Bryant Development and Review Committee Meeting

Boswell Municipal Complex - City Hall Conference Room

210 SW 3rd Street

Date: August 14, 2025 - **Time:** 9:00 AM

Call to Order

Old Business

1. 2913 Springhill Rd and 2506 W Robinhood Dr (Adjacent Properties) - Rezoning from R-M to C-1

LaDonna Henry - Requesting Recommendation for Rezoning of two adjacent properties from R-M to C-1

- 0982-APP-01.pdf

New Business

2. New Beginnings - Hwy 5 and Midland Rd - Site Plan

PLE - Requesting Site Plan Approval

- 0977-PLN-03.pdf
- 0977-DRN-03.pdf
- 0977-RPLT-01.pdf

3. 20 Tanglewood Dr - Conditional Use Permit - Additional Square Footage for Accessory Structure

David Harris - Requesting Recommendation for Approval of CUP to allow for additional Square Footage for Accessory Structure on Lot.

- 0983-PUB-01.pdf
- 0983-PLN-01.pdf
- 0983-APP-01.pdf

4. FSBC - New Site Additions - 604 S Reynolds Rd - Changes to Outfall of Retention Pond

Hope Consulting - Requesting Approval for changes to the Retention Pond Outfall

- 0912-DRN-03.pdf
- 0912-DRN-04.pdf

Adjournments

City of Bryant, Arkansas
Community Development
210 SW 3rd Street Bryant, AR 72022
501-943-0943

Rezoning Application

Applicants are advised to read the Amendments section of Bryant Zoning Code prior to completing and signing this form. The Zoning Code is available at www.cityofbryant.com under the Planning and Community Development tab.

Date: June 10, 2025

Applicant or Designee:

Name LaDonna Henry
Address 209 Texas Ave
Phone 501-281-3549
Email Address LdR02182@hotmail.com

Property Owner (If different from Applicant):

Name Lonnie Humphries
Address North Little Rock AR 72118
Phone 501-516-2907
Email Address _____

Property Information:

Address 2913 Springhill Rd.
Parcel Number 840088500 21 / 840088500 22
Existing Zoning Classification RM
Requested Zoning Classification C-1

Legal Description (If Acreage or Metes and Bounds description, please attach in a legible typed format)

Lot 11, Block 2, Sherwood Park Subdivision AND The South 10 Feet of Lot 10, Block 2 of "Sherwood Park" subdivision.

Application Submission Checklist:

- ☐ Letter stating request of zoning change from (Current Zoning) to (Requested Zoning) and to be placed on the Planning Commission Agenda
- ☐ Completed Rezoning Application
- ☐ Rezoning Application Fee ($40 fee for lot and black descriptions or $125 for acreage or metes and bound descriptions)
- ☐ If someone, other than the owner, will be handling the zoning process, we will require a

letter from the owner of said property, giving him or her authority to do so.

☐ Recent surveyed plat of the property including vicinity map

Additional Requirements:

*Items below **must be completed before the public hearing can occur**. Failure to provide notices in the following manners shall require delay of the public hearing until notice has been properly made.*

☐ Publication: Public Notice shall be published by the applicant at least one (1) time fifteen (15) days prior to the public hearing at which the rezoning application will be heard. Once published please provide a proof of publication to the Community Development office. (Sample notice attached below)

☐ Posting of Property: The city shall provide signs to post on the property involved for the fifteen (15) consecutive days leading up to Public hearing. One (1) sign is required for every two hundred (200) feet of street frontage.

☐ Notification of adjacent landowners: Applicant shall attempt to inform by certified letter, return receipt requested, all owners of land within three hundred (300) feet of any boundary of the subject property of the public hearing. (Sample letter attached below)

☐ Certified list of property owners, all return receipts, and a copy of the notice shall be provided to the Community Development Department at least five (5) days prior to the public hearing.

Note: that this is not an exhaustive guideline regarding the Conditional Use Permit Process. Additional information is available in the Bryant Zoning Ordinance.

READ CAREFULLY BEFORE SIGNING

I Lee Dawn Henry, do hereby certify that all information contained within this application is true and correct. I further certify that the owner of the property authorizes this proposed application. I understand that I must comply with all City Codes that pertain to this project and that it is my responsibility to obtain all necessary permits as needed.

City of Bryant, Arkansas
Community Development
210 SW 3rd Street Bryant, AR 72022
501-943-0943

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Phone 501-281-3549
Email Address LdR02182@hotmail.com

Property Owner (If different from Applicant):

Name Lonnie Humphries
Address North Little Rock AR 72118
Phone 501-516-2907
Email Address

Property Information:

Address 2506 W Robinhood Dr.
Parcel Number 84008850023
Existing Zoning Classification RM
Requested Zoning Classification C-1

Legal Description (If Acreage or Metes and Bounds description, please attach in a legible typed format)
Lot 12, Block 2 of Sherwood Park Subdivision

Application Submission Checklist:

- ☐ Letter stating request of zoning change from (Current Zoning) to (Requested Zoning) and to be placed on the Planning Commission Agenda
- ☐ Completed Rezoning Application
- ☐ Rezoning Application Fee ($40 fee for lot and black descriptions or $125 for acreage or metes and bound descriptions)
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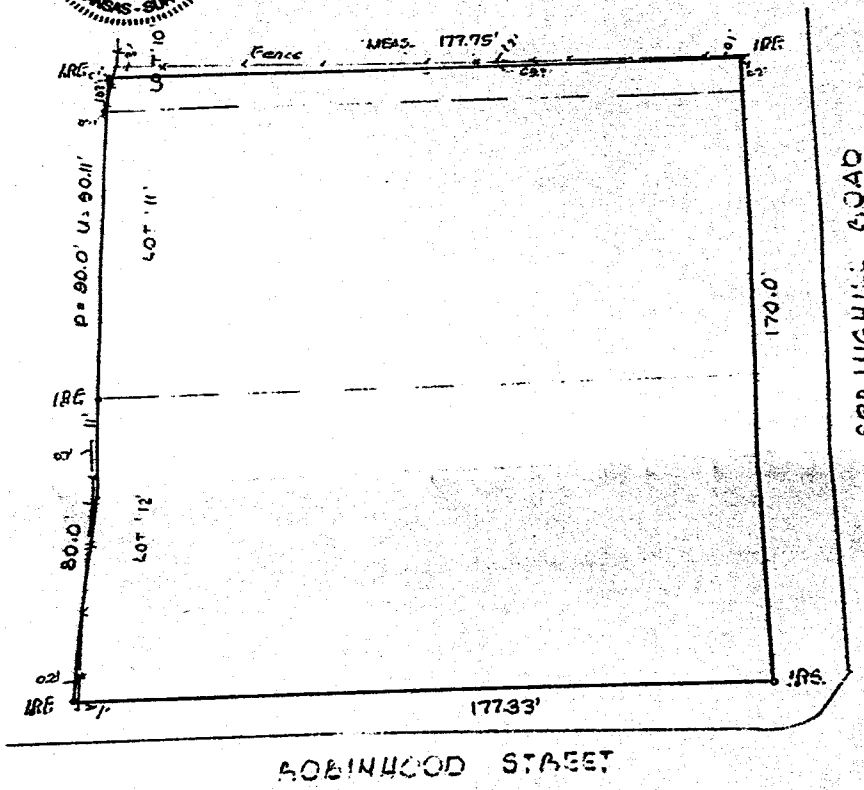
Note: that this is not an exhaustive guideline regarding the Conditional Use Permit Process. Additional information is available in the Bryant Zoning Ordinance.

READ CAREFULLY BEFORE SIGNING

I LaDonna Henry, do hereby certify that all information contained within this application is true and correct. I further certify that the owner of the property authorizes this proposed application. I understand that I must comply with all City Codes that pertain to this project and that it is my responsibility to obtain all necessary permits as needed.

BROOKS SURVEYING, INC.
20820 Arch Street Pike
Hensley, AR 72065
501-888-5336/brookssurveyinc@att.net

CERTIFICATE OF AUTHORIZATION
BROOKS SURVEYING, INC.
No. 1389
ARKANSAS - SURVEYOR



LEGAL DESCRIPTION

Lots 11 and 12 and the South 10 feet of Lot 10, Block 2, SHERWOOD PARK ADDITION to the City of Bryant, Saline County, Arkansas.

REGISTERED
STATE OF ARKANSAS
PROFESSIONAL LAND SURVEYOR

Date of Survey:	August 26, 2022
Scale:	1" = 30'
Property Address:	

Parcels: 840-08850-021
840-08850-022

FILED
SALINE COUNTY
CIRCUIT CLERK
2009 OCT 13 AM 10:27
BY:

WARRANTY DEED

09 090313

KNOW ALL MEN BY THESE PRESENTS:

THAT We, JAMES RAGAN and KAY RAGAN, Husband and Wife, Grantors, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable consideration, paid and delivered by the Grantee herein, the receipt of which is hereby acknowledged, do hereby grant, bargain, sell and convey unto the said YOULONDIA ELAINE HUMPHRIES (hereinafter referred to as the Grantee), and unto her heirs and assigns forever, the following lands lying in the County of Saline, and State of Arkansas, to-wit:

Lot 11, Block 2, Sherwood Park Subdivision, Saline County, Arkansas

AND

The South 10 feet of Lot 10, Block 2 in "Sherwood Park", a subdivision in Saline County, Arkansas.

To have and to hold the same unto the said Grantee and unto her heirs and assigns forever, with all appurtenances thereunto belonging.

And We, JAMES RAGAN and KAY RAGAN, Husband and Wife, hereby covenant with said Grantee that we will forever warrant and defend the title to the lands against all claims whatever.

WITNESS our Hands and Seals on this 13th day of October, 2009.

I Certify under penalty of false swearing that at least the legally correct amount of documentary stamps have been placed on this instrument. Exempt or no consideration paid if none shown.

GRANTEE or AGENT: Youlondia Elaine Humphries

GRANTEE'S ADDRESS: 2917 Cedar Park ST
Benton, Ar. 72019

James Ragan (L.S.)
JAMES RAGAN

Kay Ragan (L.S.)
KAY RAGAN

09 090314

This Instrument Prepared By:
John F. Lovell, Jr.
Attorney at Law
501 North Main Street
Benton, Arkansas 72015

ACKNOWLEDGMENT

STATE OF ARKANSAS)
)ss
COUNTY OF SALINE)

BE IT REMEMBERED, that on this day came before me, the undersigned, a Notary Public, within and for the County aforesaid duly commissioned and acting JAMES RAGAN and KAY RAGAN, Husband and Wife, to me well known as the Grantors in the foregoing Warranty Deed, and stated they had executed the same for the consideration and purposes therein mentioned and set forth.

WITNESS my hand and seal as such Notary Public on this 13th day of October, 2009.

Cristy Lynn Pierce
NOTARY PUBLIC

My Commission Expires:
7-1-2019

CRISTY LYNN PIERCE
MY COMMISSION # 12371370
EXPIRES: July 1, 2019
Saline County

FILED FOR RECORD ON THIS 13 DAY OF Oct, 2009, AT 10:27 AND SAME IS DULY RECORDED IN DEED BOOK 2009

PAGE 90313.

CIRCUIT CLERK AND RECORDER

BY D.C.

SEAL OF CIRCUIT COURT SALINE COUNTY, AR

09 090315

Parcel 840-08850-023

This Instrument prepared, from information furnished by the parties for the benefit of the Grantees.
No opinion as to sufficiency of title, sufficiency of legal description, or nature or extent of oil, gas, or minerals conveyed.

McMULLAN & BROWN
P.O. Box 2839
Little Rock, AR 72203-2839

2022-018465
I certify this instrument was filed on:
08/10/2022 03:40:22 PM
Myka Bono Sample
Saline County Circuit Clerk

Pages: 3
H LEE

QUITCLAIM DEED

KNOW ALL MEN BY THESE PRESENTS:

THAT Joel Brooks, a married person, ("Grantor") for and in consideration of the sum of TEN AND NO/100 ($10.00) in hand paid by Lonnie Humphries and LaDonna Henry ("Grantees"), the receipt of which is hereby acknowledged, does hereby grant, convey, sell, and quitclaim unto the said Grantees, and unto Grantees' heirs and assigns forever, all Grantor's right, title, interest and claim in and to the following lands lying in Saline County, Arkansas:

Lot 12, Block 2, in Sherwood Park Subdivision as surveyed, platted, and recorded in the office of the Circuit Clerk of Saline County, Arkansas. Subject to Protective Covenants of record.

TO HAVE AND TO HOLD the same unto the said Grantees and unto Grantees' heirs, successors, or assigns forever, with all appurtenances thereunto belonging.

AND, I, Qing Niu, spouse of Joel Brooks, do hereby release and relinquish unto the said Grantees, all my rights of dower, curtesy, and homestead in and to the said lands.

WITNESS our hands and seals this 8 day of August, 2022.

Joel Brooks

Qing Niu

DocId:8234577
Tx:4161499

ACKNOWLEDGMENT

STATE OF Arkansas
COUNTY OF Saline

On this day, before me, the undersigned Notary Public, duly commissioned in the state and county aforesaid, personally appeared Joel Brooks and Qing Niu, known to me (or satisfactorily proven) to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the consideration and purposes therein mentioned and set forth.

WITNESS my hand and official seal this 8th day of August, ~~2021.~~ 2022

Notary Public

My Commission Expires:

May 15, 2027

ANNA WAGNON
MY COMMISSION EXPIRES
05-15-2027
NOTARY PUBLIC
COMM. # 12701045
GRANT COUNTY - ARKANSAS

GAS METER	STORM DRAIN MANHOLE
WATER METER	SEWER CLEANOUT
GUY WIRE	N NORTH
POWER/UTILITY POLE	S SOUTH
TELEPHONE PEDESTAL	E EAST
SEWER MANHOLE	W WEST
WATER VALVE	(M) AS MEASURED
FIRE HYDRANT	(D) PER DEED
SIGNS	(R) RECORDED
LIGHT POLE	R/W RIGHT-OF-WAY
TELEPHONE MANHOLE	L.A. LANDSCAPED AREA
SS SANITARY SEWER LINE	CR4 CAPPED 1/2" REBAR
W WATER LINE	CONC. CONCRETE
STORM SEWER PIPE	P.O.C. POINT OF COMMENCEMENT
ROADWAY CENTERLINE	P.O.B. POINT OF BEGINNING
UTILITY EASEMENT	CMP CORRUGATED METAL PIPE
BUILDING SETBACK LINE	RCP REINFORCED CONCRETE PIPE
R/W ROADWAY RIGHT-OF-WAY	ESMT EASEMENT
OHE OVERHEAD ELECTRIC LINES	HDPE HIGH DENSITY POLYETHYLENE
UGT UNDERGROUND TELEPHONE	SUBD SUBDIVISION
G UNDERGROUND GAS	FDC FIRE DEPARTMENT CONNECTION
F.O. UNDERGROUND FIBER OPTIC	CPS COTTON PICKER SPINDLE
	P5 5/8" PIPE

ASPHALT

CONCRETE

- SET 1/2" REBAR w/ CAP #1853
- SET COTTON-PICKER SPINDLE
- FOUND MONUMENT (DESC. NOTED)
- △ COMPUTED CORNER (NOT SET)
- CORRESPONDS TO DRAWING NOTE

GENERAL CONSTRUCTION NOTES

A. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR DAMAGES OCCURRING TO ANY PROPERTY DURING THE CONSTRUCTION OF THIS PROJECT. SAID CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT PROPERTY DAMAGE.

B. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL SOLELY AND COMPLETELY BE RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS.

C. THE DUTY OF THE LOCAL UTILITY PROVIDER TO CONDUCT CONSTRUCTION INSPECTION REVIEWS OF THE CONTRACTOR'S PERFORMANCE IS NOT AN INSPECTION OR REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

D. ALL WATER AND SEWER IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST REVISION TO THE LOCAL PROVIDER'S WATER AND WASTEWATER (SANITARY SEWER) STANDARD SPECIFICATIONS.

E. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF ALL UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.

F. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.

G. PRIOR TO INSTALLATION OF ANY UTILITIES, THE CONTRACTOR IS TO EXCAVATE, VERIFY AND CALCULATE ALL CROSSINGS AND INFORM ANY AND ALL UTILITIES OF ANY CONFLICTS PRIOR TO CONSTRUCTION.

H. CONSTRUCTION SHALL NOT START ON ANY WATER UTILITY TIE-INS UNTIL APPROVAL IS GIVEN BY THE LOCAL UTILITY PROVIDER. SAID CONTRACTOR SHALL NOT OPERATE ANY VALVE, HYDRANT, OR WATER UTILITY APPURTENANCE NOR SHALL HE ATTACH TO OR TAP ANY WATER UTILITY MAIN WITHOUT APPROVAL. THE CONTRACTOR SHALL BEAR THE COST AND CONSEQUENCE OF ANY DISRUPTION OF UTILITY OPERATION CAUSED BY CONSTRUCTION.

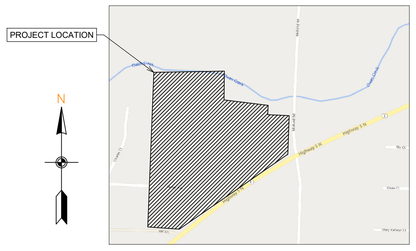
I. FIBER OPTIC CABLE ON AND/OR ADJACENT TO THIS SITE WERE NOT LOCATED BY THE SURVEY AND ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY FIBER OPTIC CABLES ASSOCIATED WITH THIS SITE AND TAKE ALL NECESSARY AND REQUIRED PRECAUTIONS TO PROTECT ANY EXISTING FIBER OPTIC CABLES. CONTRACTORS SHALL COORDINATE ALL EFFORTS WITH OWNER OF FIBER OPTIC CABLES OR THEIR DESIGNATED REPRESENTATIVE.

J. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "ONECALL" SERVICE TO MARK ALL UTILITIES PRIOR TO ANY DEMOLITION, EARTHWORK, OR UTILITY WORK ON THIS SITE.

NEW BEGINNINGS

HIGHWAY 5
BRYANT, AR

Sheet List Table	
Sheet Number	Sheet Title
C1.0	COVER SHEET
C1.1	OVERALL SITE PLAN
C1.2	ENLARGED SITE PLAN
C1.3	SITE DETAILS
C1.4	GRADING PLAN
C1.5	ENLARGED GRADING PLAN
C1.6	UTILITY PLAN
C1.7	UTILITY PROFILES
C1.8	UTILITY DETAILS I
C1.9	UTILITY DETAILS II
C1.10	PRE-DEV DRAINAGE
C1.11	POST-DEV DRAINAGE
C1.12	LANDSCAPE PLAN
C1.13	SWPPP



Vicinity Map

SCALE 1" = 500'

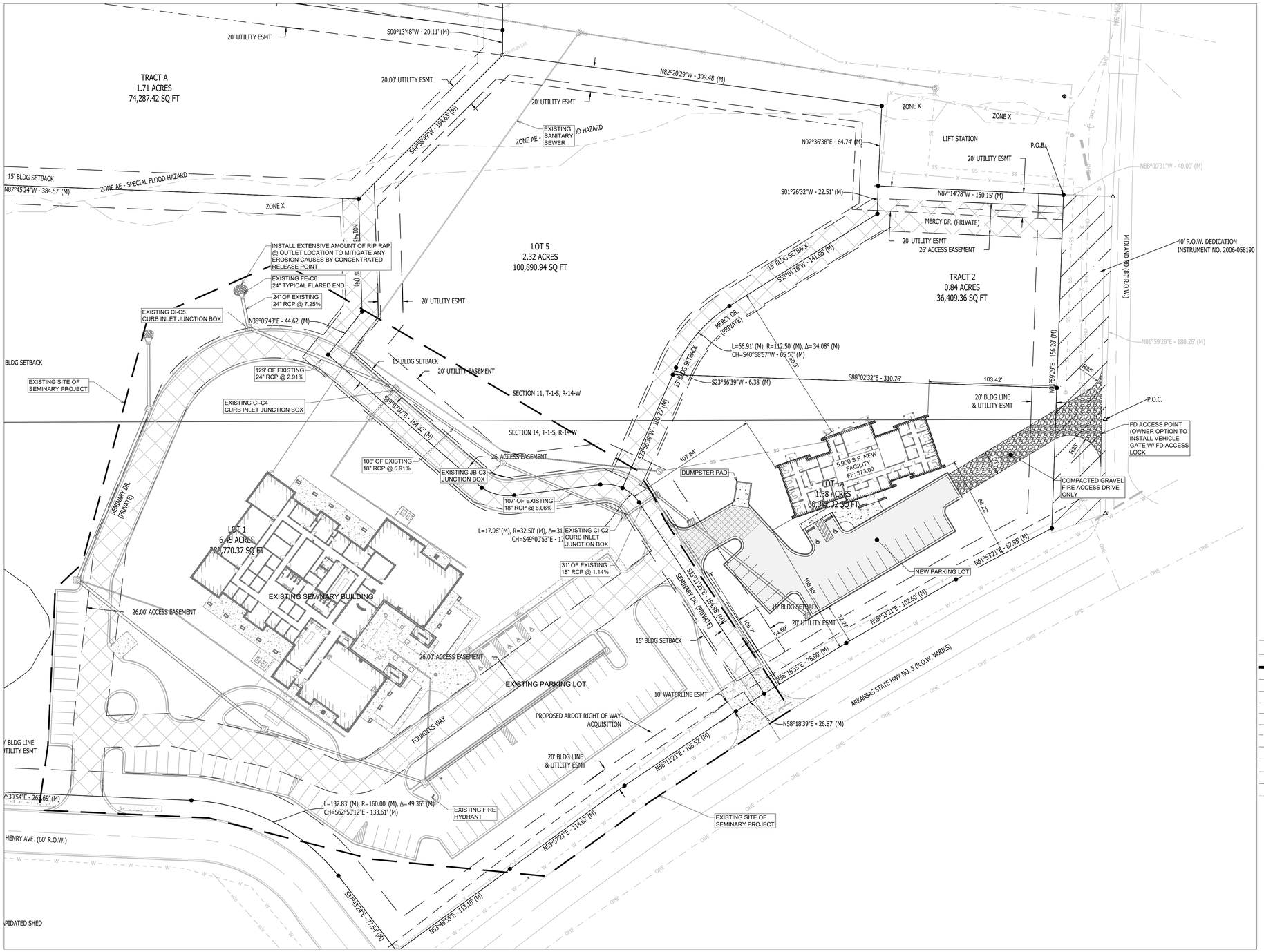
811 Know what's **below.** **Call** before you dig.

DEVIATIONS/VARIANCES

CERTIFICATE OF AUTHORIZATION PHILLIP LEWIS ENGINEERING, INC. No. 566 ARKANSAS-ENGINEER

STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 9540 PHILLIP A. LEWIS

PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840



OVERALL SITE PLAN

SCALE 1" = 40'

LEGEND

- LIGHT DUTY HMAC ASPHALT SURFACE COURSE
- MEDIUM DUTY HMAC ASPHALT SURFACE COURSE
- MEDIUM DUTY HMAC ASPHALT SURFACE COURSE

GENERAL CONSTRUCTION NOTES

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B. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL SOLELY AND COMPLETELY BE RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS.

THE DUTY OF BRYANT TO CONDUCT CONSTRUCTION INSPECTION REVIEWS OF THE CONTRACTOR'S PERFORMANCE IS NOT AN INSPECTION OR REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

C. ALL WATER AND SEWER IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST REVISION TO THE CITY OF BRYANT'S WATER AND WASTEWATER (SANITARY SEWER) STANDARD SPECIFICATIONS.

D. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF ALL UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.

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LEGEND OF SYMBOLS & ABBREVIATIONS

GAS METER		STORM DRAIN MANHOLE	
WATER METER		SEWER CLEANOUT	
GUY WIRE	N	NORTH	
POWER/UTILITY POLE	S	SOUTH	
TELEPHONE PEDESTAL	E	EAST	
SEWER MANHOLE	W	WEST	
WATER VALVE	(M)	AS MEASURED	SET 1/2" REBAR w/ CAP #1853
FIRE HYDRANT	(D)	PER DEED	SET COTTON-PICKER SPINDLE
SIGNS	(R)	RECORDED	FOUND MONUMENT (DESC. NOTED)
LIGHT POLE	R/W	RIGHT-OF-WAY	COMPUTED CORNER (NOT SET)
TELEPHONE MANHOLE	L.A.	LANDSCAPED AREA	
GAS VALVE	CR4	CAPPED 1/2" REBAR	
SANITARY SEWER LINE	CONC.	CONCRETE	
WATER LINE	P.O.C.	POINT OF COMMENCEMENT	
STORM SEWER PIPE	P.O.B.	POINT OF BEGINNING	
ROADWAY CENTERLINE	CMP	CORRUGATED METAL PIPE	
UTILITY EASEMENT	RCP	REINFORCED CONCRETE PIPE	
BUILDING SETBACK LINE	ESMT	EASEMENT	
ROADWAY RIGHT-OF-WAY	HDPE	HIGH DENSITY POLYETHYLENE	
OVERHEAD ELECTRIC LINES	SUBD	SUBDIVISION	
UNDERGROUND TELEPHONE	FDC	FIRE DEPARTMENT CONNECTION	
UNDERGROUND GAS	CPS	COTTON PICKER SPINDLE	
UNDERGROUND FIBER OPTIC	P5	5/8" PIPE	
FENCE	R5	5/8" REBAR	
STEEL GUARD RAIL	R4	1/2" REBAR	
SURFACE CONTOUR LINE & ELEVATION	PK	SURVEY NAIL	
	PB	TELEPHONE PULL BOX	

PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

NEW BEGINNINGS
HIGHWAY 5
BRYANT, ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP LEWIS

CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS ENGINEER

N

0 40'

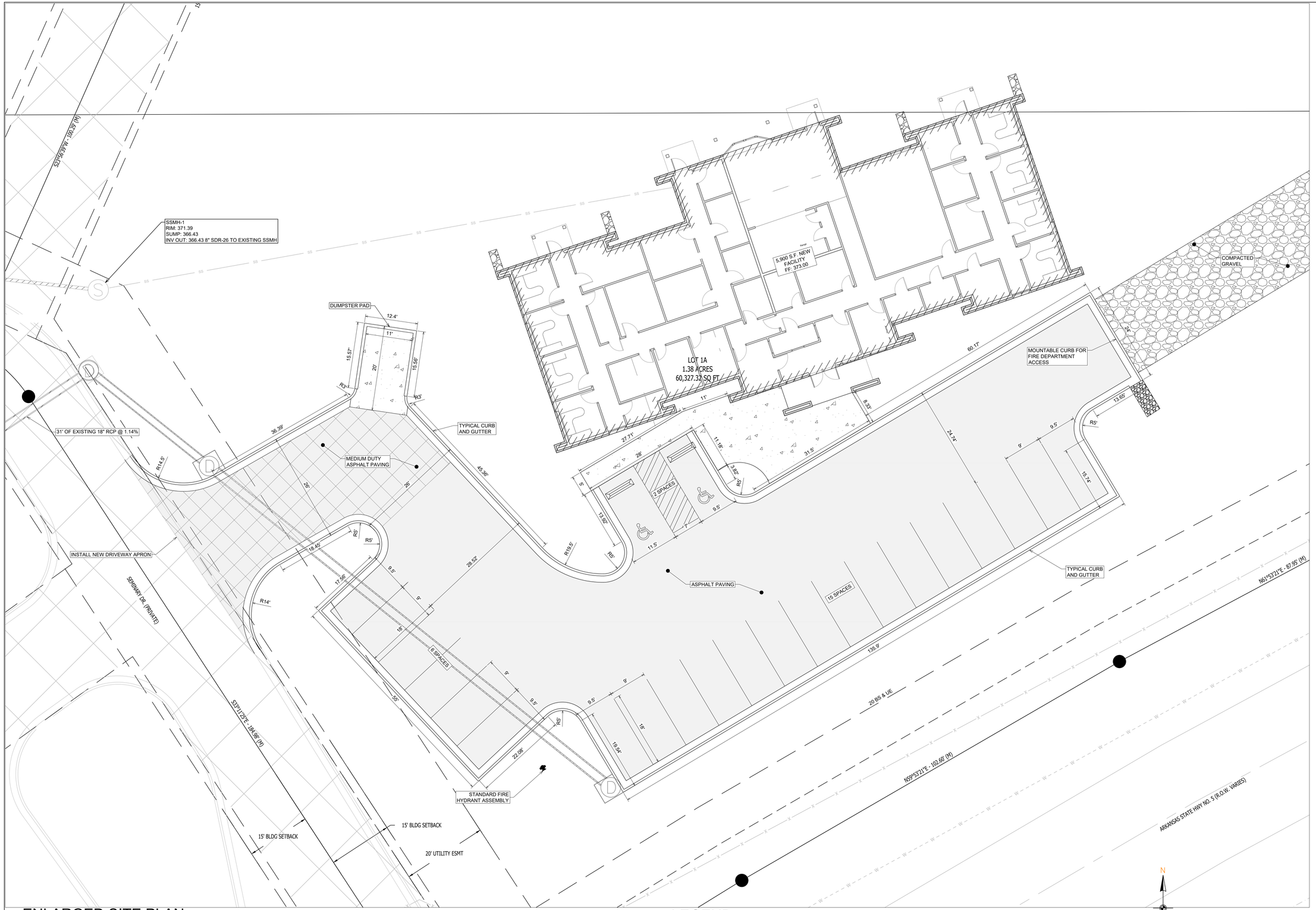
1" = 40'-0"

PROJECT NUMBER:

SHEET ISSUE DATE:
08-06-2025

PAGE TITLE:
OVERALL SITE PLAN

SHEET NUMBER:
C1.1



ENLARGED SITE PLAN

SCALE 1" = 10'

1. TOTAL NEW DEVELOPMENT AREA = (+/-) 1.8 ACRES
2. PROPERTY IS ZONED C-2
3. 23 PARKING SPACES PROVIDED INCLUDING 2 ADA ACCESSIBLE PARKING SPACES
4. ALL DIMENSIONS ARE TO THE BACK OF CURB AND/OR EDGE OF PAVEMENT
5. DAMAGE TO PUBLIC AND PRIVATE PROPERTY DUE TO HAULING OPERATIONS OR OPERATIONS OF CONSTRUCTION RELATED EQUIPMENT FROM A CONSTRUCTION SITE SHALL BE REPAIRED BY THE THE RESPONSIBLE PARTY PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
6. REPAIR, REPLACE, OR EXTEND EXISTING DAMAGED OR MISSING CURB AND GUTTER, SIDEWALK OR RAMPS WITHIN THE PUBLIC RIGHT OF WAY.
7. ALL SIGNAGE, PAVEMENT MARKING AND PARKING LOT STRIPING SHALL CONFORM TO REQUIREMENTS GIVEN IN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). MUTCD REQUIRES THAT PARKING SPACES BE MARKED IN WHITE.

LEGEND

- LIGHT DUTY HMAC ASPHALT SURFACE COURSE
- MEDIUM DUTY HMAC ASPHALT SURFACE COURSE
- COMPACTED GRAVEL
- CONCRETE PAVING OR SIDEWALK

N

0 10'

1" = 10'-0"

PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

NEW BEGININGS
HIGHWAY 5
BRYANT, ARKANSAS

CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS ENGINEER

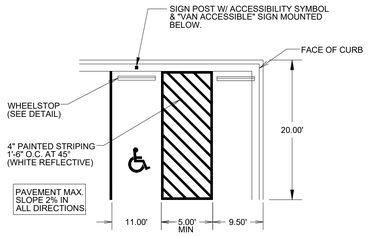
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP LEWIS

PROJECT NUMBER:

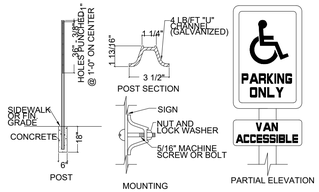
SHEET ISSUE DATE:
08-06-2025

PAGE TITLE:
ENLARGED SITE PLAN

SHEET NUMBER:
C1.2



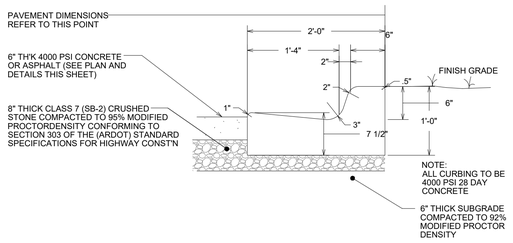
TYPICAL ACCESSIBLE PARKING STALLS



HANDICAP SIGN DETAIL

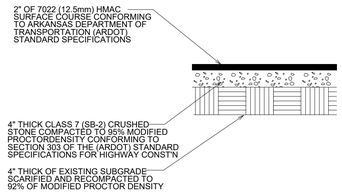
NOT TO SCALE

NOTE:
HANDICAP SIGNAGE SHALL BE IN STRICT COMPLIANCE WITH CURRENT FEDERAL AND LOCAL LAW REQUIREMENTS



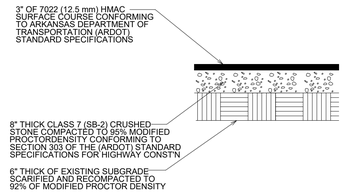
2'-0" CONCRETE CURB & GUTTER

NOT TO SCALE



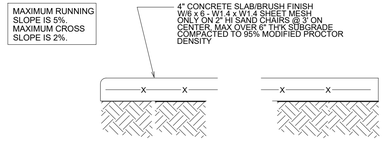
LIGHT DUTY HMAC ASPHALT SURFACE COURSE

NOT TO SCALE



MEDIUM DUTY HMAC ASPHALT SURFACE COURSE

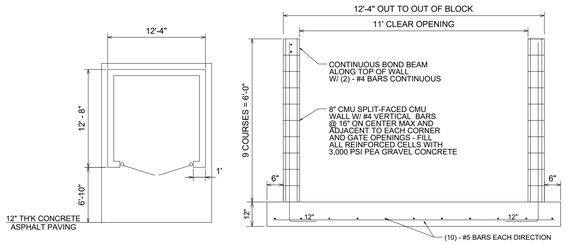
NOT TO SCALE



CONCRETE WALK SECTION

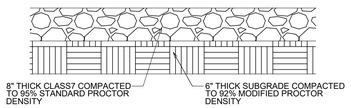
NOT TO SCALE

NOTE:
ALL SIDEWALK JOINTS TO BE STEEL TROWELED. ALL JOINT EDGES AND SHALL BE SPACED AT 5 FEET ON CENTER MAXIMUM IN ALL DIRECTIONS AND SHALLBE STEEL TROWELED ON A RADIUS NOT TO EXCEED ONE-HALF INCH.



DUMPSTER PAD/ENCLOSURE DETAIL

NOT TO SCALE



COMPACTED GRAVEL PAVEMENT SECTION

NOT TO SCALE

PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

NEW BEGINNINGS
HIGHWAY 5
BRYANT, ARKANSAS

CERTIFICATE OF AUTHORIZATION — PHILLIP LEWIS ENGINEERING, INC. — No. 566 — ARKANSAS ENGINEER

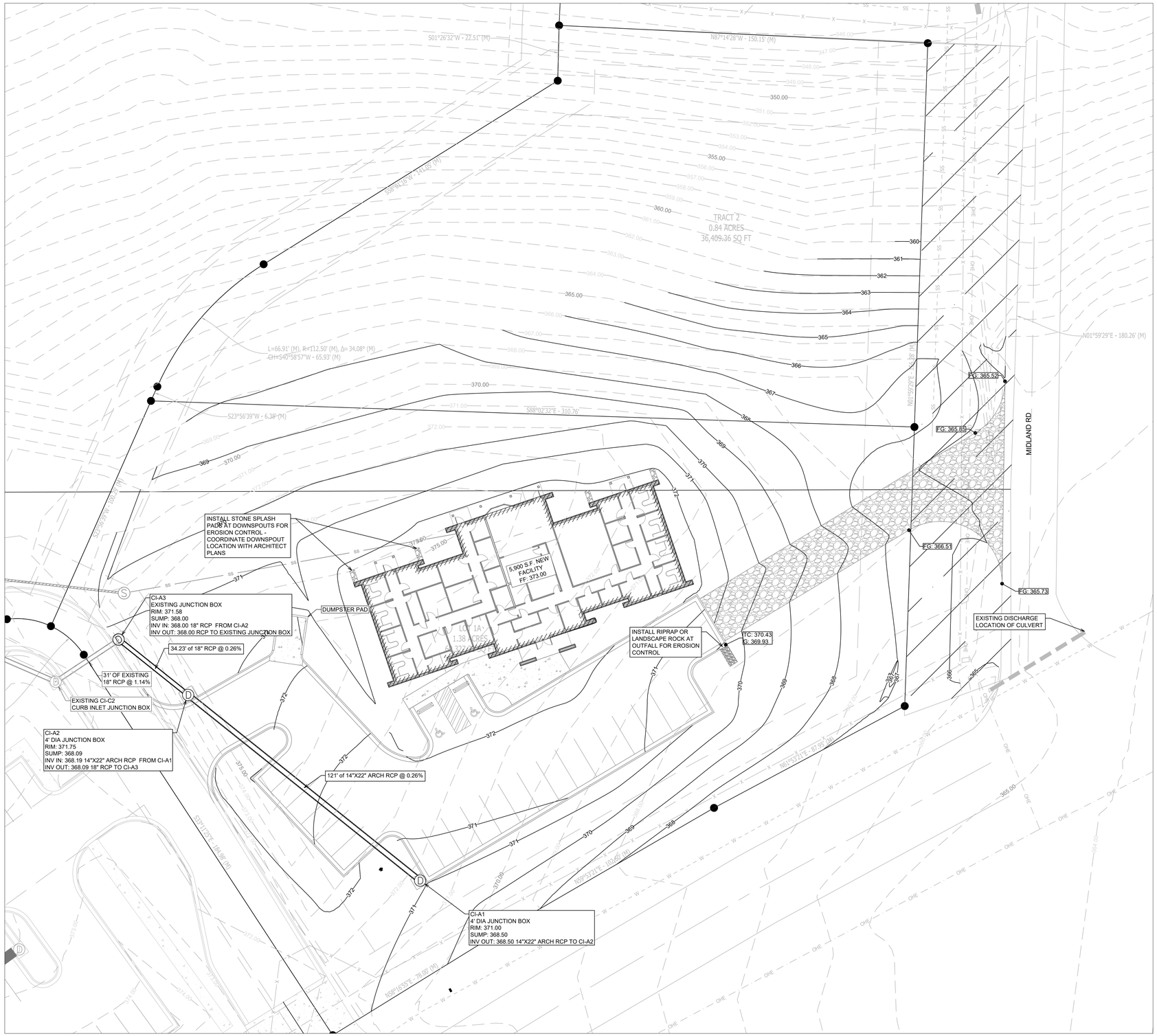
STATE OF ARKANSAS — REGISTERED PROFESSIONAL ENGINEER — No. 9540 — PHILLIP A. LEWIS

PROJECT NUMBER:

SHEET ISSUE DATE:
08-06-2025

PAGE TITLE:
SITE DETAILS

SHEET NUMBER:
C1.3



OVERALL GRADING PLAN

SCALE 1" = 20'

N

0 20'

1" = 20'-0"

PHILLIP LEWIS ENGINEERING, INC.
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REVISION:

NEW BEGINGS
HIGHWAY 5
BRYANT, ARKANSAS

CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS ENGINEER

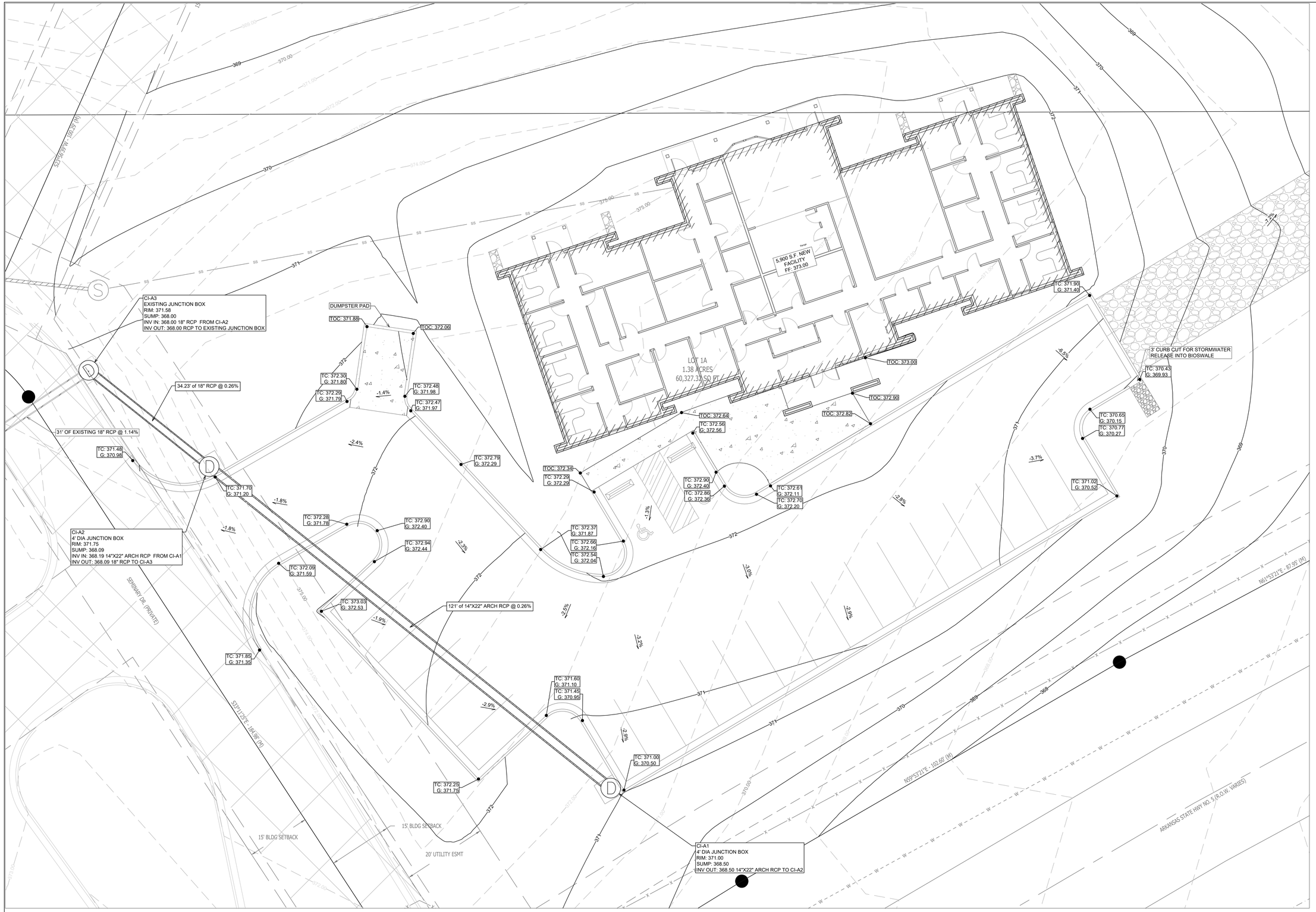
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP A. LEWIS

PROJECT NUMBER:

SHEET ISSUE DATE:
08-06-2025

PAGE TITLE:
GRADING PLAN

SHEET NUMBER:
C1.4



ENLARGED GRADING PLAN

SCALE 1" = 10'

TC = TOP OF CURB ELEVATION
G = GUTTER ELEVATION
TOC = TOP OF CONCRETE ELEVATION
FG = FINAL GRADE ELEVATION
TP = TOP OF PAVEMENT ELEVATION
EG = EXISTING GRADE ELEVATION

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Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
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REVISION:

NEW BEGININGS
HIGHWAY 5
BRYANT, ARKANSAS

CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
ARKANSAS – ENGINEER
No. 566

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP A. LEWIS

N

0 10'

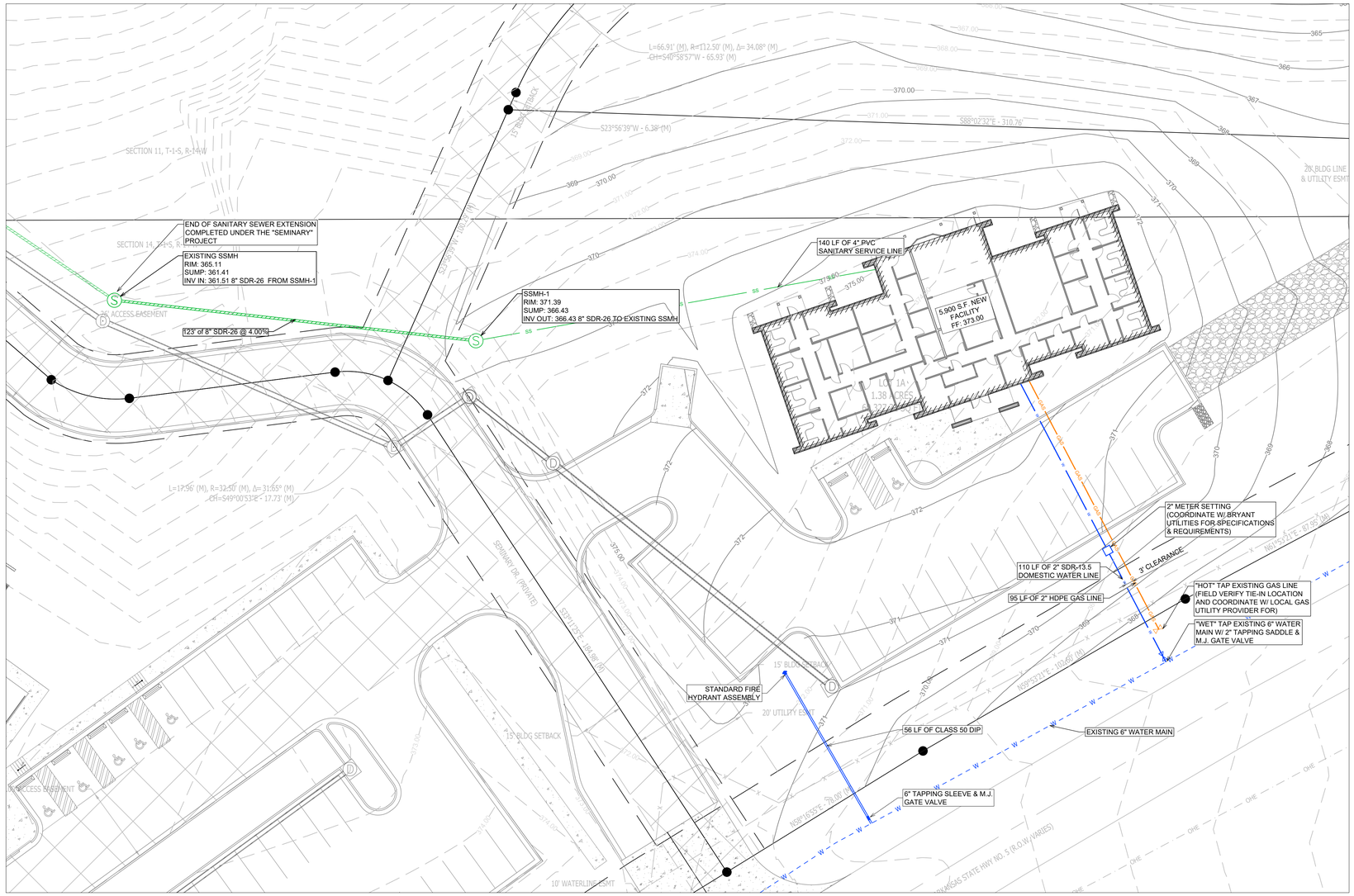
1" = 10'-0"

PROJECT NUMBER:

SHEET ISSUE DATE:
08-06-2025

PAGE TITLE:
ENLARGED GRADING PLAN

SHEET NUMBER:
C1.5



UTILITY PLAN

SCALE 1" = 20'

GENERAL CONSTRUCTION NOTES

A. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR DAMAGES OCCURRING TO ANY PROPERTY DURING THE CONSTRUCTION OF THIS PROJECT. SAID CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT PROPERTY DAMAGE.

B. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL SOLELY AND COMPLETELY BE RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS.

THE DUTY OF BRYANT TO CONDUCT CONSTRUCTION INSPECTION REVIEWS OF THE CONTRACTOR'S PERFORMANCE IS NOT AN INSPECTION OR REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

C. ALL WATER AND SEWER IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST REVISION TO THE CITY OF BRYANT'S WATER AND WASTEWATER (SANITARY SEWER) STANDARD SPECIFICATIONS.

D. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF ALL UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.

E. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.

F. PRIOR TO INSTALLATION OF ANY UTILITIES, THE CONTRACTOR IS TO EXCAVATE, VERIFY AND CALCULATE ALL CROSSINGS AND INFORM ANY AND ALL UTILITIES OF ANY CONFLICTS PRIOR TO CONSTRUCTION.

G. CONSTRUCTION SHALL NOT START ON ANY WATER UTILITY TIE-INS UNTIL APPROVAL IS GIVEN BY BRYANT WATER. SAID CONTRACTOR SHALL NOT OPERATE ANY VALVE, HYDRANT, OR WATER UTILITY APPURTENANCE NOR SHALL HE ATTACH TO OR TAP ANY WATER UTILITY MAIN WITHOUT APPROVAL. THE CONTRACTOR SHALL BEAR THE COST AND CONSEQUENCE OF ANY DISRUPTION OF UTILITY OPERATION CAUSED BY CONSTRUCTION.

H. FIBER OPTIC CABLE ON AND/OR ADJACENT TO THIS SITE WERE NOT LOCATED BY THE SURVEY AND ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY FIBER OPTIC CABLES ASSOCIATED WITH THIS SITE AND TAKE ALL NECESSARY AND REQUIRED PRECAUTIONS TO PROTECT ANY EXISTING FIBER OPTIC CABLES. CONTRACTORS SHALL COORDINATE ALL EFFORTS WITH OWNER OF FIBER OPTIC CABLES OR THEIR DESIGNATED REPRESENTATIVE.

J. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "ONECALL" SERVICE TO MARK ALL UTILITIES PRIOR TO ANY DEMOLITION, EARTHWORK, OR UTILITY WORK ON THIS SITE.

