Electronic Filing: Received, Clerk's Office 08/26/2026

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

Kenda C. Hess, Theresa Adams, Lori Shields, John and Joyce Borchers, Lois Rooney, Charles Archibald, Yolanda Taylor-Hudson, and Mary Mann Reifsteck, Petitioners,	)	
v.	)	
	)	**PCB 2027-002**
Area Disposal Service, Inc., and Village of Rantoul, Respondents.	)	

NOTICE OF FILING AND CERTIFICATE OF SERVICE

NOTICE OF FILING

PLEASE TAKE NOTICE that I have filed with the Office of the Clerk of the Illinois Pollution Control Board the Record on Appeal on behalf of Respondent, Village of Rantoul, a copy of which is herewith served upon you.

BY: _/s/ *David B. Wesner*_____

DAVID B. WESNER,
Attorney for Village of Rantoul
Evans, Froehlich, Beth & Chamley
44 Main St., Suite 310
Champaign, IL 61820
Ph: (217) 359-6494
E-mail: dwesner@efbclaw.com

CERTIFICATE OF E-MAIL SERVICE

I hereby certify that on August 26, 2026, I caused a true and correct copy of the Record on Appeal to be served by electronic mail to the following parties:

Carol Webb
Hearing Officer
60 E. Van Buren St., Suite 630
Chicago, IL 60605
Carol.Webb@illinois.gov

Don Brown
Clerk of the Illinois Pollution Control Board
60 E. Van Buren St., Suite 630
Chicago, IL 60605
don.brown@illinois.gov

William R. Andrichik
Michael Best
444 W. Lake St., Suite 3200
Chicago, IL 60606
William.Andrichik@michaelbest.com

Ann M. Zwick
Taft Stettinius & Hollister LLP
111 E. Wacker Dr., #2600
Chicago, IL 60601
azwick@taftlaw.com

Ryan G. Rudich
Taft Stettinius & Hollister LLP
111 E. Wacker Dr, #2600
Chicago, IL 60601
rrudich@taftlaw.com

Margaret E. Galka
Collins Law Group, P.C.
Attorney for Petitioners
1770 Park St., Suite 200
Naperville, IL 60563
mgalka@collinslaw.com

Janaki Nair
Elias, Meginnes & Seghetti, P.C.
Attorneys for Area Disposal Service, Inc.
416 Main St., Suite 1400
Peoria, IL 61602
jnair@emrslaw.com

__/s/ *David B. Wesner*_____

Prepared by:
David B. Wesner
EVANS, FROEHLICH, BETH & CHAMLEY
44 E MAIN ST STE 310
CHAMPAIGN IL 61820-3649
PH: (217) 359-6494
dwesner@efbclaw.com

Electronic Filing: Received, Clerk's Office 08/26/2026

STATE OF ILLINOIS)
) SS
COUNTY OF CHAMPAIGN)

CERTIFICATE OF RECORD ON APPEAL

I, the undersigned, do hereby certify that I am the duly qualified and acting Village Clerk of the Village of Rantoul, and as such, I am the keeper of the records and files of the Village and of the President and Board of Trustees of the Village.

An application for siting approval for a recycling and solid waste transfer station was submitted to the Village of Rantoul by Area Disposal Service Inc. The public hearing on the siting application submitted by Area Disposal Service Inc. was conducted by a Hearing Officer on April 17, 2026. The Hearing Officer has submitted the record of proceedings concerning the siting application to me. All other records pertaining to the application, hearing and siting approval have been included in the Record on Appeal.

I do further certify that the attached constitutes a full, true, and complete record concerning the siting application being submitted on Appeal. I have reviewed the attached copy of the record and compared such copy with the original on file and of record and that the attached constitutes a full, true and complete record of the proceedings.

Attached hereto and incorporated by reference herein as Exhibit A is an index that lists the documents comprising the record and the page numbers upon which each document starts and ends.

IN WITNESS WHEREOF, I hereunto affix my official signature as Village Clerk of the Village of Rantoul and the seal of the Village of Rantoul, Champaign County, Illinois this 25 day of August, 2026.

Janet E. Bray
Clerk

VILLAGE of RANTOUL • 1854 • ILLINOIS •

Electronic Filing: Received, Clerk's Office 08/26/2026

INDEX OF DOCUMENTS COMPRISING THE RECORD

Rantoul Record on Appeal - Illinois Pollution Control Board

No.	Document / Record Item	Record Pages
1	Application for Local Siting Approval, Area Disposal Service, Inc. - Rantoul Recycling and Transfer Station (Applicant's Hearing Exhibit 1)	C6-C1327
2	Entry of Appearance - Elias, Meginnes & Seghetti, P.C. / Janaki Nair for Applicant	C1328
3	Transcript of Proceedings - Application of Area Disposal Service, Inc. to the Village of Rantoul, April 17, 2026	C1329-C1573
4	Applicant's Hearing Exhibit 2	C1574-C1582
5	Applicant's Hearing Exhibit 3 - Notice of Filing / Affidavit of Publication	C1583-C1585
6	Applicant's Hearing Exhibit 4 - Notice of Public Hearing / Affidavit of Publication	C1586-C1587
7	Applicant's Hearing Exhibit 5 - Affidavit of Compliance with statutory and Village notice requirements	C1588-C1604
8	Applicant's Hearing Exhibit 6 - Letters of Support	C1605-C1620
9	Applicant's Hearing Exhibit 7 - Applicant's Witness List and supporting materials	C1621-C1643
10	Applicant's Hearing Exhibit 8 - Rantoul Recycling and Transfer Station Local Siting Hearing Presentation (John Hock, P.E.)	C1644-C1690
11	Applicant's Hearing Exhibit 9 - Local Siting Presentation (The Lannert Group)	C1691-C1710
12	Applicant's Hearing Exhibit 10 - Real Estate Impact Study Presentation (Associated Property Counselors, Ltd.)	C1711-C1730
13	Applicant's Hearing Exhibit 11 - Sixth Siting Criterion Presentation	C1731-C1759
14	Applicant's Hearing Exhibit 12 - Republic Services withdrawal correspondence	C1760
15	Applicant's Responses to Oral Public Comment, filed May 14, 2026	C1761-C1766
16	Applicant's Proposed Findings of Fact, filed May 14, 2026	C1767-C1796

Electronic Filing: Received, Clerk's Office 08/26/2026

INDEX OF DOCUMENTS COMPRISING THE RECORD

Rantoul Record on Appeal - Illinois Pollution Control Board

No.	Document / Record Item	Record Pages
17	Public comment correspondence / submissions (source file: doc02512520260505093427)	C1797-C1817
18	Public comment correspondence / submissions (source file: doc00655120260511095128)	C1818-C1827
19	Public comment voicemail and correspondence / submissions (source file: doc02529220260518105500)	C1828-C1865
20	GFL letters and correspondence	C1866-C1885
21	Certification of Compliance; Report of Hearing Officer and Findings pursuant to Ordinance 26-32; proposed findings and conclusions	C1886-C1913
22	Certification of Record	C1914
23	Village Board Regular Meeting Minutes - June 10, 2025	C1915-C1919
24	Village Board Public Hearing Minutes - Rantoul Recycling and Transfer Station - April 17, 2026	C1920-C1924
25	Village Board Special Meeting Minutes - June 16, 2026	C1925-C1927
26	Village Board Regular Meeting Agenda - June 10, 2025	C1928-C1930
27	Notice of Public Hearing - April 17, 2026	C1931-C1932
28	Notice of Hearing / Affidavit of Publication	C1933-C1936
29	Village Board Special Meeting Agenda - June 16, 2026	C1937-C1938
30	Resolution 06-25-1437 - Authorizing and Approving a Host Community Agreement	C1939
31	Ordinance 26-33 - Approving Siting Application for Pollution Control Facility	C1940-C1942
32	Host Community Agreement	C1943-C1964

Electronic Filing: Received, Clerk's Office 08/26/2026

INDEX OF DOCUMENTS COMPRISING THE RECORD

Rantoul Record on Appeal - Illinois Pollution Control Board

No.	Document / Record Item	Record Pages
1	Application for Local Siting Approval, Area Disposal Service, Inc. - Rantoul Recycling and Transfer Station (Applicant's Hearing Exhibit 1)	C6-C1327
2	Entry of Appearance - Elias, Meginnes & Seghetti, P.C. / Janaki Nair for Applicant	C1328
3	Transcript of Proceedings - Application of Area Disposal Service, Inc. to the Village of Rantoul, April 17, 2026	C1329-C1573
4	Applicant's Hearing Exhibit 2	C1574-C1582
5	Applicant's Hearing Exhibit 3 - Notice of Filing / Affidavit of Publication	C1583-C1585
6	Applicant's Hearing Exhibit 4 - Notice of Public Hearing / Affidavit of Publication	C1586-C1587
7	Applicant's Hearing Exhibit 5 - Affidavit of Compliance with statutory and Village notice requirements	C1588-C1604
8	Applicant's Hearing Exhibit 6 - Letters of Support	C1605-C1620
9	Applicant's Hearing Exhibit 7 - Applicant's Witness List and supporting materials	C1621-C1643
10	Applicant's Hearing Exhibit 8 - Rantoul Recycling and Transfer Station Local Siting Hearing Presentation (John Hock, P.E.)	C1644-C1690
11	Applicant's Hearing Exhibit 9 - Local Siting Presentation (The Lannert Group)	C1691-C1710
12	Applicant's Hearing Exhibit 10 - Real Estate Impact Study Presentation (Associated Property Counselors, Ltd.)	C1711-C1730
13	Applicant's Hearing Exhibit 11 - Sixth Siting Criterion Presentation	C1731-C1759
14	Applicant's Hearing Exhibit 12 - Republic Services withdrawal correspondence	C1760
15	Applicant's Responses to Oral Public Comment, filed May 14, 2026	C1761-C1766
16	Applicant's Proposed Findings of Fact, filed May 14, 2026	C1767-C1796

Electronic Filing: Received, Clerk's Office 08/26/2026

INDEX OF DOCUMENTS COMPRISING THE RECORD

Rantoul Record on Appeal - Illinois Pollution Control Board

No.	Document / Record Item	Record Pages
17	Public comment correspondence / submissions (source file: doc02512520260505093427)	C1797-C1817
18	Public comment correspondence / submissions (source file: doc00655120260511095128)	C1818-C1827
19	Public comment voicemail and correspondence / submissions (source file: doc02529220260518105500)	C1828-C1865
20	GFL letters and correspondence	C1866-C1885
21	Certification of Compliance; Report of Hearing Officer and Findings pursuant to Ordinance 26-32; proposed findings and conclusions	C1886-C1913
22	Certification of Record	C1914
23	Village Board Regular Meeting Minutes - June 10, 2025	C1915-C1919
24	Village Board Public Hearing Minutes - Rantoul Recycling and Transfer Station - April 17, 2026	C1920-C1924
25	Village Board Special Meeting Minutes - June 16, 2026	C1925-C1927
26	Village Board Regular Meeting Agenda - June 10, 2025	C1928-C1930
27	Notice of Public Hearing - April 17, 2026	C1931-C1932
28	Notice of Hearing / Affidavit of Publication	C1933-C1936
29	Village Board Special Meeting Agenda - June 16, 2026	C1937-C1938
30	Resolution 06-25-1437 - Authorizing and Approving a Host Community Agreement	C1939
31	Ordinance 26-33 - Approving Siting Application for Pollution Control Facility	C1940-C1942
32	Host Community Agreement	C1943-C1964

Electronic Filing: Received, Clerk's Office 08/26/2026

APPLICATION FOR LOCAL SITING APPROVAL

AREA DISPOSAL SERVICE, INC.

RANTOUL RECYCLING AND TRANSFER STATION

RANTOUL, ILLINOIS

CHAMPAIGN COUNTY

Prepared For:
AREA DISPOSAL SERVICE, INC.
836 CHAMPAIGN AVENUE
RANTOUL, ILLINOIS 61866

Prepared By:
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
NAPERVILLE, ILLINOIS

CEC Project 340-656

DECEMBER 2025

Applicant's Exhibit 1
4/17/2026

Electronic Filing: Received, Clerk's Office 08/26/2026

Area Disposal Service, Inc.

4700 N. Sterling Ave.
Peoria, IL 61615
P: 309-688-0760
F: 309-688-9611

December 22, 2025

VIA PERSONAL DELIVERY

Mr. Sam Hall III, Mayor
Villag of Rantoul
c/o Clerk of Village of Rantoul
333 S. Tanner Street
Rantoul, Illinois 61866

Dear Village Clerk, Mayor Sam Hall III and the Village Board of Trustees:

Area Disposal Service, Inc., with this letter of transfer, files an Application for Site Location Approval for the Rantoul Recycling and Transfer Station (Application) located at 896 West Champaign Avenue in Rantoul. The Application is being filed in accordance with Section 39.2 of the Illinois Environmental Protection Act, which establishes procedures for pollution control facility siting, and Chapter 28, Article IV of the Village of Rantoul Code (Ordinance), which provides procedures for approval of a pollution control facility (such as the Rantoul RTS) within the Village of Rantoul. In accordance with the Ordinance, six hard copies (one original and five copies) and on electronic copy (USB flash drive) of the Application are being submitted.

With this Application, we also enclose a certified check payable to the Village of Rantoul in the amount of $50,000 in payment of the required filing fee for this Application. We look forward to working with Rantoul as we proceed to hearing and decision in this matter.

Very truly yours,
AREA DISPOSAL SERVICE, INC.

Matt Coulter
Regional Director – Strategic Initiatives

Electronic Filing: Received, Clerk's Office 08/26/2026

BR919 Rev 2 11/22 M 8354367-F

HOLD DOCUMENT UP TO THE LIGHT TO VIEW TRUE WATERMARK

CASHIER'S CHECK

HOLD DOCUMENT UP TO THE LIGHT TO VIEW TRUE WATERMARK

BMO

35021128

2-28/710

PAY ***Fifty Thousand Dollars And Zero Cents***

TO THE ORDER OF **Village of Rantoul**

VOID

DATE **12/17/2025**

AMOUNT $ **50,000.00**

Security Features Details on Back.

REMITTER

MEMO **Siting Ordinance 2796**

Authorized Signature

BMO Bank N.A., Chicago, IL

Drawer: **BMO BANK N.A.**

⑈350211 28⑈ ⑆071000288⑆ 288⑉791⑉7⑈

BMO

35021128

PURCHASER'S RECEIPT - RETAIN FOR YOUR RECORDS

NOT NEGOTIABLE

PAY ***Fifty Thousand Dollars And Zero Cents***

TO THE ORDER OF **Village of Rantoul**

DATE **12/17/2025**

AMOUNT $ **50,000.00**

REMITTER

NOTICE TO CUSTOMERS

The purchase of an Indemnity Bond will be required before any Official Check of this Bank will be replaced or refunded in the event it is lost, misplaced or stolen.

OFFICIAL BANK CHECK

MEMO **Siting Ordinance 2796**

Electronic Filing: Received, Clerk's Office 08/26/2026

TABLE OF CONTENTS

EXECUTIVE SUMMARY

CRITERION 1

Narrative

Figures

Figure 1-1 Transfer Station Service Area

Figure 1-2 Surrounding Landfill and Transfer Station Locations

Tables

Table 1-1A Service Area Census Data 2020–2035

Table 1-1B Solid Waste Projections

Table 1-2 Summary of Waste Disposal Volume (in Narrative text)

Table 1-3 Champaign County Waste Haulers

Table 1-4 Summary of Shortfall/Need in Service Area (in Narrative text)

Table 1-5 Illinois Active Landfills (in Narrative text)

Table 1-6 Summary of Mileage, Fuel, and Emissions Savings

Table 1-7 Summary of Reduced Environmental Impacts (in Narrative text)

Attachments

Attachment 1-A Affidavit from M Coulter

Attachment 1-B Republic Services Proposal for Bid 2021-20

Attachment 1-C Letters of Support

Attachment 1-D Rantoul and Area Disposal Community Host Agreement

CRITERION 2

Narrative

Figures

Figure 2-1 Site Location Map

Figure 2-2 Surrounding Properties

Figure 2-3 Residential Setbacks

Figure 2-4 Surrounding Wetlands

Figure 2-5 Airport Proximity

Tables

Table 2-1 Projected Material Processing and Traffic Volume - 350 Tons Per Day Municipal Solid Waste

Table 2-2 Projected Material Processing and Traffic Volume - 150 Tons Per Day Single Stream Recyclables

Electronic Filing: Received, Clerk's Office 08/26/2026

Drawings (11 x 17 size)
- Drawing S100 Cover Sheet
- Drawing S200 Aerial Photograph
- Drawing S300 Plat of Survey
- Drawing S400 Existing Site Conditions
- Drawing S500 Proposed Site Conditions
- Drawing S600 Building Floor Plan
- Drawing S700 Elevation Views and Details

Attachments
- Attachment 2A Certificate of Good Standing
- Attachment 2-B Area Disposal Summary of Experience
- Attachment 2-C Warranty Deed
- Attachment 2-D EcoCAT Report
- Attachment 2-E Letter from Rantoul Airport
- Attachment 2-F Stormwater Management Plan
- Attachment 2-G Pre-filing Affidavit

CRITERION 3

Land Use and Planning Analysis (prepared by The Lannert Group, Inc.)

Real Estate Impact Study (prepared by Associated Property Counselors, Ltd.)

CRITERION 4

Narrative

Figures
- Figure 4-1 Flood Insurance Rate Map

CRITERION 5

Narrative

CRITERION 6

Traffic Impact Study (prepared by Kenig, Lindgren, O'Hara, Aboona, Inc.)

CRITERION 7

Narrative

CRITERION 8

Narrative

Attachments
- Attachment 8-A Champaign County SWMP 2022

CRITERION 9

Narrative

Electronic Filing: Received, Clerk's Office 08/26/2026

DRAWINGS (CRITERION 2 - FULL SIZE)

Drawing S100	Cover Sheet
Drawing S200	Aerial Photograph
Drawing S300	Plat of Survey
Drawing S400	Existing Site Conditions
Drawing S500	Proposed Site Conditions
Drawing S600	Building Floor Plan
Drawing S700	Elevation Views and Details

Electronic Filing: Received, Clerk's Office 08/26/2026

EXECUTIVE SUMMARY

This Application for Site Location Approval (Application) for the Rantoul Recycling and Transfer Station (Rantoul RTS) is being filed in accordance with the provisions of state law and local ordinance. Section 39.2 of the Illinois Environmental Protection Act, 415 ILCS 5/39.2 (Act) establishes procedures for local approval of a pollution control facility such as the Rantoul RTS. Chapter 28, Article IV of the Village of Rantoul Code (Ordinance) provides procedures for approval of a pollution control facility within the Village of Rantoul (Rantoul).

The information presented in this Application will be the subject of testimony at public hearing before the Rantoul Board of Trustees (Village Board). The purpose of the public hearing is to provide an opportunity for the public to comment on the application, and for the applicant to demonstrate to the Village Board that the factors set forth in Section 39.2 of the Act and the Ordinance are met.

The Applicant

This Application is being filed by Area Disposal Service, Inc. (Area Disposal). For more than twenty years, Area Disposal has served as a vital asset for Champaign County and Rantoul by providing many essential services, well-paying jobs as well as competitive programs and rates for the local community. Area Disposal employs approximately forty persons with an annual payroll of approximately $3.0 million and annually spends approximately $1.5 million on various vendors.

Rantoul Recycling and Transfer Station

The Rantoul RTS is located on approximately 14.03-acre parcel located at 896 West Champaign Avenue, Rantoul, Champaign County, Illinois (site). Area Disposal currently operates a waste hauling business at the site. The proposed Rantoul RTS shall be a state-of-the-practice facility where loads of municipal solid waste (MSW) from collection vehicles will be consolidated into larger loads for transport to a permitted landfill. In addition to MSW, the proposed facility is designed to accept single stream recyclables from collection vehicles for consolidation into larger loads for transport to a material recovery facility. The proposed Rantoul RTS will complement the existing waste hauling business at the site and allow for more efficient processing and/or transportation of these materials.

If siting and permitting are achieved, the Rantoul RTS is expected to be operational in 2027 and have an operational life of a minimum of twenty years. The Rantoul RTS is designed to accommodate a daily throughput of 500 tons per day. Only wastes allowed by the Illinois Environmental Protection Agency (IEPA) will be accepted. No disposal of waste will occur at the site.

Electronic Filing: Received, Clerk's Office 08/26/2026

Regulatory Approval for Illinois MSW Transfer Stations: A Two-Step Process

The Act provides a two-step approval process for the development of MSW transfer stations in Illinois: local siting and IEPA permitting.

Local Siting

This Application initiates the first step, which is local siting approval. In promulgating the local siting provisions of the Act, the legislature created a local approval process for pollution control facility siting, including MSW transfer stations such as the Rantoul RTS. The process takes the place of local zoning and requires the local governing authority (here the Village Board) to apply certain statutory criteria to its decision, which must be made in writing and which can only be made after a fair public hearing where the applicant and other persons are afforded the right to participate. Those who participate, including the applicant, are also afforded the right to appeal the local government decision to the Illinois Pollution Control Board.

IEPA Permitting

The second step is the IEPA permitting process. IEPA permitting is required prior to operation of Rantoul RTS, and Area Disposal cannot apply for IEPA permitting until the local siting discussed above is granted. Upon local authorization, Area Disposal will file an application for an IEPA permit and that application will undergo a rigorous technical review by qualified IEPA engineers, for the purpose of ensuring protection of the environment and compliance with all applicable laws and regulations.

The Application

This Application presents the information necessary for the Village Board to evaluate the nine statutory criteria, as those criteria relate to the Rantoul RTS. At the hearing, Area Disposal will present this information through testimony of environmental experts and other professionals who will be prepared to answer questions posed by the Village Board, Rantoul staff, or the public. Area Disposal has presented the information contained in this Application in a way that is responsive to the Act and the Ordinance.

The Application addresses all criteria required for local consideration under the Act and the Ordinance. A criterion- by-criterion synopsis follows. (As the Rantoul RTS is not a hazardous waste landfill, Criterion 7 is not applicable.)

Electronic Filing: Received, Clerk's Office 08/26/2026

Criterion 1: The Rantoul RTS is necessary to accommodate the waste needs of the area it is intended to serve.

The Act and the Ordinance require that the Village Board evaluate whether the Rantoul RTS is necessary to accommodate the waste needs of the service area, as defined by the applicant (Area Disposal). Area Disposal has identified a service area that consists of Champaign County; the townships of Sullivant, Drummer, Dix, Peach Orchard, Wall, Patton, and Button in Ford County; and Loda Township in Iroquois County.

Information provided demonstrates that:

- The Rantoul RTS will increase competition and available transfer station capacity, which has been recognized to help control price increases and maintain a high quality of service in both the residential and commercial sectors.
- The Rantoul RTS will increase recycling in rural areas.
- The Rantoul RTS will reduce environmental impacts to the area by decreasing the travel distance of MSW collection vehicles.
- The Rantoul RTS will pay a host fee to Rantoul for every ton of refuse that is transferred at the Rantoul RTS.

For the reasons cited above, the Rantoul RTS meets the requirements of Criterion 1, as it is "necessary to accommodate the waste needs of the area it is intended to serve".

Criterion 2: The Rantoul RTS will be so designed, located, and proposed to be operated that the public health, safety, and welfare will be protected.

The Act and the Ordinance require that the Village Board evaluate whether the Rantoul RTS is designed, located, and proposed to be operated so that the public health, safety, and welfare will be protected. The development of the Rantoul RTS includes the following:

- Construction of a transfer building including a loading pit;
- Installation of a scale; and
- Construction of access roads and turn-around areas for the incoming and outgoing vehicles.

Information provided demonstrates the Rantoul RTS meets all required location standards, and is designed and will be operated to meet all IEPA requirements. The Rantoul RTS meets the requirements of Criterion 2, as it "is so designed, located and proposed to be operated that the public health, safety and welfare will be protected".

Electronic Filing: Received, Clerk's Office 08/26/2026

Criterion 3: The Rantoul RTS is located so as to minimize incompatibility with the character of the surrounding area and to minimize the effect on the value of the surrounding property.

The Act and the Ordinance require that the Village Board evaluate whether the Rantoul RTS will be located so as to (1) minimize incompatibility with the character of the surrounding area, and (2) minimize the effect on the value of surrounding properties. To demonstrate compliance with this criterion, Area Disposal retained The Lannert Group (TLG) and Associated Property Counselors, Ltd. (APC) to complete a study of the proposed Rantoul RTS.

TLG determined that the Rantoul RTS is located in an historic commercial area that will blend with the existing use pattern and is well buffered from surrounding areas through man-made boundaries. TLG also developed a landscaping plan to augment the existing mature vegetation at the site. TLG concludes that these factors effectively minimize any influences the Rantoul RTS will have on properties located outside of the area and demonstrate that the Rantoul RTS minimizes incompatibility with the character of the surrounding area.

APC evaluated the impact of similar facilities in other Illinois locations and determined that the similar facilities minimized impacts on surrounding property values. APC also determined that the Rantoul RTS is the highest and best use of the subject property, as improved. APC concludes that the impact the Rantoul RTS will have on adjacent and nearby property values is minimized.

The Rantoul RTS meets the requirements of Criterion 3, as it "is located so as to minimize incompatibility with the character of the surrounding area and to minimize the effect on the value of the surrounding property".

Criterion 4: Rantoul RTS is located outside the boundary of the 100-year floodplain or is flood-proofed.

The Act and the Ordinance require that MSW transfer stations, like Rantoul RTS, be located outside the boundary of the 100-year floodplain or be flood-proofed. The 100-year floodplain can be determined from Federal Emergency Management Area maps and related information. The Rantoul RTS is not located within the 100-year floodplain. The Rantoul RTS meets the requirement of Criterion 4.

Criterion 5: The plan of operation for the Rantoul RTS is designed to minimize the danger to the surrounding area from fire, spills, or other operational accidents.

The Act and the Ordinance require that the Village Board evaluate whether the Rantoul RTS will operate pursuant to an operational plan that is designed to minimize the dangers related to potential

Electronic Filing: Received, Clerk's Office 08/26/2026

fires, spills, or other operational accidents. The Rantoul RTS will operate pursuant to an incident prevention and response plan that covers all of those elements and more. The Rantoul RTS meets the requirements of Criterion 5, as "the plan of operations for the facility is designed to minimize the danger to the surrounding area from fire, spills, or other operational accidents".

Criterion 6: The traffic patterns to or from the Rantoul RTS are designed to minimize the impact on existing traffic flows.

The Act and the Ordinance require that the Village Board evaluate whether traffic patterns to and from the Rantoul RTS have been designed so as to minimize any impact on existing traffic flows. Access to the Rantoul RTS will be provided via the existing access drive at the west end of the West Champaign Avenue service road, which currently serves the Area Disposal hauling operations. As part of the development of the proposed Rantoul RTS, the radius will be increased at the southwest corner of the intersection of Murray Road and the West Champaign Avenue service road to better accommodate the turning of the truck traffic at this intersection.

To demonstrate compliance with this criterion, the applicants retained Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA). KLOA determined that, as proposed, the site will have adequate access drives, and the surrounding roadways and intersections have more than adequate capacity to accommodate the traffic generated by Rantoul RTS. Hence, KLOA concludes that "the traffic patterns to or from the facility are so designed as to minimize the impact on existing traffic flows", and therefore, meets the requirements of Criterion 6.

Criterion 8: The Rantoul RTS is consistent with the Champaign County Solid Waste Management Plan.

The Act and the Ordinance require that where a county solid waste plan (County Plan) is in effect in a county (as it is in Champaign County), any proposed MSW transfer station must be consistent with the County Plan. To demonstrate compliance with this criterion, a report is provided which summarizes the relevant information in the most recent Champaign County Solid Waste Management Plan and concludes that the Rantoul RTS is consistent with the County Plan. The Rantoul RTS meets the requirements of Criterion 8.

Criterion 9: If the Rantoul RTS will be located within a regulated recharge area, any applicable Illinois Pollution Control Board requirements will be followed.

Only one regulated recharge area has been established in Illinois as of the date of this report, which is the Pleasant Valley Public Water District located in Peoria County. The Rantoul RTS is not

Electronic Filing: Received, Clerk's Office 08/26/2026

located within a regulated recharge area, as defined by the Act. The Rantoul RTS meets the requirement of Criterion 9.

Closing

Area Disposal is confident that this Application, and the testimony provided at the siting hearing, will demonstrate to the Village Board that the Rantoul RTS meets the statutory criteria and that siting approval should be granted.

Electronic Filing: Received, Clerk's Office 08/26/2026

CRITERION 1:

"the facility is necessary to accommodate the waste needs of the area it is intended to serve"
415 ILCS 5/39.2(a)(i)

Electronic Filing: Received, Clerk's Office 08/26/2026

CRITERION 1:
THE FACILITY IS NECESSARY TO ACCOMMODATE THE WASTE NEEDS OF THE SERVICE AREA

The Illinois Environmental Protection Act, at 415 ILCS 5/39.2 (a)(i), requires that an applicant for a transfer station siting demonstrate that the proposed facility is necessary to accommodate the waste needs of the area it is intended to serve. This report demonstrates that the proposed Rantoul Recycling and Transfer Station is necessary to accommodate the waste needs of the area it is intended to serve.

Prepared for:
AREA DISPOSAL SERVICE, INC.
RANTOUL RECYCLING AND TRANSFER STATION
RANTOUL, ILLINOIS
CHAMPAIGN COUNTY

Prepared by:
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
NAPERVILLE, ILLINOIS

CEC Project 340-656

DECEMBER 2025

Electronic Filing: Received, Clerk's Office 08/26/2026

1.0 INTRODUCTION

The Illinois Environmental Protection Act requires that a pollution control facility (in this case a transfer station) be necessary to accommodate the waste needs of the area it is intended to serve. This report defines the area that the proposed Area Disposal Service, Inc. (Area Disposal) Rantoul Recycling and Transfer Station (RTS) is intended to serve and demonstrates that the proposed Rantoul RTS is necessary to accommodate the waste needs of its service area.

Electronic Filing: Received, Clerk's Office 08/26/2026

1.1 RANTOUL RTS

Area Disposal is applying to the Village of Rantoul (Rantoul) for local siting approval of a municipal solid waste (MSW) transfer station, which will be located at 896 West Champaign Avenue, Rantoul, Champaign County (site). Area Disposal currently operates a waste hauling business at the approximately 14.03-acre site. The proposed facility, the Rantoul RTS, is located northeast of Interstate 57 and West Champaign Avenue (or Route 136) in the western portion of Rantoul. The facility location is shown in Figure 2-1 in the Criterion 2 report.

The proposed Rantoul RTS will be a state-of-the-practice facility where loads of MSW from collection vehicles will be consolidated into larger loads for transport to a permitted landfill. In addition to MSW, the proposed facility is designed to accept single stream recyclables from collection vehicles for consolidation into larger loads for transport to a material recovery facility. The proposed Rantoul RTS will complement the existing waste hauling business at the site.

The proposed facility will assist cities and towns in Champaign County and adjacent townships, by providing efficient transport services to disposal locations outside the county. The communities in Champaign County currently rely on transfer of MSW to out-of-county landfills. The proposed facility will benefit the community by:

- Increasing competition and available transfer station capacity, which has been clearly recognized to help control price increases and maintain a high quality of service in both the residential and commercial sectors;
- Increasing recycling for rural areas;
- Reducing environmental impacts to the area by decreasing the travel distance of MSW collection vehicles; and
- Providing a host fee to be paid for every ton of refuse that is transferred at the facility to Rantoul.

The Rantoul RTS is designed to accommodate a daily throughput of 500 tons per day. The facility will transfer MSW and recyclable materials collected by Area Disposal, as well as from third-party haulers.

Electronic Filing: Received, Clerk's Office 08/26/2026

1.2 RANTOUL RTS SERVICE AREA

The intended service area for the Rantoul RTS (Service Area) is shown in Figure 1-1 and consists of the following:

- All of Champaign County;
- The townships of Sullivant, Drummer, Dix, Peach Orchard, Wall, Patton, and Button in Ford County; and
- Loda Township in Iroquois County.

The site is located in the approximate center of the Service Area in the northern portion of Champaign County and approximately 20 miles driving distance from Champaign-Urbana.

As indicated above, Area Disposal operates an existing MSW waste hauling operation from the site. C & S Waste Services, Inc., which is part of Area Disposal, currently collects the waste and recyclables from Rantoul. Area Disposal provides collection services throughout the Service Area. Area Disposal currently hauls approximately 190 tons per day of MSW and 15 tons per day of recyclables from the Service Area.

Area Disposal began providing MSW collection services to communities and businesses in the Service Area over twenty years ago. Area Disposal has steadily grown its services to commercial and industrial customers throughout the Service Area. The Service Area also represents the area where Area Disposal anticipates being able to provide more cost-effective service for existing and new customers.

Electronic Filing: Received, Clerk's Office 08/26/2026

1.3 RANTOUL RTS SERVICE AREA WASTE GENERATION AND DISPOSAL VOLUMES

The Illinois Solid Waste Planning and Recycling Act was approved on August 23, 1988 and required that each county in the state adopt a twenty-year plan for managing the MSW generated within its boundaries [415 ILCS 15/1 et seq.]. Each county waste management plan is required to be updated and reviewed every five years, and any necessary or appropriate revisions are required to be submitted to the Environmental Protection Agency for review and comment. Each waste management plan is required to include a description of the origin, content, and weight or volume of MSW currently generated within the county's boundaries, and the origin, content, and weight or volume of MSW that will be generated within the county's boundaries during the next twenty years, including an assessment of the primary variables affecting this estimate and the extent to which they can reasonably be expected to occur.

Champaign, Ford and Iroquois counties have each developed a solid waste management plan (SWMP). These plans provide information and insights regarding waste generation and disposal trends in the Service Area including per capita waste generation rates and waste disposal diversion (i.e., recycling) rates. The methodology employed to evaluate waste generation and disposal trends in the Service Area is based on information from the SWMPs, information from independent studies, and population data.

1.3.1 PER CAPITA WASTE GENERATION RATE

Illinois Department of Commerce and Economic Opportunity Study

The Illinois Department of Commerce and Economic Opportunity (DCEO) commissioned a waste characterization study to be performed across Illinois. One of the purposes of the study was to develop the quantity of MSW generated within the state by pounds per capita per day, differentiating urban and rural values. Intensive waste sampling was performed at nineteen solid waste facilities located throughout Illinois, consisting of seventeen landfills and two transfer stations. The results of the study are contained in a report entitled “Illinois Commodity/Waste Generation Study” dated 2009 (Illinois DCEO Report). The Illinois DCEO Report estimated that McLean County generates 8.09 pounds per capita per day of MSW.

The generation estimates were calculated by applying factors based on Illinois-specific economic indicators to the 2007 national per capita generation rates derived in the United States Environmental Protection Agency report entitled “Municipal Solid Waste in the United States: 2007 Facts and Figures.” The study was limited to the Illinois statutory definition of MSW defined as “garbage, general household, institutional and commercial waste, landscape waste and construction or demolition debris.” The MSW generation rate was defined as “the quantity of

Electronic Filing: Received, Clerk's Office 08/26/2026

products considered municipal waste entering the waste management system from residential, commercial, industrial, institutional and construction and demolition debris sources before material recovery or disposal takes place."

The DCEO commissioned the Illinois Recycling Association to develop an update to the Illinois DCEO Report. The results are contained in "Illinois Commodity/Waste Generation and Characterization Study Update" dated March 30, 2015 (Illinois DCEO Update). The tasks and objectives of the Illinois DCEO Update included developing the composition and quantification of the MSW originating and disposed within the state and developing the quantity of MSW generated within the state. Overall, twenty-eight sampling events were conducted at twenty-seven solid waste facilities located throughout Illinois, consisting of fifteen landfills and twelve transfer stations, over thirty-one days between September 10, 2014 and December 2, 2014.

Champaign County

Champaign County adopted the Champaign County Solid Waste Management Plan by Champaign County Board Resolution No. 3077 on February 19, 1991 (CCSWMP). The Champaign County Board adopted five-year updates to the CCSWMP in 1996, 2002, 2007, 2012, 2017, and 2022. The update adopted in 2022 (2022 Update) is substantially more comprehensive than the previous updates and includes a waste generation assessment. The 2022 Update indicates that:

- Champaign County is located in Illinois Environmental Protection Agency (IEPA) Region 4.
- As of 2014, the estimated rate of MSW generation in IEPA Region 4 is 7.1 pounds per capita per day based on the information in the Illinois DCEO Update [page 4-1].

Ford County

Ford County appears to have last provided an update to their solid waste management plan in 2005 based on a Freedom of Information Act request to the IEPA. An estimated waste generation rate was not provided.

Since a per capita estimate for Ford County is not provided in their solid waste management plan (Ford County SWMP) or updates, the per capita generation rate for Ford County is estimated to be 7.1 pounds per person per day based on the data in the Illinois DCEO Update for IEPA Region 4.

Electronic Filing: Received, Clerk's Office 08/26/2026

Iroquois County

Iroquois County adopted its Solid Waste Management Plan in December 1991 (Iroquois County SWMP). Iroquois County adopted five-year updates to the Adopted Plan in 1996, 2002, and 2007. No additional updates were available after 2007 based on a Freedom of Information Act request to the IEPA. The updates adopted in 1996, 2002 and 2007 each indicate that the estimate MSW generation rate is 5.09 pounds per capita per day.

1.3.2 POPULATION PROJECTIONS

The population of the Service Area is approximately 218,625 persons based on the 2020 census information as shown on Table 1-1A. The number of households is approximately 93,308. The population is anticipated to increase to approximately 254,000 persons in the year 2035.

1.3.3 RECYCLING RATE

The following are relevant excerpts from the most recent updates to the county solid waste management plans:

- Champaign County - The Champaign County 2022 Update indicates that reporting metrics for recycling are from the Illinois Solid Waste Disposal and Recycling Model, published by the Illinois Recycling Association (IRA) in 2017. The model is available online at the IRA at https://illinoisrecycles.org/documents. The model presents estimates of the tons disposed and recycled by the community, for fifty-four material categories. The model for the combined Residential and Industrial/Commercial/Institutional (ICI) waste stream indicates that the capture rate (or recycling rate) is 39%.
- Ford County - An estimated recycling rate is not provided in the available five-year update to the Ford County SWMP.
- Iroquois County - An estimated recycling rate is not provided in the available five-year updates to the Iroquois County SWMP.

The Illinois DCEO Update estimated that the overall Illinois diversion rate is 37.3% by weight, assuming the difference between the generation quantities (estimated to be 19.3 million tons), and disposal quantities (estimated to be 12.1 million tons) is the quantity of materials recovered (approximately 7.2 million tons). Since an estimated recycling rate for Ford County and Iroquois County is not provided in their solid waste management plan or updates, the recycling rate for Ford County and Iroquois County Illinois is estimated to be 37.3% based on the data in the DCEO Update for IEPA Region 4.

Electronic Filing: Received, Clerk's Office 08/26/2026

1.3.4 WASTE DISPOSAL VOLUME

To estimate the waste disposal volume for the Service Area, the per capita generation rate is multiplied by the population to obtain the generation amount. The estimated recycling amount is then subtracted. The data used and calculations are summarized on Table 1-1B, which indicate that the waste disposal volume is estimated to be 172,756 tons per year.

The hauling of waste for disposal generally occurs each weekday and on periodic Saturdays or 266 days per year. The estimated annual and daily waste disposal amounts are summarized below on Table 1-2.

Table 1-2: Summary of Waste Disposal Volume

Estimated Volume (tons per year)	Estimated Volume (tons per day)
172,756	650

Electronic Filing: Received, Clerk's Office 08/26/2026

1.4 WASTE DISPOSAL SYSTEM

The Service Area currently has no operational landfills and one operational MSW transfer station available to commercial haulers. The MSW transfer station is operated by Republic Services, Inc. (Republic Services). The Service Area also has a general construction or demolition debris (GCDD) recycling and transfer facility, and a university waste transfer and material recovery facility (MRF). Figure 1-2 shows the location in the Service Area of the existing MSW transfer station, the GCDD recycling and transfer facility, and the university waste transfer and MRF.

Transfer stations and landfills also exist proximate to the Service Area, which may receive MSW from the Service Area. Figure 1-2 shows the locations of the existing MSW transfer stations and landfills within an approximately 20-mile distance from the Service Area. In addition, the Service Area has various hauling companies, including Area Disposal, which pick up and deliver waste to the transfer stations and/or landfills located within and proximate to the Service Area. The transfer stations within the Service Area, the MSW transfer stations and landfills proximate to the Service Area and hauling companies in the Service Area are discussed below.

1.4.1 TRANSFER STATION IN SERVICE AREA

Only one MSW transfer station is located in the Service Area, namely the Republic Services Urbana Transfer Station. Two recycling facilities are also located in the Service Area, namely the University of Illinois Waste Transfer & Material Recovery Facility and the Henson Urbana Recycling Center. Each is discussed below.

Republic Services Urbana Transfer Station

The Republic Services Urbana Transfer Station is located on an approximately 11.3-acre property in Urbana, Champaign County (921 Saline Court, Urbana, 61802). The site is also known as the Central Waste Services and Recycling Facility [Illinois EPA ID# 0191055163].

The Republic Services Urbana Transfer Station began operation in 2003 and is owned/operated by Republic Services. The annual IEPA solid waste capacity reports indicate that the site accepts municipal waste and recyclables. A maximum acceptable amount is not listed. The 2009 annual solid waste capacity report indicates that the site accepted 380, 385, and 347 tons per day (on average) during 2007, 2008, and 2009, respectively. Waste receipt data for the facility is not available from the IEPA annual solid waste capacity reports after 2009.

The Republic Services Urbana Transfer Station has a Host City Agreement with the City of Urbana, dated March 31, 2000. The Host City Agreement includes a host fee of $0.35 per ton as annually increased each year based on the consumer price index.

Electronic Filing: Received, Clerk's Office 08/26/2026

Information received via a freedom of information act request to Urbana indicates that Republic Services paid $10,006.78, $9,857.80, $11,439.72, and $11,181.62 in host fees for the First Quarter 2024 through the Fourth Quarter 2024, respectively. In addition, the 2024 host fee paid by Republic Services to Urbana was $0.5311 per ton. Based on this information, the amount of waste accepted during 2024 at the Republic Services Urbana Transfer Station is approximately 79,996 tons (or approximately 300 tons per day assuming 266 operating days).

Waste Transfer and Material Recovery Facility

The University of Illinois Waste Transfer & Material Recovery Facility is located on an approximately 2.2-acre property in Champaign, Champaign County [10 E St. Mary's Road, 61820; Illinois EPA ID# 0190105219].

The annual solid waste capacity reports indicate that the University of Illinois Waste Transfer & Material Recovery Facility began operation in approximately 1996 and is owned/operated by the University of Illinois. The annual solid waste capacity reports also indicate that the site accepts recyclables and waste from the university only. A maximum acceptable amount is not listed. The 2009 annual solid waste capacity report indicates that the site accepted 31, 32, and 32 tons per day (on average) during 2007, 2008 and 2009, respectively. Waste receipt data for the facility is not available from the IEPA annual solid waste capacity reports after 2009.

The 2022 Update indicates that the site opened for business in 1997. The MRF collects solid waste from campus facilities and allows the campus to capture certain recyclable materials that formerly ended up in a landfill and to market those at a profit as feasible. At present, the MRF recycles cardboard, paper, plastics, and metal, but not glass.

The U of I website [https://fs.illinois.edu/Providers/waste-transfer-station/] indicates that the Waste Transfer Station (WTS) operates daily recycling routes in addition to its regular trash routes. The recyclables collected from campus are deposited in storage bins. As recyclable material arrives at the WTS it is manually sorted. The trash is compacted and shipped to the landfill at a cost to the university. Recyclables are compressed into large bales and sold to a recycling mill. In addition to paper, plastic, and aluminum, an average of 50% of construction demolition wastes are recycled.

Henson Urbana Recycling Center

The Henson Urbana Recycling Center (HURC) is located on an approximately 8.3-acre property in Urbana, Champaign County [910 W Saline Court, Urbana, 61801; Illinois EPA ID# 0191059099].

Electronic Filing: Received, Clerk's Office 08/26/2026

The HURC began operation in 2016 and is currently owned/ operated by Henson Disposal, LLC, which is a subsidiary of Area Disposal. Area Disposal acquired the HURC in March 2025. The operating permit for the site [Log No. 2016-050] indicates that the HURC is allowed to only receive and transfer general construction or demolition debris (GCDD). In addition, the HURC may store no more than 250 tons of GCDD on site at any time.

The HURC is also required to limit the percentage of incoming non-recyclable GCDD to 25% or less of the total incoming GCDD. As such, less than 25% of the GCDD accepted at the HURC is part of the waste disposal volume from the Service Area discussed in Section 1.3.4 (i.e., at least 75% of the GCDD accepted is part of the recycled portion of the waste generation volume from the Service Area). Due to this requirement, GCDD that is difficult to recycle or may contain a high percentage of non-recyclable material will generally not be accepted at the HURC.

Information from Area Disposal indicates that, since Area Disposal acquired the HURC, the HURC has accepted approximately 200 tons per day of GCDD. Based on the 25% limitation of non-recyclable GCDD, approximately 50 tons per day would be MSW transported to a landfill for disposal.

It should be noted that the operating permit for the HURC was updated in November 2025 to reflect the new Title 35 Illinois Administrative Code Part 820 regulations, including the new regulatory definition for recyclable GCDD. The updated operating permit does not change the above conclusions as the information in the Champaign County 2022 Update was gathered and evaluated prior to the implementation of the Part 820 regulations.

1.4.2 TRANSFER STATIONS AND LANDFILLS PROXIMATE TO THE SERVICE AREA

Currently there are four permitted landfills and two permitted transfer stations proximate to the Service Area. These are illustrated on Figure 1-2 and are listed below:

- Clinton Landfill #3, De Witt County - Affiliate of Area Disposal.
- Illinois Landfill, Hoopeston, Vermillion County - Republic Services.
- Brickyard Disposal and Recycling, Inc. (Brickyard Landfill), Danville, Vermillion County - Republic Services.
- Valley View Landfill, Decatur, Macon County - Waste Management, Inc. (WM).
- Paris Transfer Station, Paris, Edgar County - City of Paris.
- Monticello Transfer Station, Monticello, Piatt County - City of Monticello.

Electronic Filing: Received, Clerk's Office 08/26/2026

The Clinton Landfill

The Clinton Landfill is located in unincorporated DeWitt County, near Clinton, Illinois (9950 Heritage Road, Clinton), and is a permitted non-hazardous solid waste landfill that is allowed to accept MSW and nonhazardous special waste. The Clinton Landfill generally consists of the closed Clinton Municipal Landfill, closed Clinton Landfill #1, closed Clinton Landfill #2, and Clinton Landfill #3. Clinton Landfill #3 began accepting waste in approximately 2009. The Clinton Landfill is owned and operated by the Clinton Landfill, Inc., which is an affiliate of Area Disposal. The annual solid waste capacity reports indicate that Clinton Landfill #3 accepted approximately 1,096,316 gate cubic yards in 2024 (approximately 1,160 tons per day). The landfill reported a remaining capacity of approximately 22,419,000 gate cubic yards (as of January 1, 2025), which would provide approximately 20.4 years of life at its 2024 waste acceptance rate.

It should be noted that a transfer station (Clinton Transfer Station) is also permitted to be operated at the Clinton Landfill. However, based on information provided from GFL, the Clinton Transfer Station has not accepted MSW and has only been used to transload recyclables for many years.

Illinois Landfill

The Illinois Landfill, located in Hoopeston, Vermillion County (16310 E 4000 North Road), began receiving waste in 1991 and is permitted to accept MSW and nonhazardous special waste. The Illinois Landfill is owned and operated by a subsidiary of Republic Services. The annual solid waste capacity reports indicate that the Illinois Landfill accepted approximately 107,532 gate cubic yards in 2024 (or approximately 110 tons per day). The landfill reported a remaining capacity of approximately 19,813,000 gate cubic yards (as of January 1, 2025), which would provide approximately 184 years of life at its 2024 waste acceptance rate.

Brickyard Landfill

Brickyard Landfill located in Danville, Vermillion County (601 East Brickyard Road), began receiving waste in 1972 and is permitted to accept MSW and nonhazardous special waste. Brickyard Landfill is owned and operated by a subsidiary of Republic Services. The annual solid waste capacity reports indicate that Brickyard Landfill accepted approximately 711,305 gate cubic yards in 2024 (approximately 750 tons per day). The landfill reported a remaining capacity of approximately 11,113,000 gate cubic yards (as of January 1, 2025), which would provide approximately 15.6 years of life at its 2024 waste acceptance rate.

Electronic Filing: Received, Clerk's Office 08/26/2026

Valley View Landfill

The Valley View Landfill is located in Decatur, Macon County (1145 Bear Road), began receiving waste in 1978, and is a permitted non-hazardous solid waste landfill that is allowed to accept MSW and nonhazardous special waste. The Valley View Landfill is owned and operated by a subsidiary of WM. The annual solid waste capacity reports indicate that the Valley View Landfill accepted approximately 592,575 gate cubic yards in 2024 (or approximately 630 tons per day). The landfill reported a remaining capacity of approximately 15,314,000 gate cubic yards (as of January 1, 2025), which would provide approximately 25.8 years of life at its 2024 waste acceptance rate.

Paris Transfer Station

The Paris Transfer Station is located within approximately 15 miles southeast of the Service Area [Illinois EPA ID# 0458080003]. The location of the Paris Transfer Station is shown on Figure 1-4.

The Paris Transfer Station is located on an approximately 3.28-acre property in Paris, Edgar County (Springfield Road). The Paris Transfer Station began operation in 1979 and is owned by the City of Paris and operated by Ingrahm Disposal. The annual solid waste capacity reports indicate that the site accepts municipal waste. A maximum acceptable amount is not listed. The 2009 annual solid waste capacity report indicates that the site accepted 24, 22, and 20 tons per day (on average) during 2007, 2008, and 2009, respectively. Waste receipt data for the facility is not available from the IEPA annual solid waste capacity reports after 2009.

Monticello Transfer Station

The Monticello Transfer Station is located within approximately 15 miles southwest of the Service Area [Illinois EPA ID# 1478040003]. The location of the Monticello Transfer Station is shown on Figure 1-4.

The Monticello Transfer Station is located on an approximately 1.8-acre property in Monticello, Piatt County (904 Allerton Road). The Monticello Transfer Station began operation in 1984 and is owned and operated by the City of Monticello. The annual solid waste capacity reports indicate that the site accepts municipal waste. A maximum acceptable amount is not listed. The 2009 annual solid waste capacity report indicates that the site is only open two weeks per year (one in the fall and one in the spring) for cleanup days.

1.4.3 WASTE COLLECTION COMPANIES IN SERVICE AREA

Waste from customers is picked up in a variety of types of trucks by waste collection companies. The services provided vary by the type of customer (residential, commercial, and industrial).

Electronic Filing: Received, Clerk's Office 08/26/2026

Commercial and industrial hauling services are generally bid on a client or company basis. This is demonstrated by the variety of company names easily observed on waste containers outside commercial and industrial businesses. Rates are negotiated based on client-specific needs such as the size of requested container and the pick-up frequency. Area Disposal picks up waste from a wide variety of commercial customers over the Service Area as discussed in Section 1.3 of this report.

Contracts for residential service in the Service Area may be performed by or bid out by municipalities. The following is a summary of which hauling companies provide services in Champaign County (based on information in the 2022 Update):

- Waste and recyclables haulers in Champaign County are required to be licensed by Champaign County. The haulers are required to license each collection vehicle that they anticipate using to haul waste or recyclables. Based on a Freedom of Information Act request to Champaign County, approximately twenty haulers are licensed to haul waste and/or recyclables in 2024 and 2025 as shown in Table 1-3. Based on the information in Tabel 1-3, the haulers with the most collection vehicles in 2025 are Area Disposal (twenty-eight trucks), Republic Services (twenty-three trucks), and Illini Recycling (thirteen trucks). Other haulers operate fifty-four trucks.
- As discussed in the 2024 Update, waste haulers operating in Champaign County that had received waste hauler vehicle licenses in 2022 reported which landfills they utilize for solid waste disposal. In 2022, reports were received from nineteen solid waste haulers that operate in Champaign County [2022 Update, page 3-1]. The waste haulers indicated that:
    - They use the Clinton Landfill, Brickyard Landfill and the Valley View Landfill, but do not use the Illinois Landfill [2022 Update, page 3-2]. This reporting is consistent with the very low volumes of waste reported to be received at the Illinois Landfill.
    - They use the Republic Services Urbana Transfer Station and the Henson Urbana Recycling Center, but do not use the Paris Transfer Station or the University of Illinois Waste Transfer & Material Recovery Facility [2022 Update, page 3-1]. This reporting is consistent with the very low volumes of waste reported to be received at the Paris Transfer Station; and with the very low volumes of waste reported to be received and acceptance restrictions at the University of Illinois Waste Transfer & Material Recovery Facility.

Electronic Filing: Received, Clerk's Office 08/26/2026

- Recyclables and MSW from residents in Rantoul are hauled by Area Disposal. Pursuant to Village of Rantoul Ordinance, Ch. 28, waste hauling service is required in the Village of Rantoul and any waste hauling companies wishing to conduct business in Rantoul need to be licensed by the Village of Rantoul to do so. The Village of Rantoul has entered into a contract with Area Disposal, doing business as C&S Waste Services, Inc. for waste collection of all Single-Family Residential units and Multi-Family Units with four units or less.

  Also under the contract, recycling is provided for free. This recycling service is "single-stream recycling" (SSR), which means that a resident can put all of the listed acceptable items for recycling into one container [https://www.village.rantoul.il.us/434/Waste-Hauling-Services].
- Area Disposal direct hauls approximately 190 tons per day of MSW from the Service Area to the Clinton Landfill. As discussed further in Section 4.1.4, Area Disposal does not use the Republic Services Urbana Transfer Station.
- The Champaign City ordinance requires every household to sign up for weekly solid waste pick-up. All solid waste (trash, recyclables, etc.) collection in the City of Champaign is handled by private solid waste haulers who are licensed. Licenses are issued by the City Clerk. Only the five haulers listed below are currently licensed to haul in Champaign: ABC Sanitary Hauling, CR Disposal, Area Disposal, Illini Recycling, and Republic Services [https://champaignil.gov/public-works/find-a-service/utility-providers/].
- Urbana is served by multiple haulers but not all haulers serve the entire City. The website indicates that the following are licensed haulers: ABC Sanitary Hauling, Chris' Service Company, Dale Levitt Disposal, Area Disposal, Mel's Disposal, and Republic Services. Only ABC Sanitary Hauling, Chris' Service Company, Dale Levitt Disposal, and Republic Services provide totes for residential pickup and/or yard waste service. Urbana handles curbside recycling pickup for residents and runs the Landscape Recycling Center for yard waste disposal [https://www.urbanail.gov/living-urbana/page/new-resident-information].

Multiple communities in the Service Area do not contract the collections services to a particular company including others in Champaign County not discussed above and those in Iroquois County and Ford County. In those communities, Republic Services, Area Disposal, and/or other companies likely provide services.

1.4.4 OBSERVATIONS REGARDING COMPANIES AND FACILITIES IN OR PROXIMATE TO THE SERVICE AREA

Shortfall of Waste Disposal Capacity in the Service Area

The following are observations regarding the transfer station in the Service Area:

Electronic Filing: Received, Clerk's Office 08/26/2026

- The information provided in Section 1.3 indicates that the volume of waste requiring disposal in the Service Area is approximately 650 tons per day.
- The Paris Transfer Station, Monticello Transfer Station, Urbana University of Illinois Waste Transfer & Material Recovery Facility, and Illinois Landfill do not manage substantial volumes of MSW generated in the Service Area as evidenced by the low volumes received at each facility, facility restrictions and/or the hauler survey results. These facilities will not be considered further in this evaluation.
- A comparison with the disposal amounts from Section 1.3 indicates that the MSW amount being managed by the available transfer stations in the Service Area (the Republic Services Urbana Transfer Station and the Henson Urbana Recycling Center) is approximately 350 tons per day (approximately 300 tons per day by the Republic Services Urbana Transfer Station and the 50 tons per day Henson Urbana Recycling Center). This amount is approximately 54% of the MSW amount needing to be disposed from the Service Area (see Table 1-4 below). This reflects an approximately 300-ton-per-day shortfall/need for transfer stations in the Service Area, which can be met by the proposed facility. This shortfall is supported by the fact that (1) Area Disposal currently direct hauls approximately 190 tons of MSW per day to the Clinton Landfill (and does not use the Republic Services Urbana Transfer Station), and (2) multiple other haulers provide waste hauling services in the Service Area at least some of which would also not be expected to use the Republic Services Urbana Transfer Station.

Table 1-4: Summary of Shortfall/Need in Service Area

MSW Estimate for Service Area	2024 Volumes (tons per day)
Volume (Ave.) Requiring Disposal	650
Volume Accepted at Available Transfer Stations in Service Area	350
Shortfall/Need	300

- The capacity of the available transfer station(s) in the Service Area may not be equally or fully available to all haulers in the Service Area. The capacity of a transfer station typically considers the anticipated market conditions (e.g., the amount of waste reasonably anticipated to be received) and can vary based on a variety of factors including pricing, available manpower, equipment, and operating hours.

Tendency/Incentives to Vertically Integrate

Customers generally do not direct a hauler where to dispose of waste. Thus, the hauler has the discretion to dispose of the waste at a transfer station or directly at a landfill. Economics (e.g.,

Electronic Filing: Received, Clerk's Office 08/26/2026

driving distance, tipping fee) are the main criteria that dictate the disposal location and a variety of other factors are considered and potentially impact the economics (contract terms, payment terms, "turnaround time" at the facility, operating hours, ability to "stage" loads, location where collection vehicles are parked, location of vertically integrated landfill relative to locations of transfer station options).

Vertical integration is the ability for a company to control its costs through the entire waste life cycle from collection to final disposal in a landfill. Hauling companies that are part of a company that owns and/or operates transfer stations and/or landfills have financial incentives to "vertically integrate" their services and bring waste that they pick up to their own transfer or disposal facility (see discussion in Section 1.5.3). The incentives to vertically integrate are believed to result in the following patterns of behavior in the Service Area:

- Republic Services hauling waste it collects to the Republic Services Urbana Transfer Station and subsequently to its own landfill in Danville (Brickyard Landfill).
- Area Disposal hauling the non-recyclable waste from its subsidiary's GCDD recycling facility in Urbana to its affiliated landfill in Clinton (Clinton Landfill).
- WM only has three licensed collection vehicles in Champaign County, presumably because it does not have its own transfer station in the Service Area and its nearest landfill is over 20 miles from the Service Area.

Pricing and/or Other Operational Factors Prohibit Use of Available Disposal Capacity

Even though the Republic Services Urbana Transfer Station appears to have additional disposal capacity, Area Disposal direct hauls all of waste it collects from the Service Area to the Clinton Landfill. As mentioned above, the capacity of the available transfer stations in the Service Area may not be equally or fully available to all haulers in the Service Area. Analysis of the capacity of a transfer station typically takes into consideration the anticipated market conditions (e.g., the amount of waste reasonably anticipated to be received) and can vary based on a variety of factors including pricing, available manpower, equipment, and operating hours.

The reason that Area Disposal is unable to take advantage of the use of the Republic Services Urbana Transfer Station is pricing. The rate charged by Republic Services makes it not economically feasible to use the Republic Services Urbana Transfer Station. Republic Services charges Area Disposal approximately $144 per ton for use of the Republic Services Urbana Transfer Station. This fee consists of a tipping fee of $125.33 per ton plus an environmental fee of $19.71 per ticket (or load) and a fuel recovery fee of 8.74% per ticket (or load). The 2025 tipping fee is an increase of over 10% from the 2024 tipping fee of $113.94 per ton. Attachment 1-A contains an affidavit from Matthew Coulter, Regional Vice President for GFL Environmental (or Area Disposal), including invoices from Republic Services, that detail the fees.

Electronic Filing: Received, Clerk's Office 08/26/2026

The fees charged by Republic Services include the cost for Republic Services to transfer the waste into a transfer trailer, haul the waste to the Brickyard Landfill, and the tipping fee at the Brickyard Landfill. As a comparison, the pricing for Bloomington-Normal to use the Republic Services Bloomington Transfer Station was $56.29 per ton (for initial two-year period beginning in 2021)

and then increasing from $57.98 (for first additional one-year period, which should be 2023) to $65.26 (for fifth additional one-year period, which should be 2025). The fee for Blooming-Normal similarly includes the cost for Republic services to transfer the waste into a transfer trailer, haul the waste to the Livingston Landfill (in Pontiac which is a similar distance as Urbana to Danville), and the tipping fee at the Livingston Landfill. The bid form from Republic Services to Bloomington-Normal (not including the various appendices) is provided in Attachment 1-B.

The fee charged by Republic Services to Area Disposal at the Urbana Transfer Station is over double the fee charged by Republic Services to Bloomington-Normal for a very similar service at the Republic Services Bloomington Transfer Station. In summary, the exorbitant pricing that Republic Services charges Area Disposal (its main competitor in the market) for its use of their transfer station prohibits Area Disposal from using the transfer station and provides a dramatic competitive advantage to Republic Services.

Only Republic Services is Fully Vertically Integrated in the Service Area

Only Republic Services is fully integrated in the Service Area (i.e., has hauling operations, owns/operates a transfer station in the Service Area, and owns/operates a landfill proximate to the Service Area). All of the other waste services companies in the Service Area lack full vertical integration, which puts them at a significant competitive disadvantage compared to Republic Services for the reasons discussed above and further explained in Section 1.5.3. As such, other companies are at a significant disadvantage in competing to provide waste hauling services in the Service Area.

The Republic Services advantage in the Champaign-Urbana market extends to the hauling of waste from rural communities as well. For example, any rural communities for which Republic Services hauls waste are located closer to the Republic Services Urbana Transfer Station than any of the proximate landfills. As such, if Area Disposal or another company bid on the hauling in these communities, they would be subject to the exorbitant pricing charged by Republic Services (their competitor) or be forced to haul the MSW a significantly farther distance than Republic Services.

Electronic Filing: Received, Clerk's Office 08/26/2026

Area Disposal is Positioned to Become Fully Vertically Integrated in the Service Area

Area Disposal has a hauling presence in the Service Area (having recently moved from Urbana to Rantoul) and an affiliated landfill proximate to the Service Area (the Clinton Landfill). If Area Disposal is able to secure a transfer station in the Service Area, Area Disposal would become fully vertically integrated in the Service Area and would be in position to effectively compete with Republic Services. No other company currently has a substantial hauling presence in the Service Area and a proximate landfill.

Electronic Filing: Received, Clerk's Office 08/26/2026

1.5 TRENDS IN THE WASTE DISPOSAL SYSTEM

1.5.1 DECREASING NUMBER OF AVAILABLE LANDFILLS

The number of operational landfills in Illinois has been decreasing for many years. Table 1-5 summarizes the number of operational landfills in Illinois over time. As shown, the number of operational landfills in Illinois has decreased from fifty-eight to thirty-six from 1995 through 2023.

Table 1-5: Illinois Active Landfills

Year	Active Landfills in Illinois
1995	58
2000	53
2005	51
2010	43
2015	38
2020	36
2024	35

Note: Data taken from IEPA Solid Waste Capacity Reports.

There have been no active landfills in the Service Area since at least 1995. The landfills discussed in Section 1.4.2 have been in operation since at least 1995 although the owners/operators have changed over time.

1.5.2 ONGOING WASTE INDUSTRY CONSOLIDATION

The waste industry has been consolidating for many years. Consolidation proximate to the Service Area is discussed below.

Republic Services Merger with Allied Waste Industries

American Disposal Services of Illinois, Inc., which included the Republic Services Bloomington Transfer Station and the Livingston Landfill, was acquired by Allied Waste Industries, Inc. (Allied Waste) in 1998. Allied Waste also owned the Brickyard Landfill, and the Urbana Transfer Station (also known as the Central Waste Services and Recycling Facility). Republic Services and Allied Waste merged in December 2008 to create one of the nation's leading waste and environmental services providers.

The combined company, which is based in Phoenix, is named Republic Services, Inc. [https://investor.republicservices.com/news-releases/news-release-details/republic-services-and-allied-waste-complete-merger-form-leading]. The Brickyard Landfill and the Urbana Transfer

Electronic Filing: Received, Clerk's Office 08/26/2026

Station have been owned by Republic Services since that time. Republic Services is the second largest waste company in the United States with approximately $16 billion in annual revenues in 2024.

WM Acquisition of Advanced Disposal Services, Inc.

The Valley View Landfill was operated by Veolia ES in 2009. Advanced Disposal Services, Inc. (Advanced Disposal) acquired Veolia ES in 2012. In April 2019, WM (the largest residential garbage and recycling company in North America) announced it entered an agreement to acquire Advanced Disposal for $4.9 billion. Advanced Disposal was the fourth largest garbage and recycling company in North America. The Wall Street Journal described the deal as WM's largest acquisition ever [https://resource-recycling.com/recycling/2019/04/16/waste-management-unveils-majormerger/].

The acquisition of Advanced Disposal was completed on October 30, 2020. The Valley View Landfill has been owned by WM since that time.

GFL Acquisition of PDC

Headquartered in Vaughan, Ontario, GFL is the fourth largest environmental services company in North America with facilities throughout Canada and twenty-seven states. [https://www.whig.com/business/area-disposal-sold-to-canadian-firm/article_85e76212-256a-11ec-88c6-c7cf8031d9fc.html].

GFL acquired the solid waste management and recycling business of Peoria Disposal Company (PDC), which included Area Disposal, on October 1, 2021. PDC has operated a regional platform for over ninety years under the ownership of the Coulter family. PDC owns a vertically integrated network of assets in Central Illinois and Eastern Missouri, providing residential, commercial, and industrial solid waste hauling and recycling services. The operations include three active landfills, two strategically located transfer stations, one material recovery facility, a wastewater treatment plant, and various other projects. The PDC assets are supported by a fleet of over 350 vehicles and more than 400 employees [https://www.prnewswire.com/news-releases/gfl-environmental-announces-the-acquisition-of-peoria-disposal-company-and-provides-update-on-year-to-date-ma-activity-301389629.html].

Summary of Landfill Operators Proximate to the Service Area

The landfills proximate to the Service Area discussed in Section 1.4.2 are now owned/ operated by three of the largest solid waste companies in the United States: WM, Republic Services, and an affiliate of Area Disposal. Each of these companies is publicly traded. Waste Connections, Inc.,

Electronic Filing: Received, Clerk's Office 08/26/2026

which is the third largest solid waste company in the United States, does not have any landfills or transfer stations proximate to the Service Area.

1.5.3 IMPORTANCE OF VERTICAL INTEGRATION

The above-discussed consolidation has resulted in the vertical integration of the waste management operations (i.e., hauling, transfer, and disposal) of the national waste companies. Vertical integration has a number of advantages in the waste industry, including control of disposal pricing. Hauling contracts predominantly include disposal in the pricing so, if a company is unable to establish their own disposal pricing, they are at a significant competitive disadvantage. Each of the national waste companies acknowledges the critical importance of vertical integration in their annual reports and Form 10-K reports.

As discussed above, only Republic Services is fully integrated in the Service Area (i.e., has hauling operations, owns/operates a transfer station in the Service Area, and owns/operates a landfill proximate to the Service Area). All of the other waste services companies in the Service Area lack full vertical integration, which puts them at a significant competitive disadvantage compared to Republic Services for the reasons discussed above and including the following:

- Other companies must pay fees to Republic Services, which reduces their margins and improves Republic Service's margins.
- Other companies do not have control of long-term pricing, which creates a significant unknown cost factor when bidding on municipal hauling contracts (which are typically five years).
- The lack of known long-term pricing creates hurdles for other companies to make capital investments.
- The use of a competitor's facility causes operational inefficiencies for the other companies (e.g., trucks must drive from the transfer station back to their facility at the end of the day versus parking at the same location, or must travel extra miles to deliver loads within the transfer station operating hours).

The above reasons are why it is believed that other companies are at a significant disadvantage to Republic Services to compete for waste hauling work in the Service Area, and, as such, do not attempt to compete. For example:

- Waste Connections has no landfill or transfer station in or proximate to the Service Area. Its nearest landfills or transfer stations are located in the Chicagoland area. Its website [https://www.wasteconnections.com/locations/] indicates that its closest hauling operation is located in Plano, which is approximately 95 miles from Rantoul. Because it has no opportunity to vertically integrate, Waste Connections would not be expected to provide hauling services in the Service Area, and, as such, is not a registered hauler in Champaign County.
- WM does not have a transfer station in or proximate to the Service Area. Its nearest landfill is located approximately 25 miles from the Service Area (Valley View Landfill). WM is a registered hauler in Champaign County but only has three licensed collection vehicles. In addition, WM's website [https://www.wm.com/us/en/location/il] indicates that they service Champaign and Urbana, but none of the rural areas of the Service Area, including Rantoul, Mahomet, Savoy, Paxton, St. Joseph, Tolono, Gibson City, and Villa Grove.

The limited number of companies that are vertically integrated in the Service Area limits the waste hauling options for customers in the Service Area.

1.5.4 RECYCLING CHALLENGES

Champaign County, along with many local government and private sector partners, has successfully completed various recycling goals over the years although challenges remain. The 2022 Update discusses the status of various initiatives and challenges. The following are relevant excerpts:

- Most early goals have been realized to some extent, although not without certain problems that regularly resurface (e.g., several waste haulers operating the same route areas; lack of funding from landfill tipping fees to support and implement countywide recycling programs) [2022 Update, page ES-1].
- Recycling is not mandatory in unincorporated Champaign County, and residents, businesses, and institutions are free to choose whether to participate in a recycling program [2022 Update, page ES-1].
- Champaign County covers nearly 1,000 square miles. Many rural residents of Champaign County, especially those in outlying areas away from municipalities, do not have access to a trash or recycling pick-up services. Some of these residents provided their comments in the Resident Survey, expressing their frustrations [2022 Update, page ES-1].

Electronic Filing: Received, Clerk's Office 08/26/2026

- Only one public recycling drop-off station is presently available in Champaign County (operated by Illini Recycling at 420 Paul Avenue, Champaign). Three limited service recycling drop-off stations are located in the Village of Ogden, Village of Homer, and Village of Philo (which are all south or east of Champaign-Urbana) [2022 Update, page ES-1 and page 2-6].
- Recycling programs within the county have been established at the University of Illinois at Urbana-Champaign, and within the City of Urbana and City of Champaign. Curbside recycling service is available to residents of the centrally located and largest municipalities within the County: Champaign, Urbana, Savoy, and Rantoul [2022 Update, page 2-3].
- Champaign County residents who reside outside of urban areas increasingly seek a means to recycle all traditional materials listed, including glass bottles/glass containers. Presently, such residents have limited access to one public recycling drop-off center, which does not accept glass bottles/glass containers [2022 Update, page 5-4].
- Goals and recommendations include improving trash disposal options and recycling drop-off options for outlying rural residents, including supporting the development of additional recycling drop-off centers for public use in Champaign County [2022 Update, page ES-2 and page 5-5 and page 7-1].

The recycling challenges faced by the rural areas of Champaign County are likely similar to the recycling challenges faced by the Ford and Iroquois County portions of the Service Area due to the similarities in lack of available infrastructure and demographics,

Electronic Filing: Received, Clerk's Office 08/26/2026

1.6 RANTOUL RTS BENEFITS

Waste recycling and transfer stations play an important role in a community's total waste management system, serving as a link between a community's solid waste collection program and a final waste disposal facility. The Rantoul RTS will provide the following benefits.

1.6.1 INCREASE COMPETITION AND TRANSFER CAPACITY IN THE SERVICE AREA

The information in Section 1.4 suggests that amount of MSW and non-recyclable GCDD being accepted at the one MSW transfer station and one GCDD recycling facility in Champaign County is approximately 350 tons per day. A comparison with the amounts from Section 1.3 indicates that the MSW amount being managed by the transfer stations in the Service Area is approximately 300 tons per day less than the MSW amount requiring disposal from the Service Area. This reflects an approximately 300-ton-per-day shortfall/need for transfer stations in the Service Area, which can be partially met by the Rantoul RTS.

Hauling companies which operate in an area without their own disposal location (transfer station and/or landfill) are at a competitive disadvantage because the owner and/or operator of the disposal location is also a hauling competitor. The owner and/or operator of the disposal location can readily "drive up" the disposal cost of their competition and give their own hauling company a cost advantage. The overall likely impact is higher pricing and a reduction in services. The economic factor which tends to prevent this from occurring is competition; specifically, multiple potential transfer/disposal locations that are incentivized to want to bid on the hauling volume. The Rantoul RTS would provide another option for haulers in the area.

The benefits of competition are well established. The Federal Trade Commission Bureau of Competition advances United States government policies that protect consumers and promote competition. Their website states the following:

- Competition in America is about price, selection, and service. It benefits consumers by keeping prices low and the quality and choice of goods and services high.
- Competition also encourages businesses to offer new and better products.
- Competition makes our economy work [https://www.ftc.gov/about-ftc/bureaus-offices/bureau-competition/about-bureau-competition].

Champaign County relies on one MSW transfer station and one GCDD recycling facility to transport non-recyclable waste and MSW to out-of-county landfills. The Rantoul RTS would enhance the capability and capacity of Champaign County to manage waste. The Rantoul RTS would also compete with the single other MSW transfer station in the county in both the

Electronic Filing: Received, Clerk's Office 08/26/2026

Champaign-Urbana market and in rural areas, which has been demonstrated to control costs and improve services, as discussed below.

Examples of Proximate Transfer Stations - Will County

Prior to 2020, the WM - Joliet Transfer Station was the only permitted MSW transfer station in Will County. Environmental Recycling and Disposal Services, Inc. began operating a new transfer station (the Moen Transfer Station) in late 2020, which is located approximately 1.25 miles from the WM - Joliet Transfer Station. WM vehemently opposed the local siting of the Moen Transfer Station. The local siting application for the Moen Transfer Station (which was unanimously approved by the Village of Rockdale) demonstrated that the Moen Transfer Station service area had only one transfer station (the WM - Joliet Transfer Station) that accepts and transfers MSW, and it is owned by the same company (WM) that operates the landfill (the Prairie View RDF). The local siting application similarly recognized that:

- This situation may discourage other haulers from using the waste disposal system in Will County.
- The owner and/or operator of the disposal location can potentially "drive up" the disposal cost of their competition and give their own hauling company a price advantage.
- The economic factor which tends to prevent this from occurring is competition; specifically, multiple potential transfer/disposal locations that are incentivized to want and bid on the hauling volume.
- While the Moen Transfer Station and WM - Joliet Transfer Station are in relatively close proximity to each other, competition for disposal services in the service area will be promoted by the addition of the Moen Transfer Station.

Subsequent to the local siting approval by Rockdale, WM appealed Rockdale's decision. The approval of the local siting application for the Moen Transfer Station was upheld by both the Illinois Pollution Control Board (IPCB) and the Appellate Court on appeal. The Moen Transfer Station was subsequently constructed and began operation in late 2020.

The Moen Transfer Station was originally only permitted to receive a maximum 350 tons per day. Due to demand from outside haulers, the capacity of the transfer station has been increased to 1,080 tons per day, and observations by CEC indicate that the Moen Transfer Station regularly accepts 600 to 800 tons per day. This is a prime example of the results of competition in a previously monopolized market.

Electronic Filing: Received, Clerk's Office 08/26/2026

Examples of Proximate Transfer Stations - DuPage County

The DuKane Transfer Station is currently the only permitted MSW transfer station in DuPage County, is owned/operated by Waste Connection, and is located in West Chicago. Lakeshore Recycling Systems, LLC (LRS) also owns/operates a GCDD recycling facility in West Chicago. LRS submitted an application for local siting to West Chicago in 2022 to establish an MSW transfer station, namely the West DuPage Recycling and Transfer Station (RTS) at the same location as its GCDD recycling operation.

Waste Connections held the waste and recyclable hauling contract with West Chicago from July 1, 2012 to December 31, 2019 to provide curbside and/or alley collection of refuse, yard waste, and recyclable materials. The City of West Chicago provided a request for proposal to LRS and Waste Connections, dated June 24, 2019, for a new hauling contract. Bids were submitted in July 2019 (which was after the Host Community Benefit Agreement for the West DuPage RTS had been executed in May 2019). Based on the potential development of the West DuPage RTS, LRS submitted a proposal for the residential waste service program. Waste Connections offered significant improvements to the rate structure and overall program relative to the current contract. Waste Connections was awarded the new waste hauling contract for the City of West Chicago. Tangible benefits to West Chicago and its residents of the new waste hauling contract include:

- Cost Savings - Five-year savings of approximately $1,700,000 compared to the previous contract (or approximately $300 of savings for each of the approximately 5,700 single-family units within the City of West Chicago) including the following reductions in costs:
  - *Refuse Sticker:* From $2.70 to $2.30;
  - *35-gallon Senior Rate:* From $9.68 to $9.00;
  - *35-gallon Regular Rate:* From $16.77 to $13.33; and
  - *95-gallon Regular Rate:* From $29.70 to $18.95.
- Organics Services - The city was offered a modified organics program which allowed organic food waste to be disposed with grass clippings on a subscription basis.
- Electronics Waste - The city requested, and received an offer to provide a monthly curbside collection of e-waste from West Chicago residents (up to six items for a fee of $30).
- Annual Collection Event - The city requested, and received an offer to provide an annual service, which would allow residents to put bulky acceptable waste at the curb for removal for a modest fee.

Similar to the Moen Transfer Station, the existing competitor in the market (i.e., Waste Connections) participated in the local siting of the West DuPage RTS and opposed its approval. Subsequent to the DuPage County's approval, Waste Connections appealed the decision to the Illinois Pollution Control Board. In 2024, the IPCB overturned the local siting approval due to an

Electronic Filing: Received, Clerk's Office 08/26/2026

administrative issue regarding the notice to an adjoining property owned by a railroad. Unfortunately for DuPage County and West Chicago, Waste Connections may keep their competitive advantage in this market.

The hauling contract for West Chicago was renewed again in late 2024 and was again won by Waste Connections. Not surprisingly, West Chicago residents saw price increases of 10% to 20% with this contract award as listed below.

- Refuse Sticker: From $2.59 to $3.00.
- 35-Gallon Senior Rate: From $10.13 to $12.50.
- 35-Gallon Regular Rate: From $15.00 to $19.74.
- 95-Gallon Regular Rate: From $21.33 to $23.74.

These costs will also increase by 4% per year over the contract term (versus an annual increase of 3% in the previous contract).

Examples of Proximate Transfer Stations - McLean County

Another example of the advantages to the community of having proximate transfer stations is McLean County. McLean County currently hosts one MSW transfer station, which is owned/ operated by Republic Services (the Republic Services Bloomington Transfer Station). In February 2024, McLean County approved the local siting of a second transfer station in their community (the Henson Recycling Campus Transfer Station or HRC Transfer Station), which would be operated by Lakeshore Recycling Systems, LLC (now Area Disposal). The local siting application demonstrated that the HRC Transfer Station will increase competition and available transfer capacity in the service area, which has been recognized to help control price increases and maintain a high quality of service in both the residential and commercial sectors.

Similar to the Moen Transfer Station and the West DuPage RTS, the existing competitor in the market (i.e., Republic Services) participated in the local siting of the HRC Transfer Station and opposed its approval. Subsequent to the McLean County's approval, Republic Services appealed the decision to the IPCB. In October 2024, the IPCB overturned the local siting approval due to an administrative issue regarding the recording of the HRC Transfer Station property and related items. Unfortunately for the McLean County, Republic Services may keep their "monopoly" in the community and McLean County's residents may not reap the benefits of an additional transfer station in their community.

Electronic Filing: Received, Clerk's Office 08/26/2026

Letters of Support

Attachment 1-C contains letters from the following hauling/ recycling companies, municipal government representatives, and customers which support the proposed Rantoul RTS for the reasons discussed above.

- Hauling/ Recycling Companies
  - Captain Hook Inc
  - Central Illinois Disposal & Recycling, Inc.
  - Illini Recycling
- Municipalities
  - Village of Fisher
  - City of Tuscola
- Customers
  - Advanced Filtration Systems Inc.
  - CDG Real Estate/ South Wind Properties
  - Champaign Urbana Mass Transit District
  - Cochranes of Champaign, Inc./ JTS Properties LLC
  - Collaborative Concepts LLC
  - FMI and Greek Management
  - Green Street Realty
  - Heritage Meadows & Maplewood Estates of Rantoul
  - Ramshaw Real Estate
  - Shadow Wood Property
  - Tabeling Development Company
  - TLT Properties

1.6.2 FACILITATE RECYCLING IN THE SERVICE AREA

Champaign County has historically taken a proactive leadership role in recycling. The 2022 Update discusses the current challenges with recycling and continuing to increase the diversion rate from landfills, including the specific desire to increase the recycling in the rural areas. The Rantoul RTS is ideally located to facilitate recycling in the rural areas, especially the underserved areas north of Champaign-Urbana.

The Rantoul RTS is designed to accept SSR for transfer to a material recovery facility, which can help control costs and improve services. The ability to accept SSR will allow Area Disposal to better serve commercial and rural residential customers, including their SSR (e.g., cardboard, paper, plastic, metals). With the Rantoul RTS, Area Disposal would be able to offer curbside recycling to rural customers outside of Rantoul.

Electronic Filing: Received, Clerk's Office 08/26/2026

The SSR from the site will be transported to a material recovery facility where it will be sorted/separated into its components (plastic, metal, paper, cardboard, etc.). The component material is then baled and sent to various facilities for further processing and/or recycling. The ability to transfer the SSR through Area Disposal's own site allows the opportunity for Area Disposal to better manage and improve the efficiencies of this operation.

In summary, the proposed Rantoul RTS will allow for more efficient recycling operations thereby expanding the geographic area and overall amount of recycling.

1.6.3 REDUCE ENVIRONMENTAL IMPACTS TO RANTOUL AND THE AREA

Area Disposal is currently performing waste and recyclables hauling operations within the Service Area. Area Disposal currently has twenty-eight licensed vehicles in Champaign County which are predominantly parked and maintained at the site. The collection vehicles travel from the site to their route, unload the waste or recyclables at another transfer station or landfill (currently the Illini Recycling facility in Champaign for SSR and the Clinton Landfill for MSW), potentially complete a second route/ unloading, and then return to the site to park overnight.

The proposed Rantoul RTS will reduce the travel distance of Area Disposal's hauling fleet. The estimated reduction in vehicle mileage is provided in Table 1-6. In summary, eliminating the direct haul travel of all of the current MSW collection vehicles to the Clinton Landfill is estimated to reduce vehicle mileage by over 400,000 miles per year. A key savings is that Area Disposal will be able to use less vehicles to haul the same amount of MSW (which is currently approximately 190 tons per day) due to the reduced travel distance (and thus increased efficiency) of each collection vehicle. These savings do not include (1) any potential mileage reductions in recyclables hauling, and (2) any potential mileage savings for additional MSW volumes hauled by Area Disposal.

The Rantoul RTS is anticipated to be used by other haulers providing services to the Service Area. These haulers would be expected to similarly realize reduced miles for their collection vehicles. If the use of the Rantoul RTS provides a mileage savings of only 20 miles per day for approximately 100 tons of waste per day (or fourteen vehicle trips per day), a reduction in vehicle mileage of approximately 75,000 miles per year would occur (fourteen collection vehicle trips x 20 miles per day x 266 days per year).

The above reductions in truck miles will save fuel and reduce wear on roads. The reduction in fuel usage will reduce the emissions and carbon footprint associated with managing this waste stream. A summary of the environmental savings is provided in Table 1-7.

Electronic Filing: Received, Clerk's Office 08/26/2026

Table 1-7: Summary of Reduced Environmental Impacts

	Reduced Miles (per year)	Reduced Miles (over 20-year operating period)	Reduced Fuel Usage (gallons over 20-year operating period)	Reduced Emissions (pounds of CO2 over 20-year operating period)
Area Disposal MSW Collection Vehicles	408,000	8.2 million	2.1 million	47.77 million
Other Collection Vehicles	75,000	1.5 million	400,000	8.93 million
Total	483,000	9.7 million	2.5 million	56.70 million

Over the minimum design period, the use of the Rantoul RTS is estimated to eliminate approximately 9.7 million heavy truck miles on area roads, reduce fuel consumption by over 2.5 million gallons, and reduce the carbon footprint by over 56 million pounds of CO2 emissions. These savings would increase if the operations and/or the operating period at the Rantoul RTS increases in the future.

1.6.4 PROVIDE DIRECT BENEFITS TO RANTOUL

In planning for the proposed transfer station, Area Disposal has executed a host community agreement with Rantoul, dated June 2025 (Host Agreement). The Host Agreement contains provisions for economic benefits to be provided to Rantoul (if the siting request meets the statutory requirements as set forth in 415 ILCS 5/39.2 and the facility is built and operated). These benefits include Area Disposal providing a host benefit fee of $0.40 for each ton of waste transferred to a landfill or other disposal facility. The host community agreement between Rantoul and Area Disposal is provided in Attachment 1-D.

If the Rantoul RTS transfers an average of 280 tons per day of MSW to a landfill disposal facility, this will result in approximately $30,000 per year of revenues to Rantoul.

Electronic Filing: Received, Clerk's Office 08/26/2026

1.7 SUMMARY AND CONCLUSION

This report demonstrates that the Rantoul RTS is necessary to accommodate the waste needs of the area it is intended to serve. The following conclusions support this opinion:

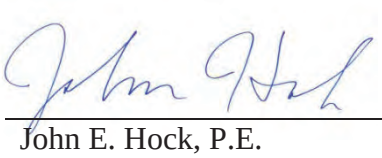
- The Rantoul RTS will increase competition and available transfer station capacity, which has been clearly recognized to help control price increases and maintain a high quality of service in both the residential and commercial sectors.
- The Rantoul RTS will increase recycling for rural areas.
- The Rantoul RTS will reduce environmental impacts to the area by decreasing the travel distance of MSW collection vehicles.
- The Rantoul RTS will provide a host fee to be paid to Rantoul for every ton of refuse that is transferred at the facility.

For the reasons cited above, the Rantoul RTS meets the requirements of Criterion 1 as it is "necessary to accommodate the waste needs of the area it is intended to serve".

Electronic Filing: Received, Clerk's Office 08/26/2026

1.8 CERTIFICATION

I hereby certify that all information contained in this Application for Local Siting Approval for Criterion 1 was prepared by me or under my direct supervision and is true and correct to the best of my knowledge and belief.



John E. Hock, P.E.

December 18, 2025
Date

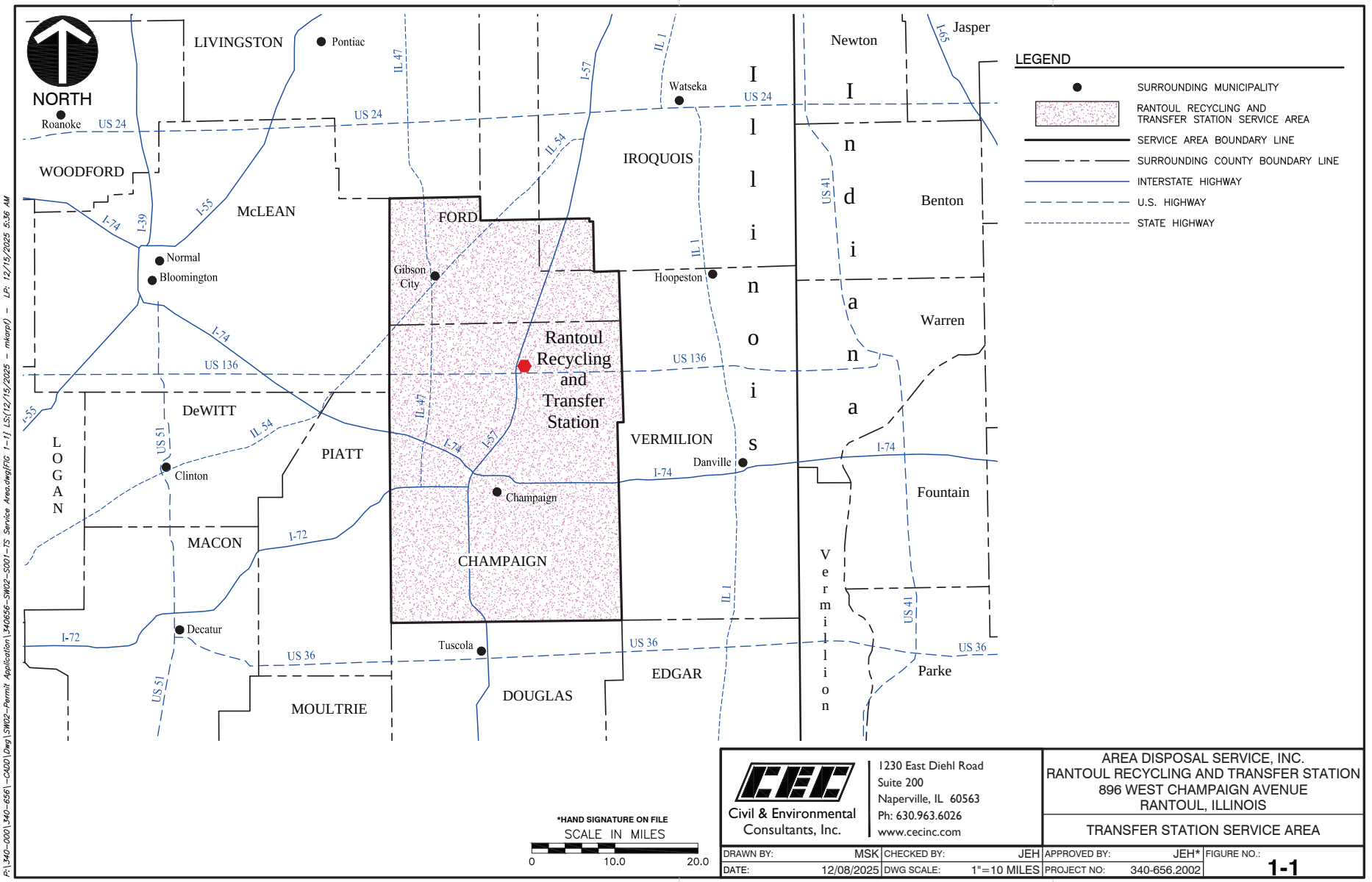
062-047623 - IL

Professional Engineer Registration Number and State

Electronic Filing: Received, Clerk's Office 08/26/2026

CRITERION 1

FIGURES



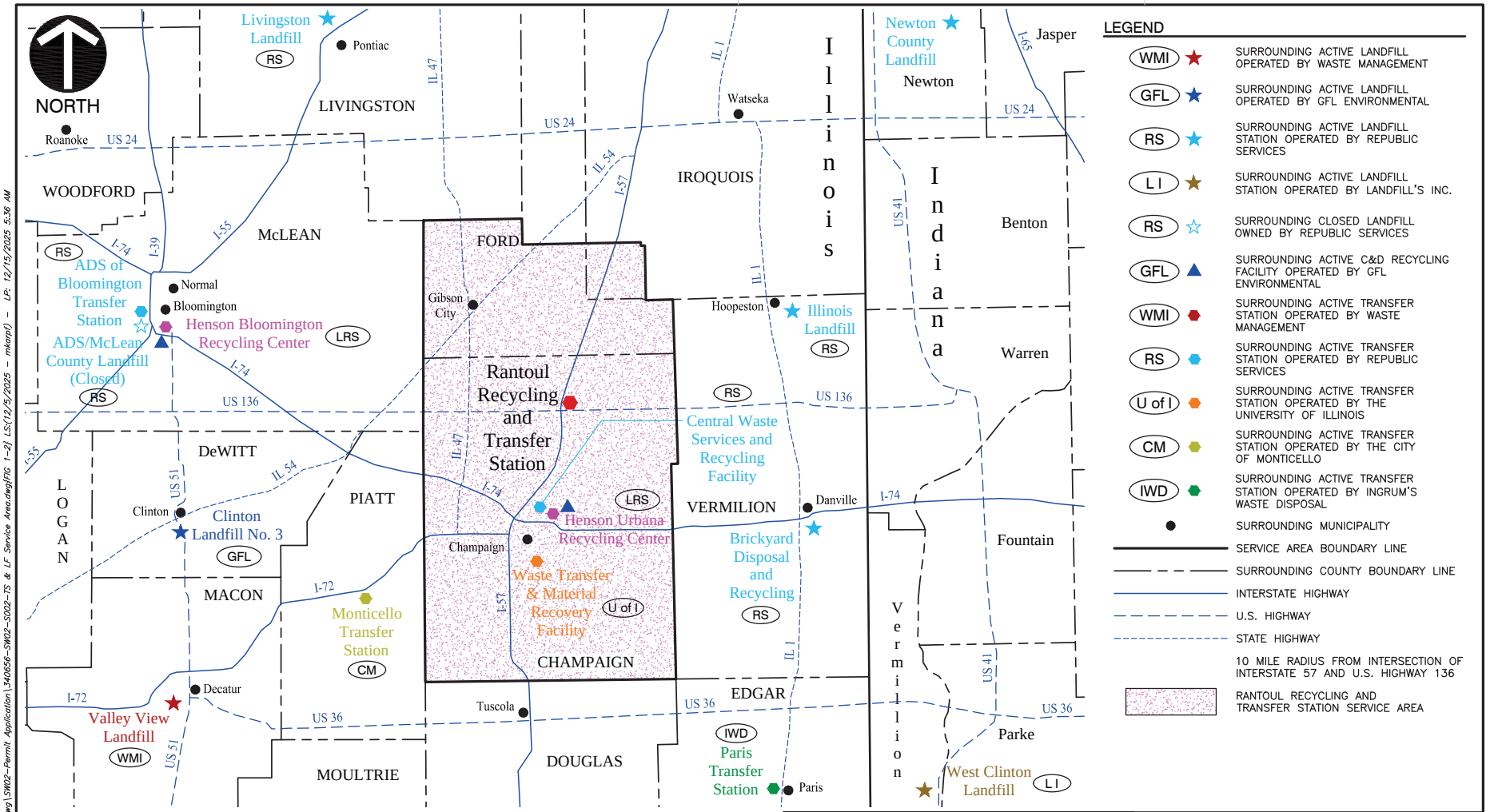
Civil & Environmental Consultants, Inc.
1230 East Diehl Road
Suite 200
Naperville, IL 60563
Ph: 630.963.6026
www.cecinc.com

AREA DISPOSAL SERVICE, INC.
RANTOUL RECYCLING AND TRANSFER STATION
896 WEST CHAMPAIGN AVENUE
RANTOUL, ILLINOIS

TRANSFER STATION SERVICE AREA

DRAWN BY:	MSK	CHECKED BY:	JEH	APPROVED BY:	JEH*	FIGURE NO.:
DATE:	12/08/2025	DWG SCALE:	1"=10 MILES	PROJECT NO:	340-656.2002	1-1

P:\340-0001\340-656\-CADD\Dwg\SW02-Permit Application\340656-SW02-S001-TS Service Area.dwg(FIG 1-1) LS:(12/15/2025 - mkorpi) - LP: 12/15/2025 5:36 AM



LEGEND

- WMI ★ — SURROUNDING ACTIVE LANDFILL OPERATED BY WASTE MANAGEMENT
- GFL ★ — SURROUNDING ACTIVE LANDFILL OPERATED BY GFL ENVIRONMENTAL
- RS ★ — SURROUNDING ACTIVE LANDFILL STATION OPERATED BY REPUBLIC SERVICES
- L I ★ — SURROUNDING ACTIVE LANDFILL STATION OPERATED BY LANDFILL'S INC.
- RS ☆ — SURROUNDING CLOSED LANDFILL OWNED BY REPUBLIC SERVICES
- GFL ▲ — SURROUNDING ACTIVE C&D RECYCLING FACILITY OPERATED BY GFL ENVIRONMENTAL
- WMI ⬢ — SURROUNDING ACTIVE TRANSFER STATION OPERATED BY WASTE MANAGEMENT
- RS ⬢ — SURROUNDING ACTIVE TRANSFER STATION OPERATED BY REPUBLIC SERVICES
- U of I ⬢ — SURROUNDING ACTIVE TRANSFER STATION OPERATED BY THE UNIVERSITY OF ILLINOIS
- CM ⬢ — SURROUNDING ACTIVE TRANSFER STATION OPERATED BY THE CITY OF MONTICELLO
- IWD ⬢ — SURROUNDING ACTIVE TRANSFER STATION OPERATED BY INGRUM'S WASTE DISPOSAL
- ● — SURROUNDING MUNICIPALITY
- SERVICE AREA BOUNDARY LINE
- SURROUNDING COUNTY BOUNDARY LINE
- INTERSTATE HIGHWAY
- U.S. HIGHWAY
- STATE HIGHWAY
- 10 MILE RADIUS FROM INTERSECTION OF INTERSTATE 57 AND U.S. HIGHWAY 136
- RANTOUL RECYCLING AND TRANSFER STATION SERVICE AREA

REFERENCE

1. LOCATION OF LANDFILLS AND TRANSFER STATIONS BASED ON ADDRESSES FROM 2009 ILLINOIS SOLID WASTE CAPACITY REPORTS OR OTHER PUBLICLY AVAILABLE INFORMATION.
2. OWNER OPERATORS OF TRANSFER STATIONS TAKEN FROM COMPANY WEBSITES AND OTHER PUBLICLY AVAILABLE INFORMATION.

*HAND SIGNATURE ON FILE

SCALE IN MILES
0 10.0 20.0

Civil & Environmental Consultants, Inc.
1230 East Diehl Road
Suite 200
Naperville, IL 60563
Ph: 630.963.6026
www.cecinc.com

AREA DISPOSAL SERVICE, INC.
RANTOUL RECYCLING AND TRANSFER STATION
896 WEST CHAMPAIGN AVENUE
RANTOUL, ILLINOIS

SURROUNDING LANDFILL AND TRANSFER STATION LOCATIONS

DRAWN BY:	MSK	CHECKED BY:	JEH	APPROVED BY:	JEH*	FIGURE NO.:
DATE:	12/08/2025	DWG SCALE:	1"=10 MILES	PROJECT NO:	340-656.2002	1-2

P:\340-000\340-656\-CADD\Dwg\SW02-Permit Application\340656-SW02-S002-TS & LF Service Area.dwg[FIG 1-2] LS:(12/5/2025 - mkarp) - LP: 12/15/2025 5:36 AM

Electronic Filing: Received, Clerk's Office 08/26/2026

CRITERION 1

TABLES

Electronic Filing: Received, Clerk's Office 08/26/2026

Civil & Environmental Consultants, Inc.

Table 1-1A
Rantoul Recycling and Transfer Station
Service Area Census Data 2020 - 2035

	Townships	2020 Census Population[1]	2020 Census Households[1]	2020 Census Employment[2,3]
Champaign County	Ayers	421	143	242
	Brown	2,107	621	1,515
	Champaign	11,264	4,558	6,860
	Champaign City	88,302	40,599	48,213
	Colfax	219	66	174
	Compromise	1,323	549	826
	Condit	486	205	221
	Crittenden	337	156	251
	Cunningham	38,336	16,425	21,161
	East Bend	623	276	358
	Harwood	610	233	293
	Hensley	1,033	266	585
	Kerr	183	75	126
	Ludlow	4,077	1,766	2,414
	Mahomet	13,679	4,743	8,917
	Newcomb	1,377	486	829
	Ogden	1,531	631	906
	Pesotum	882	342	551
	Philo	1,897	780	1,250
	Rantoul	10,705	4,219	5,877
	Raymond	354	109	241
	Sadorus	948	394	645
	Scott	999	510	721
	Sidney	1,709	508	1,060
	Somer	988	505	590
	South Homer	1,492	669	961
	St. Joseph	5,597	2,029	387
	Stanton	514	193	356
	Tolono	6,298	2,351	4,150
	Urbana	7,556	3,465	4,239
	Total	**205,847**	**87,872**	**114,919**
Ford County	Button	232	64	148
	Dix	598	241	447
	Drummer	4,046	1,785	2,286
	Patton	5,253	2,226	3,057
	Peach Orchard	551	222	304
	Sullivant	479	135	277
	Wall	190	87	119
	Total	**11,349**	**4,760**	**6,638**
Iroquis County	Loda	1,429	676	772
	Total	**1,429**	**676**	**772**
	Grand Total	**218,625**	**93,308**	**122,329**

Notes:

N/A Not Available

1. Population and household data for the year 2020 based on data from https://data.census.gov.
2. Employment data for 2020 from U.S. Census Bureau (web). Survey/Program: American Community Survey
3. Employment Data calculated from Population multiplied by Employment Rate (%), available on https://data.census.gov.

Electronic Filing: Received, Clerk's Office 08/26/2026

Civil & Environmental Consultants, Inc.

Table 1-1B
Rantoul Recycling and Transfer Station
Solid Waste Projections

	Townships	2020 Census Population[1]	2020 Census lbs. per capita/day (PCD)[2]	2020 Census Recycling Rate[2]	lbs./day[3]
Champaign County	Ayers	421	7.10	39%	1,823
	Brown	2,107	7.10	39%	9,125
	Champaign	11,264	7.10	39%	48,784
	Champaign City	88,302	7.10	39%	382,436
	Colfax	219	7.10	39%	948
	Compromise	1,323	7.10	39%	5,730
	Condit	486	7.10	39%	2,105
	Crittenden	337	7.10	39%	1,460
	Cunningham	38,336	7.10	39%	166,033
	East Bend	623	7.10	39%	2,698
	Harwood	610	7.10	39%	2,642
	Hensley	1,033	7.10	39%	4,474
	Kerr	183	7.10	39%	793
	Ludlow	4,077	7.10	39%	17,657
	Mahomet	13,679	7.10	39%	59,244
	Newcomb	1,377	7.10	39%	5,964
	Ogden	1,531	7.10	39%	6,631
	Pesotum	882	7.10	39%	3,820
	Philo	1,897	7.10	39%	8,216
	Rantoul	10,705	7.10	39%	46,363
	Raymond	354	7.10	39%	1,533
	Sadorus	948	7.10	39%	4,106
	Scott	999	7.10	39%	4,327
	Sidney	1,709	7.10	39%	7,402
	Somer	988	7.10	39%	4,279
	South Homer	1,492	7.10	39%	6,462
	St. Joseph	5,597	7.10	39%	24,241
	Stanton	514	7.10	39%	2,226
	Tolono	6,298	7.10	39%	27,277
	Urbana	7,556	7.10	39%	32,725
	Total	**205,847**		**lb./day**	**891,523**
Ford County	Button	232	7.10	37%	1,033
	Dix	598	7.10	37%	2,662
	Drummer	4,046	7.10	37%	18,012
	Patton	5,253	7.10	37%	23,385
	Peach Orchard	551	7.10	37%	2,453
	Sullivant	479	7.10	37%	2,132
	Wall	190	7.10	37%	846
	Total	**11,349**		**lb./day**	**50,522**
Iroquis County	Loda	1,429	5.09	37%	4,561
	Total	**1,429**		**lb./day**	**4,561**
	Grand Total	**218,625**		**lb./day**	**946,606**
				tons/year[4]	**172,756**

Notes:

1. Populations totals for 2020 were taken from Table 1-2.
2. The values for pounds per capita per day and the recycling percentages were taken from each individual county solid waste management plan or the Illinois Commodity/Waste Generation and Characterization Study Update dated March 30, 2015.
3. Pounds per day was calculated by taking the Population Census * pound per capita day * (100% - recycling rate %).
4. Tons per year was calculated by dividing the total pounds per a day by 2000 pounds per a ton and multiplying by 365 days per year.

Electronic Filing: Received, Clerk's Office 08/26/2026

Civil & Environmental Consultants, Inc.

Table 1-3
Champaign County Waste Haulers

Applicant	# of Collection Vehicles in 2025	# of Collection Vehicles in 2024
The Mule Junk Removal of Champaign County	2	1
Contractors Disposal, Inc.	1	1
Tyson's Disposal, LLC	2	2
Republic Services of Urbana, Inc.	23	24
ABC Sanitary Hauling & Recycling	6	11
JC Parr Company d.b.a. Dale Levitt Disposal	3	3
Captian Hook of Champaign, Inc.	3	3
Advantage Disposal Services	3	3
Chris's Service Company	7	8
Bulldog Disposal Services, Inc.	5	5
Saftey-Kleen Systems, Inc.	7	4
Waste Management of Illinois - Decatur and Charleston Sites	3	3
Midwest Fiber Normal, LLC	3	3
Mervis Recycling of Urbana	2	2
Area Garbarge Service	1	1
Jordan Fox's Junk Removal	3	4
Area Disposal Service, Inc.	28	28
Mel's Sanitation Service, LLC	2	2
Two Men And A Junk Truck	1	0
Freedom Waste Management, Inc. d.b.a. Illini Recycling	13	12
TOTAL	**118**	**120**

Note 1 - Number of vehicles based on FOIA request from Champaign County.

Civil & Environmental Consultants, Inc.

R-54

Table 1-6
Rantoul Recycling and Transfer Station
Summary of Mileage, Fuel and Emissions Savings

	Current							Anticipated with Rantoul RTS							
	# of Trucks	Tons per day	Miles/ day-truck	total miles per day	Fuel Mileage (mpg)	fuel used per day (gallons)	Emissions (pounds C02)	# of Trucks (or trips)	tons per day	Miles/ day-truck (or trip)	total miles per day	Total Miles % of Current	Fuel Mileage (mpg)	fuel used per day (gallons)	Emissions (pounds C02)
Packer Trucks-MSW	15	158	175.6	2634	4.31	611.2	13678.0	9	158	79.6	716	27%	4.31	166.2	3720.4
Roll Off Trucks-MSW	4	32	175.6	702	5.14	136.7	3058.5	2	32	79.6	159	23%	5.14	31.0	693.3
Transfer Trailesr (to landfill)	0	NA	NA	NA	NA	NA	NA	8	190	112	925	NA	6.20	149.3	3340.5
TOTAL		**190**		3337		747.8	16736.5		**190**		1801			346.5	7754.2
Savings per year (266 days)											**408,432**			**106,761**	**2,389,305**
Savings - 20 year operating period											**8,168,642**			**2,135,214**	**47,786,099**

Electronic Filing: Received, Clerk's Office 08/26/2026

ATTACHMENT 1-A

AFFIDAVIT FROM MATTHEW COULTER

Electronic Filing: Received, Clerk's Office 08/26/2026

AFFIDAVIT

Matthew Coulter being first duly sworn on oath deposes and states as follows.

1. That I am of legal age, under no disability and have personal knowledge of the matters contained herein.
2. That I am a Regional Director – Strategic Initiatives of Area Disposal Service, Inc. (Area Disposal).
3. As part of my career in the waste industry, I have had management responsibilities for waste hauling and disposal services in Champaign County for over twenty years.
4. Area Disposal does not currently nor has it historically routinely used the Republic Services Urbana Transfer Station for waste disposal due to excessively high pricing.
5. The price per ton (or rate) that Area Disposal is charged for the acceptance of MSW at the Republic Services Urbana Transfer Station was approximately $114 per ton (not including additional fees) as of October 2024 (see attached invoice).
6. The price per ton (or rate) that Area Disposal is charged for the acceptance of MSW at the Republic Services Urbana Transfer Station is approximately $125 per ton (not including additional fees) as of November 2025 (see attached invoice).
7. If the Rantoul Recycling and Transfer Station (Rantoul RTS) is permitted to accept MSW and SSR, the MSW that Area Disposal collects from the Service Area is planned to be delivered to the Rantoul RTS and transferred to the Clinton Landfill for disposal. The Rantoul RTS would provide the following benefits.
   - Internalization of transfer and disposal fees, which will improve margins
   - Operational efficiencies (e.g., parking trucks at transfer station)
   - Long term control of transfer and disposal costs
   - Greater certainty for capital investments

   In a competitive environment, the cost savings from the above benefits would result in improved cost control to Area Disposal's customers, including the municipalities that Area Disposal serves.

Further Affiant sayeth not.

Dated December 16, 2025

Signed Matthew K Coulter

Signed and sworn before me, a notary public, this 16 day of December, 2025

OFFICIAL SEAL
CAITLIN D ALWAN
NOTARY PUBLIC, STATE OF ILLINOIS
MY COMMISSION EXPIRES: 12/29/2025

Electronic Filing: Received, Clerk's Office 08/26/2026

URBANA TRANSFER STATION - 4555
PO BOX 932899
CLEVELAND, OH 44193
(309) 585-3724

INVOICE

Invoice Date 10/15/2024
Invoice No 4555-000015292
Customer No 4-4555-0001079

Page No Page 1 of 1
Due Date UPON RECEIPT

GFL ENVIRONMENTAL
ATTN: ACCOUNTS PAYABLE
PO BOX 9071
PEORIA, IL 61612

Current Charges	Total Amount Due
$926.38	$6,399.43

Please pay total amount due

Billing Questions? Call (309) 585-3724

Thank you for your business! Please be sure to remit payments to our lockbox address shown on the bottom of the invoice.

Date	Code	Description	Reference	Rate	Quantity	Amount
		Balance forward :				$5,473.05
		Payments :				$0.00
		Adjustments :				$0.00
		Invoices :				$0.00
10/02	AA	MSW	Y6-1108424	113.94	4.17 TN	$475.13
10/02	{1	ENVIRONMENTAL FEE 1	SC168369	19.71	1.00	$19.71
10/02	{1	($19.71 / Ticket)ENVIRONMENTAL FEE 1 $1				
10/02	}1	FUEL RECOVERY FEE	SC168370	8.57	1.00	$40.72
10/02	}1	(8.57% / Ticket)FUEL RECOVERY FEE				
10/15	AA	MSW	Y6-1109152	113.94	2.72 TN	$341.82
10/15	{1	ENVIRONMENTAL FEE 1	SC168669	19.71	1.00	$19.71
10/15	{1	($19.71 / Ticket)ENVIRONMENTAL FEE 1 $1				
10/15	}1	FUEL RECOVERY FEE	SC168670	8.57	1.00	$29.29
10/15	}1	(8.57% / Ticket)FUEL RECOVERY FEE				

Material / Fee Summary

{1	ENVIRONMENTAL FEE 1	2.00	$39.42
}1	FUEL RECOVERY FEE	2.00	$70.01
AA	MSW	6.89 TN	$816.95

Current	31-60 Days	61-90 Days	Over 90 Days	Total Amount Due
$2,962.20	$2,579.94	$857.29	$0.00	$6,399.43

please return this portion below with your payment. Do not attach check stub.

URBANA TRANSFER STATION - 4555
PO BOX 932899
CLEVELAND, OH 44193
(309) 585-3724

Invoice Date 10/15/2024
Invoice No 4555-000015292
Customer No 4-4555-0001079

Current Charges $926.38
Total Amount Due $6,399.43
Amount Paid: _____

Please write your account number on your check and make payable to:

Please Return Payment to: URBANA TRANSFER STATION - 4555
PO BOX 932899
CLEVELAND, OH 44193

GFL ENVIRONMENTAL
ATTN: ACCOUNTS PAYABLE
PO BOX 9071
PEORIA, IL 61612

PLEASE NOTE OUR REMIT TO ADDRESS HAS CHANGED EFF 6/1/16.

PLEASE RETURN PAYMENT TO PO BOX 932899, CLEVELAND, OH 44193

R-57

Electronic Filing: Received, Clerk's Office 08/26/2026

URBANA TRANSFER STATION - 4555
PO BOX 932899
CLEVELAND1OH 44693
(840) 308-2354

INVOICE

Invoice Date 66/65/2725
Invoice No 4555-777765852
Customer No 4-4555-7776709

Page No Page 6 of 6
Due Date UPON RECEIPT

GFL ENVIRONMENTAL
ATTN: ACCOUNTS PAYABLE
4077 N STERLING
PEORIA1IL , 6, 65

Current Charges	Total Amount Due
$1,376.38	$10,642.18

Please pay total amount due

Billing Questions? Call (840) 308-2354

Thank you for your business! Please be sure to remit payments to our lockbox address shown on the bottom of the invoice.

Date	Code	Description	Reference	Rate	Quantity	Amount
		Balance forward :				$912, 5.87
		Payments :				$7.77
		Adjustments :				$7.77
		Invoices :				$7.77
66/70	AA	MSW	Y, -662084,	625.33	, .86 TN	$853.57
66/70	{6	ENVIRONMENTAL FEE 6	SC605340	69.06	6.77	$69.06
66/70	{6	($69.06 / Ticket)ENVIRONMENTAL FEE 6 $6				
66/70	}6	FUEL RECOVERY FEE	SC605348	04., 7	6.77	$04., 7
66/70	}6	(8.04% / Ticket)FUEL RECOVERY FEE				
66/67	AA	MSW	Y, -6620925	625.33	2.04 TN	$30, .77
66/67	{6	ENVIRONMENTAL FEE 6	SC605306	69.06	6.77	$69.06
66/67	{6	($69.06 / Ticket)ENVIRONMENTAL FEE 6 $6				
66/67	}6	FUEL RECOVERY FEE	SC605302	32.8,	6.77	$32.8,
66/67	}6	(8.04% / Ticket)FUEL RECOVERY FEE				

Material / Fee Summary

{6	ENVIRONMENTAL FEE 6	2.77	$39.42
}6	FUEL RECOVERY FEE	2.77	$670.4,
AA	MSW	9.55 TN	$61229.57

Current	31-60 Days	61-90 Days	Over 90 Days	Total Amount Due
$, 14, 8.49	$41603., 9	$7.77	$7.77	$671, 42.68

please return this portion below with your payment. Do not attach check stub.

URBANA TRANSFER STATION - 4555
PO BOX 932899
CLEVELAND1OH 44693
(840) 308-2354

Invoice Date 66/65/2725
Invoice No 4555-777765852
Customer No 4-4555-7776709

Current Charges $6130, .38
Total Amount Due $671, 42.68
Amount Paid: _____

Please write your account number on your check and make payable to:

Please Return Payment to: URBANA TRANSFER STATION - 4555
PO BOX 932899
CLEVELAND1OH 44693

GFL ENVIRONMENTAL
ATTN: ACCOUNTS PAYABLE
4077 N STERLING
PEORIA1IL , 6, 65

PLEASE RETURN PAYMENT TO PO BOX 932899, CLEVELAND, OH 44193

R-58

Electronic Filing: Received, Clerk's Office 08/26/2026

ATTACHMENT 1-B

REPUBLIC SERVICES PROPOSAL FOR BID 2021-20

Electronic Filing: Received, Clerk's Office 08/26/2026

REPUBLIC SERVICES

February 1, 2021

Carla Murillo
Procurement Manager
City of Bloomington
109 East Washington Street
Bloomington, Illinois 61701

RE: Solid Waste Disposal Services City of Bloomington & Town of Normal
BID #2021 – 20

Dear Carla,

Thank you for the opportunity to offer Solid Waste Disposal Pricing. The attached RFP has been completed in its entirety with requested information and pricing.

This material would be taken to our Bloomington Transfer Station Facility located 2112 W. Washington Street Bloomington, Illinois. This MSW material would be loaded into transfer trailer and then taken to Republic's Livingston County Landfill in Pontiac, Illinois. Each load would be weighed by a certified scale and the driver would receive a ticket with each load.

IEPA Permit #'s:

Bloomington Transfer	113804002
Livingston Landfill	1058210002

Bloomington Transfer Station Hours of Operation:

Monday – Friday 7:00AM – 3:30PM
Saturday – 7:30AM – 11:30PM

Attached:

- Copy of Signed Completed RFP
- Copy of Signed Addendum # 1: January 6, 2021
- Copy of signed Addendum # 2 January 19, 2021
- Copy of Non-Discrimination and Equal Employment Opportunity
- Copy of Anti-Harassment Policy
- Copy of Certificate of Liability Insurance
- Copy of Illinois Environmental Protection Agency Permit #1977-3-DE/OP Bloomington Transfer Station

Electronic Filing: Received, Clerk's Office 08/26/2026

- Copy of Illinois Environmental Protection Agency Permit Livingston Landfill
- Secretary of State Certificate of Good State Illinois Certification
- Certificate of Secretary

Republic remains committed to providing the City of Bloomington a disposal Facility at our IEPA permitted Bloomington Transfer Facility.

Please feel free to contact me at (309) 275-5498 to further discuss.

Regards,

[redacted]

Dan Winters
General Manager
Republic Services
Central Illinois Business Unit

Electronic Filing: Received, Clerk's Office 08/26/2026

INVITATION TO BID

BID #2021-20

SOLID WASTE DISPOSAL SERVICES
CITY OF BLOOMINGTON & TOWN OF NORMAL

Mailing Address:	Office of the City Clerk City of Bloomington 109 East Olive Street Bloomington, IL 61701
Contact Person(s):	Robert Yehl Assistant Director of Public Works byehl@cityblm.org Wayne Aldrich Director of Public Works waldrich@normal.org Carla A Murillo Procurement Manager cmurillo@cityblm.org
Bids Due:	**Tuesday, February 2, 2021 @ 1:00 p.m. CT**
Bids Virtually Opened:	**Tuesday, February 2, 2021 @ 2:00 p.m. CT**

Electronic Filing: Received, Clerk's Office 08/26/2026

CITY REQUIREMENTS TABLE OF CONTENTS

Cover Page	1
Table of Contents	2
Invitation to Bid/Legal Notice	3
Background	4
Bid Identification	4
Definitions	4
Questions	4
Bid Package	4
Rejection of Bids	5
Bid Submission	5
Ex Parte Communication	5
No Bid	5
Delivery	5
Full Pricing and Contingencies	5
Payment Terms	6
Bid Evaluation	6
Quality	6
Recourse for Unsatisfactory Materials	6
Investigation	6
Proof of License, Permit, Etc.	6
Bid Form	6
Specification	6
Alternates	6
Brand Name, Model, Scope of Work, etc.	7
Default by Vendor	7
Bid Opening	7
Bid Bond	7
Cancellation	7
Withdrawal of Bid	7
Rejection of Bids, Waivers of Irregularity	7
Protests	8
Local Preference Policy	8
Security	8
Purchase Extension	8
Indemnification	8
Insurance Requirements	9
Gift Ban Act	10
Vendor Compliance	10
Insurance	10
Non-Discrimination	10
Equal Opportunity Guidelines	10
Local Preference Policy Certification	12
References	13
EEO Statement	14
EEO Plan – Certification Signature	15
Contract Compliance Report	18
Specifications	19
Bid Form	24
Bid Checklist	26
Tentative Bid Schedule	26
Sample Contract	27

Electronic Filing: Received, Clerk's Office 08/26/2026

LEGAL NOTICE OF

INVITATION TO BID
CITY OF BLOOMINGTON, ILLINOIS

Sealed bids will be received until **Tuesday, February 2, 2021 at 1:00 p.m. Central Time,** and will be virtually opened on **Tuesday, February 2, 2021 at 2:00 p.m. Central Time**.

Bid #2021-20
Solid Waste Disposal Services
for the City of Bloomington and Town of Normal

We encourage bidders and the public to participate remotely, if possible, by watching/listening to the bid opening remotely via the City's livestream: www.cityblm.org/bidopening.

Bid documents are to be obtained from the City of Bloomington Procurement Division by sending an email to **procurement@cityblm.org.** Respondents must provide their complete name, company name, street address, telephone number, fax number and their email address. Only bidders recorded with the City, as a bona fide plan holder, are eligible for the contract award. Due to the unprecedented situation and the need to limit the community spread of COVID-19, the City of Bloomington is strongly encouraging that all vendors send their sealed bid submissions by USPS or Courier to the City of Bloomington, Attn: Office of the City Clerk-Bid Submissions, 109 East Olive Street, Bloomington, IL, 61701. If you must turn in a bid in person, you may take it to Grossinger Motors Arena, 101 S. Madison, Bloomington IL, outside box office windows on the northwest corner of Front and Madison between 8:00 a.m. and 4:30 p.m., Monday – Friday.

You may not respond with a faxed or electronic bid submission. All bid submissions must be in a sealed envelope with the Bid #2021-20 Solid Waste Disposal Services clearly marked on the outside of the envelope/package. Two (2) original complete bid packets and one (1) copy on a USB drive of the complete bid packet are to be submitted. The City of Bloomington and Town of Normal reserve the right to reject any and all bids and to waive technicalities.

The City of Bloomington and Town of Normal require all bidders doing business with the City not to discriminate on the basis of race, age, color, religion, gender, ancestry, national origin, marital status, mental or physical disability unrelated to ability, familial status or sexual orientation.

A virtual pre-bid meeting will be held on Thursday, January 7, 2021 at 10:30 a.m. central time. All interested parties that wish to attend the virtual pre-bid meeting must send an email request to Bob Yehl (byehl@cityblm.org) **AND** Carla Murillo (cmurillo@cityblm.org) by 5:00 p.m. central time on Tuesday, January 5, 2021. While attendance is not mandatory, it is recommended that all bidders attend, and subcontractors are welcome.

Bids in excess of $10,000 must be accompanied by a Bid guaranty which shall not be less than ten percent (10%) of the amount of the Bid. Bid guaranty may be a cashier's check, money order, certified bank check, or a surety bond. All guaranties, except surety bonds, will be deposited and reimbursement checks and surety bonds will be issued to unsuccessful bidders following the bid award.

Published **Monday, December 21, 2020** Bloomington, Illinois
Carla A Murillo, Procurement Manager

Electronic Filing: Received, Clerk's Office 08/26/2026

TERMS AND CONDITIONS FOR BIDDERS

BACKGROUND:
The City of Bloomington, incorporated in 1856, is a home rule unit of government under the 1970 Illinois Constitution. The City of Bloomington is located in the heart of Central Illinois, approximately 125 miles southwest of Chicago, 155 miles northeast of St. Louis and 64 miles northeast of Springfield, the State Capital. The City of Bloomington is the County Seat of McLean County, the largest county in Illinois (approximately 762,240 acres). The results of the 2010 Census shows the City now has a population of 76,610 citizens. The economic strength of the City of Bloomington metropolitan area is well diversified with no single dominating industry.

The Town of Normal is a vibrant Midwestern community located in Central Illinois Incorporated in 1867. Normal is the proud home of Illinois State University and the Rivian Automotive plant. In 2010, the United Sates Census Bureau certified Normal's population at 52,497. Residents and visitors enjoy Normal's premier educational institutions, exceptional recreational amenities and a diverse employment base.

The successful bidder will sign individual contracts with the City of Bloomington and the Town of Normal, IL.

BID IDENTIFICATION: Bidders are required to legibly write the bid number, bid name and due date in the lower left corner. Do **not** submit bids by fax or electronically. Bids submitted by fax or electronically cannot be accepted or considered for award. Sealed bids are required.

DEFINITION: "City" shall mean the City of Bloomington, Illinois and the Town of Normal, Illinois.

QUESTIONS: Questions regarding bid/proposal procedures shall be directed to Carla Murillo, Procurement Manager, during regular working hours, telephone 309-434-2277.

Questions regarding the technical nature or performance expectations of the equipment, material, or service in the bid shall be submitted in writing to:

Robert Yehl
Assistant Director of Public Works
byehl@cityblm.org

Wayne Aldrich
Director of Public Works
waldrich@normal.org
309-454-9571

Carla A Murillo
Procurement Manager
cmurillo@cityblm.org
309-434-2277

Questions will be answered in the form of written addenda and provided to all Bidders, as per State of Illinois statutes. Copies of all addenda shall be signed and attached to your bid as proof of receipt.

BID PACKAGE: If you have obtained this bid from the City of Bloomington web site or from a source other than directly from the Procurement Division, you are not on record as a plan holder. The Procurement

Electronic Filing: Received, Clerk's Office 08/26/2026

Division takes no responsibility to provide addenda to parties not listed by the City as plan holders. It is the bidder's responsibility to check with the Procurement Division prior to submitting your bid to ensure that you have a complete, up-to-date package. The original bid document maintained and on file in the City Clerk's office shall be considered the official "copy". Copies of all addenda shall be attached to the bid document as proof of receipt.

REJECTION OF BIDS: The City reserves the right to reject any and all bids and to waive technicalities and to accept that bid which is to be considered to be in the best interest of the City. Any such decision shall be considered final.

If either municipality does not approve the contract through a joint agreement, then the approved contract will be modified to reflect only the approving municipality. All remaining provisions and pricing of this Contract shall remain in full force and effect.

BID SUBMISSION: Two (2) original complete bid packets and one (1) copy on a USB drive of the complete bid packet are to be submitted. Due to the unprecedented situation and the need to limit the community spread of COVID-19, the City is strongly encouraging that all vendors send their sealed bid submissions by USPS or Courier to the City of Bloomington, Attn: Office of the City Clerk-Bid Submissions, 109 East Olive Street, Bloomington, IL, 61701. If you must turn in a bid in person, you may take it to Grossinger Motors Arena, 101 S. Madison, Bloomington IL, outside box office windows on the northwest corner of Front and Madison between 8:00 a.m. and 4:30 p.m., Monday – Friday.

EX PARTE COMMUNICATION: Please note that to insure the proper and fair evaluation of a proposal or bid, the City prohibits ex parte communication (i.e., unsolicited) initiated by the Bidder to a City Official (i.e. City Aldermen, Mayor, etc.) or Employee evaluating or considering the proposal/bid prior to the time a selection has been made. Communication includes but is not limited to fax, phone calls, email and personal visit. Communication between Bidder and the City shall be directed in writing to the Procurement Manager or designated contact person only. The Procurement Manager will obtain the information or clarification needed. Ex parte communication may be grounds for disqualifying the offending Bidder from consideration or award of the proposal/bid and repeat offenders may be disqualified from future projects.

NO BID: Bidders who are not able to submit a bid for this product/service, but wish to receive bid tabulation or to be assured of remaining on the City's bid list for similar products/services should clearly indicate on the envelope the designation "**NO BID**". Envelopes so marked will not be considered as a formal bid, but the contents will be responded to in the appropriate manner by City staff. The City will issue a purchase order to the successful Bidder.

DELIVERY: F.O.B. Bloomington or Normal, IL FREIGHT PREPAID.
Delivery will be considered in making the award and the bidders shall state, in the spaces provided, expected delivery after receipt of Purchase Order. Failure to meet said delivery promises without prior consent of the City Procurement Manager may be considered a breach of faith.

FULL PRICING AND CONTINGENCIES: Please quote your best net price including delivery and discounts to meet the approval of the City. Prices shall be stated in units of quantity specified. No additional charges shall be passed to the City, including any applicable taxes, delivery or surcharges. Prices quoted shall be the final cost to the City. The City shall hold the successful bidder to the bid pricing. Additional charges for contingencies discovered by the bidder at any time after the date of the opening of this bid may not be considered for payment by the City. All prices and notations shall be in ink or typewritten. Mistakes may be crossed out and corrections made in ink and must be initialed and dated in ink by the person signing the bid. In case of error in the extension of prices, the unit price shall govern.

Electronic Filing: Received, Clerk's Office 08/26/2026

PAYMENT TERMS: If payment terms are not indicated, terms of NET 30 days shall be applied by the City. Payment terms to apply after receipt of invoice or final acceptance of the products/services, whichever is later. Payment terms offering less than 20 days for payment will not be considered.

BID EVALUATION: Bids will be evaluated and awarded to the lowest responsible, responsive bidder. The quality of the products/services, conformity with the specifications, suitability to the requirements, delivery terms including length of time for delivery, qualifications and references will be taken into consideration in making an award. The City will be the sole judge of acceptability of any products offered.

QUALITY: The scope of work or specification is intended to procure a quality product or service. Quality must be proven to the satisfaction of the City to meet or exceed requirements as set forth in the scope of work. Items shall be manufactured according to the highest traditions of the industry and shall meet all commercial standards of quality. The City will be the sole judge of acceptable products/services. Unacceptable products/services will be rejected and suitable price adjustments be made.

It is the bidder's task to be familiar with the referenced items and to offer only products/services of equal or greater quality. Samples, when requested, must be furnished free of expense, and upon request, if not destroyed, may be returned at the Bidder's risk and expense.

RECOURSE FOR UNSATISFACTORY MATERIALS: Payment shall be contingent upon the City's inspection of and satisfaction with completed work. Any defective work or materials, non-conformance to bid specifications, damaged materials, or unsatisfactory installation shall be corrected to the City's satisfaction by the successful bidder at no additional charge.

INVESTIGATION: Bidders must acquaint themselves with the policies of the City, and may do so by contacting the Procurement Manager. All questions as to the meaning of the scope of work must be resolved prior to the bid submission deadline. It is the Bidder's responsibility to check with the Procurement Division prior to submitting their bid to ensure that they have received all Addenda issued.

PROOF OF LICENSE, PERMIT, ETC.: Bidders must provide proof of conformance with any applicable Federal/State/Local permits, licenses, certifications, etc., as stated in the scope of work/specifications section. It is the Bidder's responsibility to inquire about requirements of performing the job with the requesting department contact person.

BID FORM: This entire package shall be returned complete and intact with all information requested and all questions answered. Failure to do so may be considered grounds for rejection of the bid. The amount of the bid shall be stated on the form(s) provided. Variations from the Specification shall be noted on a separate sheet of paper. If more space is required to furnish a description of the product/service offered or delivery/start terms, the bidder may attach a letter hereto, which will be made a part of the bid.

SPECIFICATION: The Specification may, in some areas, be unique to a particular brand of product or type of service. If this situation exists, equal consideration will be given to all Bidders whose items, in the opinion of the City, meets or exceeds performance in these areas.

ALTERNATES: Trade names are used solely for the purpose of setting minimum standards of quality and performance and are not to be construed as exclusionary. Bidders are encouraged to contact the City Procurement Department prior to the bid opening for the purpose of clarifying specifications.

Electronic Filing: Received, Clerk's Office 08/26/2026

BRAND NAME, MODEL, SCOPE OF WORK: All Bidders shall include with their bid brand names, models, catalog numbers, and complete information about the items they are offering. **Safety Data Sheets (SDS), are required for all chemical Bids.** Failure to do so may be considered grounds for rejection of the bid.

DEFAULT BY VENDOR: In the event of default by bidder, the City reserves the right to procure the products/services from other sources and hold the bidder liable for any excess costs occasioned thereby. Additionally, a contract shall not be assignable by the Bidder in whole or in part without the written consent of the City.

BID OPENING: Telephone/Fax/Verbal Offers Will Not Be Accepted.
Bids shall be publicly virtually opened and read at the time and date set. It is the responsibility of the bidder to see that the bid is in the Office of the City Clerk, by the specified time and date. The date of the postmark will not be considered. Bids received after the time and date set may be returned unopened to the Bidder. This includes Bids not received as a result of mail delays.

BID BOND: Bids in excess of $10,000 must be accompanied by a Bid guaranty which shall not be less than ten percent (10%) of the amount of the Bid. At the option of the Bidder, the guaranty may be a cashier's check, money order, certified bank check or a surety bond. All guaranties, except surety bonds, will be deposited and reimbursement checks and surety bonds will be issued to unsuccessful bidders following the bid award. The Bid bond shall be secured by a guaranty or a surety company listed in the latest issue of U.S. Treasury Circular 570. The amount of such Bid bond shall be within the maximum amount specified for such Company in said Circular 570. No Bid will be considered complete unless it is accompanied by the required guaranty of a cashier's check, money order, certified bank check made payable to the City of Bloomington; or a surety bond. The Bid guaranty shall insure the execution of the Agreement and the furnishings of the surety bond or bonds by the successful Bidder, all as required by the Contract Documents.

Revised Bids submitted before the opening of Bids, whether forwarded by mail or telegram, if representing an increase in excess of two percent (2%) of the original Bid, must have the Bid guaranty adjusted; accordingly, otherwise the Bid will not be considered.

CANCELLATION: Failure to comply with the terms and conditions as herein stated shall be cause for cancellation of the contract. The City will provide a written notice of unsatisfactory performance and the bidder will be allowed adequate time, typically thirty (30) days, to take corrective action and accomplish satisfactory control. If at the end of the stated time to correct, the City may deem that the bidder performance is still unsatisfactory, the contract may be canceled. The exercise of its right of cancellation shall not limit the City's right to seek any other remedies allowed by law.

WITHDRAWAL OF BID: A bidder may withdraw a bid prior to the deadline for bid submittal by submitting a request for its withdrawal. Bids received after the time for opening bids or received at any place other than the place specified will not be considered. Except as otherwise provided by regulation, all decisions to permit the correction or withdrawal of bids, or to cancel awards or contracts based on bid mistakes, will be submitted in writing and will be supported by a written determination made by the Procurement Manager.

REJECTION OF BIDS, WAIVERS OF IRREGULARITY: The City reserves the right to reject any or all bids, to waive irregularities, and to accept that bid which is considered to be in the best interest of the City. Any such decision shall be final.

Electronic Filing: Received, Clerk's Office 08/26/2026

PROTESTS: Any actual or prospective bidder who is aggrieved in connection with this bid or award may protest to the City Manager within ten (10) days of the award. The protest must be submitted in writing to the Procurement Division immediately after such aggrieved person knows or should have known of the facts.

LOCAL PREFERENCE POLICY: The City has adopted a Local Preference Purchasing Policy that is applicable in the City's competitive bidding processes, except in situations where external funding sources do not permit local preference purchasing allowances, in situations where the products or services being purchased are available through a cooperative purchasing program, or where waived by the City. Bidders should complete the Local Preference Purchasing Policy Certificate if bidder qualifies as a local bidder under the Policy. The Policy is in place to address, in part, responsiveness and related concerns of the City. After submission, but prior to award, an offeror claiming local preference will be required to submit evidence demonstrating all the criteria for local preference is met.

SECURITY: The bidder represents and warrants to the City that neither it nor any of its principals, shareholders, members, partners or affiliates, as applicable, is a person or an entity named as a Specially Designated National and Blocked Person (as defined in Presidential Executive Order 13224) and that it is not acting, directly or indirectly, for or on behalf of a Specially Designated or Blocked Person. The bidder further represents and warrants to the City that the bidder and its principals, shareholders, members, partners, or affiliates as applicable, are not directly or indirectly, engaged in, and are not facilitating, the transactions contemplated by this Agreement on behalf of any person or entity named as Specially Designated National and Blocked Person. The bidder hereby agrees to defend, indemnify and hold harmless the City, and all City elected or appointed officials, officers, employees, agents, representatives, engineers and attorneys, from and against any and all claims, damages, losses, risks, liabilities, and expenses (including reasonable attorneys' fees and costs) arising from or related to any breach of the foregoing representation and warranties.

PURCHASE EXTENSION: This contract shall be offered for purchases to be made by other governmental units within the State of Illinois as authorized by the Government Joint Purchasing Act. All purchases and payments made under this authority shall be made directly by the governmental unit to the vendor. The City shall not be responsible in any way for such purchase orders or payments. All terms and conditions of this contract shall apply to all purchases placed by another governmental unit.

INDEMNIFICATION: Bidder shall indemnify, defend with counsel approved by City, and hold harmless City, its officers, officials, employees and volunteers from and against all liability, loss, damage, expense, cost (including without limitation reasonable attorney's fees, expert fees and all other costs and fees of litigation) of every nature arising out of or in connection with Bidder's performance of work hereunder or its failure to comply with any of its obligations contained in this Agreement, regardless of City's passive negligence, but excepting such loss or damage which is caused by the sole active negligence or willful misconduct of the City. Should City in its sole discretion find Bidder's legal counsel unacceptable, then Bidder shall reimburse the City its costs of defense, including without limitation reasonable attorney's fees, expert fees and all other costs and fees of litigation. The Bidder shall promptly pay any final judgment rendered against the City (and its officers, officials, employees and volunteers) covered by this indemnity obligation. It is expressly understood and agreed that the foregoing provisions are intended to be as broad and inclusive as is permitted by the law of the State of Illinois and will survive termination of this Agreement.

Electronic Filing: Received, Clerk's Office 08/26/2026

CITY OF BLOOMINGTON, IL
INSURANCE REQUIREMENTS FOR CONTRACTS

Prior to the commencement of work governed by any contract between the **CITY** and any Third Party, the Third Party shall provide the **CITY** satisfactory evidence of insurance coverage via a valid Certificate of Insurance showing coverage provided by a carrier who has no less than an A- VIII rating with AM Best's Rating. The Certificate must list the **CITY**, its employees, and officials as additional named insured's. The Certificate must also list coverage as primary and non-contributory, include a waiver of subrogation, and include a thirty (30) days cancellation notice.

All coverage, as follows shall be maintained through the life of the contract and include, as a minimum:

General Liability – $2,000,000 per occurrence/$2,000,000 aggregate Bodily Injury and Property Damage

Worker's Compensation – $1,000,000 Each Accident/$1,000,000 Disease-Each Employee/$1,000,000 Disease-Policy Limit

Automobile Liability – $2,000,000 with $5,000 medical payments

Umbrella/Excess Liability – $5,000,000

Electronic Filing: Received, Clerk's Office 08/26/2026

1) GIFT BAN ACT: I certify that Republic Services of Bloomington (print company name), its officers, employees and agents, have not made any gifts to officers or employees of the City of Bloomington in violation of Illinois Compiled Statutes, 5 ILCS 430/Article 10, State Officers and Employees Ethics Act (commonly known as the "Gift Ban Act"). The Act is available online at: http://www.ilga.gov/legislation/ilcs/ilcs4.asp?DocName=000504300HArt%2E+10&ActID=2529&ChapterID=2&SeqStart=1700000&SeqEnd=2200000 .

I further certify that as a bidder, I have not violated the Bloomington City Code Chapter 2, Administration; Article I, Section 8: Officers and Employees Generally: Section 8a Prohibition on the Solicitation and Acceptance of Gifts; and 8b State Officials and Employees Ethics Act. This section of the Bloomington City Code is available online at https://www.cityblm.org/government/codes-ordinances.

2) Vendor Compliance with Public Act 85-1295: The vendor certifies by signing this statement that this bid is made without prior understanding, agreement or accord with any other person submitting a bid for the same product or service and that this bid is in all respects bona fide, fair and not the result of any act of fraud or collusion with another person engaged in the same line of business or commerce. Furthermore, the firm certifies that it is not barred from bidding on this contract as a result of a conviction for the violation of State laws prohibiting bid-rigging or bid-rotating. Any false statement hereunder constitutes a felony and can result in a fine and imprisonment as well as civil damages. The vendor also understands that failure to sign this statement will make the bid non-responsive and unqualified for award.

3) Insurance: Vendors providing a service or installing equipment on or about City property shall provide to the City evidence of Comprehensive, Liability, and Workman's Compensation insurance prior to commencement of work on City property. The vendor guarantees to save the City, its agents or employees, harmless from liability of any nature or kind, for use of any copyright, composition, secret process, patented or unpatented invention, articles or appliances furnished or used in the performance of the contract, or which the vendor is not the patentee, assignee, or licensee.

Furthermore, the vendor hereby agrees to save and hold harmless and indemnify the City from and against all injury, death, damage, loss, claims and liability caused by or arising out of the performance of this agreement by the Vendor, its employees, agents or sub-vendors. This agreement extends to all claims, of any nature, whether made by the Vendor's employees or third parties.

4) NON-DISCRIMINATION: The City requires all Vendors doing business with the City not to discriminate against anyone on the basis of race, age, color, religion, gender, ancestry, national origin, marital status, mental or physical disability unrelated to ability, familial status or sexual orientation.

Vendors shall comply with the Illinois Human Rights Act, 775 ILCS 5/101 et seq., as amended and any rules and regulations promulgated in accordance therewith, including, but not limited to the Equal Employment Opportunity Clause, Illinois Administrative Code, Title 44, Part 750 (Appendix A), 775 ILCS 5/1-102 and constituting of a written EEO policy and a workforce profile that demonstrates its EEO practices. Furthermore, the Vendor or Vendors shall comply with the Public Works Employment Discrimination Act, 775 ILCS 10/0.01 et seq., as amended. The Vendor or Vendors must have a written sexual harassment policy, which meets Illinois Compiled State Statutes, 775 ILCS, 15/3.

5) EQUAL OPPORTUNITY GUIDELINES: The City requires all Vendors doing business with the City not to discriminate against anyone on the basis of race, age, color, religion, gender, sexual orientation, ancestry, national origin, and non-job-related disabilities. This program was approved by the City Council on May 27, 1974. In accordance with this program, the City shall require that the Vendor or

Electronic Filing: Received, Clerk's Office 08/26/2026

Vendors be familiar and comply in every respect with the provisions of this program. Information regarding the program may be obtained by contacting the Human Relations Department 309-434-2218.

By signing below, Contractor certifies compliance with each of the five provisions outlined above.

Dan Winters
Print Name & Date

[redacted]
Authorized Signature

American Disposal Services of Illinois, Inc dba Republic Services of Bloomington
Company Name

Electronic Filing: Received, Clerk's Office 08/26/2026

LOCAL PREFERENCE PURCHASING POLICY CERTIFICATION

The City has adopted a local preference purchasing policy. Under the terms of the policy local bidders may be granted a pre-determined preference in competitive bidding situations. Bids from qualified local bidders may receive the following adjustment to the submitted bid:

1. 5% up to a maximum of $2,500 on bids of $10,000 up to $50,000;
2. 4% up to a maximum of $10,000 on bids of up to $250,000;
3. 3% up to a maximum of $30,000 on bids of up to $1,000,000; and
4. $50,000 on bids of over $1,000,000.

For purposes of comparison and consideration in awarding contracts the preferential discount will be applied to the low bid of all qualified local bidders when determining the lowest responsible bid. The City Council reserves the right to waive or amend the local preference purchasing policy in connection with any bid, when it deems it in the best interest of the citizens of Bloomington and/or Normal.

A Local Bidder is defined as any business that meets all of the following criteria:

1. The business has established and maintained a physical presence within the County of McLean, via the ownership or lease of a building or a portion of a building for a period of not less than 12 consecutive months; and
2. The business employs a minimum of two full time employees at the McLean County location and those employees spend the majority of their work day and work week at the McLean County location; and
3. The business is legally authorized to conduct business within the State of Illinois and the County of McLean.

The undersigned hereby certifies to the City that it is a Local Bidder as defined above and qualifies for the Local Bidder Preference pursuant to the Local Preference Purchasing Policy.

Dan Winters
Print Name & Date

[redacted]
Authorized Signature

American Disposal Services of Illinois, Inc dba Republic Services of Bloomington
Company Name

Electronic Filing: Received, Clerk's Office 08/26/2026

REFERENCES:
Three (3) references are **required** with your bid. The references shall be from three different sources where you have provided the minimum specifications as required in this bid. Bidder may use the City as one reference if the Bidder has provided this equipment or service to the City since January 1, 2010.

(1.) Company Name: City of Bloomington

Company address: 109 E Olive Street

City: Bloomington State: Illinois Zip: 61701

Company Contact Name or Department: Bob Yale

Company Contact Telephone: 309-434-2225 Fax: 309-434-2201

Company Contact e-mail address: byehl@cityblm.org

(2.) Company Name: Town of Normal

Company address: PO Box 589

City: Normal State: Illinois Zip: 67161

Company Contact Name or Department: Danny Edwards

Company Contact Telephone: 309-454-9715 Fax:

Company Contact e-mail address: dedwards@normal.org

(3.) Company Name: Illinois State University

Company address: Box 9100

City: Normal State: Illinois Zip: 61790

Company Contact Name or Department: Andrew Bennett

Company Contact Telephone: 309-438-5031 Fax:

Company Contact e-mail address: abennet@ilstu.edu

Electronic Filing: Received, Clerk's Office 08/26/2026

EQUAL EMPLOYMENT OPPORTUNITY

In the event of the bidder's non-compliance with the provisions of this Equal Opportunity Clause, the Illinois Human Rights Act or the Rules and Regulations of the Illinois Department of Human Rights ("Department"), or the City of Bloomington's Contract Compliance Program, the bidder may be declared ineligible for future contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations, including the City of Bloomington, and the contract may be canceled or voided in whole or in part, and such other sanctions or penalties may be imposed or remedies invoked as provided by statute, ordinance or regulation. During the performance of this contract, the bidder agrees as follows:

(1) That it will not discriminate against any employee or applicant for employment because of race, color, religion, gender, sexual orientation, marital status, national origin or ancestry, age, physical or mental disability unrelated to ability, or an unfavorable discharge from military service; and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such under-utilization.

(2) That, if it hires additional employees in order to perform this bidder any portion thereof, it will determine the availability (in accordance with the Department's Rules and Regulations or those of the Human Relations Commission) of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.

(3) That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, gender, sexual orientation, marital status, national origin or ancestry, age, physical or mental disability unrelated to ability, familial status, or an unfavorable discharge from military service.

(4) That it will send to each labor organization or representative of workers with which it has or is bound by a collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the bidder's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any such labor organization or representative fails or refuses to cooperate with the bidder in its efforts to comply with such Act and Rules and Regulations, the bidder will promptly so notify the Department and Human Relations Commission and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.

(5) That it will submit reports as required by the Department's Rules and Regulations and Human Relations Commission, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations and those of the City of Bloomington's Contract Compliance Program.

(6) That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency and the Department for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations and those of the City of Bloomington's Contract Compliance Program.

(7) That it will include verbatim or by reference the provisions of this clause in every subcontract it awards under which any portion of the contract obligations are undertaken or assumed, so that such provisions will be binding upon such subbidder. In the same manner as with other provisions of this contract, the bidder will be liable for compliance with applicable provisions of this clause by such subbidders; and further it will promptly notify the contracting agency, the Department and the Human Relations Commission in the event any subbidder fails or refuses to comply therewith. In addition, the bidder will not utilize any subbidder declared by the Illinois Human Rights Commission or Human Relation Commission to be ineligible for contracts or subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations including the City of Bloomington.

Electronic Filing: Received, Clerk's Office 08/26/2026

CITY OF Bloomington ILLINOIS

Equal Opportunity Plan
109 E. Olive Street
Bloomington, IL 6170
(309) 434-2215

Failure to properly complete this form and submit with bid or proposal will result in your submission not being considered responsive and result in the denial of eligibility to bid or do business with the City for this project/services/goods. A copy of the Equal Opportunity plan for your firm should be included with this form and Section IV. Certification must be signed and dated.

Section I. Identification

1. Company Name and Address:

Name: American Disposal Services of Illinois

D/b/a: Republic Services of Bloomington

Address: 2112 West Washington Street

City/State/Zip: Bloomington IL 61705

Telephone Number(s) Area Code: 309-585-3715

Check one of the following:

Corporation x	Partnership	Individual Proprietorship	Limited Liability Corp.

2. Name and Address of the Company's Principal Office (answer only if not the same as above).

Name: Republic Services Inc

Address: 18500 Allied Way

City/State/Zip: Phoenix AZ 85054

3. Major activity of your company (product or service):
Waste Removal, Recycling, Transfer Stations, and Landfills

Electronic Filing: Received, Clerk's Office 08/26/2026

Section II. Policies and Practices

Description of EEO Policies and Practices

A. Is it the Company's policy to recruit, hire, train, upgrade, and discipline persons without regard to race, sex, color, religion, national origin, age, mental and/or physical disability, and sexual orientation?

YES __x__ NO _____

B. Has someone been assigned to develop procedures, which will assure that the EO policy is implemented and enforced by managerial, administrative, and supervisory personnel? If so, please indicate the name and title of the charged with this responsibility.

Name: Elizabeth Duross
Title: Sr Manager, Affirmative Action & Immigration
Telephone: 480-627-2767

C. Has the Company developed a written Equal Opportunity Plan? **Note: A copy of the Equal Opportunity Plan must be submitted with this form in order to be considered eligible to do business with the City.** If you would need technical assistance in developing your plan, please contact the Community Relations Office at: (309) 434-2215.

YES __x__ NO _____

D. Has the Company developed a written policy statement prohibiting Sexual Harassment? Please attach a copy of the policy statement.

YES __x__ NO _____

E. Have all recruitment sources been notified that the Company will consider all qualified applicants without regard to race, color, age, sex, national origin, religion, mental and/or physical disability, or sexual orientation?

YES __x__ NO _____

F. If advertising is used, does it specify that all qualified applicants will be considered for employment without regard to race, color, age, sex, national origin, religion, mental and/or physical disability, or sexual orientation?

YES __x__ NO _____

G. Has the bidder notified all of its sub-bidders of their obligations to comply with the Equal Opportunity requirements either in writing, by inclusion in subbidders or purchase orders?

YES __x__ NO _____

H. Is the Company a state certified minority/female owned business? If yes, please attach a copy of the state certification.

Electronic Filing: Received, Clerk's Office 08/26/2026

YES _____ NO __x__

I. Does the Company have collective bargaining agreements with labor organizations?

YES _____ NO __x__

J. Has the labor organization been notified of the Company's responsibility to comply with the Equal Employment Opportunity requirements in all contracts by the City of Bloomington?

YES _____ NO __x__

Section III. Employment Information

A. Please complete the company workforce analysis form on the bottom of this page. Use the number of employees as of the most recent payroll period. Be sure to complete all applicable columns.

B. Job Classifications (See descriptions attached)

C. Identify the geographical area(s) from which the company may reasonably recruit employees (use city, county, SMSA, or distance in miles from your company location.

D. If minorities and women are currently under-utilized in your workforce, please attach a copy of an explanation for your plan to recruit and hire minorities and women.

Section IV. Certification

The Company certifies that it has answered all of the foregoing questions truthfully to the best of its knowledge and belief. The Company also agrees that it will comply and abide by the City of Bloomington's Contract Compliance Ordinance and the City of Bloomington Human Relations Ordinance.

[redacted]	Dan Winters, General Manager	217-391-0631	2-1-2021
Signature:	**Print Name & Title**	**Telephone Number**	**Date**

Electronic Filing: Received, Clerk's Office 08/26/2026

CITY OF BLOOMINGTON
CONTRACT COMPLIANCE
WORKFORCE ANALYSIS

*M = male/F=female

Please See Attached

Job Categories	Overall Totals		White (Not of Hispanic origin)		Black of African American (Not of Hispanic Origin)		Hispanic or Latino		Asian or Pacific Islander		American Indian or Alaskan Native	
	M*	F	M	F	M	F	M	F	M	F	M	F
Officials & Managers												
Professionals												
Technicians												
Office & Clerical												
Craft Workers (skilled)												
Operatives (semi-skilled)												
Laborers (unskilled)												
Service Workers												
TOTAL												

Name of person that compiled the above data: Elizabeth Duross

Electronic Filing: Received, Clerk's Office 08/26/2026

JOB CATEGORIES	Overall Totals		White (Not of Hispanic orgin)		Black or African American (Not of Hispanic Orgin)		Hispanic or Latino		Asian or Pacific Islander		American Indian or Alaska Native	
	M	F	M	F	M	F	M	F	M	F	M	F
Officals & Managers	3	0	2	0	1	0	0	0	0	0	0	0
Professionals	0	1	1	0	0	0	0	0	0	0	0	0
Technicians	0	0	0	0	0	0	0	0	0	0	0	0
Office & Clerical	0	2	0	2	0	0	0	0	0	0	0	0
Craft Workers	3	0	0	0	3	0	0	0	0	0	0	0
Operators	13	0	11	0	1	0	1	0	0	0	0	0
Laborers & Helpers	0	0	0	0	0	0	0	0	0	0	0	0
Service Workers	0	0	0	0	0	0	0	0	0	0	0	0
Total	**19**	**3**	**14**	**2**	**5**	**0**	**1**	**0**	**0**	**0**	**0**	**0**

Electronic Filing: Received, Clerk's Office 08/26/2026

BID #2021-20 – SPECIFICATIONS
SOLID WASTE DISPOSAL SERVICES
CITY OF BLOOMINGTON & TOWN OF NORMAL

SCOPE OF WORK:
The City of Bloomington and the Town of Normal (Collectively "the City") are soliciting bids for solid waste disposal at a licensed solid waste facility.

OPERATIONAL INFORMATION:

Volume of refuse, recycling, bulk the two communities have disposed of in the last five (5) years.

Normal:

Calendar Year	Total Bulk Tons	Curbside Recycle Tons	Curbside Garbage Tons
2015	4,087	1,769	8,432
2016	3,836	1,829	8,752
2017	3,763	1,792	8,650
2018	3,679	1,876	8,577
2019	4,059	1,825	8,710
2020*	3,477	1,782	8,222
*Through 12/2/2020			

Bloomington:

Fiscal Year	Total Bulk Tons	Curbside Recycle Tons	Curbside Garbage Tons
FY 2016	4,789	4,923	15,964
FY 2017	4,390	4,795	16,102
FY 2018	3,741	4,724	16,360
FY 2019	4,142	4,395	15,157
FY 2020	5,444	5,081	15,192

Operating hours per day/week.
Normal: 6.5 hours per day per five trucks.
Bloomington: 5 days per week, 9 to 10 automated trucks per day (6 garbage and 3 to 4 recycling); 1 rear packer is used two days per week.

House count for each community.
Normal: 11,060
Bloomington: Approximately 23,100

Historical extended hours requests.
Neither the Town of Normal nor the City of Bloomington have requested extended hours in the past.

Tons per load.
Bloomington and Normal: Variable – garbage loads are 10 to 12 tons average and recycle loads are 4 and 6 tons average.

Electronic Filing: Received, Clerk's Office 08/26/2026

Trucks used by each community.
Normal: 3 for solid waste and 2 curbside recycle.
Bloomington: 9 to 10 automated trucks per day (6 garbage and 3 to 4 recycling); 1 rear packer is used two days per week.

Number of times each truck dumps per day.
Normal: 2 times.
Bloomington: Depends, between 1 and 2 per day.

SPECIFICATIONS:

1. Contractor will own/operate an appropriately licensed solid waste facility within a ten (10) mile radius of the intersection of Main and Division Streets and accept Refuse for disposal with the exception of certain hazardous, special and other wastes as set forth later in this Agreement.

2. The City will assume responsibility for the collection of Refuse generated within the City limits, and the City wishes to dispose of some, or all of the Refuse generated within the City at the above referenced licensed solid waste facility.

3. **Performance by Contractor:**
The performance and obligations of Contractor hereunder shall be termed the "Work", shall include the following:

   a. **Acceptance by Contractor:**
   Contractor shall accept for disposal, at its licensed solid waste facility all Refuse, as defined by the Bloomington City Code and Normal Town Code (the "Refuse"), collected by the City, its agents and employees for the consideration hereinafter set forth which the City shall transport to the licensed solid waste facility subject to the exceptions set forth hereafter. The Refuse may include solid waste collected from buildings owned by the City, public litter receptacles, and all other items of whatsoever kind or nature except hazardous wastes as defined by Federal law, special wastes as defined by the State of Illinois, white goods, tires, landscape waste, lead/acid batteries, asbestos containing materials, or any other materials which at this time or in the future may not be disposed in a licensed solid waste facility pursuant to Federal or State statutes, rules or regulations. Contractor retains the right to refuse or reject after acceptance any loads containing any materials described above. The Contractor shall immediately notify the City if the Contractor believes the Refuse is contaminated with materials that cannot be processed by the Contractor under their applicable permits.

   b. **Compliance with Laws:**
   Contractor shall, during the term of this contract or any extensions or renewals thereof, fully comply with all Federal, State and local laws, statues, ordinances, rules and regulations which in any manner control, affect or relate to the Work or the ownership, operation and/or maintenance of a licensed solid waste facility in the State of Illinois, its operating permit, and the performances, obligations, operations or conduct of the Work hereunder, including all laws, statutes, ordinances, rules and regulations which are subsequently enacted. City shall have the right to request and receive verification from Contractor of its compliance with the provisions of this paragraph; to the extent Contractor is reasonably able to provide such verifications.

Electronic Filing: Received, Clerk's Office 08/26/2026

c. **Permits and Licenses:**
Contractor is responsible for abiding by all Environmental Protection Agency and Illinois Environmental Protection Agency regulations and requirements for acceptance, use, and disposal of the material defined within this bid and maintaining all necessary permits, including those required to own, operate and / or maintain the licensed solid waste facility. Contractor must submit copies of all permits relative to this bid with their bid submission.

d. **Operating Time:**
Contractor shall accept Refuse from the City at the licensed solid waste facility during the following days and times:

Labor Day to Memorial Day (Except Christmas Day) –
Monday through Friday - 7:00 AM to 3:30 PM

Memorial Day to Labor Day -
Monday through Friday - 6:00 AM to 3:30 PM

e. **Continued Operation:**
During the entire term of this contract, Contractor will maintain a licensed solid waste facility within a ten (10) mile radius of the intersection of Main and Division Streets.

f. **Site Operations:**
The solid waste facility shall provide a hard surface (concrete or asphalt) drop off location within the licensed solid waste facility for the City to dispose of Refuse.

The Contractor must provide sufficient staff and equipment to keep delays to the waste collection delivery vehicles to a minimum. The maximum waiting time for any deliverer must not exceed 30 minutes.

g. **Indemnification:**
Contactor agrees to indemnify and hold the City harmless from and against any loss, damage, or claim (including reasonable attorneys' fees) resulting from or arising out of the negligent acts or omissions of Contractor in the performance of its obligations under this agreement.

4. **Performance by the City:**

a. **Delivery by the City:**
The City will deliver for disposal at the licensed solid waste facility some or all Refuse collected by the City, its agents, and employees during the term of this agreement.

b. **Permits and Licenses:**
The City shall obtain and maintain all permits, licenses and approvals required by any regulatory or statutory authority necessary for it to transport Refuse to Contractor, and will comply with the provisions contained within the Contractor's operating permit and all reasonable rules and regulations promulgated by Contractor relating to receipt and disposal of Refuse.

c. **Compliance with Rules:**
Drivers working for the City will obey posted speed and traffic control signs. Refuse will be disposed of at the location and in the manner directed by the Contractor's managers or its supervisors.

Electronic Filing: Received, Clerk's Office 08/26/2026

d. **Indemnification:**
The City agrees to indemnify and hold the Contractor harmless from and against loss, damage, or claim (including reasonable attorneys' fees) resulting from or arising out of the negligent acts or omissions of City in the performance of its obligations under this Agreement.

5. **Assignment:**
In the event that the City discontinues using its own employees to collect the City's Refuse and contracts for all such work with a third party, including the issuance of any franchise therefore, then the City shall assign this Agreement to such contractor or franchisee and shall require such contractor or franchisee to comply with all obligations contained in the Agreement during the remaining term thereof. In such event, Contractor shall charge the City for all Refuse delivered by such contractor or franchisee at the same rate as set forth herein. Any such assignment shall not be deemed to be a cause to terminate this Agreement.

6. **Term:**

a. This Agreement shall be for an initial period of two (2) years, commencing on March 1, 2021, and will be automatically renewed for up to five (5) additional periods of one (1) year each unless either party gives ninety (90) days written notice to the other prior to the expiration date of the original term or any renewal period. All terms, conditions, covenants and agreements set forth herein shall be applicable to any extension or renewal of this Agreement, except that the parties will negotiate in good faith mutually acceptable rates to be paid by the City during any renewal periods.

b. This Agreement shall be subject to cancellation in the event either party is guilty of material breach of this Agreement; provided, however, that the Agreement may not be cancelled if the breaching party cures the breach within thirty days of receipt of written notice from the other party; provided further, if the breach is of such a nature that it is impossible to cure within such thirty day period, the Agreement may not be cancelled so long as the breaching party continues to diligently pursue a cure, unless such breach relates to the inability of Contractor to accept Refuse at the licensed solid waste facility as a result of the cancellation or suspension of its permit by the Illinois Environmental Protection Agency.

7. **Compensation:**

a. In consideration for the Work, the City agrees to pay Contractor the appropriate rate set forth herein for each ton of Refuse delivered to the licensed solid waste facility. The Rate shall apply regardless of whether the Refuse delivered by the City to Contractor is loose or compacted. The City agrees that any delivery of Refuse by the City to Contractor shall be deemed to be at least one (1) ton per vehicle. The Contractor shall operate an onsite certified truck scale capable of recording the Refuse delivered to the hundredth of a ton for each load delivered.

b. Whenever the licensed solid waste facility remains open past closing time solely because of a request of the City, the City shall pay Contractor an hourly rate for any actual time the facility remains open; provided, however, that this charge shall not be applied if the reason the City requested the facility to remain open was to dispose of Refuse resulting from fires, floods, explosion, accidents, weather or Acts of God.

Electronic Filing: Received, Clerk's Office 08/26/2026

c. At no time during the term of this Agreement, including any renewal term, shall any fine or penalty entered against Contractor for any breach or violation of any Federal, State or local law, statue, ordinance, rule or regulation, be passed through to the City.

d. Contractor shall invoice the City of Bloomington and Town of Normal separately for Refuse delivered to the licensed solid waste facility, at least monthly, for the total quantity of Refuse delivered to the facilities covered by this Agreement. The invoices shall include each load accepted at the facility, recorded, and billed to the hundredth of ton based on the onsite certified truck scale.

e. All invoices sent to the City, by the Contractor, shall be paid within thirty (30) days after approved by the City Council, provided, however, in the event of any dispute as to any invoice, the City will pay the amount that is not in dispute, and will undertake discussions and negotiation with Contractor to resolve any discrepancy or dispute in any invoice, and shall, upon resolution of any discrepancy or dispute, pay said agreed upon amount as soon as reasonably possible. In order to enable the parties to reach a resolution of any discrepancy or dispute, Contractor shall maintain records indicating, in sufficient detail, dates, truck numbers, amounts, tonnages, etc. including in each invoice and shall make available such records to the City in the event of any discrepancy or dispute concerning any invoice.

8. **Specific Performance:**
The parties hereto agree that substitute performance of the Work will be difficult or impossible to obtain without undue hardship or extreme expense to either party, and in the event Contractor or the City fails or Refuses to perform the Work hereunder, the parties hereto agree that the other party has an inadequate remedy at law. Therefore, Contractor or the City may be compelled to specifically perform the Work under this Agreement.

8. **Independent Contractor:**
It is understood and agreed that Contractor is an independent Contractor.

9. **Other Refuse Collected:**
The City shall retain the right to dispose of "other" Refuse, spoil, bulky waste, leaves, grass, brush, recyclables as is determined to be in the best interest of the City.

Electronic Filing: Received, Clerk's Office 08/26/2026

BID FORM

BID #2021-20

SOLID WASTE DISPOSAL SERVICES FOR THE CITY OF BLOOMINGTON AND THE TOWN OF NORMAL

The offeror agrees to contract with the City of Bloomington and Town of Normal to provide all necessary labor, supervision, machinery, tools, apparatus, documents and any other means to do all the work and furnish all the materials specified in the proposal in the manner and time therein as set forth by the proposer and that the proposer will take in full payment the amount set forth hereon. The cost of all labor, material, and equipment necessary for the completion of the proposed work, even though not shown or specified, shall be included in the total price for the various items shown herein.

The offeror certifies by signature below that it has not been barred from contracting with a unit of State or Local government in the State of Illinois as a result of a violation of Section 33E-3 or 33E-4 of the Criminal Code of 1961, as amended.

We further agree to complete all of the above work in a complete, neat, and workmanlike manner, and to abide by all Environmental Protection Agency and Illinois Environmental Protection Agency regulations and requirements for Refuse disposal services and maintaining all necessary permits.

DESCRIPTION	AMOUNT	
Solid Waste Disposal (3/1/2021 to 2/28/2023)	$ 56.29	per Ton
After Hours Operation (3/1/2021 to 2/28/2023)	$ 35.00	per hour - per person
Cost for Five (5) Year Period After Expiration of Original Agreement		
Solid Waste Disposal (3/1/2023 to 2/29/2024)	$ 57.98	per Ton
Solid Waste Disposal (3/1/2024 to 2/28/2025)	$ 59.72	per Ton
Solid Waste Disposal (3/1/2025 to 2/28/2026)	$ 61.51	per Ton
Solid Waste Disposal (3/1/2026 to 2/28/2027)	$ 63.36	per Ton
Solid Waste Disposal (3/1/2027 to 2/29/2028)	$ 65.26	per Ton
After Hours Operation (3/1/2023 to 2/29/2024)	$ 35.00	per hour - per person
After Hours Operation (3/1/2024 to 2/28/2025)	$ 35.00	per hour - per person
After Hours Operation (3/1/2025 to 2/28/2026)	$ 35.00	per hour - per person
After Hours Operation (3/1/2026 to 2/28/2027)	$ 35.00	per hour - per person
After Hours Operation (3/1/2027 to 2/29/2028)	$ 35.00	per hour - per person

Site Address: 2112 W Washington, Bloomington IL 61705

Bidder certifies by signature below they maintain all necessary permits relative and legally authorized to take and accept delivery of the materials subject to the bid.

Electronic Filing: Received, Clerk's Office 08/26/2026

The undersigned understands that any condition above, clarification made to the above, or information submitted on or with this form other than requested may render this bid unresponsive.

Republic Services of Bloomington	[redacted]
Firm	Authorized Signature
2112 West Washington St	Bloomington IL 61705
Address	City State Zip
217-391-0631	2-1-2021
Phone Number	Date

Email Address: dwinters@republicservices.com

Electronic Filing: Received, Clerk's Office 08/26/2026

BID CHECKLIST:

1. Return the ***entire*** packet – not just your response

2. Sign and Attach all addenda if any were issued

3. Sign and date all required forms

4. Include a copy of your certificate of insurance for your business and any other required certificates, permits, etc. Bidder **must** submit copies of all permits, including Environmental Protection Agency and Illinois Environmental Protection Agency relative to this bid with their submission packet(s).

