

**PRELIMINARY STORMWATER MANAGEMENT
REPORT**

for

**Cagle Mill Residential
& Industrial Tracts**

4745 Cagle Mill Road

Lula, GA 30554



3500 Parkway Lane, Suite 500

Peachtree Corners, Georgia 30092

678-336-7740

www.pondco.com

Pond & Company Project No. 1220366

Issued: February 7th, 2025

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PROJECT DESCRIPTION

This Preliminary Hydrology Study has been prepared for Cagle Mill, residential and commercial development in Hall County, Georgia. The property consists of two lots. The lots have been surveyed at 72.67 acres and 68.76 acres and is owned by CBD Investments, LLC. Cornelia Highway (GA State Road #365) abuts the site from the northwest side and Cagle Mill Road from the southeast side. The North Oconee River crosses the site.

Based on FIRM Panel Maps 13139C0225G, dated December 1, 2022, The North Oconee River in our site is within a Special Flood Hazard Area Flood Zone “A” (Appendix A).

This project is intended to develop the site into two different parcels, commercial and residential areas. In the residential area, there will be 214 units of single-family, 97 units of townhomes, 68 cottage houses, a clubhouse, and 2 amenity areas. The commercial space will be adjacent to Cornelia Highway and mostly contain industrial-use buildings with a visitor’s parking lot.

The development is anticipated to disturb about 70 percent of the site area. More detailed explanations will be provided in the final report. The site will drain to the North Oconee River on the west side of the property, which is also part of the floodplain.

The new construction will include the installation of a new BMP as follows:

- Bioretention Basin: One (1)
- Stormwater Wet Pond: One (1)
- Enhance Swale: Four (4)
- Pond: One (1)

The following report describes the methodology and the associated analysis results to meet the proposed developments above performance criteria.

METHODOLOGY

Hydrograph modeling and pond routing is performed using Hydraflow Hydrographs Extension for AutoCAD Civil 3D 2022. Soil Conservation Service (SCS) hydrograph method is used to generate Type II 24-hour hydrographs for all pre- and post- developed basins during storm events. SCS runoff curve numbers are taken from the Georgia Stormwater Management Manual (GSMM). Curve numbers are selected based on existing and proposed ground cover located on soil group B. In cases where ground cover is not uniform over a basin area, a weighted curve number is calculated based on the area of each type of ground cover. Time of concentration calculations for each basin (pre- and post- developed) are performed in accordance with the procedure found in USDA’s Technical Release 55 Urban Hydrology for Small Watersheds (TR-55).

HYDROLOGICAL ANALYSIS

PRE-DEVELOPED CONDITIONS

The existing area of the site is primarily wooded. Onsite basins are modeled using the maximum pre-developed curve number of 55 while offsite basins are modeled using true land cover values in accordance with the Georgia Stormwater Management Manual (GSMM). The soils on site are categorized as Hydrologic Soils Group B.

For the analysis of the pre-developed conditions the site is divided into onsite basins (See Figure 3) leaving the site at four points of analysis:

- Pre-Developed Basin A is 50.20-acres with a maximum allowable CN of 55 and a time of concentration of 22 minutes. The basin is a heavily wooded area with steep slopes. All runoff from this basin is discharged from the project area via the North Oconee River.
- Pre-Developed Basin B is 6.82-acres with a maximum allowable CN of 55 and a time of concentration of 25 minutes. The basin is a heavily wooded area with steep slopes. All runoff from this basin is discharged from the project area to the northwest of the parcel onto a neighboring undeveloped parcel.
- Pre-Developed Basin C is 83.63-acres with a maximum allowable CN of 55 and a time of concentration of 17 minutes. The basin is a heavily wooded area with steep slopes. All runoff from this basin is discharged from the project area via an existing stream that feed into the North Oconee River.
- Pre-Developed Basin D is 0.77-acres with a maximum allowable CN of 55 and a time of concentration of 5 minutes. The basin is a heavily wooded area with steep slopes. All runoff from this basin is discharged from the project area as sheet flow.

Runoff from four offsite basins drain to the points of analyses as follows:

- Pre-Developed Offsite Basin A1 is 7.91-acres with a CN of 61 and a time of concentration of 12 minutes.
- Pre-Developed Offsite Basin A2 is 0.61-acres with a CN of 58 and a time of concentration of 8 minutes.
- Pre-Developed Offsite Basin C1 is 9.13-acres with a CN of 59 and a time of concentration of 6 minutes.
- Pre-Developed Offsite Basin C2 is 36.72-acres with a CN of 57 and a time of concentration of 18 minutes.

While Pre-Developed Basins A, B, C, and D all leave the existing site at different points of analysis, they all converge approximately 556 feet east of the property line downstream along the North Oconee. All combined predeveloped basins can be analyzed as one basin but for the purpose of this preliminary hydrology report, the basins are analyzed as distinct basins to model changes in runoff directly off the subject property.

POST-DEVELOPED CONDITIONS

The proposed site area includes new commercial and residential developments. Onsite and offsite basins are modeled using the true land cover values in accordance with the Georgia Stormwater Management Manual (GSMM). The soils on site are categorized as Hydrologic Soils Group B.

For the analysis of the post-developed conditions the site is divided into onsite and onsite bypass (See Figure 4).

- Post-Developed Basin A to Pond 1 is 42.27-acres with a CN of 77 and a time of concentration of 5 minutes. The basin is comprised of a portion of the proposed residential development with a majority impervious cover. All runoff from this basin is treated by the proposed wet extended detention pond and discharged from a proposed outlet control structure. Runoff within this basin is discharged into the North Oconee.
- Post-Developed Basin A Bypass is 23.91-acres with a CN of 66 and a time of concentration of 5 minutes. The basin is comprised of a proposed industrial development with a majority pervious cover. All runoff from this basin is discharged from the project area into the North Oconee.
- Post-Developed Basin B is 5.70-acres with a CN of 79 and a time of concentration of 10 minutes. The basin is comprised of a portion of the proposed residential development. All runoff from this basin is discharged from the project area to the northwest of the parcel onto a neighboring undeveloped parcel. Flows will be managed using a Best Management Practice (BMP) to control runoff and improve water quality.
- Post-Developed Basin C to Pond 2 is 56.47-acres with a CN of 71 and a time of concentration of 5 minutes. The basin is comprised of a portion of the proposed residential development with a majority impervious cover. All runoff from this basin is treated by the proposed dry extended detention pond and discharged from a proposed outlet control structure. Runoff within this basin is discharged into the North Oconee.
- Post-Developed Basin C Bypass is 12.53-acres with a CN of 62 and a time of concentration of 5 minutes. The basin is comprised of a portion of the proposed residential development with a majority pervious cover. All runoff from this basin is discharged from the project area into the North Oconee.
- Post-Developed Onsite Basin D is 0.53-acres with a CN of 61 and a time of concentration of 5 minutes. The basin is a grass slope. All runoff from this basin is discharged from the project area as sheet flow into the North Oconee.

OFFSITE CONDITIONS

Runoff from four offsite basins drain to the points of analyses as follows:

- Post-Developed Offsite Basin A to Pond 1 is 1.91-acres with a CN of 59 and a time of concentration of 12 minutes.
- Post-Developed Offsite Basin A1 Bypass is 6.0-acres with a CN of 60 and a time of concentration of 8 minutes.
- Post-Developed Offsite Basin A2 Bypass is 0.62-acres with a CN of 58 and a time of concentration of 8 minutes.
- Post-Developed Offsite Basin C to Pond 2 is 36.72-acres with a CN of 57 and a time of concentration of 18 minutes.
- Post-Developed Offsite Basin C Bypass is 9.13-acres with a CN of 59 and a time of concentration of 6 minutes.

As with the Pre-Developed Basins, although the Post-Developed Basins leave the site at different points of analysis, they all converge approximately 556 feet east of the property line downstream along the North Oconee. All combined predeveloped basins can be analyzed as one basin but for the purpose of this preliminary hydrology report, the basins are analyzed as distinct basins to model changes in runoff directly off the subject property.

BASIN SUMMARY

Pre-Dev Basin A Flow Summary					
Basin ID	Return Freq.	Pre-Dev A (cfs)	Offsite A1 (cfs)	Offsite A2 (cfs)	Total Pre Dev A (cfs)
A	1	6.2	4.0	0.2	8.9
	2	12.9	6.5	0.4	17.3
	5	29.1	11.4	0.8	37.0
	10	46.9	16.1	1.2	58.6
	25	77.4	23.6	1.8	95.2
	50	104.4	30.0	2.3	127.5
	100	134.7	37.1	2.9	163.7

Post-Dev Basin A Flow Summary								
Basin ID	Return Freq. (cfs)	Post-Dev A to Pond 1 (cfs)	Offsite A to Pond 1 (cfs)	Pond 1 Routed (cfs)	Post-Dev A Bypass (cfs)	Offsite A1 Byp. (cfs)	Offsite A2 Byp. (cfs)	Total Post-Dev A
A	1	92.3	0.7	3.6	3.4	3.2	0.2	6.1
	2	115.5	1.3	4.1	5.6	5.2	0.4	8.6
	5	158.1	2.4	4.8	9.9	9.1	0.8	14.1
	10	197.2	3.4	13.6	14.2	13.0	1.2	18.7
	25	255.6	5.2	48.4	20.9	19.1	1.8	61.0
	50	303.4	6.7	96.6	26.7	24.4	2.3	115.8
	100	353.8	8.3	148.6	33.1	30.2	2.9	177.6

Basin B Flow Summary			
Basin ID	Return Freq.	Pre-Dev B (cfs)	Post-Dev B (cfs)
B	1	0.8	11.5
	2	1.6	14.4
	5	3.6	19.6
	10	5.8	24.3
	25	9.5	31.3
	50	12.9	37.0
	100	16.6	43.0

Pre-Dev Basin C Flow Summary					
Basin ID	Return Freq.	Pre-Dev C	Offsite C1	Offsite C2	Total Pre Dev C
C	1	6.7 cfs	0.1 cfs	30.5 cfs	32.5 cfs
	2	7.8	0.1	36.6	39.0
	5	9.8	0.2	47.5	50.5
	10	11.5	0.2	56.9	60.6
	25	13.9	0.2	70.8	75.4
	50	15.9	0.3	82.0	87.4
	100	17.9	0.3	93.7	99.9

Post-Dev Basin C Flow Summary							
Basin ID	Return Freq.	Post-Dev C to Pond 2 (cfs)	Offsite C to Pond 2 (cfs)	Pond 2 Routed (cfs)	Post-Dev C Onsite Bypass (cfs)	Offsite C Byp. (cfs1)	Total Post-Dev C (cfs)
C	1	89.3	7.6	5.7	9.8	4.9	18.6
	2	116.9	14.2	10.3	14.6	8.1	27.4
	5	168.5	29.1	38.7	23.9	14.3	44.1
	10	215.7	44.7	73.9	32.9	20.4	90.6
	25	288.2	70.2	143.6	46.9	30.1	180.1
	50	349.7	92.5	202.0	58.9	38.4	257.7
	100	415.4	117.4	265.7	71.9	47.5	341.9

Basin D Flow Summary			
Basin ID	Return Freq.	Pre-Dev D (cfs)	Post-Dev D (cfs)
D	1	0.2	0.4
	2	0.4	0.6
	5	0.9	1.0
	10	1.3	1.3
	25	2.1	1.9
	50	2.7	2.4
	100	3.4	2.9

STORMWATER MANAGEMENT DESIGN

The purpose of this section is to present a method for conformance with the current Clayton County Water Authority’s Stormwater Regulations and Georgia’s Stormwater Management Manual (GSMM) for the proposed development. The stormwater facilities herein will conform to the current Clayton County Water Authority’s regulations as well as Vol 2 of the Georgia Stormwater Management Manual, Latest Edition.

WATER QUALITY / RUNOFF REDUCTION

As of December 2020, the State of Georgia implemented Runoff Reduction practices as a stormwater Best Management Practice used to disconnect impervious and disturbed pervious surfaces from the storm drainage system. The purpose of this is to reduce post-construction

stormwater runoff rates, volumes, and pollutant loads. The Runoff Reduction Volume (RRv) is the retention of the volume calculated to infiltrate, evapotranspire, harvest and use or otherwise remove runoff from a post-developed condition to mimic the natural hydrological conditions more closely.

The proposed development will utilize a system of bioretention basins, enhanced swales, wet ponds, and dry extended detention basins to achieve the maximum practical extent possible of the required RRv for the project area. As part of the State of Georgia's implementation of the Watershed Protection Plan, developments that do not meet the full RRv requirements are required to capture and treat the first 1.2 inches of rainfall to remove a significant portion of the total pollution load inherent in the stormwater runoff.

To analyze the TSS loading for individual developments, GSMM has provided the Stormwater Quality Site Development Review Tool (See Appendix D).

CHANNEL PROTECTION

The Channel Protection criteria are typically achieved by providing 24 hours of extended detention for runoff generated by the 1-year, 24-hour rainfall event. The overbank flood protection criteria generally are achieved by attenuating the post-development flows not to exceed the predevelopment flows for the 1, 2, 5, 10, and 25-year storm events. The extreme flood protection criteria are typically achieved by safely controlling and conveying the 100-year storm event.

OVERBANK FLOOD PROTECTION

As is shown in the basin summary of this report, the proposed project attenuates peak runoff flows in all return frequency storm events. In addition to attenuation, the project area discharges through a proposed storm network directly into the floodplain of the North Oconee.

EXTREME FLOOD PROTECTION

It is recommended that these criteria are not required for this project due to the nature of the development and the site's proximity to the 100-year floodplain. While this site is anticipated to contribute pollutants via stormwater runoff to be treated by the water quality measures listed above, the expected increase in peak runoff flows will not be significant, and flooding will not be exacerbated. See below for a summary of peak runoff rates for all storm events and Appendix D for Hydraflow Hydrograph model results.

10 % BASIN

As described in the Georgia Stormwater Management Manual, the point at which the site accounts for 10% of the total drainage basin (10% point) typically reveals the most severe issues regarding the timing of hydrographs.

Since the site area (141.43 ac) is less than 10% of the total drainage area (3,251.52 ac), a downstream analysis will be located at POA 10%.

10% Basin Flow Summary			
Basin ID	Return Freq.	10% Pre (cfs)	10% Post (cfs)
A	1	8.9	6.1
	2	17.3	8.6
	5	37.0	14.1
	10	58.6	18.7
	25	95.2	61.0
	50	127.5	115.8
	100	169.7	177.6

CONCLUSION

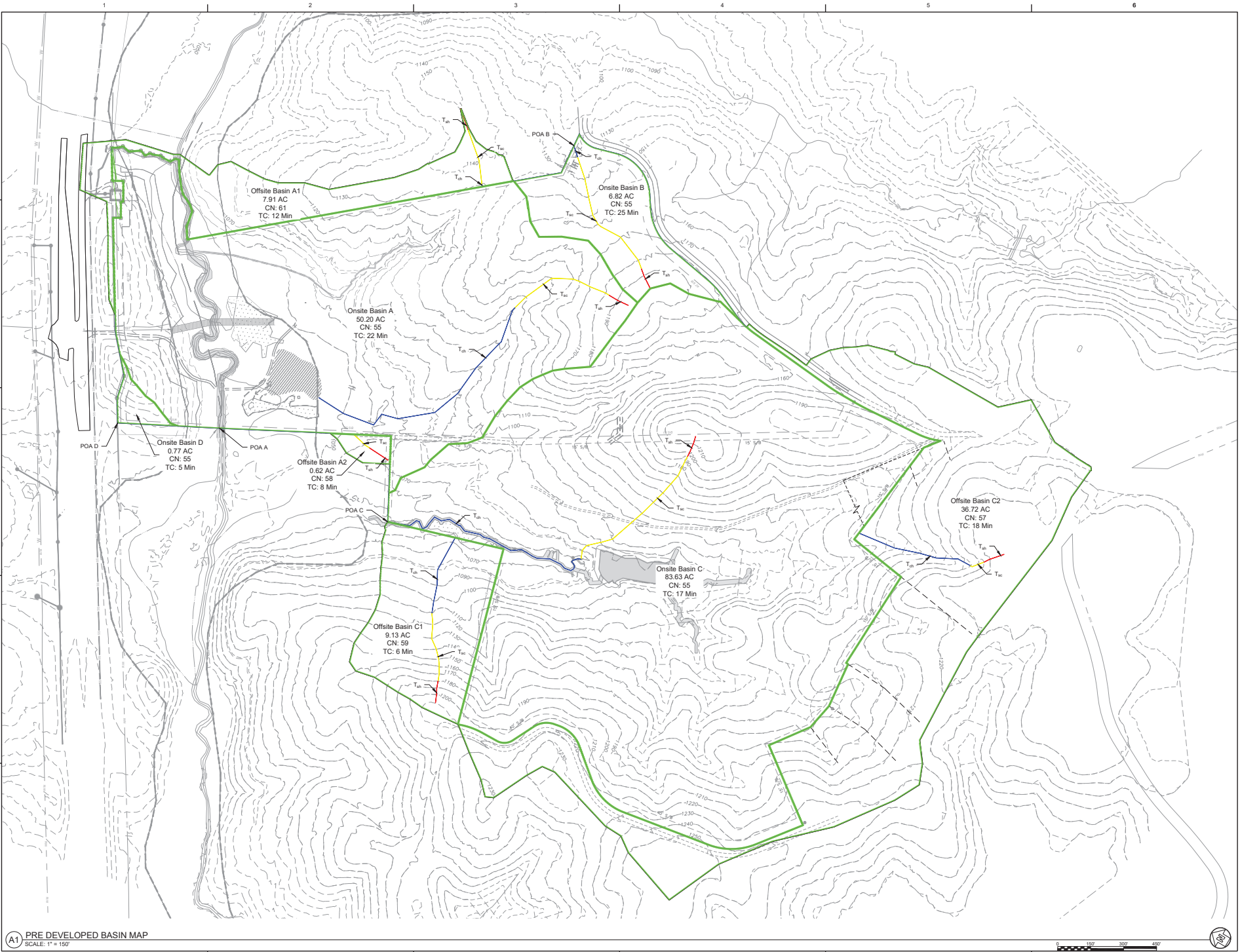
This hydrology study report demonstrates that the stormwater best management practices designed herein will satisfy stormwater management and storm drainage requirements of Clayton County for the project based on the following conclusions:

1. The stormwater management for this project achieves the maximum practical extent possible of the required RRv. To comply with stormwater regulations, the first 1.2 inches of runoff is treated and meets the TSS requirements. Stormwater treatment is proposed via water quality measures listed with the North Georgia Post-Construction Stormwater Technology Assessment Protocol to ensure that it meets the 80% TSS requirement where runoff reduction is not viable.
2. Peak flows are anticipated to increase due to this project, but not significantly. In addition, the site is adjacent to the Creek floodplain area. Due to these conditions, it is recommended that Channel Protection, Overbank Flood Protection, and Extreme Flood Protection criteria be waived for this project.

The stormwater management facilities will continue to meet the regulatory requirements discussed herein only if the facilities are properly maintained on a regular basis. Any sediment or trash accumulation in the facilities should be removed immediately.

This report and associated construction plans pertain to those topics expressly stated herein. No evaluation has been made by the designer with regards to any other topic including but not limited to: structural or geotechnical evaluations, environmental evaluations, etc.

FIGURE 3: PRE-DEVELOPED BASINS

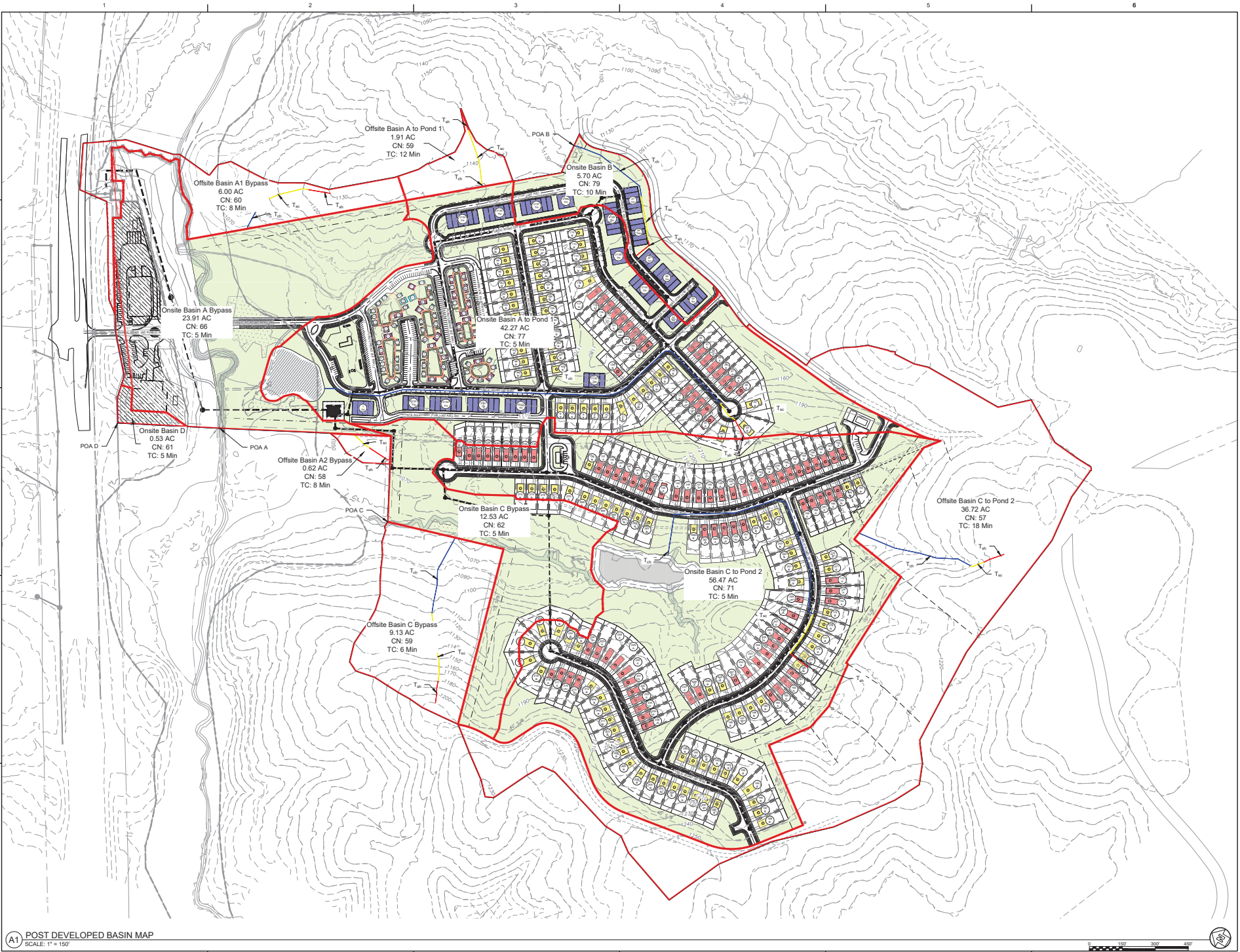


FILE PATH: X:\P\2012\2003\04 CAD_BMAP\02 CAD\REF\001_06-17 REZONING CONCEPTS\HYDROLOGY\HYDRO\PLT\012.DWG BY: HARRISON, MICHAEL DATE: 7/26/14

A1 PRE DEVELOPED BASIN MAP
 SCALE: 1" = 150'



FIGURE 4: POST-DEVELOPED BASINS



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A1 POST DEVELOPED BASIN MAP
 SCALE: 1" = 150'



APPENDIX A

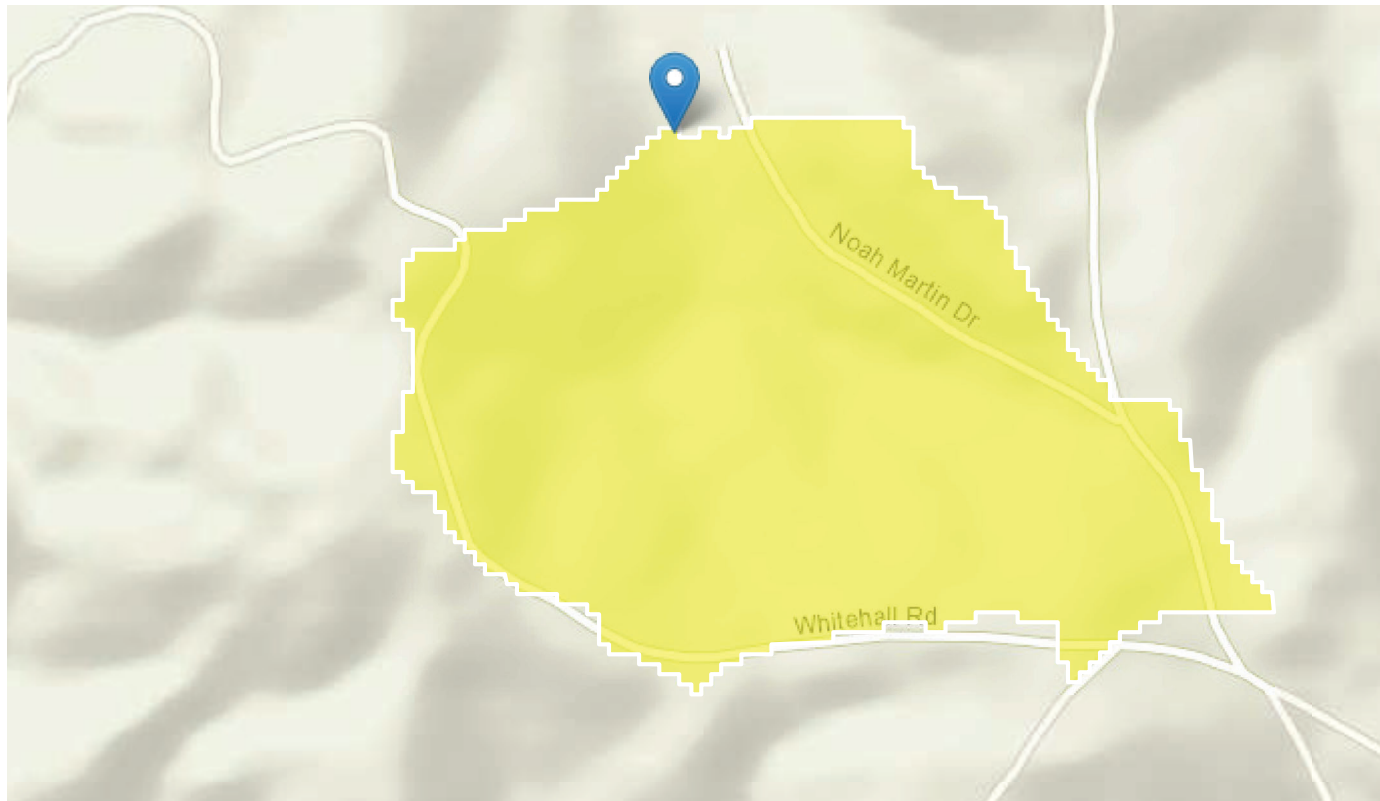
Cagle Mill Phase 2- StreamStats Report

Region ID: GA

Workspace ID: GA20240228150937256000

Clicked Point (Latitude, Longitude): 34.36732, -83.72267

Time: 2024-02-28 10:09:59 -0500



 Collapse All

➤ Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLDEM10M	Mean basin slope computed from 10 m DEM	15.896	percent
CSL10_85	Change in elevation divided by length between points 10 and 85 percent of distance along main channel to basin divide - main channel method not known	315	feet per mi
DRNAREA	Area that drains to a point on a stream	0.12	square miles
ELEV	Mean Basin Elevation	1180	feet

Parameter Code	Parameter Description	Value	Unit
ELEVMAX	Maximum basin elevation	1261	feet
GWHEAD	Mean basin elevation minus minimum basin elevation	106	feet
I24H100Y	Maximum 24-hour precipitation that occurs on average once in 100 years	7.76	inches
I24H10Y	Maximum 24-hour precipitation that occurs on average once in 10 years	5.38	inches
I24H25Y	Maximum 24-hour precipitation that occurs on average once in 25 years	6.3	inches
I24H50Y	Maximum 24-hour precipitation that occurs on average once in 50 years	7.02	inches
LC06AGRI	Percent agriculture computed as total of grass, pasture, and crops, NLCD classes 71, 81 and 82	1.153	percent
LC06DEV	Percentage of land-use from NLCD 2006 classes 21-24	12.536	percent
LC06FOREST	Percentage of forest from NLCD 2006 classes 41-43	85.253	percent
LC06IMP	Percentage of impervious area determined from NLCD 2006 impervious dataset	1.12	percent
LC11DEV	Percentage of developed (urban) land from NLCD 2011 classes 21-24	13.1	percent
LC11IMP	Average percentage of impervious area determined from NLCD 2011 impervious dataset	1.49	percent
MINBELEV	Minimum basin elevation	1074	feet
PCTREG1	Percentage of drainage area located in Region 1 - Piedmont / Ridge and Valley	100	percent
PCTREG2	Percentage of drainage area located in Region 2 - Blue Ridge	0	percent
PCTREG3	Percentage of drainage area located in Region 3 - Sandhills	0	percent
PCTREG4	Percentage of drainage area located in Region 4 - Coastal Plains	0	percent
PCTREG5	Percentage of drainage area located in Region 5 - Lower Tifton Uplands	0	percent

Parameter Code	Parameter Description	Value	Unit
PRECPRIS00	Basin average mean annual precipitation for 1971 to 2000 from PRISM	57.2	inches
RELIEF	Maximum - minimum elevation	187	feet
RRMEAN	Relief ratio defined as $(ELEV-MINBELEV)/(ELEVMAX-MINBELEV)$	0.569	dimensionless

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

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Application Version: 4.19.4

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1

APPENDIX B

ALTANSPS SURVEY FOR: CHICAGO TITLE INSURANCE COMPANY & ACM VENTURES, LLC

THIS BLOCK RESERVED FOR THE CLERK OF THE SUPERIOR COURT

- LEGEND**
- CALCULATED POSITION
 - IRON PIN FOUND/SET
 - MONUMENT
 - CONCRETE TOP PIPE
 - GEE BOX
 - OPEN TOP PIPE
 - PLATE BOX
 - PAID
 - TELEPHONE (TP)
 - WATER METER (WM)
 - POWER POLE (PP)
 - REBAR
 - SILEX CONTROL STRUCTURE
 - CORRUGATED PLASTIC
 - GRATE INLET
 - DRAIN PIPE
 - GANTRY (GEM)
 - LAND LOT LINE (L.L.L.)
 - ALIEN
 - FENCE
 - OVERHEAD POWER
- ZONING INFORMATION-**
- COUNTY: HALL
ZONE: AR-II & AR-IV
SETBACK REQUIREMENTS:
FRONT: 40'
REAR: 20'
SIDE: 15'

-ALTA NOTES-

NO CEMETERIES WERE OBSERVED ON SITE AT TIME OF SURVEY.
ACTIVE EARTHWORK WAS OBSERVED ON SITE AT TIME OF SURVEY.
NO STATE WATERS OR WETLANDS WERE OBSERVED ON SITE AT TIME OF SURVEY.
SITE ADDRESS: 8324 MAIN STREET

PER MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS (EFFECTIVE 2/23/2021) (G.O.): BOUNDARY DEFINED BY WATER BOUNDARY IS SUBJECT TO CHANGE DUE TO NATURAL CAUSES AND MAY OR MAY NOT REPRESENT THE ACTUAL LOCATION OF THE LIMIT OF TITLE. PROPERTY HAS DIRECT ROAD ACCESS TO CAGLE MILL ROAD, AND CORNELIA HIGHWAY, HOWEVER ADDITIONAL PERMITTING MAY BE REQUIRED TO ALTER OR ADD ACCESS POINTS.

-AS SURVEYED- LEGAL DESCRIPTION

All that tract or parcel of land lying and being in the Lula District, 1690 G.M.D., Hall County, Georgia and being more particularly described as follows:

COMMENCING at a point at the center line intersection of Cornelia Highway (A.K.A -Georgia Highway 365 with a variable right-of-way) and Whitehall Road;

THENCE, N65°13'31" E a distance of 558.73' to a 1/2" rebar found at the southeasterly right-of-way of Cornelia Highway; add 1/2" rebar found being the POINT OF BEGINNING;

THENCE, along the southeasterly right-of-way of Cornelia Highway, N51°12'45" E a distance of 114.40' to a point;

THENCE, continuing along the southeasterly right-of-way of Cornelia Highway, N41°23'31" E a distance of 105.84' to a point;

THENCE, continuing along the southeasterly right-of-way of Cornelia Highway, N41°23'31" E a distance of 201.81' to a point;

THENCE, continuing along the southeasterly right-of-way of Cornelia Highway, N51°17'49" E a distance of 52.45' to a point;

THENCE, leaving the southeasterly right-of-way of Cornelia Highway, S37°11'56" E a distance of 10.17' to a point;

THENCE, N53°11'56" E a distance of 73.74' to a point;

THENCE, S37°11'56" E a distance of 2.89' to a point;

THENCE, N53°11'56" E a distance of 84.51' to a point at the southeasterly right-of-way of Cornelia Highway;

THENCE, along the southeasterly right-of-way of Cornelia Highway, with a curve to the left, having an arc length of 120.51' and a radius of 1357894.45', with a chord bearing of N15°11'21" E and a chord length of 150.51' to a point at the centerline of a stream;

THENCE, leaving the southeasterly right-of-way of Cornelia Highway and along the centerline of the stream, the following courses and distances:

S28°50'03" E a distance of 31.52' to a point; S44°21'59" E a distance of 20.77' to a point; S03°11'08" W a distance of 36.93' to a point; S43°02'29" E a distance of 12.82' to a point; S14°46'52" E a distance of 41.52' to a point; S21°01'07" W a distance of 29.68' to a point; S62°29'59" E a distance of 24.76' to a point; S14°36'48" E a distance of 16.99' to a point; S20°03'03" E a distance of 41.52' to a point; S00°26'37" W a distance of 13.24' to a point; S11°18'23" E a distance of 38.83' to a point; S68°19'26" E a distance of 25.08' to a point; S20°04'45" E a distance of 19.26' to a point; S57°49'17" W a distance of 11.75' to a point; S20°31'32" W a distance of 38.83' to a point; S48°31'17" W a distance of 37.15' to a point; S44°42'11" W a distance of 40.10' to a point; S38°03'50" W a distance of 28.80' to a point; S17°35'11" W a distance of 44.56' to a point; S23°04'47" W a distance of 14.42' to a point; S24°40'08" W a distance of 31.63' to a point; S72°29'48" W a distance of 45.48' to a point; S79°34'58" W a distance of 11.47' to a point; S49°33'11" W a distance of 61.63' to a point;

THENCE, leaving the centerline of stream, S47°40'59" E a distance of 1728.25' to a 1/2" rebar found;

THENCE, N74°32'24" E a distance of 196.66' to a 1/2" rebar found at the westerly right-of-way of Cagle Mill Road (right-of-way);

THENCE, along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 104.74' and a radius of 1116.00', with a chord bearing of S03°54'12" W and a chord length of 101.09' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S23°10'28" E a distance of 34.22' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 257.36' and a radius of 205.00', with a chord bearing of S14°27'27" E and a chord length of 240.79' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S48°45'23" W a distance of 87.20' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 208.94' and a radius of 250.00', with a chord bearing of S44°42'11" W and a chord length of 192.56' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S02°44'50" W a distance of 22.40' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 370.00' and a radius of 370.00', with a chord bearing of S24°45'40" W and a chord length of 30.40' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S16°44'45" W a distance of 122.87' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 107.52' and a radius of 330.00', with a chord bearing of S02°24'42" W and a chord length of 101.09' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S01°55'21" E a distance of 410.83' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, with a curve to the left, having an arc length of 78.24' and a radius of 830.00', with a chord bearing of S04°32'23" E and a chord length of 78.24' to a point;

THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S07°19'24" E a distance of 49.75' to a 1/2" rebar set;

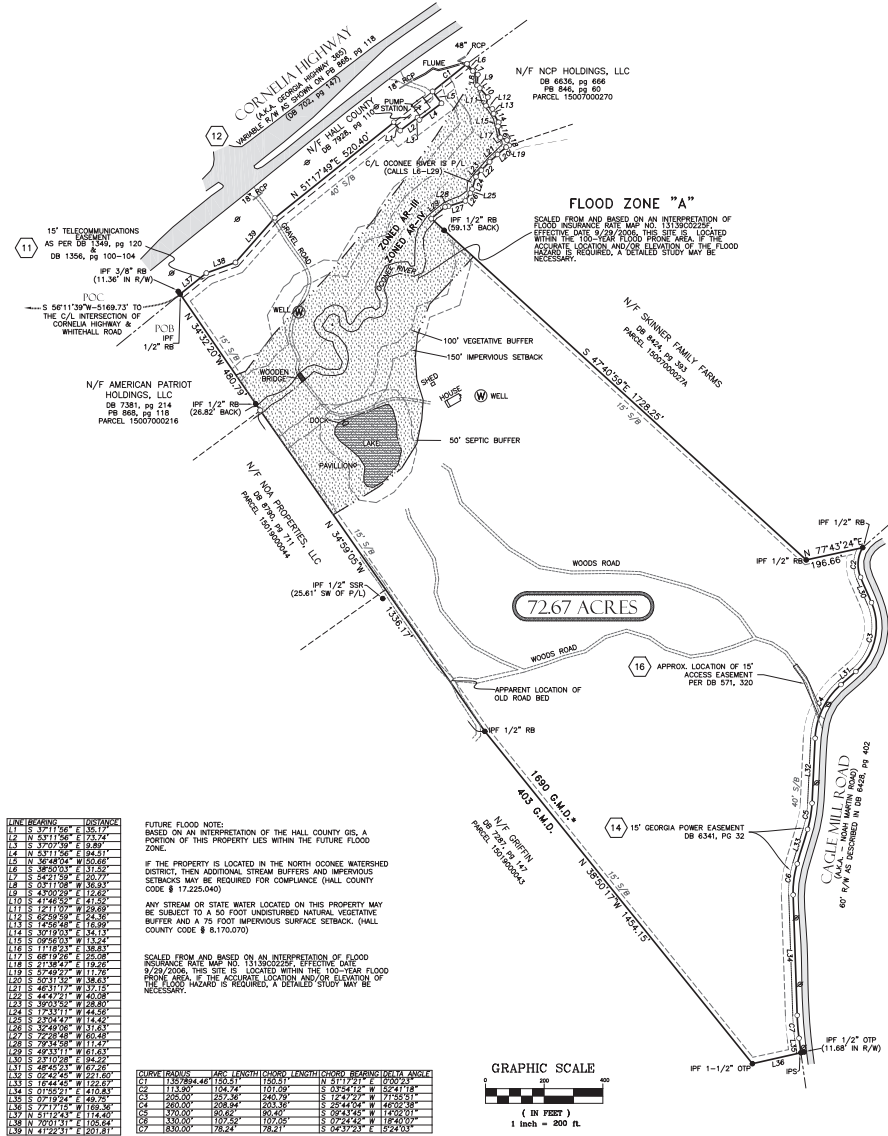
THENCE, continuing along the westerly right-of-way of Cagle Mill Road, S77°11'51" W a distance of 169.36' to a 1/2" rebar open top pipe found;

THENCE, N89°01'11" W a distance of 136.93' to a 1/2" rebar found;

THENCE, N43°59'05" W a distance of 136.93' to a point;

THENCE, N43°22'01" W a distance of 480.29' to a 1/2" rebar found; add 1/2" rebar found and being the POINT OF BEGINNING.

Sold property containing 72.67 acres.



-SURVEY NOTES-

FIELD MEASUREMENTS WERE TAKEN WITH A TRIMBLE SR PODESTIC INSTRUMENT.

FIELD DATA FOUND TO HAVE A CLOSURE PRECISION OF 1 FOOT IN 15,310 FEET, AND AN ANGULAR ERROR OF 4 SECONDS PER ANGLE.

FIELD DATA ADJUSTED USING THE LEAST SQUARES METHOD.

THIS PLAN HAS BEEN CALCULATED FOR CLOSURE AND FOUND TO HAVE A PRECISION OF 1 FOOT IN 554,049 FEET.

THIS PLAN DOES NOT CONSTITUTE AND SHALL NOT BE CONSIDERED AS A TITLE SEARCH OR REPORT, AND THIS MAY BE SUBJECT TO ANY EASEMENTS, RIGHTS OF WAY OR RESTRICTIONS ONE MAY FIND.

THIS PLAN WAS PREPARED FOR THE EXCLUSIVE USE OF THE PERSON, PERSONS OR ENTITY NAMED ON THIS PLAN.

THIS DOES NOT EXTEND TO ANY UNMANNED THIRD PARTY WITHOUT AN EXPRESSED STATEMENT BY THE SURVEYOR.

TYPE OF SURVEY: ALTA/NSPS

SOURCE OF TITLE DESCRIPTION FOR PROPERTY IS: 1507 000234

PROPERTY OWNERS AS OF SURVEY DATE: CDB INVESTMENTS, LLC

PARCEL NUMBER: 15007 000234

SITE ADDRESS: 4745 CAGLE MILL ROAD, LULA, GEORGIA

- TITLE EXCEPTIONS-**
AS PER ISSUING OFFICE NO. 4654
- All matters on shown on plot of survey for Roy Sweet dated November 5, 1972, last revised November 15, 1985, recorded in Plat Book 108, Page 78, Hall County, Georgia Deed Records. (AFFECTS- AS SHOWN)
 - Judgment in favor of Southern Bell Telephone and Telegraph Company dated June 7, 1989, recorded in Deed Book 1356, Pages 100-104, Hall County, Georgia Deed Records. (AFFECTS- AS SHOWN)
 - Right of Way Deed to Department of Transportation dated August 2, 1979, recorded in Deed Book 700, Page 147, Hall County, Georgia Deed Records. (AFFECTS- AS SHOWN)
 - Rights of upper and lower riparian owners in and to the waters of creeks crossing or adjoining the property, and the natural flow thereof, free from diminution or pollution. (AFFECTS- AS SHOWN)
 - Easement to Georgia Power Company dated February 26, 2008, recorded in Deed Book 6341, Pages 32-35, Hall County, Georgia Deed Records. (AFFECTS- AS SHOWN)
 - Right of Way Deed to Hall County dated September 3, 1999, recorded in Deed Book 3556, Page 317, Hall County, Georgia Deed Records. (DOES NOT AFFECT)
 - Subject to Easement described in Indenture from Georgia Kraft Company to Arthur F. Rees, Jr. dated April 1, 1975, recorded in Deed Book 571, Pages 319-320, Hall County Georgia Deed Records. (AFFECTS- AS SHOWN)
 - Certificate of Merger from Rome Kraft Company to Georgia Kraft Company, dated December 6, 1973, recorded in Deed Book 548, Page 432, Hall County, Georgia Deed Records. (NOT A SURVEY MATTER)
 - All matters shown on plot of survey for Roy W. Sweet dated August 26, 2021, as prepared by Davis Engineering & Surveying, P.L.L.C. reveals the following:
 - A portion of the property is located within the 100-year flood zone area;
 - A portion of the property is located within a 25' state waters buffer;
 - A portion of the property is located within a 50' impervious setback;
 - A portion of the property is located with a 75' impervious setback
 - The Occone River forms the northeast property line
 - 12 telecommunication easement running across northeast portion of subject property. (AFFECTS- AS SHOWN)

"DEEDS AND PLATS RECOVERED DURING THE COURSE OF THIS SURVEY DESCRIBE THE SUBJECT PROPERTY TO LIE WITHIN MULTIPLE GEORGIA MILITIA DISTRICTS, LISTED BELOW ARE DOCUMENTS FOUND AND THE CORRESPONDING G.M.D. THE PROPERTY IS CITED TO LIE WITHIN, THIS LIST SHOULD NOT BE CONSIDERED CONCLUSIVE, NOR DOES IT CONSTITUTE A TITLE SEARCH:

DB 3714, PGS 73-75 -- GLADE DISTRICT, G.M.D. 403
 DB 3714, PGS 70-72 -- GLADE DISTRICT, G.M.D. 403
 DB 3723, PGS 82-84 -- GLADE DISTRICT, G.M.D. 403
 DB 6428, PGS 399-403 -- LULA DISTRICT, G.M.D. 1690
 DB 702, PG 147 LULA DISTRICT, G.M.D. 1690
 PB 57, PG 54 -- GLADE DISTRICT, G.M.D. 403
 PB 108, PG 78 -- G.M. 1680
 PB 872, PG 237 -- LULA DISTRICT G.M.D. 1690

G.O.D.T.1 RIGHT-OF-WAY PLANS FOR PROJECT E-013-1(29) AND SUPPLEMENTAL RIGHT-OF-WAY DEEDS SHOW THE PROPERTY TO LIE WITHIN G.M.D. 1690. ADDITIONALLY, U.S. CENSUS DATA FOR HALL COUNTY FROM 1940 MAKES REFERENCE ONLY TO A DISTRICT 1690, LULA, AND DISTRICT 403, GLADE, WHEREAS THERE IS NO MENTION OF A 1680 DISTRICT.

TO: CHICAGO TITLE INSURANCE COMPANY AND ACM VENTURES, LLC

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS. THIS PLAN COMPLIES WITH THE MINIMUM TECHNICAL STANDARDS FOR PROFESSIONAL SURVEYING SET FORTH IN RULES AND REGULATIONS OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND AS SET FORTH IN O.C.G.A. SECTION 15-6-67.

FIELD WORK WAS COMPLETED ON 8/27/2021. DATE OF PLAT OR MAP: 16th DAY OF MAY, 2022

DUSTY L. LOWMAN PLS# 3216

AS REQUIRED BY SUBSECTION (6) OF O.C.G.A. SECTION 15-6-67, THIS PLAN HAS BEEN PREPARED BY A LAND SURVEYOR APPROVED BY THE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS. APPROVAL CERTIFICATES, SIGNATURES, STAMPS OR STATEMENTS HEREON, SUCH APPROVALS OR AFFIRMATIONS SHALL BE CONSIDERED VALID AND EFFECTIVE FOR THE PURPOSES OF THIS PLAN AS INTENDED USE OF ANY PARCEL. FURTHERMORE, THE UNDERSIGNED SURVEYOR CERTIFIES THAT THIS PLAN COMPLIES WITH THE MINIMUM TECHNICAL STANDARDS FOR PROFESSIONAL SURVEYING SET FORTH IN RULES AND REGULATIONS OF THE GEORGIA BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND AS SET FORTH IN O.C.G.A. SECTION 15-6-67.

DUSTY L. LOWMAN PLS# 3216

SURVEYOR CERTIFICATION

NO. 3216

PREPARED BY
DES DAVIS
 ENGINEERING & SURVEYING
 133 PROMINENCE COURT
 SUITE 210
 DAWSONVILLE, GA 30534
 PHONE: (706) 265-1234
 DAVISENGINEERS.COM

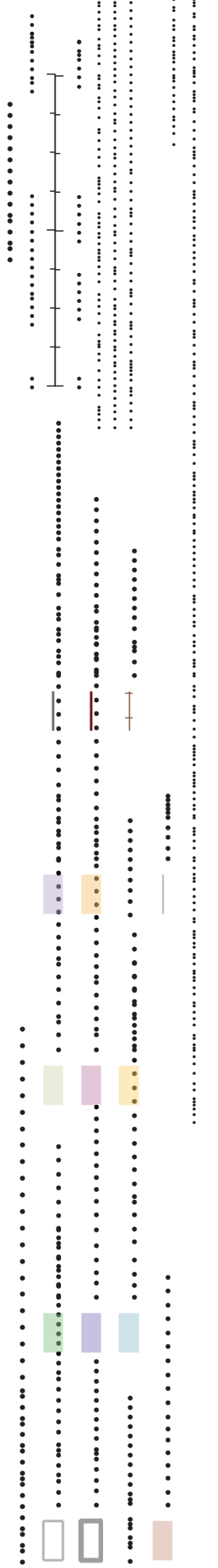
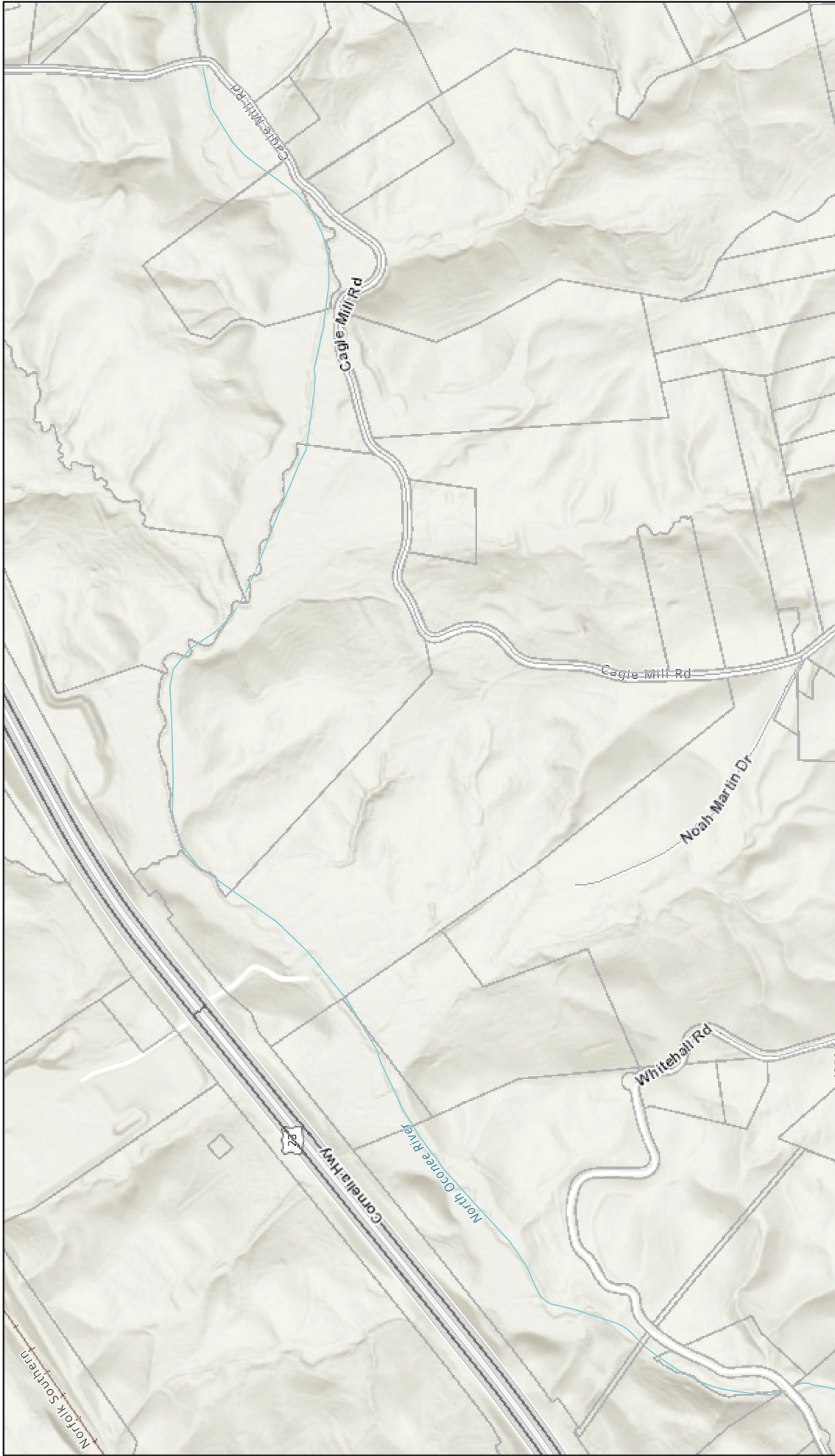


ALTA/NSPS LAND TITLE SURVEY FOR
 CHICAGO TITLE INSURANCE COMPANY AND ACM VENTURES, LLC
 LULA DISTRICT
 1690th G.M.D.
 HALL COUNTY, GEORGIA

REVISIONS BY: FA
 REVISION DATE: 05/16/22
 REVISIONS BY: DS
 REVISION DATE: 1/18/2022

DRAWN BY: DS
 FIELD CREW: AM
 PLAT DATE: 8/26/2021
 FIELD DATE: 7/30/2021

SHEET NO.
 1 of 1
 PROJECT NO.
 21-239



APPENDIX C

Custom Soil Resource Report Soil Map




Map Scale: 1:12,900 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N 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 1:20,000.

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: Barrow, Hall, and Jackson Counties, Georgia
 Survey Area Data: Version 18, Aug 30, 2023

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

Date(s) aerial images were photographed: Mar 19, 2022—Apr 20, 2022

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Cc	Cartecay and Chewacla soils	18.0	2.5%
MdD	Madison sandy loam, 10 to 15 percent slopes	9.6	1.3%
MdE	Madison sandy loam, 15 to 25 percent slopes	232.6	32.5%
MIC2	Madison sandy clay loam, 6 to 10 percent slopes, moderately eroded	19.6	2.7%
MID2	Madison sandy clay loam, 10 to 15 percent slopes, moderately eroded	225.0	31.5%
MuF	Musella cobbly clay loam, 15 to 35 percent slopes	54.2	7.6%
PaE	Pacolet sandy loam, 15 to 25 percent slopes	25.7	3.6%
PTF	Pacolet-Tallapoosa association, steep	66.0	9.2%
To	Toccoa soils	63.6	8.9%
W	Water	0.8	0.1%
Totals for Area of Interest		715.0	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different

Custom Soil Resource Report

management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Appendix D

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

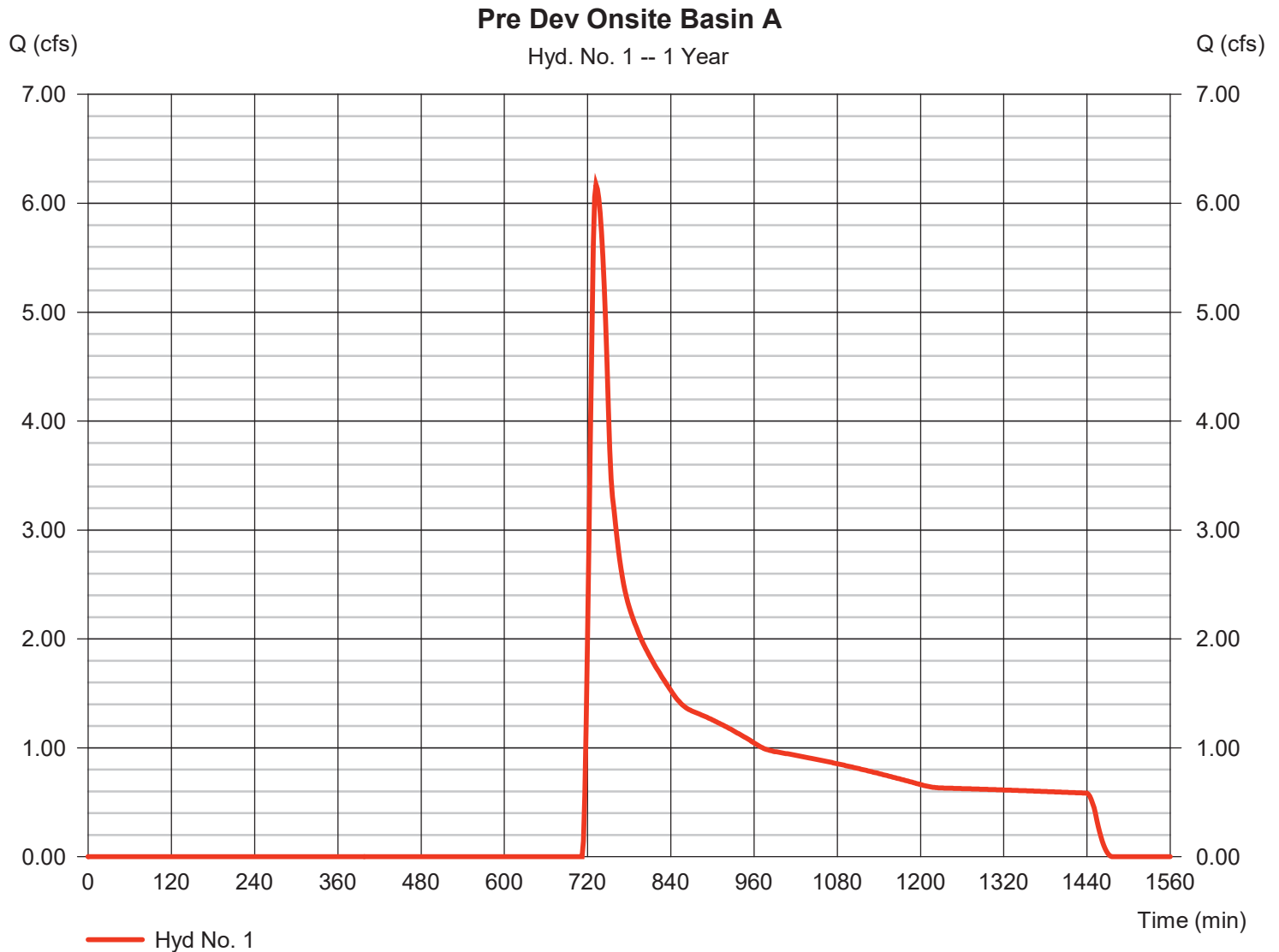
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	6.172	2	732	52,053	----	----	----	Pre Dev Onsite Basin A
2	SCS Runoff	4.047	2	722	14,370	----	----	----	Pre Dev Offite Basin A1
3	SCS Runoff	0.242	2	722	848	----	----	----	Pre Dev Offsite Basin A2
5	Combine	8.904	2	728	67,271	1, 2, 3,	----	----	Pre Dev Basin A Total
7	SCS Runoff	92.31	2	718	184,668	----	----	----	Post Dev Onsite Basin A to Pond 1
8	SCS Runoff	0.740	2	724	2,944	----	----	----	Post Dev Offsite Basin A to Pond 1
9	SCS Runoff	3.174	2	720	9,757	----	----	----	Post Dev Offsite Basin A1 Bypass
10	SCS Runoff	0.242	2	722	848	----	----	----	Post Dev Offsite Basin A2 Bypass
12	Combine	92.77	2	718	187,611	7, 8,	----	----	Post Dev Basin A to Pond 1
13	Reservoir	3.601	2	832	171,640	12	1056.29	101,286	Post Dev Pond 1 Routed
15	Combine	6.085	2	722	182,245	9, 10, 13,	----	----	Post Dev Basin A Total
17	SCS Runoff	0.639	2	734	5,716	----	----	----	Pre Dev Onsite Basin B
18	SCS Runoff	11.52	2	722	30,134	----	----	----	Post Dev Onsite Basin B
20	SCS Runoff	11.31	2	730	85,196	----	----	----	Pre Dev Onsite Basin C
21	SCS Runoff	5.649	2	718	13,919	----	----	----	Pre Dev Offsite Basin C1
22	SCS Runoff	7.613	2	728	45,786	----	----	----	Pre Dev Offsite Basin C2
24	Combine	20.00	2	728	144,901	20, 21, 22,	----	----	Pre Dev Basin C Total
26	SCS Runoff	89.33	2	718	180,416	----	----	----	Post Dev Onsite Basin C to Pond 2
27	SCS Runoff	7.613	2	728	45,786	----	----	----	Post Dev Offsite Basin C to Pond 2
28	SCS Runoff	9.782	2	718	22,362	----	----	----	Post Dev Onsite Basin C Bypass
29	SCS Runoff	4.930	2	718	12,792	----	----	----	Post Dev Offsite Basin C Bypass
31	Combine	91.72	2	718	226,203	26, 27,	----	----	Post Dev Basin C to Pond 2
32	Reservoir	5.690	2	818	226,184	31	1106.11	93,413	Post Dev Pond 2 Routed
34	Combine	18.69	2	718	261,338	28, 29, 32,	----	----	Post Dev Basin C Total
36	SCS Runoff	0.204	2	720	735	----	----	----	Pre Dev Onsite Basin D
37	SCS Runoff	0.370	2	718	875	----	----	----	Post Dev Onsite Basin D
1220263 Hydrology Concept.gpw					Return Period: 1 Year			Friday, 01 / 31 / 2025	

Hydrograph Report

Hyd. No. 1

Pre Dev Onsite Basin A

Hydrograph type	= SCS Runoff	Peak discharge	= 6.172 cfs
Storm frequency	= 1 yrs	Time to peak	= 732 min
Time interval	= 2 min	Hyd. volume	= 52,053 cuft
Drainage area	= 50.200 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 22.00 min
Total precip.	= 3.30 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

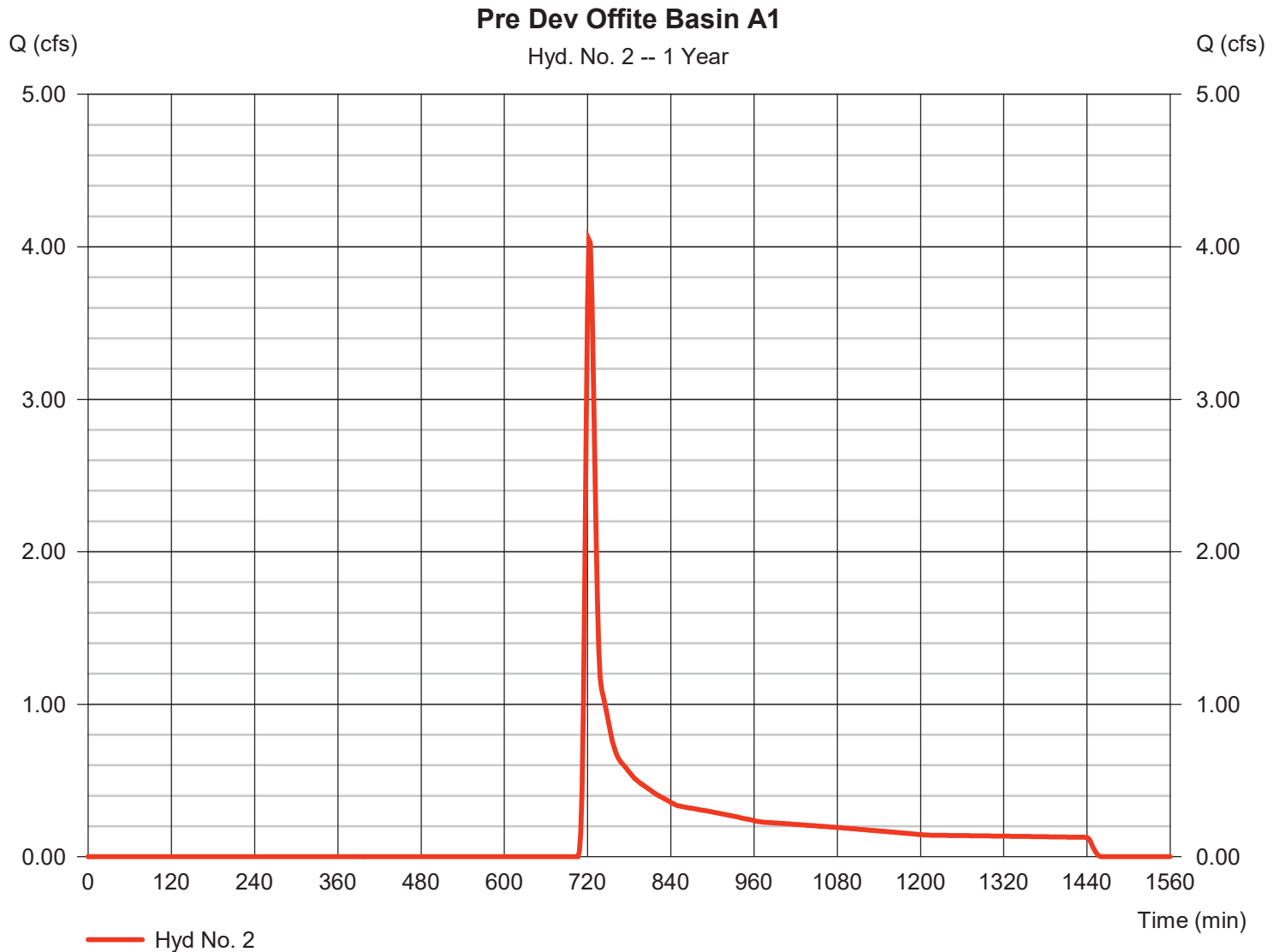


Hydrograph Report

Hyd. No. 2

Pre Dev Offite Basin A1

Hydrograph type	= SCS Runoff	Peak discharge	= 4.047 cfs
Storm frequency	= 1 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 14,370 cuft
Drainage area	= 7.910 ac	Curve number	= 61
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.00 min
Total precip.	= 3.30 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

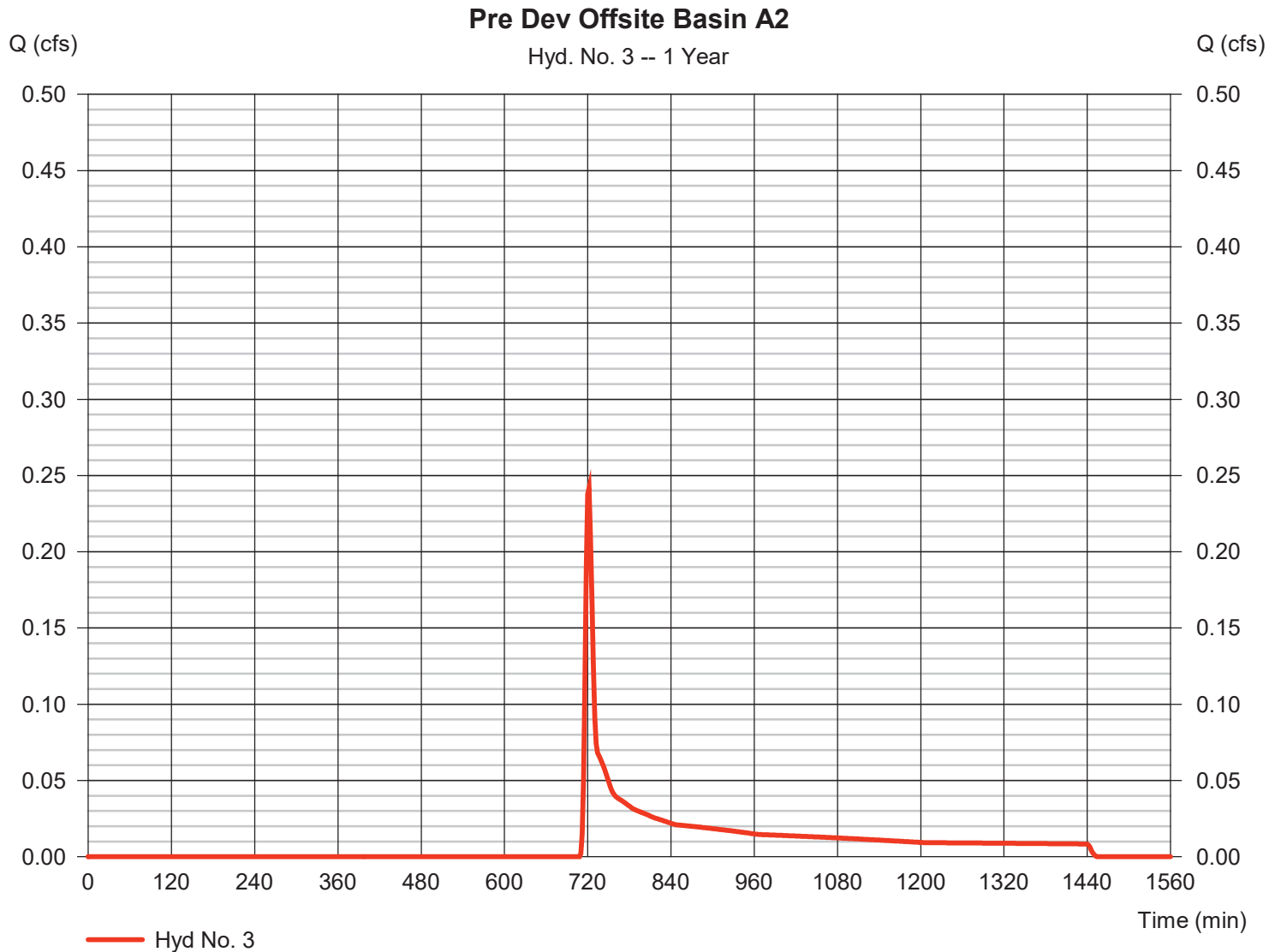


Hydrograph Report

Hyd. No. 3

Pre Dev Offsite Basin A2

Hydrograph type	= SCS Runoff	Peak discharge	= 0.242 cfs
Storm frequency	= 1 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 848 cuft
Drainage area	= 0.620 ac	Curve number	= 58
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 3.30 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



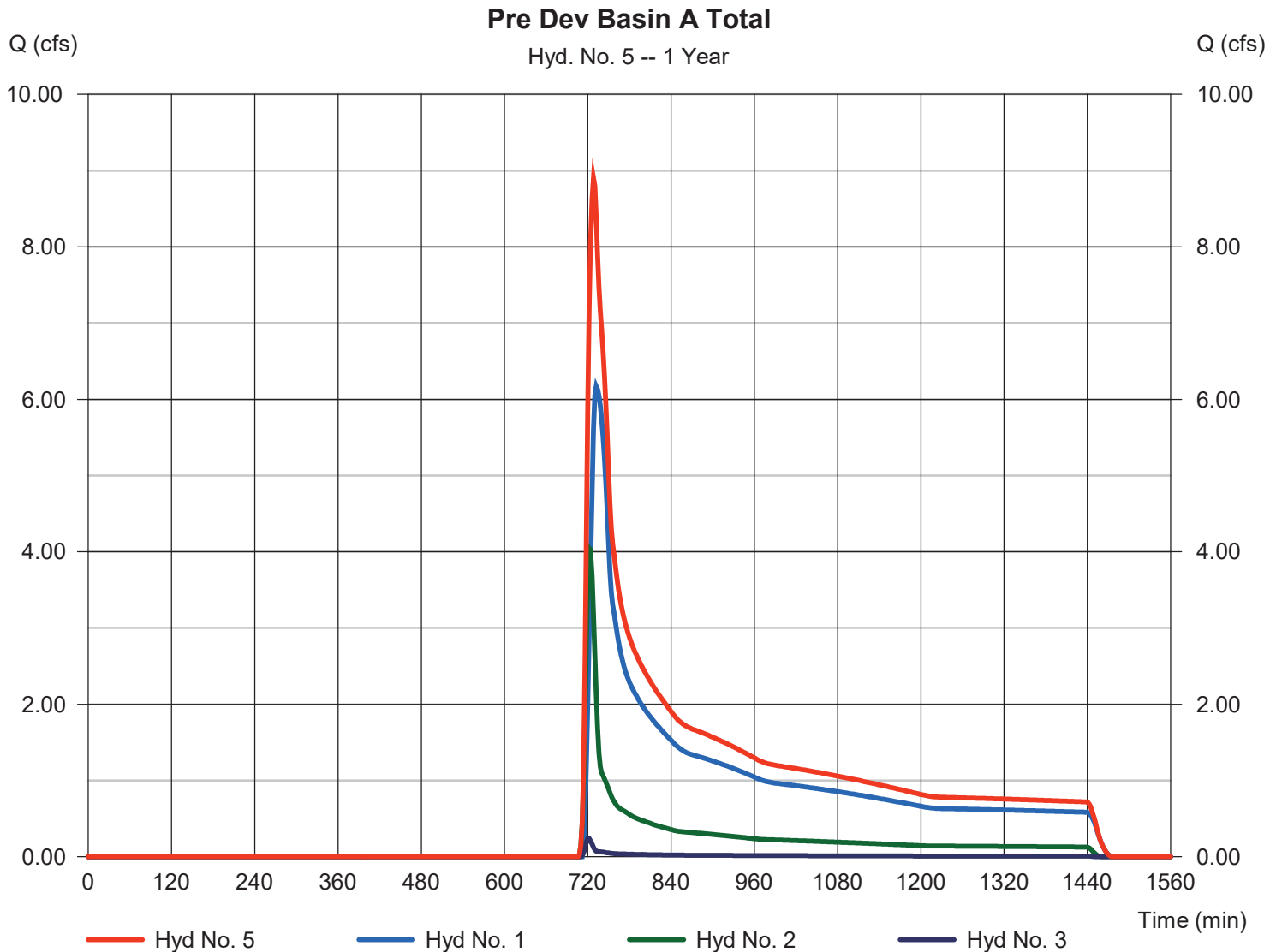
Hydrograph Report

Hyd. No. 5

Pre Dev Basin A Total

Hydrograph type = Combine
Storm frequency = 1 yrs
Time interval = 2 min
Inflow hyds. = 1, 2, 3

Peak discharge = 8.904 cfs
Time to peak = 728 min
Hyd. volume = 67,271 cuft
Contrib. drain. area = 58.730 ac



Hydrograph Report

Hyd. No. 7

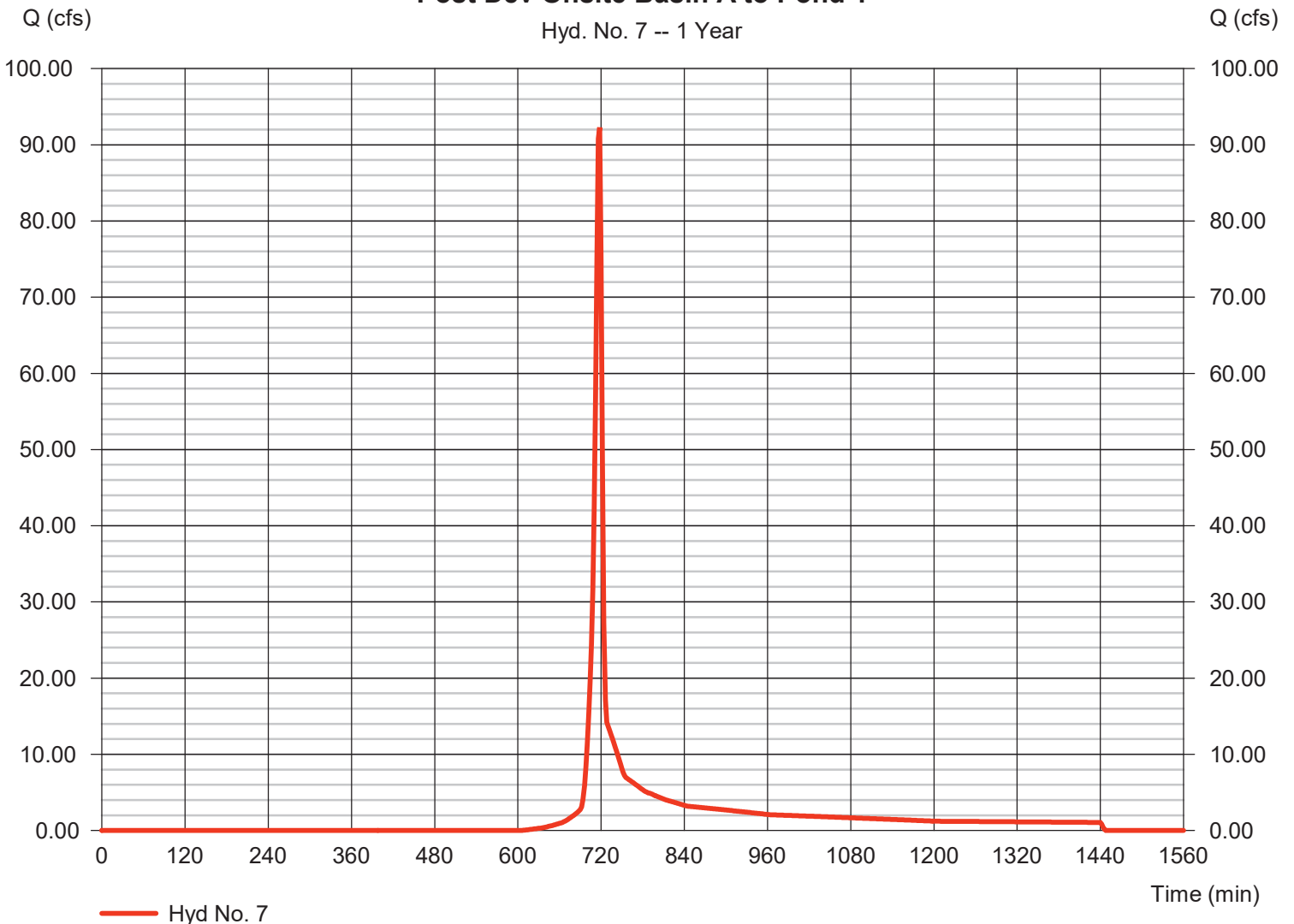
Post Dev Onsite Basin A to Pond 1

Hydrograph type = SCS Runoff
Storm frequency = 1 yrs
Time interval = 2 min
Drainage area = 42.270 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 3.30 in
Storm duration = 24 hrs

Peak discharge = 92.31 cfs
Time to peak = 718 min
Hyd. volume = 184,668 cuft
Curve number = 77
Hydraulic length = 0 ft
Time of conc. (Tc) = 5.00 min
Distribution = Type II
Shape factor = 484

Post Dev Onsite Basin A to Pond 1

Hyd. No. 7 -- 1 Year



Hydrograph Report

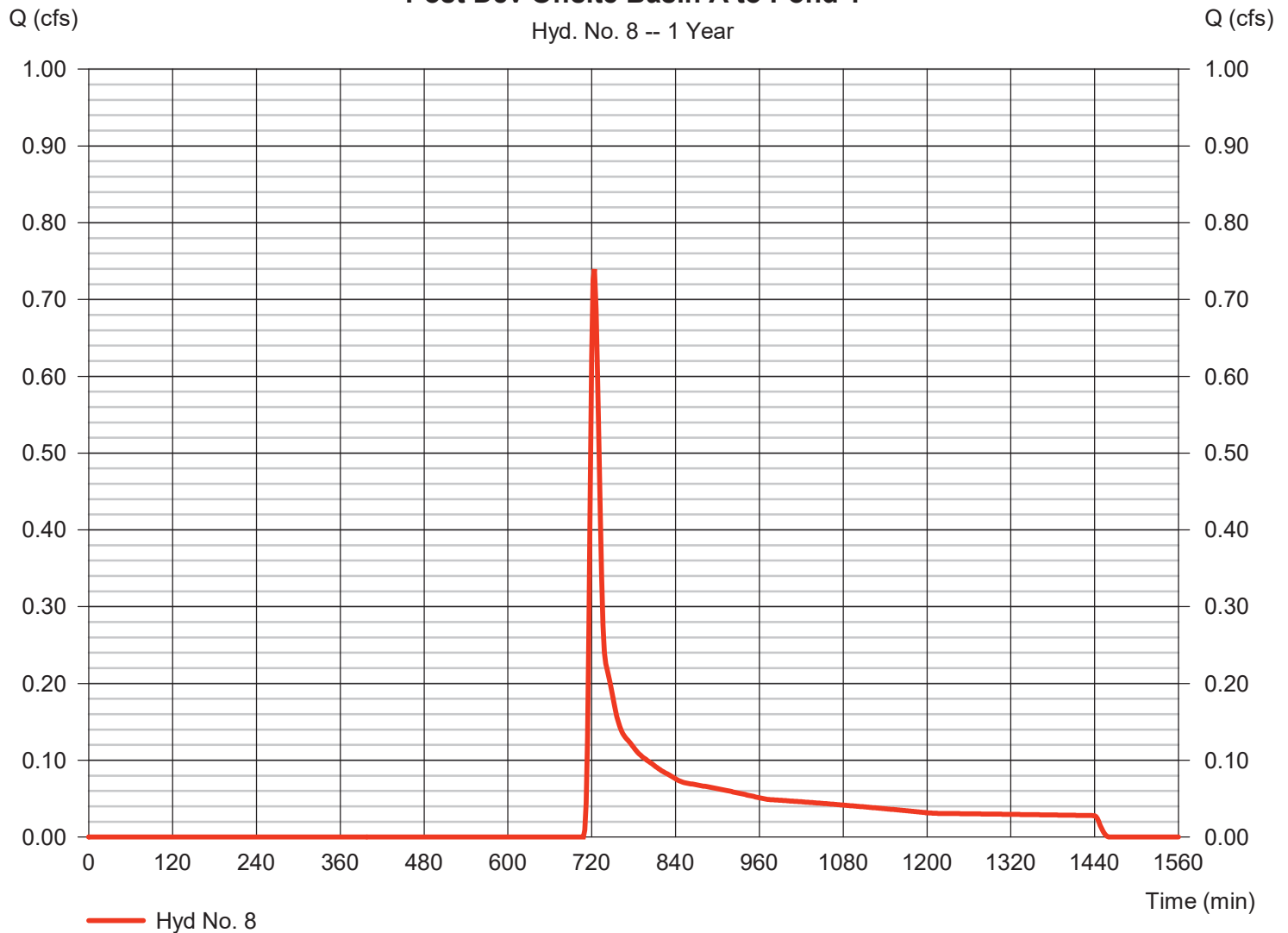
Hyd. No. 8

Post Dev Offsite Basin A to Pond 1

Hydrograph type	= SCS Runoff	Peak discharge	= 0.740 cfs
Storm frequency	= 1 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 2,944 cuft
Drainage area	= 1.910 ac	Curve number	= 59
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.00 min
Total precip.	= 3.30 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A to Pond 1

Hyd. No. 8 -- 1 Year



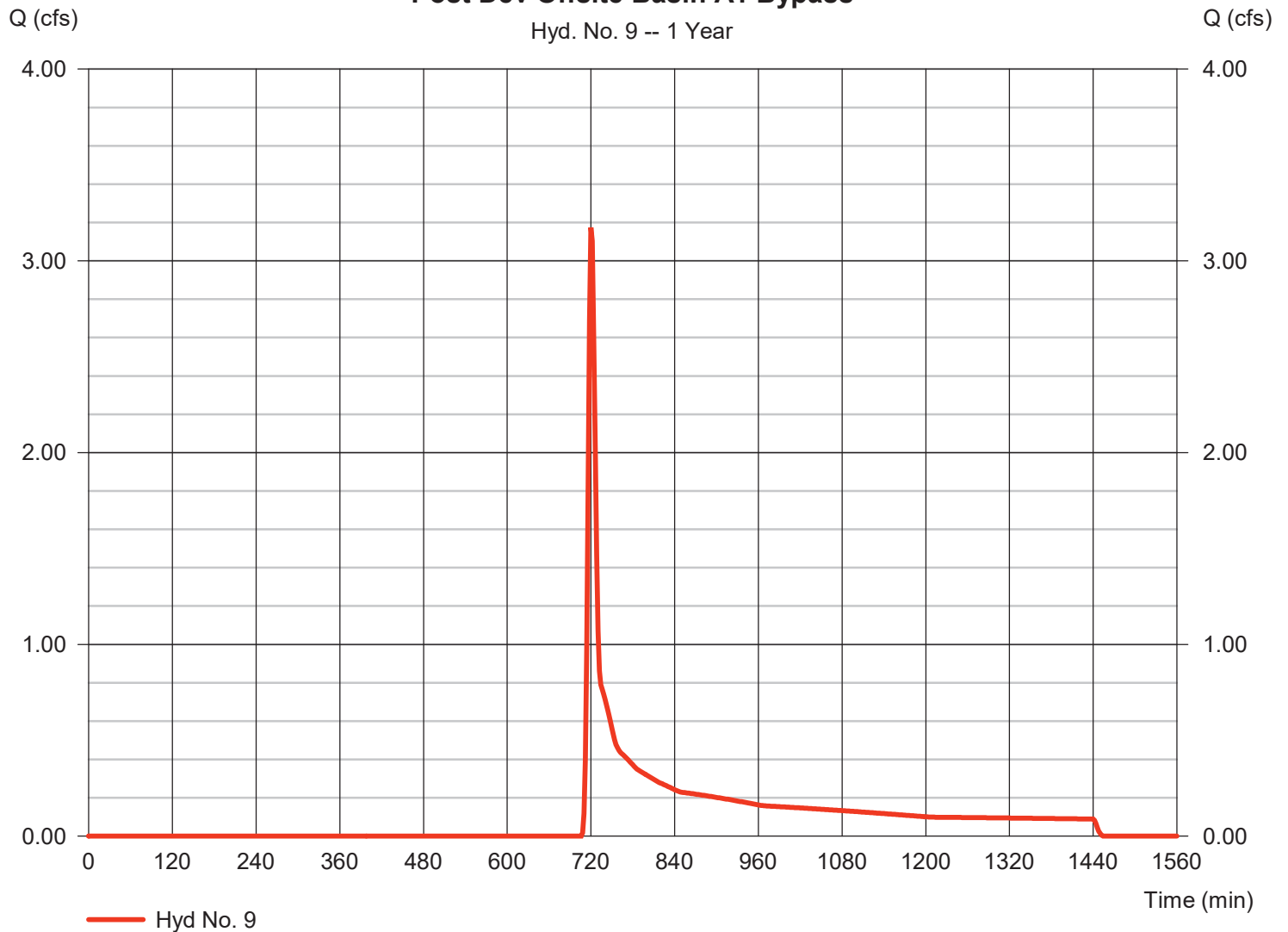
Hydrograph Report

Hyd. No. 9

Post Dev Offsite Basin A1 Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 3.174 cfs
Storm frequency	= 1 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 9,757 cuft
Drainage area	= 6.000 ac	Curve number	= 60
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 3.30 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A1 Bypass



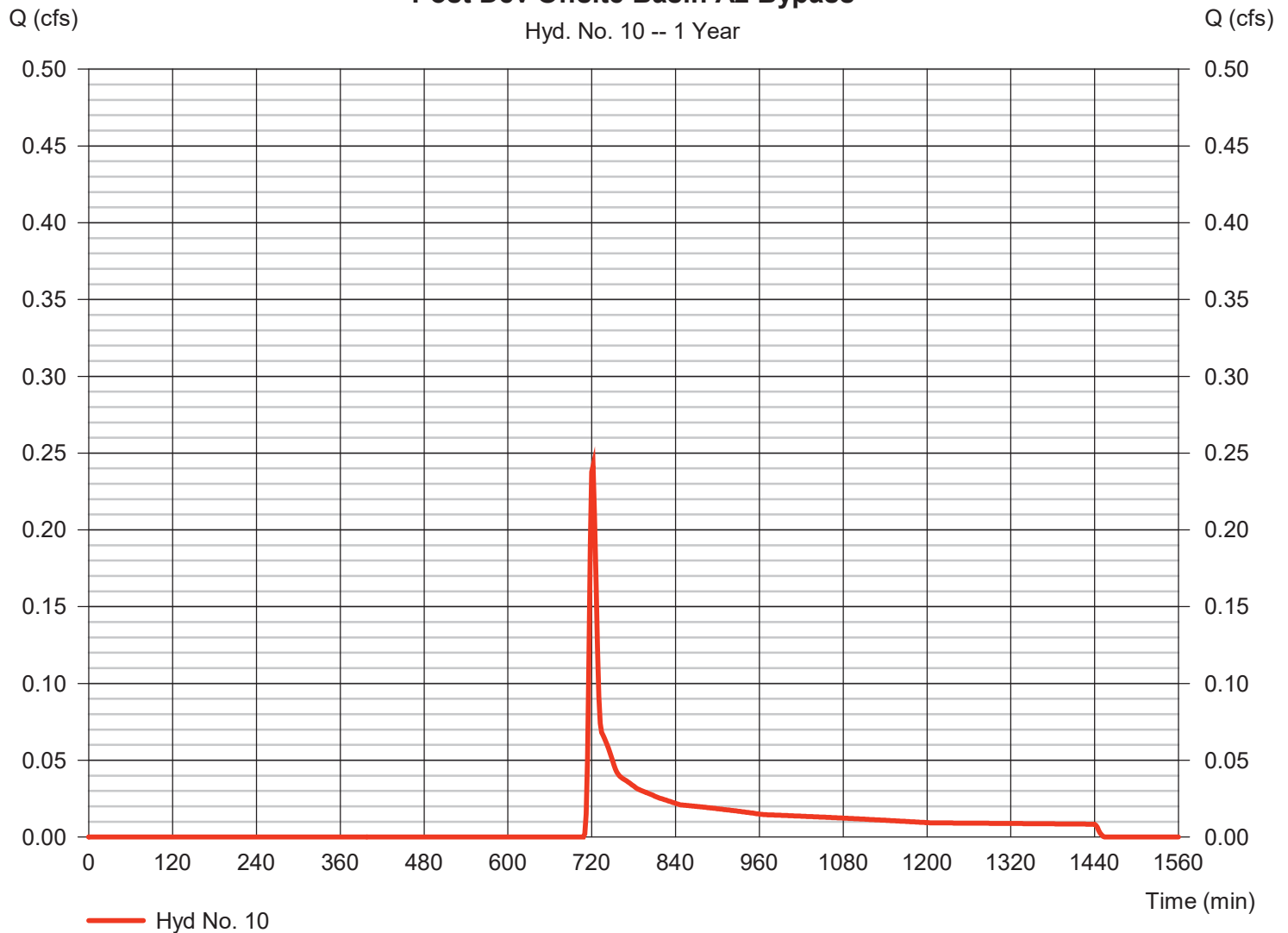
Hydrograph Report

Hyd. No. 10

Post Dev Offsite Basin A2 Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 0.242 cfs
Storm frequency	= 1 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 848 cuft
Drainage area	= 0.620 ac	Curve number	= 58
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 3.30 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A2 Bypass



Hydrograph Report

Hyd. No. 12

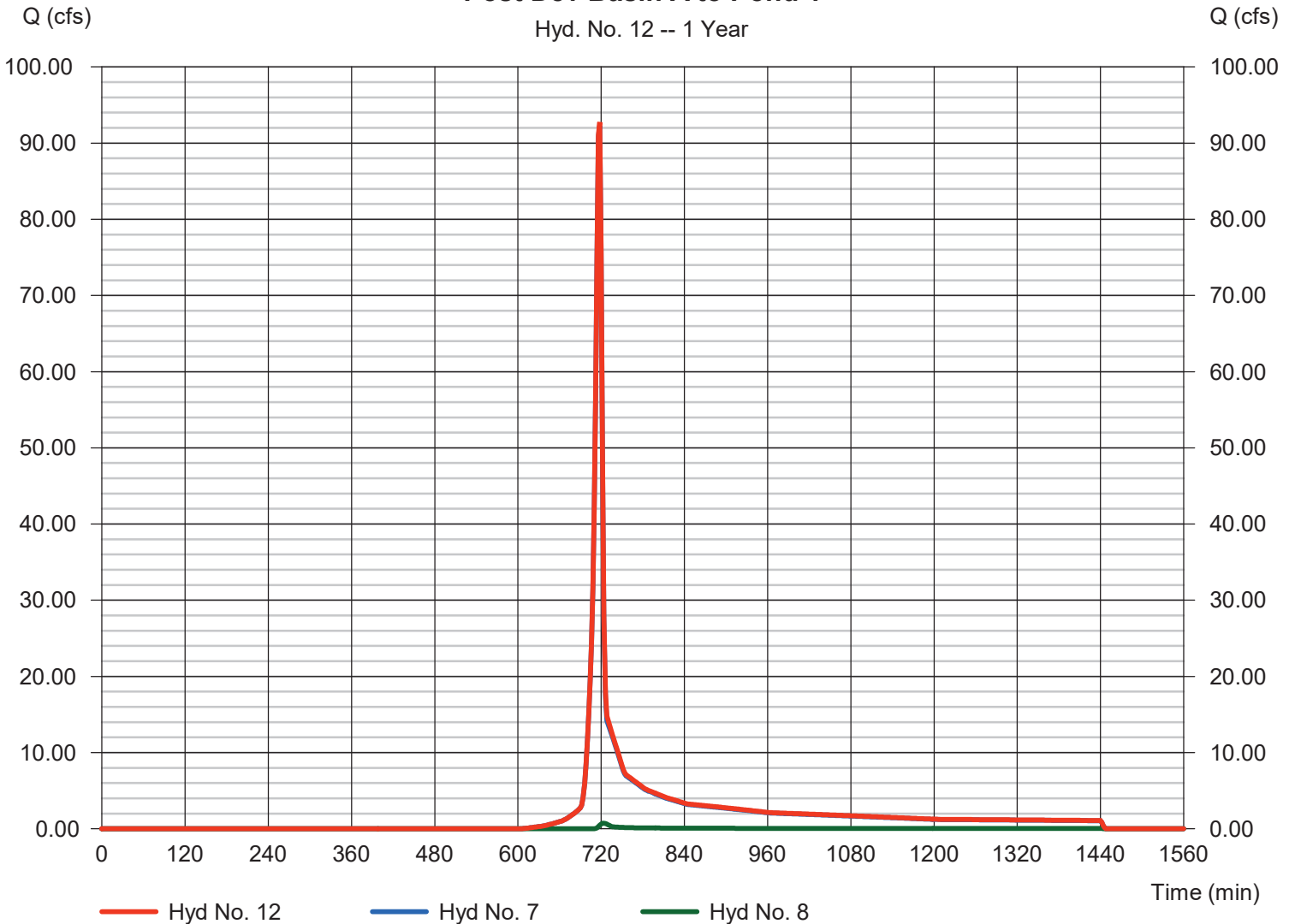
Post Dev Basin A to Pond 1

Hydrograph type = Combine
Storm frequency = 1 yrs
Time interval = 2 min
Inflow hyds. = 7, 8

Peak discharge = 92.77 cfs
Time to peak = 718 min
Hyd. volume = 187,611 cuft
Contrib. drain. area = 44.180 ac

Post Dev Basin A to Pond 1

Hyd. No. 12 -- 1 Year



Hydrograph Report

Hyd. No. 13

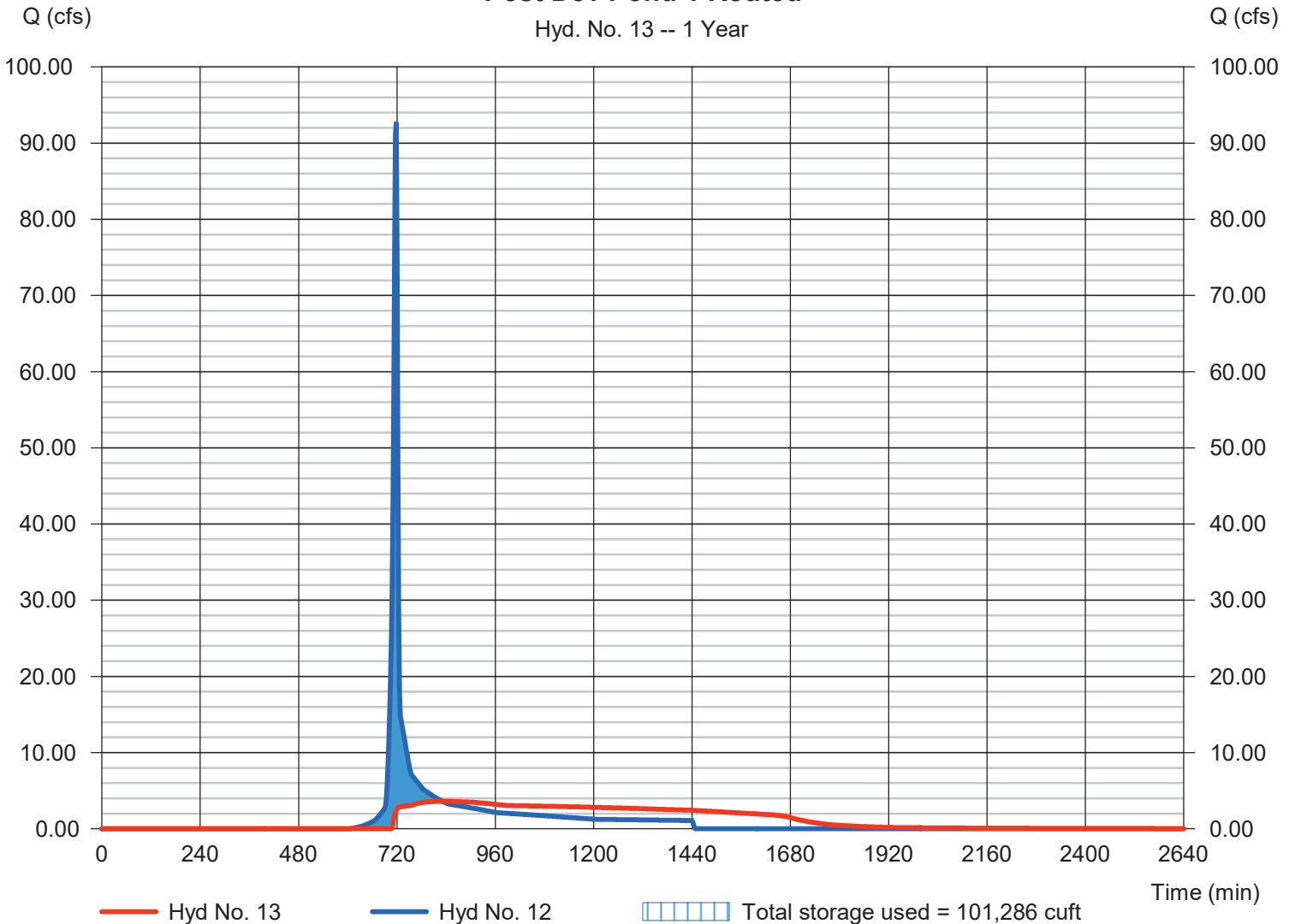
Post Dev Pond 1 Routed

Hydrograph type	= Reservoir	Peak discharge	= 3.601 cfs
Storm frequency	= 1 yrs	Time to peak	= 832 min
Time interval	= 2 min	Hyd. volume	= 171,640 cuft
Inflow hyd. No.	= 12 - Post Dev Basin A to Pond	Max. Elevation	= 1056.29 ft
Reservoir name	= Pond 1	Max. Storage	= 101,286 cuft

Storage Indication method used.