811
Know what's **below.**
Call before you dig.

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Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

PLE

REVISION:

NEW BEGININGS
HIGHWAY 5
BRYANT, ARKANSAS

CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP A. LEWIS

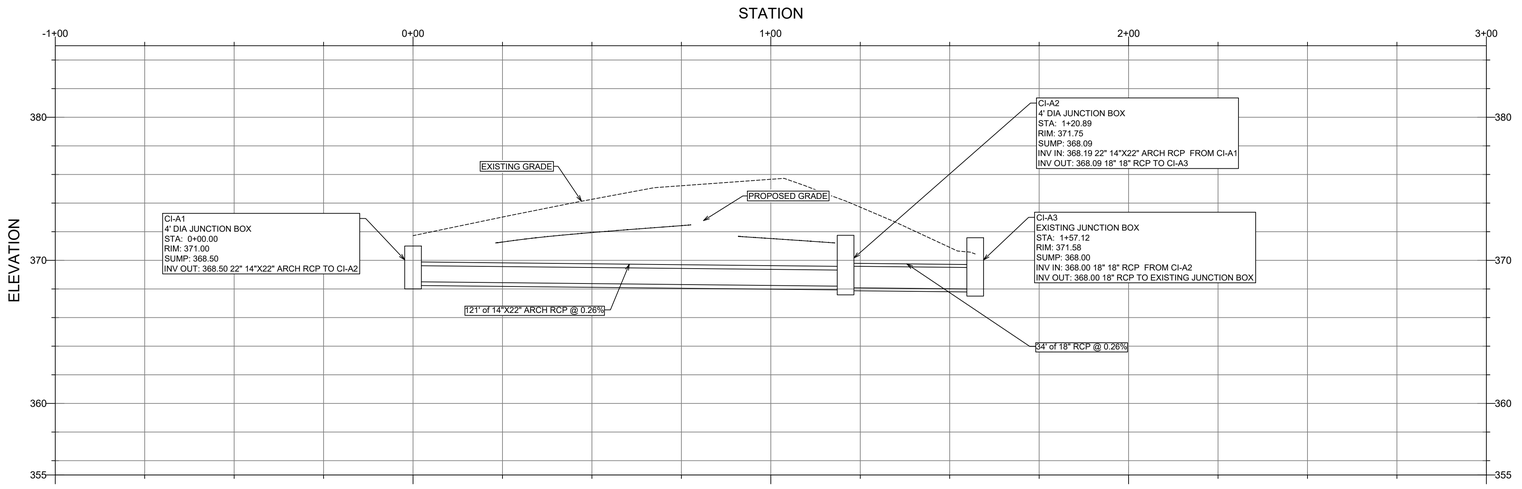
PROJECT NUMBER:

SHEET ISSUE DATE:
08-06-2025

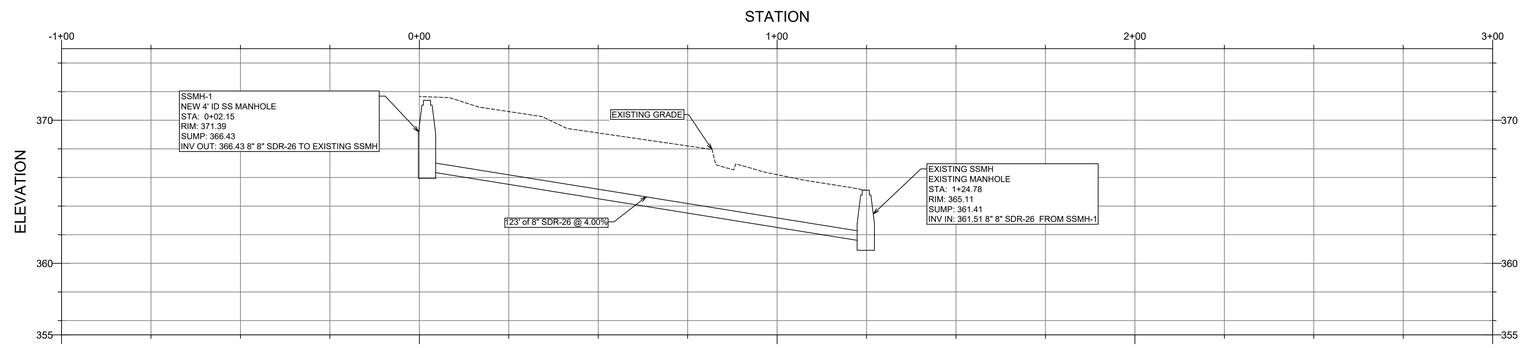
PAGE TITLE:
UTILITY PLAN

SHEET NUMBER:
C1.6

STORM SEWER



SANITARY SEWER



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Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

NEW BEGINGS
HIGHWAY 5
BRYANT, ARKANSAS

CERTIFICATE OF AUTHORIZATION
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No. 566
ARKANSAS ENGINEER

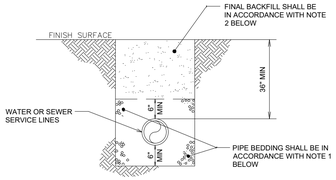
STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP A. LEWIS

PROJECT NUMBER:

SHEET ISSUE DATE:
C1.7

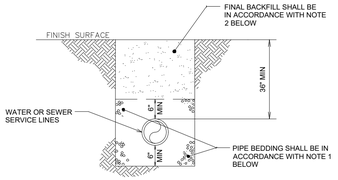
PAGE TITLE:
UTILITY PROFILES

SHEET NUMBER:
C1.7



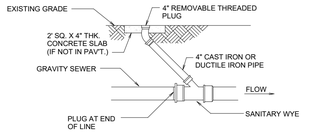
GAS LINE BEDDING DETAIL

NOT TO SCALE



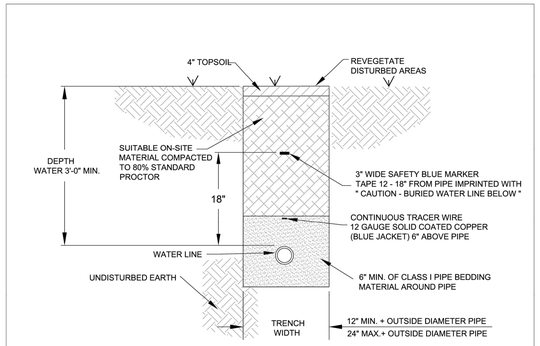
WATER AND SEWER LINES BEDDING DETAIL

NOT TO SCALE



THROUGH FLOW CLEANOUT

NOT TO SCALE



NOTES:

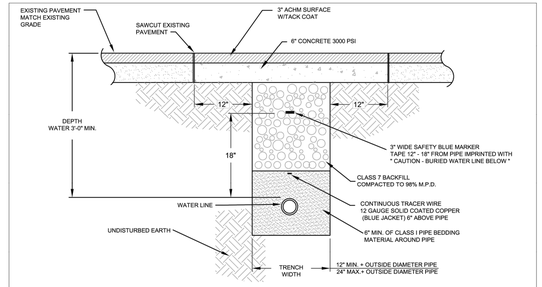
1. ALL VALVES, BENDS, ETC. SHALL BE RESTRAINED.
2. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING WATER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE WATER SYSTEM.
3. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART B)
4. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.
5. MAXIMUM PIPE COVER SHALL BE 60" UNDER NORMAL CONDITIONS. COVER GREATER THAN 60" MAY BE ALLOWED FOR SHORT DISTANCES WHERE REQUIRED BY FIELD CONDITIONS. NO HYDRANT SHALL BE ALLOWED WHERE LINES ARE GREATER THAN 60" DEEP.

WATER MAIN TRENCH

(NON-PAVED AREA)

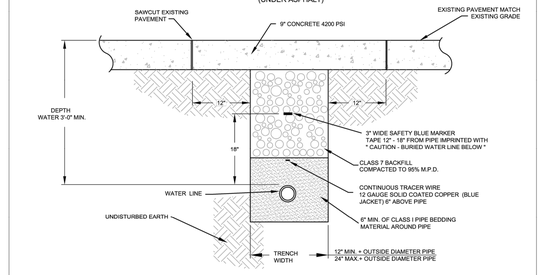
CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	WATER MAIN TRENCH (NON-PAVED AREA)	REVISED ----- ----- ----- ----- -----	W1
DRAWN BY:	CHECKED BY:	FILE: W1-Water Trench (Non-Paved Area).dwg	



WATER MAIN TRENCH

(UNDER ASPHALT)



WATER MAIN TRENCH

(UNDER CONCRETE)

NOTES:

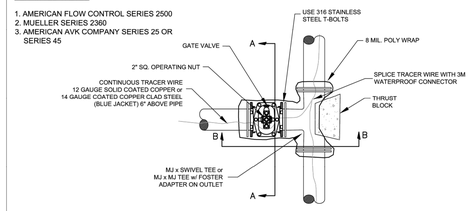
1. ALL VALVES, BENDS, ETC. SHALL BE RESTRAINED.
2. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING WATER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE WATER SYSTEM.
3. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART B)
4. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.
5. MAXIMUM PIPE COVER SHALL BE 60" UNDER NORMAL CONDITIONS. COVER GREATER THAN 60" MAY BE ALLOWED FOR SHORT DISTANCES WHERE REQUIRED BY FIELD CONDITIONS. NO HYDRANT SHALL BE ALLOWED WHERE LINES ARE GREATER THAN 60" DEEP.

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

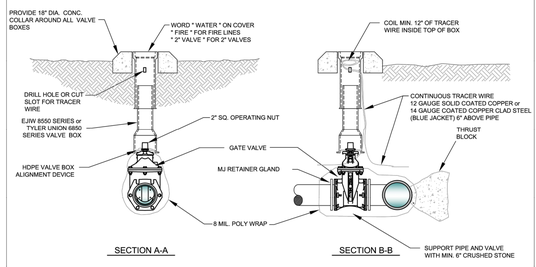
TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	WATER MAIN TRENCH (UNDER PAVEMENT)	REVISED ----- ----- ----- ----- -----	W2
DRAWN BY:	CHECKED BY:	FILE: W2-Water Trench (Under Pavement).dwg	

PERMITTED VALVES

1. AMERICAN FLOW CONTROL SERIES 2500
2. MUELLER SERIES 2360
3. AMERICAN AVK COMPANY SERIES 25 OR SERIES 45



PLAN



SECTION A-A

SECTION B-B

NOTES:

1. ALL VALVES SHALL BE SECURELY ANCHORED TO THE TEE.
2. ALL HARDWARE SHALL BE 316 STAINLESS STEEL.
3. IF DEPTH OF BURY EXCEEDS 4 FT., A VALVE STEM EXTENSION SHALL BE REQUIRED. THE VALVE STEM EXTENSION NUT SHALL BE WITHIN 24-INCHES TO 12-INCHES OF THE FINISHED SURFACE.

GATE VALVE DETAIL

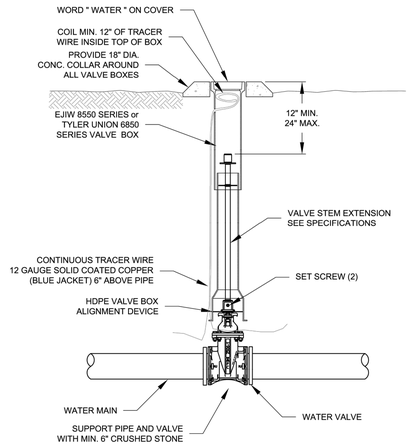
2" - 12"

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	GATE VALVE	REVISED ----- ----- ----- ----- -----	W4
DRAWN BY:	CHECKED BY:	FILE: W4-Gate Valve.dwg	

NOTES:

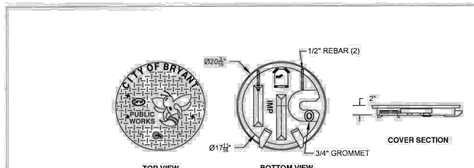
1. OPERATING NUT EXTENSIONS SHALL BE USED WHEN THE TOP OF THE OPERATING NUT IS GREATER THAN 4 FEET FROM THE TOP OF FINISHED SURFACE.
2. THE STEM EXTENSION SHALL BE OF ADEQUATE LENGTH TO REACH FROM THE VALVE OPERATING NUT TO A POINT WITHIN 24-INCHES TO 12-INCHES OF THE FINISHED SURFACE.



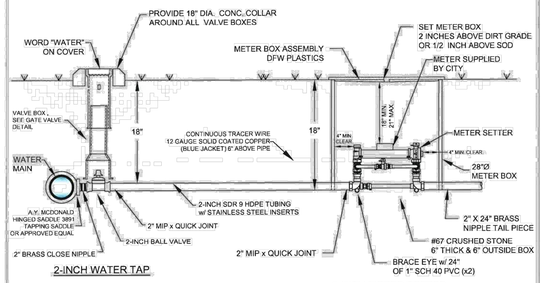
VALVE WITH STEM EXTENSION

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	VALVE STEM EXTENSION	REVISED ----- ----- ----- ----- -----	W7
DRAWN BY:	CHECKED BY:	FILE: W7-Valve Stem Extension.dwg	



WATER METER LID



2-INCH WATER TAP

2-INCH METER SETTER

NOTES:

1. COORDINATE INSTALLATION AND CONFIGURATIONOF ALL 1-1/2" AND LARGER METER SETTINGS WITH THE CITY.
2. ALL METER BOXES SHALL BE INSTALLED IN NON-PAVED AREAS. ANY METER BOX THAT GETS PLACED IN A PAVED AREA SHALL BE RELOCATED AT THE OWNER'S EXPENSE BEFORE A WATER METER WILL BE INSTALLED.
3. SUPPORT METER INSTALLATION WITH 1"x24" SCH40 PVC THROUGH EACH BRACE EYE.

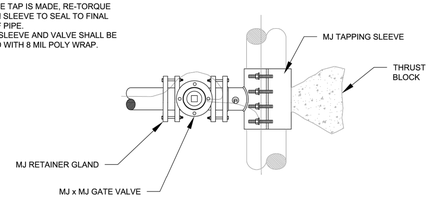
2" WATER SERVICE AND WATER METER

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

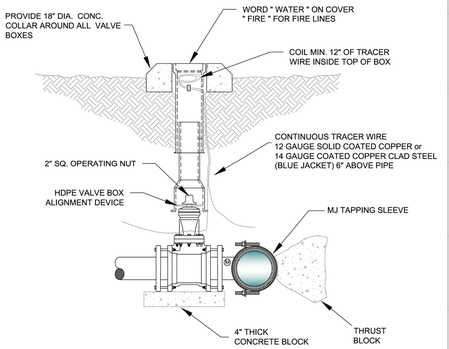
TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	2" WATER METER	REVISED ----- ----- ----- ----- -----	W12
DRAWN BY:	CHECKED BY:	FILE: W12-2 Inch Water Meter.dwg	

NOTES:

1. TAPPING SLEEVE SHALL BE SMITH-BLAIR 662 OR FORD FAST.
2. AFTER THE TAP IS MADE, RE-TORQUE BOLTS ON SLEEVE TO SEAL TO FINAL SHAPE OF PIPE.
3. TAPPING SLEEVE AND VALVE SHALL BE WRAPPED WITH 8 MIL POLY WRAP.



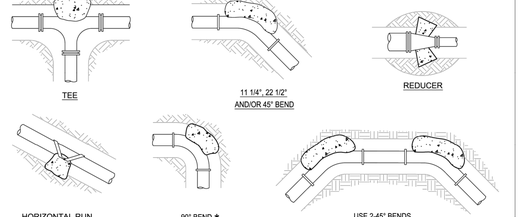
PLAN VIEW

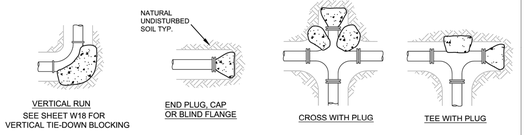


PROFILE VIEW

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	TAPPING SLEEVE AND VALVE	REVISED ----- ----- ----- ----- -----	W13
DRAWN BY:	CHECKED BY:	FILE: W13-Tapping Sleeve and Valve.dwg	





THRUST BLOCK SCHEDULE

(2000 PSF SOIL, 200 PSI WATER PRESSURE, 100 PSI WATER HAMMER)

BEARING AREA OF THRUST BLOCKS IN SQ. FT. (HORIZONTAL BENDS)						VOLUME OF THRUST BLOCK IN CU. FEET (VERTICAL BENDS)					
FITTING SIZE	PLUG TEE OR CAP	BEND ANGLE 90° *	45°	22 1/2°	11 1/4°	FITTING SIZE	BEND ANGLE 90° *	45°	22 1/2°	11 1/4°	ROD DIAM.	EMBEDMENT
2, 3 & 4	1.9	2.7	1.4	0.7	0.4	2, 3 & 4	35.5	19.2	9.9	4.9	50"	30"
6	5.6	7.9	4.3	2.2	1.1	6	105.8	57.2	29.2	14.7	75"	30"
8	9.6	13.6	7.4	3.8	1.9	8	181.9	98.5	50.2	25.2	75"	30"
12	20.5	29.0	15.7	8.0	4.0	12	387.1	209.5	106.8	53.7	1.0"	30"
16	35.7	50.4	27.3	13.9	7.0	16	672.6	364.0	185.6	93.2	1.0"	36"
18	44.8	63.4	34.3	17.5	18.8	18	844.7	457.2	233.1	117.1	1.0"	36"
24	78.4	110.9	60.0	30.6	15.4	24	1478.7	800.3	408.0	205.0	1.5"	36"

* 90 DEGREE BENDS SHALL ONLY BE USED ON A BY-EXCEPTION BASIS, AND MUST EACH BE SPECIFICALLY APPROVED BY CITY.

THRUST BLOCK NOTES:

1. CONCRETE FOR THRUST BLOCKS - CLASS A CONCRETE SHALL DEVELOP NOT LESS THAN 3000 P.S.I. COMPRESSIVE STRENGTH AT 28 DAYS AND BE PLACED AGAINST UNDISTURBED SOIL.
2. ALL BENDS, BOTH HORIZONTAL AND VERTICAL, SHALL BE BACKED WITH CONCRETE. VERTICAL BENDS SHALL BE PLACED ON CONCRETE PADS WHERE BENDS TURN UP, OR LOADED WHERE BENDS TURN DOWN.
3. WRAP PIPE JOINTS IN 8 MIL "POLYETHLENE" BEFORE PLACING CONCRETE.
4. BEARING AREA SHOWN IN TABLE IS BASED UPON A 2000 LBS/F SOIL BEARING, AND UPON A PIPELINE PRESSURE OF 200 psi. PLUS 100 psi. WATER HAMMER. AREAS SHOWN SHALL BE ADJUSTED, SHOULD FIELD CONDITIONS VARY.
5. MJ RESTRAINTS ARE REQUIRED FOR ALL FITTINGS.
6. USE LONG-RADIUS FITTINGS WHEREVER POSSIBLE.
7. ALL BOLTS FOR FITTINGS SHALL BE 316 STAINLESS STEEL.
8. ALL DUCTILE IRON FITTINGS SHALL BE FUSION-BONDED EPOXY COATED INSIDE AND OUTSIDE IN ACCORDANCE WITH ANSI/AWWA C116/A21.16.
9. UNIT WEIGHT OF CONCRETE FOR VERTICAL THRUST BLOCKS IS 150 LBS/CU. FT.

THRUST BLOCKING

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	THRUST BLOCKING	REVISED ----- ----- ----- ----- -----	W16
DRAWN BY:	CHECKED BY:	FILE: W16-Thrust Blocking.dwg	

PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

NEW BEGINNINGS
HIGHWAY 5
BRYANT, ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP A. LEWIS

CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS ENGINEER

PROJECT NUMBER:

SHEET ISSUE DATE:
08-06-2025

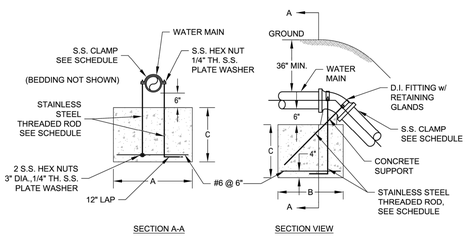
PAGE TITLE:
UTILITY DETAILS I

SHEET NUMBER:
C1.8

BLOCKING SCHEDULE					
PIPE SIZE	BENDS	45°	22 1/2°	11 1/4°	ROD DIA.
8"	VOLUME REQ'D (CU. FT.)	98.5	50.2	25.2	3/4 IN.
	A (FT.)	5.00'	4.00'	3.00'	
	B (FT.)	4.00'	3.20'	2.80'	
	C (FT.)	5.00'	4.00'	3.00'	
	MIN. CLAMP (2 EA.)	5/8 IN. x 2 IN.			
12"	VOLUME REQ'D (CU. FT.)	209.5	106.8	53.7	3/4 IN.
	A (FT.)	6.00'	5.00'	4.00'	
	B (FT.)	6.00'	4.25'	3.50'	
	C (FT.)	6.00'	5.00'	4.00'	
	MIN. CLAMP (2 EA.)	1/2 IN. x 2 IN.			
18"	VOLUME REQ'D (CU. FT.)	457.2	233.1	117.1	1 IN.
	A (FT.)	8.00'	6.50'	5.00'	
	B (FT.)	7.25'	5.50'	4.75'	
	C (FT.)	8.00'	6.50'	5.00'	
	MIN. CLAMP (2 EA.)	5/8 IN. x 3 IN.			
24"	VOLUME REQ'D (CU. FT.)	800.3	408.0	205.0	1 1/4 IN.
	A (FT.)	9.50'	7.50'	6.00'	
	B (FT.)	9.00'	7.25'	5.75'	
	C (FT.)	9.50'	7.50'	6.00'	
	MIN. CLAMP (2 EA.)	5/8 IN. x 3 IN.			

VOLUME CALCULATED ON THE BASIS OF CONCRETE REACTING THRUST ON THE RESPECTIVE BENDS UNDER AN INTERNAL PRESSURE OF 250 PSI, 50 PSI SURGE AND THE WEIGHT OF CONCRETE IS 150 POUNDS PER CU. FT.

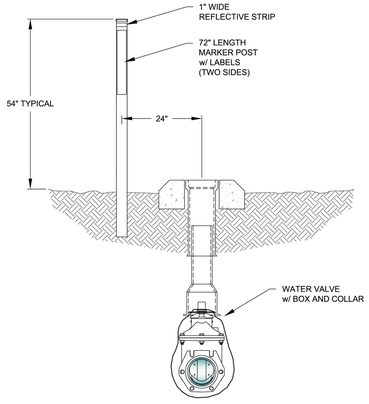
ALL FITTINGS SHALL BE MECHANICAL JOINTS WITH RETAINING GLANDS. BEDDING NOT SHOWN



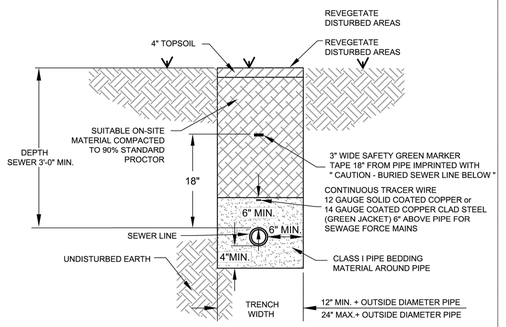
VERTICAL TIE-DOWN BLOCKING

NOTES:

1. WATER LINE MARKERS SHALL BE TRI-VIEW MARKING SYSTEM BY RHINO MARKING AND PROTECTION SYSTEMS OR CARSONITE INTERNATIONAL DUAL-SIDED UTILITY MARKER (CIB-380).
2. THE UPPERMOST PORTION OF THE CARSONITE MARKER SHALL BE MADE OF VISIBILITY ENHANCER (CVE-360).
3. TRI-VIEW MARKERS DO NOT REQUIRE VISIBILITY ENHANCERS.
4. AN ADDITIONAL WHITE 1" WIDE REFLECTIVE TAPE (3M OR EQUAL) SHALL BE PLACED AROUND THE FULL CIRCUMFERENCE OF THE TOP OF THE MARKER.



VALVE MARKER

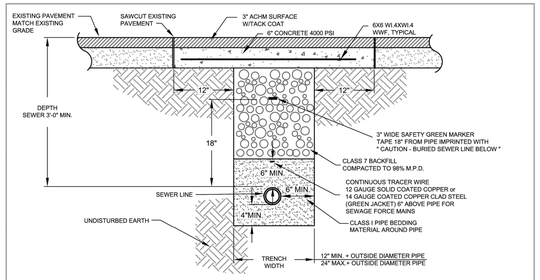


NOTES:

1. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING SEWER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE SEWER SYSTEM.
2. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART B)
3. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.

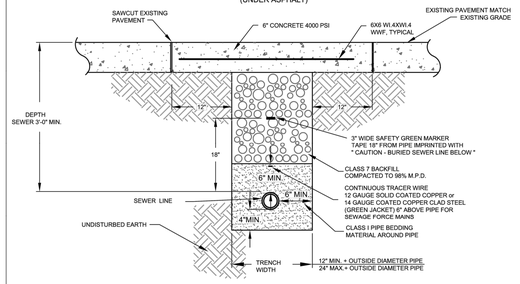
SEWER TRENCH

(NON-PAVED AREA)



SEWER TRENCH

(UNDER ASPHALT)



SEWER TRENCH

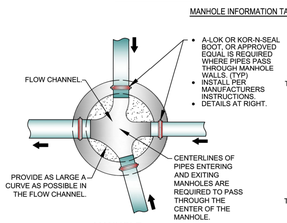
(UNDER CONCRETE)

NOTES:

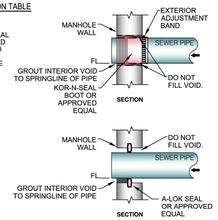
1. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING SEWER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE SEWER SYSTEM.
2. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART B)
3. TRENCH SHALL BE EXCAVATED BELOW GRADE REQUIRED TO PROVIDE A MINIMUM 36" OF PIPE COVER.

Inside Diameter of Manhole	Minimum Wall Thickness	Base Thickness	Minimum Ring & Cover Size
4' DIA	5"	6"	24" (< or Equal to 24' Pipes)
5' DIA	7"	8"	
6' DIA	7"	8"	36" (> 24' Pipes)

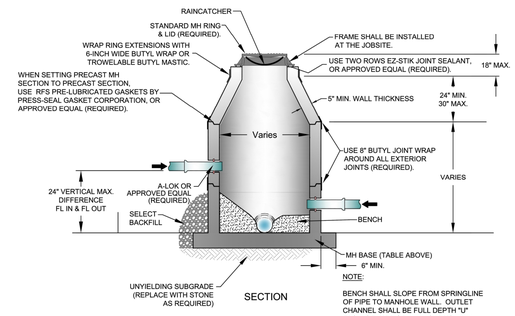
MANHOLE INFORMATION TABLE



MANHOLE FLOW CHANNEL



CONNECTION DETAILS

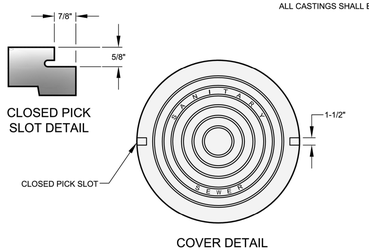


NOTE:

BENCH SHALL SLOPE FROM SPRINGLINE OF PIPE TO MANHOLE WALL. OUTLET CHANNEL SHALL BE FULL DEPTH "U" FROM CENTER OF MANHOLE TO WALL.

PRECAST MANHOLE

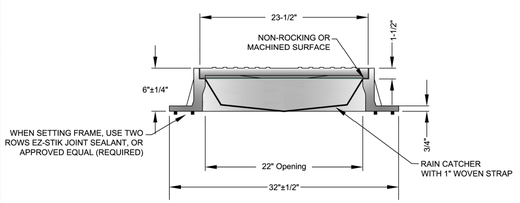
ALL CASTINGS SHALL BE "MADE IN USA"



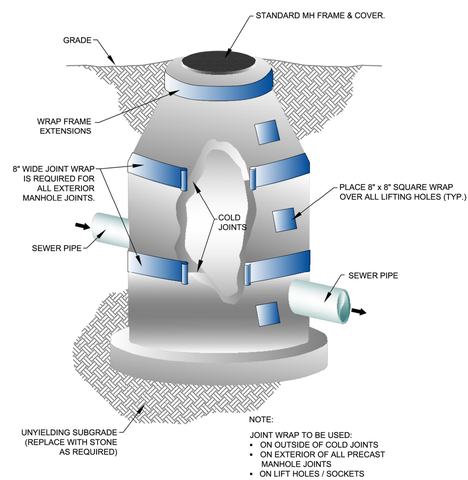
COVER DETAIL

1. MINIMUM WEIGHT OF RING: 100 POUNDS
2. MINIMUM WEIGHT OF COVER: 110 POUNDS
3. COVERS ARE FURNISHED WITH TWO CLOSED PICK SLOTS.
4. CASTINGS SHALL BE "MADE IN USA"

* DIMENSIONAL TOLERANCES SHALL NOT EXCEED 1/16 INCH PER FOOT



FRAME AND COVER DETAIL



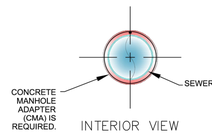
NOTE:

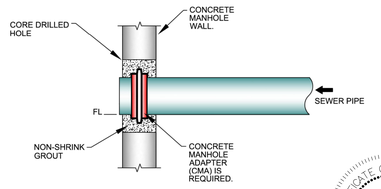
JOINT WRAP TO BE USED:

- ON OUTSIDE OF COLD JOINTS
- ON EXTERIOR OF ALL PRECAST MANHOLE JOINTS
- ON LIFT HOLES / SOCKETS

MANHOLE JOINT WRAP

THE INSTALLATION SHALL BE DYE TESTED FOR ACCEPTANCE.





MANHOLE CORING DETAILS

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REVISION:

NEW BEGINNINGS
HIGHWAY 5
BRYANT, ARKANSAS

STATE OF ARKANSAS — PHILLIP LEWIS — REGISTERED PROFESSIONAL ENGINEER — No. 9540

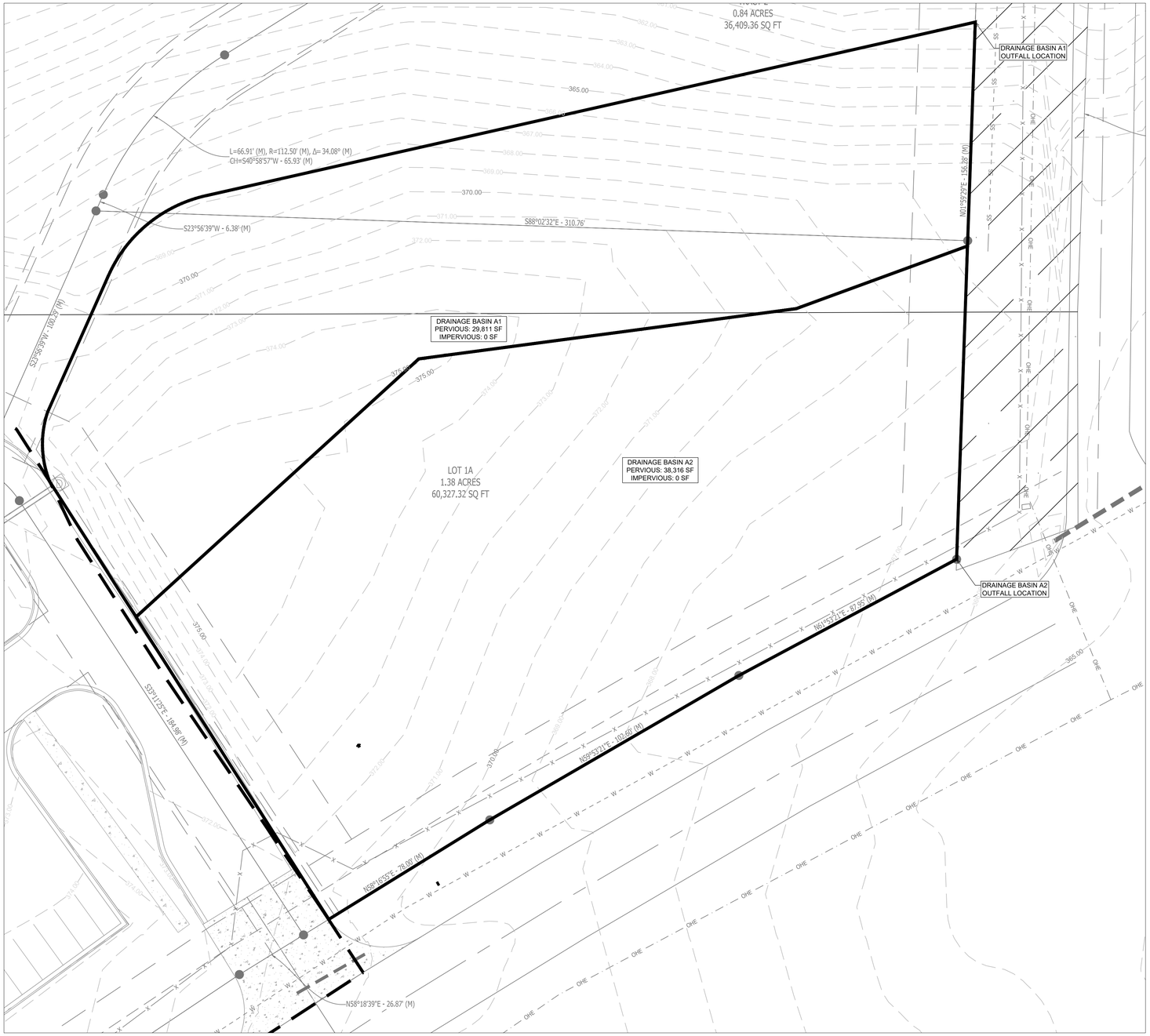
CERTIFICATE OF AUTHORIZATION — PHILLIP LEWIS ENGINEERING, INC. — No. 566 — ARKANSAS ENGINEER

PROJECT NUMBER:

SHEET ISSUE DATE: 08-06-2025

PAGE TITLE: UTILITY DETAILS II

SHEET NUMBER: C1.9



PRE-DEVELOPMENT DRAINAGE BASIN PLAN

SCALE 1" = 20'

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NEW BEGINNINGS
HIGHWAY 5
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CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP A. LEWIS

N

0 20'
1" = 20'-0"

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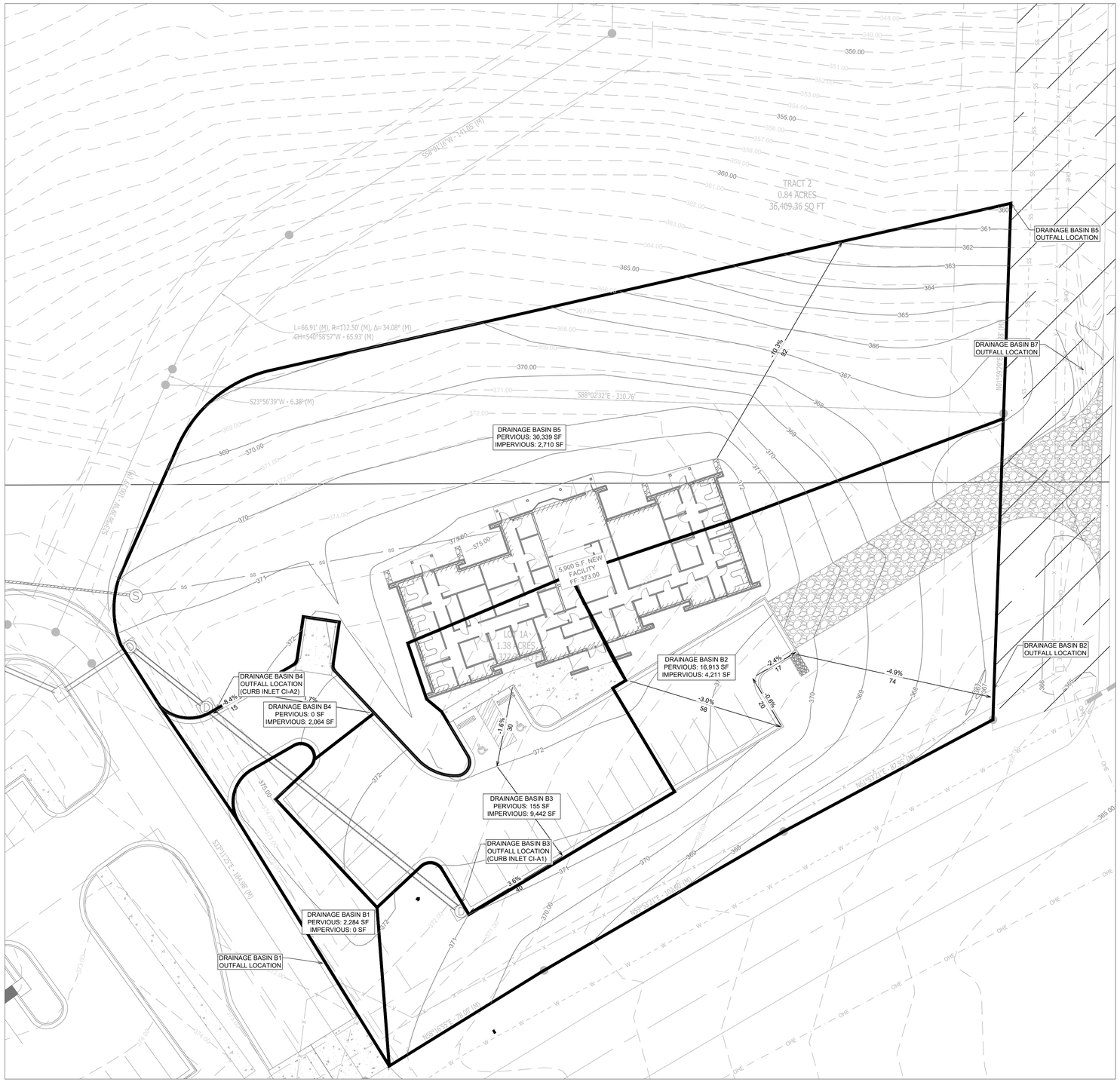
08-06-2025

PAGE TITLE:
PRE-DEV DRAINAGE

SHEET NUMBER:
C1.10



POST-DEV DRAINAGE

SCALE 1" = 20'

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REVISION:

NEW BEGINNINGS
HIGHWAY 5
BRYANT, ARKANSAS

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PHILLIP LEWIS ENGINEERING, INC.
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ARKANSAS ENGINEER

STATE OF
ARKANSAS
REGISTERED
PROFESSIONAL
ENGINEER
No. 9540
PHILLIP LEWIS

PROJECT NUMBER:

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PAGE TITLE:
POST-DEV
DRAINAGE

SHEET NUMBER:
C1.11

N

0 10'
1" = 10'-0"

LANDSCAPE PLAN

SCALE 1" = 60'

NOTES:

1. LANDSCAPED AREAS TO BE AMENDED WITH 4" OF TOPSOIL, SCARIFY SOIL 3" PRIOR TO APPLICATION. ALL TOP SOIL SHALL BE PLACED IN COORDINATION WITH GRADING AND DRAINAGE PLANS TO ENSURE THAT THE GRADING AND DRAINAGE DESIGN FOR THE SITE IS MAINTAINED AFTER BEING SODDED OR SEEDED. EXISTING SOIL FROM THE SITE CAN BE STOCK PILED AND REUSED AS LONG AS IT IS OF QUALITY THAT ENCOURAGES ADEQUATE GROWTH OF PLANTING MATERIAL. THE CONTRACTOR IS RESPONSIBLE FOR ANY SOIL TESTING THAT MAY BE REQUIRED.
2. LANDSCAPE PLAN REPRESENTS RECOMMENDED SPECIES, SIZES, & LOCATIONS. OWNER SHALL CHANGE THE ITEMS TO EQUAL OR GREATER VALUE.

GENERAL CONSTRUCTION NOTES

A. THE CONTRACTOR WILL BE HELD SOLELY RESPONSIBLE FOR DAMAGES OCCURRING TO ANY PROPERTY DURING THE CONSTRUCTION OF THIS PROJECT. SAID CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT PROPERTY DAMAGE.

B. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL SOLELY AND COMPLETELY BE RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS.

THE DUTY OF BRYANT TO CONDUCT CONSTRUCTION INSPECTION REVIEWS OF THE CONTRACTOR'S PERFORMANCE IS NOT AN INSPECTION OR REVIEW OF THE ADEQUACY OF THE CONTRACTOR'S SAFETY MEASURES IN, ON, OR NEAR THE CONSTRUCTION SITE.

C. ALL WATER AND SEWER IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST REVISION TO THE CITY OF BRYANT'S WATER AND WASTEWATER (SANITARY SEWER) STANDARD SPECIFICATIONS.

D. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF ALL UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.

E. CONTRACTOR IS TO REMOVE AND DISPOSE OF ALL DEBRIS, RUBBISH, AND OTHER MATERIALS RESULTING FROM PREVIOUS AND CURRENT DEMOLITION OPERATIONS. DISPOSAL WILL BE IN ACCORDANCE WITH ALL LOCAL, STATE AND/OR FEDERAL REGULATIONS GOVERNING SUCH OPERATIONS.

F. PRIOR TO INSTALLATION OF ANY UTILITIES, THE CONTRACTOR IS TO EXCAVATE, VERIFY AND CALCULATE ALL CROSSINGS AND INFORM ANY AND ALL UTILITIES OF ANY CONFLICTS PRIOR TO CONSTRUCTION.

G. CONSTRUCTION SHALL NOT START ON ANY WATER UTILITY TIE-INS UNTIL APPROVAL IS GIVEN BY BRYANT WATER. SAID CONTRACTOR SHALL NOT OPERATE ANY VALVE, HYDRANT, OR WATER UTILITY APPURTENANCE NOR SHALL HE ATTACH TO OR TAP ANY WATER UTILITY MAIN WITHOUT APPROVAL. THE CONTRACTOR SHALL BEAR THE COST AND CONSEQUENCE OF ANY DISRUPTION OF UTILITY OPERATION CAUSED BY CONSTRUCTION.

H. FIBER OPTIC CABLE ON AND/OR ADJACENT TO THIS SITE WERE NOT LOCATED BY THE SURVEY AND ARE NOT SHOWN. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ANY FIBER OPTIC CABLES ASSOCIATED WITH THIS SITE AND TAKE ALL NECESSARY AND REQUIRED PRECAUTIONS TO PROTECT ANY EXISTING FIBER OPTIC CABLES. CONTRACTORS SHALL COORDINATE ALL EFFORTS WITH OWNER OF FIBER OPTIC CABLES OR THEIR DESIGNATED REPRESENTATIVE.

J. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING "ONECALL" SERVICE TO MARK ALL UTILITIES PRIOR TO ANY DEMOLITION, EARTHWORK, OR UTILITY WORK ON THIS SITE.

PLANT SCHEDULE

PLANT TYPE	SYMBOL	CODE	QTY	COMMON SPECIES	SCIENTIFIC NAME	CAL / SIZE
TREES		WO	6	WILLOW OAK	QUERCUS PHELLOS	MIN. 3" DIAMETER @ BASE AND 12' TALL
SHRUBS		BW	40	DWARF NANDINA	N. DOMESTICA "HARBOUR DWARF"	3 GAL
GROUND COVER		SO	25,587 SF	BERMUDA SOD		
		GS	24,140 SF	GRASS SEED		
			1,828 SF	LANDSCAPE BEDDING (TBD BY OWNER)		

CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS-ENGINEER

N

0 60'

1" = 60'-0"

PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

NEW BEGINNINGS
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BRYANT, ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP LEWIS

PROJECT NUMBER:

SHEET ISSUE DATE:
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PAGE TITLE:
LANDSCAPE PLAN

SHEET NUMBER:
C1.12

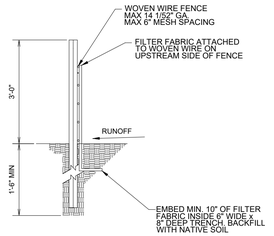
STORMWATER POLLUTION PREVENTION PLAN

SCALE 1" = 60'

INSTALL FILTER SOCKS AT ALL INLETS; MAINTAIN THROUGHOUT CONSTRUCTION.
DISTURBED AREA: 85,405 AC.

LEGEND

- DISTURBED AREA
- UNDISTURBED AREA
- SEDIMENT FENCE WITH WIRE BACKING
- DRAINAGE DIRECTION



SILT FENCE

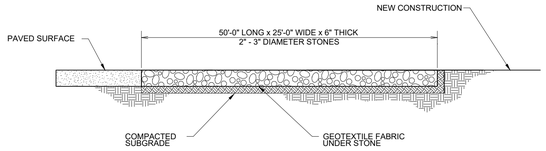
NOT TO SCALE

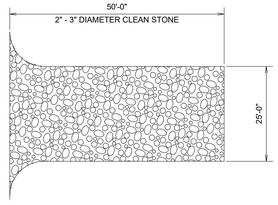
NOTES AND SPECIFICATIONS:

1. POSTS SHALL BE A MINIMUM OF 36 INCHES CONSTRUCTED OF EITHER OF THE FOLLOWING MATERIALS: STEEL "T" OR "U" TYPE, OR 2" x 2" HARDWOOD.
2. WOVEN WIRE USED AS ADDITIONAL FENCE SUPPORT SHALL BE MINIMUM 14.5 GA. WITH 6" MAXIMUM SPACING.
3. WOVEN WIRE SHALL BE PLACED ALONG THE UPHILL SIDE OF THE FENCE AND FASTENED WITH WIRE TIES OR 1" STAPLES ALONG THE UPHILL SIDE OF THE POSTS.
4. FILTER FABRIC SHALL BE FASTENED TO WOVEN WIRE ACCORDING TO MANUFACTURER'S RECOMMENDATION, OR WITH TIES EVERY 24" AT THE TOP AND MID-SECTIONS.
5. WHERE TWO PIECES OF FILTER FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6 INCHES AND FOLDED TOGETHER.
6. WHERE TWO POSTS MEET TO JOIN FENCE SECTIONS, THE TOPS OF THE POSTS SHALL BE SECURED TOGETHER WITH WIRE.
7. THE FENCE SHALL BE CONSTRUCTED ALONG THE CONTOUR AS MUCH AS POSSIBLE.
8. ENDS OF FENCES SHALL BE EXTENDED UP THE SLOPE TO PRVENT RUNOFF FROM MIGRATING AROUND THE END OF THE FENCE.
9. INSPECTION OF THE FENCE SHALL BE PERFORMED WEEKLY, OR IMMEDIATELY AFTER A RAIN EVENT, OR WHEN BULGES APPEAR IN THE FENCE. ACCUMULATED SILT SHALL NOT BE ALLOWED TO EXCEED HALF THE HEIGHT OF THE FABRIC. REPAIR AND OR REPLACMENT OF DAMAGED FENCE SHALL BE COMPLETED PROMPTLY.
10. ACCUMULATED SILT SHALL BE REMOVED AND DISPOSED OF IN AN APPROVED SITE IN SUCH A MANNER THAT IT WILL NOT CONTRIBUTE TO OFF-SITE SILTATION.
11. ALL FENCING SHALL BE REMOVED WITH THE CONSTRUCTION SITE IS FULLY STABLIZED SO AS TO NOT IMPEDE STORM FLOW OR DRAINAGE.
12. PRE-FRABRICATED UNITS DO NOT REQUIRE THE USE OF WOVEN WIRE FENCE.

NOTES (GENERAL):

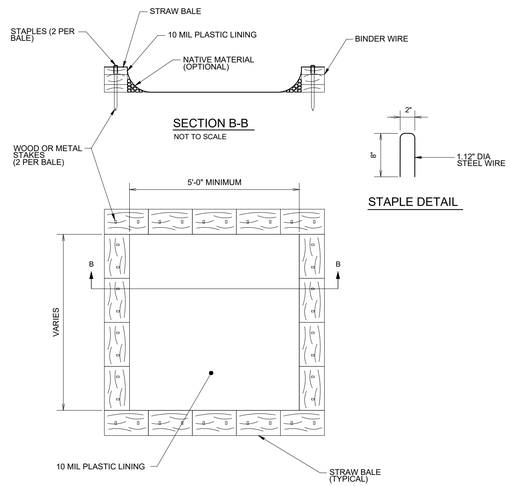
1. SEE EROSION CONTROL DETAILS IN SWPPP FOR EROSION CONTROL FACILITIES.
2. SEE SWPPP FOR INSTALLATION, MAINTENANCE, INSPECTION, AND RECORD KEEPING REQUIREMENTS.
3. CONTRACTOR SHALL SHOW EROSION CONTROL MEASURE ON SITE MAP.
4. EROSION AND SEDIMENT CONTROL STRUCTURES TO MEET SWPPP DETAILS - APPENDIX D
5. INSTALL ROCK DITCH, CHECK, OR SAND BAG CHECKS AS NECESSARY TO PREVENT SCOUR UNTIL LANDSCAPING IS ESTABLISHED.
6. CONTRACTOR MUST PLACE SEDIMENT BASIN WITH SEDIMENT FENCE OUTLET FOR ANY SEDIMENT CONTAMINATED DEWATERING DISCHARGE.
7. FINAL SLOPE WILL BE SAME DIRECTION AS EXISTING SLOPE.
8. TEMPORARY STABILIZATION PRACTICES WILL NOT BE REQUIRED. WORK WILL BE CONTINUOUS AND DISTURBED AREA REVEGITATED IN A TIMELY MANNER. SEE SWPPP FOR SEEDING MIXES.
9. PERMANENT STABILIZATION OF ALL DISTURBED AREAS ARE TO BE SEEDED, FERTILIZED, WATERED AND COVERED WITH STRAW UNLESS OTHERWISE NOTED ON PLANS TO BE HYDROSEEDED.
10. CONTRACTOR TO SHOW CONCRETE WASH OUT SUMP, ENTRANCE/EXIT PAD AND OTHER CONTROLS AS REQUIRED/NEEDED AS SWPPP SITE MAP IS UPDATED THROUGHOUT THE DURATION OF THE PROJECT.
11. STOCKPILING OF CONSTRUCTION SPOIL MATERIAL AT PARTICULAR LOCATIONS SHALL ONLY BE ALLOWED FOR A LIMITED TIME PERIOD, NOT TO EXCEED (6) MONTHS. PRIOR TO A FINAL INSPECTION OF THE GRADING PERMIT, THE FOLLOWING STANDARDS SHALL BE ACHIEVED FOR COMPLETION OF CONSTRUCTION:
    a) DEVELOPMENT AND GRADING WITHIN THE DISTURBED AREA IS COMPLETE AND MATCHES PLANS AS APPROVED BY THE PLANNING COMMISSION, AND
    b) THE DISTURBED SOIL AREA IS OBSERVED TO HAVE 80% GRASS COVERAGE AND 100% STABILITY, AND
    c) NO SLOPES STEEPER THAN A 3:1 PITCH UNLESS OTHERWISE APPROVED IN WRITING BY THE DIRECTOR OF ENGINEERING, AND
    d) NOTICE OF VIOLATIONS ISSUED HAVE ALL CORRECTIVE ACTIONS APPROVED WITH AN INSPECTION REPORT SIGNED BY A REPRESENTATIVE OF THE DIRECTOR OF ENGINEERING, AND
    e) ALL HEAVY EQUIPMENT, STOCKPILES, AND CONSTRUCTION SITE MATERIALS HAVE BEEN REMOVED FROM THE CONSTRUCTION SITE.





