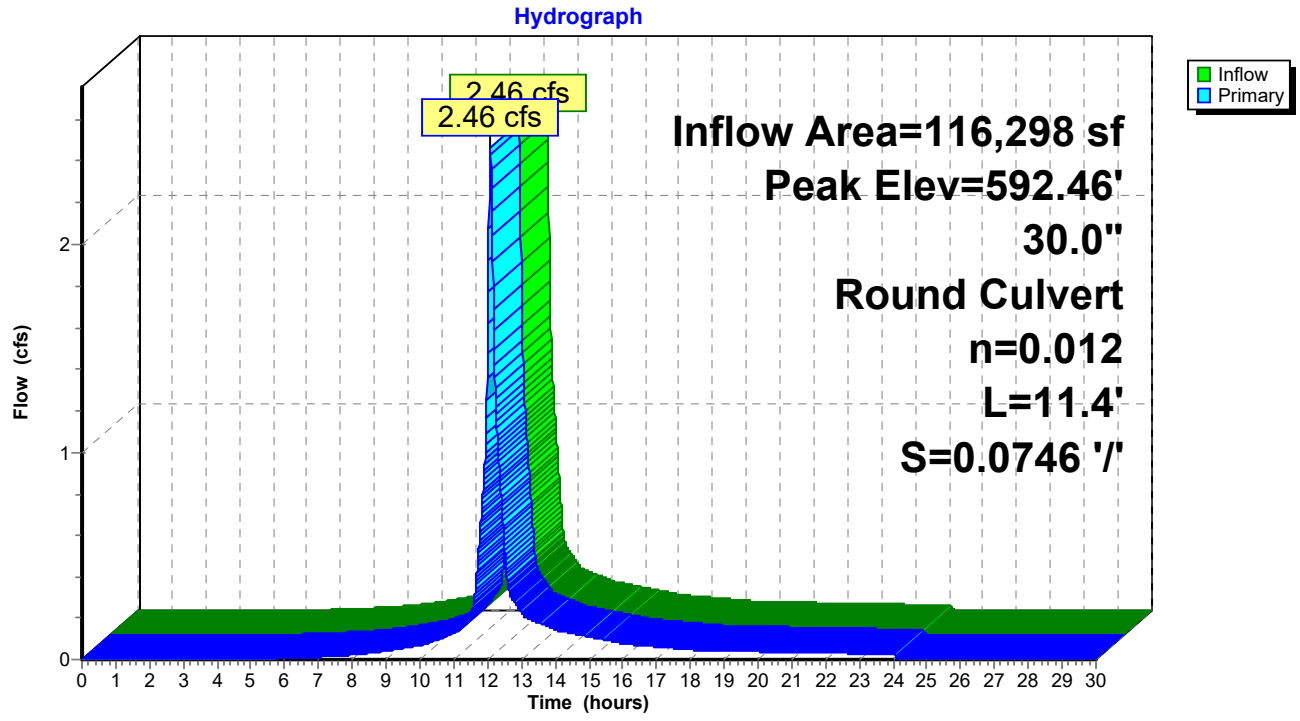
Inflow Area = 116,298 sf, 94.38% Impervious, Inflow Depth = 0.81" for 90% Storm event
Inflow = 2.46 cfs @ 12.09 hrs, Volume= 7,836 cf
Outflow = 2.46 cfs @ 12.09 hrs, Volume= 7,836 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.46 cfs @ 12.09 hrs, Volume= 7,836 cf
Routed to Pond ADS 1A : ADS 1A

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 592.46' @ 12.09 hrs
Flood Elev= 595.35'

Device	Routing	Invert	Outlet Devices
#1	Primary	591.85'	**30.0" Round HDPE Round 30"** L= 11.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.85' / 591.00' S= 0.0746 '/' Cc= 0.900 n= 0.012, Flow Area= 4.91 sf

Primary OutFlow Max=2.46 cfs @ 12.09 hrs HW=592.46' TW=590.53' (Dynamic Tailwater)
1=HDPE Round 30" (Inlet Controls 2.46 cfs @ 2.66 fps)

Pond CB-A-01: CB-A-01



Summary for Pond CB-A-02: CB-A-02

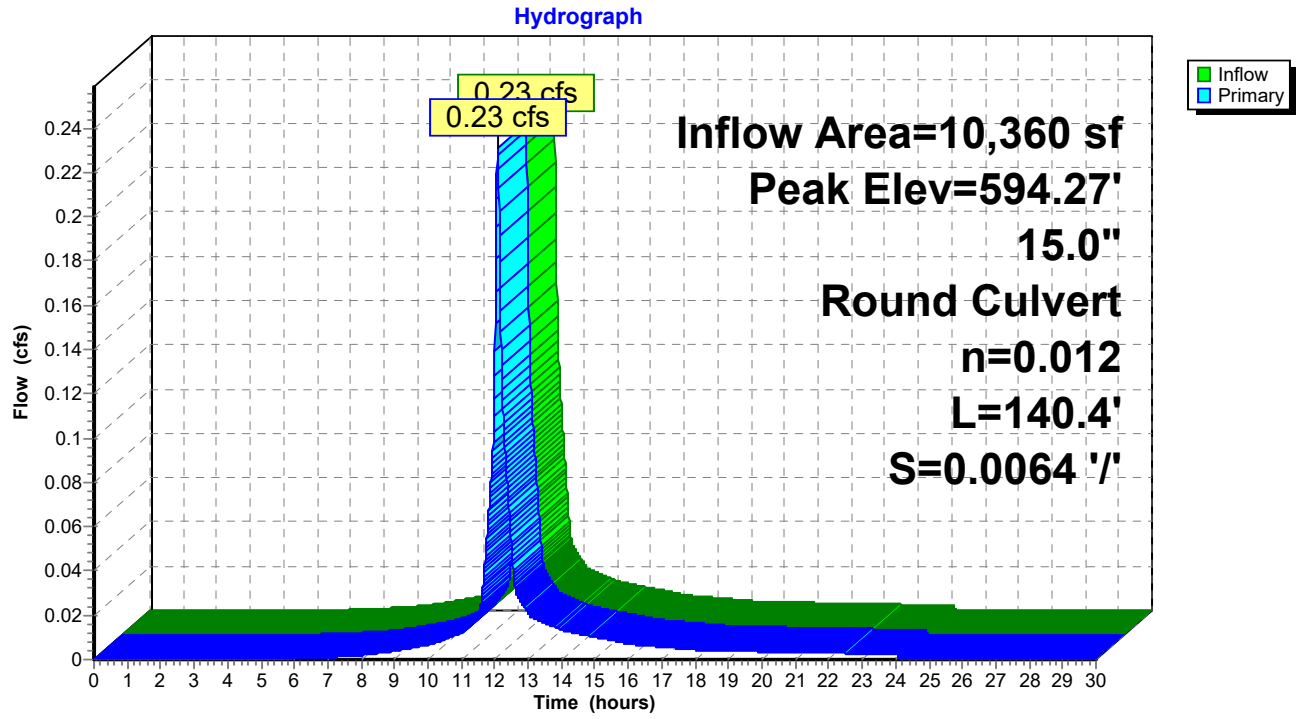
Inflow Area = 10,360 sf, 96.33% Impervious, Inflow Depth = 0.85" for 90% Storm event
Inflow = 0.23 cfs @ 12.09 hrs, Volume= 730 cf
Outflow = 0.23 cfs @ 12.09 hrs, Volume= 730 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.23 cfs @ 12.09 hrs, Volume= 730 cf
Routed to Pond CB-A-01 : CB-A-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.27' @ 12.09 hrs
Flood Elev= 596.53'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.04'	**15.0" Round HDPE Round 15"** L= 140.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.04' / 593.14' S= 0.0064 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.23 cfs @ 12.09 hrs HW=594.27' TW=592.46' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 0.23 cfs @ 2.20 fps)

Pond CB-A-02: CB-A-02



Summary for Pond CB-A-03: CB-A-03

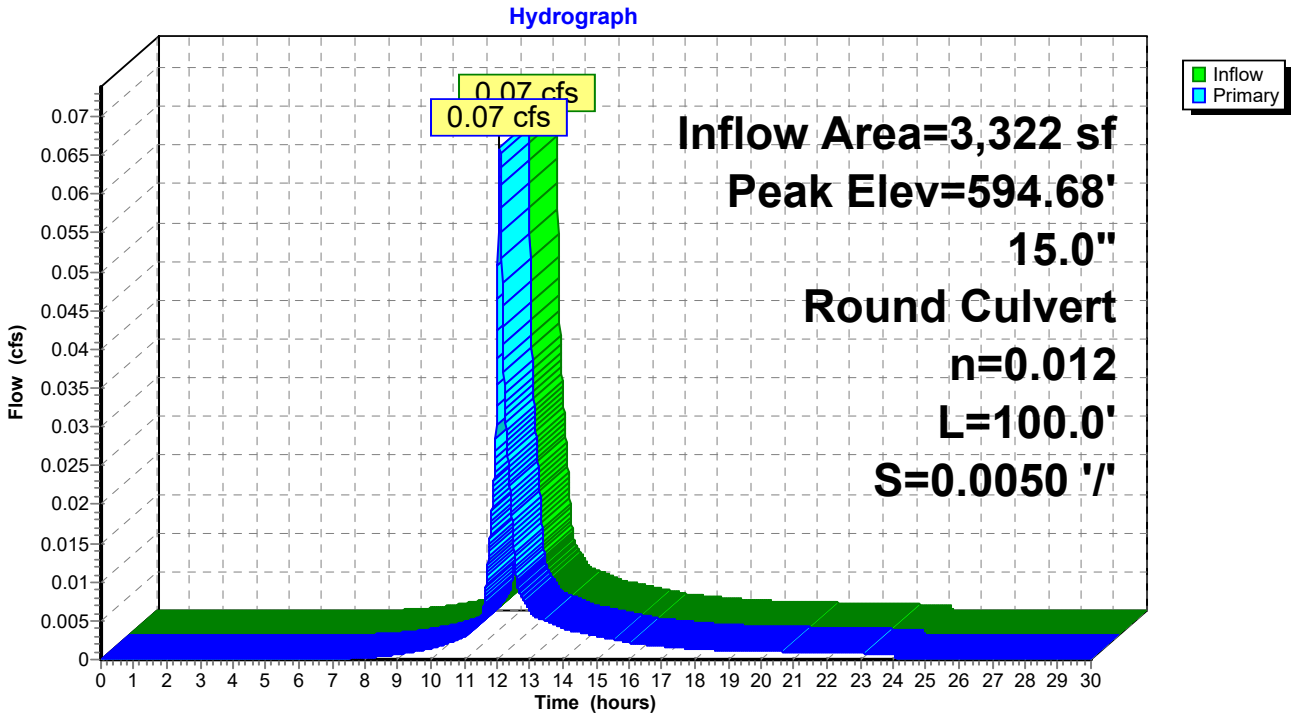
Inflow Area = 3,322 sf, 92.69% Impervious, Inflow Depth = 0.74" for 90% Storm event
Inflow = 0.07 cfs @ 12.09 hrs, Volume= 205 cf
Outflow = 0.07 cfs @ 12.09 hrs, Volume= 205 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.07 cfs @ 12.09 hrs, Volume= 205 cf
Routed to Pond CB-A-02 : CB-A-02

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.68' @ 12.09 hrs
Flood Elev= 597.53'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.54'	**15.0" Round HDPE Round 15"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.54' / 594.04' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.07 cfs @ 12.09 hrs HW=594.68' TW=594.27' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 0.07 cfs @ 1.27 fps)

Pond CB-A-03: CB-A-03



Summary for Pond CB-A-04: CB-A-04

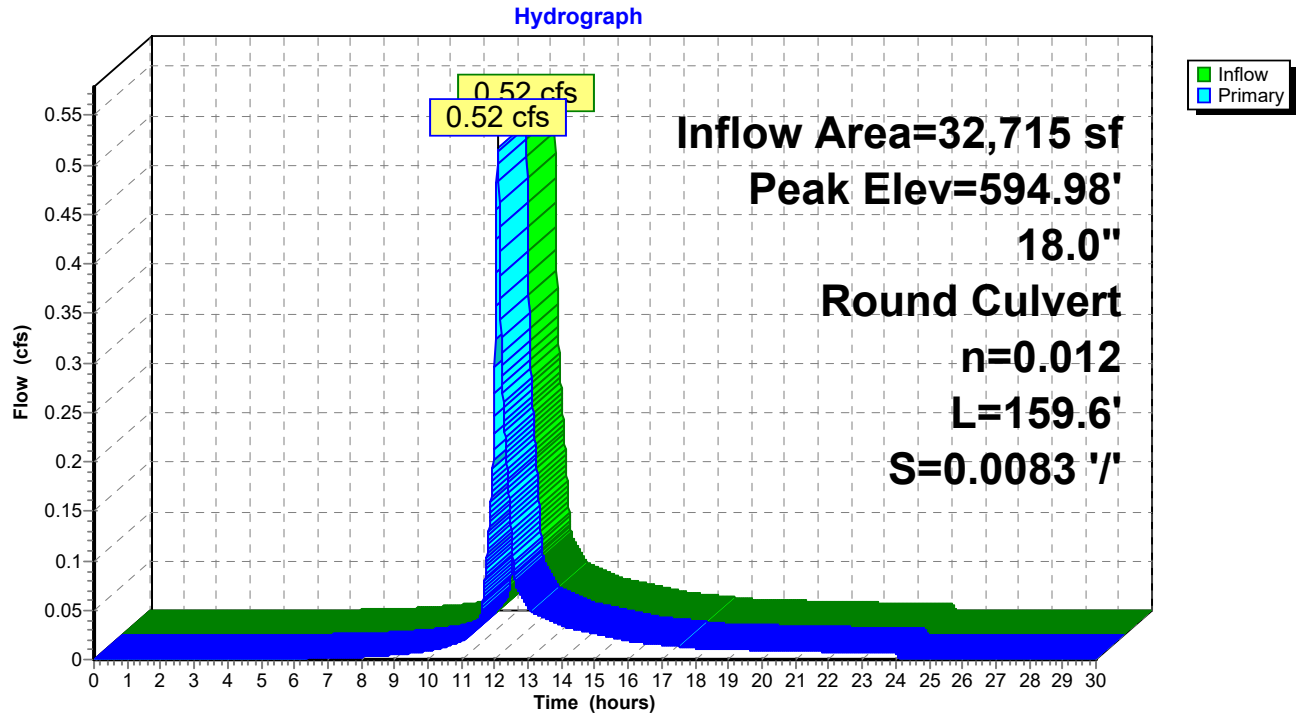
Inflow Area = 32,715 sf, 84.21% Impervious, Inflow Depth = 0.60" for 90% Storm event
Inflow = 0.52 cfs @ 12.09 hrs, Volume= 1,646 cf
Outflow = 0.52 cfs @ 12.09 hrs, Volume= 1,646 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.52 cfs @ 12.09 hrs, Volume= 1,646 cf
Routed to Pond CB-A-01 : CB-A-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.98' @ 12.09 hrs
Flood Elev= 596.96'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.66'	**18.0" Round HDPE Round 18"** L= 159.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.66' / 593.34' S= 0.0083 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf

Primary OutFlow Max=0.52 cfs @ 12.09 hrs HW=594.98' TW=592.46' (Dynamic Tailwater)
1=HDPE Round 18" (Inlet Controls 0.52 cfs @ 1.91 fps)

Pond CB-A-04: CB-A-04



Summary for Pond CB-A-05: CB-A-05

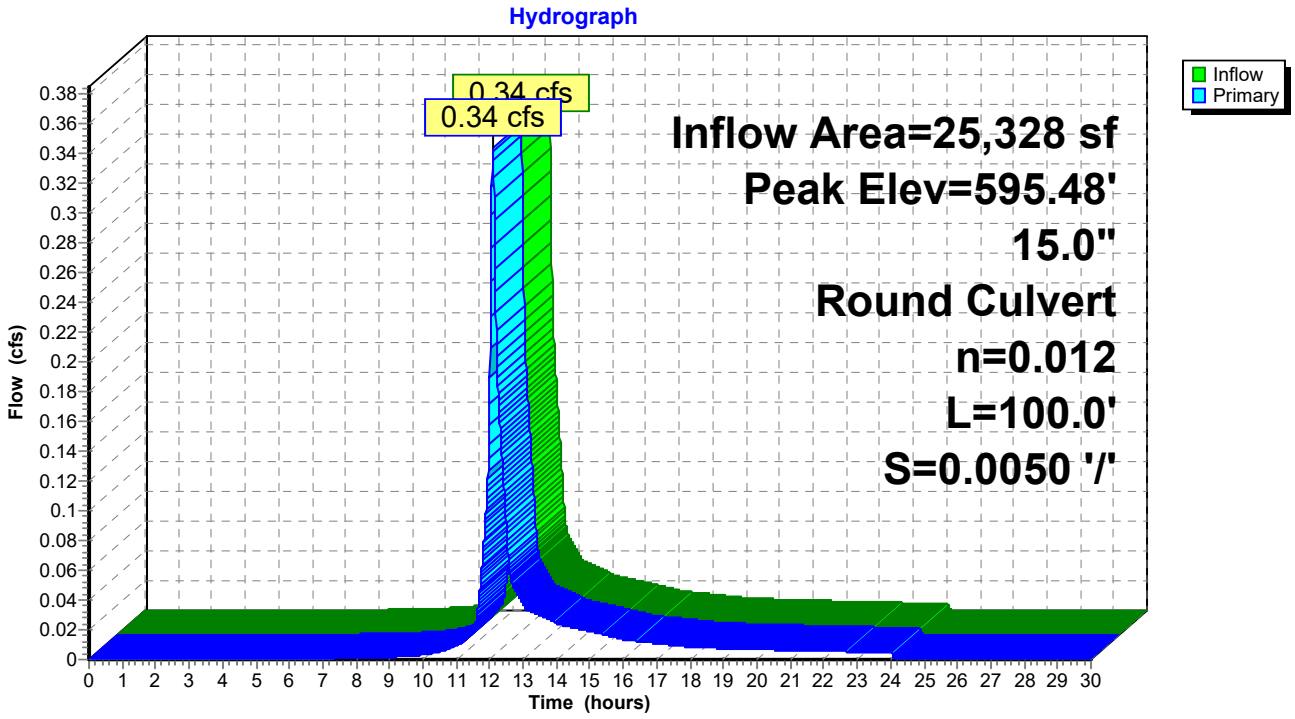
Inflow Area = 25,328 sf, 80.41% Impervious, Inflow Depth = 0.52" for 90% Storm event
Inflow = 0.34 cfs @ 12.09 hrs, Volume= 1,095 cf
Outflow = 0.34 cfs @ 12.09 hrs, Volume= 1,095 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.34 cfs @ 12.09 hrs, Volume= 1,095 cf
Routed to Pond CB-A-04 : CB-A-04

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.48' @ 12.09 hrs
Flood Elev= 597.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	595.16'	**15.0" Round HDPE Round 15"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 595.16' / 594.66' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.34 cfs @ 12.09 hrs HW=595.48' TW=594.98' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 0.34 cfs @ 2.13 fps)

Pond CB-A-05: CB-A-05



Summary for Pond CB-A-06: CB-A-06

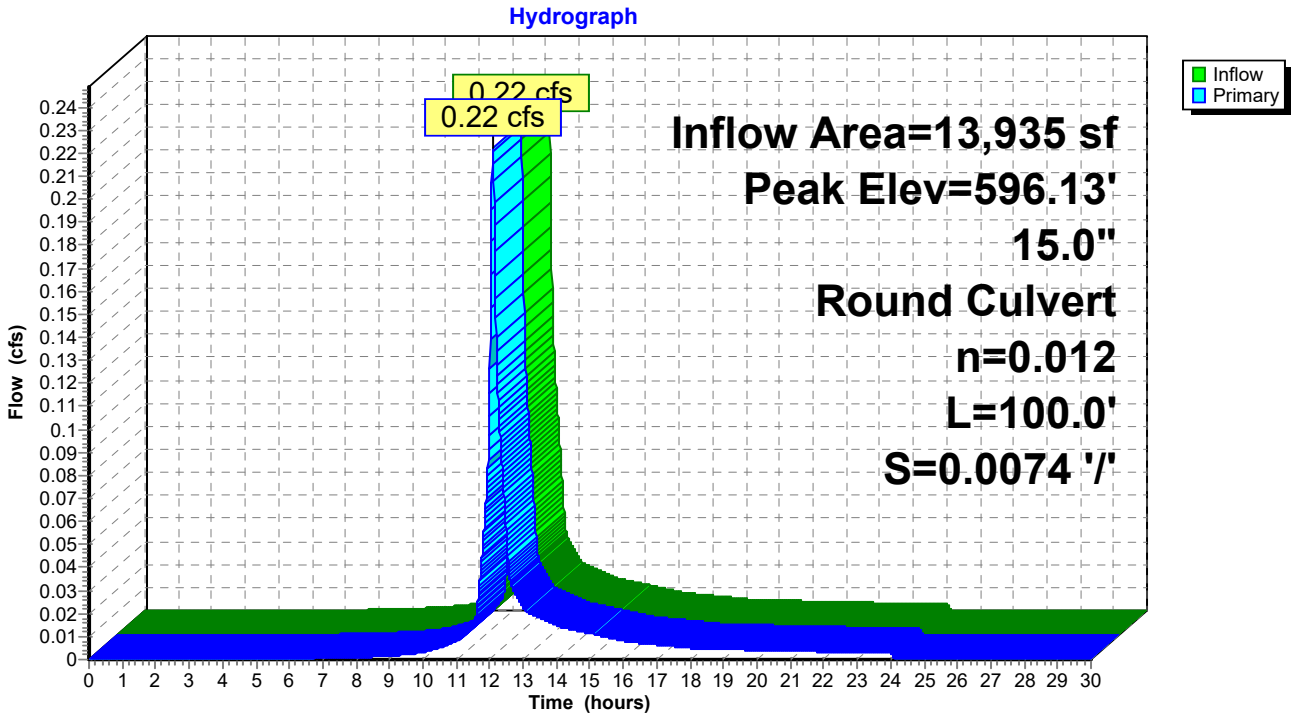
Inflow Area = 13,935 sf, 84.82% Impervious, Inflow Depth = 0.60" for 90% Storm event
Inflow = 0.22 cfs @ 12.09 hrs, Volume= 701 cf
Outflow = 0.22 cfs @ 12.09 hrs, Volume= 701 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.22 cfs @ 12.09 hrs, Volume= 701 cf
Routed to Pond CB-A-05 : CB-A-05

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.13' @ 12.09 hrs
Flood Elev= 598.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	595.90'	**15.0" Round HDPE Round 15"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 595.90' / 595.16' S= 0.0074 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.22 cfs @ 12.09 hrs HW=596.13' TW=595.48' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 0.22 cfs @ 2.11 fps)

Pond CB-A-06: CB-A-06



Summary for Pond CB-A-07: CB-A-07

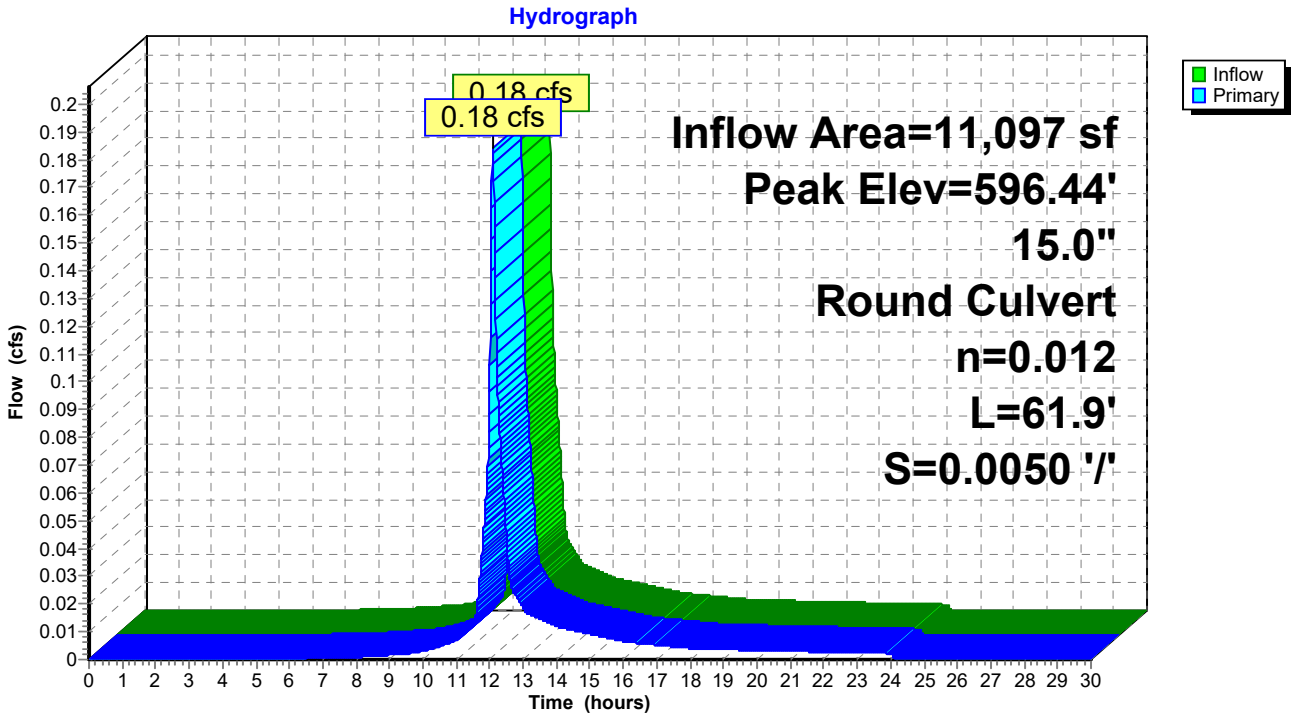
Inflow Area = 11,097 sf, 85.64% Impervious, Inflow Depth = 0.63" for 90% Storm event
Inflow = 0.18 cfs @ 12.09 hrs, Volume= 582 cf
Outflow = 0.18 cfs @ 12.09 hrs, Volume= 582 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.18 cfs @ 12.09 hrs, Volume= 582 cf
Routed to Pond CB-A-06 : CB-A-06

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.44' @ 12.09 hrs
Flood Elev= 600.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.21'	**15.0" Round HDPE Round 15"** L= 61.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.21' / 595.90' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.18 cfs @ 12.09 hrs HW=596.44' TW=596.13' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 0.18 cfs @ 1.75 fps)

Pond CB-A-07: CB-A-07



Summary for Pond CB-A-08: CB-A-08

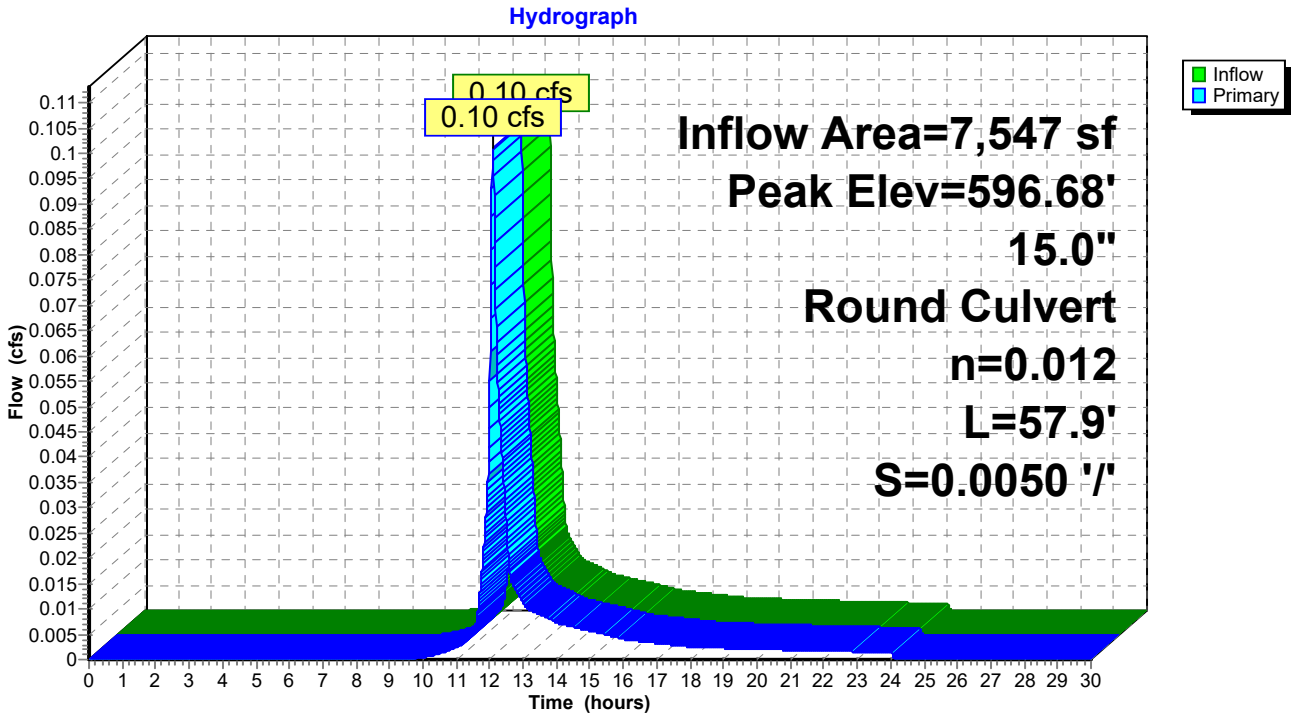
Inflow Area = 7,547 sf, 80.23% Impervious, Inflow Depth = 0.50" for 90% Storm event
Inflow = 0.10 cfs @ 12.09 hrs, Volume= 317 cf
Outflow = 0.10 cfs @ 12.09 hrs, Volume= 317 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.10 cfs @ 12.09 hrs, Volume= 317 cf
Routed to Pond CB-A-07 : CB-A-07

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.68' @ 12.09 hrs
Flood Elev= 598.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.50'	**15.0" Round HDPE Round 15"** L= 57.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.50' / 596.21' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.10 cfs @ 12.09 hrs HW=596.68' TW=596.44' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 0.10 cfs @ 1.39 fps)

Pond CB-A-08: CB-A-08



Summary for Pond CB-A-09: CB-A-09

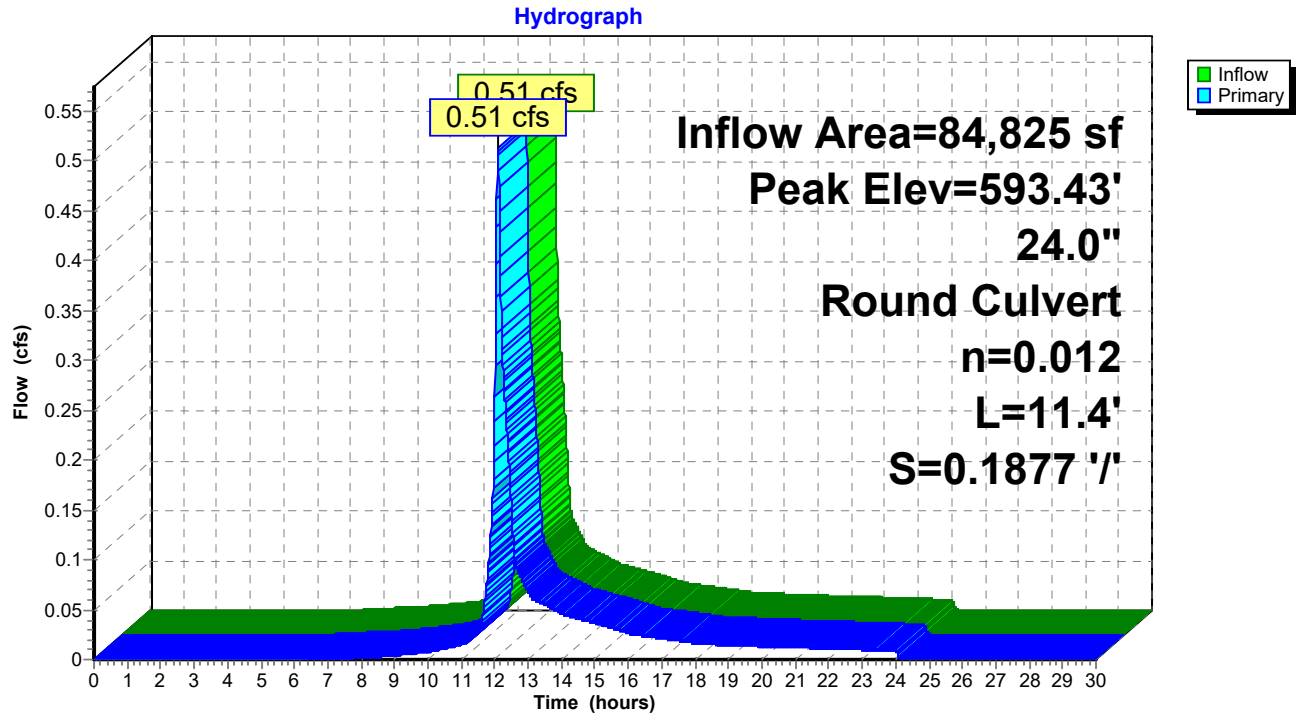
Inflow Area = 84,825 sf, 57.29% Impervious, Inflow Depth = 0.27" for 90% Storm event
Inflow = 0.51 cfs @ 12.09 hrs, Volume= 1,926 cf
Outflow = 0.51 cfs @ 12.09 hrs, Volume= 1,926 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.51 cfs @ 12.09 hrs, Volume= 1,926 cf
Routed to Pond ADS 1A : ADS 1A

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 593.43' @ 12.09 hrs
Flood Elev= 595.44'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.14'	**24.0" Round HDPE Round 24"** L= 11.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.14' / 591.00' S= 0.1877 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf

Primary OutFlow Max=0.51 cfs @ 12.09 hrs HW=593.43' TW=590.53' (Dynamic Tailwater)
↑—**1=HDPE Round 24"** (Inlet Controls 0.51 cfs @ 1.83 fps)

Pond CB-A-09: CB-A-09



Summary for Pond CB-A-10: CB-A-10

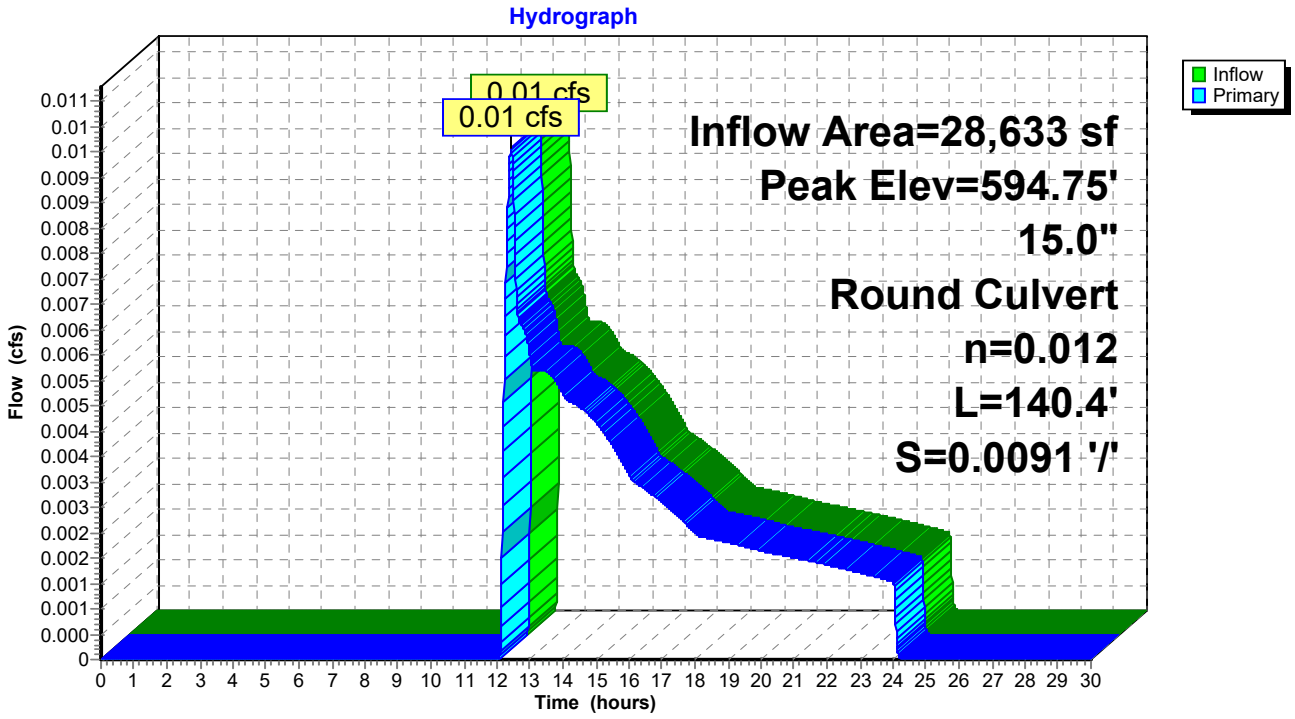
Inflow Area = 28,633 sf, 34.41% Impervious, Inflow Depth = 0.06" for 90% Storm event
Inflow = 0.01 cfs @ 12.42 hrs, Volume= 142 cf
Outflow = 0.01 cfs @ 12.42 hrs, Volume= 142 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.01 cfs @ 12.42 hrs, Volume= 142 cf
Routed to Pond CB-A-09 : CB-A-09

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.75' @ 12.42 hrs
Flood Elev= 596.72'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.70'	**15.0" Round HDPE Round 15"** L= 140.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.70' / 593.42' S= 0.0091 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.01 cfs @ 12.42 hrs HW=594.75' TW=593.32' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 0.01 cfs @ 0.98 fps)

Pond CB-A-10: CB-A-10



Summary for Pond CB-A-11: CB-A-11

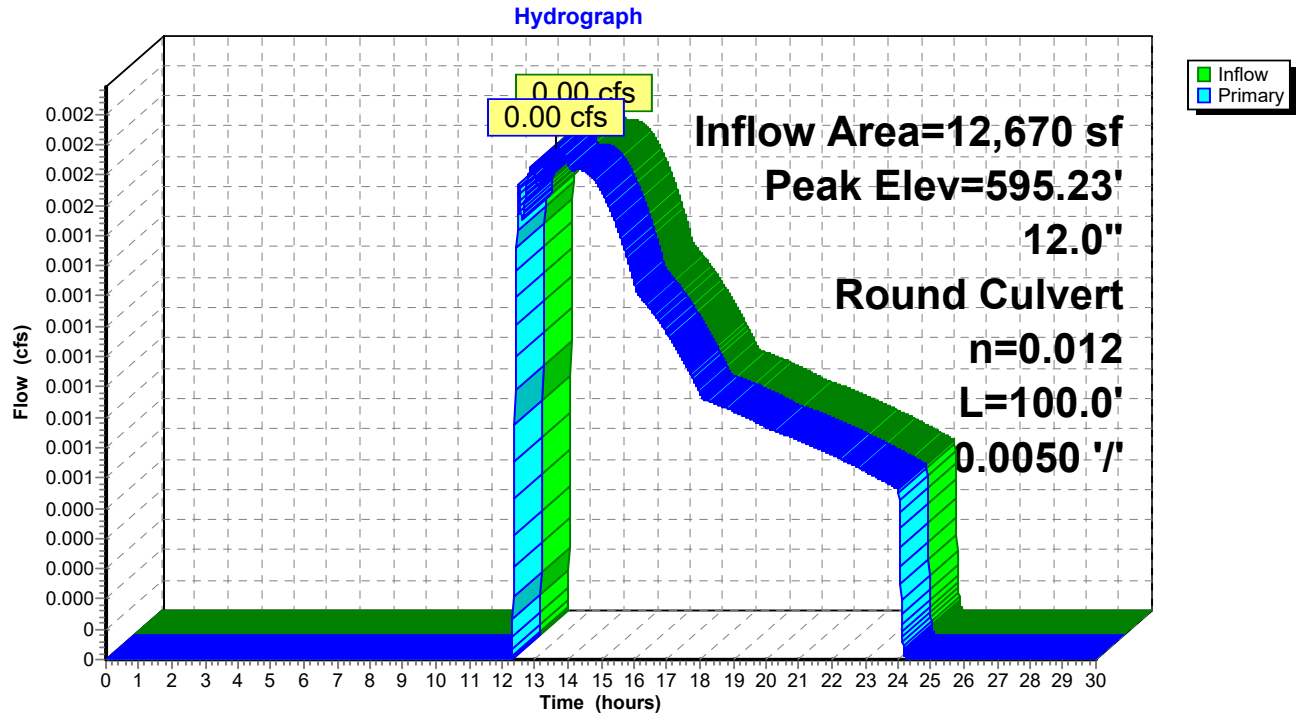
Inflow Area = 12,670 sf, 30.21% Impervious, Inflow Depth = 0.04" for 90% Storm event
Inflow = 0.00 cfs @ 13.66 hrs, Volume= 44 cf
Outflow = 0.00 cfs @ 13.66 hrs, Volume= 44 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 13.66 hrs, Volume= 44 cf
Routed to Pond CB-A-10 : CB-A-10

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.23' @ 13.66 hrs
Flood Elev= 597.61'

Device	Routing	Invert	Outlet Devices
#1	Primary	595.20'	**12.0" Round HDPE Round 12"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 595.20' / 594.70' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.00 cfs @ 13.66 hrs HW=595.23' TW=594.74' (Dynamic Tailwater)
↑**1=HDPE Round 12"** (Outlet Controls 0.00 cfs @ 0.47 fps)

Pond CB-A-11: CB-A-11



Summary for Pond CB-A-12: CB-A-12

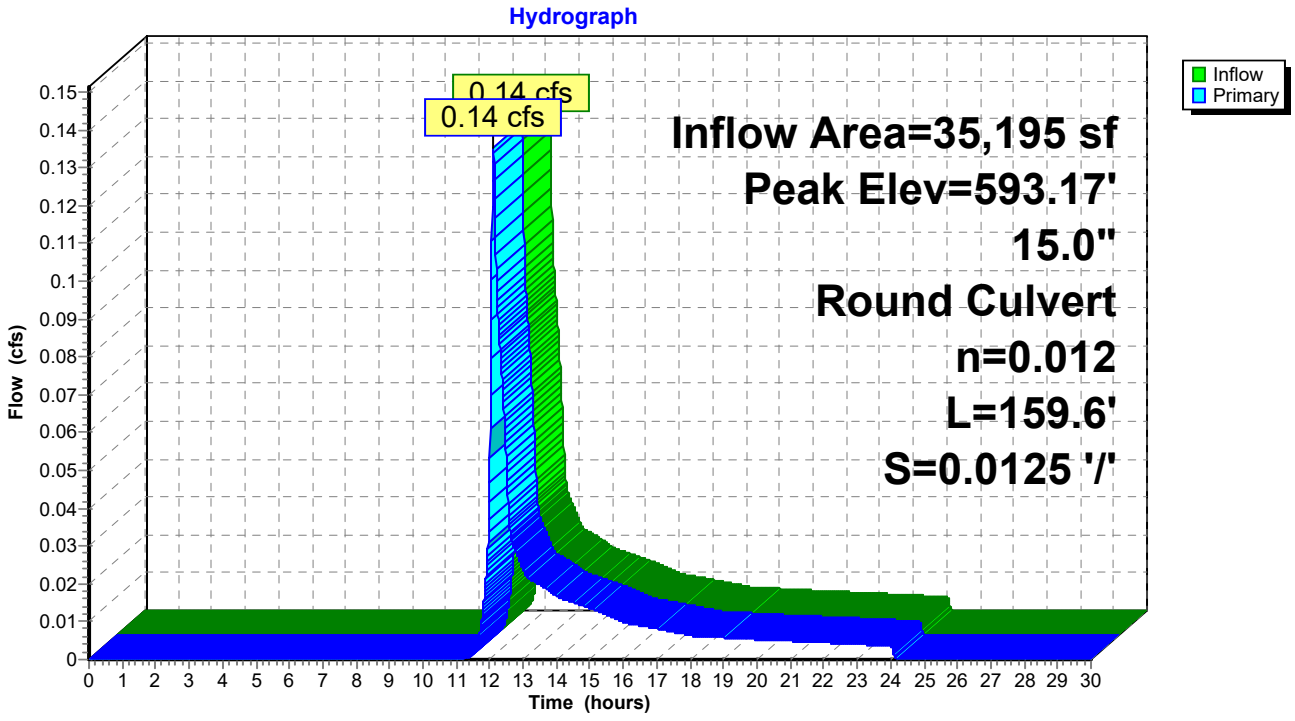
Inflow Area = 35,195 sf, 54.89% Impervious, Inflow Depth = 0.20" for 90% Storm event
Inflow = 0.14 cfs @ 12.11 hrs, Volume= 576 cf
Outflow = 0.14 cfs @ 12.11 hrs, Volume= 576 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.14 cfs @ 12.11 hrs, Volume= 576 cf
Routed to Pond ADS 1A : ADS 1A

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 593.17' @ 12.11 hrs
Flood Elev= 597.01'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.00'	**15.0" Round HDPE Round 15"** L= 159.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.00' / 591.00' S= 0.0125 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.14 cfs @ 12.11 hrs HW=593.17' TW=590.54' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Inlet Controls 0.14 cfs @ 1.39 fps)

Pond CB-A-12: CB-A-12



Summary for Pond CB-A-13: CB-A-12

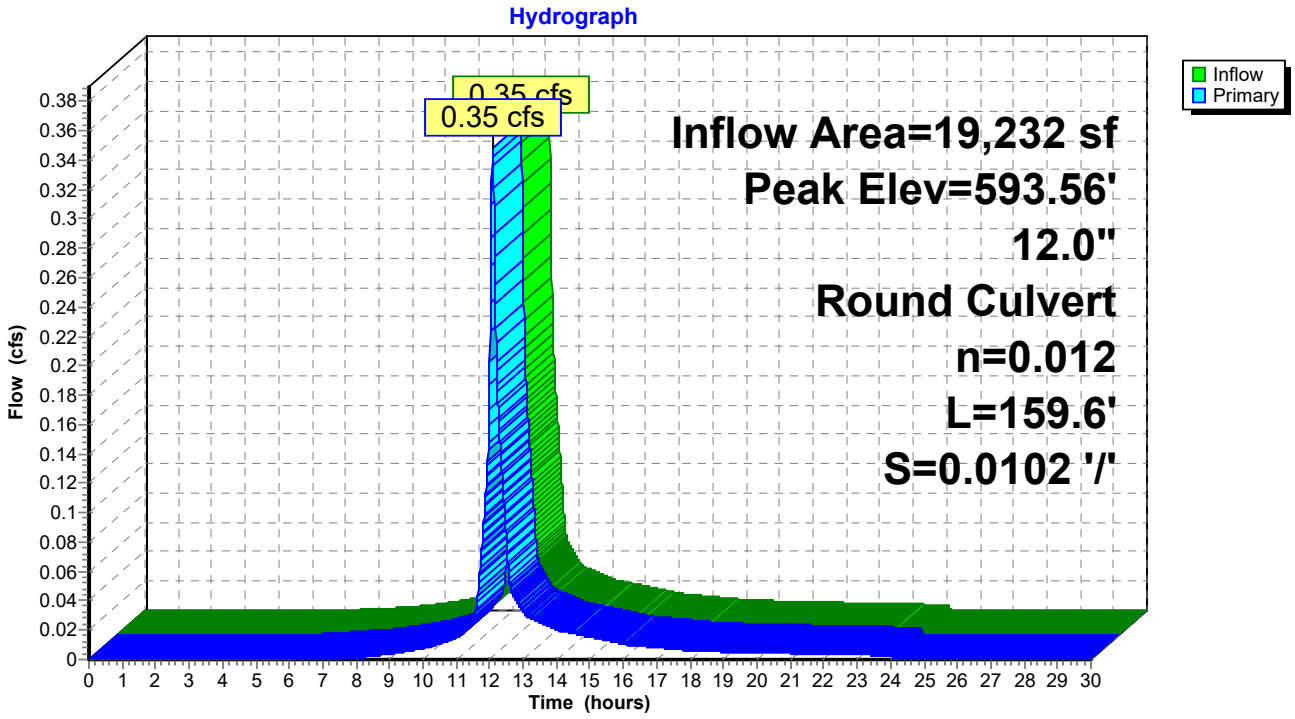
Inflow Area = 19,232 sf, 86.74% Impervious, Inflow Depth = 0.69" for 90% Storm event
Inflow = 0.35 cfs @ 12.09 hrs, Volume= 1,106 cf
Outflow = 0.35 cfs @ 12.09 hrs, Volume= 1,106 cf, Atten= 0%, Lag= 0.1 min
Primary = 0.35 cfs @ 12.09 hrs, Volume= 1,106 cf
Routed to Pond CB-A-09 : CB-A-09

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 593.56' @ 12.09 hrs
Flood Elev= 597.01'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.00'	**12.0" Round HDPE Round 12"** L= 159.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.00' / 591.37' S= 0.0102 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.34 cfs @ 12.09 hrs HW=593.55' TW=593.43' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 0.34 cfs @ 1.11 fps)

Pond CB-A-13: CB-A-12



Summary for Pond CB-A-14: CB-A-14

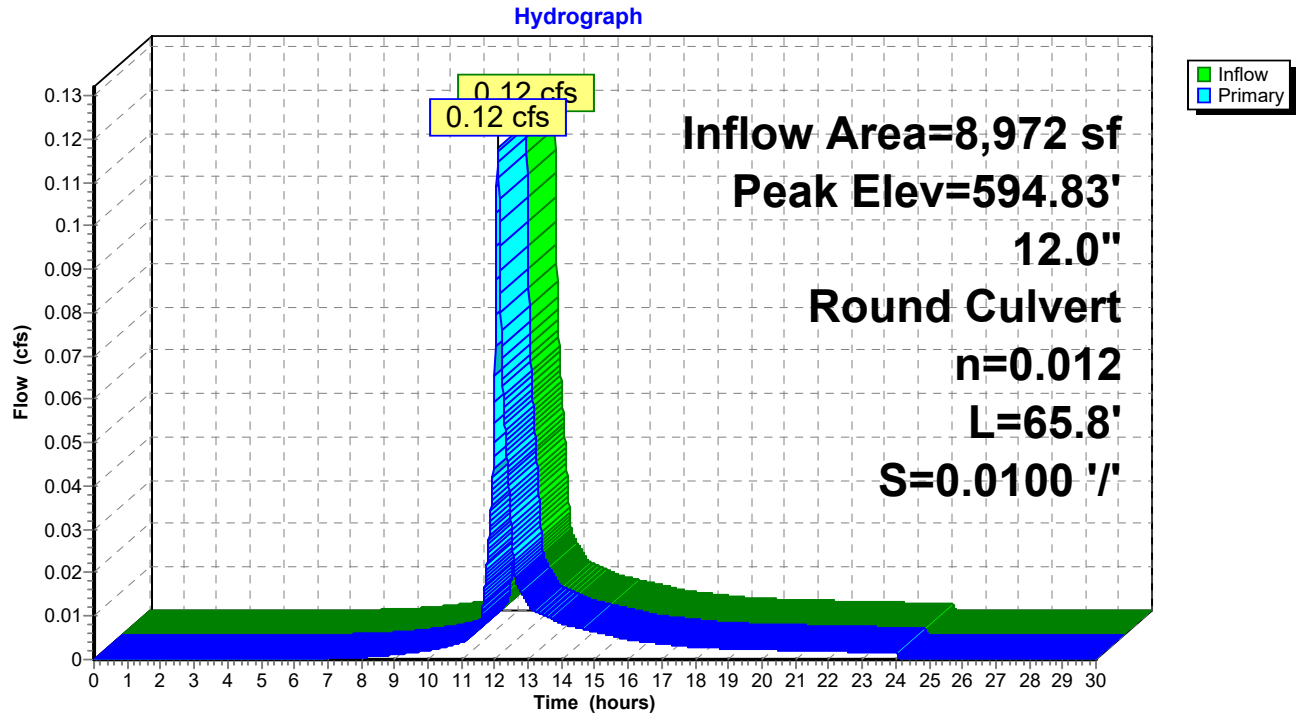
Inflow Area = 8,972 sf, 77.86% Impervious, Inflow Depth = 0.51" for 90% Storm event
Inflow = 0.12 cfs @ 12.09 hrs, Volume= 384 cf
Outflow = 0.12 cfs @ 12.09 hrs, Volume= 384 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.12 cfs @ 12.09 hrs, Volume= 384 cf
Routed to Pond 3P : CB-A-13

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.83' @ 12.09 hrs
Flood Elev= 598.67'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.66'	**12.0" Round HDPE Round 12"** L= 65.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.66' / 594.00' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.12 cfs @ 12.09 hrs HW=594.83' TW=594.24' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 0.12 cfs @ 2.00 fps)

Pond CB-A-14: CB-A-14



Summary for Pond CB-A-15: CB-A-15

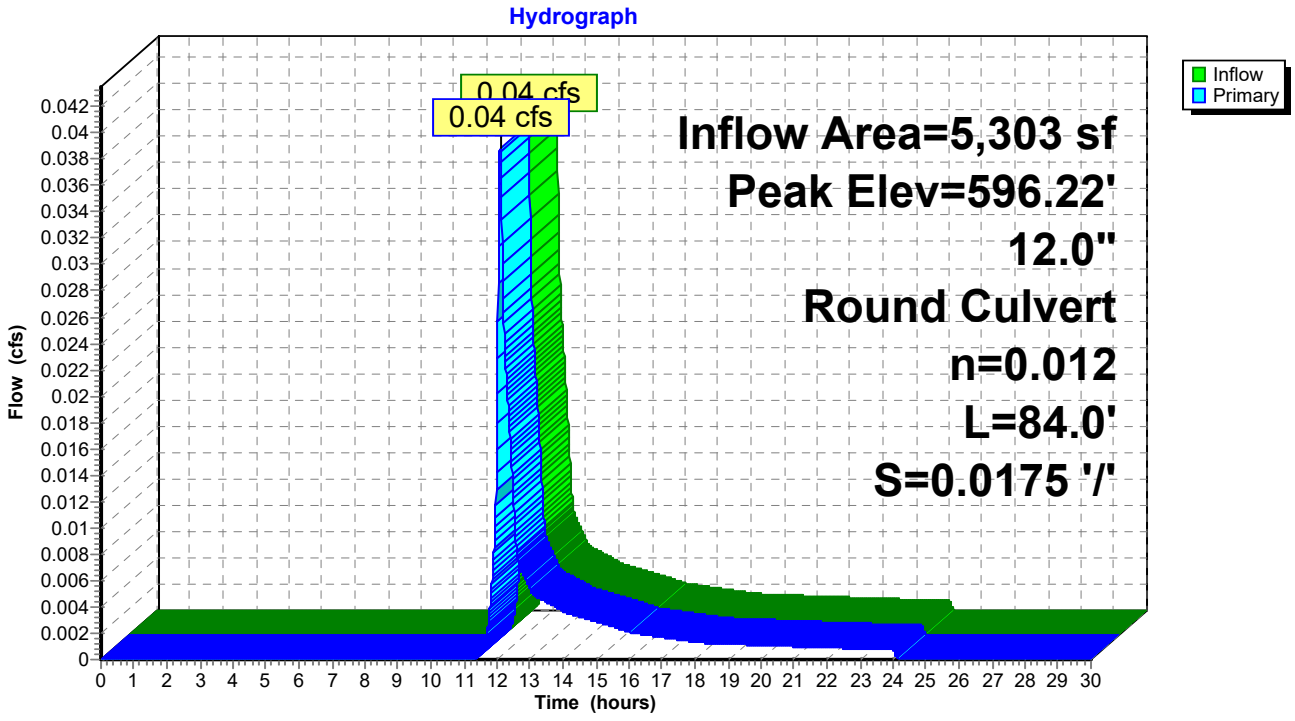
Inflow Area = 5,303 sf, 67.21% Impervious, Inflow Depth = 0.31" for 90% Storm event
Inflow = 0.04 cfs @ 12.10 hrs, Volume= 135 cf
Outflow = 0.04 cfs @ 12.10 hrs, Volume= 135 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.04 cfs @ 12.10 hrs, Volume= 135 cf
Routed to Pond CB-A-14 : CB-A-14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.22' @ 12.10 hrs
Flood Elev= 600.14'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.13'	**12.0" Round HDPE Round 12"** L= 84.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.13' / 594.66' S= 0.0175 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.04 cfs @ 12.10 hrs HW=596.22' TW=594.83' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Inlet Controls 0.04 cfs @ 1.04 fps)

Pond CB-A-15: CB-A-15



Summary for Pond CB-A-16: CB-A-16

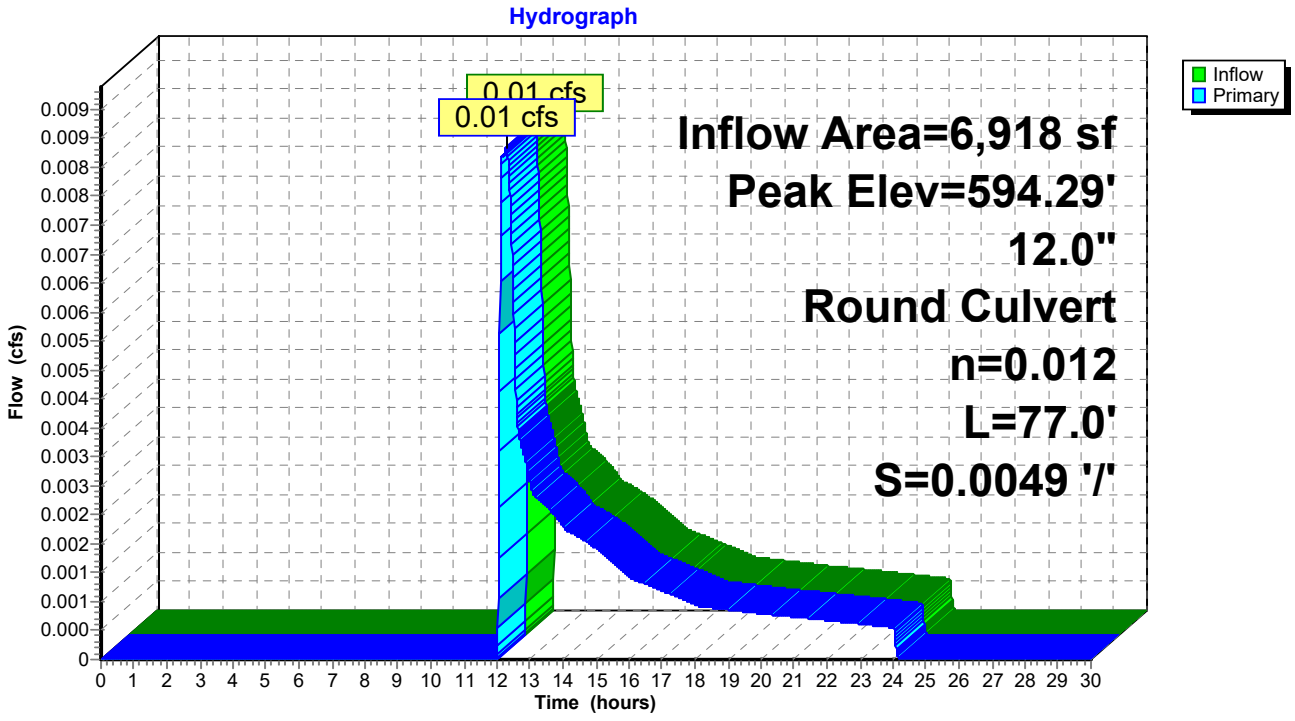
Inflow Area = 6,918 sf, 46.04% Impervious, Inflow Depth = 0.12" for 90% Storm event
Inflow = 0.01 cfs @ 12.28 hrs, Volume= 67 cf
Outflow = 0.01 cfs @ 12.27 hrs, Volume= 67 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.01 cfs @ 12.27 hrs, Volume= 67 cf
Routed to Pond CB-A-17 : CB-A-17

