



SPRINGFIELD

NEBRASKA

PLANNING COMMISSION REPORT
APRIL 14, 2026 AGENDA

Agenda Item:	Subject:	Submitted By:
Agenda Items 6C & 6D and 7C & 7D	Applications for Change of Zoning Classification and Preliminary Plat submitted by Scannell Properties LLC (“Subdivider”) and Alvin & Nancy Glesmann Trust (“Owner”) for property generally located at the Southeast Corner of 144 th Street (Hwy 50) & Capehart Road, Springfield, NE	Kathleen Gottsch City Administrator

Synopsis

Thompson Dreessen & Dorner (“TD2”) (“Agent”) submitted the following documents on March 9, 2026, on behalf of Scannell Properties LLC (“Subdivider”) related to the property legally described as a tract of land beginning at the W1/2 NW1/4 Exc ROW of Section 12, Township 13 N, Range 11 East of the 6th P.M., Sarpy County, Nebraska, owned by the Alvin & Nancy Glesmann Trust (“Owner”):

1. Request for Zone Change Application
2. Preliminary Plat Application

Additionally, the following exhibits were submitted:

1. Glesmann Owner Authorization Letter
2. Preliminary Plat & Exhibits
 - a. Paving Plan
 - b. General Obligation Paving Plan
 - c. Sanitary Sewer Plan
 - d. Sanitary Sewer Calculations
 - e. Sediment and Erosion Control Plan
 - f. Storm Sewer Plan
 - g. Post Construction Stormwater Management Plan
 - h. Water Main
 - i. Street Profiles
3. Preliminary Drainage Study
4. Source and Use of Funds

Owner/Subdivider/Agent request the following in order to subdivide the land into a residential development:

1. Change of the zoning classification from AR (Agricultural Residential) to BP (Business Park)
2. Preliminary Plat of Lots 1-3 and Outlot A, Springfield Gateway Park

The documents were forwarded to the Planning Review Team, which is comprised of Bill Seidler, Jr. (city attorney), Jeff Ray (city planner), Jeff Thompson (engineer for Sarpy County & Cities Wastewater Agency (SCCWWA)), Brian Schuele (city engineer with Olsson), MUD, NDOT, OPPD Land Management, Papio Missouri River Natural Resources District, Sarpy County (Admin/Engineering/Public Works), Sarpy County Emergency Management Agency, Sarpy County GIS, Sarpy County Planning, Sarpy County Sheriff, Chad Zimmerman (Springfield Fire Chief), and Ryan Saunders (Springfield Platteview Community Schools).

A copy of the synopsis of comments from the Planning Review team, as well as the submitted documents and exhibits, are attached.

Recommendation

Planning Commission consideration. Refer to staff comments in synopsis.

Attachments

Synopsis of Comments

- Springfield Gateway Park Sr. Conn Fee Calcs_3-11-26.pdf
- Springfield Gateway Park Prelim Plat & Street Profiles COM 3-19.pdf
- Springfield Gateway Park Streets 3-23-26.pdf

Request for Zone Change Application

Preliminary Plat Application

Glesmann Owner Authorization Letter

Preliminary Plat & Exhibits

- Paving Plan
- General Obligation Paving Plan
- Sanitary Sewer Plan
- Sanitary Sewer Calculations
- Sediment and Erosion Control Plan
- Storm Sewer Plan
- Post Construction Stormwater Management Plan
- Water Main
- Street Profiles

Preliminary Drainage Study

Source and Use of Funds



SPRINGFIELD

NEBRASKA

April 9, 2026

SYNOPSIS OF PROFESSIONAL STAFF COMMENTS FOR PLANNING COMMISSION & CITY COUNCIL

Lots 1-3 and Outlot A – Springfield Gateway Park Alvin & Nancy Glesmann Trust (Owner)/Scannell Properties LLC (Subdivider)/TD2 (Agent) Request for Zone Change Application & Preliminary Plat Application

Thompson Dreesen & Dorner (“TD2”) (“Agent”) submitted the following documents on March 9, 2026, on behalf of Scannell Properties LLC (“Subdivider”) related to the property legally described as a tract of land beginning at the W1/2 NW1/4 Exc Row of Section 12, Township 13 N, Range 11 East of the 6th P.M., Sarpy County, Nebraska, owned by the Alvin & Nancy Glesmann Trust (“Owner”):

1. Request for Zone Change Application
2. Preliminary Plat Application

The following exhibits were also provided:

1. Glesmann Owner Authorization Letter
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 - h. Water Main
 - i. Street Profiles
3. Preliminary Drainage Study
4. Source and Use of Funds

Owner/Subdivider/Agent request the following in order to subdivide the land into a business park development:

1. Change of the zoning classification from AR (Agricultural Residential) to BP (Business Park)
2. Preliminary Plat of Lots 1-3 and Outlot A, Springfield Gateway Park

The documents were forwarded to the Planning Review Team, which is comprised of Bill Seidler, Jr. (city attorney), Jeff Ray (city planner), Jeff Thompson (engineer for Sarpy County & Cities Wastewater Agency (SCCWWA)), Brian Schuele (city engineer with Olsson), MUD, NDOT, OPPD Land Management, Papio Missouri River Natural Resources District, Sarpy County (Admin/Engineering/Public Works), Sarpy County Emergency Management Agency, Sarpy County GIS, Sarpy County Planning, Sarpy County Sheriff, Chad

Zimmerman (Springfield Fire Chief), and Ryan Saunders (Springfield Platteview Community Schools). Below is a synopsis of their comments.

Bill Seidler, Jr., City Attorney

1. Description

- a. This is a Preliminary Plat Application and Rezoning Application by Scannell Properties, LLC for land owned by the Alvin Glesmann and Nancy Glesmann Trust at 14305 Capehart Road, Springfield, 68509.
- b. The proposal is for a two-phase subdivision. Phase 1 with one lot of 22.47 acres and 5.14 acres Outlot A. Phase 2 has two lots. Lot 2 is 21.56 acres. Lot 3 is 21.77 acres.
- c. The subdivision would be called Springfield Gateway Park.
- d. The rezone request is from AR Agriculture Residential to BP Business Park Lots 1-3 and Outlot A.
- e. The land is north/east of the current corporate limits of Springfield. It is not within the current city corporate limits but is within its extra territorial zoning jurisdiction.

2. Documents Reviewed

- a. Letter dated March 6, 2026, signed by Linda Dorothy, Successor Trustee to Scannell Properties, LLC;
- b. Springfield Gateway Park Preliminary Drainage Study dated 3.09.2026;
- c. Springfield Gateway Park Preliminary Plat;
- d. Springfield Gateway Park Preliminary Plat Application dated 3.09.2026;
- e. Springfield Gateway Park Request for Zone Change dated 3.09.2026;
- f. Springfield Gateway Park SUF dated 3.09.2026; and
- g. Springfield Gateway Park Transmittal dated 3.09.2026.

3. Application

- a. It is not disclosed under what state Scannell Properties is an LLC, but if it is a foreign limited liability company, it will have to apply for a Nebraska Certificate of Authority. See Neb. Rev. Stat. §21-156.

4. S.I.D. Valuation

- a. The sources and uses of funds projects a completed valuation of \$85,500.00.00.
 - i. Phase 1 of project= a valuation of \$28,500,000.00.
 - ii. Phase 2 of project= a valuation of \$57,000.000.00.
 - iii. Total= \$85,500,000.00
- b. S.I.D. versus other methods of public improvement methods.
- c. This appears to be an application for zoning that will allow a use of the type described in Springfield Zoning Code, under Business Park.
- d. Under Springfield Subdivision Regulations, Section 3.03 B. l.n, a preliminary plat must contain an itemized cost estimate for all public improvements and detailed breakdown of portion of estimated costs to be borne by the subdivider, and those borne by the city, S.I.D., or other proposed issuer of public debt.
- e. It appears that the S.I.D. property tax levy would be higher than the city levy.
- f. S.I.D.s are a government unto themselves.
- g. The city should consider alternatives to S.I.D. construction.
- h. S.I.D.s are not part of the corporate limits of the city, and the city derives no property tax revenue from them. They do, however, have the potential for demands from S.I.D. operators, who do not understand the distinction between the city and the S.I.D.
- i. S.I.D.s are governed by an S.I.D. Board of Directors, elected by the lot owners.
- j. While the construction costs can be projected, the final development valuation and timing are speculative. The final development valuation and timing will affect the ability of the S.I.D. to pay its debt. This could, in turn, affect the possibility of the city annexing this S.I.D.



5. Development Risks to Springfield

- a. A risk is that promoters of the development may not be able to build and sell the lots or improvements to reach the projected values.
- b. If the Subdivider cannot sell all of the lots at the projected price, and collect the special assessments, or if the value of the improvements is less than the projected value, it may mean that the S.I.D. would have to address its debt. It would also mean that the projected debt could not be retired according to the projected schedule.
- c. It is unknown if the current business market conditions in Springfield, or the surrounding area, would economically justify the construction of the imagined improvement at the hoped-for valuation.

6. Annexation Risk

- a. If it is the policy of the City of Springfield not to annex S.I.D.s until the S.I.D. reduces its debt to a level that can be serviced at the then current levy of the city, it may mean that annexation of the area may never occur.
- b. The tax levy of the S.I.D. should be compared to the property tax levy of the City of Springfield. It is unknown what the district tax levy would have to be to service its construction, debt, and operation cost.
- c. If the S.I.D. cannot generate sufficient revenue to maintain its infrastructure, it may allow its infrastructure to deteriorate, which would create a problem for the city, with deteriorated streets, sewers, and outlots in an area within city limits.
- d. If, in the future, the city cannot, or will not, annex this S.I.D., because of debt levels, or infrastructure considerations, the city would not be able to annex areas of this S.I.D that were contiguous with this S.I.D. but not the corporate limits of the city.

7. Papillion Issues

- a. Springfield has an interlocal agreement with Papillion regarding extraterritorial zoning jurisdiction. If there is additional development to the north of the current Springfield corporate limits, and Springfield annexes the subdivision, it would potentially alter Springfield's one-mile extraterritorial zoning jurisdiction boundary.
- b. Alternatively, if the area between Springfield and Papillion becomes increasingly urbanized, Papillion may wish to extend its boundaries.
 - i. These matters should be studied in light of the city's relationship with Papillion.
- c. Papillion is a City of the First Class and Springfield is a City of the Second Class.
- d. Springfield should consider the zoning and annexation issues that could arise because of increased suburban development in the area between Papillion and Springfield.

8. Sewer Agency Issue

- a. It is unknown if the sewer agency has a sewer line in this area. If there is any pioneering required, that would require coordination with the Agency.

9. Outlot A

- a. Outlot A in Phase 1 appears to be a drainage basin. Projected ownership and maintenance of Outlot A should be disclosed and discussed between the Subdivider and the city.

10. Business Park District

- a. Springfield Zoning Code at 5.01, section 5.18 (BP) contains the permitted uses and conditional permitted uses for the zone.
- b. The description of Business Park on page 73 of the Springfield Comprehensive Plan and the permitted uses in section 5.18 of the Springfield Zoning Code are different.
 - i. City to discuss the differences and contemplated use with the Subdivider.



Jeff Ray, City Planner

1. The proposed preliminary plat and zone change to BP, Business Park, are in conformance with the Comprehensive Plan and Zoning Ordinance.

Jeff Thompson, SCCWWA Engineer

SCCWWA staff review is based on the SCCWWA policy and procedures currently in effect at the time of this review.

1. City to provide, at the time of the final plat submittal, the sewer connection agreement between the City of Springfield and the development area.
 - a. Based on the current Agency Master Plan and the natural topography of the property, the entire parcel lies within the Phase 1A service area and can be serviced through localized outfall sewers that may, through the current agreement for connection and wastewater service between the City of Springfield and the Agency, be allowed to connect.
2. Recommend a boundary adjustment application be submitted to the Agency board for consideration to amend and adjust the growth boundary zone to include the entire parcel within the Urban Development Zone ("UDZ").
 - a. SCCWWA recommends the boundary adjustment application include the entire subbasin that can be serviced by the localized outfall within this request to prevent further Agency action in the future should additional development wish to connect.
 - i. Based on the current Growth Management Plan, the entire parcel lies within the Urban Reserve Zone ("URZ").
3. Actual flow quantities within the entire service area will need to be monitored and evaluated routinely to ensure system surcharging and/or limiting capacities do not occur.
 - a. Land uses from this development area were assumed "low density residential" based on the future land use plans provided by the City of Springfield at the time of the Agency's initial system design. The estimated flow rate for that land use was approximately 45,653 GPD on average.
<https://scacwa.maps.arcgis.com/apps/instant/basic/index.html?appid=6307929e69234ac58f8eb18b6e533fda>.
 - b. Based on the current proposed layout and calculations provided, the estimated average daily development flow from the proposed development boundary is 120,643 GPD.
 - i. This is nearly three (3) times in excess of the original design flow which means this development could in theory deplete approximately 75,000 GPD more capacity than originally designed for however, based on actually pipe slopes completed at the time of construction, the capacity of the system exceeded design by nearly 15% at the most restrictive point downstream.
 - c. The "timing" of development not happening across the entire service area all at once helps alleviate most concern; however, as more development builds out throughout the service area as a whole, additional pumps may need to be added at the lift station sites downstream.
 - d. It is also noteworthy that the contributing area within the calculation provided may be slightly inflated due to the boundary inclusion of Hwy 50 right-of-way within service Area B (75.6 Ac)
4. Subdivider to provide, at the time of the final plat submittal, an Excel spreadsheet with the final lot count and acreage for final connection fees due, as well as an AutoCAD file of the final plat layout.
 - a. Based on the current preliminary plat, the estimated Agency connection fees due at the time of the final plat will be \$1,972,647.36 (see **attached Springfield Gateway Park Sr. Conn Fee Calcs_3-11-26.pdf**).



- i. Should item 3 above be pursued and the development area is moved within the UDZ, only half (½) of the connection fees would be due at the time of the platting equaling \$986,323.68 with the second half becoming due at the time of building permits for each lot being built upon.
 - ii. These fees are based on the 2025-2026 fiscal year rates which expire June 30, 2026. Should the final plat not be approved by then or a phased development approach is desired, future fiscal years rates shall apply.
 - b. The City of Springfield may have their own connection fee charge for the development on top of the Agency charges which is perfectly understandable to assist in the construction of the localized outfall sewer servicing a larger area of development.
5. SCCWWA will review the layout of future final plat submittals for any changes to the development ratio.
 - a. The Regional Wastewater System Financial Assessment TM_2015 3-11-16(final) Waatach and Platte River Regional Wastewater System Refinement Technical Memorandum and the Regional Wastewater Treatment Alternatives Technical Memorandum estimated 65% of the total acres of any residential to be developable with 5 EDUs per acre.
 - b. Based on the current preliminary plat information, this development equates to a ratio of 91% which is larger than those preliminary engineering estimates. This is subject to change, however, based on any changes to the proposed development submittal.
6. Recommend further due diligence within the development area after testing to confirm and ensure inflow and infiltration (“I & I”) is not encountered.
 - a. Recent developments within the Agency jurisdiction have found newly constructed developments are experiencing I & I issues even after initial system testing.
 - b. An inflatable plug at the tie in structures prior to any initial home construction may be prudent for identifying this type of issue.

Brian Schuele, City Engineer w/ Olsson

1. Capehart Road
 - a. Agree with Sarpy County Admin’s comments below.
 - b. Subdivider is showing completion of the third lane of pavement and a sidewalk on the south side of Capehart, which meets the requirements.
 - i. It is presumed that this this would satisfy Papillion as well.
2. Capehart Quarter Mile Access
 - a. For residential or commercial developments, typically ***an access at the quarter mile point of an arterial road is required***, which is the east boundary of the property.
 - i. This road would run along the eastern edge of the property.
 - ii. Once past 14009 Capehart Road, it could potentially shift east to be centered on the shared property line since the adjacent property would have the same requirement of a quarter mile access.
3. Highway 50
 - a. Agent to coordinate access with NDOT.
 - b. NDOT may require a traffic study and the addition of a deceleration lane, etc.
4. Gateway Drive
 - a. Gateway drive would be classified as a collector road, requiring an 80’ ROW, 36’ pavement width, 300’ min. centerline radius, and 8” concrete.
 - b. Recommend a 10’ sidewalk/trail section on one side in order to provide connectivity to trail along Hwy 50.
 - i. A 5’ sidewalk will be required on the other side.



5. Wetlands
 - a. Agent to provide a wetland delineation and show impacts.
6. Sanitary Sewer
 - a. Agent to obtain easements from landowner to the south to construct the sanitary outfall.
 - b. Reimbursement to be made by future developers connecting to the outfall sewer on a per acreage basis.
7. Drainage Report/Storm Sewer
 - a. Site appears to meet the drainage requirements.
 - b. Drainage report will be reviewed in detail during the final plat review process.

MUD

1. Metropolitan Utilities District (“MUD”) is the supplier of natural gas and water to Springfield Gateway Park subdivision.
 - a. MUD has an existing 16” water main in Capehart Road, as well as an existing 24” water main in S. 144th Street (HWY 50).
 - b. Subdivider to add a gas main extension along S. 144th Street (Hwy 50) from Platteview Road to the north.
 - c. Easements may or may not be needed, depending on the design.

NDOT

No comments received.

OPPD

1. High voltage (69kv & 161kv) transmission line on west side of property with restrictions outlined within final ROW Easement (plat specifies proposed).
2. Subdivider/Agent to contact OPPD Utility Coordinator regarding electrical needs such as:
 - a. Existing facilities within and surrounding property to be removed and/or relocated for future improvements.
 - b. Timeline to install electrical backbone for future subdivision/lots. Recommended to obtain building permit AFTER backbone is installed.
 - c. Additional easements on subject property outside plat dedication may be required for electrical facilities to power future improvements.
3. Agent to include standard OPPD dedication language on final plat to install electrical backbone to feed future improvements:

- a. **Dedication**

Know all men by these presents that we, , owners of the property described in the Certification of Survey and embraced within the plat, have caused said land to be subdivided into lots and streets to be numbered and named as shown, said subdivision to be hereafter known as (lots numbered as shown), and we do hereby ratify and approve of the disposition of our property as shown on the plat, and we do hereby dedicate to the public for public use the streets, avenues and circles, and we do hereby grant easements as shown on this plat, we do further grant a perpetual easement to the Omaha Public Power District, Qwest Communications and any company which has been granted a franchise to provide a cable television system in the area to be subdivided, their successors and assigns, to erect, operate, maintain, repair and renew poles, wires, cables, conduits and other related facilities, and to extend thereon wires or cables for the carrying and transmission of electric current for light, heat and power and for the transmission of signals and sounds of all kinds including signals provided by a cable television system, and the reception on, over, through, under and across a five-foot (5') wide strip of land abutting all front and side boundary lot lines; an eight-foot (8') wide strip of land abutting the rear boundary lines of all



interior lots; and a sixteen-foot (16') wide strip of land abutting the rear boundary lines of all exterior lots. The term exterior lots is herein defined as those lots forming the outer perimeter of the above-described addition. Said sixteen-foot (16') wide easement will be reduced to an eight-foot (8') wide strip when the adjacent land is surveyed, platted and recorded. No permanent buildings or retaining walls shall be placed in the said easement ways, but the same may be used for gardens, shrubs, landscaping and other purposes that do not then or later interfere with the aforesaid uses or rights herein granted.

Papio Missouri River Natural Resources District

1. Access to this site from the east side of Highway 50 will impact the MoPac Trail that is operated and maintained by the Papio NRD.
 - a. Areas distributed by construction shall be replaced with concrete trail surface.
 - b. Appropriate signage, paint, and access control features shall be included at location where streets or driveways cross the trail.
 - c. Plans shall be submitted to the Papio NRD for review with Eric Williams (EWilliams@PapioNRD.org) as the primary contact.

Sarpy County Admin/Engineer/Public Works

Admin

1. Subdivider is responsible for reimbursing the County for the cost of the 650' of the third lane of Capehart Road adjacent to their property, inclusive of ROW acquisition, in the amount of \$192,349.
 - a. The County led the improvement of Capehart Road from Highway 50 to the east property line of Meta's development, which consisted of approx. 650' of 3-lane road then tapered to 2-lanes.
 - b. Meta has reimbursed the County for one lane of pavement adjacent to their property.
2. City to work with subdivider on any additional improvements needed on Capehart Road.
 - a. Capehart Road from Highway 50 to Meta's east property line is now in Papillion city limits.

Engineer

1. Preliminary Plat
 - a. The cul-de-sac between Lots 1 and 2 exceeds the length limit.
 - b. Agent to submit roadway plans to Sarpy County Public Works for review.
2. Streets Profile exhibit
 - a. The PVI Elevation and K on the Street ROW W-E STA: 12.00 to STA: 19.00 does not meet minimum.
 - b. Agent to indicate design/posted speed.

See attached Springfield Gateway Park Prelim Plat & Street Profiles COM 3-19.pdf.

Sarpy County Emergency Management Agency

1. A small portion of this property lacks sufficient outdoor warning siren coverage.
 - a. A new outdoor warning siren is needed in this area.
 - i. It is recommended that the City of Springfield collaborate with the subdivider, the City of Papillion, and the Sarpy County Emergency Management Agency to identify a funding source and suitable location for a new outdoor warning siren in this area.

Sarpy County GIS

1. Gateway Drive cannot be used as a street name in this development.
 - a. Suggestions provided by the city.
2. Streets provided (***see attached Springfield Gateway Park Streets 3-23-26.pdf***).



Sarpy County Planning

No comments received.

Sarpy County Sheriff

No comments.

Springfield Fire Chief

No comments.

Ryan Saunders (Springfield Platteview Community Schools)

No comments received.

Attachments:

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- Springfield Gateway Park Prelim Plat & Street Profiles COM 3-19.pdf
- Springfield Gateway Park Streets 3-23-26.pdf



3/11/2026

Agency Rates per Ac	\$	25-26 29,984.00	\$	26-27 31,484.00	\$	27-28 32,059.00
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Gross Plat Size 72.27

		25-26	26-27	27-28
Lot No.	Size (Ac)	Conn Fee	Conn Fee	Conn Fee
1	22.47	\$ 673,740.48	\$ 707,445.48	\$ 720,365.73
2	21.55	\$ 646,155.20	\$ 678,480.20	\$ 690,871.45
3	21.77	\$ 652,751.68	\$ 685,406.68	\$ 697,924.43
Total	65.79	\$ 1,972,647.36	\$ 2,071,332.36	\$ 2,109,161.61

Outlot A Size (Ac) 5.14

ROW 1.34

Total Buildable

% Builable 91% > 65% TRUE

Table 1 – Growth Forecast Assumptions		
Variable	Unit	Value
Overall Sarpy County Residential Population Growth	People/year	• 3,625
• 2015-2045		• 2,845
• 2046-2055		
Percentage of Projected Incremental Growth Occurring South of Ridgeline:	Percent	• 10
• Year 2020		• 25
• Year 2025		• 75
• Year 2035		• 90
• Year 2050		
Single Family Residential	People/DU	2.7
Dwelling Units (DU) per Gross Acre	DU/acre	3
People per Gross Acre	People/acre	8.1
Developable Acre to Gross Acre Ratio (Residential)	Percent	60
Commercial Growth	SF/10 years	500,000
Commercial Building Area per Developable Acre	SF/acre	13,700
Area per Commercial Employee	SF/employee	196
Commercial Employees per Developable Acre	Employees/acre	70
Industrial Growth	SF/10 years	3,000,000
Industrial Building Area per Developable Acre	SF/acre	12,000
Area per Industrial Employee	SF/employee	600
Industrial Employees per Developable Acre	Employees/acre	20
Developable Acre to Gross Acre Ratio (Commercial/Industrial)	Percent	65
Residential Wastewater Flow	gpcd	100
Commercial Wastewater Flow	gpad	1,500
Industrial Wastewater Flow	gpad	1,500

Capehart Rd

Silicon Prairie Plz

Hwy-50

Capehart Rd

SPRINGFIELD GATEWAY PARK

LOTS 1-3, AND OUTLOT A
SARPY COUNTY, NEBRASKA

TDS
Engineering & Surveying

Thompson, Stessman & Doran, Inc.
10104 Old Mill Rd
Omaha, NE 68154
402.233.1000 www.tdsinc.com
TDS Engineering and Surveying
NE 042079

Springfield Gateway Park



VICINITY MAP

LEGAL DESCRIPTION

ENGINEER

APPLICANT

NOTES

LEGEND

Symbol	Area	Width	Depth	Height
[Symbol]	10'	12"	12"	12"
[Symbol]	10'	12"	12"	12"
[Symbol]	10'	12"	12"	12"
[Symbol]	10'	12"	12"	12"
[Symbol]	10'	12"	12"	12"

North Arrow

Drawn by: MDR - Reviewed by: CLK
Date: 08/08/11 Date: 08/08/11

Preliminary Plat

Exhibit A

PHASE 2

Heritage Dr

PHASE 1

Springfield Gateway Park

Springfield NE, 68059



REQUEST FOR ZONE CHANGE

(please print or type)

Applicant's Name Scannell Properties LLC

Address 1600 Genessee St., Suite 232 Kansas City, MO 64102

Phone (913) 909-6503 - _____ ext. _____

Owner's Name Alvin & Nancy Glesmann

Address 5108 N 192nd Ave. Cir. Omaha, NE 68022

Phone () _____ - _____ ext. _____

Agent's Name Thompson Dreessen & Dornier

Address 10836 Old Mill Road, Omaha, Nebraska 68154

Phone (402) 330-8860 - _____ ext. _____

Hereby request the Planning Commission and City Council to consider a change of zoning classification. The current zoning designation of the property is as follows:

AR Agricultural Residential District

The desired zoning designation of the property is as follows:

BP Business Park

Please note: Minimum size requirements are necessary in some Zoning Districts. Please contact city staff for information regarding these minimum requirements.

The zone change is requested for the property legally described as the following:

Lots 1-3 and Outlot A, Springfield Gateway Park, being a platting of the W 1/2 of the NW quarter of section 12, T13N, R11E of the 6th P.M., Sarpy County, Nebraska.


The existing use of the property is as follows:

The existing use of the property is farmland with row crops.

The applicant is requesting a zone change for the following purpose:
Platting the land for development of lots fitting the permitted uses within the Highway
Business zoning.

- ✓ ***Please refer to the Zone Change Checklist for a complete list of required information.***
- ✓ ***Complete information must be provided by the applicant or no action will be taken.***
- ✓ ***Please refer to the Review Schedule for submittal deadlines and public hearing dates.***

I hereby certify that all required information and materials are herewith attached and said materials are true and accurate to the best of my knowledge.

Signed  (CAM DUFF)
Applicant

Date MARCH 9TH, 2026

Application Fee: \$400.00

**\$200.00 of the fee is refundable only if City Council denies request*

All fees are due and payable to the City Treasurer upon application.

Zone Change Recommendation / Action

Planning Commission

- Approval recommended
- Approval not recommended
- Changes and improvements required:

- ___ Ayes
- ___ Nays
- ___ Abstain

Date of Public Hearing _____, 20____
Date of Notice of Public Hearing _____, 20____

Signed _____
Chairman, Planning Commission

City Council

- Application approved
- Application denied
- Application referred back to Planning Commission with specific instructions:

- ___ Ayes
- ___ Nays
- ___ Abstain

Date of Public Hearing _____, 20____
Date of Notice of Public Hearing _____, 20____

Signed _____
Mayor

Attest _____
City Clerk



PRELIMINARY PLAT APPLICATION

(please print or type)

Subdivider's Name Scannell Properties LLC
Address 1600 Genessee St., Suite 232 Kansas City, MO 64102
Phone (913) 909-6503

Owner's Name Alvin & Nancy Glesmann
Address 5108 N 192nd Ave Cir Omaha, NE 68022
Phone _____

Agent's Name Thompson Dreessen & Dörner
Address 10836 Old Mill Road, Omaha, Nebraska 68154
Phone (402) 330-8860

The Preliminary Plat is requested for the property legally described as follows:
Lots 1-3 and Outlot A, Springfield Gateway Park, being a platting of the W ½ of the NW quarter
of Section 12, T13N, R11E of the 6th P.M., Sarpy County, Nebraska.

The current zoning of the property is as follows:
AR Agricultural Residential District

Name of the Preliminary Plat:
Springfield Gateway Park

Number of lots in the Preliminary Plat:
3 BP (Business Park) Lots, 1 BP (Business Park) Outlot

Does the subdivider have any interest in the land surrounding the preliminary plat?
 yes
 no

If yes, please describe the nature of such interest:

Will the preliminary plat require any zoning or other action (rezone, planned development, conditional use, vacations) to complete the development?

- yes
- no

If yes, please describe the nature of the action:

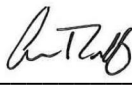
Change of zoning will be required. Change of zoning application is provided with plat submittal.

Does the preliminary plat meet all the criteria required in the Subdivision Regulations and as found on the Preliminary Plat Checklist?

- yes
- no

- ✓ ***Please refer to the Preliminary Plat Checklist for a complete list of required information.***
- ✓ ***Complete information must be provided by the applicant or no action will be taken.***
- ✓ ***Please refer to the Review Schedule for submittal deadlines and public hearing dates.***

I hereby certify that all required information and materials are herewith attached and said materials are true and accurate to the best of my knowledge.

Signed  (CAM DUFF)
Applicant

Date MARCH 9TH, 2026

Application Fee: \$750.00 plus \$10.00 per lot

Revised Preliminary Plat Fee: \$250.00

*fees are nonrefundable

All fees are due and payable to the City Treasurer upon application.

Preliminary Plat Recommendation / Action

Planning Commission

- Approval recommended
- Approval not recommended
- Changes and improvements required:

- ___ Ayes
- ___ Nays
- ___ Abstain

Date of Public Hearing _____, 20____

Date of Notice of Public Hearing _____, 20____

Signed _____
Chairman, Planning Commission

City Council

- Application approved
- Application denied
- Application referred back to Planning Commission with specific instructions:

- ___ Ayes
- ___ Nays
- ___ Abstain

Date of Public Hearing _____, 20____

Date of Notice of Public Hearing _____, 20____

Signed _____
Mayor

Attest _____
City Clerk

March 6, 2026

VIA EMAIL

Linda Dorothy
Linda Dorothy, Successor Trustee of the Alvin Glesmann Trust & Nancy Glesmann Trust

RE: 14305 Capehart Road Springfield, NE Preliminary Plat Owner Authorization Letter

Dear Ms. Linda Dorothy

Linda Dorothy, Successor Trustee of the Alvin Glesmann Trust & Nancy Glesmann Trust (herein, "Owner") hereby authorizes Scannell Properties, LLC, an Indiana Limited Liability Company (the "Applicant") and the Applicant's engineering firm, Thompson, Dreessen and Dorner, to apply for and obtain any zoning, platting, subdivision approvals, and or other approvals necessary to allow for zoning approvals described on Exhibit A attached hereto by the Applicant within the property owned by the Owner. Applicant shall bear the cost of obtaining all such approvals. Owner agrees to cooperate with and to assist the Applicant in obtaining approval for any such subdivision, rezoning, variances, permits and approvals, including signing all documents to the extent necessary for obtaining the same; provided Owner shall not be required to incur any costs or expenses in connection with the same.