CONSTRUCTION ENTRANCE

NOT TO SCALE



CONCRETE WASHOUT

NOT TO SCALE

N

0 60'

1" = 60'-0"

PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

NEW BEGINNINGS
HIGHWAY 5
BRYANT, ARKANSAS

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PRELIMINARY - NOT FOR CONSTRUCTION
PHILLIP LEWIS

PROJECT NUMBER:

SHEET ISSUE DATE:
08-06-2025

PAGE TITLE:
SWPPP

SHEET NUMBER:
C1.13

NEW BEGINNINGS

DRAINAGE REPORT

Date: **08-07-2025**

Located in: **Bryant, Arkansas**

Prepared for:
City of Bryant, Arkansas

Prepared by:

PHILLIP LEWIS ENGINEERING

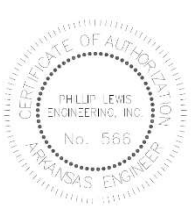
Structural + Civil Consultants

23620 Interstate 30 | Bryant, AR
PH: 501-350-9840

Table of Contents

CERTIFICATION

I hereby state that this Drainage Analysis has been prepared by me or under my supervision and meets the standard of care and expertise which is usual and customary in this community of professional engineers. The analysis has been prepared utilizing procedures and practices by the City of Bryant and within the standard accepted practices.



DATE: 08-07-2024

Phillip A. Lewis, PE.

DESCRIPTION OF PROPERTY

The proposed project is for the construction of a new pregnancy center located along Highway 5, directly adjacent to the current ongoing seminary project. The proposed development is a 5,900 sq. ft. building and parking lot.

The intent of this drainage analysis is to adequately size the storm sewer system and summarize pre and post runoff conditions.

The existing ground coverage for the entire development drainage basin consists of natural vegetation (2%-7% slope), hydrologic soil group B/C.

According to FEMA Flood Insurance Rate Map, Panel 05125C0240E, this property lies within Zone X, areas determined to be outside the 0.2% annual chance floodplain. A copy of the map can be found in the appendix.

PROJECT LOCATION MAP

DRAINAGE CRITERIA

In accordance with the requirements of the City of Bryant, the proposed developments drainage plan and this drainage report were developed with the criteria established in the Bryant Stormwater Management & Drainage Manual provided on cityofbryant.com.

All drainage calculations were performed using HydroCAD software to determine and analyze the changes in storm runoff volume, flow rates, and design the outlet release structure. Hydraflow Express software was used to appropriately design and size all storm sewer inlets, pipes and channels.

Calculations were performed using the Rational Method, using NOAA rainfall data, Runoff Coefficient table (Bryant Stormwater Management & Drainage Manual, Table 400-2) and the pipe and inlet structure sizes were determined by the 25-year storm event.

PROPOSED DRAINAGE SYSTEM

This development is designed to capture the majority of runoff within the parking lot curb and gutter. A portion of the site will discharge into a standard storm sewer system, releasing into the existing adjacent storm sewer. Other portions of the new development will either be captured by gutter/downspouts or curb/gutter and released to vegetated greenspace surrounding the project. These release points are similar to the pre-development conditions of this site.

The storm sewer system will consist of standard concrete curb inlets. These inlets were sized based on their independent drainage basin flow rate and the slope that the inlets will be placed at. The New Beginnings storm sewer system will tie-into the Bryant Seminary existing storm sewer system. The stormwater will ultimately be discharged to the north side of the property into the floodplain.

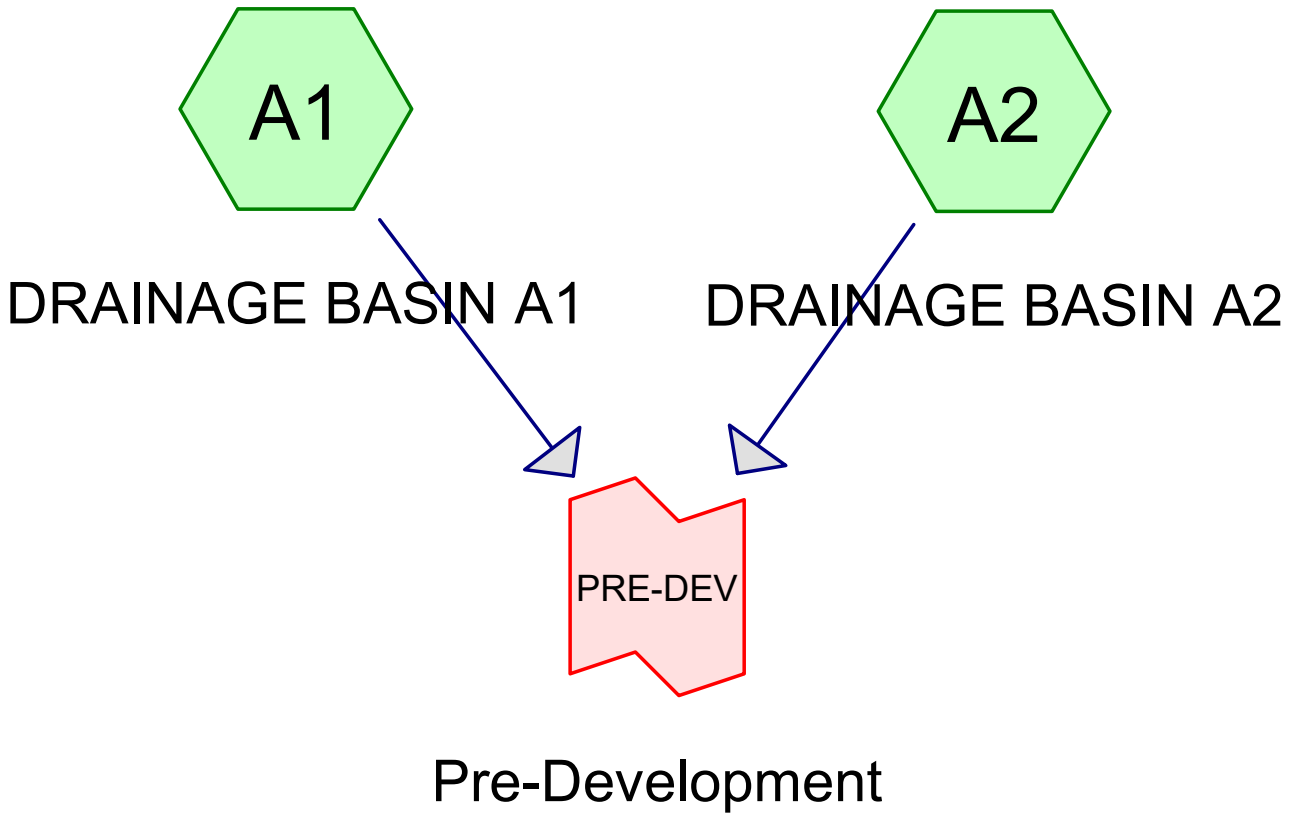
Overall Pre-development and Post-development runoff/discharge rates are compared below:

Storm Event	Pre-development Discharge (cfs)	Post-development Discharge (cfs) Without Detention
2-yr	1.51	4.38
10-yr	2.02	5.86
25-yr	2.33	6.82
50-yr	2.56	7.41
100-yr	2.77	8.04

Hydraulic grade elevations for the inlets are shown below:

Inlet	Peak Elevation (25-yr Storm Event)
CI – A1	369.08’
CI – A2	368.89’

PRE DEVELOPMENT HYDROGRAPHS



Pre-Development

Subcat Reach Pond Link

Routing Diagram for New Beginnings Drainage
Prepared by Phillip Lewis Engineering, Printed 7/24/2025

Summary for Subcatchment A1: DRAINAGE BASIN A1

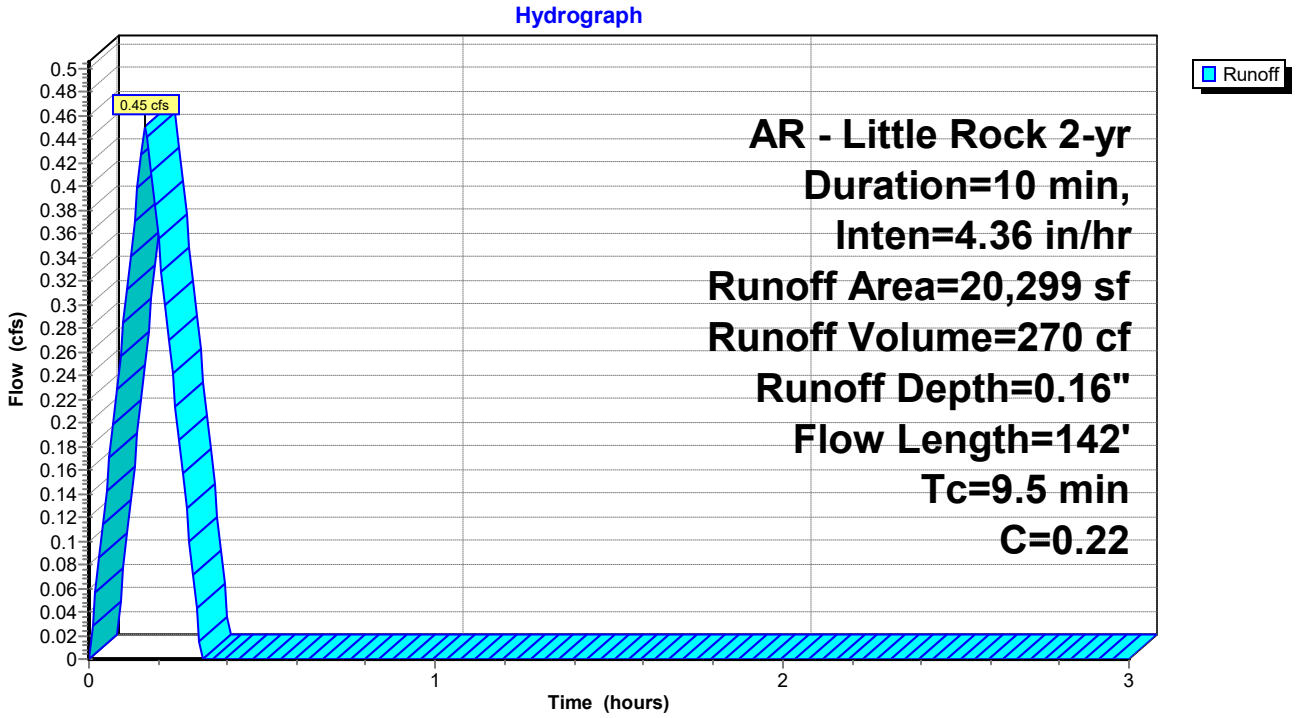
Runoff = 0.45 cfs @ 0.16 hrs, Volume= 270 cf, Depth= 0.16"
Routed to Link PRE-DEV : Pre-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=10 min, Inten=4.36 in/hr

Area (sf)	C	Description
20,299	0.22	Sandy Soil 2-7% per manual (undeveloped)
20,299		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.0430	0.18		**Sheet Flow, Overland Sheet flow** Grass: Dense n= 0.240 P2= 4.20"
0.3	42	0.1410	2.63		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
9.5	142	Total			

Subcatchment A1: DRAINAGE BASIN A1



Summary for Subcatchment A2: DRAINAGE BASIN A2

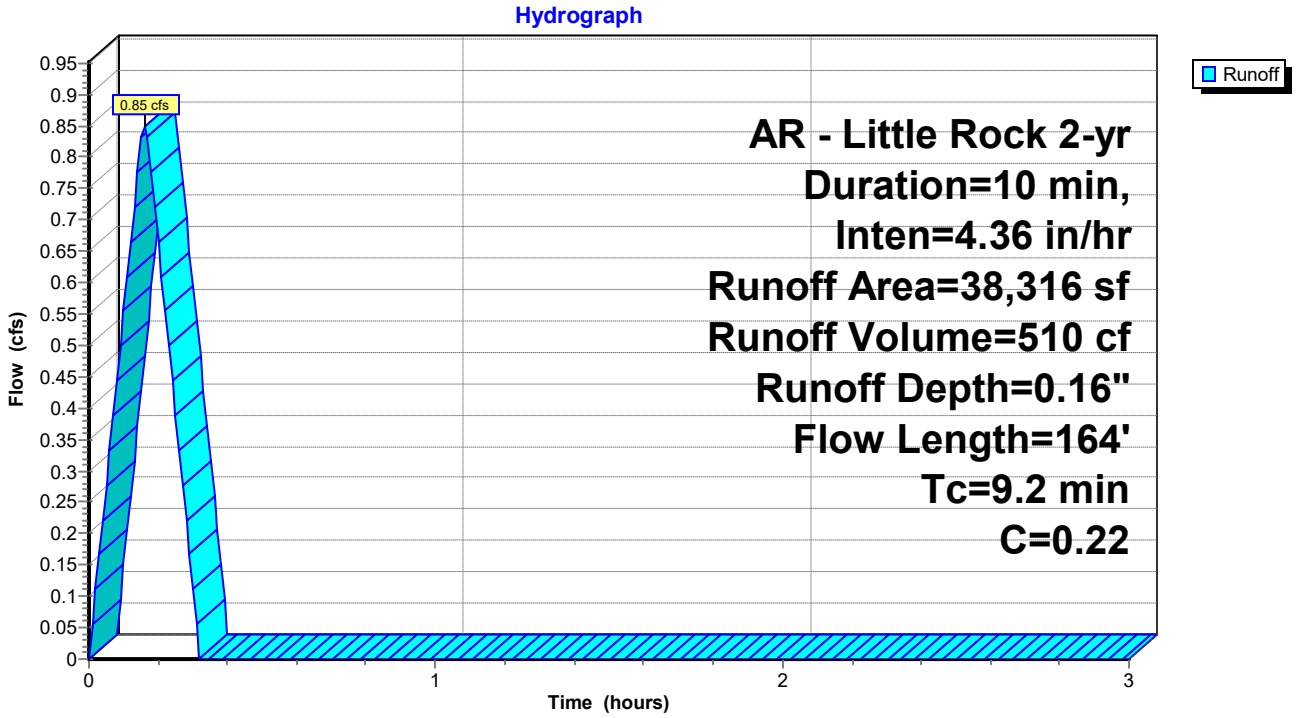
Runoff = 0.85 cfs @ 0.16 hrs, Volume= 510 cf, Depth= 0.16"
Routed to Link PRE-DEV : Pre-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=10 min, Inten=4.36 in/hr

Area (sf)	C	Description
38,316	0.22	Sandy Soil 2-7% per manual (undeveloped)
38,316		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	100	0.0560	0.20		**Sheet Flow, Overland Sheet flow** Grass: Dense n= 0.240 P2= 4.20"
0.9	64	0.0320	1.25		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
9.2	164	Total			

Subcatchment A2: DRAINAGE BASIN A2

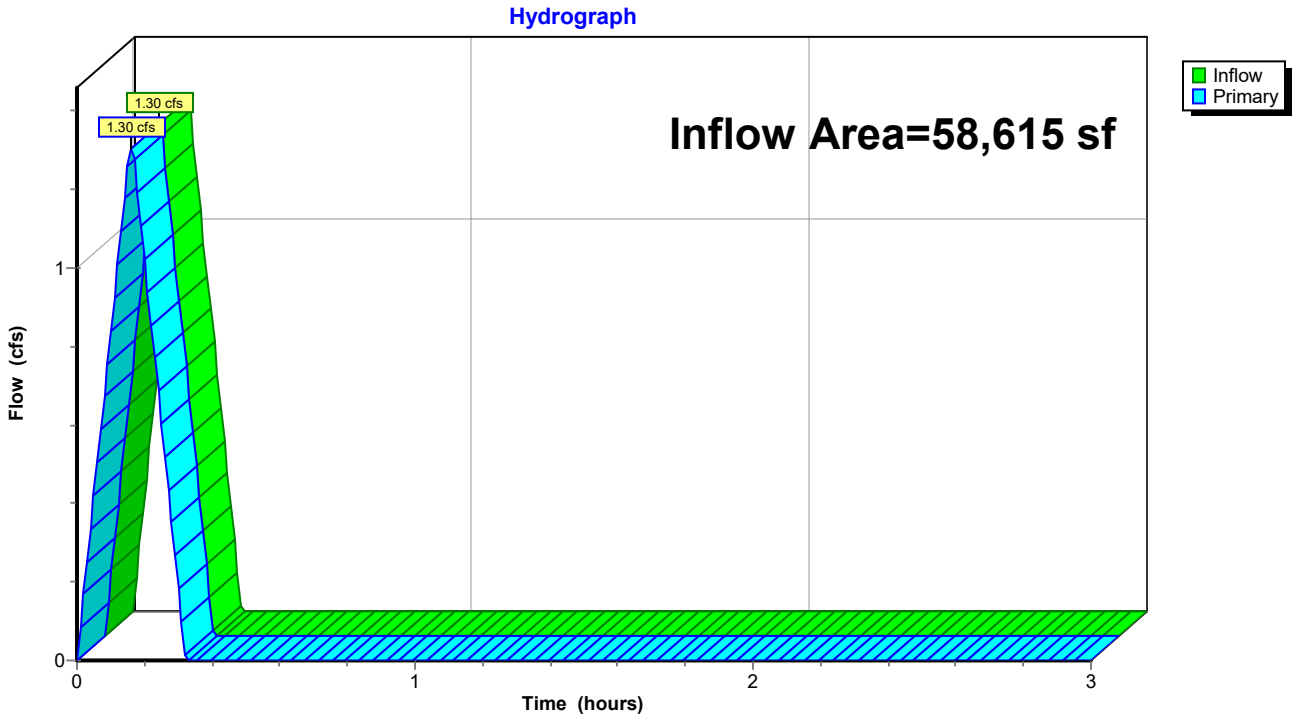


Summary for Link PRE-DEV: Pre-Development

Inflow Area = 58,615 sf, 0.00% Impervious, Inflow Depth = 0.16" for 2-yr event
Inflow = 1.30 cfs @ 0.16 hrs, Volume= 780 cf
Primary = 1.30 cfs @ 0.16 hrs, Volume= 780 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link PRE-DEV: Pre-Development



Summary for Subcatchment A1: DRAINAGE BASIN A1

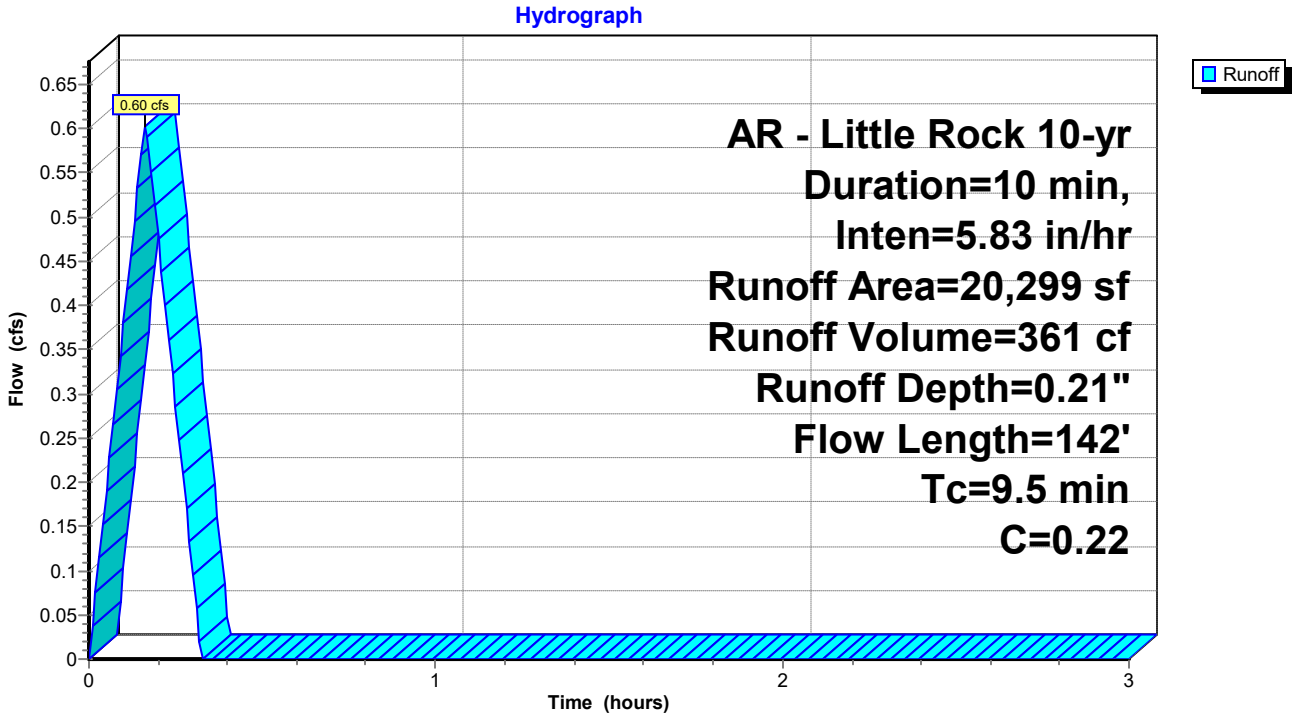
Runoff = 0.60 cfs @ 0.16 hrs, Volume= 361 cf, Depth= 0.21"
Routed to Link PRE-DEV : Pre-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=10 min, Inten=5.83 in/hr

Area (sf)	C	Description
20,299	0.22	Sandy Soil 2-7% per manual (undeveloped)
20,299		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.0430	0.18		**Sheet Flow, Overland Sheet flow** Grass: Dense n= 0.240 P2= 4.20"
0.3	42	0.1410	2.63		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
9.5	142	Total			

Subcatchment A1: DRAINAGE BASIN A1



Summary for Subcatchment A2: DRAINAGE BASIN A2

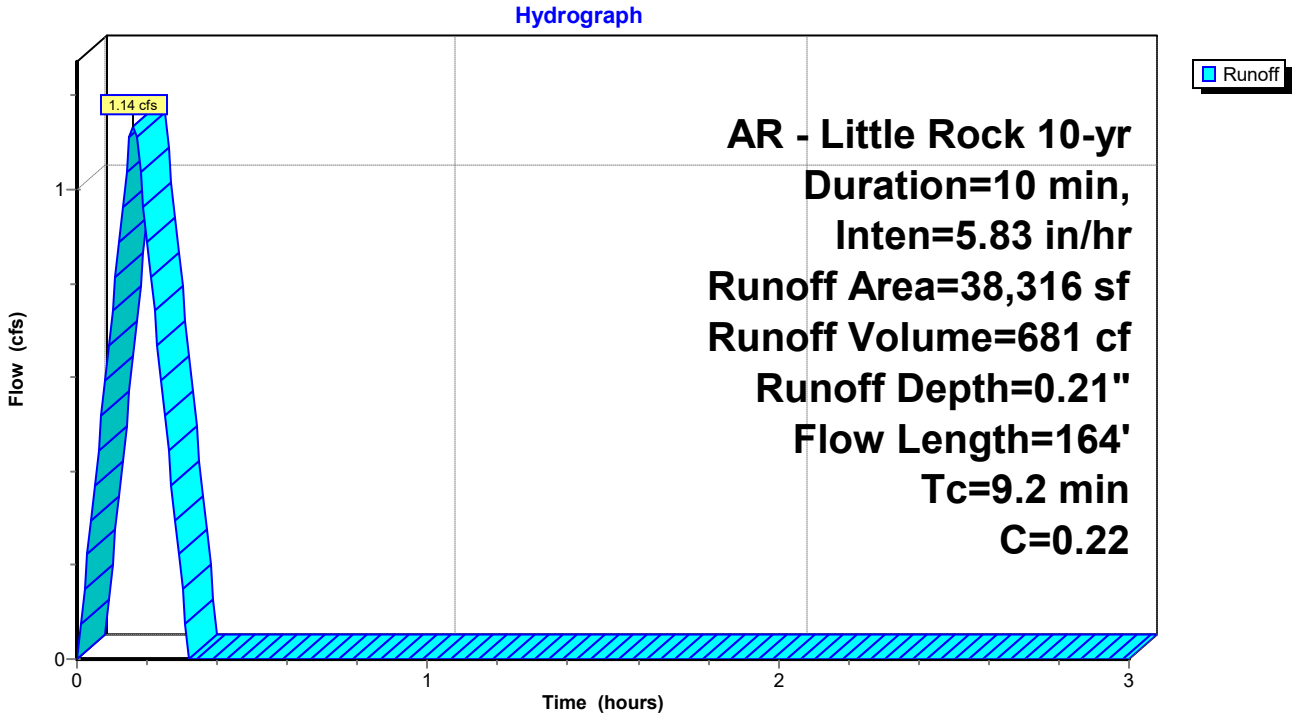
Runoff = 1.14 cfs @ 0.16 hrs, Volume= 681 cf, Depth= 0.21"
Routed to Link PRE-DEV : Pre-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=10 min, Inten=5.83 in/hr

Area (sf)	C	Description
38,316	0.22	Sandy Soil 2-7% per manual (undeveloped)
38,316		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	100	0.0560	0.20		**Sheet Flow, Overland Sheet flow** Grass: Dense n= 0.240 P2= 4.20"
0.9	64	0.0320	1.25		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
9.2	164	Total			

Subcatchment A2: DRAINAGE BASIN A2

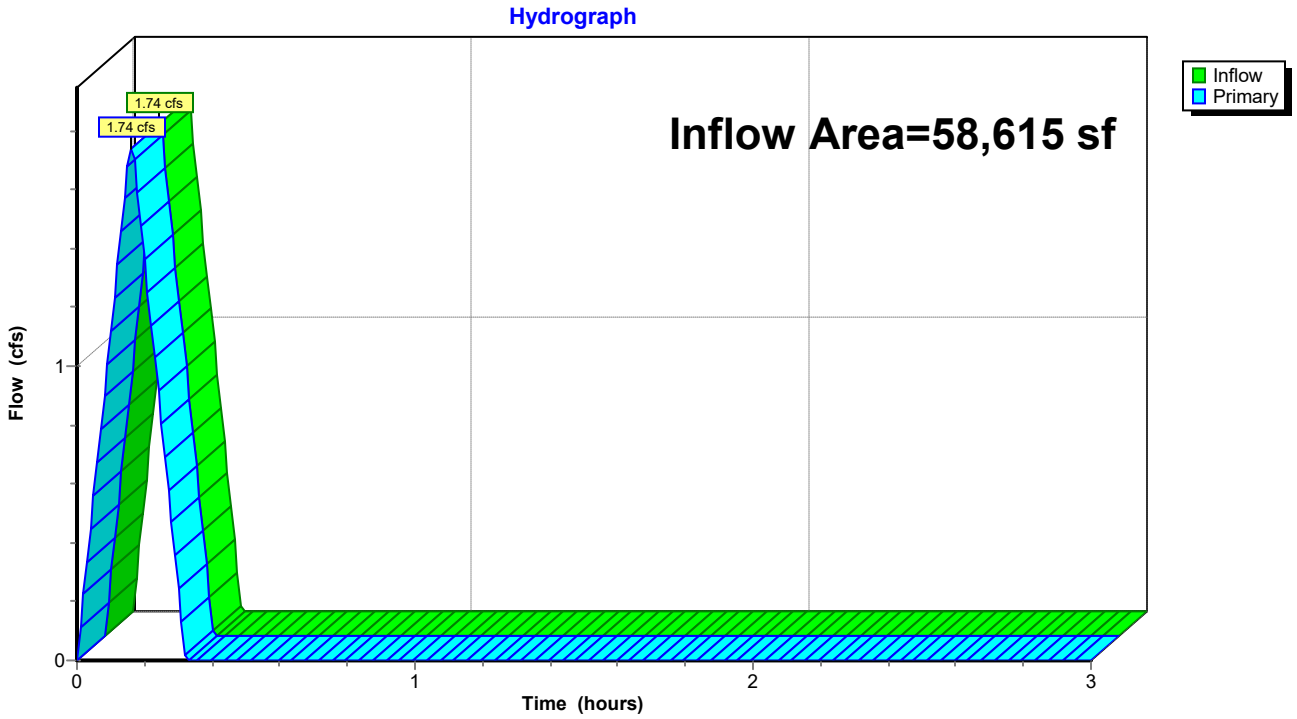


Summary for Link PRE-DEV: Pre-Development

Inflow Area = 58,615 sf, 0.00% Impervious, Inflow Depth = 0.21" for 10-yr event
Inflow = 1.74 cfs @ 0.16 hrs, Volume= 1,043 cf
Primary = 1.74 cfs @ 0.16 hrs, Volume= 1,043 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link PRE-DEV: Pre-Development



Summary for Subcatchment A1: DRAINAGE BASIN A1

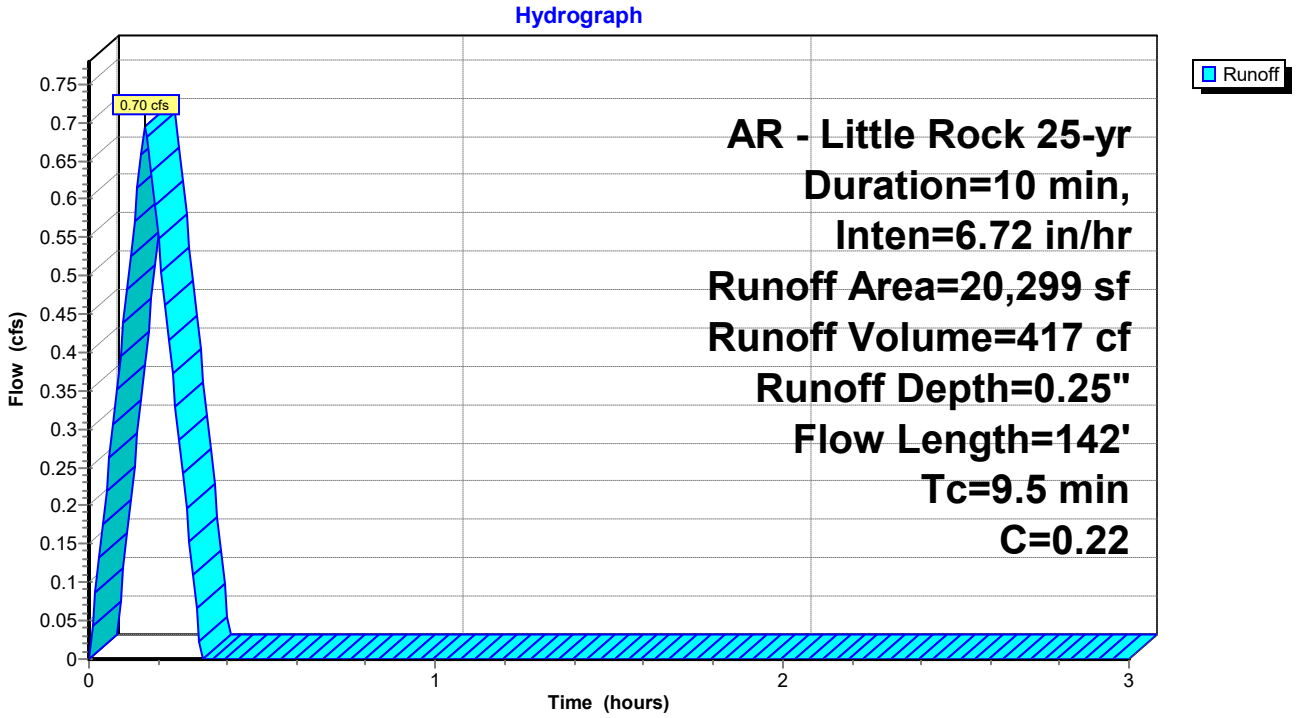
Runoff = 0.70 cfs @ 0.16 hrs, Volume= 417 cf, Depth= 0.25"
Routed to Link PRE-DEV : Pre-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=10 min, Inten=6.72 in/hr

Area (sf)	C	Description
20,299	0.22	Sandy Soil 2-7% per manual (undeveloped)
20,299		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.0430	0.18		**Sheet Flow, Overland Sheet flow** Grass: Dense n= 0.240 P2= 4.20"
0.3	42	0.1410	2.63		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
9.5	142	Total			

Subcatchment A1: DRAINAGE BASIN A1



Summary for Subcatchment A2: DRAINAGE BASIN A2

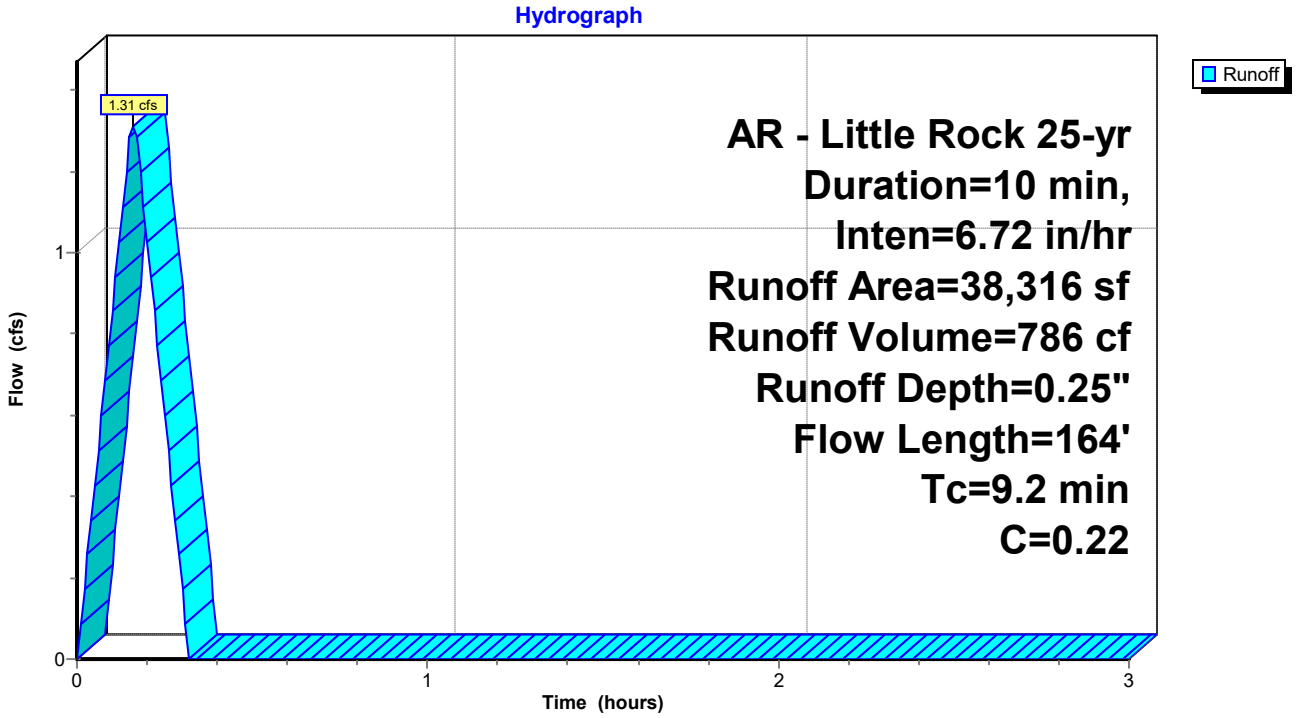
Runoff = 1.31 cfs @ 0.16 hrs, Volume= 786 cf, Depth= 0.25"
Routed to Link PRE-DEV : Pre-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=10 min, Inten=6.72 in/hr

Area (sf)	C	Description
38,316	0.22	Sandy Soil 2-7% per manual (undeveloped)
38,316		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	100	0.0560	0.20		**Sheet Flow, Overland Sheet flow** Grass: Dense n= 0.240 P2= 4.20"
0.9	64	0.0320	1.25		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
9.2	164	Total			

Subcatchment A2: DRAINAGE BASIN A2

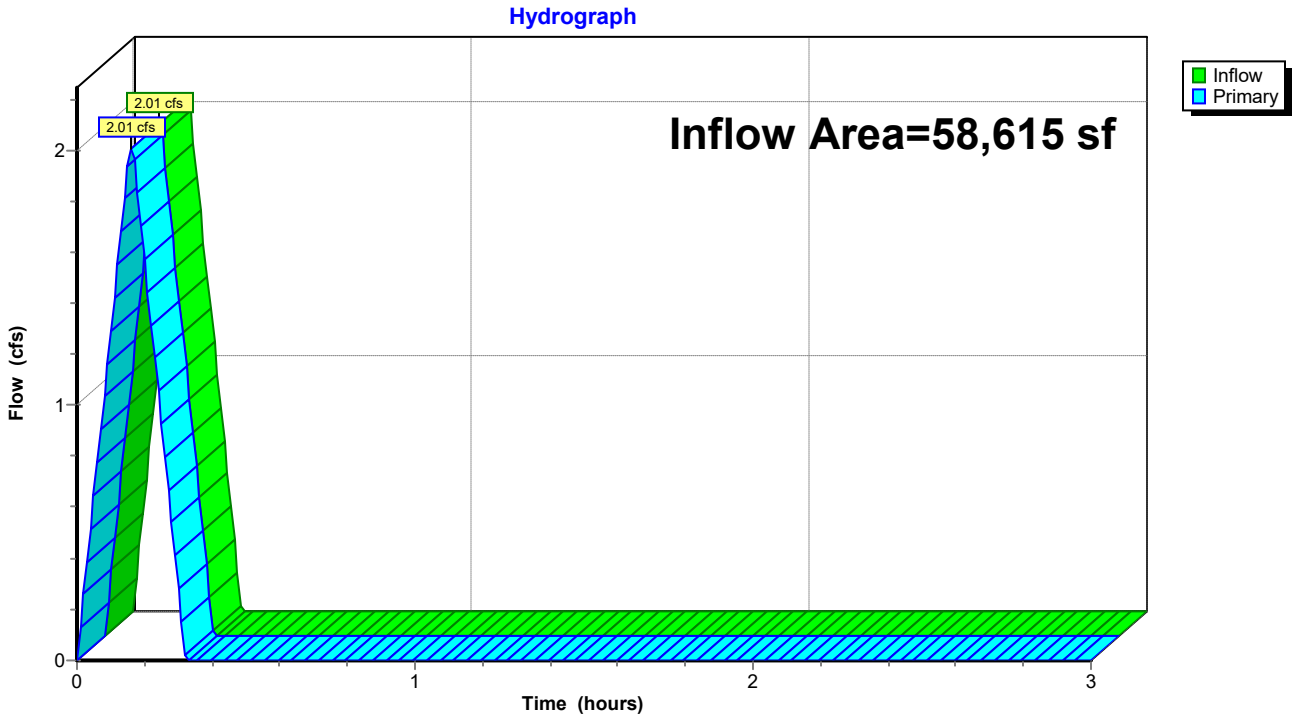


Summary for Link PRE-DEV: Pre-Development

Inflow Area = 58,615 sf, 0.00% Impervious, Inflow Depth = 0.25" for 25-yr event
Inflow = 2.01 cfs @ 0.16 hrs, Volume= 1,203 cf
Primary = 2.01 cfs @ 0.16 hrs, Volume= 1,203 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link PRE-DEV: Pre-Development



Summary for Subcatchment A1: DRAINAGE BASIN A1

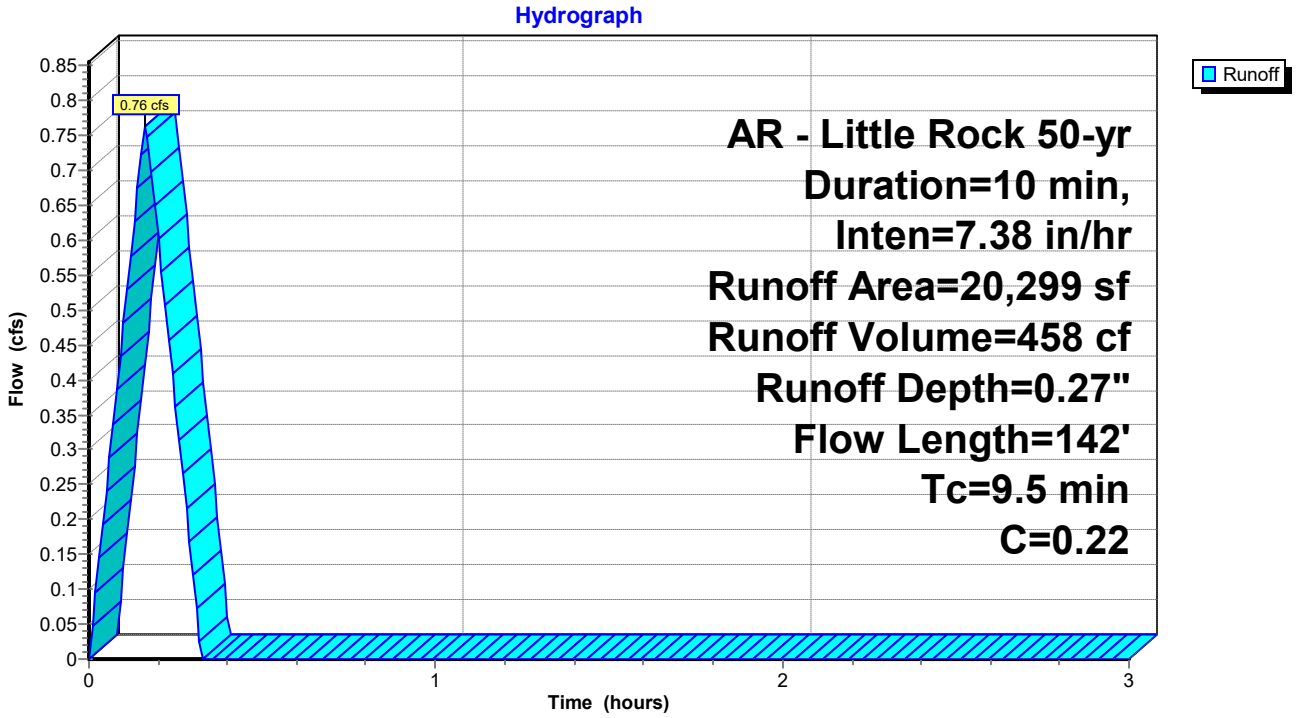
Runoff = 0.76 cfs @ 0.16 hrs, Volume= 458 cf, Depth= 0.27"
Routed to Link PRE-DEV : Pre-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 50-yr Duration=10 min, Inten=7.38 in/hr

Area (sf)	C	Description
20,299	0.22	Sandy Soil 2-7% per manual (undeveloped)
20,299		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.0430	0.18		**Sheet Flow, Overland Sheet flow** Grass: Dense n= 0.240 P2= 4.20"
0.3	42	0.1410	2.63		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
9.5	142	Total			

Subcatchment A1: DRAINAGE BASIN A1



Summary for Subcatchment A2: DRAINAGE BASIN A2

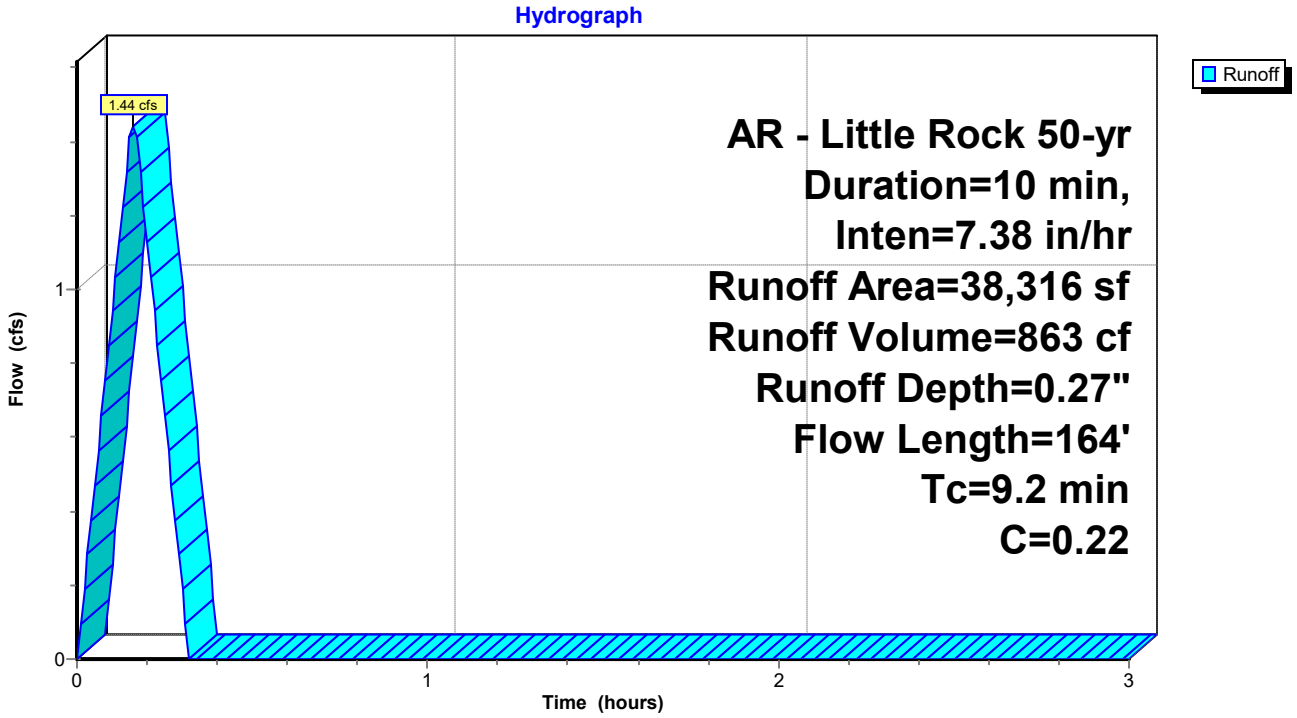
Runoff = 1.44 cfs @ 0.16 hrs, Volume= 863 cf, Depth= 0.27"
Routed to Link PRE-DEV : Pre-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 50-yr Duration=10 min, Inten=7.38 in/hr

Area (sf)	C	Description
38,316	0.22	Sandy Soil 2-7% per manual (undeveloped)
38,316		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	100	0.0560	0.20		**Sheet Flow, Overland Sheet flow** Grass: Dense n= 0.240 P2= 4.20"
0.9	64	0.0320	1.25		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
9.2	164	Total			

Subcatchment A2: DRAINAGE BASIN A2

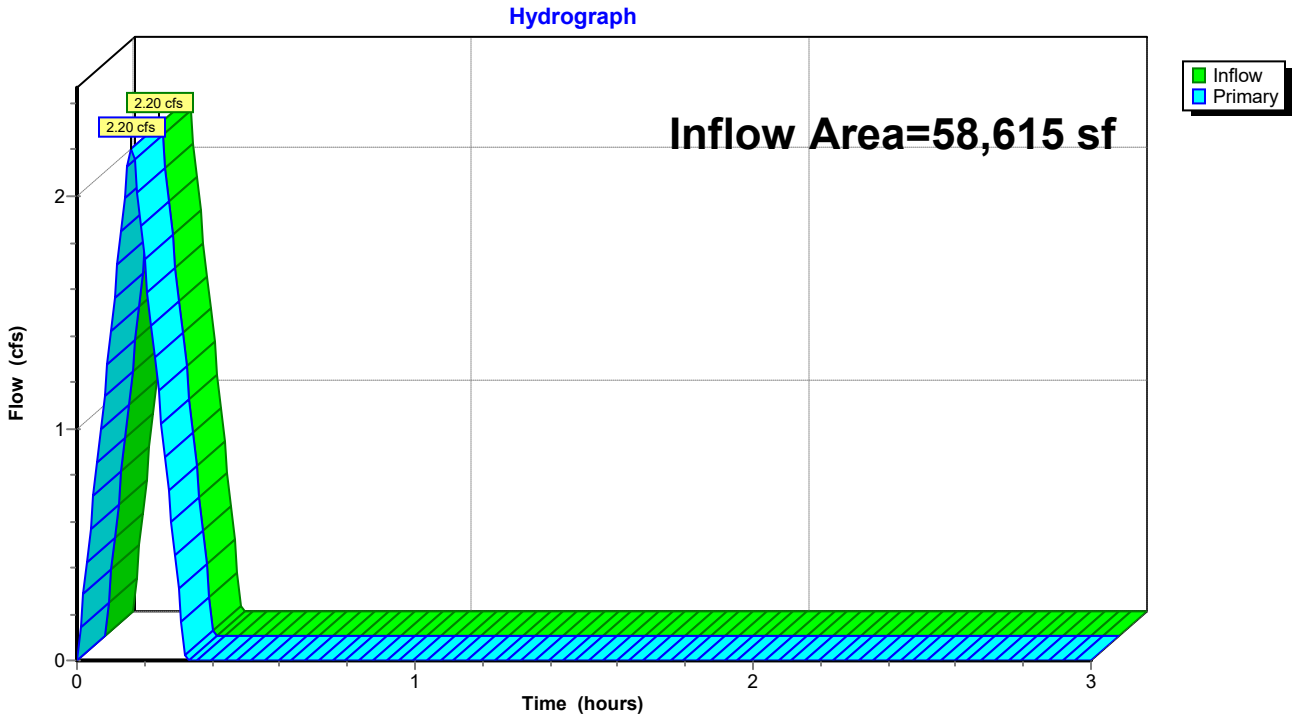


Summary for Link PRE-DEV: Pre-Development

Inflow Area = 58,615 sf, 0.00% Impervious, Inflow Depth = 0.27" for 50-yr event
Inflow = 2.20 cfs @ 0.16 hrs, Volume= 1,321 cf
Primary = 2.20 cfs @ 0.16 hrs, Volume= 1,321 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link PRE-DEV: Pre-Development