Post Dev Pond 1 Routed

Hyd. No. 13 -- 1 Year



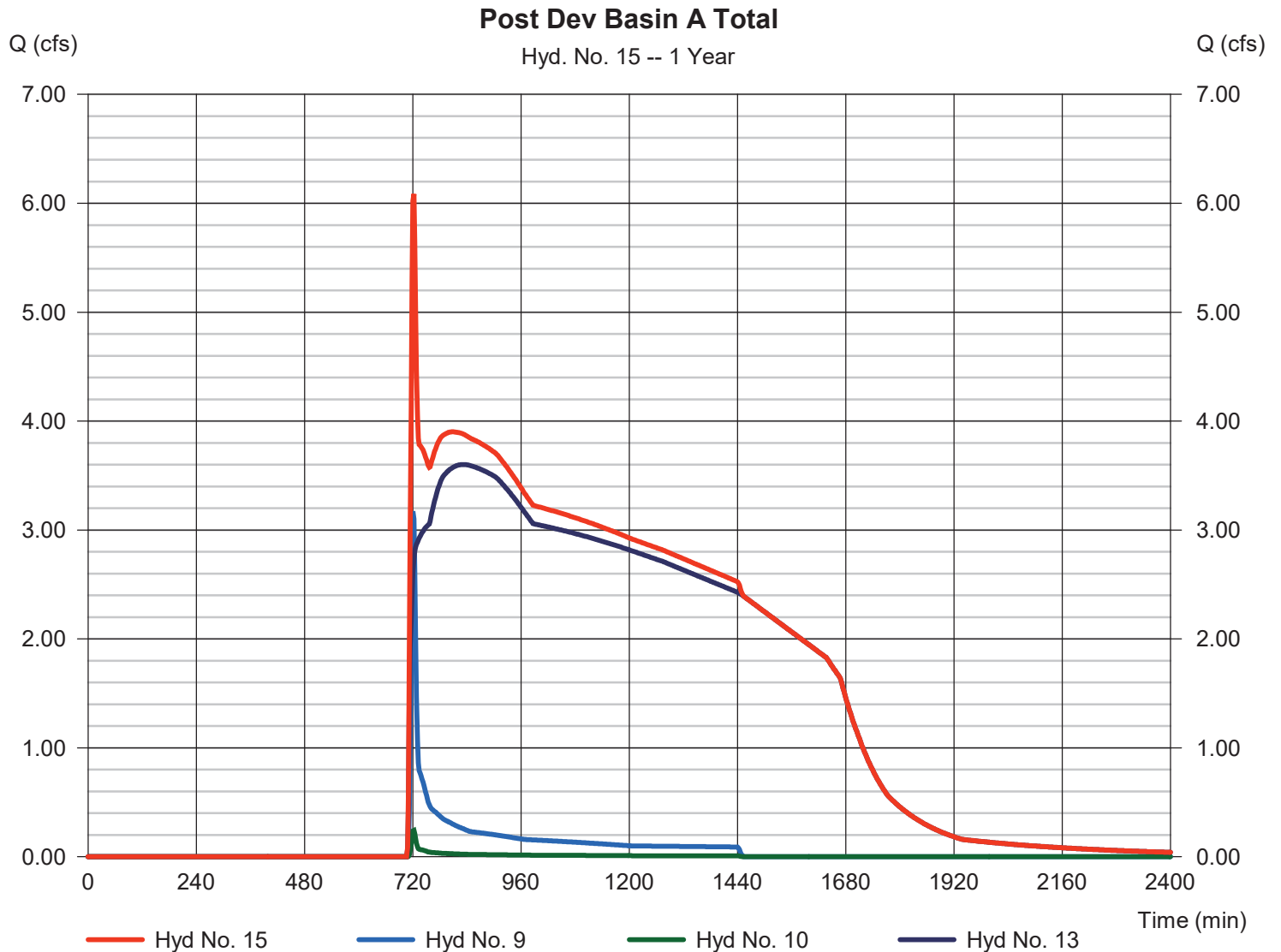
Hydrograph Report

Hyd. No. 15

Post Dev Basin A Total

Hydrograph type = Combine
Storm frequency = 1 yrs
Time interval = 2 min
Inflow hyds. = 9, 10, 13

Peak discharge = 6.085 cfs
Time to peak = 722 min
Hyd. volume = 182,245 cuft
Contrib. drain. area = 6.620 ac

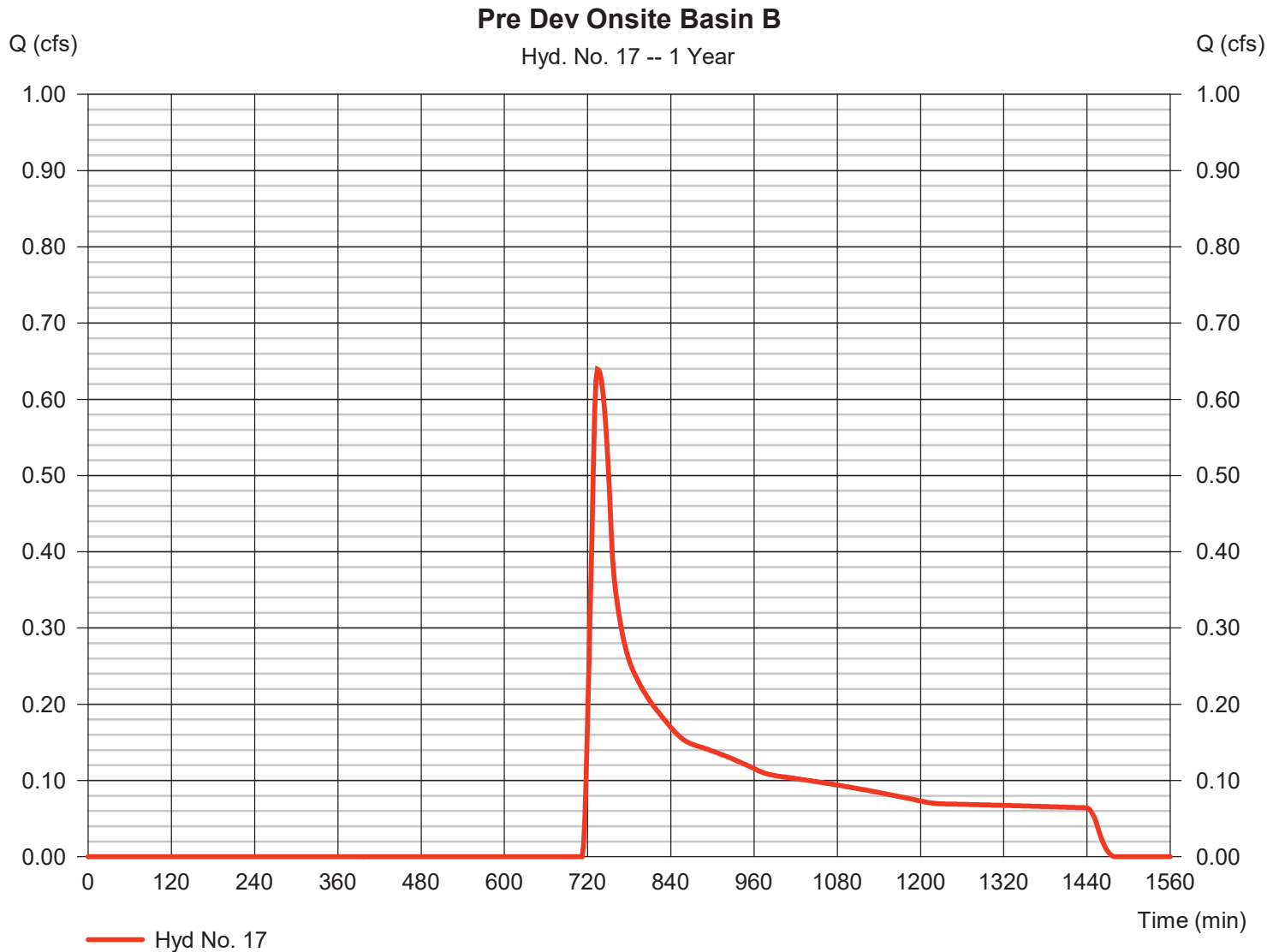


Hydrograph Report

Hyd. No. 17

Pre Dev Onsite Basin B

Hydrograph type	= SCS Runoff	Peak discharge	= 0.639 cfs
Storm frequency	= 1 yrs	Time to peak	= 734 min
Time interval	= 2 min	Hyd. volume	= 5,716 cuft
Drainage area	= 5.700 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 25.00 min
Total precip.	= 3.30 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

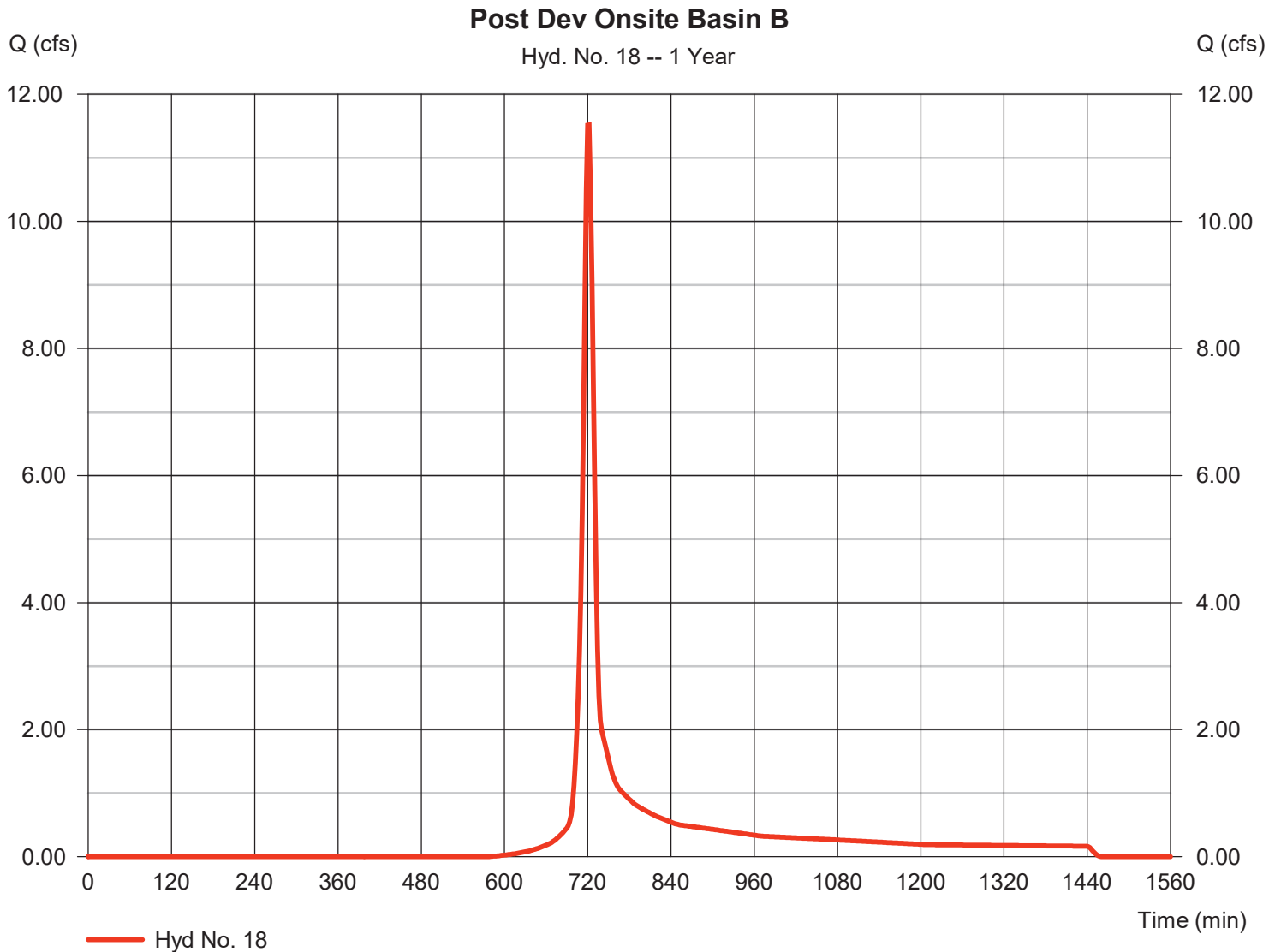


Hydrograph Report

Hyd. No. 18

Post Dev Onsite Basin B

Hydrograph type	= SCS Runoff	Peak discharge	= 11.52 cfs
Storm frequency	= 1 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 30,134 cuft
Drainage area	= 5.700 ac	Curve number	= 79
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.00 min
Total precip.	= 3.30 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

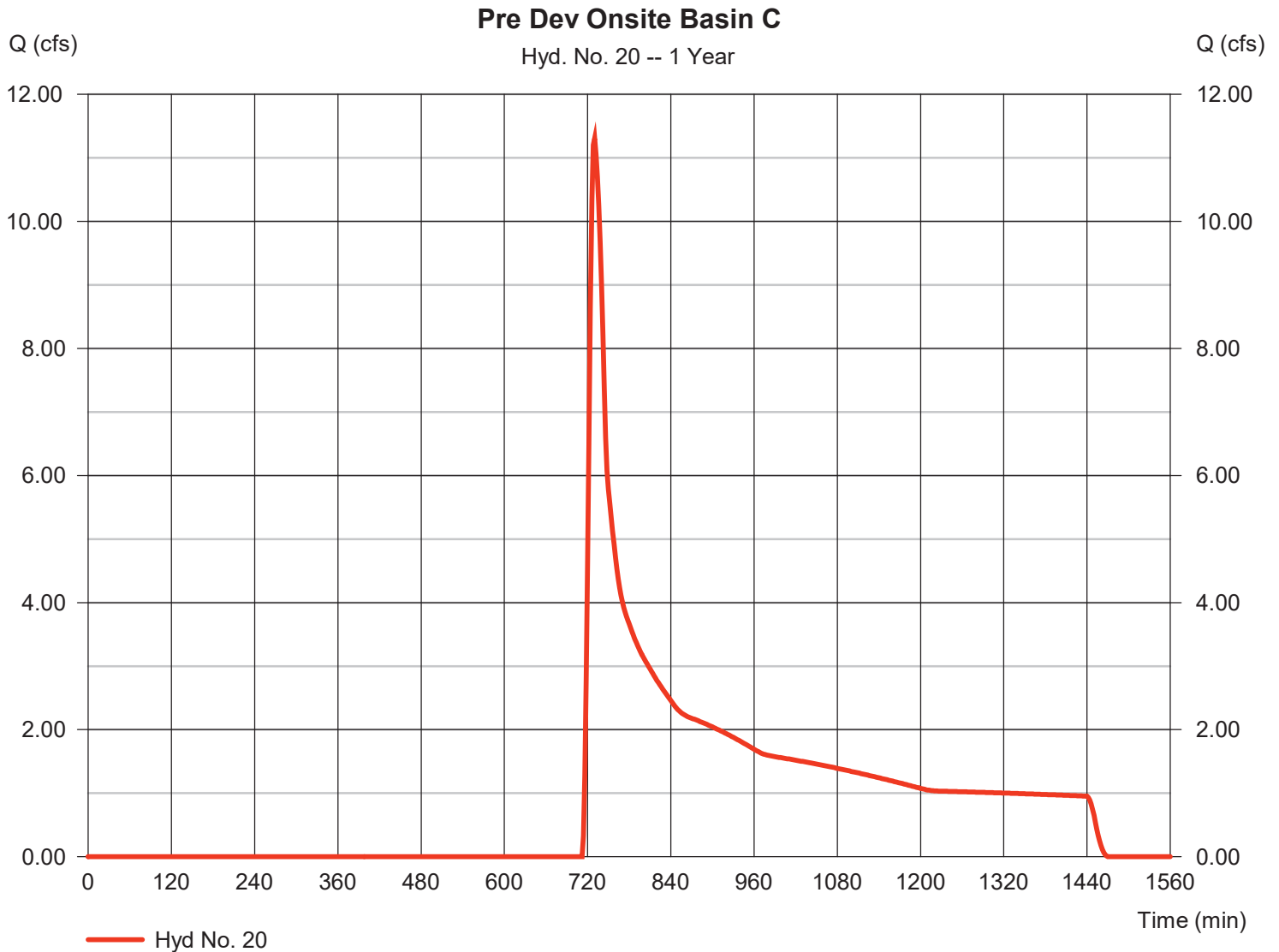


Hydrograph Report

Hyd. No. 20

Pre Dev Onsite Basin C

Hydrograph type	= SCS Runoff	Peak discharge	= 11.31 cfs
Storm frequency	= 1 yrs	Time to peak	= 730 min
Time interval	= 2 min	Hyd. volume	= 85,196 cuft
Drainage area	= 83.630 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 17.00 min
Total precip.	= 3.30 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

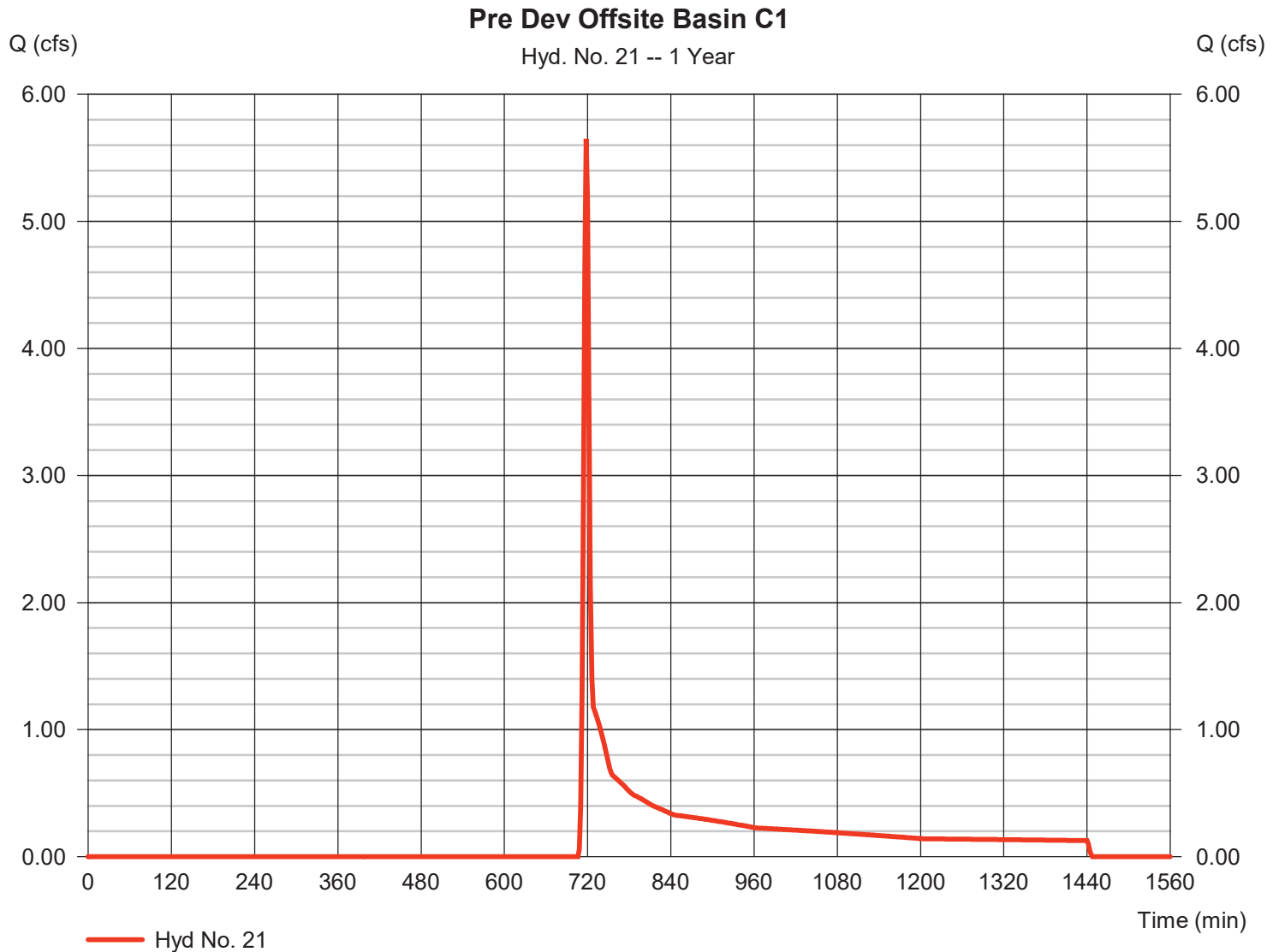


Hydrograph Report

Hyd. No. 21

Pre Dev Offsite Basin C1

Hydrograph type	= SCS Runoff	Peak discharge	= 5.649 cfs
Storm frequency	= 1 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 13,919 cuft
Drainage area	= 9.130 ac	Curve number	= 60
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.30 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

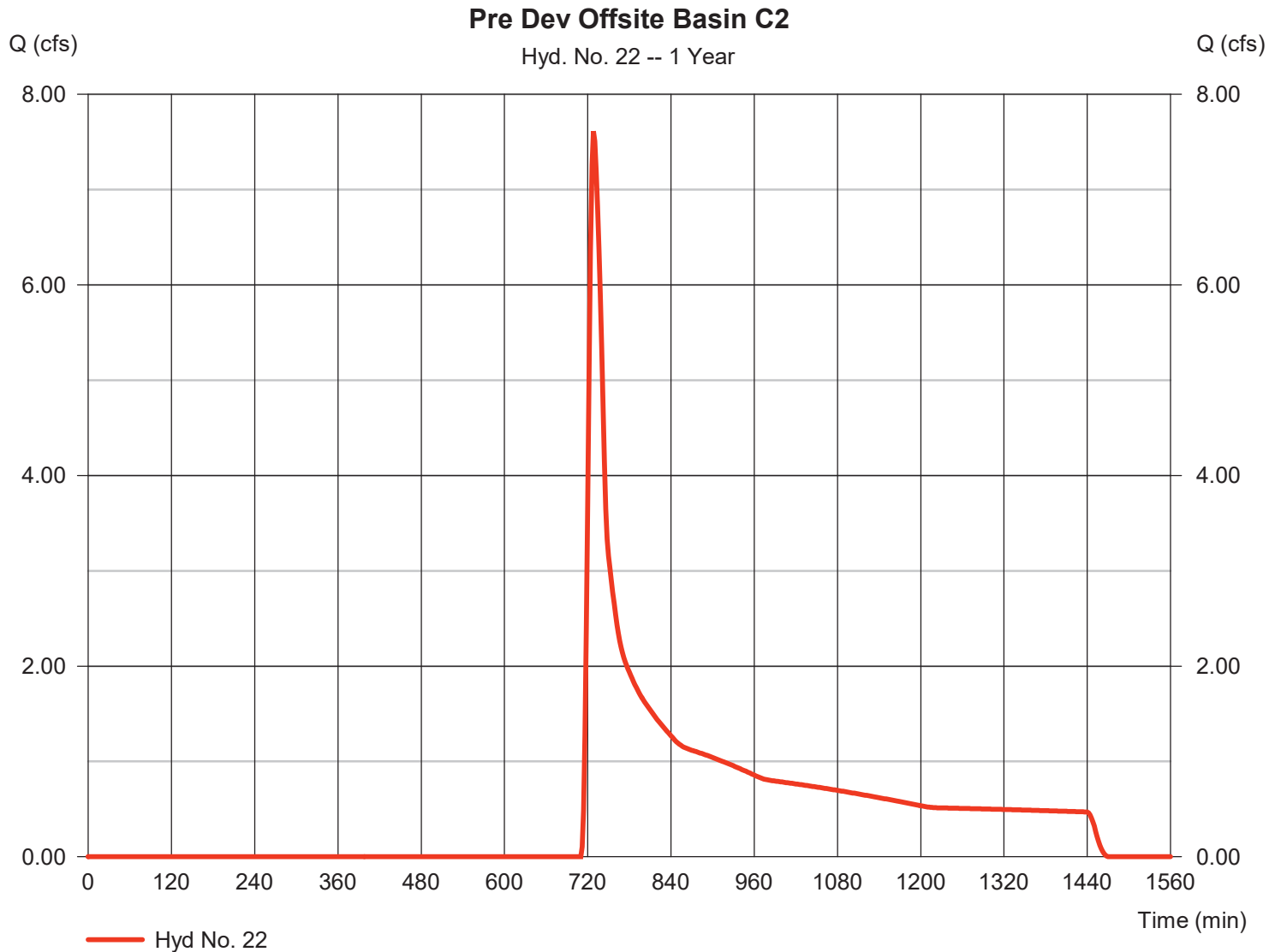


Hydrograph Report

Hyd. No. 22

Pre Dev Offsite Basin C2

Hydrograph type	= SCS Runoff	Peak discharge	= 7.613 cfs
Storm frequency	= 1 yrs	Time to peak	= 728 min
Time interval	= 2 min	Hyd. volume	= 45,786 cuft
Drainage area	= 36.720 ac	Curve number	= 57
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 18.00 min
Total precip.	= 3.30 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



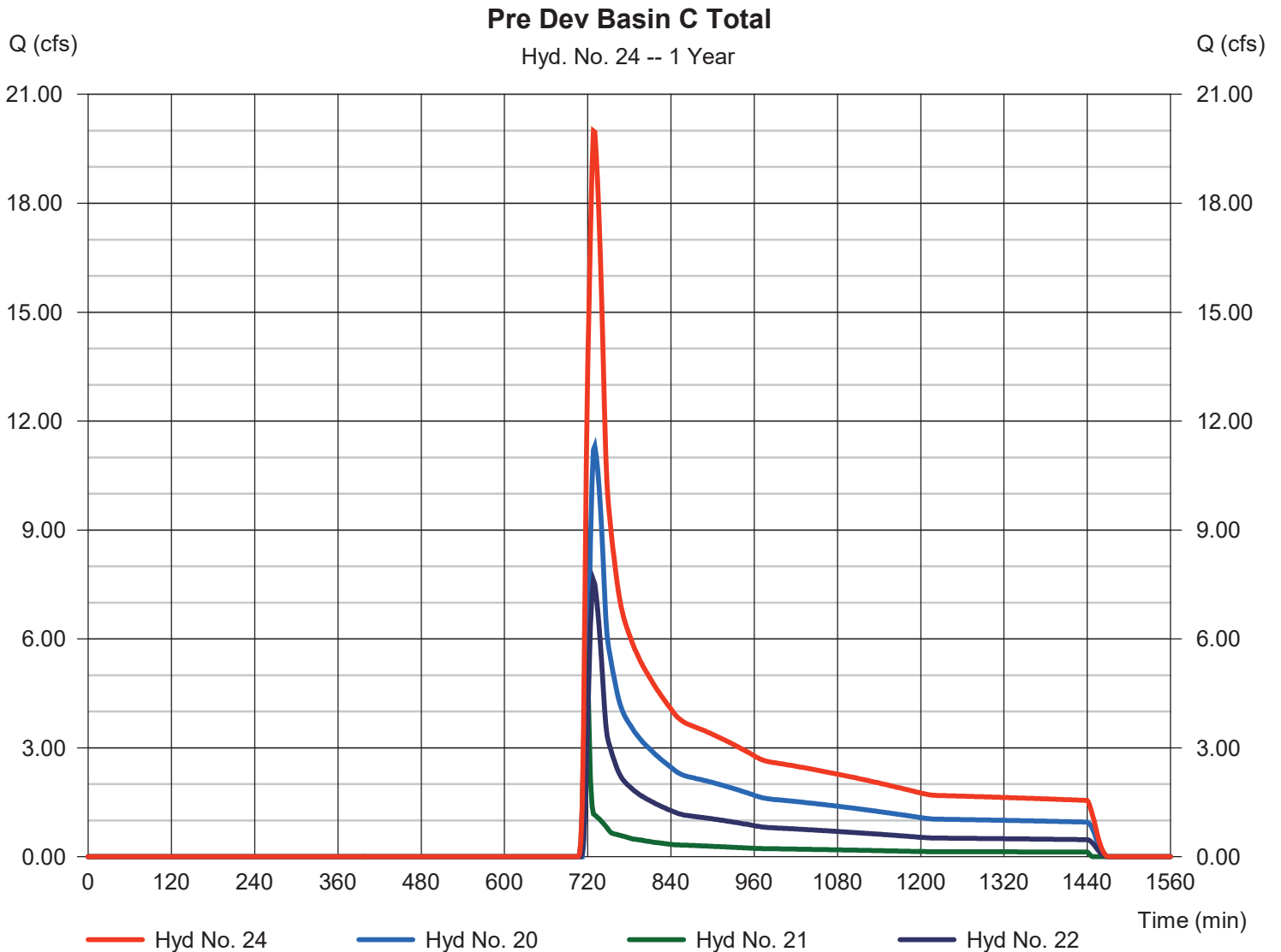
Hydrograph Report

Hyd. No. 24

Pre Dev Basin C Total

Hydrograph type = Combine
Storm frequency = 1 yrs
Time interval = 2 min
Inflow hyds. = 20, 21, 22

Peak discharge = 20.00 cfs
Time to peak = 728 min
Hyd. volume = 144,901 cuft
Contrib. drain. area = 129.480 ac



Hydrograph Report

Hyd. No. 26

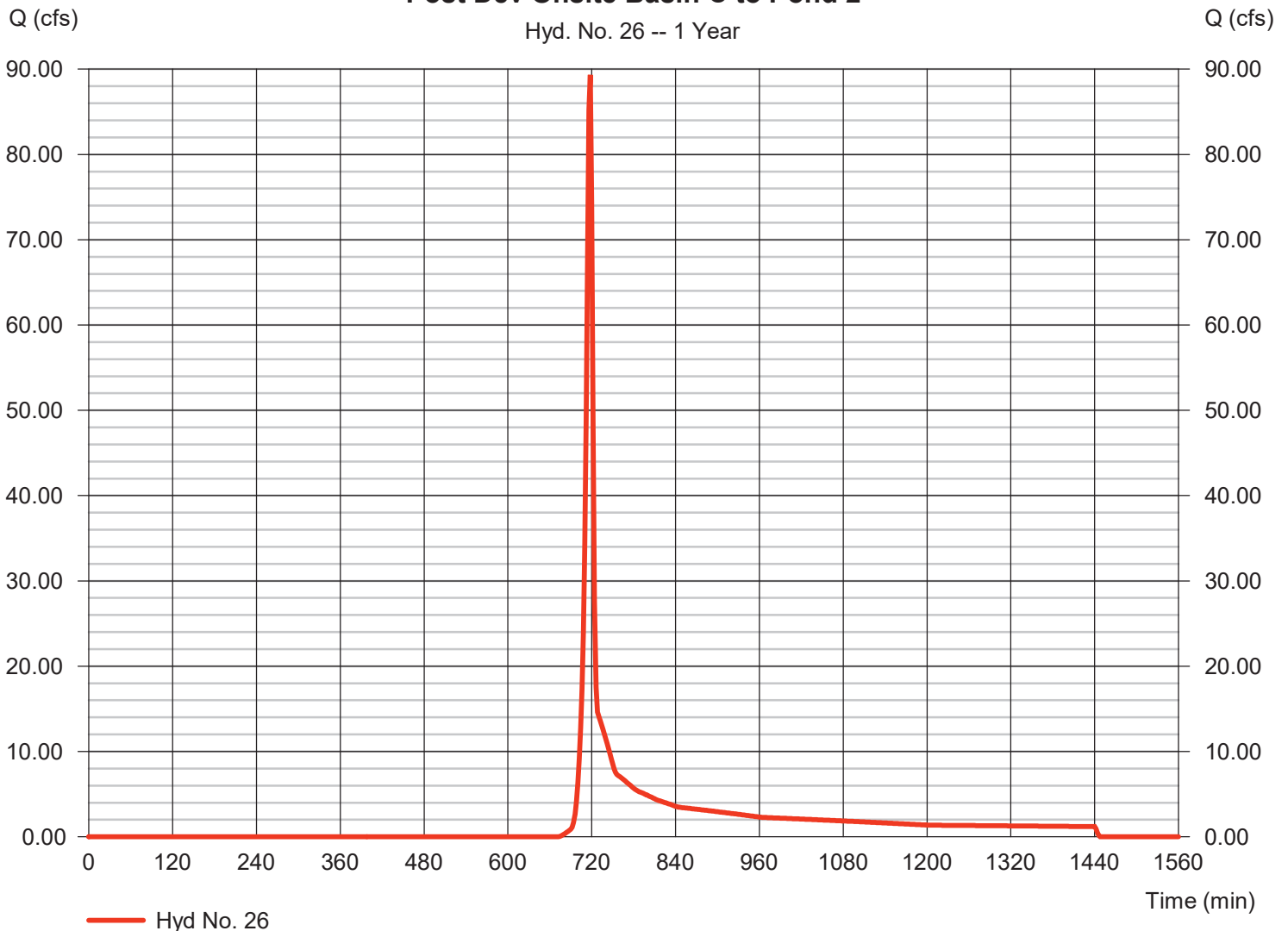
Post Dev Onsite Basin C to Pond 2

Hydrograph type = SCS Runoff
Storm frequency = 1 yrs
Time interval = 2 min
Drainage area = 56.470 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 3.30 in
Storm duration = 24 hrs

Peak discharge = 89.33 cfs
Time to peak = 718 min
Hyd. volume = 180,416 cuft
Curve number = 71
Hydraulic length = 0 ft
Time of conc. (Tc) = 5.00 min
Distribution = Type II
Shape factor = 484

Post Dev Onsite Basin C to Pond 2

Hyd. No. 26 -- 1 Year



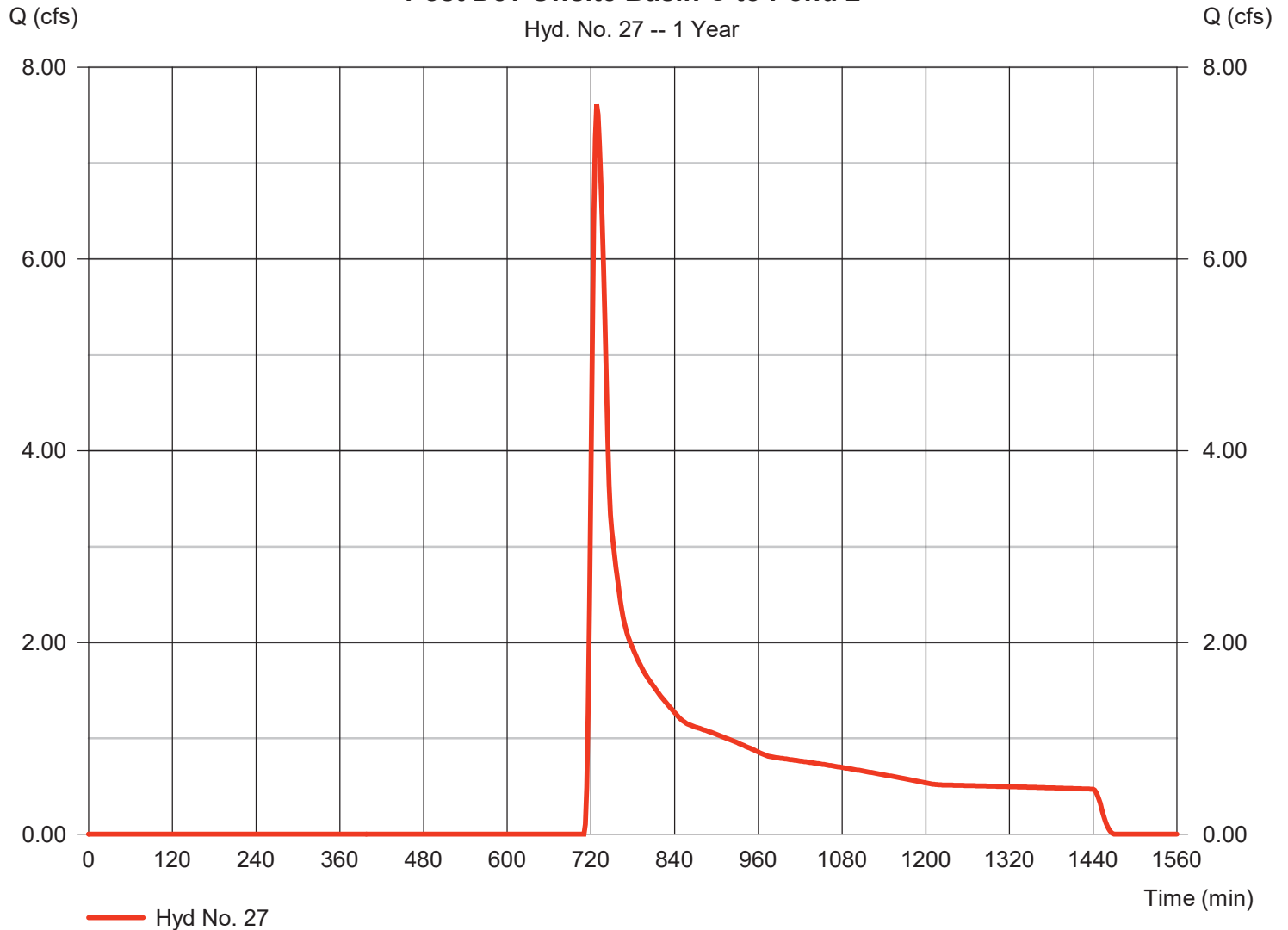
Hydrograph Report

Hyd. No. 27

Post Dev Offsite Basin C to Pond 2

Hydrograph type	= SCS Runoff	Peak discharge	= 7.613 cfs
Storm frequency	= 1 yrs	Time to peak	= 728 min
Time interval	= 2 min	Hyd. volume	= 45,786 cuft
Drainage area	= 36.720 ac	Curve number	= 57
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 18.00 min
Total precip.	= 3.30 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin C to Pond 2

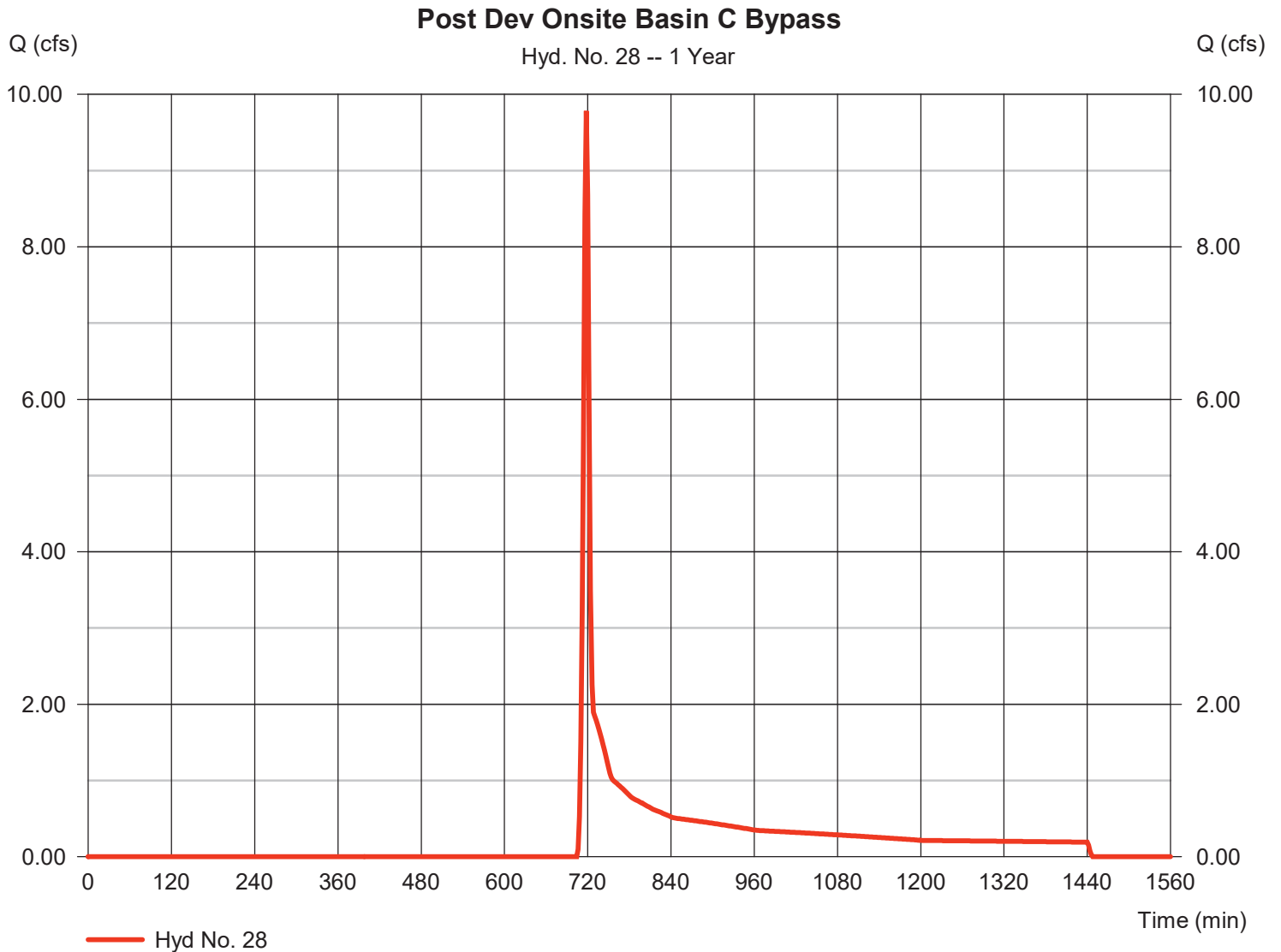


Hydrograph Report

Hyd. No. 28

Post Dev Onsite Basin C Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 9.782 cfs
Storm frequency	= 1 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 22,362 cuft
Drainage area	= 12.530 ac	Curve number	= 62
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.30 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

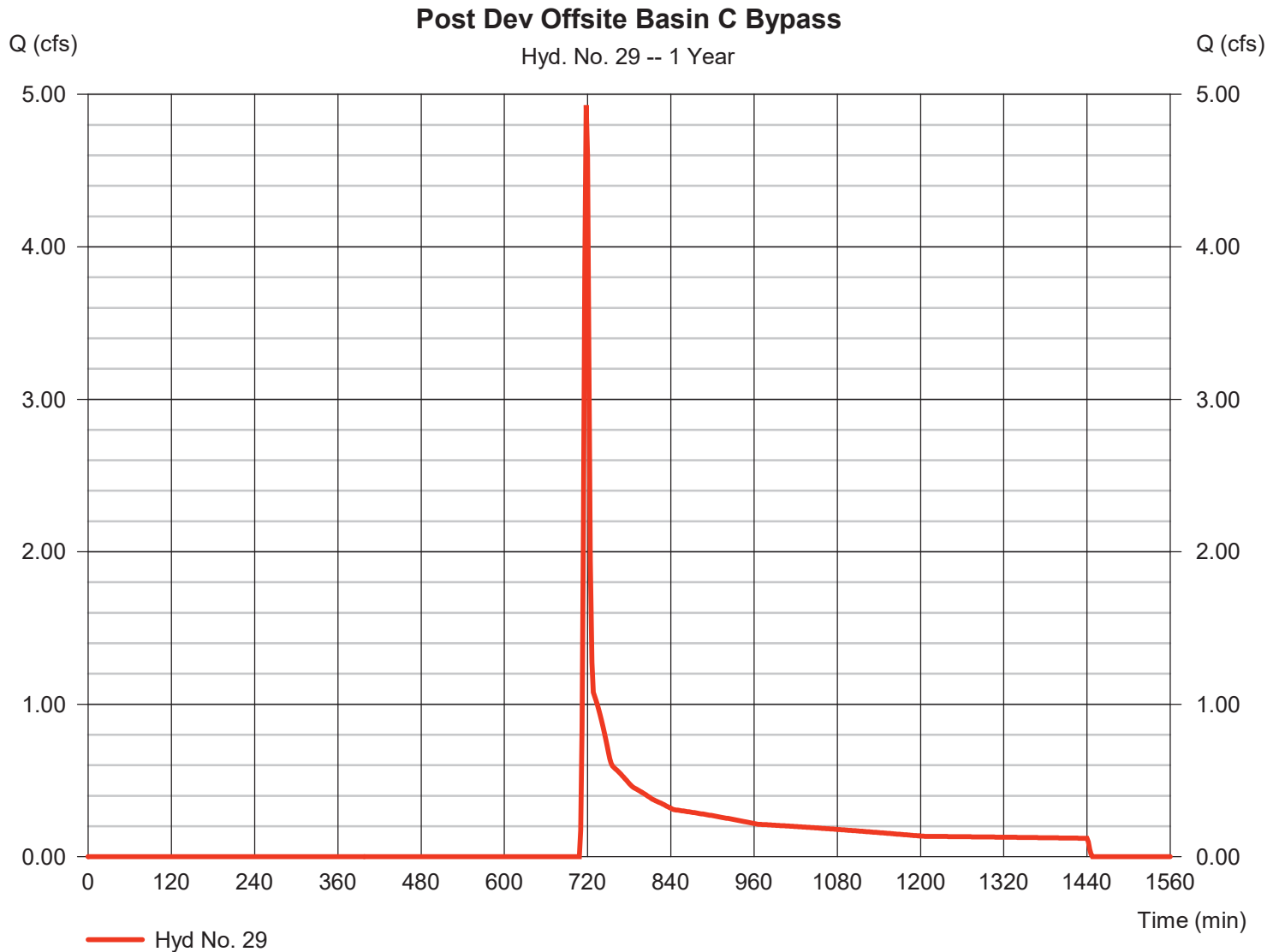


Hydrograph Report

Hyd. No. 29

Post Dev Offsite Basin C Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 4.930 cfs
Storm frequency	= 1 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 12,792 cuft
Drainage area	= 9.130 ac	Curve number	= 59
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.30 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hyd. No. 31

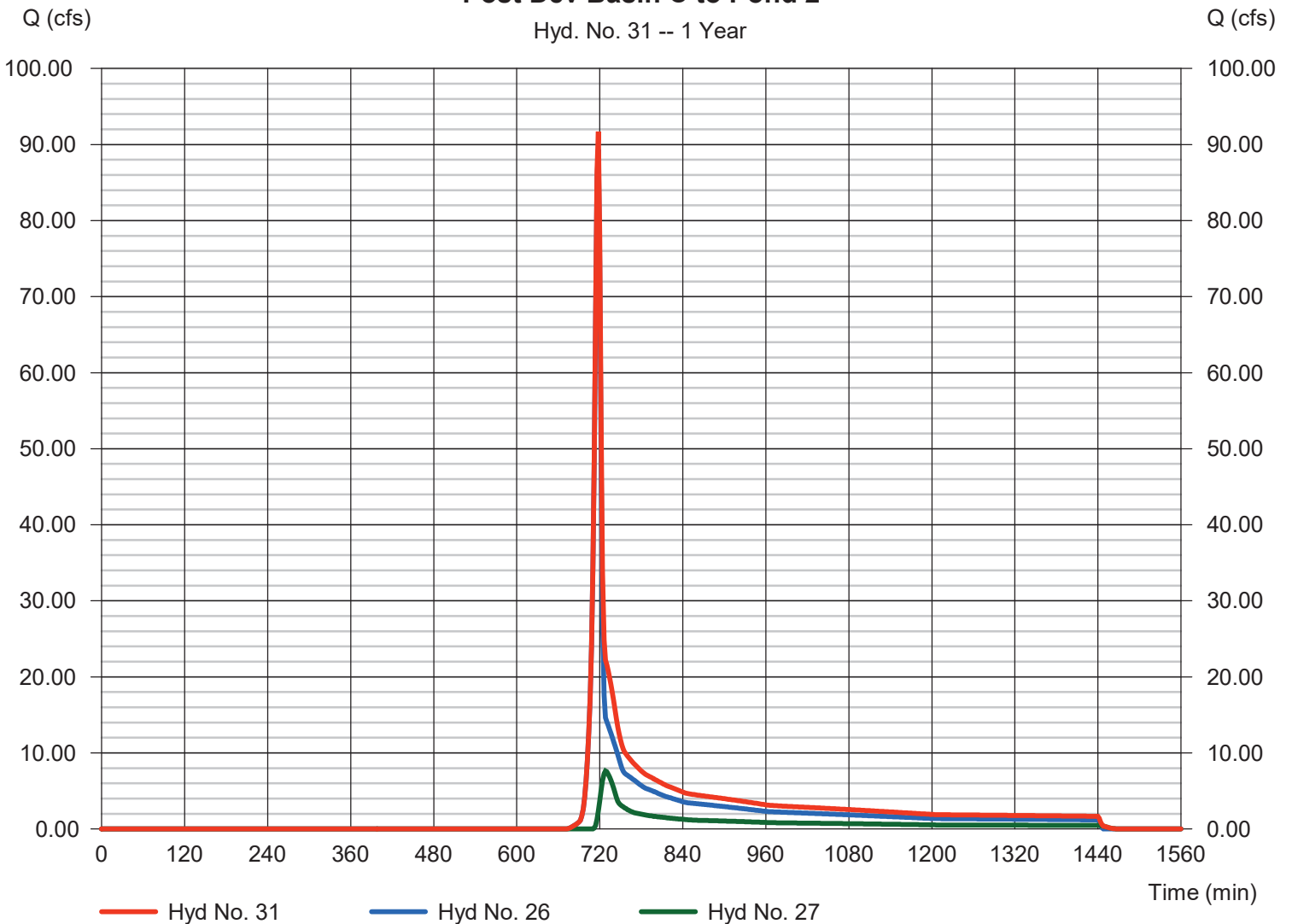
Post Dev Basin C to Pond 2

Hydrograph type = Combine
Storm frequency = 1 yrs
Time interval = 2 min
Inflow hyds. = 26, 27

Peak discharge = 91.72 cfs
Time to peak = 718 min
Hyd. volume = 226,203 cuft
Contrib. drain. area = 93.190 ac

Post Dev Basin C to Pond 2

Hyd. No. 31 -- 1 Year



Hydrograph Report

Hyd. No. 32

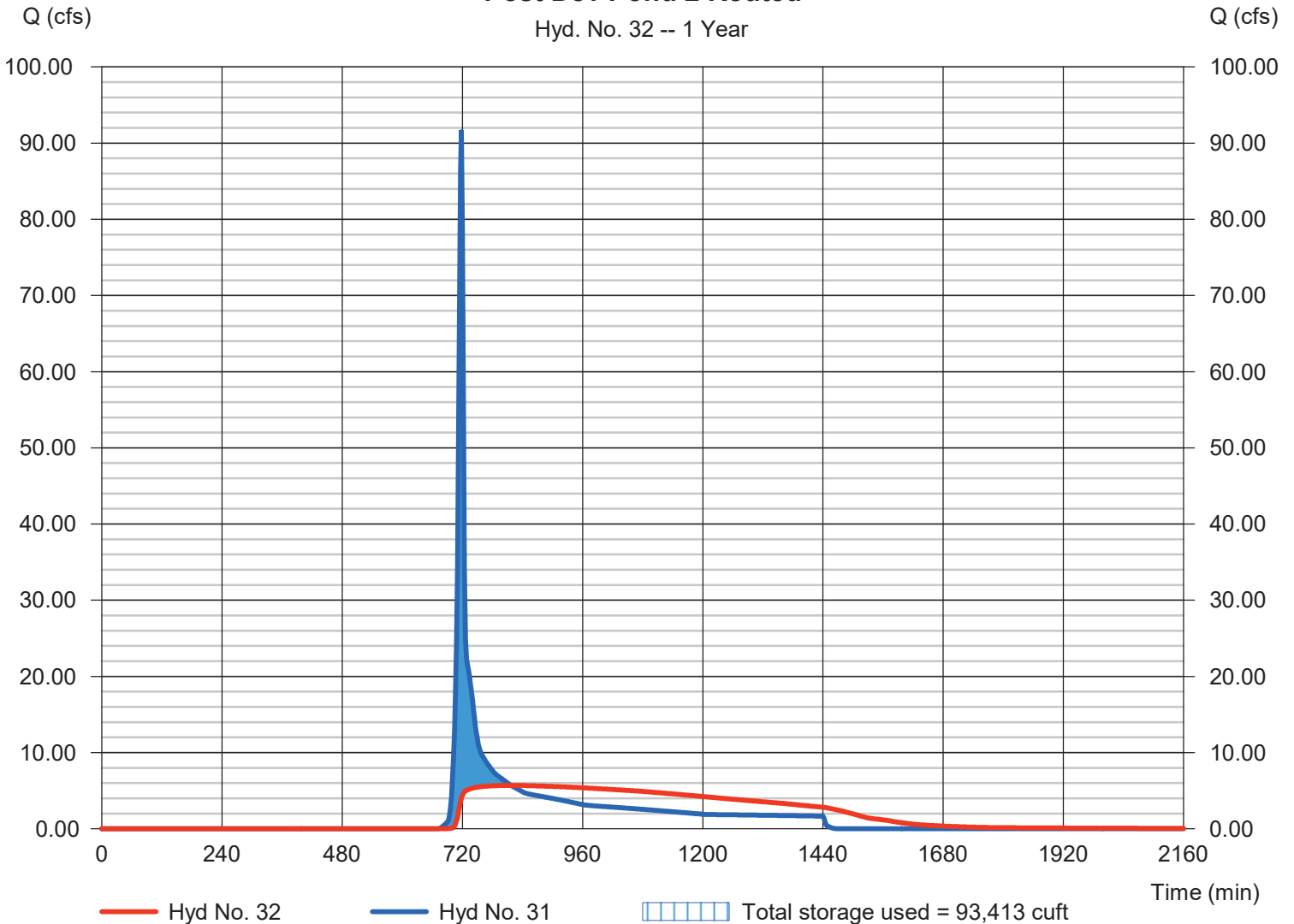
Post Dev Pond 2 Routed

Hydrograph type	= Reservoir	Peak discharge	= 5.690 cfs
Storm frequency	= 1 yrs	Time to peak	= 818 min
Time interval	= 2 min	Hyd. volume	= 226,184 cuft
Inflow hyd. No.	= 31 - Post Dev Basin C to Pond 2	Max. Elevation	= 1106.11 ft
Reservoir name	= Pond 2	Max. Storage	= 93,413 cuft

Storage Indication method used.

Post Dev Pond 2 Routed

Hyd. No. 32 -- 1 Year



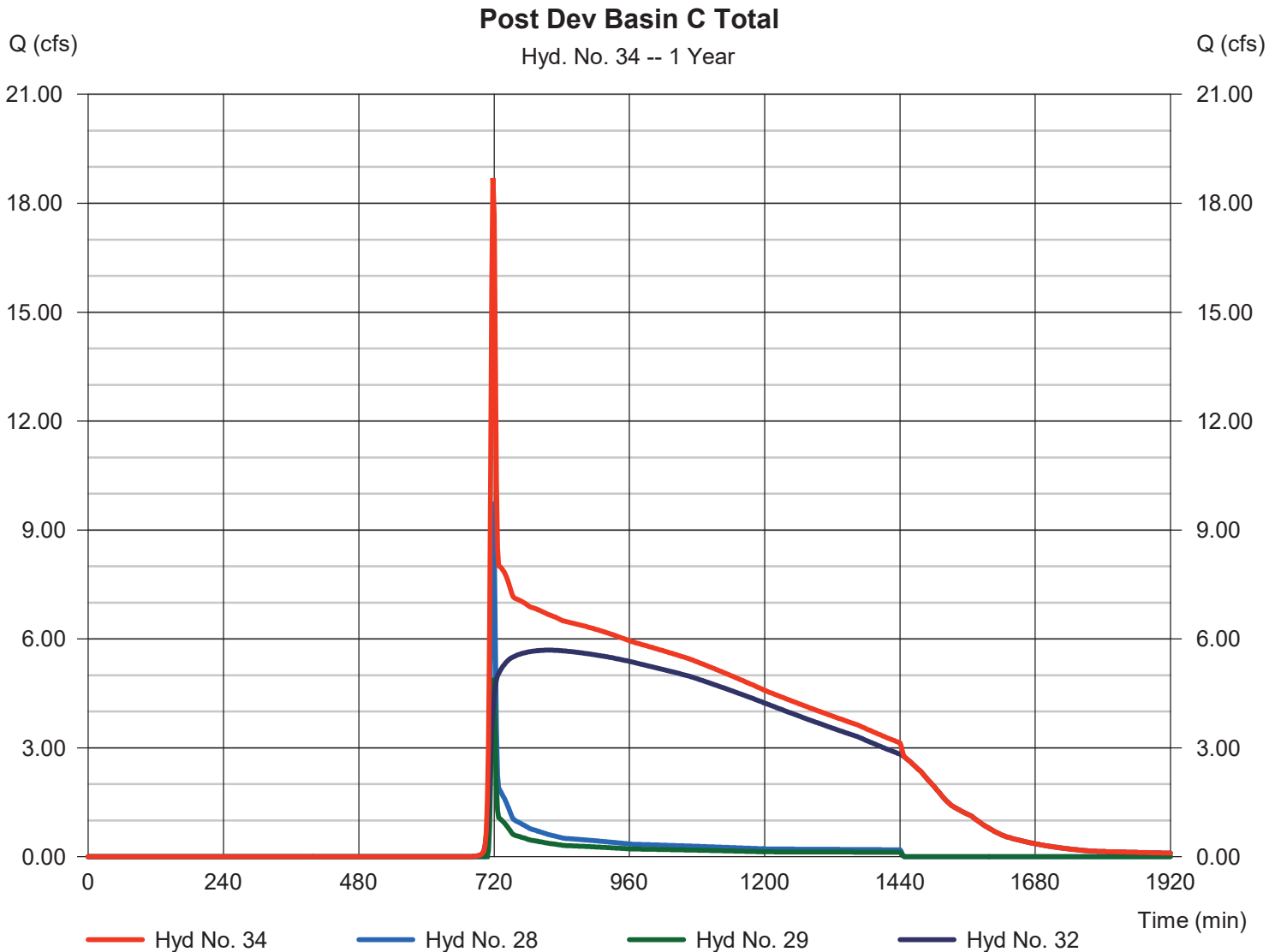
Hydrograph Report

Hyd. No. 34

Post Dev Basin C Total

Hydrograph type = Combine
Storm frequency = 1 yrs
Time interval = 2 min
Inflow hyds. = 28, 29, 32

Peak discharge = 18.69 cfs
Time to peak = 718 min
Hyd. volume = 261,338 cuft
Contrib. drain. area = 21.660 ac

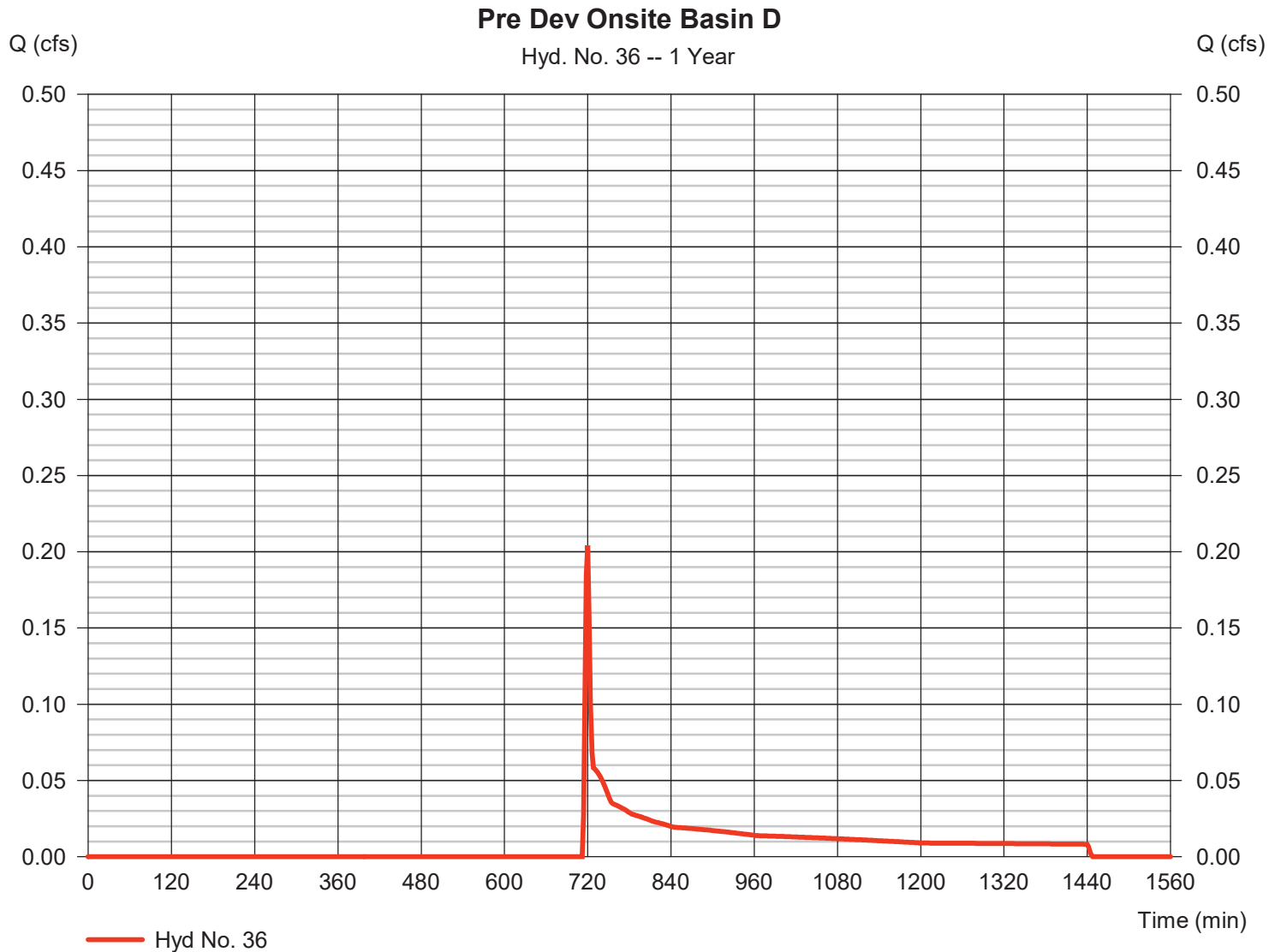


Hydrograph Report

Hyd. No. 36

Pre Dev Onsite Basin D

Hydrograph type	= SCS Runoff	Peak discharge	= 0.204 cfs
Storm frequency	= 1 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 735 cuft
Drainage area	= 0.770 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.30 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

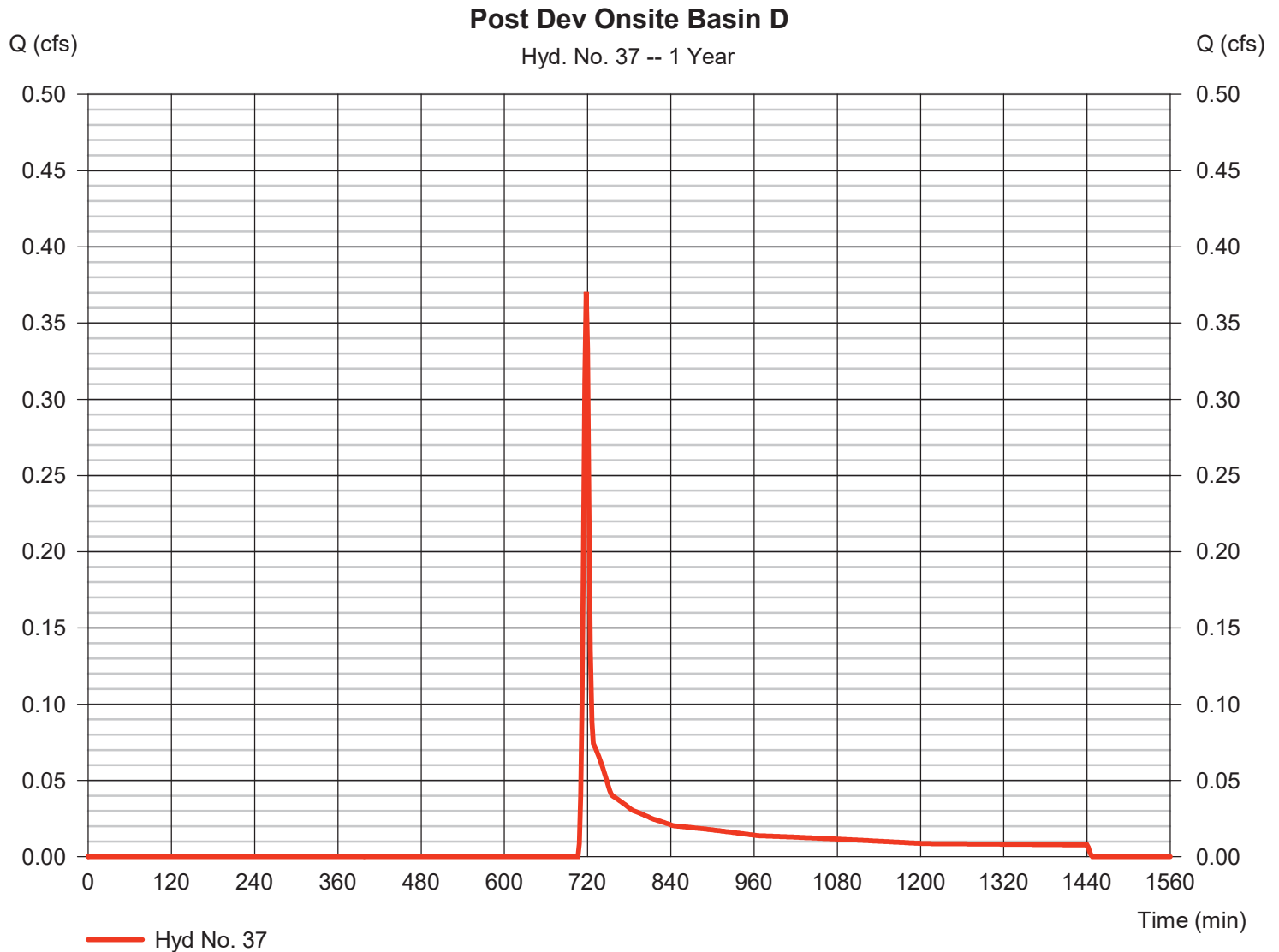


Hydrograph Report

Hyd. No. 37

Post Dev Onsite Basin D

Hydrograph type	= SCS Runoff	Peak discharge	= 0.370 cfs
Storm frequency	= 1 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 875 cuft
Drainage area	= 0.530 ac	Curve number	= 61
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.30 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

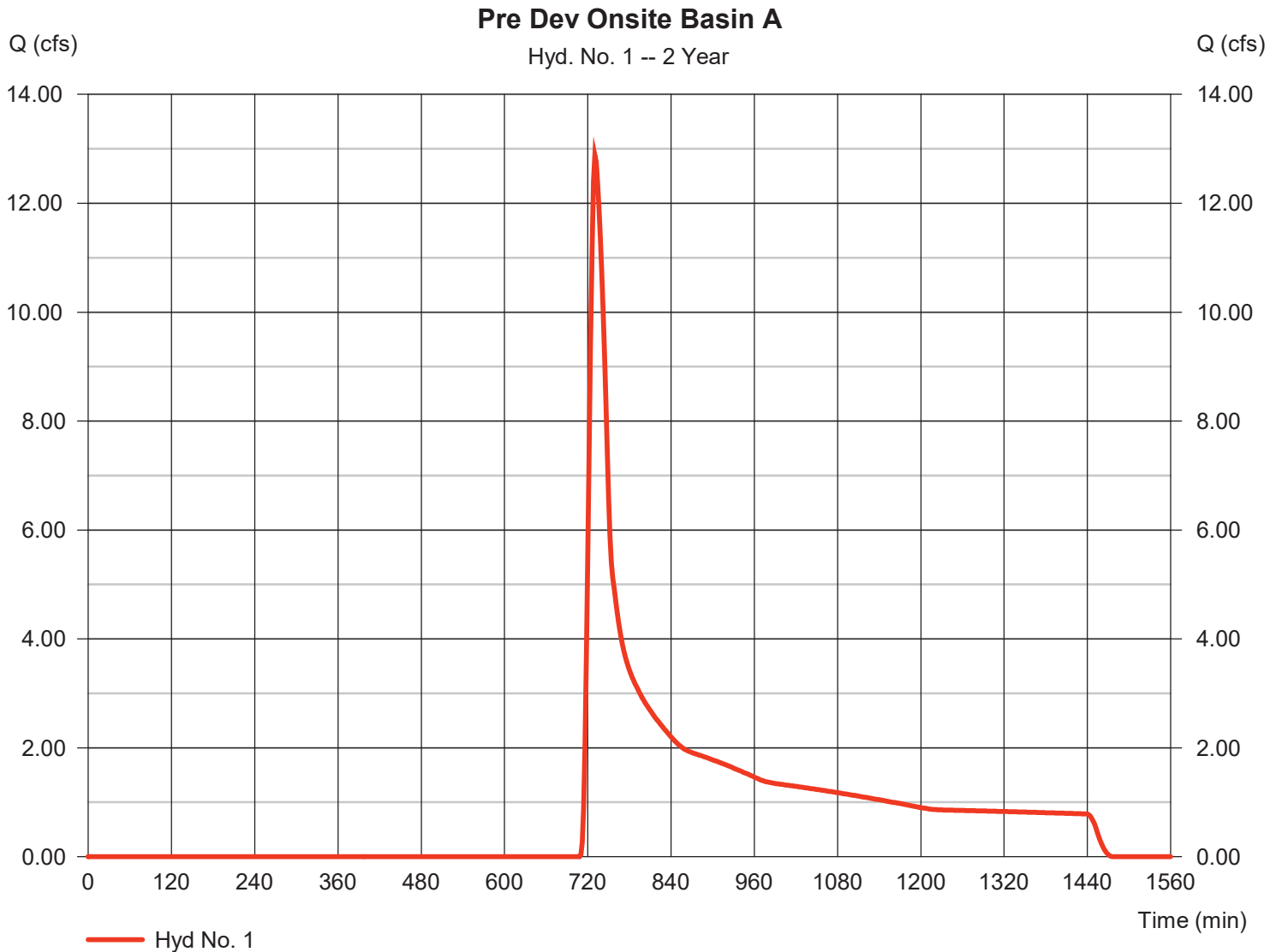
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	12.88	2	730	79,788	----	----	----	Pre Dev Onsite Basin A
2	SCS Runoff	6.488	2	722	20,256	----	----	----	Pre Dev Offite Basin A1
3	SCS Runoff	0.426	2	720	1,239	----	----	----	Pre Dev Offsite Basin A2
5	Combine	17.34	2	728	101,283	1, 2, 3,	----	----	Pre Dev Basin A Total
7	SCS Runoff	115.48	2	718	231,769	----	----	----	Post Dev Onsite Basin A to Pond 1
8	SCS Runoff	1.259	2	722	4,246	----	----	----	Post Dev Offsite Basin A to Pond 1
9	SCS Runoff	5.166	2	720	13,903	----	----	----	Post Dev Offsite Basin A1 Bypass
10	SCS Runoff	0.426	2	720	1,239	----	----	----	Post Dev Offsite Basin A2 Bypass
12	Combine	116.38	2	718	236,015	7, 8,	----	----	Post Dev Basin A to Pond 1
13	Reservoir	4.149	2	838	220,044	12	1057.49	131,311	Post Dev Pond 1 Routed
15	Combine	8.550	2	720	235,186	9, 10, 13,	----	----	Post Dev Basin A Total
17	SCS Runoff	1.324	2	732	8,762	----	----	----	Pre Dev Onsite Basin B
18	SCS Runoff	14.39	2	720	37,439	----	----	----	Post Dev Onsite Basin B
20	SCS Runoff	23.85	2	728	130,589	----	----	----	Pre Dev Onsite Basin C
21	SCS Runoff	8.905	2	718	19,834	----	----	----	Pre Dev Offsite Basin C1
22	SCS Runoff	14.18	2	728	67,882	----	----	----	Pre Dev Offsite Basin C2
24	Combine	39.71	2	728	218,305	20, 21, 22,	----	----	Pre Dev Basin C Total
26	SCS Runoff	116.93	2	718	234,322	----	----	----	Post Dev Onsite Basin C to Pond 2
27	SCS Runoff	14.18	2	728	67,882	----	----	----	Post Dev Offsite Basin C to Pond 2
28	SCS Runoff	14.57	2	718	31,180	----	----	----	Post Dev Onsite Basin C Bypass
29	SCS Runoff	8.069	2	718	18,453	----	----	----	Post Dev Offsite Basin C Bypass
31	Combine	122.76	2	718	302,204	26, 27,	----	----	Post Dev Basin C to Pond 2
32	Reservoir	10.34	2	776	302,184	31	1107.38	125,945	Post Dev Pond 2 Routed
34	Combine	27.42	2	718	351,817	28, 29, 32,	----	----	Post Dev Basin C Total
36	SCS Runoff	0.409	2	718	1,127	----	----	----	Pre Dev Onsite Basin D
37	SCS Runoff	0.566	2	718	1,234	----	----	----	Post Dev Onsite Basin D
1220263 Hydrology Concept.gpw					Return Period: 2 Year			Friday, 01 / 31 / 2025	

Hydrograph Report

Hyd. No. 1

Pre Dev Onsite Basin A

Hydrograph type	= SCS Runoff	Peak discharge	= 12.88 cfs
Storm frequency	= 2 yrs	Time to peak	= 730 min
Time interval	= 2 min	Hyd. volume	= 79,788 cuft
Drainage area	= 50.200 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 22.00 min
Total precip.	= 3.74 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

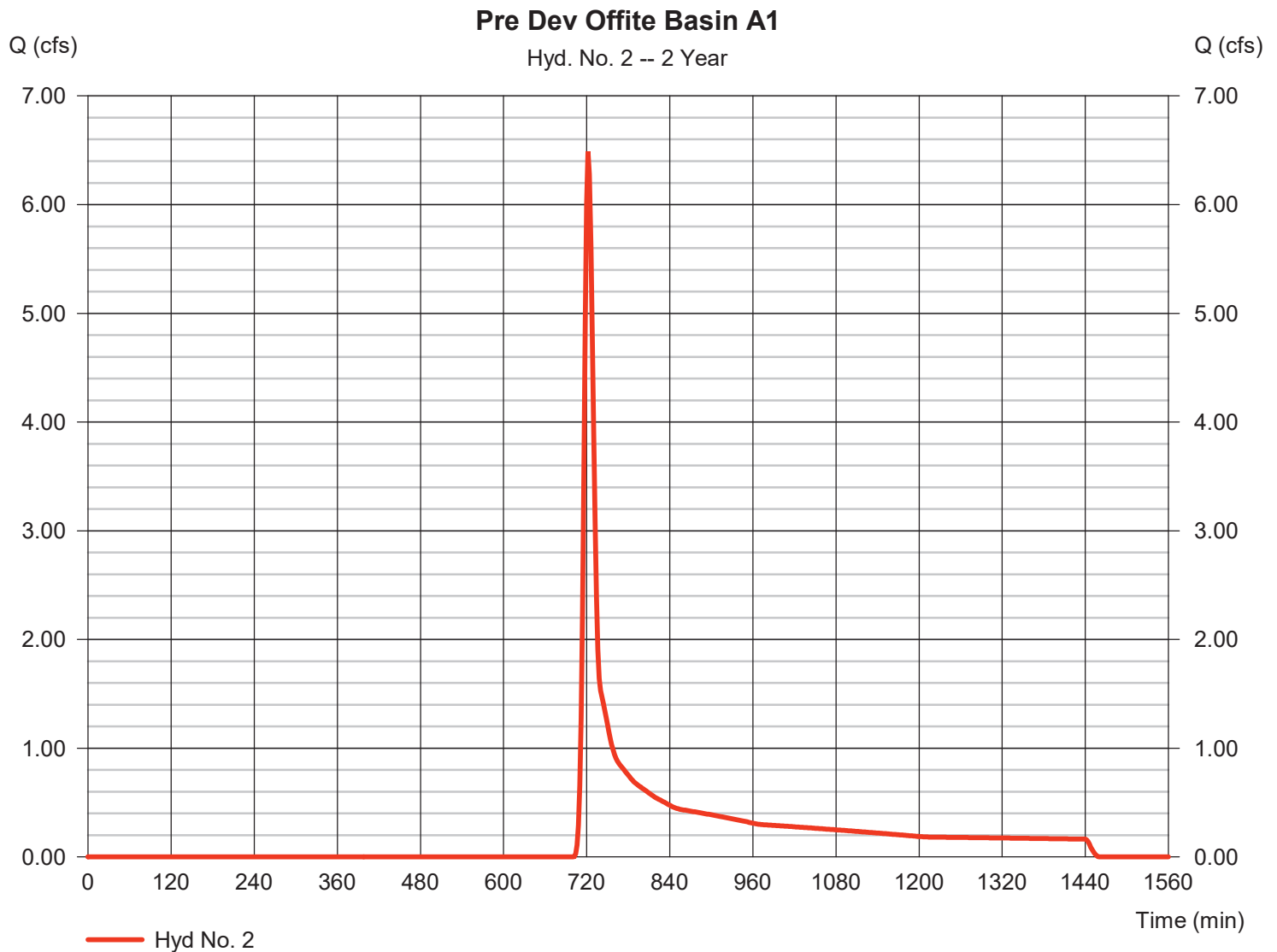


Hydrograph Report

Hyd. No. 2

Pre Dev Offite Basin A1

Hydrograph type	= SCS Runoff	Peak discharge	= 6.488 cfs
Storm frequency	= 2 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 20,256 cuft
Drainage area	= 7.910 ac	Curve number	= 61
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.00 min
Total precip.	= 3.74 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

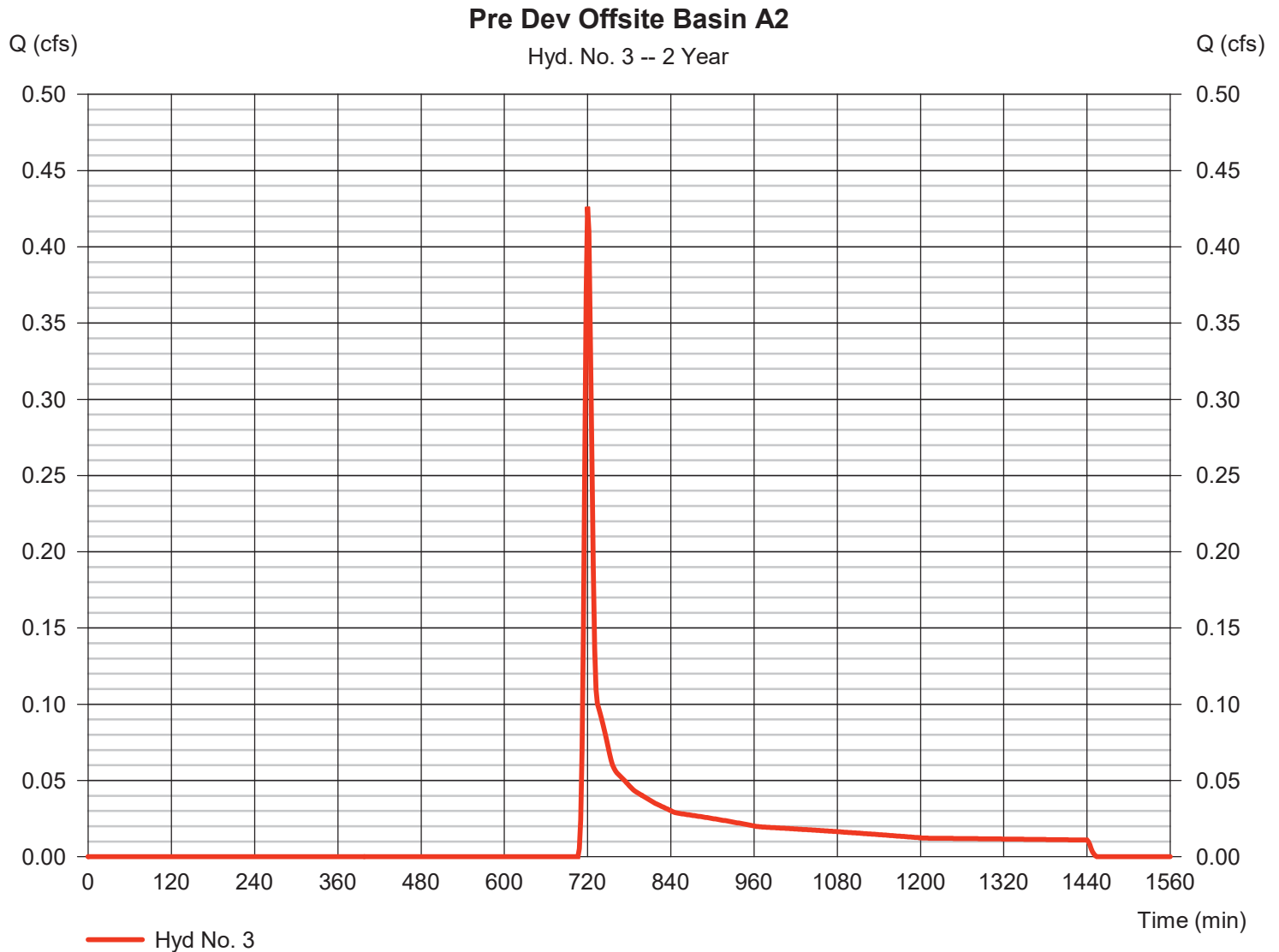


Hydrograph Report

Hyd. No. 3

Pre Dev Offsite Basin A2

Hydrograph type	= SCS Runoff	Peak discharge	= 0.426 cfs
Storm frequency	= 2 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 1,239 cuft
Drainage area	= 0.620 ac	Curve number	= 58
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 3.74 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



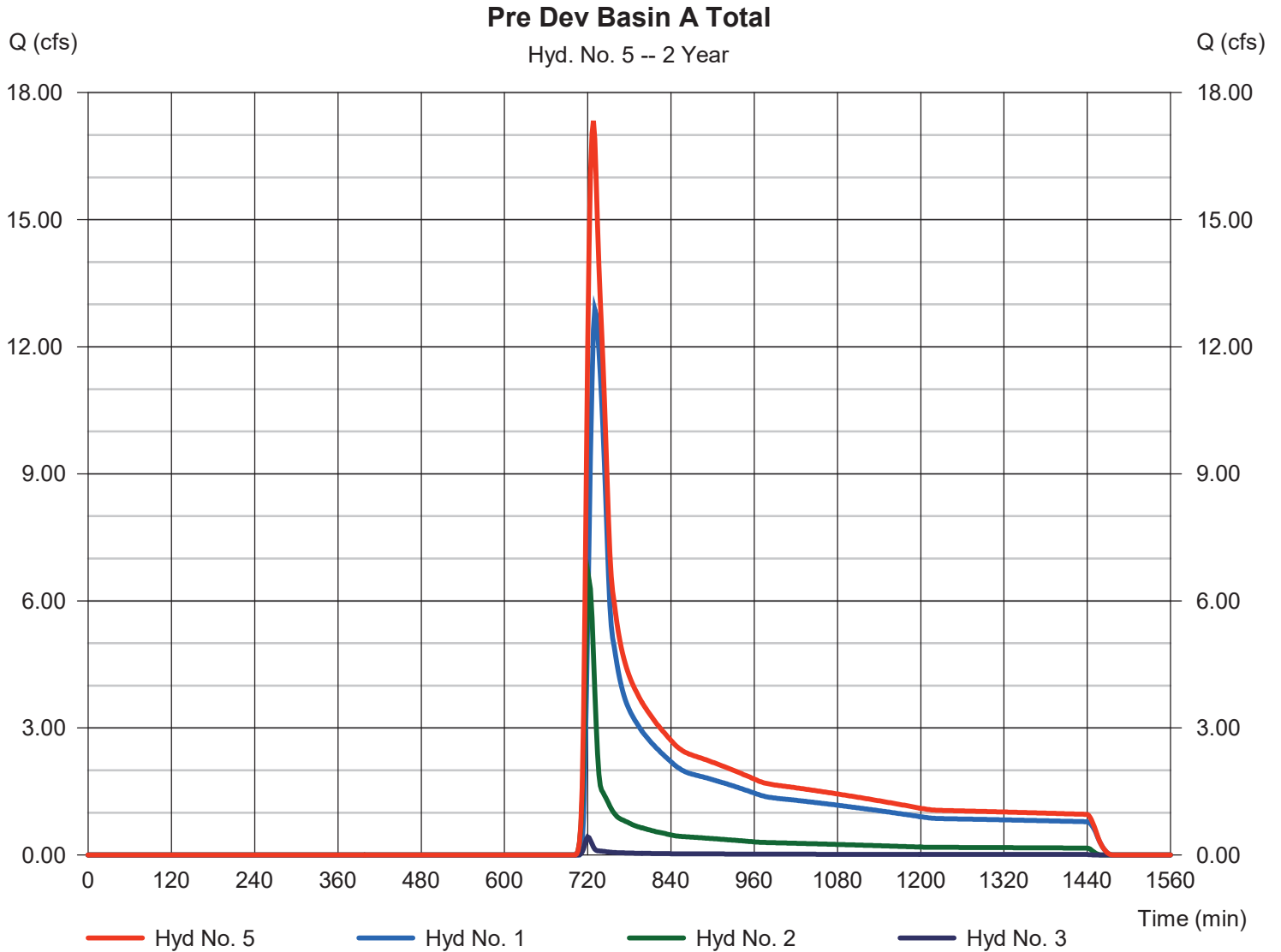
Hydrograph Report

Hyd. No. 5

Pre Dev Basin A Total

Hydrograph type = Combine
Storm frequency = 2 yrs
Time interval = 2 min
Inflow hyds. = 1, 2, 3

Peak discharge = 17.34 cfs
Time to peak = 728 min
Hyd. volume = 101,283 cuft
Contrib. drain. area = 58.730 ac



Hydrograph Report

Hyd. No. 7

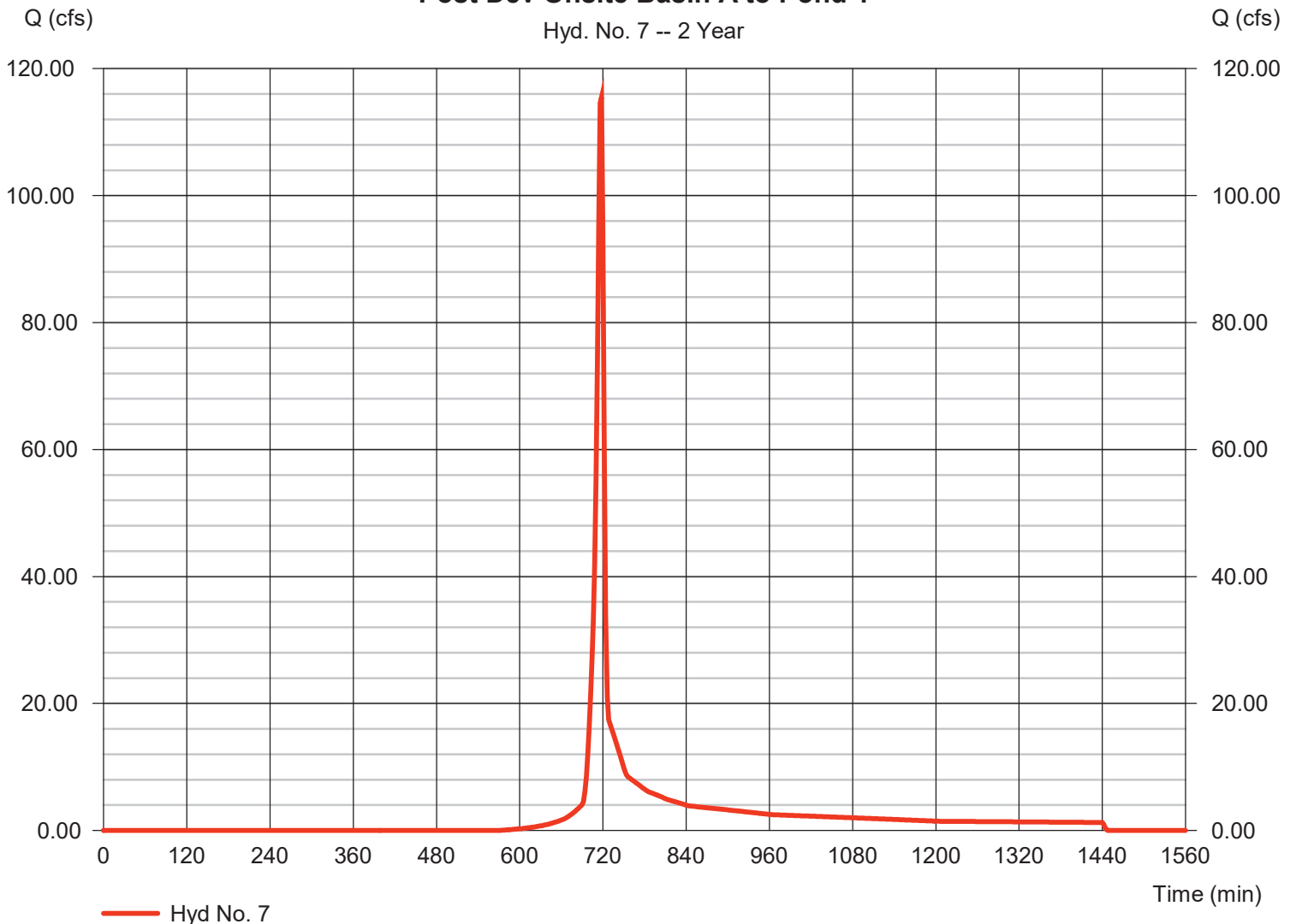
Post Dev Onsite Basin A to Pond 1

Hydrograph type = SCS Runoff
Storm frequency = 2 yrs
Time interval = 2 min
Drainage area = 42.270 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 3.74 in
Storm duration = 24 hrs

Peak discharge = 115.48 cfs
Time to peak = 718 min
Hyd. volume = 231,769 cuft
Curve number = 77
Hydraulic length = 0 ft
Time of conc. (Tc) = 5.00 min
Distribution = Type II
Shape factor = 484

Post Dev Onsite Basin A to Pond 1

Hyd. No. 7 -- 2 Year



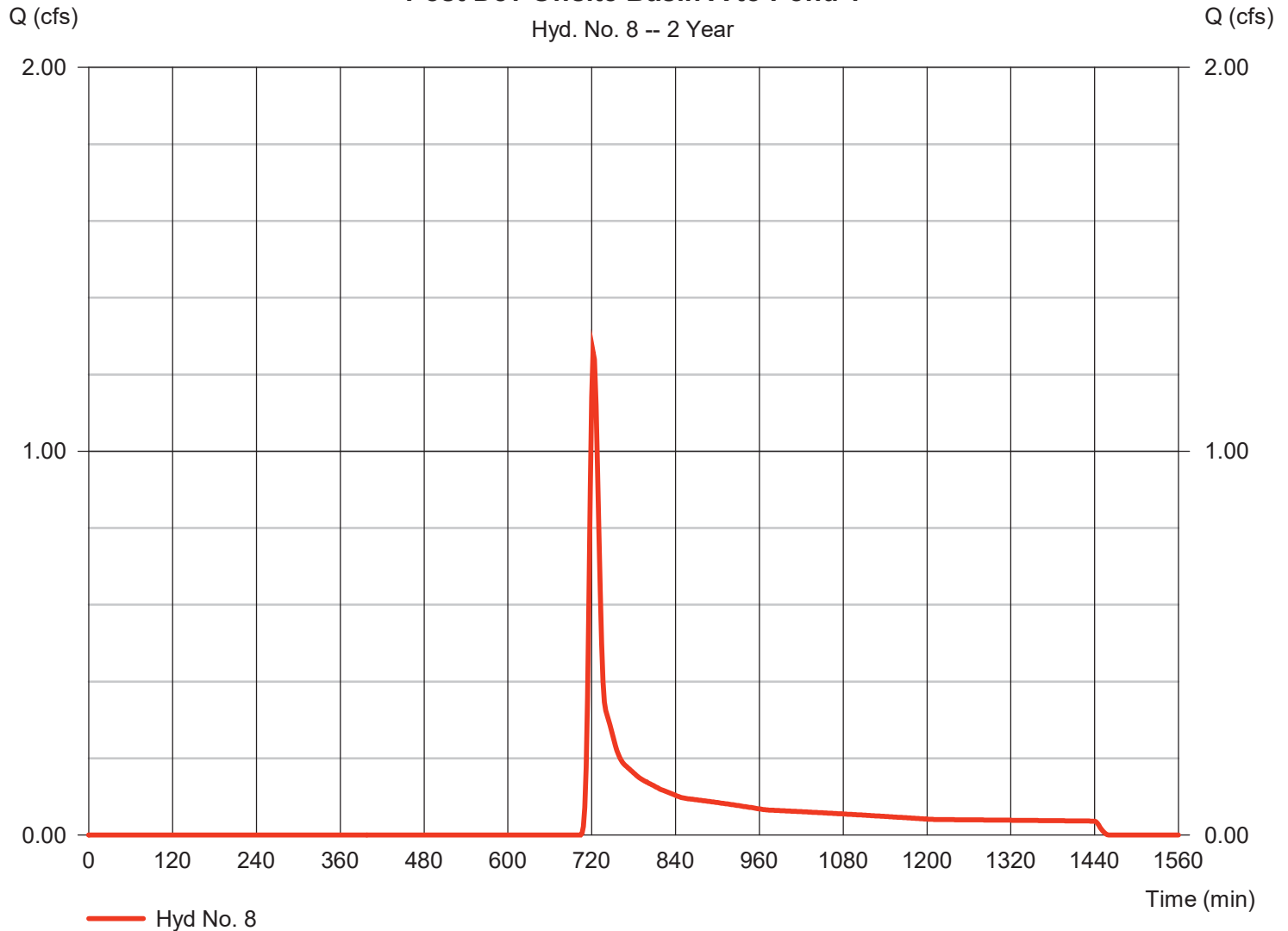
Hydrograph Report

Hyd. No. 8

Post Dev Offsite Basin A to Pond 1

Hydrograph type	= SCS Runoff	Peak discharge	= 1.259 cfs
Storm frequency	= 2 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 4,246 cuft
Drainage area	= 1.910 ac	Curve number	= 59
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.00 min
Total precip.	= 3.74 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A to Pond 1



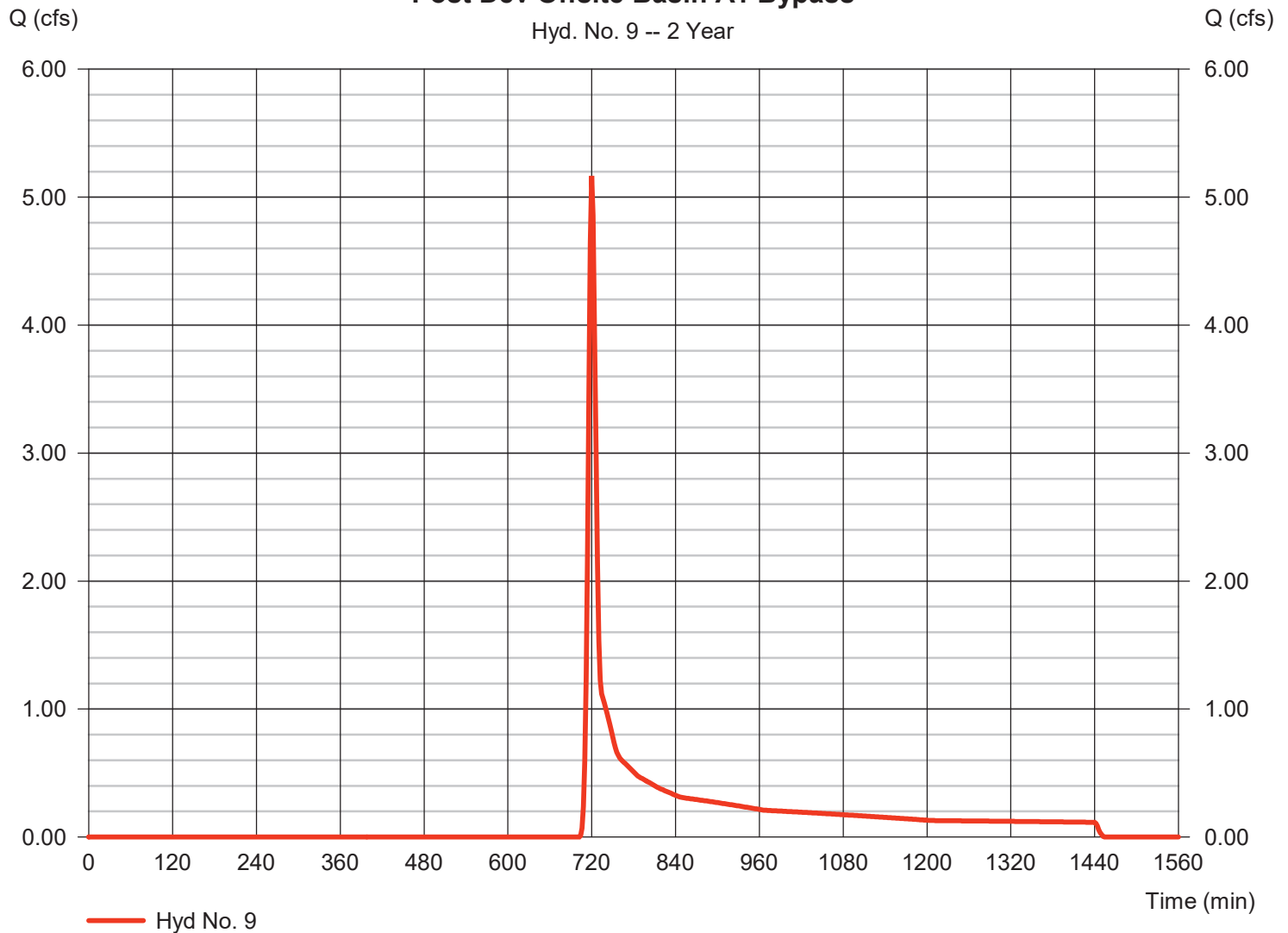
Hydrograph Report

Hyd. No. 9

Post Dev Offsite Basin A1 Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 5.166 cfs
Storm frequency	= 2 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 13,903 cuft
Drainage area	= 6.000 ac	Curve number	= 60
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 3.74 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A1 Bypass



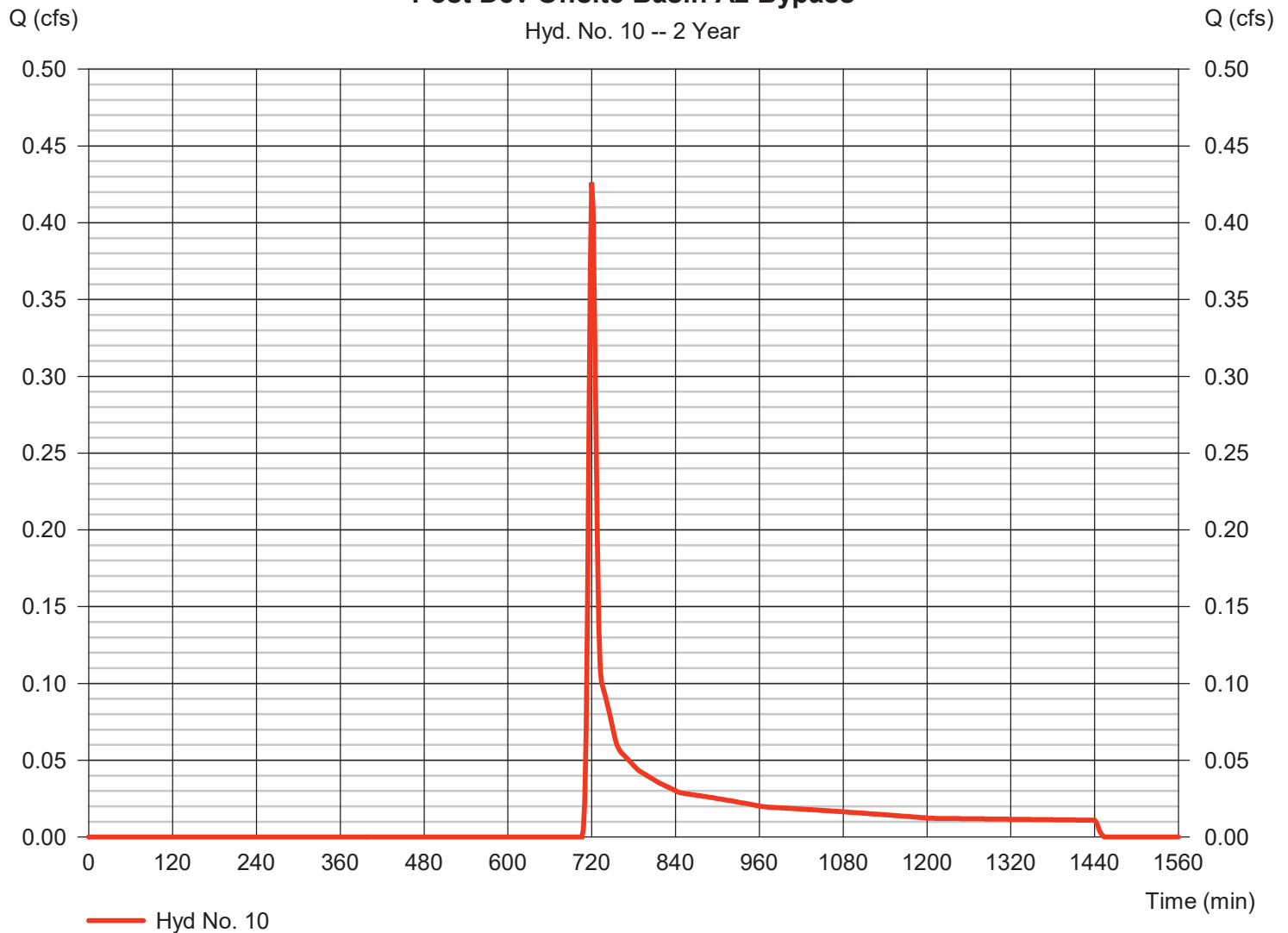
Hydrograph Report

Hyd. No. 10

Post Dev Offsite Basin A2 Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 0.426 cfs
Storm frequency	= 2 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 1,239 cuft
Drainage area	= 0.620 ac	Curve number	= 58
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 3.74 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A2 Bypass



Hydrograph Report

Hyd. No. 12

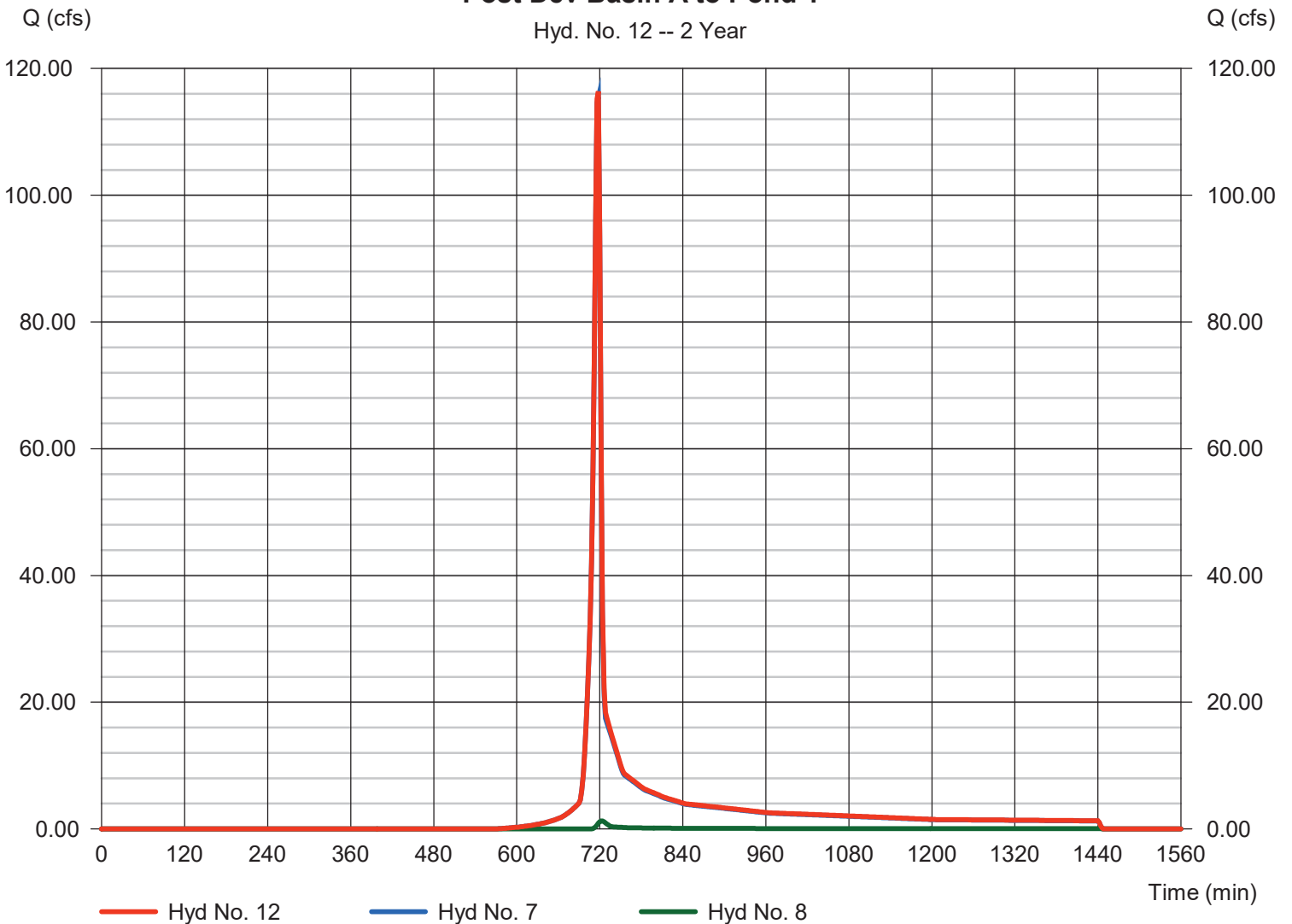
Post Dev Basin A to Pond 1

Hydrograph type = Combine
Storm frequency = 2 yrs
Time interval = 2 min
Inflow hyds. = 7, 8

Peak discharge = 116.38 cfs
Time to peak = 718 min
Hyd. volume = 236,015 cuft
Contrib. drain. area = 44.180 ac

Post Dev Basin A to Pond 1

Hyd. No. 12 -- 2 Year



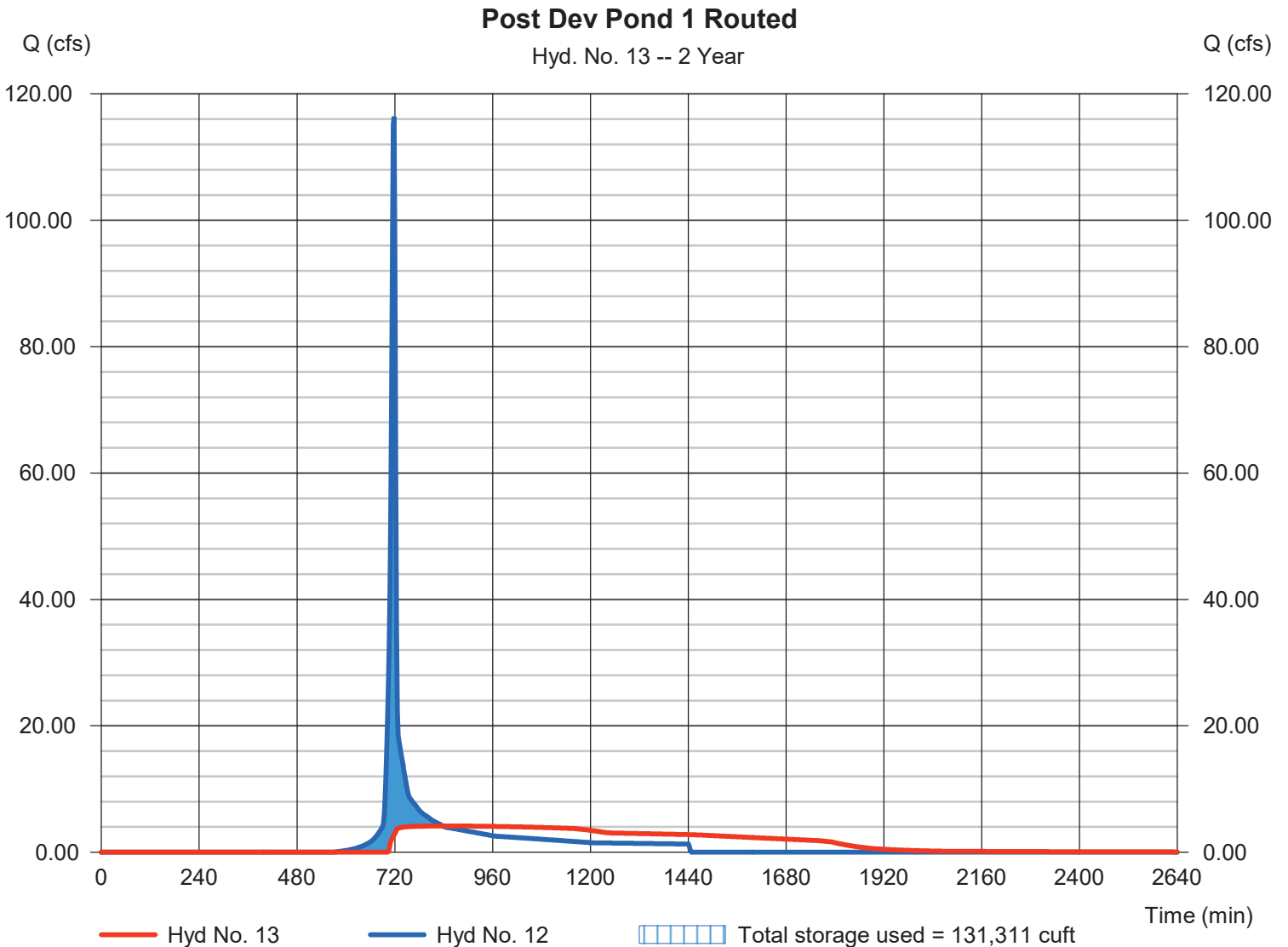
Hydrograph Report

Hyd. No. 13

Post Dev Pond 1 Routed

Hydrograph type	= Reservoir	Peak discharge	= 4.149 cfs
Storm frequency	= 2 yrs	Time to peak	= 838 min
Time interval	= 2 min	Hyd. volume	= 220,044 cuft
Inflow hyd. No.	= 12 - Post Dev Basin A to Pond	Max. Elevation	= 1057.49 ft
Reservoir name	= Pond 1	Max. Storage	= 131,311 cuft

Storage Indication method used.