BUYER: Scannell Properties, LLC



By: Cameron Duff

Its: Director of Development

Agreed to and accepted this 6th day of March 2026.

SELLER: Linda Dorothy, Successor Trustee of the Alvin Glesmann Trust & Nancy Glesmann Trust

By: Linda Dorothy

Its: Linda Dorothy

March 6th, 2026

Linda Dorothy

Linda Dorothy, Successor Trustee of the Alvin Glesmann Trust & Nancy Glesmann Trust

Page 2

EXHIBIT "A"

SPRING

PROJECT LOCATION

- 1. EIR
- 2. WAIVER
- 3. ENVIRONMENTAL IMPACT STATEMENT
- 4. PERMITS
- 5. CONTRACTS
- 6. UTILITIES
- 7. RECORD DRAWINGS
- 8. RECORDS
- 9. MAINTENANCE

Curve Table Alignments			
CURVE #	RADIUS	LENGTH	DELTA
C1	200.00'	248.91'	77° 02' 28"
C2	200.00'	247.83'	77° 01' 47"

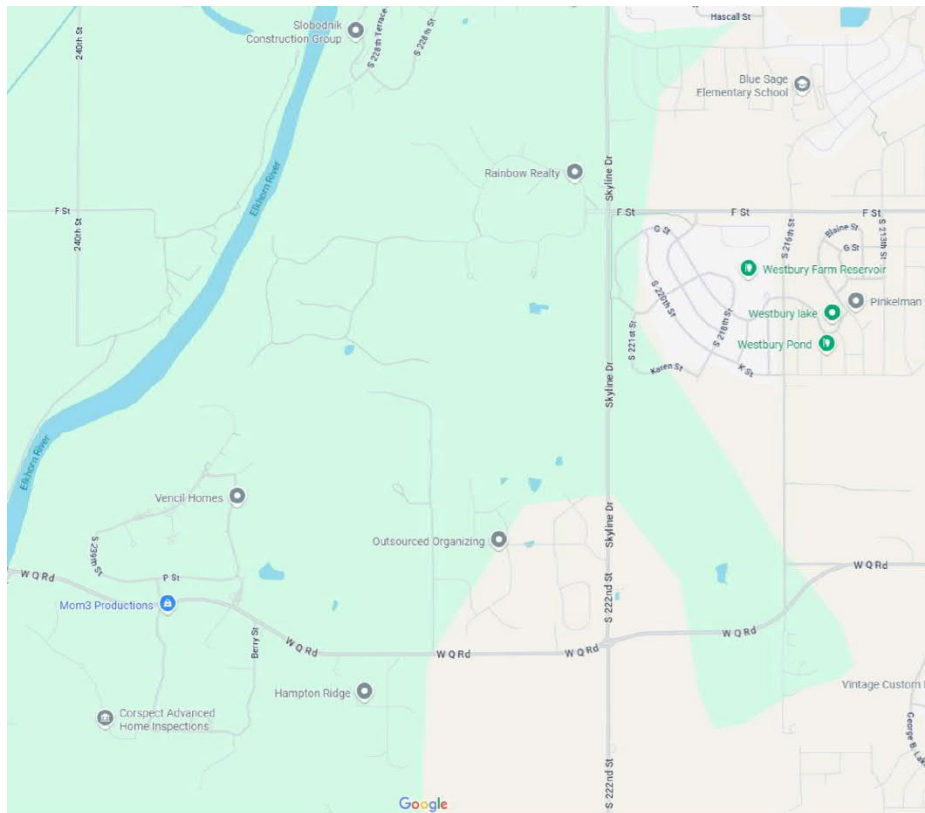


Preliminary Draft

Springfield Gateway Park
Lots 1 - 3 and Outlot A
Highway 50 and Capehart Road
Sarpy County, NE

DRAINAGE STUDY & PCSMP CALCULATIONS

PCSMP No.



Project Engineer

Matthew E. Maly, P.E.

DRAINAGE STUDY & PCSMP CALCULATIONS

Springfield Gateway Park
Highway 50 and Capehart Road
Sarpy County, Nebraska

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- STORM SEWER CALCULATIONS 1 PAGE
- BOX CULVERT HY-8 REPORT 8 PAGES
- CULVERT HYDROGRAPH REPORT 13 PAGES
- PCSMP HYDROGRAPH REPORT..... 32 PAGES
- DETENTION BASIN 1 SECTION 1 PAGES
- DETENTION BASIN 1 ELEVATION VS TIME GRAPH1 PAGES
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SECTION 2

- EXISTING DRAINAGE MAP..... 1 PAGE
- PCSMP DRAINAGE MAP..... 1 PAGE
- STORM SEWER DRAINAGE MAP 1 PAGES

PRELIMINARY DRAINAGE STUDY AND PCSMP CALCULATIONS
Springfield Gateway Park
Lots 1-3 and Outlot A
Sarpy County, Nebraska

EXECUTIVE SUMMARY

This drainage study was prepared for the Springfield Gateway Park subdivision located at the SE corner of Highway 50 and Capehart Road in Springfield, Sarpy County, Nebraska. This study will analyze the Post Construction Stormwater Management Plan (PCSMP) requirements for treatment and detention for the approximately 72 acres of the subdivision.

The existing conditions of the site consist of predominately agricultural land. There is also one residence at the NW corner of the site. The existing topography generally falls from east to west towards a drainage way along highway 50. EX1 overland flows west through minor drainageways to the main channel and to Impact Point 1 at the SW corner of the site. From there it continues downstream to Springfield Creek. EX2 is a small portion along the east edge of the property that overland flows off site to the east at Impact Point 2 eventually reaching Springfield Creek. EX 3 is a small portion at the NE corner which overland flows east off site at Impact Point 3 eventually reaching Springfield Creek. A small off-site area to the north is also conveyed under Capehart Road and through an existing drainageway through the site to Impact Point 1. Also, a large offsite area to the north and west of the site is conveyed under Highway 50 and follows the main channel to the south and exits the site at Impact Point 1.

The proposed conditions of the site will consist of 3 large commercial lots within a BH (Highway Business) zoned subdivision. Approximately 70 acres of the site will be graded during construction. Proposed grading will provide large flat building pad for the lots while maintaining the general runoff direction from east to west. The proposed site will consist of a central paved road, sanitary sewers, storm sewers, and other utilities. Runoff from the site will be captured by the developed lots and tap into public storm sewer. The storm sewer will convey runoff to the south and into Detention Basin 1 (DB1) at the south end of the site. DB1 will provide treatment and detention as necessary for the Post-Construction Stormwater requirements. The northern off site area which is conveyed under Capehart Road will be tapped and routed around the north and west edges of the lots and be discharge back into the main channel along Highway 50. The other large offsite area to the west/north will continue to be conveyed under Highway 50 at the same location and be conveyed through a new box culvert under Gateway Drive as it continues downstream to Impact Point 1.

The SCS and Rational Methods were used to analyze runoff from the development.

It is our intent to demonstrate that the stormwater system has been designed to adequately transport the stormwater from this site, that this site will adequately treat the first half inch of runoff, and that the site will meet pre- and post-construction runoff requirements.

I. Existing Conditions

The existing conditions can be seen on the Existing Drainage Map, found in Section 2 of this report. The existing site is predominately agricultural land with one residence in the NW corner. Surrounding areas are predominately agricultural fields and data centers.

The existing conditions for this site were analyzed below:

Existing Area 1 (EX1): This area consists of the main area of the site. The area is agricultural land and includes the residence to the NW. Runoff from this area overland flows to the west towards the main drainage channel along Highway 50 and then south to Impact Point 1 at the SW corner of the site.

- Total Drainage Area = 60.8 acres
- SCS Runoff Curve Number, CN = 77
- Time of Concentration = 33.1 minutes
- 2 Year Storm Runoff, $Q_2 = 52.75$ cfs
- 10 Year Storm Runoff, $Q_{10} = 117.69$ cfs
- 100 Year Storm Runoff, $Q_{100} = 211.93$ cfs

Existing Area 2 (EX2): This area consists of a small drainage area to the SE corner. Runoff from this area overland flows east and south off the site at Impact Point 2.

- Total Drainage Area = 8.1 acres
- SCS Runoff Curve Number, CN = 77
- Time of Concentration = 10 minutes
- 2 Year Storm Runoff, $Q_2 = 12.28$ cfs
- 10 Year Storm Runoff, $Q_{10} = 26.78$ cfs
- 100 Year Storm Runoff, $Q_{100} = 47.72$ cfs

Existing Area 3 (EX3): This area consists of a small drainage area to the NE corner. Runoff from this area overland flows east and north off the site at Impact Point 3.

- Total Drainage Area = 4 acres
- SCS Runoff Curve Number, CN = 77
- Time of Concentration = 5 minutes
- 2 Year Storm Runoff, $Q_2 = 7.29$ cfs
- 10 Year Storm Runoff, $Q_{10} = 15.45$ cfs
- 100 Year Storm Runoff, $Q_{100} = 27.27$ cfs

II. Proposed Conditions

The proposed site improvements for Springfield Gateway Park will consist of mass grading, sanitary sewer, storm sewer, street paving, utilities, and a detention basin for Post-Construction Stormwater Management. The proposed drainage areas can be seen on the Proposed Conditions map in Section 2 of this report.

The proposed conditions for this site were analyzed below:

Proposed Area 1 (A1): This area consists of the main portion of the site. It will contain the developed lots. Runoff from this area will be captured by the developed sites and be conveyed to the public storm sewer. The sewer will discharge runoff into Detention Basin 1 at the south end of the site where it will be treated and detained prior to being released downstream at Impact Point 1

- Total Drainage Area = 66.24 acres
- SCS Runoff Curve Number, CN = 91
- Time of Concentration = 19.9 minutes
- 2 Year Storm Runoff, $Q_2 = 157.49$ cfs
- 10 Year Storm Runoff, $Q_{10} = 267.12$ cfs
- 100 Year Storm Runoff, $Q_{100} = 409.51$ cfs

Proposed Area 2 (A2): This area consists of a small portion along the west edge of the site. It contains the main drainageway along Highway 50 and sloped areas that cannot be captured and conveyed to DB1. Runoff will be conveyed through the drainageway south to Impact Point 1.

- Total Drainage Area = 6.6 acres
- SCS Runoff Curve Number, CN = 79
- Time of Concentration = 5.0 minutes
- 2 Year Storm Runoff, $Q_2 = 13.34$ cfs
- 10 Year Storm Runoff, $Q_{10} = 27.30$ cfs
- 100 Year Storm Runoff, $Q_{100} = 47.04$ cfs

III. Culvert Summary

One proposed box culvert will be required to convey water under Gateway Drive. This culvert has been analyzed to pass the 50-year storm within the culvert with a minimum of 2' freeboard. Larger storm events may overtop the roadways and be conveyed downstream. A summary of this culvert is in Table 1 below and design reports with cross sections can be found in Section 1 of this report.

Table 1 - Internal Culvert Summary

Area Name	Culvert Size (in)	50-Year Flow Rate (cfs)	Road Elevation	50-Year Headwater Elev.	Freeboard (ft)	Notes
C1	10' x 7' Box	660.62	1124.00	1121.00	3.00	

The culvert will concentrate runoff and create a point discharge that have the potential to cause an increase in erosion. An energy dissipator shall be designed and constructed in accordance with Chapter 7 of the Omaha Regional Stormwater Design Manual. In cases where manufactured systems, such as Flex-A-Mat, are utilized, manufacturers' guidelines shall be followed for design and construction. Dissipator calculations can be found in Section 1 of this report.

IV. Runoff Summary

Hydraflow Hydrographs Extension for AutoCAD Civil 3D was used to calculate the pre- and post-construction runoff rates for the 2-year, 10-year, and 100-year storm events for this site. Analysis was done for the entire site and can be seen in Table 2 below.

Table 2 – Runoff Summary

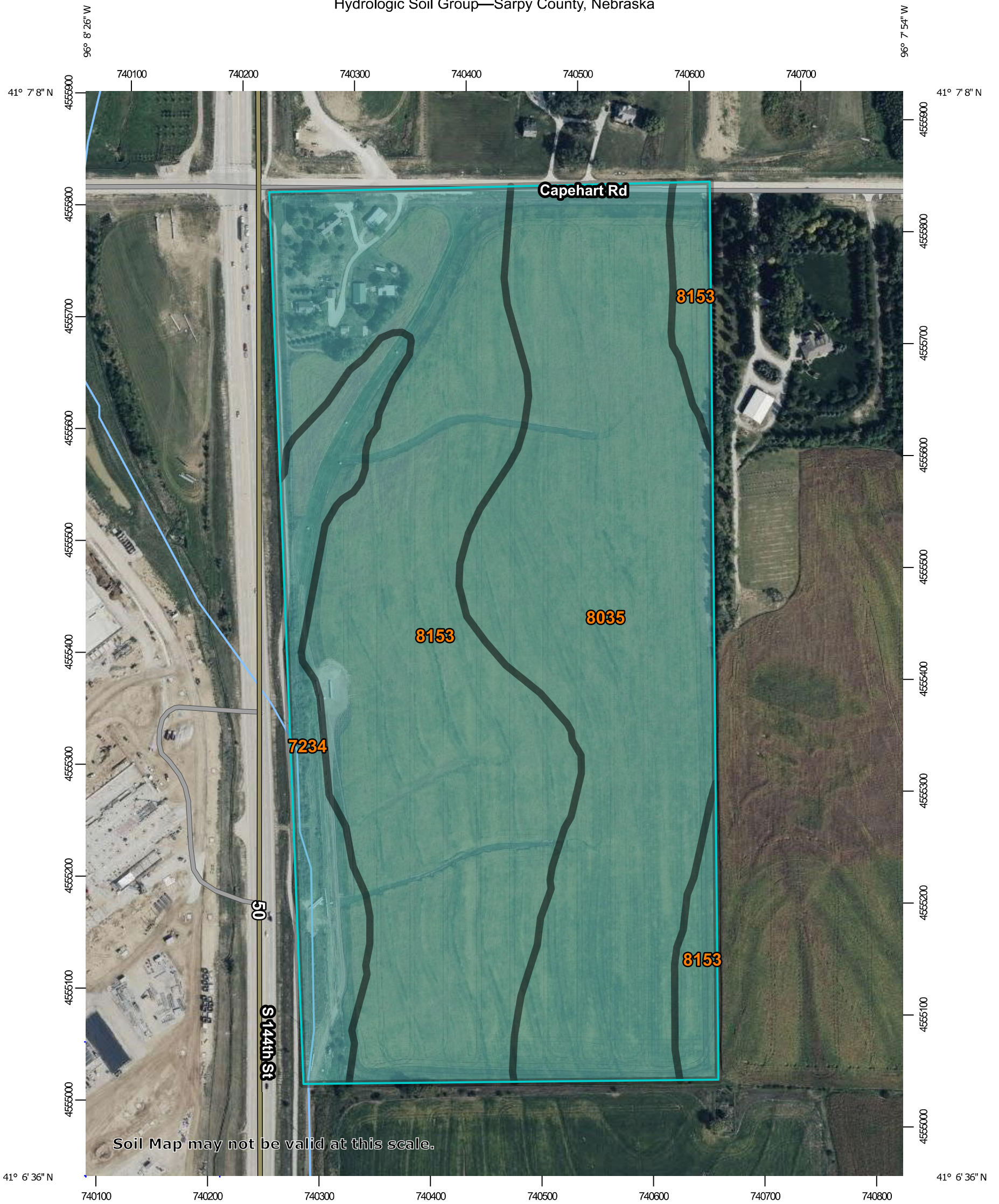
Impact Point	Pre-Construction Runoff (cfs)			Post-Construction Runoff (cfs)		
	2-Yr	10-Yr	100-Yr	2-Yr	10-Yr	100-Yr
1	52.75	117.69	211.93	24.37	96.09	179.76
2	12.78	26.78	47.72	0	0	0
3	7.29	15.45	27.27	0	0	0
TOTAL	72.82	159.92	286.92	24.37	96.09	179.76

Overall, the post-construction runoff will decrease for all storm events as compared to the pre-construction runoff.

Required treatment volumes and detention times for the proposed PCSMP system can be found in the table below.

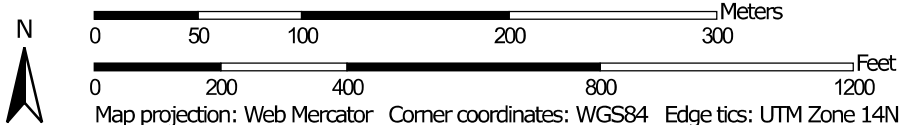
Area	Basin	Treatment Area (ac.)	Required Treatment Volume (First ½" +20%)(CF)	Provided Treatment Below Principal Spillway (CF)	Treatment Volume Elevation	Drawdown Time to Release Treatment Volume (hrs)
A1	DB1	66.24	144,270	295,246	1135.00	47.8

Hydrologic Soil Group—Sarpy County, Nebraska



Soil Map may not be valid at this scale.

Map Scale: 1:4,720 if printed on A portrait (8.5" x 11") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 14N WGS84

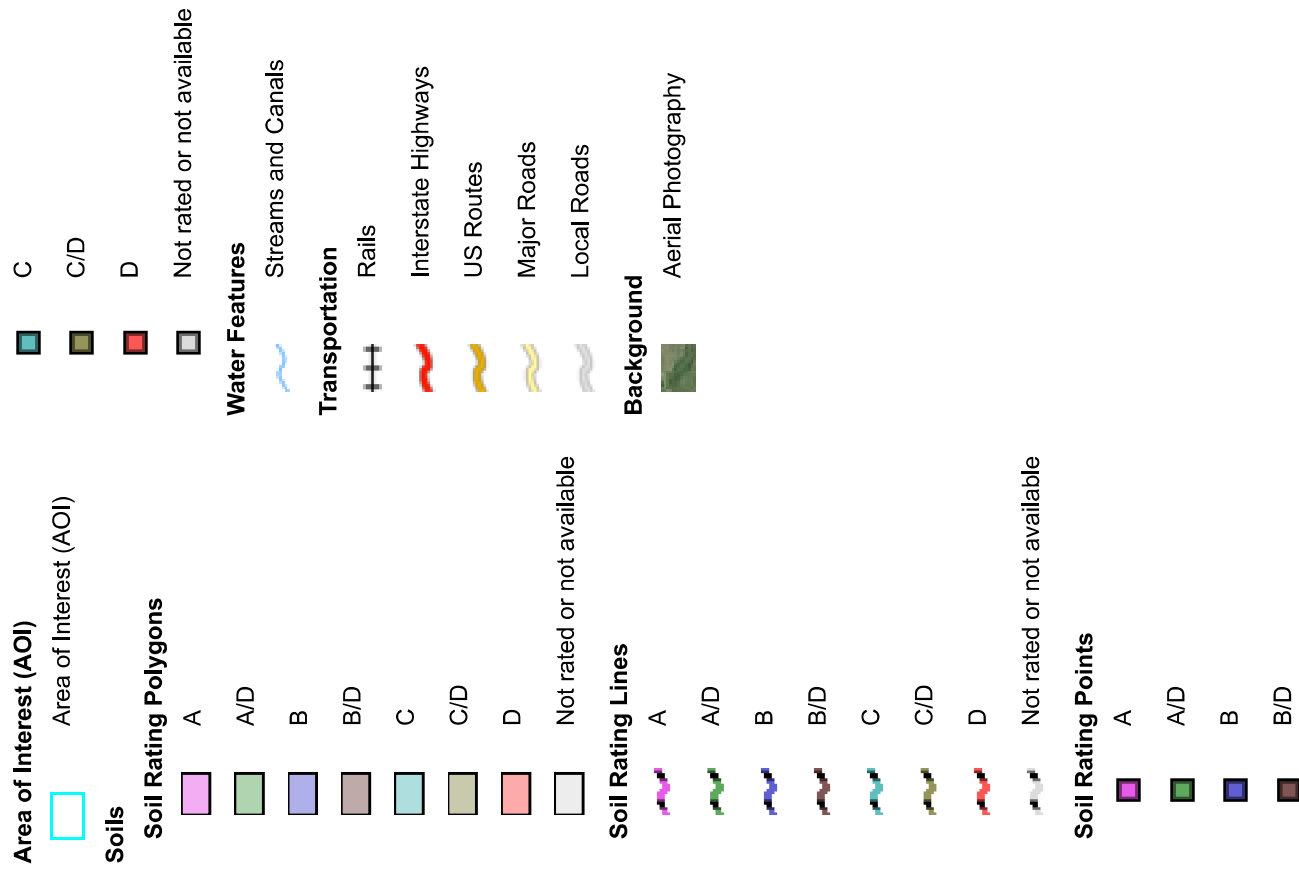


Natural Resources
Conservation Service

Web Soil Survey
National Cooperative Soil Survey

3/6/2026
Page 1 of 4

MAP LEGEND



MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:12,000.

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

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

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

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

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

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

Soil Survey Area: Sarpy County, Nebraska
 Survey Area Data: Version 19, Sep 8, 2025

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

Date(s) aerial images were photographed: Data not available.

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.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
7234	Judson silty clay loam, 2 to 6 percent slopes	C	7.3	9.6%
8035	Marshall-Contrary silty clay loams, 2 to 7 percent slopes	C	31.1	40.9%
8153	Contrary-Marshall silty clay loams, 6 to 11 percent slopes	C	37.7	49.5%
Totals for Area of Interest			76.1	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

COMPUTATION FORM STORM DRAINAGE SYSTEM DESIGN BY THE RATIONAL METHOD		THOMPSON DREESSEN & DORNER Consulting Engineers & Land Surveyors Omaha, NE 68154 (402)330-8860										Calculated By: MEM Date: 7-18-22 Checked By: BPH			Preliminary Final Design x			Drainage Area Project No. 2338-103 Design Storm: 10 yr.									
Imp Pt. No.	Location		Conveyance		Direct Runoff							Travel Time (System Design)					Total Runoff					Remarks					
	From	To	W.S. or No.	O.F.L. ft.	W.C. Type *	S %	V fps	Ti min	i in/hr	A Ac.	C	Conv Sys			Slope		V des. fps	Cap. (all.) cfs	Lgth ft.	t min	TOC min		i	Comp C	Total A Ac.	Des. Q cfs	
												q cfs	No.	Size	min %	des %											
1			B1					20	5	18.77	0.90	84.465		36	1.60	1.70	12.3	87.1898	400	0.54	20	5	0.90	18.77	84.47		
			B2					20	5	22.31	0.90	100.4		48	1.66	1.75	15.2	190.534	1000	1.1	20.5	5	0.90	41.08	184.9		
			B3							20.89	0.90	0		60	1.06	1.10	14	273.91			21.6	4.8	0.90	61.97	267.7		
REMINDER: Check Storm Drain System for Major Storm Provisions.			*Water Course Legend Figure 2-2 FO - Forest FA - Fallow GR - Grass/Lawn										BG - Bare Ground GW - Grass Waterway SG - Shallow Gut. Flow										NOTES:		Sheet 1 of 1		

HY-8 Culvert Analysis Report

Table 1 - Project Headwater Table

Crossing Name	Culvert Name	Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	HW / D (ft)	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Outlet Velocity (ft/s)
Culvert	Culvert 1	660.00	660.00	1120.99	7.99	6.010	1.14	3.35	5.13	4.03	16.39

Crossing Discharge Data

Discharge Selection Method: Specify Minimum, Design, and Maximum Flow

Minimum Flow: 0.00 cfs

Design Flow: 660.00 cfs

Maximum Flow: 750.00 cfs

Table 2 - Summary of Culvert Flows at crossing: Culvert

Headwater Elevation (ft)	Total Discharge (cfs)	Culvert 1 Discharge (cfs)	Roadway Discharge (cfs)	Iterations
1113.00	0.00	0.00	0.00	1
1114.87	75.00	75.00	0.00	1
1115.96	150.00	150.00	0.00	1
1116.89	225.00	225.00	0.00	1
1117.71	300.00	300.00	0.00	1
1118.46	375.00	375.00	0.00	1
1119.16	450.00	450.00	0.00	1
1119.82	525.00	525.00	0.00	1
1120.47	600.00	600.00	0.00	1
1120.99	660.00	660.00	0.00	1
1121.77	750.00	750.00	0.00	1
1124.00	984.28	984.28	0.00	Overtopping

Rating Curve Plot for crossing: Culvert

Total Rating Curve
Crossing: Culvert

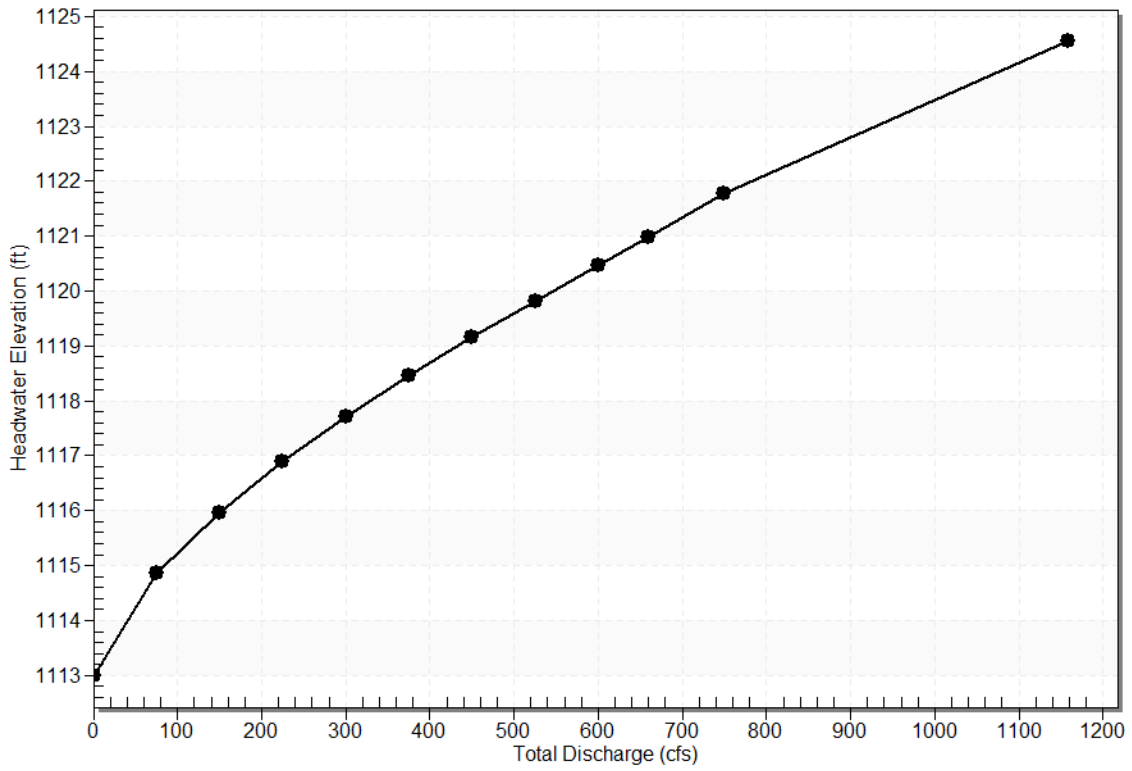


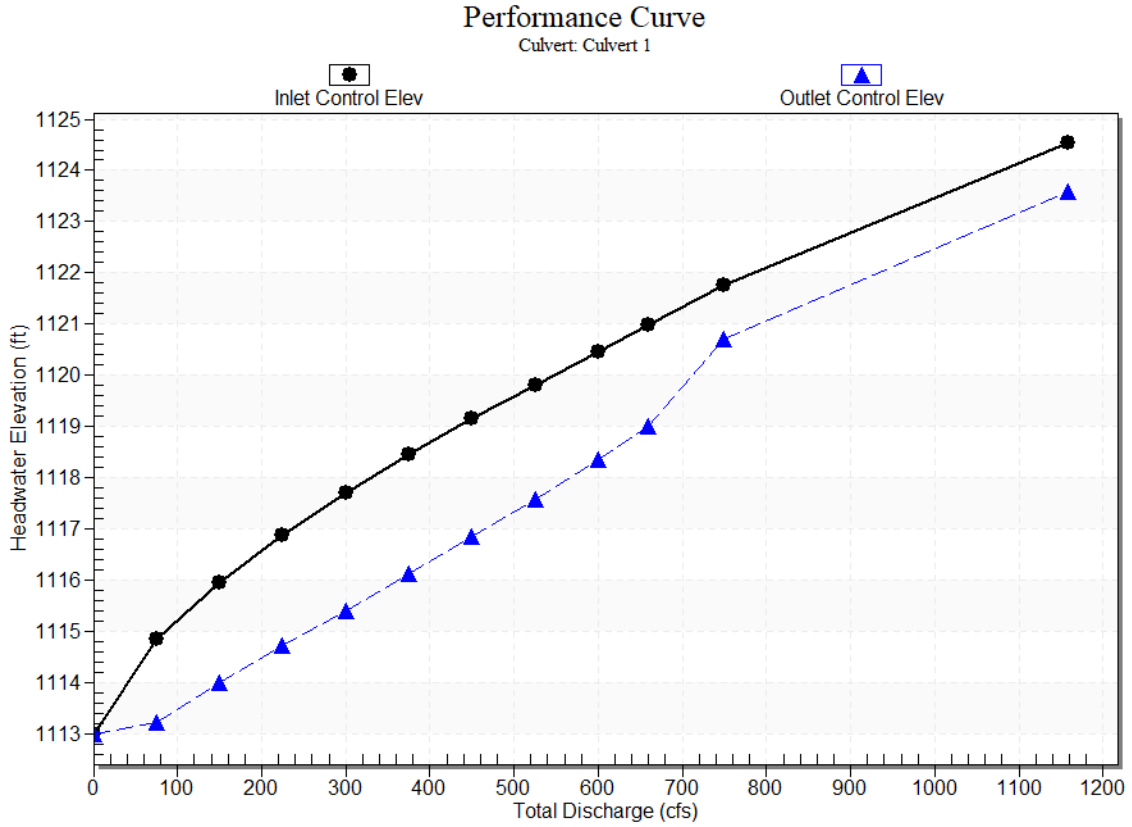
Table 3 - Culvert Summary Table: Culvert 1