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.29' @ 12.15 hrs
Flood Elev= 596.24'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.23'	**12.0" Round HDPE Round 12"** L= 77.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.23' / 593.85' S= 0.0049 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.01 cfs @ 12.27 hrs HW=594.29' TW=594.00' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 0.01 cfs @ 0.70 fps)

Pond CB-A-16: CB-A-16



Summary for Pond CB-A-17: CB-A-17

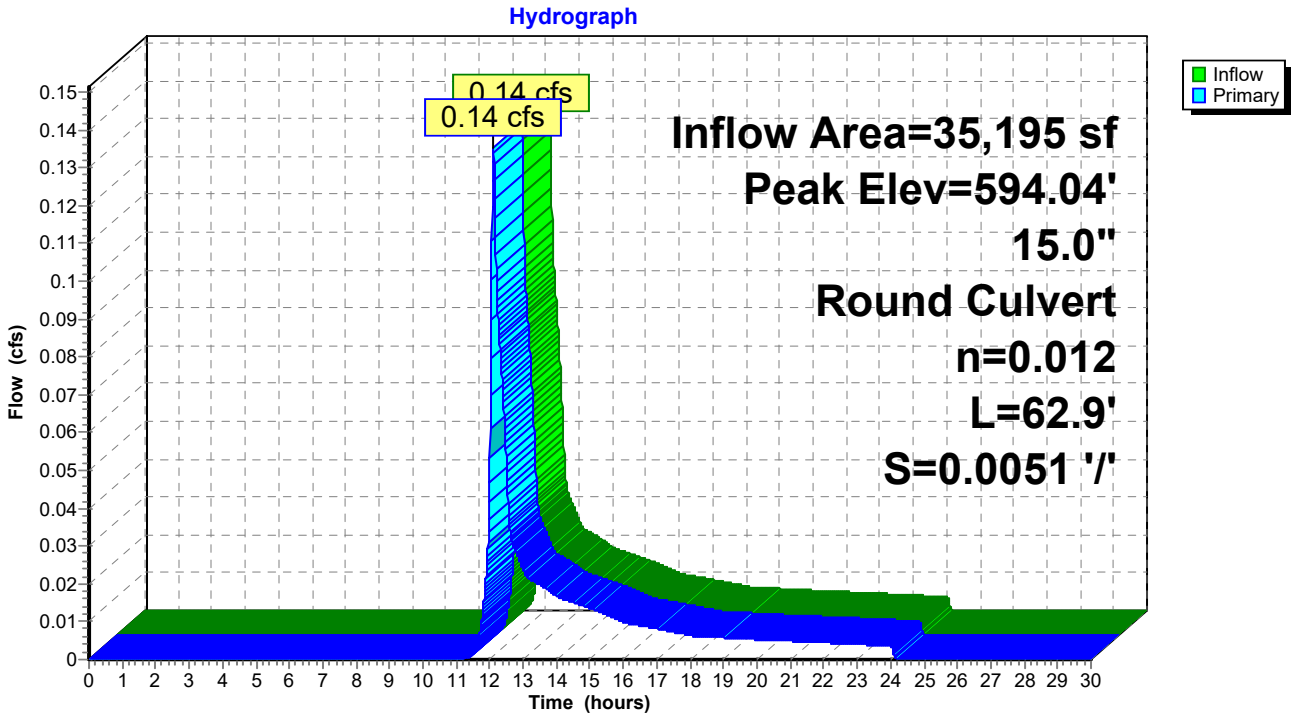
Inflow Area = 35,195 sf, 54.89% Impervious, Inflow Depth = 0.20" for 90% Storm event
Inflow = 0.14 cfs @ 12.11 hrs, Volume= 576 cf
Outflow = 0.14 cfs @ 12.11 hrs, Volume= 576 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.14 cfs @ 12.11 hrs, Volume= 576 cf
Routed to Pond CB-A-12 : CB-A-12

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.04' @ 12.11 hrs
Flood Elev= 597.01'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.85'	**15.0" Round HDPE Round 15"** L= 62.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.85' / 593.53' S= 0.0051 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.14 cfs @ 12.11 hrs HW=594.04' TW=593.17' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 0.14 cfs @ 1.72 fps)

Pond CB-A-17: CB-A-17



Summary for Pond CB-A-18: CB-A-18

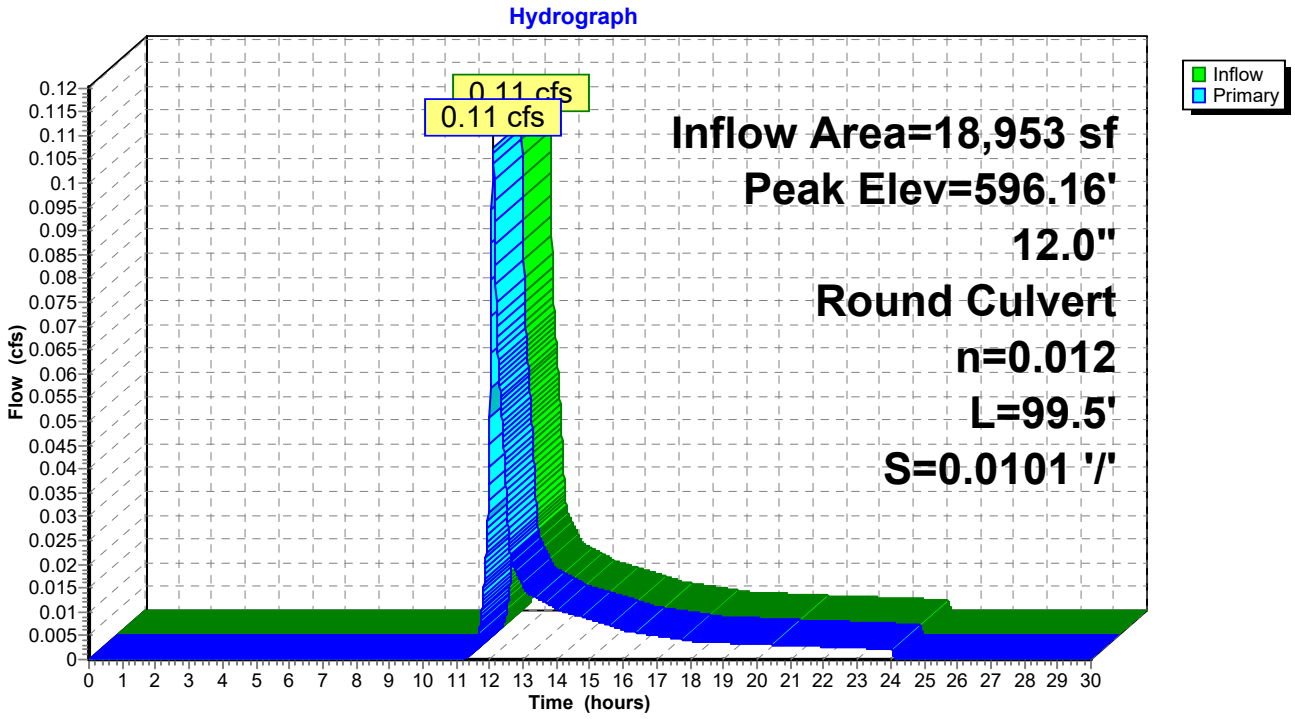
Inflow Area = 18,953 sf, 59.78% Impervious, Inflow Depth = 0.25" for 90% Storm event
Inflow = 0.11 cfs @ 12.10 hrs, Volume= 390 cf
Outflow = 0.11 cfs @ 12.10 hrs, Volume= 390 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.11 cfs @ 12.10 hrs, Volume= 390 cf
Routed to Pond CB-A-17 : CB-A-17

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.16' @ 12.10 hrs
Flood Elev= 598.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.00'	**12.0" Round HDPE Round 12"** L= 99.5' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.00' / 595.00' S= 0.0101 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.11 cfs @ 12.10 hrs HW=596.16' TW=594.04' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Inlet Controls 0.11 cfs @ 1.35 fps)

Pond CB-A-18: CB-A-18



Summary for Pond CB-A-19: CB-A-19

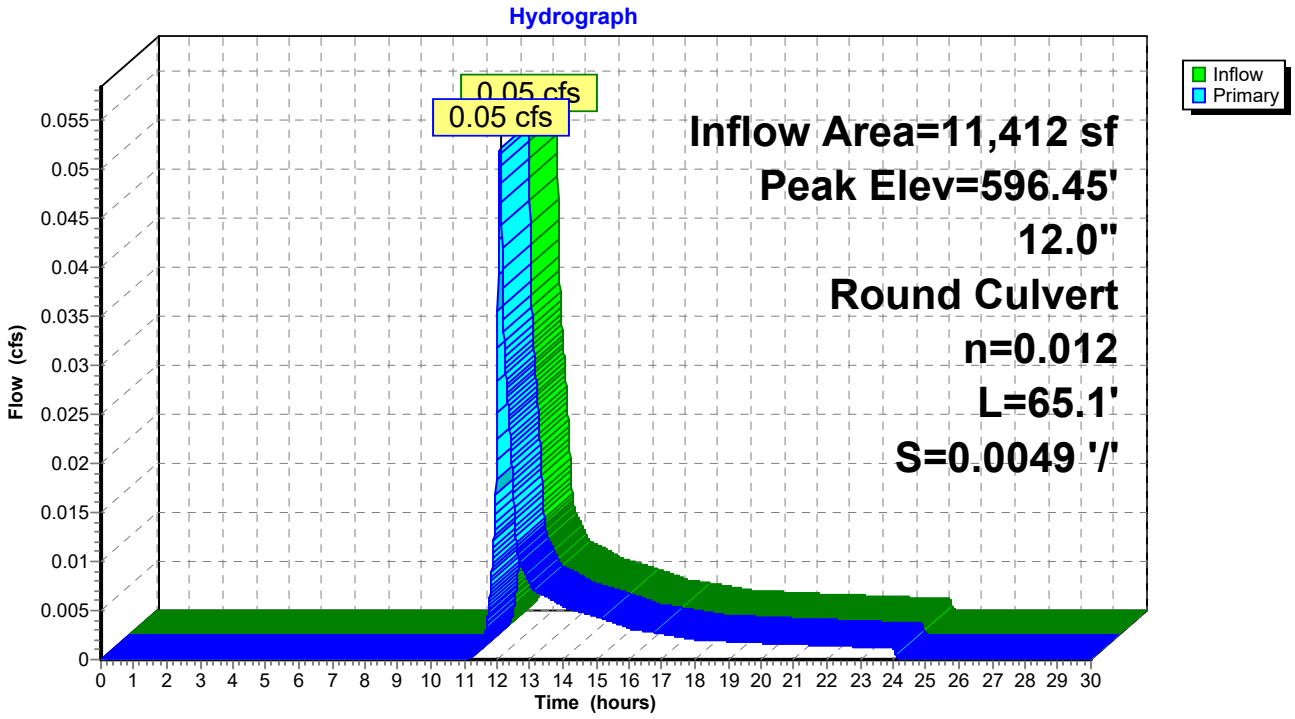
Inflow Area = 11,412 sf, 53.74% Impervious, Inflow Depth = 0.21" for 90% Storm event
Inflow = 0.05 cfs @ 12.10 hrs, Volume= 198 cf
Outflow = 0.05 cfs @ 12.10 hrs, Volume= 198 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.05 cfs @ 12.10 hrs, Volume= 198 cf
Routed to Pond CB-A-18 : CB-A-18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.45' @ 12.10 hrs
Flood Elev= 598.65'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.32'	**12.0" Round HDPE Round 12"** L= 65.1' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.32' / 596.00' S= 0.0049 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.05 cfs @ 12.10 hrs HW=596.45' TW=596.16' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 0.05 cfs @ 1.25 fps)

Pond CB-A-19: CB-A-19



Summary for Pond CB-A-20: CB-A-20

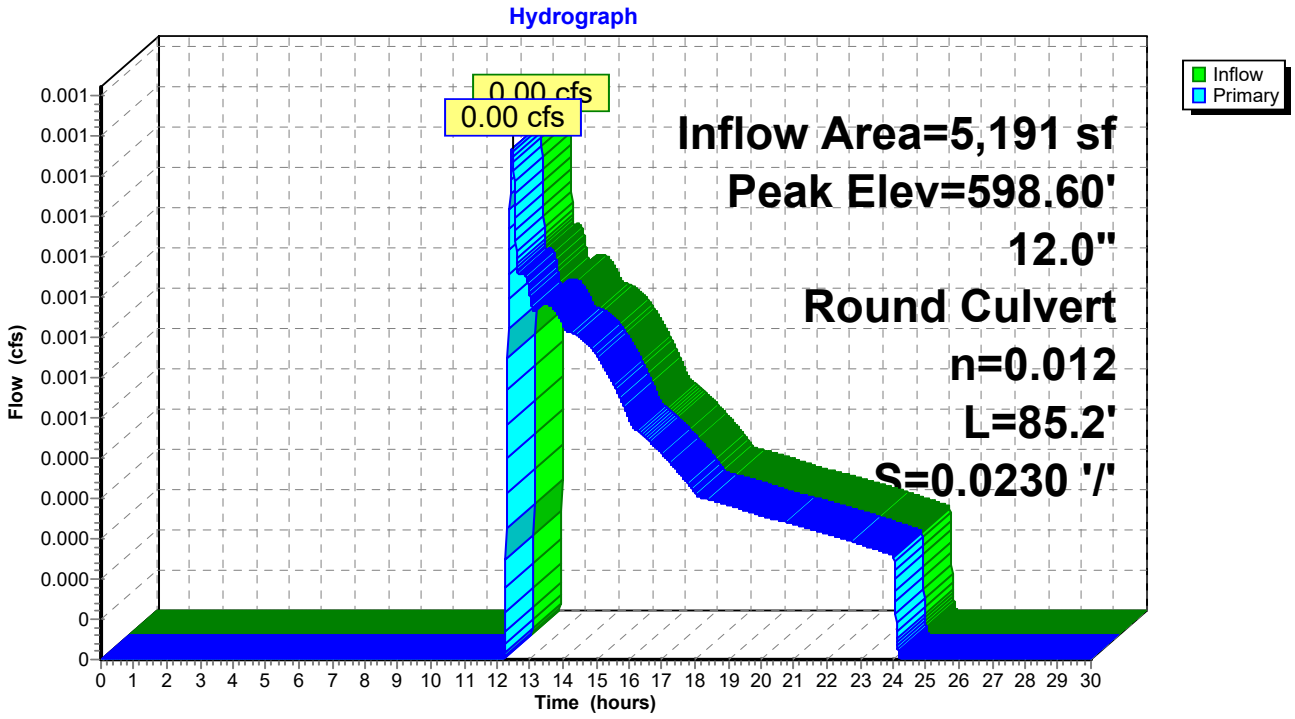
Inflow Area = 5,191 sf, 33.40% Impervious, Inflow Depth = 0.05" for 90% Storm event
Inflow = 0.00 cfs @ 12.46 hrs, Volume= 22 cf
Outflow = 0.00 cfs @ 12.46 hrs, Volume= 22 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 12.46 hrs, Volume= 22 cf
Routed to Pond CB-A-19 : CB-A-19

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 598.60' @ 12.46 hrs
Flood Elev= 600.58'

Device	Routing	Invert	Outlet Devices
#1	Primary	598.58'	**12.0" Round HDPE Round 12"** L= 85.2' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 598.58' / 596.62' S= 0.0230 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.00 cfs @ 12.46 hrs HW=598.60' TW=596.40' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Inlet Controls 0.00 cfs @ 0.44 fps)

Pond CB-A-20: CB-A-20



Summary for Pond CB-B-01: CB-B-01

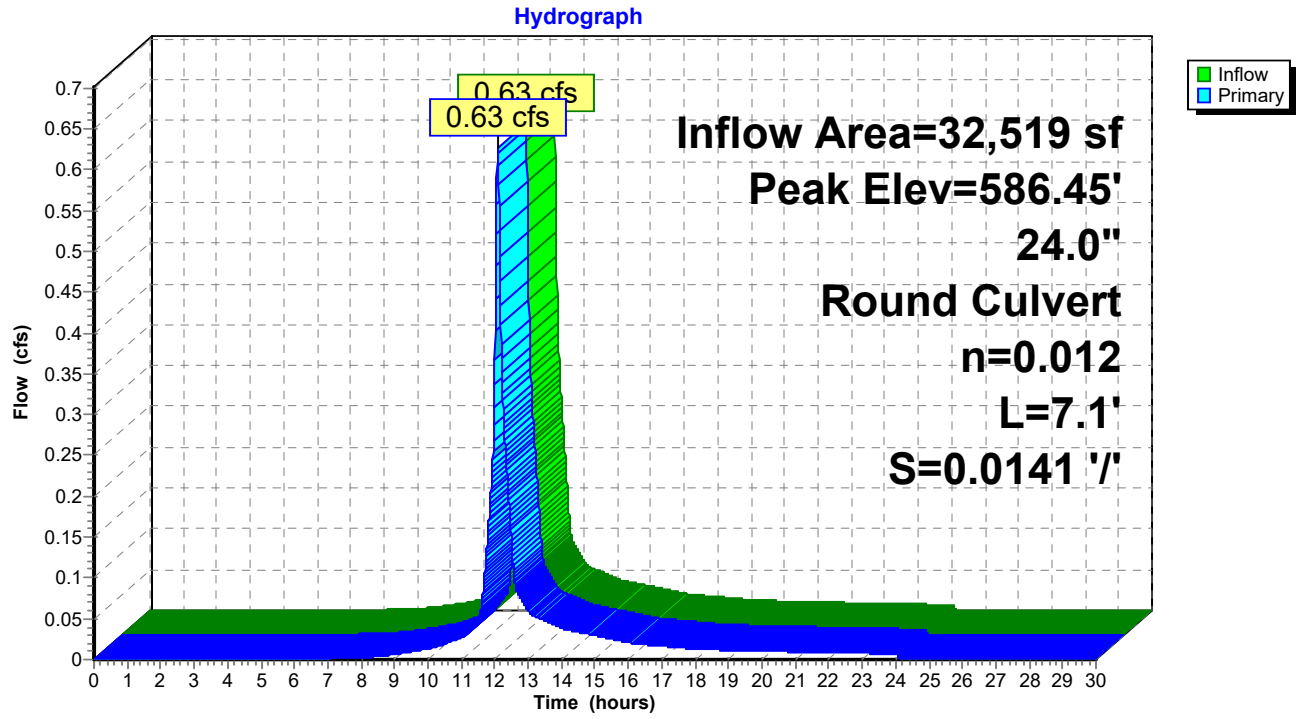
Inflow Area = 32,519 sf, 91.41% Impervious, Inflow Depth = 0.72" for 90% Storm event
Inflow = 0.63 cfs @ 12.09 hrs, Volume= 1,955 cf
Outflow = 0.63 cfs @ 12.09 hrs, Volume= 1,955 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.63 cfs @ 12.09 hrs, Volume= 1,955 cf
Routed to Pond ADS 1B : ADS 1B

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 586.45' @ 12.09 hrs
Flood Elev= 589.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	586.10'	**24.0" Round HDPE Round 24"** L= 7.1' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 586.10' / 586.00' S= 0.0141 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf

Primary OutFlow Max=0.63 cfs @ 12.09 hrs HW=586.45' TW=585.01' (Dynamic Tailwater)
↑—**1=HDPE Round 24"** (Barrel Controls 0.63 cfs @ 2.57 fps)

Pond CB-B-01: CB-B-01



Summary for Pond CB-B-02: CB-B-02

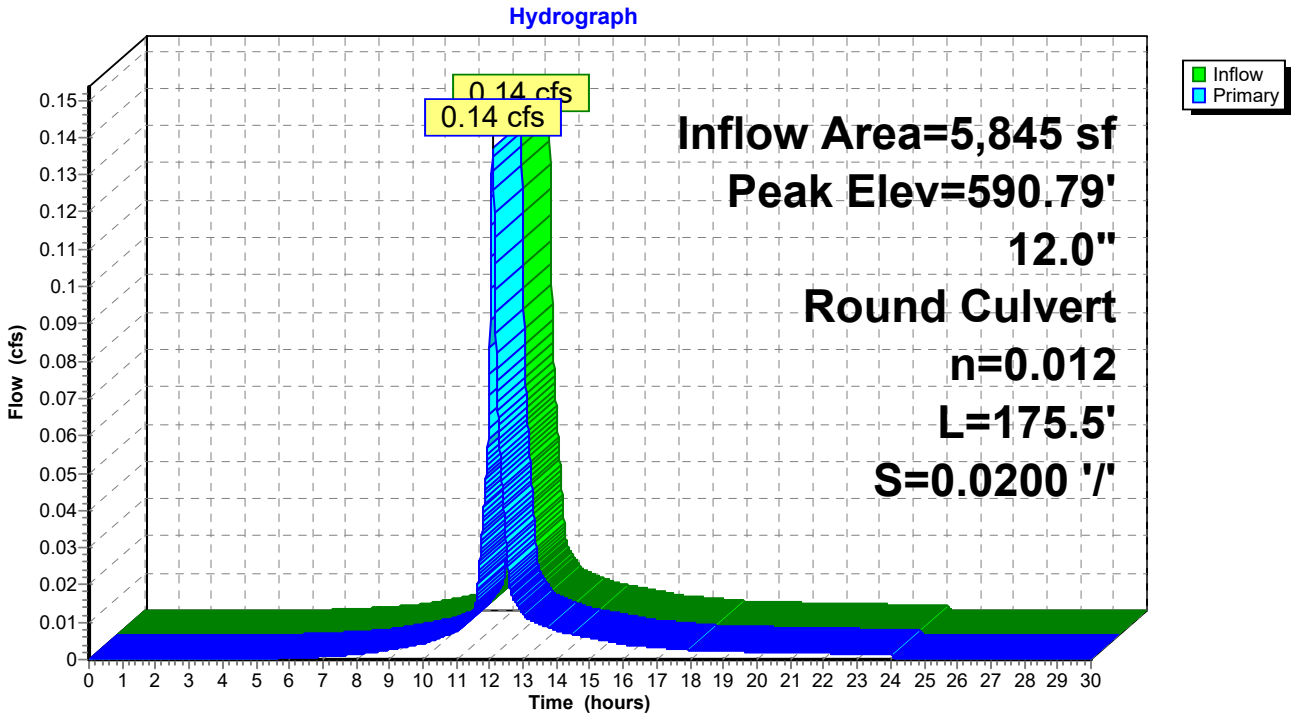
Inflow Area = 5,845 sf, 96.34% Impervious, Inflow Depth = 0.89" for 90% Storm event
Inflow = 0.14 cfs @ 12.09 hrs, Volume= 436 cf
Outflow = 0.14 cfs @ 12.09 hrs, Volume= 436 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.14 cfs @ 12.09 hrs, Volume= 436 cf
Routed to Pond CB-B-01 : CB-B-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 590.79' @ 12.09 hrs
Flood Elev= 592.61'

Device	Routing	Invert	Outlet Devices
#1	Primary	590.61'	**12.0" Round HDPE Round 12"** L= 175.5' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 590.61' / 587.10' S= 0.0200 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.14 cfs @ 12.09 hrs HW=590.79' TW=586.45' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Inlet Controls 0.14 cfs @ 1.44 fps)

Pond CB-B-02: CB-B-02



Summary for Pond CB-B-03: CB-B-03

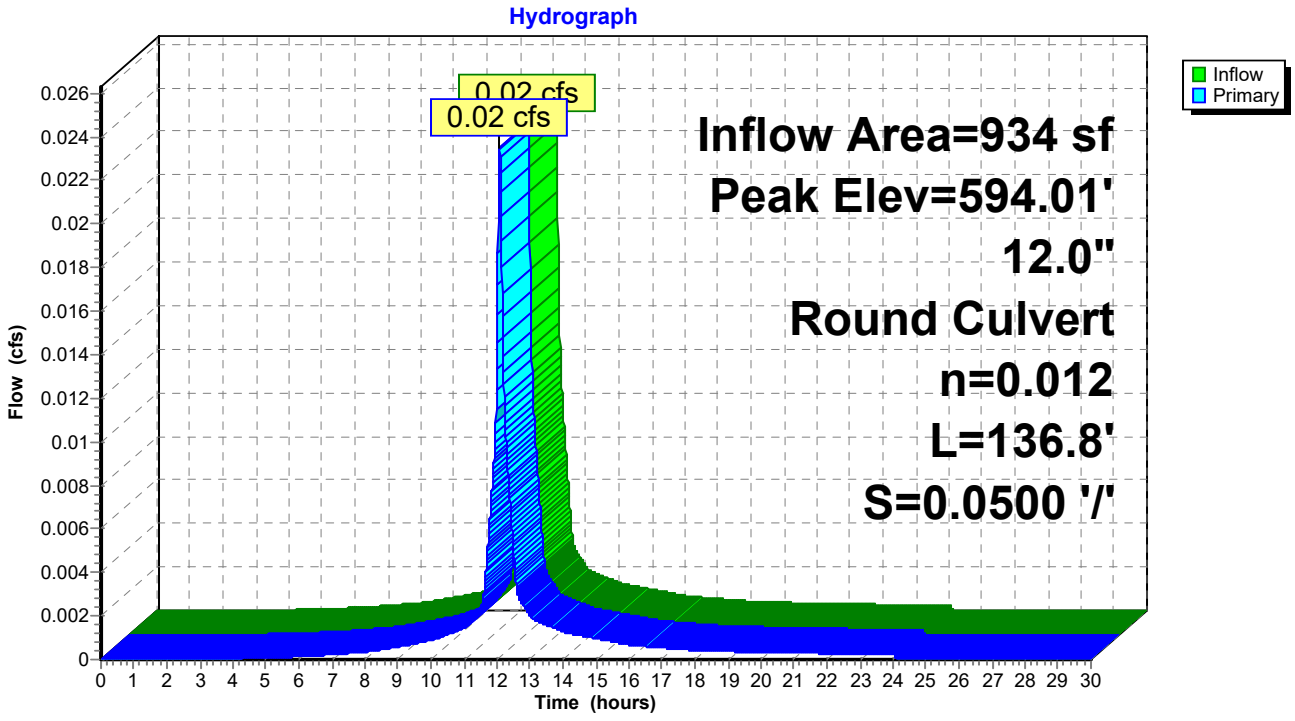
Inflow Area = 934 sf,100.00% Impervious, Inflow Depth = 0.99" for 90% Storm event
Inflow = 0.02 cfs @ 12.08 hrs, Volume= 77 cf
Outflow = 0.02 cfs @ 12.08 hrs, Volume= 77 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.02 cfs @ 12.08 hrs, Volume= 77 cf
Routed to Pond CB-B-01 : CB-B-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.01' @ 12.08 hrs
Flood Elev= 595.94'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.94'	**12.0" Round HDPE Round 12"** L= 136.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.94' / 587.10' S= 0.0500 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.02 cfs @ 12.08 hrs HW=594.01' TW=586.45' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Inlet Controls 0.02 cfs @ 0.92 fps)

Pond CB-B-03: CB-B-03



Summary for Pond CB-B-04: CB-B-04

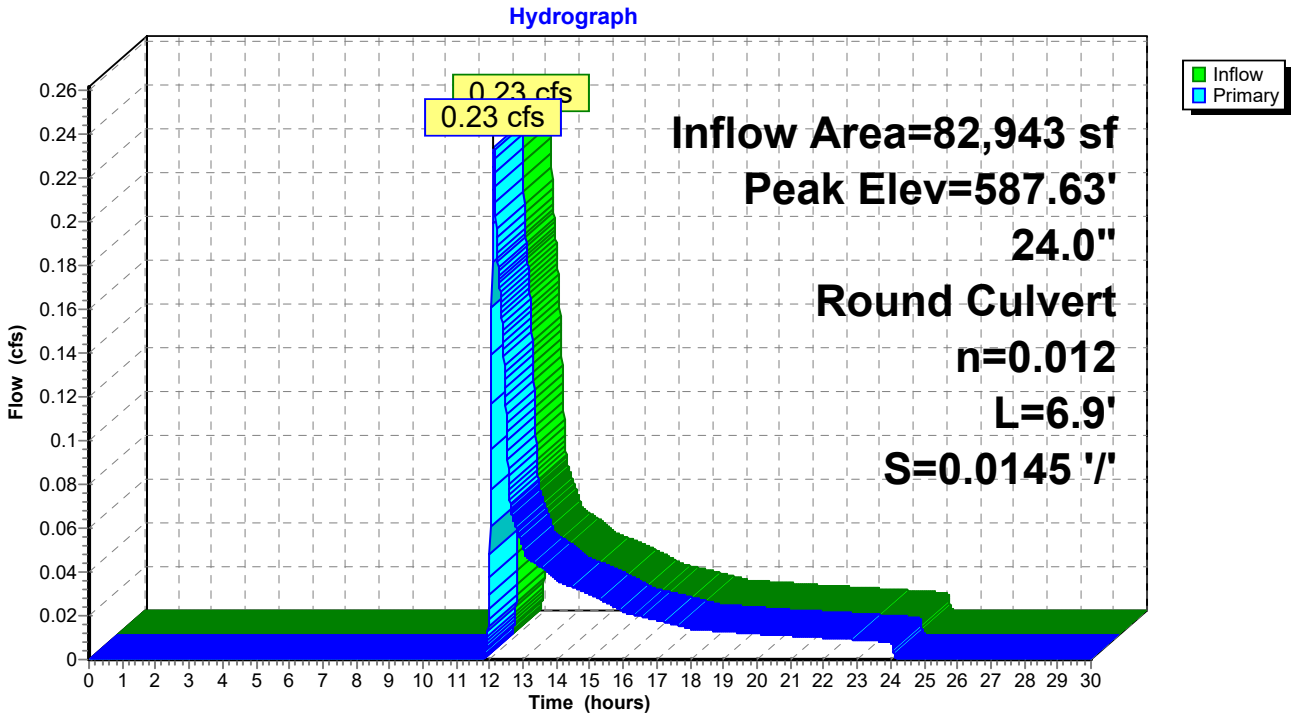
Inflow Area = 82,943 sf, 52.19% Impervious, Inflow Depth = 0.17" for 90% Storm event
Inflow = 0.23 cfs @ 12.12 hrs, Volume= 1,157 cf
Outflow = 0.23 cfs @ 12.12 hrs, Volume= 1,157 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.23 cfs @ 12.12 hrs, Volume= 1,157 cf
Routed to Pond ADS 1B : ADS 1B

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 587.63' @ 12.12 hrs
Flood Elev= 590.44'

Device	Routing	Invert	Outlet Devices
#1	Primary	587.43'	**24.0" Round HDPE Round 24"** L= 6.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 587.43' / 587.33' S= 0.0145 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf

Primary OutFlow Max=0.23 cfs @ 12.12 hrs HW=587.63' TW=585.02' (Dynamic Tailwater)
↑—**1=HDPE Round 24"** (Barrel Controls 0.23 cfs @ 2.13 fps)

Pond CB-B-04: CB-B-04



Summary for Pond CB-B-05: CB-B-05

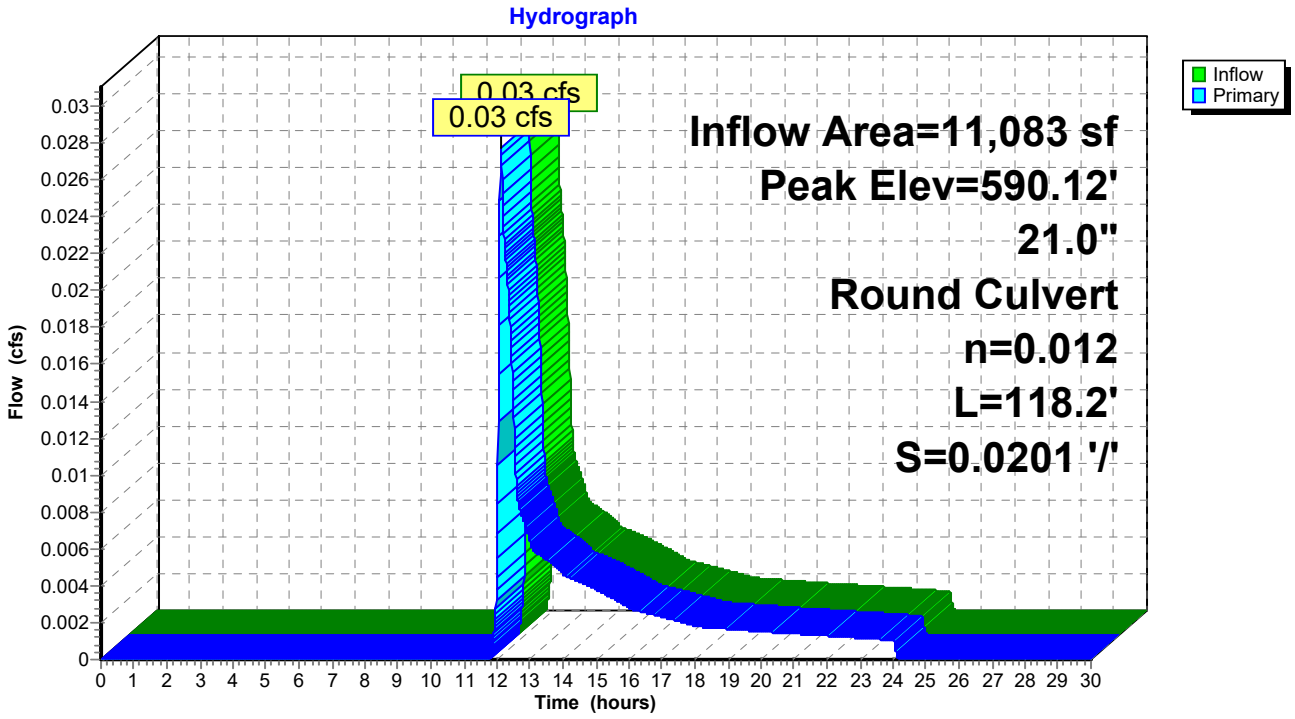
Inflow Area = 11,083 sf, 51.58% Impervious, Inflow Depth = 0.16" for 90% Storm event
Inflow = 0.03 cfs @ 12.13 hrs, Volume= 146 cf
Outflow = 0.03 cfs @ 12.13 hrs, Volume= 146 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.03 cfs @ 12.13 hrs, Volume= 146 cf
Routed to Pond CB-B-04 : CB-B-04

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 590.12' @ 12.13 hrs
Flood Elev= 592.82'

Device	Routing	Invert	Outlet Devices
#1	Primary	590.05'	**21.0" Round HDPE Round 21"** L= 118.2' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 590.05' / 587.68' S= 0.0201 '/' Cc= 0.900 n= 0.012, Flow Area= 2.41 sf

Primary OutFlow Max=0.03 cfs @ 12.13 hrs HW=590.12' TW=587.63' (Dynamic Tailwater)
↑—**1=HDPE Round 21"** (Inlet Controls 0.03 cfs @ 0.89 fps)

Pond CB-B-05: CB-B-05



Summary for Pond CB-B-07: CB-B-07

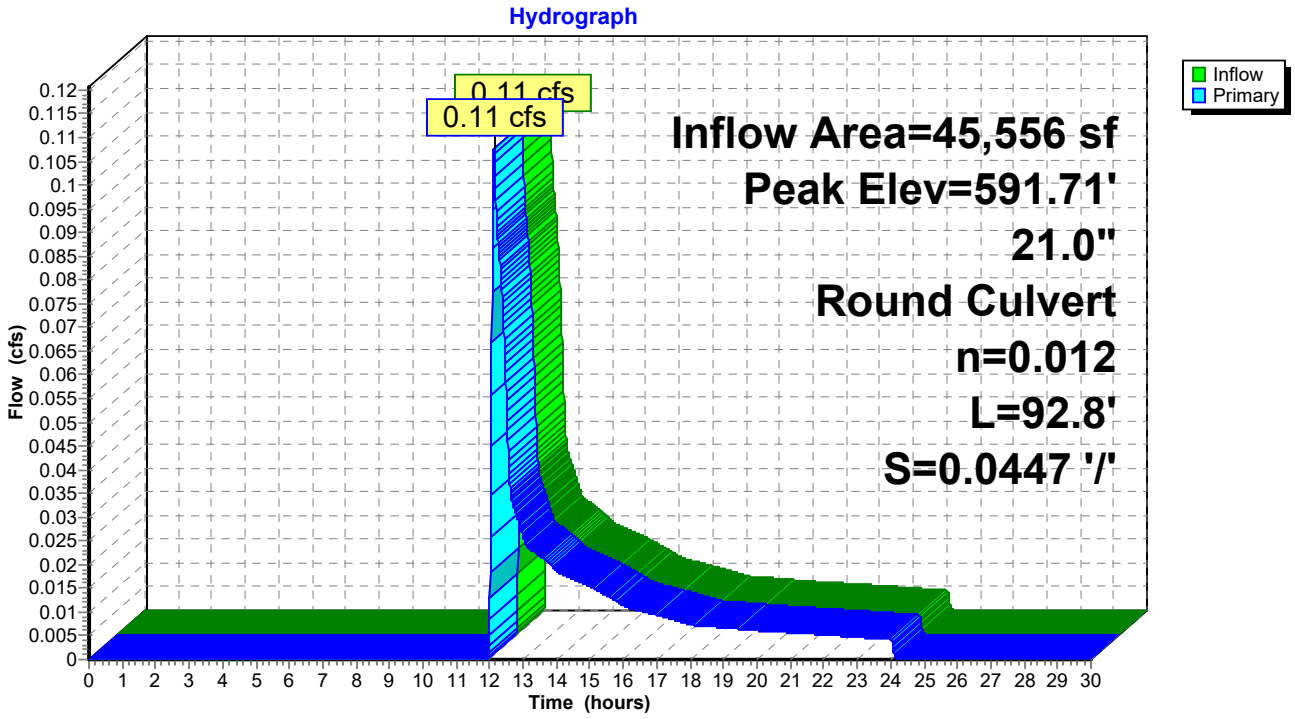
Inflow Area = 45,556 sf, 50.38% Impervious, Inflow Depth = 0.15" for 90% Storm event
Inflow = 0.11 cfs @ 12.13 hrs, Volume= 581 cf
Outflow = 0.11 cfs @ 12.13 hrs, Volume= 581 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.11 cfs @ 12.13 hrs, Volume= 581 cf
Routed to Pond CB-B-04 : CB-B-04

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 591.71' @ 12.13 hrs
Flood Elev= 595.09'

Device	Routing	Invert	Outlet Devices
#1	Primary	591.57'	**21.0" Round HDPE Round 21"** L= 92.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.57' / 587.42' S= 0.0447 '/' Cc= 0.900 n= 0.012, Flow Area= 2.41 sf

Primary OutFlow Max=0.11 cfs @ 12.13 hrs HW=591.71' TW=587.63' (Dynamic Tailwater)
↑—**1=HDPE Round 21"** (Inlet Controls 0.11 cfs @ 1.25 fps)

Pond CB-B-07: CB-B-07



Summary for Pond CB-C-01: CB-C-01

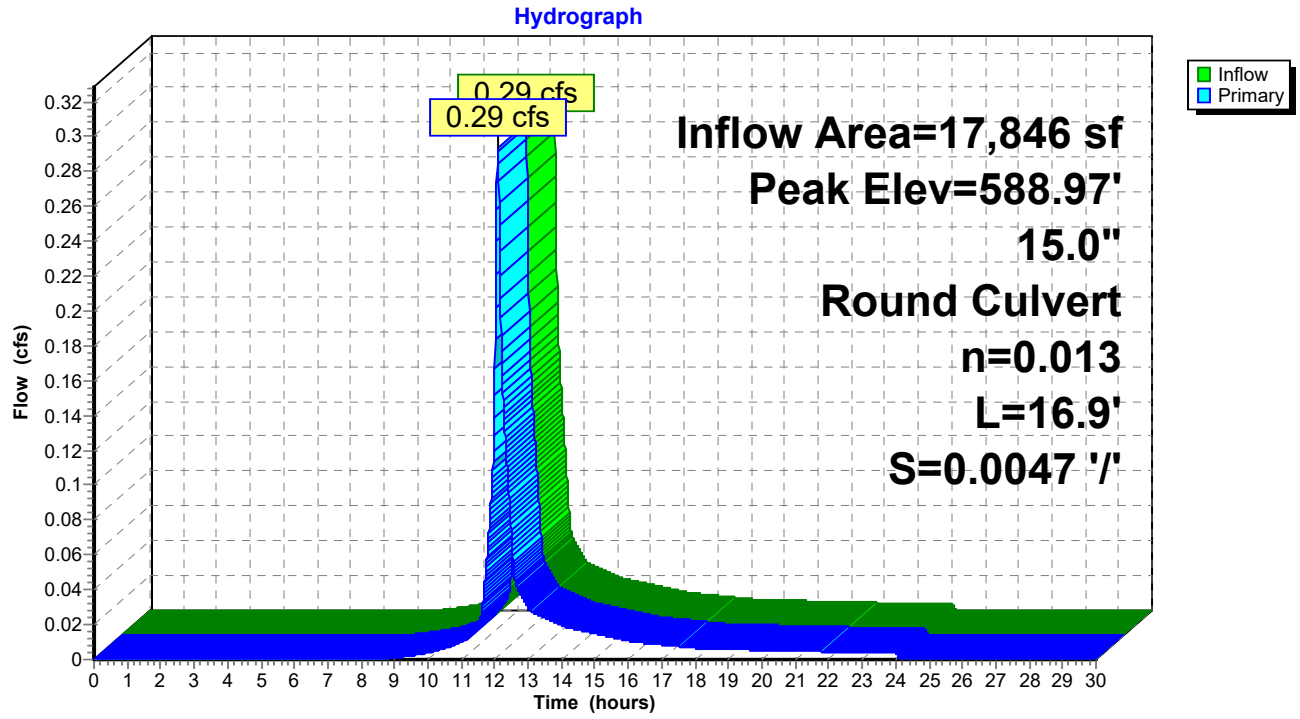
Inflow Area = 17,846 sf, 86.77% Impervious, Inflow Depth = 0.61" for 90% Storm event
Inflow = 0.29 cfs @ 12.09 hrs, Volume= 909 cf
Outflow = 0.29 cfs @ 12.09 hrs, Volume= 909 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.29 cfs @ 12.09 hrs, Volume= 909 cf
Routed to Pond ADS1C : ADS 1C

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 588.97' @ 12.09 hrs
Flood Elev= 590.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	588.67'	**15.0" Round HDPE Round 15"** L= 16.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 588.67' / 588.59' S= 0.0047 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=0.29 cfs @ 12.09 hrs HW=588.97' TW=586.56' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 0.29 cfs @ 1.94 fps)

Pond CB-C-01: CB-C-01



Summary for Pond CB-C-02: CB-C-02

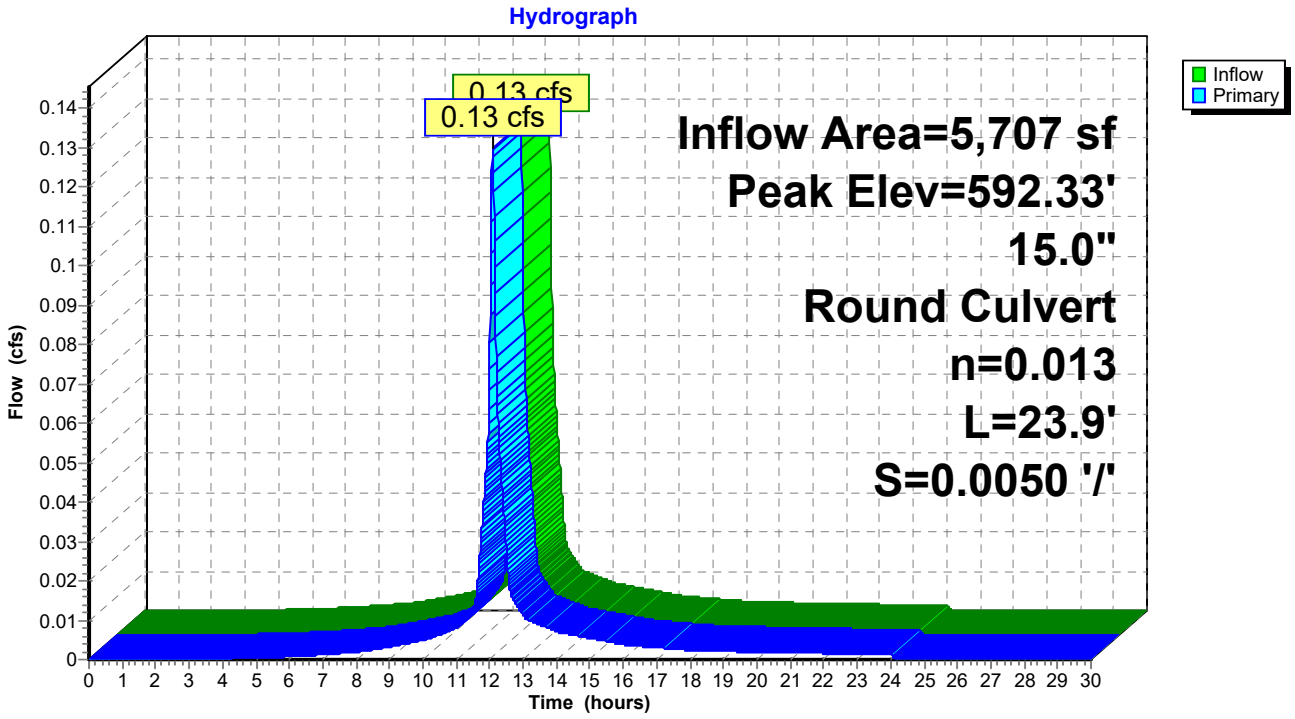
Inflow Area = 5,707 sf, 93.48% Impervious, Inflow Depth = 0.90" for 90% Storm event
Inflow = 0.13 cfs @ 12.08 hrs, Volume= 426 cf
Outflow = 0.13 cfs @ 12.08 hrs, Volume= 426 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.13 cfs @ 12.08 hrs, Volume= 426 cf
Routed to Pond ADS1C : ADS 1C

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 592.33' @ 12.08 hrs
Flood Elev= 593.55'

Device	Routing	Invert	Outlet Devices
#1	Primary	592.13'	**15.0" Round HDPE Round 15"** L= 23.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.13' / 592.01' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=0.13 cfs @ 12.08 hrs HW=592.33' TW=586.55' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 0.13 cfs @ 1.59 fps)

Pond CB-C-02: CB-C-02



Summary for Pond CB-C-03: CB-C-03

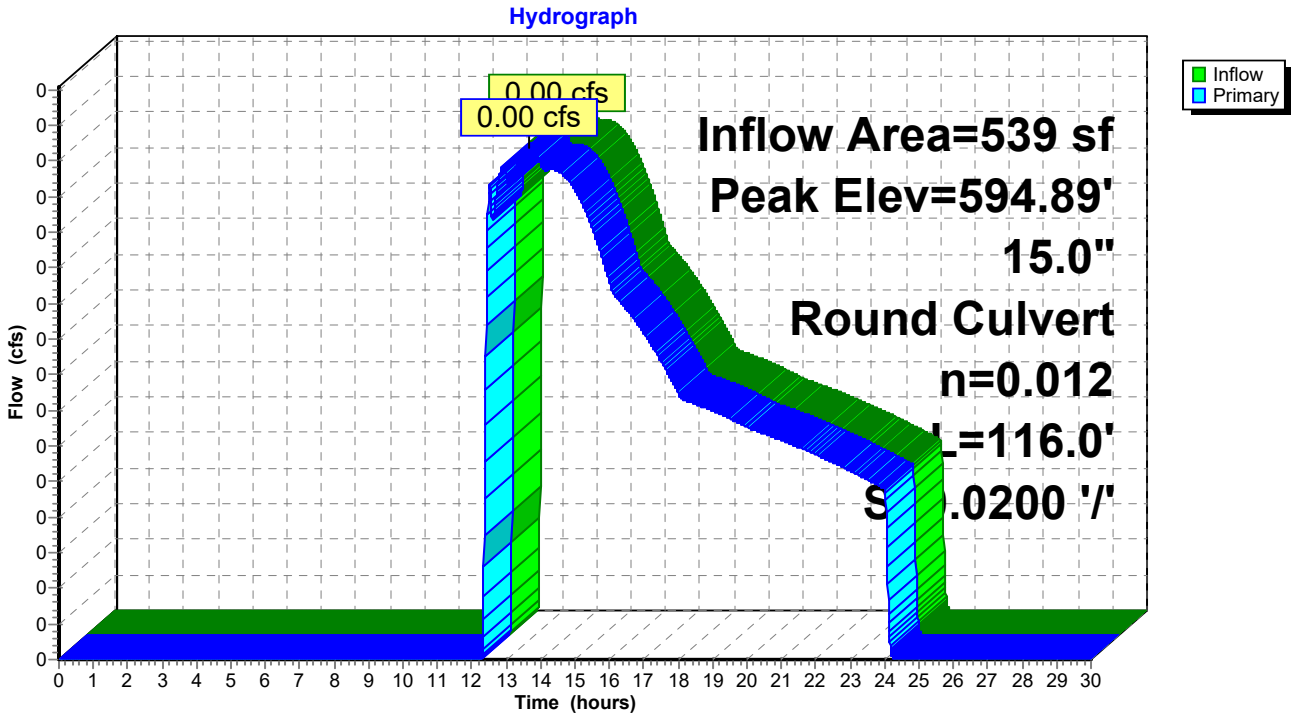
Inflow Area = 539 sf, 30.98% Impervious, Inflow Depth = 0.04" for 90% Storm event
Inflow = 0.00 cfs @ 13.66 hrs, Volume= 2 cf
Outflow = 0.00 cfs @ 13.66 hrs, Volume= 2 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.00 cfs @ 13.66 hrs, Volume= 2 cf
Routed to Pond CB-C-02 : CB-C-02

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.89' @ 13.66 hrs
Flood Elev= 596.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.89'	**15.0" Round HDPE Round 15"** L= 116.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.89' / 592.57' S= 0.0200 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.00 cfs @ 13.66 hrs HW=594.89' TW=592.18' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 0.00 cfs @ 0.28 fps)

Pond CB-C-03: CB-C-03



Summary for Pond CB-C-04: CB-C-04

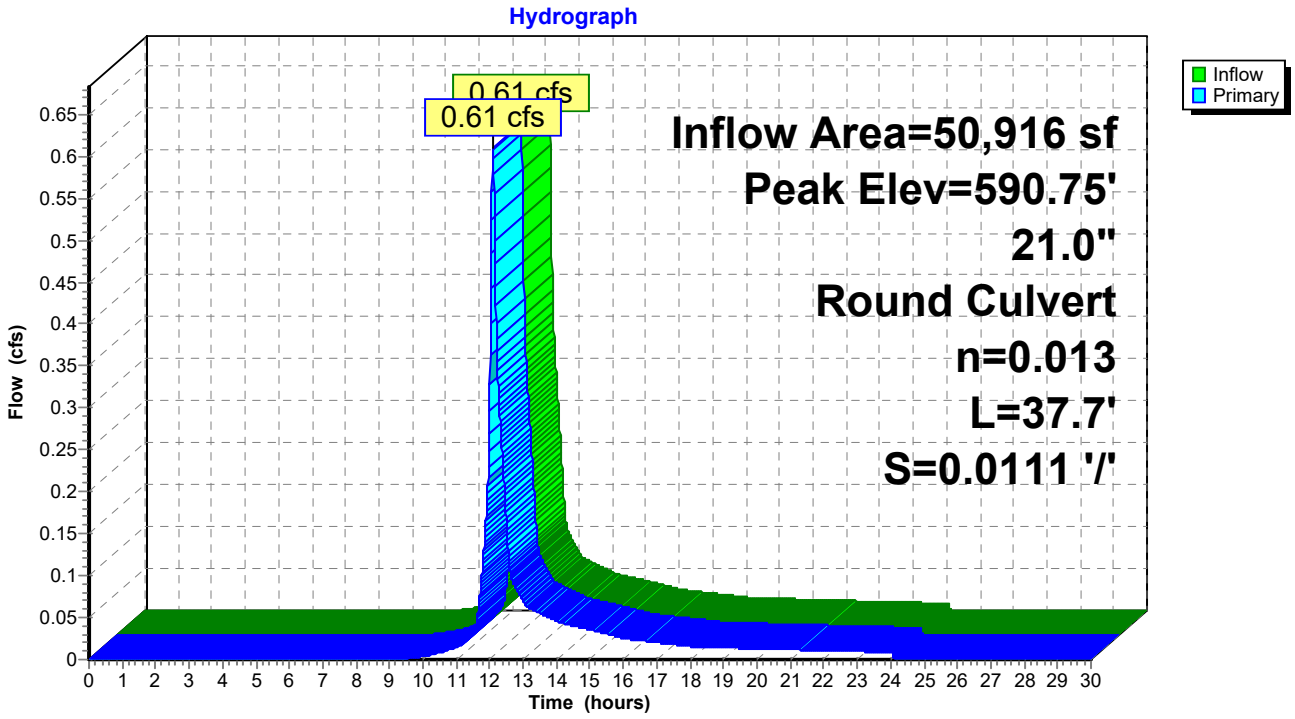
Inflow Area = 50,916 sf, 77.30% Impervious, Inflow Depth = 0.46" for 90% Storm event
Inflow = 0.61 cfs @ 12.09 hrs, Volume= 1,957 cf
Outflow = 0.61 cfs @ 12.09 hrs, Volume= 1,957 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.61 cfs @ 12.09 hrs, Volume= 1,957 cf
Routed to Pond ADS1C : ADS 1C

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 590.75' @ 12.09 hrs
Flood Elev= 593.26'

Device	Routing	Invert	Outlet Devices
#1	Primary	590.42'	**21.0" Round HDPE Round 21"** L= 37.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 590.42' / 590.00' S= 0.0111 '/' Cc= 0.900 n= 0.013, Flow Area= 2.41 sf

Primary OutFlow Max=0.61 cfs @ 12.09 hrs HW=590.75' TW=586.56' (Dynamic Tailwater)
↑—**1=HDPE Round 21"** (Barrel Controls 0.61 cfs @ 2.93 fps)

Pond CB-C-04: CB-C-04



Summary for Pond CB-C-05: CB-C-05

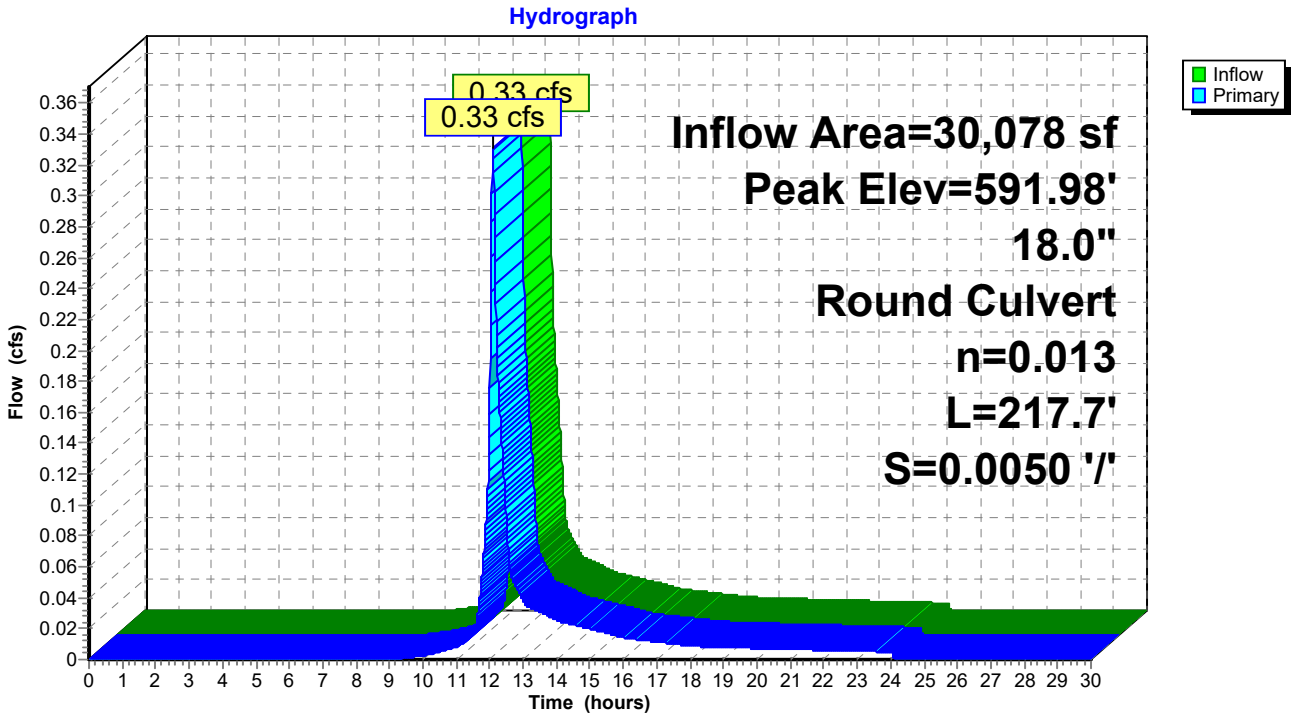
Inflow Area = 30,078 sf, 74.79% Impervious, Inflow Depth = 0.43" for 90% Storm event
Inflow = 0.33 cfs @ 12.09 hrs, Volume= 1,081 cf
Outflow = 0.33 cfs @ 12.09 hrs, Volume= 1,081 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.33 cfs @ 12.09 hrs, Volume= 1,081 cf
Routed to Pond CB-C-04 : CB-C-04

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 591.98' @ 12.09 hrs
Flood Elev= 596.27'

Device	Routing	Invert	Outlet Devices
#1	Primary	591.69'	**18.0" Round HDPE Round 18"** L= 217.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.69' / 590.61' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=0.33 cfs @ 12.09 hrs HW=591.98' TW=590.75' (Dynamic Tailwater)
↑—**1=HDPE Round 18"** (Barrel Controls 0.33 cfs @ 2.09 fps)