Summary for Subcatchment A1: DRAINAGE BASIN A1

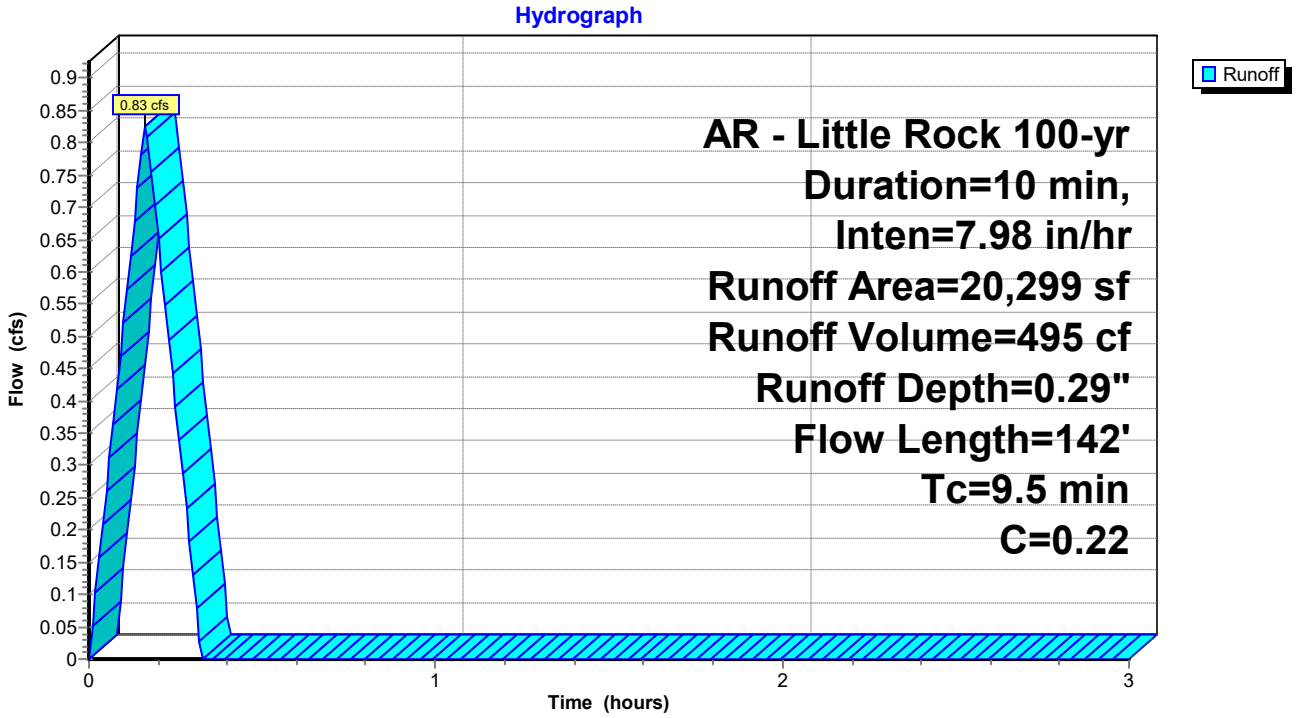
Runoff = 0.83 cfs @ 0.16 hrs, Volume= 495 cf, Depth= 0.29"
Routed to Link PRE-DEV : Pre-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=10 min, Inten=7.98 in/hr

Area (sf)	C	Description
20,299	0.22	Sandy Soil 2-7% per manual (undeveloped)
20,299		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.2	100	0.0430	0.18		**Sheet Flow, Overland Sheet flow** Grass: Dense n= 0.240 P2= 4.20"
0.3	42	0.1410	2.63		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
9.5	142	Total			

Subcatchment A1: DRAINAGE BASIN A1



Summary for Subcatchment A2: DRAINAGE BASIN A2

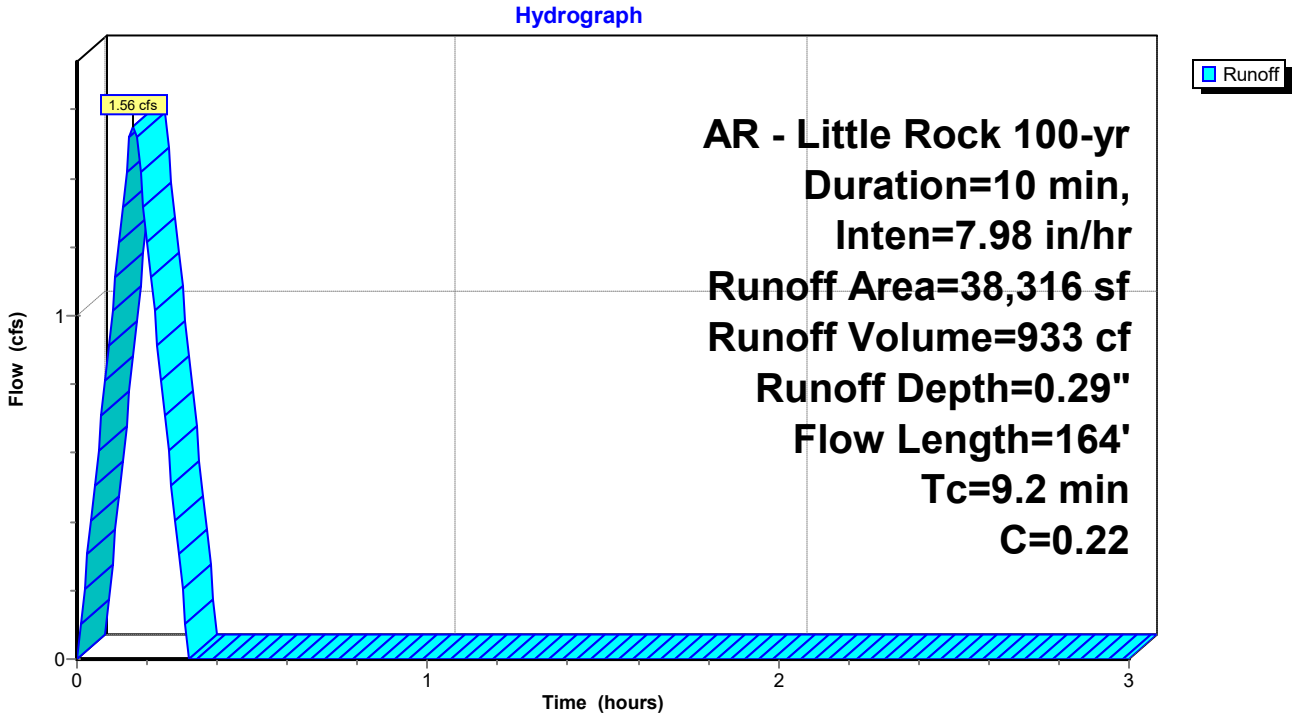
Runoff = 1.56 cfs @ 0.16 hrs, Volume= 933 cf, Depth= 0.29"
Routed to Link PRE-DEV : Pre-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=10 min, Inten=7.98 in/hr

Area (sf)	C	Description
38,316	0.22	Sandy Soil 2-7% per manual (undeveloped)
38,316		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
8.3	100	0.0560	0.20		**Sheet Flow, Overland Sheet flow** Grass: Dense n= 0.240 P2= 4.20"
0.9	64	0.0320	1.25		**Shallow Concentrated Flow, Overland Concentrated Flow** Short Grass Pasture Kv= 7.0 fps
9.2	164	Total			

Subcatchment A2: DRAINAGE BASIN A2

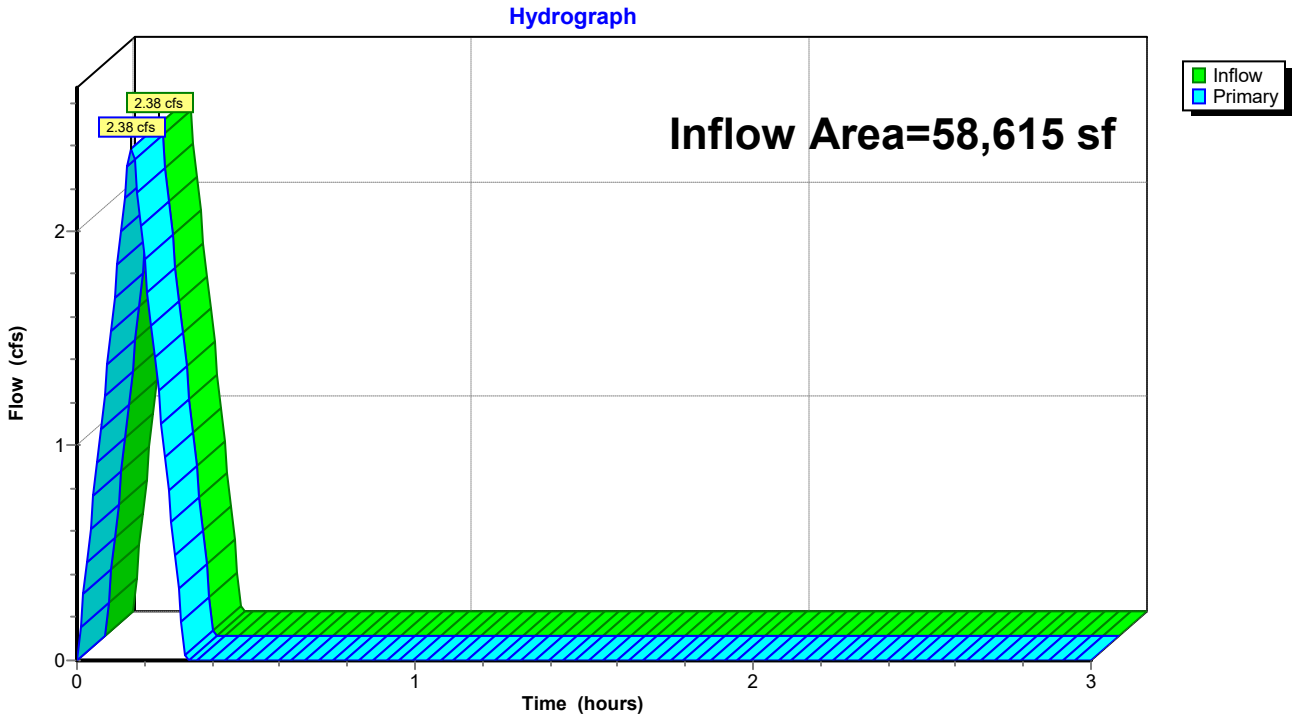


Summary for Link PRE-DEV: Pre-Development

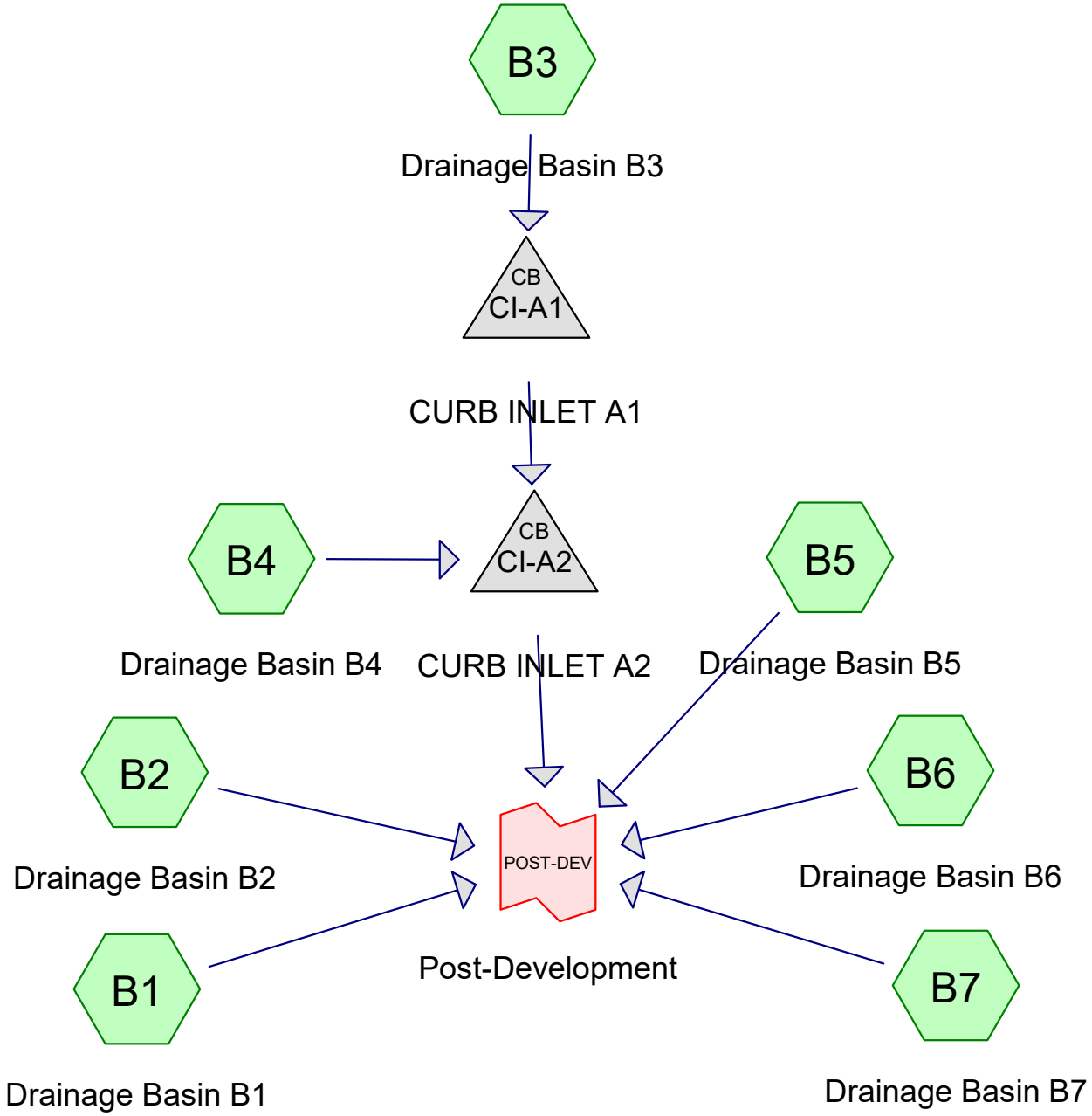
Inflow Area = 58,615 sf, 0.00% Impervious, Inflow Depth = 0.29" for 100-yr event
Inflow = 2.38 cfs @ 0.16 hrs, Volume= 1,428 cf
Primary = 2.38 cfs @ 0.16 hrs, Volume= 1,428 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link PRE-DEV: Pre-Development



POST DEVELOPMENT HYDROGRAPHS



Subcat Reach Pond Link

Routing Diagram for New Beginnings Drainage
Prepared by Phillip Lewis Engineering, Printed 7/24/2025

Summary for Subcatchment B1: Drainage Basin B1

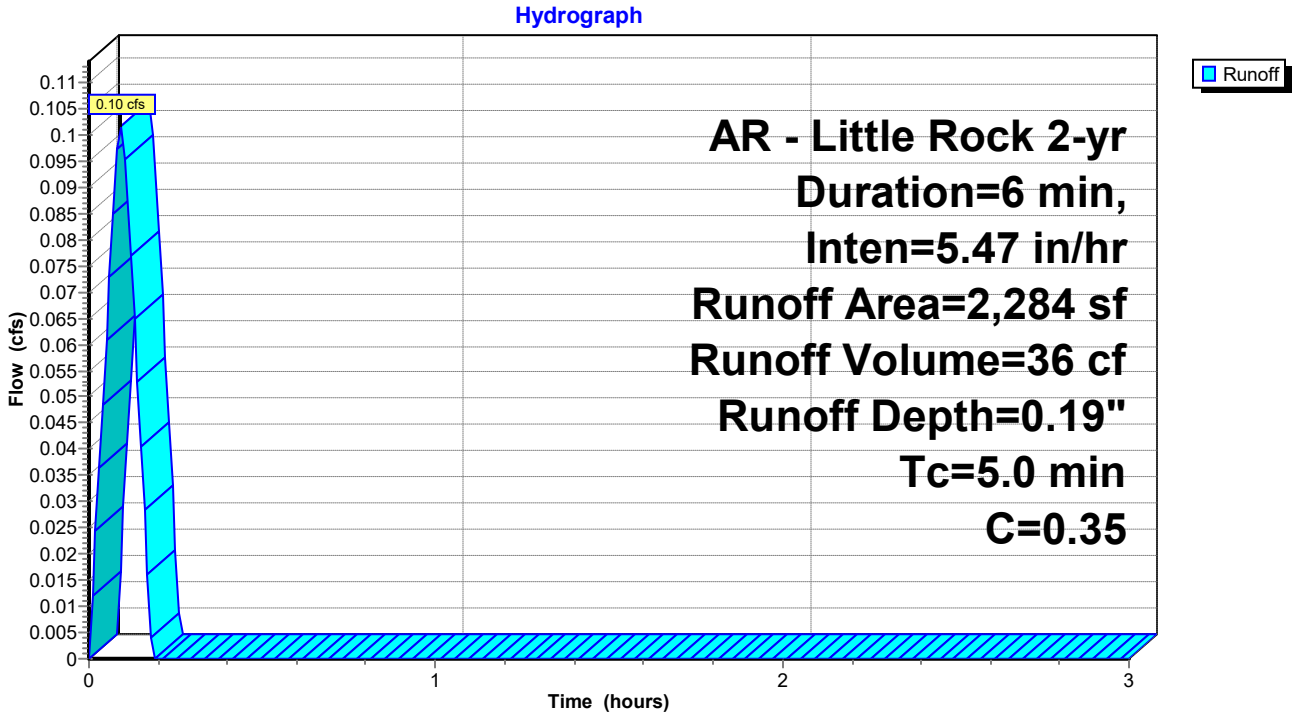
Runoff = 0.10 cfs @ 0.09 hrs, Volume= 36 cf, Depth= 0.19"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=6 min, Inten=5.47 in/hr

Area (sf)	C	Description
2,284	0.35	Sandy Soil 2-7% per manual
0	0.92	Paved Areas
2,284	0.35	Weighted Average
2,284		100.00% Pervious Area

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

Subcatchment B1: Drainage Basin B1



Summary for Subcatchment B2: Drainage Basin B2

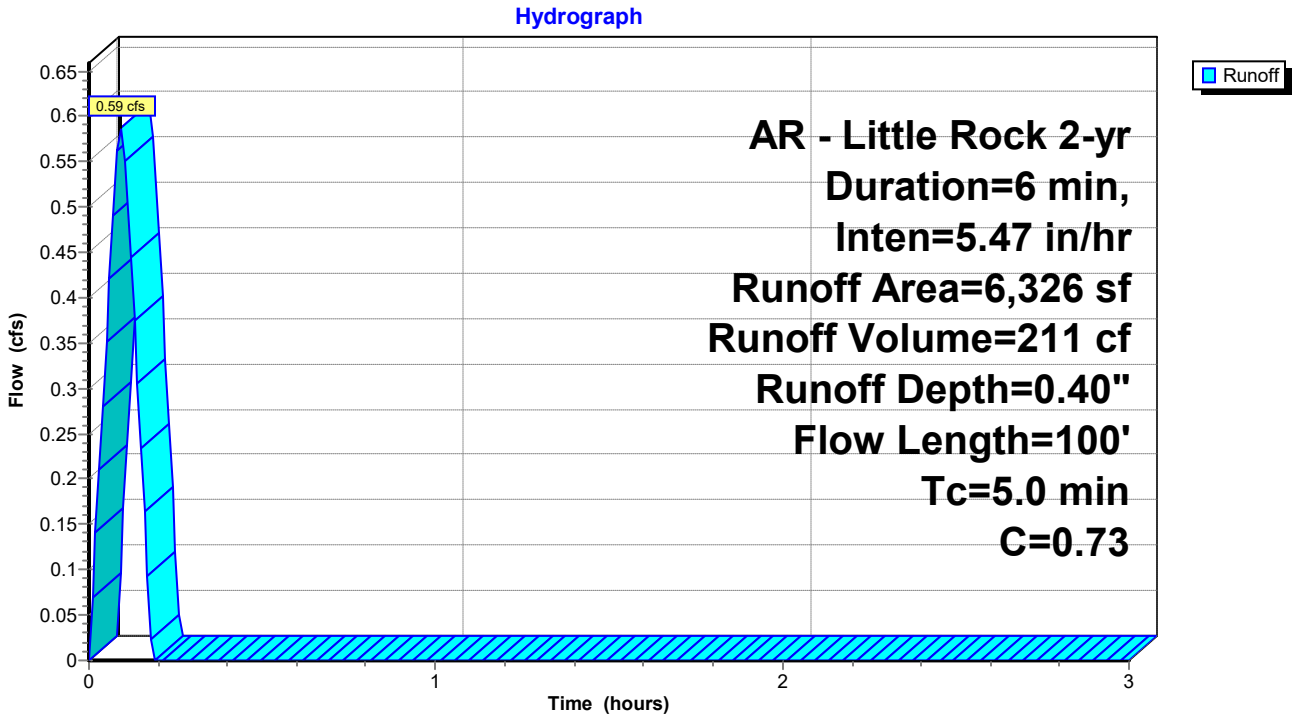
Runoff = 0.59 cfs @ 0.09 hrs, Volume= 211 cf, Depth= 0.40"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=6 min, Inten=5.47 in/hr

Area (sf)	C	Description
2,115	0.35	Sandy Soil 2-7% per manual
4,211	0.92	Paved Areas
6,326	0.73	Weighted Average
6,326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	42	0.1667	3.09		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.5	58	0.0500	2.04		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
4.3					**Direct Entry, Minimum Adjustment**
5.0	100	Total			

Subcatchment B2: Drainage Basin B2



Summary for Subcatchment B3: Drainage Basin B3

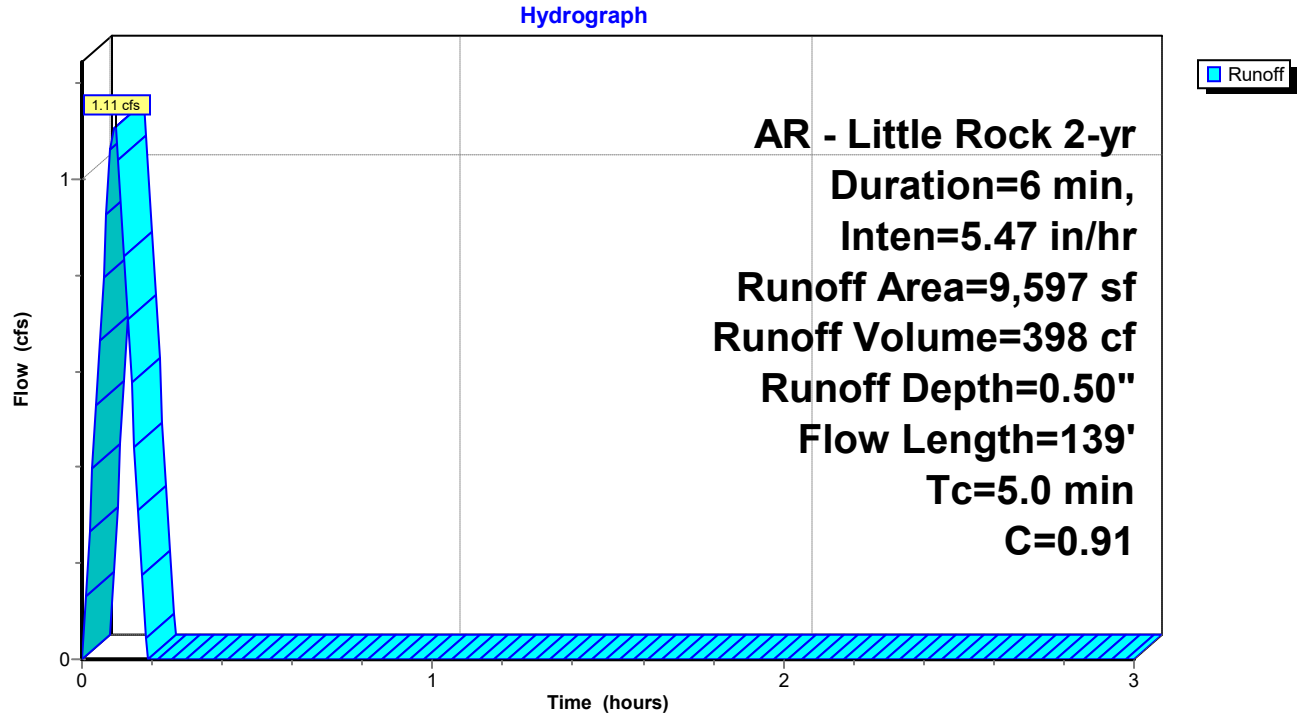
Runoff = 1.11 cfs @ 0.09 hrs, Volume= 398 cf, Depth= 0.50"
Routed to Pond CI-A1 : CURB INLET A1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=6 min, Inten=5.47 in/hr

Area (sf)	C	Description
155	0.35	Sandy Soil 2-7% per manual
9,442	0.92	Paved Areas
9,597	0.91	Weighted Average
9,597		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	28	0.1667	2.85		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.4	30	0.0160	1.13		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
0.4	41	0.0520	1.93		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
0.2	40	0.0360	3.85		**Shallow Concentrated Flow, Gutter Flow** Paved Kv= 20.3 fps
3.8					**Direct Entry, Minimum Adjustment**
5.0	139	Total			

Subcatchment B3: Drainage Basin B3



Summary for Subcatchment B4: Drainage Basin B4

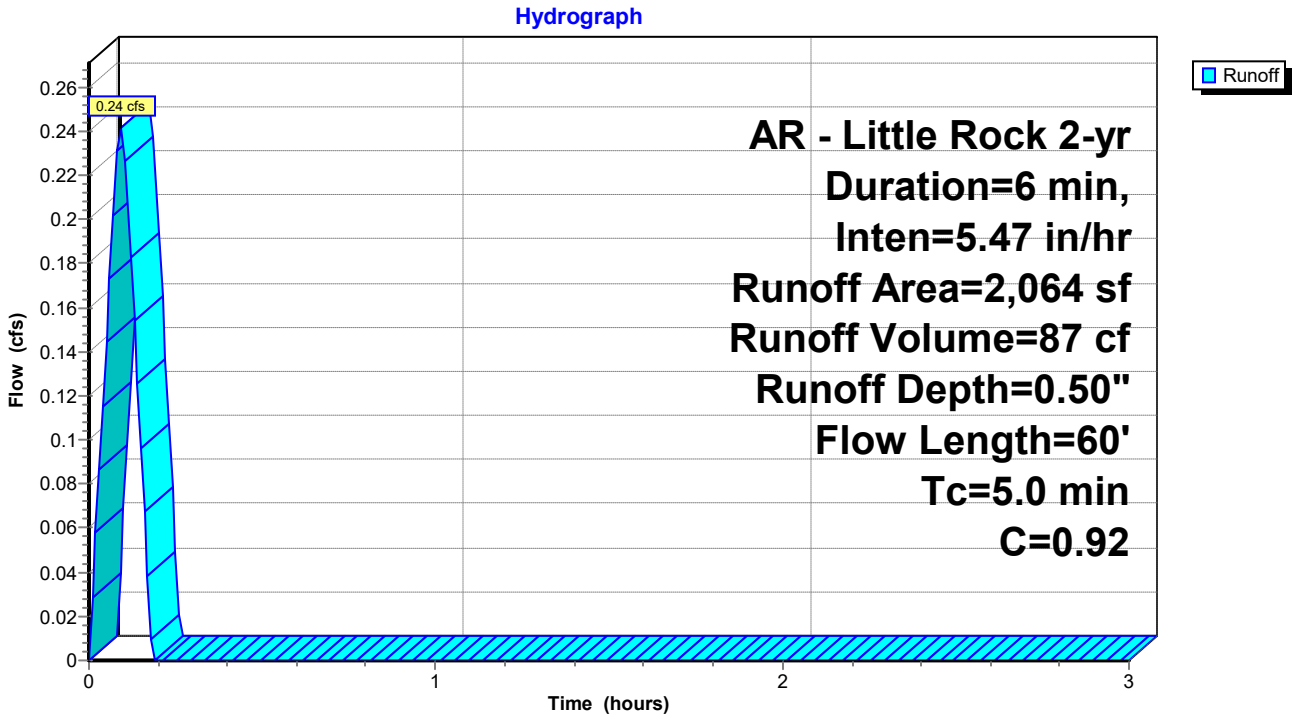
Runoff = 0.24 cfs @ 0.09 hrs, Volume= 87 cf, Depth= 0.50"
Routed to Pond CI-A2 : CURB INLET A2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=6 min, Inten=5.47 in/hr

Area (sf)	C	Description
0	0.35	Sandy Soil 2-7% per manual
2,064	0.92	Paved Areas
2,064	0.92	Weighted Average
2,064		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	45	0.0170	1.26		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
0.0	15	0.0840	5.88		**Shallow Concentrated Flow, Gutter Flow** Paved Kv= 20.3 fps
4.4					**Direct Entry, Minimum Adjustment**
5.0	60	Total			

Subcatchment B4: Drainage Basin B4



Summary for Subcatchment B5: Drainage Basin B5

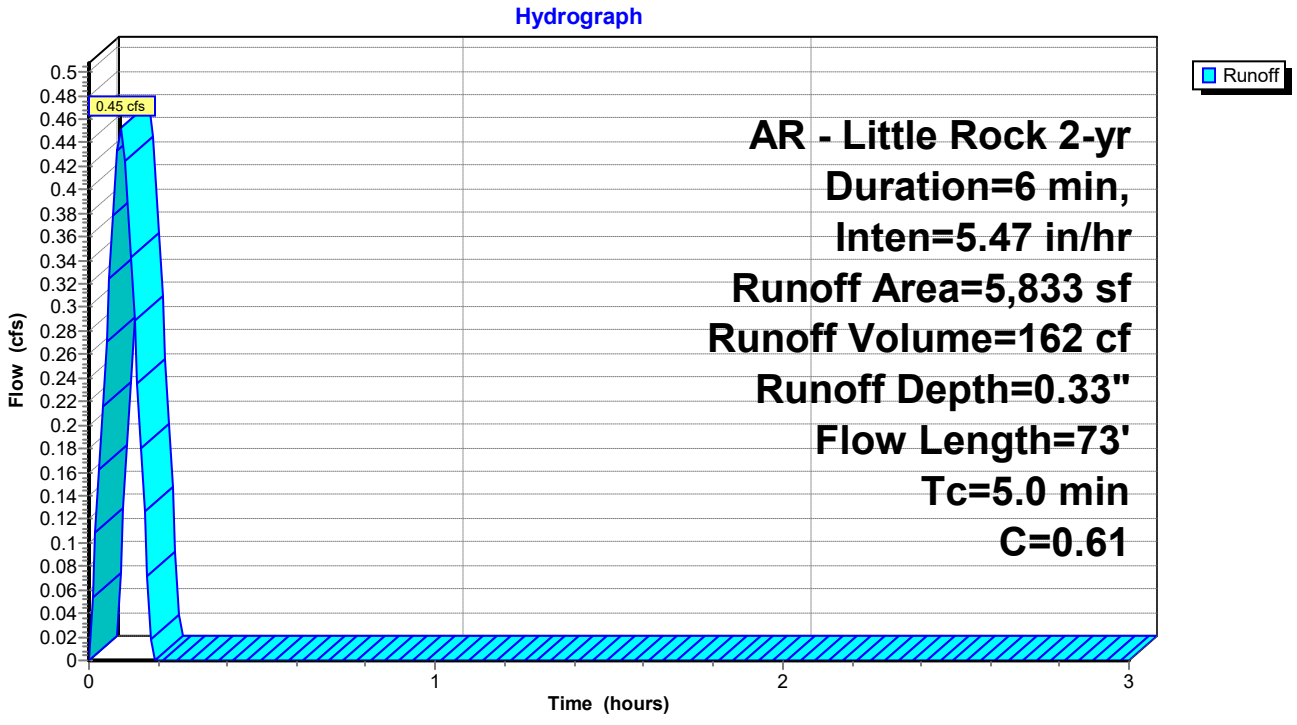
Runoff = 0.45 cfs @ 0.09 hrs, Volume= 162 cf, Depth= 0.33"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=6 min, Inten=5.47 in/hr

Area (sf)	C	Description
3,123	0.35	Sandy Soil 2-7% per manual
2,710	0.92	Paved Areas
5,833	0.61	Weighted Average
5,833		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	18	0.1667	2.61		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.4	55	0.0860	2.05		**Shallow Concentrated Flow, Overland Concentrated** Short Grass Pasture Kv= 7.0 fps
4.5					**Direct Entry, Minimum Adjustment**
5.0	73	Total			

Subcatchment B5: Drainage Basin B5



Summary for Subcatchment B6: Drainage Basin B6

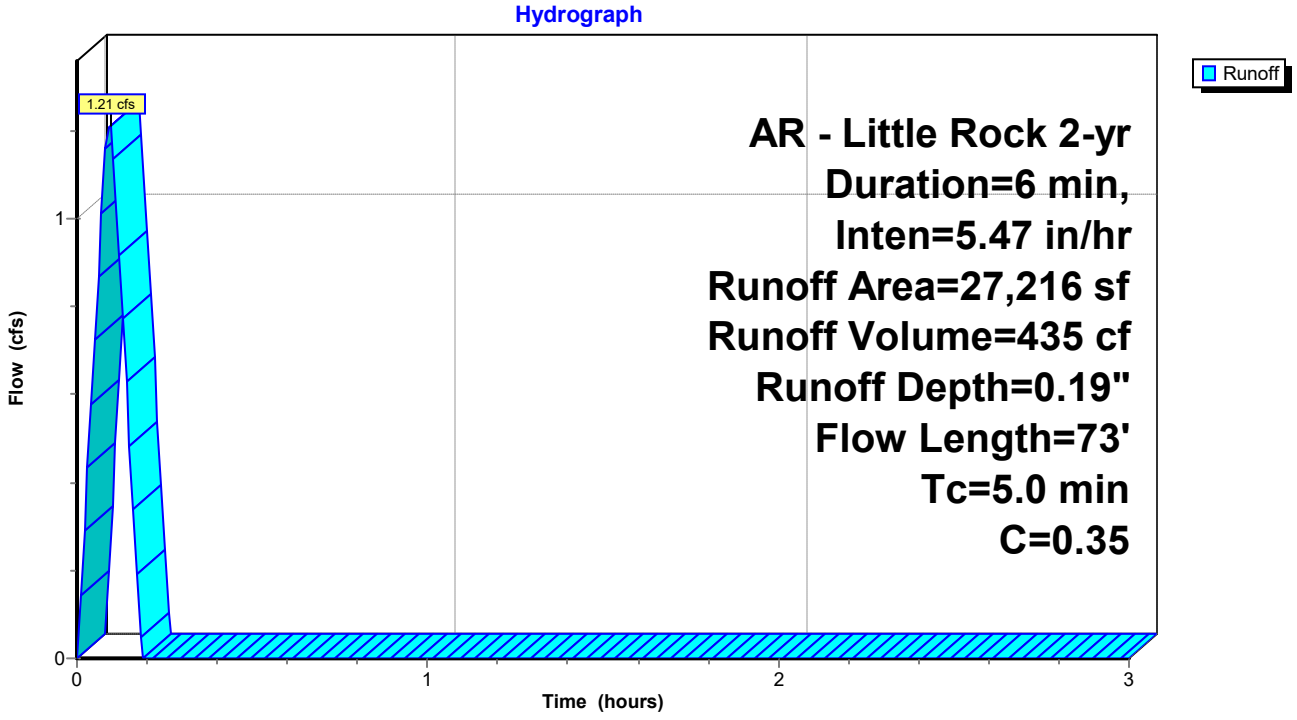
Runoff = 1.21 cfs @ 0.09 hrs, Volume= 435 cf, Depth= 0.19"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=6 min, Inten=5.47 in/hr

Area (sf)	C	Description
27,216	0.35	Sandy Soil 2-7% per manual
27,216		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	18	0.1667	2.61		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.4	55	0.0860	2.05		**Shallow Concentrated Flow, Overland Concentrated** Short Grass Pasture Kv= 7.0 fps
4.5					**Direct Entry, Minimum Adjustment**
5.0	73	Total			

Subcatchment B6: Drainage Basin B6



Summary for Subcatchment B7: Drainage Basin B7

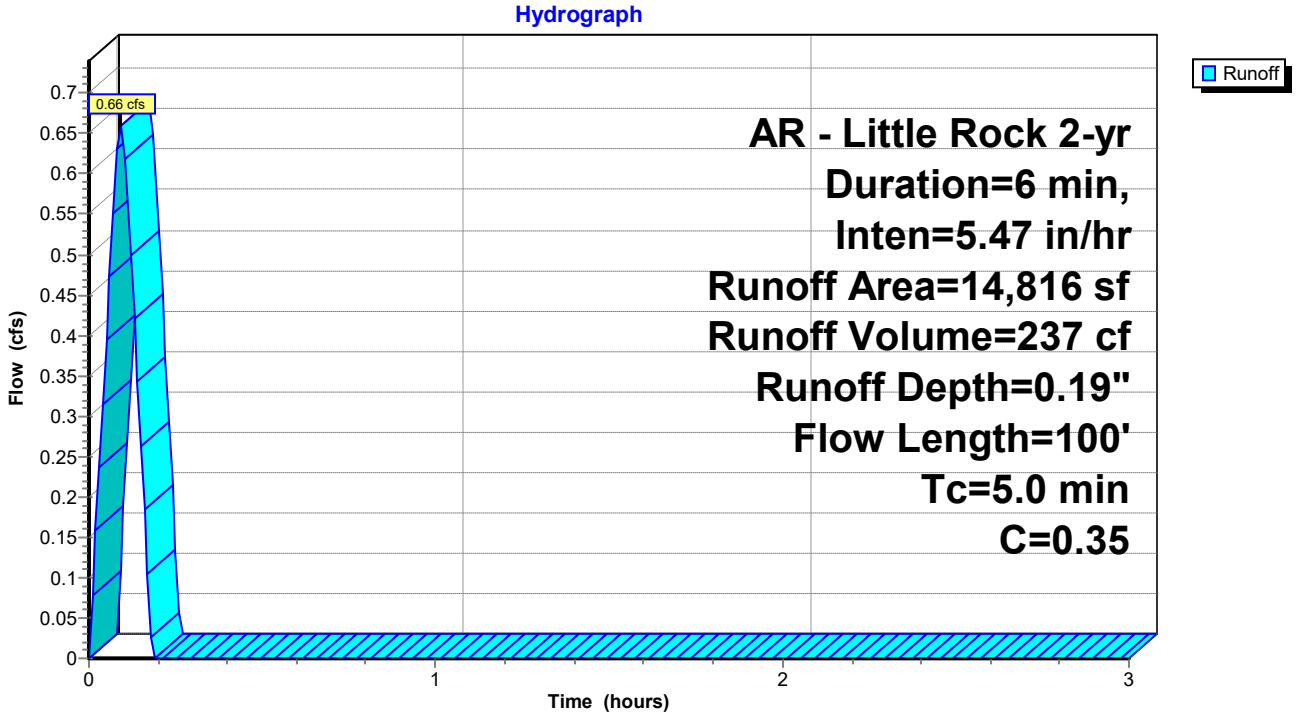
Runoff = 0.66 cfs @ 0.09 hrs, Volume= 237 cf, Depth= 0.19"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 2-yr Duration=6 min, Inten=5.47 in/hr

Area (sf)	C	Description
14,816	0.35	Sandy Soil 2-7% per manual
14,816		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	42	0.1667	3.09		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.5	58	0.0500	2.04		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
4.3					**Direct Entry, Minimum Adjustment**
5.0	100	Total			

Subcatchment B7: Drainage Basin B7



Summary for Pond CI-A1: CURB INLET A1

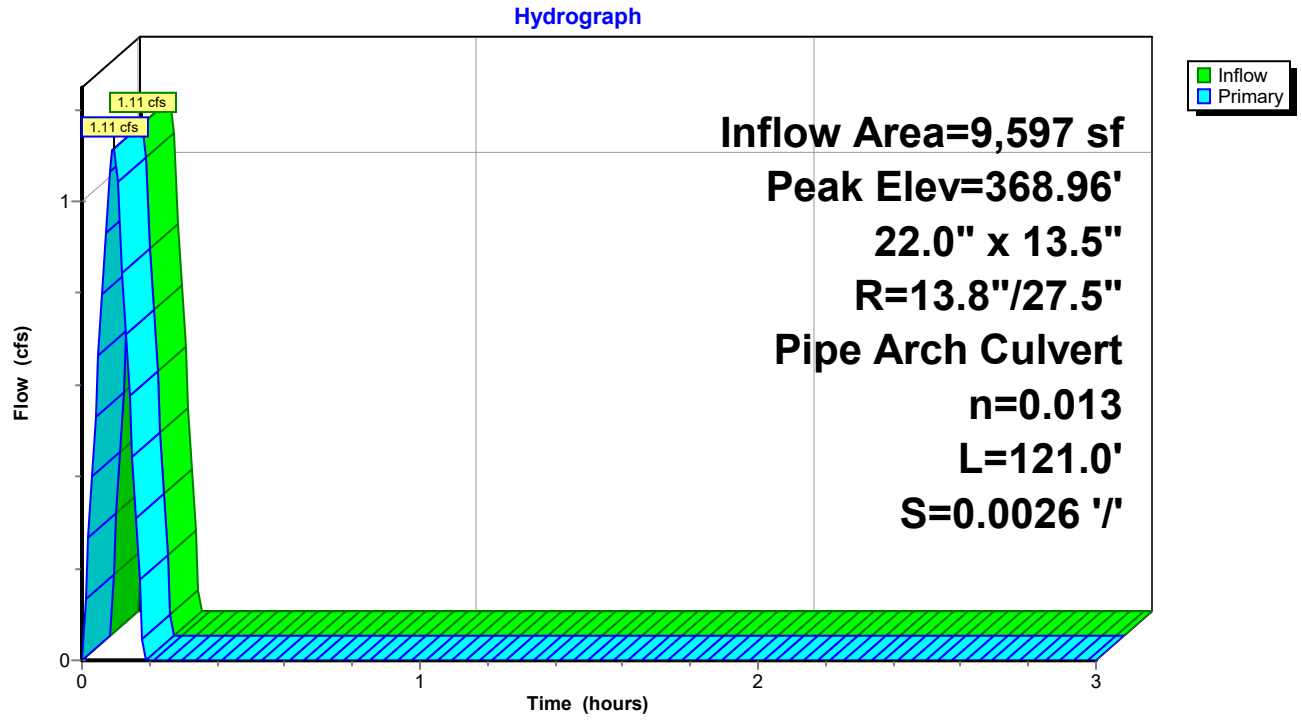
Inflow Area = 9,597 sf, 0.00% Impervious, Inflow Depth = 0.50" for 2-yr event
Inflow = 1.11 cfs @ 0.09 hrs, Volume= 398 cf
Outflow = 1.11 cfs @ 0.09 hrs, Volume= 398 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.11 cfs @ 0.09 hrs, Volume= 398 cf
Routed to Pond CI-A2 : CURB INLET A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 368.96' @ 0.09 hrs

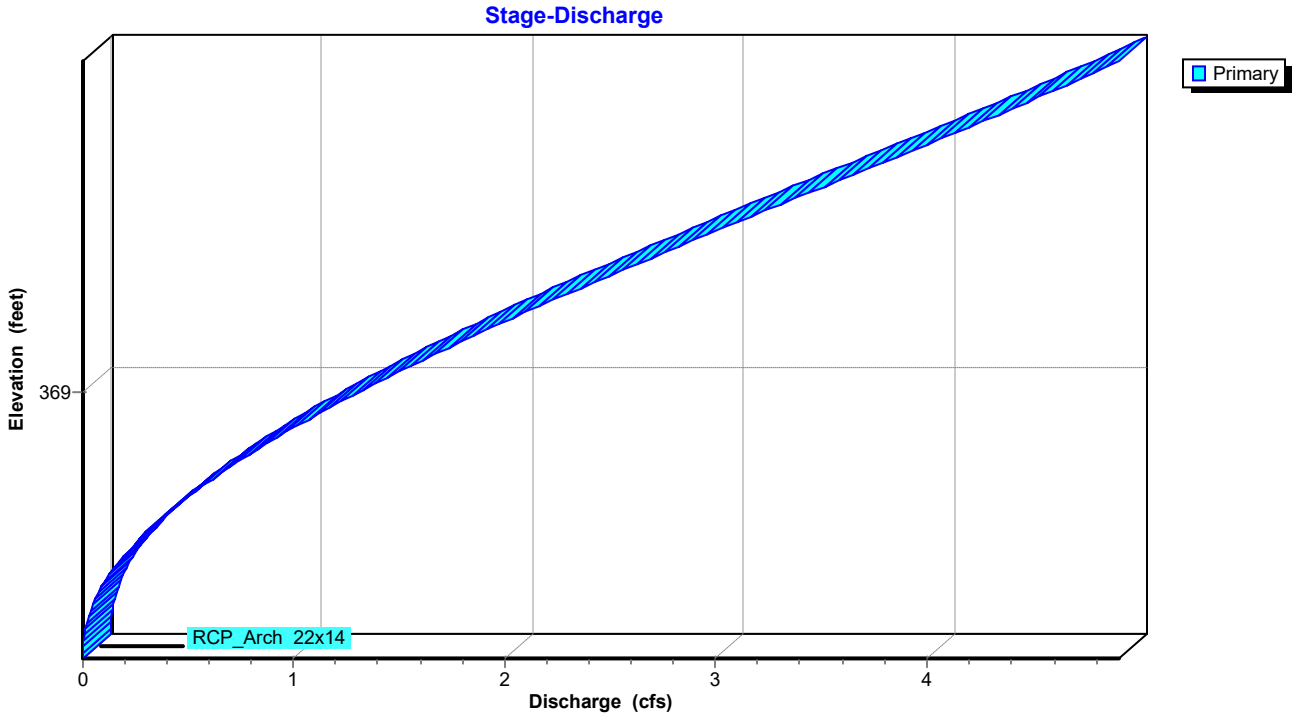
Device	Routing	Invert	Outlet Devices
#1	Primary	368.50'	**22.0" W x 13.5" H, R=13.8"/27.5" Pipe Arch RCP_Arch 22x14** L= 121.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 368.50' / 368.19' S= 0.0026 '/' Cc= 0.900 n= 0.013, Flow Area= 1.65 sf

Primary OutFlow Max=1.11 cfs @ 0.09 hrs HW=368.96' (Free Discharge)
1=RCP_Arch 22x14 (Barrel Controls 1.11 cfs @ 2.30 fps)

Pond CI-A1: CURB INLET A1



Pond CI-A1: CURB INLET A1



Stage-Area-Storage for Pond CI-A1: CURB INLET A1

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
368.50	**0**	369.02	0	369.54	0
368.51	0	369.03	0	369.55	0
368.52	0	369.04	0	369.56	0
368.53	0	369.05	0	369.57	0
368.54	0	369.06	0	369.58	0
368.55	0	369.07	0	369.59	0
368.56	0	369.08	0	369.60	0
368.57	0	369.09	0	369.61	0
368.58	0	369.10	0	369.62	0
368.59	0	369.11	0		
368.60	0	369.12	0		
368.61	0	369.13	0		
368.62	0	369.14	0		
368.63	0	369.15	0		
368.64	0	369.16	0		
368.65	0	369.17	0		
368.66	0	369.18	0		
368.67	0	369.19	0		
368.68	0	369.20	0		
368.69	0	369.21	0		
368.70	0	369.22	0		
368.71	0	369.23	0		
368.72	0	369.24	0		
368.73	0	369.25	0		
368.74	0	369.26	0		
368.75	0	369.27	0		
368.76	0	369.28	0		
368.77	0	369.29	0		
368.78	0	369.30	0		
368.79	0	369.31	0		
368.80	0	369.32	0		
368.81	0	369.33	0		
368.82	0	369.34	0		
368.83	0	369.35	0		
368.84	0	369.36	0		
368.85	0	369.37	0		
368.86	0	369.38	0		
368.87	0	369.39	0		
368.88	0	369.40	0		
368.89	0	369.41	0		
368.90	0	369.42	0		
368.91	0	369.43	0		
368.92	0	369.44	0		
368.93	0	369.45	0		
368.94	0	369.46	0		
368.95	0	369.47	0		
368.96	0	369.48	0		
368.97	0	369.49	0		
368.98	0	369.50	0		
368.99	0	369.51	0		
369.00	0	369.52	0		
369.01	0	369.53	0		