5. Seal the envelope and attach the label or print in the lower left corner of the outer envelope the bid name and date due

6. Submit two (2) original complete bid packets and one (1) copy on a USB drive of the complete bid packet are to be submitted.

7. Bid Bond

8. Anything relative to this bid

TENTATIVE BID SCHEDULE:

A. The following projected timetable should be used as a working guide for planning purposes. The City reserves the right to adjust this timetable as required during the course of the bid process.

Action – Solid Waste #2021-20	Due Date	Due Time
BID Released	**Monday, December 21, 2020**	**8:00 a.m. Central Time**
Virtual Pre-Bid Meeting	**Thursday, January 7, 2021**	**10:30 a.m. Central Time**
Questions Due to City	**Thursday, January 14, 2021**	**3:00 p.m. Central Time**
Response from City	**Thursday, January 21, 2021**	**3:00 p.m. Central Time**
BIDS Due	**Tuesday, February 2, 2021**	**1:00 p.m. Central Time**
Bids Virtually Opened	**Tuesday, February 2, 2021**	**2:00 p.m. Central Time**

B. Questions will be answered in the form of written addenda and provided to all Bidders, as per State of Illinois statutes. Submit questions regarding the bid in writing to Bob Yehl, Assistant Public Works Director, at **byehl@cityblm.org** , Wayne Aldrich, Public Works Director, at **waldrich@normal.org** , **and** Carla Murillo, Procurement Manager, at **cmurillo@cityblm.org** **no later than 3:00 P.M, Central Time, on Thursday, January 14, 2021.**

Electronic Filing: Received, Clerk's Office 08/26/2026

SAMPLE CONTRACT

CONTRACT WITH

FOR

Solid Waste Disposal Services

THIS AGREEMENT, dated this ____ day of _____, 2020, is between the City of Bloomington (hereinafter "CITY") and (hereinafter "CONTRACTOR").

NOW THEREFORE, the parties agree as follows:

Section 1. **Recitals.** The recitals set forth above are incorporated into this Section 1 as if specifically stated herein.

Section 2. **Incorporation of Bid/RFP/RFQ & Proposal Terms.** This work was subject to the following procurement initiative by the CITY:
Bid #2021-20 Solid Waste Disposal Services (hereinafter "Request")

Accordingly, the provisions of the Request and the proposal submitted by CONTRACTOR (hereinafter collectively referred to as "Procurement Documents" and attached as Exhibit A), shall be incorporated into this Contract and made a part thereof and shall be considered additional contractual requirements that must be met by CONTRACTOR. In the event of a direct conflict between the provisions of this contract and the incorporated documents, the provisions of this contract shall apply.

Section 3. **Description of Services.** CONTRACTOR shall provide the services/work identified in the Procurement Documents, and specifically as follows: The City of Bloomington and the Town of Normal (collectively "the City") are soliciting bids for solid waste disposal at a licensed solid waste facility.

Section 4. **Payment.** For the work performed by CONTRACTOR under this Contract, the CITY shall pay CONTRACTOR one of the following:

☐ A flat fee of $_____ as set forth in the Procurement Documents.

☑ Fees as set forth in the Procurement Documents.

Section 5. **Default and Termination.** Either party shall be in default if it fails to perform all or any part of this Contract. If either party is in default, the other party may terminate this Contract upon giving written notice of such termination to the party in default. Such notice shall be in writing and provided thirty (30) days prior to termination. The non-defaulting party shall be entitled to all remedies, whether in law or equity, upon the default or a violation of this Contract. In addition, the prevailing party shall be entitled to reimbursement of attorney's fees and court costs.

Electronic Filing: Received, Clerk's Office 08/26/2026

Section 6. **Representations of Vendor.** CONTRACTOR hereby represents it is legally able to perform the work that is subject to this Contract.

Section 7. **Assignment.** Neither party may assign this Contract, or the proceeds thereof, without written consent of the other party.

Section 8. **Compliance with Laws.** CONTRACTOR agrees that any and all work by CONTRACTOR shall at all times comply with all laws, ordinances, statutes and governmental rules, regulations and codes.

Section 9. **Compliance with FOIA Requirements.** CONTRACTOR further explicitly agrees to furnish all records related to this Contract and any documentation related to CITY required under an Illinois Freedom of Information Act (ILCS 140/1 et. seq.) ("FOIA") request within five (5) business days after CITY issues notice of such request to CONTRACTOR. CONTRACTOR agrees to not apply any costs or charge any fees to the CITY regarding the procurement of records required pursuant to a FOIA request. CONTRACTOR shall be responsible for any damages/penalties assessed to CITY for CONTRACTOR'S failure to furnish all documentation in CONTRACTOR'S possession responsive and related to a request within five (5) days after CITY issues a notice of a request.

Section 10. **Governing Law.** This Agreement shall be governed by and interpreted pursuant to the laws of the State of Illinois.

Section 11. **Joint Drafting.** The parties expressly agree that this agreement was jointly drafted, and that both had opportunity to negotiate its terms and to obtain the assistance of counsel in reviewing it terms prior to execution. Therefore, this agreement shall be construed neither against nor in favor of either party, but shall construed in a neutral manner.

Section 12. **Attorney Fees.** In the event that any action is filed in relation to this agreement, the unsuccessful party in the action shall pay to the successful party, in addition to all the sums that either party may be called on to pay, a reasonable sum for the successful party's attorneys' fees.

Section 13. **Paragraph Headings.** The titles to the paragraphs of this agreement are solely for the convenience of the parties and shall not be used to explain, modify, simplify, or aid in the interpretation of the provisions of this agreement.

Section 14. **Counterparts.** This agreement may be executed in any number of counterparts, each of which shall be deemed to be an original, but all of which together shall constitute the same instrument.

CITY OF BLOOMINGTON

By: _____ By: _____

Its City Manager Its_____

ATTEST:

By: _____ By: _____

City Clerk Its_____

Electronic Filing: Received, Clerk's Office 08/26/2026

CITY OF Bloomington ILLINOIS

ADDENDUM NUMBER 1: January 6, 2021

BID #2021-20
Solid Waste Disposal Services
City of Bloomington & Town of Normal

1. **Please see Exhibit A for updated specifications.**

Republic Services Bloomington TS [redacted]
Firm Authorized Signature

2-1-2021
Date

PLEASE NOTE: Failure to return the signed addendum with your sealed bid may result in disqualification.

Carla A Murillo, Procurement Manager
1/6/2021

Electronic Filing: Received, Clerk's Office 08/26/2026

EXHIBIT A

Electronic Filing: Received, Clerk's Office 08/26/2026

BID #2021-20 – UPDATED SPECIFICATIONS
ADDENDUM #1 – EXHIBIT A
SOLID WASTE DISPOSAL SERVICES
CITY OF BLOOMINGTON & TOWN OF NORMAL

SCOPE OF WORK:
The City of Bloomington and the Town of Normal (Collectively "the City") are soliciting bids for solid waste disposal at a licensed solid waste facility. The communities are seeking an initial agreement for two (2) years commencing on March 2, 2021 with automatic renewal for up to five (5) additional periods of one (1) year each as set forth below in the term section. The successful bidder will sign individual contracts with the City of Bloomington and the Town of Normal.

DEFINITIONS:

Refuse – may include solid waste collected from buildings owned by the City, public litter receptacles, garbage, rubbish, ashes, brush, construction, demolition wastes and all other items of whatsoever kind or nature excluding hazardous wastes as defined by Federal law, special wastes as defined by the State of Illinois, white goods, tires, landscape waste, lead/acid batteries, asbestos containing material, or any other materials which at this time or in the future may not be disposed in a licensed solid waste facility pursuant to Federal or State statutes, rule or regulations.

Facility – transfer or landfill location operating with the required Federal, State, and Local permits and meets all Illinois Environmental Protection Agency regulations and requirements for acceptance, use and disposal of refuse. In addition, the facility is within a ten (10) mile radius of the intersection of Main and Division Streets and has a hard surface (concrete or asphalt) for drop off.

Other Refuse - spoil, bulky waste, leaves, grass, brush, and recyclables.

OPERATIONAL INFORMATION:

Volume of refuse, recycling, bulk the two communities have disposed of in the last five (5) years.

Normal:

Calendar Year	Total Bulk Tons	Curbside Recycle Tons	Curbside Garbage Tons
2015	4,087	1,769	8,432
2016	3,836	1,829	8,752
2017	3,763	1,792	8,650
2018	3,679	1,876	8,577
2019	4,059	1,825	8,710
2020*	3,477	1,782	8,222
*Through 12/2/2020			

Electronic Filing: Received, Clerk's Office 08/26/2026

Bloomington:

Fiscal Year	Total Bulk Tons	Curbside Recycle Tons	Curbside Garbage Tons
FY 2016	4,789	4,923	15,964
FY 2017	4,390	4,795	16,102
FY 2018	3,741	4,724	16,360
FY 2019	4,142	4,395	15,157
FY 2020	5,444	5,081	15,192

Operating hours per day/week.
Normal: 6.5 hours per day per five trucks.
Bloomington: 5 days per week, 9 to 10 automated trucks per day (6 garbage and 3 to 4 recycling); 1 rear packer is used two days per week.

House count for each community.
Normal: 11,060
Bloomington: Approximately 23,100

Historical extended hours requests.
Neither the Town of Normal nor the City of Bloomington have requested extended hours in the past.

Tons per load.
Bloomington and Normal: Variable – garbage loads are 10 to 12 tons average and recycle loads are 4 and 6 tons average.

Trucks used by each community.
Normal: 3 for solid waste and 2 curbside recycle.
Bloomington: 9 to 10 automated trucks per day (6 garbage and 3 to 4 recycling); 1 rear packer is used two days per week.

Number of times each truck dumps per day.
Normal: 2 times.
Bloomington: Depends, between 1 and 2 per day.

Electronic Filing: Received, Clerk's Office 08/26/2026

SPECIFICATIONS:

1. Contractor will operate an appropriately licensed Facility within a ten (10) mile radius of the intersection of Main and Division Streets and accept Refuse for disposal with the exception of certain hazardous, special and other wastes as set forth in the definition of Refuse.

2. The City will assume responsibility for the collection of Refuse generated within the City limits, and the City wishes to dispose of some, or all of the Refuse generated within the City at the above referenced Facility.

3. **Obligation of the Contractor:**

   a. **Acceptance by Contractor:**
   Contractor shall accept for disposal, at its Facility all Refuse, as defined, collected by the City, its agents and employees for the consideration hereinafter set forth which the City shall transport to the Facility subject to the exceptions set forth in the Refuse definition. Contractor retains the right to refuse or reject before or after acceptance any loads containing any materials excluded in the Refuse definition. The Contractor shall immediately notify the City if the Contractor believes the Refuse is contaminated with materials that cannot be processed by the Contractor under their applicable permits.

   b. **Compliance with Laws:**
   Contractor shall fully comply with all Federal, State and local laws, statues, ordinances, rules and regulations which in any manner control, affect or relate to the acceptance of Refuse or the ownership, operation and/or maintenance of a Facility in the State of Illinois, its operating permit, and the performances, obligations, operations or conduct hereunder, including all laws, statutes, ordinances, rules and regulations which are subsequently enacted. City shall have the right to request and receive verification from Contractor of its compliance with the provisions of this paragraph. Contractor is responsible for abiding by all Environmental Protection Agency and Illinois Environmental Protection Agency regulations and requirements for acceptance, use, and disposal of the material defined within this bid and maintaining all necessary permits, including those required to own, operate and/or maintain the Facility. Contractor must submit copies of all permits relative to this bid with their bid submission.

   c. **Operating Time:**
   Contractor shall accept for disposal, Refuse from the City at the Facility during the following days and times:

   Labor Day to Memorial Day (Except Christmas Day) –
   Monday through Friday - 7:00 AM to 3:30 PM

   Memorial Day to Labor Day -
   Monday through Friday - 6:00 AM to 3:30 PM

   d. **Continued Operation:**
   During the entire term of this contract, Contractor will maintain a licensed Facility within a ten (10) mile radius of the intersection of Main and Division Streets.

Electronic Filing: Received, Clerk's Office 08/26/2026

e. **Site Operations:**
The Facility shall provide a hard surface (concrete or asphalt) drop off location within the Facility for the City for the acceptance of disposal of Refuse.

The Contractor must provide sufficient staff and equipment to keep delays to the waste collection delivery vehicles to a minimum. The maximum waiting time for any deliverer must not exceed 30 minutes.

f. **Indemnification:**
To the fullest extent permitted by law, Contractor shall indemnify and hold harmless the City, its officers, officials, agents, and employees from claims, demands, causes of action, and liabilities of every kind and nature whatsoever arising out of or in connection with Contractor's operations performed under this Agreement, except for loss, damage, or expense arising from the sole gross negligence or willful misconduct of the City or the City's agents, servants, or independent contractors who are directly responsible to the City. This indemnification shall extend to all claims occurring after this Agreement is terminated as well as while it is in force. The indemnity shall apply regardless of any concurrent negligence, whether active or passive, of the City or the City's officers, officials, agents, employees, or any other persons or entities. The indemnity set forth in this section shall not be limited by insurance requirements or by any other provision of this Agreement.

4. Performance by the City:

a. **Delivery by the City:**
The City will deliver Refuse for acceptance of disposal to the Facility some or all Refuse collected by the City, its agents, and employees during the term of this agreement.

b. **Permits and Licenses:**
The City shall obtain and maintain all permits, licenses and approvals required by any regulatory or statutory authority necessary for it to transport Refuse to Contractor, and will comply with the provisions contained within the Contractor's operating permit and all reasonable rules and regulations promulgated by Contractor relating to receipt and acceptance for disposal of Refuse.

c. **Compliance with Rules:**
Drivers working for the City will obey posted speed and traffic control signs at the Facility. Refuse will be accepted for disposal at the Facility and in the manner directed by the Contractor's managers or its supervisors.

5. Assignment:

In the event that the City discontinues using its own employees to collect the City's Refuse and contracts for all such work with a third party, including the issuance of any franchise therefore, then the City shall assign this Agreement to such contractor or franchisee and shall require such contractor or franchisee to comply with all obligations contained in the Agreement during the remaining term thereof. In such event, Contractor shall charge the City for all Refuse delivered by such contractor or franchisee at the same rate as set forth herein. Any such assignment shall not be deemed to be a cause to terminate this Agreement.

Electronic Filing: Received, Clerk's Office 08/26/2026

6. Term:

a. This Agreement shall be for an initial period of two (2) years, commencing on March 1, 2021, and will be automatically renewed for up to five (5) additional periods of one (1) year each unless either party gives ninety (90) days written notice to the other prior to the expiration date of the original term or any renewal period. All terms, conditions, covenants and agreements set forth herein shall be applicable to any extension or renewal of this Agreement, except that the parties will negotiate in good faith mutually acceptable rates to be paid by the City during any renewal periods.

b. This Agreement shall be subject to cancellation in the event either party is guilty of material breach of this Agreement or the inability of Contractor to accept Refuse at the Facility as a result of the cancellation or suspension of its permit by the Illinois Environmental Protection Agency.

7. Compensation:

a. The City agrees to pay Contractor the appropriate rate set forth herein for each ton of Refuse accepted for disposal to the Facility. The rate shall apply regardless of whether the Refuse delivered by the City to Contractor is loose or compacted. The City agrees that any delivery of acceptance for disposal of Refuse by the City to Contractor shall be deemed to be at least one (1) ton per vehicle. The Contractor shall operate an onsite certified truck scale capable of recording the Refuse delivered to the hundredth of a ton for each load delivered.

b. Whenever the Facility remains open past closing time solely because of a request of the City, the City shall pay Contractor an hourly rate for any actual time the Facility remains open; provided, however, that this charge shall not be applied if the reason the City requested the Facility to remain open was to dispose of Refuse resulting from fires, floods, explosion, accidents, weather or Acts of God.

c. At no time during the term of this Agreement, including any renewal term, shall any fine or penalty entered against Contractor for any breach or violation of any Federal, State or local law, statue, ordinance, rule or regulation, be passed through to the City.

d. Contractor shall invoice the City of Bloomington and Town of Normal separately for Refuse accepted for disposal to the Facility, at least monthly, for the total quantity of each municipality separately of Refuse delivered to the Facilities covered by this Agreement. The invoices shall include each load accepted at the Facility, recorded, and billed to the hundredth of ton based on the onsite certified truck scale.

e. All separated invoices sent to the City of Bloomington and Town of Normal, by the Contractor, shall be paid within thirty (30) days after approved by the City Council, provided, however, in the event of any dispute as to any invoice, the City of Bloomington or the Town of Normal will pay the amount that is not in dispute, and will undertake discussions and negotiation with Contractor separately to resolve any discrepancy or dispute in any invoice, and shall, upon resolution of any discrepancy or dispute, pay said agreed upon amount as soon as reasonably possible. In order to enable the parties to reach a resolution of any discrepancy or dispute, Contractor shall maintain records indicating, in sufficient detail, dates, truck numbers, amounts, tonnages, etc. including in each invoice and shall make available such records to the City of Bloomington or Town of Normal in the event of any discrepancy or dispute concerning any invoice.

Electronic Filing: Received, Clerk's Office 08/26/2026

8. Specific Performance:

The parties hereto agree that substitute performance will be difficult or impossible to obtain without undue hardship or extreme expense to either party, and in the event Contractor or the City fails or refuses to perform their duties hereunder, the parties hereto agree that the other party has an inadequate remedy at law. Therefore, Contractor or the City may be compelled to specifically perform their duties under this Agreement.

9. Independent Contractor:

It is understood and agreed that Contractor is an independent Contractor.

10. Other Refuse Collected:

The City shall retain the right to dispose of Other Refuse as is determined to be in the best interest of the City.

Electronic Filing: Received, Clerk's Office 08/26/2026

CITY OF Bloomington ILLINOIS

Town of Normal

ADDENDUM NUMBER 2: January 19, 2021

BID #2021-20
Solid Waste Disposal Services
City of Bloomington & Town of Normal

1. **Please see Exhibit A for the Agenda Minutes from pre-bid meeting.**

2. **Please see Exhibit B for the pre-bid attendance record.**

3. **Please see Exhibit C for the planholder's list.**

4. **Is bulk waste included with solid waste in this bid?**
   Bulk waste is defined under Other Refuse in the updated specifications and both the City of Bloomington and Town of Normal have the option of including this bulk waste or taking it to another location.

5. **Who currently is under contract for bulk waste?**
   For both the City of Bloomington and Town of Normal, Henson Disposal Inc. is contracted for bulk waste.

6. **Is bulk waste included in the Operational Information section volumes for the City of Bloomington and Town or Normal?**
   No.

7. **Please provide the City of Bloomington and Town of Normal current bulk waste contracts.**
   See Exhibit D.

8. **Would an alternative bid proposal be considered?**
   Please submit an original bid as stated in the specifications and a separate bid packet with the alternate bid.

9. **Bidders and public are encouraged to participate remotely, if possible, by watching/listening to the bid opening remotely via the City's live stream: www.cityblm.org/bidopening at 2:00 p.m. Central Time on Tuesday, February 2, 2021.**

Electronic Filing: Received, Clerk's Office 08/26/2026

Republic Services Bloomington IS
Firm

[redacted]
Authorized Signature

2-1-2021
Date

PLEASE NOTE: Failure to return the signed addendum with your sealed bid may result in disqualification.

Carla A Murillo, Procurement Manager
1/19/2021

Electronic Filing: Received, Clerk's Office 08/26/2026

ATTACHMENT 1-C

LETTERS OF SUPPORT

Electronic Filing: Received, Clerk's Office 08/26/2026



Advanced Filtration Systems Inc.

3206 Farber Drive

Champaign, IL 61822

Date – 9-11-2025

RE: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

I am writing to express my support for the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to construct and operate the proposed Rantoul Recycling and Transfer Station.

This facility will reduce the number of trucks hauling waste to distant landfills which will result in less fuel usage, reduced vehicle emissions, and less wear and tear on our highways. These benefits and more will improve the robustness and sustainability of this area's refuse disposal network and provide assurance that current and future business and residential users will have dependable service and capacity well into the future.

I've found GFL to be trustworthy, responsive and environmentally conscientious. GFL is a great asset to the community. Its proposed investment in our community should be applauded and will provide long-term benefits to the area.

This is an important project for not only Rantoul, but also Champaign County and adjacent rural communities. I strongly urge your approval of GFL's proposed transfer station development in Rantoul.

Sincerely,

Jon E Bailey
Global Technical Support Manager

AFSI Confidentiality: Green

Electronic Filing: Received, Clerk's Office 08/26/2026

September 19, 2025

Village of Rantoul
Attn: Village Clerk
333 South Tanner
Rantoul, IL 61866

Re: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

This letter is respectfully submitted to urge approval of the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to build and operate the proposed Rantoul Recycling and Transfer Station.

Over the last several years, we have witnessed the number of disposal companies dwindling and/or consolidating in our local market. We understand this is partially due to the high cost associated with this industry and in maintaining compliance with local, state and federal regulations. Fewer bid participants over a long period of time leads to higher costs for government entities and taxpayers. As a result, GFL's proposed transfer station is timely, creating more competitive options for service in the area.

As a customer of GFL, we have been pleased with the company's environmental practices, its overall management philosophy and responsiveness to questions and outreach. As a result, we strongly urge your approval of GFL's proposed transfer station development in Rantoul, so residents, municipalities, and area businesses have more competitive options for their businesses well into the future.

Sincerely,

Gary Babb, CDG Real Estate / South Wind Properties

Owner

217-530-2568

Electronic Filing: Received, Clerk's Office 08/26/2026

___9/11/2025_____, 2025

Village of Rantoul
Attn: Village Clerk
333 South Tanner
Rantoul, IL 61866

Re: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

I am writing to express my support for the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to construct and operate the proposed Rantoul Recycling and Transfer Station.

This facility will reduce the number of trucks hauling waste to distant landfills which will result in less fuel usage, reduced vehicle emissions, and less wear and tear on our highways. These benefits and more will improve the robustness and sustainability of this area's refuse disposal network and provide assurance that current and future business and residential users will have dependable service and capacity well into the future.

I've found GFL to be trustworthy, responsive and environmentally conscientious. GFL is a great asset to the community. Its proposed investment in our community should be applauded and will provide long-term benefits to the area.

This is an important project for not only Rantoul, but also Champaign County and adjacent rural communities. I strongly urge your approval of GFL's proposed transfer station development in Rantoul.

Sincerely,

Supporter Name Harley Wagehoft
Supporter Title Owner/President
Contact information Captain Hook Inc
PO Box 7074, Champaign, IL 61826
217 493 9484

Electronic Filing: Received, Clerk's Office 08/26/2026

CENTRAL ILLINOIS DISPOSAL & RECYCLING, INC.
P.O. Box 314, 1190 N. Market St.
Paxton, IL 60957-0314
Phone (217) 379-3309
cidr1@cidrpaxton.com

September 18, 2025

Village of Rantoul
Attn: Village Clerk
333 South Tanner
Rantoul, IL 61866

Re: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

This letter is respectfully submitted to urge approval of the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to build and operate the proposed Rantoul Recycling and Transfer Station.

Over the last several years, we have witnessed the number of disposal companies dwindling and/or consolidating in our local market. We understand this is partially due to the high cost associated with this industry and in maintaining compliance with local, state, and federal regulations. Fewer bid participants over a long period of time leads to higher costs for government entities and taxpayers. As a result, GFL's proposed transfer station is timely, creating more competitive options for service in the area.

As a customer of GFL, we have been pleased with the company's environmental practices, its overall management philosophy and responsiveness to questions and outreach. As a result, we strongly urge your approval of GFL's proposed transfer station development in Rantoul, so residents, municipalities, and area businesses have more competitive options for their businesses well into the future.

Sincerely,

Gene May
President

Electronic Filing: Received, Clerk's Office 08/26/2026

David Thornton
Assistant Facilities Director
Champaign-Urbana Mass Transit District
dthornton@mtd.org
P: 217.384.8188 M: 217-417-6023
803 E. University Ave.
Urbana, IL 61802

9/16, 2025

Village of Rantoul
Attn: Village Clerk
333 South Tanner
Rantoul, IL 61866

Re: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

This letter is respectfully submitted to urge approval of the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to build and operate the proposed Rantoul Recycling and Transfer Station.

Over the last several years, we have witnessed the number of disposal companies dwindling and/or consolidating in our local market. We understand this is partially due to the high cost associated with this industry and in maintaining compliance with local, state and federal regulations. Fewer bid participants over a long period of time leads to higher costs for government entities and taxpayers. As a result, GFL's proposed transfer station is timely, creating more competitive options for service in the area.

As a customer of GFL, we have been pleased with the company's environmental practices, its overall management philosophy and responsiveness to questions and outreach. As a result, we strongly urge your approval of GFL's proposed transfer station development in Rantoul, so residents, municipalities, and area businesses have more competitive options for their businesses well into the future.

Sincerely,

Supporter Name DAVE THORNTON

Supporter Title FACILITIES DIRECTOR CHAMPAIGN-URBANA MTD

Contact information DTHORNTON@MTD.ORG

Electronic Filing: Received, Clerk's Office 08/26/2026

COCHRANES OF CHAMPAIGN, INC
1612 S NEIL ST SUITE B
CHAMPAIGN IL 61820
(217) 351-8888

July 29, 2025

Village of Rantoul
Attn: Village Clerk
333 South Tanner
Rantoul, IL 61866

Re: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

This letter is respectfully submitted to urge approval of the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to build and operate the proposed Rantoul Recycling and Transfer Station.

Over the last several years, we have witnessed the number of disposal companies dwindling and/or consolidating in our local market. We understand this is partially due to the high cost associated with this industry and in maintaining compliance with local, state and federal regulations. Fewer bid participants over a long period of time leads to higher costs for government entities and taxpayers. As a result, GFL's proposed transfer station is timely, creating more competitive options for service in the area.

As a customer of GFL, we have been pleased with the company's environmental practices, its overall management philosophy and responsiveness to questions and outreach. As a result, we strongly urge your approval of GFL's proposed transfer station development in Rantoul, so residents, municipalities, and area businesses have more competitive options for their businesses well into the future.

Sincerely,

Chris Copeland
Business Manager
Cochranes of Champaign, Inc./JTS Properties LLC

Electronic Filing: Received, Clerk's Office 08/26/2026

Collaborative Concepts

PO Box 634
Urbana, IL 61803

August 29th, 2025

Village of Rantoul
Attn: Village Clerk
333 South Tanner
Rantoul, IL 61866

Re: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

This letter is respectfully submitted to urge approval of the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to build and operate the proposed Rantoul Recycling and Transfer Station.

Over the last several years, we have witnessed the number of disposal companies dwindling and/or consolidating in our local market. We understand this is partially due to the high cost associated with this industry and in maintaining compliance with local, state and federal regulations. Fewer bid participants over a long period of time leads to higher costs for government entities and taxpayers. As a result, GFL's proposed transfer station is timely, creating more competitive options for service in the area.

As a customer of GFL, we have been pleased with the company's environmental practices, its overall management philosophy and responsiveness to questions and outreach. As a result, we strongly urge your approval of GFL's proposed transfer station development in Rantoul, so residents, municipalities, and area businesses have more competitive options for their businesses well into the future.

Sincerely,

Gregory Tresslar

Owner, Collaborative Concepts, LLC

Electronic Filing: Received, Clerk's Office 08/26/2026

September 17, 2025

Village of Rantoul
Attn: Village Clerk
333 South Tanner
Rantoul, IL 61866

Re: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

This letter is respectfully submitted to urge approval of the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to build and operate the proposed Rantoul Recycling and Transfer Station.

Over the last several years, we have witnessed the number of disposal companies dwindling and/or consolidating in our local market. We understand this is partially due to the high cost associated with this industry and in maintaining compliance with local, state and federal regulations. Fewer bid participants over a long period of time leads to higher costs for government entities and taxpayers. As a result, GFL's proposed transfer station is timely, creating more competitive options for service in the area.

As a customer of GFL, we have been pleased with the company's environmental practices, its overall management philosophy and responsiveness to questions and outreach. As a result, we strongly urge your approval of GFL's proposed transfer station development in Rantoul, so residents, municipalities, and area businesses have more competitive options for their businesses well into the future.

Sincerely,

David Kelton

Owner FMI and Greek Management

FMI
4210 Brittany Trail Drive
Champaign, IL. 61822
217-351-9022
dave@facilitymanagersinc.com

Electronic Filing: Received, Clerk's Office 08/26/2026

Michael Bayler, Mayor
Christa Moore, Clerk
Mary Hubbell, Treasurer

FISHER
ILLINOIS

VILLAGE OF FISHER
Incorporated May 1, 1895

Build Your Future in Fisher

217-897-1180
100 East School Street
Fisher, Illinois 61843
fishervillageoffice@gmail.com

September 2nd, 2025

Village of Rantoul

Attn: Village Clerk

333 South Tanner

Rantoul, IL 61866

Re: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

This letter is respectfully submitted to urge approval of the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to build and operate the proposed Rantoul Recycling and Transfer Station.

Dependable and cost-effective solid waste and recycling services are important for the sustainability of our community. We are confident that the proposed Rantoul Recycling and Transfer Station will improve the long-term efficiency and dependability of the solid waste services that our residents and businesses need.

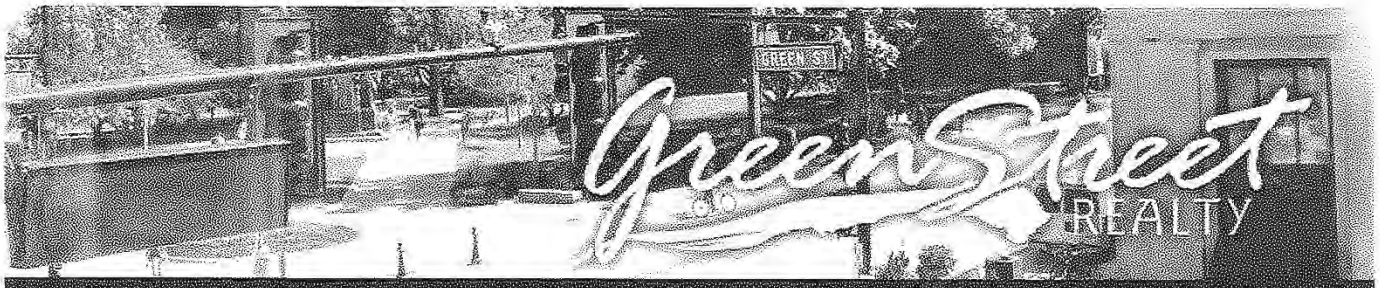
As a representative of our citizens and as a customer of GFL, we have been pleased with the company's environmental stewardship, responsiveness and efforts to improve our community. In short, GFL is a great asset to the community and its proposed investment should be applauded as it will provide long-term benefits to the area. As a result, we strongly urge your approval of GFL's proposed Transfer Station development in Rantoul.

Sincerely,

Michael Bayler; Mayor

Village of Fisher

Electronic Filing: Received, Clerk's Office 08/26/2026



September 19, 2025

Village of Rantoul
Attn: Village Clerk
333 South Tanner
Rantoul, IL 61866

Re: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

I am writing to express my support for the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to construct and operate the proposed Rantoul Recycling and Transfer Station.

This facility will reduce the number of trucks hauling waste to distant landfills which will result in less fuel usage, reduced vehicle emissions, and less wear and tear on our highways. These benefits and more will improve the robustness and sustainability of this area's refuse disposal network and provide assurance that current and future business and residential users will have dependable service and capacity well into the future.

I've found GFL to be trustworthy, responsive and environmentally conscientious. GFL is a great asset to the community. Its proposed investment in our community should be applauded and will provide long-term benefits to the area.

This is an important project for not only Rantoul, but also Champaign County and adjacent rural communities. I strongly urge your approval of GFL's proposed transfer station development in Rantoul.

Sincerely,

Michael Ellars
Accountant
Green Street Realty
510 S Neil St
Champaign, IL 61820
217-202-8867
Michael.ellars@greenstrealty.com

Electronic Filing: Received, Clerk's Office 08/26/2026

Horizon Land Management

September 18, 2025
Village of Rantoul
Attn: Village Clerk
333 South Tanner
Rantoul, IL 61866

Re: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

This letter is respectfully submitted to urge approval of the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to build and operate the proposed Rantoul Recycling and Transfer Station.

Over the last several years, we have witnessed the number of disposal companies dwindling and/or consolidating in our local market. We understand this is partially due to the high cost associated with this industry and in maintaining compliance with local, state and federal regulations. Fewer bid participants over a long period of time leads to higher costs for government entities and taxpayers. As a result, GFL's proposed transfer station is timely, creating more competitive options for service in the area.

As a customer of GFL, we have been pleased with the company's environmental practices, its overall management philosophy and responsiveness to questions and outreach. As a result, we strongly urge your approval of GFL's proposed transfer station development in Rantoul, so residents, municipalities, and area businesses have more competitive options for their businesses well into the future.

Sincerely,
Lori Jones
Community Manager
Heritage Meadows & Maplewood Estates of Rantoul
600 S. Maplewood Dr.
Rantoul, IL 61866
Office: 217-394-4062
ljones@horizonlm.com // www.horizonlandmgmt.com

Horizon Land Management

Electronic Filing: Received, Clerk's Office 08/26/2026

City of **Tuscola**
MEMBER OF THE ILLINOIS MUNICIPAL LEAGUE

Daniel J. Kleiss Mayor
J. Drew Hoel City Administrator
Beth Leamon City Clerk
Alta Long City Treasurer

September 22, 2025

Village of Rantoul
Attn: Village Clerk
333 South Tanner
Rantoul, IL 61866

Re: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

This letter is respectfully submitted to urge approval of the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to build and operate the proposed Rantoul Recycling and Transfer Station.

Dependable and cost-effective solid waste and recycling services are important for the sustainability of our community. We are confident that the proposed Rantoul Recycling and Transfer Station will improve the long-term efficiency and dependability of the solid waste services that our residents and businesses need.

As a representative of our citizens and as a customer of GFL, we have been pleased with the company's environmental stewardship, responsiveness and efforts to improve our community. In short, GFL is a great asset to the community and its proposed investment should be applauded as it will provide long-term benefits to the area. As a result, we strongly urge your approval of GFL's proposed Transfer Station development in Rantoul.

Sincerely,

Daniel J. Kleiss
Mayor of Tuscola

214 NORTH MAIN STREET • TUSCOLA, ILLINOIS 61953
217.253.2112 • FAX 217.253.5026
WWW.TUSCOLA.ORG

Electronic Filing: Received, Clerk's Office 08/26/2026

Ramshaw
REAL ESTATE

July 14, 2025

Village of Rantoul
Attn: Village Clerk
333 South Tanner
Rantoul, IL 61866
Re: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

This letter is respectfully submitted to urge approval of the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to build and operate the proposed Rantoul Recycling and Transfer Station.

Over the last several years, we have witnessed the number of disposal companies dwindling and/or consolidating in our local market. We understand this is partially due to the high cost associated with this industry and in maintaining compliance with local, state and federal regulations. Fewer bid participants over a long period of time leads to higher costs for government entities and taxpayers. As a result, GFL's proposed transfer station is timely, creating more competitive options for service in the area.

As a customer of GFL, we have been pleased with the company's environmental practices, its overall management philosophy and responsiveness to questions and outreach. As a result, we strongly urge your approval of GFL's proposed transfer station development in Rantoul, so residents, municipalities, and area businesses have more competitive options for their businesses well into the future.

Sincerely,

Jay Ramshaw

Ramshaw Real Estate

President

Jay@ramshaw.com

(217)359-6400

Electronic Filing: Received, Clerk's Office 08/26/2026

September 5, 2025

Village of Rantoul
Attn: Village Clerk
333 South Tanner
Rantoul, IL 61866

Re: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

This letter is respectfully submitted to urge approval of the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to build and operate the proposed Rantoul Recycling and Transfer Station.

Over the last several years, we have witnessed the number of disposal companies dwindling and/or consolidating in our local market. We understand this is partially due to the high cost associated with this industry and in maintaining compliance with local, state and federal regulations. Fewer bid participants over a long period of time leads to higher costs for government entities and taxpayers. As a result, GFL's proposed transfer station is timely, creating more competitive options for service in the area.

As a customer of GFL, we have been pleased with the company's environmental practices, its overall management philosophy and responsiveness to questions and outreach. As a result, we strongly urge your approval of GFL's proposed transfer station development in Rantoul, so residents, municipalities, and area businesses have more competitive options for their businesses well into the future.

Sincerely,

Roxana Almaraz

Roxana Almaraz
Shadow wood
Property Manager
217-255-0038

Electronic Filing: Received, Clerk's Office 08/26/2026

September 22, 2025

Village of Rantoul
Attn: Village Clerk
333 South Tanner
Rantoul, IL 61866

Re: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

This letter is respectfully submitted to urge approval of the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to build and operate the proposed Rantoul Recycling and Transfer Station.

Over the last several years, we have witnessed the number of disposal companies dwindling and/or consolidating in our local market. We understand this is partially due to the high cost associated with this industry and in maintaining compliance with local, state and federal regulations. Fewer bid participants over a long period of time leads to higher costs for government entities and taxpayers. As a result, GFL's proposed transfer station is timely, creating more competitive options for service in the area.

As a customer of GFL, we have been pleased with the company's environmental practices, its overall management philosophy and responsiveness to questions and outreach. As a result, we strongly urge your approval of GFL's proposed transfer station development in Rantoul, so residents, municipalities, and area businesses have more competitive options for their businesses well into the future.

Sincerely,

Austin Tabeling, General Manager of Tabeling Development Company

austin@tabelingco.com (217)722-4859

Tabeling Development

Electronic Filing: Received, Clerk's Office 08/26/2026

TLT PROPERTIES
THORSTENSON MANAGEMENT

41 E. University Avenue, 3rd Floor Champaign, IL 61820 217.355.1950 fax 772.619.3914
www.TLTProperties.com

September 18, 2025
Village of Rantoul
Attn: Village Clerk
333 South Tanner
Rantoul, IL 61866

Re: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

This letter is respectfully submitted to urge approval of the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to build and operate the proposed Rantoul Recycling and Transfer Station.

Over the last several years, we have witnessed the number of disposal companies dwindling and/or consolidating in our local market. We understand this is partially due to the high cost associated with this industry and in maintaining compliance with local, state and federal regulations. Fewer bid participants over a long period of time leads to higher costs for government entities and taxpayers. As a result, GFL's proposed transfer station is timely, creating more competitive options for service in the area.

As a customer of GFL, we have been pleased with the company's environmental practices, its overall management philosophy and responsiveness to questions and outreach. As a result, we strongly urge your approval of GFL's proposed transfer station development in Rantoul, so residents, municipalities, and area businesses have more competitive options for their businesses well into the future.

Sincerely,

Todd Thorstenson
Owner, TLT Properties
217-778-9052

Electronic Filing: Received, Clerk's Office 08/26/2026

ILLINI RECYCLING

November 20, 2025

Village of Rantoul
Attn: Village Clerk
333 South Tanner
Rantoul, IL 61866

Re: GFL's Transfer Station Siting Application

Dear Rantoul Mayor and Board of Trustees:

This letter is respectfully submitted to urge approval of the siting application by Area Disposal Service, Inc., doing business as GFL Environmental, to build and operate the proposed Rantoul Recycling and Transfer Station.

Over the last several years, we have witnessed the number of disposal companies dwindling and/or consolidating in our local market. We understand this is partially due to the high cost associated with this industry and in maintaining compliance with local, state and federal regulations. Fewer bid participants over a long period of time leads to higher costs for government entities and taxpayers. As a result, GFL's proposed transfer station is timely, creating more competitive options for service in the area.

As a customer of GFL, we have been pleased with the company's environmental practices, its overall management philosophy and responsiveness to questions and outreach. As a result, we strongly urge your approval of GFL's proposed transfer station development in Rantoul, so residents, municipalities, and area businesses have more competitive options for their businesses well into the future.

Sincerely,

Cain Kiser
President, Illini Recycling
ckiser@illinirecycling.com

Electronic Filing: Received, Clerk's Office 08/26/2026

ATTACHMENT 1-D

RANTOUL AND AREA DISPOSAL COMMUNITY HOST AGREEMENT

Electronic Filing: Received, Clerk's Office 08/26/2026

HOST COMMUNITY AGREEMENT

THIS HOST COMMUNITY AGREEMENT ("Agreement") is made and dated this 10th day of June, 2025, by and between Area Disposal Service, Inc., an Illinois corporation ("Area"), and the Village of Rantoul, Illinois (the "Village");

WITNESSETH:

WHEREAS, Area owns a parcel of land totaling approximately 14.063 acres as described on Attachment A. The parcel described on Attachment A is hereinafter referred to as the "Area Property";

WHEREAS, Area is the owner and operator of the Area Property;

WHEREAS, Area intends to file a siting application ("Siting Application") with the Village to build a waste recycling and transfer station on the Area Property ("Transfer Station");

WHEREAS, it has been proposed that Area pay to the Village, and Area is willing to pay to the Village, a Host Benefit Fee to be used for the general revenue needs of the Village as the Village may deem appropriate;

WHEREAS, Area is desirous of earning the goodwill of the citizens of the Village by demonstrating its good faith in educating the community as to the nature of its operations in the Village and in demonstrating that its waste recycling and transfer operations are, have been and will continue to be conducted in an environmentally sound manner;

WHEREAS, the Village is desirous of protecting the health, safety and welfare of its citizens, assisting Area with public education, ensuring that factually and technically accurate information is given to the public at the hearing on Area's Siting Application;

WHEREAS, the parties understand that this Agreement places no obligation on the Village with respect to its review and/or approval or rejection of the Siting Application;

WHEREAS, this Agreement further complies with relevant provisions in the Champaign County Solid Waste Management Plan 2022 Update;

NOW, THEREFORE, in consideration of the covenants set forth in this Agreement, the parties hereto, intending to be legally bound, hereby agree as follows:

1. INCORPORATION OF RECITALS.

The above recitals are incorporated as part of this Agreement as though fully set forth herein.

Electronic Filing: Received, Clerk's Office 08/26/2026

2. LANDS COVERED.

This Agreement covers the Area Property as described on Attachment A.

3. PRE-FILING REVIEW

Area agrees to submit a draft of the Siting Application to the Village prior to formal submittal pursuant to Section 39.2 of the Act. Area shall pay the application fee required by Rantoul Village Code Section 28-104, which shall be used to reimburse the Village for the actual reasonable and customary costs incurred by the Village in connection with its review of the draft Siting Application. It is estimated that such costs will not exceed $25,000.00. Such payment shall be made to the Village prior to filing of the notices pursuant to Section 39.2 of the Act.

4. EFFECTIVE DATE.

Except as set forth in Paragraph 3, above, this Agreement shall be deemed incorporated into the Siting Application for the Transfer Station to be filed with the Village. This Agreement shall become effective, if and only if the Village grants site location approval for the proposed Transfer Station, in which event the terms of this Agreement shall become a condition upon the granting of site location approval, and shall become a contract binding upon both the Village and Area. This Agreement shall be effective as of the date on which the proposed Transfer Station receives non-appealable local siting approval from the Village ("Effective Date"), provided, however, the Village has not, by entering into this Agreement, predetermined whether it will grant or deny local siting approval or whether Area can (or cannot) establish any of the criteria related to local siting approval, and the Village retains all of its authority to grant, deny or grant with conditions local siting approval in accordance with Section 39.2 of the Illinois Environmental Protection Act, 415 ILCS 5/1 et seq. (the "Act").

5. TERM OF AGREEMENT.

This Agreement commences on the Effective Date and shall remain in force and effect until the certified final closure of the Transfer Station by the Illinois Environmental Protection Agency ("IEPA").

6. COVENANT.

This Agreement shall constitute a covenant in the nature of a covenant running with the land. Area agrees to execute all additional documents necessary for the recording of this Agreement, or notice thereof, in the chain of title of the Area Property.

7. RECORDS.

Area shall provide to the Village, within thirty (30) days of receipt and/or generation, free of charge, copies of all of the following documents:

Electronic Filing: Received, Clerk's Office 08/26/2026

a. those filed with or received from the U.S. Environmental Protection Agency and the IEPA relevant to charges, complaints or citations or environmental violations with respect to the Transfer Station; and

b. reports on compliance with IEPA closure fund requirements with respect to the Transfer Station.

8. COOPERATION WITH VILLAGE BOARD.

Area agrees to cooperate with the Village Board in using the Transfer Station as a means to help attract new commercial and industrial facilities into the Village. This could include at the Village's request, Area providing design and operation information on the Transfer Station.

Neither this Paragraph 8, nor any other term or condition of this Agreement shall be deemed to create any legal relationship between Area and the Village with regard to the operation of the Transfer Station. The Village does not undertake any responsibility or liability for compliance with any laws, rules or regulations relating to the operation of the Transfer Station. Area is wholly responsible for compliance with all applicable statutes, rules, regulations, and ordinances relating to its operations. The duties and obligations imposed by this Agreement are designed and intended to be in addition to any such applicable requirements imposed on Area by law. Nothing in this Agreement shall be read or construed to conflict with or alleviate or lessen the requirements imposed on Area by law.

9. HOST BENEFIT FEE.

Area shall pay the Village a Host Benefit Fee for each ton of municipal solid waste transferred at the Transfer Station for land disposal. The Host Benefit Fee may be used by the Village for such benefits, services and facilities as are customarily and legally permitted to be funded from the Village's general fund.

a. Calculation of Host Benefit Fee

Commencing thirty (30) days after the Effective Date, Area shall pay to the Village a Host Benefit Fee of 40¢ for each ton of municipal solid waste transferred at the Transfer Station for land disposal.

The Host Benefit Fee rate shall be adjusted annually on January 1 of each succeeding year, beginning in 2026. The adjustment shall be calculated based on the increase in the United States Department of Labor, Bureau of Labor Statistics, U.S. City Average, Consumer Price Index ("CPI") for all urban consumers. The Host Benefit Fee rate shall not be decreased regardless of whether the CPI is negative for a given adjustment period and in that event the Host Benefit Fee rate shall not be adjusted. Each

Electronic Filing: Received, Clerk's Office 08/26/2026

adjustment will be based on the increase (if any) in the CPI during the period November 1 of the prior year through October 31 of the adjustment year, and the amount of the adjustment shall not exceed six percent (6%).

b. Payment

The Host Benefit Fee shall be payable to the Village on a quarterly basis on or before the 20th day following the end of each calendar quarter.

c. Payment Form

Each Host Benefit Fee payment shall be accompanied by a form prescribed by the Village and stating the weight of waste transferred by the Transfer Station, during the payment period and providing such other information as may be necessary for the Village to assure compliance with this Agreement. The form shall be signed by Area.

d. Audit

The Village shall be entitled to audit the scale tickets of Area once per calendar year to verify the amount of the Host Benefit Fee payments.

10. REASONABLE AND NECESSARY COSTS

Area will reimburse the Village for all reasonable and necessary costs, including but not limited to legal fees and consulting fees, associated with the development of this Agreement.

11. DESIGN AND OPERATION; ENVIRONMENTAL SAFEGUARDS.

Area shall have sole design and operational control over the Transfer Station during the life of the facility, subject only to the right of the Village to require that it be designed and operated in compliance with all applicable federal, state, and local laws and regulations. Area agrees that the design and operation of the Transfer Station will incorporate all relevant environmental safeguards required by applicable federal, state, and local laws and regulations.

12. OPERATIONAL COMPLIANCE WITH APPLICABLE LAWS, RULES AND REGULATIONS.

Area warrants that it will at all times conduct its operations at the Transfer Station site in material compliance with all of the ordinances, laws, rules and regulations of the Village, the State of Illinois and the United States of America relevant thereto. The acceptance of payment of the Host Benefit Fee under this Agreement shall not be construed as a waiver by the Village of material compliance by Area with all said laws, rules and regulations; nor shall acceptance of said payment by the Village otherwise restrain or

Electronic Filing: Received, Clerk's Office 08/26/2026

prohibit the Village from taking such legal action as may be necessary to protect the health, safety and general welfare of the residents of the Village, or the enforcement of any and all laws, rules, regulations, ordinances or the requirements for the Transfer Station, in the event of any violation by Area.

13. ACCESS AND INSPECTION

Area shall allow any agent duly authorized by the Village to enter the Transfer Station at reasonable times, to have access to and copy at reasonable times any records required to be kept under the terms and conditions of this Agreement or any law, ordinance, regulations, or developmental or operational permit issued for the Transfer Station, and to otherwise inspect the Transfer Station at reasonable times.

14. ENFORCEMENT OF SITING CONDITIONS

Area agrees that any final and non-appealable conditions to siting imposed on the Transfer Station or Area as part of such siting approval are enforceable by the Village against Area in the same manner in which the Village's ordinances or this Agreement are enforceable.

15. GUARANTEE OF ACCEPTANCE

Area agrees that solid waste generated in unincorporated and incorporated Champaign County will be accepted at the Transfer Station at market rates.

16. VILLAGE DUTIES OR RESPONSIBILITIES.

The terms of this Agreement shall not be construed in any manner to impose upon the Village any duties or responsibilities to provide any services or facilities to Area beyond those which the Village customarily provides to residents and businesses of a similar nature within the Village.

17. VILLAGE SOLID WASTE MANAGEMENT PLAN.

The Village shall include the Transfer Station in its Solid Waste Management Plan (if any) and any modification thereto.

18. LOCAL TIP FEE SURCHARGE.

Except for the fees and/or charges contemplated by this Agreement, the Village covenants and agrees not to levy or impose any other form of tax, fee, surcharge, host fee or other charge solely and directly related to the recycling, transfer, or consolidation of waste at the Transfer Station during the term of this Agreement.

Electronic Filing: Received, Clerk's Office 08/26/2026

19. AMENDMENT TO AGREEMENT.

This Agreement may not be amended except by an Agreement signed in writing by all parties hereto.

20. NOTICES.

Any notice, request, instruction, correspondence or other document required to be given hereunder by any party to another (herein collectively called "Notice") shall be in writing and delivered in person or by courier service requiring acknowledgment of delivery or mailed by certified mail, postage prepaid and return receipt requested, or by electronic mail, as follows:

If to Area, addressed to:

Area Disposal Service, Inc.
4700 N. Sterling Avenue
Peoria, IL 61615
Attention: Matthew R. Coulter
Email: matthew.coulter@gflenv.com

With a copy to:

Elias, Meginnes & Seghetti, P.C.
416 Main Street, Suite 1400
Peoria, Illinois 61602
Attention: Brian J. Meginnes and Janaki Nair
Email: bmeginnes@emrslaw.com and jnair@emrslaw.com

If to the Village, addressed to:

Village of Rantoul
333 S. Tanner
Rantoul, IL 61866
Attn: Village Administrator
Ph: (217) 892-6801
E-mail: seisenhauer@village.rantoul.il.us

With a copy to:
David B. Wesner
Evans, Froehlich, Beth & Chamley
44 Main St., Suite 310
Champaign, IL 61820
Ph: (217) 359-6494
E-mail: dwesner@efbclaw.com

Electronic Filing: Received, Clerk's Office 08/26/2026

Notice given by personal delivery or courier service shall be effective upon actual receipt. Notice given by mail shall be effective five days after deposit with the United States postal service. Notice given by email shall be confirmed by appropriate answer back and shall be effective upon actual receipt if received during the recipient's normal business hours, or at the beginning of the recipient's next business day after receipt if received before the recipient's normal business hours. All Notices by email shall be confirmed promptly after transmission in writing by regular mail or personal delivery. Any party may change any address to which Notice is to be given to it by giving Notice as provided above of such change of address.

21. FORCE MAJEURE.

The obligations with respect to performance of this Agreement by either party (except for the payment of money) shall be suspended and extended in the event, and during the period, that such performance is prevented, hindered, or delayed by a cause or causes beyond the reasonable control of either party including, without limitation, Acts of God (except weather conditions normal for the geographic area of the facility); epidemic, landslide, lightning, hurricane, earthquake, fire, explosion, flood or similar occurrence; an act of the public enemy, war, blockade, insurrection, riot, general unrest, civil disturbance or other similar occurrence that may have a material adverse effect on the construction or operation of the Transfer Station; and any change in law which has a material effect on the construction or operation of the Transfer Station, including the order or judgment of any court, provided such order or judgment is not the result of negligence, failure or wrongful action or omission on the part of the party involved. In the event of disruption of services under any such circumstances, each party will make every reasonable effort and steps to overcome the cause of cessation of services and to reopen the Transfer Station as soon as practicable after the cessation of the cause of suspension of services.

22. SEVERABILITY AND APPLICABLE LAW.

If any provision or subsection hereof or the application thereof to any person or circumstances is held invalid, the other provisions of this Agreement and/or their applicability to other persons or circumstances shall not be affected thereby. It is declared to be the intent of this Agreement that the same would have been adopted had such invalid provision, if any, not been included herein. This Agreement shall be governed by the laws of the State of Illinois. The parties stipulate and agree that any and all litigation relating to or arising out of this Agreement shall be filed in a court of competent jurisdiction in Champaign County, Illinois, and that Champaign County shall be the only proper venue.

23. AUTHORITY TO ENTER INTO AGREEMENT.

Area hereby represents and warrants that it is a valid and existing Illinois corporation authorized to do business in Illinois and that the individuals executing this Agreement have been duly authorized by Area to act on its behalf and enter into this Agreement.

Electronic Filing: Received, Clerk's Office 08/26/2026

The Village shall approve this Agreement by Village Ordinance or Resolution.

24. INDEMNIFICATION.

Area shall at all times (including subsequent to the expiration or cancellation of this Agreement) defend, indemnify and forever keep and hold harmless the Village, and each of its agents, representatives, officials, servants and employees against, without limitation and regardless of the forum in which asserted, any and all charges, fees, costs, expenses, claims of every type, nature and description (including, but not limited to, claims for injuries, death, loss, damages, penalties, environmental and patent claims), suits, liabilities, litigation including appeals, judgments, attorney's fees (including those fees to establish the right to indemnification), which are in any manner connected with this Agreement, or in any manner connected with Area or Area's operation of the Transfer Station. Area's duty to defend, indemnify and forever keep and hold harmless extends to all losses regardless of description. However, Area shall not be liable for losses suffered by the Village to the extent that they arise solely from either the negligent or wanton and willful conduct of the Village.

Except as otherwise expressly stated herein, the Village does not waive or surrender any immunity or indemnity available under any federal, state or local law. This Paragraph 24 shall survive termination or expiration of this Agreement.

25. ENFORCEMENT.

The parties shall have the right to enforce this Agreement by an action in Champaign County Circuit Court. However, prior to commencing such action, the party seeking to enforce this Agreement ("Complaining Party") agrees to give the other party written notice of any non-compliance alleged to constitute a violation of this Agreement at least thirty (30) days (which period includes holidays and weekends) prior to filing an action in Champaign County Circuit Court. The parties shall have the right to seek any and all appropriate relief without limitation and, if successful, shall be entitled to reasonable attorney's fees and costs.

26. TIME OF ESSENCE.

Time is of the essence of this Agreement.

27. BINDING EFFECT.

All of the terms and conditions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors, administrators, legal representatives, and assigns, as the case may be, of the parties hereto.

[Signature pages follow]

Electronic Filing: Received, Clerk's Office 08/26/2026

IN WITNESS WHEREOF, the parties hereto have caused the signatures of their legally authorized representatives to be affixed hereto on the day and year indicated on the first page of this Agreement.

VILLAGE OF RANTOUL

By: _____
Samuel E. Hall, Mayor

Attest:

_____
Village Clerk

AREA DISPOSAL SERVICE, INC.

By: _____

Print name: Matthew R. Carlton

Title: Regional Vice President

924-0606

Electronic Filing: Received, Clerk's Office 08/26/2026

ATTACHMENT A

DESCRIPTION OF AREA PROPERTY

TRACT 1:

PART OF NORTHEAST QUARTER OF SECTION OF 4, TOWNSHIP 21 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF ESTES SUBDIVISION AS RECORDED IN PLAT BOOK "N" AT PAGE 70 IN THE OFFICE OF THE CHAMPAIGN COUNTY RECORDER OF DEEDS, THENCE SOUTH 89°43'17" WEST ALONG A WESTERLY EXTENSION OF THE NORTH LINE OF SAID ESTES SUBDIVISION 159.97 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 00°22'21" WEST 384.62 FEET TO THE WESTERLY EXTENSION OF THE NORTH LINE OF LOT 24 OF PARKER-ESTES SUBDIVISION AS RECORDED IN PLAT BOOK "M" AT PAGE 99 IN THE OFFICE OF THE CHAMPAIGN COUNTY RECORDER OF DEEDS; THENCE SOUTH 89°38'42" WEST ALONG SAID EXTENSION 83.25 FEET; THENCE SOUTH 00°47'36" EAST 190.00 FEET; THENCE NORTH 89°38'42" EAST 101.05 FEET; THENCE SOUTH 71°56'59" EAST 158.49 FEET TO THE WEST LINE OF LOT 24 OF SAID PARKER-ESTES SUBDIVISION; THENCE SOUTH 00°12'51" EAST ALONG SAID WEST LINE 30.29 FEET TO THE NORTH RIGHT-OF-WAY LINE OF S.B.I. ROUTE 119 (U.S. ROUTE 136); THENCE NORTH 82°55'21" WEST ALONG SAID NORTH RIGHT-OF-WAY LINE 233.82 FEET; THENCE SOUTH 89°48'23" WEST ALONG SAID NORTH RIGHT-OF-WAY LINE 200.23 FEET; THENCE NORTH 84°19'37" WEST ALONG SAID NORTH RIGHT-OF-WAY LINE 351.49 FEET; THENCE NORTH 68°09'46" WEST ALONG SAID NORTH RIGHT-OF-WAY LINE 247.08 FEET; THENCE NORTH 48°02'34" WEST ALONG SAID NORTH RIGHT-OF-WAY LINE 262.64 FEET TO THE EAST RIGHT-OF-WAY LINE OF F.A.I. 57 (INTERSTATE 57); THENCE NORTH 30°07'33" WEST ALONG SAID EAST RIGHT-OF-WAY LINE 175.34 FEET; THENCE NORTH 15°28'10" WEST ALONG SAID EAST RIGHT-OF-WAY LINE 172.40 FEET TO THE WESTERLY EXTENSION OF THE NORTH LINE OF SAID ESTES SUBDIVISION; THENCE NORTH 89°43'17" EAST ALONG SAID WESTERLY EXTENSION 1171.96 FEET TO THE POINT OF BEGINNING, ENCOMPASSING 13.708 ACRES, MORE OR LESS, IN CHAMPAIGN COUNTY, ILLINOIS.

PARCEL I.D.: 20-09-04-201-004

Electronic Filing: Received, Clerk's Office 08/26/2026

TRACT 2:

PART OF NORTHEAST QUARTER OF SECTION OF 4, TOWNSHIP 21 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF ESTES SUBDIVISION AS RECORDED IN PLAT BOOK "N" AT PAGE 70 IN THE OFFICE OF THE CHAMPAIGN COUNTY RECORDER OF DEEDS, THENCE SOUTH 89°43'17" WEST ALONG A WESTERLY EXTENSION OF THE NORTH LINE OF SAID ESTES SUBDIVISION 159.97 FEET; THENCE SOUTH 00°22'21" WEST 384.62 FEET TO THE WESTERLY EXTENSION OF THE NORTH LINE OF LOT 24 OF PARKER-ESTES SUBDIVISION AS RECORDED IN PLAT BOOK "M" AT PAGE 99 IN THE OFFICE OF THE CHAMPAIGN COUNTY RECORDER OF DEEDS, ALSO BEING THE POINT OF BEGINNING; THENCE SOUTH 00°22'21" WEST 190.01 FEET; THENCE SOUTH 89°38'42" WEST 79.39 FEET; THENCE NORTH 00°47'36" WEST 190.00 FEET TO THE WESTERLY EXTENSION OF SAID LOT 24; THENCE NORTH 89°38'42" EAST ALONG SAID WESTERLY EXTENSION 83.25 FEET TO THE POINT OF BEGINNING, ENCOMPASSING 0.355 ACRES, MORE OF LESS, IN CHAMPAIGN COUNTY, ILLINOIS.

PARCEL I.D.: 20-09-04-227-005

Electronic Filing: Received, Clerk's Office 08/26/2026

CRITERION 2:

"the facility is so designed, located, and proposed to be operated that the public health, safety, and welfare will be protected"
415 ILCS 5/39.2(a)(ii)

Electronic Filing: Received, Clerk's Office 08/26/2026

CRITERION 2:
DESIGN, LOCATION STANDARDS, AND OPERATING PLAN

The Illinois Environmental Protection Act, at 415 ILCS 5/39.2 (a)(ii), requires that an applicant for a transfer station siting demonstrate that the facility is so designed, located, and proposed to be operated so that the public health, safety, and welfare will be protected. This report demonstrates that the proposed Rantoul Recycling and Transfer Station is designed, located, and proposed to be operated so that public health, safety, and welfare will be protected.

Prepared for:
AREA DISPOSAL SERVICE, INC.
RANTOUL RECYCLING AND TRANSFER STATION
RANTOUL, ILLINOIS
CHAMPAIGN COUNTY

Prepared by:
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
NAPERVILLE, ILLINOIS

CEC Project 340-656

DECEMBER 2025

Electronic Filing: Received, Clerk's Office 08/26/2026

2.0 INTRODUCTION

The Illinois Environmental Protection Act (Act) requires that a pollution control facility, such as the transfer station that is the subject of this application, be so designed, located, and proposed to be operated that the public health, safety, and welfare will be protected. This report demonstrates that the proposed Rantoul Recycling and Transfer Station (Rantoul RTS) is designed, located, and proposed to be operated so that public health, safety, and welfare will be protected.

Area Disposal Service, Inc. (Area Disposal) is applying to the Village of Rantoul (Rantoul) for local siting approval of a municipal solid waste (MSW) transfer station, which will be located at 896 West Champaign Avenue, Rantoul, Champaign County (site). Area Disposal currently operates a waste hauling business at the approximately 14.03-acre site. The proposed facility (the Rantoul RTS) is located northeast of Interstate 57 and West Champaign Avenue (or Route 136) in the western portion of Rantoul.

The proposed Rantoul RTS shall be a state-of-the-practice facility where loads of MSW from collection vehicles will be consolidated into larger loads for transport to a permitted landfill. In addition to MSW, the proposed facility is designed to accept single stream recyclables from collection vehicles for consolidation into larger loads for transport to a material recovery facility. The proposed Rantoul RTS will complement the existing waste hauling business at the site and allow for more efficient processing and/or transportation of these materials.

The Rantoul RTS is designed to accommodate a daily throughput of 500 tons per day. The facility will transfer MSW and recyclable materials collected by Area Disposal, as well as from third-party haulers.

Electronic Filing: Received, Clerk's Office 08/26/2026

2.1 SITE LOCATION

2.1.1 CURRENT PROPERTY USE AND SURROUNDING FEATURES

The Rantoul RTS is located at 896 West Champaign Avenue, Rantoul, Champaign County (site). Area Disposal currently operates a waste hauling business at the approximately 14.03-acre site. The proposed facility (the Rantoul RTS) is located northeast of Interstate 57 and West Champaign Avenue (or Route 136) in the western portion of Rantoul. A site location map is provided as Figure 2-1. A planimetric map on an aerial photograph showing the location of the site and the area within 1,500 feet of the site is provided on Drawing S200.

2.1.1.1 Identification of Applicant and Property Owner

The Rantoul RTS will be operated by Area Disposal. Area Disposal is also the owner of the site and the applicant. Area Disposal is an Illinois corporation, which is an affiliate of GFL Environmental Inc. The address of Area Disposal is 4700 North Sterling Avenue, Peoria, Illinois 61615.

Appendix 2-A contains a certificate of good standing for Area Disposal.

For more than twenty years, Area Disposal has served as a vital asset for Champaign County and Rantoul by providing many essential services, well-paying jobs as well as competitive programs and rates for the local community. Area Disposal employs approximately forty persons with an annual payroll of approximately $3.0 million and annually spends approximately $1.5 million on various vendors.

A summary of the experience of Area Disposal in operating other pollution control facilities of a type similar to the proposed pollution control facility is provided in Appendix 2-B. The summary includes the location, dates of operation of such facilities, and any operating violations by Area Disposal or any subsidiary or parent corporation of Area Disposal within the last five years at any facility in the State of Illinois that is of the same type as the facility that is the subject of the application (i.e., a transfer station). In summary, Area Disposal, its subsidiaries, and parent corporation operate four other permitted MSW transfer stations in Illinois. No violations have been alleged at any of the transfer stations in the last five years.

2.1.1.2 Plat of Survey

The address of the Rantoul RTS is 896 West Champaign Avenue, Rantoul, Champaign County. A plat of survey and legal description for the property is provided on Drawing S300. The property is comprised of two parcels (Champaign County parcel identification numbers 20-09-04-201-004

Electronic Filing: Received, Clerk's Office 08/26/2026

and 20-09-04-227-005) that total approximately 14.03 acres. The deed demonstrating that Area Disposal is the owner of the properties with the two noted parcel identification numbers is provided in Appendix 2-C.

2.1.1.3 Existing Topography and Features

A topographic survey and existing features of the Rantoul RTS are shown on Drawing S400. Area Disposal parks and maintains vehicles and containers associated with its waste collection business at the site. The entrance is located on the southeast portion of the site. The site includes an approximately 29,500 square feet office and maintenance building. An approximately 2-acre parking area for trucks is located north of the building. Parking for employees is provided south and east of the building.

A detention pond is located on the western portion of the site. Storm drains and piping are present in the parking areas around the building, which collect and convey stormwater to the detention pond.

2.1.2 LOCATION STANDARDS

2.1.2.1 Residential Properties

Section 22.14(a) of the Act states the following:

> *No person may establish any pollution control facility for use as a garbage transfer station, which is located less than 1000 feet from the nearest property zoned for primarily residential uses or within 1000 feet of any dwelling, except in counties of at least 3,000,000 inhabitants.*

Champaign County has less than 3,000,000 inhabitants, so the Rantoul RTS may not be established within 1,000 feet of the nearest property zoned for primarily residential uses or within 1,000 feet of any dwelling. The Rantoul RTS is located in Rantoul but portions of the surrounding area are located in unincorporated Champaign County. The Rantoul and Champaign County zoning for the surrounding properties are shown on Figure 2-2. A 1,000-foot setback is also shown on the figure.

Figure 2-2 indicates that all of the surrounding properties within 1,000 feet of the Rantoul RTS are zoned C-2 General Commercial (by Rantoul), I-2 Industrial Heavy (by Rantoul), or Agricultural (by Champaign County). Residences are not permitted uses in a General Commercial or Industrial Heavy area (by Rantoul).

Electronic Filing: Received, Clerk's Office 08/26/2026

As shown on Figure 2-3, the nearest property zoned for primarily residential use is approximately 1,390 feet to the southeast. Figure 2-3 also demonstrates that there are no residences or dwellings within 1,000 feet of the Rantoul RTS. The nearest occupied residence or dwelling is located approximately 1,434 feet to the southeast. An unoccupied farmhouse is located approximately 1,294 feet to the northeast. The figure was based upon Civil & Environmental Consultants, Inc.'s (CEC) review of zoning maps, aerial photographs, as well as a visual survey, performed by Mr. John E. Hock of CEC, of all properties and buildings within approximately 2,000 feet of the site.

2.1.2.2 100-Year Floodplain Limits

As discussed in more detail in Criterion 4, the proposed operations are located over 4,000 feet south of the nearest floodplain area, which is associated with Big Ditch. Thus, the Rantoul RTS is not within the designated 100-year floodplain.

2.1.2.3 Wetland Location Documentation

Section 404 of the Clean Water Act prohibits filling within jurisdictional Wetlands or Waters of the United States without prior authorization from the United States Army Corps of Engineers. The site is located in an agricultural and commercial area. The National Fish and Wildlife mapping service was queried for the site. No wetlands were identified on the Rantoul RTS, as shown on the National Wetland Inventory Map provided in Figure 2-4. The nearest identified wetlands are located in the low areas of the interstate entrance and exit ramps to the southwest of the site.

2.1.2.4 Archaeological or Historical Sites

A CEC professional who meets the Title 36 Code of Federal Regulations Part 61 Secretary of the Interior's Professional Qualification Standards conducted a review of the Illinois Inventory of Archaeological Sites and the Historic and Architectural Resources GIS databases for known cultural resources within the project area. There are no known resources recorded within the project area. The closest archaeological site, a not-eligible historic scatter, is located 0.5 miles southwest of the project area. The closest National Register District, the Chanute Field Historic District, is located 1.1-miles southeast of the project area. As such, no significant historic, architectural, or archaeological resources are known to be located at the site.

2.1.2.5 Threatened or Endangered Species

The site is located in an agricultural and commercial area. To confirm the ongoing lack of presence of any threatened or endangered species, an Illinois Ecological Compliance Assessment Tool (EcoCAT) report was obtained. The EcoCAT report indicates that the Illinois Natural Heritage Database contains no record of state-listed threatened or endangered species, Illinois natural area

Electronic Filing: Received, Clerk's Office 08/26/2026

inventory sites, dedicated Illinois nature preserves, or registered land and water reserves in the vicinity of the project location. The EcoCAT information is provided in Appendix 2-D.

2.1.2.6 Wild and Scenic Rivers

The National Wild and Scenic Rivers Act was passed in 1968 to preserve selected rivers that possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values. The National Wild and Scenic Rivers System [www.rivers.gov] online database was queried. The website indicates that Illinois has one stretch of river designated as a wild and scenic river: the Vermilion River from river mile 46.9 to river mile 29.8 [www.rivers.gov/illinois.php]. This location is near Danville and is over 25 miles from the site.

2.1.2.7 Airports

The nearest airport to the proposed transfer station facility is the Rantoul National Aviation Center Airport (Rantoul Airport). Rantoul Airport is located approximately 1.83 miles southeast of the site as shown on Figure 2-5. Transfer stations are not prohibited from being located near airports. Federal Aviation Administration (FAA) Advisory Circular 15/5200-33C (Advisory Circular) provides guidance on certain land uses that have the potential to attract hazardous wildlife on or near public-use airports. The Advisory Circular indicates the following regarding MSW transfer stations:

- Enclosed waste-handling facilities that receive MSW behind closed doors; process it via compaction, incineration, or similar manner; and remove all residue by enclosed vehicles generally are compatible with safe airport operations, provided they are not located on airport property or within the runway protection zone (RPZ).
- These facilities should not handle or store putrescible waste outside or in a partially enclosed structure accessible to hazardous wildlife.
- MSW transfer facilities that are open on one or more sides; that store uncovered quantities of municipal solid waste outside, even if only for a short time; that use semi-trailers that leak or have trash clinging to the outside; or that do not control odors by ventilation and filtration systems (odor masking is not acceptable) do not meet the FAA's definition of fully enclosed trash transfer stations.

As discussed in the operating plan, the Rantoul RTS meets all of the above criteria so will be compatible with safe airport operations.

CEC provided the proposed design drawings and operating plan to the Rantoul Airport. Attachment 2-E contains a letter from the Rantoul Airport indicating that they:

Electronic Filing: Received, Clerk's Office 08/26/2026

- Have studied the provided information for the proposed Rantoul RTS;
- Visited similar facilities;
- Reviewed the Advisory Circular carefully; and
- Do not foresee any impacts on the Rantoul Airport operations and have no objection to the project proceeding as proposed.

As noted above, the Advisory Circular indicates that waste handling facilities should not be located within an RPZ. FAA Advisory Circular 150/5300-13A, Section 310 indicates the following regarding the RPZ:

- The RPZ's function is to enhance the protection of people and property on the ground through the airport ownership over RPZs.
- The RPZ is trapezoidal in shape and is centered about the extended runway centerline.
- The RPZ has two components with varying widths (central portion and controlled activity), and the approach RPZ may be different from the departure RPZ.
- The RPZ generally extends 1,000 feet from the end of the runway.

Since the site is located over 1.8 miles from the Rantoul Airport. The site is not in the RPZ.

Electronic Filing: Received, Clerk's Office 08/26/2026

2.2 SITE DESIGN

As discussed in Section 2.1, Area Disposal currently operates a waste hauling business at the site. The proposed development includes the following:

- Construction of a transfer building including a loading pit;
- Installation of a scale; and
- Construction of access roads for the incoming and outgoing vehicles.

The site plan for the Rantoul RTS is provided on Drawing S500. The site design is discussed further below.

2.2.1 TRANSFER BUILDING

The transfer building is designed to be an approximately 12,000-square-foot, two-level, rectangular, pre-engineered metal building. The building will have a width of approximately 100 feet and a maximum length of approximately 120 feet. The waste transfer tipping floor is situated on the upper level with a back-in loading pit on the lower level approximately 7.5 feet lower than the tipping floor. A floor plan of the transfer building is provided on Drawing S600 and elevation views of the building are provided on Drawing S700. The transfer building will be equipped with electric and water service.

The design and operation of the transfer building is planned to incorporate the following green/sustainable building principles.

- Use of recycled materials - The transfer building is intended to be manufactured with up to 95% recycled steel, and the aggregate subbase for the turnaround areas, roads, and building are intended to be produced from recycled concrete.
- Minimize energy use - The transfer building is designed to minimize energy usage by:
    - Using light emitting diode bulbs for all interior lights, which are generally 90% more efficient than incandescent bulbs;
    - Constructing translucent panels in the transfer building sidewalls to admit daylight during operational hours; and
    - Using a high albedo roof (i.e., a roof designed to reflect significantly more sunlight and absorb less heat than a typical roof) to keep the transfer building cooler and preclude the need for air conditioning.

The tipping floor will be a minimum 8-inch thick slab-on-grade reinforced concrete. Floor elevations of the transfer building will be designed so that the highest elevation will be at the building walls with a downward slope both into and out of the building. Similarly, the loading pit

Electronic Filing: Received, Clerk's Office 08/26/2026

is designed to be sloped in the direction of a collection sump in the approximate center of the pit. Any wastewater that flows to either sump will flow through an oil-water separator into a holding tank. An appropriate contractor will empty the holding tank, as needed and in accordance with all relevant laws and regulations.

2.2.2 SCALE

Access to the site is currently provided by a two-way access drive located on the southeast perimeter of the site. The access drive will accommodate all vehicles entering and exiting the site, including employee vehicles, single-unit waste collection vehicles, semi-trailer transfer vehicles, and emergency vehicles.

A scale will be installed for entering and exiting vehicles as shown on Drawing S500. The site has been designed to accommodate a second scale, if needed. The scale area will be equipped with surveillance cameras and a communication system with the scale office.

2.2.3 SCALE OFFICE AND PARKING FACILITIES

The scale office will be located in the office space of the existing building and include a workstation for the scale clerk and an office with records storage. The scale office will be equipped with monitor(s) which display the video from the surveillance cameras on the scale. As an alternative, a scale house may be constructed adjacent to the scale, which would function the same as the scale office.

Parking areas are provided to accommodate the projected number of employees and a select number of visitors at the proposed transfer station. Restrooms are available in the office area of the existing building and portable toilets will be available near the scale. Multiple parking spaces are provided by the existing building (see Drawing S400).

2.2.4 ACCESS ROADS AND TRAFFIC FLOW

Collection vehicles will enter the site and proceed west to the truck scale. At the scale, each incoming disposal vehicle will be weighed, and billing information will be obtained from the driver (i.e., company, type of waste, origin of waste). MSW disposal vehicles will then proceed northwest to unload in the transfer building through the bay doors. After unloading, they will proceed southeast and, presuming the truck's tare weight (weight when empty) is known, the truck will exit the facility. If the truck's tare weight is unknown, the truck will proceed across the scale to obtain the tare weight and then proceed east to exit the facility. The traffic flow pattern for collection vehicles is shown on Drawing S500.

Electronic Filing: Received, Clerk's Office 08/26/2026

Transfer trailers will enter the site using the right-hand bypass lane and proceed northwest to the north side of the transfer building to the loading pit. They do not need to pass over the scale. After loading, the transfer trailers will exit the loading pit and move forward onto the exit road, where the load will be tarped. All transfer trailers are planned to be equipped with auto tarpers. Once the load is tarped, the transfer trailer will proceed southeast to be weighed at the scale. The transfer trailer will then proceed east and exit the facility. The traffic flow pattern for transfer trailers is shown on Drawing S500.

The turning radius for the various vehicle types and movements were evaluated and adequate space is available for anticipated turns. Queuing space is provided as vehicles enter the site, potentially wait to use the transfer building, and potentially wait to receive their tickets as they exit the site.

Electronic Filing: Received, Clerk's Office 08/26/2026

2.3 STORMWATER MANAGEMENT DESIGN

The stormwater at the site will be managed in accordance with the applicable requirements of Illinois Environmental Protection Agency (IEPA) and Rantoul. The stormwater management system and the stormwater pollution prevention measures for the site are provided below. The stormwater management features may be modified, as requested, based on comments during IEPA permitting.

2.3.1 STORMWATER MANAGEMENT SYSTEM

The site has an existing stormwater management system that includes the following major components:

- Storm sewer inlets and piping;
- Above ground detention pond; and
- Inflow and outflow structures for the detention pond.

In general, stormwater from the eastern portion of the site flows to the detention pond via sheet flow and underground piping, and discharges through an outflow structure to the ditch along the interchange to Interstate 57.

The existing stormwater management system was constructed during 2025 as part of the site improvements for the waste hauling operations. As part of these site improvements, a stormwater management plan was submitted to and approved by Rantoul. The stormwater management system that was designed, approved and constructed contemplated the impervious nature of all of the improvements proposed in this siting application.

A stormwater management plan was prepared consistent with the Rantoul requirements for the proposed site improvements in this local siting application and is provided in Appendix 2-F. Since the existing stormwater management system contemplated the impervious nature of all of the improvements proposed in this siting application, the stormwater management plan demonstrates that minimal modifications to the detention pond are required. An emergency overflow structure is proposed to be added to the detention pond. Additional storm sewer inlets and piping are also proposed. The additional components of the stormwater management system are shown on Drawing S500.

Electronic Filing: Received, Clerk's Office 08/26/2026

2.3.2 STORMWATER POLLUTION PREVENTION

Stormwater pollution prevention will be managed on-site both during construction and during operations. Discharges associated with the construction and operation of the Rantoul RTS will be minimized through controls and procedures.

Prior to site development, a notice of intent and stormwater pollution prevention plan will be submitted to the IEPA to obtain a General National Pollutant Discharge Elimination System (NPDES) Permit for Storm Water Discharges from Construction Site Activities, as required by state and federal law. During construction, procedures such as installing silt fencing, straw bale filters, temporary seeding and other methods will be used. All non-paved areas of the Rantoul RTS will be vegetated upon completion of construction to provide long-term erosion protection.

Prior to operations, a separate notice of intent and stormwater pollution prevention plan will be submitted to the IEPA to obtain a General NPDES Permit for Storm Water Discharges from Industrial Activities. Once operational, stormwater runoff from areas with transfer station operations will be conveyed to the detention pond. Additionally:

- All waste tipping and handling operations will be conducted completely within the transfer building;
- Liquids generated and collected on the tipping floor and within the loading bays will be directed to floor drains connected to a holding tank; and
- Employees will be trained to identify situations that may cause exposure of waste or other materials to stormwater runoff.

Electronic Filing: Received, Clerk's Office 08/26/2026

2.4 OPERATIONS PLAN

This section describes the daily operating procedures at the proposed transfer station facility. The operations plan details waste acceptance and handling procedures, nuisance control procedures, staffing and equipment requirements, cleaning procedures, and the closure plan for the proposed transfer station.

2.4.1 DAYS AND HOURS OF OPERATION

The Rantoul RTS anticipates operating hours of 5:00 a.m. to 6:00 p.m. on weekdays and 5:00 a.m. to 12:00 p.m. on Saturdays, with no operation on Sundays or the six major federal holidays (New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day), provided that on the Saturday following any federal holiday regular business hours may be extended to the weekday hours.

2.4.2 FACILITY STAFFING AND TRAINING

Area Disposal currently employs approximately forty persons including office personnel, mechanics, drivers, and the facility manager. With the operation of the proposed Rantoul RTS, approximately five additional employees would be added including operators, laborers, and a scale attendant. The proposed transfer station will be staffed with the necessary number of employees to safely and efficiently operate the facility. A facility manager and operators will primarily manage and perform the operations at the transfer building. Brief descriptions of the primary duties and training requirements for the facility manager and operators are provided below. The exact number and duties of personnel managing and performing the operations at the transfer and building may vary over time.

2.4.2.1 Facility Manager

The facility manager is responsible for the supervision of all activities at the site, including safety and emergency response coordination (safety officer), inspection of all operational and safety equipment, on-the-job training for personnel, site inspection, production and incident reporting and record keeping, and load inspections. The facility manager duties include:

- To allocate work efficiently to all support staff in order to maximize productivity, meet customer demands, and maintain quality of service.
- To efficiently develop and provide appropriate work training and instruction to staff members, in accordance with company guidelines.
- To communicate customer requirements to relevant staff members.

Electronic Filing: Received, Clerk's Office 08/26/2026

- To manage the completion of all operating equipment installations, repairs, and replacements in accordance with company procedures and deadlines.
- To recruit and train/arrange training for site staff as required.

Responsibilities will also include coordinating and maintaining site records. These records include, but are not limited to, waste and recyclable receipt data, load checking reports, results of inspections (by IEPA or relevant local authorities), copies of all submitted reports (to IEPA or any relevant local authorities), employee training records, and employee personnel records.

The facility manager's training will include operating requirements, safety and emergency response, record keeping and reporting, and identification of unacceptable wastes/load inspections.

2.4.2.2 Equipment Operators

At least one trained operator per shift will be present and responsible for operating the wheel loader used to load waste and recycling materials from the tipping floor into the transfer trailer, and operate any other equipment needed for operations. This person will also ensure that all weight records of transfer trailers are collected and stored. This position requires training on hazardous waste and unacceptable waste identification.

The equipment operator's training includes operating requirements, safety and emergency response, record keeping and reporting, and identification of unacceptable wastes/load inspections.

2.4.3 WASTE ACCEPTANCE

The Rantoul RTS will accept municipal waste and single-stream recyclables (SSR) for transfer to off-site disposal location(s). "Municipal waste" is defined by Section 3.290 of the Act to mean garbage, general household and commercial waste, industrial lunchroom or office waste, landscape waste, and construction or demolition debris. The site will also accept SSR for transfer to processing facilities for separation and re-use as a commodity.

While included in the definition of municipal waste, landscape waste has been banned from disposal in Illinois landfills since July l, 1990 and now has an entirely separate regulatory structure that involves composting. Thus, the Rantoul RTS will not accept loads of landscape waste.

The Rantoul RTS will reject materials that are not compatible with the operations of the proposed transfer station facility. The following wastes, at a minimum, are considered unauthorized and will not be knowingly accepted at the Rantoul RTS:

Electronic Filing: Received, Clerk's Office 08/26/2026

- Hazardous substances (as defined by Section 3.215 of the Act);
- Hazardous waste (as defined by Section 3.220 of the Act);
- Potentially infectious medical wastes (as defined by the Act in Section 3.84);
- Universal waste (as defined by Title 35 of the Illinois Administrative Code Part 733 including batteries, pesticides, mercury-containing equipment and lamps);
- Regulated asbestos containing materials;
- Polychlorinated biphenyl wastes;
- Used motor oil;
- Source, special, or by-product nuclear materials;
- Radioactive wastes (both high and low level);
- Sludge;
- White goods (incidental white goods received at the proposed transfer station will be segregated and stored for pickup by an off-site recycler);
- Lead-acid automotive batteries (incidental automotive batteries received at the transfer station will be segregated and stored for pickup by an off-site recycler);
- Used tires (incidental tires received at the transfer station will be segregated and stored for pickup by an off-site recycler); and
- Landscape waste.

Rejected materials will not be allowed to unload or will be promptly removed and transferred to an appropriate facility for ultimate disposition or, to the extent allowed by law, legally placed back on the vehicle that transported said unauthorized waste to the Rantoul RTS and sent away from the Rantoul RTS.

The Rantoul RTS reserves the right to reject any other materials or loads that are deemed incompatible with site operations. The Rantoul RTS will deny access to a vehicle for reasons that include, but are not limited to, the following:

- The vehicle is known, or reasonably suspected, to contain unauthorized waste materials.
- The vehicle appears likely to leak or spill material, especially material that is easily windblown or otherwise scattered.
- The vehicle does not appear to be in safe operating condition.
- The vehicle has repeated non-compliance with Area Disposal's tarping policy.

2.4.4 OPERATING EQUIPMENT

Mobile equipment will be used to facilitate all transfer operations and to handle material for storage and load out after processing. The following provides an overview of the typical types of equipment that will be used at the proposed transfer station facility:

Electronic Filing: Received, Clerk's Office 08/26/2026

- Semi-tractor/yard tractors for transfer trailer hauling/on-site movement;
- Semi-trailers for material transfer to landfill; and
- Wheel loaders for material handling to transfer trailers.

Other equipment may also be used as needed. If replacement equipment is necessary, due to equipment failure or breakdown, the equipment will be brought in from contractor rental yards. The list of mobile equipment may be changed or supplemented in response to incoming volumes, materials types, etc.

2.4.5 TRANSFER OPERATIONS AND STORAGE

Unloading and loading of the waste will take place only inside the transfer station building, and only under the direction of Rantoul RTS operating personnel. Loading equipment inside the structure will load the waste into transfer trailers in the loading pit on the north side of the building.

All transfer trailers are planned to be equipped with auto tarpers. During tarping, the driver will be trained to make sure that no waste is clinging to the outside of the transfer trailer and no leaks are occurring.

No waste shall be left on the floor of the transfer station for more than twenty-four hours. SSR may be stored on the floor inside the transfer station building as needed to allow sufficient material to be accumulated to provide a full transfer trailer load.

Waste and/or recyclables may be kept temporarily outside in transfer trailers which are tarped/covered for no more than twenty-four hours, except over holidays and weekends, when the time shall be extended by an additional twenty-four hours for a holiday and forty-eight hours for a weekend. As indicated above, all transfer trailers shall be tarped/covered at all times during such periods of temporary storage.

2.4.6 ON-SITE TRAFFIC CONTROLS

As vehicles enter the site, pavement markings and/or signs will direct each vehicle to the lane which it should use. A spotter may be stationed at the entrance to assist/direct vehicles as needed.

In-bound collection vehicles will proceed over the in-bound scale. Security cameras, a screen display and an intercom will be present for the driver to communicate with the scale clerk located in the office. The purpose of the scales is to measure the weight of the waste being delivered to the site. Typically, in-bound and out-bound weights are obtained, and then the difference between the two weights is the amount of waste delivered to the site (and is the basis of the customer's

Electronic Filing: Received, Clerk's Office 08/26/2026

invoice). Customers may request tickets/receipts documenting the recorded weights upon exiting the site.

The Rantoul RTS will be implementing an electronic ticketing system to minimize time on the scales and the ticketing/receipt process. The system includes the following:

- For the in-bound trucks, the scale clerk simply records the company name, license plate, driver, material, weight, and related information. The process is very quick, and the truck generally only needs to stop for about thirty seconds on the in-bound scale.
- Area Disposal collects and stores tare-weights (empty weights) of each of the packer-trucks for its own vehicles and regular customers (recalibrated monthly). The stored tare-weight is then used for each transaction, which allows those vehicles to predominantly bypass the out-bound scale. For these customers, the scale clerk routinely sends a batch-ticket to the designated customer via email.
- For those that do need to proceed over the out-bound scale, a monitor/screen and corresponding camera system will be present which will display the truck, license plate, driver, tare-weight, and related information. The driver can take a picture of the monitor/ screen with their phone, opt for an emailed ticket, or request a printed ticket/receipt.
- For those that request a printed ticket/receipt or need to provide payment, the vehicle will pull off the scale and park in a designated area along the drive.

2.4.7 CLEANING PROCEDURES

The tipping floor and barrier walls will be cleaned with a pressure washer after sweeping as needed to remove waste residue and control odors. A disinfectant may be used in the washwater to control odors. All excess washwater from the tipping floor will be directed through the oil-water separator to the holding tank.

2.4.8 LITTER CONTROL

Unloading, transferring, and loading of all waste will be performed within the transfer building to minimize the potential for wind-blown distribution of litter. Tarps on all loaded incoming and outgoing open-top trucks will contain the waste to prevent its escape onto the grounds or the public roadways. Loaded transfer trailers will be tarped using auto tarpers. Area Disposal shall use its best efforts to assure that vehicles hauling waste to and from the Rantoul RTS shall be suitably covered so as to prevent waste from leaving the vehicles.

Fencing will surround the Rantoul RTS property and assist in keeping any windblown litter from leaving the site. In order to ensure the effectiveness of these litter prevention measures, Rantoul

Electronic Filing: Received, Clerk's Office 08/26/2026

RTS personnel will patrol the site during hours of operation to collect any litter. Any litter collected will be added to the waste being managed on the tipping floor.

2.4.9 VECTOR CONTROL

Several design and operational features have been incorporated into the proposed Rantoul RTS to minimize the potential to attract vectors, including:

- Elimination or minimization of available food by removing waste on a first-in, first-out basis. The waste material will remain at the proposed transfer building for only a short period of time before being processed and removed;
- Routine cleaning of the floor inside the proposed transfer building, as discussed above;
- Regular inspections by site personnel for rodents, insects, and birds;
- Containment of waste within the transfer building;
- Requiring that all vehicles entering and exiting the site be properly tarped or fully enclosed; and
- Contracting with a professional exterminator to inspect and treat the site as needed.

2.4.10 DUST AND MUD CONTROL

All access roads, parking areas, storage areas, and vehicle-maneuvering areas at the Rantoul RTS will be appropriately paved, thus minimizing dust generated at the site. With the exception of entrance and exit bays, the transfer building will be fully enclosed to protect operations from the wind. Potential dust impacts from material operations within the structure (e.g., unloading, processing, and loading) will be mitigated by periodic washdowns of the floors and barrier wall areas.

A street sweeper will be provided to remove mud, dirt and dust tracked onto hard surfaces inside the site on an as-needed basis, except during severe weather conditions (e.g., heavy rains, winter conditions when salt has been applied to the roadway). All access drives, parking areas, storage areas, and vehicle maneuvering areas at the site shall be paved and swept with a street sweeper as needed.

2.4.11 ODOR CONTROL

Odors will be controlled at the Rantoul RTS through several effective design and operating features. Area Disposal will implement the following to control odors:

- MSW will be delivered primarily in enclosed vehicles, and tarps will be required on all non-enclosed loads.

Electronic Filing: Received, Clerk's Office 08/26/2026

- Unloading, transferring, and loading operations for MSW will be performed indoors within the transfer building.
- MSW will be removed from the tipping floor with a frequency adequate to greatly minimize the generation of odors.
- The MSW tipping floor areas will be cleaned with a pressure washer as needed.
- If malodors are detected off-site, the source of odor generation will be removed from the site, and the off-site condition will be monitored by site personnel to insure against reoccurrence. If a continuous source of odorous materials is identified, the generator will be contacted and advised that the materials must be effectively treated for odor control or the service will be discontinued and the materials no longer brought to the site.

Due to the site's proximity to the Rantoul Airport, the transfer building will be equipped with a ventilation and filtration system. The ventilation system will remove air from the building and be designed to work in conjunction with the building design and operations to provide a negative air pressure condition within the building. The filtration system will be designed to effectively eliminate any odors from the exhaust. The ventilation and filtration system will include the following:

- Ventilation fans mounted on the roof or outside walls of the transfer building;
- A duct system at the inlet of each ventilation fan;
- An ozone generating equipment and dispersion device installed within each duct system which will destroy any odorous compounds or bacteria; and
- A particulate filter system at the inlet of each ventilation unit.

The transfer building will be equipped with doors at all vehicle ingress/egress locations including openings for transfer trailers and waste collection vehicles. The doors will remain closed when not in use. The doors are sized and will be operated to minimize the area open to the outside at any one time.

2.4.12 NOISE CONTROL

Noises associated with the operation of the proposed Rantoul RTS include vehicular traffic, equipment, and safety signals on mobile equipment. The design and location of the proposed transfer station minimizes the potential for noise-related concerns.

The Rantoul RTS is located in a commercial area and will have minimal noise impact to the surrounding properties. Noise characteristics are expected to be similar to those generated by existing surrounding land uses.

Electronic Filing: Received, Clerk's Office 08/26/2026

Unloading and loading of the transfer vehicles will take place inside the proposed transfer building, thereby reducing noise levels outside of the building. All on-site equipment will be equipped with mufflers and will utilize other sound-suppressing devices, as required, for compliance with applicable state regulations. A routine maintenance program will be followed to ensure all on-site equipment is kept in good working order.

2.4.13 SITE SECURITY

The Rantoul RTS as proposed is bordered on the north by agricultural properties, the east by commercial properties, the south by expressway ramps and Champaign Avenue, and to the west by Interstate 57. The site will be surrounded with a 6-foot fence with a locking gate system. The point of access to the proposed transfer station will be the gated entrance off of the West Champaign Avenue service road. Signage will be present at the entrance gate identifying the facility, operating hours, and a warning to all unauthorized persons.

During operating hours, all traffic entering the facility will pass by the scale office and will therefore be visible to the scale personnel. The scale office will be equipped with multiple security cameras that feed to monitors viewed by the scale personnel. The security cameras will be positioned to allow full and constant visibility of the driveway, scale, and entrance area. Any unauthorized traffic will be stopped at this point. During non-operating hours, the access gates will be in a closed and locked position.

Lights are or will be installed at the site entrance, in parking areas and on the transfer building to provide adequate lighting. A security camera system will also be installed at strategic locations around the site.

2.4.14 VEHICLE FUELING PROCEDURES

Fuel tanks are located on-site and will be used to fuel mobile equipment.

2.4.15 COMMUNICATIONS

All equipment operators at the Rantoul RTS will be equipped to communicate with the facility manager and other personnel via mobile phone at all times during operating hours. Emergency numbers will be clearly posted.

2.4.16 MONITORING PLAN

Stormwater discharges will be monitored quarterly at the Rantoul RTS in accordance with the National Pollutant Discharge Elimination System permit and stormwater pollution prevention plan as described in Section 2.3.2.

Electronic Filing: Received, Clerk's Office 08/26/2026

The proposed design and operations of the Rantoul RTS preclude the potential for impacts to groundwater. In addition, the Rantoul RTS does not include the construction or operation of any regulated air emission sources. As such, no groundwater and/or air quality monitoring is anticipated to be required by the IEPA, and no groundwater and/or air monitoring is proposed.

2.4.17 RECORDKEEPING

Accurate and up-to-date records documenting facility operations will be maintained at the Rantoul RTS. These records will include, but are not limited to, the following:

- Daily records of the amounts and description of the various types of materials received;
- Load inspection reports;
- Results of inspections (by IEPA, county, or local authorities);
- Copies of all submitted reports (to IEPA, county, or local authorities);
- Employee training records; and
- Employee personnel records.

The records will be maintained for a period of at least two years. The records of the amounts and descriptions of the various types of materials received will include both waste receipts and scale weight on the disposal tickets and logs (electronic and/or hard copies), including, without limitation, those showing the amount in tons of all material received.

2.4.18 SITE THROUGHPUT CAPACITY

Subject to IEPA permitting, the Rantoul RTS is anticipated to accept up to 500 tons per day of which up to 350 tons per day may be MSW and up to 150 tons per day may be SSR.

The maximum volumes are based on the following:

- MSW - Area Disposal currently hauls approximately 190 tons per day of MSW from the Service Area (which is defined in Criterion 1 as all of Champaign County and certain townships in Iroquois and Ford Counties). The 350-ton-per-day amount would accommodate the existing volume Area Disposal hauls, volume from other privately owned companies, reasonable growth, and a contingency for a peak day.
- SSR - Area Disposal currently hauls approximately 15 tons per day of SSR from the Service Area. The 150 tons per day limit would accommodate the existing volume Area Disposal hauls, volume from other privately owned companies, significant growth, and a contingency for a peak day.

Electronic Filing: Received, Clerk's Office 08/26/2026

The Rantoul RTS has been designed to manage the peak amounts of each material type on the same day. The site and operating features that determine the daily throughput capacity of a transfer station are the following:

- Incoming waste flow;
- The available capacity to queue incoming waste vehicles;
- The time needed for collection vehicles to empty their loads and exit the facility;
- The time needed to load a transfer trailer;
- The tipping floor size and stockpiling capacity; and
- The operating hours of the facility.

2.4.19 DAILY OPERATING CAPACITY AND THROUGHPUT CAPACITY DESIGN

The following summarizes our evaluation of site features that are determinative of daily operating capacity and throughput capacity, relative to the anticipated acceptance volumes. The assumptions discussed below are typical estimates and may vary.

2.4.19.1 Incoming Waste Flow

This evaluation utilizes a summary of the anticipated collection amounts and transportation times based on the following:

- The typical anticipated route schedules of Area Disposal MSW and SSR collection vehicles, which schedules will be consistent week to week.
- The typical distribution of the number of Area Disposal packer trucks versus roll off trucks that Area Disposal operates in the Service Area.
- The typical average weights of loaded Area Disposal MSW and SSR collection vehicles, which average weights are not expected to significantly change with the operation of the Rantoul RTS.

The information indicates the following:

- Minor amounts of MSW and SSR will be accepted prior to 9:00 a.m.
- The peak hours of MSW and SSR acceptance will be between 10:00 a.m. and 12:00 p.m., and then again between 3:00 p.m. and 6:00 p.m.
- MSW and SSR acceptance is not anticipated after 6:00 p.m.

Electronic Filing: Received, Clerk's Office 08/26/2026

2.4.19.2 Unloading Time and Queuing Capacity

Trucks may be required to queue (i.e., wait in line) if multiple trucks arrive at the transfer station facility in a short amount of time. The time needed to weigh-in a vehicle at the scale is approximately thirty seconds. The time for a collection vehicle to pull forward to the transfer station building, back into the building, discharge its load and pull out of the area (such that the area is clear for another disposal vehicle) is estimated to be approximately five minutes.
The transfer building will be equipped with three 20-foot wide bay doors. To be conservative, only two vehicles are assumed to be unloaded at one time. Based on an unloading time of five minutes, up to twenty-four vehicles can be unloaded at the MSW and SSR transfer building in an hour (60 minutes/hour x 1 unloading vehicle/5 minutes x 2 concurrent vehicles/unloading vehicle).

The Rantoul RTS entrance drive has sufficient capacity for at least four collection vehicles: one on the scale and at least three queuing on-site before the scale. Additional queuing capacity is available between the scale and the unloading areas, if needed, to prevent any on-site traffic gridlock.

2.4.19.3 MSW and SSR Transfer Trailer Loading Rate

Rantoul RTS personnel will use a wheel loader for the transfer of MSW and SSR. Based on similar operations at other facilities, the typical time to load MSW into a transfer trailer with a wheel loader is approximately twelve minutes and the capacity of a transfer trailer loaded with MSW is approximately 24 tons. The average weight of a loaded transfer trailer with SSR is estimated to be approximately 18 tons per load and, primarily due to the lower density of SSR relative to MSW, the time to load a transfer trailer with SSR is estimated to be approximately fifteen minutes.

Based on the above, the facility has the capacity to load up to five transfer trailers per hour of MSW or approximately four transfer trailers per hour of SSR.

If MSW and/or SSR is being unloaded onto the tipping floor at a rate less than the respective load out rates, MSW and/or SSR may not need to be staged on the tipping floor (assuming material is being loaded during that time). If MSW and/or SSR is being unloaded onto the tipping floor at a rate greater than the respective load out rates, MSW and/or SSR will need to be staged on the tipping floor. It should be noted that transfer trailer loading can occur simultaneously with unloading from collection vehicles.

2.4.19.4 Tipping Floor Size

The tipping floor for the transfer building is approximately 10,000 square feet (100 feet by 100 feet). MSW and SSR will be unloaded in separate locations, which may vary based on actual daily

Electronic Filing: Received, Clerk's Office 08/26/2026

acceptance volumes of each. MSW and SSR cannot occupy the entire tipping floor as adequate maneuvering space is needed for the loader and the disposal vehicles. During a maximum waste acceptance day, MSW is anticipated to be stored on the west/northwest portion of the transfer building, and SSR stored in the southwest portion. A barrier wall of concrete blocks may be provided to facilitate the separation of MSW from SSR.

2.4.19.5 Operating Hours

The Rantoul RTS anticipates operating hours of up to 5:00 a.m. to 6:00 p.m. on weekdays and 5:00 a.m. to 12:00 p.m. on Saturdays. These hours will allow operational flexibility to accommodate specific customer or market needs. However, the Rantoul RTS will not be open all of these hours if the customer needs and market do not warrant these hours.

2.4.19.6 Evaluation of Maximum Amount

Tables 2-1 and 2-2, located in the tables section of this Criterion 2, provide an evaluation of the needed tipping floor storage volume for 350 tons per day of MSW and 150 tons per day of SSR.

As shown in Tables 2-1 and 2-2, the transfer building is anticipated to receive up to eight MSW waste collection vehicles and four SSR vehicles during the peak one-hour period (from 11:00 a.m. to noon), which is 50% of the twenty-four vehicles per hour capacity. During the peak one-hour period, transfer trailers only need to be loaded out at three per hour, which is approximately 60% of the load out capacity of five transfer trailers per hour.

Also as shown on Table 2-1, the maximum amount of MSW anticipated to be required to be staged during the peak one-hour period is approximately 37 tons. As shown on Table 2-2, the maximum amount of SSR anticipated to be required to be staged during the peak one-hour period is approximately 24 tons.

As previously mentioned, the tipping floor is approximately 10,000 square feet. MSW is anticipated to be staged along the west barrier wall and SSR is anticipated to be staged in the corner area of the south and west barrier walls. An approximately 1,000 square foot area will hold at least 50 tons of MSW. An approximately 1,200-square-foot area will hold at least 30 tons of SSR. SSR takes up a higher proportion of the tip floor since its density is less than the density of MSW. Based on the above assumptions, the staging of MSW and SSR will only occupy less than 2,200 square feet (or approximately 22% of the tipping floor) during a peak one-hour period, which will still leave more than adequate maneuvering space for the wheel loader to load transfer trailers and collection vehicles to unload materials.

Electronic Filing: Received, Clerk's Office 08/26/2026

The largest storage volumes would occur during the 11:00 a.m. to noon hour (as the collection vehicles complete their "first round"). During the second round, the SSR trucks could be parked/ staged on-site and unloaded later if helpful for site operations.

The above evaluation indicates that the proposed Rantoul RTS acceptance rates of 350 tons per day of MSW and 150 tons per day of SSR can be easily managed under the anticipated incoming waste flow.

2.4.20 FINAL CLOSURE

The expected life of the Rantoul RTS is at least twenty years. Final closure of the Rantoul RTS will consist of the following activities:

- Removal of all MSW from the transfer station building;
- Cleaning of the transfer station building and equipment;
- Removal of all equipment; and
- Preparation and submittal of closure documentation to the IEPA.

Closure activities will be initiated within thirty days of the date Area Disposal declares the acceptance of its last load of waste, or within thirty days of notification of closure, whichever is earlier. No waste will be accepted at the proposed transfer station after either of the two above-mentioned events. Access gates will be secured and signs will be posted which indicate that the facility is closed and is no longer accepting MSW.

2.4.20.1 Waste Removal

All MSW is anticipated to be removed from the Rantoul RTS within twenty-four hours of arrival at the transfer station.

2.4.20.2 Building and Equipment Cleaning

After all waste has been removed from the transfer building, all areas and equipment that were in contact with waste will be thoroughly cleaned. Such areas will include, but are not limited to, the tipping floor and barrier walls. The building is anticipated to remain and be re-purposed.

2.4.20.3 Equipment Removal

After the transfer building has been cleaned, on-site equipment will be removed from the proposed Rantoul RTS for beneficial reuse or resale.

Electronic Filing: Received, Clerk's Office 08/26/2026

2.4.20.4 Continued Monitoring

Since all wastes will be removed, continued monitoring is not anticipated to be required by the IEPA and no continued monitoring after certification of closure is proposed.

Electronic Filing: Received, Clerk's Office 08/26/2026

2.5 CONSTRUCTION QUALITY ASSURANCE AND CONTROL PROGRAM

Construction quality assurance (CQA) generally consists of a planned and systematic actions to assess conformity of construction with the required plans and specifications, and to provide adequate confidence that constructed items meet contractual and regulatory requirements. Construction quality control (CQC) generally consists of actions implemented by the contractor to document that its methods, materials, and workmanship are accurate and correct, and meet contractual and regulatory requirements including required plans and specifications.

All required regulatory approvals, including an IEPA development permit and any local permits, will be received prior to construction of the Rantoul RTS. The development features of the Rantoul RTS will be described in the narrative and drawings which will be submitted to the IEPA as part of the application for a development permit. The narrative and drawings submitted to the IEPA will be consistent with the approved local siting application.

Construction level drawings and specifications will be developed prior to the construction of the various project components. A CQA/CQC plan will also be prepared which will define the requirements regarding the following:

- Roles and responsibilities;
- Contractor submittals;
- Quality assurance testing;
- Field observations;
- Survey requirements;
- Project documentation and routine reporting; and
- Project coordination meetings.

The construction of the following features will be observed and documented:

- Foundations and slabs;
- Roadways and/or paving;
- Buildings and ancillary features;
- Scale(s);
- Utilities; and
- Stormwater control features.

A construction documentation report and certification, including as-built drawings, will be submitted to the IEPA as part of the application for an operating permit. All construction documentation will be consolidated and maintained at the Rantoul RTS.

Electronic Filing: Received, Clerk's Office 08/26/2026

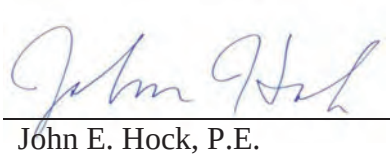
2.6 NOTICE INFORMATION

No later than fourteen days prior to a request for location approval, the applicant caused written notice of this request for location approval to be served by certified mail, return receipt requested, on the owners of all property within 1,000 feet in each direction of the site, said owners being such persons or entities which appear from the authentic tax records of Champaign County. Written notice was also served upon members of the General Assembly from the legislative district in which the site is located and was published in a newspaper of general circulation published in the county in which the site is located. The notices stated the name and address of the applicant, the location of the site, the nature and size of the development, the nature of the activity proposed, the probable life of the proposed activity, the date when the request for site approval will be submitted, and a description of the right of persons to comment on such request as hereafter provided. The notices were all performed more than fourteen days prior to this request for location approval. An affidavit demonstrating the above is provided in Appendix 2-G.

Electronic Filing: Received, Clerk's Office 08/26/2026

2.7 CERTIFICATION

I hereby certify that all information contained in this Application for Local Siting Approval for Criterion 2 was prepared by me or under my direct supervision and is true and correct to the best of my knowledge and belief.



John E. Hock, P.E.

December 18, 2025
Date

062-047623 - IL

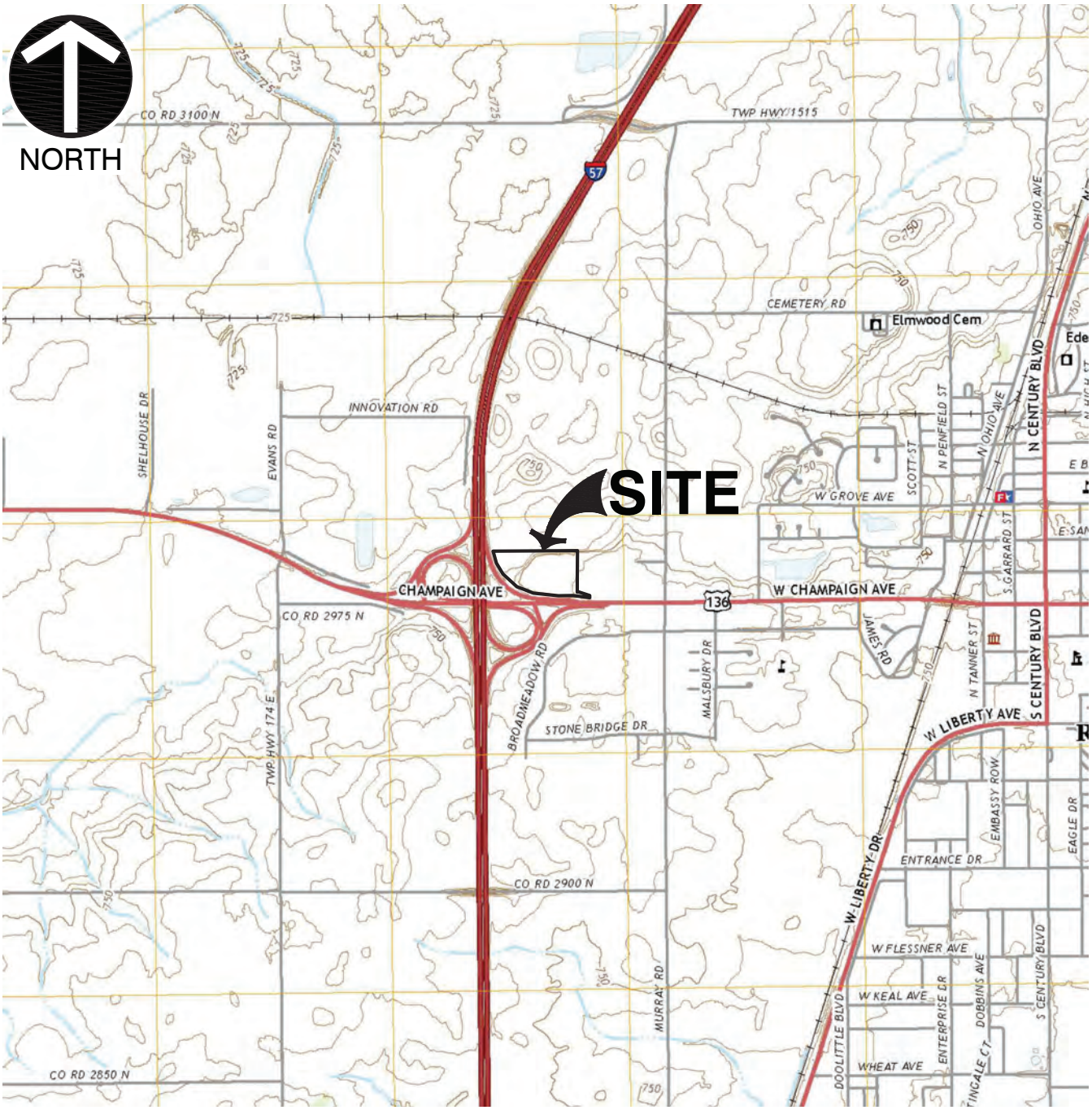
Professional Engineer Registration Number and State

Electronic Filing: Received, Clerk's Office 08/26/2026

CRITERION 2

FIGURES

R-162



REFERENCE

1. U.S.G.S. 7.5' TOPOGRAPHIC MAP, RANTOUL QUADRANGLE, ILLINOIS DATED: 2021.

*HAND SIGNATURE ON FILE

SCALE IN FEET

0 2000 4000

Civil & Environmental Consultants, Inc.
1230 East Diehl Road
Suite 200
Naperville, IL 60563
Ph: 630.963.6026
www.cecinc.com

AREA DISPOSAL SERVICE, INC.
RANTOUL RECYCLING AND TRANSFER STATION
896 WEST CHAMPAIGN AVENUE
RANTOUL, ILLINOIS

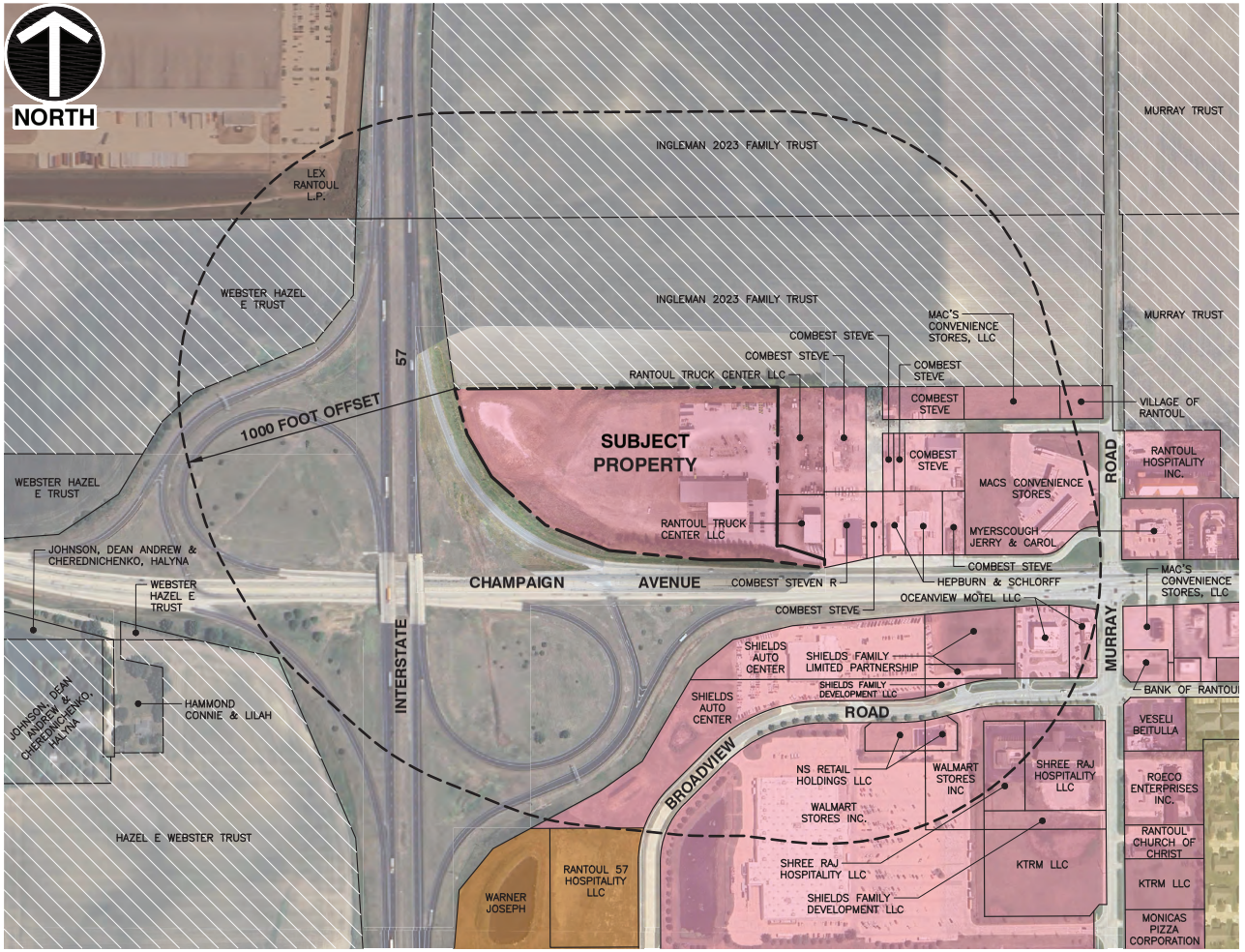
SITE LOCATION MAP

DRAWN BY:	MSK	CHECKED BY:	JEH	APPROVED BY:	JEH*	FIGURE NO.:
DATE:	12/08/2025	DWG SCALE:	1"=2000'	PROJECT NO:	340-656.2002	2-1

P:\340-000\340-656\-CADD\Dwg\SW02-Permit Application\340656-SW02-S003-Site Location Map.dwg[FIG 2-1] LS:(8/26/2025 - mkarpf) - LP: 12/5/2025 11:45 AM

Electronic Filing: Received, Clerk's Office 08/26/2026

Electronic Filing: Received, Clerk's Office 08/26/2026



LEGEND

- SUBJECT PROPERTY
- SURROUNDING PROPERTY
- 1000 FOOT PROPERTY OFFSET
- CHAMPAIGN COUNTY
- AG AGRICULTURAL
- C-2 GENERAL COMMERCIAL
- C-3 INDUSTRIAL COMMERCIAL
- I-2 INDUSTRIAL HEAVY
- R-4 GENERAL MULTIFAMILY RESIDENTIAL

REFERENCE

1. SITE IMAGE TAKEN FROM UAV FLYOVER COMPLETED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATE OF FLYOVER OCTOBER 6, 2025.
2. SURROUNDING IMAGE PROVIDED BY GOOGLE EARTH. DATE OF IMAGE: MARCH 21, 2024.
3. ZONING DISTRICTS AND PROPERTY OWNERSHIP PROVIDED BY VILLAGE OF RANTOUL PUBLIC WORKS DEPARTMENT.

*HAND SIGNATURE ON FILE

SCALE IN FEET

0 400 800

Civil & Environmental Consultants, Inc.
1230 East Diehl Road
Suite 200
Naperville, IL 60563
Ph: 630.963.6026
www.cecinc.com

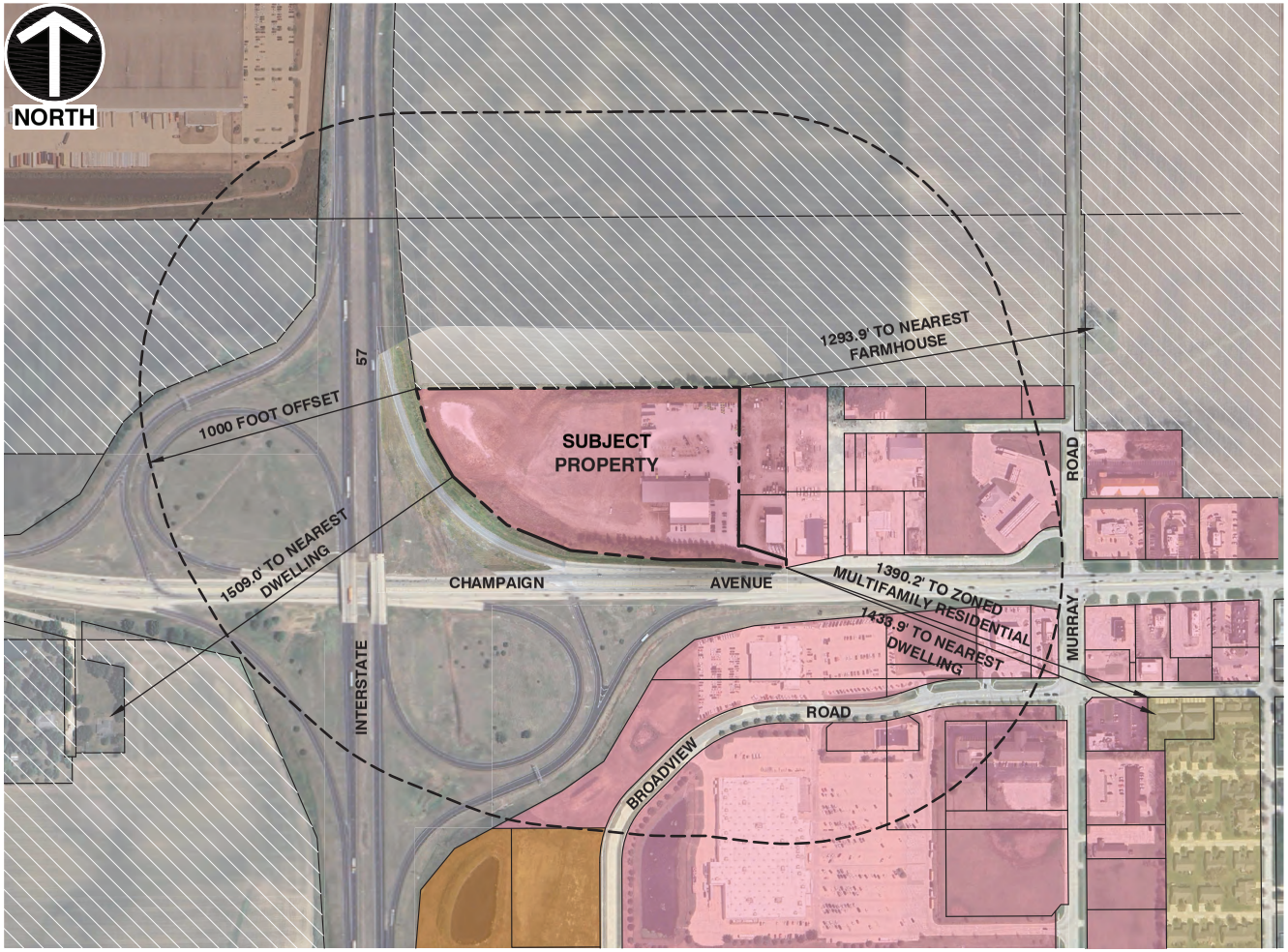
AREA DISPOSAL SERVICE, INC.
RANTOUL RECYCLING AND TRANSFER STATION
896 WEST CHAMPAIGN AVENUE
RANTOUL, ILLINOIS

SURROUNDING PROPERTIES

DRAWN BY:	MSK	CHECKED BY:	JEH	APPROVED BY:	JEH*	FIGURE NO.:	2-2
DATE:	12/08/2025	DWG SCALE:	1"=400'	PROJECT NO:	340-656.2002		

P:\340-000\340-656\-CADD\Dwg\SW02-Permit Application\340656-SW02-S004-Surrounding Properties.dwg[FIG 2-2] LS:(11/10/2025 - mtarpl) - LP: 12/5/2025 11:46 AM

Electronic Filing: Received, Clerk's Office 08/26/2026



LEGEND

- SUBJECT PROPERTY
- SURROUNDING PROPERTY
- 1000 FOOT PROPERTY OFFSET
- CHAMPAIGN COUNTY
- AG AGRICULTURAL
- C-2 GENERAL COMMERCIAL
- C-3 INDUSTRIAL COMMERCIAL
- I-2 INDUSTRIAL HEAVY
- R-4 GENERAL MULTIFAMILY RESIDENTIAL

REFERENCE

1. SITE IMAGE TAKEN FROM UAV FLYOVER COMPLETED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATE OF FLYOVER OCTOBER 6, 2025
2. SURROUNDING IMAGE PROVIDED BY GOOGLE EARTH. DATE OF IMAGE: MARCH 21, 2024.
3. ZONING DISTRICTS PROVIDED BY VILLAGE OF RANTOUL PUBLIC WORKS DEPARTMENT.

*HAND SIGNATURE ON FILE

SCALE IN FEET

0 400 800

Civil & Environmental Consultants, Inc.
1230 East Diehl Road
Suite 200
Naperville, IL 60563
Ph: 630.963.6026
www.cecinc.com

AREA DISPOSAL SERVICE, INC.
RANTOUL RECYCLING AND TRANSFER STATION
896 WEST CHAMPAIGN AVENUE
RANTOUL, ILLINOIS

RESIDENTIAL SETBACK

DRAWN BY:	MSK	CHECKED BY:	JEH	APPROVED BY:	JEH*	FIGURE NO.:
DATE:	12/08/2025	DWG SCALE:	1"=400'	PROJECT NO:	340-656.2002	2-3

P:\340-000\340-656\-CAD\Dwg\SW02-Permit Application\340656-SW02-S005-Residential Setback.dwg[FIG 2-3] LS:(10/14/2025 - mkarpl) - LP: 12/5/2025 11:47 AM

P:\340-000\340-656\-CADD\Dwg\SW02-Permit Application\340656-SW02-S008-Surrounding Wetlands.dwg[FIG 2-4] LS:(10/14/2025 - mkarpf) - LP: 12/5/2025 11:56 AM

NORTH

INTERSTATE 57

CHAMPAIGN AVENUE

BROADVIEW ROAD

MURRAY ROAD

SUBJECT PROPERTY

REFERENCE

1. SITE IMAGE TAKEN FROM UAV FLYOVER COMPLETED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATE OF FLYOVER OCTOBER 6, 2025.
2. SURROUNDING IMAGE PROVIDED BY GOOGLE EARTH. DATE OF IMAGE: MARCH 21, 2024.
3. FRESHWATER EMERGENT WETLAND AND FRESHWATER POND LOCATION PROVIDED BY U.S. FISH AND WILDLIFE SERVICE, NATIONAL WETLANDS INVENTORY, WETLANDS MAPPER WEBSITE.

LEGEND

- BOUNDARY OF RANTOUL RECYCLING AND TRANSFER STATION
- FRESHWATER EMERGENT WETLAND
- FRESHWATER POND

SCALE IN FEET
0 300 600

*HAND SIGNATURE ON FILE

Civil & Environmental Consultants, Inc.
1230 East Diehl Road
Suite 200
Naperville, IL 60563
Ph: 630.963.6026
www.ceciinc.com

AREA DISPOSAL SERVICE, INC.
RANTOUL RECYCLING AND TRANSFER STATION
896 WEST CHAMPAIGN AVENUE
RANTOUL, ILLINOIS

SURROUNDING WETLANDS

DRAWN BY:	MSK	CHECKED BY:	JEH	APPROVED BY:	JEH*	FIGURE NO.:
DATE:	12/08/2025	DWG SCALE:	1"=300'	PROJECT NO:	340-656.2002	2-4

C170

P:\340-000\340-656\-CADD\Dwg\SW02-Permit Application\340656-SW02-S006-Airport Proximity.dwg[FIG 2-5] LS:(10/14/2025 - mkarpf) - LP: 12/5/2025 11:57 AM



REFERENCE

1. SITE IMAGE TAKEN FROM UAV FLYOVER COMPLETED BY CIVIL & ENVIRONMENTAL CONSULTANTS, INC. DATE OF FLYOVER OCTOBER 6, 2025.
2. SURROUNDING IMAGE PROVIDED BY GOOGLE EARTH. DATE OF IMAGE: MARCH 21, 2024.

0 1200 2400
SCALE IN FEET

*HAND SIGNATURE ON FILE

Civil & Environmental Consultants, Inc.
1230 East Diehl Road
Suite 200
Naperville, IL 60563
Ph: 630.963.6026
www.ceciinc.com

AREA DISPOSAL SERVICE, INC.
RANTOUL RECYCLING AND TRANSFER STATION
896 WEST CHAMPAIGN AVENUE
RANTOUL, ILLINOIS

AIRPORT PROXIMITY

DRAWN BY:	CHECKED BY:	APPROVED BY:	FIGURE NO.:
MSK	JEH	JEH*	2-5
DATE:	DWG SCALE:	PROJECT NO:	
12/08/2025	1"= 1200'	340-656.2002	

R-166

Electronic Filing: Received, Clerk's Office 08/26/2026

CRITERION 2

TABLES

Civil & Environmental Consultants, Inc.

Table 2-1
Rantoul Recycling and Transfer Station
Projected Material Processing and Traffic Volume
350 Tons Per Day Municipal Solid Waste

Time	Collection Vehicle Distribution		Municipal Solid Waste Delivered									Outgoing MSW		Municipal Solid Waste Transferred					Required Tip Floor Storage	
	Hour Incoming		Hour Incoming				Total Hourly Incoming			Cumulative Incoming		from SSR	MSW	Hourly Transferred			Cum Out	Hourly Truck Volumes		
(Hour Beginning)	Packer (trucks)	Roll-off (trucks)	Packer (trucks)	Packer (tons)	Roll-off (trucks)	Roll-off (tons)	Trucks	Tons	yd^3	Tons	yd^3	Tons	Tons	Trucks	Tons	yd^3	tons	(trucks)	Tons	yd^3
12:00 AM			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0.0%	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0.0%	0.8%	0	0	0	2	0	2	8	2	8	0	2	0	0	0	0	0	2	8
7:00 AM	0.0%	0.8%	0	0	0	2	0	2	8	3	16	0	3	0	0	0	0	0	3	16
8:00 AM	0.0%	2.5%	0	0	1	5	1	5	24	8	39	0	8	0	0	0	0	1	8	39
9:00 AM	6.0%	2.5%	3	22	1	5	4	27	135	35	175	0	35	1	24	120	24	5	11	55
10:00 AM	7.8%	2.5%	4	29	1	5	5	34	171	69	345	0	69	1	24	120	48	6	21	105
11:00 AM	16.2%	1.7%	8	61	1	3	8	64	319	133	664	0	133	2	48	240	96	10	37	184
12:00 PM	7.2%	2.5%	3	27	1	5	5	32	159	165	824	0	165	2	48	240	144	7	21	104
1:00 PM	6.0%	0.0%	3	22	0	0	3	22	112	187	936	0	187	1	24	120	168	4	19	96
2:00 PM	7.8%	0.8%	4	29	0	2	4	31	155	218	1091	0	218	1	24	120	192	5	26	131
3:00 PM	10.2%	0.8%	5	38	0	2	5	40	200	258	1290	0	258	2	48	240	240	7	18	90
4:00 PM	8.4%	0.0%	4	32	0	0	4	32	158	290	1448	0	290	2	48	240	288	6	2	8
5:00 PM	15.6%	0.0%	7	58	0	0	7	58	292	348	1741	0	348	1	24	120	312	8	36	181
6:00 PM			0	0	0	0	0	0	0	348	1741	0	348	1.5	36	180	348	2	0	1
7:00 PM			0	0	0	0	0	0	0	348	1741	0	348	0	0	0	348	0	0	1
8:00 PM			0	0	0	0	0	0	0	348	1741	0	348	0	0	0	348	0	0	1
9:00 PM			0	0	0	0	0	0	0	348	1741	0	348	0	0	0	348	0	0	1
10:00 PM			0	0	0	0	0	0	0	348	1741	0	348	0	0	0	348	0	0	1
11:00 PM			0	0	0	0	0	0	0	348	1741	0	348	0	0	0	348	0	0	1
DAILY TOTALS	85%	15%	40	320	7	28	47	348	1741	348	1741	0	348	14.5	348	1740	348	62	MAX 37	MAX 184

Assumptions:

47 is total collection vehicles per day.
350 tons = approximate daily throughput of MSW.
8 tons = average MSW packer truck load.
4 tons = average MSW roll-off truck load.
24 tons = average MSW transfer trailer load.
1 ton MSW = 5 cubic yards on tipping floor (or 400 pounds/cubic yard).
85% of total incoming vehicles are MSW packer trucks.
15% of total incoming vehicles are MSW roll-off trucks.

Electronic Filing: Received, Clerk's Office 08/26/2026

Civil & Environmental Consultants, Inc.

Table 2-2
Rantoul Recycling and Transfer Station
Projected Material Processing and Traffic Volume
150 Tons Per Day Single-Stream Recyclables

Time	Collection Vehicle Distribution		SSR Delivered									Outgoing		SSR Transferred				Required Tip Floor Storage	
	Hour Incoming		Hour Incoming				Total Hourly Incoming			Cumulative Incoming				Hourly Transferred			Hourly Truck Volumes		
(Hour Beginning)	Packer (trucks)	Roll-off (trucks)	Packer (trucks)	Packer (tons)	Roll-off (trucks)	Roll-off (tons)	Trucks	Tons	yd^3	Tons	yd^3	SSR Tons	MSW Tons	Trucks	Tons	yd^3	(trucks)	Tons	yd^3
12:00 AM			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1:00 AM			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2:00 AM			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:00 AM			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 AM			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 AM	0.0%	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:00 AM	0.0%	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0.0%	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0.0%	0.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:00 AM	5.8%	0.0%	1	9	0	0	1	9	44	9	44	9	0	0	0	0	1	9	87
10:00 AM	12.5%	0.0%	3	19	0	0	3	19	94	27	137	27	0	1	18	90	4	9	95
11:00 AM	17.5%	0.0%	4	26	0	0	4	26	131	54	269	54	0	1	18	90	5	18	177
12:00 PM	6.7%	0.0%	2	10	0	0	2	10	50	64	319	64	0	1	18	90	3	10	98
1:00 PM	3.3%	0.0%	1	5	0	0	1	5	25	69	344	69	0	0	0	0	1	15	147
2:00 PM	5.8%	0.0%	1	9	0	0	1	9	44	77	387	77	0	1	18	90	2	5	54
3:00 PM	16.7%	0.0%	4	25	0	0	4	25	125	102	512	102	0	1	18	90	5	12	125
4:00 PM	15.8%	0.0%	4	24	0	0	4	24	119	126	631	126	0	1	18	90	5	18	182
5:00 PM	15.8%	0.0%	4	24	0	0	4	24	119	150	749	150	0	1	18	90	5	24	239
6:00 PM			0	0	0	0	0	0	0	150	749	150	0	1.33	23.85	119.25	1	0	0
7:00 PM			0	0	0	0	0	0	0	150	749	150	0	0	0	0	0	0	0
8:00 PM			0	0	0	0	0	0	0	150	749	150	0	0	0	0	0	0	0
9:00 PM			0	0	0	0	0	0	0	150	749	150	0	0	0	0	0	0	0
10:00 PM			0	0	0	0	0	0	0	150	749	150	0	0	0	0	0	0	0
11:00 PM			0	0	0	0	0	0	0	150	749	150	0	0	0	0	0	0	0
DAILY TOTALS	100%	0%	25	150	0	0	25	150	749	150	749	150	0	8.33	150	749	33	MAX 24	MAX 239

Assumptions:

25 is total collection vehicles per day.
150 tons = maximum daily throughput of SSR.
6 is tons of average packer truck load.
18 is tones of average transfer trailer load.
1 ton MSW = 10 cubic yards on tipping floor (or 200 pounds/cubic yard).
100% = percentage of incoming SSR that is sent to a MRF.
0% = percentage of incoming SSR that is not recycled (and hauled off as MSW).

Electronic Filing: Received, Clerk's Office 08/26/2026

R-169

Electronic Filing: Received, Clerk's Office 08/26/2026

CRITERION 2

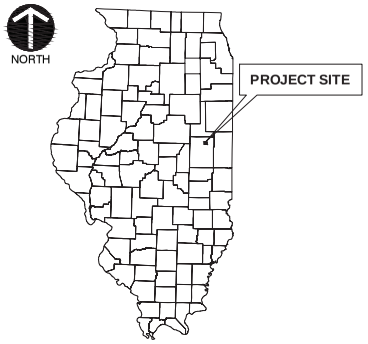
DRAWINGS

AREA DISPOSAL SERVICE, INC.

RANTOUL RECYCLING AND TRANSFER STATION

896 WEST CHAMPAIGN AVENUE

RANTOUL, CHAMPAIGN COUNTY, ILLINOIS



LOCATION KEY MAP

COUNTY MAP SOURCE:
ILLINOIS STATE GEOLOGICAL SURVEY
NOT TO SCALE

OWNER/TEAM INFORMATION

CIVIL ENGINEER

CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
1230 EAST DIEHL ROAD, SUITE 200
NAPERVILLE, ILLINOIS
PH: (630) 963-6026
FX: (630) 963-6027
CONTACTS: JOHN E. HOCK, PE

OWNER

AREA DISPOSAL SERVICE, INC.
4700 NORTH STERLING AVENUE
PEORIA, ILLINOIS

LAND SURVEYOR - PLAT OF SURVEY

FEHR GRAHAM
101 WEST STEPHENSON STREET
FREEPORT, ILLINOIS
PH: (815) 235-7643
CONTACT: CHAD M. OSTERBUR, PLS

LAND SURVEYOR - EXISTING SITE CONDITIONS

MOHR & KERR ENGINEERING & LAND SURVEYING, P.C.
5901 N. PROSPECT, SUITE 6B
PEORIA, ILLINOIS
PH: (309) 692-8500
CONTACT: CALEB E. JOHNSON, PLS



SITE LOCATION MAP

U.S.G.S. 7.5 MIN. TOPOGRAPHIC MAP,
RANTOUL QUADRANGLE, ILLINOIS DATED: 2021
SCALE: 1"=1000'
SCALE IN FEET
0 1000 2000

LIST OF DRAWINGS	
DRAWING NUMBER	DRAWING TITLE
S100	COVER SHEET
S200	AERIAL PHOTOGRAPH
S300	PLAT OF SURVEY
S400	EXISTING SITE CONDITIONS
S500	PROPOSED SITE CONDITIONS
S600	BUILDING FLOOR PLAN
S700	BUILDING ELEVATIONS

*HAND SIGNATURE ON FILE

REVISION RECORD

NO	DATE	DESCRIPTION

1230 East Diehl Road
Suite 200
Naperville, IL 60563
Ph: 630.963.6026
www.cecinc.com

Civil & Environmental Consultants, Inc.

AREA DISPOSAL SERVICE, INC.
RANTOUL RECYCLING AND TRANSFER STATION
896 WEST CHAMPAIGN AVENUE
RANTOUL, ILLINOIS

COVER SHEET

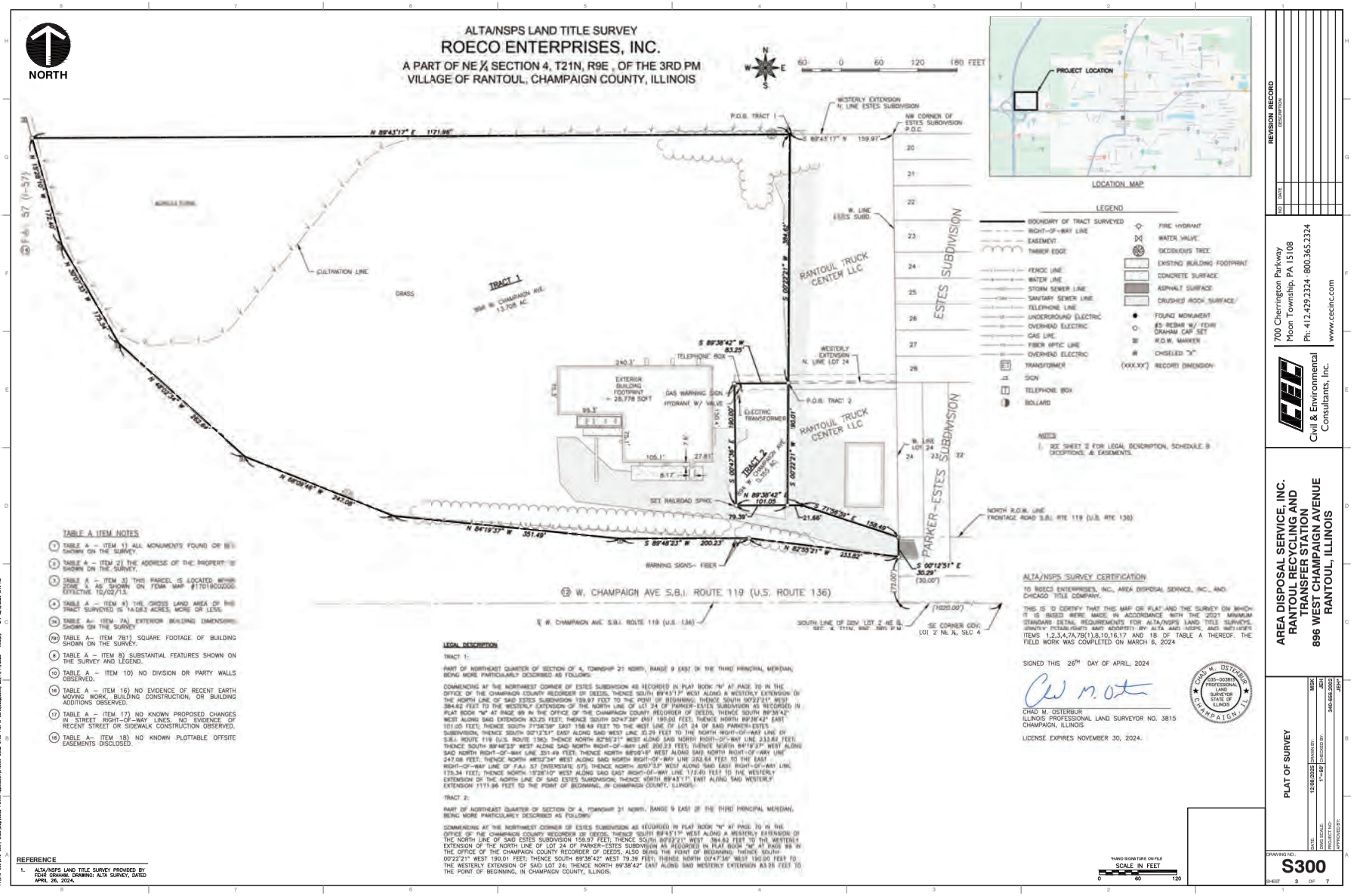
DATE:	12/08/2025
DWG SCALE:	AS SHOWN
PROJECT NO:	340-656.2002
Drawn By:	MSK
CHECKED BY:	JEH
APPROVED BY:	JEH*

DRAWING NO.: S100
SHEET 1 OF 7

Electronic Filing: Received, Clerk's Office 08/26/2026

Electronic Filing: Received, Clerk's Office 08/26/2026





REVISION RECORD

NO	DATE	DESCRIPTION

Civil & Environmental Consultants, Inc.
700 Cherrington Parkway
Moon Township, PA 15108
Ph: 412.429.2324 800.365.2324
www.cecinc.com

AREA DISPOSAL SERVICE, INC.
RANTOUL RECYCLING AND TRANSFER STATION
896 WEST CHAMPAIGN AVENUE
RANTOUL, ILLINOIS

PLAT OF SURVEY

DATE:	12/06/2025
DRAWN BY:	MSK
CHECKED BY:	JEH
DWG SCALE:	1" = 60'
PROJECT NO:	340-858.2002
APPROVED BY:	JEH

DRAWING NO.: S300
SHEET 3 OF 7

AREA DISPOSAL SERVICE, INC.
RANTOUL RECYCLING AND
TRANSFER STATION
896 WEST CHAMPAIGN AVENUE
RANTOUL, ILLINOIS
EXISTING SITE CONDITIONS
S400
DRAWING NO.
SHEET 4 OF 7
DATE: 12/08/2025
DRAWN BY: MSK
DWG SCALE: 1"=50'
CHECKED BY: JEH
PROJECT NO: 240-656.2002
APPROVED BY: JEH*
Civil & Environmental Consultants, Inc.
1230 East Diehl Road
Suite 200
Naperville, IL 60563
Ph: 630.963.6026
www.cecinc.com
REVISION RECORD
NO. DATE DESCRIPTION
EXISTING FIRE HYDRANT
EXISTING WATER VALVE
EXISTING LIGHT POLE
EXISTING ELECTRIC CHARGING PORT
EXISTING ELECTRIC TRANSFORMER
EXISTING ELECTRIC METER
EXISTING TELEPHONE MANHOLE
EXISTING TELEPHONE PEDESTAL
EXISTING SIGN
EXISTING BOLLARD
EXISTING PROPERTY LINE
EXISTING STORM SEWER
EXISTING SANITARY SEWER
EXISTING WATER MAIN
EXISTING ELECTRIC LINE
EXISTING GAS LINE
EXISTING TELEPHONE LINE
EXISTING FIBER OPTICS LINE
EXISTING CURB AND GUTTER
EXISTING FENCE LINE
EXISTING TREE LINE
EXISTING INDEX CONTOUR
EXISTING INTERMEDIATE CONTOUR
EXISTING BUILDING
EXISTING ASPHALT AREA
EXISTING CONCRETE AREA
PROPOSED STORM CATCH BASIN
PROPOSED STORM CURB INLET
PROPOSED STORM TRENCH DRAIN
PROPOSED STORM SEWER
PROPOSED FORCEMAIN
PROPOSED SUMP PIT AND PUMP
*HAND SIGNATURE ON FILE
SCALE IN FEET
0 50 100
OFFICE AND MAINTENANCE BUILDING
EMPLOYEE AND VISITOR PARKING
ENTRANCE ROAD
ENTRANCE
DRIVEWAY TO/FROM PARKING AND STAGING AREA
STORMWATER DETENTION POND
CONCRETE DITCH
INLET STRUCTURE TO STORMWATER DETENTION POND
OUTLET FROM STORMWATER DETENTION POND
NORTH
REFERENCE
1. SURVEY IS BASED UPON FIELD OBSERVATIONS MADE JULY 2025 BY MOHR & KERR ENGINEERING & LAND SURVEYING, P.C., ROMA, ILLINOIS.

AREA DISPOSAL SERVICE, INC.
RANTOUL RECYCLING AND
TRANSFER STATION
896 WEST CHAMPAIGN AVENUE
RANTOUL, ILLINOIS
PROPOSED SITE CONDITIONS
S500
Civil & Environmental
Consultants, Inc.
1230 East Diehl Road
Suite 200
Naperville, IL 60563
Ph: 630.963.6026
www.ceiinc.com
REVISION RECORD
LEGEND
EXISTING STORM INLET
EXISTING CURB INLET
EXISTING STORM CLEANOUT
EXISTING BUILDING DOWNSPOUT
EXISTING SANITARY MANHOLE
EXISTING FIRE HYDRANT
EXISTING WATER VALVE
EXISTING LIGHT POLE
EXISTING ELECTRIC CHARGING PORT
EXISTING ELECTRIC TRANSFORMER
EXISTING ELECTRIC METER
EXISTING TELEPHONE MANHOLE
EXISTING TELEPHONE PEDESTAL
EXISTING SIGN
EXISTING BOLLARD
EXISTING PROPERTY LINE
EXISTING STORM SEWER
EXISTING SANITARY SEWER
EXISTING WATER MAIN
EXISTING ELECTRIC LINE
EXISTING GAS LINE
EXISTING TELEPHONE LINE
EXISTING FIBER OPTICS LINE
EXISTING CURB AND GUTTER
EXISTING EDGE LINE
EXISTING TREE LINE
EXISTING INDEX CONTOUR
EXISTING INTERMEDIATE CONTOUR
EXISTING BUILDING
EXISTING CONCRETE AREA
EXISTING AGGREGATE AREA
PROPOSED STORM CATCH BASIN
PROPOSED STORM CURB INLET
PROPOSED STORM TRENCH DRAIN
PROPOSED STORM SEWER
PROPOSED FORCEMAIN
PROPOSED SUMP PIT AND PUMP
PROPOSED WATER LINE
PROPOSED WATER VALVE
PROPOSED ELECTRIC LINE
PROPOSED FENCE LINE
PROPOSED TRANSFER TRAILER FLOW
PROPOSED COLLECTION VEHICLE FLOW
PROPOSED CONCRETE PAVEMENT
PROPOSED ASPHALT PAVEMENT
OFFICE AND MAINTENANCE BUILDING
VEHICLE QUEUING AREA
TRANSFER STATION BUILDING
500 GALLON STORAGE TANK
FIRE HYDRANT AND VALVE CONCRETE SLAB
UTILITY ROOMS
EMERGENCY SPILLWAY RIP RAP
GATE
OPTIONAL SCALE HOUSE LANE
SCALE
NORTH
SCALE IN FEET
0
50
100
REFERENCE
1. SURVEY IS BASED UPON FIELD OBSERVATIONS MADE JULY 9, 2025 BY ACHP & KERR ENGINEERING & LAND SURVEYING, PLLC, ROCHA, ILLINOIS.

BUILDING FLOOR PLAN			
DATE:	12/08/2025	DRAWN BY:	MSK
DWG SCALE:	AS SHOWN	CHECKED BY:	JEH
PROJECT NO:			340-656.2022
APPROVED BY:			JEH

DRAWING NO: S600

SHEET 9 OF 17

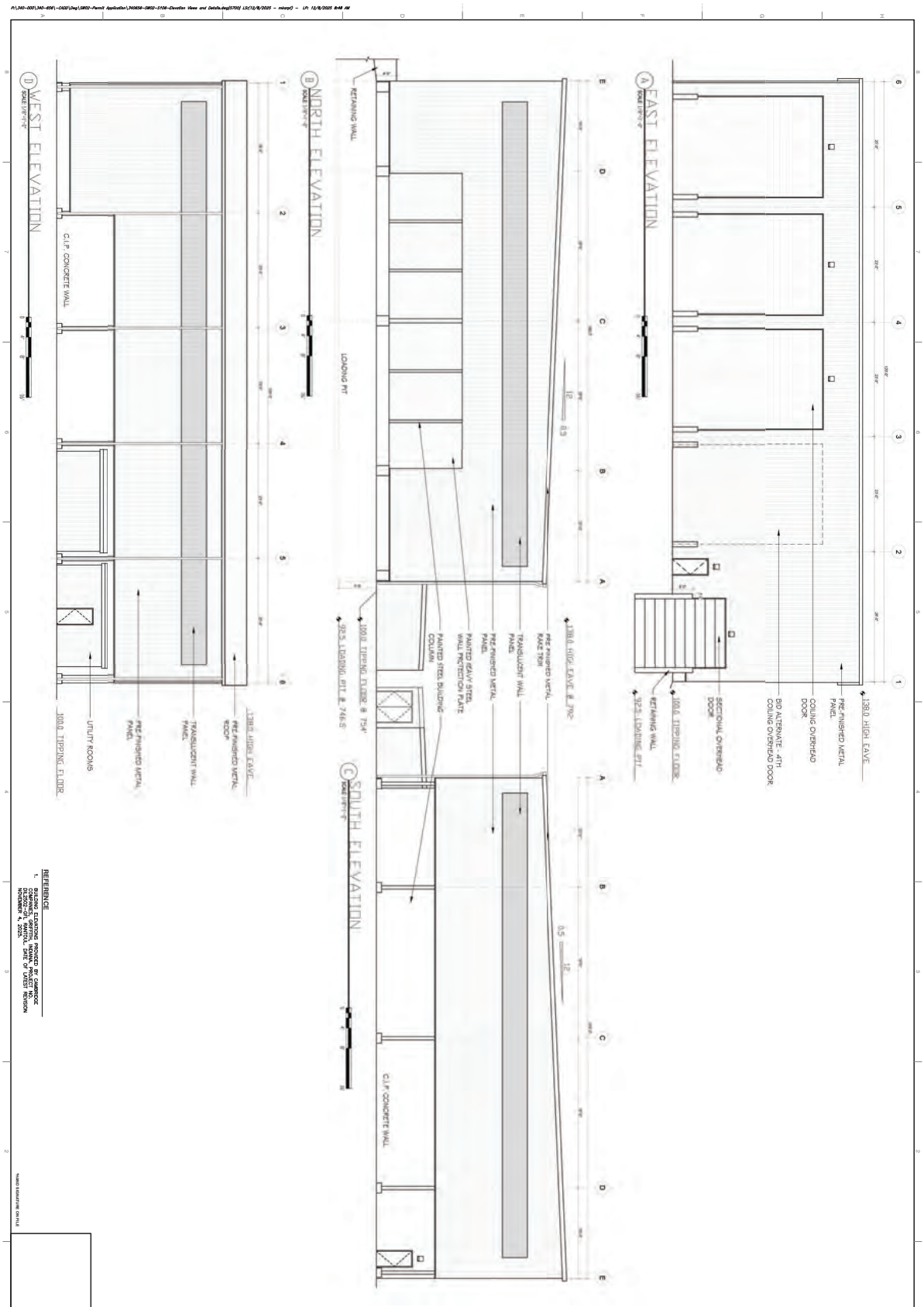
AREA DISPOSAL SERVICE, INC.
RANTOUL RECYCLING AND TRANSFER STATION
896 WEST CHAMPAIGN AVENUE
RANTOUL, ILLINOIS

CEC
Civil & Environmental Consultants, Inc.
1230 East Diehl Road
Suite 200
Naperville, IL 60563
Ph: 630.963.6026
www.cecinc.com

REVISION RECORD

NO.	DATE	DESCRIPTION

C181



REFERENCE
1. DRAWING PREPARED BY CAMARGO CRANMER, CRYSTAL, ROMAK, PROJECT NO. 20220XX, DATE OF LATEST REVISION NOVEMBER 4, 2025.

NAMES SUBMITTED ON FILE

SHEET 7 OF 7	DRAWING NO. S700	BUILDING ELEVATIONS	
		DATE: 12/08/2025	DRAWN BY: MSK
		DWG SCALE: AS SHOWN	CHECKED BY: JEH
		PROJECT NO:	340-656.2002
		APPROVED BY:	JEH

AREA DISPOSAL SERVICE, INC.
RANTOUL RECYCLING AND TRANSFER STATION
896 WEST CHAMPAIGN AVENUE
RANTOUL, ILLINOIS

Civil & Environmental Consultants, Inc.
1230 East Diehl Road
Suite 200
Naperville, IL 60563
Ph: 630.963.6026
www.cecinc.com

REVISION RECORD

NO	DATE	DESCRIPTION

APPENDIX 2-A

CERTIFICATE OF GOOD STANDING

File Number 5310-680-3

STATE OF ILLINOIS

OFFICE OF THE SECRETARY OF STATE

To all to whom these Presents Shall Come, Greeting:

I, **Alexi Giannoulias**, *Secretary of State of the State of Illinois, do hereby certify that I am the keeper of the records of the Department of Business Services. I certify that*

AREA DISPOSAL SERVICE, INC., A DOMESTIC CORPORATION, INCORPORATED UNDER THE LAWS OF THIS STATE ON JUNE 03, 1983, APPEARS TO HAVE COMPLIED WITH ALL THE PROVISIONS OF THE BUSINESS CORPORATION ACT OF THIS STATE, AND AS OF THIS DATE, IS IN GOOD STANDING AS A DOMESTIC CORPORATION IN THE STATE OF ILLINOIS.

In Testimony Whereof, *I hereto set my hand and cause to be affixed the Great Seal of the State of Illinois, this* 4TH *day of* JUNE ***A.D.*** 2025 .

Authentication #: 2515503722 verifiable until 06/04/2026

Authenticate at: https://www.ilsos.gov

SECRETARY OF STATE

R-179

APPENDIX 2-B

AREA DISPOSAL SUMMARY OF EXPERIENCE

Clinton Landfill Transfer Station
9550 Heritage Road
Clinton, DeWitt County, Illinois

PROPERTY/TAX ID: 12-10-400-003

PROPERTY OWNER: Clinton Landfill, Inc. [Note that Clinton Landfill, Inc. is not a subsidiary or parent company of Area Disposal Service, Inc. Rather, it is owned by the same parent company as Area Disposal Service, Inc.]

DATE OF ORIGINAL TRANSFER STATION DEVELOPMENT PERMIT: October 22, 1982

NARRATIVE: The original transfer station building was present at the facility as early as 1983. At this time, the transfer station solely handles recyclable materials.

TRANSFER STATION VIOLATIONS IN THE PAST 5 YEARS: None.

Lincoln Trucking Facility
835 1575th Street
Lincoln, Logan County, Illinois

PROPERTY/TAX ID: 12-033-020-00 and 12-033-020-50.

PROPERTY OWNER: Area Disposal Service, Inc.

DATE OF ORIGINAL TRANSFER STATION DEVELOPMENT PERMIT: May 5, 1981

NARRATIVE: The property was developed into a municipal waste transfer station in 1981. The facility remains permitted as a transfer station; however, it ceased the waste transfer operations circa 1997.

TRANSFER STATION VIOLATIONS IN THE PAST 5 YEARS: None.

Morgan County Recycling and Transfer Facility
2234 State Highway 104
Jacksonville, Morgan County, Illinois

PROPERTY/TAX ID: 09-35-200-002

PROPERTY OWNER: Area Disposal Service, Inc.

DATE OF ORIGINAL TRANSFER STATION DEVELOPMENT PERMIT: June 11, 2009

NARRATIVE: The current transfer station and office/scale house buildings were constructed in 2009. The facility has operated continuously since that time, and currently accepts approximately 200 tons per day of municipal solid waste.

TRANSFER STATION VIOLATIONS IN THE PAST 5 YEARS: None.

Wigand Transfer Station
19908 North Route 29
Chillicothe, Peoria County, Illinois

PROPERTY/TAX ID: 05-16-300-025, 05-21-101-011, and 05-21-101-021.

PROPERTY OWNER: Area Disposal Service, Inc.

DATE OF ORIGINAL TRANSFER STATION DEVELOPMENT PERMIT: November 10, 1997

NARRATIVE: The facility is a permitted municipal solid waste transfer station, including recyclable materials and landscape waste. Solid waste transfer operations were initiated in 1998 and have continued through the present time. The facility currently accepts approximately 150 tons per day.

TRANSFER STATION VIOLATIONS IN THE PAST 5 YEARS: None.

APPENDIX 2-C

WARRANTY DEED

2025R18645
REC ON: 12/04/2025 12:20:50 PM
CHAMPAIGN COUNTY
AARON AMMONS
REC FEE: 52.00
RHSPS FEE: 18.00
STATE TAX:
COUNTY TAX:
PLAT ACT:
PAGES: 6

File No.: 5253-2400140

(Grantor) Roeco Enterprises, Inc. an Illinois corporation
and Re-Recording Deed to correct legal description
(Grantee) Area Disposal Service, Inc., dba GFL Environmental, an Illinois corporation

This page is added to provide adequate space for recording information and microfilming.
Do not remove this page as it is now part of the document.

PREPARED BY AND RETURN THIS DOCUMENT TO:

Brian J. Meginnes
Elias, Meginnes & Seghetti
416 Main St, Suite 1400
Peoria, IL 61602

Chicago Title and Trust Company
301 North Neil, Suite 304
Champaign, IL 61820

Exempt under provisions of Paragraph e
Section 4 Real Estate Transfer Tax Act.
12/3/25
Date Buyer, Seller or Representative

2024R07403
REC ON: 06/06/2024 09:00:32 AM
CHAMPAIGN COUNTY
AARON AMMONS
REC FEE: 52.00
RHSPS FEE: 18.00
STATE TAX: 510.00
COUNTY TAX: 255.00
PLAT ACT:
PAGES: 4

5253-24000140

WARRANTY DEED

THE GRANTOR, Roeco Enterprises, Inc., an Illinois Corporation, for and in consideration of Ten Dollars ($10.00) and other good and valuable consideration in hand paid, **CONVEYS** and **WARRANTS** to the **GRANTEE, Area Disposal Service, Inc., an Illinois Corporation,** the following described real estate:

TRACT 1:

PART OF NORTHEAST QUARTER OF SECTION OF 4, TOWNSHIP 21 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF ESTES SUBDIVISION AS RECORDED IN PLAT BOOK "N" AT PAGE 70 IN THE OFFICE OF THE CHAMPAIGN COUNTY RECORDER OF DEEDS, THENCE SOUTH 89°43'17" WEST ALONG A WESTERLY EXTENSION OF THE NORTH LINE OF SAID ESTES SUBDIVISION 159.97 FEET TO THE POINT OF BEGINNING; THENCE SOUTH 00°22'21" WEST 384.62 FEET TO THE WESTERLY EXTENSION OF THE NORTH LINE OF LOT 24 OF PARKER-ESTES SUBDIVISION AS RECORDED IN PLAT BOOK "M" AT PAGE 99 IN THE OFFICE OF

THE CHAMPAIGN COUNTY RECORDER OF DEEDS; THENCE SOUTH 89°38'42" WEST ALONG SAID EXTENSION 83.25 FEET; THENCE SOUTH 00°47'36" EAST 190.00 FEET; THENCE NORTH 89°38'42" EAST 101.05 FEET; THENCE SOUTH 71°56'59" EAST 158.49 FEET TO THE WEST LINE OF LOT 24 OF SAID PARKER-ESTES SUBDIVISION; THENCE SOUTH 00°12'51" EAST ALONG SAID WEST LINE 30.29 FEET TO THE NORTH RIGHT-OF-WAY LINE OF S.B.I. ROUTE 119 (U.S. ROUTE 136); THENCE NORTH 82°55'21" WEST ALONG SAID NORTH RIGHT-OF-WAY LINE 233.82 FEET; THENCE SOUTH 89°48'23" WEST ALONG SAID NORTH RIGHT-OF-WAY LINE 200.23 FEET; THENCE NORTH 84°19'37" WEST ALONG SAID NORTH RIGHT-OF-WAY LINE 351.49 FEET; THENCE NORTH 68°09'46" WEST ALONG SAID NORTH RIGHT-OF-WAY LINE 247.08 FEET; THENCE NORTH 48°02'34" WEST ALONG SAID NORTH RIGHT-OF-WAY LINE 262.64 FEET TO THE EAST RIGHT-OF-WAY LINE OF F.A.I. 57 (INTERSTATE 57); THENCE NORTH 30°07'33" WEST ALONG SAID EAST RIGHT-OF-WAY LINE 175.34 FEET; THENCE NORTH 15°28'10" WEST ALONG SAID EAST RIGHT-OF-WAY LINE 172.40 FEET TO THE WESTERLY EXTENSION OF THE NORTH LINE OF SAID ESTES SUBDIVISION; THENCE NORTH 89°43'17" EAST ALONG SAID WESTERLY EXTENSION 1171.96 FEET TO THE POINT OF BEGINNING, IN CHAMPAIGN COUNTY, ILLINOIS.

PIN 20-09-04-201-004

TRACT 2:

PART OF NORTHEAST QUARTER OF SECTION OF 4, TOWNSHIP 21 NORTH, RANGE 9 EAST OF THE THIRD PRINCIPAL MERIDIAN, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF ESTES SUBDIVISION AS RECORDED IN PLAT BOOK "N" AT PAGE 70 IN THE OFFICE OF THE CHAMPAIGN COUNTY RECORDER OF DEEDS, THENCE SOUTH ~~89°43'17"~~ * WEST ALONG A WESTERLY EXTENSION OF THE NORTH LINE OF SAID ESTES SUBDIVISION 159.97 FEET; THENCE SOUTH 00°22'21" WEST 384.62 FEET TO THE WESTERLY EXTENSION OF THE NORTH LINE OF LOT 24 OF PARKER-ESTES SUBDIVISION AS RECORDED IN PLAT BOOK "M" AT PAGE 99 IN THE OFFICE OF THE CHAMPAIGN COUNTY RECORDER OF DEEDS, ALSO BEING THE POINT OF BEGINNING; THENCE SOUTH 00°22'21" WEST 190.01 FEET; THENCE SOUTH 89°38'42" WEST 79.39 FEET; THENCE NORTH 00°47'36" WEST 190.00 FEET TO THE WESTERLY EXTENSION OF SAID LOT 24; THENCE NORTH 89°38'42" EAST ALONG SAID WESTERLY EXTENSION 83.25 FEET TO THE POINT OF BEGINNING, IN CHAMPAIGN COUNTY, ILLINOIS. * 89°43'17" or

PIN 20-09-04-227-005

Subject to: (1) Real estate taxes for the year 2024 and subsequent years;
(2) Covenants, conditions, restrictions and easements apparent or of record;

(3) All applicable zoning laws and ordinances;

In witness whereof, said Grantor, **Roeco Enterprises, Inc., an Illinois Corporation,** has caused its name to be signed to these presents by its President this 31 day of May, 2024.

Roeco Enterprises, Inc.

By: _____
Lawrence W. Roessler, Its President

STATE OF ILLINOIS)
)**SS:**
COUNTY OF CHAMPAIGN)

I am a Notary Public in and for said County and in the State aforesaid, and DO HEREBY CERTIFY that, **Lawrence W. Roessler, President of Roeco Enterprises, Inc., an Illinois Corporation,** and, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed and delivered the said instrument as his free and voluntary act, and as the free and voluntary act and deed of said corporation, for the uses and purposes therein set forth.

GIVEN under my hand and notarial seal this 31 day of May, 2024.

_____
Notary Public

WILLIAM ROY SCOTT
OFFICIAL SEAL
Notary Public - State of Illinois
Commission No. 987167
My Commission Expires February 15, 2028

PLAT ACT AFFIDAVIT

STATE OF ILLINOIS)
) **SS:**
COUNTY OF CHAMPAIGN)

Lawrence Roessler, being first duly sworn on oath, state, that the attached deed should be accepted for recording as it is not in violation of Section 1 of the Plat Act Statute for the following reason:

Grantor owns nothing adjoining the property herein conveyed.

Affiant also states that, according to his/her belief, the filing of the accompanying deed will not constitute a violation of any relevant subdivision ordinance.

Lawrence Roessler

Subscribed and Sworn to before me this May 31, 2024

Notary Public

WILLIAM ROY SCOTT
OFFICIAL SEAL
Notary Public - State of Illinois
Commission No. 987167
My Commission Expires February 15, 2028

Deed Prepared By
William R. Scott
ALLEN & KORKOWSKI & ASSOCIATES
123 N. Garrard
P.O. Box 200
Rantoul, Illinois, 61866
217-893-1401

Return To:

Brian J. Meginnes
Elias, Meginnes & Seghetti, P.C.
416 Main Street
Suite 1400
Peoria, IL 61602-1611

Send Tax Bill To:

Area Disposal Service, Inc.
4700 N Sterling Ave
Peoria IL 61615-3652



I certify that this is a copy of an instrument recorded in my office.

Aaron Ammons

Aaron Ammons Champaign Co. Clerk/Recorder

Date 11/19/2025 Deputy

APPENDIX 2-D

ECOCAT REPORT

EcoCAT
Ecological Compliance Assessment Tool

ILLINOIS DEPARTMENT OF NATURAL RESOURCES

Applicant: Brice Rhoades
Contact: Brice Rhoades
Address: 1230 East Diehl Road
Suite 200
Naperville, IL 60653

IDNR Project Number: 2511131
Date: 03/25/2025

Project: 340-656 Rantoul
Address: 894 and 896 West Champaign Avenue, Rantoul

Description: Preparing a notice of intent for this property, requesting permitting to develop an MSW transfer station at the property.

Natural Resource Review Results

This project was submitted for information only. It is not a consultation under Part 1075.

The Illinois Natural Heritage Database contains no record of State-listed threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land and Water Reserves in the vicinity of the project location.