Total Discharge (cfs)	Culvert Discharge (cfs)	Headwater Elevation (ft)	Inlet Control Depth (ft)	Outlet Control Depth (ft)	HW / D (ft)	Flow Type	Normal Depth (ft)	Critical Depth (ft)	Outlet Depth (ft)	Tailwater Depth (ft)	Outlet Velocity (ft/s)	Tailwater Velocity (ft/s)
0.00	0.00	1113.00	0.00	0.000	0.00	0-NF	0.00	0.00	0.00	0.00	0.00	0.00
75.00	75.00	1114.87	1.87	0.229	0.27	1-S2n	0.78	1.20	0.82	1.65	9.15	3.85
150.00	150.00	1115.96	2.96	1.009	0.42	1-S2n	1.22	1.91	1.35	2.23	11.15	4.56
225.00	225.00	1116.89	3.89	1.723	0.56	1-S2n	1.60	2.51	1.81	2.61	12.44	4.87
300.00	300.00	1117.71	4.71	2.423	0.67	1-S2n	1.94	3.03	2.24	2.91	13.41	5.04
375.00	375.00	1118.46	5.46	3.127	0.78	1-S2n	2.25	3.52	2.64	3.15	14.19	5.17
450.00	450.00	1119.16	6.16	3.849	0.88	1-S2n	2.55	3.98	3.03	3.37	14.87	5.29
525.00	525.00	1119.82	6.82	4.595	0.97	1-S2n	2.85	4.41	3.40	3.55	15.46	5.40
600.00	600.00	1120.47	7.47	5.368	1.07	5-S2n	3.13	4.82	3.75	3.72	16.00	5.50
660.00	660.00	1120.99	7.99	6.010	1.14	5-S2n	3.35	5.13	4.03	3.85	16.39	5.57
750.00	750.00	1121.77	8.77	7.718	1.25	5-S2n	3.67	5.59	4.43	4.02	16.93	5.68
1159.09	1036.32	1124.55	11.55	10.594	1.65	5-S2n	4.65	6.93	5.64	4.64	18.39	6.33

Culvert Barrel Data

Culvert Barrel Type: Straight Culvert
Inlet Elevation(invert): 1113.00 ft
Outlet Elevation (invert): 1112.00 ft
Culvert Length: 100.00 ft
Culvert Slope: 0.01 ft/ft

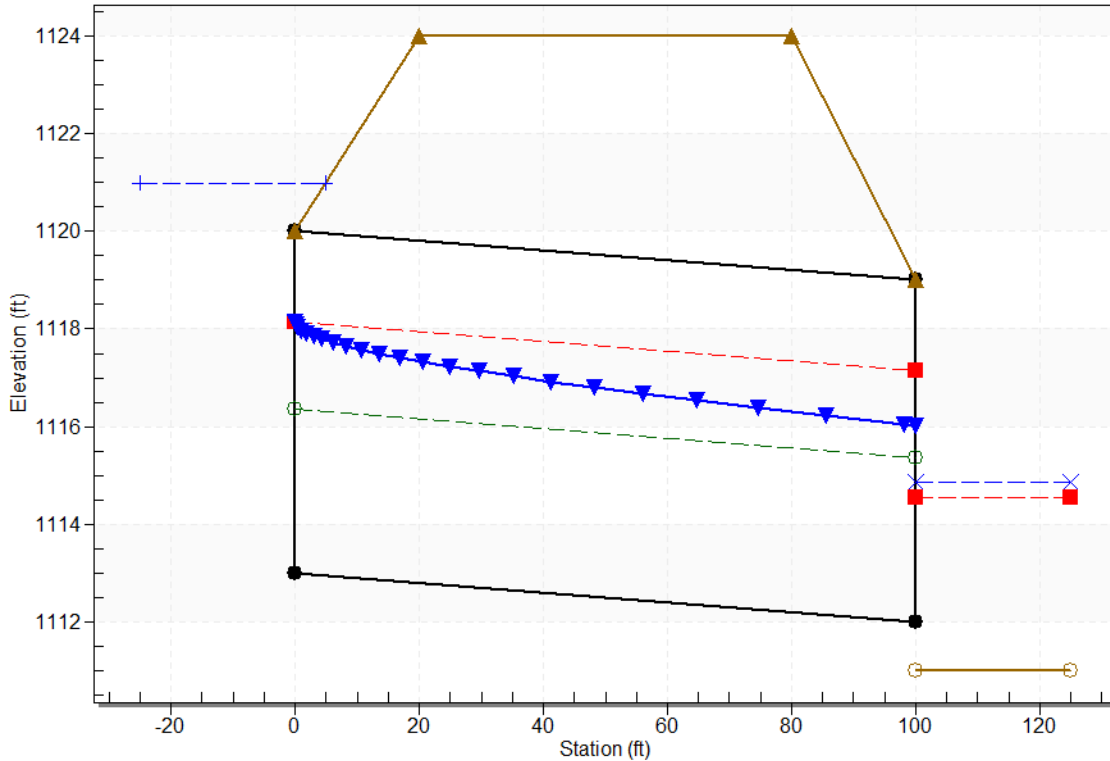
Culvert Performance Curve Plot: Culvert 1



Water Surface Profile Plot for Culvert: Culvert 1

Crossing - Culvert, Design Discharge - 660.0 cfs

Culvert - Culvert 1, Culvert Discharge - 660.0 cfs



Site Data - Culvert 1

Site Data Option: Culvert Invert Data

Inlet Station: 0.00 ft

Inlet Elevation: 1113.00 ft

Outlet Station: 100.00 ft

Outlet Elevation: 1112.00 ft

Number of Barrels: 1

Culvert Data Summary - Culvert 1

Barrel Shape: Concrete Box

Barrel Span: 10.00 ft

Barrel Rise: 7.00 ft

Barrel Material: Concrete

Embedment: 0.00 in

Barrel Manning's n: 0.0120

Culvert Type: Straight

Inlet Configuration: 1.5:1 Bevel (18-34° flare) Wingwall (Ke=0.2)

Inlet Depression: None

Tailwater Channel Data for Crossing: Culvert

Tailwater Channel Option: Irregular Channel

Channel Slope: 0.01 ft/ft

User Defined Channel Cross-Section

Coord No.	Station (ft)	Elevation (ft)	Manning's n
1	0.00	1120.00	0.0500
2	32.00	1113.00	0.0500
3	47.00	1111.00	0.0400
4	51.00	1111.00	0.0400
5	55.00	1113.00	0.0500
6	103.00	1115.00	0.0500
7	123.00	1120.00	0.0000

Table 4 - Downstream Channel Rating Curve (crossing: Culvert)

Flow (cfs)	Water Surface Elev (ft)	Depth (ft)	Velocity (ft/s)	Shear (psf)	Froude Number
0.00	1111.00	0.00	0.00	0.00	0.00
75.00	1112.65	1.65	3.85	1.34	0.68
150.00	1113.23	2.23	4.56	1.81	0.76
225.00	1113.61	2.61	4.87	2.12	0.80
300.00	1113.91	2.91	5.04	2.36	0.80
375.00	1114.15	3.15	5.17	2.56	0.80
450.00	1114.37	3.37	5.29	2.73	0.80
525.00	1114.55	3.55	5.40	2.88	0.79
600.00	1114.72	3.72	5.50	3.02	0.79
660.00	1114.85	3.85	5.57	3.12	0.79
750.00	1115.02	4.02	5.68	3.26	0.78

Roadway Data for crossing: Culvert

Roadway Profile Shape: Constant Roadway Elevation

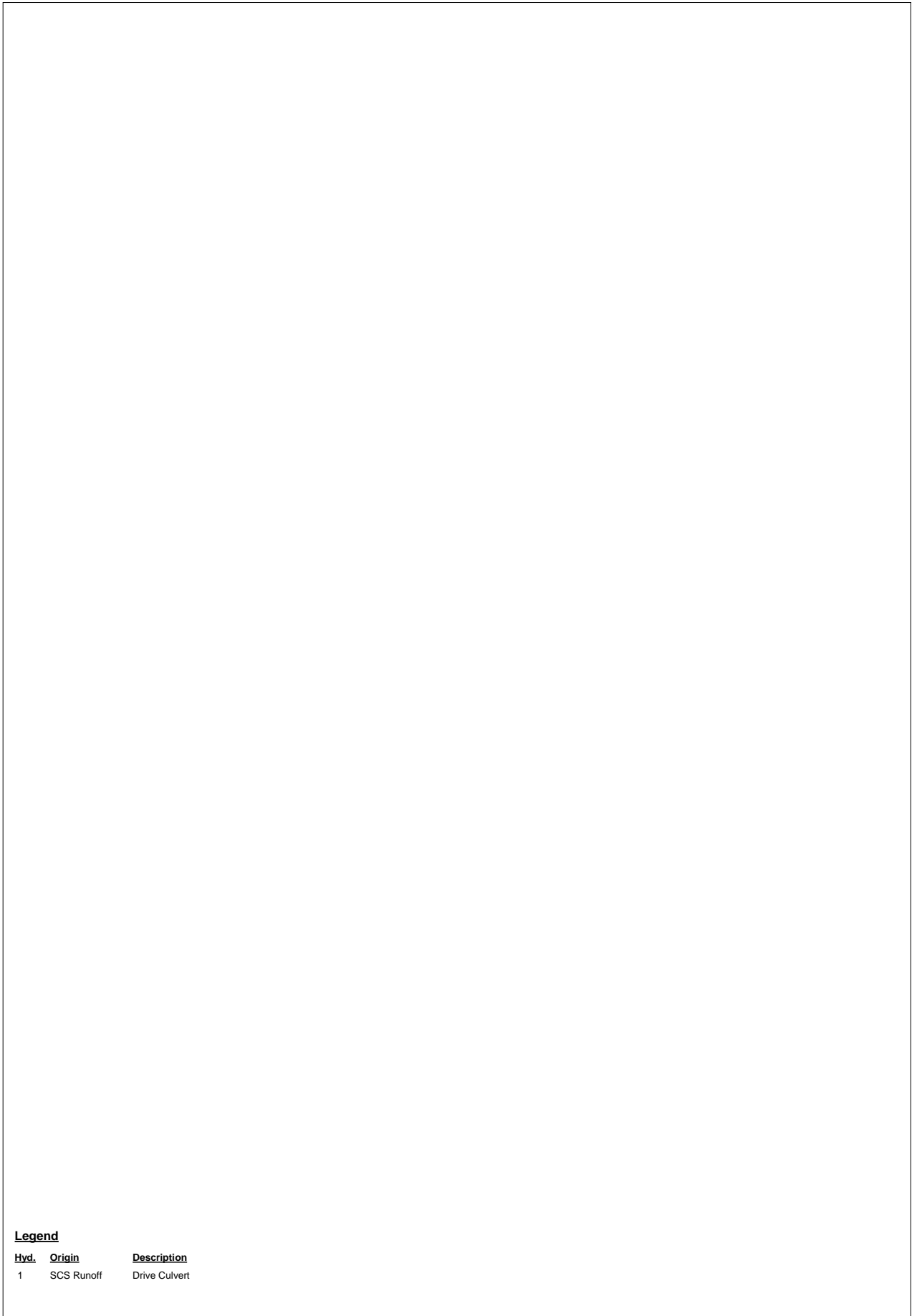
Crest Length: 100.00 ft

Crest Elevation: 1124.00 ft

Roadway Surface: Paved

Roadway Top Width: 60.00 ft

1 Watershed Model Schematic



Legend

<u>Hvd.</u>	<u>Origin</u>	<u>Description</u>
1	SCS Runoff	Drive Culvert

Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	-----	-----	283.70	-----	-----	485.22	-----	660.62	747.82	Drive Culvert

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

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	283.70	2	748	1,834,493	-----	-----	-----	Drive Culvert
2439-101 - Hydroflow - Culvert.gpw					Return Period: 2 Year			Thursday, 03 / 5 / 2026	

Hydrograph Report

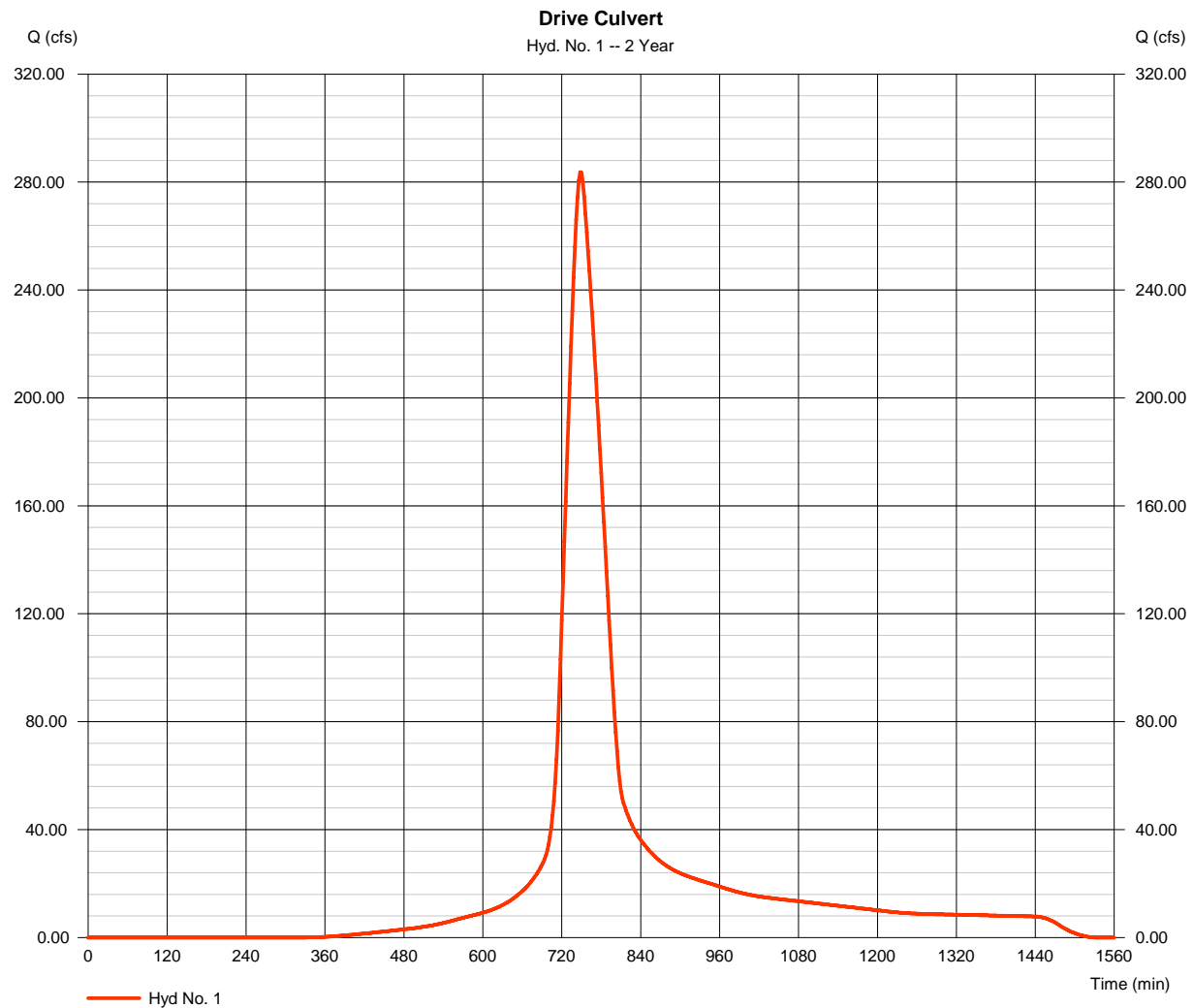
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Thursday, 03 / 5 / 2026

Hyd. No. 1

Drive Culvert

Hydrograph type	= SCS Runoff	Peak discharge	= 283.70 cfs
Storm frequency	= 2 yrs	Time to peak	= 748 min
Time interval	= 2 min	Hyd. volume	= 1,834,493 cuft
Drainage area	= 244.000 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 59.90 min
Total precip.	= 3.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No. 1

Drive Culvert

<u>Description</u>	<u>A</u>		<u>B</u>		<u>C</u>		<u>Totals</u>
Sheet Flow							
Manning's n-value	= 0.011		0.150		0.011		
Flow length (ft)	= 50.0		100.0		0.0		
Two-year 24-hr precip. (in)	= 3.00		3.00		0.00		
Land slope (%)	= 2.00		2.00		0.00		
Travel Time (min)	= 0.72	+	10.12	+	0.00	=	10.84
Shallow Concentrated Flow							
Flow length (ft)	= 5420.00		0.00		0.00		
Watercourse slope (%)	= 1.30		0.00		0.00		
Surface description	= Unpaved		Paved		Paved		
Average velocity (ft/s)	=1.84		0.00		0.00		
Travel Time (min)	= 49.10	+	0.00	+	0.00	=	49.10
Channel Flow							
X sectional flow area (sqft)	= 0.00		0.00		0.00		
Wetted perimeter (ft)	= 0.00		0.00		0.00		
Channel slope (%)	= 0.00		0.00		0.00		
Manning's n-value	= 0.015		0.015		0.015		
Velocity (ft/s)	=0.00		0.00		0.00		
					0.00		
Flow length (ft)	({0})0.0		0.0		0.0		
Travel Time (min)	= 0.00	+	0.00	+	0.00	=	0.00
Total Travel Time, Tc							59.90 min

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

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	485.22	2	748	3,183,827	-----	-----	-----	Drive Culvert
2439-101 - Hydroflow - Culvert.gpw					Return Period: 10 Year			Thursday, 03 / 5 / 2026	

Hydrograph Report

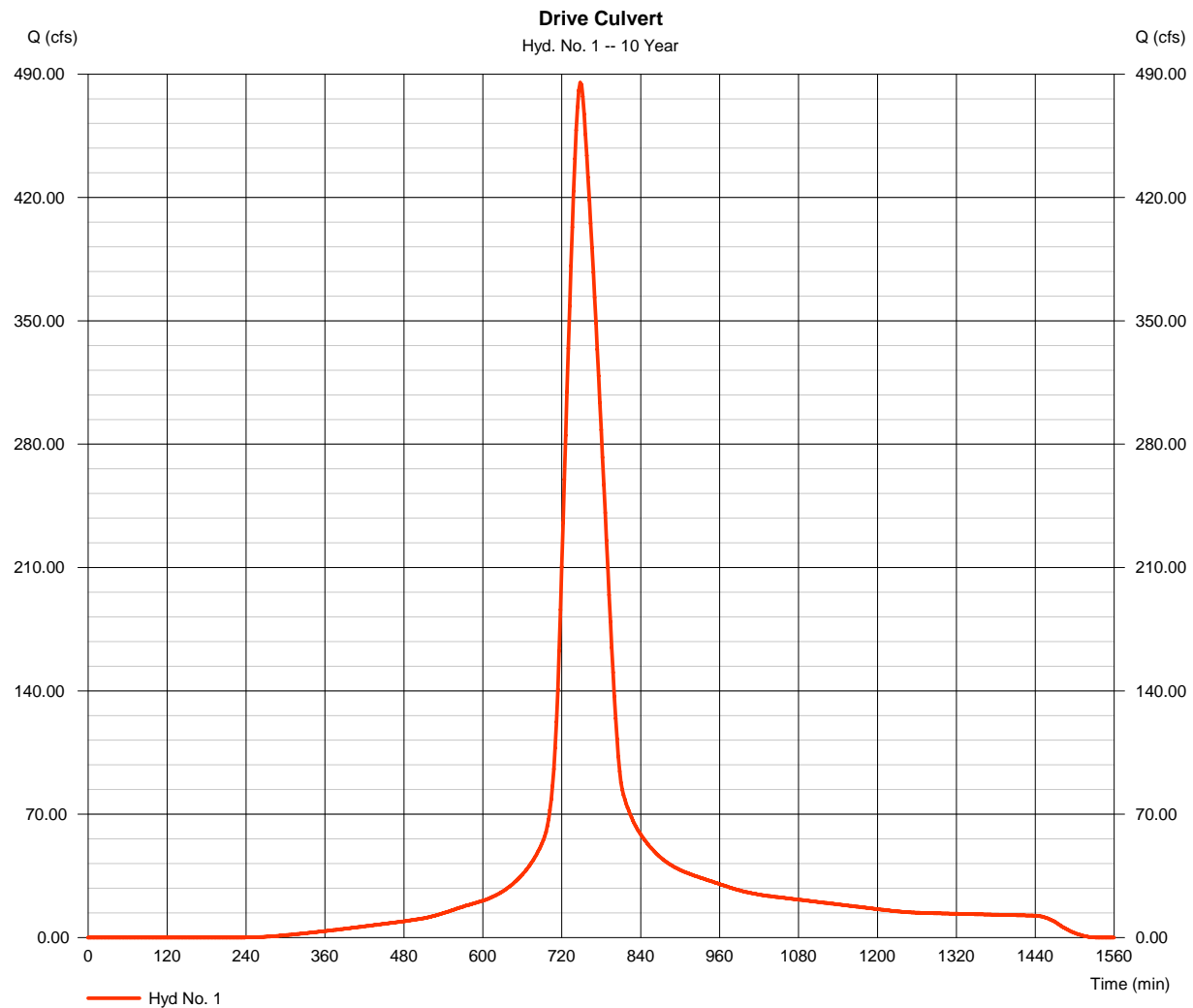
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Thursday, 03 / 5 / 2026

Hyd. No. 1

Drive Culvert

Hydrograph type	= SCS Runoff	Peak discharge	= 485.22 cfs
Storm frequency	= 10 yrs	Time to peak	= 748 min
Time interval	= 2 min	Hyd. volume	= 3,183,827 cuft
Drainage area	= 244.000 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 59.90 min
Total precip.	= 4.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

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	660.62	2	748	4,390,705	-----	-----	-----	Drive Culvert
2439-101 - Hydroflow - Culvert.gpw					Return Period: 50 Year		Thursday, 03 / 5 / 2026		

Hydrograph Report

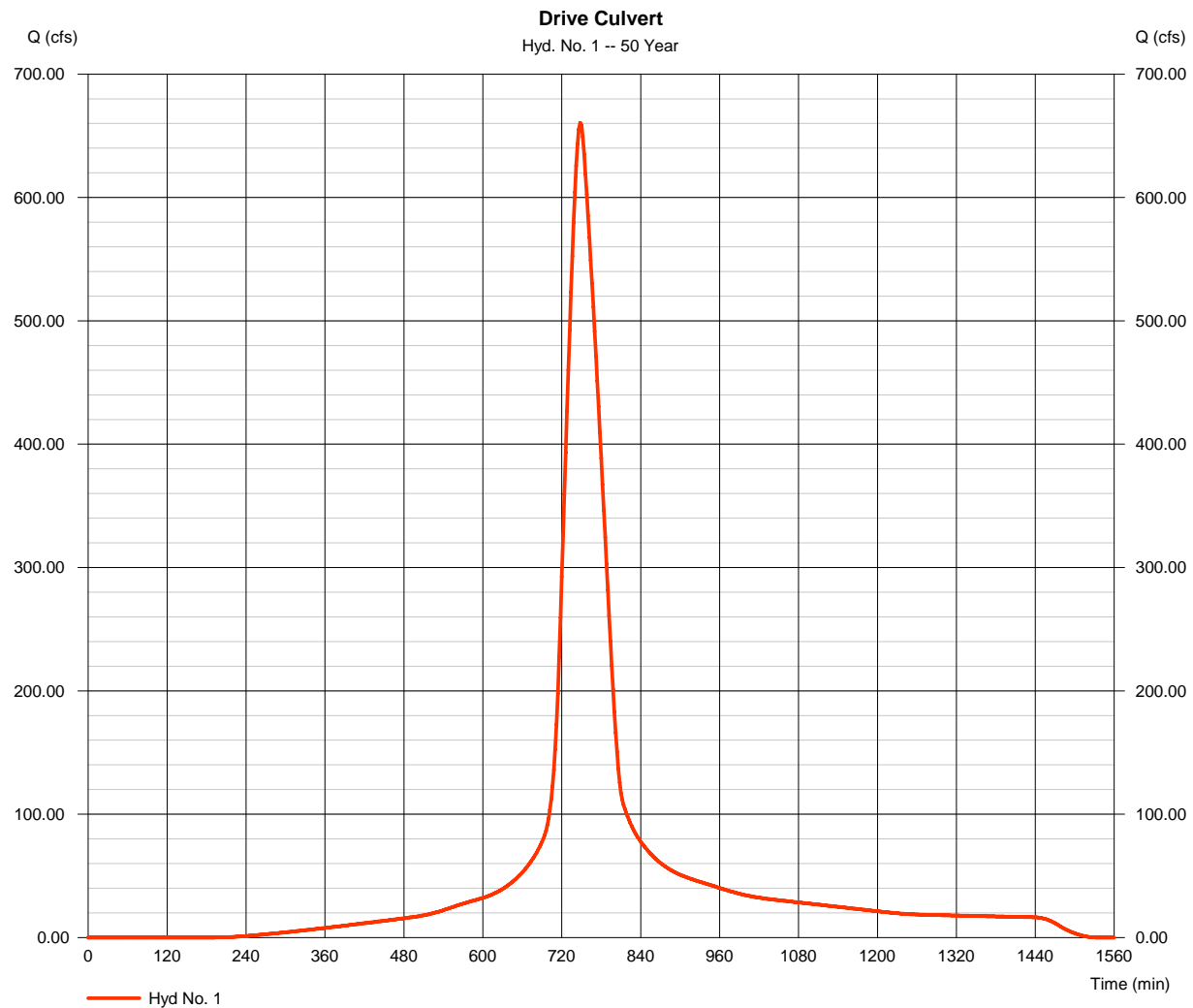
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Thursday, 03 / 5 / 2026

Hyd. No. 1

Drive Culvert

Hydrograph type	= SCS Runoff	Peak discharge	= 660.62 cfs
Storm frequency	= 50 yrs	Time to peak	= 748 min
Time interval	= 2 min	Hyd. volume	= 4,390,705 cuft
Drainage area	= 244.000 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 59.90 min
Total precip.	= 6.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

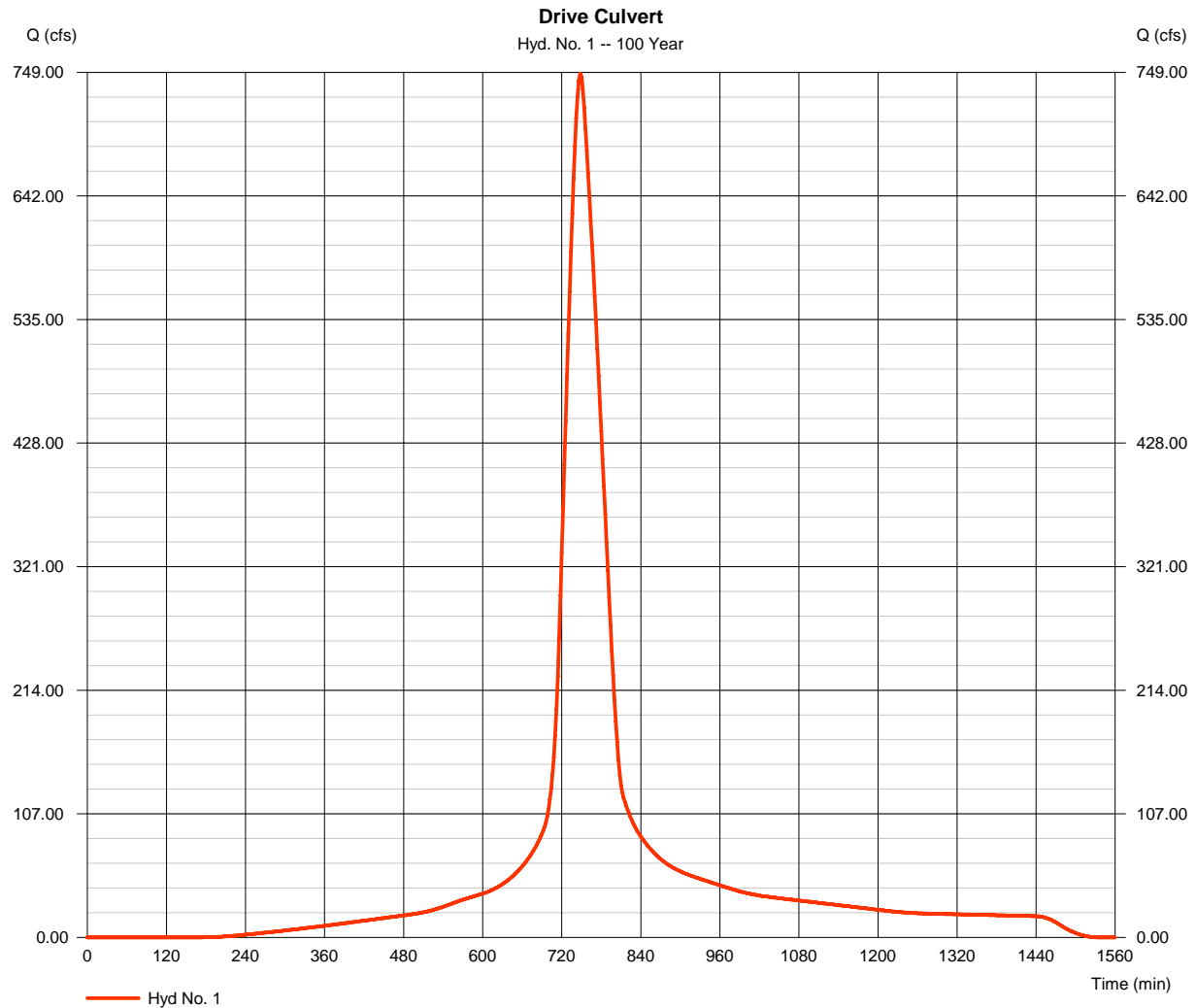
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	SCS Runoff	747.82	2	748	4,998,790	-----	-----	-----	Drive Culvert
2439-101 - Hydroflow - Culvert.gpw					Return Period: 100 Year			Thursday, 03 / 5 / 2026	