Summary for Pond CI-A2: CURB INLET A2

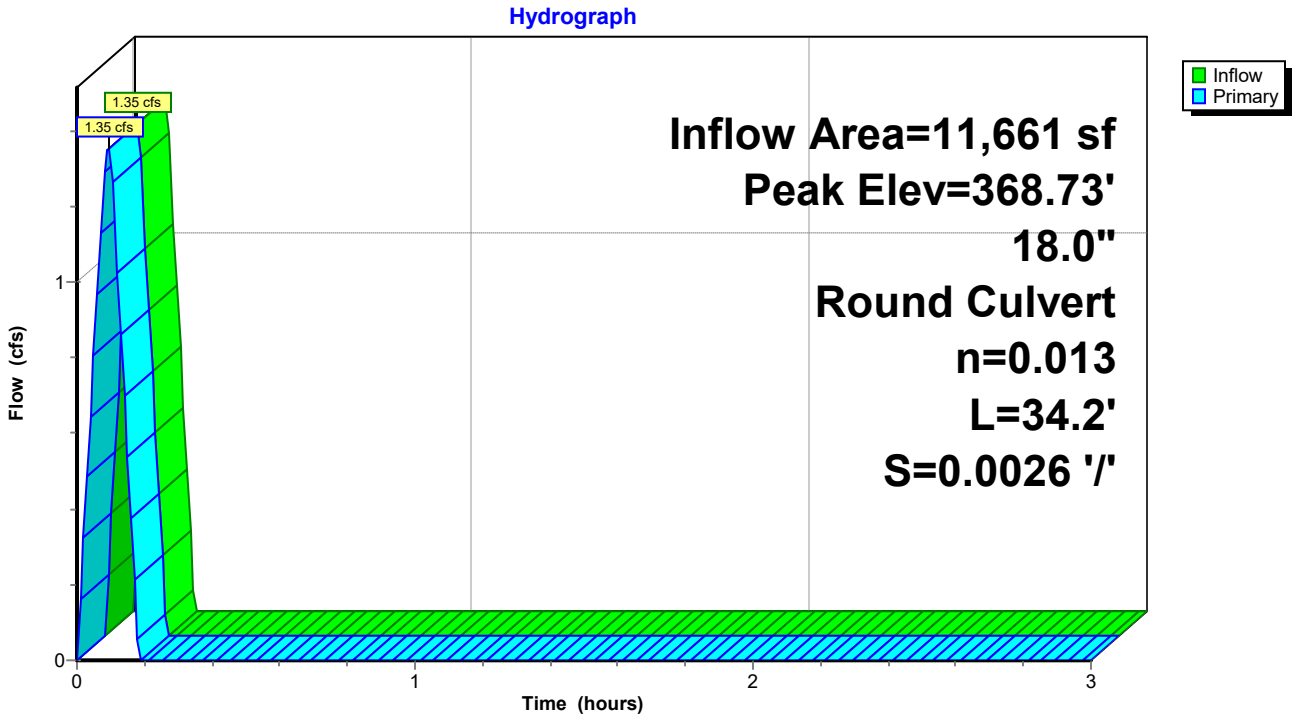
Inflow Area = 11,661 sf, 0.00% Impervious, Inflow Depth = 0.50" for 2-yr event
Inflow = 1.35 cfs @ 0.09 hrs, Volume= 485 cf
Outflow = 1.35 cfs @ 0.09 hrs, Volume= 485 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.35 cfs @ 0.09 hrs, Volume= 485 cf
Routed to Link POST-DEV : Post-Development

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 368.73' @ 0.09 hrs

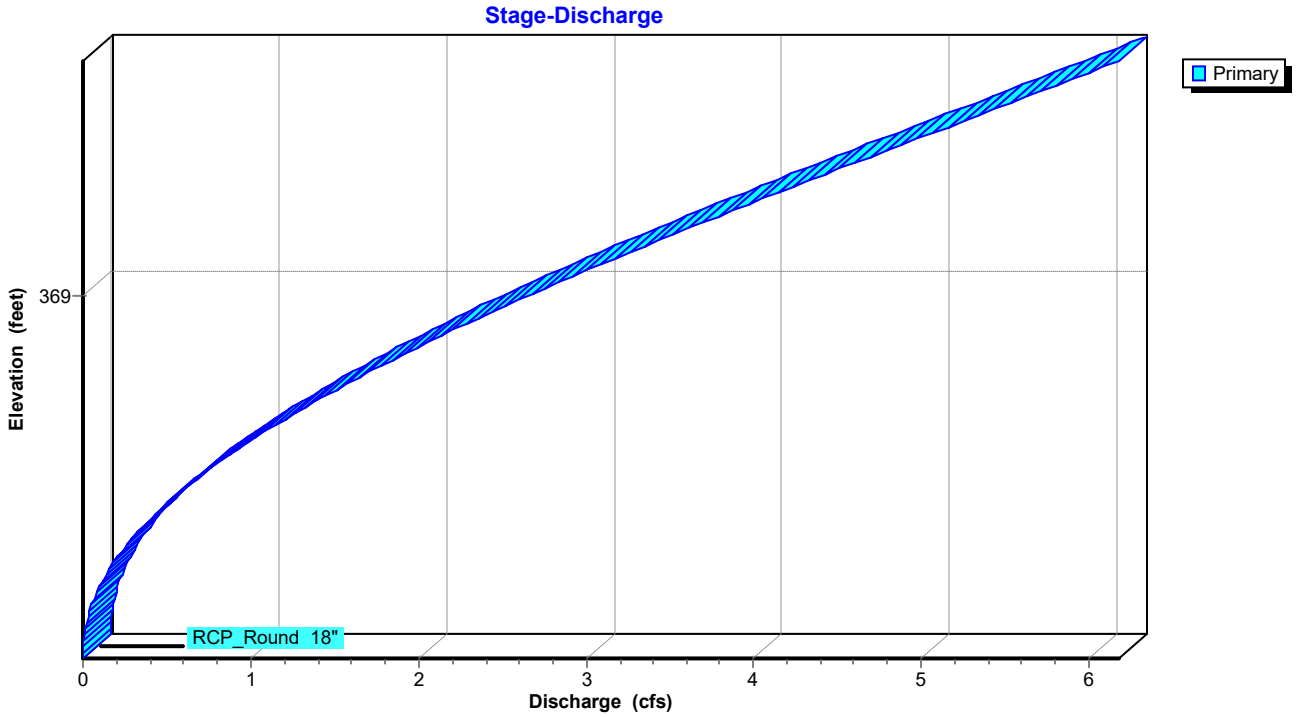
Device	Routing	Invert	Outlet Devices
#1	Primary	368.09'	**18.0" Round RCP_Round 18"** L= 34.2' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 368.09' / 368.00' S= 0.0026 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=1.35 cfs @ 0.09 hrs HW=368.73' (Free Discharge)
1=RCP_Round 18" (Barrel Controls 1.35 cfs @ 2.78 fps)

Pond CI-A2: CURB INLET A2



Pond CI-A2: CURB INLET A2



Stage-Area-Storage for Pond CI-A2: CURB INLET A2

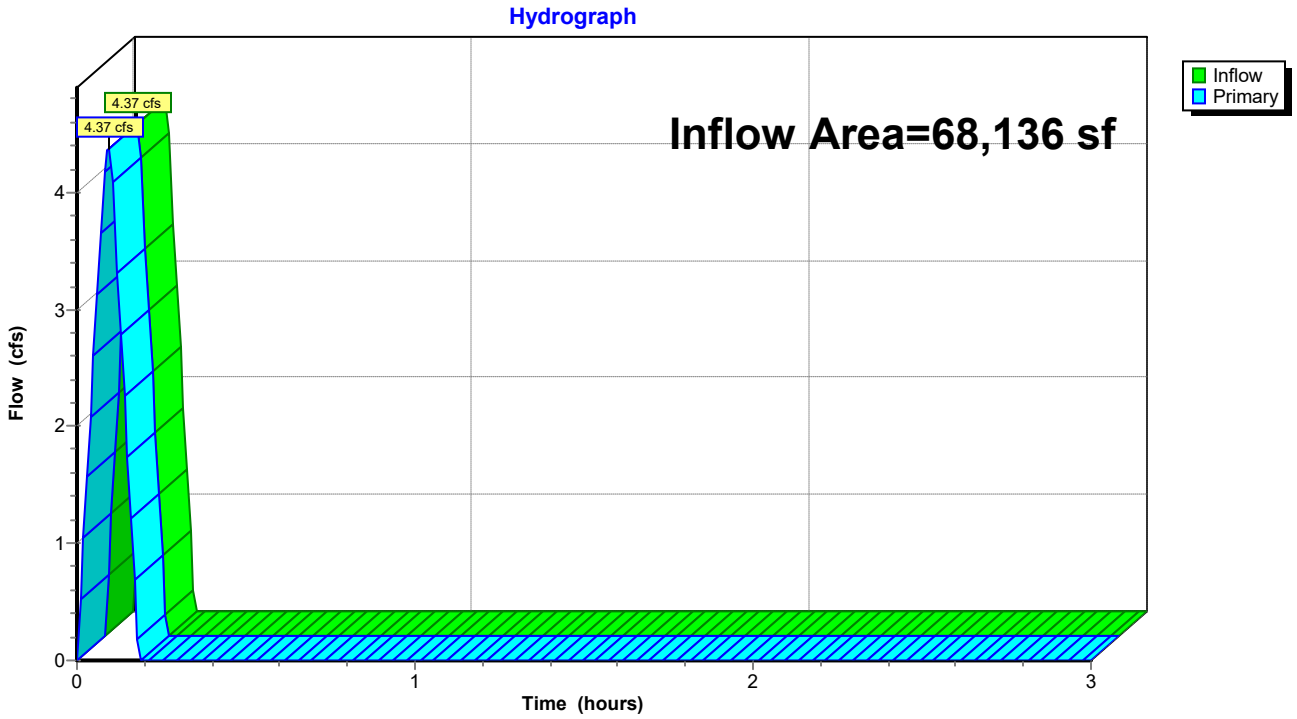
Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
368.09	**0**	368.61	0	369.13	0
368.10	0	368.62	0	369.14	0
368.11	0	368.63	0	369.15	0
368.12	0	368.64	0	369.16	0
368.13	0	368.65	0	369.17	0
368.14	0	368.66	0	369.18	0
368.15	0	368.67	0	369.19	0
368.16	0	368.68	0	369.20	0
368.17	0	368.69	0	369.21	0
368.18	0	368.70	0	369.22	0
368.19	0	368.71	0	369.23	0
368.20	0	368.72	0	369.24	0
368.21	0	368.73	0	369.25	0
368.22	0	368.74	0	369.26	0
368.23	0	368.75	0	369.27	0
368.24	0	368.76	0	369.28	0
368.25	0	368.77	0	369.29	0
368.26	0	368.78	0	369.30	0
368.27	0	368.79	0	369.31	0
368.28	0	368.80	0	369.32	0
368.29	0	368.81	0	369.33	0
368.30	0	368.82	0	369.34	0
368.31	0	368.83	0	369.35	0
368.32	0	368.84	0	369.36	0
368.33	0	368.85	0	369.37	0
368.34	0	368.86	0	369.38	0
368.35	0	368.87	0	369.39	0
368.36	0	368.88	0	369.40	0
368.37	0	368.89	0	369.41	0
368.38	0	368.90	0	369.42	0
368.39	0	368.91	0	369.43	0
368.40	0	368.92	0	369.44	0
368.41	0	368.93	0	369.45	0
368.42	0	368.94	0	369.46	0
368.43	0	368.95	0	369.47	0
368.44	0	368.96	0	369.48	0
368.45	0	368.97	0	369.49	0
368.46	0	368.98	0	369.50	0
368.47	0	368.99	0	369.51	0
368.48	0	369.00	0	369.52	0
368.49	0	369.01	0	369.53	0
368.50	0	369.02	0	369.54	0
368.51	0	369.03	0	369.55	0
368.52	0	369.04	0	369.56	0
368.53	0	369.05	0	369.57	0
368.54	0	369.06	0	369.58	0
368.55	0	369.07	0	369.59	0
368.56	0	369.08	0		
368.57	0	369.09	0		
368.58	0	369.10	0		
368.59	0	369.11	0		
368.60	0	369.12	0		

Summary for Link POST-DEV: Post-Development

Inflow Area = 68,136 sf, 0.00% Impervious, Inflow Depth = 0.28" for 2-yr event
Inflow = 4.37 cfs @ 0.09 hrs, Volume= 1,566 cf
Primary = 4.37 cfs @ 0.09 hrs, Volume= 1,566 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link POST-DEV: Post-Development



Summary for Subcatchment B1: Drainage Basin B1

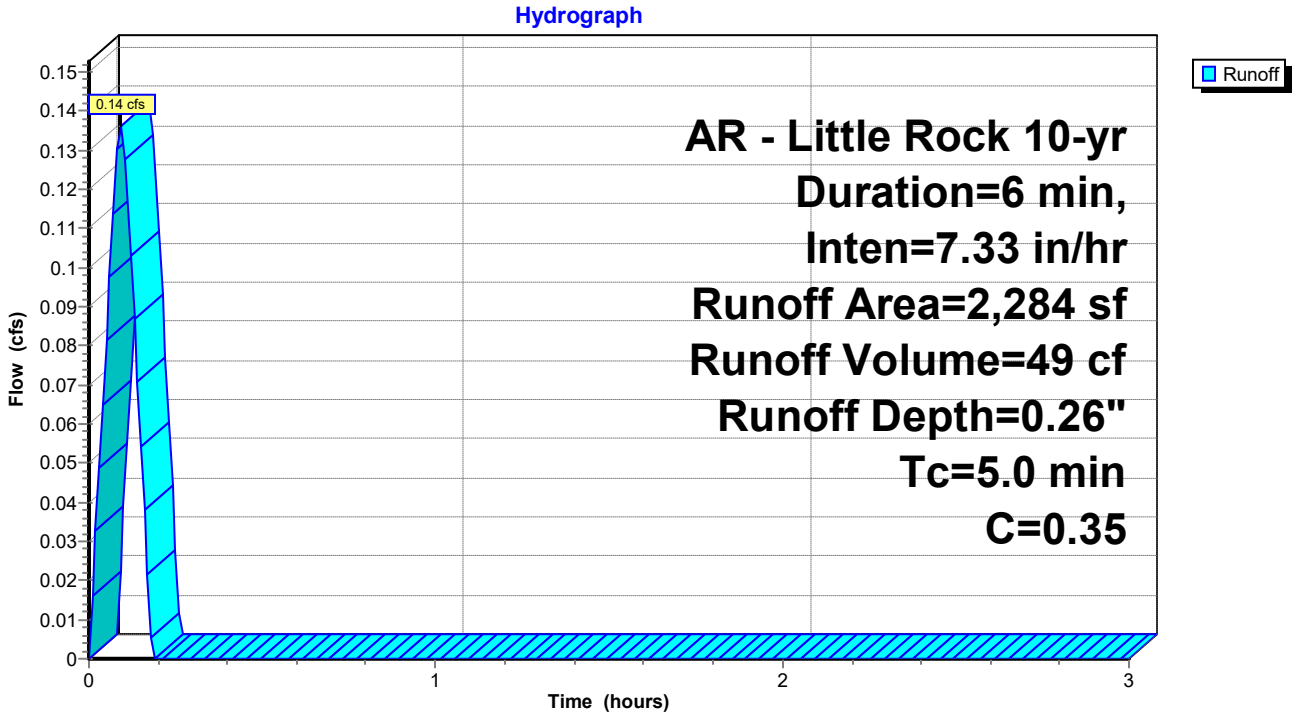
Runoff = 0.14 cfs @ 0.09 hrs, Volume= 49 cf, Depth= 0.26"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=6 min, Inten=7.33 in/hr

Area (sf)	C	Description
2,284	0.35	Sandy Soil 2-7% per manual
0	0.92	Paved Areas
2,284	0.35	Weighted Average
2,284		100.00% Pervious Area

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

Subcatchment B1: Drainage Basin B1



Summary for Subcatchment B2: Drainage Basin B2

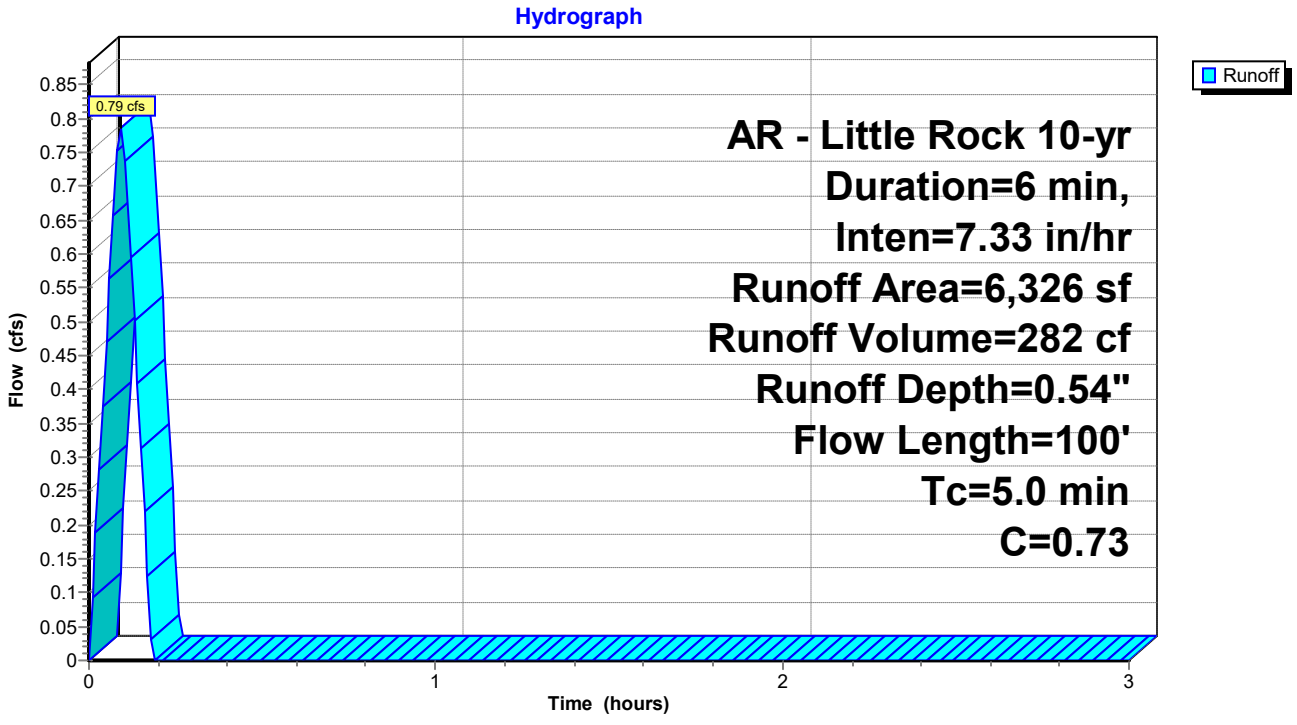
Runoff = 0.79 cfs @ 0.09 hrs, Volume= 282 cf, Depth= 0.54"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=6 min, Inten=7.33 in/hr

Area (sf)	C	Description
2,115	0.35	Sandy Soil 2-7% per manual
4,211	0.92	Paved Areas
6,326	0.73	Weighted Average
6,326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	42	0.1667	3.09		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.5	58	0.0500	2.04		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
4.3					**Direct Entry, Minimum Adjustment**
5.0	100	Total			

Subcatchment B2: Drainage Basin B2



Summary for Subcatchment B3: Drainage Basin B3

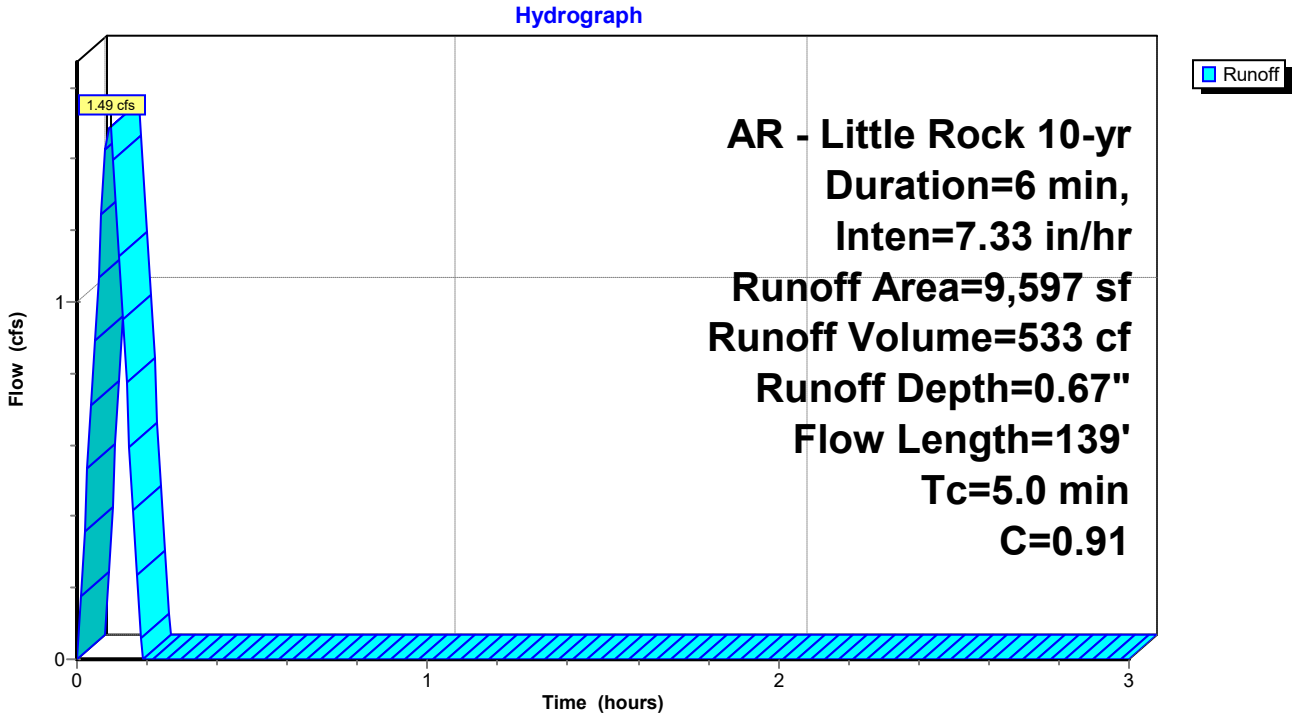
Runoff = 1.49 cfs @ 0.10 hrs, Volume= 533 cf, Depth= 0.67"
Routed to Pond CI-A1 : CURB INLET A1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=6 min, Inten=7.33 in/hr

Area (sf)	C	Description
155	0.35	Sandy Soil 2-7% per manual
9,442	0.92	Paved Areas
9,597	0.91	Weighted Average
9,597		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	28	0.1667	2.85		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.4	30	0.0160	1.13		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
0.4	41	0.0520	1.93		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
0.2	40	0.0360	3.85		**Shallow Concentrated Flow, Gutter Flow** Paved Kv= 20.3 fps
3.8					**Direct Entry, Minimum Adjustment**
5.0	139	Total			

Subcatchment B3: Drainage Basin B3



Summary for Subcatchment B4: Drainage Basin B4

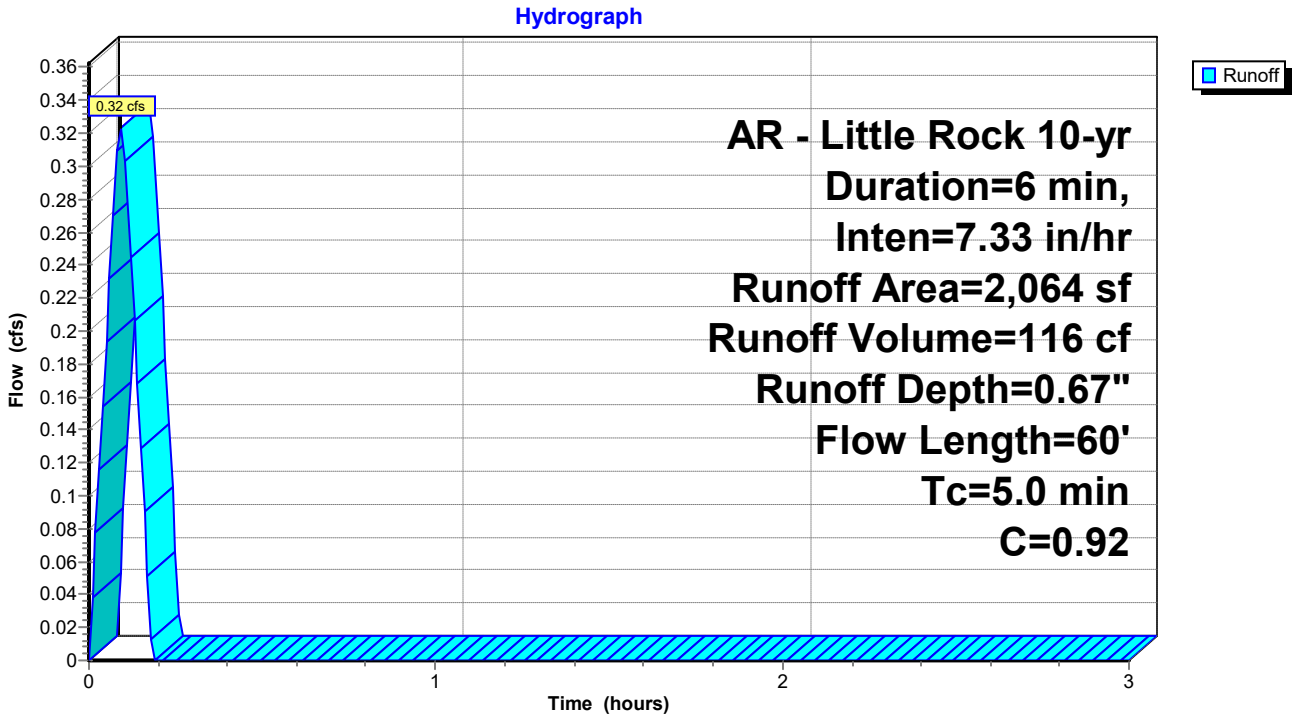
Runoff = 0.32 cfs @ 0.09 hrs, Volume= 116 cf, Depth= 0.67"
Routed to Pond CI-A2 : CURB INLET A2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=6 min, Inten=7.33 in/hr

Area (sf)	C	Description
0	0.35	Sandy Soil 2-7% per manual
2,064	0.92	Paved Areas
2,064	0.92	Weighted Average
2,064		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	45	0.0170	1.26		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
0.0	15	0.0840	5.88		**Shallow Concentrated Flow, Gutter Flow** Paved Kv= 20.3 fps
4.4					**Direct Entry, Minimum Adjustment**
5.0	60	Total			

Subcatchment B4: Drainage Basin B4



Summary for Subcatchment B5: Drainage Basin B5

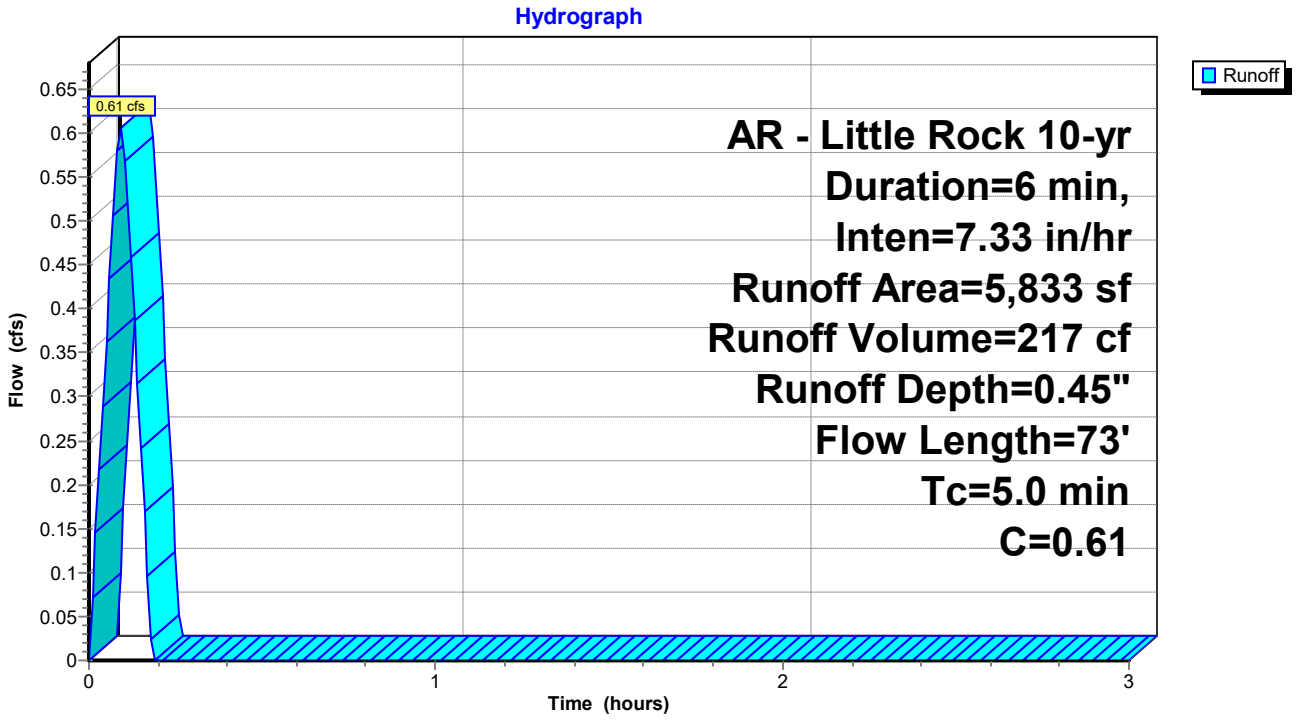
Runoff = 0.61 cfs @ 0.09 hrs, Volume= 217 cf, Depth= 0.45"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=6 min, Inten=7.33 in/hr

Area (sf)	C	Description
3,123	0.35	Sandy Soil 2-7% per manual
2,710	0.92	Paved Areas
5,833	0.61	Weighted Average
5,833		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	18	0.1667	2.61		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.4	55	0.0860	2.05		**Shallow Concentrated Flow, Overland Concentrated** Short Grass Pasture Kv= 7.0 fps
4.5					**Direct Entry, Minimum Adjustment**
5.0	73	Total			

Subcatchment B5: Drainage Basin B5



Summary for Subcatchment B6: Drainage Basin B6

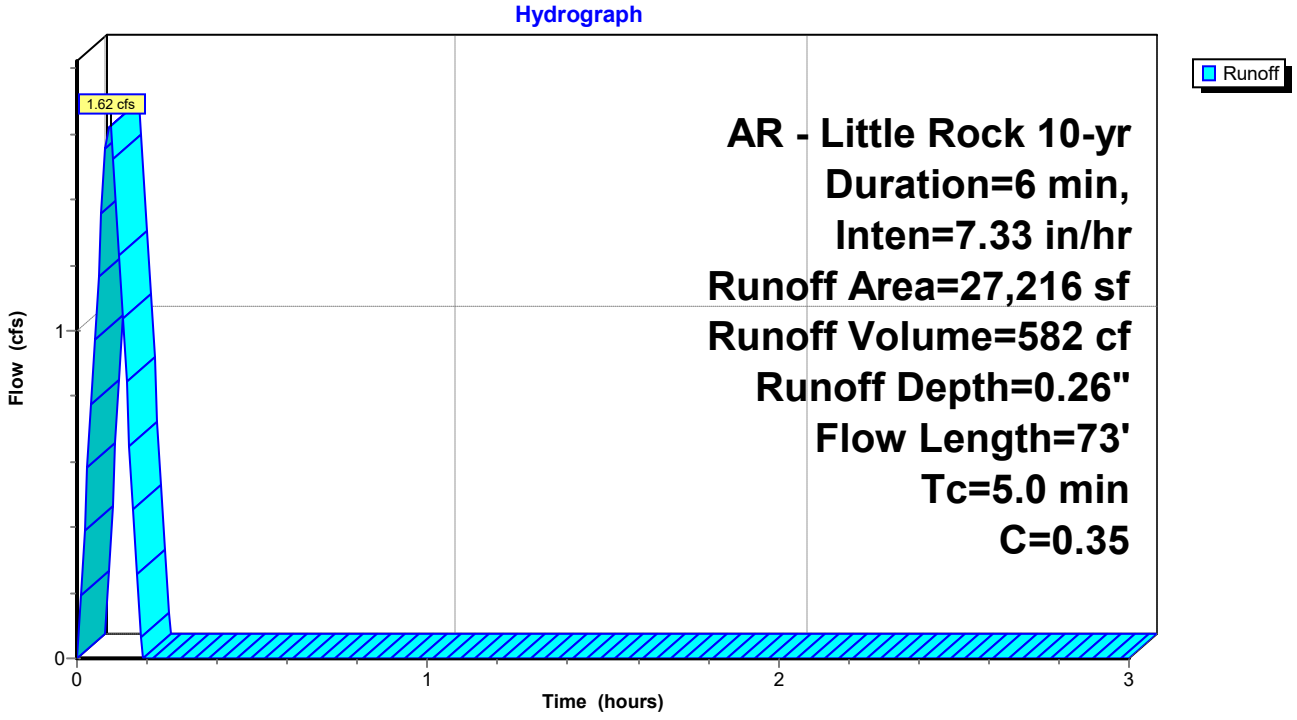
Runoff = 1.62 cfs @ 0.09 hrs, Volume= 582 cf, Depth= 0.26"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=6 min, Inten=7.33 in/hr

Area (sf)	C	Description
27,216	0.35	Sandy Soil 2-7% per manual
27,216		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	18	0.1667	2.61		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.4	55	0.0860	2.05		**Shallow Concentrated Flow, Overland Concentrated** Short Grass Pasture Kv= 7.0 fps
4.5					**Direct Entry, Minimum Adjustment**
5.0	73	Total			

Subcatchment B6: Drainage Basin B6



Summary for Subcatchment B7: Drainage Basin B7

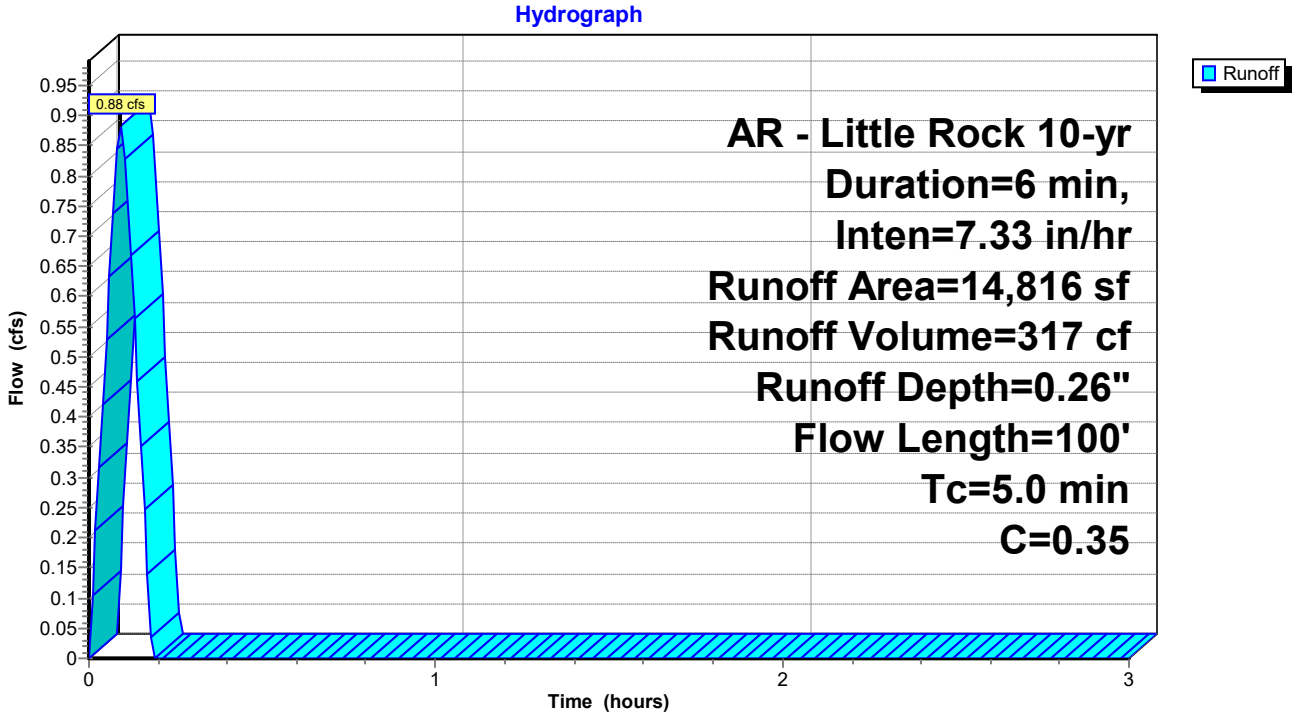
Runoff = 0.88 cfs @ 0.09 hrs, Volume= 317 cf, Depth= 0.26"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 10-yr Duration=6 min, Inten=7.33 in/hr

Area (sf)	C	Description
14,816	0.35	Sandy Soil 2-7% per manual
14,816		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	42	0.1667	3.09		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.5	58	0.0500	2.04		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
4.3					**Direct Entry, Minimum Adjustment**
5.0	100	Total			

Subcatchment B7: Drainage Basin B7



Summary for Pond CI-A1: CURB INLET A1

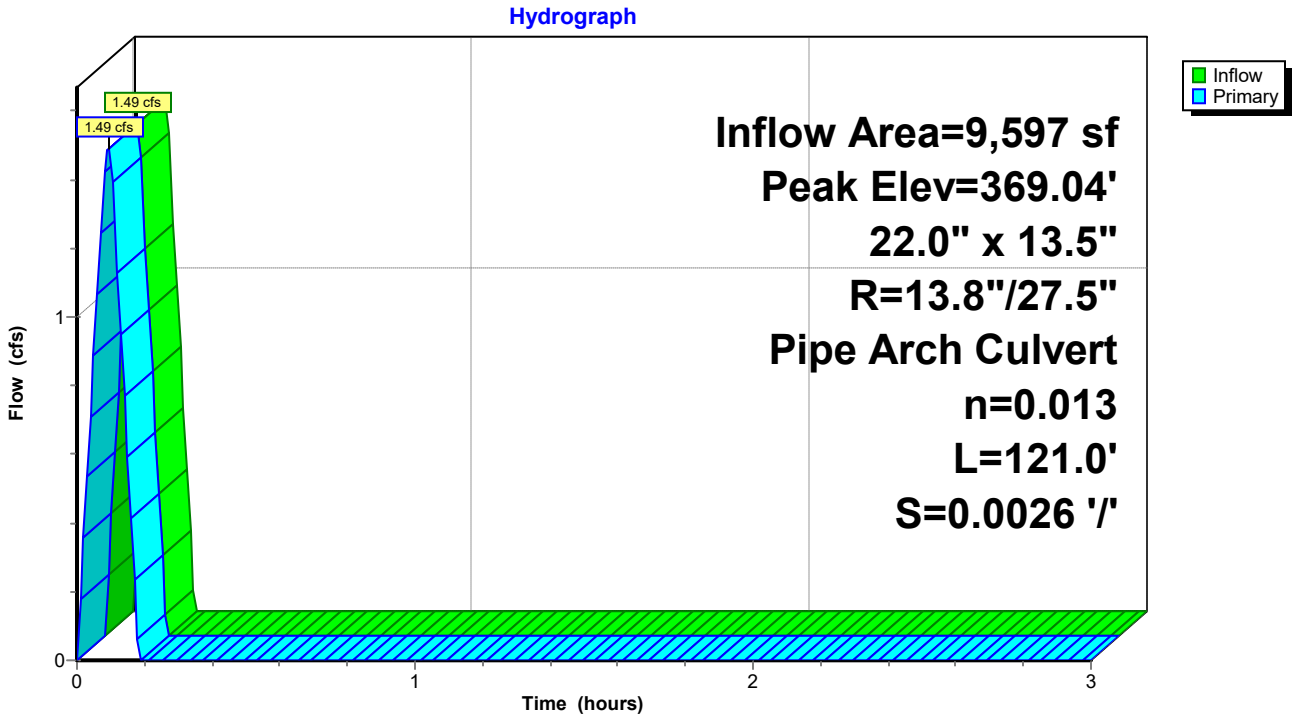
Inflow Area = 9,597 sf, 0.00% Impervious, Inflow Depth = 0.67" for 10-yr event
Inflow = 1.49 cfs @ 0.10 hrs, Volume= 533 cf
Outflow = 1.49 cfs @ 0.09 hrs, Volume= 533 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.49 cfs @ 0.09 hrs, Volume= 533 cf
Routed to Pond CI-A2 : CURB INLET A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 369.04' @ 0.09 hrs

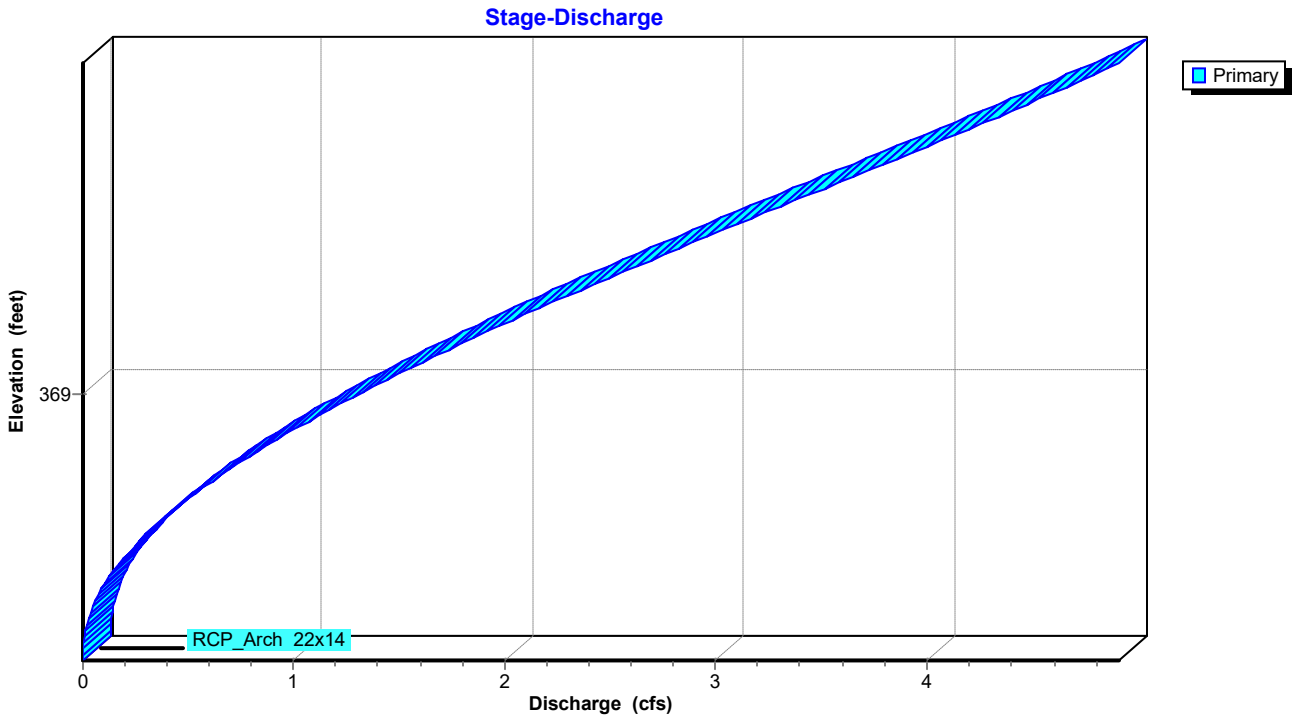
Device	Routing	Invert	Outlet Devices
#1	Primary	368.50'	**22.0" W x 13.5" H, R=13.8"/27.5" Pipe Arch RCP_Arch 22x14** L= 121.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 368.50' / 368.19' S= 0.0026 '/' Cc= 0.900 n= 0.013, Flow Area= 1.65 sf

Primary OutFlow Max=1.48 cfs @ 0.09 hrs HW=369.04' (Free Discharge)
1=RCP_Arch 22x14 (Barrel Controls 1.48 cfs @ 2.53 fps)

Pond CI-A1: CURB INLET A1



Pond CI-A1: CURB INLET A1



Stage-Area-Storage for Pond CI-A1: CURB INLET A1

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
368.50	**0**	369.02	0	369.54	0
368.51	0	369.03	0	369.55	0
368.52	0	369.04	0	369.56	0
368.53	0	369.05	0	369.57	0
368.54	0	369.06	0	369.58	0
368.55	0	369.07	0	369.59	0
368.56	0	369.08	0	369.60	0
368.57	0	369.09	0	369.61	0
368.58	0	369.10	0	369.62	0
368.59	0	369.11	0		
368.60	0	369.12	0		
368.61	0	369.13	0		
368.62	0	369.14	0		
368.63	0	369.15	0		
368.64	0	369.16	0		
368.65	0	369.17	0		
368.66	0	369.18	0		
368.67	0	369.19	0		
368.68	0	369.20	0		
368.69	0	369.21	0		
368.70	0	369.22	0		
368.71	0	369.23	0		
368.72	0	369.24	0		
368.73	0	369.25	0		
368.74	0	369.26	0		
368.75	0	369.27	0		
368.76	0	369.28	0		
368.77	0	369.29	0		
368.78	0	369.30	0		
368.79	0	369.31	0		
368.80	0	369.32	0		
368.81	0	369.33	0		
368.82	0	369.34	0		
368.83	0	369.35	0		
368.84	0	369.36	0		
368.85	0	369.37	0		
368.86	0	369.38	0		
368.87	0	369.39	0		
368.88	0	369.40	0		
368.89	0	369.41	0		
368.90	0	369.42	0		
368.91	0	369.43	0		
368.92	0	369.44	0		
368.93	0	369.45	0		
368.94	0	369.46	0		
368.95	0	369.47	0		
368.96	0	369.48	0		
368.97	0	369.49	0		
368.98	0	369.50	0		
368.99	0	369.51	0		
369.00	0	369.52	0		
369.01	0	369.53	0		

Summary for Pond CI-A2: CURB INLET A2

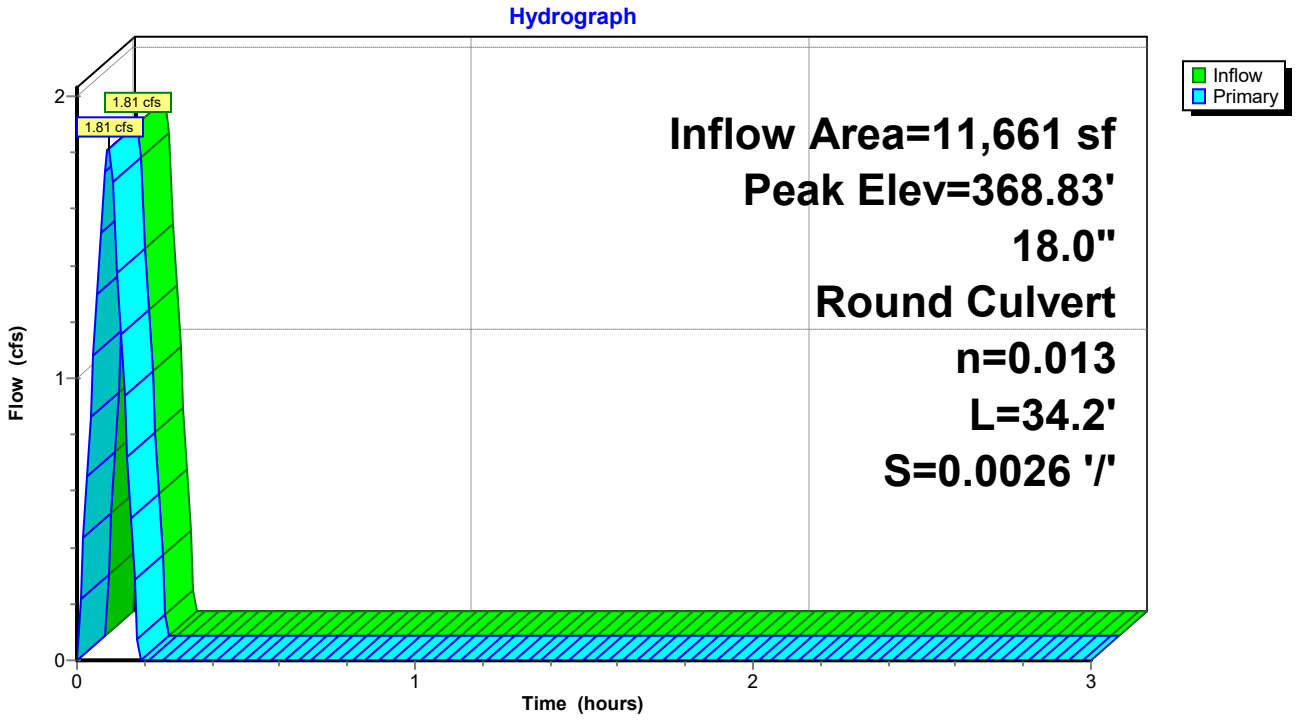
Inflow Area = 11,661 sf, 0.00% Impervious, Inflow Depth = 0.67" for 10-yr event
Inflow = 1.81 cfs @ 0.09 hrs, Volume= 649 cf
Outflow = 1.81 cfs @ 0.09 hrs, Volume= 649 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.81 cfs @ 0.09 hrs, Volume= 649 cf
Routed to Link POST-DEV : Post-Development

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 368.83' @ 0.09 hrs

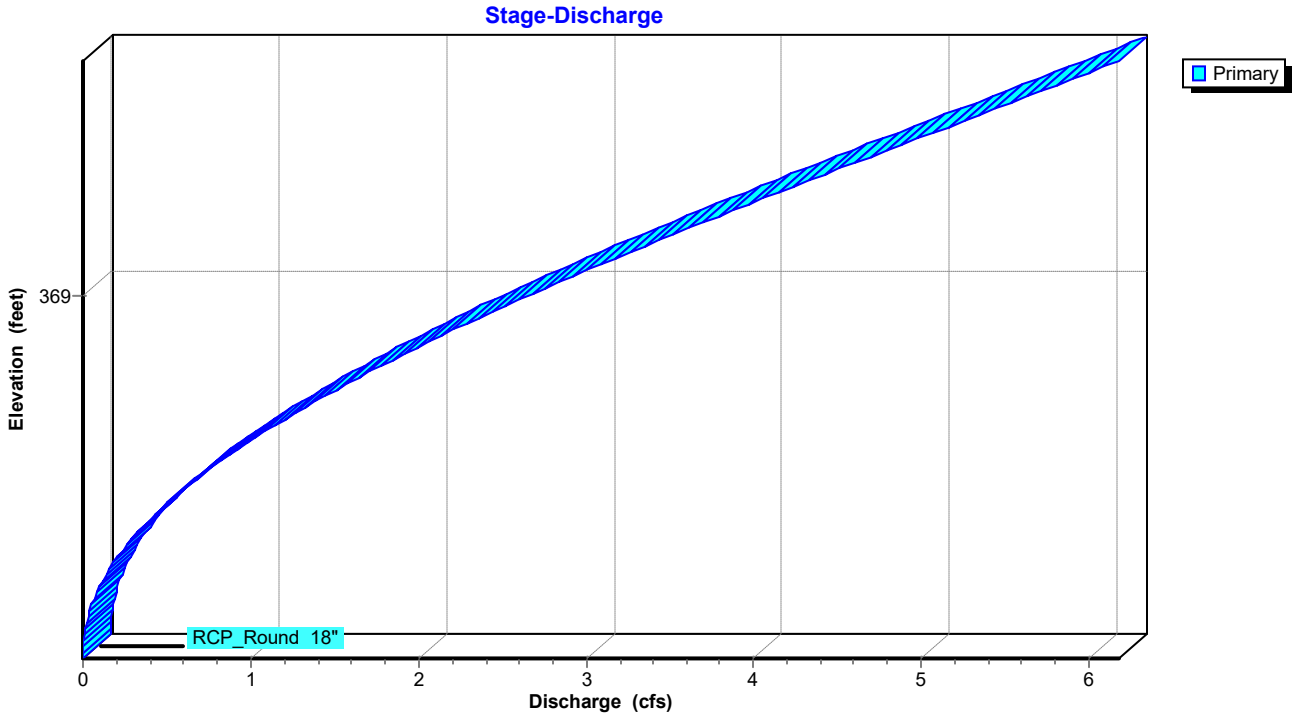
Device	Routing	Invert	Outlet Devices
#1	Primary	368.09'	**18.0" Round RCP_Round 18"** L= 34.2' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 368.09' / 368.00' S= 0.0026 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=1.80 cfs @ 0.09 hrs HW=368.83' (Free Discharge)
1=RCP_Round 18" (Barrel Controls 1.80 cfs @ 3.03 fps)