Pond CB-C-05: CB-C-05



Summary for Pond CB-C-06: CB-C-06

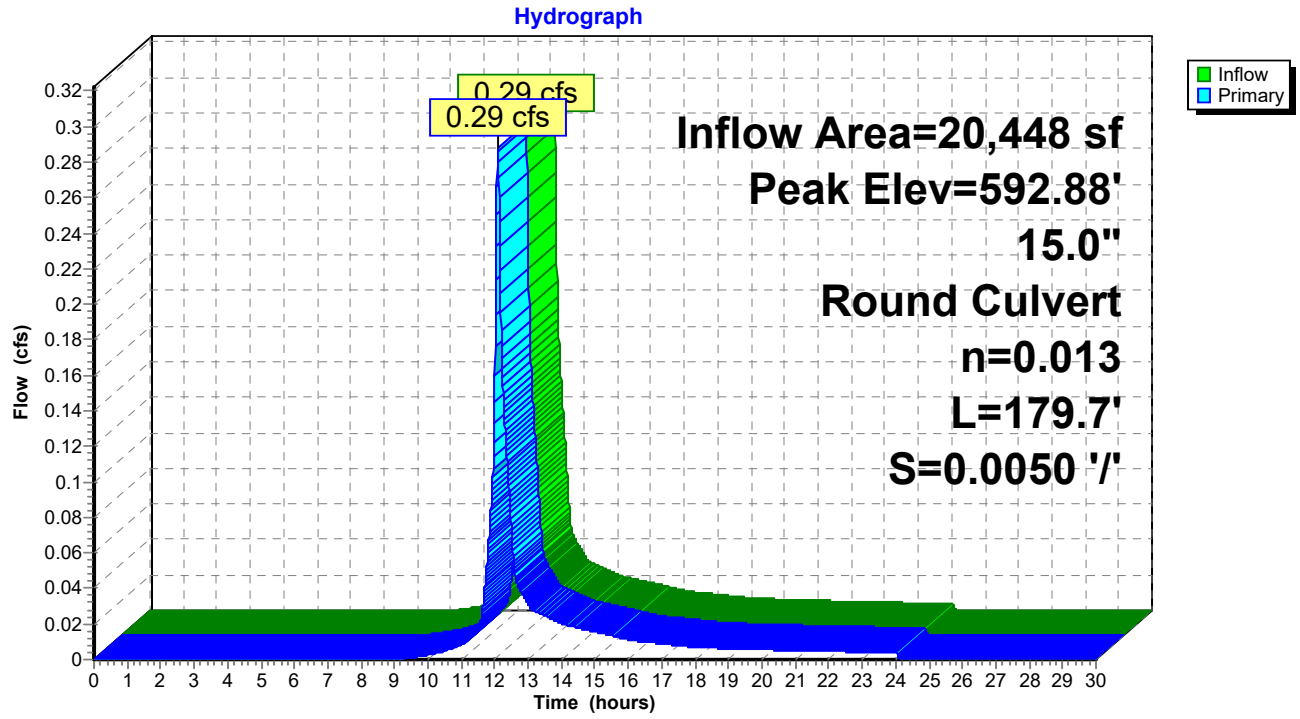
Inflow Area = 20,448 sf, 81.84% Impervious, Inflow Depth = 0.53" for 90% Storm event
Inflow = 0.29 cfs @ 12.09 hrs, Volume= 905 cf
Outflow = 0.29 cfs @ 12.09 hrs, Volume= 905 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.29 cfs @ 12.09 hrs, Volume= 905 cf
Routed to Pond CB-C-05 : CB-C-05

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 592.88' @ 12.09 hrs
Flood Elev= 598.99'

Device	Routing	Invert	Outlet Devices
#1	Primary	592.59'	**15.0" Round HDPE Round 15"** L= 179.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.59' / 591.69' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=0.29 cfs @ 12.09 hrs HW=592.88' TW=591.98' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 0.29 cfs @ 2.00 fps)

Pond CB-C-06: CB-C-06



Summary for Pond CB-C-07: CB-C-07

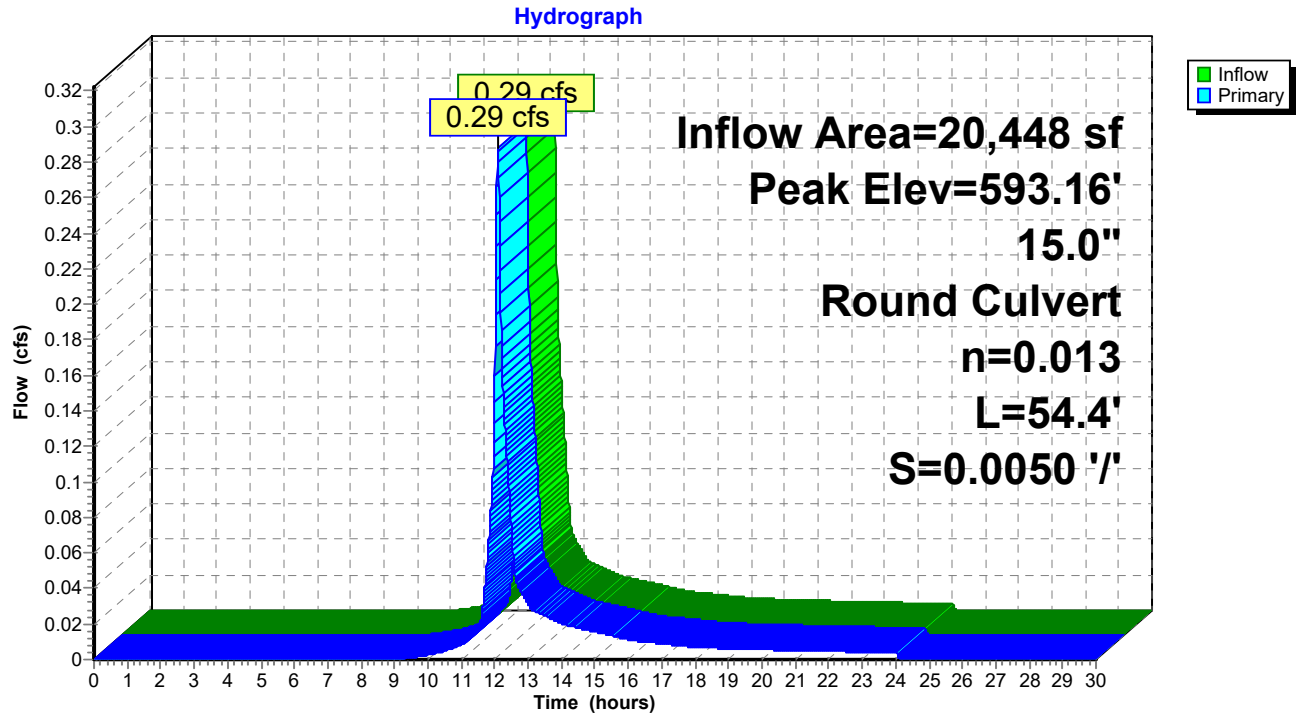
Inflow Area = 20,448 sf, 81.84% Impervious, Inflow Depth = 0.53" for 90% Storm event
Inflow = 0.29 cfs @ 12.09 hrs, Volume= 905 cf
Outflow = 0.29 cfs @ 12.09 hrs, Volume= 905 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.29 cfs @ 12.09 hrs, Volume= 905 cf
Routed to Pond CB-C-06 : CB-C-06

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 593.16' @ 12.09 hrs
Flood Elev= 598.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	592.86'	**15.0" Round HDPE Round 15"** L= 54.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.86' / 592.59' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=0.29 cfs @ 12.09 hrs HW=593.16' TW=592.88' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 0.29 cfs @ 1.87 fps)

Pond CB-C-07: CB-C-07



Summary for Pond CB-C-08: CB-C-08

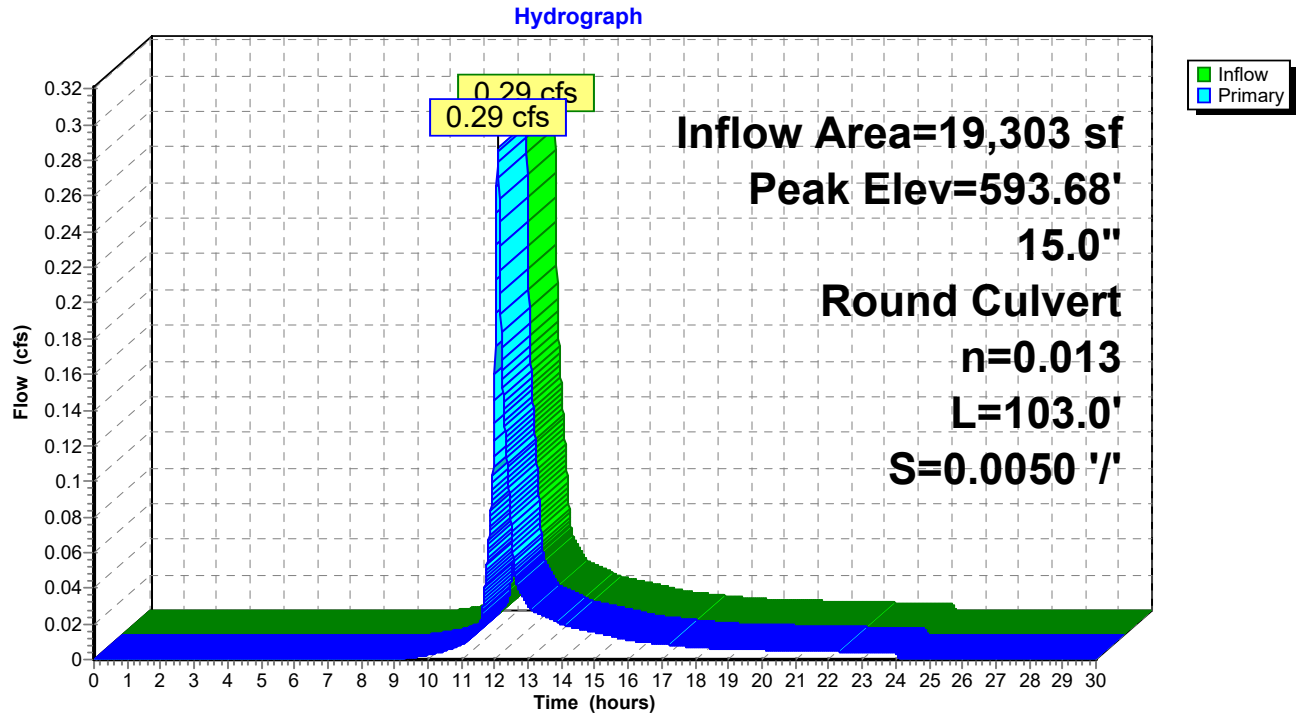
Inflow Area = 19,303 sf, 83.90% Impervious, Inflow Depth = 0.56" for 90% Storm event
Inflow = 0.29 cfs @ 12.09 hrs, Volume= 893 cf
Outflow = 0.29 cfs @ 12.09 hrs, Volume= 893 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.29 cfs @ 12.09 hrs, Volume= 893 cf
Routed to Pond CB-C-07 : CB-C-07

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 593.68' @ 12.09 hrs
Flood Elev= 595.63'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.38'	**15.0" Round HDPE Round 15"** L= 103.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.38' / 592.86' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=0.29 cfs @ 12.09 hrs HW=593.68' TW=593.16' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 0.29 cfs @ 1.94 fps)

Pond CB-C-08: CB-C-08



Time span=0.00-30.00 hrs, dt=0.01 hrs, 3001 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1APRE: WS #1A PRE Runoff Area=188,851 sf 22.35% Impervious Runoff Depth=3.89"
Flow Length=1,105' Tc=21.1 min CN=65 Runoff=12.98 cfs 61,286 cf

Subcatchment 1BPRE: WS #1B PRE Runoff Area=270,126 sf 0.00% Impervious Runoff Depth=2.78"
Flow Length=468' Tc=11.2 min CN=55 Runoff=16.28 cfs 62,671 cf

Subcatchment 1S: W-A-12 Runoff Area=6,257 sf 93.29% Impervious Runoff Depth=7.52"
Tc=6.0 min CN=96 Runoff=1.12 cfs 3,921 cf

Subcatchment 2S: W-A-16 Runoff Area=6,918 sf 46.04% Impervious Runoff Depth=5.39"
Tc=6.0 min CN=78 Runoff=0.99 cfs 3,108 cf

Subcatchment CB-B-06: W-B-06 Runoff Area=3,067 sf 58.98% Impervious Runoff Depth=5.98"
Tc=6.0 min CN=83 Runoff=0.48 cfs 1,528 cf

Subcatchment W-A-01: W-A-01 Runoff Area=73,223 sf 98.64% Impervious Runoff Depth=7.64"
Tc=6.0 min CN=97 Runoff=13.16 cfs 46,621 cf

Subcatchment W-A-02: W-A-02 Runoff Area=7,038 sf 98.05% Impervious Runoff Depth=7.64"
Tc=6.0 min CN=97 Runoff=1.27 cfs 4,481 cf

Subcatchment W-A-03: W-A-03 Runoff Area=3,322 sf 92.69% Impervious Runoff Depth=7.40"
Tc=6.0 min CN=95 Runoff=0.59 cfs 2,049 cf

Subcatchment W-A-04: W-A-04 Runoff Area=7,387 sf 97.25% Impervious Runoff Depth=7.64"
Tc=6.0 min CN=97 Runoff=1.33 cfs 4,703 cf

Subcatchment W-A-05: W-A-05 Runoff Area=11,393 sf 75.02% Impervious Runoff Depth=6.69"
Tc=6.0 min CN=89 Runoff=1.93 cfs 6,349 cf

Subcatchment W-A-06: W-A-06 Runoff Area=2,838 sf 81.57% Impervious Runoff Depth=6.92"
Tc=6.0 min CN=91 Runoff=0.49 cfs 1,638 cf

Subcatchment W-A-07: W-A-07 Runoff Area=3,550 sf 97.15% Impervious Runoff Depth=7.64"
Tc=6.0 min CN=97 Runoff=0.64 cfs 2,260 cf

Subcatchment W-A-08: W-A-08 Runoff Area=7,547 sf 80.23% Impervious Runoff Depth=6.92"
Tc=6.0 min CN=91 Runoff=1.30 cfs 4,355 cf

Subcatchment W-A-09: W-A-09 Runoff Area=36,960 sf 59.69% Impervious Runoff Depth=5.98"
Tc=6.0 min CN=83 Runoff=5.79 cfs 18,410 cf

Subcatchment W-A-10: W-A-10 Runoff Area=15,963 sf 37.75% Impervious Runoff Depth=5.04"
Tc=6.0 min CN=75 Runoff=2.16 cfs 6,707 cf

Subcatchment W-A-11: W-A-11 Runoff Area=12,670 sf 30.21% Impervious Runoff Depth=4.69"
Tc=6.0 min CN=72 Runoff=1.60 cfs 4,957 cf

Subcatchment W-A-13: W-A-13 Runoff Area=4,003 sf 96.38% Impervious Runoff Depth=7.64"
Tc=6.0 min CN=97 Runoff=0.72 cfs 2,549 cf

Subcatchment W-A-14: W-A-14 Runoff Area=3,669 sf 93.27% Impervious Runoff Depth=7.52"
Tc=6.0 min CN=96 Runoff=0.66 cfs 2,299 cf

Subcatchment W-A-15: W-A-15 Runoff Area=5,303 sf 67.21% Impervious Runoff Depth=6.33"
Tc=6.0 min CN=86 Runoff=0.87 cfs 2,798 cf

Subcatchment W-A-17: W-A-17 Runoff Area=9,324 sf 51.51% Impervious Runoff Depth=5.63"
Tc=6.0 min CN=80 Runoff=1.39 cfs 4,371 cf

Subcatchment W-A-18: W-A-18 Runoff Area=7,541 sf 68.92% Impervious Runoff Depth=6.33"
Tc=6.0 min CN=86 Runoff=1.23 cfs 3,979 cf

Subcatchment W-A-19: W-A-19 Runoff Area=6,221 sf 70.71% Impervious Runoff Depth=6.45"
Tc=6.0 min CN=87 Runoff=1.03 cfs 3,344 cf

Subcatchment W-A-20: W-A-20 Runoff Area=5,191 sf 33.40% Impervious Runoff Depth=4.81"
Tc=6.0 min CN=73 Runoff=0.67 cfs 2,081 cf

Subcatchment W-B-01: W-B-01 Runoff Area=25,740 sf 89.98% Impervious Runoff Depth=7.28"
Tc=6.0 min CN=94 Runoff=4.56 cfs 15,620 cf

Subcatchment W-B-02: W-B-02 Runoff Area=5,845 sf 96.34% Impervious Runoff Depth=7.64"
Tc=6.0 min CN=97 Runoff=1.05 cfs 3,722 cf

Subcatchment W-B-03: W-B-03 Runoff Area=934 sf 100.00% Impervious Runoff Depth=7.76"
Tc=6.0 min CN=98 Runoff=0.17 cfs 604 cf

Subcatchment W-B-04: W-B-04 Runoff Area=26,304 sf 55.58% Impervious Runoff Depth=5.86"
Tc=6.0 min CN=82 Runoff=4.05 cfs 12,845 cf

Subcatchment W-B-05: W-B-05 Runoff Area=8,016 sf 48.75% Impervious Runoff Depth=5.51"
Tc=6.0 min CN=79 Runoff=1.17 cfs 3,679 cf

Subcatchment W-B-06: W-B-06 Runoff Area=45,556 sf 50.38% Impervious Runoff Depth=5.62"
Tc=6.0 min CN=80 Runoff=6.79 cfs 21,354 cf

Subcatchment W-C-01: W-C-01 Runoff Area=17,846 sf 86.77% Impervious Runoff Depth=7.16"
Tc=6.0 min CN=93 Runoff=3.14 cfs 10,652 cf

Subcatchment W-C-02: W-C-02 Runoff Area=5,168 sf 100.00% Impervious Runoff Depth=7.76"
Tc=6.0 min CN=98 Runoff=0.93 cfs 3,342 cf

Subcatchment W-C-03: W-C-03 Runoff Area=539 sf 30.98% Impervious Runoff Depth=4.69"
Tc=6.0 min CN=72 Runoff=0.07 cfs 211 cf

Subcatchment W-C-04: W-C-04 Runoff Area=20,838 sf 80.92% Impervious Runoff Depth=6.92"
Tc=6.0 min CN=91 Runoff=3.60 cfs 12,024 cf

Subcatchment W-C-05: W-C-05 Runoff Area=9,630 sf 59.82% Impervious Runoff Depth=5.98"
Tc=6.0 min CN=83 Runoff=1.51 cfs 4,797 cf

Subcatchment W-C-06: W-C-06 Runoff Area=1,145 sf 47.07% Impervious Runoff Depth=5.39"
Tc=6.0 min CN=78 Runoff=0.16 cfs 514 cf

Subcatchment W-C-07: W-C-07 Runoff Area=19,303 sf 83.90% Impervious Runoff Depth=7.04"
Tc=6.0 min CN=92 Runoff=3.37 cfs 11,330 cf

Reach DP1POST: DP1 POST Inflow=21.90 cfs 71,641 cf
Outflow=21.90 cfs 71,641 cf

Reach DP1PRE: DP1 PRE Inflow=26.89 cfs 123,957 cf
Outflow=26.89 cfs 123,957 cf

Pond 1P: CB-B-06 Peak Elev=591.51' Inflow=0.48 cfs 1,528 cf
15.0" Round Culvert n=0.012 L=57.3' S=0.0112 '/' Outflow=0.48 cfs 1,528 cf

Pond 3P: CB-A-13 Peak Elev=597.02' Inflow=2.24 cfs 7,646 cf
12.0" Round Culvert n=0.012 L=100.0' S=0.0100 '/' Outflow=2.24 cfs 7,646 cf

Pond ADS 1A: ADS 1A Peak Elev=593.35' Storage=46,218 cf Inflow=38.93 cfs 130,979 cf
Discarded=1.69 cfs 101,765 cf Primary=7.75 cfs 29,217 cf Outflow=9.44 cfs 130,982 cf

Pond ADS 1B: ADS 1B Peak Elev=587.92' Storage=15,982 cf Inflow=18.27 cfs 59,351 cf
Discarded=0.58 cfs 34,091 cf Primary=7.92 cfs 25,269 cf Outflow=8.50 cfs 59,360 cf

Pond ADS1C: ADS 1C Peak Elev=589.00' Storage=10,573 cf Inflow=12.78 cfs 42,871 cf
Discarded=0.43 cfs 26,964 cf Primary=6.93 cfs 17,155 cf Outflow=7.36 cfs 44,119 cf

Pond CB-A-01: CB-A-01 Peak Elev=593.88' Inflow=20.71 cfs 72,456 cf
30.0" Round Culvert n=0.012 L=11.4' S=0.0746 '/' Outflow=20.71 cfs 72,456 cf

Pond CB-A-02: CB-A-02 Peak Elev=594.78' Inflow=1.86 cfs 6,530 cf
15.0" Round Culvert n=0.012 L=140.4' S=0.0064 '/' Outflow=1.86 cfs 6,530 cf

Pond CB-A-03: CB-A-03 Peak Elev=595.04' Inflow=0.59 cfs 2,049 cf
15.0" Round Culvert n=0.012 L=100.0' S=0.0050 '/' Outflow=0.59 cfs 2,049 cf

Pond CB-A-04: CB-A-04 Peak Elev=595.87' Inflow=5.69 cfs 19,305 cf
18.0" Round Culvert n=0.012 L=159.6' S=0.0083 '/' Outflow=5.69 cfs 19,305 cf

Pond CB-A-05: CB-A-05 Peak Elev=596.58' Inflow=4.36 cfs 14,601 cf
15.0" Round Culvert n=0.012 L=100.0' S=0.0050 '/' Outflow=4.36 cfs 14,601 cf

Pond CB-A-06: CB-A-06 Peak Elev=596.98' Inflow=2.43 cfs 8,253 cf
15.0" Round Culvert n=0.012 L=100.0' S=0.0074 '/' Outflow=2.43 cfs 8,253 cf

Pond CB-A-07: CB-A-07 Peak Elev=597.22' Inflow=1.94 cfs 6,615 cf
15.0" Round Culvert n=0.012 L=61.9' S=0.0050 '/' Outflow=1.94 cfs 6,615 cf

Pond CB-A-08: CB-A-08 Peak Elev=597.37' Inflow=1.30 cfs 4,355 cf
15.0" Round Culvert n=0.012 L=57.9' S=0.0050 '/' Outflow=1.30 cfs 4,355 cf

Pond CB-A-09: CB-A-09 Peak Elev=594.87' Inflow=12.91 cfs 41,641 cf
24.0" Round Culvert n=0.012 L=11.4' S=0.1877 '/' Outflow=12.91 cfs 41,641 cf

Pond CB-A-10: CB-A-10 Peak Elev=595.86' Inflow=3.76 cfs 11,663 cf
15.0" Round Culvert n=0.012 L=140.4' S=0.0091 '/' Outflow=3.76 cfs 11,663 cf

Pond CB-A-11: CB-A-11 Peak Elev=596.20' Inflow=1.60 cfs 4,957 cf
12.0" Round Culvert n=0.012 L=100.0' S=0.0050 '/' Outflow=1.60 cfs 4,957 cf

Pond CB-A-12: CB-A-12 Peak Elev=594.43' Inflow=5.32 cfs 16,882 cf
15.0" Round Culvert n=0.012 L=159.6' S=0.0125 '/' Outflow=5.32 cfs 16,882 cf

Pond CB-A-13: CB-A-12 Peak Elev=596.50' Inflow=3.36 cfs 11,568 cf
12.0" Round Culvert n=0.012 L=159.6' S=0.0102 '/' Outflow=3.36 cfs 11,568 cf

Pond CB-A-14: CB-A-14 Peak Elev=597.20' Inflow=1.52 cfs 5,097 cf
12.0" Round Culvert n=0.012 L=65.8' S=0.0100 '/' Outflow=1.52 cfs 5,097 cf

Pond CB-A-15: CB-A-15 Peak Elev=597.26' Inflow=0.87 cfs 2,798 cf
12.0" Round Culvert n=0.012 L=84.0' S=0.0175 '/' Outflow=0.87 cfs 2,798 cf

Pond CB-A-16: CB-A-16 Peak Elev=595.67' Inflow=0.99 cfs 3,108 cf
12.0" Round Culvert n=0.012 L=77.0' S=0.0049 '/' Outflow=0.99 cfs 3,108 cf

Pond CB-A-17: CB-A-17 Peak Elev=595.58' Inflow=5.32 cfs 16,882 cf
15.0" Round Culvert n=0.012 L=62.9' S=0.0051 '/' Outflow=5.32 cfs 16,882 cf

Pond CB-A-18: CB-A-18 Peak Elev=597.10' Inflow=2.93 cfs 9,403 cf
12.0" Round Culvert n=0.012 L=99.5' S=0.0101 '/' Outflow=2.93 cfs 9,403 cf

Pond CB-A-19: CB-A-19 Peak Elev=597.38' Inflow=1.70 cfs 5,424 cf
12.0" Round Culvert n=0.012 L=65.1' S=0.0049 '/' Outflow=1.70 cfs 5,424 cf

Pond CB-A-20: CB-A-20 Peak Elev=598.99' Inflow=0.67 cfs 2,081 cf
12.0" Round Culvert n=0.012 L=85.2' S=0.0230 '/' Outflow=0.67 cfs 2,081 cf

Pond CB-B-01: CB-B-01 Peak Elev=587.95' Inflow=5.78 cfs 19,945 cf
24.0" Round Culvert n=0.012 L=7.1' S=0.0141 '/' Outflow=5.78 cfs 19,945 cf

Pond CB-B-02: CB-B-02 Peak Elev=591.14' Inflow=1.05 cfs 3,722 cf
12.0" Round Culvert n=0.012 L=175.5' S=0.0200 '/' Outflow=1.05 cfs 3,722 cf

Pond CB-B-03: CB-B-03 Peak Elev=594.14' Inflow=0.17 cfs 604 cf
12.0" Round Culvert n=0.012 L=136.8' S=0.0500 '/' Outflow=0.17 cfs 604 cf

Pond CB-B-04: CB-B-04 Peak Elev=589.42' Inflow=12.50 cfs 39,406 cf
24.0" Round Culvert n=0.012 L=6.9' S=0.0145 '/' Outflow=12.50 cfs 39,406 cf

Pond CB-B-05: CB-B-05 Peak Elev=590.60' Inflow=1.65 cfs 5,207 cf
21.0" Round Culvert n=0.012 L=118.2' S=0.0201 '/' Outflow=1.65 cfs 5,207 cf

Pond CB-B-07: CB-B-07 Peak Elev=592.80' Inflow=6.79 cfs 21,354 cf
21.0" Round Culvert n=0.012 L=92.8' S=0.0447 '/' Outflow=6.79 cfs 21,354 cf

Pond CB-C-01: CB-C-01 Peak Elev=589.79' Inflow=3.14 cfs 10,652 cf
15.0" Round Culvert n=0.013 L=16.9' S=0.0047 '/' Outflow=3.14 cfs 10,652 cf

Pond CB-C-02: CB-C-02 Peak Elev=592.70' Inflow=1.00 cfs 3,553 cf
15.0" Round Culvert n=0.013 L=23.9' S=0.0050 '/' Outflow=1.00 cfs 3,553 cf

Pond CB-C-03: CB-C-03 Peak Elev=595.01' Inflow=0.07 cfs 211 cf
15.0" Round Culvert n=0.012 L=116.0' S=0.0200 '/' Outflow=0.07 cfs 211 cf

Pond CB-C-04: CB-C-04 Peak Elev=591.96' Inflow=8.64 cfs 28,666 cf
21.0" Round Culvert n=0.013 L=37.7' S=0.0111 '/' Outflow=8.64 cfs 28,666 cf

Pond CB-C-05: CB-C-05 Peak Elev=593.06' Inflow=5.04 cfs 16,641 cf
18.0" Round Culvert n=0.013 L=217.7' S=0.0050 '/' Outflow=5.04 cfs 16,641 cf

Pond CB-C-06: CB-C-06 Peak Elev=593.90' Inflow=3.53 cfs 11,844 cf
15.0" Round Culvert n=0.013 L=179.7' S=0.0050 '/' Outflow=3.53 cfs 11,844 cf

Pond CB-C-07: CB-C-07 Peak Elev=594.28' Inflow=3.53 cfs 11,844 cf
15.0" Round Culvert n=0.013 L=54.4' S=0.0050 '/' Outflow=3.53 cfs 11,844 cf

Pond CB-C-08: CB-C-08 Peak Elev=594.76' Inflow=3.37 cfs 11,330 cf
15.0" Round Culvert n=0.013 L=103.0' S=0.0050 '/' Outflow=3.37 cfs 11,330 cf

Total Runoff Area = 885,226 sf Runoff Volume = 357,158 cf Average Runoff Depth = 4.84"
60.11% Pervious = 532,149 sf 39.89% Impervious = 353,077 sf

Summary for Subcatchment 1APRE: WS #1A PRE

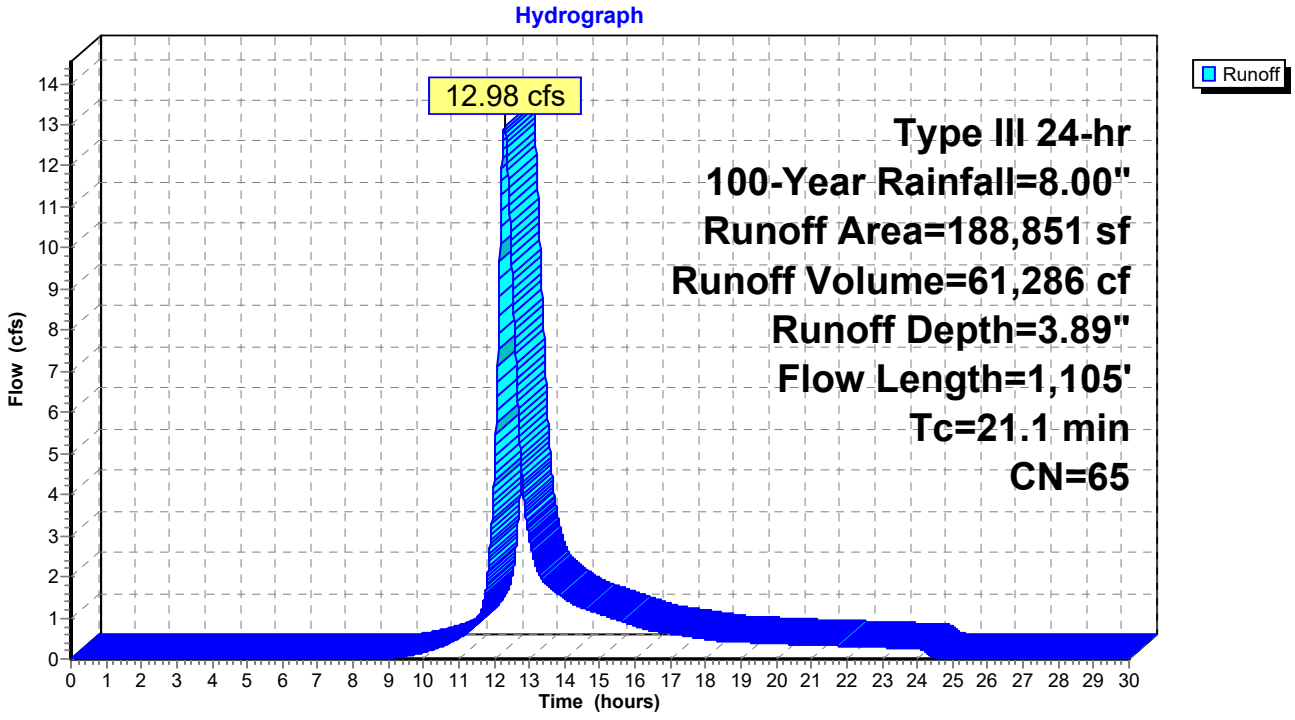
Runoff = 12.98 cfs @ 12.30 hrs, Volume= 61,286 cf, Depth= 3.89"
Routed to Reach DP1PRE : DP1 PRE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
146,641	55	Woods, Good, HSG B
37,510	98	Paved parking, HSG C
4,700	98	Water Surface, HSG C
188,851	65	Weighted Average
146,641		77.65% Pervious Area
42,210		22.35% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.5	100	0.0900	0.16		**Sheet Flow, SHEET FLOW BY 208 & MVR** Woods: Light underbrush n= 0.400 P2= 4.00"
4.3	545	0.0200	2.12		**Shallow Concentrated Flow, SHALLOW FLOW TO LAST OFFICE** Grassed Waterway Kv= 15.0 fps
6.3	460	0.0600	1.22		**Shallow Concentrated Flow, SHALLOW FLOW OFFICE TO DP1A** Woodland Kv= 5.0 fps
21.1	1,105	Total			

Subcatchment 1APRE: WS #1A PRE



Summary for Subcatchment 1BPRE: WS #1B PRE

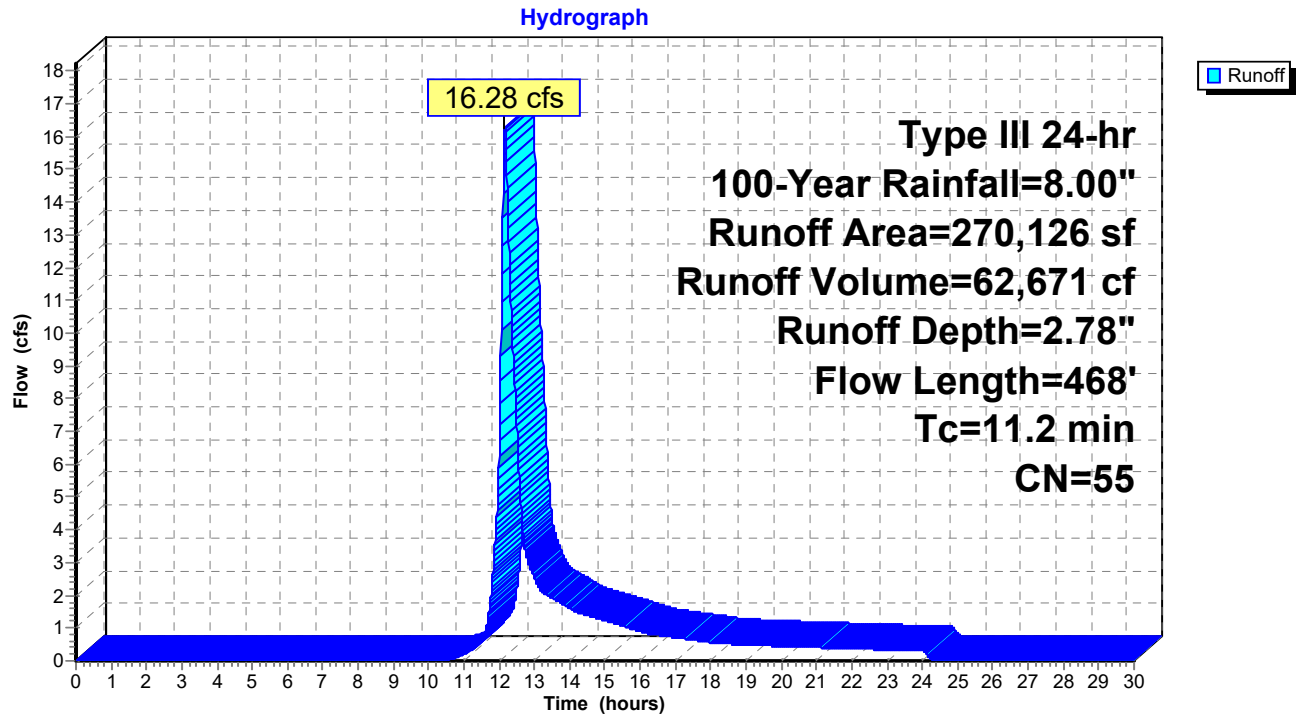
Runoff = 16.28 cfs @ 12.16 hrs, Volume= 62,671 cf, Depth= 2.78"
Routed to Reach DP1PRE : DP1 PRE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
270,126	55	Woods, Good, HSG B
270,126		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.0	100	0.2500	0.24		**Sheet Flow, SHEET FLOW BY 208** Woods: Light underbrush n= 0.400 P2= 4.00"
4.2	368	0.0870	1.47		**Shallow Concentrated Flow, SHALLOW FLOW TO DP1B** Woodland Kv= 5.0 fps
11.2	468	Total			

Subcatchment 1BPRE: WS #1B PRE



Summary for Subcatchment 1S: W-A-12

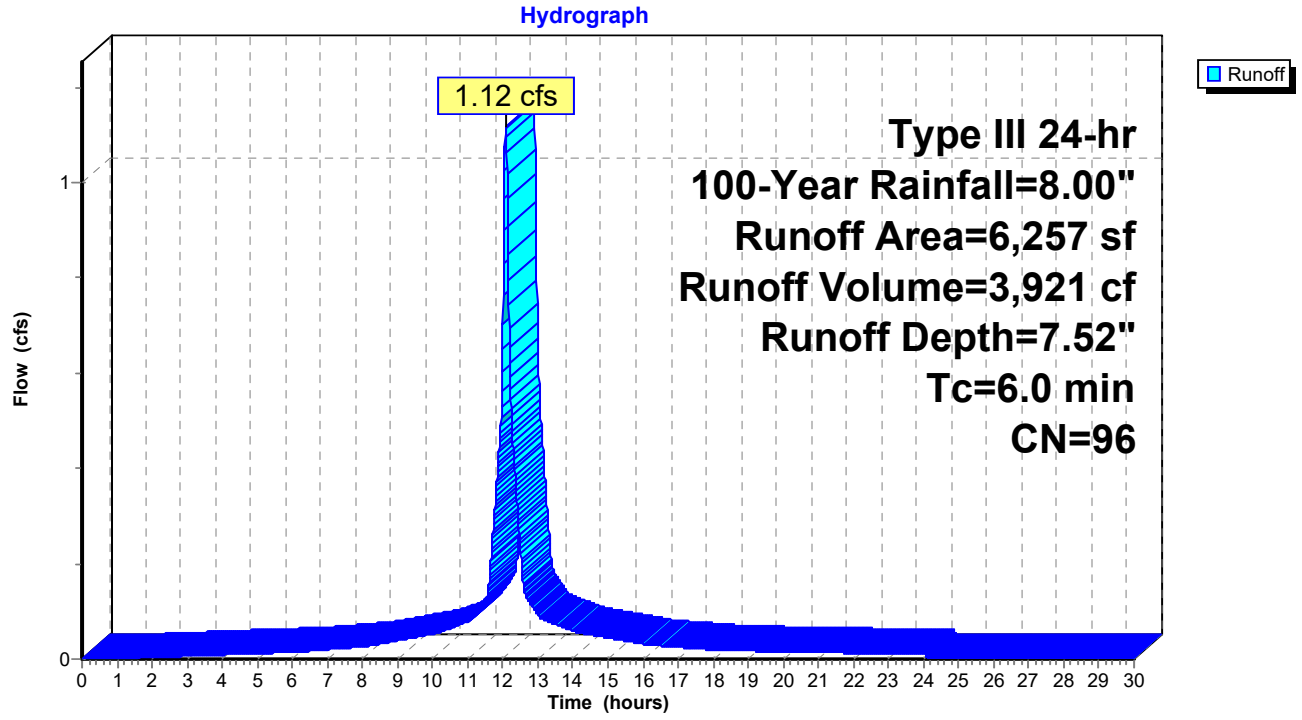
Runoff = 1.12 cfs @ 12.08 hrs, Volume= 3,921 cf, Depth= 7.52"
Routed to Pond CB-A-13 : CB-A-12

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
420	61	>75% Grass cover, Good, HSG B
5,837	98	Paved parking, HSG B
6,257	96	Weighted Average
420		6.71% Pervious Area
5,837		93.29% Impervious Area

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

Subcatchment 1S: W-A-12



Summary for Subcatchment 2S: W-A-16

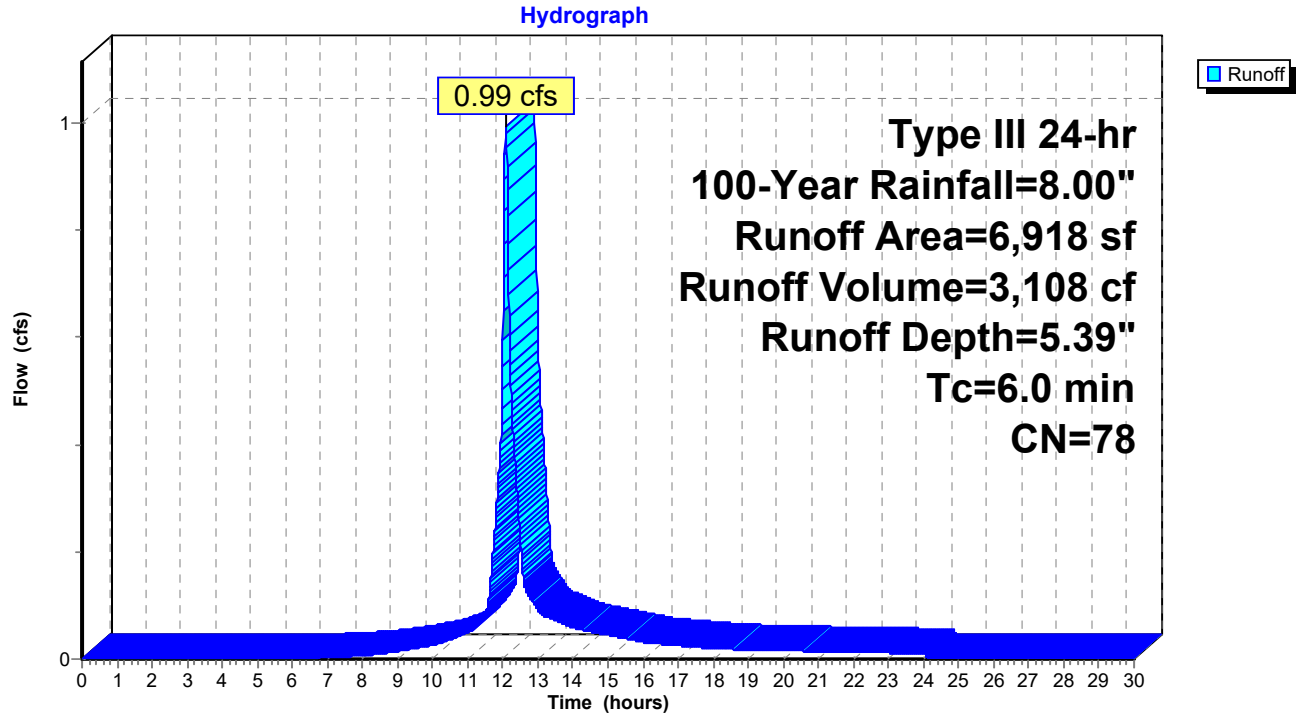
Runoff = 0.99 cfs @ 12.09 hrs, Volume= 3,108 cf, Depth= 5.39"
Routed to Pond CB-A-16 : CB-A-16

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
3,733	61	>75% Grass cover, Good, HSG B
3,185	98	Paved parking, HSG B
6,918	78	Weighted Average
3,733		53.96% Pervious Area
3,185		46.04% Impervious Area

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

Subcatchment 2S: W-A-16



Summary for Subcatchment CB-B-06: W-B-06

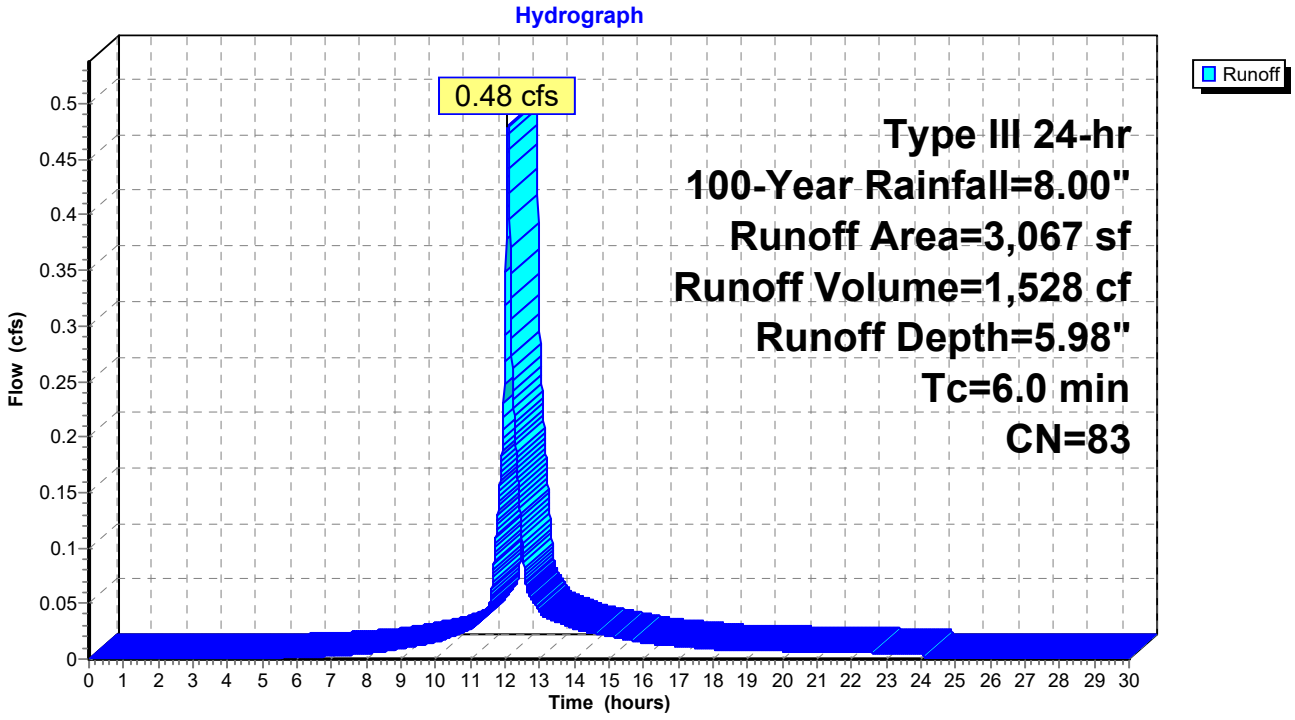
Runoff = 0.48 cfs @ 12.09 hrs, Volume= 1,528 cf, Depth= 5.98"
Routed to Pond 1P : CB-B-06

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
1,258	61	>75% Grass cover, Good, HSG B
1,809	98	Paved parking, HSG B
3,067	83	Weighted Average
1,258		41.02% Pervious Area
1,809		58.98% Impervious Area

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

Subcatchment CB-B-06: W-B-06



Summary for Subcatchment W-A-01: W-A-01

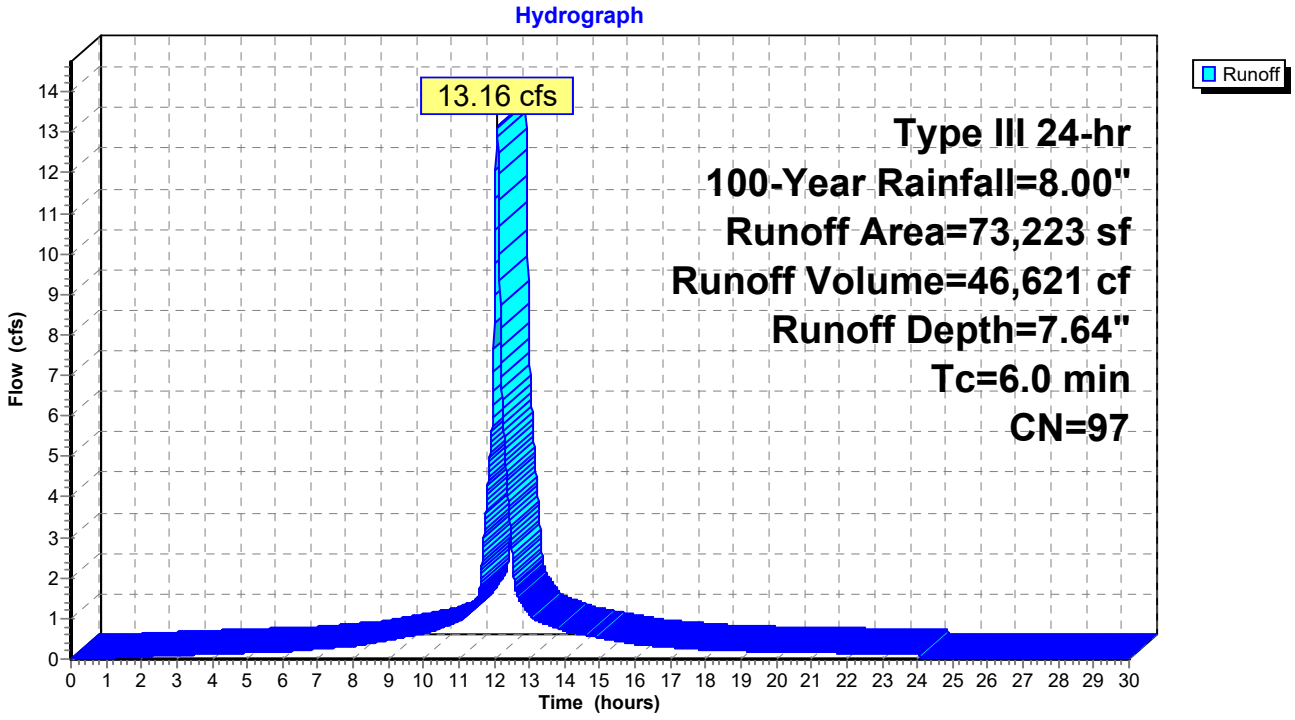
Runoff = 13.16 cfs @ 12.08 hrs, Volume= 46,621 cf, Depth= 7.64"
Routed to Pond CB-A-01 : CB-A-01

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
994	61	>75% Grass cover, Good, HSG B
72,229	98	Paved parking, HSG B
73,223	97	Weighted Average
994		1.36% Pervious Area
72,229		98.64% Impervious Area

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

Subcatchment W-A-01: W-A-01



Summary for Subcatchment W-A-02: W-A-02

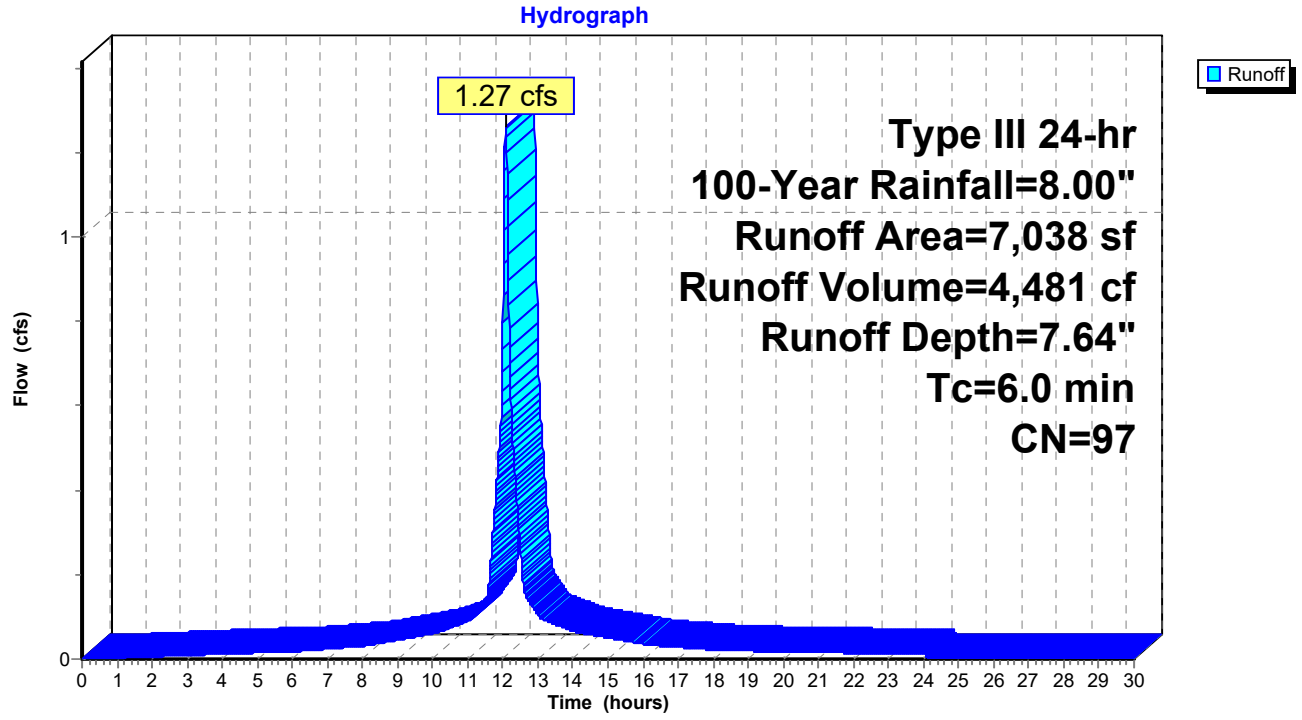
Runoff = 1.27 cfs @ 12.08 hrs, Volume= 4,481 cf, Depth= 7.64"
Routed to Pond CB-A-02 : CB-A-02

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
137	61	>75% Grass cover, Good, HSG B
6,901	98	Paved parking, HSG B
7,038	97	Weighted Average
137		1.95% Pervious Area
6,901		98.05% Impervious Area

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

Subcatchment W-A-02: W-A-02



Summary for Subcatchment W-A-03: W-A-03

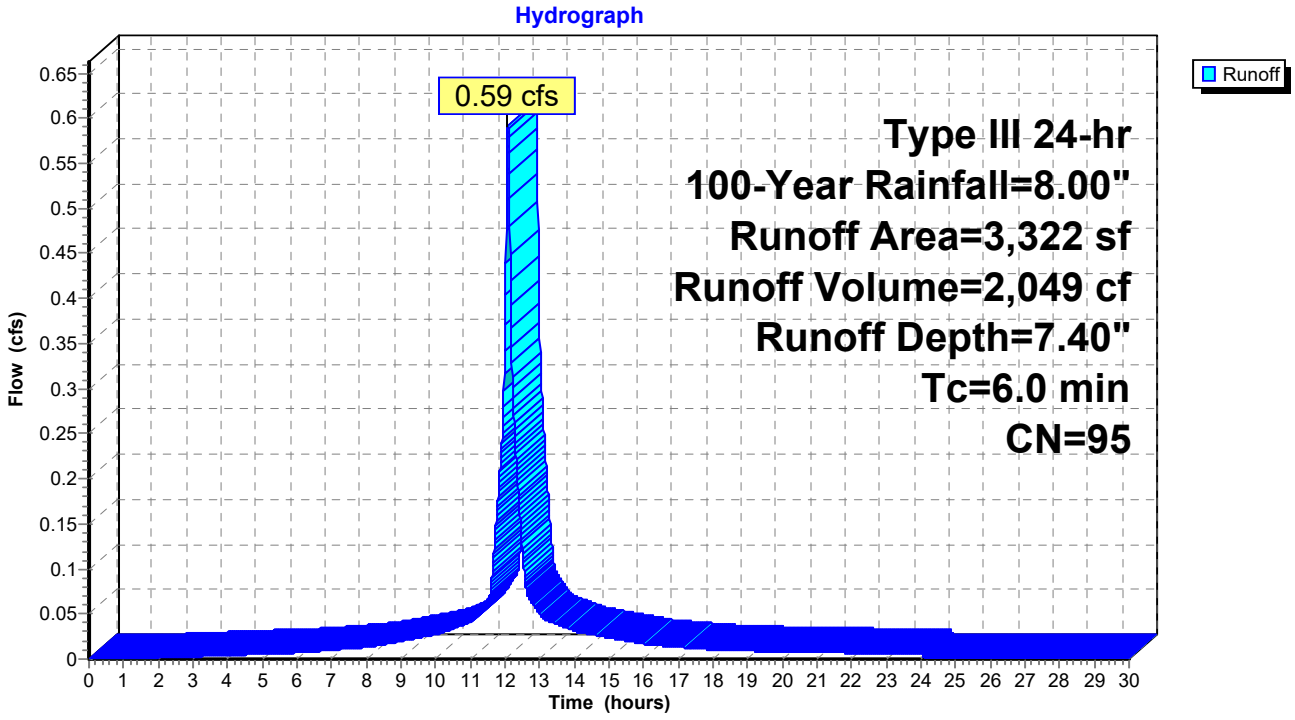
Runoff = 0.59 cfs @ 12.08 hrs, Volume= 2,049 cf, Depth= 7.40"
Routed to Pond CB-A-03 : CB-A-03

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
243	61	>75% Grass cover, Good, HSG B
3,079	98	Paved parking, HSG A
3,322	95	Weighted Average
243		7.31% Pervious Area
3,079		92.69% Impervious Area

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

Subcatchment W-A-03: W-A-03



Summary for Subcatchment W-A-04: W-A-04

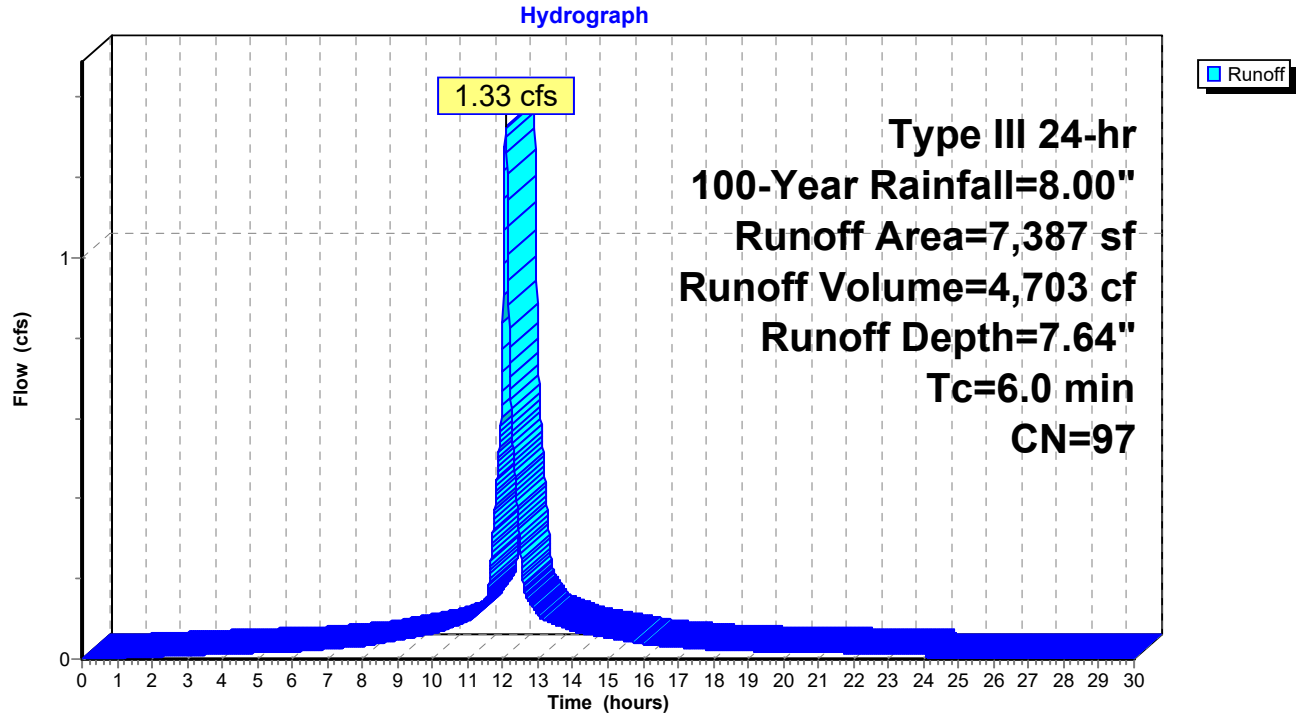
Runoff = 1.33 cfs @ 12.08 hrs, Volume= 4,703 cf, Depth= 7.64"
Routed to Pond CB-A-04 : CB-A-04

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
203	61	>75% Grass cover, Good, HSG B
7,184	98	Paved parking, HSG B
7,387	97	Weighted Average
203		2.75% Pervious Area
7,184		97.25% Impervious Area