Hydrograph Report

Hyd. No. 1

Drive Culvert

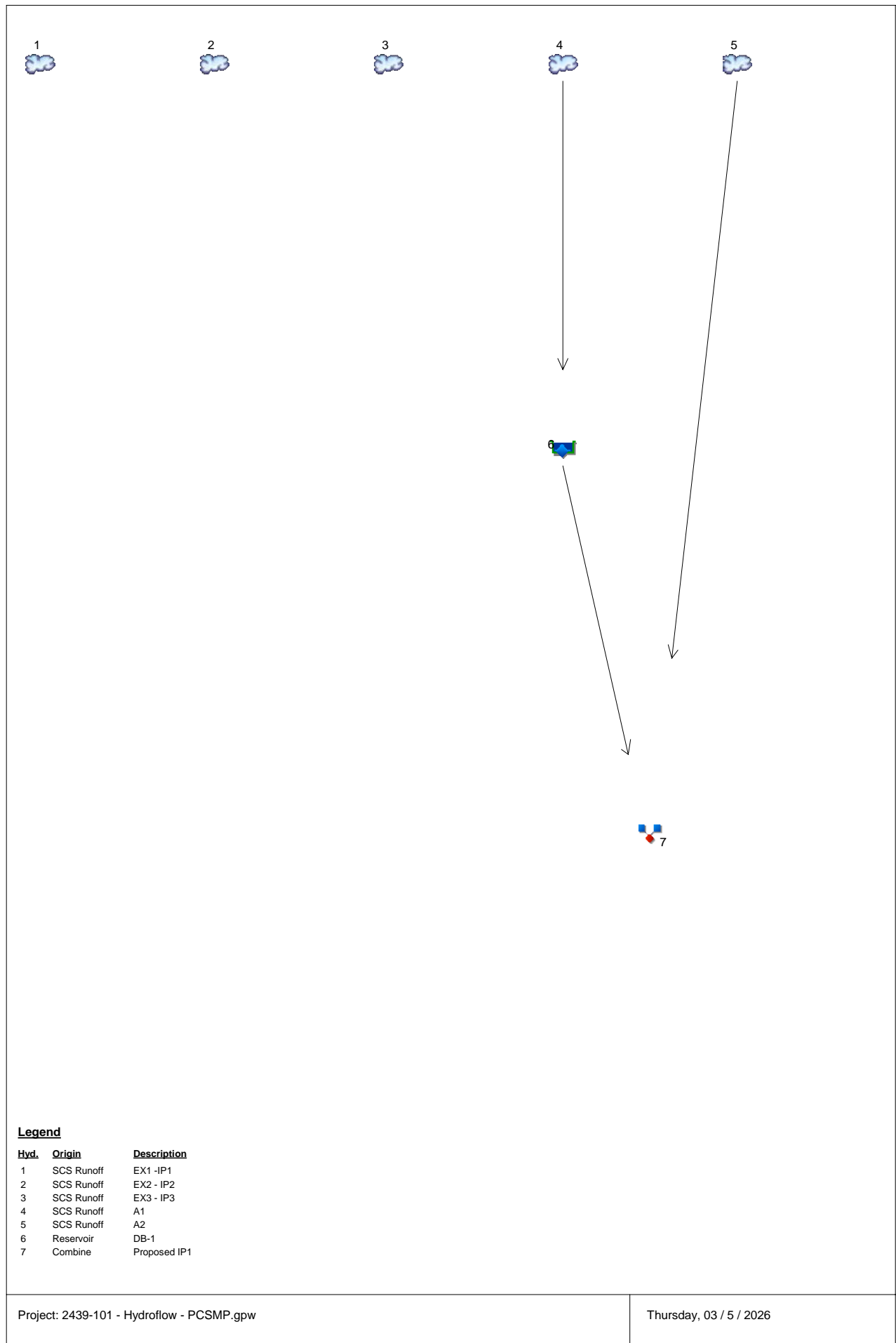
Hydrograph type	= SCS Runoff	Peak discharge	= 747.82 cfs
Storm frequency	= 100 yrs	Time to peak	= 748 min
Time interval	= 2 min	Hyd. volume	= 4,998,790 cuft
Drainage area	= 244.000 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 59.90 min
Total precip.	= 6.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



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Watershed Model Schematic

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024



Hydrograph Return Period Recap

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	SCS Runoff	-----	-----	52.75	-----	-----	117.69	-----	179.89	211.93	EX1 - IP1
2	SCS Runoff	-----	-----	12.28	-----	-----	26.78	-----	40.63	47.72	EX2 - IP2
3	SCS Runoff	-----	-----	7.290	-----	-----	15.45	-----	23.28	27.27	EX3 - IP3
4	SCS Runoff	-----	-----	157.49	-----	-----	267.12	-----	362.25	409.51	A1
5	SCS Runoff	-----	-----	13.34	-----	-----	27.30	-----	40.40	47.04	A2
6	Reservoir	4	-----	18.57	-----	-----	93.07	-----	150.18	174.56	DB-1
7	Combine	5, 6	-----	24.37	-----	-----	96.09	-----	154.70	179.76	Proposed IP1

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

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	52.75	2	734	239,337	-----	-----	-----	EX1 - IP1	
2	SCS Runoff	12.28	2	722	32,476	-----	-----	-----	EX2 - IP2	
3	SCS Runoff	7.290	2	718	14,579	-----	-----	-----	EX3 - IP3	
4	SCS Runoff	157.49	2	724	498,020	-----	-----	-----	A1	
5	SCS Runoff	13.34	2	718	26,694	-----	-----	-----	A2	
6	Reservoir	18.57	2	760	498,006	4	1136.55	260,952	DB-1	
7	Combine	24.37	2	718	524,699	5, 6	-----	-----	Proposed IP1	
2439-101 - Hydroflow - PCSMP.gpw					Return Period: 2 Year			Thursday, 03 / 5 / 2026		

Hydrograph Report

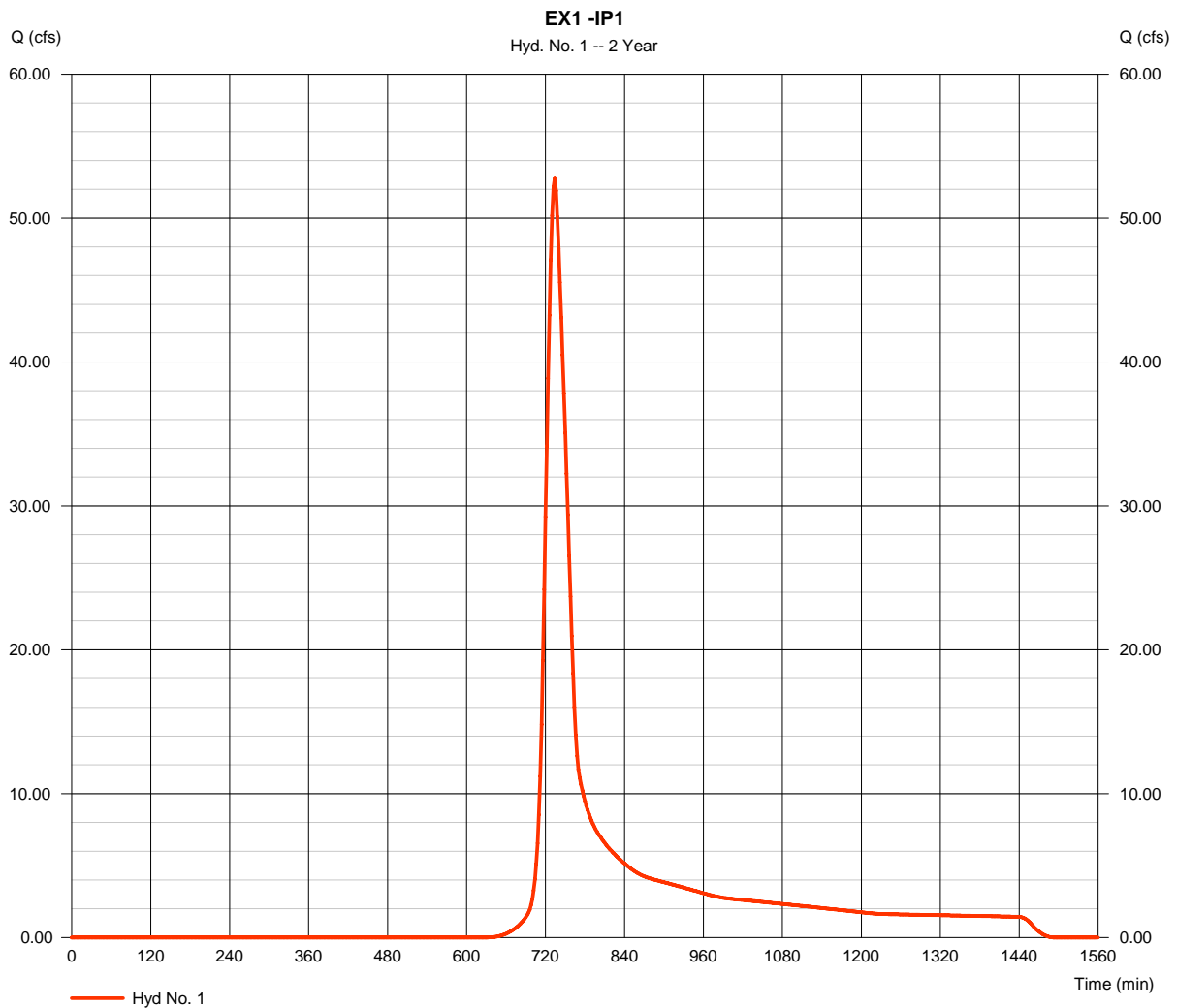
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Thursday, 03 / 5 / 2026

Hyd. No. 1

EX1 -IP1

Hydrograph type	= SCS Runoff	Peak discharge	= 52.75 cfs
Storm frequency	= 2 yrs	Time to peak	= 734 min
Time interval	= 2 min	Hyd. volume	= 239,337 cuft
Drainage area	= 60.800 ac	Curve number	= 77
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 33.10 min
Total precip.	= 3.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No. 1

EX1 -IP1

<u>Description</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>Totals</u>
Sheet Flow				
Manning's n-value	= 0.170	0.011	0.011	
Flow length (ft)	= 100.0	0.0	0.0	
Two-year 24-hr precip. (in)	= 3.00	0.00	0.00	
Land slope (%)	= 2.00	0.00	0.00	
Travel Time (min)	= 11.18	+ 0.00	+ 0.00	= 11.18
Shallow Concentrated Flow				
Flow length (ft)	= 3000.00	0.00	0.00	
Watercourse slope (%)	= 2.00	0.00	0.00	
Surface description	= Unpaved	Paved	Paved	
Average velocity (ft/s)	=2.28	0.00	0.00	
Travel Time (min)	= 21.91	+ 0.00	+ 0.00	= 21.91
Channel Flow				
X sectional flow area (sqft)	= 0.00	0.00	0.00	
Wetted perimeter (ft)	= 0.00	0.00	0.00	
Channel slope (%)	= 0.00	0.00	0.00	
Manning's n-value	= 0.015	0.015	0.015	
Velocity (ft/s)	=0.00	0.00	0.00	
Flow length (ft)	({0})0.0	0.0	0.0	
Travel Time (min)	= 0.00	+ 0.00	+ 0.00	= 0.00
Total Travel Time, Tc				33.10 min

Hydrograph Report

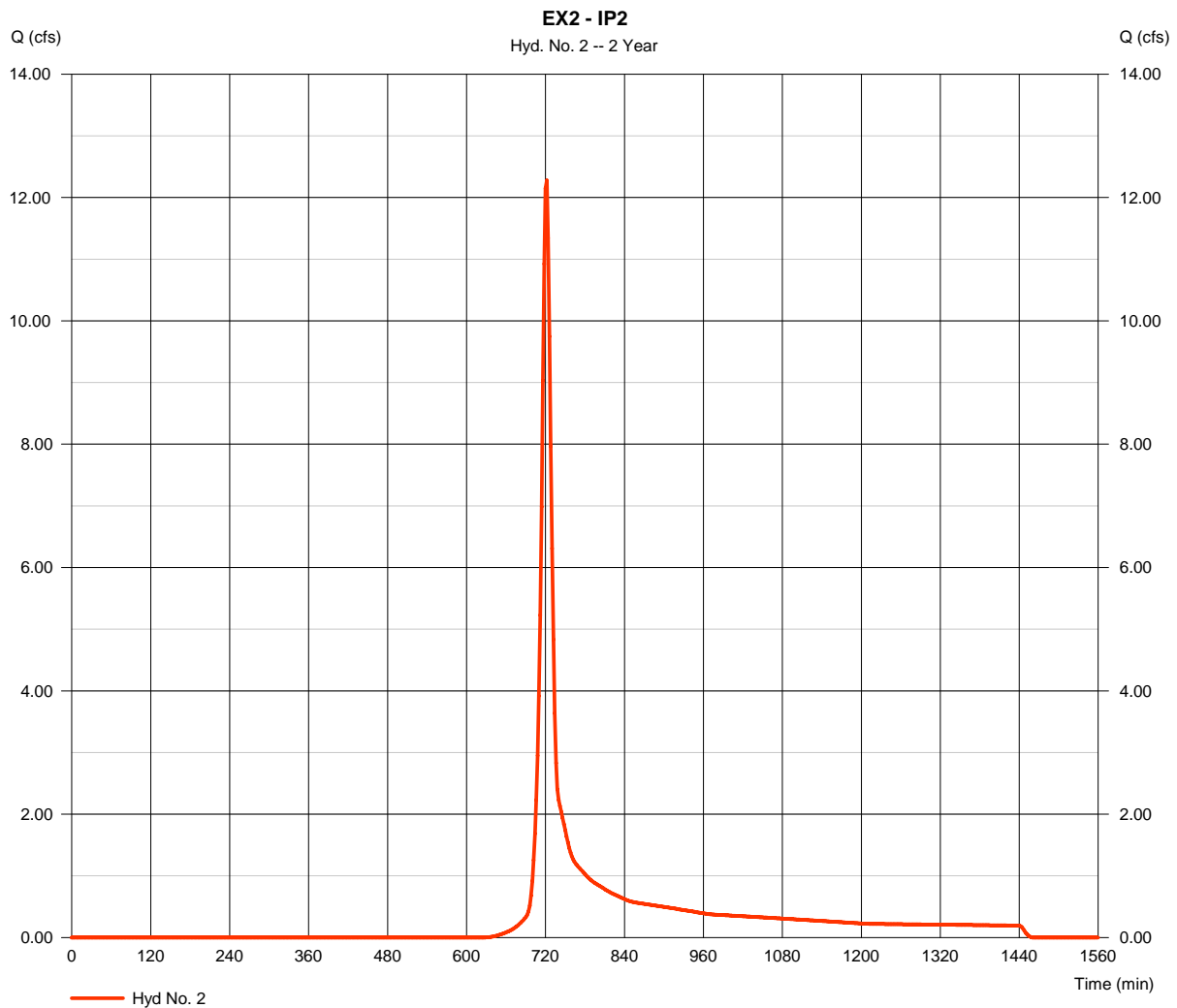
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Thursday, 03 / 5 / 2026

Hyd. No. 2

EX2 - IP2

Hydrograph type	= SCS Runoff	Peak discharge	= 12.28 cfs
Storm frequency	= 2 yrs	Time to peak	= 722 min
Time interval	= 2 min	Hyd. volume	= 32,476 cuft
Drainage area	= 8.100 ac	Curve number	= 77
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.00 min
Total precip.	= 3.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

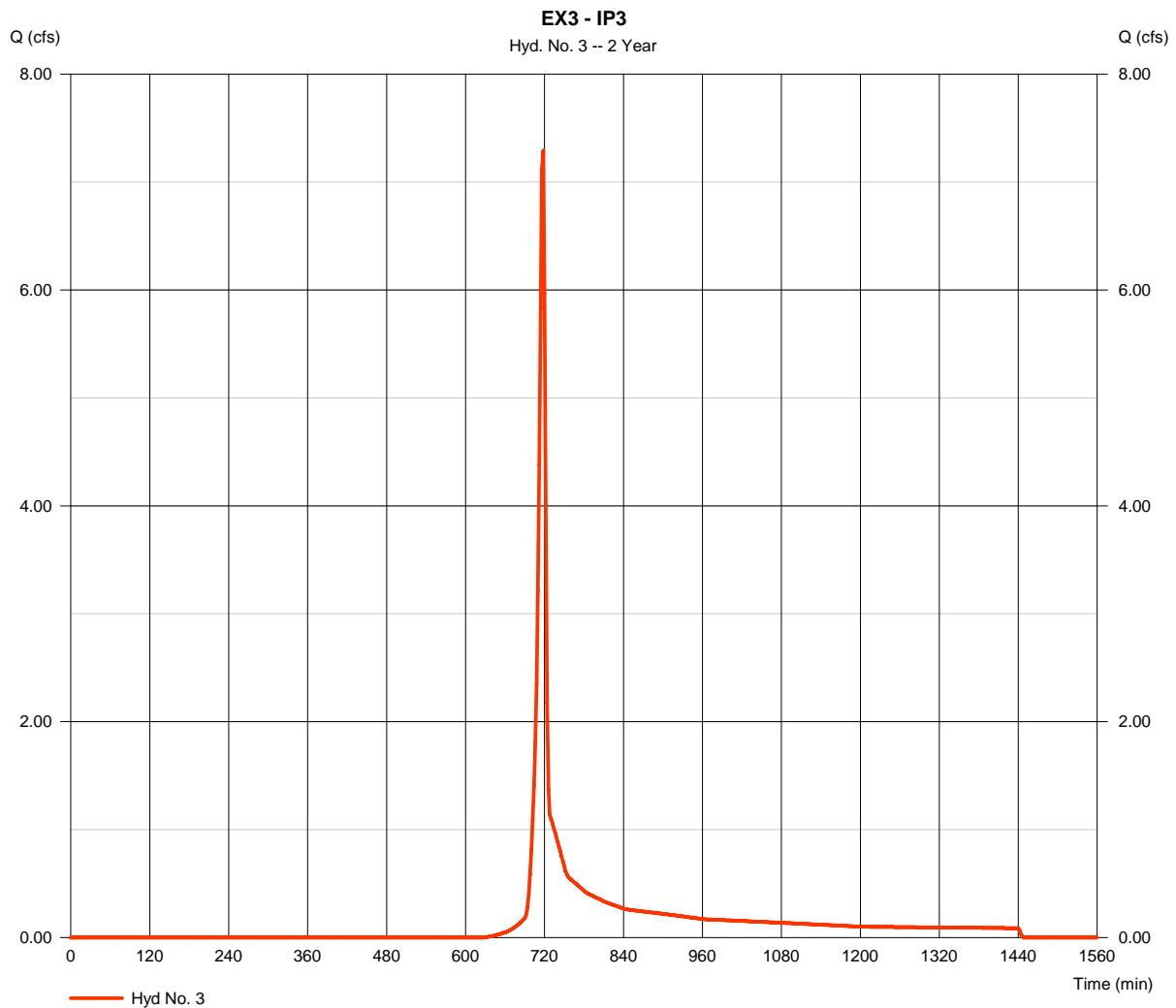
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Thursday, 03 / 5 / 2026

Hyd. No. 3

EX3 - IP3

Hydrograph type	= SCS Runoff	Peak discharge	= 7.290 cfs
Storm frequency	= 2 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 14,579 cuft
Drainage area	= 4.000 ac	Curve number	= 77
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

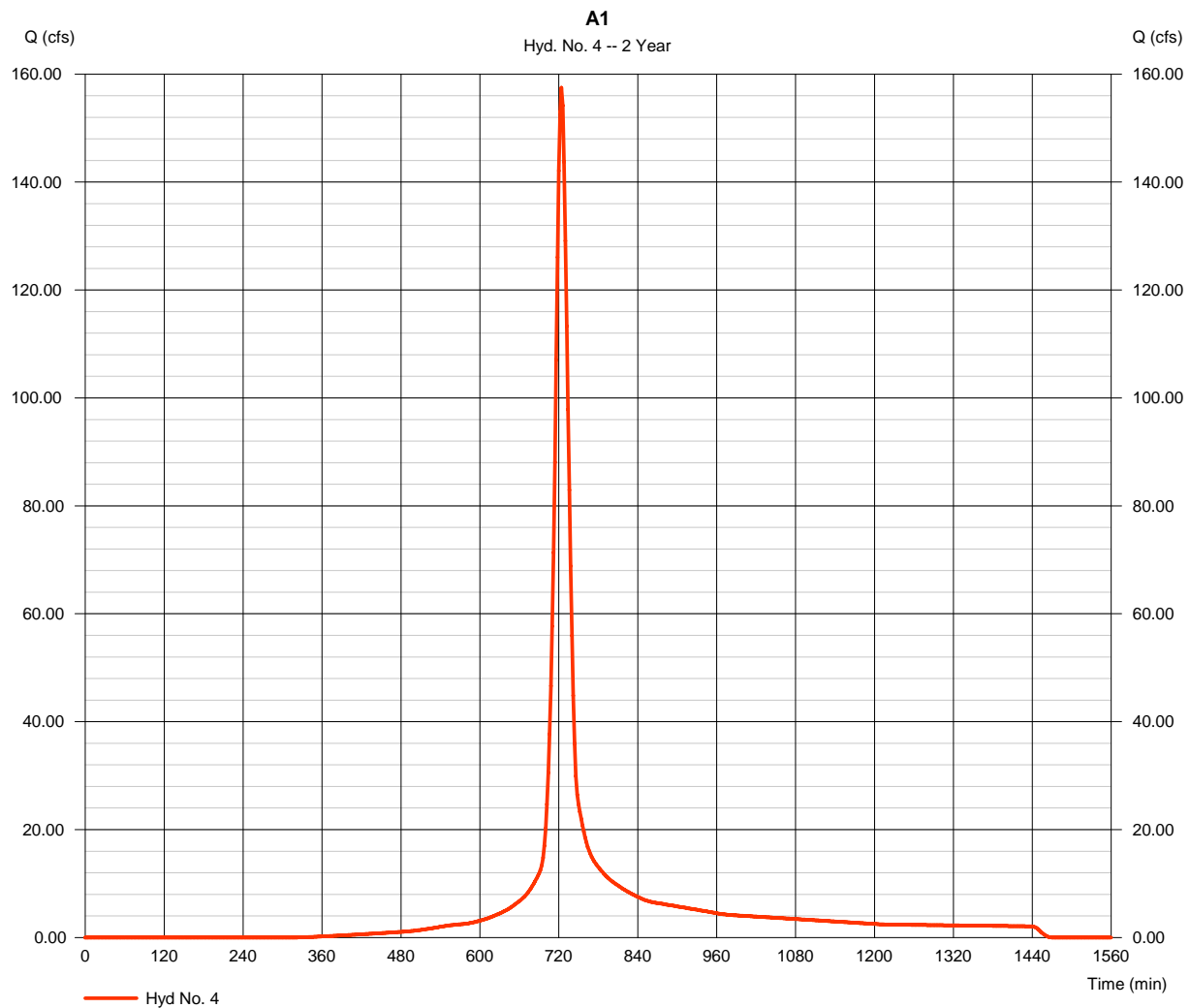
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Thursday, 03 / 5 / 2026

Hyd. No. 4

A1

Hydrograph type	= SCS Runoff	Peak discharge	= 157.49 cfs
Storm frequency	= 2 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 498,020 cuft
Drainage area	= 66.240 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 19.90 min
Total precip.	= 3.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



TR55 Tc Worksheet

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

Hyd. No. 4

A1

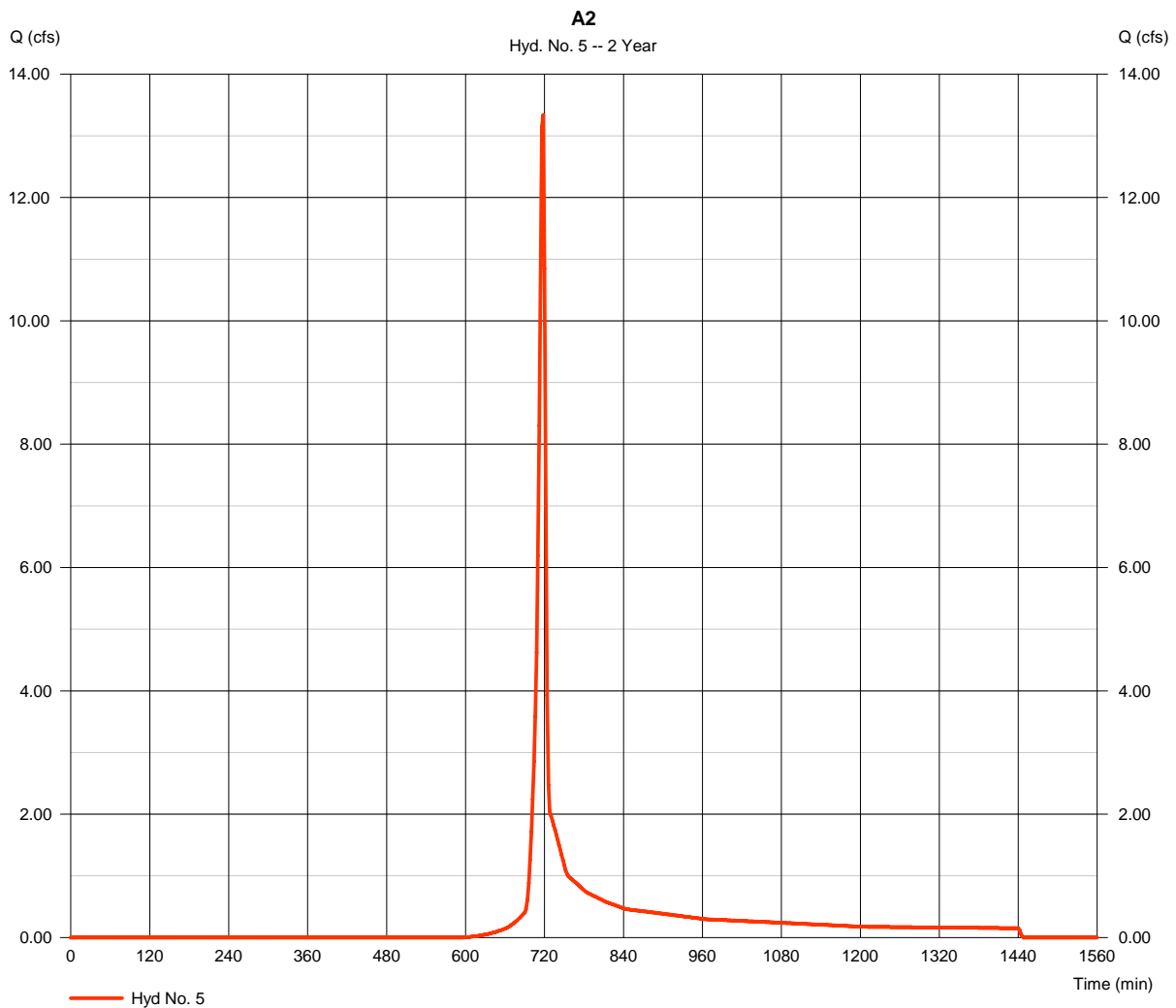
<u>Description</u>	<u>A</u>		<u>B</u>		<u>C</u>		<u>Totals</u>
Sheet Flow							
Manning's n-value	= 0.150		0.011		0.011		
Flow length (ft)	= 50.0		0.0		0.0		
Two-year 24-hr precip. (in)	= 3.00		0.00		0.00		
Land slope (%)	= 2.00		0.00		0.00		
Travel Time (min)	= 5.81	+	0.00	+	0.00	=	5.81
Shallow Concentrated Flow							
Flow length (ft)	= 1400.00		0.00		0.00		
Watercourse slope (%)	= 1.00		0.00		0.00		
Surface description	= Paved		Paved		Paved		
Average velocity (ft/s)	=2.03		0.00		0.00		
Travel Time (min)	= 11.48	+	0.00	+	0.00	=	11.48
Channel Flow							
X sectional flow area (sqft)	= 15.90		0.00		0.00		
Wetted perimeter (ft)	= 14.10		0.00		0.00		
Channel slope (%)	= 1.00		0.00		0.00		
Manning's n-value	= 0.015		0.015		0.015		
Velocity (ft/s)	=10.77		0.00		0.00		
					0.00		
Flow length (ft)	{{0}}1700.0		0.0		0.0		
Travel Time (min)	= 2.63	+	0.00	+	0.00	=	2.63
Total Travel Time, Tc							19.90 min

Hydrograph Report

Hyd. No. 5

A2

Hydrograph type	= SCS Runoff	Peak discharge	= 13.34 cfs
Storm frequency	= 2 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 26,694 cuft
Drainage area	= 6.600 ac	Curve number	= 79
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 3.00 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



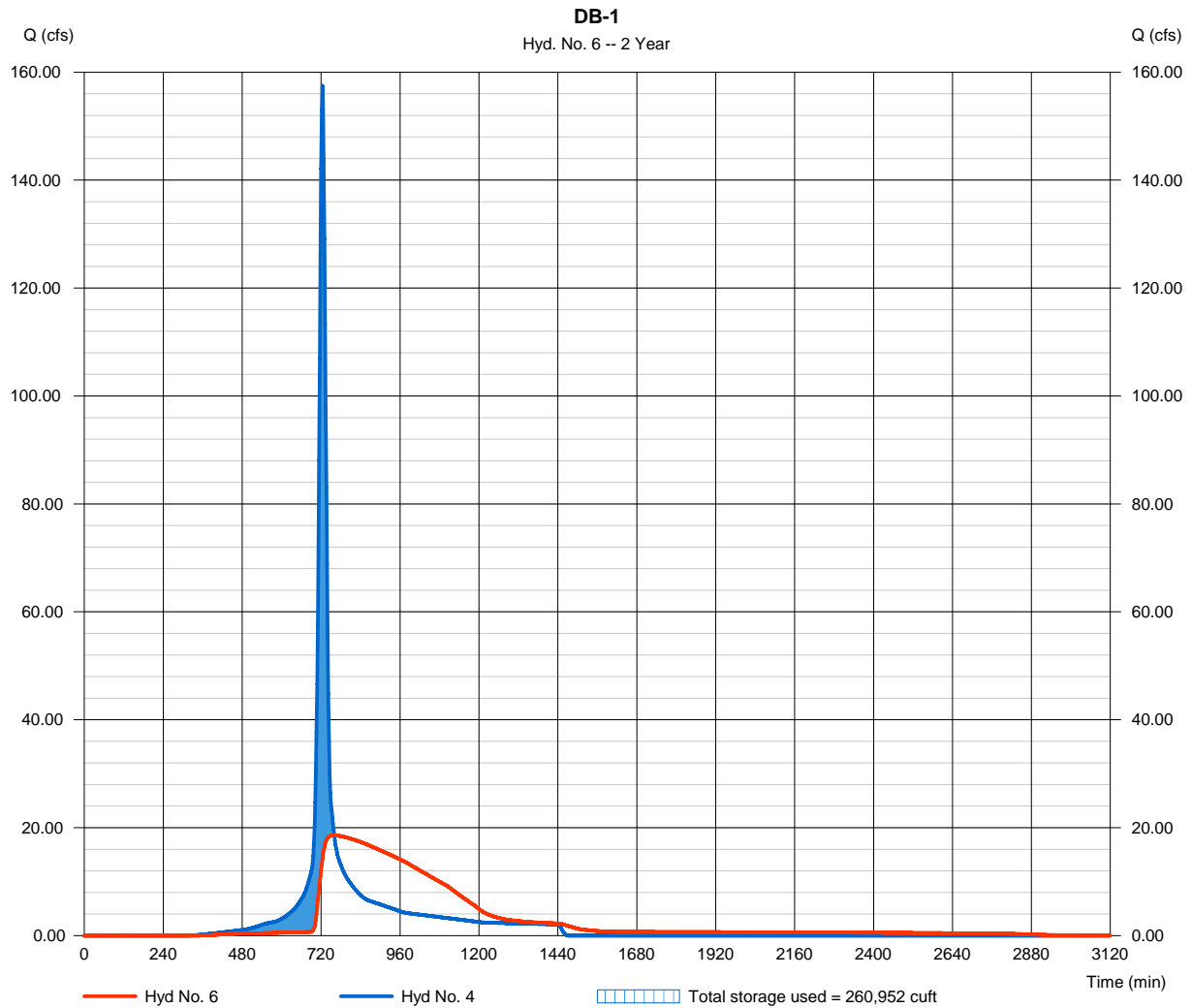
Hydrograph Report

Hyd. No. 6

DB-1

Hydrograph type	= Reservoir	Peak discharge	= 18.57 cfs
Storm frequency	= 2 yrs	Time to peak	= 760 min
Time interval	= 2 min	Hyd. volume	= 498,006 cuft
Inflow hyd. No.	= 4 - A1	Max. Elevation	= 1136.55 ft
Reservoir name	= DB-1	Max. Storage	= 260,952 cuft

Storage Indication method used.