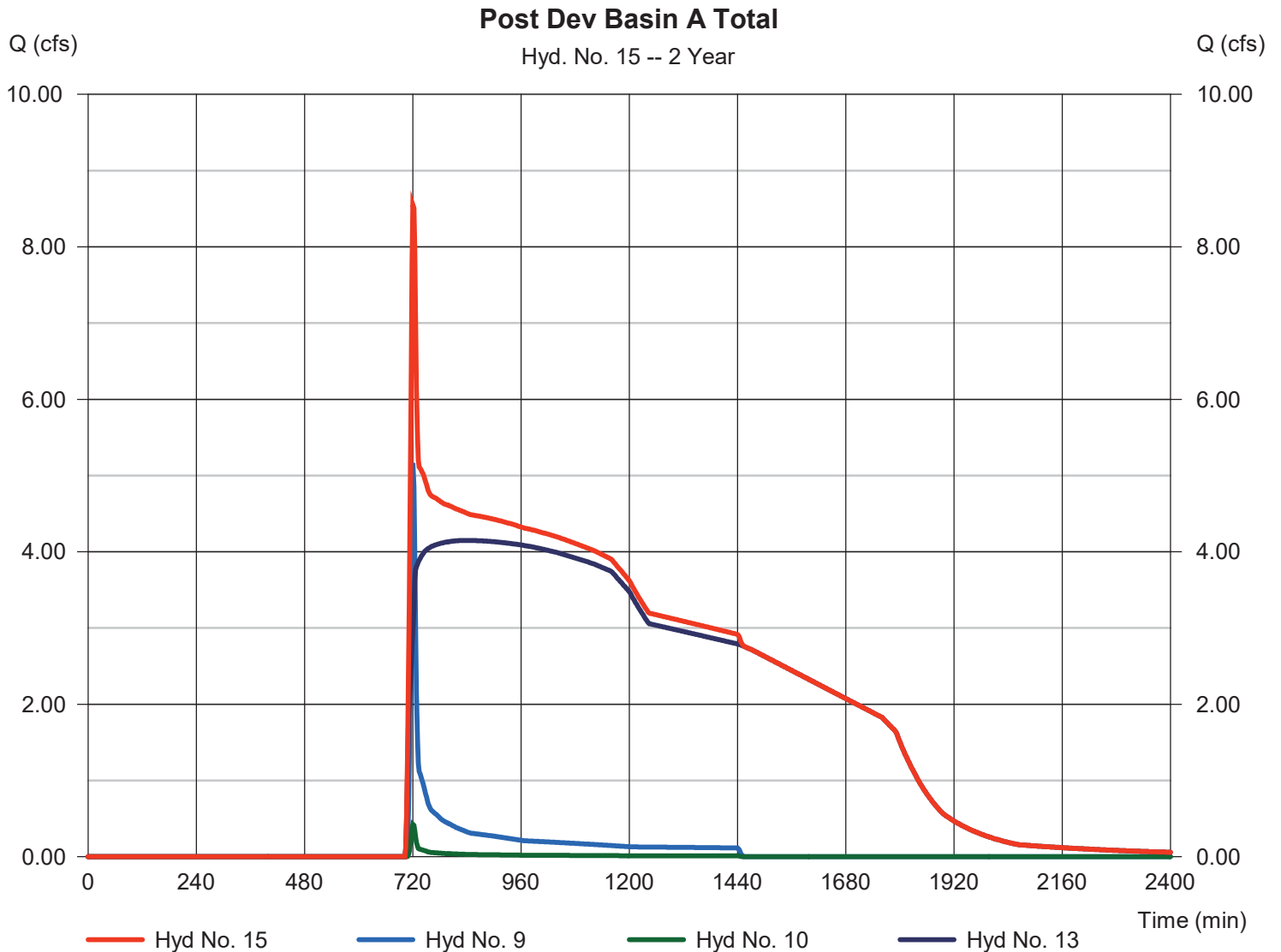
Hydrograph Report

Hyd. No. 15

Post Dev Basin A Total

Hydrograph type = Combine
Storm frequency = 2 yrs
Time interval = 2 min
Inflow hyds. = 9, 10, 13

Peak discharge = 8.550 cfs
Time to peak = 720 min
Hyd. volume = 235,186 cuft
Contrib. drain. area = 6.620 ac

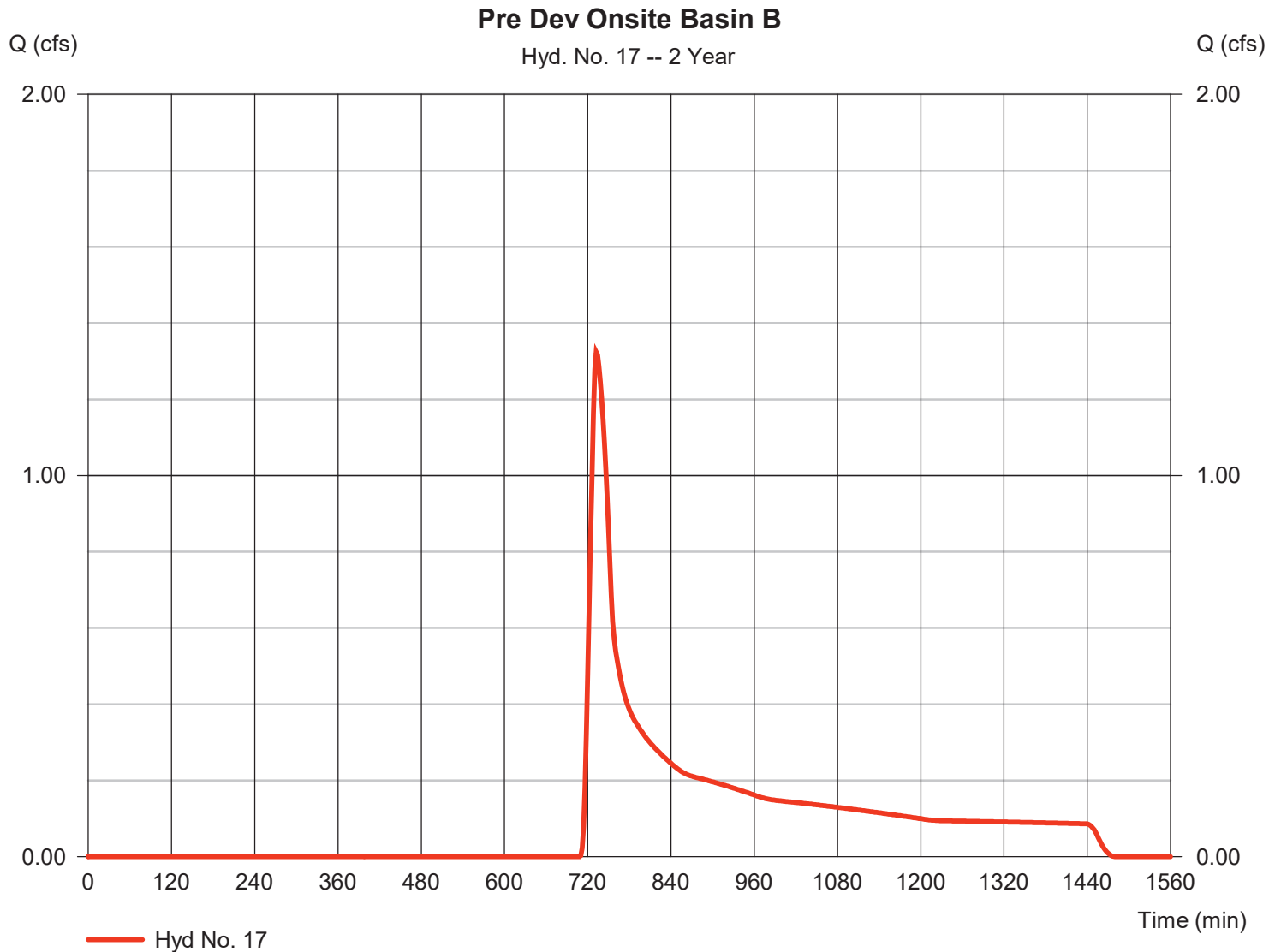


Hydrograph Report

Hyd. No. 17

Pre Dev Onsite Basin B

Hydrograph type	= SCS Runoff	Peak discharge	= 1.324 cfs
Storm frequency	= 2 yrs	Time to peak	= 732 min
Time interval	= 2 min	Hyd. volume	= 8,762 cuft
Drainage area	= 5.700 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 25.00 min
Total precip.	= 3.74 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

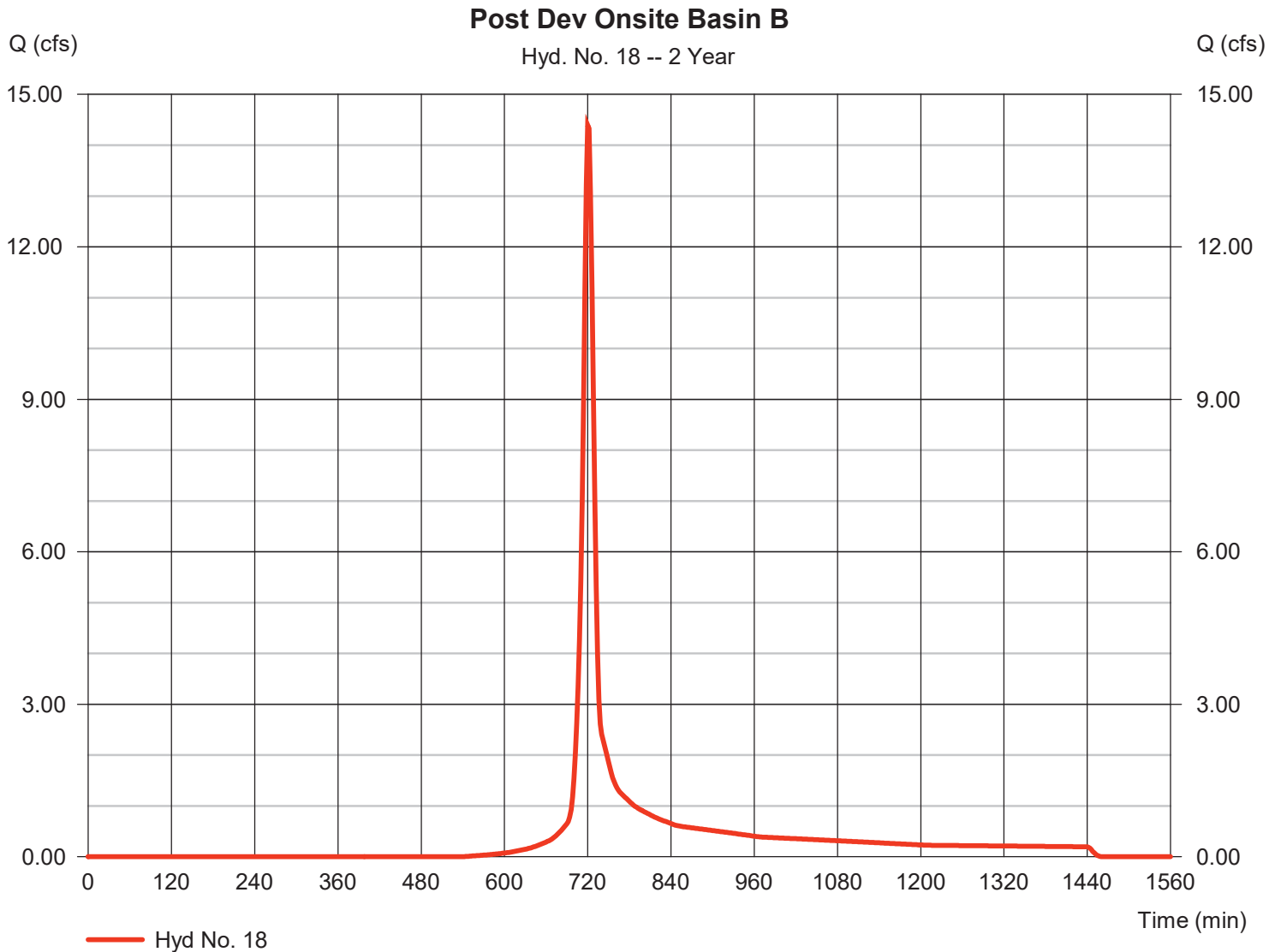


Hydrograph Report

Hyd. No. 18

Post Dev Onsite Basin B

Hydrograph type	= SCS Runoff	Peak discharge	= 14.39 cfs
Storm frequency	= 2 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 37,439 cuft
Drainage area	= 5.700 ac	Curve number	= 79
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.00 min
Total precip.	= 3.74 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

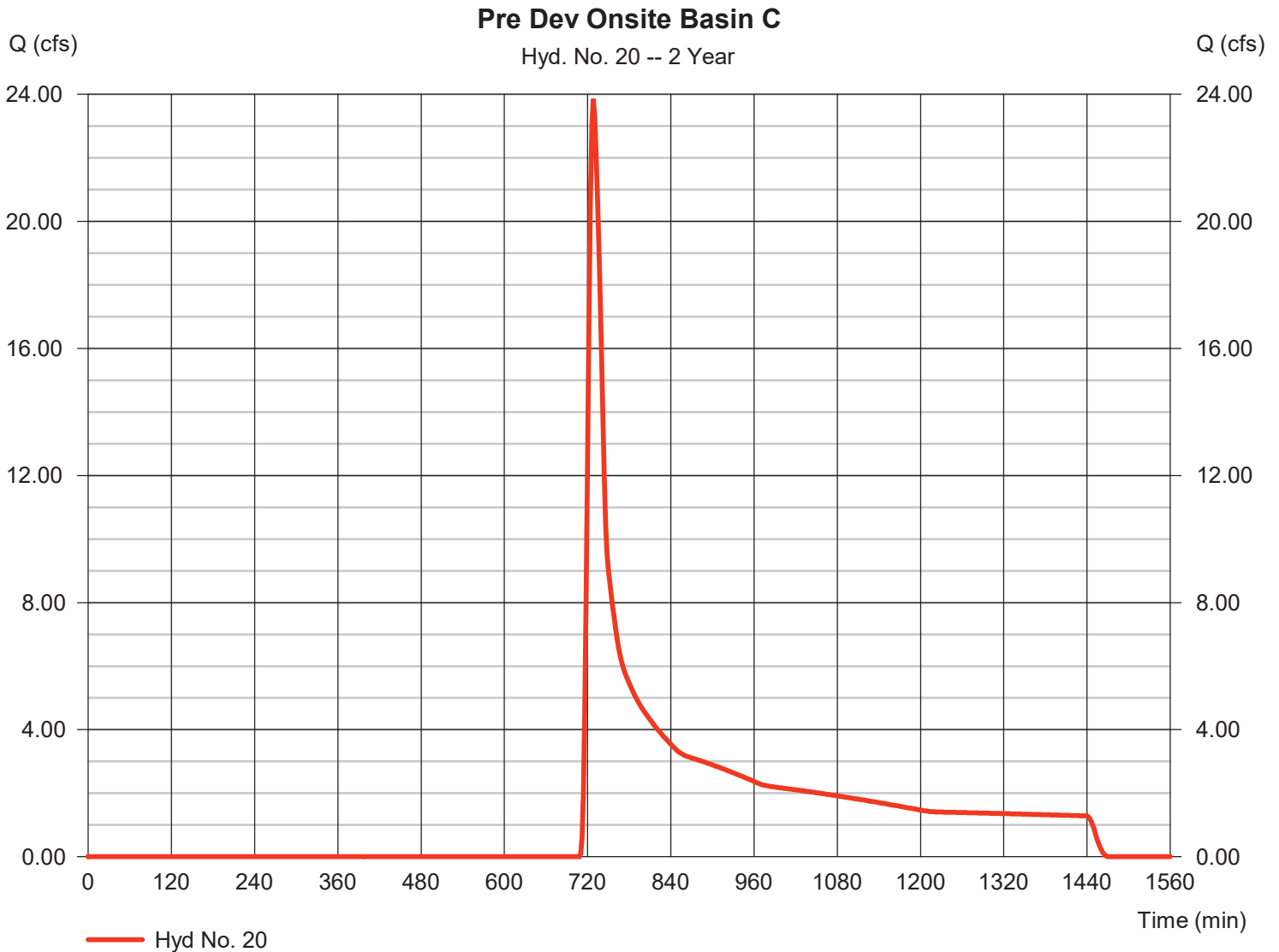


Hydrograph Report

Hyd. No. 20

Pre Dev Onsite Basin C

Hydrograph type	= SCS Runoff	Peak discharge	= 23.85 cfs
Storm frequency	= 2 yrs	Time to peak	= 728 min
Time interval	= 2 min	Hyd. volume	= 130,589 cuft
Drainage area	= 83.630 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 17.00 min
Total precip.	= 3.74 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

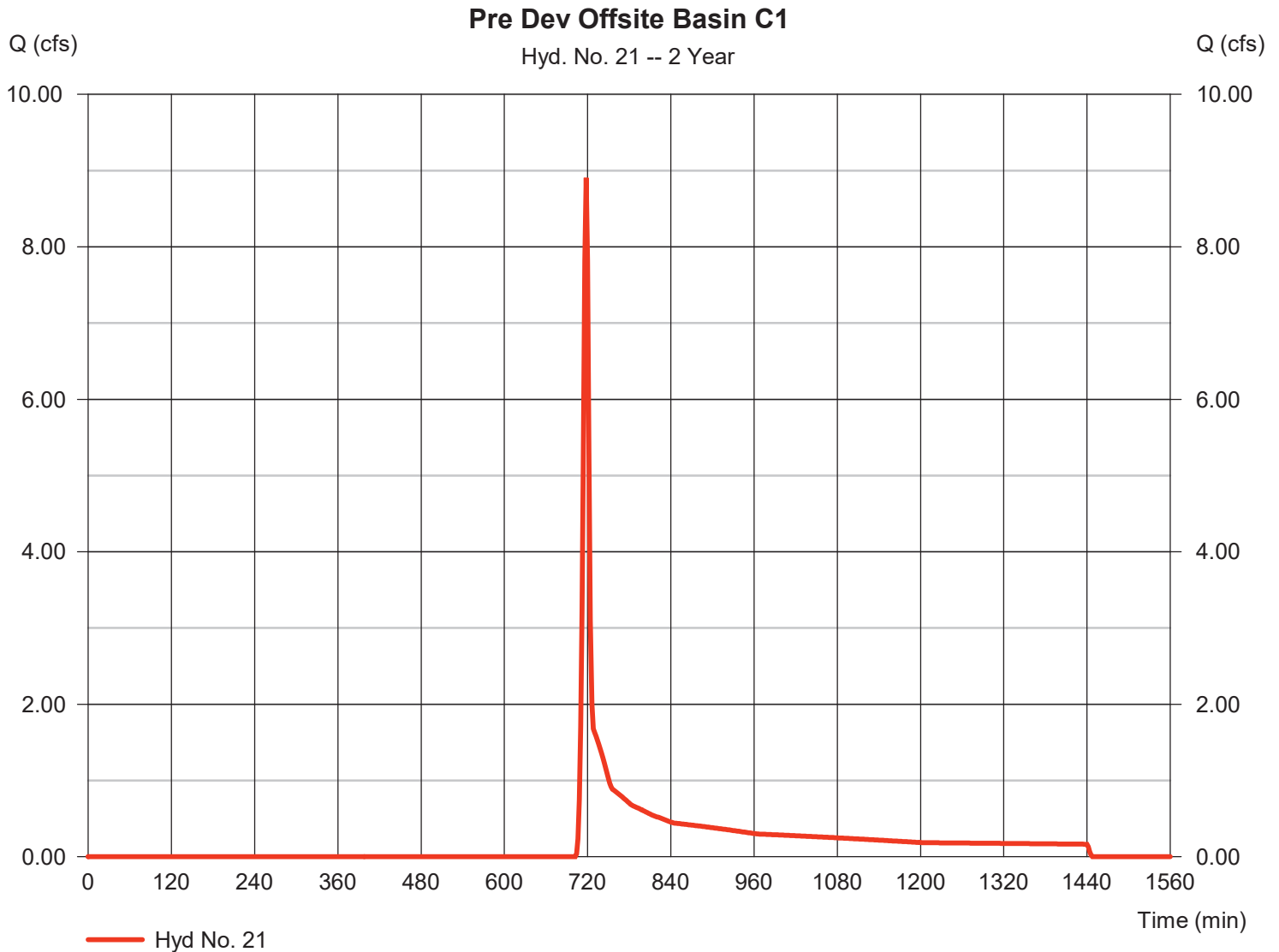


Hydrograph Report

Hyd. No. 21

Pre Dev Offsite Basin C1

Hydrograph type	= SCS Runoff	Peak discharge	= 8.905 cfs
Storm frequency	= 2 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 19,834 cuft
Drainage area	= 9.130 ac	Curve number	= 60
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.74 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

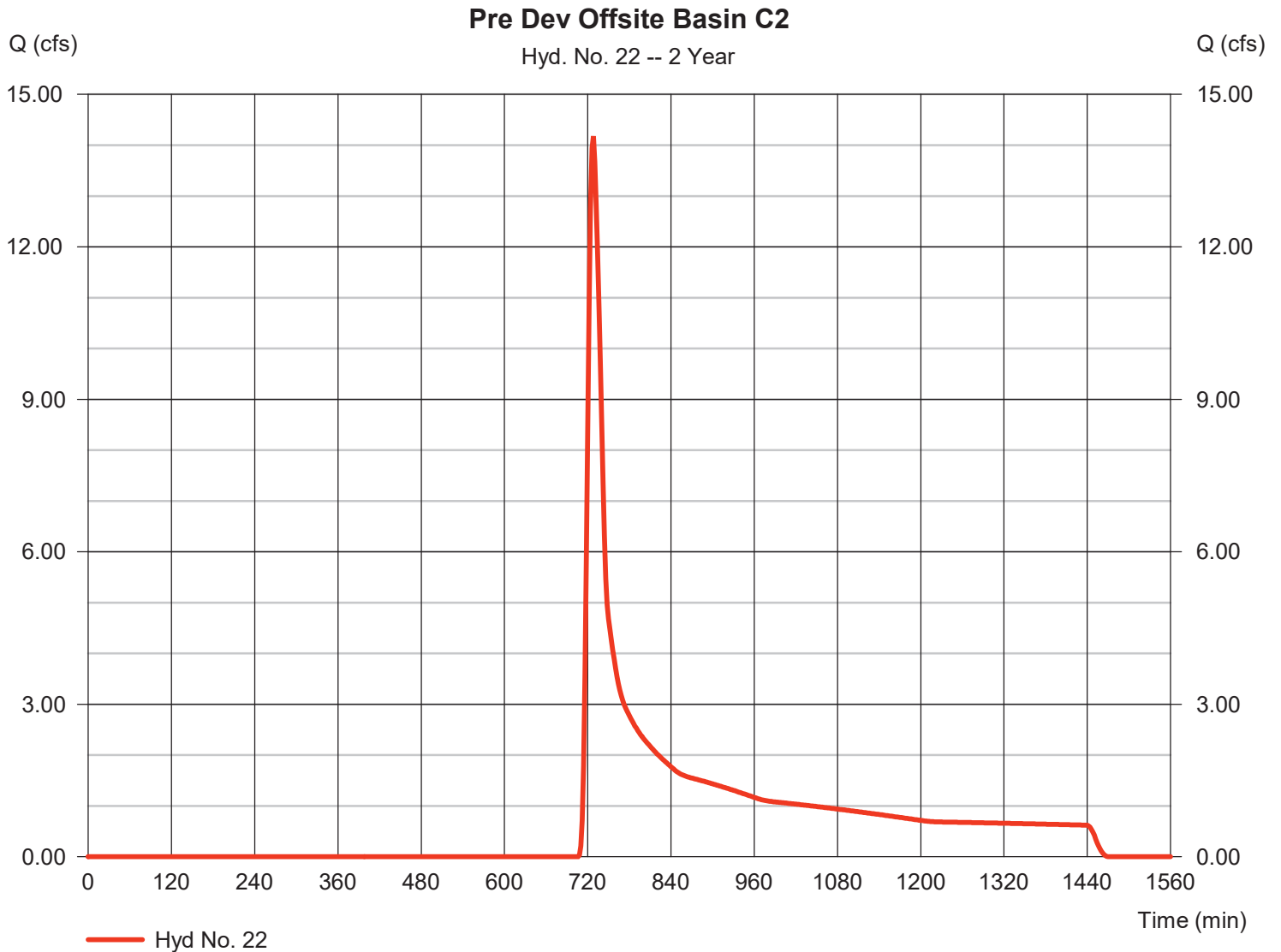


Hydrograph Report

Hyd. No. 22

Pre Dev Offsite Basin C2

Hydrograph type	= SCS Runoff	Peak discharge	= 14.18 cfs
Storm frequency	= 2 yrs	Time to peak	= 728 min
Time interval	= 2 min	Hyd. volume	= 67,882 cuft
Drainage area	= 36.720 ac	Curve number	= 57
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 18.00 min
Total precip.	= 3.74 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



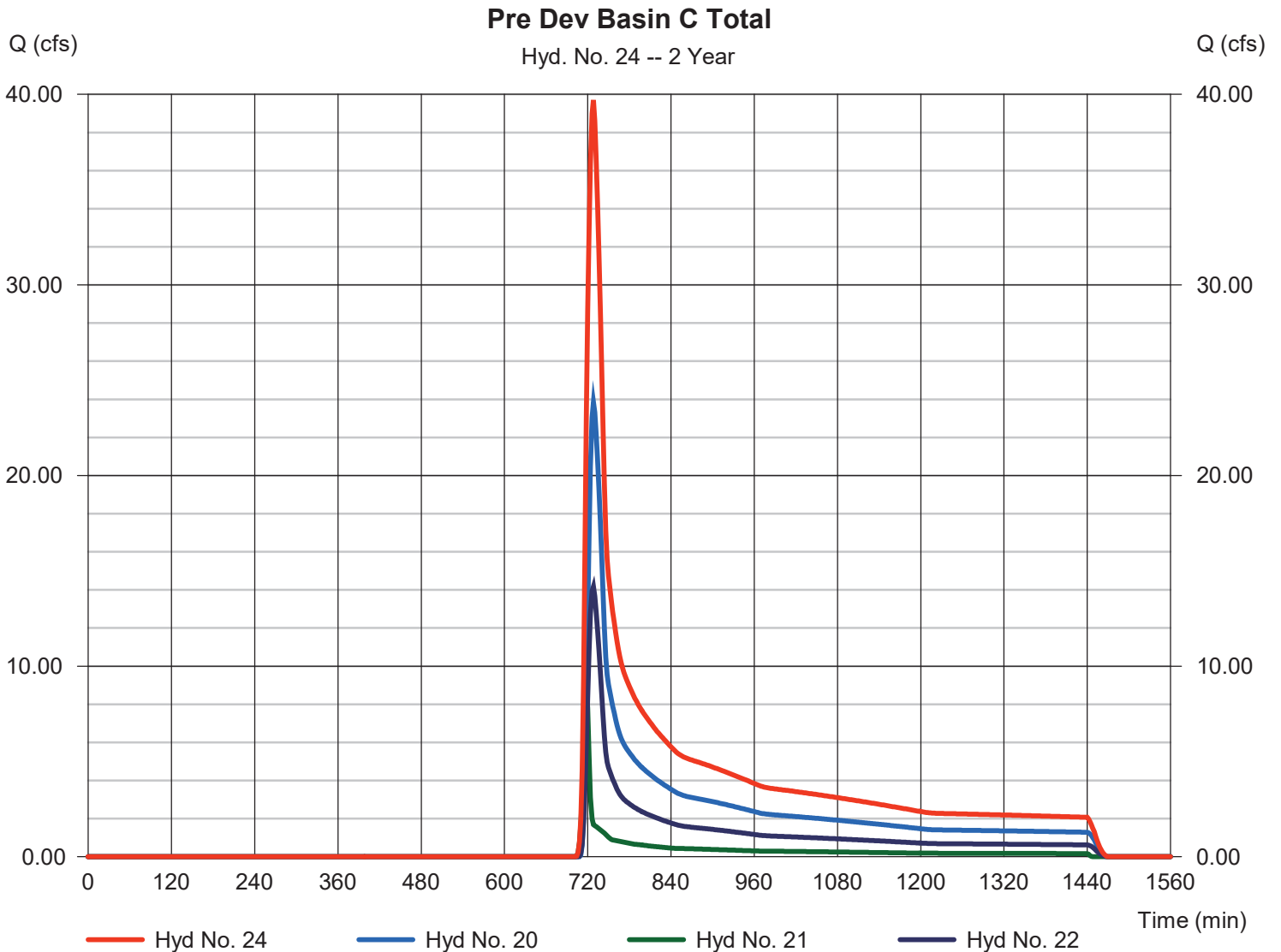
Hydrograph Report

Hyd. No. 24

Pre Dev Basin C Total

Hydrograph type = Combine
Storm frequency = 2 yrs
Time interval = 2 min
Inflow hyds. = 20, 21, 22

Peak discharge = 39.71 cfs
Time to peak = 728 min
Hyd. volume = 218,305 cuft
Contrib. drain. area = 129.480 ac



Hydrograph Report

Hyd. No. 26

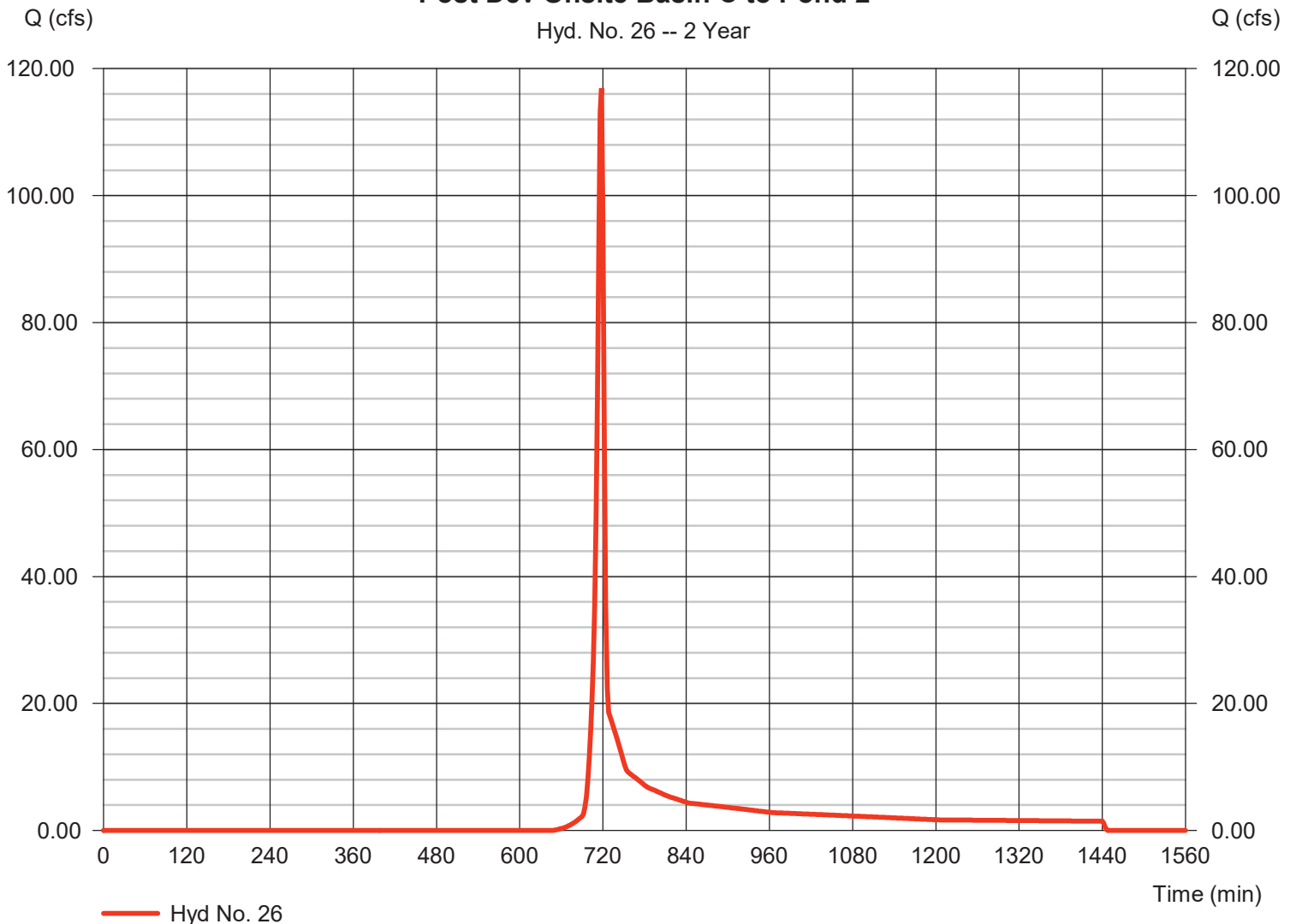
Post Dev Onsite Basin C to Pond 2

Hydrograph type = SCS Runoff
Storm frequency = 2 yrs
Time interval = 2 min
Drainage area = 56.470 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 3.74 in
Storm duration = 24 hrs

Peak discharge = 116.93 cfs
Time to peak = 718 min
Hyd. volume = 234,322 cuft
Curve number = 71
Hydraulic length = 0 ft
Time of conc. (Tc) = 5.00 min
Distribution = Type II
Shape factor = 484

Post Dev Onsite Basin C to Pond 2

Hyd. No. 26 -- 2 Year



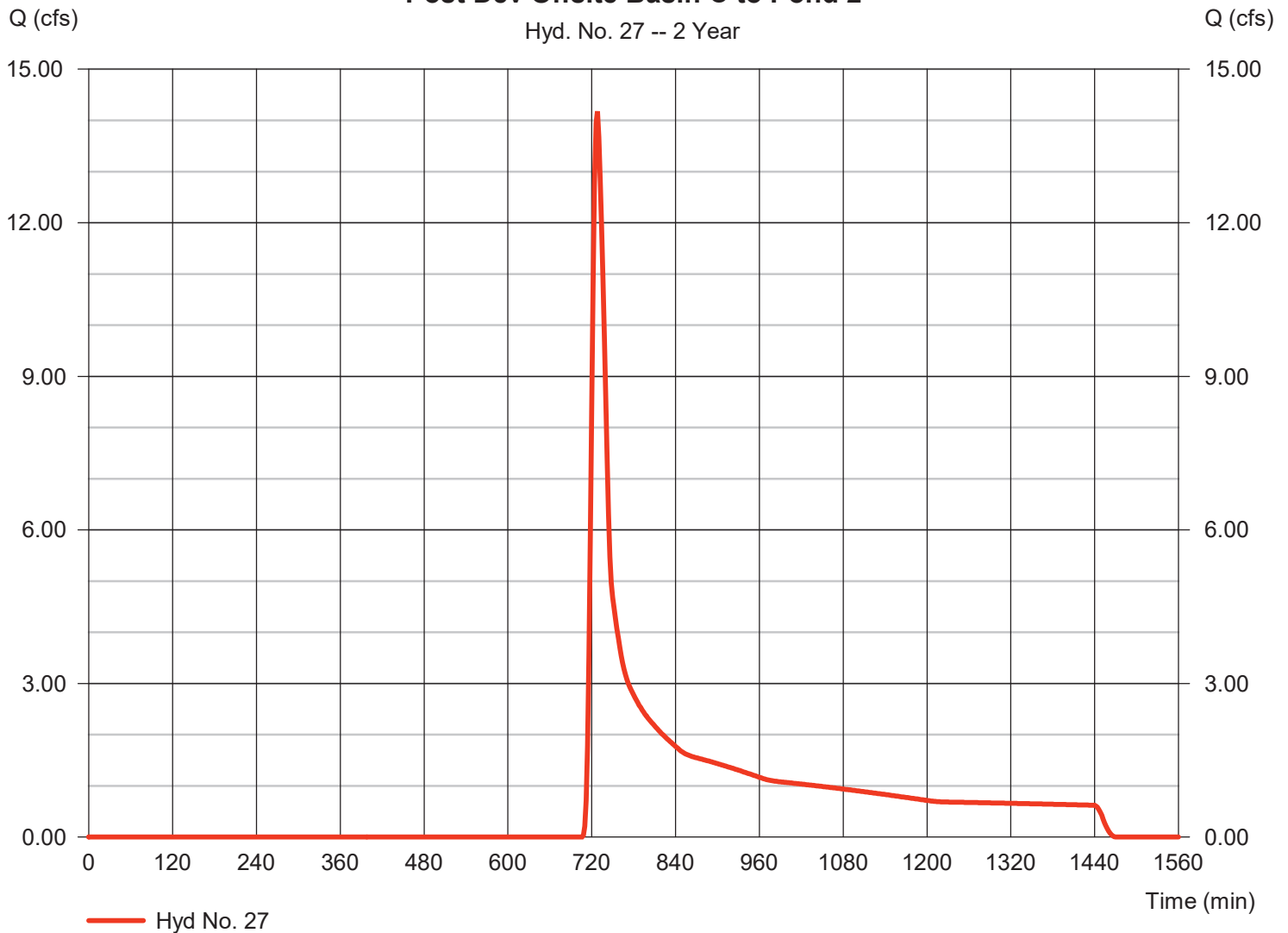
Hydrograph Report

Hyd. No. 27

Post Dev Offsite Basin C to Pond 2

Hydrograph type	= SCS Runoff	Peak discharge	= 14.18 cfs
Storm frequency	= 2 yrs	Time to peak	= 728 min
Time interval	= 2 min	Hyd. volume	= 67,882 cuft
Drainage area	= 36.720 ac	Curve number	= 57
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 18.00 min
Total precip.	= 3.74 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin C to Pond 2

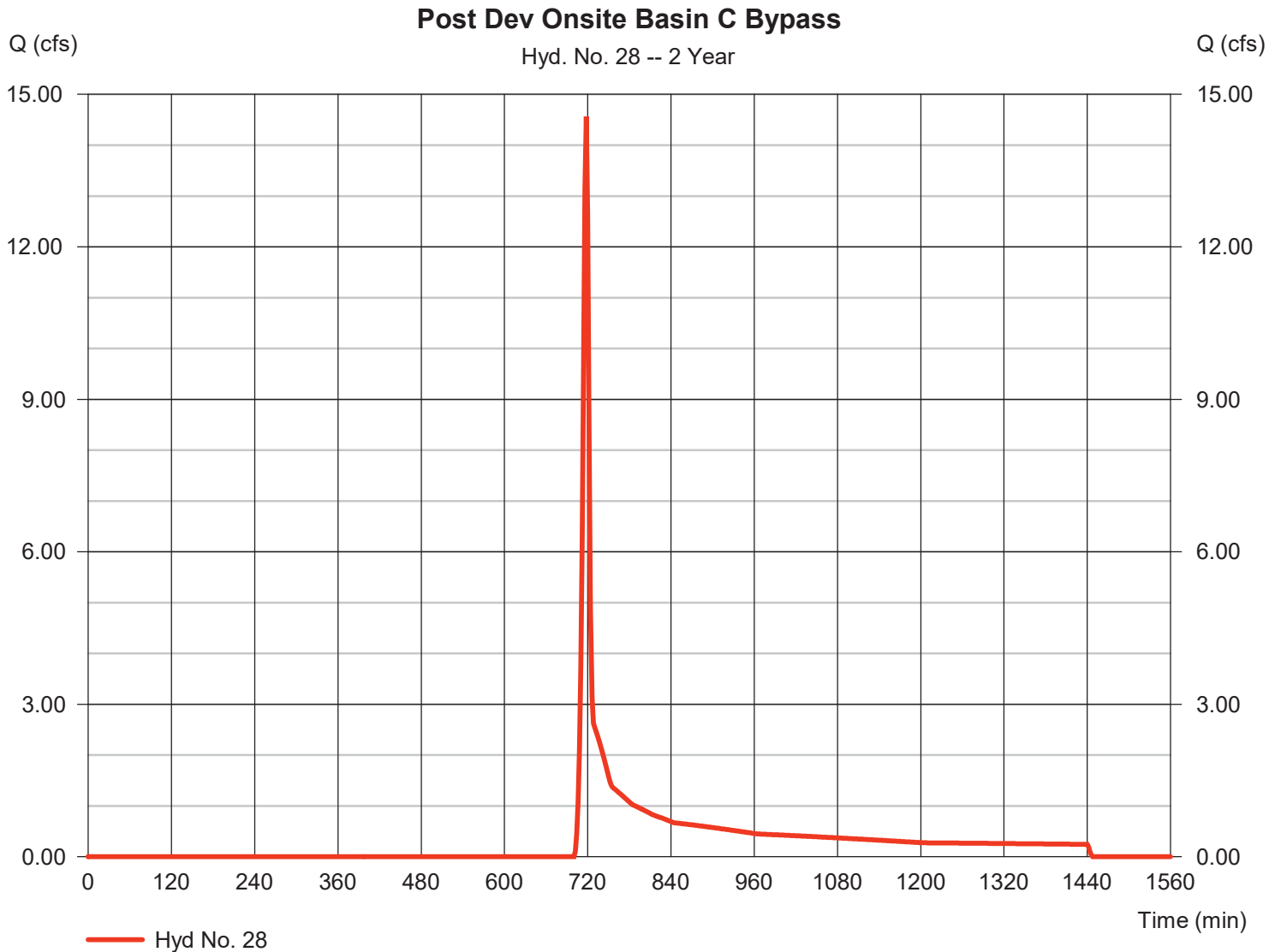


Hydrograph Report

Hyd. No. 28

Post Dev Onsite Basin C Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 14.57 cfs
Storm frequency	= 2 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 31,180 cuft
Drainage area	= 12.530 ac	Curve number	= 62
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.74 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

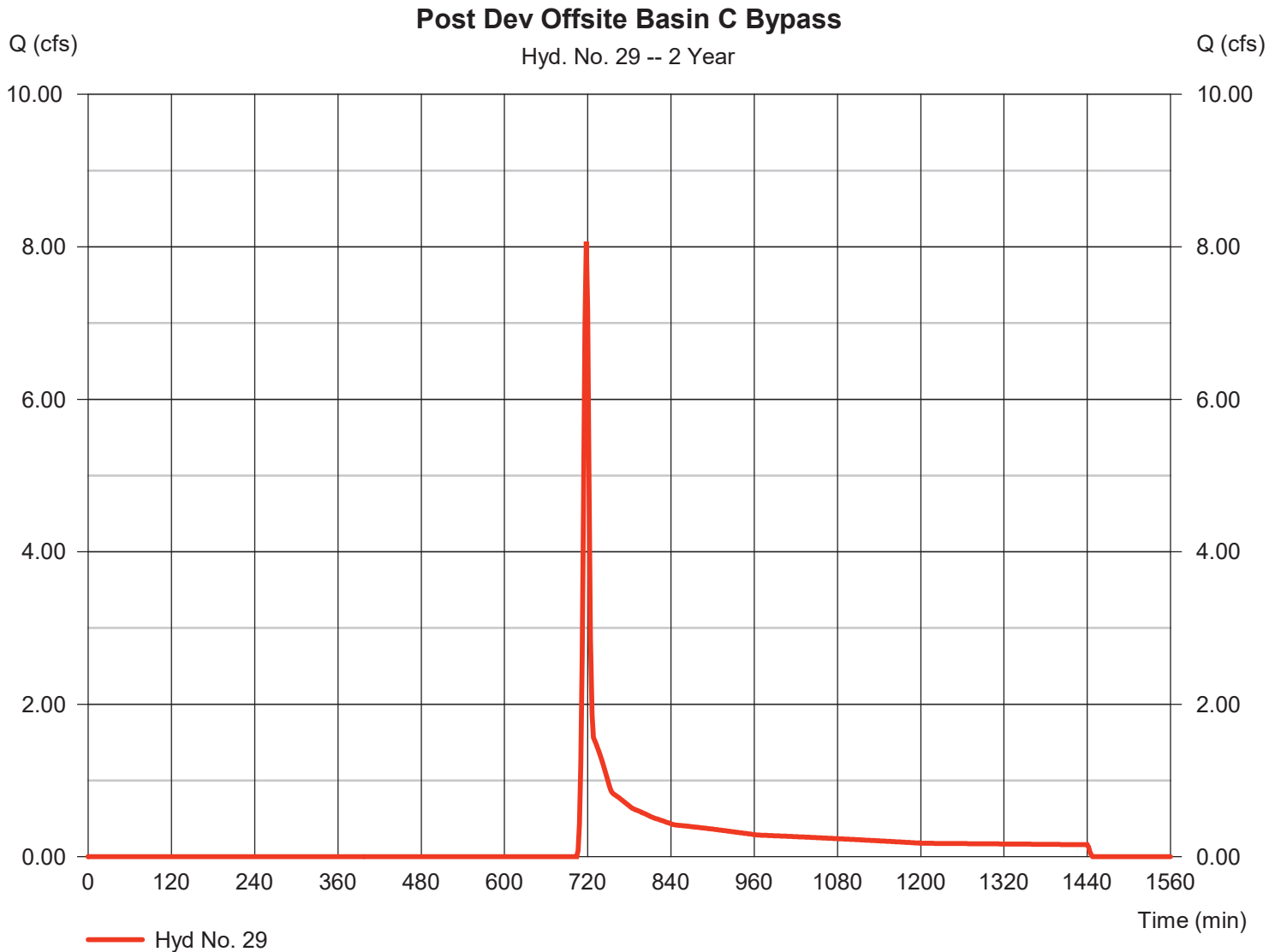


Hydrograph Report

Hyd. No. 29

Post Dev Offsite Basin C Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 8.069 cfs
Storm frequency	= 2 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 18,453 cuft
Drainage area	= 9.130 ac	Curve number	= 59
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 3.74 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hyd. No. 31

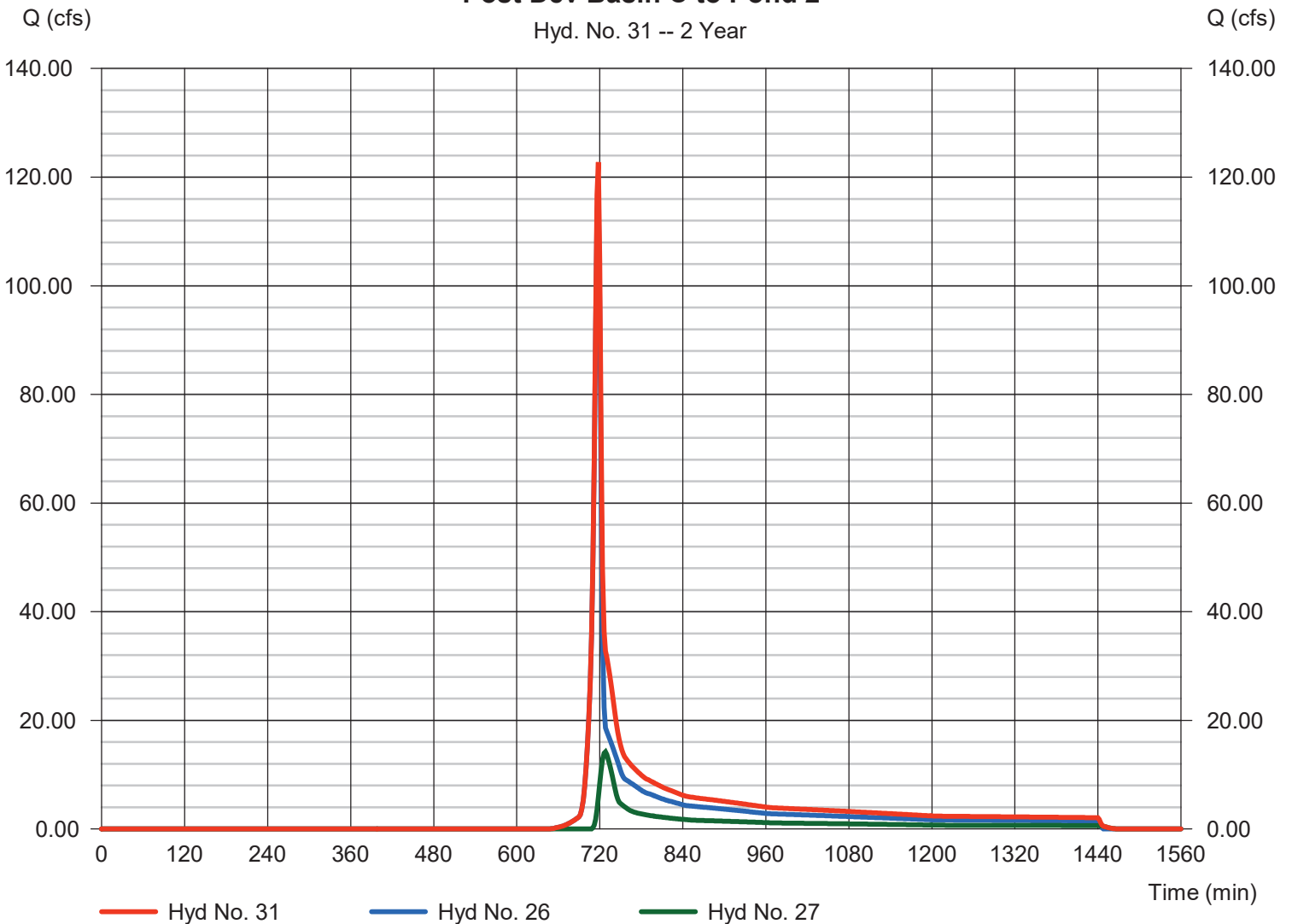
Post Dev Basin C to Pond 2

Hydrograph type = Combine
Storm frequency = 2 yrs
Time interval = 2 min
Inflow hyds. = 26, 27

Peak discharge = 122.76 cfs
Time to peak = 718 min
Hyd. volume = 302,204 cuft
Contrib. drain. area = 93.190 ac

Post Dev Basin C to Pond 2

Hyd. No. 31 -- 2 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Friday, 01 / 31 / 2025

Hyd. No. 32

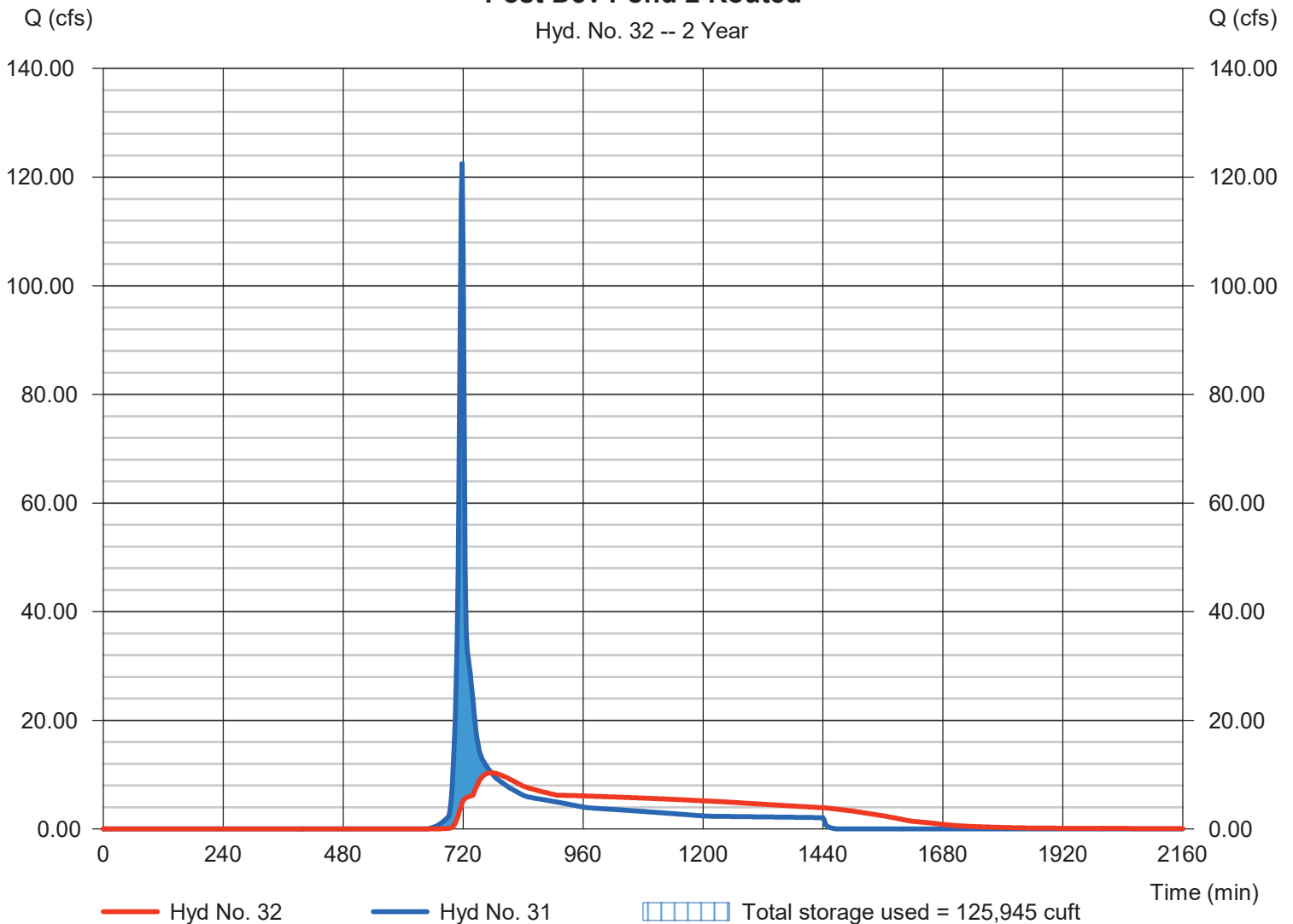
Post Dev Pond 2 Routed

Hydrograph type	= Reservoir	Peak discharge	= 10.34 cfs
Storm frequency	= 2 yrs	Time to peak	= 776 min
Time interval	= 2 min	Hyd. volume	= 302,184 cuft
Inflow hyd. No.	= 31 - Post Dev Basin C to Pond 2	Max. Elevation	= 1107.38 ft
Reservoir name	= Pond 2	Max. Storage	= 125,945 cuft

Storage Indication method used.

Post Dev Pond 2 Routed

Hyd. No. 32 -- 2 Year



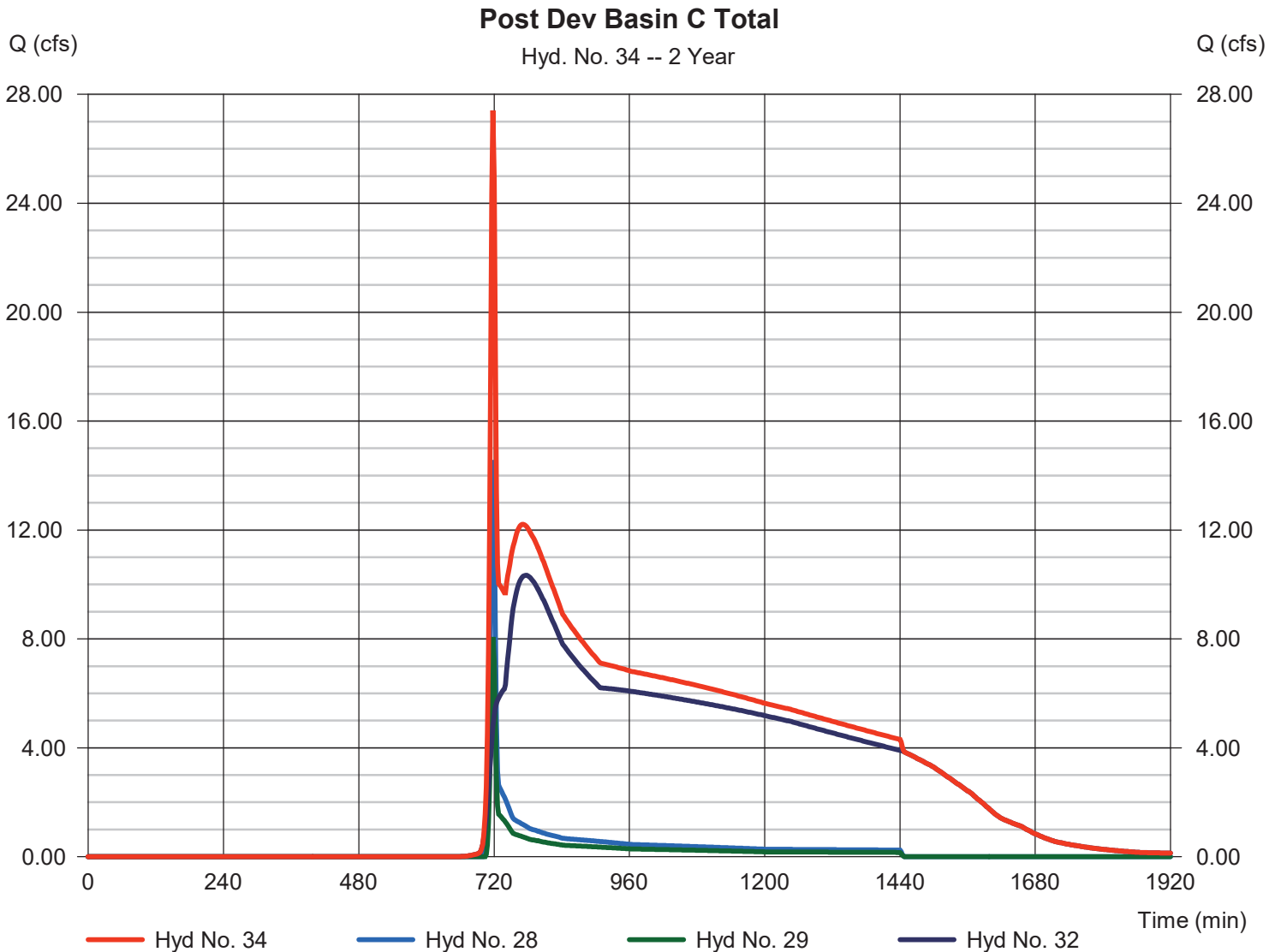
Hydrograph Report

Hyd. No. 34

Post Dev Basin C Total

Hydrograph type = Combine
Storm frequency = 2 yrs
Time interval = 2 min
Inflow hyds. = 28, 29, 32

Peak discharge = 27.42 cfs
Time to peak = 718 min
Hyd. volume = 351,817 cuft
Contrib. drain. area = 21.660 ac

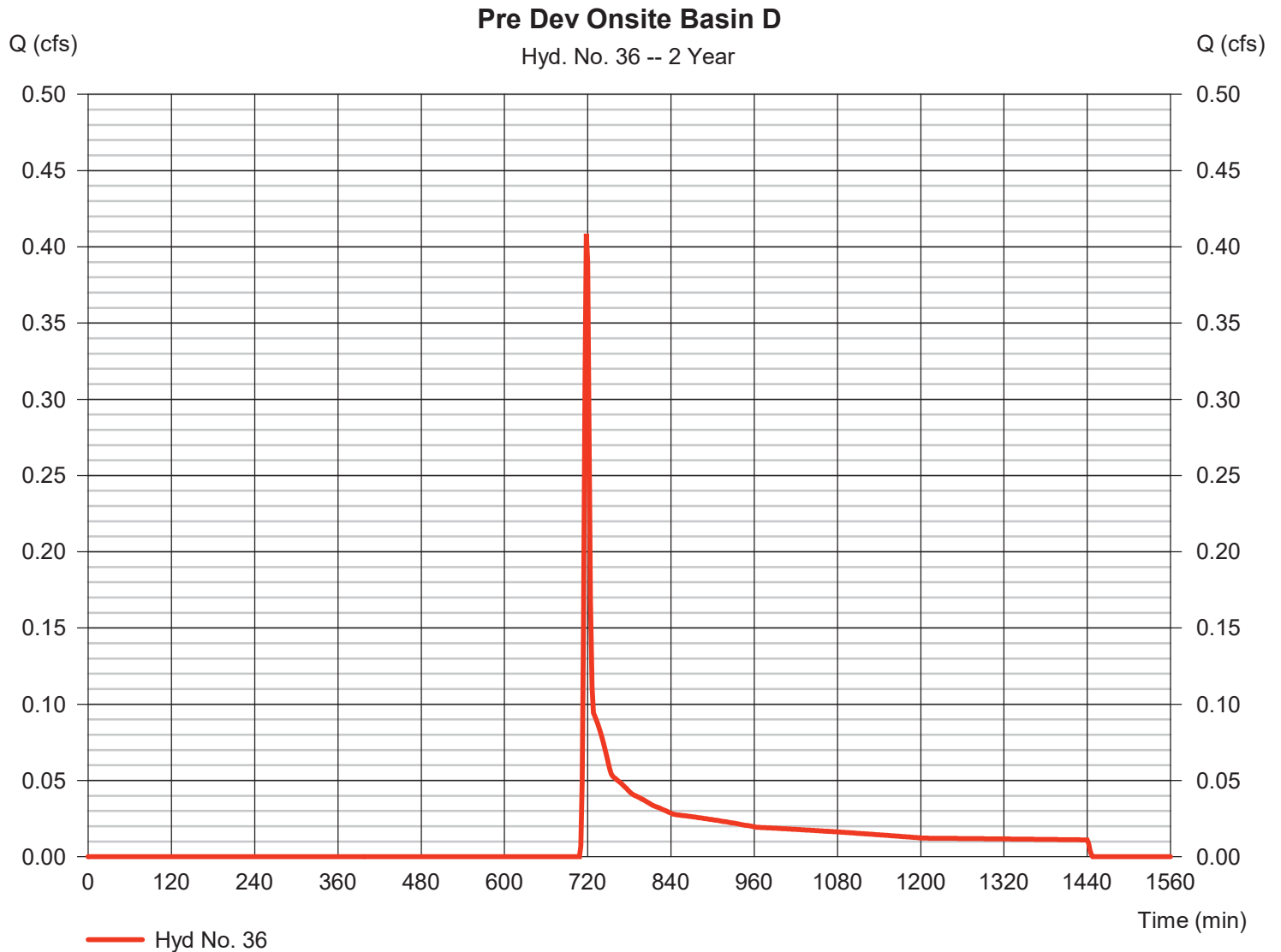


Hydrograph Report

Hyd. No. 36

Pre Dev Onsite Basin D

Hydrograph type	= SCS Runoff	Peak discharge	= 0.409 cfs
Storm frequency	= 2 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 1,127 cuft
Drainage area	= 0.770 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.74 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

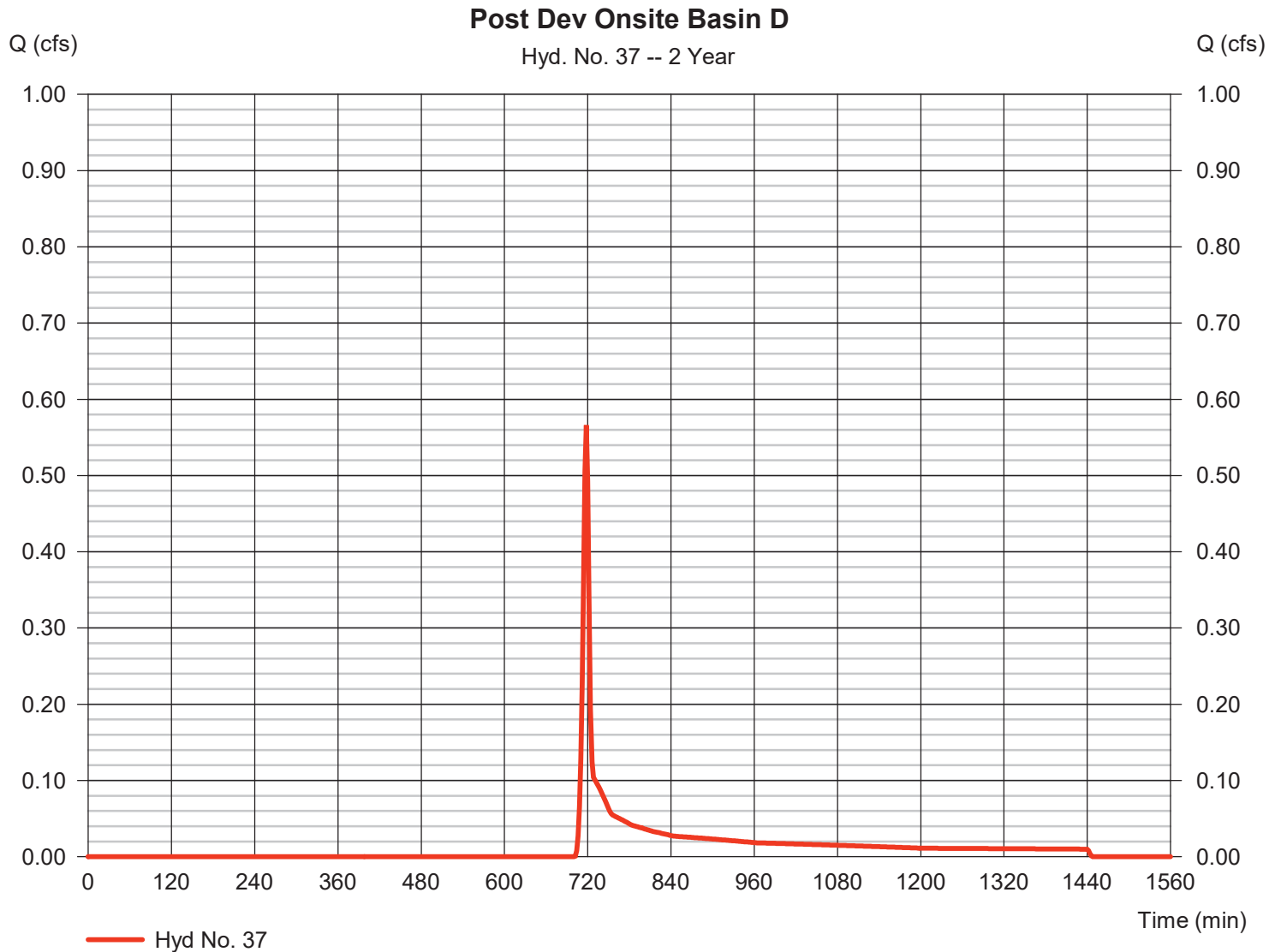


Hydrograph Report

Hyd. No. 37

Post Dev Onsite Basin D

Hydrograph type	= SCS Runoff	Peak discharge	= 0.566 cfs
Storm frequency	= 2 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 1,234 cuft
Drainage area	= 0.530 ac	Curve number	= 61
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.74 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	29.06	2	730	138,510	----	----	----	Pre Dev Onsite Basin A
2	SCS Runoff	11.35	2	722	32,123	----	----	----	Pre Dev Offite Basin A1
3	SCS Runoff	0.810	2	720	2,048	----	----	----	Pre Dev Offsite Basin A2
5	Combine	37.00	2	728	172,680	1, 2, 3,	----	----	Pre Dev Basin A Total
7	SCS Runoff	158.06	2	716	319,165	----	----	----	Post Dev Onsite Basin A to Pond 1
8	SCS Runoff	2.360	2	722	6,913	----	----	----	Post Dev Offsite Basin A to Pond 1
9	SCS Runoff	9.128	2	720	22,328	----	----	----	Post Dev Offsite Basin A1 Bypass
10	SCS Runoff	0.810	2	720	2,048	----	----	----	Post Dev Offsite Basin A2 Bypass
12	Combine	159.50	2	718	326,078	7, 8,	----	----	Post Dev Basin A to Pond 1
13	Reservoir	4.804	2	870	310,107	12	1059.66	193,778	Post Dev Pond 1 Routed
15	Combine	14.07	2	720	334,483	9, 10, 13,	----	----	Post Dev Basin A Total
17	SCS Runoff	2.983	2	732	15,210	----	----	----	Pre Dev Onsite Basin B
18	SCS Runoff	19.63	2	720	50,887	----	----	----	Post Dev Onsite Basin B
20	SCS Runoff	53.58	2	726	226,700	----	----	----	Pre Dev Onsite Basin C
21	SCS Runoff	15.35	2	718	31,853	----	----	----	Pre Dev Offsite Basin C1
22	SCS Runoff	29.06	2	726	113,856	----	----	----	Pre Dev Offsite Basin C2
24	Combine	85.81	2	726	372,409	20, 21, 22,	----	----	Pre Dev Basin C Total
26	SCS Runoff	168.45	2	718	337,001	----	----	----	Post Dev Onsite Basin C to Pond 2
27	SCS Runoff	29.06	2	726	113,856	----	----	----	Post Dev Offsite Basin C to Pond 2
28	SCS Runoff	23.92	2	718	48,859	----	----	----	Post Dev Onsite Basin C Bypass
29	SCS Runoff	14.32	2	718	30,040	----	----	----	Post Dev Offsite Basin C Bypass
31	Combine	184.02	2	718	450,857	26, 27,	----	----	Post Dev Basin C to Pond 2
32	Reservoir	38.65	2	738	450,839	31	1108.53	159,944	Post Dev Pond 2 Routed
34	Combine	44.14	2	718	529,738	28, 29, 32,	----	----	Post Dev Basin C Total
36	SCS Runoff	0.870	2	718	1,957	----	----	----	Pre Dev Onsite Basin D
37	SCS Runoff	0.951	2	718	1,957	----	----	----	Post Dev Onsite Basin D
1220263 Hydrology Concept.gpw					Return Period: 5 Year			Friday, 01 / 31 / 2025	

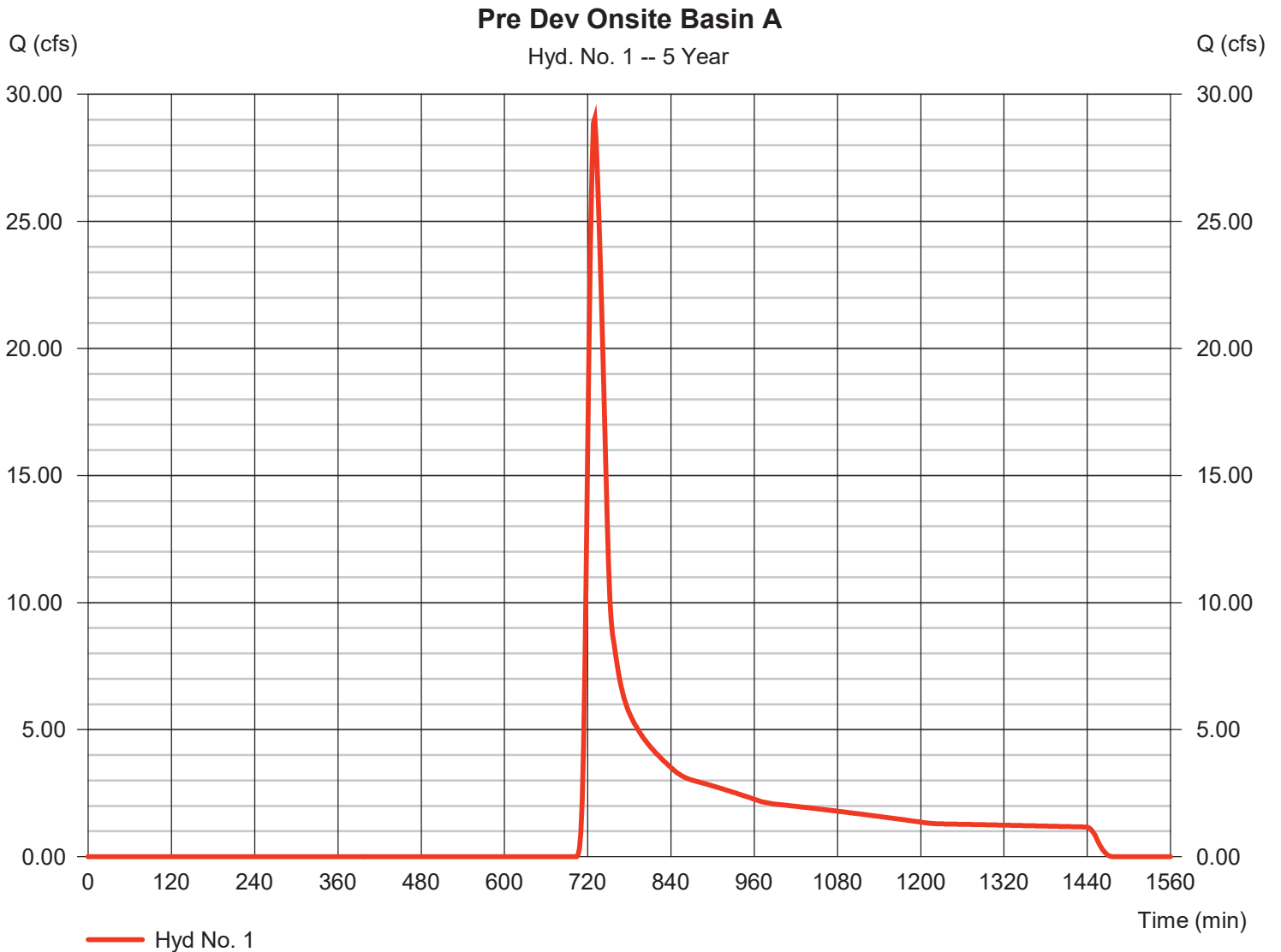
Hydrograph Report

Hyd. No. 1

Pre Dev Onsite Basin A

Hydrograph type = SCS Runoff
Storm frequency = 5 yrs
Time interval = 2 min
Drainage area = 50.200 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 4.51 in
Storm duration = 24 hrs

Peak discharge = 29.06 cfs
Time to peak = 730 min
Hyd. volume = 138,510 cuft
Curve number = 55
Hydraulic length = 0 ft
Time of conc. (Tc) = 22.00 min
Distribution = Type II
Shape factor = 484

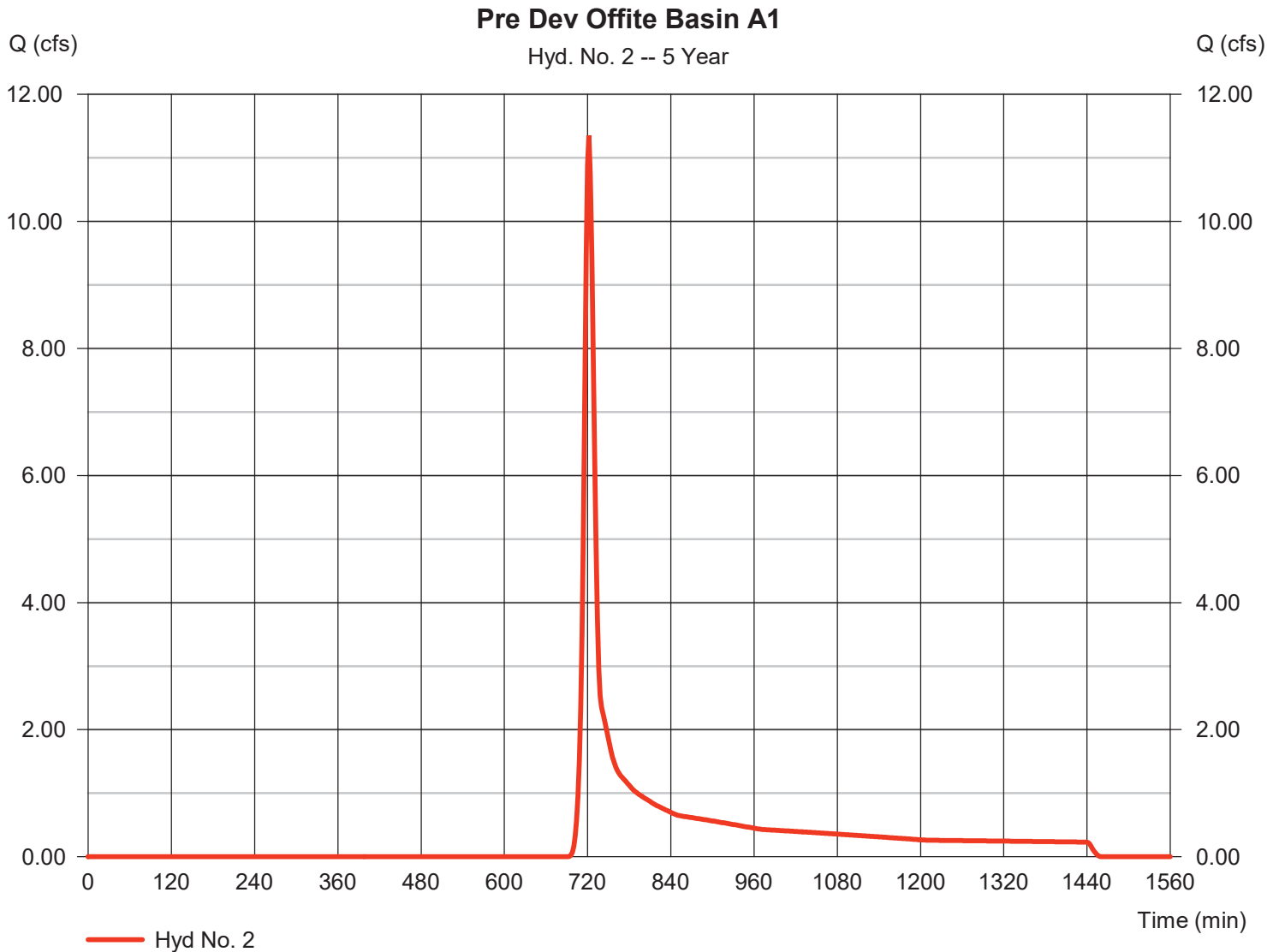


Hydrograph Report

Hyd. No. 2

Pre Dev Offite Basin A1

Hydrograph type	= SCS Runoff	Peak discharge	= 11.35 cfs
Storm frequency	= 5 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 32,123 cuft
Drainage area	= 7.910 ac	Curve number	= 61
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.00 min
Total precip.	= 4.51 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

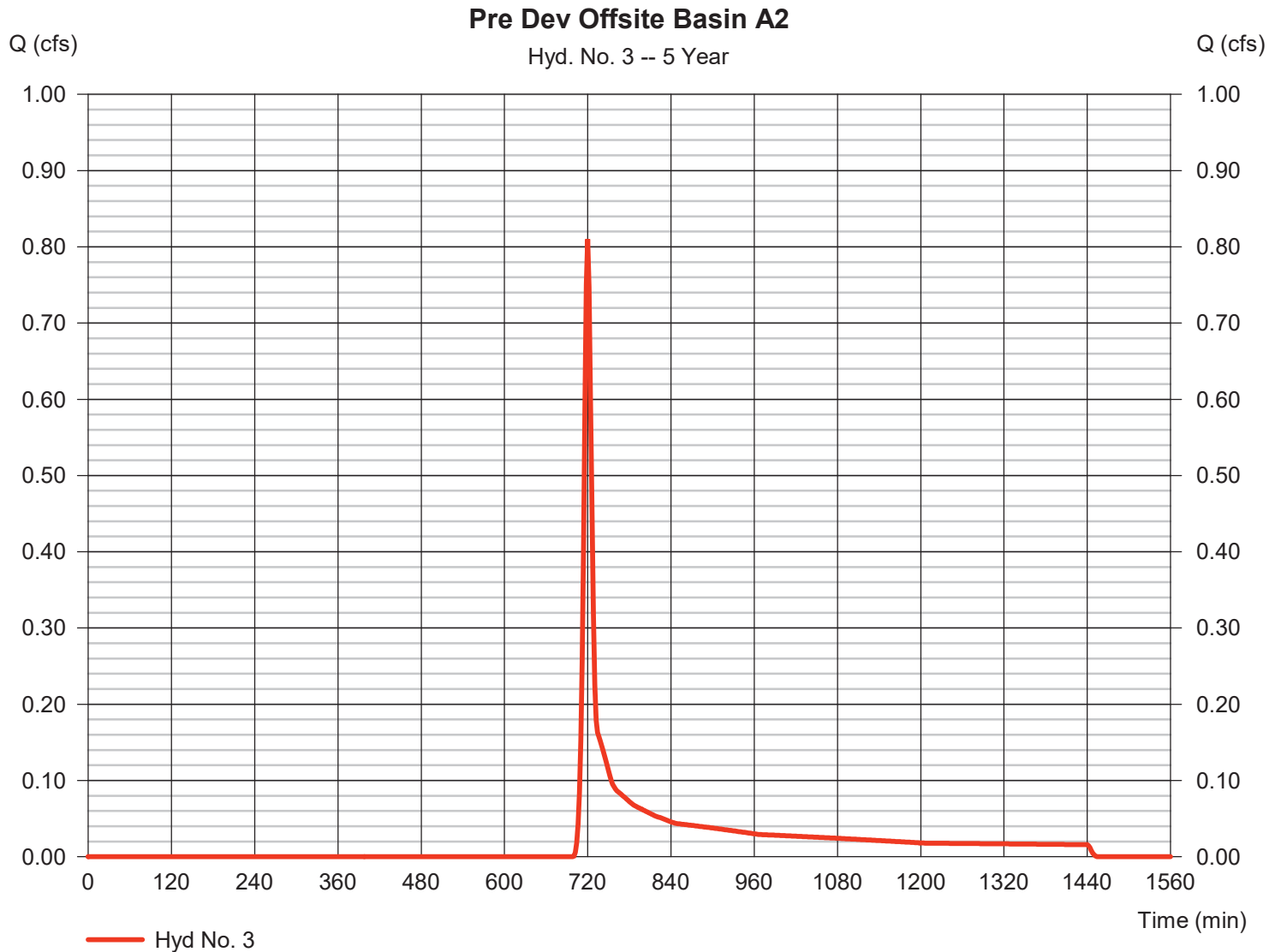


Hydrograph Report

Hyd. No. 3

Pre Dev Offsite Basin A2

Hydrograph type	= SCS Runoff	Peak discharge	= 0.810 cfs
Storm frequency	= 5 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 2,048 cuft
Drainage area	= 0.620 ac	Curve number	= 58
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 4.51 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



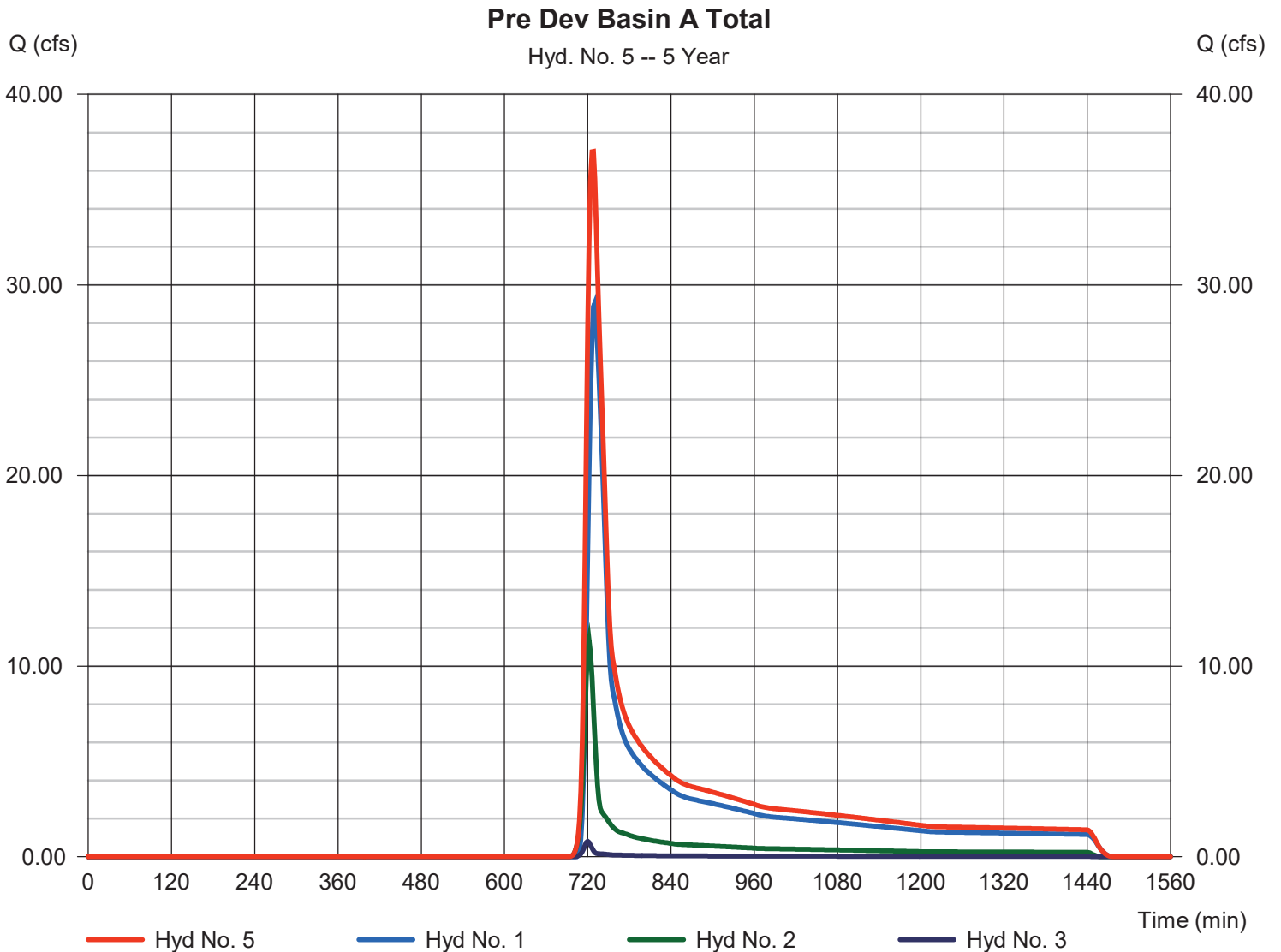
Hydrograph Report

Hyd. No. 5

Pre Dev Basin A Total

Hydrograph type = Combine
Storm frequency = 5 yrs
Time interval = 2 min
Inflow hyds. = 1, 2, 3

Peak discharge = 37.00 cfs
Time to peak = 728 min
Hyd. volume = 172,680 cuft
Contrib. drain. area = 58.730 ac



Hydrograph Report

Hyd. No. 7

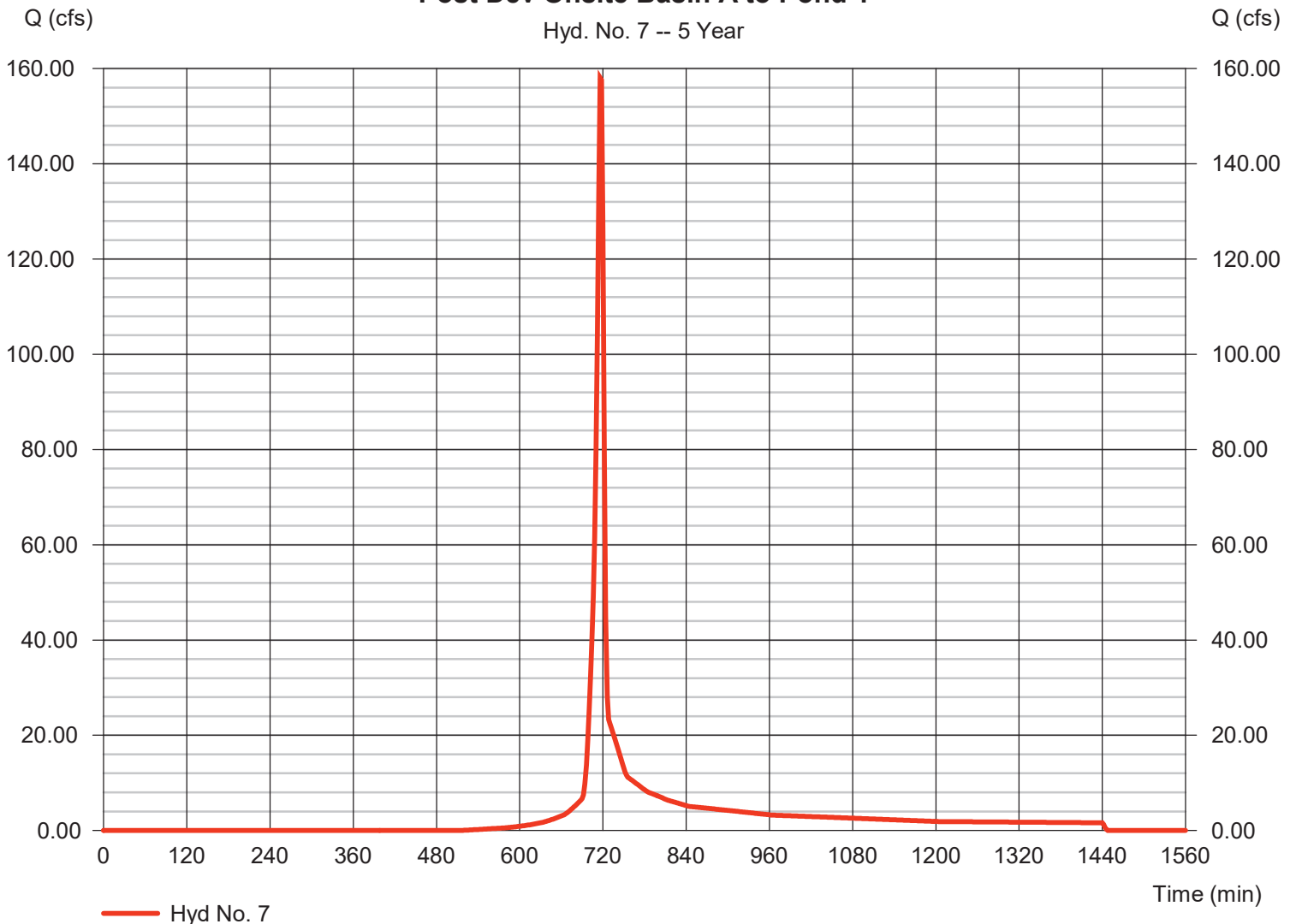
Post Dev Onsite Basin A to Pond 1

Hydrograph type = SCS Runoff
Storm frequency = 5 yrs
Time interval = 2 min
Drainage area = 42.270 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 4.51 in
Storm duration = 24 hrs

Peak discharge = 158.06 cfs
Time to peak = 716 min
Hyd. volume = 319,165 cuft
Curve number = 77
Hydraulic length = 0 ft
Time of conc. (Tc) = 5.00 min
Distribution = Type II
Shape factor = 484

Post Dev Onsite Basin A to Pond 1

Hyd. No. 7 -- 5 Year



Hydrograph Report

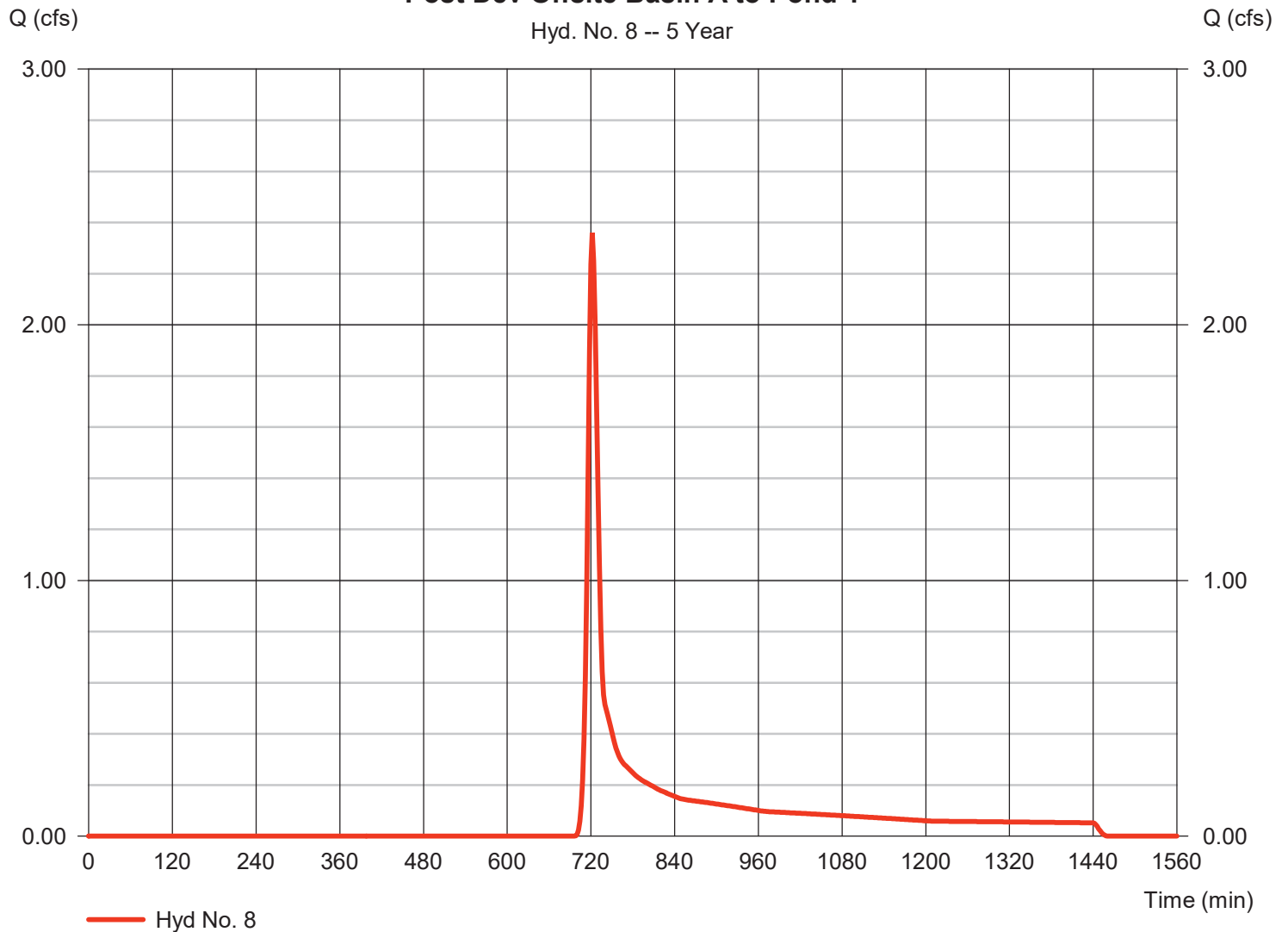
Hyd. No. 8

Post Dev Offsite Basin A to Pond 1

Hydrograph type	= SCS Runoff	Peak discharge	= 2.360 cfs
Storm frequency	= 5 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 6,913 cuft
Drainage area	= 1.910 ac	Curve number	= 59
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.00 min
Total precip.	= 4.51 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A to Pond 1

Hyd. No. 8 -- 5 Year



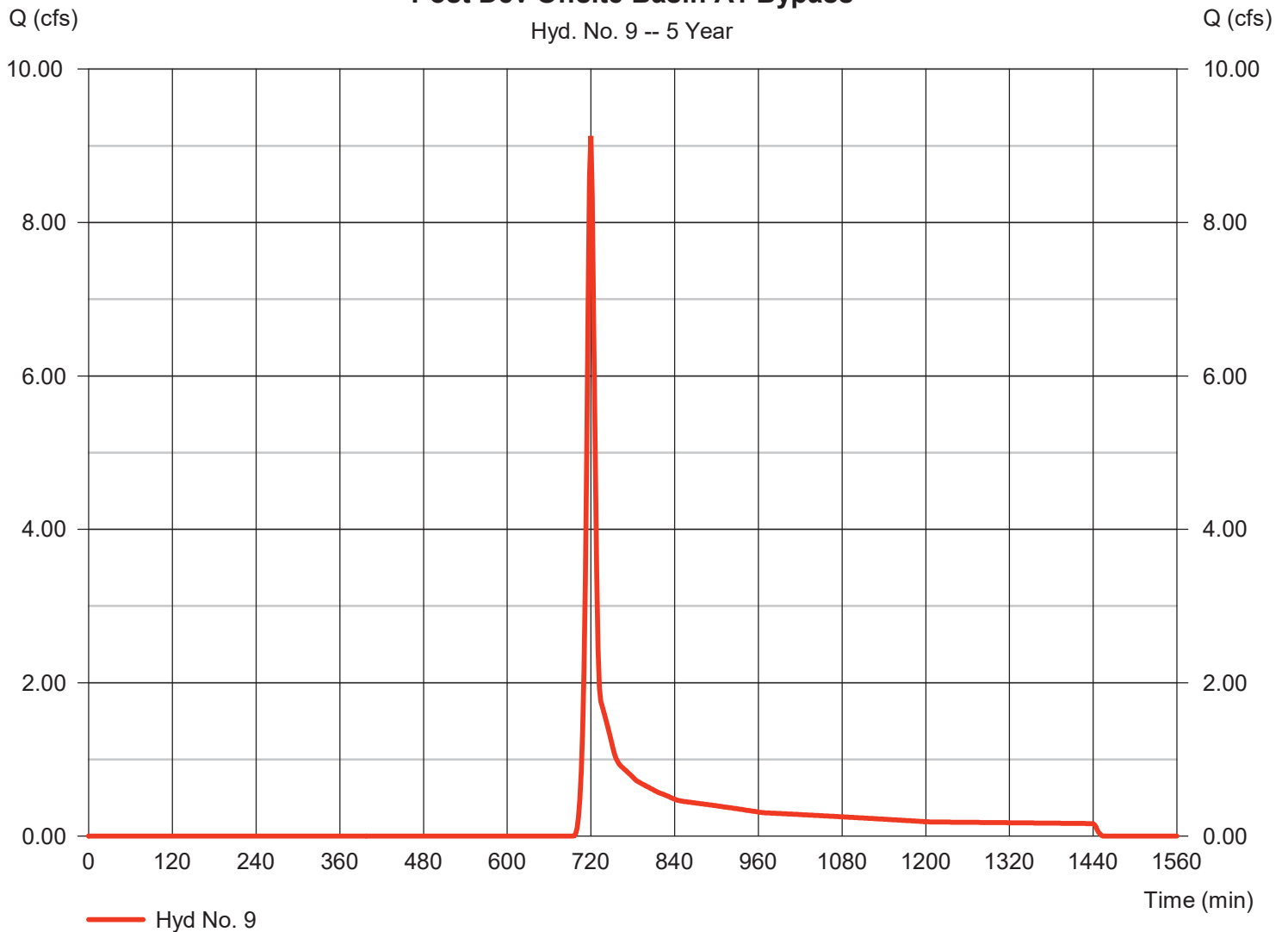
Hydrograph Report

Hyd. No. 9

Post Dev Offsite Basin A1 Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 9.128 cfs
Storm frequency	= 5 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 22,328 cuft
Drainage area	= 6.000 ac	Curve number	= 60
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 4.51 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A1 Bypass



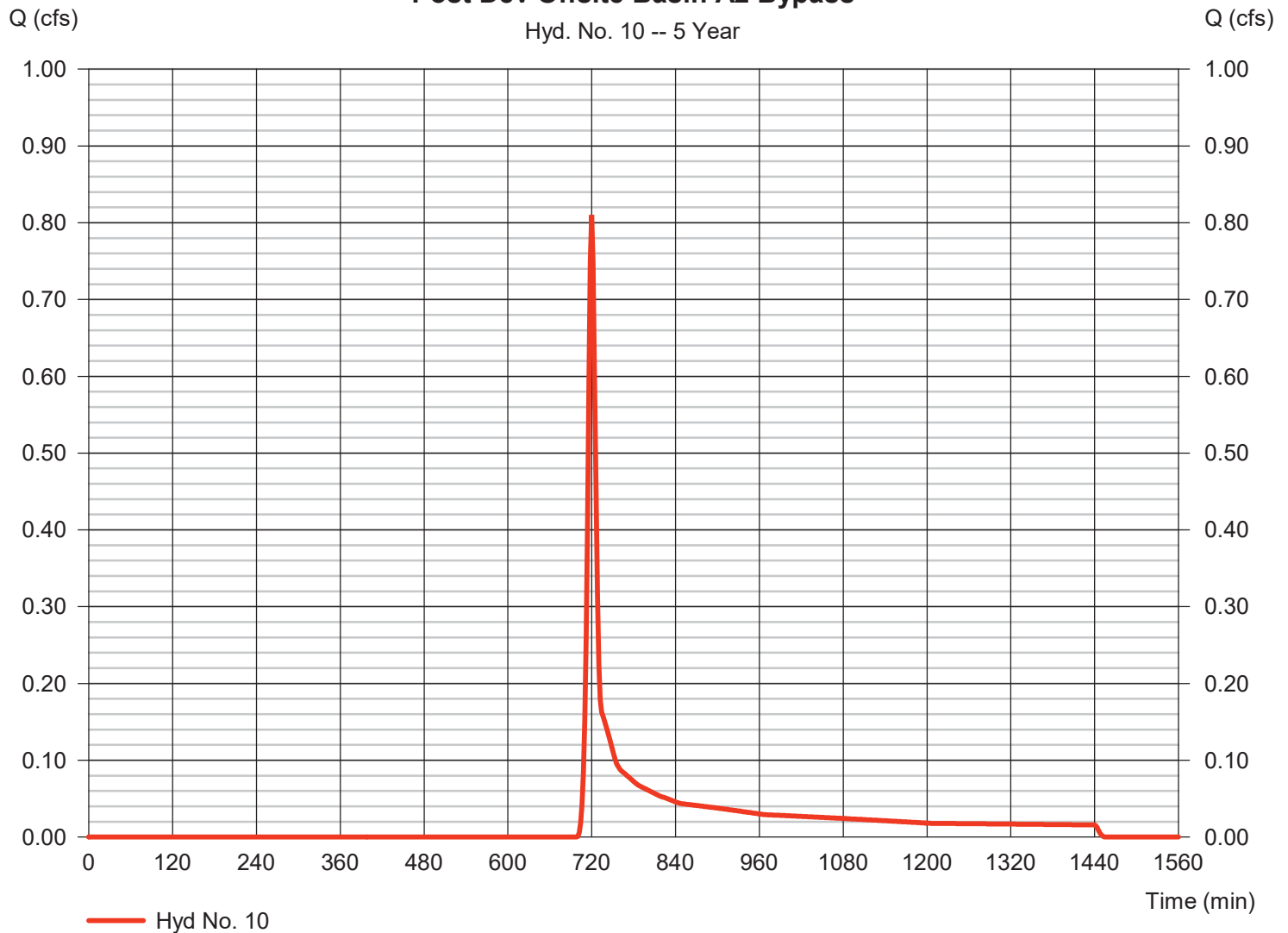
Hydrograph Report

Hyd. No. 10

Post Dev Offsite Basin A2 Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 0.810 cfs
Storm frequency	= 5 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 2,048 cuft
Drainage area	= 0.620 ac	Curve number	= 58
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 4.51 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A2 Bypass



Hydrograph Report

Hyd. No. 12

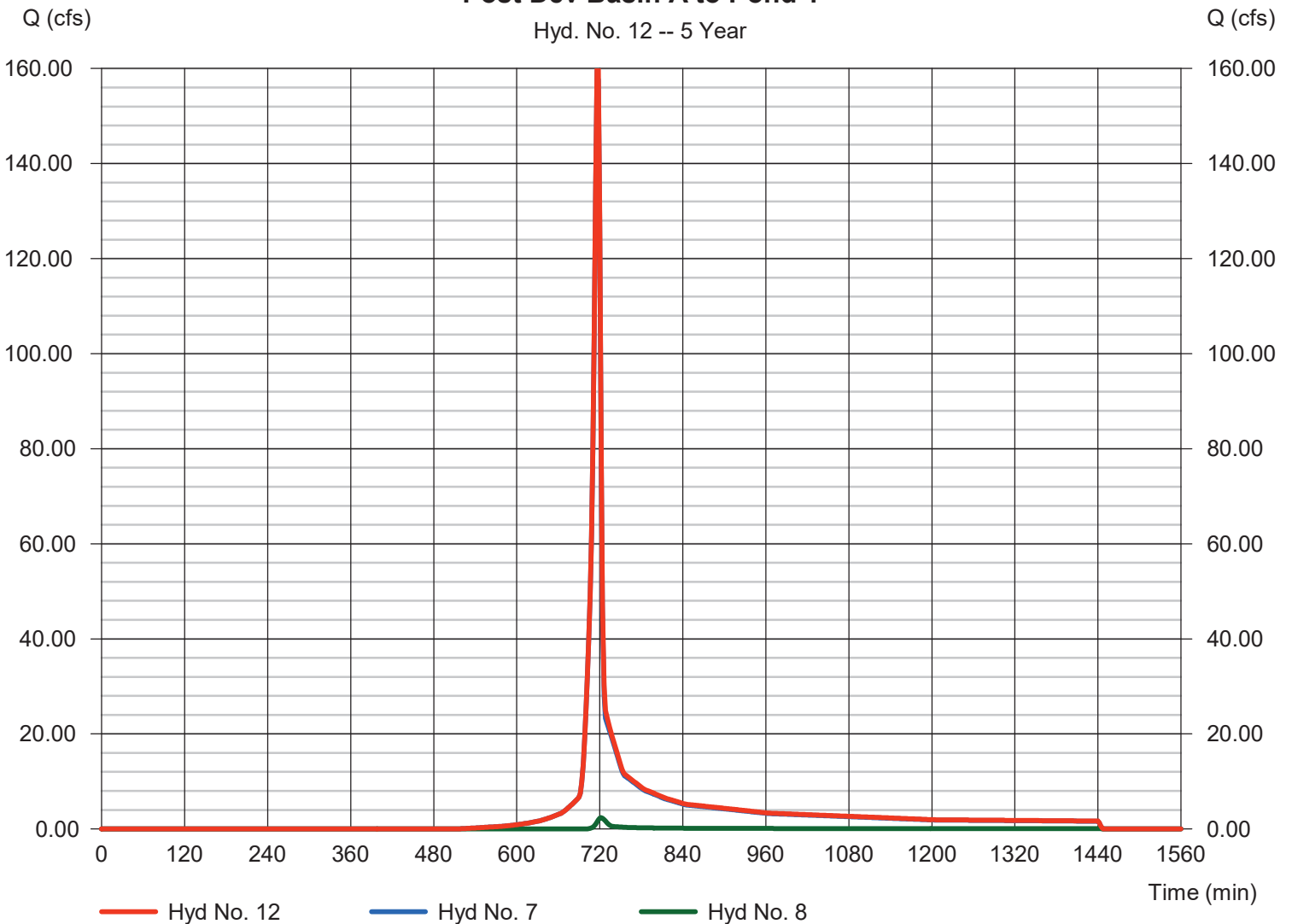
Post Dev Basin A to Pond 1

Hydrograph type = Combine
Storm frequency = 5 yrs
Time interval = 2 min
Inflow hyds. = 7, 8

Peak discharge = 159.50 cfs
Time to peak = 718 min
Hyd. volume = 326,078 cuft
Contrib. drain. area = 44.180 ac

Post Dev Basin A to Pond 1

Hyd. No. 12 -- 5 Year



Hydrograph Report

Hyd. No. 13

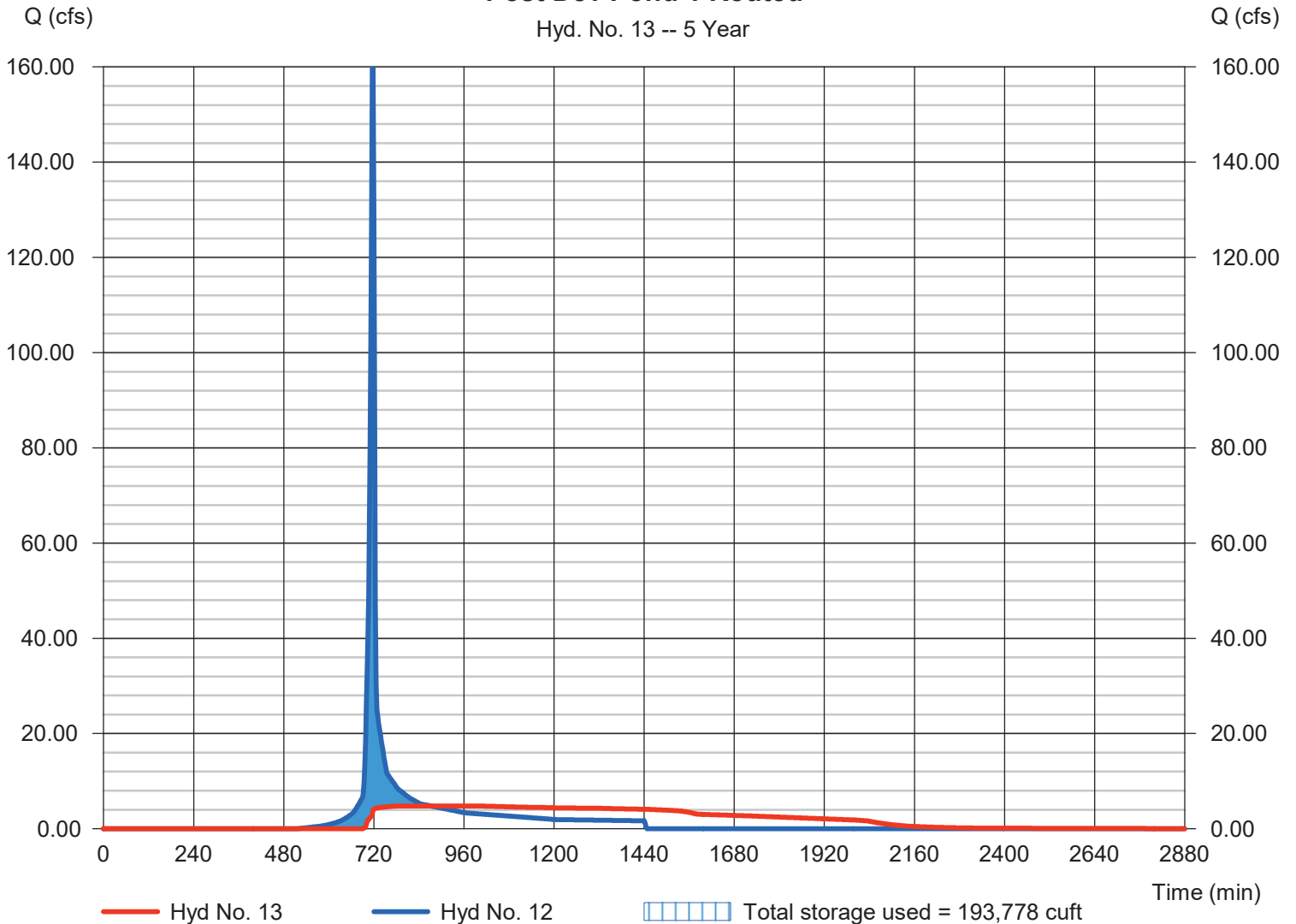
Post Dev Pond 1 Routed

Hydrograph type	= Reservoir	Peak discharge	= 4.804 cfs
Storm frequency	= 5 yrs	Time to peak	= 870 min
Time interval	= 2 min	Hyd. volume	= 310,107 cuft
Inflow hyd. No.	= 12 - Post Dev Basin A to Pond	Max. Elevation	= 1059.66 ft
Reservoir name	= Pond 1	Max. Storage	= 193,778 cuft

Storage Indication method used.