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

Subcatchment W-A-04: W-A-04



Summary for Subcatchment W-A-05: W-A-05

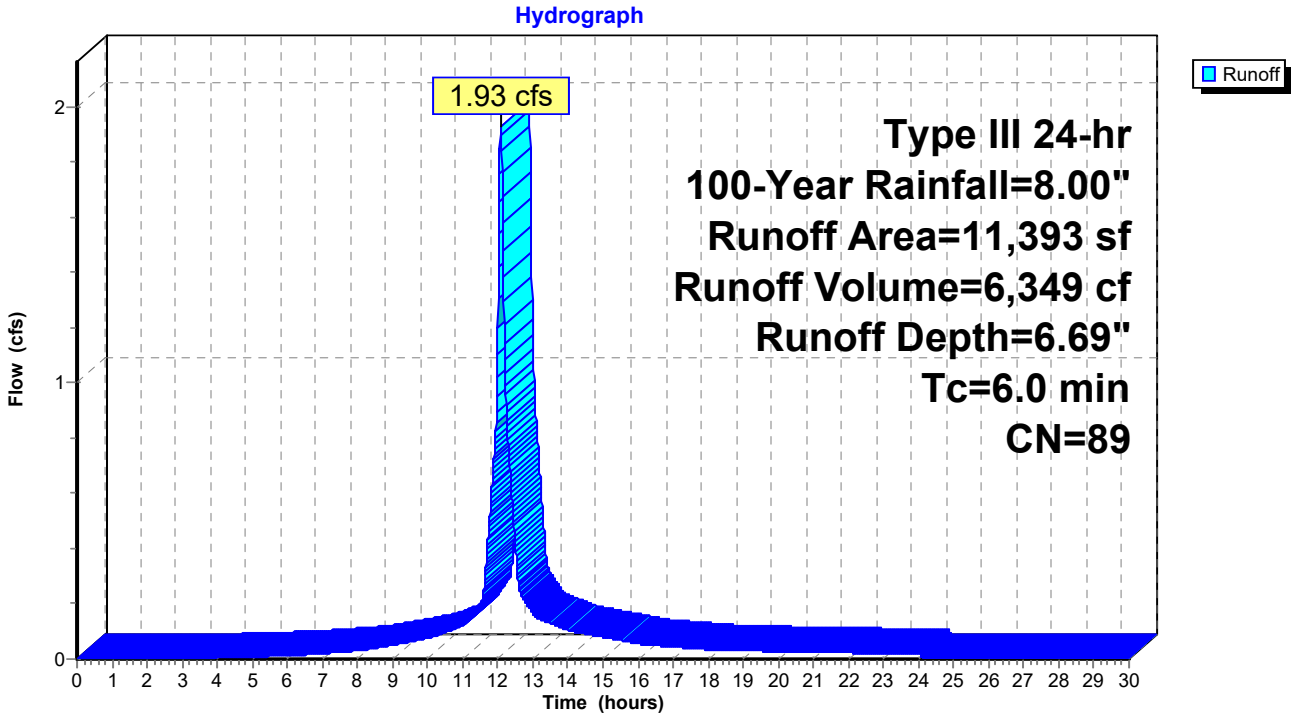
Runoff = 1.93 cfs @ 12.08 hrs, Volume= 6,349 cf, Depth= 6.69"
Routed to Pond CB-A-05 : CB-A-05

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
2,846	61	>75% Grass cover, Good, HSG B
8,547	98	Paved parking, HSG B
11,393	89	Weighted Average
2,846		24.98% Pervious Area
8,547		75.02% Impervious Area

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

Subcatchment W-A-05: W-A-05



Summary for Subcatchment W-A-06: W-A-06

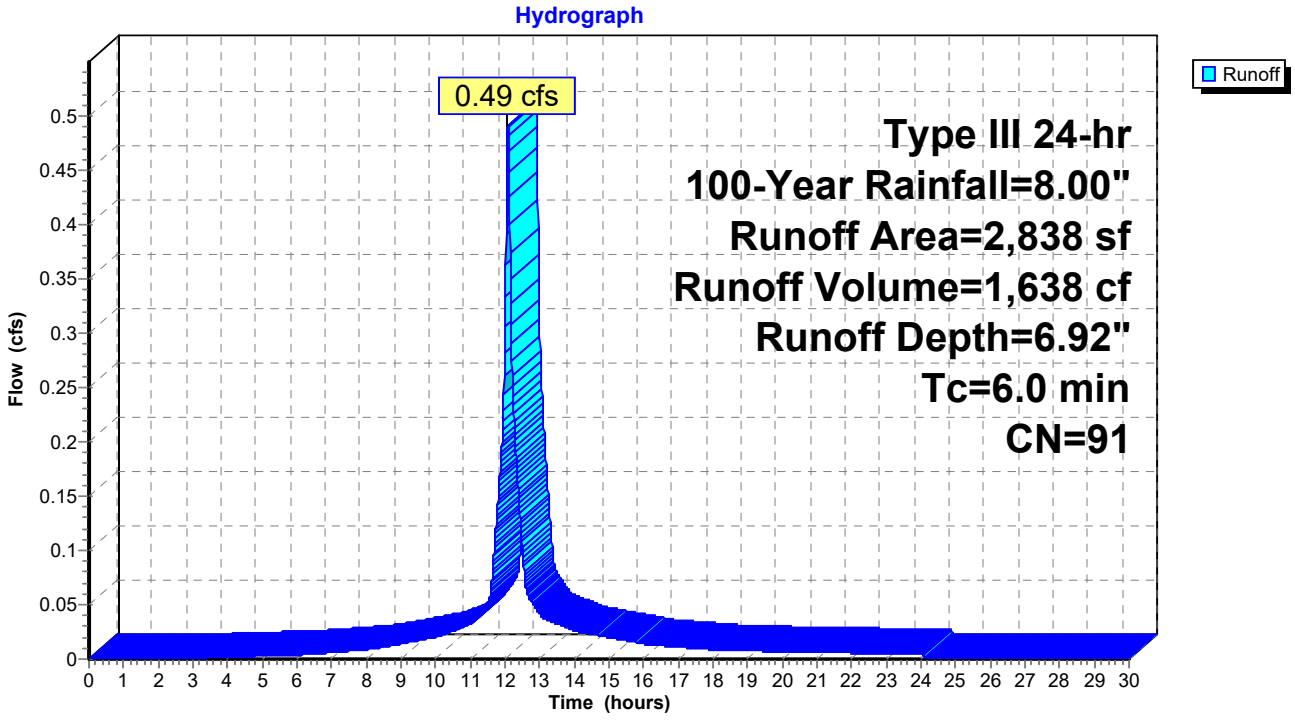
Runoff = 0.49 cfs @ 12.08 hrs, Volume= 1,638 cf, Depth= 6.92"
Routed to Pond CB-A-06 : CB-A-06

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
523	61	>75% Grass cover, Good, HSG B
2,315	98	Paved parking, HSG B
2,838	91	Weighted Average
523		18.43% Pervious Area
2,315		81.57% Impervious Area

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

Subcatchment W-A-06: W-A-06



Summary for Subcatchment W-A-07: W-A-07

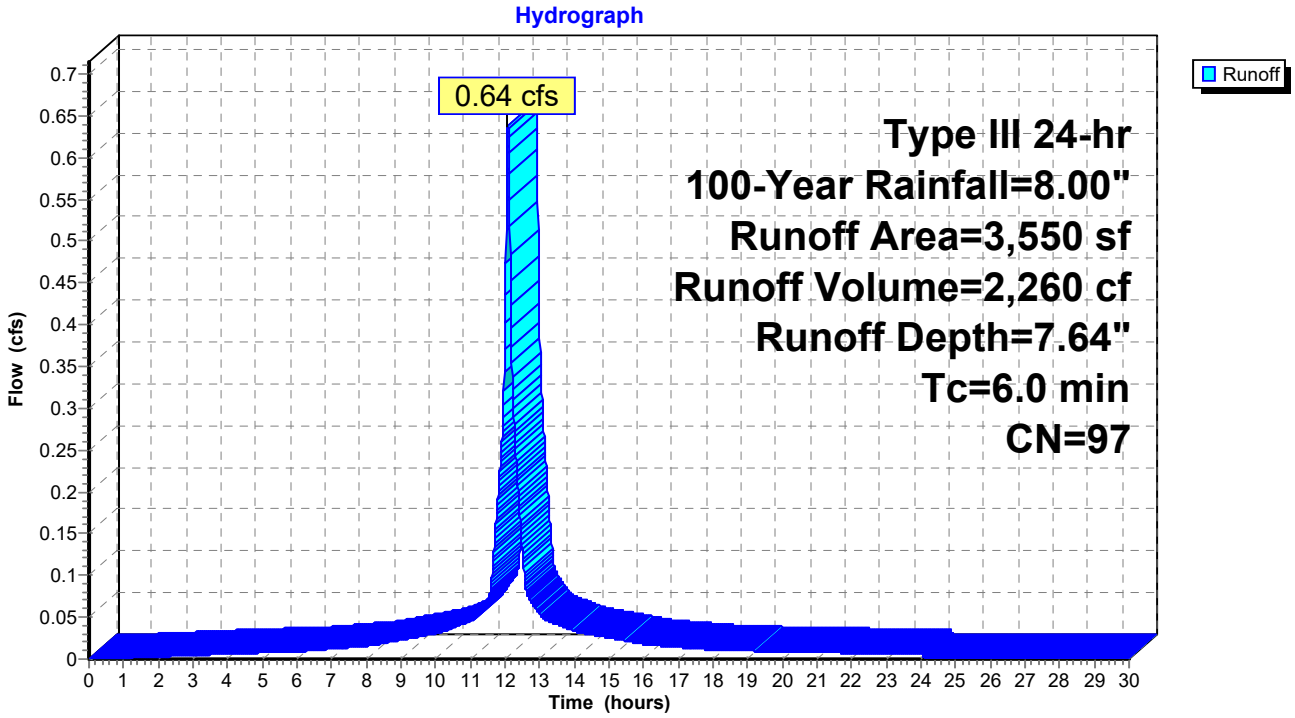
Runoff = 0.64 cfs @ 12.08 hrs, Volume= 2,260 cf, Depth= 7.64"
Routed to Pond CB-A-07 : CB-A-07

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
101	61	>75% Grass cover, Good, HSG B
3,449	98	Paved parking, HSG B
3,550	97	Weighted Average
101		2.85% Pervious Area
3,449		97.15% Impervious Area

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

Subcatchment W-A-07: W-A-07



Summary for Subcatchment W-A-08: W-A-08

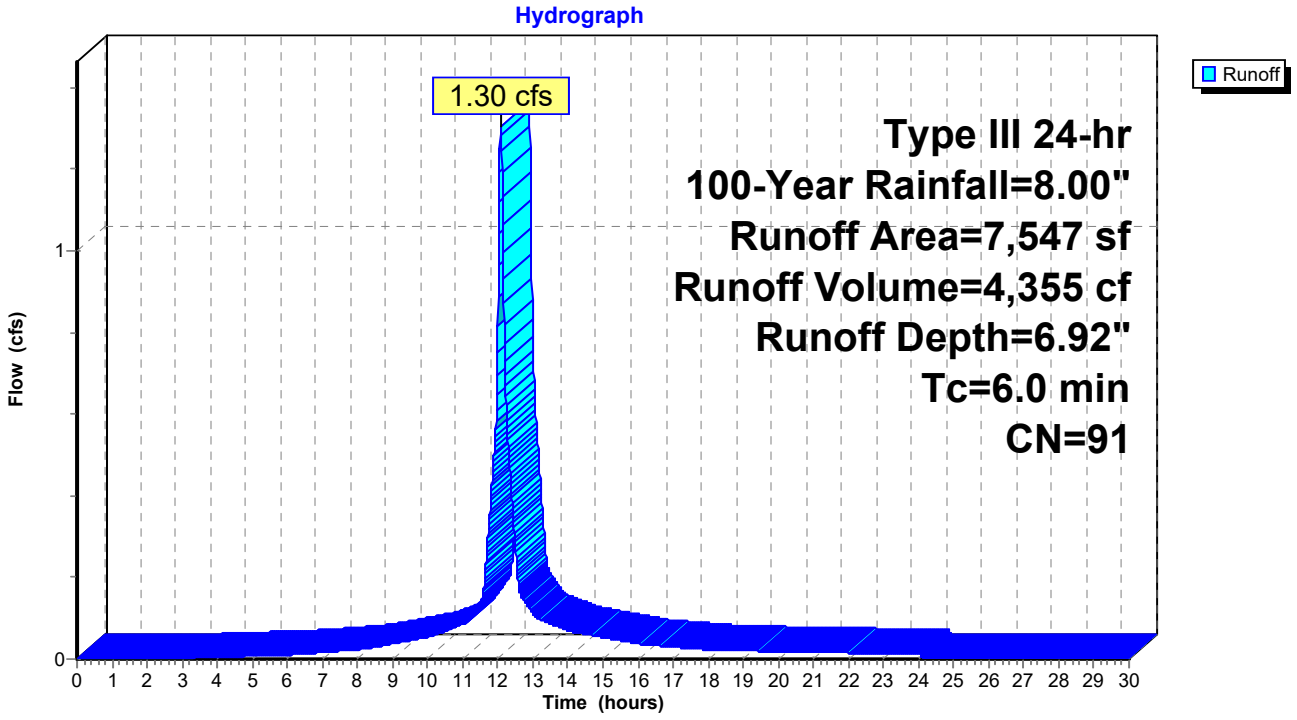
Runoff = 1.30 cfs @ 12.08 hrs, Volume= 4,355 cf, Depth= 6.92"
Routed to Pond CB-A-08 : CB-A-08

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
1,492	61	>75% Grass cover, Good, HSG B
6,055	98	Paved parking, HSG B
7,547	91	Weighted Average
1,492		19.77% Pervious Area
6,055		80.23% Impervious Area

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

Subcatchment W-A-08: W-A-08



Summary for Subcatchment W-A-09: W-A-09

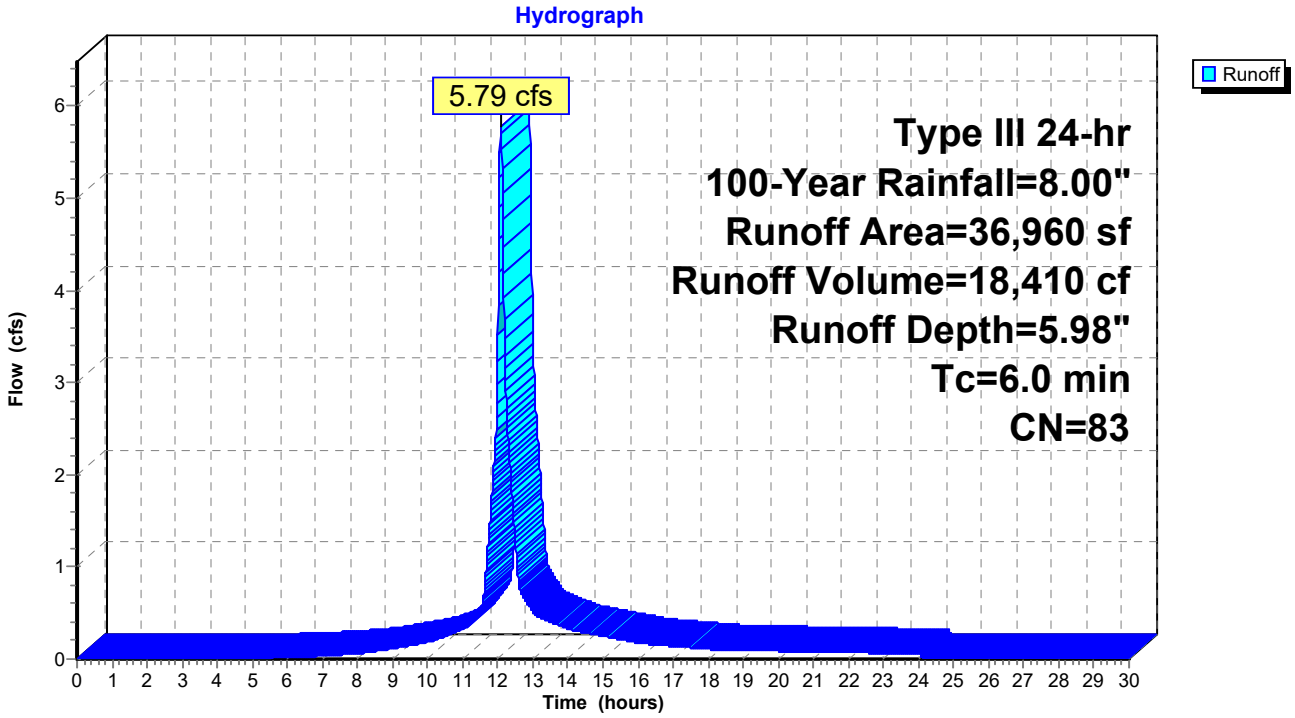
Runoff = 5.79 cfs @ 12.09 hrs, Volume= 18,410 cf, Depth= 5.98"
Routed to Pond CB-A-09 : CB-A-09

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
14,898	61	>75% Grass cover, Good, HSG B
22,062	98	Paved parking, HSG B
36,960	83	Weighted Average
14,898		40.31% Pervious Area
22,062		59.69% Impervious Area

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

Subcatchment W-A-09: W-A-09



Summary for Subcatchment W-A-10: W-A-10

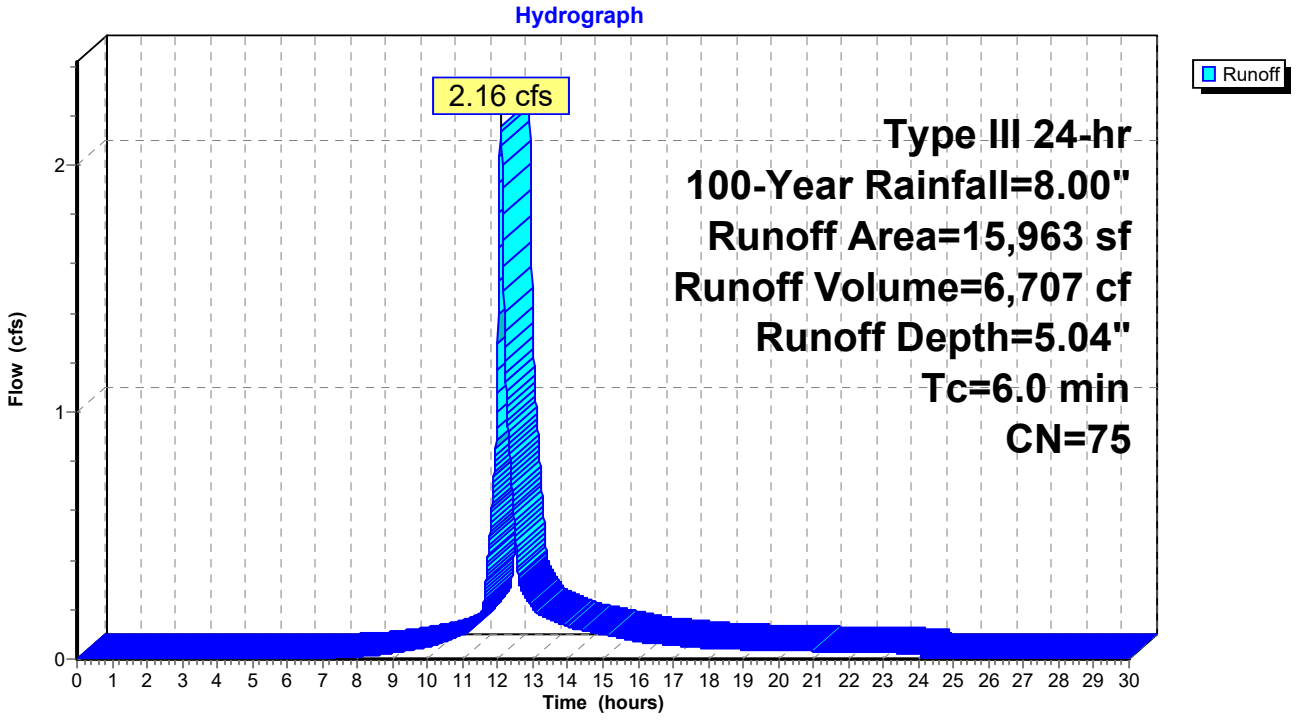
Runoff = 2.16 cfs @ 12.09 hrs, Volume= 6,707 cf, Depth= 5.04"
Routed to Pond CB-A-10 : CB-A-10

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
9,937	61	>75% Grass cover, Good, HSG B
6,026	98	Paved parking, HSG B
15,963	75	Weighted Average
9,937		62.25% Pervious Area
6,026		37.75% Impervious Area

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

Subcatchment W-A-10: W-A-10



Summary for Subcatchment W-A-11: W-A-11

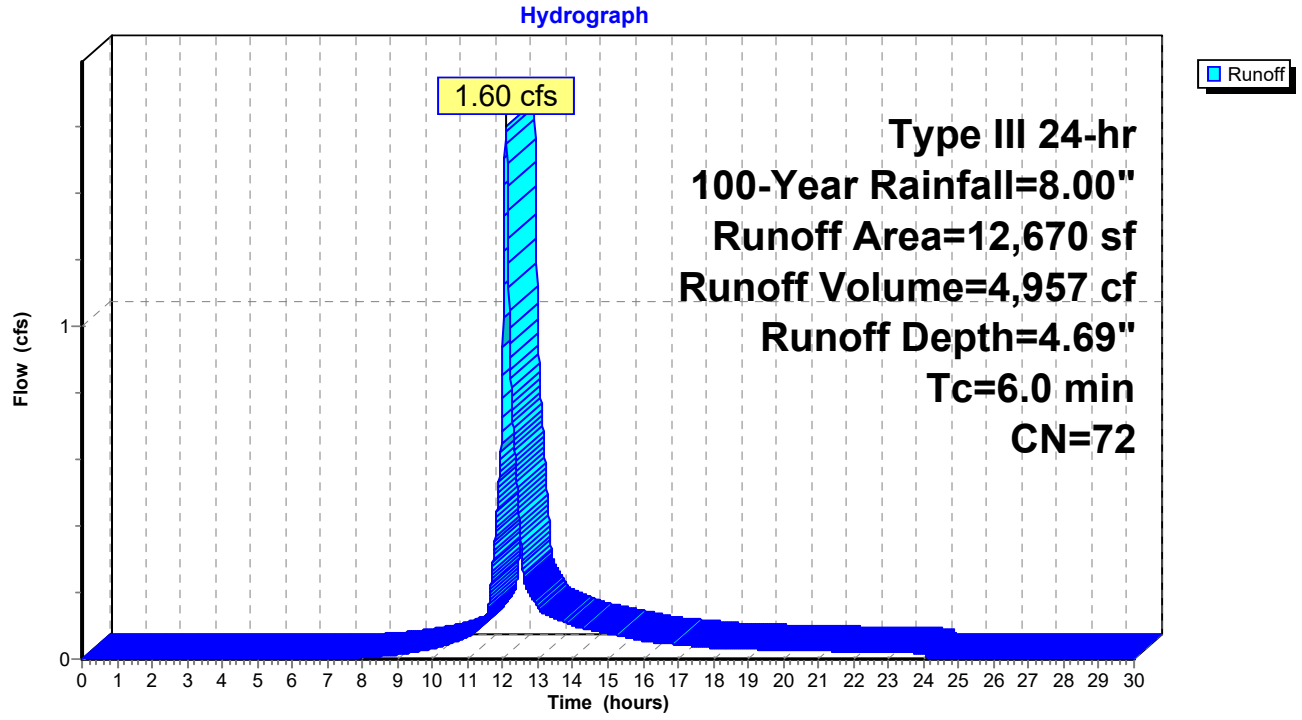
Runoff = 1.60 cfs @ 12.09 hrs, Volume= 4,957 cf, Depth= 4.69"
Routed to Pond CB-A-11 : CB-A-11

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
8,843	61	>75% Grass cover, Good, HSG B
3,827	98	Paved parking, HSG A
12,670	72	Weighted Average
8,843		69.79% Pervious Area
3,827		30.21% Impervious Area

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

Subcatchment W-A-11: W-A-11



Summary for Subcatchment W-A-13: W-A-13

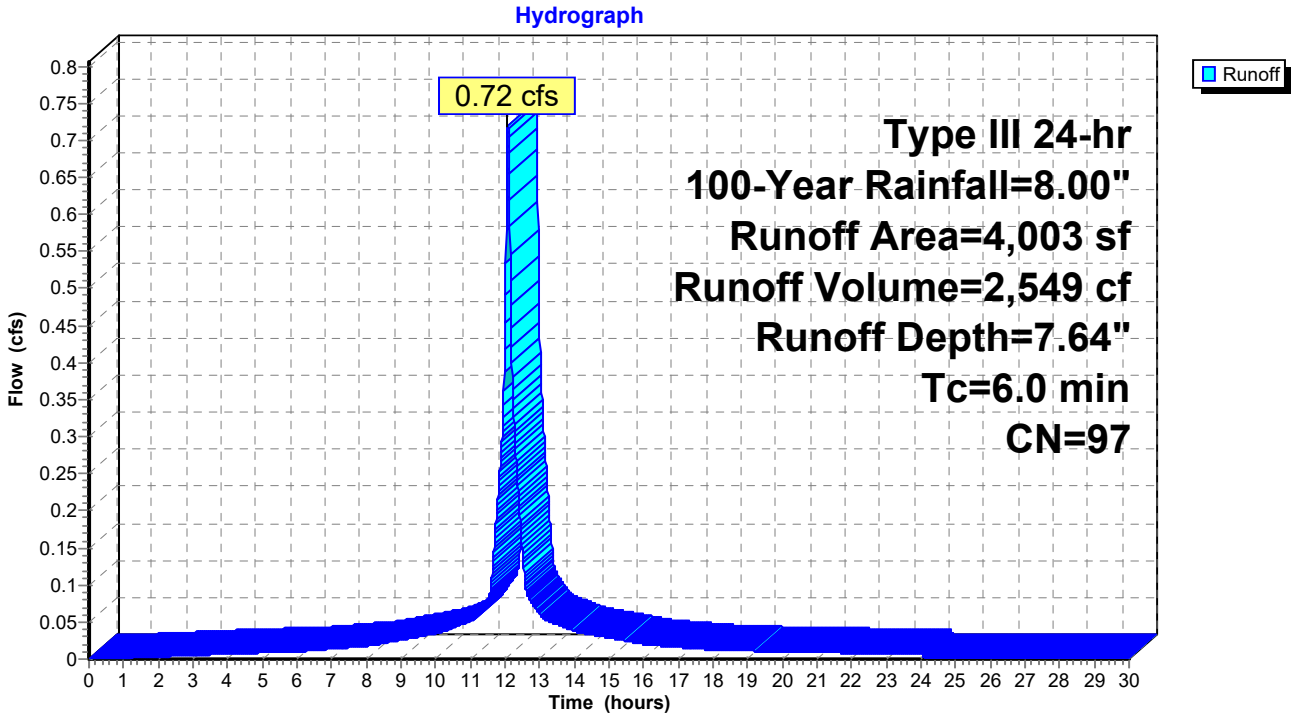
Runoff = 0.72 cfs @ 12.08 hrs, Volume= 2,549 cf, Depth= 7.64"
Routed to Pond 3P : CB-A-13

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
145	61	>75% Grass cover, Good, HSG B
3,858	98	Paved parking, HSG B
4,003	97	Weighted Average
145		3.62% Pervious Area
3,858		96.38% Impervious Area

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

Subcatchment W-A-13: W-A-13



Summary for Subcatchment W-A-14: W-A-14

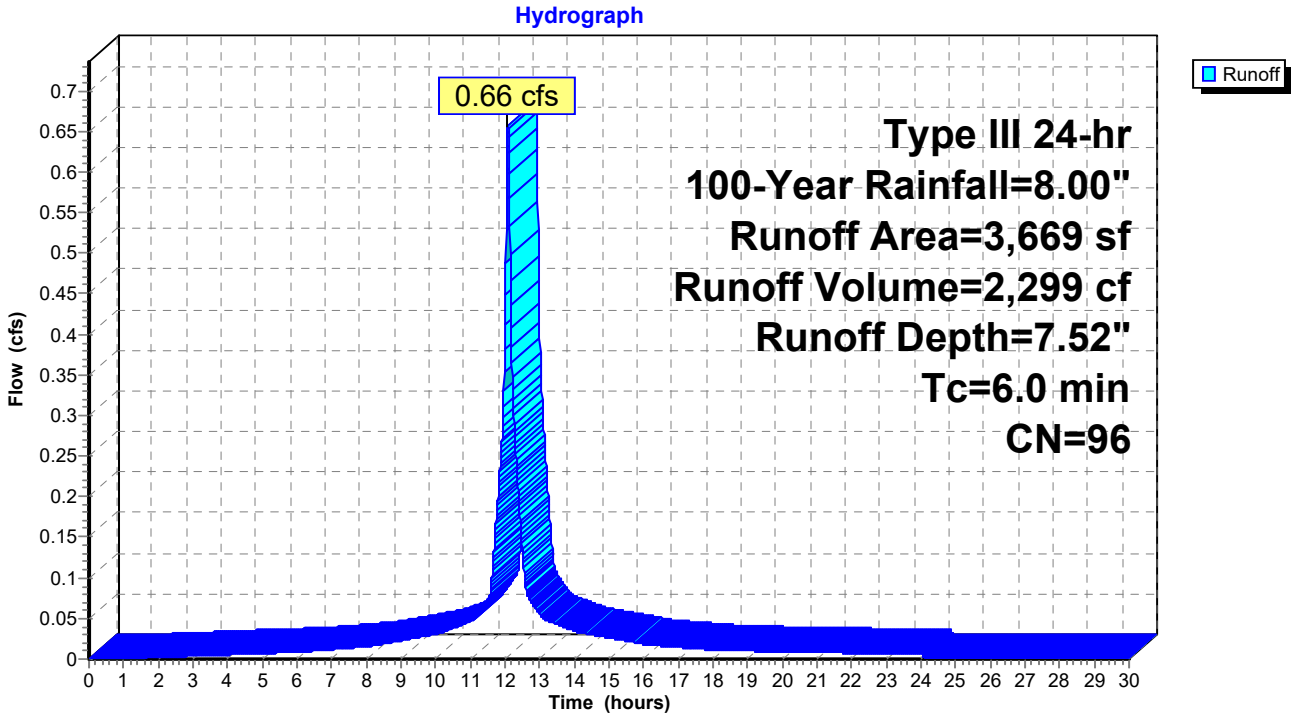
Runoff = 0.66 cfs @ 12.08 hrs, Volume= 2,299 cf, Depth= 7.52"
Routed to Pond CB-A-14 : CB-A-14

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
247	61	>75% Grass cover, Good, HSG B
3,422	98	Paved parking, HSG B
3,669	96	Weighted Average
247		6.73% Pervious Area
3,422		93.27% Impervious Area

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

Subcatchment W-A-14: W-A-14



Summary for Subcatchment W-A-15: W-A-15

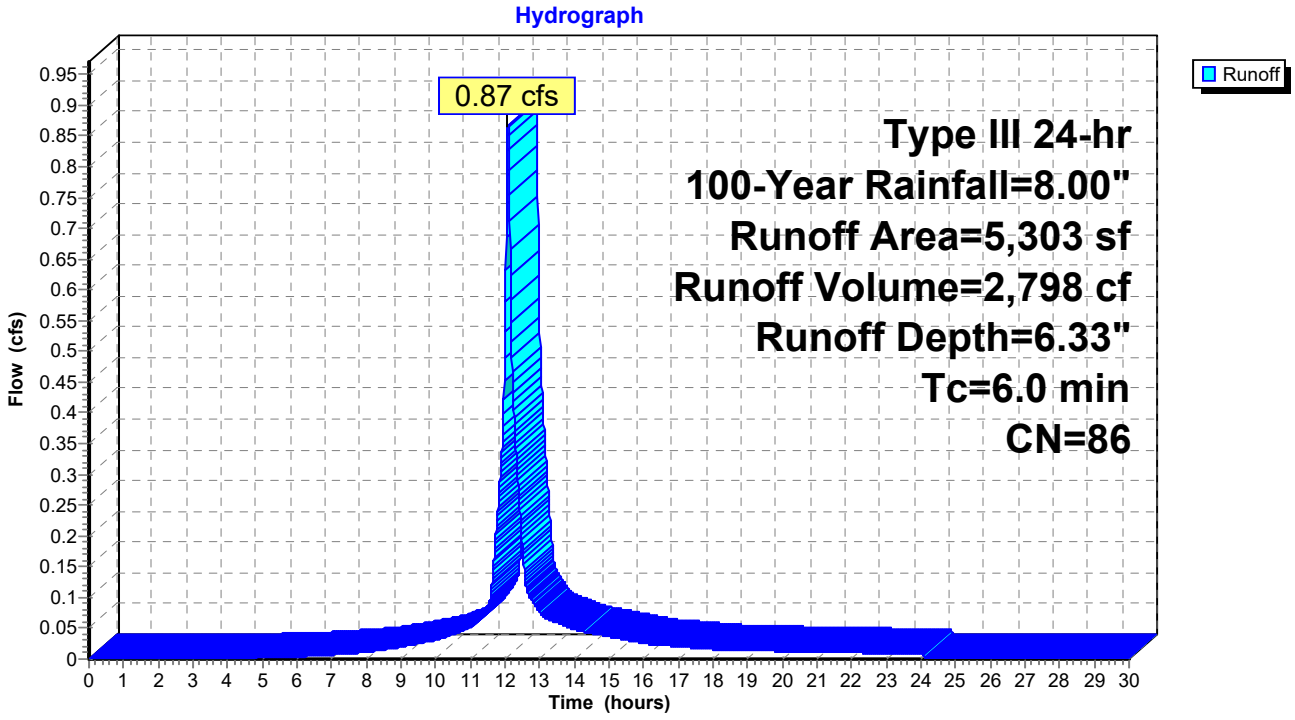
Runoff = 0.87 cfs @ 12.08 hrs, Volume= 2,798 cf, Depth= 6.33"
Routed to Pond CB-A-15 : CB-A-15

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
1,739	61	>75% Grass cover, Good, HSG B
3,564	98	Paved parking, HSG B
5,303	86	Weighted Average
1,739		32.79% Pervious Area
3,564		67.21% Impervious Area

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

Subcatchment W-A-15: W-A-15



Summary for Subcatchment W-A-17: W-A-17

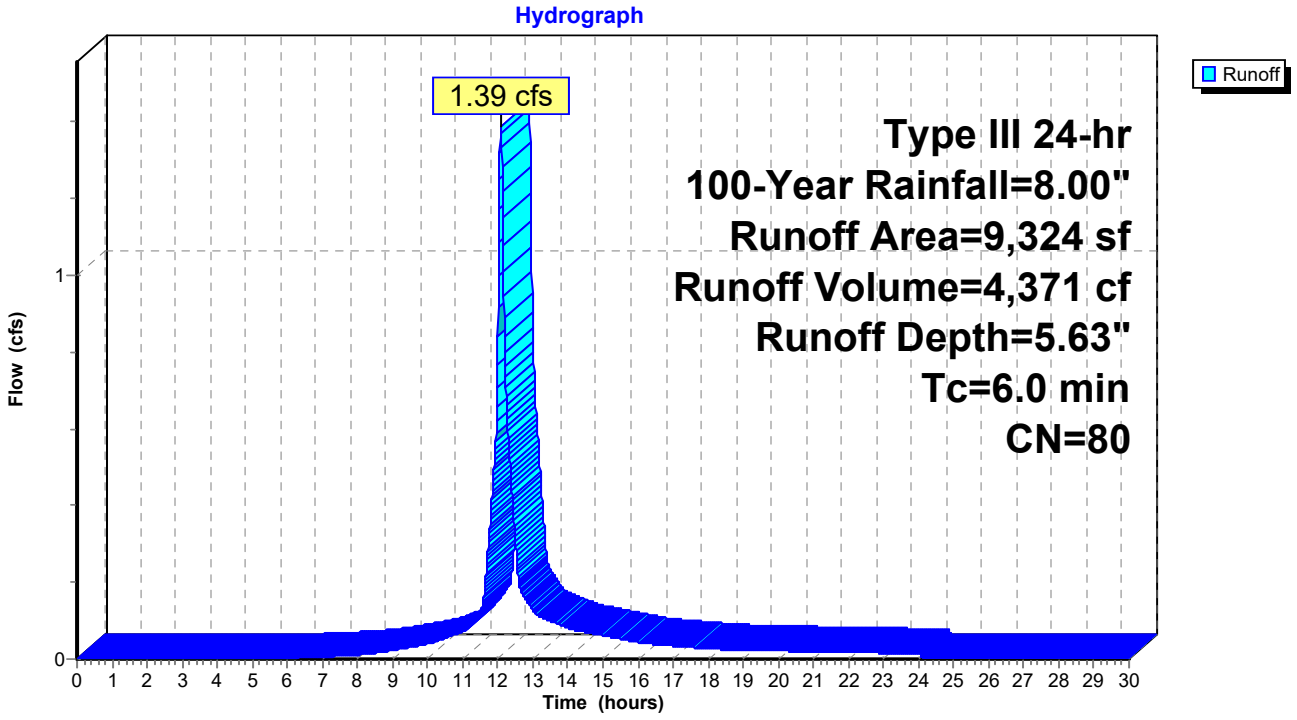
Runoff = 1.39 cfs @ 12.09 hrs, Volume= 4,371 cf, Depth= 5.63"
Routed to Pond CB-A-17 : CB-A-17

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
4,521	61	>75% Grass cover, Good, HSG B
4,803	98	Paved parking, HSG B
9,324	80	Weighted Average
4,521		48.49% Pervious Area
4,803		51.51% Impervious Area

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

Subcatchment W-A-17: W-A-17



Summary for Subcatchment W-A-18: W-A-18

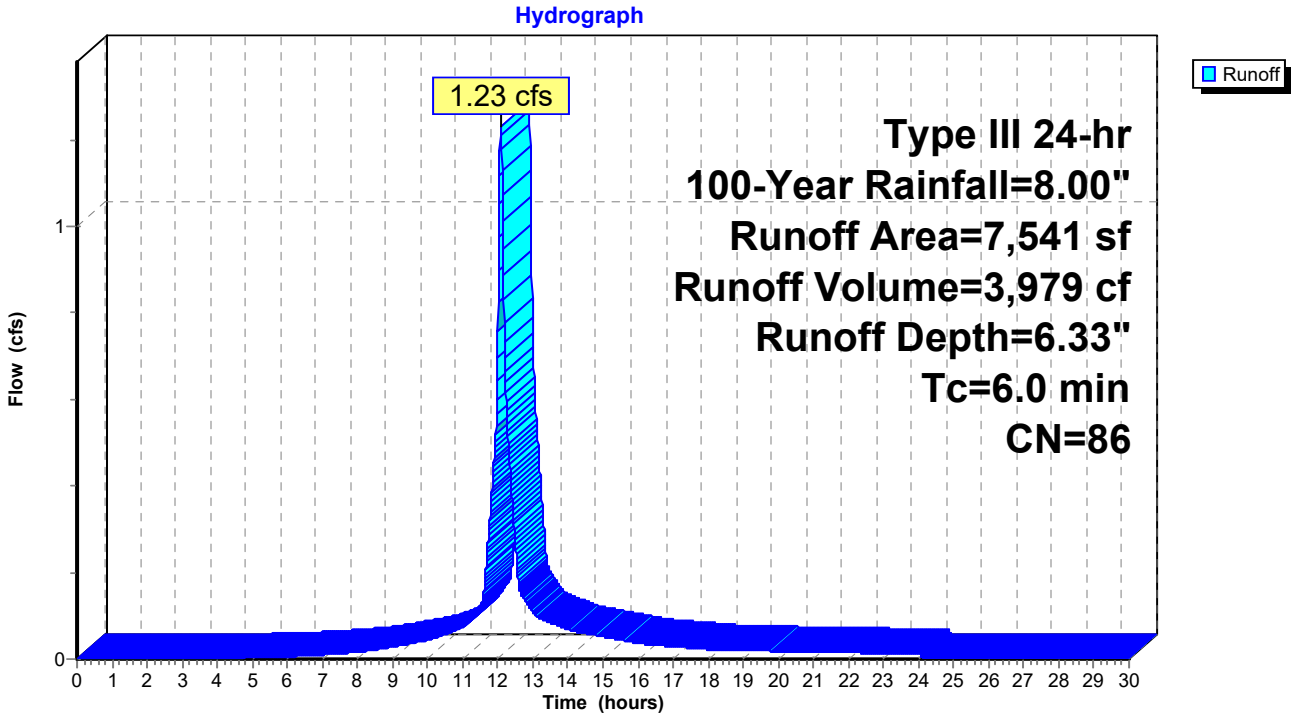
Runoff = 1.23 cfs @ 12.08 hrs, Volume= 3,979 cf, Depth= 6.33"
Routed to Pond CB-A-18 : CB-A-18

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
2,344	61	>75% Grass cover, Good, HSG B
5,197	98	Paved parking, HSG B
7,541	86	Weighted Average
2,344		31.08% Pervious Area
5,197		68.92% Impervious Area

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

Subcatchment W-A-18: W-A-18



Summary for Subcatchment W-A-19: W-A-19

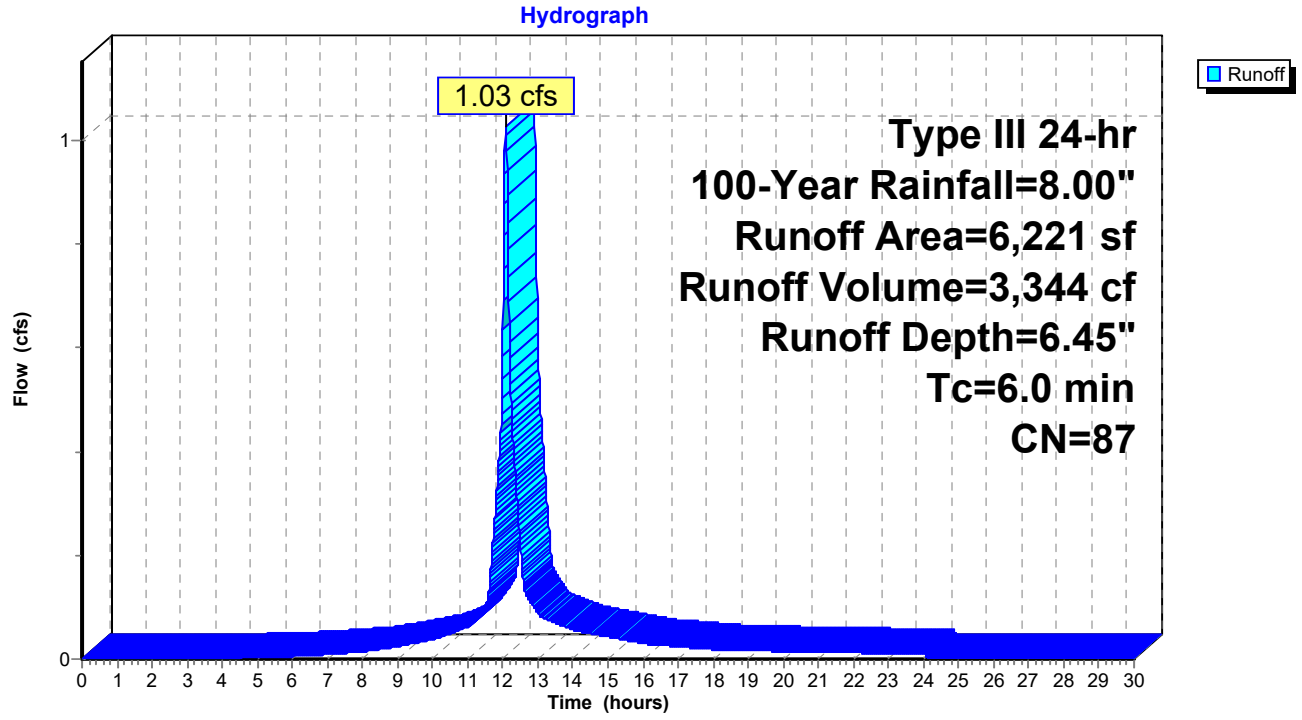
Runoff = 1.03 cfs @ 12.08 hrs, Volume= 3,344 cf, Depth= 6.45"
Routed to Pond CB-A-19 : CB-A-19

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
1,822	61	>75% Grass cover, Good, HSG B
4,399	98	Paved parking, HSG B
6,221	87	Weighted Average
1,822		29.29% Pervious Area
4,399		70.71% Impervious Area

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

Subcatchment W-A-19: W-A-19



Summary for Subcatchment W-A-20: W-A-20

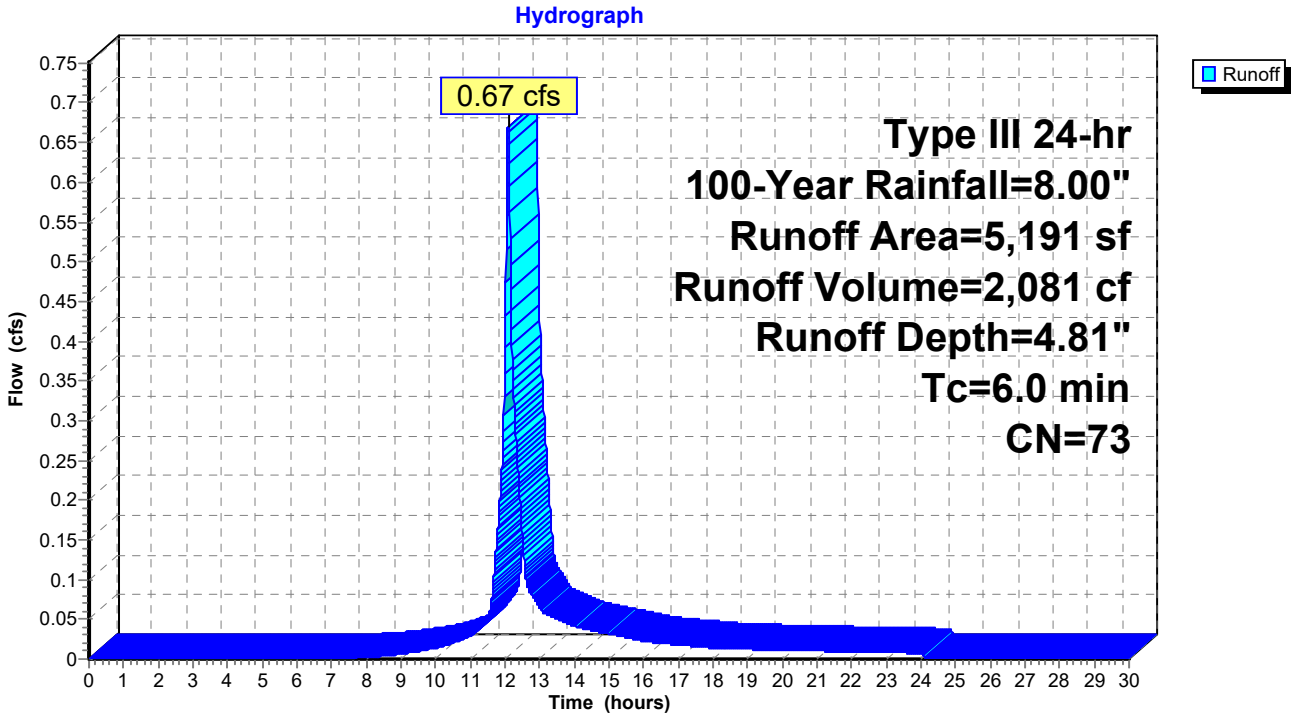
Runoff = 0.67 cfs @ 12.09 hrs, Volume= 2,081 cf, Depth= 4.81"
Routed to Pond CB-A-20 : CB-A-20

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
3,457	61	>75% Grass cover, Good, HSG B
1,734	98	Paved parking, HSG B
5,191	73	Weighted Average
3,457		66.60% Pervious Area
1,734		33.40% Impervious Area

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

Subcatchment W-A-20: W-A-20



Summary for Subcatchment W-B-01: W-B-01

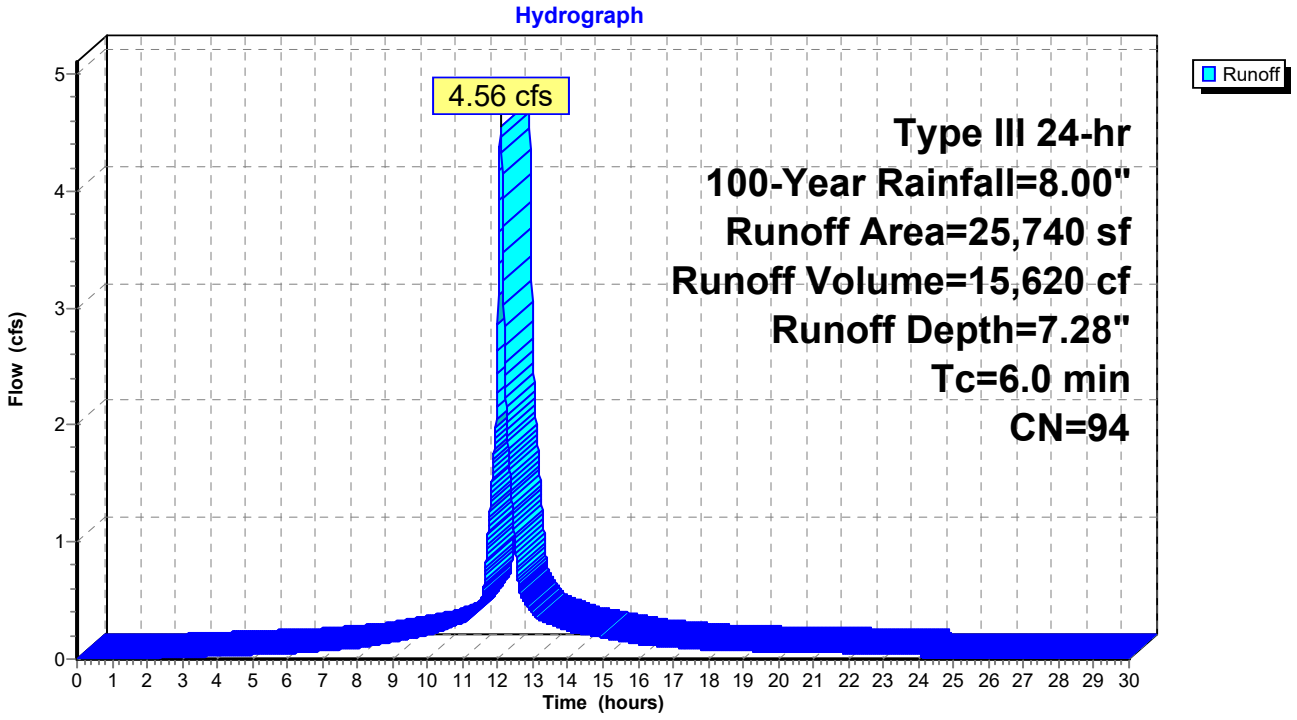
Runoff = 4.56 cfs @ 12.08 hrs, Volume= 15,620 cf, Depth= 7.28"
Routed to Pond CB-B-01 : CB-B-01

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
2,579	61	>75% Grass cover, Good, HSG B
23,161	98	Paved parking, HSG B
25,740	94	Weighted Average
2,579		10.02% Pervious Area
23,161		89.98% Impervious Area

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

Subcatchment W-B-01: W-B-01



Summary for Subcatchment W-B-02: W-B-02

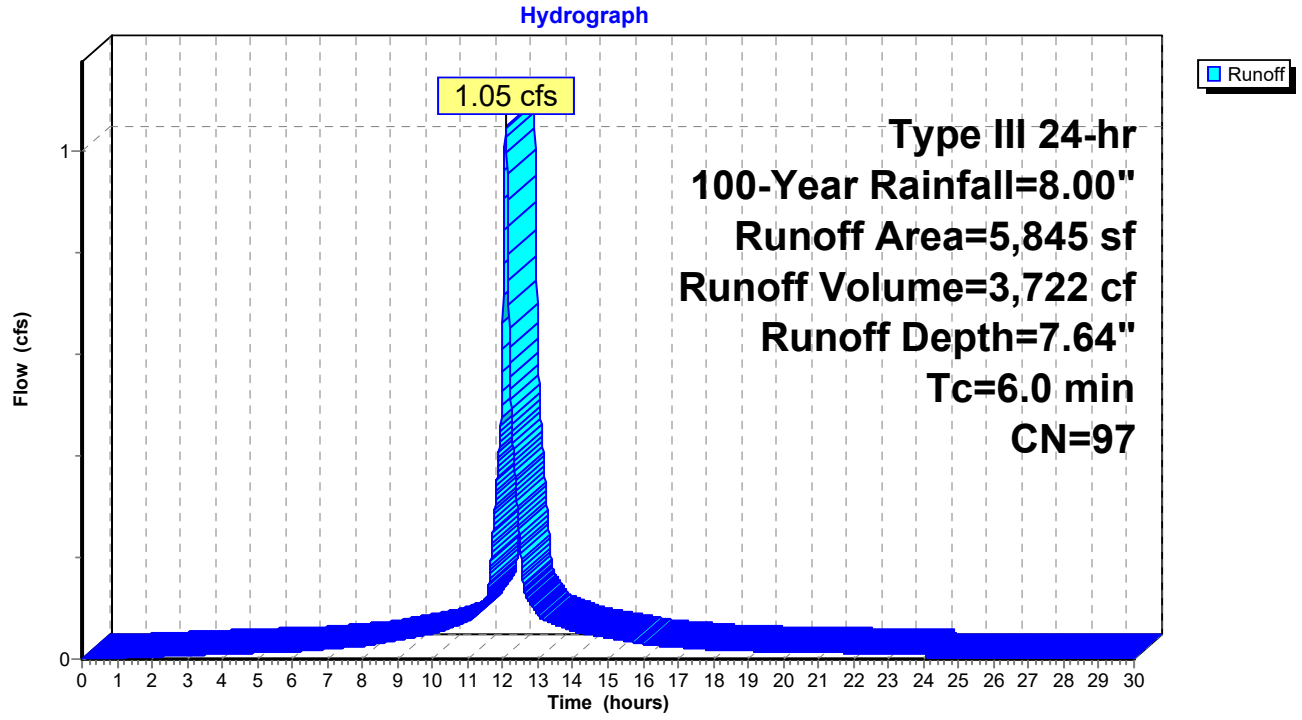
Runoff = 1.05 cfs @ 12.08 hrs, Volume= 3,722 cf, Depth= 7.64"
Routed to Pond CB-B-02 : CB-B-02

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
214	61	>75% Grass cover, Good, HSG B
5,631	98	Paved parking, HSG B
5,845	97	Weighted Average
214		3.66% Pervious Area
5,631		96.34% Impervious Area

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

Subcatchment W-B-02: W-B-02



Summary for Subcatchment W-B-03: W-B-03

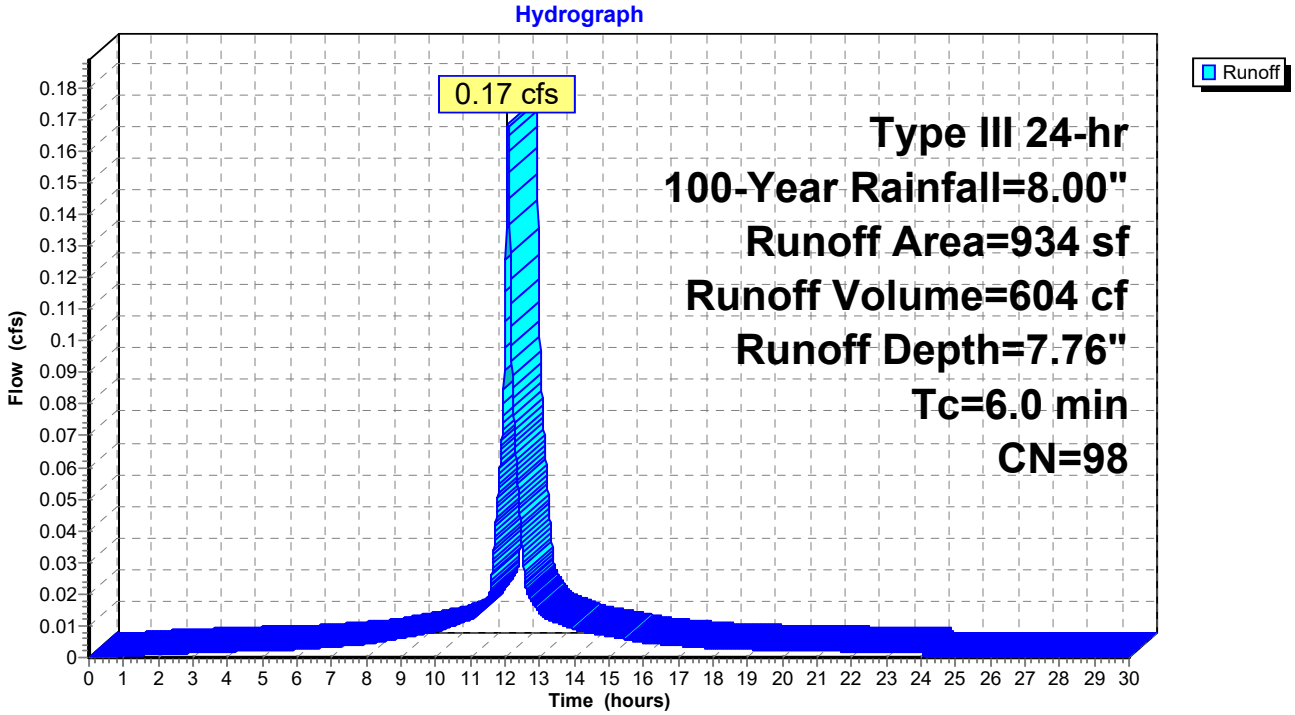
Runoff = 0.17 cfs @ 12.08 hrs, Volume= 604 cf, Depth= 7.76"
Routed to Pond CB-B-03 : CB-B-03

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
934	98	Paved parking, HSG B
934		100.00% Impervious Area