Location
The applicant is responsible for the accuracy of the location submitted for the project.

County: Champaign

Township, Range, Section:
21N, 9E, 4



IL Department of Natural Resources Contact
Impact Assessment Section
217-785-5500
Division of Ecosystems & Environment

Disclaimer

The Illinois Natural Heritage Database cannot provide a conclusive statement on the presence, absence, or condition of natural resources in Illinois. This review reflects the information existing in the Database at the time of this inquiry, and should not be regarded as a final statement on the site being considered, nor should it be a substitute for detailed site surveys or field surveys required for environmental assessments. If additional protected resources are encountered during the project's implementation, compliance with applicable statutes and regulations is required.

Terms of Use

By using this website, you acknowledge that you have read and agree to these terms. These terms may be revised by IDNR as necessary. If you continue to use the EcoCAT application after we post changes to these terms, it will mean that you accept such changes. If at any time you do not accept the Terms of Use, you may not continue to use the website.

1. The IDNR EcoCAT website was developed so that units of local government, state agencies and the public could request information or begin natural resource consultations on-line for the Illinois Endangered Species Protection Act, Illinois Natural Areas Preservation Act, and Illinois Interagency Wetland Policy Act. EcoCAT uses databases, Geographic Information System mapping, and a set of programmed decision rules to determine if proposed actions are in the vicinity of protected natural resources. By indicating your agreement to the Terms of Use for this application, you warrant that you will not use this web site for any other purpose.

2. Unauthorized attempts to upload, download, or change information on this website are strictly prohibited and may be punishable under the Computer Fraud and Abuse Act of 1986 and/or the National Information Infrastructure Protection Act.

3. IDNR reserves the right to enhance, modify, alter, or suspend the website at any time without notice, or to terminate or restrict access.

Security

EcoCAT operates on a state of Illinois computer system. We may use software to monitor traffic and to identify unauthorized attempts to upload, download, or change information, to cause harm or otherwise to damage this site. Unauthorized attempts to upload, download, or change information on this server is strictly prohibited by law.

Unauthorized use, tampering with or modification of this system, including supporting hardware or software, may subject the violator to criminal and civil penalties. In the event of unauthorized intrusion, all relevant information regarding possible violation of law may be provided to law enforcement officials.

Privacy

EcoCAT generates a public record subject to disclosure under the Freedom of Information Act. Otherwise, IDNR uses the information submitted to EcoCAT solely for internal tracking purposes.

IDNR Project Number: 2511131

EcoCAT Receipt

Project Code 2511131

APPLICANT	DATE
Brice Rhoades Brice Rhoades 1230 East Diehl Road Suite 200 Naperville, IL 60653	3/25/2025

DESCRIPTION	FEE	CONVENIENCE FEE	TOTAL PAID
EcoCAT Consultation	$ 25.00	$ 1.00	$ 26.00

TOTAL PAID $ 26.00

Illinois Department of Natural Resources
One Natural Resources Way
Springfield, IL 62702
217-785-5500
dnr.ecocat@illinois.gov

APPENDIX 2-E

LETTER FROM RANTOUL AIRPORT

Village of Rantoul

Public Works
200 West Grove
Rantoul, IL 61866

Phone: 217.892.6526
Fax: 217.892.6527

Mr. John E. Hock, P.E. | Vice President
Civil & Environmental Consultants, Inc.
1230 East Diehl Road, Suite 200
Naperville, Illinois 60563

December 16, 2025

RE: Proposed Waste Recycling and Transfer Station in Rantoul, IL

Dear Mr. Hock:

I am following up on the proposal to construct a Waste Recycling and Transfer Station at 896 W. Champaign Ave in Rantoul, IL.

I have studied the construction plans and other documents you have provided that show the location of the facility and describe its operation. On December 10, 2025, I conducted a site visit of a similar facility under construction that is owned by your client to view its operation in Peoria, IL. I also visited an operational facility in Chillicothe, IL and discussed typical day-to-day operations, with an emphasis on waste containment and daily clean up procedures. We also discussed typical observations of birds with the on-site foreman of operations.

The U.S. Department of Transportation, Federal Aviation Administration, has published Advisory Circular 150/5200-33C, "Hazardous Wildlife Attractants on or near Airport," which serves as a guide for airport facility managers regarding all aspects of wildlife management and mitigation of areas of attraction for wildlife. Advisory Circulars are not legally binding and do not constitute a regulation, per se, but are provided to guide aviation professionals in decision making. I have reviewed the AC carefully, and in particular cite Paragraph 2.2.4:

Enclosed waste-handling facilities that receive garbage behind closed doors; process it via compaction, incineration, or similar manager; and remove all residue by enclosed vehicles generally are compatible with safe airport operations, provided they are constructed and operated properly and are not located on airport property or with the Runway Protection Zone.

Based upon my site review of existing facilities and with reference to the FAA Advisory Circular cited above, I do not foresee any impact on airport operations of the proposed Waste Recycling and Transfer Station. I have no objections to the project proceeding as proposed.

Sincerely,

RE Coverdill

Robert E. Coverdill
Manager, Rantoul National Aviation Center
6 Aviation Center Drive
Rantoul, IL 61866

APPENDIX 2-F

STORMWATER MANAGEMENT PLAN

RANTOUL RECYCLING AND TRANSFER STATION
STORMWATER MANAGEMENT PLAN

Prepared For:
RANTOUL RECYCLING AND TRANSFER STATION
RANTOUL, ILLINOIS
CHAMPAIGN COUNTY

Prepared By:
CIVIL & ENVIRONMENTAL CONSULTANTS, INC.
NAPERVILLE, ILLINOIS

CEC Project 340-656

DECEMBER 2025

Civil & Environmental Consultants, Inc.
1230 East Diehl Road, Suite 200 | Naperville, IL 60563 | p: 630-963-6026 f: 630-963-6027 | www.cecinc.com

TABLE OF CONTENTS

1.0 INTRODUCTION.....1
1.1 Stormwater Design Summary..... 2
2.0 STORMWATER MANAGEMENT PLAN [MANUAL OF PRACTICE: CHAP. 6.3, SECTION B].....4

APPENDICES

Appendix 1 Mohr & Kerr Stormwater Calculations and Drawings for Phase 1 Stormwater Design
Appendix 2 Rantoul Approval of Phase 1 Stormwater Design
Appendix 3 HydroCAD Report - Existing Conditions
Appendix 4 HydroCAD Report - Proposed Conditions
Appendix 5 Catchment Area Exhibits
Appendix 6 Catchment Areas Table
Appendix 7 Precipitation Frequency Data
Appendix 8 National Flood Hazard Area FIRMette
Appendix 9 Soil Resource Report

1.0 INTRODUCTION

Area Disposal Service, Inc. (Area Disposal) is applying to the Village of Rantoul (Rantoul) for local siting approval of a municipal solid waste (MSW) transfer station, which will be located at 896 West Champaign Avenue, Rantoul, Champaign County (site). Area Disposal currently operates a waste hauling business at the approximately 14.03-acre site. The proposed facility the Rantoul Recycling and Transfer Station (Rantoul RTS) is located northeast of Interstate 57 and West Champaign Avenue (or Route 136) in the western portion of Rantoul.

The proposed Rantoul RTS shall be a state-of-the-practice facility where loads of MSW from collection vehicles will be consolidated into larger loads for transport to a permitted landfill. In addition to MSW, the proposed facility is designed to accept single stream recyclables from collection vehicles for consolidation into larger loads for transport to a material recovery facility. The proposed Rantoul RTS will complement the existing waste hauling business at the site and is designed to accommodate a daily throughput of 500 tons per day.

Given the site location, the Village of Rantoul maintains regulatory authority for the review and permitting of stormwater management features, which are to be designed and implemented in accordance with the Rantoul Code and Manual of Practice for the Village of Rantoul, Chapter 6: "Design and Construction Standards for Storm Sewers, Drainage Ways and Storm Water Detention Facilities" (Manual). From Chapter 6, Section 6.3(B)(1):

…a stormwater management plan is required for all developments which meet the following criteria:

a. *Residential developments of five (5) or more acres gross aggregate land area, including roads, utility rights-of-way, and any other dedicated lands. Residential developments of less than five (5) acres if the amount of impervious surface is greater than fifty (50) per cent of the area of development.*
b. *Nonresidential developments of two (2) or more acres gross aggregate land area including roads, utility rights-of-way, and any other dedicated lands. Nonresidential developments of less than two (2) acres if the amount of impervious surface is greater than fifty (50) per cent of the area of development.*
c. *Developments of less than two (2) acres located in the CB Central Business Zoning District shall be exempt from these regulations.*

The site includes the non-residential development of two or more acres of gross aggregate land area. As such, we understand that the preparation and approval of a stormwater management plan meeting the requirements of Section 6.3(B)(4) is required. The design criteria for the stormwater

management plan, requirements for detention facilities, and requirements for physical aspects of wet and dry bottom reservoirs are contained in Sections 6.3(B)(5) through 6.3(B)(7), respectively.

The following sections address each Section of Chapter 6.3(B)(4) through 6.3(B)(7) of the Manual. Excerpts from the Manual are shown below in italicized text followed by Civil & Environmental Consultant's (CEC's) response describing compliance with the Manual excerpt.

1.1 STORMWATER DESIGN SUMMARY

Prior to 2024, the site had been used for various commercial purposes and had remained largely unchanged since approximately 2006. A storage/office building and aggregate access road were also present on the site during this time.

Improvements were made to the site in 2024 and 2025 including renovations to the storage/office building, improvements to the access road, addition of an aggregate parking area for commercial vehicles, addition of a paved parking area for employees/ visitors, and addition of a detention basin and storm sewer system (Phase 1 Improvements). The Phase 1 Improvements are shown on the drawings prepared by Mohr and Kerr Engineering & Land Surveying, P.C. (Mohr & Kerr) in Appendix 1. Prior to construction of the Phase 1 Improvements, stormwater calculations and drawings (Phase 1 Stormwater Plan) were performed by Mohr & Kerr, which were submitted to and approved by Rantoul. The calculations prepared by Mohr & Kerr included determination of the site's pre-existing peak flow rate from the natural undeveloped state for a two-year, critical duration (thirty-minute) storm event (4.61 cubic feet per second), as required by the Manual, and used a tabular Modified Rational Method approach for detention sizing. Precipitation data utilized NOAA Atlas 14, Volume 2, Version 3, Point Precipitation Frequency Estimates, as required by the Manual.

The Phase 1 Stormwater Plan included a narrative, calculations, and drawings, which are provided in Appendix 1. As discussed further below, the Phase 1 Stormwater Plan included consideration for the additional impervious areas that are to be added as part of the Phase 2 improvements. T he Phase 1 Stormwater Plan was approved by Rantoul on November 15, 2024 (see approval included in Appendix 2). The Phase 1 Improvements were completed in the Spring 2025.

The improvements proposed for the Rantoul RTS will include a transfer station building, scale, additional access roads, and additional stormwater management features (Phase 2 Improvements). The drawings for the Phase 2 Improvements are provided in the Drawings portion of the Criterion 2 Report. The stormwater management features for the Phase 2 Improvements are designed consistent with the stormwater management features designed and constructed for the Phase 1 Improvements. Specifically, both the Phase 1 and 2 Improvements have been hydraulically modelled using the same method used by Morh & Kerr (i.e., the Modified Rational Method).

As noted above, Phase 1 Improvements were calculated by Mohr & Kerr in tabular format using the Modified Rational Method. CEC recreated the Phase 1 Improvement calculations using the Modified Rational Method in HydroCAD version 10.2, which provides additional time-based analysis and produces hydrographs of the various modelled stormwater events. As discussed further below, the Phase 1 Improvement model produced substantially equivalent results to the Mohr & Kerr tabular method.

CEC additionally modelled the Phase 2 Improvements using the Modified Rational Method in HydroCAD version 10.2. In addition to detention sizing, both the Phase 1 and Phase 2 Improvement models included an assessment of the storm sewer system which has been sized to convey the critical duration 10-year event without surcharge. The HydoCAD model results for the Phase 1 Improvements (i.e., the existing conditions) is provided in Appendix 3 and the HydroCAD model results for the Phase 2 Improvements (i.e., the proposed conditions) is provided in Appendix 4.

The models indicate the following as discussed further below:

- For Phase 1 and 2 Improvements, the surface water from the majority of tributary area of the site respectively, is appropriately conveyed to the detention basin on the west portion of the site. For Phase 2, all of the runoff from operational areas will flow to the detention basin. Exhibits of the pond watershed area for each phase are provided as Appendix 5.
- The required storage capacity for the Phase 2 Improvements is 1.798 acre-feet based upon the critical duration 100-year event. The existing detention basin has adequate capacity to store this volume with a high-water level (HWL) of 738.64. Based on the surveyed existing conditions of the Phase 1 improvements, the existing detention basin has 0.86 feet of freeboard at HWL. Minor modifications to the existing detention basin will be required to obtain the required 1-foot of freeboard and overflow location.
- The required release rate from the detention basin for the Phase 2 Improvements is the same as Phase 1 Improvements and equals 4.61 cubic feet per second. Based on the Phase 2 model, the existing detention basin will provide a release rate of 2.94 cubic feet per second at HWL.
- The storm sewer is adequately sized to convey the 5-year, 50-year, and 100-year critical duration storm event without system surcharge.

Based on the above information, with minor proposed modifications, the existing detention basin is sufficiently sized to accommodate the Phase 2 Improvements,. Additional details describing how the stormwater management design for the Phase 2 Improvements meets the Manual are discussed below.

2.0 STORMWATER MANAGEMENT PLAN [MANUAL OF PRACTICE: CHAP. 6.3, SECTION B]

Chapter 6.3 B - No development shall be approved unless the Director approves a stormwater management plan which attenuates the acceleration of runoff due to development. For the purposes of this Section, a stormwater management plan means a report, plans and documents which identify the water which naturally flows to, from and through the development, the means of controlling the stormwater runoff release from the development,

4. *Plan requirements. Unless the Director excludes specific items, the stormwater management plan shall include, but not be limited to, the following information:*

   a. *A topographic map of the project site, and a drainage basin limits map and other pertinent data necessary to define flows entering the development from adjacent land. Maps shall be of suitable scale and contour interval, and include the extent of floodplains, calculated high water elevations, the shoreline of existing lakes, ponds, swamps and detention basins as well as their inflow and outflow structures, if any. Maps shall also include the fifty (50) and one hundred (100) year floodplain elevations for any streams for which detailed flood studies have been prepared by the Illinois Division of Water Resources or federal agencies. Floodway limits should also be shown as defined by available studies.*

Response:

The topographic map of the existing features of the site is provided in Drawing S400 included in the Criterion 2 report.

Drainage limits for the Phase 1 Improvements are shown on the Catchment Basin Exhibit - Existing Conditions and drainage limits for the Phase 2 Improvements are shown on the Catchment Basin Exhibit - Proposed Conditions, both included in Appendix 5. The exhibits indicate the natural tributary areas to the pond, which include off-site areas as well as areas from the improved site. The off-site areas that flow to the property include approximately 2.86 acres to the east, which are part of the northeast parking area, southeast parking area, and east building catchment areas. A portion of the north, west, and south parts of the site naturally flow to lower ground located north, west, and south of the site. There are no 50- and 100-year floodplains as shown in the FEMA map included in Appendix 8.

b. *The locations and invert elevation of all existing sanitary and storm sewers in the development area or in adjacent areas.*

Response:

A map of the site showing proposed conditions can be found in Drawing S500 in the Criterion 2 report. Existing storm sewer rims, inverts, and pipes are provided in the catchment area exhibits included as Appendix 5.

c. *Detailed calculations of runoff anticipated for the developed site which indicate design volumes and existing and proposed runoff rates for each portion of the watershed tributary to the storm drainage system. The Design Engineer shall submit the calculations used to determine such runoff volumes and rates as well as a restatement of the criteria used throughout the calculations. Calculations are to be provided for a five-year storm, fifty-year storm and a one hundred-year storm event.*

Response:

Catchment area exhibits are provided in Appendix 5 for both Phase 1 and Phase 2 Improvements. The soil types and Rational Method C-value associated with each catchment area for both Phase 1 and Phase 2 Improvements are included in Appendix 6.

The stormwater management calculations for both Phase 1 and Phase 2 improvements are provided as Appendices 3 and 4, respectively. The calculations are provided as a report from HydroCAD and include analyses of the 5-year, 10-year, 50-year, and 100-year storm events. The results are summarized in the tables below.

The pond HWL for each critical storm duration for each analyzed rainfall event, 5-year, 50-year, and 100-year is highlighted in yellow in tables 1 through 6 below. The critical storm duration is that which results in the highest basin elevation for each rainfall event. Please note, to avoid hundreds of pages of additional calculation outputs from the HydroCAD model, the calculations included in Appendices 3 and 4 only contain the highlighted events.

The model results for the Phase I Improvements (existing conditions) indicate that the pond HWL for each critical duration storm associated with the 5-year, 50-year, and 100-year events, is substantially the same as the calculations prepared by Mohr & Kerr. Based on the model, the pond HWL is 738.20 feet for the 100-year event.

A HWL is not provided in the Mohr & Kerr calculations; however, for the 100-year event, the required storage indicates 61,746 cubic feet, or 1.42 acre-feet, and, based on the stage storage table provided, this volume is achieved at pond elevation 738.50 (62,081 cubic feet, or 1.43 acre-feet). This difference results from the variation between design basin storage capacity and as-built storage capacity as calculated from the existing conditions survey prepared by Mohr & Kerr subsequent to construction. Please note, the basin outflow rate of the critical duration 100-year storm event is 2.72 cubic feet per second, which is lower than the required release rate of 4.61 cubic feet per second.

Table 1: Existing Conditions 5-Year Event

Area (acres)	Runoff Coef.	Storm Duration (min)	Rainfall Intensity (inch/hr)	Basin Inflow rate (cfs)	Basin Outflow rate (cfs)	Basin Volume (acre-ft)	Basin HWL Elevation
12.43	0.44	5	6.88	13.75	1.60	0.093	736.53
12.43	0.44	10	5.35	17.24	1.88	0.233	736.86
12.43	0.44	15	4.36	17.91	2.05	0.369	737.10
12.43	0.44	30	3.00	15.97	2.24	0.562	737.38
12.43	0.44	60	1.88	10.44	2.32	0.658	737.50
12.43	0.44	120	1.10	6.11	2.29	0.625	737.46
12.43	0.44	150	0.92	5.09	2.17	0.484	737.27
12.43	0.44	165	0.85	4.71	2.12	0.432	737.20
12.43	0.44	180	0.79	4.39	2.07	0.388	737.13

Table 2: Existing Conditions 50-Year Event

Area (acres)	Runoff Coef.	Storm Duration (min)	Rainfall Intensity (inch/hr)	Basin Inflow rate (cfs)	Basin Outflow rate (cfs)	Basin Volume (acre-ft)	Basin HWL Elevation
12.43	0.44	5	9.73	17.05	1.71	0.139	736.66
12.43	0.44	10	7.38	19.46	2.01	0.334	737.04
12.43	0.44	15	6.08	20.78	2.21	0.530	737.33
12.43	0.44	30	4.34	18.65	2.44	0.835	737.71
12.43	0.44	60	2.86	15.65	2.59	1.083	737.97
12.43	0.44	120	1.75	9.69	2.62	1.135	738.02
12.43	0.44	150	1.46	8.12	2.49	0.920	737.79
12.43	0.44	165	1.36	7.53	2.44	0.826	737.70
12.43	0.44	180	1.27	7.03	2.39	0.755	737.62

Table 3: Existing Conditions 100-Year Event

Area (acres)	Runoff Coef.	Storm Duration (min)	Rainfall Intensity (inch/hr)	Basin Inflow rate (cfs)	Basin Outflow rate (cfs)	Basin Volume (acre-ft)	Basin HWL Elevation
12.43	0.44	5	10.57	17.55	1.74	0.152	736.69
12.43	0.44	10	7.98	20.18	2.04	0.362	737.09
12.43	0.44	15	6.60	21.65	2.25	0.576	737.40
12.43	0.44	30	4.76	19.43	2.49	0.914	737.79

Area (acres)	Runoff Coef.	Storm Duration (min)	Rainfall Intensity (inch/hr)	Basin Inflow rate (cfs)	Basin Outflow rate (cfs)	Basin Volume (acre-ft)	Basin HWL Elevation
12.43	0.44	60	3.18	16.46	2.66	1.211	738.09
12.43	0.44	120	1.99	11.02	2.72	1.328	738.20
12.43	0.44	150	1.67	9.28	2.59	1.077	737.96
12.43	0.44	165	1.55	8.63	2.54	0.982	737.87
12.43	0.44	180	1.45	8.07	2.49	0.903	737.78

The model for the Phase 2 Improvements (proposed conditions) indicates that the pond HWL for each critical duration storm associated with the 5-year, 50-year, and 100-year events is similar to the pond HWLs provided in Phase 1. The 100-year HWL elevation is 738.64 feet versus 738.50 feet calculated in Phase 1. The maximum release rate is 2.94 cubic feet per second, which is below the required rate of 4.61 cubic feet per second.

Table 4: Proposed Conditions 5-Year Event

Area (acres)	Runoff Coef.	Storm Duration (min)	Rainfall Intensity (inch/hr)	Basin Inflow rate (cfs)	Basin Outflow rate (cfs)	Basin Volume (acre-ft)	Basin HWL Elevation
12.79	0.53	5	6.88	21.71	1.75	0.155	736.70
12.79	0.53	10	5.35	22.04	1.99	0.312	737.01
12.79	0.53	15	4.36	21.54	2.12	0.435	737.20
12.79	0.53	30	3.00	18.38	2.31	0.650	737.49
12.79	0.53	60	1.88	12.91	2.43	0.815	737.68
12.79	0.53	120	1.10	7.55	2.45	0.848	737.72
12.79	0.53	150	0.92	6.30	2.44	0.825	737.70
12.79	0.53	165	0.85	5.83	2.43	0.810	737.68
12.79	0.53	180	0.79	5.43	2.41	0.780	737.65

Table 5: Proposed Conditions 50-Year Event

Area (acres)	Runoff Coef.	Storm Duration (min)	Rainfall Intensity (inch/hr)	Basin Inflow rate (cfs)	Basin Outflow rate (cfs)	Basin Volume (acre-ft)	Basin HWL Elevation
12.79	0.53	5	9.73	28.11	1.87	0.226	736.85
12.79	0.53	10	7.38	27.11	2.12	0.433	737.20
12.79	0.53	15	6.08	25.25	2.28	0.607	737.44
12.79	0.53	30	4.34	22.45	2.54	0.983	737.87
12.79	0.53	60	2.86	18.82	2.72	1.332	738.21
12.79	0.53	120	1.75	11.98	2.81	1.514	738.38
12.79	0.53	150	1.46	10.05	2.82	1.521	738.38
12.79	0.53	165	1.36	9.32	2.82	1.518	738.38
12.79	0.53	180	1.27	8.70	2.80	1.480	738.35

Table 6: Proposed Conditions 100-Year Event

Area (acres)	Runoff Coef.	Storm Duration (min)	Rainfall Intensity (inch/hr)	Basin Inflow rate (cfs)	Basin Outflow rate (cfs)	Basin Volume (acre-ft)	Basin HWL Elevation
12.79	0.53	5	10.57	29.69	1.90	0.246	736.89
12.79	0.53	10	7.98	27.82	2.15	0.468	737.25
12.79	0.53	15	6.60	26.21	2.32	0.658	737.50
12.79	0.53	30	4.76	23.37	2.59	1.081	737.97
12.79	0.53	60	3.18	19.66	2.81	1.504	738.37
12.79	0.53	120	1.99	13.63	2.93	1.766	738.61
12.79	0.53	150	1.67	11.48	2.94	1.792	738.63
12.79	0.53	165	1.55	10.67	2.94	1.798	738.64
12.79	0.53	180	1.45	9.98	2.93	1.760	738.60

d. *A site plan of the proposed storm water management system including the location and size of all drainage structures, storm sewers, channels and channel sections, detention basins, outlet lines, and analyses of the effect of said improvement on the receiving outlet pipe, the associated channel and high water elevations.*

e. *The slope, type, and size of all existing and proposed storm sewers and other waterways.*

Response:

A site plan has been provided in Drawing -S500 included in the Criterion 2 report showing the proposed improvements. Piping details will be provided during final engineering.

High water elevations for the 5-year, 50-year, and 100-year critical duration storm event are provided for each structure in Tables 7 through 9. Storm duration analyzed for each storm event uses the critical duration established in the detention pond analysis determined in Tables 4 through 6 above (i.e., 120 minutes for the 5-year event, 150 minutes for the 50-year event, and 165 minutes for the 100-year event). The analysis indicates that the existing and proposed storm sewer system can convey the critical duration storm for the 5-year, 50-year, and 100-year event without surcharge. Structure 5-4 has not been modeled due to its role as a back-up inlet for structure 6-3.

Table 7: Structures Water Elevation 5-Year Event

Structure	Structure HydroCAD ID	Storm Duration (min)	Rainfall Intensity (inch/hr)	Structure Inflow rate (cfs)	Structure Rim Elevation	Structure water elevation
Inlet 1-4	I14	120	1.10	6.14	749.98	742.64
Inlet 1-5	I15	120	1.10	6.00	750.40	745.71

Structure	Structure HydroCAD ID	Storm Duration (min)	Rainfall Intensity (inch/hr)	Structure Inflow rate (cfs)	Structure Rim Elevation	Structure water elevation
Inlet 1-6	I16	120	1.10	0.52	752.90	749.69
Trench Drain 1-7	I17	120	1.10	0.43	746.50	745.96
Inlet 1-8	I18	120	1.10	6.14	752.61	744.14
Inlet 1-9	I19	120	1.10	0.14	751.91	745.59
Inlet 2-1	I21	120	1.10	4.23	752.51	747.98
Inlet 3-1	I31	120	1.10	2.93	752.46	748.50
Inlet 4-1	I41	120	1.10	0.53	754.18	749.31
Inlet 5-1	I51	120	1.10	1.35	752.93	749.56
Inlet 5-2	I52	120	1.10	1.10	752.31	750.63
Inlet 5-3	I53	120	1.10	0.09	752.78	750.64
Inlet 6-1	I61	120	1.10	1.25	752.92	749.06
Inlet 6-2	I62	120	1.10	0.91	752.75	749.78
Inlet 6-3	I63	120	1.10	0.65	752.35	750.38
Inlet 7-1	I71	120	1.10	1.65	752.23	748.37
Inlet 8-1	I81	120	1.10	0.56	753.87	748.95
Inlet 8-2	I82	120	1.10	0.39	752.00	751.07
Inlet 9-1	I91	120	1.10	0.45	754.11	750.61
Inlet 9-2	I92	120	1.10	0.37	753.34	751.56

Table 8: Structures Water Elevation 50-Year Event

Structure	Structure HydroCAD ID	Storm Duration (min)	Rainfall Intensity (inch/hr)	Structure Inflow rate (cfs)	Structure Rim Elevation	Structure water elevation
Inlet 1-4	I14	150	1.46	8.17	749.98	742.77
Inlet 1-5	I15	150	1.46	7.98	750.40	745.86
Inlet 1-6	I16	150	1.46	0.69	752.90	749.75
Trench Drain 1-7	I17	150	1.46	0.58	746.50	746.12
Inlet 1-8	I18	150	1.46	8.17	752.61	744.27
Inlet 1-9	I19	150	1.10	0.19	751.91	745.62
Inlet 2-1	I21	150	1.46	5.62	752.51	748.13
Inlet 3-1	I31	150	1.46	3.89	752.46	748.63
Inlet 4-1	I41	150	1.46	0.70	754.18	749.38
Inlet 5-1	I51	150	1.46	1.79	752.93	749.64
Inlet 5-2	I52	150	1.46	1.47	752.31	750.73
Inlet 5-3	I53	150	1.46	0.12	752.78	750.67
Inlet 6-1	I61	150	1.46	1.66	752.92	749.14
Inlet 6-2	I62	150	1.46	1.21	752.75	749.86
Inlet 6-3	I63	150	1.46	0.87	752.35	750.46
Inlet 7-1	I71	150	1.46	2.19	752.23	748.48
Inlet 8-1	I81	150	1.46	0.75	753.87	748.99
Inlet 8-2	I82	150	1.46	0.52	752.00	751.12
Inlet 9-1	I91	150	1.46	0.60	754.11	750.66
Inlet 9-2	I92	150	1.46	0.49	753.34	751.61

Table 9: Structures Water Elevation 100-Year Event

Structure	Structure HydroCAD ID	Storm Duration (min)	Rainfall Intensity (inch/hr)	Structure Inflow rate (cfs)	Structure Rim Elevation	Structure water elevation
Inlet 1-4	I14	165	1.55	8.68	749.98	742.80
Inlet 1-5	I15	165	1.55	8.48	750.40	745.89
Inlet 1-6	I16	165	1.55	0.73	752.90	749.77
Trench Drain 1-7	I17	165	1.55	0.61	746.50	746.17
Inlet 1-8	I18	165	1.55	8.68	752.61	744.30
Inlet 1-9	I19	165	1.10	0.20	751.91	745.63
Inlet 2-1	I21	165	1.55	5.97	752.51	748.16
Inlet 3-1	I31	165	1.55	4.13	752.46	748.66
Inlet 4-1	I41	165	1.55	0.75	754.18	749.40
Inlet 5-1	I51	165	1.55	1.90	752.93	749.66
Inlet 5-2	I52	165	1.55	1.56	752.31	750.75
Inlet 5-3	I53	165	1.55	0.13	752.78	750.67
Inlet 6-1	I61	165	1.55	1.77	752.92	749.16
Inlet 6-2	I62	165	1.55	1.28	752.75	749.88
Inlet 6-3	I63	165	1.55	0.92	752.35	750.48
Inlet 7-1	I71	165	1.55	2.33	752.23	748.51
Inlet 8-1	I81	165	1.55	0.79	753.87	749.01
Inlet 8-2	I82	165	1.55	0.55	752.00	751.13
Inlet 9-1	I91	165	1.55	0.64	754.11	750.67
Inlet 9-2	I92	165	1.55	0.52	753.34	751.63

f. A plot or tabulation of storage volumes with corresponding water surface elevations and of the basin outflow rates for five-year, fifty-year and one hundred-year water surface elevations for all detention basins. If development work is to be performed in phases, such tabulations should be performed independently for each phase.

Response:

Storage volumes and water surface elevations for the Phase 2 (proposed conditions) 5-year, 50-year, and 100-year storm events are provided in Tables 4 through 6 above respectively.

g. Design hydrographs of inflow and corresponding outflow for both the fifty-year and one hundred-year design runoff events for the site's projected final stage of development and the calculated five- year, fifty-year, and one hundred-year peak inflows from the development under natural, existing conditions and under the projected final stage of development for all detention basins.

Response:
Phase 2 Improvement inflow and outflow conditions are modelled for each catchment area, storm sewer, and pond for each of the 5-year, 10-year, 50-year, and 100-year conditions. See hydrographs and associated calculations included in Appendix 4. Catchment areas are provided in Appendix 5.

The 2-year, 10-year, and 100-year natural existing conditions peak flows were previously calculated as part of the Phase 1 improvements by Mohr & Kerr. The natural existing condition peak flows are as follows:

- 2-year: 4.61 cubic feet per second;
- 10-year: 6.49 cubic feet per second; and
- 100-year: 10.25 cubic feet per second.

The project maximum allowable release rate is based upon the 2-year condition, or 4.61 cubic feet per second.

h. *A profile and one or more cross sections of all existing and proposed channels or other open drainage facilities, showing existing conditions and the proposed changes thereto. In addition, the Design Engineer shall provide high water elevations expected from stormwater runoff under the controlled conditions called for by these regulations and the relationship of structures, streets, and other utilities to such channels.*

Response:
The final design of the storm management system, including detention pond and storm sewers, will be performed subsequent to siting approval. Proposed channels are not anticipated as the site is intended to convey the stormwater surface drainage via overland flow or storm sewers. Cross-sections for the proposed pond will be provided following siting approval during final site engineering.

i. *An engineering cost estimate detailing and explaining all construction costs associated with the stormwater management plan.*

Response:
The existing stormwater management system in place is substantially complete to accommodate the proposed conditions. Costs associated with stormwater management modifications will be provided during final engineering. Costs would be expected to be in the range of $25,000 to $50,000.

5. *Design criteria for the stormwater management plan:*
   a. *Methods of determining stormwater runoff rate and volume. Drainage and storage facilities shall be designed using one of the methods of calculating of runoff discharge rate and total volume given below. The Director may approve other calculation methods.*

      TR-20
      Modified Rational Method
      TR-55
      Quick TR-55 Pond-2

      Response:
      Both the Phase 1 (existing conditions) and Phase 2 (proposed conditions) have been modeled using the Modified Rational Method within HydroCAD. Outputs for the models are provided in Appendices 3 and 4. Additionally, the previous phase calculations performed by Mohr & Kerr were made in accordance with the Modified Rational Method. These can be found in Appendix 1.

   b. *Release rate. The controlled release rate of stormwater runoff from developments subject to this Section shall not exceed the subject property's rate of runoff from the natural undeveloped rate for a two (2) storm with a maximum run-off coefficient of C=0.15. The design rate at which stormwater runoff is delivered to a designated stormwater storage area shall be based on a hundred- year storm after full development. The storm sewers, however, shall be designed to deliver a runoff resulting from a ten-year storm, flowing under gravity conditions. The balance of runoff is to be delivered by overland flow or in the storm sewers under surcharge conditions. In the event the natural downstream channel or storm sewer system is inadequate to accommodate the required release rate, the allowable release rate shall be reduced to that rate permitted by the capacity of the downstream channel or storm sewer system without overflowing its banks or surcharging of sewers.*

      The allowable release rate has been determined following the criteria above. The calculation can be found in Appendix 1, where the 2-year undeveloped release rate was determined to be 4.61 cubic feet per second.

      The existing conditions hydraulic model in Appendix 3 shows that the maximum release rate from the site under the worst-case scenario during a 100-year storm event is 2.72 cubic feet per second, which is below the allowable release rate.

Similarly, the proposed conditions hydraulic model in Appendix 4 shows that the maximum release rate associated with the critical duration 100-year storm event is 2.94 cubic feet per second.

The critical storm duration for the storm sewer capacity for the 10-year storm event has been determined in Table 10. The event with the highest inflow volume has been selected as the critical scenario for calculating storm sewer capacity. Storm sewer capacity for the 10-year storm event is shown in Table 11. Storm sewer R54 connecting inlet 5-4 to 6-3 is not modelled due to structure 5-4 role as a back-up inlet for structure 6-3.

Table 10: Proposed Conditions Storm Duration 10-Year Event

Area (acres)	Runoff Coef.	Storm Duration (min)	Rainfall Intensity (inch/hr)	Basin Inflow rate (cfs)	Basin Outflow rate (cfs)	Basin Volume (acre-ft)	Basin Elevation
12.79	0.53	5	7.74	23.77	1.79	0.177	736.75
12.79	0.53	10	5.98	23.90	2.03	0.350	737.07
12.79	0.53	15	4.88	23.28	2.17	0.488	737.28
12.79	0.53	30	3.40	20.31	2.39	0.750	737.61
12.79	0.53	60	2.16	14.84	2.52	0.961	737.84
12.79	0.53	120	1.28	8.76	2.56	1.027	737.91
12.79	0.53	150	1.06	7.29	2.55	1.006	737.89
12.79	0.53	165	0.98	6.74	2.54	0.992	737.88
12.79	0.53	180	0.91	6.27	2.52	0.959	737.84

Table 11: Structures Water Elevation 10-Year Event

Structure	Structure HydroCAD ID	Storm Duration (min)	Rainfall Intensity (inch/hr)	Sewer Size (inch)	Sewer inflow flow rate (cfs)	Sewer outflow flow rate (cfs)	Sewer avg. flow depth (ft)	Sewer max. vel. (fps)
Pipe I14-Pond	R14	10	5.98	24	17.53	17.54	0.87	13.44
Pipe I15-I14	R15	10	5.98	24	16.91	16.89	1.21	8.50
Pipe I16-I14	R16	10	5.98	12	2.82	2.83	0.63	5.45
Pipe I17-Pond	R17	10	5.98	6	1.46	1.46	0.46	7.89
Pipe I18-I14	R18	10	5.98	24	0.80	17.55	17.53	14.86
Pipe I19-I18	R19	10	5.98	12	0.76	0.77	0.21	6.53
Pipe I21-I15	R21	10	5.98	24	12.87	12.72	1.27	6.04
Pipe I31-I21	R31	10	5.98	18	7.11	6.95	1.24	4.46
Pipe I41-I31	R41	10	5.98	12	2.88	2.30	1.00	3.10
Pipe I51-I31	R51	10	5.98	15	2.98	2.94	0.56	5.58
Pipe I52-I51	R52	10	5.98	12	1.73	1.71	0.49	4.53
Pipe I53-I52	R53	10	5.98	6	0.50	0.39	0.50	2.21
PipeI61-I31	R61	10	5.98	15	2.74	2.73	0.63	4.41
Pipe I62-I61	R62	10	5.98	12	2.19	2.15	0.63	4.09
Pipe I63-I62	R63	10	5.98	12	0.85	0.83	0.38	3.00

Structure	Structure HydroCAD ID	Storm Duration (min)	Rainfall Intensity (inch/hr)	Sewer Size (inch)	Sewer inflow flow rate (cfs)	Sewer outflow flow rate (cfs)	Sewer avg. flow depth (ft)	Sewer max. vel. (fps)
Pipe I71-I15	R71	10	5.98	12	7.48	3.74	1.00	5.36
Pipe –CA13-I81	R13	10	5.98	12	0.94	0.94	0.31	4.60
Pipe I81-I71	R81	10	5.98	12	3.05	3.05	0.60	6.21
Pipe I82-I81	R82	10	5.98	12	2.11	2.11	0.47	5.85
Pipe I91-I71	R91	10	5.98	12	1.88	1.84	0.55	4.16
Pipe I92-I91	R92	10	5.98	12	1.54	1.51	0.48	4.01

c. *Development design. Streets, blocks, lots, parks, and other public grounds shall be located and designed to give a continuous surface relief path avoiding the flooding of buildings and structures, and to preserve and utilize existing and planned streams, channels, and detention basins. Whenever possible, streams and floodplains shall be located within parks and other public grounds.*

Response:

The site is designed to shed water away from the buildings towards the detention pond to the west. Proposed grades generally follow existing drainage patterns for the site.

d. *No drainage facility for the purpose of the detention or retention of water shall be constructed within a distance of ten (10) feet plus one-and-one-half (1 1/2) times the depth of any drainage facility adjacent to the right-of-way of any public street without the written permission of the Director or other authority having jurisdiction over the public street. No earthen berm such that the toe of a berm will be nearer than ten (10) feet to the right-of-way of any public street without the written permission of the Director or other authority having jurisdiction over the public street.*

Response:

The property is adjacent to Interstate 57 right-of-way, which is located west/southwest of the site. Basin depth is approximately 4 feet. Based on the above criteria, the drainage facility requires an offset of 10 feet plus 1.5 x 4 feet = 16 feet. The basin also includes a small berm (1-foot to 4-foot in height). The existing offset from property line to toe of berm is 4.4 feet and the offset to pond HWL is 17.7 feet. The pond location was previously approved as part of the Phase 1 improvements.

6. *Detention facilities. The increased stormwater runoff resulting from a proposed development may be stored in appropriate detention facilities including wet bottom reservoirs, dry bottom reservoirs and parking lots. The following standards shall govern the design of such detention facilities:*

   a. *Storage volume. The volume of storage capacity provided in detention facilities shall be sufficient to control the excess stormwater runoff, resulting from a hundred-year rainfall as published by the Illinois State Water Survey in Technical Letter 13.*

      Response:
      Stormwater runoff has been calculated based on rainfall data from NOAA's National Weather Service Hydrometeorological Design Studies Center Atlas 14 Precipitation frequency estimates for the Site location (http://hdsc.nws.noaa.gov/hdsc/pfds/). This data was used instead of Technical Letter 13 as it includes a broader range of events (180 minutes storm durations vs. 60 minutes storm durations provided by Illinois State Water Survey Technical Letter 13) and has more conservative estimates of rainfall events. The data is included in Appendix 7.

   b. *Release rate. At no time shall the stormwater runoff release rate exceed the allowable release rate required in Section 6.3.B.5.b of this Chapter.*

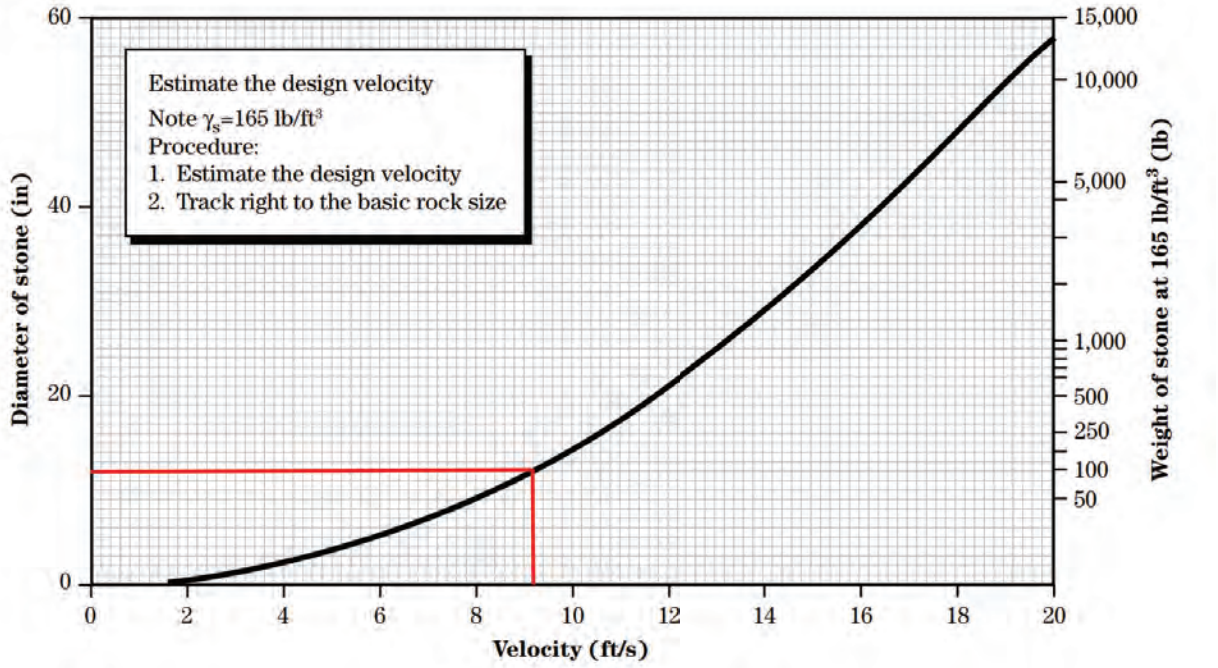
   c. *Release velocity. Detention facilities shall release storm water at a non-erosive velocity. Protected channels receiving detention discharge shall incorporate features to reduce velocity to non- erosive levels where such discharge enters the unprotected channel.*

      Response:
      The pond release rate under Phase 1 and Phase 2 is below the required 4.61 cubic foot per second rate. The spillway of the existing detention pond includes RR4 riprap area at the outlet to prevent erosion. Table 12 below provides a calculation of the release rate and water velocity under various pond elevations up to the maximum pond freeboard elevation (at 739.5 elevation). The maximum water velocity at top of freeboard is 9.57 feet per second. Based on the United States Department of Agriculture Technical Supplement 14C RR4 riprap, which includes angular 6-inch to 12-inch stone provides adequate protection against the maximum estimated water velocity as per figure TS14C-5 provided below.

Table 12: Proposed Conditions Detention Basin Release Rate and Velocity at Varying Water Elevations

Water elevation (feet)	Basin Outflow rate (cfs)	Basin Outflow velocity (fps)	Basin Volume (acre-ft)
736.0	0.00	0.00	0.000
736.5	1.57	4.50	0.083
737.0	1.98	5.67	0.308
737.5	2.32	6.65	0.658
738.0	2.61	7.48	1.117
738.5	2.88	8.25	1.647
739.0	3.12	8.94	2.214
739.5	3.34	9.57	2.825

Figure TS14C–5 Rock size based on Isbash curve



d. Spillway. An emergency spillway shall be provided to permit the safe passage of runoff generated from a one hundred-year storm or greater under developed conditions.

Response:

The Phase 1 improvements did not include a defined emergency spillway. An emergency spillway is proposed as part of the Phase 2 improvements.

e. *Freeboard. Wet and dry bottom reservoirs shall have adequate capacity to contain the storage volume of tributary stormwater runoff in a hundred-year storm with at least one foot of freeboard above the water surface.*

Response:
The Phase 2 calculations indicate a 100-year HWL of 738.64. The top of the existing pond is at 739.50, which would provide 0.86 feet of freeboard. An additional 0.64 feet of height shall be added to the pond embankment in order to provide an emergency spillway with maximum height of 0.5 feet, and to obtain 1 foot of freeboard above the HWL.

7. *Physical aspects of wet and dry bottom reservoirs. To ensure public safety, the protection of the facility, the ease of facility maintenance, facility durability and aesthetics, the following shall be considerations in detention facility design:*

a. *The water depth near the perimeter of a storage pool shall be limited. Access restrictions (fence, walls, etc.) may be required if land availability dictates greater water depth.*

Response:
The Phase 1 pond provides for 5:1 side slopes at the pond perimeter and a maximum water depth of approximately 4 feet at pond bottom. The facility is private and not anticipated to be accessed by the public. The pond design is believed to be adequate for public safety and facility functionality.

b. *The amount and geometric shape of available land sites and location of the detention facility will influence depth and side slopes specifications and other design factors.*

c. *To facilitate maintenance and reduce safety hazards the side slopes for grassed areas should not be steeper than 1 to 4.*

Response:
Side slopes are indicated as 5:1 on the Phase 1 plans prepared by Mohr & Kerr.

d. *To promote surface drainage for grass mowing and multiple purpose use, grass bottoms in detention basins should be designed with minimum slopes of one per cent.*

Response:
The Phase 1 detention pond is anticipated to be seeded. Grassed areas of the pond bottom vary but are designed to be above 1%.

e. Provisions should be made to protect the facility from soil erosion under all probable flow conditions imposed by the design storm.

Response:
Phase 1 grading design of the detention basin directs inflow water from storm sewers to a concrete-paved ditch, which reduces erosion. Additionally, a riprap is located downstream of the outlet. Other areas of the pond bottom are anticipated to be seeded and have shallow slopes.

f. Control devices should be adequately protected from theft and vandalism.

Response:
The site is to be secured by a fence, therefore providing protection from theft and vandalism.

g. The facility's landscaping should harmonize with the surrounding area.

Response:
Landscaping for the site is discussed in the Criterion 3 report for the local siting application.

h. The design shall facilitate control and removal of debris both in the storage structure and in all inlet or outlet devices.
i. Inflow and outflow structures, pumping stations, and other structures should be protected and designed to minimize safety hazards.
j. To promote the facility's durability, longevity and physical appearance construction specifications should require quality materials and workmanship.
k. The outflow structure shall have an orifice, weir plate or similar control device to contain the basin's outflow at the same release rate specified in Section 6.3.B.5.b of this Chapter.

Response:
The release rate from the detention pond is controlled with an 8-inch outlet pipe which restricts the outflow. The hydraulic calculations provided in Appendices 3 and 4 show that at the maximum water elevation the flowrate does not exceed the

maximum allowable release rate of 4.61 cubic feet per second. The maximum release rate is 3.34 cubic feet per second at the designed 739.50 (freeboard) water elevation. The pond side slopes of 5:1, and the generally flat bottom, will allow for access for mowing (if necessary) and enable the removal of debris.

l. To minimize debris a debris catcher chamber shall be installed at the inlet end of reservoirs greater than ten (10) acre-feet. For ponds smaller than ten (10) acre-feet a manhole constructed two (2) feet deeper than the inlet and outlet pipes may serve as a debris catcher.

Response:

A catch basin, structure 1-8, is proposed to be added as part of the Phase 2 improvements to enable debris catchment prior to storm sewer flow entering the pond.

m. Dry bottom reservoir construction detail. A dry bottom reservoir should be designed to drain within twenty-four (24) hours after a twenty-five-year rain event, and after associated flows have ceased. Further, the following construction details shall apply to the design and construction of a dry bottom reservoir.

Response:

As per calculations shown in Table 13, the maximum level of the Detention Basin in a 25-year storm event is calculated to be 738.16 for a 120 minutes storm duration. These calculations were performed using HydroCAD. Table 14 shows the dewatering time of the basin at 25-year HWL, which is approximately 17.80 hours.

Table 13: Proposed Conditions Storm Duration 25-Year Event

Area (acres)	Runoff Coef.	Storm Duration (min)	Rainfall Intensity (inch/hr)	Basin Inflow rate (cfs)	Basin Outflow rate (cfs)	Basin Volume (acre-ft)	Basin Elevation
12.79	0.53	5	8.86	26.42	1.83	0.205	736.81
12.79	0.53	10	6.78	25.95	2.08	0.398	737.14
12.79	0.53	15	5.56	24.52	2.23	0.556	737.37
12.79	0.53	30	3.94	21.54	2.48	0.886	737.76
12.79	0.53	60	2.55	17.51	2.64	1.166	738.05
12.79	0.53	120	1.53	10.47	2.70	1.285	738.16
12.79	0.53	150	1.28	8.77	2.70	1.280	738.16
12.79	0.53	165	1.18	8.12	2.69	1.273	738.15
12.79	0.53	180	1.10	7.58	2.68	1.238	738.12

Table 14: Proposed Conditions Storm Duration 25-Year Event

Water surface elevation (ft)	Cumulative storage volume (cu. Ft)	Discharge (cfs)	Average discharge (cfs)	Time (hrs)	Accumulated time (hrs)
736.0	0	0.000	0.000	0.0	0.0
736.5	3,615	1.697	0.849	1.2	1.2
737.0	17,032	2.072	1.885	2.0	3.2
737.5	45,694	2.389	2.230	3.6	6.7
738.0	94,351	2.668	2.528	5.3	12.1
738.16	149,759	2.751	2.710	5.7	17.8

(1) Grass and other vegetation used to line the bottom and shall be able to sustain a minimum thirty-hour period of inundation.

Response:

The proposed vegetation for the pond bottom, seeded grass, is expected to be able to withstand a thirty-hour period of inundation.

(2) Whenever possible, the dry-bottom reservoir should be considered for other land uses during dry periods. Appropriate secondary land uses include: baseball fields, tennis courts, playgrounds and parks.

(3) To expedite drainage, french drains shall be included in any dry bottom reservoir having multiple land uses. Each tile line shall have a clean-out and/or manhole at each end to allow maintenance.

Response:

A secondary use for detention pond is not planned for the facility.

APPENDIX 1

MOHR & KERR STORMWATER CALCULATIONS AND DRAWINGS FOR PHASE 1 STORMWATER DESIGN

Mohr & Kerr Engineering & Land Surveying, P.C.

5901 N. Prospect, Suite 6B
Peoria, IL 61614
(309) 692-8500 Office
(309) 692-8501 Fax

www.mohrandkerr.com

November 4, 2024

Jake McCoy, P.E.

Re: GFL Environmental
Rantoul, IL

Dear Jake,

On behalf of GFL Environmental, Mohr & Kerr Engineering & Land Surveying, P.C. (MKELS) (Engineer) is submitting the attached report for the above referenced project.

To accomplish general site erosion control, MKELS used silt fence, inlet protection and other techniques shown in the construction plans on the SWPPP. The disturbance is greater than 1 acre, an NOI (Notice of Intent) for the NPDES General Permit has been applied for.

MKELS analyzed the property from a standpoint of existing (all grass) to proposed conditions. The existing site drainage area to the proposed detention is 12.43 acres.

The proposed improvements outlined in the attached construction plans modify the drainage patterns such that the site will be drained through storm sewer to a new detention basin to the West.

Following the Village of Rantoul Manual of Practice, we analyzed the site using the modified rational method for the following storm events with a 2 year storm event release rate (4.61 CFS):

5yr – 26,533 cu. ft. of storage required
50yr – 49,006 cu. ft. of storage required
100yr – 61,746 cu. ft. of storage required

The proposed basin is designed to hold a storage volume of 62081 cu. Ft with a foot of freeboard above the water surface. This includes storage for future development in the property. We believe the design conforms to the Village policy for erosion control and storm water management.

Included in this submittal are the following: Civil Plans including a SWPPP, Proposed Drainage Areas & Flow Routes and Modified Rational Method Hydraulic Calculations for 5yr, 50yr and 100yr storm events.

If during your review, you have any questions or concerns, please don't hesitate to contact me by phone or email. I may be reached at 309-635-7765 or alherrmann@mohrandkerr.com.

Sincerely,

Alex Herrmann

Mohr and Kerr Engineering and Land Surveying, P.C.
5901 N. Prospect Rd., Suite 6B
Peoria, IL 61614
Office: (309) 692-8500
Fax: (309) 692-8501

Detention Calculations Modified Rational Method - GFL Environmental - Rantoul, IL

Existing Peak Flow - 2 year storm (Rantoul)

Area Acres - Impervious	0
C Value Impervious	0.95
Area Acres - Gravel	0
C Value Gravel	0.50
Area Acres - Grass	12.43
C Value Grass	0.15
Tc - Minutes	30
Rainfall Intensity - 2 year/30 min	2.47
Discharge CFS	4.61

Mohr and Kerr Engineering and Land Surveying, P.C.
5901 N. Prospect Rd., Suite 6B
Peoria, IL 61614
Office: (309) 692-8500
Fax: (309) 692-8501

Detention Calculations Modified Rational Method - GFL Environmental - Rantoul, IL

Existing Peak Flow - 10 year storm (Rantoul)

Area Acres - Impervious	0
C Value Impervious	0.95
Area Acres - Gravel	0
C Value Gravel	0.50
Area Acres - Grass	12.43
C Value Grass	0.15
Tc - Minutes	30
Rainfall Intensity - 10 year/30 min	3.48
Discharge CFS	6.49

Mohr and Kerr Engineering and Land Surveying, P.C.
5901 N. Prospect Rd., Suite 6B
Peoria, IL 61614
Office: (309) 692-8500
Fax: (309) 692-8501

Detention Calculations Modified Rational Method - GFL Environmental - Rantoul, IL

Existing Peak Flow - 100 year storm (Rantoul)

Area Acres - Impervious	0
C Value Impervious	0.95
Area Acres - Gravel	0
C Value Gravel	0.50
Area Acres - Grass	12.43
C Value Grass	0.15
Tc - Minutes	30
Rainfall Intensity - 100 year/30 min	5.5
Discharge CFS	10.25

Mohr and Kerr Engineering and Land Surveying, P.C.
5901 N. Prospect Rd., Suite 6B
Peoria, IL 61614
Office: (309) 692-8500
Fax: (309) 692-8501

Detention Calculations Modified Rational Method - GFL Environmental - Rantoul, IL

Existing Allowable Discharge - 2 year storm (Rantoul)

Area Acres - Impervious	0
C Value Impervious	0.95
Area Acres - Gravel	0
C Value Gravel	0.50
Area Acres - Grass	12.43
C Value Grass	0.15
Tc - Minutes	30
Rainfall Intensity - 2 year/30 min	2.47
Allowable Discharge CFS	4.61

Outlet Sizing

2 year - A=q/(C(2*g*H)^0.5)			
q	4.61	cfs	
h	4.00	feet	
C	0.51		
Allowable Area	0.560	sf	
Allowable Diameter	0.84	feet	**Use a 8" Pipe**

Proposed Storage - 5 year inflow, 2 year outfall

	Area - Ac.	C	CA
Paved/Roof	3.37	0.95	3.20
Gravel	5.17	0.50	2.59
Residential/Grass	3.89	0.15	0.58
Total / Composite C	12.43		0.51

Runoff Coeff. C	Storm Duration T min	Intensity I in/hr	Area A Acres	Inflow Rate Qi cfs	Release Rate Qo cfs	Storage Rate S cfs	Storage cu. Ft
0.51	5	6.88	12.43	43.83	4.61	39.22	11766
0.51	10	5.35	12.43	34.08	4.61	29.47	17685
0.51	15	4.38	12.43	27.90	4.61	23.30	20966
0.51	30	3.00	12.43	19.11	4.61	14.50	26108
0.51	60	1.88	12.43	11.98	4.61	7.37	26533
0.51	120	1.10	12.43	7.01	4.61	2.40	17292

Proposed Stage Storage Table

Elevation	Area - sf	Volume	Cumulative Volume
735.5	0		
736	1635	409	409
737	21689	11662	12071
738	38187	29938	42009
739	42102	20072	62081
739	46808	22228	84309
739.5	49275	24021	108329

Mohr and Kerr Engineering and Land Surveying, P.C.
5901 N. Prospect Rd., Suite 6B
Peoria, IL 61614
Office: (309) 692-8500
Fax: (309) 692-8501

Detention Calculations Modified Rational Method - GFL Environmental - Rantoul, IL

Existing Allowable Discharge - 2 year storm (Rantoul)

Area Acres - Impervious	0
C Value Impervious	0.95
Area Acres - Gravel	0
C Value Gravel	0.50
Area Acres - Grass	12.43
C Value Grass	0.15
Tc - Minutes	30
Rainfall Intensity - 2 year/30 min	2.47
Allowable Discharge CFS	4.61

Outlet Sizing

2 year - A=q/(C(2*g*H)^0.5)

q	4.61	cfs	
h	4.00	feet	
C	0.51		
Allowable Area	0.560	sf	
Allowable Diameter	0.84	feet	**Use a 8" Pipe**

Proposed Storage - 50 year inflow, 2 year outfall

	Area - Ac.	C	CA
Paved/Roof	3.37	0.95	3.20
Gravel	5.17	0.50	2.59
Residential/Grass	3.89	0.15	0.58
Total / Composite C	12.43		0.51

Runoff Coeff. C	Storm Duration T min	Intensity I in/hr	Area A Acres	Inflow Rate Qi cfs	Release Rate Qo cfs	Storage Rate S cfs	Storage cu. Ft
0.51	5	9.73	12.43	61.98	4.61	57.37	17212
0.51	10	7.37	12.43	46.95	4.61	42.34	25405
0.51	15	6.08	12.43	38.73	4.61	34.12	30712
0.51	30	4.35	12.43	27.71	4.61	23.10	41588
0.51	60	2.86	12.43	18.22	4.61	13.61	49006
0.51	120	1.74	12.43	11.08	4.61	6.48	46645
0.51	180	1.27	12.43	8.09	4.61	3.48	37634

Proposed Stage Storage Table

Elevation	Area - sf	Volume	Cumulative Volume
735.5	0		
736	1635	409	409
737	21689	11662	12071
738	38187	29938	42009
739	42102	20072	62081
739	46808	22228	84309
739.5	49275	24021	108329

Mohr and Kerr Engineering and Land Surveying, P.C.
5901 N. Prospect Rd., Suite 6B
Peoria, IL 61614
Office: (309) 692-8500
Fax: (309) 692-8501

Detention Calculations Modified Rational Method - GFL Environmental - Rantoul, IL

Existing Allowable Discharge - 2 year storm (Rantoul)

Area Acres - Impervious	0
C Value Impervious	0.95
Area Acres - Gravel	0
C Value Gravel	0.50
Area Acres - Grass	12.43
C Value Grass	0.15
Tc - Minutes	30
Rainfall Intensity - 2 year/30 min	2.47
Allowable Discharge CFS	4.61

Outlet Sizing

2 year - A=q/(C(2*g*H)^0.5)

q	4.61	cfs	
h	4.00	feet	
C	0.51		
Allowable Area	0.560	sf	
Allowable Diameter	0.84	feet	**Use a 8" Pipe**

Proposed Storage - 100 year inflow, 2 year outfall

	Area - Ac.	C	CA
Paved/Roof	3.37	0.95	3.20
Gravel	5.17	0.50	2.59
Residential/Grass	3.89	0.15	0.58
Total / Composite C	12.43		0.51

Runoff Coeff. C	Storm Duration T min	Intensity I in/hr	Area A Acres	Inflow Rate Qi cfs	Release Rate Qo cfs	Storage Rate S cfs	Storage cu. Ft
0.51	5	10.60	12.43	67.52	4.61	62.92	18875
0.51	10	7.96	12.43	50.71	4.61	46.10	27660
0.51	15	6.59	12.43	41.98	4.61	37.37	33636
0.51	30	4.76	12.43	30.32	4.61	25.72	46289
0.51	60	3.18	12.43	20.26	4.61	15.65	56345
0.51	120	1.99	12.43	12.68	4.61	8.07	58111
0.51	150	1.80	12.43	11.47	4.61	6.86	61746
0.51	165	1.65	12.43	10.51	4.61	5.91	58461
0.51	180	1.45	12.43	9.24	4.61	4.63	50017

Proposed Stage Storage Table

Elevation	Area - sf	Volume	Cumulative Volume
735.50	0		
736.00	1635	409	409
737.00	21689	11662	12071
738.00	38187	29938	42009
738.50	42102	20072	62081
739.0	46808	22228	84309
739.5	49275	24021	108329

Summary for Subcatchment 1S: EXISTING SITE

Runoff = 0.00 cfs @ 5.00 hrs, Volume= 0.000 af, Depth= 0.00"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Rainfall file not specified

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
19.7	200	0.0150	0.17		**Sheet Flow, Sheet Flow** Grass: Short n= 0.150 P2= 3.02"
14.9	768	0.0150	0.86		**Shallow Concentrated Flow, Grass** Short Grass Pasture Kv= 7.0 fps
34.6	968	Total			

SITE EXPANSION
FOR
GFL ENVIRONMENTAL
RANTOUL, ILLINOIS

IDOT STANDARDS

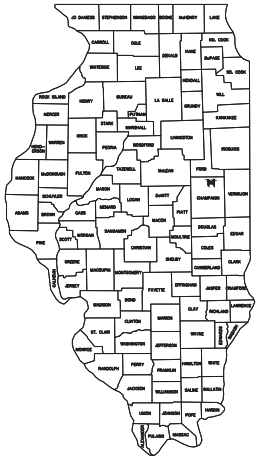
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001006	DECIMAL OF AN INCH AND FOOT

UTILITY COMPANIES

VILLAGE OF RANTOUL ELECTRIC	PHONE: (217) 892-6595
VILLAGE OF RANTOUL WATER	PHONE: (217) 892-6524
VILLAGE OF RANTOUL SEWER	PHONE: (217) 892-6560
NICOR GAS GAS	PHONE: (888) 642-6748
AT&T	PHONE: (217) 398-7980



LOCATION MAP



LOCATION OF PROPOSED IMPROVEMENT

INDEX OF SHEETS

	COVER SHEET
1	GENERAL NOTES & SPECIFICATIONS
2	EXISTING SITE & DEMOLITION PLAN
3-4	SITE LAYOUT PLAN
5-6	SITE GRADING PLAN
7	SITE UTILITY PLAN
8	DETENTION BASIN DETAIL
9-11	CONSTRUCTION DETAILS
12	STORM WATER POLLUTION PREVENTION PLAN

GENERAL NOTES

ALL ROAD AND STORM SEWER CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE PORTIONS OF THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" OF THE STATE OF ILLINOIS, ADOPTED JANUARY 1, 2022, AND CURRENT SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS. ACCEPTANCE BY THE LOCAL AUTHORITY AND RELATED IMPROVEMENTS ARE BASED ON THE CONDITION OF THE IMPROVEMENTS AT THE TIME THE FINAL INSPECTION IS MADE.

GFL ENVIRONMENTAL
896 W. CHAMPAIGN AVE SERVICE RD
RANTOUL, IL 61866

CALL JULIE 811 OR 1-800-892-0123 48 HOURS BEFORE YOU DIG
EXCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS

811 Know what's below. Call before you dig.

PRELIMINARY ONLY
NOT FOR CONSTRUCTION

MOHR & KERR ENGINEERING & LAND SURVEYING, P.C.
5901 N. Prospect Road, Suite 6B
Peoria, Illinois 61614
www.mohrandkerr.com
Office: (309) 692-8500
Fax: (309) 692-8501
Professional Design Firm #184.005091

N:\24-333 R Hoerr GFL Rantoul\DWG\PHASE I\COVER SHEET GFL RANTOUL 24-333.dwg, Dec 20, 2024

GENERAL NOTES

ALL WORK SHALL BE IN CONFORMANCE WITH THE APPLICABLE SECTIONS OF THE ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (HEREIN AFTER STANDARD SPECIFICATIONS) LATEST EDITION. WITHIN THE STANDARD SPECIFICATIONS, ARTICLES 105.01, 105.09, 105.10, 105.11, 105.12, 105.13, AND SECTION 109 SHALL NOT BE INCORPORATED INTO THIS CONTRACT.

ALL WORK SHALL BE IN CONFORMANCE WITH THE ILLINOIS ACCESSIBILITY CODE AND ILLINOIS PLUMBING CODE.

ALL REFERENCES TO THE "DEPARTMENT" OR "ENGINEER" IN THE STANDARD SPECIFICATIONS AND SUPPLEMENTAL SPECIFICATIONS SHALL BE CONSTRUED TO MEAN THE OWNER OR OWNERS REPRESENTATIVE, IF APPLICABLE. REFERENCES TO "INSPECTION OF "INSPECTOR" IN THE STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, AND SPECIFICATIONS/SPECIAL PROVISIONS SHALL NOT CREATE, IMPOSE, OR GIVE RISE TO ANY DUTY OWED BY THE OWNER OR OWNERS REPRESENTATIVE.

THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN MARKINGS AND ASSOCIATED LIGHTING OF OPEN TRENCHES, EXCAVATIONS, TEMPORARY STOCK PILES, AND PARKED CONSTRUCTION EQUIPMENT THAT MAY POSE A POTENTIAL HAZARD TO THE DAILY OPERATIONS WITHIN THE CONSTRUCTION LIMITS.

ALL SIGNS, TRAFFIC CONTROL DEVICES, ETC. SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS - CURRENT EDITION, THE APPLICABLE GUIDELINES IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES - CURRENT EDITION, THE APPLICABLE GUIDELINES IN THE ILLINOIS MANUAL ON TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS - CURRENT EDITION, THE SPECIFICATIONS/SPECIAL PROVISIONS, ANY SPECIAL DETAILS, AND ILLINOIS DEPARTMENT OF TRANSPORTATION HIGHWAY STANDARDS INCLUDED IN THE CONTRACT DOCUMENTS.

PRIOR TO BEGINNING THE PROJECT, THE CONTRACTOR SHALL VERIFY ALL MEASUREMENTS AND DIMENSIONS SHOWN AND SHALL REPORT TO THE ENGINEER ANY DISCREPANCIES WHICH MAY AFFECT THE PERFORMANCE OF THE WORK IN ACCORDANCE WITH THE CONTRACT DRAWINGS.

ALL WORK MUST BE FULLY COORDINATED WITH OWNER'S SITE ACTIVITIES OVER THE CONSTRUCTION PERIOD.

THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, IF ANY, FROM ALL LOCAL AGENCIES.

CONTRACTORS BIDDING THIS PROJECT SHALL VISIT THE SITE BEFORE BIDDING.

ALL SECTIONS, DETAILS, AND NOTES SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL APPLY TO SIMILAR SITUATIONS ELSEWHERE, UNLESS OTHERWISE SHOWN.

ADJUSTMENT OF NEW GRADES TO MATCH EXISTING FIELD CONDITIONS MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.

CONTRACTOR PARKING SHALL BE COORDINATED WITH THE OWNER, IF APPLICABLE.

ALL EXCESS MATERIALS (SUITABLE AND UNSUITABLE), INCLUDING EXCAVATED AND DETRITUS MATERIALS, SHALL BE HAULED AND LEGALLY DISPOSED OF OFF-SITE.

ELECTRONIC FILES FOR SITE GRADING ACTIVITIES WILL BE AVAILABLE UPON REQUEST.

STORM SEWER

PIPE LENGTH ON THE PLANS IS THE LENGTH FROM INSIDE STRUCTURE WALL TO INSIDE OF STRUCTURE WALL ALONG THE CENTERLINE OF THE PIPE. PIPES WITH END SECTIONS ARE MEASURED TO THE INVERT OF THE END SECTION.

COORDINATES FOR MANHOLE STRUCTURES ARE GIVEN TO THE CENTER OF THE STRUCTURE. COORDINATES FOR INLET AND INLET-MANHOLES ARE GIVEN TO THE CENTER BACK OF THE CASTING.

COORDINATES AND ELEVATIONS FOR END SECTIONS ARE GIVEN AT THE OUTFALL OF THE END SECTION.

PRIOR TO ORDERING STORM SEWER MATERIALS, CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING MANHOLE INVERT ELEVATIONS (THAT ARE BEING TIED INTO AS A PART OF THIS PROJECT), FIELD VERIFYING INVERT ELEVATIONS AT ALL EXISTING STORM SEWER PIPES AT THE NEW CONNECTION LOCATIONS, AND FIELD VERIFYING ELEVATIONS AT ALL UTILITY CROSSINGS AS PART OF THE PROJECT.

ALL VOIDS BETWEEN A STRUCTURE'S WALL (MANHOLE, INLET, INLET-MANHOLE, ETC.) AND THE OUTSIDE WALL OF A PIPE PENETRATION SHALL BE INFILLED WITH BRICKS AND NON-SHRINK GROUT.

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO THE ENGINEER FOR REVIEW ON ALL STORM SEWER COMPONENTS 7 DAYS AFTER THE NOTICE TO PROCEED.

EXAMINATION OF EXISTING CONDITIONS

IT IS THE RESPONSIBILITY OF EACH BIDDER TO SATISFY HIMSELF/HERSELF AS TO CONDITIONS HE/SHE WILL ENCOUNTER IN PERFORMING THE WORK. FAILURE TO DO SO WILL NOT BE CONSIDERED AS GROUNDS FOR ADDITIONAL COMPENSATION FOR UNFORESEEN ADVERSE CONDITIONS ENCOUNTERED DURING THE PROGRESS OF THE WORK.

PLANS, SPECIFICATIONS, AND/OR SPECIAL PROVISIONS - CONFLICTS WITH CIVIL/SITE ITEMS

IF THERE IS A CONFLICT BETWEEN THE PLANS, SPECIFICATIONS, AND/OR SPECIAL PROVISIONS, THE MORE STRINGENT OR MORE COSTLY AS DETERMINED BY THE OWNER OR THE ENGINEER, IF APPLICABLE, SHALL APPLY.

MATERIAL TESTING

THE CONTRACTOR SHALL EMPLOY A MATERIAL TESTING COMPANY WITH A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF ILLINOIS TO PROVIDE QUALITY CONTROL / VERIFICATION THAT THE FOLLOWING ITEMS MEET THE MINIMUM REQUIREMENTS OF THE CONTRACT DOCUMENTS:

AGGREGATE MATERIALS
BITUMINOUS MATERIALS
CONCRETE MATERIALS
EARTHEN MATERIALS

THE RESULTS SHALL BE SUBMITTED ELECTRONICALLY (PDF FORMAT) TO THE OWNER OR THE ENGINEER, IF APPLICABLE, AS SOON AS POSSIBLE. THE FREQUENCY OF MATERIAL TESTING AND THE TESTING OF MATERIALS SHALL BE IN ACCORDANCE WITH CURRENT IDOT MANUALS, POLICIES, AND PROCEDURES. THE MATERIAL TESTING COMPANY SHALL BE AN ILLINOIS LICENSED ENGINEERING FIRM.

CONSTRUCTION LAYOUT & STAKING

THE CONTRACTOR SHALL PROVIDE CONSTRUCTION LAYOUT AND STAKING BASED ON GRADES AND HORIZONTAL LOCATIONS SHOWN ON THE PLANS. ELECTRONIC FILES AND CONTROL WILL BE PROVIDED BY THE ENGINEER.

JULIE & EXISTING UNDERGROUND FACILITIES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATIONS AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE J.U.L.I.E. NUMBER IS 800-892-0123 OR 811. A MINIMUM OF FORTY-EIGHT (48) HOURS ADVANCE NOTICE IS REQUIRED.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES. THE CONTRACTOR SHALL USE A SUBCONSULTANT, IF NECESSARY, TO LOCATE ALL UNDERGROUND UTILITIES. THE OWNER ASSUMES NO RESPONSIBILITY FOR THE PRESENCE, SPECIFIC SIZE OR LOCATION OF ANY UNDERGROUND UTILITIES. DAMAGED UTILITIES SHALL BE REPAIRED TO THE SATISFACTION OF THE CURRENT AND/OR FUTURE OWNER OF THE UNDERGROUND UTILITY. NO RESPONSIBILITY FOR THE PROTECTION OF SAID UNDERGROUND SYSTEMS WILL BE ASSUMED BY THE OWNER EXCEPT WHERE DESIGNATED OTHERWISE.

THE LOCATIONS AND/OR DEPTHS OF UNDERGROUND UTILITIES SHOWN HAVE BEEN TAKEN FROM THE BEST AVAILABLE INFORMATION AND MUST BE CONSIDERED APPROXIMATE.

THE COST TO REPAIR DAMAGED UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CONTRACTOR TO LOCATE THE UTILITIES AND FOR THE CONTRACTOR TO UNCOVER AND/OR HAND DIG AROUND EXISTING UTILITIES.

KEEPING ROADS OPEN TO TRAFFIC

THE CONTRACTOR MAY SHUT DOWN ACCESS TO THE CONSTRUCTION AREA AS LONG AS IT DOES NOT CONFLICT WITH THE OWNER'S OPERATIONS.

TRAFFIC CONTROL AND PROTECTION

THIS WORK SHALL CONSIST OF FURNISHING, INSTALLING, MAINTAINING, SURVEILLANCE (WHEN REQUIRED), RELOCATING, AND REMOVAL OF ALL TRAFFIC CONTROL REQUIRED FOR THE PURPOSE OF REGULATING, WARNING OR DIRECTING TRAFFIC FOR CONSTRUCTION ACTIVITIES. THIS WORK INCLUDES, BUT IS NOT LIMITED TO, PROVIDING, RELOCATING AND REMOVING SIGNS AND BARRICADE. THIS WORK SHALL BE DONE IN ACCORDANCE WITH ARTICLE 107.14 AND SECTION 701 OF THE STANDARD SPECIFICATIONS, APPLICABLE HIGHWAY STANDARDS AND SPECIAL PROVISIONS. COORDINATE WITH LOCAL AUTHORITY.

ALL CONSTRUCTION ACTIVITIES WHICH REQUIRE TRAFFIC CONTROL MAY NOT BE IDENTIFIED AND MAY REQUIRE ADDITIONAL SIGNING AND BARRICADES DUE TO THE CONTRACTOR'S ACTIVITIES.

EXISTING REGULATORY TRAFFIC SIGNING SHALL BE REMOVED OR RELOCATED AS NEEDED FOR EACH CONSTRUCTION OPERATION. THE CONTRACTOR SHALL FURNISH, INSTALL AND MAINTAIN ANY TEMPORARY REGULATORY OR WARNING SIGNS NECESSARY. TEMPORARY SIGNS SHALL REMAIN IN PLACE AS REQUIRED.

CLEANING

THE CONTRACTOR SHALL BE RESPONSIBLE DURING CONSTRUCTION FOR THE PROTECTION AND CLEANING OF ALL WORK UNDER THE CONTRACT, UNTIL FINAL COMPLETION AND ACCEPTANCE THEREOF, UNLESS AN EARLIER DATE IS AGREED UPON.

THE CONTRACTOR SHALL PROVIDE REMOVAL AND LEGAL DISPOSAL OF ALL DEBRIS FROM THE SITE AT A MINIMUM OF A DAILY BASIS.

THE CONTRACTOR SHALL KEEP ALL PAVED SURFACES CLEAR OF MUD, DIRT AND DEBRIS DURING CONSTRUCTION. CLEANING SHALL BE DONE IN AN ACCEPTABLE MANNER AS REQUESTED BY THE ENGINEER, WITH EQUIPMENT THAT DOES NOT DAMAGE THE EXISTING PAVEMENT.

ALL PAVED SURFACES SHALL BE SWEPT TO THE SATISFACTION OF THE ENGINEER AT THE END OF EACH WORKING DAY. THE LIMITS OF THE SWEEPING SHALL BE DETERMINED BY THE ENGINEER. THE TYPE OF STREET SWEEPING MACHINE SHALL BE A MOTORIZED VEHICLE SIMILAR TO WHAT IS USED TO CLEAN/SWEEP CITY STREETS.

DAMAGE TO EXISTING STRUCTURES

IF DAMAGE IS DONE TO EXISTING OR NEW STRUCTURES DURING CONSTRUCTION OF THE PROPOSED IMPROVEMENT, THE DAMAGED STRUCTURE SHALL BE REPLACED OR REPAIRED IN A SATISFACTORY MANNER BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER AND/OR LOCAL MUNICIPALITY.

PAVEMENT, SIDEWALK, AND CURB REMOVAL

PAVEMENT, SIDEWALK, AND CURB (COMBINATION CURB AND GUTTER AND/OR CURB) REMOVAL SHALL BE IN ACCORDANCE WITH SECTION 440 OF THE STANDARD SPECIFICATIONS EXCEPT THE REMOVAL SHALL INCLUDE THE AGGREGATE BASE COURSE/SUBBASE GRANULAR MATERIAL LOCATED BENEATH THE PAVEMENT, SIDEWALK, CONCRETE MEDIAN, AND CURB (COMBINATION CURB AND GUTTER AND/OR CURB).

AS PROVIDED FOR IN ARTICLE 107.16 OF THE STANDARD SPECIFICATIONS, PAVEMENT, SIDEWALK, CURB AND GUTTER AND STRUCTURES ON OR ADJACENT TO THE WORK SHALL BE PROTECTED IN A MANNER SATISFACTORY TO THE OWNER(S) OF THE PAVEMENT, SIDEWALK, CURB AND GUTTER, AND STRUCTURE FROM DAMAGE BY LUGS OR CLEATS OR TREADS OR WHEELS OF EQUIPMENT. THE CONTRACTOR WILL BE RESPONSIBLE FOR PATCHING ANY PAVEMENT, SIDEWALK, CURB AND GUTTER, DISTURBED, DESTROYED, OR REMOVED AS A RESULT OF HIS/HER OPERATION, AT THE CONTRACTOR'S EXPENSE.

CONCRETE AND BITUMINOUS SAW CUT

FULL DEPTH CONCRETE AND BITUMINOUS SAWING SHALL BE PERFORMED AT ALL REMOVAL LIMITS ILLUSTRATED ON THE PLANS AND AS DIRECTED BY THE ENGINEER. THE CONTRACTOR WILL FURNISH ALL LABOR, EQUIPMENT, AND MATERIALS NEEDED TO ACCOMPLISH THIS WORK. NO ADDITIONAL COMPENSATION WILL BE ALLOWED. FINAL PAVING OPERATION SHALL NOT COMMENCE.

AGGREGATE BASE COURSE, TYPE B

THIS WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS IN THE PLANS AND SECTION 351 OF THE STANDARD SPECIFICATIONS EXCEPT: ALL LIFTS SHALL BE COMPACTED TO MINIMUM 95% STANDARD PROCTOR DENSITY.

CONCRETE CURE / SEALANT

THIS WORK SHALL BE ACCORDING TO SECTION 587 OF THE STANDARD SPECIFICATIONS EXCEPT AS MODIFIED HEREIN:
THE CONCRETE CURE/SEALANT SHALL BE APPLIED WITHIN 10 MINUTES AFTER ALL FINISHING WORK TO THE CONCRETE SURFACE HAS BEEN COMPLETED.

THE APPLICATION RATE AND TYPE OF EQUIPMENT REQUIRED TO APPLY THE CONCRETE CURE/SEALANT, SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

THE CONCRETE CURE/SEALANT SEALER SHALL BE CHEMMASTER'S SILENCURE SRT OR EQUAL APPROVED IN WRITING BY THE ENGINEER.

THE CONCRETE CURE/SEALANT SHALL BE APPLIED TO ALL CONCRETE PAVEMENT, UNLESS DIRECTED OTHERWISE. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THIS WORK.

JOINT SEALANT

ALL THE PROPOSED SIDEWALK EXPANSION JOINTS, ALL COMBINATION CONCRETE CURB AND GUTTER JOINTS (CONTRACTION/TRANSVERSE, CONSTRUCTION, LONGITUDINAL, AND EXPANSION), ALL CONCRETE CURB JOINTS (CONTRACTION/TRANSVERSE, CONSTRUCTION, LONGITUDINAL, AND EXPANSION), IF APPLICABLE, AND ALL EXPANSION JOINTS ADJACENT TO STRUCTURES SHALL BE SEALED WITH SELF-LEVELING JOINT SEALANT OF THE COLOR "GREY". EXPANSION JOINTS IN THE SIDEWALK SHALL BE ROUTED TO THE DEPTH NOTED ON THE SIDEWALK DETAILS IN THE PLANS. IMMEDIATELY AHEAD OF THE PLACEMENT OF THE SEALER, DUST AND DEBRIS SHALL BE BLOWN FROM THE JOINT WITH A POWER BRUSH OR WITH COMPRESSED AIR AT A MINIMUM PRESSURE OF 90 PSI. IF COMPRESSED AIR IS USED, THE PNEUMATIC TOOL LUBRICATOR MUST BE BYPASSED AND A FILTER INSTALLED ON THE DISCHARGE VALVE TO KEEP WATER AND OIL OUT OF THE LINES. THE JOINT SHALL ALSO BE DRY. THE JOINT RESERVOIR SHALL BE FILLED FLUSH WITH SEALANT.

JOINT MATERIALS

EXPANSION JOINT MATERIAL SHALL BE FLEX/FOAM EXPANSION JOINT, OF THE THICKNESS SPECIFIED, AS MANUFACTURED BY RIGHT POINTE COMPANY, OR APPROVED EQUAL. THIS EXPANSION MATERIAL SHALL BE USED ON PAVEMENTS, CURB AND GUTTER, SIDEWALK, ENTRANCES, PAVED DITCH OR ANY OTHER REQUIRED EXPANSION JOINT.

P.C.C. PAVEMENT

THE P.C.C. PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 420 OF THE STANDARD SPECIFICATIONS EXCEPT: THE CONCRETE'S COURSE AGGREGATE SHALL CONSIST OF CRUSHED LIMESTONE AND ALL JOINTS (CONTRACTION, CONSTRUCTION, EXPANSION, LONGITUDINAL, AND TRANSVERSE) SHALL BE SEALED WITH GREY SELF-LEVELING SEALANT.

CONTRACTOR TO PROVIDE POUR SCHEDULE AND PROPOSED JOINT LOCATIONS.

P.C.C. SIDEWALK

THE SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 424 OF THE STANDARD SPECIFICATIONS EXCEPT: THE CONCRETE'S COURSE AGGREGATE SHALL CONSIST OF CRUSHED LIMESTONE AND ALL EXPANSION JOINTS SHALL BE SEALED WITH GREY SELF LEVELING SEALANT.

SUBGRADE

ALL PAVEMENT, SIDEWALK, COMBINATION CURB AND GUTTER, AND LANDSCAPED AREAS SHALL BE PREPARED IN ACCORDANCE WITH ARTICLE 301 OF THE STANDARD SPECIFICATIONS.

EARTHWORK, COMPLETE

THIS WORK SHALL CONSIST OF ALL CLEARING, STRIPPING OF VEGETATION, TOPSOIL REMOVAL, EMBANKMENT, DRYING AGENTS, MIXING OF DRYING AGENTS, EXCAVATION, AND TRANSPORTATION OF ALL EARTHWORK SUCH THAT THE PROPOSED FINISHED SURFACE ELEVATIONS MEET THE LINES AND GRADES INDICATED IN THE PLANS. THE EARTH EXCAVATION AND EMBANKMENT SHALL CONFORM TO SECTIONS 202 AND 205 OF THE STANDARD SPECIFICATIONS UNLESS INDICATED OTHERWISE IN THE CONTRACT DOCUMENTS. EMBANKMENT SHALL CONFORM TO THE DENSITY REQUIREMENTS OUTLINED IN ARTICLE 205.06 OF THE STANDARD SPECIFICATIONS EXCEPT ALL LIFTS SHALL BE COMPACTED TO MINIMUM 95% STANDARD PROCTOR DENSITY. THE THIRD PARAGRAPH OF ARTICLE 205.06 OF THE STANDARD SPECIFICATIONS SHOULD ALSO BE REVISED TO READ: ALL EMBANKMENT CONSTRUCTED OF COHESIVE SOILS SHALL BE CONSTRUCTED WITH NOT MORE THAN 110% OF OPTIMUM MOISTURE CONTENT, DETERMINED BY THE STANDARD PROCTOR TEST. COHESIVE SOIL SHALL BE DEFINED AS ANY SOIL WHICH CONTAINS GREATER THAN 10% OF PARTICLES BY WEIGHT PASSING THE #200 SIEVE. THE 100% OF OPTIMUM MOISTURE LIMIT MAY BE WAIVED IN FREE DRAINING GRANULAR MATERIAL WHEN APPROVED BY THE ENGINEER. THE CONTRACTOR MAY, AT THEIR OPTION, ADD A DRYING AGENT TO LOWER THE MOISTURE CONTENT AS SPECIFIED ABOVE. THE DRYING AGENT MUST BE APPROVED BY THE MATERIALS TESTING COMPANY PRIOR TO USE. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE USE OF A DRYING AGENT.

DISPOSAL OF EXCESS EXCAVATED MATERIALS, INCLUDING TOPSOIL, SHALL BE IN ACCORDANCE WITH THE GENERAL NOTES IN THE PLANS UNLESS DIRECTED OTHERWISE BY THE ENGINEER IN WRITING.

THE COST TO PROTECT AND EXCAVATE AROUND THE UTILITIES WITH APPURTENANCES AT THE SURFACE (MANHOLES, INLETS, INLET-MANHOLES, FRAMES AND LIDS, VALVE VAULTS/BOXES, CABINETS, FIRE HYDRANTS, CLEANOUTS, ETC.) SHALL BE CONSIDERED INCIDENTAL AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR THE CONTRACTOR TO PROVIDE A TANDEM AXLE DUMP TRUCK WITH AT LEAST 25 TONS GROSS WEIGHT DRIVEN OVER THE PROPOSED PAVED AREAS PRIOR TO THE PLACEMENT OF THE PAVING. PROOF ROLLING CONSISTS OF TWO PASSES IN PERPENDICULAR DIRECTIONS. THE OWNER SHALL BE PRESENT TO OBSERVE THE PROOF ROLLING OF THE BASE COURSE'S PROPOSED FINISHED SURFACE ELEVATION.

THE CONTRACTOR SHALL PROOF ROLL THE BASE COURSE UNTIL IT IS APPROVED BY THE OWNER. IF THERE IS INCLEMENT WEATHER AFTER THE BASE COURSE HAS BEEN PREPARED, THE OWNER MAY REQUEST THAT THE BASE COURSE BE RE-PROOF ROLLED (MULTIPLE TIMES IF NECESSARY) UNTIL REAPPROVED. NO ADDITIONAL COMPENSATION WILL BE ALLOWED TO REPROCESS AND RECOMPACT PREVIOUSLY APPROVED BASE COURSE (INCLUDING REPROCESSING AND RECOMPACTING DUE TO INCLEMENT WEATHER). REPROCESSING AND RECOMPACTION SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

MAINTAINING STORM WATER CONVEYANCE

THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS AND SUBSEQUENTLY MAINTAINING THE FLOW BETWEEN EXISTING STORM WATER CONVEYANCE SYSTEM(S) AND PROPOSED STORM WATER CONVEYANCE SYSTEM(S). THIS MAY CONSIST OF BUT IS NOT LIMITED TO: TEMPORARY PIPING, DITCHING, PUMPING, AND DE-WATERING OPERATIONS.

SHORING AND SUPPORTING EXISTING UTILITIES AND STRUCTURES TO REMAIN IN PLACE

THE CONTRACTOR SHALL FURNISH ALL LABOR, EQUIPMENT AND MATERIALS NEEDED TO SAFELY AND ADEQUATELY SHORE AND/OR SUPPORT EXISTING UTILITIES, STORM SEWER SYSTEMS, SANITARY SEWER SYSTEMS, WATER DISTRIBUTION SYSTEMS, ETC. AND STRUCTURES TO REMAIN IN PLACE. THE EXISTING UTILITIES, STORM SEWER SYSTEMS, SANITARY SEWER SYSTEMS, WATER DISTRIBUTION SYSTEMS, ETC. AND STRUCTURES SHALL BE SHORED AND SUPPORTED TO THE SATISFACTION OF THE UTILITY OWNER AND/OR THE ENGINEER.

LANDSCAPING, COMPLETE

THIS WORK SHALL BE IN ACCORDANCE WITH SECTIONS 211, 250, AND 251 OF THE STANDARD SPECIFICATIONS EXCEPT AS MODIFIED HEREIN. ITEMS INCLUDED IN THIS WORK ARE:

ROUGH AND FINAL GRADING THE AREAS DISTURBED BY THE PROPOSED IMPROVEMENTS.

TOPSOIL FURNISH AND PLACE 4" IN ALL DISTURBED LANDSCAPED AREAS. TOPSOIL SHALL BE FREE OF DEBRIS, ROCKS AND CLODS GREATER THAN ½" IN SIZE.

SEEDING, CLASS 2 IN ALL DISTURBED, NON-PAVED AREAS.

FERTILIZER NUTRIENTS (NITROGEN, POTASSIUM, AND PHOSPHOROUS) IN ALL DISTURBED LANDSCAPED AREAS.

MULCH, METHOD 2, PROCEDURE 2 IN ALL DISTURBED LANDSCAPED AREAS.

COMBINATION CONCRETE CURB AND GUTTER

THE WORK SHALL BE IN ACCORDANCE WITH SECTION 606 OF THE STANDARD SPECIFICATIONS EXCEPT: THE COURSE AGGREGATE SHALL CONSIST OF CRUSHED LIMESTONE.

PAINT PAVEMENT MARKING - LINE & PAINT PAVEMENT MARKING - LETTERS AND SYMBOLS

THIS WORK SHALL BE IN ACCORDANCE WITH SECTION 780 OF THE STANDARD SPECIFICATIONS

MANHOLES AND INLETS

THIS WORK SHALL BE IN ACCORDANCE WITH THE SECTION 602 OF THE STANDARD SPECIFICATIONS.

SIGNS

ALL SIGNS SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, THE ILLINOIS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, AND THE ILLINOIS DEPARTMENT OF TRANSPORTATION HIGHWAY STANDARDS 720006 TYPICAL SECTION FOR URBAN LOCATION.

MOHR & KERR ENGINEERING & LAND SURVEYING, P.C.
5901 N. Prospect Road, Suite 6B
Peoria, Illinois 61614
www.mohrandkerr.com
Office: (309) 692-8500
Fax: (309) 692-8501
Professional Design Firm #184.005091

REV.	DATE	NATURE OF REVISION	CHECKED
1	12-13-24	GRADING REVISIONS	

RUN NAME:

SURVEYED: CTG
DRAWN: ALH
CHECKED: SDK
SCALE:
DATE: 12-20-2024

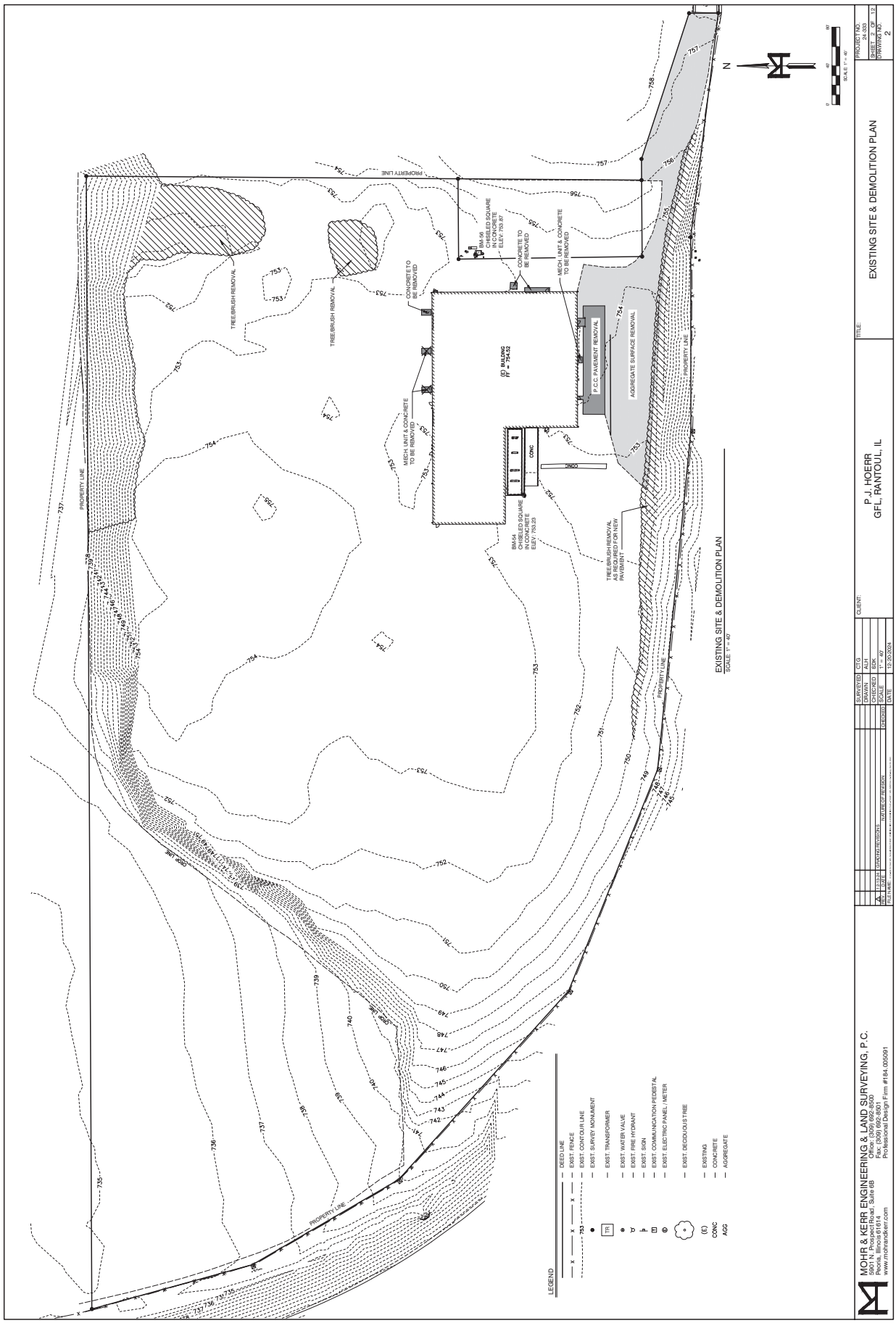
CLIENT: P.J. HOERR
GFL, RANTOUL, IL

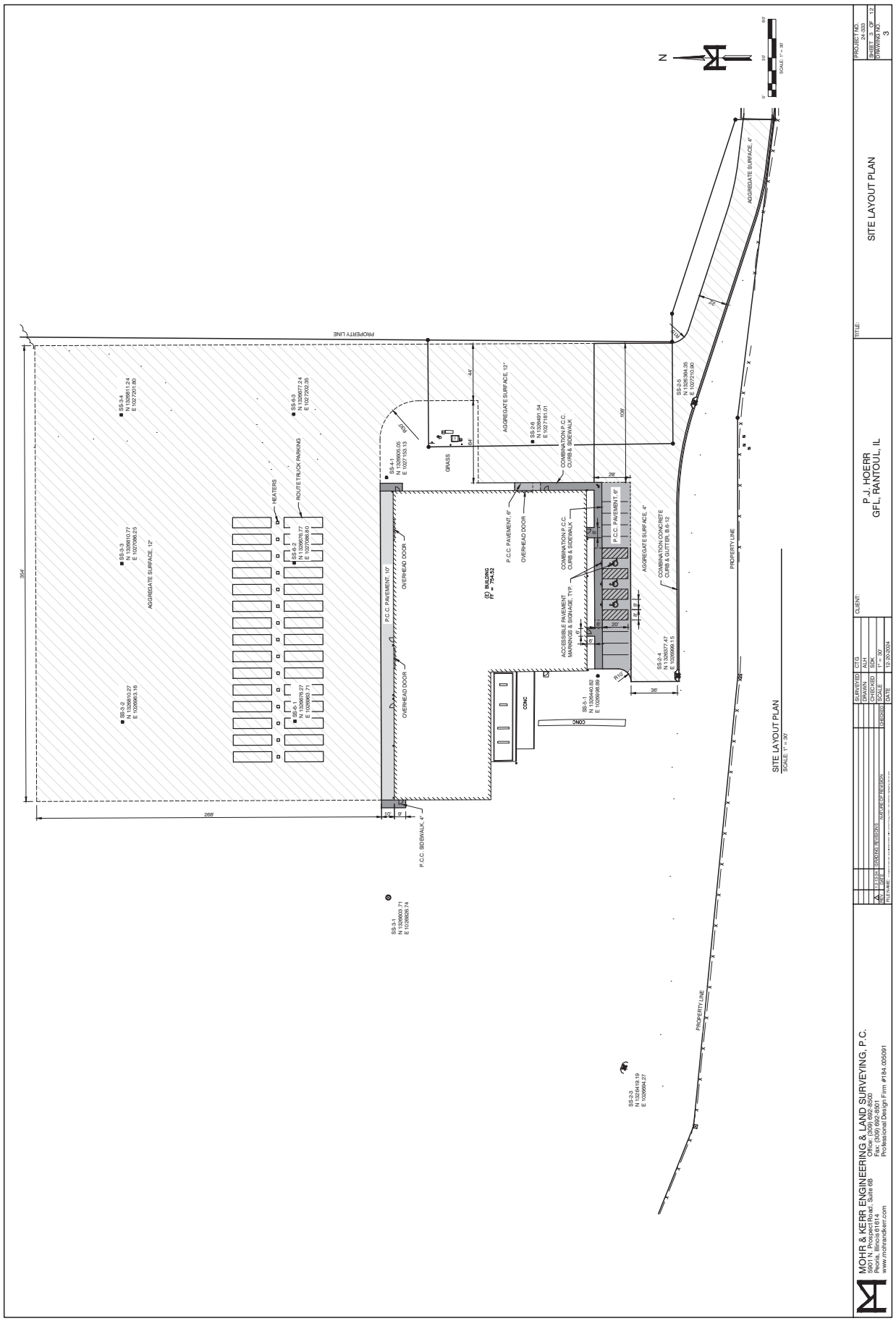
TITLE: GENERAL NOTES & SPECIFICATIONS

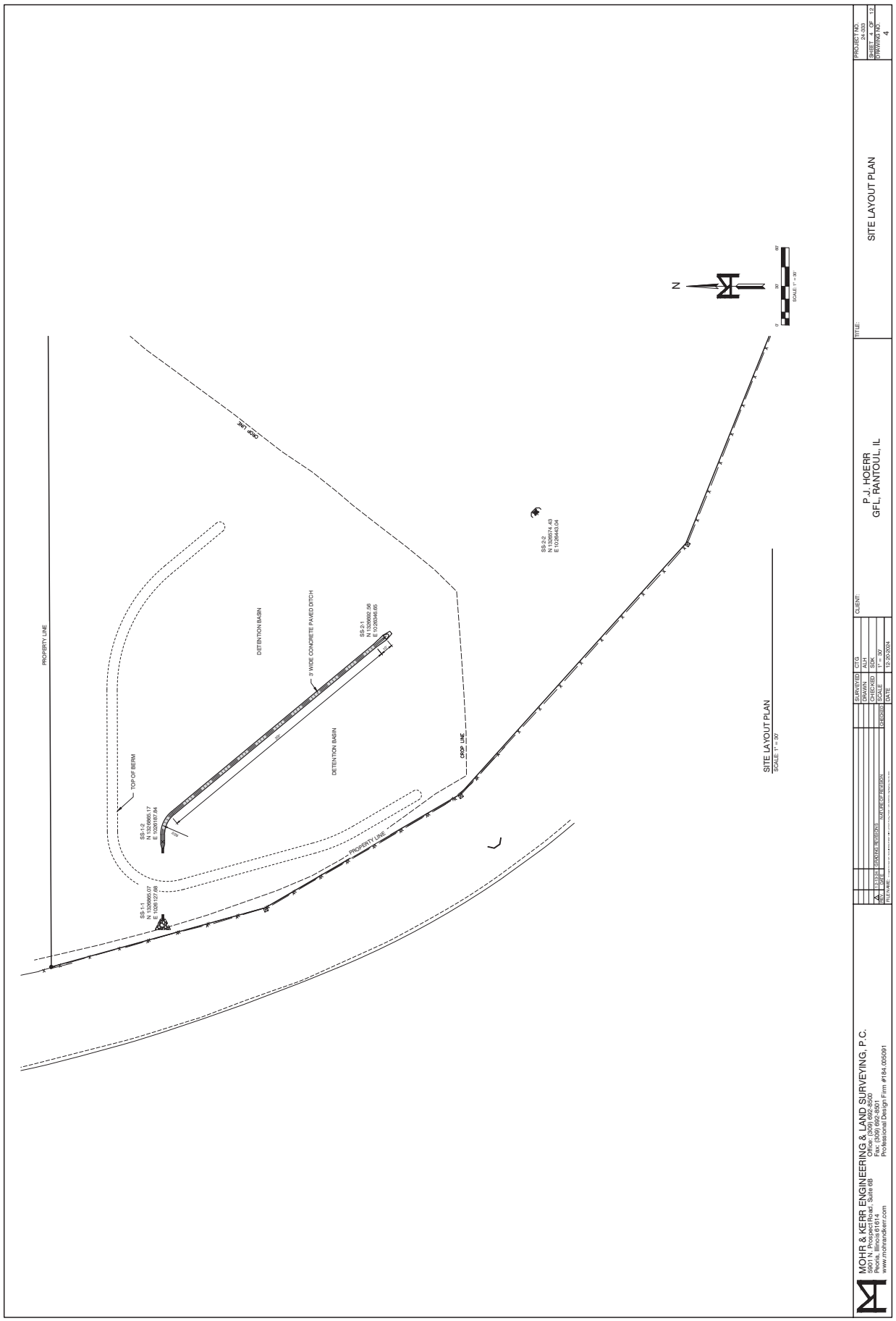
PROJECT NO. 24-333
SHEET 1 OF 12
DRAWING NO. 1

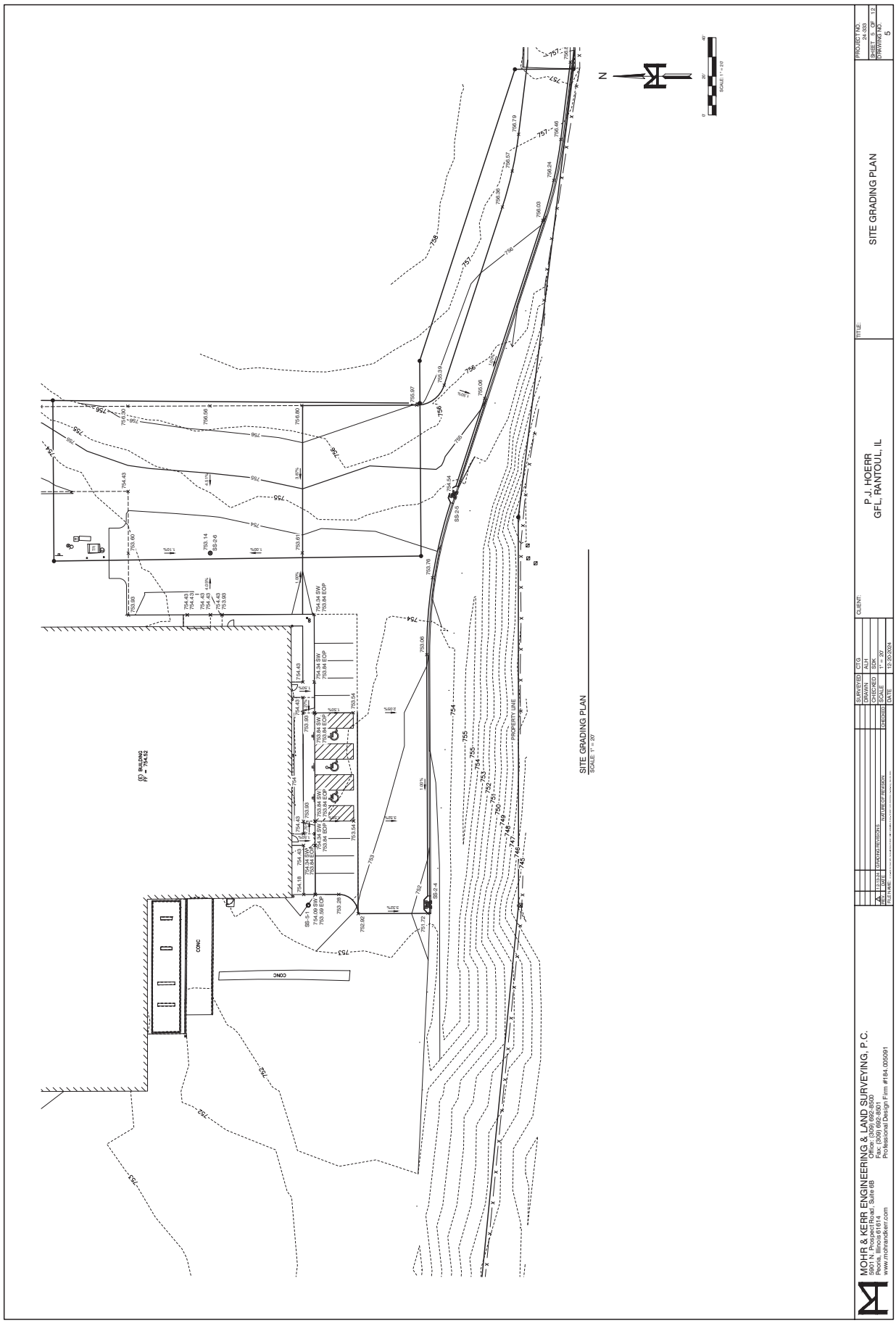
R-229

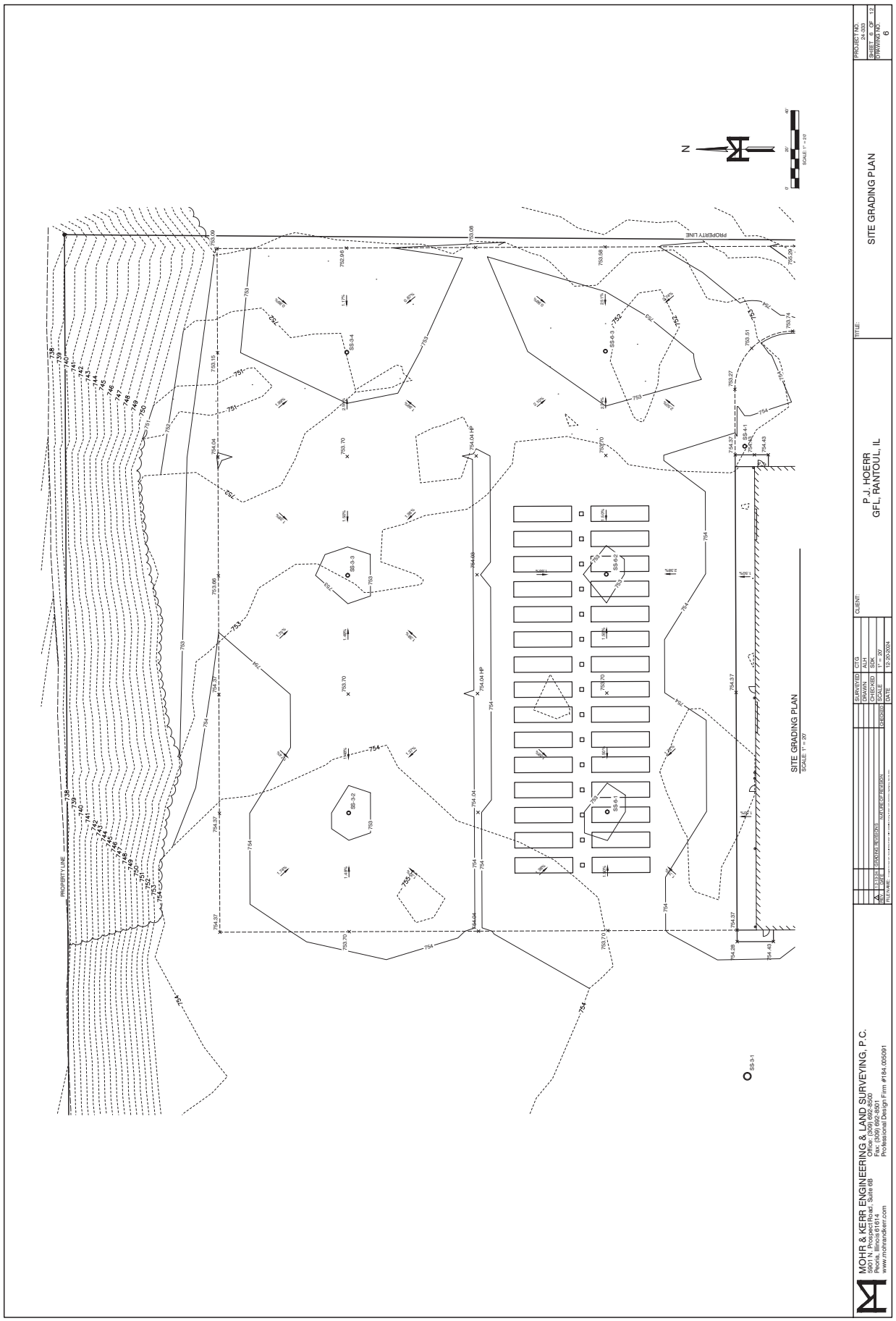
C234


EXISTING SITE & DEMOLITION PLAN
SCALE 1" = 40'
(E) BUILDING
FF = 754.52
P.C.C. PAVEMENT REMOVAL
AGGREGATE SURFACE REMOVAL
MECH. UNIT & CONCRETE TO BE REMOVED
CONCRETE TO BE REMOVED
TREE/BRUSH REMOVAL
TREE/BRUSH REMOVAL AS REQUIRED FOR NEW PAVEMENT
PROPERTY LINE
BM 56
CHISELED SQUARE IN CONCRETE
ELEV. 753.87
BM 54
CHISELED SQUARE IN CONCRETE
ELEV. 753.23
CONC
LEGEND
DEED LINE
EXIST. FENCE
EXIST. CONTOUR LINE
EXIST. SURVEY MONUMENT
EXIST. TRANSFORMER
EXIST. WATER VALVE
EXIST. FIRE HYDRANT
EXIST. SIGN
EXIST. COMMUNICATION PEDESTAL
EXIST. ELECTRIC PANEL / METER
EXIST. DECIDUOUS TREE
EXISTING
CONCRETE
AGGREGATE
MOHR & KERR ENGINEERING & LAND SURVEYING, P.C.
5909 N. Sheboygan Road, Suite 6B
Peoria, Illinois 61614
www.mohrandkerr.com
Fax: (309) 692-8501
Professional Design Firm #184.005091
SURVEYED
DRAWN ALH
CHECKED BDK
SCALE 1" = 40'
DATE 12.20.2024
CLIENT:
P.J. HOERR
GFL, RANTOUL, IL
TITLE
EXISTING SITE & DEMOLITION PLAN
PROJECT NO. 24-083
SHEET 2 OF 12
DRAWING NO. 2

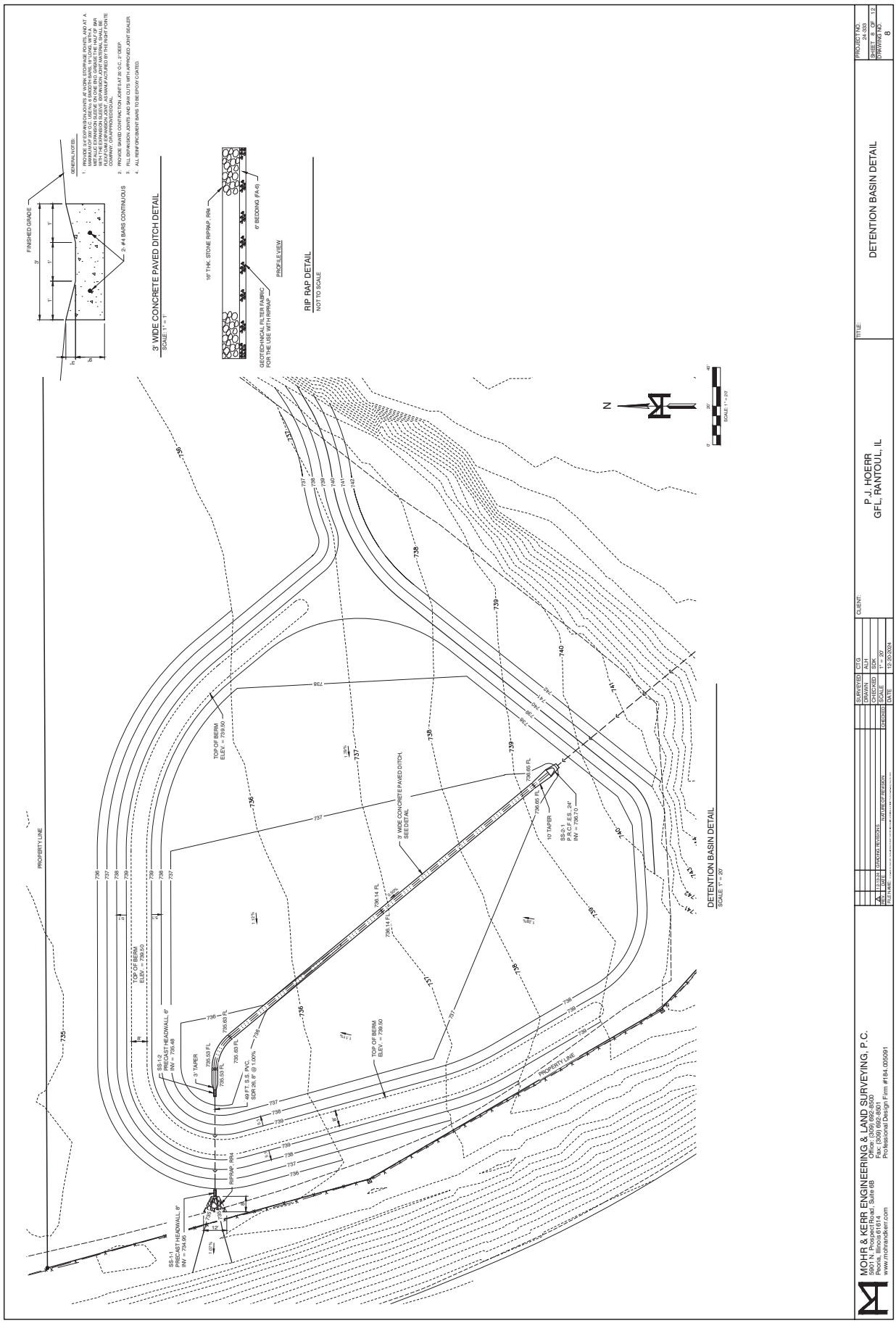

SITE LAYOUT PLAN
SCALE: 1" = 30'
N
SCALE: 1" = 30'
PROPERTY LINE
AGGREGATE SURFACE, 12'
AGGREGATE SURFACE, 4'
P.C.C. PAVEMENT, 10"
P.C.C. PAVEMENT, 6"
OVERHEAD DOOR
COMBINATION P.C.C. CURB & SIDEWALK
COMBINATION CONCRETE CURB & GUTTER, B-6.12
ACCESSIBLE PAVEMENT MARKINGS & SIGNAGE, TYP.
P.C.C. SIDEWALK, 4"
GRASS
CONC
(E) BUILDING FF = 754.52
HEATERS
ROUTE TRUCK PARKING
SS-1-1 N 1329603.71 E 1036836.74
SS-1-2 N 1329601.27 E 1036963.71
SS-1-3 N 1329601.27 E 1036963.16
SS-1-4 N 1329603.71 E 1036963.71
SS-1-5 N 1329440.82 E 1036996.89
SS-2-1 N 1329603.05 E 1037183.13
SS-2-2 N 1329419.19 E 1036994.27
SS-2-3 N 1329419.19 E 1036994.27
SS-2-4 N 1329577.47 E 1036996.15
SS-2-5 N 1329364.35 E 1037210.90
SS-2-6 N 1329491.54 E 1037181.01
SS-3-1 N 1329610.77 E 1037086.25
SS-3-2 N 1329610.27 E 1036963.16
SS-3-3 N 1329676.77 E 1037086.80
SS-3-4 N 1329811.24 E 1037201.80
SS-6-3 N 1329577.24 E 1037202.35
954'
268'
109'
44'
64'
30'
28'
20'
MOHR & KERR ENGINEERING & LAND SURVEYING, P.C.
5809 N. Prospect Road, Suite 68
Peoria, Illinois 61614
www.mohrandkerr.com
Phone: (309) 692-4500
Fax: (309) 692-4501
Professional Design Firm #184.005091
SURVEYED
DRAWN
CHECKED
DATE
CLIENT:
P.J. HOERR
GFL, RANTOUL, IL
TITLE:
SITE LAYOUT PLAN
PROJECT NO.
24-083
SHEET
OF
DRAWING NO.
3

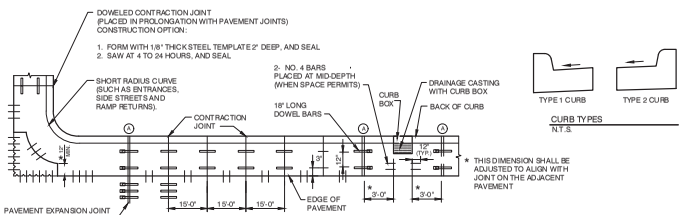

PROPERTY LINE
CROP LINE
TOP OF BERM
DETENTION BASIN
8' WIDE CONCRETE PAVED DITCH
DETENTION BASIN
CROP LINE
PROPERTY LINE
SS-1-1
N 1539985.07
E 1093127.68
SS-1-2
N 1539885.17
E 1092187.84
SS-2-1
N 1539992.56
E 1092846.65
SS-2-2
N 1539974.43
E 1092944.04
N
0
30'
60'
SCALE: 1" = 30'
SITE LAYOUT PLAN
SCALE: 1" = 30'
MOHR & KERR ENGINEERING & LAND SURVEYING, P.C.
5909 N. Prospect Road, Suite 6B
Peoria, Illinois 61614
www.mohrandkerr.com
Office: (309) 692-4500
Fax: (309) 692-8931
Professional Design Firm #184.005091
SURVEYED
DRAWN ALH
CHECKED SDK
SCALE 1" = 30'
DATE 12-20-2024
CLIENT:
P.J. HOERR
GFL, RANTOUL, IL
TITLE:
SITE LAYOUT PLAN
PROJECT NO.
24-083
SHEET 4 OF 13
DRAWING NO.
4


SITE GRADING PLAN
SCALE 1" = 20'
(E) BUILDING
FF = 754.52
CONC
CONC
PROPERTY LINE
N
SCALE 1" = 20'
MOHR & KERR ENGINEERING & LAND SURVEYING, P.C.
9909 N. Knoxville Road, Suite 6B
Peoria, Illinois 61614
www.mohrandkerr.com
Office: (309) 692-4500
Fax: (309) 692-4501
Professional Design Firm #184.005091
SURVEYED
DRAWN ALH
CHECKED SDK
SCALE 1" = 20'
DATE 12-20-2024
CLIENT:
P.J. HOERR
GFL, RANTOUL, IL
TITLE:
SITE GRADING PLAN
PROJECT NO. 24-083
SHEET 5 OF 13
DRAWING NO. 5

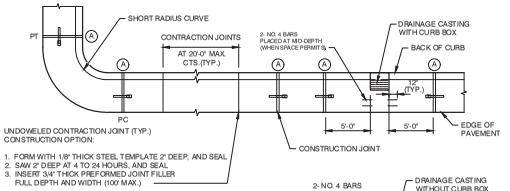

SITE GRADING PLAN
SCALE 1" = 20'
PROPERTY LINE
PROPERTY LINE
SS-1
SS-2
SS-3
SS-4
SS-5
SS-6-1
SS-6-2
SS-6-3
SS-4-1
N
SCALE 1" = 20'
MOHR & KERR ENGINEERING & LAND SURVEYING, P.C.
9908 N. Allen Road, Suite 6B
Peoria, Illinois 61614
www.mohrandkerr.com
Phone: (309) 692-4500
Fax: (309) 692-8931
Professional Design Firm #184.005091
SURVEYED
DRAWN ALH
CHECKED SDK
SCALE 1" = 20'
DATE 12-20-2024
CLIENT:
P.J. HOERR
GFL, RANTOUL, IL
TITLE:
SITE GRADING PLAN
PROJECT NO. 24-083
SHEET 6 OF 12
DRAWING NO. 6

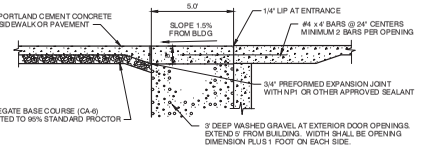

SITE UTILITY PLAN
SCALE: 1" = 40'
PROPERTY LINE
SS-1.1 PRECAST HEADWALL 8" INV = 734.85
SS-1.2 PRECAST HEADWALL 8" INV = 735.48
49 FT. S.S. PVC SDR 26, 8" @ 1.00%
SS-2.1 F.E.S. 24" INV = 736.70
159 FT. – S.S. CLASS A. TY. 2, 24" @ 0.50%
SS-2.2 5' DIA. TYPE A MANHOLE TYPE G-1 FRAME AND HOOD T/CURB = 751.12 NE INV = 741.86 NW INV = 741.76
292 FT. – S.S. CLASS A. TY. 2, 24" @ 1.00%
SS-3.1 5' DIA. TYPE A MANHOLE TYPE 1 FR. AND GR., OPEN RIM = 752.42 E INV = 740.99 NE INV = 740.89 SW INV = 740.00
259 FT. – S.S. CLASS A. TY. 2, 24" @ 0.50%
153 FT. – S.S. CLASS A. TY. 2, 18" @ 1.00%
SS-3.2 4' DIA. TYPE A MANHOLE TYPE 1 FR. AND GR., OPEN RIM = 752.78 E INV = 748.71 S INV = 748.61
153 FT. – S.S. CLASS A. TY. 2, 15" @ 0.66%
SS-3.3 INLET TYPE A TYPE 1 FR. AND GR., OPEN RIM = 752.78 E INV = 749.42 W INV = 749.32
122 FT. – S.S. CLASS A. TY. 2, 15" @ 0.50%
SS-3.4 INLET TYPE A TYPE 1 FR. AND GR., OPEN RIM = 752.78 W INV = 749.68
114 FT. – S.S. CLASS A. TY. 2, 12" @ 0.50%
SS-6.1 5' DIA. TYPE A MANHOLE TYPE 1 FR. AND GR., OPEN RIM = 752.78 N INV = 747.73 E INV = 747.63 SW INV = 747.63
SS-6.2 INLET TYPE A TYPE 1 FR. AND GR., OPEN RIM = 752.78 E INV = 749.05 W INV = 748.95
SS-6.3 INLET TYPE A TYPE 1 FR. AND GR., OPEN RIM = 752.78 W INV = 749.91
114 FT. – S.S. CLASS A. TY. 2, 12" @ 0.50%
ELECTRICAL CONTRACTOR TO DETERMINE FINAL ROUTE TO MEET ECI
DS CONNECTION
122 FT. – S.S. CLASS A. TY. 2, 15" @ 1.00%
333 FT. – S.S. PVC SDR 26, 12" @ 1.00%
SS-4.1 INLET TYPE A TYPE 1 FR. AND GR., OPEN RIM = 754.34 W INV = 749.00
(E) BUILDING FF = 755.50
SS-2.5 INLET TYPE A TYPE 1 FR. AND GR., OPEN RIM = 755.14 W INV = 750.89
DS CONNECTION
114 FT. – S.S. PVC SDR 26, 12" @ 1.00%
SS-2.6 INLET TYPE G-1 TYPE 1 FR. AND GR., OPEN RIM = 754.97 E INV = 748.75 S INV = 748.65
60 FT. – S.S. CLASS A. TY. 2, 12" @ 1.00%
107 FT. – S.S. CLASS A. TY. 2, 12" @ 1.00%
202 FT. – S.S. CLASS A. TY. 2, 12" @ 1.00%
SS-2.4 INLET TYPE G-1 TYPE 1 FR. AND GR., OPEN RIM = 755.03 E INV = 748.04 N INV = 748.04 NW INV = 747.94
SS-2.3 5' DIA. TYPE A MANHOLE TYPE G-1 FRAME AND HOOD T/CURB = 751.39 NE INV = 744.88 E INV = 744.78 SW INV = 744.78
304 FT. – S.S. CLASS A. TY. 2, 18" @ 1.00%
SS-2.3 INLET TYPE G-1 G-1 FR. AND HOOD T/CURB = 754.97 N INV = 750.25 W INV = 750.15
MOHR & KERR ENGINEERING & LAND SURVEYING, P.C.
5908 N. Knoxville Road, Suite 6B
Peoria, Illinois 61614
www.mohrandkerr.com
Fax: (309) 692-8931
Professional Design Firm #184.005091
SURVEYED
DRAWN ALH
CHECKED SDK
SCALE 1" = 40'
DATE 12-20-2024
CLIENT:
P.J. HOERR
GFL, RANTOUL, IL
TITLE
SITE UTILITY PLAN
PROJECT NO. 24-083
SHEET NO. 12
DRAWING NO. 7


3' WIDE CONCRETE PAVED DITCH DETAIL
SCALE: 1" = 1'
FINISHED GRADE
2- #4 BARS CONTINUOUS
GENERAL NOTES:
1. PROVIDE 3/4" EXPANSION JOINTS AT WORK STOPPAGE POINTS, AND AT A MAXIMUM SPACING OF 60 FEET. EXPANSION JOINTS SHALL BE METALIC EXPANSION SLEEVE OR ONE INCH GRADE THE HALF OF BAR WITH A SMOOTH COATING. EXPANSION JOINTS SHALL BE FILLED WITH PREFORMED FLEXIFOAM EXPANSION JOINT, ASKANA PICTURED BY THE RIGHT POINTE COMPANY OR APPROVED EQUAL.
2. PROVIDE SAWED CONTRACTION JOINTS AT 30' O.C., 1" DEEP.
3. FILL EXPANSION JOINTS AND SAW CUTS WITH APPROVED JOINT SEALER.
4. ALL REINFORCEMENT BARS TO BE EPOXY COATED.
RIP RAP DETAIL
NOT TO SCALE
16" THK. STONE RIPRAP - RR
6" BEDDING (FA-6)
PROFILE VIEW
GEOTECHNICAL FILTER FABRIC FOR THE USE WITH RIPRAP
PROPERTY LINE
TOP OF BERM ELEV. = 739.50
SS-1:1 PRECAST HEADWALL, 6' INV = 734.95
SS-1:2 PRECAST HEADWALL, 6' INV = 735.45
9' TAPER
735.53 FL
735.63 FL
40 FT. S.S. PVC SDR 26, 6" @ 1.00%
RIPRAP - RR
3' WIDE CONCRETE PAVED DITCH SEE DET AIL
736.14 FL
736.65 FL
10' TAPER
SS-2:1 P.R.C.P. E.S., 24" INV = 735.17
DETENTION BASIN DETAIL
SCALE: 1" = 20'
N
SCALE: 1" = 20'
MOHR & KERR ENGINEERING & LAND SURVEYING, P.C.
5800 N. Prospect Road, Suite 68
Peoria, Illinois 61614
www.mohrandkerr.com
Phone: (309) 692-4200
Fax: (309) 692-4931
Professional Design Firm #184.005091
SURVEYED
DRAWN ALH
CHECKED SDK
SCALE 1" = 20'
DATE 12-20-2024
CLIENT:
P.J. HOERR
GFL, RANTOUL, IL
TITLE
DETENTION BASIN DETAIL
PROJECT NO.
24-083
SHEET 8 OF 12
DRAWING NO.
8

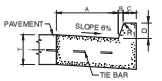


CURB TYPES
N.T.S.

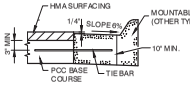




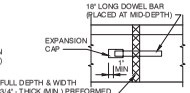
SIDEWALK / DOORWAY DETAIL AT ENTRANCE APPROACH PAD
NOT TO SCALE



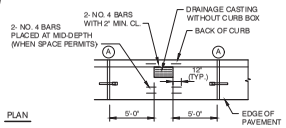
BARRIER CURB

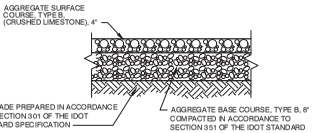


ADJACENT TO PCC BASE COURSE WITH HMA SURFACING



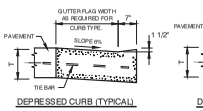
DETAIL A
EXPANSION JOINT



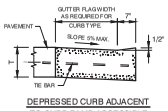


AGGREGATE SURFACE DETAIL
NOT TO SCALE

TABLE OF DIMENSIONS BARRIER CURB					
TYPE	A	B	C	D	R_1
B-6.12	12"	1"	6"	6"	1"
B-6.18	18"	1"	6"	6"	1"
B-6.24	24"	1"	6"	6"	1"
B-9.12	12"	2"	5"	9"	1"
B-9.18	18"	2"	5"	9"	1"
B-9.24	24"	2"	5"	9"	1"



DEPRESSED CURB (TYPICAL)



DEPRESSED CURB ADJACENT TO CURB RAMP ACCESSIBLE TO THE DISABLED

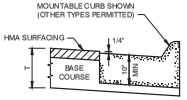
GENERAL NOTES

THE BOTTOM SLOPE OF COMBINATION CURB AND GUTTER CONSTRUCTED ADJACENT TO PCC PAVEMENT SHALL BE THE SAME SLOPE AS THE SUBBASE OR 6% WHEN SUBBASE IS OMITTED.

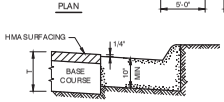
T = THICKNESS OF PAVEMENT.

LONGITUDINAL JOINT TIE BARS SHALL BE NO. 6 AT 24" CENTERS IN ACCORDANCE WITH DETAILS FOR LONGITUDINAL CONSTRUCTION JOINT SHOWN ON STANDARD 420001.

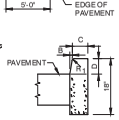
A MINIMUM CLEARANCE OF 2" BETWEEN THE END OF THE TIE BAR AND THE BACK OF THE CURB SHALL BE MAINTAINED.



ON DISTURBED SUBGRADE



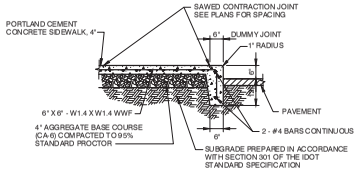
ON UNDISTURBED SUBGRADE



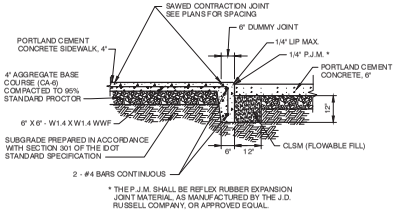
BARRIER CURB

ADJACENT TO FLEXIBLE PAVEMENT

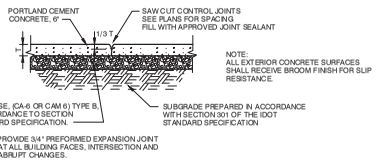
COMBINATION CONCRETE CURB AND GUTTER DETAIL
NOT TO SCALE



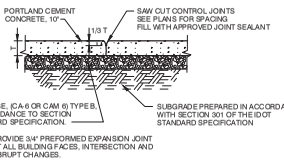
COMBINATION P.C.C. CURB AND SIDEWALK
NOT TO SCALE



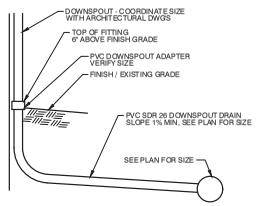
COMBINATION P.C.C. CURB AND SIDEWALK (DEPRESSED)
NOT TO SCALE



P.C.C. PAVEMENT, 6"
NOT TO SCALE



P.C.C. PAVEMENT, 10"
NOT TO SCALE



DOWNSPOUT CONNECTION DETAIL
NOT TO SCALE

MOHR & KERR ENGINEERING & LAND SURVEYING, P.C.
5901 N. Prospect Road, Suite 6B
Peoria, Illinois 61614
www.mohrandkerr.com
Office: (309) 692-8500
Fax: (309) 692-8501
Professional Design Firm #184.005091

REV.	DATE	NATURE OF REVISION	CHECKED
1	12-13-24	GRADING REVISIONS	

FILE NAME: [illegible]

SURVEYED: CTG
DRAWN: ALH
CHECKED: SDK
SCALE:
DATE: 12-20-2024

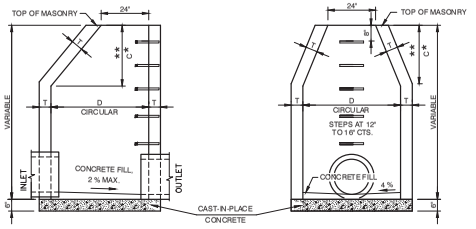
CLIENT: P.J. HOERR
GFL, RANTOUL, IL

TITLE: CONSTRUCTION DETAILS

PROJECT NO. 24-333
SHEET 9 OF 12
DRAWING NO. 9

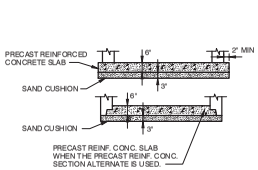
R-237

C242



ELEVATION - ECCENTRIC

ELEVATION - CONCENTRIC



ALTERNATE BOTTOM SLAB

ALTERNATE MATERIALS FOR WALLS	D	C	T (MIN.)
CONCRETE MASONRY UNIT	(4'-0") (5'-0")	(30") (3'-9")	(5") (5")
BRICK MASONRY	(4'-0") (5'-0")	(30") (3'-9")	(8") (8")
PRECAST REINFORCED CONCRETE SECTION	(4'-0") (5'-0")	(30") (3'-9")	(4") (5")
CAST-IN-PLACE CONCRETE	(4'-0") (5'-0")	(30") (3'-9")	(6") (6")

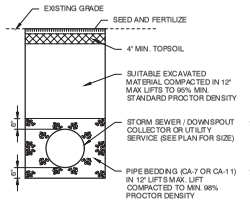
GENERAL NOTES

* DIMENSION "C" FOR PRECAST REINFORCED CONCRETE SECTIONS MAY VARY FROM THE DIMENSION GIVEN TO PLUS 6".

** SEE FOR OPTIONAL PRECAST REINFORCED CONCRETE FLAT SLAB TOP.

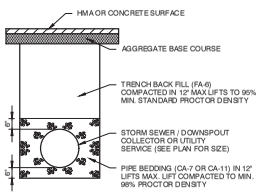
MANHOLE TYPE A

NOT TO SCALE



TRENCH DETAILS CASE 1

NOT TO SCALE



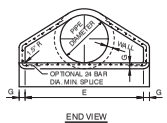
TRENCH DETAIL CASE 2

NOT TO SCALE

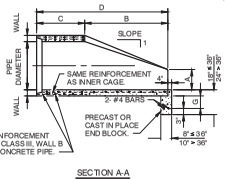
TRENCH DETAILS

NOT TO SCALE

PIPE DIA.	APPROX. LBS	WALL	A	B	C	D	E	G	R	APPROX. SLOPE
12"	530	2"	4"	24"	4'-0 7/8"	6'-0 7/8"	24"	2"	9"	1:2.4
15"	740	2.25"	6"	27"	3'-10"	6'-1"	30"	2.25"	11"	1:2.4
18"	990	2.5"	9"	27"	3'-10"	6'-1"	36"	2.5"	12"	1:2.4
21"	1280	2.5"	9"	35"	38"	6'-1"	3'-6"	2.75"	13"	1:2.4
24"	1520	3"	9.5"	3'-7.5"	30"	6'-1.5"	4'-0"	3"	14"	1:2.5



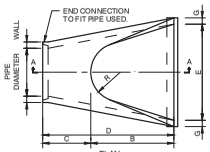
END VIEW



SECTION A-A

GENERAL NOTES

ALL SLOPE RATIOS ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).



PLAN

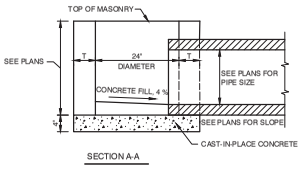
PRECAST REINFORCED CONCRETE FLARED END SECTION

NOT TO SCALE

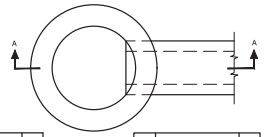
ALTERNATE MATERIALS FOR WALLS	T
BRICK MASONRY	8"
CAST-IN-PLACE CONCRETE	6"
CONCRETE MASONRY UNIT	5"
PRECAST REINFORCED CONCRETE SECTION	3"

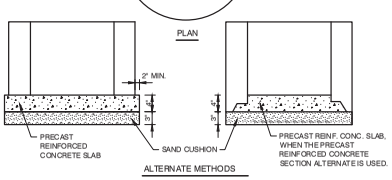
GENERAL NOTES

AN ALTERNATE PAVED INVERT MEETING THE APPROVAL OF THE ENGINEER MAY BE SUBSTITUTED FOR THAT SHOWN IN SIDE VIEW.



SECTION A-A

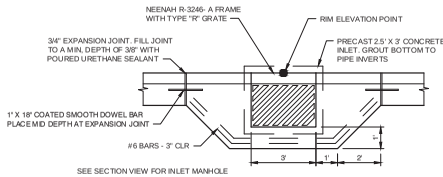




ALTERNATE METHODS

INLET TYPE A DETAILS

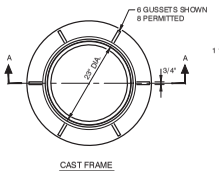
NOT TO SCALE



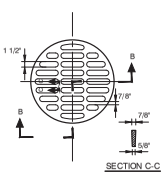
SEE SECTION VIEW FOR INLET MANHOLE

INLET, TYPE G-1

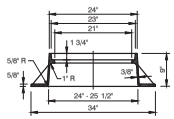
NOT TO SCALE



CAST FRAME

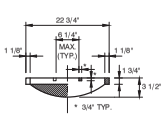


SECTION C-C



SECTION A-A

Gray Iron



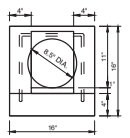
SECTION B-B

CAST OPEN LID

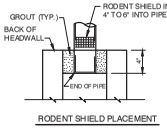
TYPE 1 FRAME AND LID

NOT TO SCALE

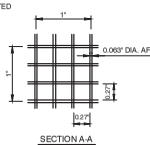
NEENAH R-2504 OR APPROVED EQUAL



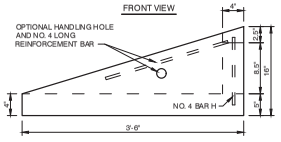
FRONT VIEW



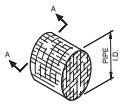
RODENT SHIELD PLACEMENT



SECTION A-A



SIDE VIEW



DETAIL OF RODENT SHIELD



BAR H

CONCRETE HEADWALL FOR PIPE DRAIN

NOT TO SCALE

MOHR & KERR ENGINEERING & LAND SURVEYING, P.C.
5901 N. Prospect Road, Suite 6B
Peoria, Illinois 61614
www.mohrandkerr.com
Office: (309) 692-8500
Fax: (309) 692-8501
Professional Design Firm #184.005091

REV.	DATE	NATURE OF REVISION	CHECKED
A	12/13/24	GRADING REVISIONS	

RUN NAME: [illegible]

SURVEYED	CTG
DRAWN	ALH
CHECKED	SDK
SCALE	
DATE	12-20-2024

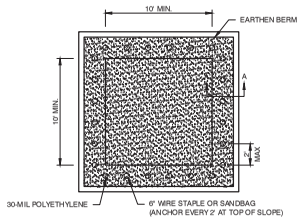
CLIENT: P.J. HOERR GFL, RANTOUL, IL

TITLE: CONSTRUCTION DETAILS

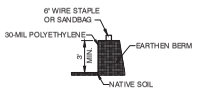
PROJECT NO. 24-333
SHEET 10 OF 12
DRAWING NO. 10

R-238

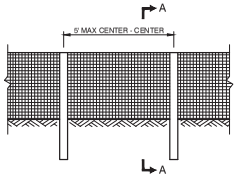
C243



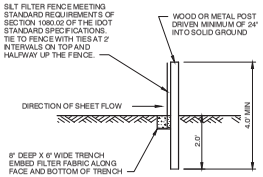
PLAN VIEW
SCALE: 1:5



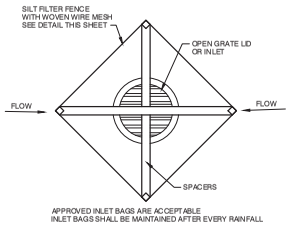
SECTION A-A - EARTHEN BERM
SCALE: 1:2



SILT FENCE DETAIL
NOT TO SCALE

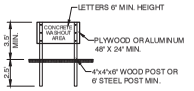


SECTION A-A

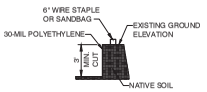


APPROVED INLET BAGS ARE ACCEPTABLE
INLET BAGS SHALL BE MAINTAINED AFTER EVERY RAINFALL

INLET PROTECTION
NOT TO SCALE



SIGN DETAIL
SCALE: 1:2



SECTION A-A - SUBGRADE
SCALE: 1:2

NOTES:

MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES SHALL INCLUDE REMOVING AND DISPOSING OF HARDENED CONCRETE AND/OR SLURRY AND RETURNING THE FACILITIES TO FUNCTIONAL CONDITION.

FACILITY SHALL BE CLEANED OR RECONSTRUCTED IN A NEW AREA ONCE WASHOUT BECOMES TWO-THIRDS FULL.

TEMPORARY CONCRETE WASHOUT FACILITY - EARTHEN TYPE
SCALE: 1" = 5'

MOHR & KERR ENGINEERING & LAND SURVEYING, P.C.
5901 N. Prospect Road, Suite 6B
Peoria, Illinois 61614
www.mohrandkerr.com
Office: (309) 692-8500
Fax: (309) 692-8501
Professional Design Firm #184.005091

REV.	DATE	NATURE OF REVISION	CHECKED
1	12-13-24	GRADING REVISIONS	

FILE NAME:

SURVEYED	CTG
DRAWN	ALH
CHECKED	SDK
SCALE	
DATE	12-20-2024

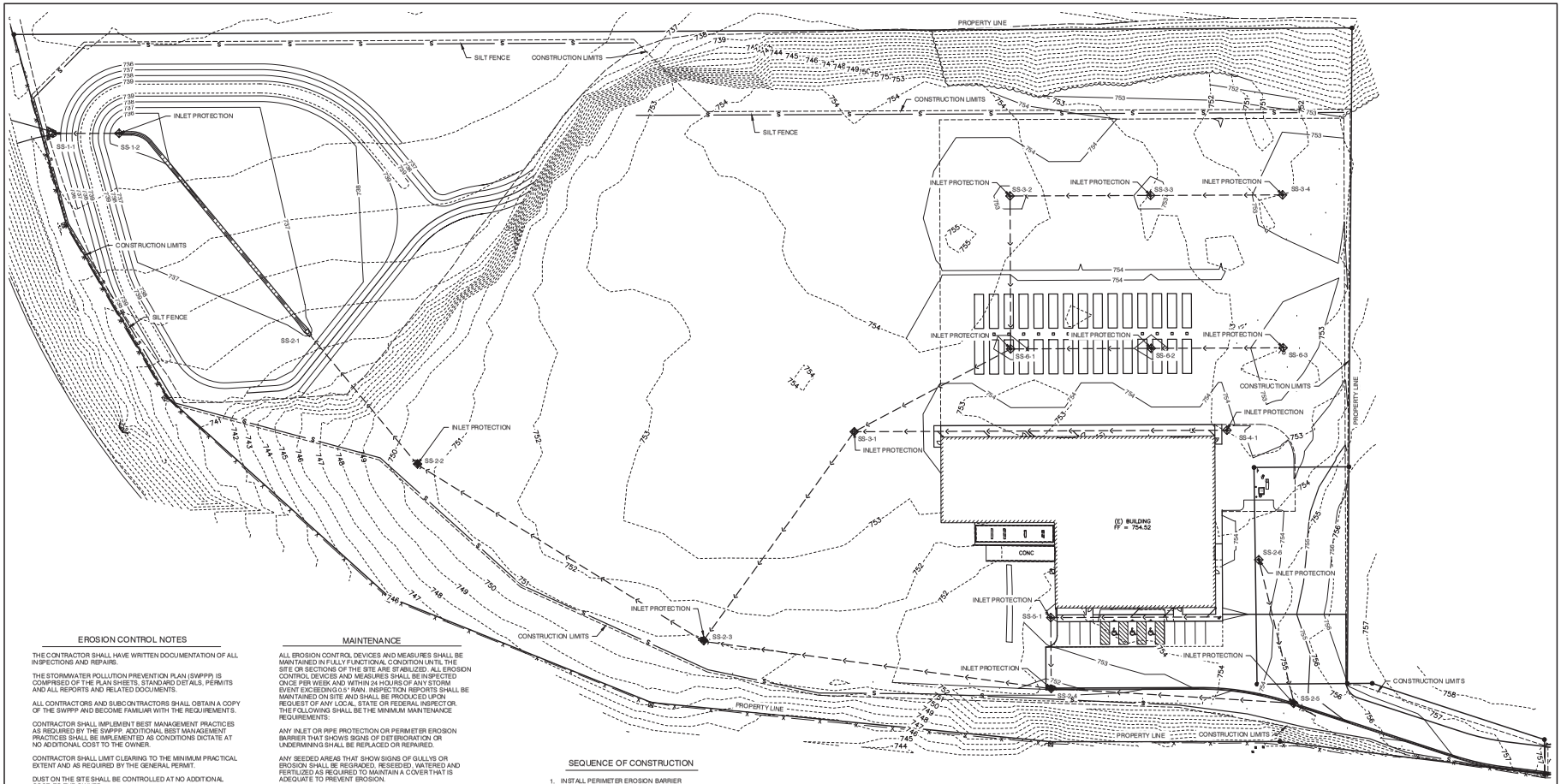
CLIENT: P.J. HOERR
GFL, RANTOUL, IL

TITLE: CONSTRUCTION DETAILS

PROJECT NO. 24-333
SHEET 11 OF 12
DRAWING NO. 11

R-239

C244



EROSION CONTROL NOTES

THE CONTRACTOR SHALL HAVE WRITTEN DOCUMENTATION OF ALL INSPECTIONS AND REPAIRS.

THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IS COMPRISED OF THE PLAN SHEETS, STANDARD DETAILS, PERMITS AND ALL REPORTS AND RELATED DOCUMENTS.

ALL CONTRACTORS AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE SWPPP AND BECOME FAMILIAR WITH THE REQUIREMENTS.

CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS CONDITIONS DICTATE AT NO ADDITIONAL COST TO THE OWNER.

CONTRACTOR SHALL LIMIT CLEARING TO THE MINIMUM PRACTICAL EXTENT AND AS REQUIRED BY THE GENERAL PERMIT.

DUST ON THE SITE SHALL BE CONTROLLED AT NO ADDITIONAL COST TO THE OWNER.

DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY WILL BE TEMPORARILY STOPPED SHALL BE TEMPORARILY SEEDED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY.

DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENT SEEDED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY.

CONTRACTOR SHALL BE REQUIRED TO REMOVE ANY COLLECTED SEDIMENT FROM DETENTION PONDS, SILT BASINS, AND STORM SEWERS AT NO ADDITIONAL COST TO THE OWNER UNTIL THE SITE IS STABILIZED.

DUE TO GRADE CHANGES DURING THE CONSTRUCTION ACTIVITY, THE CONTRACTOR MAY BE REQUIRED TO ADJUST SILT FENCES, STRAW BALES, ETC. AT NO ADDITIONAL COST TO THE OWNER.

MAINTENANCE

ALL EROSION CONTROL DEVICES AND MEASURES SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL THE SITE OR SECTIONS OF THE SITE ARE STABILIZED. ALL EROSION CONTROL DEVICES AND MEASURES SHALL BE INSPECTED ONCE PER WEEK AND WITHIN 24 HOURS OF ANY STORM EVENT EXCEEDING 0.5" RAIN. INSPECTION REPORTS SHALL BE MAINTAINED ON SITE AND SHALL BE PRODUCED UPON REQUEST OF ANY LOCAL, STATE OR FEDERAL INSPECTOR. THE FOLLOWING SHALL BE THE MINIMUM MAINTENANCE REQUIREMENTS:

ANY INLET OR PIPE PROTECTION OR PERIMETER EROSION BARRIER THAT SHOWS SIGNS OF DETERIORATION OR UNDERMINING SHALL BE REPLACED OR REPAIRED.

ANY SEEDED AREAS THAT SHOW SIGNS OF GULLYS OR EROSION SHALL BE REGRADED, RESEEDED, WATERED AND FERTILIZED AS REQUIRED TO MAINTAIN A COVER THAT IS ADEQUATE TO PREVENT EROSION.

SEDIMENT SHALL BE REMOVED FROM PERIMETER EROSION BARRIER WHEN SILT REACHES ONE HALF THE HEIGHT OF THE FENCE.

CONSTRUCTION ENTRANCES SHALL BE MAINTAINED TO PREVENT TRACKING OF MUD ONTO THE RIGHT OF WAY OR PUBLIC PARKING LOTS. TOP DRESSING MAY BE REQUIRED ON THE CONSTRUCTION ENTRANCES.

ANY MUD OR DEBRIS TRACKED ON A PUBLIC ROAD SHALL BE REMOVED BY THE CONTRACTOR TO THE SATISFACTION OF THE JURISDICTIONAL BODY OF THE ROAD. THIS SHALL BE AT NO ADDITIONAL COST TO THE OWNER.

EROSION CONTROL LEGEND

CONSTRUCTION LIMITS

PERIMETER EROSION BARRIER — S —

INLET AND PIPE PROTECTION ☒

SEQUENCE OF CONSTRUCTION

1. INSTALL PERIMETER EROSION BARRIER
2. CONSTRUCT STORM SEWER
3. INSTALL INLET AND PIPE PROTECTION
4. CLEAR AND GRUB WITHIN CONSTRUCTION LIMITS
5. GRADE SITE
6. BEGIN STRUCTURE CONSTRUCTION
7. TEMPORARY SEED BARE AREAS
8. PAVE SITE
9. COMPLETE GRADING AND FINAL SEED OR SOD
10. REMOVE TEMPORARY EROSION DEVICES ONCE SITE IS STABILIZED

AREA OF CONSTRUCTION LIMITS	= 11.94 AC
DISTURBED AREA	= 11.16 AC
IMPERVIOUS AREA ADDED	= 3.37 AC
TEMPORARY SEEDING	= 11.16 AC

NOTE: SEE SWPPP DETAILS ON SHEET 11

STORM WATER POLLUTION PREVENTION PLAN

SCALE: 1" = 40'

N

0 40 80

SCALE: 1" = 40'

MOHR & KERR ENGINEERING & LAND SURVEYING, P.C.
5901 N. Prospect Road, Suite 6B
Peoria, Illinois 61614
www.mohrandkerr.com
Office: (309) 692-8500
Fax: (309) 692-8501
Professional Design Firm #184.005091

REV.	DATE	NATURE OF REVISION	CHECKED
1	12-13-24	GRADING REVISIONS	

FILE NAME: [illegible]

SURVEYED	CTG
DRAWN	ALH
CHECKED	SDK
SCALE	1" = 40'
DATE	12-20-2024

CLIENT: P.J. HOERR
GFL, RANTOUL, IL

TITLE: STORM WATER POLLUTION PREVENTION PLAN

PROJECT NO. 24-333
SHEET 12 OF 12
DRAWING NO. 12

R-240

C245

APPENDIX 2

RANTOUL APPROVAL OF PHASE 1 STORMWATER DESIGN

Outlook

FW: GFL RANTOUL SITE PERMITTING

From Alex Herrmann <alherrmann@mohrandkerr.com>
Date Wed 1/22/2025 10:12 AM
To Hock, John <jhock@cecinc.com>

John,

Forwarding my communication with Village of Rantoul. Let me know if you need anything else.

Thanks,

Alex Herrmann
Project Engineer
Mohr & Kerr Engineering & Land Surveying, P.C.

Email: alherrmann@mohrandkerr.com
Office: (309) 692-8500 | Mobile: (309) 635-7765

5901 N. Prospect Rd., Suite 6B, Peoria, IL 61614
www.mohrandkerr.com

From: Jake McCoy <jmccoy@village.rantoul.il.us>
Sent: Friday, November 15, 2024 9:15 AM
To: Alex Herrmann <alherrmann@mohrandkerr.com>
Subject: RE: GFL RANTOUL SITE PERMITTING

Alex,

I have no comments on the engineering plans or the storm drainage calculations. It all looks good to Public Works.

Jake McCoy, P.E.
Director of Public Works
Village of Rantoul
217-892-6526
jmccoy@myrantoul.com

From: Alex Herrmann <alherrmann@mohrandkerr.com>
Sent: Monday, November 11, 2024 8:19 AM
To: Jake McCoy <jmccoy@village.rantoul.il.us>
Subject: RE: GFL RANTOUL SITE PERMITTING

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Jake,

I have submitted an updated PDF set of the civil plans. There were some incorrect elevations in the detention basin. Let me know where you are in the review process as well. We just got the NPDES NOI

approved over the weekend so they will be wanting to start here as soon as possible.

Thanks,

Alex Herrmann
Project Engineer
Mohr & Kerr Engineering & Land Surveying, P.C.

Email: alherrmann@mohrandkerr.com
Office: (309) 692-8500 | Mobile: (309) 635-7765

5901 N. Prospect Rd., Suite 6B, Peoria, IL 61614
www.mohrandkerr.com

From: Alex Herrmann
Sent: Monday, November 4, 2024 8:24 AM
To: 'jmccoy@myrantoul.com' <jmccoy@myrantoul.com>
Subject: GFL RANTOUL SITE PERMITTING

Jake,

We are working with P.J. Hoerr on the site development of GFL in Rantoul. Attached are my drainage calcs and site plans. Please distribute to anyone else who would need to review these as well. We have an NOI applied for that should be approved here in a week or two and are looking to start as soon after that as possible and get as much done before winter as they can. The basin is sized for a future building along with significant area of additional impervious and gravel. Let me know if you have any questions on anything.

Thanks,

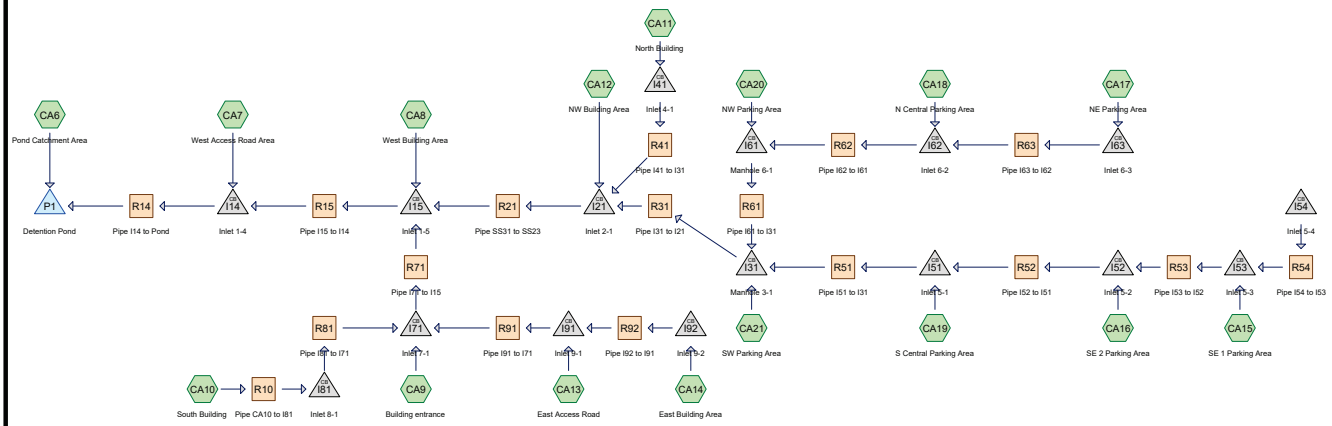
Alex Herrmann
Project Engineer
Mohr & Kerr Engineering & Land Surveying, P.C.