Pond CI-A2: CURB INLET A2



Pond CI-A2: CURB INLET A2



Stage-Area-Storage for Pond CI-A2: CURB INLET A2

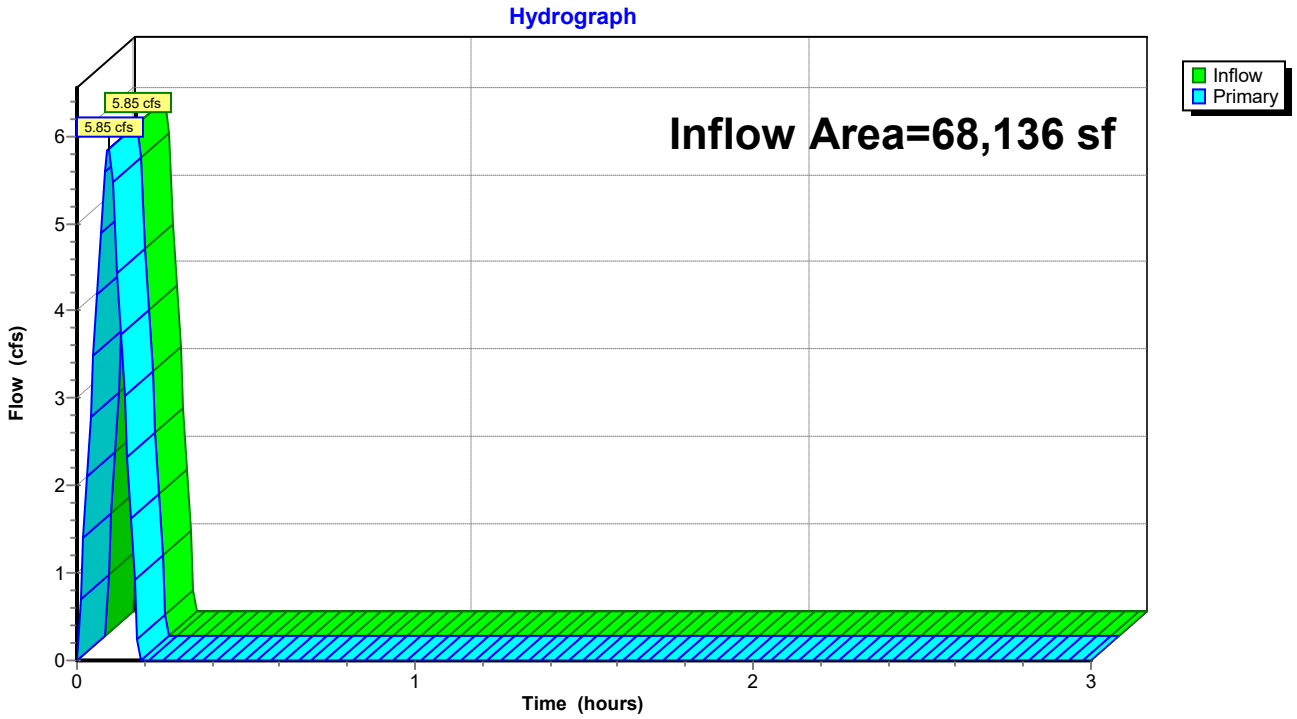
Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
368.09	**0**	368.61	0	369.13	0
368.10	0	368.62	0	369.14	0
368.11	0	368.63	0	369.15	0
368.12	0	368.64	0	369.16	0
368.13	0	368.65	0	369.17	0
368.14	0	368.66	0	369.18	0
368.15	0	368.67	0	369.19	0
368.16	0	368.68	0	369.20	0
368.17	0	368.69	0	369.21	0
368.18	0	368.70	0	369.22	0
368.19	0	368.71	0	369.23	0
368.20	0	368.72	0	369.24	0
368.21	0	368.73	0	369.25	0
368.22	0	368.74	0	369.26	0
368.23	0	368.75	0	369.27	0
368.24	0	368.76	0	369.28	0
368.25	0	368.77	0	369.29	0
368.26	0	368.78	0	369.30	0
368.27	0	368.79	0	369.31	0
368.28	0	368.80	0	369.32	0
368.29	0	368.81	0	369.33	0
368.30	0	368.82	0	369.34	0
368.31	0	368.83	0	369.35	0
368.32	0	368.84	0	369.36	0
368.33	0	368.85	0	369.37	0
368.34	0	368.86	0	369.38	0
368.35	0	368.87	0	369.39	0
368.36	0	368.88	0	369.40	0
368.37	0	368.89	0	369.41	0
368.38	0	368.90	0	369.42	0
368.39	0	368.91	0	369.43	0
368.40	0	368.92	0	369.44	0
368.41	0	368.93	0	369.45	0
368.42	0	368.94	0	369.46	0
368.43	0	368.95	0	369.47	0
368.44	0	368.96	0	369.48	0
368.45	0	368.97	0	369.49	0
368.46	0	368.98	0	369.50	0
368.47	0	368.99	0	369.51	0
368.48	0	369.00	0	369.52	0
368.49	0	369.01	0	369.53	0
368.50	0	369.02	0	369.54	0
368.51	0	369.03	0	369.55	0
368.52	0	369.04	0	369.56	0
368.53	0	369.05	0	369.57	0
368.54	0	369.06	0	369.58	0
368.55	0	369.07	0	369.59	0
368.56	0	369.08	0		
368.57	0	369.09	0		
368.58	0	369.10	0		
368.59	0	369.11	0		
368.60	0	369.12	0		

Summary for Link POST-DEV: Post-Development

Inflow Area = 68,136 sf, 0.00% Impervious, Inflow Depth = 0.37" for 10-yr event
Inflow = 5.85 cfs @ 0.09 hrs, Volume= 2,096 cf
Primary = 5.85 cfs @ 0.09 hrs, Volume= 2,096 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link POST-DEV: Post-Development



Summary for Subcatchment B1: Drainage Basin B1

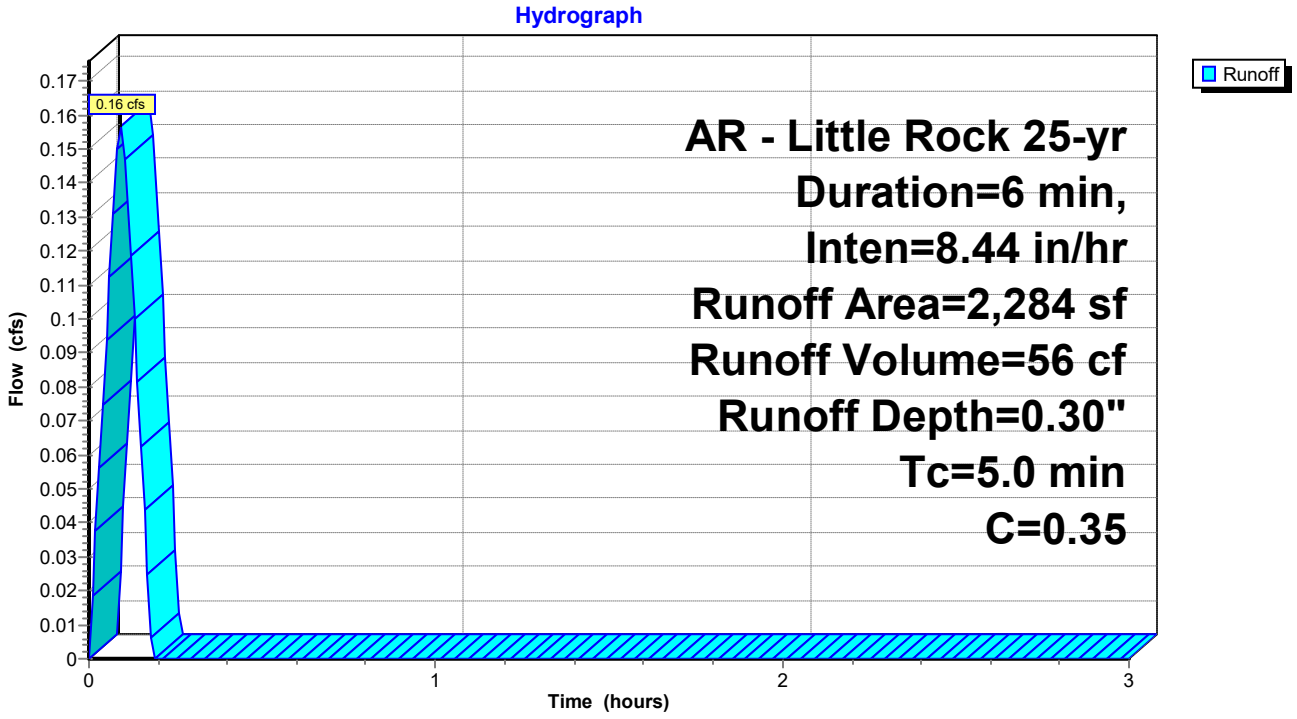
Runoff = 0.16 cfs @ 0.09 hrs, Volume= 56 cf, Depth= 0.30"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=6 min, Inten=8.44 in/hr

Area (sf)	C	Description
2,284	0.35	Sandy Soil 2-7% per manual
0	0.92	Paved Areas
2,284	0.35	Weighted Average
2,284		100.00% Pervious Area

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

Subcatchment B1: Drainage Basin B1



Summary for Subcatchment B2: Drainage Basin B2

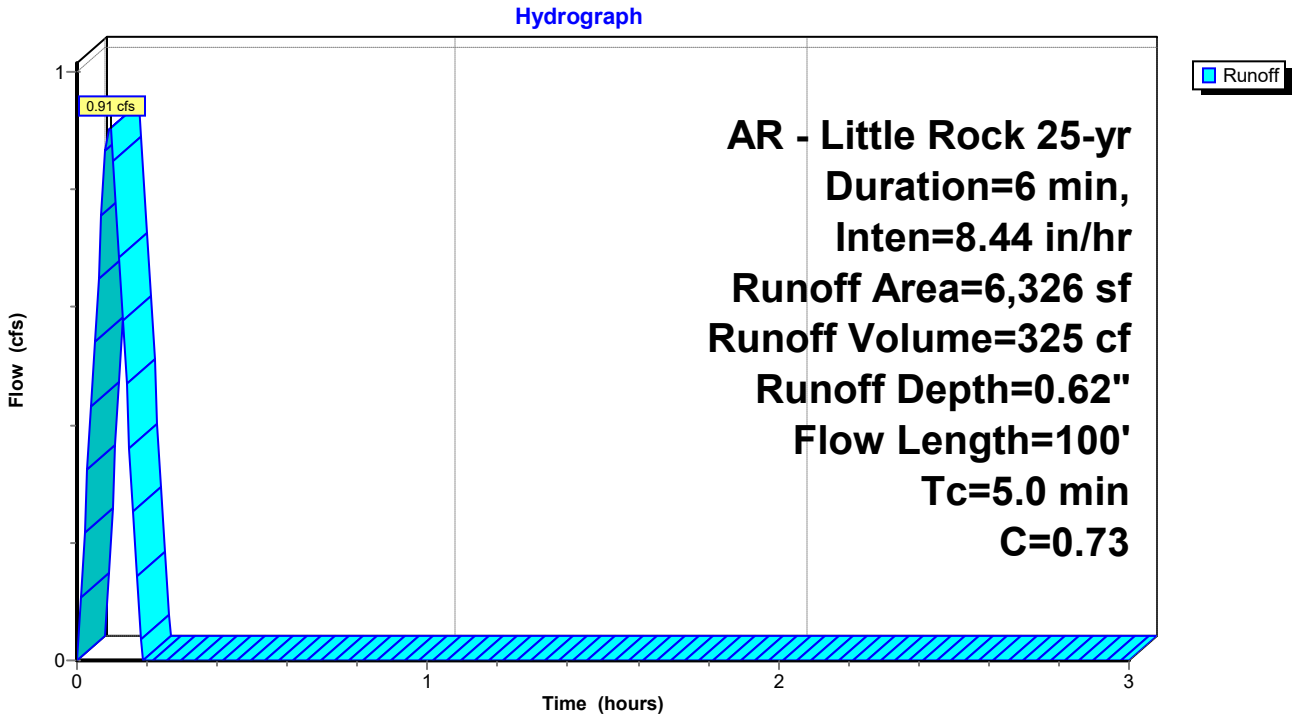
Runoff = 0.91 cfs @ 0.09 hrs, Volume= 325 cf, Depth= 0.62"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=6 min, Inten=8.44 in/hr

Area (sf)	C	Description
2,115	0.35	Sandy Soil 2-7% per manual
4,211	0.92	Paved Areas
6,326	0.73	Weighted Average
6,326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	42	0.1667	3.09		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.5	58	0.0500	2.04		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
4.3					**Direct Entry, Minimum Adjustment**
5.0	100	Total			

Subcatchment B2: Drainage Basin B2



Summary for Subcatchment B3: Drainage Basin B3

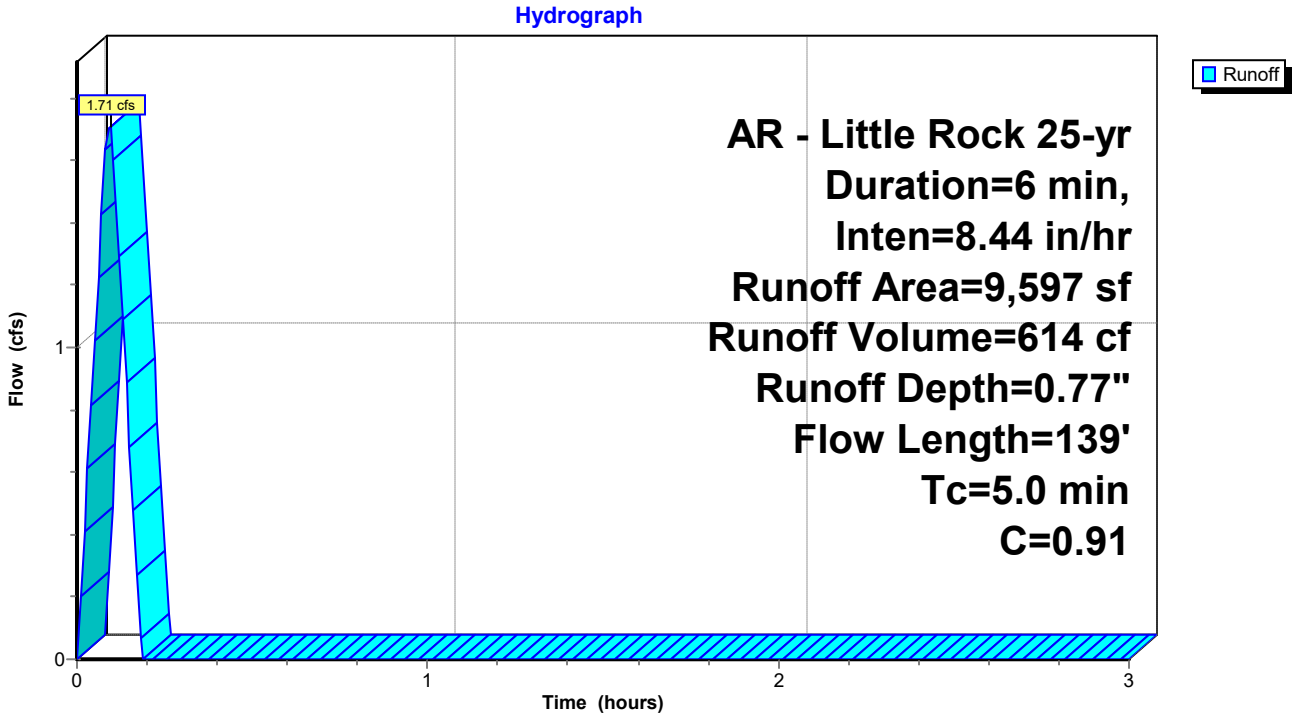
Runoff = 1.71 cfs @ 0.09 hrs, Volume= 614 cf, Depth= 0.77"
Routed to Pond CI-A1 : CURB INLET A1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=6 min, Inten=8.44 in/hr

Area (sf)	C	Description
155	0.35	Sandy Soil 2-7% per manual
9,442	0.92	Paved Areas
9,597	0.91	Weighted Average
9,597		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	28	0.1667	2.85		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.4	30	0.0160	1.13		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
0.4	41	0.0520	1.93		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
0.2	40	0.0360	3.85		**Shallow Concentrated Flow, Gutter Flow** Paved Kv= 20.3 fps
3.8					**Direct Entry, Minimum Adjustment**
5.0	139	Total			

Subcatchment B3: Drainage Basin B3



Summary for Subcatchment B4: Drainage Basin B4

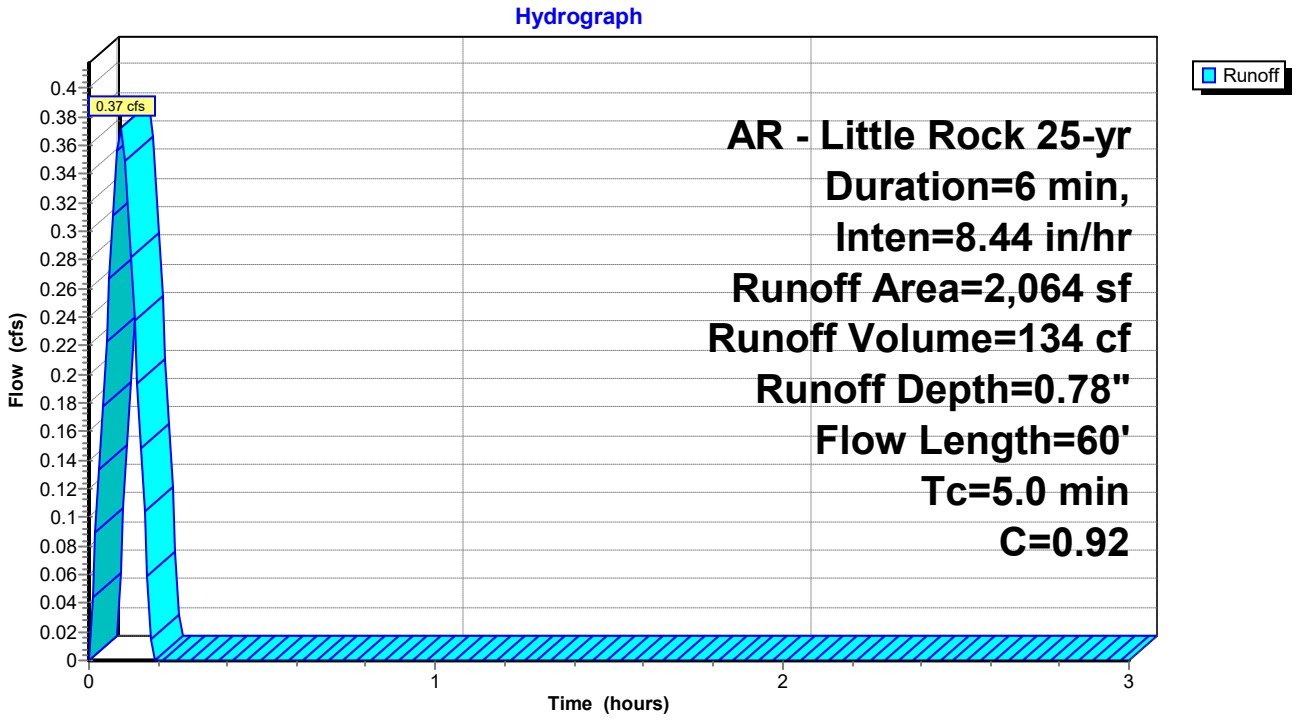
Runoff = 0.37 cfs @ 0.09 hrs, Volume= 134 cf, Depth= 0.78"
Routed to Pond CI-A2 : CURB INLET A2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=6 min, Inten=8.44 in/hr

Area (sf)	C	Description
0	0.35	Sandy Soil 2-7% per manual
2,064	0.92	Paved Areas
2,064	0.92	Weighted Average
2,064		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	45	0.0170	1.26		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
0.0	15	0.0840	5.88		**Shallow Concentrated Flow, Gutter Flow** Paved Kv= 20.3 fps
4.4					**Direct Entry, Minimum Adjustment**
5.0	60	Total			

Subcatchment B4: Drainage Basin B4



Summary for Subcatchment B5: Drainage Basin B5

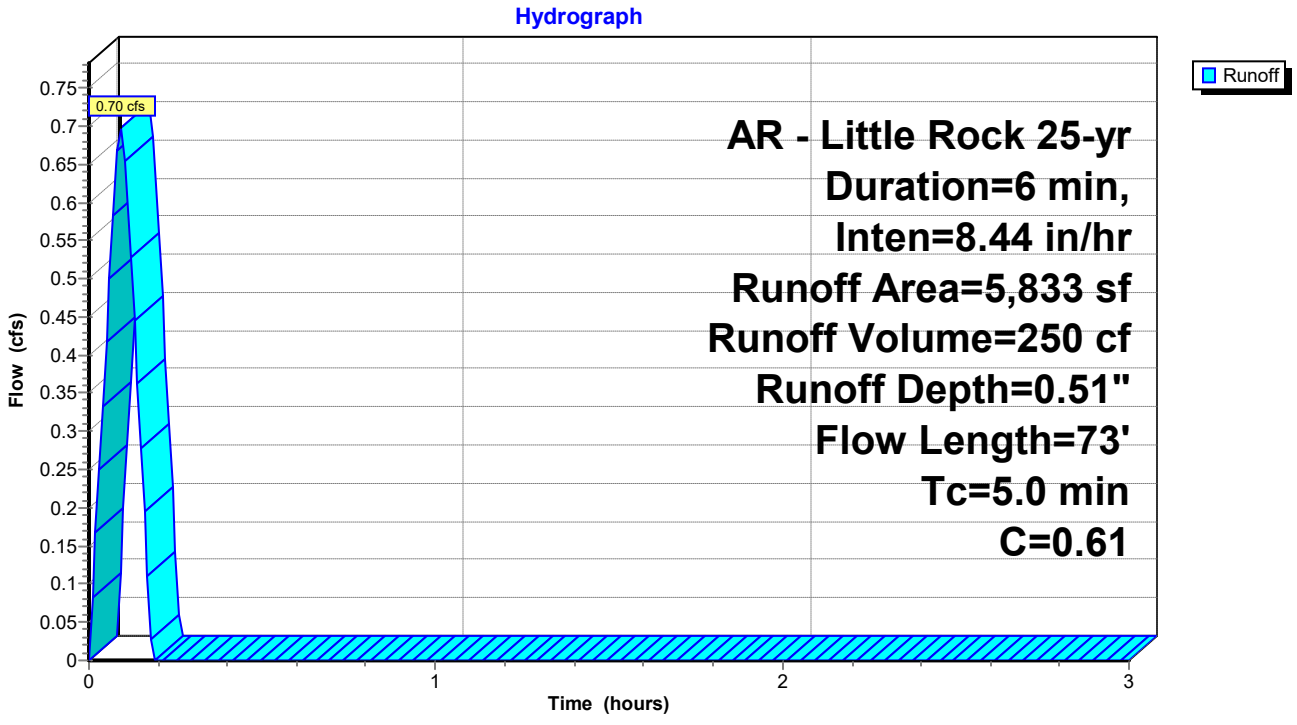
Runoff = 0.70 cfs @ 0.09 hrs, Volume= 250 cf, Depth= 0.51"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=6 min, Inten=8.44 in/hr

Area (sf)	C	Description
3,123	0.35	Sandy Soil 2-7% per manual
2,710	0.92	Paved Areas
5,833	0.61	Weighted Average
5,833		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	18	0.1667	2.61		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.4	55	0.0860	2.05		**Shallow Concentrated Flow, Overland Concentrated** Short Grass Pasture Kv= 7.0 fps
4.5					**Direct Entry, Minimum Adjustment**
5.0	73	Total			

Subcatchment B5: Drainage Basin B5



Summary for Subcatchment B6: Drainage Basin B6

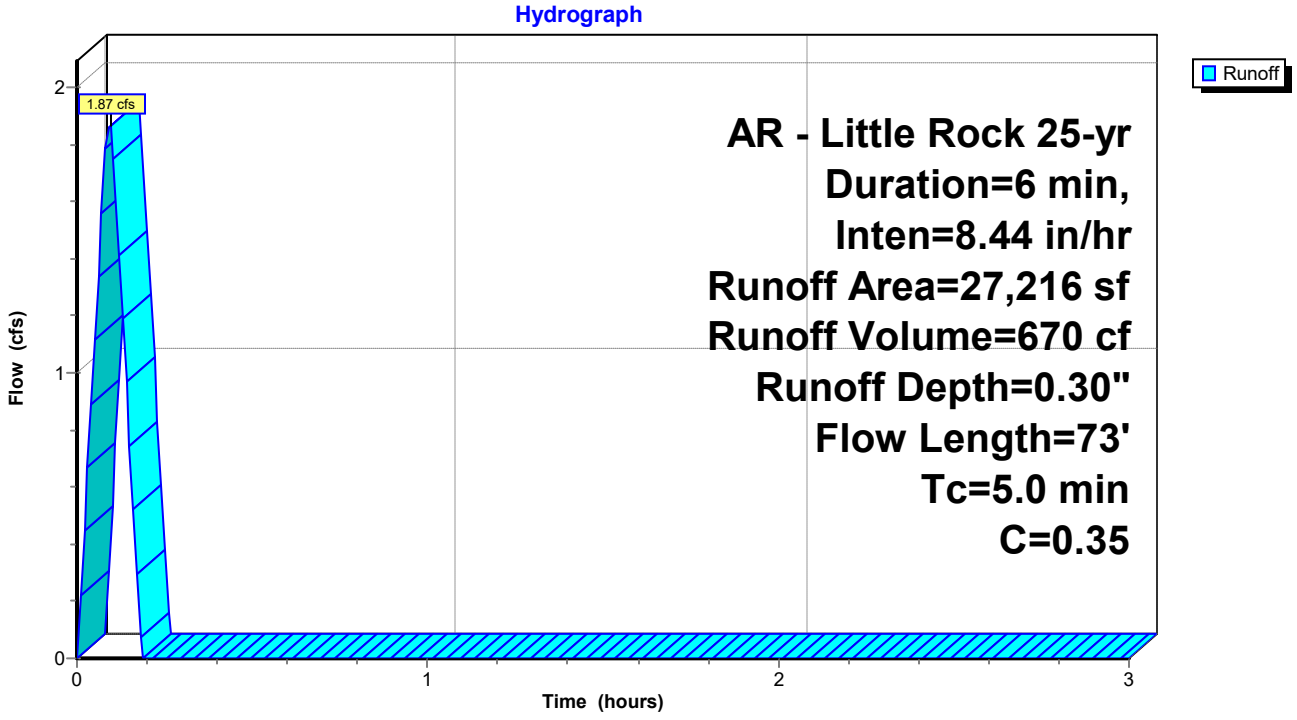
Runoff = 1.87 cfs @ 0.09 hrs, Volume= 670 cf, Depth= 0.30"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=6 min, Inten=8.44 in/hr

Area (sf)	C	Description
27,216	0.35	Sandy Soil 2-7% per manual
27,216		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	18	0.1667	2.61		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.4	55	0.0860	2.05		**Shallow Concentrated Flow, Overland Concentrated** Short Grass Pasture Kv= 7.0 fps
4.5					**Direct Entry, Minimum Adjustment**
5.0	73	Total			

Subcatchment B6: Drainage Basin B6



Summary for Subcatchment B7: Drainage Basin B7

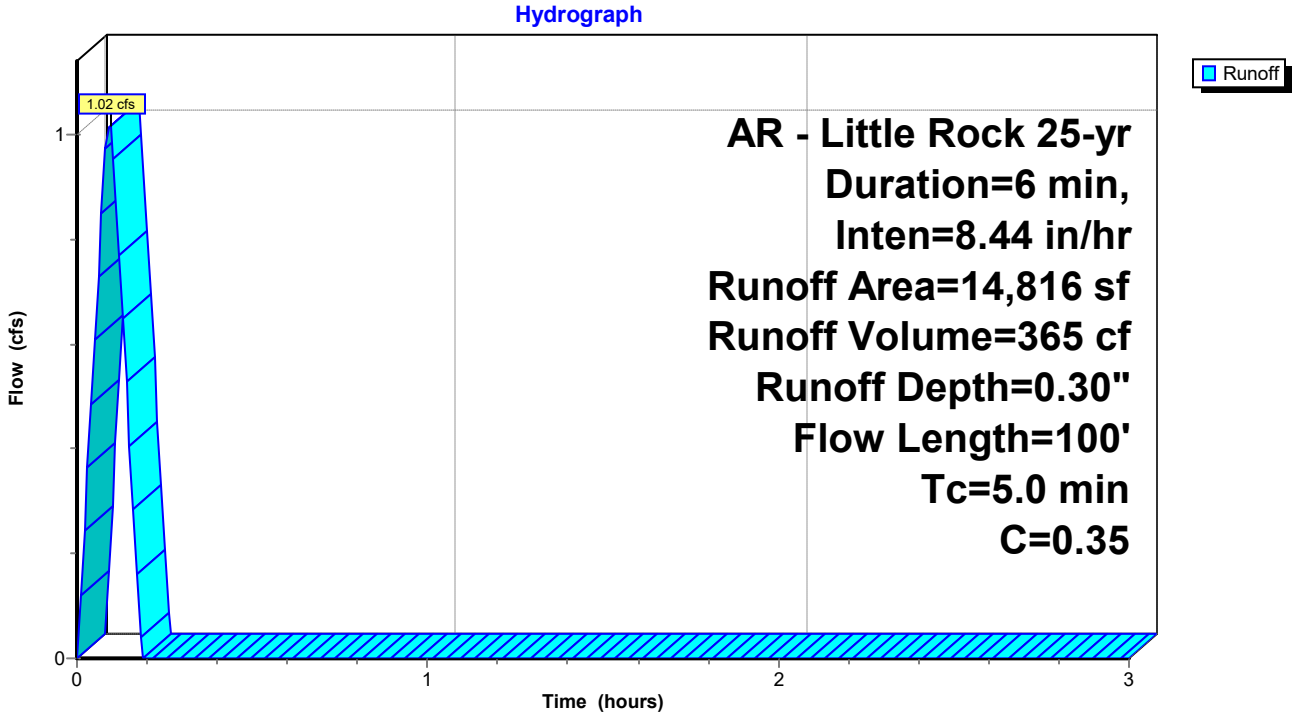
Runoff = 1.02 cfs @ 0.09 hrs, Volume= 365 cf, Depth= 0.30"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 25-yr Duration=6 min, Inten=8.44 in/hr

Area (sf)	C	Description
14,816	0.35	Sandy Soil 2-7% per manual
14,816		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	42	0.1667	3.09		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.5	58	0.0500	2.04		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
4.3					**Direct Entry, Minimum Adjustment**
5.0	100	Total			

Subcatchment B7: Drainage Basin B7



Summary for Pond CI-A1: CURB INLET A1

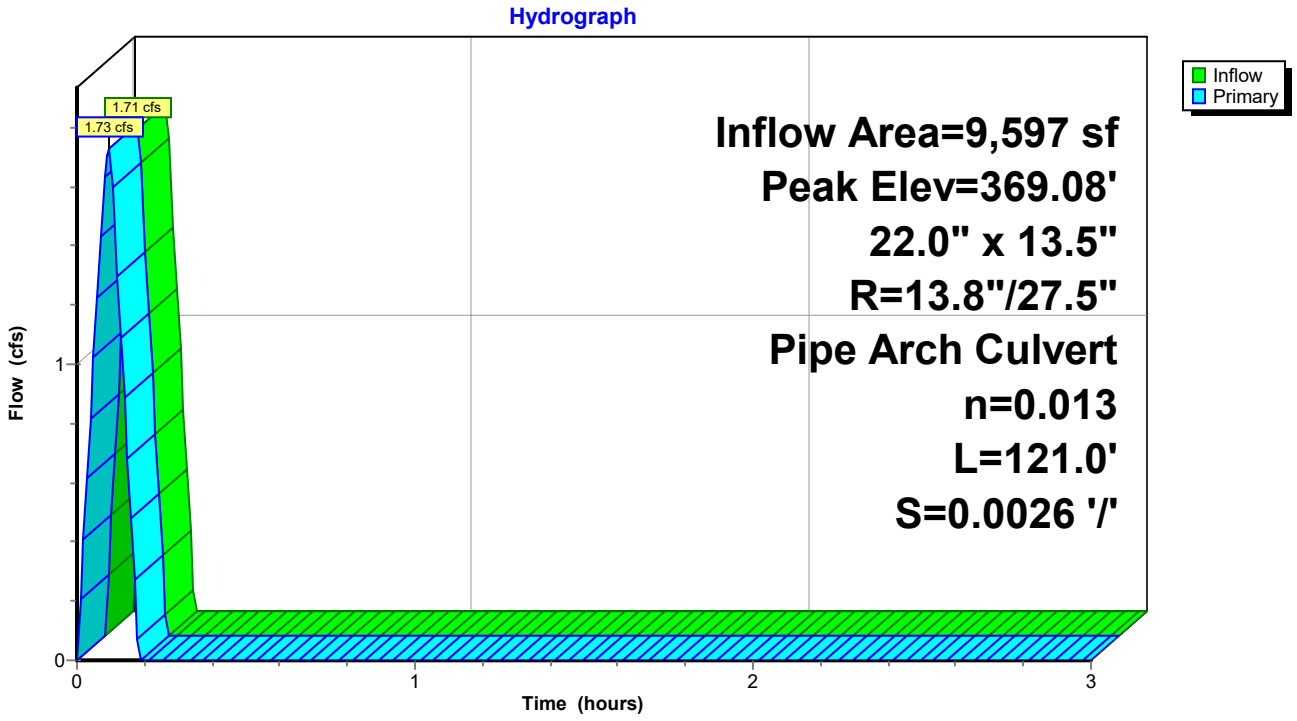
Inflow Area = 9,597 sf, 0.00% Impervious, Inflow Depth = 0.77" for 25-yr event
Inflow = 1.71 cfs @ 0.09 hrs, Volume= 614 cf
Outflow = 1.73 cfs @ 0.10 hrs, Volume= 614 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.73 cfs @ 0.10 hrs, Volume= 614 cf
Routed to Pond CI-A2 : CURB INLET A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 369.08' @ 0.09 hrs

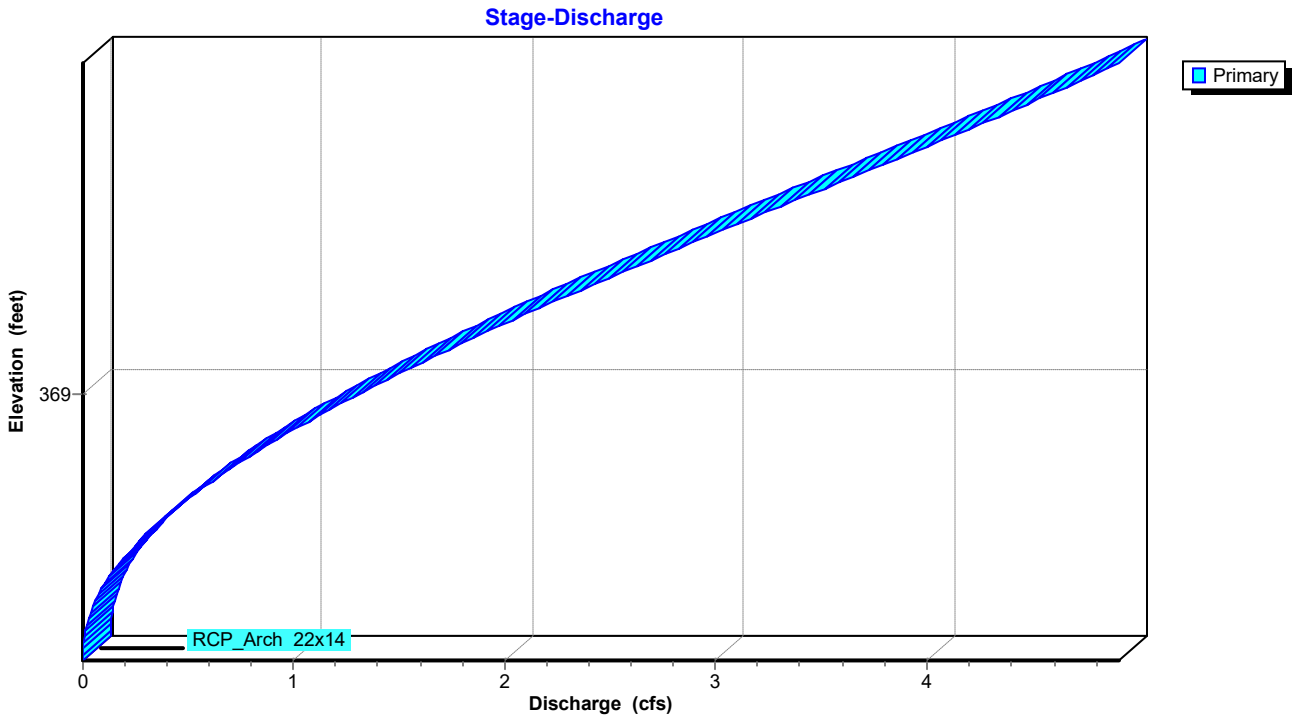
Device	Routing	Invert	Outlet Devices
#1	Primary	368.50'	**22.0" W x 13.5" H, R=13.8"/27.5" Pipe Arch RCP_Arch 22x14** L= 121.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 368.50' / 368.19' S= 0.0026 '/' Cc= 0.900 n= 0.013, Flow Area= 1.65 sf

Primary OutFlow Max=1.71 cfs @ 0.10 hrs HW=369.08' (Free Discharge)
1=RCP_Arch 22x14 (Barrel Controls 1.71 cfs @ 2.64 fps)

Pond CI-A1: CURB INLET A1



Pond CI-A1: CURB INLET A1



Stage-Area-Storage for Pond CI-A1: CURB INLET A1

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
368.50	**0**	369.02	0	369.54	0
368.51	0	369.03	0	369.55	0
368.52	0	369.04	0	369.56	0
368.53	0	369.05	0	369.57	0
368.54	0	369.06	0	369.58	0
368.55	0	369.07	0	369.59	0
368.56	0	369.08	0	369.60	0
368.57	0	369.09	0	369.61	0
368.58	0	369.10	0	369.62	0
368.59	0	369.11	0		
368.60	0	369.12	0		
368.61	0	369.13	0		
368.62	0	369.14	0		
368.63	0	369.15	0		
368.64	0	369.16	0		
368.65	0	369.17	0		
368.66	0	369.18	0		
368.67	0	369.19	0		
368.68	0	369.20	0		
368.69	0	369.21	0		
368.70	0	369.22	0		
368.71	0	369.23	0		
368.72	0	369.24	0		
368.73	0	369.25	0		
368.74	0	369.26	0		
368.75	0	369.27	0		
368.76	0	369.28	0		
368.77	0	369.29	0		
368.78	0	369.30	0		
368.79	0	369.31	0		
368.80	0	369.32	0		
368.81	0	369.33	0		
368.82	0	369.34	0		
368.83	0	369.35	0		
368.84	0	369.36	0		
368.85	0	369.37	0		
368.86	0	369.38	0		
368.87	0	369.39	0		
368.88	0	369.40	0		
368.89	0	369.41	0		
368.90	0	369.42	0		
368.91	0	369.43	0		
368.92	0	369.44	0		
368.93	0	369.45	0		
368.94	0	369.46	0		
368.95	0	369.47	0		
368.96	0	369.48	0		
368.97	0	369.49	0		
368.98	0	369.50	0		
368.99	0	369.51	0		
369.00	0	369.52	0		
369.01	0	369.53	0		

Summary for Pond CI-A2: CURB INLET A2

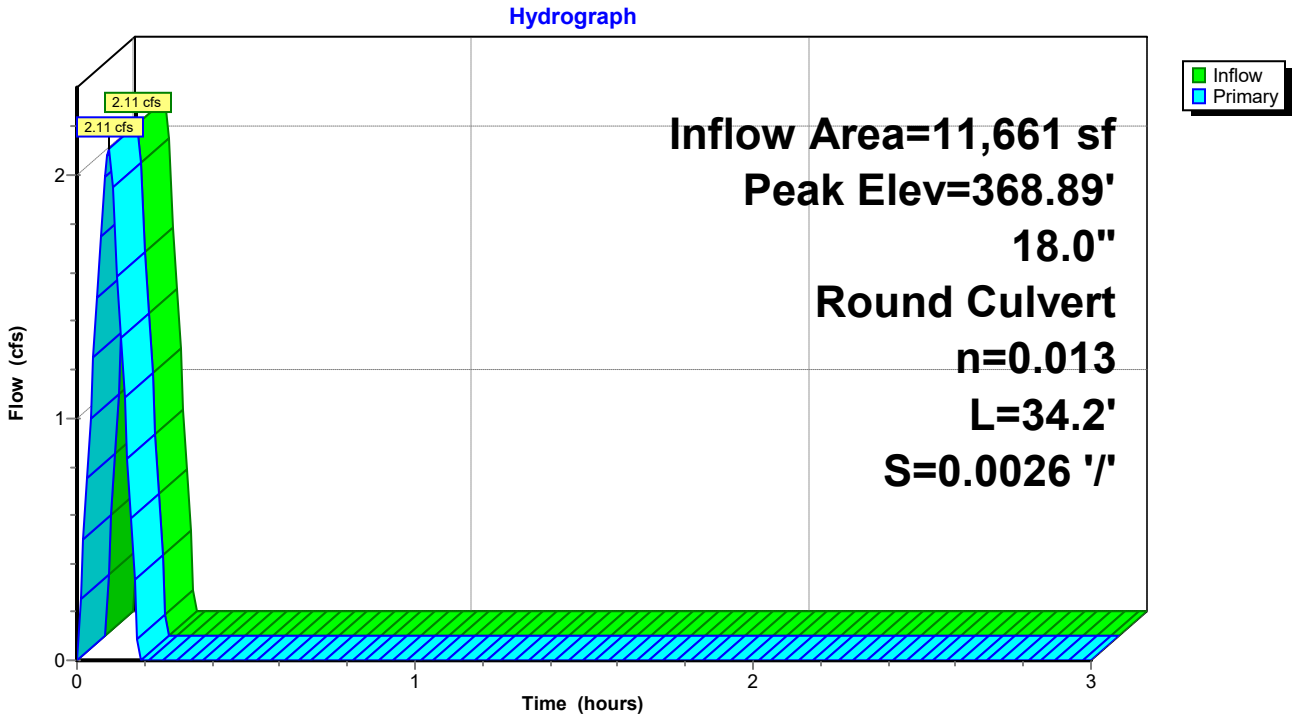
Inflow Area = 11,661 sf, 0.00% Impervious, Inflow Depth = 0.77" for 25-yr event
Inflow = 2.11 cfs @ 0.10 hrs, Volume= 748 cf
Outflow = 2.11 cfs @ 0.10 hrs, Volume= 748 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.11 cfs @ 0.10 hrs, Volume= 748 cf
Routed to Link POST-DEV : Post-Development

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 368.89' @ 0.09 hrs

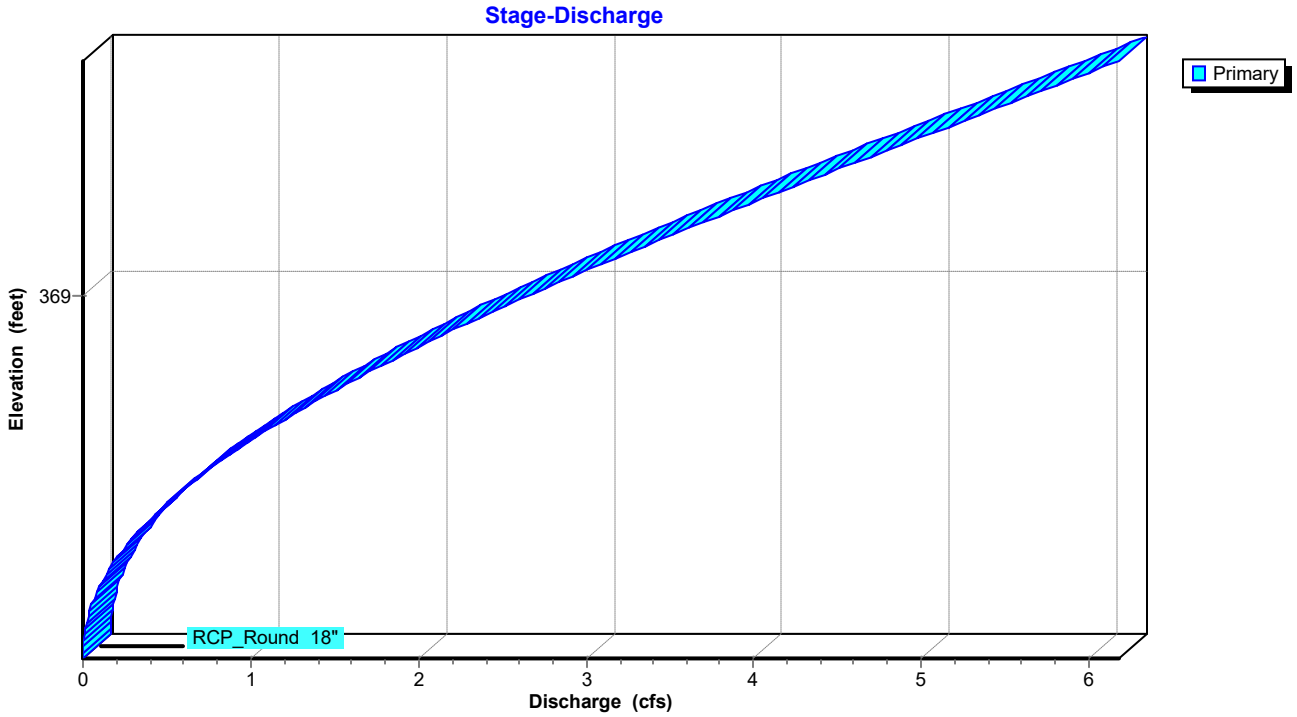
Device	Routing	Invert	Outlet Devices
#1	Primary	368.09'	**18.0" Round RCP_Round 18"** L= 34.2' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 368.09' / 368.00' S= 0.0026 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.08 cfs @ 0.10 hrs HW=368.89' (Free Discharge)
1=RCP_Round 18" (Barrel Controls 2.08 cfs @ 3.16 fps)

Pond CI-A2: CURB INLET A2



Pond CI-A2: CURB INLET A2



Stage-Area-Storage for Pond CI-A2: CURB INLET A2

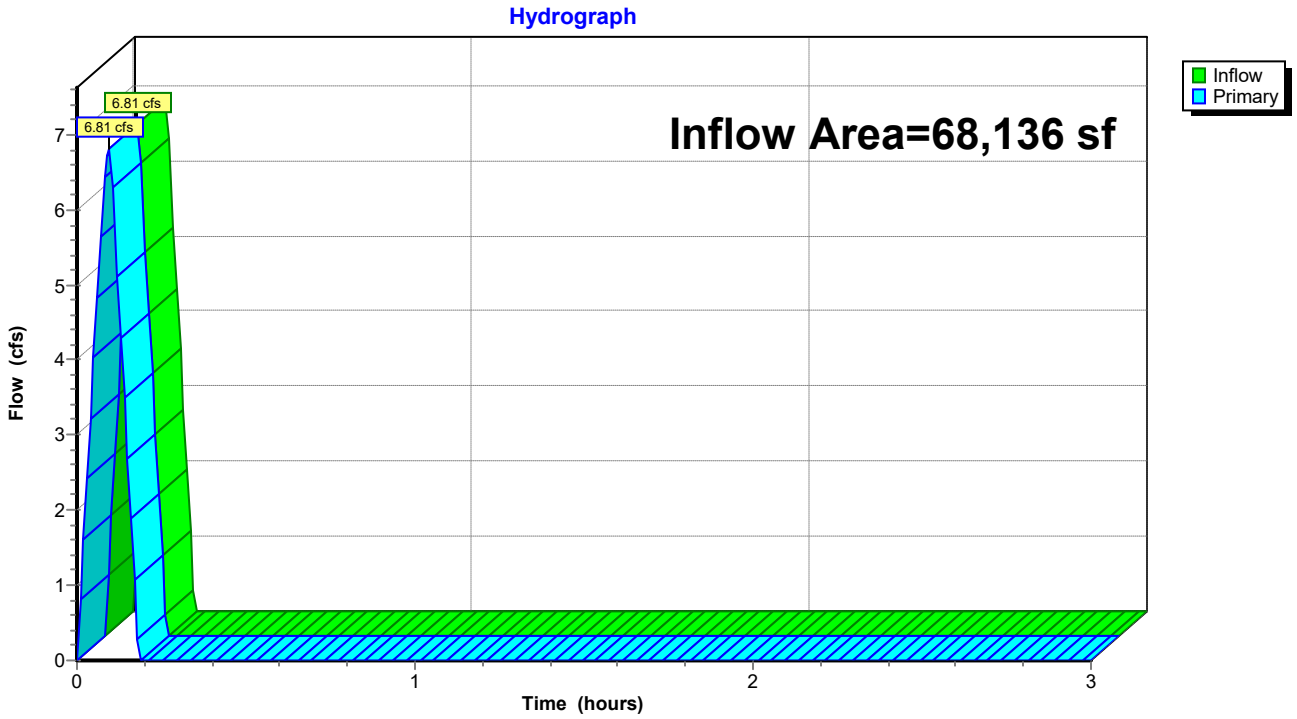
Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
368.09	**0**	368.61	0	369.13	0
368.10	0	368.62	0	369.14	0
368.11	0	368.63	0	369.15	0
368.12	0	368.64	0	369.16	0
368.13	0	368.65	0	369.17	0
368.14	0	368.66	0	369.18	0
368.15	0	368.67	0	369.19	0
368.16	0	368.68	0	369.20	0
368.17	0	368.69	0	369.21	0
368.18	0	368.70	0	369.22	0
368.19	0	368.71	0	369.23	0
368.20	0	368.72	0	369.24	0
368.21	0	368.73	0	369.25	0
368.22	0	368.74	0	369.26	0
368.23	0	368.75	0	369.27	0
368.24	0	368.76	0	369.28	0
368.25	0	368.77	0	369.29	0
368.26	0	368.78	0	369.30	0
368.27	0	368.79	0	369.31	0
368.28	0	368.80	0	369.32	0
368.29	0	368.81	0	369.33	0
368.30	0	368.82	0	369.34	0
368.31	0	368.83	0	369.35	0
368.32	0	368.84	0	369.36	0
368.33	0	368.85	0	369.37	0
368.34	0	368.86	0	369.38	0
368.35	0	368.87	0	369.39	0
368.36	0	368.88	0	369.40	0
368.37	0	368.89	0	369.41	0
368.38	0	368.90	0	369.42	0
368.39	0	368.91	0	369.43	0
368.40	0	368.92	0	369.44	0
368.41	0	368.93	0	369.45	0
368.42	0	368.94	0	369.46	0
368.43	0	368.95	0	369.47	0
368.44	0	368.96	0	369.48	0
368.45	0	368.97	0	369.49	0
368.46	0	368.98	0	369.50	0
368.47	0	368.99	0	369.51	0
368.48	0	369.00	0	369.52	0
368.49	0	369.01	0	369.53	0
368.50	0	369.02	0	369.54	0
368.51	0	369.03	0	369.55	0
368.52	0	369.04	0	369.56	0
368.53	0	369.05	0	369.57	0
368.54	0	369.06	0	369.58	0
368.55	0	369.07	0	369.59	0
368.56	0	369.08	0		
368.57	0	369.09	0		
368.58	0	369.10	0		
368.59	0	369.11	0		
368.60	0	369.12	0		