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

Subcatchment W-B-03: W-B-03



Summary for Subcatchment W-B-04: W-B-04

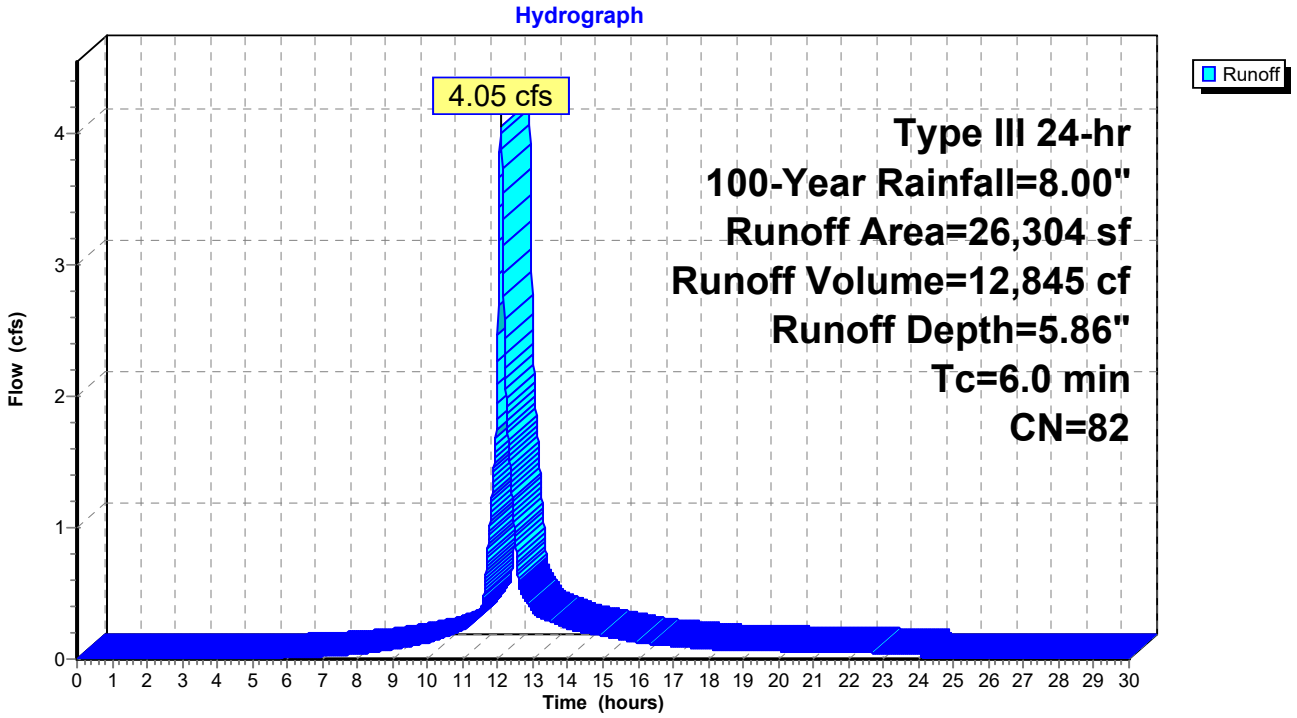
Runoff = 4.05 cfs @ 12.09 hrs, Volume= 12,845 cf, Depth= 5.86"
Routed to Pond CB-B-04 : CB-B-04

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
11,684	61	>75% Grass cover, Good, HSG B
14,620	98	Paved parking, HSG B
26,304	82	Weighted Average
11,684		44.42% Pervious Area
14,620		55.58% Impervious Area

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

Subcatchment W-B-04: W-B-04



Summary for Subcatchment W-B-05: W-B-05

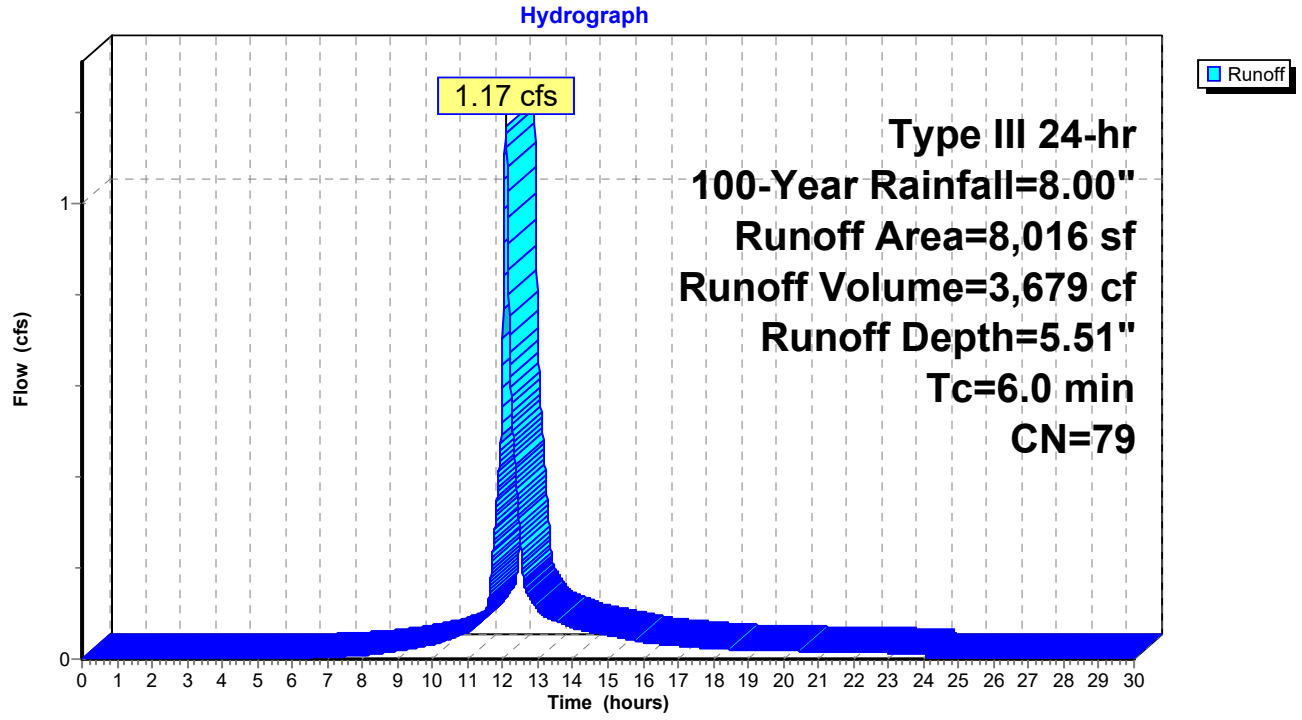
Runoff = 1.17 cfs @ 12.09 hrs, Volume= 3,679 cf, Depth= 5.51"
Routed to Pond CB-B-05 : CB-B-05

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
4,108	61	>75% Grass cover, Good, HSG B
3,908	98	Paved parking, HSG B
8,016	79	Weighted Average
4,108		51.25% Pervious Area
3,908		48.75% Impervious Area

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

Subcatchment W-B-05: W-B-05



Summary for Subcatchment W-B-06: W-B-06

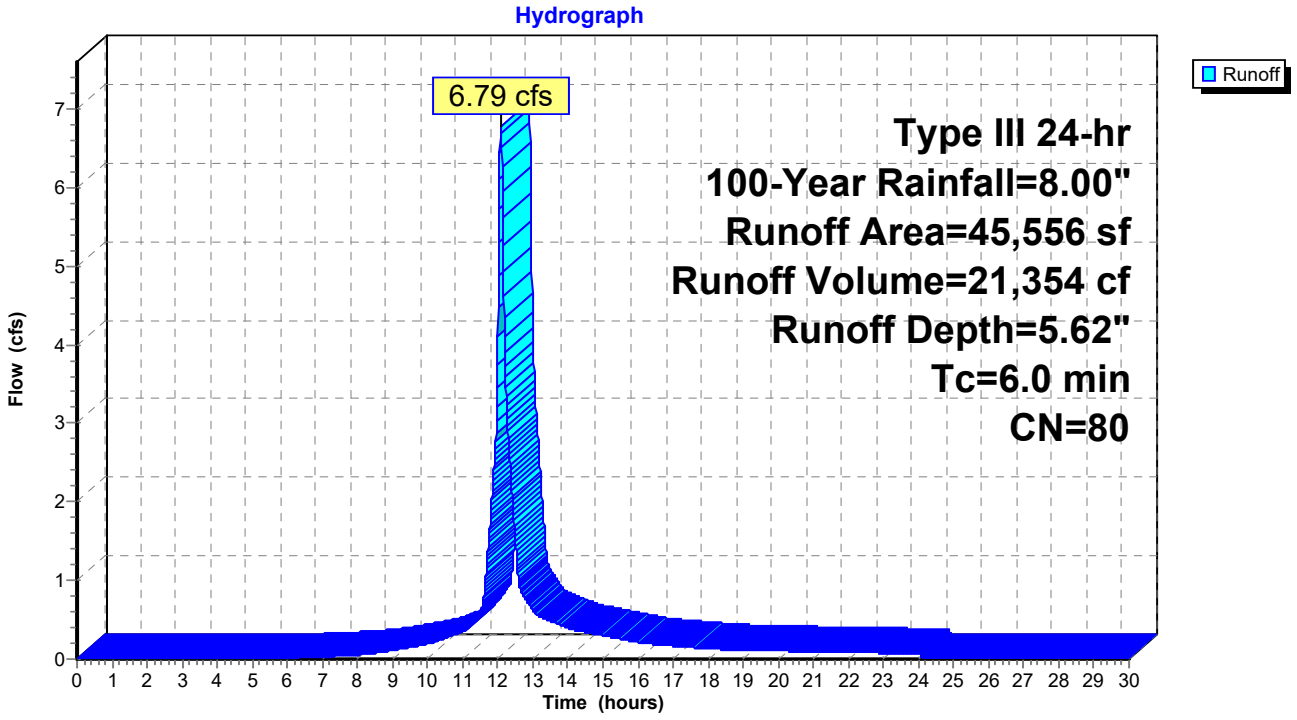
Runoff = 6.79 cfs @ 12.09 hrs, Volume= 21,354 cf, Depth= 5.62"
Routed to Pond CB-B-07 : CB-B-07

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
22,604	61	>75% Grass cover, Good, HSG B
22,952	98	Paved parking, HSG B
45,556	80	Weighted Average
22,604		49.62% Pervious Area
22,952		50.38% Impervious Area

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

Subcatchment W-B-06: W-B-06



Summary for Subcatchment W-C-01: W-C-01

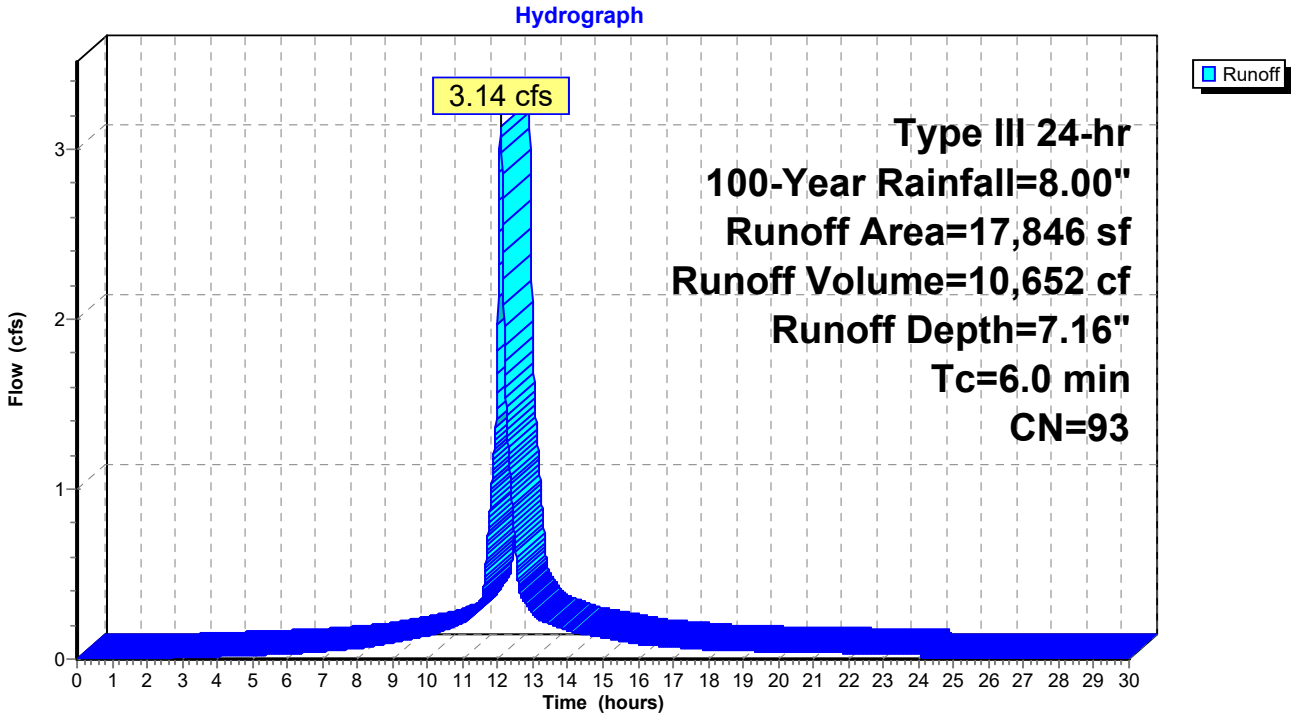
Runoff = 3.14 cfs @ 12.08 hrs, Volume= 10,652 cf, Depth= 7.16"
Routed to Pond CB-C-01 : CB-C-01

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
2,361	61	>75% Grass cover, Good, HSG B
15,485	98	Paved parking, HSG B
17,846	93	Weighted Average
2,361		13.23% Pervious Area
15,485		86.77% Impervious Area

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

Subcatchment W-C-01: W-C-01



Summary for Subcatchment W-C-02: W-C-02

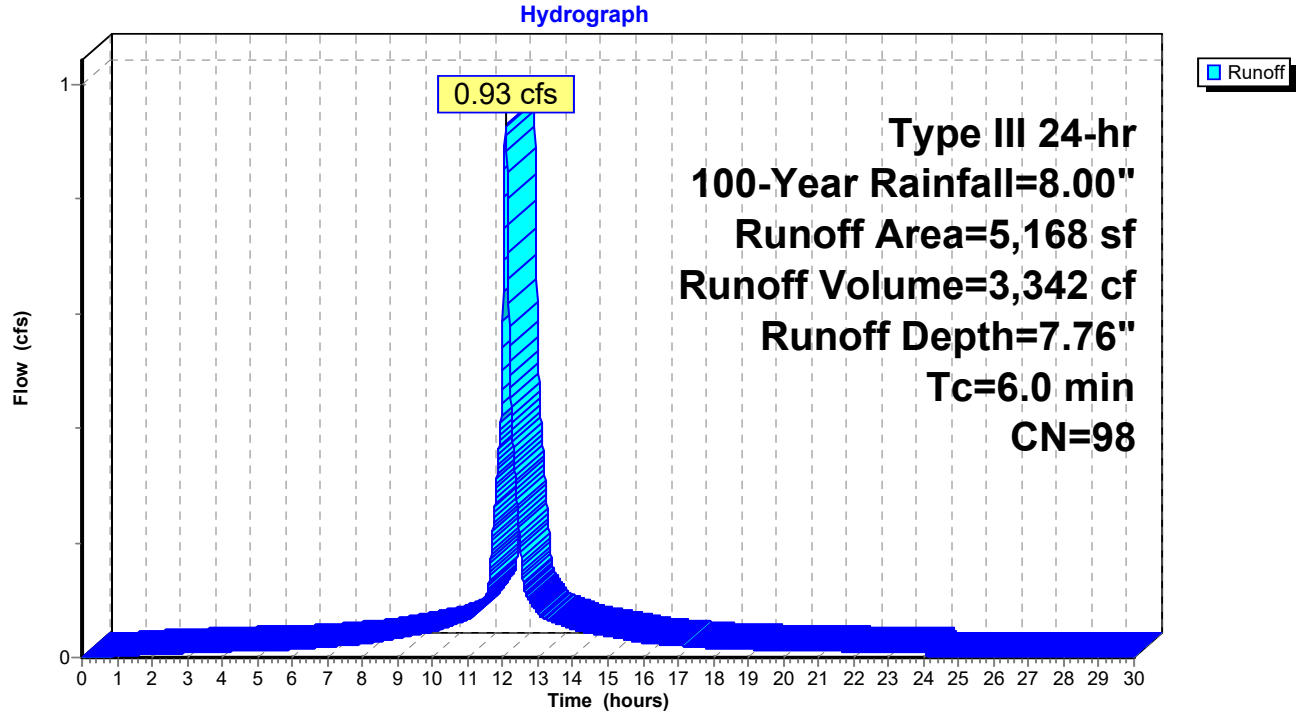
Runoff = 0.93 cfs @ 12.08 hrs, Volume= 3,342 cf, Depth= 7.76"
Routed to Pond CB-C-02 : CB-C-02

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
5,168	98	Paved parking, HSG B
5,168		100.00% Impervious Area

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

Subcatchment W-C-02: W-C-02



Summary for Subcatchment W-C-03: W-C-03

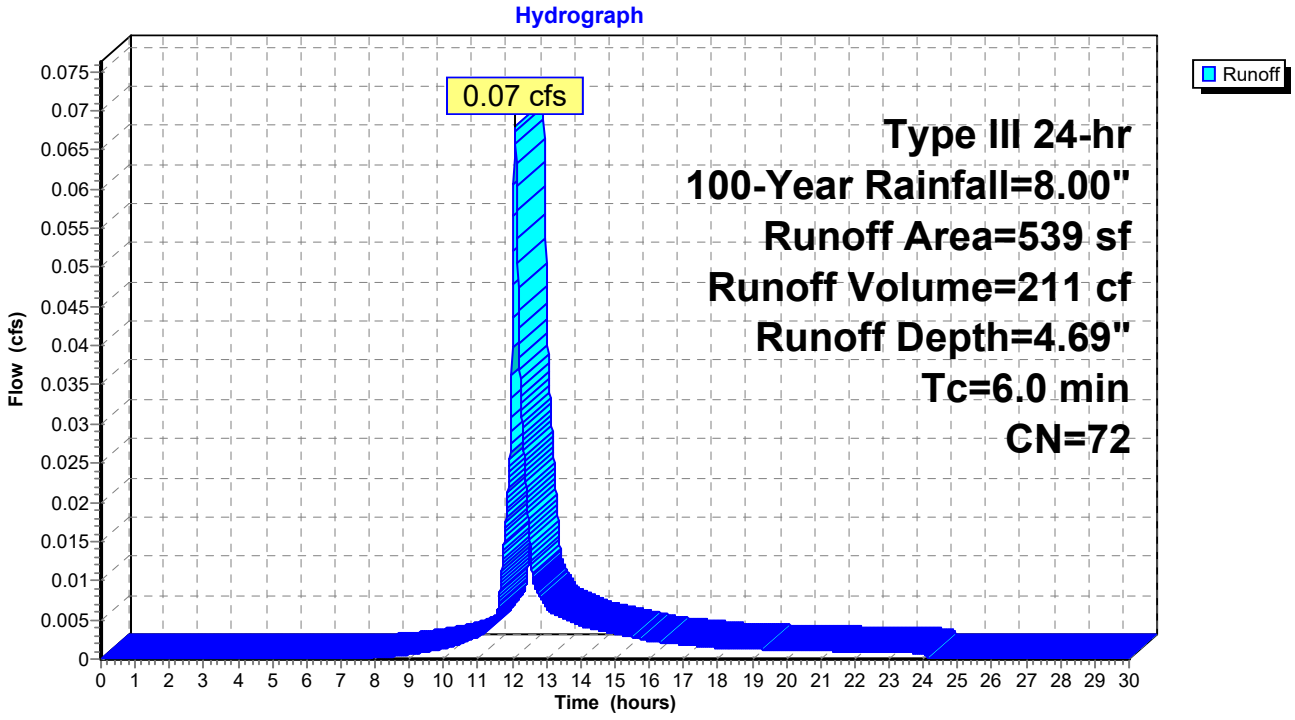
Runoff = 0.07 cfs @ 12.09 hrs, Volume= 211 cf, Depth= 4.69"
Routed to Pond CB-C-03 : CB-C-03

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
372	61	>75% Grass cover, Good, HSG B
167	98	Paved parking, HSG B
539	72	Weighted Average
372		69.02% Pervious Area
167		30.98% Impervious Area

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

Subcatchment W-C-03: W-C-03



Summary for Subcatchment W-C-04: W-C-04

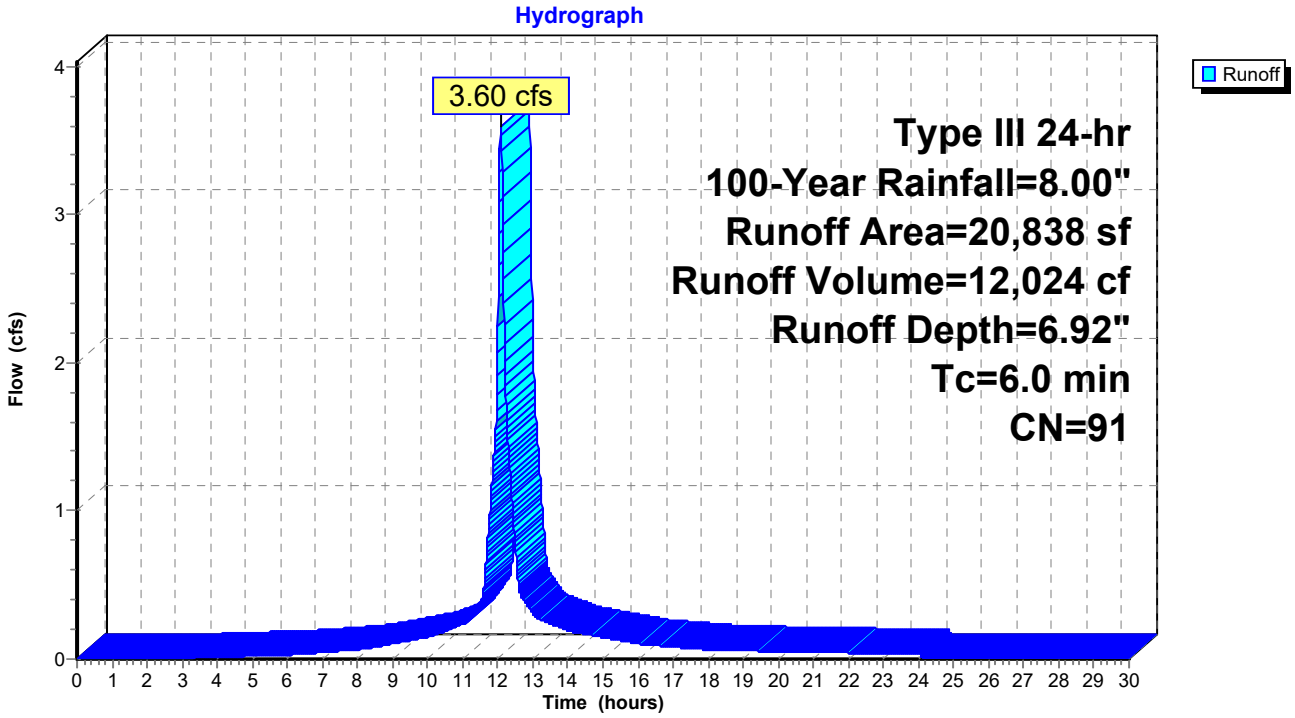
Runoff = 3.60 cfs @ 12.08 hrs, Volume= 12,024 cf, Depth= 6.92"
Routed to Pond CB-C-04 : CB-C-04

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
3,975	61	>75% Grass cover, Good, HSG B
16,863	98	Paved parking, HSG B
20,838	91	Weighted Average
3,975		19.08% Pervious Area
16,863		80.92% Impervious Area

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

Subcatchment W-C-04: W-C-04



Summary for Subcatchment W-C-05: W-C-05

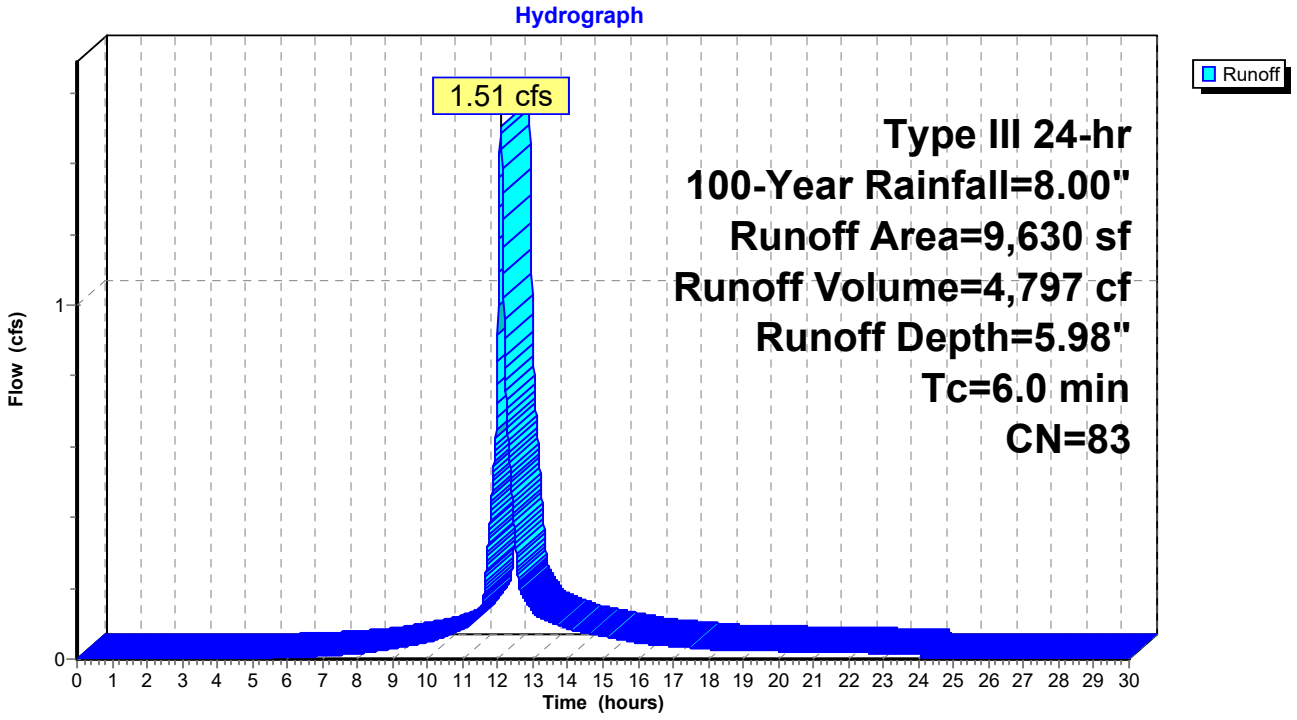
Runoff = 1.51 cfs @ 12.09 hrs, Volume= 4,797 cf, Depth= 5.98"
Routed to Pond CB-C-05 : CB-C-05

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
3,869	61	>75% Grass cover, Good, HSG B
5,761	98	Paved parking, HSG B
9,630	83	Weighted Average
3,869		40.18% Pervious Area
5,761		59.82% Impervious Area

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

Subcatchment W-C-05: W-C-05



Summary for Subcatchment W-C-06: W-C-06

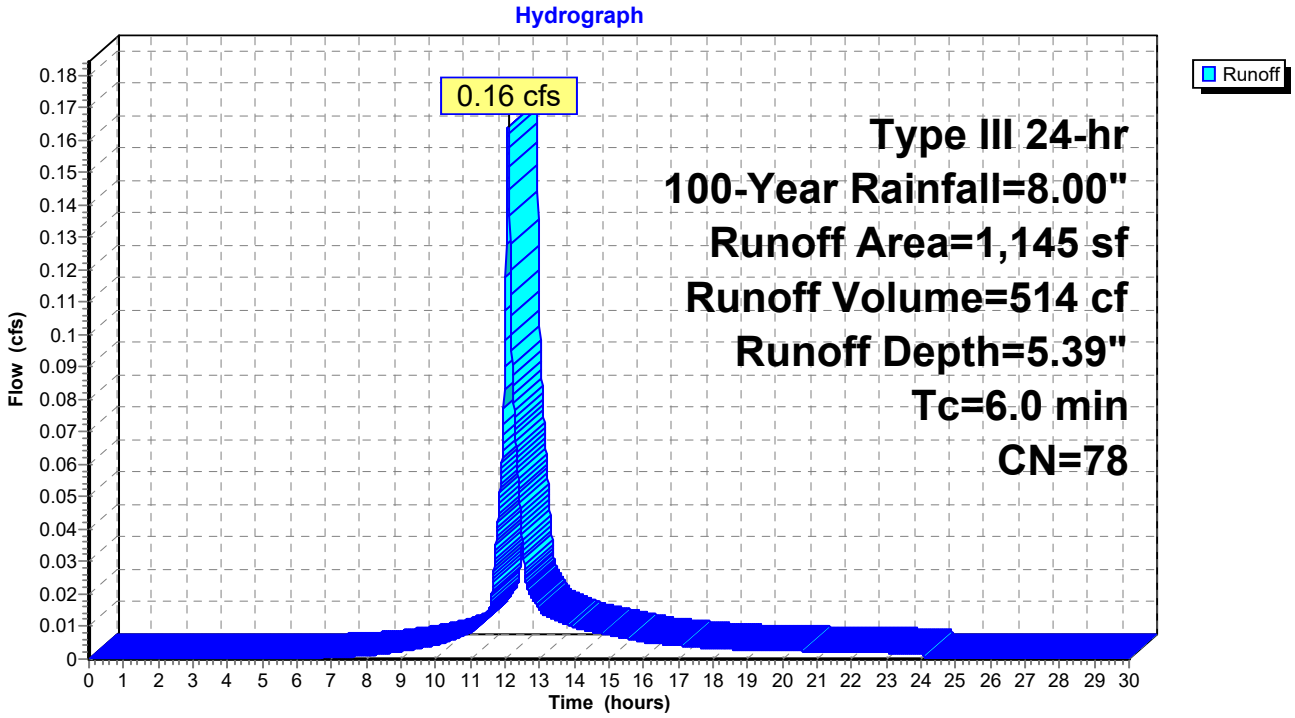
Runoff = 0.16 cfs @ 12.09 hrs, Volume= 514 cf, Depth= 5.39"
Routed to Pond CB-C-07 : CB-C-07

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
606	61	>75% Grass cover, Good, HSG B
539	98	Paved parking, HSG B
1,145	78	Weighted Average
606		52.93% Pervious Area
539		47.07% Impervious Area

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

Subcatchment W-C-06: W-C-06



Summary for Subcatchment W-C-07: W-C-07

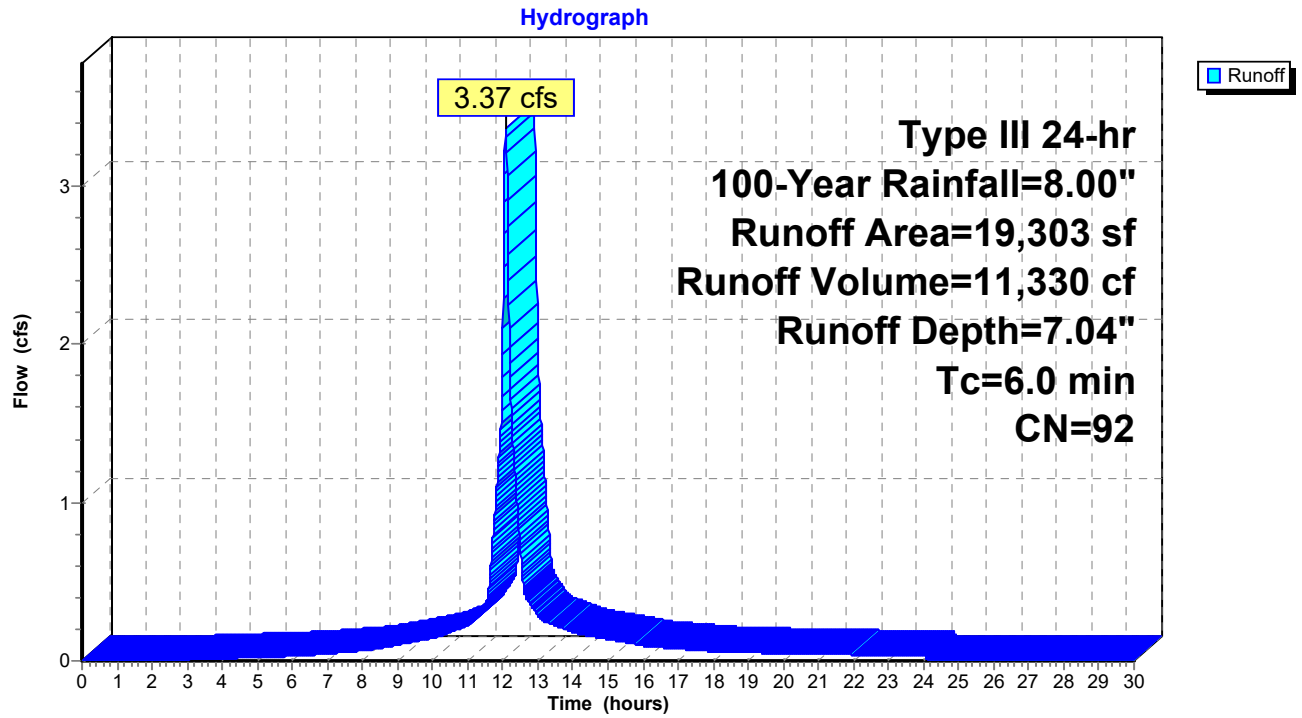
Runoff = 3.37 cfs @ 12.08 hrs, Volume= 11,330 cf, Depth= 7.04"
Routed to Pond CB-C-08 : CB-C-08

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-Year Rainfall=8.00"

Area (sf)	CN	Description
3,107	61	>75% Grass cover, Good, HSG B
16,196	98	Paved parking, HSG B
19,303	92	Weighted Average
3,107		16.10% Pervious Area
16,196		83.90% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					**Direct Entry,**
5.0	0	Total, Increased to minimum Tc = 6.0 min			

Subcatchment W-C-07: W-C-07

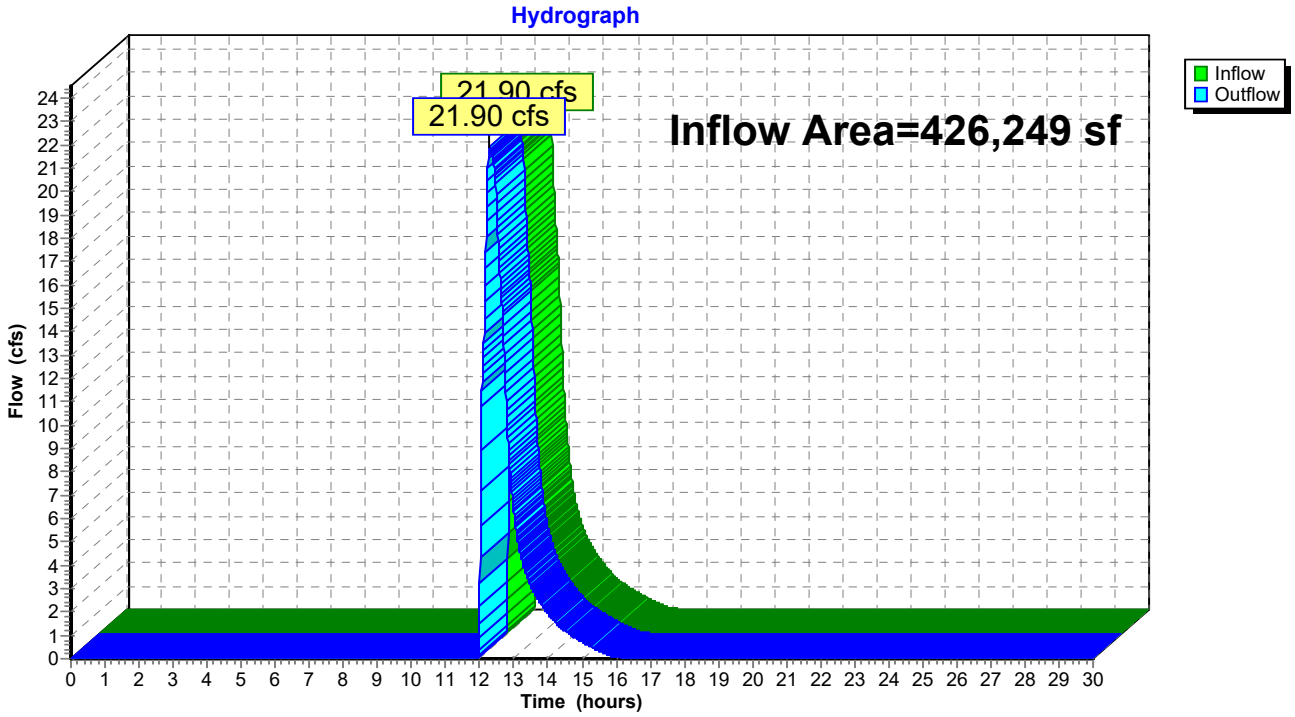


Summary for Reach DP1POST: DP1 POST

Inflow Area = 426,249 sf, 72.93% Impervious, Inflow Depth = 2.02" for 100-Year event
Inflow = 21.90 cfs @ 12.27 hrs, Volume= 71,641 cf
Outflow = 21.90 cfs @ 12.27 hrs, Volume= 71,641 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs

Reach DP1POST: DP1 POST

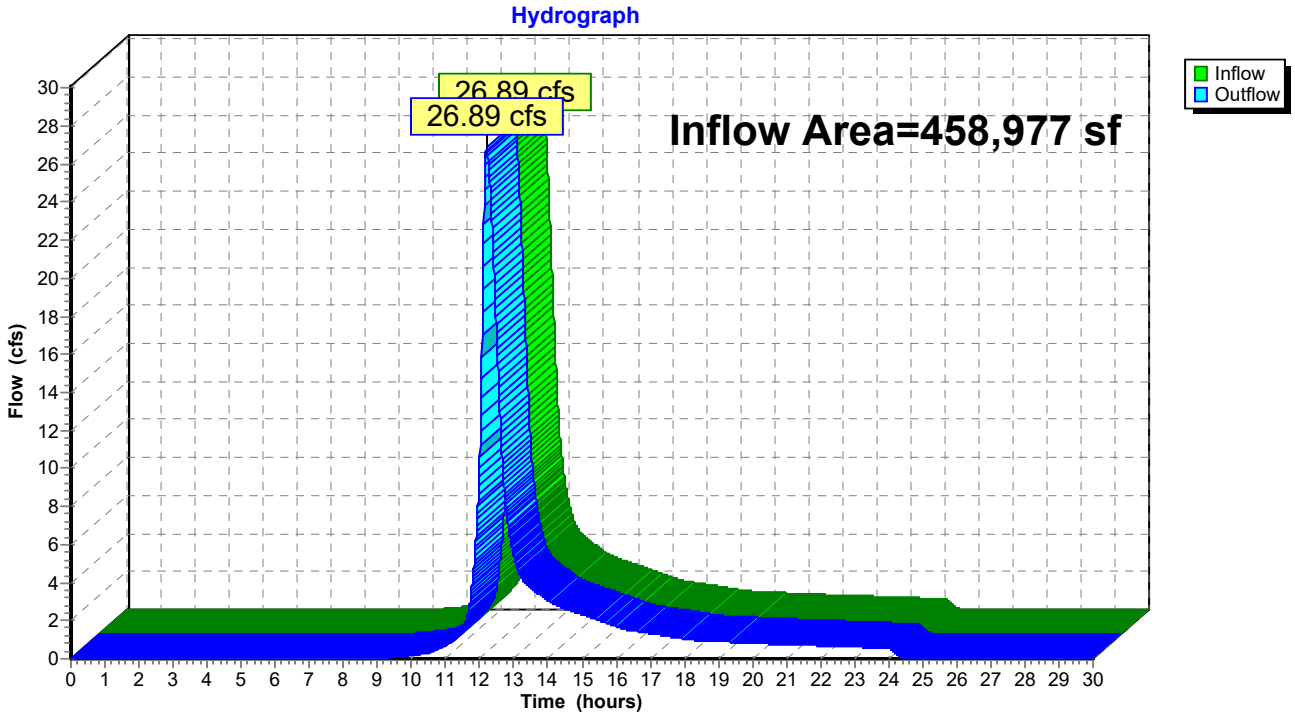


Summary for Reach DP1PRE: DP1 PRE

Inflow Area = 458,977 sf, 9.20% Impervious, Inflow Depth = 3.24" for 100-Year event
Inflow = 26.89 cfs @ 12.21 hrs, Volume= 123,957 cf
Outflow = 26.89 cfs @ 12.21 hrs, Volume= 123,957 cf, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs

Reach DP1PRE: DP1 PRE



Summary for Pond 1P: CB-B-06

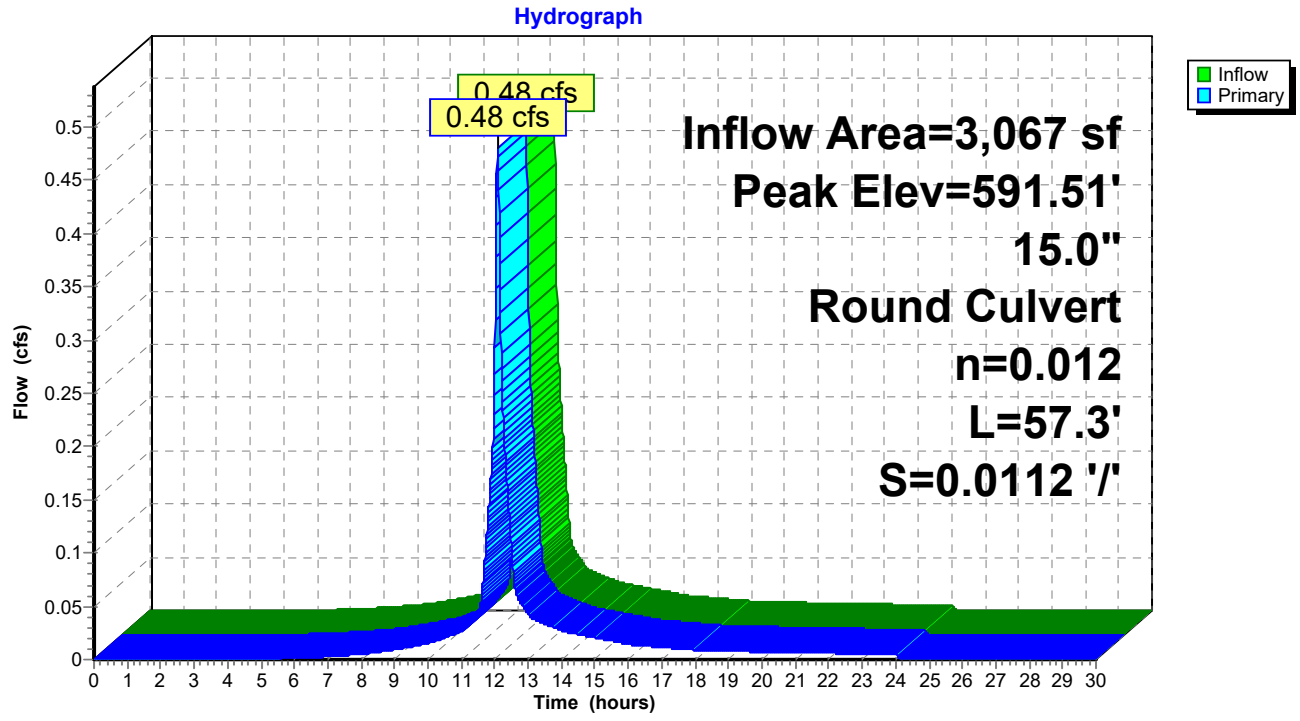
Inflow Area = 3,067 sf, 58.98% Impervious, Inflow Depth = 5.98" for 100-Year event
Inflow = 0.48 cfs @ 12.09 hrs, Volume= 1,528 cf
Outflow = 0.48 cfs @ 12.09 hrs, Volume= 1,528 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.48 cfs @ 12.09 hrs, Volume= 1,528 cf
Routed to Pond CB-B-05 : CB-B-05

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 591.51' @ 12.09 hrs
Flood Elev= 593.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	591.19'	**15.0" Round HDPE Round 15"** L= 57.3' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.19' / 590.55' S= 0.0112 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.48 cfs @ 12.09 hrs HW=591.51' TW=590.60' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Inlet Controls 0.48 cfs @ 1.93 fps)

Pond 1P: CB-B-06



Summary for Pond 3P: CB-A-13

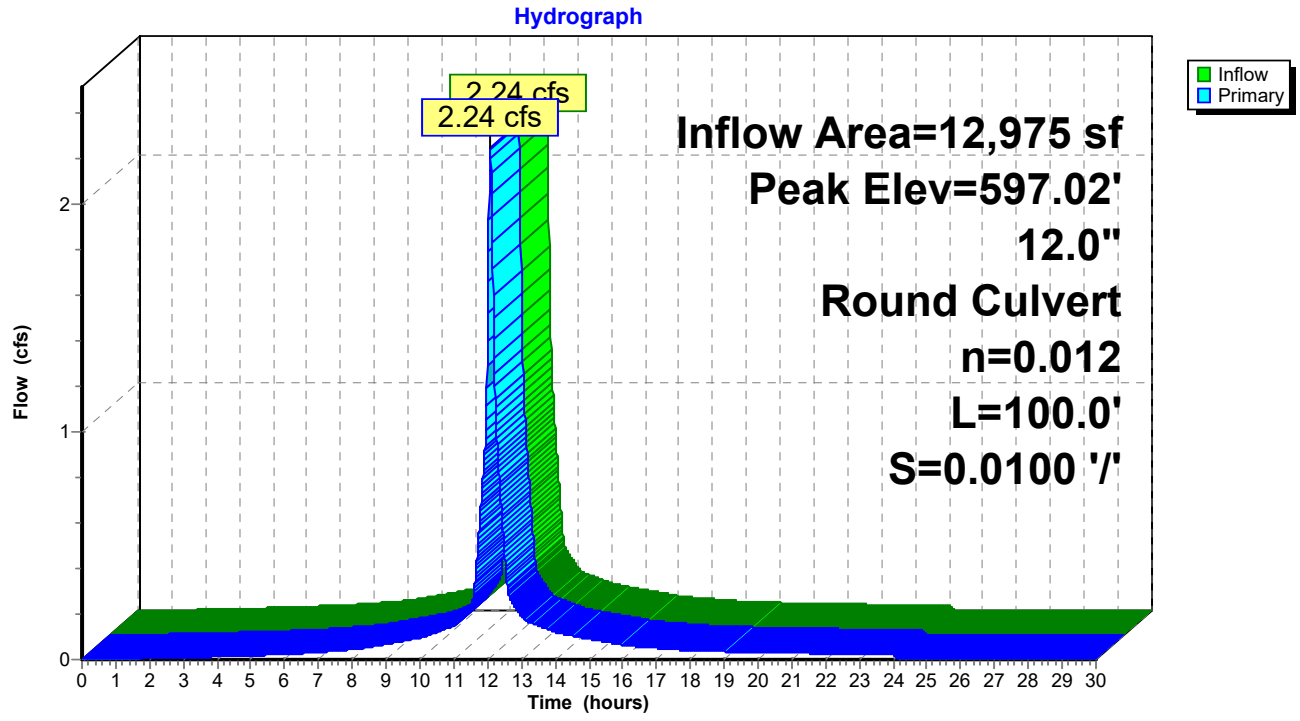
Inflow Area = 12,975 sf, 83.58% Impervious, Inflow Depth = 7.07" for 100-Year event
Inflow = 2.24 cfs @ 12.08 hrs, Volume= 7,646 cf
Outflow = 2.24 cfs @ 12.08 hrs, Volume= 7,646 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.24 cfs @ 12.08 hrs, Volume= 7,646 cf
Routed to Pond CB-A-13 : CB-A-12

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 597.02' @ 12.09 hrs
Flood Elev= 598.01'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.00'	**12.0" Round HDPE Round 12"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.00' / 593.00' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=2.12 cfs @ 12.08 hrs HW=596.96' TW=596.49' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 2.12 cfs @ 2.69 fps)

Pond 3P: CB-A-13



Summary for Pond ADS 1A: ADS 1A

Inflow Area = 236,318 sf, 75.18% Impervious, Inflow Depth = 6.65" for 100-Year event
Inflow = 38.93 cfs @ 12.08 hrs, Volume= 130,979 cf
Outflow = 9.44 cfs @ 12.47 hrs, Volume= 130,982 cf, Atten= 76%, Lag= 23.0 min
Discarded = 1.69 cfs @ 12.47 hrs, Volume= 101,765 cf
Primary = 7.75 cfs @ 12.47 hrs, Volume= 29,217 cf
Routed to Reach DP1POST : DP1 POST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 593.35' @ 12.47 hrs Surf.Area= 24,105 sf Storage= 46,218 cf
Flood Elev= 593.50' Surf.Area= 24,105 sf Storage= 47,779 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 143.6 min (914.4 - 770.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	590.50'	21,177 cf	**44.25'W x 544.74'L x 3.50'H Field A** 84,366 cf Overall - 31,423 cf Embedded = 52,943 cf x 40.0% Voids
#2A	591.00'	31,423 cf	**ADS_StormTech SC-740 +Cap** x 684 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 684 Chambers in 9 Rows
		52,600 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	591.00'	**15.0" Round Culvert** L= 282.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.00' / 576.00' S= 0.0532 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 1.23 sf
#2	Device 1	592.50'	**5.0' 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
#3	Discarded	590.50'	**3.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 290.00'

Discarded OutFlow Max=1.69 cfs @ 12.47 hrs HW=593.35' (Free Discharge)
↑**3=Exfiltration** (Controls 1.69 cfs)

Primary OutFlow Max=7.75 cfs @ 12.47 hrs HW=593.35' TW=0.00' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 7.75 cfs @ 6.32 fps)
↑**2=Broad-Crested Rectangular Weir** (Passes 7.75 cfs of 12.86 cfs potential flow)

Pond ADS 1A: ADS 1A - Chamber Wizard Field A

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

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

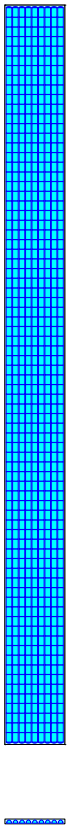
76 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 542.74' Row Length +12.0" End Stone x 2 = 544.74' Base Length
9 Rows x 51.0" Wide + 6.0" Spacing x 8 + 12.0" Side Stone x 2 = 44.25' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

684 Chambers x 45.9 cf = 31,423.0 cf Chamber Storage

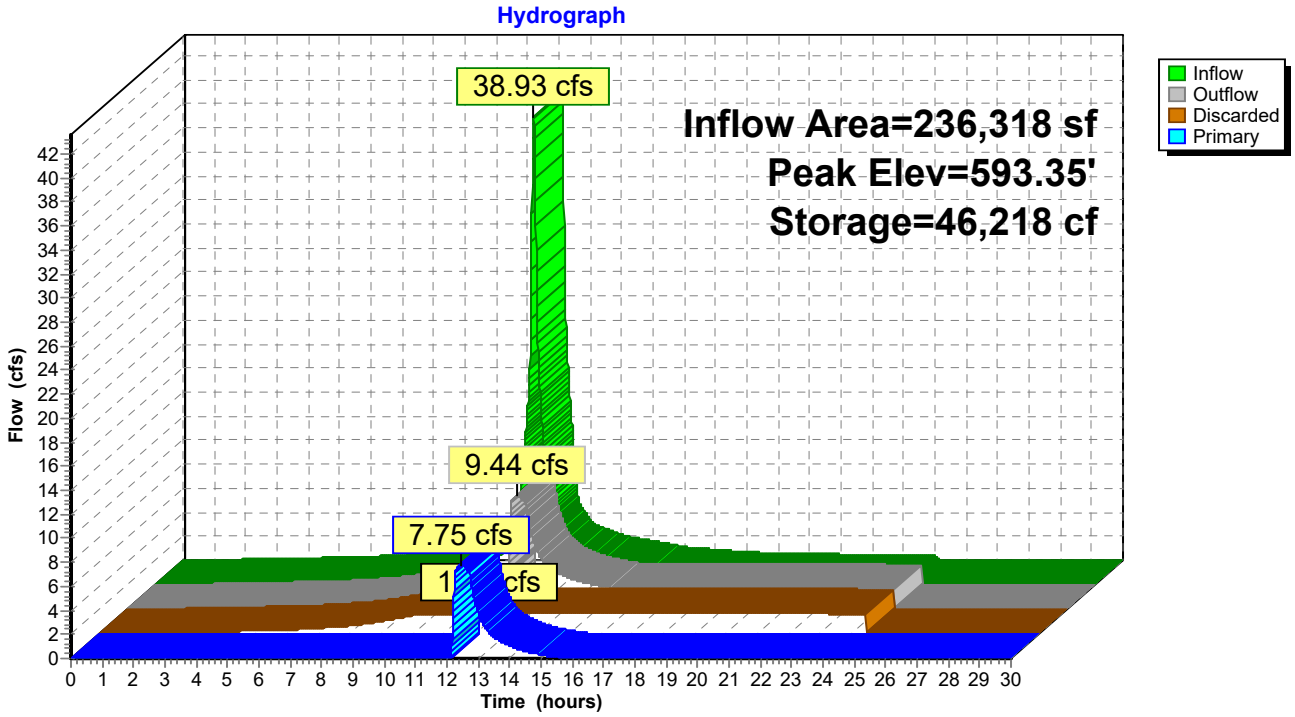
84,366.1 cf Field - 31,423.0 cf Chambers = 52,943.1 cf Stone x 40.0% Voids = 21,177.2 cf Stone Storage

Chamber Storage + Stone Storage = 52,600.2 cf = 1.208 af
Overall Storage Efficiency = 62.3%
Overall System Size = 544.74' x 44.25' x 3.50'

684 Chambers
3,124.7 cy Field
1,960.9 cy Stone



Pond ADS 1A: ADS 1A



Summary for Pond ADS 1B: ADS 1B

Inflow Area = 115,462 sf, 63.24% Impervious, Inflow Depth = 6.17" for 100-Year event
Inflow = 18.27 cfs @ 12.09 hrs, Volume= 59,351 cf
Outflow = 8.50 cfs @ 12.25 hrs, Volume= 59,360 cf, Atten= 53%, Lag= 10.1 min
Discarded = 0.58 cfs @ 12.25 hrs, Volume= 34,091 cf
Primary = 7.92 cfs @ 12.25 hrs, Volume= 25,269 cf
Routed to Reach DP1POST : DP1 POST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 587.92' @ 12.25 hrs Surf.Area= 8,231 sf Storage= 15,982 cf
Flood Elev= 588.00' Surf.Area= 8,231 sf Storage= 16,245 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 86.7 min (873.4 - 786.8)

Volume	Invert	Avail.Storage	Storage Description
#1A	585.00'	7,279 cf	**53.75'W x 153.14'L x 3.50'H Field A** 28,809 cf Overall - 10,612 cf Embedded = 18,197 cf x 40.0% Voids
#2A	585.50'	10,612 cf	**ADS_StormTech SC-740 +Cap** x 231 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 231 Chambers in 11 Rows
		17,891 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	585.50'	**15.0" Round Culvert** L= 83.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 585.50' / 575.00' S= 0.1265 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	586.50'	**5.0' 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
#3	Discarded	585.00'	**3.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 290.00'

Discarded OutFlow Max=0.58 cfs @ 12.25 hrs HW=587.92' (Free Discharge)
↑**3=Exfiltration** (Controls 0.58 cfs)

Primary OutFlow Max=7.92 cfs @ 12.25 hrs HW=587.92' TW=0.00' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 7.92 cfs @ 6.45 fps)
↑**2=Broad-Crested Rectangular Weir** (Passes 7.92 cfs of 28.15 cfs potential flow)

Pond ADS 1B: ADS 1B - Chamber Wizard Field A

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

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

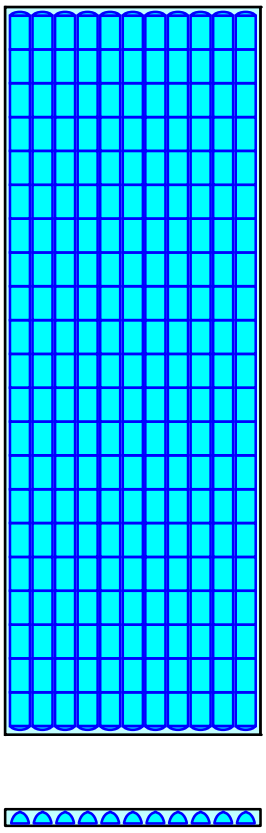
21 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 151.14' Row Length +12.0" End Stone x 2 = 153.14' Base Length
11 Rows x 51.0" Wide + 6.0" Spacing x 10 + 12.0" Side Stone x 2 = 53.75' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

231 Chambers x 45.9 cf = 10,612.1 cf Chamber Storage

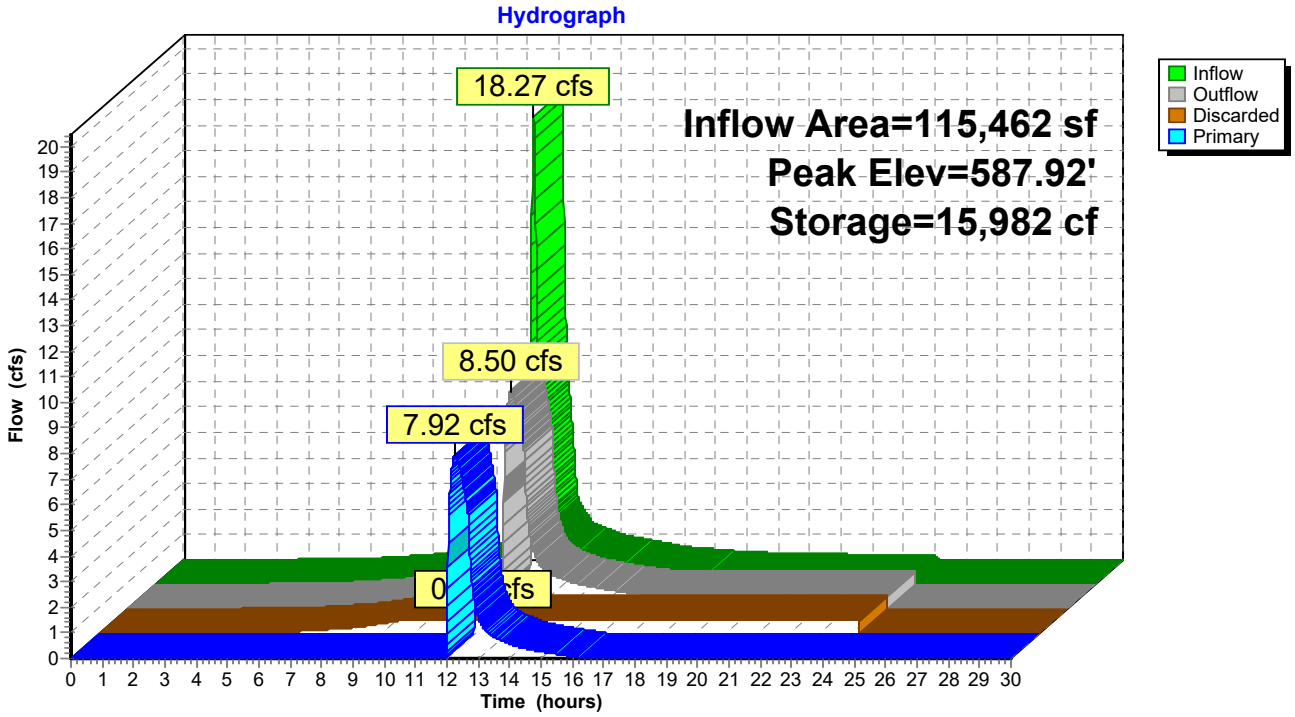
28,808.8 cf Field - 10,612.1 cf Chambers = 18,196.7 cf Stone x 40.0% Voids = 7,278.7 cf Stone Storage

Chamber Storage + Stone Storage = 17,890.8 cf = 0.411 af
Overall Storage Efficiency = 62.1%
Overall System Size = 153.14' x 53.75' x 3.50'