Pond No. 1 - DB-1

Pond Data

Contours -User-defined contour areas. Average end area method used for volume calculation. Begining Elevation = 1130.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	1130.00	00	0	0
1.00	1131.00	5,511	2,756	2,756
2.00	1132.00	20,360	12,936	15,691
3.00	1133.00	36,760	28,560	44,251
4.00	1134.00	50,130	43,445	87,696
5.00	1135.00	68,500	59,315	147,011
6.00	1136.00	74,100	71,300	218,311
7.00	1137.00	79,770	76,935	295,246
8.00	1138.00	85,500	82,635	377,881
9.00	1139.00	91,270	88,385	466,266
10.00	1140.00	97,100	94,185	560,451

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 42.00	4.00	6.00	0.00
Span (in)	= 42.00	4.00	24.00	0.00
No. Barrels	= 1	1	2	0
Invert El. (ft)	= 1127.00	1130.01	1133.00	0.00
Length (ft)	= 160.00	0.50	0.50	0.00
Slope (%)	= 5.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	No

Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 14.85	10.00	0.00	0.00
Crest El. (ft)	= 1137.00	1139.00	0.00	0.00
Weir Coeff.	= 3.33	2.60	3.33	3.33
Weir Type	= 1	Broad	---	---
Multi-Stage	= Yes	No	No	No
Exfil.(in/hr)	= 0.000 (by Contour)			
TW Elev. (ft)	= 0.00			

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Civ A cfs	Civ B cfs	Civ C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
0.00	0	1130.00	0.00	0.00	0.00	---	0.00	0.00	---	---	---	---	0.000
0.10	276	1130.10	51.86 ic	0.02 ic	0.00	---	0.00	0.00	---	---	---	---	0.020
0.20	551	1130.20	51.86 ic	0.08 ic	0.00	---	0.00	0.00	---	---	---	---	0.076
0.30	827	1130.30	51.86 ic	0.15 ic	0.00	---	0.00	0.00	---	---	---	---	0.148
0.40	1,102	1130.40	51.86 ic	0.20 ic	0.00	---	0.00	0.00	---	---	---	---	0.198
0.50	1,378	1130.50	51.86 ic	0.24 ic	0.00	---	0.00	0.00	---	---	---	---	0.239
0.60	1,653	1130.60	51.86 ic	0.27 ic	0.00	---	0.00	0.00	---	---	---	---	0.273
0.70	1,929	1130.70	51.86 ic	0.30 ic	0.00	---	0.00	0.00	---	---	---	---	0.304
0.80	2,204	1130.80	51.86 ic	0.33 ic	0.00	---	0.00	0.00	---	---	---	---	0.332
0.90	2,480	1130.90	51.86 ic	0.36 ic	0.00	---	0.00	0.00	---	---	---	---	0.357
1.00	2,756	1131.00	51.86 ic	0.38 ic	0.00	---	0.00	0.00	---	---	---	---	0.381
1.10	4,049	1131.10	51.86 ic	0.40 ic	0.00	---	0.00	0.00	---	---	---	---	0.404
1.20	5,343	1131.20	51.86 ic	0.42 ic	0.00	---	0.00	0.00	---	---	---	---	0.425
1.30	6,636	1131.30	51.86 ic	0.45 ic	0.00	---	0.00	0.00	---	---	---	---	0.445
1.40	7,930	1131.40	51.86 ic	0.46 ic	0.00	---	0.00	0.00	---	---	---	---	0.465
1.50	9,223	1131.50	51.86 ic	0.48 ic	0.00	---	0.00	0.00	---	---	---	---	0.483
1.60	10,517	1131.60	51.86 ic	0.50 ic	0.00	---	0.00	0.00	---	---	---	---	0.501
1.70	11,810	1131.70	51.86 ic	0.52 ic	0.00	---	0.00	0.00	---	---	---	---	0.519
1.80	13,104	1131.80	51.86 ic	0.54 ic	0.00	---	0.00	0.00	---	---	---	---	0.535
1.90	14,397	1131.90	51.86 ic	0.55 ic	0.00	---	0.00	0.00	---	---	---	---	0.551
2.00	15,691	1132.00	51.86 ic	0.57 ic	0.00	---	0.00	0.00	---	---	---	---	0.567
2.10	18,547	1132.10	51.86 ic	0.58 ic	0.00	---	0.00	0.00	---	---	---	---	0.583
2.20	21,403	1132.20	51.86 ic	0.60 ic	0.00	---	0.00	0.00	---	---	---	---	0.598
2.30	24,259	1132.30	51.86 ic	0.61 ic	0.00	---	0.00	0.00	---	---	---	---	0.612
2.40	27,115	1132.40	51.86 ic	0.63 ic	0.00	---	0.00	0.00	---	---	---	---	0.626
2.50	29,971	1132.50	51.86 ic	0.64 ic	0.00	---	0.00	0.00	---	---	---	---	0.640
2.60	32,827	1132.60	51.86 ic	0.65 ic	0.00	---	0.00	0.00	---	---	---	---	0.654
2.70	35,683	1132.70	51.86 ic	0.67 ic	0.00	---	0.00	0.00	---	---	---	---	0.667
2.80	38,539	1132.80	51.86 ic	0.68 ic	0.00	---	0.00	0.00	---	---	---	---	0.680
2.90	41,395	1132.90	51.86 ic	0.69 ic	0.00	---	0.00	0.00	---	---	---	---	0.693
3.00	44,251	1133.00	51.86 ic	0.71 ic	0.00	---	0.00	0.00	---	---	---	---	0.706
3.10	48,596	1133.10	51.86 ic	0.72 ic	0.43 ic	---	0.00	0.00	---	---	---	---	1.149
3.20	52,940	1133.20	51.86 ic	0.73 ic	1.22 ic	---	0.00	0.00	---	---	---	---	1.948
3.30	57,285	1133.30	51.86 ic	0.74 ic	2.24 ic	---	0.00	0.00	---	---	---	---	2.979
3.40	61,629	1133.40	51.86 ic	0.75 ic	3.44 ic	---	0.00	0.00	---	---	---	---	4.198
3.50	65,974	1133.50	51.86 ic	0.77 ic	4.81 ic	---	0.00	0.00	---	---	---	---	5.579
3.60	70,318	1133.60	51.86 ic	0.78 ic	5.70 ic	---	0.00	0.00	---	---	---	---	6.473
3.70	74,663	1133.70	51.86 ic	0.79 ic	6.46 ic	---	0.00	0.00	---	---	---	---	7.247
3.80	79,007	1133.80	51.86 ic	0.80 ic	7.14 ic	---	0.00	0.00	---	---	---	---	7.940
3.90	83,352	1133.90	51.86 ic	0.81 ic	7.76 ic	---	0.00	0.00	---	---	---	---	8.573
4.00	87,696	1134.00	51.86 ic	0.82 ic	8.34 ic	---	0.00	0.00	---	---	---	---	9.161
4.10	93,628	1134.10	51.86 ic	0.83 ic	8.89 ic	---	0.00	0.00	---	---	---	---	9.710
4.20	99,559	1134.20	51.86 ic	0.84 ic	9.39 ic	---	0.00	0.00	---	---	---	---	10.23
4.30	105,491	1134.30	51.86 ic	0.85 ic	9.87 ic	---	0.00	0.00	---	---	---	---	10.72
4.40	111,422	1134.40	51.86 ic	0.86 ic	10.33 ic	---	0.00	0.00	---	---	---	---	11.19
4.50	117,354	1134.50	51.86 ic	0.87 ic	10.77 ic	---	0.00	0.00	---	---	---	---	11.64
4.60	123,285	1134.60	51.86 ic	0.88 ic	11.19 ic	---	0.00	0.00	---	---	---	---	12.07
4.70	129,217	1134.70	51.86 ic	0.89 ic	11.60 ic	---	0.00	0.00	---	---	---	---	12.49
4.80	135,148	1134.80	51.86 ic	0.90 ic	11.99 ic	---	0.00	0.00	---	---	---	---	12.89
4.90	141,080	1134.90	51.86 ic	0.91 ic	12.37 ic	---	0.00	0.00	---	---	---	---	13.28
5.00	147,011	1135.00	51.86 ic	0.92 ic	12.74 ic	---	0.00	0.00	---	---	---	---	13.66
5.10	154,141	1135.10	51.86 ic	0.93 ic	13.10 ic	---	0.00	0.00	---	---	---	---	14.03
5.20	161,271	1135.20	51.86 ic	0.94 ic	13.45 ic	---	0.00	0.00	---	---	---	---	14.39
5.30	168,401	1135.30	51.86 ic	0.95 ic	13.79 ic	---	0.00	0.00	---	---	---	---	14.74
5.40	175,531	1135.40	51.86 ic	0.96 ic	14.12 ic	---	0.00	0.00	---	---	---	---	15.08
5.50	182,661	1135.50	51.86 ic	0.97 ic	14.44 ic	---	0.00	0.00	---	---	---	---	15.41
5.60	189,791	1135.60	51.86 ic	0.98 ic	14.76 ic	---	0.00	0.00	---	---	---	---	15.74
5.70	196,921	1135.70	51.86 ic	0.99 ic	15.07 ic	---	0.00	0.00	---	---	---	---	16.06
5.80	204,051	1135.80	51.86 ic	1.00 ic	15.38 ic	---	0.00	0.00	---	---	---	---	16.37
5.90	211,181	1135.90	51.86 ic	1.01 ic	15.68 ic	---	0.00	0.00	---	---	---	---	16.68
6.00	218,311	1136.00	51.86 ic	1.01 ic	15.97 ic	---	0.00	0.00	---	---	---	---	16.98
6.10	226,005	1136.10	51.86 ic	1.02 ic	16.26 ic	---	0.00	0.00	---	---	---	---	17.28
6.20	233,698	1136.20	51.86 ic	1.03 ic	16.54 ic	---	0.00	0.00	---	---	---	---	17.57
6.30	241,392	1136.30	51.86 ic	1.04 ic	16.82 ic	---	0.00	0.00	---	---	---	---	17.86
6.40	249,085	1136.40	51.86 ic	1.05 ic	17.09 ic	---	0.00	0.00	---	---	---	---	18.14
6.50	256,779	1136.50	51.86 ic	1.06 ic	17.36 ic	---	0.00	0.00	---	---	---	---	18.42
6.60	264,472	1136.60	51.86 ic	1.06 ic	17.63 ic	---	0.00	0.00	---	---	---	---	18.69
6.70	272,166	1136.70	51.86 ic	1.07 ic	17.89 ic	---	0.00	0.00	---	---	---	---	18.96
6.80	279,859	1136.80	51.86 ic	1.08 ic	18.14 ic	---	0.00	0.00	---	---	---	---	19.22
6.90	287,553	1136.90	51.86 ic	1.09 ic	18.40 ic	---	0.00	0.00	---	---	---	---	19.49

Continues on next page...

DB-1

Stage / Storage / Discharge Table

Stage ft	Storage cuft	Elevation ft	Civ A cfs	Civ B cfs	Civ C cfs	PrfRsr cfs	Wr A cfs	Wr B cfs	Wr C cfs	Wr D cfs	Exfil cfs	User cfs	Total cfs
7.00	295,246	1137.00	51.86 ic	1.10 ic	18.65 ic	---	0.00	0.00	---	---	---	---	19.75
7.10	303,510	1137.10	51.86 ic	1.11 ic	18.90 ic	---	1.56	0.00	---	---	---	---	21.56
7.20	311,773	1137.20	51.86 ic	1.11 ic	19.14 ic	---	4.42	0.00	---	---	---	---	24.67
7.30	320,037	1137.30	51.86 ic	1.12 ic	19.38 ic	---	8.12	0.00	---	---	---	---	28.62
7.40	328,300	1137.40	51.86 ic	1.13 ic	19.62 ic	---	12.51	0.00	---	---	---	---	33.25
7.50	336,564	1137.50	51.86 ic	1.14 ic	19.85 ic	---	17.48	0.00	---	---	---	---	38.47
7.60	344,827	1137.60	51.86 ic	1.14 ic	20.08 ic	---	22.97	0.00	---	---	---	---	44.20
7.70	353,091	1137.70	51.86 ic	1.15 ic	20.31 ic	---	28.95	0.00	---	---	---	---	50.42
7.80	361,354	1137.80	57.18 ic	1.15 ic	20.54 ic	---	35.37	0.00	---	---	---	---	57.07
7.90	369,618	1137.90	64.10 ic	1.13 ic	20.77 ic	---	42.21	0.00	---	---	---	---	64.10
8.00	377,881	1138.00	71.54 ic	1.10 ic	20.99 ic	---	49.45	0.00	---	---	---	---	71.54
8.10	386,720	1138.10	79.32 ic	1.06 ic	21.21 ic	---	57.05	0.00	---	---	---	---	79.32
8.20	395,558	1138.20	87.45 ic	1.02 ic	21.43 ic	---	65.00	0.00	---	---	---	---	87.44
8.30	404,397	1138.30	95.90 ic	0.96 ic	21.64 ic	---	73.29	0.00	---	---	---	---	95.90
8.40	413,235	1138.40	103.58 ic	0.91 ic	20.76 ic	---	81.91	0.00	---	---	---	---	103.58
8.50	422,074	1138.50	110.96 ic	0.84 ic	19.29 ic	---	90.84	0.00	---	---	---	---	110.96
8.60	430,912	1138.60	118.38 ic	0.77 ic	17.54 ic	---	100.07	0.00	---	---	---	---	118.38
8.70	439,751	1138.70	125.74 ic	0.67 ic	15.47 ic	---	109.59	0.00	---	---	---	---	125.74
8.80	448,589	1138.80	132.93 ic	0.57 ic	12.97 ic	---	119.40	0.00	---	---	---	---	132.93
8.90	457,428	1138.90	136.38 ic	0.51 ic	11.72 ic	---	124.15 s	0.00	---	---	---	---	136.38
9.00	466,266	1139.00	138.73 ic	0.48 ic	10.89 ic	---	127.36 s	0.00	---	---	---	---	138.72
9.10	475,685	1139.10	140.68 ic	0.45 ic	10.22 ic	---	130.01 s	0.82	---	---	---	---	141.50
9.20	485,103	1139.20	142.39 ic	0.42 ic	9.63 ic	---	132.33 s	2.32	---	---	---	---	144.71
9.30	494,522	1139.30	143.92 ic	0.40 ic	9.12 ic	---	134.40 s	4.27	---	---	---	---	148.18
9.40	503,940	1139.40	145.32 ic	0.38 ic	8.65 ic	---	136.28 s	6.58	---	---	---	---	151.89
9.50	513,359	1139.50	146.61 ic	0.36 ic	8.24 ic	---	138.01 s	9.19	---	---	---	---	155.80
9.60	522,777	1139.60	147.82 ic	0.34 ic	7.86 ic	---	139.62 s	12.08	---	---	---	---	159.89
9.70	532,196	1139.70	148.96 ic	0.33 ic	7.51 ic	---	141.12 s	15.22	---	---	---	---	164.18
9.80	541,614	1139.80	150.04 ic	0.31 ic	7.19 ic	---	142.53 s	18.60	---	---	---	---	168.63
9.90	551,033	1139.90	151.07 ic	0.30 ic	6.90 ic	---	143.87 s	22.19	---	---	---	---	173.26
10.00	560,451	1140.00	152.06 ic	0.29 ic	6.62 ic	---	145.15 s	26.00	---	---	---	---	178.06

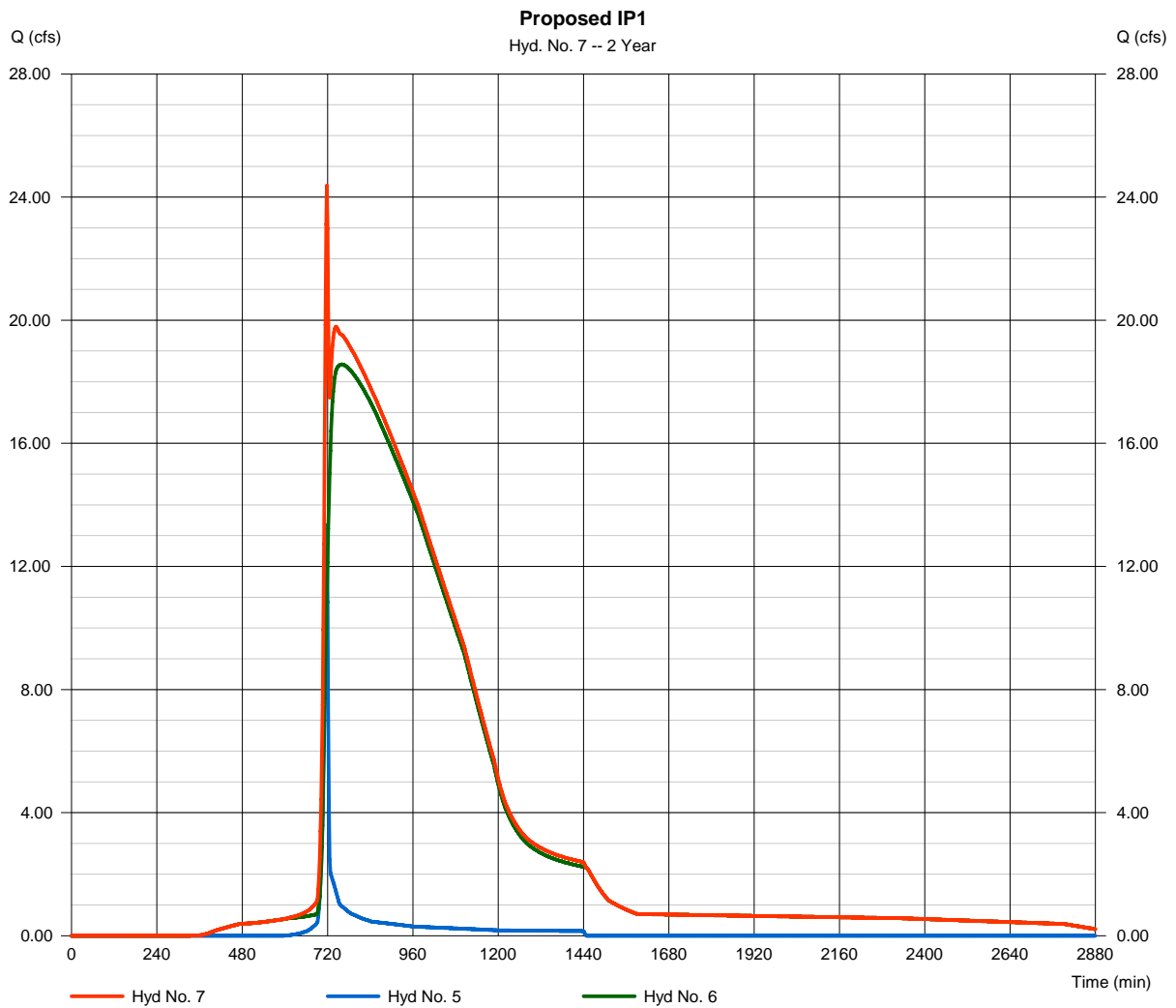
...End

Hydrograph Report

Hyd. No. 7

Proposed IP1

Hydrograph type	= Combine	Peak discharge	= 24.37 cfs
Storm frequency	= 2 yrs	Time to peak	= 718 min
Time interval	= 2 min	Hyd. volume	= 524,699 cuft
Inflow hyds.	= 5, 6	Contrib. drain. area	= 6.600 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

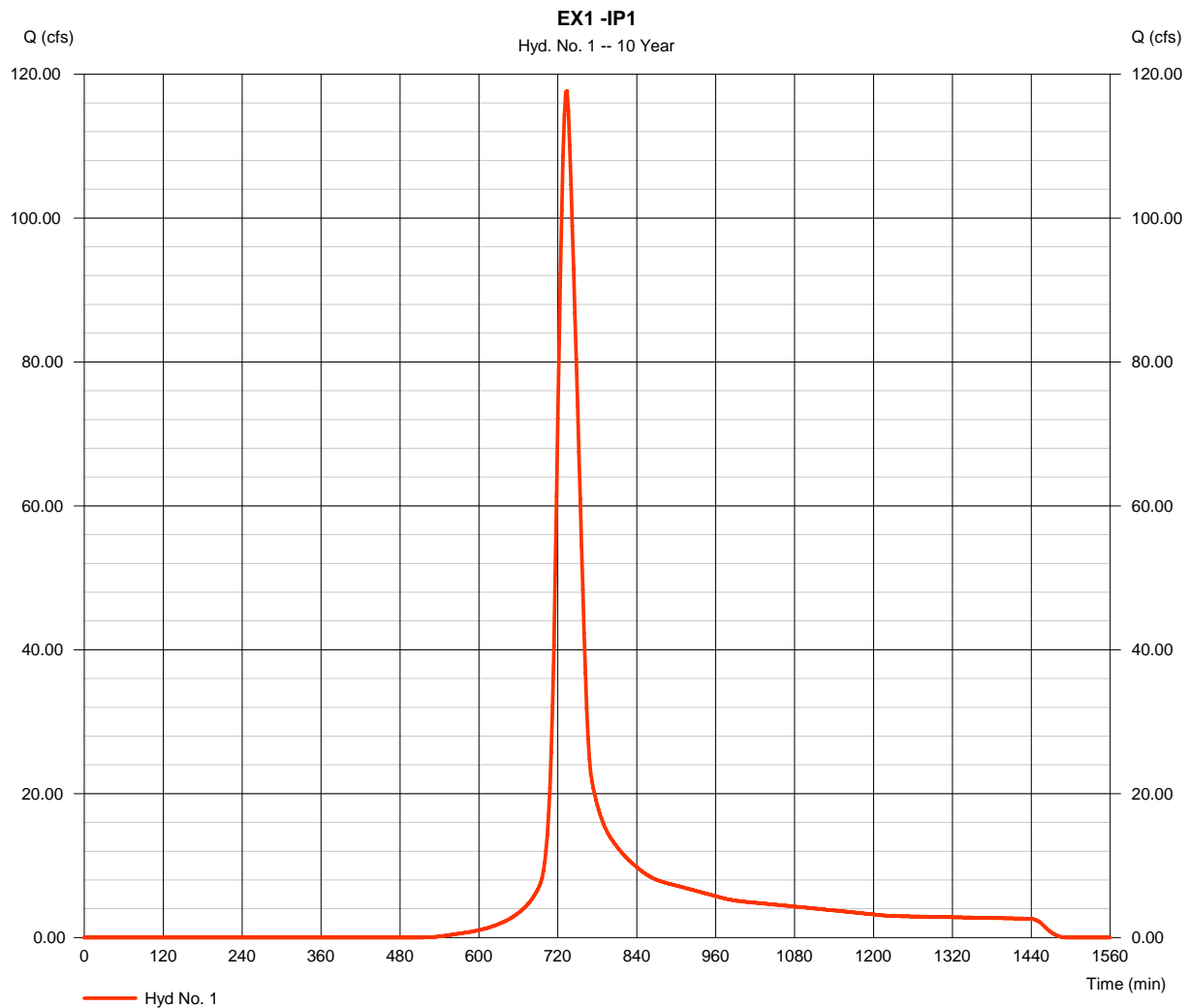
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description	
1	SCS Runoff	117.69	2	734	512,195	-----	-----	-----	EX1 - IP1	
2	SCS Runoff	26.78	2	720	69,500	-----	-----	-----	EX2 - IP2	
3	SCS Runoff	15.45	2	716	31,201	-----	-----	-----	EX3 - IP3	
4	SCS Runoff	267.12	2	724	864,331	-----	-----	-----	A1	
5	SCS Runoff	27.30	2	716	55,267	-----	-----	-----	A2	
6	Reservoir	93.07	2	740	864,317	4	1138.27	401,443	DB-1	
7	Combine	96.09	2	740	919,583	5, 6	-----	-----	Proposed IP1	
2439-101 - Hydroflow - PCSMP.gpw					Return Period: 10 Year			Thursday, 03 / 5 / 2026		

Hydrograph Report

Hyd. No. 1

EX1 -IP1

Hydrograph type	= SCS Runoff	Peak discharge	= 117.69 cfs
Storm frequency	= 10 yrs	Time to peak	= 734 min
Time interval	= 2 min	Hyd. volume	= 512,195 cuft
Drainage area	= 60.800 ac	Curve number	= 77
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 33.10 min
Total precip.	= 4.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

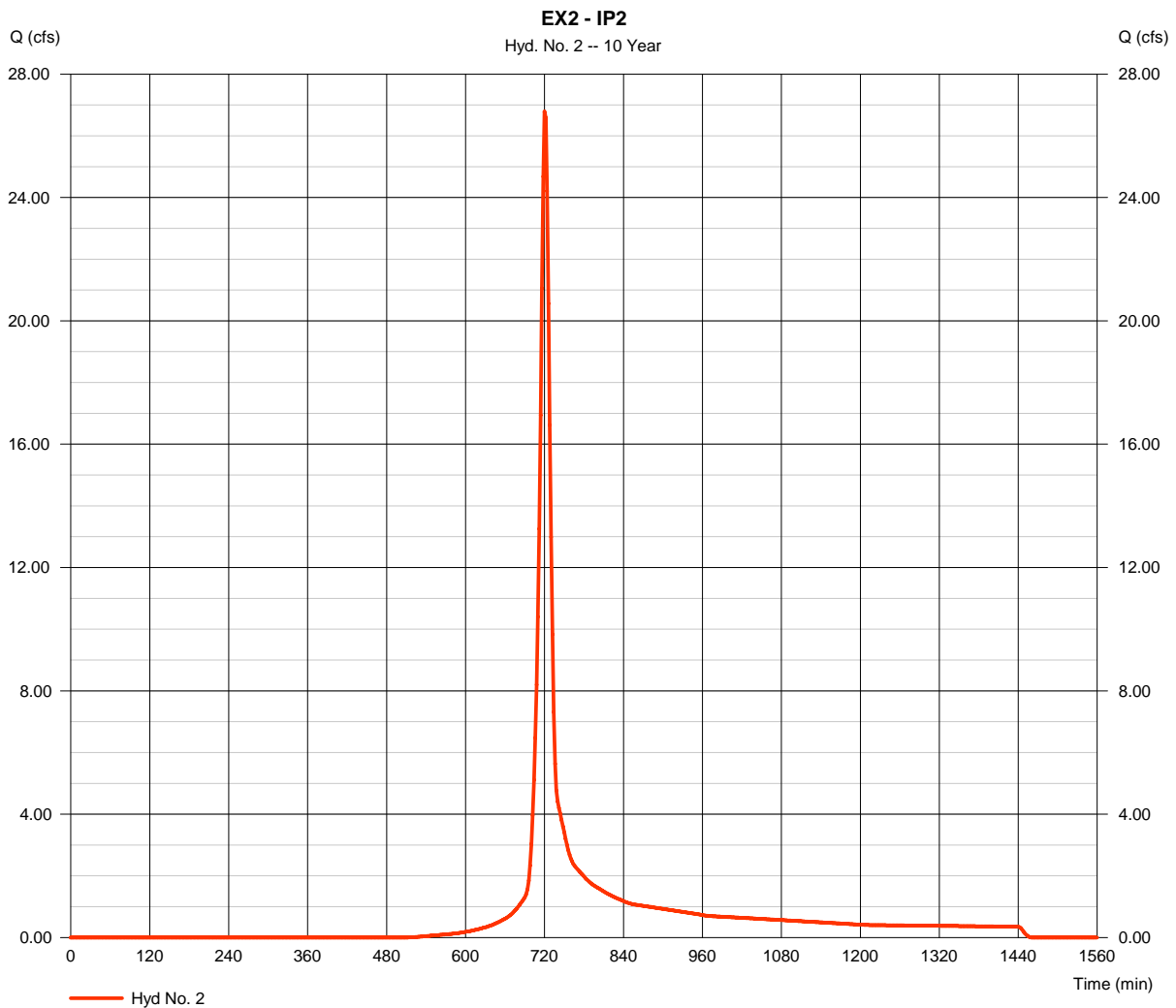


Hydrograph Report

Hyd. No. 2

EX2 - IP2

Hydrograph type	= SCS Runoff	Peak discharge	= 26.78 cfs
Storm frequency	= 10 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 69,500 cuft
Drainage area	= 8.100 ac	Curve number	= 77
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.00 min
Total precip.	= 4.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

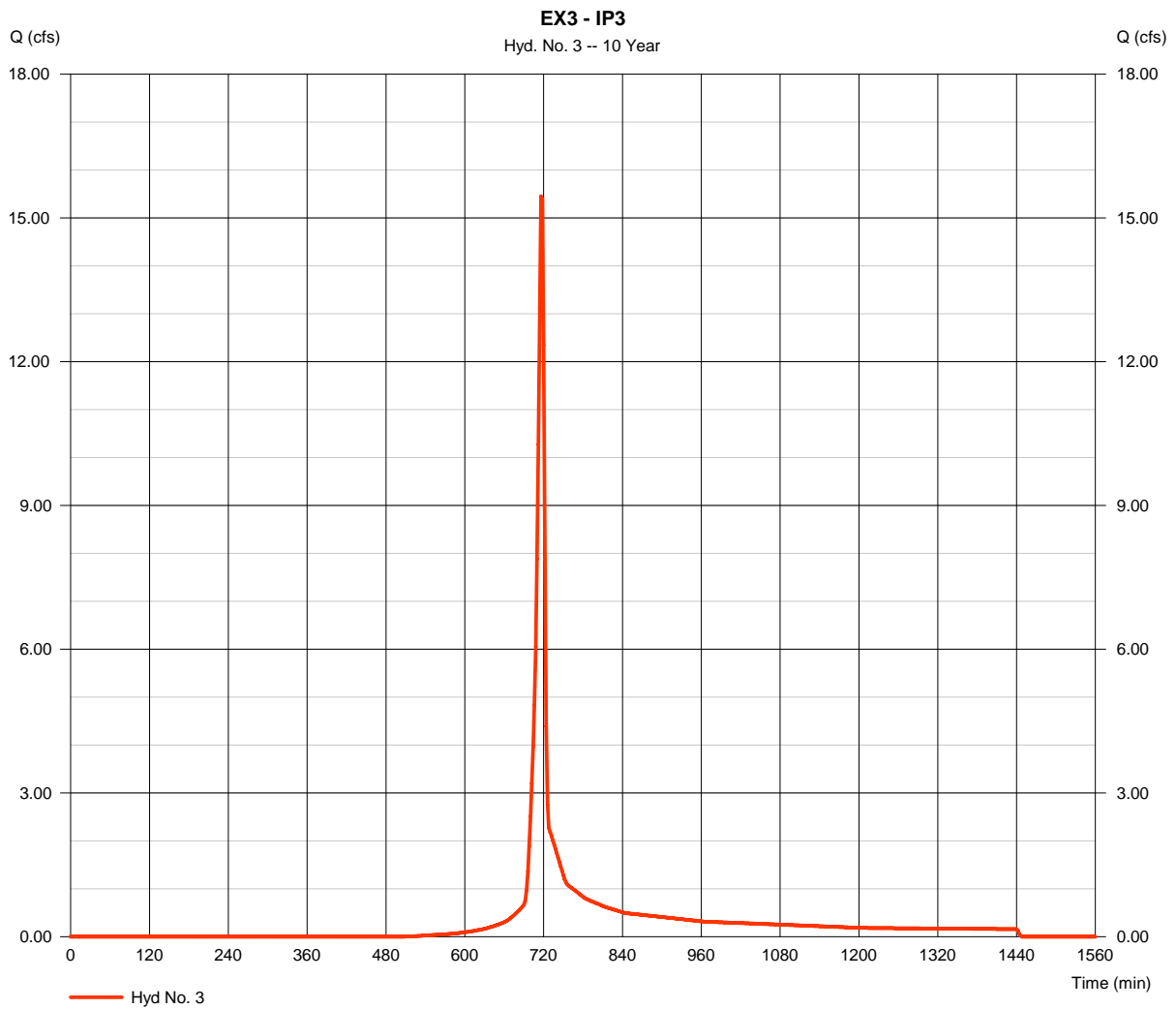


Hydrograph Report

Hyd. No. 3

EX3 - IP3

Hydrograph type	= SCS Runoff	Peak discharge	= 15.45 cfs
Storm frequency	= 10 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 31,201 cuft
Drainage area	= 4.000 ac	Curve number	= 77
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