Email: alherrmann@mohrandkerr.com
Office: (309) 692-8500 | Mobile: (309) 635-7765

5901 N. Prospect Rd., Suite 6B, Peoria, IL 61614
www.mohrandkerr.com

APPENDIX 3

HYDROCAD REPORT - EXISTING CONDITIONS



Subcat Reach Pond Link

Routing Diagram for 340656 - Rantoul Transfer Station - Existing Conditions Rational

Prepared by CEC Inc, Printed 8/13/2025

HydroCAD® 10.20-7a s/n 01006 © 2025 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	C	Description (subcatchment-numbers)
0.229	0.95	Building (CA11)
1.568	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C (CA13, CA14, CA16, CA17, CA9)
1.695	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D (CA12, CA20, CA21, CA6, CA7)
2.872	0.60	Gravel (CA12, CA13, CA14, CA15, CA16, CA17, CA18, CA19, CA20, CA21, CA9)
0.070	0.40	Orthents, loamy, 1 to 7 percent slopes (802B), Well drained, HSG C (CA6, CA8)
4.075	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D (CA12, CA16, CA17, CA21, CA6, CA7, CA8, CA9)
0.432	0.95	Roof (CA10)
0.218	0.95	Sidewalk (CA12, CA14, CA16, CA19, CA21, CA8, CA9)
1.271	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C (CA14, CA15, CA16, CA17, CA19, CA21, CA8, CA9)
12.430	**0.44**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
5.770	HSG B	CA12, CA16, CA17, CA20, CA21, CA6, CA7, CA8, CA9
2.909	HSG C	CA13, CA14, CA15, CA16, CA17, CA19, CA21, CA6, CA8, CA9
0.000	HSG D	
3.751	Other	CA10, CA11, CA12, CA13, CA14, CA15, CA16, CA17, CA18, CA19, CA20, CA21, CA8, CA9
12.430		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover
0.000	0.000	0.000	0.000	0.229	0.229	Building
0.000	0.000	1.568	0.000	0.000	1.568	Dana silt loam, 2 to 5 percent slopes (56B), Well drained
0.000	1.695	0.000	0.000	0.000	1.695	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained
0.000	0.000	0.000	0.000	2.872	2.872	Gravel
0.000	0.000	0.070	0.000	0.000	0.070	Orthents, loamy, 1 to 7 percent slopes (802B), Well drained
0.000	4.075	0.000	0.000	0.000	4.075	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained
0.000	0.000	0.000	0.000	0.432	0.432	Roof
0.000	0.000	0.000	0.000	0.218	0.218	Sidewalk
0.000	0.000	1.271	0.000	0.000	1.271	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained
0.000	**5.770**	**2.909**	**0.000**	**3.751**	**12.430**	**TOTAL AREA**

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	CA10	0.00	0.00	81.0	0.0100	0.012	0.0	8.0	0.0	
2	R10	750.17	748.69	149.2	0.0099	0.010	0.0	12.0	0.0	
3	R14	741.84	736.82	148.6	0.0338	0.012	0.0	24.0	0.0	
4	R15	744.87	741.84	294.5	0.0103	0.012	0.0	24.0	0.0	
5	R21	746.00	744.88	223.0	0.0050	0.012	0.0	24.0	0.0	
6	R31	747.75	747.18	154.3	0.0037	0.012	0.0	18.0	0.0	
7	R41	748.86	748.17	324.3	0.0021	0.010	0.0	12.0	0.0	
8	R51	749.07	747.75	123.9	0.0107	0.012	0.0	15.0	0.0	
9	R52	750.10	749.10	114.4	0.0087	0.012	0.0	12.0	0.0	
10	R53	750.43	750.26	62.2	0.0027	0.010	0.0	6.0	0.0	
11	R54	752.46	750.56	68.7	0.0277	0.010	0.0	6.0	0.0	
12	R61	748.55	747.75	133.8	0.0060	0.012	0.0	15.0	0.0	
13	R62	749.32	748.61	122.3	0.0058	0.012	0.0	12.0	0.0	
14	R63	749.91	749.35	117.3	0.0048	0.012	0.0	12.0	0.0	
15	R71	747.78	744.96	307.3	0.0092	0.012	0.0	12.0	0.0	
16	R81	748.66	747.78	63.2	0.0139	0.012	0.0	12.0	0.0	
17	R91	750.30	748.93	206.5	0.0066	0.012	0.0	12.0	0.0	
18	R92	751.22	750.30	134.2	0.0069	0.012	0.0	12.0	0.0	
19	P1	735.51	734.98	50.4	0.0105	0.010	0.0	8.0	0.0	

Time span=0.00-2.00 hrs, dt=0.01 hrs, 201 points
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment CA10: South Building Runoff Area=0.432 ac 100.00% Impervious Runoff Depth=1.79"
Flow Length=227' Slope=0.0100 '/' Tc=1.6 min C=0.95 Runoff=0.78 cfs 0.064 af

Subcatchment CA11: North Building Runoff Area=0.229 ac 100.00% Impervious Runoff Depth=1.79"
Flow Length=80' Slope=0.0100 '/' Tc=0.7 min C=0.95 Runoff=0.41 cfs 0.034 af

Subcatchment CA12: NW Building Area Runoff Area=0.484 ac 2.27% Impervious Runoff Depth=0.60"
Flow Length=323' Tc=10.7 min C=0.32 Runoff=0.29 cfs 0.024 af

Subcatchment CA13: East Access Road Runoff Area=0.072 ac 0.00% Impervious Runoff Depth=0.98"
Flow Length=194' Tc=6.9 min C=0.52 Runoff=0.07 cfs 0.006 af

Subcatchment CA14: East Building Area Runoff Area=0.656 ac 1.22% Impervious Runoff Depth=1.02"
Flow Length=194' Tc=6.9 min C=0.54 Runoff=0.67 cfs 0.055 af

Subcatchment CA15: SE 1 Parking Area Runoff Area=0.156 ac 0.00% Impervious Runoff Depth=1.00"
Flow Length=1,178' Tc=20.8 min C=0.53 Runoff=0.16 cfs 0.013 af

Subcatchment CA16: SE 2 Parking Area Runoff Area=2.030 ac 0.30% Impervious Runoff Depth=0.85"
Flow Length=1,178' Tc=20.8 min C=0.45 Runoff=1.73 cfs 0.143 af

Subcatchment CA17: NE Parking Area Runoff Area=1.364 ac 0.00% Impervious Runoff Depth=0.81"
Flow Length=764' Tc=15.1 min C=0.43 Runoff=1.11 cfs 0.092 af

Subcatchment CA18: N Central Parking Area Runoff Area=0.385 ac 0.00% Impervious Runoff Depth=1.13"
Flow Length=91' Slope=0.0048 '/' Tc=1.1 min C=0.60 Runoff=0.44 cfs 0.036 af

Subcatchment CA19: S Central Parking Area Runoff Area=0.354 ac 5.65% Impervious Runoff Depth=1.17"
Flow Length=91' Slope=0.0048 '/' Tc=1.1 min C=0.62 Runoff=0.42 cfs 0.034 af

Subcatchment CA20: NW Parking Area Runoff Area=0.643 ac 0.00% Impervious Runoff Depth=0.88"
Flow Length=292' Tc=19.2 min C=0.47 Runoff=0.57 cfs 0.047 af

Subcatchment CA21: SW Parking Area Runoff Area=0.510 ac 5.10% Impervious Runoff Depth=1.07"
Flow Length=228' Tc=22.6 min C=0.57 Runoff=0.55 cfs 0.046 af

Subcatchment CA6: Pond Catchment Area Runoff Area=3.224 ac 0.00% Impervious Runoff Depth=0.56"
Flow Length=435' Tc=16.9 min C=0.30 Runoff=1.83 cfs 0.152 af

Subcatchment CA7: West Access Road Area Runoff Area=0.350 ac 0.00% Impervious Runoff Depth=0.56"
Flow Length=435' Tc=16.9 min C=0.30 Runoff=0.20 cfs 0.016 af

Subcatchment CA8: West Building Area Runoff Area=1.154 ac 4.42% Impervious Runoff Depth=0.64"
Flow Length=435' Tc=16.9 min C=0.34 Runoff=0.74 cfs 0.061 af

Subcatchment CA9: Building entrance Runoff Area=0.387 ac 24.81% Impervious Runoff Depth=1.17"
Flow Length=264' Tc=12.7 min C=0.62 Runoff=0.45 cfs 0.038 af

Reach R10: Pipe CA10 to I81 Avg. Flow Depth=0.28' Max Vel=4.37 fps Inflow=0.78 cfs 0.064 af
12.0" Round Pipe n=0.010 L=149.2' S=0.0099 '/' Capacity=4.61 cfs Outflow=0.78 cfs 0.064 af

Reach R14: Pipe I14 to Pond Avg. Flow Depth=0.59' Max Vel=11.05 fps Inflow=8.60 cfs 0.711 af
24.0" Round Pipe n=0.012 L=148.6' S=0.0338 '/' Capacity=45.04 cfs Outflow=8.60 cfs 0.711 af

Reach R15: Pipe I15 to I14 Avg. Flow Depth=0.80' Max Vel=7.14 fps Inflow=8.40 cfs 0.694 af
24.0" Round Pipe n=0.012 L=294.5' S=0.0103 '/' Capacity=24.86 cfs Outflow=8.40 cfs 0.694 af

Reach R21: Pipe SS31 to SS23 Avg. Flow Depth=0.79' Max Vel=4.95 fps Inflow=5.68 cfs 0.470 af
24.0" Round Pipe n=0.012 L=223.0' S=0.0050 '/' Capacity=17.37 cfs Outflow=5.68 cfs 0.470 af

Reach R31: Pipe I31 to I21 Avg. Flow Depth=0.94' Max Vel=4.26 fps Inflow=4.98 cfs 0.411 af
18.0" Round Pipe n=0.012 L=154.3' S=0.0037 '/' Capacity=6.92 cfs Outflow=4.98 cfs 0.411 af

Reach R41: Pipe I41 to I31 Avg. Flow Depth=0.30' Max Vel=2.10 fps Inflow=0.41 cfs 0.034 af
12.0" Round Pipe n=0.010 L=324.3' S=0.0021 '/' Capacity=2.14 cfs Outflow=0.41 cfs 0.034 af

Reach R51: Pipe I51 to I31 Avg. Flow Depth=0.49' Max Vel=5.23 fps Inflow=2.30 cfs 0.190 af
15.0" Round Pipe n=0.012 L=123.9' S=0.0107 '/' Capacity=7.22 cfs Outflow=2.30 cfs 0.190 af

Reach R52: Pipe I52 to I51 Avg. Flow Depth=0.51' Max Vel=4.65 fps Inflow=1.89 cfs 0.156 af
12.0" Round Pipe n=0.012 L=114.4' S=0.0087 '/' Capacity=3.61 cfs Outflow=1.89 cfs 0.156 af

Reach R53: Pipe I53 to I52 Avg. Flow Depth=0.22' Max Vel=1.85 fps Inflow=0.16 cfs 0.013 af
6.0" Round Pipe n=0.010 L=62.2' S=0.0027 '/' Capacity=0.38 cfs Outflow=0.16 cfs 0.013 af

Reach R54: Pipe I54 to I53 Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af
6.0" Round Pipe n=0.010 L=68.7' S=0.0277 '/' Capacity=1.21 cfs Outflow=0.00 cfs 0.000 af

Reach R61: Pipe I61 to I31 Avg. Flow Depth=0.54' Max Vel=4.14 fps Inflow=2.12 cfs 0.175 af
15.0" Round Pipe n=0.012 L=133.8' S=0.0060 '/' Capacity=5.41 cfs Outflow=2.12 cfs 0.175 af

Reach R62: Pipe I62 to I61 Avg. Flow Depth=0.52' Max Vel=3.79 fps Inflow=1.55 cfs 0.128 af
12.0" Round Pipe n=0.012 L=122.3' S=0.0058 '/' Capacity=2.94 cfs Outflow=1.55 cfs 0.128 af

Reach R63: Pipe I63 to I62 Avg. Flow Depth=0.45' Max Vel=3.24 fps Inflow=1.11 cfs 0.092 af
12.0" Round Pipe n=0.012 L=117.3' S=0.0048 '/' Capacity=2.67 cfs Outflow=1.11 cfs 0.092 af

Reach R71: Pipe I71 to I15 Avg. Flow Depth=0.52' Max Vel=4.79 fps Inflow=1.98 cfs 0.163 af
12.0" Round Pipe n=0.012 L=307.3' S=0.0092 '/' Capacity=3.70 cfs Outflow=1.98 cfs 0.163 af

Reach R81: Pipe I81 to I71 Avg. Flow Depth=0.28' Max Vel=4.33 fps Inflow=0.78 cfs 0.064 af
12.0" Round Pipe n=0.012 L=63.2' S=0.0139 '/' Capacity=4.55 cfs Outflow=0.78 cfs 0.064 af

Reach R91: Pipe I91 to I71 Avg. Flow Depth=0.33' Max Vel=3.28 fps Inflow=0.74 cfs 0.061 af
12.0" Round Pipe n=0.012 L=206.5' S=0.0066 '/' Capacity=3.14 cfs Outflow=0.74 cfs 0.061 af

Reach R92: Pipe I92 to I91 Avg. Flow Depth=0.31' Max Vel=3.22 fps Inflow=0.67 cfs 0.055 af
12.0" Round Pipe n=0.012 L=134.2' S=0.0069 '/' Capacity=3.20 cfs Outflow=0.67 cfs 0.055 af

Pond I14: Inlet 1-4 Peak Elev=742.80' Inflow=8.60 cfs 0.711 af
Outflow=8.60 cfs 0.711 af

Pond I15: Inlet 1-5 Peak Elev=745.88' Inflow=8.40 cfs 0.694 af
Outflow=8.40 cfs 0.694 af

Pond I21: Inlet 2-1 Peak Elev=748.14' Inflow=5.68 cfs 0.470 af
Outflow=5.68 cfs 0.470 af

Pond I31: Manhole 3-1 Peak Elev=748.78' Inflow=4.98 cfs 0.411 af
Outflow=4.98 cfs 0.411 af

Pond I41: Inlet 4-1 Peak Elev=749.25' Inflow=0.41 cfs 0.034 af
Outflow=0.41 cfs 0.034 af

Pond I51: Inlet 5-1 Peak Elev=749.72' Inflow=2.30 cfs 0.190 af
Outflow=2.30 cfs 0.190 af

Pond I52: Inlet 5-2 Peak Elev=750.84' Inflow=1.89 cfs 0.156 af
Outflow=1.89 cfs 0.156 af

Pond I53: Inlet 5-3 Peak Elev=750.70' Inflow=0.16 cfs 0.013 af
Outflow=0.16 cfs 0.013 af

Pond I54: Inlet 5-4 Peak Elev=0.00'
Primary=0.00 cfs 0.000 af

Pond I61: Manhole 6-1 Peak Elev=749.23' Inflow=2.12 cfs 0.175 af
Outflow=2.12 cfs 0.175 af

Pond I62: Inlet 6-2 Peak Elev=749.94' Inflow=1.55 cfs 0.128 af
Outflow=1.55 cfs 0.128 af

Pond I63: Inlet 6-3 Peak Elev=750.55' Inflow=1.11 cfs 0.092 af
Outflow=1.11 cfs 0.092 af

Pond I71: Inlet 7-1 Peak Elev=748.44' Inflow=1.98 cfs 0.163 af
Outflow=1.98 cfs 0.163 af

Pond I81: Inlet 8-1 Peak Elev=749.04' Inflow=0.78 cfs 0.064 af
Outflow=0.78 cfs 0.064 af

Pond I91: Inlet 9-1 Peak Elev=750.70' Inflow=0.74 cfs 0.061 af
Outflow=0.74 cfs 0.061 af

Pond I92: Inlet 9-2 Peak Elev=751.68' Inflow=0.67 cfs 0.055 af
Outflow=0.67 cfs 0.055 af

Pond P1: Detention Pond Peak Elev=737.50' Storage=0.658 af Inflow=10.44 cfs 0.862 af
8.0" Round Culvert n=0.010 L=50.4' S=0.0105 '/' Outflow=2.32 cfs 0.333 af

Total Runoff Area = 12.430 ac Runoff Volume = 0.862 af Average Runoff Depth = 0.83"
92.93% Pervious = 11.551 ac 7.07% Impervious = 0.879 ac

Summary for Subcatchment CA10: South Building

[70] Warning: Tc<8dt requires smaller dt

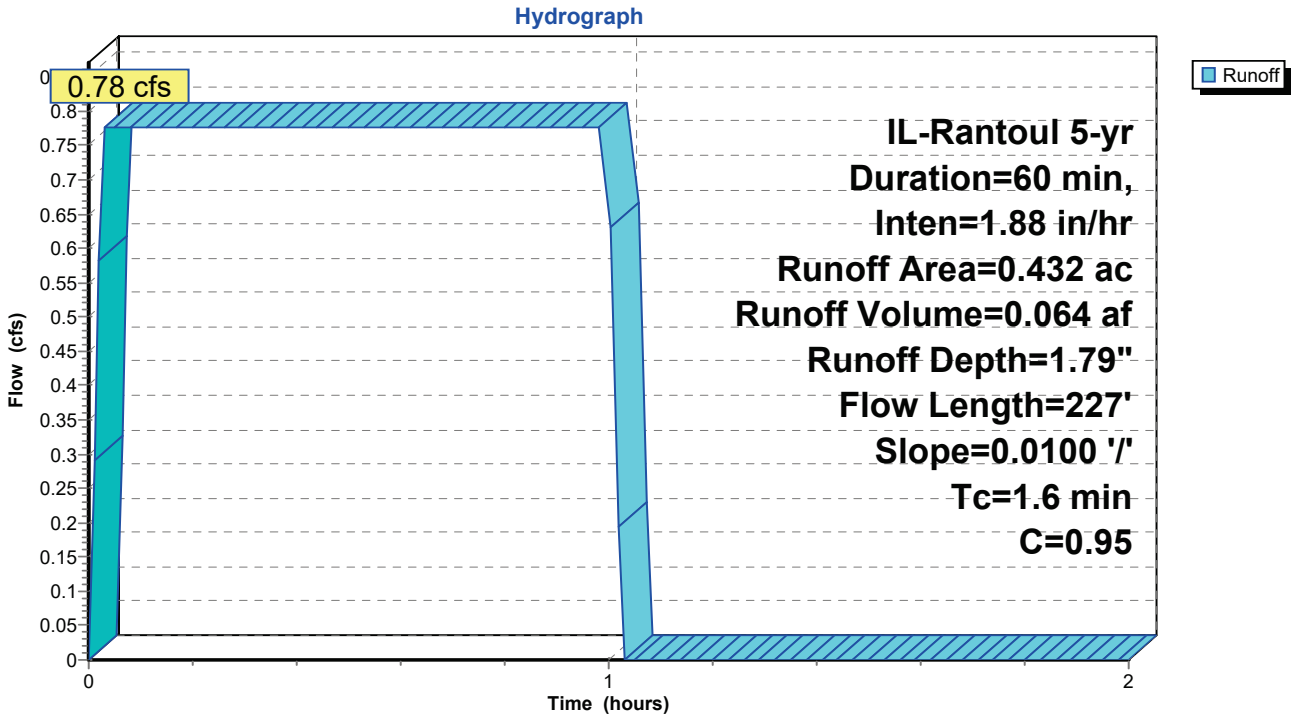
Runoff = 0.78 cfs @ 0.03 hrs, Volume= 0.064 af, Depth= 1.79"
Routed to Reach R10 : Pipe CA10 to I81

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=60 min, Inten=1.88 in/hr

Area (ac)	C	Description
0.432	0.95	Roof
0.432		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	146	0.0100	2.03		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
0.4	81	0.0100	3.75	1.31	**Pipe Channel, Downpipes** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.012 Corrugated PP, smooth interior
1.6	227	Total			

Subcatchment CA10: South Building



Summary for Subcatchment CA11: North Building

[70] Warning: Tc<8dt requires smaller dt

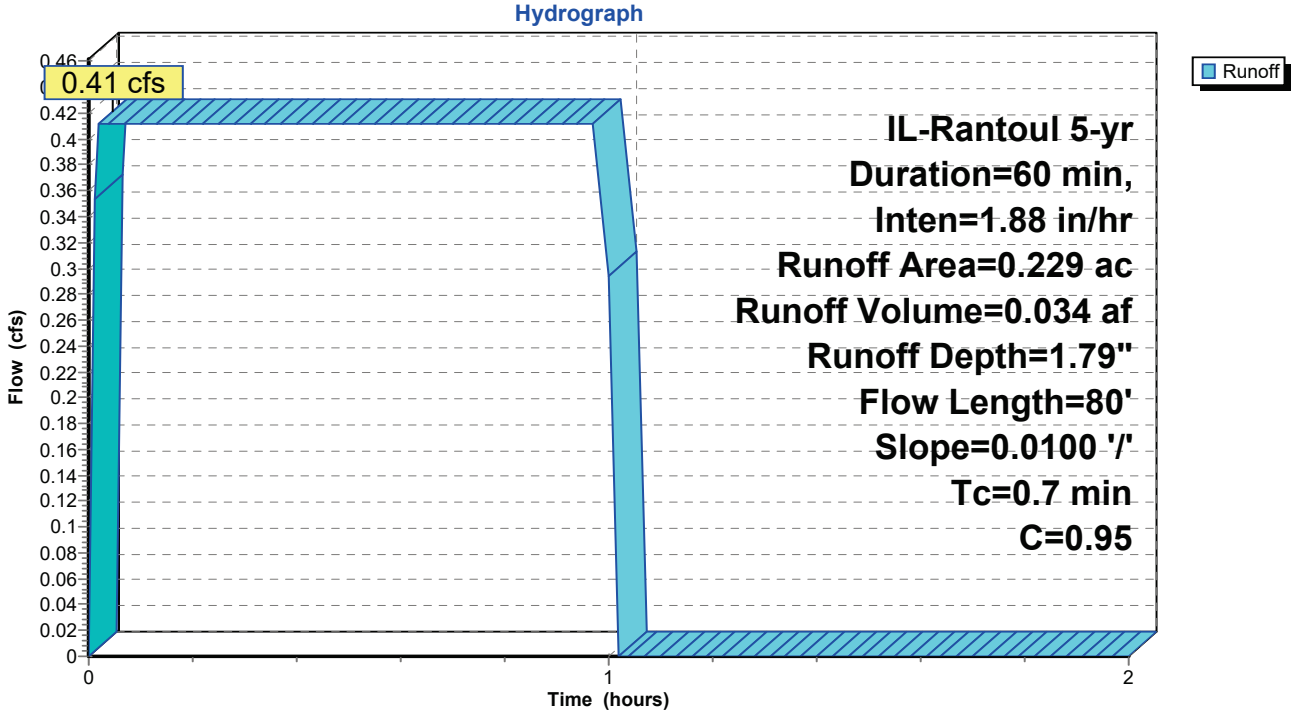
Runoff = 0.41 cfs @ 0.02 hrs, Volume= 0.034 af, Depth= 1.79"
Routed to Pond I41 : Inlet 4-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=60 min, Inten=1.88 in/hr

Area (ac)	C	Description
0.229	0.95	Building
0.229		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	80	0.0100	2.03		**Shallow Concentrated Flow, N building** Paved Kv= 20.3 fps

Subcatchment CA11: North Building



Summary for Subcatchment CA12: NW Building Area

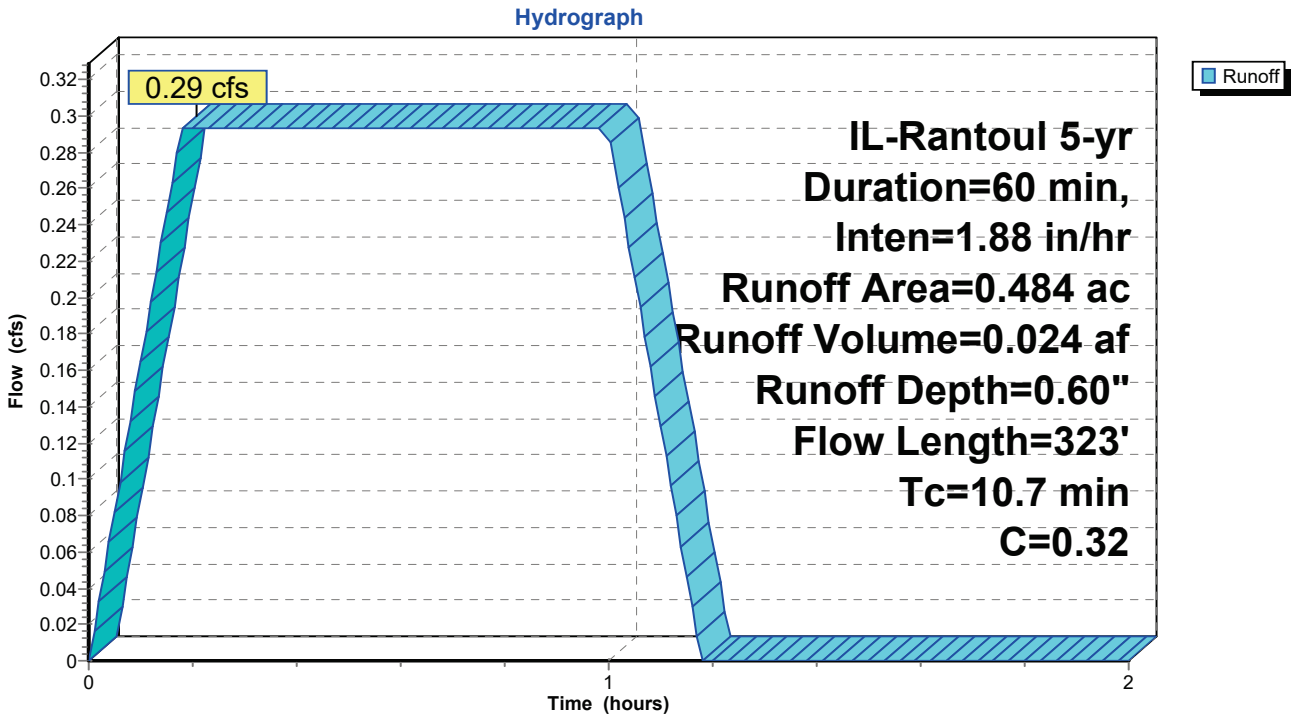
Runoff = 0.29 cfs @ 0.18 hrs, Volume= 0.024 af, Depth= 0.60"
Routed to Pond I21 : Inlet 2-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=60 min, Inten=1.88 in/hr

Area (ac)	C	Description
0.095	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
0.368	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.011	0.95	Sidewalk
0.010	0.60	Gravel
0.484	0.32	Weighted Average
0.473		97.73% Pervious Area
0.011		2.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	185	0.0003	0.39		**Sheet Flow, Parking N of building** Smooth surfaces n= 0.011 P2= 5.80"
1.4	60	0.0012	0.70		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
1.4	78	0.0187	0.96		**Shallow Concentrated Flow, Parking N of building** Short Grass Pasture Kv= 7.0 fps
10.7	323	Total			

Subcatchment CA12: NW Building Area



Summary for Subcatchment CA13: East Access Road

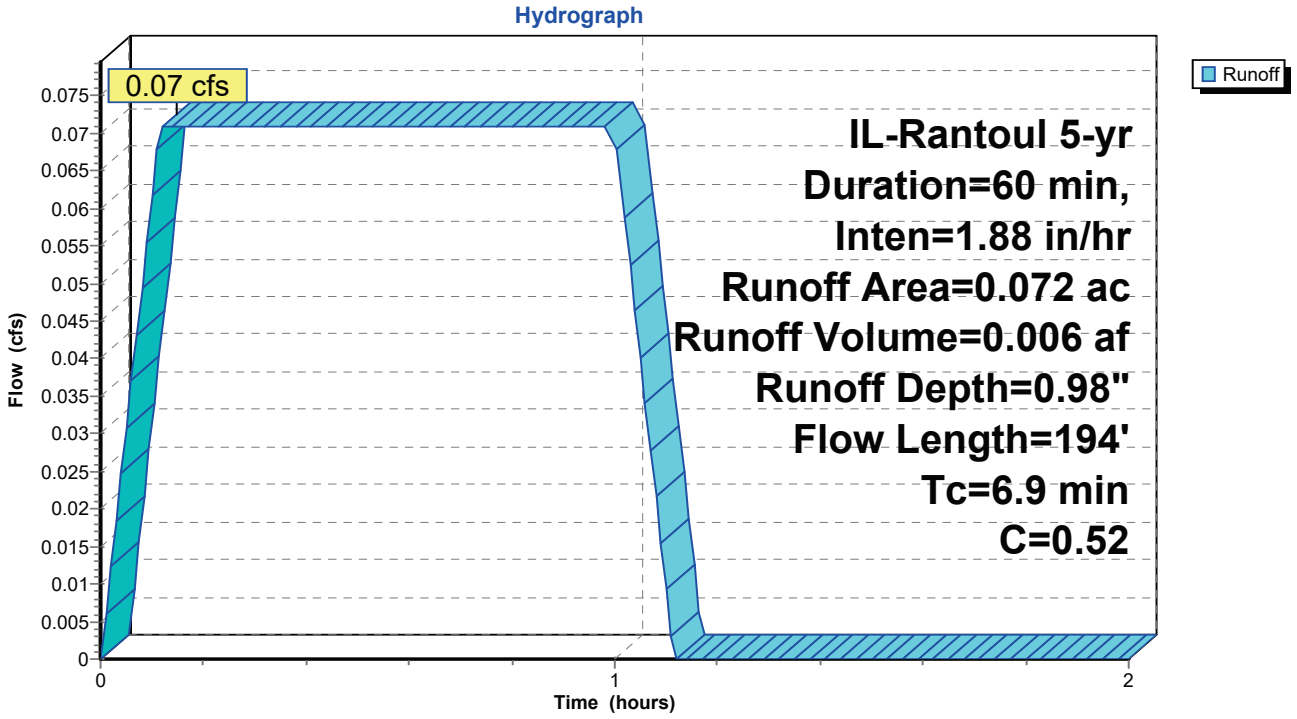
Runoff = 0.07 cfs @ 0.12 hrs, Volume= 0.006 af, Depth= 0.98"
Routed to Pond I91 : Inlet 9-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=60 min, Inten=1.88 in/hr

Area (ac)	C	Description
0.031	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.041	0.60	Gravel
0.072	0.52	Weighted Average
0.072		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.9	78	0.0208	0.22		**Sheet Flow, Grass E of building** Grass: Short n= 0.150 P2= 5.80"
1.0	116	0.0088	1.90		**Shallow Concentrated Flow, Access Road** Paved Kv= 20.3 fps
6.9	194	Total			

Subcatchment CA13: East Access Road



Summary for Subcatchment CA14: East Building Area

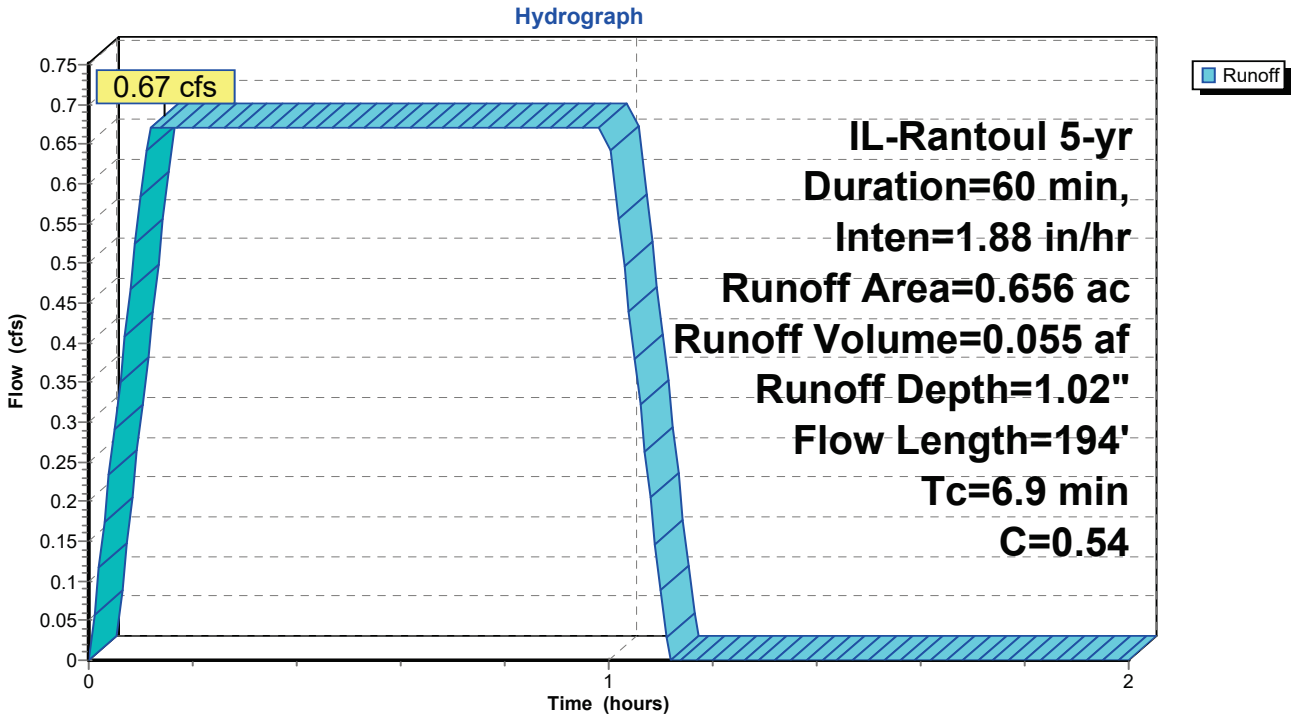
Runoff = 0.67 cfs @ 0.12 hrs, Volume= 0.055 af, Depth= 1.02"
Routed to Pond I92 : Inlet 9-2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=60 min, Inten=1.88 in/hr

Area (ac)	C	Description
0.032	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.216	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.008	0.95	Sidewalk
0.400	0.60	Gravel
0.656	0.54	Weighted Average
0.648		98.78% Pervious Area
0.008		1.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.9	78	0.0208	0.22		**Sheet Flow, Grass E of building** Grass: Short n= 0.150 P2= 5.80"
1.0	116	0.0088	1.90		**Shallow Concentrated Flow, Access Road** Paved Kv= 20.3 fps
6.9	194	Total			

Subcatchment CA14: East Building Area



Summary for Subcatchment CA15: SE 1 Parking Area

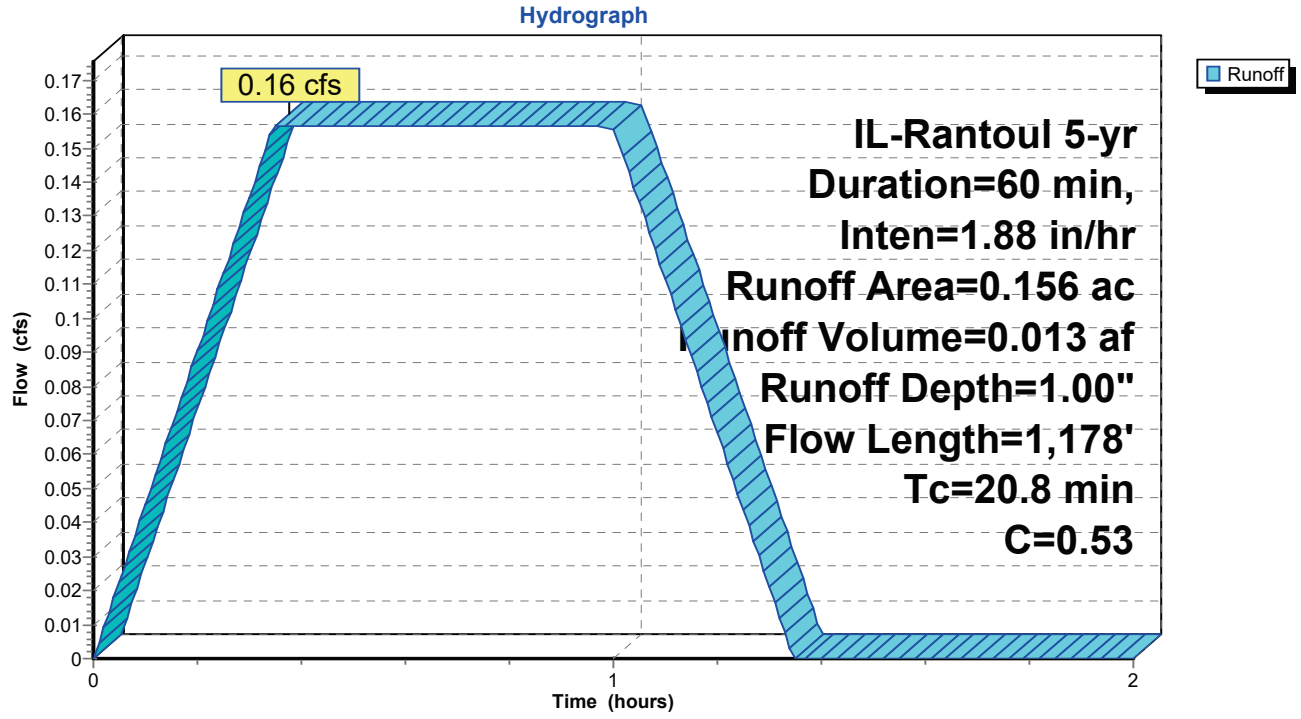
Runoff = 0.16 cfs @ 0.35 hrs, Volume= 0.013 af, Depth= 1.00"
Routed to Pond I53 : Inlet 5-3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=60 min, Inten=1.88 in/hr

Area (ac)	C	Description
0.060	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.096	0.60	Gravel
0.156	0.53	Weighted Average
0.156		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	100	0.0500	0.33		**Sheet Flow, Area E outside of property** Grass: Short n= 0.150 P2= 5.80"
8.8	539	0.0040	1.02		**Shallow Concentrated Flow, Area E outside of property** Unpaved Kv= 16.1 fps
7.0	539	0.0040	1.28		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
20.8	1,178	Total			

Subcatchment CA15: SE 1 Parking Area



Summary for Subcatchment CA16: SE 2 Parking Area

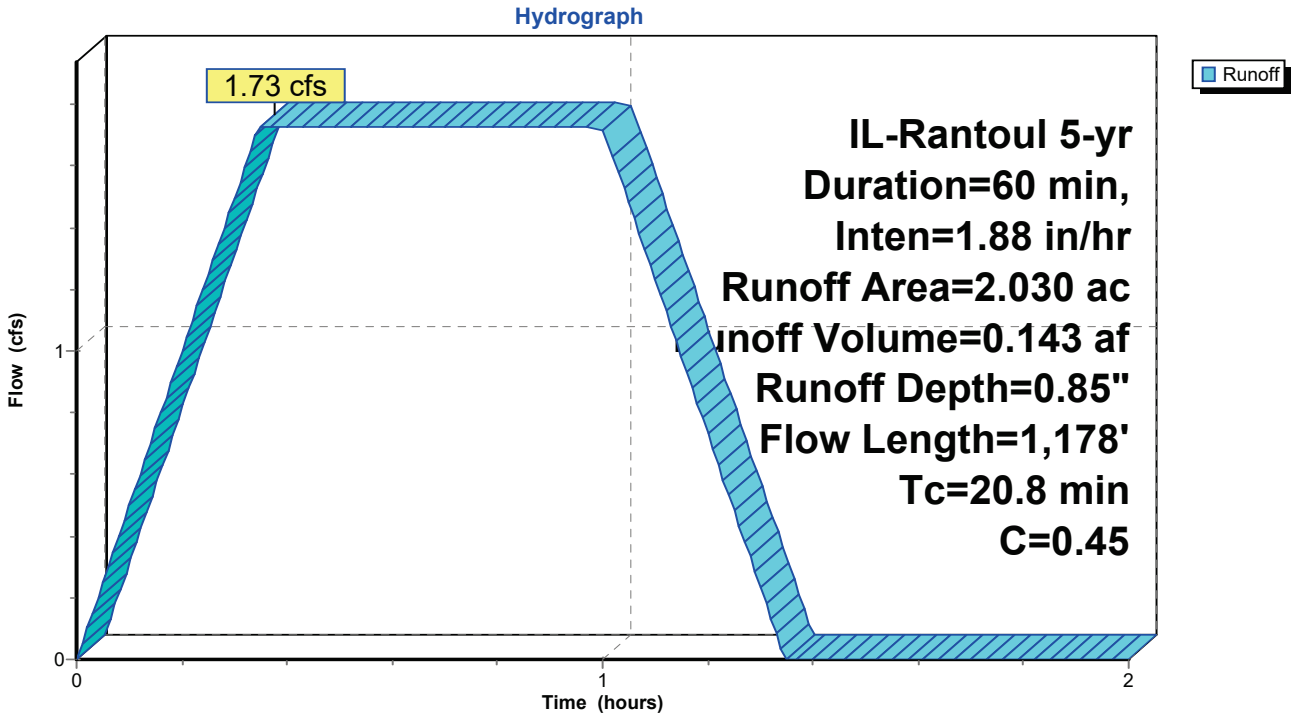
Runoff = 1.73 cfs @ 0.35 hrs, Volume= 0.143 af, Depth= 0.85"
Routed to Pond I52 : Inlet 5-2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=60 min, Inten=1.88 in/hr

Area (ac)	C	Description
0.609	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.101	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.951	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.006	0.95	Sidewalk
0.363	0.60	Gravel
2.030	0.45	Weighted Average
2.024		99.70% Pervious Area
0.006		0.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	100	0.0500	0.33		**Sheet Flow, Area E outside of property** Grass: Short n= 0.150 P2= 5.80"
8.8	539	0.0040	1.02		**Shallow Concentrated Flow, Area E outside of property** Unpaved Kv= 16.1 fps
7.0	539	0.0040	1.28		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
20.8	1,178	Total			

Subcatchment CA16: SE 2 Parking Area



Summary for Subcatchment CA17: NE Parking Area

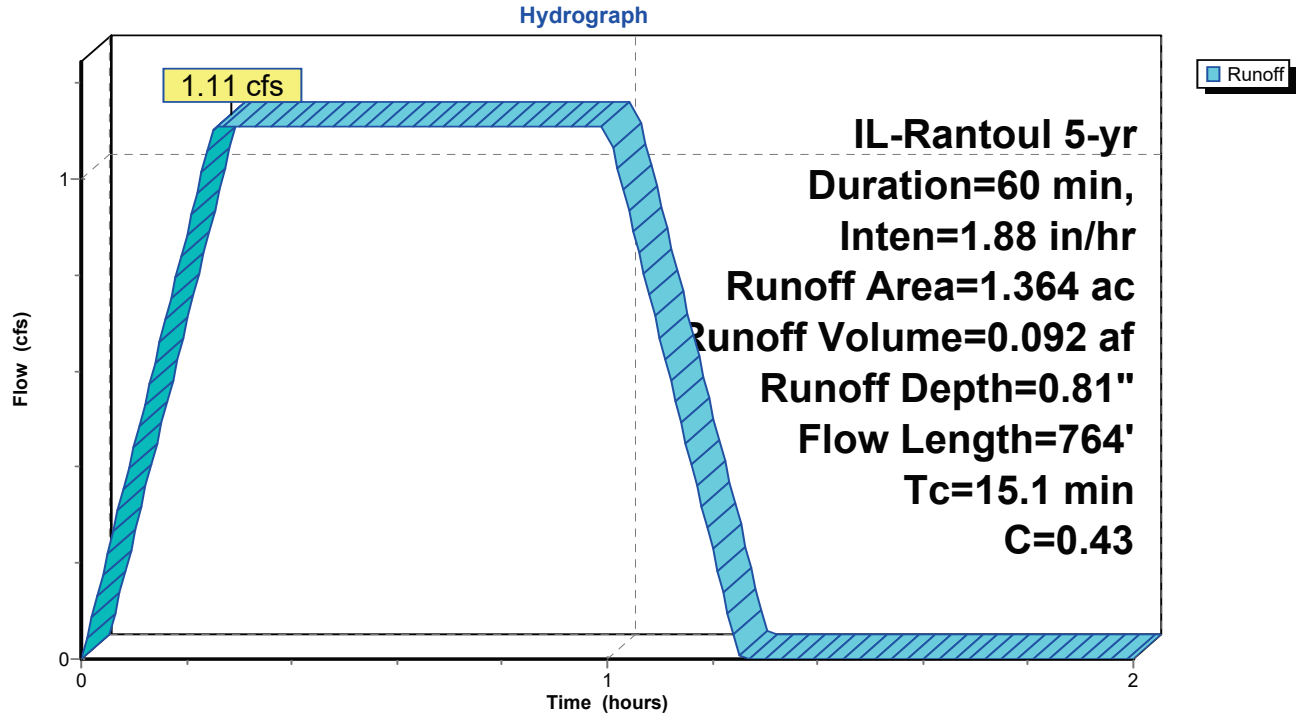
Runoff = 1.11 cfs @ 0.26 hrs, Volume= 0.092 af, Depth= 0.81"
Routed to Pond I63 : Inlet 6-3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=60 min, Inten=1.88 in/hr

Area (ac)	C	Description
0.319	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.362	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.338	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.345	0.60	Gravel
1.364	0.43	Weighted Average
1.364		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	100	0.0500	0.33		**Sheet Flow, Area E outside of property** Grass: Short n= 0.150 P2= 5.80"
9.5	568	0.0038	0.99		**Shallow Concentrated Flow, Area E outside of property** Unpaved Kv= 16.1 fps
0.6	96	0.0160	2.57		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
15.1	764	Total			

Subcatchment CA17: NE Parking Area



Summary for Subcatchment CA18: N Central Parking Area

[70] Warning: Tc<8dt requires smaller dt

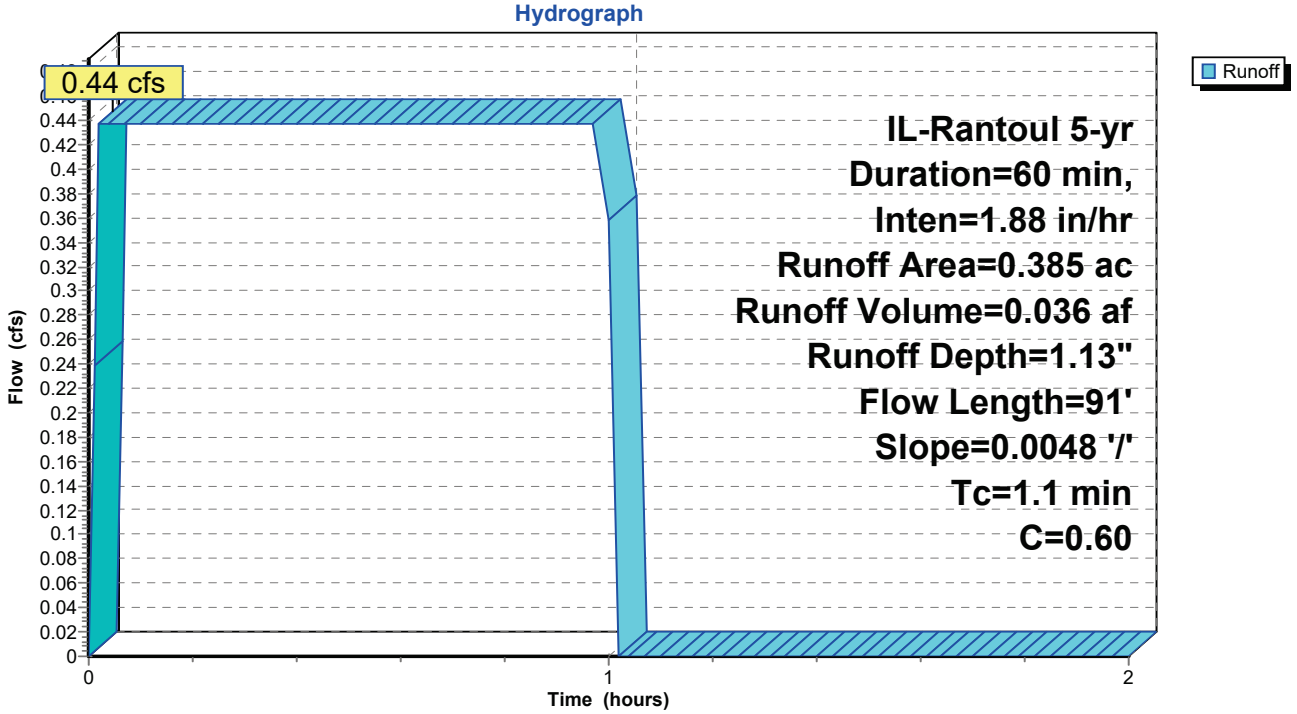
Runoff = 0.44 cfs @ 0.02 hrs, Volume= 0.036 af, Depth= 1.13"
Routed to Pond I62 : Inlet 6-2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=60 min, Inten=1.88 in/hr

Area (ac)	C	Description
0.385	0.60	Gravel
0.385		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	91	0.0048	1.41		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps

Subcatchment CA18: N Central Parking Area



Summary for Subcatchment CA19: S Central Parking Area

[70] Warning: Tc<8dt requires smaller dt

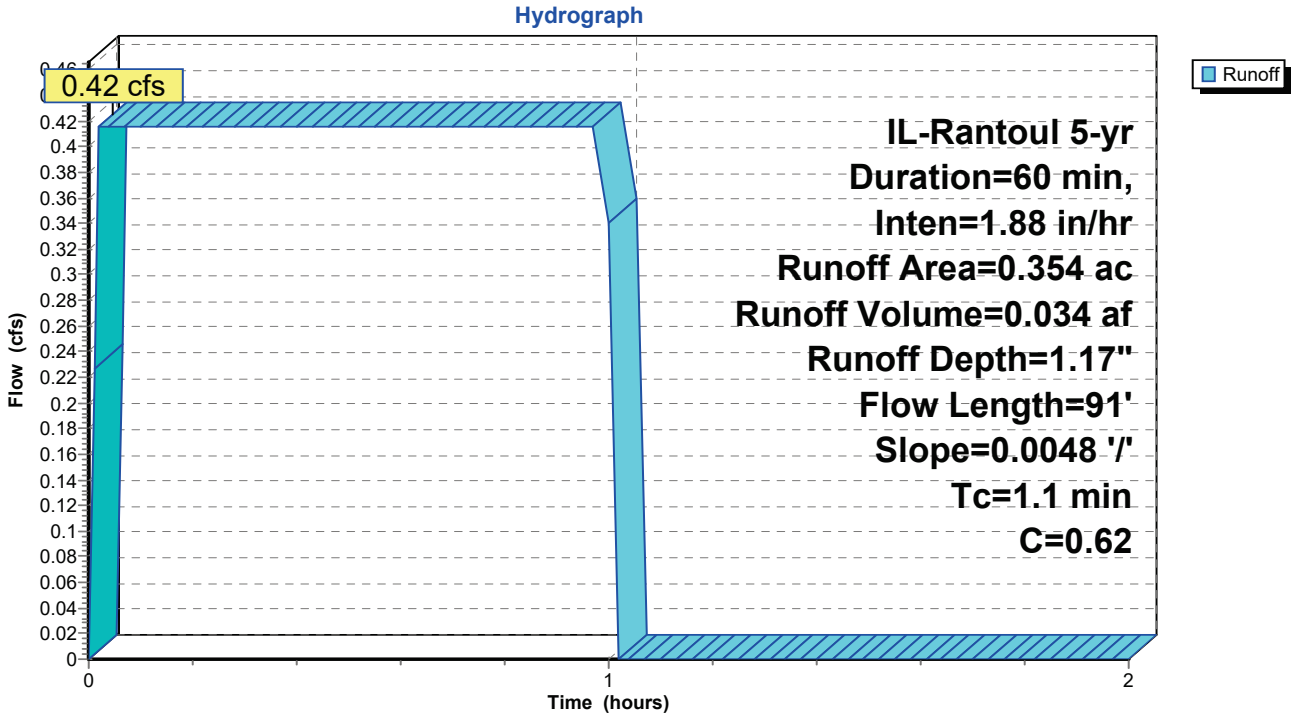
Runoff = 0.42 cfs @ 0.02 hrs, Volume= 0.034 af, Depth= 1.17"
Routed to Pond I51 : Inlet 5-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=60 min, Inten=1.88 in/hr

Area (ac)	C	Description
0.003	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.331	0.60	Gravel
0.020	0.95	Sidewalk
0.354	0.62	Weighted Average
0.334		94.35% Pervious Area
0.020		5.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	91	0.0048	1.41		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps

Subcatchment CA19: S Central Parking Area



Summary for Subcatchment CA20: NW Parking Area

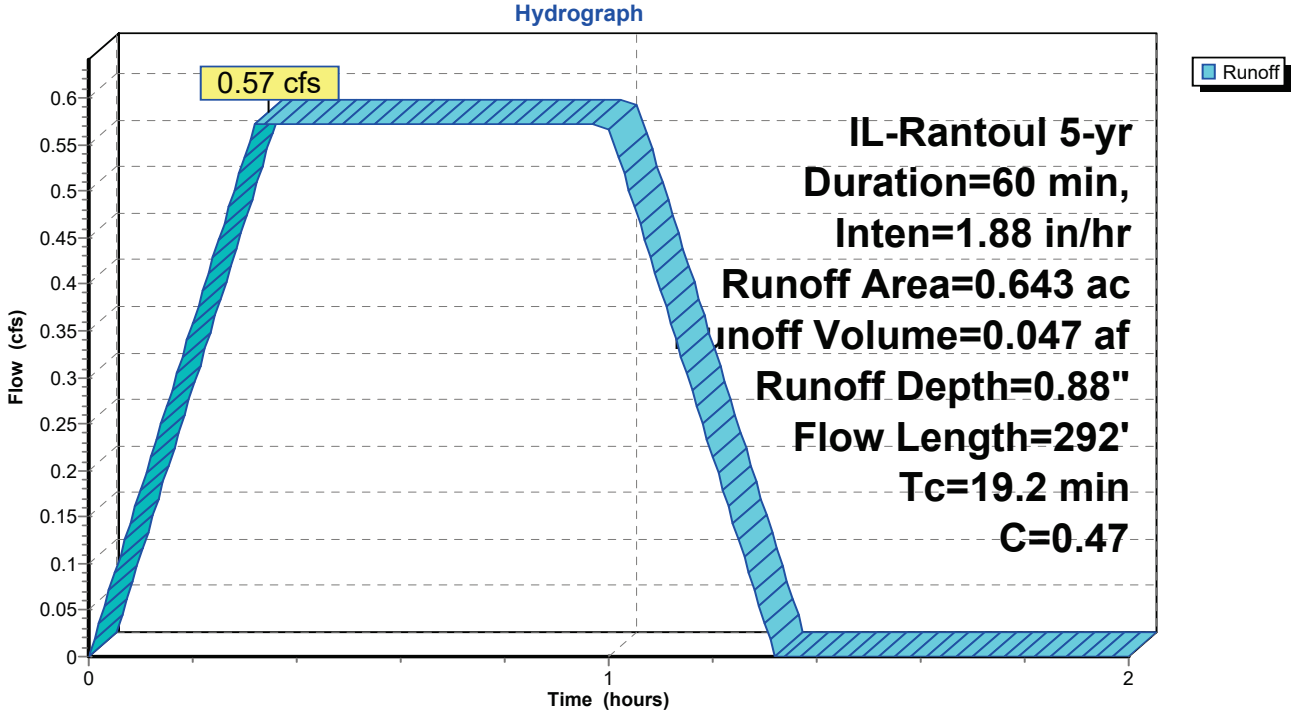
Runoff = 0.57 cfs @ 0.32 hrs, Volume= 0.047 af, Depth= 0.88"
Routed to Pond I61 : Manhole 6-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=60 min, Inten=1.88 in/hr

Area (ac)	C	Description
0.280	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
0.363	0.60	Gravel
0.643	0.47	Weighted Average
0.643		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.2	114	0.0035	0.12		**Sheet Flow, Grass area N of building** Grass: Short n= 0.150 P2= 5.80"
2.4	114	0.0129	0.80		**Shallow Concentrated Flow, Grass area N of building** Short Grass Pasture Kv= 7.0 fps
0.6	64	0.0072	1.72		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
19.2	292	Total			

Subcatchment CA20: NW Parking Area



Summary for Subcatchment CA21: SW Parking Area

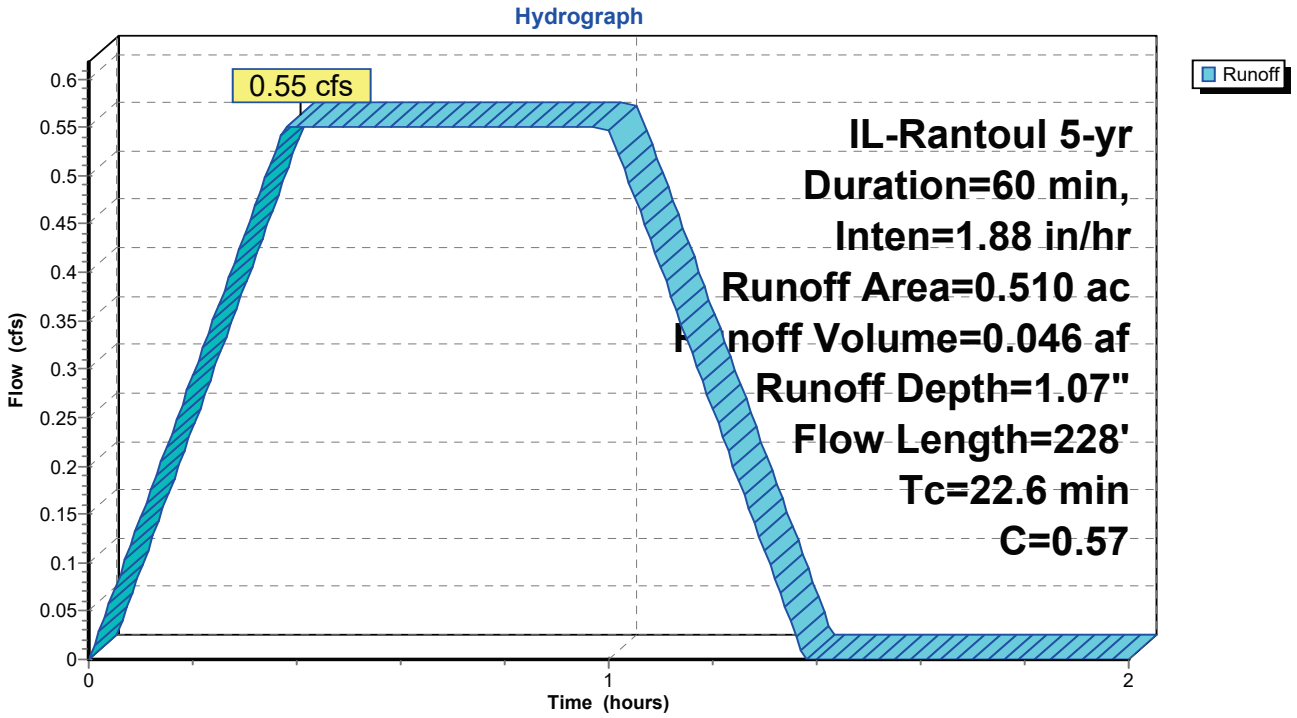
Runoff = 0.55 cfs @ 0.38 hrs, Volume= 0.046 af, Depth= 1.07"
Routed to Pond I31 : Manhole 3-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=60 min, Inten=1.88 in/hr

Area (ac)	C	Description
0.065	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
0.024	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.001	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.026	0.95	Sidewalk
0.394	0.60	Gravel
0.510	0.57	Weighted Average
0.484		94.90% Pervious Area
0.026		5.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.9	98	0.0032	0.11		**Sheet Flow, Grass area N of building** Grass: Short n= 0.150 P2= 5.80"
7.1	60	0.0004	0.14		**Shallow Concentrated Flow, Grass area N of building** Short Grass Pasture Kv= 7.0 fps
0.6	70	0.0100	2.03		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
22.6	228	Total			

Subcatchment CA21: SW Parking Area



Summary for Subcatchment CA6: Pond Catchment Area

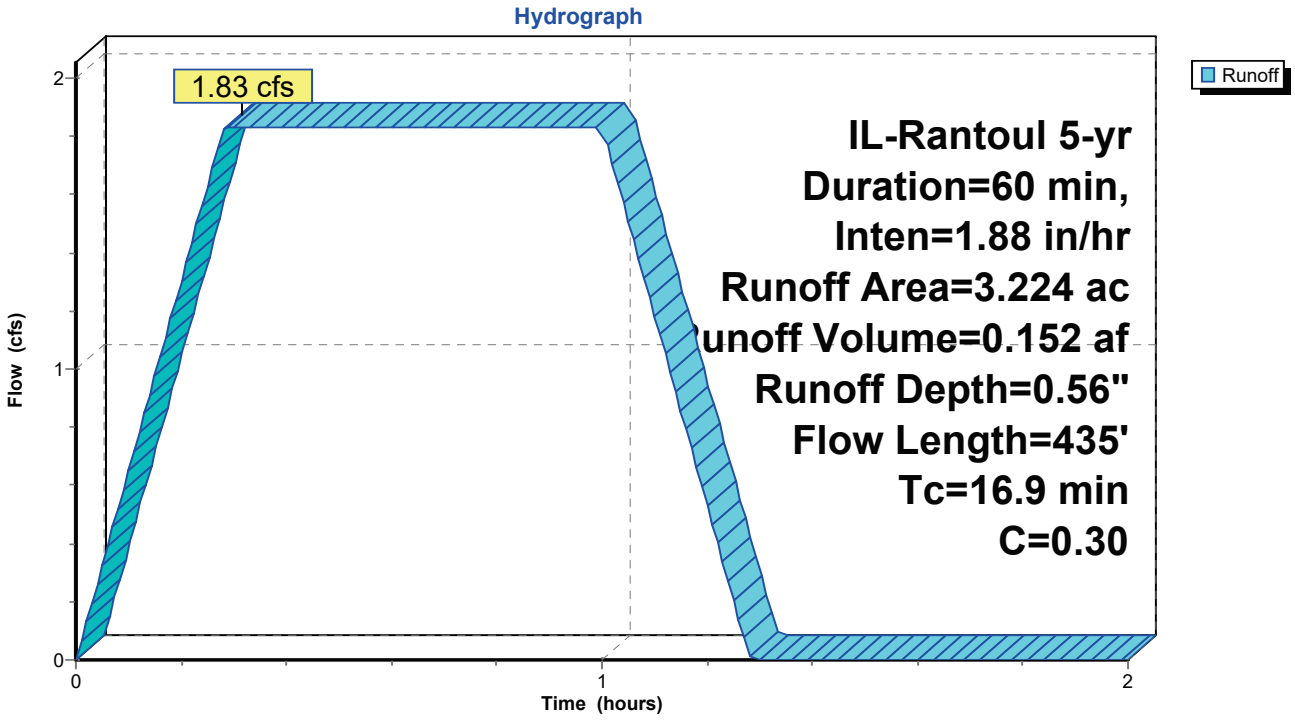
Runoff = 1.83 cfs @ 0.29 hrs, Volume= 0.152 af, Depth= 0.56"
Routed to Pond P1 : Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=60 min, Inten=1.88 in/hr

Area (ac)	C	Description
1.253	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
1.908	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.063	0.40	Orthents, loamy, 1 to 7 percent slopes (802B), Well drained, HSG C
3.224	0.30	Weighted Average
3.224		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0051	0.13		**Sheet Flow, Grass area W of parking area** Grass: Short n= 0.150 P2= 5.80"
4.3	335	0.0344	1.30		**Shallow Concentrated Flow, Grass area W of parking area** Short Grass Pasture Kv= 7.0 fps
16.9	435	Total			

Subcatchment CA6: Pond Catchment Area



Summary for Subcatchment CA7: West Access Road Area

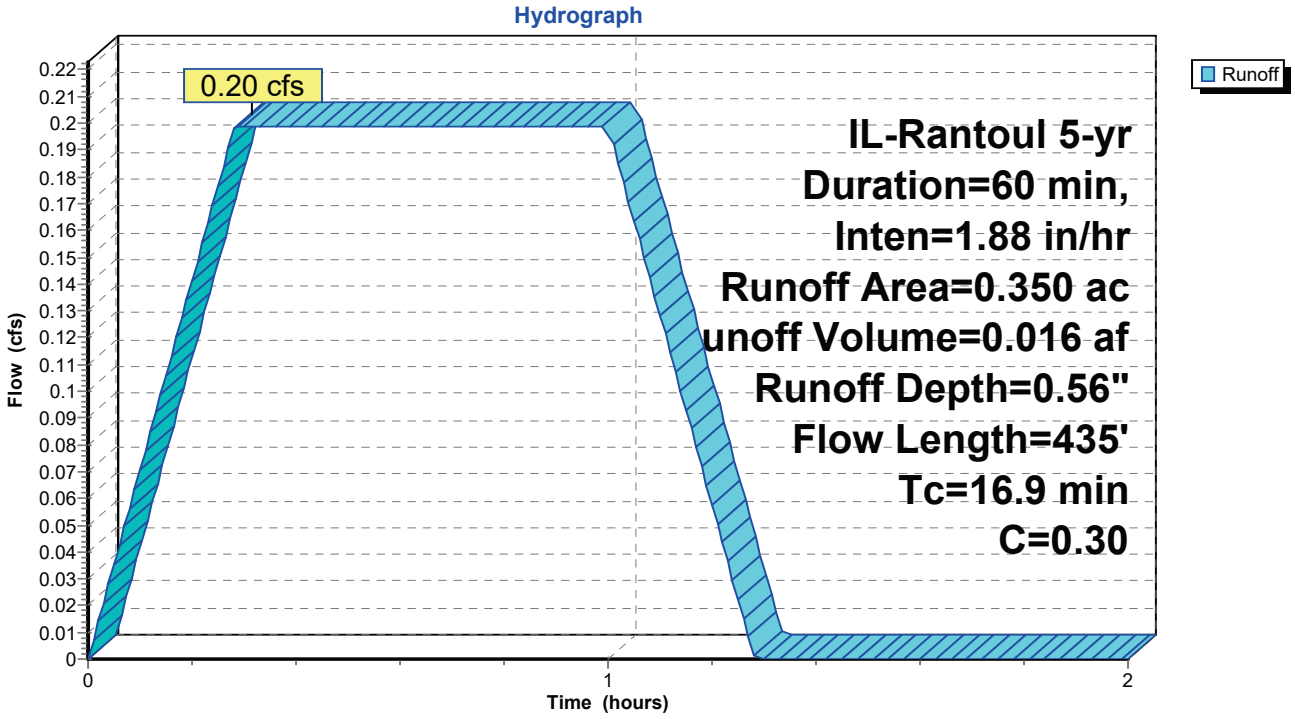
Runoff = 0.20 cfs @ 0.29 hrs, Volume= 0.016 af, Depth= 0.56"
Routed to Pond I14 : Inlet 1-4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=60 min, Inten=1.88 in/hr

Area (ac)	C	Description
0.348	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.002	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
0.350	0.30	Weighted Average
0.350		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0051	0.13		**Sheet Flow, Grass area W of parking area** Grass: Short n= 0.150 P2= 5.80"
4.3	335	0.0344	1.30		**Shallow Concentrated Flow, Grass area W of parking area** Short Grass Pasture Kv= 7.0 fps
16.9	435	Total			

Subcatchment CA7: West Access Road Area



Summary for Subcatchment CA8: West Building Area

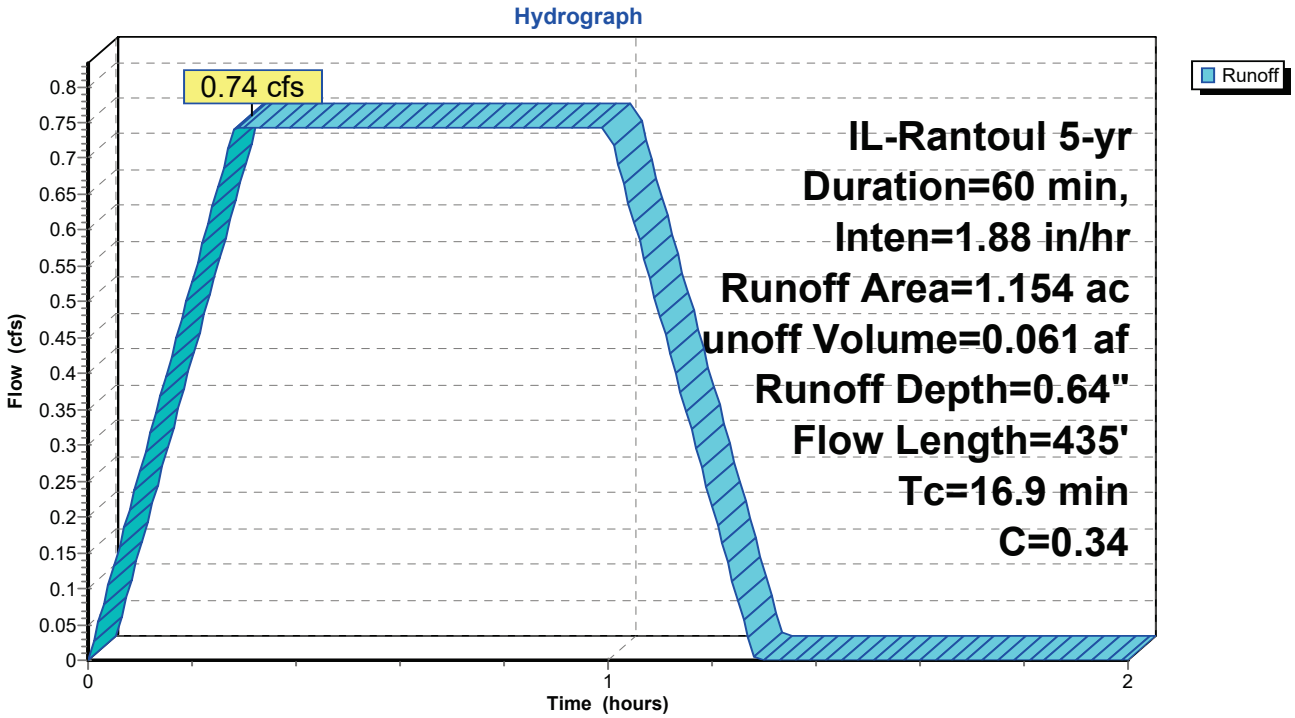
Runoff = 0.74 cfs @ 0.29 hrs, Volume= 0.061 af, Depth= 0.64"
Routed to Pond I15 : Inlet 1-5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=60 min, Inten=1.88 in/hr

Area (ac)	C	Description
0.960	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.136	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.007	0.40	Orthents, loamy, 1 to 7 percent slopes (802B), Well drained, HSG C
0.051	0.95	Sidewalk
1.154	0.34	Weighted Average
1.103		95.58% Pervious Area
0.051		4.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0051	0.13		**Sheet Flow, Grass area W of parking area** Grass: Short n= 0.150 P2= 5.80"
4.3	335	0.0344	1.30		**Shallow Concentrated Flow, Grass area W of parking area** Short Grass Pasture Kv= 7.0 fps
16.9	435	Total			

Subcatchment CA8: West Building Area



Summary for Subcatchment CA9: Building entrance

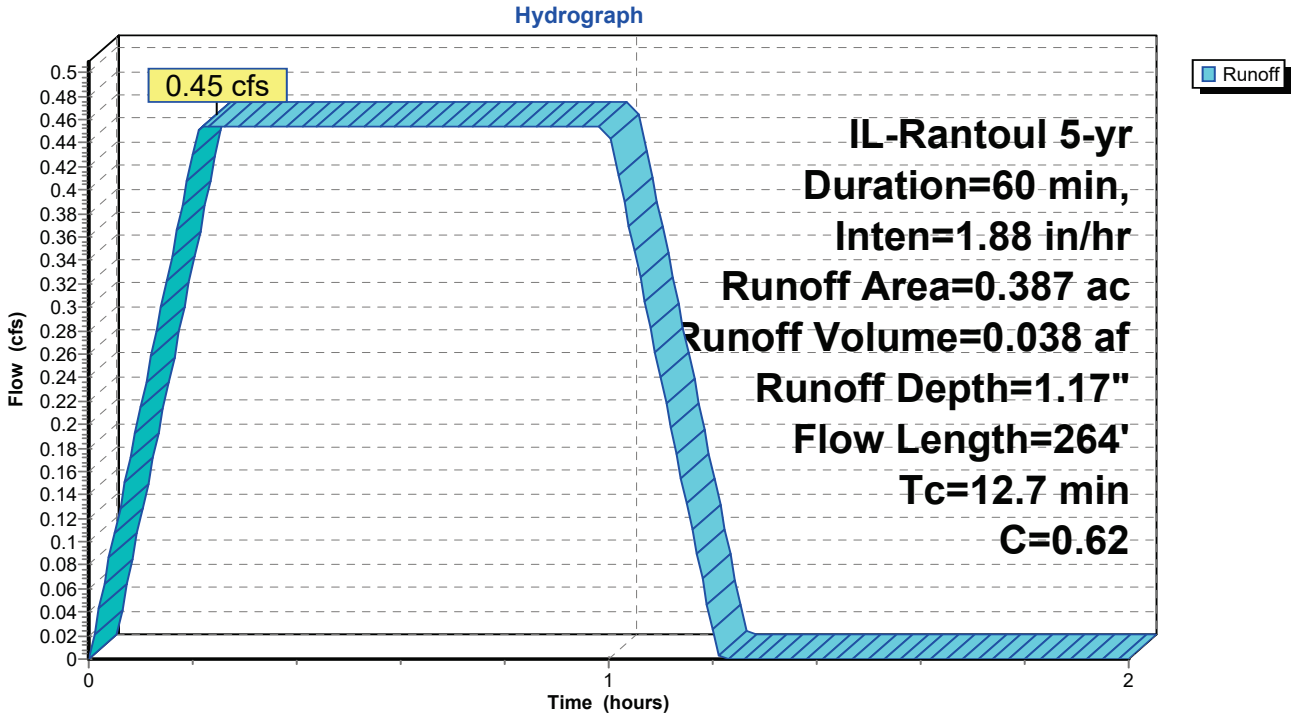
Runoff = 0.45 cfs @ 0.22 hrs, Volume= 0.038 af, Depth= 1.17"
Routed to Pond I71 : Inlet 7-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=60 min, Inten=1.88 in/hr

Area (ac)	C	Description
0.111	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.004	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.032	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.096	0.95	Sidewalk
0.144	0.60	Gravel
0.387	0.62	Weighted Average
0.291		75.19% Pervious Area
0.096		24.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.7	148	0.0135	0.21		**Sheet Flow, Gass SE of building** Grass: Short n= 0.150 P2= 5.80"
1.0	116	0.0088	1.90		**Shallow Concentrated Flow, Access Road** Paved Kv= 20.3 fps
12.7	264	Total			

Subcatchment CA9: Building entrance



Summary for Reach R10: Pipe CA10 to I81

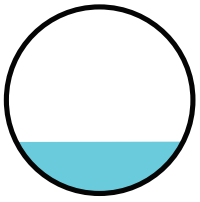
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.432 ac,100.00% Impervious, Inflow Depth = 1.79" for 5-yr event
Inflow = 0.78 cfs @ 0.03 hrs, Volume= 0.064 af
Outflow = 0.78 cfs @ 0.23 hrs, Volume= 0.064 af, Atten= 0%, Lag= 12.0 min
Routed to Pond I81 : Inlet 8-1

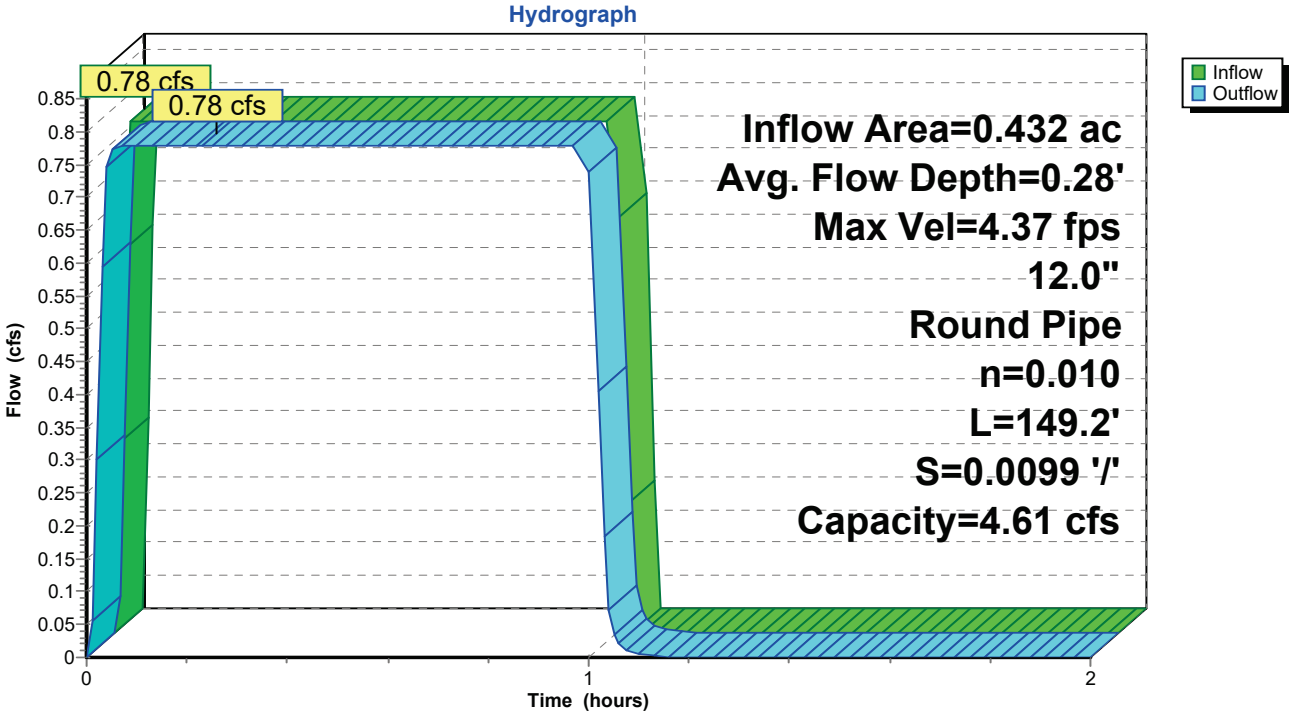
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.37 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 3.42 fps, Avg. Travel Time= 0.7 min

Peak Storage= 27 cf @ 0.23 hrs
Average Depth at Peak Storage= 0.28' , Surface Width= 0.90'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 4.61 cfs

12.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 149.2' Slope= 0.0099 '/'
Inlet Invert= 750.17', Outlet Invert= 748.69'



Reach R10: Pipe CA10 to I81



Summary for Reach R14: Pipe I14 to Pond

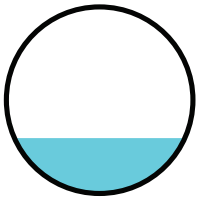
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 9.206 ac, 9.55% Impervious, Inflow Depth > 0.93" for 5-yr event
Inflow = 8.60 cfs @ 0.99 hrs, Volume= 0.711 af
Outflow = 8.60 cfs @ 1.00 hrs, Volume= 0.711 af, Atten= 0%, Lag= 0.6 min
Routed to Pond P1 : Detention Pond

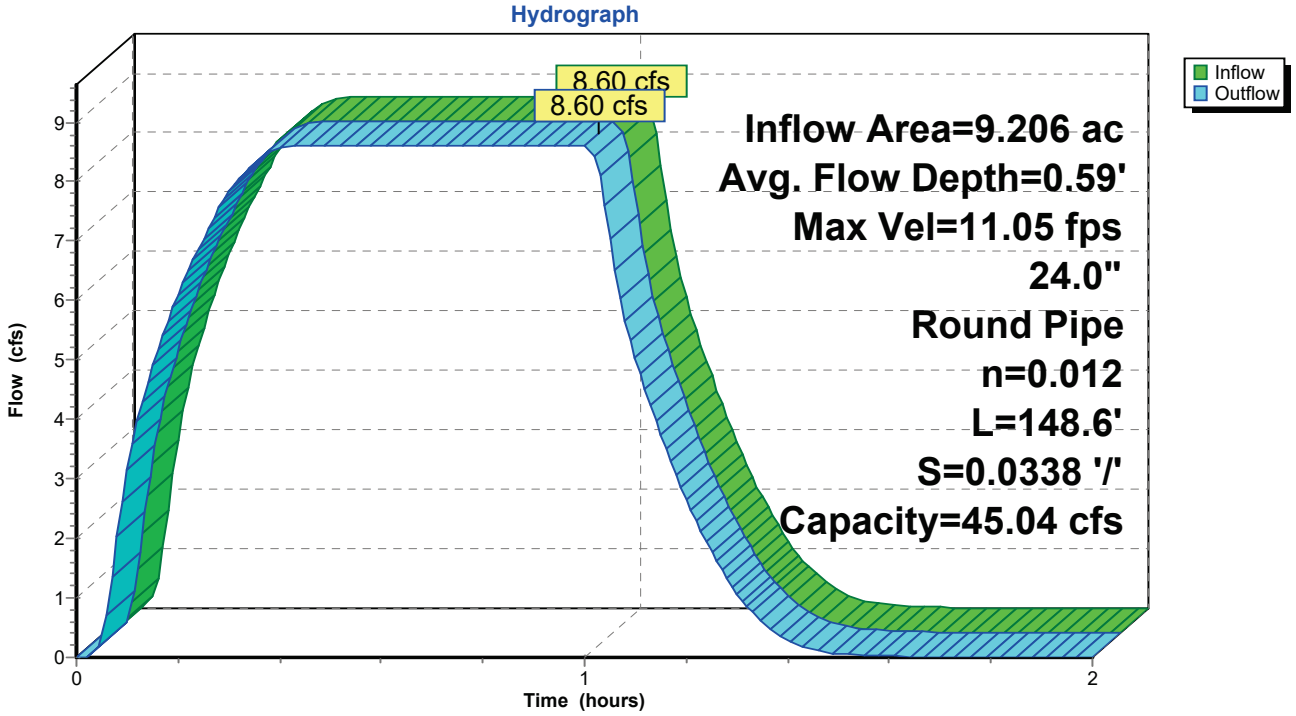
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 11.05 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 7.15 fps, Avg. Travel Time= 0.3 min

Peak Storage= 116 cf @ 1.00 hrs
Average Depth at Peak Storage= 0.59' , Surface Width= 1.83'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 45.04 cfs

24.0" Round Pipe
n= 0.012 Steel, smooth
Length= 148.6' Slope= 0.0338 '/'
Inlet Invert= 741.84', Outlet Invert= 736.82'



Reach R14: Pipe I14 to Pond



Summary for Reach R15: Pipe I15 to I14

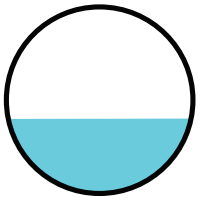
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 8.856 ac, 9.93% Impervious, Inflow Depth > 0.94" for 5-yr event
Inflow = 8.40 cfs @ 1.00 hrs, Volume= 0.694 af
Outflow = 8.40 cfs @ 1.00 hrs, Volume= 0.694 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I14 : Inlet 1-4

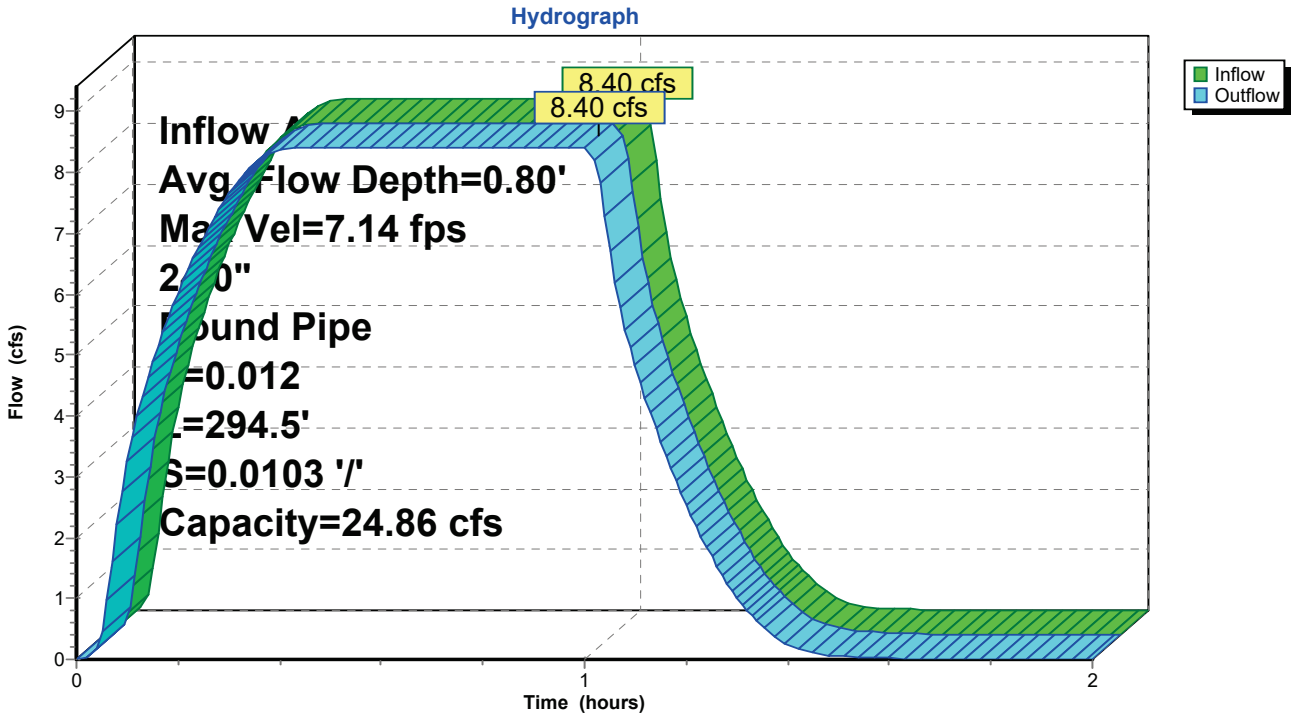
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 7.14 fps, Min. Travel Time= 0.7 min
Avg. Velocity = 4.62 fps, Avg. Travel Time= 1.1 min

Peak Storage= 346 cf @ 1.00 hrs
Average Depth at Peak Storage= 0.80' , Surface Width= 1.96'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 24.86 cfs

24.0" Round Pipe
n= 0.012 Steel, smooth
Length= 294.5' Slope= 0.0103 '/'
Inlet Invert= 744.87', Outlet Invert= 741.84'



Reach R15: Pipe I15 to I14



Summary for Reach R21: Pipe SS31 to SS23

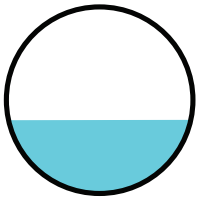
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 6.155 ac, 4.74% Impervious, Inflow Depth = 0.92" for 5-yr event
Inflow = 5.68 cfs @ 0.99 hrs, Volume= 0.470 af
Outflow = 5.68 cfs @ 1.00 hrs, Volume= 0.470 af, Atten= 0%, Lag= 0.6 min
Routed to Pond I15 : Inlet 1-5

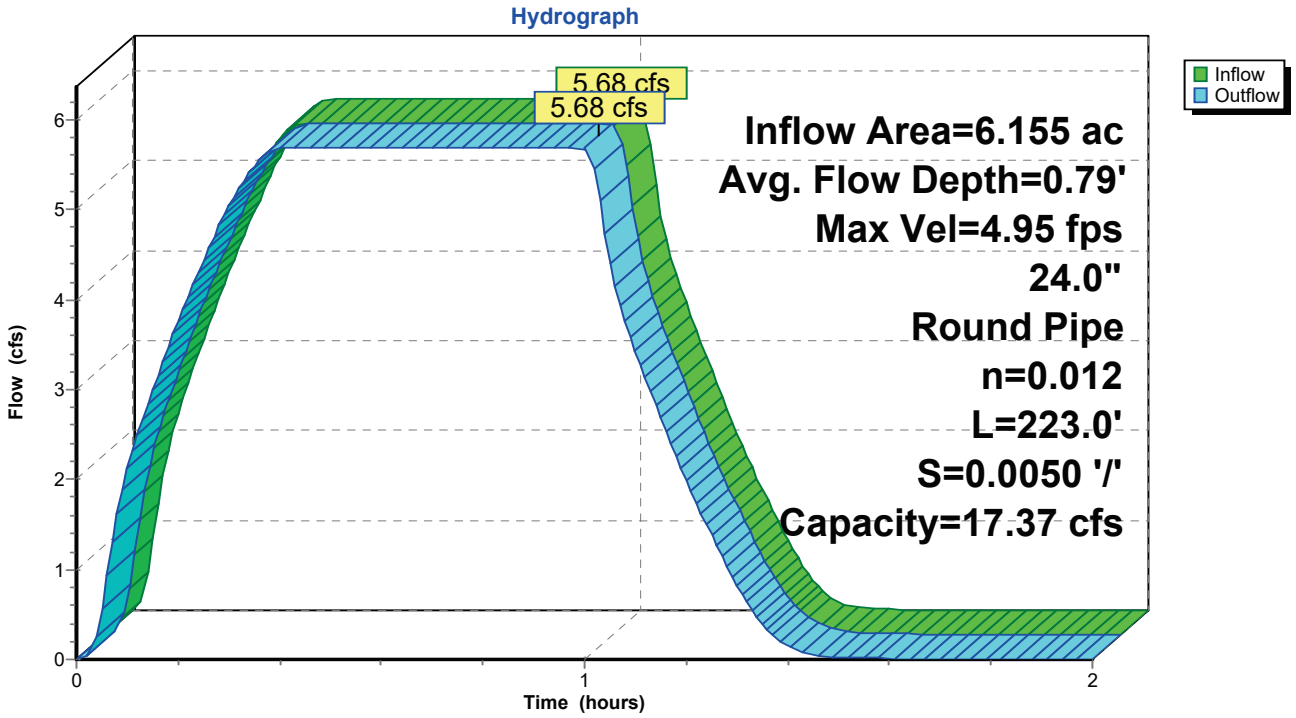
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.95 fps, Min. Travel Time= 0.8 min
Avg. Velocity = 3.20 fps, Avg. Travel Time= 1.2 min

Peak Storage= 256 cf @ 1.00 hrs
Average Depth at Peak Storage= 0.79' , Surface Width= 1.95'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 17.37 cfs

24.0" Round Pipe
n= 0.012 Steel, smooth
Length= 223.0' Slope= 0.0050 '/'
Inlet Invert= 746.00', Outlet Invert= 744.88'



Reach R21: Pipe SS31 to SS23



Summary for Reach R31: Pipe I31 to I21

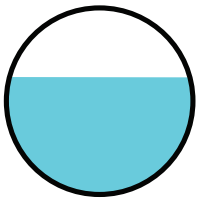
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 5.442 ac, 0.96% Impervious, Inflow Depth = 0.91" for 5-yr event
Inflow = 4.98 cfs @ 0.55 hrs, Volume= 0.411 af
Outflow = 4.98 cfs @ 0.59 hrs, Volume= 0.411 af, Atten= 0%, Lag= 2.4 min
Routed to Pond I21 : Inlet 2-1

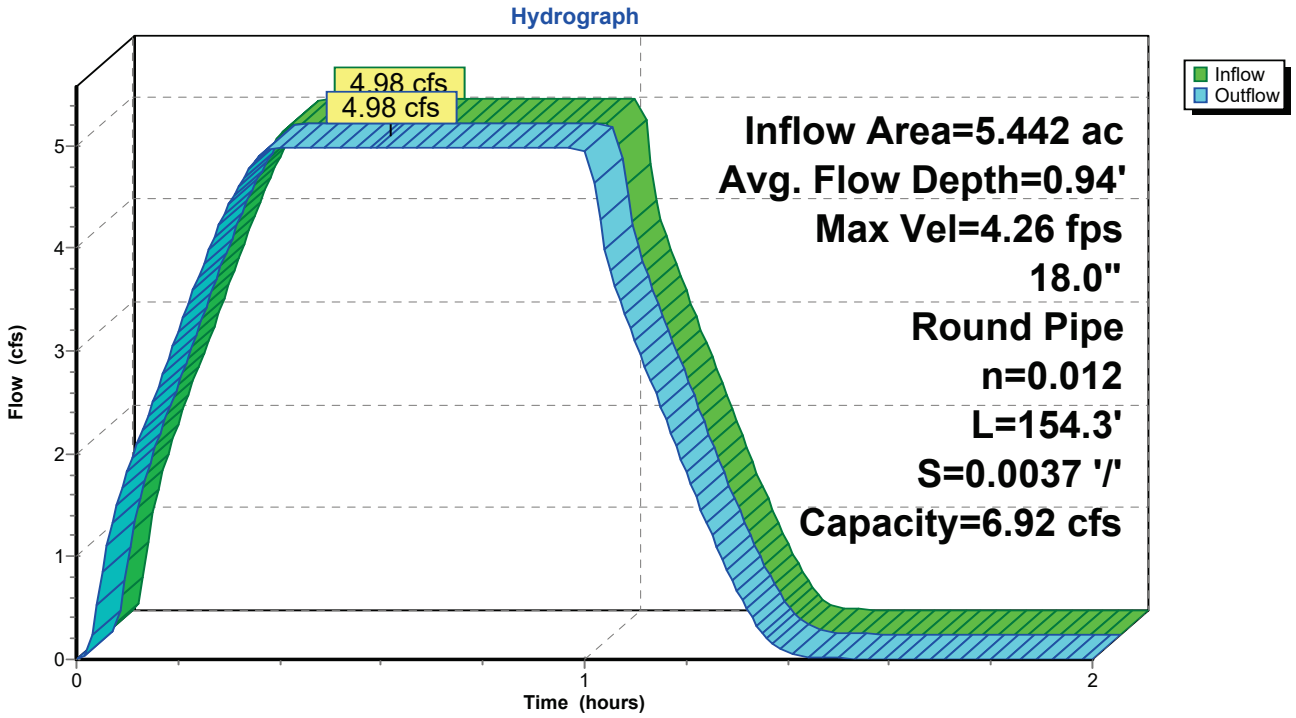
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.26 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 2.75 fps, Avg. Travel Time= 0.9 min

Peak Storage= 180 cf @ 0.59 hrs
Average Depth at Peak Storage= 0.94' , Surface Width= 1.45'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 6.92 cfs

18.0" Round Pipe
n= 0.012 Steel, smooth
Length= 154.3' Slope= 0.0037 '/'
Inlet Invert= 747.75', Outlet Invert= 747.18'



Reach R31: Pipe I31 to I21



Summary for Reach R41: Pipe I41 to I31

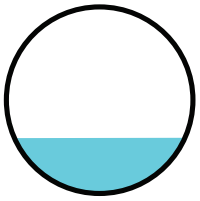
[52] Hint: Inlet/Outlet conditions not evaluated
[80] Warning: Exceeded Pond I41 by 0.21' @ 1.03 hrs (0.19 cfs 0.001 af)

Inflow Area = 0.229 ac,100.00% Impervious, Inflow Depth = 1.79" for 5-yr event
Inflow = 0.41 cfs @ 0.38 hrs, Volume= 0.034 af
Outflow = 0.41 cfs @ 1.00 hrs, Volume= 0.034 af, Atten= 0%, Lag= 37.2 min
Routed to Pond I21 : Inlet 2-1

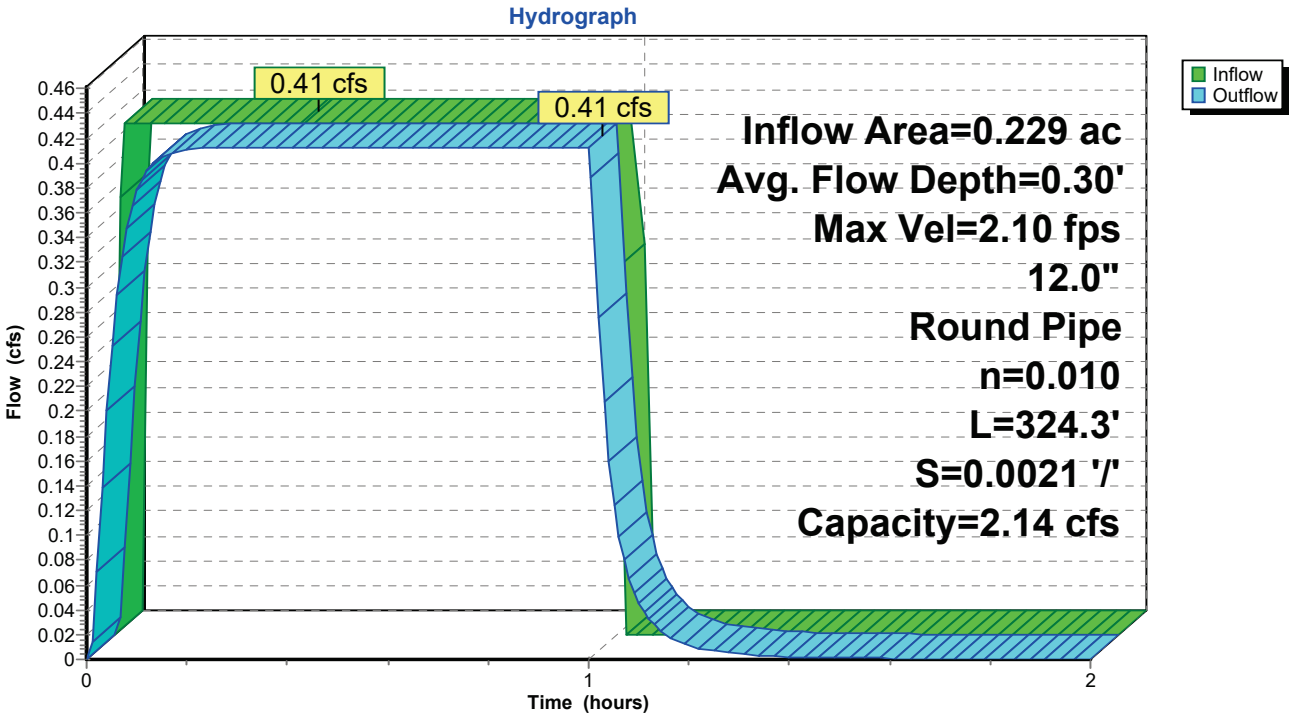
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 2.10 fps, Min. Travel Time= 2.6 min
Avg. Velocity = 1.29 fps, Avg. Travel Time= 4.2 min

Peak Storage= 64 cf @ 1.00 hrs
Average Depth at Peak Storage= 0.30' , Surface Width= 0.91'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 2.14 cfs

12.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 324.3' Slope= 0.0021 '/'
Inlet Invert= 748.86', Outlet Invert= 748.17'



Reach R41: Pipe I41 to I31



Summary for Reach R51: Pipe I51 to I31

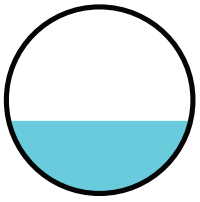
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 2.540 ac, 1.02% Impervious, Inflow Depth = 0.90" for 5-yr event
Inflow = 2.30 cfs @ 0.57 hrs, Volume= 0.190 af
Outflow = 2.30 cfs @ 0.55 hrs, Volume= 0.190 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I31 : Manhole 3-1

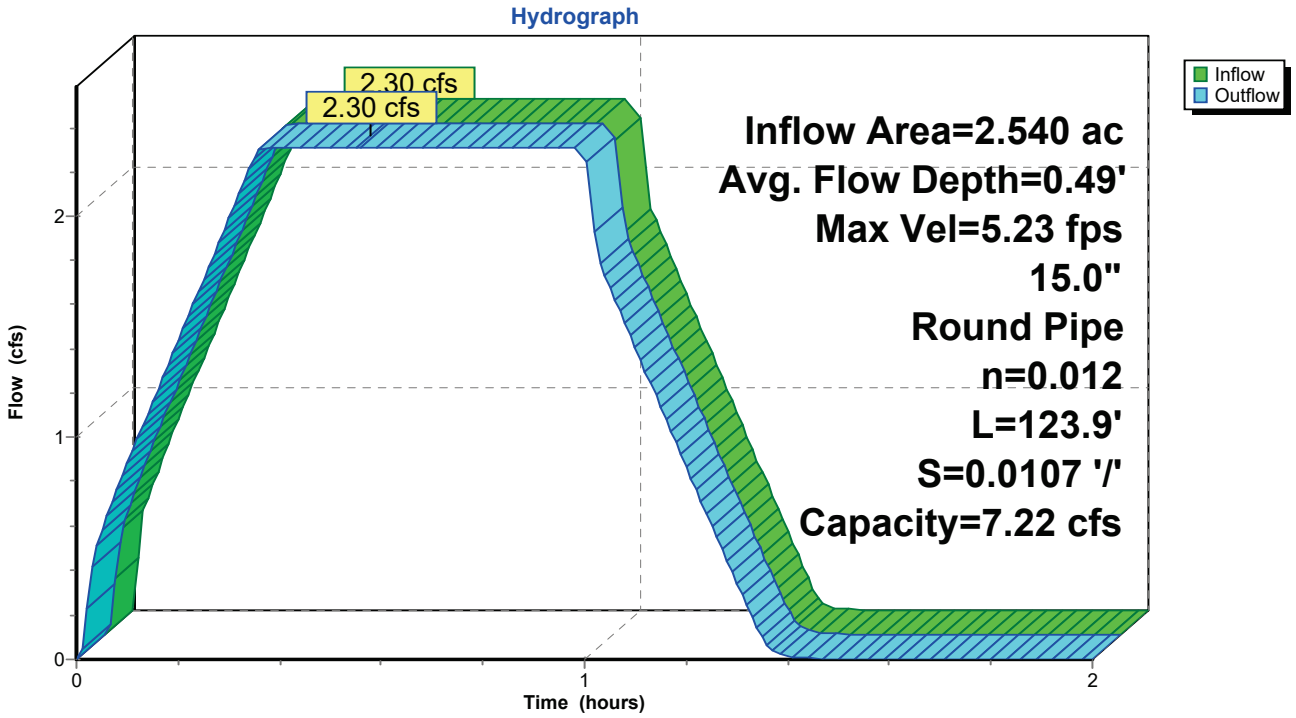
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 5.23 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 3.65 fps, Avg. Travel Time= 0.6 min

Peak Storage= 55 cf @ 0.55 hrs
Average Depth at Peak Storage= 0.49' , Surface Width= 1.22'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 7.22 cfs

15.0" Round Pipe
n= 0.012 Steel, smooth
Length= 123.9' Slope= 0.0107 '/'
Inlet Invert= 749.07', Outlet Invert= 747.75'



Reach R51: Pipe I51 to I31



Summary for Reach R52: Pipe I52 to I51

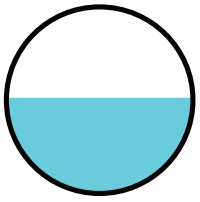
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 2.186 ac, 0.27% Impervious, Inflow Depth = 0.86" for 5-yr event
Inflow = 1.89 cfs @ 0.52 hrs, Volume= 0.156 af
Outflow = 1.89 cfs @ 0.53 hrs, Volume= 0.156 af, Atten= 0%, Lag= 0.6 min
Routed to Pond I51 : Inlet 5-1

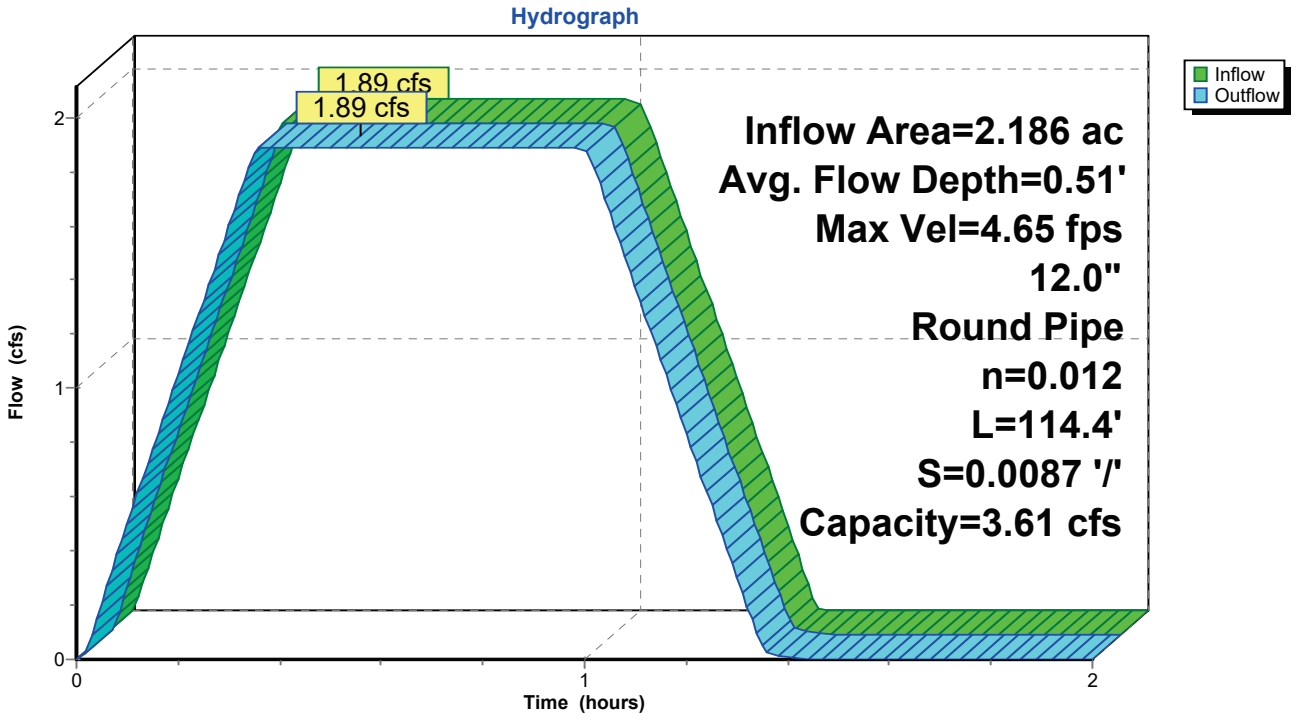
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.65 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 3.34 fps, Avg. Travel Time= 0.6 min

Peak Storage= 46 cf @ 0.53 hrs
Average Depth at Peak Storage= 0.51' , Surface Width= 1.00'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.61 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 114.4' Slope= 0.0087 '/'
Inlet Invert= 750.10', Outlet Invert= 749.10'



Reach R52: Pipe I52 to I51



Summary for Reach R53: Pipe I53 to I52

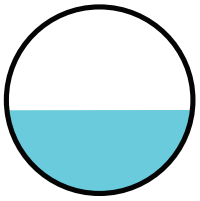
[52] Hint: Inlet/Outlet conditions not evaluated
[80] Warning: Exceeded Pond I53 by 0.04' @ 1.35 hrs (0.01 cfs 0.000 af)

Inflow Area = 0.156 ac, 0.00% Impervious, Inflow Depth = 1.00" for 5-yr event
Inflow = 0.16 cfs @ 0.46 hrs, Volume= 0.013 af
Outflow = 0.16 cfs @ 0.53 hrs, Volume= 0.013 af, Atten= 0%, Lag= 4.2 min
Routed to Pond I52 : Inlet 5-2

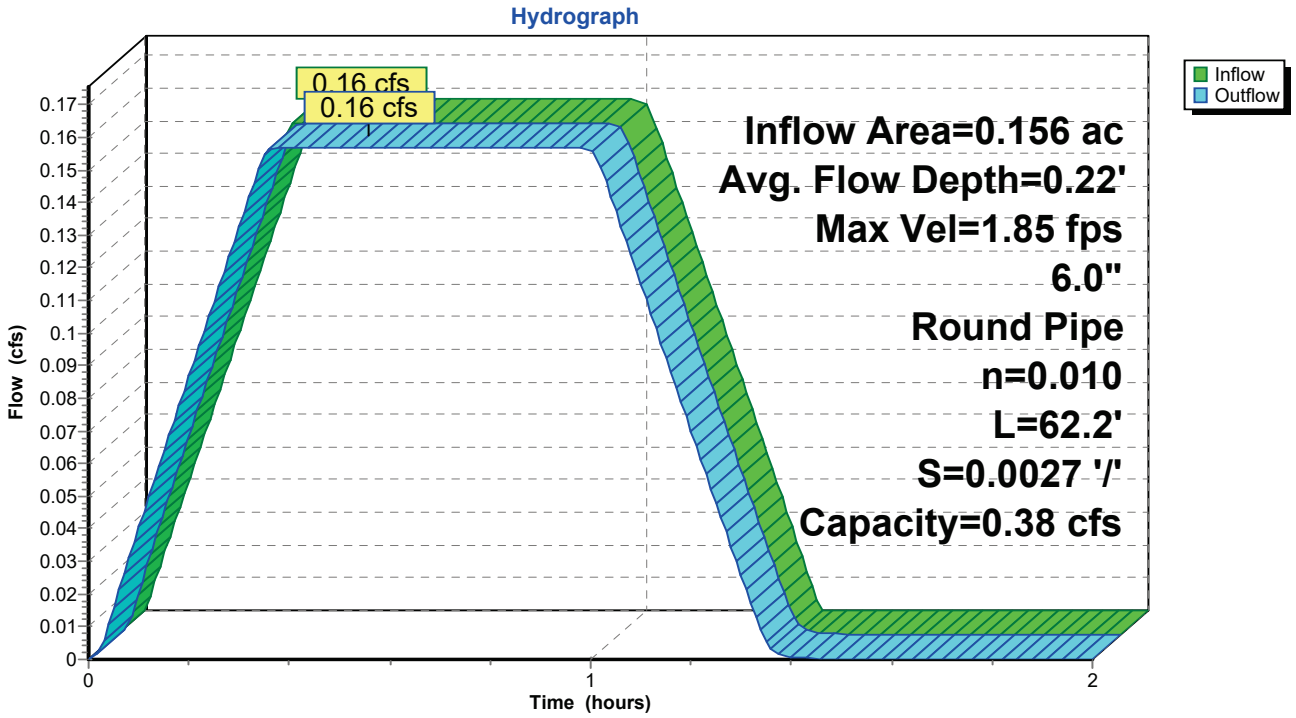
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 1.85 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 1.40 fps, Avg. Travel Time= 0.7 min

Peak Storage= 5 cf @ 0.53 hrs
Average Depth at Peak Storage= 0.22' , Surface Width= 0.50'
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 0.38 cfs

6.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 62.2' Slope= 0.0027 '/'
Inlet Invert= 750.43', Outlet Invert= 750.26'



Reach R53: Pipe I53 to I52



Summary for Reach R54: Pipe I54 to I53

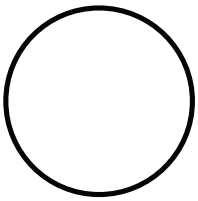
[52] Hint: Inlet/Outlet conditions not evaluated

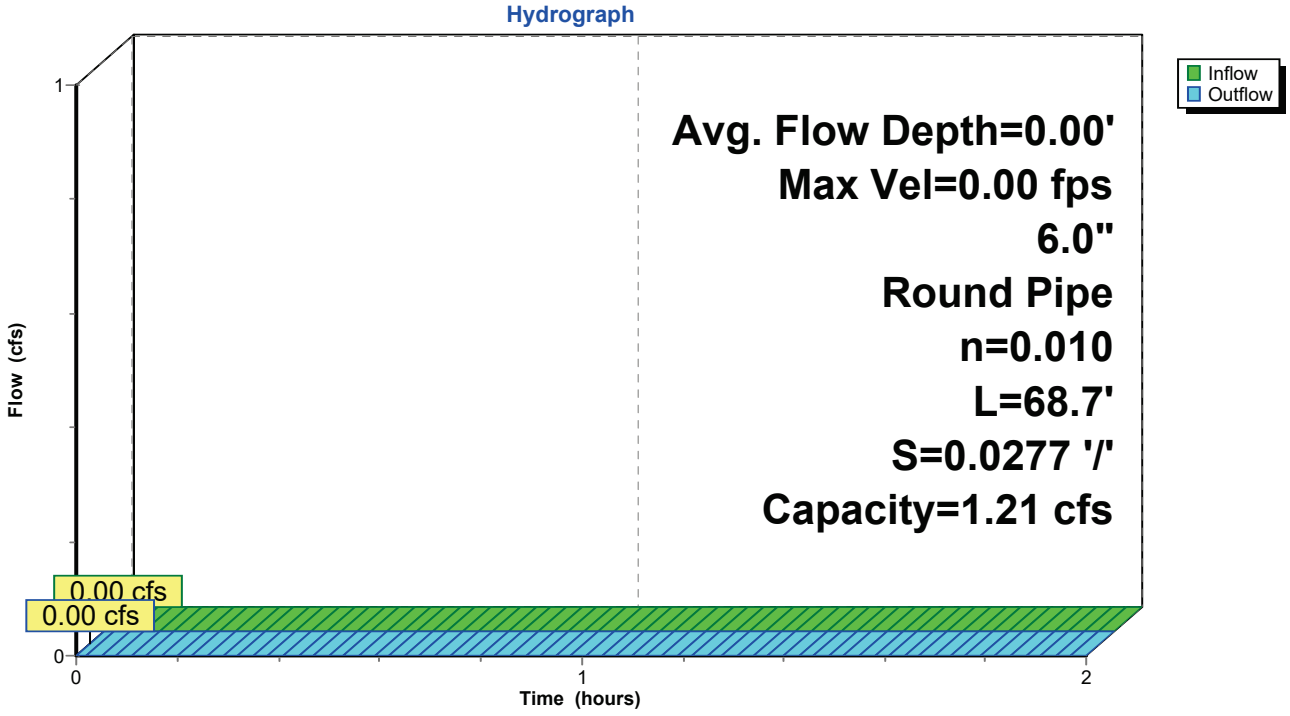
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I53 : Inlet 5-3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 1.21 cfs

6.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 68.7' Slope= 0.0277 '/'
Inlet Invert= 752.46', Outlet Invert= 750.56'





Summary for Reach R61: Pipe I61 to I31

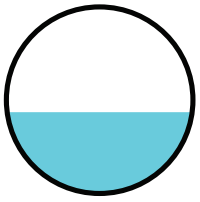
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 2.392 ac, 0.00% Impervious, Inflow Depth = 0.88" for 5-yr event
Inflow = 2.12 cfs @ 0.47 hrs, Volume= 0.175 af
Outflow = 2.12 cfs @ 0.48 hrs, Volume= 0.175 af, Atten= 0%, Lag= 0.6 min
Routed to Pond I31 : Manhole 3-1

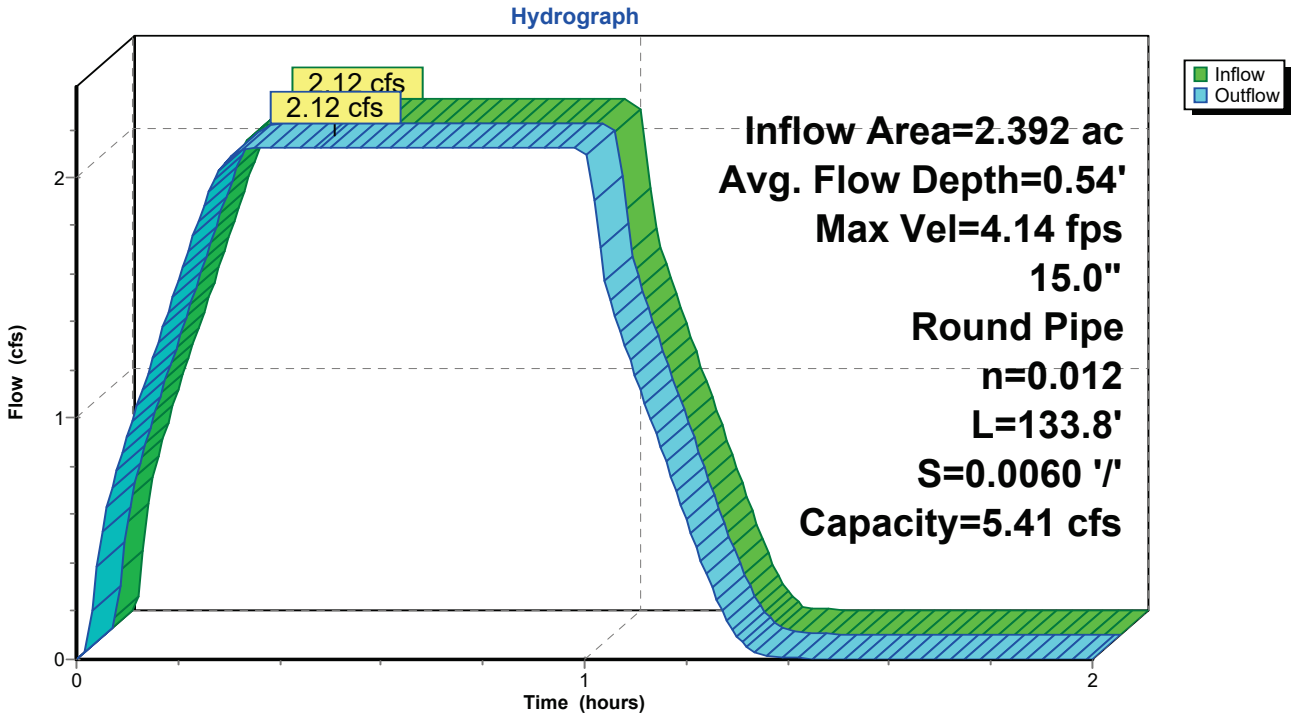
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.14 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 2.60 fps, Avg. Travel Time= 0.9 min

Peak Storage= 69 cf @ 0.48 hrs
Average Depth at Peak Storage= 0.54' , Surface Width= 1.24'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 5.41 cfs

15.0" Round Pipe
n= 0.012 Steel, smooth
Length= 133.8' Slope= 0.0060 '/'
Inlet Invert= 748.55', Outlet Invert= 747.75'



Reach R61: Pipe I61 to I31



Summary for Reach R62: Pipe I62 to I61

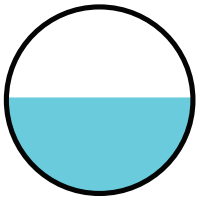
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.749 ac, 0.00% Impervious, Inflow Depth = 0.88" for 5-yr event
Inflow = 1.55 cfs @ 0.48 hrs, Volume= 0.128 af
Outflow = 1.55 cfs @ 0.47 hrs, Volume= 0.128 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I61 : Manhole 6-1

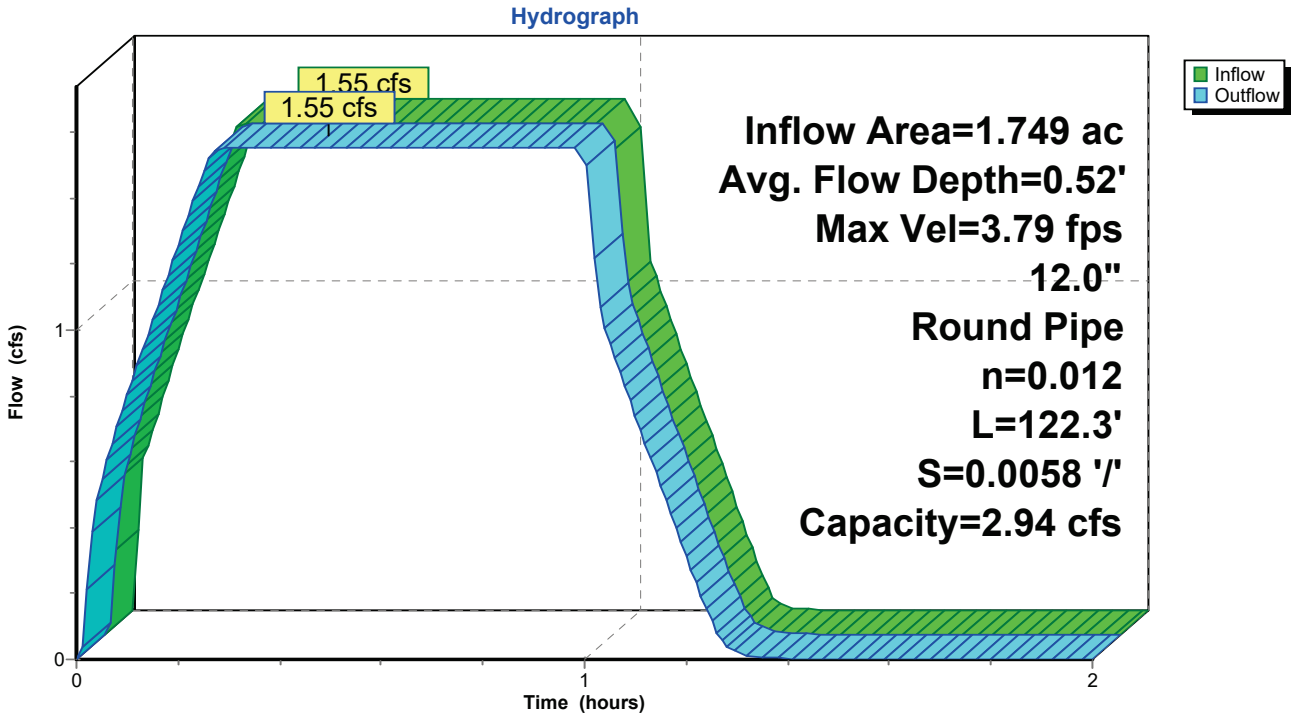
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.79 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 2.49 fps, Avg. Travel Time= 0.8 min

Peak Storage= 50 cf @ 0.47 hrs
Average Depth at Peak Storage= 0.52' , Surface Width= 1.00'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 2.94 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 122.3' Slope= 0.0058 '/'
Inlet Invert= 749.32', Outlet Invert= 748.61'



Reach R62: Pipe I62 to I61



Summary for Reach R63: Pipe I63 to I62

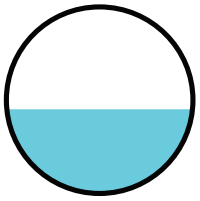
[52] Hint: Inlet/Outlet conditions not evaluated
[80] Warning: Exceeded Pond I63 by 0.07' @ 1.27 hrs (0.02 cfs 0.000 af)

Inflow Area = 1.364 ac, 0.00% Impervious, Inflow Depth = 0.81" for 5-yr event
Inflow = 1.11 cfs @ 0.36 hrs, Volume= 0.092 af
Outflow = 1.11 cfs @ 0.46 hrs, Volume= 0.092 af, Atten= 0%, Lag= 6.0 min
Routed to Pond I62 : Inlet 6-2

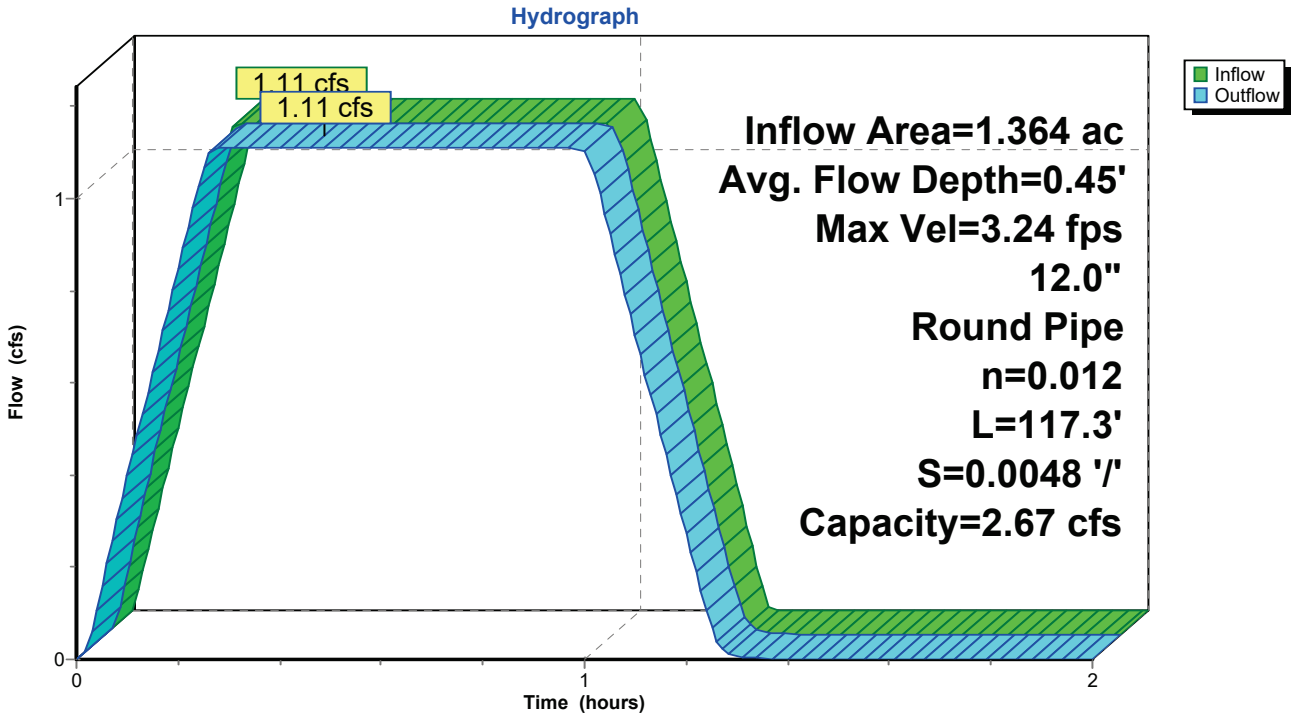
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.24 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 2.27 fps, Avg. Travel Time= 0.9 min

Peak Storage= 40 cf @ 0.46 hrs
Average Depth at Peak Storage= 0.45' , Surface Width= 1.00'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 2.67 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 117.3' Slope= 0.0048 '/'
Inlet Invert= 749.91', Outlet Invert= 749.35'



Reach R63: Pipe I63 to I62



Summary for Reach R71: Pipe I71 to I15

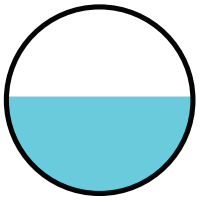
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.547 ac, 34.65% Impervious, Inflow Depth = 1.27" for 5-yr event
Inflow = 1.98 cfs @ 0.55 hrs, Volume= 0.163 af
Outflow = 1.98 cfs @ 0.62 hrs, Volume= 0.163 af, Atten= 0%, Lag= 4.2 min
Routed to Pond I15 : Inlet 1-5

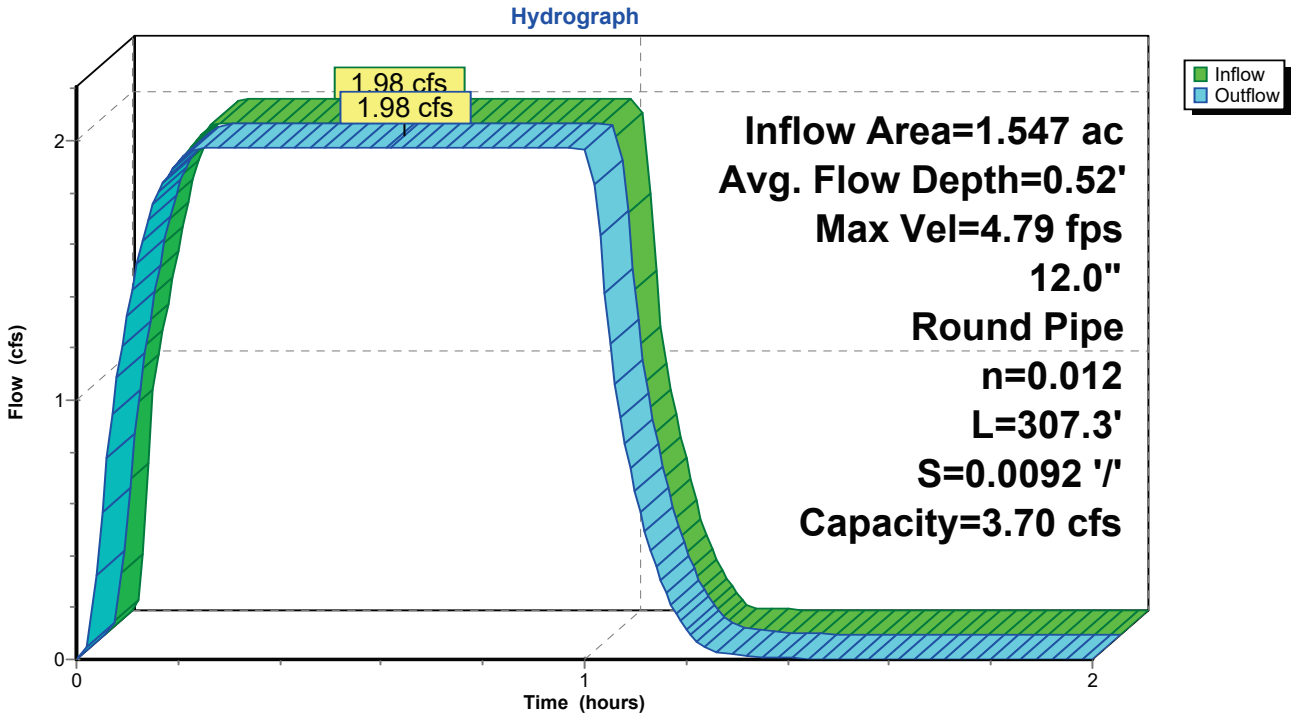
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.79 fps, Min. Travel Time= 1.1 min
Avg. Velocity = 2.91 fps, Avg. Travel Time= 1.8 min

Peak Storage= 127 cf @ 0.62 hrs
Average Depth at Peak Storage= 0.52' , Surface Width= 1.00'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.70 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 307.3' Slope= 0.0092 '/'
Inlet Invert= 747.78', Outlet Invert= 744.96'



Reach R71: Pipe I71 to I15



Summary for Reach R81: Pipe I81 to I71

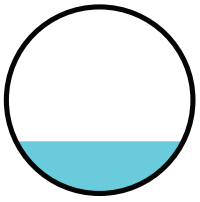
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.432 ac,100.00% Impervious, Inflow Depth = 1.79" for 5-yr event
Inflow = 0.78 cfs @ 0.23 hrs, Volume= 0.064 af
Outflow = 0.78 cfs @ 0.09 hrs, Volume= 0.064 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I71 : Inlet 7-1

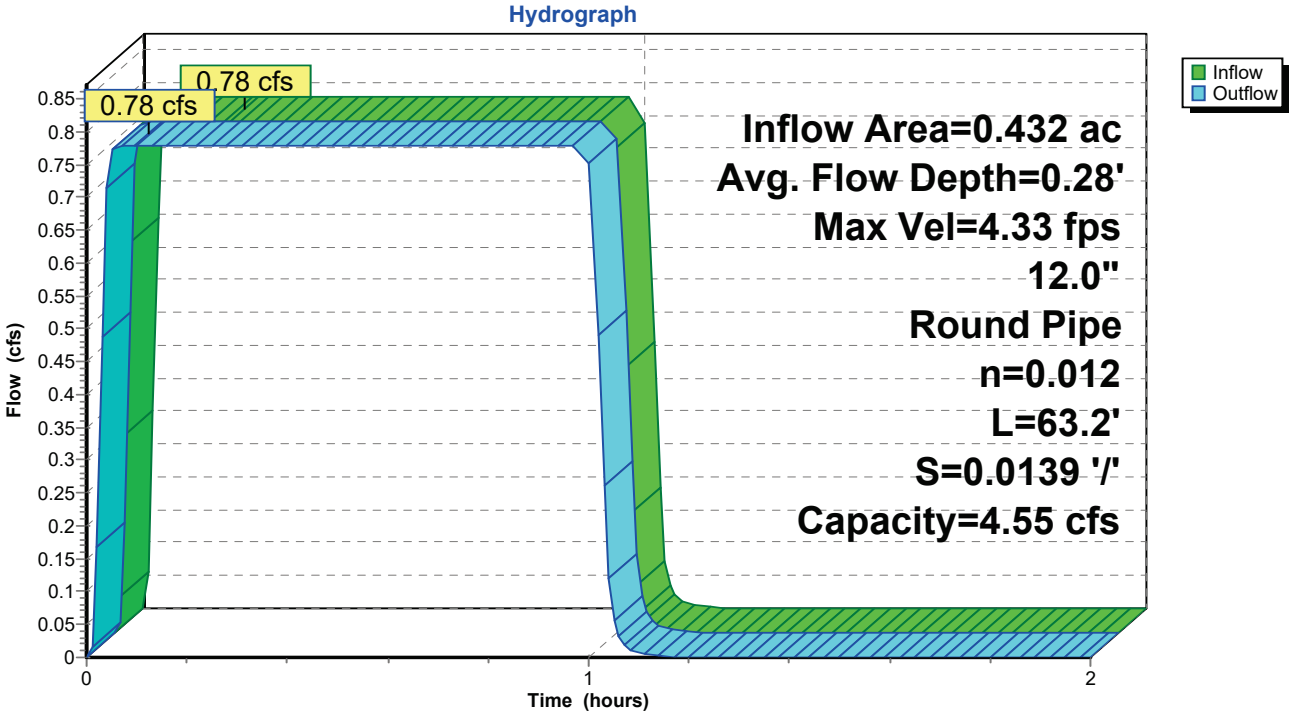
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.33 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 3.32 fps, Avg. Travel Time= 0.3 min

Peak Storage= 11 cf @ 0.09 hrs
Average Depth at Peak Storage= 0.28' , Surface Width= 0.90'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 4.55 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 63.2' Slope= 0.0139 '/'
Inlet Invert= 748.66', Outlet Invert= 747.78'



Reach R81: Pipe I81 to I71



Summary for Reach R91: Pipe I91 to I71

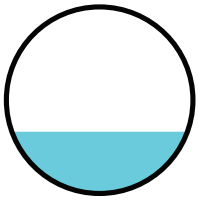
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.728 ac, 1.10% Impervious, Inflow Depth = 1.01" for 5-yr event
Inflow = 0.74 cfs @ 0.37 hrs, Volume= 0.061 af
Outflow = 0.74 cfs @ 0.54 hrs, Volume= 0.061 af, Atten= 0%, Lag= 10.2 min
Routed to Pond I71 : Inlet 7-1

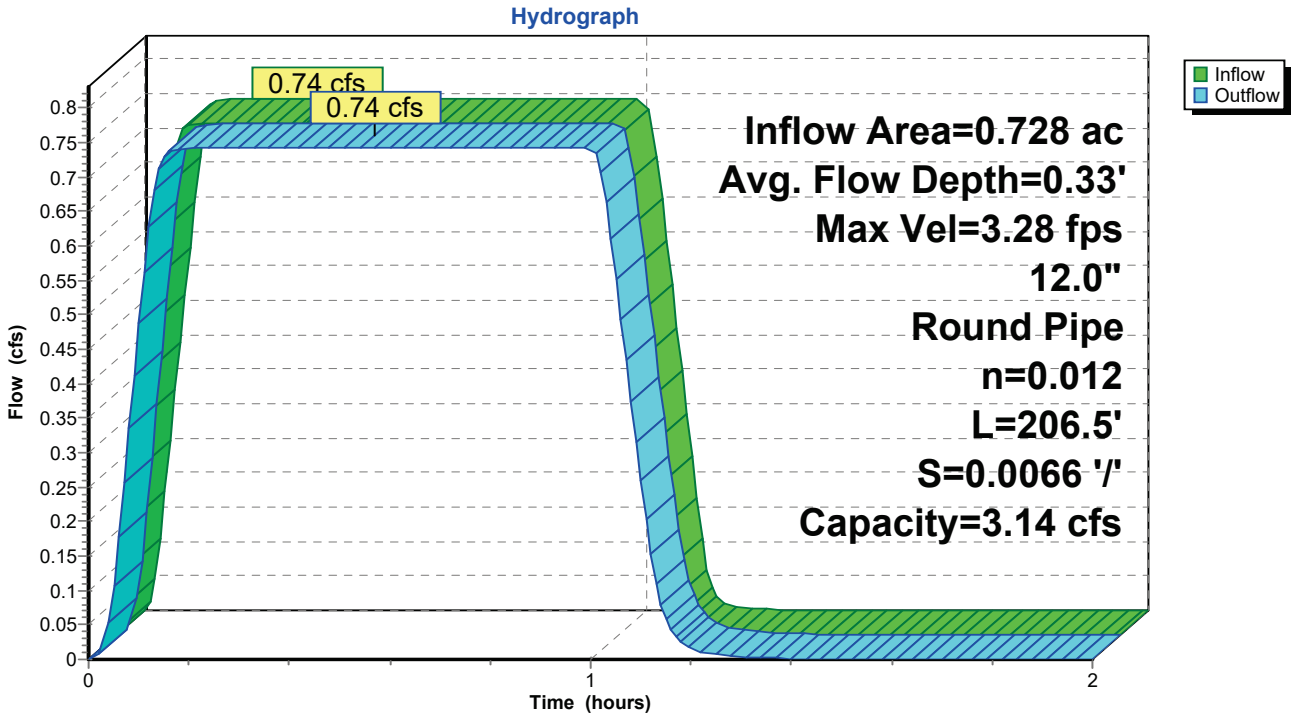
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.28 fps, Min. Travel Time= 1.1 min
Avg. Velocity = 2.03 fps, Avg. Travel Time= 1.7 min

Peak Storage= 47 cf @ 0.53 hrs
Average Depth at Peak Storage= 0.33' , Surface Width= 0.94'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.14 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 206.5' Slope= 0.0066 '/'
Inlet Invert= 750.30', Outlet Invert= 748.93'



Reach R91: Pipe I91 to I71



Summary for Reach R92: Pipe I92 to I91

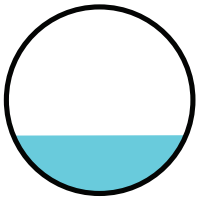
[52] Hint: Inlet/Outlet conditions not evaluated
[80] Warning: Exceeded Pond I92 by 0.07' @ 1.13 hrs (0.02 cfs 0.000 af)

Inflow Area = 0.656 ac, 1.22% Impervious, Inflow Depth = 1.02" for 5-yr event
Inflow = 0.67 cfs @ 0.17 hrs, Volume= 0.055 af
Outflow = 0.67 cfs @ 0.36 hrs, Volume= 0.055 af, Atten= 0%, Lag= 11.4 min
Routed to Pond I91 : Inlet 9-1

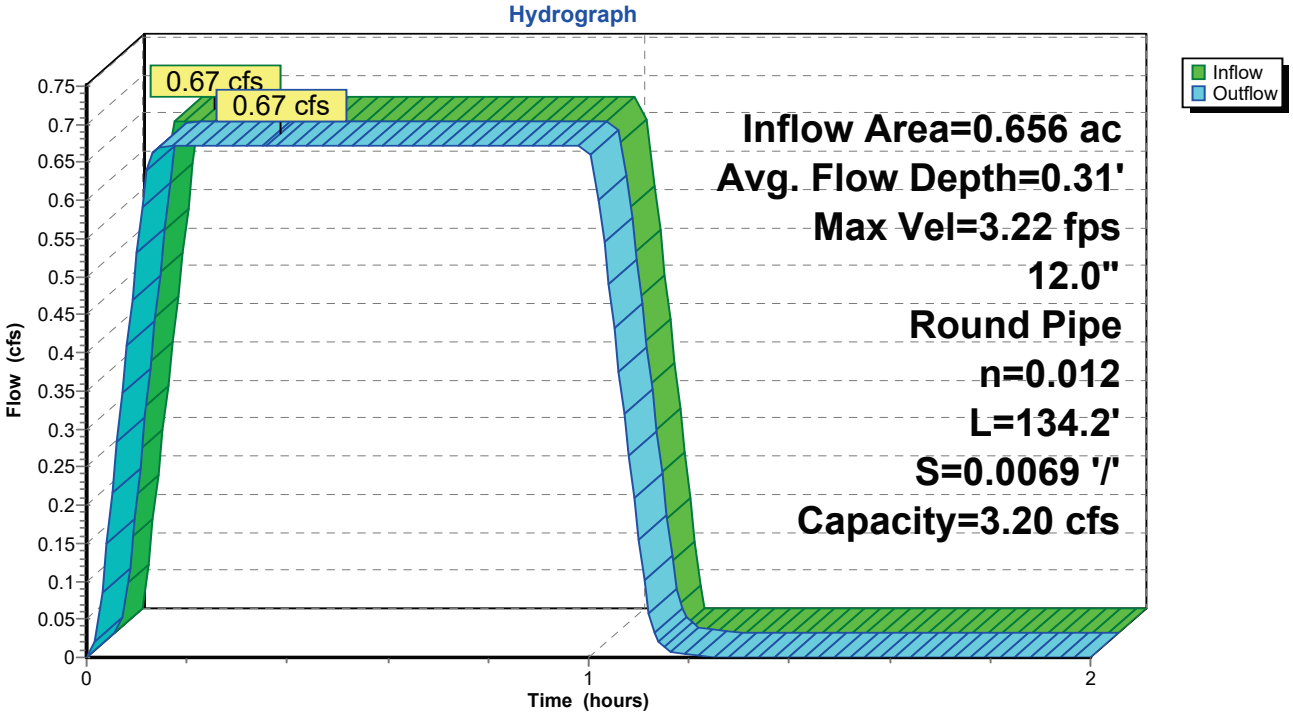
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.22 fps, Min. Travel Time= 0.7 min
Avg. Velocity = 2.35 fps, Avg. Travel Time= 1.0 min

Peak Storage= 28 cf @ 0.36 hrs
Average Depth at Peak Storage= 0.31' , Surface Width= 0.93'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.20 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 134.2' Slope= 0.0069 '/'
Inlet Invert= 751.22', Outlet Invert= 750.30'



Reach R92: Pipe I92 to I91



Summary for Pond I14: Inlet 1-4

[57] Hint: Peaked at 742.80' (Flood elevation advised)
[62] Hint: Exceeded Reach R15 OUTLET depth by 0.16' @ 1.03 hrs

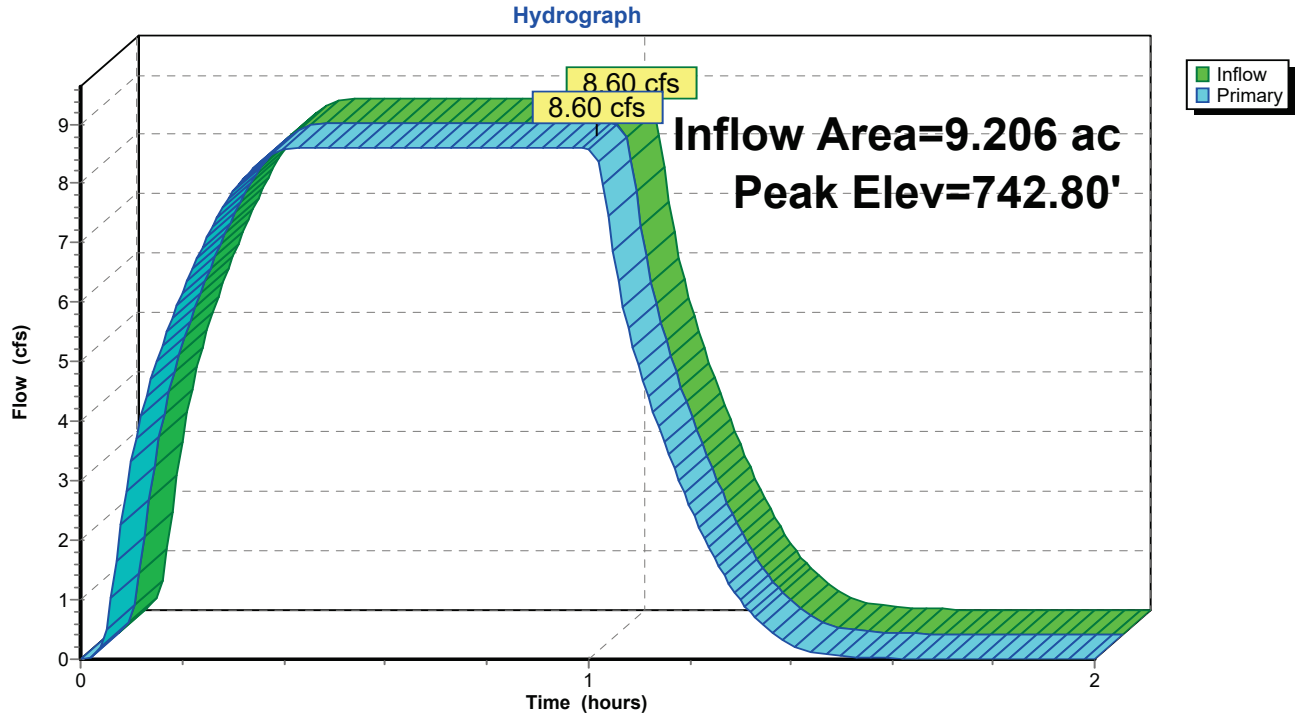
Inflow Area = 9.206 ac, 9.55% Impervious, Inflow Depth > 0.93" for 5-yr event
Inflow = 8.60 cfs @ 1.00 hrs, Volume= 0.711 af
Outflow = 8.60 cfs @ 0.99 hrs, Volume= 0.711 af, Atten= 0%, Lag= 0.0 min
Primary = 8.60 cfs @ 0.99 hrs, Volume= 0.711 af
Routed to Reach R14 : Pipe I14 to Pond

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 742.80' @ 0.87 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	741.84'	**24.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	741.84'	**24.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=8.60 cfs @ 0.99 hrs HW=742.80' TW=742.43' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 4.30 cfs @ 2.90 fps)
2=Orifice/Grate (Orifice Controls 4.30 cfs @ 2.90 fps)

Pond I14: Inlet 1-4



Summary for Pond I15: Inlet 1-5

[57] Hint: Peaked at 745.88' (Flood elevation advised)
[62] Hint: Exceeded Reach R21 OUTLET depth by 0.22' @ 1.03 hrs
[62] Hint: Exceeded Reach R71 OUTLET depth by 0.42' @ 1.04 hrs

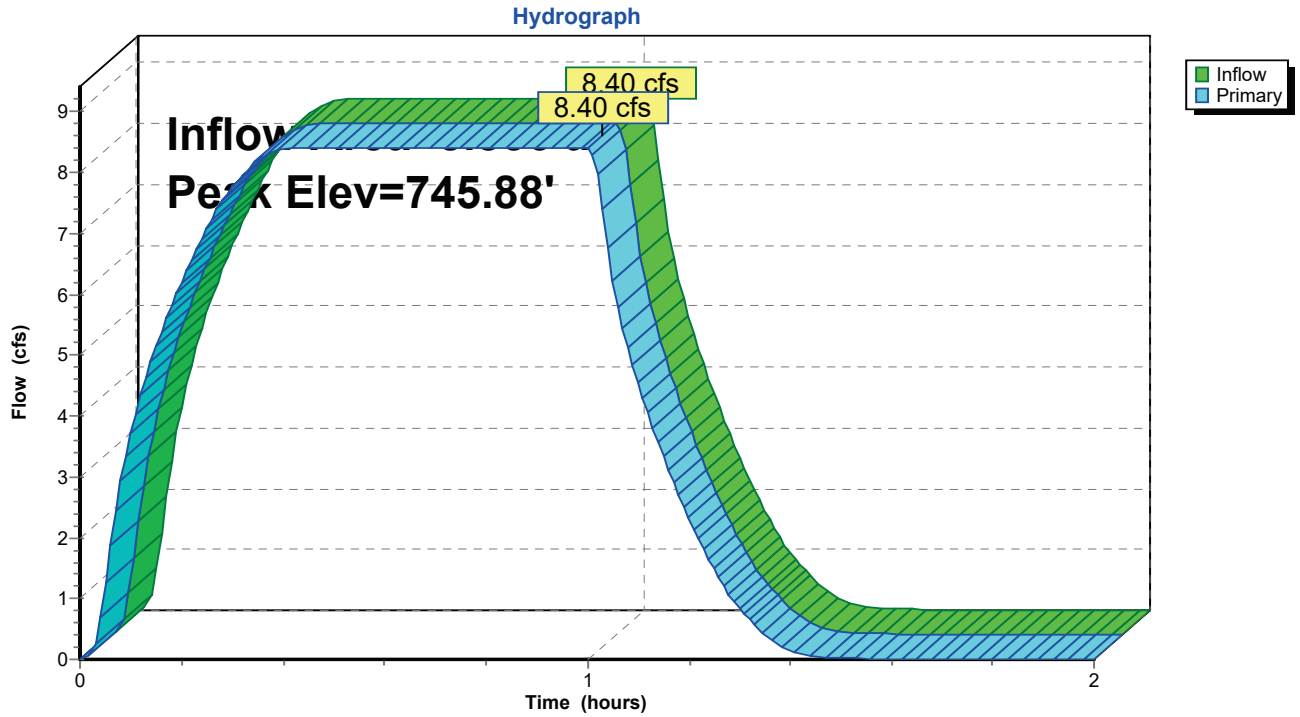
Inflow Area = 8.856 ac, 9.93% Impervious, Inflow Depth > 0.94" for 5-yr event
Inflow = 8.40 cfs @ 1.00 hrs, Volume= 0.694 af
Outflow = 8.40 cfs @ 1.00 hrs, Volume= 0.694 af, Atten= 0%, Lag= 0.0 min
Primary = 8.40 cfs @ 1.00 hrs, Volume= 0.694 af
Routed to Reach R15 : Pipe I15 to I14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 745.88' @ 0.87 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	744.87'	**24.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	744.96'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#3	Primary	744.96'	**24.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=8.40 cfs @ 1.00 hrs HW=745.88' TW=745.67' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 3.56 cfs @ 2.22 fps)
└─**2=Orifice/Grate** (Orifice Controls 1.69 cfs @ 2.22 fps)
└─**3=Orifice/Grate** (Orifice Controls 3.16 cfs @ 2.22 fps)

Pond I15: Inlet 1-5



Summary for Pond I21: Inlet 2-1

[57] Hint: Peaked at 748.14' (Flood elevation advised)
[62] Hint: Exceeded Reach R31 OUTLET depth by 0.05' @ 0.18 hrs

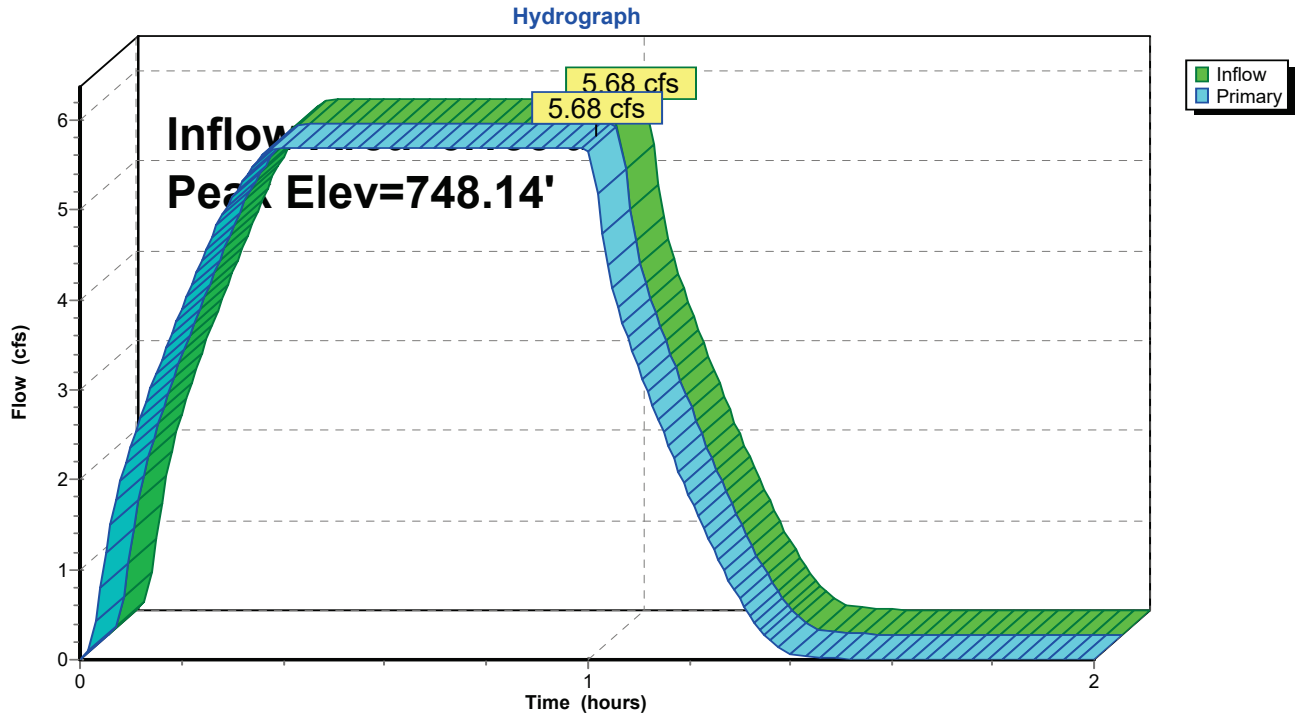
Inflow Area = 6.155 ac, 4.74% Impervious, Inflow Depth = 0.92" for 5-yr event
Inflow = 5.68 cfs @ 1.00 hrs, Volume= 0.470 af
Outflow = 5.68 cfs @ 0.99 hrs, Volume= 0.470 af, Atten= 0%, Lag= 0.0 min
Primary = 5.68 cfs @ 0.99 hrs, Volume= 0.470 af
Routed to Reach R21 : Pipe SS31 to SS23

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 748.14' @ 0.85 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	747.10'	**24.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	748.18'	**18.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#3	Primary	748.17'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=5.68 cfs @ 0.99 hrs HW=748.14' TW=746.79' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 5.68 cfs @ 3.46 fps)
└─**2=Orifice/Grate** (Controls 0.00 cfs)
└─**3=Orifice/Grate** (Controls 0.00 cfs)

Pond I21: Inlet 2-1



Summary for Pond I31: Manhole 3-1

[57] Hint: Peaked at 748.78' (Flood elevation advised)
[62] Hint: Exceeded Reach R51 OUTLET depth by 0.56' @ 1.02 hrs
[62] Hint: Exceeded Reach R61 OUTLET depth by 0.49' @ 1.02 hrs

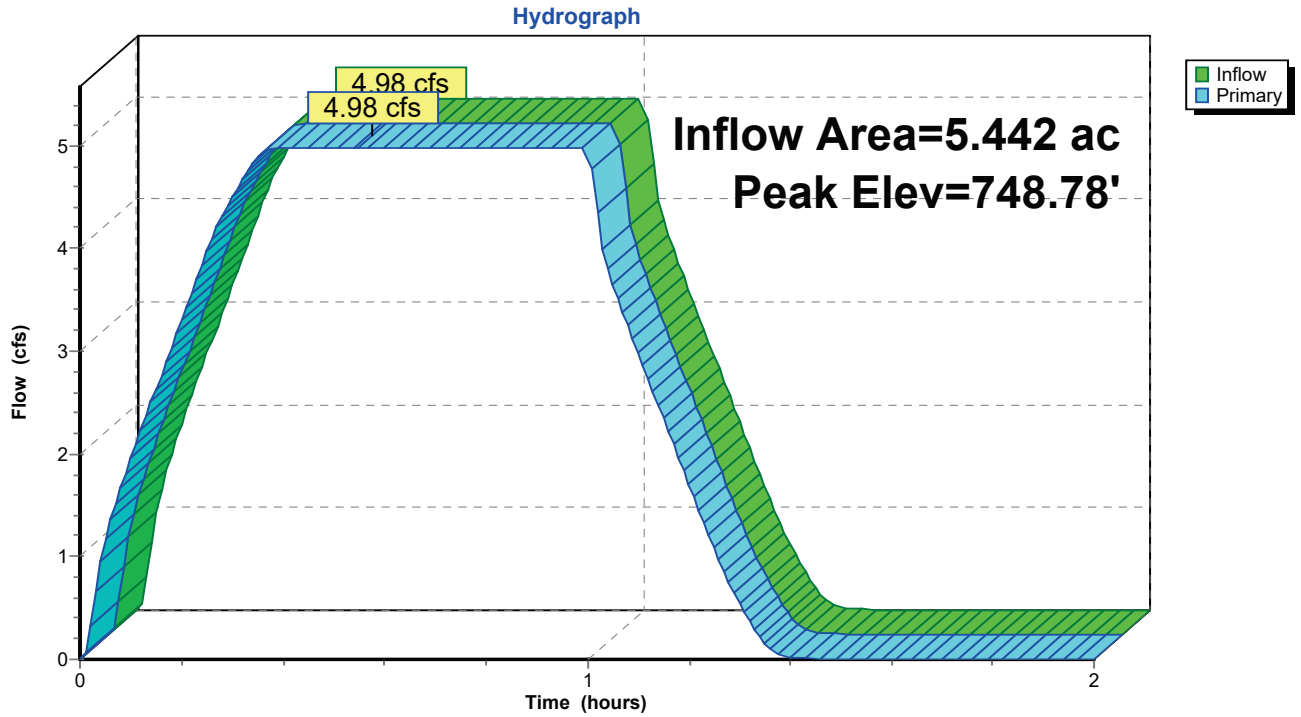
Inflow Area = 5.442 ac, 0.96% Impervious, Inflow Depth = 0.91" for 5-yr event
Inflow = 4.98 cfs @ 0.55 hrs, Volume= 0.411 af
Outflow = 4.98 cfs @ 0.55 hrs, Volume= 0.411 af, Atten= 0%, Lag= 0.0 min
Primary = 4.98 cfs @ 0.55 hrs, Volume= 0.411 af
Routed to Reach R31 : Pipe I31 to I21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 748.78' @ 0.56 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	747.75'	**18.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	747.75'	**15.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#3	Primary	747.75'	**15.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=4.98 cfs @ 0.55 hrs HW=748.78' TW=748.69' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.86 cfs @ 1.44 fps)
└─**2=Orifice/Grate** (Orifice Controls 1.56 cfs @ 1.44 fps)
└─**3=Orifice/Grate** (Orifice Controls 1.56 cfs @ 1.44 fps)

Pond I31: Manhole 3-1



Summary for Pond I41: Inlet 4-1

[57] Hint: Peaked at 749.25' (Flood elevation advised)

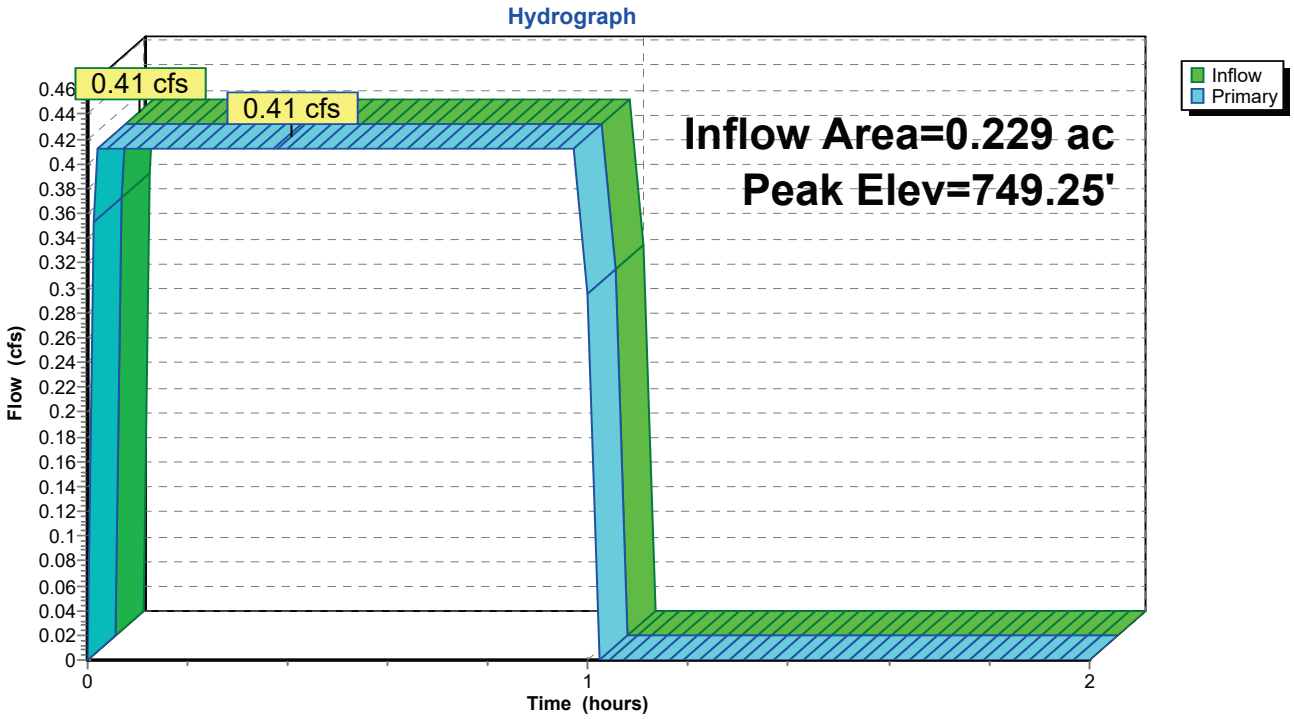
Inflow Area = 0.229 ac,100.00% Impervious, Inflow Depth = 1.79" for 5-yr event
Inflow = 0.41 cfs @ 0.02 hrs, Volume= 0.034 af
Outflow = 0.41 cfs @ 0.38 hrs, Volume= 0.034 af, Atten= 0%, Lag= 21.6 min
Primary = 0.41 cfs @ 0.38 hrs, Volume= 0.034 af
Routed to Reach R41 : Pipe I41 to I31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 749.25' @ 0.90 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	748.86'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.41 cfs @ 0.38 hrs HW=749.25' TW=749.16' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.41 cfs @ 1.46 fps)

Pond I41: Inlet 4-1



Summary for Pond I51: Inlet 5-1

[57] Hint: Peaked at 749.72' (Flood elevation advised)
[62] Hint: Exceeded Reach R52 OUTLET depth by 0.14' @ 0.02 hrs

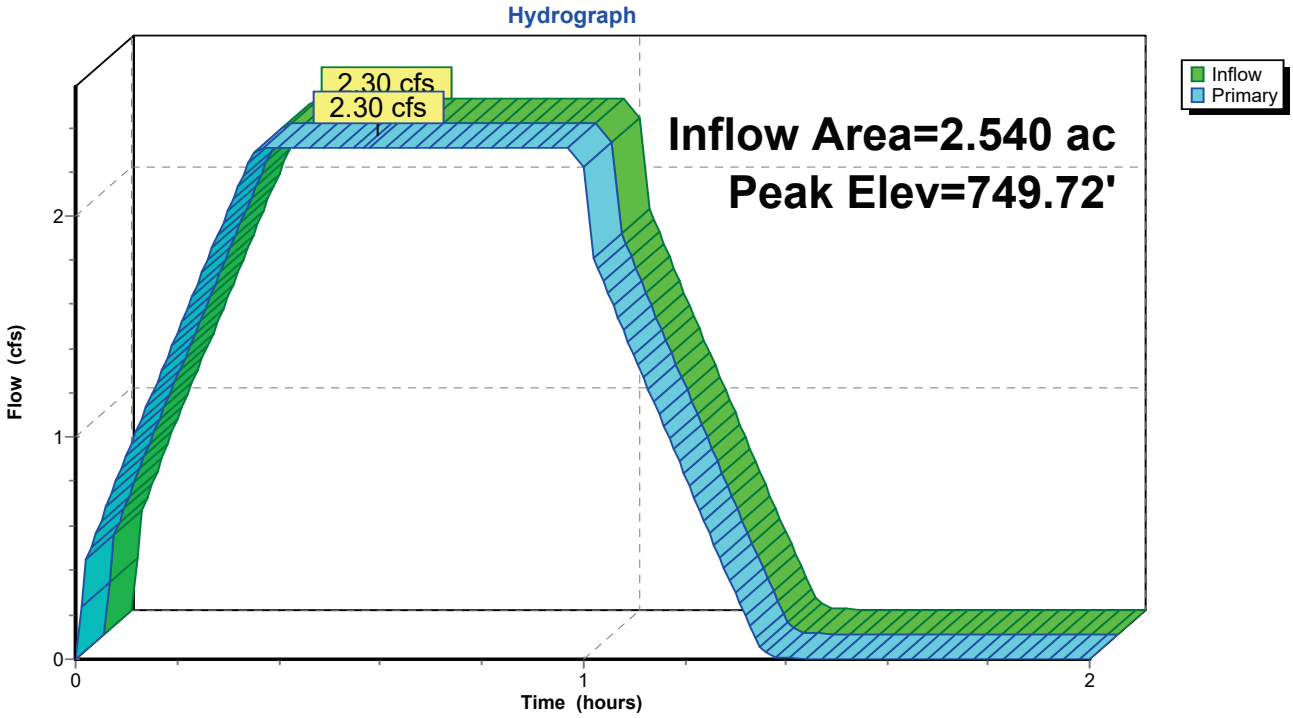
Inflow Area = 2.540 ac, 1.02% Impervious, Inflow Depth = 0.90" for 5-yr event
Inflow = 2.30 cfs @ 0.53 hrs, Volume= 0.190 af
Outflow = 2.30 cfs @ 0.57 hrs, Volume= 0.190 af, Atten= 0%, Lag= 2.4 min
Primary = 2.30 cfs @ 0.57 hrs, Volume= 0.190 af
Routed to Reach R51 : Pipe I51 to I31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 749.72' @ 0.50 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	749.07'	**15.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	749.10'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.30 cfs @ 0.57 hrs HW=749.72' TW=749.56' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.29 cfs @ 1.98 fps)
└─**2=Orifice/Grate** (Orifice Controls 1.02 cfs @ 1.98 fps)

Pond I51: Inlet 5-1



Summary for Pond I52: Inlet 5-2

[57] Hint: Peaked at 750.84' (Flood elevation advised)
[63] Warning: Exceeded Reach R53 INLET depth by 0.19' @ 0.50 hrs

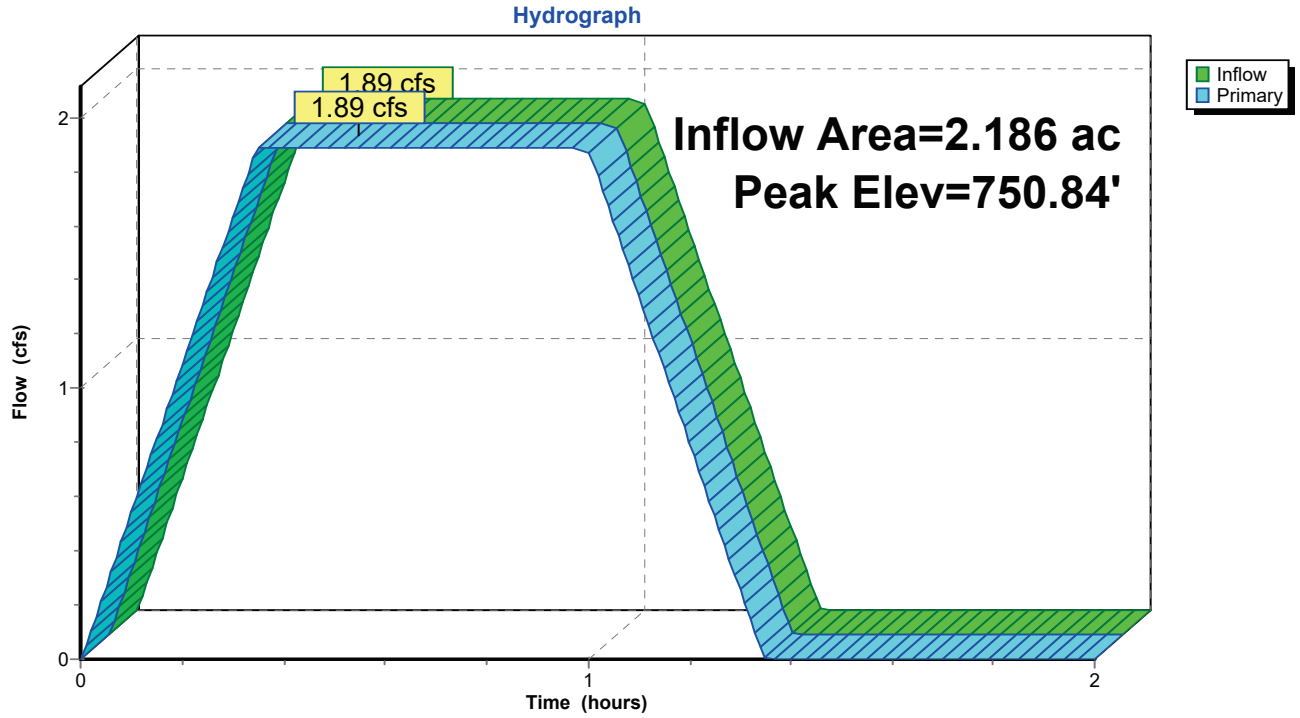
Inflow Area = 2.186 ac, 0.27% Impervious, Inflow Depth = 0.86" for 5-yr event
Inflow = 1.89 cfs @ 0.52 hrs, Volume= 0.156 af
Outflow = 1.89 cfs @ 0.52 hrs, Volume= 0.156 af, Atten= 0%, Lag= 0.0 min
Primary = 1.89 cfs @ 0.52 hrs, Volume= 0.156 af
Routed to Reach R52 : Pipe I52 to I51

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 750.84' @ 0.50 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	750.10'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	750.26'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.89 cfs @ 0.52 hrs HW=750.84' TW=750.61' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 1.44 cfs @ 2.30 fps)
2=Orifice/Grate (Orifice Controls 0.45 cfs @ 2.30 fps)

Pond I52: Inlet 5-2



Summary for Pond I53: Inlet 5-3

[57] Hint: Peaked at 750.70' (Flood elevation advised)
[62] Hint: Exceeded Reach R54 OUTLET depth by 0.14' @ 0.50 hrs

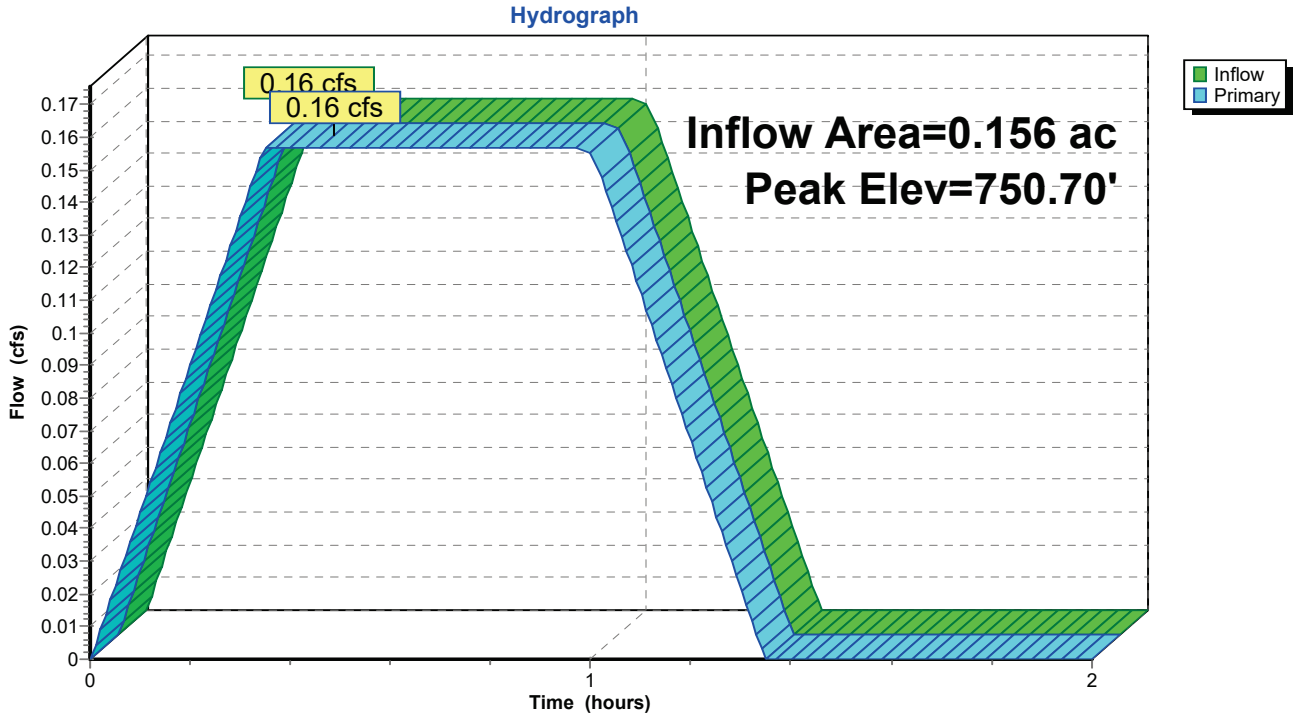
Inflow Area = 0.156 ac, 0.00% Impervious, Inflow Depth = 1.00" for 5-yr event
Inflow = 0.16 cfs @ 0.35 hrs, Volume= 0.013 af
Outflow = 0.16 cfs @ 0.46 hrs, Volume= 0.013 af, Atten= 0%, Lag= 6.6 min
Primary = 0.16 cfs @ 0.46 hrs, Volume= 0.013 af
Routed to Reach R53 : Pipe I53 to I52

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 750.70' @ 0.50 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	750.43'	**6.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	750.56'	**6.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=0.16 cfs @ 0.46 hrs HW=750.70' TW=750.65' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 0.11 cfs @ 1.03 fps)
└─**2=Orifice/Grate** (Orifice Controls 0.05 cfs @ 1.03 fps)