Summary for Link POST-DEV: Post-Development

Inflow Area = 68,136 sf, 0.00% Impervious, Inflow Depth = 0.43" for 25-yr event
Inflow = 6.81 cfs @ 0.09 hrs, Volume= 2,414 cf
Primary = 6.81 cfs @ 0.09 hrs, Volume= 2,414 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link POST-DEV: Post-Development



Summary for Subcatchment B1: Drainage Basin B1

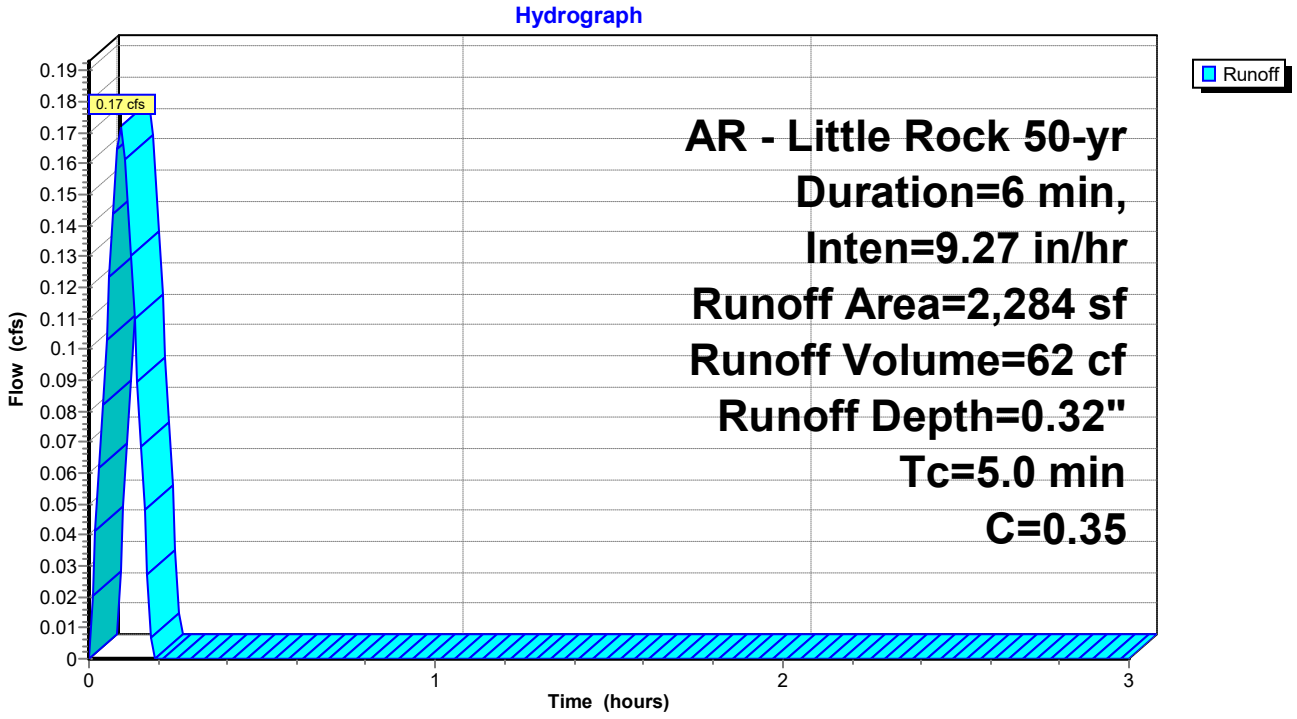
Runoff = 0.17 cfs @ 0.09 hrs, Volume= 62 cf, Depth= 0.32"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 50-yr Duration=6 min, Inten=9.27 in/hr

Area (sf)	C	Description
2,284	0.35	Sandy Soil 2-7% per manual
0	0.92	Paved Areas
2,284	0.35	Weighted Average
2,284		100.00% Pervious Area

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

Subcatchment B1: Drainage Basin B1



Summary for Subcatchment B2: Drainage Basin B2

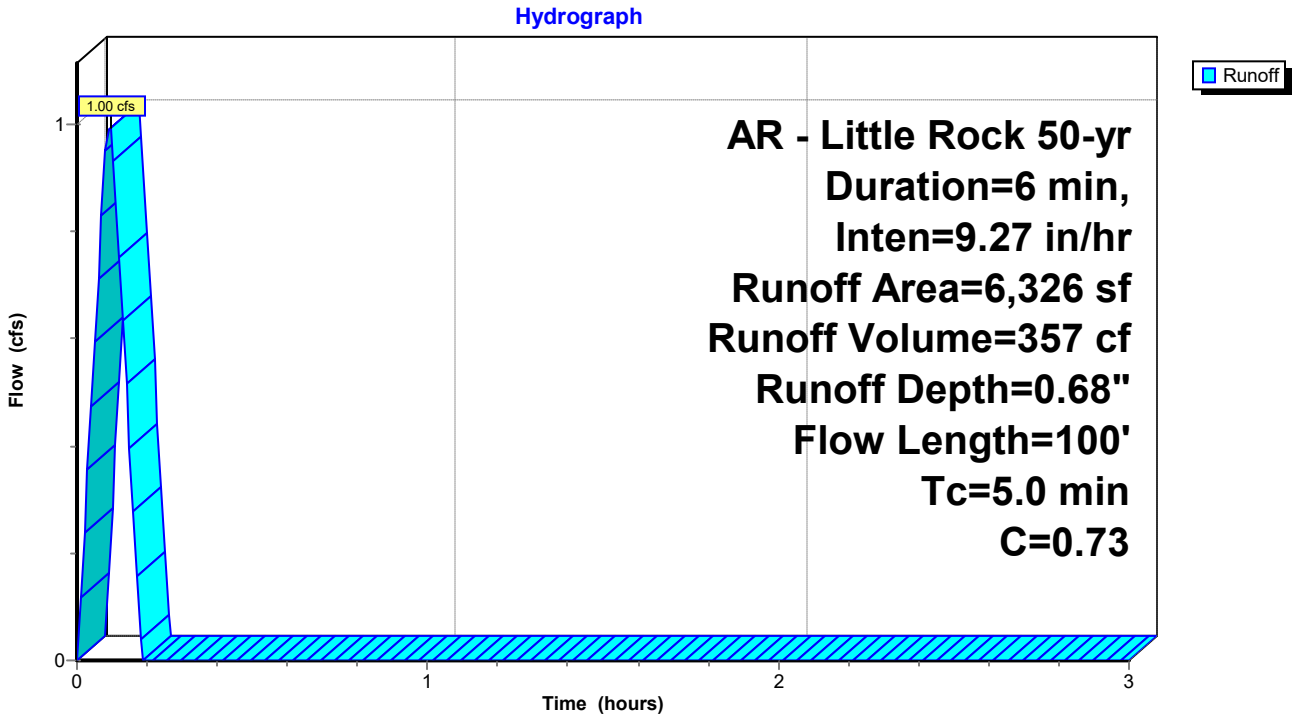
Runoff = 1.00 cfs @ 0.09 hrs, Volume= 357 cf, Depth= 0.68"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 50-yr Duration=6 min, Inten=9.27 in/hr

Area (sf)	C	Description
2,115	0.35	Sandy Soil 2-7% per manual
4,211	0.92	Paved Areas
6,326	0.73	Weighted Average
6,326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	42	0.1667	3.09		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.5	58	0.0500	2.04		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
4.3					**Direct Entry, Minimum Adjustment**
5.0	100	Total			

Subcatchment B2: Drainage Basin B2



Summary for Subcatchment B3: Drainage Basin B3

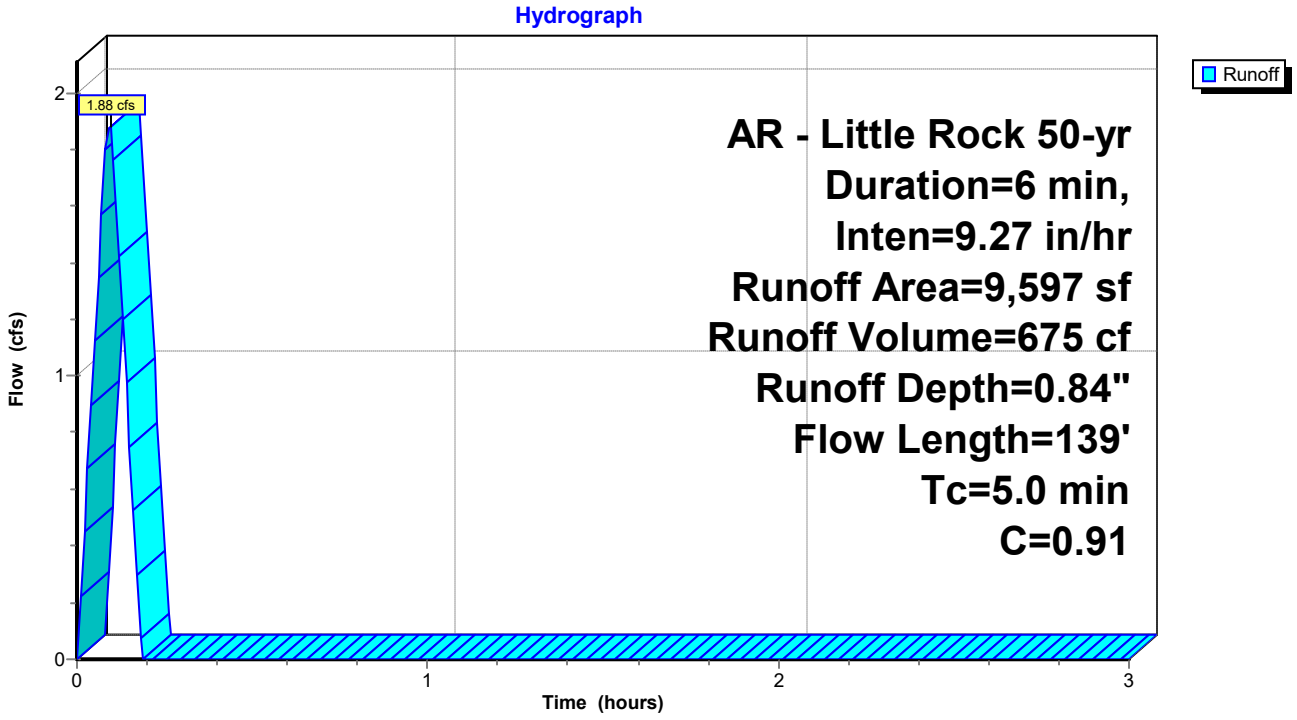
Runoff = 1.88 cfs @ 0.09 hrs, Volume= 675 cf, Depth= 0.84"
Routed to Pond CI-A1 : CURB INLET A1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 50-yr Duration=6 min, Inten=9.27 in/hr

Area (sf)	C	Description
155	0.35	Sandy Soil 2-7% per manual
9,442	0.92	Paved Areas
9,597	0.91	Weighted Average
9,597		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	28	0.1667	2.85		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.4	30	0.0160	1.13		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
0.4	41	0.0520	1.93		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
0.2	40	0.0360	3.85		**Shallow Concentrated Flow, Gutter Flow** Paved Kv= 20.3 fps
3.8					**Direct Entry, Minimum Adjustment**
5.0	139	Total			

Subcatchment B3: Drainage Basin B3



Summary for Subcatchment B4: Drainage Basin B4

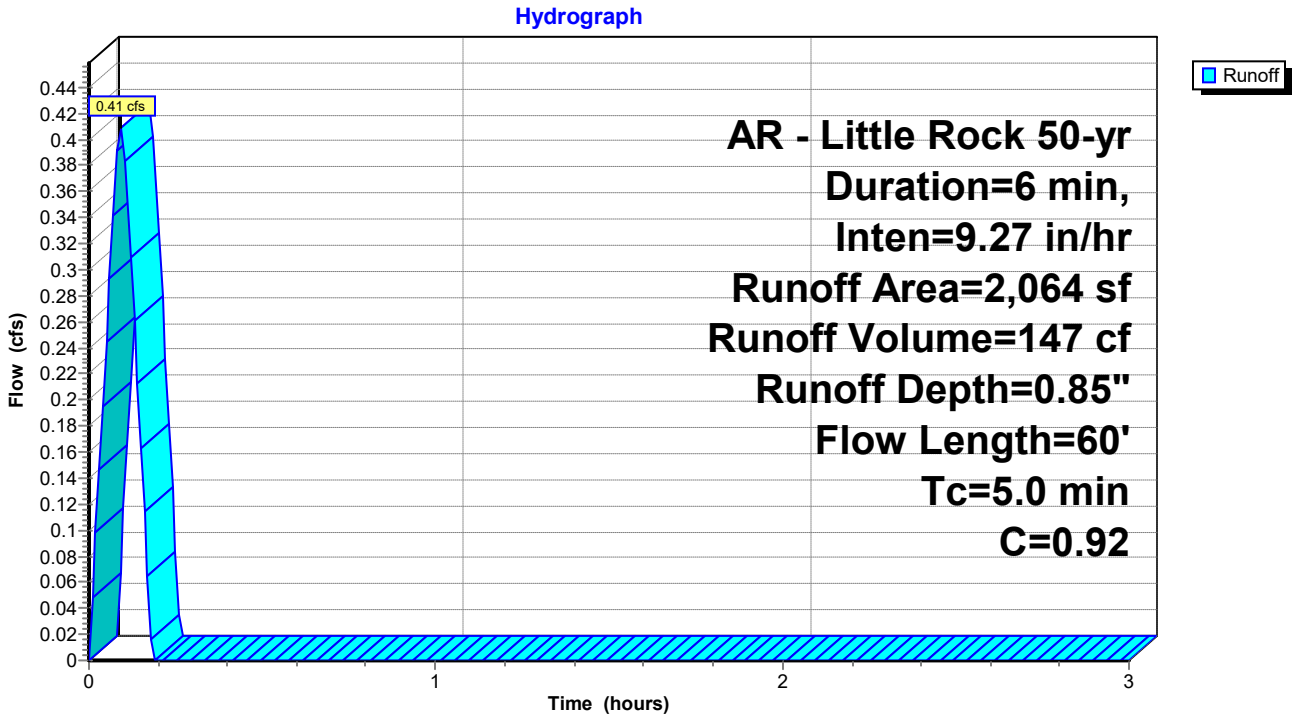
Runoff = 0.41 cfs @ 0.09 hrs, Volume= 147 cf, Depth= 0.85"
Routed to Pond CI-A2 : CURB INLET A2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 50-yr Duration=6 min, Inten=9.27 in/hr

Area (sf)	C	Description
0	0.35	Sandy Soil 2-7% per manual
2,064	0.92	Paved Areas
2,064	0.92	Weighted Average
2,064		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	45	0.0170	1.26		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
0.0	15	0.0840	5.88		**Shallow Concentrated Flow, Gutter Flow** Paved Kv= 20.3 fps
4.4					**Direct Entry, Minimum Adjustment**
5.0	60	Total			

Subcatchment B4: Drainage Basin B4



Summary for Subcatchment B5: Drainage Basin B5

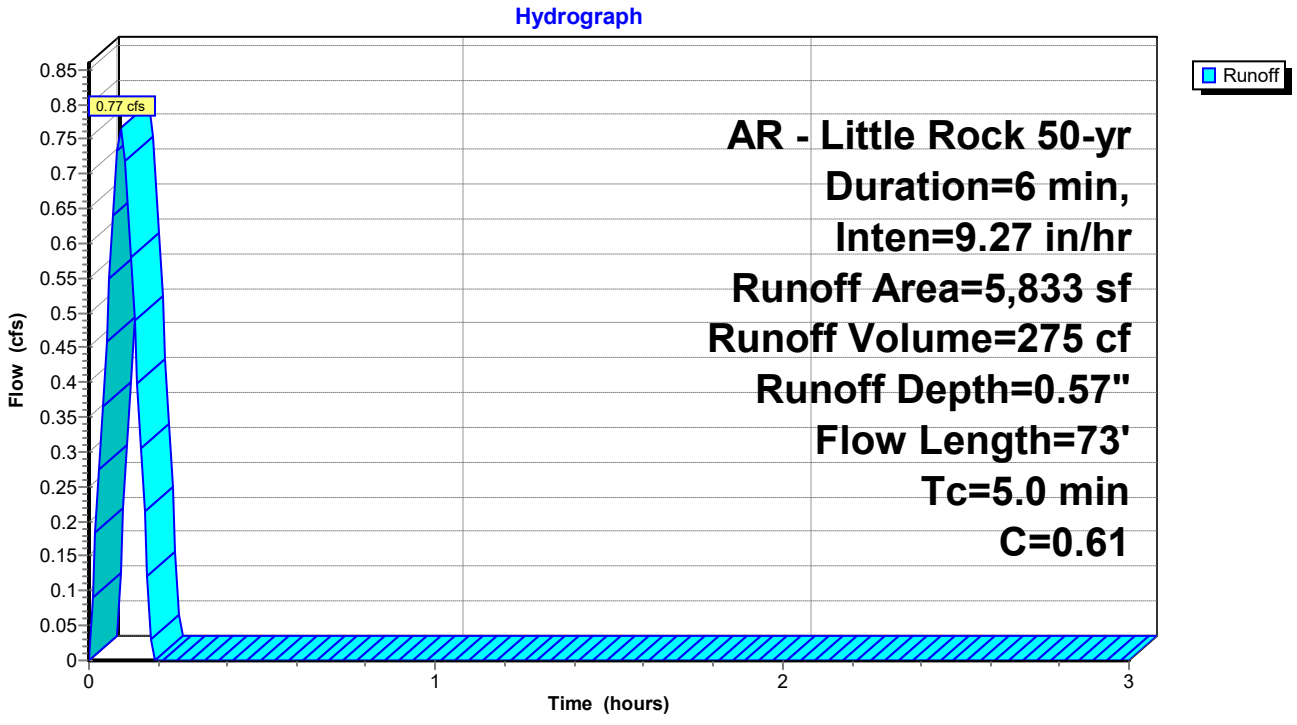
Runoff = 0.77 cfs @ 0.09 hrs, Volume= 275 cf, Depth= 0.57"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 50-yr Duration=6 min, Inten=9.27 in/hr

Area (sf)	C	Description
3,123	0.35	Sandy Soil 2-7% per manual
2,710	0.92	Paved Areas
5,833	0.61	Weighted Average
5,833		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	18	0.1667	2.61		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.4	55	0.0860	2.05		**Shallow Concentrated Flow, Overland Concentrated** Short Grass Pasture Kv= 7.0 fps
4.5					**Direct Entry, Minimum Adjustment**
5.0	73	Total			

Subcatchment B5: Drainage Basin B5



Summary for Subcatchment B6: Drainage Basin B6

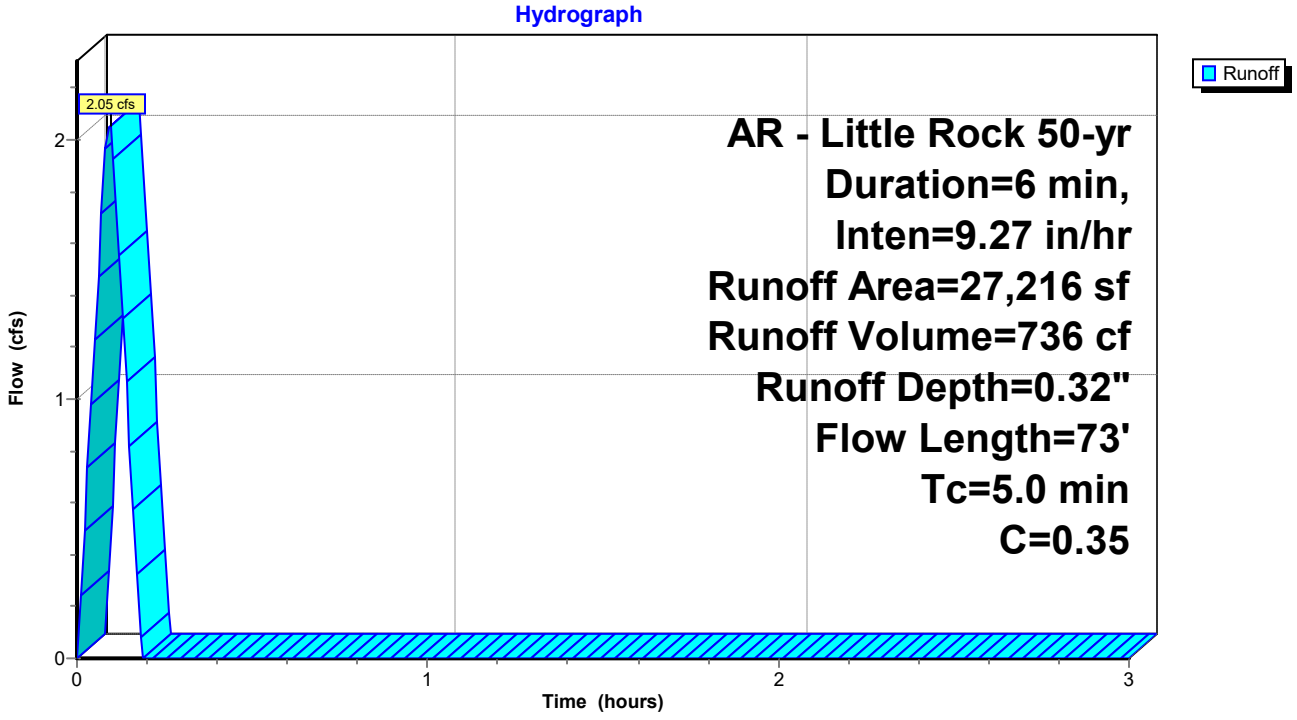
Runoff = 2.05 cfs @ 0.09 hrs, Volume= 736 cf, Depth= 0.32"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 50-yr Duration=6 min, Inten=9.27 in/hr

Area (sf)	C	Description
27,216	0.35	Sandy Soil 2-7% per manual
27,216		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	18	0.1667	2.61		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.4	55	0.0860	2.05		**Shallow Concentrated Flow, Overland Concentrated** Short Grass Pasture Kv= 7.0 fps
4.5					**Direct Entry, Minimum Adjustment**
5.0	73	Total			

Subcatchment B6: Drainage Basin B6



Summary for Subcatchment B7: Drainage Basin B7

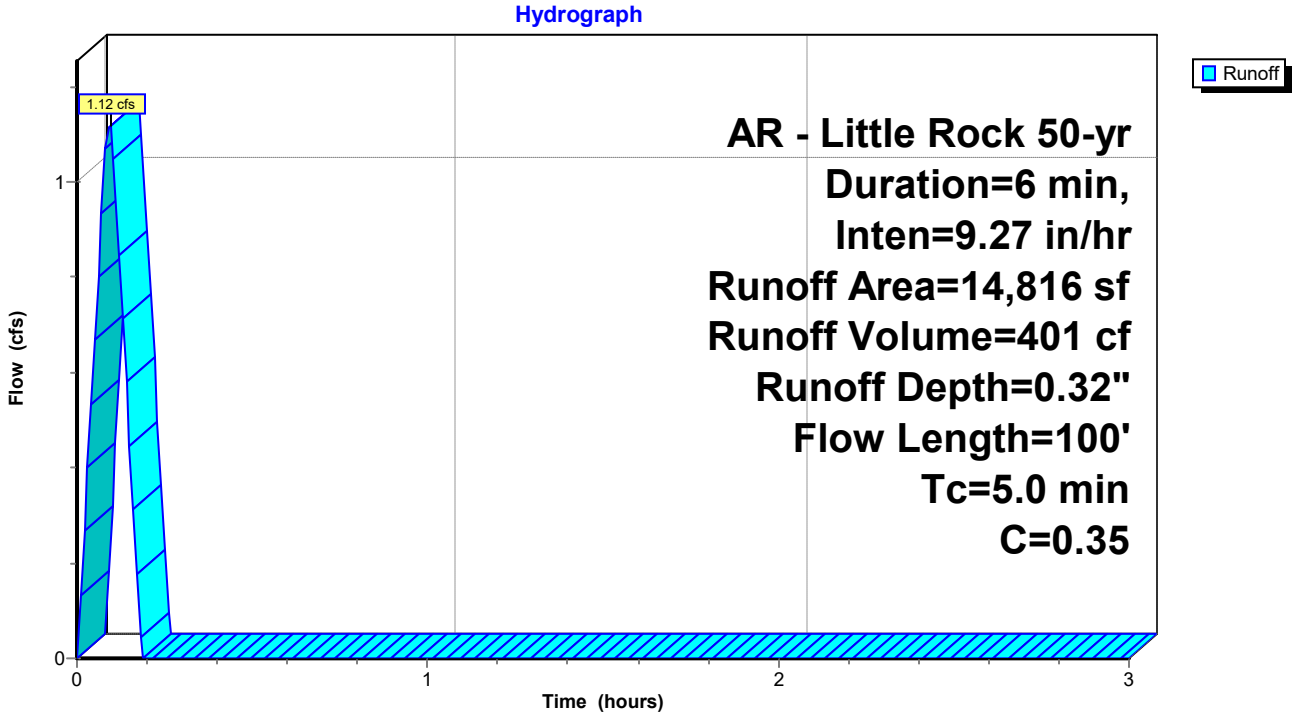
Runoff = 1.12 cfs @ 0.09 hrs, Volume= 401 cf, Depth= 0.32"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 50-yr Duration=6 min, Inten=9.27 in/hr

Area (sf)	C	Description
14,816	0.35	Sandy Soil 2-7% per manual
14,816		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	42	0.1667	3.09		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.5	58	0.0500	2.04		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
4.3					**Direct Entry, Minimum Adjustment**
5.0	100	Total			

Subcatchment B7: Drainage Basin B7



Summary for Pond CI-A1: CURB INLET A1

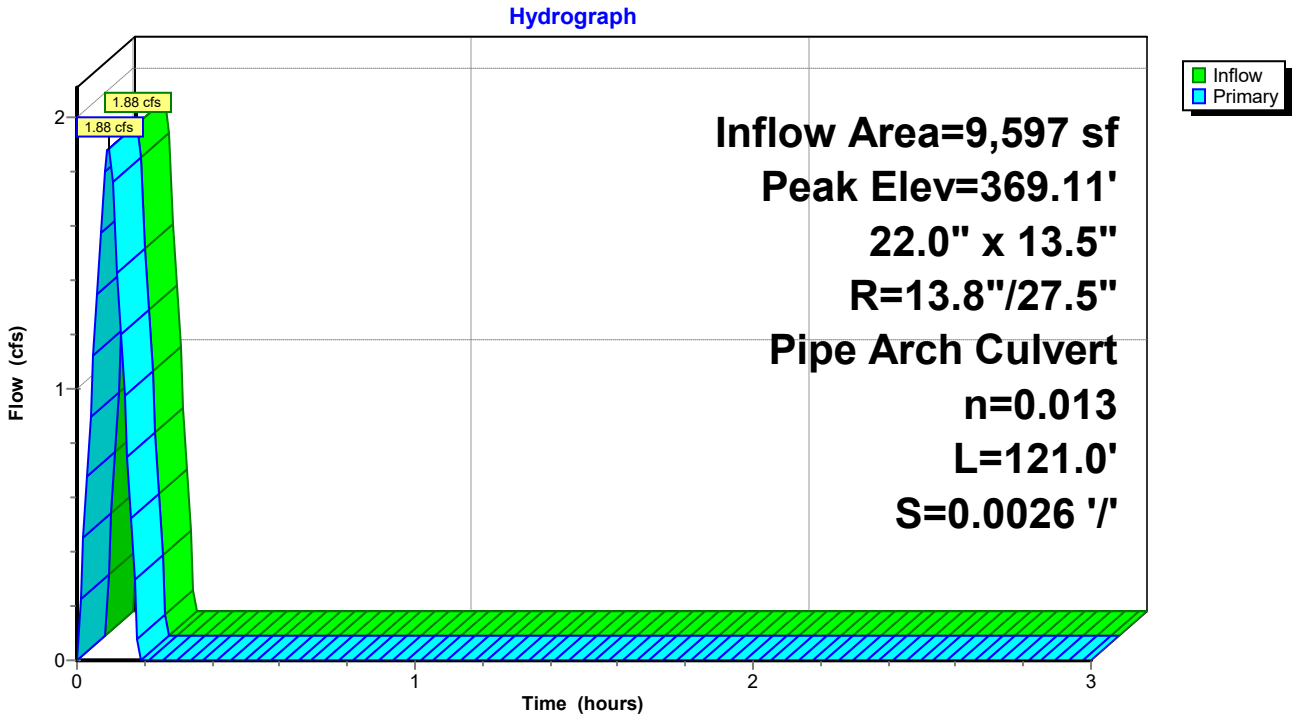
Inflow Area = 9,597 sf, 0.00% Impervious, Inflow Depth = 0.84" for 50-yr event
Inflow = 1.88 cfs @ 0.09 hrs, Volume= 675 cf
Outflow = 1.88 cfs @ 0.09 hrs, Volume= 675 cf, Atten= 0%, Lag= 0.0 min
Primary = 1.88 cfs @ 0.09 hrs, Volume= 675 cf
Routed to Pond CI-A2 : CURB INLET A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 369.11' @ 0.09 hrs

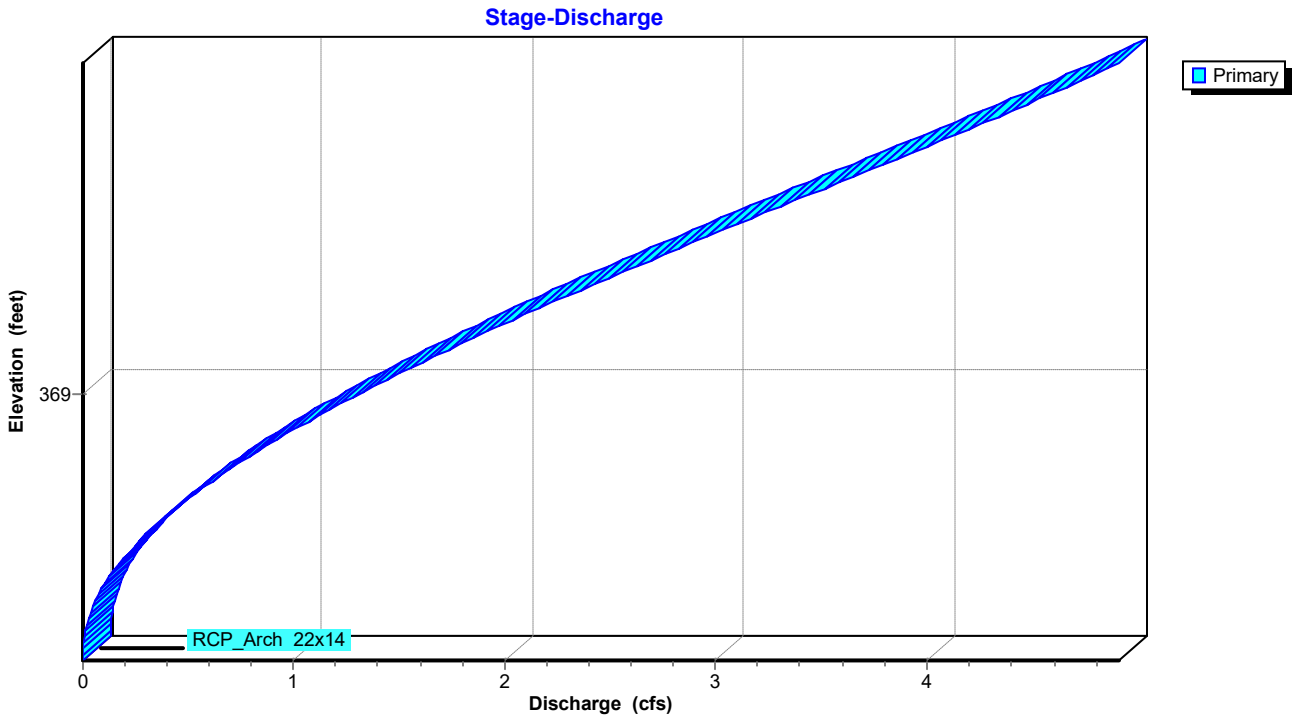
Device	Routing	Invert	Outlet Devices
#1	Primary	368.50'	**22.0" W x 13.5" H, R=13.8"/27.5" Pipe Arch RCP_Arch 22x14** L= 121.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 368.50' / 368.19' S= 0.0026 '/' Cc= 0.900 n= 0.013, Flow Area= 1.65 sf

Primary OutFlow Max=1.87 cfs @ 0.09 hrs HW=369.11' (Free Discharge)
1=RCP_Arch 22x14 (Barrel Controls 1.87 cfs @ 2.72 fps)

Pond CI-A1: CURB INLET A1



Pond CI-A1: CURB INLET A1



Stage-Area-Storage for Pond CI-A1: CURB INLET A1

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
368.50	**0**	369.02	0	369.54	0
368.51	0	369.03	0	369.55	0
368.52	0	369.04	0	369.56	0
368.53	0	369.05	0	369.57	0
368.54	0	369.06	0	369.58	0
368.55	0	369.07	0	369.59	0
368.56	0	369.08	0	369.60	0
368.57	0	369.09	0	369.61	0
368.58	0	369.10	0	369.62	0
368.59	0	369.11	0		
368.60	0	369.12	0		
368.61	0	369.13	0		
368.62	0	369.14	0		
368.63	0	369.15	0		
368.64	0	369.16	0		
368.65	0	369.17	0		
368.66	0	369.18	0		
368.67	0	369.19	0		
368.68	0	369.20	0		
368.69	0	369.21	0		
368.70	0	369.22	0		
368.71	0	369.23	0		
368.72	0	369.24	0		
368.73	0	369.25	0		
368.74	0	369.26	0		
368.75	0	369.27	0		
368.76	0	369.28	0		
368.77	0	369.29	0		
368.78	0	369.30	0		
368.79	0	369.31	0		
368.80	0	369.32	0		
368.81	0	369.33	0		
368.82	0	369.34	0		
368.83	0	369.35	0		
368.84	0	369.36	0		
368.85	0	369.37	0		
368.86	0	369.38	0		
368.87	0	369.39	0		
368.88	0	369.40	0		
368.89	0	369.41	0		
368.90	0	369.42	0		
368.91	0	369.43	0		
368.92	0	369.44	0		
368.93	0	369.45	0		
368.94	0	369.46	0		
368.95	0	369.47	0		
368.96	0	369.48	0		
368.97	0	369.49	0		
368.98	0	369.50	0		
368.99	0	369.51	0		
369.00	0	369.52	0		
369.01	0	369.53	0		

Summary for Pond CI-A2: CURB INLET A2

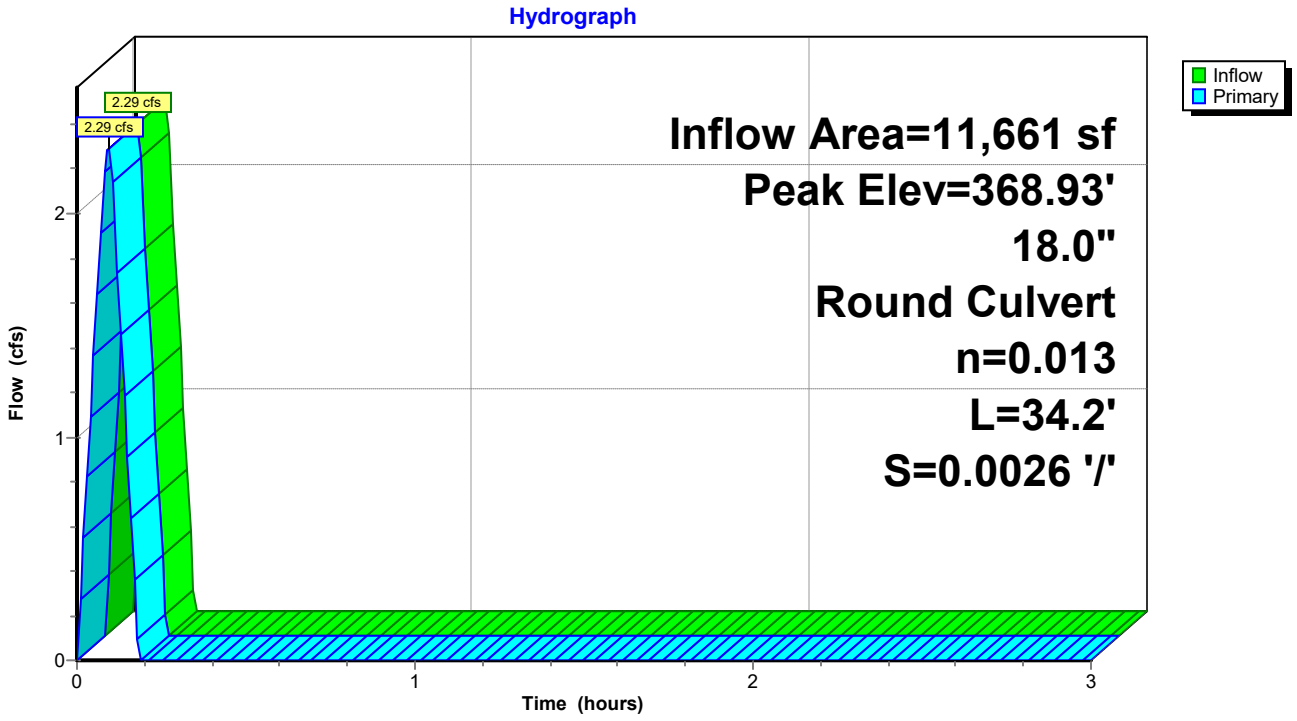
Inflow Area = 11,661 sf, 0.00% Impervious, Inflow Depth = 0.85" for 50-yr event
Inflow = 2.29 cfs @ 0.09 hrs, Volume= 821 cf
Outflow = 2.29 cfs @ 0.09 hrs, Volume= 821 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.29 cfs @ 0.09 hrs, Volume= 821 cf
Routed to Link POST-DEV : Post-Development

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 368.93' @ 0.09 hrs

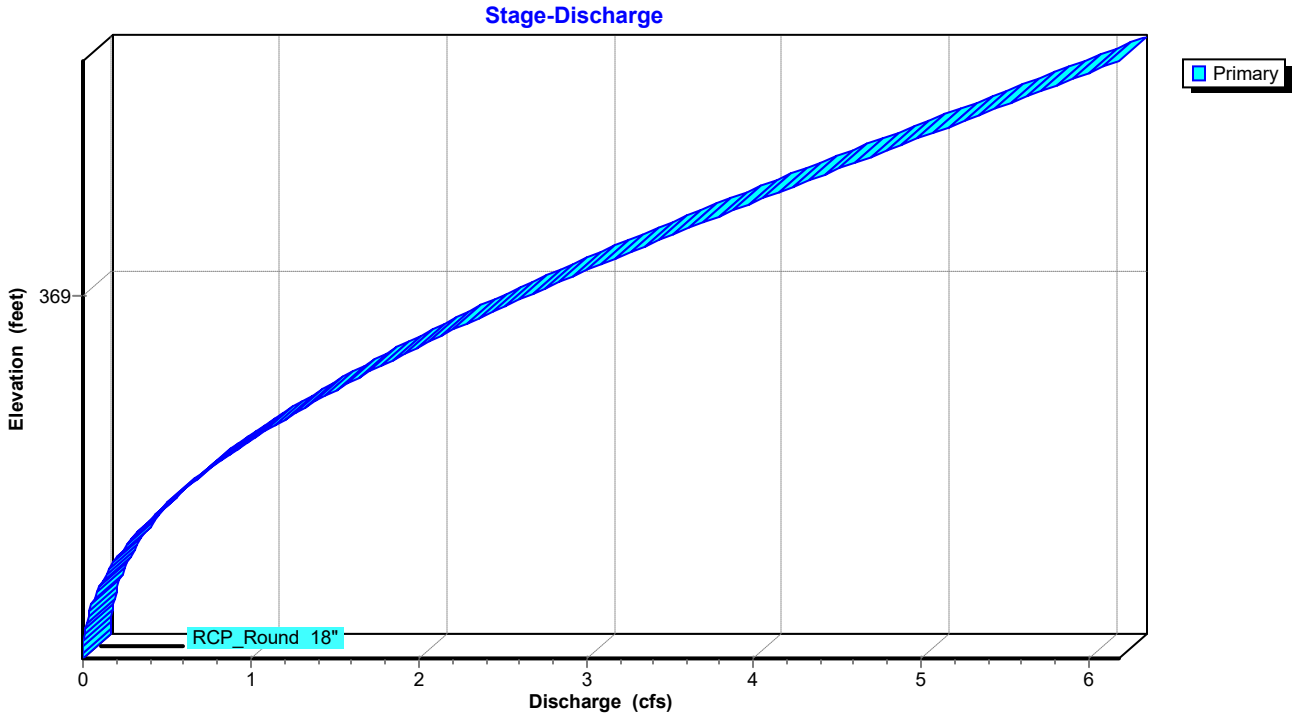
Device	Routing	Invert	Outlet Devices
#1	Primary	368.09'	**18.0" Round RCP_Round 18"** L= 34.2' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 368.09' / 368.00' S= 0.0026 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.28 cfs @ 0.09 hrs HW=368.93' (Free Discharge)
1=RCP_Round 18" (Barrel Controls 2.28 cfs @ 3.24 fps)

Pond CI-A2: CURB INLET A2



Pond CI-A2: CURB INLET A2



Stage-Area-Storage for Pond CI-A2: CURB INLET A2

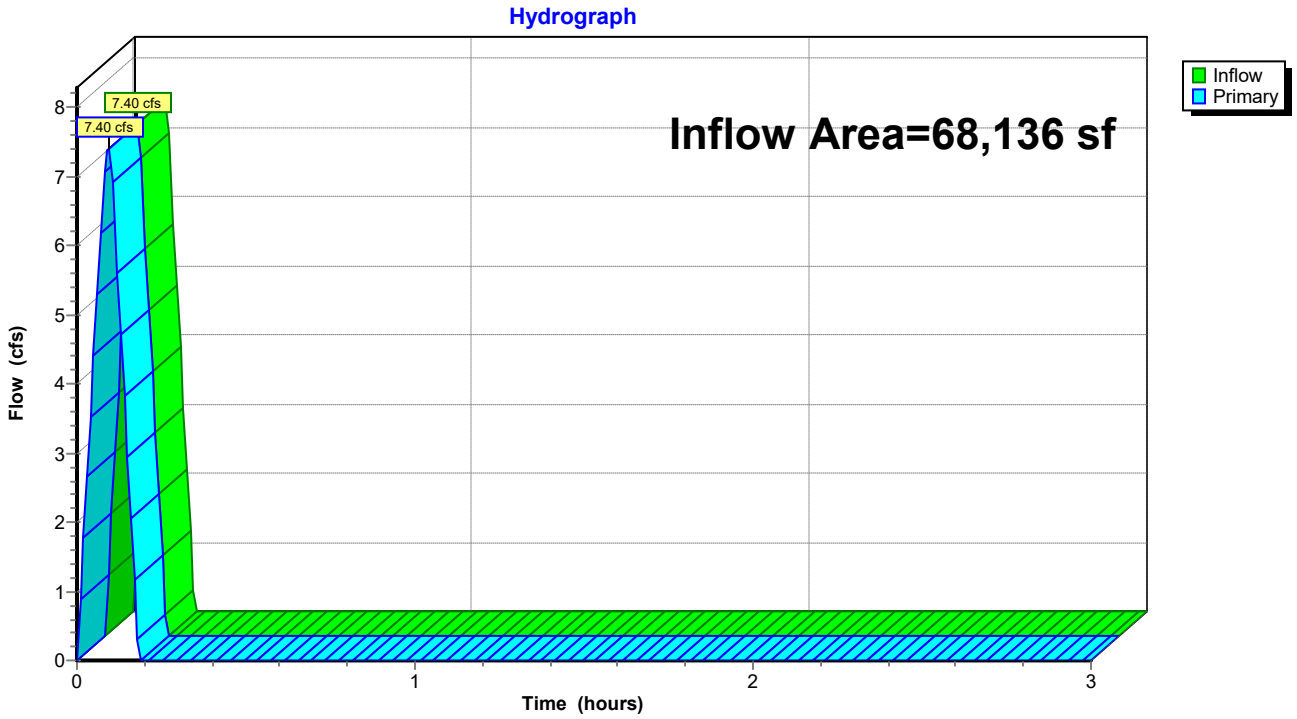
Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
368.09	**0**	368.61	0	369.13	0
368.10	0	368.62	0	369.14	0
368.11	0	368.63	0	369.15	0
368.12	0	368.64	0	369.16	0
368.13	0	368.65	0	369.17	0
368.14	0	368.66	0	369.18	0
368.15	0	368.67	0	369.19	0
368.16	0	368.68	0	369.20	0
368.17	0	368.69	0	369.21	0
368.18	0	368.70	0	369.22	0
368.19	0	368.71	0	369.23	0
368.20	0	368.72	0	369.24	0
368.21	0	368.73	0	369.25	0
368.22	0	368.74	0	369.26	0
368.23	0	368.75	0	369.27	0
368.24	0	368.76	0	369.28	0
368.25	0	368.77	0	369.29	0
368.26	0	368.78	0	369.30	0
368.27	0	368.79	0	369.31	0
368.28	0	368.80	0	369.32	0
368.29	0	368.81	0	369.33	0
368.30	0	368.82	0	369.34	0
368.31	0	368.83	0	369.35	0
368.32	0	368.84	0	369.36	0
368.33	0	368.85	0	369.37	0
368.34	0	368.86	0	369.38	0
368.35	0	368.87	0	369.39	0
368.36	0	368.88	0	369.40	0
368.37	0	368.89	0	369.41	0
368.38	0	368.90	0	369.42	0
368.39	0	368.91	0	369.43	0
368.40	0	368.92	0	369.44	0
368.41	0	368.93	0	369.45	0
368.42	0	368.94	0	369.46	0
368.43	0	368.95	0	369.47	0
368.44	0	368.96	0	369.48	0
368.45	0	368.97	0	369.49	0
368.46	0	368.98	0	369.50	0
368.47	0	368.99	0	369.51	0
368.48	0	369.00	0	369.52	0
368.49	0	369.01	0	369.53	0
368.50	0	369.02	0	369.54	0
368.51	0	369.03	0	369.55	0
368.52	0	369.04	0	369.56	0
368.53	0	369.05	0	369.57	0
368.54	0	369.06	0	369.58	0
368.55	0	369.07	0	369.59	0
368.56	0	369.08	0		
368.57	0	369.09	0		
368.58	0	369.10	0		
368.59	0	369.11	0		
368.60	0	369.12	0		

Summary for Link POST-DEV: Post-Development

Inflow Area = 68,136 sf, 0.00% Impervious, Inflow Depth = 0.47" for 50-yr event
Inflow = 7.40 cfs @ 0.09 hrs, Volume= 2,651 cf
Primary = 7.40 cfs @ 0.09 hrs, Volume= 2,651 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link POST-DEV: Post-Development