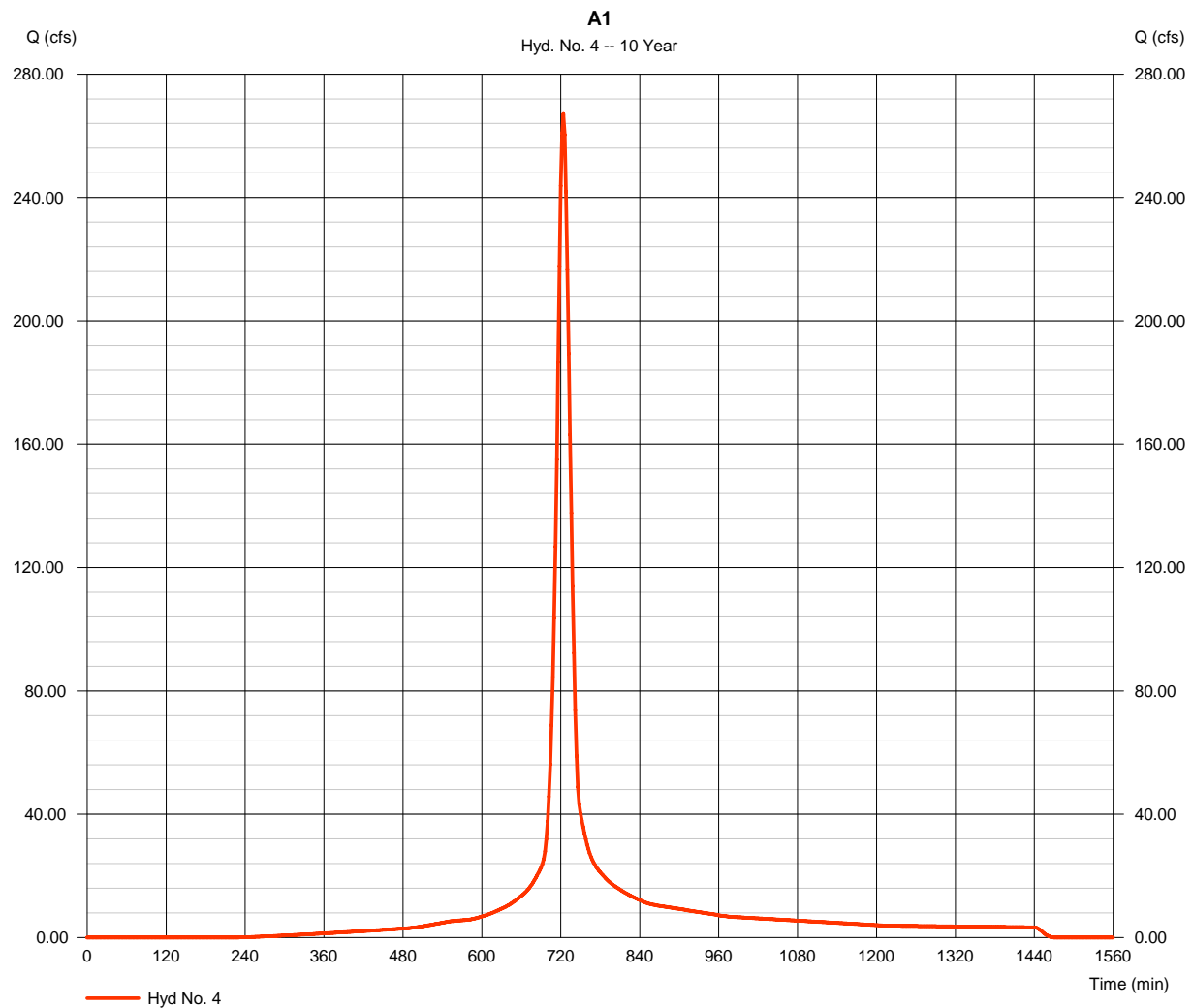


Hydrograph Report

Hyd. No. 4

A1

Hydrograph type	= SCS Runoff	Peak discharge	= 267.12 cfs
Storm frequency	= 10 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 864,331 cuft
Drainage area	= 66.240 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 19.90 min
Total precip.	= 4.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

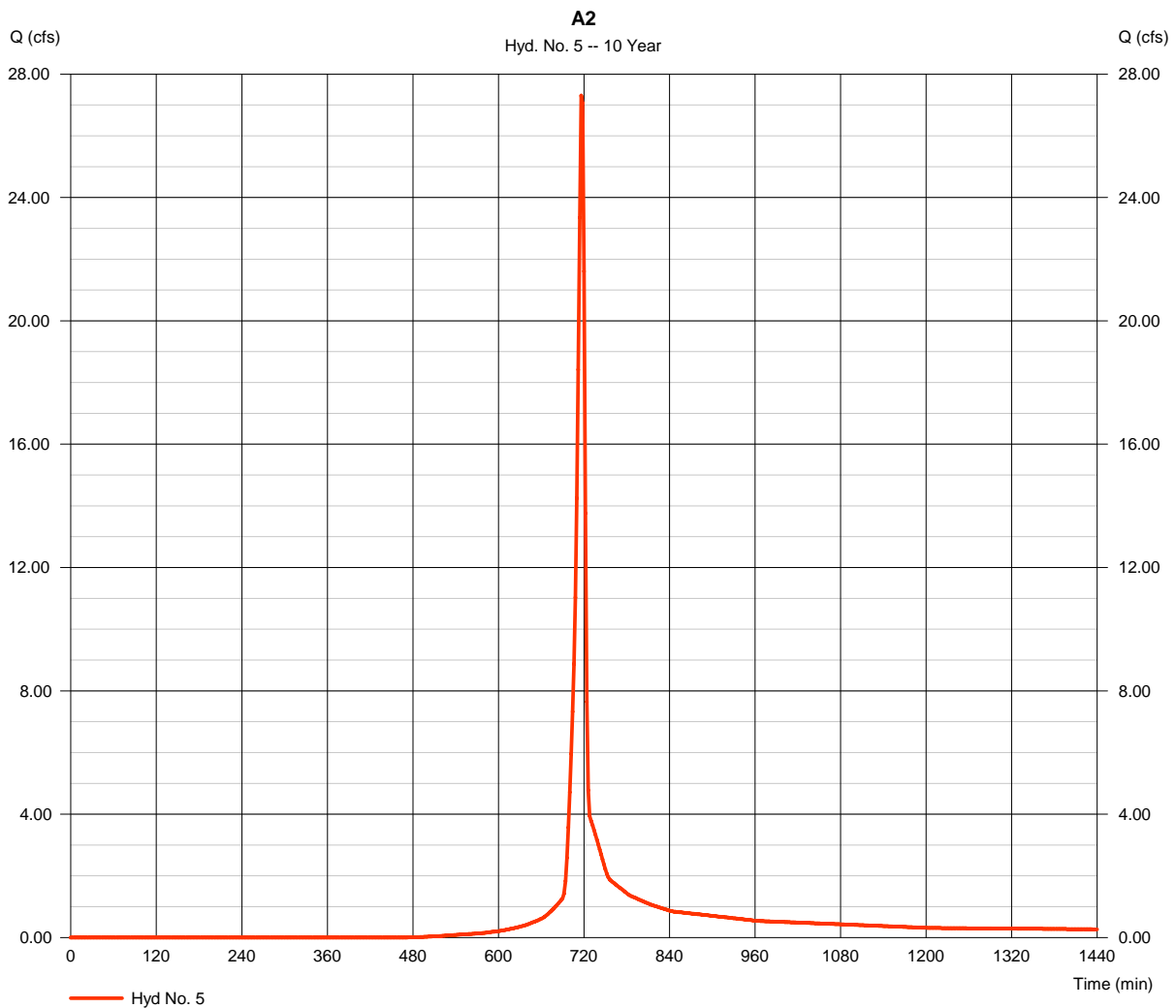


Hydrograph Report

Hyd. No. 5

A2

Hydrograph type	= SCS Runoff	Peak discharge	= 27.30 cfs
Storm frequency	= 10 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 55,267 cuft
Drainage area	= 6.600 ac	Curve number	= 79
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 4.60 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



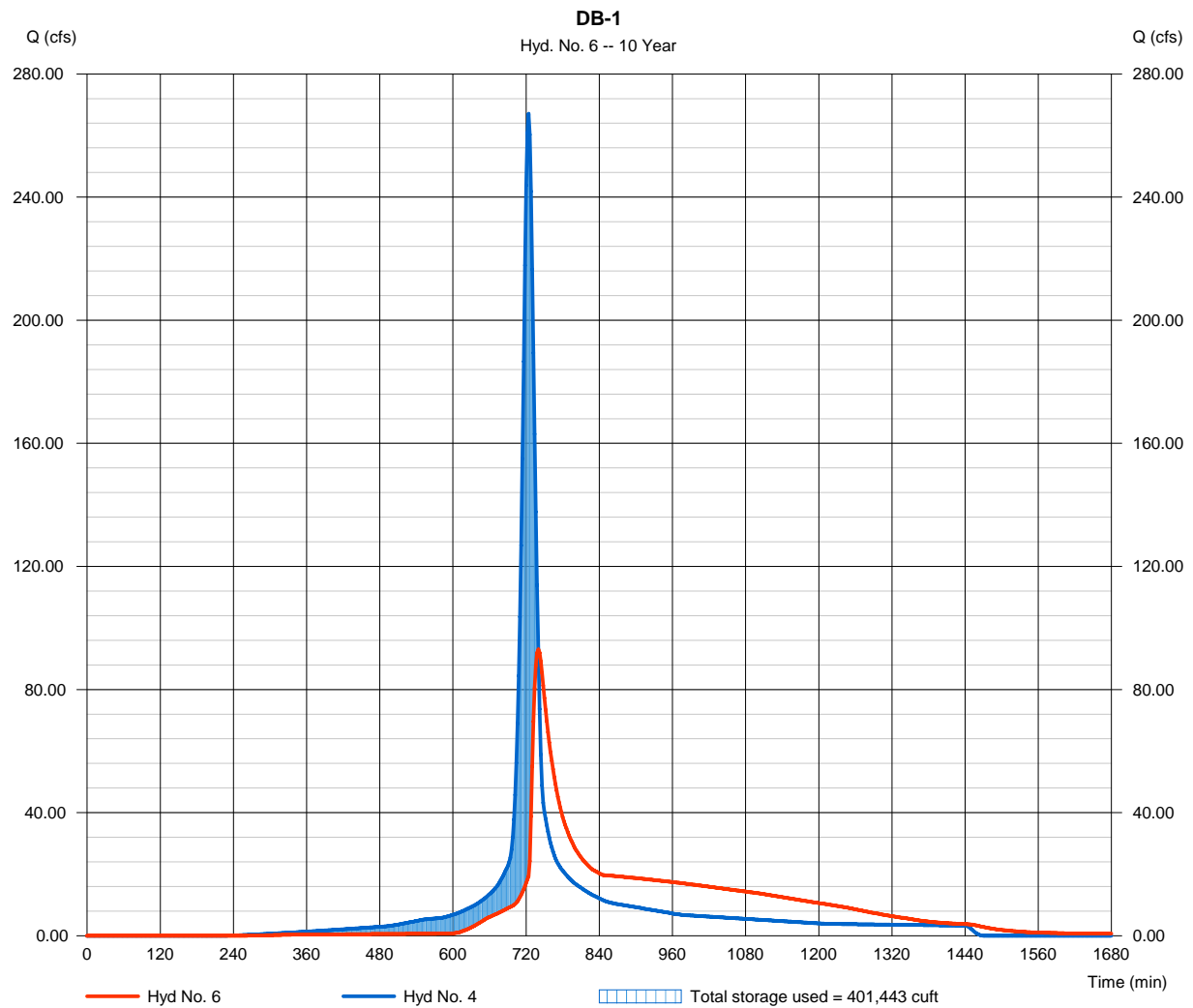
Hydrograph Report

Hyd. No. 6

DB-1

Hydrograph type	= Reservoir	Peak discharge	= 93.07 cfs
Storm frequency	= 10 yrs	Time to peak	= 740 min
Time interval	= 2 min	Hyd. volume	= 864,317 cuft
Inflow hyd. No.	= 4 - A1	Max. Elevation	= 1138.27 ft
Reservoir name	= DB-1	Max. Storage	= 401,443 cuft

Storage Indication method used.

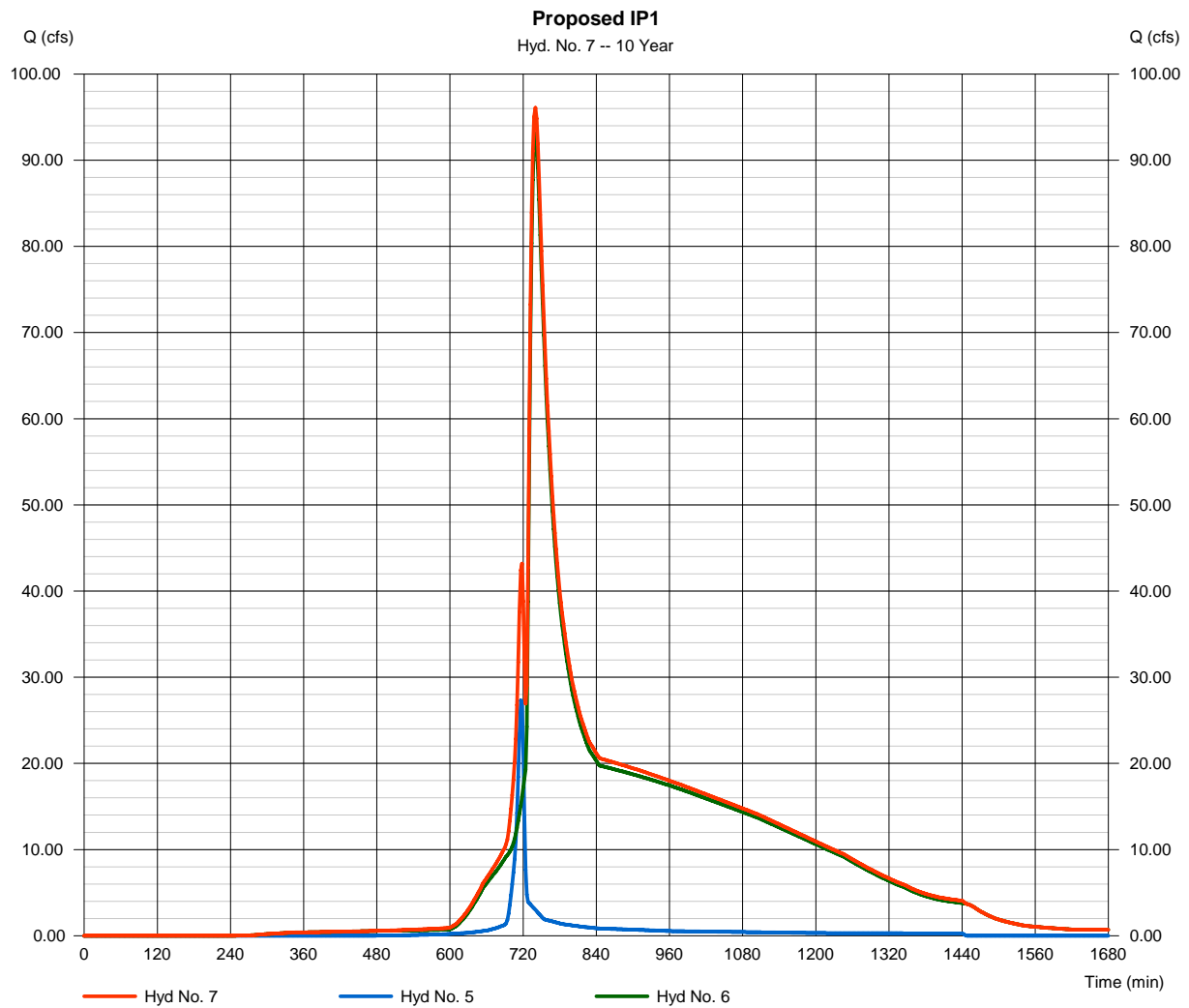


Hydrograph Report

Hyd. No. 7

Proposed IP1

Hydrograph type	= Combine	Peak discharge	= 96.09 cfs
Storm frequency	= 10 yrs	Time to peak	= 740 min
Time interval	= 2 min	Hyd. volume	= 919,583 cuft
Inflow hyds.	= 5, 6	Contrib. drain. area	= 6.600 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

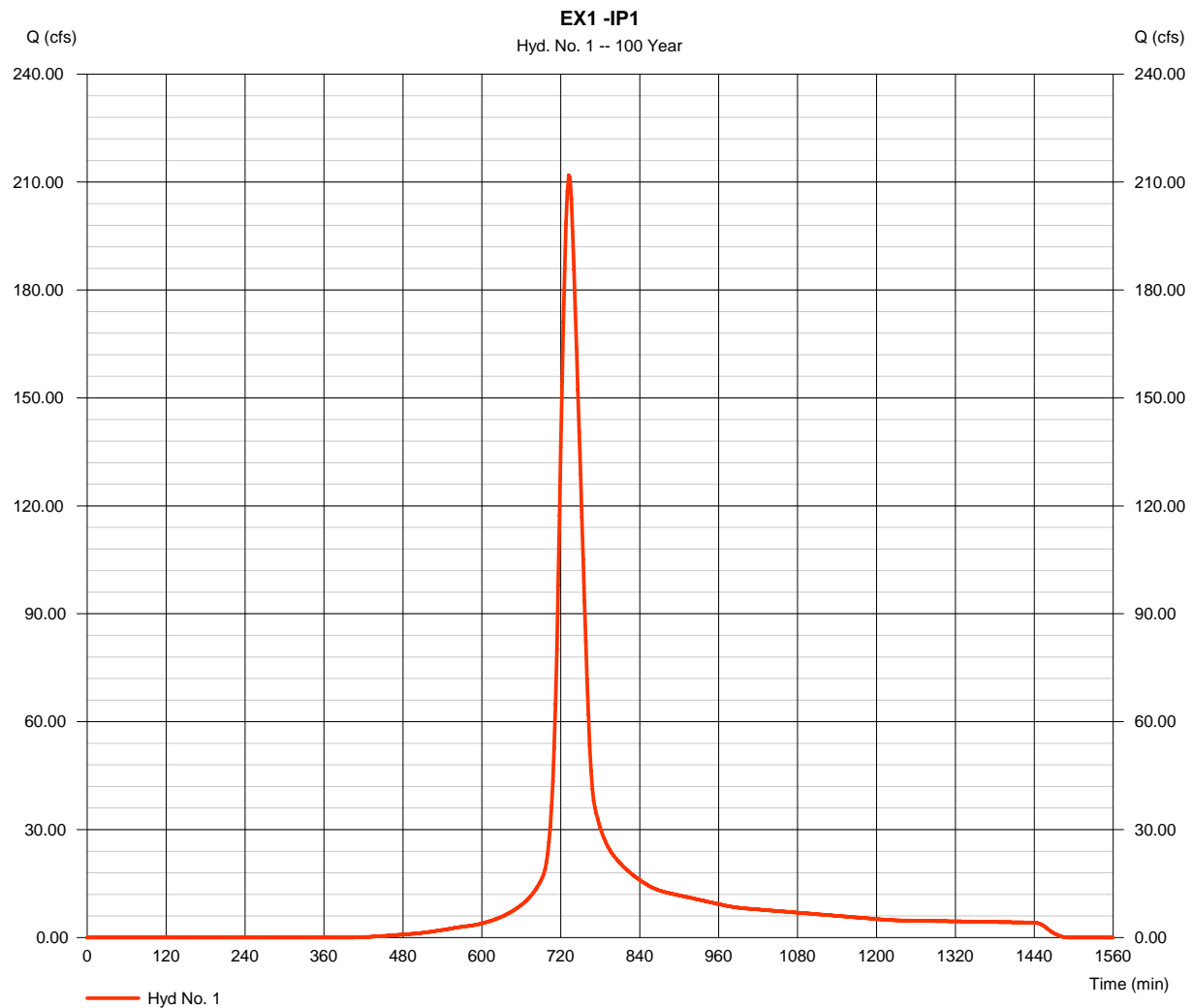
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description	
1	SCS Runoff	211.93	2	732	915,565	-----	-----	-----	EX1 - IP1	
2	SCS Runoff	47.72	2	720	124,234	-----	-----	-----	EX2 - IP2	
3	SCS Runoff	27.27	2	716	55,773	-----	-----	-----	EX3 - IP3	
4	SCS Runoff	409.51	2	724	1,357,048	-----	-----	-----	A1	
5	SCS Runoff	47.04	2	716	96,821	-----	-----	-----	A2	
6	Reservoir	174.56	2	738	1,357,033	4	1139.93	553,581	DB-1	
7	Combine	179.76	2	738	1,453,853	5, 6	-----	-----	Proposed IP1	
2439-101 - Hydroflow - PCSMP.gpw					Return Period: 100 Year			Thursday, 03 / 5 / 2026		

Hydrograph Report

Hyd. No. 1

EX1 -IP1

Hydrograph type	= SCS Runoff	Peak discharge	= 211.93 cfs
Storm frequency	= 100 yrs	Time to peak	= 732 min
Time interval	= 2 min	Hyd. volume	= 915,565 cuft
Drainage area	= 60.800 ac	Curve number	= 77
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 33.10 min
Total precip.	= 6.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

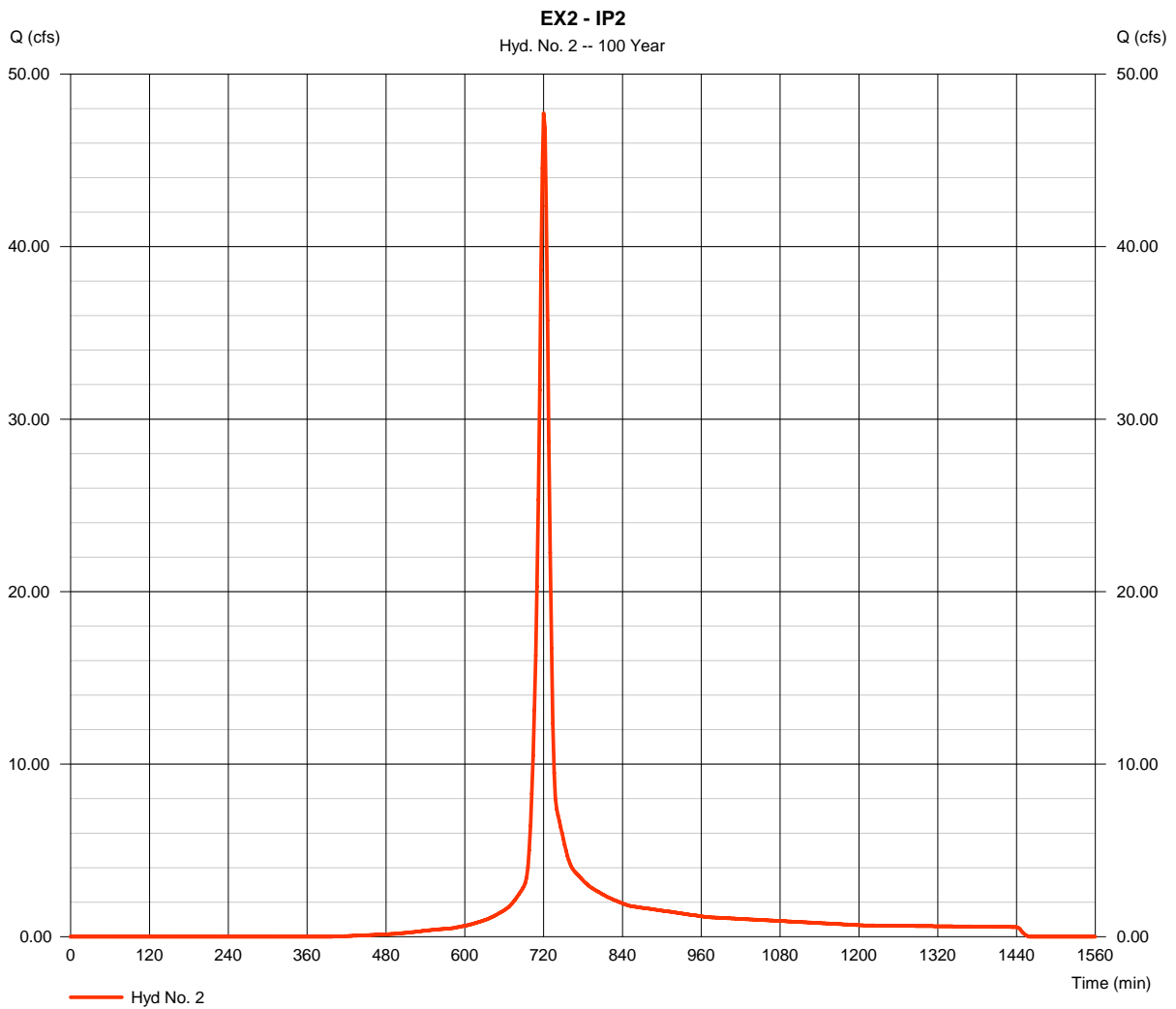


Hydrograph Report

Hyd. No. 2

EX2 - IP2

Hydrograph type	= SCS Runoff	Peak discharge	= 47.72 cfs
Storm frequency	= 100 yrs	Time to peak	= 720 min
Time interval	= 2 min	Hyd. volume	= 124,234 cuft
Drainage area	= 8.100 ac	Curve number	= 77
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 10.00 min
Total precip.	= 6.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

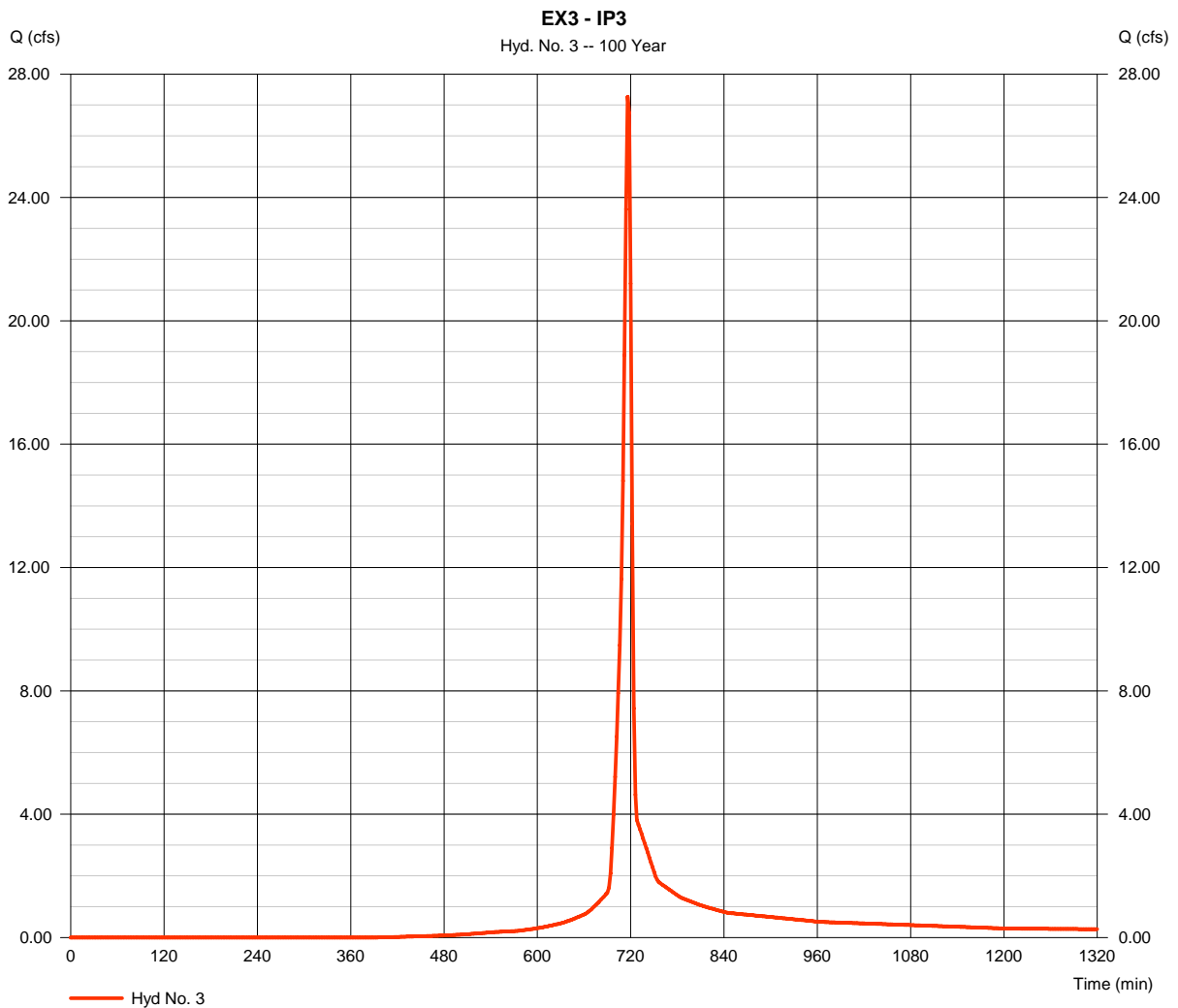


Hydrograph Report

Hyd. No. 3

EX3 - IP3

Hydrograph type	= SCS Runoff	Peak discharge	= 27.27 cfs
Storm frequency	= 100 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 55,773 cuft
Drainage area	= 4.000 ac	Curve number	= 77
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