Pond I53: Inlet 5-3



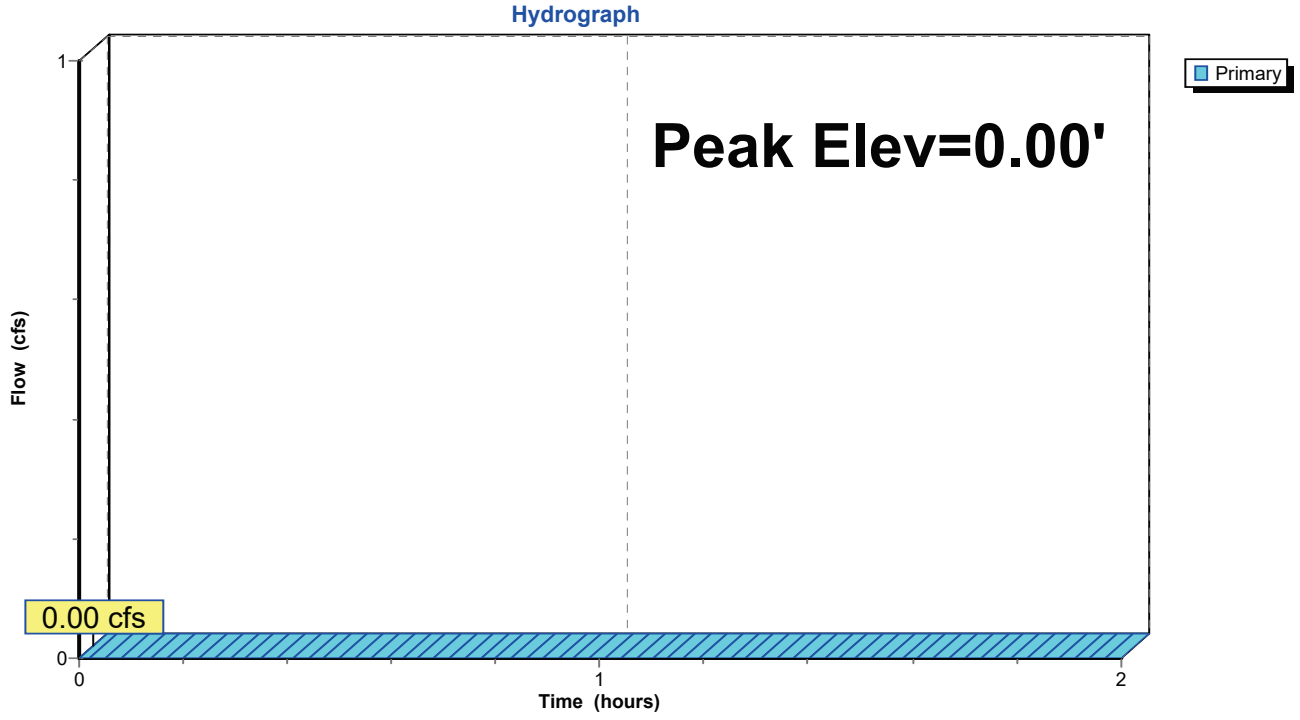
Summary for Pond I54: Inlet 5-4

[43] Hint: Has no inflow (Outflow=Zero)

Device	Routing	Invert	Outlet Devices
#1	Primary	750.30'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' TW=752.46' (Dynamic Tailwater)
└**1=Orifice/Grate** (Controls 0.00 cfs)

Pond I54: Inlet 5-4



Summary for Pond I61: Manhole 6-1

[57] Hint: Peaked at 749.23' (Flood elevation advised)
[62] Hint: Exceeded Reach R62 OUTLET depth by 0.14' @ 1.03 hrs

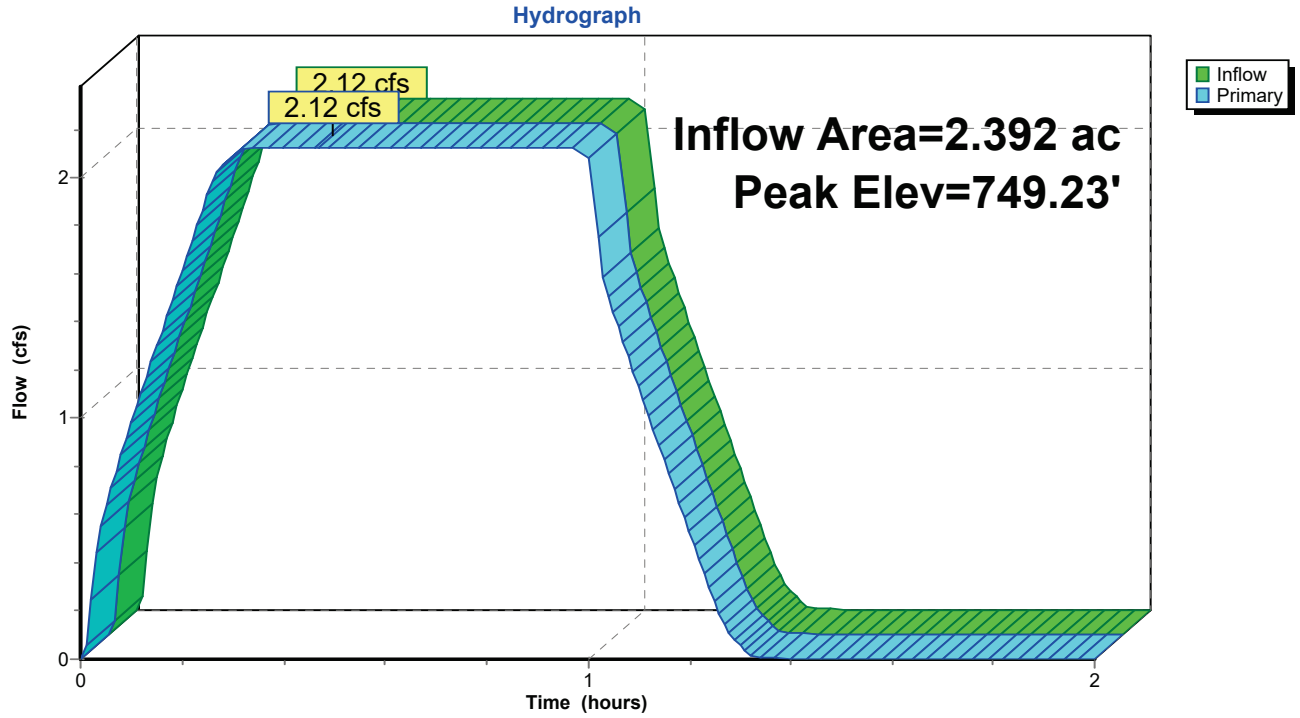
Inflow Area = 2.392 ac, 0.00% Impervious, Inflow Depth = 0.88" for 5-yr event
Inflow = 2.12 cfs @ 0.47 hrs, Volume= 0.175 af
Outflow = 2.12 cfs @ 0.47 hrs, Volume= 0.175 af, Atten= 0%, Lag= 0.0 min
Primary = 2.12 cfs @ 0.47 hrs, Volume= 0.175 af
Routed to Reach R61 : Pipe I61 to I31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 749.23' @ 0.46 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	748.55'	**15.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	748.61'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.12 cfs @ 0.47 hrs HW=749.23' TW=749.09' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 1.21 cfs @ 1.78 fps)
2=Orifice/Grate (Orifice Controls 0.91 cfs @ 1.78 fps)

Pond I61: Manhole 6-1



Summary for Pond I62: Inlet 6-2

[57] Hint: Peaked at 749.94' (Flood elevation advised)
[62] Hint: Exceeded Reach R63 OUTLET depth by 0.16' @ 0.04 hrs

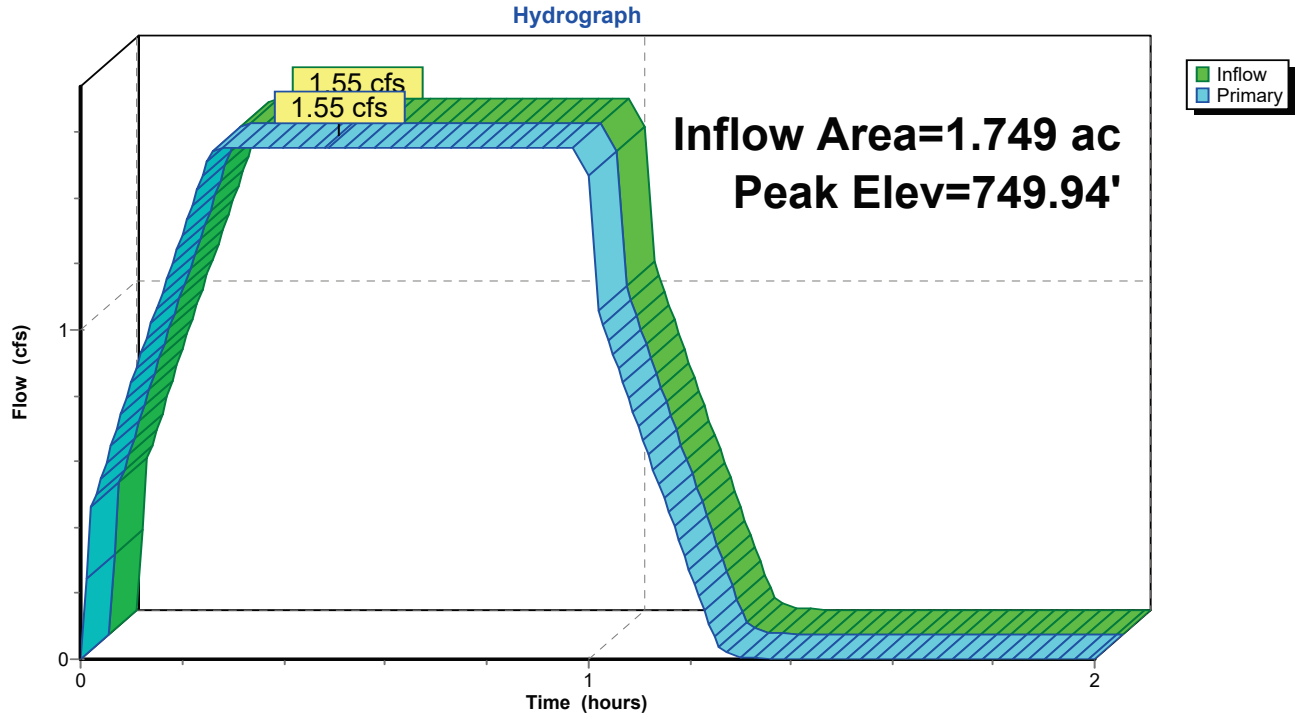
Inflow Area = 1.749 ac, 0.00% Impervious, Inflow Depth = 0.88" for 5-yr event
Inflow = 1.55 cfs @ 0.46 hrs, Volume= 0.128 af
Outflow = 1.55 cfs @ 0.48 hrs, Volume= 0.128 af, Atten= 0%, Lag= 1.2 min
Primary = 1.55 cfs @ 0.48 hrs, Volume= 0.128 af
Routed to Reach R62 : Pipe I62 to I61

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 749.94' @ 0.43 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	749.32'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	749.35'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.55 cfs @ 0.48 hrs HW=749.94' TW=749.84' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.80 cfs @ 1.56 fps)
2=Orifice/Grate (Orifice Controls 0.75 cfs @ 1.56 fps)

Pond I62: Inlet 6-2



Summary for Pond I63: Inlet 6-3

[57] Hint: Peaked at 750.55' (Flood elevation advised)

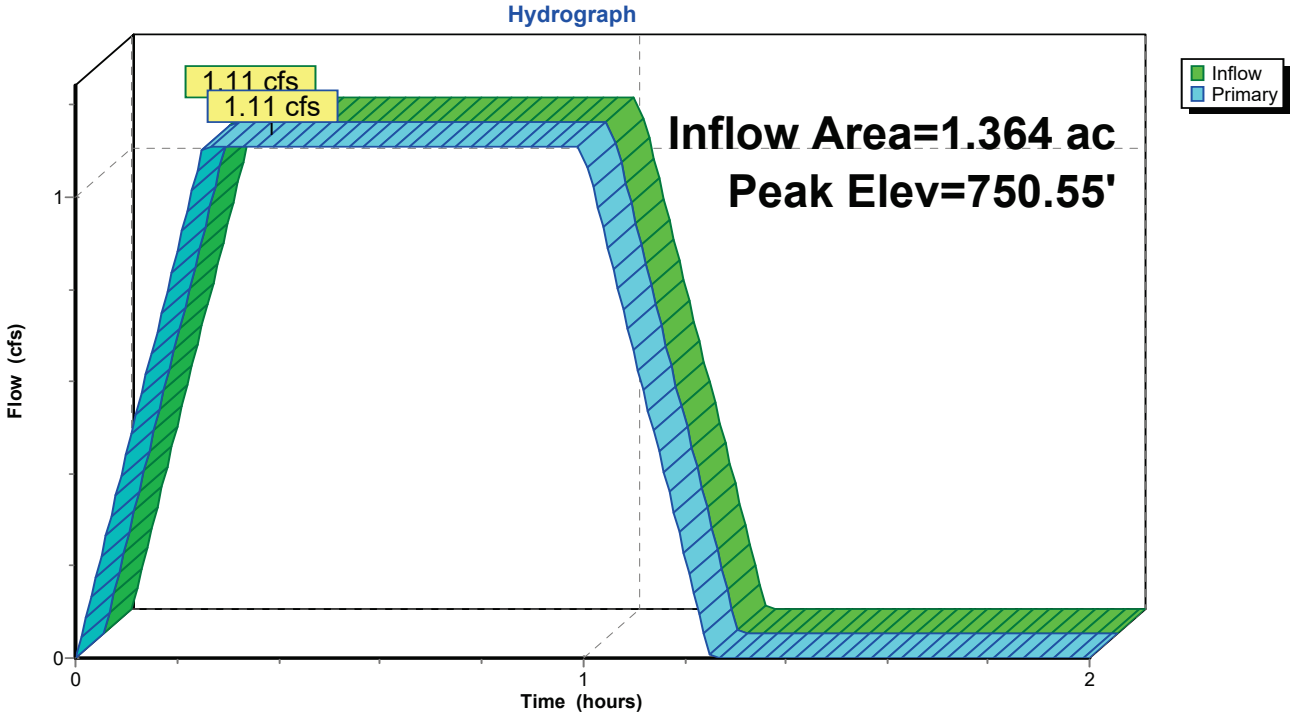
Inflow Area = 1.364 ac, 0.00% Impervious, Inflow Depth = 0.81" for 5-yr event
Inflow = 1.11 cfs @ 0.26 hrs, Volume= 0.092 af
Outflow = 1.11 cfs @ 0.36 hrs, Volume= 0.092 af, Atten= 0%, Lag= 6.0 min
Primary = 1.11 cfs @ 0.36 hrs, Volume= 0.092 af
Routed to Reach R63 : Pipe I63 to I62

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 750.55' @ 0.42 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	749.91'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.11 cfs @ 0.36 hrs HW=750.55' TW=750.36' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 1.11 cfs @ 2.10 fps)

Pond I63: Inlet 6-3



Summary for Pond I71: Inlet 7-1

[57] Hint: Peaked at 748.44' (Flood elevation advised)
[62] Hint: Exceeded Reach R81 OUTLET depth by 0.43' @ 1.04 hrs

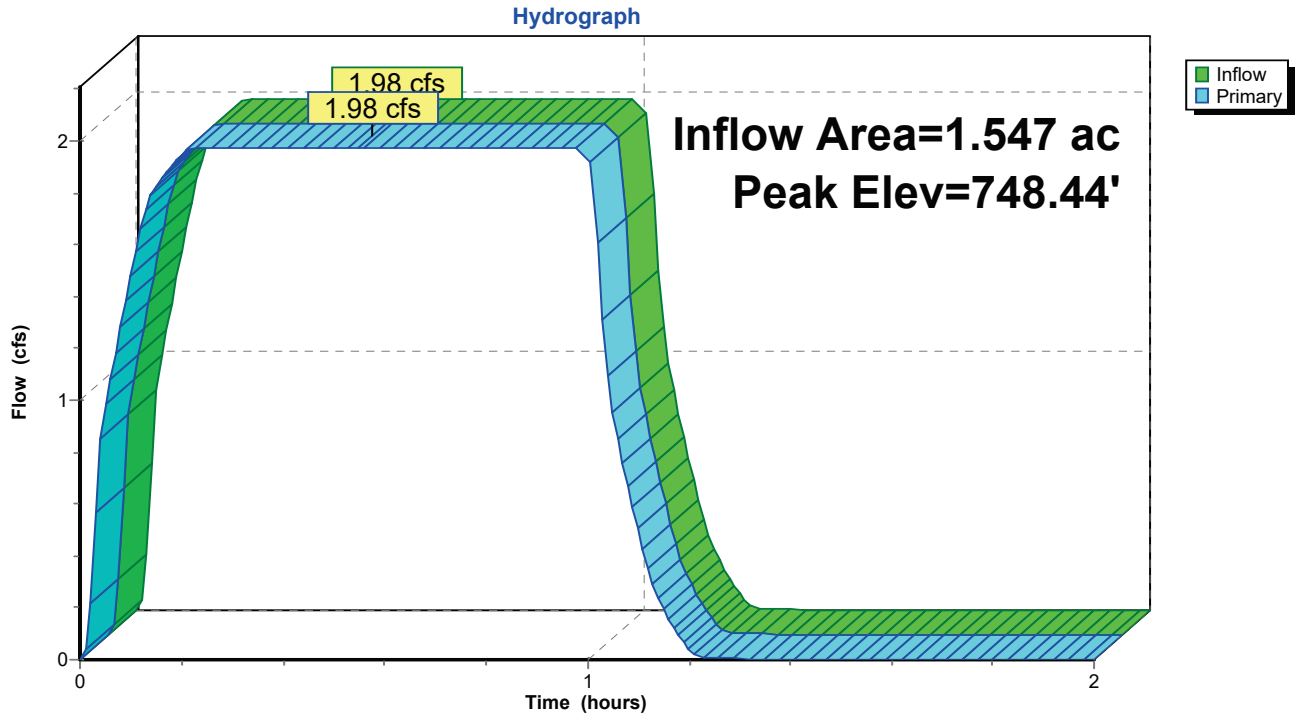
Inflow Area = 1.547 ac, 34.65% Impervious, Inflow Depth = 1.27" for 5-yr event
Inflow = 1.98 cfs @ 0.54 hrs, Volume= 0.163 af
Outflow = 1.98 cfs @ 0.55 hrs, Volume= 0.163 af, Atten= 0%, Lag= 0.6 min
Primary = 1.98 cfs @ 0.55 hrs, Volume= 0.163 af
Routed to Reach R71 : Pipe I71 to I15

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 748.44' @ 0.55 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	747.78'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	747.78'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#3	Primary	748.93'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=1.98 cfs @ 0.55 hrs HW=748.44' TW=748.30' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.99 cfs @ 1.80 fps)
2=Orifice/Grate (Orifice Controls 0.99 cfs @ 1.80 fps)
3=Orifice/Grate (Controls 0.00 cfs)

Pond I71: Inlet 7-1



Summary for Pond I81: Inlet 8-1

[57] Hint: Peaked at 749.04' (Flood elevation advised)
[62] Hint: Exceeded Reach R10 OUTLET depth by 0.08' @ 1.02 hrs

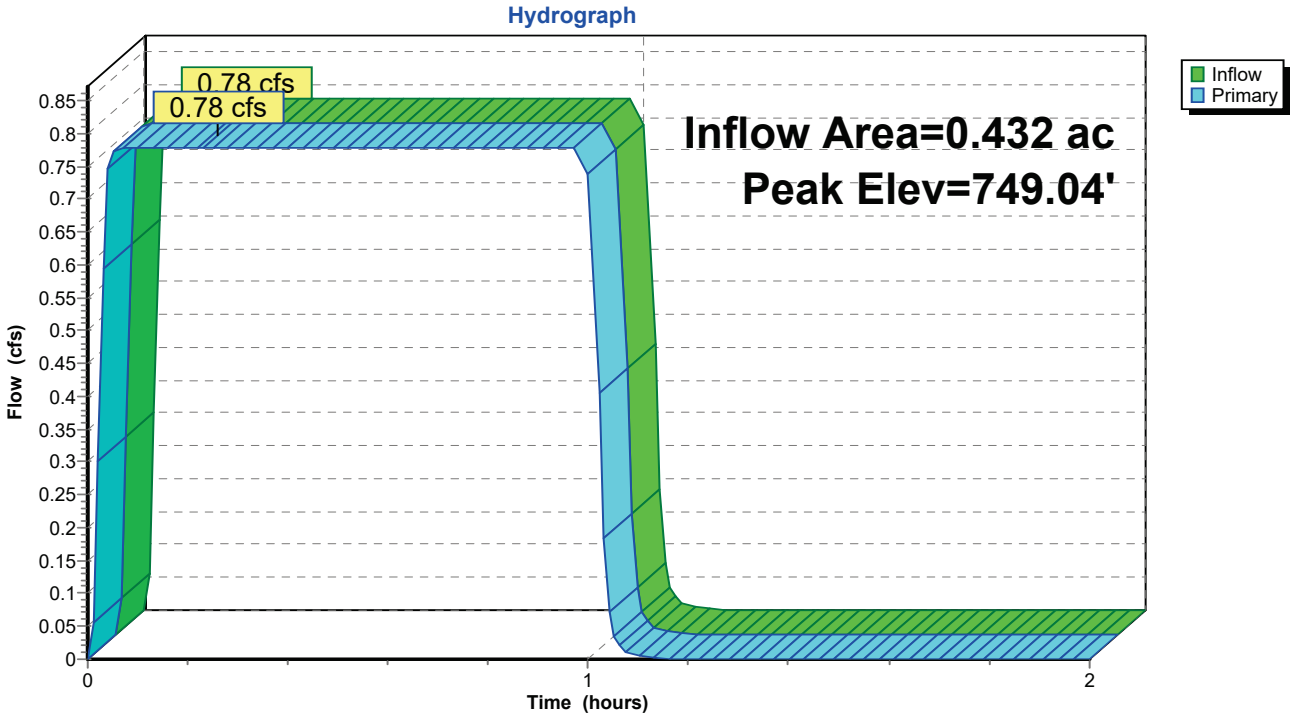
Inflow Area = 0.432 ac,100.00% Impervious, Inflow Depth = 1.79" for 5-yr event
Inflow = 0.78 cfs @ 0.23 hrs, Volume= 0.064 af
Outflow = 0.78 cfs @ 0.23 hrs, Volume= 0.064 af, Atten= 0%, Lag= 0.0 min
Primary = 0.78 cfs @ 0.23 hrs, Volume= 0.064 af
Routed to Reach R81 : Pipe I81 to I71

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 749.04' @ 0.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	748.66'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	748.69'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.78 cfs @ 0.23 hrs HW=749.04' TW=748.94' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 0.41 cfs @ 1.51 fps)
└─**2=Orifice/Grate** (Orifice Controls 0.37 cfs @ 1.51 fps)

Pond I81: Inlet 8-1



Summary for Pond I91: Inlet 9-1

[57] Hint: Peaked at 750.70' (Flood elevation advised)
[62] Hint: Exceeded Reach R92 OUTLET depth by 0.10' @ 1.03 hrs

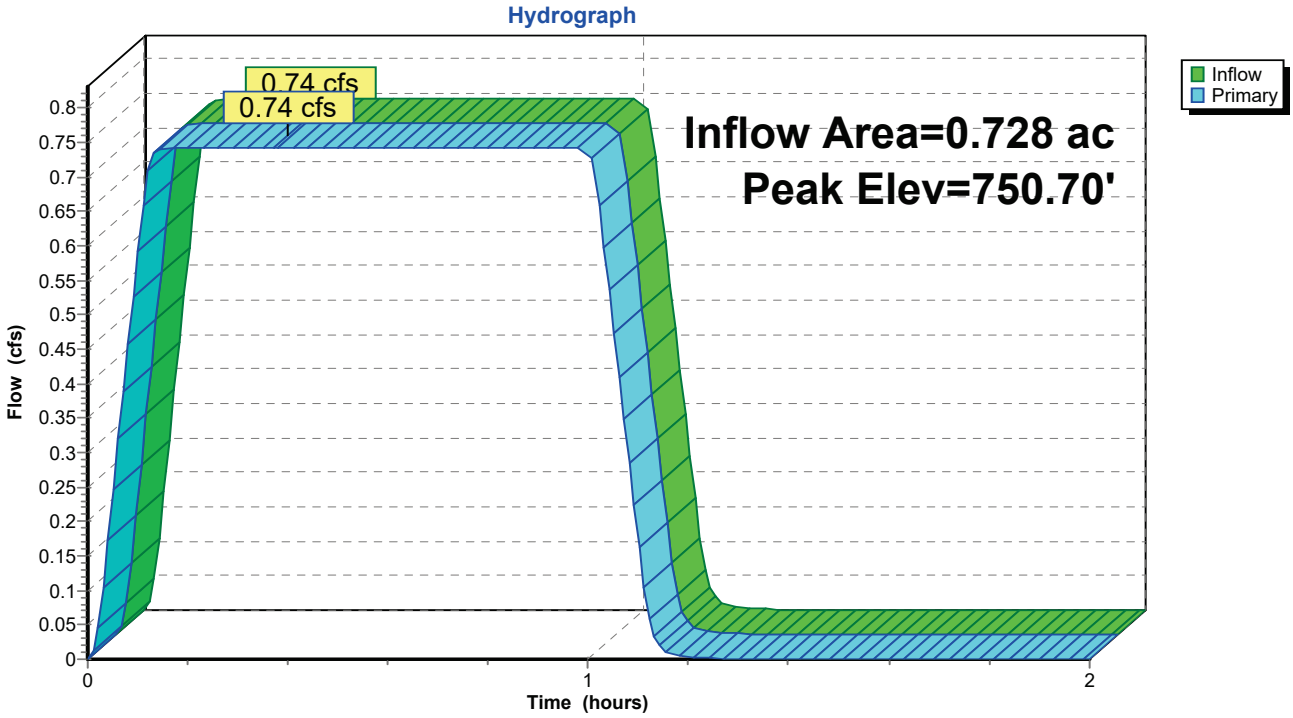
Inflow Area = 0.728 ac, 1.10% Impervious, Inflow Depth = 1.01" for 5-yr event
Inflow = 0.74 cfs @ 0.36 hrs, Volume= 0.061 af
Outflow = 0.74 cfs @ 0.37 hrs, Volume= 0.061 af, Atten= 0%, Lag= 0.6 min
Primary = 0.74 cfs @ 0.37 hrs, Volume= 0.061 af
Routed to Reach R91 : Pipe I91 to I71

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 750.70' @ 0.45 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	750.30'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	750.30'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.74 cfs @ 0.37 hrs HW=750.70' TW=750.63' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 0.37 cfs @ 1.27 fps)
└─**2=Orifice/Grate** (Orifice Controls 0.37 cfs @ 1.27 fps)

Pond I91: Inlet 9-1



Summary for Pond I92: Inlet 9-2

[57] Hint: Peaked at 751.68' (Flood elevation advised)

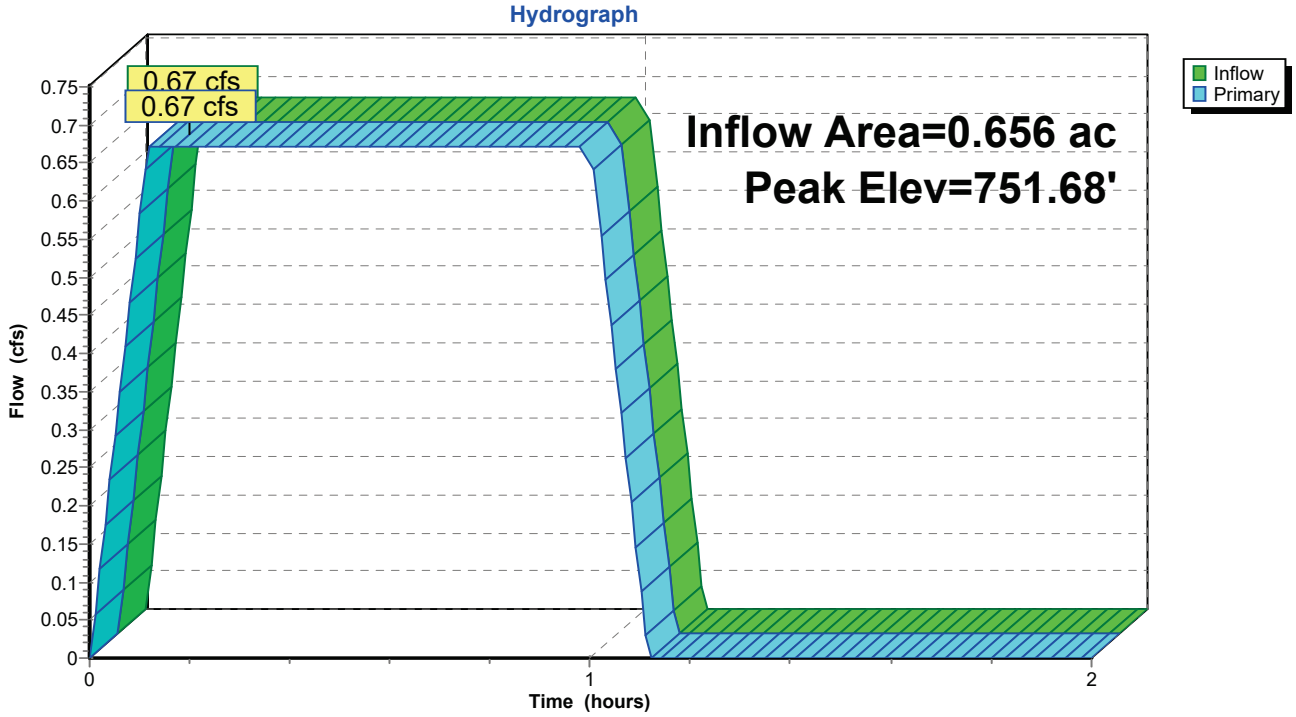
Inflow Area = 0.656 ac, 1.22% Impervious, Inflow Depth = 1.02" for 5-yr event
Inflow = 0.67 cfs @ 0.12 hrs, Volume= 0.055 af
Outflow = 0.67 cfs @ 0.17 hrs, Volume= 0.055 af, Atten= 0%, Lag= 3.0 min
Primary = 0.67 cfs @ 0.17 hrs, Volume= 0.055 af
Routed to Reach R92 : Pipe I92 to I91

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 751.68' @ 0.32 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	751.22'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.67 cfs @ 0.17 hrs HW=751.68' TW=751.53' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.67 cfs @ 1.88 fps)

Pond I92: Inlet 9-2



Summary for Pond P1: Detention Pond

[44] Hint: Outlet device #1 is below defined storage
[62] Hint: Exceeded Reach R14 OUTLET depth by 0.58' @ 1.53 hrs

Inflow Area = 12.430 ac, 7.07% Impervious, Inflow Depth > 0.83" for 5-yr event
Inflow = 10.44 cfs @ 1.00 hrs, Volume= 0.862 af
Outflow = 2.32 cfs @ 1.24 hrs, Volume= 0.333 af, Atten= 78%, Lag= 14.1 min
Primary = 2.32 cfs @ 1.24 hrs, Volume= 0.333 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 737.50' @ 1.24 hrs Surf.Area= 0.809 ac Storage= 0.658 af

Plug-Flow detention time= 45.7 min calculated for 0.333 af (39% of inflow)
Center-of-Mass det. time= 26.6 min (65.9 - 39.3)

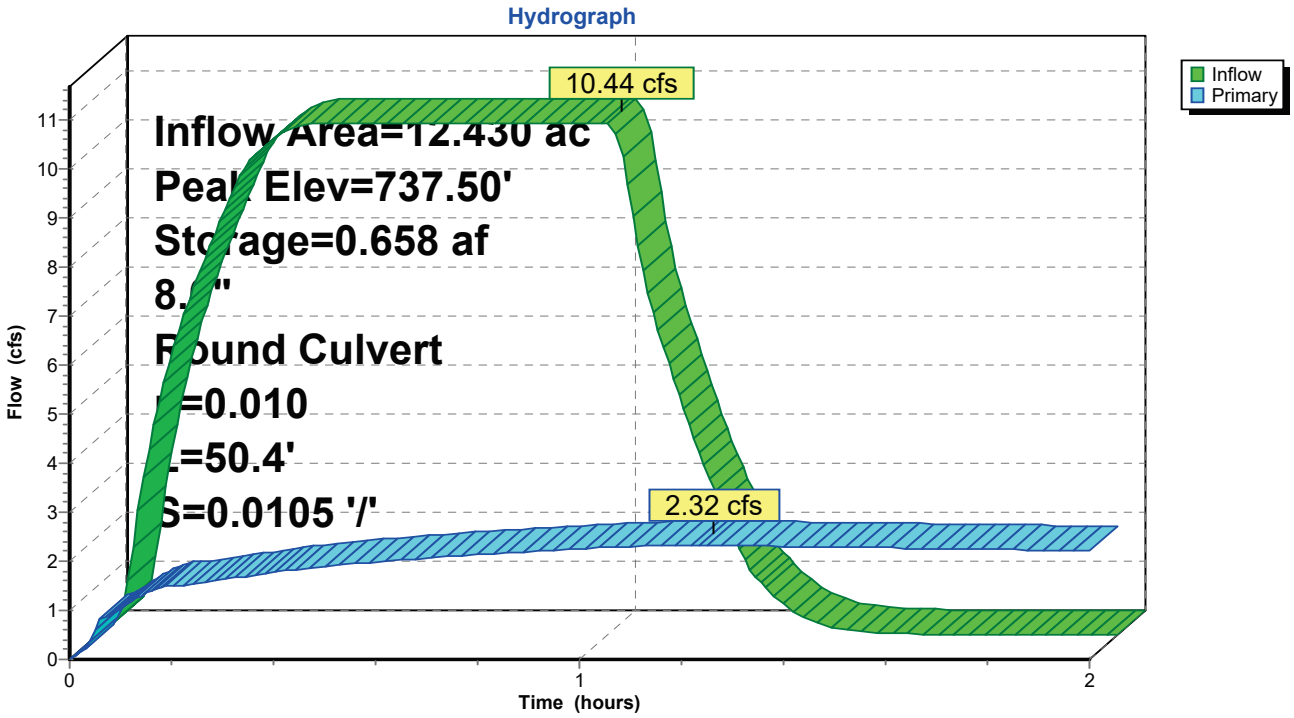
Volume	Invert	Avail.Storage	Storage Description
#1	736.00'	2.825 af	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
736.00	0.024	0.000	0.000
737.00	0.592	0.308	0.308
738.00	1.025	0.809	1.117
739.00	1.170	1.097	2.214
739.50	1.276	0.611	2.825

Device	Routing	Invert	Outlet Devices
#1	Primary	735.51'	**8.0" Round Culvert** L= 50.4' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 735.51' / 734.98' S= 0.0105 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=2.32 cfs @ 1.24 hrs HW=737.50' (Free Discharge)
↑—**1=Culvert** (Barrel Controls 2.32 cfs @ 6.64 fps)

Pond P1: Detention Pond



Summary for Subcatchment CA10: South Building

[70] Warning: Tc<8dt requires smaller dt

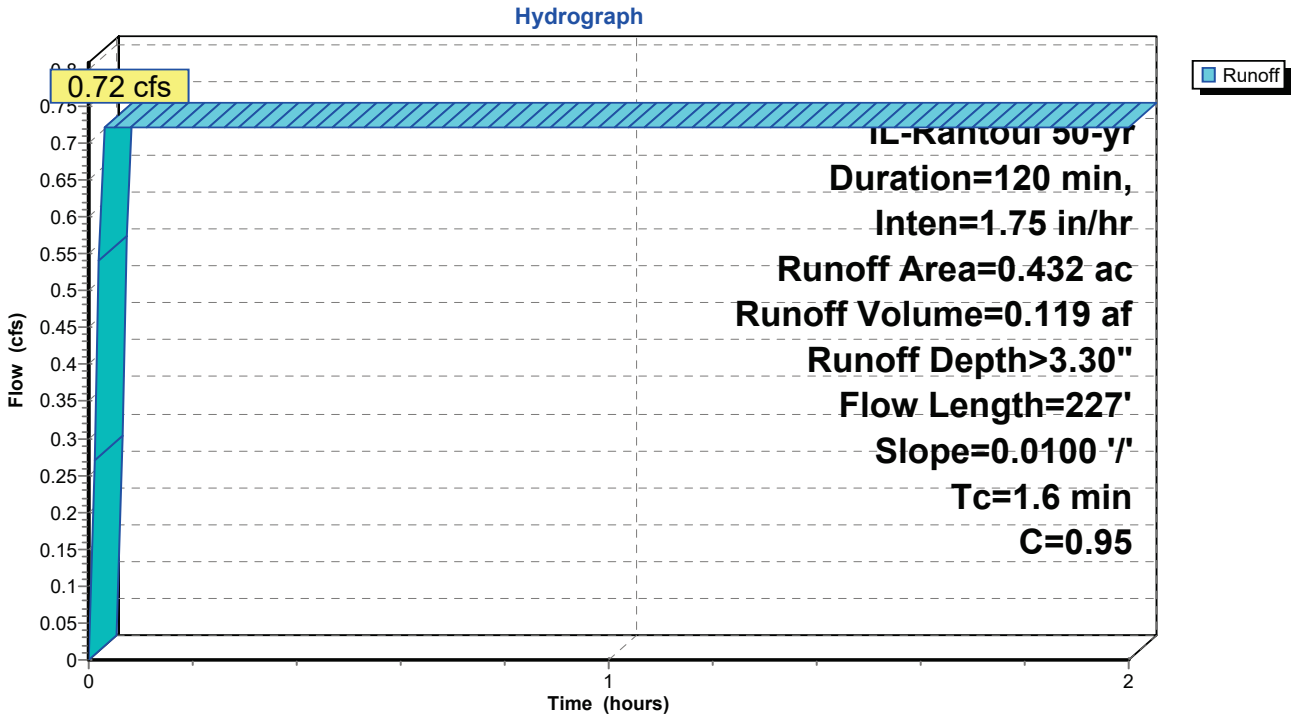
Runoff = 0.72 cfs @ 0.03 hrs, Volume= 0.119 af, Depth> 3.30"
Routed to Reach R10 : Pipe CA10 to I81

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 50-yr Duration=120 min, Inten=1.75 in/hr

Area (ac)	C	Description
0.432	0.95	Roof
0.432		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	146	0.0100	2.03		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
0.4	81	0.0100	3.75	1.31	**Pipe Channel, Downpipes** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.012 Corrugated PP, smooth interior
1.6	227	Total			

Subcatchment CA10: South Building



Summary for Subcatchment CA11: North Building

[70] Warning: Tc<8dt requires smaller dt

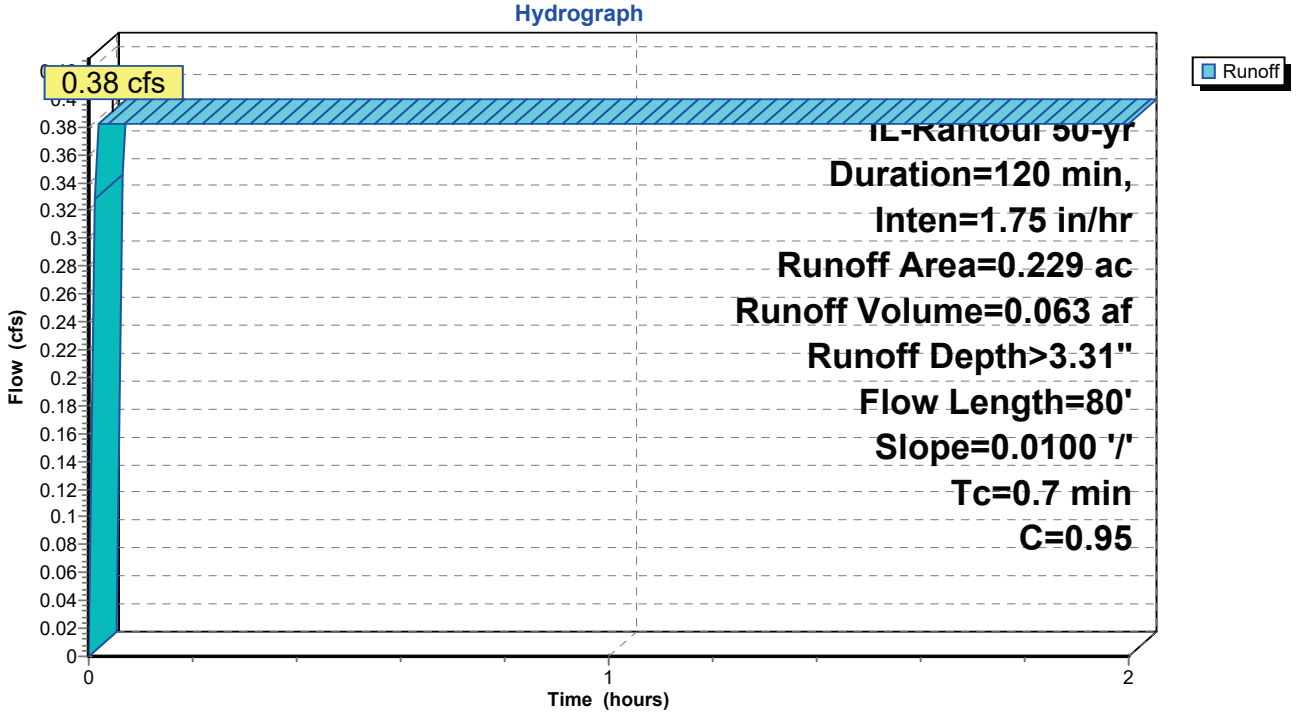
Runoff = 0.38 cfs @ 0.02 hrs, Volume= 0.063 af, Depth> 3.31"
Routed to Pond I41 : Inlet 4-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 50-yr Duration=120 min, Inten=1.75 in/hr

Area (ac)	C	Description
0.229	0.95	Building
0.229		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	80	0.0100	2.03		**Shallow Concentrated Flow, N building** Paved Kv= 20.3 fps

Subcatchment CA11: North Building



Summary for Subcatchment CA12: NW Building Area

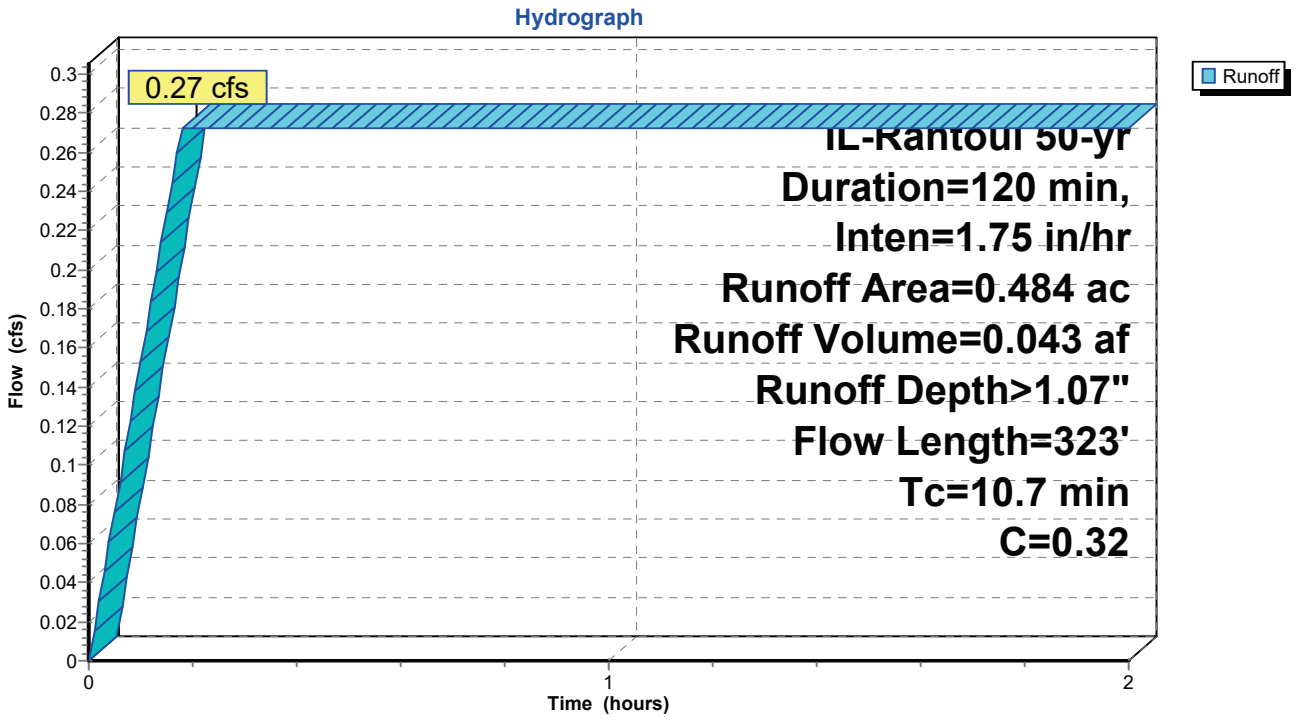
Runoff = 0.27 cfs @ 0.18 hrs, Volume= 0.043 af, Depth> 1.07"
Routed to Pond I21 : Inlet 2-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 50-yr Duration=120 min, Inten=1.75 in/hr

Area (ac)	C	Description
0.095	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
0.368	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.011	0.95	Sidewalk
0.010	0.60	Gravel
0.484	0.32	Weighted Average
0.473		97.73% Pervious Area
0.011		2.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	185	0.0003	0.39		**Sheet Flow, Parking N of building** Smooth surfaces n= 0.011 P2= 5.80"
1.4	60	0.0012	0.70		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
1.4	78	0.0187	0.96		**Shallow Concentrated Flow, Parking N of building** Short Grass Pasture Kv= 7.0 fps
10.7	323	Total			

Subcatchment CA12: NW Building Area



Summary for Subcatchment CA13: East Access Road

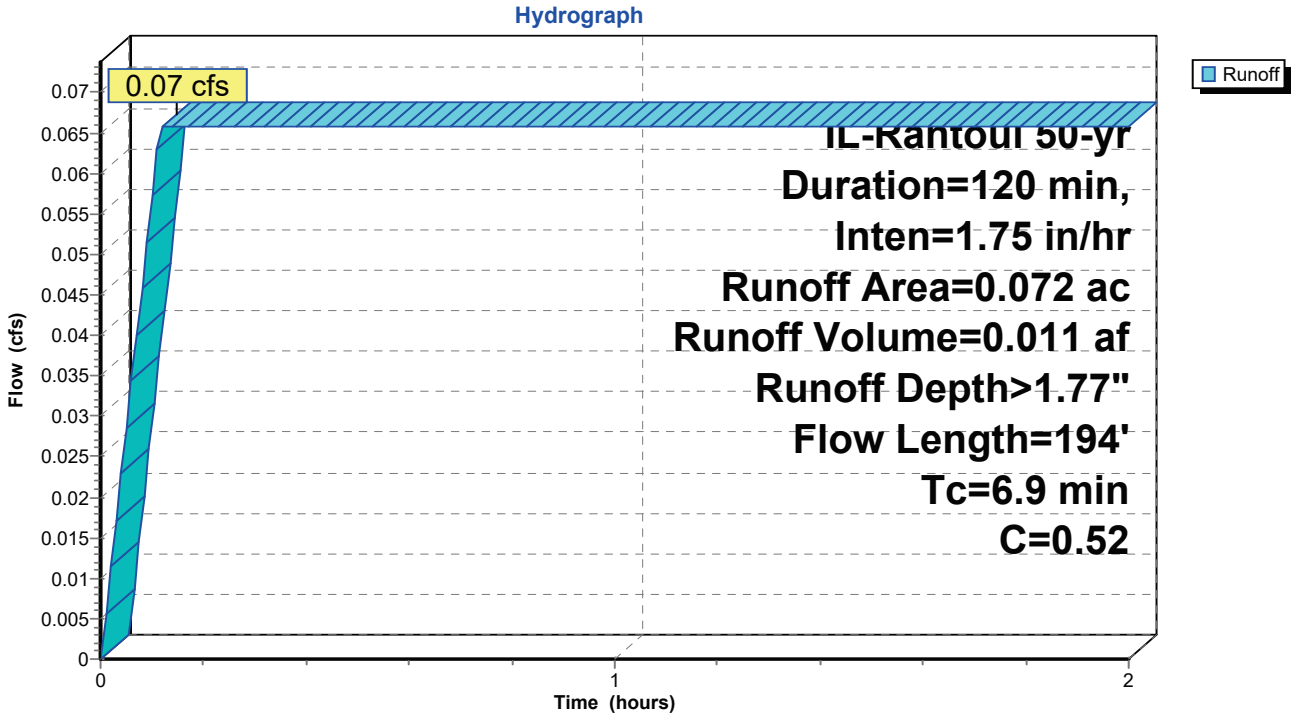
Runoff = 0.07 cfs @ 0.12 hrs, Volume= 0.011 af, Depth> 1.77"
Routed to Pond I91 : Inlet 9-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 50-yr Duration=120 min, Inten=1.75 in/hr

Area (ac)	C	Description
0.031	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.041	0.60	Gravel
0.072	0.52	Weighted Average
0.072		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.9	78	0.0208	0.22		**Sheet Flow, Grass E of building** Grass: Short n= 0.150 P2= 5.80"
1.0	116	0.0088	1.90		**Shallow Concentrated Flow, Access Road** Paved Kv= 20.3 fps
6.9	194	Total			

Subcatchment CA13: East Access Road



Summary for Subcatchment CA14: East Building Area

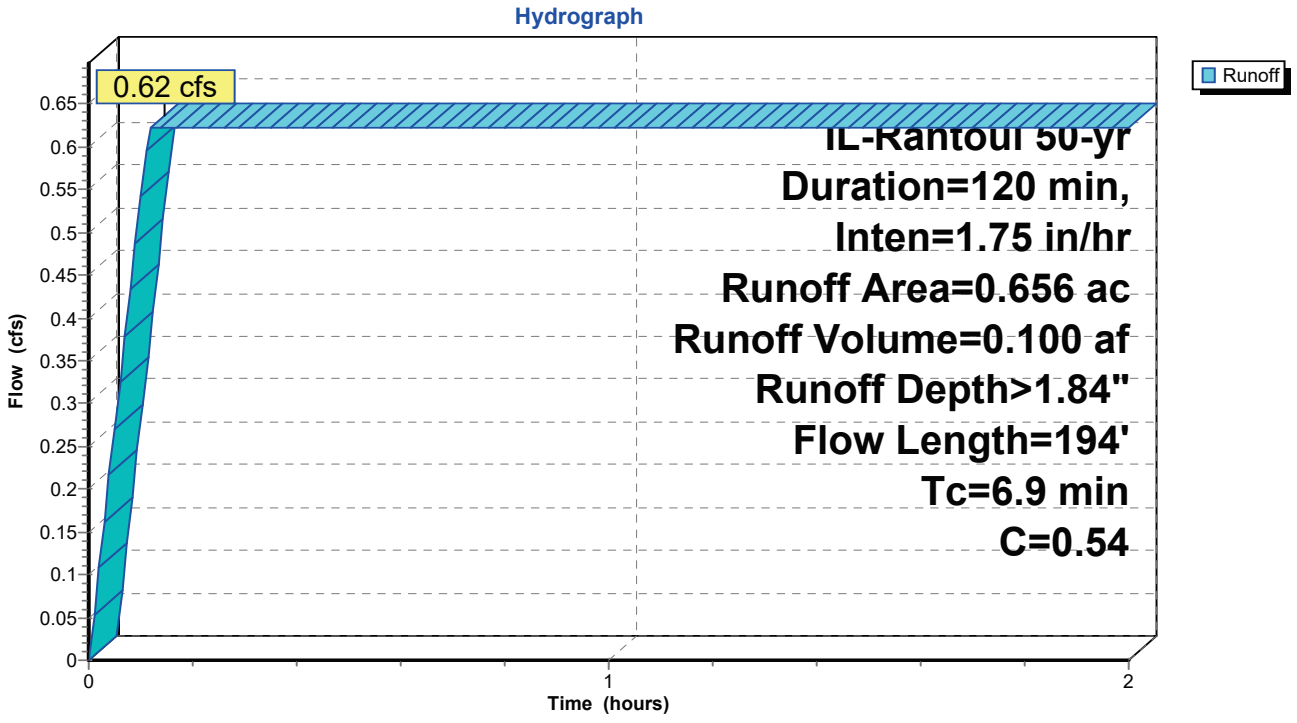
Runoff = 0.62 cfs @ 0.12 hrs, Volume= 0.100 af, Depth> 1.84"
Routed to Pond I92 : Inlet 9-2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 50-yr Duration=120 min, Inten=1.75 in/hr

Area (ac)	C	Description
0.032	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.216	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.008	0.95	Sidewalk
0.400	0.60	Gravel
0.656	0.54	Weighted Average
0.648		98.78% Pervious Area
0.008		1.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.9	78	0.0208	0.22		**Sheet Flow, Grass E of building** Grass: Short n= 0.150 P2= 5.80"
1.0	116	0.0088	1.90		**Shallow Concentrated Flow, Access Road** Paved Kv= 20.3 fps
6.9	194	Total			

Subcatchment CA14: East Building Area



Summary for Subcatchment CA15: SE 1 Parking Area

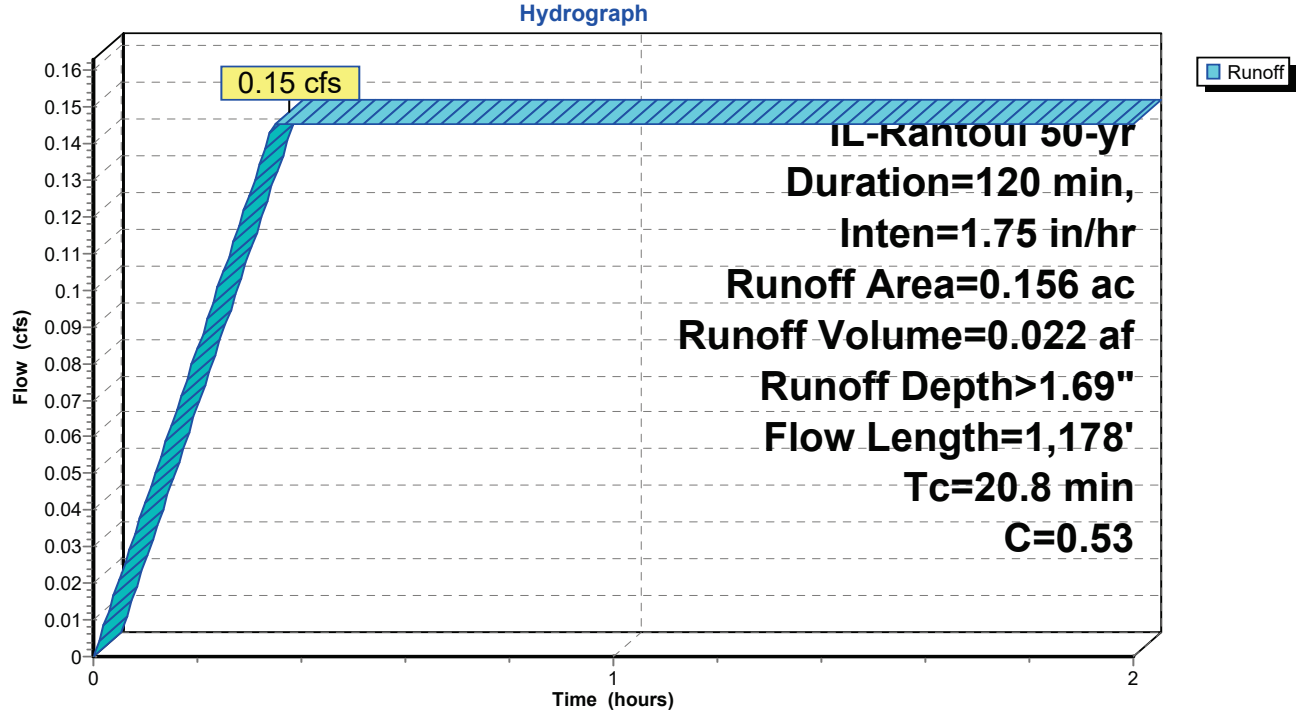
Runoff = 0.15 cfs @ 0.35 hrs, Volume= 0.022 af, Depth> 1.69"
Routed to Pond I53 : Inlet 5-3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 50-yr Duration=120 min, Inten=1.75 in/hr

Area (ac)	C	Description
0.060	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.096	0.60	Gravel
0.156	0.53	Weighted Average
0.156		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	100	0.0500	0.33		**Sheet Flow, Area E outside of property** Grass: Short n= 0.150 P2= 5.80"
8.8	539	0.0040	1.02		**Shallow Concentrated Flow, Area E outside of property** Unpaved Kv= 16.1 fps
7.0	539	0.0040	1.28		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
20.8	1,178	Total			

Subcatchment CA15: SE 1 Parking Area



Summary for Subcatchment CA16: SE 2 Parking Area

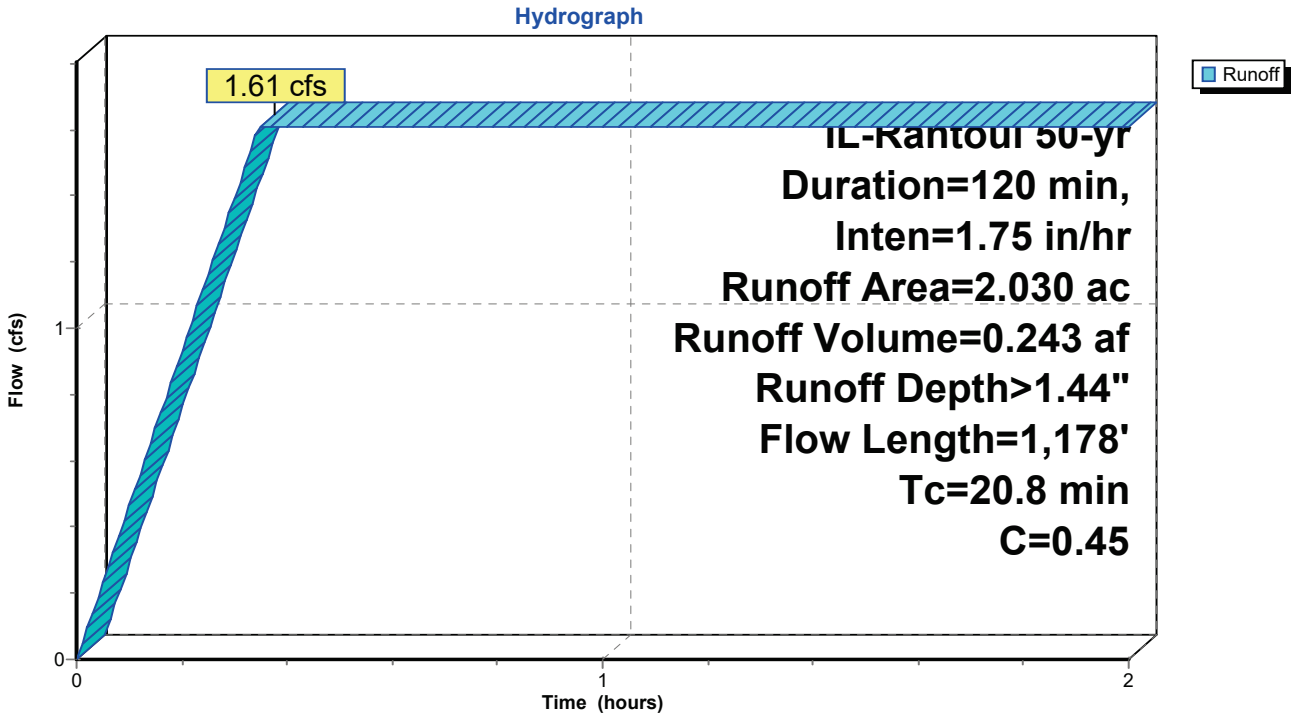
Runoff = 1.61 cfs @ 0.35 hrs, Volume= 0.243 af, Depth> 1.44"
Routed to Pond I52 : Inlet 5-2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 50-yr Duration=120 min, Inten=1.75 in/hr

Area (ac)	C	Description
0.609	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.101	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.951	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.006	0.95	Sidewalk
0.363	0.60	Gravel
2.030	0.45	Weighted Average
2.024		99.70% Pervious Area
0.006		0.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	100	0.0500	0.33		**Sheet Flow, Area E outside of property** Grass: Short n= 0.150 P2= 5.80"
8.8	539	0.0040	1.02		**Shallow Concentrated Flow, Area E outside of property** Unpaved Kv= 16.1 fps
7.0	539	0.0040	1.28		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
20.8	1,178	Total			

Subcatchment CA16: SE 2 Parking Area



Summary for Subcatchment CA17: NE Parking Area

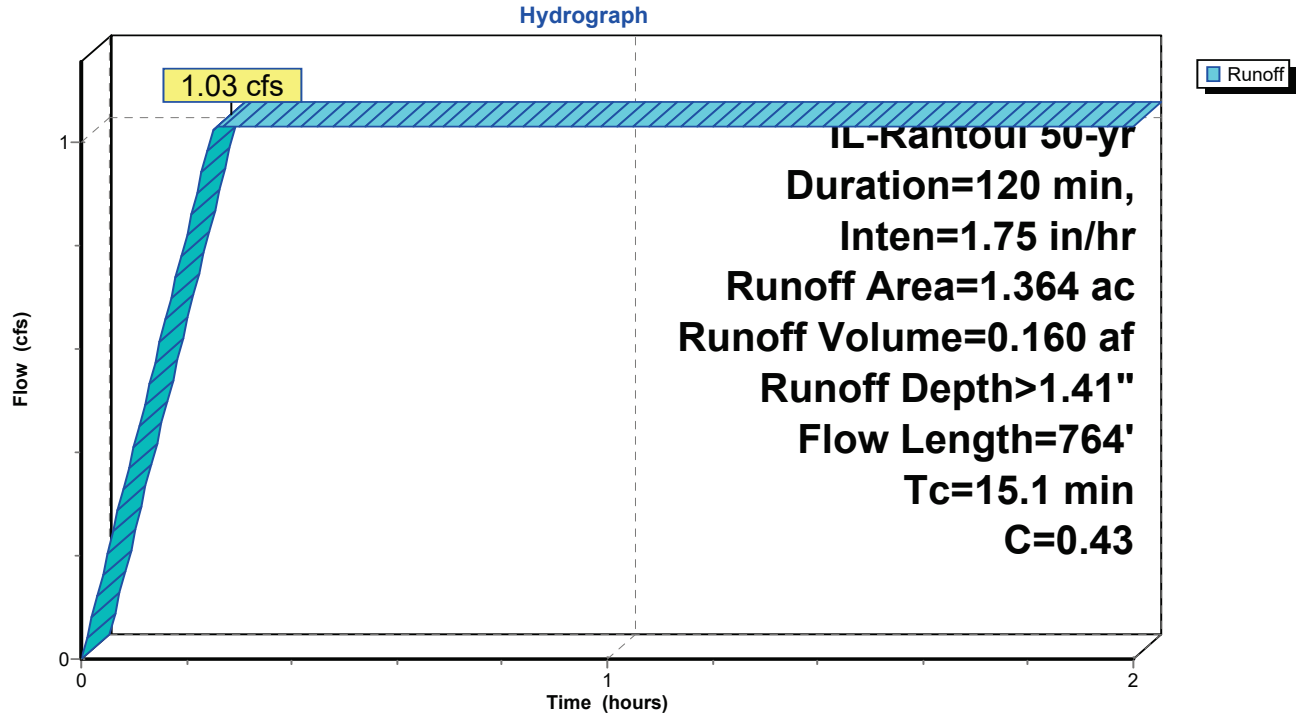
Runoff = 1.03 cfs @ 0.26 hrs, Volume= 0.160 af, Depth> 1.41"
Routed to Pond I63 : Inlet 6-3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 50-yr Duration=120 min, Inten=1.75 in/hr

Area (ac)	C	Description
0.319	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.362	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.338	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.345	0.60	Gravel
1.364	0.43	Weighted Average
1.364		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	100	0.0500	0.33		**Sheet Flow, Area E outside of property** Grass: Short n= 0.150 P2= 5.80"
9.5	568	0.0038	0.99		**Shallow Concentrated Flow, Area E outside of property** Unpaved Kv= 16.1 fps
0.6	96	0.0160	2.57		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
15.1	764	Total			

Subcatchment CA17: NE Parking Area



Summary for Subcatchment CA18: N Central Parking Area

[70] Warning: Tc<8dt requires smaller dt

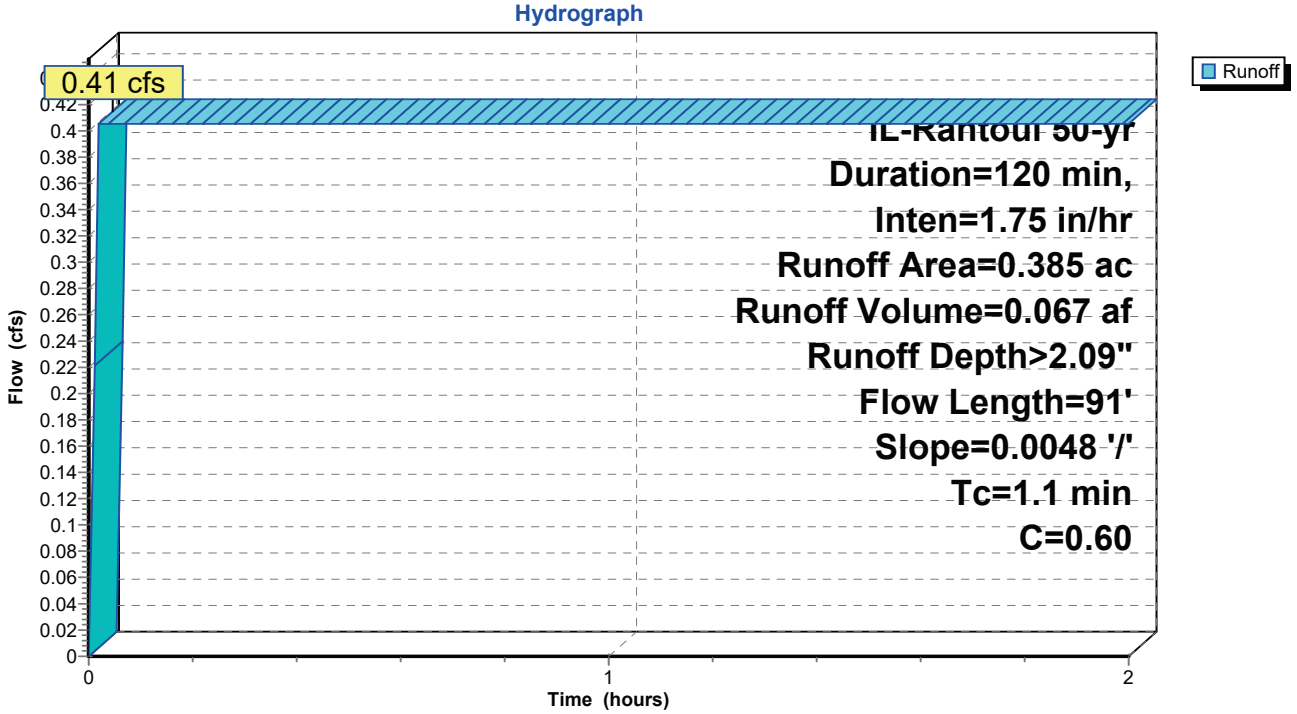
Runoff = 0.41 cfs @ 0.02 hrs, Volume= 0.067 af, Depth> 2.09"
Routed to Pond I62 : Inlet 6-2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 50-yr Duration=120 min, Inten=1.75 in/hr

Area (ac)	C	Description
0.385	0.60	Gravel
0.385		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	91	0.0048	1.41		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps

Subcatchment CA18: N Central Parking Area



Summary for Subcatchment CA19: S Central Parking Area

[70] Warning: Tc<8dt requires smaller dt

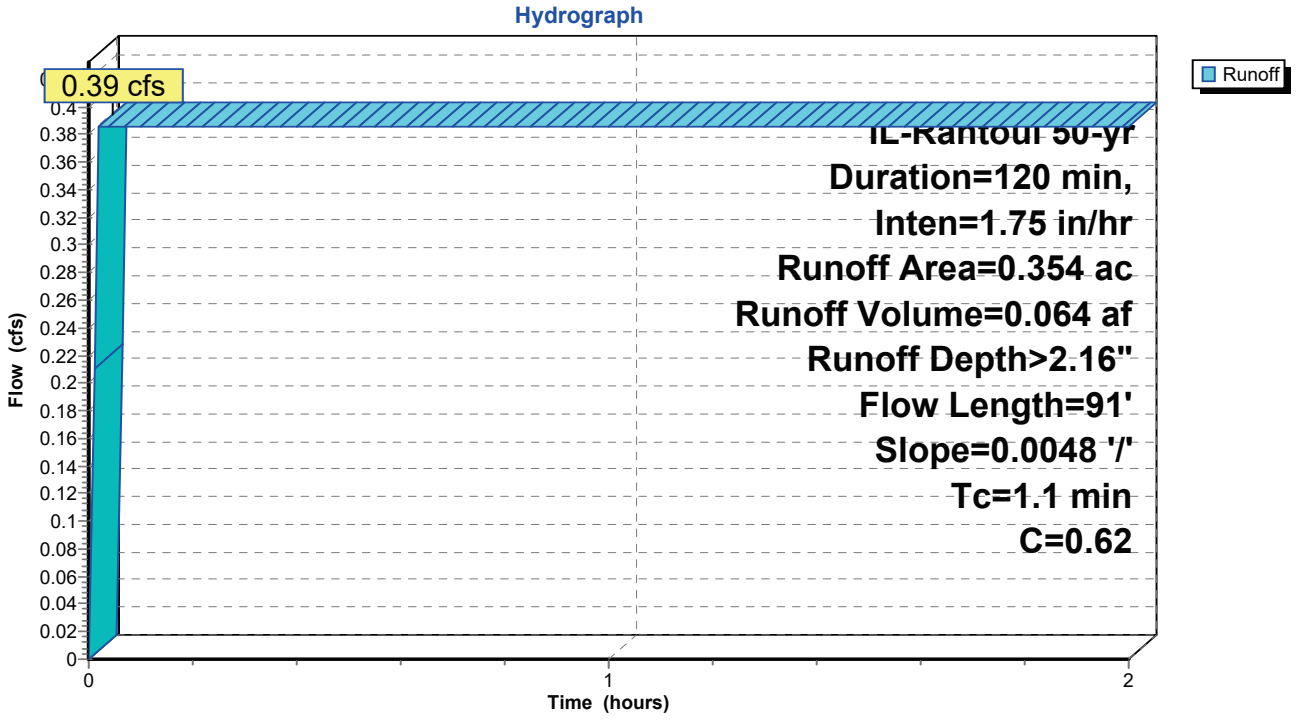
Runoff = 0.39 cfs @ 0.02 hrs, Volume= 0.064 af, Depth> 2.16"
Routed to Pond I51 : Inlet 5-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 50-yr Duration=120 min, Inten=1.75 in/hr

Area (ac)	C	Description
0.003	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.331	0.60	Gravel
0.020	0.95	Sidewalk
0.354	0.62	Weighted Average
0.334		94.35% Pervious Area
0.020		5.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	91	0.0048	1.41		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps

Subcatchment CA19: S Central Parking Area



Summary for Subcatchment CA20: NW Parking Area

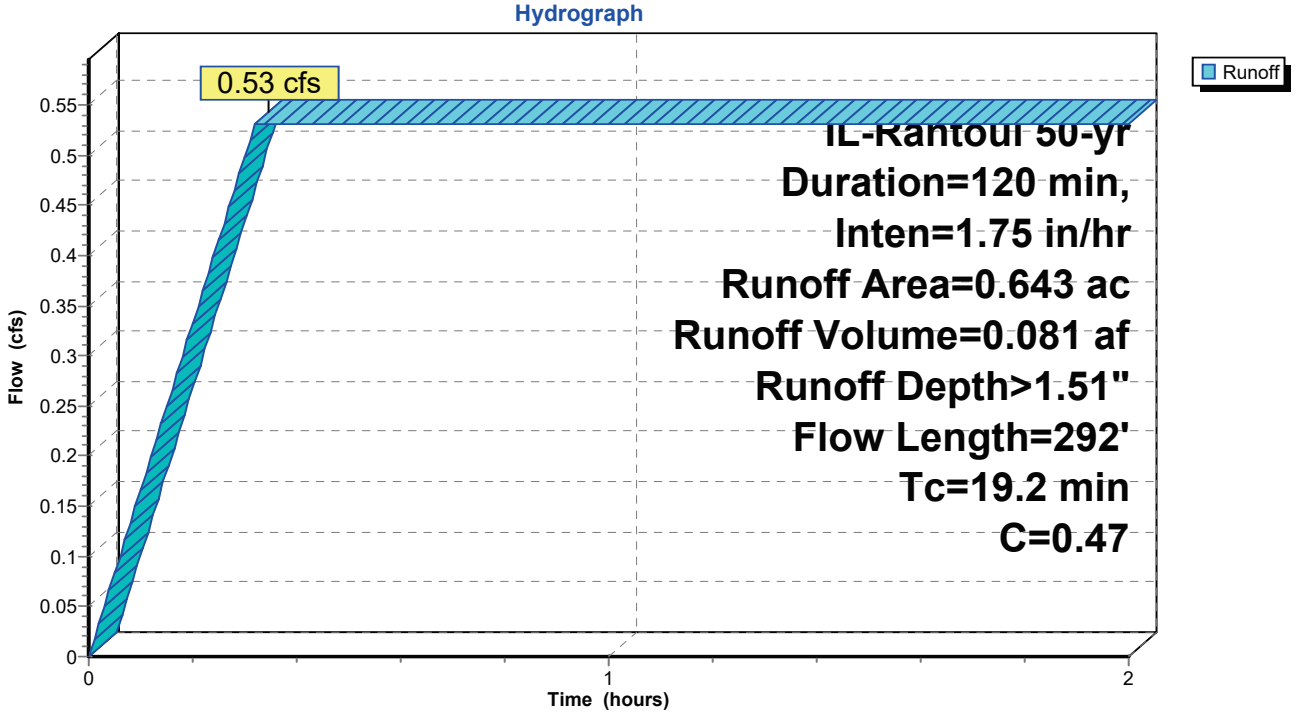
Runoff = 0.53 cfs @ 0.32 hrs, Volume= 0.081 af, Depth> 1.51"
Routed to Pond I61 : Manhole 6-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 50-yr Duration=120 min, Inten=1.75 in/hr

Area (ac)	C	Description
0.280	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
0.363	0.60	Gravel
0.643	0.47	Weighted Average
0.643		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.2	114	0.0035	0.12		**Sheet Flow, Grass area N of building** Grass: Short n= 0.150 P2= 5.80"
2.4	114	0.0129	0.80		**Shallow Concentrated Flow, Grass area N of building** Short Grass Pasture Kv= 7.0 fps
0.6	64	0.0072	1.72		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
19.2	292	Total			

Subcatchment CA20: NW Parking Area



Summary for Subcatchment CA21: SW Parking Area

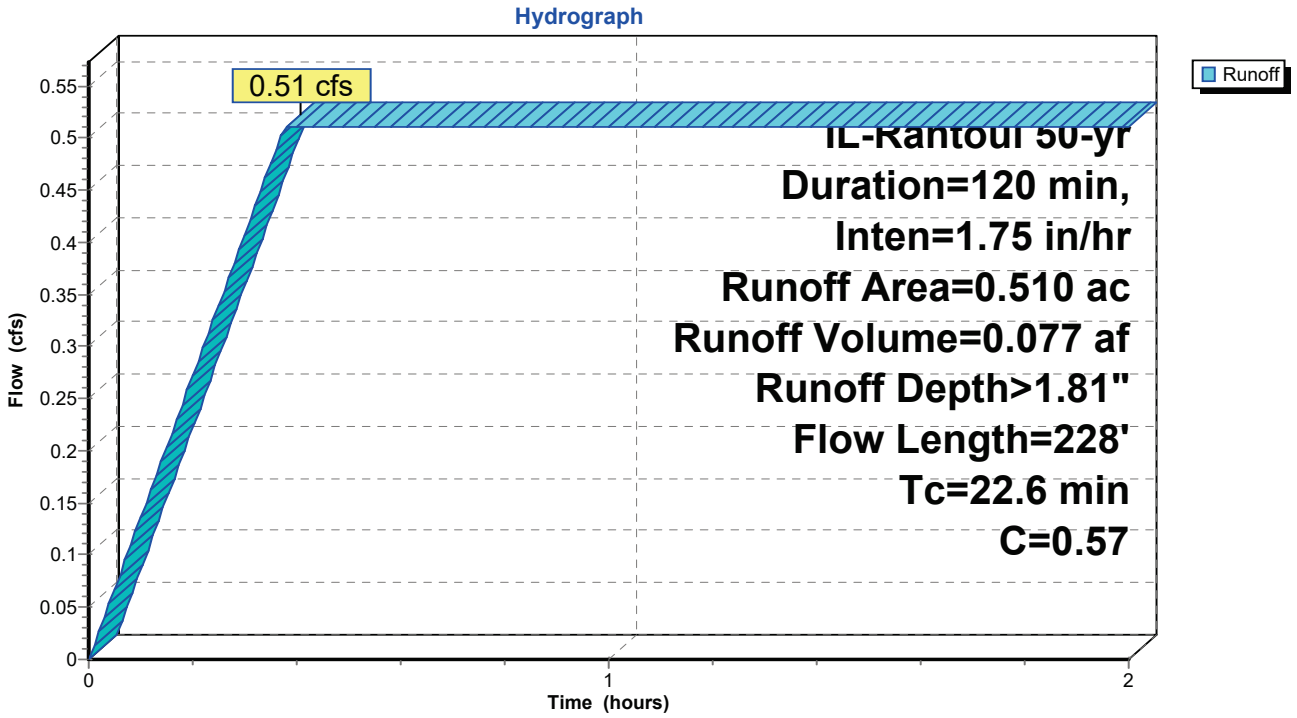
Runoff = 0.51 cfs @ 0.38 hrs, Volume= 0.077 af, Depth> 1.81"
Routed to Pond I31 : Manhole 3-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 50-yr Duration=120 min, Inten=1.75 in/hr

Area (ac)	C	Description
0.065	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
0.024	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.001	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.026	0.95	Sidewalk
0.394	0.60	Gravel
0.510	0.57	Weighted Average
0.484		94.90% Pervious Area
0.026		5.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.9	98	0.0032	0.11		**Sheet Flow, Grass area N of building** Grass: Short n= 0.150 P2= 5.80"
7.1	60	0.0004	0.14		**Shallow Concentrated Flow, Grass area N of building** Short Grass Pasture Kv= 7.0 fps
0.6	70	0.0100	2.03		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
22.6	228	Total			

Subcatchment CA21: SW Parking Area



Summary for Subcatchment CA6: Pond Catchment Area

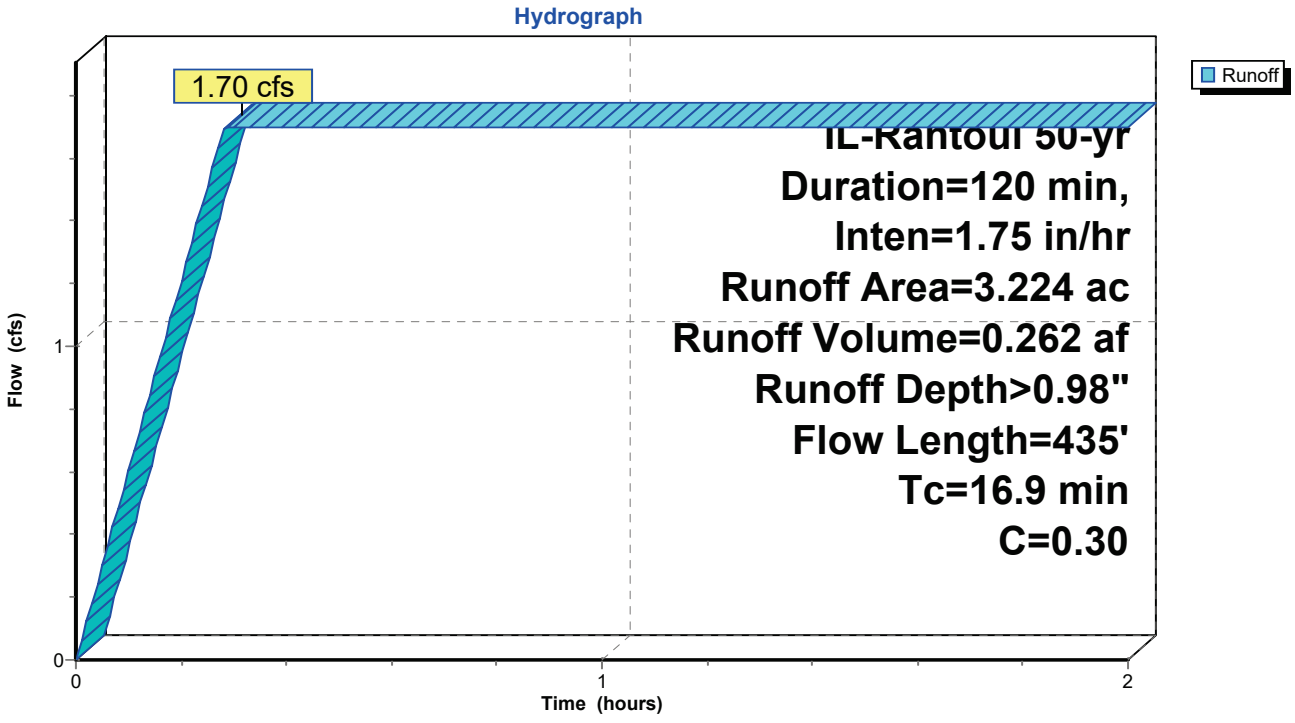
Runoff = 1.70 cfs @ 0.29 hrs, Volume= 0.262 af, Depth> 0.98"
Routed to Pond P1 : Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 50-yr Duration=120 min, Inten=1.75 in/hr

Area (ac)	C	Description
1.253	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
1.908	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.063	0.40	Orthents, loamy, 1 to 7 percent slopes (802B), Well drained, HSG C
3.224	0.30	Weighted Average
3.224		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0051	0.13		**Sheet Flow, Grass area W of parking area** Grass: Short n= 0.150 P2= 5.80"
4.3	335	0.0344	1.30		**Shallow Concentrated Flow, Grass area W of parking area** Short Grass Pasture Kv= 7.0 fps
16.9	435	Total			

Subcatchment CA6: Pond Catchment Area



Summary for Subcatchment CA7: West Access Road Area

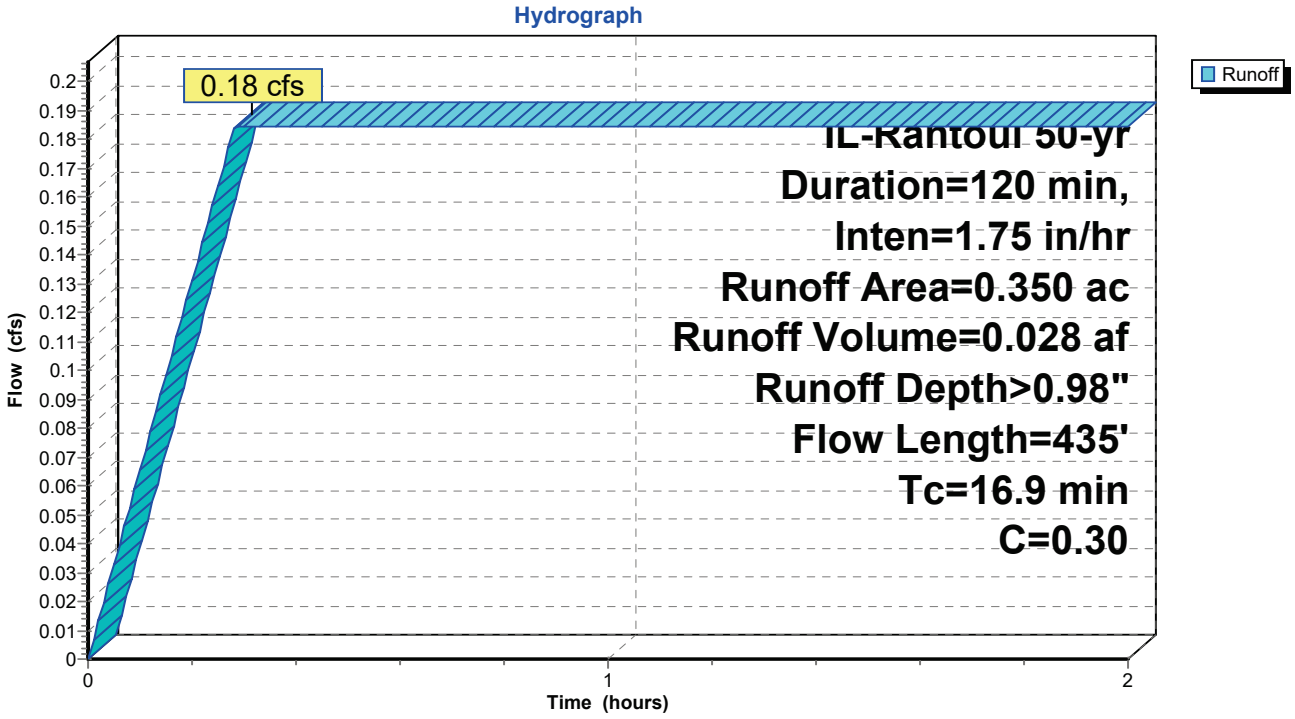
Runoff = 0.18 cfs @ 0.29 hrs, Volume= 0.028 af, Depth> 0.98"
Routed to Pond I14 : Inlet 1-4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 50-yr Duration=120 min, Inten=1.75 in/hr

Area (ac)	C	Description
0.348	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.002	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
0.350	0.30	Weighted Average
0.350		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0051	0.13		**Sheet Flow, Grass area W of parking area** Grass: Short n= 0.150 P2= 5.80"
4.3	335	0.0344	1.30		**Shallow Concentrated Flow, Grass area W of parking area** Short Grass Pasture Kv= 7.0 fps
16.9	435	Total			

Subcatchment CA7: West Access Road Area



Summary for Subcatchment CA8: West Building Area

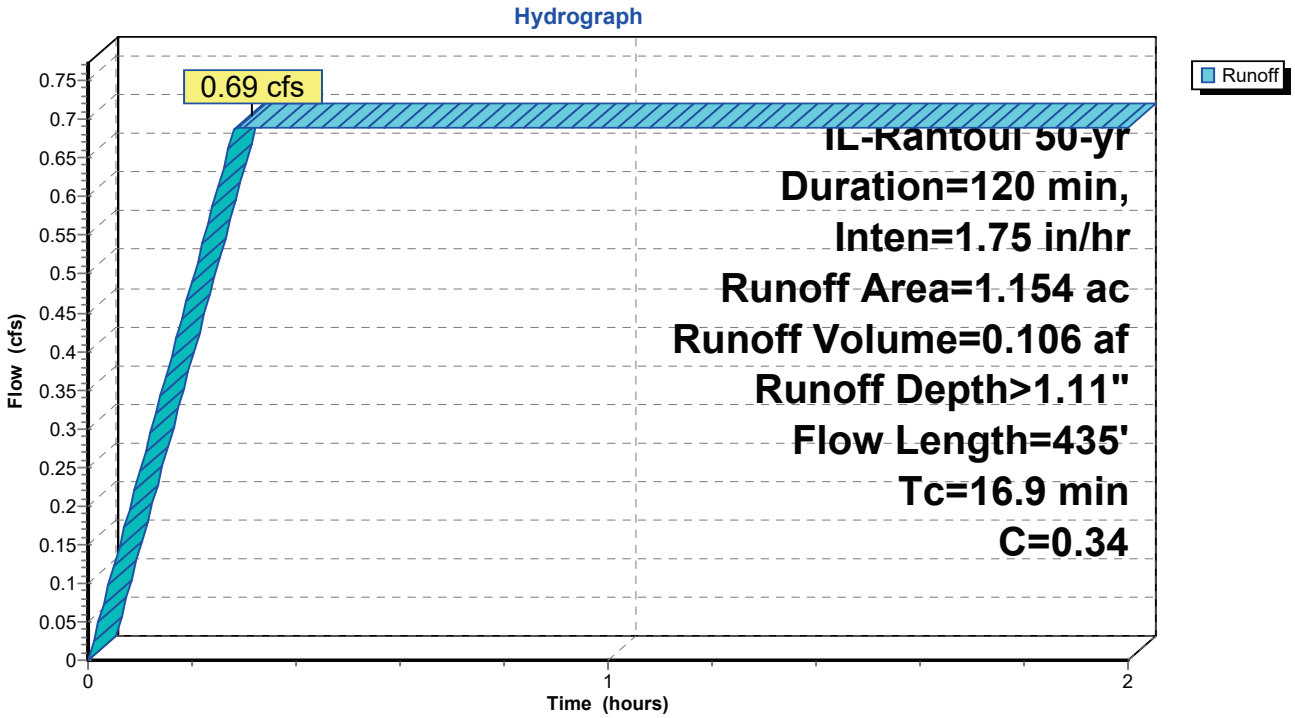
Runoff = 0.69 cfs @ 0.29 hrs, Volume= 0.106 af, Depth> 1.11"
Routed to Pond I15 : Inlet 1-5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 50-yr Duration=120 min, Inten=1.75 in/hr

Area (ac)	C	Description
0.960	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.136	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.007	0.40	Orthents, loamy, 1 to 7 percent slopes (802B), Well drained, HSG C
0.051	0.95	Sidewalk
1.154	0.34	Weighted Average
1.103		95.58% Pervious Area
0.051		4.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0051	0.13		**Sheet Flow, Grass area W of parking area** Grass: Short n= 0.150 P2= 5.80"
4.3	335	0.0344	1.30		**Shallow Concentrated Flow, Grass area W of parking area** Short Grass Pasture Kv= 7.0 fps
16.9	435	Total			

Subcatchment CA8: West Building Area



Summary for Subcatchment CA9: Building entrance

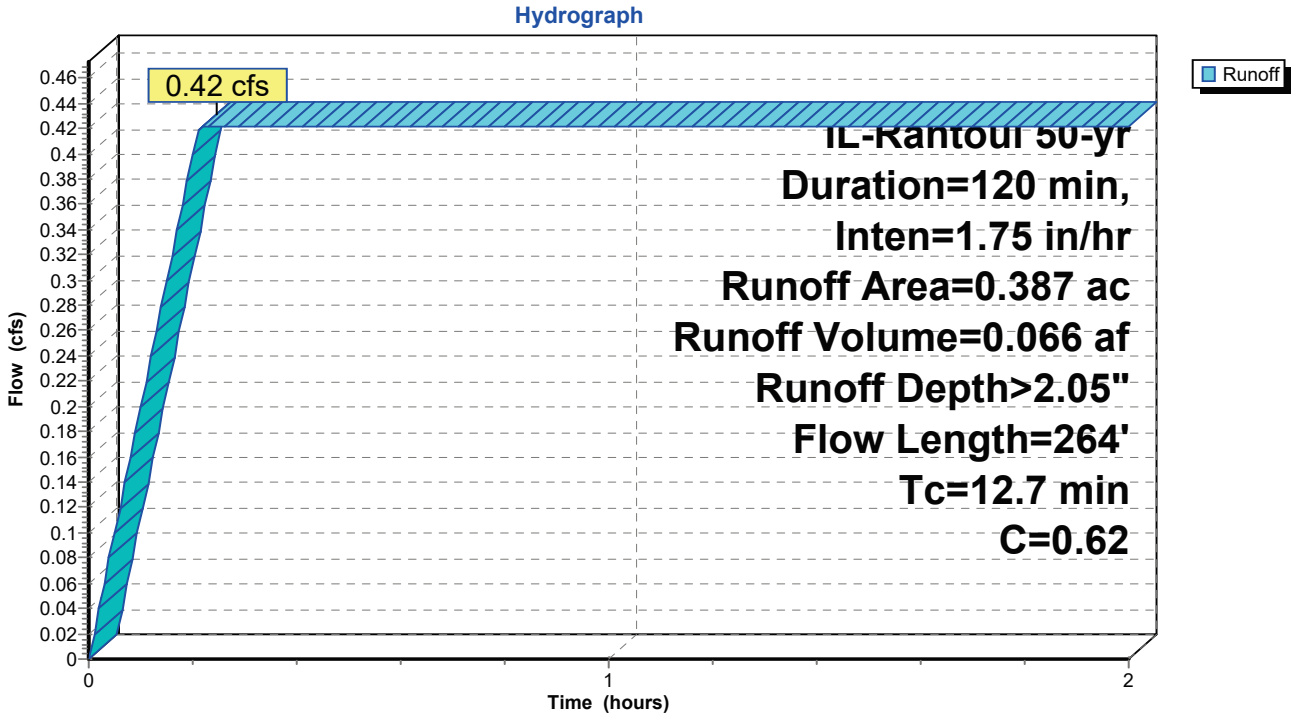
Runoff = 0.42 cfs @ 0.22 hrs, Volume= 0.066 af, Depth> 2.05"
Routed to Pond I71 : Inlet 7-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 50-yr Duration=120 min, Inten=1.75 in/hr

Area (ac)	C	Description
0.111	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.004	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.032	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.096	0.95	Sidewalk
0.144	0.60	Gravel
0.387	0.62	Weighted Average
0.291		75.19% Pervious Area
0.096		24.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.7	148	0.0135	0.21		**Sheet Flow, Gass SE of building** Grass: Short n= 0.150 P2= 5.80"
1.0	116	0.0088	1.90		**Shallow Concentrated Flow, Access Road** Paved Kv= 20.3 fps
12.7	264	Total			

Subcatchment CA9: Building entrance



Summary for Reach R10: Pipe CA10 to I81

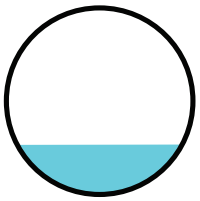
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.432 ac,100.00% Impervious, Inflow Depth > 3.30" for 50-yr event
Inflow = 0.72 cfs @ 0.03 hrs, Volume= 0.119 af
Outflow = 0.72 cfs @ 0.23 hrs, Volume= 0.118 af, Atten= 0%, Lag= 12.0 min
Routed to Pond I81 : Inlet 8-1

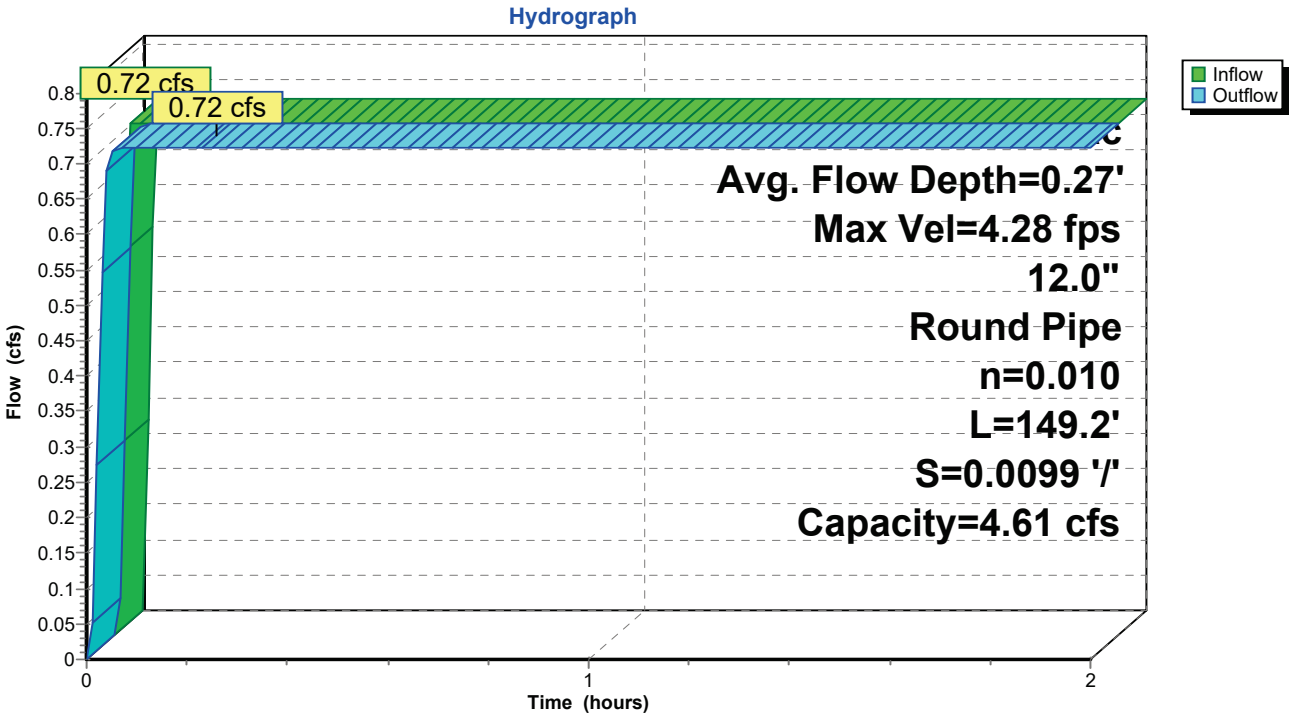
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.28 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 4.26 fps, Avg. Travel Time= 0.6 min

Peak Storage= 25 cf @ 0.23 hrs
Average Depth at Peak Storage= 0.27' , Surface Width= 0.89'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 4.61 cfs

12.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 149.2' Slope= 0.0099 '/'
Inlet Invert= 750.17', Outlet Invert= 748.69'



Reach R10: Pipe CA10 to I81



Summary for Reach R14: Pipe I14 to Pond

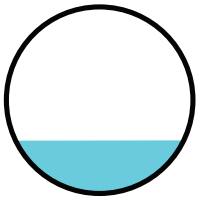
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 9.206 ac, 9.55% Impervious, Inflow Depth > 1.59" for 50-yr event
Inflow = 7.98 cfs @ 1.10 hrs, Volume= 1.222 af
Outflow = 7.98 cfs @ 1.10 hrs, Volume= 1.220 af, Atten= 0%, Lag= 0.0 min
Routed to Pond P1 : Detention Pond

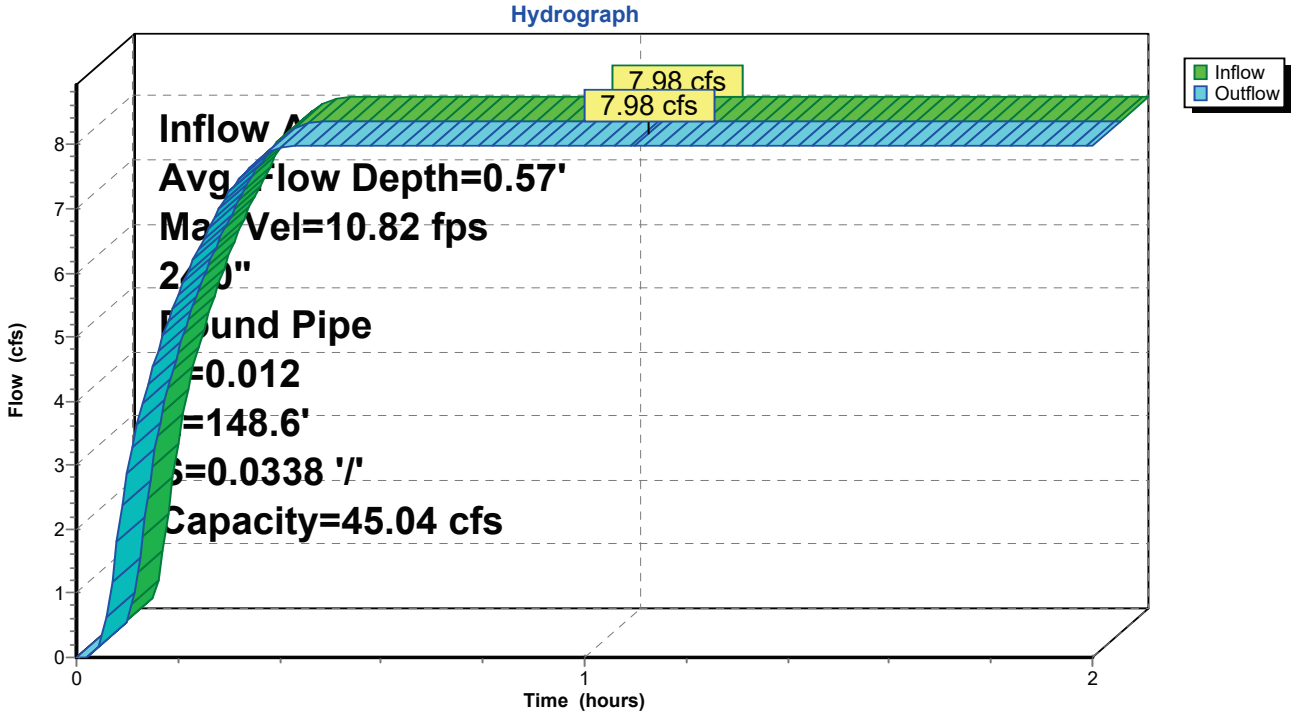
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 10.82 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 10.38 fps, Avg. Travel Time= 0.2 min

Peak Storage= 110 cf @ 1.10 hrs
Average Depth at Peak Storage= 0.57' , Surface Width= 1.81'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 45.04 cfs

24.0" Round Pipe
n= 0.012 Steel, smooth
Length= 148.6' Slope= 0.0338 '/'
Inlet Invert= 741.84', Outlet Invert= 736.82'



Reach R14: Pipe I14 to Pond



Summary for Reach R15: Pipe I15 to I14

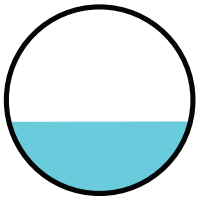
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 8.856 ac, 9.93% Impervious, Inflow Depth > 1.63" for 50-yr event
Inflow = 7.80 cfs @ 1.11 hrs, Volume= 1.201 af
Outflow = 7.80 cfs @ 1.10 hrs, Volume= 1.194 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I14 : Inlet 1-4

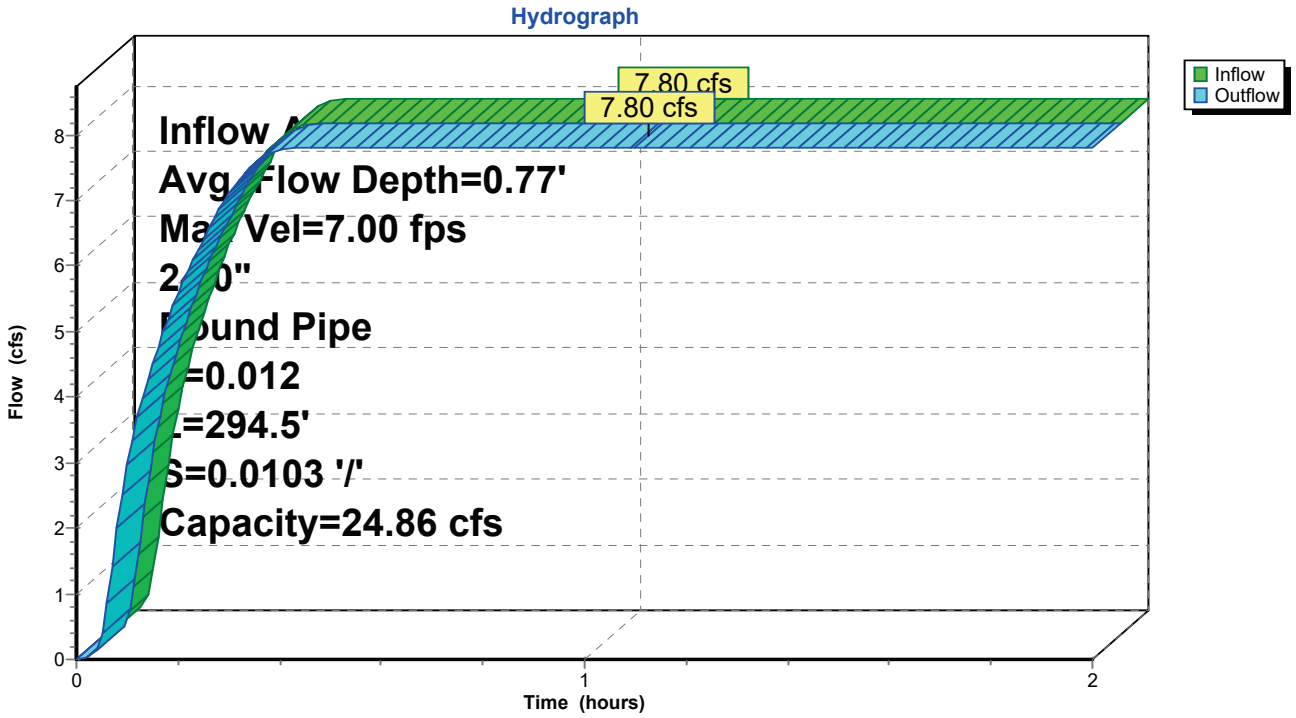
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 7.00 fps, Min. Travel Time= 0.7 min
Avg. Velocity = 6.74 fps, Avg. Travel Time= 0.7 min

Peak Storage= 328 cf @ 1.06 hrs
Average Depth at Peak Storage= 0.77' , Surface Width= 1.95'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 24.86 cfs

24.0" Round Pipe
n= 0.012 Steel, smooth
Length= 294.5' Slope= 0.0103 '/'
Inlet Invert= 744.87', Outlet Invert= 741.84'



Reach R15: Pipe I15 to I14



Summary for Reach R21: Pipe SS31 to SS23

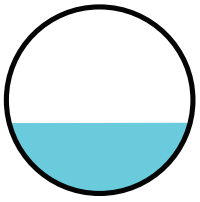
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 6.155 ac, 4.74% Impervious, Inflow Depth > 1.58" for 50-yr event
Inflow = 5.28 cfs @ 1.05 hrs, Volume= 0.810 af
Outflow = 5.28 cfs @ 1.10 hrs, Volume= 0.804 af, Atten= 0%, Lag= 3.0 min
Routed to Pond I15 : Inlet 1-5

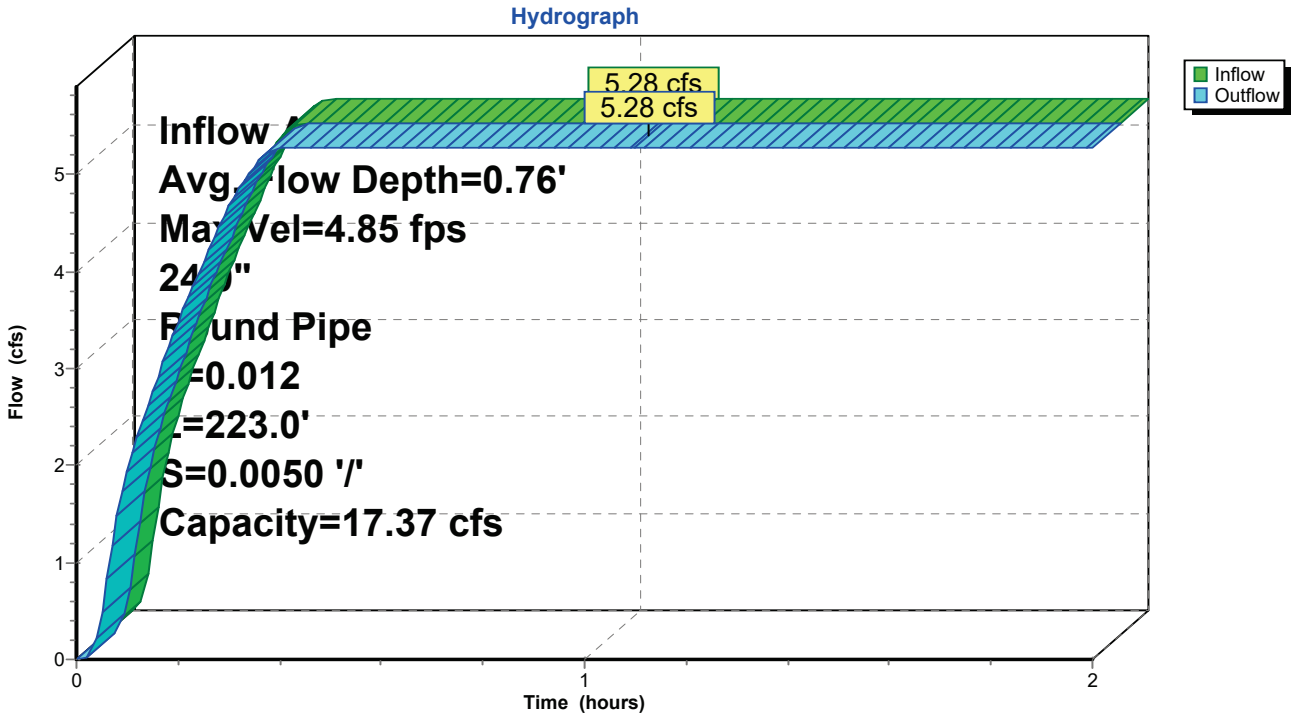
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.85 fps, Min. Travel Time= 0.8 min
Avg. Velocity = 4.67 fps, Avg. Travel Time= 0.8 min

Peak Storage= 243 cf @ 1.10 hrs
Average Depth at Peak Storage= 0.76' , Surface Width= 1.94'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 17.37 cfs

24.0" Round Pipe
n= 0.012 Steel, smooth
Length= 223.0' Slope= 0.0050 '/'
Inlet Invert= 746.00', Outlet Invert= 744.88'



Reach R21: Pipe SS31 to SS23



Summary for Reach R31: Pipe I31 to I21

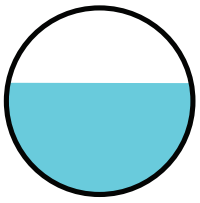
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 5.442 ac, 0.96% Impervious, Inflow Depth > 1.56" for 50-yr event
Inflow = 4.62 cfs @ 0.55 hrs, Volume= 0.708 af
Outflow = 4.62 cfs @ 0.60 hrs, Volume= 0.705 af, Atten= 0%, Lag= 3.0 min
Routed to Pond I21 : Inlet 2-1

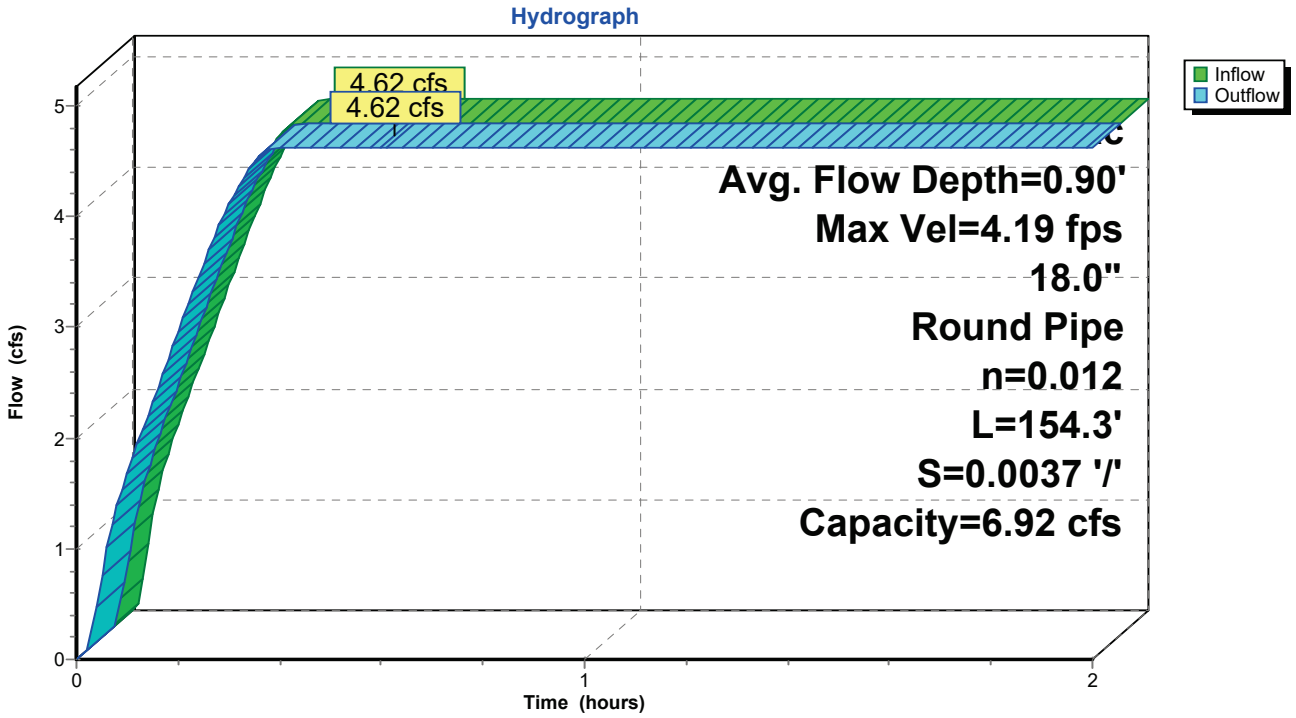
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.19 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 4.05 fps, Avg. Travel Time= 0.6 min

Peak Storage= 170 cf @ 0.60 hrs
Average Depth at Peak Storage= 0.90' , Surface Width= 1.47'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 6.92 cfs

18.0" Round Pipe
n= 0.012 Steel, smooth
Length= 154.3' Slope= 0.0037 '/'
Inlet Invert= 747.75', Outlet Invert= 747.18'



Reach R31: Pipe I31 to I21



Summary for Reach R41: Pipe I41 to I31

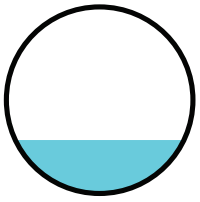
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.229 ac,100.00% Impervious, Inflow Depth > 3.31" for 50-yr event
Inflow = 0.38 cfs @ 0.23 hrs, Volume= 0.063 af
Outflow = 0.38 cfs @ 1.12 hrs, Volume= 0.062 af, Atten= 0%, Lag= 53.4 min
Routed to Pond I21 : Inlet 2-1

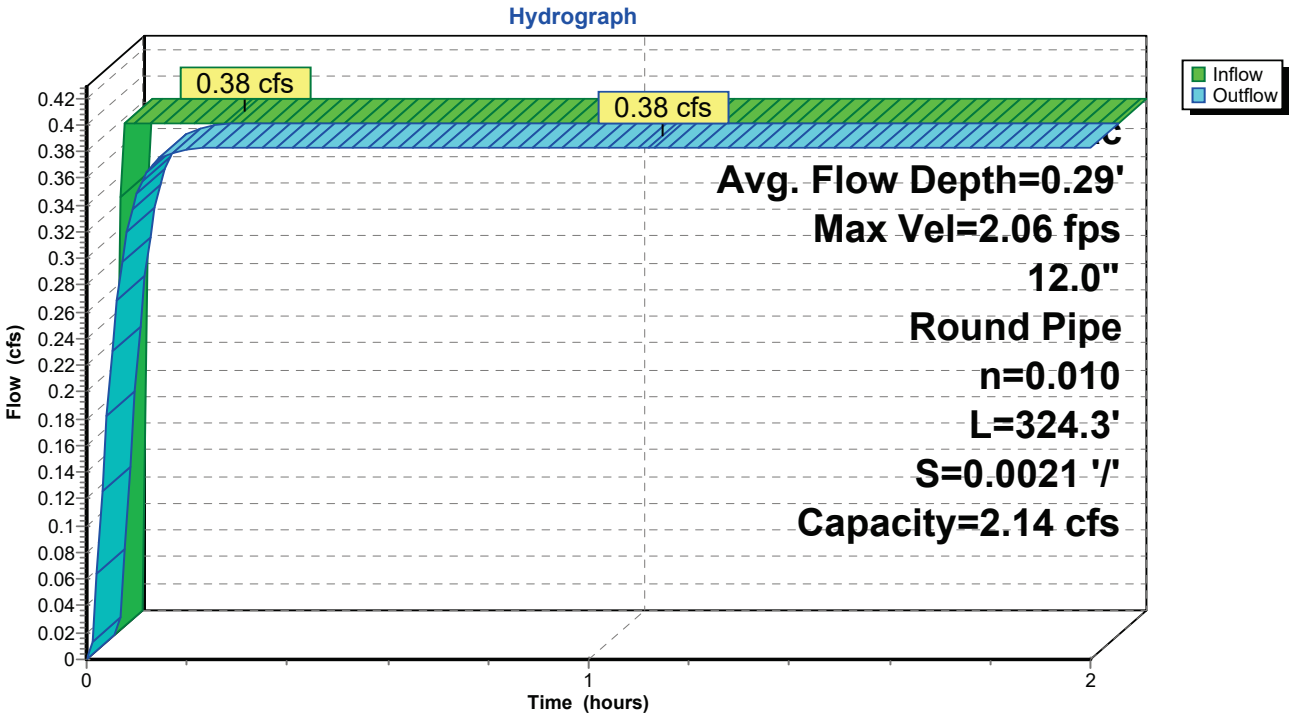
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 2.06 fps, Min. Travel Time= 2.6 min
Avg. Velocity = 2.04 fps, Avg. Travel Time= 2.7 min

Peak Storage= 60 cf @ 1.12 hrs
Average Depth at Peak Storage= 0.29' , Surface Width= 0.90'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 2.14 cfs

12.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 324.3' Slope= 0.0021 '/'
Inlet Invert= 748.86', Outlet Invert= 748.17'



Reach R41: Pipe I41 to I31



Summary for Reach R51: Pipe I51 to I31

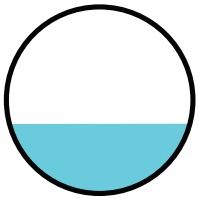
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 2.540 ac, 1.02% Impervious, Inflow Depth > 1.55" for 50-yr event
Inflow = 2.14 cfs @ 0.54 hrs, Volume= 0.328 af
Outflow = 2.14 cfs @ 0.55 hrs, Volume= 0.327 af, Atten= 0%, Lag= 0.6 min
Routed to Pond I31 : Manhole 3-1

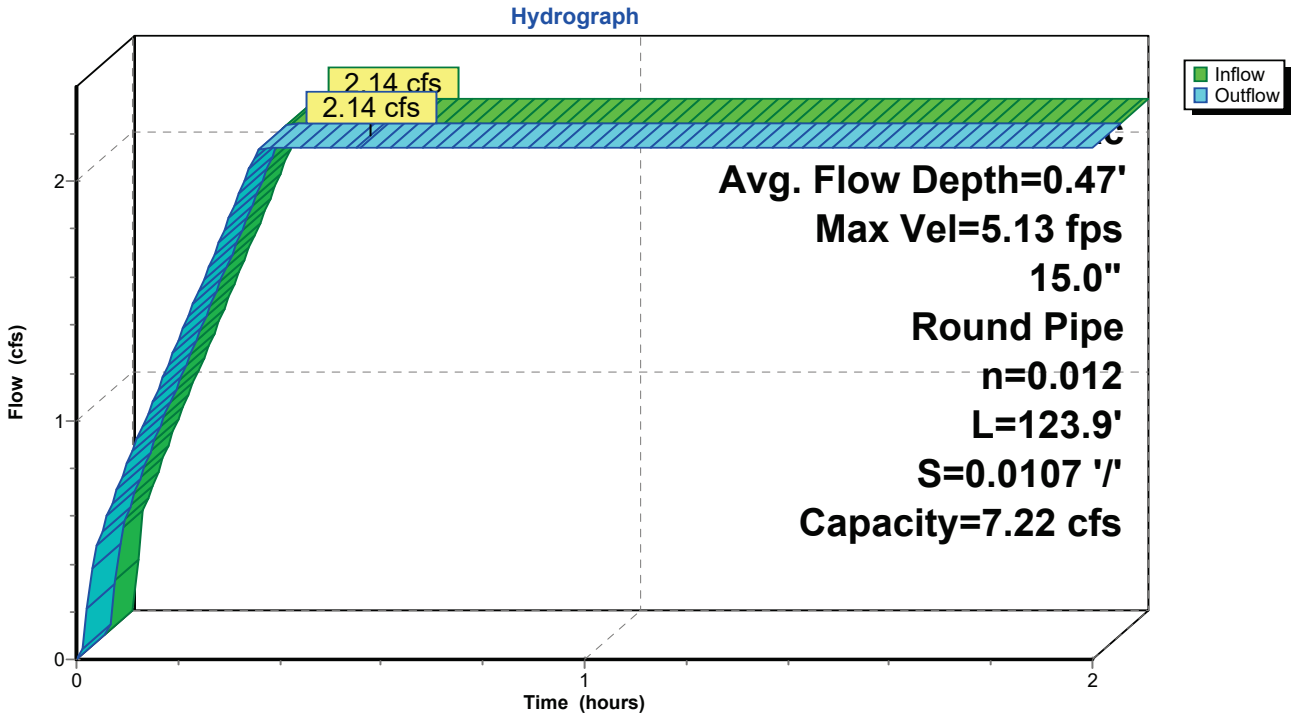
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 5.13 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 4.97 fps, Avg. Travel Time= 0.4 min

Peak Storage= 52 cf @ 0.55 hrs
Average Depth at Peak Storage= 0.47' , Surface Width= 1.21'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 7.22 cfs

15.0" Round Pipe
n= 0.012 Steel, smooth
Length= 123.9' Slope= 0.0107 '/'
Inlet Invert= 749.07', Outlet Invert= 747.75'



Reach R51: Pipe I51 to I31



Summary for Reach R52: Pipe I52 to I51

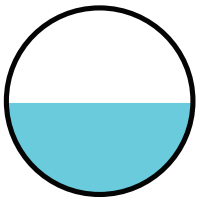
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 2.186 ac, 0.27% Impervious, Inflow Depth > 1.46" for 50-yr event
Inflow = 1.75 cfs @ 0.53 hrs, Volume= 0.265 af
Outflow = 1.75 cfs @ 0.54 hrs, Volume= 0.264 af, Atten= 0%, Lag= 0.6 min
Routed to Pond I51 : Inlet 5-1

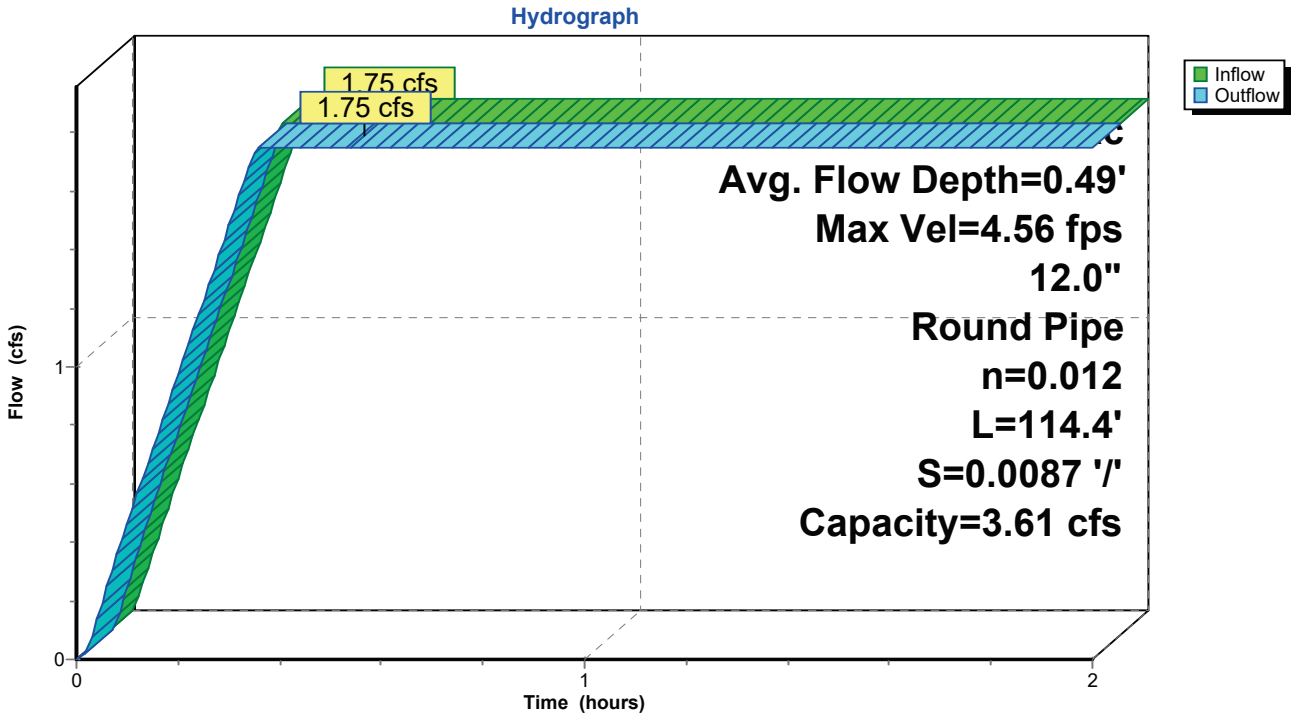
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.56 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 4.38 fps, Avg. Travel Time= 0.4 min

Peak Storage= 44 cf @ 0.54 hrs
Average Depth at Peak Storage= 0.49' , Surface Width= 1.00'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.61 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 114.4' Slope= 0.0087 '/'
Inlet Invert= 750.10', Outlet Invert= 749.10'



Reach R52: Pipe I52 to I51



Summary for Reach R53: Pipe I53 to I52

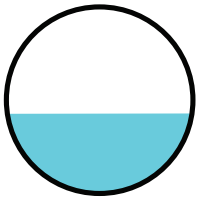
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.156 ac, 0.00% Impervious, Inflow Depth > 1.69" for 50-yr event
Inflow = 0.15 cfs @ 0.36 hrs, Volume= 0.022 af
Outflow = 0.15 cfs @ 0.54 hrs, Volume= 0.022 af, Atten= 0%, Lag= 10.8 min
Routed to Pond I52 : Inlet 5-2

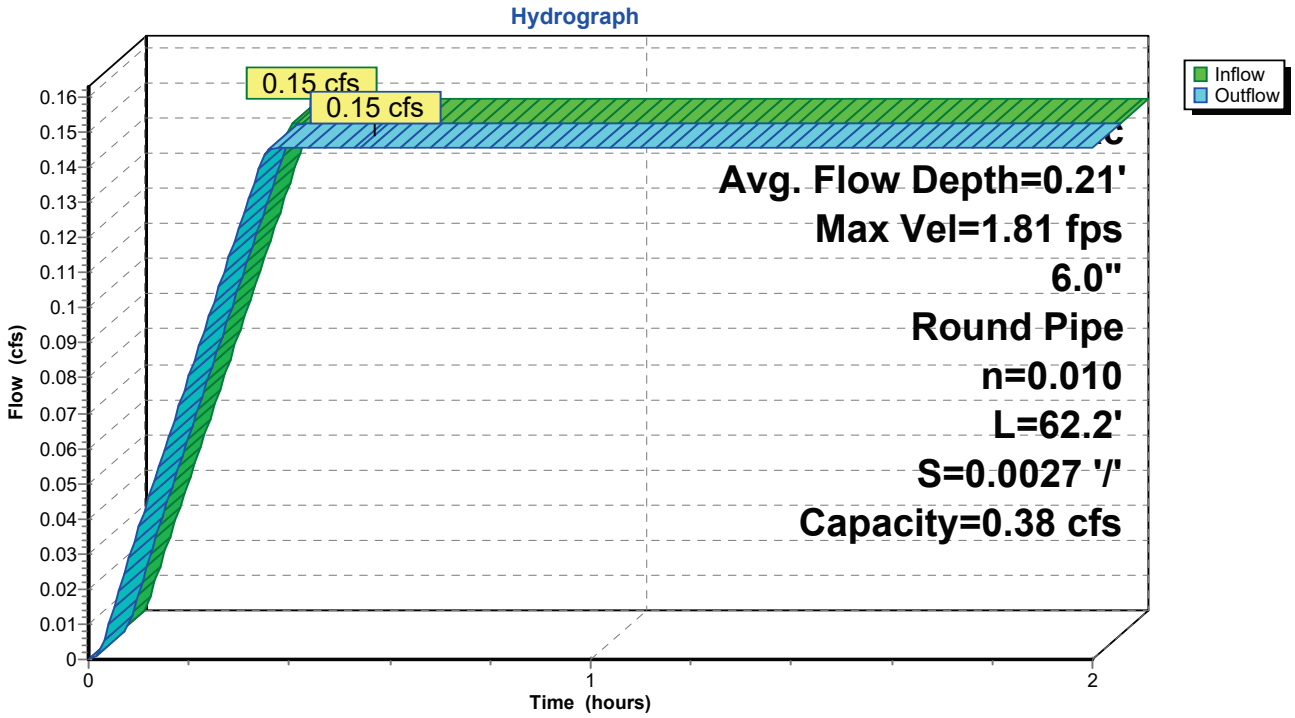
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 1.81 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 1.74 fps, Avg. Travel Time= 0.6 min

Peak Storage= 5 cf @ 0.54 hrs
Average Depth at Peak Storage= 0.21' , Surface Width= 0.49'
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 0.38 cfs

6.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 62.2' Slope= 0.0027 '/'
Inlet Invert= 750.43', Outlet Invert= 750.26'



Reach R53: Pipe I53 to I52



Summary for Reach R54: Pipe I54 to I53

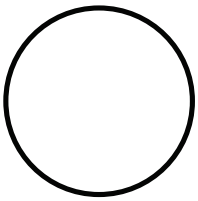
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I53 : Inlet 5-3

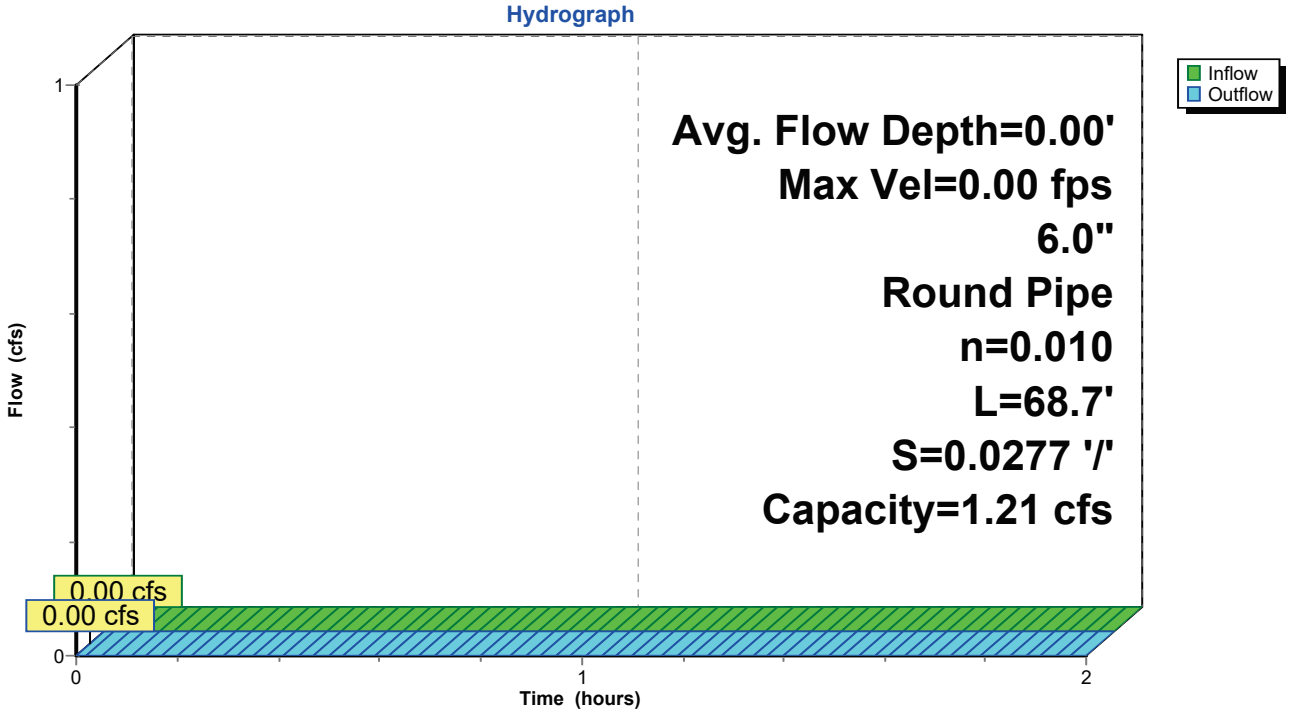
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 1.21 cfs

6.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 68.7' Slope= 0.0277 '/'
Inlet Invert= 752.46', Outlet Invert= 750.56'



Reach R54: Pipe I54 to I53



Summary for Reach R61: Pipe I61 to I31

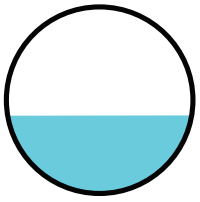
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 2.392 ac, 0.00% Impervious, Inflow Depth > 1.54" for 50-yr event
Inflow = 1.97 cfs @ 0.49 hrs, Volume= 0.306 af
Outflow = 1.97 cfs @ 0.49 hrs, Volume= 0.305 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I31 : Manhole 3-1

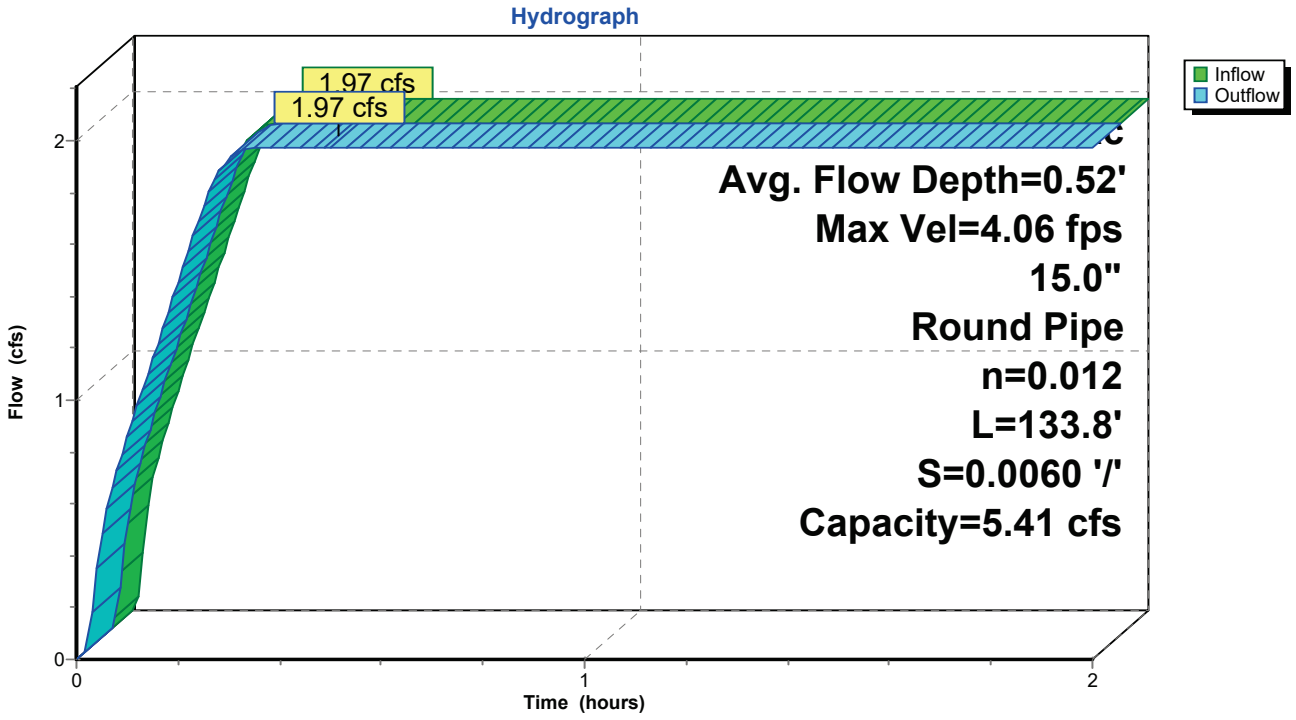
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.06 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 3.95 fps, Avg. Travel Time= 0.6 min

Peak Storage= 65 cf @ 0.49 hrs
Average Depth at Peak Storage= 0.52' , Surface Width= 1.23'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 5.41 cfs

15.0" Round Pipe
n= 0.012 Steel, smooth
Length= 133.8' Slope= 0.0060 '/'
Inlet Invert= 748.55', Outlet Invert= 747.75'



Reach R61: Pipe I61 to I31



Summary for Reach R62: Pipe I62 to I61

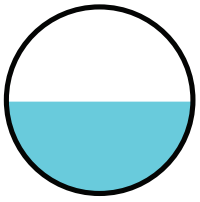
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.749 ac, 0.00% Impervious, Inflow Depth > 1.55" for 50-yr event
Inflow = 1.44 cfs @ 0.47 hrs, Volume= 0.226 af
Outflow = 1.44 cfs @ 0.48 hrs, Volume= 0.225 af, Atten= 0%, Lag= 0.6 min
Routed to Pond I61 : Manhole 6-1

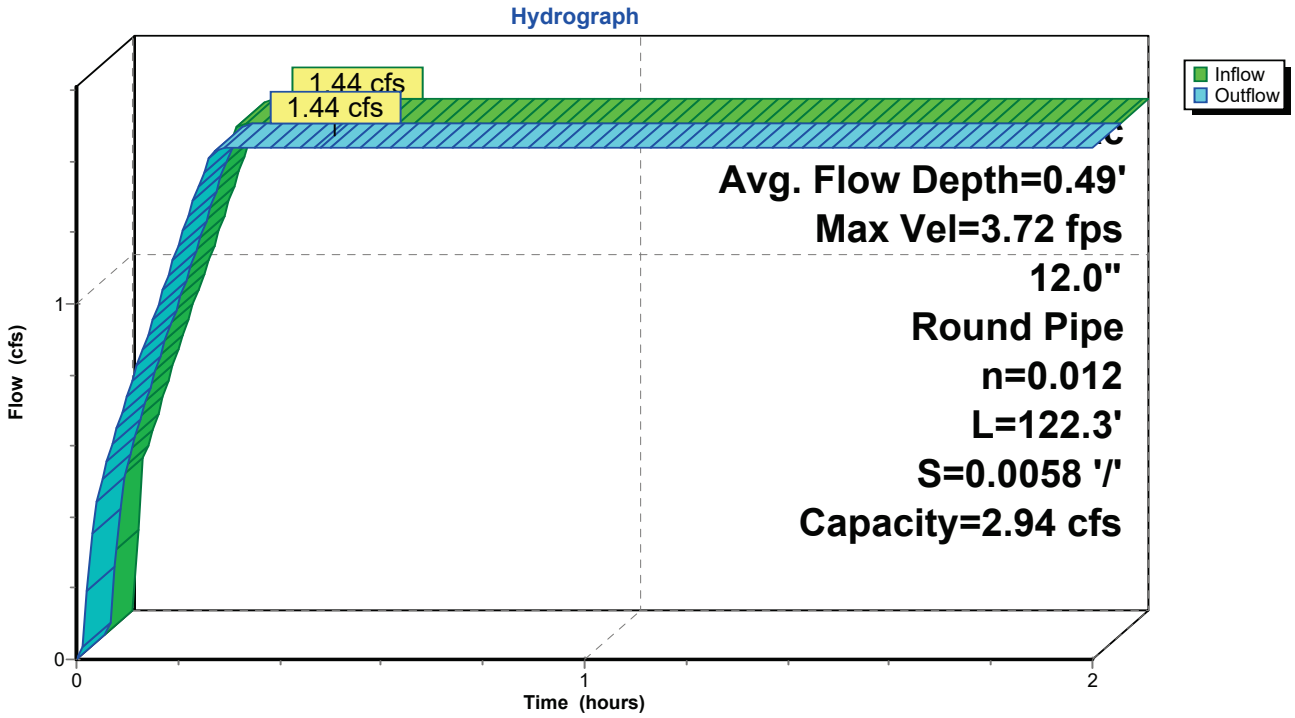
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.72 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 3.65 fps, Avg. Travel Time= 0.6 min

Peak Storage= 47 cf @ 0.48 hrs
Average Depth at Peak Storage= 0.49' , Surface Width= 1.00'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 2.94 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 122.3' Slope= 0.0058 '/'
Inlet Invert= 749.32', Outlet Invert= 748.61'



Reach R62: Pipe I62 to I61



Summary for Reach R63: Pipe I63 to I62

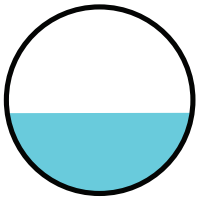
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.364 ac, 0.00% Impervious, Inflow Depth > 1.41" for 50-yr event
Inflow = 1.03 cfs @ 0.27 hrs, Volume= 0.160 af
Outflow = 1.03 cfs @ 0.46 hrs, Volume= 0.159 af, Atten= 0%, Lag= 11.4 min
Routed to Pond I62 : Inlet 6-2

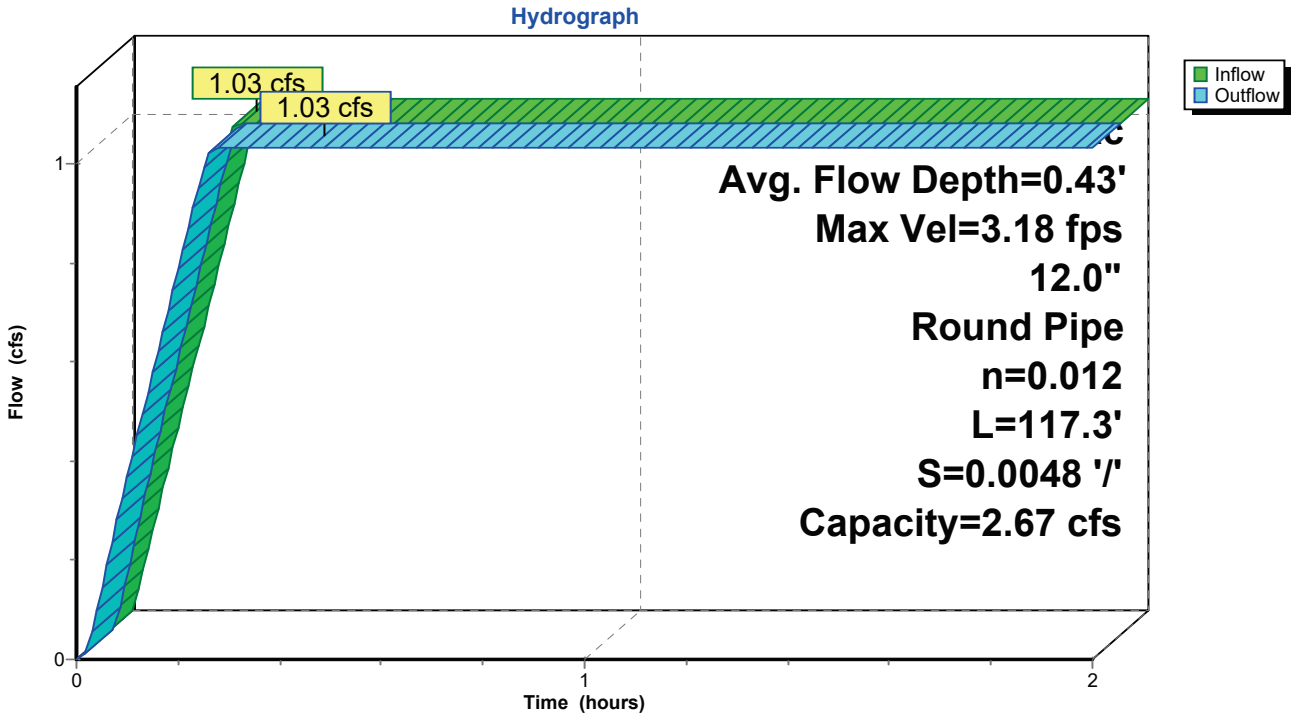
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.18 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 3.08 fps, Avg. Travel Time= 0.6 min

Peak Storage= 38 cf @ 0.47 hrs
Average Depth at Peak Storage= 0.43' , Surface Width= 0.99'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 2.67 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 117.3' Slope= 0.0048 '/'
Inlet Invert= 749.91', Outlet Invert= 749.35'



Reach R63: Pipe I63 to I62



Summary for Reach R71: Pipe I71 to I15

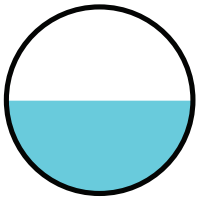
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.547 ac, 34.65% Impervious, Inflow Depth > 2.28" for 50-yr event
Inflow = 1.83 cfs @ 0.55 hrs, Volume= 0.294 af
Outflow = 1.83 cfs @ 0.63 hrs, Volume= 0.291 af, Atten= 0%, Lag= 4.8 min
Routed to Pond I15 : Inlet 1-5

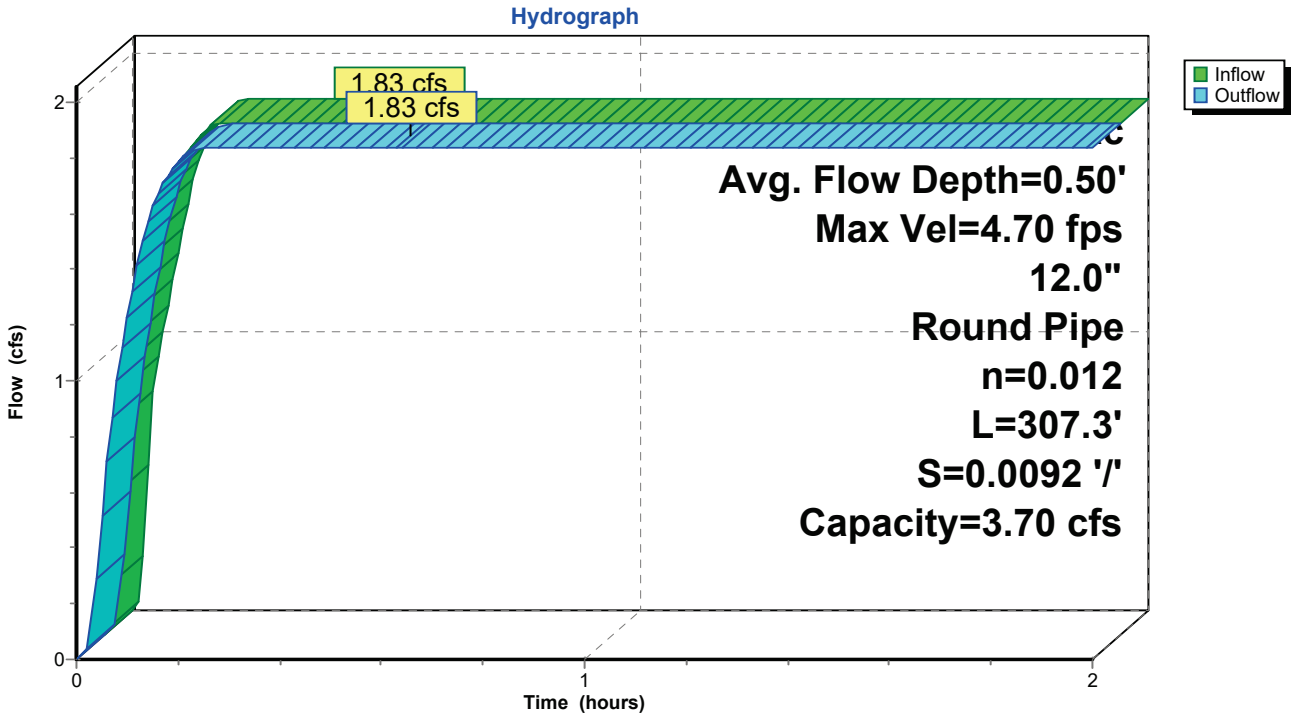
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.70 fps, Min. Travel Time= 1.1 min
Avg. Velocity = 4.60 fps, Avg. Travel Time= 1.1 min

Peak Storage= 120 cf @ 0.63 hrs
Average Depth at Peak Storage= 0.50' , Surface Width= 1.00'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.70 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 307.3' Slope= 0.0092 '/'
Inlet Invert= 747.78', Outlet Invert= 744.96'



Reach R71: Pipe I71 to I15



Summary for Reach R81: Pipe I81 to I71

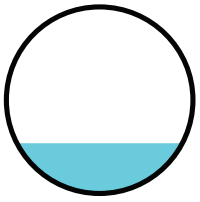
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.432 ac,100.00% Impervious, Inflow Depth > 3.28" for 50-yr event
Inflow = 0.72 cfs @ 0.23 hrs, Volume= 0.118 af
Outflow = 0.72 cfs @ 0.09 hrs, Volume= 0.118 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I71 : Inlet 7-1

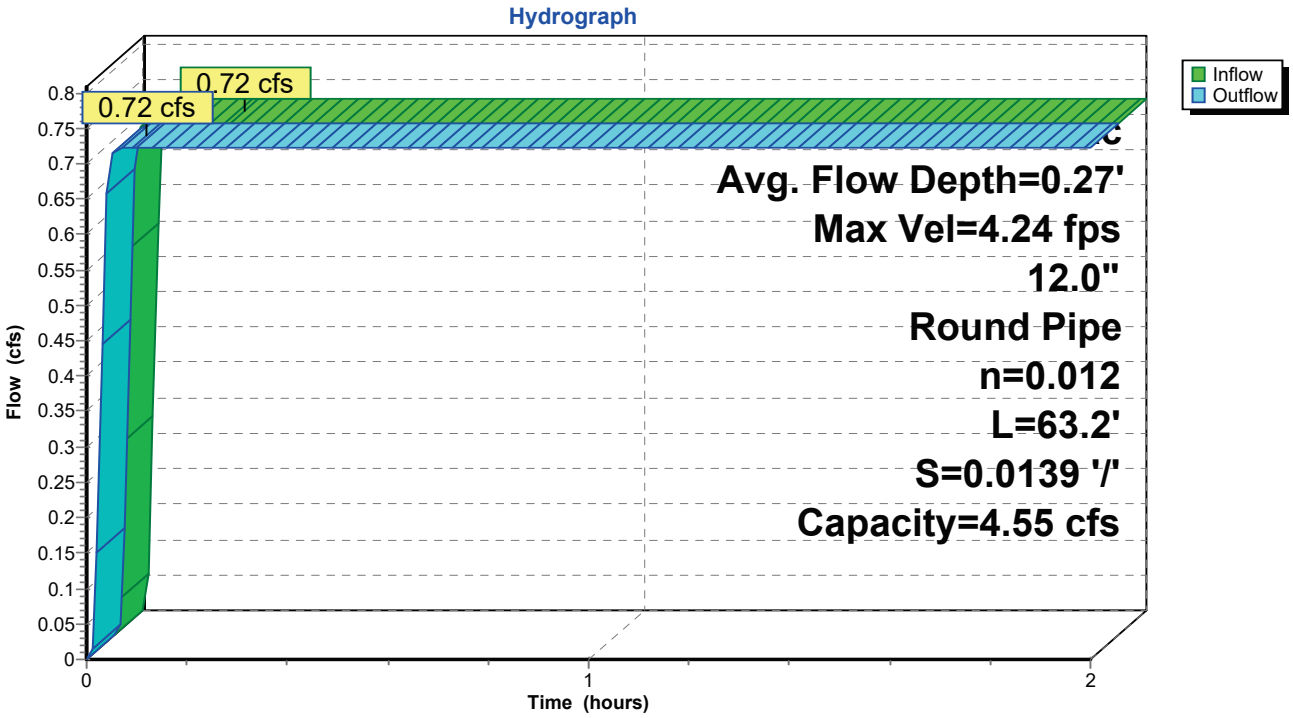
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.24 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 4.21 fps, Avg. Travel Time= 0.3 min

Peak Storage= 11 cf @ 0.09 hrs
Average Depth at Peak Storage= 0.27' , Surface Width= 0.89'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 4.55 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 63.2' Slope= 0.0139 '/'
Inlet Invert= 748.66', Outlet Invert= 747.78'



Reach R81: Pipe I81 to I71



Summary for Reach R91: Pipe I91 to I71

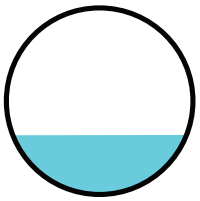
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.728 ac, 1.10% Impervious, Inflow Depth > 1.82" for 50-yr event
Inflow = 0.69 cfs @ 0.40 hrs, Volume= 0.110 af
Outflow = 0.69 cfs @ 0.55 hrs, Volume= 0.109 af, Atten= 0%, Lag= 9.0 min
Routed to Pond I71 : Inlet 7-1

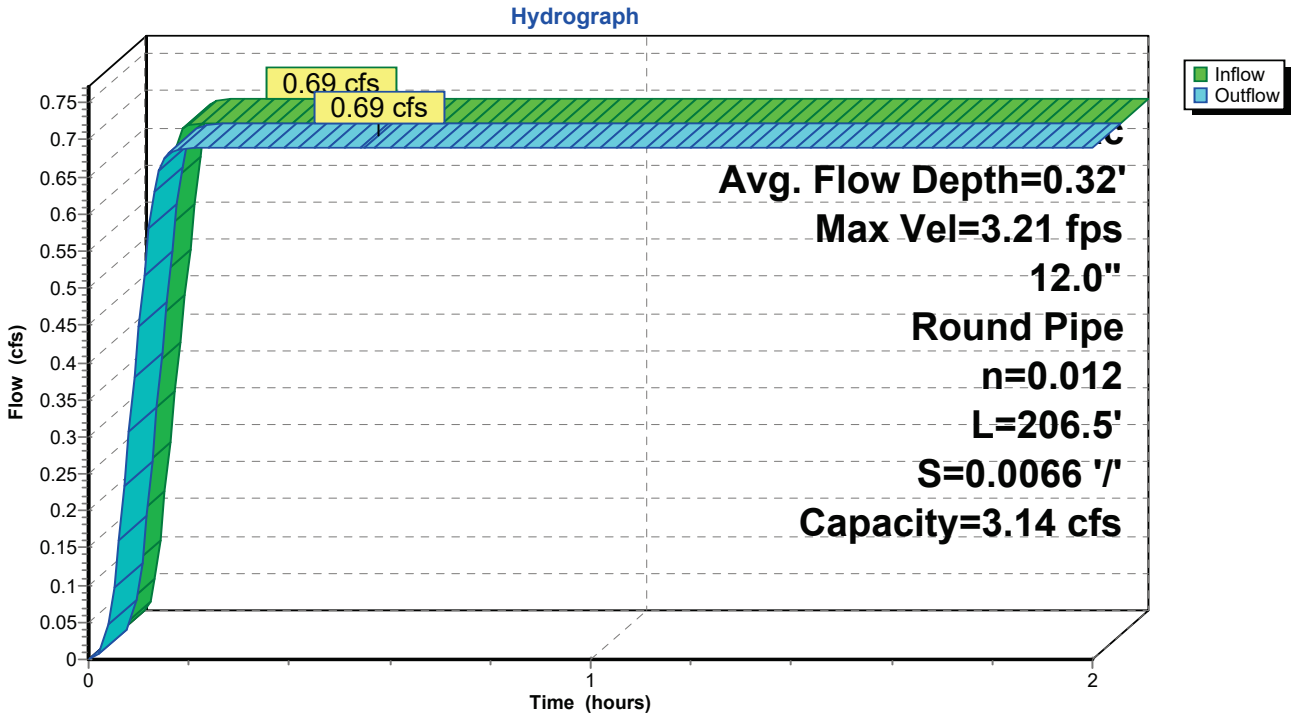
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.21 fps, Min. Travel Time= 1.1 min
Avg. Velocity = 3.13 fps, Avg. Travel Time= 1.1 min

Peak Storage= 44 cf @ 0.55 hrs
Average Depth at Peak Storage= 0.32' , Surface Width= 0.93'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.14 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 206.5' Slope= 0.0066 '/'
Inlet Invert= 750.30', Outlet Invert= 748.93'



Reach R91: Pipe I91 to I71



Summary for Reach R92: Pipe I92 to I91

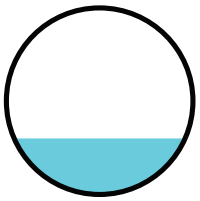
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.656 ac, 1.22% Impervious, Inflow Depth > 1.84" for 50-yr event
Inflow = 0.62 cfs @ 0.12 hrs, Volume= 0.100 af
Outflow = 0.62 cfs @ 0.38 hrs, Volume= 0.100 af, Atten= 0%, Lag= 15.6 min
Routed to Pond I91 : Inlet 9-1

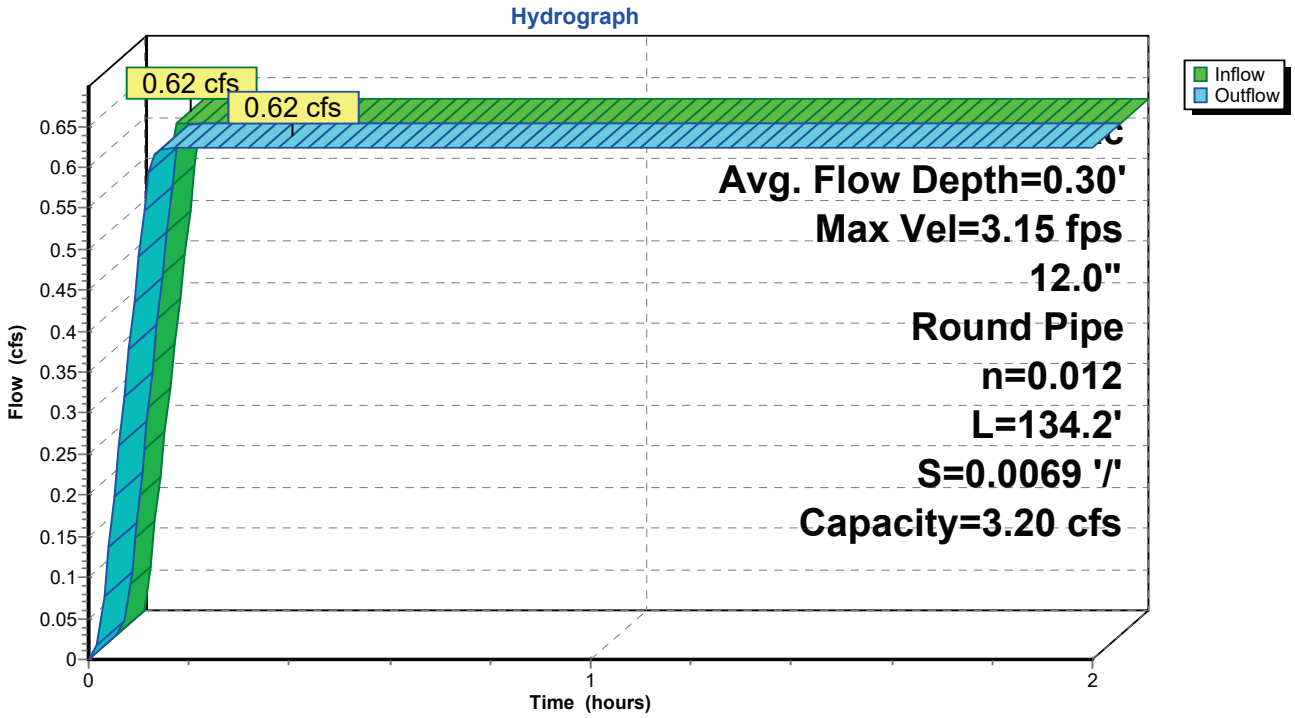
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.15 fps, Min. Travel Time= 0.7 min
Avg. Velocity = 3.10 fps, Avg. Travel Time= 0.7 min

Peak Storage= 27 cf @ 0.38 hrs
Average Depth at Peak Storage= 0.30' , Surface Width= 0.92'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.20 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 134.2' Slope= 0.0069 '/'
Inlet Invert= 751.22', Outlet Invert= 750.30'



Reach R92: Pipe I92 to I91



Summary for Pond I14: Inlet 1-4

[57] Hint: Peaked at 742.76' (Flood elevation advised)
[62] Hint: Exceeded Reach R15 OUTLET depth by 0.15' @ 0.85 hrs

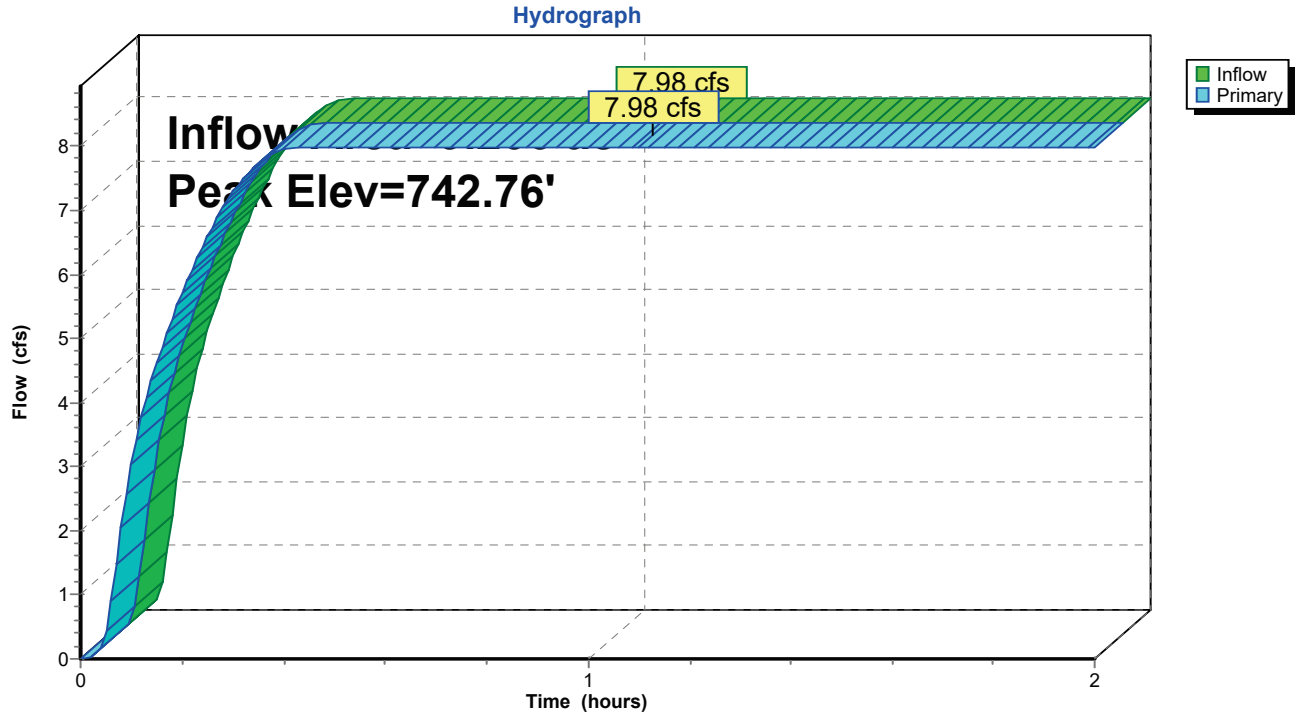
Inflow Area = 9.206 ac, 9.55% Impervious, Inflow Depth > 1.59" for 50-yr event
Inflow = 7.98 cfs @ 1.10 hrs, Volume= 1.222 af
Outflow = 7.98 cfs @ 1.10 hrs, Volume= 1.222 af, Atten= 0%, Lag= 0.0 min
Primary = 7.98 cfs @ 1.10 hrs, Volume= 1.222 af
Routed to Reach R14 : Pipe I14 to Pond

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 742.76' @ 0.90 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	741.84'	**24.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	741.84'	**24.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=7.98 cfs @ 1.10 hrs HW=742.76' TW=742.41' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 3.99 cfs @ 2.84 fps)
2=Orifice/Grate (Orifice Controls 3.99 cfs @ 2.84 fps)

Pond I14: Inlet 1-4



Summary for Pond I15: Inlet 1-5

[57] Hint: Peaked at 745.84' (Flood elevation advised)
[62] Hint: Exceeded Reach R21 OUTLET depth by 0.21' @ 0.88 hrs
[62] Hint: Exceeded Reach R71 OUTLET depth by 0.39' @ 0.88 hrs