Post Dev Pond 1 Routed

Hyd. No. 13 -- 5 Year



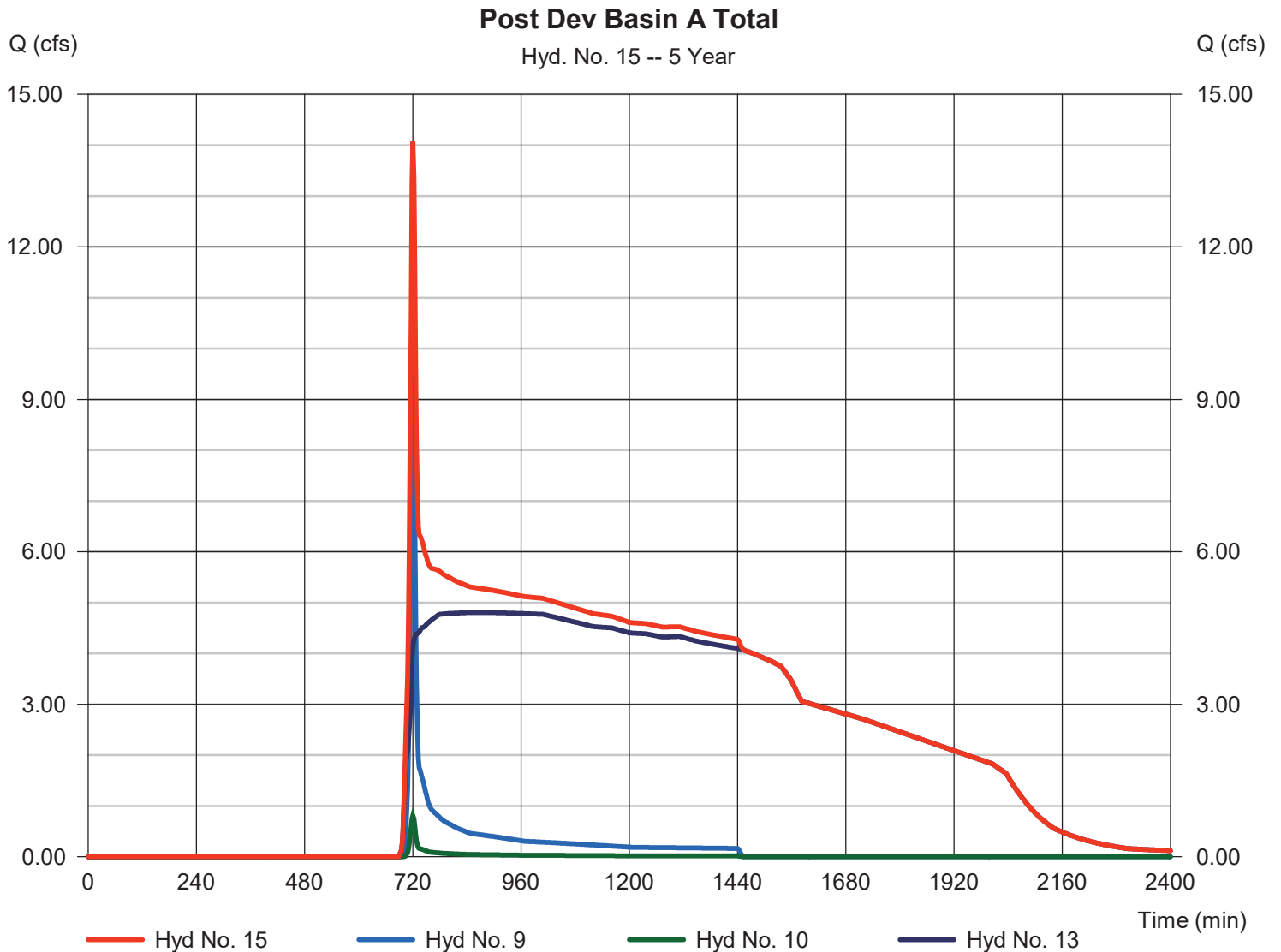
Hydrograph Report

Hyd. No. 15

Post Dev Basin A Total

Hydrograph type = Combine
Storm frequency = 5 yrs
Time interval = 2 min
Inflow hyds. = 9, 10, 13

Peak discharge = 14.07 cfs
Time to peak = 720 min
Hyd. volume = 334,483 cuft
Contrib. drain. area = 6.620 ac

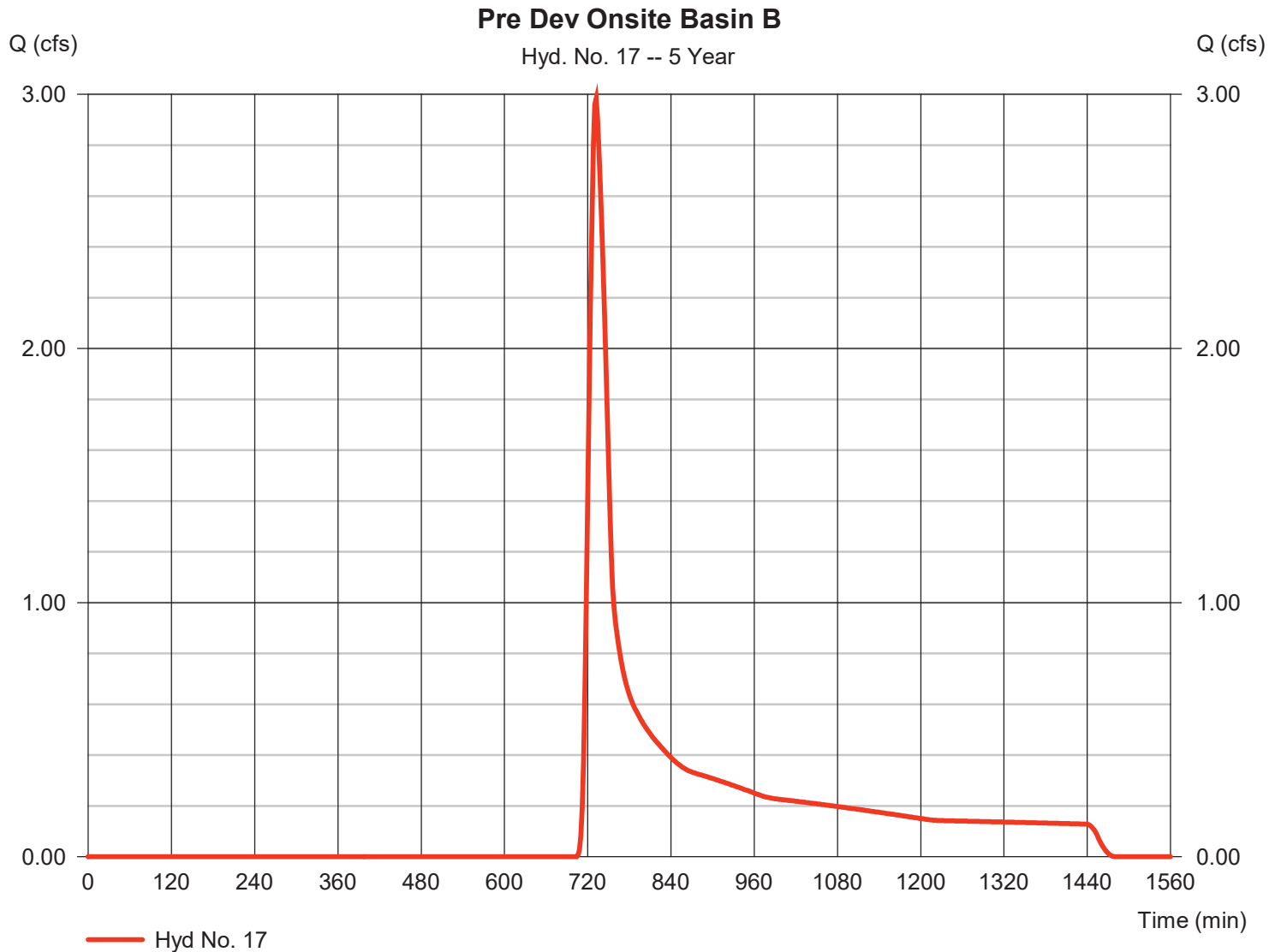


Hydrograph Report

Hyd. No. 17

Pre Dev Onsite Basin B

Hydrograph type	= SCS Runoff	Peak discharge	= 2.983 cfs
Storm frequency	= 5 yrs	Time to peak	= 732 min
Time interval	= 2 min	Hyd. volume	= 15,210 cuft
Drainage area	= 5.700 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 25.00 min
Total precip.	= 4.51 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

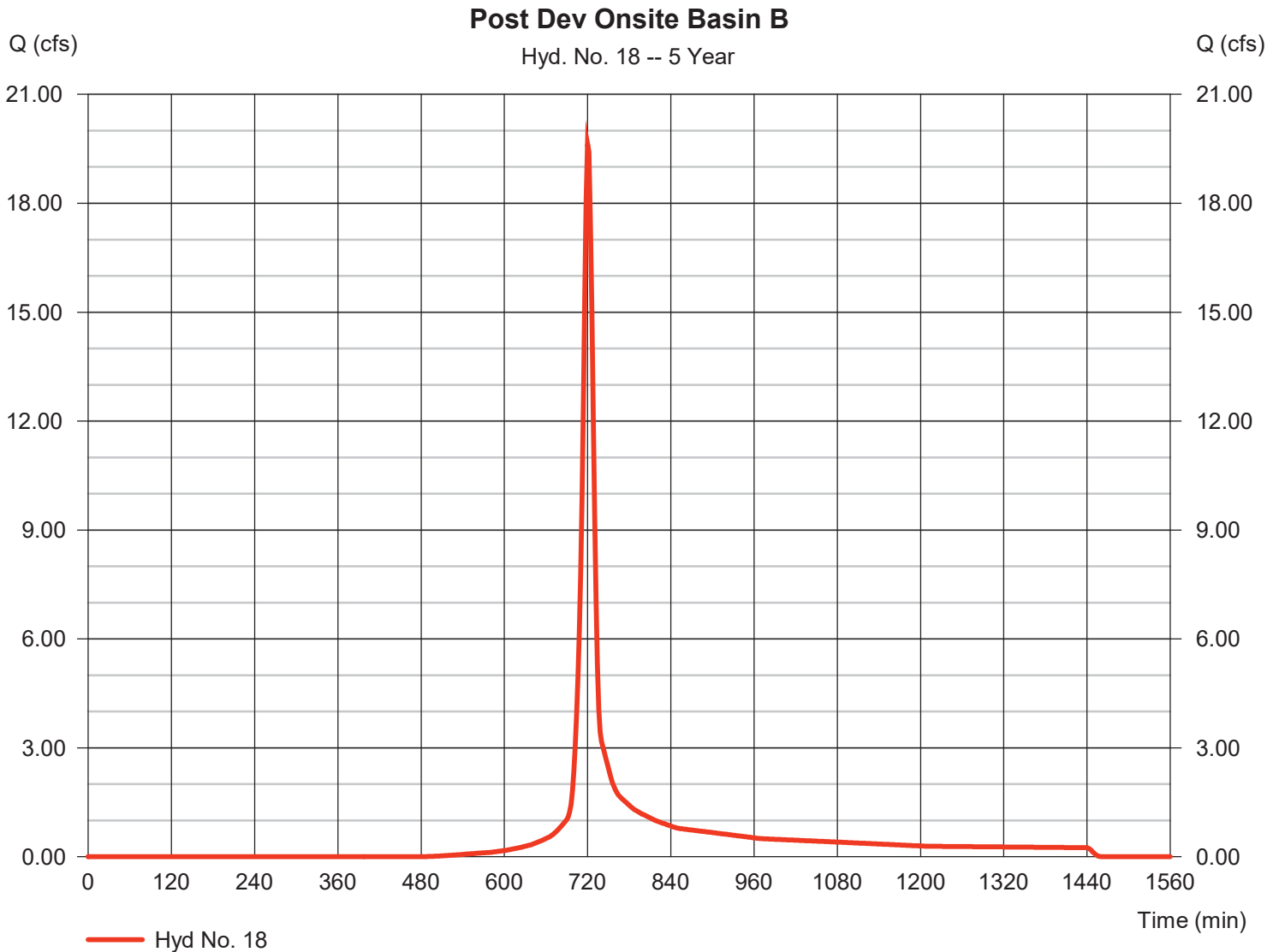


Hydrograph Report

Hyd. No. 18

Post Dev Onsite Basin B

Hydrograph type	= SCS Runoff	Peak discharge	= 19.63 cfs
Storm frequency	= 5 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 50,887 cuft
Drainage area	= 5.700 ac	Curve number	= 79
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.00 min
Total precip.	= 4.51 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

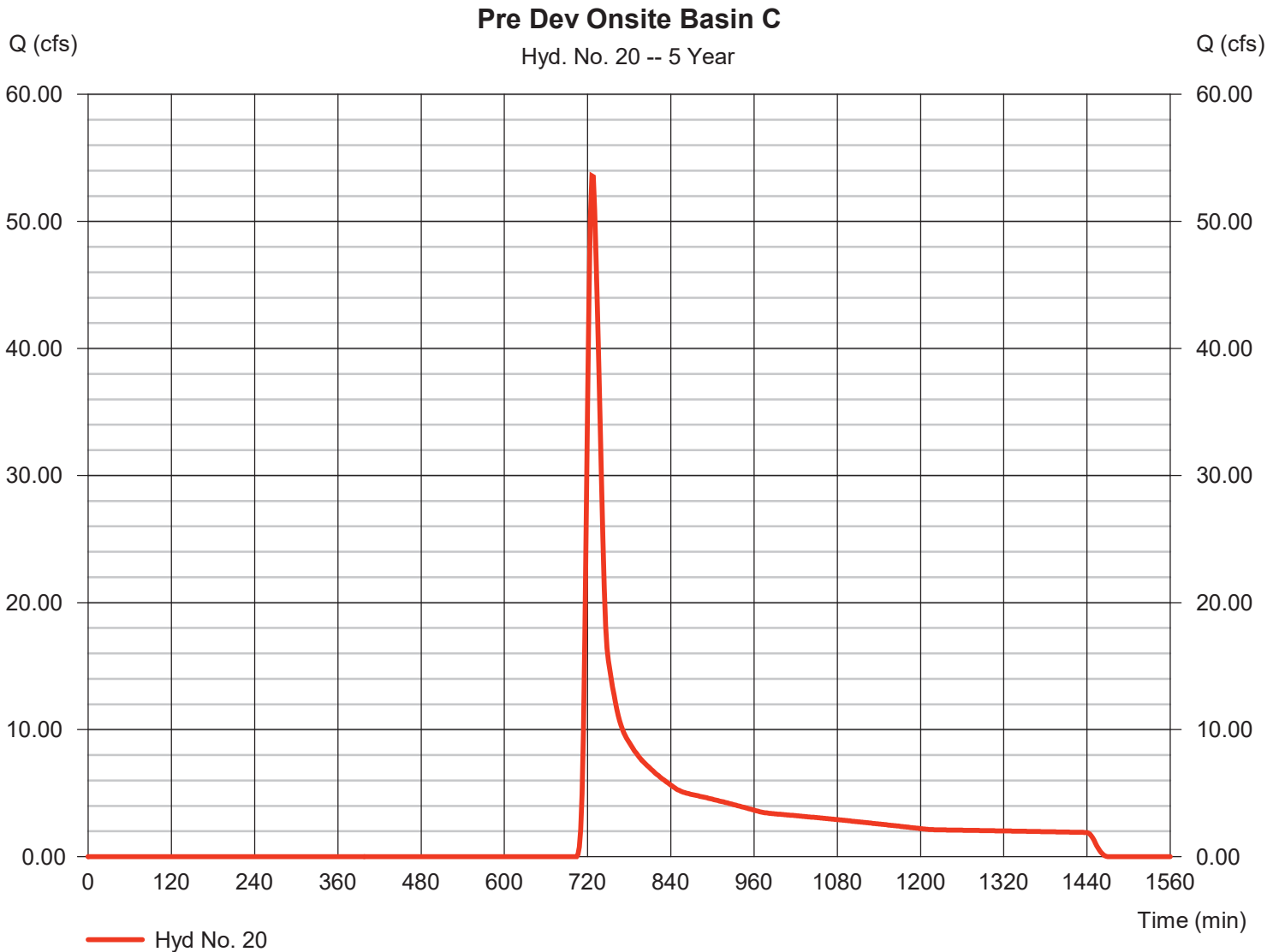


Hydrograph Report

Hyd. No. 20

Pre Dev Onsite Basin C

Hydrograph type	= SCS Runoff	Peak discharge	= 53.58 cfs
Storm frequency	= 5 yrs	Time to peak	= 726 min
Time interval	= 2 min	Hyd. volume	= 226,700 cuft
Drainage area	= 83.630 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 17.00 min
Total precip.	= 4.51 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

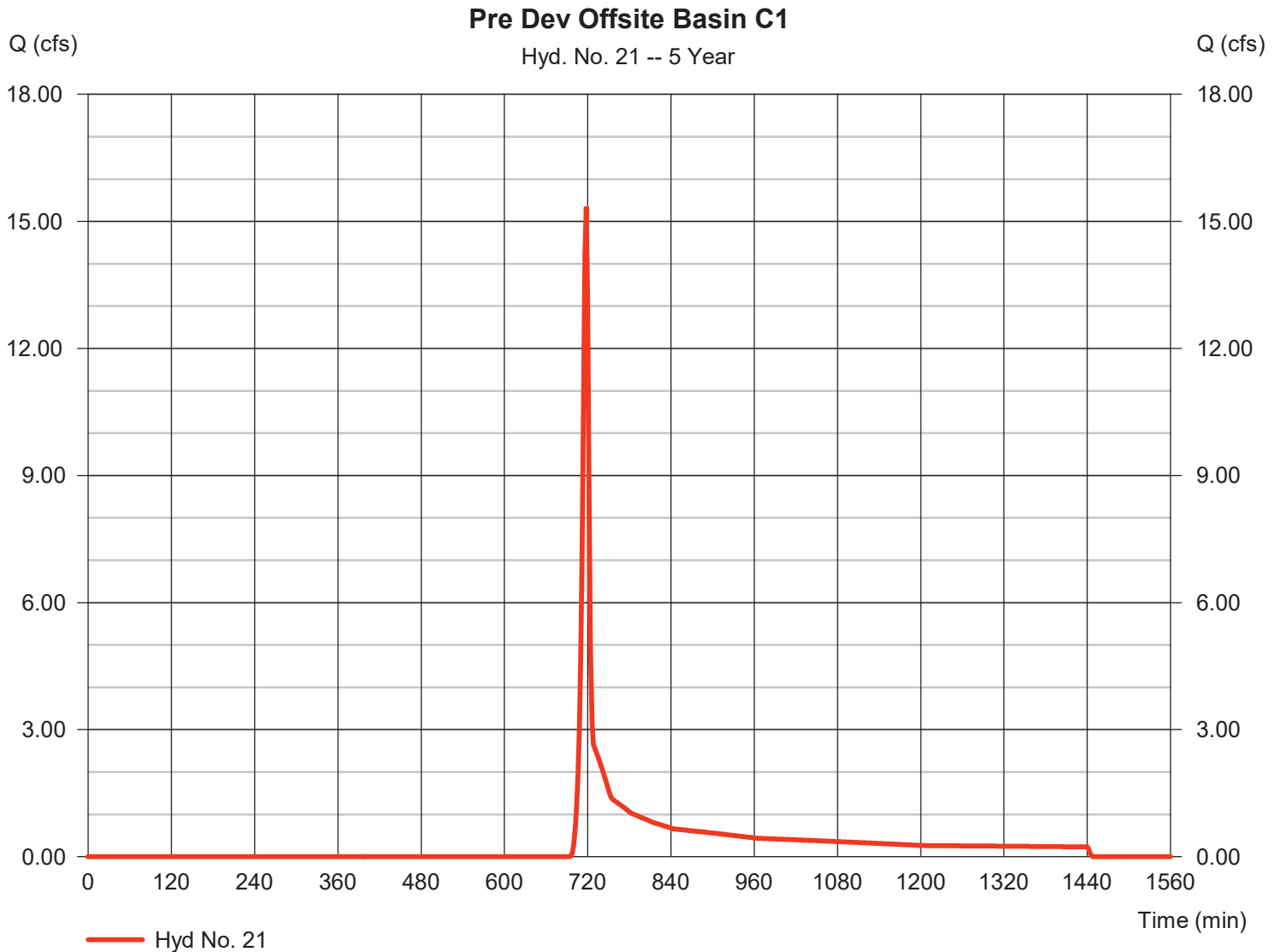


Hydrograph Report

Hyd. No. 21

Pre Dev Offsite Basin C1

Hydrograph type	= SCS Runoff	Peak discharge	= 15.35 cfs
Storm frequency	= 5 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 31,853 cuft
Drainage area	= 9.130 ac	Curve number	= 60
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 4.51 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



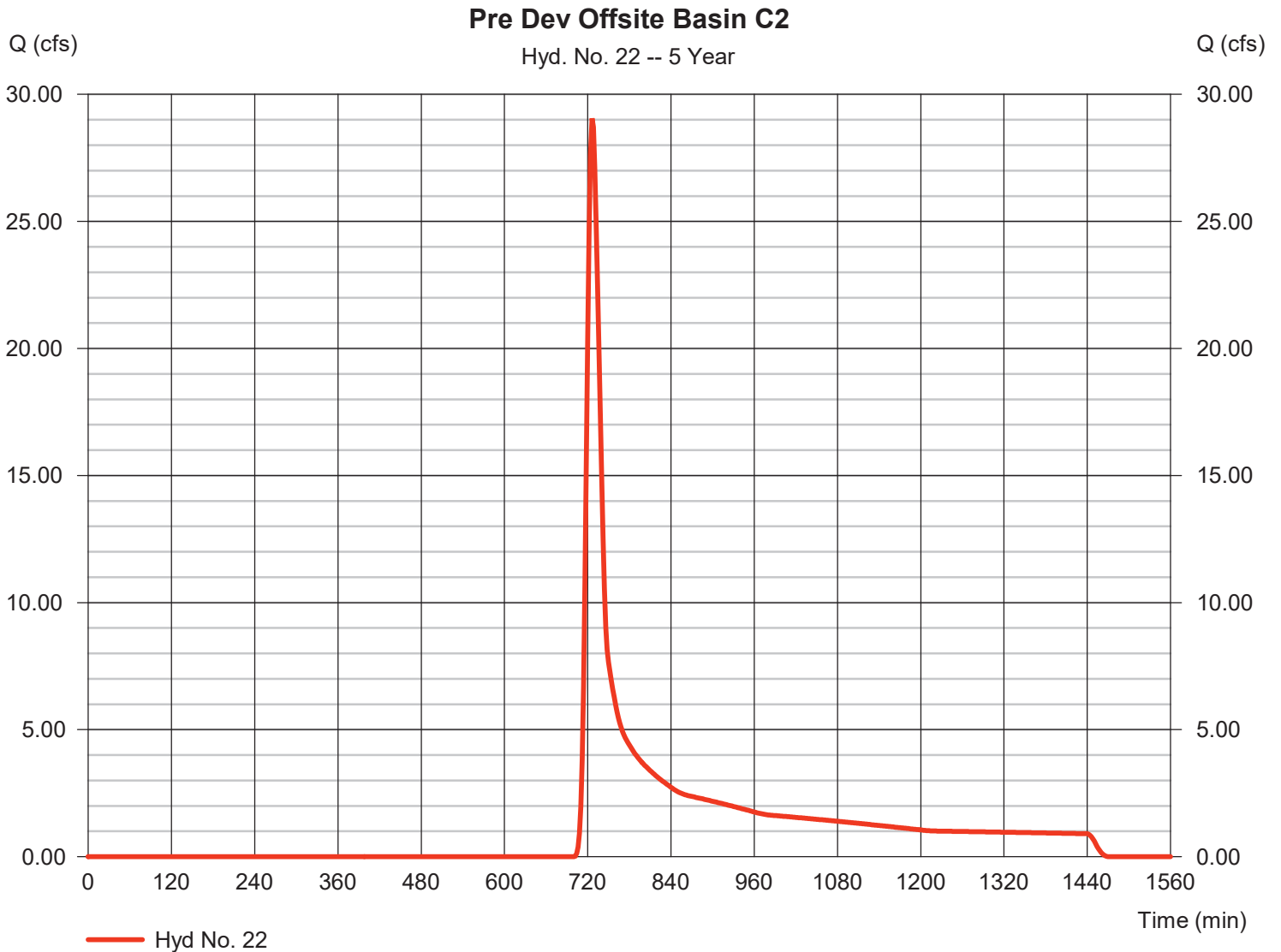
Hydrograph Report

Hyd. No. 22

Pre Dev Offsite Basin C2

Hydrograph type = SCS Runoff
Storm frequency = 5 yrs
Time interval = 2 min
Drainage area = 36.720 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 4.51 in
Storm duration = 24 hrs

Peak discharge = 29.06 cfs
Time to peak = 726 min
Hyd. volume = 113,856 cuft
Curve number = 57
Hydraulic length = 0 ft
Time of conc. (Tc) = 18.00 min
Distribution = Type II
Shape factor = 484



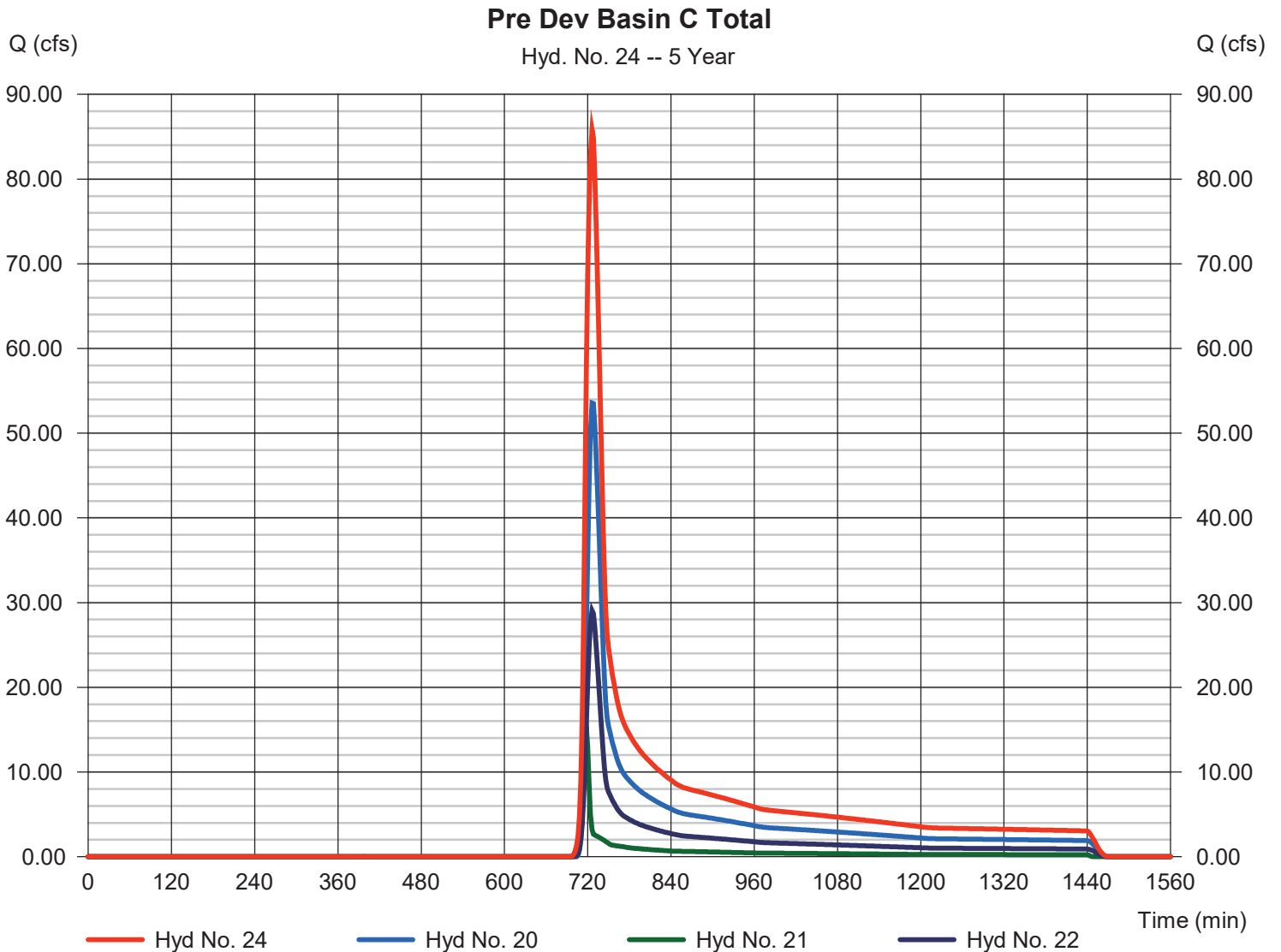
Hydrograph Report

Hyd. No. 24

Pre Dev Basin C Total

Hydrograph type = Combine
Storm frequency = 5 yrs
Time interval = 2 min
Inflow hyds. = 20, 21, 22

Peak discharge = 85.81 cfs
Time to peak = 726 min
Hyd. volume = 372,409 cuft
Contrib. drain. area = 129.480 ac



Hydrograph Report

Hyd. No. 26

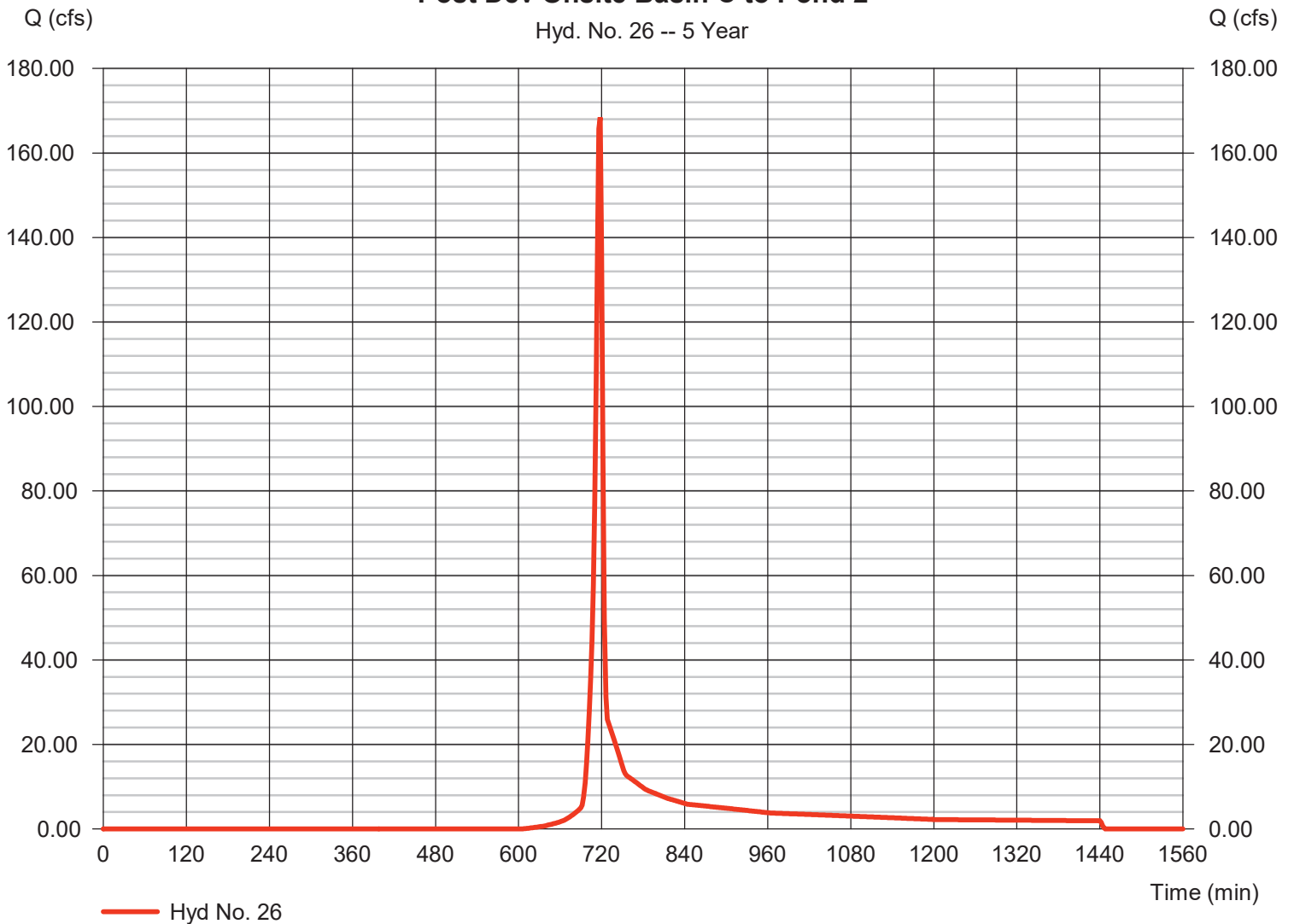
Post Dev Onsite Basin C to Pond 2

Hydrograph type = SCS Runoff
Storm frequency = 5 yrs
Time interval = 2 min
Drainage area = 56.470 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 4.51 in
Storm duration = 24 hrs

Peak discharge = 168.45 cfs
Time to peak = 718 min
Hyd. volume = 337,001 cuft
Curve number = 71
Hydraulic length = 0 ft
Time of conc. (Tc) = 5.00 min
Distribution = Type II
Shape factor = 484

Post Dev Onsite Basin C to Pond 2

Hyd. No. 26 -- 5 Year



Hydrograph Report

Hyd. No. 27

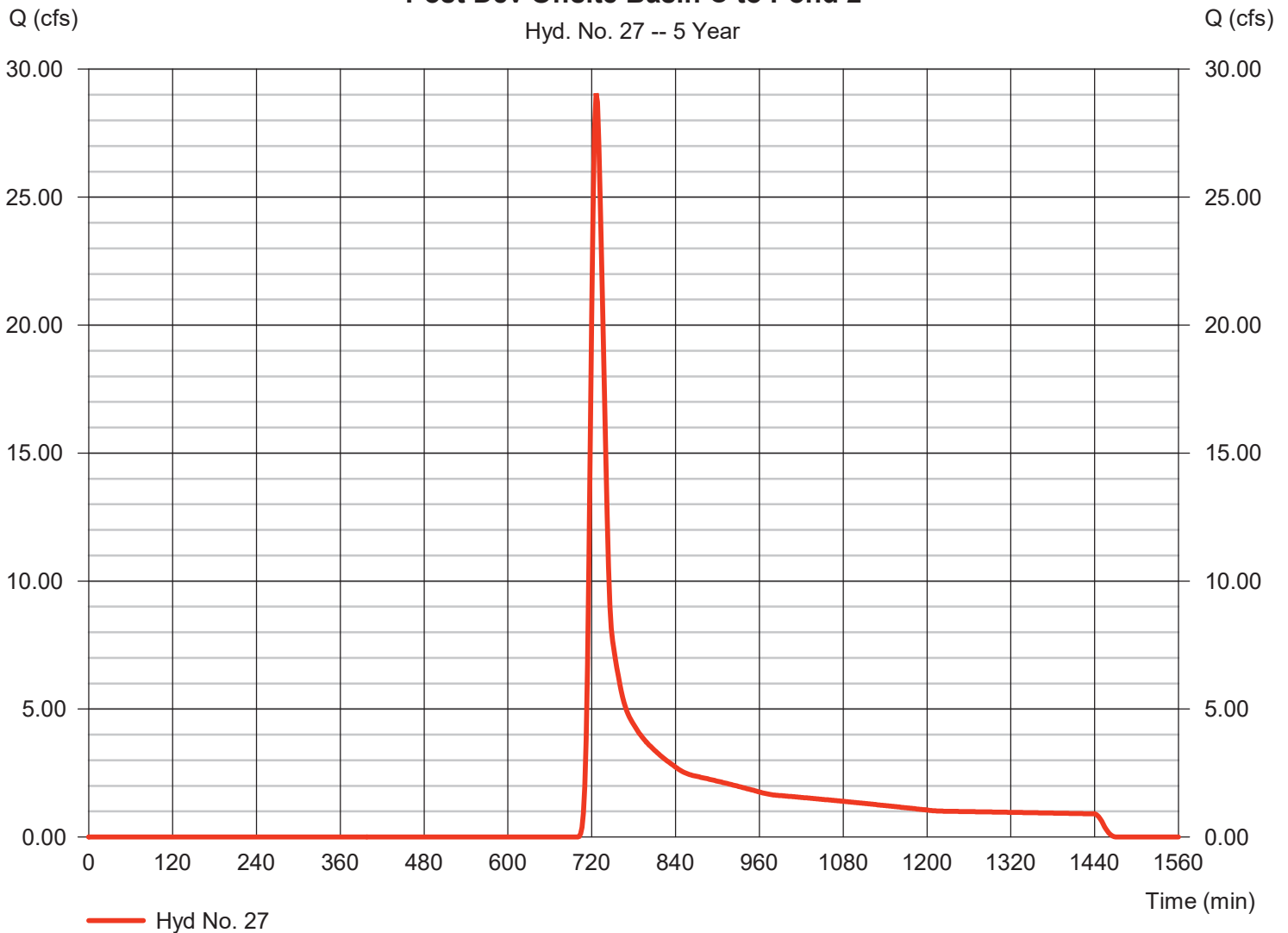
Post Dev Offsite Basin C to Pond 2

Hydrograph type = SCS Runoff
Storm frequency = 5 yrs
Time interval = 2 min
Drainage area = 36.720 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 4.51 in
Storm duration = 24 hrs

Peak discharge = 29.06 cfs
Time to peak = 726 min
Hyd. volume = 113,856 cuft
Curve number = 57
Hydraulic length = 0 ft
Time of conc. (Tc) = 18.00 min
Distribution = Type II
Shape factor = 484

Post Dev Offsite Basin C to Pond 2

Hyd. No. 27 -- 5 Year

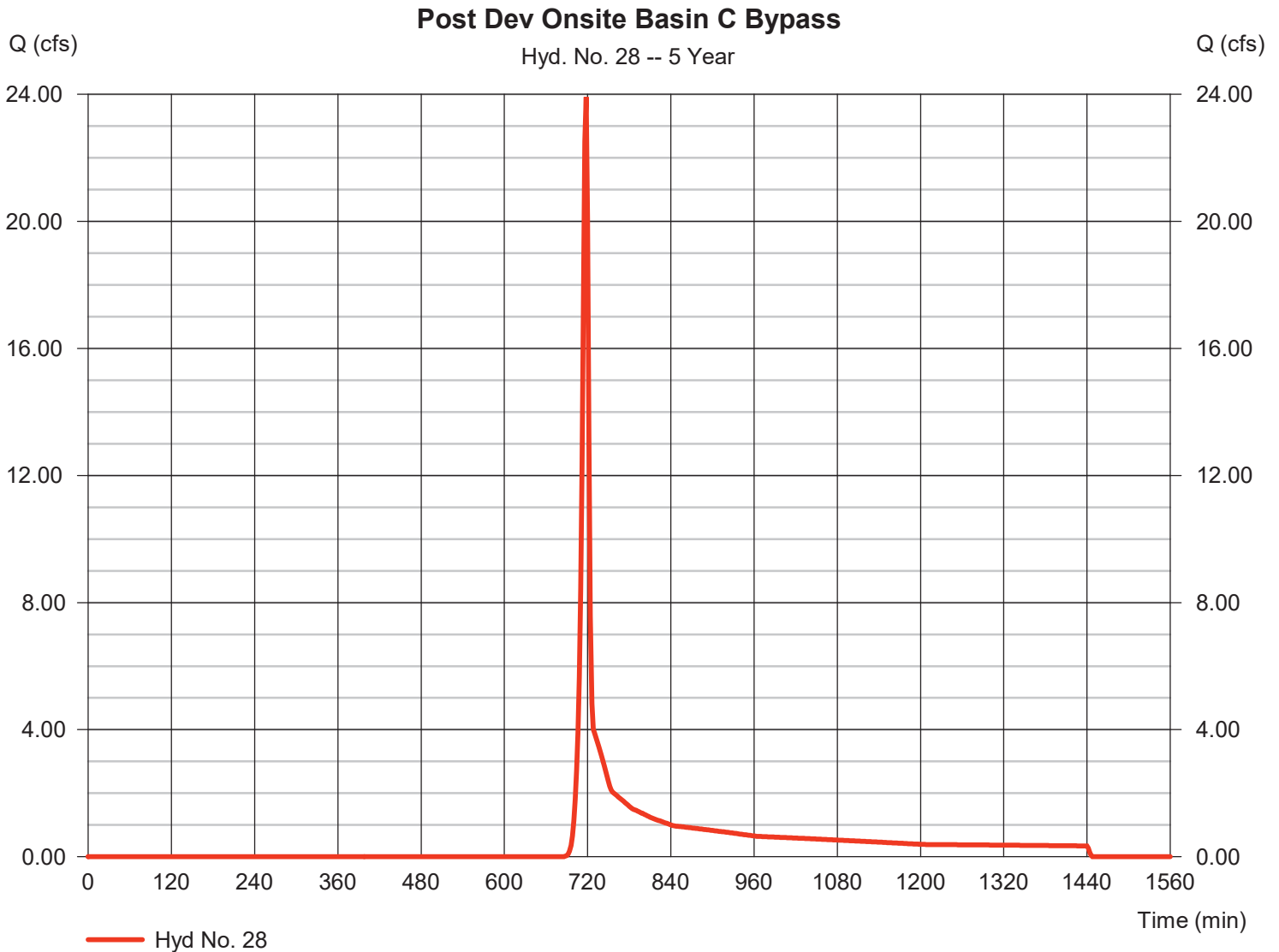


Hydrograph Report

Hyd. No. 28

Post Dev Onsite Basin C Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 23.92 cfs
Storm frequency	= 5 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 48,859 cuft
Drainage area	= 12.530 ac	Curve number	= 62
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.51 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

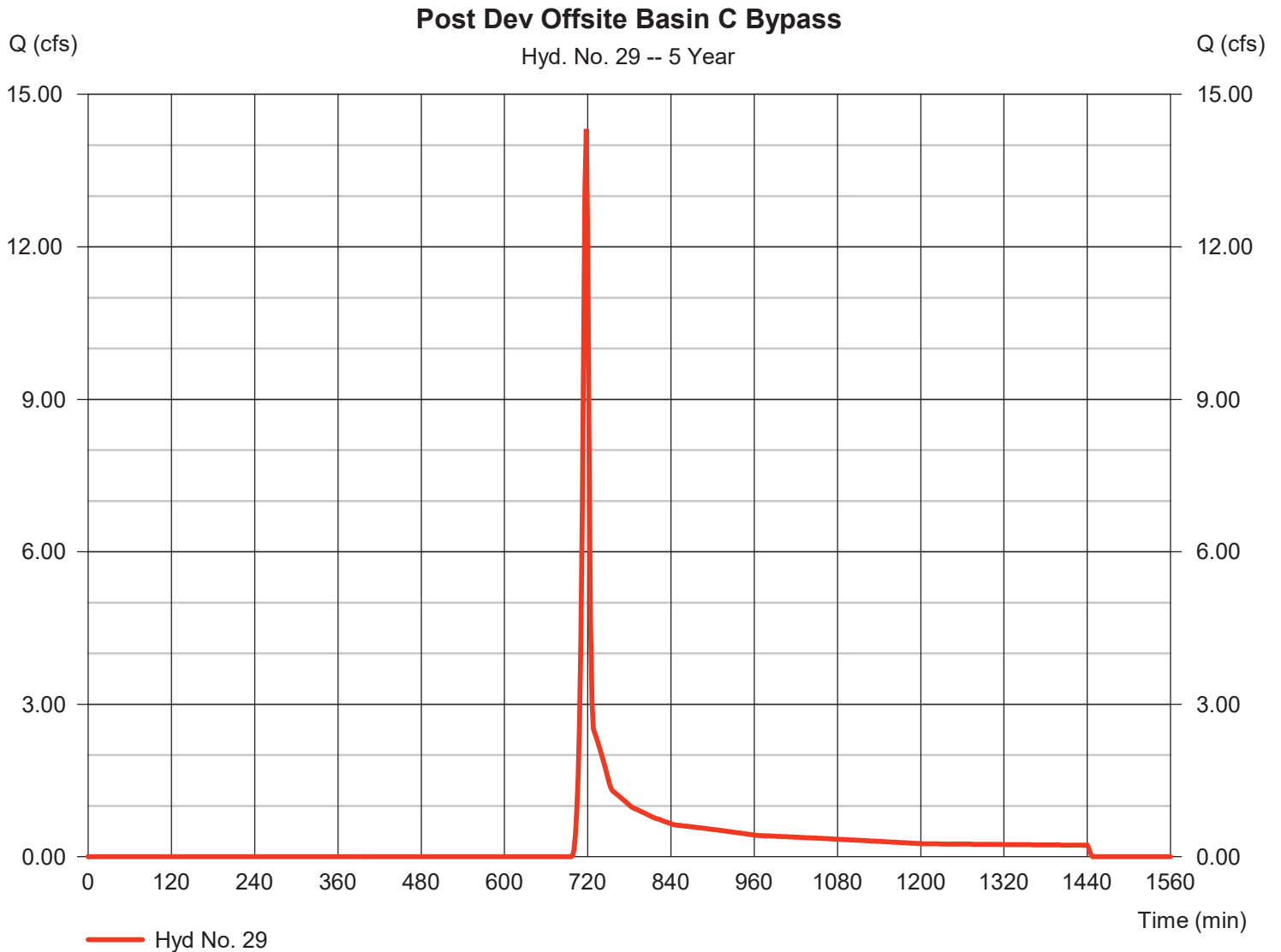


Hydrograph Report

Hyd. No. 29

Post Dev Offsite Basin C Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 14.32 cfs
Storm frequency	= 5 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 30,040 cuft
Drainage area	= 9.130 ac	Curve number	= 59
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 4.51 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hyd. No. 31

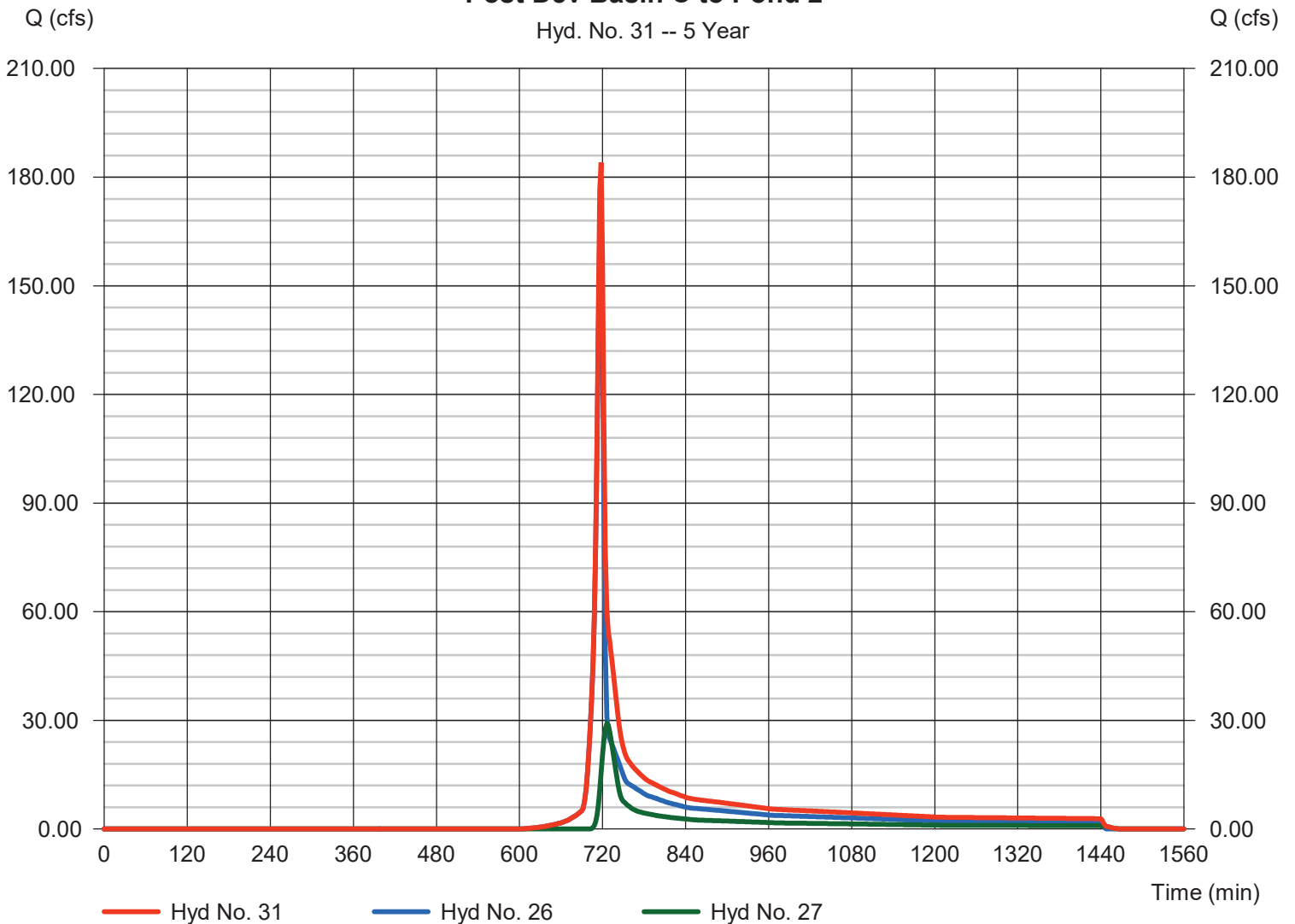
Post Dev Basin C to Pond 2

Hydrograph type = Combine
Storm frequency = 5 yrs
Time interval = 2 min
Inflow hyds. = 26, 27

Peak discharge = 184.02 cfs
Time to peak = 718 min
Hyd. volume = 450,857 cuft
Contrib. drain. area = 93.190 ac

Post Dev Basin C to Pond 2

Hyd. No. 31 -- 5 Year



Hydrograph Report

Hyd. No. 32

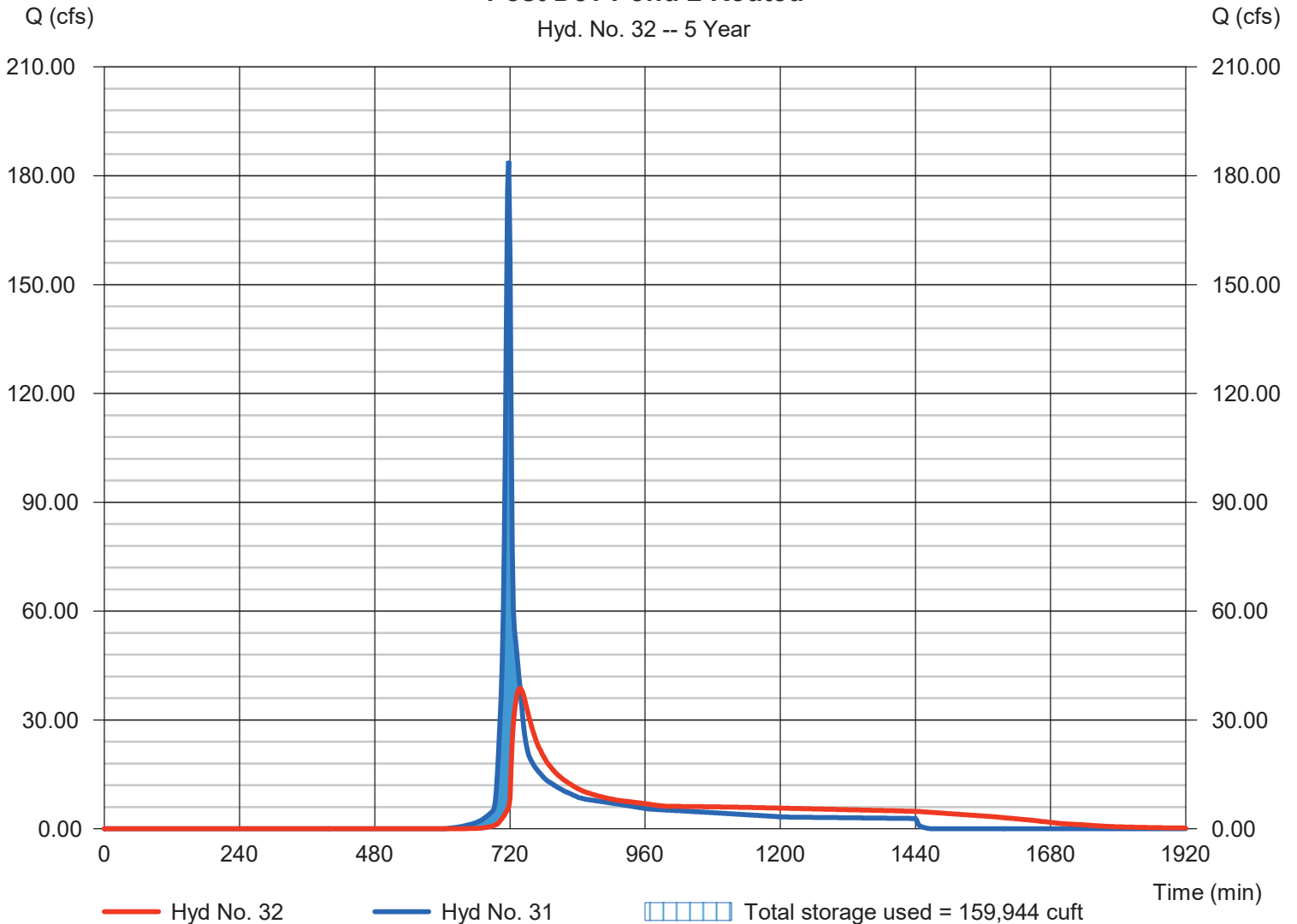
Post Dev Pond 2 Routed

Hydrograph type	= Reservoir	Peak discharge	= 38.65 cfs
Storm frequency	= 5 yrs	Time to peak	= 738 min
Time interval	= 2 min	Hyd. volume	= 450,839 cuft
Inflow hyd. No.	= 31 - Post Dev Basin C to Pond 2	Max. Elevation	= 1108.53 ft
Reservoir name	= Pond 2	Max. Storage	= 159,944 cuft

Storage Indication method used.

Post Dev Pond 2 Routed

Hyd. No. 32 -- 5 Year



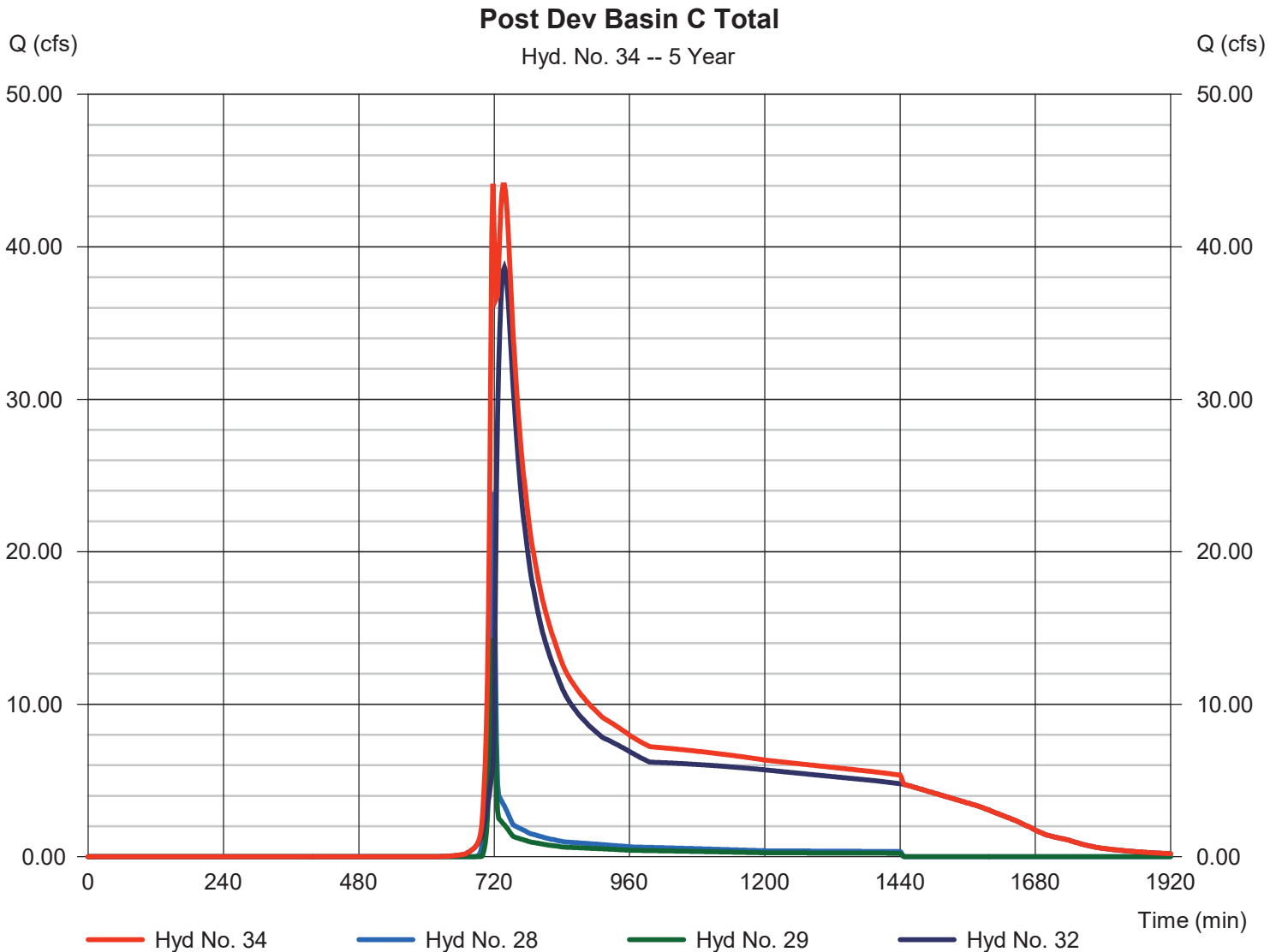
Hydrograph Report

Hyd. No. 34

Post Dev Basin C Total

Hydrograph type = Combine
Storm frequency = 5 yrs
Time interval = 2 min
Inflow hyds. = 28, 29, 32

Peak discharge = 44.14 cfs
Time to peak = 718 min
Hyd. volume = 529,738 cuft
Contrib. drain. area = 21.660 ac

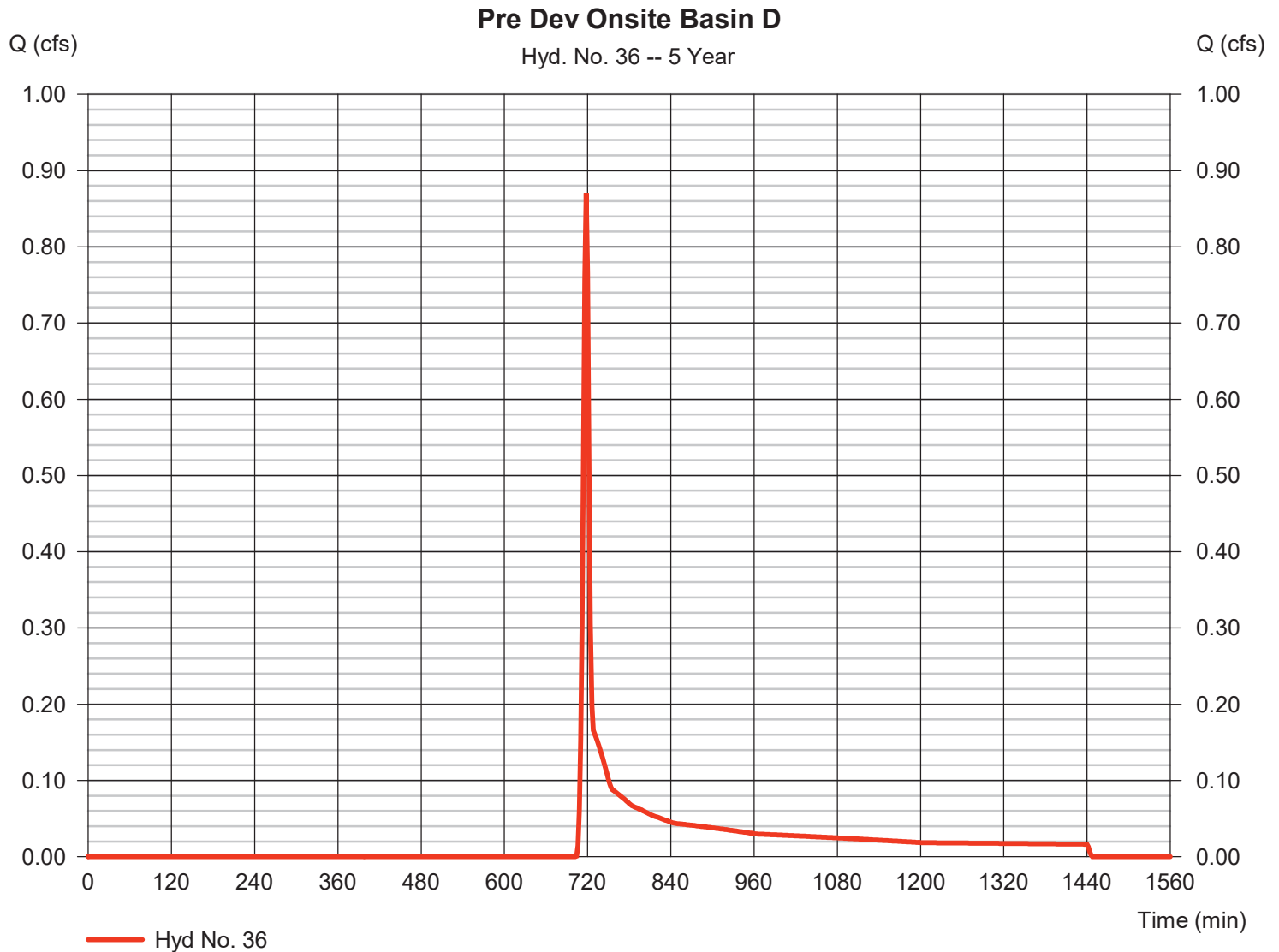


Hydrograph Report

Hyd. No. 36

Pre Dev Onsite Basin D

Hydrograph type	= SCS Runoff	Peak discharge	= 0.870 cfs
Storm frequency	= 5 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 1,957 cuft
Drainage area	= 0.770 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.51 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

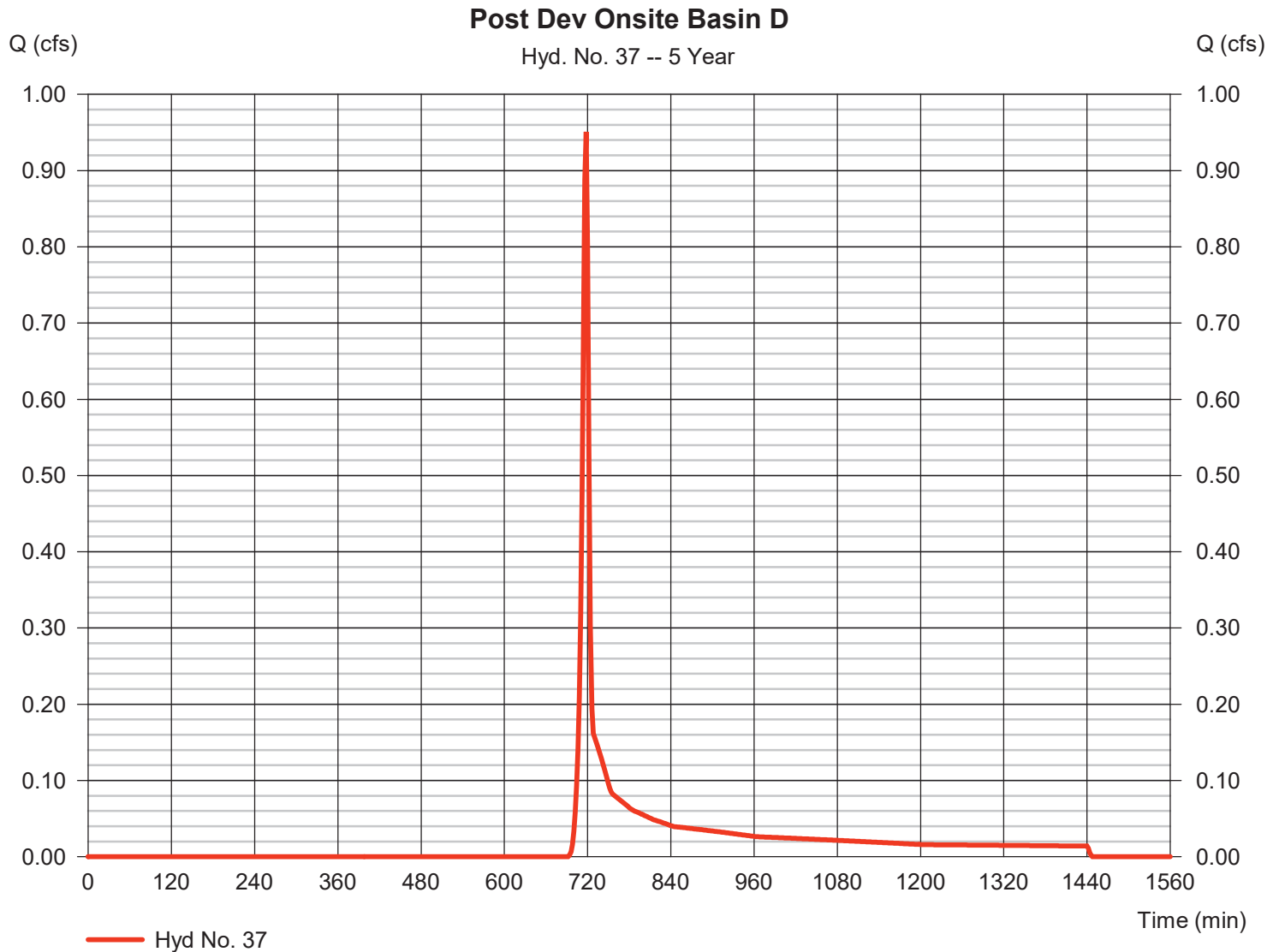


Hydrograph Report

Hyd. No. 37

Post Dev Onsite Basin D

Hydrograph type	= SCS Runoff	Peak discharge	= 0.951 cfs
Storm frequency	= 5 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 1,957 cuft
Drainage area	= 0.530 ac	Curve number	= 61
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.51 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

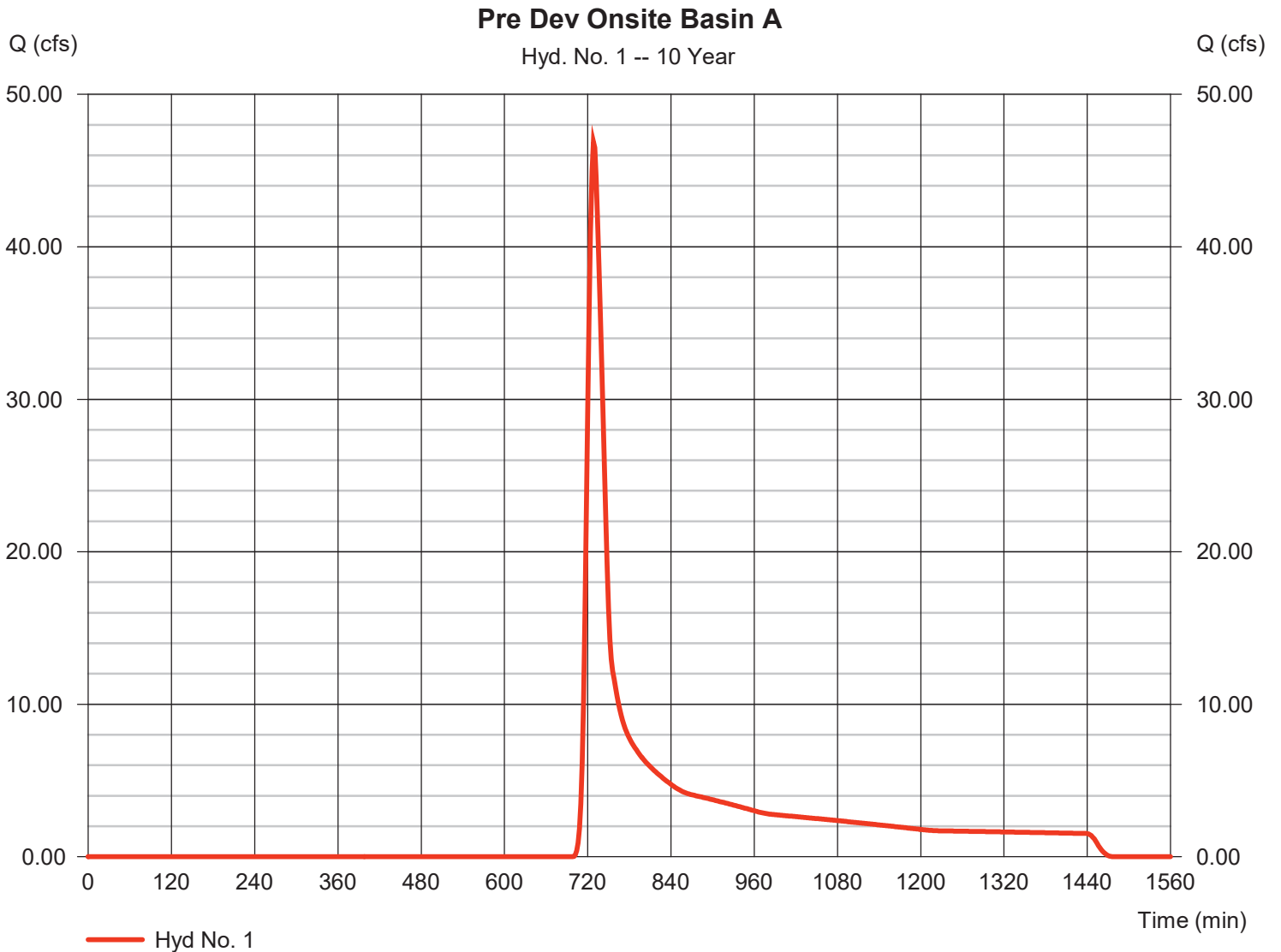
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	46.88	2	728	198,629	----	----	----	Pre Dev Onsite Basin A
2	SCS Runoff	16.07	2	722	43,777	----	----	----	Pre Dev Offite Basin A1
3	SCS Runoff	1.187	2	720	2,856	----	----	----	Pre Dev Offsite Basin A2
5	Combine	58.61	2	726	245,263	1, 2, 3,	----	----	Pre Dev Basin A Total
7	SCS Runoff	197.16	2	716	399,080	----	----	----	Post Dev Onsite Basin A to Pond 1
8	SCS Runoff	3.440	2	722	9,564	----	----	----	Post Dev Offsite Basin A to Pond 1
9	SCS Runoff	12.97	2	720	30,654	----	----	----	Post Dev Offsite Basin A1 Bypass
10	SCS Runoff	1.187	2	720	2,856	----	----	----	Post Dev Offsite Basin A2 Bypass
12	Combine	199.44	2	716	408,644	7, 8,	----	----	Post Dev Basin A to Pond 1
13	Reservoir	13.61	2	758	392,673	12	1060.52	221,174	Post Dev Pond 1 Routed
15	Combine	18.67	2	720	426,183	9, 10, 13,	----	----	Post Dev Basin A Total
17	SCS Runoff	4.808	2	730	21,812	----	----	----	Pre Dev Onsite Basin B
18	SCS Runoff	24.32	2	720	63,100	----	----	----	Post Dev Onsite Basin B
20	SCS Runoff	86.56	2	726	325,098	----	----	----	Pre Dev Onsite Basin C
21	SCS Runoff	21.56	2	718	43,730	----	----	----	Pre Dev Offsite Basin C1
22	SCS Runoff	44.67	2	726	160,184	----	----	----	Pre Dev Offsite Basin C2
24	Combine	135.52	2	726	529,012	20, 21, 22,	----	----	Pre Dev Basin C Total
26	SCS Runoff	215.68	2	718	433,064	----	----	----	Post Dev Onsite Basin C to Pond 2
27	SCS Runoff	44.67	2	726	160,184	----	----	----	Post Dev Offsite Basin C to Pond 2
28	SCS Runoff	32.86	2	718	66,122	----	----	----	Post Dev Onsite Basin C Bypass
29	SCS Runoff	20.39	2	718	41,561	----	----	----	Post Dev Offsite Basin C Bypass
31	Combine	242.62	2	718	593,249	26, 27,	----	----	Post Dev Basin C to Pond 2
32	Reservoir	73.86	2	730	593,229	31	1109.51	191,818	Post Dev Pond 2 Routed
34	Combine	90.60	2	722	700,912	28, 29, 32,	----	----	Post Dev Basin C Total
36	SCS Runoff	1.328	2	718	2,806	----	----	----	Pre Dev Onsite Basin D
37	SCS Runoff	1.321	2	718	2,667	----	----	----	Post Dev Onsite Basin D
1220263 Hydrology Concept.gpw					Return Period: 10 Year			Friday, 01 / 31 / 2025	

Hydrograph Report

Hyd. No. 1

Pre Dev Onsite Basin A

Hydrograph type	= SCS Runoff	Peak discharge	= 46.88 cfs
Storm frequency	= 10 yrs	Time to peak	= 728 min
Time interval	= 2 min	Hyd. volume	= 198,629 cuft
Drainage area	= 50.200 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 22.00 min
Total precip.	= 5.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

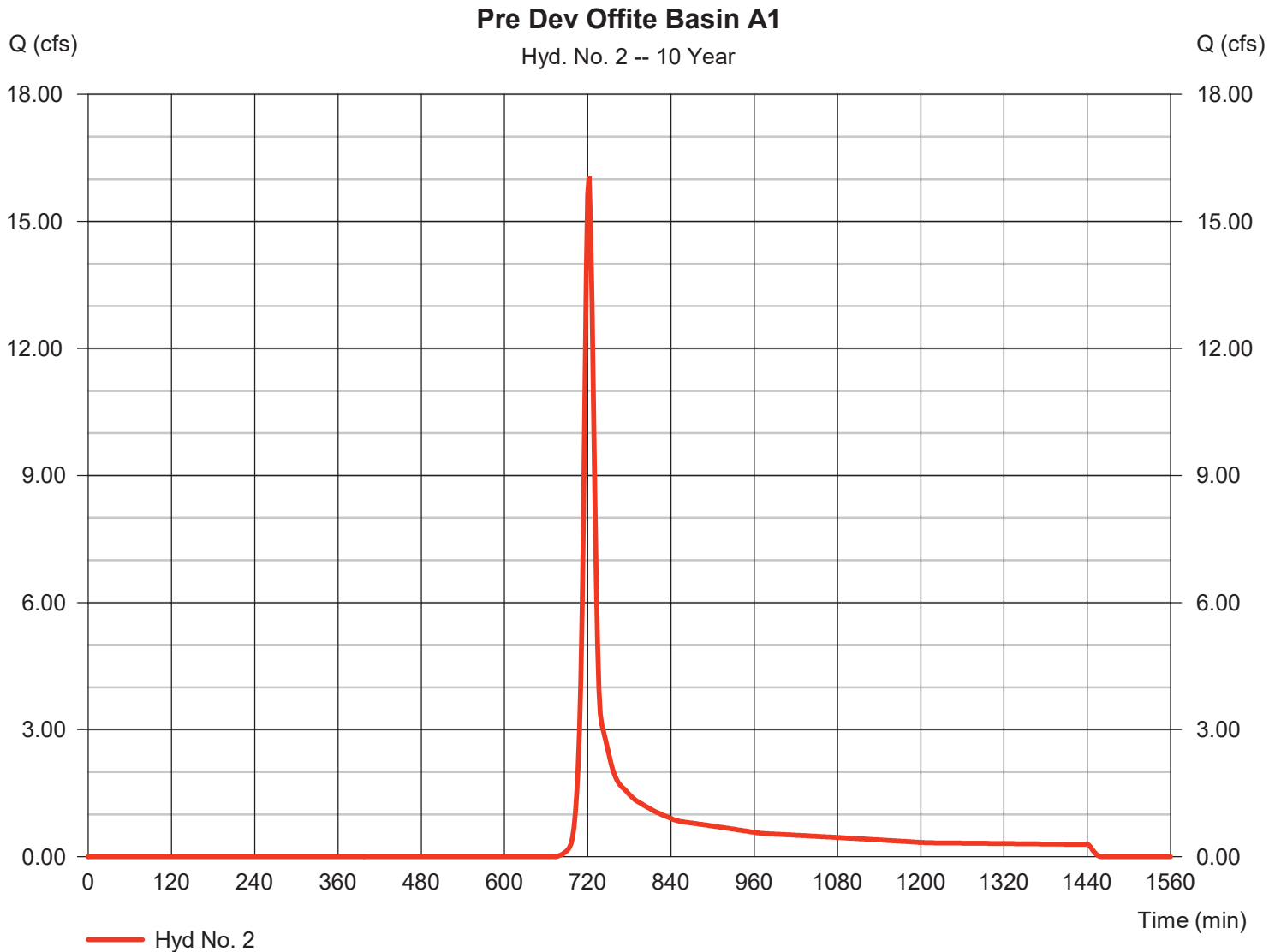


Hydrograph Report

Hyd. No. 2

Pre Dev Offite Basin A1

Hydrograph type	= SCS Runoff	Peak discharge	= 16.07 cfs
Storm frequency	= 10 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 43,777 cuft
Drainage area	= 7.910 ac	Curve number	= 61
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.00 min
Total precip.	= 5.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

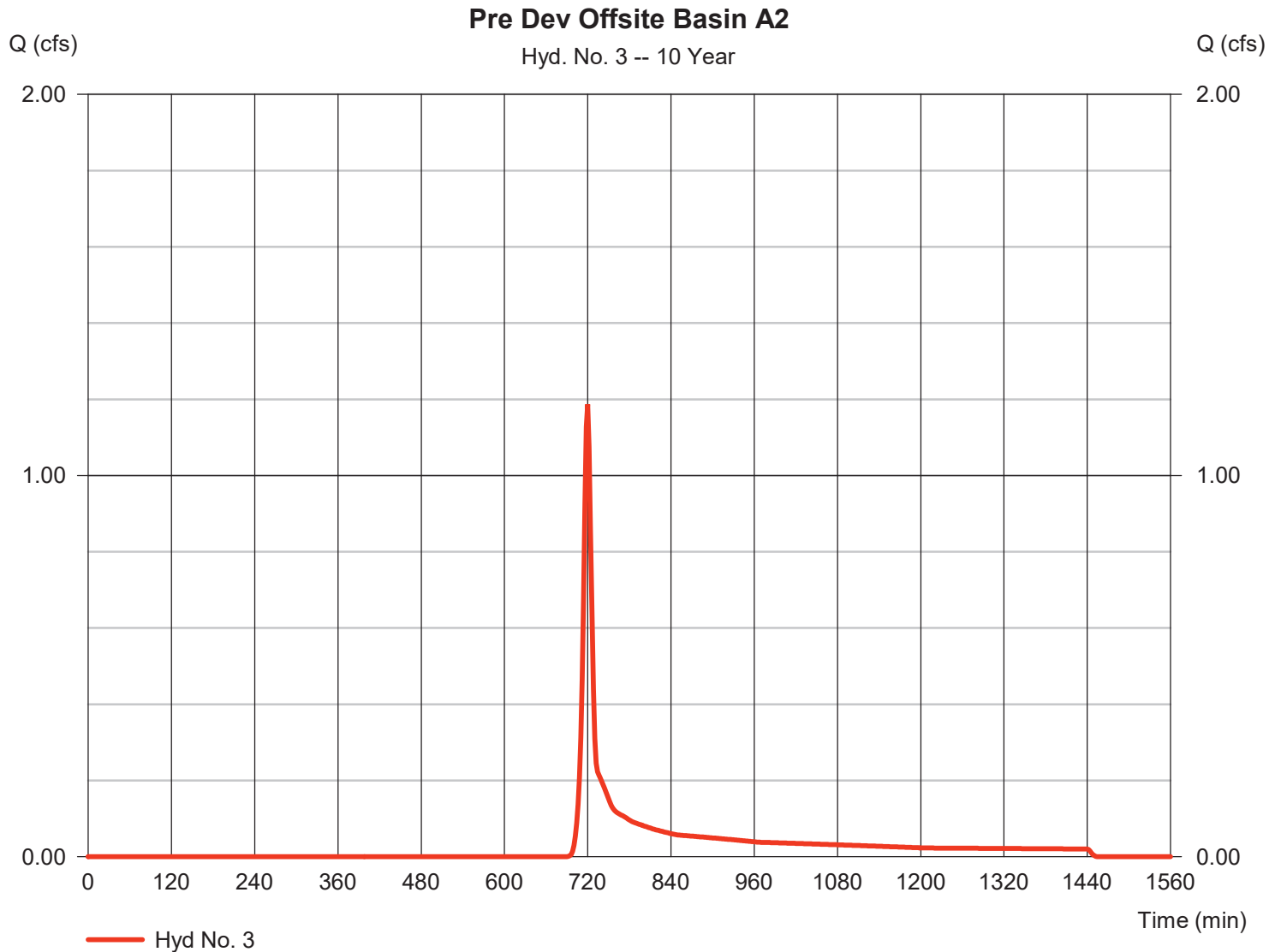


Hydrograph Report

Hyd. No. 3

Pre Dev Offsite Basin A2

Hydrograph type	= SCS Runoff	Peak discharge	= 1.187 cfs
Storm frequency	= 10 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 2,856 cuft
Drainage area	= 0.620 ac	Curve number	= 58
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 5.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



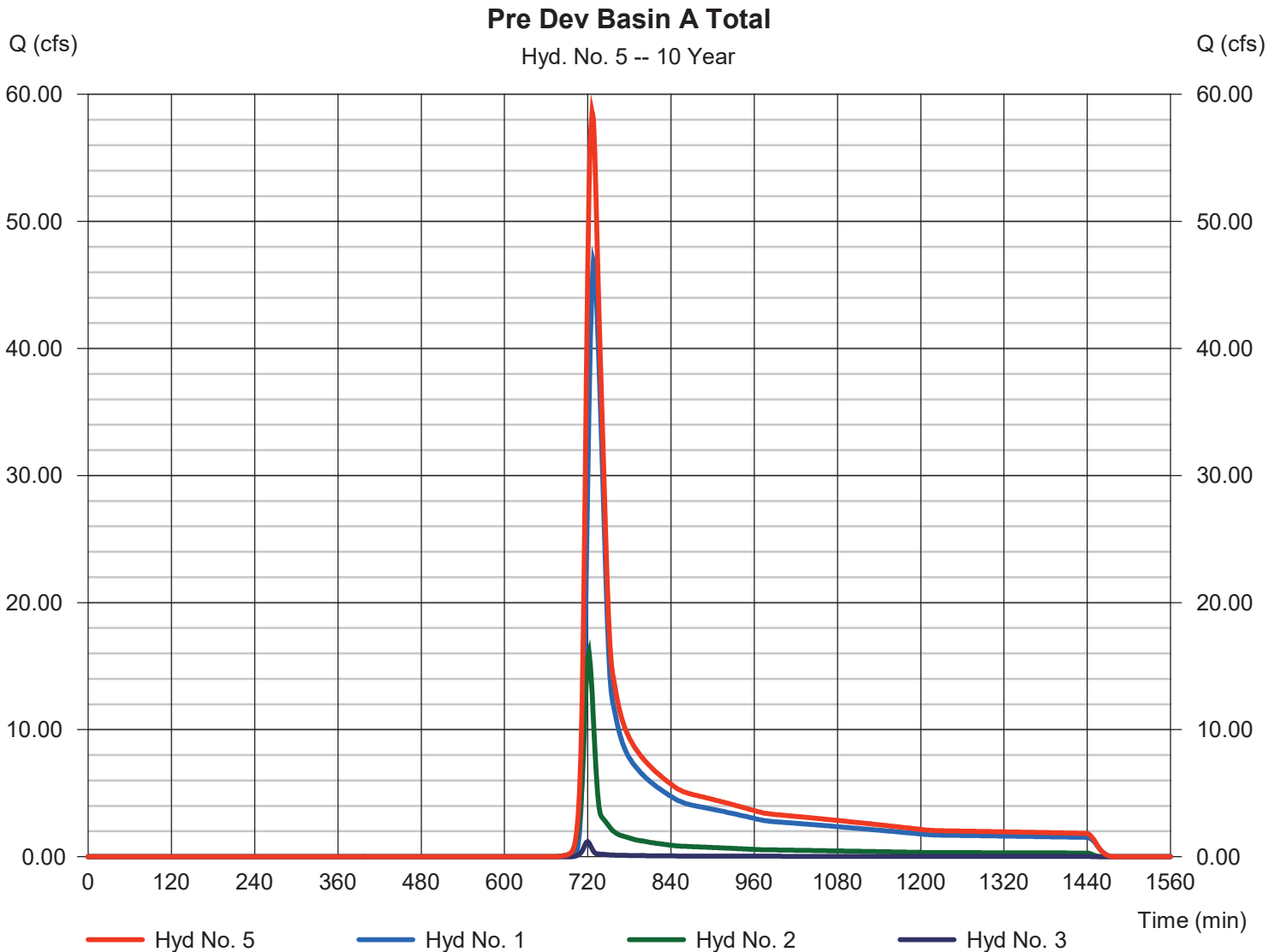
Hydrograph Report

Hyd. No. 5

Pre Dev Basin A Total

Hydrograph type = Combine
Storm frequency = 10 yrs
Time interval = 2 min
Inflow hyds. = 1, 2, 3

Peak discharge = 58.61 cfs
Time to peak = 726 min
Hyd. volume = 245,263 cuft
Contrib. drain. area = 58.730 ac



Hydrograph Report

Hyd. No. 7

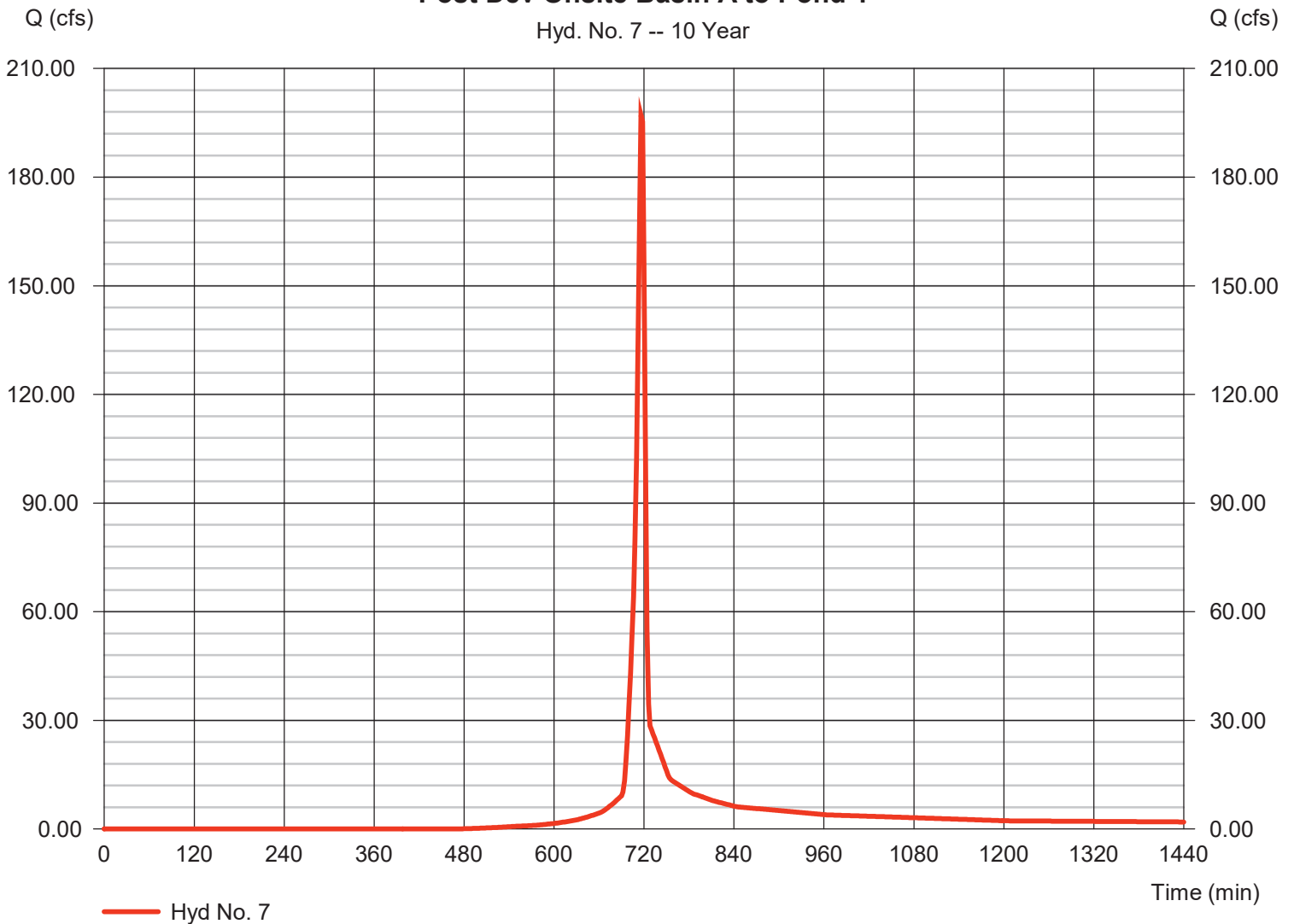
Post Dev Onsite Basin A to Pond 1

Hydrograph type = SCS Runoff
Storm frequency = 10 yrs
Time interval = 2 min
Drainage area = 42.270 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 5.18 in
Storm duration = 24 hrs

Peak discharge = 197.16 cfs
Time to peak = 716 min
Hyd. volume = 399,080 cuft
Curve number = 77
Hydraulic length = 0 ft
Time of conc. (Tc) = 5.00 min
Distribution = Type II
Shape factor = 484

Post Dev Onsite Basin A to Pond 1

Hyd. No. 7 -- 10 Year



Hydrograph Report

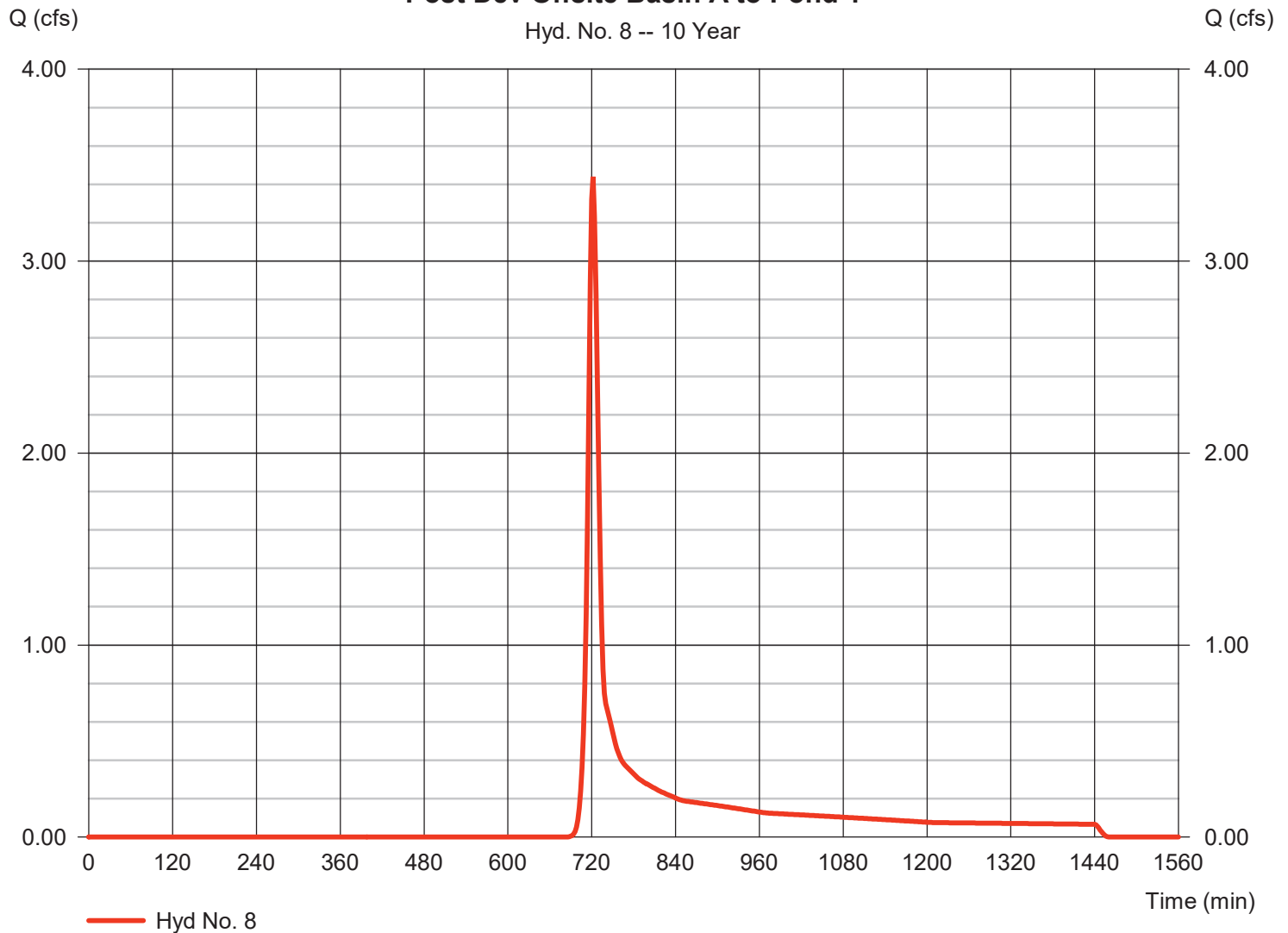
Hyd. No. 8

Post Dev Offsite Basin A to Pond 1

Hydrograph type	= SCS Runoff	Peak discharge	= 3.440 cfs
Storm frequency	= 10 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 9,564 cuft
Drainage area	= 1.910 ac	Curve number	= 59
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.00 min
Total precip.	= 5.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A to Pond 1

Hyd. No. 8 -- 10 Year



Hydrograph Report

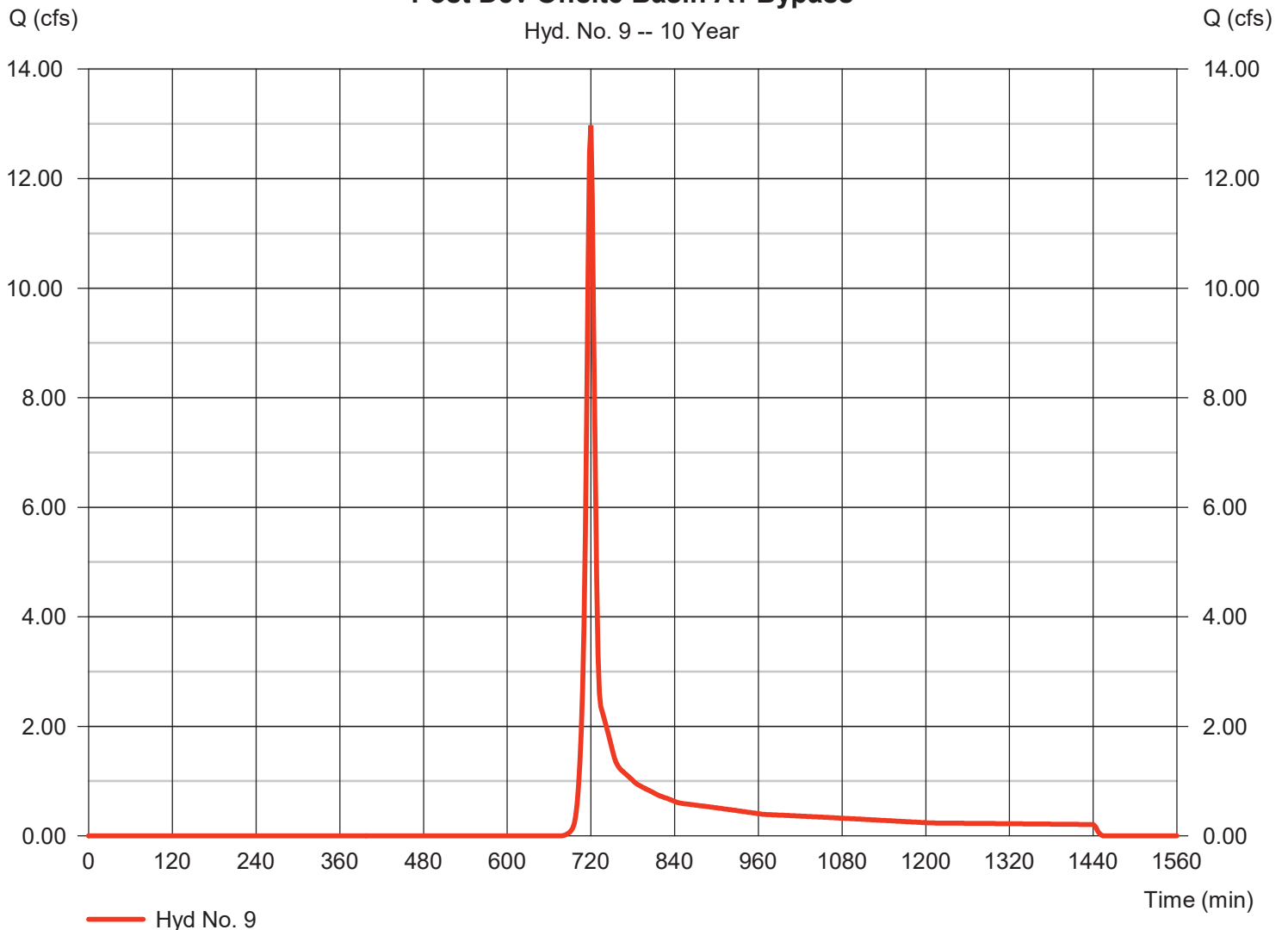
Hyd. No. 9

Post Dev Offsite Basin A1 Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 12.97 cfs
Storm frequency	= 10 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 30,654 cuft
Drainage area	= 6.000 ac	Curve number	= 60
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 5.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A1 Bypass

Hyd. No. 9 -- 10 Year



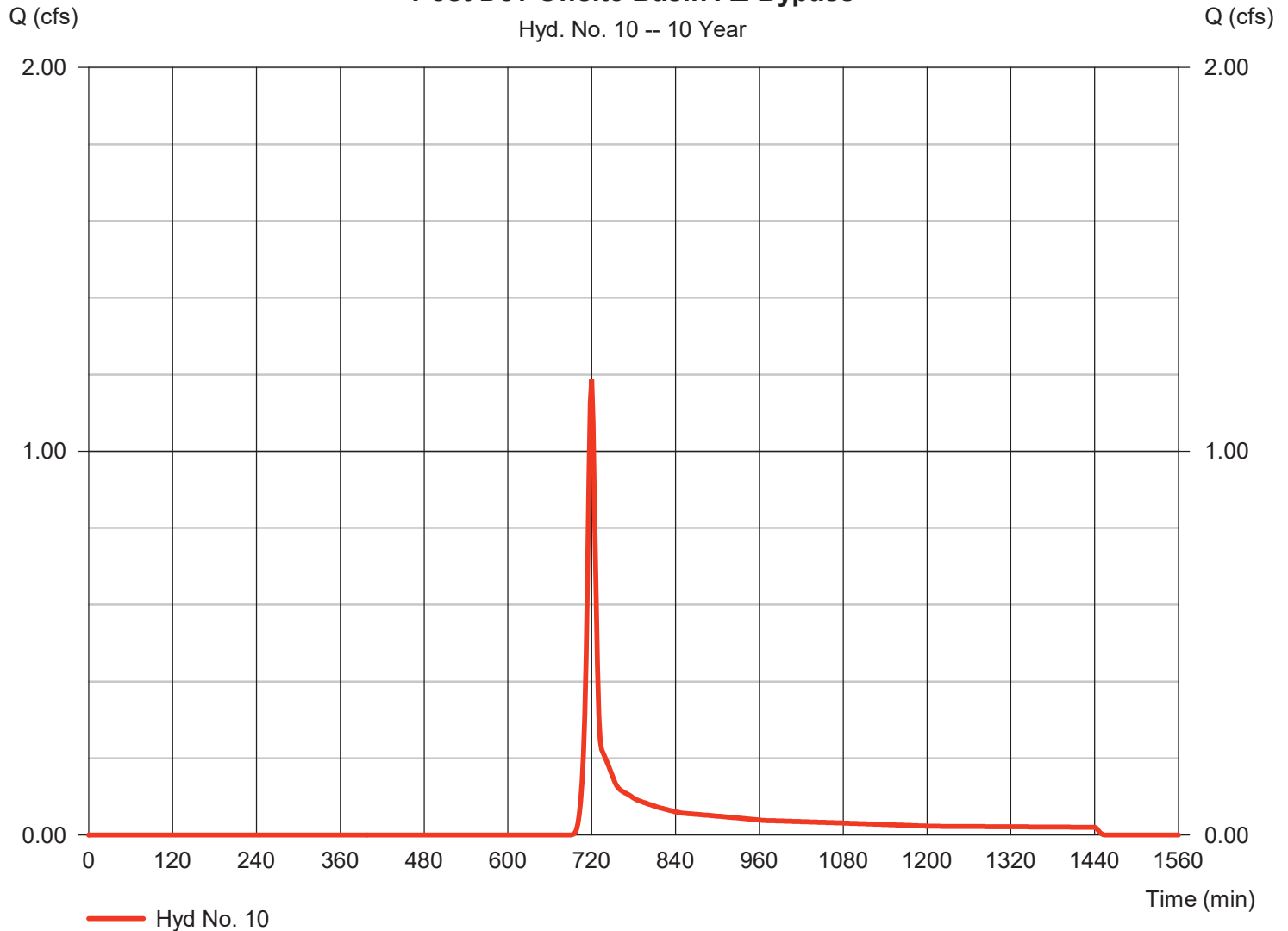
Hydrograph Report

Hyd. No. 10

Post Dev Offsite Basin A2 Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 1.187 cfs
Storm frequency	= 10 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 2,856 cuft
Drainage area	= 0.620 ac	Curve number	= 58
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 5.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A2 Bypass



Hydrograph Report

Hyd. No. 12

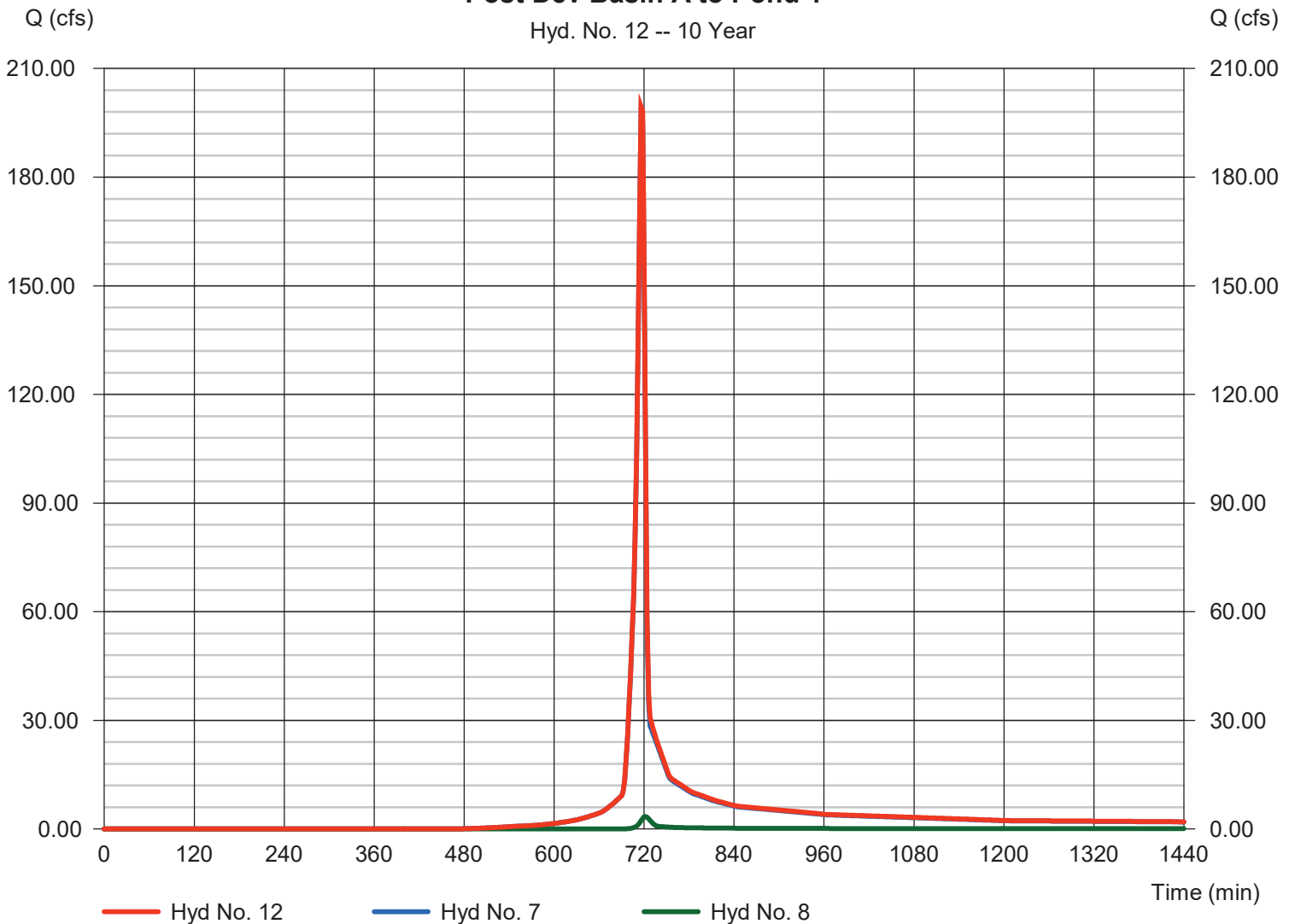
Post Dev Basin A to Pond 1

Hydrograph type = Combine
Storm frequency = 10 yrs
Time interval = 2 min
Inflow hyds. = 7, 8

Peak discharge = 199.44 cfs
Time to peak = 716 min
Hyd. volume = 408,644 cuft
Contrib. drain. area = 44.180 ac

Post Dev Basin A to Pond 1

Hyd. No. 12 -- 10 Year



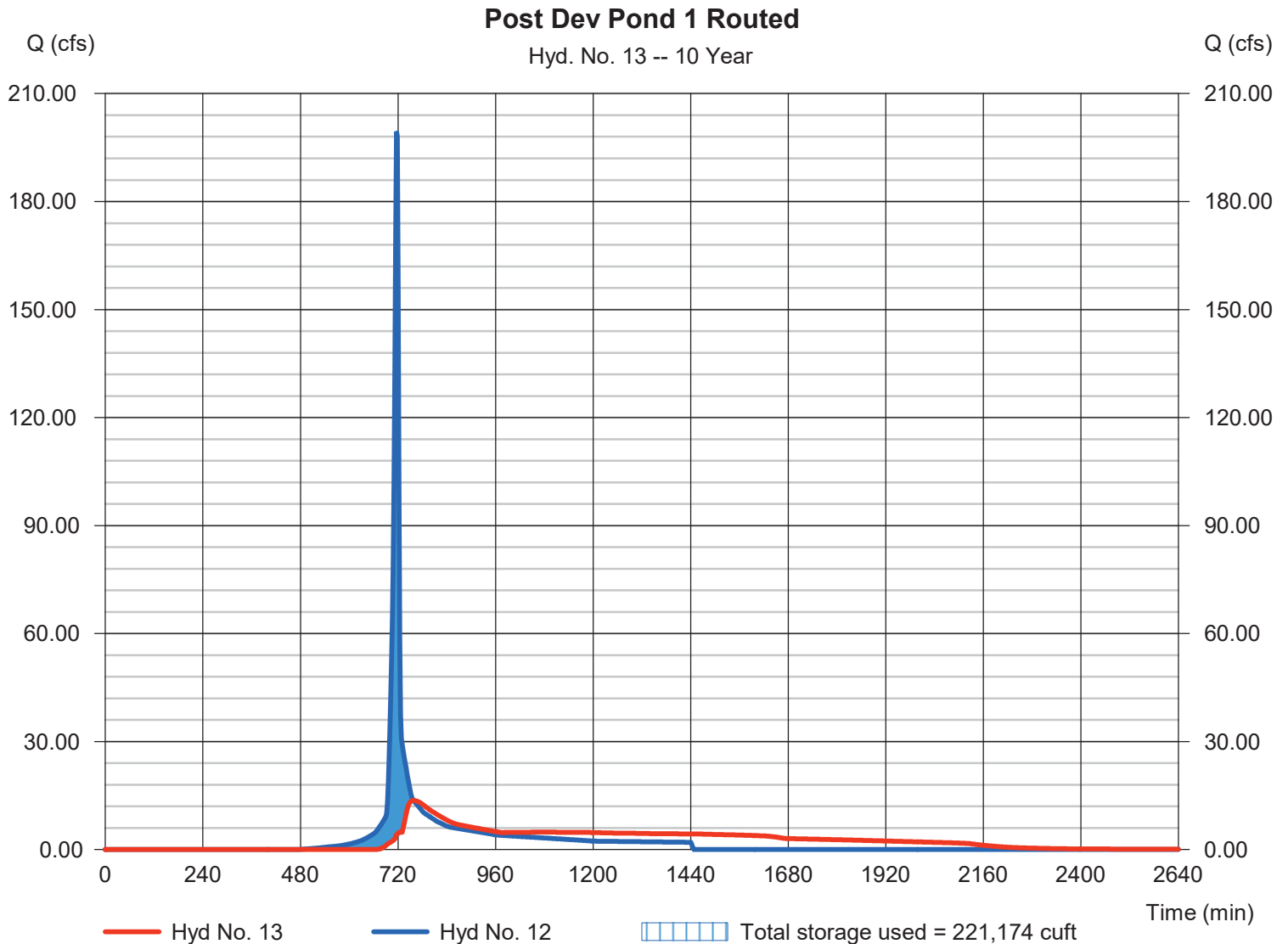
Hydrograph Report

Hyd. No. 13

Post Dev Pond 1 Routed

Hydrograph type	= Reservoir	Peak discharge	= 13.61 cfs
Storm frequency	= 10 yrs	Time to peak	= 758 min
Time interval	= 2 min	Hyd. volume	= 392,673 cuft
Inflow hyd. No.	= 12 - Post Dev Basin A to Pond	Max. Elevation	= 1060.52 ft
Reservoir name	= Pond 1	Max. Storage	= 221,174 cuft

Storage Indication method used.