231 Chambers
1,067.0 cy Field
674.0 cy Stone



Pond ADS 1B: ADS 1B



Summary for Pond ADS1C: ADS 1C

Inflow Area = 74,469 sf, 80.81% Impervious, Inflow Depth = 6.91" for 100-Year event
Inflow = 12.78 cfs @ 12.08 hrs, Volume= 42,871 cf
Outflow = 7.36 cfs @ 12.19 hrs, Volume= 44,119 cf, Atten= 42%, Lag= 6.6 min
Discarded = 0.43 cfs @ 12.19 hrs, Volume= 26,964 cf
Primary = 6.93 cfs @ 12.19 hrs, Volume= 17,155 cf
Routed to Reach DP1POST : DP1 POST

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Starting Elev= 587.00' Surf.Area= 6,146 sf Storage= 1,229 cf
Peak Elev= 589.00' @ 12.19 hrs Surf.Area= 6,146 sf Storage= 10,573 cf (9,344 cf above start)
Flood Elev= 589.50' Surf.Area= 6,146 sf Storage= 12,089 cf (10,860 cf above start)

Plug-Flow detention time= (not calculated: outflow precedes inflow)
Center-of-Mass det. time= 59.0 min (829.6 - 770.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	586.50'	5,462 cf	**44.25'W x 138.90'L x 3.50'H Field A** 21,512 cf Overall - 7,856 cf Embedded = 13,656 cf x 40.0% Voids
#2A	587.00'	7,856 cf	**ADS_StormTech SC-740 +Cap** x 171 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 171 Chambers in 9 Rows
		13,318 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	587.00'	**15.0" Round Culvert** L= 80.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 587.00' / 576.00' S= 0.1375 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf
#2	Device 1	588.00'	**5.0' 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
#3	Discarded	586.50'	**3.000 in/hr Exfiltration over Surface area** Conductivity to Groundwater Elevation = 290.00'

Discarded OutFlow Max=0.43 cfs @ 12.19 hrs HW=589.00' (Free Discharge)
└**3=Exfiltration** (Controls 0.43 cfs)

Primary OutFlow Max=6.93 cfs @ 12.19 hrs HW=589.00' TW=0.00' (Dynamic Tailwater)
└**1=Culvert** (Inlet Controls 6.93 cfs @ 5.65 fps)
└**2=Broad-Crested Rectangular Weir** (Passes 6.93 cfs of 16.64 cfs potential flow)

Pond ADS1C: ADS 1C - Chamber Wizard Field A

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

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

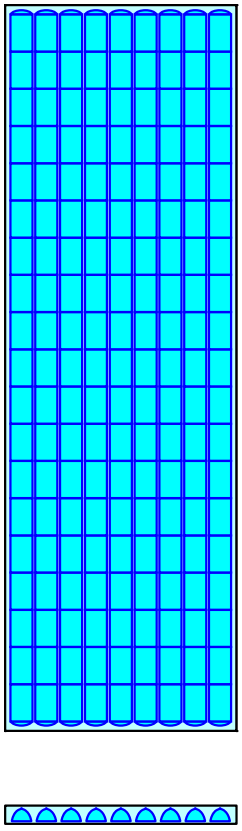
19 Chambers/Row x 7.12' Long +0.81' Cap Length x 2 = 136.90' Row Length +12.0" End Stone x 2 = 138.90' Base Length
9 Rows x 51.0" Wide + 6.0" Spacing x 8 + 12.0" Side Stone x 2 = 44.25' Base Width
6.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 3.50' Field Height

171 Chambers x 45.9 cf = 7,855.7 cf Chamber Storage

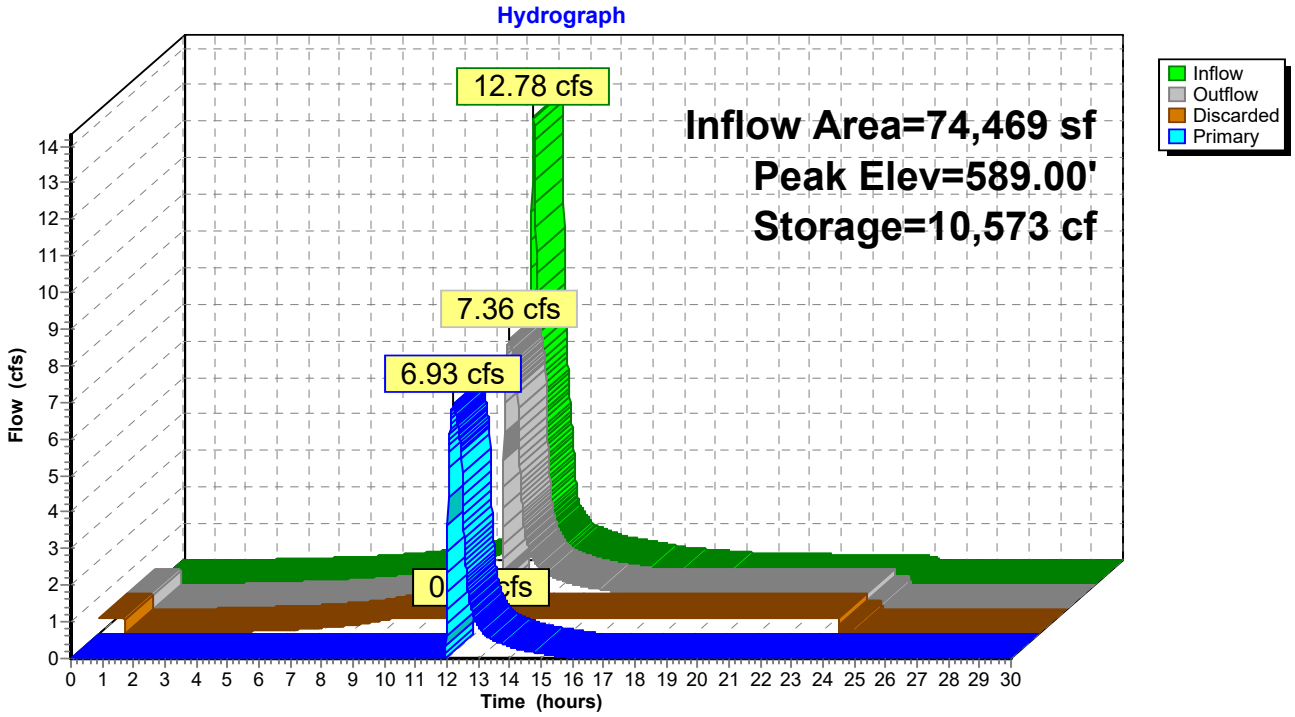
21,511.6 cf Field - 7,855.7 cf Chambers = 13,655.9 cf Stone x 40.0% Voids = 5,462.4 cf Stone Storage

Chamber Storage + Stone Storage = 13,318.1 cf = 0.306 af
Overall Storage Efficiency = 61.9%
Overall System Size = 138.90' x 44.25' x 3.50'

171 Chambers
796.7 cy Field
505.8 cy Stone



Pond ADS1C: ADS 1C



Summary for Pond CB-A-01: CB-A-01

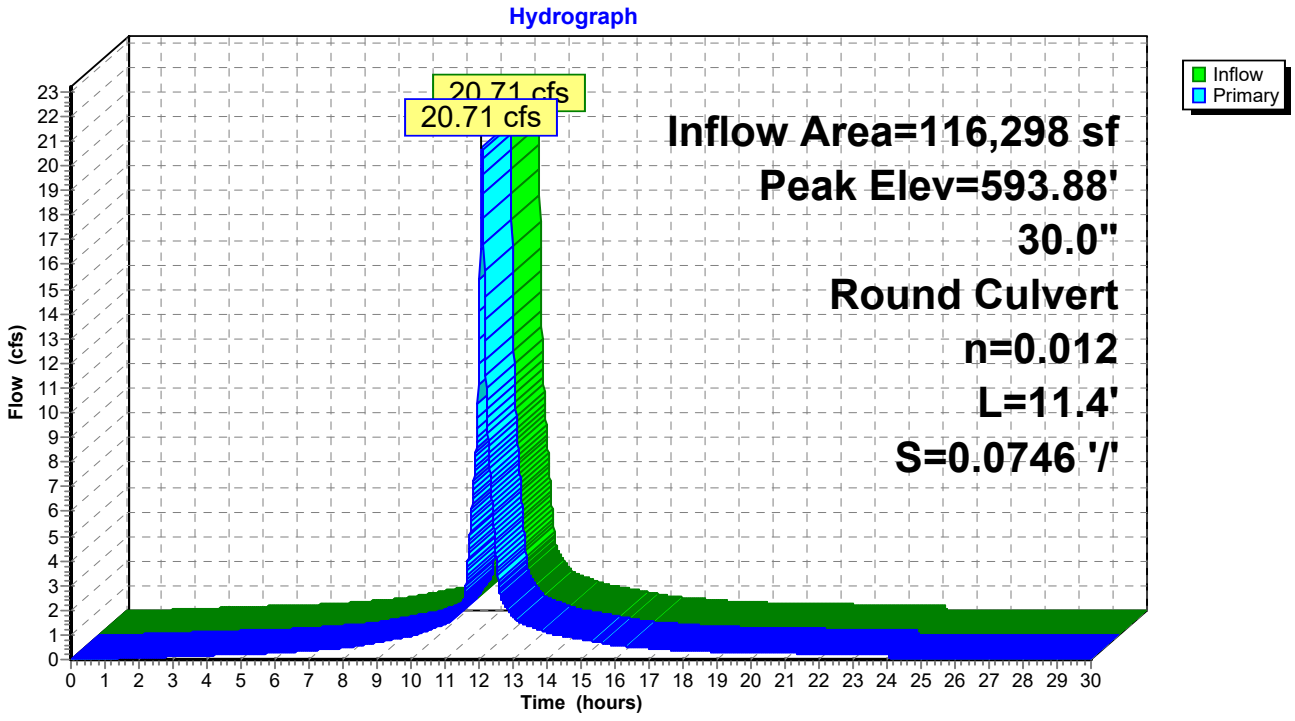
Inflow Area = 116,298 sf, 94.38% Impervious, Inflow Depth = 7.48" for 100-Year event
Inflow = 20.71 cfs @ 12.08 hrs, Volume= 72,456 cf
Outflow = 20.71 cfs @ 12.08 hrs, Volume= 72,456 cf, Atten= 0%, Lag= 0.0 min
Primary = 20.71 cfs @ 12.08 hrs, Volume= 72,456 cf
Routed to Pond ADS 1A : ADS 1A

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 593.88' @ 12.08 hrs
Flood Elev= 595.35'

Device	Routing	Invert	Outlet Devices
#1	Primary	591.85'	**30.0" Round HDPE Round 30"** L= 11.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.85' / 591.00' S= 0.0746 '/' Cc= 0.900 n= 0.012, Flow Area= 4.91 sf

Primary OutFlow Max=20.68 cfs @ 12.08 hrs HW=593.88' TW=592.22' (Dynamic Tailwater)
↑—**1=HDPE Round 30"** (Inlet Controls 20.68 cfs @ 4.85 fps)

Pond CB-A-01: CB-A-01



Summary for Pond CB-A-02: CB-A-02

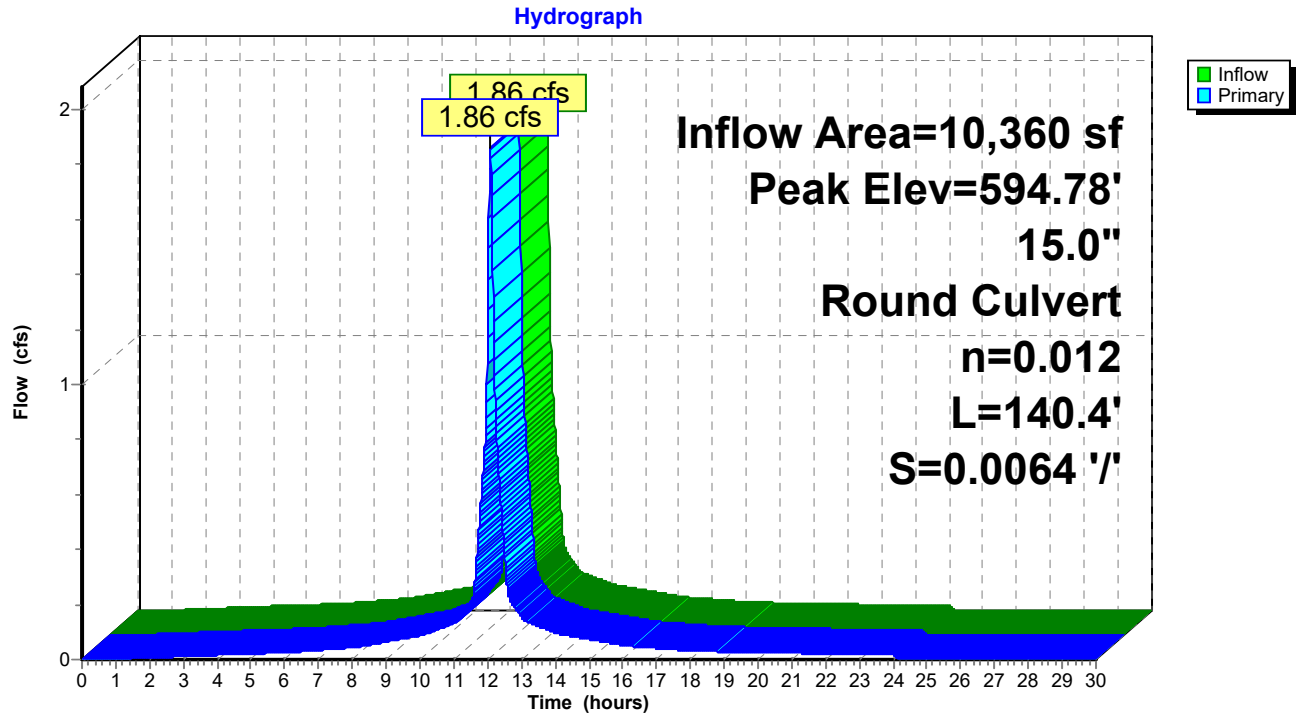
Inflow Area = 10,360 sf, 96.33% Impervious, Inflow Depth = 7.56" for 100-Year event
Inflow = 1.86 cfs @ 12.08 hrs, Volume= 6,530 cf
Outflow = 1.86 cfs @ 12.08 hrs, Volume= 6,530 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.86 cfs @ 12.08 hrs, Volume= 6,530 cf
Routed to Pond CB-A-01 : CB-A-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.78' @ 12.09 hrs
Flood Elev= 596.53'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.04'	**15.0" Round HDPE Round 15"** L= 140.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.04' / 593.14' S= 0.0064 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=1.84 cfs @ 12.08 hrs HW=594.77' TW=593.88' (Dynamic Tailwater)
↑**1=HDPE Round 15"** (Outlet Controls 1.84 cfs @ 3.53 fps)

Pond CB-A-02: CB-A-02



Summary for Pond CB-A-03: CB-A-03

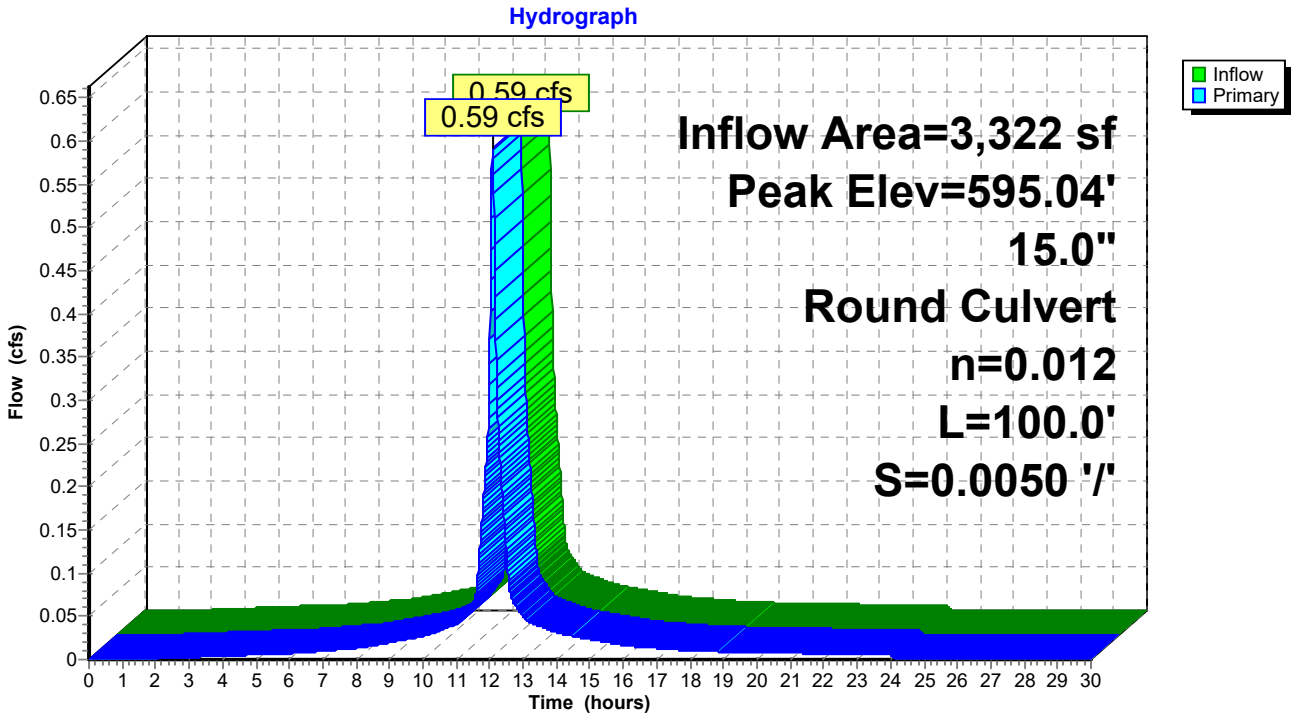
Inflow Area = 3,322 sf, 92.69% Impervious, Inflow Depth = 7.40" for 100-Year event
Inflow = 0.59 cfs @ 12.08 hrs, Volume= 2,049 cf
Outflow = 0.59 cfs @ 12.08 hrs, Volume= 2,049 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.59 cfs @ 12.08 hrs, Volume= 2,049 cf
Routed to Pond CB-A-02 : CB-A-02

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.04' @ 12.09 hrs
Flood Elev= 597.53'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.54'	**15.0" Round HDPE Round 15"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.54' / 594.04' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.58 cfs @ 12.08 hrs HW=595.04' TW=594.77' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 0.58 cfs @ 1.88 fps)

Pond CB-A-03: CB-A-03



Summary for Pond CB-A-04: CB-A-04

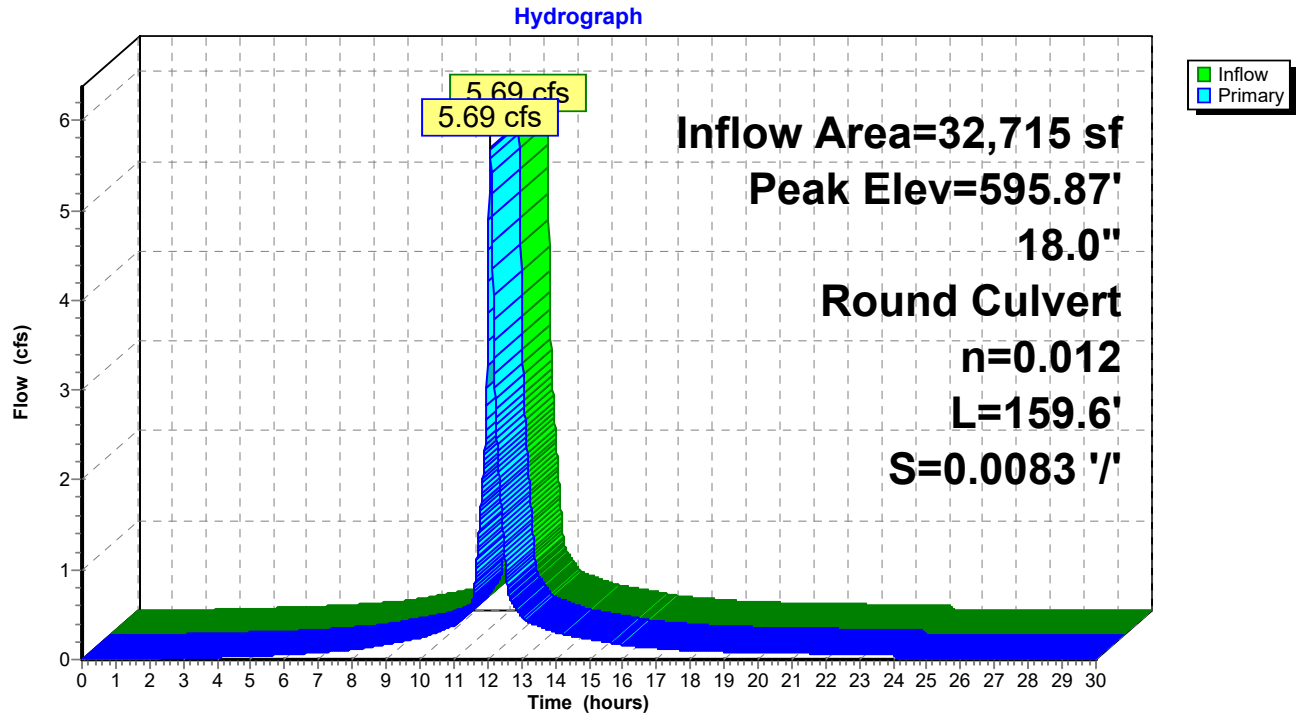
Inflow Area = 32,715 sf, 84.21% Impervious, Inflow Depth = 7.08" for 100-Year event
Inflow = 5.69 cfs @ 12.08 hrs, Volume= 19,305 cf
Outflow = 5.69 cfs @ 12.08 hrs, Volume= 19,305 cf, Atten= 0%, Lag= 0.0 min
Primary = 5.69 cfs @ 12.08 hrs, Volume= 19,305 cf
Routed to Pond CB-A-01 : CB-A-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.87' @ 12.08 hrs
Flood Elev= 596.96'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.66'	**18.0" Round HDPE Round 18"** L= 159.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.66' / 593.34' S= 0.0083 '/' Cc= 0.900 n= 0.012, Flow Area= 1.77 sf

Primary OutFlow Max=5.68 cfs @ 12.08 hrs HW=595.86' TW=593.88' (Dynamic Tailwater)
↑**1=HDPE Round 18"** (Inlet Controls 5.68 cfs @ 3.74 fps)

Pond CB-A-04: CB-A-04



Summary for Pond CB-A-05: CB-A-05

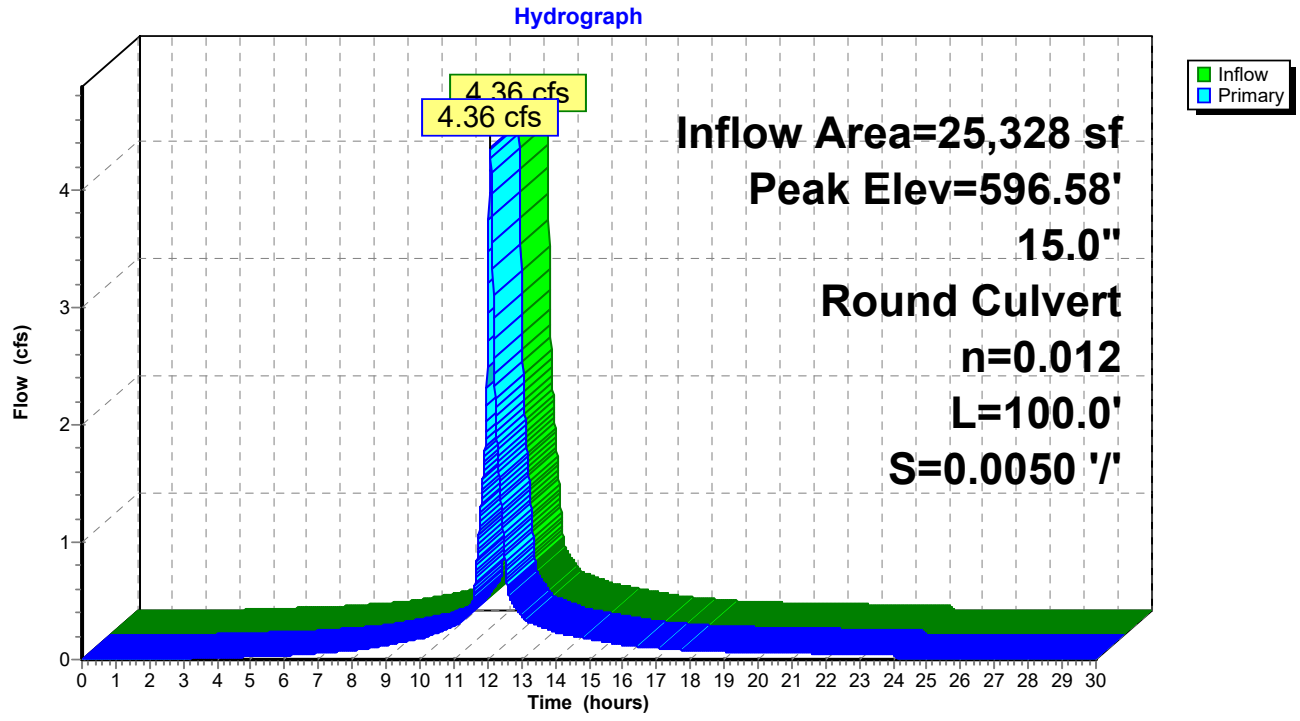
Inflow Area = 25,328 sf, 80.41% Impervious, Inflow Depth = 6.92" for 100-Year event
Inflow = 4.36 cfs @ 12.08 hrs, Volume= 14,601 cf
Outflow = 4.36 cfs @ 12.08 hrs, Volume= 14,601 cf, Atten= 0%, Lag= 0.0 min
Primary = 4.36 cfs @ 12.08 hrs, Volume= 14,601 cf
Routed to Pond CB-A-04 : CB-A-04

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.58' @ 12.09 hrs
Flood Elev= 597.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	595.16'	**15.0" Round HDPE Round 15"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 595.16' / 594.66' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=4.34 cfs @ 12.08 hrs HW=596.58' TW=595.86' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 4.34 cfs @ 3.90 fps)

Pond CB-A-05: CB-A-05



Summary for Pond CB-A-06: CB-A-06

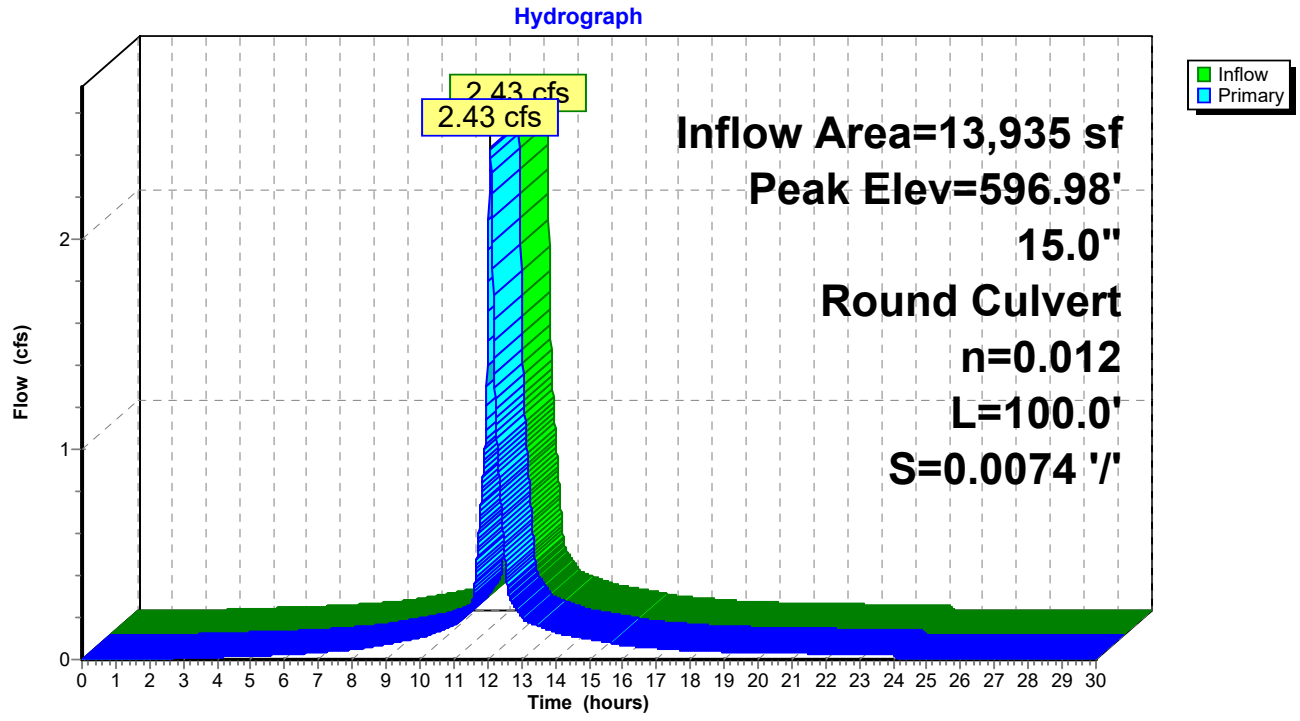
Inflow Area = 13,935 sf, 84.82% Impervious, Inflow Depth = 7.11" for 100-Year event
Inflow = 2.43 cfs @ 12.08 hrs, Volume= 8,253 cf
Outflow = 2.43 cfs @ 12.08 hrs, Volume= 8,253 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.43 cfs @ 12.08 hrs, Volume= 8,253 cf
Routed to Pond CB-A-05 : CB-A-05

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.98' @ 12.09 hrs
Flood Elev= 598.95'

Device	Routing	Invert	Outlet Devices
#1	Primary	595.90'	**15.0" Round HDPE Round 15"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 595.90' / 595.16' S= 0.0074 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=2.38 cfs @ 12.08 hrs HW=596.98' TW=596.58' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 2.38 cfs @ 2.84 fps)

Pond CB-A-06: CB-A-06



Summary for Pond CB-A-07: CB-A-07

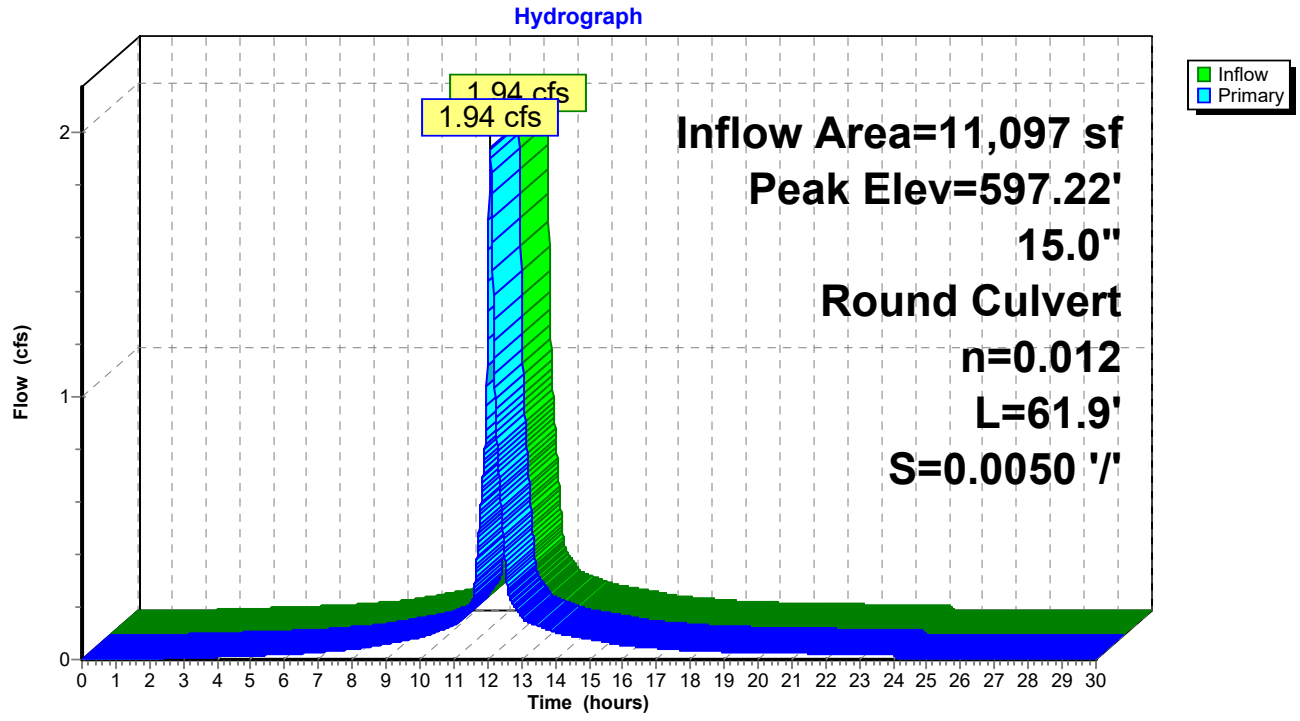
Inflow Area = 11,097 sf, 85.64% Impervious, Inflow Depth = 7.15" for 100-Year event
Inflow = 1.94 cfs @ 12.08 hrs, Volume= 6,615 cf
Outflow = 1.94 cfs @ 12.08 hrs, Volume= 6,615 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.94 cfs @ 12.08 hrs, Volume= 6,615 cf
Routed to Pond CB-A-06 : CB-A-06

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 597.22' @ 12.10 hrs
Flood Elev= 600.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.21'	**15.0" Round HDPE Round 15"** L= 61.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.21' / 595.90' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=1.86 cfs @ 12.08 hrs HW=597.21' TW=596.98' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 1.86 cfs @ 2.42 fps)

Pond CB-A-07: CB-A-07



Summary for Pond CB-A-08: CB-A-08

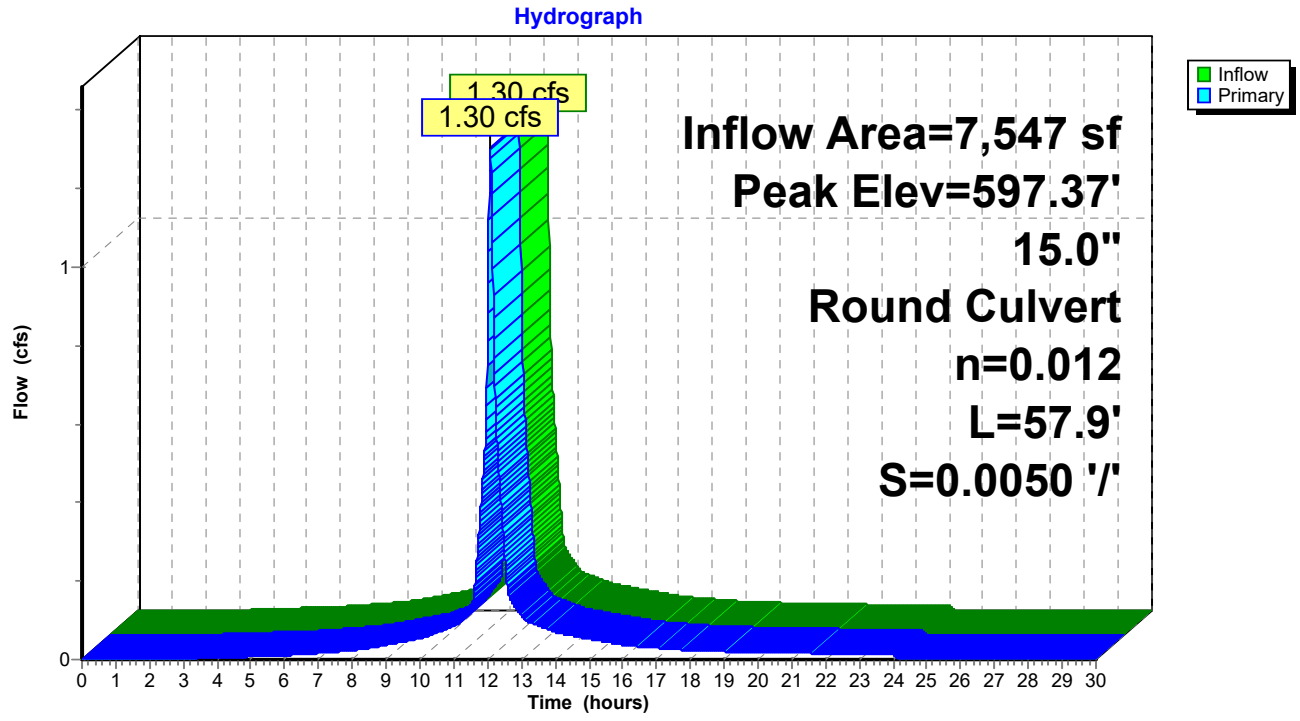
Inflow Area = 7,547 sf, 80.23% Impervious, Inflow Depth = 6.92" for 100-Year event
Inflow = 1.30 cfs @ 12.08 hrs, Volume= 4,355 cf
Outflow = 1.30 cfs @ 12.08 hrs, Volume= 4,355 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.30 cfs @ 12.08 hrs, Volume= 4,355 cf
Routed to Pond CB-A-07 : CB-A-07

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 597.37' @ 12.10 hrs
Flood Elev= 598.50'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.50'	**15.0" Round HDPE Round 15"** L= 57.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.50' / 596.21' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=1.22 cfs @ 12.08 hrs HW=597.36' TW=597.21' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 1.22 cfs @ 1.91 fps)

Pond CB-A-08: CB-A-08



Summary for Pond CB-A-09: CB-A-09

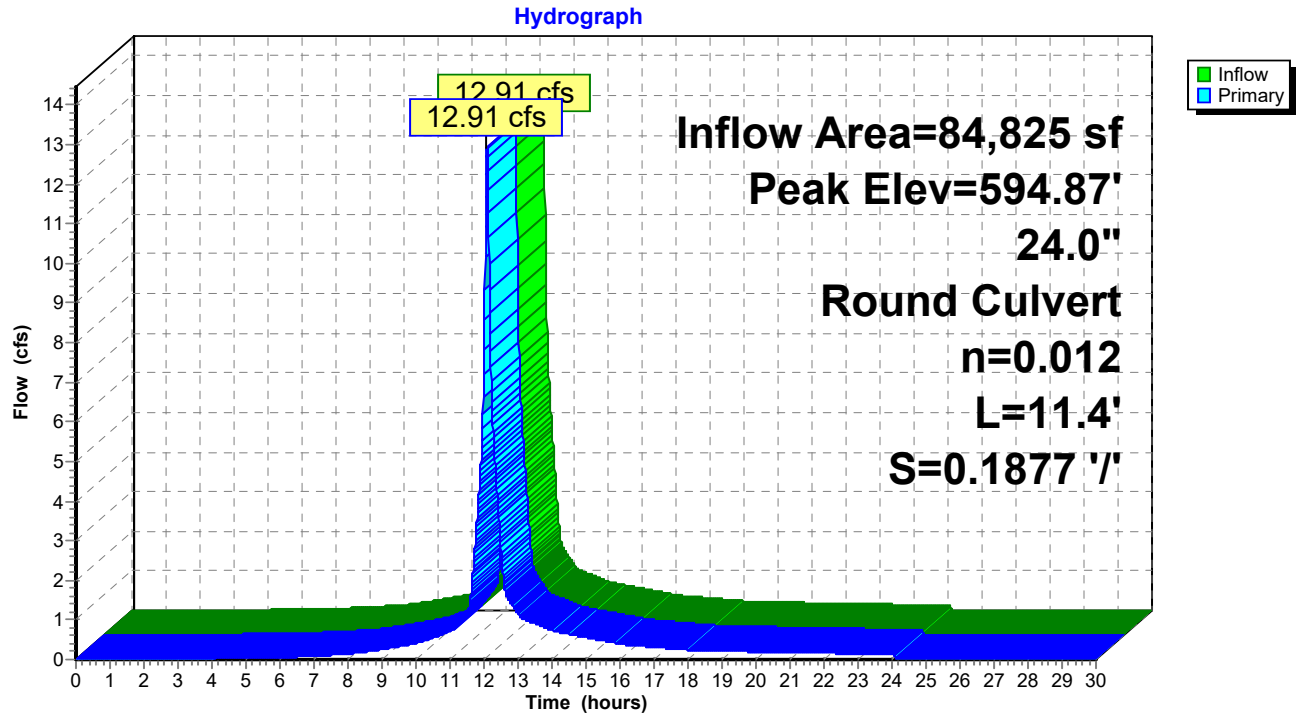
Inflow Area = 84,825 sf, 57.29% Impervious, Inflow Depth = 5.89" for 100-Year event
Inflow = 12.91 cfs @ 12.09 hrs, Volume= 41,641 cf
Outflow = 12.91 cfs @ 12.09 hrs, Volume= 41,641 cf, Atten= 0%, Lag= 0.0 min
Primary = 12.91 cfs @ 12.09 hrs, Volume= 41,641 cf
Routed to Pond ADS 1A : ADS 1A

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.87' @ 12.09 hrs
Flood Elev= 595.44'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.14'	**24.0" Round HDPE Round 24"** L= 11.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.14' / 591.00' S= 0.1877 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf

Primary OutFlow Max=12.88 cfs @ 12.09 hrs HW=594.86' TW=592.23' (Dynamic Tailwater)
↑**1=HDPE Round 24"** (Inlet Controls 12.88 cfs @ 4.47 fps)

Pond CB-A-09: CB-A-09



Summary for Pond CB-A-10: CB-A-10

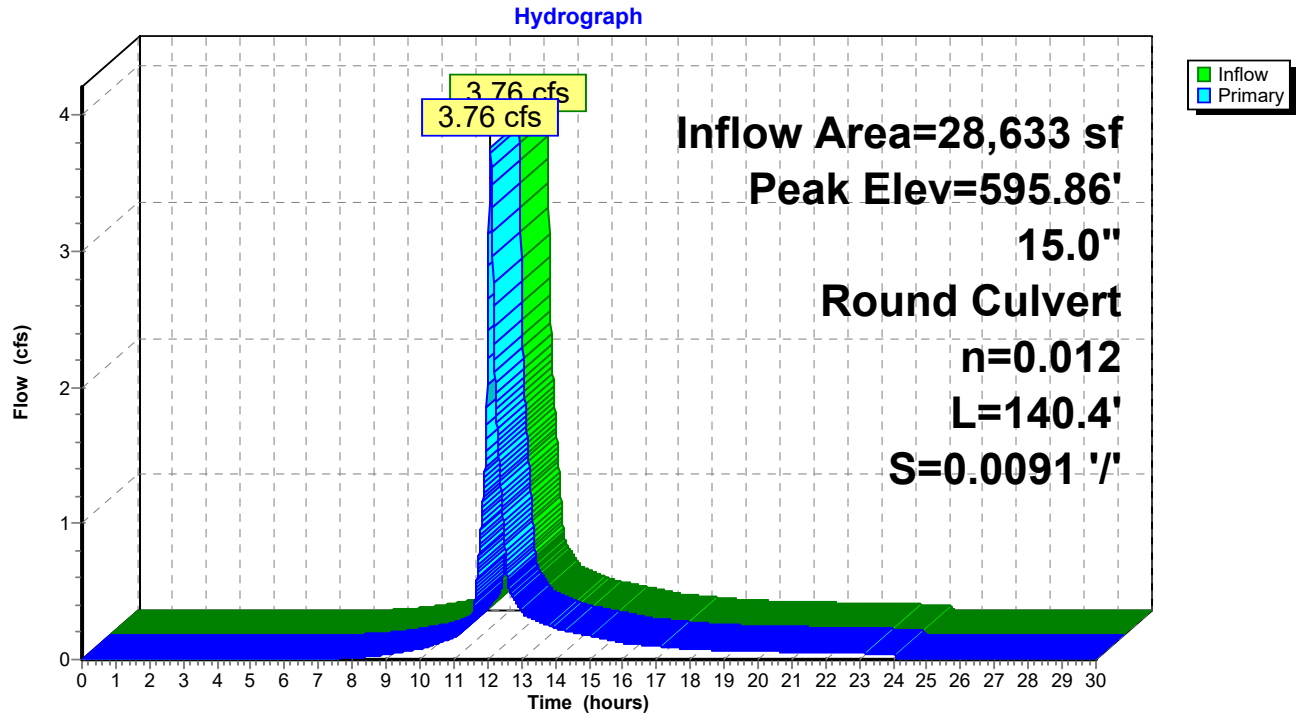
Inflow Area = 28,633 sf, 34.41% Impervious, Inflow Depth = 4.89" for 100-Year event
Inflow = 3.76 cfs @ 12.09 hrs, Volume= 11,663 cf
Outflow = 3.76 cfs @ 12.09 hrs, Volume= 11,663 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.76 cfs @ 12.09 hrs, Volume= 11,663 cf
Routed to Pond CB-A-09 : CB-A-09

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.86' @ 12.09 hrs
Flood Elev= 596.72'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.70'	**15.0" Round HDPE Round 15"** L= 140.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.70' / 593.42' S= 0.0091 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=3.74 cfs @ 12.09 hrs HW=595.85' TW=594.87' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Outlet Controls 3.74 cfs @ 4.13 fps)

Pond CB-A-10: CB-A-10



Summary for Pond CB-A-11: CB-A-11

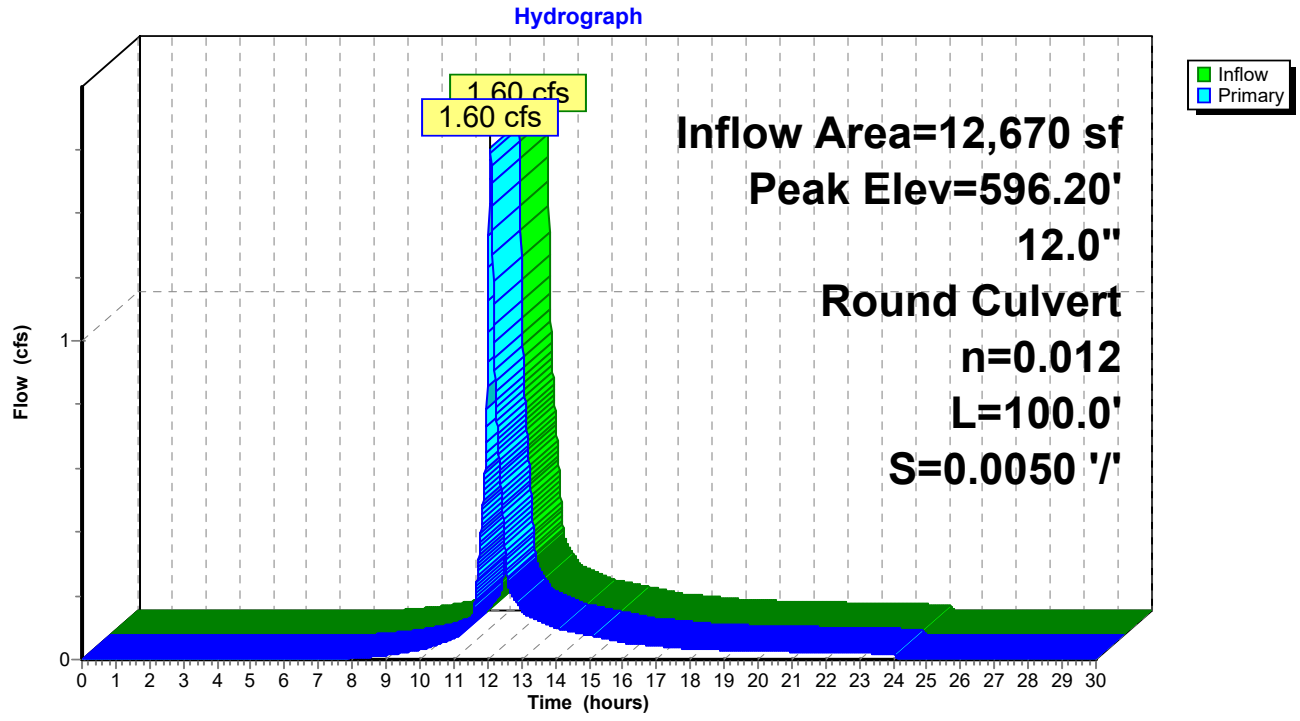
Inflow Area = 12,670 sf, 30.21% Impervious, Inflow Depth = 4.69" for 100-Year event
Inflow = 1.60 cfs @ 12.09 hrs, Volume= 4,957 cf
Outflow = 1.60 cfs @ 12.09 hrs, Volume= 4,957 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.60 cfs @ 12.09 hrs, Volume= 4,957 cf
Routed to Pond CB-A-10 : CB-A-10

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.20' @ 12.10 hrs
Flood Elev= 597.61'

Device	Routing	Invert	Outlet Devices
#1	Primary	595.20'	**12.0" Round HDPE Round 12"** L= 100.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 595.20' / 594.70' S= 0.0050 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=1.57 cfs @ 12.09 hrs HW=596.20' TW=595.85' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 1.57 cfs @ 2.49 fps)

Pond CB-A-11: CB-A-11



Summary for Pond CB-A-12: CB-A-12

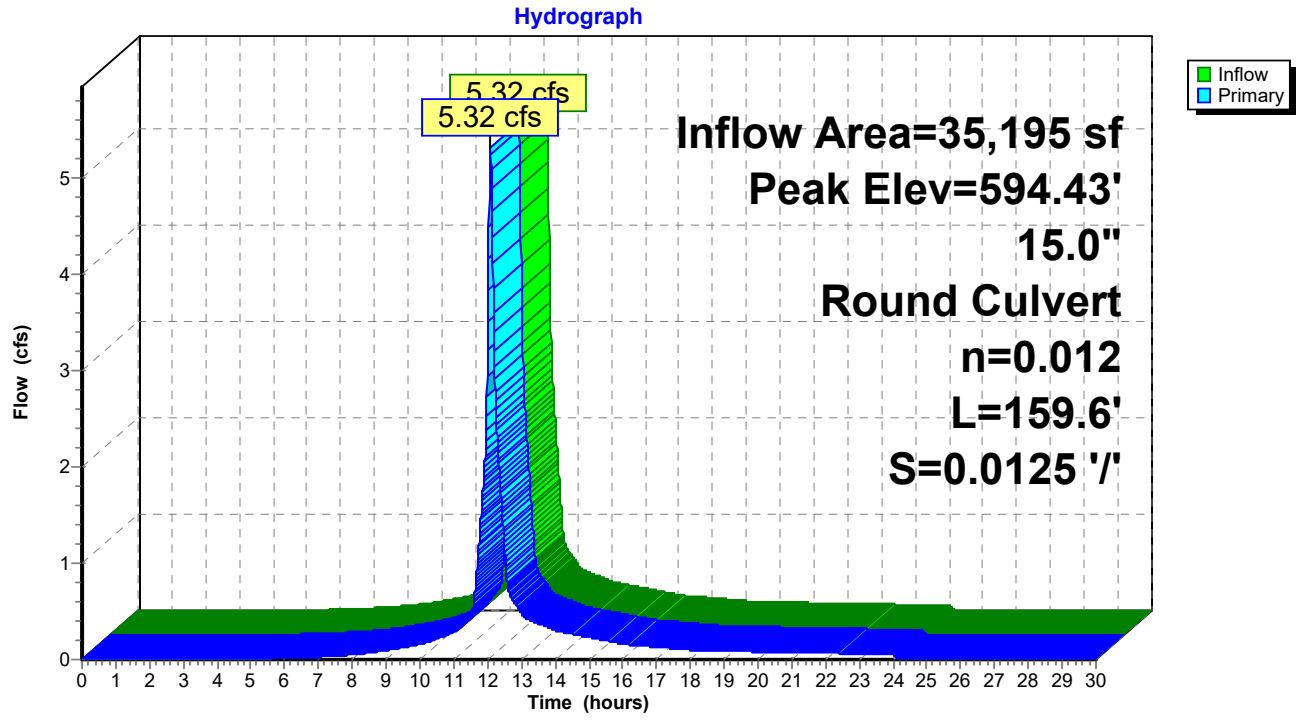
Inflow Area = 35,195 sf, 54.89% Impervious, Inflow Depth = 5.76" for 100-Year event
Inflow = 5.32 cfs @ 12.09 hrs, Volume= 16,882 cf
Outflow = 5.32 cfs @ 12.09 hrs, Volume= 16,882 cf, Atten= 0%, Lag= 0.0 min
Primary = 5.32 cfs @ 12.09 hrs, Volume= 16,882 cf
Routed to Pond ADS 1A : ADS 1A

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.43' @ 12.09 hrs
Flood Elev= 597.01'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.00'	**15.0" Round HDPE Round 15"** L= 159.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.00' / 591.00' S= 0.0125 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=5.31 cfs @ 12.09 hrs HW=594.43' TW=592.23' (Dynamic Tailwater)
1=HDPE Round 15" (Inlet Controls 5.31 cfs @ 4.32 fps)

Pond CB-A-12: CB-A-12



Summary for Pond CB-A-13: CB-A-12

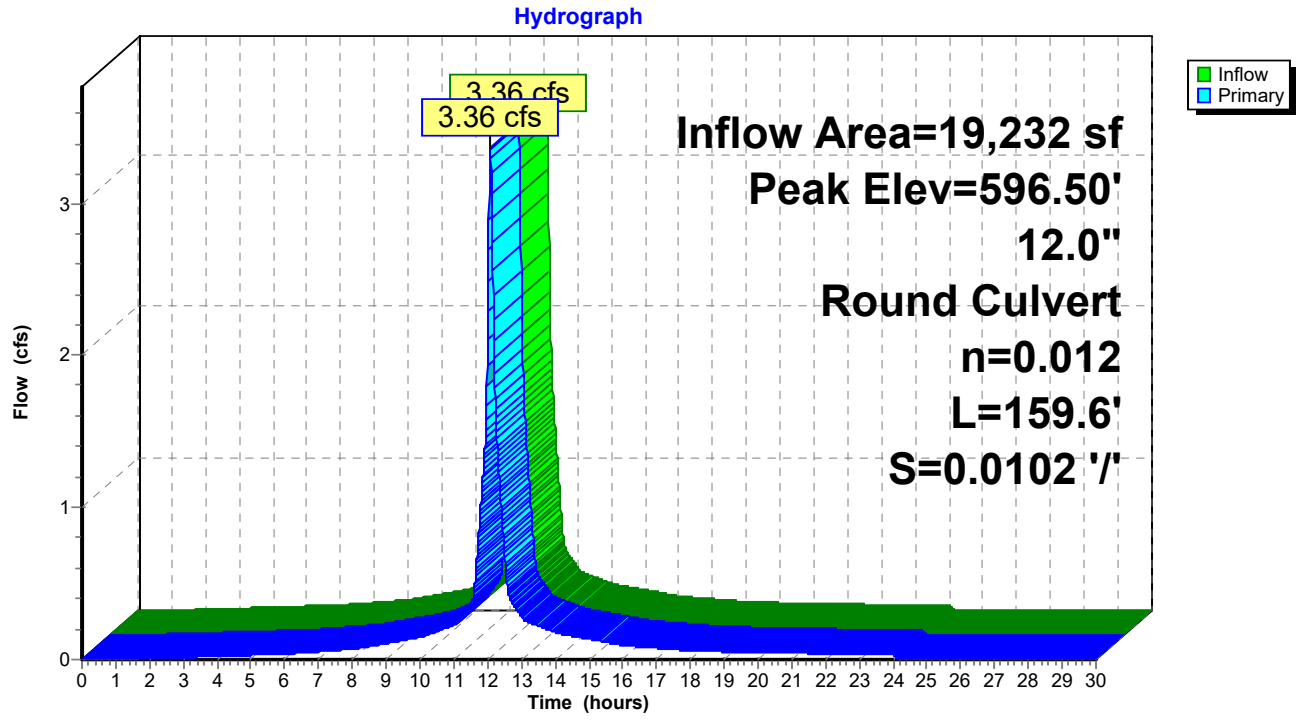
Inflow Area = 19,232 sf, 86.74% Impervious, Inflow Depth = 7.22" for 100-Year event
Inflow = 3.36 cfs @ 12.08 hrs, Volume= 11,568 cf
Outflow = 3.36 cfs @ 12.08 hrs, Volume= 11,568 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.36 cfs @ 12.08 hrs, Volume= 11,568 cf
Routed to Pond CB-A-09 : CB-A-09

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 596.50' @ 12.09 hrs
Flood Elev= 597.01'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.00'	**12.0" Round HDPE Round 12"** L= 159.6' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.00' / 591.37' S= 0.0102 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=3.34 cfs @ 12.08 hrs HW=596.49' TW=594.86' (Dynamic Tailwater)
↑**1=HDPE Round 12"** (Outlet Controls 3.34 cfs @ 4.26 fps)

Pond CB-A-13: CB-A-12



Summary for Pond CB-A-14: CB-A-14

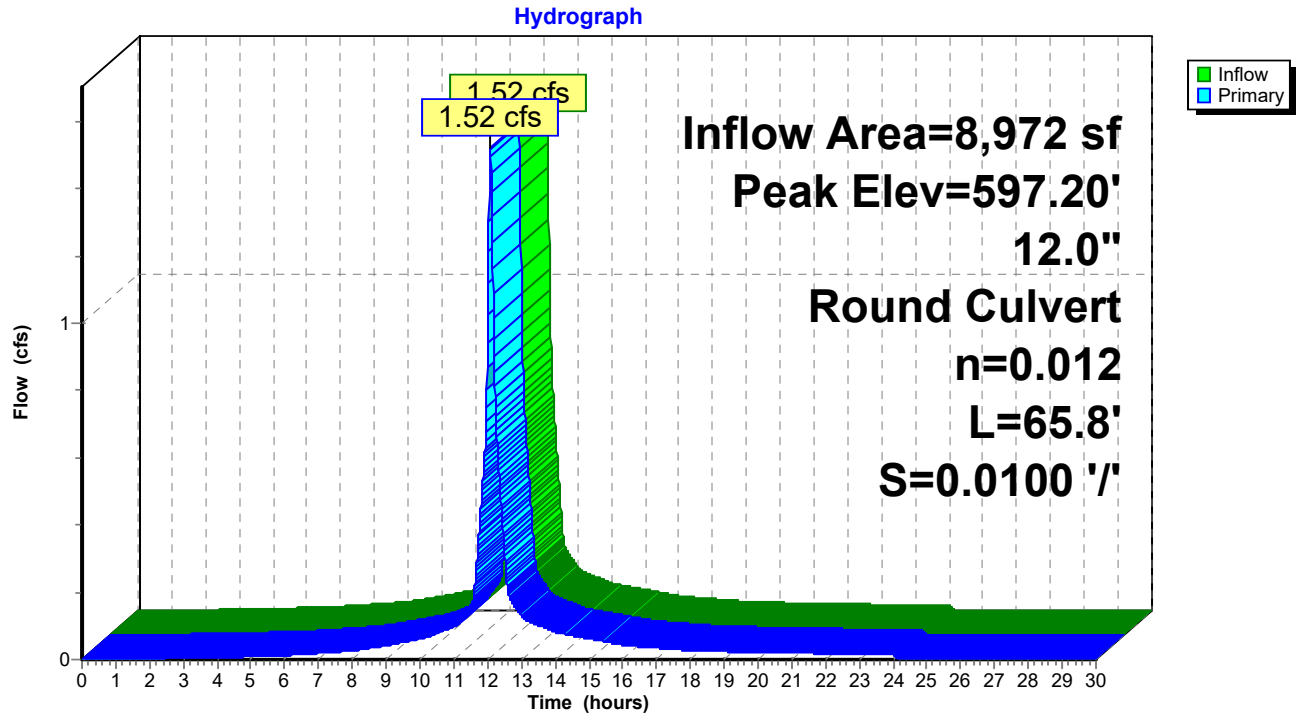
Inflow Area = 8,972 sf, 77.86% Impervious, Inflow Depth = 6.82" for 100-Year event
Inflow = 1.52 cfs @ 12.08 hrs, Volume= 5,097 cf
Outflow = 1.52 cfs @ 12.08 hrs, Volume= 5,097 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.52 cfs @ 12.08 hrs, Volume= 5,097 cf
Routed to Pond 3P : CB-A-13