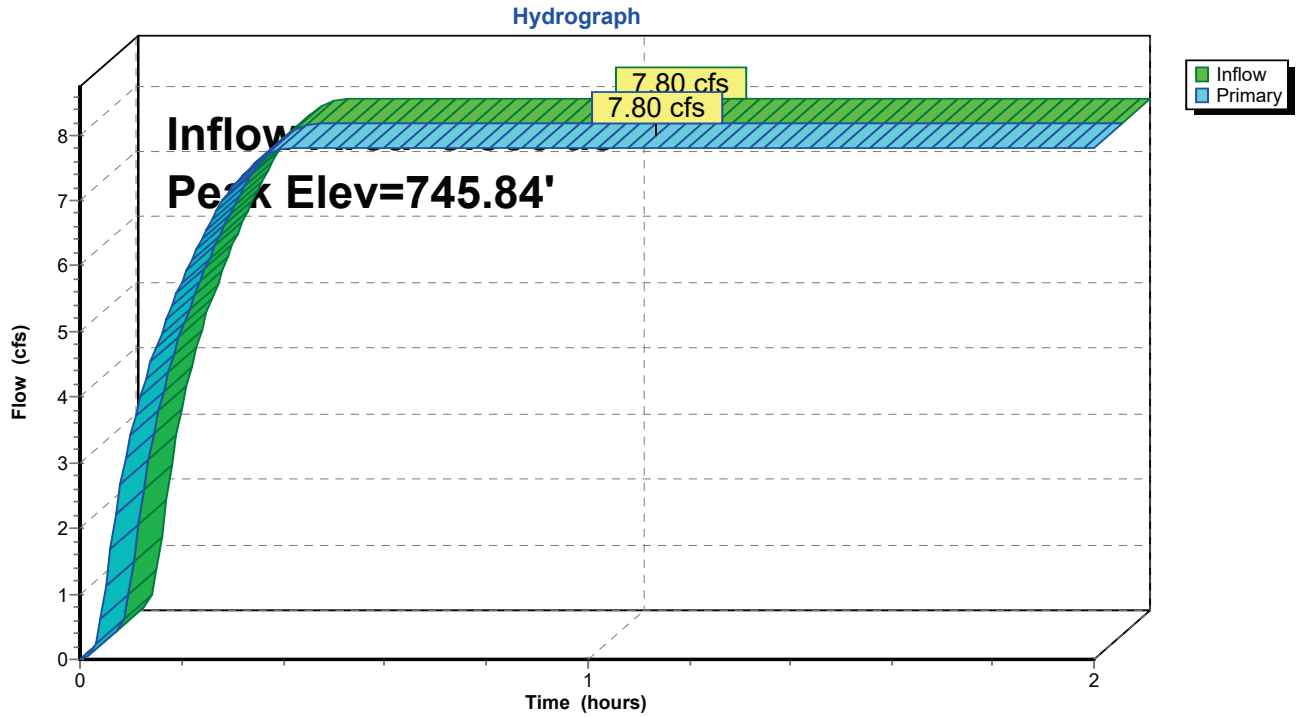
Inflow Area = 8.856 ac, 9.93% Impervious, Inflow Depth > 1.63" for 50-yr event
Inflow = 7.80 cfs @ 1.10 hrs, Volume= 1.201 af
Outflow = 7.80 cfs @ 1.11 hrs, Volume= 1.201 af, Atten= 0%, Lag= 0.6 min
Primary = 7.80 cfs @ 1.11 hrs, Volume= 1.201 af
Routed to Reach R15 : Pipe I15 to I14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 745.84' @ 0.88 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	744.87'	**24.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	744.96'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#3	Primary	744.96'	**24.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=7.80 cfs @ 1.11 hrs HW=745.84' TW=745.64' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 3.30 cfs @ 2.17 fps)
└─**2=Orifice/Grate** (Orifice Controls 1.60 cfs @ 2.17 fps)
└─**3=Orifice/Grate** (Orifice Controls 2.91 cfs @ 2.17 fps)

Pond I15: Inlet 1-5



Summary for Pond I21: Inlet 2-1

[57] Hint: Peaked at 748.09' (Flood elevation advised)
[62] Hint: Exceeded Reach R31 OUTLET depth by 0.04' @ 0.18 hrs

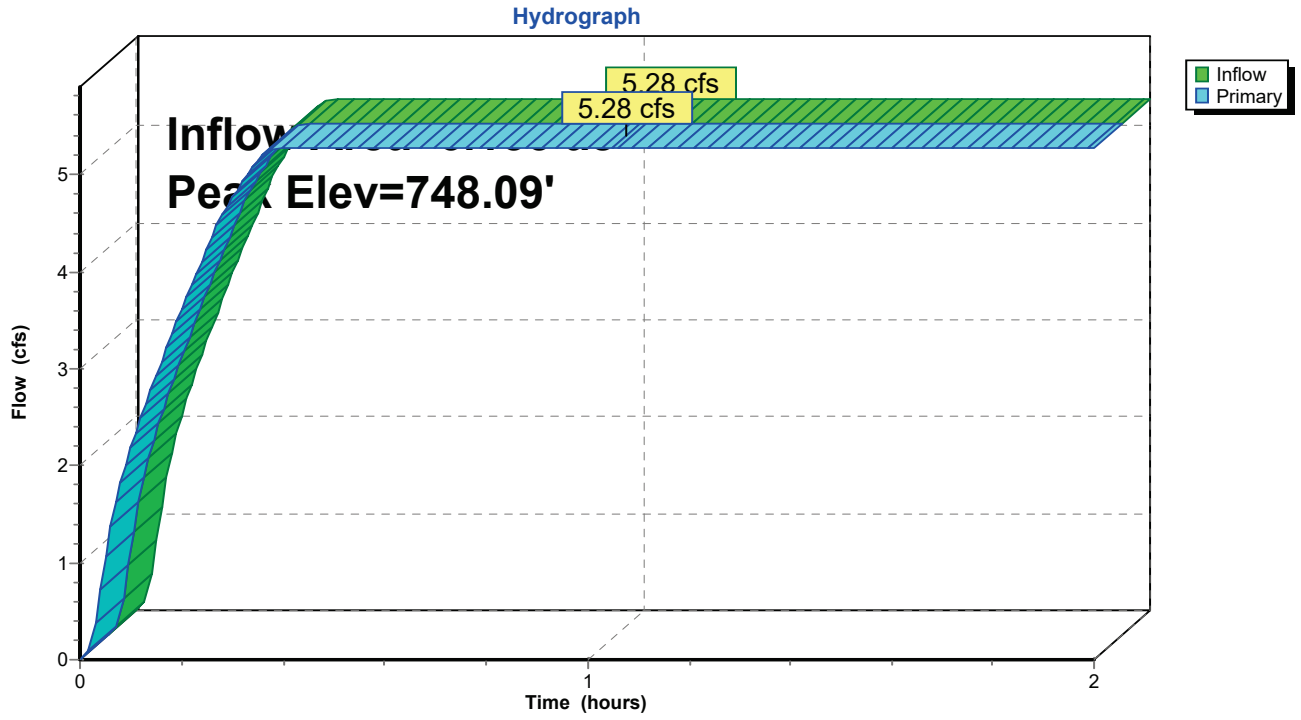
Inflow Area = 6.155 ac, 4.74% Impervious, Inflow Depth > 1.58" for 50-yr event
Inflow = 5.28 cfs @ 1.08 hrs, Volume= 0.810 af
Outflow = 5.28 cfs @ 1.05 hrs, Volume= 0.810 af, Atten= 0%, Lag= 0.0 min
Primary = 5.28 cfs @ 1.05 hrs, Volume= 0.810 af
Routed to Reach R21 : Pipe SS31 to SS23

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 748.09' @ 0.91 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	747.10'	**24.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	748.18'	**18.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#3	Primary	748.17'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=5.28 cfs @ 1.05 hrs HW=748.09' TW=746.76' (Dynamic Tailwater)
- **1=Orifice/Grate** (Orifice Controls 5.28 cfs @ 3.39 fps)
- **2=Orifice/Grate** (Controls 0.00 cfs)
- **3=Orifice/Grate** (Controls 0.00 cfs)

Pond I21: Inlet 2-1



Summary for Pond I31: Manhole 3-1

[57] Hint: Peaked at 748.73' (Flood elevation advised)
[62] Hint: Exceeded Reach R51 OUTLET depth by 0.52' @ 0.56 hrs
[62] Hint: Exceeded Reach R61 OUTLET depth by 0.46' @ 0.56 hrs

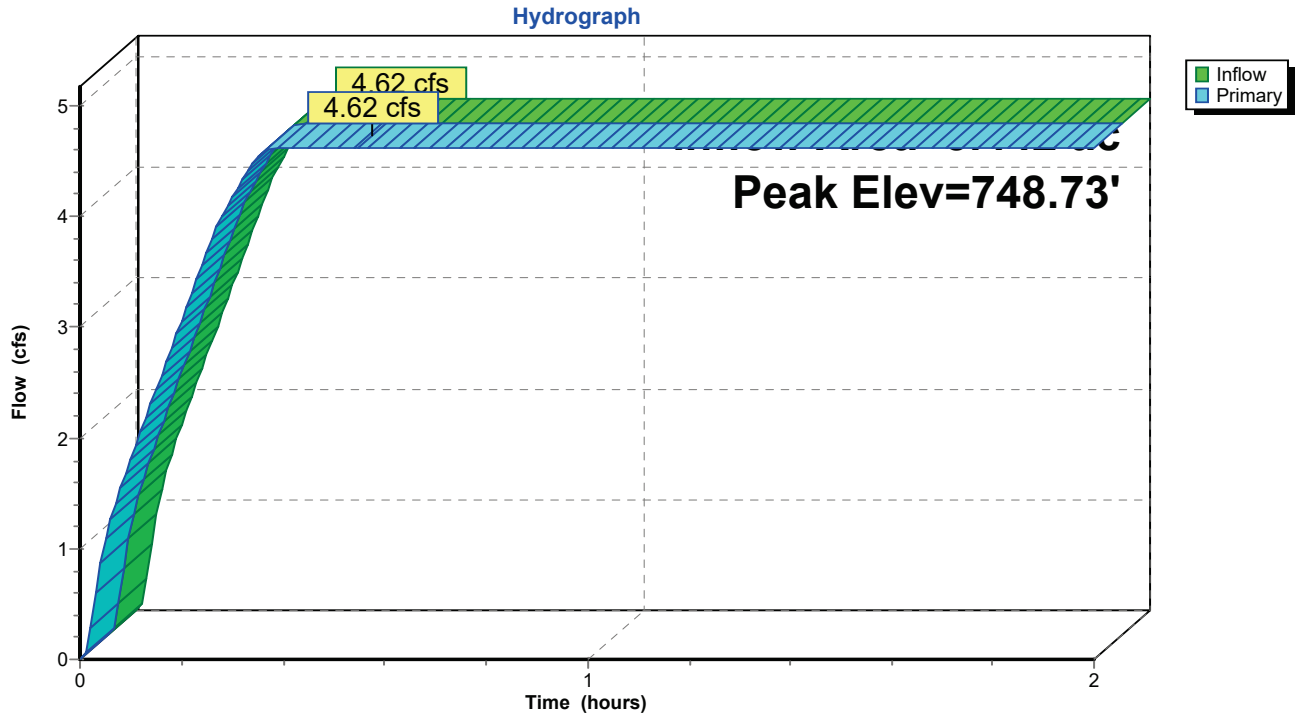
Inflow Area = 5.442 ac, 0.96% Impervious, Inflow Depth > 1.56" for 50-yr event
Inflow = 4.62 cfs @ 0.55 hrs, Volume= 0.708 af
Outflow = 4.62 cfs @ 0.55 hrs, Volume= 0.708 af, Atten= 0%, Lag= 0.0 min
Primary = 4.62 cfs @ 0.55 hrs, Volume= 0.708 af
Routed to Reach R31 : Pipe I31 to I21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 748.73' @ 0.56 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	747.75'	**18.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	747.75'	**15.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#3	Primary	747.75'	**15.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=4.62 cfs @ 0.55 hrs HW=748.73' TW=748.65' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.72 cfs @ 1.40 fps)
└─**2=Orifice/Grate** (Orifice Controls 1.45 cfs @ 1.40 fps)
└─**3=Orifice/Grate** (Orifice Controls 1.45 cfs @ 1.40 fps)

Pond I31: Manhole 3-1



Summary for Pond I41: Inlet 4-1

[57] Hint: Peaked at 749.23' (Flood elevation advised)

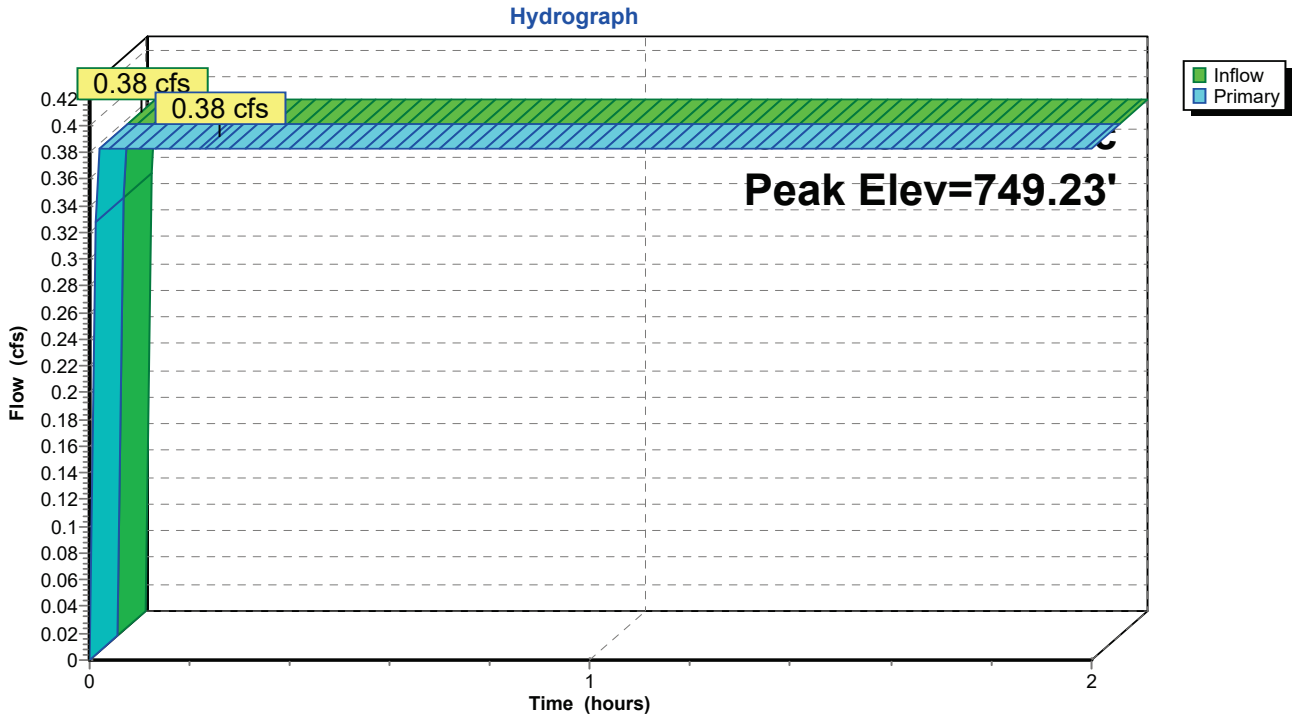
Inflow Area = 0.229 ac,100.00% Impervious, Inflow Depth > 3.31" for 50-yr event
Inflow = 0.38 cfs @ 0.02 hrs, Volume= 0.063 af
Outflow = 0.38 cfs @ 0.23 hrs, Volume= 0.063 af, Atten= 0%, Lag= 12.6 min
Primary = 0.38 cfs @ 0.23 hrs, Volume= 0.063 af
Routed to Reach R41 : Pipe I41 to I31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 749.23' @ 0.91 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	748.86'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.38 cfs @ 0.23 hrs HW=749.23' TW=749.15' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.38 cfs @ 1.43 fps)

Pond I41: Inlet 4-1



Summary for Pond I51: Inlet 5-1

[57] Hint: Peaked at 749.70' (Flood elevation advised)
[62] Hint: Exceeded Reach R52 OUTLET depth by 0.13' @ 0.02 hrs

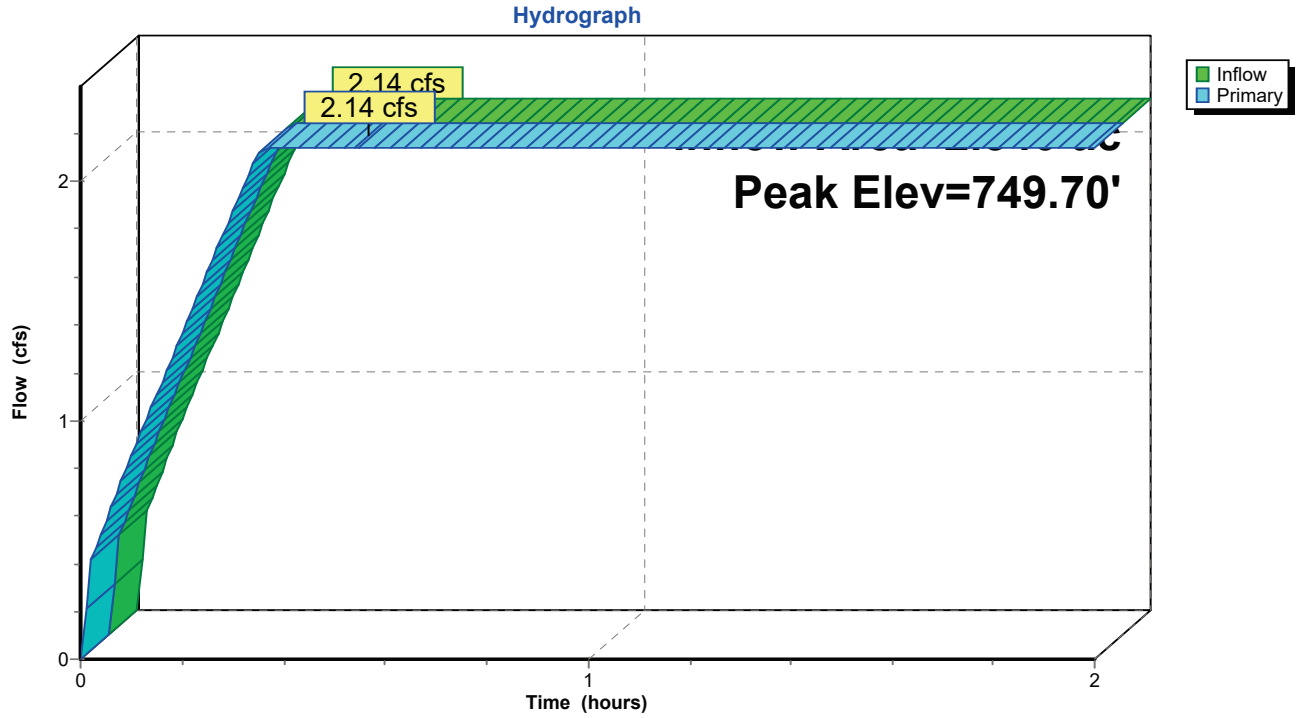
Inflow Area = 2.540 ac, 1.02% Impervious, Inflow Depth > 1.55" for 50-yr event
Inflow = 2.14 cfs @ 0.54 hrs, Volume= 0.328 af
Outflow = 2.14 cfs @ 0.54 hrs, Volume= 0.328 af, Atten= 0%, Lag= 0.0 min
Primary = 2.14 cfs @ 0.54 hrs, Volume= 0.328 af
Routed to Reach R51 : Pipe I51 to I31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 749.70' @ 0.50 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	749.07'	**15.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	749.10'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.14 cfs @ 0.54 hrs HW=749.70' TW=749.54' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 1.19 cfs @ 1.93 fps)
2=Orifice/Grate (Orifice Controls 0.95 cfs @ 1.93 fps)

Pond I51: Inlet 5-1



Summary for Pond I52: Inlet 5-2

[57] Hint: Peaked at 750.80' (Flood elevation advised)
[63] Warning: Exceeded Reach R53 INLET depth by 0.16' @ 0.50 hrs

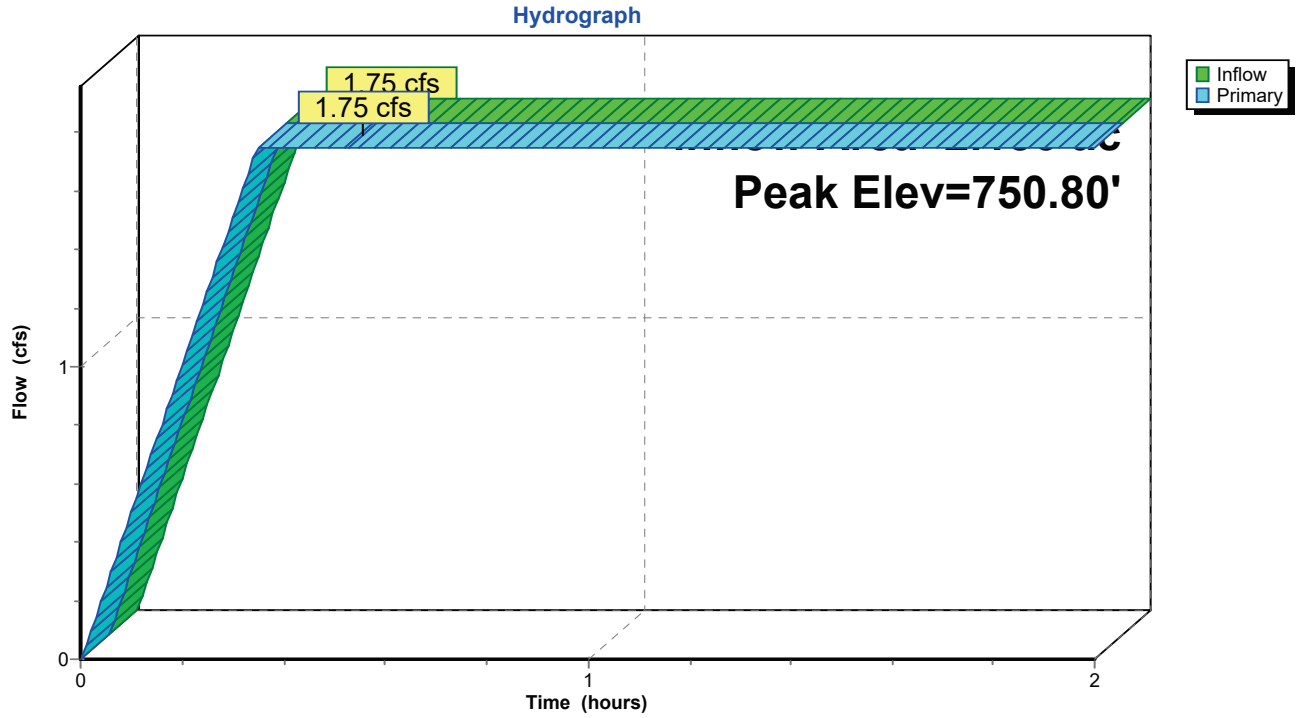
Inflow Area = 2.186 ac, 0.27% Impervious, Inflow Depth > 1.46" for 50-yr event
Inflow = 1.75 cfs @ 0.53 hrs, Volume= 0.265 af
Outflow = 1.75 cfs @ 0.53 hrs, Volume= 0.265 af, Atten= 0%, Lag= 0.0 min
Primary = 1.75 cfs @ 0.53 hrs, Volume= 0.265 af
Routed to Reach R52 : Pipe I52 to I51

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 750.80' @ 0.50 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	750.10'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	750.26'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.75 cfs @ 0.53 hrs HW=750.80' TW=750.59' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.32 cfs @ 2.22 fps)
└─**2=Orifice/Grate** (Orifice Controls 0.44 cfs @ 2.22 fps)

Pond I52: Inlet 5-2



Summary for Pond I53: Inlet 5-3

[57] Hint: Peaked at 750.69' (Flood elevation advised)
[62] Hint: Exceeded Reach R54 OUTLET depth by 0.13' @ 0.50 hrs

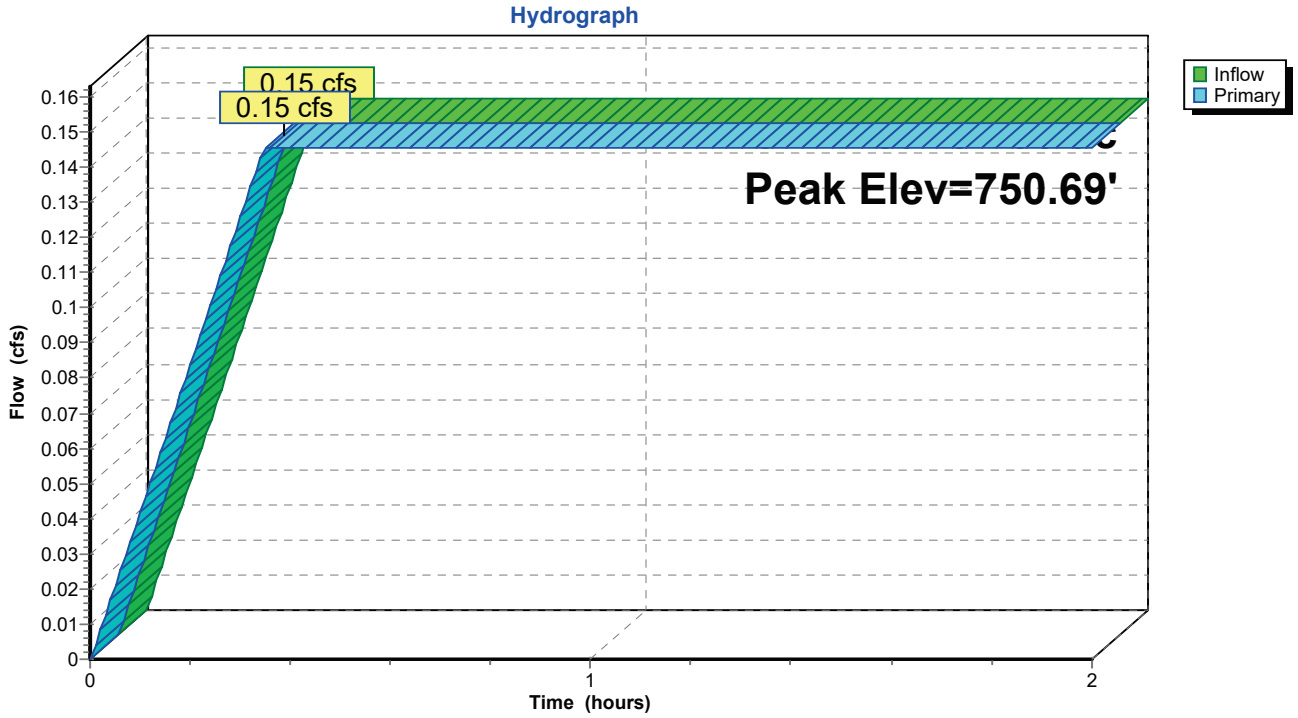
Inflow Area = 0.156 ac, 0.00% Impervious, Inflow Depth > 1.69" for 50-yr event
Inflow = 0.15 cfs @ 0.35 hrs, Volume= 0.022 af
Outflow = 0.15 cfs @ 0.36 hrs, Volume= 0.022 af, Atten= 0%, Lag= 0.6 min
Primary = 0.15 cfs @ 0.36 hrs, Volume= 0.022 af
Routed to Reach R53 : Pipe I53 to I52

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 750.69' @ 0.50 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	750.43'	**6.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	750.56'	**6.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=0.14 cfs @ 0.36 hrs HW=750.69' TW=750.64' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.10 cfs @ 1.01 fps)
2=Orifice/Grate (Orifice Controls 0.04 cfs @ 1.01 fps)

Pond I53: Inlet 5-3



Summary for Pond I54: Inlet 5-4

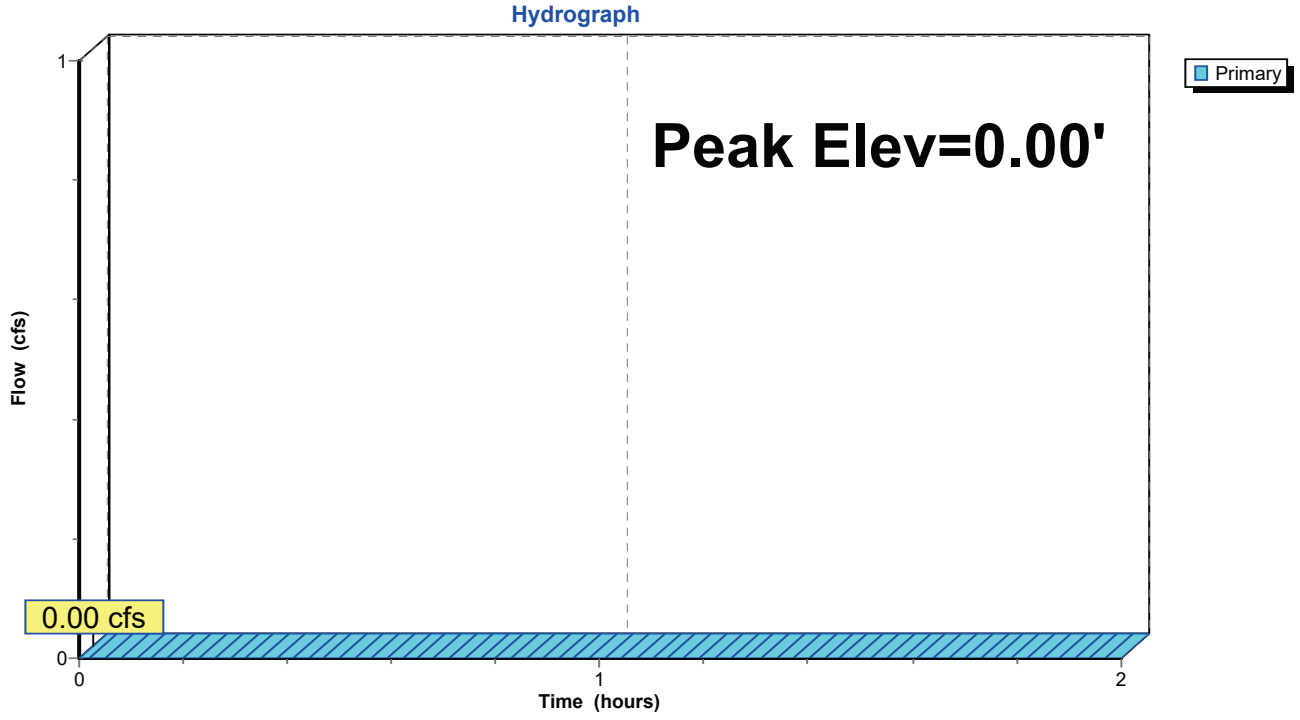
[43] Hint: Has no inflow (Outflow=Zero)

Device	Routing	Invert	Outlet Devices
#1	Primary	750.30'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' TW=752.46' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Controls 0.00 cfs)

Pond I54: Inlet 5-4

Hydrograph



Summary for Pond I61: Manhole 6-1

[57] Hint: Peaked at 749.20' (Flood elevation advised)
[62] Hint: Exceeded Reach R62 OUTLET depth by 0.10' @ 0.46 hrs

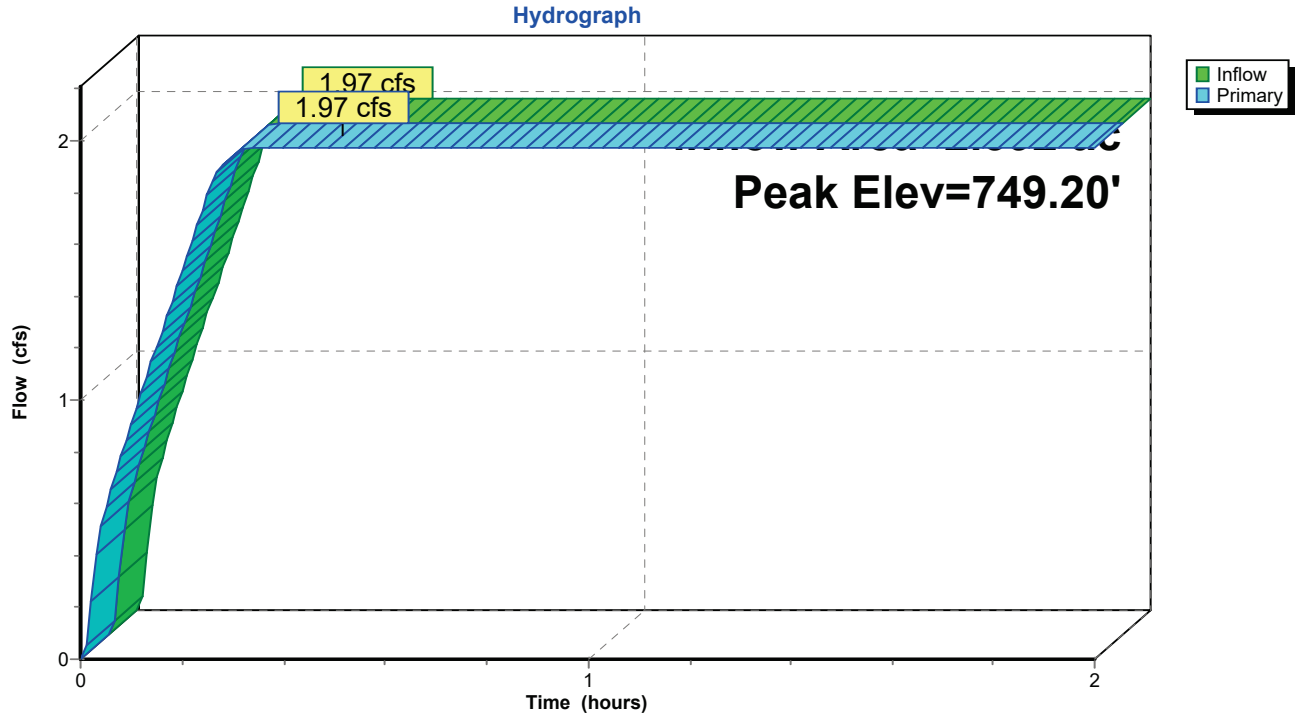
Inflow Area = 2.392 ac, 0.00% Impervious, Inflow Depth > 1.54" for 50-yr event
Inflow = 1.97 cfs @ 0.48 hrs, Volume= 0.306 af
Outflow = 1.97 cfs @ 0.49 hrs, Volume= 0.306 af, Atten= 0%, Lag= 0.6 min
Primary = 1.97 cfs @ 0.49 hrs, Volume= 0.306 af
Routed to Reach R61 : Pipe I61 to I31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 749.20' @ 0.46 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	748.55'	**15.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	748.61'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=1.97 cfs @ 0.49 hrs HW=749.20' TW=749.07' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.13 cfs @ 1.74 fps)
└─**2=Orifice/Grate** (Orifice Controls 0.84 cfs @ 1.74 fps)

Pond I61: Manhole 6-1



Summary for Pond I62: Inlet 6-2

[57] Hint: Peaked at 749.91' (Flood elevation advised)
[62] Hint: Exceeded Reach R63 OUTLET depth by 0.15' @ 0.04 hrs

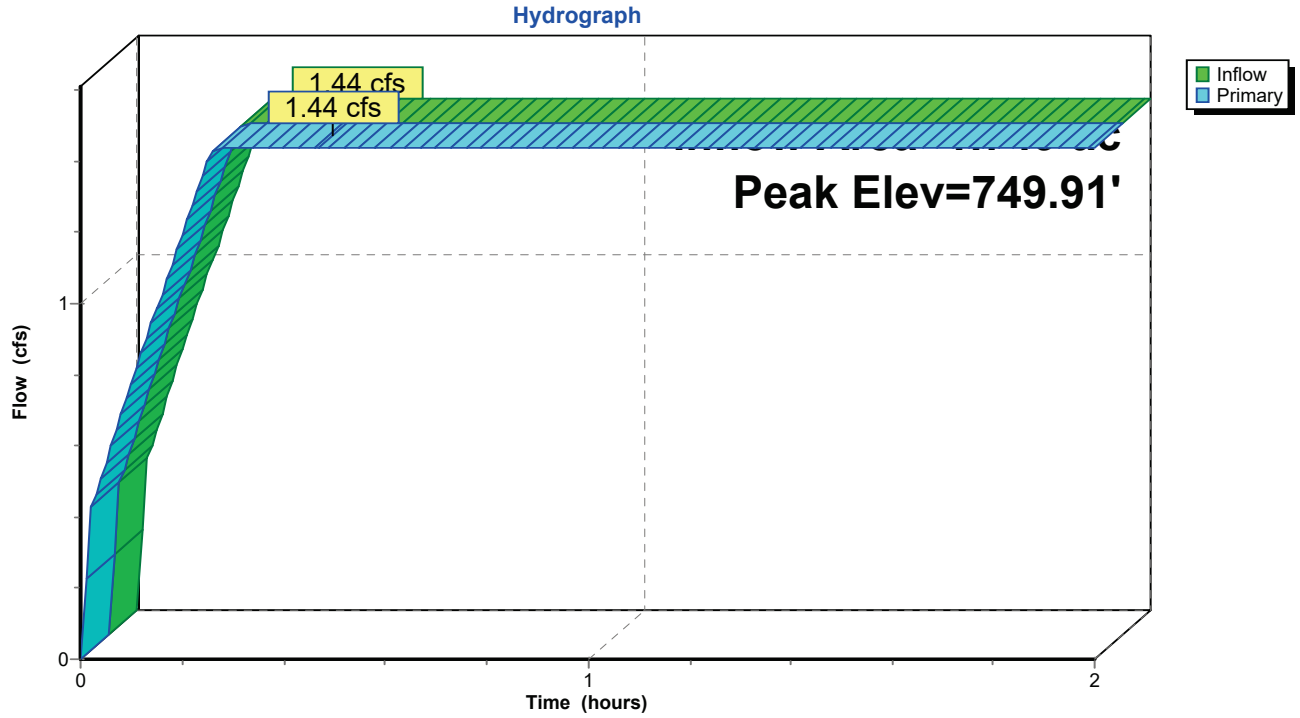
Inflow Area = 1.749 ac, 0.00% Impervious, Inflow Depth > 1.55" for 50-yr event
Inflow = 1.44 cfs @ 0.46 hrs, Volume= 0.226 af
Outflow = 1.44 cfs @ 0.47 hrs, Volume= 0.226 af, Atten= 0%, Lag= 0.6 min
Primary = 1.44 cfs @ 0.47 hrs, Volume= 0.226 af
Routed to Reach R62 : Pipe I62 to I61

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 749.91' @ 0.45 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	749.32'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	749.35'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.44 cfs @ 0.47 hrs HW=749.91' TW=749.81' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 0.74 cfs @ 1.53 fps)
└─**2=Orifice/Grate** (Orifice Controls 0.70 cfs @ 1.53 fps)

Pond I62: Inlet 6-2



Summary for Pond I63: Inlet 6-3

[57] Hint: Peaked at 750.52' (Flood elevation advised)

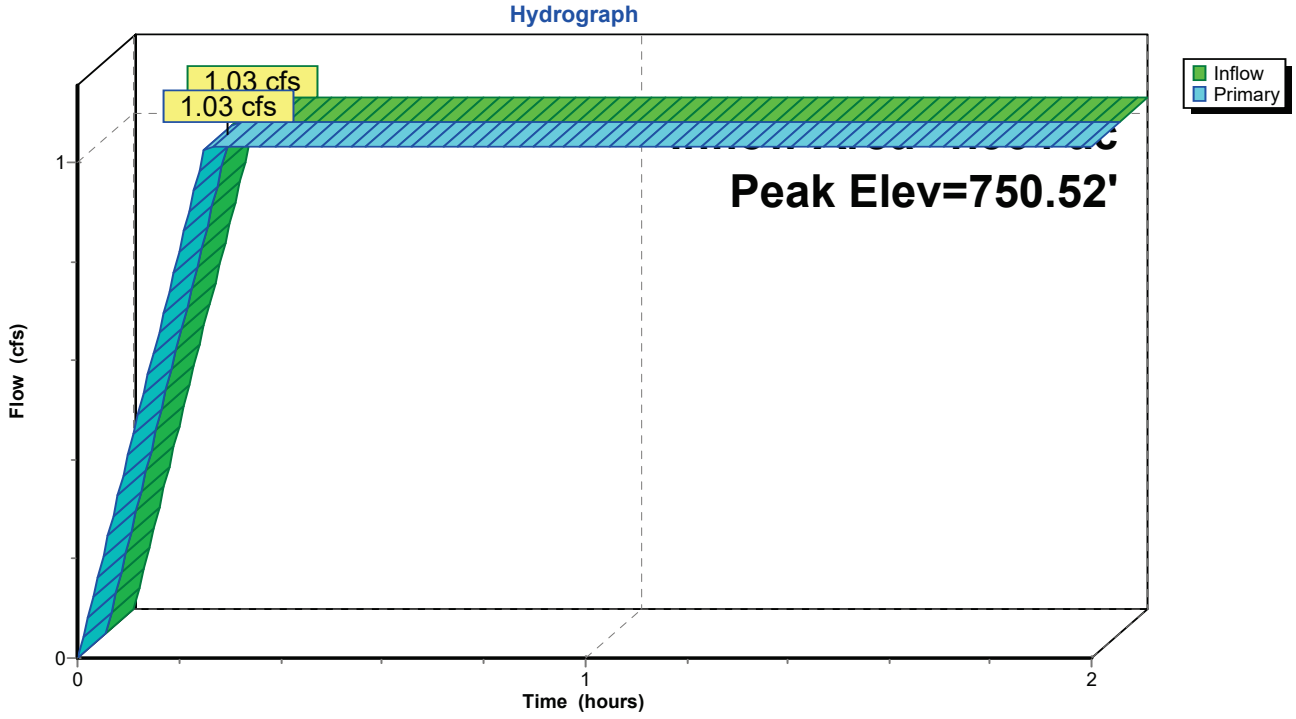
Inflow Area = 1.364 ac, 0.00% Impervious, Inflow Depth > 1.41" for 50-yr event
Inflow = 1.03 cfs @ 0.26 hrs, Volume= 0.160 af
Outflow = 1.03 cfs @ 0.27 hrs, Volume= 0.160 af, Atten= 0%, Lag= 0.6 min
Primary = 1.03 cfs @ 0.27 hrs, Volume= 0.160 af
Routed to Reach R63 : Pipe I63 to I62

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 750.52' @ 0.42 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	749.91'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.03 cfs @ 0.27 hrs HW=750.52' TW=750.34' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 1.03 cfs @ 2.04 fps)

Pond I63: Inlet 6-3



Summary for Pond I71: Inlet 7-1

[57] Hint: Peaked at 748.41' (Flood elevation advised)
[62] Hint: Exceeded Reach R81 OUTLET depth by 0.36' @ 0.54 hrs

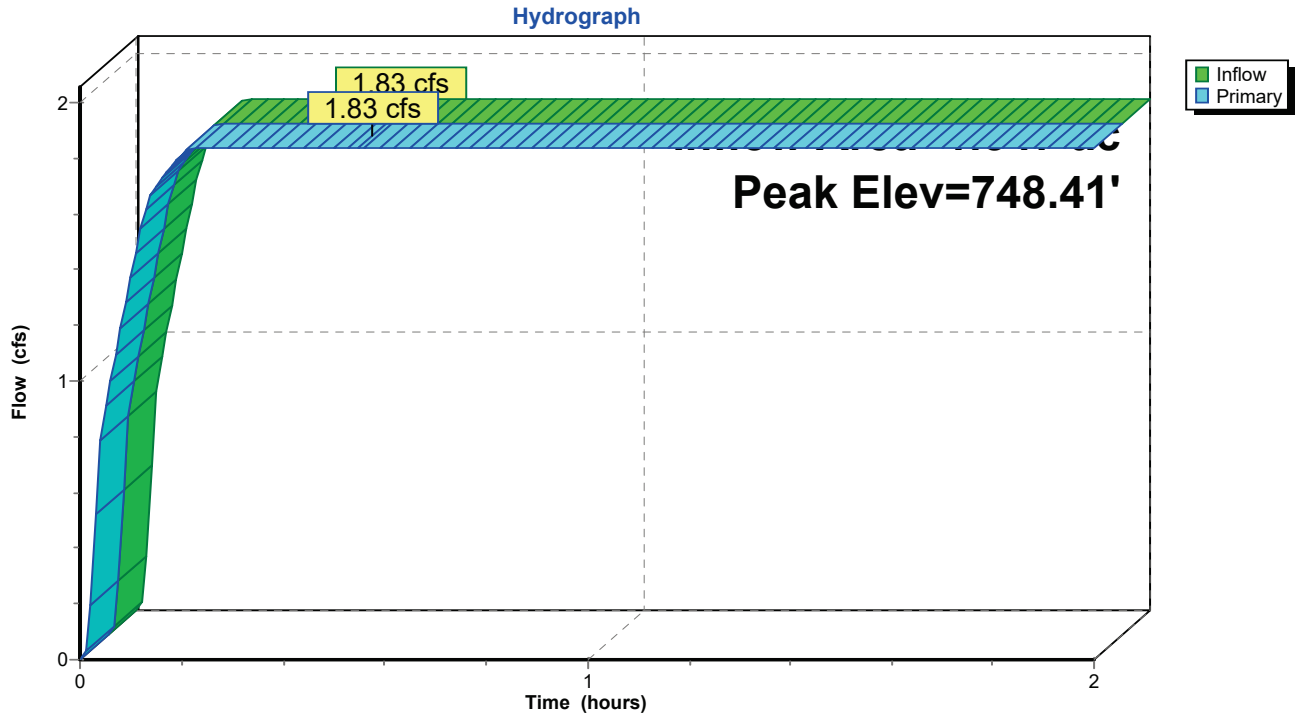
Inflow Area = 1.547 ac, 34.65% Impervious, Inflow Depth > 2.28" for 50-yr event
Inflow = 1.83 cfs @ 0.55 hrs, Volume= 0.294 af
Outflow = 1.83 cfs @ 0.55 hrs, Volume= 0.294 af, Atten= 0%, Lag= 0.0 min
Primary = 1.83 cfs @ 0.55 hrs, Volume= 0.294 af
Routed to Reach R71 : Pipe I71 to I15

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 748.41' @ 0.54 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	747.78'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	747.78'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#3	Primary	748.93'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=1.83 cfs @ 0.55 hrs HW=748.41' TW=748.28' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 0.92 cfs @ 1.76 fps)
└─**2=Orifice/Grate** (Orifice Controls 0.92 cfs @ 1.76 fps)
└─**3=Orifice/Grate** (Controls 0.00 cfs)

Pond I71: Inlet 7-1



Summary for Pond I81: Inlet 8-1

[57] Hint: Peaked at 749.02' (Flood elevation advised)
[62] Hint: Exceeded Reach R10 OUTLET depth by 0.07' @ 0.10 hrs

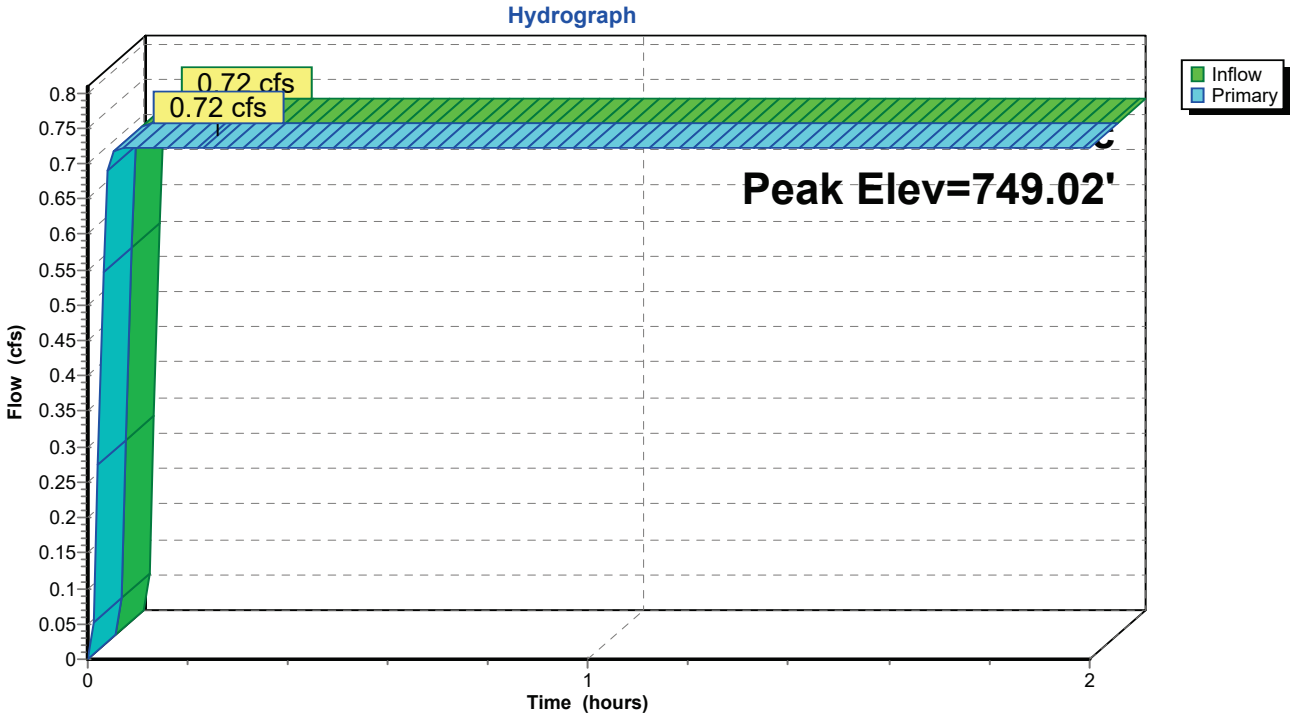
Inflow Area = 0.432 ac,100.00% Impervious, Inflow Depth > 3.28" for 50-yr event
Inflow = 0.72 cfs @ 0.23 hrs, Volume= 0.118 af
Outflow = 0.72 cfs @ 0.23 hrs, Volume= 0.118 af, Atten= 0%, Lag= 0.0 min
Primary = 0.72 cfs @ 0.23 hrs, Volume= 0.118 af
Routed to Reach R81 : Pipe I81 to I71

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 749.02' @ 0.10 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	748.66'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	748.69'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.72 cfs @ 0.23 hrs HW=749.02' TW=748.93' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.38 cfs @ 1.48 fps)
2=Orifice/Grate (Orifice Controls 0.34 cfs @ 1.48 fps)

Pond I81: Inlet 8-1



Summary for Pond I91: Inlet 9-1

[57] Hint: Peaked at 750.68' (Flood elevation advised)
[62] Hint: Exceeded Reach R92 OUTLET depth by 0.08' @ 0.46 hrs

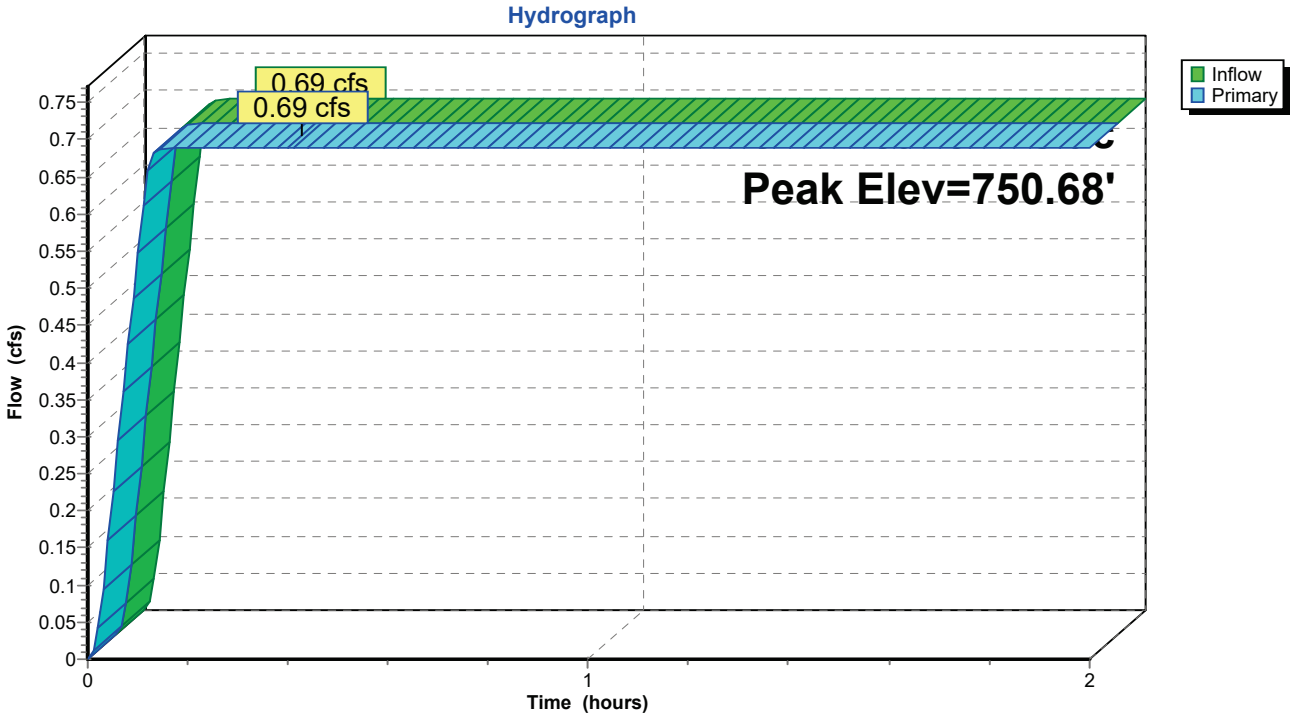
Inflow Area = 0.728 ac, 1.10% Impervious, Inflow Depth > 1.82" for 50-yr event
Inflow = 0.69 cfs @ 0.38 hrs, Volume= 0.110 af
Outflow = 0.69 cfs @ 0.40 hrs, Volume= 0.110 af, Atten= 0%, Lag= 1.2 min
Primary = 0.69 cfs @ 0.40 hrs, Volume= 0.110 af
Routed to Reach R91 : Pipe I91 to I71

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 750.68' @ 0.46 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	750.30'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	750.30'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.69 cfs @ 0.40 hrs HW=750.68' TW=750.62' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 0.34 cfs @ 1.24 fps)
└─**2=Orifice/Grate** (Orifice Controls 0.34 cfs @ 1.24 fps)

Pond I91: Inlet 9-1



Summary for Pond I92: Inlet 9-2

[57] Hint: Peaked at 751.67' (Flood elevation advised)

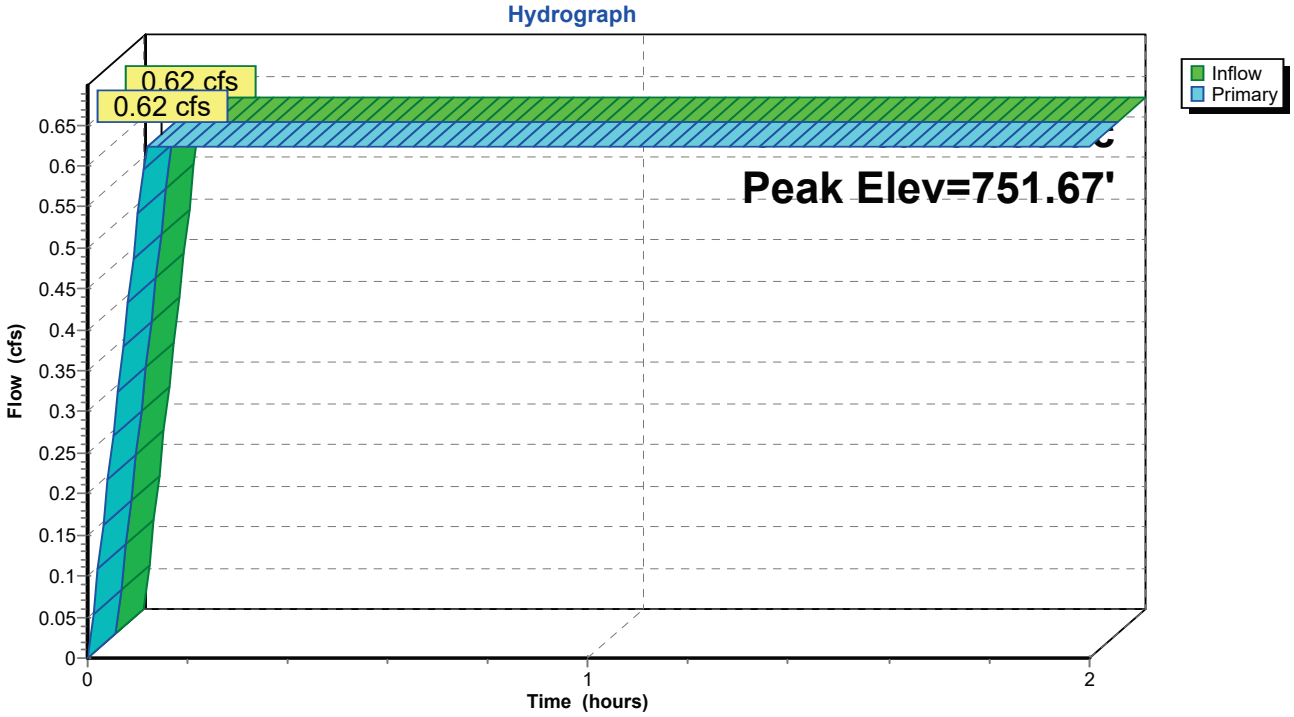
Inflow Area = 0.656 ac, 1.22% Impervious, Inflow Depth > 1.84" for 50-yr event
Inflow = 0.62 cfs @ 0.12 hrs, Volume= 0.100 af
Outflow = 0.62 cfs @ 0.12 hrs, Volume= 0.100 af, Atten= 0%, Lag= 0.0 min
Primary = 0.62 cfs @ 0.12 hrs, Volume= 0.100 af
Routed to Reach R92 : Pipe I92 to I91

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 751.67' @ 0.34 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	751.22'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.60 cfs @ 0.12 hrs HW=751.66' TW=751.51' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.60 cfs @ 1.83 fps)

Pond I92: Inlet 9-2



Summary for Pond P1: Detention Pond

[44] Hint: Outlet device #1 is below defined storage
[62] Hint: Exceeded Reach R14 OUTLET depth by 0.62' @ 1.99 hrs

Inflow Area = 12.430 ac, 7.07% Impervious, Inflow Depth > 1.43" for 50-yr event
Inflow = 9.69 cfs @ 1.10 hrs, Volume= 1.482 af
Outflow = 2.62 cfs @ 2.00 hrs, Volume= 0.344 af, Atten= 73%, Lag= 54.0 min
Primary = 2.62 cfs @ 2.00 hrs, Volume= 0.344 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 738.02' @ 2.00 hrs Surf.Area= 1.028 ac Storage= 1.135 af

Plug-Flow detention time= 45.9 min calculated for 0.342 af (23% of inflow)
Center-of-Mass det. time= 3.1 min (67.7 - 64.6)

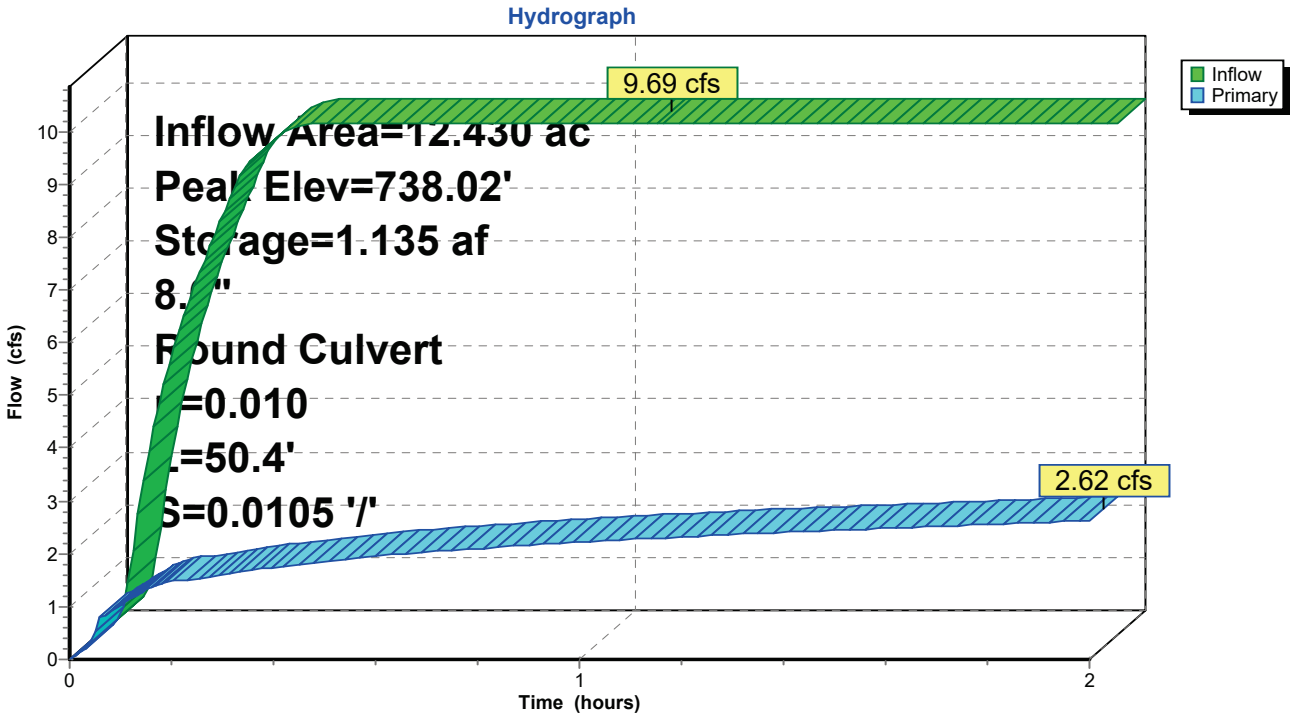
Volume	Invert	Avail.Storage	Storage Description
#1	736.00'	2.825 af	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
736.00	0.024	0.000	0.000
737.00	0.592	0.308	0.308
738.00	1.025	0.809	1.117
739.00	1.170	1.097	2.214
739.50	1.276	0.611	2.825

Device	Routing	Invert	Outlet Devices
#1	Primary	735.51'	**8.0" Round Culvert** L= 50.4' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 735.51' / 734.98' S= 0.0105 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

Primary OutFlow Max=2.62 cfs @ 2.00 hrs HW=738.02' (Free Discharge)
1=Culvert (Barrel Controls 2.62 cfs @ 7.51 fps)

Pond P1: Detention Pond



Time span=0.00-2.00 hrs, dt=0.01 hrs, 201 points
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment CA10: South Building Runoff Area=0.432 ac 100.00% Impervious Runoff Depth>3.75"
Flow Length=227' Slope=0.0100 '/' Tc=1.6 min C=0.95 Runoff=0.82 cfs 0.135 af

Subcatchment CA11: North Building Runoff Area=0.229 ac 100.00% Impervious Runoff Depth>3.77"
Flow Length=80' Slope=0.0100 '/' Tc=0.7 min C=0.95 Runoff=0.44 cfs 0.072 af

Subcatchment CA12: NW Building Area Runoff Area=0.484 ac 2.27% Impervious Runoff Depth>1.22"
Flow Length=323' Tc=10.7 min C=0.32 Runoff=0.31 cfs 0.049 af

Subcatchment CA13: East Access Road Runoff Area=0.072 ac 0.00% Impervious Runoff Depth>2.01"
Flow Length=194' Tc=6.9 min C=0.52 Runoff=0.07 cfs 0.012 af

Subcatchment CA14: East Building Area Runoff Area=0.656 ac 1.22% Impervious Runoff Depth>2.09"
Flow Length=194' Tc=6.9 min C=0.54 Runoff=0.71 cfs 0.114 af

Subcatchment CA15: SE 1 Parking Area Runoff Area=0.156 ac 0.00% Impervious Runoff Depth>1.93"
Flow Length=1,178' Tc=20.8 min C=0.53 Runoff=0.17 cfs 0.025 af

Subcatchment CA16: SE 2 Parking Area Runoff Area=2.030 ac 0.30% Impervious Runoff Depth>1.64"
Flow Length=1,178' Tc=20.8 min C=0.45 Runoff=1.83 cfs 0.277 af

Subcatchment CA17: NE Parking Area Runoff Area=1.364 ac 0.00% Impervious Runoff Depth>1.60"
Flow Length=764' Tc=15.1 min C=0.43 Runoff=1.17 cfs 0.182 af

Subcatchment CA18: N Central Parking Area Runoff Area=0.385 ac 0.00% Impervious Runoff Depth>2.38"
Flow Length=91' Slope=0.0048 '/' Tc=1.1 min C=0.60 Runoff=0.46 cfs 0.076 af

Subcatchment CA19: S Central Parking Area Runoff Area=0.354 ac 5.65% Impervious Runoff Depth>2.46"
Flow Length=91' Slope=0.0048 '/' Tc=1.1 min C=0.62 Runoff=0.44 cfs 0.072 af

Subcatchment CA20: NW Parking Area Runoff Area=0.643 ac 0.00% Impervious Runoff Depth>1.72"
Flow Length=292' Tc=19.2 min C=0.47 Runoff=0.60 cfs 0.092 af

Subcatchment CA21: SW Parking Area Runoff Area=0.510 ac 5.10% Impervious Runoff Depth>2.06"
Flow Length=228' Tc=22.6 min C=0.57 Runoff=0.58 cfs 0.087 af

Subcatchment CA6: Pond Catchment Area Runoff Area=3.224 ac 0.00% Impervious Runoff Depth>1.11"
Flow Length=435' Tc=16.9 min C=0.30 Runoff=1.94 cfs 0.298 af

Subcatchment CA7: West Access Road Area Runoff Area=0.350 ac 0.00% Impervious Runoff Depth>1.11"
Flow Length=435' Tc=16.9 min C=0.30 Runoff=0.21 cfs 0.032 af

Subcatchment CA8: West Building Area Runoff Area=1.154 ac 4.42% Impervious Runoff Depth>1.26"
Flow Length=435' Tc=16.9 min C=0.34 Runoff=0.79 cfs 0.121 af

Subcatchment CA9: Building entrance Runoff Area=0.387 ac 24.81% Impervious Runoff Depth>2.34"
Flow Length=264' Tc=12.7 min C=0.62 Runoff=0.48 cfs 0.075 af

Reach R10: Pipe CA10 to I81 Avg. Flow Depth=0.29' Max Vel=4.44 fps Inflow=0.82 cfs 0.135 af
12.0" Round Pipe n=0.010 L=149.2' S=0.0099 '/' Capacity=4.61 cfs Outflow=0.82 cfs 0.135 af

Reach R14: Pipe I14 to Pond Avg. Flow Depth=0.61' Max Vel=11.22 fps Inflow=9.08 cfs 1.391 af
24.0" Round Pipe n=0.012 L=148.6' S=0.0338 '/' Capacity=45.04 cfs Outflow=9.08 cfs 1.388 af

Reach R15: Pipe I15 to I14 Avg. Flow Depth=0.83' Max Vel=7.25 fps Inflow=8.87 cfs 1.367 af
24.0" Round Pipe n=0.012 L=294.5' S=0.0103 '/' Capacity=24.86 cfs Outflow=8.87 cfs 1.359 af

Reach R21: Pipe SS31 to SS23 Avg. Flow Depth=0.81' Max Vel=5.02 fps Inflow=6.00 cfs 0.921 af
24.0" Round Pipe n=0.012 L=223.0' S=0.0050 '/' Capacity=17.37 cfs Outflow=6.00 cfs 0.915 af

Reach R31: Pipe I31 to I21 Avg. Flow Depth=0.98' Max Vel=4.31 fps Inflow=5.26 cfs 0.806 af
18.0" Round Pipe n=0.012 L=154.3' S=0.0037 '/' Capacity=6.92 cfs Outflow=5.26 cfs 0.802 af

Reach R41: Pipe I41 to I31 Avg. Flow Depth=0.31' Max Vel=2.14 fps Inflow=0.44 cfs 0.072 af
12.0" Round Pipe n=0.010 L=324.3' S=0.0021 '/' Capacity=2.14 cfs Outflow=0.44 cfs 0.070 af

Reach R51: Pipe I51 to I31 Avg. Flow Depth=0.50' Max Vel=5.31 fps Inflow=2.43 cfs 0.373 af
15.0" Round Pipe n=0.012 L=123.9' S=0.0107 '/' Capacity=7.22 cfs Outflow=2.43 cfs 0.372 af

Reach R52: Pipe I52 to I51 Avg. Flow Depth=0.53' Max Vel=4.71 fps Inflow=1.99 cfs 0.302 af
12.0" Round Pipe n=0.012 L=114.4' S=0.0087 '/' Capacity=3.61 cfs Outflow=1.99 cfs 0.301 af

Reach R53: Pipe I53 to I52 Avg. Flow Depth=0.23' Max Vel=1.87 fps Inflow=0.17 cfs 0.025 af
6.0" Round Pipe n=0.010 L=62.2' S=0.0027 '/' Capacity=0.38 cfs Outflow=0.17 cfs 0.025 af

Reach R54: Pipe I54 to I53 Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af
6.0" Round Pipe n=0.010 L=68.7' S=0.0277 '/' Capacity=1.21 cfs Outflow=0.00 cfs 0.000 af

Reach R61: Pipe I61 to I31 Avg. Flow Depth=0.56' Max Vel=4.20 fps Inflow=2.24 cfs 0.349 af
15.0" Round Pipe n=0.012 L=133.8' S=0.0060 '/' Capacity=5.41 cfs Outflow=2.24 cfs 0.347 af

Reach R62: Pipe I62 to I61 Avg. Flow Depth=0.53' Max Vel=3.84 fps Inflow=1.64 cfs 0.258 af
12.0" Round Pipe n=0.012 L=122.3' S=0.0058 '/' Capacity=2.94 cfs Outflow=1.64 cfs 0.256 af

Reach R63: Pipe I63 to I62 Avg. Flow Depth=0.46' Max Vel=3.29 fps Inflow=1.17 cfs 0.182 af
12.0" Round Pipe n=0.012 L=117.3' S=0.0048 '/' Capacity=2.67 cfs Outflow=1.17 cfs 0.181 af

Reach R71: Pipe I71 to I15 Avg. Flow Depth=0.54' Max Vel=4.85 fps Inflow=2.09 cfs 0.334 af
12.0" Round Pipe n=0.012 L=307.3' S=0.0092 '/' Capacity=3.70 cfs Outflow=2.09 cfs 0.331 af

Reach R81: Pipe I81 to I71 Avg. Flow Depth=0.29' Max Vel=4.40 fps Inflow=0.82 cfs 0.135 af
12.0" Round Pipe n=0.012 L=63.2' S=0.0139 '/' Capacity=4.55 cfs Outflow=0.82 cfs 0.134 af

Reach R91: Pipe I91 to I71 Avg. Flow Depth=0.34' Max Vel=3.33 fps Inflow=0.78 cfs 0.126 af
12.0" Round Pipe n=0.012 L=206.5' S=0.0066 '/' Capacity=3.14 cfs Outflow=0.78 cfs 0.124 af

Reach R92: Pipe I92 to I91 Avg. Flow Depth=0.32' Max Vel=3.27 fps Inflow=0.71 cfs 0.114 af
12.0" Round Pipe n=0.012 L=134.2' S=0.0069 '/' Capacity=3.20 cfs Outflow=0.71 cfs 0.113 af

Pond I14: Inlet 1-4 Peak Elev=742.82' Inflow=9.08 cfs 1.391 af
Outflow=9.08 cfs 1.391 af

Pond I15: Inlet 1-5 Peak Elev=745.92' Inflow=8.87 cfs 1.367 af
Outflow=8.87 cfs 1.367 af

Pond I21: Inlet 2-1 Peak Elev=748.17' Inflow=6.00 cfs 0.921 af
Outflow=6.00 cfs 0.921 af

Pond I31: Manhole 3-1 Peak Elev=748.82' Inflow=5.26 cfs 0.806 af
Outflow=5.26 cfs 0.806 af

Pond I41: Inlet 4-1 Peak Elev=749.26' Inflow=0.44 cfs 0.072 af
Outflow=0.44 cfs 0.072 af

Pond I51: Inlet 5-1 Peak Elev=749.74' Inflow=2.43 cfs 0.373 af
Outflow=2.43 cfs 0.373 af

Pond I52: Inlet 5-2 Peak Elev=750.87' Inflow=1.99 cfs 0.302 af
Outflow=1.99 cfs 0.302 af

Pond I53: Inlet 5-3 Peak Elev=750.71' Inflow=0.17 cfs 0.025 af
Outflow=0.17 cfs 0.025 af

Pond I54: Inlet 5-4 Peak Elev=0.00'
Primary=0.00 cfs 0.000 af

Pond I61: Manhole 6-1 Peak Elev=749.25' Inflow=2.24 cfs 0.349 af
Outflow=2.24 cfs 0.349 af

Pond I62: Inlet 6-2 Peak Elev=749.96' Inflow=1.64 cfs 0.258 af
Outflow=1.64 cfs 0.258 af

Pond I63: Inlet 6-3 Peak Elev=750.57' Inflow=1.17 cfs 0.182 af
Outflow=1.17 cfs 0.182 af

Pond I71: Inlet 7-1 Peak Elev=748.46' Inflow=2.09 cfs 0.334 af
Outflow=2.09 cfs 0.334 af

Pond I81: Inlet 8-1 Peak Elev=749.05' Inflow=0.82 cfs 0.135 af
Outflow=0.82 cfs 0.135 af

Pond I91: Inlet 9-1 Peak Elev=750.71' Inflow=0.78 cfs 0.126 af
Outflow=0.78 cfs 0.126 af

Pond I92: Inlet 9-2 Peak Elev=751.70' Inflow=0.71 cfs 0.114 af
Outflow=0.71 cfs 0.114 af

Pond P1: Detention Pond Peak Elev=738.20' Storage=1.328 af Inflow=11.02 cfs 1.687 af
8.0" Round Culvert n=0.010 L=50.4' S=0.0105 '/' Outflow=2.72 cfs 0.356 af

Total Runoff Area = 12.430 ac Runoff Volume = 1.722 af Average Runoff Depth = 1.66"
92.93% Pervious = 11.551 ac 7.07% Impervious = 0.879 ac

Summary for Subcatchment CA10: South Building

[70] Warning: Tc<8dt requires smaller dt

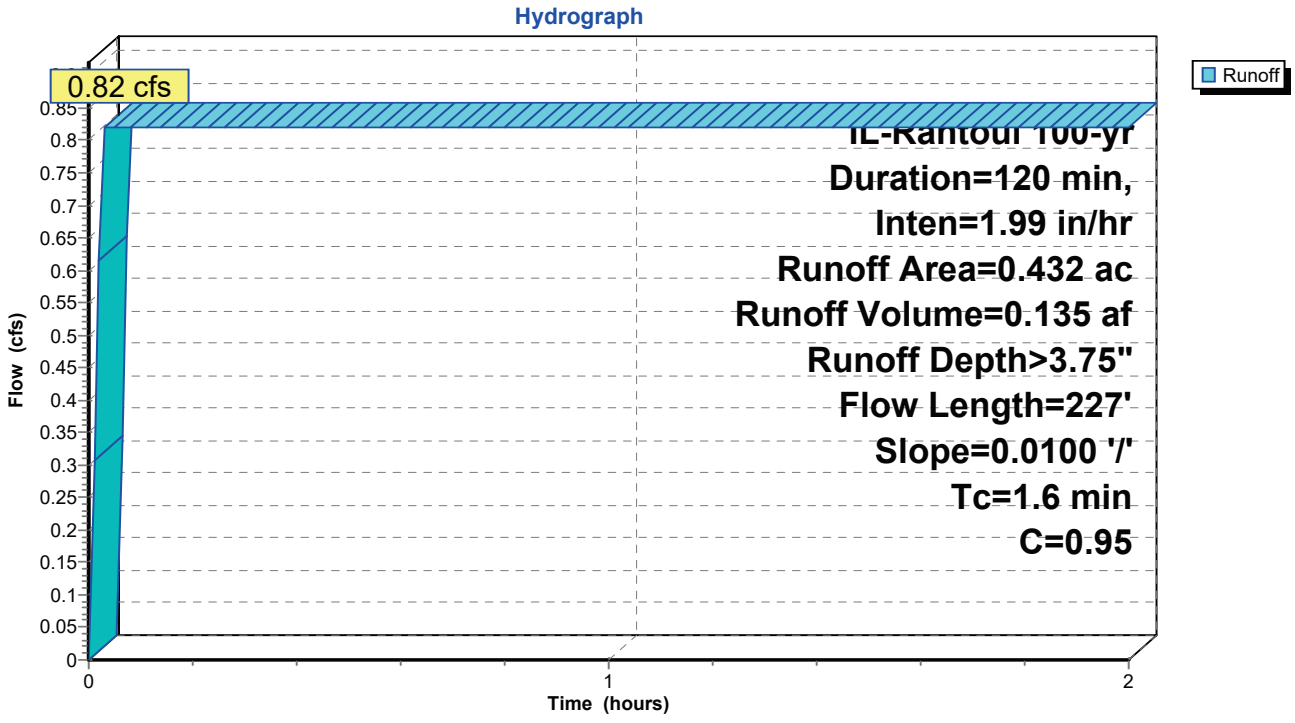
Runoff = 0.82 cfs @ 0.03 hrs, Volume= 0.135 af, Depth> 3.75"
Routed to Reach R10 : Pipe CA10 to I81

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 100-yr Duration=120 min, Inten=1.99 in/hr

Area (ac)	C	Description
0.432	0.95	Roof
0.432		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.2	146	0.0100	2.03		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
0.4	81	0.0100	3.75	1.31	**Pipe Channel, Downpipes** 8.0" Round Area= 0.3 sf Perim= 2.1' r= 0.17' n= 0.012 Corrugated PP, smooth interior
1.6	227	Total			

Subcatchment CA10: South Building



Summary for Subcatchment CA11: North Building

[70] Warning: Tc<8dt requires smaller dt

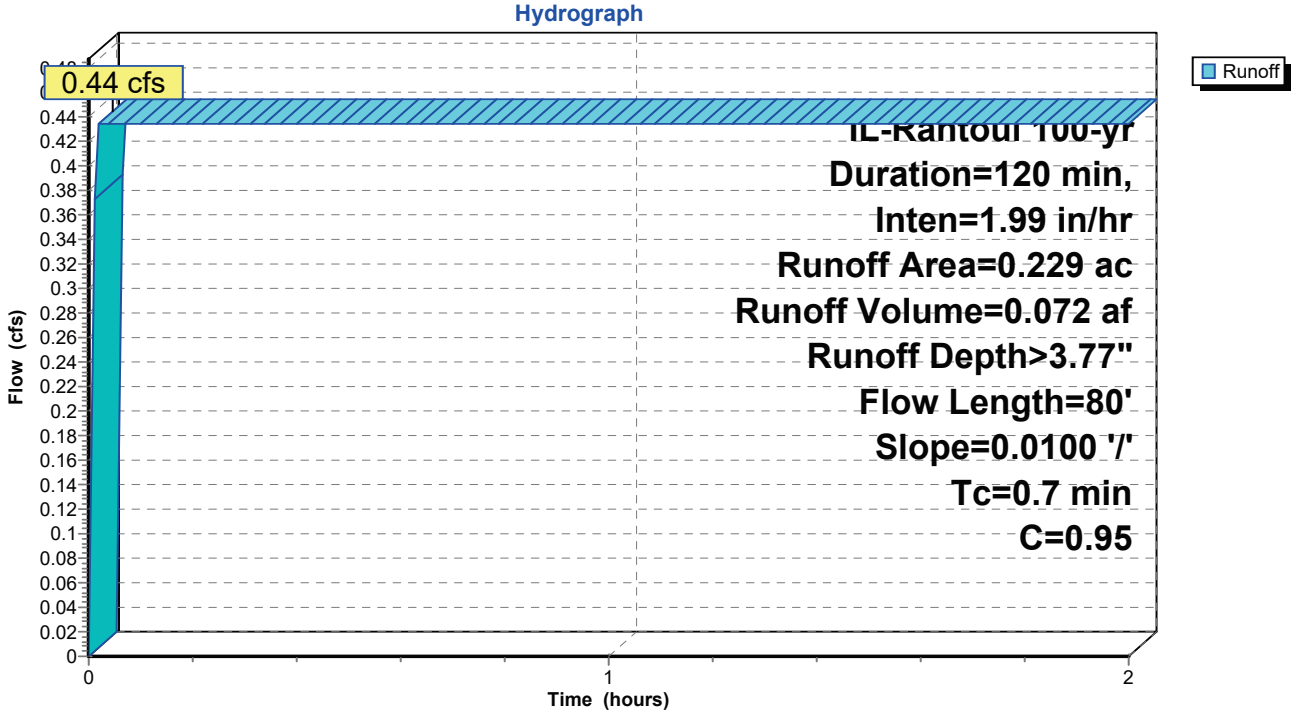
Runoff = 0.44 cfs @ 0.02 hrs, Volume= 0.072 af, Depth> 3.77"
Routed to Pond I41 : Inlet 4-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 100-yr Duration=120 min, Inten=1.99 in/hr

Area (ac)	C	Description
0.229	0.95	Building
0.229		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	80	0.0100	2.03		**Shallow Concentrated Flow, N building** Paved Kv= 20.3 fps

Subcatchment CA11: North Building



Summary for Subcatchment CA12: NW Building Area

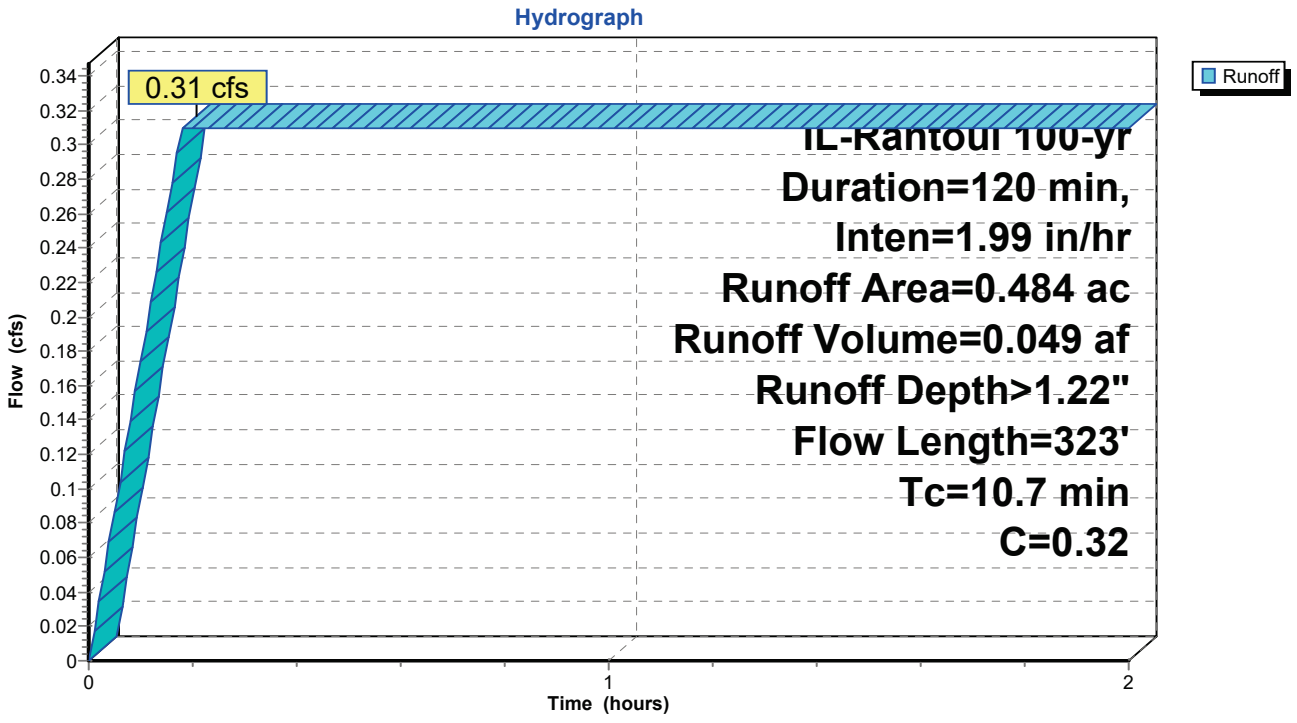
Runoff = 0.31 cfs @ 0.18 hrs, Volume= 0.049 af, Depth> 1.22"
Routed to Pond I21 : Inlet 2-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 100-yr Duration=120 min, Inten=1.99 in/hr

Area (ac)	C	Description
0.095	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
0.368	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.011	0.95	Sidewalk
0.010	0.60	Gravel
0.484	0.32	Weighted Average
0.473		97.73% Pervious Area
0.011		2.27% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.9	185	0.0003	0.39		**Sheet Flow, Parking N of building** Smooth surfaces n= 0.011 P2= 5.80"
1.4	60	0.0012	0.70		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
1.4	78	0.0187	0.96		**Shallow Concentrated Flow, Parking N of building** Short Grass Pasture Kv= 7.0 fps
10.7	323	Total			

Subcatchment CA12: NW Building Area



Summary for Subcatchment CA13: East Access Road

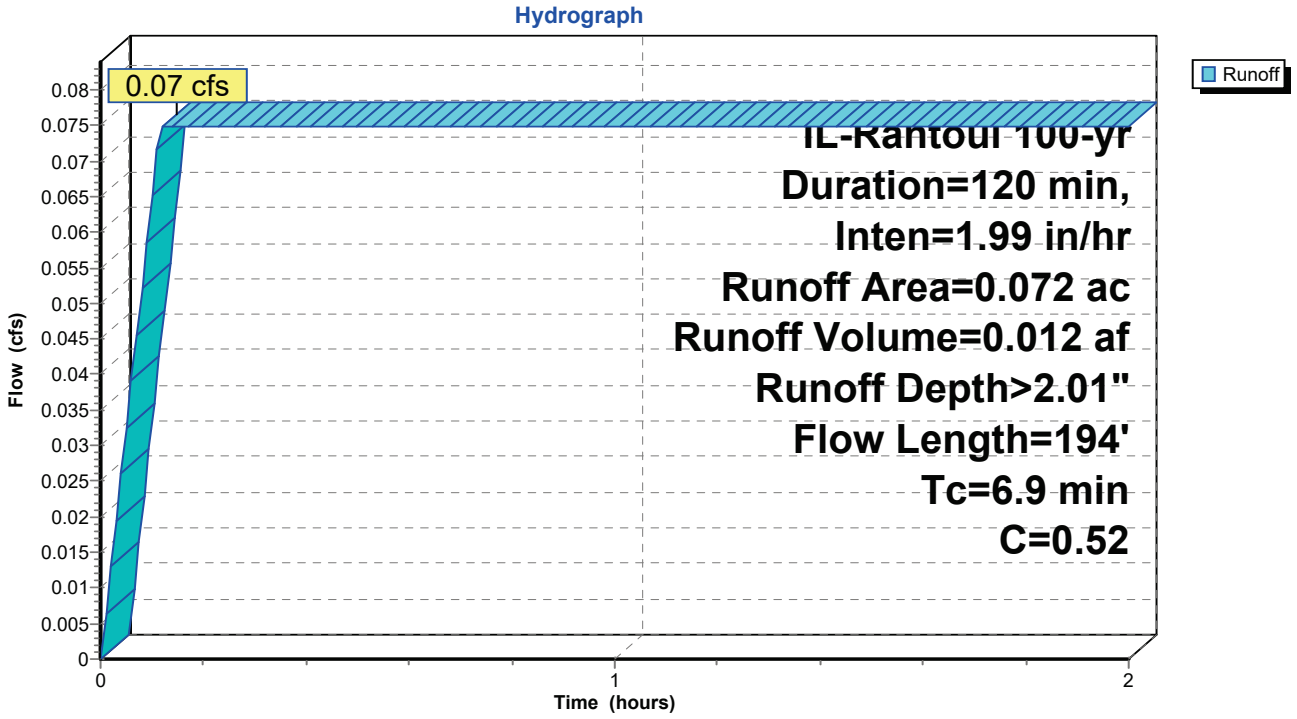
Runoff = 0.07 cfs @ 0.12 hrs, Volume= 0.012 af, Depth> 2.01"
Routed to Pond I91 : Inlet 9-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 100-yr Duration=120 min, Inten=1.99 in/hr

Area (ac)	C	Description
0.031	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.041	0.60	Gravel
0.072	0.52	Weighted Average
0.072		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.9	78	0.0208	0.22		**Sheet Flow, Grass E of building** Grass: Short n= 0.150 P2= 5.80"
1.0	116	0.0088	1.90		**Shallow Concentrated Flow, Access Road** Paved Kv= 20.3 fps
6.9	194	Total			

Subcatchment CA13: East Access Road



Summary for Subcatchment CA14: East Building Area

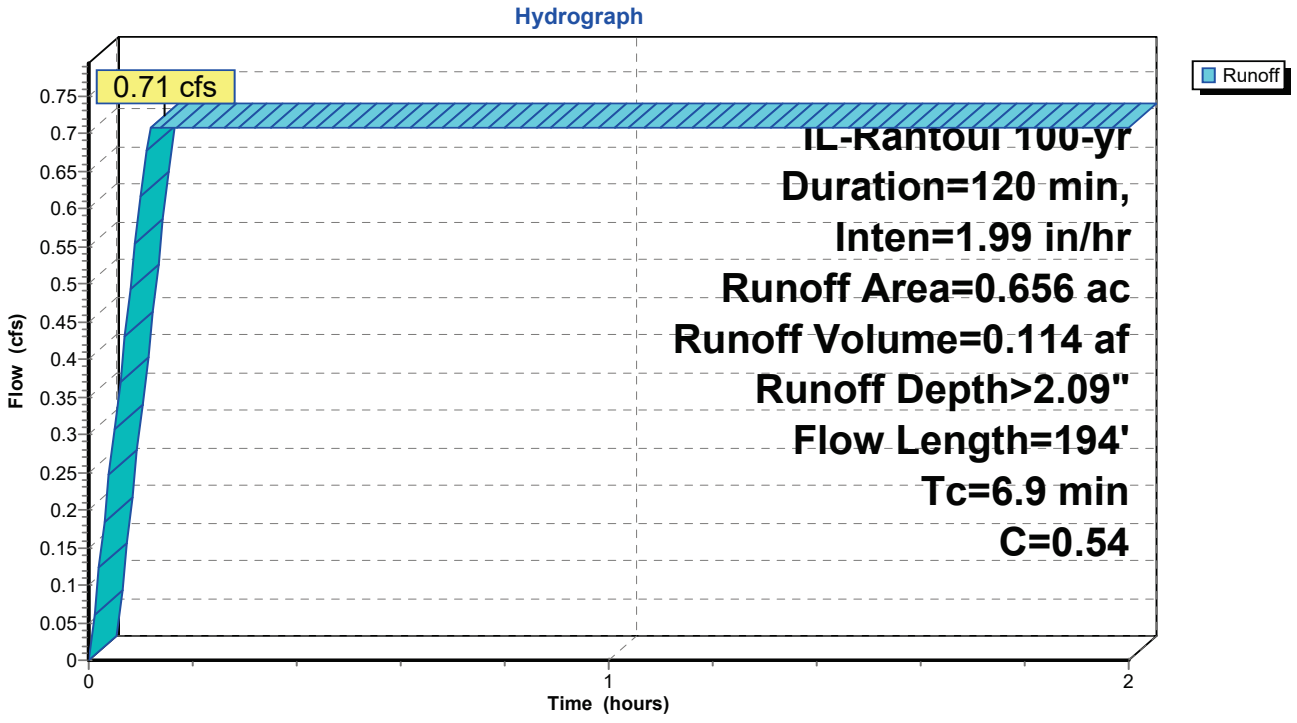
Runoff = 0.71 cfs @ 0.12 hrs, Volume= 0.114 af, Depth> 2.09"
Routed to Pond I92 : Inlet 9-2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 100-yr Duration=120 min, Inten=1.99 in/hr

Area (ac)	C	Description
0.032	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.216	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.008	0.95	Sidewalk
0.400	0.60	Gravel
0.656	0.54	Weighted Average
0.648		98.78% Pervious Area
0.008		1.22% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.9	78	0.0208	0.22		**Sheet Flow, Grass E of building** Grass: Short n= 0.150 P2= 5.80"
1.0	116	0.0088	1.90		**Shallow Concentrated Flow, Access Road** Paved Kv= 20.3 fps
6.9	194	Total			

Subcatchment CA14: East Building Area



Summary for Subcatchment CA15: SE 1 Parking Area

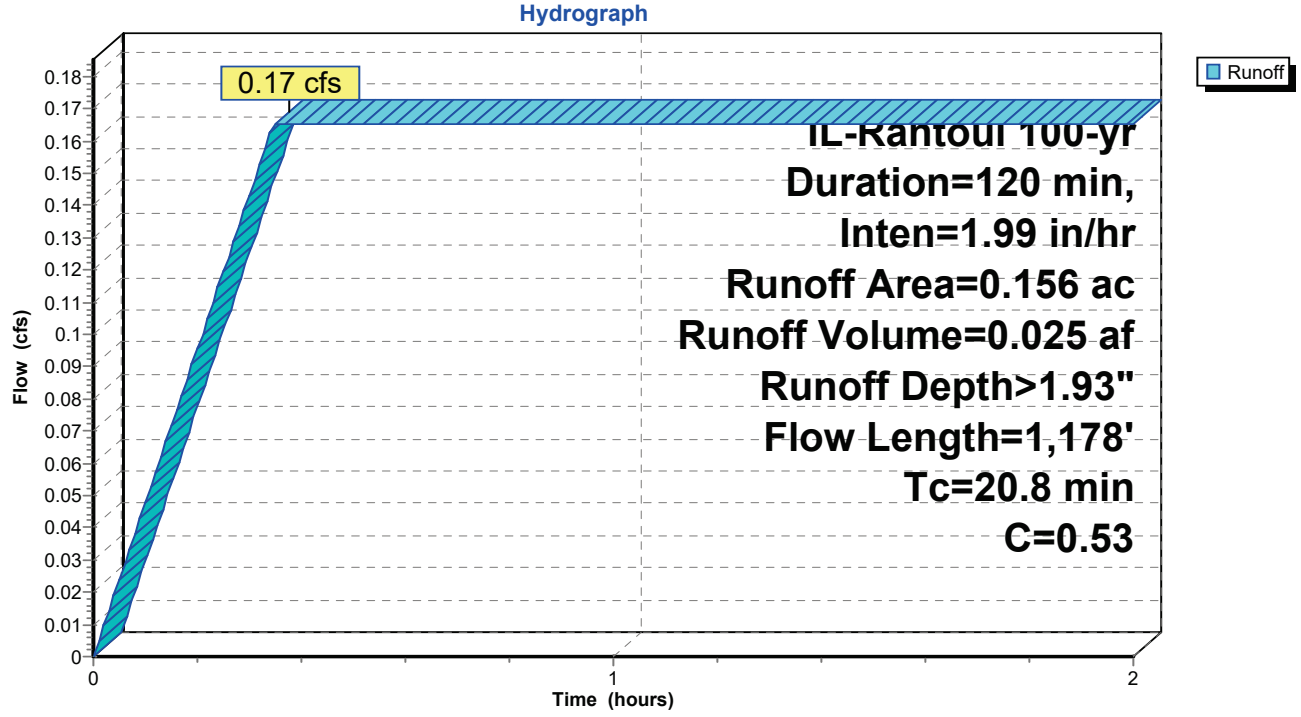
Runoff = 0.17 cfs @ 0.35 hrs, Volume= 0.025 af, Depth> 1.93"
Routed to Pond I53 : Inlet 5-3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 100-yr Duration=120 min, Inten=1.99 in/hr

Area (ac)	C	Description
0.060	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.096	0.60	Gravel
0.156	0.53	Weighted Average
0.156		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	100	0.0500	0.33		**Sheet Flow, Area E outside of property** Grass: Short n= 0.150 P2= 5.80"
8.8	539	0.0040	1.02		**Shallow Concentrated Flow, Area E outside of property** Unpaved Kv= 16.1 fps
7.0	539	0.0040	1.28		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
20.8	1,178	Total			

Subcatchment CA15: SE 1 Parking Area



Summary for Subcatchment CA16: SE 2 Parking Area

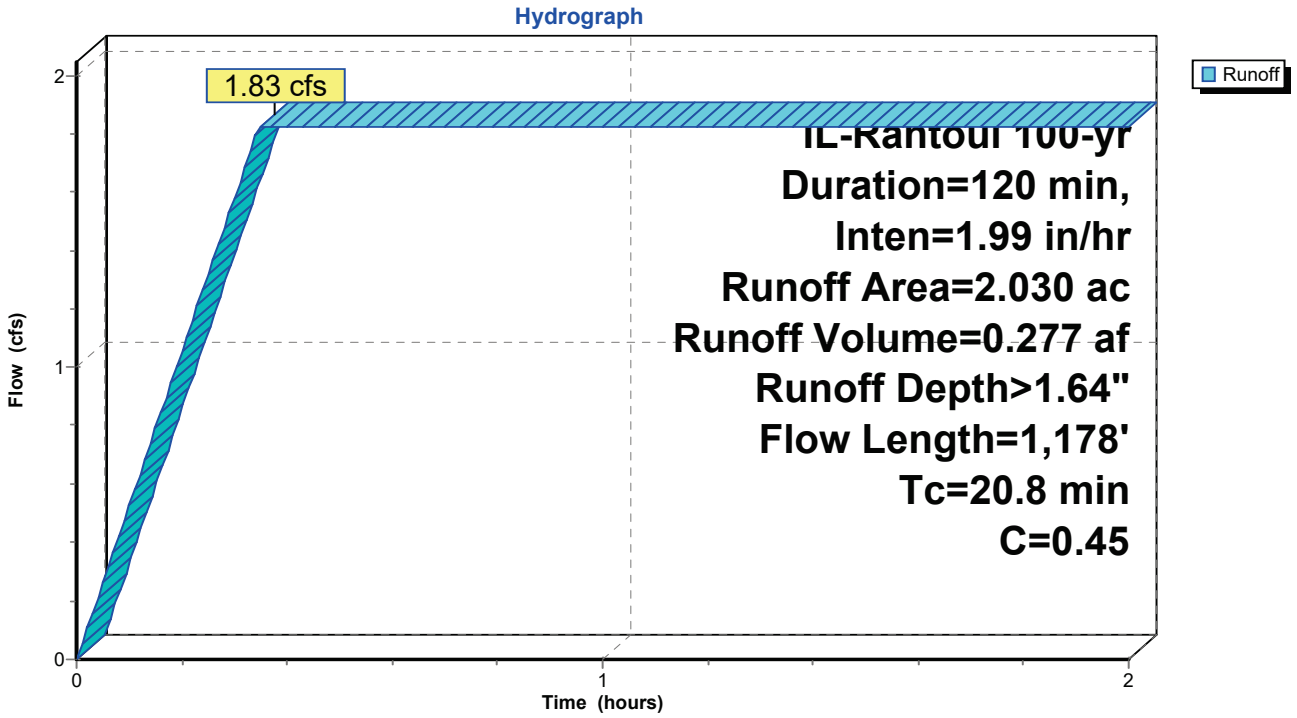
Runoff = 1.83 cfs @ 0.35 hrs, Volume= 0.277 af, Depth> 1.64"
Routed to Pond I52 : Inlet 5-2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 100-yr Duration=120 min, Inten=1.99 in/hr

Area (ac)	C	Description
0.609	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.101	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.951	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.006	0.95	Sidewalk
0.363	0.60	Gravel
2.030	0.45	Weighted Average
2.024		99.70% Pervious Area
0.006		0.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	100	0.0500	0.33		**Sheet Flow, Area E outside of property** Grass: Short n= 0.150 P2= 5.80"
8.8	539	0.0040	1.02		**Shallow Concentrated Flow, Area E outside of property** Unpaved Kv= 16.1 fps
7.0	539	0.0040	1.28		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
20.8	1,178	Total			

Subcatchment CA16: SE 2 Parking Area



Summary for Subcatchment CA17: NE Parking Area

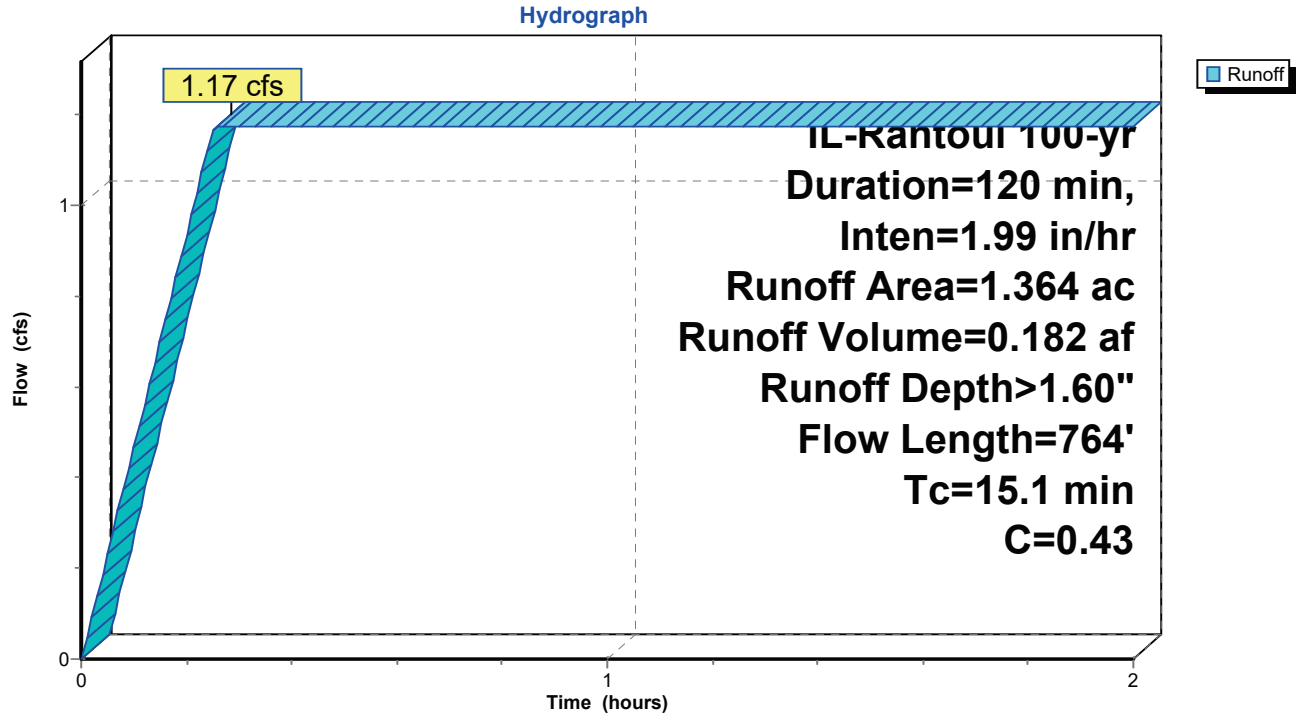
Runoff = 1.17 cfs @ 0.26 hrs, Volume= 0.182 af, Depth> 1.60"
Routed to Pond I63 : Inlet 6-3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 100-yr Duration=120 min, Inten=1.99 in/hr

Area (ac)	C	Description
0.319	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.362	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.338	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.345	0.60	Gravel
1.364	0.43	Weighted Average
1.364		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	100	0.0500	0.33		**Sheet Flow, Area E outside of property** Grass: Short n= 0.150 P2= 5.80"
9.5	568	0.0038	0.99		**Shallow Concentrated Flow, Area E outside of property** Unpaved Kv= 16.1 fps
0.6	96	0.0160	2.57		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
15.1	764	Total			

Subcatchment CA17: NE Parking Area



Summary for Subcatchment CA18: N Central Parking Area

[70] Warning: Tc<8dt requires smaller dt

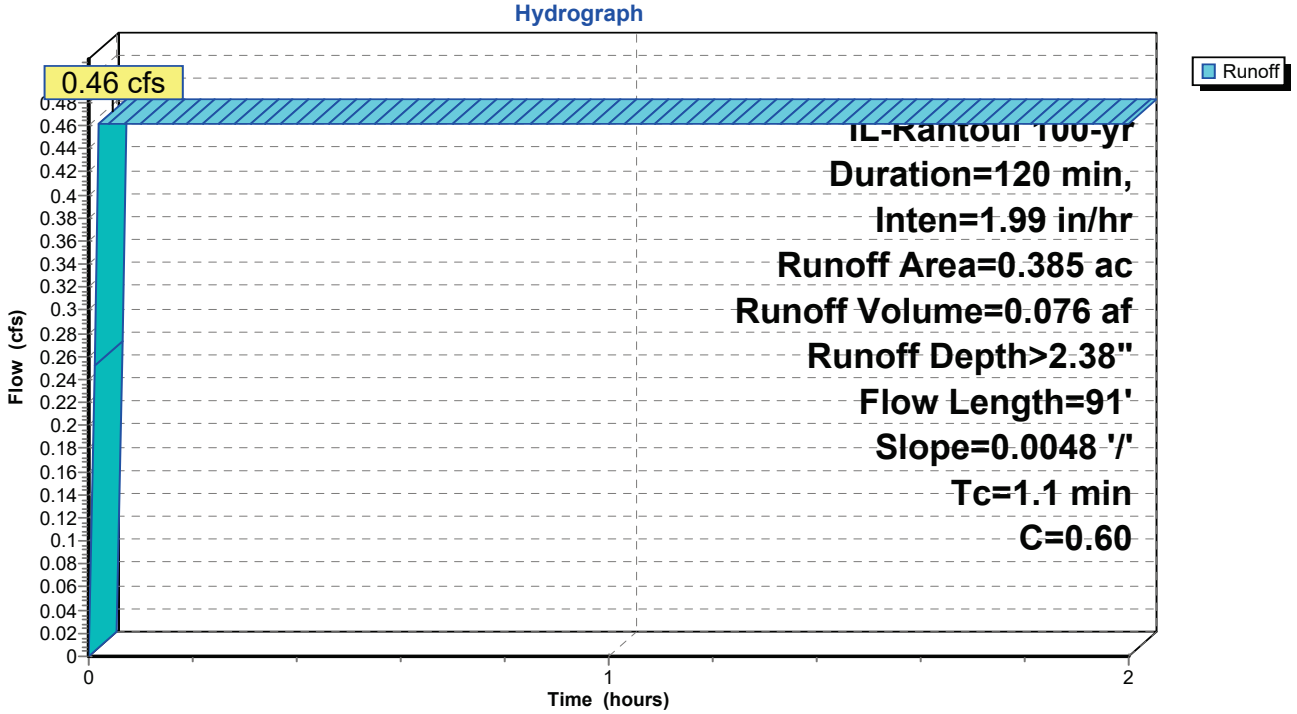
Runoff = 0.46 cfs @ 0.02 hrs, Volume= 0.076 af, Depth> 2.38"
Routed to Pond I62 : Inlet 6-2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 100-yr Duration=120 min, Inten=1.99 in/hr

Area (ac)	C	Description
0.385	0.60	Gravel
0.385		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	91	0.0048	1.41		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps

Subcatchment CA18: N Central Parking Area



Summary for Subcatchment CA19: S Central Parking Area

[70] Warning: Tc<8dt requires smaller dt

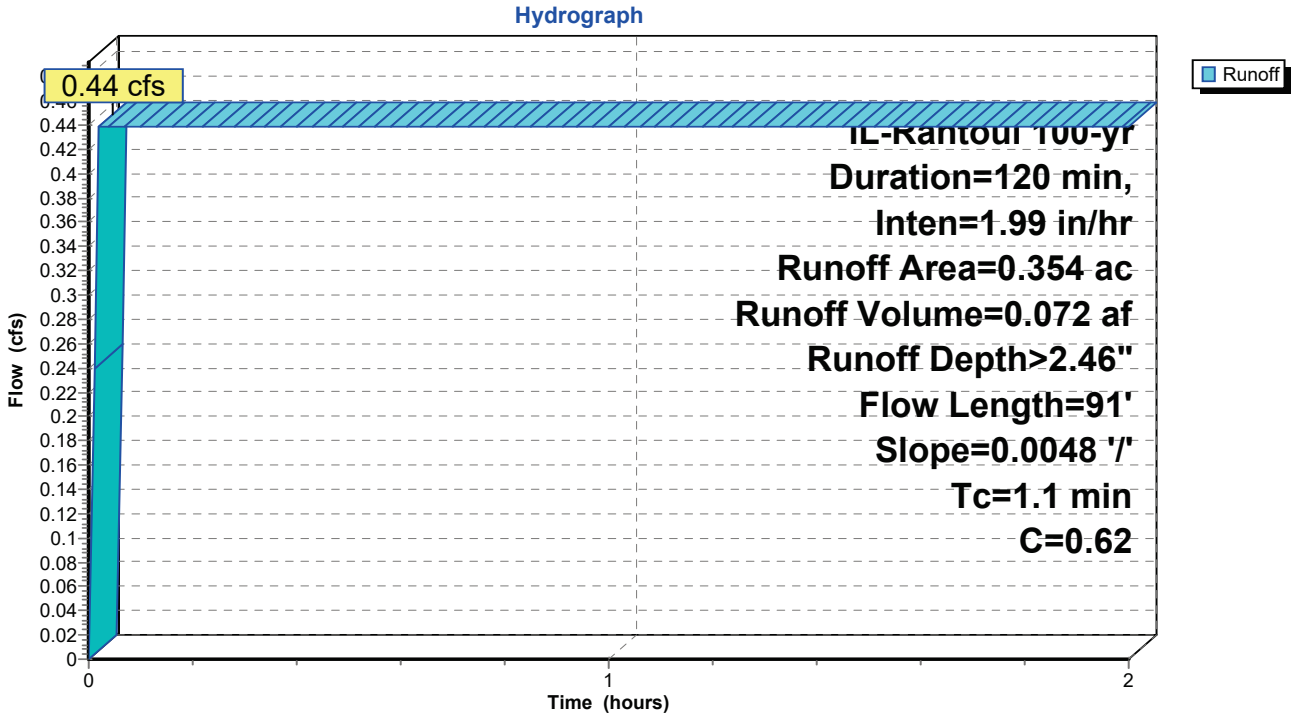
Runoff = 0.44 cfs @ 0.02 hrs, Volume= 0.072 af, Depth> 2.46"
Routed to Pond I51 : Inlet 5-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 100-yr Duration=120 min, Inten=1.99 in/hr

Area (ac)	C	Description
0.003	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.331	0.60	Gravel
0.020	0.95	Sidewalk
0.354	0.62	Weighted Average
0.334		94.35% Pervious Area
0.020		5.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.1	91	0.0048	1.41		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps

Subcatchment CA19: S Central Parking Area



Summary for Subcatchment CA20: NW Parking Area

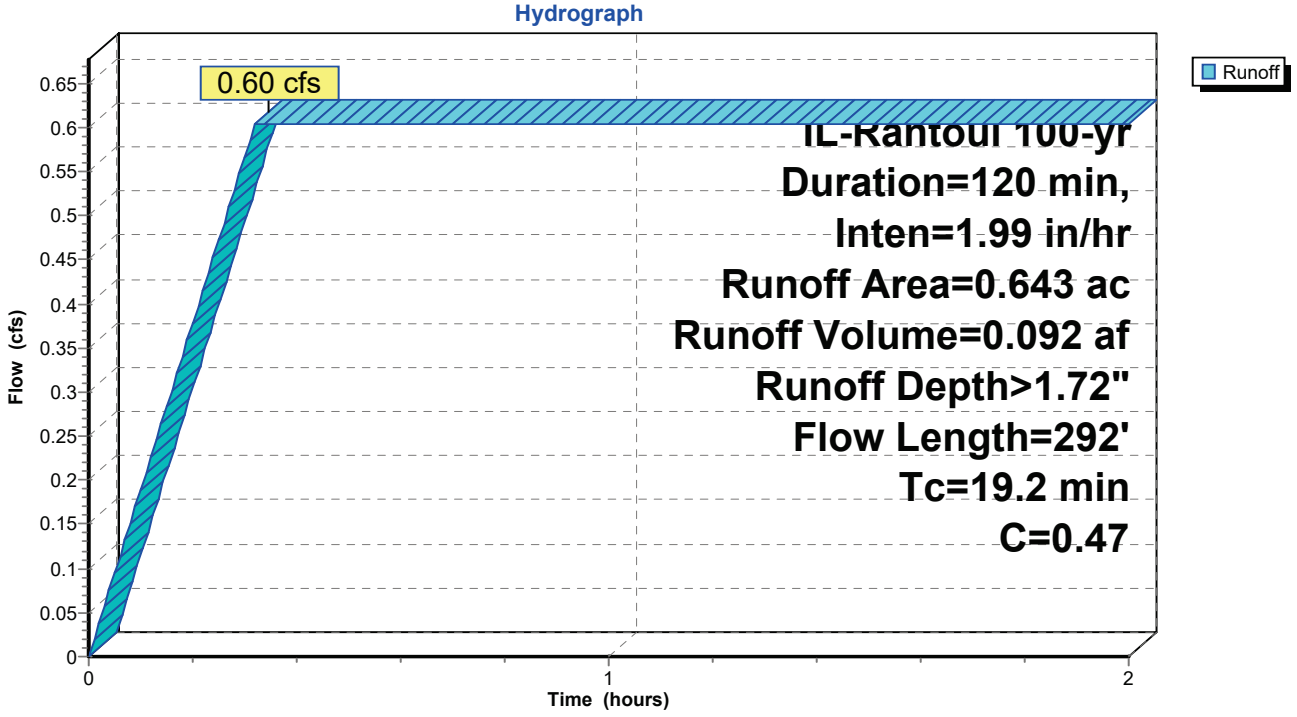
Runoff = 0.60 cfs @ 0.32 hrs, Volume= 0.092 af, Depth> 1.72"
Routed to Pond I61 : Manhole 6-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 100-yr Duration=120 min, Inten=1.99 in/hr

Area (ac)	C	Description
0.280	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
0.363	0.60	Gravel
0.643	0.47	Weighted Average
0.643		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.2	114	0.0035	0.12		**Sheet Flow, Grass area N of building** Grass: Short n= 0.150 P2= 5.80"
2.4	114	0.0129	0.80		**Shallow Concentrated Flow, Grass area N of building** Short Grass Pasture Kv= 7.0 fps
0.6	64	0.0072	1.72		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
19.2	292	Total			

Subcatchment CA20: NW Parking Area



Summary for Subcatchment CA21: SW Parking Area

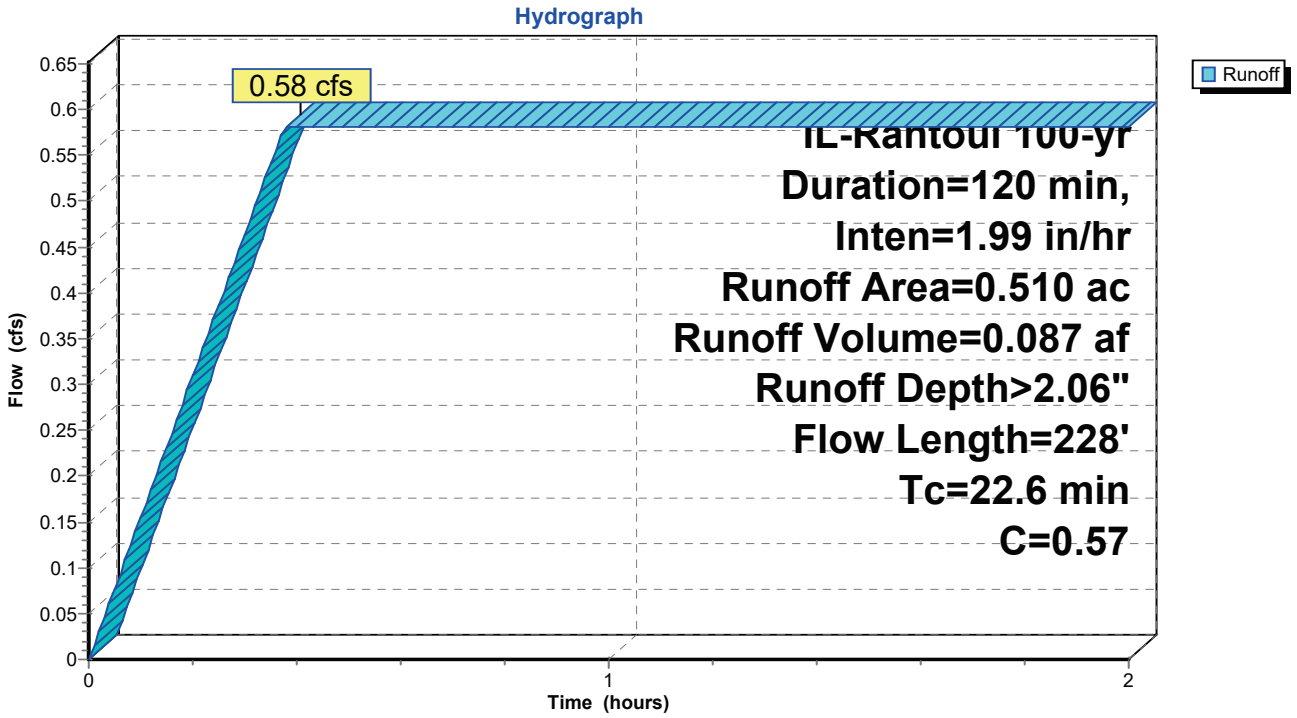
Runoff = 0.58 cfs @ 0.38 hrs, Volume= 0.087 af, Depth> 2.06"
Routed to Pond I31 : Manhole 3-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 100-yr Duration=120 min, Inten=1.99 in/hr

Area (ac)	C	Description
0.065	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
0.024	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.001	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.026	0.95	Sidewalk
0.394	0.60	Gravel
0.510	0.57	Weighted Average
0.484		94.90% Pervious Area
0.026		5.10% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.9	98	0.0032	0.11		**Sheet Flow, Grass area N of building** Grass: Short n= 0.150 P2= 5.80"
7.1	60	0.0004	0.14		**Shallow Concentrated Flow, Grass area N of building** Short Grass Pasture Kv= 7.0 fps
0.6	70	0.0100	2.03		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
22.6	228	Total			

Subcatchment CA21: SW Parking Area



Summary for Subcatchment CA6: Pond Catchment Area

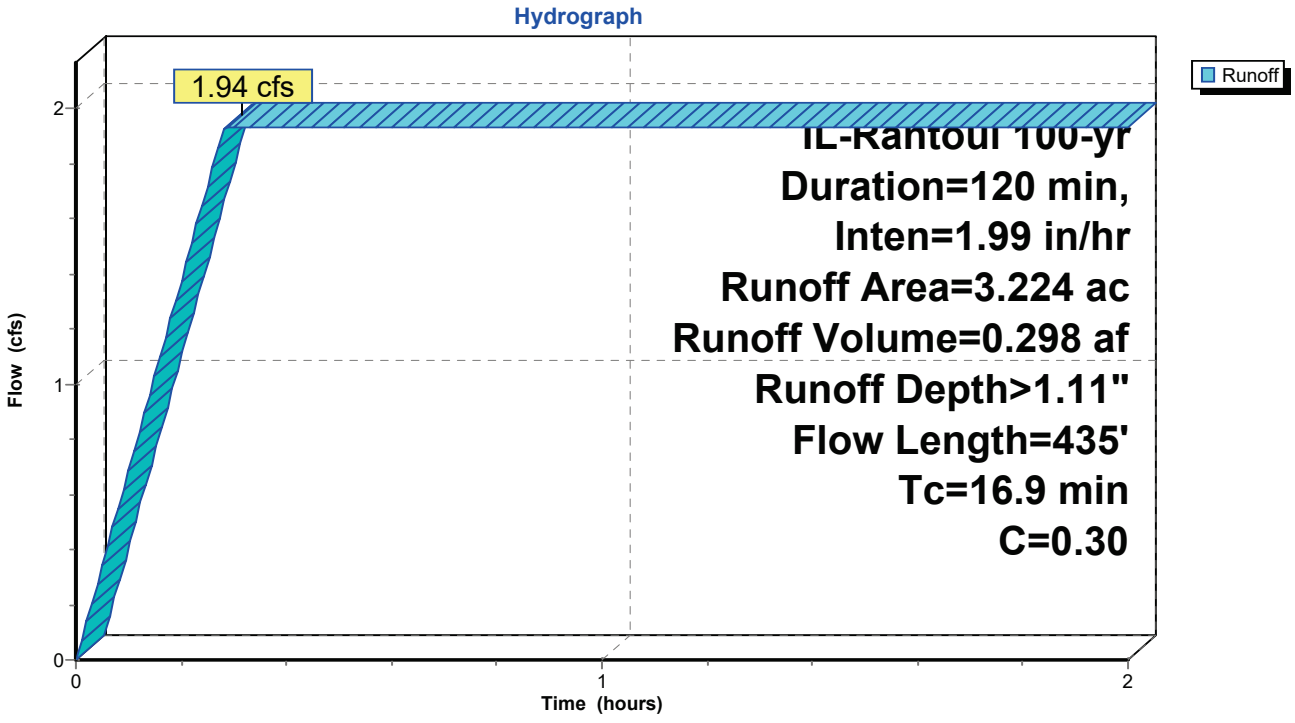
Runoff = 1.94 cfs @ 0.29 hrs, Volume= 0.298 af, Depth> 1.11"
Routed to Pond P1 : Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 100-yr Duration=120 min, Inten=1.99 in/hr

Area (ac)	C	Description
1.253	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
1.908	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.063	0.40	Orthents, loamy, 1 to 7 percent slopes (802B), Well drained, HSG C
3.224	0.30	Weighted Average
3.224		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0051	0.13		**Sheet Flow, Grass area W of parking area** Grass: Short n= 0.150 P2= 5.80"
4.3	335	0.0344	1.30		**Shallow Concentrated Flow, Grass area W of parking area** Short Grass Pasture Kv= 7.0 fps
16.9	435	Total			

Subcatchment CA6: Pond Catchment Area



Summary for Subcatchment CA7: West Access Road Area

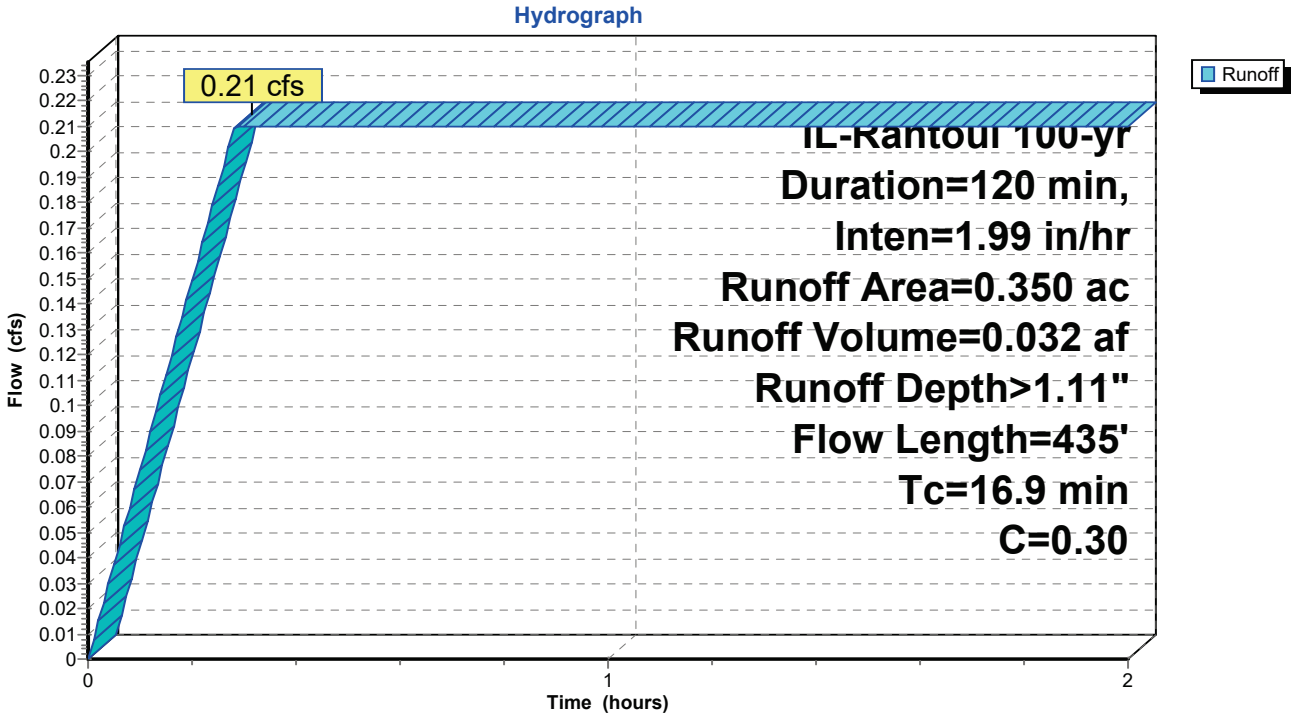
Runoff = 0.21 cfs @ 0.29 hrs, Volume= 0.032 af, Depth> 1.11"
Routed to Pond I14 : Inlet 1-4

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 100-yr Duration=120 min, Inten=1.99 in/hr

Area (ac)	C	Description
0.348	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.002	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
0.350	0.30	Weighted Average
0.350		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0051	0.13		**Sheet Flow, Grass area W of parking area** Grass: Short n= 0.150 P2= 5.80"
4.3	335	0.0344	1.30		**Shallow Concentrated Flow, Grass area W of parking area** Short Grass Pasture Kv= 7.0 fps
16.9	435	Total			

Subcatchment CA7: West Access Road Area



Summary for Subcatchment CA8: West Building Area

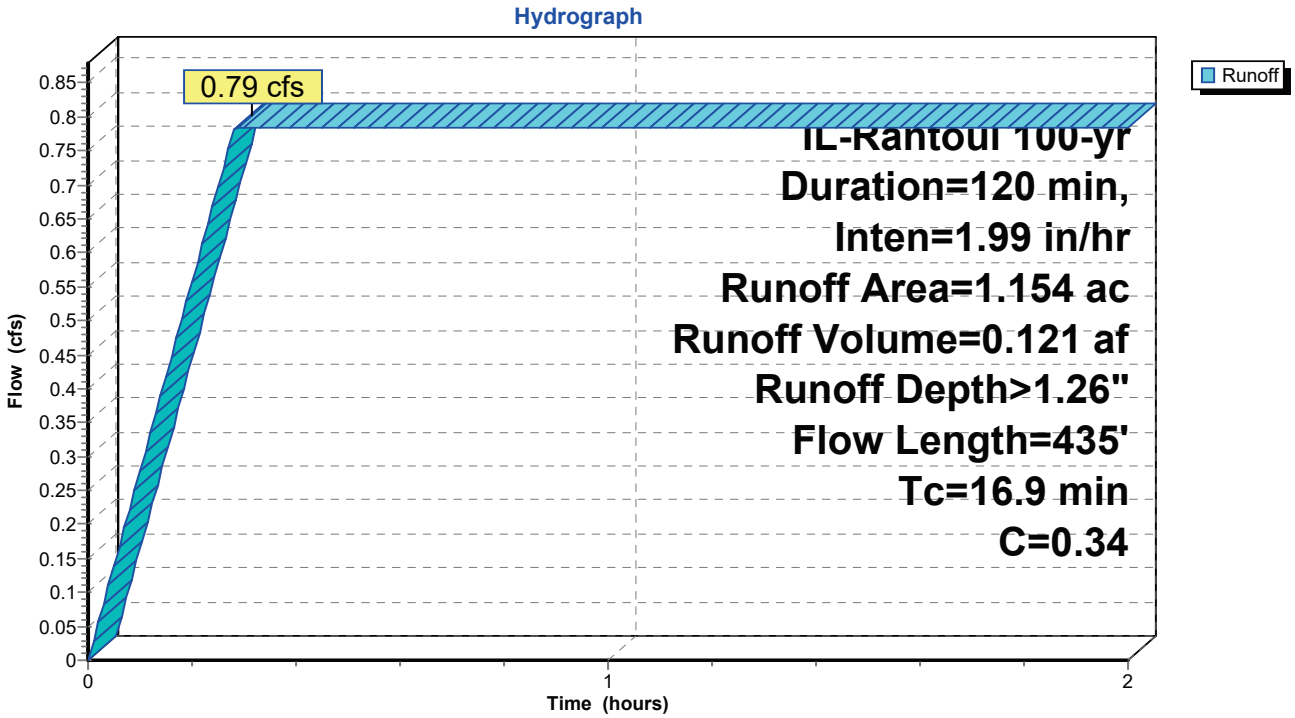
Runoff = 0.79 cfs @ 0.29 hrs, Volume= 0.121 af, Depth> 1.26"
Routed to Pond I15 : Inlet 1-5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 100-yr Duration=120 min, Inten=1.99 in/hr

Area (ac)	C	Description
0.960	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.136	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.007	0.40	Orthents, loamy, 1 to 7 percent slopes (802B), Well drained, HSG C
0.051	0.95	Sidewalk
1.154	0.34	Weighted Average
1.103		95.58% Pervious Area
0.051		4.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.6	100	0.0051	0.13		**Sheet Flow, Grass area W of parking area** Grass: Short n= 0.150 P2= 5.80"
4.3	335	0.0344	1.30		**Shallow Concentrated Flow, Grass area W of parking area** Short Grass Pasture Kv= 7.0 fps
16.9	435	Total			

Subcatchment CA8: West Building Area



Summary for Subcatchment CA9: Building entrance

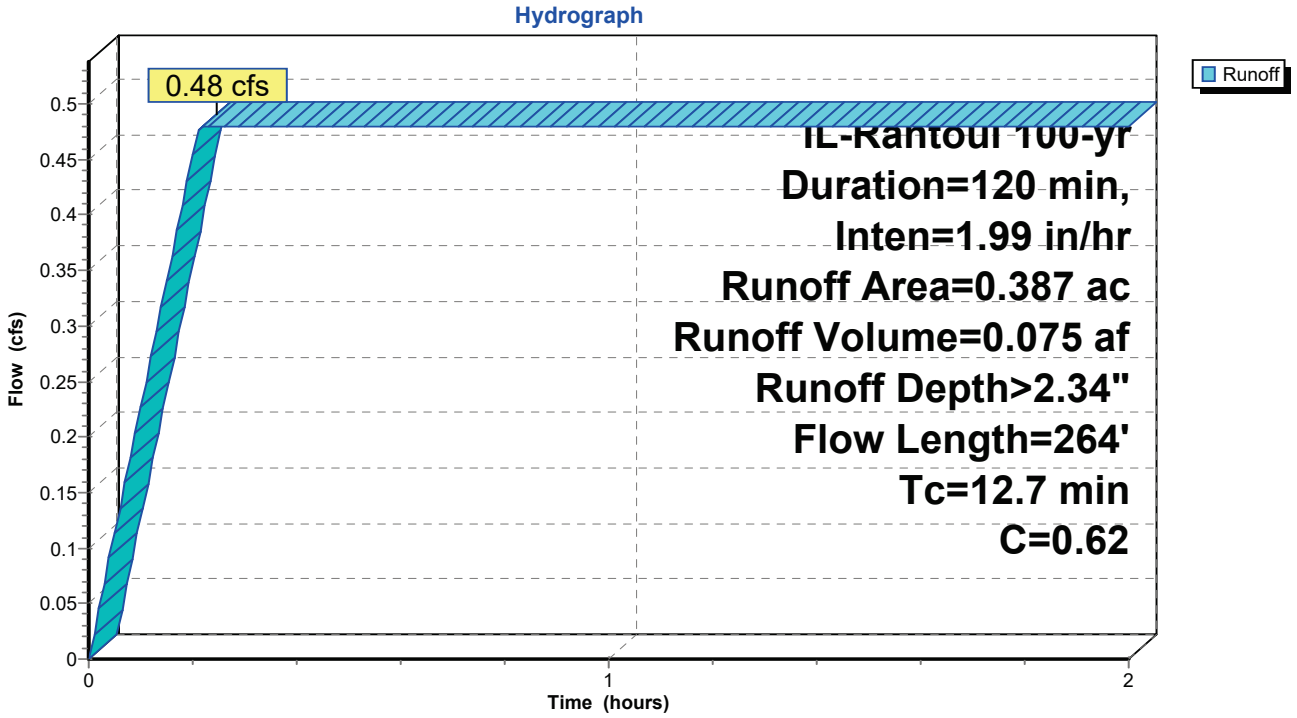
Runoff = 0.48 cfs @ 0.22 hrs, Volume= 0.075 af, Depth> 2.34"
Routed to Pond I71 : Inlet 7-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
IL-Rantoul 100-yr Duration=120 min, Inten=1.99 in/hr

Area (ac)	C	Description
0.111	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.004	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.032	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.096	0.95	Sidewalk
0.144	0.60	Gravel
0.387	0.62	Weighted Average
0.291		75.19% Pervious Area
0.096		24.81% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.7	148	0.0135	0.21		**Sheet Flow, Gass SE of building** Grass: Short n= 0.150 P2= 5.80"
1.0	116	0.0088	1.90		**Shallow Concentrated Flow, Access Road** Paved Kv= 20.3 fps
12.7	264	Total			

Subcatchment CA9: Building entrance



Summary for Reach R10: Pipe CA10 to I81

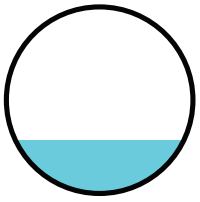
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.432 ac,100.00% Impervious, Inflow Depth > 3.75" for 100-yr event
Inflow = 0.82 cfs @ 0.03 hrs, Volume= 0.135 af
Outflow = 0.82 cfs @ 0.22 hrs, Volume= 0.135 af, Atten= 0%, Lag= 11.4 min
Routed to Pond I81 : Inlet 8-1

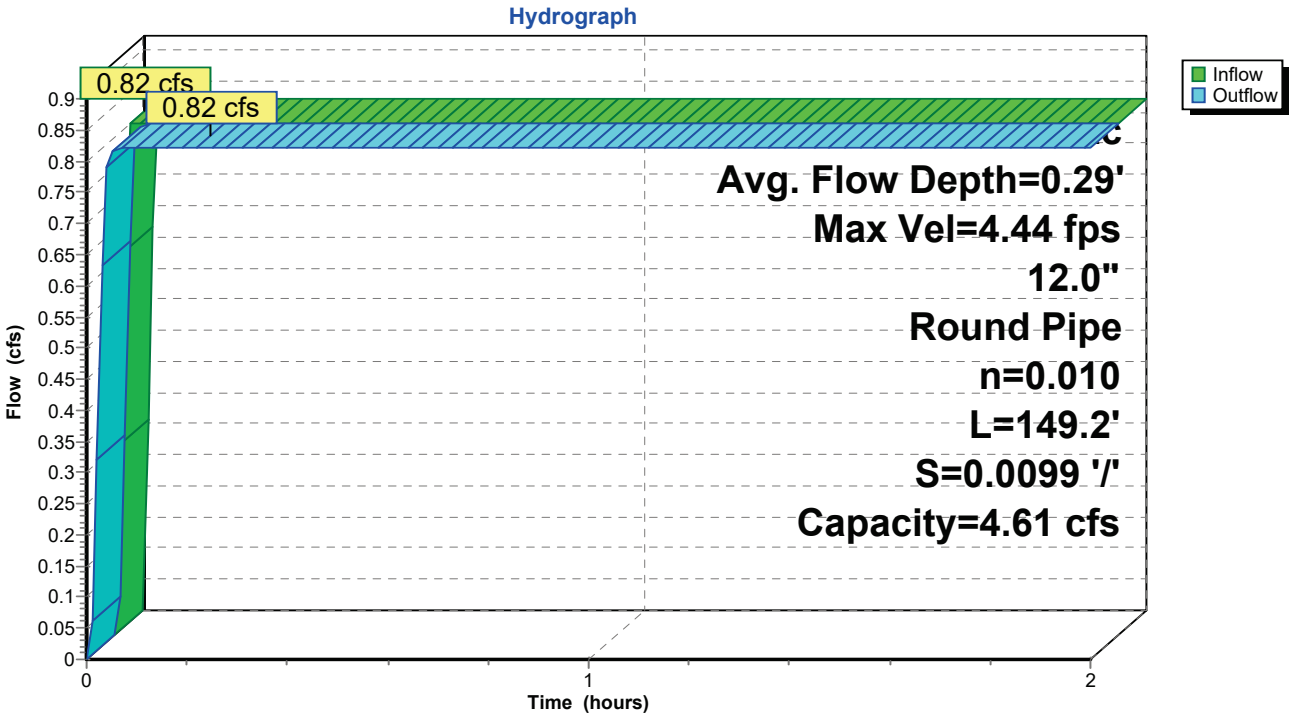
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.44 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 4.42 fps, Avg. Travel Time= 0.6 min

Peak Storage= 28 cf @ 0.22 hrs
Average Depth at Peak Storage= 0.29' , Surface Width= 0.90'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 4.61 cfs

12.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 149.2' Slope= 0.0099 '/'
Inlet Invert= 750.17', Outlet Invert= 748.69'



Reach R10: Pipe CA10 to I81



Summary for Reach R14: Pipe I14 to Pond

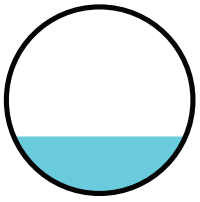
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 9.206 ac, 9.55% Impervious, Inflow Depth > 1.81" for 100-yr event
Inflow = 9.08 cfs @ 1.03 hrs, Volume= 1.391 af
Outflow = 9.08 cfs @ 1.02 hrs, Volume= 1.388 af, Atten= 0%, Lag= 0.0 min
Routed to Pond P1 : Detention Pond

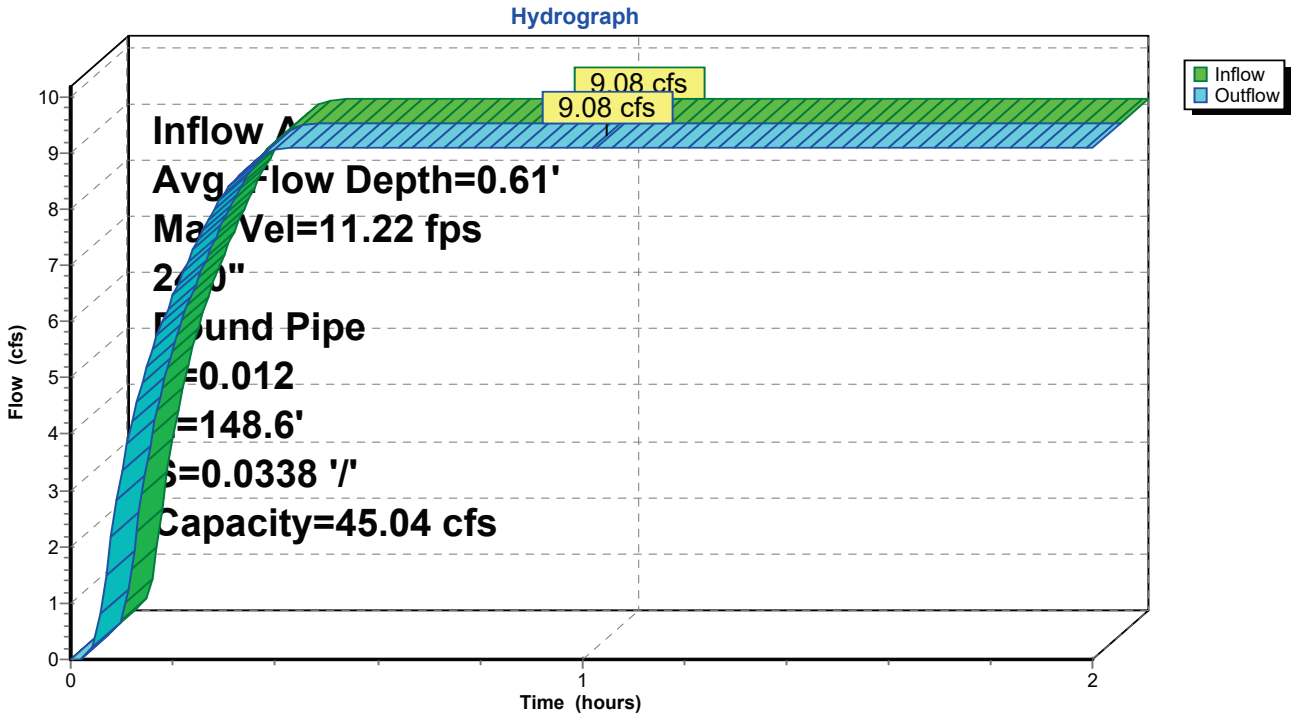
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 11.22 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 10.78 fps, Avg. Travel Time= 0.2 min

Peak Storage= 120 cf @ 1.02 hrs
Average Depth at Peak Storage= 0.61' , Surface Width= 1.84'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 45.04 cfs

24.0" Round Pipe
n= 0.012 Steel, smooth
Length= 148.6' Slope= 0.0338 '/'
Inlet Invert= 741.84', Outlet Invert= 736.82'



Reach R14: Pipe I14 to Pond



Summary for Reach R15: Pipe I15 to I14

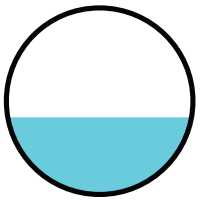
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 8.856 ac, 9.93% Impervious, Inflow Depth > 1.85" for 100-yr event
Inflow = 8.87 cfs @ 1.07 hrs, Volume= 1.367 af
Outflow = 8.87 cfs @ 1.03 hrs, Volume= 1.359 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I14 : Inlet 1-4

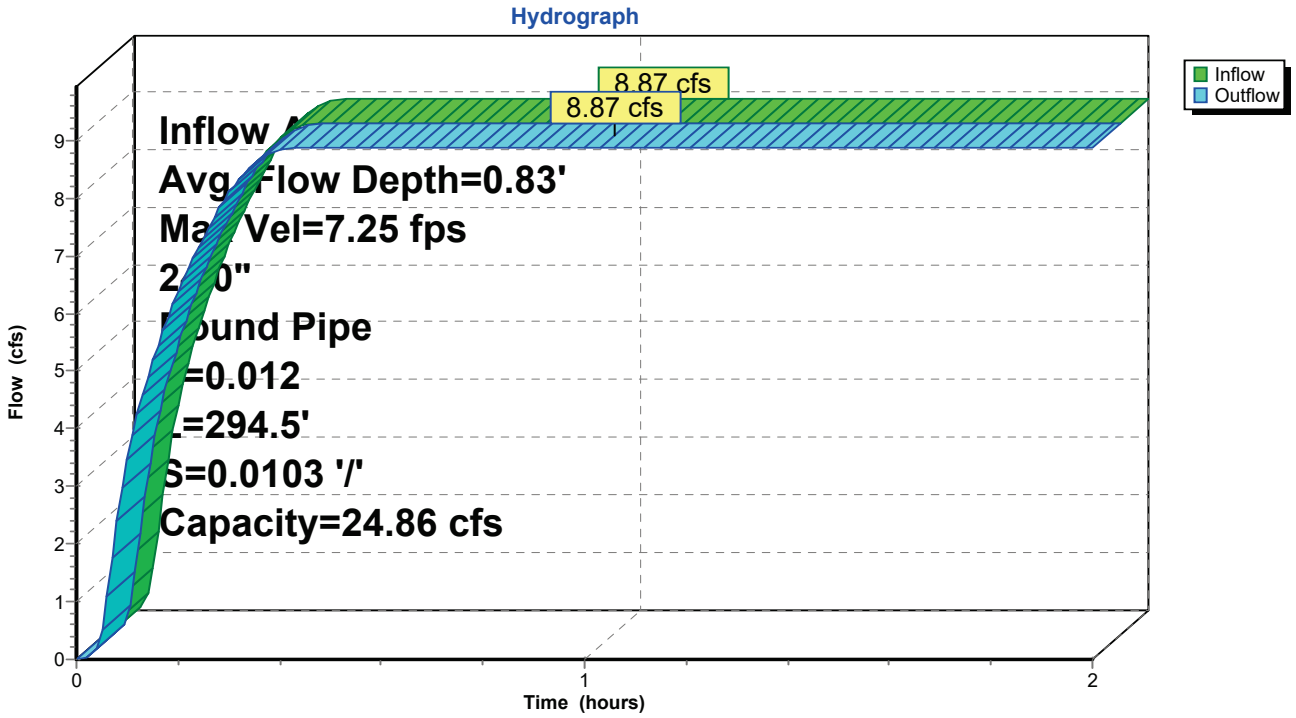
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 7.25 fps, Min. Travel Time= 0.7 min
Avg. Velocity = 6.98 fps, Avg. Travel Time= 0.7 min

Peak Storage= 360 cf @ 1.03 hrs
Average Depth at Peak Storage= 0.83' , Surface Width= 1.97'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 24.86 cfs

24.0" Round Pipe
n= 0.012 Steel, smooth
Length= 294.5' Slope= 0.0103 '/'
Inlet Invert= 744.87', Outlet Invert= 741.84'



Reach R15: Pipe I15 to I14



Summary for Reach R21: Pipe SS31 to SS23

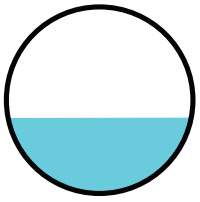
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 6.155 ac, 4.74% Impervious, Inflow Depth > 1.80" for 100-yr event
Inflow = 6.00 cfs @ 1.08 hrs, Volume= 0.921 af
Outflow = 6.00 cfs @ 1.03 hrs, Volume= 0.915 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I15 : Inlet 1-5

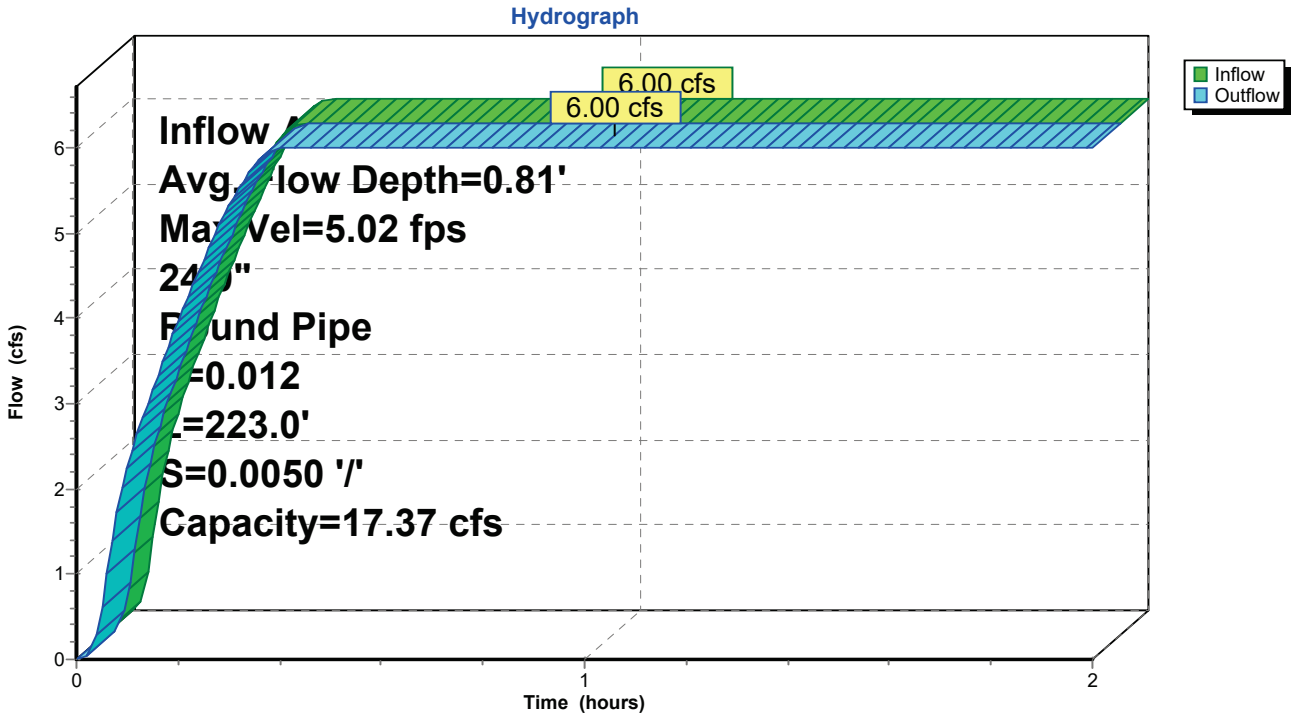
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 5.02 fps, Min. Travel Time= 0.7 min
Avg. Velocity = 4.84 fps, Avg. Travel Time= 0.8 min

Peak Storage= 267 cf @ 1.02 hrs
Average Depth at Peak Storage= 0.81' , Surface Width= 1.96'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 17.37 cfs

24.0" Round Pipe
n= 0.012 Steel, smooth
Length= 223.0' Slope= 0.0050 '/'
Inlet Invert= 746.00', Outlet Invert= 744.88'



Reach R21: Pipe SS31 to SS23



Summary for Reach R31: Pipe I31 to I21

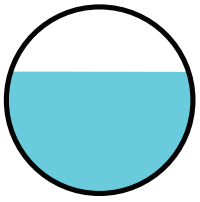
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 5.442 ac, 0.96% Impervious, Inflow Depth > 1.78" for 100-yr event
Inflow = 5.26 cfs @ 0.55 hrs, Volume= 0.806 af
Outflow = 5.26 cfs @ 0.60 hrs, Volume= 0.802 af, Atten= 0%, Lag= 3.0 min
Routed to Pond I21 : Inlet 2-1

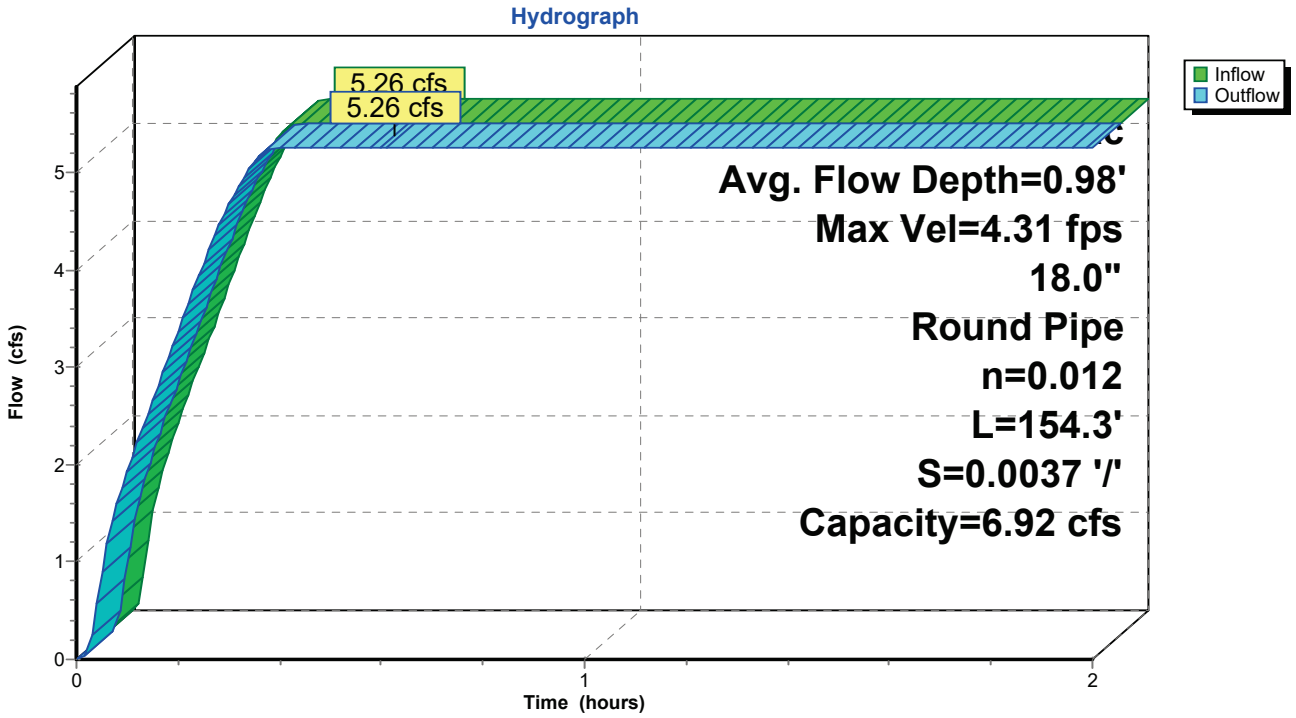
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.31 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 4.17 fps, Avg. Travel Time= 0.6 min

Peak Storage= 188 cf @ 0.60 hrs
Average Depth at Peak Storage= 0.98' , Surface Width= 1.43'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 6.92 cfs

18.0" Round Pipe
n= 0.012 Steel, smooth
Length= 154.3' Slope= 0.0037 '/'
Inlet Invert= 747.75', Outlet Invert= 747.18'



Reach R31: Pipe I31 to I21



Summary for Reach R41: Pipe I41 to I31

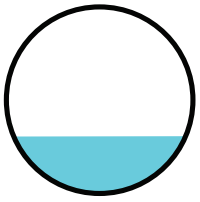
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.229 ac,100.00% Impervious, Inflow Depth > 3.77" for 100-yr event
Inflow = 0.44 cfs @ 0.81 hrs, Volume= 0.072 af
Outflow = 0.44 cfs @ 1.08 hrs, Volume= 0.070 af, Atten= 0%, Lag= 16.2 min
Routed to Pond I21 : Inlet 2-1

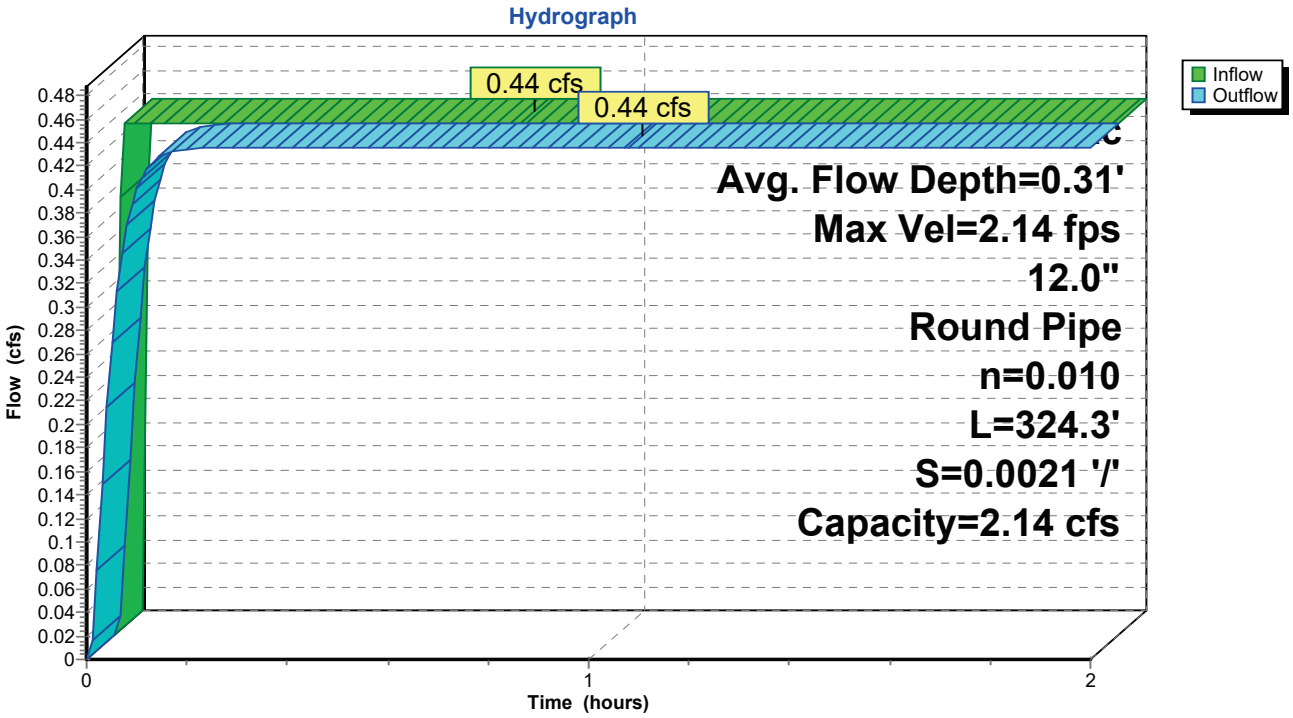
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 2.14 fps, Min. Travel Time= 2.5 min
Avg. Velocity = 2.11 fps, Avg. Travel Time= 2.6 min

Peak Storage= 66 cf @ 1.08 hrs
Average Depth at Peak Storage= 0.31' , Surface Width= 0.92'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 2.14 cfs

12.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 324.3' Slope= 0.0021 '/'
Inlet Invert= 748.86', Outlet Invert= 748.17'



Reach R41: Pipe I41 to I31



Summary for Reach R51: Pipe I51 to I31

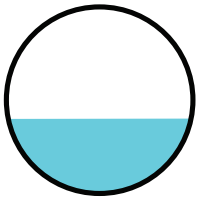
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 2.540 ac, 1.02% Impervious, Inflow Depth > 1.76" for 100-yr event
Inflow = 2.43 cfs @ 0.52 hrs, Volume= 0.373 af
Outflow = 2.43 cfs @ 0.53 hrs, Volume= 0.372 af, Atten= 0%, Lag= 0.6 min
Routed to Pond I31 : Manhole 3-1

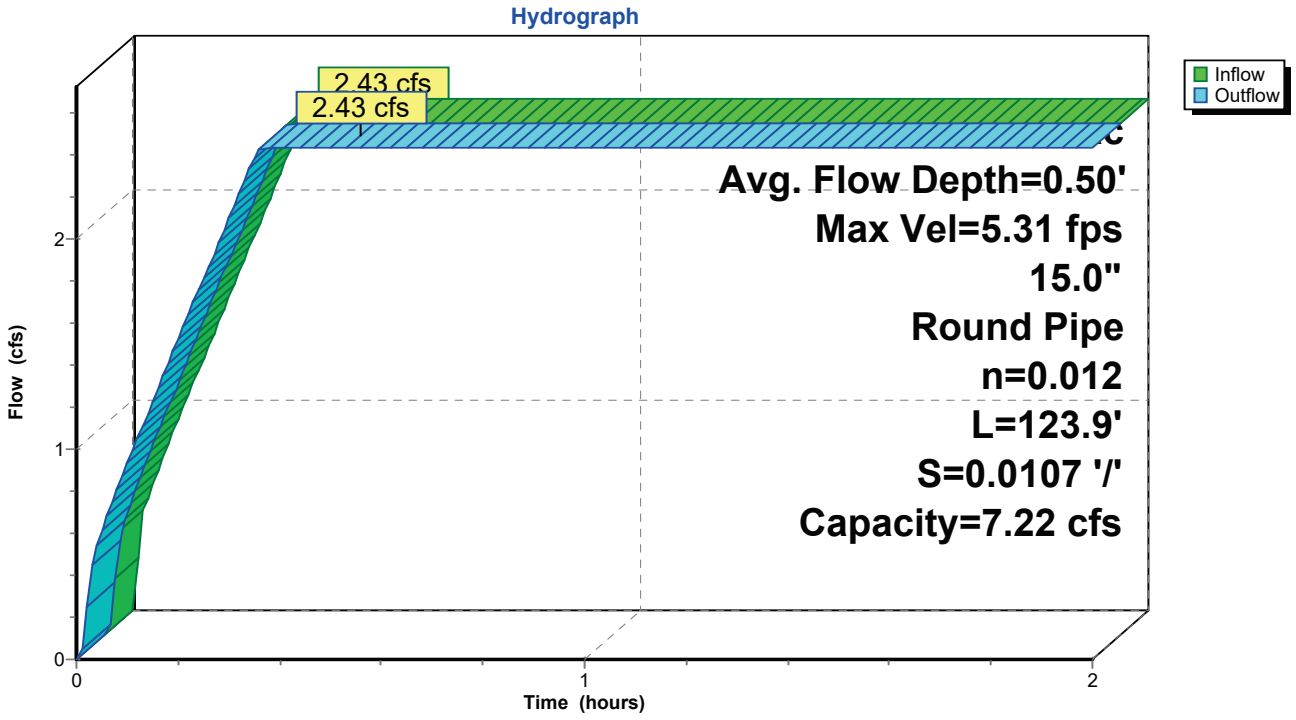
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 5.31 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 5.15 fps, Avg. Travel Time= 0.4 min

Peak Storage= 57 cf @ 0.53 hrs
Average Depth at Peak Storage= 0.50' , Surface Width= 1.22'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 7.22 cfs

15.0" Round Pipe
n= 0.012 Steel, smooth
Length= 123.9' Slope= 0.0107 '/'
Inlet Invert= 749.07', Outlet Invert= 747.75'



Reach R51: Pipe I51 to I31



Summary for Reach R52: Pipe I52 to I51

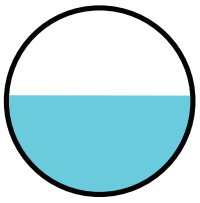
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 2.186 ac, 0.27% Impervious, Inflow Depth > 1.66" for 100-yr event
Inflow = 1.99 cfs @ 0.51 hrs, Volume= 0.302 af
Outflow = 1.99 cfs @ 0.52 hrs, Volume= 0.301 af, Atten= 0%, Lag= 0.6 min
Routed to Pond I51 : Inlet 5-1

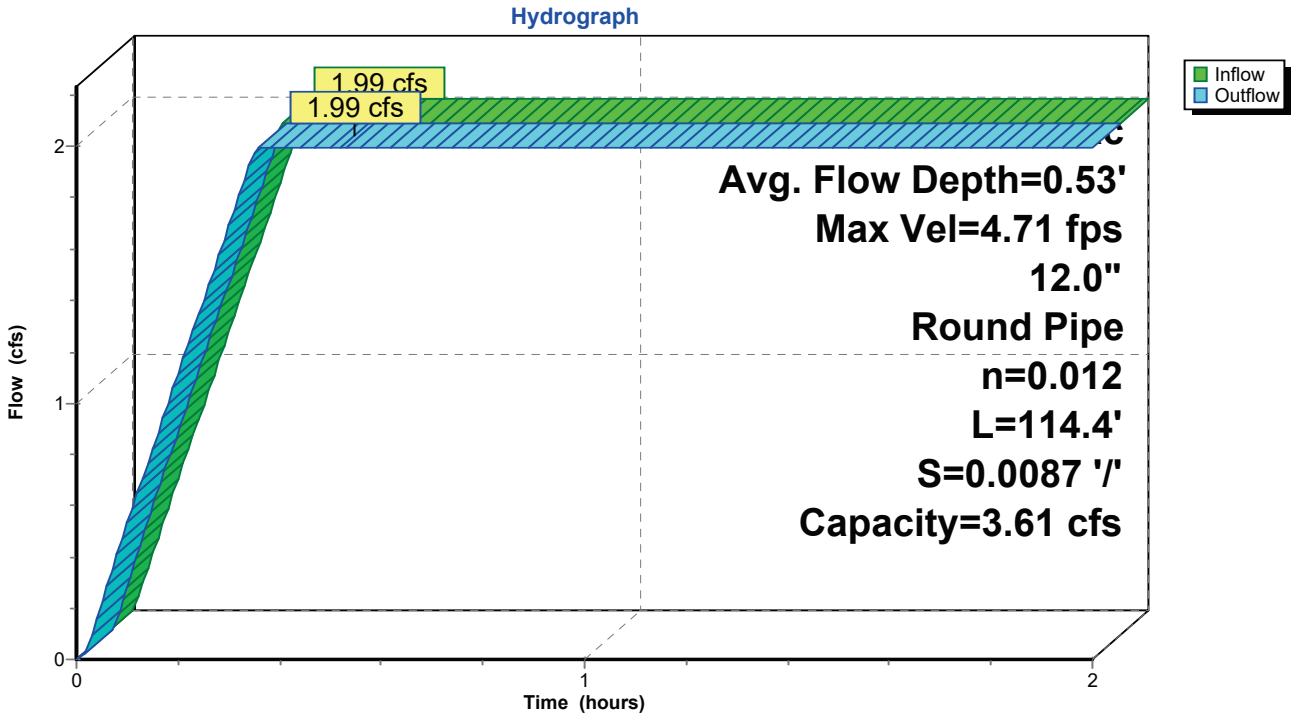
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.71 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 4.53 fps, Avg. Travel Time= 0.4 min

Peak Storage= 48 cf @ 0.52 hrs
Average Depth at Peak Storage= 0.53' , Surface Width= 1.00'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.61 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 114.4' Slope= 0.0087 '/'
Inlet Invert= 750.10', Outlet Invert= 749.10'



Reach R52: Pipe I52 to I51



Summary for Reach R53: Pipe I53 to I52

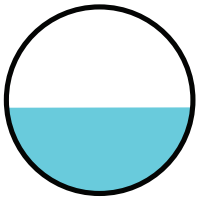
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.156 ac, 0.00% Impervious, Inflow Depth > 1.93" for 100-yr event
Inflow = 0.17 cfs @ 0.42 hrs, Volume= 0.025 af
Outflow = 0.17 cfs @ 0.53 hrs, Volume= 0.025 af, Atten= 0%, Lag= 6.6 min
Routed to Pond I52 : Inlet 5-2