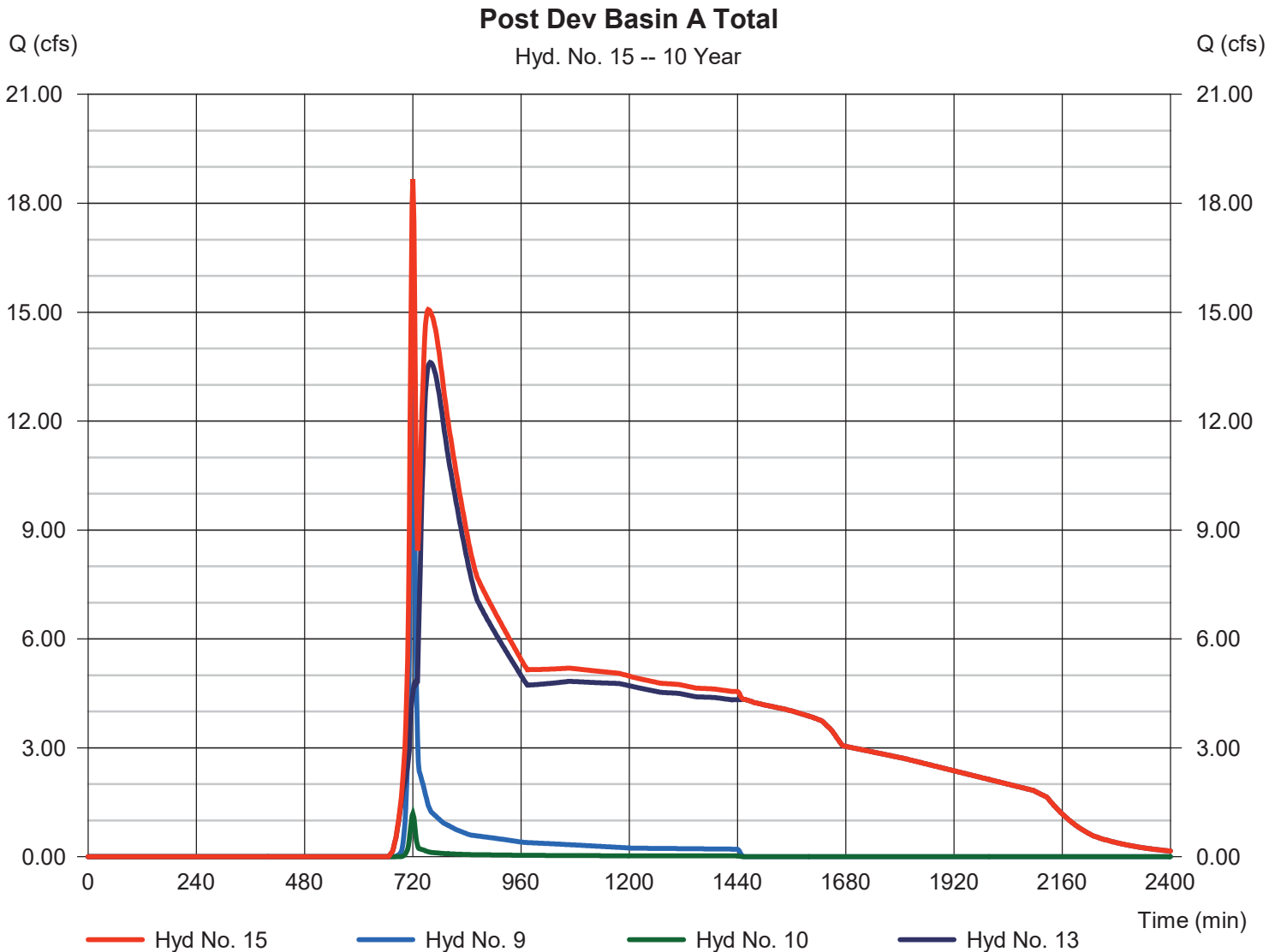
Hydrograph Report

Hyd. No. 15

Post Dev Basin A Total

Hydrograph type = Combine
Storm frequency = 10 yrs
Time interval = 2 min
Inflow hyds. = 9, 10, 13

Peak discharge = 18.67 cfs
Time to peak = 720 min
Hyd. volume = 426,183 cuft
Contrib. drain. area = 6.620 ac

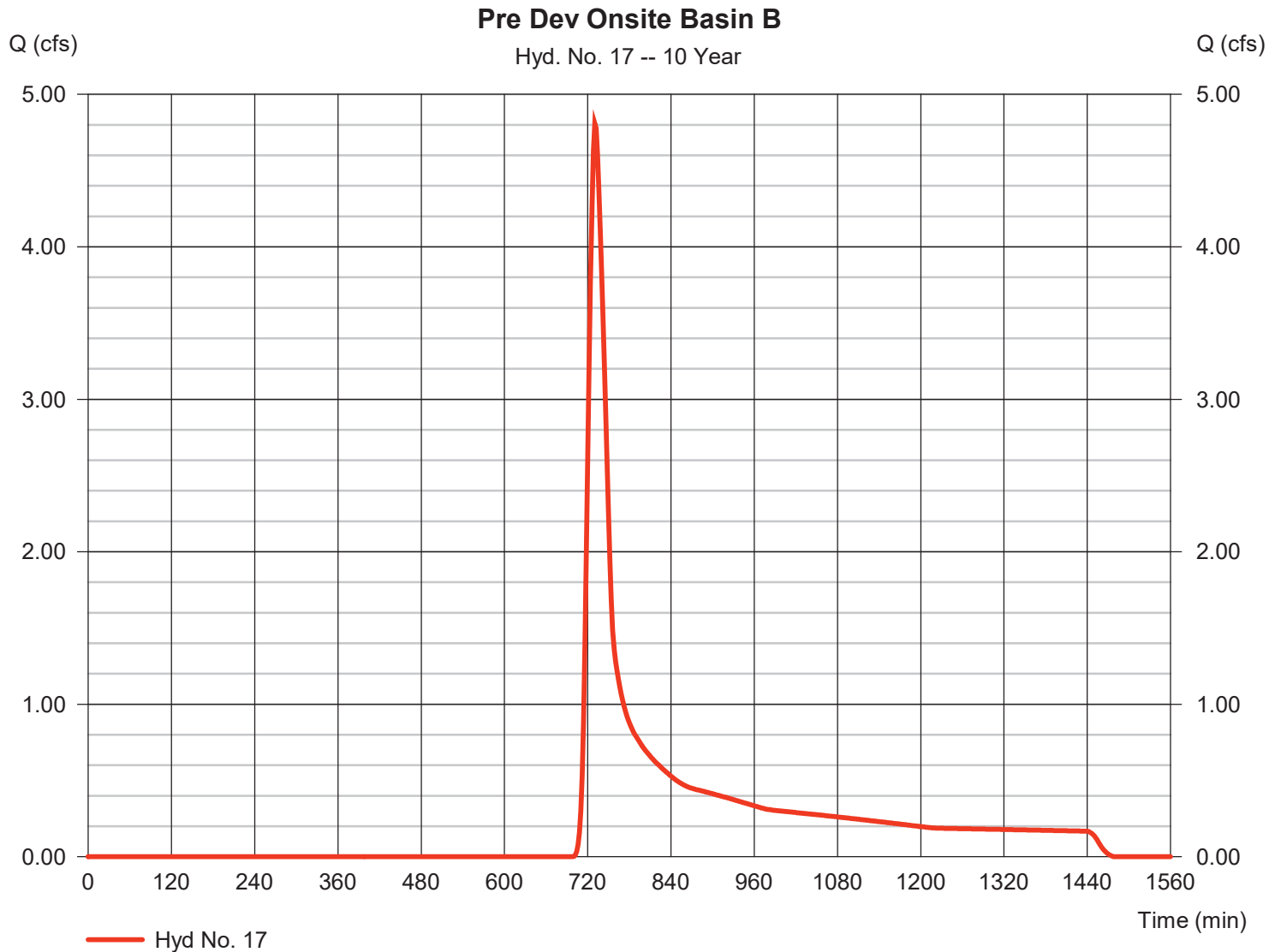


Hydrograph Report

Hyd. No. 17

Pre Dev Onsite Basin B

Hydrograph type	= SCS Runoff	Peak discharge	= 4.808 cfs
Storm frequency	= 10 yrs	Time to peak	= 730 min
Time interval	= 2 min	Hyd. volume	= 21,812 cuft
Drainage area	= 5.700 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 25.00 min
Total precip.	= 5.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

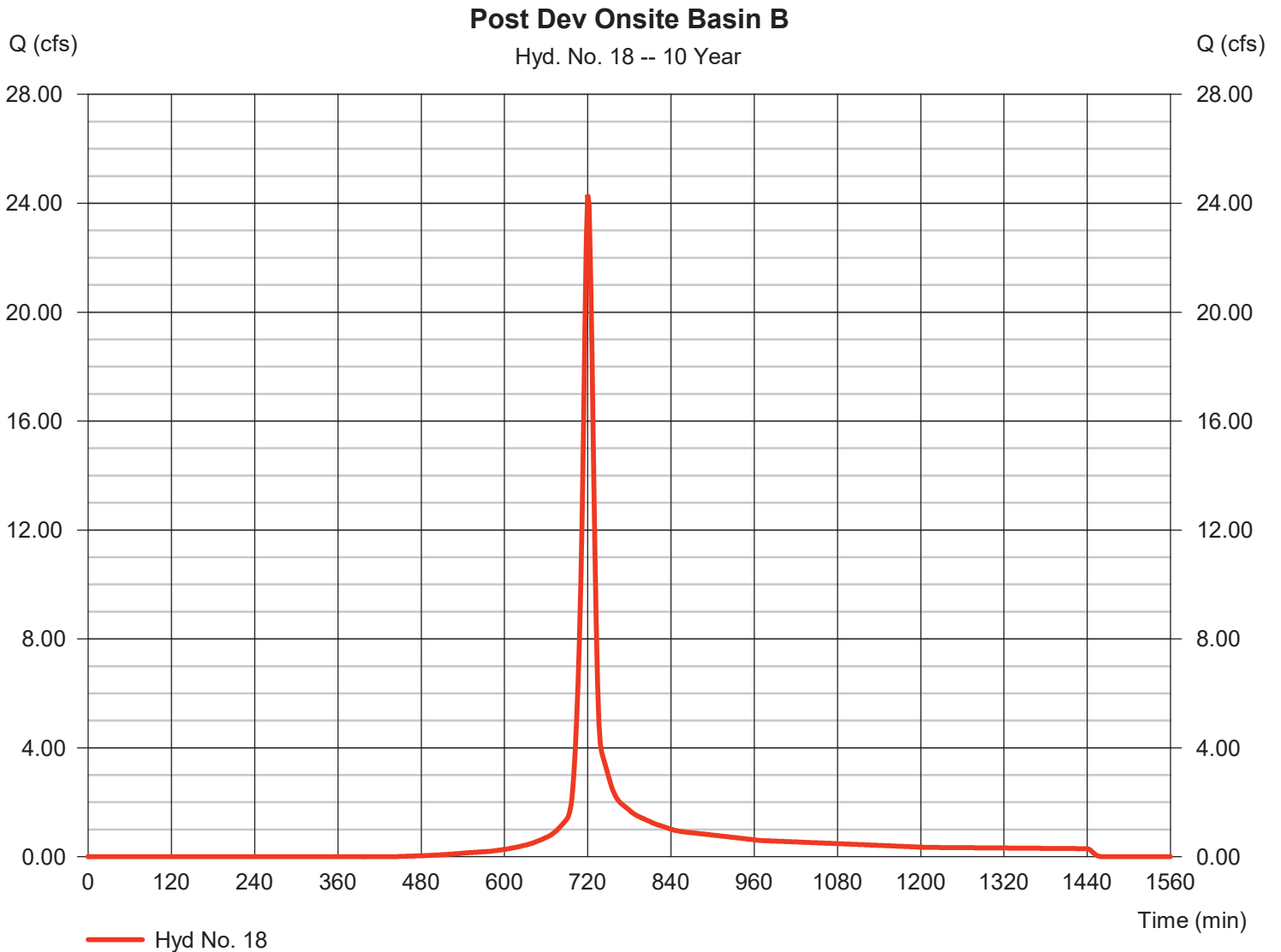


Hydrograph Report

Hyd. No. 18

Post Dev Onsite Basin B

Hydrograph type	= SCS Runoff	Peak discharge	= 24.32 cfs
Storm frequency	= 10 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 63,100 cuft
Drainage area	= 5.700 ac	Curve number	= 79
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.00 min
Total precip.	= 5.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

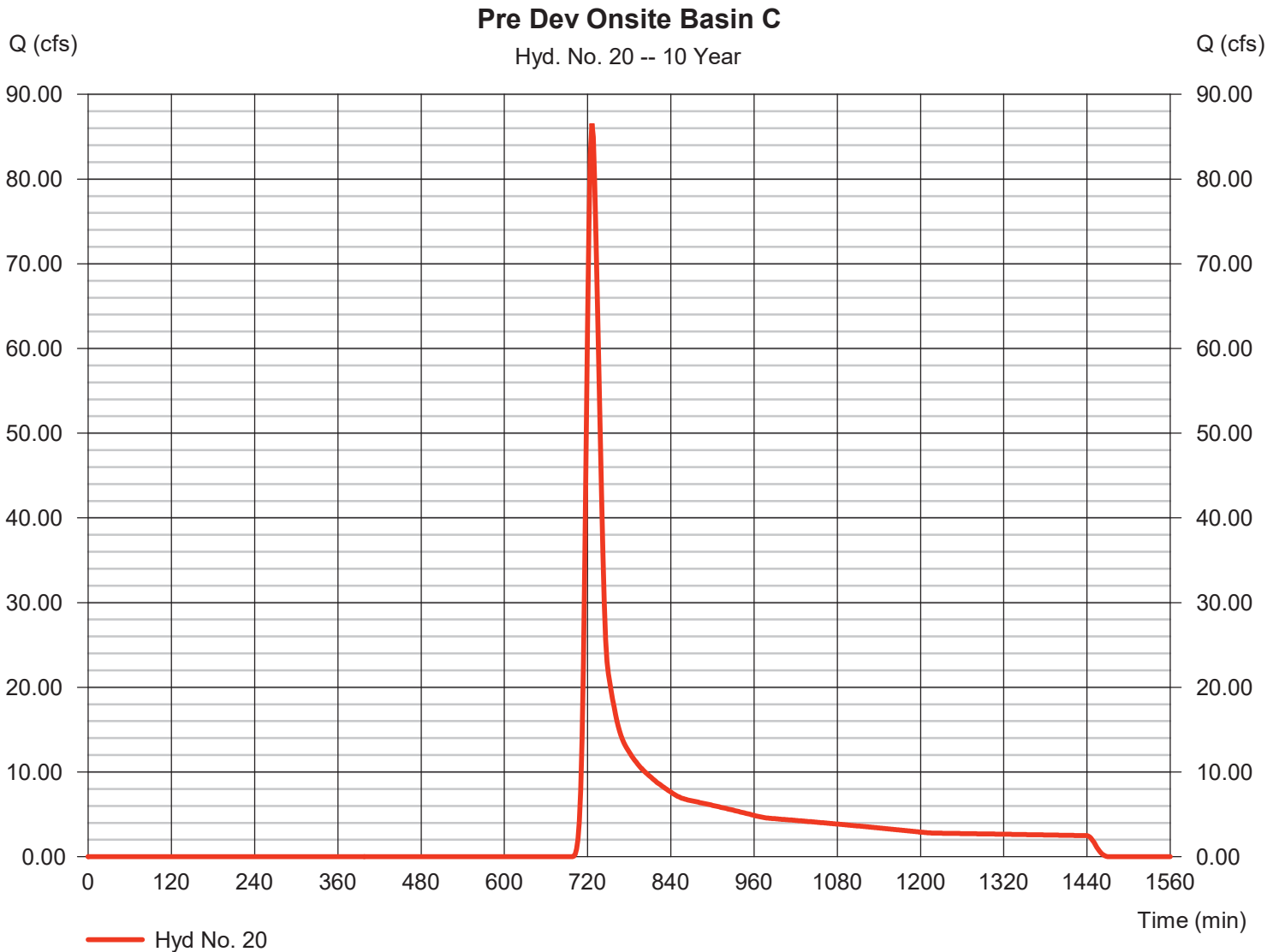


Hydrograph Report

Hyd. No. 20

Pre Dev Onsite Basin C

Hydrograph type	= SCS Runoff	Peak discharge	= 86.56 cfs
Storm frequency	= 10 yrs	Time to peak	= 726 min
Time interval	= 2 min	Hyd. volume	= 325,098 cuft
Drainage area	= 83.630 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 17.00 min
Total precip.	= 5.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

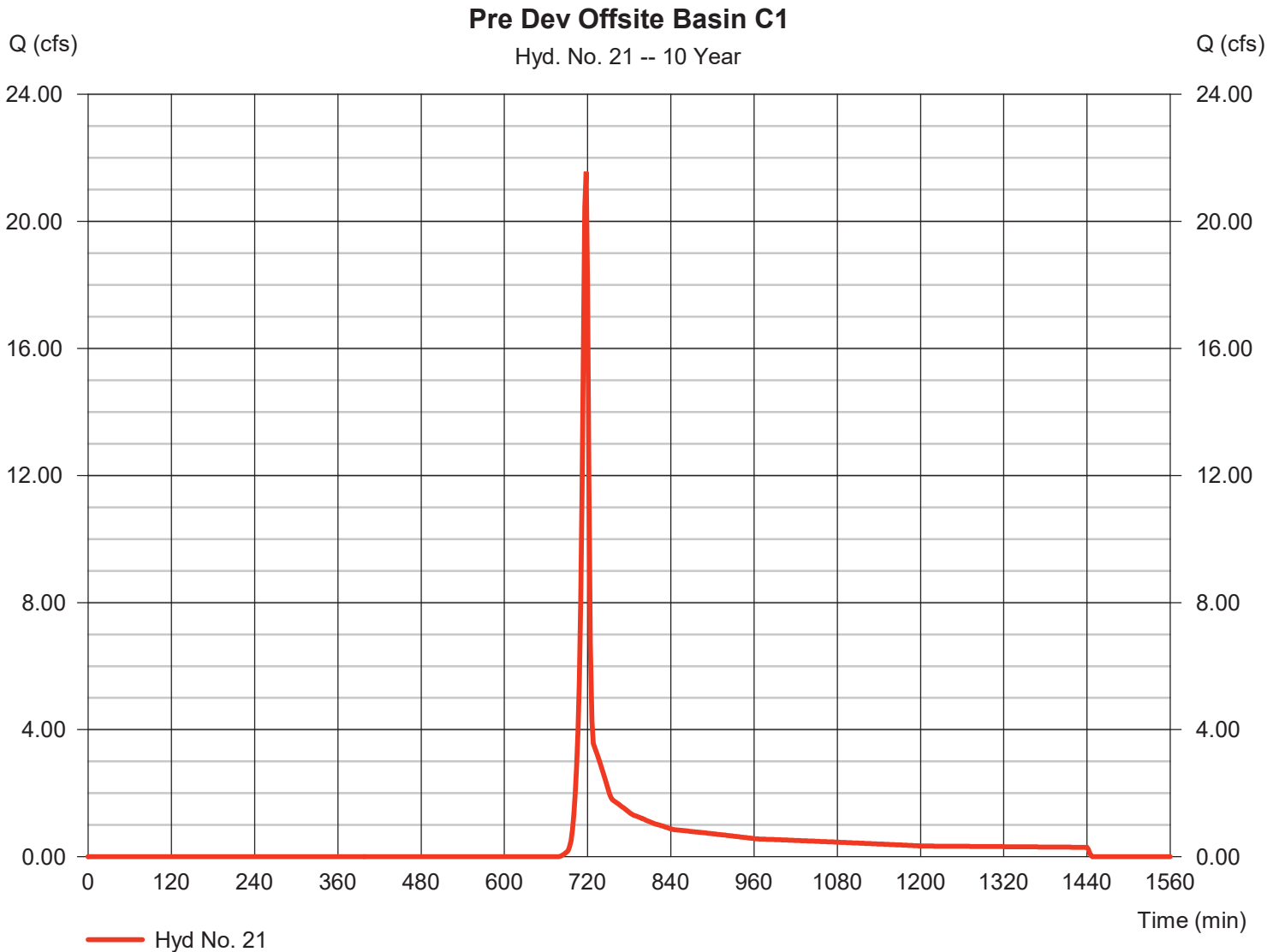


Hydrograph Report

Hyd. No. 21

Pre Dev Offsite Basin C1

Hydrograph type	= SCS Runoff	Peak discharge	= 21.56 cfs
Storm frequency	= 10 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 43,730 cuft
Drainage area	= 9.130 ac	Curve number	= 60
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 5.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

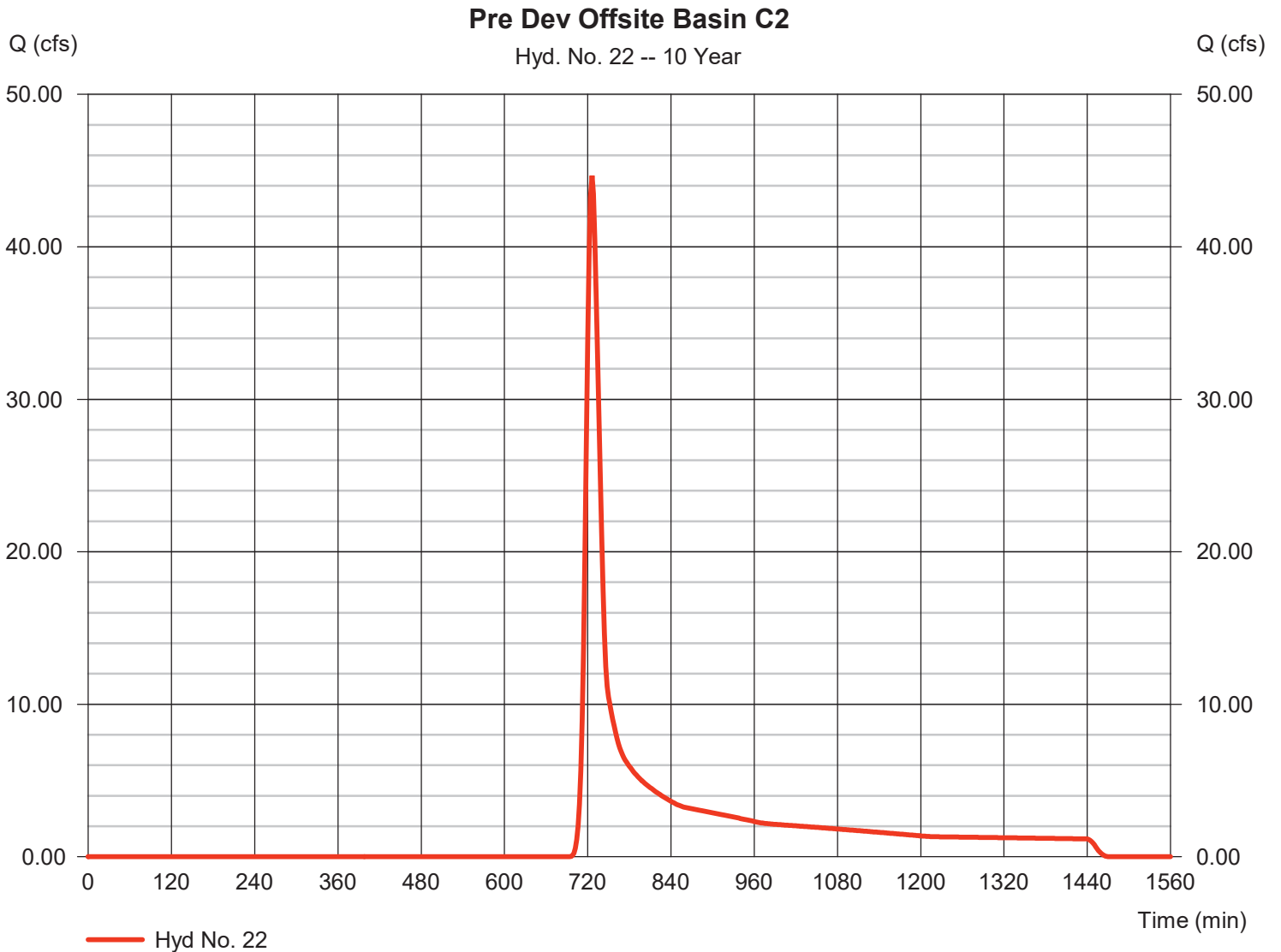


Hydrograph Report

Hyd. No. 22

Pre Dev Offsite Basin C2

Hydrograph type	= SCS Runoff	Peak discharge	= 44.67 cfs
Storm frequency	= 10 yrs	Time to peak	= 726 min
Time interval	= 2 min	Hyd. volume	= 160,184 cuft
Drainage area	= 36.720 ac	Curve number	= 57
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 18.00 min
Total precip.	= 5.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hyd. No. 24

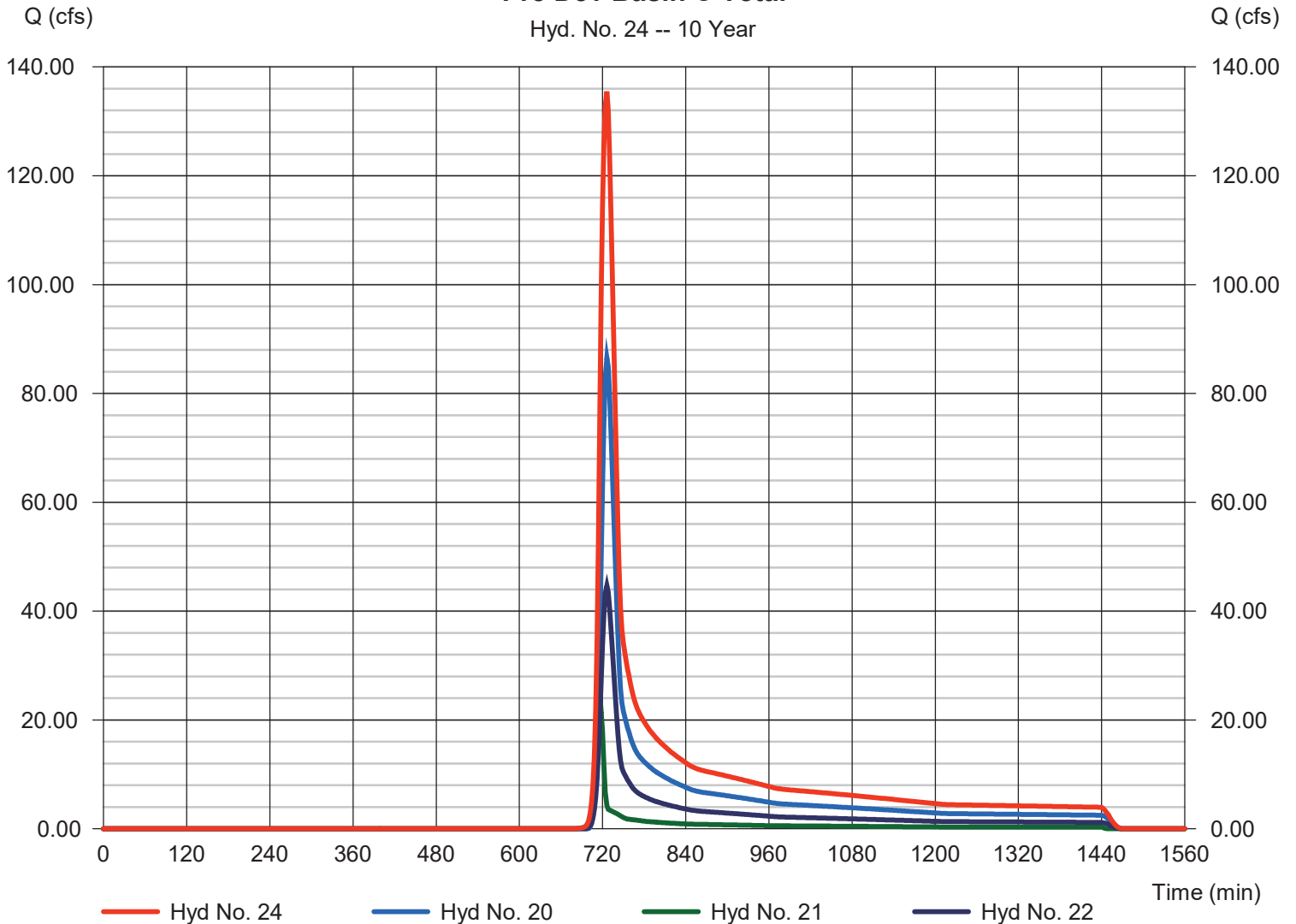
Pre Dev Basin C Total

Hydrograph type = Combine
Storm frequency = 10 yrs
Time interval = 2 min
Inflow hyds. = 20, 21, 22

Peak discharge = 135.52 cfs
Time to peak = 726 min
Hyd. volume = 529,012 cuft
Contrib. drain. area = 129.480 ac

Pre Dev Basin C Total

Hyd. No. 24 -- 10 Year



Hydrograph Report

Hyd. No. 26

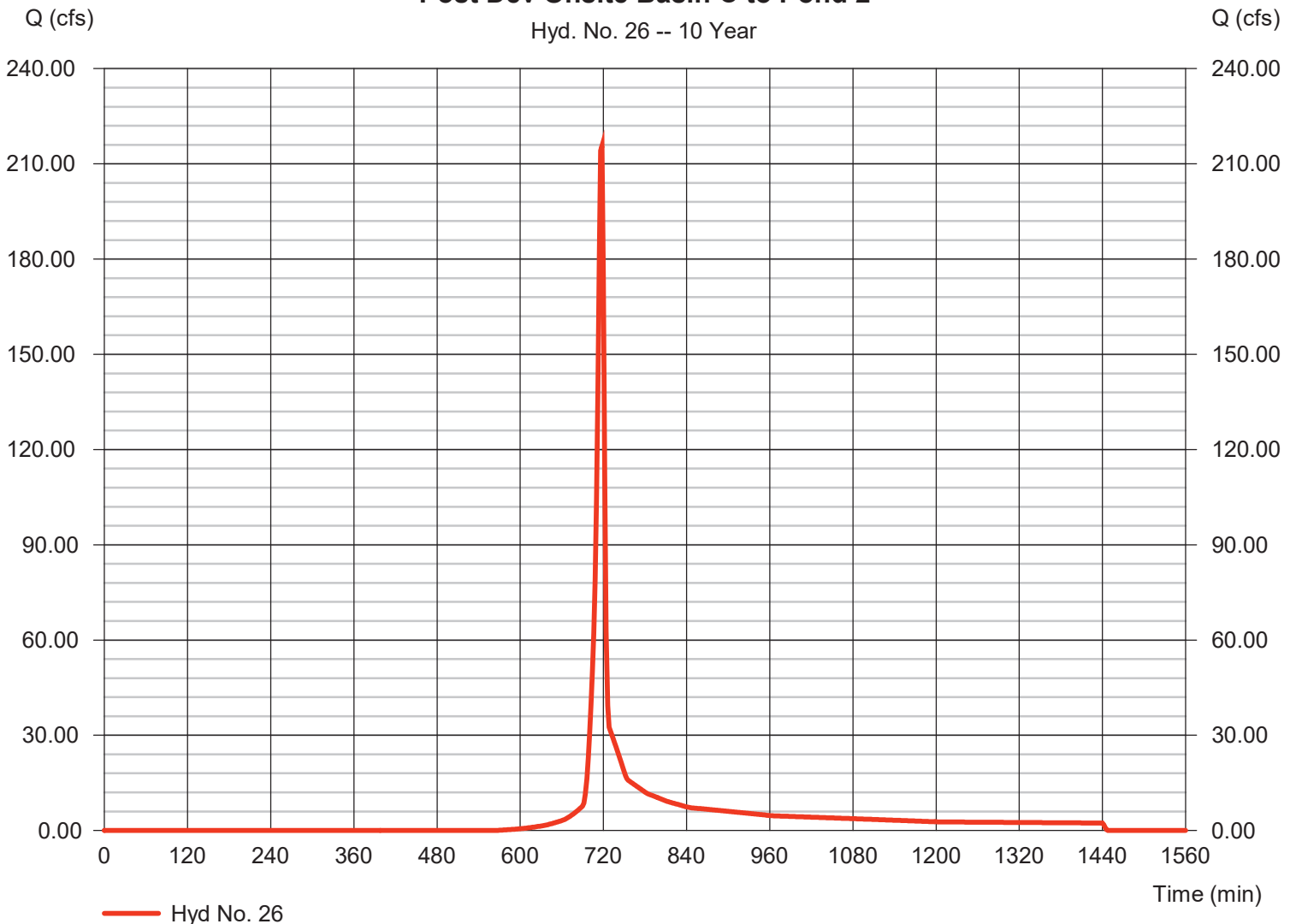
Post Dev Onsite Basin C to Pond 2

Hydrograph type = SCS Runoff
Storm frequency = 10 yrs
Time interval = 2 min
Drainage area = 56.470 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 5.18 in
Storm duration = 24 hrs

Peak discharge = 215.68 cfs
Time to peak = 718 min
Hyd. volume = 433,064 cuft
Curve number = 71
Hydraulic length = 0 ft
Time of conc. (Tc) = 5.00 min
Distribution = Type II
Shape factor = 484

Post Dev Onsite Basin C to Pond 2

Hyd. No. 26 -- 10 Year



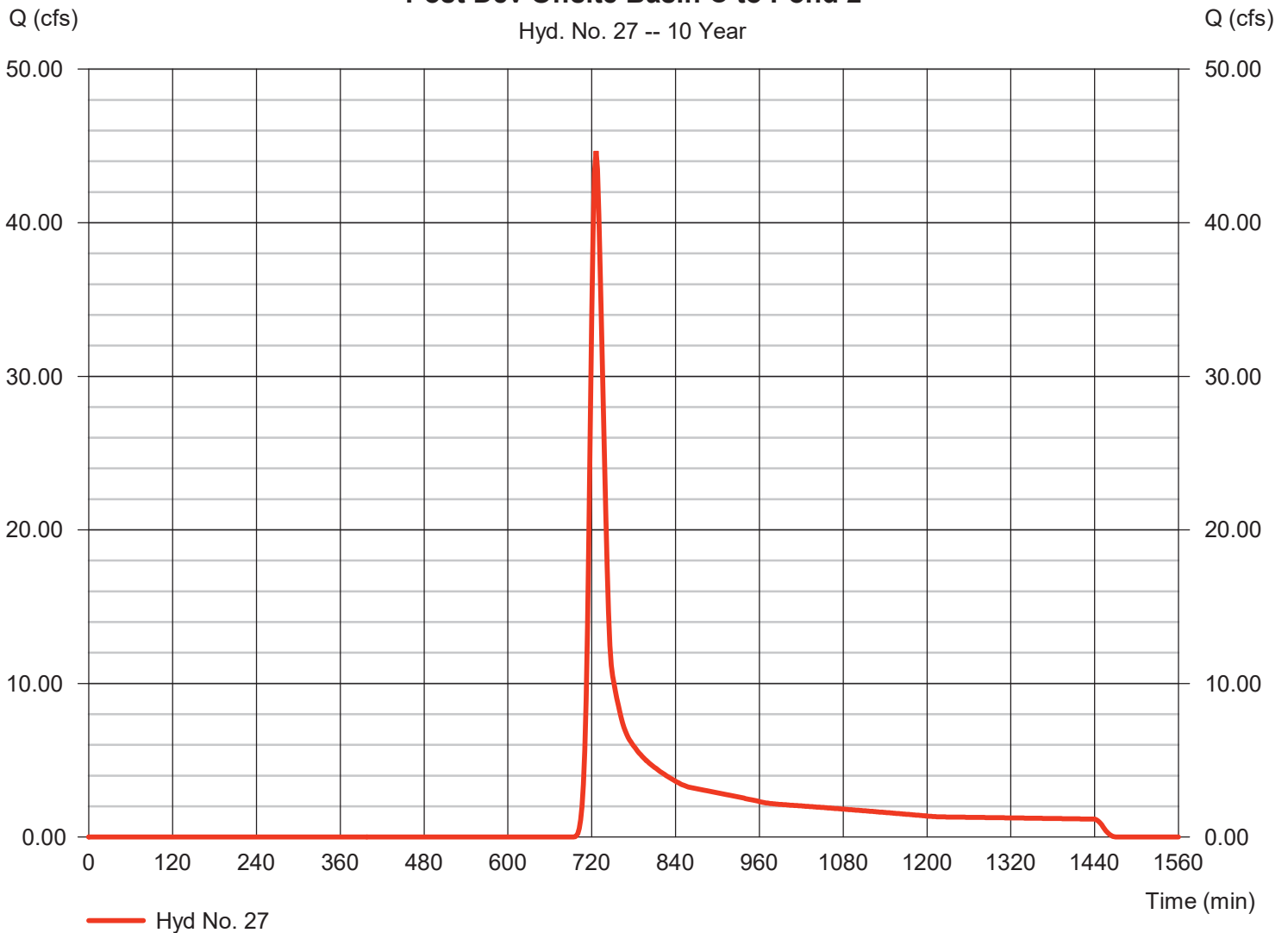
Hydrograph Report

Hyd. No. 27

Post Dev Offsite Basin C to Pond 2

Hydrograph type	= SCS Runoff	Peak discharge	= 44.67 cfs
Storm frequency	= 10 yrs	Time to peak	= 726 min
Time interval	= 2 min	Hyd. volume	= 160,184 cuft
Drainage area	= 36.720 ac	Curve number	= 57
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 18.00 min
Total precip.	= 5.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin C to Pond 2

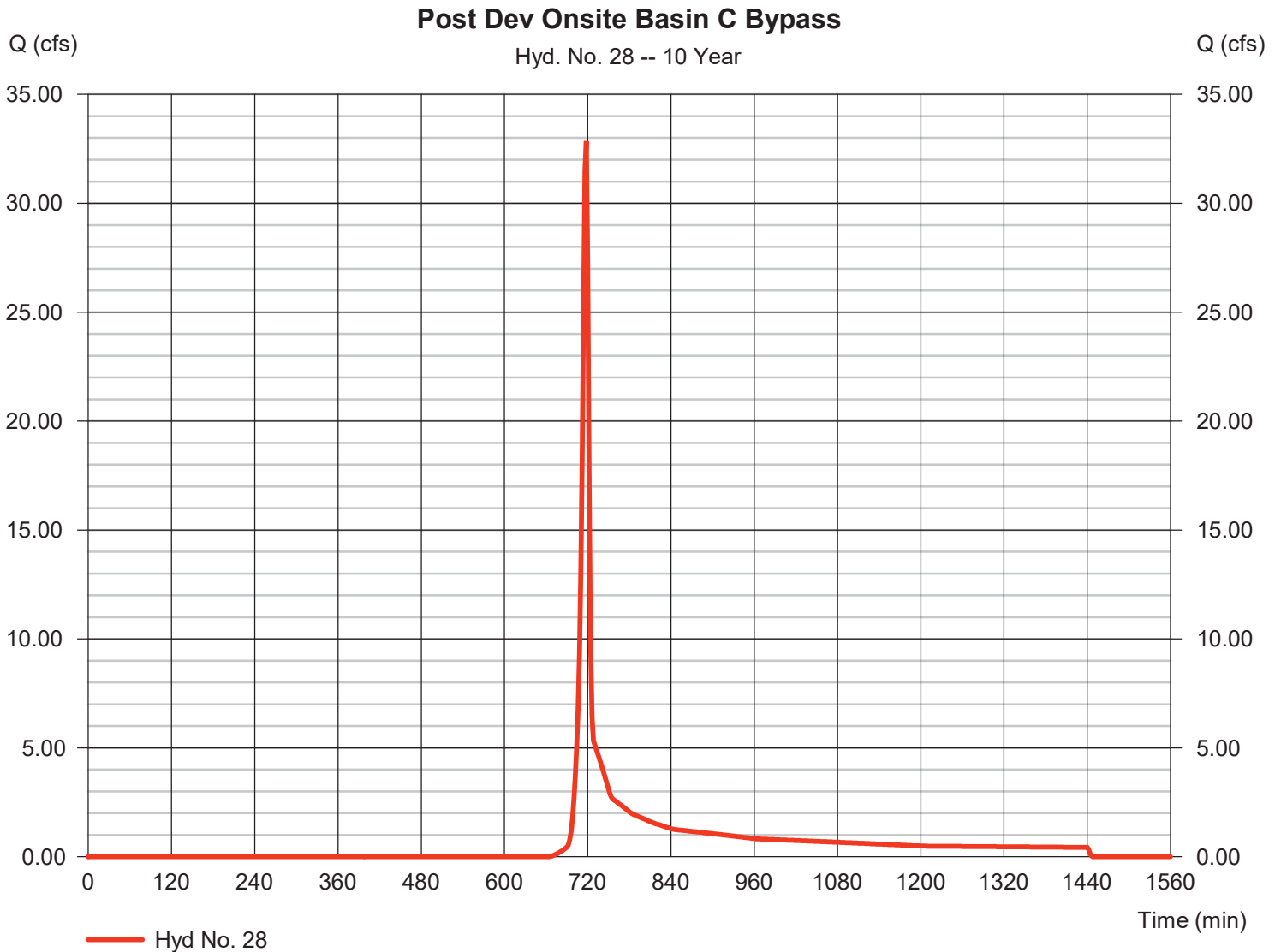


Hydrograph Report

Hyd. No. 28

Post Dev Onsite Basin C Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 32.86 cfs
Storm frequency	= 10 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 66,122 cuft
Drainage area	= 12.530 ac	Curve number	= 62
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

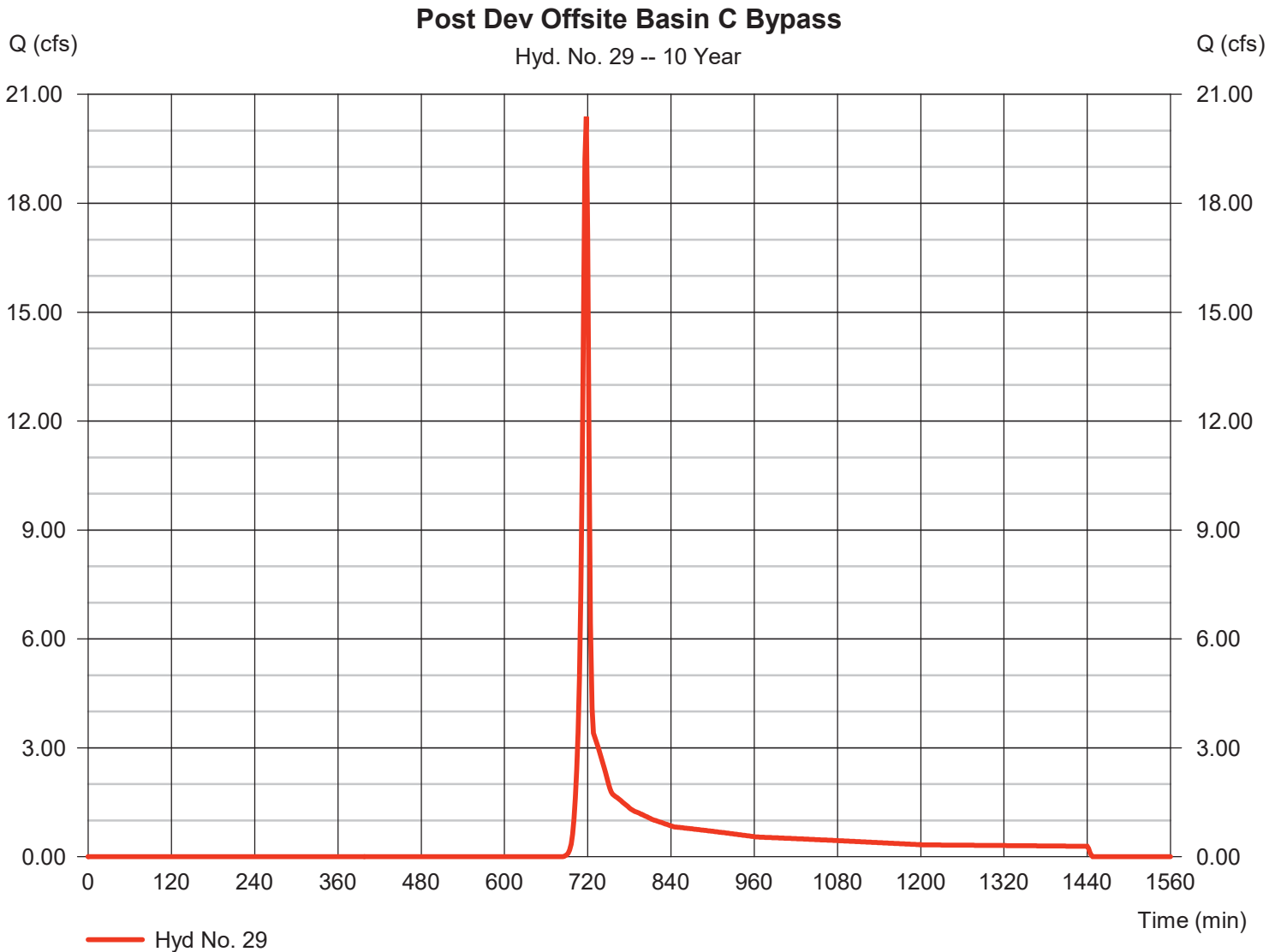


Hydrograph Report

Hyd. No. 29

Post Dev Offsite Basin C Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 20.39 cfs
Storm frequency	= 10 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 41,561 cuft
Drainage area	= 9.130 ac	Curve number	= 59
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 5.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hyd. No. 31

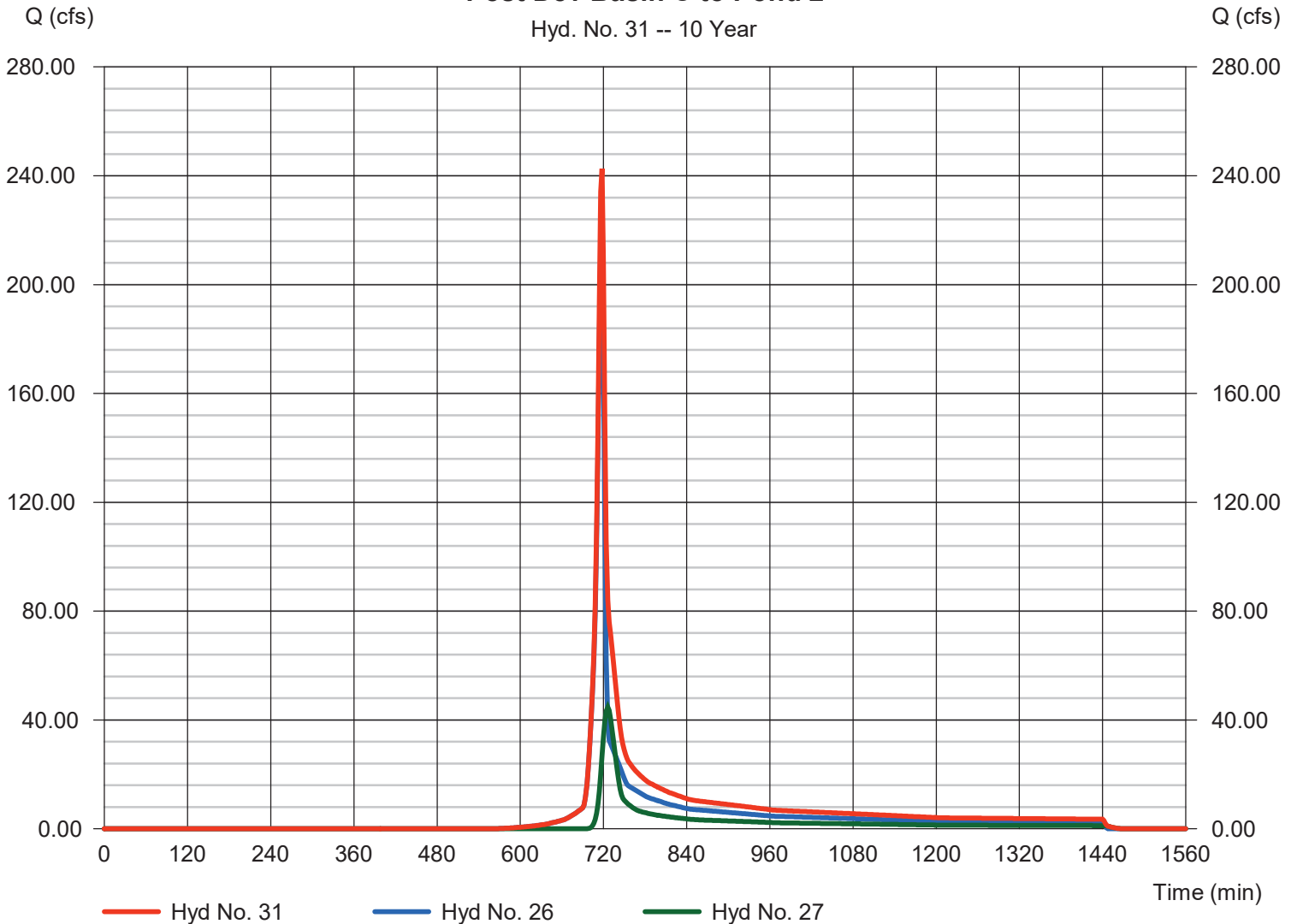
Post Dev Basin C to Pond 2

Hydrograph type = Combine
Storm frequency = 10 yrs
Time interval = 2 min
Inflow hyds. = 26, 27

Peak discharge = 242.62 cfs
Time to peak = 718 min
Hyd. volume = 593,249 cuft
Contrib. drain. area = 93.190 ac

Post Dev Basin C to Pond 2

Hyd. No. 31 -- 10 Year



Hydrograph Report

Hyd. No. 32

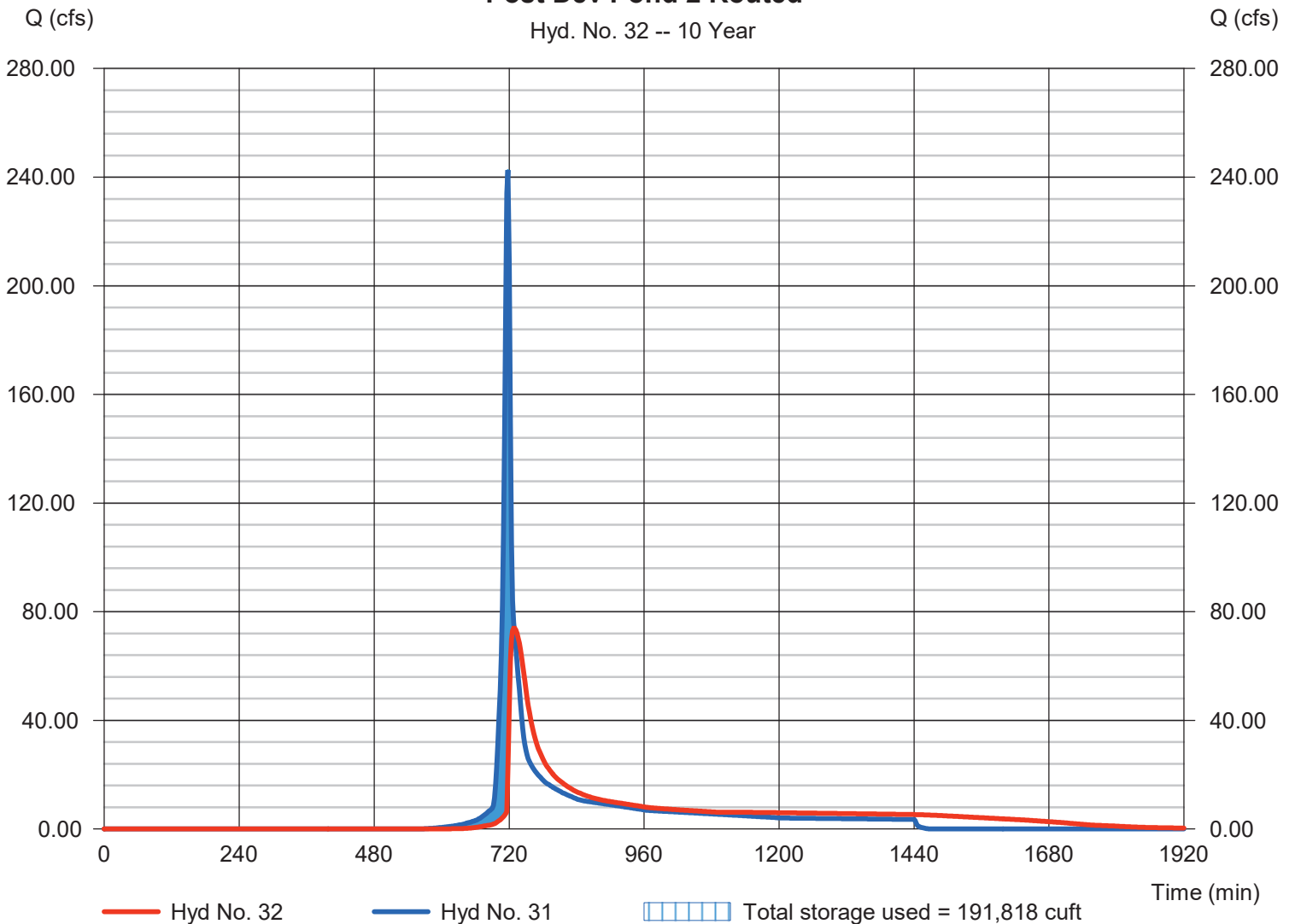
Post Dev Pond 2 Routed

Hydrograph type	= Reservoir	Peak discharge	= 73.86 cfs
Storm frequency	= 10 yrs	Time to peak	= 730 min
Time interval	= 2 min	Hyd. volume	= 593,229 cuft
Inflow hyd. No.	= 31 - Post Dev Basin C to Pond 2	Max. Elevation	= 1109.51 ft
Reservoir name	= Pond 2	Max. Storage	= 191,818 cuft

Storage Indication method used.

Post Dev Pond 2 Routed

Hyd. No. 32 -- 10 Year



Hydrograph Report

Hyd. No. 34

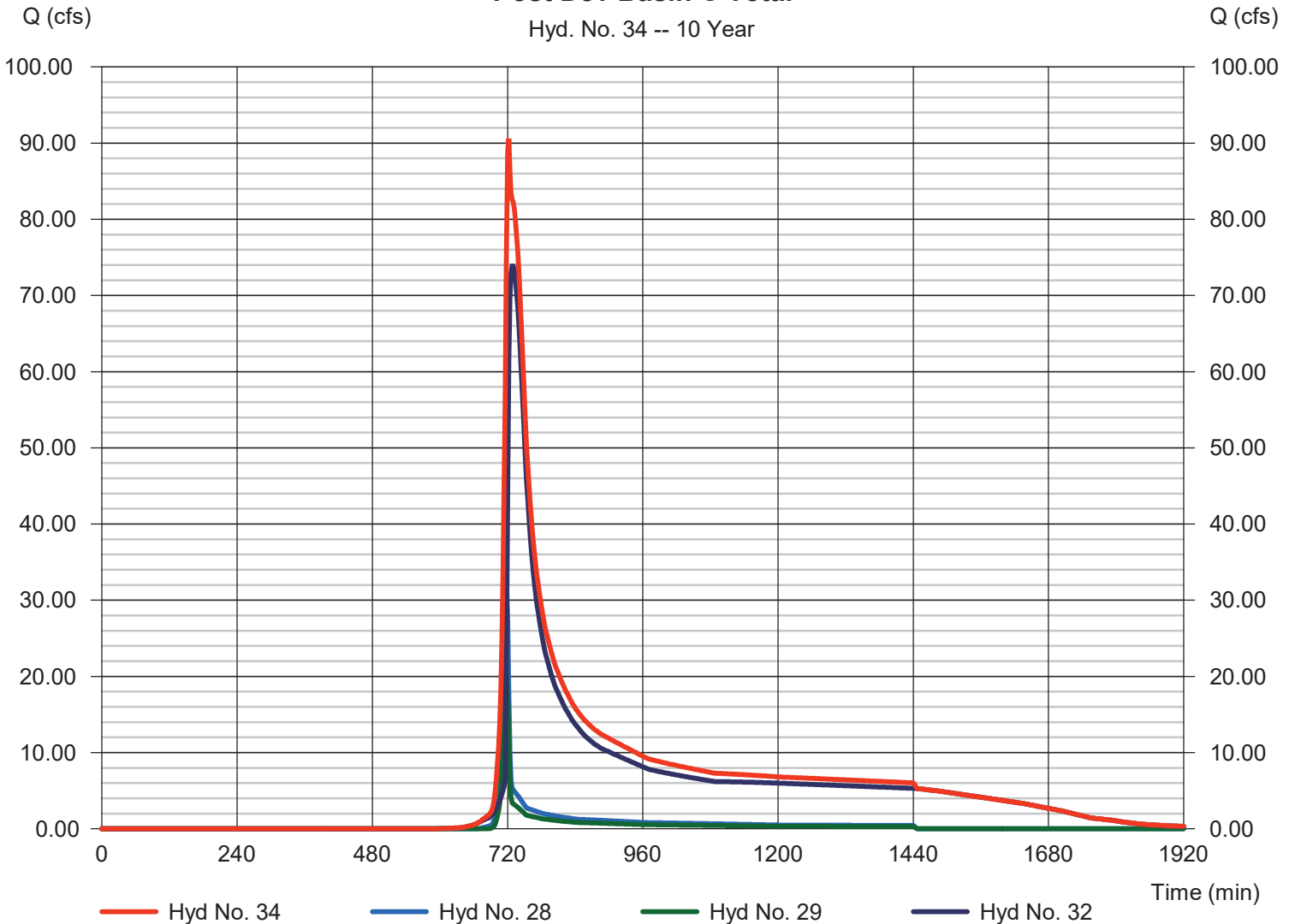
Post Dev Basin C Total

Hydrograph type = Combine
Storm frequency = 10 yrs
Time interval = 2 min
Inflow hyds. = 28, 29, 32

Peak discharge = 90.60 cfs
Time to peak = 722 min
Hyd. volume = 700,912 cuft
Contrib. drain. area = 21.660 ac

Post Dev Basin C Total

Hyd. No. 34 -- 10 Year

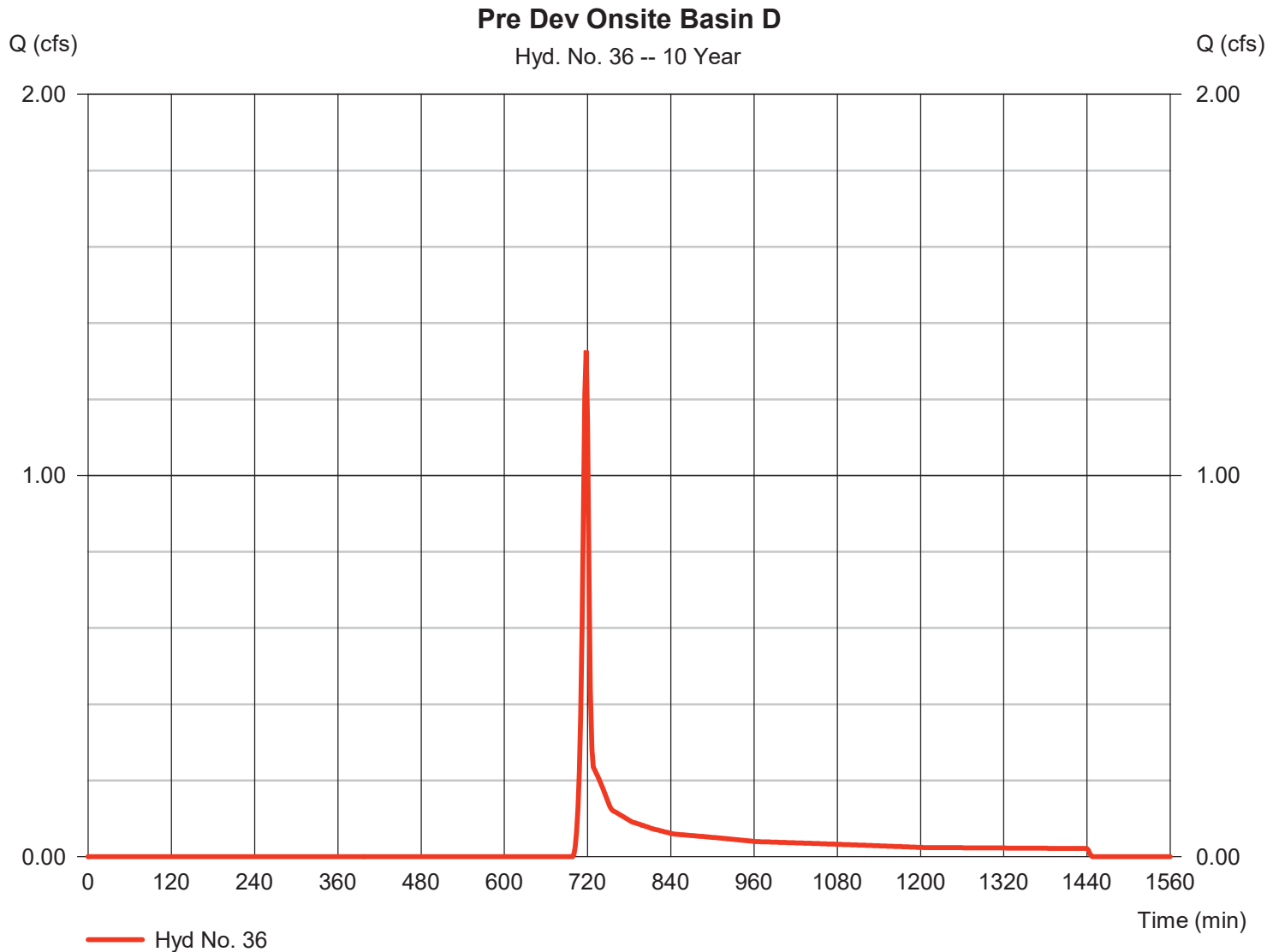


Hydrograph Report

Hyd. No. 36

Pre Dev Onsite Basin D

Hydrograph type	= SCS Runoff	Peak discharge	= 1.328 cfs
Storm frequency	= 10 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 2,806 cuft
Drainage area	= 0.770 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

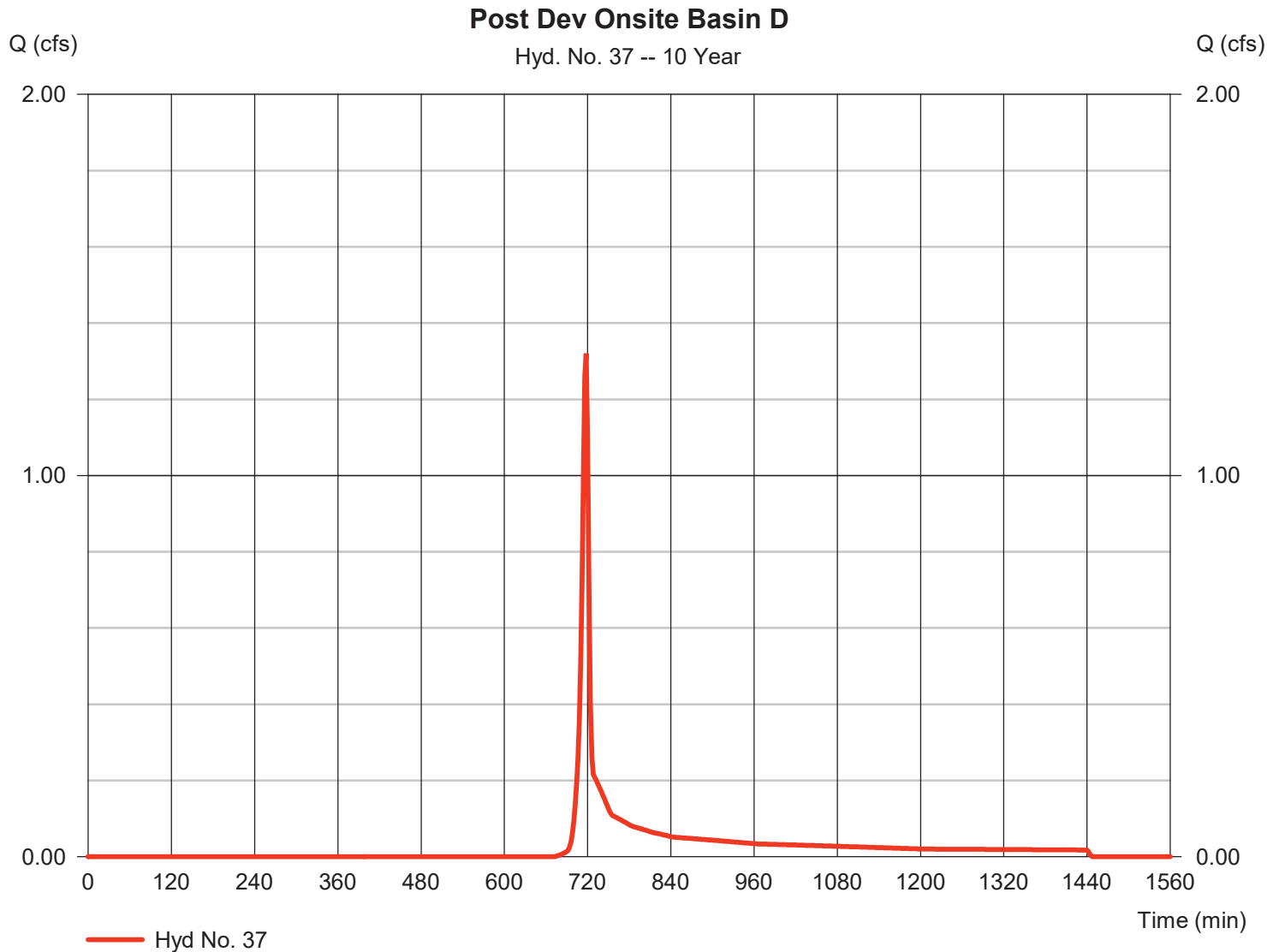


Hydrograph Report

Hyd. No. 37

Post Dev Onsite Basin D

Hydrograph type	= SCS Runoff	Peak discharge	= 1.321 cfs
Storm frequency	= 10 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 2,667 cuft
Drainage area	= 0.530 ac	Curve number	= 61
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 5.18 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

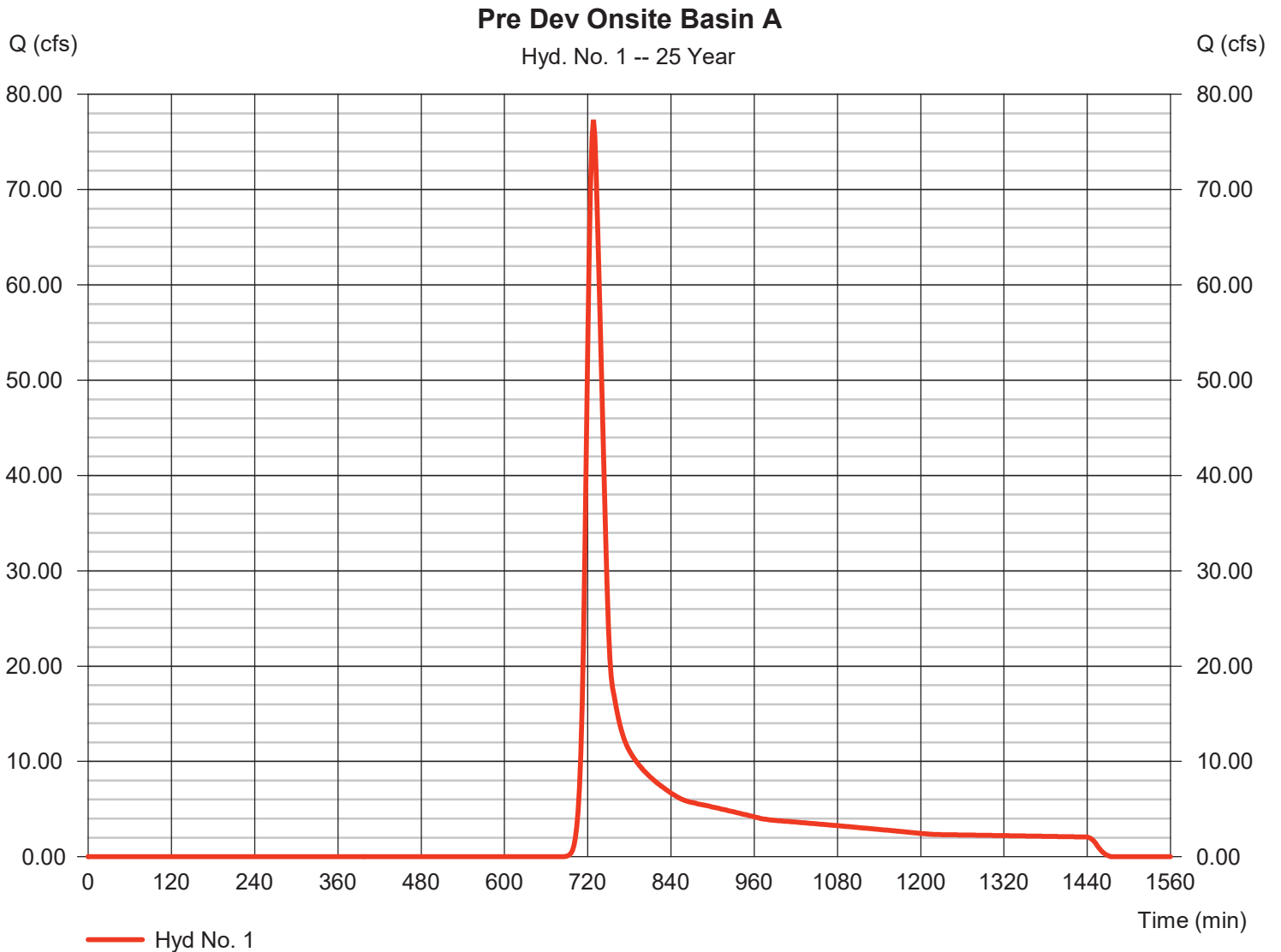
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	77.35	2	728	298,731	-----	-----	-----	Pre Dev Onsite Basin A
2	SCS Runoff	23.56	2	722	62,577	-----	-----	-----	Pre Dev Offite Basin A1
3	SCS Runoff	1.793	2	720	4,180	-----	-----	-----	Pre Dev Offsite Basin A2
5	Combine	95.15	2	726	365,488	1, 2, 3,	-----	-----	Pre Dev Basin A Total
7	SCS Runoff	255.60	2	716	520,618	-----	-----	-----	Post Dev Onsite Basin A to Pond 1
8	SCS Runoff	5.175	2	722	13,883	-----	-----	-----	Post Dev Offsite Basin A to Pond 1
9	SCS Runoff	19.10	2	720	44,147	-----	-----	-----	Post Dev Offsite Basin A1 Bypass
10	SCS Runoff	1.793	2	720	4,180	-----	-----	-----	Post Dev Offsite Basin A2 Bypass
12	Combine	259.28	2	716	534,501	7, 8,	-----	-----	Post Dev Basin A to Pond 1
13	Reservoir	48.37	2	726	518,530	12	1061.51	254,883	Post Dev Pond 1 Routed
15	Combine	60.95	2	724	566,857	9, 10, 13,	-----	-----	Post Dev Basin A Total
17	SCS Runoff	7.950	2	730	32,804	-----	-----	-----	Pre Dev Onsite Basin B
18	SCS Runoff	31.30	2	720	81,570	-----	-----	-----	Post Dev Onsite Basin B
20	SCS Runoff	141.61	2	726	488,935	-----	-----	-----	Pre Dev Onsite Basin C
21	SCS Runoff	31.44	2	718	62,979	-----	-----	-----	Pre Dev Offsite Basin C1
22	SCS Runoff	70.18	2	726	236,461	-----	-----	-----	Pre Dev Offsite Basin C2
24	Combine	217.80	2	726	788,376	20, 21, 22,	-----	-----	Pre Dev Basin C Total
26	SCS Runoff	288.20	2	716	581,944	-----	-----	-----	Post Dev Onsite Basin C to Pond 2
27	SCS Runoff	70.18	2	726	236,461	-----	-----	-----	Post Dev Offsite Basin C to Pond 2
28	SCS Runoff	46.92	2	718	93,838	-----	-----	-----	Post Dev Onsite Basin C Bypass
29	SCS Runoff	30.06	2	718	60,327	-----	-----	-----	Post Dev Offsite Basin C Bypass
31	Combine	333.93	2	718	818,404	26, 27,	-----	-----	Post Dev Basin C to Pond 2
32	Reservoir	143.60	2	724	818,386	31	1111.04	246,093	Post Dev Pond 2 Routed
34	Combine	180.05	2	720	972,552	28, 29, 32,	-----	-----	Post Dev Basin C Total
36	SCS Runoff	2.073	2	718	4,220	-----	-----	-----	Pre Dev Onsite Basin D
37	SCS Runoff	1.905	2	718	3,812	-----	-----	-----	Post Dev Onsite Basin D
1220263 Hydrology Concept.gpw					Return Period: 25 Year			Friday, 01 / 31 / 2025	

Hydrograph Report

Hyd. No. 1

Pre Dev Onsite Basin A

Hydrograph type	= SCS Runoff	Peak discharge	= 77.35 cfs
Storm frequency	= 25 yrs	Time to peak	= 728 min
Time interval	= 2 min	Hyd. volume	= 298,731 cuft
Drainage area	= 50.200 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 22.00 min
Total precip.	= 6.16 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

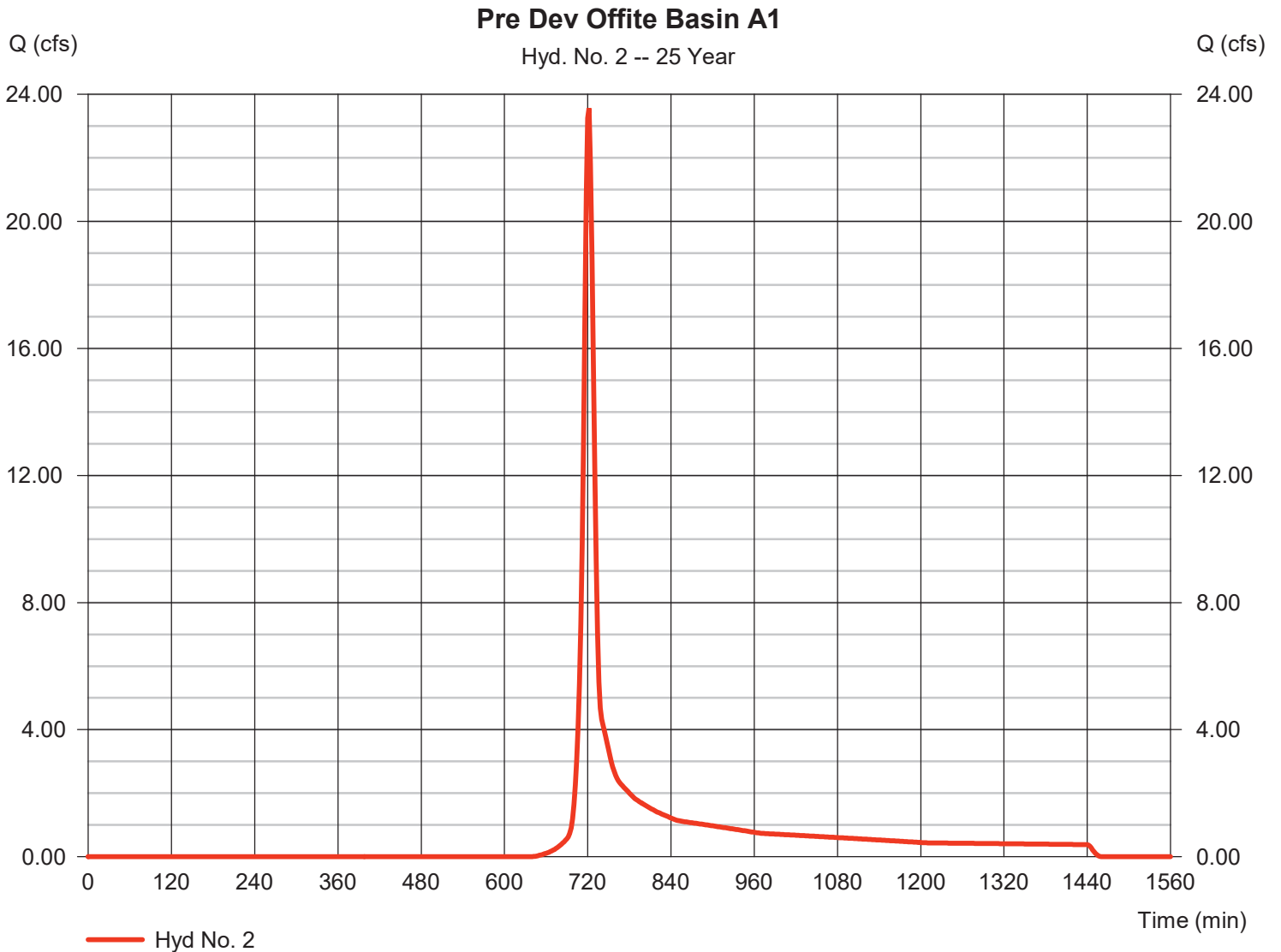


Hydrograph Report

Hyd. No. 2

Pre Dev Offite Basin A1

Hydrograph type	= SCS Runoff	Peak discharge	= 23.56 cfs
Storm frequency	= 25 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 62,577 cuft
Drainage area	= 7.910 ac	Curve number	= 61
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.00 min
Total precip.	= 6.16 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

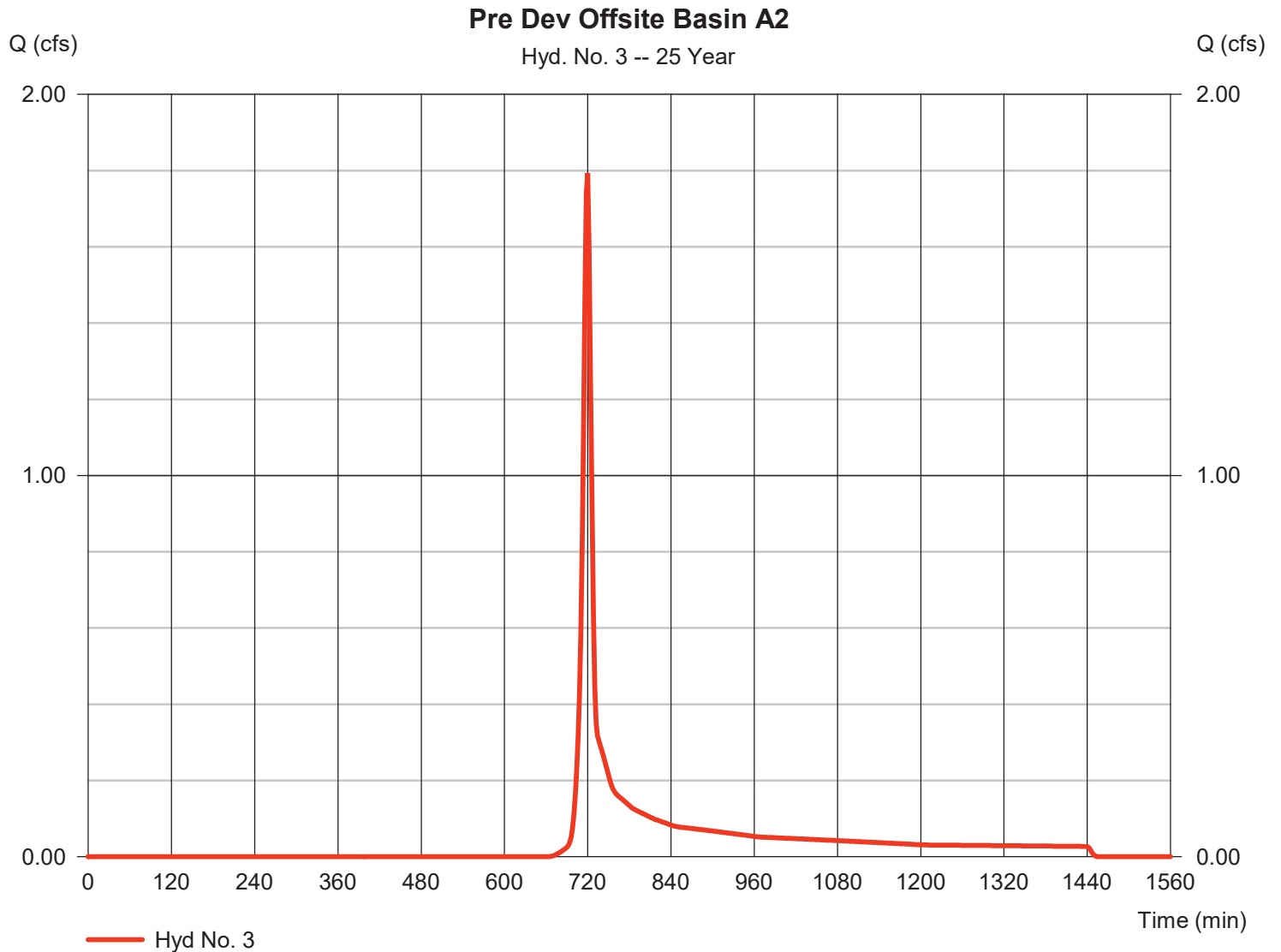


Hydrograph Report

Hyd. No. 3

Pre Dev Offsite Basin A2

Hydrograph type	= SCS Runoff	Peak discharge	= 1.793 cfs
Storm frequency	= 25 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 4,180 cuft
Drainage area	= 0.620 ac	Curve number	= 58
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 6.16 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hyd. No. 5

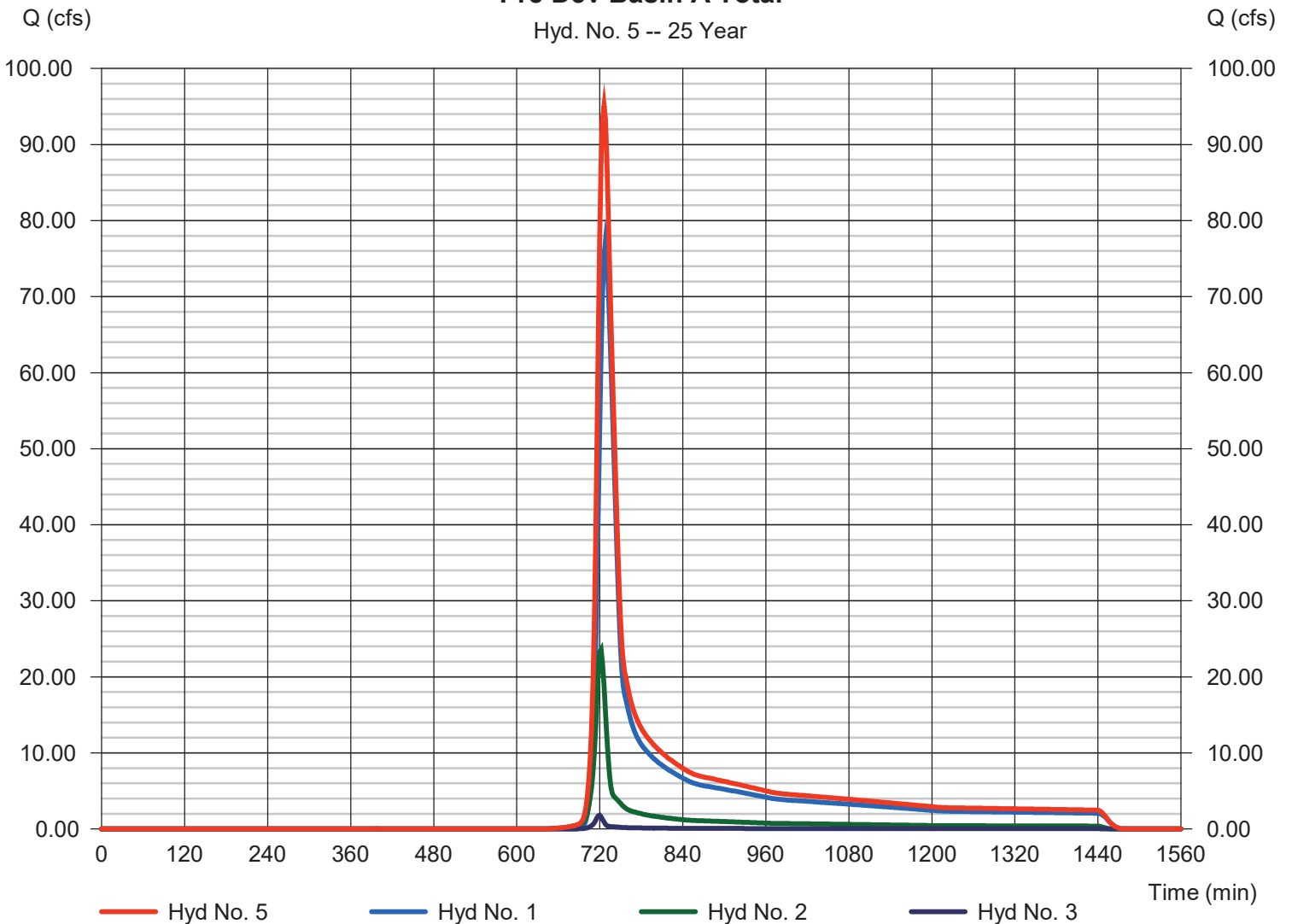
Pre Dev Basin A Total

Hydrograph type = Combine
Storm frequency = 25 yrs
Time interval = 2 min
Inflow hyds. = 1, 2, 3

Peak discharge = 95.15 cfs
Time to peak = 726 min
Hyd. volume = 365,488 cuft
Contrib. drain. area = 58.730 ac

Pre Dev Basin A Total

Hyd. No. 5 -- 25 Year



Hydrograph Report

Hyd. No. 7

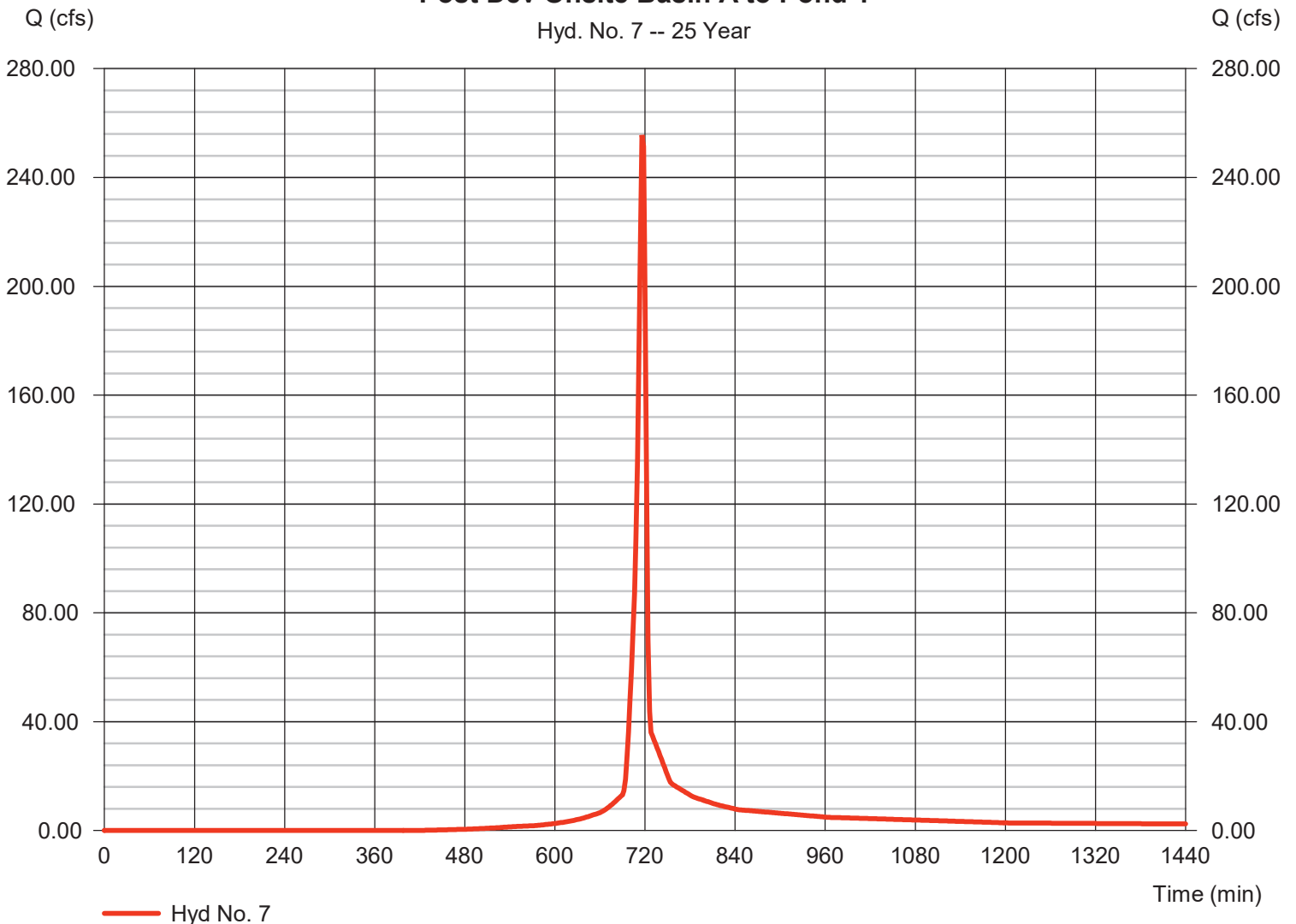
Post Dev Onsite Basin A to Pond 1

Hydrograph type = SCS Runoff
Storm frequency = 25 yrs
Time interval = 2 min
Drainage area = 42.270 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 6.16 in
Storm duration = 24 hrs

Peak discharge = 255.60 cfs
Time to peak = 716 min
Hyd. volume = 520,618 cuft
Curve number = 77
Hydraulic length = 0 ft
Time of conc. (Tc) = 5.00 min
Distribution = Type II
Shape factor = 484

Post Dev Onsite Basin A to Pond 1

Hyd. No. 7 -- 25 Year



Hydrograph Report

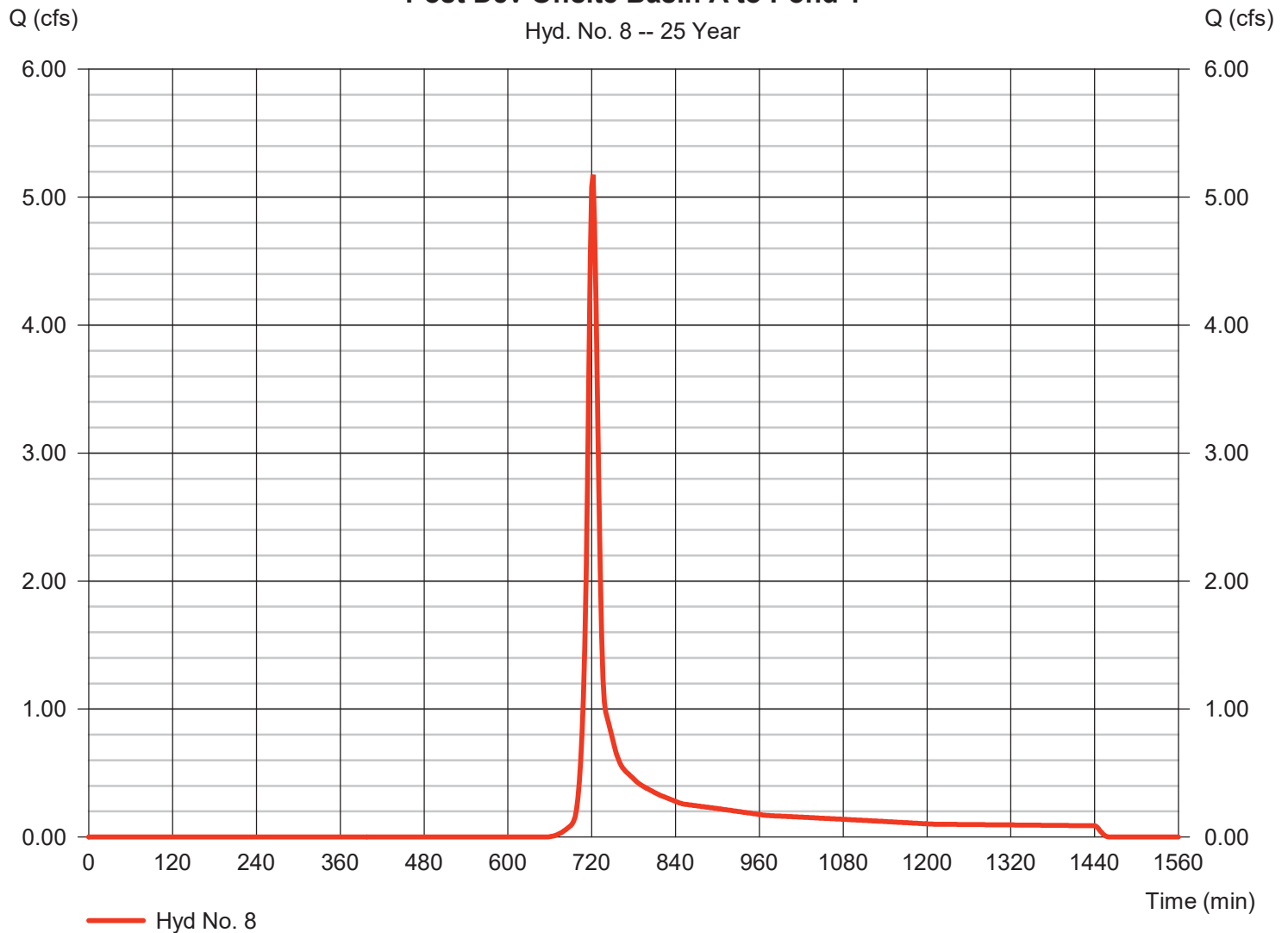
Hyd. No. 8

Post Dev Offsite Basin A to Pond 1

Hydrograph type	= SCS Runoff	Peak discharge	= 5.175 cfs
Storm frequency	= 25 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 13,883 cuft
Drainage area	= 1.910 ac	Curve number	= 59
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.00 min
Total precip.	= 6.16 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A to Pond 1

Hyd. No. 8 -- 25 Year



Hydrograph Report

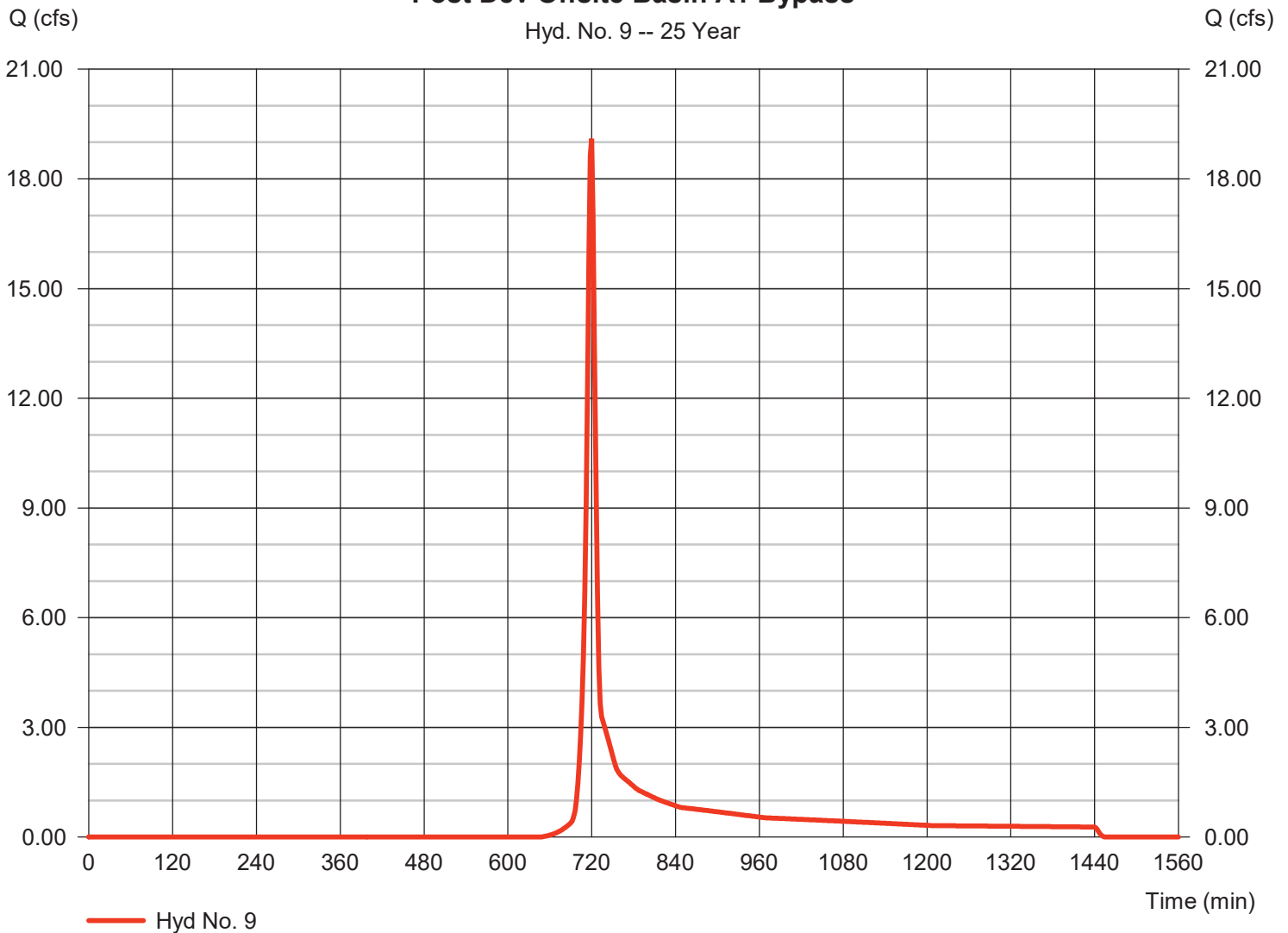
Hyd. No. 9

Post Dev Offsite Basin A1 Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 19.10 cfs
Storm frequency	= 25 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 44,147 cuft
Drainage area	= 6.000 ac	Curve number	= 60
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 6.16 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A1 Bypass

Hyd. No. 9 -- 25 Year



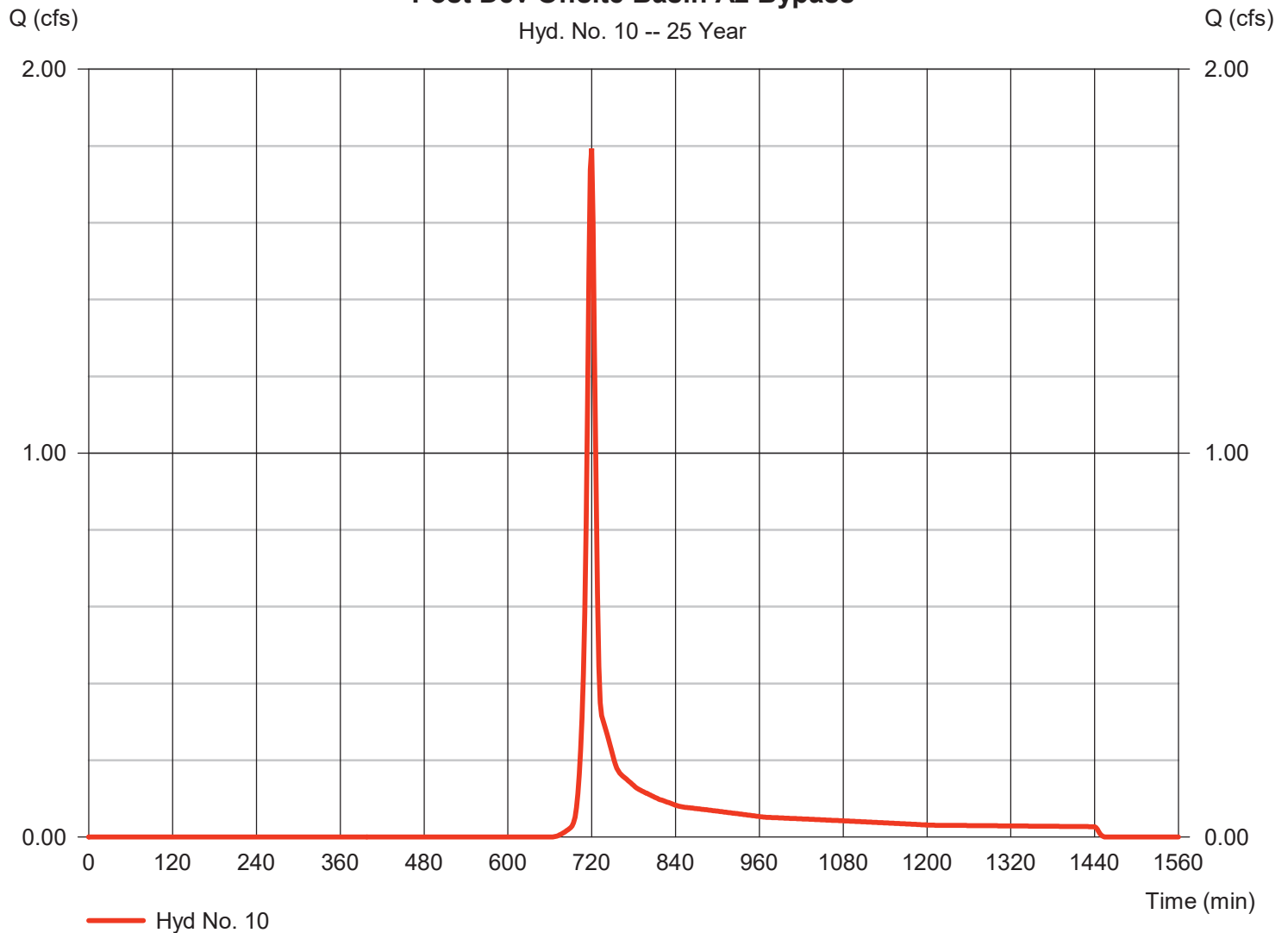
Hydrograph Report

Hyd. No. 10

Post Dev Offsite Basin A2 Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 1.793 cfs
Storm frequency	= 25 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 4,180 cuft
Drainage area	= 0.620 ac	Curve number	= 58
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 6.16 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A2 Bypass



Hydrograph Report

Hyd. No. 12

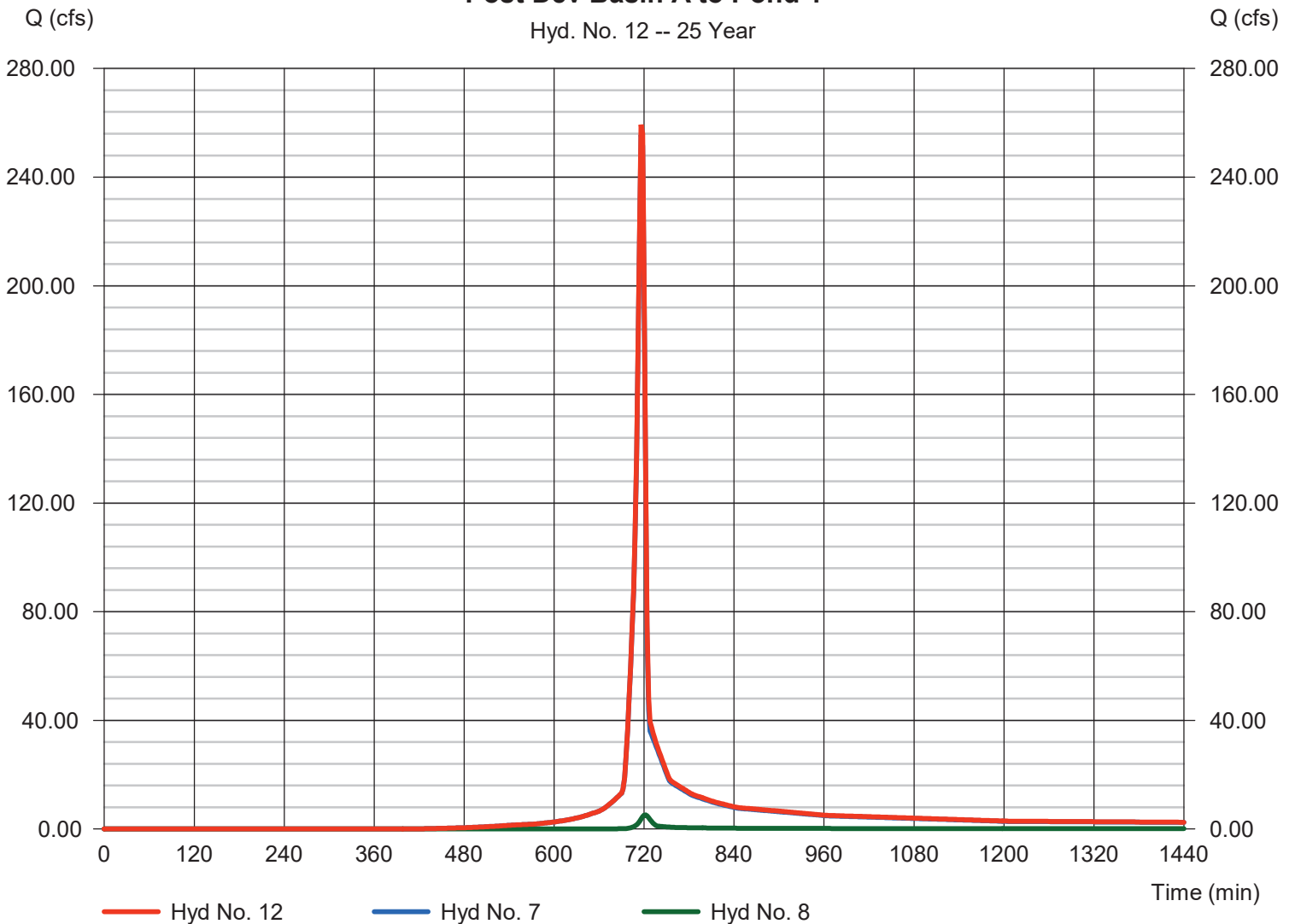
Post Dev Basin A to Pond 1

Hydrograph type = Combine
Storm frequency = 25 yrs
Time interval = 2 min
Inflow hyds. = 7, 8

Peak discharge = 259.28 cfs
Time to peak = 716 min
Hyd. volume = 534,501 cuft
Contrib. drain. area = 44.180 ac

Post Dev Basin A to Pond 1

Hyd. No. 12 -- 25 Year



Hydrograph Report

Hyd. No. 13

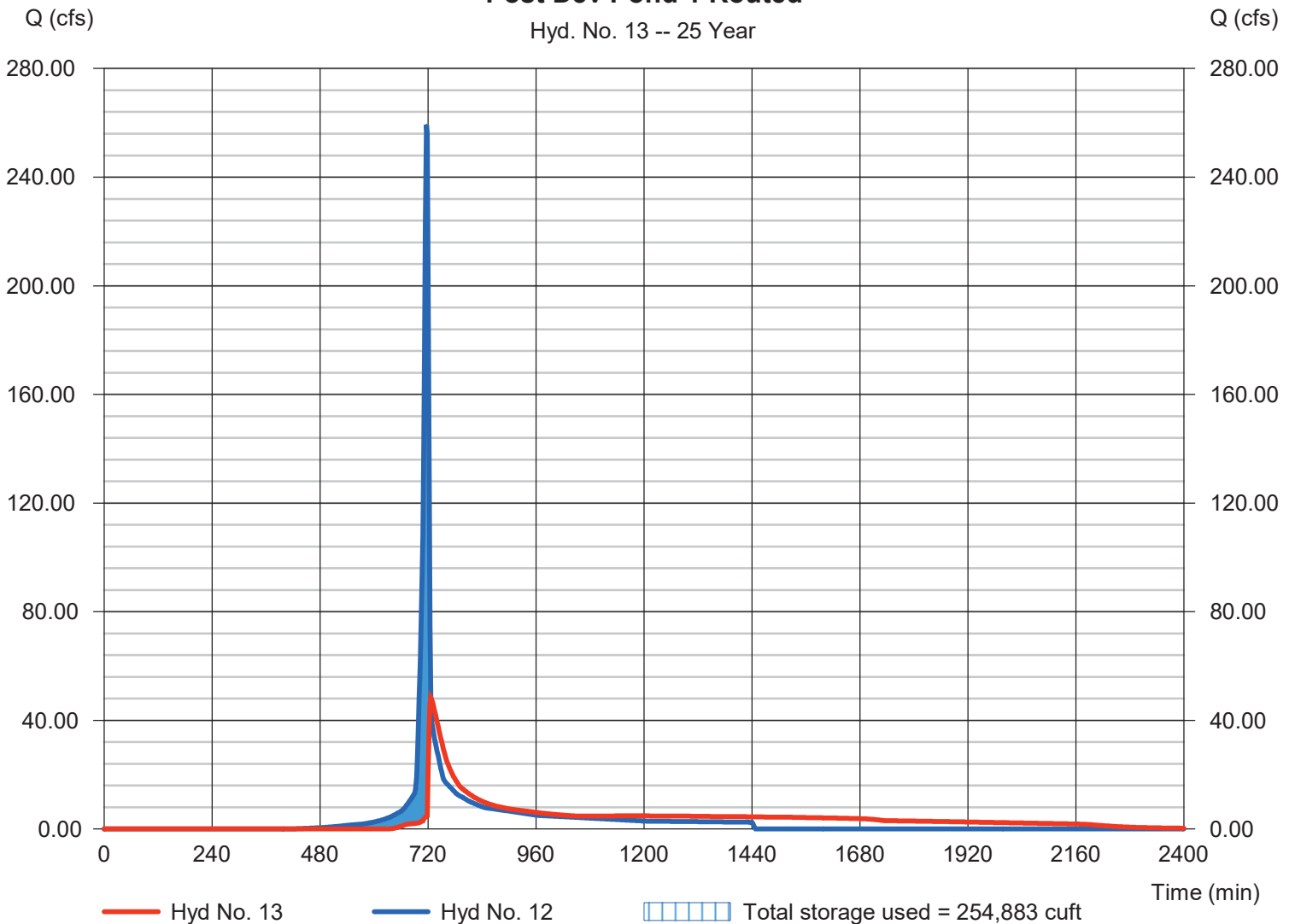
Post Dev Pond 1 Routed

Hydrograph type	= Reservoir	Peak discharge	= 48.37 cfs
Storm frequency	= 25 yrs	Time to peak	= 726 min
Time interval	= 2 min	Hyd. volume	= 518,530 cuft
Inflow hyd. No.	= 12 - Post Dev Basin A to Pond	Max. Elevation	= 1061.51 ft
Reservoir name	= Pond 1	Max. Storage	= 254,883 cuft

Storage Indication method used.