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 597.20' @ 12.10 hrs
Flood Elev= 598.67'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.66'	**12.0" Round HDPE Round 12"** L= 65.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.66' / 594.00' S= 0.0100 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.86 cfs @ 12.08 hrs HW=597.02' TW=596.96' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 0.86 cfs @ 1.10 fps)

Pond CB-A-14: CB-A-14



Summary for Pond CB-A-15: CB-A-15

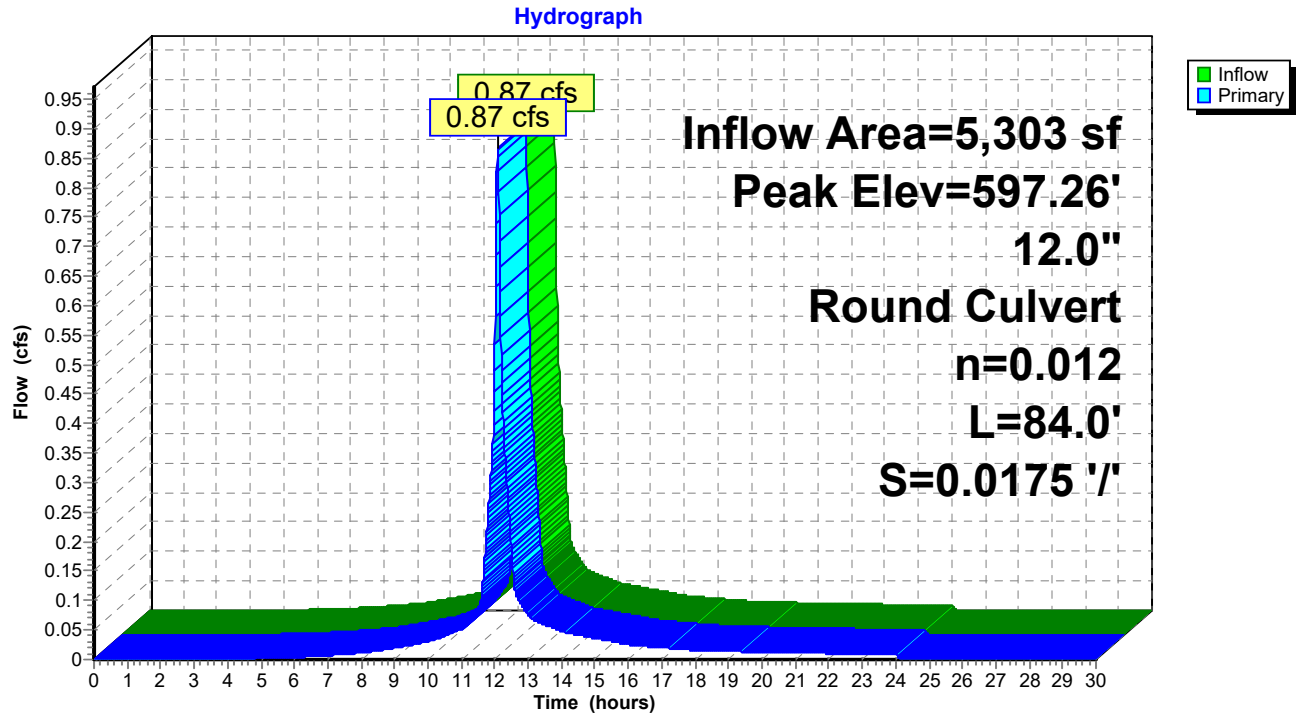
Inflow Area = 5,303 sf, 67.21% Impervious, Inflow Depth = 6.33" for 100-Year event
Inflow = 0.87 cfs @ 12.08 hrs, Volume= 2,798 cf
Outflow = 0.87 cfs @ 12.08 hrs, Volume= 2,798 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.87 cfs @ 12.08 hrs, Volume= 2,798 cf
Routed to Pond CB-A-14 : CB-A-14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 597.26' @ 12.11 hrs
Flood Elev= 600.14'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.13'	**12.0" Round HDPE Round 12"** L= 84.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.13' / 594.66' S= 0.0175 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.00 cfs @ 12.08 hrs HW=596.98' TW=597.03' (Dynamic Tailwater)
↑**1=HDPE Round 12"** (Controls 0.00 cfs)

Pond CB-A-15: CB-A-15



Summary for Pond CB-A-16: CB-A-16

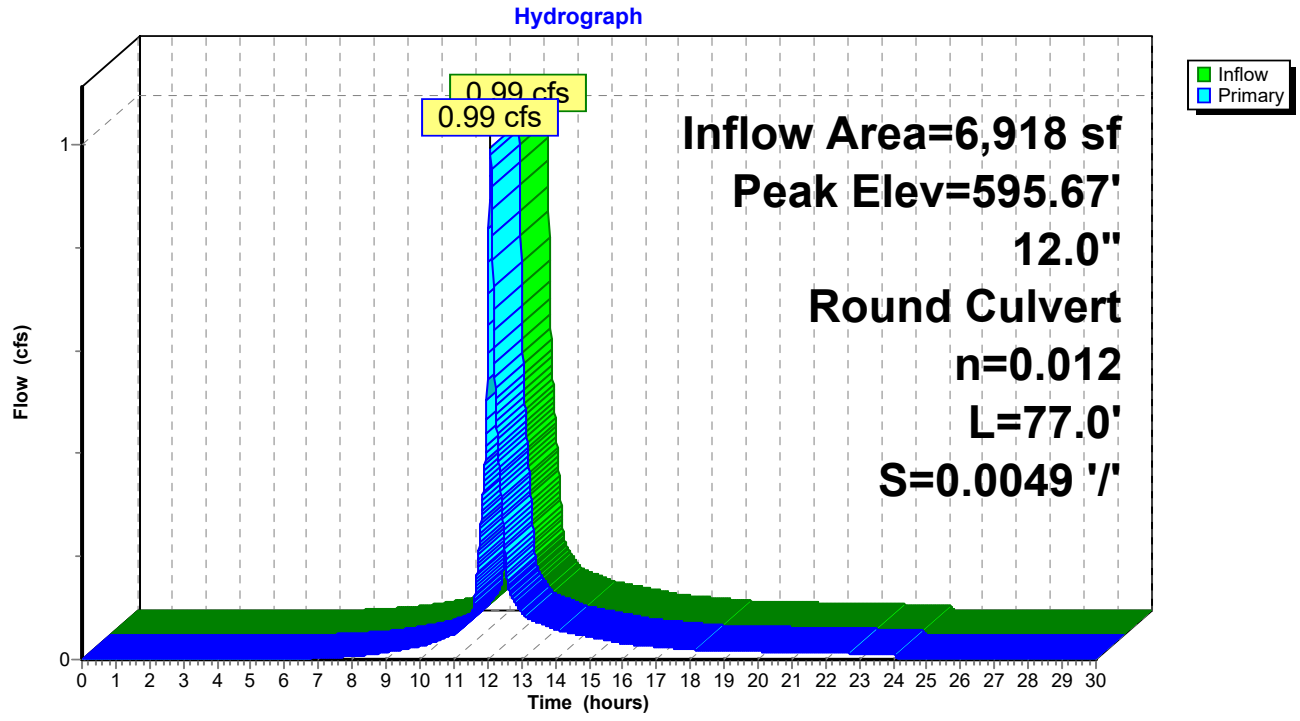
Inflow Area = 6,918 sf, 46.04% Impervious, Inflow Depth = 5.39" for 100-Year event
Inflow = 0.99 cfs @ 12.09 hrs, Volume= 3,108 cf
Outflow = 0.99 cfs @ 12.09 hrs, Volume= 3,108 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.99 cfs @ 12.09 hrs, Volume= 3,108 cf
Routed to Pond CB-A-17 : CB-A-17

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.67' @ 12.09 hrs
Flood Elev= 596.24'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.23'	**12.0" Round HDPE Round 12"** L= 77.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.23' / 593.85' S= 0.0049 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.93 cfs @ 12.09 hrs HW=595.66' TW=595.58' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 0.93 cfs @ 1.19 fps)

Pond CB-A-16: CB-A-16



Summary for Pond CB-A-17: CB-A-17

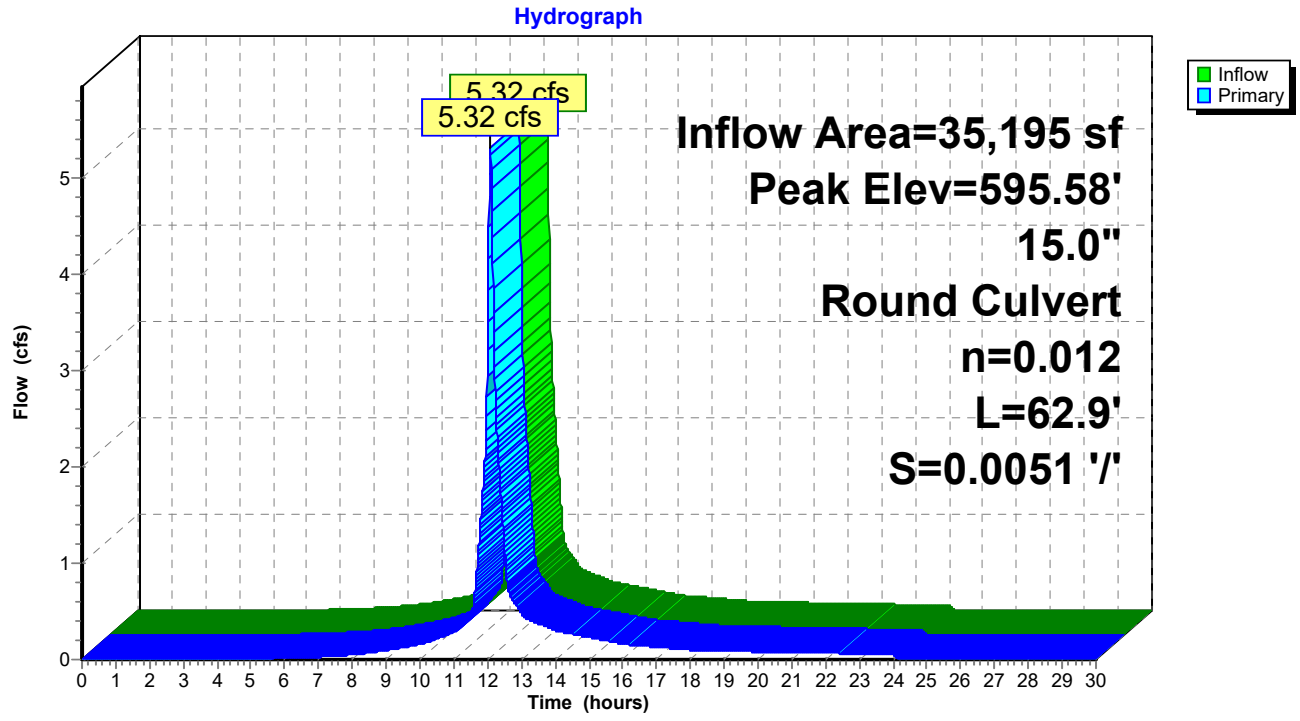
Inflow Area = 35,195 sf, 54.89% Impervious, Inflow Depth = 5.76" for 100-Year event
Inflow = 5.32 cfs @ 12.09 hrs, Volume= 16,882 cf
Outflow = 5.32 cfs @ 12.09 hrs, Volume= 16,882 cf, Atten= 0%, Lag= 0.0 min
Primary = 5.32 cfs @ 12.09 hrs, Volume= 16,882 cf
Routed to Pond CB-A-12 : CB-A-12

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.58' @ 12.09 hrs
Flood Elev= 597.01'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.85'	**15.0" Round HDPE Round 15"** L= 62.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.85' / 593.53' S= 0.0051 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=5.31 cfs @ 12.09 hrs HW=595.58' TW=594.43' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 5.31 cfs @ 4.32 fps)

Pond CB-A-17: CB-A-17



Summary for Pond CB-A-18: CB-A-18

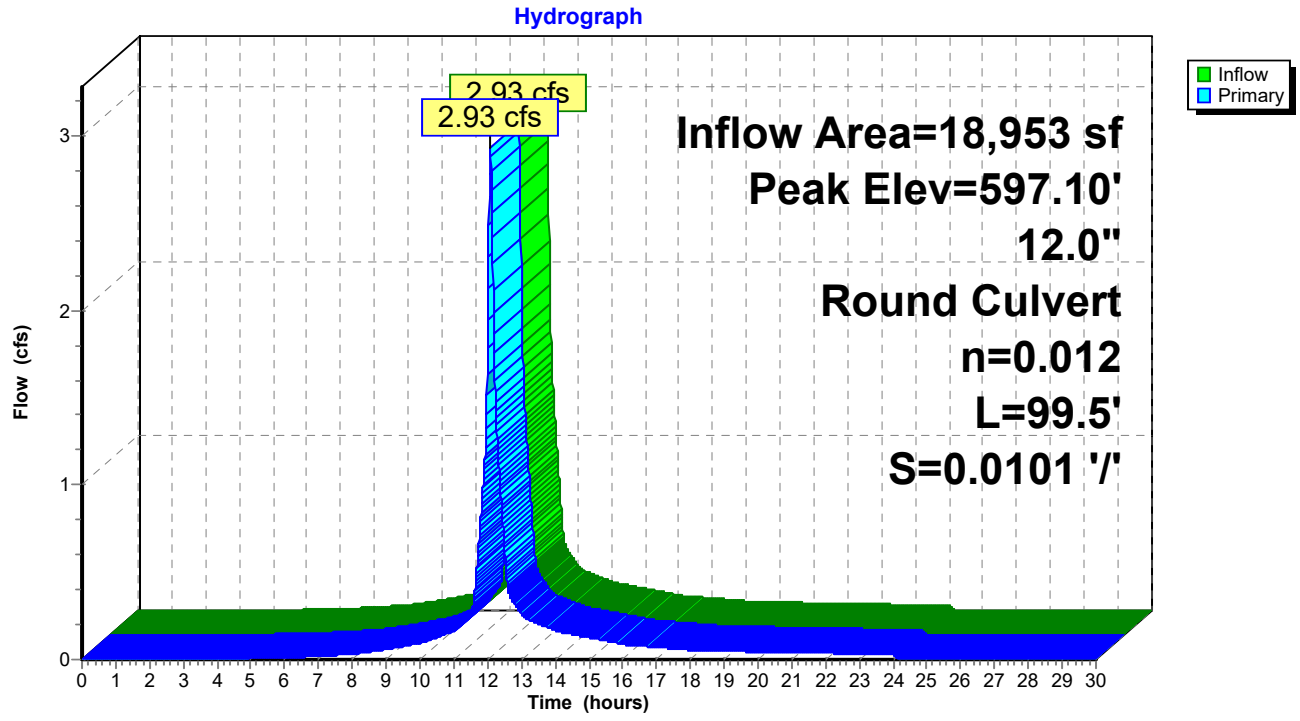
Inflow Area = 18,953 sf, 59.78% Impervious, Inflow Depth = 5.95" for 100-Year event
Inflow = 2.93 cfs @ 12.09 hrs, Volume= 9,403 cf
Outflow = 2.93 cfs @ 12.09 hrs, Volume= 9,403 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.93 cfs @ 12.09 hrs, Volume= 9,403 cf
Routed to Pond CB-A-17 : CB-A-17

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 597.10' @ 12.09 hrs
Flood Elev= 598.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.00'	**12.0" Round HDPE Round 12"** L= 99.5' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.00' / 595.00' S= 0.0101 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=2.93 cfs @ 12.09 hrs HW=597.10' TW=595.58' (Dynamic Tailwater)
1=HDPE Round 12" (Inlet Controls 2.93 cfs @ 3.73 fps)

Pond CB-A-18: CB-A-18



Summary for Pond CB-A-19: CB-A-19

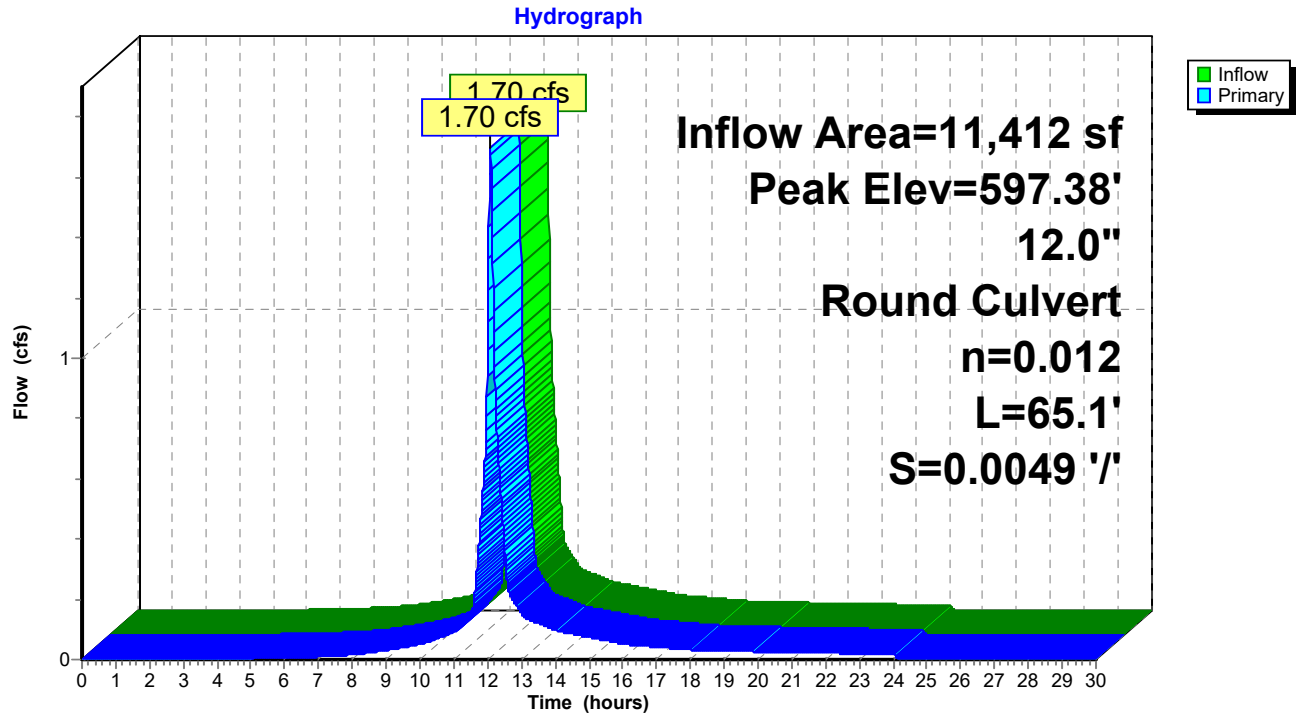
Inflow Area = 11,412 sf, 53.74% Impervious, Inflow Depth = 5.70" for 100-Year event
Inflow = 1.70 cfs @ 12.09 hrs, Volume= 5,424 cf
Outflow = 1.70 cfs @ 12.09 hrs, Volume= 5,424 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.70 cfs @ 12.09 hrs, Volume= 5,424 cf
Routed to Pond CB-A-18 : CB-A-18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 597.38' @ 12.09 hrs
Flood Elev= 598.65'

Device	Routing	Invert	Outlet Devices
#1	Primary	596.32'	**12.0" Round HDPE Round 12"** L= 65.1' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 596.32' / 596.00' S= 0.0049 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=1.67 cfs @ 12.09 hrs HW=597.38' TW=597.10' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Outlet Controls 1.67 cfs @ 2.51 fps)

Pond CB-A-19: CB-A-19



Summary for Pond CB-A-20: CB-A-20

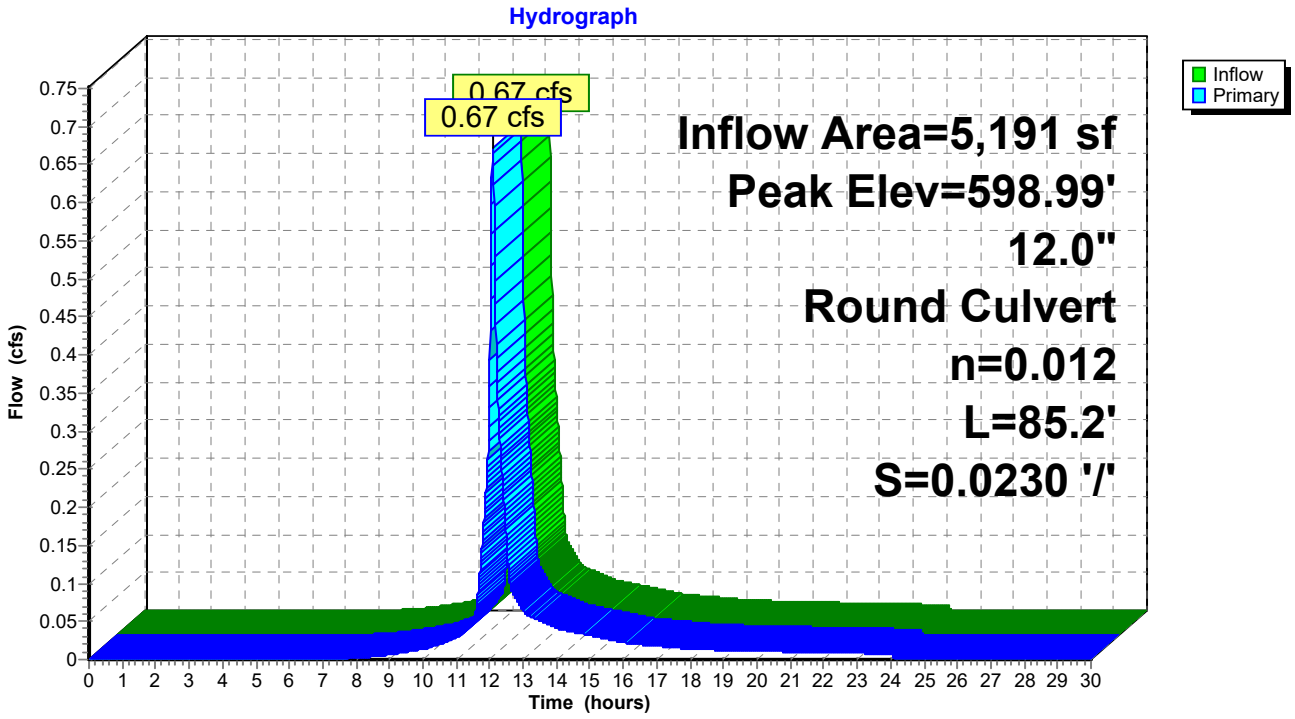
Inflow Area = 5,191 sf, 33.40% Impervious, Inflow Depth = 4.81" for 100-Year event
Inflow = 0.67 cfs @ 12.09 hrs, Volume= 2,081 cf
Outflow = 0.67 cfs @ 12.09 hrs, Volume= 2,081 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.67 cfs @ 12.09 hrs, Volume= 2,081 cf
Routed to Pond CB-A-19 : CB-A-19

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 598.99' @ 12.09 hrs
Flood Elev= 600.58'

Device	Routing	Invert	Outlet Devices
#1	Primary	598.58'	**12.0" Round HDPE Round 12"** L= 85.2' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 598.58' / 596.62' S= 0.0230 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.67 cfs @ 12.09 hrs HW=598.99' TW=597.38' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Inlet Controls 0.67 cfs @ 2.19 fps)

Pond CB-A-20: CB-A-20



Summary for Pond CB-B-01: CB-B-01

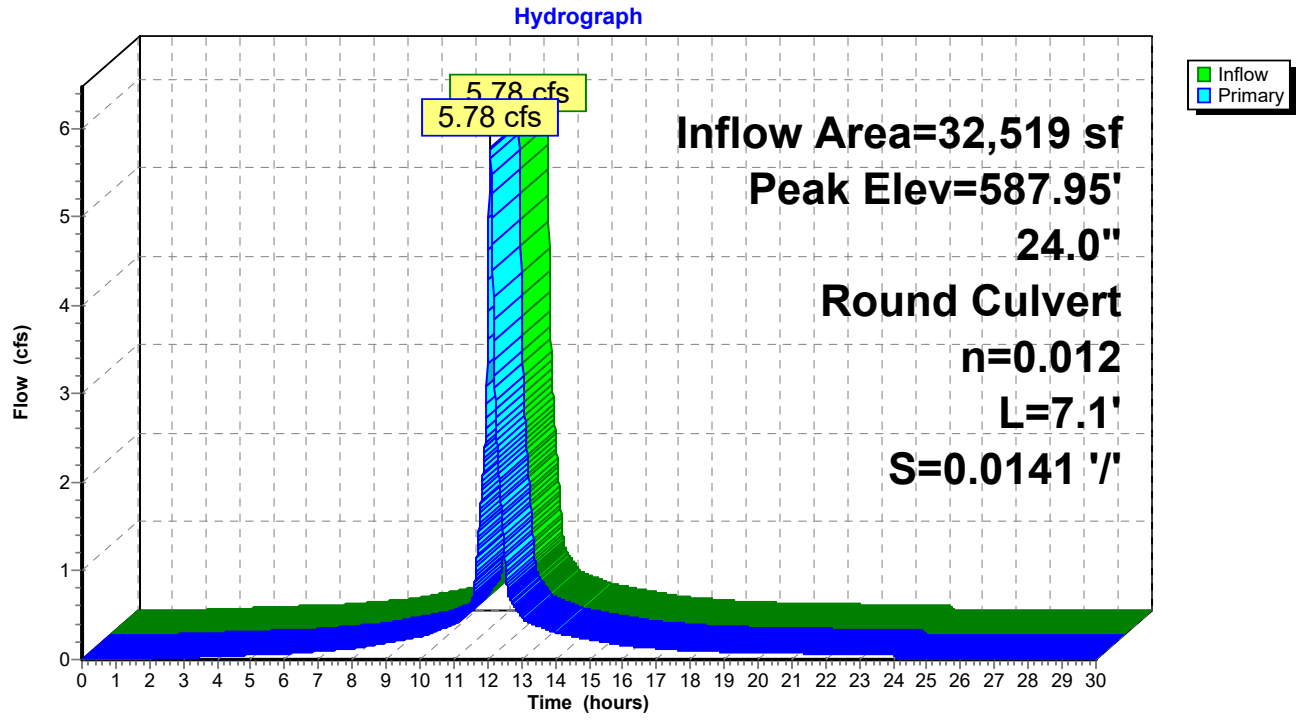
Inflow Area = 32,519 sf, 91.41% Impervious, Inflow Depth = 7.36" for 100-Year event
Inflow = 5.78 cfs @ 12.08 hrs, Volume= 19,945 cf
Outflow = 5.78 cfs @ 12.08 hrs, Volume= 19,945 cf, Atten= 0%, Lag= 0.0 min
Primary = 5.78 cfs @ 12.08 hrs, Volume= 19,945 cf
Routed to Pond ADS 1B : ADS 1B

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 587.95' @ 12.26 hrs
Flood Elev= 589.10'

Device	Routing	Invert	Outlet Devices
#1	Primary	586.10'	**24.0" Round HDPE Round 24"** L= 7.1' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 586.10' / 586.00' S= 0.0141 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf

Primary OutFlow Max=5.01 cfs @ 12.08 hrs HW=587.48' TW=587.25' (Dynamic Tailwater)
↑—**1=HDPE Round 24"** (Outlet Controls 5.01 cfs @ 3.05 fps)

Pond CB-B-01: CB-B-01



Summary for Pond CB-B-02: CB-B-02

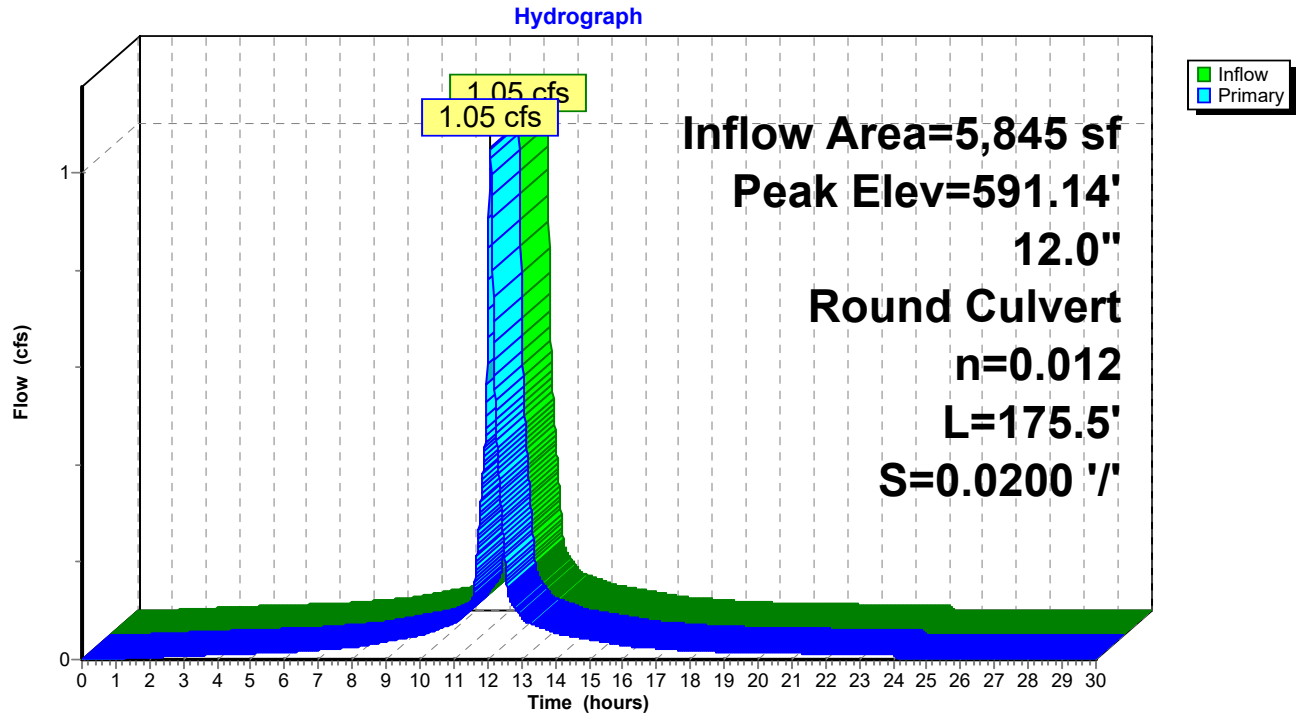
Inflow Area = 5,845 sf, 96.34% Impervious, Inflow Depth = 7.64" for 100-Year event
Inflow = 1.05 cfs @ 12.08 hrs, Volume= 3,722 cf
Outflow = 1.05 cfs @ 12.08 hrs, Volume= 3,722 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.05 cfs @ 12.08 hrs, Volume= 3,722 cf
Routed to Pond CB-B-01 : CB-B-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 591.14' @ 12.08 hrs
Flood Elev= 592.61'

Device	Routing	Invert	Outlet Devices
#1	Primary	590.61'	**12.0" Round HDPE Round 12"** L= 175.5' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 590.61' / 587.10' S= 0.0200 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=1.05 cfs @ 12.08 hrs HW=591.14' TW=587.48' (Dynamic Tailwater)
1=HDPE Round 12" (Inlet Controls 1.05 cfs @ 2.48 fps)

Pond CB-B-02: CB-B-02



Summary for Pond CB-B-03: CB-B-03

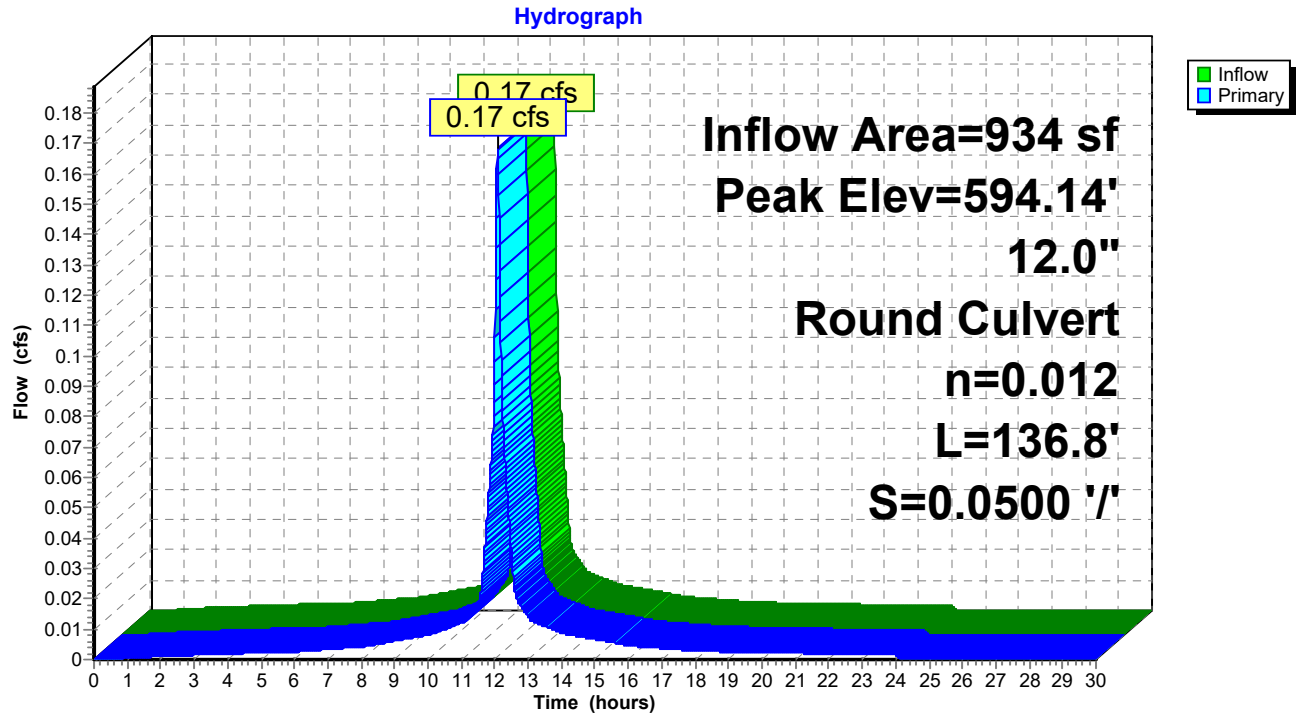
Inflow Area = 934 sf,100.00% Impervious, Inflow Depth = 7.76" for 100-Year event
Inflow = 0.17 cfs @ 12.08 hrs, Volume= 604 cf
Outflow = 0.17 cfs @ 12.08 hrs, Volume= 604 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.17 cfs @ 12.08 hrs, Volume= 604 cf
Routed to Pond CB-B-01 : CB-B-01

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.14' @ 12.08 hrs
Flood Elev= 595.94'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.94'	**12.0" Round HDPE Round 12"** L= 136.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.94' / 587.10' S= 0.0500 '/' Cc= 0.900 n= 0.012, Flow Area= 0.79 sf

Primary OutFlow Max=0.17 cfs @ 12.08 hrs HW=594.14' TW=587.48' (Dynamic Tailwater)
↑—**1=HDPE Round 12"** (Inlet Controls 0.17 cfs @ 1.52 fps)

Pond CB-B-03: CB-B-03



Summary for Pond CB-B-04: CB-B-04

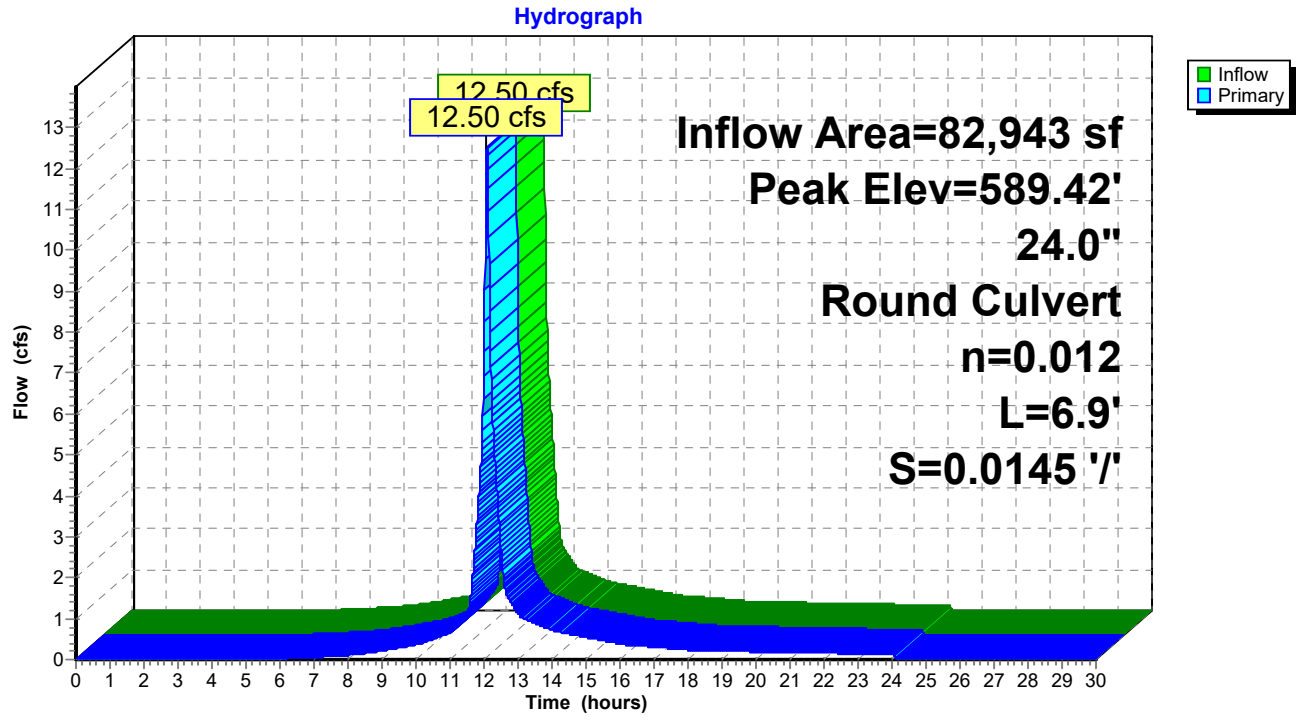
Inflow Area = 82,943 sf, 52.19% Impervious, Inflow Depth = 5.70" for 100-Year event
Inflow = 12.50 cfs @ 12.09 hrs, Volume= 39,406 cf
Outflow = 12.50 cfs @ 12.09 hrs, Volume= 39,406 cf, Atten= 0%, Lag= 0.0 min
Primary = 12.50 cfs @ 12.09 hrs, Volume= 39,406 cf
Routed to Pond ADS 1B : ADS 1B

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 589.42' @ 12.09 hrs
Flood Elev= 590.44'

Device	Routing	Invert	Outlet Devices
#1	Primary	587.43'	**24.0" Round HDPE Round 24"** L= 6.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 587.43' / 587.33' S= 0.0145 '/' Cc= 0.900 n= 0.012, Flow Area= 3.14 sf

Primary OutFlow Max=12.47 cfs @ 12.09 hrs HW=589.42' TW=587.27' (Dynamic Tailwater)
↑—**1=HDPE Round 24"** (Barrel Controls 12.47 cfs @ 4.97 fps)

Pond CB-B-04: CB-B-04



Summary for Pond CB-B-05: CB-B-05

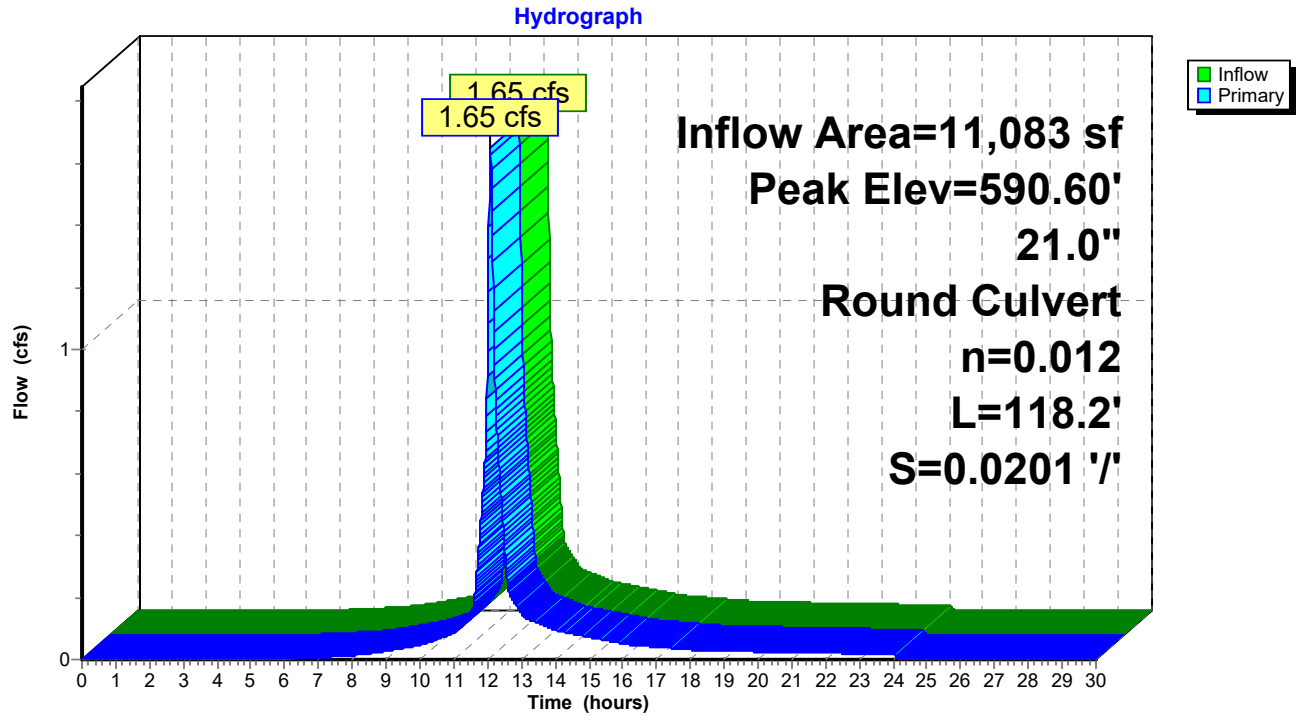
Inflow Area = 11,083 sf, 51.58% Impervious, Inflow Depth = 5.64" for 100-Year event
Inflow = 1.65 cfs @ 12.09 hrs, Volume= 5,207 cf
Outflow = 1.65 cfs @ 12.09 hrs, Volume= 5,207 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.65 cfs @ 12.09 hrs, Volume= 5,207 cf
Routed to Pond CB-B-04 : CB-B-04

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 590.60' @ 12.09 hrs
Flood Elev= 592.82'

Device	Routing	Invert	Outlet Devices
#1	Primary	590.05'	**21.0" Round HDPE Round 21"** L= 118.2' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 590.05' / 587.68' S= 0.0201 '/' Cc= 0.900 n= 0.012, Flow Area= 2.41 sf

Primary OutFlow Max=1.65 cfs @ 12.09 hrs HW=590.60' TW=589.42' (Dynamic Tailwater)
↑—**1=HDPE Round 21"** (Inlet Controls 1.65 cfs @ 2.53 fps)

Pond CB-B-05: CB-B-05



Summary for Pond CB-B-07: CB-B-07

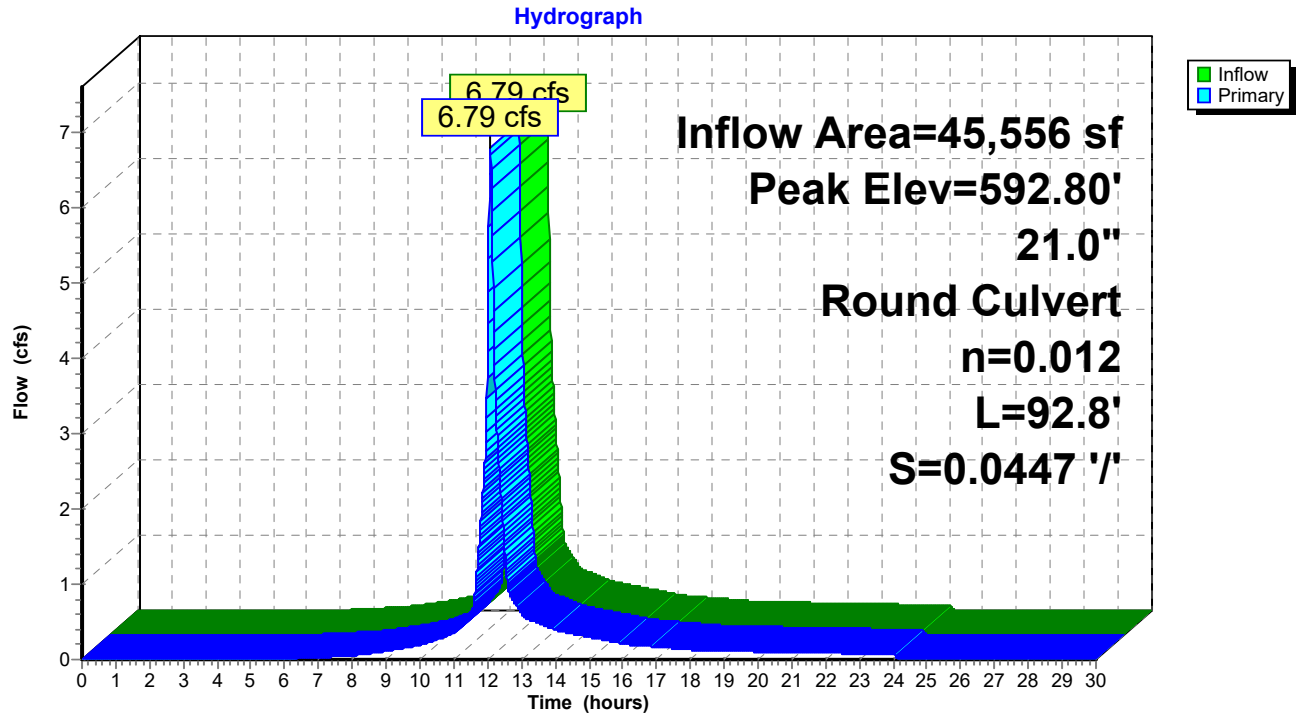
Inflow Area = 45,556 sf, 50.38% Impervious, Inflow Depth = 5.62" for 100-Year event
Inflow = 6.79 cfs @ 12.09 hrs, Volume= 21,354 cf
Outflow = 6.79 cfs @ 12.09 hrs, Volume= 21,354 cf, Atten= 0%, Lag= 0.0 min
Primary = 6.79 cfs @ 12.09 hrs, Volume= 21,354 cf
Routed to Pond CB-B-04 : CB-B-04

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 592.80' @ 12.09 hrs
Flood Elev= 595.09'

Device	Routing	Invert	Outlet Devices
#1	Primary	591.57'	**21.0" Round HDPE Round 21"** L= 92.8' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.57' / 587.42' S= 0.0447 '/' Cc= 0.900 n= 0.012, Flow Area= 2.41 sf

Primary OutFlow Max=6.78 cfs @ 12.09 hrs HW=592.79' TW=589.42' (Dynamic Tailwater)
↑—**1=HDPE Round 21"** (Inlet Controls 6.78 cfs @ 3.77 fps)

Pond CB-B-07: CB-B-07



Summary for Pond CB-C-01: CB-C-01

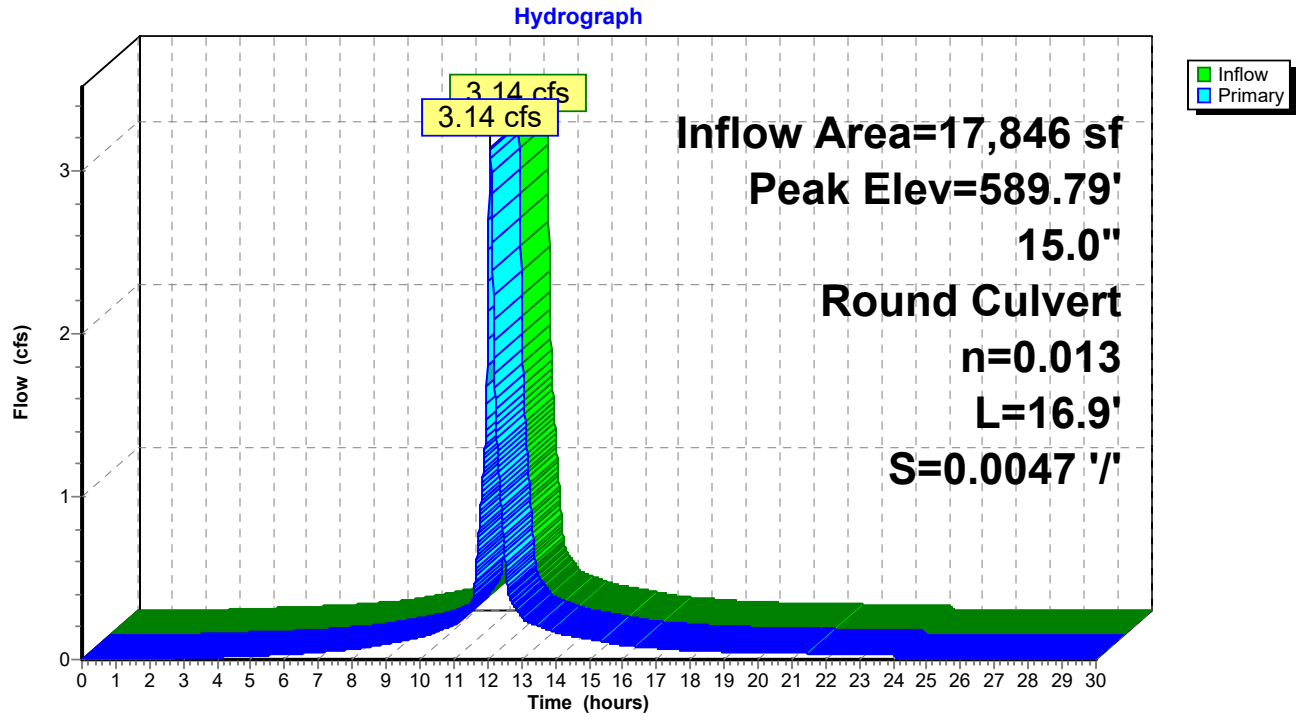
Inflow Area = 17,846 sf, 86.77% Impervious, Inflow Depth = 7.16" for 100-Year event
Inflow = 3.14 cfs @ 12.08 hrs, Volume= 10,652 cf
Outflow = 3.14 cfs @ 12.08 hrs, Volume= 10,652 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.14 cfs @ 12.08 hrs, Volume= 10,652 cf
Routed to Pond ADS1C : ADS 1C

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 589.79' @ 12.08 hrs
Flood Elev= 590.93'

Device	Routing	Invert	Outlet Devices
#1	Primary	588.67'	**15.0" Round HDPE Round 15"** L= 16.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 588.67' / 588.59' S= 0.0047 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.13 cfs @ 12.08 hrs HW=589.79' TW=588.67' (Dynamic Tailwater)
1=HDPE Round 15" (Barrel Controls 3.13 cfs @ 3.57 fps)

Pond CB-C-01: CB-C-01



Summary for Pond CB-C-02: CB-C-02

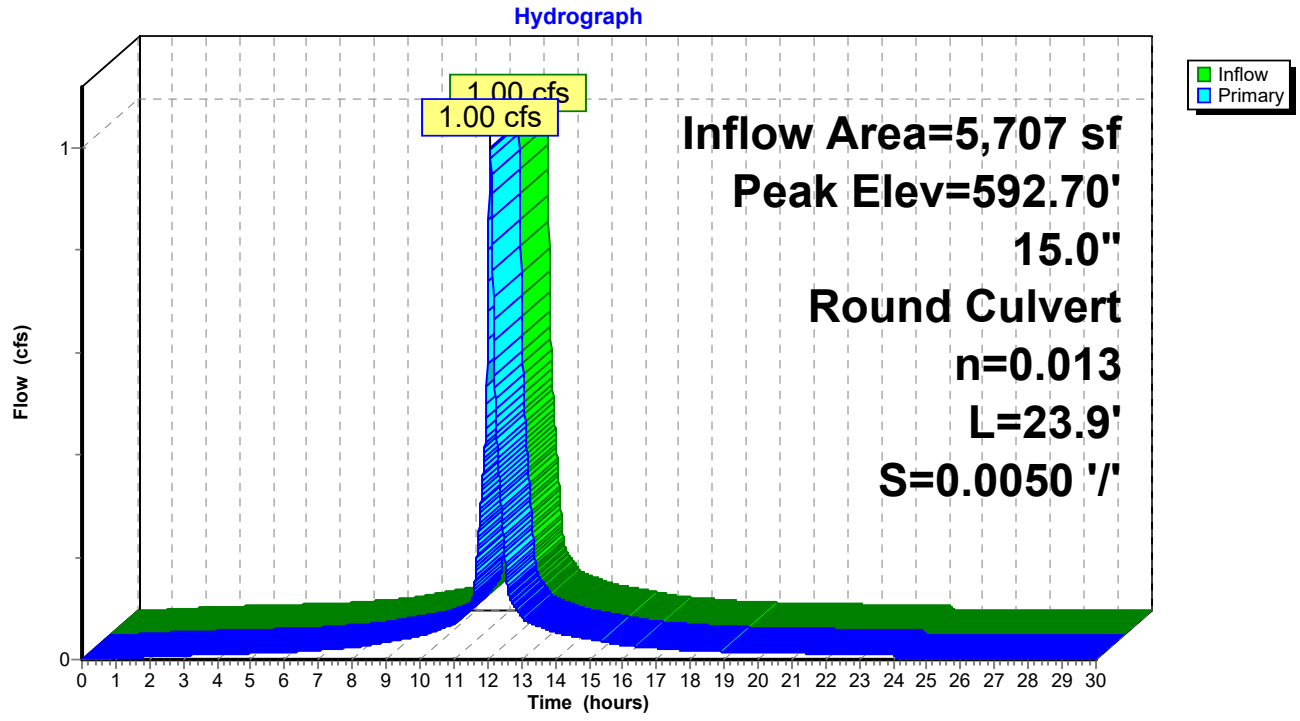
Inflow Area = 5,707 sf, 93.48% Impervious, Inflow Depth = 7.47" for 100-Year event
Inflow = 1.00 cfs @ 12.08 hrs, Volume= 3,553 cf
Outflow = 1.00 cfs @ 12.08 hrs, Volume= 3,553 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.00 cfs @ 12.08 hrs, Volume= 3,553 cf
Routed to Pond ADS1C : ADS 1C

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 592.70' @ 12.08 hrs
Flood Elev= 593.55'

Device	Routing	Invert	Outlet Devices
#1	Primary	592.13'	**15.0" Round HDPE Round 15"** L= 23.9' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.13' / 592.01' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=1.00 cfs @ 12.08 hrs HW=592.70' TW=588.67' (Dynamic Tailwater)
↑—**1=HDPE Round 15"** (Barrel Controls 1.00 cfs @ 2.70 fps)

Pond CB-C-02: CB-C-02



Summary for Pond CB-C-03: CB-C-03

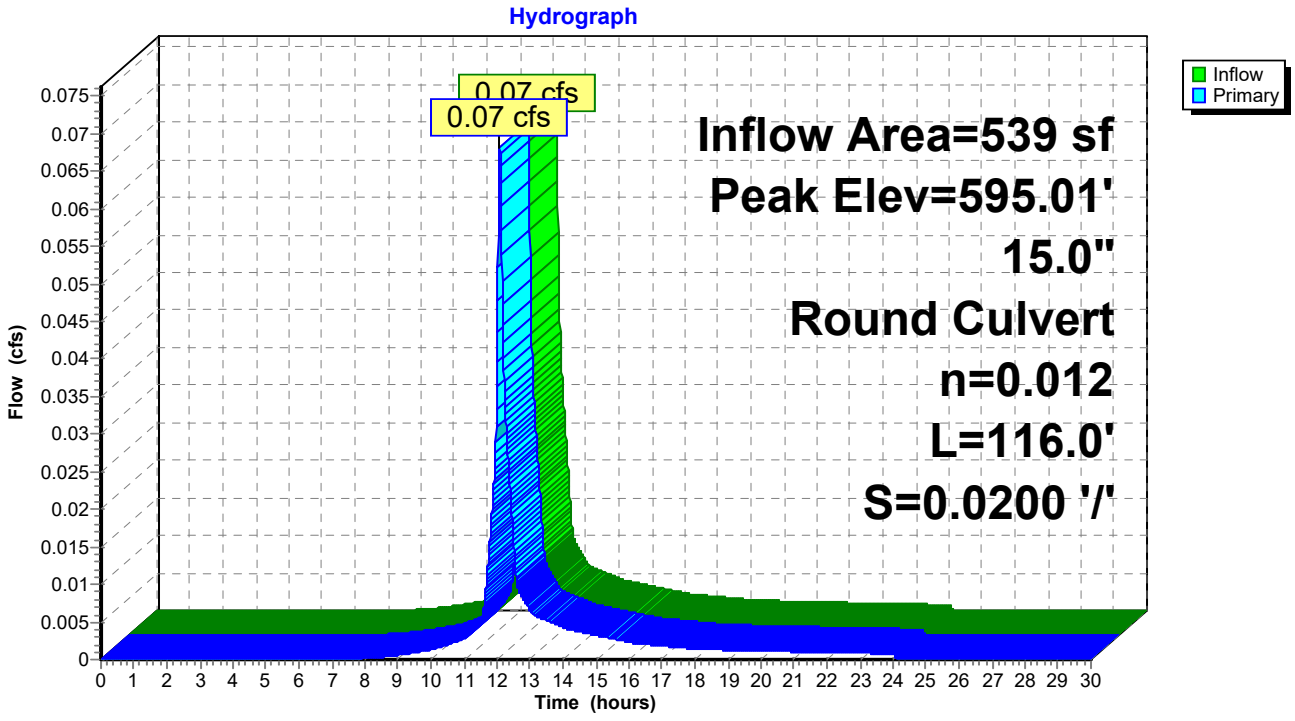
Inflow Area = 539 sf, 30.98% Impervious, Inflow Depth = 4.69" for 100-Year event
Inflow = 0.07 cfs @ 12.09 hrs, Volume= 211 cf
Outflow = 0.07 cfs @ 12.09 hrs, Volume= 211 cf, Atten= 0%, Lag= 0.0 min
Primary = 0.07 cfs @ 12.09 hrs, Volume= 211 cf
Routed to Pond CB-C-02 : CB-C-02

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 595.01' @ 12.09 hrs
Flood Elev= 596.80'

Device	Routing	Invert	Outlet Devices
#1	Primary	594.89'	**15.0" Round HDPE Round 15"** L= 116.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 594.89' / 592.57' S= 0.0200 '/' Cc= 0.900 n= 0.012, Flow Area= 1.23 sf