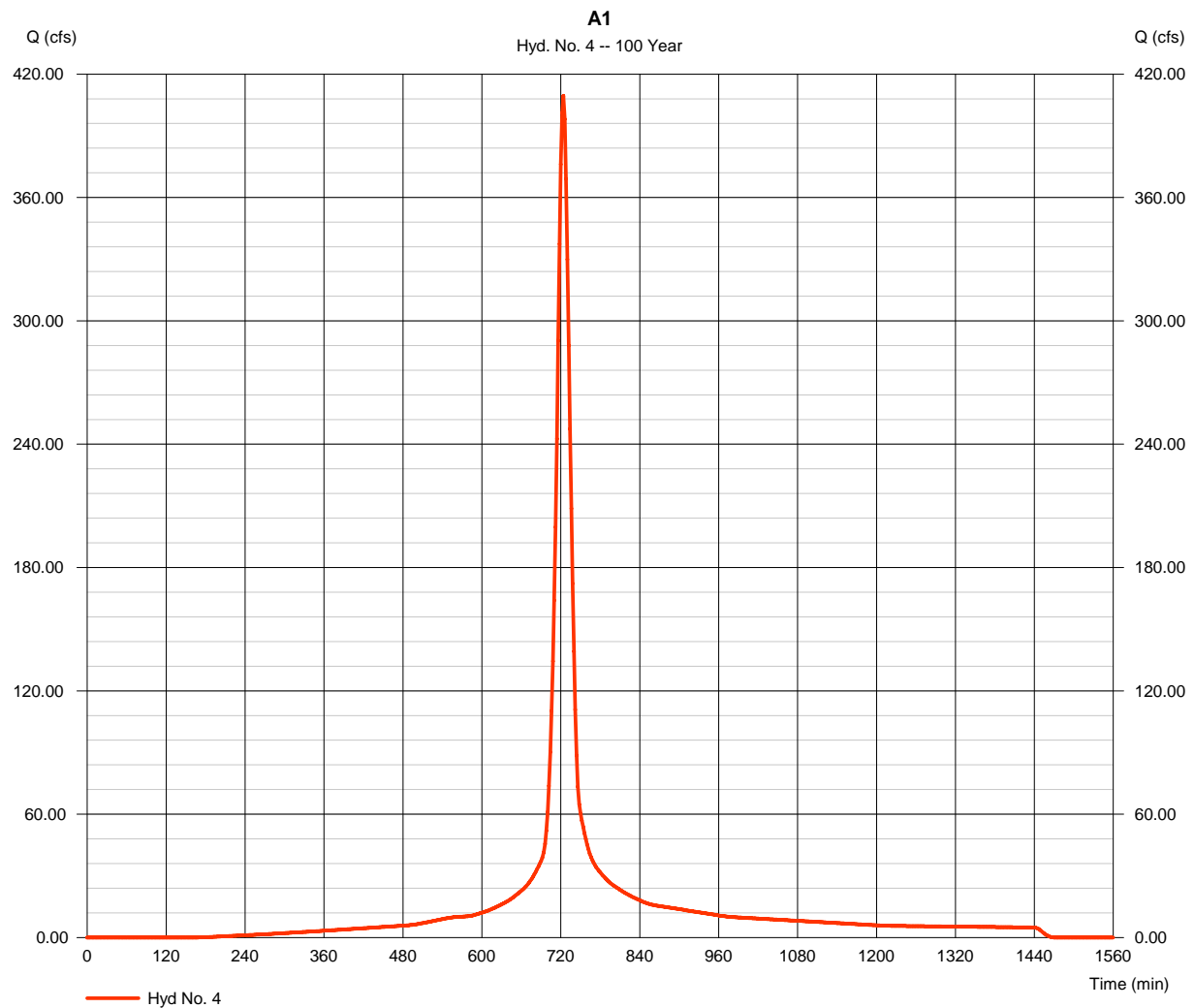


Hydrograph Report

Hyd. No. 4

A1

Hydrograph type	= SCS Runoff	Peak discharge	= 409.51 cfs
Storm frequency	= 100 yrs	Time to peak	= 724 min
Time interval	= 2 min	Hyd. volume	= 1,357,048 cuft
Drainage area	= 66.240 ac	Curve number	= 91
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= TR55	Time of conc. (Tc)	= 19.90 min
Total precip.	= 6.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

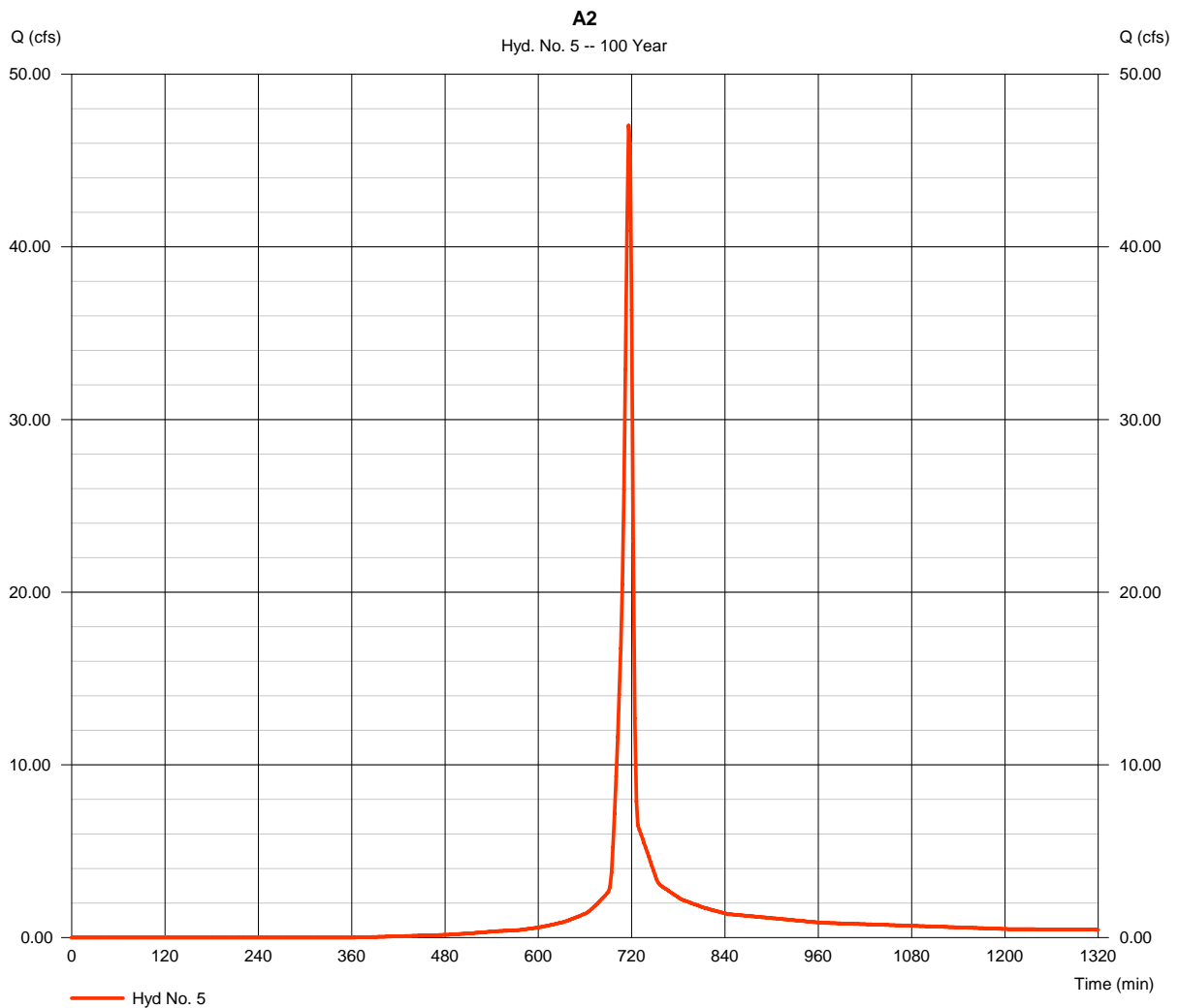


Hydrograph Report

Hyd. No. 5

A2

Hydrograph type	= SCS Runoff	Peak discharge	= 47.04 cfs
Storm frequency	= 100 yrs	Time to peak	= 716 min
Time interval	= 2 min	Hyd. volume	= 96,821 cuft
Drainage area	= 6.600 ac	Curve number	= 79
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 5.00 min
Total precip.	= 6.70 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484



Hydrograph Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024

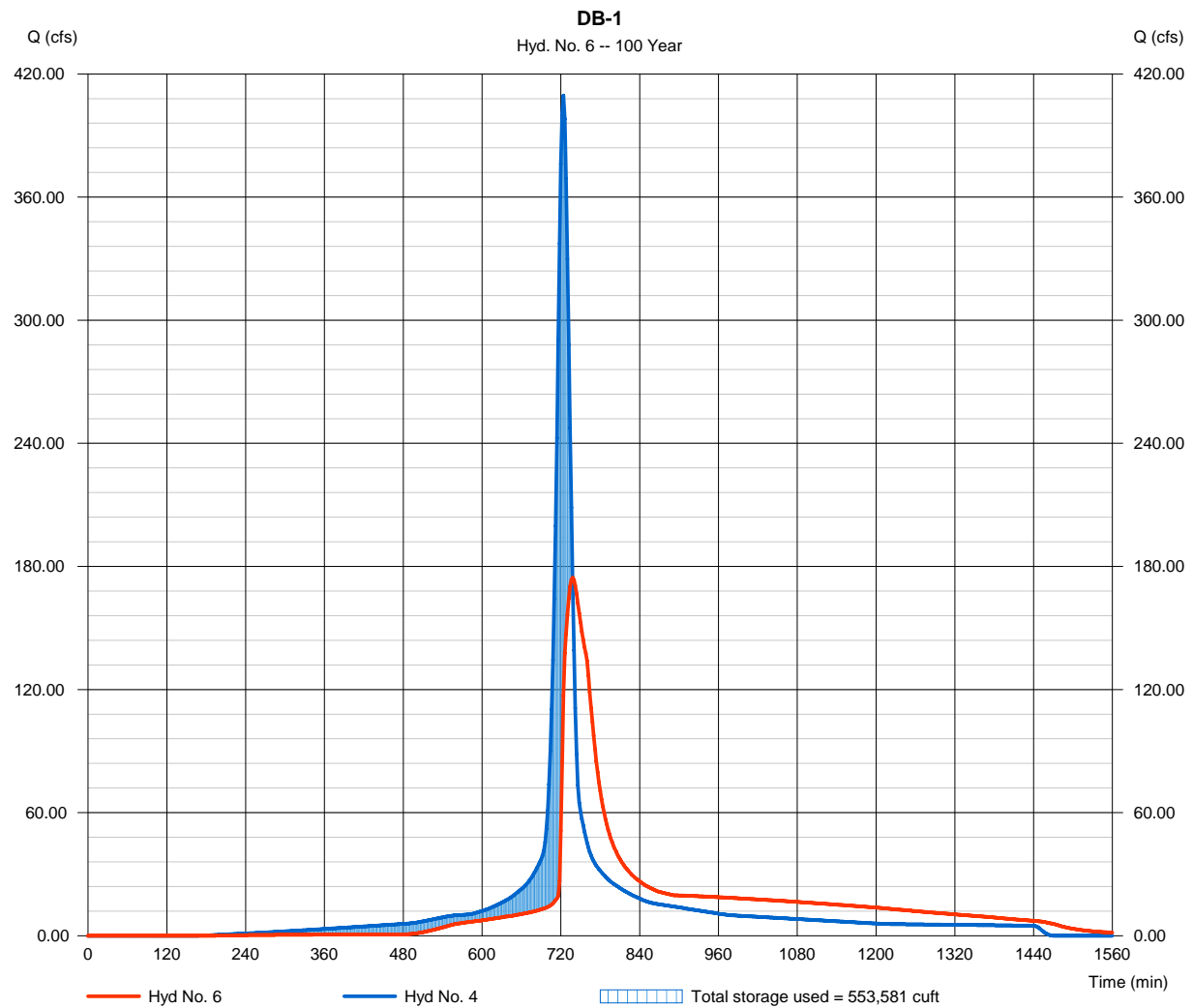
Thursday, 03 / 5 / 2026

Hyd. No. 6

DB-1

Hydrograph type	= Reservoir	Peak discharge	= 174.56 cfs
Storm frequency	= 100 yrs	Time to peak	= 738 min
Time interval	= 2 min	Hyd. volume	= 1,357,033 cuft
Inflow hyd. No.	= 4 - A1	Max. Elevation	= 1139.93 ft
Reservoir name	= DB-1	Max. Storage	= 553,581 cuft

Storage Indication method used.

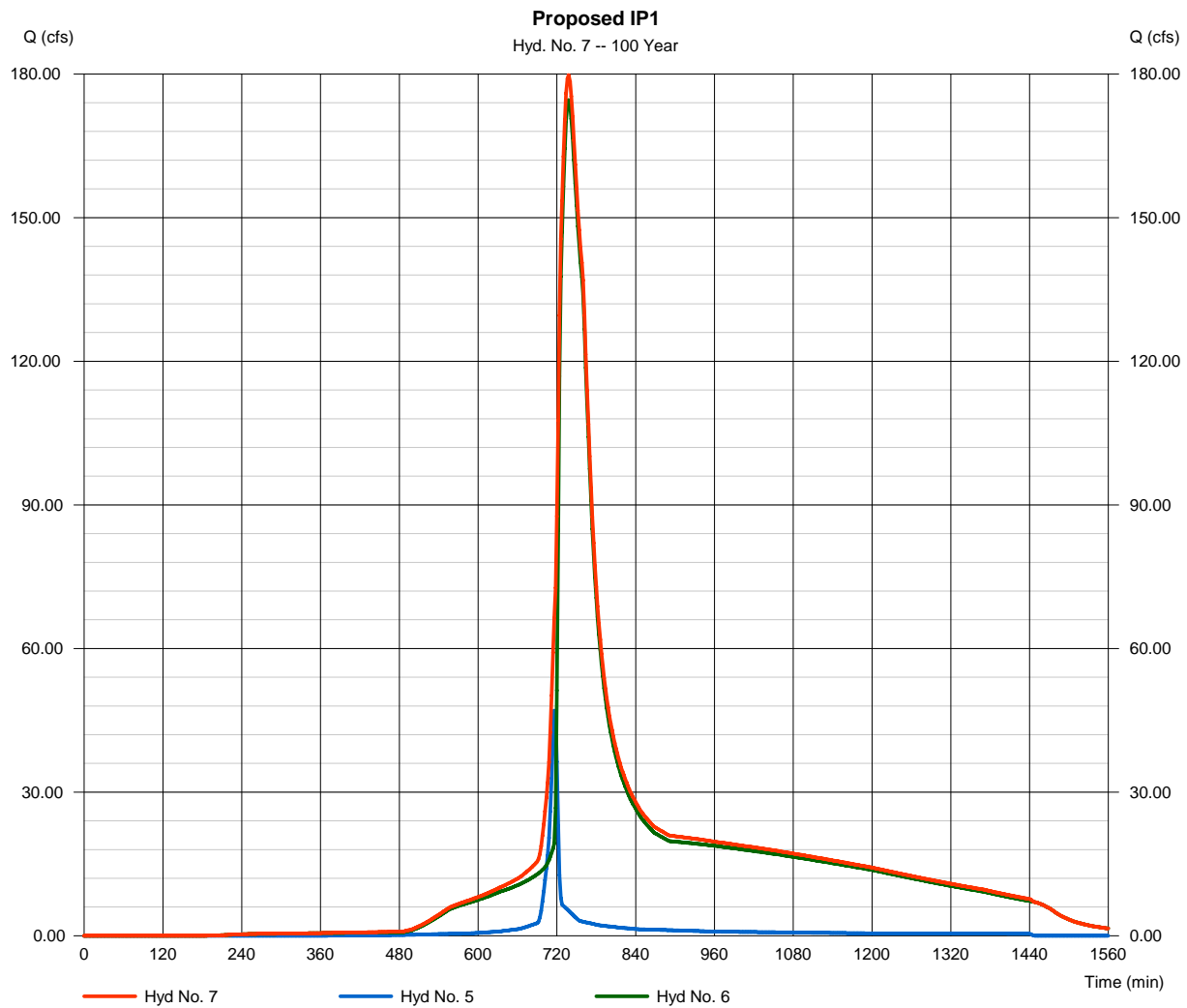


Hydrograph Report

Hyd. No. 7

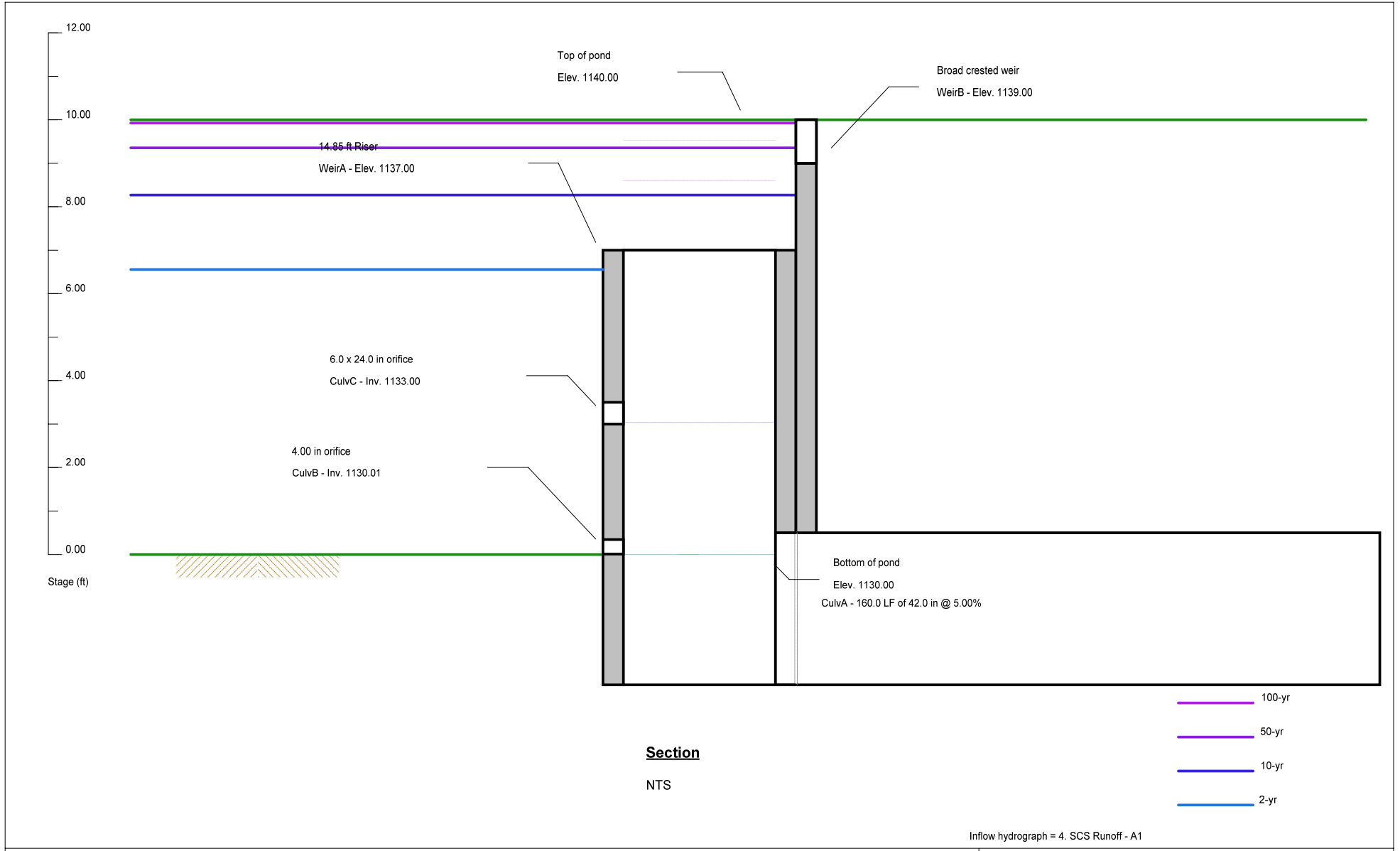
Proposed IP1

Hydrograph type	= Combine	Peak discharge	= 179.76 cfs
Storm frequency	= 100 yrs	Time to peak	= 738 min
Time interval	= 2 min	Hyd. volume	= 1,453,853 cuft
Inflow hyds.	= 5, 6	Contrib. drain. area	= 6.600 ac



- Watershed Model Schematic..... 1**
- Hydrograph Return Period Recap..... 2**
- 2 - Year**
 - Summary Report..... 3**
 - Hydrograph Reports..... 4**
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 - TR-55 Tc Worksheet..... 5
 - Hydrograph No. 2, SCS Runoff, EX2 - IP2..... 6
 - Hydrograph No. 3, SCS Runoff, EX3 - IP3..... 7
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 - Hydrograph No. 6, Reservoir, DB-1..... 29
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Pond No. 1 - DB-1



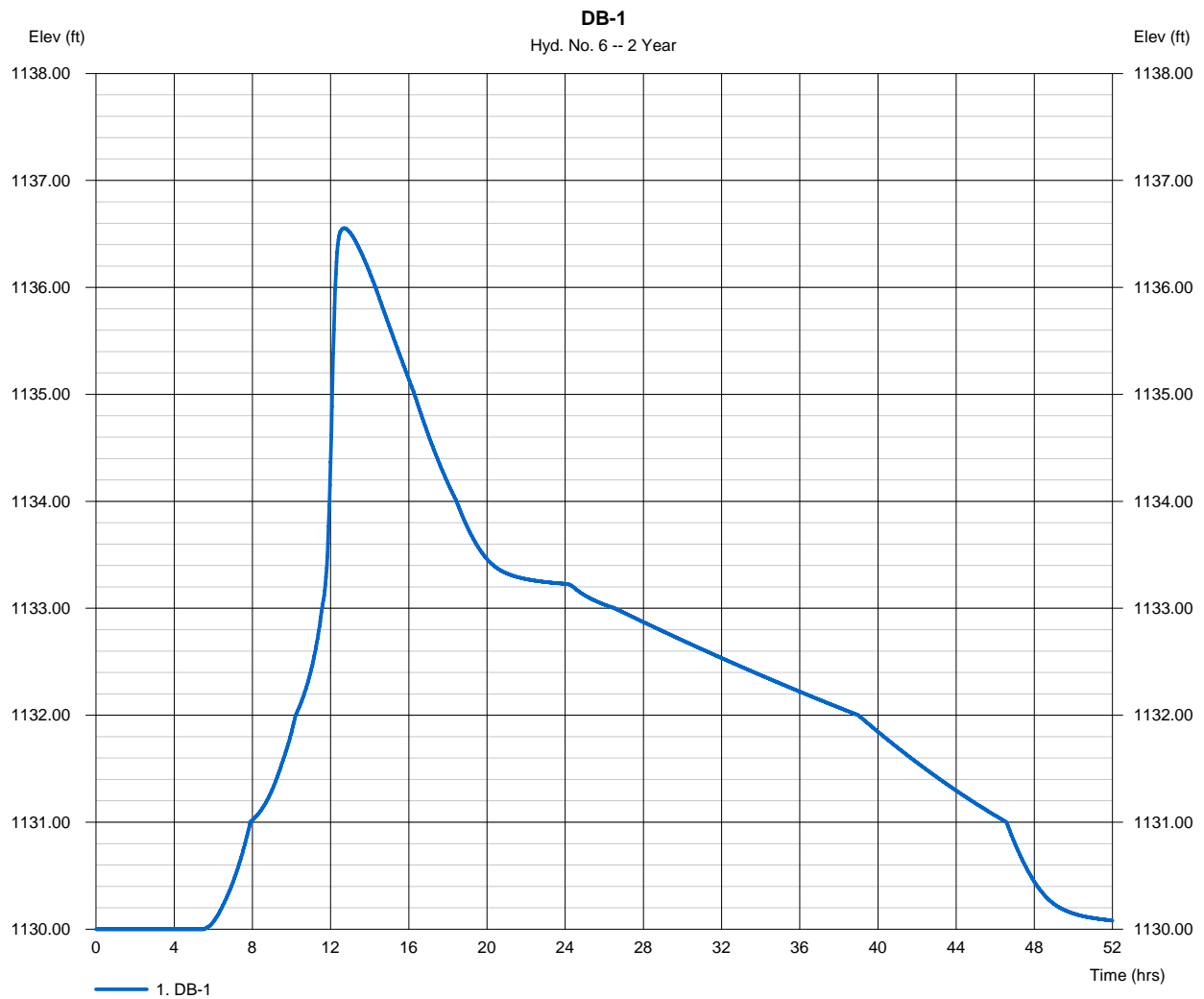
Hydrograph Report

Hyd. No. 6

DB-1

Hydrograph type	= Reservoir	Peak discharge	= 18.57 cfs
Storm frequency	= 2 yrs	Time to peak	= 12.67 hrs
Time interval	= 2 min	Hyd. volume	= 498,006 cuft
Inflow hyd. No.	= 4 - A1	Max. Elevation	= 1136.55 ft
Reservoir name	= DB-1	Max. Storage	= 260,950 cuft

Storage Indication method used.



HY-8 Energy Dissipation Results

External Energy Dissipator

Parameter	Value	Units
Select Culvert and Flow		
Crossing	Culvert	
Culvert	Culvert 1	
Flow	660.00	cfs
Culvert Data		
Culvert Width (including multiple barrels)	10.0	ft
Culvert Height	7.0	ft
Outlet Depth	4.03	ft
Outlet Velocity	16.39	ft/s
Froude Number	1.09	
Tailwater Depth	3.85	ft
Tailwater Velocity	5.57	ft/s
Tailwater Slope (S0)	0.0100	
External Dissipator Data		
External Dissipator Category	Streambed Level Structures	
External Dissipator Type	Riprap Basin	
Restrictions		
Froude Number	<3	
Input Data		
Condition to be used to Compute Basin Outlet Velocity	Best Fit Curve	
D50 of the Riprap Mixture		
Note:	Minimum HS/D50 = 2 is Obtained if D50 = 0.722 ft	
D50 of the Riprap Mixture	0.722	ft
DMax of the Riprap Mixture	1.250	ft
Results		
Brink Depth	4.027	ft
Brink Velocity	16.390	ft/s
Depth (YE)	4.027	ft
Riprap Thickness	1.875	ft
Riprap Foreslope	2.5000	ft
Check HS/D50		
Note:	OK if HS/D50 > 2.0	
HS/D50	2.015	
HS/D50 Check	HS/D50 is OK	
Check D50/YE		
Note:	OK if 0.1 < D50/YE < 0.7	

Check D50/YE	0.179	
D50/YE Check	D50/YE is OK	
Basin Length (LB)	40.000	ft
Basin Width	36.667	ft
Apron Length	10.000	ft
Pool Length	30.000	ft
Pool Depth (HS)	1.455	ft
TW/YE	0.956	
Tailwater Depth (TW)	3.850	ft
Average Velocity with TW	3.864	ft/s
Critical Depth (Yc)	2.076	ft
Average Velocity with Yc	7.788	ft/s
Downstream Riprap for High TW		
Distance: 1 LB		
Velocity	13.850	ft/s
Size	1.250	ft
Distance: 2 LB		
Velocity	8.910	ft/s
Size	0.518	ft
Distance: 3 LB		
Velocity	5.923	ft/s
Size	0.229	ft
Distance: 4 LB		
Velocity	4.433	ft/s
Size	0.128	ft

Name of Addition

Springfield Gateway Park - Phase 1

SID # **New**

Source and Use of Funds: (Provide a separate sheet for the preliminary plat and for each final plat phase.)

	Proposed Improvements		Construction Cost	Total Cost	General Obligation	Special Assessed	Financing Reimbursable	Private
	Quantity							
Storm Sewer								
Storm Sewer	2,600	LF	\$1,244,900	\$1,751,500	\$1,751,500			
Sanitary Sewer								
SCCWWA Sewer Fees	22.47	AC.	\$673,800	\$799,400	\$799,400 ⁴			
Outfall (With Easements)	2,000	LF	\$436,600	\$614,300	\$614,300		\$282,600 ³	
Interior	1,600	LF	\$187,700	\$264,100		\$264,100		
Paving								
Exterior (Capehart Rd)	-	SY						
Interior	5,842	SY	\$579,700	\$815,700	\$322,200	\$493,500		
Highway 50 Traffic Signal	1	LS	\$500,000	\$695,000	\$695,000		\$347,500 ⁵	
City Review Fee	1	LS	\$31,300	\$31,300	\$31,300			
Springfield ASIP Fee	1	LS	\$35,000	\$42,000	\$42,000			
ADA Ramps and SID Sidewalks	1	LS	\$3,200	\$4,500	\$4,500			
Water								
Interior	1	LS	\$621,100	\$873,900		\$873,900		
Pioneer Main Fee	1	LS	\$138,800	\$164,700	\$164,700			
Exterior								
Electricity	22.47	AC.	\$188,800	\$265,600		\$265,600		
Gas	1	LS	\$178,000	\$267,300	\$267,300 ⁶			
Total			\$4,818,900	\$6,589,300	\$4,692,200	\$1,897,100	\$630,100	

¹ Total cost includes engineering fees and administrative fees

² Attach a statement of assumptions as basis for preliminary projections.

³ Outfall services 138 acres and proposed project uses 75 acres of service; therefore, 46% of outfall shall be reimbursed by future connections to outfall built by Springfield Gateway Park.

⁴ 100% of SCCWWA Sewer Fees shall be paid by the SID as a General Obligation expense.