Post Dev Pond 1 Routed

Hyd. No. 13 -- 25 Year



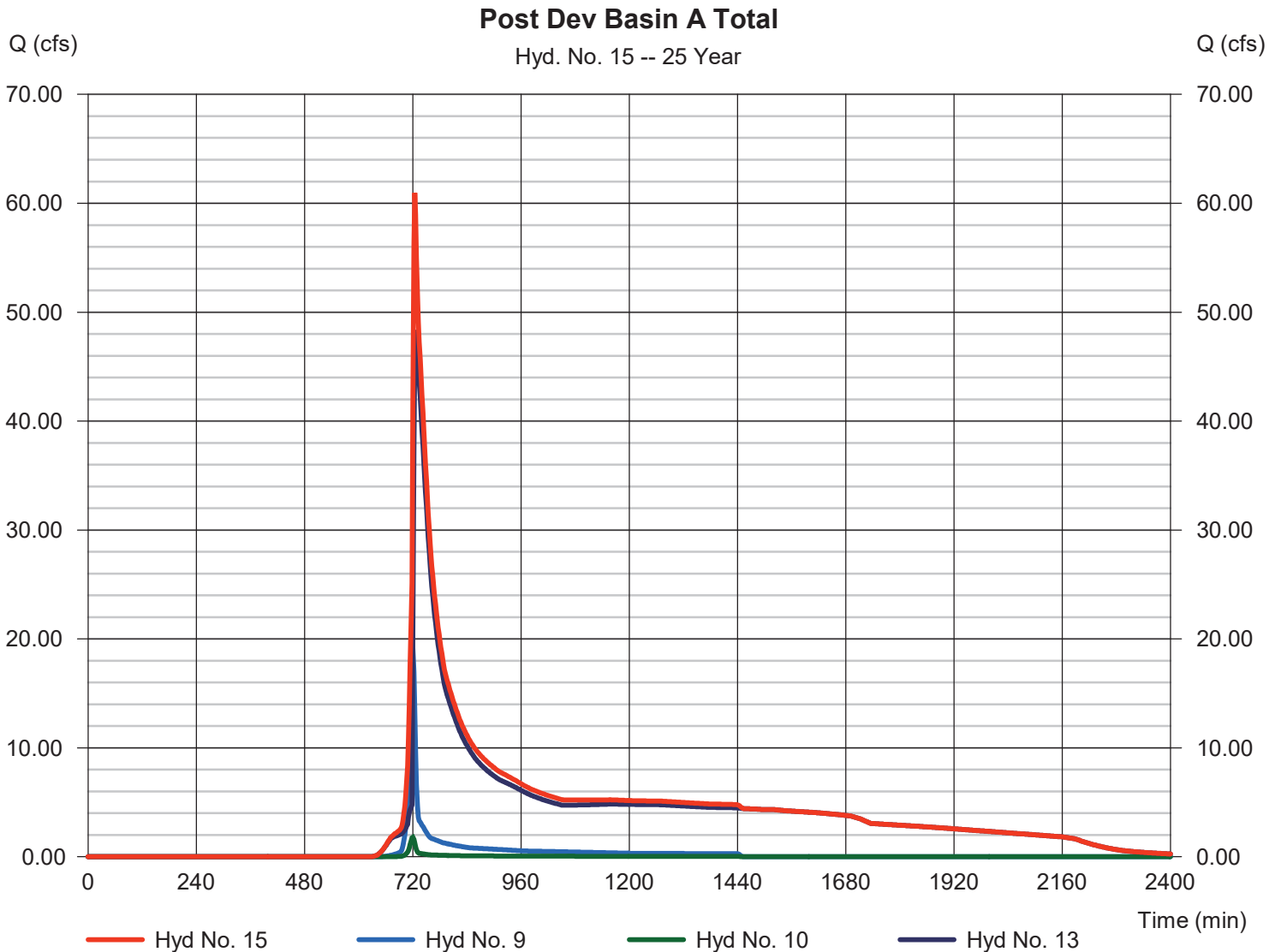
Hydrograph Report

Hyd. No. 15

Post Dev Basin A Total

Hydrograph type = Combine
Storm frequency = 25 yrs
Time interval = 2 min
Inflow hyds. = 9, 10, 13

Peak discharge = 60.95 cfs
Time to peak = 724 min
Hyd. volume = 566,857 cuft
Contrib. drain. area = 6.620 ac

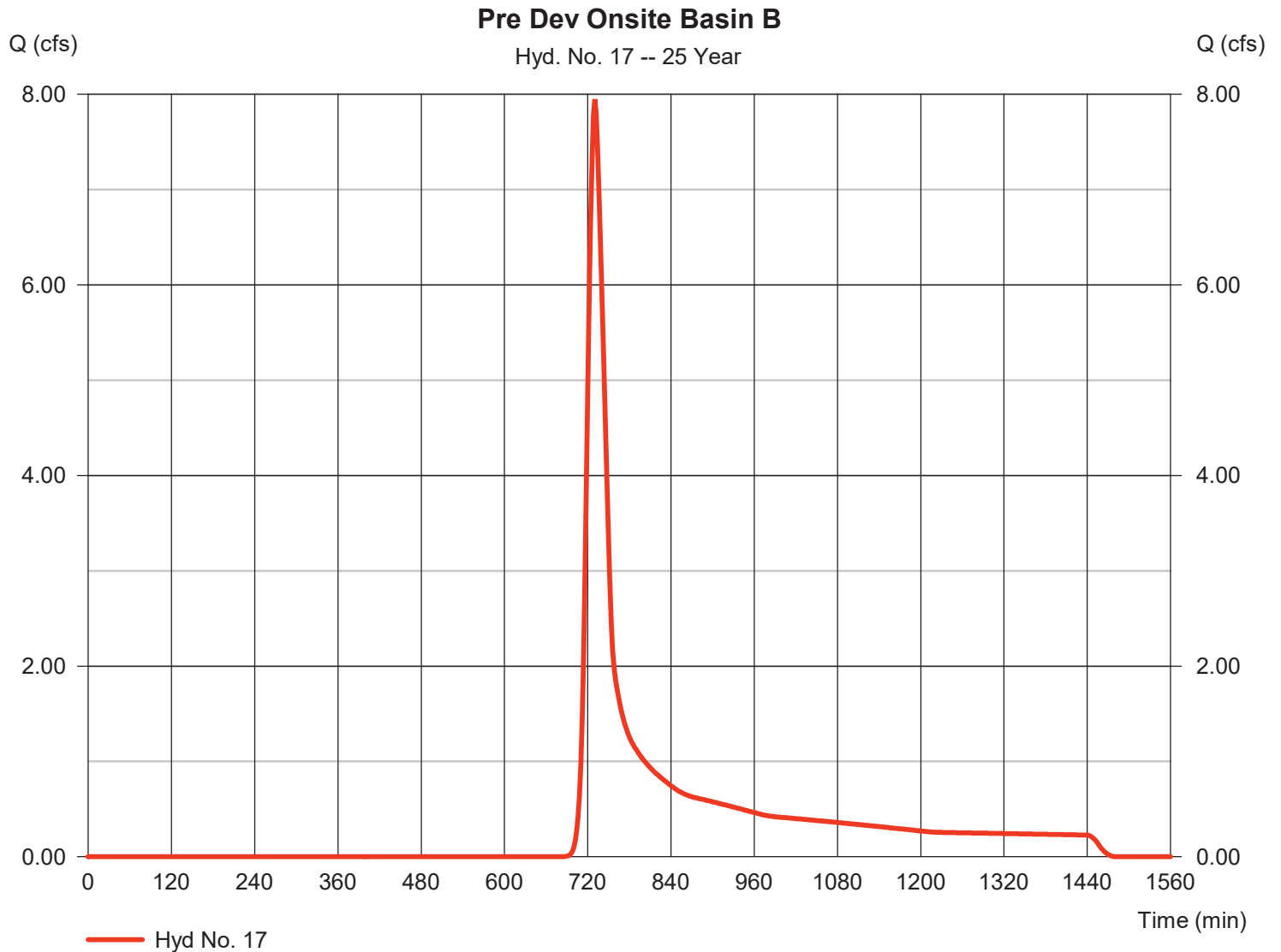


Hydrograph Report

Hyd. No. 17

Pre Dev Onsite Basin B

Hydrograph type	= SCS Runoff	Peak discharge	= 7.950 cfs
Storm frequency	= 25 yrs	Time to peak	= 730 min
Time interval	= 2 min	Hyd. volume	= 32,804 cuft
Drainage area	= 5.700 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 25.00 min
Total precip.	= 6.16 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

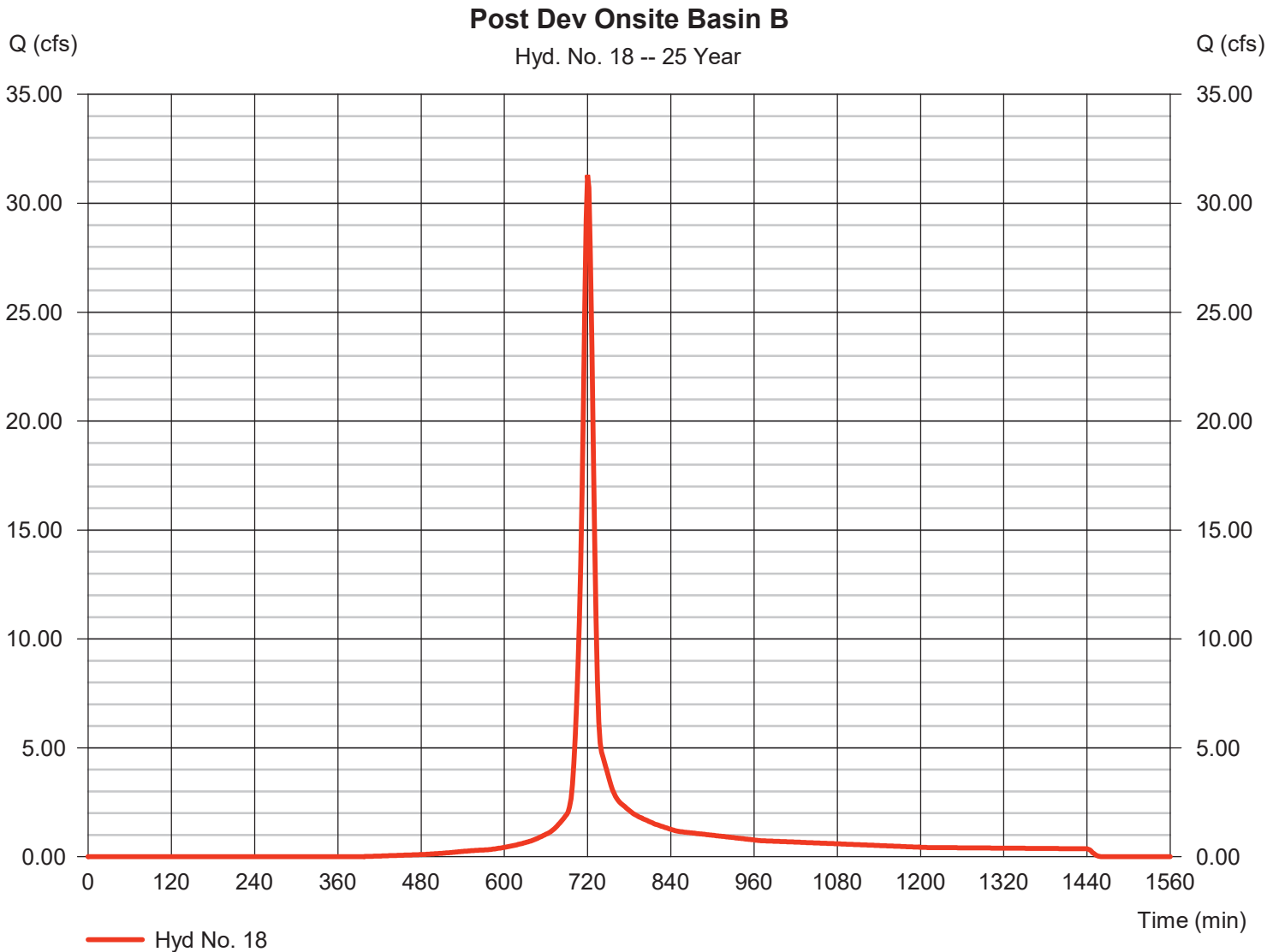


Hydrograph Report

Hyd. No. 18

Post Dev Onsite Basin B

Hydrograph type	= SCS Runoff	Peak discharge	= 31.30 cfs
Storm frequency	= 25 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 81,570 cuft
Drainage area	= 5.700 ac	Curve number	= 79
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.00 min
Total precip.	= 6.16 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hyd. No. 20

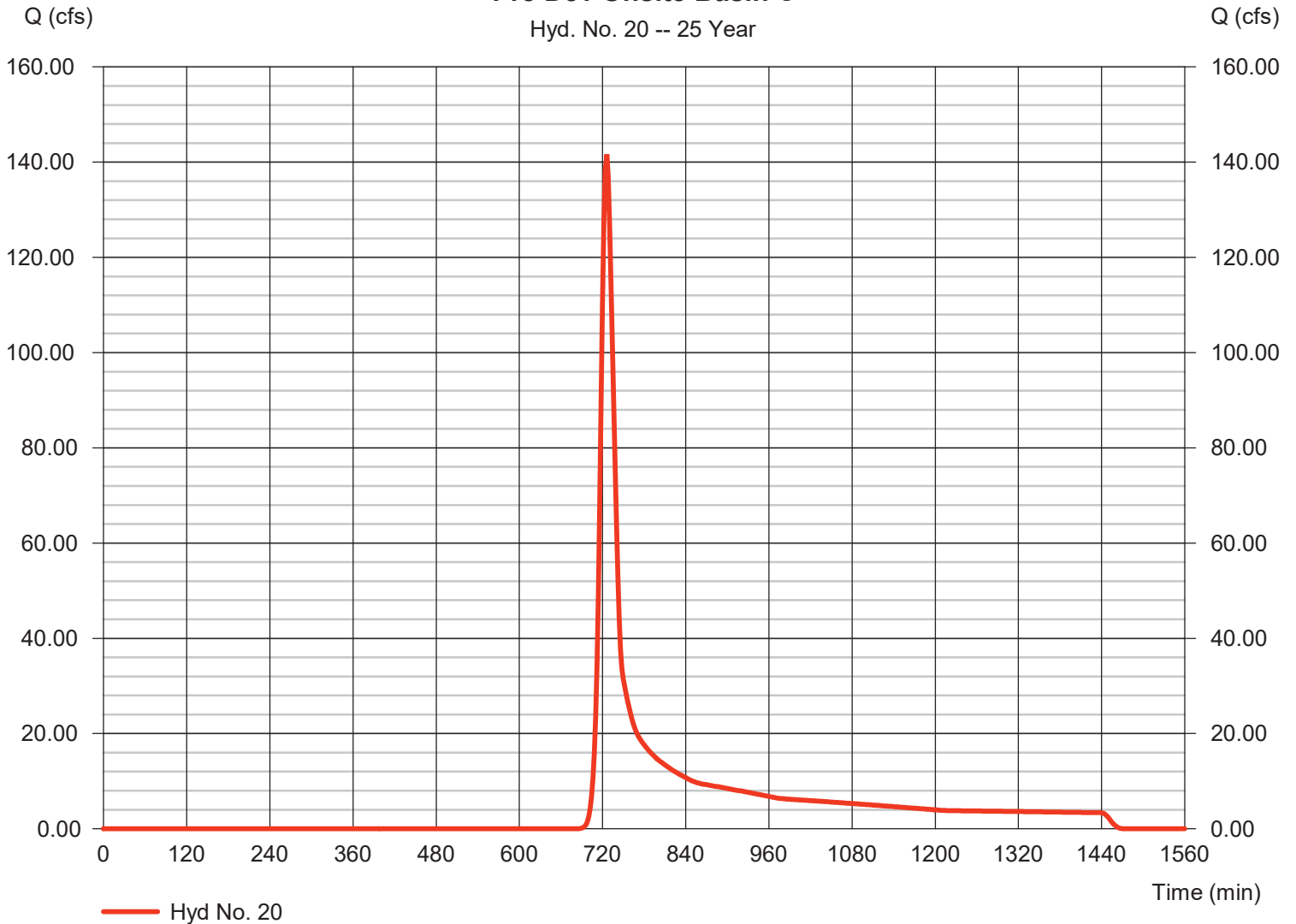
Pre Dev Onsite Basin C

Hydrograph type = SCS Runoff
Storm frequency = 25 yrs
Time interval = 2 min
Drainage area = 83.630 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 6.16 in
Storm duration = 24 hrs

Peak discharge = 141.61 cfs
Time to peak = 726 min
Hyd. volume = 488,935 cuft
Curve number = 55
Hydraulic length = 0 ft
Time of conc. (Tc) = 17.00 min
Distribution = Type II
Shape factor = 484

Pre Dev Onsite Basin C

Hyd. No. 20 -- 25 Year

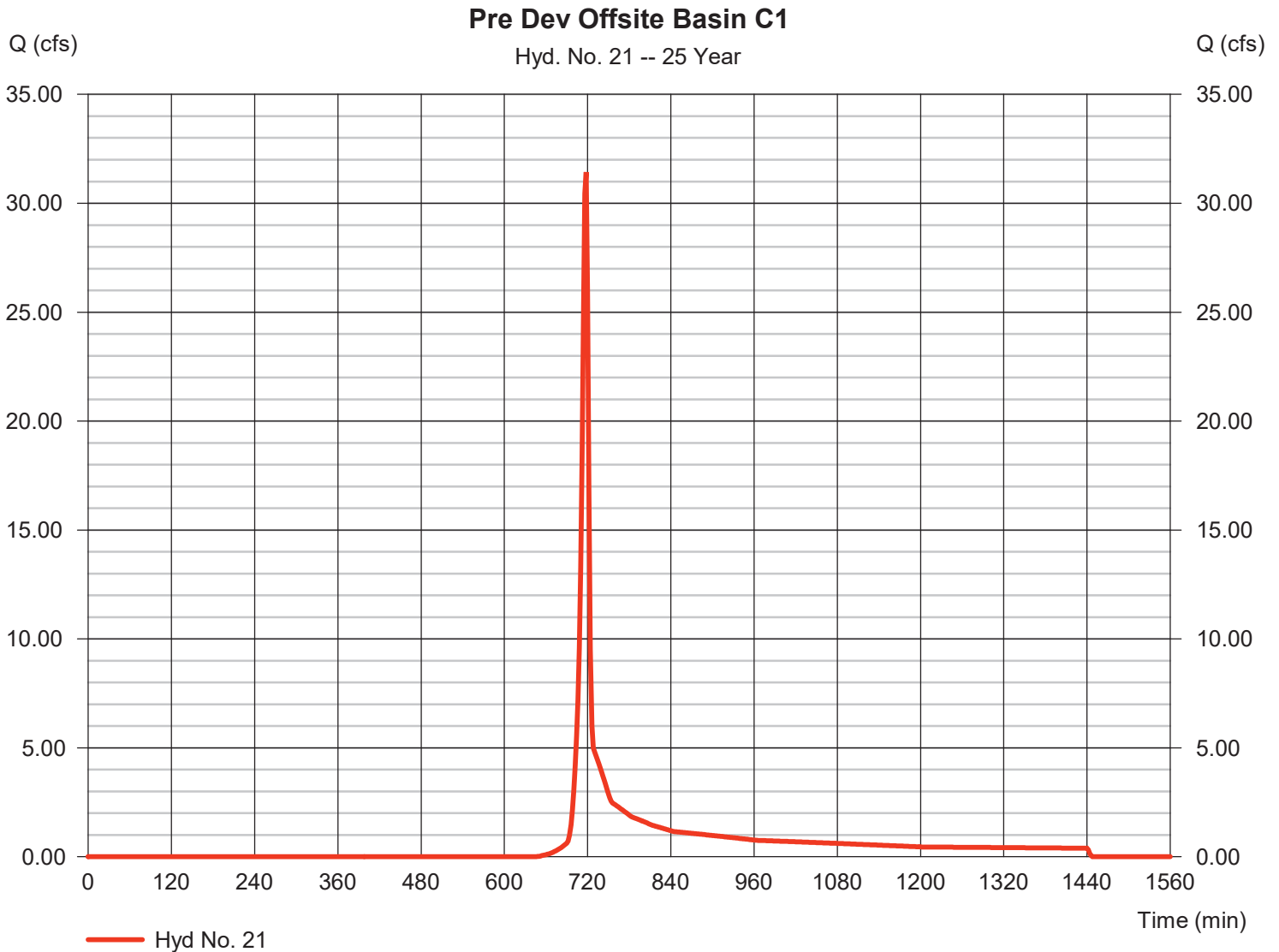


Hydrograph Report

Hyd. No. 21

Pre Dev Offsite Basin C1

Hydrograph type	= SCS Runoff	Peak discharge	= 31.44 cfs
Storm frequency	= 25 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 62,979 cuft
Drainage area	= 9.130 ac	Curve number	= 60
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 6.16 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



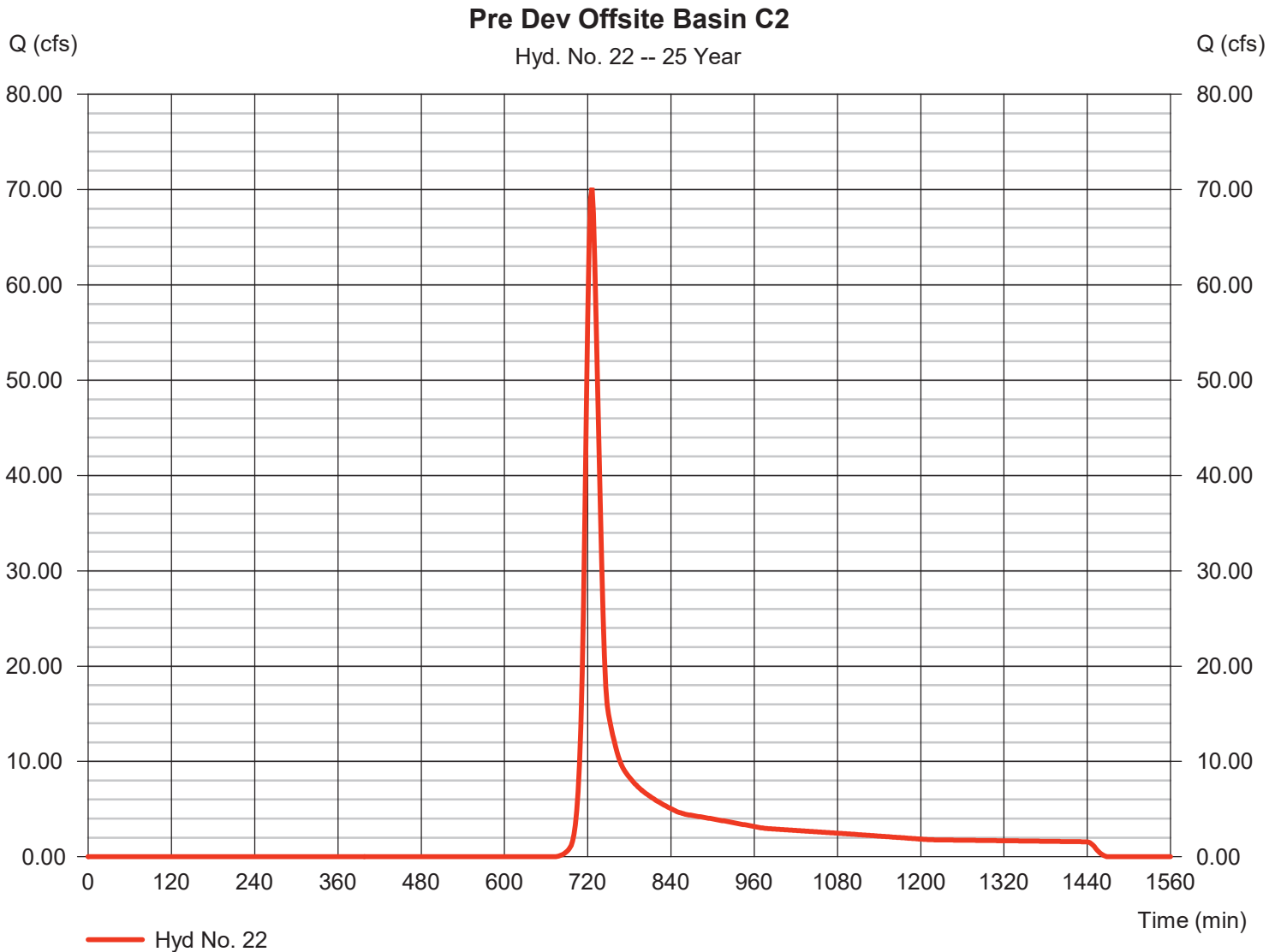
Hydrograph Report

Hyd. No. 22

Pre Dev Offsite Basin C2

Hydrograph type = SCS Runoff
Storm frequency = 25 yrs
Time interval = 2 min
Drainage area = 36.720 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 6.16 in
Storm duration = 24 hrs

Peak discharge = 70.18 cfs
Time to peak = 726 min
Hyd. volume = 236,461 cuft
Curve number = 57
Hydraulic length = 0 ft
Time of conc. (Tc) = 18.00 min
Distribution = Type II
Shape factor = 484



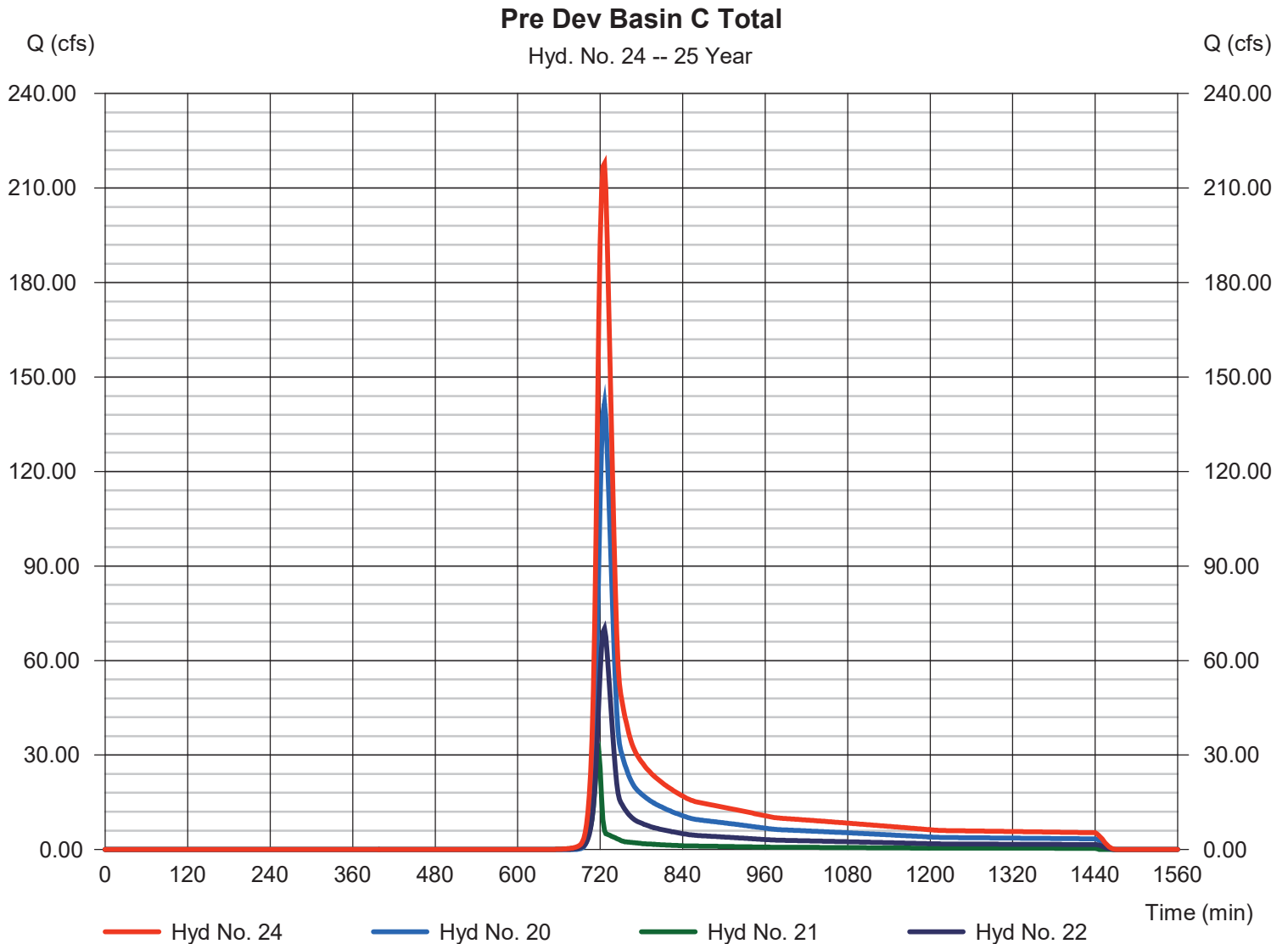
Hydrograph Report

Hyd. No. 24

Pre Dev Basin C Total

Hydrograph type = Combine
Storm frequency = 25 yrs
Time interval = 2 min
Inflow hyds. = 20, 21, 22

Peak discharge = 217.80 cfs
Time to peak = 726 min
Hyd. volume = 788,376 cuft
Contrib. drain. area = 129.480 ac



Hydrograph Report

Hyd. No. 26

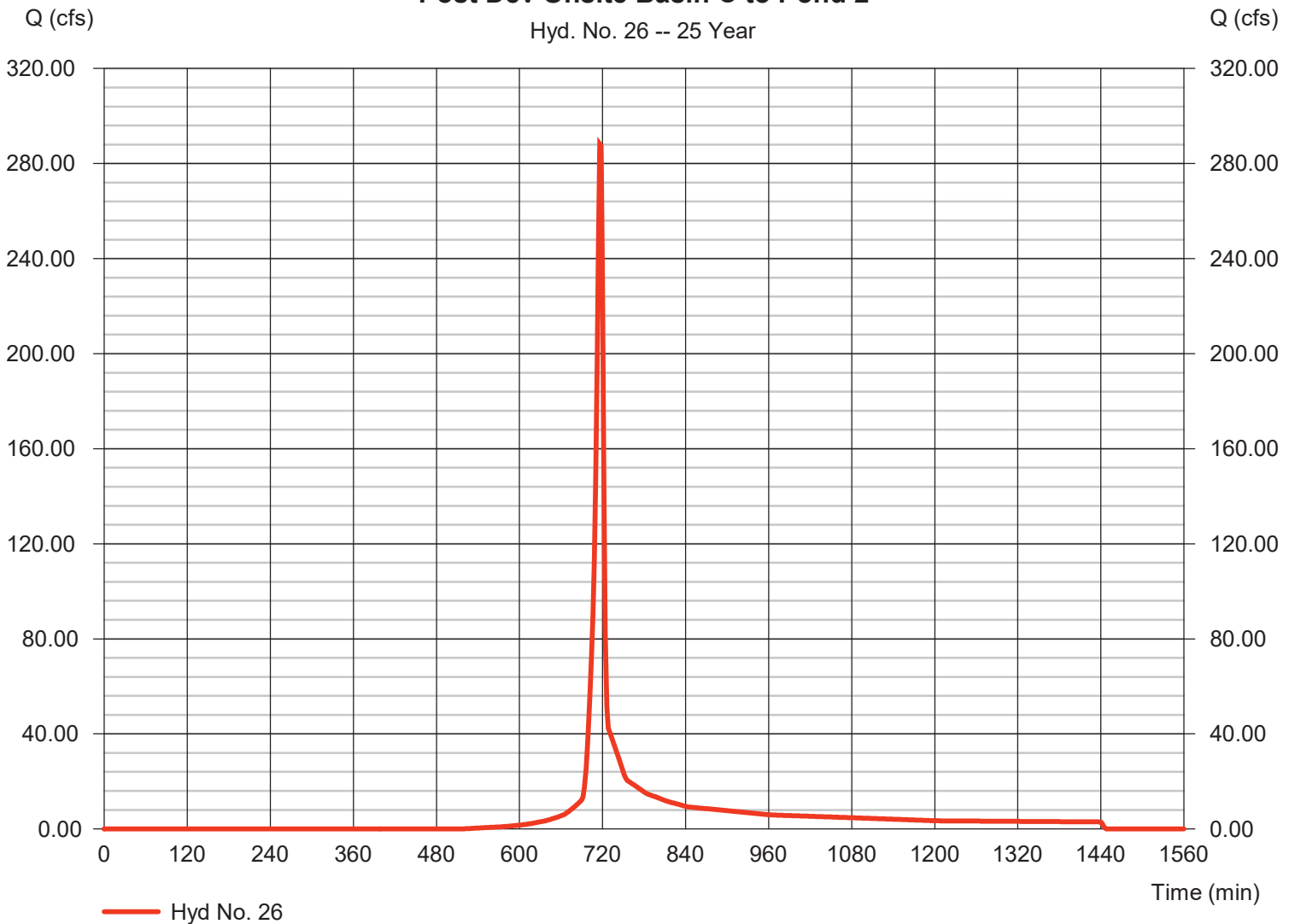
Post Dev Onsite Basin C to Pond 2

Hydrograph type = SCS Runoff
Storm frequency = 25 yrs
Time interval = 2 min
Drainage area = 56.470 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 6.16 in
Storm duration = 24 hrs

Peak discharge = 288.20 cfs
Time to peak = 716 min
Hyd. volume = 581,944 cuft
Curve number = 71
Hydraulic length = 0 ft
Time of conc. (Tc) = 5.00 min
Distribution = Type II
Shape factor = 484

Post Dev Onsite Basin C to Pond 2

Hyd. No. 26 -- 25 Year



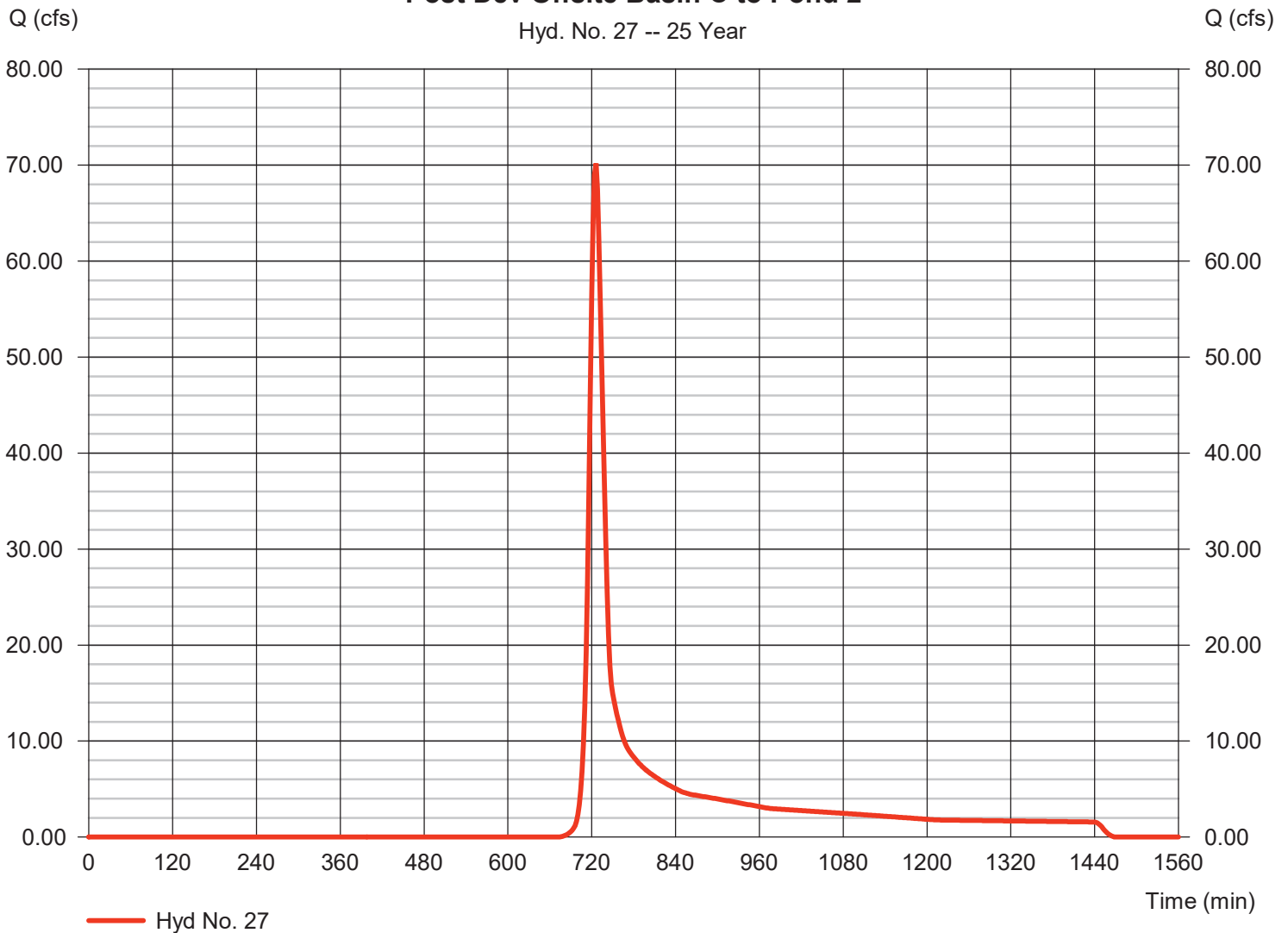
Hydrograph Report

Hyd. No. 27

Post Dev Offsite Basin C to Pond 2

Hydrograph type	= SCS Runoff	Peak discharge	= 70.18 cfs
Storm frequency	= 25 yrs	Time to peak	= 726 min
Time interval	= 2 min	Hyd. volume	= 236,461 cuft
Drainage area	= 36.720 ac	Curve number	= 57
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 18.00 min
Total precip.	= 6.16 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin C to Pond 2

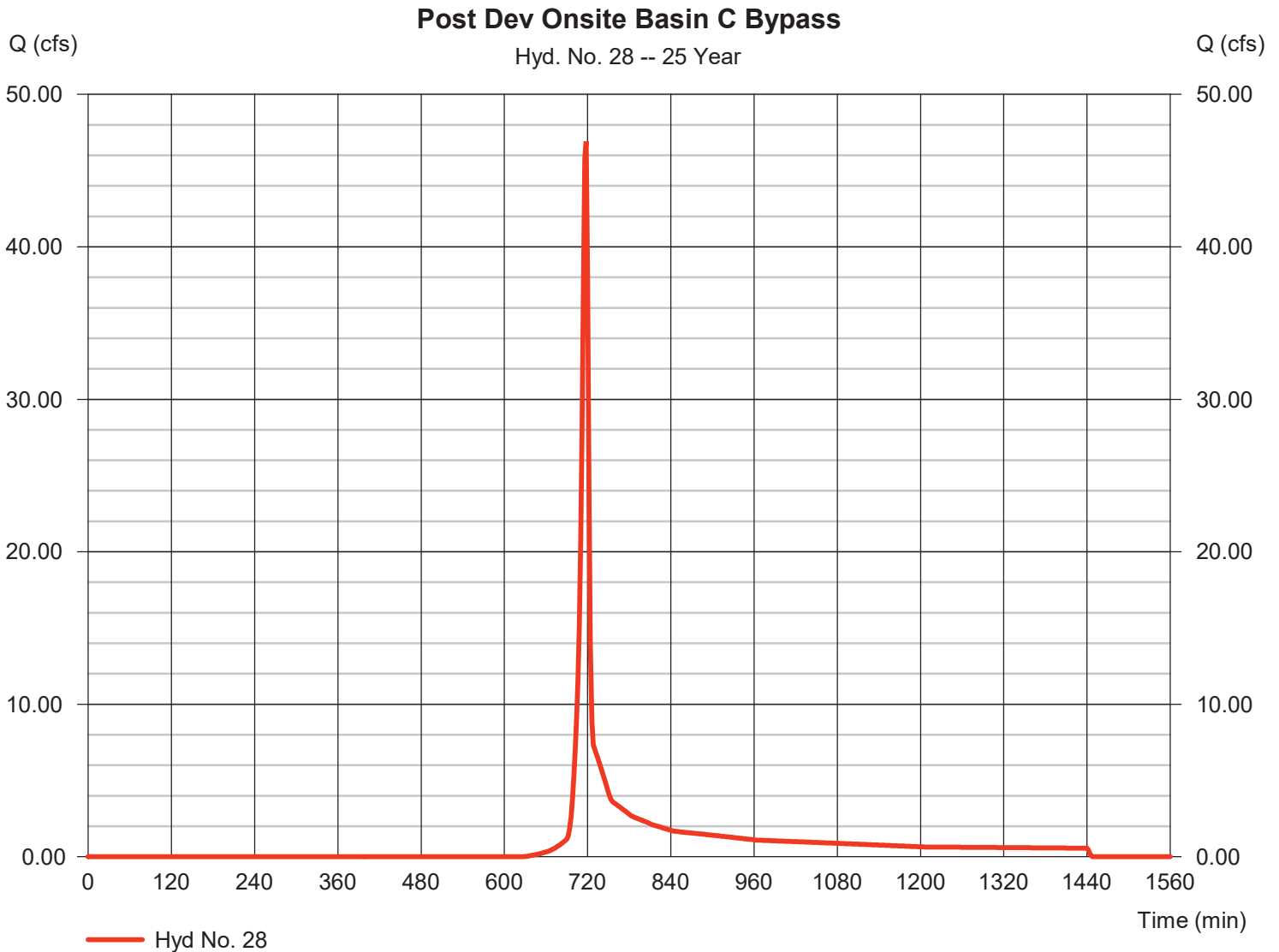


Hydrograph Report

Hyd. No. 28

Post Dev Onsite Basin C Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 46.92 cfs
Storm frequency	= 25 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 93,838 cuft
Drainage area	= 12.530 ac	Curve number	= 62
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.16 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



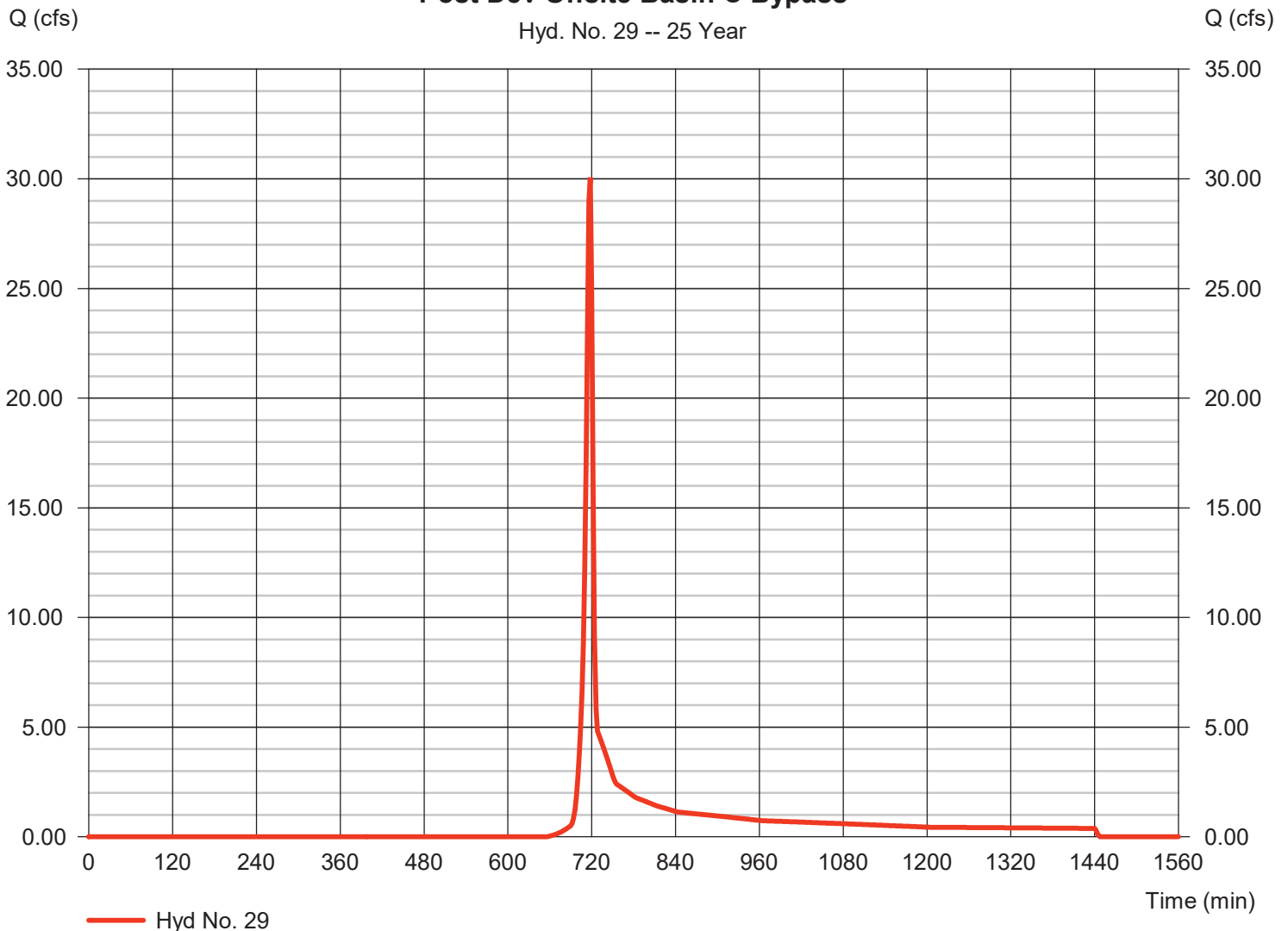
Hydrograph Report

Hyd. No. 29

Post Dev Offsite Basin C Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 30.06 cfs
Storm frequency	= 25 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 60,327 cuft
Drainage area	= 9.130 ac	Curve number	= 59
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 6.16 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin C Bypass



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Friday, 01 / 31 / 2025

Hyd. No. 31

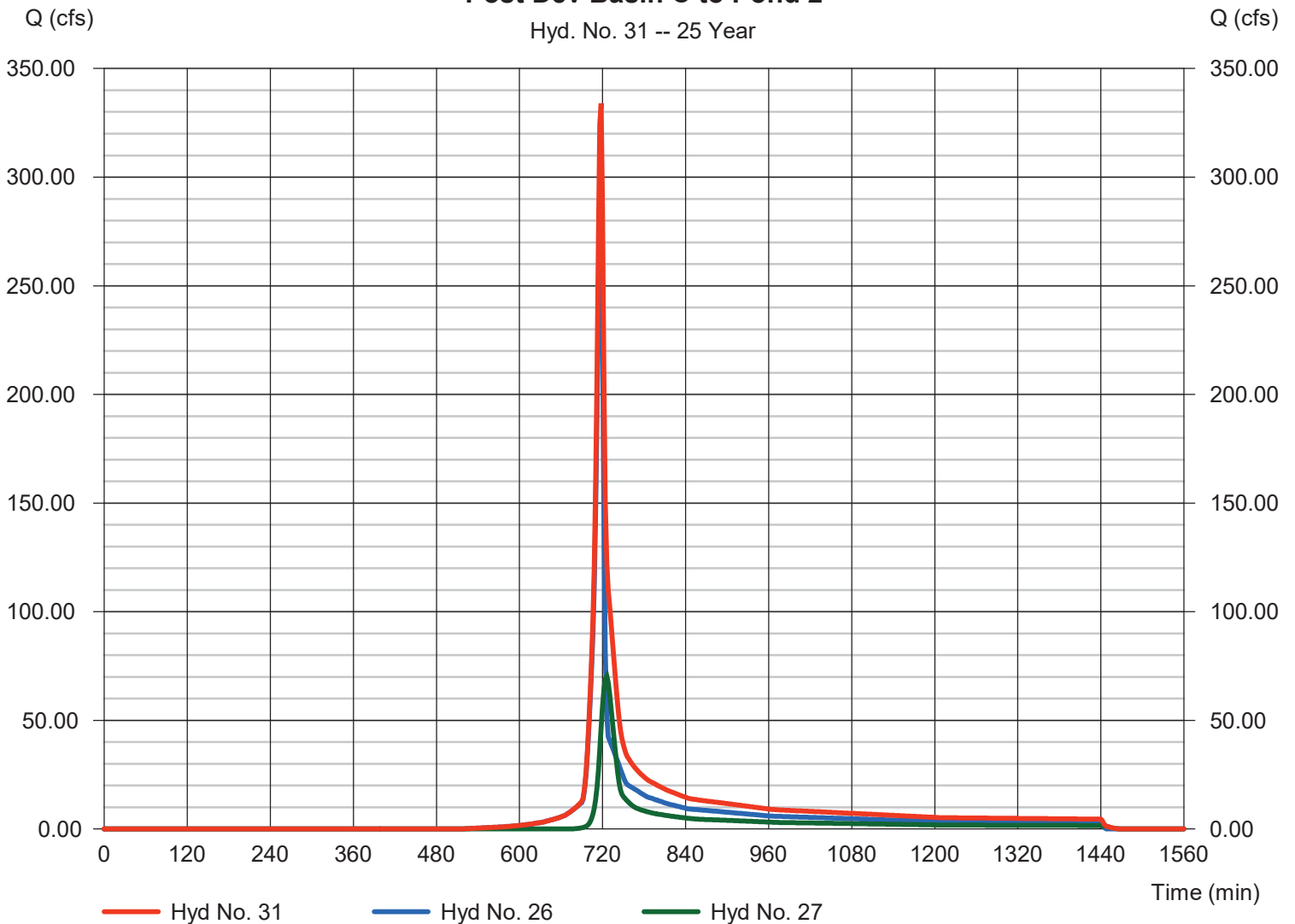
Post Dev Basin C to Pond 2

Hydrograph type = Combine
Storm frequency = 25 yrs
Time interval = 2 min
Inflow hyds. = 26, 27

Peak discharge = 333.93 cfs
Time to peak = 718 min
Hyd. volume = 818,404 cuft
Contrib. drain. area = 93.190 ac

Post Dev Basin C to Pond 2

Hyd. No. 31 -- 25 Year



Hydrograph Report

Hyd. No. 32

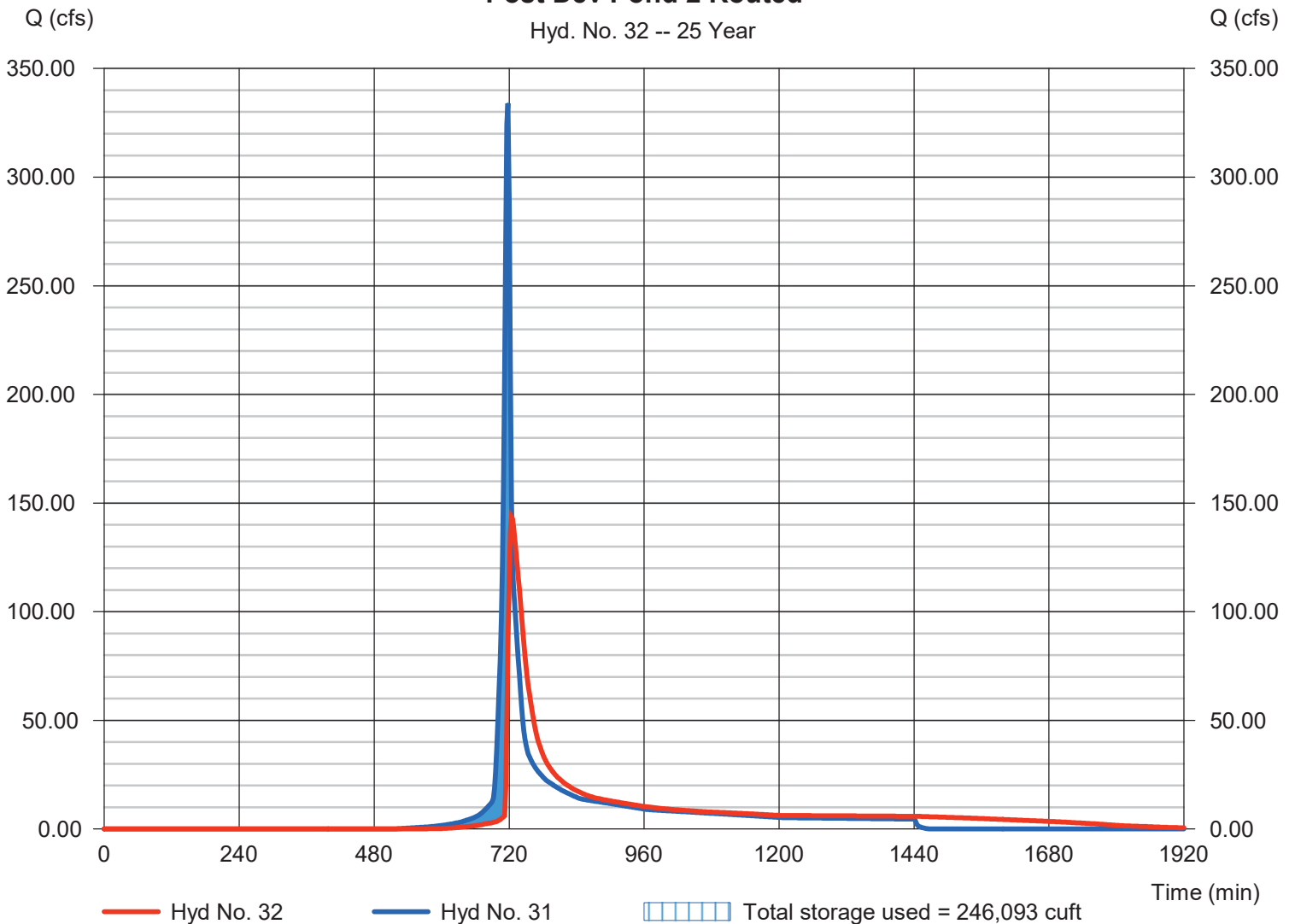
Post Dev Pond 2 Routed

Hydrograph type	= Reservoir	Peak discharge	= 143.60 cfs
Storm frequency	= 25 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 818,386 cuft
Inflow hyd. No.	= 31 - Post Dev Basin C to Pond 2	Max. Elevation	= 1111.04 ft
Reservoir name	= Pond 2	Max. Storage	= 246,093 cuft

Storage Indication method used.

Post Dev Pond 2 Routed

Hyd. No. 32 -- 25 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Friday, 01 / 31 / 2025

Hyd. No. 34

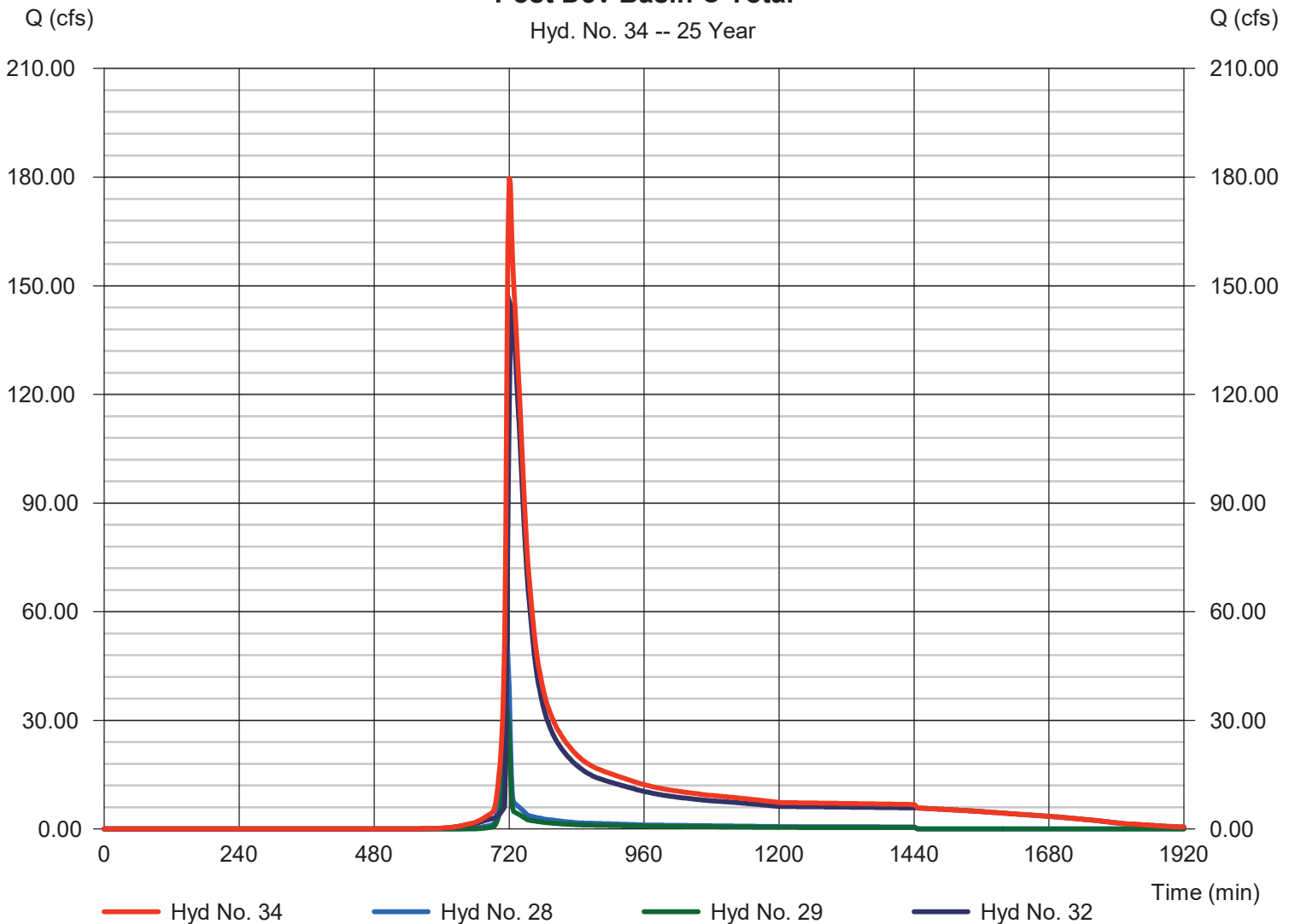
Post Dev Basin C Total

Hydrograph type = Combine
Storm frequency = 25 yrs
Time interval = 2 min
Inflow hyds. = 28, 29, 32

Peak discharge = 180.05 cfs
Time to peak = 720 min
Hyd. volume = 972,552 cuft
Contrib. drain. area = 21.660 ac

Post Dev Basin C Total

Hyd. No. 34 -- 25 Year

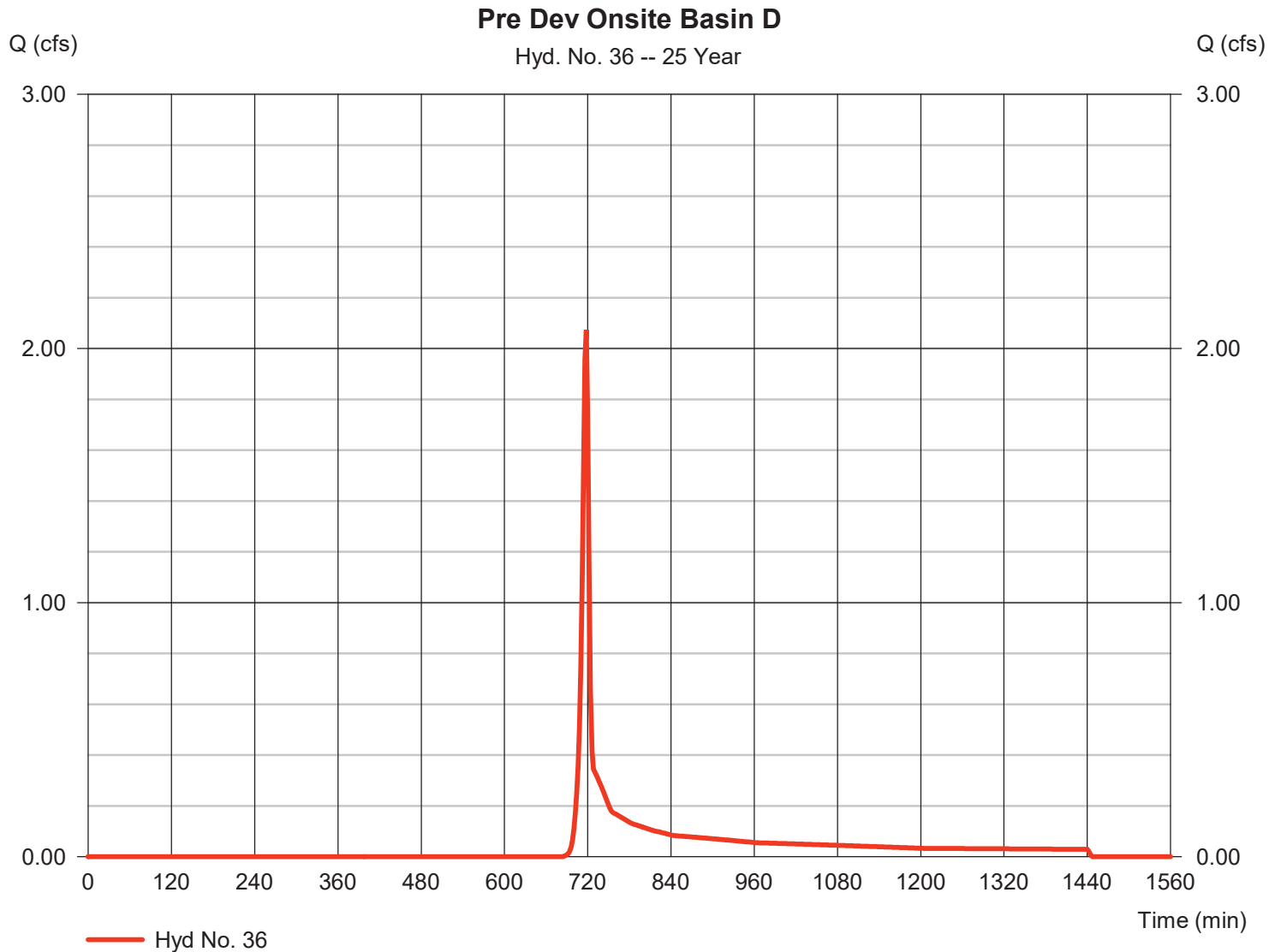


Hydrograph Report

Hyd. No. 36

Pre Dev Onsite Basin D

Hydrograph type	= SCS Runoff	Peak discharge	= 2.073 cfs
Storm frequency	= 25 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 4,220 cuft
Drainage area	= 0.770 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.16 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

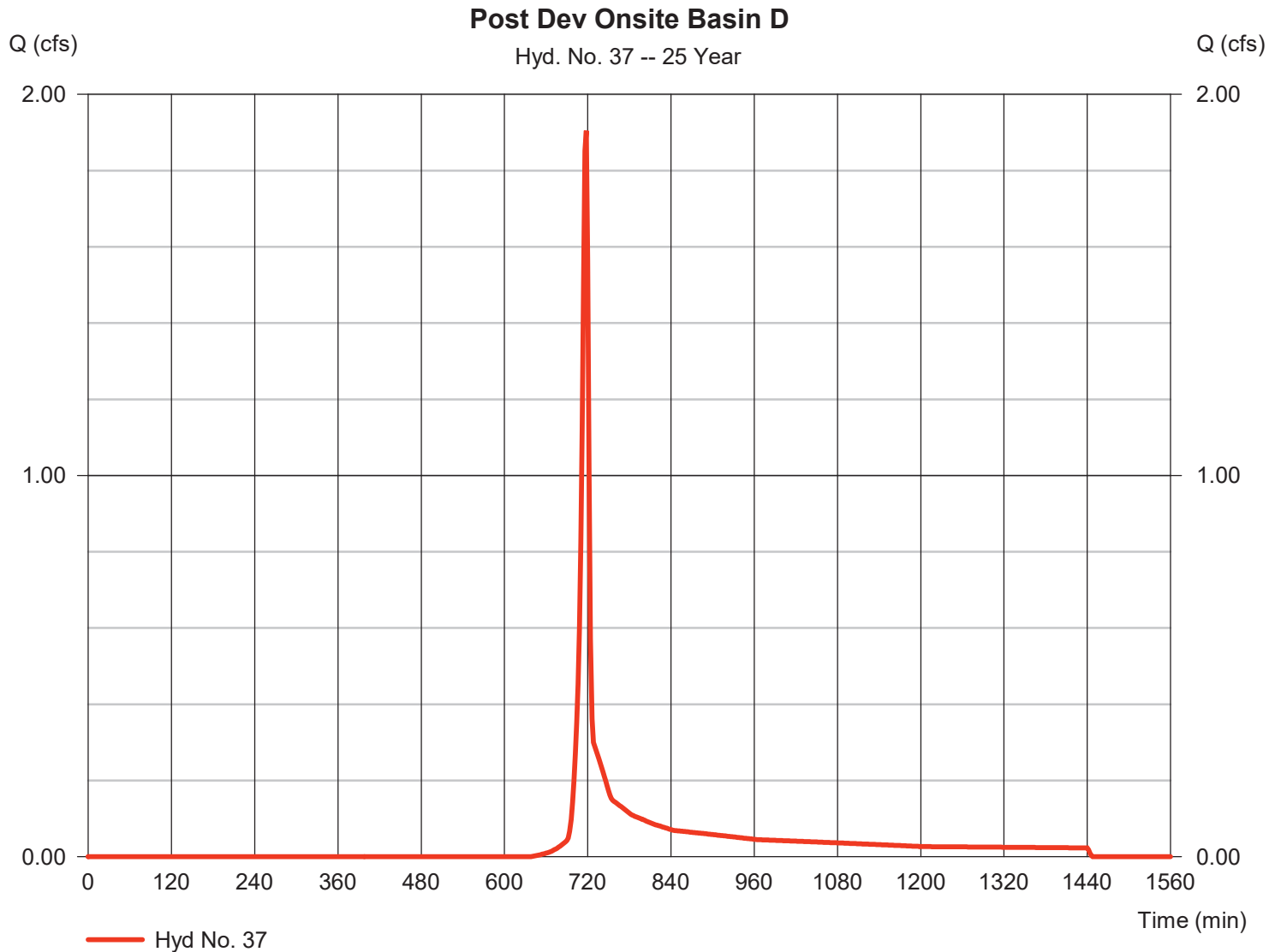


Hydrograph Report

Hyd. No. 37

Post Dev Onsite Basin D

Hydrograph type	= SCS Runoff	Peak discharge	= 1.905 cfs
Storm frequency	= 25 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 3,812 cuft
Drainage area	= 0.530 ac	Curve number	= 61
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.16 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	104.40	2	728	388,055	-----	-----	-----	Pre Dev Onsite Basin A
2	SCS Runoff	30.01	2	722	78,940	-----	-----	-----	Pre Dev Offite Basin A1
3	SCS Runoff	2.319	2	720	5,346	-----	-----	-----	Pre Dev Offsite Basin A2
5	Combine	127.51	2	726	472,340	1, 2, 3,	-----	-----	Pre Dev Basin A Total
7	SCS Runoff	303.35	2	716	621,561	-----	-----	-----	Post Dev Onsite Basin A to Pond 1
8	SCS Runoff	6.678	2	722	17,670	-----	-----	-----	Post Dev Offsite Basin A to Pond 1
9	SCS Runoff	24.37	2	720	55,937	-----	-----	-----	Post Dev Offsite Basin A1 Bypass
10	SCS Runoff	2.319	2	720	5,346	-----	-----	-----	Post Dev Offsite Basin A2 Bypass
12	Combine	308.25	2	716	639,231	7, 8,	-----	-----	Post Dev Basin A to Pond 1
13	Reservoir	96.62	2	724	623,259	12	1062.49	290,706	Post Dev Pond 1 Routed
15	Combine	115.76	2	722	684,543	9, 10, 13,	-----	-----	Post Dev Basin A Total
17	SCS Runoff	10.74	2	730	42,613	-----	-----	-----	Pre Dev Onsite Basin B
18	SCS Runoff	36.98	2	720	96,844	-----	-----	-----	Post Dev Onsite Basin B
20	SCS Runoff	190.30	2	726	635,133	-----	-----	-----	Pre Dev Onsite Basin C
21	SCS Runoff	39.91	2	718	79,797	-----	-----	-----	Pre Dev Offsite Basin C1
22	SCS Runoff	92.53	2	726	303,920	-----	-----	-----	Pre Dev Offsite Basin C2
24	Combine	291.06	2	724	1,018,850	20, 21, 22,	-----	-----	Pre Dev Basin C Total
26	SCS Runoff	349.68	2	716	707,468	-----	-----	-----	Post Dev Onsite Basin C to Pond 2
27	SCS Runoff	92.53	2	726	303,920	-----	-----	-----	Post Dev Offsite Basin C to Pond 2
28	SCS Runoff	58.89	2	718	117,875	-----	-----	-----	Post Dev Onsite Basin C Bypass
29	SCS Runoff	38.39	2	718	76,788	-----	-----	-----	Post Dev Offsite Basin C Bypass
31	Combine	410.75	2	718	1,011,387	26, 27,	-----	-----	Post Dev Basin C to Pond 2
32	Reservoir	201.97	2	724	1,011,368	31	1112.13	291,046	Post Dev Pond 2 Routed
34	Combine	257.73	2	720	1,206,030	28, 29, 32,	-----	-----	Post Dev Basin C Total
36	SCS Runoff	2.725	2	718	5,482	-----	-----	-----	Pre Dev Onsite Basin D
37	SCS Runoff	2.404	2	718	4,808	-----	-----	-----	Post Dev Onsite Basin D
1220263 Hydrology Concept.gpw					Return Period: 50 Year			Friday, 01 / 31 / 2025	

Hydrograph Report

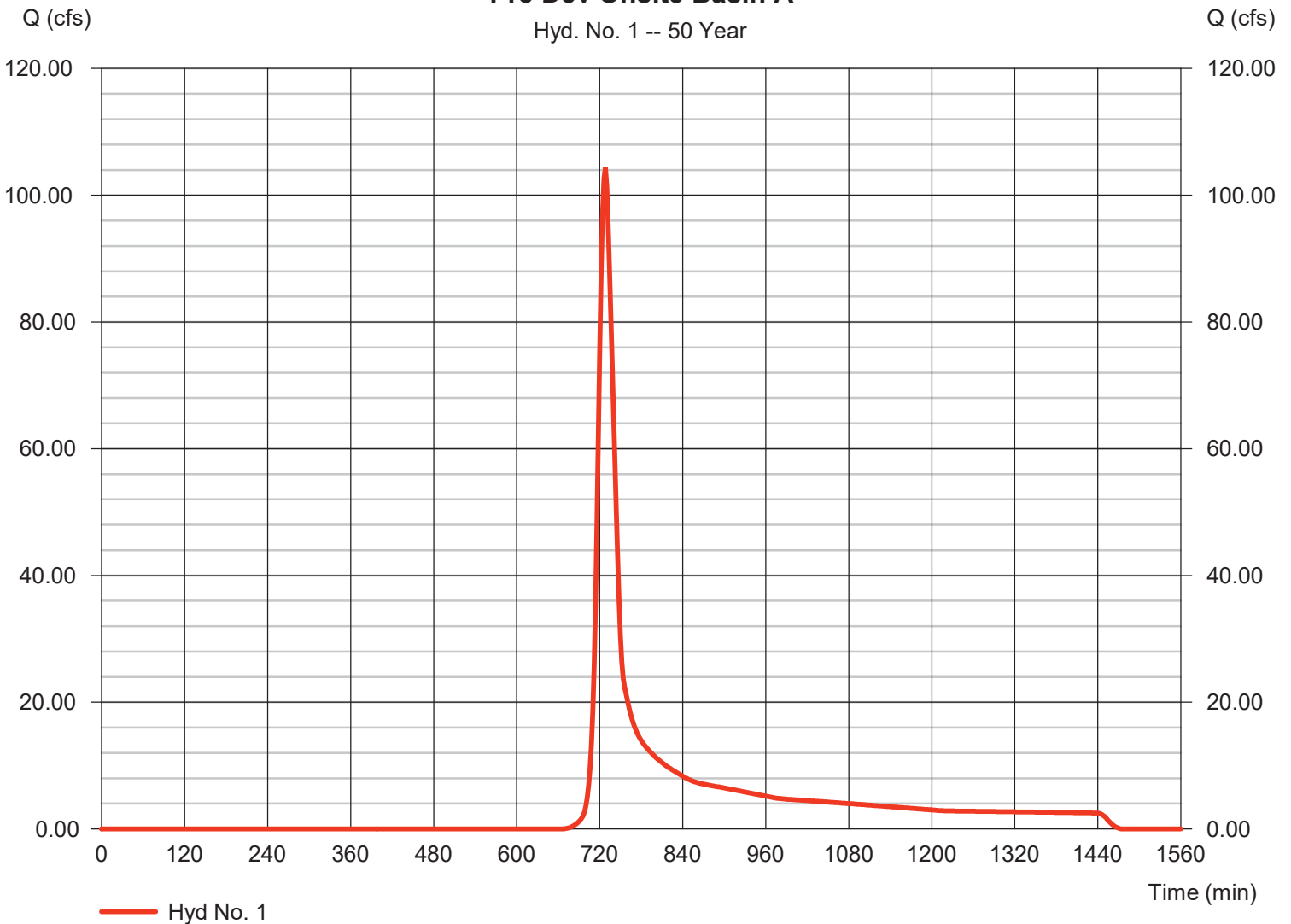
Hyd. No. 1

Pre Dev Onsite Basin A

Hydrograph type	= SCS Runoff	Peak discharge	= 104.40 cfs
Storm frequency	= 50 yrs	Time to peak	= 728 min
Time interval	= 2 min	Hyd. volume	= 388,055 cuft
Drainage area	= 50.200 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 22.00 min
Total precip.	= 6.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Pre Dev Onsite Basin A

Hyd. No. 1 -- 50 Year

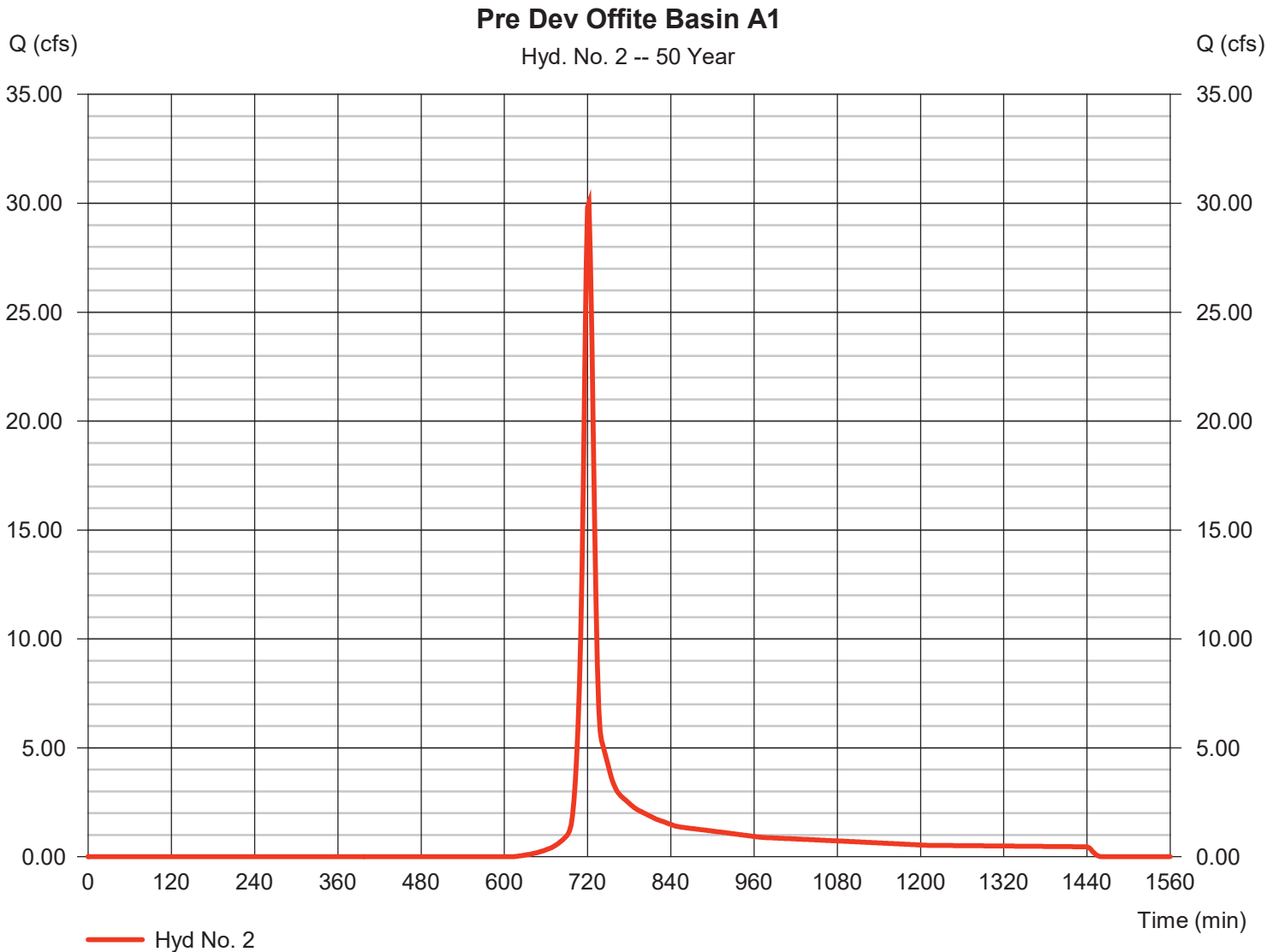


Hydrograph Report

Hyd. No. 2

Pre Dev Offite Basin A1

Hydrograph type	= SCS Runoff	Peak discharge	= 30.01 cfs
Storm frequency	= 50 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 78,940 cuft
Drainage area	= 7.910 ac	Curve number	= 61
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.00 min
Total precip.	= 6.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

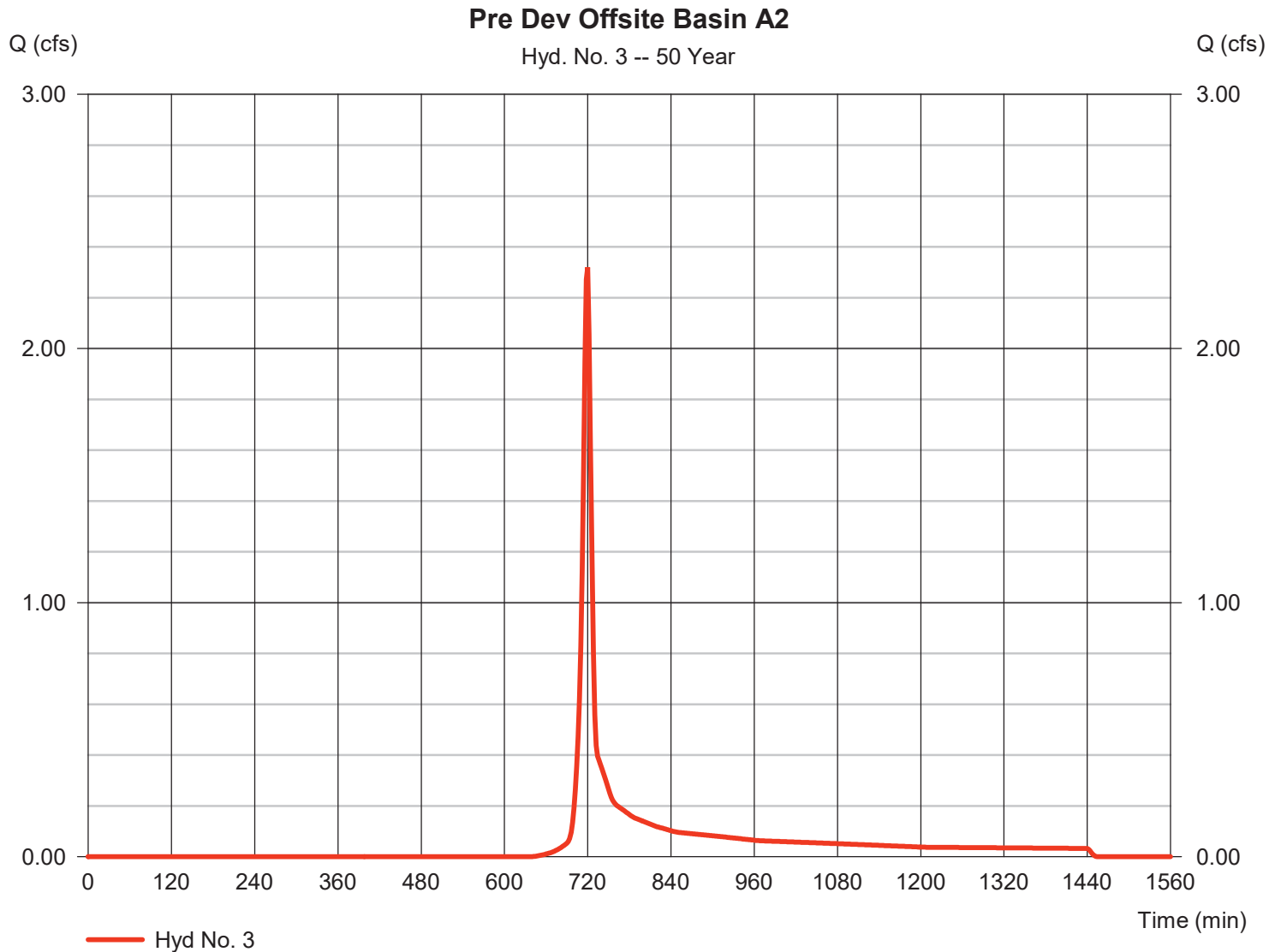


Hydrograph Report

Hyd. No. 3

Pre Dev Offsite Basin A2

Hydrograph type	= SCS Runoff	Peak discharge	= 2.319 cfs
Storm frequency	= 50 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 5,346 cuft
Drainage area	= 0.620 ac	Curve number	= 58
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 6.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hyd. No. 5

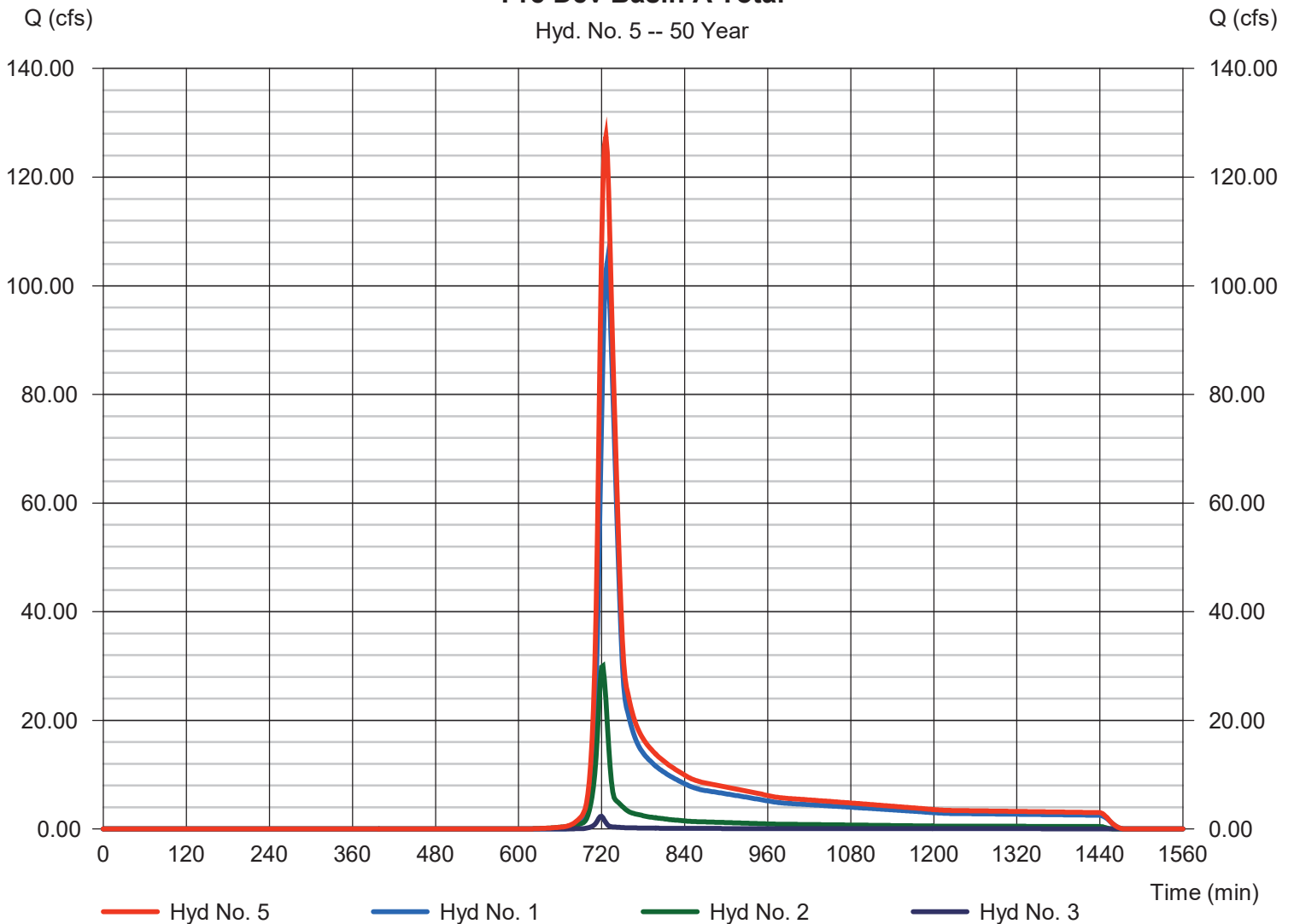
Pre Dev Basin A Total

Hydrograph type = Combine
Storm frequency = 50 yrs
Time interval = 2 min
Inflow hyds. = 1, 2, 3

Peak discharge = 127.51 cfs
Time to peak = 726 min
Hyd. volume = 472,340 cuft
Contrib. drain. area = 58.730 ac

Pre Dev Basin A Total

Hyd. No. 5 -- 50 Year



Hydrograph Report

Hyd. No. 7

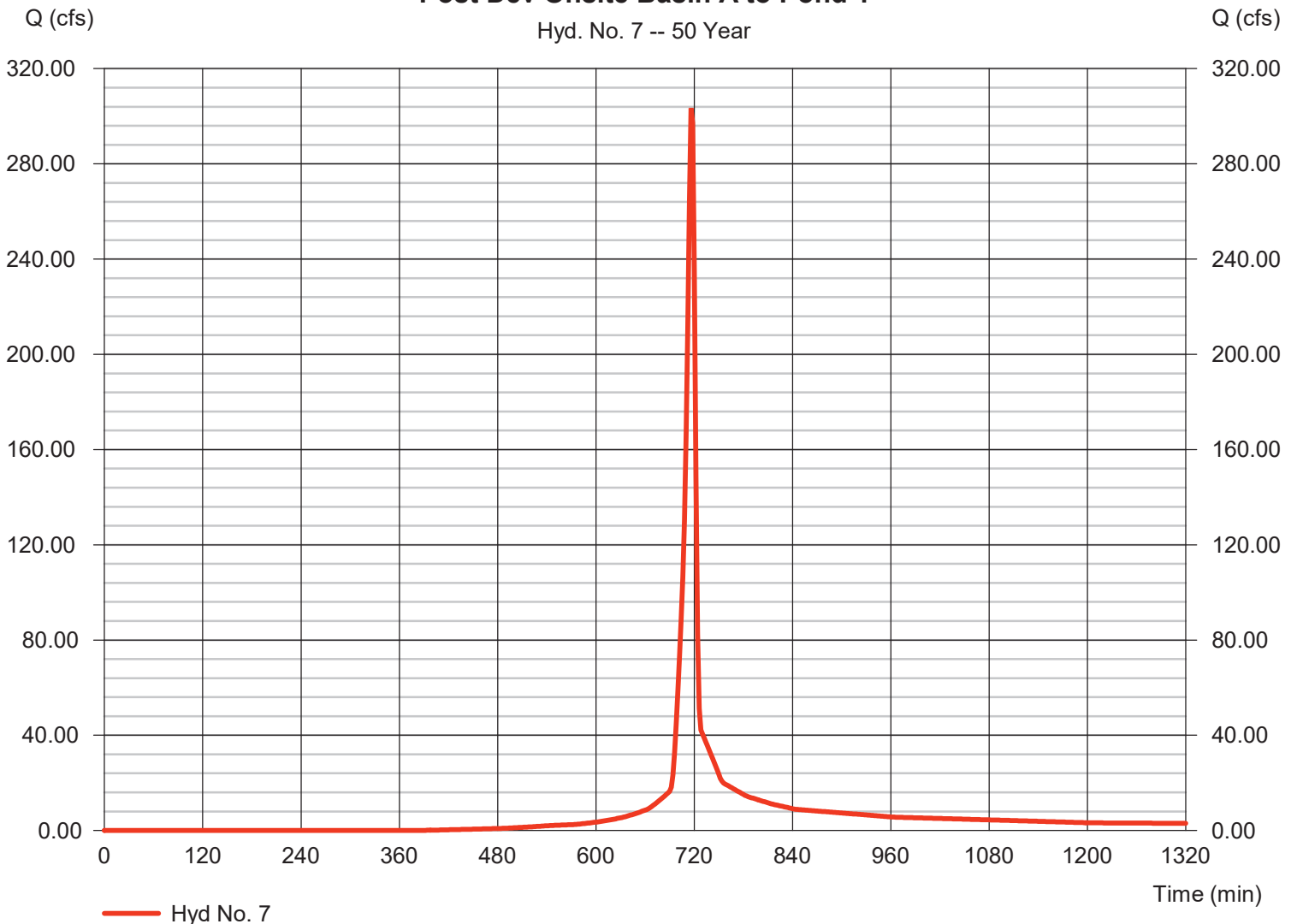
Post Dev Onsite Basin A to Pond 1

Hydrograph type = SCS Runoff
Storm frequency = 50 yrs
Time interval = 2 min
Drainage area = 42.270 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 6.95 in
Storm duration = 24 hrs

Peak discharge = 303.35 cfs
Time to peak = 716 min
Hyd. volume = 621,561 cuft
Curve number = 77
Hydraulic length = 0 ft
Time of conc. (Tc) = 5.00 min
Distribution = Type II
Shape factor = 484

Post Dev Onsite Basin A to Pond 1

Hyd. No. 7 -- 50 Year



Hydrograph Report

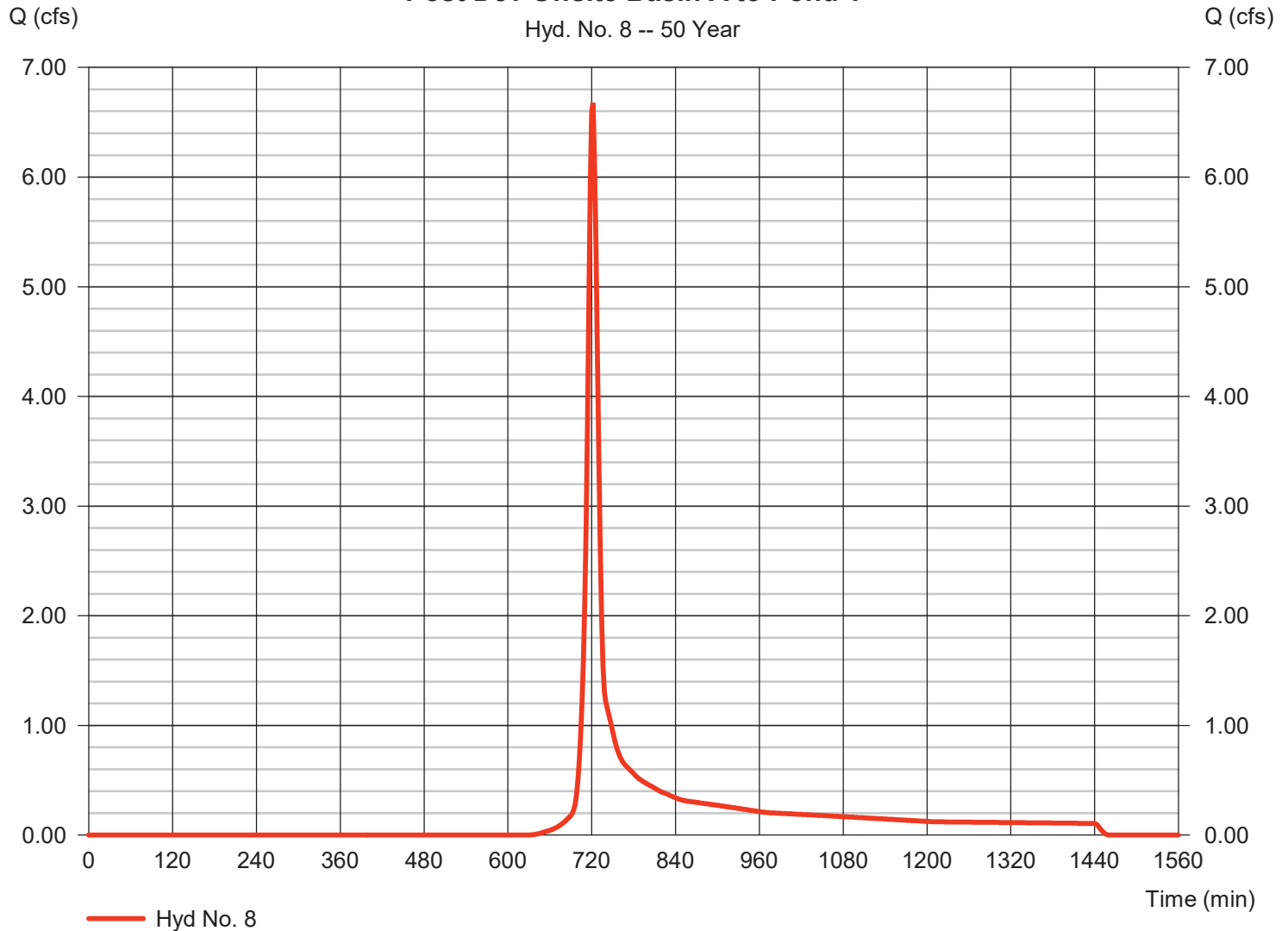
Hyd. No. 8

Post Dev Offsite Basin A to Pond 1

Hydrograph type	= SCS Runoff	Peak discharge	= 6.678 cfs
Storm frequency	= 50 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 17,670 cuft
Drainage area	= 1.910 ac	Curve number	= 59
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.00 min
Total precip.	= 6.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A to Pond 1

Hyd. No. 8 -- 50 Year



Hydrograph Report

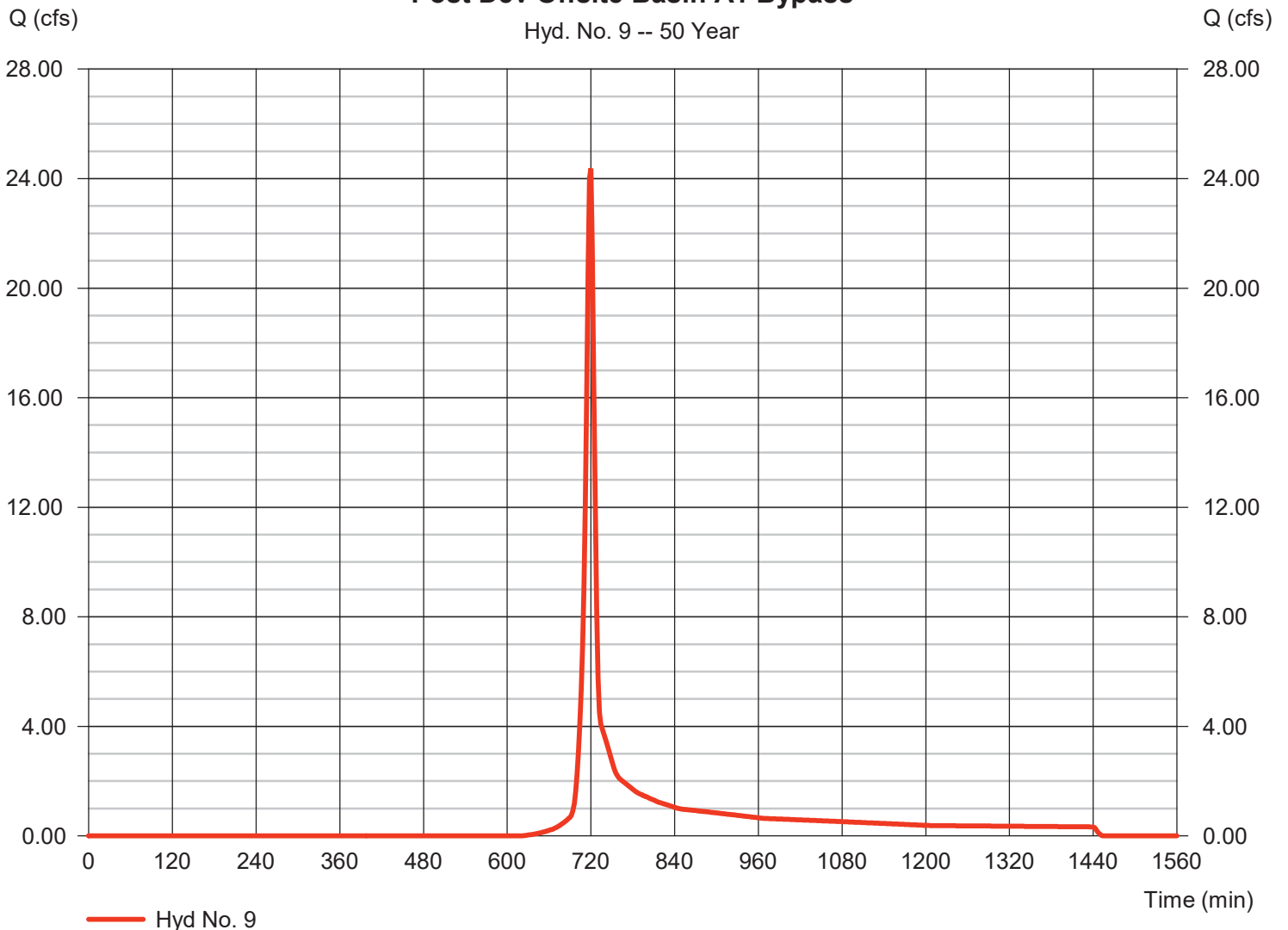
Hyd. No. 9

Post Dev Offsite Basin A1 Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 24.37 cfs
Storm frequency	= 50 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 55,937 cuft
Drainage area	= 6.000 ac	Curve number	= 60
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 6.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A1 Bypass

Hyd. No. 9 -- 50 Year



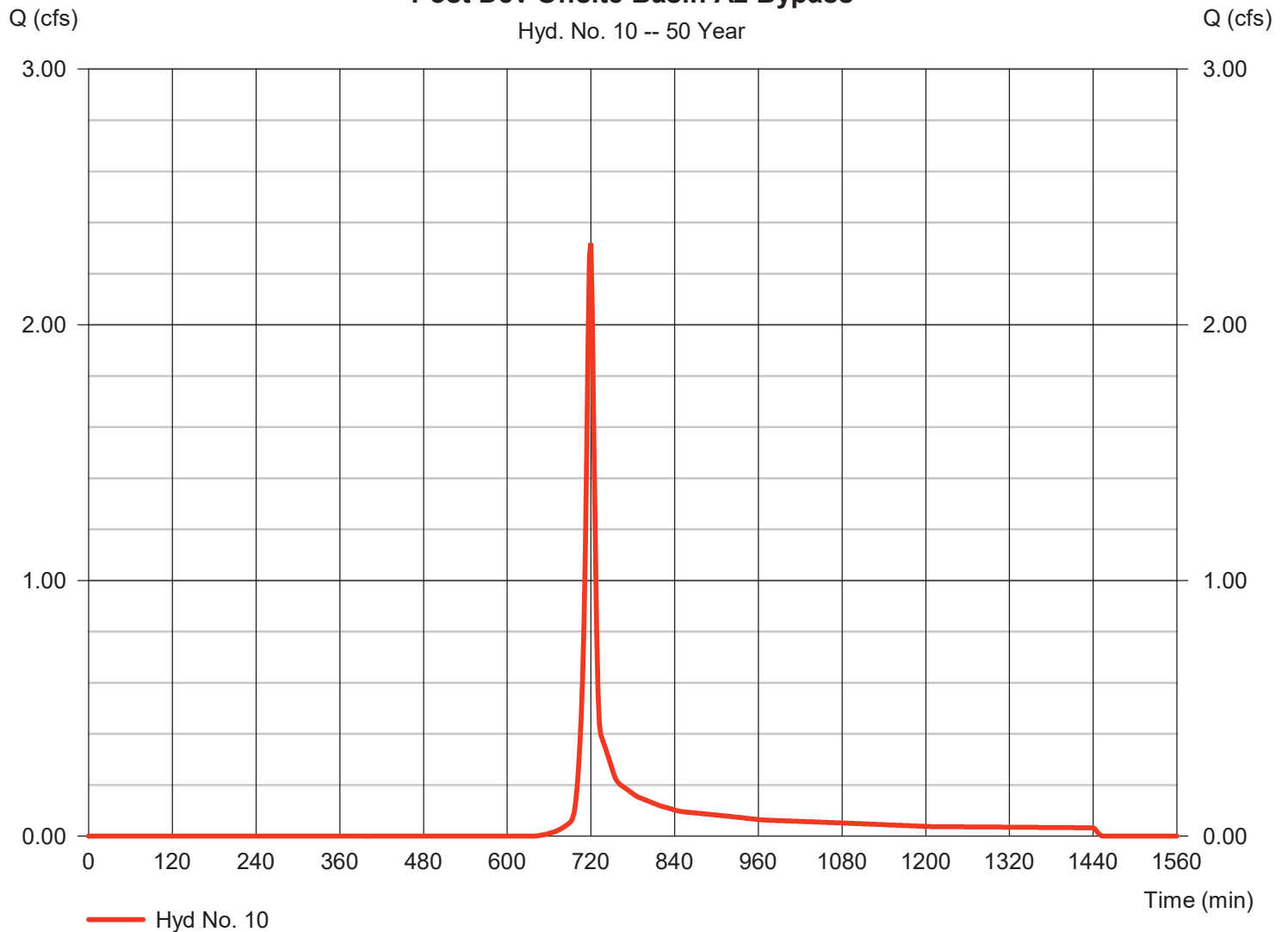
Hydrograph Report

Hyd. No. 10

Post Dev Offsite Basin A2 Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 2.319 cfs
Storm frequency	= 50 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 5,346 cuft
Drainage area	= 0.620 ac	Curve number	= 58
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 6.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A2 Bypass



Hydrograph Report

Hyd. No. 12

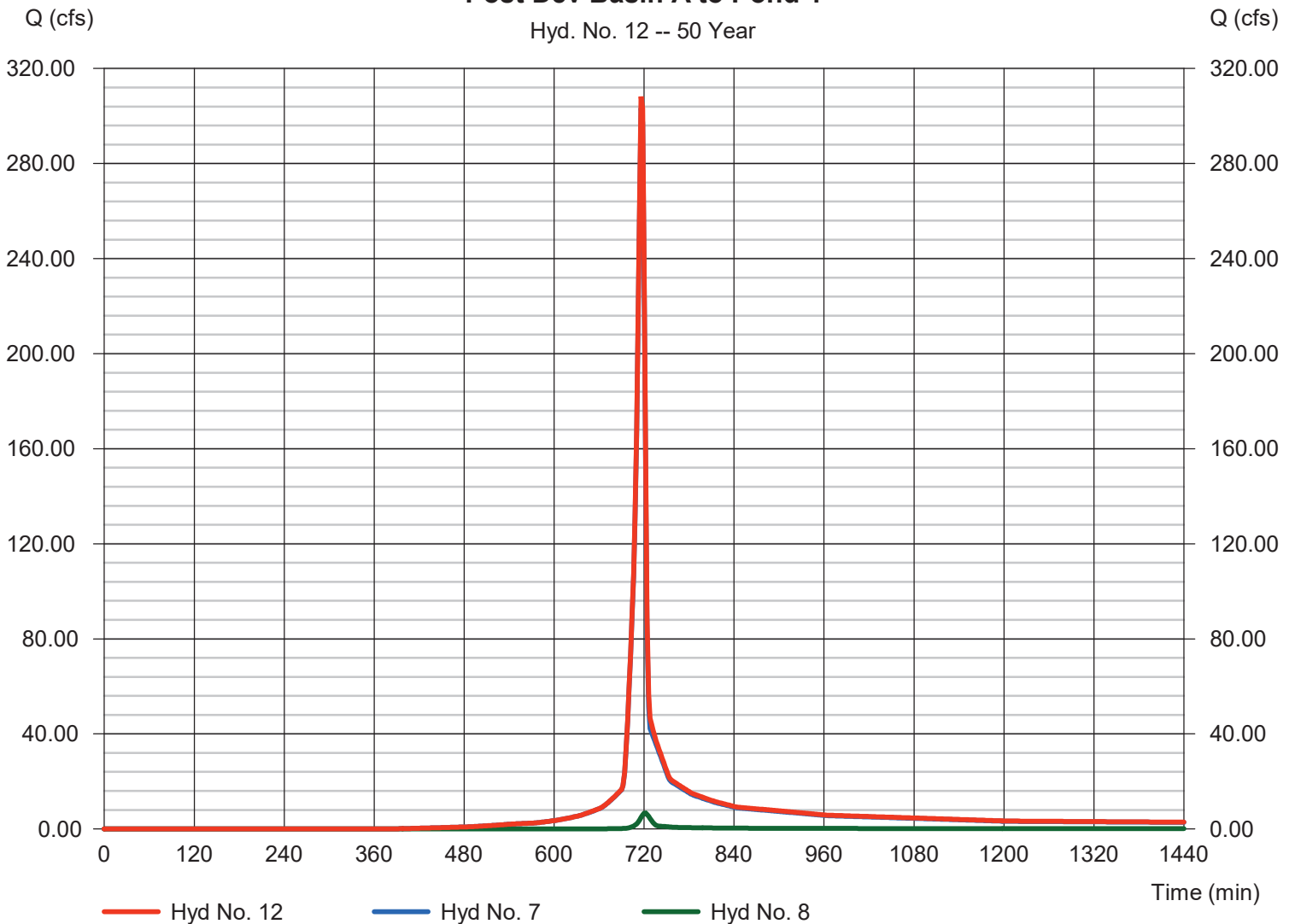
Post Dev Basin A to Pond 1

Hydrograph type = Combine
Storm frequency = 50 yrs
Time interval = 2 min
Inflow hyds. = 7, 8

Peak discharge = 308.25 cfs
Time to peak = 716 min
Hyd. volume = 639,231 cuft
Contrib. drain. area = 44.180 ac

Post Dev Basin A to Pond 1

Hyd. No. 12 -- 50 Year



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

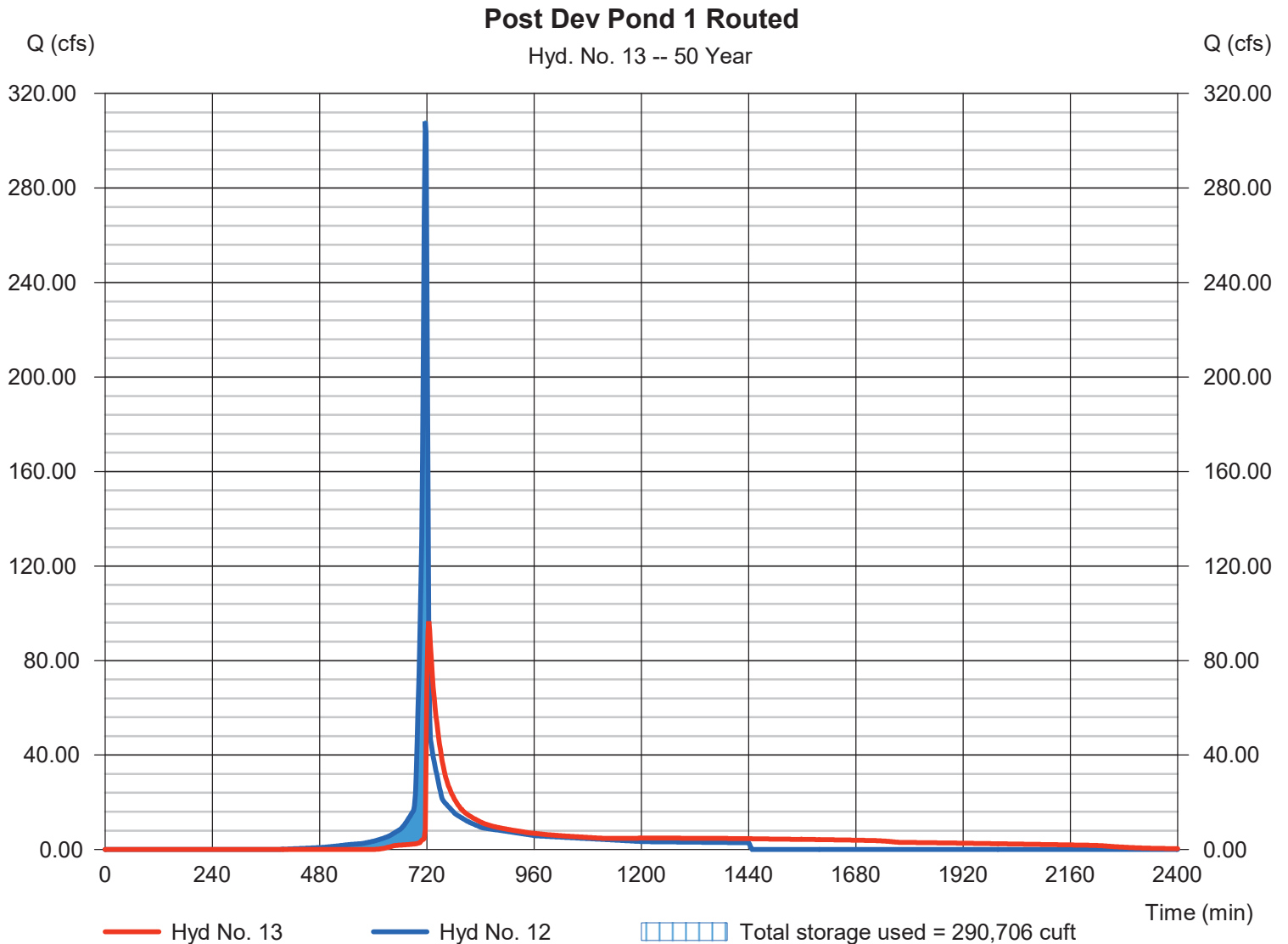
Friday, 01 / 31 / 2025

Hyd. No. 13

Post Dev Pond 1 Routed

Hydrograph type	= Reservoir	Peak discharge	= 96.62 cfs
Storm frequency	= 50 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 623,259 cuft
Inflow hyd. No.	= 12 - Post Dev Basin A to Pond	Max. Elevation	= 1062.49 ft
Reservoir name	= Pond 1	Max. Storage	= 290,706 cuft

Storage Indication method used.