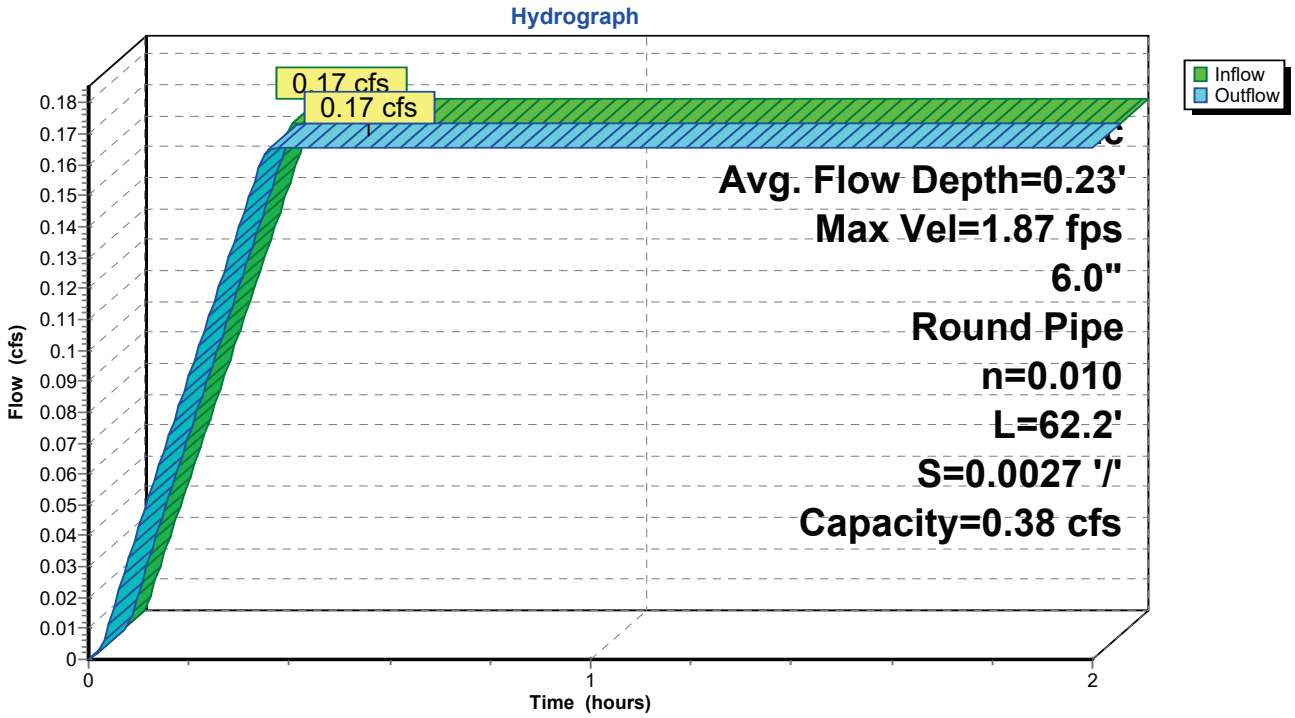
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 1.87 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 1.80 fps, Avg. Travel Time= 0.6 min

Peak Storage= 5 cf @ 0.53 hrs
Average Depth at Peak Storage= 0.23' , Surface Width= 0.50'
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 0.38 cfs

6.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 62.2' Slope= 0.0027 '/'
Inlet Invert= 750.43', Outlet Invert= 750.26'



Reach R53: Pipe I53 to I52



Summary for Reach R54: Pipe I54 to I53

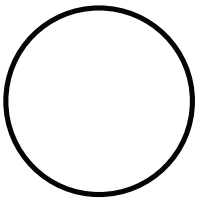
[52] Hint: Inlet/Outlet conditions not evaluated

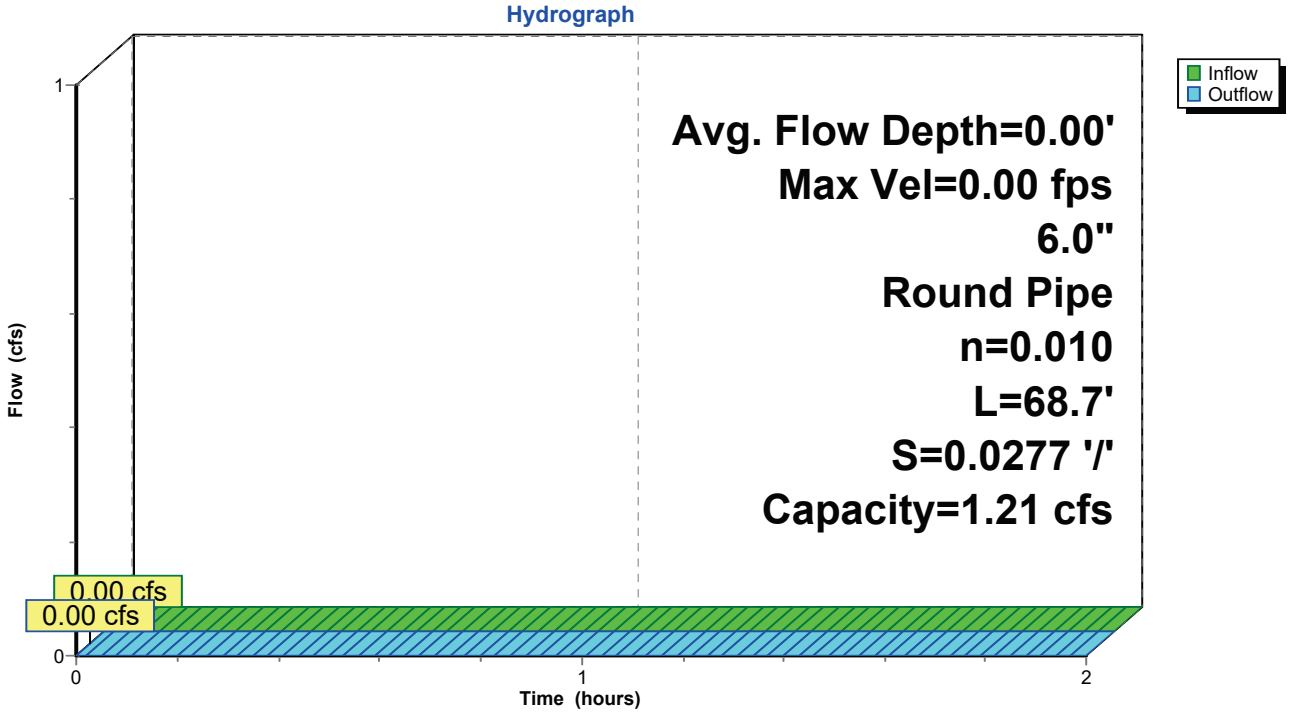
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I53 : Inlet 5-3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 1.21 cfs

6.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 68.7' Slope= 0.0277 '/'
Inlet Invert= 752.46', Outlet Invert= 750.56'





Summary for Reach R61: Pipe I61 to I31

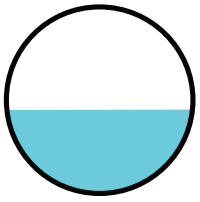
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 2.392 ac, 0.00% Impervious, Inflow Depth > 1.75" for 100-yr event
Inflow = 2.24 cfs @ 0.47 hrs, Volume= 0.349 af
Outflow = 2.24 cfs @ 0.49 hrs, Volume= 0.347 af, Atten= 0%, Lag= 1.2 min
Routed to Pond I31 : Manhole 3-1

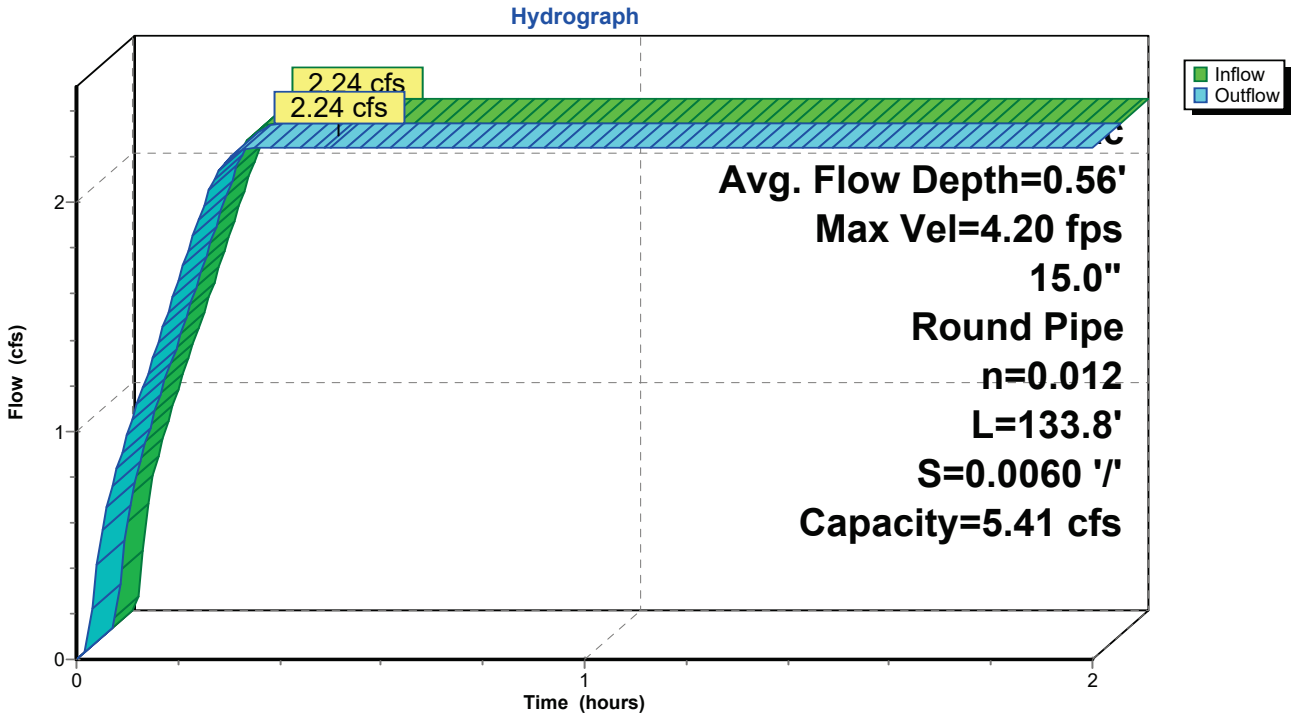
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.20 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 4.09 fps, Avg. Travel Time= 0.5 min

Peak Storage= 71 cf @ 0.49 hrs
Average Depth at Peak Storage= 0.56' , Surface Width= 1.24'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 5.41 cfs

15.0" Round Pipe
n= 0.012 Steel, smooth
Length= 133.8' Slope= 0.0060 '/'
Inlet Invert= 748.55', Outlet Invert= 747.75'



Reach R61: Pipe I61 to I31



Summary for Reach R62: Pipe I62 to I61

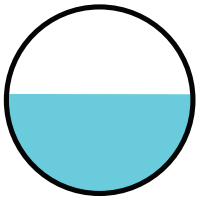
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.749 ac, 0.00% Impervious, Inflow Depth > 1.77" for 100-yr event
Inflow = 1.64 cfs @ 0.47 hrs, Volume= 0.258 af
Outflow = 1.64 cfs @ 0.47 hrs, Volume= 0.256 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I61 : Manhole 6-1

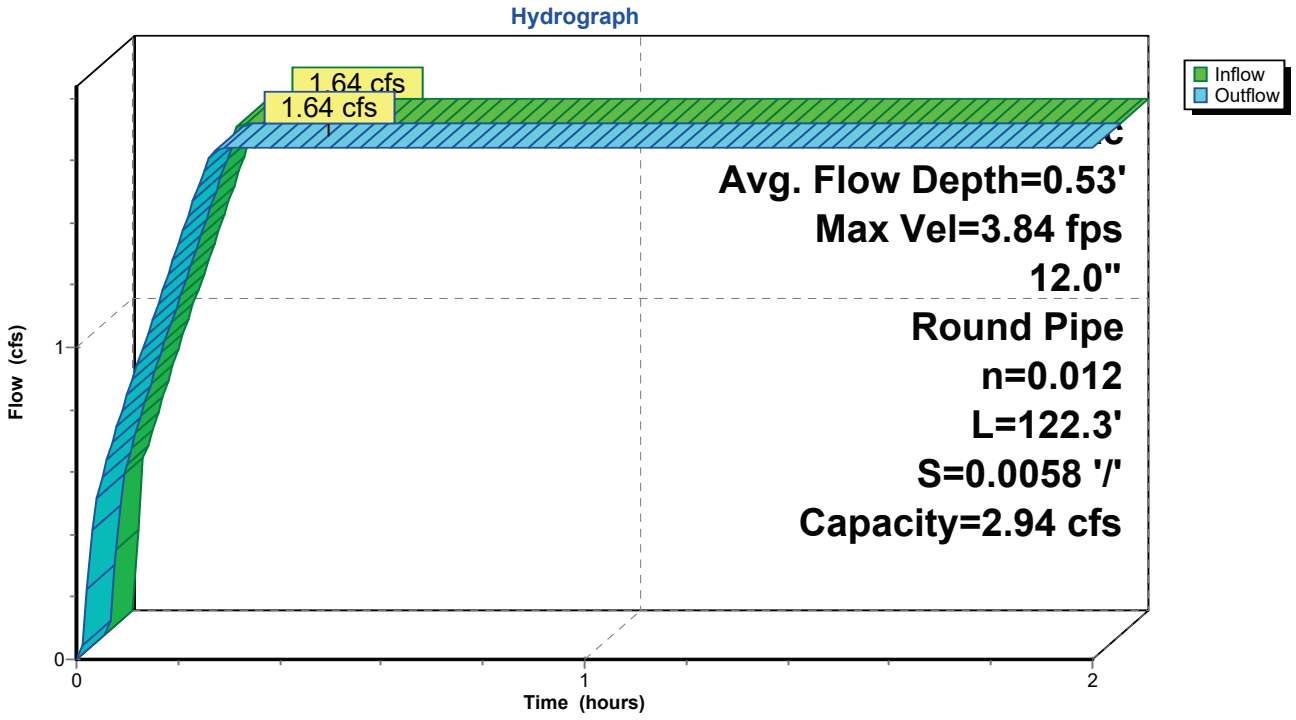
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.84 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 3.77 fps, Avg. Travel Time= 0.5 min

Peak Storage= 52 cf @ 0.47 hrs
Average Depth at Peak Storage= 0.53' , Surface Width= 1.00'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 2.94 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 122.3' Slope= 0.0058 '/'
Inlet Invert= 749.32', Outlet Invert= 748.61'



Reach R62: Pipe I62 to I61



Summary for Reach R63: Pipe I63 to I62

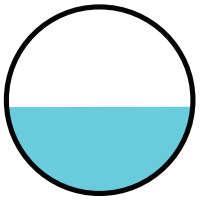
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.364 ac, 0.00% Impervious, Inflow Depth > 1.60" for 100-yr event
Inflow = 1.17 cfs @ 0.27 hrs, Volume= 0.182 af
Outflow = 1.17 cfs @ 0.46 hrs, Volume= 0.181 af, Atten= 0%, Lag= 11.4 min
Routed to Pond I62 : Inlet 6-2

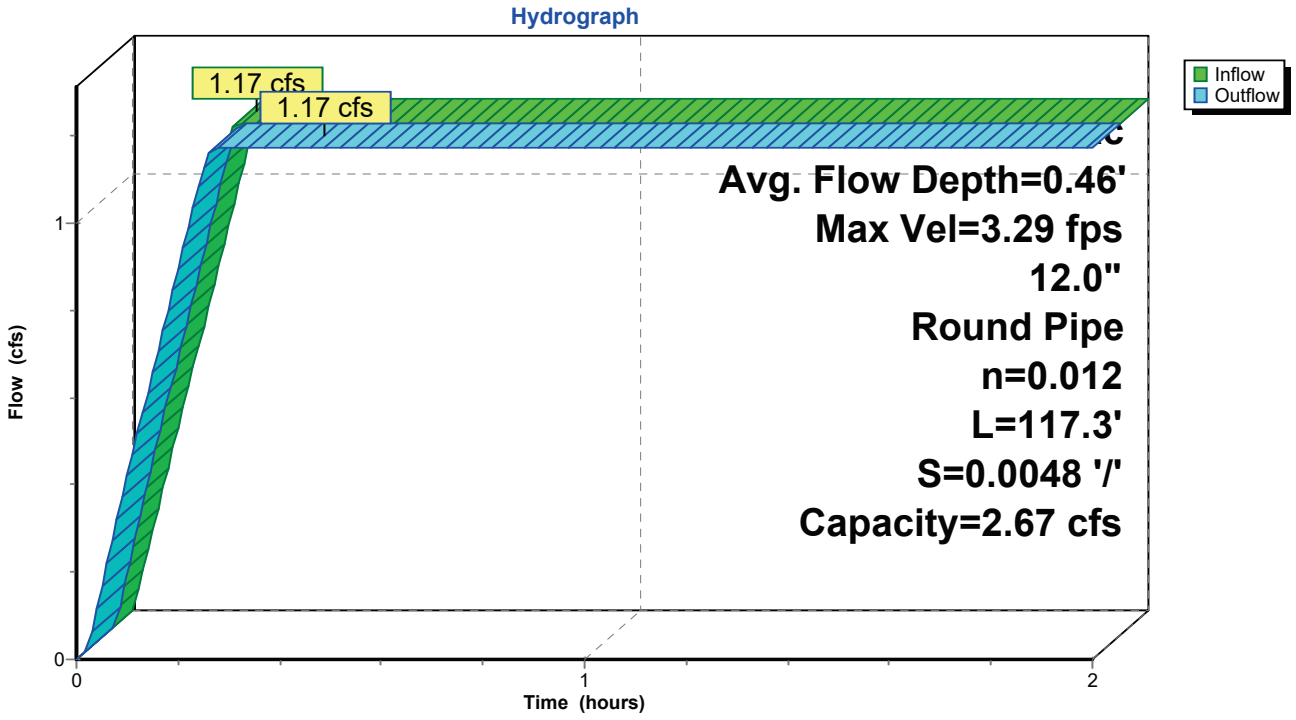
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.29 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 3.19 fps, Avg. Travel Time= 0.6 min

Peak Storage= 42 cf @ 0.46 hrs
Average Depth at Peak Storage= 0.46' , Surface Width= 1.00'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 2.67 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 117.3' Slope= 0.0048 '/'
Inlet Invert= 749.91', Outlet Invert= 749.35'



Reach R63: Pipe I63 to I62



Summary for Reach R71: Pipe I71 to I15

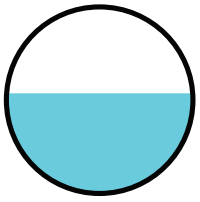
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.547 ac, 34.65% Impervious, Inflow Depth > 2.59" for 100-yr event
Inflow = 2.09 cfs @ 0.53 hrs, Volume= 0.334 af
Outflow = 2.09 cfs @ 0.63 hrs, Volume= 0.331 af, Atten= 0%, Lag= 6.0 min
Routed to Pond I15 : Inlet 1-5

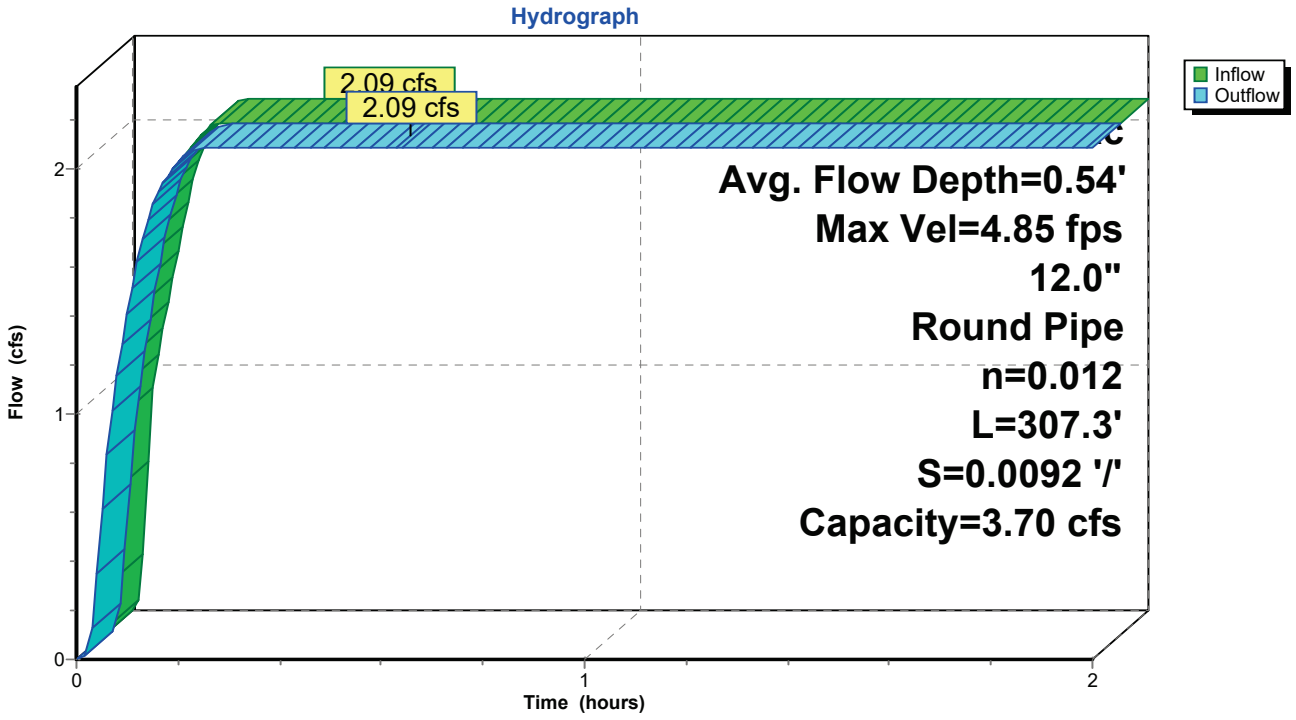
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.85 fps, Min. Travel Time= 1.1 min
Avg. Velocity = 4.75 fps, Avg. Travel Time= 1.1 min

Peak Storage= 132 cf @ 0.62 hrs
Average Depth at Peak Storage= 0.54' , Surface Width= 1.00'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.70 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 307.3' Slope= 0.0092 '/'
Inlet Invert= 747.78', Outlet Invert= 744.96'



Reach R71: Pipe I71 to I15



Summary for Reach R81: Pipe I81 to I71

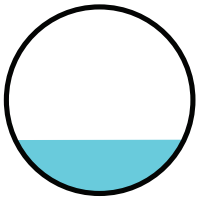
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.432 ac,100.00% Impervious, Inflow Depth > 3.74" for 100-yr event
Inflow = 0.82 cfs @ 0.22 hrs, Volume= 0.135 af
Outflow = 0.82 cfs @ 0.07 hrs, Volume= 0.134 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I71 : Inlet 7-1

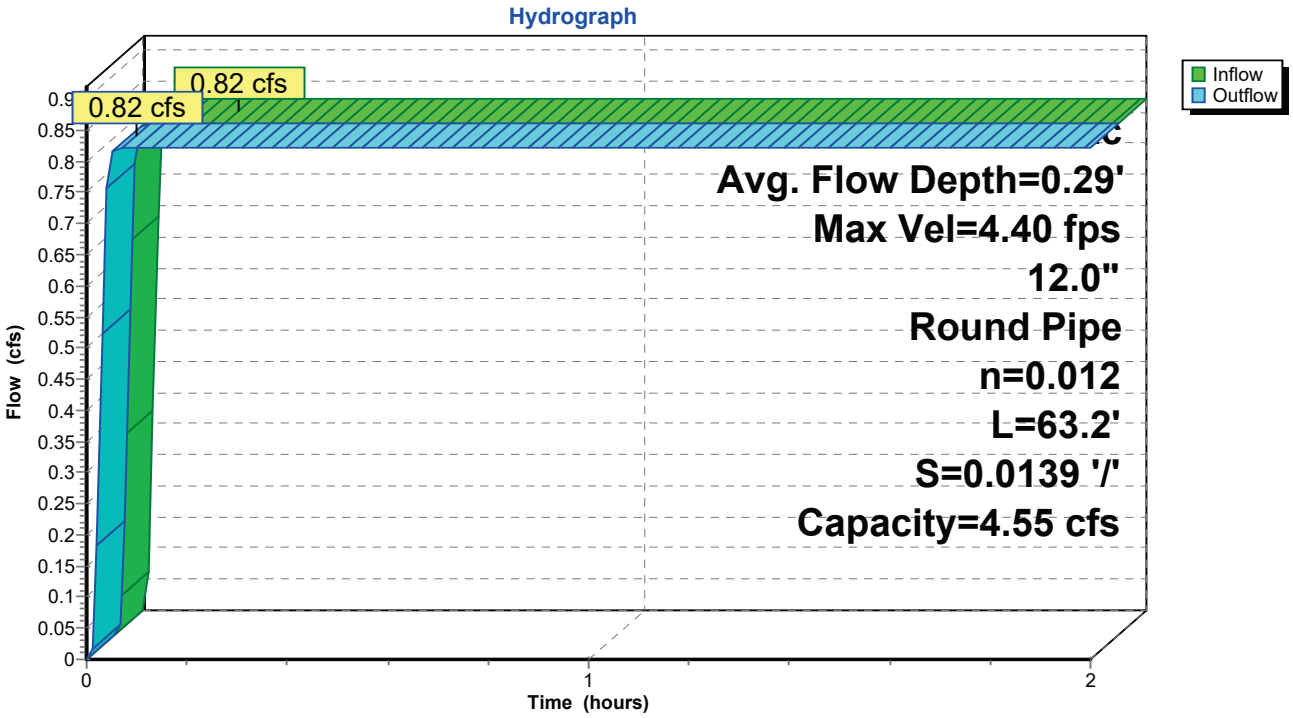
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.40 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 4.37 fps, Avg. Travel Time= 0.2 min

Peak Storage= 12 cf @ 0.07 hrs
Average Depth at Peak Storage= 0.29' , Surface Width= 0.91'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 4.55 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 63.2' Slope= 0.0139 '/'
Inlet Invert= 748.66', Outlet Invert= 747.78'



Reach R81: Pipe I81 to I71



Summary for Reach R91: Pipe I91 to I71

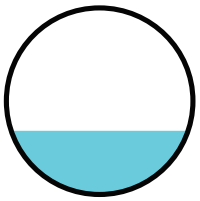
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.728 ac, 1.10% Impervious, Inflow Depth > 2.07" for 100-yr event
Inflow = 0.78 cfs @ 0.38 hrs, Volume= 0.126 af
Outflow = 0.78 cfs @ 0.55 hrs, Volume= 0.124 af, Atten= 0%, Lag= 10.2 min
Routed to Pond I71 : Inlet 7-1

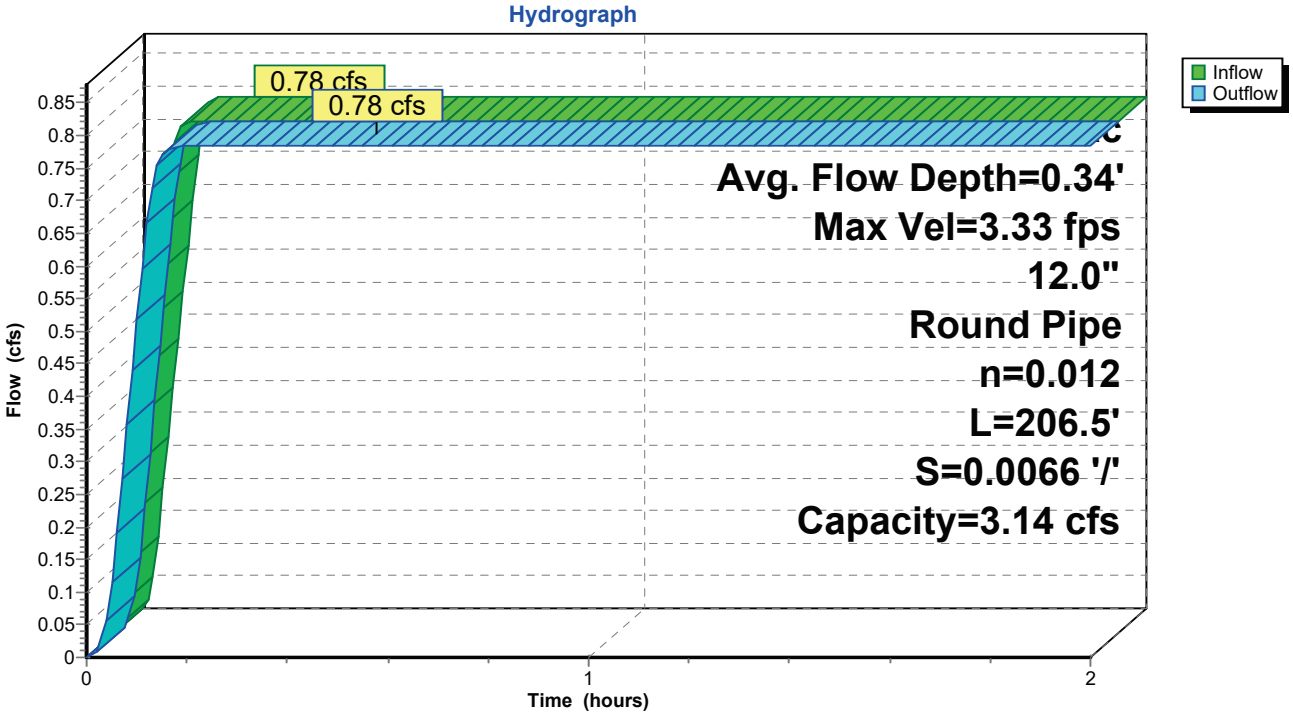
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.33 fps, Min. Travel Time= 1.0 min
Avg. Velocity = 3.25 fps, Avg. Travel Time= 1.1 min

Peak Storage= 49 cf @ 0.54 hrs
Average Depth at Peak Storage= 0.34' , Surface Width= 0.95'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.14 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 206.5' Slope= 0.0066 '/'
Inlet Invert= 750.30', Outlet Invert= 748.93'



Reach R91: Pipe I91 to I71



Summary for Reach R92: Pipe I92 to I91

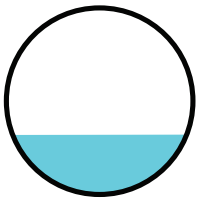
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.656 ac, 1.22% Impervious, Inflow Depth > 2.09" for 100-yr event
Inflow = 0.71 cfs @ 0.16 hrs, Volume= 0.114 af
Outflow = 0.71 cfs @ 0.36 hrs, Volume= 0.113 af, Atten= 0%, Lag= 12.0 min
Routed to Pond I91 : Inlet 9-1

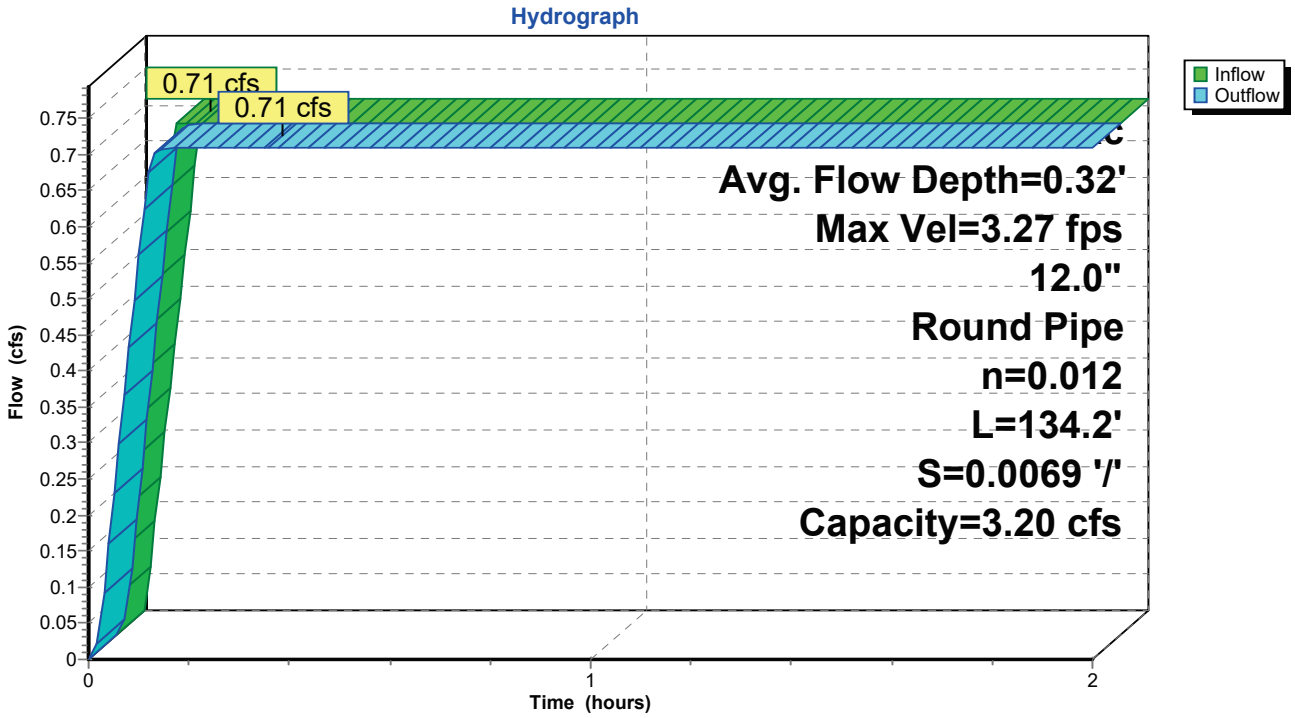
Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.27 fps, Min. Travel Time= 0.7 min
Avg. Velocity = 3.22 fps, Avg. Travel Time= 0.7 min

Peak Storage= 29 cf @ 0.36 hrs
Average Depth at Peak Storage= 0.32' , Surface Width= 0.93'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.20 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 134.2' Slope= 0.0069 '/'
Inlet Invert= 751.22', Outlet Invert= 750.30'



Reach R92: Pipe I92 to I91



Summary for Pond I14: Inlet 1-4

[57] Hint: Peaked at 742.82' (Flood elevation advised)
[62] Hint: Exceeded Reach R15 OUTLET depth by 0.16' @ 0.83 hrs

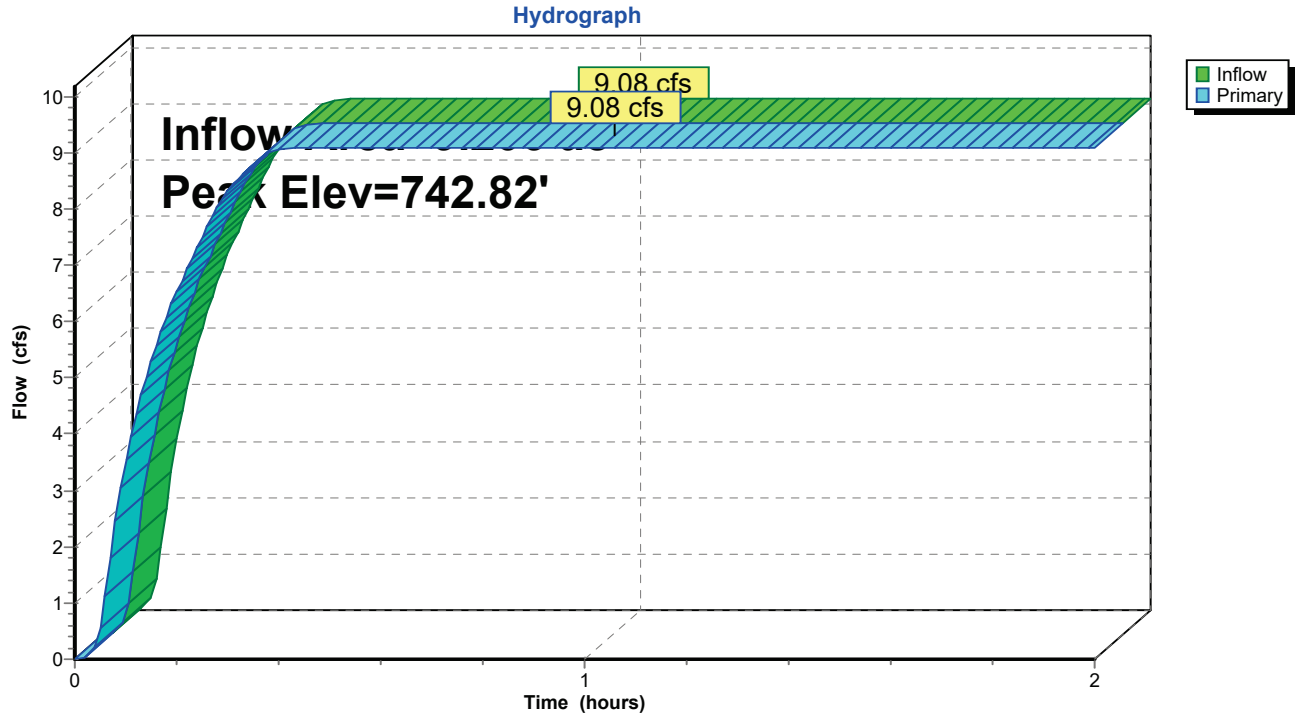
Inflow Area = 9.206 ac, 9.55% Impervious, Inflow Depth > 1.81" for 100-yr event
Inflow = 9.08 cfs @ 1.03 hrs, Volume= 1.391 af
Outflow = 9.08 cfs @ 1.03 hrs, Volume= 1.391 af, Atten= 0%, Lag= 0.0 min
Primary = 9.08 cfs @ 1.03 hrs, Volume= 1.391 af
Routed to Reach R14 : Pipe I14 to Pond

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 742.82' @ 0.86 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	741.84'	**24.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	741.84'	**24.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=9.08 cfs @ 1.03 hrs HW=742.82' TW=742.45' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 4.54 cfs @ 2.95 fps)
└─**2=Orifice/Grate** (Orifice Controls 4.54 cfs @ 2.95 fps)

Pond I14: Inlet 1-4



Summary for Pond I15: Inlet 1-5

[57] Hint: Peaked at 745.92' (Flood elevation advised)
[62] Hint: Exceeded Reach R21 OUTLET depth by 0.23' @ 0.81 hrs
[62] Hint: Exceeded Reach R71 OUTLET depth by 0.42' @ 0.85 hrs

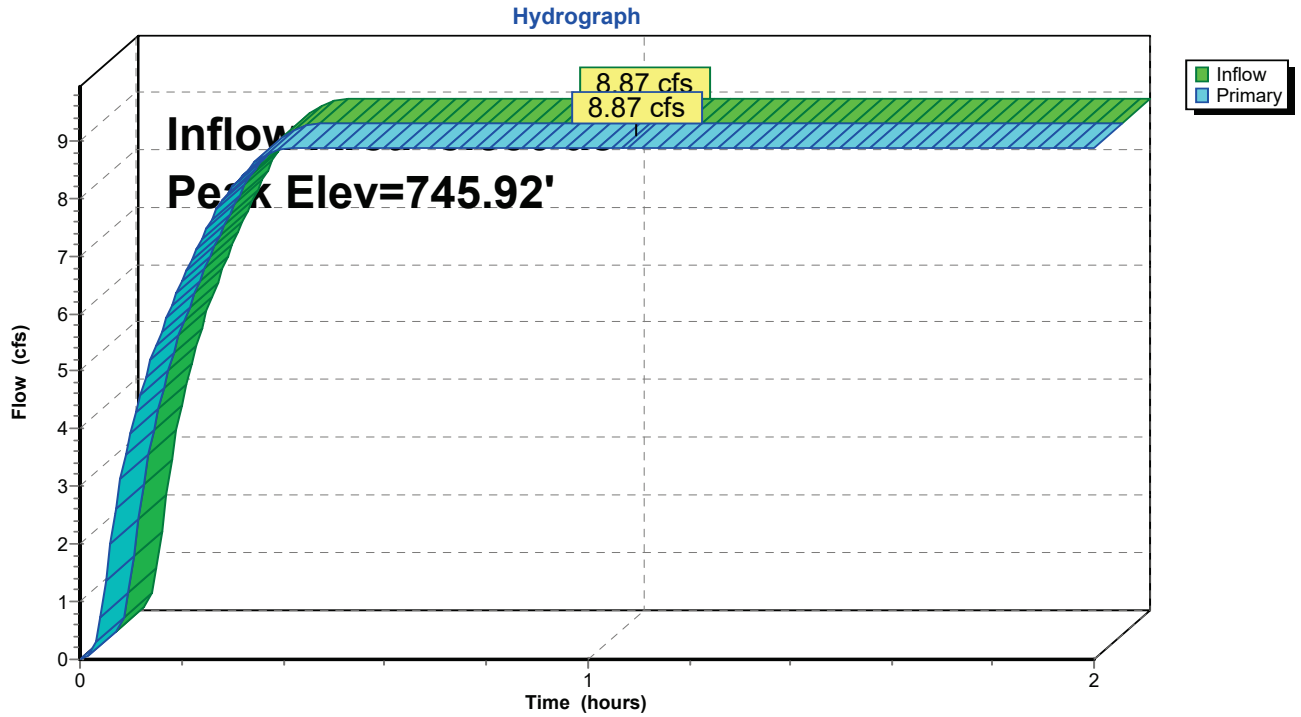
Inflow Area = 8.856 ac, 9.93% Impervious, Inflow Depth > 1.85" for 100-yr event
Inflow = 8.87 cfs @ 1.03 hrs, Volume= 1.367 af
Outflow = 8.87 cfs @ 1.07 hrs, Volume= 1.367 af, Atten= 0%, Lag= 2.4 min
Primary = 8.87 cfs @ 1.07 hrs, Volume= 1.367 af
Routed to Reach R15 : Pipe I15 to I14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 745.92' @ 0.85 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	744.87'	**24.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	744.96'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#3	Primary	744.96'	**24.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=8.87 cfs @ 1.07 hrs HW=745.92' TW=745.70' (Dynamic Tailwater)
- **1=Orifice/Grate** (Orifice Controls 3.76 cfs @ 2.26 fps)
- **2=Orifice/Grate** (Orifice Controls 1.75 cfs @ 2.26 fps)
- **3=Orifice/Grate** (Orifice Controls 3.36 cfs @ 2.26 fps)

Pond I15: Inlet 1-5



Summary for Pond I21: Inlet 2-1

[57] Hint: Peaked at 748.17' (Flood elevation advised)
[62] Hint: Exceeded Reach R31 OUTLET depth by 0.05' @ 0.18 hrs

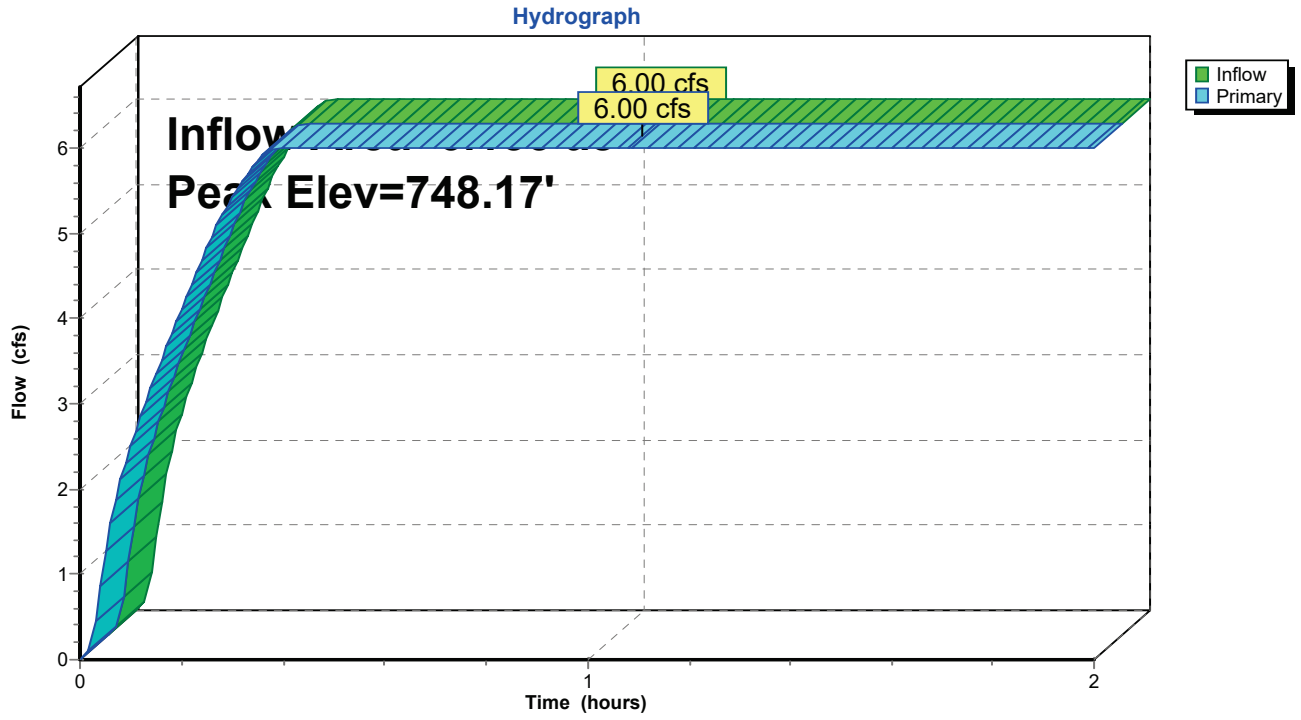
Inflow Area = 6.155 ac, 4.74% Impervious, Inflow Depth > 1.80" for 100-yr event
Inflow = 6.00 cfs @ 1.06 hrs, Volume= 0.921 af
Outflow = 6.00 cfs @ 1.08 hrs, Volume= 0.921 af, Atten= 0%, Lag= 1.2 min
Primary = 6.00 cfs @ 1.08 hrs, Volume= 0.921 af
Routed to Reach R21 : Pipe SS31 to SS23

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 748.17' @ 0.88 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	747.10'	**24.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	748.18'	**18.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#3	Primary	748.17'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=6.00 cfs @ 1.08 hrs HW=748.17' TW=746.81' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 6.00 cfs @ 3.52 fps)
└─**2=Orifice/Grate** (Controls 0.00 cfs)
└─**3=Orifice/Grate** (Controls 0.00 cfs)

Pond I21: Inlet 2-1



Summary for Pond I31: Manhole 3-1

[57] Hint: Peaked at 748.82' (Flood elevation advised)
[62] Hint: Exceeded Reach R51 OUTLET depth by 0.57' @ 0.56 hrs
[62] Hint: Exceeded Reach R61 OUTLET depth by 0.51' @ 0.56 hrs

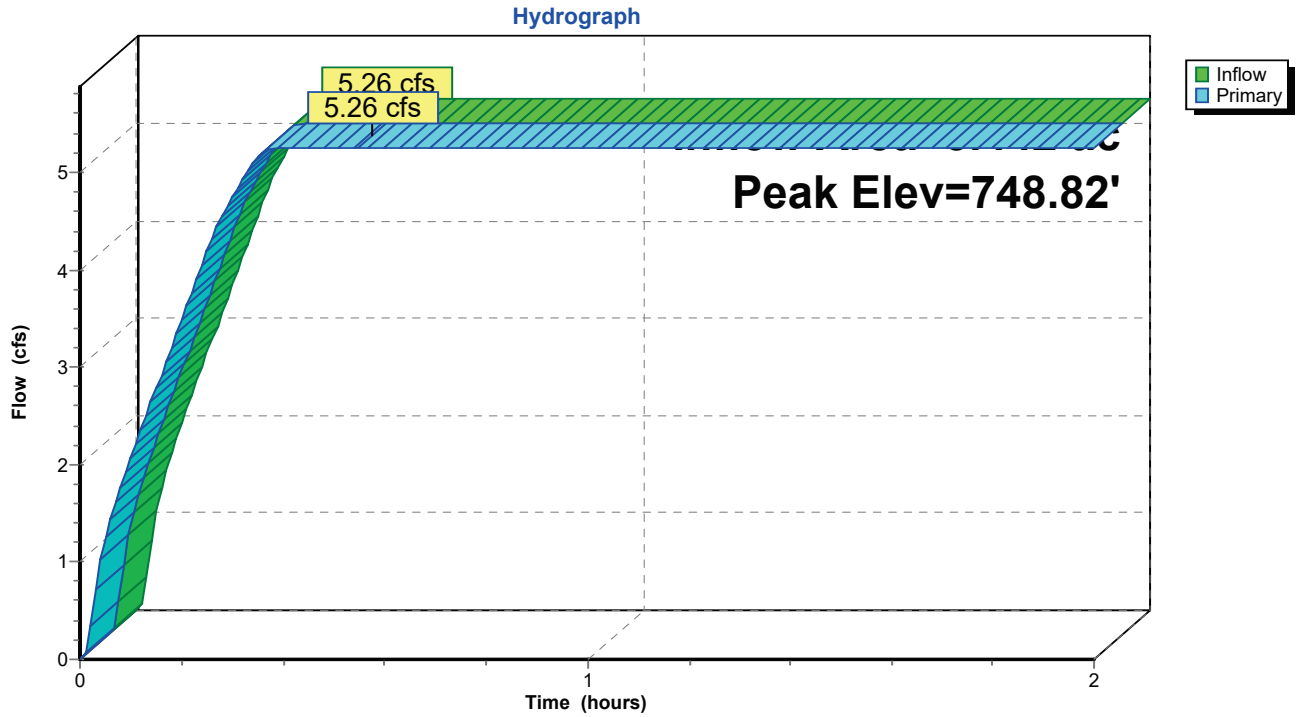
Inflow Area = 5.442 ac, 0.96% Impervious, Inflow Depth > 1.78" for 100-yr event
Inflow = 5.26 cfs @ 0.52 hrs, Volume= 0.806 af
Outflow = 5.26 cfs @ 0.55 hrs, Volume= 0.806 af, Atten= 0%, Lag= 1.8 min
Primary = 5.26 cfs @ 0.55 hrs, Volume= 0.806 af
Routed to Reach R31 : Pipe I31 to I21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 748.82' @ 0.56 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	747.75'	**18.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	747.75'	**15.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#3	Primary	747.75'	**15.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=5.26 cfs @ 0.55 hrs HW=748.82' TW=748.73' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.98 cfs @ 1.47 fps)
└─**2=Orifice/Grate** (Orifice Controls 1.64 cfs @ 1.47 fps)
└─**3=Orifice/Grate** (Orifice Controls 1.64 cfs @ 1.47 fps)

Pond I31: Manhole 3-1



Summary for Pond I41: Inlet 4-1

[57] Hint: Peaked at 749.26' (Flood elevation advised)

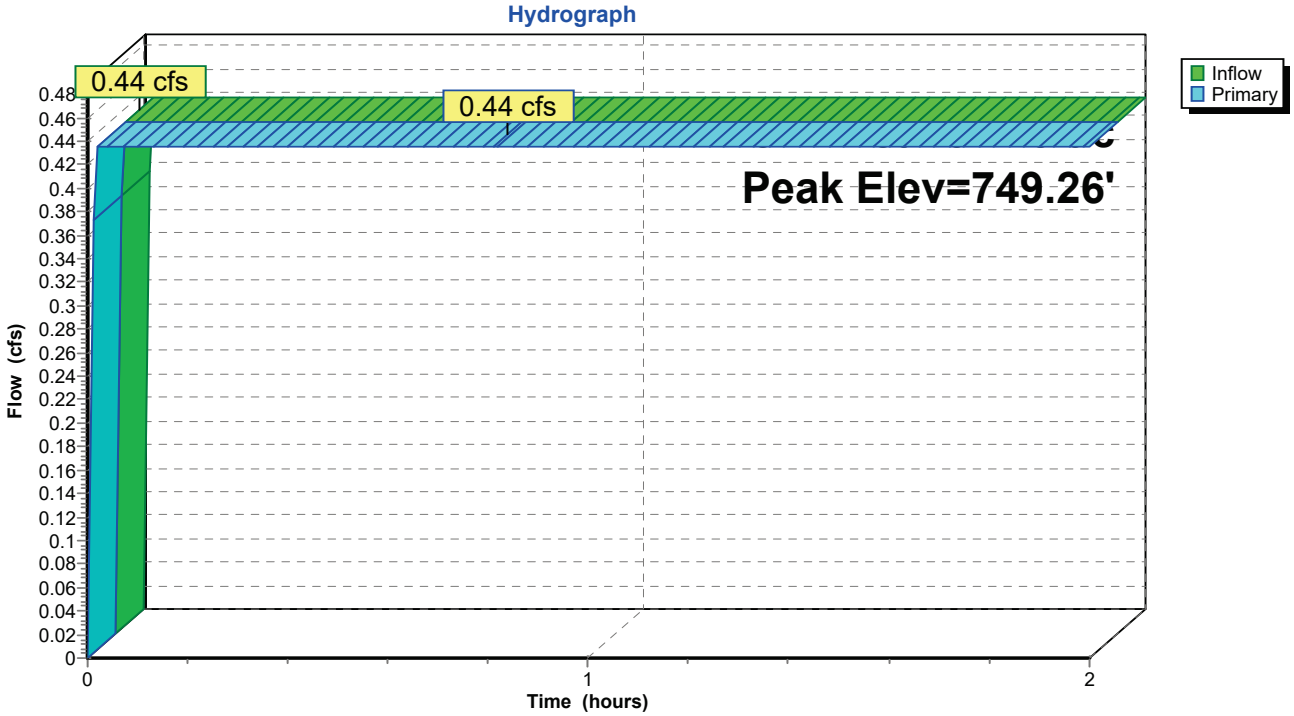
Inflow Area = 0.229 ac,100.00% Impervious, Inflow Depth > 3.77" for 100-yr event
Inflow = 0.44 cfs @ 0.02 hrs, Volume= 0.072 af
Outflow = 0.44 cfs @ 0.81 hrs, Volume= 0.072 af, Atten= 0%, Lag= 47.4 min
Primary = 0.44 cfs @ 0.81 hrs, Volume= 0.072 af
Routed to Reach R41 : Pipe I41 to I31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 749.26' @ 0.87 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	748.86'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.44 cfs @ 0.81 hrs HW=749.26' TW=749.17' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.44 cfs @ 1.48 fps)

Pond I41: Inlet 4-1



Summary for Pond I51: Inlet 5-1

[57] Hint: Peaked at 749.74' (Flood elevation advised)
[62] Hint: Exceeded Reach R52 OUTLET depth by 0.14' @ 0.02 hrs

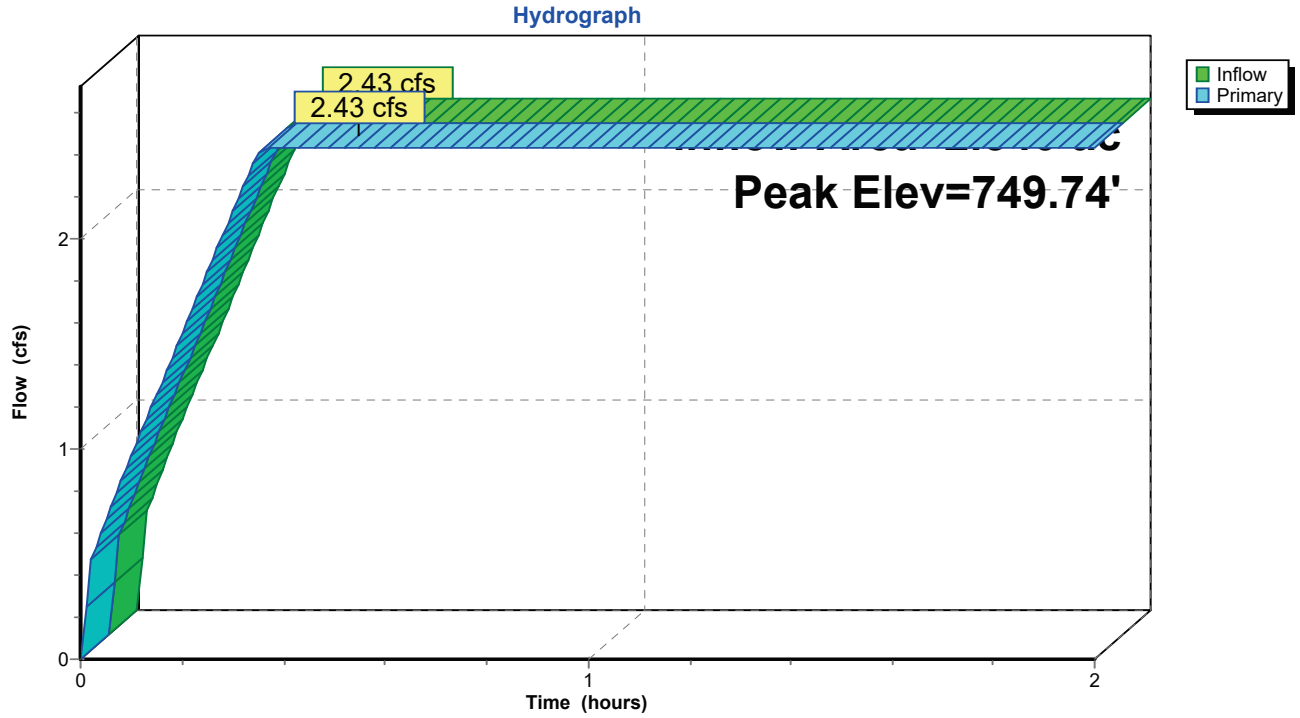
Inflow Area = 2.540 ac, 1.02% Impervious, Inflow Depth > 1.76" for 100-yr event
Inflow = 2.43 cfs @ 0.52 hrs, Volume= 0.373 af
Outflow = 2.43 cfs @ 0.52 hrs, Volume= 0.373 af, Atten= 0%, Lag= 0.0 min
Primary = 2.43 cfs @ 0.52 hrs, Volume= 0.373 af
Routed to Reach R51 : Pipe I51 to I31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 749.74' @ 0.50 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	749.07'	**15.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	749.10'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.43 cfs @ 0.52 hrs HW=749.74' TW=749.57' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 1.36 cfs @ 2.01 fps)
2=Orifice/Grate (Orifice Controls 1.08 cfs @ 2.01 fps)

Pond I51: Inlet 5-1



Summary for Pond I52: Inlet 5-2

[57] Hint: Peaked at 750.87' (Flood elevation advised)
[63] Warning: Exceeded Reach R53 INLET depth by 0.21' @ 0.50 hrs

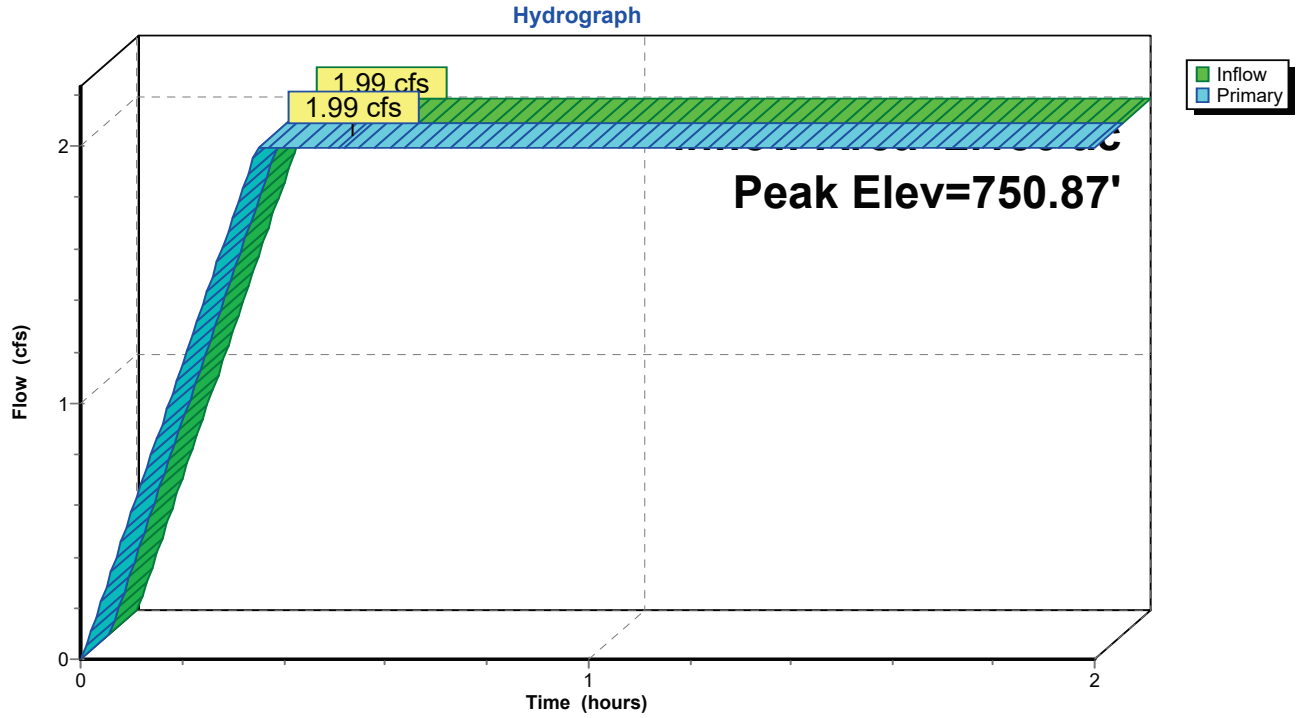
Inflow Area = 2.186 ac, 0.27% Impervious, Inflow Depth > 1.66" for 100-yr event
Inflow = 1.99 cfs @ 0.51 hrs, Volume= 0.302 af
Outflow = 1.99 cfs @ 0.51 hrs, Volume= 0.302 af, Atten= 0%, Lag= 0.0 min
Primary = 1.99 cfs @ 0.51 hrs, Volume= 0.302 af
Routed to Reach R52 : Pipe I52 to I51

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 750.87' @ 0.50 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	750.10'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	750.26'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.99 cfs @ 0.51 hrs HW=750.87' TW=750.63' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.53 cfs @ 2.36 fps)
└─**2=Orifice/Grate** (Orifice Controls 0.46 cfs @ 2.36 fps)

Pond I52: Inlet 5-2



Summary for Pond I53: Inlet 5-3

[57] Hint: Peaked at 750.71' (Flood elevation advised)
[62] Hint: Exceeded Reach R54 OUTLET depth by 0.15' @ 0.49 hrs

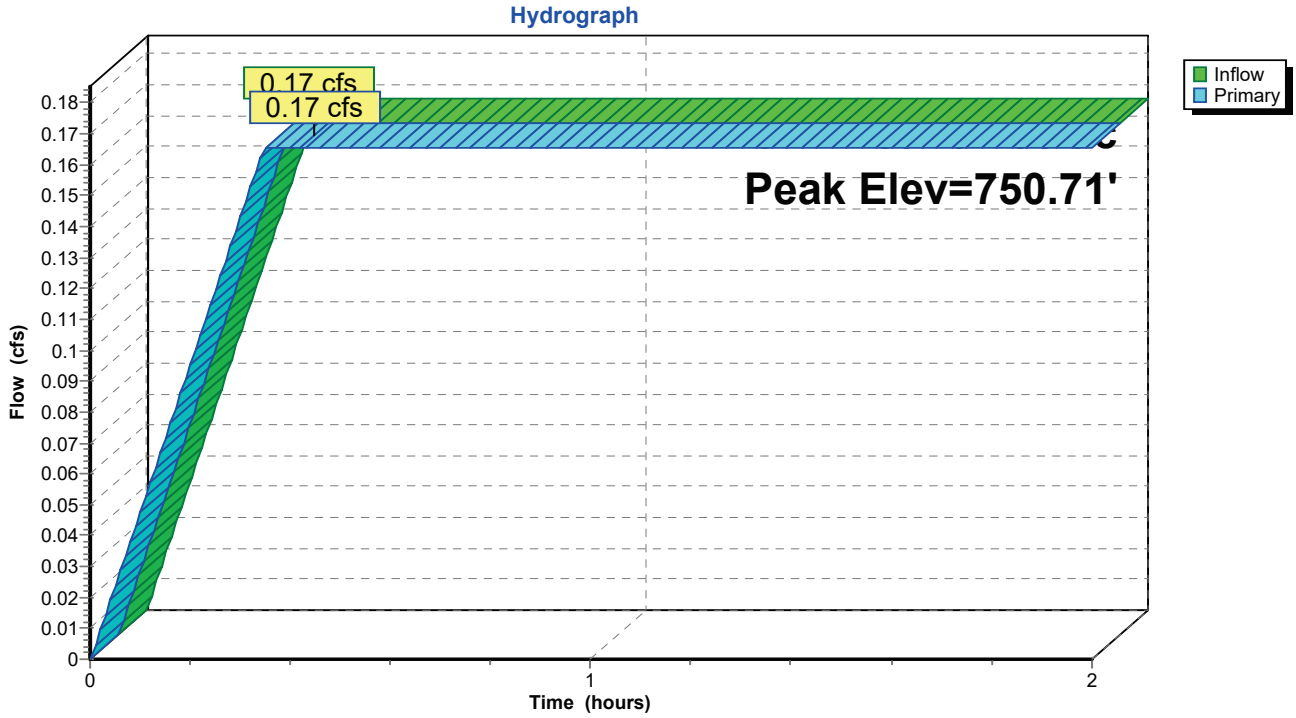
Inflow Area = 0.156 ac, 0.00% Impervious, Inflow Depth > 1.93" for 100-yr event
Inflow = 0.17 cfs @ 0.35 hrs, Volume= 0.025 af
Outflow = 0.17 cfs @ 0.42 hrs, Volume= 0.025 af, Atten= 0%, Lag= 4.2 min
Primary = 0.17 cfs @ 0.42 hrs, Volume= 0.025 af
Routed to Reach R53 : Pipe I53 to I52

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 750.71' @ 0.49 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	750.43'	**6.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	750.56'	**6.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=0.17 cfs @ 0.42 hrs HW=750.71' TW=750.66' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 0.12 cfs @ 1.04 fps)
└─**2=Orifice/Grate** (Orifice Controls 0.05 cfs @ 1.04 fps)

Pond I53: Inlet 5-3



Summary for Pond I54: Inlet 5-4

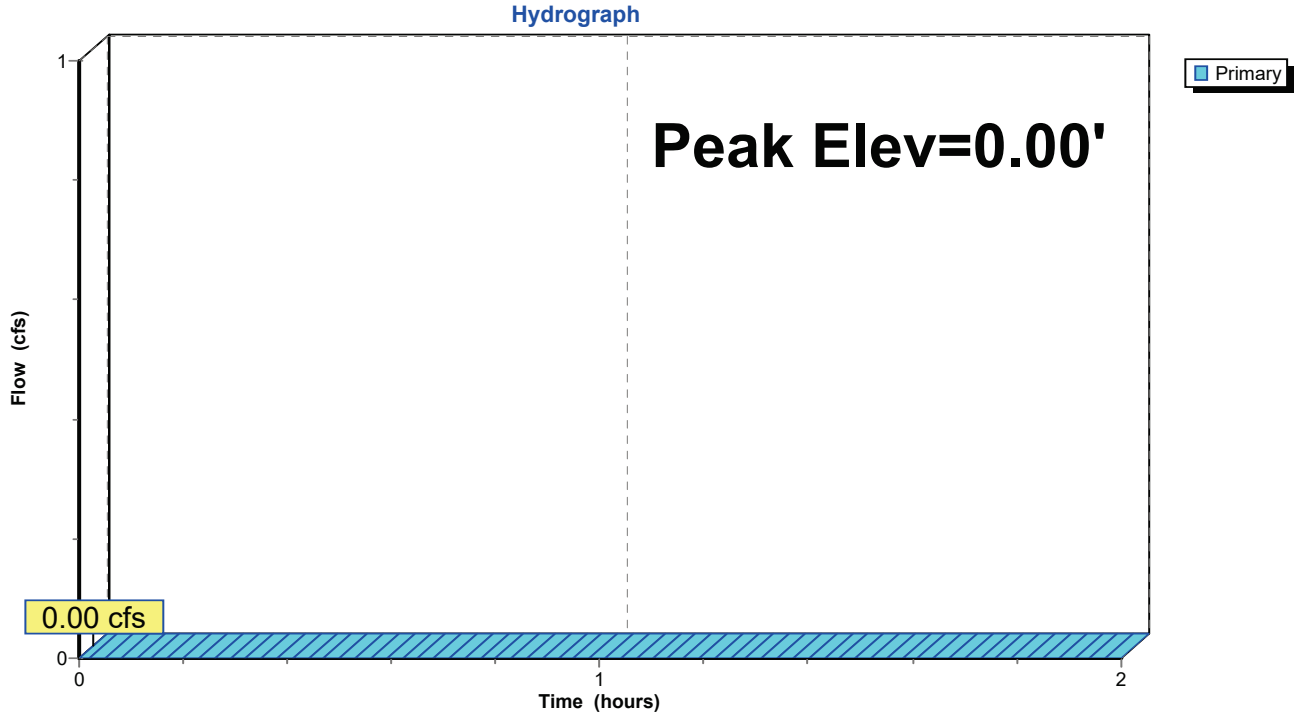
[43] Hint: Has no inflow (Outflow=Zero)

Device	Routing	Invert	Outlet Devices
#1	Primary	750.30'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' TW=752.46' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Controls 0.00 cfs)

Pond I54: Inlet 5-4

Hydrograph



Summary for Pond I61: Manhole 6-1

[57] Hint: Peaked at 749.25' (Flood elevation advised)
[62] Hint: Exceeded Reach R62 OUTLET depth by 0.11' @ 0.46 hrs

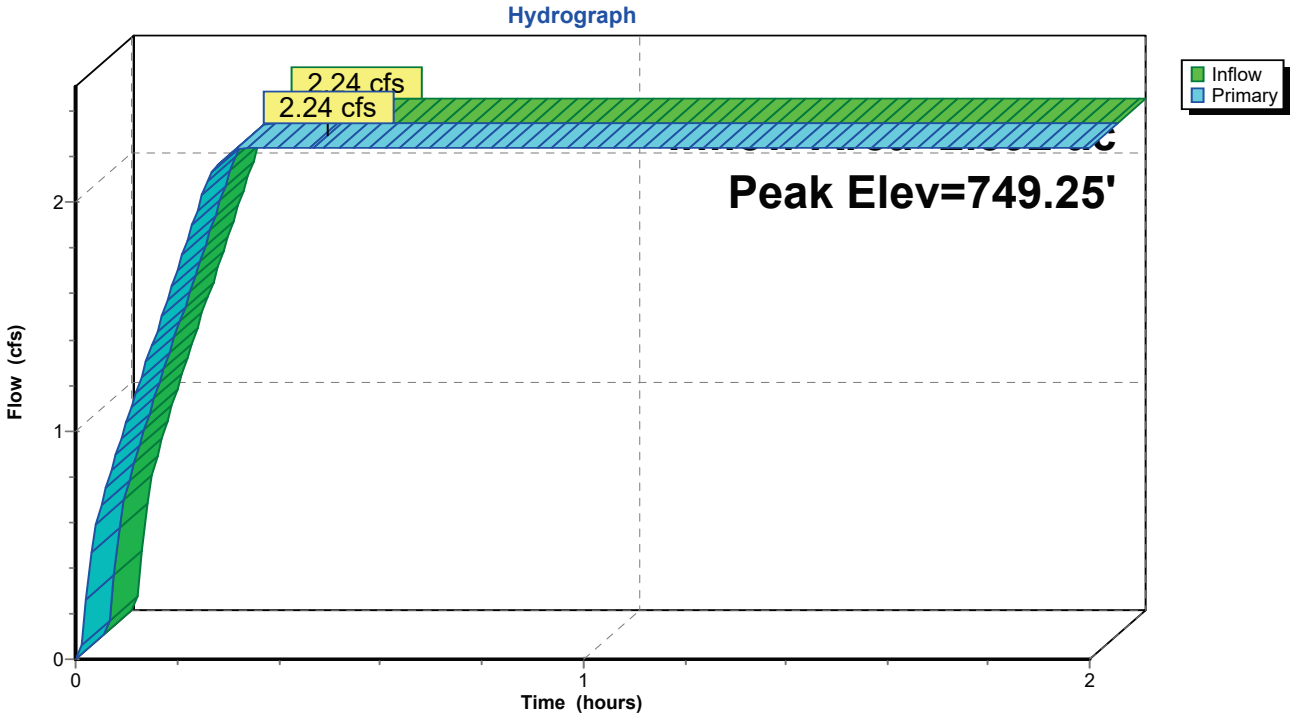
Inflow Area = 2.392 ac, 0.00% Impervious, Inflow Depth > 1.75" for 100-yr event
Inflow = 2.24 cfs @ 0.47 hrs, Volume= 0.349 af
Outflow = 2.24 cfs @ 0.47 hrs, Volume= 0.349 af, Atten= 0%, Lag= 0.0 min
Primary = 2.24 cfs @ 0.47 hrs, Volume= 0.349 af
Routed to Reach R61 : Pipe I61 to I31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 749.25' @ 0.46 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	748.55'	**15.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	748.61'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=2.24 cfs @ 0.47 hrs HW=749.25' TW=749.11' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.28 cfs @ 1.81 fps)
└─**2=Orifice/Grate** (Orifice Controls 0.96 cfs @ 1.81 fps)

Pond I61: Manhole 6-1



Summary for Pond I62: Inlet 6-2

[57] Hint: Peaked at 749.96' (Flood elevation advised)
[62] Hint: Exceeded Reach R63 OUTLET depth by 0.16' @ 0.04 hrs

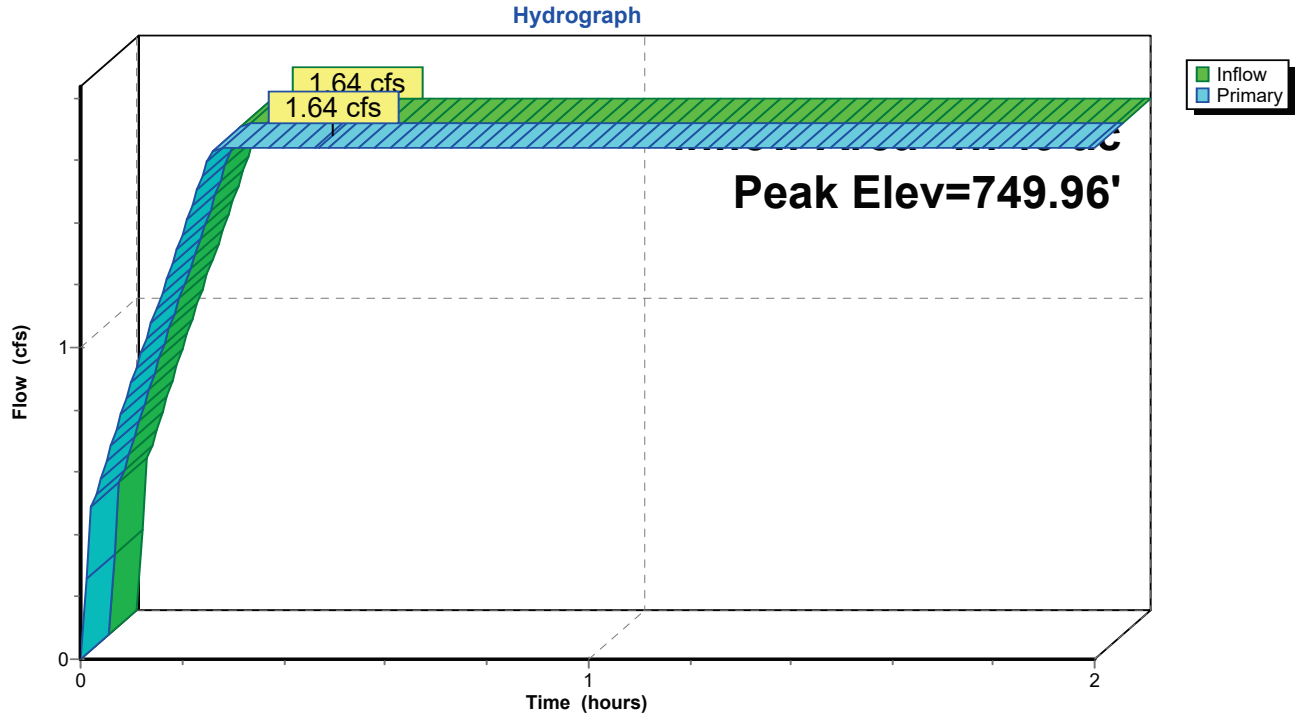
Inflow Area = 1.749 ac, 0.00% Impervious, Inflow Depth > 1.77" for 100-yr event
Inflow = 1.64 cfs @ 0.46 hrs, Volume= 0.258 af
Outflow = 1.64 cfs @ 0.47 hrs, Volume= 0.258 af, Atten= 0%, Lag= 0.6 min
Primary = 1.64 cfs @ 0.47 hrs, Volume= 0.258 af
Routed to Reach R62 : Pipe I62 to I61

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 749.96' @ 0.43 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	749.32'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	749.35'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.64 cfs @ 0.47 hrs HW=749.96' TW=749.85' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 0.84 cfs @ 1.58 fps)
└─**2=Orifice/Grate** (Orifice Controls 0.80 cfs @ 1.58 fps)

Pond I62: Inlet 6-2



Summary for Pond I63: Inlet 6-3

[57] Hint: Peaked at 750.57' (Flood elevation advised)

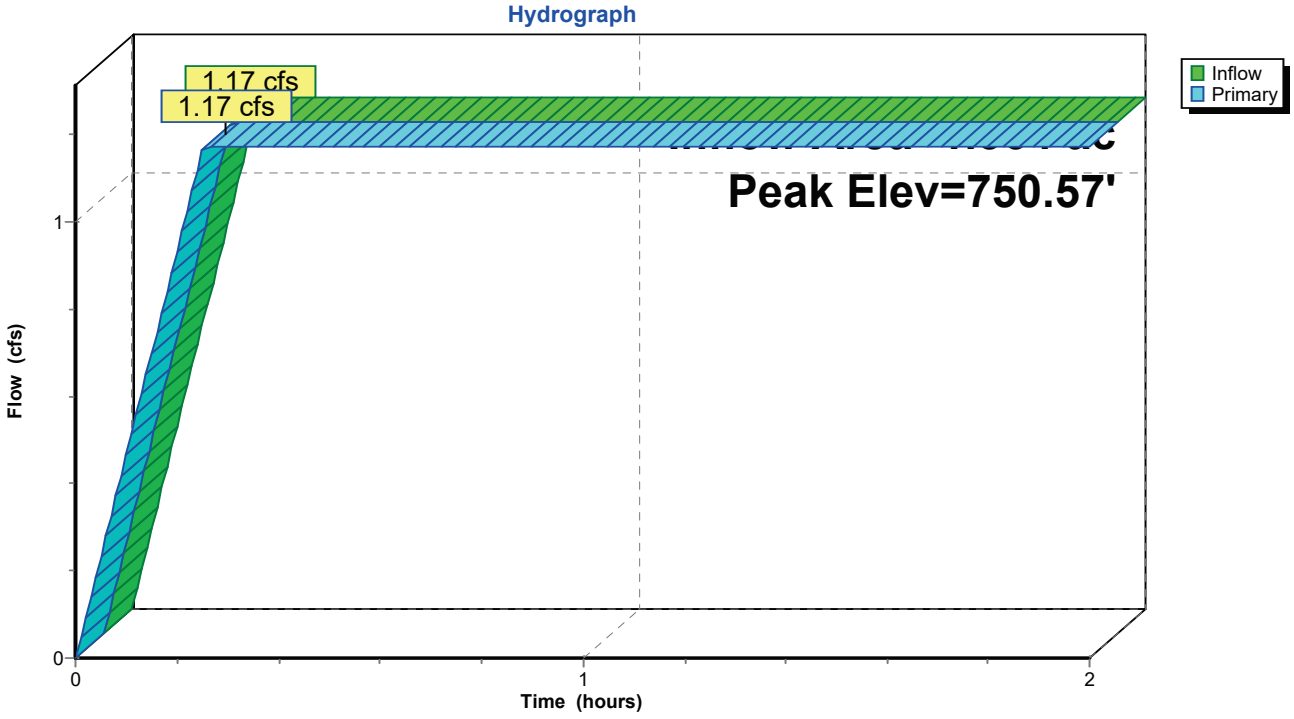
Inflow Area = 1.364 ac, 0.00% Impervious, Inflow Depth > 1.60" for 100-yr event
Inflow = 1.17 cfs @ 0.26 hrs, Volume= 0.182 af
Outflow = 1.17 cfs @ 0.27 hrs, Volume= 0.182 af, Atten= 0%, Lag= 0.6 min
Primary = 1.17 cfs @ 0.27 hrs, Volume= 0.182 af
Routed to Reach R63 : Pipe I63 to I62

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 750.57' @ 0.42 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	749.91'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.17 cfs @ 0.27 hrs HW=750.57' TW=750.37' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 1.17 cfs @ 2.13 fps)

Pond I63: Inlet 6-3



Summary for Pond I71: Inlet 7-1

[57] Hint: Peaked at 748.46' (Flood elevation advised)
[62] Hint: Exceeded Reach R81 OUTLET depth by 0.39' @ 0.54 hrs

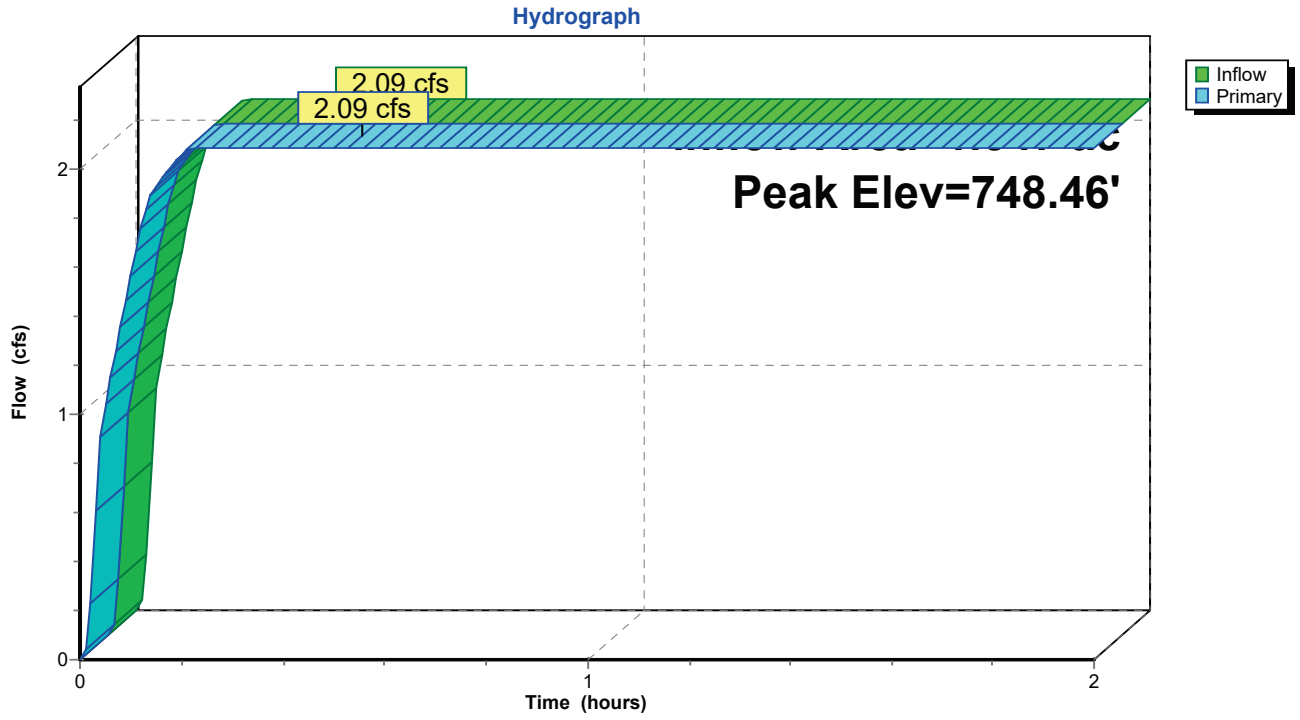
Inflow Area = 1.547 ac, 34.65% Impervious, Inflow Depth > 2.59" for 100-yr event
Inflow = 2.09 cfs @ 0.55 hrs, Volume= 0.334 af
Outflow = 2.09 cfs @ 0.53 hrs, Volume= 0.334 af, Atten= 0%, Lag= 0.0 min
Primary = 2.09 cfs @ 0.53 hrs, Volume= 0.334 af
Routed to Reach R71 : Pipe I71 to I15

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 748.46' @ 0.54 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	747.78'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	747.78'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#3	Primary	748.93'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=2.09 cfs @ 0.53 hrs HW=748.46' TW=748.32' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.04 cfs @ 1.83 fps)
└─**2=Orifice/Grate** (Orifice Controls 1.04 cfs @ 1.83 fps)
└─**3=Orifice/Grate** (Controls 0.00 cfs)

Pond I71: Inlet 7-1



Summary for Pond I81: Inlet 8-1

[57] Hint: Peaked at 749.05' (Flood elevation advised)
[62] Hint: Exceeded Reach R10 OUTLET depth by 0.07' @ 0.08 hrs

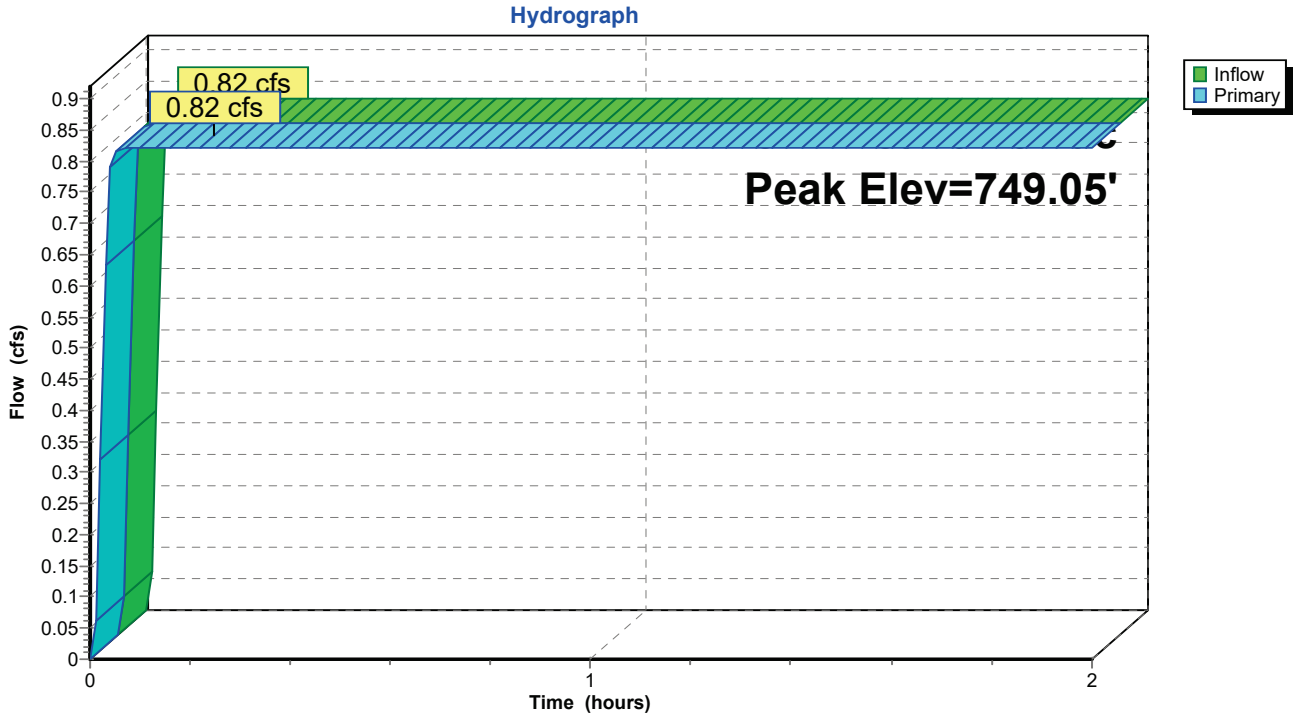
Inflow Area = 0.432 ac,100.00% Impervious, Inflow Depth > 3.74" for 100-yr event
Inflow = 0.82 cfs @ 0.22 hrs, Volume= 0.135 af
Outflow = 0.82 cfs @ 0.22 hrs, Volume= 0.135 af, Atten= 0%, Lag= 0.0 min
Primary = 0.82 cfs @ 0.22 hrs, Volume= 0.135 af
Routed to Reach R81 : Pipe I81 to I71

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 749.05' @ 0.08 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	748.66'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	748.69'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.82 cfs @ 0.22 hrs HW=749.05' TW=748.95' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 0.43 cfs @ 1.53 fps)
└─**2=Orifice/Grate** (Orifice Controls 0.39 cfs @ 1.53 fps)

Pond I81: Inlet 8-1



Summary for Pond I91: Inlet 9-1

[57] Hint: Peaked at 750.71' (Flood elevation advised)
[62] Hint: Exceeded Reach R92 OUTLET depth by 0.09' @ 0.44 hrs

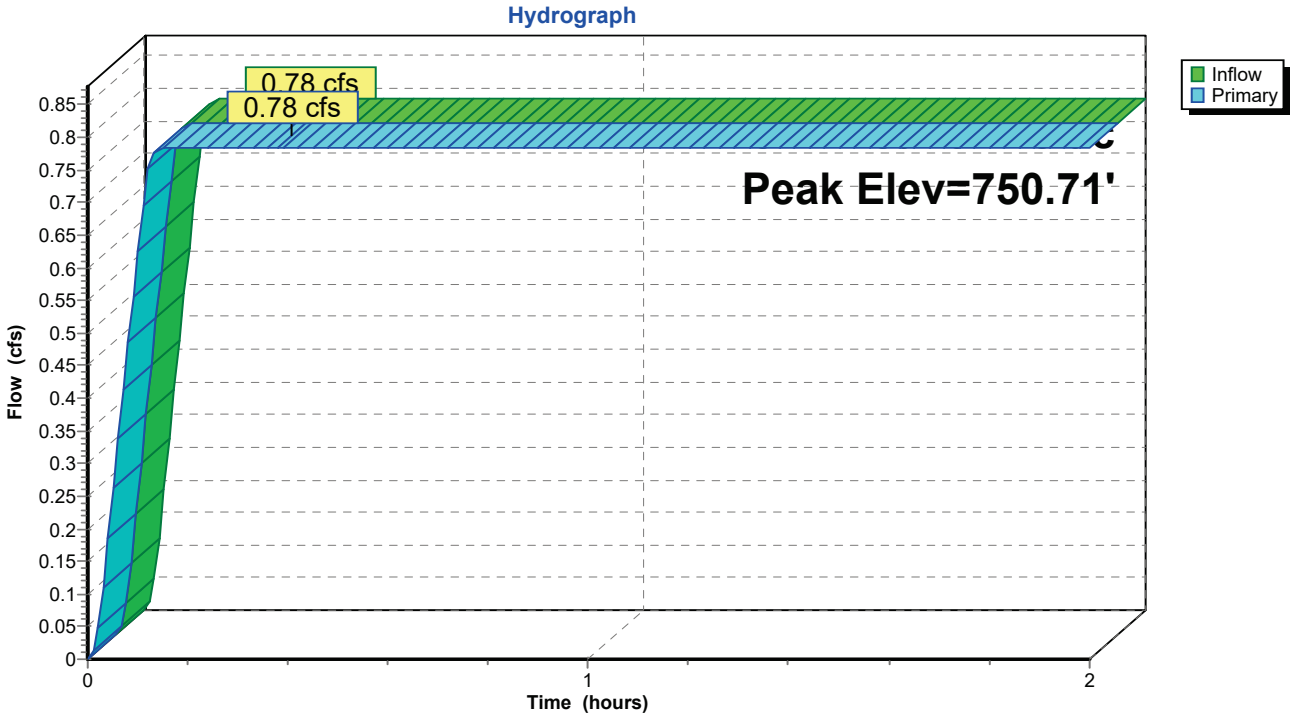
Inflow Area = 0.728 ac, 1.10% Impervious, Inflow Depth > 2.07" for 100-yr event
Inflow = 0.78 cfs @ 0.36 hrs, Volume= 0.126 af
Outflow = 0.78 cfs @ 0.38 hrs, Volume= 0.126 af, Atten= 0%, Lag= 1.2 min
Primary = 0.78 cfs @ 0.38 hrs, Volume= 0.126 af
Routed to Reach R91 : Pipe I91 to I71

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 750.71' @ 0.44 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	750.30'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	750.30'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.78 cfs @ 0.38 hrs HW=750.71' TW=750.64' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.39 cfs @ 1.29 fps)
2=Orifice/Grate (Orifice Controls 0.39 cfs @ 1.29 fps)

Pond I91: Inlet 9-1



Summary for Pond I92: Inlet 9-2

[57] Hint: Peaked at 751.70' (Flood elevation advised)

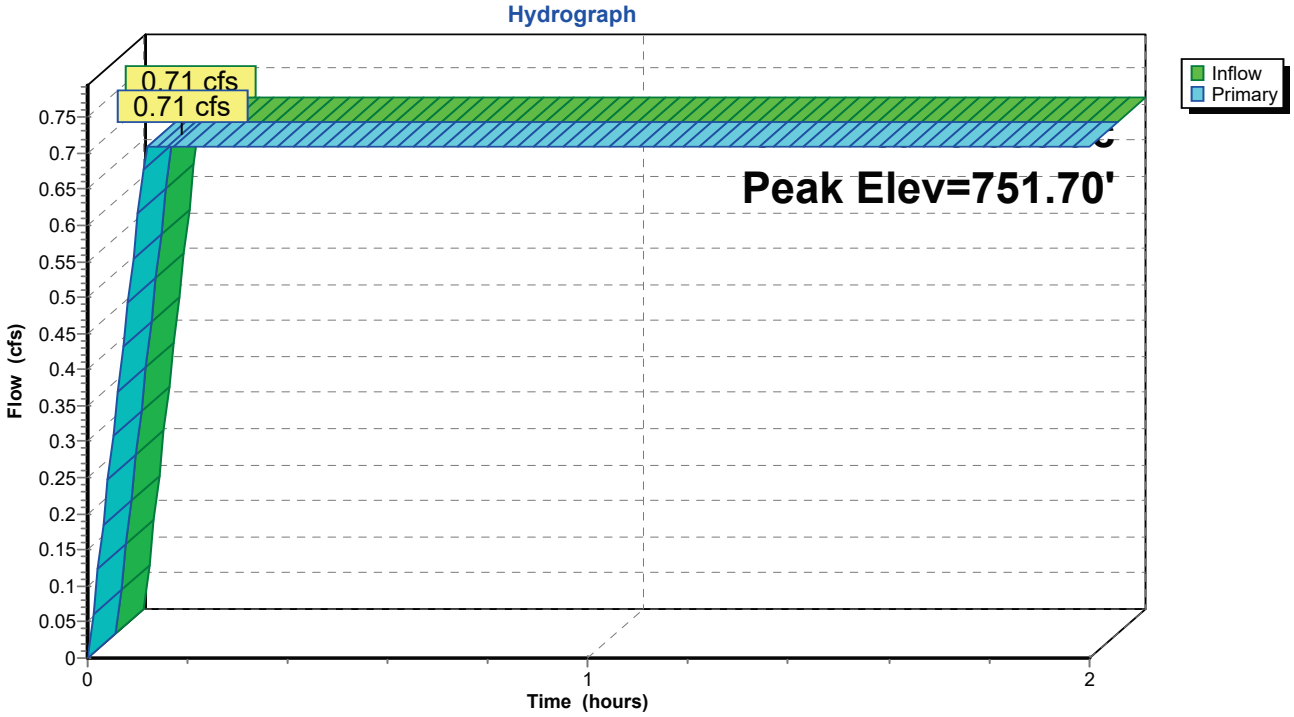
Inflow Area = 0.656 ac, 1.22% Impervious, Inflow Depth > 2.09" for 100-yr event
Inflow = 0.71 cfs @ 0.12 hrs, Volume= 0.114 af
Outflow = 0.71 cfs @ 0.16 hrs, Volume= 0.114 af, Atten= 0%, Lag= 2.4 min
Primary = 0.71 cfs @ 0.16 hrs, Volume= 0.114 af
Routed to Reach R92 : Pipe I92 to I91

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 751.70' @ 0.31 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	751.22'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.71 cfs @ 0.16 hrs HW=751.70' TW=751.54' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.71 cfs @ 1.91 fps)

Pond I92: Inlet 9-2



Summary for Pond P1: Detention Pond

[44] Hint: Outlet device #1 is below defined storage
[62] Hint: Exceeded Reach R14 OUTLET depth by 0.77' @ 1.99 hrs

Inflow Area = 12.430 ac, 7.07% Impervious, Inflow Depth > 1.63" for 100-yr event
Inflow = 11.02 cfs @ 1.02 hrs, Volume= 1.687 af
Outflow = 2.72 cfs @ 2.00 hrs, Volume= 0.356 af, Atten= 75%, Lag= 58.8 min
Primary = 2.72 cfs @ 2.00 hrs, Volume= 0.356 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-2.00 hrs, dt= 0.01 hrs
Peak Elev= 738.20' @ 2.00 hrs Surf.Area= 1.054 ac Storage= 1.328 af

Plug-Flow detention time= 47.5 min calculated for 0.356 af (21% of inflow)
Center-of-Mass det. time= 3.2 min (67.8 - 64.6)

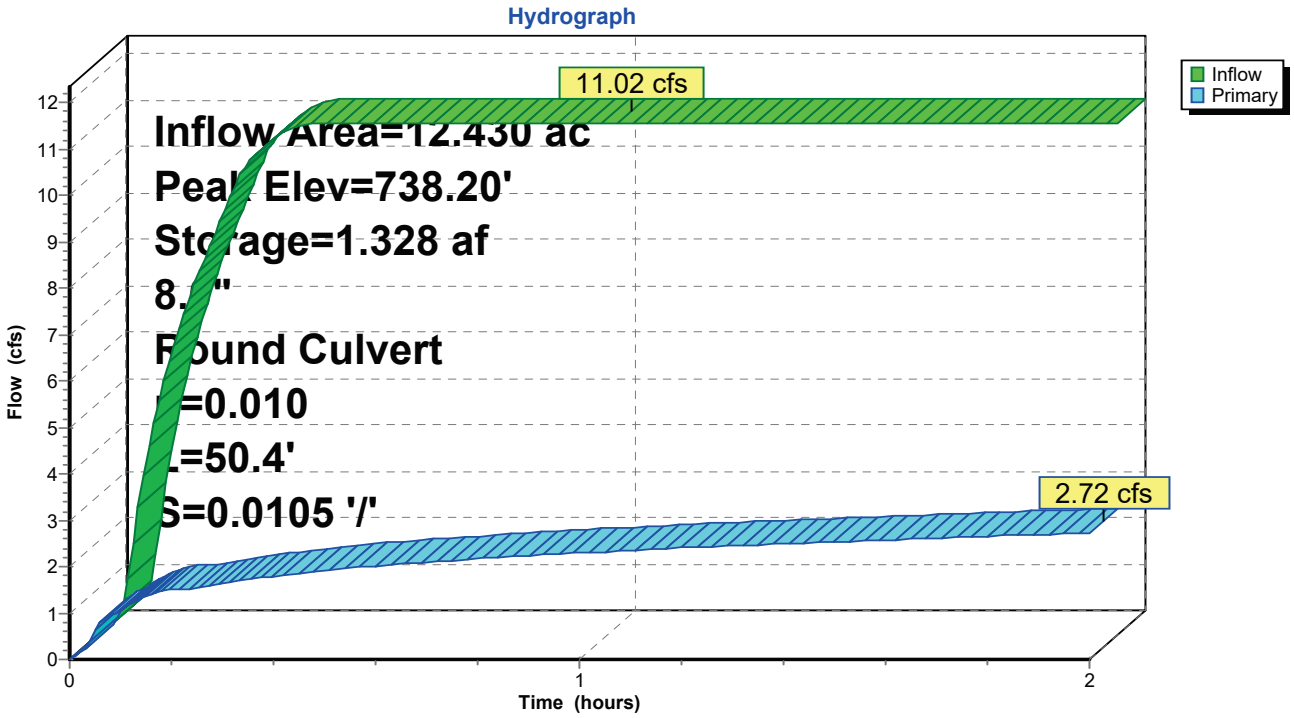
Volume	Invert	Avail.Storage	Storage Description
#1	736.00'	2.825 af	**Custom Stage Data (Prismatic)** Listed below (Recalc)

Elevation (feet)	Surf.Area (acres)	Inc.Store (acre-feet)	Cum.Store (acre-feet)
736.00	0.024	0.000	0.000
737.00	0.592	0.308	0.308
738.00	1.025	0.809	1.117
739.00	1.170	1.097	2.214
739.50	1.276	0.611	2.825

Device	Routing	Invert	Outlet Devices
#1	Primary	735.51'	**8.0" Round Culvert** L= 50.4' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 735.51' / 734.98' S= 0.0105 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.35 sf

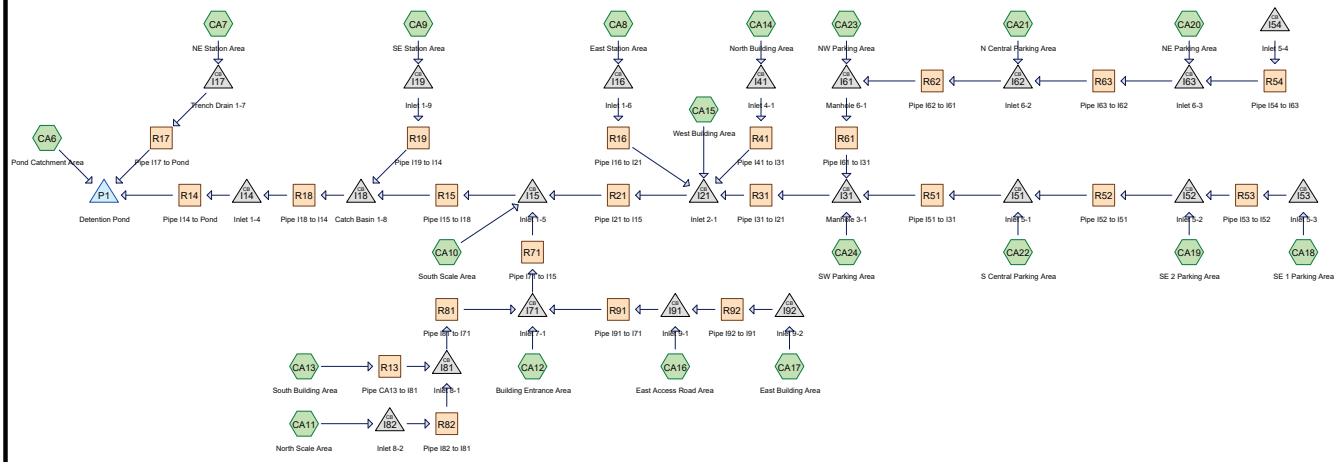
Primary OutFlow Max=2.72 cfs @ 2.00 hrs HW=738.20' (Free Discharge)
↑—**1=Culvert** (Barrel Controls 2.72 cfs @ 7.80 fps)

Pond P1: Detention Pond



APPENDIX 4

HYDROCAD REPORT - PROPOSED CONDITIONS



Subcat Reach Pond Link

Routing Diagram for 340656 - Rantoul Transfer Station - Proposed Conditions Rational

Prepared by CEC Inc, Printed 12/9/2025

HydroCAD® 10.20-7a s/n 01006 © 2025 HydroCAD Software Solutions LLC

Area Listing (all nodes)

Area (acres)	C	Description (subcatchment-numbers)
0.047	0.95	Ashpalt (CA16)
1.601	0.95	Asphalt (CA11, CA12, CA15, CA17, CA24, CA7, CA8, CA9)
0.452	0.95	Building (CA13, CA6)
0.005	0.95	Concrete (CA6)
1.629	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C (CA11, CA12, CA16, CA17, CA19, CA20)
1.562	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D (CA15, CA23, CA24, CA6, CA7)
2.591	0.60	Gravel (CA11, CA12, CA15, CA16, CA17, CA18, CA19, CA20, CA21, CA22, CA23, CA24)
0.070	0.40	Orthents, loamy, 1 to 7 percent slopes (802B), Well drained, HSG C (CA10, CA6)
2.920	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D (CA10, CA11, CA12, CA13, CA15, CA19, CA20, CA24, CA6, CA7, CA8, CA9)
0.228	0.95	Sidewalk (CA11, CA12, CA13, CA15, CA17, CA19, CA22, CA24)
0.503	0.95	Unconnected roofs, HSG A (CA14)
1.181	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C (CA11, CA12, CA17, CA18, CA19, CA20, CA22, CA24)
12.789	**0.53**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.503	HSG A	CA14
4.482	HSG B	CA10, CA11, CA12, CA13, CA15, CA19, CA20, CA23, CA24, CA6, CA7, CA8, CA9
2.880	HSG C	CA10, CA11, CA12, CA16, CA17, CA18, CA19, CA20, CA22, CA24, CA6
0.000	HSG D	
4.924	Other	CA11, CA12, CA13, CA15, CA16, CA17, CA18, CA19, CA20, CA21, CA22, CA23, CA24, CA6, CA7, CA8, CA9
12.789		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover
0.000	0.000	0.000	0.000	0.047	0.047	Ashpalt
0.000	0.000	0.000	0.000	1.601	1.601	Asphalt
0.000	0.000	0.000	0.000	0.452	0.452	Building
0.000	0.000	0.000	0.000	0.005	0.005	Concrete
0.000	0.000	1.629	0.000	0.000	1.629	Dana silt loam, 2 to 5 percent slopes (56B), Well drained
0.000	1.562	0.000	0.000	0.000	1.562	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained
0.000	0.000	0.000	0.000	2.591	2.591	Gravel
0.000	0.000	0.070	0.000	0.000	0.070	Orthents, loamy, 1 to 7 percent slopes (802B), Well drained
0.000	2.920	0.000	0.000	0.000	2.920	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained
0.000	0.000	0.000	0.000	0.228	0.228	Sidewalk
0.503	0.000	0.000	0.000	0.000	0.503	Unconnected roofs
0.000	0.000	1.181	0.000	0.000	1.181	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained
0.503	**4.482**	**2.880**	**0.000**	**4.924**	**12.789**	**TOTAL AREA**

Pipe Listing (all nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	R13	750.17	748.69	149.2	0.0099	0.010	0.0	12.0	0.0	
2	R14	741.84	736.82	148.6	0.0338	0.012	0.0	24.0	0.0	
3	R15	744.87	743.36	147.0	0.0103	0.012	0.0	24.0	0.0	
4	R16	749.30	748.18	108.0	0.0104	0.012	0.0	12.0	0.0	
5	R17	745.50	744.50	20.0	0.0500	0.012	0.0	6.0	0.0	
6	R18	743.36	736.82	147.0	0.0445	0.012	0.0	24.0	0.0	
7	R19	745.41	743.36	46.0	0.0446	0.012	0.0	12.0	0.0	
8	R21	746.00	744.88	223.0	0.0050	0.012	0.0	24.0	0.0	
9	R31	747.75	747.18	154.3	0.0037	0.012	0.0	18.0	0.0	
10	R41	748.86	748.17	324.3	0.0021	0.010	0.0	12.0	0.0	
11	R51	749.07	747.75	123.9	0.0107	0.012	0.0	15.0	0.0	
12	R52	750.10	749.10	114.4	0.0087	0.012	0.0	12.0	0.0	
13	R53	750.43	750.26	62.2	0.0027	0.010	0.0	6.0	0.0	
14	R54	750.30	749.91	63.0	0.0062	0.010	0.0	6.0	0.0	
15	R61	748.55	747.75	133.8	0.0060	0.012	0.0	15.0	0.0	
16	R62	749.32	748.61	122.3	0.0058	0.012	0.0	12.0	0.0	
17	R63	749.91	749.35	117.3	0.0048	0.012	0.0	12.0	0.0	
18	R71	747.78	744.96	307.3	0.0092	0.012	0.0	12.0	0.0	
19	R81	748.66	747.78	63.2	0.0139	0.012	0.0	12.0	0.0	
20	R82	750.74	748.70	136.0	0.0150	0.012	0.0	12.0	0.0	
21	R91	750.30	748.93	206.5	0.0066	0.012	0.0	12.0	0.0	
22	R92	751.22	750.30	134.2	0.0069	0.012	0.0	12.0	0.0	
23	P1	735.51	734.98	50.4	0.0105	0.010	0.0	8.0	0.0	

Time span=0.00-3.00 hrs, dt=0.01 hrs, 301 points
Runoff by Rational method, Rise/Fall=1.0/1.0 xTc
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment CA10: South Scale Area Runoff Area=0.371 ac 0.00% Impervious Runoff Depth=0.66"
Flow Length=218' Tc=13.3 min C=0.30 Runoff=0.12 cfs 0.020 af

Subcatchment CA11: North Scale Area Runoff Area=0.625 ac 35.68% Impervious Runoff Depth=1.23"
Flow Length=168' Tc=5.9 min C=0.56 Runoff=0.39 cfs 0.064 af

Subcatchment CA12: Building Entrance Runoff Area=0.720 ac 70.56% Impervious Runoff Depth=1.76"
Flow Length=376' Tc=12.6 min C=0.80 Runoff=0.64 cfs 0.106 af

Subcatchment CA13: South Building Area Runoff Area=0.167 ac 97.60% Impervious Runoff Depth=2.05"
Flow Length=85' Slope=0.0100 '/' Tc=0.7 min C=0.93 Runoff=0.17 cfs 0.028 af

Subcatchment CA14: North Building Area Runoff Area=0.503 ac 100.00% Impervious Runoff Depth=2.09"
Flow Length=162' Slope=0.0100 '/' Tc=1.3 min C=0.95 Runoff=0.53 cfs 0.088 af

Subcatchment CA15: West Building Area Runoff Area=0.650 ac 7.23% Impervious Runoff Depth=0.77"
Flow Length=175' Tc=13.3 min C=0.35 Runoff=0.25 cfs 0.042 af

Subcatchment CA16: East Access Road Runoff Area=0.109 ac 43.12% Impervious Runoff Depth=1.43"
Flow Length=172' Tc=11.0 min C=0.65 Runoff=0.08 cfs 0.013 af

Subcatchment CA17: East Building Area Runoff Area=0.531 ac 21.66% Impervious Runoff Depth=1.39"
Flow Length=221' Tc=12.9 min C=0.63 Runoff=0.37 cfs 0.061 af

Subcatchment CA18: SE 1 Parking Area Runoff Area=0.156 ac 0.00% Impervious Runoff Depth=1.17"
Flow Length=146' Tc=7.8 min C=0.53 Runoff=0.09 cfs 0.015 af

Subcatchment CA19: SE 2 Parking Area Runoff Area=2.030 ac 0.30% Impervious Runoff Depth=0.99"
Flow Length=694' Tc=40.1 min C=0.45 Runoff=1.01 cfs 0.167 af

Subcatchment CA20: NE Parking Area Runoff Area=1.364 ac 0.00% Impervious Runoff Depth=0.95"
Flow Length=738' Tc=40.7 min C=0.43 Runoff=0.65 cfs 0.108 af

Subcatchment CA21: N Central Parking Area Runoff Area=0.385 ac 0.00% Impervious Runoff Depth=1.32"
Flow Length=92' Slope=0.0121 '/' Tc=1.4 min C=0.60 Runoff=0.26 cfs 0.042 af

Subcatchment CA22: S Central Parking Area Runoff Area=0.354 ac 5.65% Impervious Runoff Depth=1.36"
Flow Length=86' Slope=0.0137 '/' Tc=1.3 min C=0.62 Runoff=0.24 cfs 0.040 af

Subcatchment CA23: NW Parking Area Runoff Area=0.659 ac 0.00% Impervious Runoff Depth=1.03"
Flow Length=203' Tc=30.5 min C=0.47 Runoff=0.34 cfs 0.057 af

Subcatchment CA24: SW Parking Area Runoff Area=0.510 ac 6.86% Impervious Runoff Depth=1.28"
Flow Length=179' Tc=12.3 min C=0.58 Runoff=0.33 cfs 0.054 af

Subcatchment CA6: Pond Catchment Area Runoff Area=2.266 ac 13.02% Impervious Runoff Depth=0.86"
Flow Length=218' Slope=0.0698 '/' Tc=2.0 min C=0.39 Runoff=0.98 cfs 0.162 af

Subcatchment CA7: NE Station Area Runoff Area=0.750 ac 33.20% Impervious Runoff Depth=1.14"
Flow Length=258' Tc=15.8 min C=0.52 Runoff=0.43 cfs 0.071 af

Subcatchment CA8: East Station Area Runoff Area=0.504 ac 97.62% Impervious Runoff Depth=2.05"
Flow Length=219' Tc=3.9 min C=0.93 Runoff=0.52 cfs 0.086 af

Subcatchment CA9: SE Station Area Runoff Area=0.135 ac 98.52% Impervious Runoff Depth=2.07"
Flow Length=117' Tc=3.1 min C=0.94 Runoff=0.14 cfs 0.023 af

Reach R13: Pipe CA13 to I81 Avg. Flow Depth=0.13' Max Vel=2.81 fps Inflow=0.17 cfs 0.028 af
12.0" Round Pipe n=0.010 L=149.2' S=0.0099 '/' Capacity=4.61 cfs Outflow=0.17 cfs 0.028 af

Reach R14: Pipe I14 to Pond Avg. Flow Depth=0.50' Max Vel=10.03 fps Inflow=6.14 cfs 1.015 af
24.0" Round Pipe n=0.012 L=148.6' S=0.0338 '/' Capacity=45.04 cfs Outflow=6.14 cfs 1.015 af

Reach R15: Pipe I15 to I18 Avg. Flow Depth=0.67' Max Vel=6.51 fps Inflow=6.00 cfs 0.992 af
24.0" Round Pipe n=0.012 L=147.0' S=0.0103 '/' Capacity=24.84 cfs Outflow=6.00 cfs 0.992 af

Reach R16: Pipe I16 to I21 Avg. Flow Depth=0.25' Max Vel=3.47 fps Inflow=0.52 cfs 0.086 af
12.0" Round Pipe n=0.012 L=108.0' S=0.0104 '/' Capacity=3.93 cfs Outflow=0.52 cfs 0.086 af

Reach R17: Pipe I17 to Pond Avg. Flow Depth=0.19' Max Vel=6.15 fps Inflow=0.43 cfs 0.071 af
6.0" Round Pipe n=0.012 L=20.0' S=0.0500 '/' Capacity=1.36 cfs Outflow=0.43 cfs 0.071 af

Reach R18: Pipe I18 to I14 Avg. Flow Depth=0.47' Max Vel=11.07 fps Inflow=6.14 cfs 1.015 af
24.0" Round Pipe n=0.012 L=147.0' S=0.0445 '/' Capacity=51.69 cfs Outflow=6.14 cfs 1.015 af

Reach R19: Pipe I19 to I14 Avg. Flow Depth=0.09' Max Vel=3.94 fps Inflow=0.14 cfs 0.023 af
12.0" Round Pipe n=0.012 L=46.0' S=0.0446 '/' Capacity=8.15 cfs Outflow=0.14 cfs 0.023 af

Reach R21: Pipe I21 to I15 Avg. Flow Depth=0.67' Max Vel=4.56 fps Inflow=4.23 cfs 0.699 af
24.0" Round Pipe n=0.012 L=223.0' S=0.0050 '/' Capacity=17.37 cfs Outflow=4.23 cfs 0.699 af

Reach R31: Pipe I31 to I21 Avg. Flow Depth=0.68' Max Vel=3.75 fps Inflow=2.93 cfs 0.484 af
18.0" Round Pipe n=0.012 L=154.3' S=0.0037 '/' Capacity=6.92 cfs Outflow=2.93 cfs 0.484 af

Reach R41: Pipe I41 to I31 Avg. Flow Depth=0.34' Max Vel=2.26 fps Inflow=0.53 cfs 0.088 af
12.0" Round Pipe n=0.010 L=324.3' S=0.0021 '/' Capacity=2.14 cfs Outflow=0.53 cfs 0.088 af

Reach R51: Pipe I51 to I31 Avg. Flow Depth=0.37' Max Vel=4.51 fps Inflow=1.35 cfs 0.223 af
15.0" Round Pipe n=0.012 L=123.9' S=0.0107 '/' Capacity=7.22 cfs Outflow=1.35 cfs 0.223 af

Reach R52: Pipe I52 to I51 Avg. Flow Depth=0.38' Max Vel=4.04 fps Inflow=1.10 cfs 0.183 af
12.0" Round Pipe n=0.012 L=114.4' S=0.0087 '/' Capacity=3.61 cfs Outflow=1.10 cfs 0.183 af

Reach R53: Pipe I53 to I52 Avg. Flow Depth=0.17' Max Vel=1.60 fps Inflow=0.09 cfs 0.015 af
6.0" Round Pipe n=0.010 L=62.2' S=0.0027 '/' Capacity=0.38 cfs Outflow=0.09 cfs 0.015 af

Reach R54: Pipe I54 to I63 Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af
6.0" Round Pipe n=0.010 L=63.0' S=0.0062 '/' Capacity=0.57 cfs Outflow=0.00 cfs 0.000 af

Reach R61: Pipe I61 to I31 Avg. Flow Depth=0.41' Max Vel=3.59 fps Inflow=1.25 cfs 0.207 af
15.0" Round Pipe n=0.012 L=133.8' S=0.0060 '/' Capacity=5.41 cfs Outflow=1.25 cfs 0.207 af

Reach R62: Pipe I62 to I61 Avg. Flow Depth=0.38' Max Vel=3.30 fps Inflow=0.91 cfs 0.150 af
12.0" Round Pipe n=0.012 L=122.3' S=0.0058 '/' Capacity=2.94 cfs Outflow=0.91 cfs 0.150 af

Reach R63: Pipe I63 to I62 Avg. Flow Depth=0.34' Max Vel=2.80 fps Inflow=0.65 cfs 0.108 af
12.0" Round Pipe n=0.012 L=117.3' S=0.0048 '/' Capacity=2.67 cfs Outflow=0.65 cfs 0.108 af

Reach R71: Pipe I71 to I15 Avg. Flow Depth=0.47' Max Vel=4.57 fps Inflow=1.65 cfs 0.273 af
12.0" Round Pipe n=0.012 L=307.3' S=0.0092 '/' Capacity=3.70 cfs Outflow=1.65 cfs 0.273 af

Reach R81: Pipe I81 to I71 Avg. Flow Depth=0.24' Max Vel=3.94 fps Inflow=0.56 cfs 0.093 af
12.0" Round Pipe n=0.012 L=63.2' S=0.0139 '/' Capacity=4.55 cfs Outflow=0.56 cfs 0.093 af

Reach R82: Pipe I82 to I81 Avg. Flow Depth=0.19' Max Vel=3.63 fps Inflow=0.39 cfs 0.064 af
12.0" Round Pipe n=0.012 L=136.0' S=0.0150 '/' Capacity=4.73 cfs Outflow=0.39 cfs 0.064 af

Reach R91: Pipe I91 to I71 Avg. Flow Depth=0.26' Max Vel=2.84 fps Inflow=0.45 cfs 0.074 af
12.0" Round Pipe n=0.012 L=206.5' S=0.0066 '/' Capacity=3.14 cfs Outflow=0.45 cfs 0.074 af

Reach R92: Pipe I92 to I91 Avg. Flow Depth=0.23' Max Vel=2.72 fps Inflow=0.37 cfs 0.061 af
12.0" Round Pipe n=0.012 L=134.2' S=0.0069 '/' Capacity=3.20 cfs Outflow=0.37 cfs 0.061 af

Pond I14: Inlet 1-4 Peak Elev=742.64' Inflow=6.14 cfs 1.015 af
Outflow=6.14 cfs 1.015 af

Pond I15: Inlet 1-5 Peak Elev=745.71' Inflow=6.00 cfs 0.992 af
Outflow=6.00 cfs 0.992 af

Pond I16: Inlet 1-6 Peak Elev=749.69' Inflow=0.52 cfs 0.086 af
Outflow=0.52 cfs 0.086 af

Pond I17: Trench Drain 1-7 Peak Elev=745.96' Inflow=0.43 cfs 0.071 af
Outflow=0.43 cfs 0.071 af

Pond I18: Catch Basin 1-8 Peak Elev=744.14' Inflow=6.14 cfs 1.015 af
Outflow=6.14 cfs 1.015 af

Pond I19: Inlet 1-9 Peak Elev=745.59' Inflow=0.14 cfs 0.023 af
Outflow=0.14 cfs 0.023 af

Pond I21: Inlet 2-1 Peak Elev=747.98' Inflow=4.23 cfs 0.699 af
Outflow=4.23 cfs 0.699 af

Pond I31: Manhole 3-1 Peak Elev=748.50' Inflow=2.93 cfs 0.484 af
Outflow=2.93 cfs 0.484 af

Pond I41: Inlet 4-1 Peak Elev=749.31' Inflow=0.53 cfs 0.088 af
Outflow=0.53 cfs 0.088 af

Pond I51: Inlet 5-1 Peak Elev=749.56' Inflow=1.35 cfs 0.223 af
Outflow=1.35 cfs 0.223 af

Pond I52: Inlet 5-2 Peak Elev=750.63' Inflow=1.10 cfs 0.183 af
Outflow=1.10 cfs 0.183 af

Pond I53: Inlet 5-3 Peak Elev=750.64' Inflow=0.09 cfs 0.015 af
Outflow=0.09 cfs 0.015 af

Pond I54: Inlet 5-4 Peak Elev=0.00'
Primary=0.00 cfs 0.000 af

Pond I61: Manhole 6-1 Peak Elev=749.06' Inflow=1.25 cfs 0.207 af
Outflow=1.25 cfs 0.207 af

Pond I62: Inlet 6-2 Peak Elev=749.78' Inflow=0.91 cfs 0.150 af
Outflow=0.91 cfs 0.150 af

Pond I63: Inlet 6-3 Peak Elev=750.38' Inflow=0.65 cfs 0.108 af
Outflow=0.65 cfs 0.108 af

Pond I71: Inlet 7-1 Peak Elev=748.37' Inflow=1.65 cfs 0.273 af
Outflow=1.65 cfs 0.273 af

Pond I81: Inlet 8-1 Peak Elev=748.95' Inflow=0.56 cfs 0.093 af
Outflow=0.56 cfs 0.093 af

Pond I82: Inlet 8-2 Peak Elev=751.07' Inflow=0.39 cfs 0.064 af
Outflow=0.39 cfs 0.064 af

Pond I91: Inlet 9-1 Peak Elev=750.61' Inflow=0.45 cfs 0.074 af
Outflow=0.45 cfs 0.074 af

Pond I92: Inlet 9-2 Peak Elev=751.56' Inflow=0.37 cfs 0.061 af
Outflow=0.37 cfs 0.061 af

Pond P1: Detention Pond Peak Elev=737.72' Storage=0.848 af Inflow=7.55 cfs 1.249 af
Primary=2.45 cfs 0.525 af Secondary=0.00 cfs 0.000 af Outflow=2.45 cfs 0.525 af

Total Runoff Area = 12.789 ac Runoff Volume = 1.249 af Average Runoff Depth = 1.17"
77.82% Pervious = 9.953 ac 22.18% Impervious = 2.836 ac

Summary for Subcatchment CA10: South Scale Area

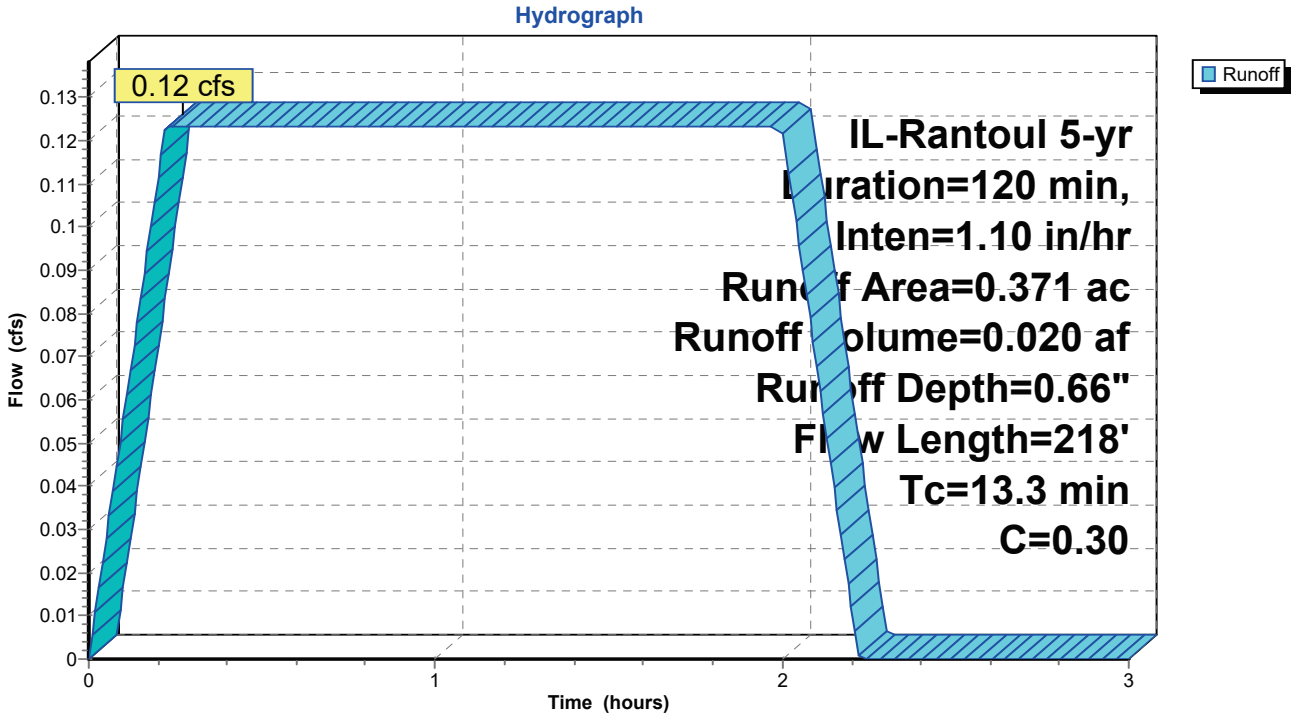
Runoff = 0.12 cfs @ 0.23 hrs, Volume= 0.020 af, Depth= 0.66"
Routed to Pond I15 : Inlet 1-5

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.007	0.40	Orthents, loamy, 1 to 7 percent slopes (802B), Well drained, HSG C
0.364	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.371	0.30	Weighted Average
0.371		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.6	100	0.0176	0.16		**Sheet Flow, Grass area S of access road** Grass: Short n= 0.150 P2= 3.03"
2.7	118	0.0105	0.72		**Shallow Concentrated Flow, Grass area s of access road** Short Grass Pasture Kv= 7.0 fps
13.3	218	Total			

Subcatchment CA10: South Scale Area



Summary for Subcatchment CA11: North Scale Area

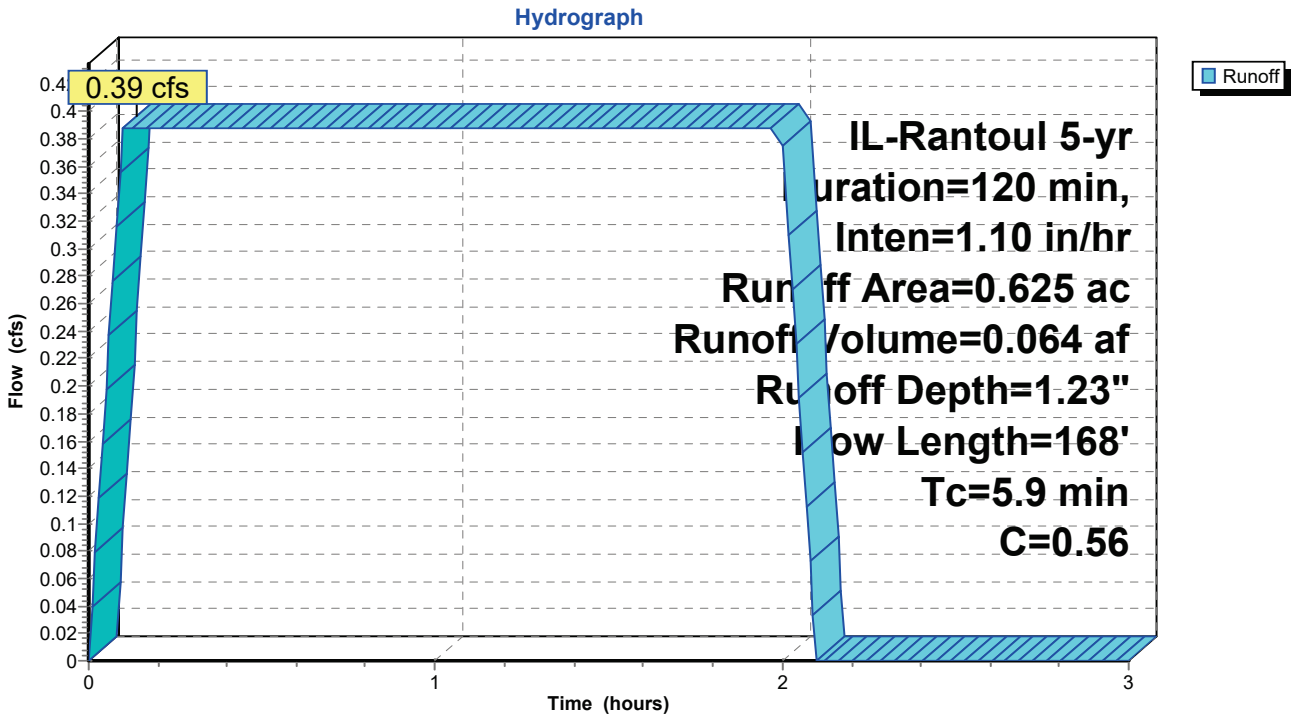
Runoff = 0.39 cfs @ 0.10 hrs, Volume= 0.064 af, Depth= 1.23"
Routed to Pond I82 : Inlet 8-2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.032	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.258	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.111	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.162	0.95	Asphalt
0.061	0.95	Sidewalk
0.001	0.60	Gravel
0.625	0.56	Weighted Average
0.402		64.32% Pervious Area
0.223		35.68% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
4.4	42	0.0274	0.16		**Sheet Flow, Grass area SW of building** Grass: Short n= 0.150 P2= 3.03"
1.5	126	0.0047	1.39		**Shallow Concentrated Flow, Access road N of scale** Paved Kv= 20.3 fps
5.9	168	Total			

Subcatchment CA11: North Scale Area



Summary for Subcatchment CA12: Building Entrance Area

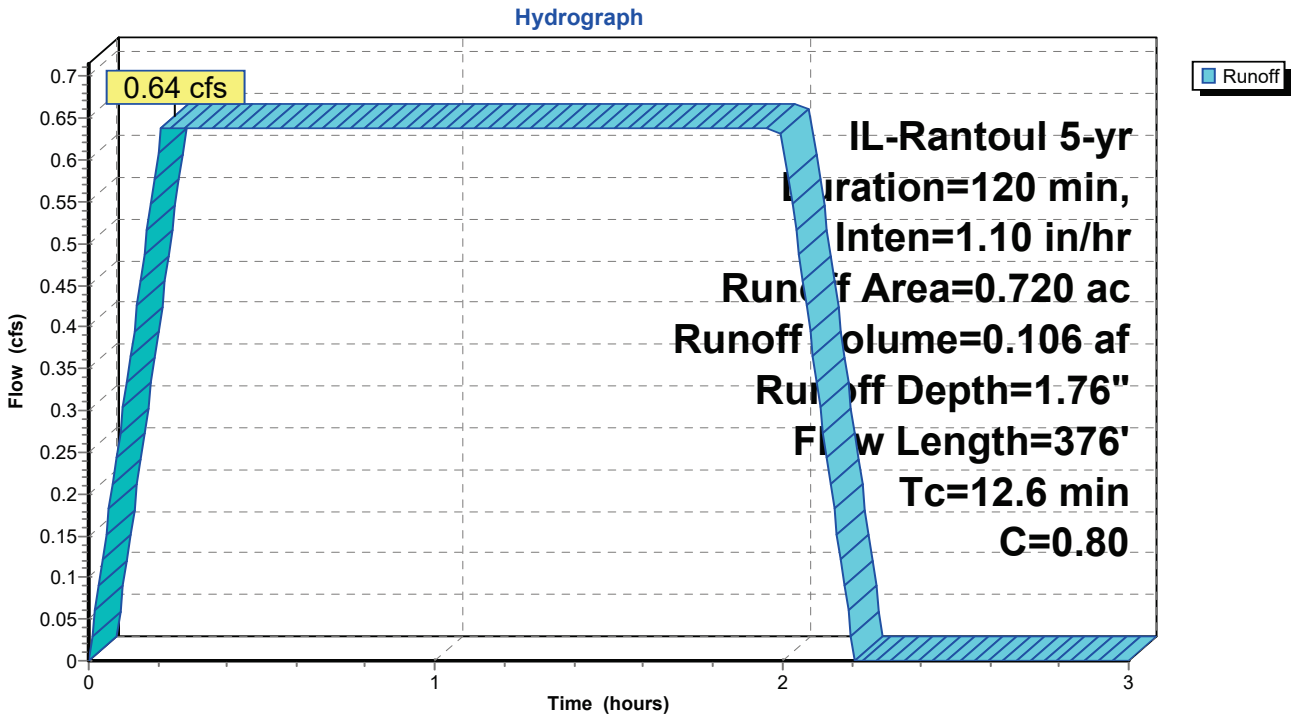
Runoff = 0.64 cfs @ 0.21 hrs, Volume= 0.106 af, Depth= 1.76"
Routed to Pond I71 : Inlet 7-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.132	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.001	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.046	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.413	0.95	Asphalt
0.095	0.95	Sidewalk
0.033	0.60	Gravel
0.720	0.80	Weighted Average
0.212		29.44% Pervious Area
0.508		70.56% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.8	116	0.0224	0.18		**Sheet Flow, Gass SE of building** Grass: Short n= 0.150 P2= 3.03"
1.8	260	0.0137	2.38		**Shallow Concentrated Flow, Access Road** Paved Kv= 20.3 fps
12.6	376	Total			

Subcatchment CA12: Building Entrance Area



Summary for Subcatchment CA13: South Building Area

[70] Warning: Tc<8dt requires smaller dt

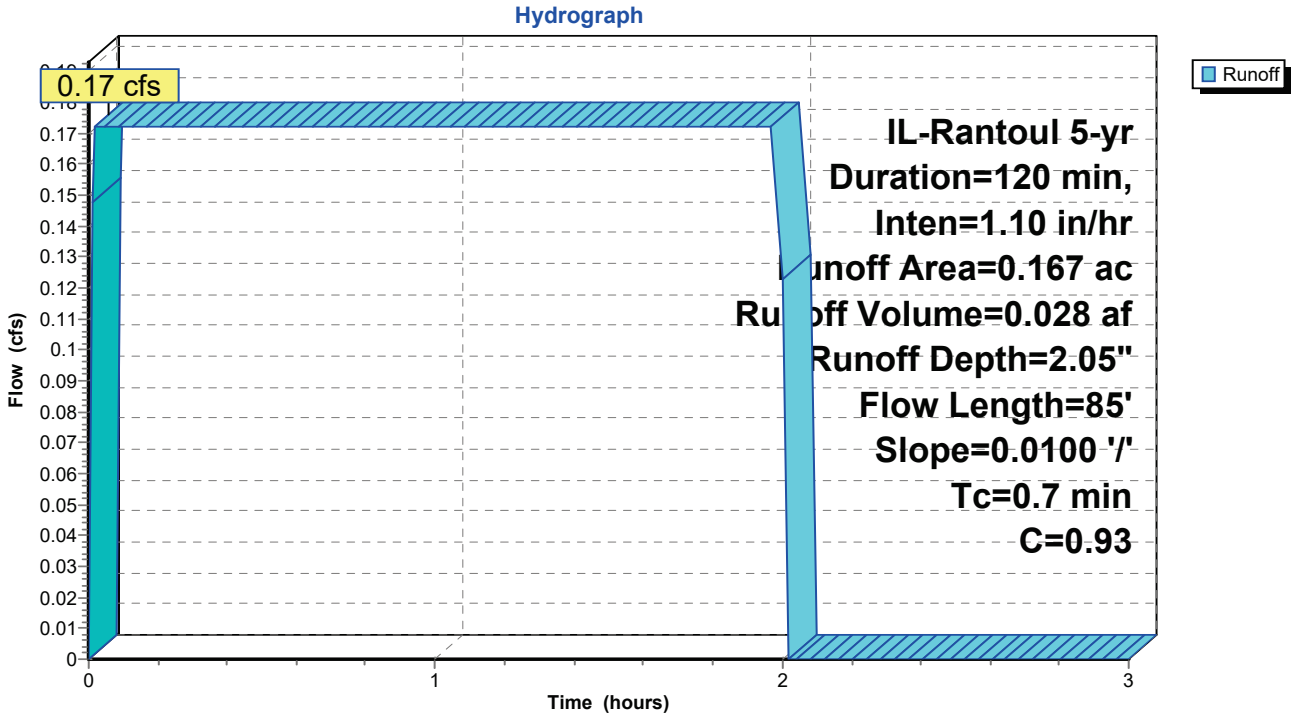
Runoff = 0.17 cfs @ 0.02 hrs, Volume= 0.028 af, Depth= 2.05"
Routed to Reach R13 : Pipe CA13 to I81

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.162	0.95	Building
0.001	0.95	Sidewalk
0.004	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.167	0.93	Weighted Average
0.004		2.40% Pervious Area
0.163		97.60% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.7	85	0.0100	2.03		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps

Subcatchment CA13: South Building Area



Summary for Subcatchment CA14: North Building Area

[70] Warning: Tc<8dt requires smaller dt

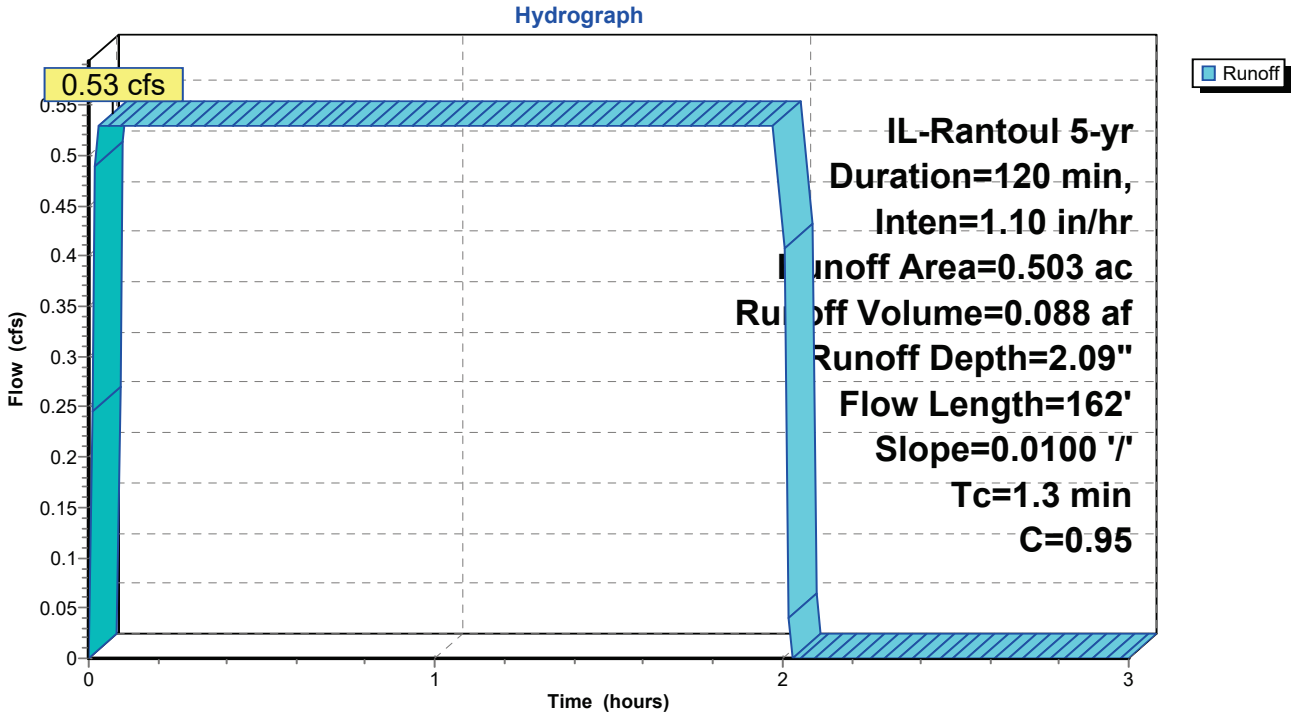
Runoff = 0.53 cfs @ 0.03 hrs, Volume= 0.088 af, Depth= 2.09"
Routed to Pond I41 : Inlet 4-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.503	0.95	Unconnected roofs, HSG A
0.503		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	162	0.0100	2.03		**Shallow Concentrated Flow, N building** Paved Kv= 20.3 fps

Subcatchment CA14: North Building Area



Summary for Subcatchment CA15: West Building Area

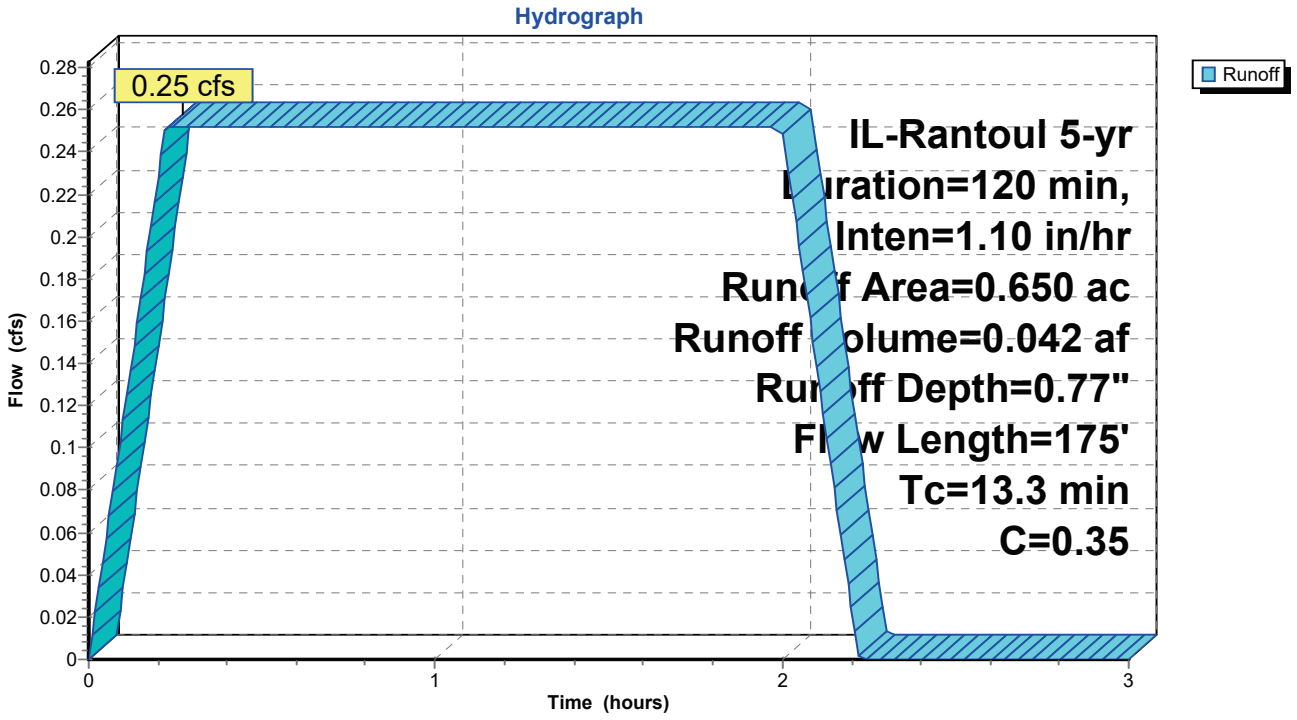
Runoff = 0.25 cfs @ 0.23 hrs, Volume= 0.042 af, Depth= 0.77"
Routed to Pond I21 : Inlet 2-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.394	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.199	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
0.036	0.95	Asphalt
0.011	0.95	Sidewalk
0.010	0.60	Gravel
0.650	0.35	Weighted Average
0.603		92.77% Pervious Area
0.047		7.23% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.1	79	0.0123	0.13		**Sheet Flow, Parking N of building** Grass: Short n= 0.150 P2= 3.03"
1.0	5	0.0172	0.09		**Sheet Flow, Parking N of building** Grass: Short n= 0.150 P2= 3.03"
0.3	16	0.0193	0.91		**Sheet Flow, Parking access road** Smooth surfaces n= 0.011 P2= 3.03"
1.9	75	0.0084	0.64		**Shallow Concentrated Flow, Parking N of building** Short Grass Pasture Kv= 7.0 fps
13.3	175	Total			

Subcatchment CA15: West Building Area



Summary for Subcatchment CA16: East Access Road Area

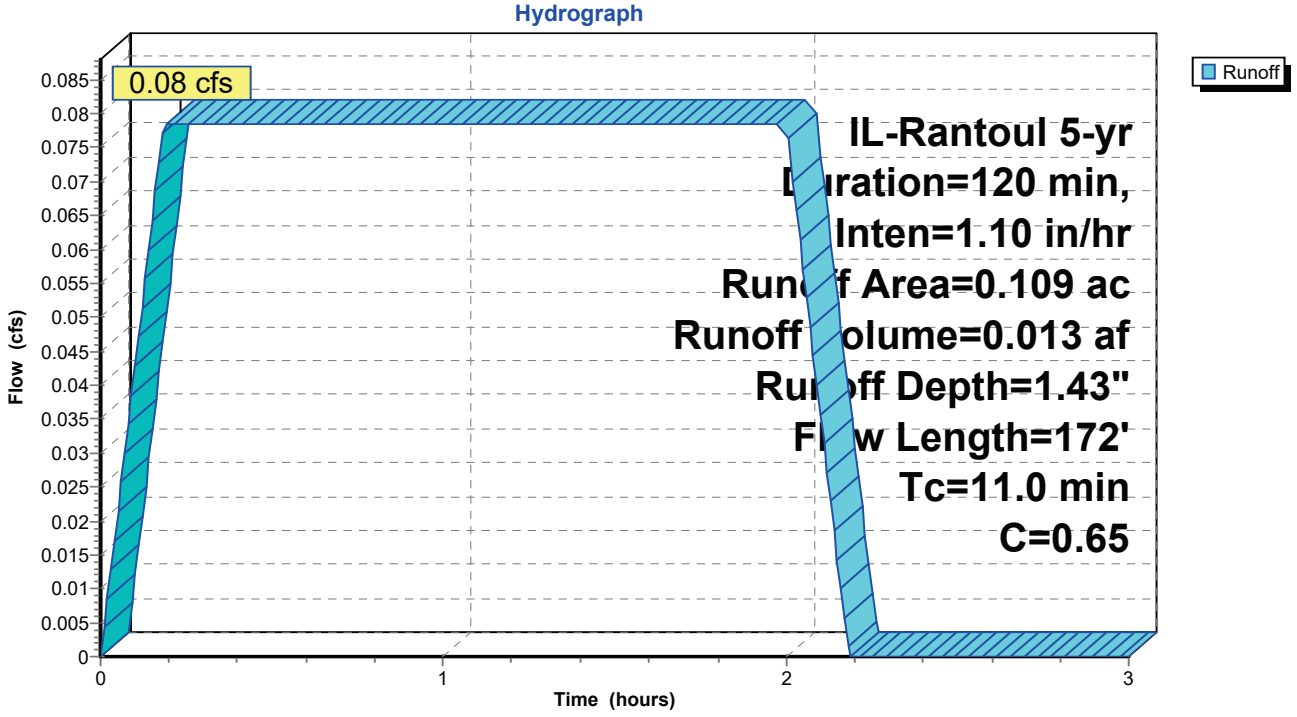
Runoff = 0.08 cfs @ 0.19 hrs, Volume= 0.013 af, Depth= 1.43"
Routed to Pond I91 : Inlet 9-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.061	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.047	0.95	Ashpalt
0.001	0.60	Gravel
0.109	0.65	Weighted Average
0.062		56.88% Pervious Area
0.047		43.12% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.7	113	0.0218	0.18		**Sheet Flow, Grass E of building** Grass: Short n= 0.150 P2= 3.03"
0.3	59	0.0327	3.67		**Shallow Concentrated Flow, Access Road** Paved Kv= 20.3 fps
11.0	172	Total			

Subcatchment CA16: East Access Road Area



Summary for Subcatchment CA17: East Building Area

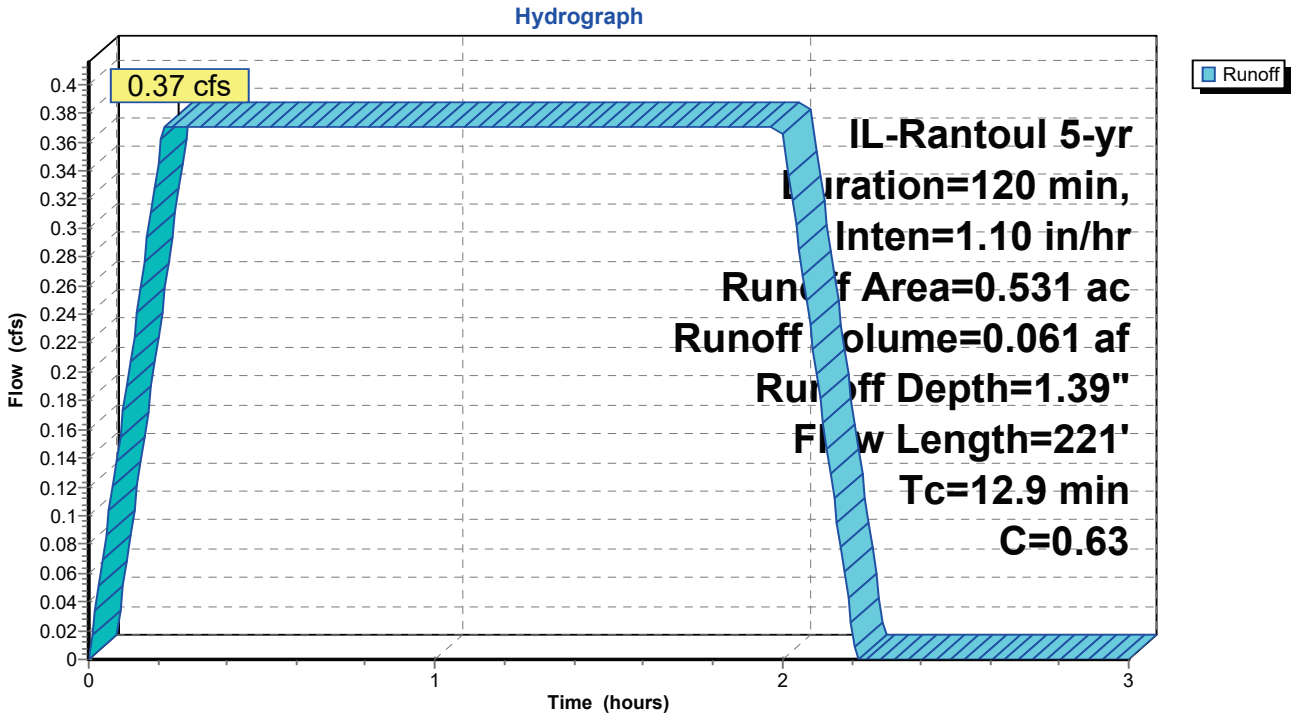
Runoff = 0.37 cfs @ 0.22 hrs, Volume= 0.061 af, Depth= 1.39"
Routed to Pond I92 : Inlet 9-2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.115	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.032	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.008	0.95	Sidewalk
0.269	0.60	Gravel
0.107	0.95	Asphalt
0.531	0.63	Weighted Average
0.416		78.34% Pervious Area
0.115		21.66% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
12.0	100	0.0129	0.14		**Sheet Flow, Grass E of building** Grass: Short n= 0.150 P2= 3.03"
0.4	26	0.0231	1.06		**Shallow Concentrated Flow, Access Road** Short Grass Pasture Kv= 7.0 fps
0.5	95	0.0344	2.99		**Shallow Concentrated Flow, Access Road** Unpaved Kv= 16.1 fps
12.9	221	Total			

Subcatchment CA17: East Building Area



Summary for Subcatchment CA18: SE 1 Parking Area

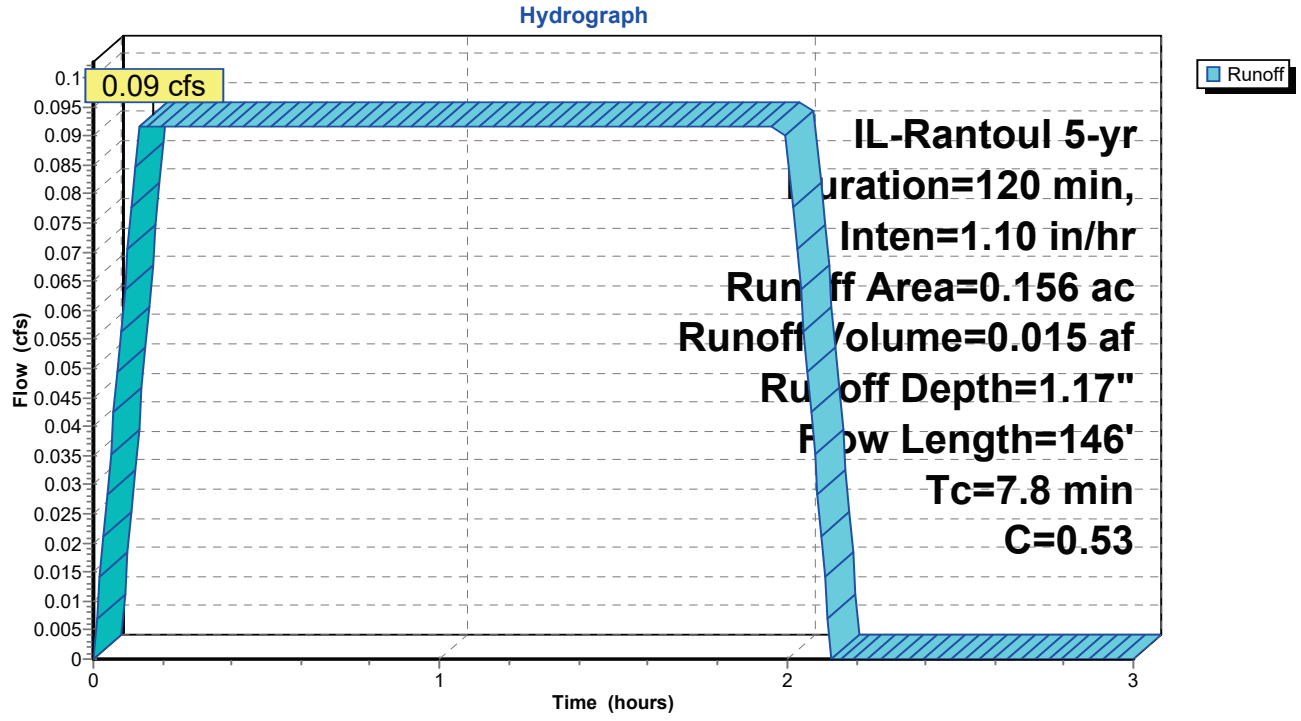
Runoff = 0.09 cfs @ 0.13 hrs, Volume= 0.015 af, Depth= 1.17"
Routed to Pond I53 : Inlet 5-3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.060	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.096	0.60	Gravel
0.156	0.53	Weighted Average
0.156		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
7.2	87	0.0350	0.20		**Sheet Flow, Area E outside of property** Grass: Short n= 0.150 P2= 3.03"
0.6	59	0.0114	1.72		**Shallow Concentrated Flow, Area E outside of property** Unpaved Kv= 16.1 fps
7.8	146	Total			

Subcatchment CA18: SE 1 Parking Area



Summary for Subcatchment CA19: SE 2 Parking Area

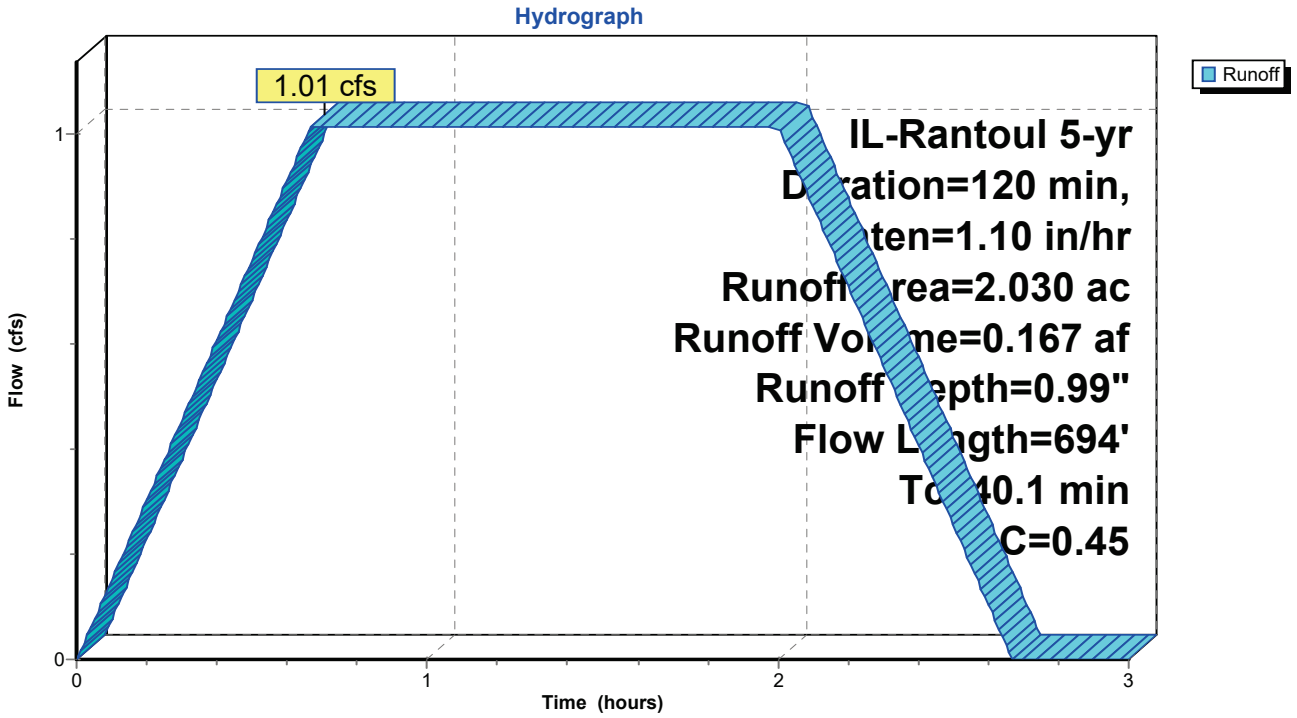
Runoff = 1.01 cfs @ 0.67 hrs, Volume= 0.167 af, Depth= 0.99"
Routed to Pond I52 : Inlet 5-2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.951	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.609	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.101	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.363	0.60	Gravel
0.006	0.95	Sidewalk
2.030	0.45	Weighted Average
2.024		99.70% Pervious Area
0.006		0.30% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.3	100	0.0020	0.07		**Sheet Flow, Area E outside of property** Grass: Short n= 0.150 P2= 3.03"
14.4	526	0.0076	0.61		**Shallow Concentrated Flow, Area E outside of property** Short Grass Pasture Kv= 7.0 fps
0.4	68	0.0248	2.54		**Shallow Concentrated Flow, Parking N of building** Unpaved Kv= 16.1 fps
40.1	694	Total			

Subcatchment CA19: SE 2 Parking Area



Summary for Subcatchment CA20: NE Parking Area

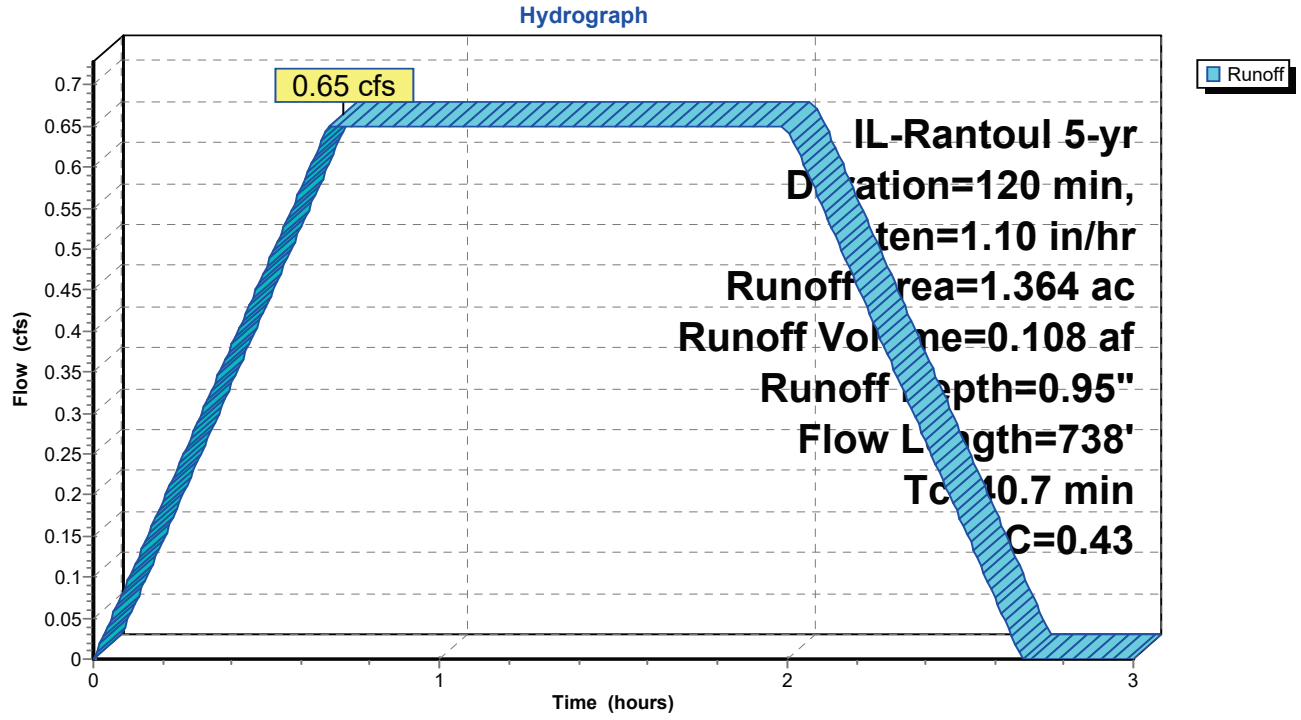
Runoff = 0.65 cfs @ 0.68 hrs, Volume= 0.108 af, Depth= 0.95"
Routed to Pond I63 : Inlet 6-3

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.338	0.42	Dana silt loam, 2 to 5 percent slopes (56B), Well drained, HSG C
0.319	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.362	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.345	0.60	Gravel
1.364	0.43	Weighted Average
1.364		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
25.3	100	0.0020	0.07		**Sheet Flow, Area E outside of property** Grass: Short n= 0.150 P2= 3.03"
14.8	568	0.0083	0.64		**Shallow Concentrated Flow, Area E outside of property** Short Grass Pasture Kv= 7.0 fps
0.6	70	0.0132	1.85		**Shallow Concentrated Flow, Parking N of building** Unpaved Kv= 16.1 fps
40.7	738	Total			