Primary OutFlow Max=0.07 cfs @ 12.09 hrs HW=595.01' TW=592.70' (Dynamic Tailwater)
↑**1=HDPE Round 15"** (Inlet Controls 0.07 cfs @ 1.17 fps)

Pond CB-C-03: CB-C-03



Summary for Pond CB-C-04: CB-C-04

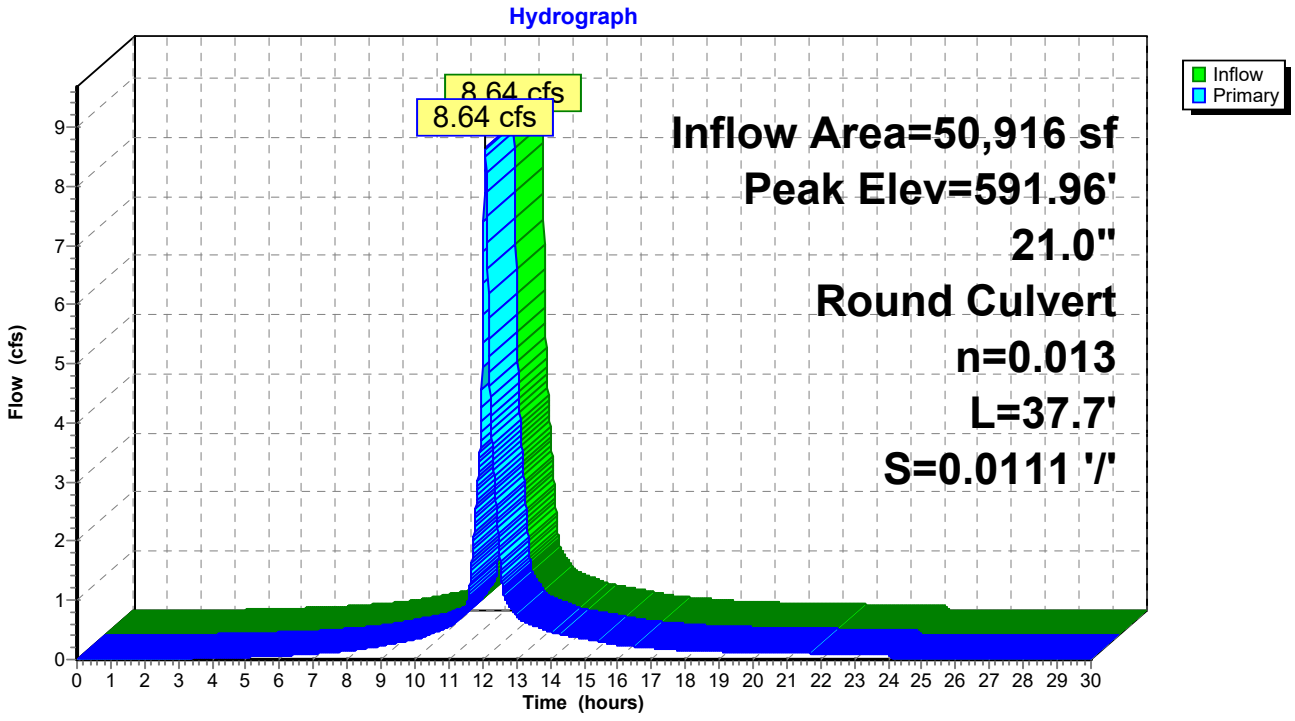
Inflow Area = 50,916 sf, 77.30% Impervious, Inflow Depth = 6.76" for 100-Year event
Inflow = 8.64 cfs @ 12.08 hrs, Volume= 28,666 cf
Outflow = 8.64 cfs @ 12.08 hrs, Volume= 28,666 cf, Atten= 0%, Lag= 0.0 min
Primary = 8.64 cfs @ 12.08 hrs, Volume= 28,666 cf
Routed to Pond ADS1C : ADS 1C

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 591.96' @ 12.08 hrs
Flood Elev= 593.26'

Device	Routing	Invert	Outlet Devices
#1	Primary	590.42'	**21.0" Round HDPE Round 21"** L= 37.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 590.42' / 590.00' S= 0.0111 '/' Cc= 0.900 n= 0.013, Flow Area= 2.41 sf

Primary OutFlow Max=8.63 cfs @ 12.08 hrs HW=591.96' TW=588.67' (Dynamic Tailwater)
↑—**1=HDPE Round 21"** (Barrel Controls 8.63 cfs @ 5.14 fps)

Pond CB-C-04: CB-C-04



Summary for Pond CB-C-05: CB-C-05

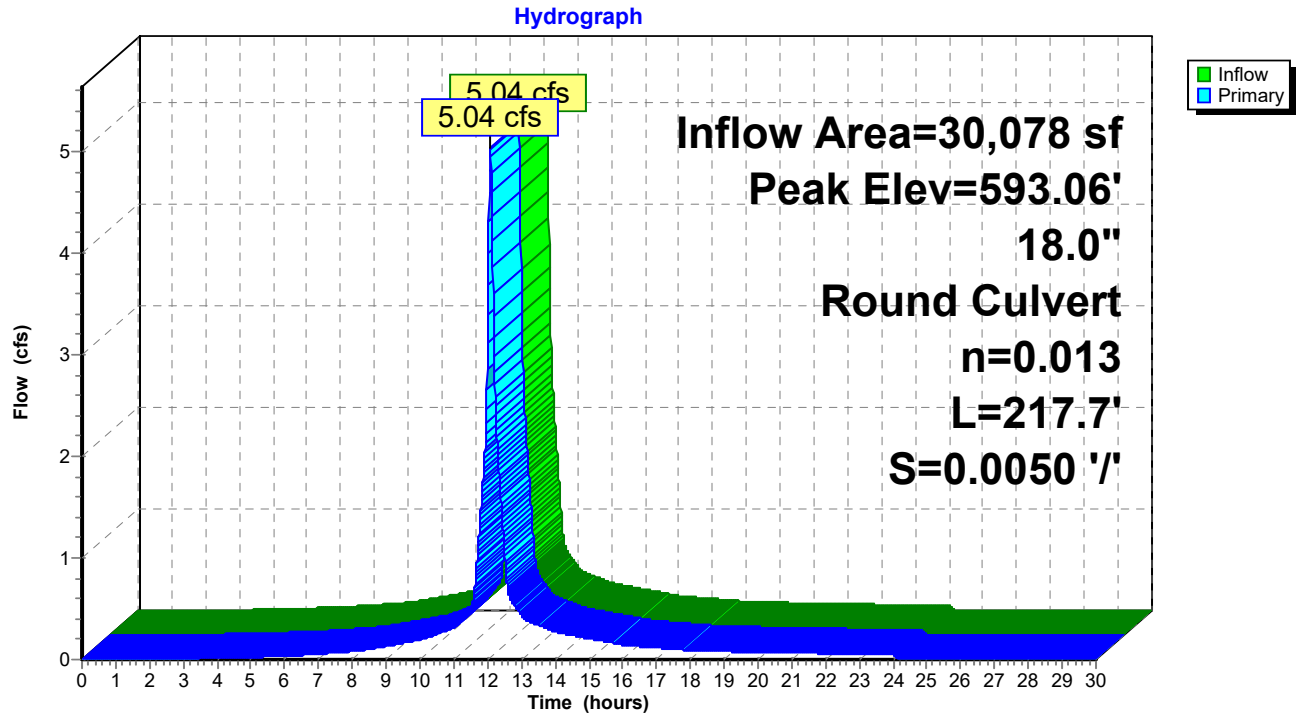
Inflow Area = 30,078 sf, 74.79% Impervious, Inflow Depth = 6.64" for 100-Year event
Inflow = 5.04 cfs @ 12.08 hrs, Volume= 16,641 cf
Outflow = 5.04 cfs @ 12.08 hrs, Volume= 16,641 cf, Atten= 0%, Lag= 0.0 min
Primary = 5.04 cfs @ 12.08 hrs, Volume= 16,641 cf
Routed to Pond CB-C-04 : CB-C-04

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 593.06' @ 12.09 hrs
Flood Elev= 596.27'

Device	Routing	Invert	Outlet Devices
#1	Primary	591.69'	**18.0" Round HDPE Round 18"** L= 217.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 591.69' / 590.61' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=5.01 cfs @ 12.08 hrs HW=593.06' TW=591.96' (Dynamic Tailwater)
↑—**1=HDPE Round 18"** (Outlet Controls 5.01 cfs @ 3.89 fps)

Pond CB-C-05: CB-C-05



Summary for Pond CB-C-06: CB-C-06

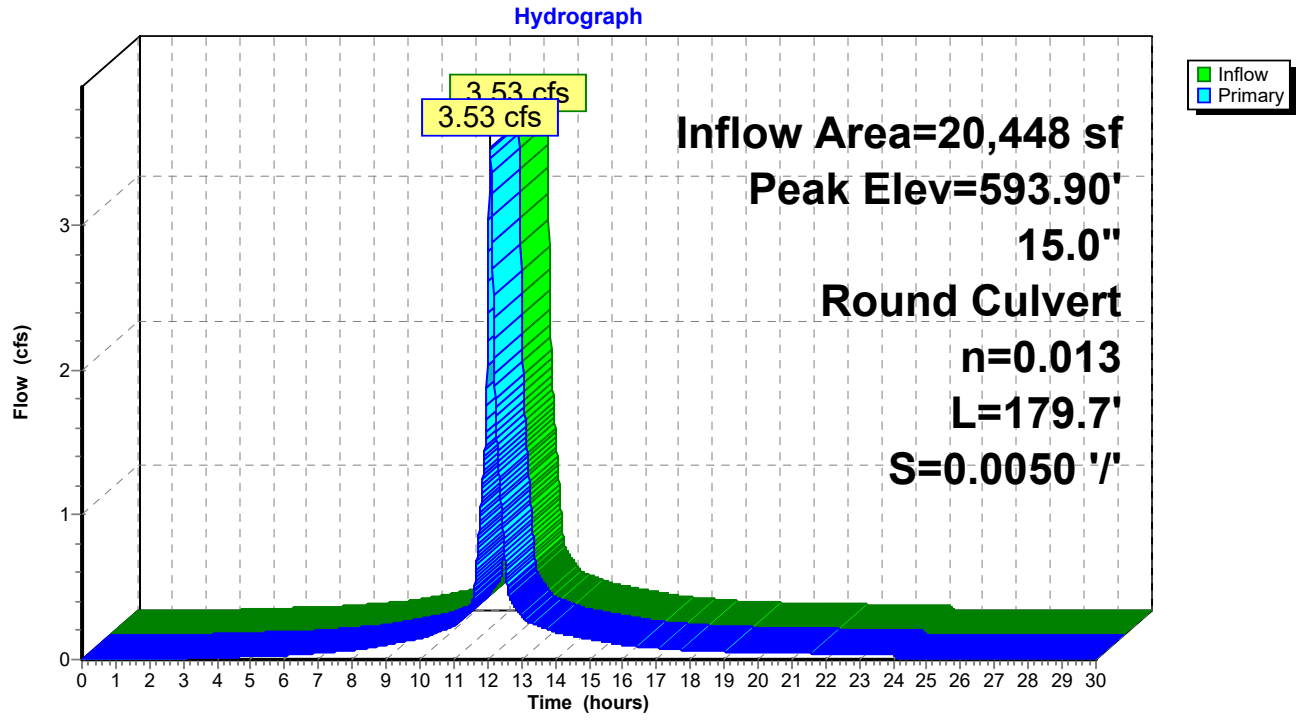
Inflow Area = 20,448 sf, 81.84% Impervious, Inflow Depth = 6.95" for 100-Year event
Inflow = 3.53 cfs @ 12.08 hrs, Volume= 11,844 cf
Outflow = 3.53 cfs @ 12.08 hrs, Volume= 11,844 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.53 cfs @ 12.08 hrs, Volume= 11,844 cf
Routed to Pond CB-C-05 : CB-C-05

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 593.90' @ 12.09 hrs
Flood Elev= 598.99'

Device	Routing	Invert	Outlet Devices
#1	Primary	592.59'	**15.0" Round HDPE Round 15"** L= 179.7' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.59' / 591.69' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.50 cfs @ 12.08 hrs HW=593.90' TW=593.06' (Dynamic Tailwater)
1=HDPE Round 15" (Outlet Controls 3.50 cfs @ 3.38 fps)

Pond CB-C-06: CB-C-06



Summary for Pond CB-C-07: CB-C-07

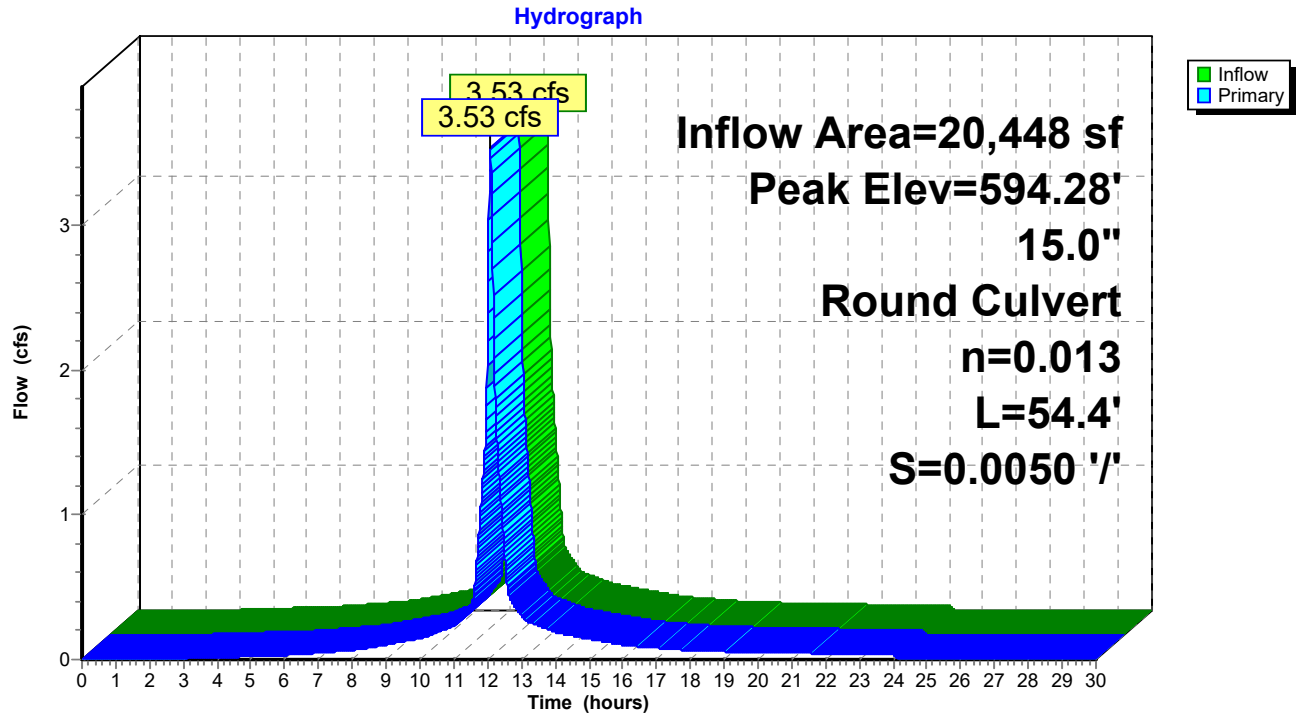
Inflow Area = 20,448 sf, 81.84% Impervious, Inflow Depth = 6.95" for 100-Year event
Inflow = 3.53 cfs @ 12.08 hrs, Volume= 11,844 cf
Outflow = 3.53 cfs @ 12.08 hrs, Volume= 11,844 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.53 cfs @ 12.08 hrs, Volume= 11,844 cf
Routed to Pond CB-C-06 : CB-C-06

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.28' @ 12.09 hrs
Flood Elev= 598.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	592.86'	**15.0" Round HDPE Round 15"** L= 54.4' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 592.86' / 592.59' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.44 cfs @ 12.08 hrs HW=594.27' TW=593.90' (Dynamic Tailwater)
1=HDPE Round 15" (Outlet Controls 3.44 cfs @ 3.11 fps)

Pond CB-C-07: CB-C-07



Summary for Pond CB-C-08: CB-C-08

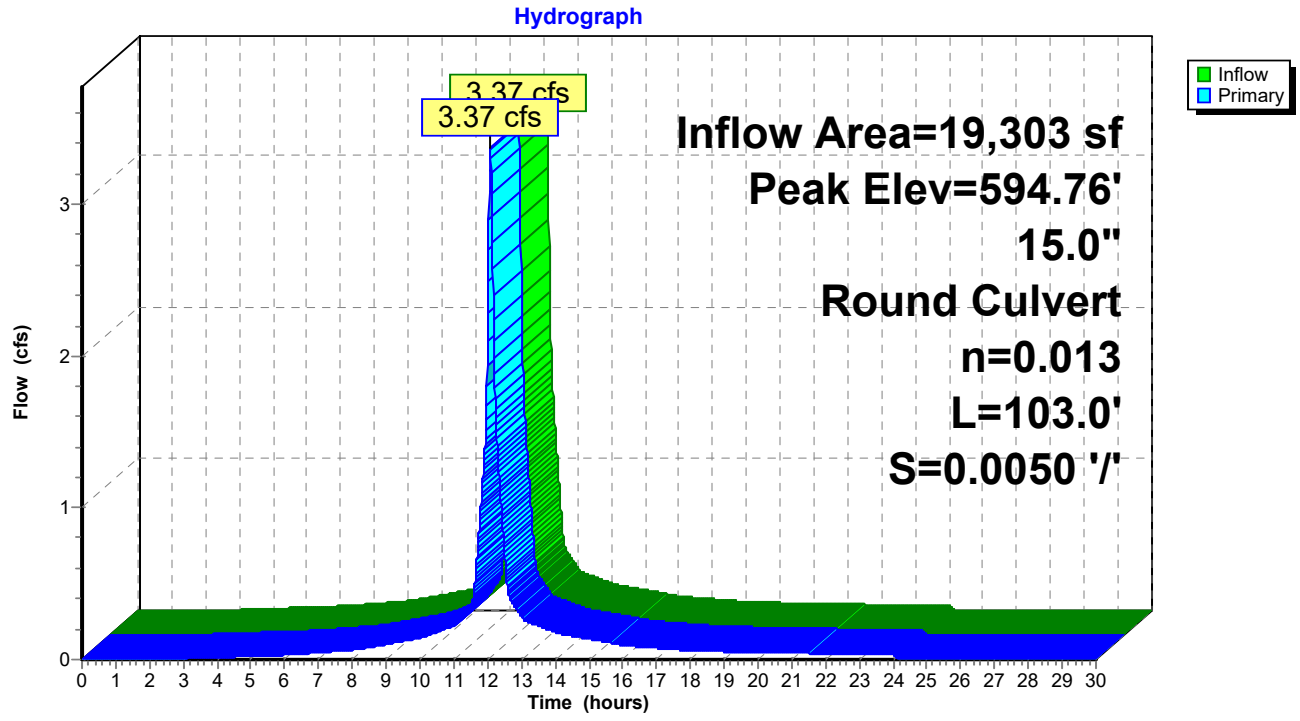
Inflow Area = 19,303 sf, 83.90% Impervious, Inflow Depth = 7.04" for 100-Year event
Inflow = 3.37 cfs @ 12.08 hrs, Volume= 11,330 cf
Outflow = 3.37 cfs @ 12.08 hrs, Volume= 11,330 cf, Atten= 0%, Lag= 0.0 min
Primary = 3.37 cfs @ 12.08 hrs, Volume= 11,330 cf
Routed to Pond CB-C-07 : CB-C-07

Routing by Dyn-Stor-Ind method, Time Span= 0.00-30.00 hrs, dt= 0.01 hrs
Peak Elev= 594.76' @ 12.09 hrs
Flood Elev= 595.63'

Device	Routing	Invert	Outlet Devices
#1	Primary	593.38'	**15.0" Round HDPE Round 15"** L= 103.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 593.38' / 592.86' S= 0.0050 '/' Cc= 0.900 n= 0.013, Flow Area= 1.23 sf

Primary OutFlow Max=3.27 cfs @ 12.08 hrs HW=594.75' TW=594.27' (Dynamic Tailwater)
1=HDPE Round 15" (Outlet Controls 3.27 cfs @ 3.03 fps)

Pond CB-C-08: CB-C-08



APPENDIX C

ATTACHMENT 1

Construction Stormwater Compliance Inspection Report

Project Name and Location:	Date:	Page 1 of 2
	Permit # (if any): **NYR**	
Municipality: County:	Entry Time:	Exit Time:
On-site Representative(s) and contact information:	Weather Conditions:	
Name and Address of SPDES Permittee/Title/Phone/Fax Numbers: Contacted: Yes ☐ No ☐		

INSPECTION CHECKLIST

SPDES Authority

	Yes	No	N/A		Law, rule or permit citation
1.	☐	☐	☐	Is a copy of the NOI posted at the construction site for public viewing?	
2.	☐	☐	☐	Is an up-to-date copy of the signed SWPPP retained at the construction site?	
3.	☐	☐	☐	Is a copy of the SPDES General Permit retained at the construction site?	

SWPPP Content

	Yes	No	N/A		Law, rule or permit citation
4.	☐	☐	☐	Does the SWPPP describe and identify the erosion & sediment control measures to be employed?	
5.	☐	☐	☐	Does the SWPPP provide a maintenance schedule for the erosion & sediment control measures?	
6.	☐	☐	☐	Does the SWPPP describe and identify the post-construction SW control measures to be employed?	
7.	☐	☐	☐	Does the SWPPP identify the contractor(s) and subcontractor(s) responsible for each measure?	
8.	☐	☐	☐	Does the SWPPP include all the necessary 'CONTRACTOR CERTIFICATION' statements?	
9.	☐	☐	☐	Is the SWPPP signed/certified by the permittee?	

Recordkeeping

	Yes	No	N/A		Law, rule or permit citation
10.	☐	☐	☐	Are inspections performed as required by the permit (every 7 days and after ½" rain event)?	
11.	☐	☐	☐	Are the site inspections performed by a qualified professional?	
12.	☐	☐	☐	Are all required reports properly signed/certified?	
13.	☐	☐	☐	Does the SWPPP include copies of the monthly/quarterly written summaries of compliance status?	

Visual Observations

	Yes	No	N/A		Law, rule or permit citation
14.	☐	☐	☐	Are all erosion and sediment control measures installed/constructed?	
15.	☐	☐	☐	Are all erosion and sediment control measures maintained properly?	
16.	☐	☐	☐	Have all disturbances of 5 acres or more been approved prior to the disturbance?	
17.	☐	☐	☐	Are stabilization measures initiated in inactive areas?	
18.	☐	☐	☐	Are permanent stormwater control measures implemented?	
19.	☐	☐	☐	Was there a discharge into the receiving water on the day of inspection?	
20.	☐	☐	☐	Are receiving waters free of there evidence of turbidity, sedimentation, or oil ? (If no , complete Page 2)	

Overall Inspection Rating: ❑ Satisfactory ❑ Marginal ❑ Unsatisfactory	
Name/Agency of Lead Inspector:	**Signature of Lead Inspector:**
Names/Agencies of Other Inspectors:	

Water Quality Observations

Describe the discharge(s) [source(s), impact on receiving water(s), etc.] ____

____

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____

____

Describe the quality of the receiving water(s) both upstream and downstream of the discharge________________________________

____

____

____

____

Describe any other water quality standards or permit violations ____

____

____

Additional Comments:____

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☐ Photographs attached

APPENDIX H

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES

CONSTRUCTION SITE LOG BOOK

Table of Contents

Properly completing forms such as those contained in Appendix H meet the inspection requirement of NYS-DEC SPDES GP for Construction Activities. Completed forms shall be kept on site at all times and made available to authorities upon request.

I. PRE-CONSTRUCTION MEETING DOCUMENTS
Project Name _____
Permit No. _____ Date of Authorization _____
Name of Operator _____
Prime Contractor _____

a. Preamble to Site Assessment and Inspections
The Following Information To Be Read By All Person's Involved in The Construction of Stormwater Related Activities:

The Operator agrees to have a qualified professional[1] conduct an assessment of the site prior to the commencement of construction[2] and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Prior to the commencement of construction, the Operator shall certify in this site logbook that the SWPPP has been prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements.

When construction starts, site inspections shall be conducted by the qualified professional at least every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater (Construction Duration Inspections). The Operator shall maintain a record of all inspection reports in this site logbook. The site logbook shall be maintained on site and be made available to the permitting authorities upon request. The Operator shall post at the site, in a publicly accessible location, a summary of the site inspection activities on a monthly basis (Monthly Summary Report).

The operator shall also prepare a written summary of compliance with this general permit at a minimum frequency of every three months (Operator's Compliance Response Form), while coverage exists. The summary should address the status of achieving each component of the SWPPP.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified professional perform a final site inspection. The qualified professional shall certify that the site has undergone final stabilization[3] using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. In addition, the Operator must identify and certify that all permanent structures described in the SWPPP have been constructed and provide the owner(s) with an operation and maintenance plan that ensures the structure(s) continuously functions as designed.

1 "Qualified Professional means a person knowledgeable in the principles and practice of erosion and sediment controls, such as a Certified Professional in Erosion and Sediment Control (CPESC), soil scientist, licensed engineer or someone working under the direction and supervision of a licensed engineer (person must have experience in the principles and practices of erosion and sediment control).

2 "Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.

3 "Final stabilization" means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

b. Operators Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. Further, I hereby certify that the SWPPP meets all Federal, State, and local erosion and sediment control requirements. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Name (please print): _____

Title _____ **Date:** _____

Address: _____

Phone: _____ **Email:** _____

Signature: _____

c. Qualified Professional's Credentials & Certification

"I hereby certify that I meet the criteria set forth in the General Permit to conduct site inspections for this project and that the appropriate erosion and sediment controls described in the SWPPP and as described in the following Pre-construction Site Assessment Checklist have been adequately installed or implemented, ensuring the overall preparedness of this site for the commencement of construction."

Name (please print): _____

Title _____ **Date:** _____

Address: _____

Phone: _____ **Email:** _____

Signature: _____

d. Pre-construction Site Assessment Checklist
(NOTE: Provide comments below as necessary)

1. Notice of Intent, SWPPP, and Contractors Certification:

Yes No NA

[ ] [ ] [ ] Has a Notice of Intent been filed with the NYS Department of Conservation?
[ ] [ ] [ ] Is the SWPPP on-site? Where?_____
[ ] [ ] [ ] Is the Plan current? What is the latest revision date?_____
[ ] [ ] [ ] Is a copy of the NOI (with brief description) onsite? Where?_____
[ ] [ ] [ ] Have all contractors involved with stormwater related activities signed a contractor's certification?

2. Resource Protection

Yes No NA

[ ] [ ] [ ] Are construction limits clearly flagged or fenced?
[ ] [ ] [ ] Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, have been flagged for protection.
[ ] [ ] [ ] Creek crossings installed prior to land-disturbing activity, including clearing and blasting.

3. Surface Water Protection

Yes No NA

[ ] [ ] [ ] Clean stormwater runoff has been diverted from areas to be disturbed.
[ ] [ ] [ ] Bodies of water located either on site or in the vicinity of the site have been identified and protected.
[ ] [ ] [ ] Appropriate practices to protect on-site or downstream surface water are installed.
[ ] [ ] [ ] Are clearing and grading operations divided into areas <5 acres?

4. Stabilized Construction Entrance

Yes No NA

[ ] [ ] [ ] A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed.
[ ] [ ] [ ] Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover.
[ ] [ ] [ ] Sediment tracked onto public streets is removed or cleaned on a regular basis.

5. Perimeter Sediment Controls

Yes No NA

[ ] [ ] [ ] Silt fence material and installation comply with the standard drawing and specifications.
[ ] [ ] [ ] Silt fences are installed at appropriate spacing intervals
[ ] [ ] [ ] Sediment/detention basin was installed as first land disturbing activity.
[ ] [ ] [ ] Sediment traps and barriers are installed.

6. Pollution Prevention for Waste and Hazardous Materials

Yes No NA

[ ] [ ] [ ] The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.
[ ] [ ] [ ] The plan is contained in the SWPPP on page _____
[ ] [ ] [ ] Appropriate materials to control spills are onsite. Where? _____

II. CONSTRUCTION DURATION INSPECTIONS

a. Directions:
Inspection Forms will be filled out during the entire construction phase of the project.
Required Elements:

(1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;

(2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;

(3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;

(4) Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);

(5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass
water; and

(6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

SITE PLAN/SKETCH

_____	_____
Inspector (print name)	**Date of Inspection**
_____	_____
Qualified Professional (print name)	**Qualified Professional Signature**

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

Maintaining Water Quality

Yes No NA
[ ] [ ] [ ] Is there an increase in turbidity causing a substantial visible contrast to natural conditions?
[ ] [ ] [ ] Is there residue from oil and floating substances, visible oil film, or globules or grease?
[ ] [ ] [ ] All disturbance is within the limits of the approved plans.
[ ] [ ] [ ] Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

Housekeeping

1. General Site Conditions
Yes No NA
[ ] [ ] [ ] Is construction site litter and debris appropriately managed?
[ ] [ ] [ ] Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?
[ ] [ ] [ ] Is construction impacting the adjacent property?
[ ] [ ] [ ] Is dust adequately controlled?

2. Temporary Stream Crossing
Yes No NA
[ ] [ ] [ ] Maximum diameter pipes necessary to span creek without dredging are installed.
[ ] [ ] [ ] Installed non-woven geotextile fabric beneath approaches.
[ ] [ ] [ ] Is fill composed of aggregate (no earth or soil)?
[ ] [ ] [ ] Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

Runoff Control Practices

1. Excavation Dewatering
Yes No NA
[ ] [ ] [ ] Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.
[ ] [ ] [ ] Clean water from upstream pool is being pumped to the downstream pool.
[ ] [ ] [ ] Sediment laden water from work area is being discharged to a silt-trapping device.
[ ] [ ] [ ] Constructed upstream berm with one-foot minimum freeboard.

2. Level Spreader
Yes No NA
[ ] [ ] [ ] Installed per plan.
[ ] [ ] [ ] Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.
[ ] [ ] [ ] Flow sheets out of level spreader without erosion on downstream edge.

3. Interceptor Dikes and Swales
Yes No NA
[ ] [ ] [ ] Installed per plan with minimum side slopes 2H:1V or flatter.
[ ] [ ] [ ] Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.
[ ] [ ] [ ] Sediment-laden runoff directed to sediment trapping structure

Runoff Control Practices (continued)

4. Stone Check Dam
Yes No NA
[ ] [ ] [ ] Is channel stable? (flow is not eroding soil underneath or around the structure).
[ ] [ ] [ ] Check is in good condition (rocks in place and no permanent pools behind the structure).
[ ] [ ] [ ] Has accumulated sediment been removed?.

5. Rock Outlet Protection
Yes No NA
[ ] [ ] [ ] Installed per plan.
[ ] [ ] [ ] Installed concurrently with pipe installation.

Soil Stabilization

1. Topsoil and Spoil Stockpiles
Yes No NA
[ ] [ ] [ ] Stockpiles are stabilized with vegetation and/or mulch.
[ ] [ ] [ ] Sediment control is installed at the toe of the slope.

2. Revegetation
Yes No NA
[ ] [ ] [ ] Temporary seedings and mulch have been applied to idle areas.
[ ] [ ] [ ] 4 inches minimum of topsoil has been applied under permanent seedings

Sediment Control Practices

1. Stabilized Construction Entrance
Yes No NA
[ ] [ ] [ ] Stone is clean enough to effectively remove mud from vehicles.
[ ] [ ] [ ] Installed per standards and specifications?
[ ] [ ] [ ] Does all traffic use the stabilized entrance to enter and leave site?
[ ] [ ] [ ] Is adequate drainage provided to prevent ponding at entrance?

2. Silt Fence
Yes No NA
[ ] [ ] [ ] Installed on Contour, 10 feet from toe of slope (not across conveyance channels).
[ ] [ ] [ ] Joints constructed by wrapping the two ends together for continuous support.
[ ] [ ] [ ] Fabric buried 6 inches minimum.
[ ] [ ] [ ] Posts are stable, fabric is tight and without rips or frayed areas.
Sediment accumulation is ___% of design capacity.

Sediment Control Practices (continued)

3. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated practices)

Yes No NA

[ ] [ ] [ ] Installed concrete blocks lengthwise so open ends face outward, not upward.
[ ] [ ] [ ] Placed wire screen between No. 3 crushed stone and concrete blocks.
[ ] [ ] [ ] Drainage area is 1acre or less.
[ ] [ ] [ ] Excavated area is 900 cubic feet.
[ ] [ ] [ ] Excavated side slopes should be 2:1.
[ ] [ ] [ ] 2" x 4" frame is constructed and structurally sound.
[ ] [ ] [ ] Posts 3-foot maximum spacing between posts.
[ ] [ ] [ ] Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
[ ] [ ] [ ] Posts are stable, fabric is tight and without rips or frayed areas.

Sediment accumulation ___% of design capacity.

4. Temporary Sediment Trap

Yes No NA

[ ] [ ] [ ] Outlet structure is constructed per the approved plan or drawing.
[ ] [ ] [ ] Geotextile fabric has been placed beneath rock fill.

Sediment accumulation is ___% of design capacity.

5. Temporary Sediment Basin

Yes No NA

[ ] [ ] [ ] Basin and outlet structure constructed per the approved plan.
[ ] [ ] [ ] Basin side slopes are stabilized with seed/mulch.
[ ] [ ] [ ] Drainage structure flushed and basin surface restored upon removal of sediment basin facility.

Sediment accumulation is ___% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design.
Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

CONSTRUCTION DURATION INSPECTIONS

b. Modifications to the SWPPP (To be completed as described below)

The Operator shall amend the SWPPP whenever:
1. There is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or
2. The SWPPP proves to be ineffective in:
   a. Eliminating or significantly minimizing pollutants from sources identified in the SWPPP and as required by this permit; or
   b. Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity; and
3. Additionally, the SWPPP shall be amended to identify any new contractor or subcontractor that will implement any measure of the SWPPP.

Modification & Reason:

III. Monthly Summary of Site Inspection Activities

Name of Permitted Facility:	Today's Date:	Reporting Month:
Location:	Permit Identification #:	
Name and Telephone Number of Site Inspector:		

Date of Inspection	Regular / Rainfall based Inspection	Name of Inspector	Items of Concern

Owner/Operator Certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law."

_____ _____

Signature of Permittee or Duly Authorized Representative Name of Permittee or Duly Authorized Representative Date

Duly authorized representatives must have written authorization, submitted to DEC, to sign any permit documents.

APPENDIX D

NOI for coverage under Stormwater General Permit for Construction Activity

version 1.31

(Submission #: HPB-VG48-0FET9, version 1)

Details

Originally Started By	Michael Morgante
Submission ID	HPB-VG48-0FET9
Submission Reason	New
Status	Draft

Form Input

Owner/Operator Information

Owner/Operator Name (Company/Private Owner/Municipality/Agency/Institution, etc.)
Route 208 Holdings, LLC

Owner/Operator Contact Person Last Name (NOT CONSULTANT)
Schwimmer

Owner/Operator Contact Person First Name
Moshe

Owner/Operator Mailing Address
199 Lee Ave PMB 103

City
Brooklyn

State
NY

Zip
11211

Phone
347-786-2048

Email
mschwimmer@chessbuilders.com

Federal Tax ID
NONE PROVIDED

Project Location

Project/Site Name
Site Plan & Subdivision for South Blooming Grove Business Park

Street Address (Not P.O. Box)
1 Rieger Drive

Side of Street
North

City/Town/Village (THAT ISSUES BUILDING PERMIT)
V. South Blooming Grove

State
NY

Zip
10950

DEC Region
3

County
ORANGE

Name of Nearest Cross Street
NYS Route 209

Distance to Nearest Cross Street (Feet)
70

Project In Relation to Cross Street
East

Tax Map Numbers Section-Block-Parcel
223-1-2 & 223-1-4

Tax Map Numbers
53-1-20

1. Coordinates

Provide the Geographic Coordinates for the project site. The two methods are:
- Navigate to the project location on the map (below) and click to place a marker and obtain the XY coordinates.
- The "Find Me" button will provide the lat/long for the person filling out this form. Then pan the map to the correct location and click the map to place a marker and obtain the XY coordinates.

Navigate to your location and click on the map to get the X,Y coordinates
41.351475543288544,-74.19395270984711

Project Details

2. What is the nature of this project?
Redevelopment with increase in impervious area

3. Select the predominant land use for both pre and post development conditions.

Pre-Development Existing Landuse
Commercial

Post-Development Future Land Use
Commercial

3a. If Single Family Subdivision was selected in question 3, enter the number of subdivision lots.
NONE PROVIDED

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4. In accordance with the larger common plan of development or sale, enter the total project site acreage, the acreage to be disturbed and the future impervious area (acreage)within the disturbed area.

*** ROUND TO THE NEAREST TENTH OF AN ACRE. ***

Total Site Area (acres)
42.60

Total Area to be Disturbed (acres)
9.50

Existing Impervious Area to be Disturbed (acres)
0.86

Future Impervious Area Within Disturbed Area (acres)
7.20

5. Do you plan to disturb more than 5 acres of soil at any one time?
Yes

---

6. Indicate the percentage (%) of each Hydrologic Soil Group(HSG) at the site.

A (%)
60

B (%)
0

C (%)
10

D (%)
20

7. Is this a phased project?
No

8. Enter the planned start and end dates of the disturbance activities.

Start Date
2/1/2022

End Date
2/1/2023

9. Identify the nearest surface waterbody(ies) to which construction site runoff will discharge.
ACOE Wetland & Satterly Creek

9a. Type of waterbody identified in question 9?
Stream/Creek On Site
Wetland/Federal Jurisdiction On Site (Answer 9b)

Other Waterbody Type Off Site Description
NONE PROVIDED

9b. If "wetland" was selected in 9A, how was the wetland identified?
Delineated by Consultant

10. Has the surface waterbody(ies in question 9 been identified as a 303(d) segment in Appendix E of GP-0-20-001?
No

11. Is this project located in one of the Watersheds identified in Appendix C of GP-0-20-001?
No

12. Is the project located in one of the watershed areas associated with AA and AA-S classified waters?
No

If No, skip question 13.

13. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey?
NONE PROVIDED

If Yes, what is the acreage to be disturbed?
NONE PROVIDED

14. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area?
No

15. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)?
No

16. What is the name of the municipality/entity that owns the separate storm sewer system?
N/A

17. Does any runoff from the site enter a sewer classified as a Combined Sewer?
No

18. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law?
No

19. Is this property owned by a state authority, state agency, federal government or local government?
No

20. Is this a remediation project being done under a Department approved work plan? (i.e. CERCLA, RCRA, Voluntary Cleanup Agreement, etc.)
No

Required SWPPP Components

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book)?
Yes

22. Does this construction activity require the development of a SWPPP that includes the post-construction stormwater management practice component (i.e. Runoff Reduction, Water Quality and Quantity Control practices/techniques)?
Yes

If you answered No in question 22, skip question 23 and the Post-construction Criteria and Post-construction SMP Identification sections.

23. Has the post-construction stormwater management practice component of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual?
Yes

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:
Professional Engineer (P.E.)

SWPPP Preparer
Arden Consulting Engineers, PLLC

Contact Name (Last, Space, First)
Morgante Michael

Mailing Address
POB 340

City
Monroe

State
New York

Zip
10950

Phone
8452342510

Email
mam@ardenconsulting.net

Download SWPPP Preparer Certification Form
Please take the following steps to prepare and upload your preparer certification form:

1) Click on the link below to download a blank certification form
2) The certified SWPPP preparer should sign this form

3) Scan the signed form
4) Upload the scanned document
Download SWPPP Preparer Certification Form

Please upload the SWPPP Preparer Certification
swpppcert.pdf - 09/19/2021 11:37 AM
Comment
NONE PROVIDED

Erosion & Sediment Control Criteria

25. Has a construction sequence schedule for the planned management practices been prepared?
Yes

26. Select all of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural
Dust Control
Silt Fence
Stabilized Construction Entrance

Biotechnical
None

Vegetative Measures
Mulching
Seeding

Permanent Structural
Land Grading
Retaining Wall

Other
NONE PROVIDED

Post-Construction Criteria

*** IMPORTANT: Completion of Questions 27-39 is not required if response to Question 22 is No.**

27. Identify all site planning practices that were used to prepare the final site plan/layout for the project.
Preservation of Undisturbed Area
Locating Development in Less Sensitive Areas

27a. Indicate which of the following soil restoration criteria was used to address the requirements in Section 5.1.6("Soil Restoration") of the Design Manual (2010 version).
All disturbed areas will be restored in accordance with the Soil Restoration requirements in Table 5.3 of the Design Manual (see page 5-22).

28. Provide the total Water Quality Volume (WQv) required for this project (based on final site plan/layout). (Acre-feet)
0.89

29. Post-construction SMP Identification
Use the Post-construction SMP Identification section to identify the RR techniques (Area Reduction), RR techniques(Volume Reduction) and Standard SMPs with RRv Capacity that were used to reduce the Total WQv Required (#28).

Identify the SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

Note: Redevelopment projects shall use the Post-Construction SMP Identification section to identify the SMPs used to treat and/or reduce the WQv required. If runoff reduction techniques will not be used to reduce the required WQv, skip to question 33a after identifying the SMPs.

30. Indicate the Total RRv provided by the RR techniques (Area/Volume Reduction) and Standard SMPs with RRv capacity identified in question 29. (acre-feet)
0.89

31. Is the Total RRv provided (#30) greater than or equal to the total WQv required (#28)?
Yes

If Yes, go to question 36. If No, go to question 32.

32. Provide the Minimum RRv required based on HSG. [Minimum RRv Required = (P) (0.95) (Ai) / 12, Ai=(s) (Aic)] (acre-feet)
0.22

32a. Is the Total RRv provided (#30) greater than or equal to the Minimum RRv Required (#32)?
Yes

If Yes, go to question 33.
Note: Use the space provided in question #39 to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). A detailed evaluation of the specific site limitations and justification for not reducing 100% of the WQv required (#28) must also be included in the SWPPP.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

33. SMPs
Use the Post-construction SMP Identification section to identify the Standard SMPs and, if applicable, the Alternative SMPs to be used to treat the remaining total WQv (=Total WQv Required in #28 - Total RRv Provided in #30).

Also, provide the total impervious area that contributes runoff to each practice selected.

NOTE: Use the Post-construction SMP Identification section to identify the SMPs used on Redevelopment projects.

33a. Indicate the Total WQv provided (i.e. WQv treated) by the SMPs identified in question #33 and Standard SMPs with RRv Capacity identified in question #29. (acre-feet)
0.89

Note: For the standard SMPs with RRv capacity, the WQv provided by each practice = the WQv calculated using the contributing drainage area to the practice - provided by the practice. (See Table 3.5 in Design Manual)

34. Provide the sum of the Total RRv provided (#30) and the WQv provided (#33a).
1.78

35. Is the sum of the RRv provided (#30) and the WQv provided (#33a) greater than or equal to the total WQv required (#28)?
Yes

If Yes, go to question 36.

If No, sizing criteria has not been met; therefore, NOI can not be processed. SWPPP preparer must modify design to meet sizing criteria.

36. Provide the total Channel Protection Storage Volume (CPv required and provided or select waiver (#36a), if applicable.

CPv Required (acre-feet)
2.01

CPv Provided (acre-feet)
2.01

36a. The need to provide channel protection has been waived because:
NONE PROVIDED

37. Provide the Overbank Flood (Qp) and Extreme Flood (Qf) control criteria or select waiver (#37a), if applicable.

Overbank Flood Control Criteria (Qp)

Pre-Development (CFS)
14.56

Post-Development (CFS)
9.98

Total Extreme Flood Control Criteria (Qf)

Pre-Development (CFS)
26.89

Post-Development (CFS)
21.90

37a. The need to meet the Qp and Qf criteria has been waived because:
NONE PROVIDED

38. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed?
Yes

If Yes, Identify the entity responsible for the long term Operation and Maintenance
Route 208 Holdings, LLC

39. Use this space to summarize the specific site limitations and justification for not reducing 100% of WQv required (#28). (See question #32a) This space can also be used for other pertinent project information.
NONE PROVIDED

Post-Construction SMP Identification

Runoff Reduction (RR) Techniques, Standard Stormwater Management Practices (SMPs) and Alternative SMPs
Identify the Post-construction SMPs to be used by providing the total impervious area that contributes runoff to each technique/practice selected. For the Area Reduction Techniques, provide the total contributing area (includes pervious area) and, if applicable, the total impervious area that contributes runoff to the technique/practice.

RR Techniques (Area Reduction)

Round to the nearest tenth

Total Contributing Acres for Conservation of Natural Area (RR-1)
20.52

Total Contributing Impervious Acres for Conservation of Natural Area (RR-1)
0

Total Contributing Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)
NONE PROVIDED

Total Contributing Impervious Acres for Sheetflow to Riparian Buffers/Filter Strips (RR-2)
NONE PROVIDED

Total Contributing Acres for Tree Planting/Tree Pit (RR-3)
NONE PROVIDED

Total Contributing Impervious Acres for Tree Planting/Tree Pit (RR-3)
NONE PROVIDED

Total Contributing Acres for Disconnection of Rooftop Runoff (RR-4)
NONE PROVIDED

RR Techniques (Volume Reduction)

Total Contributing Impervious Acres for Disconnection of Rooftop Runoff (RR-4)
NONE PROVIDED

Total Contributing Impervious Acres for Vegetated Swale (RR-5)
NONE PROVIDED

Total Contributing Impervious Acres for Rain Garden (RR-6)
NONE PROVIDED

Total Contributing Impervious Acres for Stormwater Planter (RR-7)
NONE PROVIDED

Total Contributing Impervious Acres for Rain Barrel/Cistern (RR-8)
NONE PROVIDED

Total Contributing Impervious Acres for Porous Pavement (RR-9)
NONE PROVIDED

Total Contributing Impervious Acres for Green Roof (RR-10)
NONE PROVIDED

Standard SMPs with RRv Capacity

Total Contributing Impervious Acres for Infiltration Trench (I-1)
NONE PROVIDED

Total Contributing Impervious Acres for Infiltration Basin (I-2)
NONE PROVIDED

Total Contributing Impervious Acres for Dry Well (I-3)
NONE PROVIDED

Total Contributing Impervious Acres for Underground Infiltration System (I-4)
7.2

Total Contributing Impervious Acres for Bioretention (F-5)
NONE PROVIDED

Total Contributing Impervious Acres for Dry Swale (O-1)
NONE PROVIDED

Standard SMPs

Total Contributing Impervious Acres for Micropool Extended Detention (P-1)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Pond (P-2)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Extended Detention (P-3)
NONE PROVIDED

Total Contributing Impervious Acres for Multiple Pond System (P-4)
NONE PROVIDED

Total Contributing Impervious Acres for Pocket Pond (P-5)
NONE PROVIDED

Total Contributing Impervious Acres for Surface Sand Filter (F-1)
NONE PROVIDED

Total Contributing Impervious Acres for Underground Sand Filter (F-2)
NONE PROVIDED

Total Contributing Impervious Acres for Perimeter Sand Filter (F-3)
NONE PROVIDED

Total Contributing Impervious Acres for Organic Filter (F-4)
NONE PROVIDED

Total Contributing Impervious Acres for Shallow Wetland (W-1)
NONE PROVIDED

Total Contributing Impervious Acres for Extended Detention Wetland (W-2)
NONE PROVIDED

Total Contributing Impervious Acres for Pond/Wetland System (W-3)
NONE PROVIDED

Total Contributing Impervious Acres for Pocket Wetland (W-4)
NONE PROVIDED

Total Contributing Impervious Acres for Wet Swale (O-2)
NONE PROVIDED

Alternative SMPs (DO NOT INCLUDE PRACTICES BEING USED FOR PRETREATMENT ONLY)

Total Contributing Impervious Area for Hydrodynamic
NONE PROVIDED

Total Contributing Impervious Area for Wet Vault
NONE PROVIDED

Total Contributing Impervious Area for Media Filter
NONE PROVIDED

"Other" Alternative SMP?
NONE PROVIDED

Total Contributing Impervious Area for "Other"
NONE PROVIDED

Provide the name and manufaturer of the alternative SMPs (i.e. proprietary practice(s)) being used for WQv treatment.

Note: Redevelopment projects which do not use RR techniques, shall use questions 28, 29, 33 and 33a to provide SMPs used, total WQv required and total WQv provided for the project.

Manufacturer of Alternative SMP
ADS

Name of Alternative SMP
Stormtech 740 Chambers

Other Permits

40. Identify other DEC permits, existing and new, that are required for this project/facility.
None

If SPDES Multi-Sector GP, then give permit ID
NONE PROVIDED

If Other, then identify
NONE PROVIDED

41. Does this project require a US Army Corps of Engineers Wetland Permit?
No

If "Yes," then indicate Size of Impact, in acres, to the nearest tenth
NONE PROVIDED

42. If this NOI is being submitted for the purpose of continuing or transferring coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned.
NONE PROVIDED

MS4 SWPPP Acceptance

43. Is this project subject to the requirements of a regulated, traditional land use control MS4?
Yes - Please attach the MS4 Acceptance form below

If No, skip question 44

44. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI?
Yes

MS4 SWPPP Acceptance Form Download
Download form from the link below. Complete, sign, and upload.
MS4 SWPPP Acceptance Form

MS4 Acceptance Form Upload
swpppaccept.pdf - 09/19/2021 11:51 AM
Comment
NONE PROVIDED

Owner/Operator Certification

Owner/Operator Certification Form Download
Download the certification form by clicking the link below. Complete, sign, scan, and upload the form.
Owner/Operator Certification Form (PDF, 45KB)

Upload Owner/Operator Certification Form
constnoioocert.pdf - 09/19/2021 11:53 AM
Comment
NONE PROVIDED

Attachments

Date	Attachment Name	Context	User
9/19/2021 11:53 AM	constnoioocert.pdf	Attachment	Michael Morgante
9/19/2021 11:51 AM	swpppaccept.pdf	Attachment	Michael Morgante
9/19/2021 11:37 AM	swpppcert.pdf	Attachment	Michael Morgante

APPENDIX E

CONSTRUCTION WASTE MANAGEMENT & SPILL PREVENTION PLAN

At the commencement of construction, land clearing materials will be collected and stored on-site for reuse. Construction debris such as cardboard, concrete, metal, wood and similar garbage will be collected in dumpsters and disposed of properly. An open top container will be on site during construction. The contractor will be responsible for organizing and placing containers on site and timely removal/replacement when containers are filled to capacity.

On-site storage of fuel chemicals shall be equipped with a spill kit. The contractor must provide secondary containment for storing any hazardous chemicals on site.

All equipment stored on site shall be inspected daily by the contractor for any oil or lubricant spills or leaks. Any leaks shall be repaired immediately. In addition, all equipment must be closely inspected prior to working in any R.O.W.

The contractor shall clean all spills immediately and shall report all spills to the New York State Department of Environmental Conservation.

This plan will be displayed in the construction jobsite trailer at all times.

APPENDIX F

Contractor Certification Statement

_____ NYR_____ _____

Name of Construction Site | DEC Permit ID | Municipality (MS4)

I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version New York State Pollution Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of State of New York and could subject me to criminal, civil and /or administrative proceedings.

Name _____ Title _____

Signature _____ Date _____

Company Name & Address _____ Phone_____

_____

Project Site Address North Drury Lane _____

Provisions Responsible for _____

_____

_____

Information on the Trained Certified Contractor or Subcontractor

_____ _____ _____

Name of Trained Employee | Title of Trained Employee | NYSDEC SWT#

A copy of this signed contractor certification statement must be maintained in the SWPPP on site.

APPENDIX G

Village of South Blooming Grove
Stormwater Management Facility Easement and Maintenance Agreement

THIS AGREEMENT is made this ____ day of _____ 2021 by and between the Village of South Blooming Grove, having an address at 811 NY-208, Monroe, NY 10950 ("Municipality" or "Village") and _____ a New York limited liability company (or individual or corporation) having an address at _____ (the "Facility Owner").

WHEREAS, the Facility Owner is the owner of certain real property in the Village of South Blooming Grove County of Orange, State of New York, consisting of approximately _____ acres more particularly described in Schedule "A" annexed hereto and made a part hereof (the "Property"); and with a street address of _____ and further known as S-B-L ____-____-____; and further known as the _____ commercial site plan; and

WHEREAS, the project plans were approved by the Village of South Blooming Grove Planning Board on _____, 2021 with various conditions; and

WHEREAS, the Municipality and the Facility Owner have to enter into an agreement to provide for the long-term maintenance and continuation of stormwater control measures and facilities approved by the Municipality for the below named project; and

WHEREAS, the Municipality and the Facility Owner desire that the stormwater control measures and facilities be built in accordance with the approved project plans and thereafter be maintained, cleaned, repaired, replaced and continued in perpetuity in order to ensure optimum performance of the components.

NOW, THEREFORE, the Municipality and the Facility Owner agree as follows:

1. This agreement binds the Municipality and the Facility Owner, its successors and assigns to the maintenance provisions depicted in the approved project plans and described in the Stormwater Pollution Prevention Plan (SWPPP) which are on file with the Municipality's Stormwater Management Officer and where the operation and maintenance requirements are clearly set forth. The Facility Owner shall remain solely responsible for operation and maintenance in perpetuity and the Village assumes no operation, maintenance, control or responsibility in respect thereof.

2. The Facility Owner shall install, maintain, clean, repair, replace and continue the stormwater control measures depicted on the approved project plans for the Facility on and about the Property, as necessary to ensure optimum performance of the measures and in accordance with the approved design specifications. The stormwater control measures are identified in the Stormwater Pollution Prevention Plan (SWPPP) approved by the Municipality and shall be in accord with the project plans approved by the Planning Board.

3. The Facility Owner shall be responsible for all expenses, costs and professional fees related to the installation and perpetual maintenance of the stormwater control measures and shall promptly comply with any future regulatory requirements as applicable and shall indemnify and hold the Municipality harmless from all actions, proceedings, including regulatory proceedings, including the Villages reasonable professional fees related thereto, and for all claims, damages, injuries and fines relative to the stormwater control measures and facilities.

4. The Facility Owner shall provide for the periodic inspection of the stormwater control measures, not less than once every 2 years, to determine the condition and integrity of the measures. Such inspection shall be performed by a Professional Engineer licensed by the State of New York. The inspecting engineer shall prepare and submit to the Municipality within 30 days of the inspection, a written report of the findings including recommendations for those actions necessary for the continuation of the stormwater control measures. The Facility Owner shall undertake necessary maintenance, repairs and replacement of the stormwater control measures pursuant to the SWPPP or at the direction of the Municipality or in accordance with the recommendations of the inspecting engineer.

5. The Facility Owner shall not authorize, undertake or permit alteration, abandonment, modification or discontinuation of the stormwater control measures except in accordance with written approval of the Municipality. The obligations of the Facility Owner under paragraphs 2, 3and 4 of this Agreement shall toll upon the completion of the establishment of a drainage district of the Municipality and the acceptance of the dedication of the stormwater control measures by the Municipality. Notwithstanding, the Municipality shall have no obligation to establish any such drainage district nor accept ownership of any of the stormwater control measures.

6. This agreement shall be recorded in the Office of the County Clerk, County of Orange at the expense of the Facility owner and shall be referenced in any offering plan and/or prospectus, lease, contract of sale or future transfer, however, the failure to so reference shall not affect the validity of this Agreement. All rights, title and privileges herein granted, including all benefits and burdens, shall run with the land and shall be binding upon and inure to the benefit of the parties hereto, their respective heirs, executors, administrators, successors, assigns and legal representatives.

7. If ever the Municipality determines that the Facility Owner has failed to construct or maintain the stormwater control measures and facilities in accordance with the project plans or has failed to undertake corrective action specified by the Municipality or by the inspecting engineer, the Municipality is authorized to undertake such steps as reasonably necessary for the preservation, continuation or maintenance of the stormwater control measures and facilities and is hereby authorized by the owner to assess the expenses thereof as a lien against the property to be collected in the same fashion as other municipal taxes. In lieu thereof, the Facility Owner shall reimburse the Municipality for all actual costs and expenses, incurred in enforcing this Agreement and curing a violation.

8. At any time after a violation of this Agreement is alleged by the Municipality, the owner, at the sole discretion of the Municipality, shall post security in an amount and in a form acceptable to the Municipality to ensure the owner's future performance and maintenance of the stormwater control measures.

9. The Facility Owner hereby grants to the Village, its authorized agents, contractors and employees, a permanent easement which runs with the land to enter upon the Property at reasonable times to inspect the stormwater control measures whenever the Village deems necessary to ensure that the facility is maintained in proper working condition to meet design standards, and to undertake such steps as the Village deems reasonably necessary for the preservation, continuation or maintenance of the stormwater control measures. The Facility Owner hereby releases and shall hold the Village harmless from any damages as a result of such entry and work. It is expressly understood and agreed that the Village is under no obligation to construct or routinely maintain or repair the stormwater control facilities, and in no event shall this agreement be construed to impose any such obligation on the Village.

10. The Facility Owner shall complete the site work within one (1) year of the issuance of permits for the site work, and conduct all site disturbance work in accordance with the approved SWPPP and in compliance with the approved project plans. In the event that the Facility Owner fails to complete the site work within one (1) year of the issuance of permits for the site work or fails to maintain/repair the facilities, the Municipality, upon giving twenty (20) days written notice to the Facility Owner, and a demand to complete, perform and correct by a date certain, and upon default of said Facility Owner, the Municipality shall have the right to complete the site work and/or to maintain/repair the facilities and to take such steps as it deems appropriate to either complete the site work or to stabilize and restore the site and/or to maintain/repair the facilities, and to recover its cost per paragraph 7 above. The time required to notice may be reduced to that deemed practicable and reasonable upon recommendation of the Engineer for the Village and upon the engineer's certification that an emergency condition exists which requires action to be undertaken immediately and does not allow time to give notice to the Facility Owner and an opportunity to correct in the manner specified above.

11. The governing bodies of the parties hereto have authorized the respective signatories to this Agreement.

IN WITNESS WHEREOF, the parties have duly executed this agreement as of the day and year first above written.

VILLAGE OF SOUTH BLOOMING GROVE **NAME OF RECORD OWNER:**

By: _____ **By:** _____

George Kalaj, Mayor [Print name]

STATE OF NEW YORK:)
) SS.
COUNTY OF ORANGE:)

On the ___ day of _____, in the year 2021 before me, the undersigned, personally appeared _____ personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

STATE OF NEW YORK:)
) SS.
COUNTY OF ORANGE:)

On the ___ day of _____, in the year 2021 before me, the undersigned, personally appeared GEORGE KALAJ personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his capacity, and that by his signature on the instrument, the individual, or the person upon behalf of which the individual acted, executed the instrument.

_____
Notary Public

STORMWATER
OPERATION, MAINTENANCE AND MANAGEMENT INSPECTION CHECKLIST

Project: *****
Location: ****

Site Status: _____

Date: _____

Time: _____

Inspector: _____

Maintenance Item	Satisfactory / Unsatisfactory	Comments
1.		
2.		
3.		

Comments:

_____

_____

_____

_____

_____

_____

_____

_____

Actions to be taken:

_____

_____

_____

_____

_____

_____

_____

_____