Hydrograph Report

Hyd. No. 15

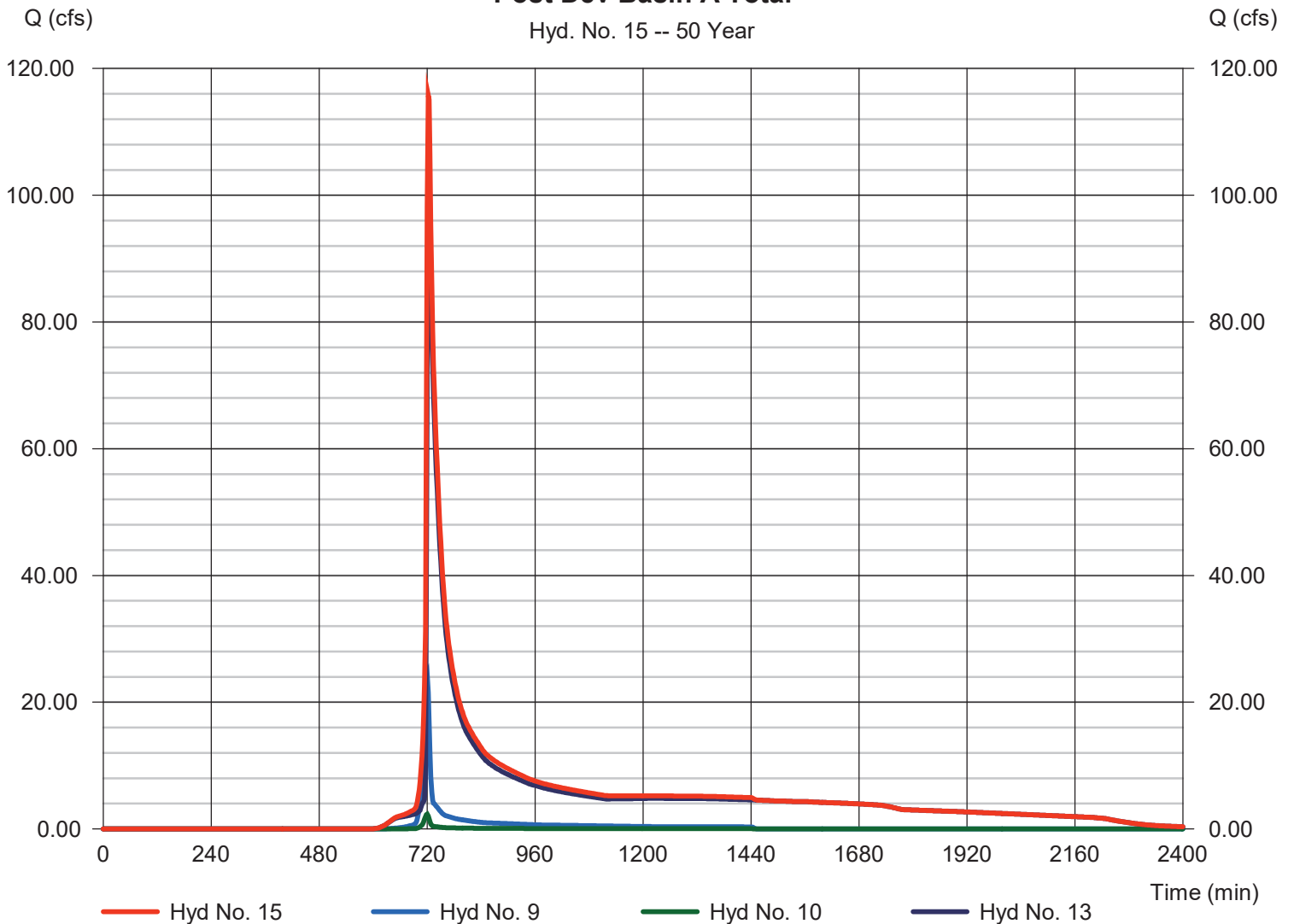
Post Dev Basin A Total

Hydrograph type = Combine
Storm frequency = 50 yrs
Time interval = 2 min
Inflow hyds. = 9, 10, 13

Peak discharge = 115.76 cfs
Time to peak = 722 min
Hyd. volume = 684,543 cuft
Contrib. drain. area = 6.620 ac

Post Dev Basin A Total

Hyd. No. 15 -- 50 Year

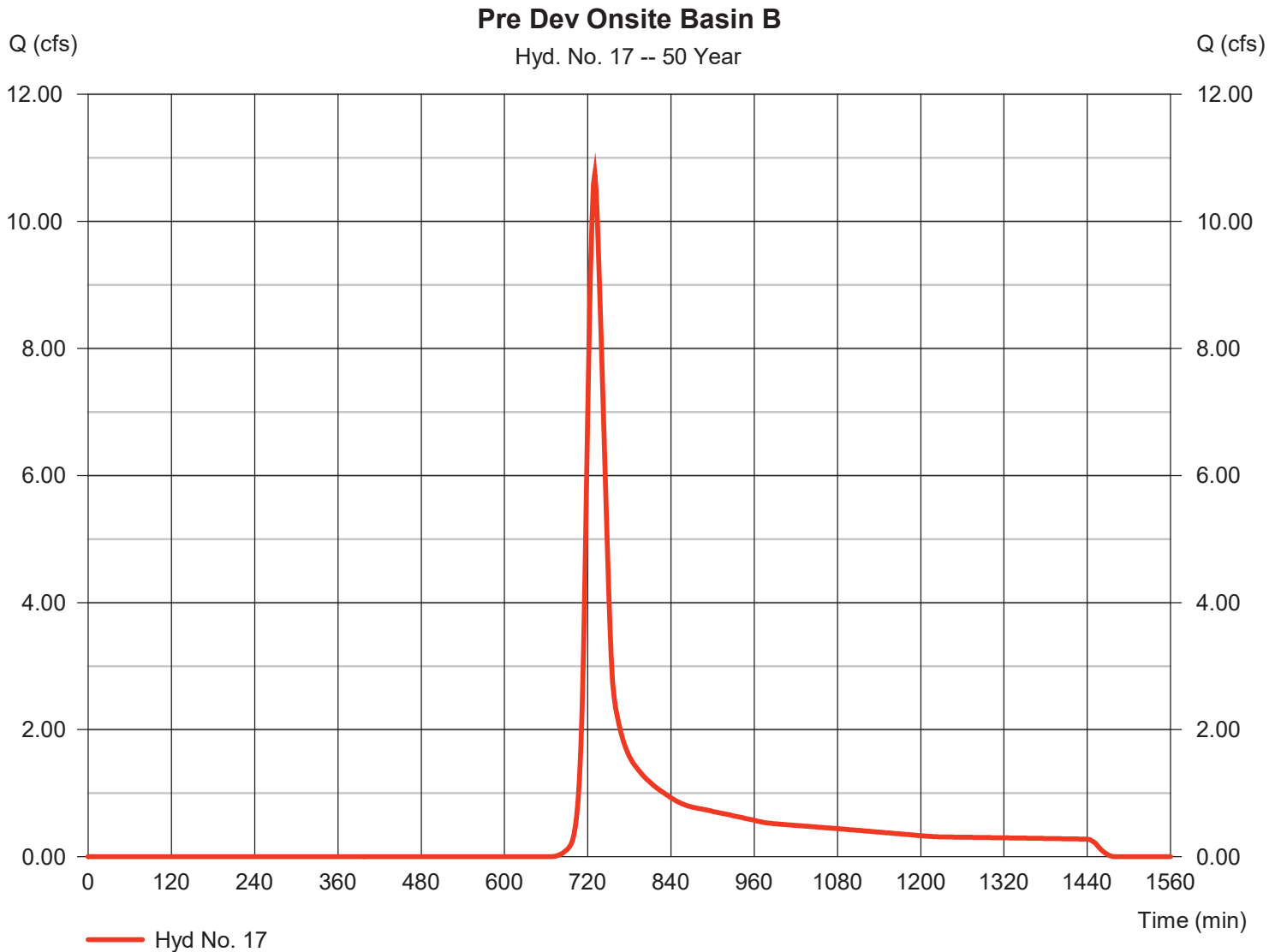


Hydrograph Report

Hyd. No. 17

Pre Dev Onsite Basin B

Hydrograph type	= SCS Runoff	Peak discharge	= 10.74 cfs
Storm frequency	= 50 yrs	Time to peak	= 730 min
Time interval	= 2 min	Hyd. volume	= 42,613 cuft
Drainage area	= 5.700 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 25.00 min
Total precip.	= 6.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

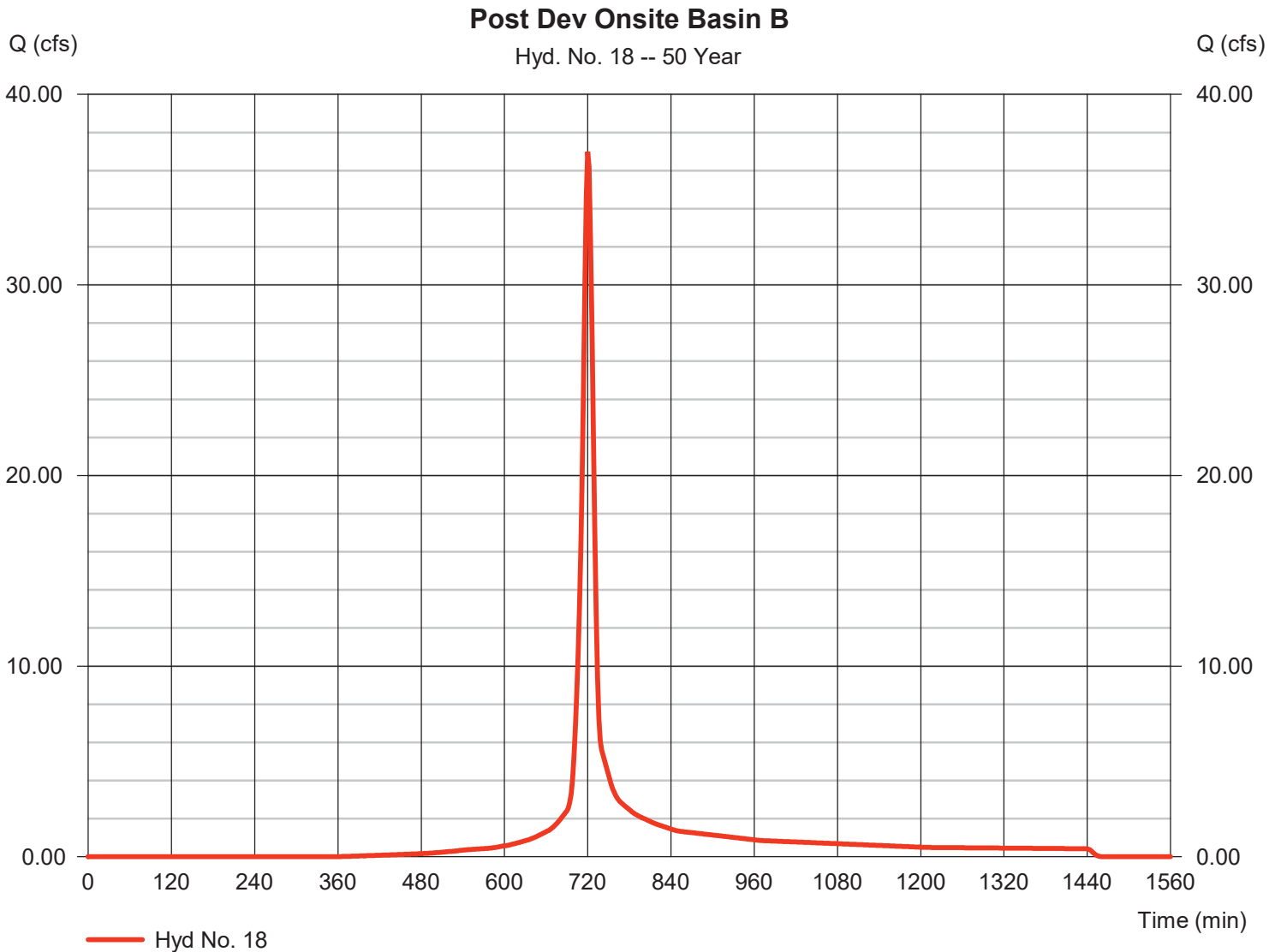


Hydrograph Report

Hyd. No. 18

Post Dev Onsite Basin B

Hydrograph type	= SCS Runoff	Peak discharge	= 36.98 cfs
Storm frequency	= 50 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 96,844 cuft
Drainage area	= 5.700 ac	Curve number	= 79
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.00 min
Total precip.	= 6.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

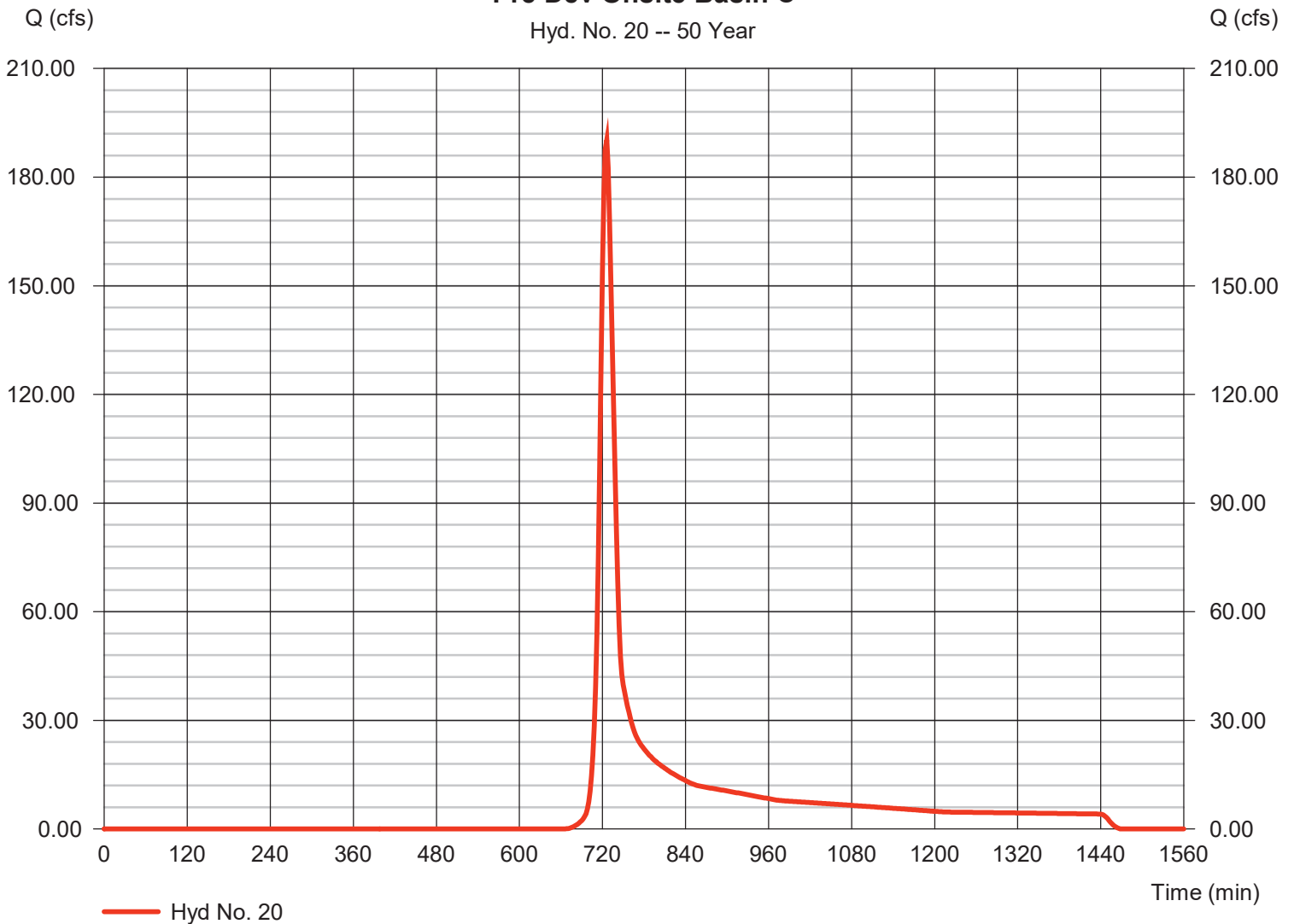
Hyd. No. 20

Pre Dev Onsite Basin C

Hydrograph type	= SCS Runoff	Peak discharge	= 190.30 cfs
Storm frequency	= 50 yrs	Time to peak	= 726 min
Time interval	= 2 min	Hyd. volume	= 635,133 cuft
Drainage area	= 83.630 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 17.00 min
Total precip.	= 6.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Pre Dev Onsite Basin C

Hyd. No. 20 -- 50 Year

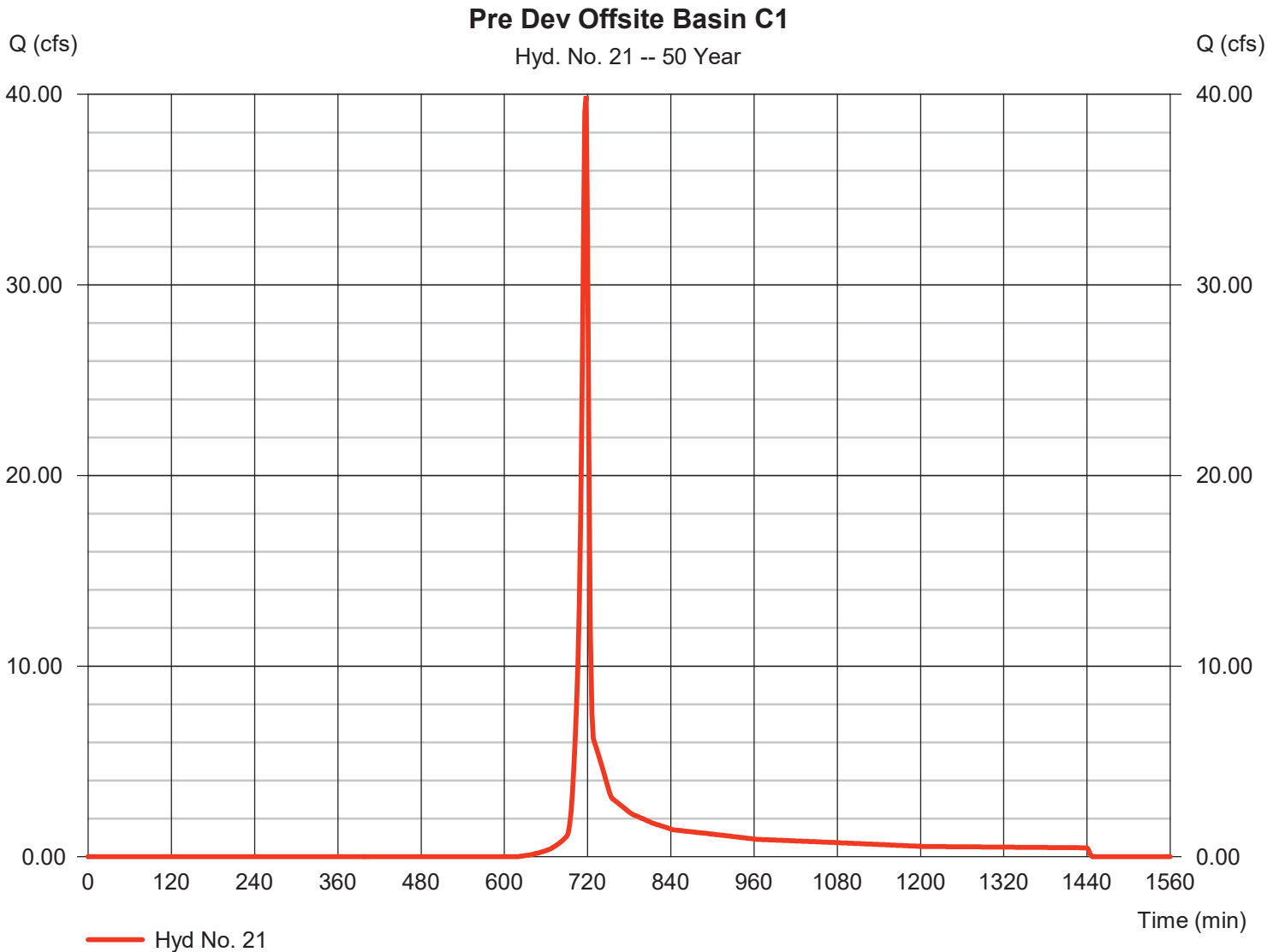


Hydrograph Report

Hyd. No. 21

Pre Dev Offsite Basin C1

Hydrograph type	= SCS Runoff	Peak discharge	= 39.91 cfs
Storm frequency	= 50 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 79,797 cuft
Drainage area	= 9.130 ac	Curve number	= 60
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 6.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hyd. No. 22

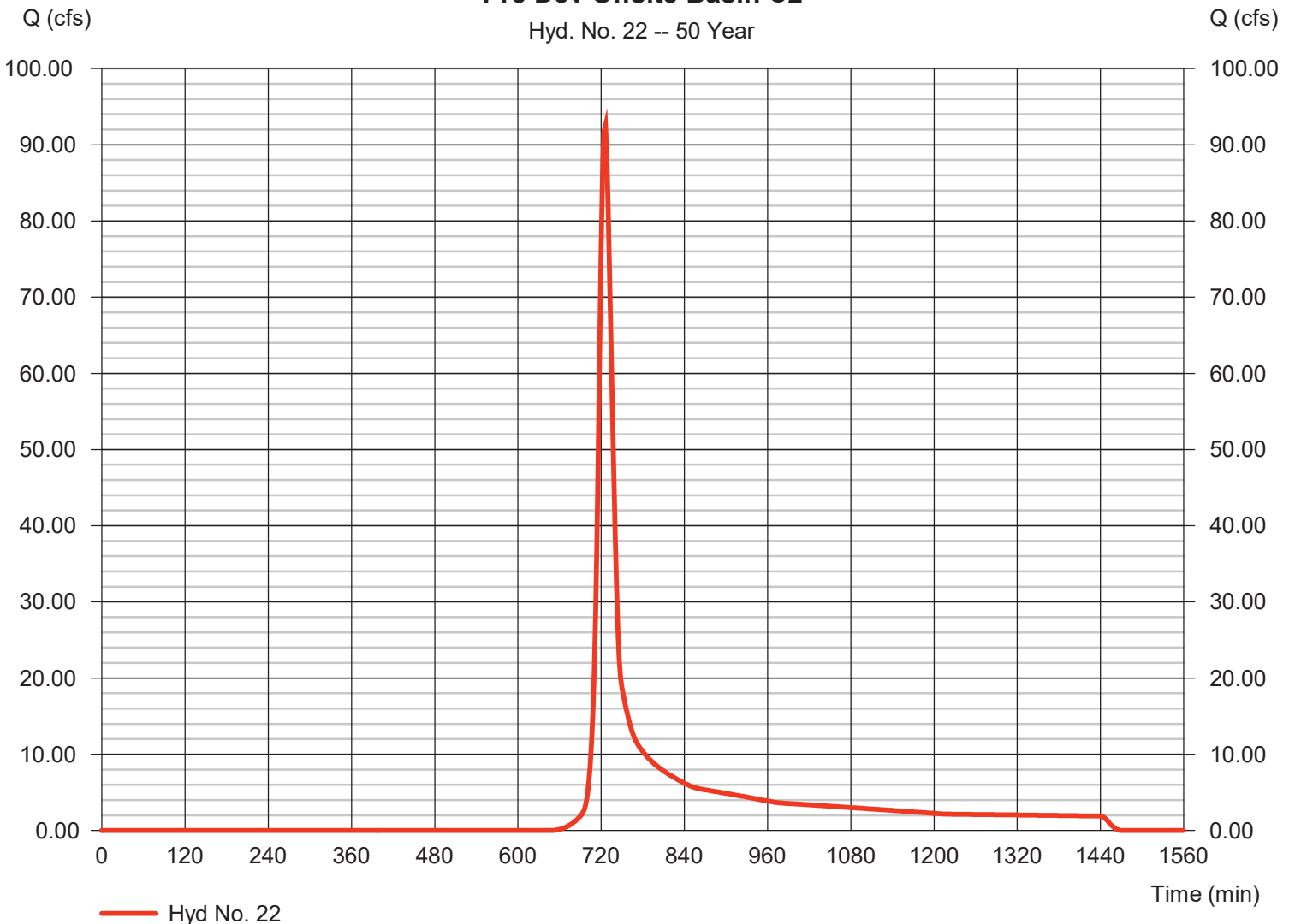
Pre Dev Offsite Basin C2

Hydrograph type = SCS Runoff
Storm frequency = 50 yrs
Time interval = 2 min
Drainage area = 36.720 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 6.95 in
Storm duration = 24 hrs

Peak discharge = 92.53 cfs
Time to peak = 726 min
Hyd. volume = 303,920 cuft
Curve number = 57
Hydraulic length = 0 ft
Time of conc. (Tc) = 18.00 min
Distribution = Type II
Shape factor = 484

Pre Dev Offsite Basin C2

Hyd. No. 22 -- 50 Year

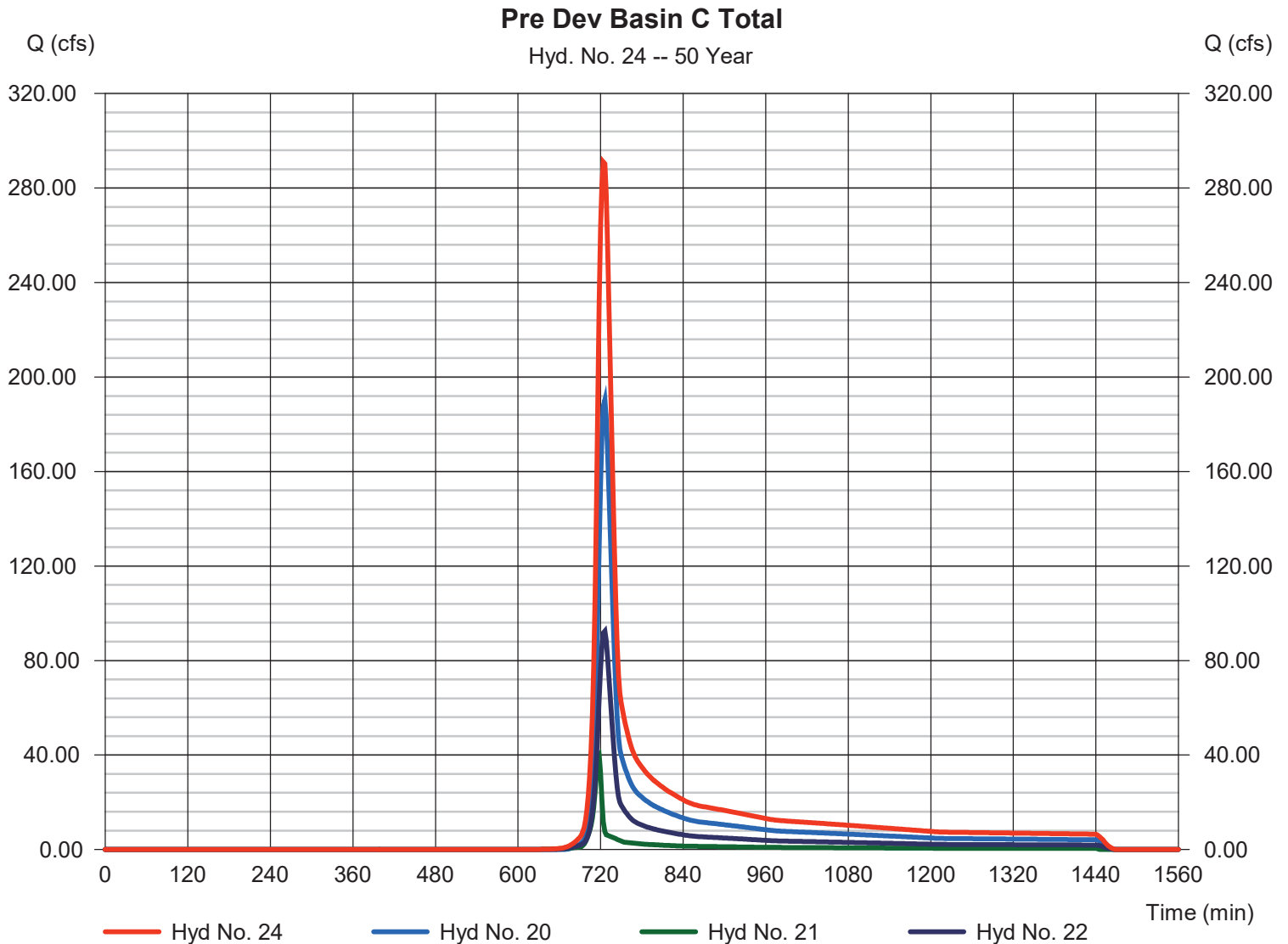


Hydrograph Report

Hyd. No. 24

Pre Dev Basin C Total

Hydrograph type	= Combine	Peak discharge	= 291.06 cfs
Storm frequency	= 50 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 1,018,850 cuft
Inflow hyds.	= 20, 21, 22	Contrib. drain. area	= 129.480 ac



Hydrograph Report

Hyd. No. 26

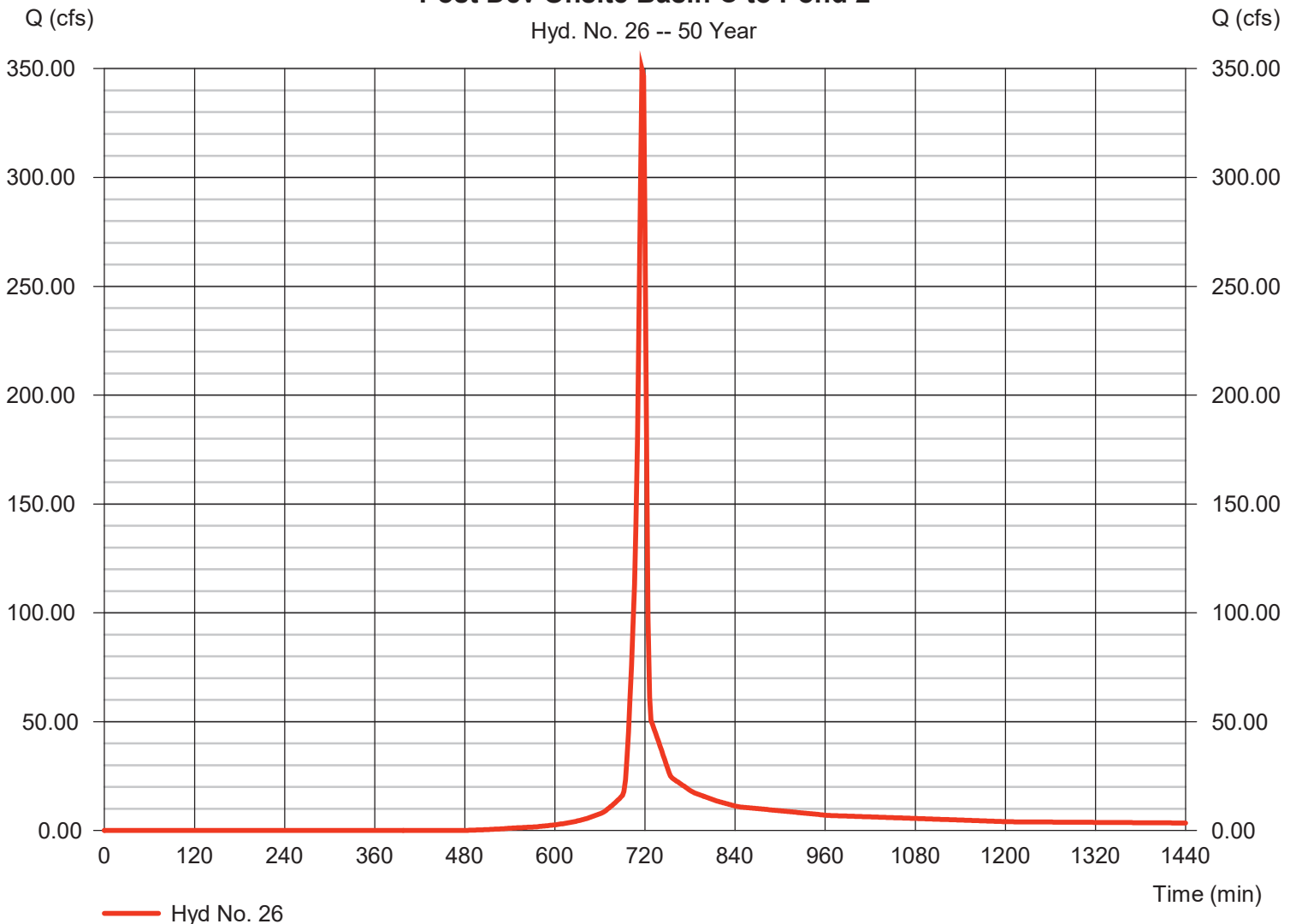
Post Dev Onsite Basin C to Pond 2

Hydrograph type = SCS Runoff
Storm frequency = 50 yrs
Time interval = 2 min
Drainage area = 56.470 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 6.95 in
Storm duration = 24 hrs

Peak discharge = 349.68 cfs
Time to peak = 716 min
Hyd. volume = 707,468 cuft
Curve number = 71
Hydraulic length = 0 ft
Time of conc. (Tc) = 5.00 min
Distribution = Type II
Shape factor = 484

Post Dev Onsite Basin C to Pond 2

Hyd. No. 26 -- 50 Year



Hydrograph Report

Hyd. No. 27

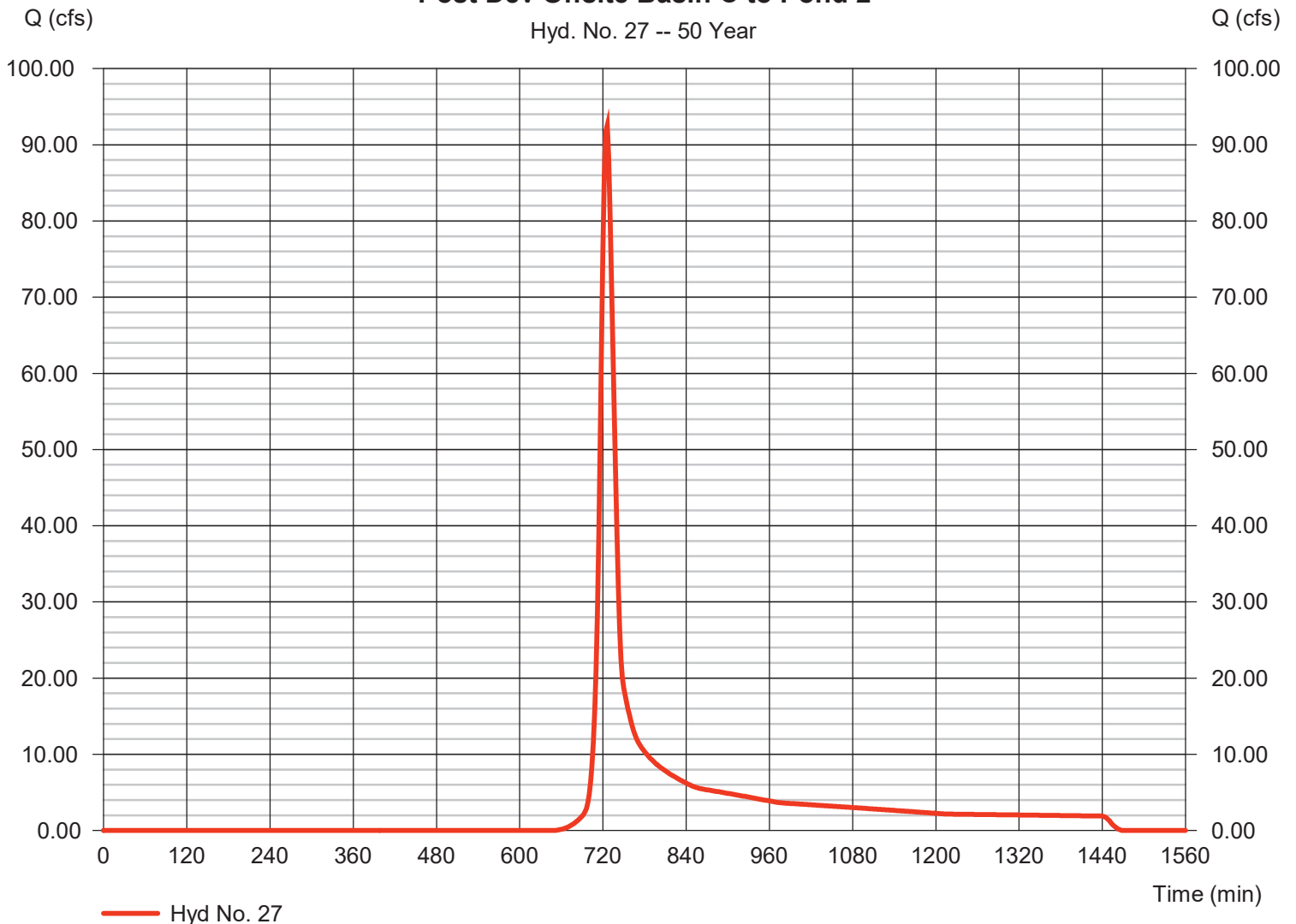
Post Dev Offsite Basin C to Pond 2

Hydrograph type = SCS Runoff
Storm frequency = 50 yrs
Time interval = 2 min
Drainage area = 36.720 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 6.95 in
Storm duration = 24 hrs

Peak discharge = 92.53 cfs
Time to peak = 726 min
Hyd. volume = 303,920 cuft
Curve number = 57
Hydraulic length = 0 ft
Time of conc. (Tc) = 18.00 min
Distribution = Type II
Shape factor = 484

Post Dev Offsite Basin C to Pond 2

Hyd. No. 27 -- 50 Year

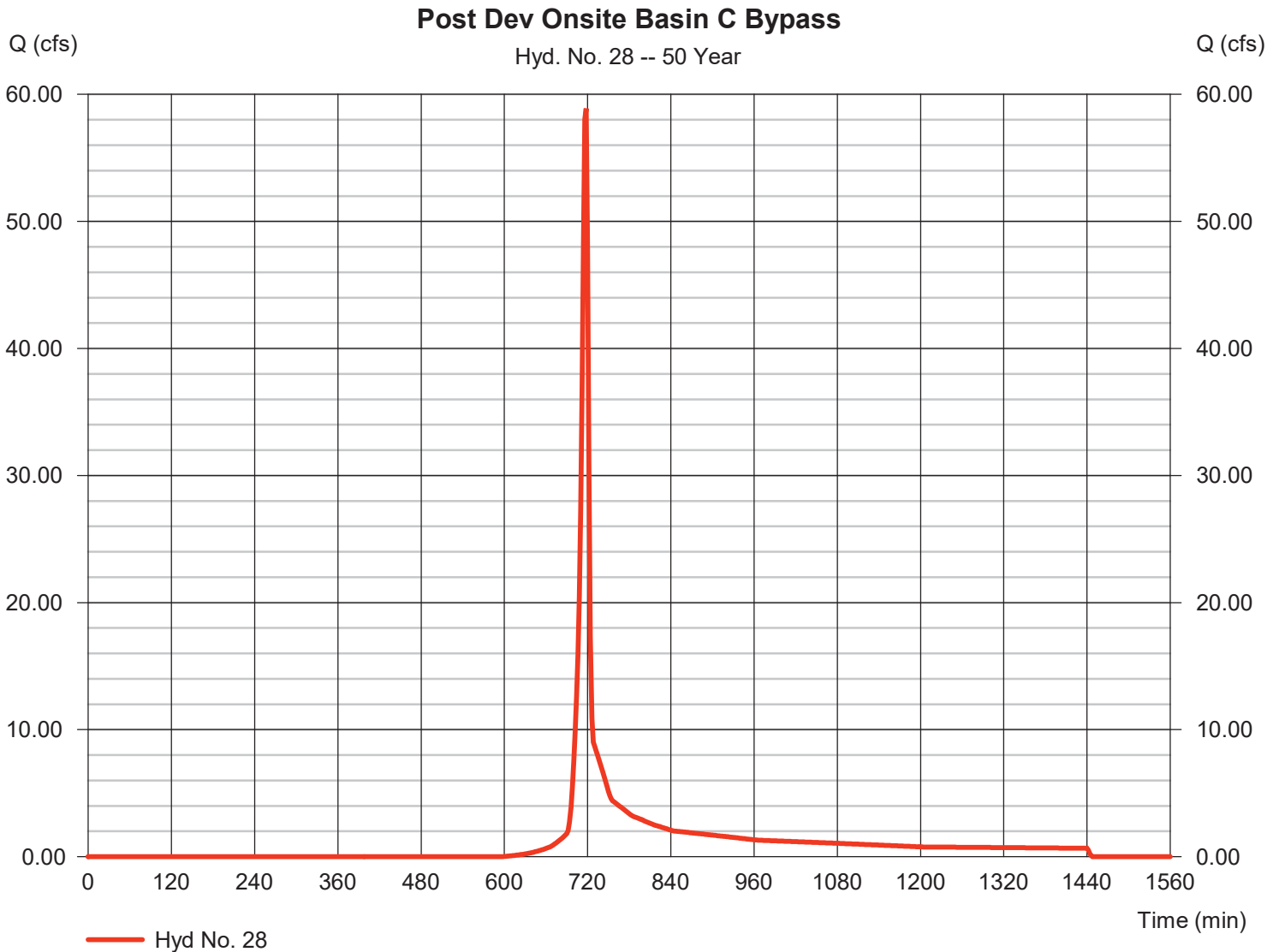


Hydrograph Report

Hyd. No. 28

Post Dev Onsite Basin C Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 58.89 cfs
Storm frequency	= 50 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 117,875 cuft
Drainage area	= 12.530 ac	Curve number	= 62
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

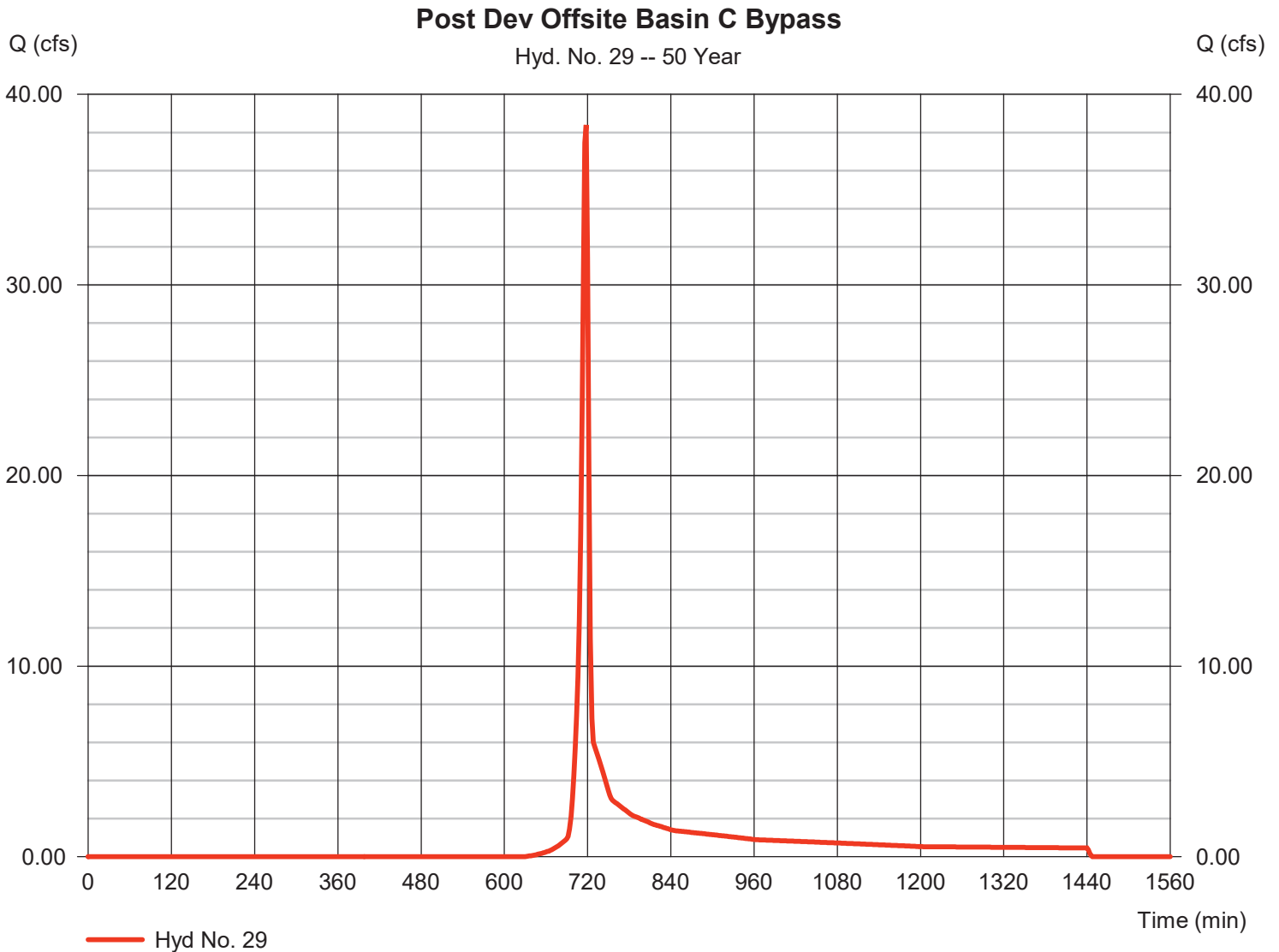


Hydrograph Report

Hyd. No. 29

Post Dev Offsite Basin C Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 38.39 cfs
Storm frequency	= 50 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 76,788 cuft
Drainage area	= 9.130 ac	Curve number	= 59
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 6.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hyd. No. 31

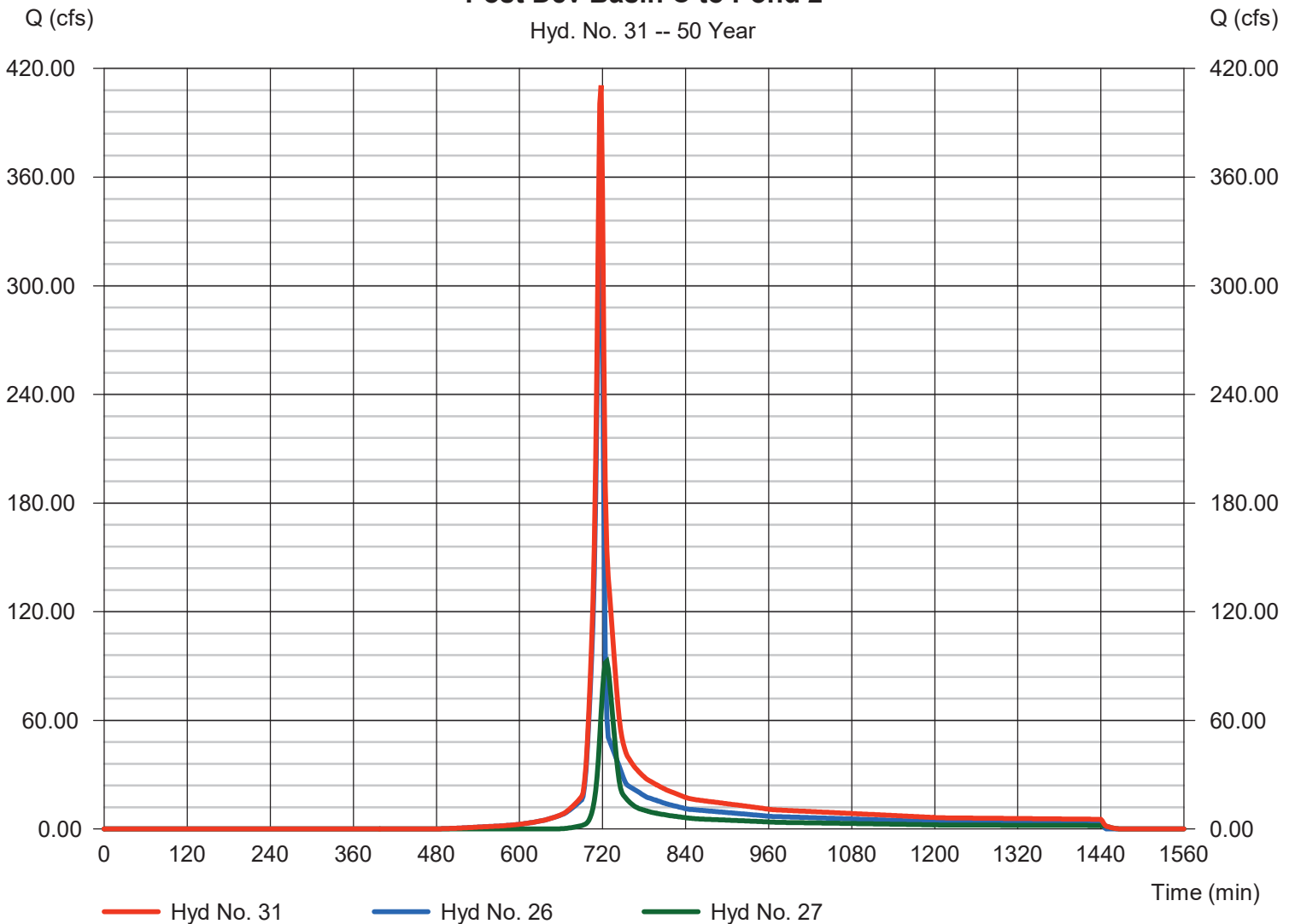
Post Dev Basin C to Pond 2

Hydrograph type = Combine
Storm frequency = 50 yrs
Time interval = 2 min
Inflow hyds. = 26, 27

Peak discharge = 410.75 cfs
Time to peak = 718 min
Hyd. volume = 1,011,387 cuft
Contrib. drain. area = 93.190 ac

Post Dev Basin C to Pond 2

Hyd. No. 31 -- 50 Year



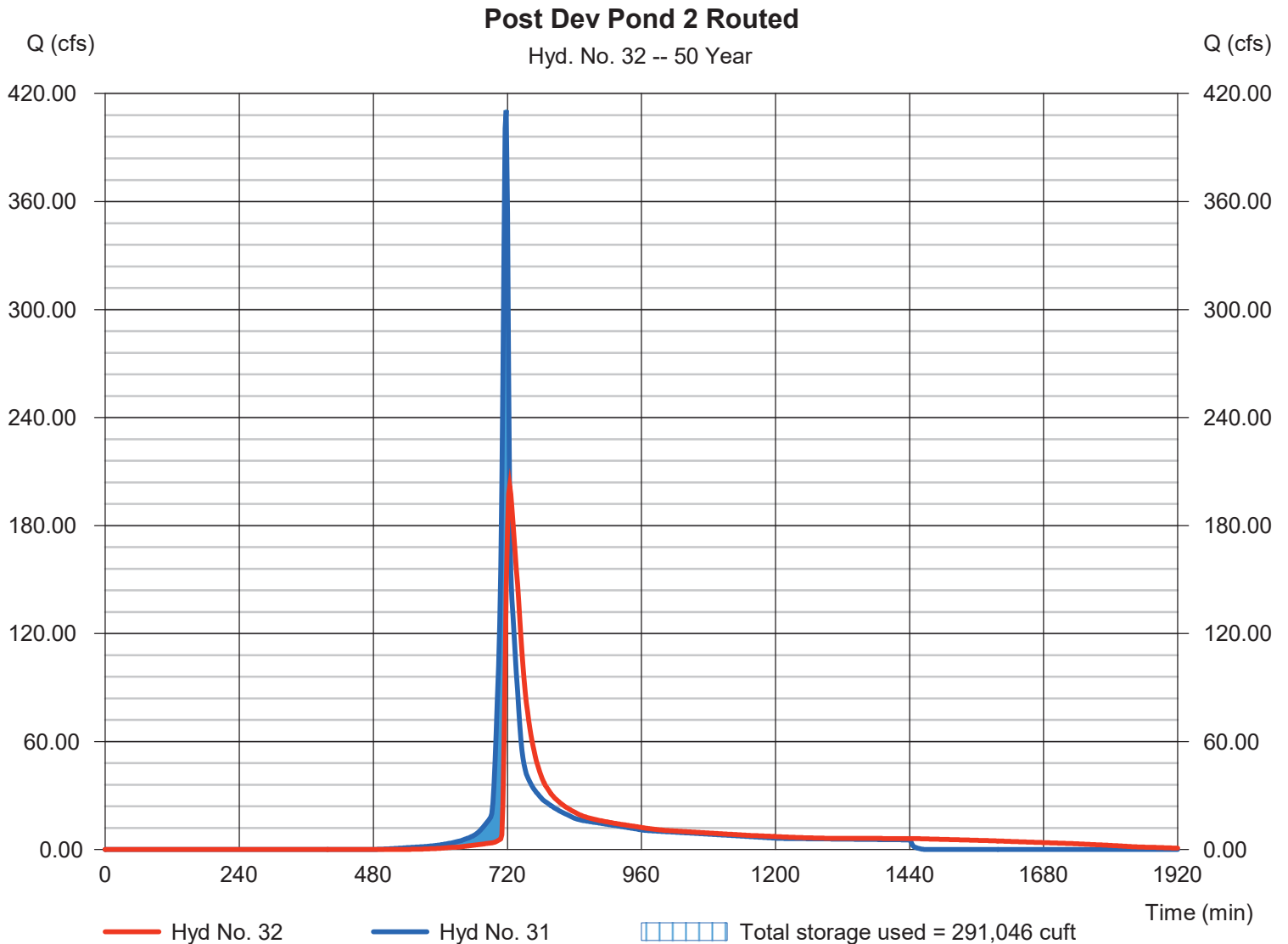
Hydrograph Report

Hyd. No. 32

Post Dev Pond 2 Routed

Hydrograph type	= Reservoir	Peak discharge	= 201.97 cfs
Storm frequency	= 50 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 1,011,368 cuft
Inflow hyd. No.	= 31 - Post Dev Basin C to Pond 2	Max. Elevation	= 1112.13 ft
Reservoir name	= Pond 2	Max. Storage	= 291,046 cuft

Storage Indication method used.



Hydrograph Report

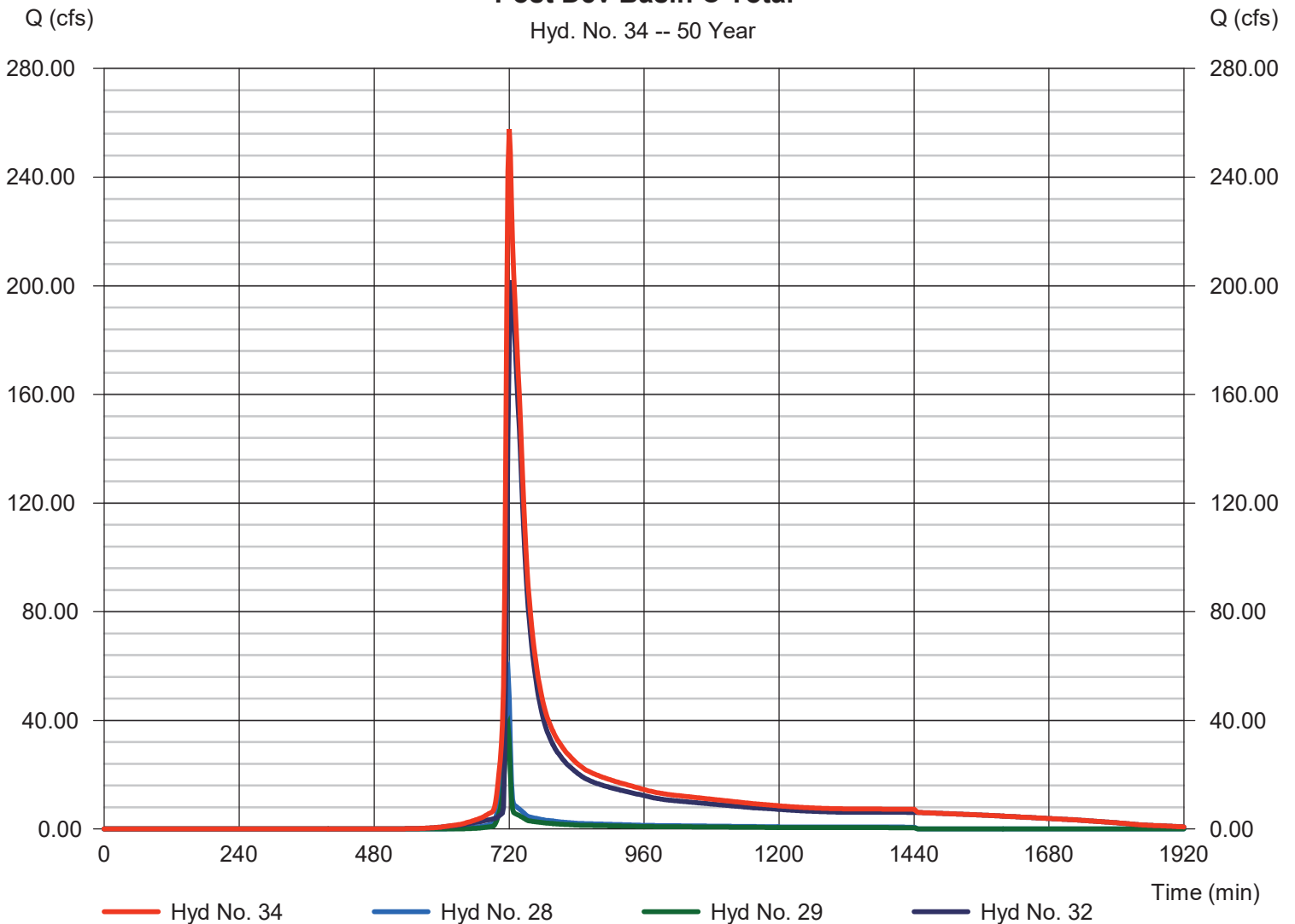
Hyd. No. 34

Post Dev Basin C Total

Hydrograph type	= Combine	Peak discharge	= 257.73 cfs
Storm frequency	= 50 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 1,206,030 cuft
Inflow hyds.	= 28, 29, 32	Contrib. drain. area	= 21.660 ac

Post Dev Basin C Total

Hyd. No. 34 -- 50 Year

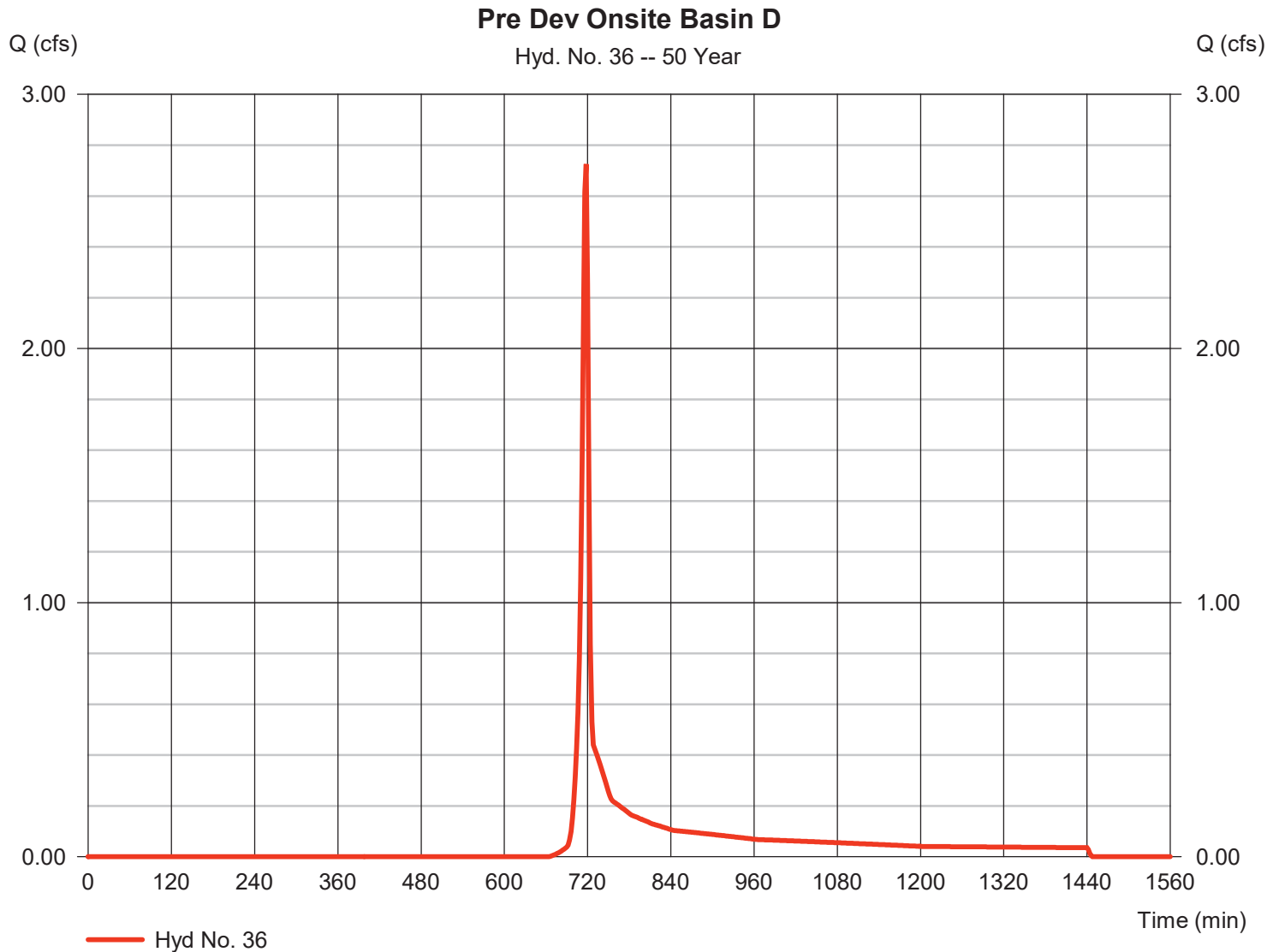


Hydrograph Report

Hyd. No. 36

Pre Dev Onsite Basin D

Hydrograph type	= SCS Runoff	Peak discharge	= 2.725 cfs
Storm frequency	= 50 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 5,482 cuft
Drainage area	= 0.770 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

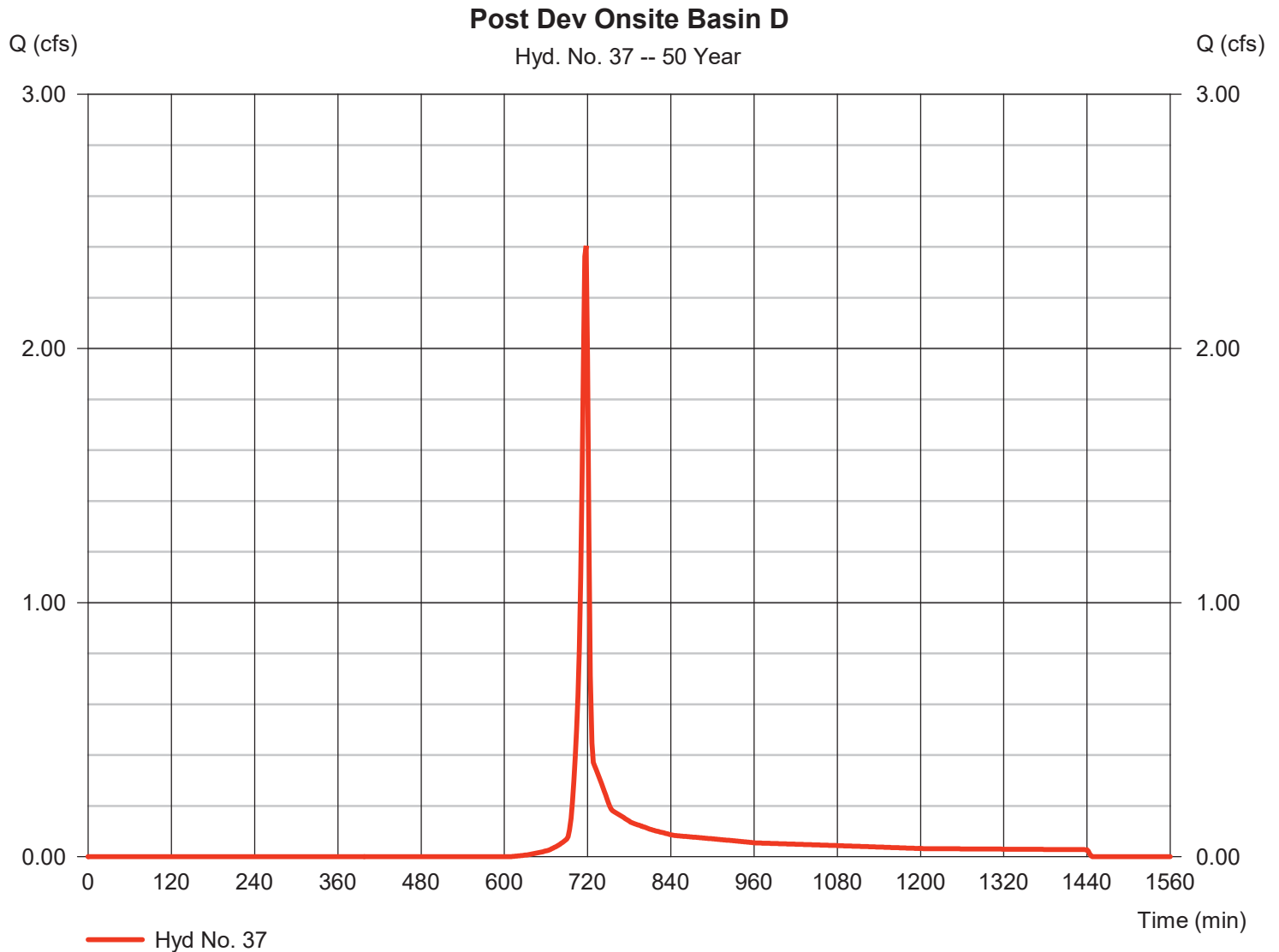


Hydrograph Report

Hyd. No. 37

Post Dev Onsite Basin D

Hydrograph type	= SCS Runoff	Peak discharge	= 2.404 cfs
Storm frequency	= 50 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 4,808 cuft
Drainage area	= 0.530 ac	Curve number	= 61
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.95 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2022

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	134.70	2	728	488,696	-----	-----	-----	Pre Dev Onsite Basin A
2	SCS Runoff	37.08	2	722	97,059	-----	-----	-----	Pre Dev Offite Basin A1
3	SCS Runoff	2.899	2	720	6,648	-----	-----	-----	Pre Dev Offsite Basin A2
5	Combine	163.69	2	726	592,403	1, 2, 3,	-----	-----	Pre Dev Basin A Total
7	SCS Runoff	353.83	2	716	729,741	-----	-----	-----	Post Dev Onsite Basin A to Pond 1
8	SCS Runoff	8.334	2	722	21,887	-----	-----	-----	Post Dev Offsite Basin A to Pond 1
9	SCS Runoff	30.15	2	720	69,026	-----	-----	-----	Post Dev Offsite Basin A1 Bypass
10	SCS Runoff	2.899	2	720	6,648	-----	-----	-----	Post Dev Offsite Basin A2 Bypass
12	Combine	360.10	2	716	751,629	7, 8,	-----	-----	Post Dev Basin A to Pond 1
13	Reservoir	148.59	2	722	735,656	12	1063.38	324,674	Post Dev Pond 1 Routed
15	Combine	177.62	2	722	811,331	9, 10, 13,	-----	-----	Post Dev Basin A Total
17	SCS Runoff	13.87	2	730	53,664	-----	-----	-----	Pre Dev Onsite Basin B
18	SCS Runoff	42.99	2	720	113,162	-----	-----	-----	Post Dev Onsite Basin B
20	SCS Runoff	244.76	2	726	799,853	-----	-----	-----	Pre Dev Onsite Basin C
21	SCS Runoff	49.17	2	718	98,470	-----	-----	-----	Pre Dev Offsite Basin C1
22	SCS Runoff	117.37	2	726	379,456	-----	-----	-----	Pre Dev Offsite Basin C2
24	Combine	374.08	2	724	1,277,780	20, 21, 22,	-----	-----	Pre Dev Basin C Total
26	SCS Runoff	415.42	2	716	843,398	-----	-----	-----	Post Dev Onsite Basin C to Pond 2
27	SCS Runoff	117.37	2	726	379,456	-----	-----	-----	Post Dev Offsite Basin C to Pond 2
28	SCS Runoff	71.92	2	718	144,423	-----	-----	-----	Post Dev Onsite Basin C Bypass
29	SCS Runoff	47.53	2	718	95,113	-----	-----	-----	Post Dev Offsite Basin C Bypass
31	Combine	493.70	2	718	1,222,854	26, 27,	-----	-----	Post Dev Basin C to Pond 2
32	Reservoir	265.72	2	724	1,222,834	31	1113.19	336,562	Post Dev Pond 2 Routed
34	Combine	341.86	2	720	1,462,372	28, 29, 32,	-----	-----	Post Dev Basin C Total
36	SCS Runoff	3.449	2	718	6,904	-----	-----	-----	Pre Dev Onsite Basin D
37	SCS Runoff	2.949	2	718	5,912	-----	-----	-----	Post Dev Onsite Basin D
1220263 Hydrology Concept.gpw					Return Period: 100 Year			Friday, 01 / 31 / 2025	

Hydrograph Report

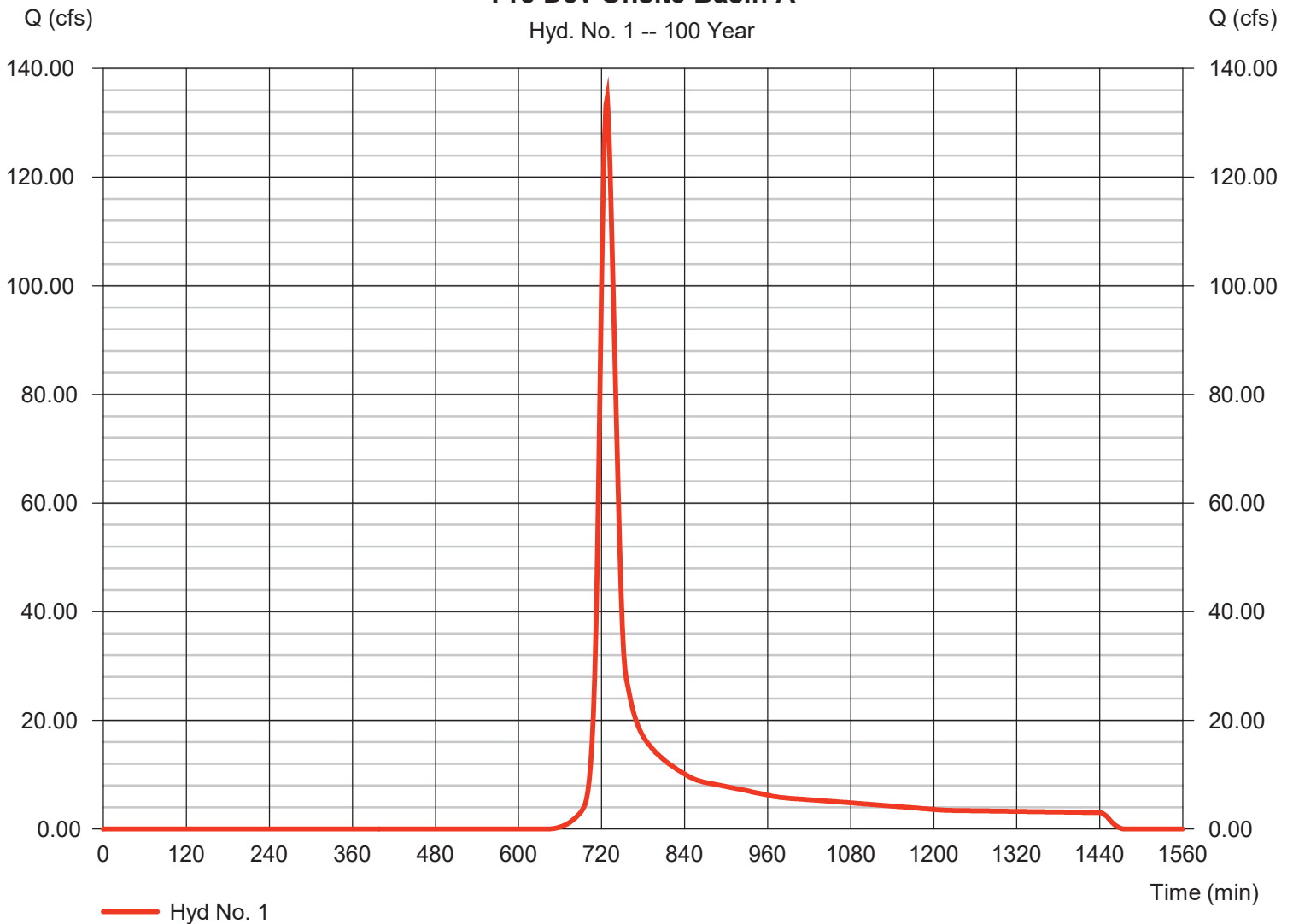
Hyd. No. 1

Pre Dev Onsite Basin A

Hydrograph type	= SCS Runoff	Peak discharge	= 134.70 cfs
Storm frequency	= 100 yrs	Time to peak	= 728 min
Time interval	= 2 min	Hyd. volume	= 488,696 cuft
Drainage area	= 50.200 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 22.00 min
Total precip.	= 7.78 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Pre Dev Onsite Basin A

Hyd. No. 1 -- 100 Year

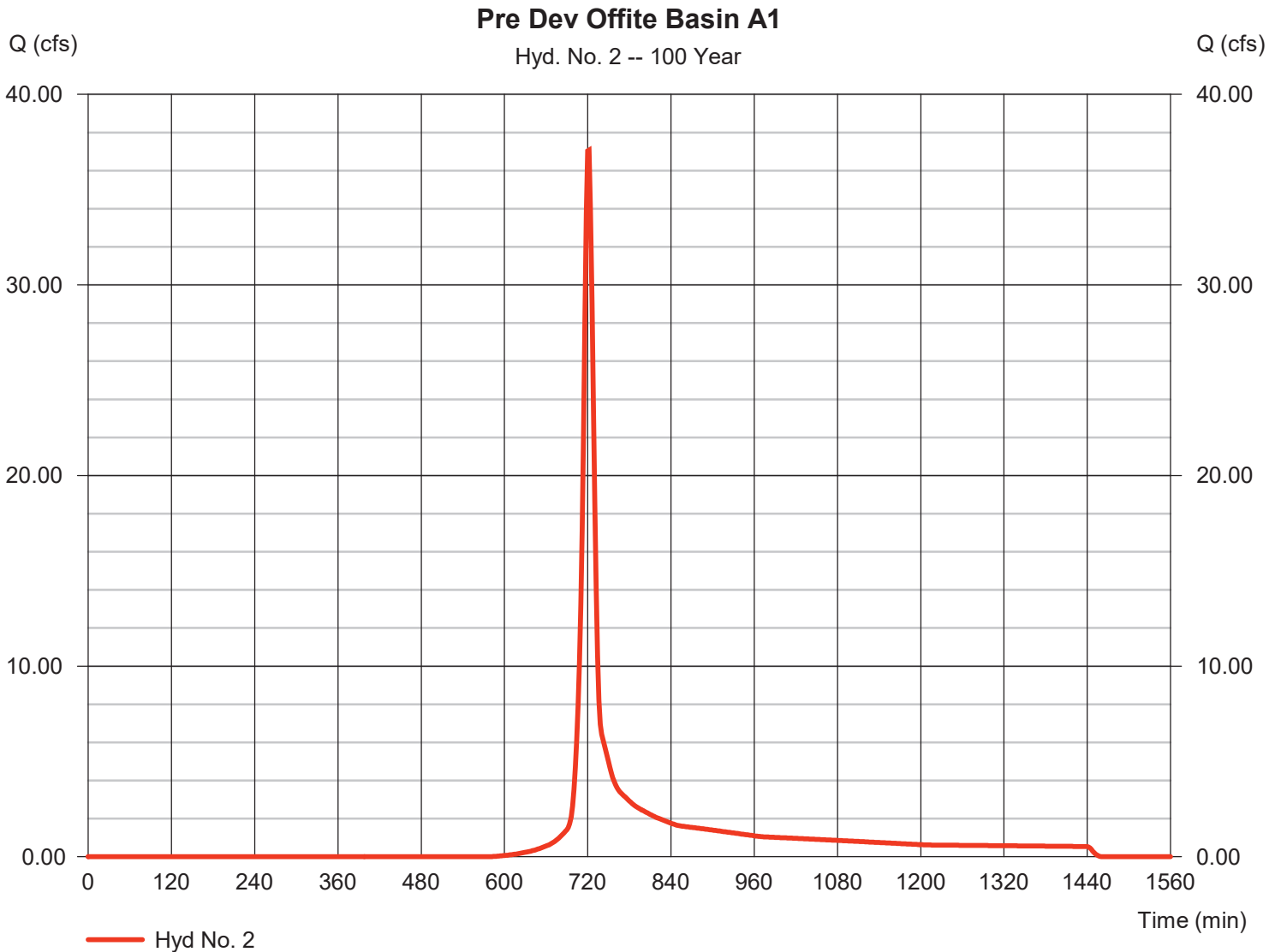


Hydrograph Report

Hyd. No. 2

Pre Dev Offite Basin A1

Hydrograph type	= SCS Runoff	Peak discharge	= 37.08 cfs
Storm frequency	= 100 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 97,059 cuft
Drainage area	= 7.910 ac	Curve number	= 61
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.00 min
Total precip.	= 7.78 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

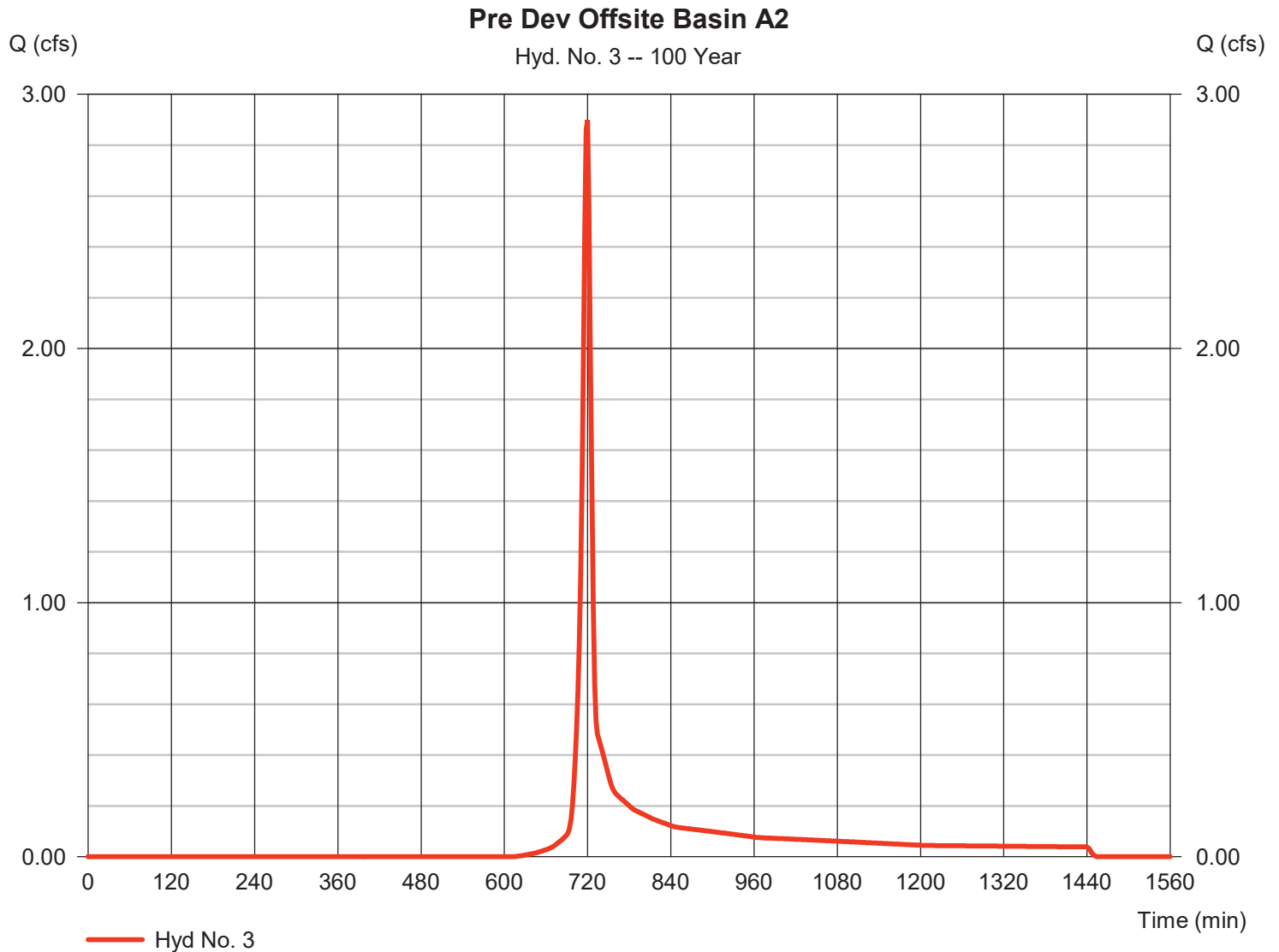


Hydrograph Report

Hyd. No. 3

Pre Dev Offsite Basin A2

Hydrograph type	= SCS Runoff	Peak discharge	= 2.899 cfs
Storm frequency	= 100 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 6,648 cuft
Drainage area	= 0.620 ac	Curve number	= 58
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 7.78 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hyd. No. 5

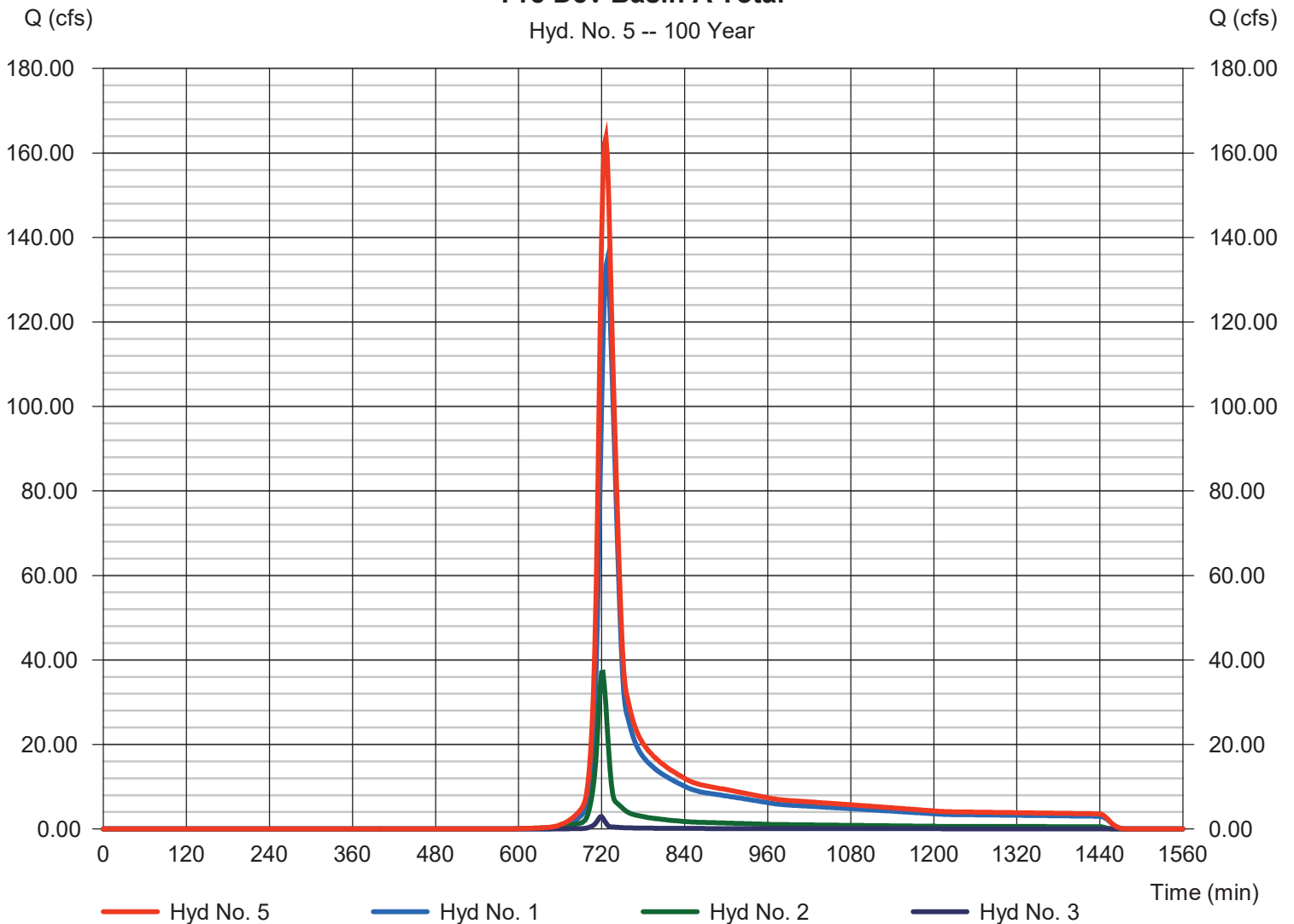
Pre Dev Basin A Total

Hydrograph type = Combine
Storm frequency = 100 yrs
Time interval = 2 min
Inflow hyds. = 1, 2, 3

Peak discharge = 163.69 cfs
Time to peak = 726 min
Hyd. volume = 592,403 cuft
Contrib. drain. area = 58.730 ac

Pre Dev Basin A Total

Hyd. No. 5 -- 100 Year



Hydrograph Report

Hyd. No. 7

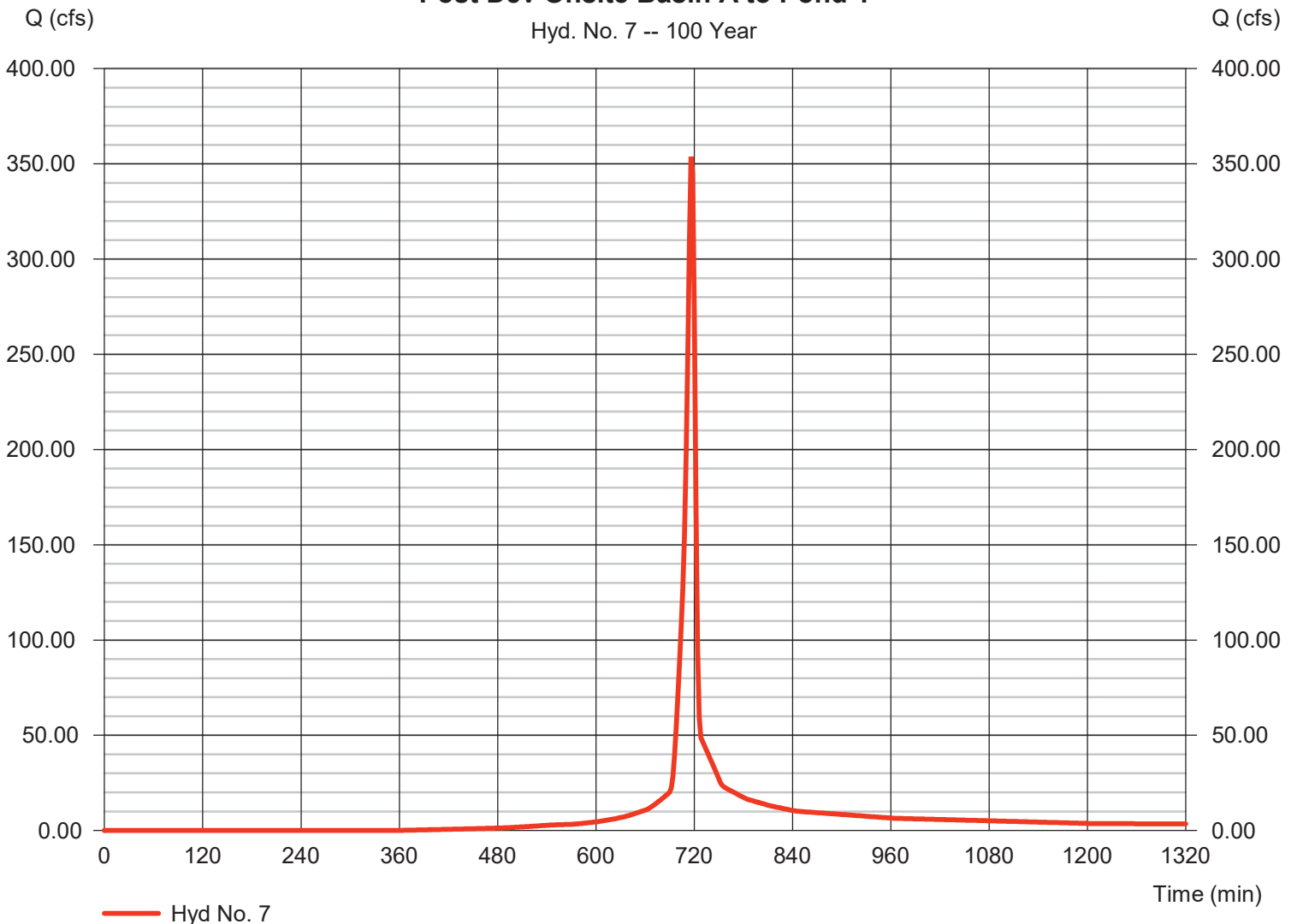
Post Dev Onsite Basin A to Pond 1

Hydrograph type = SCS Runoff
Storm frequency = 100 yrs
Time interval = 2 min
Drainage area = 42.270 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 7.78 in
Storm duration = 24 hrs

Peak discharge = 353.83 cfs
Time to peak = 716 min
Hyd. volume = 729,741 cuft
Curve number = 77
Hydraulic length = 0 ft
Time of conc. (Tc) = 5.00 min
Distribution = Type II
Shape factor = 484