Subcatchment CA20: NE Parking Area



Summary for Subcatchment CA21: N Central Parking Area

[70] Warning: Tc<8dt requires smaller dt

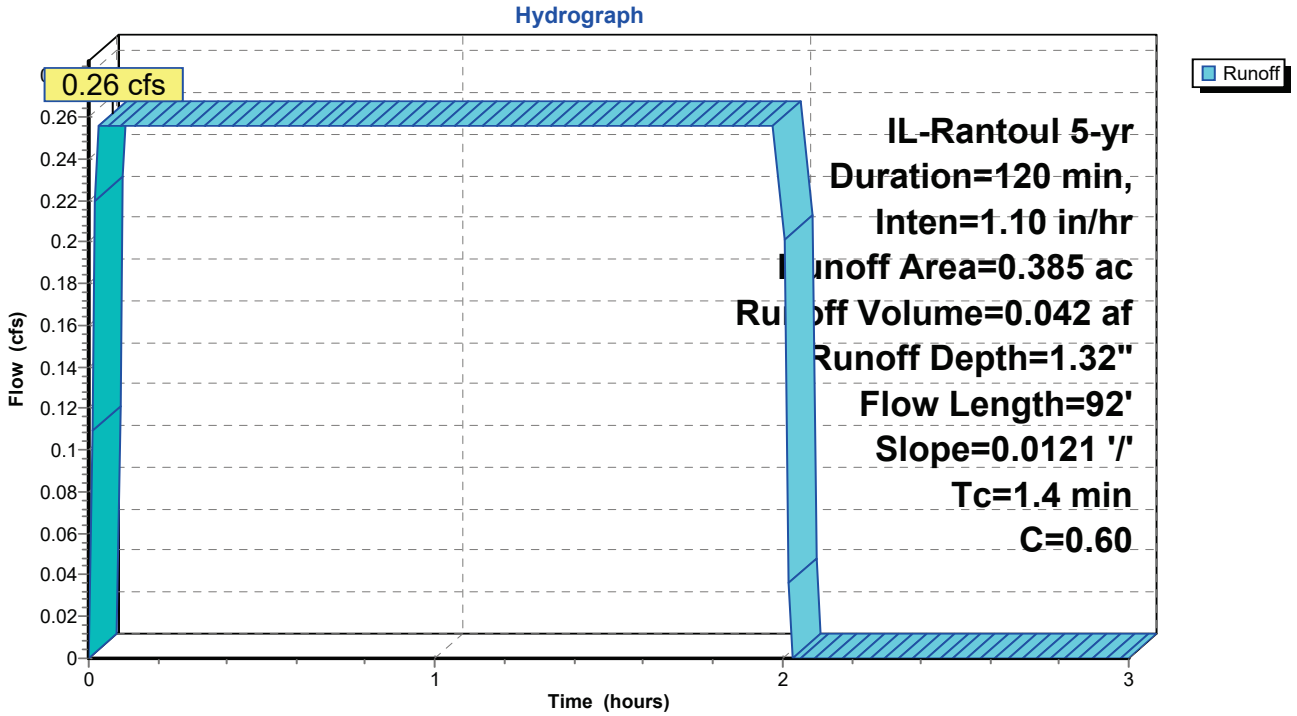
Runoff = 0.26 cfs @ 0.03 hrs, Volume= 0.042 af, Depth= 1.32"
Routed to Pond I62 : Inlet 6-2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.385	0.60	Gravel
0.385		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.4	92	0.0121	1.08		**Sheet Flow, Parking Area** Smooth surfaces n= 0.011 P2= 3.03"

Subcatchment CA21: N Central Parking Area



Summary for Subcatchment CA22: S Central Parking Area

[70] Warning: Tc<8dt requires smaller dt

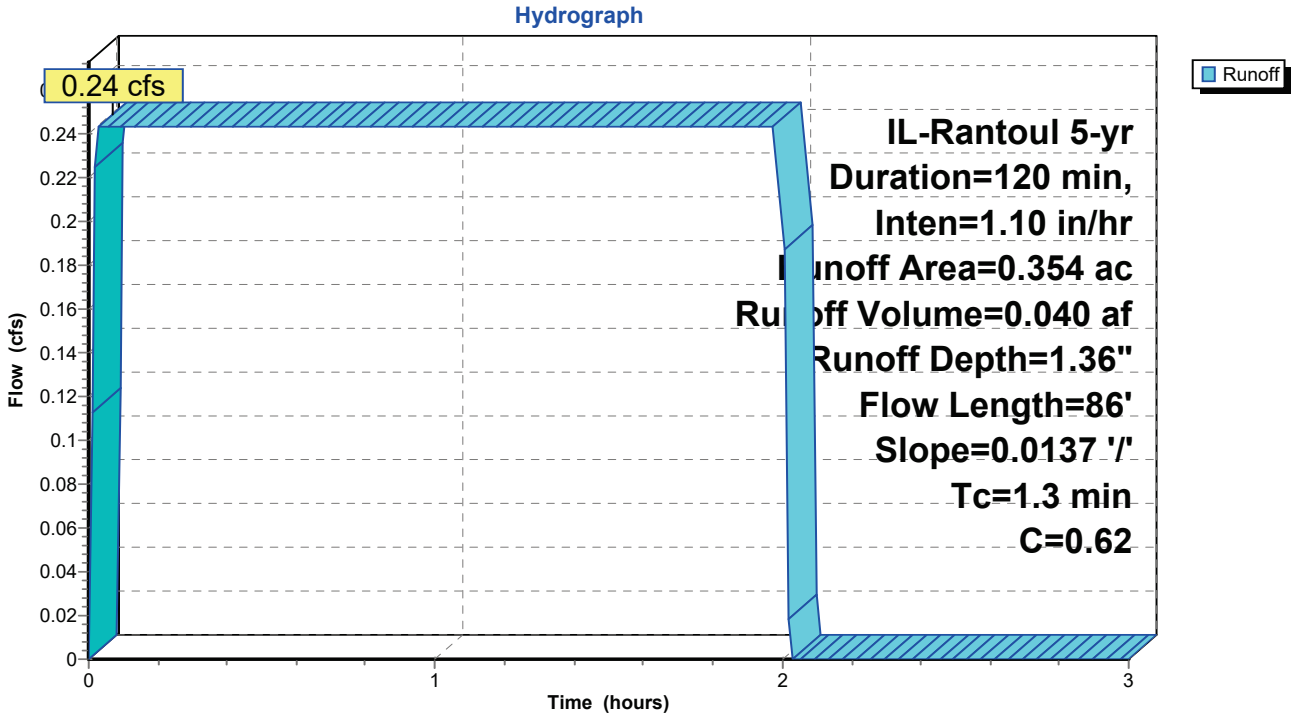
Runoff = 0.24 cfs @ 0.03 hrs, Volume= 0.040 af, Depth= 1.36"
Routed to Pond I51 : Inlet 5-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.003	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.331	0.60	Gravel
0.020	0.95	Sidewalk
0.354	0.62	Weighted Average
0.334		94.35% Pervious Area
0.020		5.65% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.3	86	0.0137	1.12		**Sheet Flow, Parking Area** Smooth surfaces n= 0.011 P2= 3.03"

Subcatchment CA22: S Central Parking Area



Summary for Subcatchment CA23: NW Parking Area

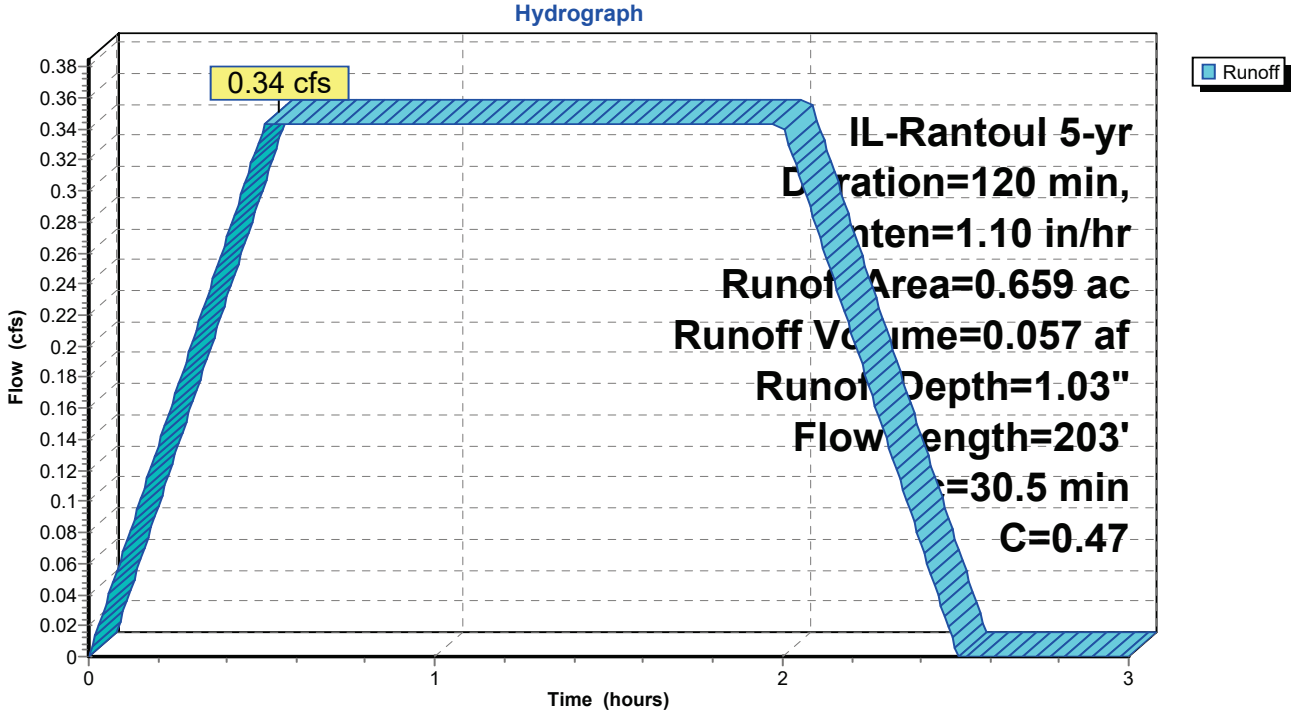
Runoff = 0.34 cfs @ 0.51 hrs, Volume= 0.057 af, Depth= 1.03"
Routed to Pond I61 : Manhole 6-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.296	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
0.363	0.60	Gravel
0.659	0.47	Weighted Average
0.659		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
29.2	100	0.0014	0.06		**Sheet Flow, Grass area N of building** Grass: Short n= 0.150 P2= 3.03"
0.6	40	0.0238	1.08		**Shallow Concentrated Flow, Grass area N of building** Short Grass Pasture Kv= 7.0 fps
0.7	63	0.0096	1.58		**Shallow Concentrated Flow, Parking N of building** Unpaved Kv= 16.1 fps
30.5	203	Total			

Subcatchment CA23: NW Parking Area



Summary for Subcatchment CA24: SW Parking Area

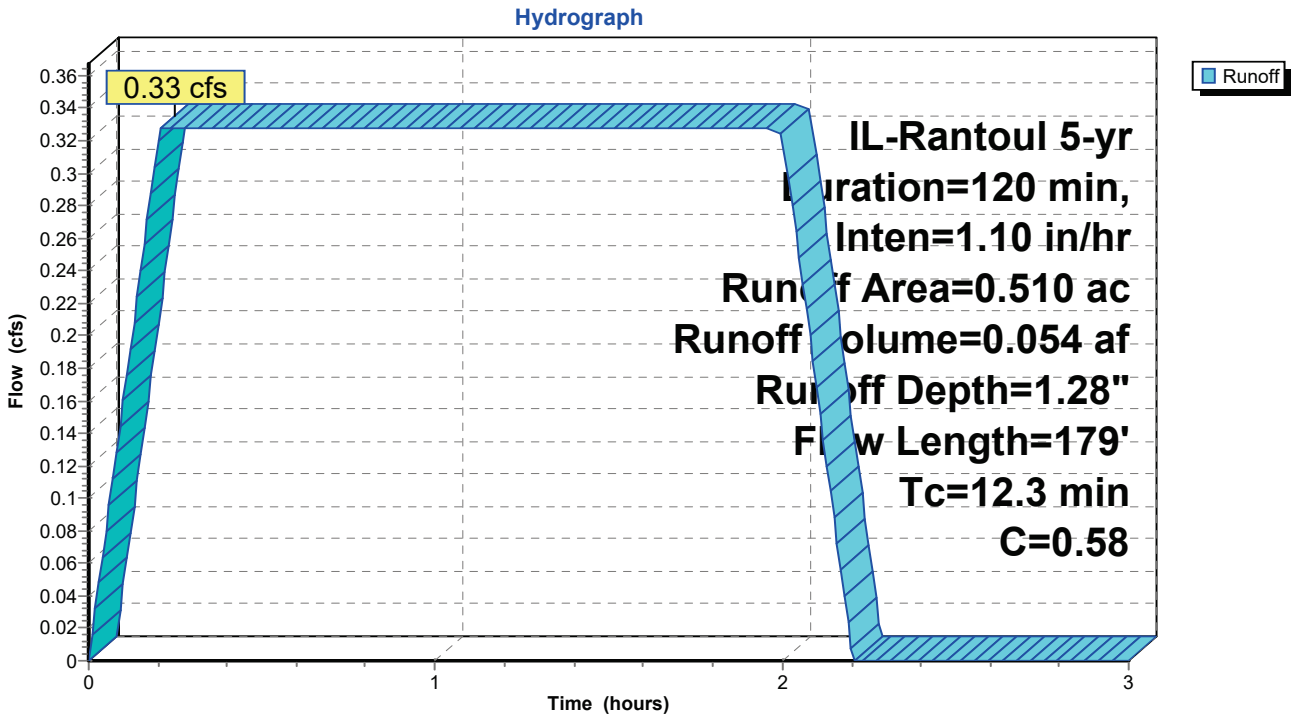
Runoff = 0.33 cfs @ 0.21 hrs, Volume= 0.054 af, Depth= 1.28"
Routed to Pond I31 : Manhole 3-1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.001	0.42	Wyanet silt loam, 5 to 10 percent slopes, eroded (622C2), Well drained, HSG C
0.065	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
0.015	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.394	0.60	Gravel
0.026	0.95	Sidewalk
0.009	0.95	Asphalt
0.510	0.58	Weighted Average
0.475		93.14% Pervious Area
0.035		6.86% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
11.4	78	0.0090	0.11		**Sheet Flow, Grass area N of building** Grass: Short n= 0.150 P2= 3.03"
0.9	101	0.0133	1.86		**Shallow Concentrated Flow, Parking N of building** Unpaved Kv= 16.1 fps
12.3	179	Total			

Subcatchment CA24: SW Parking Area



Summary for Subcatchment CA6: Pond Catchment Area

[70] Warning: Tc<8dt requires smaller dt

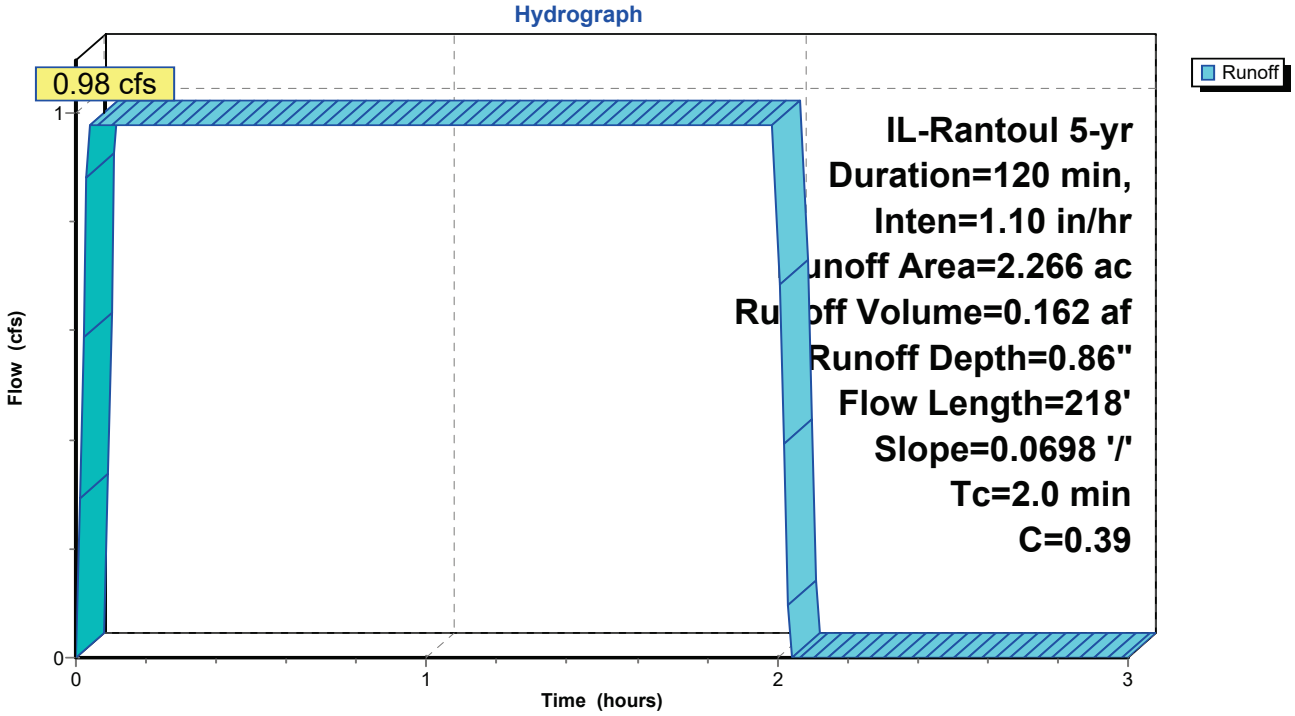
Runoff = 0.98 cfs @ 0.04 hrs, Volume= 0.162 af, Depth= 0.86"
Routed to Pond P1 : Detention Pond

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.523	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
1.385	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.063	0.40	Orthents, loamy, 1 to 7 percent slopes (802B), Well drained, HSG C
0.005	0.95	Concrete
0.290	0.95	Building
2.266	0.39	Weighted Average
1.971		86.98% Pervious Area
0.295		13.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
2.0	218	0.0698	1.85		**Shallow Concentrated Flow, Grass area W of parking area** Short Grass Pasture Kv= 7.0 fps

Subcatchment CA6: Pond Catchment Area



Summary for Subcatchment CA7: NE Station Area

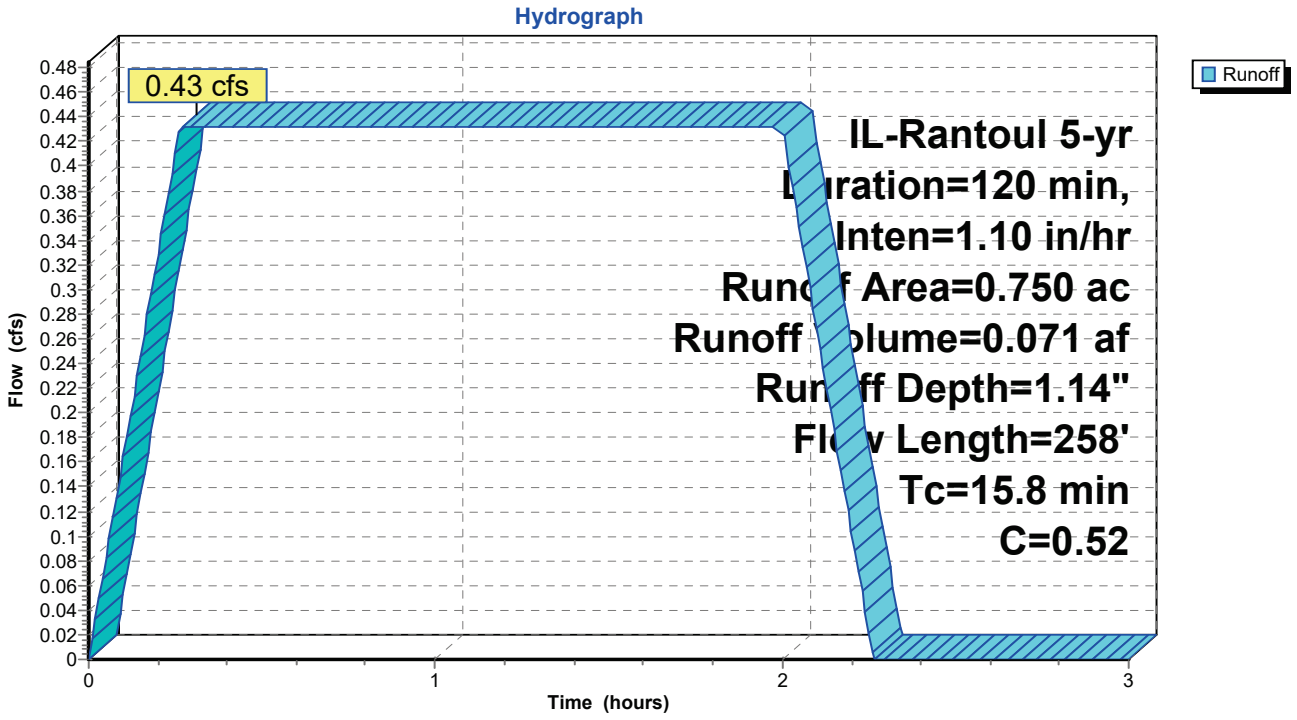
Runoff = 0.43 cfs @ 0.27 hrs, Volume= 0.071 af, Depth= 1.14"
Routed to Pond I17 : Trench Drain 1-7

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.479	0.30	Drummer silty clay loam, 0 to 2 percent slopes (152A), Poorly drained, HSG B/D
0.022	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.249	0.95	Asphalt
0.750	0.52	Weighted Average
0.501		66.80% Pervious Area
0.249		33.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	100	0.0084	0.12		**Sheet Flow, Parking N of building** Grass: Short n= 0.150 P2= 3.03"
0.6	50	0.0042	1.32		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
0.0	13	0.0927	6.18		**Shallow Concentrated Flow, Parking N of building** Paved Kv= 20.3 fps
1.0	95	0.0560	1.66		**Shallow Concentrated Flow, Parking N of building** Short Grass Pasture Kv= 7.0 fps
15.8	258	Total			

Subcatchment CA7: NE Station Area



Summary for Subcatchment CA8: East Station Area

[70] Warning: Tc<8dt requires smaller dt

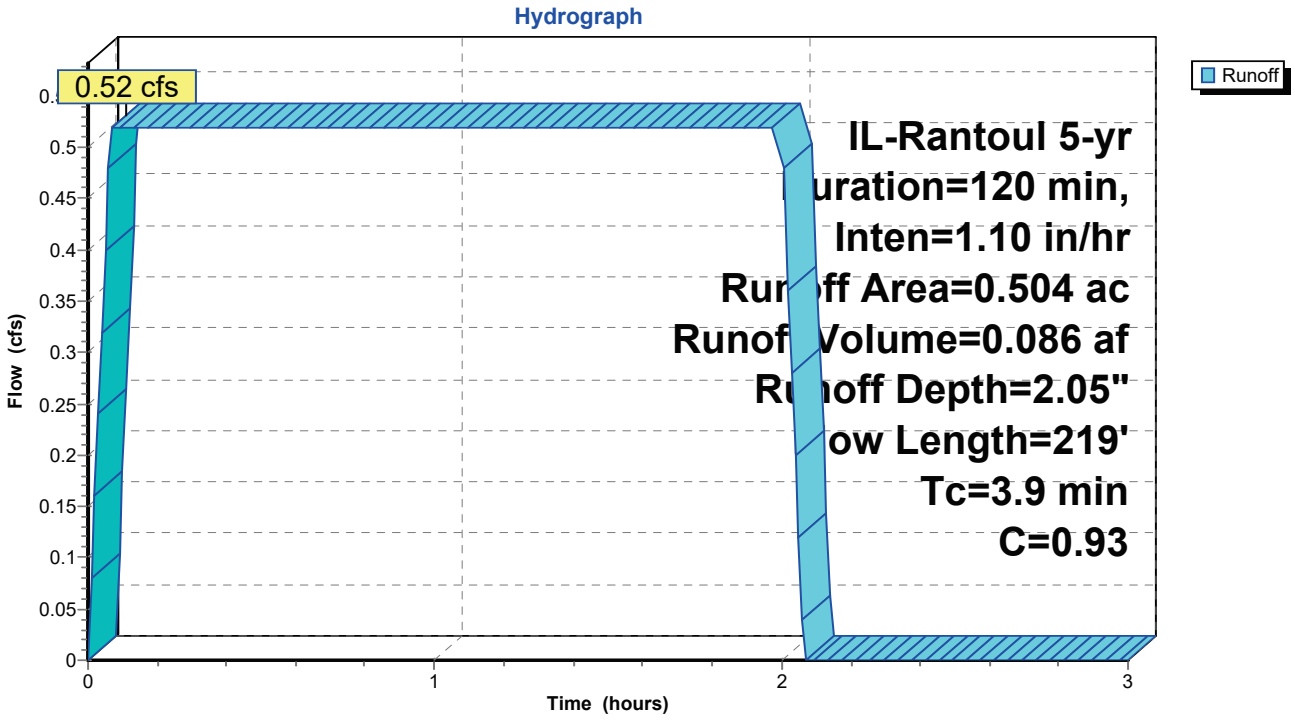
Runoff = 0.52 cfs @ 0.07 hrs, Volume= 0.086 af, Depth= 2.05"
Routed to Pond I16 : Inlet 1-6

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.012	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.492	0.95	Asphalt
0.504	0.93	Weighted Average
0.012		2.38% Pervious Area
0.492		97.62% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
1.7	100	0.0087	0.96		**Sheet Flow, Grass area W of parking area** Smooth surfaces n= 0.011 P2= 3.03"
2.2	119	0.0019	0.88		**Shallow Concentrated Flow, Grass area W of parking area** Paved Kv= 20.3 fps
3.9	219	Total			

Subcatchment CA8: East Station Area



Summary for Subcatchment CA9: SE Station Area

[70] Warning: Tc<8dt requires smaller dt

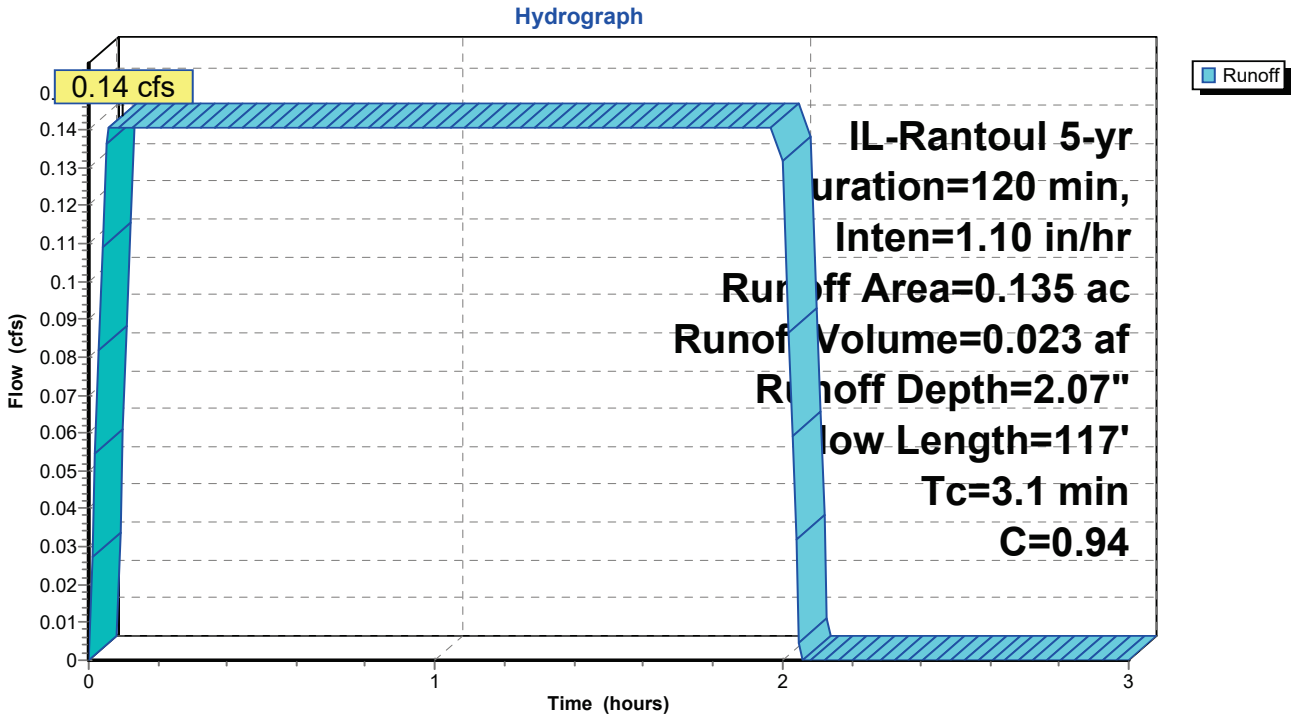
Runoff = 0.14 cfs @ 0.06 hrs, Volume= 0.023 af, Depth= 2.07"
Routed to Pond I19 : Inlet 1-9

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
IL-Rantoul 5-yr Duration=120 min, Inten=1.10 in/hr

Area (ac)	C	Description
0.002	0.30	Raub silt loam, 0 to 2 percent slopes (481A), Poorly drained, HSG B/D
0.133	0.95	Asphalt
0.135	0.94	Weighted Average
0.002		1.48% Pervious Area
0.133		98.52% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
3.0	100	0.0023	0.56		**Sheet Flow, Access Road** Smooth surfaces n= 0.011 P2= 3.03"
0.1	17	0.0253	3.23		**Shallow Concentrated Flow, Access Road** Paved Kv= 20.3 fps
3.1	117	Total			

Subcatchment CA9: SE Station Area



Summary for Reach R13: Pipe CA13 to I81

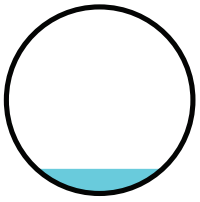
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.167 ac, 97.60% Impervious, Inflow Depth = 2.05" for 5-yr event
Inflow = 0.17 cfs @ 0.02 hrs, Volume= 0.028 af
Outflow = 0.17 cfs @ 0.35 hrs, Volume= 0.028 af, Atten= 0%, Lag= 19.8 min
Routed to Pond I81 : Inlet 8-1

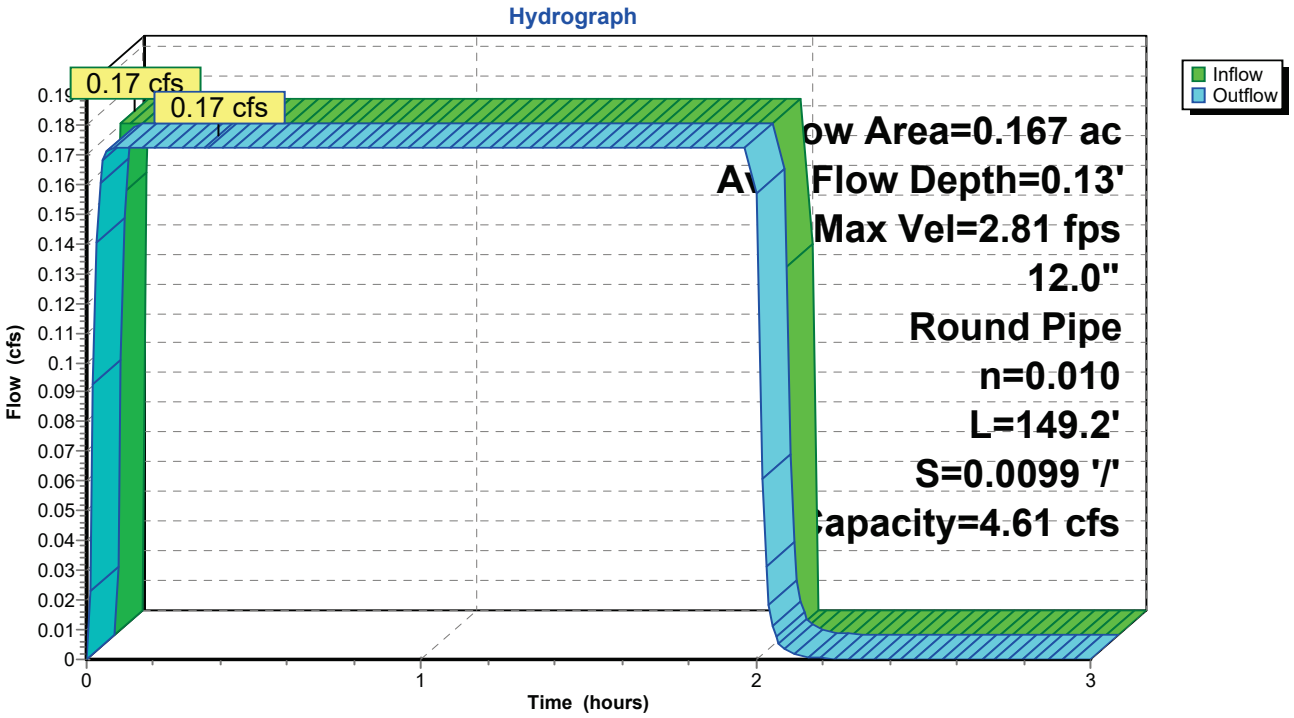
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 2.81 fps, Min. Travel Time= 0.9 min
Avg. Velocity = 2.50 fps, Avg. Travel Time= 1.0 min

Peak Storage= 9 cf @ 0.35 hrs
Average Depth at Peak Storage= 0.13' , Surface Width= 0.68'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 4.61 cfs

12.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 149.2' Slope= 0.0099 '/'
Inlet Invert= 750.17', Outlet Invert= 748.69'



Reach R13: Pipe CA13 to I81



Summary for Reach R14: Pipe I14 to Pond

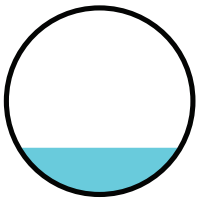
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 9.773 ac, 23.45% Impervious, Inflow Depth > 1.25" for 5-yr event
Inflow = 6.14 cfs @ 1.03 hrs, Volume= 1.015 af
Outflow = 6.14 cfs @ 1.04 hrs, Volume= 1.015 af, Atten= 0%, Lag= 0.5 min
Routed to Pond P1 : Detention Pond

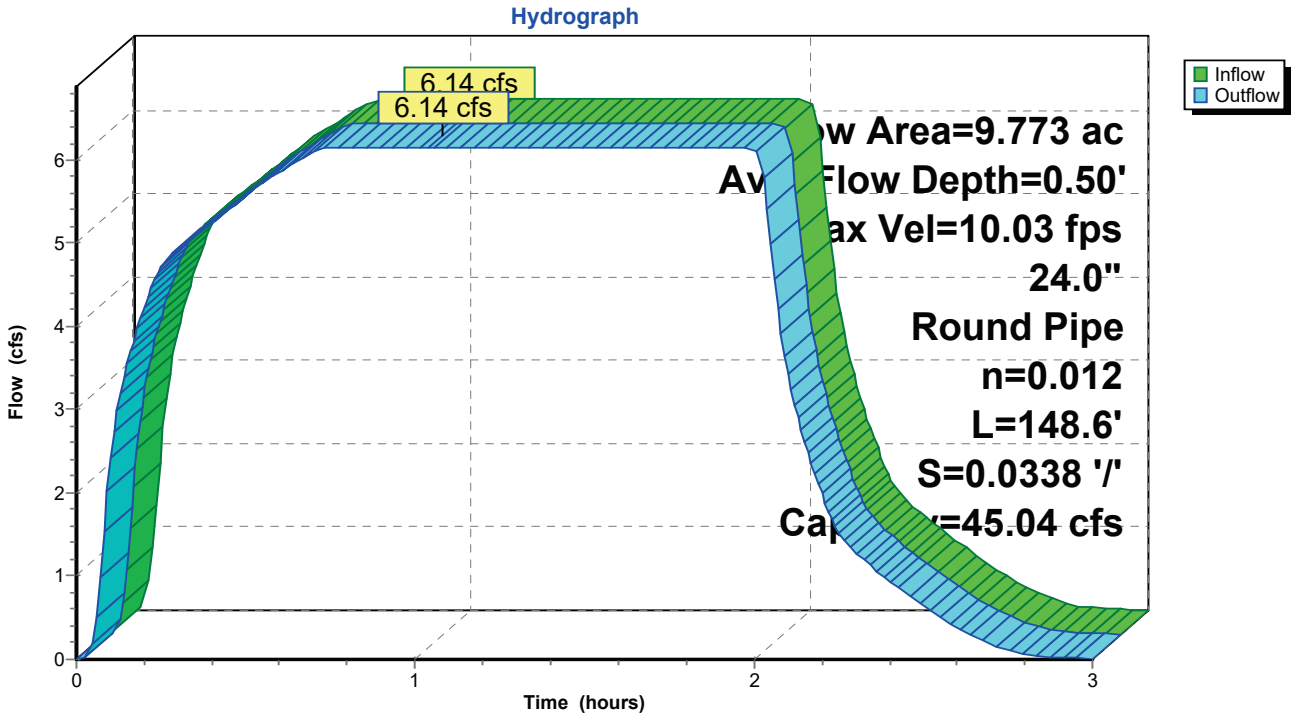
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 10.03 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 8.06 fps, Avg. Travel Time= 0.3 min

Peak Storage= 91 cf @ 1.04 hrs
Average Depth at Peak Storage= 0.50' , Surface Width= 1.73'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 45.04 cfs

24.0" Round Pipe
n= 0.012 Steel, smooth
Length= 148.6' Slope= 0.0338 '/'
Inlet Invert= 741.84', Outlet Invert= 736.82'



Reach R14: Pipe I14 to Pond



Summary for Reach R15: Pipe I15 to I18

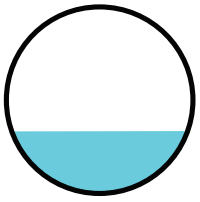
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 9.638 ac, 22.40% Impervious, Inflow Depth > 1.23" for 5-yr event
Inflow = 6.00 cfs @ 1.02 hrs, Volume= 0.992 af
Outflow = 6.00 cfs @ 1.03 hrs, Volume= 0.992 af, Atten= 0%, Lag= 0.6 min
Routed to Pond I18 : Catch Basin 1-8

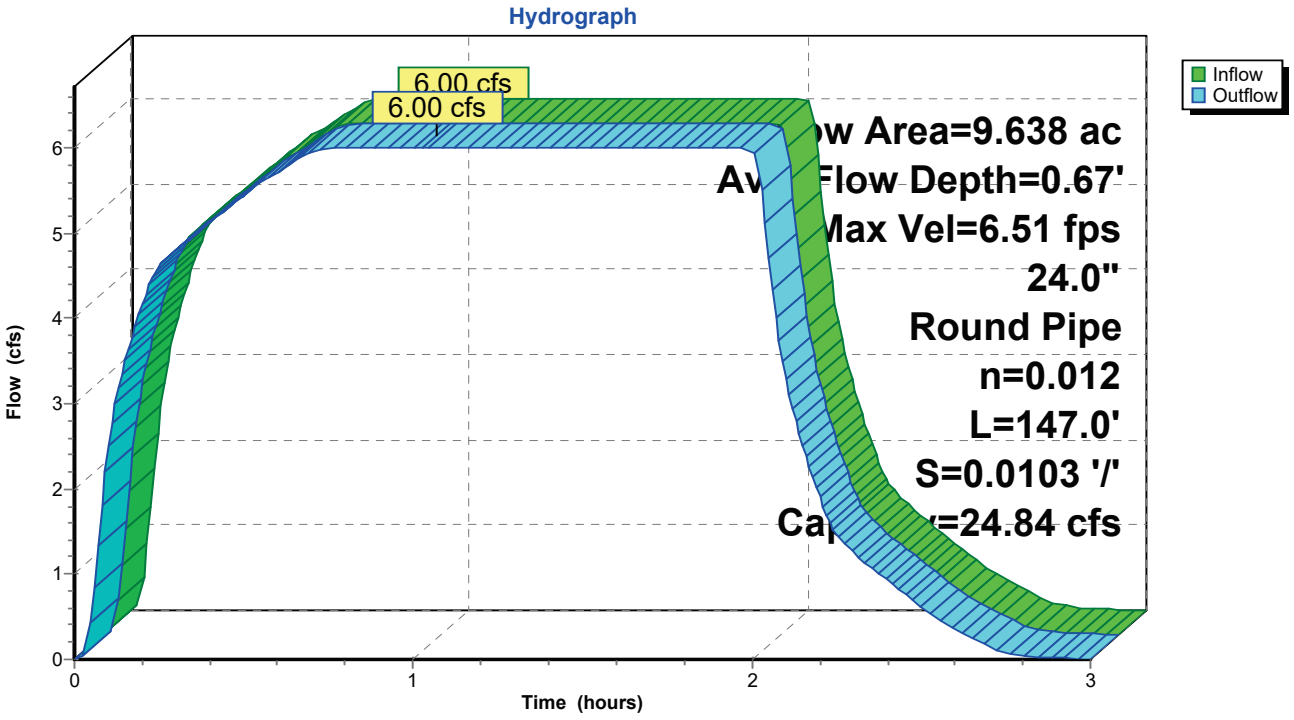
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 6.51 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 5.23 fps, Avg. Travel Time= 0.5 min

Peak Storage= 136 cf @ 1.02 hrs
Average Depth at Peak Storage= 0.67' , Surface Width= 1.89'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 24.84 cfs

24.0" Round Pipe
n= 0.012 Steel, smooth
Length= 147.0' Slope= 0.0103 '/'
Inlet Invert= 744.87', Outlet Invert= 743.36'



Reach R15: Pipe I15 to I18



Summary for Reach R16: Pipe I16 to I21

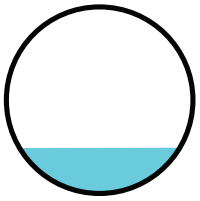
[52] Hint: Inlet/Outlet conditions not evaluated
[80] Warning: Exceeded Pond I16 by 0.06' @ 2.08 hrs (0.01 cfs 0.000 af)

Inflow Area = 0.504 ac, 97.62% Impervious, Inflow Depth = 2.05" for 5-yr event
Inflow = 0.52 cfs @ 0.13 hrs, Volume= 0.086 af
Outflow = 0.52 cfs @ 0.23 hrs, Volume= 0.086 af, Atten= 0%, Lag= 6.0 min
Routed to Pond I21 : Inlet 2-1

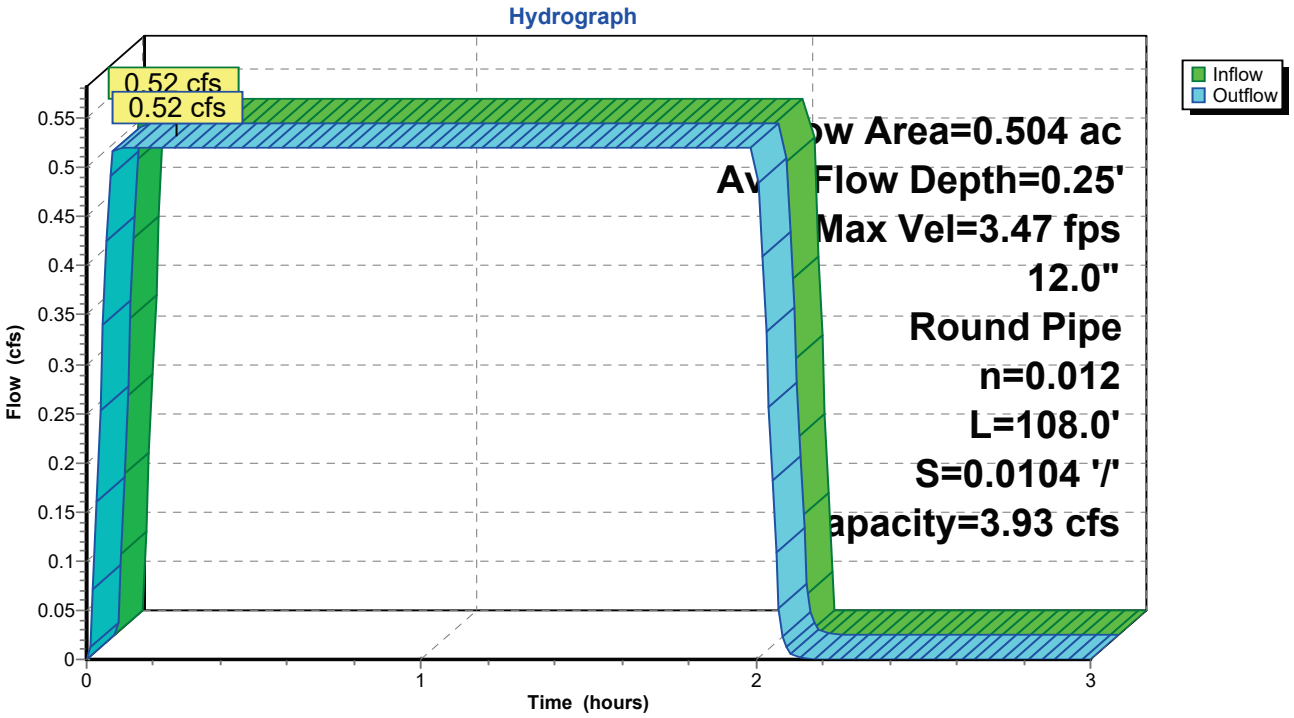
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.47 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 3.08 fps, Avg. Travel Time= 0.6 min

Peak Storage= 16 cf @ 0.22 hrs
Average Depth at Peak Storage= 0.25' , Surface Width= 0.86'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.93 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 108.0' Slope= 0.0104 '/'
Inlet Invert= 749.30', Outlet Invert= 748.18'



Reach R16: Pipe I16 to I21



Summary for Reach R17: Pipe I17 to Pond

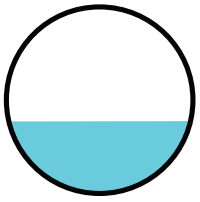
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.750 ac, 33.20% Impervious, Inflow Depth = 1.14" for 5-yr event
Inflow = 0.43 cfs @ 0.27 hrs, Volume= 0.071 af
Outflow = 0.43 cfs @ 0.27 hrs, Volume= 0.071 af, Atten= 0%, Lag= 0.0 min
Routed to Pond P1 : Detention Pond

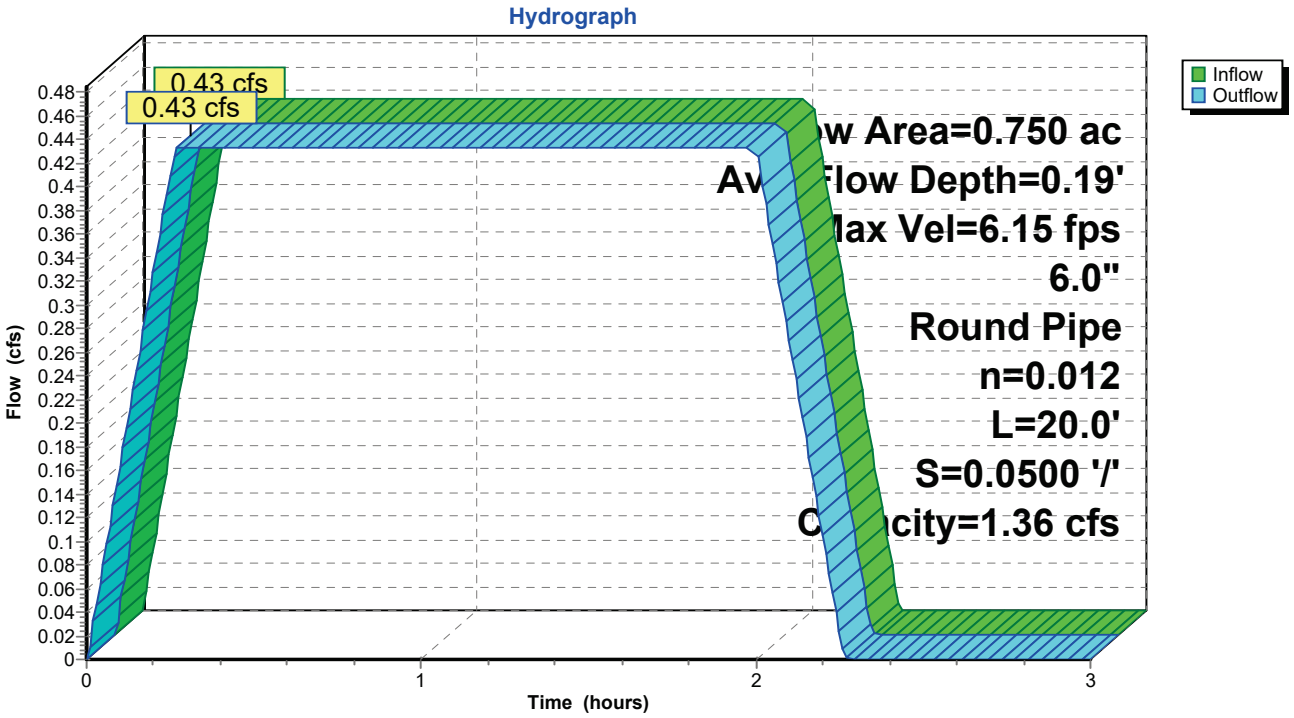
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 6.15 fps, Min. Travel Time= 0.1 min
Avg. Velocity = 5.82 fps, Avg. Travel Time= 0.1 min

Peak Storage= 1 cf @ 0.27 hrs
Average Depth at Peak Storage= 0.19' , Surface Width= 0.49'
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 1.36 cfs

6.0" Round Pipe
n= 0.012 Steel, smooth
Length= 20.0' Slope= 0.0500 '/'
Inlet Invert= 745.50', Outlet Invert= 744.50'



Reach R17: Pipe I17 to Pond



Summary for Reach R18: Pipe I18 to I14

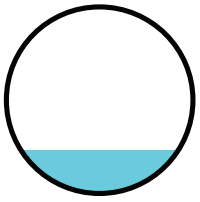
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 9.773 ac, 23.45% Impervious, Inflow Depth > 1.25" for 5-yr event
Inflow = 6.14 cfs @ 1.03 hrs, Volume= 1.015 af
Outflow = 6.14 cfs @ 1.06 hrs, Volume= 1.015 af, Atten= 0%, Lag= 1.9 min
Routed to Pond I14 : Inlet 1-4

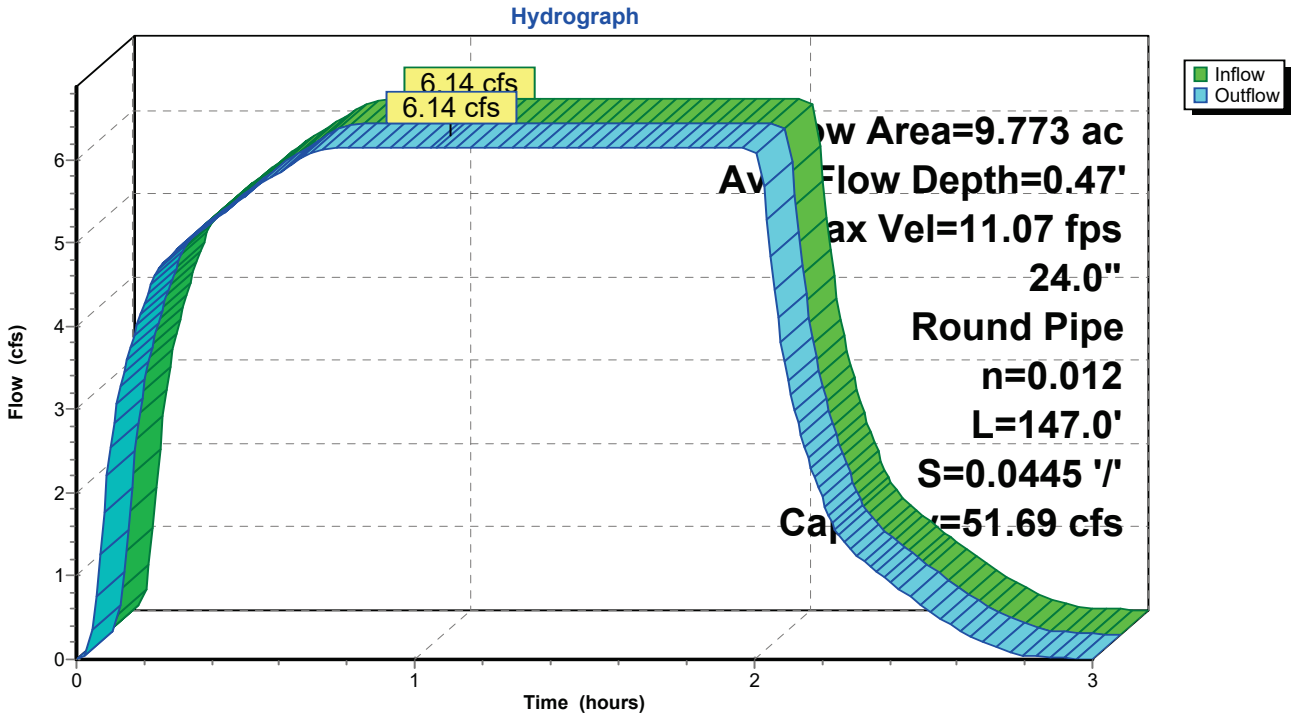
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 11.07 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 8.89 fps, Avg. Travel Time= 0.3 min

Peak Storage= 82 cf @ 1.06 hrs
Average Depth at Peak Storage= 0.47' , Surface Width= 1.69'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 51.69 cfs

24.0" Round Pipe
n= 0.012 Steel, smooth
Length= 147.0' Slope= 0.0445 '/'
Inlet Invert= 743.36', Outlet Invert= 736.82'



Reach R18: Pipe I18 to I14



Summary for Reach R19: Pipe I19 to I14

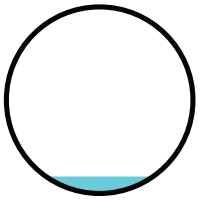
[52] Hint: Inlet/Outlet conditions not evaluated
[80] Warning: Exceeded Pond I19 by 0.01' @ 2.06 hrs (0.00 cfs 0.000 af)

Inflow Area = 0.135 ac, 98.52% Impervious, Inflow Depth = 2.07" for 5-yr event
Inflow = 0.14 cfs @ 0.06 hrs, Volume= 0.023 af
Outflow = 0.14 cfs @ 0.06 hrs, Volume= 0.023 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I18 : Catch Basin 1-8

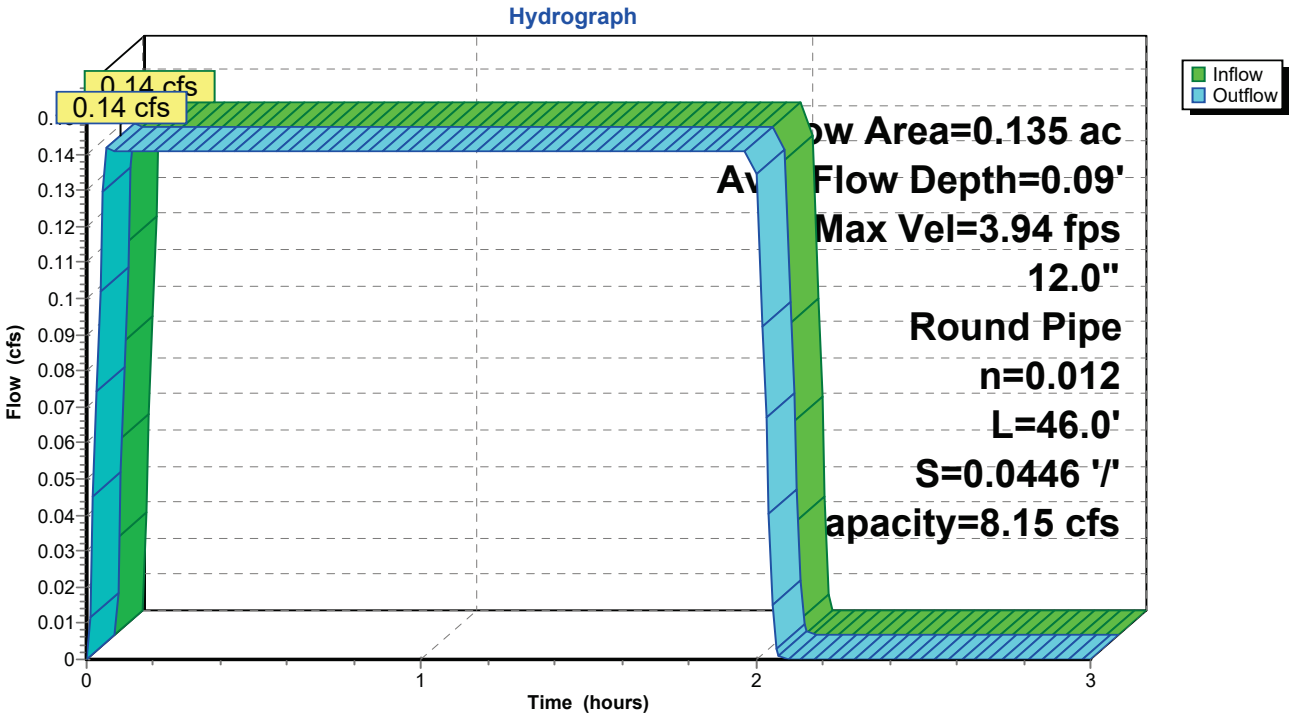
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.94 fps, Min. Travel Time= 0.2 min
Avg. Velocity = 3.83 fps, Avg. Travel Time= 0.2 min

Peak Storage= 2 cf @ 0.06 hrs
Average Depth at Peak Storage= 0.09' , Surface Width= 0.58'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 8.15 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 46.0' Slope= 0.0446 '/'
Inlet Invert= 745.41', Outlet Invert= 743.36'



Reach R19: Pipe I19 to I14



Summary for Reach R21: Pipe I21 to I15

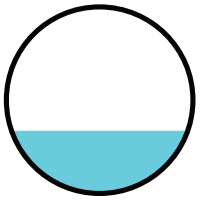
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 7.115 ac, 15.50% Impervious, Inflow Depth > 1.18" for 5-yr event
Inflow = 4.23 cfs @ 1.01 hrs, Volume= 0.699 af
Outflow = 4.23 cfs @ 1.02 hrs, Volume= 0.699 af, Atten= 0%, Lag= 0.6 min
Routed to Pond I15 : Inlet 1-5

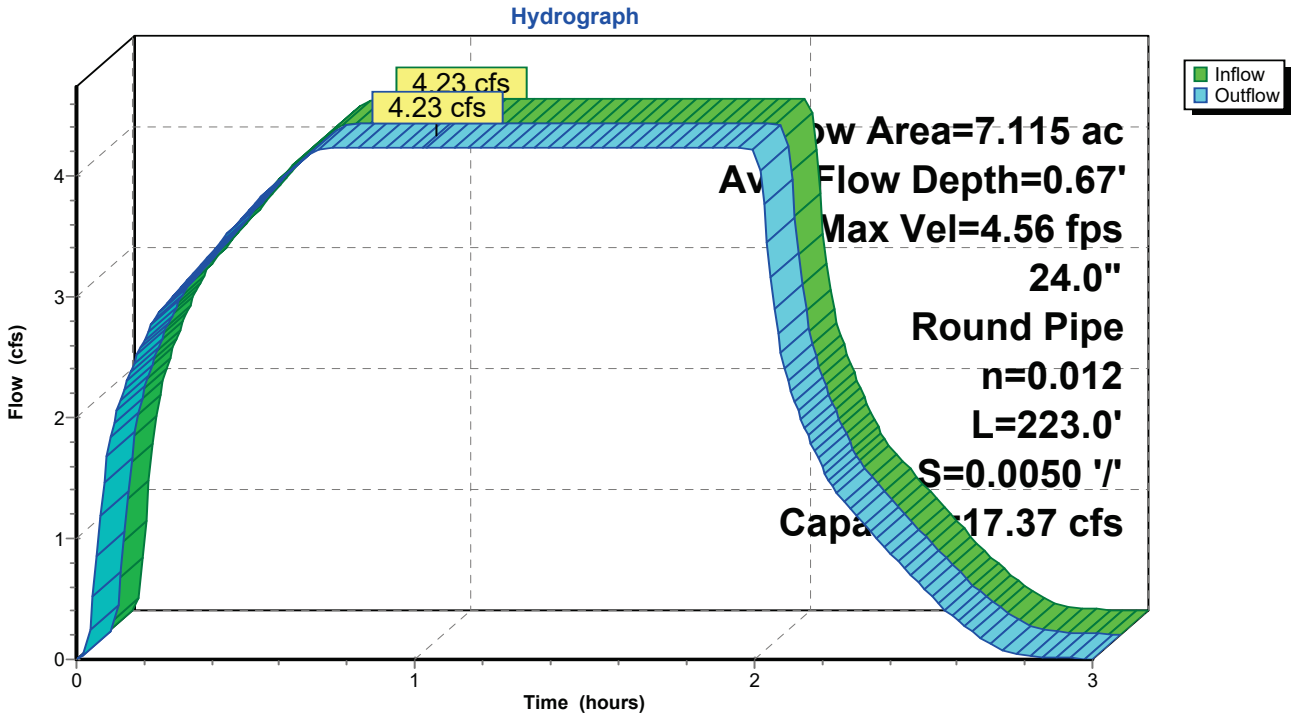
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.56 fps, Min. Travel Time= 0.8 min
Avg. Velocity = 3.70 fps, Avg. Travel Time= 1.0 min

Peak Storage= 207 cf @ 1.02 hrs
Average Depth at Peak Storage= 0.67' , Surface Width= 1.89'
Bank-Full Depth= 2.00' Flow Area= 3.1 sf, Capacity= 17.37 cfs

24.0" Round Pipe
n= 0.012 Steel, smooth
Length= 223.0' Slope= 0.0050 '/'
Inlet Invert= 746.00', Outlet Invert= 744.88'



Reach R21: Pipe I21 to I15



Summary for Reach R31: Pipe I31 to I21

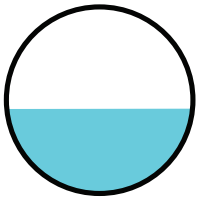
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 5.458 ac, 1.12% Impervious, Inflow Depth > 1.06" for 5-yr event
Inflow = 2.93 cfs @ 0.93 hrs, Volume= 0.484 af
Outflow = 2.93 cfs @ 0.96 hrs, Volume= 0.484 af, Atten= 0%, Lag= 1.8 min
Routed to Pond I21 : Inlet 2-1

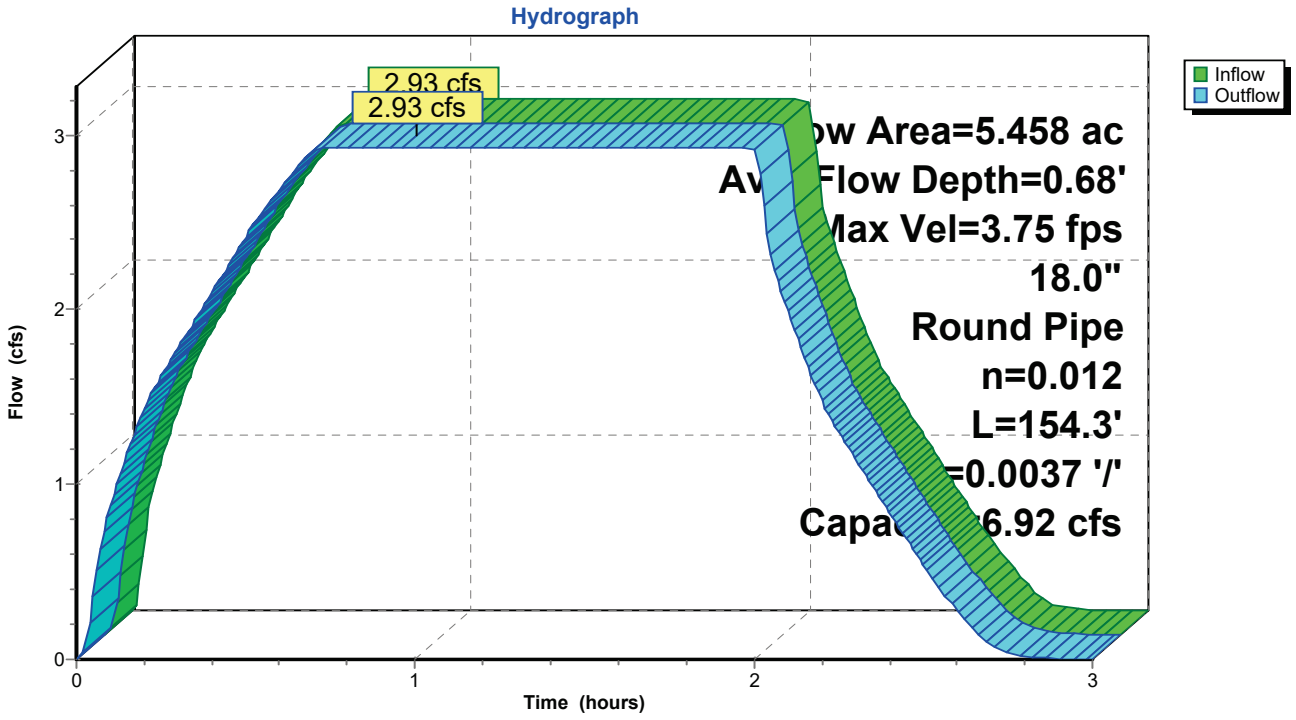
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.75 fps, Min. Travel Time= 0.7 min
Avg. Velocity = 3.06 fps, Avg. Travel Time= 0.8 min

Peak Storage= 120 cf @ 0.96 hrs
Average Depth at Peak Storage= 0.68' , Surface Width= 1.49'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 6.92 cfs

18.0" Round Pipe
n= 0.012 Steel, smooth
Length= 154.3' Slope= 0.0037 '/'
Inlet Invert= 747.75', Outlet Invert= 747.18'



Reach R31: Pipe I31 to I21



Summary for Reach R41: Pipe I41 to I31

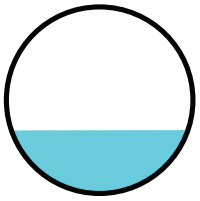
[52] Hint: Inlet/Outlet conditions not evaluated
[80] Warning: Exceeded Pond I41 by 0.22' @ 2.04 hrs (0.20 cfs 0.001 af)

Inflow Area = 0.503 ac,100.00% Impervious, Inflow Depth = 2.09" for 5-yr event
Inflow = 0.53 cfs @ 0.32 hrs, Volume= 0.088 af
Outflow = 0.53 cfs @ 1.05 hrs, Volume= 0.088 af, Atten= 0%, Lag= 43.8 min
Routed to Pond I21 : Inlet 2-1

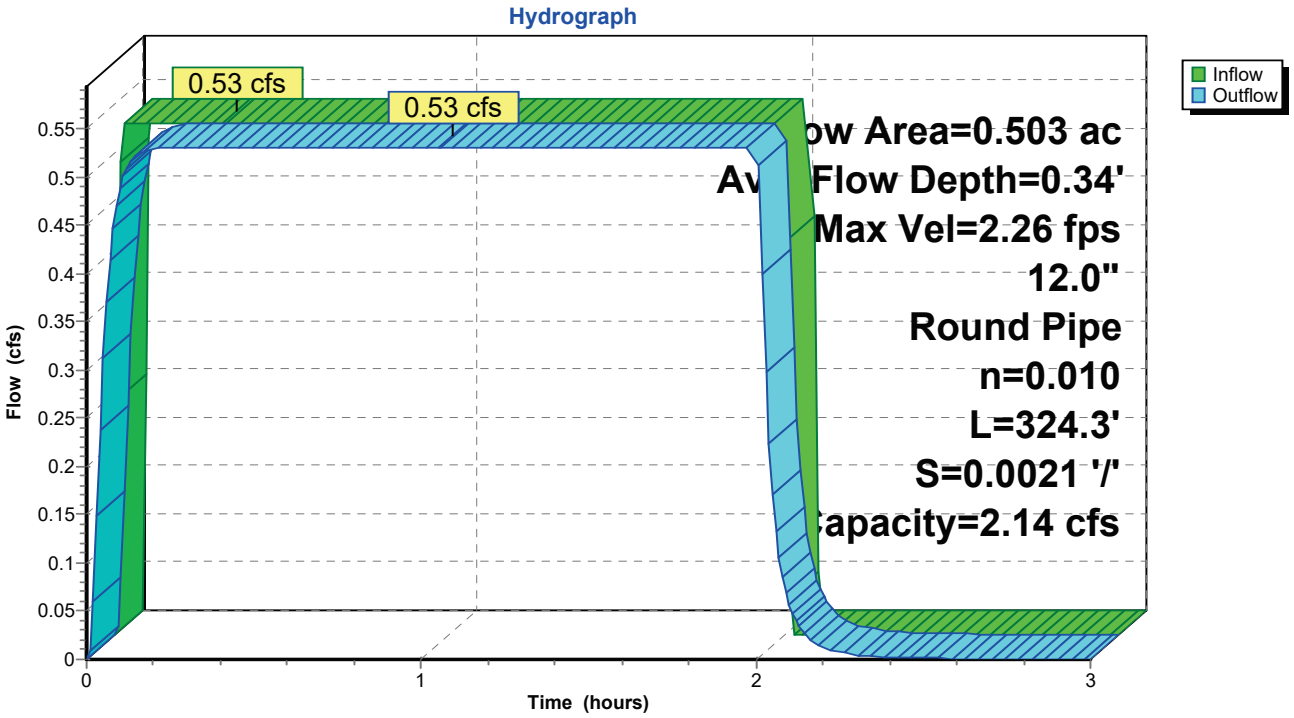
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 2.26 fps, Min. Travel Time= 2.4 min
Avg. Velocity = 1.67 fps, Avg. Travel Time= 3.2 min

Peak Storage= 76 cf @ 1.04 hrs
Average Depth at Peak Storage= 0.34' , Surface Width= 0.95'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 2.14 cfs

12.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 324.3' Slope= 0.0021 '/'
Inlet Invert= 748.86', Outlet Invert= 748.17'



Reach R41: Pipe I41 to I31



Summary for Reach R51: Pipe I51 to I31

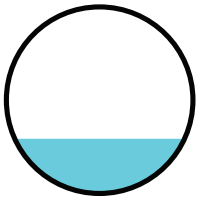
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 2.540 ac, 1.02% Impervious, Inflow Depth = 1.05" for 5-yr event
Inflow = 1.35 cfs @ 0.80 hrs, Volume= 0.223 af
Outflow = 1.35 cfs @ 0.81 hrs, Volume= 0.223 af, Atten= 0%, Lag= 0.6 min
Routed to Pond I31 : Manhole 3-1

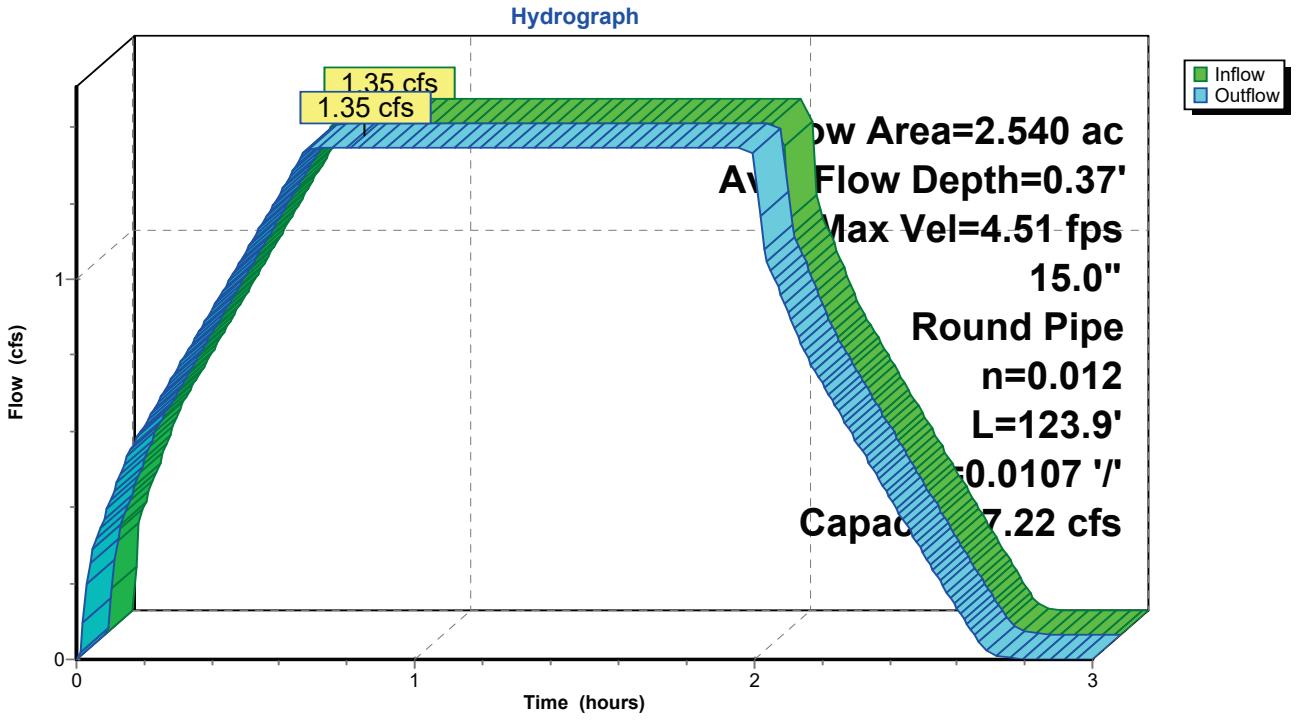
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.51 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 3.65 fps, Avg. Travel Time= 0.6 min

Peak Storage= 37 cf @ 0.80 hrs
Average Depth at Peak Storage= 0.37' , Surface Width= 1.14'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 7.22 cfs

15.0" Round Pipe
n= 0.012 Steel, smooth
Length= 123.9' Slope= 0.0107 '/'
Inlet Invert= 749.07', Outlet Invert= 747.75'



Reach R51: Pipe I51 to I31



Summary for Reach R52: Pipe I52 to I51

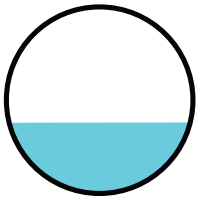
[52] Hint: Inlet/Outlet conditions not evaluated
[80] Warning: Exceeded Pond I52 by 0.01' @ 2.80 hrs (0.00 cfs 0.000 af)

Inflow Area = 2.186 ac, 0.27% Impervious, Inflow Depth = 1.00" for 5-yr event
Inflow = 1.10 cfs @ 0.67 hrs, Volume= 0.183 af
Outflow = 1.10 cfs @ 0.79 hrs, Volume= 0.183 af, Atten= 0%, Lag= 7.2 min
Routed to Pond I51 : Inlet 5-1

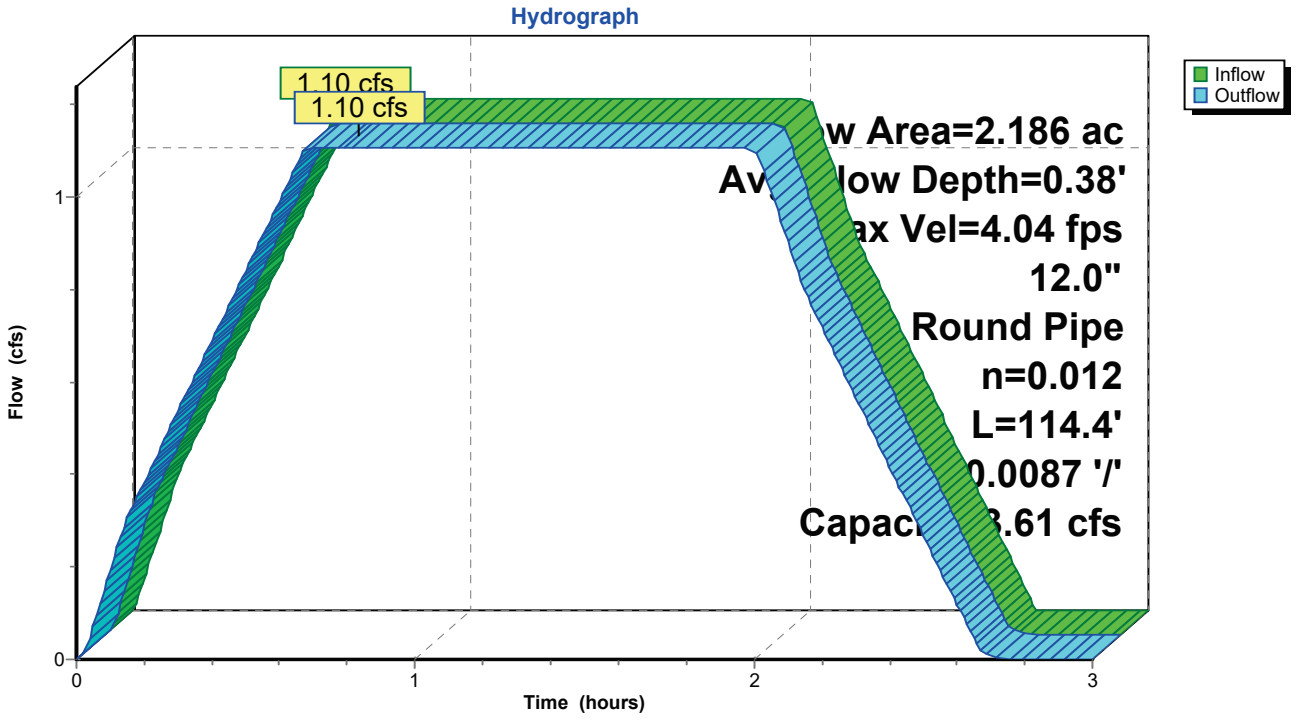
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.04 fps, Min. Travel Time= 0.5 min
Avg. Velocity = 3.27 fps, Avg. Travel Time= 0.6 min

Peak Storage= 31 cf @ 0.79 hrs
Average Depth at Peak Storage= 0.38' , Surface Width= 0.97'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.61 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 114.4' Slope= 0.0087 '/'
Inlet Invert= 750.10', Outlet Invert= 749.10'



Reach R52: Pipe I52 to I51



Summary for Reach R53: Pipe I53 to I52

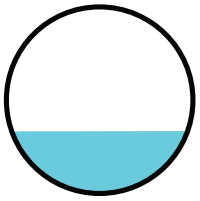
[52] Hint: Inlet/Outlet conditions not evaluated
[80] Warning: Exceeded Pond I53 by 0.04' @ 2.14 hrs (0.00 cfs 0.000 af)

Inflow Area = 0.156 ac, 0.00% Impervious, Inflow Depth = 1.17" for 5-yr event
Inflow = 0.09 cfs @ 0.14 hrs, Volume= 0.015 af
Outflow = 0.09 cfs @ 0.36 hrs, Volume= 0.015 af, Atten= 0%, Lag= 13.2 min
Routed to Pond I52 : Inlet 5-2

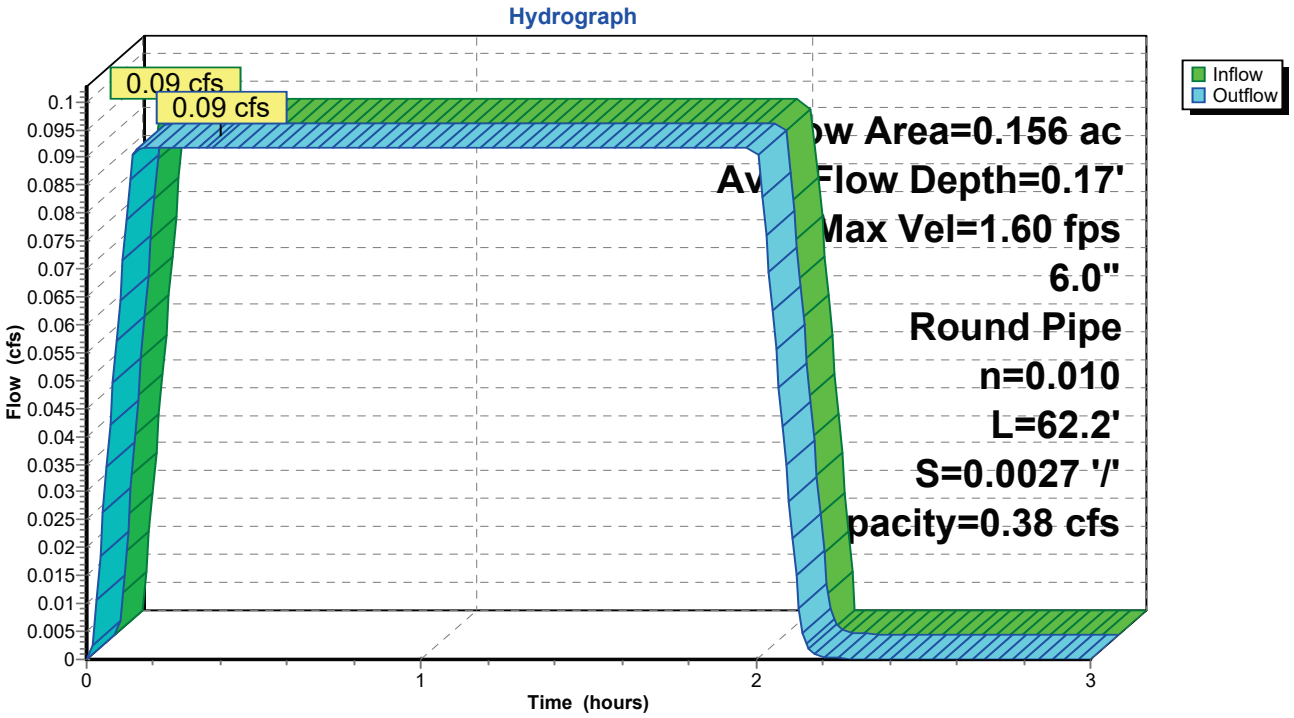
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 1.60 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 1.40 fps, Avg. Travel Time= 0.7 min

Peak Storage= 4 cf @ 0.36 hrs
Average Depth at Peak Storage= 0.17' , Surface Width= 0.47'
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 0.38 cfs

6.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 62.2' Slope= 0.0027 '/'
Inlet Invert= 750.43', Outlet Invert= 750.26'



Reach R53: Pipe I53 to I52



Summary for Reach R54: Pipe I54 to I63

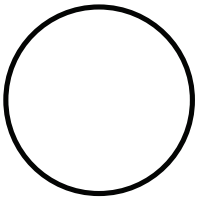
[52] Hint: Inlet/Outlet conditions not evaluated

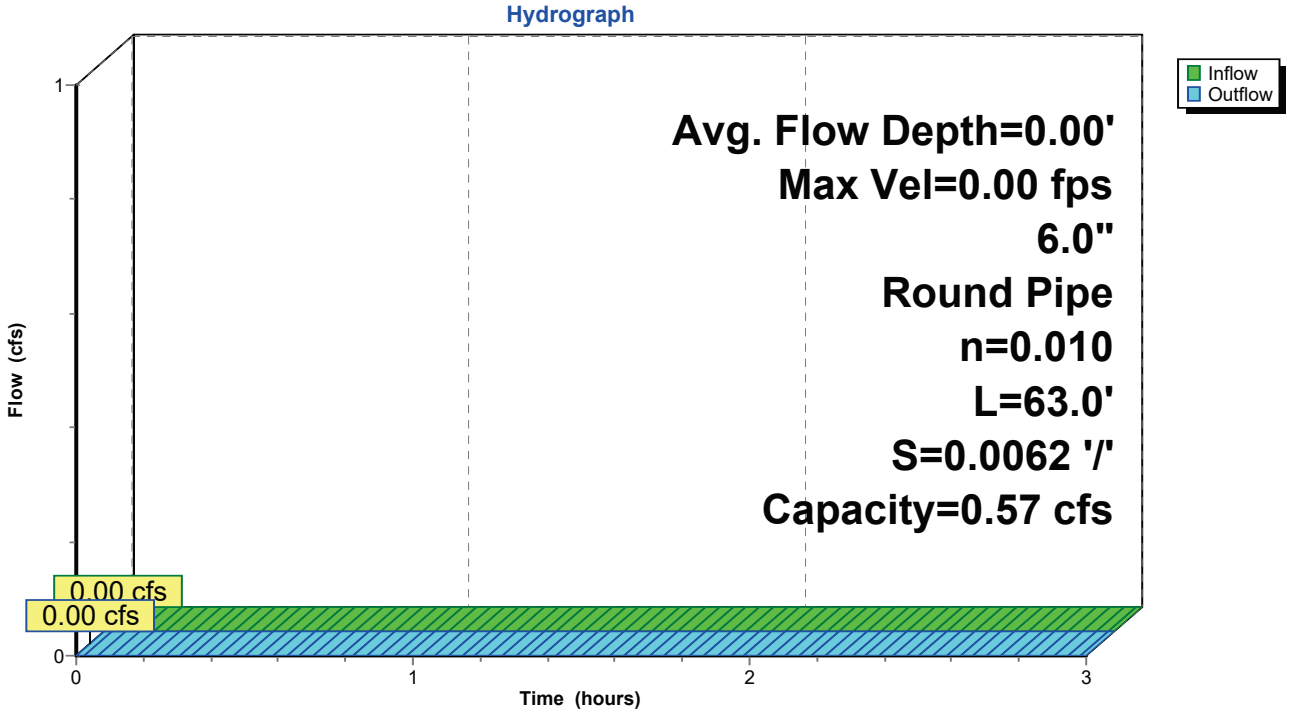
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I63 : Inlet 6-3

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 0.50' Flow Area= 0.2 sf, Capacity= 0.57 cfs

6.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 63.0' Slope= 0.0062 '/'
Inlet Invert= 750.30', Outlet Invert= 749.91'





Summary for Reach R61: Pipe I61 to I31

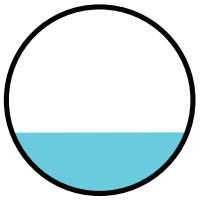
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 2.408 ac, 0.00% Impervious, Inflow Depth > 1.03" for 5-yr event
Inflow = 1.25 cfs @ 0.93 hrs, Volume= 0.207 af
Outflow = 1.25 cfs @ 0.94 hrs, Volume= 0.207 af, Atten= 0%, Lag= 0.6 min
Routed to Pond I31 : Manhole 3-1

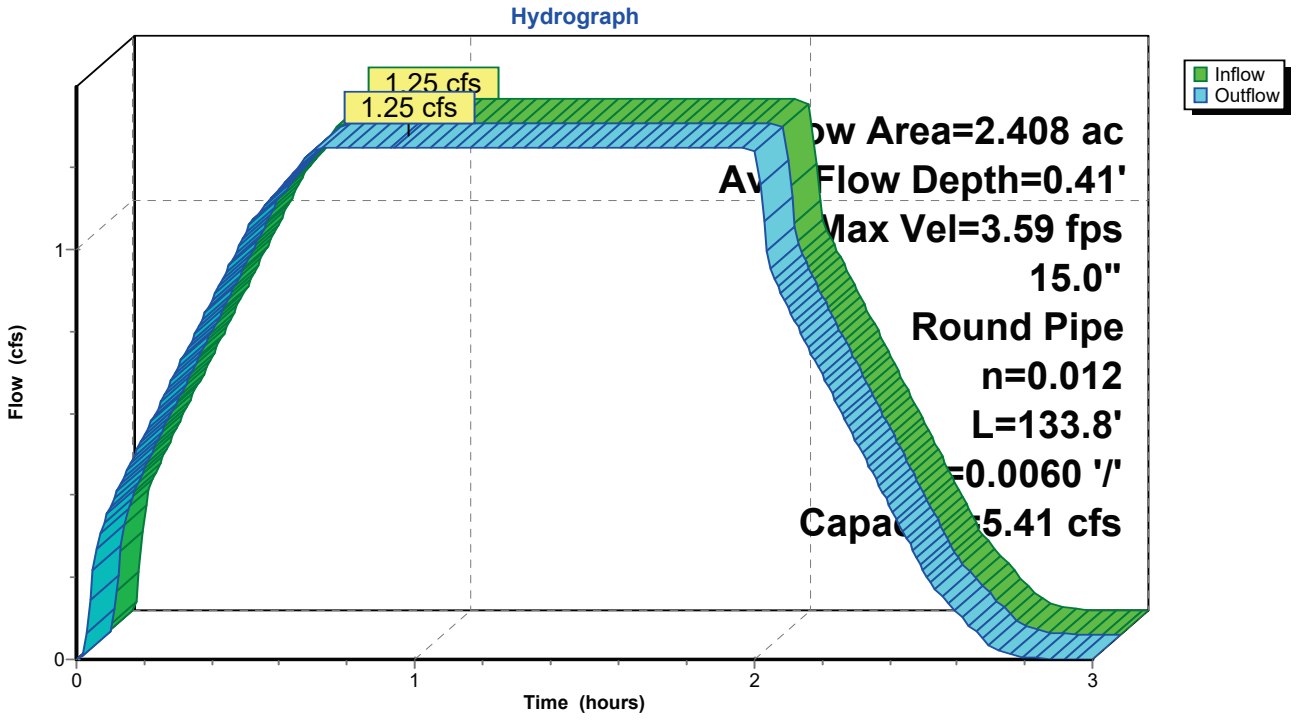
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.59 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 2.92 fps, Avg. Travel Time= 0.8 min

Peak Storage= 47 cf @ 0.94 hrs
Average Depth at Peak Storage= 0.41' , Surface Width= 1.17'
Bank-Full Depth= 1.25' Flow Area= 1.2 sf, Capacity= 5.41 cfs

15.0" Round Pipe
n= 0.012 Steel, smooth
Length= 133.8' Slope= 0.0060 '/'
Inlet Invert= 748.55', Outlet Invert= 747.75'



Reach R61: Pipe I61 to I31



Summary for Reach R62: Pipe I62 to I61

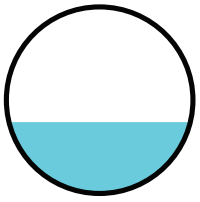
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.749 ac, 0.00% Impervious, Inflow Depth > 1.03" for 5-yr event
Inflow = 0.91 cfs @ 0.91 hrs, Volume= 0.150 af
Outflow = 0.91 cfs @ 0.92 hrs, Volume= 0.150 af, Atten= 0%, Lag= 0.6 min
Routed to Pond I61 : Manhole 6-1

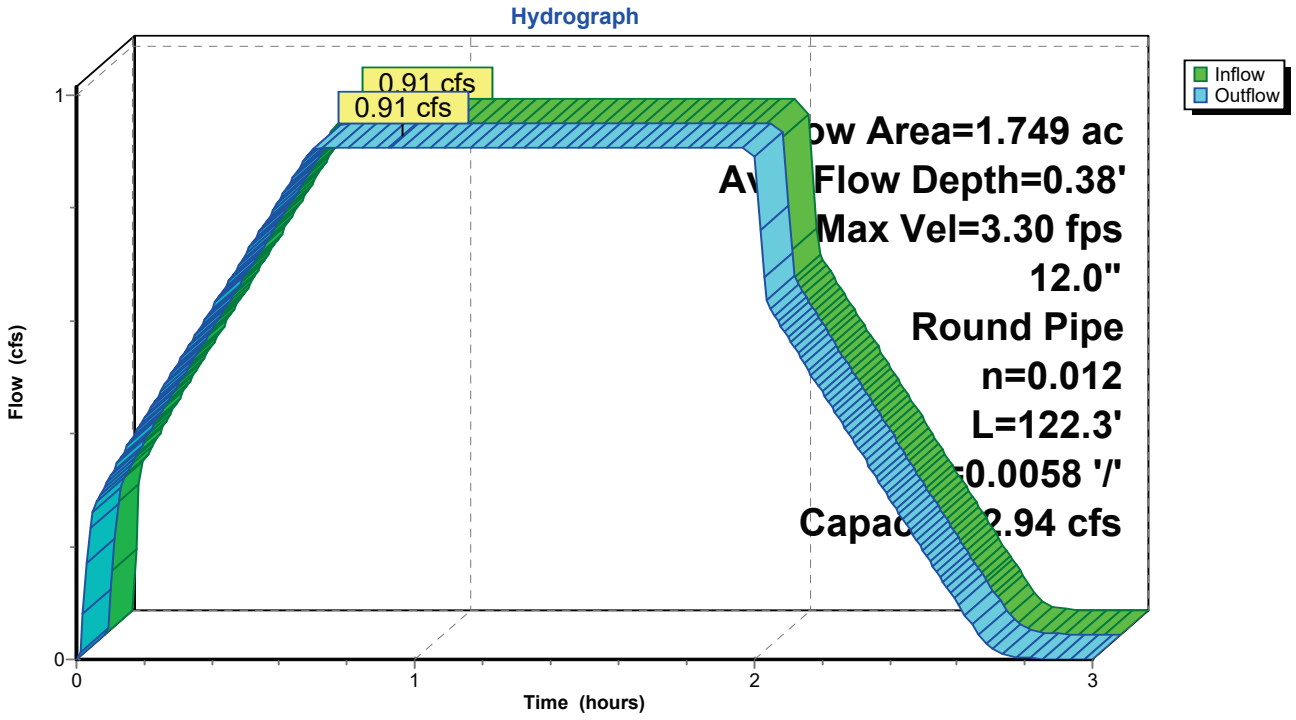
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.30 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 2.69 fps, Avg. Travel Time= 0.8 min

Peak Storage= 34 cf @ 0.92 hrs
Average Depth at Peak Storage= 0.38' , Surface Width= 0.97'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 2.94 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 122.3' Slope= 0.0058 '/'
Inlet Invert= 749.32', Outlet Invert= 748.61'



Reach R62: Pipe I62 to I61



Summary for Reach R63: Pipe I63 to I62

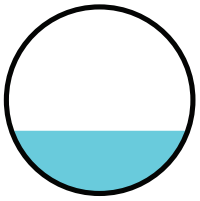
[52] Hint: Inlet/Outlet conditions not evaluated
[80] Warning: Exceeded Pond I63 by 0.06' @ 2.68 hrs (0.02 cfs 0.000 af)

Inflow Area = 1.364 ac, 0.00% Impervious, Inflow Depth = 0.95" for 5-yr event
Inflow = 0.65 cfs @ 0.69 hrs, Volume= 0.108 af
Outflow = 0.65 cfs @ 0.92 hrs, Volume= 0.108 af, Atten= 0%, Lag= 13.8 min
Routed to Pond I62 : Inlet 6-2

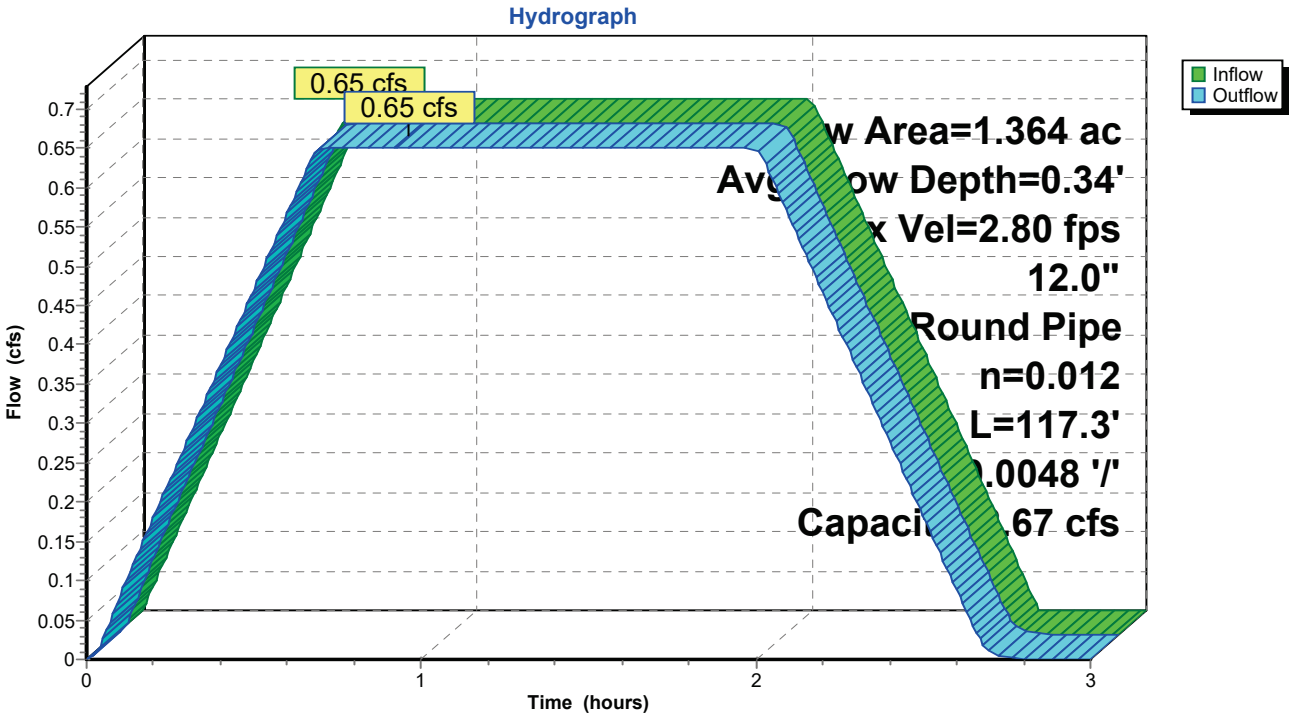
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 2.80 fps, Min. Travel Time= 0.7 min
Avg. Velocity = 2.26 fps, Avg. Travel Time= 0.9 min

Peak Storage= 27 cf @ 0.92 hrs
Average Depth at Peak Storage= 0.34' , Surface Width= 0.94'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 2.67 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 117.3' Slope= 0.0048 '/'
Inlet Invert= 749.91', Outlet Invert= 749.35'



Reach R63: Pipe I63 to I62



Summary for Reach R71: Pipe I71 to I15

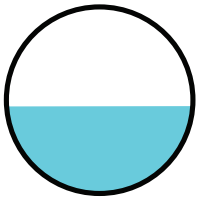
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 2.152 ac, 49.07% Impervious, Inflow Depth = 1.52" for 5-yr event
Inflow = 1.65 cfs @ 0.70 hrs, Volume= 0.273 af
Outflow = 1.65 cfs @ 0.72 hrs, Volume= 0.273 af, Atten= 0%, Lag= 1.2 min
Routed to Pond I15 : Inlet 1-5

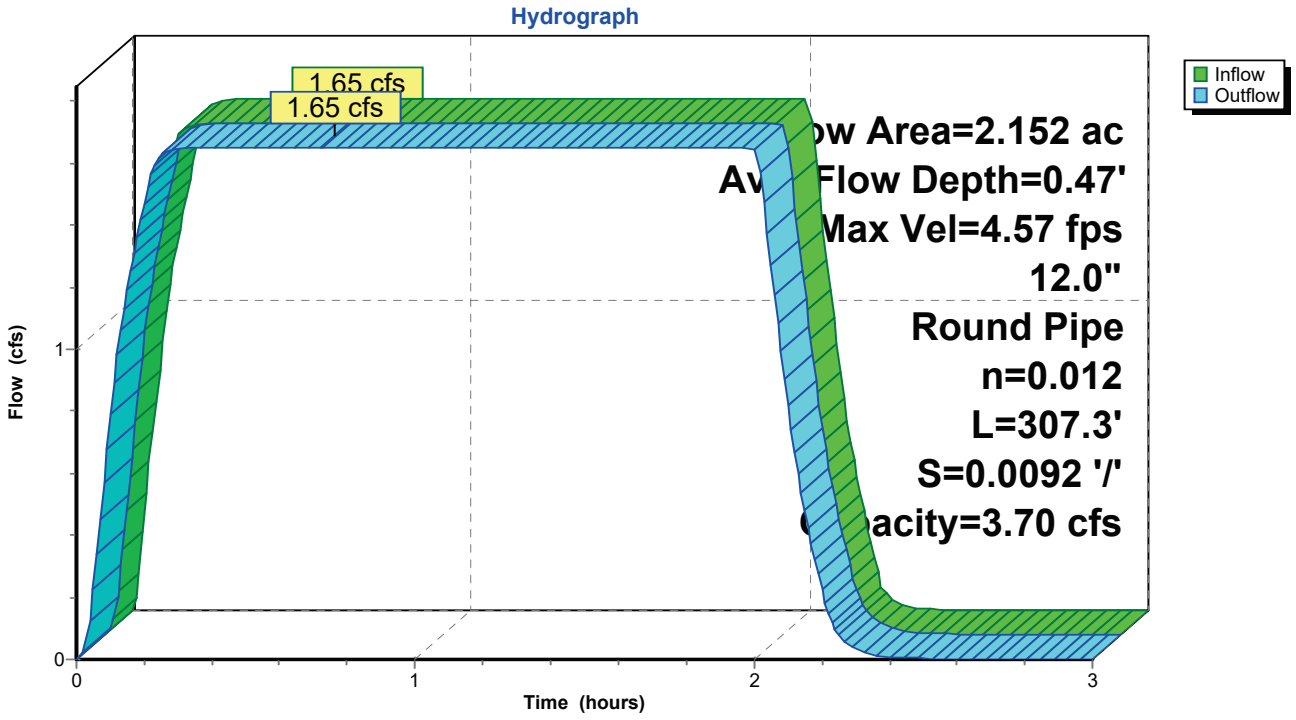
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 4.57 fps, Min. Travel Time= 1.1 min
Avg. Velocity = 3.42 fps, Avg. Travel Time= 1.5 min

Peak Storage= 111 cf @ 0.72 hrs
Average Depth at Peak Storage= 0.47' , Surface Width= 1.00'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.70 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 307.3' Slope= 0.0092 '/'
Inlet Invert= 747.78', Outlet Invert= 744.96'



Reach R71: Pipe I71 to I15



Summary for Reach R81: Pipe I81 to I71

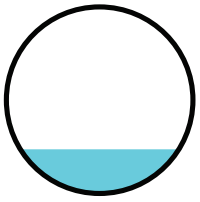
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.792 ac, 48.74% Impervious, Inflow Depth = 1.40" for 5-yr event
Inflow = 0.56 cfs @ 0.35 hrs, Volume= 0.093 af
Outflow = 0.56 cfs @ 0.35 hrs, Volume= 0.093 af, Atten= 0%, Lag= 0.0 min
Routed to Pond I71 : Inlet 7-1

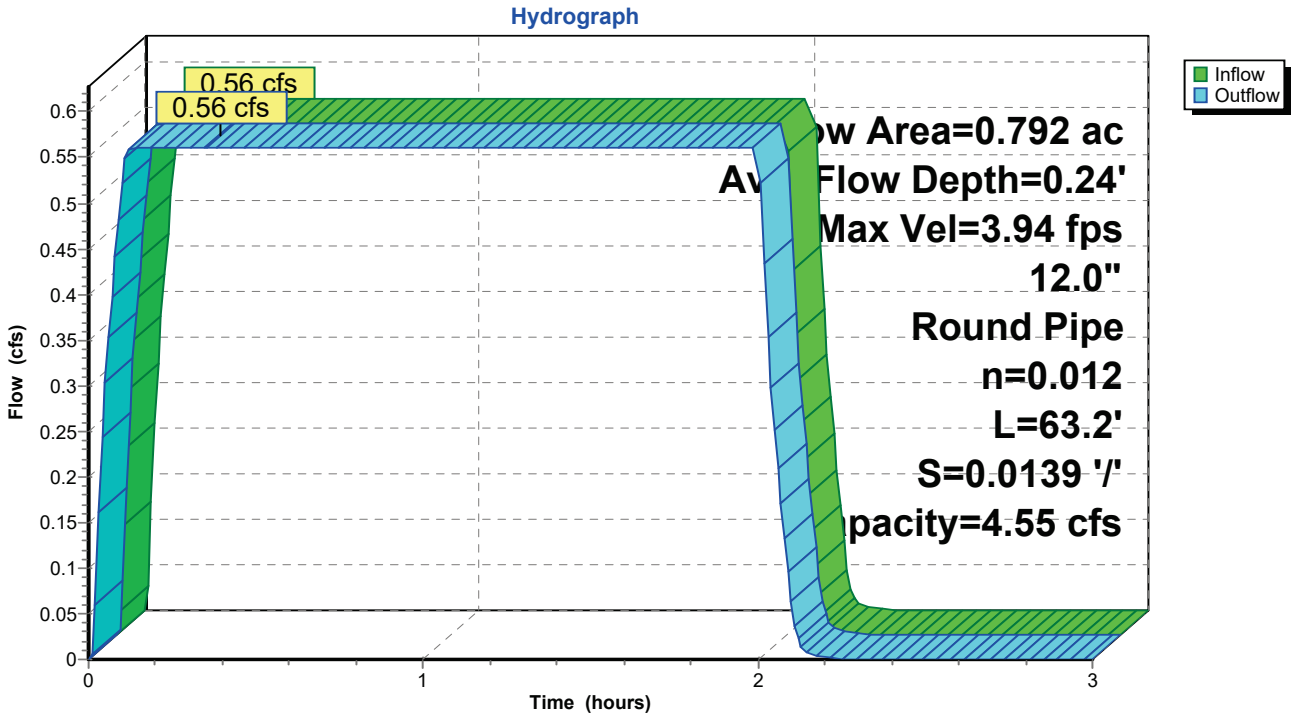
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.94 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 3.38 fps, Avg. Travel Time= 0.3 min

Peak Storage= 9 cf @ 0.35 hrs
Average Depth at Peak Storage= 0.24' , Surface Width= 0.85'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 4.55 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 63.2' Slope= 0.0139 '/'
Inlet Invert= 748.66', Outlet Invert= 747.78'



Reach R81: Pipe I81 to I71



Summary for Reach R82: Pipe I82 to I81

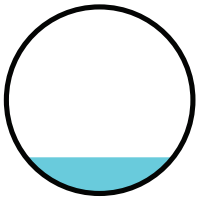
[52] Hint: Inlet/Outlet conditions not evaluated
[80] Warning: Exceeded Pond I82 by 0.05' @ 2.11 hrs (0.01 cfs 0.000 af)

Inflow Area = 0.625 ac, 35.68% Impervious, Inflow Depth = 1.23" for 5-yr event
Inflow = 0.39 cfs @ 0.24 hrs, Volume= 0.064 af
Outflow = 0.39 cfs @ 0.31 hrs, Volume= 0.064 af, Atten= 0%, Lag= 4.2 min
Routed to Pond I81 : Inlet 8-1

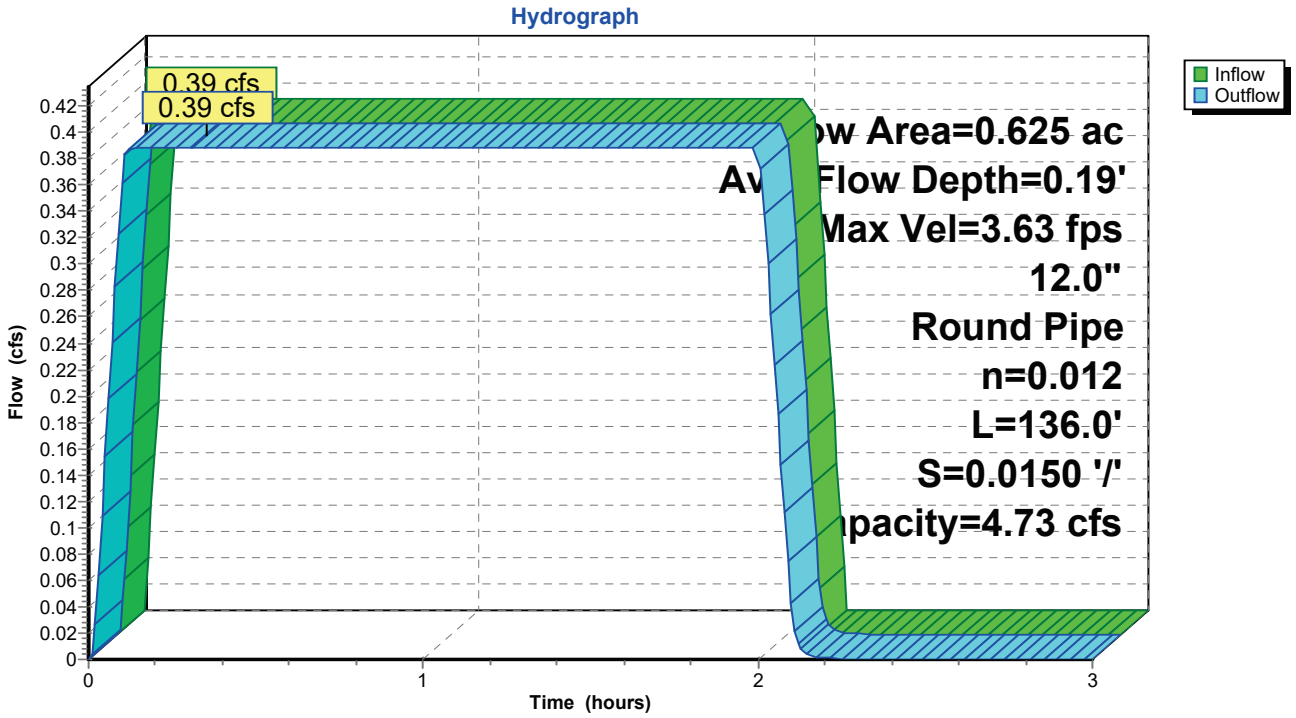
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 3.63 fps, Min. Travel Time= 0.6 min
Avg. Velocity = 3.20 fps, Avg. Travel Time= 0.7 min

Peak Storage= 15 cf @ 0.31 hrs
Average Depth at Peak Storage= 0.19' , Surface Width= 0.79'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 4.73 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 136.0' Slope= 0.0150 '/'
Inlet Invert= 750.74', Outlet Invert= 748.70'



Reach R82: Pipe I82 to I81



Summary for Reach R91: Pipe I91 to I71

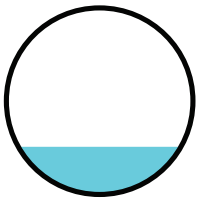
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.640 ac, 25.31% Impervious, Inflow Depth = 1.39" for 5-yr event
Inflow = 0.45 cfs @ 0.53 hrs, Volume= 0.074 af
Outflow = 0.45 cfs @ 0.70 hrs, Volume= 0.074 af, Atten= 0%, Lag= 10.2 min
Routed to Pond I71 : Inlet 7-1

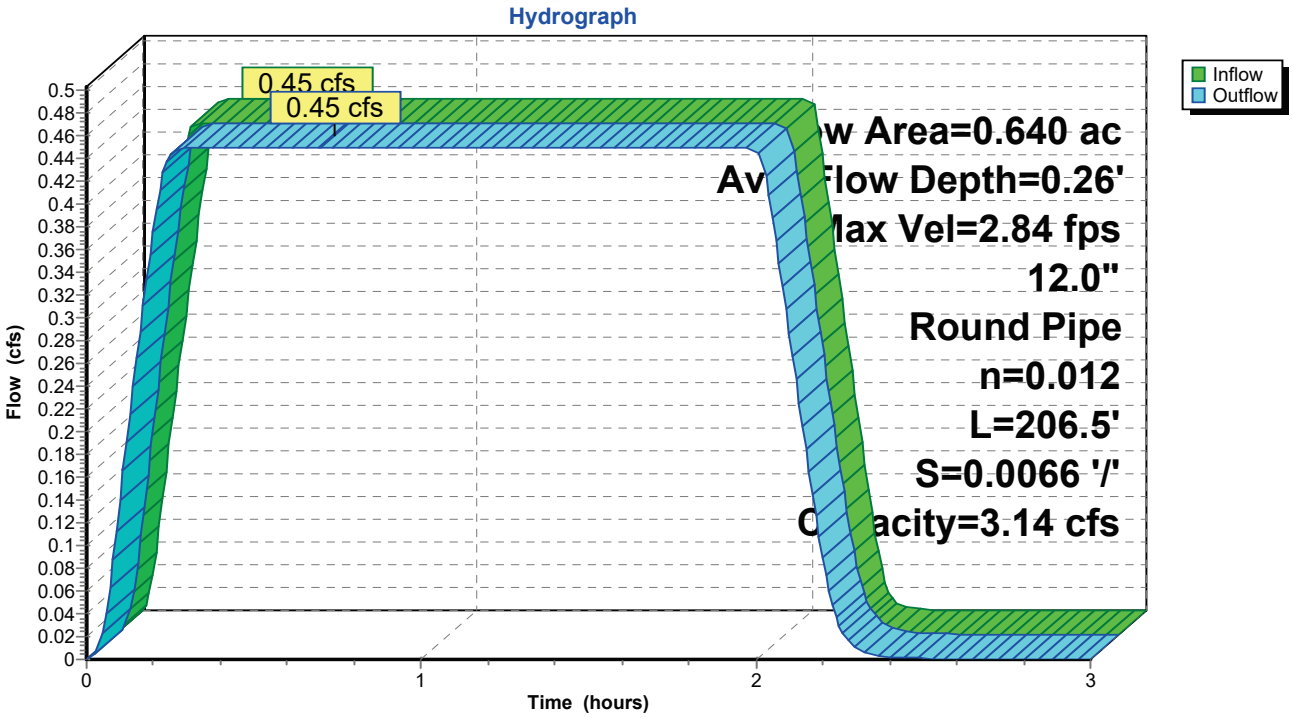
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 2.84 fps, Min. Travel Time= 1.2 min
Avg. Velocity = 2.13 fps, Avg. Travel Time= 1.6 min

Peak Storage= 33 cf @ 0.69 hrs
Average Depth at Peak Storage= 0.26' , Surface Width= 0.87'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.14 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 206.5' Slope= 0.0066 '/'
Inlet Invert= 750.30', Outlet Invert= 748.93'



Reach R91: Pipe I91 to I71



Summary for Reach R92: Pipe I92 to I91

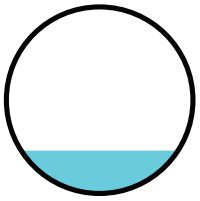
[52] Hint: Inlet/Outlet conditions not evaluated
[80] Warning: Exceeded Pond I92 by 0.05' @ 2.23 hrs (0.01 cfs 0.000 af)

Inflow Area = 0.531 ac, 21.66% Impervious, Inflow Depth = 1.39" for 5-yr event
Inflow = 0.37 cfs @ 0.22 hrs, Volume= 0.061 af
Outflow = 0.37 cfs @ 0.52 hrs, Volume= 0.061 af, Atten= 0%, Lag= 18.0 min
Routed to Pond I91 : Inlet 9-1

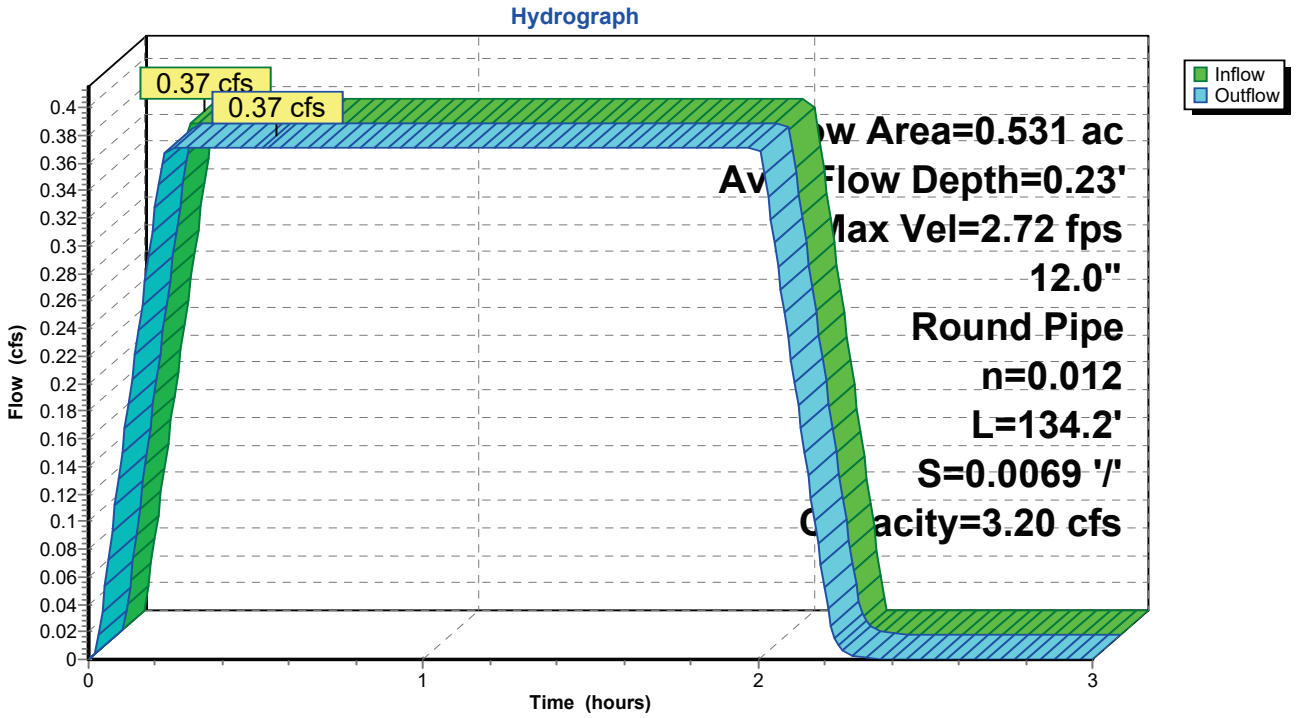
Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Max. Velocity= 2.72 fps, Min. Travel Time= 0.8 min
Avg. Velocity = 2.25 fps, Avg. Travel Time= 1.0 min

Peak Storage= 18 cf @ 0.52 hrs
Average Depth at Peak Storage= 0.23' , Surface Width= 0.84'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 3.20 cfs

12.0" Round Pipe
n= 0.012 Steel, smooth
Length= 134.2' Slope= 0.0069 '/'
Inlet Invert= 751.22', Outlet Invert= 750.30'



Reach R92: Pipe I92 to I91



Summary for Pond I14: Inlet 1-4

[57] Hint: Peaked at 742.64' (Flood elevation advised)
[62] Hint: Exceeded Reach R18 OUTLET depth by 5.35' @ 0.97 hrs

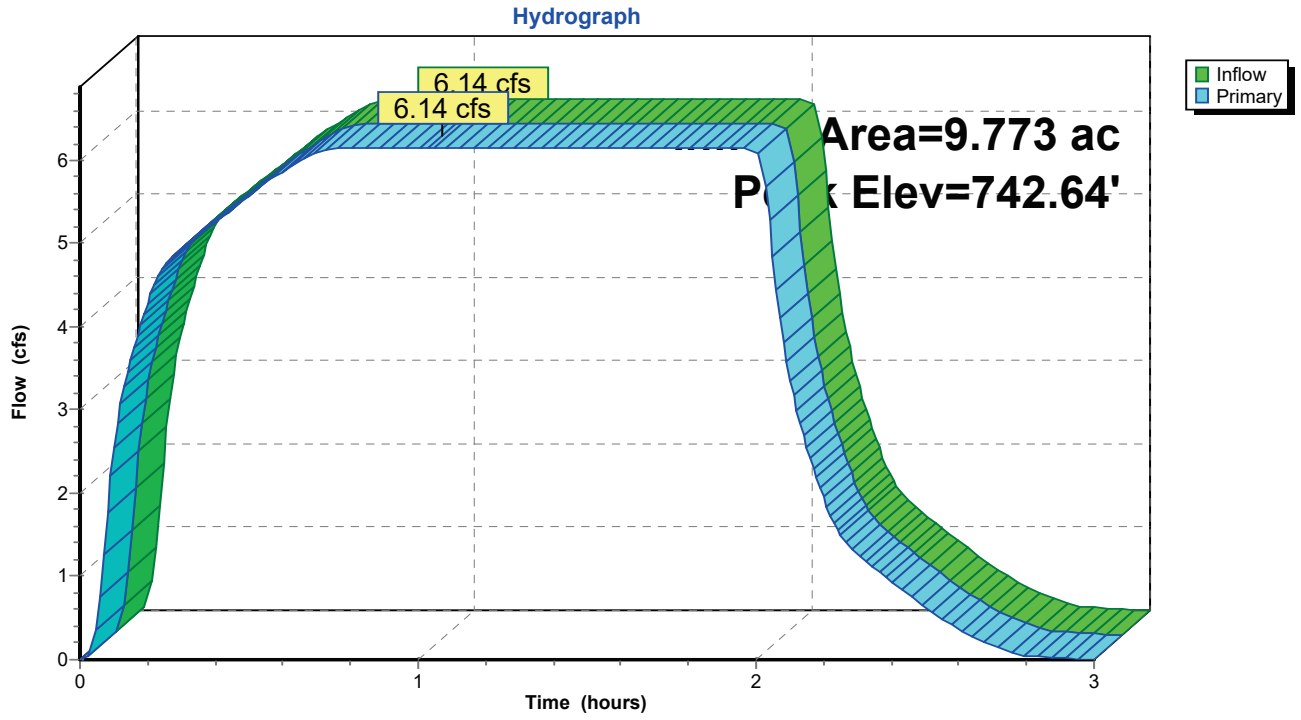
Inflow Area = 9.773 ac, 23.45% Impervious, Inflow Depth > 1.25" for 5-yr event
Inflow = 6.14 cfs @ 1.06 hrs, Volume= 1.015 af
Outflow = 6.14 cfs @ 1.03 hrs, Volume= 1.015 af, Atten= 0%, Lag= 0.0 min
Primary = 6.14 cfs @ 1.03 hrs, Volume= 1.015 af
Routed to Reach R14 : Pipe I14 to Pond

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 742.64' @ 0.97 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	741.84'	**24.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	741.84'	**24.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#3	Primary	743.84'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=6.14 cfs @ 1.03 hrs HW=742.64' TW=742.34' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 3.07 cfs @ 2.63 fps)
2=Orifice/Grate (Orifice Controls 3.07 cfs @ 2.63 fps)
3=Orifice/Grate (Controls 0.00 cfs)

Pond I14: Inlet 1-4



Summary for Pond I15: Inlet 1-5

[57] Hint: Peaked at 745.71' (Flood elevation advised)
[62] Hint: Exceeded Reach R21 OUTLET depth by 0.17' @ 0.27 hrs
[62] Hint: Exceeded Reach R71 OUTLET depth by 0.29' @ 2.02 hrs

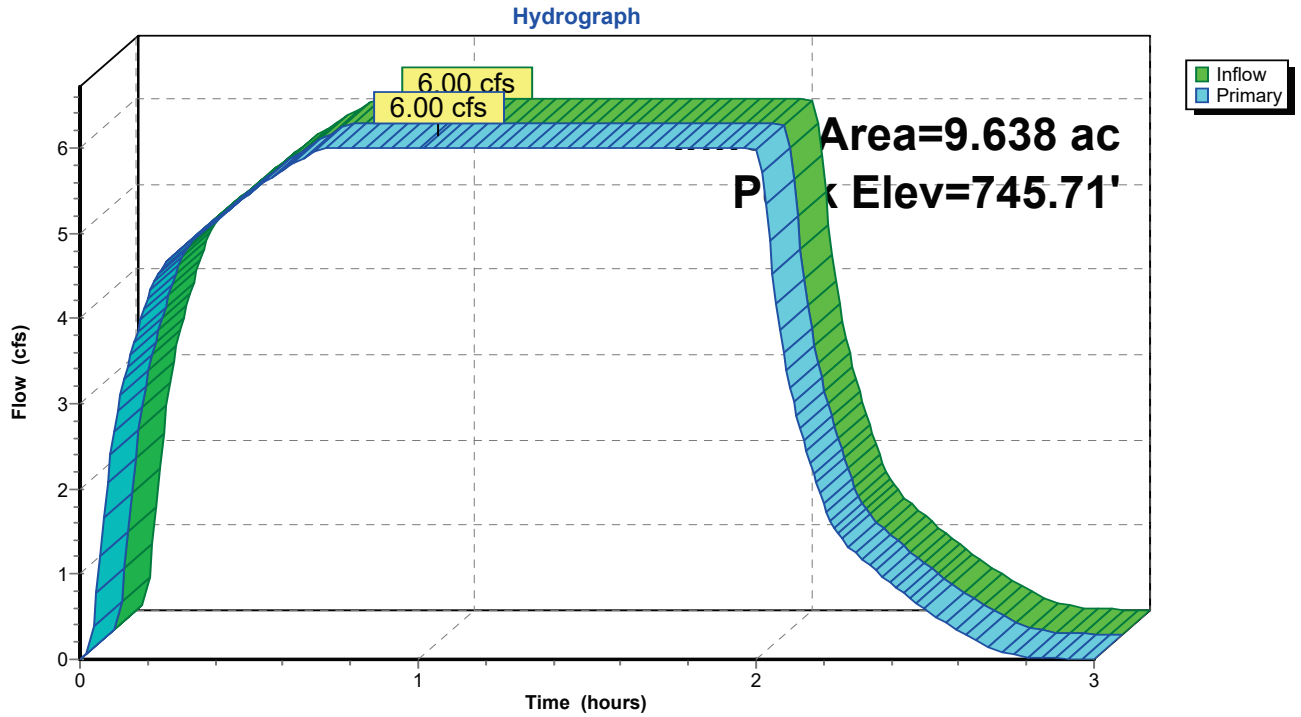
Inflow Area = 9.638 ac, 22.40% Impervious, Inflow Depth > 1.23" for 5-yr event
Inflow = 6.00 cfs @ 1.02 hrs, Volume= 0.992 af
Outflow = 6.00 cfs @ 1.02 hrs, Volume= 0.992 af, Atten= 0%, Lag= 0.0 min
Primary = 6.00 cfs @ 1.02 hrs, Volume= 0.992 af
Routed to Reach R15 : Pipe I15 to I18

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 745.71' @ 0.99 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	744.87'	**24.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	744.96'	**12.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#3	Primary	744.96'	**24.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=6.00 cfs @ 1.02 hrs HW=745.71' TW=745.54' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 2.54 cfs @ 2.01 fps)
└─**2=Orifice/Grate** (Orifice Controls 1.28 cfs @ 2.01 fps)
└─**3=Orifice/Grate** (Orifice Controls 2.18 cfs @ 2.01 fps)

Pond I15: Inlet 1-5



Summary for Pond I16: Inlet 1-6

[57] Hint: Peaked at 749.69' (Flood elevation advised)

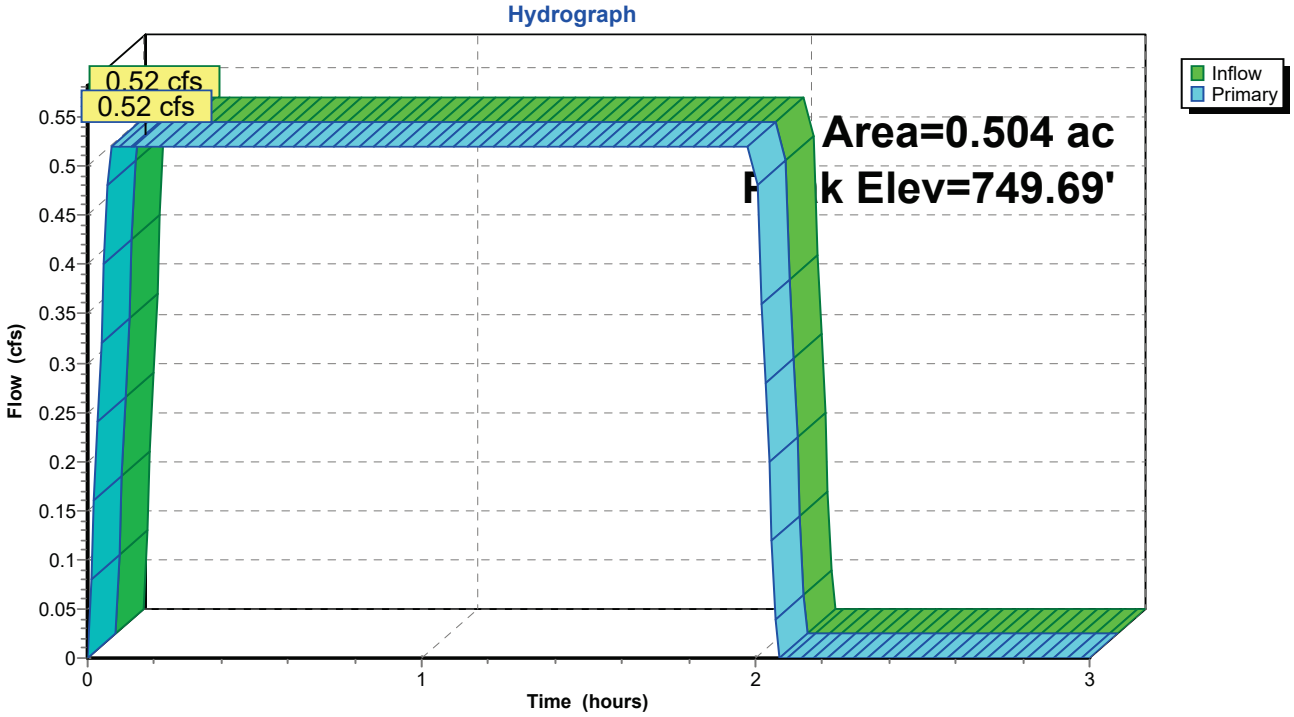
Inflow Area = 0.504 ac, 97.62% Impervious, Inflow Depth = 2.05" for 5-yr event
Inflow = 0.52 cfs @ 0.07 hrs, Volume= 0.086 af
Outflow = 0.52 cfs @ 0.13 hrs, Volume= 0.086 af, Atten= 0%, Lag= 3.6 min
Primary = 0.52 cfs @ 0.13 hrs, Volume= 0.086 af
Routed to Reach R16 : Pipe I16 to I21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 749.69' @ 0.20 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	749.30'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.52 cfs @ 0.13 hrs HW=749.69' TW=749.55' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.52 cfs @ 1.83 fps)

Pond I16: Inlet 1-6



Summary for Pond I17: Trench Drain 1-7

[57] Hint: Peaked at 745.96' (Flood elevation advised)

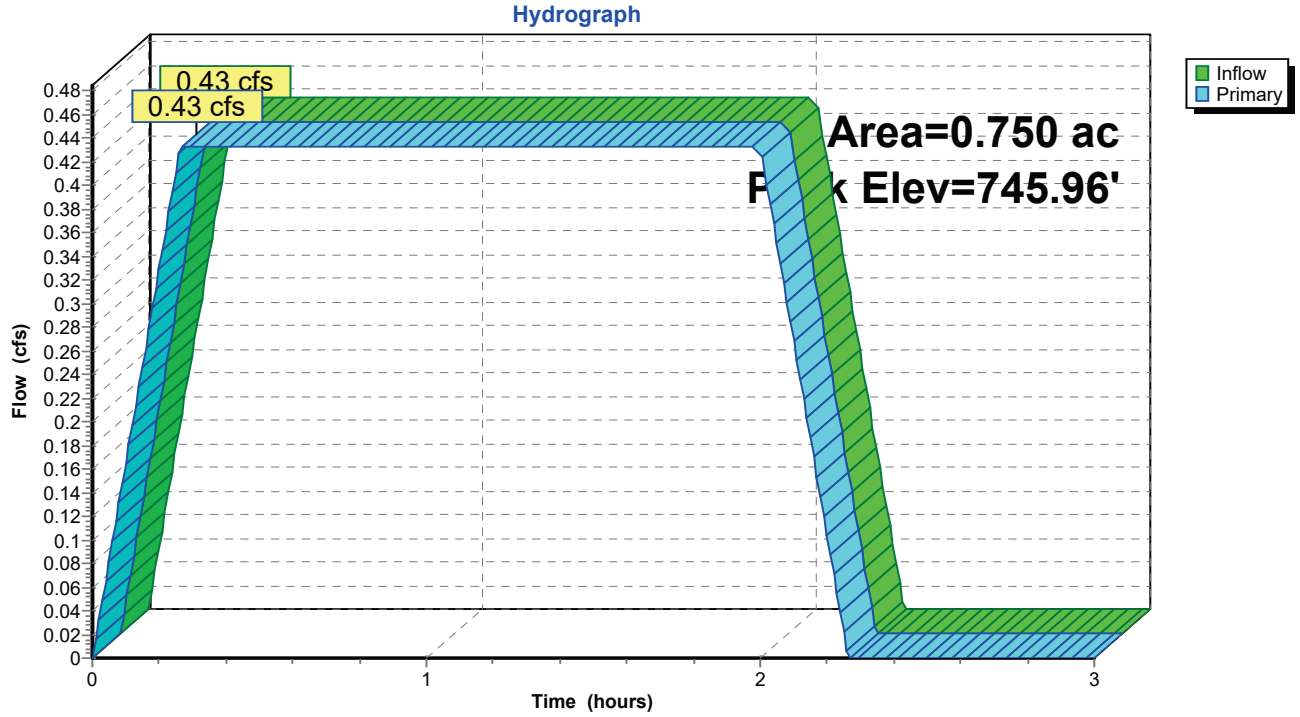
Inflow Area = 0.750 ac, 33.20% Impervious, Inflow Depth = 1.14" for 5-yr event
Inflow = 0.43 cfs @ 0.27 hrs, Volume= 0.071 af
Outflow = 0.43 cfs @ 0.27 hrs, Volume= 0.071 af, Atten= 0%, Lag= 0.0 min
Primary = 0.43 cfs @ 0.27 hrs, Volume= 0.071 af
Routed to Reach R17 : Pipe I17 to Pond

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 745.96' @ 0.27 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	745.50'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.43 cfs @ 0.27 hrs HW=745.96' TW=745.69' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.43 cfs @ 2.30 fps)

Pond I17: Trench Drain 1-7



Summary for Pond I18: Catch Basin 1-8

[57] Hint: Peaked at 744.14' (Flood elevation advised)
[62] Hint: Exceeded Reach R15 OUTLET depth by 0.11' @ 0.95 hrs
[62] Hint: Exceeded Reach R19 OUTLET depth by 0.69' @ 2.02 hrs

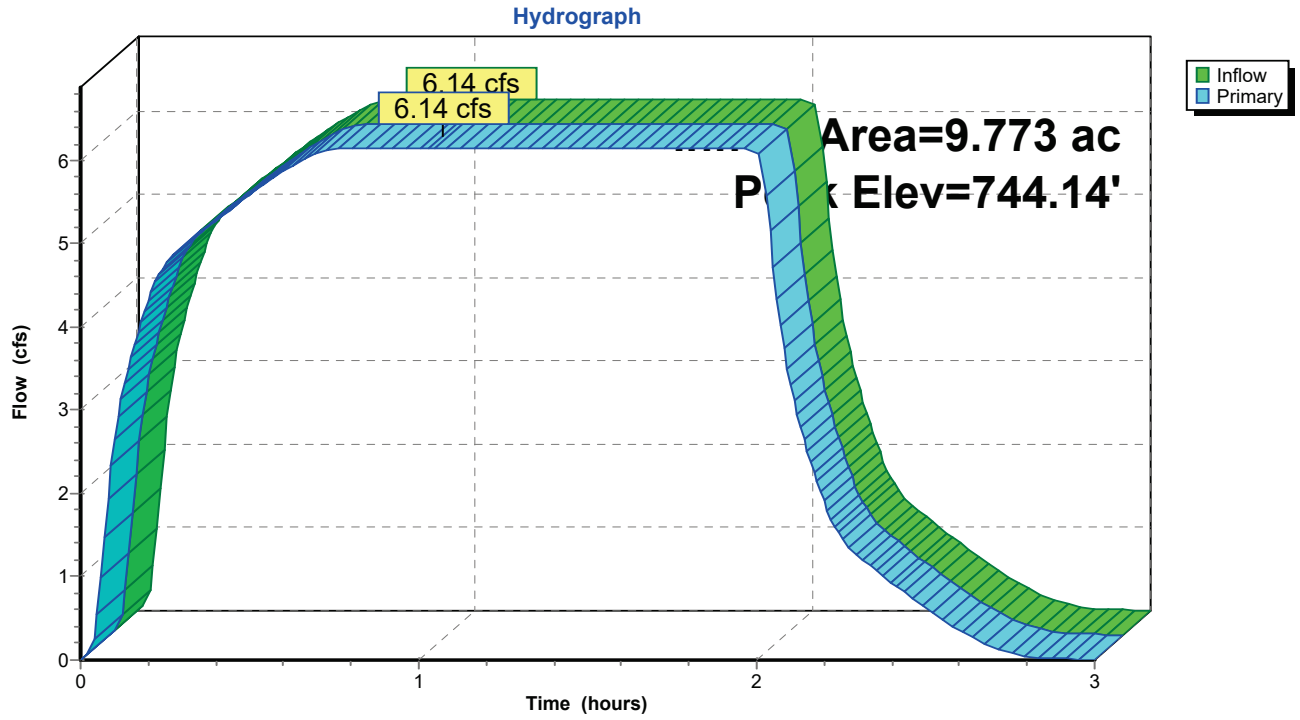
Inflow Area = 9.773 ac, 23.45% Impervious, Inflow Depth > 1.25" for 5-yr event
Inflow = 6.14 cfs @ 1.03 hrs, Volume= 1.015 af
Outflow = 6.14 cfs @ 1.03 hrs, Volume= 1.015 af, Atten= 0%, Lag= 0.1 min
Primary = 6.14 cfs @ 1.03 hrs, Volume= 1.015 af
Routed to Reach R18 : Pipe I18 to I14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 744.14' @ 0.95 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	743.36'	**24.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	743.36'	**24.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=6.14 cfs @ 1.03 hrs HW=744.14' TW=743.83' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 3.07 cfs @ 2.70 fps)
└─**2=Orifice/Grate** (Orifice Controls 3.07 cfs @ 2.70 fps)

Pond I18: Catch Basin 1-8



Summary for Pond I19: Inlet 1-9

[57] Hint: Peaked at 745.59' (Flood elevation advised)

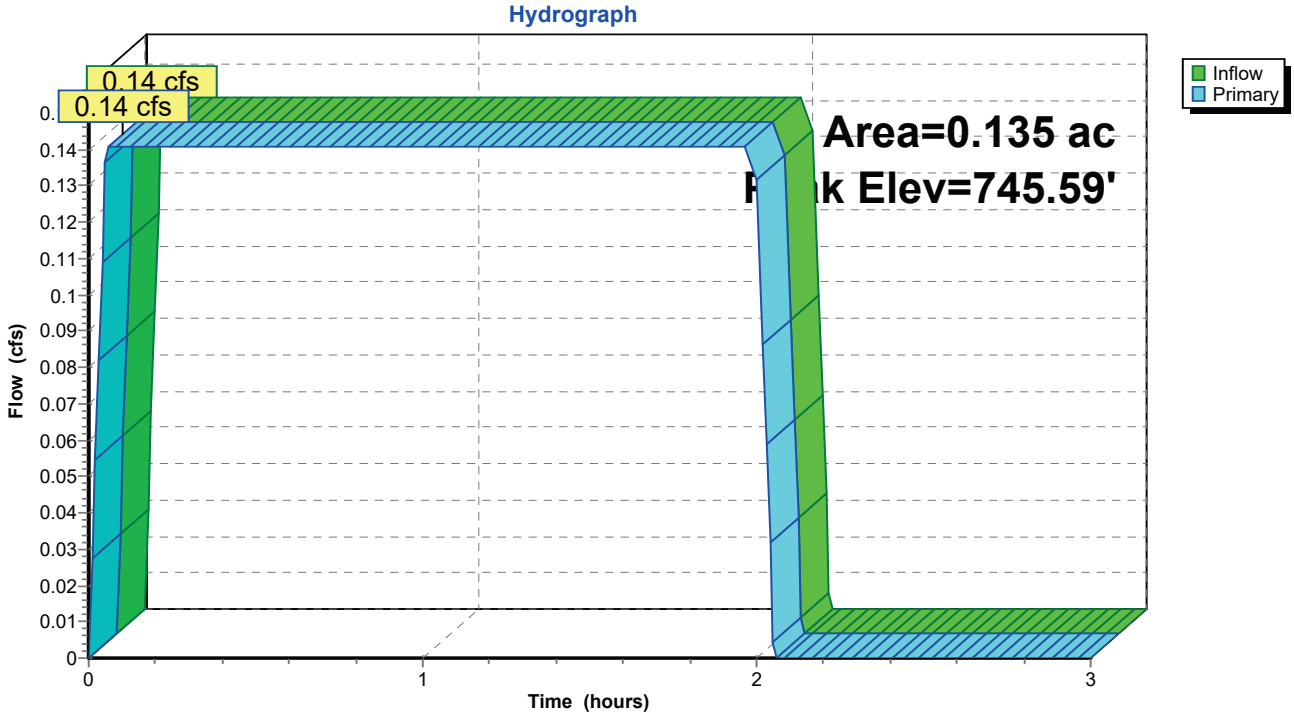
Inflow Area = 0.135 ac, 98.52% Impervious, Inflow Depth = 2.07" for 5-yr event
Inflow = 0.14 cfs @ 0.06 hrs, Volume= 0.023 af
Outflow = 0.14 cfs @ 0.06 hrs, Volume= 0.023 af, Atten= 0%, Lag= 0.0 min
Primary = 0.14 cfs @ 0.06 hrs, Volume= 0.023 af
Routed to Reach R19 : Pipe I19 to I14

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 745.59' @ 0.07 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	745.41'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.14 cfs @ 0.06 hrs HW=745.59' TW=745.50' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.14 cfs @ 1.44 fps)

Pond I19: Inlet 1-9



Summary for Pond I21: Inlet 2-1

[57] Hint: Peaked at 747.98' (Flood elevation advised)
[62] Hint: Exceeded Reach R31 OUTLET depth by 0.15' @ 0.22 hrs

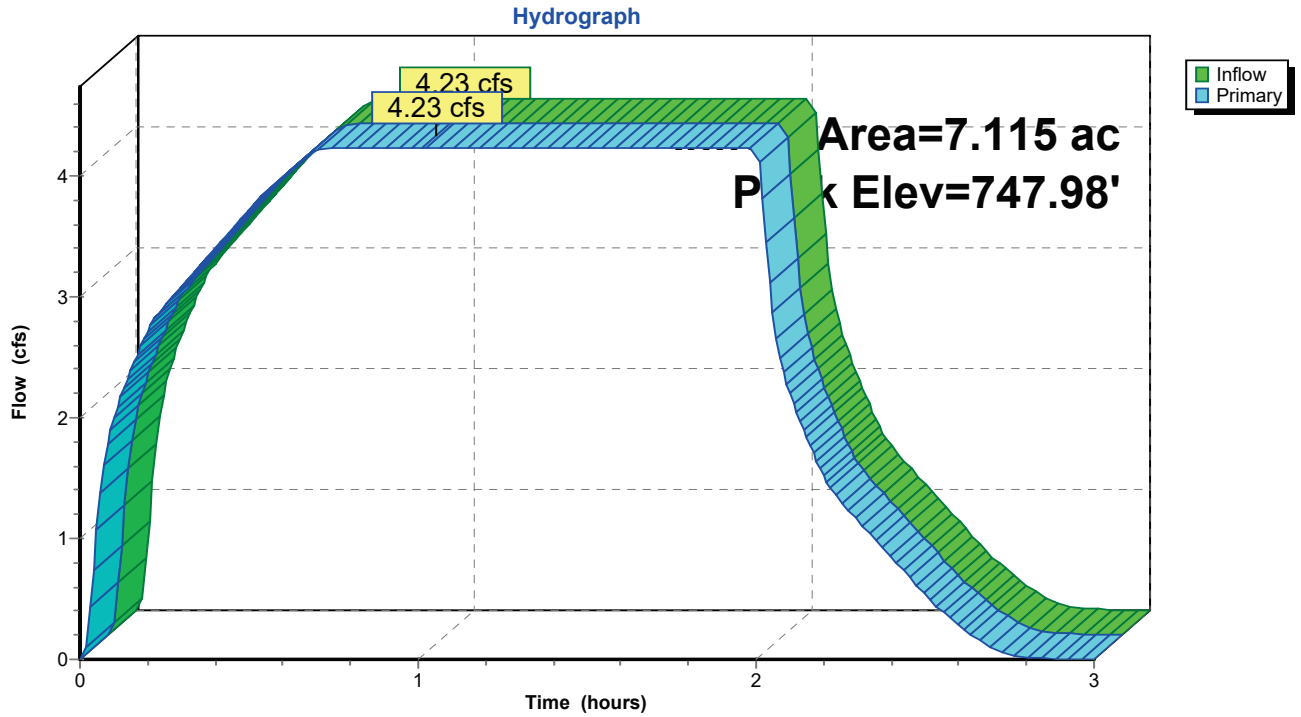
Inflow Area = 7.115 ac, 15.50% Impervious, Inflow Depth > 1.18" for 5-yr event
Inflow = 4.23 cfs @ 1.01 hrs, Volume= 0.699 af
Outflow = 4.23 cfs @ 1.01 hrs, Volume= 0.699 af, Atten= 0%, Lag= 0.0 min
Primary = 4.23 cfs @ 1.01 hrs, Volume= 0.699 af
Routed to Reach R21 : Pipe I21 to I15

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 747.98' @ 0.92 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	747.10'	**24.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	748.18'	**18.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#3	Primary	748.17'	**12.0" Vert. Orifice/Grate X 2.00** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=4.23 cfs @ 1.01 hrs HW=747.98' TW=746.67' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 4.23 cfs @ 3.19 fps)
└─**2=Orifice/Grate** (Controls 0.00 cfs)
└─**3=Orifice/Grate** (Controls 0.00 cfs)

Pond I21: Inlet 2-1



Summary for Pond I31: Manhole 3-1

[57] Hint: Peaked at 748.50' (Flood elevation advised)
[62] Hint: Exceeded Reach R51 OUTLET depth by 0.39' @ 2.02 hrs
[62] Hint: Exceeded Reach R61 OUTLET depth by 0.34' @ 2.02 hrs

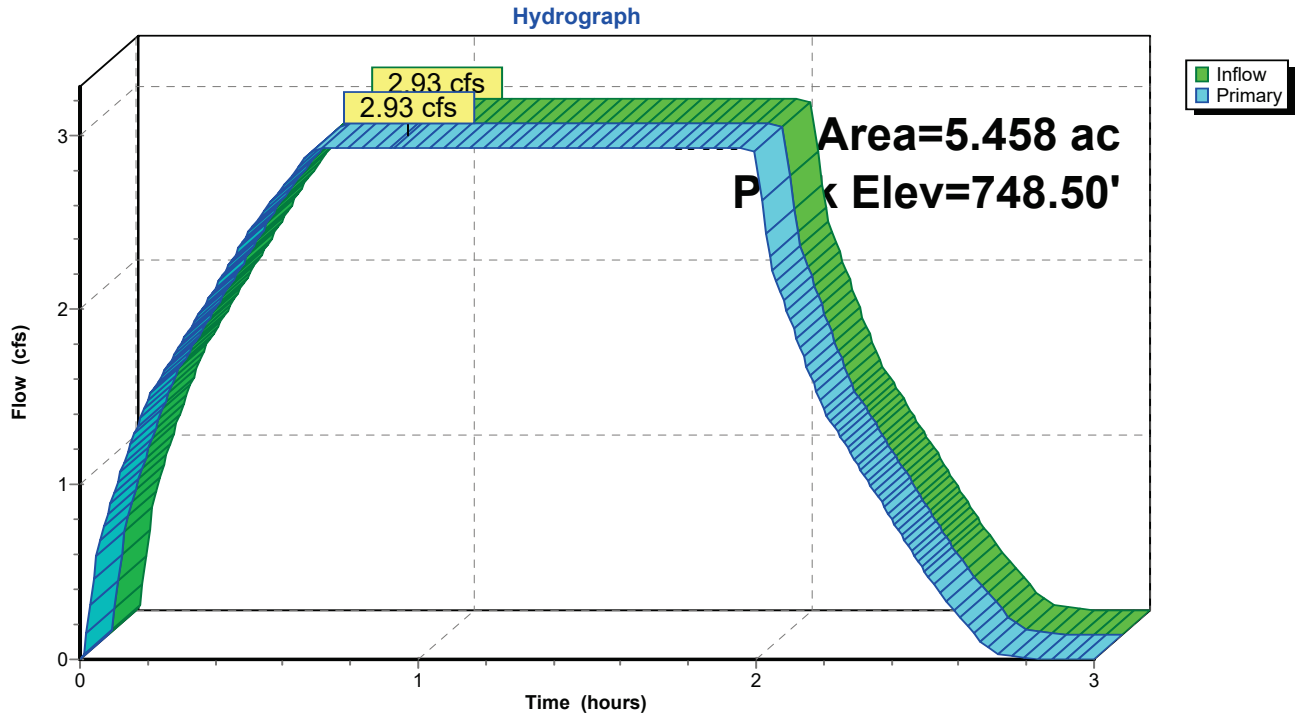
Inflow Area = 5.458 ac, 1.12% Impervious, Inflow Depth > 1.06" for 5-yr event
Inflow = 2.93 cfs @ 0.93 hrs, Volume= 0.484 af
Outflow = 2.93 cfs @ 0.93 hrs, Volume= 0.484 af, Atten= 0%, Lag= 0.0 min
Primary = 2.93 cfs @ 0.93 hrs, Volume= 0.484 af
Routed to Reach R31 : Pipe I31 to I21

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 748.50' @ 0.92 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	747.75'	**18.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	747.75'	**15.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#3	Primary	747.75'	**15.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=2.93 cfs @ 0.93 hrs HW=748.50' TW=748.43' (Dynamic Tailwater)
└─**1=Orifice/Grate** (Orifice Controls 1.07 cfs @ 1.22 fps)
└─**2=Orifice/Grate** (Orifice Controls 0.93 cfs @ 1.22 fps)
└─**3=Orifice/Grate** (Orifice Controls 0.93 cfs @ 1.22 fps)

Pond I31: Manhole 3-1



Summary for Pond I41: Inlet 4-1

[57] Hint: Peaked at 749.31' (Flood elevation advised)

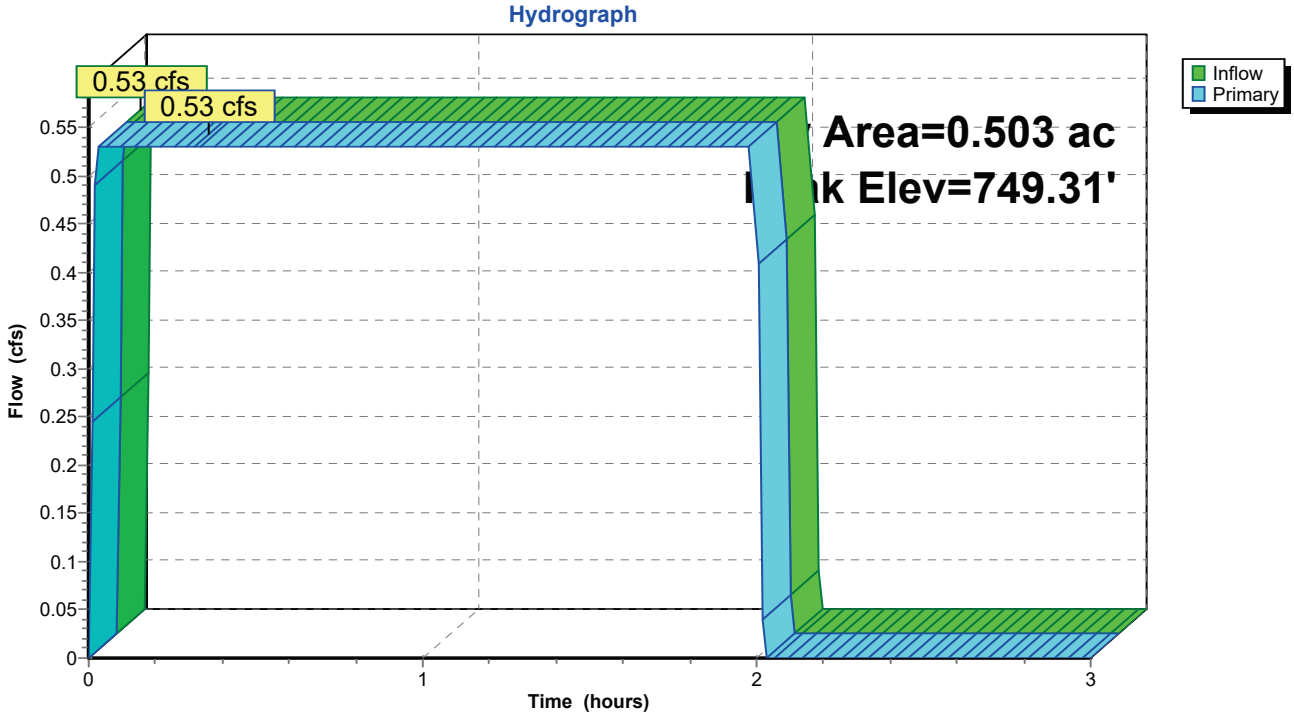
Inflow Area = 0.503 ac,100.00% Impervious, Inflow Depth = 2.09" for 5-yr event
Inflow = 0.53 cfs @ 0.03 hrs, Volume= 0.088 af
Outflow = 0.53 cfs @ 0.32 hrs, Volume= 0.088 af, Atten= 0%, Lag= 17.4 min
Primary = 0.53 cfs @ 0.32 hrs, Volume= 0.088 af
Routed to Reach R41 : Pipe I41 to I31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 749.31' @ 0.90 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	748.86'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.53 cfs @ 0.32 hrs HW=749.31' TW=749.20' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.53 cfs @ 1.57 fps)

Pond I41: Inlet 4-1



Summary for Pond I51: Inlet 5-1

[57] Hint: Peaked at 749.56' (Flood elevation advised)
[62] Hint: Exceeded Reach R52 OUTLET depth by 0.11' @ 0.02 hrs

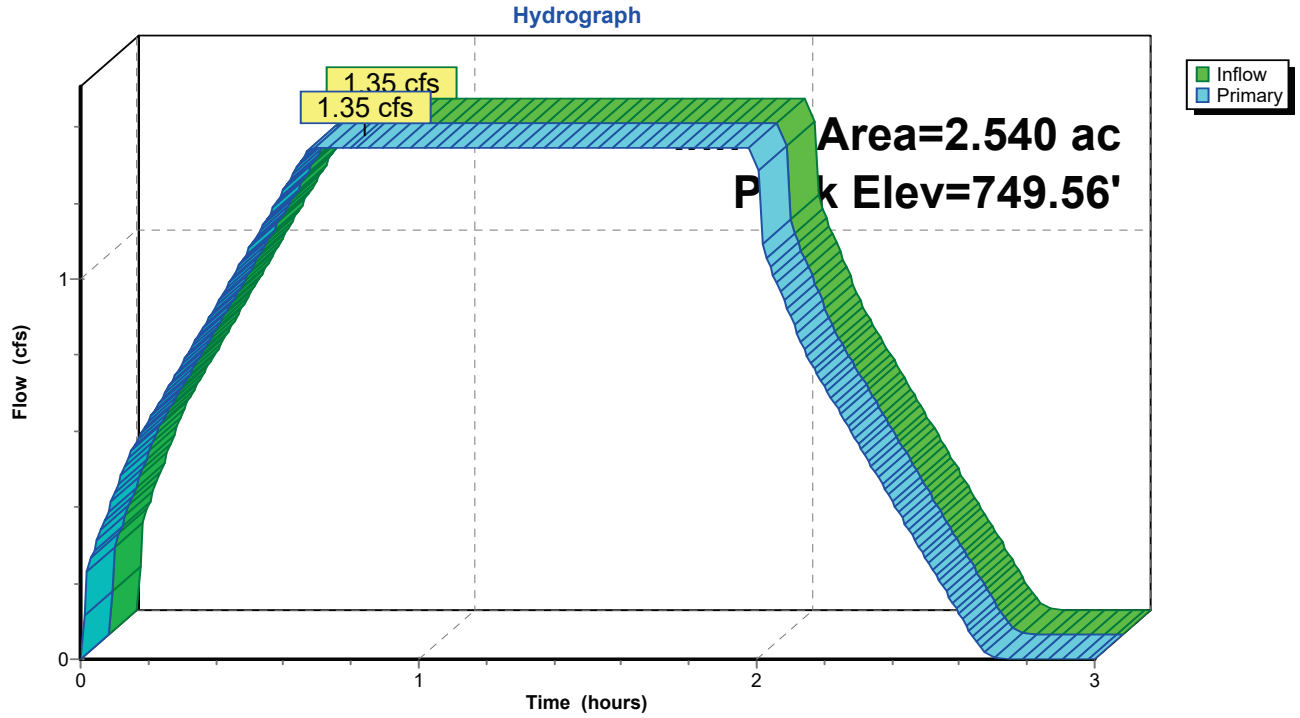
Inflow Area = 2.540 ac, 1.02% Impervious, Inflow Depth = 1.05" for 5-yr event
Inflow = 1.35 cfs @ 0.79 hrs, Volume= 0.223 af
Outflow = 1.35 cfs @ 0.80 hrs, Volume= 0.223 af, Atten= 0%, Lag= 0.6 min
Primary = 1.35 cfs @ 0.80 hrs, Volume= 0.223 af
Routed to Reach R51 : Pipe I51 to I31

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 749.56' @ 0.78 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	749.07'	**15.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	749.10'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.35 cfs @ 0.80 hrs HW=749.56' TW=749.44' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.75 cfs @ 1.69 fps)
2=Orifice/Grate (Orifice Controls 0.60 cfs @ 1.69 fps)

Pond I51: Inlet 5-1



Summary for Pond I52: Inlet 5-2

[57] Hint: Peaked at 750.63' (Flood elevation advised)
[63] Warning: Exceeded Reach R53 INLET depth by 0.09' @ 2.16 hrs

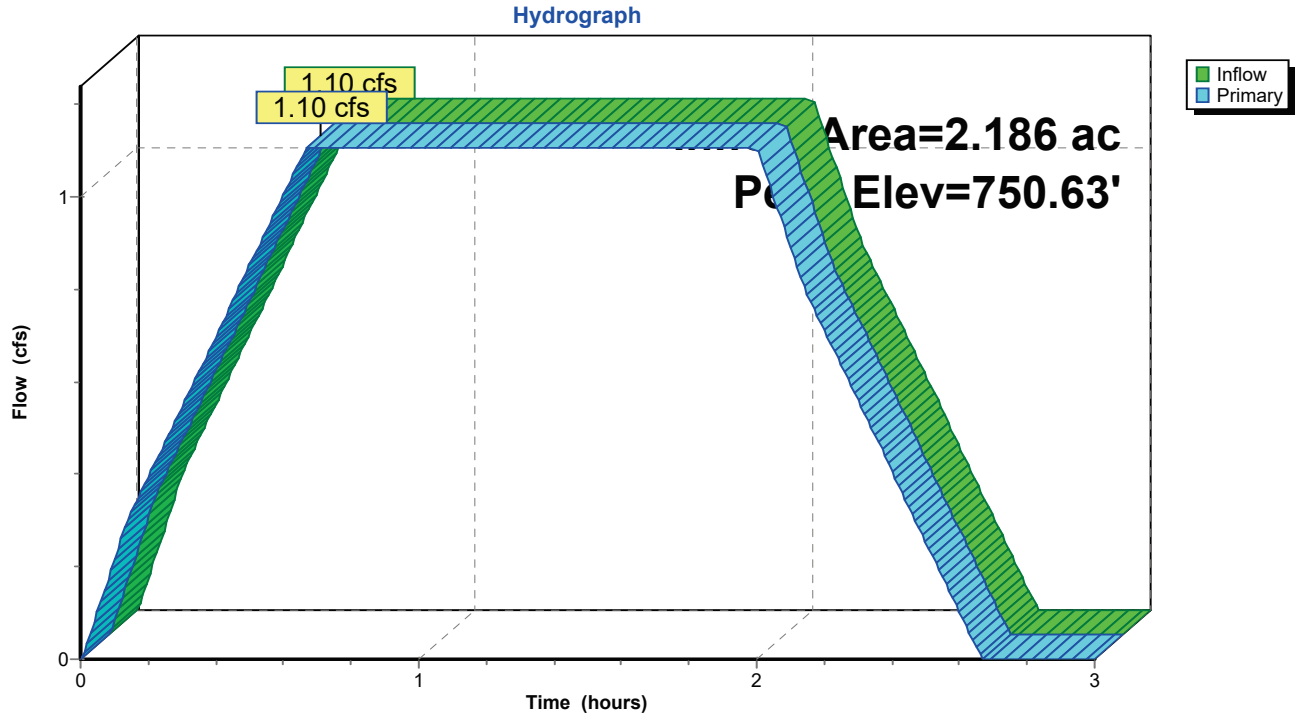
Inflow Area = 2.186 ac, 0.27% Impervious, Inflow Depth = 1.00" for 5-yr event
Inflow = 1.10 cfs @ 0.67 hrs, Volume= 0.183 af
Outflow = 1.10 cfs @ 0.67 hrs, Volume= 0.183 af, Atten= 0%, Lag= 0.0 min
Primary = 1.10 cfs @ 0.67 hrs, Volume= 0.183 af
Routed to Reach R52 : Pipe I52 to I51

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 750.63' @ 0.77 hrs

Device	Routing	Invert	Outlet Devices
#1	Primary	750.10'	**12.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#2	Primary	750.26'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=1.10 cfs @ 0.67 hrs HW=750.63' TW=750.48' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.80 cfs @ 1.89 fps)
2=Orifice/Grate (Orifice Controls 0.30 cfs @ 1.89 fps)

Pond I52: Inlet 5-2



Summary for Pond I53: Inlet 5-3

[57] Hint: Peaked at 750.64' (Flood elevation advised)

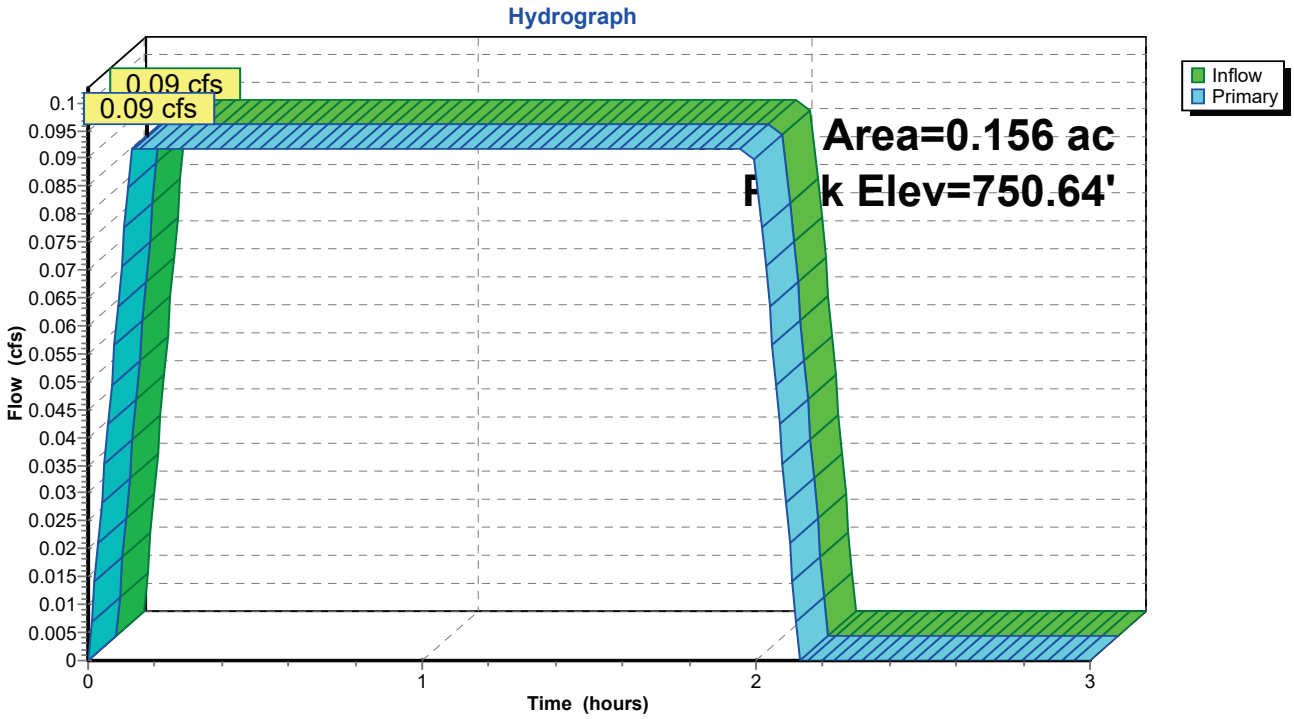
Inflow Area = 0.156 ac, 0.00% Impervious, Inflow Depth = 1.17" for 5-yr event
Inflow = 0.09 cfs @ 0.13 hrs, Volume= 0.015 af
Outflow = 0.09 cfs @ 0.14 hrs, Volume= 0.015 af, Atten= 0%, Lag= 0.6 min
Primary = 0.09 cfs @ 0.14 hrs, Volume= 0.015 af
Routed to Reach R53 : Pipe I53 to I52

Routing by Dyn-Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 750.64' @ 0.32 hrs

Device	Routing	Invert	Outlet Devices		
#1	Primary	750.43'	**6.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads
#2	Primary	750.56'	**6.0" Vert. Orifice/Grate**	C= 0.600	Limited to weir flow at low heads

Primary OutFlow Max=0.09 cfs @ 0.14 hrs HW=750.63' TW=750.60' (Dynamic Tailwater)
1=Orifice/Grate (Orifice Controls 0.07 cfs @ 0.94 fps)
2=Orifice/Grate (Orifice Controls 0.02 cfs @ 0.93 fps)

Pond I53: Inlet 5-3



Summary for Pond I54: Inlet 5-4

[43] Hint: Has no inflow (Outflow=Zero)

Device	Routing	Invert	Outlet Devices
#1	Primary	750.30'	**6.0" Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=0.00' TW=750.30' (Dynamic Tailwater)
└**1=Orifice/Grate** (Controls 0.00 cfs)

Pond I54: Inlet 5-4

Hydrograph