⁵ 50% of Highway 50 Traffic Signal at Gateway Drive to be reimbursible by property adjacent to the east of Springfield Gateway Park upon development

⁶ Includes approx. 9,200 LF of exterior gas main construction

G.O. Debt Less GO Reimbursements
Valuation
Debt Ratio

\$ 4,062,100
\$ 28,500,000
14.25%

Date

March 9, 2026

PRELIMINARY COST ESTIMATE - Phase 1
Springfield Gateway Park
TD2 NO: 2439-101
DATE: 03/09/2026
SID: New

ITEM OF WORK	UNIT	QUANTITY	UNIT PRICE	AMOUNT
SANITARY SEWER				
6-inch Stub San. Swr. w/ Crushed Rock Bedding	LF	0	\$60.00	\$0.00
8-inch Main Line San. Swr. w/ Crushed Rock Bedding	LF	1600	\$60.00	\$96,000.00
Directional Bore 8" PVC	LF	0	\$160.00	\$0.00
18-inch O.D. Welded Steel Casing	LF	0	\$150.00	\$0.00
Bore and Jack 18-inch O.D. Welded Steel Casing	LF	0	\$600.00	\$0.00
Wyes or Slants	EA	3	\$250.00	\$750.00
54" I.D. Sanitary Sewer Manhole	VF	90	\$700.00	\$63,000.00
Standard Ring & Cover	EA	7	\$1,200.00	\$8,400.00
Tap Existing Manhole/Stub	EA	0	\$2,000.00	\$0.00
Crushed Rock, Unstable Trench	TON	100	\$100.00	\$10,000.00
Geotextile Fabric, Unstable Trench	SY	100	\$6.00	\$600.00
Lift Station w/ Backup Generator	LS	0	\$400,000.00	\$0.00
4" PVC DR 14 Force Main w/ Tracer Wire	LF	0	\$38.00	\$0.00
Subtotal (5% Contingency)				\$187,687.50
Engineering Fees, 21%				\$39,414.38
Legal Fees, 5%				\$9,384.38
Warrant Interest, 1 Yrs. @ 8%				\$15,015.00
Subtotal				\$251,501.25
Warrant Fee, 5%				\$12,575.06
Total				\$264,076.31
SANITARY SEWER OUTFALL				
Mobilization	LS	1.00	\$25,000.00	\$25,000.00
Directional Bore PVC Siphon (10")	LF	0	\$150.00	\$0.00
8-inch San. Swr. w/ Crushed Rock Bedding	LF	2000	\$60.00	\$120,000.00
15-inch San. Swr. w/ Crushed Rock Bedding	LF	0	\$110.00	\$0.00
Bore and Jack 18-inch O.D. Welded Steel Casing	LF	0	\$650.00	\$0.00
54" I.D. Sanitary Sewer Manhole	VF	80	\$700.00	\$56,000.00
Standard Ring & Cover	EA	6	\$1,200.00	\$7,200.00
Tap Existing Manhole/Stub	EA	1	\$5,000.00	\$5,000.00
Dewatering, If Necessary	LS	1	\$20,000.00	\$20,000.00
Crushed Rock, Unstable Trench	TON	100	\$100.00	\$10,000.00
Geotextile Fabric, Unstable Trench	SY	100	\$6.00	\$600.00
Seeding/Matting	SY	15000	\$2.00	\$30,000.00
Geotech Report	LS	1	\$20,000.00	\$20,000.00
Topographic Survey	LS	1	\$20,000.00	\$20,000.00
Permanent Easement	ACRE	1.40	\$50,000.00	\$70,000.00
Temporary Easement	ACRE	3.20	\$10,000.00	\$32,000.00
Subtotal (5% Contingency)				\$436,590.00
Engineering Fees, 21%				\$91,683.90
Legal Fees, 5%				\$21,829.50
Warrant Interest, 1 Yrs. @ 8%				\$34,927.20
Subtotal				\$585,030.60
Warrant Fee, 5%				\$29,251.53
Total				\$614,282.13

PAVEMENT, MINOR (SPECIAL ASSESS)

Mobilizaton	LS	1	\$25,000.00	\$25,000.00
7-inch PCC Pavement	SY	0	\$55.00	\$0.00
9-inch PCC Pavement	SY	3660	\$80.00	\$292,800.00
Common Excavation	CY	1470	\$10.00	\$14,700.00
5" Wide (White) Striping	LF	0	\$5.50	\$0.00
5" Wide (Yellow) Striping	LF	0	\$5.50	\$0.00
12" Wide (White) Striping	LF	0	\$14.00	\$0.00
Preformed Pavement Marking Symbol	EA	0	\$1,000.00	\$0.00
Adjust Manhole	EA	3	\$500.00	\$1,500.00
Street Signs	EA	0	\$300.00	\$0.00

Subtotal (5% Contingency)				\$350,700.00
Engineering Fees, 21%				\$73,647.00
Legal Fees, 5%				\$17,535.00
Warrant Interest, 1 Yrs. @ 8%				\$28,056.00
Subtotal				\$469,938.00
Warrant Fee, 5%				\$23,496.90
Total				\$493,434.90

PAVEMENT, MINOR (GENERAL OBLIGATION)

Mobilizaton	LS	1	\$25,000.00	\$25,000.00
6-inch Median Pavement	SY	0	\$70.00	\$0.00
7-inch PCC Pavement	SY	0	\$55.00	\$0.00
9-inch PCC Pavement	SY	2182	\$80.00	\$174,595.56
Common Excavation	CY	873	\$10.00	\$8,729.78
Adjust Manhole	EA	0	\$1,000.00	\$0.00
5" Wide (White) Striping	LF	250	\$5.00	\$1,250.00
5" Wide (Yellow) Striping	LF	1300	\$5.00	\$6,500.00
12" Wide (White) Striping	LF	0	\$14.00	\$0.00
Preformed Pavement Marking Symbol	EA	2	\$1,000.00	\$2,000.00
Pavement Removal	SY	0	\$30.00	\$0.00
Street Signs	EA	0	\$500.00	\$0.00

Subtotal (5% Contingency)				\$228,979.10
Engineering Fees, 21%				\$48,085.61
Legal Fees, 5%				\$11,448.96
Warrant Interest, 1 Yrs. @ 8%				\$18,318.33
Subtotal				\$306,831.99
Warrant Fee, 5%				\$15,341.60
Total				\$322,173.59

PAVEMENT, MAJOR (CAPEHART ROAD)

Traffic Control and Mobilization	LS	0	\$25,000.00	\$0.00
Pavement Removal	SY	0	\$20.00	\$0.00
6-inch Median Pavement	SY	0	\$40.00	\$0.00
7-inch PCC Pavement	SY	0	\$45.00	\$0.00
9-inch PCC Pavement	SY	0	\$80.00	\$0.00
Common Excavation	CY	0	\$10.00	\$0.00
Adjust Manhole	EA	0	\$300.00	\$0.00
5" Wide (White) Striping	LF	0	\$10.00	\$0.00
5" Wide (Yellow) Striping	LF	0	\$5.50	\$0.00
12" Wide (White) Striping	LF	0	\$14.00	\$0.00
Curb Inlets	EA	0	\$3,500.00	\$0.00
Seeding and Matting, Erosion Items	SY	0	\$2.00	\$0.00
30-inch RCP Storm Sewer	LF	0	\$200.00	\$0.00

Subtotal (5% Contingency)				\$0.00
Engineering Fees, 21%				\$0.00
Legal Fees, 5%				\$0.00
Warrant Interest, 1 Yrs. @ 8%				\$0.00
Subtotal				\$0.00
Warrant Fee, 5%				\$0.00
Total				\$0.00

WATER INTERIOR

Interior Water Mains	L.S.	1.0		\$591,480.00
Interior Water Mains Master Fee	AC			\$0.00
Connection Charges	LS			\$0.00

Subtotal (5% Contingency)				\$621,054.00
Engineering Fees, 21%				\$130,421.34
Legal Fees, 5%				\$31,052.70
Warrant Interest, 1 Yrs. @ 8%				\$49,684.32
Subtotal				\$832,212.36
Warrant Fee, 5%				\$41,610.62
Total				\$873,822.98

WATER PIONEER MAIN FEE

Pioneer Main Fee	L.S.	1.0		\$138,744.54
Connection Charge	LS	0.0		\$0.00

Subtotal (0% Contingency)				\$138,744.54
Engineering Fees, 0%				\$0.00
Legal Fees, 5%				\$6,937.23
Warrant Interest, 1 Yrs. @ 8%				\$11,099.56
Subtotal				\$156,781.33
Warrant Fee, 5%				\$7,839.07
Total				\$164,620.40

WATER EXTERIOR

Exterior Water Mains	LF	0.0	\$150.00	\$0.00
Connection Charges	LS			\$0.00

Subtotal (5% Contingency)				\$0.00
Engineering Fees, 21%				\$0.00
Legal Fees, 5%				\$0.00
Warrant Interest, 1 Yrs. @ 8%				\$0.00
Subtotal				\$0.00
Warrant Fee, 5%				\$0.00
Total				\$0.00

GAS

Total				\$177,969.00
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Subtotal (0% Contingency)				\$177,969.00
Engineering Fees, 3%				\$53,390.70
Legal Fees, 5%				\$8,898.45
Warrant Interest, 1 Yrs. @ 8%				\$14,237.52
Subtotal				\$254,495.67
Warrant Fee, 5%				\$12,724.78
Total				\$267,220.45

POWER

Single Family Lots	EA	0	\$1,500.00	\$0.00
Comm/Industrial Backbone	AC	22.47	\$8,000.00	\$179,760.00

Subtotal (5% Contingency)				\$188,748.00
Engineering Fees, 21%				\$39,637.08
Legal Fees, 5%				\$9,437.40
Warrant Interest, 1 Yrs. @ 8%				\$15,099.84
Subtotal				\$252,922.32
Warrant Fee, 5%				\$12,646.12
Total				\$265,568.44

STORM SEWER (GENERAL OBLIGATION)

15-inch RCP Storm Sewer	LF	0	\$60.00	\$0.00
18-inch RCP Storm Sewer	LF	90	\$70.00	\$6,300.00
24-inch RCP Storm Sewer	LF	0	\$85.00	\$0.00
30-inch RCP Storm Sewer	LF	1500	\$120.00	\$180,000.00
36-inch RCP Storm Sewer	LF	490	\$150.00	\$73,500.00
42-inch RCP Storm Sewer	LF	260	\$215.00	\$55,900.00
48-inch RCP Storm Sewer	LF	260	\$275.00	\$71,500.00
54-inch RCP Storm Sewer	LF	0	\$325.00	\$0.00
60-inch RCP Storm Sewer	LF	640	\$380.00	\$243,200.00
72-inch RCP Storm Sewer	LF	90	\$450.00	\$40,500.00
84-inch RCP Storm Sewer	LF	0	\$500.00	\$0.00
Storm Manhole, 54-inch I.D.	EA	0	\$8,000.00	\$0.00
Storm Manhole, 60-inch I.D.	EA	1	\$10,000.00	\$10,000.00
Storm Manhole, 72-inch I.D.	EA	1	\$12,000.00	\$12,000.00
Storm Manhole, 84-inch I.D.	EA	1	\$15,000.00	\$15,000.00
Storm Manhole, 96-inch I.D.	EA	3	\$18,000.00	\$54,000.00
Storm Manhole, 120-inch I.D.	EA	2	\$25,000.00	\$50,000.00
Standard Ring and Cover	EA	7	\$1,200.00	\$8,400.00
Curb Inlets	EA	6	\$5,500.00	\$33,000.00
Area Inlets	EA	0	\$5,500.00	\$0.00
Flared End Sections	EA	2	\$6,000.00	\$12,000.00
10' X 7' Box Culvert w/ Wingwalls	LF	105	\$2,250.00	\$236,250.00
Rip Rap	TON	400	\$110.00	\$44,000.00
Embankment for Box Culvert	CY	0	\$12.00	\$0.00
Culvert Tree Clearing	LS	0	\$10,000.00	\$0.00
Temporary 48" CMP for Culvert Surcharge	LF	0	\$200.00	\$0.00
Sediment Basin Cleanout	LS	1	\$20,000.00	\$20,000.00
PCSMP Outlet	EA	1	\$20,000.00	\$20,000.00

Subtotal (5% Contingency)				\$1,244,827.50
Engineering Fees, 21%				\$261,413.78
Legal Fees, 5%				\$62,241.38
Warrant Interest, 1 Yrs. @ 8%				\$99,586.20
Subtotal				\$1,668,068.85
Warrant Fee, 5%				\$83,403.44
Total				\$1,751,472.29

SIDEWALK (GENERAL OBLIGATION)

5" P.C.C. Sidewalk Pavement	SY	0	\$70.00	\$0.00
Handicap Ramps	EA	2	\$1,500.00	\$3,000.00

Subtotal (5% Contingency)				\$3,150.00
Engineering Fees, 21%				\$661.50
Legal Fees, 5%				\$157.50
Warrant Interest, 1 Yrs. @ 8%				\$252.00
Subtotal				\$4,221.00
Warrant Fee, 5%				\$211.05
Total				\$4,432.05

SIDEWALK CAPEHART (GENERAL OBLIGATION)

5" P.C.C. Sidewalk Pavement	SY	0	\$55.00	\$0.00
Handicap Ramps	EA	0	\$1,500.00	\$0.00

Subtotal (5% Contingency)				\$0.00
Engineering Fees, 21%				\$0.00
Legal Fees, 5%				\$0.00
Warrant Interest, 1 Yrs. @ 8%				\$0.00
Subtotal				\$0.00
Warrant Fee, 5%				\$0.00
Total				\$0.00

PCSMP

Land Acquisition	AC	5.14	50,000.00	257,000.00

Subtotal				257,000.00
Fees, 20%				51,400.00
Total				308,400.00

SEWER FEES

Pioneer Main Fee	AC	22.47	\$29,984.00	\$673,740.48
Connection Charge	LS			\$0.00

Subtotal (0% Contingency)				\$673,740.48
Engineering Fees, 0%				\$0.00
Legal Fees, 5%				\$33,687.02
Warrant Interest, 1 Yrs. @ 8%				\$53,899.24
Subtotal				\$761,326.74
Warrant Fee, 5%				\$38,066.34
Total				\$799,393.08

Name of Addition

Springfield Gateway Park - Phase 2

SID # **New**

Source and Use of Funds: (Provide a separate sheet for the preliminary plat and for each final plat phase.)

	Quantity		Proposed Improvements Construction Cost	Total Cost	General Obligation	Special Assessed	Financing Reimbursable	Private
Storm Sewer								
Storm Sewer	1,780	LF	\$379,900	\$534,600	\$534,600			
Sanitary Sewer								
SCCWWA Sewer Fees	43.32	AC.	\$1,299,000	\$1,541,200	\$1,541,200	⁴		
Outfall (With Easements)		LF						
Interior	2,100	LF	\$210,200	\$295,700		\$295,700		
Paving								
Exterior (Capehart Rd)	930	SY	\$123,800	\$174,200	\$174,200	³		
Interior		SY						
City Review Fee	1	LS	\$20,200	\$20,200	\$20,200			
Springfield ASIP Fee	1	LS	\$65,000	\$78,000	\$78,000			
Capehart Rd Sidewalks	730	SY	\$42,200	\$59,400	\$59,400			
Water								
Interior		LS						
Pioneer Main Fee	1	LS	\$281,700	\$334,300	\$334,300			
Exterior								
Electricity	43.32	AC.	\$363,900	\$512,000		\$512,000		
Gas (Interior)	1	LS	\$361,400	\$542,600	\$542,600	⁵		
Total			\$3,147,300	\$4,092,200	\$3,284,500	\$807,700		

¹ Total cost includes engineering fees and administrative fees

² Attach a statement of assumptions as basis for preliminary projections.

³ Includes widening Capehart Rd to three lanes along the frontage of Springfield Gateway Park

⁴ 100% of SCCWWA Sewer Fees shall be paid by the SID as a General Obligation expense.

⁵ Includes approx. 9,200 LF of exterior gas main construction

G.O. Debt Less GO Reimbursements
Valuation
Debt Ratio

\$ 3,284,500
\$ 57,000,000
5.76%

Date

March 9, 2026

PRELIMINARY COST ESTIMATE - Phase 2
Springfield Gateway Park
TD2 NO: 2439-101
DATE: 03/09/2026
SID: New

ITEM OF WORK	UNIT	QUANTITY	UNIT PRICE	AMOUNT
SANITARY SEWER				
6-inch Stub San. Swr. w/ Crushed Rock Bedding	LF	0	\$60.00	\$0.00
8-inch Main Line San. Swr. w/ Crushed Rock Bedding	LF	2100	\$60.00	\$126,000.00
Directional Bore 8" PVC	LF	0	\$160.00	\$0.00
18-inch O.D. Welded Steel Casing	LF	0	\$150.00	\$0.00
Bore and Jack 18-inch O.D. Welded Steel Casing	LF	0	\$600.00	\$0.00
Wyes or Slants	EA	10	\$250.00	\$2,500.00
54" I.D. Sanitary Sewer Manhole	VF	70	\$700.00	\$49,000.00
Standard Ring & Cover	EA	10	\$1,200.00	\$12,000.00
Tap Existing Manhole/Stub	EA	0	\$2,000.00	\$0.00
Crushed Rock, Unstable Trench	TON	100	\$100.00	\$10,000.00
Geotextile Fabric, Unstable Trench	SY	100	\$6.00	\$600.00
Lift Station w/ Backup Generator	LS	0	\$400,000.00	\$0.00
4" PVC DR 14 Force Main w/ Tracer Wire	LF	0	\$38.00	\$0.00
Subtotal (5% Contingency)				\$210,105.00
Engineering Fees, 21%				\$44,122.05
Legal Fees, 5%				\$10,505.25
Warrant Interest, 1 Yrs. @ 8%				\$16,808.40
Subtotal				\$281,540.70
Warrant Fee, 5%				\$14,077.04
Total				\$295,617.74
SANITARY SEWER OUTFALL				
Mobilization	LS	0.00	\$25,000.00	\$0.00
Directional Bore PVC Siphon (10")	LF	0	\$150.00	\$0.00
8-inch San. Swr. w/ Crushed Rock Bedding	LF	0	\$60.00	\$0.00
15-inch San. Swr. w/ Crushed Rock Bedding	LF	0	\$110.00	\$0.00
Bore and Jack 18-inch O.D. Welded Steel Casing	LF	0	\$650.00	\$0.00
54" I.D. Sanitary Sewer Manhole	VF	0	\$700.00	\$0.00
Standard Ring & Cover	EA	0	\$1,200.00	\$0.00
Tap Existing Manhole/Stub	EA	0	\$5,000.00	\$0.00
Dewatering, If Necessary	LS	0	\$20,000.00	\$0.00
Crushed Rock, Unstable Trench	TON	0	\$100.00	\$0.00
Geotextile Fabric, Unstable Trench	SY	0	\$6.00	\$0.00
Seeding/Matting	SY	0	\$2.00	\$0.00
Geotech Report	LS	0	\$20,000.00	\$0.00
Topographic Survey	LS	0	\$20,000.00	\$0.00
Permanent Easement	ACRE	0	\$50,000.00	\$0.00
Temporary Easement	ACRE	0	\$10,000.00	\$0.00
Subtotal (5% Contingency)				\$0.00
Engineering Fees, 21%				\$0.00
Legal Fees, 5%				\$0.00
Warrant Interest, 1 Yrs. @ 8%				\$0.00
Subtotal				\$0.00
Warrant Fee, 5%				\$0.00
Total				\$0.00

PAVEMENT, MINOR (SPECIAL ASSESS)

Mobilizaton	LS	0	\$25,000.00	\$0.00
7-inch PCC Pavement	SY	0	\$55.00	\$0.00
9-inch PCC Pavement	SY	0	\$80.00	\$0.00
Common Excavation	CY	0	\$10.00	\$0.00
5" Wide (White) Striping	LF	0	\$5.50	\$0.00
5" Wide (Yellow) Striping	LF	0	\$5.50	\$0.00
12" Wide (White) Striping	LF	0	\$14.00	\$0.00
Preformed Pavement Marking Symbol	EA	0	\$1,000.00	\$0.00
Adjust Manhole	EA	0	\$500.00	\$0.00
Street Signs	EA	0	\$300.00	\$0.00

Subtotal (5% Contingency)				\$0.00
Engineering Fees, 21%				\$0.00
Legal Fees, 5%				\$0.00
Warrant Interest, 1 Yrs. @ 8%				\$0.00
Subtotal				\$0.00
Warrant Fee, 5%				\$0.00
Total				\$0.00

PAVEMENT, MINOR (GENERAL OBLIGATION)

Mobilizaton	LS	0	\$25,000.00	\$0.00
6-inch Median Pavement	SY	0	\$70.00	\$0.00
7-inch PCC Pavement	SY	0	\$55.00	\$0.00
9-inch PCC Pavement	SY	0	\$80.00	\$0.00
Common Excavation	CY	0	\$10.00	\$0.00
Adjust Manhole	EA	0	\$1,000.00	\$0.00
5" Wide (White) Striping	LF	0	\$5.00	\$0.00
5" Wide (Yellow) Striping	LF	0	\$5.00	\$0.00
12" Wide (White) Striping	LF	0	\$14.00	\$0.00
Preformed Pavement Marking Symbol	EA	0	\$1,000.00	\$0.00
Pavement Removal	SY	0	\$30.00	\$0.00
Street Signs	EA	0	\$500.00	\$0.00

Subtotal (5% Contingency)				\$0.00
Engineering Fees, 21%				\$0.00
Legal Fees, 5%				\$0.00
Warrant Interest, 1 Yrs. @ 8%				\$0.00
Subtotal				\$0.00
Warrant Fee, 5%				\$0.00
Total				\$0.00

PAVEMENT, MAJOR (CAPEHART ROAD)

Traffic Control and Mobilization	LS	1	\$25,000.00	\$25,000.00
Pavement Removal	SY	0	\$20.00	\$0.00
6-inch Median Pavement	SY	0	\$40.00	\$0.00
7-inch PCC Pavement	SY	0	\$45.00	\$0.00
9-inch PCC Pavement	SY	930	\$80.00	\$74,400.00
Common Excavation	CY	380	\$10.00	\$3,800.00
Adjust Manhole	EA	0	\$300.00	\$0.00
5" Wide (White) Striping	LF	700	\$10.00	\$7,000.00
5" Wide (Yellow) Striping	LF	1400	\$5.50	\$7,700.00
12" Wide (White) Striping	LF	0	\$14.00	\$0.00
Curb Inlets	EA	0	\$3,500.00	\$0.00
Seeding and Matting, Erosion Items	SY	0	\$2.00	\$0.00
30-inch RCP Storm Sewer	LF	0	\$200.00	\$0.00

Subtotal (5% Contingency)				\$123,795.00
Engineering Fees, 21%				\$25,996.95
Legal Fees, 5%				\$6,189.75
Warrant Interest, 1 Yrs. @ 8%				\$9,903.60
Subtotal				\$165,885.30
Warrant Fee, 5%				\$8,294.27
Total				\$174,179.57

WATER INTERIOR

Interior Water Mains	L.S.	1.0	\$0.00	\$0.00
Interior Water Mains Master Fee	AC			\$0.00
Connection Charges	LS			\$0.00

Subtotal (5% Contingency)				\$0.00
Engineering Fees, 21%				\$0.00
Legal Fees, 5%				\$0.00
Warrant Interest, 1 Yrs. @ 8%				\$0.00
Subtotal				\$0.00
Warrant Fee, 5%				\$0.00
Total				\$0.00

WATER PIONEER MAIN FEE

Pioneer Main Fee	L.S.	1.0		\$281,693.46
Connection Charge	LS	0.0		\$0.00

Subtotal (0% Contingency)				\$281,693.46
Engineering Fees, 0%				\$0.00
Legal Fees, 5%				\$14,084.67
Warrant Interest, 1 Yrs. @ 8%				\$22,535.48
Subtotal				\$318,313.61
Warrant Fee, 5%				\$15,915.68
Total				\$334,229.29

WATER EXTERIOR

Exterior Water Mains	LF	0.0	\$150.00	\$0.00
Connection Charges	LS			\$0.00

Subtotal (5% Contingency)				\$0.00
Engineering Fees, 21%				\$0.00
Legal Fees, 5%				\$0.00
Warrant Interest, 1 Yrs. @ 8%				\$0.00
Subtotal				\$0.00
Warrant Fee, 5%				\$0.00
Total				\$0.00

GAS

Total				\$361,331.00
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Subtotal (0% Contingency)				\$361,331.00
Engineering Fees, 3%				\$108,399.30
Legal Fees, 5%				\$18,066.55
Warrant Interest, 1 Yrs. @ 8%				\$28,906.48
Subtotal				\$516,703.33
Warrant Fee, 5%				\$25,835.17
Total				\$542,538.50

POWER

Single Family Lots	EA	0	\$1,500.00	\$0.00
Comm/Industrial Backbone	AC	43.32	\$8,000.00	\$346,560.00

Subtotal (5% Contingency)				\$363,888.00
Engineering Fees, 21%				\$76,416.48
Legal Fees, 5%				\$18,194.40
Warrant Interest, 1 Yrs. @ 8%				\$29,111.04
Subtotal				\$487,609.92
Warrant Fee, 5%				\$24,380.50
Total				\$511,990.42

STORM SEWER (GENERAL OBLIGATION)

15-inch RCP Storm Sewer	LF	0	\$60.00	\$0.00
18-inch RCP Storm Sewer	LF	0	\$70.00	\$0.00
24-inch RCP Storm Sewer	LF	0	\$85.00	\$0.00
30-inch RCP Storm Sewer	LF	0	\$120.00	\$0.00
36-inch RCP Storm Sewer	LF	1780	\$150.00	\$267,000.00
42-inch RCP Storm Sewer	LF	0	\$215.00	\$0.00
48-inch RCP Storm Sewer	LF	0	\$275.00	\$0.00
54-inch RCP Storm Sewer	LF	0	\$325.00	\$0.00
60-inch RCP Storm Sewer	LF	0	\$380.00	\$0.00
72-inch RCP Storm Sewer	LF	0	\$450.00	\$0.00
84-inch RCP Storm Sewer	LF	0	\$500.00	\$0.00
Storm Manhole, 54-inch I.D.	EA	0	\$8,000.00	\$0.00
Storm Manhole, 60-inch I.D.	EA	0	\$10,000.00	\$0.00
Storm Manhole, 72-inch I.D.	EA	5	\$12,000.00	\$60,000.00
Storm Manhole, 84-inch I.D.	EA	1	\$15,000.00	\$15,000.00
Storm Manhole, 96-inch I.D.	EA	0	\$18,000.00	\$0.00
Storm Manhole, 120-inch I.D.	EA	0	\$25,000.00	\$0.00
Standard Ring and Cover	EA	6	\$1,200.00	\$7,200.00
Curb Inlets	EA	0	\$5,500.00	\$0.00
Area Inlets	EA	0	\$5,500.00	\$0.00
Flared End Sections	EA	1	\$6,000.00	\$6,000.00
10' X 7' Box Culvert w/ Wingwalls	LF	0	\$2,250.00	\$0.00
Rip Rap	TON	60	\$110.00	\$6,600.00
Embankment for Box Culvert	CY	0	\$12.00	\$0.00
Culvert Tree Clearing	LS	0	\$10,000.00	\$0.00
Temporary 48" CMP for Culvert Surcharge	LF	0	\$200.00	\$0.00
Sediment Basin Cleanout	LS	0	\$20,000.00	\$0.00
PCSMP Outlet	EA	0	\$20,000.00	\$0.00

Subtotal (5% Contingency)				\$379,890.00
Engineering Fees, 21%				\$79,776.90
Legal Fees, 5%				\$18,994.50
Warrant Interest, 1 Yrs. @ 8%				\$30,391.20
Subtotal				\$509,052.60
Warrant Fee, 5%				\$25,452.63
Total				\$534,505.23

SIDEWALK (GENERAL OBLIGATION)

5" P.C.C. Sidewalk Pavement	SY	0	\$70.00	\$0.00
Handicap Ramps	EA	0	\$1,500.00	\$0.00

Subtotal (5% Contingency)				\$0.00
Engineering Fees, 21%				\$0.00
Legal Fees, 5%				\$0.00
Warrant Interest, 1 Yrs. @ 8%				\$0.00
Subtotal				\$0.00
Warrant Fee, 5%				\$0.00
Total				\$0.00

SIDEWALK CAPEHART (GENERAL OBLIGATION)

5" P.C.C. Sidewalk Pavement	SY	730	\$55.00	\$40,150.00
Handicap Ramps	EA	0	\$1,500.00	\$0.00

Subtotal (5% Contingency)				\$42,157.50
Engineering Fees, 21%				\$8,853.08
Legal Fees, 5%				\$2,107.88
Warrant Interest, 1 Yrs. @ 8%				\$3,372.60
Subtotal				\$56,491.05
Warrant Fee, 5%				\$2,824.55
Total				\$59,315.60

PCSMP

Land Acquisition	AC	0.00	50,000.00	0.00
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Subtotal				0.00
Fees, 20%				0.00
Total				0.00

SEWER FEES

Pioneer Main Fee	AC	43.32	\$29,984.00	\$1,298,906.88
Connection Charge	LS			\$0.00

Subtotal (0% Contingency)				\$1,298,906.88
Engineering Fees, 0%				\$0.00
Legal Fees, 5%				\$64,945.34
Warrant Interest, 1 Yrs. @ 8%				\$103,912.55
Subtotal				\$1,467,764.77
Warrant Fee, 5%				\$73,388.24
Total				\$1,541,153.01

Name of Addition

Springfield Gateway Park - Total (For Reference Only)

SID # **New**

Source and Use of Funds: (Provide a separate sheet for the preliminary plat and for each final plat phase.)

	Proposed Improvements		Total Cost	General Obligation	Special Assessed	Financing Reimbursable	Private
	Quantity	Construction Cost					
Storm Sewer							
Storm Sewer	4,380	LF	\$1,624,800	\$2,286,100	\$2,286,100		
Sanitary Sewer							
SCCWVA Sewer Fees	65.79	AC.	\$1,972,800	\$2,340,600	\$2,340,600 ⁴		
Outfall (With Easements)	2,000	LF	\$436,600	\$614,300	\$614,300	\$282,600 ³	
Interior	3,700	LF	\$397,900	\$559,800	\$559,800		
Paving							
Exterior (Capehart Rd)	930	SY	\$123,800	\$174,200	\$174,200 ⁶		
Interior	5,842	SY	\$579,700	\$815,700	\$322,200	\$493,500	
Highway 50 Traffic Signal	1	LS	\$500,000	\$695,000	\$695,000	\$347,500 ⁵	
City Review Fee	1	LS	\$51,500	\$51,500	\$51,500		
Springfield ASIP Fee	1	LS	\$100,000	\$120,000	\$120,000		
ADA Ramps and SID Sidewalks	2	EA	\$3,200	\$4,500	\$4,500		
Capehart Rd Sidewalks	730	SY	\$42,200	\$59,400	\$59,400		
Water							
Interior	1	LS	\$621,100	\$873,900	\$873,900		
Pioneer Main Fee	1	LS	\$420,500	\$499,000	\$499,000		
Exterior		LS					
Electricity	22.47	AC.	\$552,700	\$777,600	\$777,600		
Gas (Interior)	1	LS	\$539,400	\$809,900	\$809,900 ⁷		
Total			\$7,966,200	\$10,681,500	\$7,976,700	\$2,704,800	\$630,100

¹ Total cost includes engineering fees and administrative fees

² Attach a statement of assumptions as basis for preliminary projections.

³ Outfall services 138 acres and proposed project uses 75 acres of service; therefore, 46% of outfall shall be reimbursed by future connections to outfall built by Springfield Gateway Park.

⁴ 100% of SCCWWA Sewer Fees shall be paid by the SID as a General Obligation expense.

⁵ 50% of Highway 50 Traffic Signal at Gateway Drive to be reimbursible by property adjacent to the east of Springfield Gateway Park upon development

⁶ Includes widening Capehart Rd to three lanes along the frontage of Springfield Gateway Park

⁷ Includes approx. 9,200 LF of exterior gas main construction

G.O. Debt Less GO Reimbursements
Valuation
Debt Ratio

\$ 7,346,600
\$ 85,500,000
8.59%

Date

March 9, 2026