Post Dev Onsite Basin A to Pond 1

Hyd. No. 7 -- 100 Year



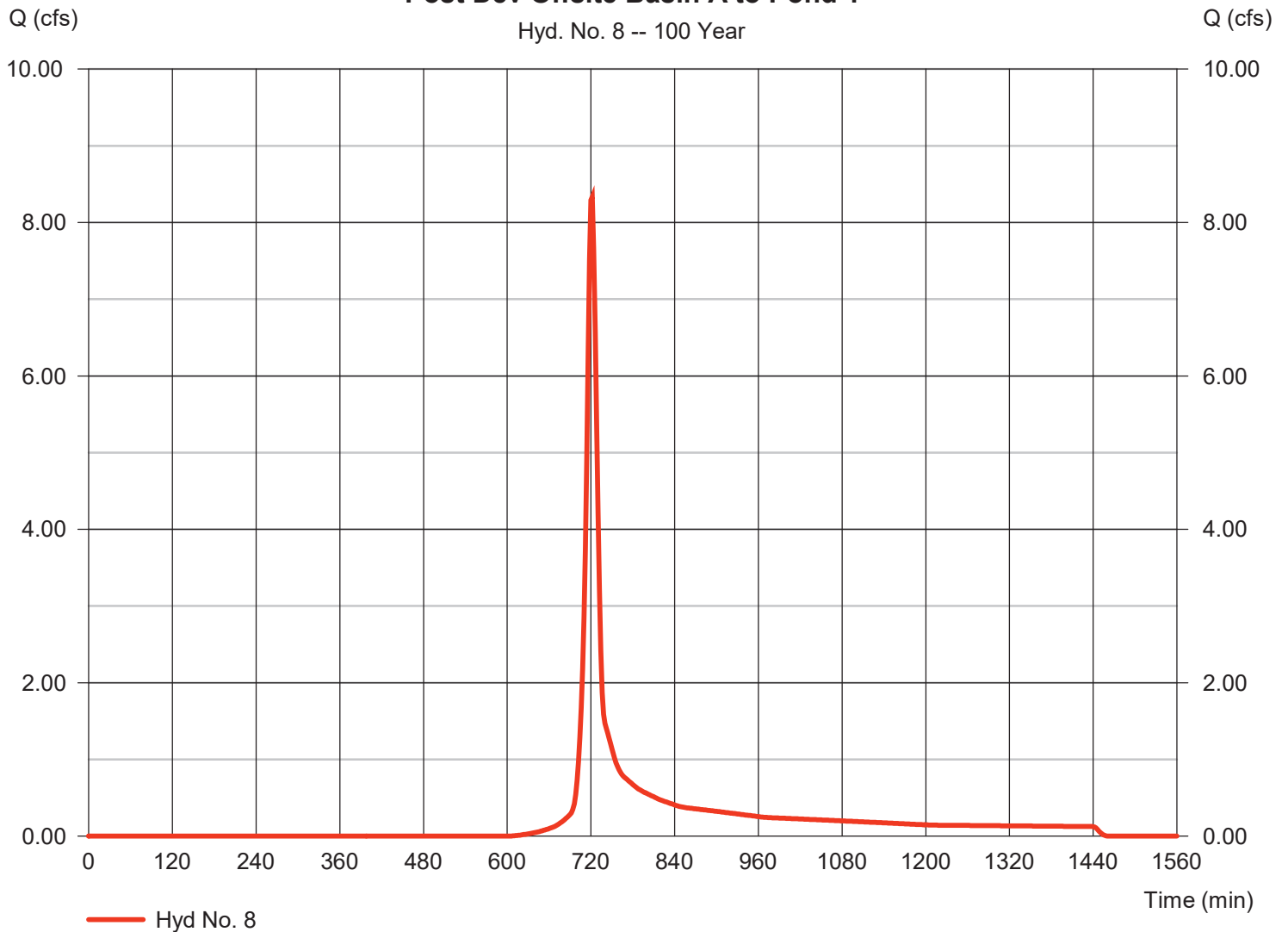
Hydrograph Report

Hyd. No. 8

Post Dev Offsite Basin A to Pond 1

Hydrograph type	= SCS Runoff	Peak discharge	= 8.334 cfs
Storm frequency	= 100 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 21,887 cuft
Drainage area	= 1.910 ac	Curve number	= 59
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 12.00 min
Total precip.	= 7.78 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A to Pond 1



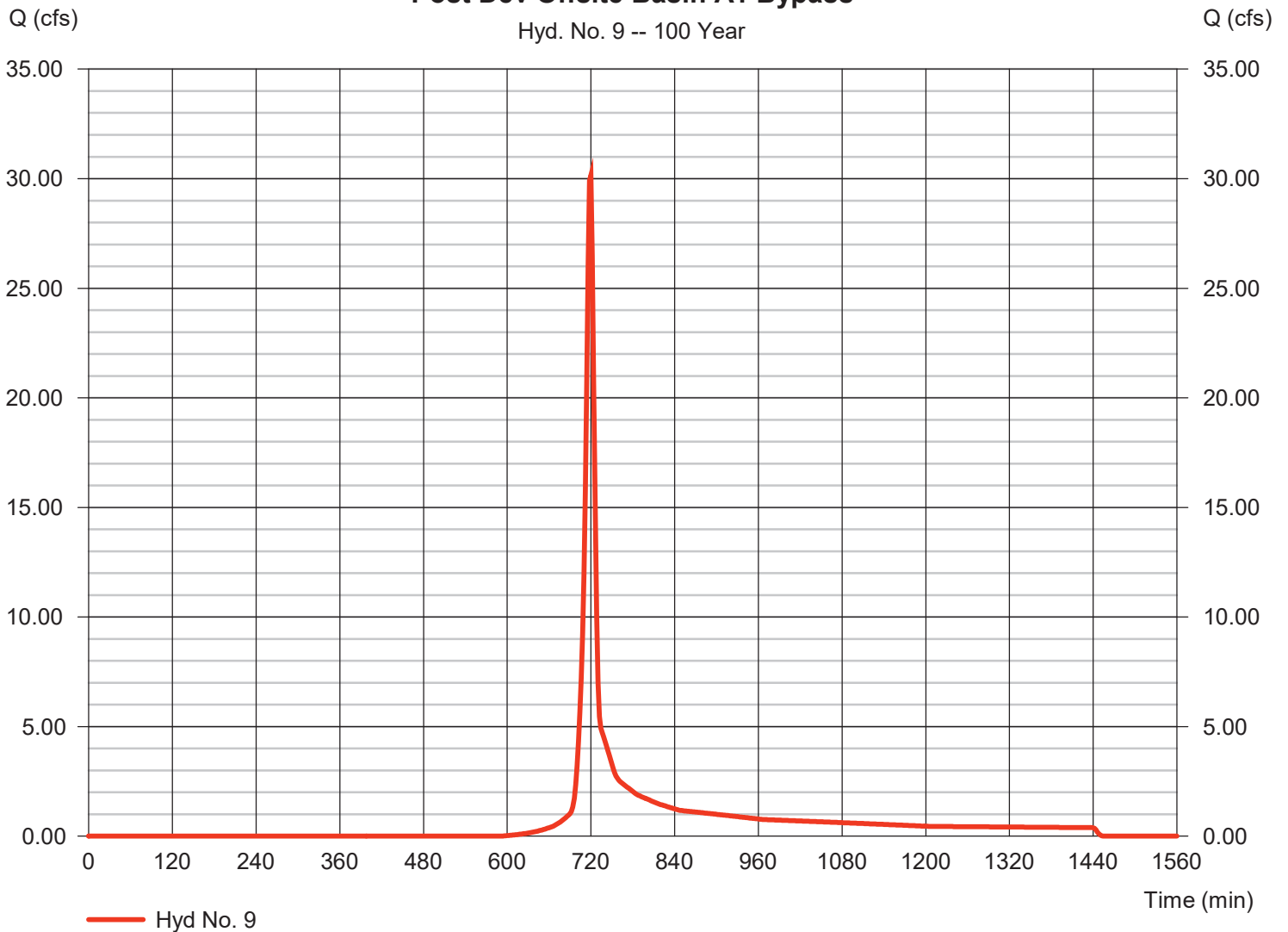
Hydrograph Report

Hyd. No. 9

Post Dev Offsite Basin A1 Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 30.15 cfs
Storm frequency	= 100 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 69,026 cuft
Drainage area	= 6.000 ac	Curve number	= 60
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 7.78 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A1 Bypass



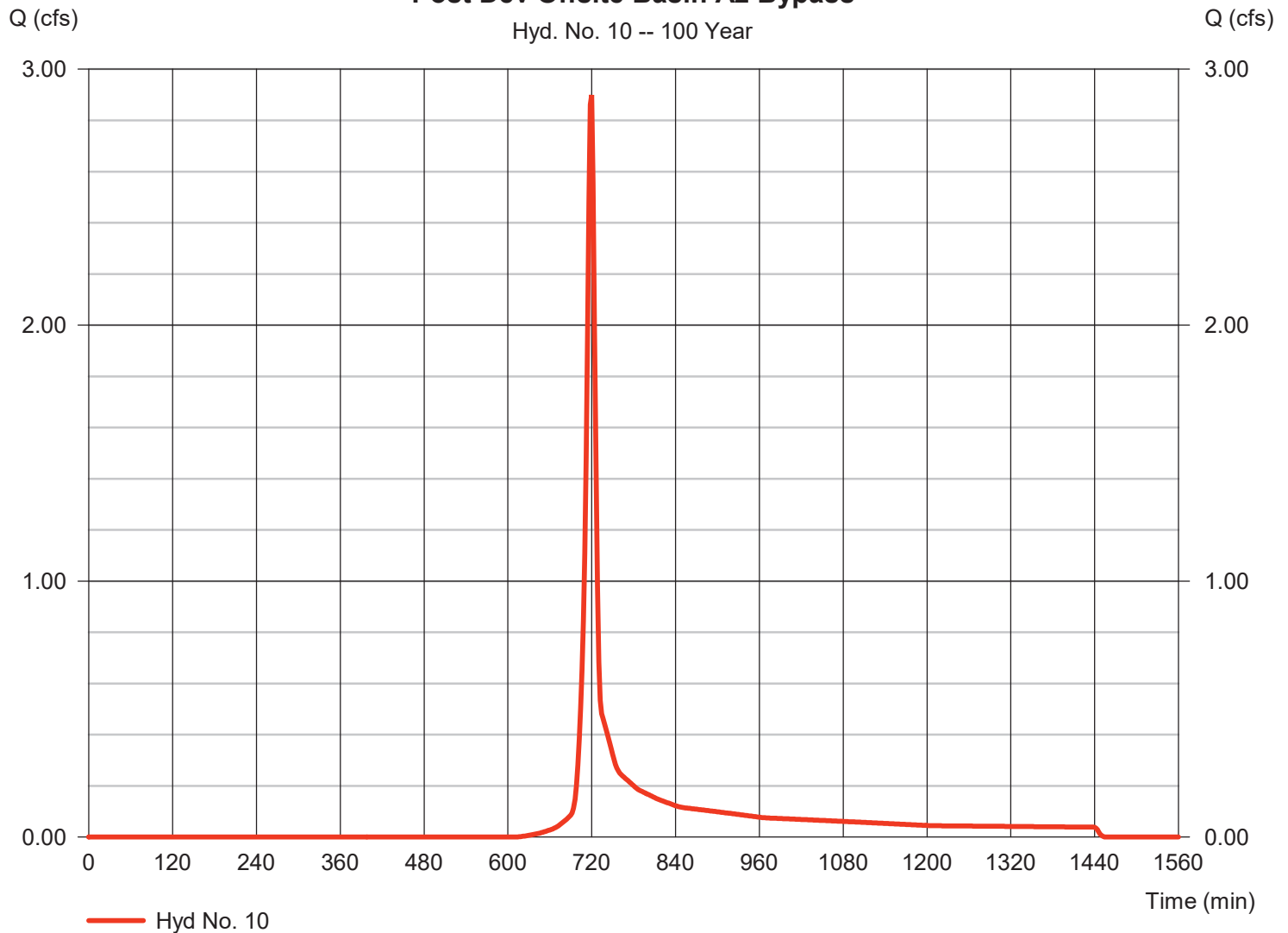
Hydrograph Report

Hyd. No. 10

Post Dev Offsite Basin A2 Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 2.899 cfs
Storm frequency	= 100 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 6,648 cuft
Drainage area	= 0.620 ac	Curve number	= 58
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 8.00 min
Total precip.	= 7.78 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

Post Dev Offsite Basin A2 Bypass



Hydrograph Report

Hyd. No. 12

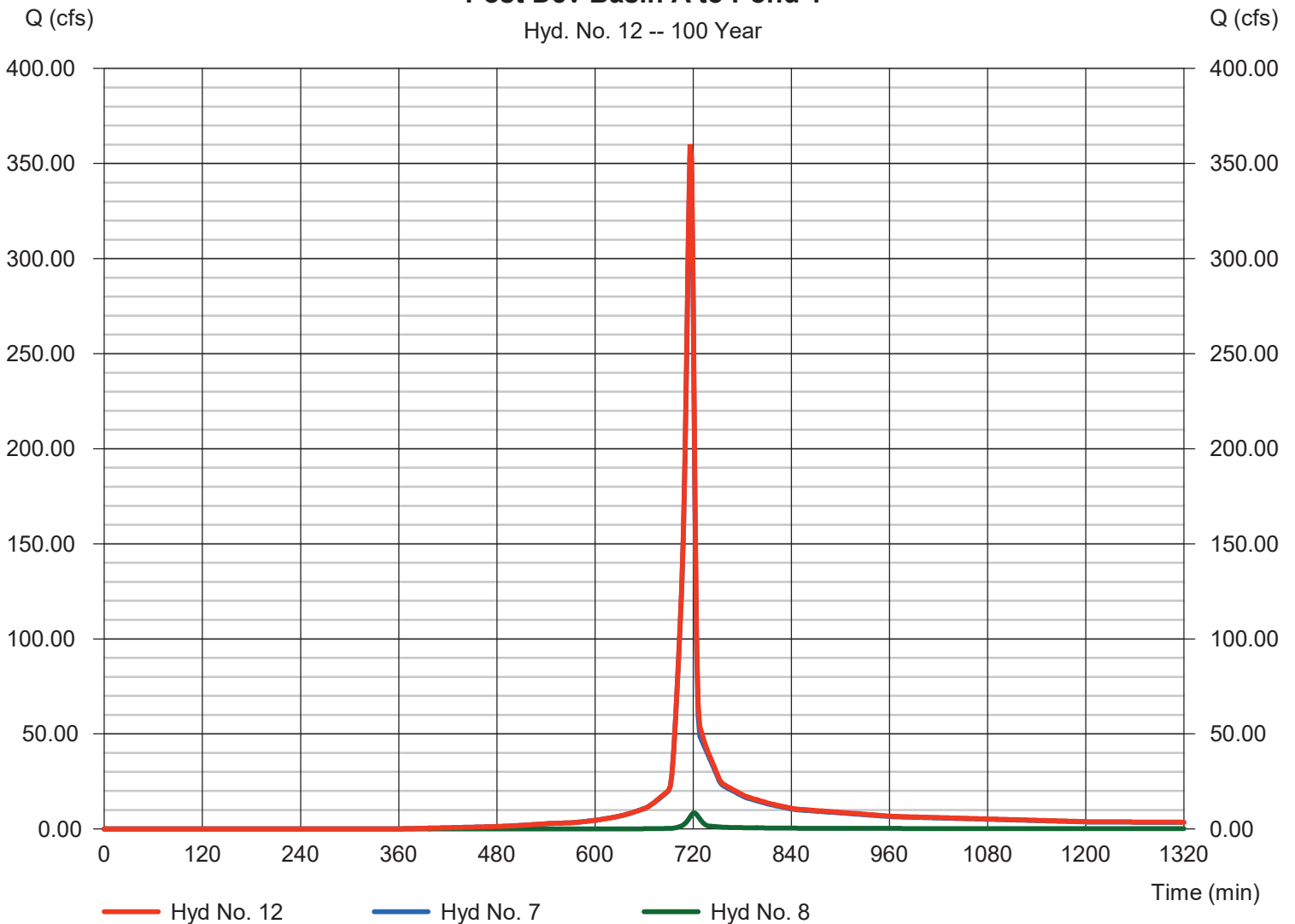
Post Dev Basin A to Pond 1

Hydrograph type = Combine
Storm frequency = 100 yrs
Time interval = 2 min
Inflow hyds. = 7, 8

Peak discharge = 360.10 cfs
Time to peak = 716 min
Hyd. volume = 751,629 cuft
Contrib. drain. area = 44.180 ac

Post Dev Basin A to Pond 1

Hyd. No. 12 -- 100 Year



Hydrograph Report

Hyd. No. 13

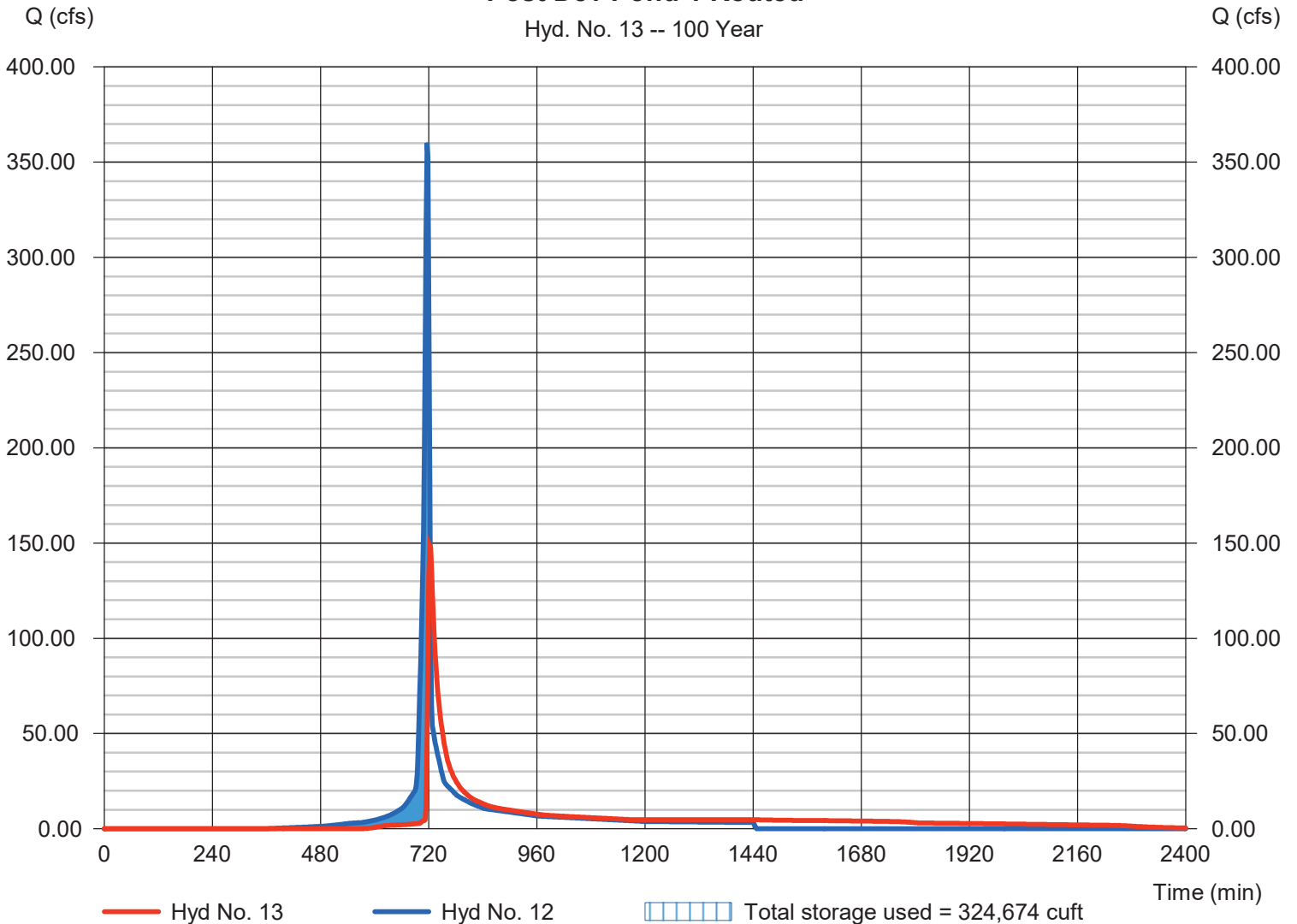
Post Dev Pond 1 Routed

Hydrograph type	= Reservoir	Peak discharge	= 148.59 cfs
Storm frequency	= 100 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 735,656 cuft
Inflow hyd. No.	= 12 - Post Dev Basin A to Pond	Max. Elevation	= 1063.38 ft
Reservoir name	= Pond 1	Max. Storage	= 324,674 cuft

Storage Indication method used.

Post Dev Pond 1 Routed

Hyd. No. 13 -- 100 Year



Hydrograph Report

Hyd. No. 15

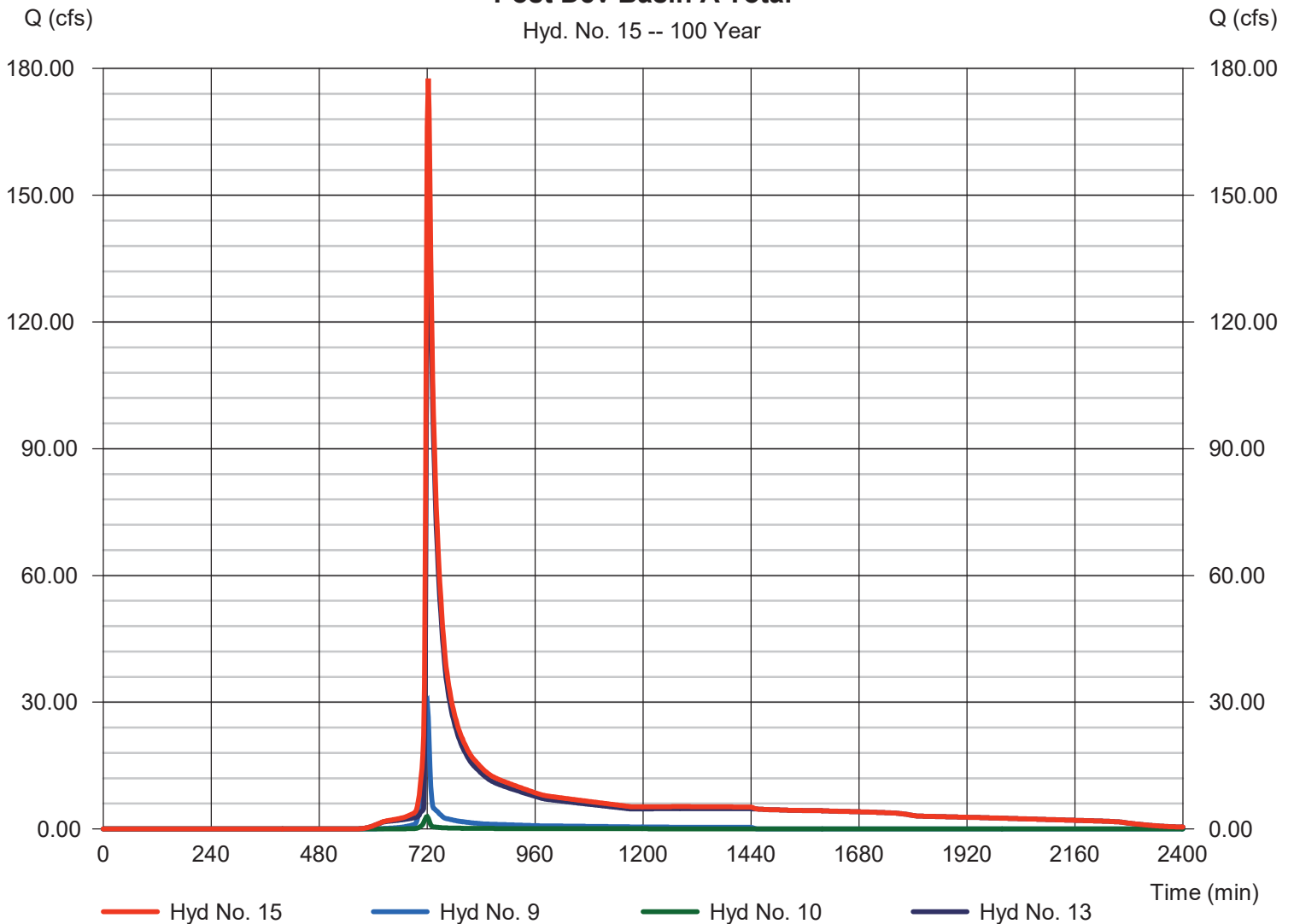
Post Dev Basin A Total

Hydrograph type = Combine
Storm frequency = 100 yrs
Time interval = 2 min
Inflow hyds. = 9, 10, 13

Peak discharge = 177.62 cfs
Time to peak = 722 min
Hyd. volume = 811,331 cuft
Contrib. drain. area = 6.620 ac

Post Dev Basin A Total

Hyd. No. 15 -- 100 Year

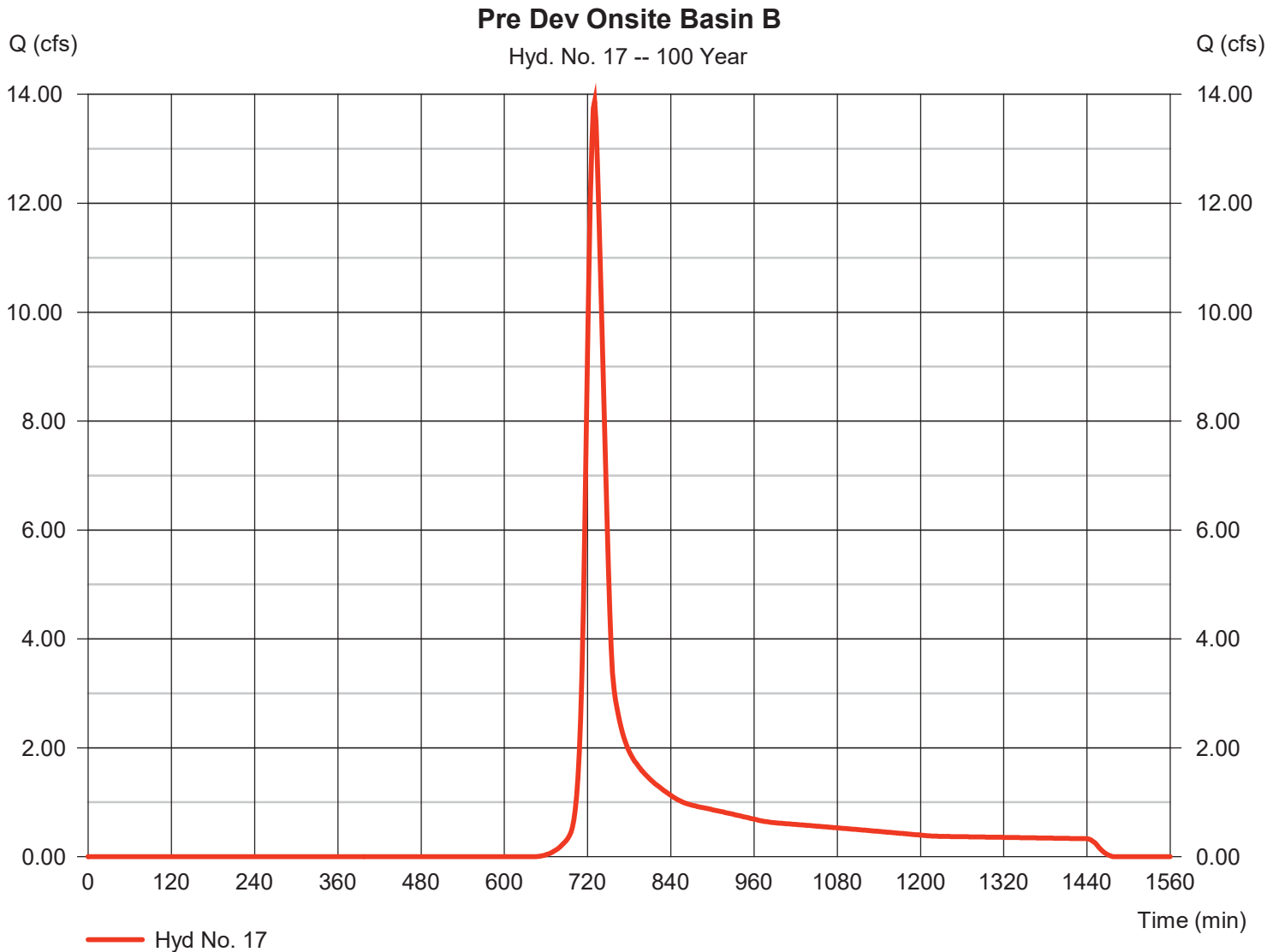


Hydrograph Report

Hyd. No. 17

Pre Dev Onsite Basin B

Hydrograph type	= SCS Runoff	Peak discharge	= 13.87 cfs
Storm frequency	= 100 yrs	Time to peak	= 730 min
Time interval	= 2 min	Hyd. volume	= 53,664 cuft
Drainage area	= 5.700 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 25.00 min
Total precip.	= 7.78 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

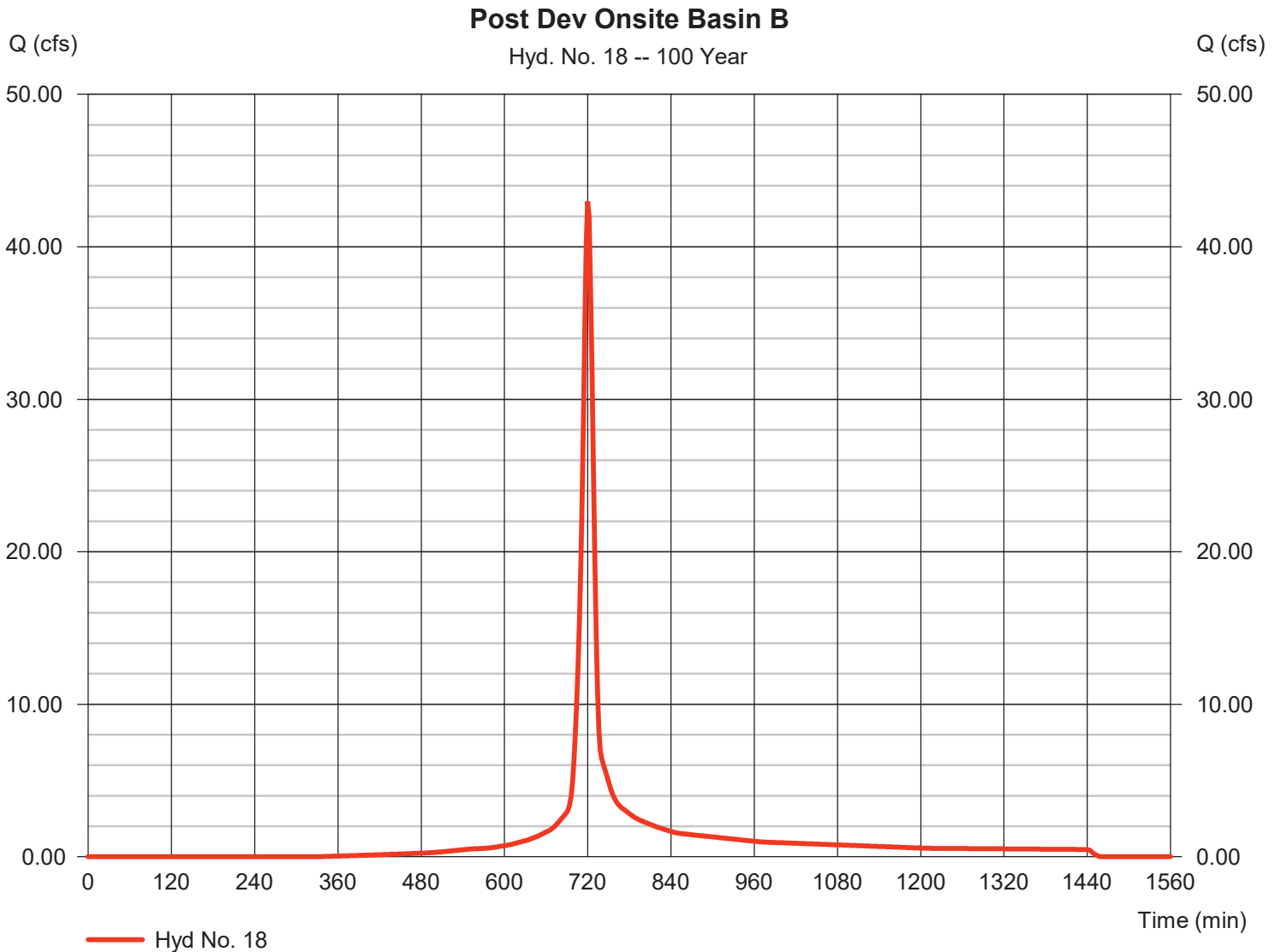


Hydrograph Report

Hyd. No. 18

Post Dev Onsite Basin B

Hydrograph type	= SCS Runoff	Peak discharge	= 42.99 cfs
Storm frequency	= 100 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 113,162 cuft
Drainage area	= 5.700 ac	Curve number	= 79
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.00 min
Total precip.	= 7.78 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hyd. No. 20

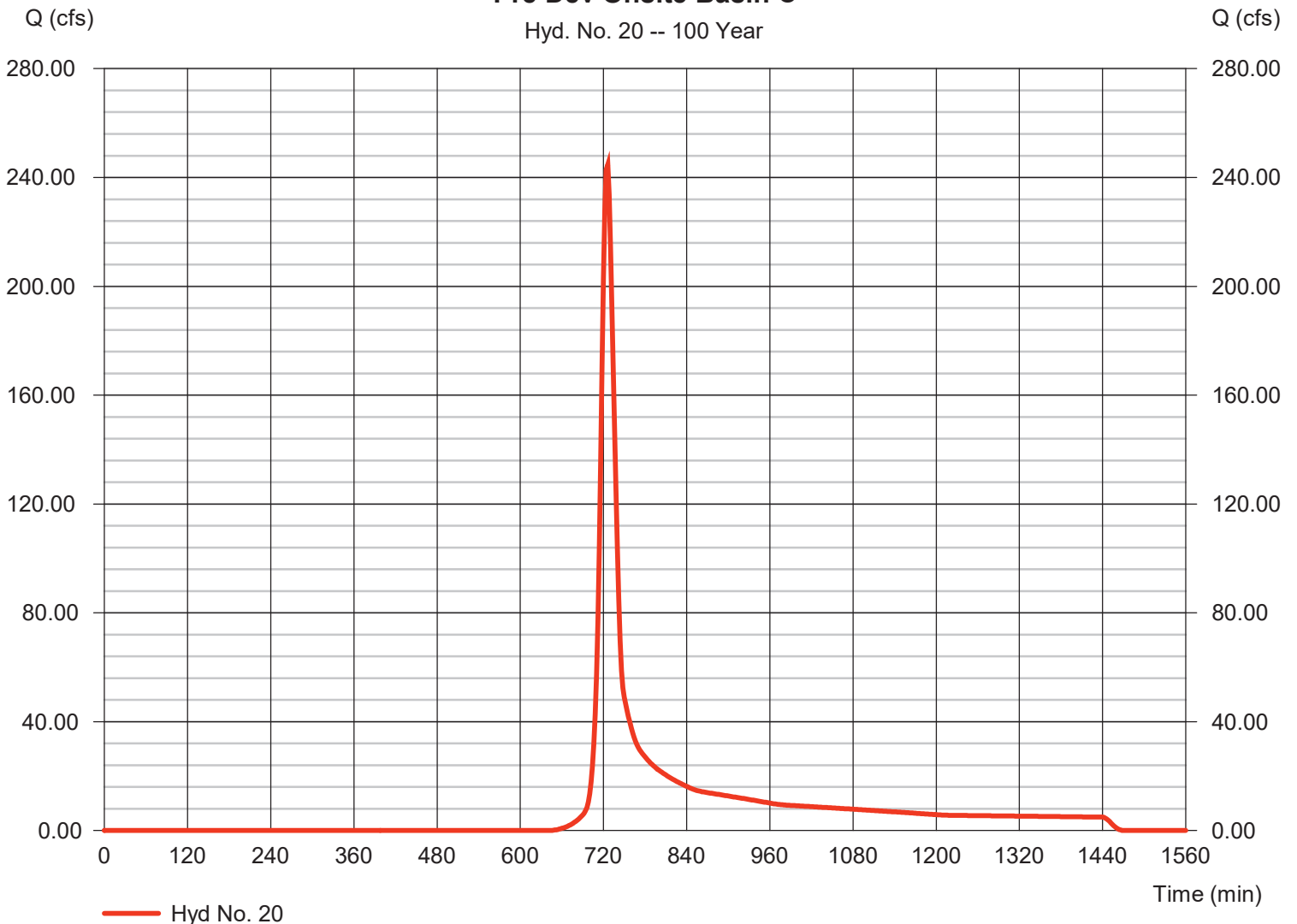
Pre Dev Onsite Basin C

Hydrograph type = SCS Runoff
Storm frequency = 100 yrs
Time interval = 2 min
Drainage area = 83.630 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 7.78 in
Storm duration = 24 hrs

Peak discharge = 244.76 cfs
Time to peak = 726 min
Hyd. volume = 799,853 cuft
Curve number = 55
Hydraulic length = 0 ft
Time of conc. (Tc) = 17.00 min
Distribution = Type II
Shape factor = 484

Pre Dev Onsite Basin C

Hyd. No. 20 -- 100 Year

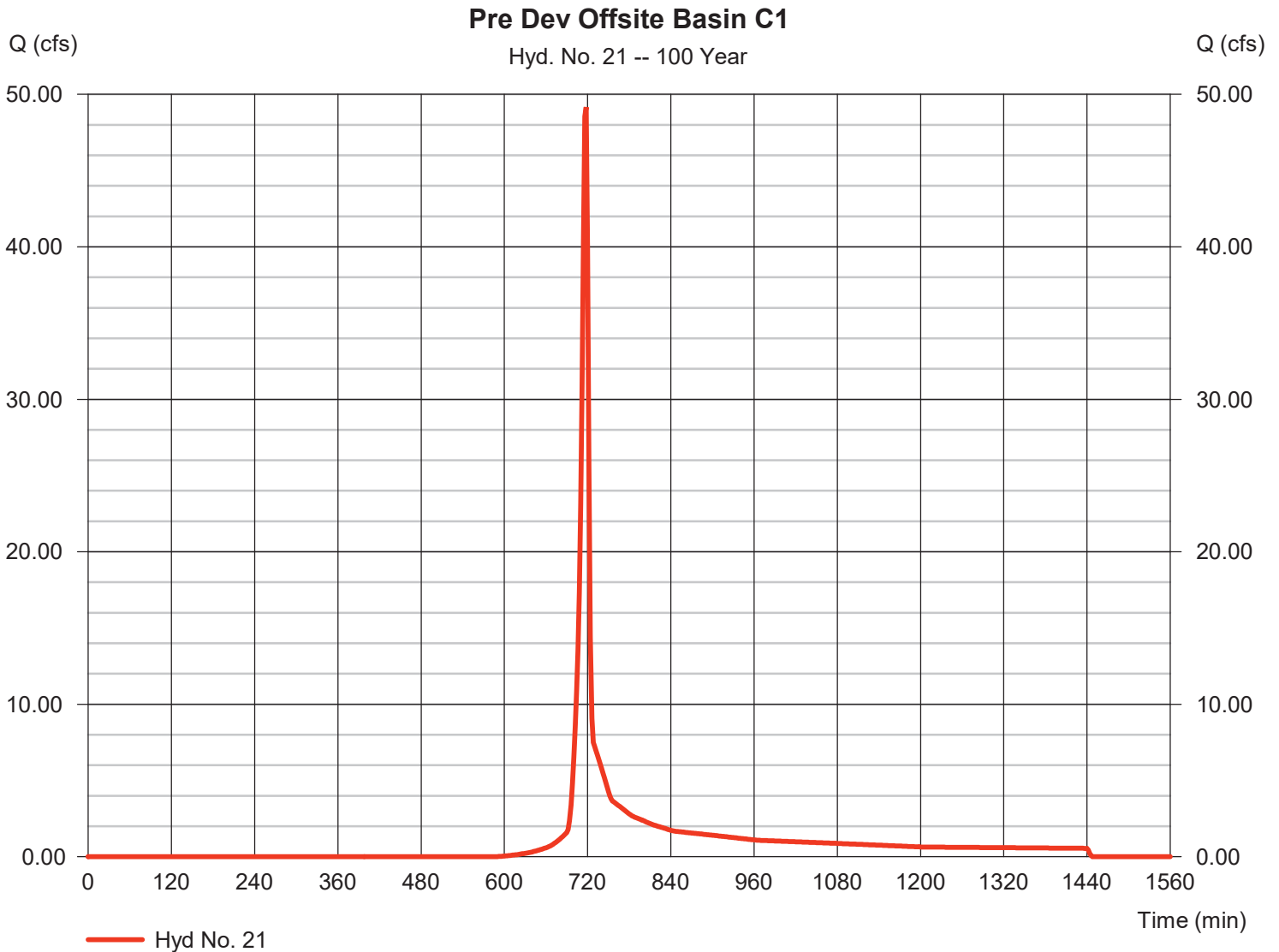


Hydrograph Report

Hyd. No. 21

Pre Dev Offsite Basin C1

Hydrograph type	= SCS Runoff	Peak discharge	= 49.17 cfs
Storm frequency	= 100 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 98,470 cuft
Drainage area	= 9.130 ac	Curve number	= 60
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 7.78 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hyd. No. 22

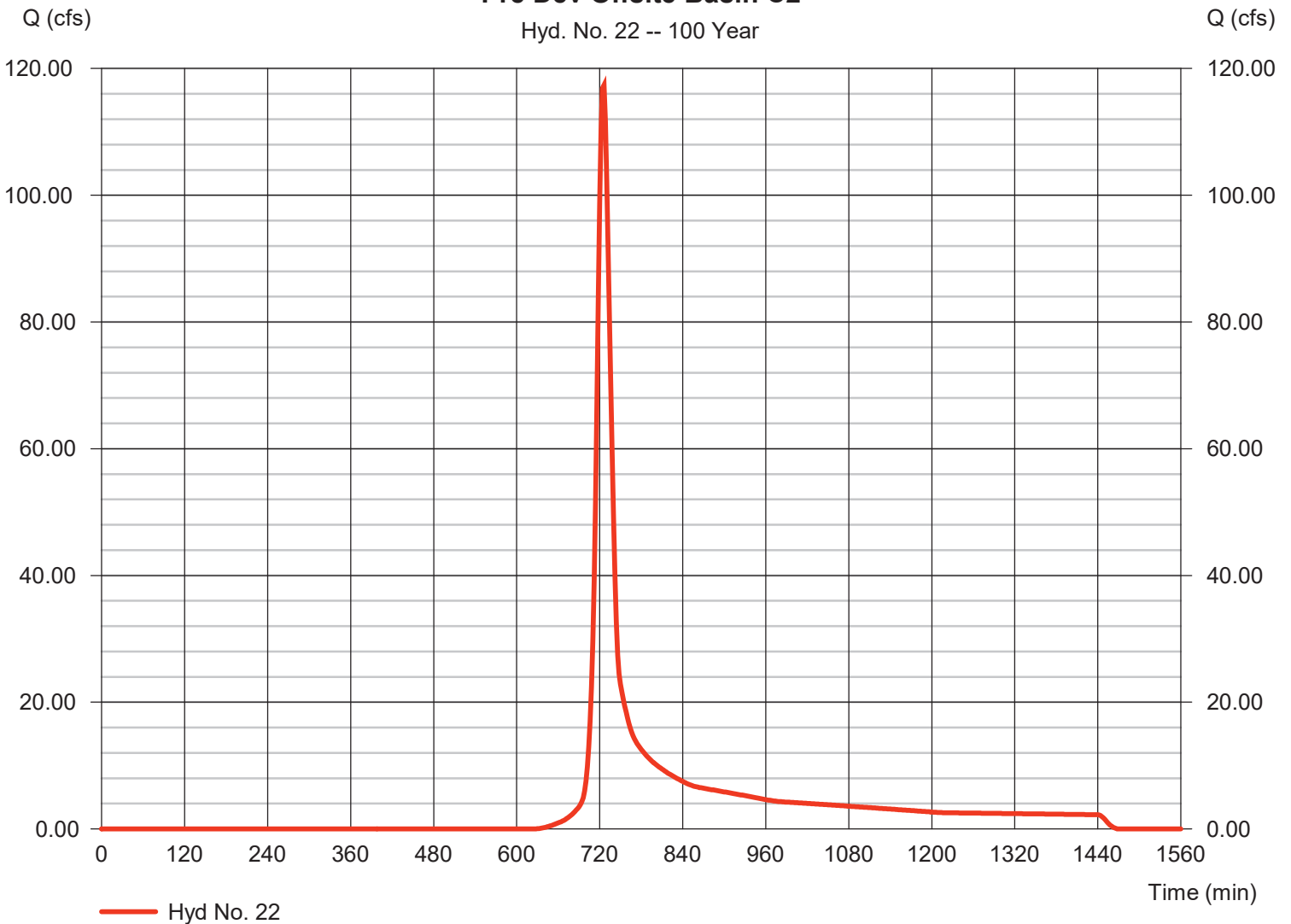
Pre Dev Offsite Basin C2

Hydrograph type = SCS Runoff
Storm frequency = 100 yrs
Time interval = 2 min
Drainage area = 36.720 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 7.78 in
Storm duration = 24 hrs

Peak discharge = 117.37 cfs
Time to peak = 726 min
Hyd. volume = 379,456 cuft
Curve number = 57
Hydraulic length = 0 ft
Time of conc. (Tc) = 18.00 min
Distribution = Type II
Shape factor = 484

Pre Dev Offsite Basin C2

Hyd. No. 22 -- 100 Year

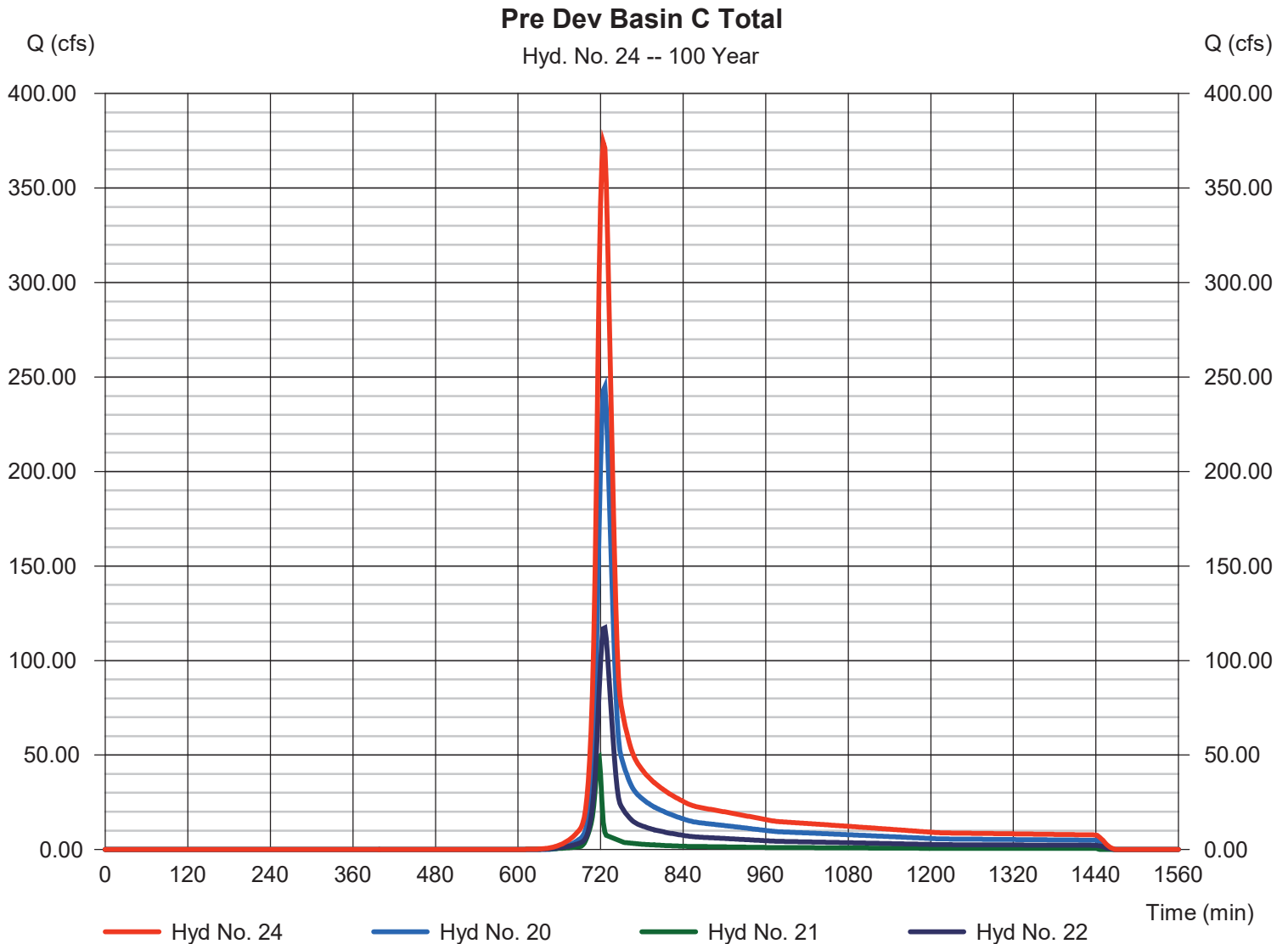


Hydrograph Report

Hyd. No. 24

Pre Dev Basin C Total

Hydrograph type	= Combine	Peak discharge	= 374.08 cfs
Storm frequency	= 100 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 1,277,780 cuft
Inflow hyds.	= 20, 21, 22	Contrib. drain. area	= 129.480 ac



Hydrograph Report

Hyd. No. 26

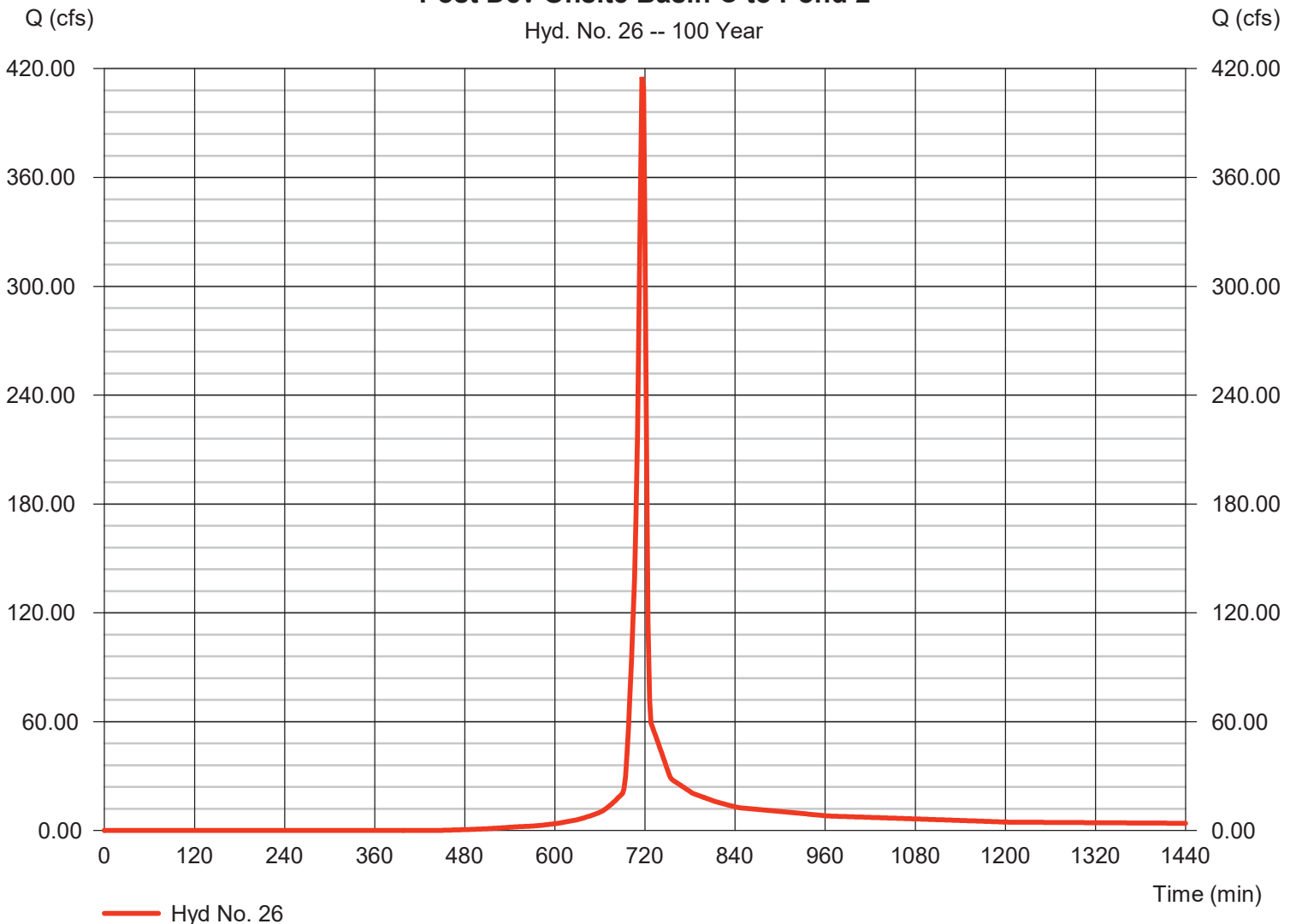
Post Dev Onsite Basin C to Pond 2

Hydrograph type = SCS Runoff
Storm frequency = 100 yrs
Time interval = 2 min
Drainage area = 56.470 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 7.78 in
Storm duration = 24 hrs

Peak discharge = 415.42 cfs
Time to peak = 716 min
Hyd. volume = 843,398 cuft
Curve number = 71
Hydraulic length = 0 ft
Time of conc. (Tc) = 5.00 min
Distribution = Type II
Shape factor = 484

Post Dev Onsite Basin C to Pond 2

Hyd. No. 26 -- 100 Year



Hydrograph Report

Hyd. No. 27

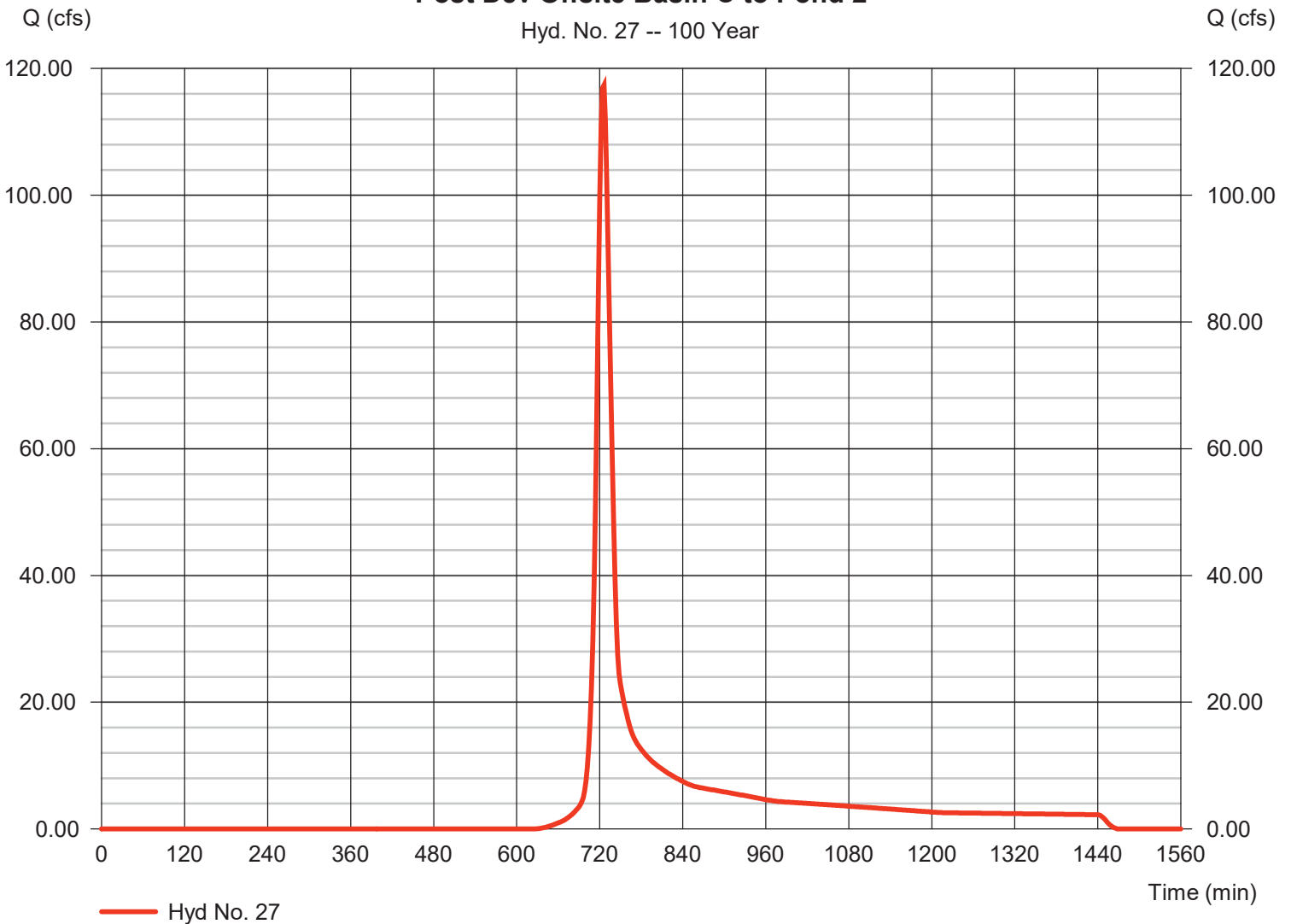
Post Dev Offsite Basin C to Pond 2

Hydrograph type = SCS Runoff
Storm frequency = 100 yrs
Time interval = 2 min
Drainage area = 36.720 ac
Basin Slope = 0.0 %
Tc method = User
Total precip. = 7.78 in
Storm duration = 24 hrs

Peak discharge = 117.37 cfs
Time to peak = 726 min
Hyd. volume = 379,456 cuft
Curve number = 57
Hydraulic length = 0 ft
Time of conc. (Tc) = 18.00 min
Distribution = Type II
Shape factor = 484

Post Dev Offsite Basin C to Pond 2

Hyd. No. 27 -- 100 Year

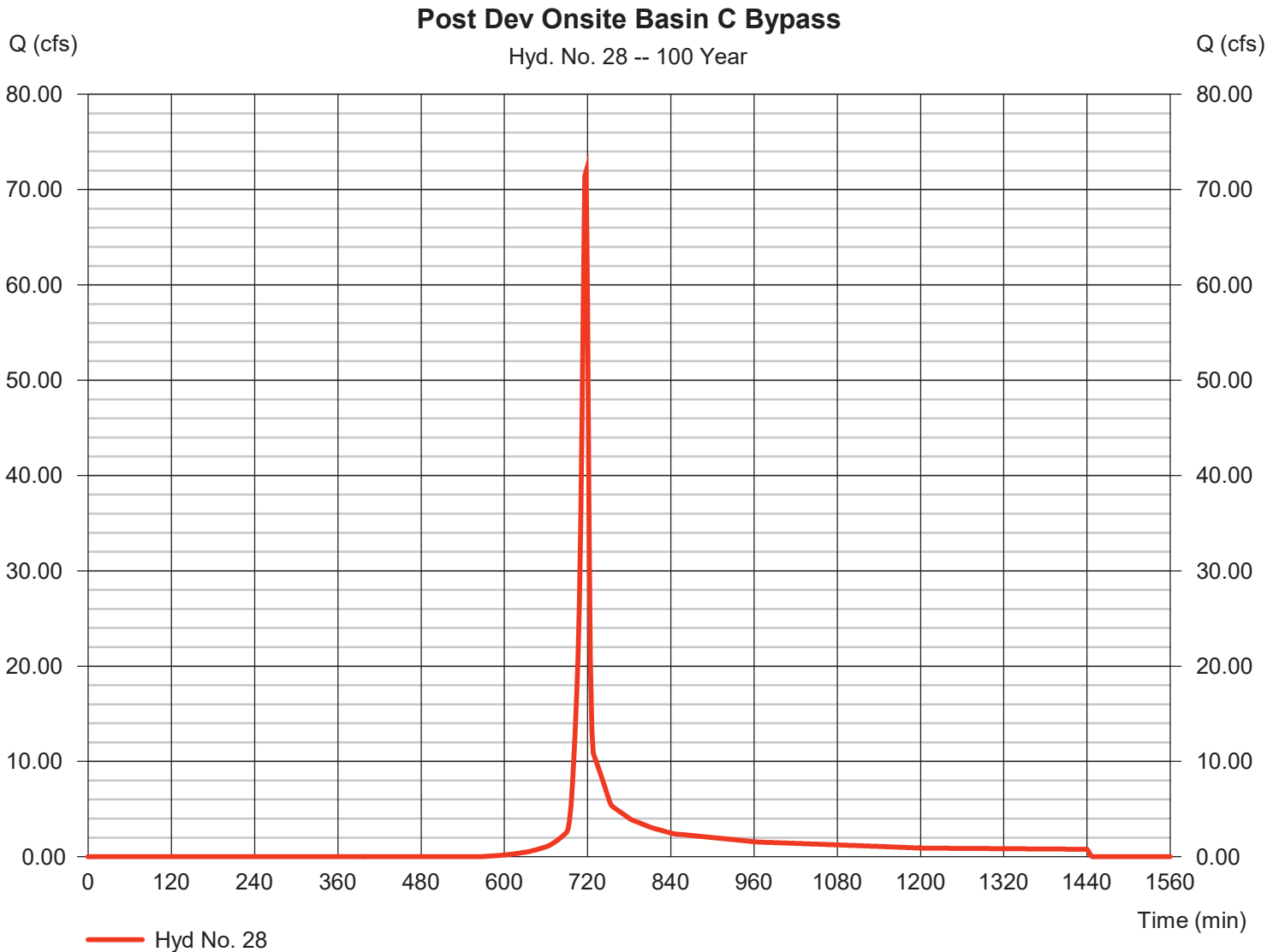


Hydrograph Report

Hyd. No. 28

Post Dev Onsite Basin C Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 71.92 cfs
Storm frequency	= 100 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 144,423 cuft
Drainage area	= 12.530 ac	Curve number	= 62
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.78 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

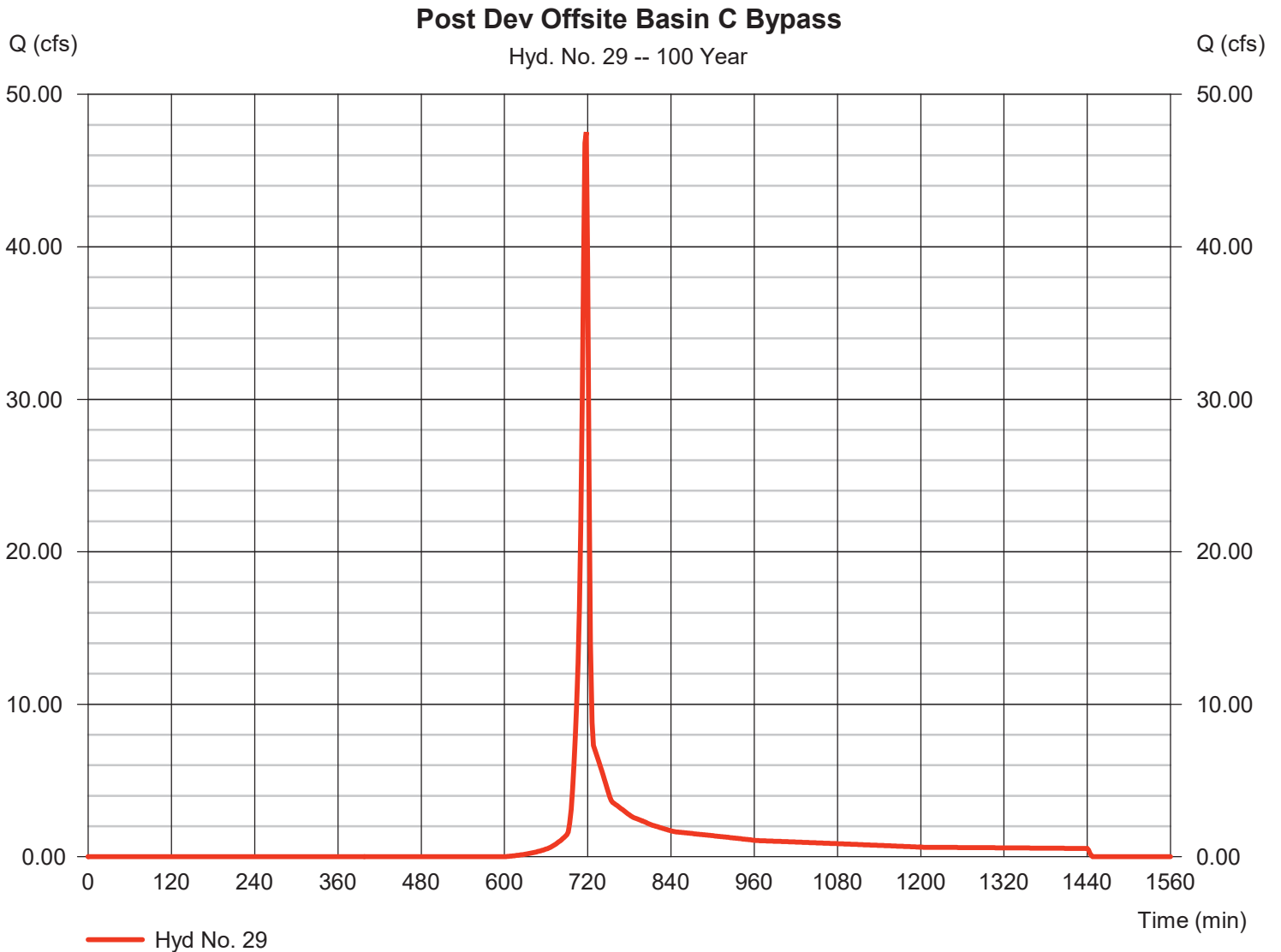


Hydrograph Report

Hyd. No. 29

Post Dev Offsite Basin C Bypass

Hydrograph type	= SCS Runoff	Peak discharge	= 47.53 cfs
Storm frequency	= 100 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 95,113 cuft
Drainage area	= 9.130 ac	Curve number	= 59
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 7.78 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hyd. No. 31

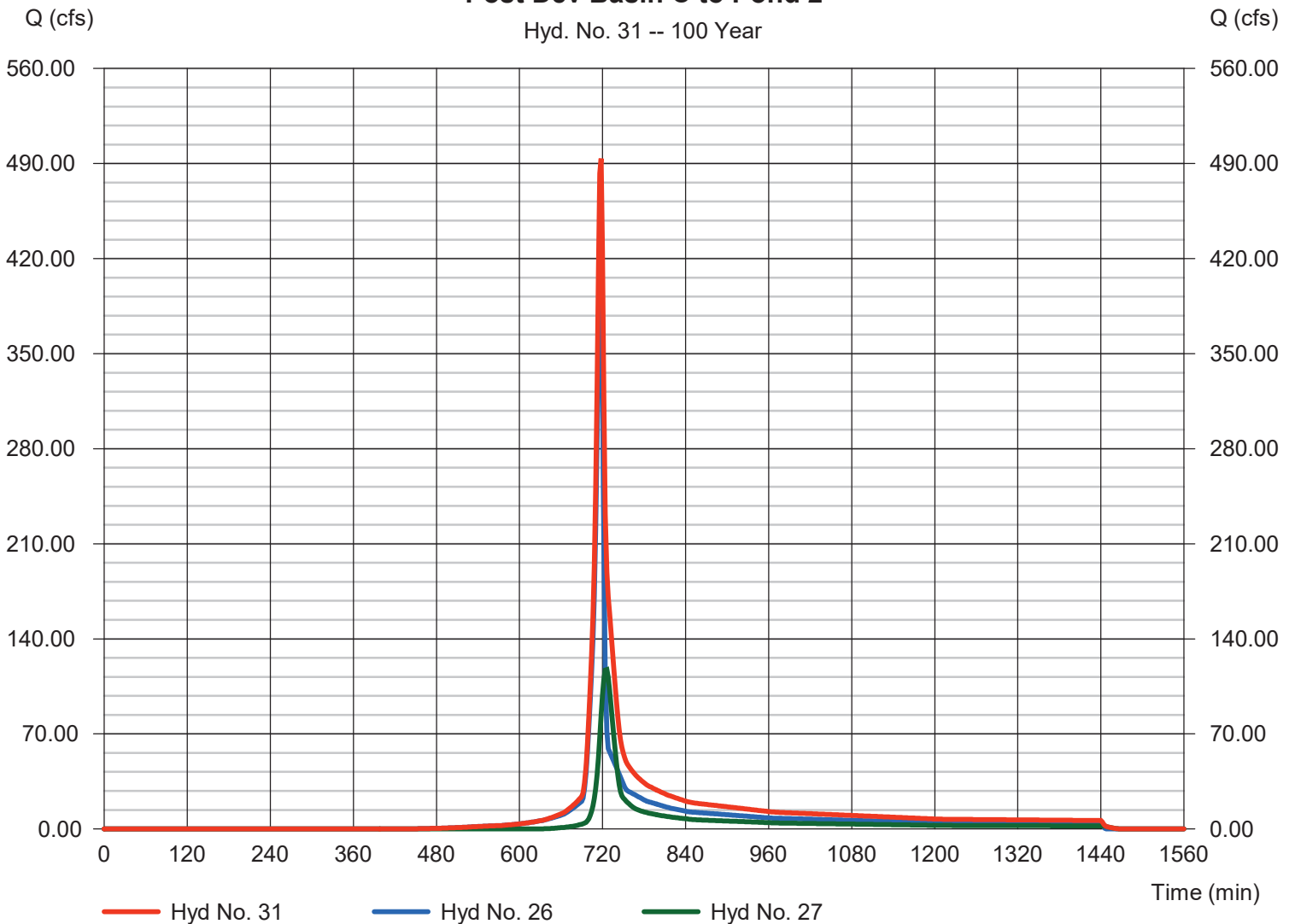
Post Dev Basin C to Pond 2

Hydrograph type = Combine
Storm frequency = 100 yrs
Time interval = 2 min
Inflow hyds. = 26, 27

Peak discharge = 493.70 cfs
Time to peak = 718 min
Hyd. volume = 1,222,854 cuft
Contrib. drain. area = 93.190 ac

Post Dev Basin C to Pond 2

Hyd. No. 31 -- 100 Year



Hydrograph Report

Hyd. No. 32

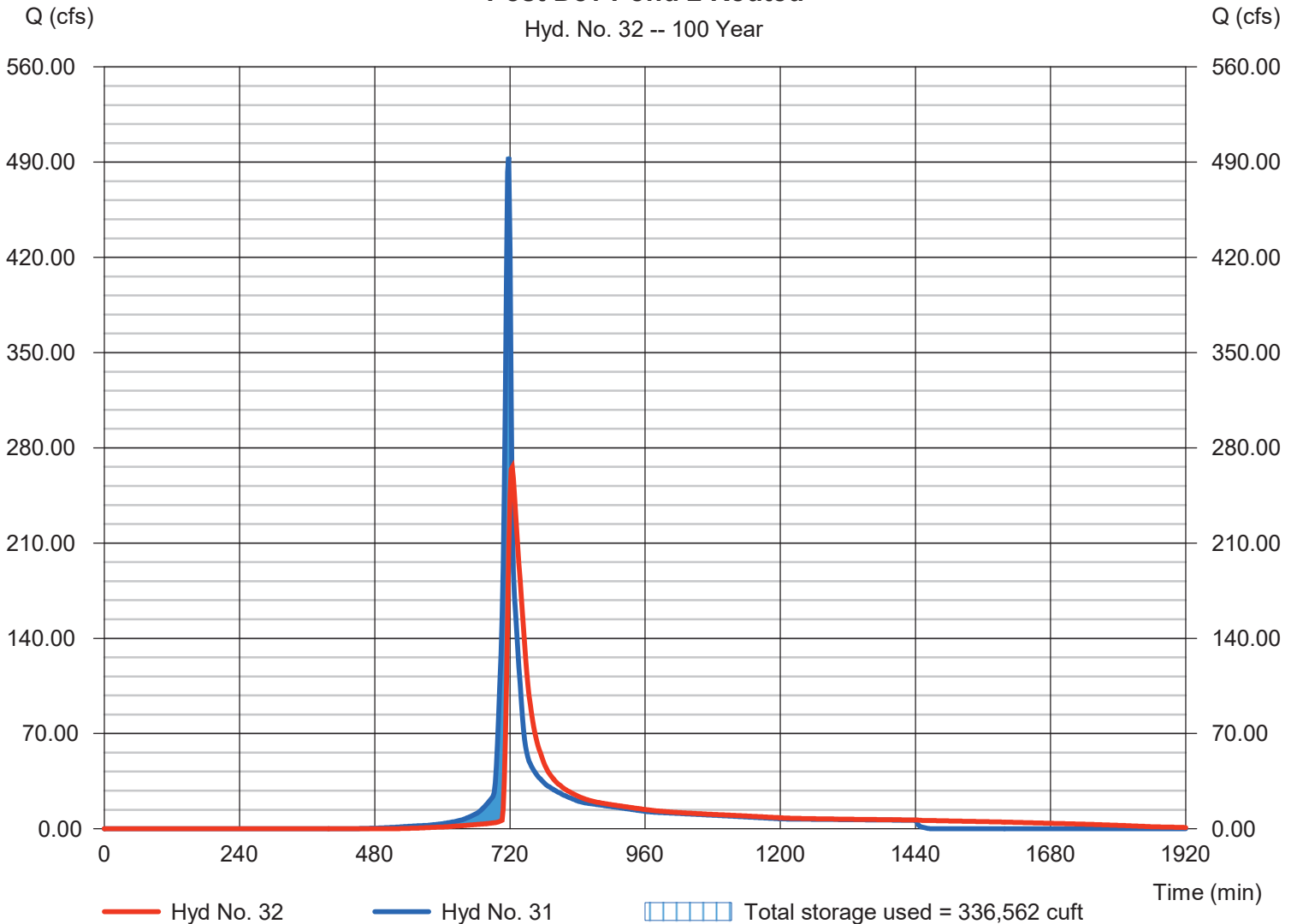
Post Dev Pond 2 Routed

Hydrograph type	= Reservoir	Peak discharge	= 265.72 cfs
Storm frequency	= 100 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 1,222,834 cuft
Inflow hyd. No.	= 31 - Post Dev Basin C to Pond 2	Max. Elevation	= 1113.19 ft
Reservoir name	= Pond 2	Max. Storage	= 336,562 cuft

Storage Indication method used.

Post Dev Pond 2 Routed

Hyd. No. 32 -- 100 Year



Hydrograph Report

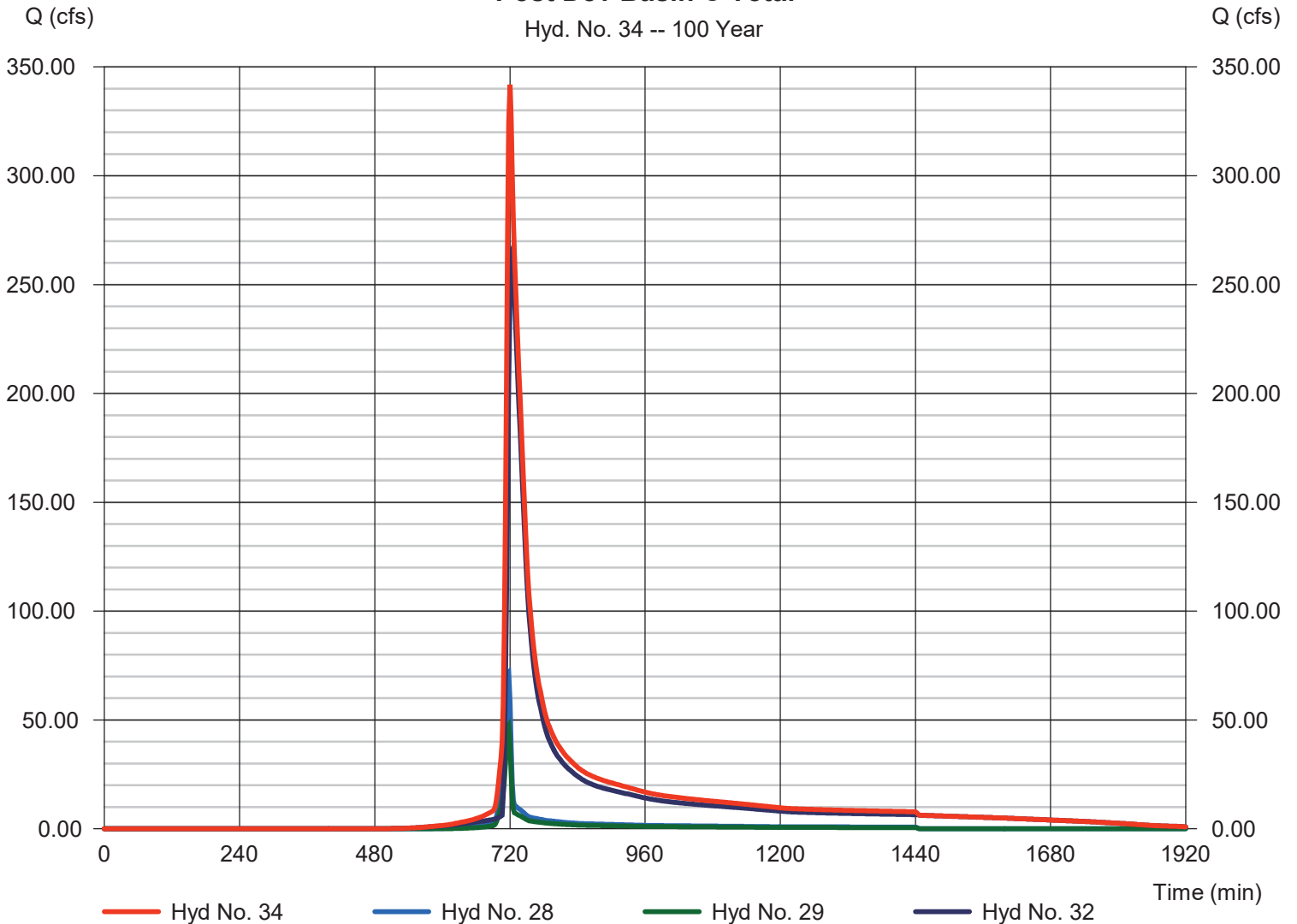
Hyd. No. 34

Post Dev Basin C Total

Hydrograph type	= Combine	Peak discharge	= 341.86 cfs
Storm frequency	= 100 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 1,462,372 cuft
Inflow hyds.	= 28, 29, 32	Contrib. drain. area	= 21.660 ac

Post Dev Basin C Total

Hyd. No. 34 -- 100 Year

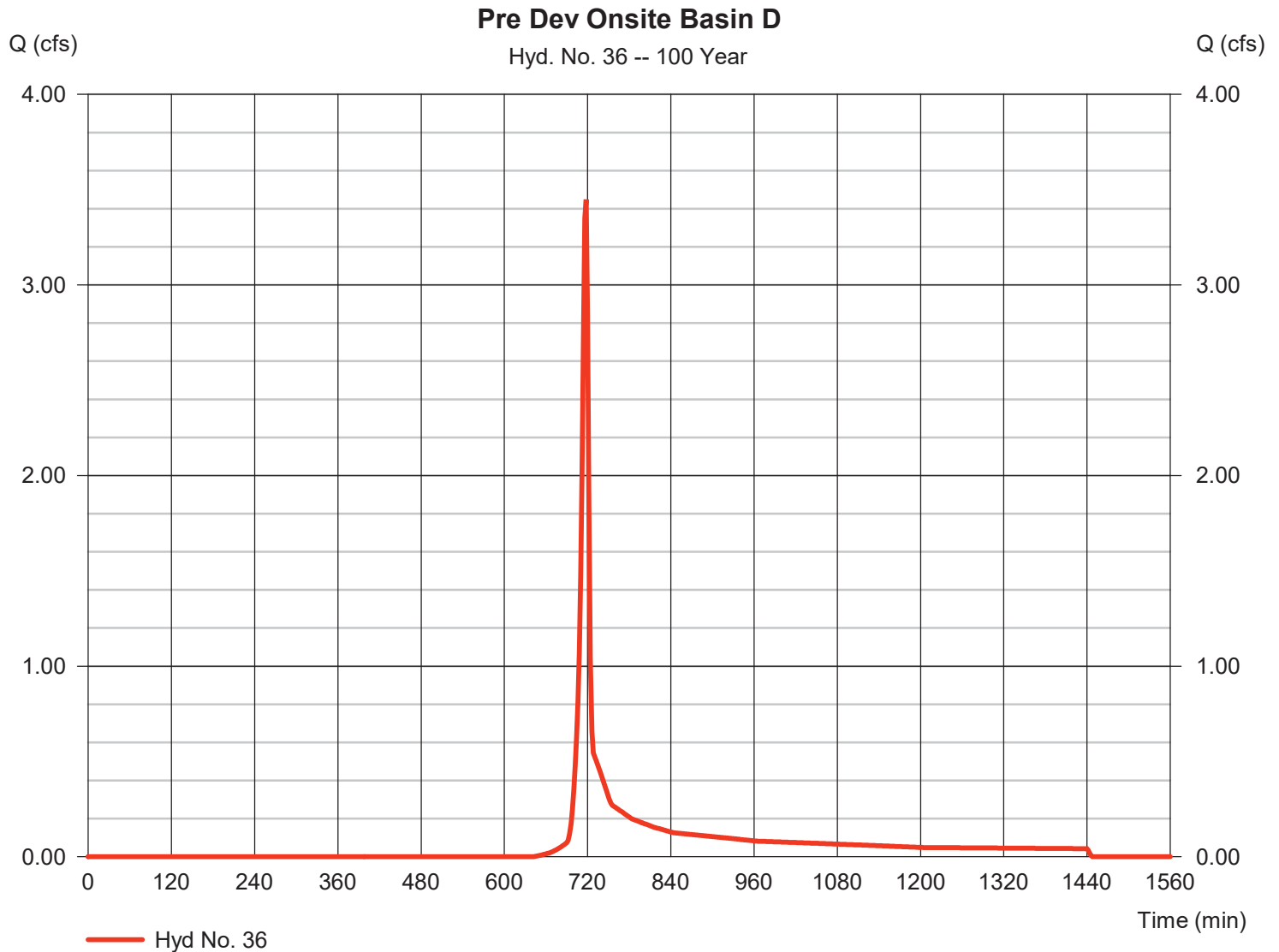


Hydrograph Report

Hyd. No. 36

Pre Dev Onsite Basin D

Hydrograph type	= SCS Runoff	Peak discharge	= 3.449 cfs
Storm frequency	= 100 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 6,904 cuft
Drainage area	= 0.770 ac	Curve number	= 55
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.78 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

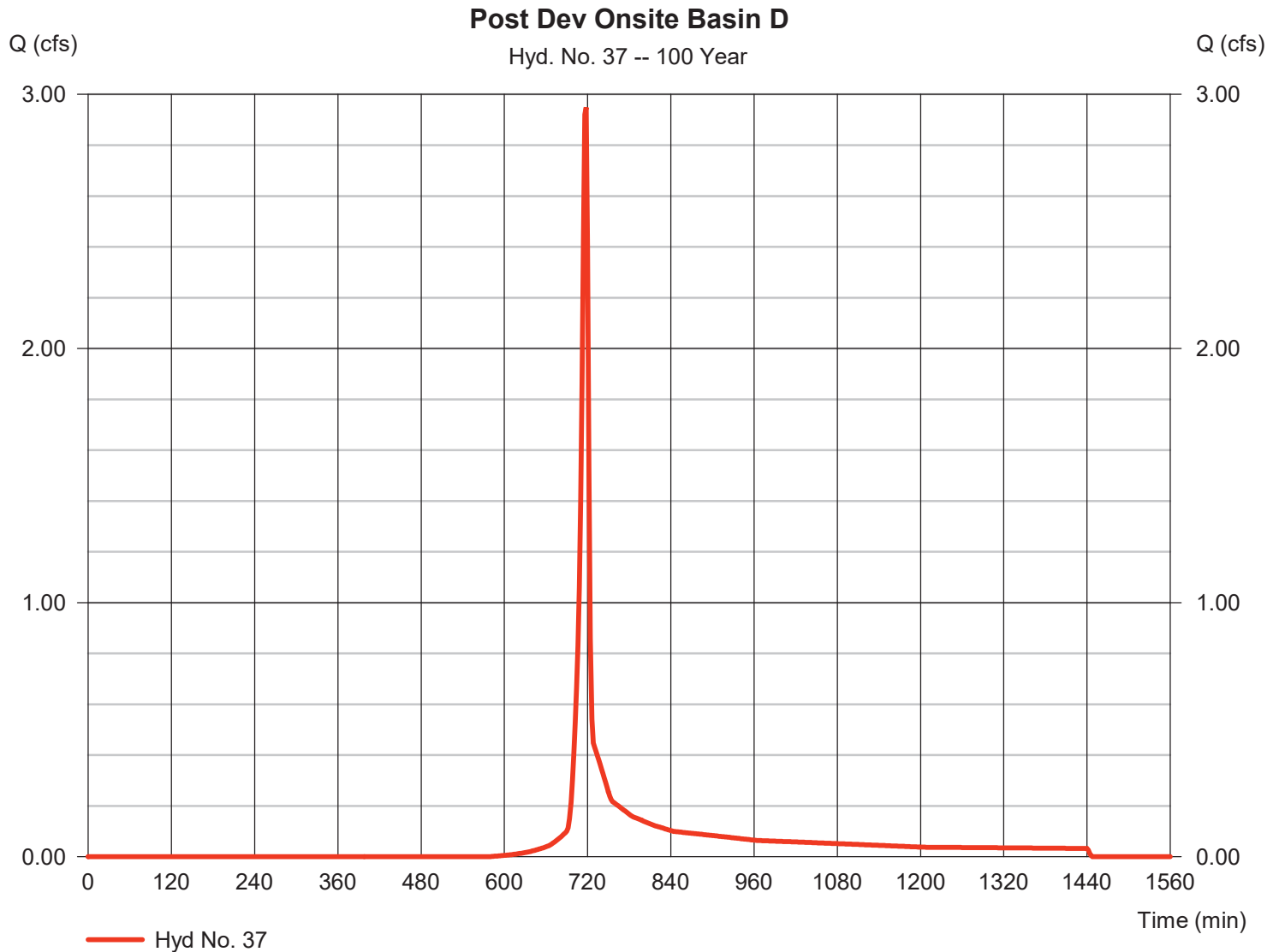


Hydrograph Report

Hyd. No. 37

Post Dev Onsite Basin D

Hydrograph type	= SCS Runoff	Peak discharge	= 2.949 cfs
Storm frequency	= 100 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 5,912 cuft
Drainage area	= 0.530 ac	Curve number	= 61
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 7.78 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Appendix E

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool

Version 2.2

General Information

Name of Developer:	Audubon Development	Date Submitted:	
Development Name:	Cagle Mill	Permit Number:	
Site Location / Address:	4745 Cagle Mill Rd Lula, GA 30554	Developer Contact:	
		Phone Number:	
		Name of Engineer(s):	
Development Type:		Maintenance Responsibility:	

Site Summary

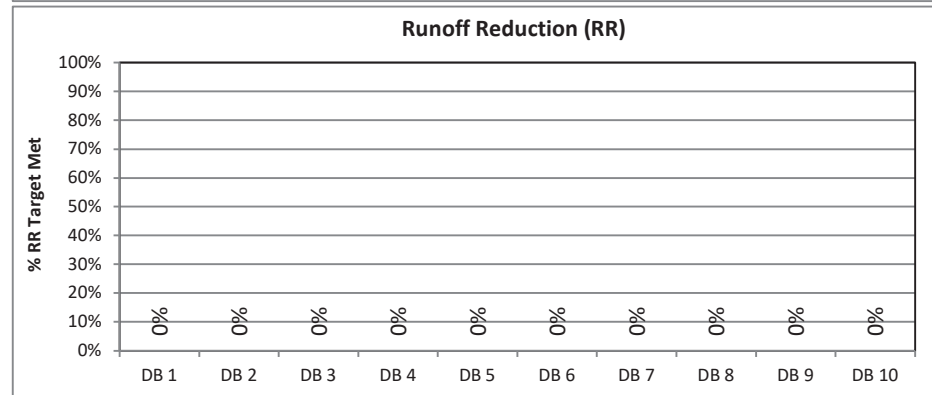
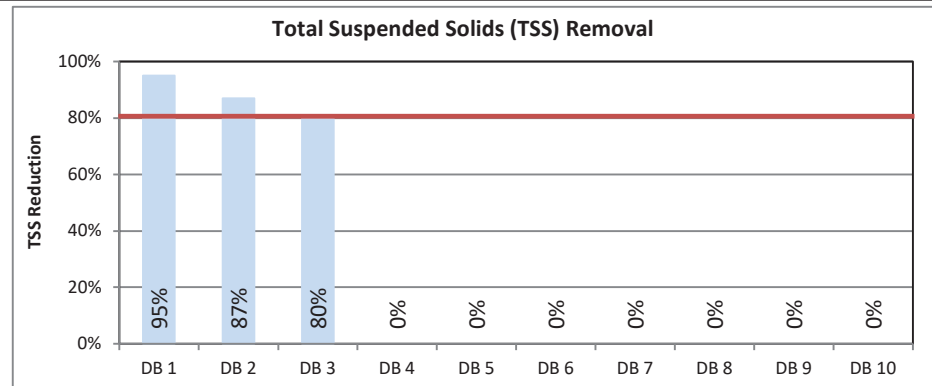
Total Pre-Development Area (ac): **129.38**
 Total Post-Development Area (ac): **140.62**
 Total Treated Area (ac): **137.31**
 Total Untreated Area (ac): **3.31**

		I (ac)	P (ac)	CA (ac)
A	DB 1	31.06	39.30	0.00
B	DB 2	38.23	29.21	0.00
C	DB 3	1.52	1.30	0.00
	Drainage Basin 4	DB 4	0.00	0.00
	Drainage Basin 5	DB 5	0.00	0.00
	Drainage Basin 6	DB 6	0.00	0.00
	Drainage Basin 7	DB 7	0.00	0.00
	Drainage Basin 8	DB 8	0.00	0.00
	Drainage Basin 9	DB 9	0.00	0.00
	Drainage Basin 10	DB 10	0.00	0.00
TOTAL		70.81	69.81	0.00

I = Impervious Area, P = Pervious Area, CA = Conservation Area

Target Runoff Reduction Volume Achieved? **No**
 Target TSS Removal Achieved? **Yes**

Total Target Runoff Reduction Volume (cf) 256,859
 Runoff Reduction Volume Achieved (cf) 0
 Total Target Water Quality Volume (cf) 308,231
 % TSS Removal Achieved 90%



Official Use Only

Tracking #: _____
 Reviewed By: _____
 Date Approved: _____

Conditions of Approval: _____

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:
 Drainage Basin Name:

data input cells
 calculation cells
 constant values

Site Data

Indicate Pre-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

Cover Type	HSG* A (acres)	CN	HSG B (acres)	CN	HSG C (acres)	CN	HSG D (acres)	CN	Total	% Cover
Woods - Good Condition		30	53.31	55		70		77	53.31	100%
Impervious		98	0.00	98		98		98	0.00	0%
Open space - Good condition (grass cover > 75%)		39	0.00	61		74		80	0.00	0%
Select a land cover type...		0		0		0		0	0.00	0%
Select a land cover type...		0		0		0		0	0.00	0%
Local Jurisdiction Input									0.00	0%
Other									0.00	0%
Total	0.00		53.31		0.00		0.00		53.31	100%

*HSG = hydrologic soil group

Impervious (ac) 0.00
 Weighted CN 55
 Potential Max Soil Retention, S_{pre} (in) 8.18

Indicate Post-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

Cover Type	HSG A (acres)	CN	HSG B (acres)	CN	HSG C (acres)	CN	HSG D (acres)	CN	Total	% Cover
Impervious		98	24.56	98		98		98	24.56	35%
Open space - Good condition (grass cover > 75%)		39	20.00	61		74		80	20.00	28%
Woods - Good Condition		30	19.30	55		70		77	19.30	27%
Impervious		98	6.50	98		98		98	6.50	9%
Open space - Good condition (grass cover > 75%)		39	0.00	61		74		80	0.00	0%
Local Jurisdiction Input									0.00	0%
Other									0.00	0%
Total	0.00		70.36		0.00		0.00		70.36	100%

Impervious (ac) 31.06
 Rv 0.45
 Weighted CN 76
 Potential Max Soil Retention, S_{post} (in) 3.21

Conservation Area Credits

Scenario 1: Natural Conservation Area **See the GSMM Volume 2, Section 2.3.3.3 for more information.*

Check the box if a portion of the post-developed area is protected by a conservation easement or equivalent form of protection.

Area (ac) of development protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 1 box above is checked

Scenario 3: Soil Restoration **See the GSMM Volume 2, Section 4.23 for more information.*

Check the box if a portion of the post-developed area employs soil restoration and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development with restored soils and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 3 box above is checked

Scenario 2: Site Reforestation/Revegetation **See the GSMM Volume 2, Section 4.22 for more information.*

Check the box if a portion of the post-developed area employs site reforestation/revegetation and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development reforested/revegetated and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 2 box above is checked

Scenario 4: Site Reforestation/Revegetation & Soil Restoration

**See the GSMM Volume 2, Section 4.22 and 4.23 for more information.*

Check the box if the same portion of the post-developed area employs site reforestation/revegetation and soil restoration, and is protected by a conservation easement or equivalent form of protection.

Area (ac) with restored soils in a reforested & revegetated area and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 4 box above is checked

Total Conservation Area Credit (acres) 0.00

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:
 Drainage Basin Name:

data input cells
 calculation cells
 constant values

Water Quality Goals

Target Runoff Reduction Storm (in)

Total Site Area for Water Quality Volume (acres)
 Target Runoff Reduction Volume (cf)
 Target Water Quality Volume (cf)

Select BMPs for Runoff Reduction and Water Quality

		Area Draining to Each BMP			Storage Volume Provided by BMP (cf)	RR Conveyance Volume Provided by BMP (cf)	Down-stream BMP	Runoff Reduction Calculations						WQ Calculations	
		On-site Pervious Area (acres)	On-site Impervious Area (acres)	Offsite Area (acres)				RR Volume from Direct Drainage (cf)	RR Volume from Upstream Practices (cf)	Total RR Volume Received by BMP (cf)	Runoff Reduction %	RR Achieved (cf)	Remaining RR Volume (cf)	WQ, from Direct Drainage (cf)	Effective TSS Removal %
BMP 1	Stormwater Pond	20.00	24.56		70,000		BMP 2	88,325	0	88,325	0%	0	88,325	105,990	80%
BMP 2	Stormwater Wetlands – Level 1		0.00			88,325		0	88,325	88,325	0%	0	88,325	0	80%
BMP 3	Bioretention Basin (w/o underdrain)		2.50					8,621	0	8,621	100%	0	8,621	10,346	100%
BMP 4	Bioretention Basin (w/o underdrain)		2.50					8,621	0	8,621	100%	0	8,621	10,346	100%
BMP 5	Regenerative Stormwater Conveyance	19.30	1.50					8,676	0	8,676	0%	0	8,676	10,411	80%
BMP 6	Select a BMP...		0.00					0	0	0	N/A	0	0	0	N/A
BMP 7	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 8	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 9	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 10	Select a BMP...							0	0	0	N/A	0	0	0	N/A
TOTAL		39.30	31.06	0.00				114,243				0		137,092	
UNTREATED AREA (acres)		0.00	0.00												

Target Runoff Reduction Volume (cf)	114,243
Target Achieved?	No
Remaining Runoff Reduction Volume (cf)	114,243

Target Water Quality Volume (cf)	137,092
% TSS Removal Achieved	95%
Target Achieved?	Yes!
Remaining TSS Removal %	0%

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:

Drainage Basin Name:

data input cells
 calculation cells
 constant values

Channel and Flood Protection Calculations

	1-yr, 24-hr storm	2-yr, 24-hr storm	25-yr, 24-hr storm	100-yr, 24-hr storm
Target Rainfall Event (in)				

	1-yr, 24-hr storm	2-yr, 24-hr storm	25-yr, 24-hr storm	100-yr, 24-hr storm
Pre-Development Runoff Volume (in)	0.00	0.00	0.00	0.00
Post-Development Runoff Volume (in) with no BMPs	0.00	0.00	0.00	0.00
Post-Development Runoff Volume (in) with BMPs	0.00	0.00	0.00	0.00
Adjusted CN	0	0	0	0

*See Stormwater Management Standards to Determine Detention Requirements.

Comments

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:
 Drainage Basin Name:

data input cells
 calculation cells
 constant values

Site Data

Indicate Pre-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

Cover Type	HSG* A (acres)	CN	HSG B (acres)	CN	HSG C (acres)	CN	HSG D (acres)	CN	Total	% Cover
Woods - Good Condition		30	70.00	55		70		77	70.00	100%
Select a land cover type...		0	0.00	0		0		0	0.00	0%
Select a land cover type...		0		0		0		0	0.00	0%
Select a land cover type...		0		0		0		0	0.00	0%
Select a land cover type...		0		0		0		0	0.00	0%
Local Jurisdiction Input									0.00	0%
Other									0.00	0%
Total	0.00		70.00		0.00		0.00		70.00	100%

*HSG = hydrologic soil group

Impervious (ac) 0.00
 Weighted CN 55
 Potential Max Soil Retention, S_{pre} (in) 8.18

Indicate Post-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

Cover Type	HSG A (acres)	CN	HSG B (acres)	CN	HSG C (acres)	CN	HSG D (acres)	CN	Total	% Cover
Woods - Good Condition		30	13.21	55		70		77	13.21	20%
Open space - Good condition (grass cover > 75%)		39	16.00	61		74		80	16.00	24%
Impervious		98	38.23	98		98		98	38.23	57%
Select a land cover type...		0		0		0		0	0.00	0%
Select a land cover type...		0		0		0		0	0.00	0%
Local Jurisdiction Input									0.00	0%
Other									0.00	0%
Total	0.00		67.44		0.00		0.00		67.44	100%

Impervious (ac) 38.23
 Rv 0.56
 Weighted CN 81
 Potential Max Soil Retention, S_{post} (in) 2.38

Conservation Area Credits

Scenario 1: Natural Conservation Area **See the GSMM Volume 2, Section 2.3.3.3 for more information.*

Check the box if a portion of the post-developed area is protected by a conservation easement or equivalent form of protection.

Area (ac) of development protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 1 box above is checked

Scenario 3: Soil Restoration **See the GSMM Volume 2, Section 4.23 for more information.*

Check the box if a portion of the post-developed area employs soil restoration and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development with restored soils and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 3 box above is checked

Scenario 2: Site Reforestation/Revegetation **See the GSMM Volume 2, Section 4.22 for more information.*

Check the box if a portion of the post-developed area employs site reforestation/revegetation and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development reforested/revegetated and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 2 box above is checked

Scenario 4: Site Reforestation/Revegetation & Soil Restoration

**See the GSMM Volume 2, Section 4.22 and 4.23 for more information.*

Check the box if the same portion of the post-developed area employs site reforestation/revegetation and soil restoration, and is protected by a conservation easement or equivalent form of protection.

Area (ac) with restored soils in a reforested & revegetated area and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 4 box above is checked

Total Conservation Area Credit (acres) 0.00

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:
 Drainage Basin Name:

data input cells
 calculation cells
 constant values

Water Quality Goals

Target Runoff Reduction Storm (in)

Total Site Area for Water Quality Volume (acres)
 Target Runoff Reduction Volume (cf)
 Target Water Quality Volume (cf)

Select BMPs for Runoff Reduction and Water Quality

		Area Draining to Each BMP			Storage Volume Provided by BMP (cf)	RR Conveyance Volume Provided by BMP (cf)	Down-stream BMP	Runoff Reduction Calculations					WQ Calculations		
		On-site Pervious Area (acres)	On-site Impervious Area (acres)	Offsite Area (acres)				RR Volume from Direct Drainage (cf)	RR Volume from Upstream Practices (cf)	Total RR Volume Received by BMP (cf)	Runoff Reduction %	RR Achieved (cf)	Remaining RR Volume (cf)	WQ, from Direct Drainage (cf)	Effective TSS Removal %
BMP 1	Stormwater Pond	16.00	38.23	13.21				134,740	0	134,740	0%	0	134,740	161,688	80%
BMP 2	Regenerative Stormwater Conveyance	6.15	3.75					14,048	0	14,048	0%	0	14,048	16,858	80%
BMP 3	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 4	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 5	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 6	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 7	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 8	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 9	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 10	Select a BMP...							0	0	0	N/A	0	0	0	N/A
TOTAL		22.15	41.98	13.21				148,788				0		178,546	
UNTREATED AREA (acres)		7.06	0.00												

Target Runoff Reduction Volume (cf)	137,138
Target Achieved?	No
Remaining Runoff Reduction Volume (cf)	137,138

Target Water Quality Volume (cf)	164,565
% TSS Removal Achieved	87%
Target Achieved?	Yes!
Remaining TSS Removal %	0%

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:

Drainage Basin Name:

data input cells
 calculation cells
 constant values

Channel and Flood Protection Calculations

	1-yr, 24-hr storm	2-yr, 24-hr storm	25-yr, 24-hr storm	100-yr, 24-hr storm
Target Rainfall Event (in)				

	1-yr, 24-hr storm	2-yr, 24-hr storm	25-yr, 24-hr storm	100-yr, 24-hr storm
Pre-Development Runoff Volume (in)	0.00	0.00	0.00	0.00
Post-Development Runoff Volume (in) with no BMPs	0.00	0.00	0.00	0.00
Post-Development Runoff Volume (in) with BMPs	0.00	0.00	0.00	0.00
Adjusted CN	0	0	0	0

*See Stormwater Management Standards to Determine Detention Requirements.

Comments

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:
 Drainage Basin Name:

data input cells
 calculation cells
 constant values

Site Data

Indicate Pre-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

Cover Type	HSG* A (acres)	CN	HSG B (acres)	CN	HSG C (acres)	CN	HSG D (acres)	CN	Total	% Cover
Woods - Good Condition		30	6.07	55		70		77	6.07	100%
Select a land cover type...		0		0		0		0	0.00	0%
Select a land cover type...		0		0		0		0	0.00	0%
Select a land cover type...		0		0		0		0	0.00	0%
Select a land cover type...		0		0		0		0	0.00	0%
Local Jurisdiction Input									0.00	0%
Other									0.00	0%
Total	0.00		6.07		0.00		0.00		6.07	100%

*HSG = hydrologic soil group

Impervious (ac) 0.00
 Weighted CN 55
 Potential Max Soil Retention, S_{pre} (in) 8.18

Indicate Post-Development Land Cover and Runoff Curve Numbers in the Site's Disturbed Area

Cover Type	HSG A (acres)	CN	HSG B (acres)	CN	HSG C (acres)	CN	HSG D (acres)	CN	Total	% Cover
Impervious		98	1.52	98		98		98	1.52	54%
Open space - Fair condition (grass cover 50% to 75%)		49	1.30	69		79		84	1.30	46%
Select a land cover type...		0		0		0		0	0.00	0%
Select a land cover type...		0		0		0		0	0.00	0%
Select a land cover type...		0		0		0		0	0.00	0%
Local Jurisdiction Input									0.00	0%
Other									0.00	0%
Total	0.00		2.82		0.00		0.00		2.82	100%

Impervious (ac) 1.52
 Rv 0.54
 Weighted CN 85
 Potential Max Soil Retention, S_{post} (in) 1.82

Conservation Area Credits

Scenario 1: Natural Conservation Area **See the GSMM Volume 2, Section 2.3.3.3 for more information.*

Check the box if a portion of the post-developed area is protected by a conservation easement or equivalent form of protection.

Area (ac) of development protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 1 box above is checked

Scenario 3: Soil Restoration **See the GSMM Volume 2, Section 4.23 for more information.*

Check the box if a portion of the post-developed area employs soil restoration and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development with restored soils and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 3 box above is checked

Scenario 2: Site Reforestation/Revegetation **See the GSMM Volume 2, Section 4.22 for more information.*

Check the box if a portion of the post-developed area employs site reforestation/revegetation and is protected by a conservation easement or equivalent form of protection.

Area (ac) of development reforested/revegetated and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 2 box above is checked

Scenario 4: Site Reforestation/Revegetation & Soil Restoration

**See the GSMM Volume 2, Section 4.22 and 4.23 for more information.*

Check the box if the same portion of the post-developed area employs site reforestation/revegetation and soil restoration, and is protected by a conservation easement or equivalent form of protection.

Area (ac) with restored soils in a reforested & revegetated area and protected by a conservation easement or equivalent form of protection. Note: The green cell will unlock if the Scenario 4 box above is checked

Total Conservation Area Credit (acres) 0.00

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:
 Drainage Basin Name:

data input cells
 calculation cells
 constant values

Water Quality Goals

Target Runoff Reduction Storm (in) Total Site Area for Water Quality Volume (acres)
 Target Runoff Reduction Volume (cf)
 Target Water Quality Volume (cf)

Select BMPs for Runoff Reduction and Water Quality

		Area Draining to Each BMP			Storage Volume Provided by BMP (cf)	RR Conveyance Volume Provided by BMP (cf)	Down-stream BMP	Runoff Reduction Calculations					WQ Calculations		
		On-site Pervious Area (acres)	On-site Impervious Area (acres)	Offsite Area (acres)				RR Volume from Direct Drainage (cf)	RR Volume from Upstream Practices (cf)	Total RR Volume Received by BMP (cf)	Runoff Reduction %	RR Achieved (cf)	Remaining RR Volume (cf)	WQ, from Direct Drainage (cf)	Effective TSS Removal %
BMP 1	Stormwater Wetlands – Level 1	1.30	1.52			5,478		5,478	0	5,478	0%	0	5,478	6,573	80%
BMP 2	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 3	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 4	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 5	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 6	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 7	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 8	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 9	Select a BMP...							0	0	0	N/A	0	0	0	N/A
BMP 10	Select a BMP...							0	0	0	N/A	0	0	0	N/A
TOTAL		1.30	1.52	0.00				5,478				0		6,573	
UNTREATED AREA (acres)		0.00	0.00												

Target Runoff Reduction Volume (cf)	5,478
Target Achieved?	No
Remaining Runoff Reduction Volume (cf)	5,478

Target Water Quality Volume (cf)	6,573
% TSS Removal Achieved	80%
Target Achieved?	Yes!
Remaining TSS Removal %	0%

Georgia Stormwater Management Manual

Stormwater Quality Site Development Review Tool, v2.2

Development Name:

Drainage Basin Name:

data input cells
 calculation cells
 constant values

Channel and Flood Protection Calculations

	1-yr, 24-hr storm	2-yr, 24-hr storm	25-yr, 24-hr storm	100-yr, 24-hr storm
Target Rainfall Event (in)				

	1-yr, 24-hr storm	2-yr, 24-hr storm	25-yr, 24-hr storm	100-yr, 24-hr storm
Pre-Development Runoff Volume (in)	0.00	0.00	0.00	0.00
Post-Development Runoff Volume (in) with no BMPs	0.00	0.00	0.00	0.00
Post-Development Runoff Volume (in) with BMPs	0.00	0.00	0.00	0.00
Adjusted CN	0	0	0	0

*See Stormwater Management Standards to Determine Detention Requirements.

Comments