Summary for Subcatchment B1: Drainage Basin B1

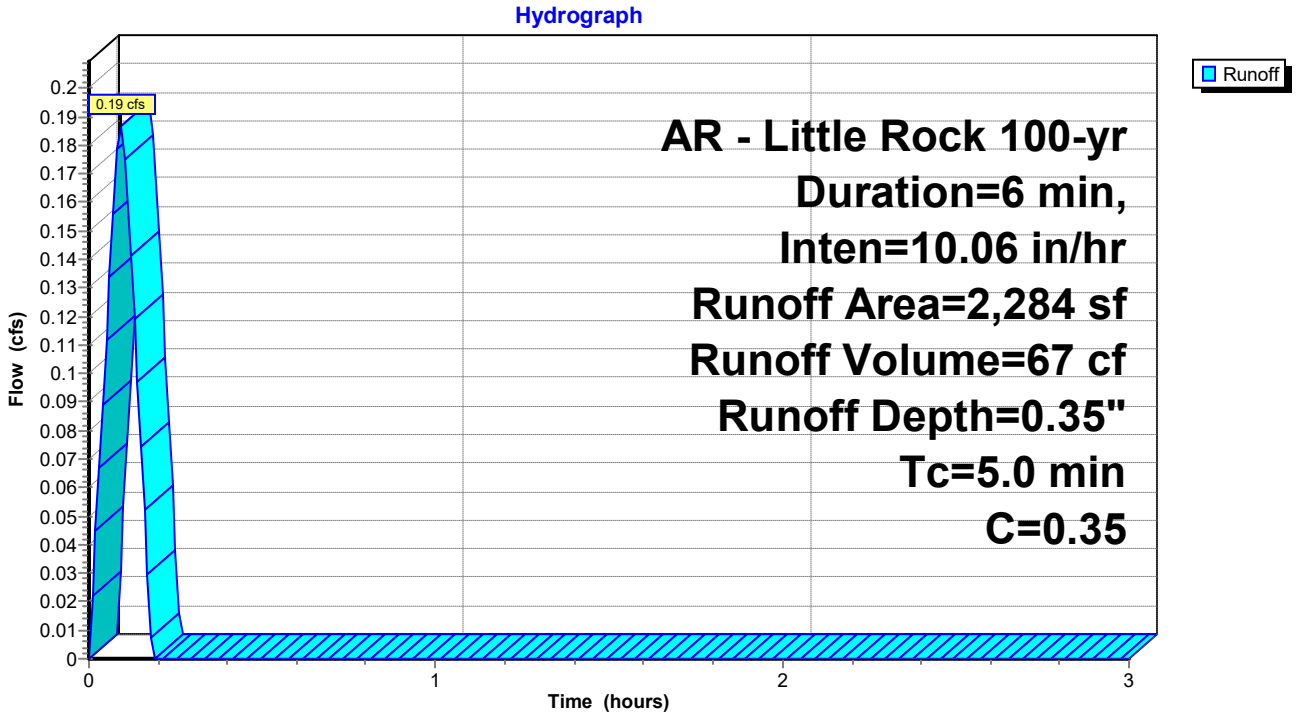
Runoff = 0.19 cfs @ 0.09 hrs, Volume= 67 cf, Depth= 0.35"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=6 min, Inten=10.06 in/hr

Area (sf)	C	Description
2,284	0.35	Sandy Soil 2-7% per manual
0	0.92	Paved Areas
2,284	0.35	Weighted Average
2,284		100.00% Pervious Area

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

Subcatchment B1: Drainage Basin B1



Summary for Subcatchment B2: Drainage Basin B2

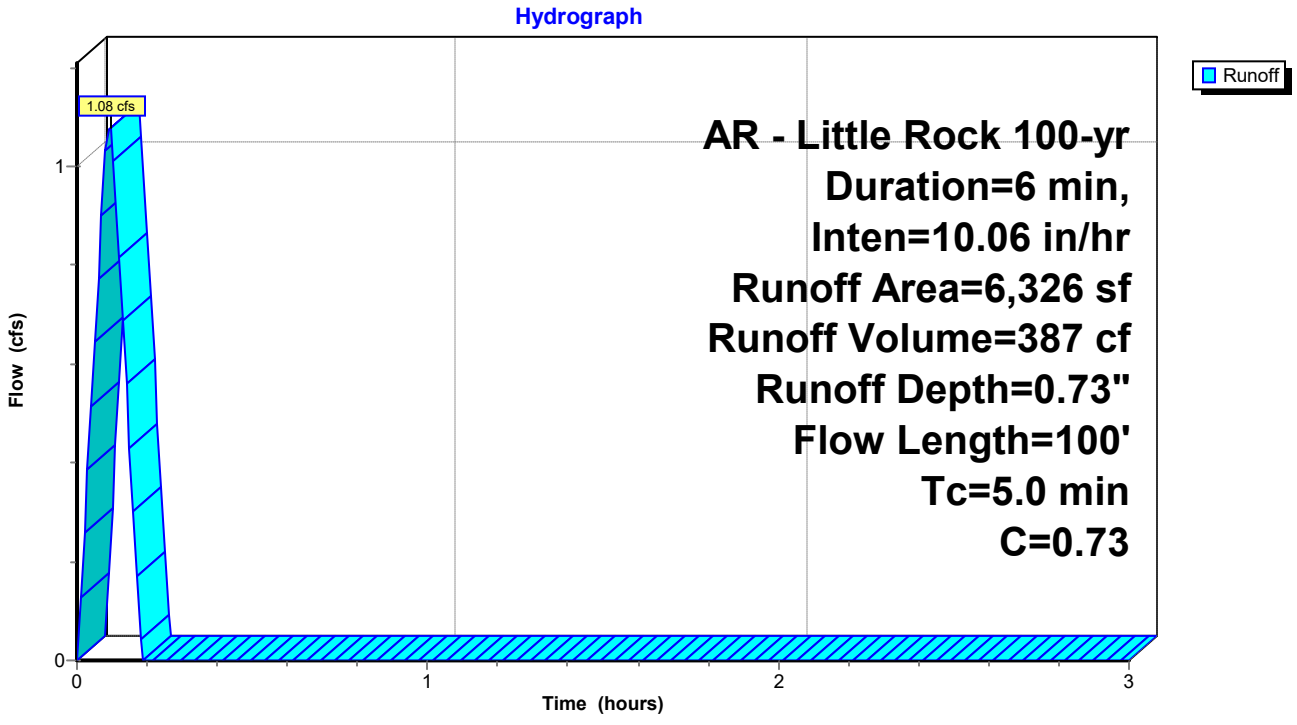
Runoff = 1.08 cfs @ 0.09 hrs, Volume= 387 cf, Depth= 0.73"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=6 min, Inten=10.06 in/hr

Area (sf)	C	Description
2,115	0.35	Sandy Soil 2-7% per manual
4,211	0.92	Paved Areas
6,326	0.73	Weighted Average
6,326		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	42	0.1667	3.09		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.5	58	0.0500	2.04		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
4.3					**Direct Entry, Minimum Adjustment**
5.0	100	Total			

Subcatchment B2: Drainage Basin B2



Summary for Subcatchment B3: Drainage Basin B3

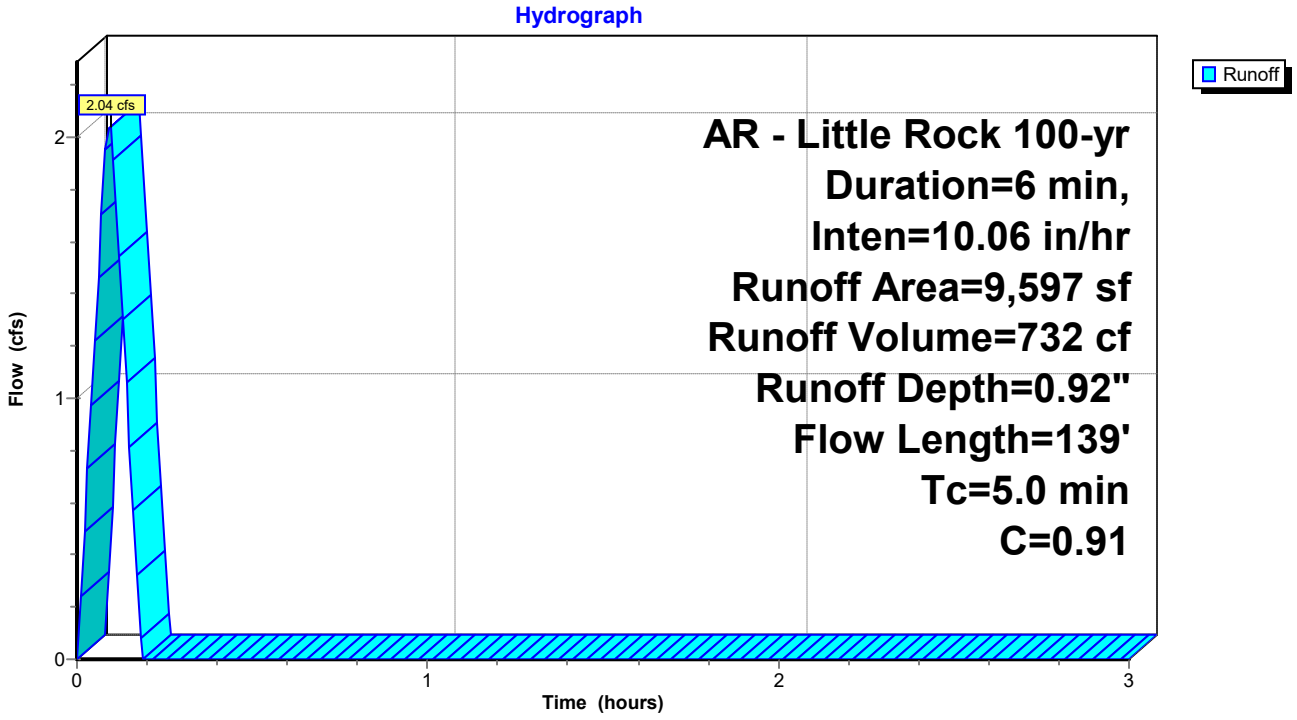
Runoff = 2.04 cfs @ 0.09 hrs, Volume= 732 cf, Depth= 0.92"
Routed to Pond CI-A1 : CURB INLET A1

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=6 min, Inten=10.06 in/hr

Area (sf)	C	Description
155	0.35	Sandy Soil 2-7% per manual
9,442	0.92	Paved Areas
9,597	0.91	Weighted Average
9,597		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	28	0.1667	2.85		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.4	30	0.0160	1.13		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
0.4	41	0.0520	1.93		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
0.2	40	0.0360	3.85		**Shallow Concentrated Flow, Gutter Flow** Paved Kv= 20.3 fps
3.8					**Direct Entry, Minimum Adjustment**
5.0	139	Total			

Subcatchment B3: Drainage Basin B3



Summary for Subcatchment B4: Drainage Basin B4

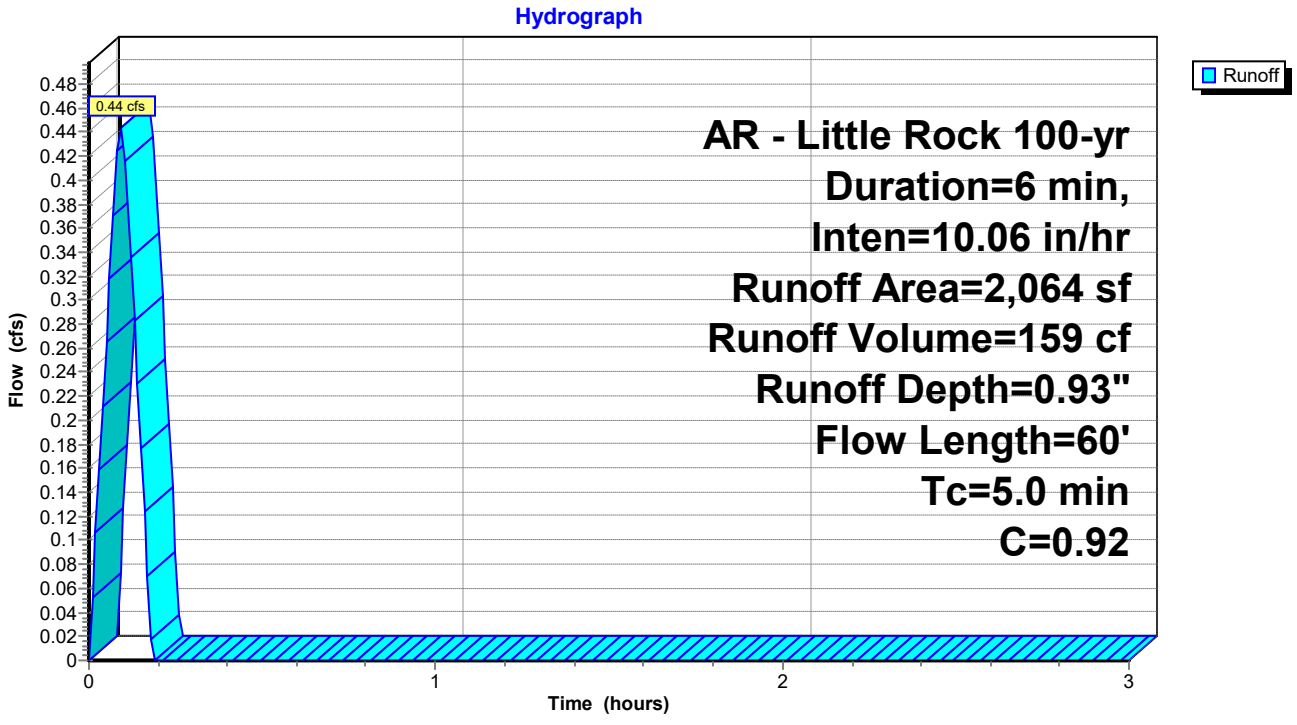
Runoff = 0.44 cfs @ 0.09 hrs, Volume= 159 cf, Depth= 0.93"
Routed to Pond CI-A2 : CURB INLET A2

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=6 min, Inten=10.06 in/hr

Area (sf)	C	Description
0	0.35	Sandy Soil 2-7% per manual
2,064	0.92	Paved Areas
2,064	0.92	Weighted Average
2,064		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.6	45	0.0170	1.26		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
0.0	15	0.0840	5.88		**Shallow Concentrated Flow, Gutter Flow** Paved Kv= 20.3 fps
4.4					**Direct Entry, Minimum Adjustment**
5.0	60	Total			

Subcatchment B4: Drainage Basin B4



Summary for Subcatchment B5: Drainage Basin B5

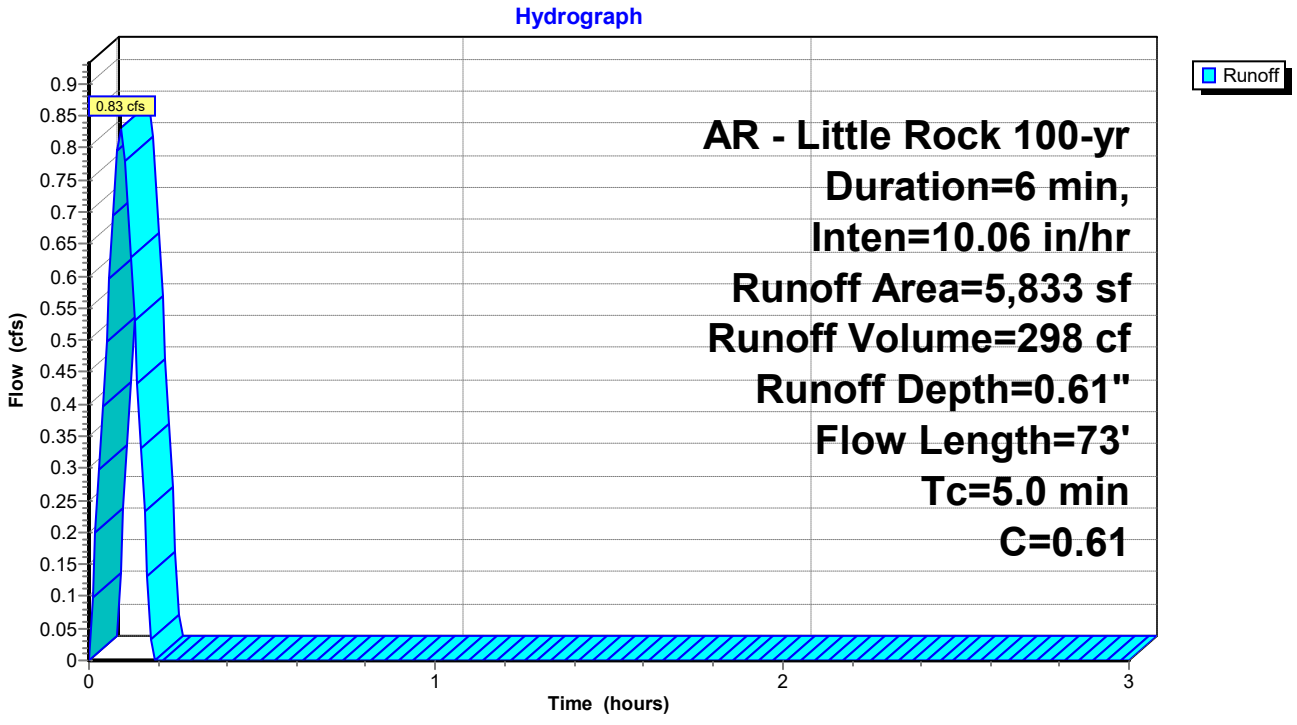
Runoff = 0.83 cfs @ 0.09 hrs, Volume= 298 cf, Depth= 0.61"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=6 min, Inten=10.06 in/hr

Area (sf)	C	Description
3,123	0.35	Sandy Soil 2-7% per manual
2,710	0.92	Paved Areas
5,833	0.61	Weighted Average
5,833		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	18	0.1667	2.61		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.4	55	0.0860	2.05		**Shallow Concentrated Flow, Overland Concentrated** Short Grass Pasture Kv= 7.0 fps
4.5					**Direct Entry, Minimum Adjustment**
5.0	73	Total			

Subcatchment B5: Drainage Basin B5



Summary for Subcatchment B6: Drainage Basin B6

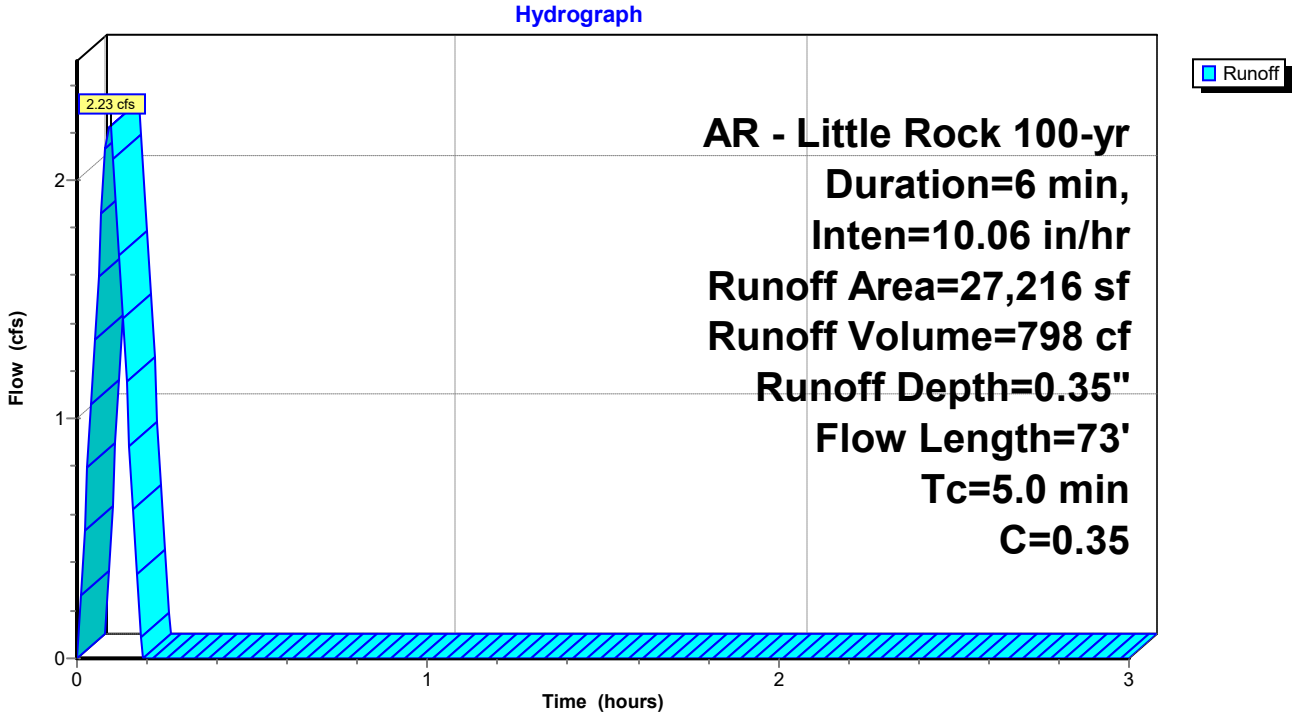
Runoff = 2.23 cfs @ 0.09 hrs, Volume= 798 cf, Depth= 0.35"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=6 min, Inten=10.06 in/hr

Area (sf)	C	Description
27,216	0.35	Sandy Soil 2-7% per manual
27,216		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.1	18	0.1667	2.61		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.4	55	0.0860	2.05		**Shallow Concentrated Flow, Overland Concentrated** Short Grass Pasture Kv= 7.0 fps
4.5					**Direct Entry, Minimum Adjustment**
5.0	73	Total			

Subcatchment B6: Drainage Basin B6



Summary for Subcatchment B7: Drainage Basin B7

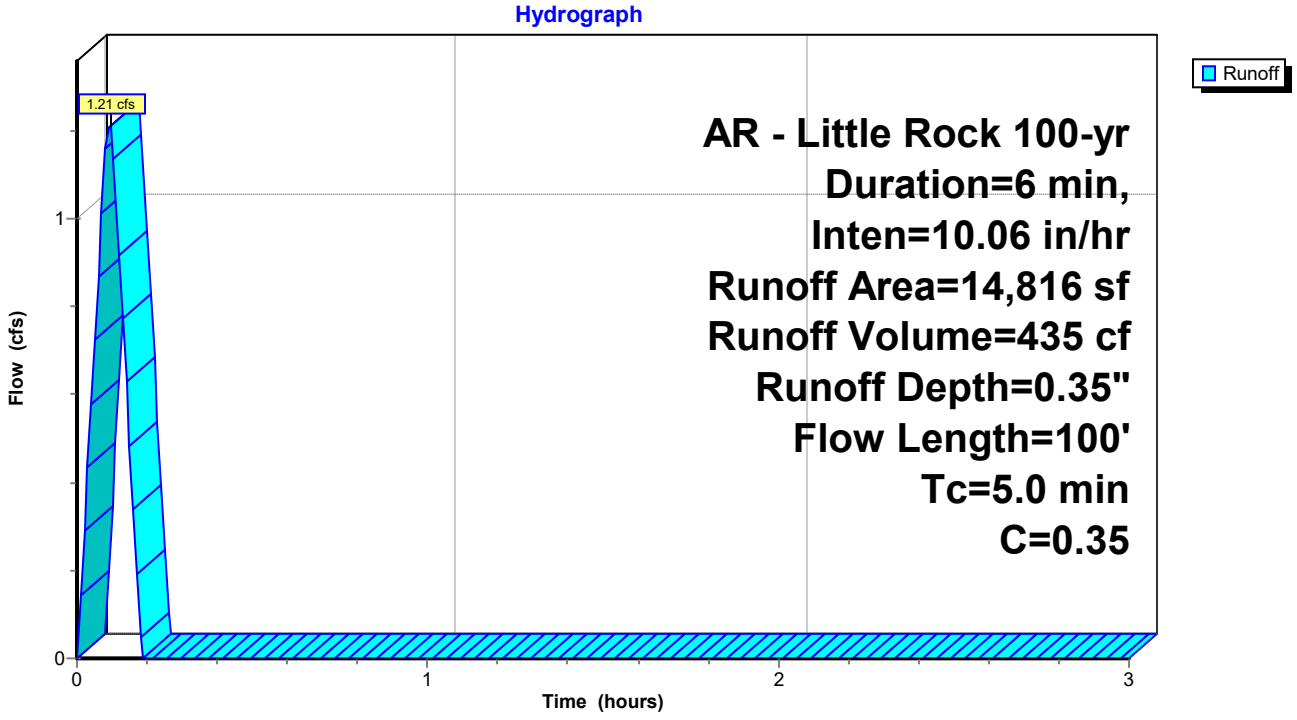
Runoff = 1.21 cfs @ 0.09 hrs, Volume= 435 cf, Depth= 0.35"
Routed to Link POST-DEV : Post-Development

Runoff by Rational method, Rise/Fall=1.0/1.0 xTc, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
AR - Little Rock 100-yr Duration=6 min, Inten=10.06 in/hr

Area (sf)	C	Description
14,816	0.35	Sandy Soil 2-7% per manual
14,816		100.00% Pervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	42	0.1667	3.09		**Sheet Flow, Rooftop** Smooth surfaces n= 0.011 P2= 4.20"
0.5	58	0.0500	2.04		**Sheet Flow, Asphalt Sheet Flow** Smooth surfaces n= 0.011 P2= 4.20"
4.3					**Direct Entry, Minimum Adjustment**
5.0	100	Total			

Subcatchment B7: Drainage Basin B7



Summary for Pond CI-A1: CURB INLET A1

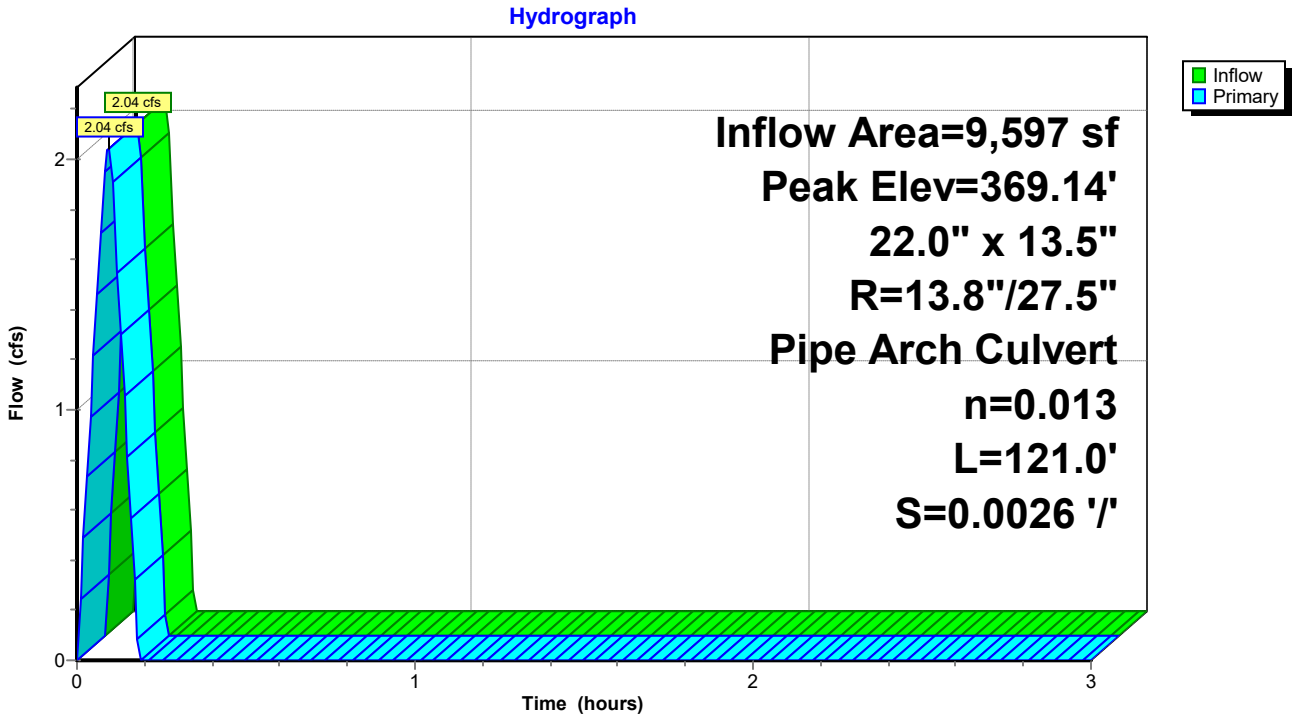
Inflow Area = 9,597 sf, 0.00% Impervious, Inflow Depth = 0.92" for 100-yr event
Inflow = 2.04 cfs @ 0.09 hrs, Volume= 732 cf
Outflow = 2.04 cfs @ 0.09 hrs, Volume= 732 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.04 cfs @ 0.09 hrs, Volume= 732 cf
Routed to Pond CI-A2 : CURB INLET A2

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 369.14' @ 0.09 hrs

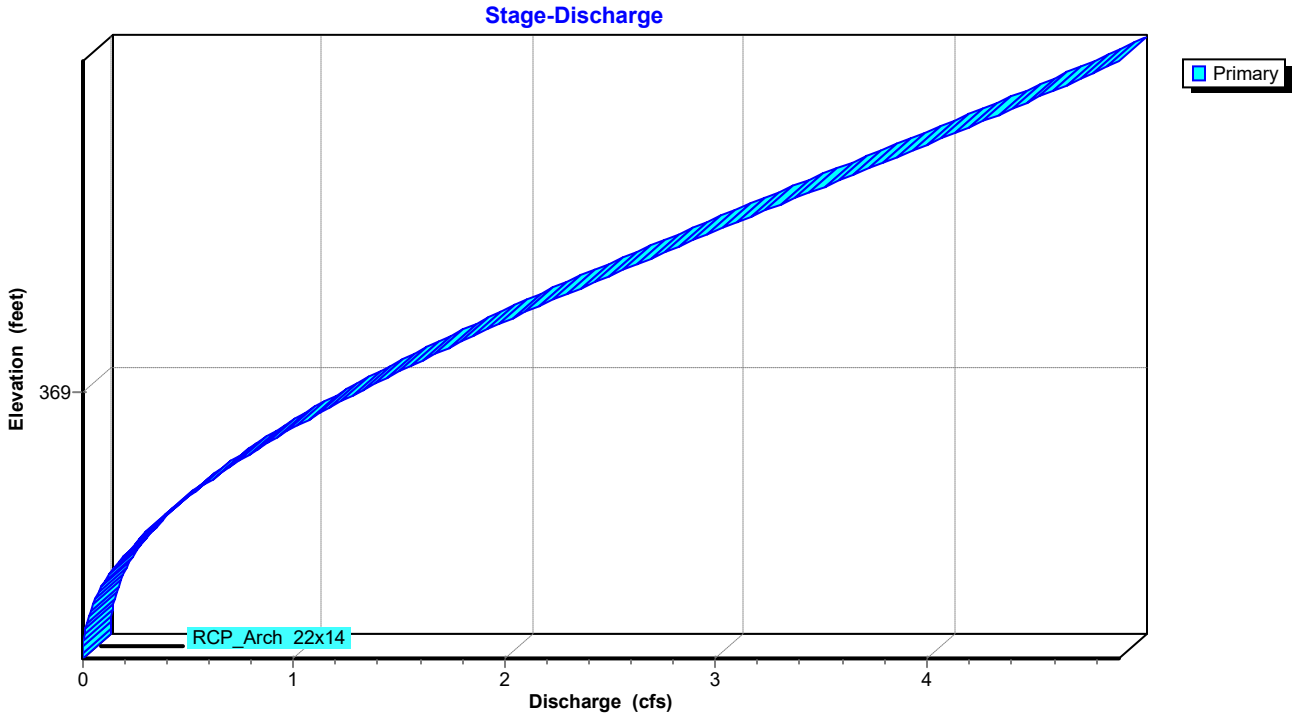
Device	Routing	Invert	Outlet Devices
#1	Primary	368.50'	**22.0" W x 13.5" H, R=13.8"/27.5" Pipe Arch RCP_Arch 22x14** L= 121.0' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 368.50' / 368.19' S= 0.0026 '/' Cc= 0.900 n= 0.013, Flow Area= 1.65 sf

Primary OutFlow Max=2.03 cfs @ 0.09 hrs HW=369.14' (Free Discharge)
1=RCP_Arch 22x14 (Barrel Controls 2.03 cfs @ 2.79 fps)

Pond CI-A1: CURB INLET A1



Pond CI-A1: CURB INLET A1



Stage-Area-Storage for Pond CI-A1: CURB INLET A1

Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
368.50	**0**	369.02	0	369.54	0
368.51	0	369.03	0	369.55	0
368.52	0	369.04	0	369.56	0
368.53	0	369.05	0	369.57	0
368.54	0	369.06	0	369.58	0
368.55	0	369.07	0	369.59	0
368.56	0	369.08	0	369.60	0
368.57	0	369.09	0	369.61	0
368.58	0	369.10	0	369.62	0
368.59	0	369.11	0		
368.60	0	369.12	0		
368.61	0	369.13	0		
368.62	0	369.14	0		
368.63	0	369.15	0		
368.64	0	369.16	0		
368.65	0	369.17	0		
368.66	0	369.18	0		
368.67	0	369.19	0		
368.68	0	369.20	0		
368.69	0	369.21	0		
368.70	0	369.22	0		
368.71	0	369.23	0		
368.72	0	369.24	0		
368.73	0	369.25	0		
368.74	0	369.26	0		
368.75	0	369.27	0		
368.76	0	369.28	0		
368.77	0	369.29	0		
368.78	0	369.30	0		
368.79	0	369.31	0		
368.80	0	369.32	0		
368.81	0	369.33	0		
368.82	0	369.34	0		
368.83	0	369.35	0		
368.84	0	369.36	0		
368.85	0	369.37	0		
368.86	0	369.38	0		
368.87	0	369.39	0		
368.88	0	369.40	0		
368.89	0	369.41	0		
368.90	0	369.42	0		
368.91	0	369.43	0		
368.92	0	369.44	0		
368.93	0	369.45	0		
368.94	0	369.46	0		
368.95	0	369.47	0		
368.96	0	369.48	0		
368.97	0	369.49	0		
368.98	0	369.50	0		
368.99	0	369.51	0		
369.00	0	369.52	0		
369.01	0	369.53	0		

Summary for Pond CI-A2: CURB INLET A2

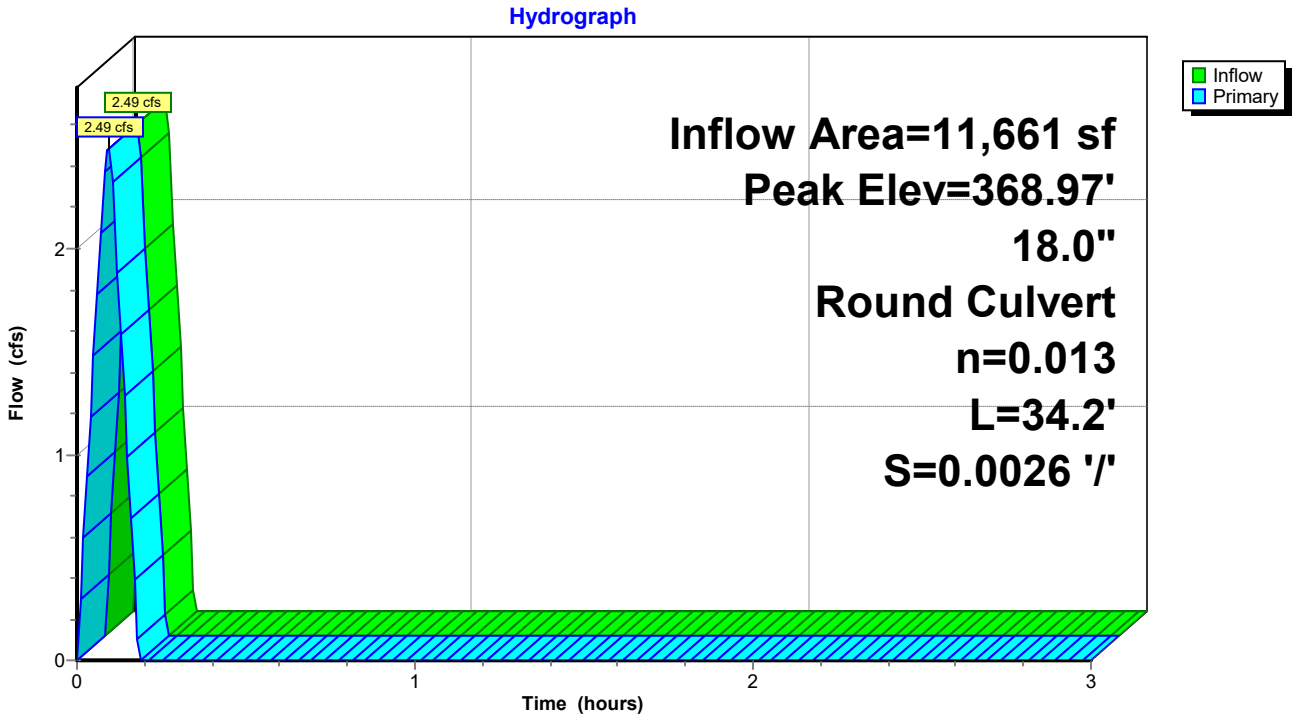
Inflow Area = 11,661 sf, 0.00% Impervious, Inflow Depth = 0.92" for 100-yr event
Inflow = 2.49 cfs @ 0.09 hrs, Volume= 891 cf
Outflow = 2.49 cfs @ 0.09 hrs, Volume= 891 cf, Atten= 0%, Lag= 0.0 min
Primary = 2.49 cfs @ 0.09 hrs, Volume= 891 cf
Routed to Link POST-DEV : Post-Development

Routing by Stor-Ind method, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs
Peak Elev= 368.97' @ 0.09 hrs

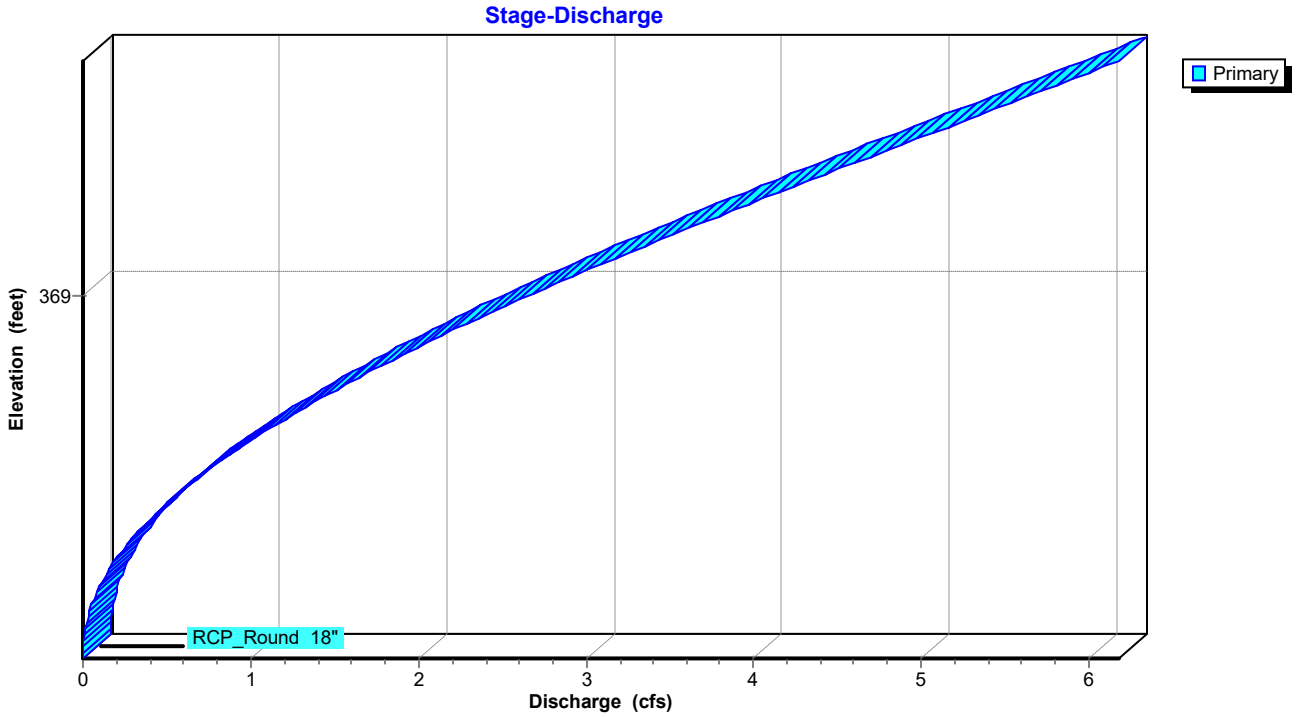
Device	Routing	Invert	Outlet Devices
#1	Primary	368.09'	**18.0" Round RCP_Round 18"** L= 34.2' RCP, rounded edge headwall, Ke= 0.100 Inlet / Outlet Invert= 368.09' / 368.00' S= 0.0026 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf

Primary OutFlow Max=2.47 cfs @ 0.09 hrs HW=368.97' (Free Discharge)
1=RCP_Round 18" (Barrel Controls 2.47 cfs @ 3.32 fps)

Pond CI-A2: CURB INLET A2



Pond CI-A2: CURB INLET A2



Stage-Area-Storage for Pond CI-A2: CURB INLET A2

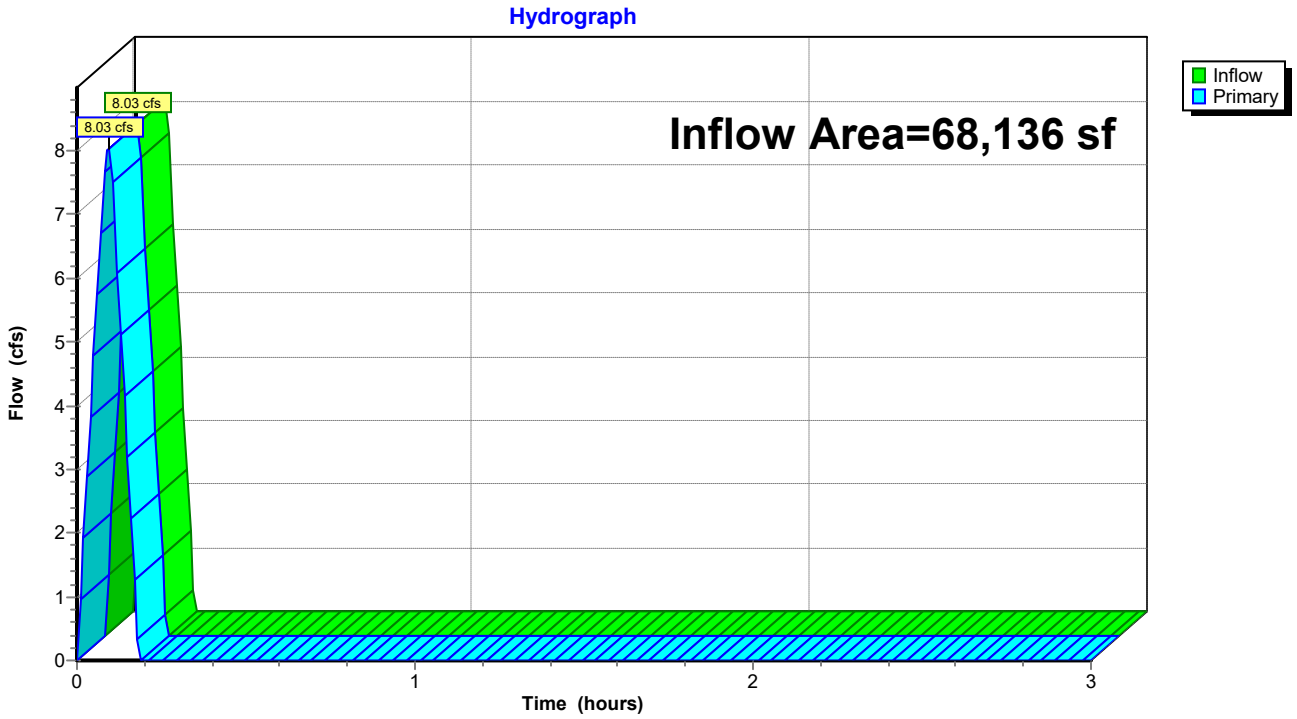
Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)	Elevation (feet)	Storage (cubic-feet)
368.09	**0**	368.61	0	369.13	0
368.10	0	368.62	0	369.14	0
368.11	0	368.63	0	369.15	0
368.12	0	368.64	0	369.16	0
368.13	0	368.65	0	369.17	0
368.14	0	368.66	0	369.18	0
368.15	0	368.67	0	369.19	0
368.16	0	368.68	0	369.20	0
368.17	0	368.69	0	369.21	0
368.18	0	368.70	0	369.22	0
368.19	0	368.71	0	369.23	0
368.20	0	368.72	0	369.24	0
368.21	0	368.73	0	369.25	0
368.22	0	368.74	0	369.26	0
368.23	0	368.75	0	369.27	0
368.24	0	368.76	0	369.28	0
368.25	0	368.77	0	369.29	0
368.26	0	368.78	0	369.30	0
368.27	0	368.79	0	369.31	0
368.28	0	368.80	0	369.32	0
368.29	0	368.81	0	369.33	0
368.30	0	368.82	0	369.34	0
368.31	0	368.83	0	369.35	0
368.32	0	368.84	0	369.36	0
368.33	0	368.85	0	369.37	0
368.34	0	368.86	0	369.38	0
368.35	0	368.87	0	369.39	0
368.36	0	368.88	0	369.40	0
368.37	0	368.89	0	369.41	0
368.38	0	368.90	0	369.42	0
368.39	0	368.91	0	369.43	0
368.40	0	368.92	0	369.44	0
368.41	0	368.93	0	369.45	0
368.42	0	368.94	0	369.46	0
368.43	0	368.95	0	369.47	0
368.44	0	368.96	0	369.48	0
368.45	0	368.97	0	369.49	0
368.46	0	368.98	0	369.50	0
368.47	0	368.99	0	369.51	0
368.48	0	369.00	0	369.52	0
368.49	0	369.01	0	369.53	0
368.50	0	369.02	0	369.54	0
368.51	0	369.03	0	369.55	0
368.52	0	369.04	0	369.56	0
368.53	0	369.05	0	369.57	0
368.54	0	369.06	0	369.58	0
368.55	0	369.07	0	369.59	0
368.56	0	369.08	0		
368.57	0	369.09	0		
368.58	0	369.10	0		
368.59	0	369.11	0		
368.60	0	369.12	0		

Summary for Link POST-DEV: Post-Development

Inflow Area = 68,136 sf, 0.00% Impervious, Inflow Depth = 0.51" for 100-yr event
Inflow = 8.03 cfs @ 0.09 hrs, Volume= 2,876 cf
Primary = 8.03 cfs @ 0.09 hrs, Volume= 2,876 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-3.00 hrs, dt= 0.01 hrs

Link POST-DEV: Post-Development



STORM SEWER SIZING

Inlet Report

CI-A1 (25 YEAR)

Curb Inlet

Location	= Sag
Curb Length (ft)	= 4.00
Throat Height (in)	= 4.00
Grate Area (sqft)	= -0-
Grate Width (ft)	= -0-
Grate Length (ft)	= -0-

Gutter

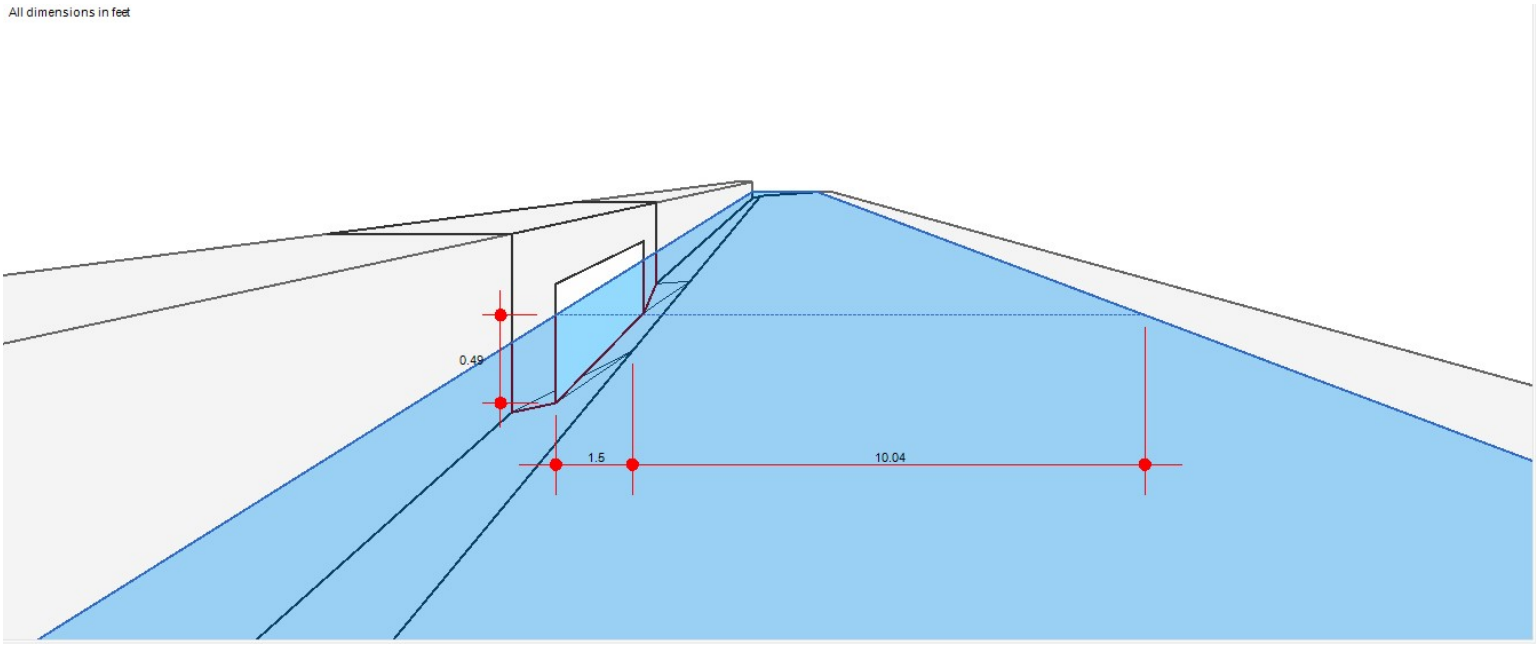
Slope, Sw (ft/ft)	= 0.083
Slope, Sx (ft/ft)	= 0.020
Local Depr (in)	= 2.00
Gutter Width (ft)	= 1.50
Gutter Slope (%)	= -0-
Gutter n-value	= -0-

Calculations

Compute by:	Known Q
Q (cfs)	= 1.71

Highlighted

Q Total (cfs)	= 1.71
Q Capt (cfs)	= 1.71
Q Bypass (cfs)	= -0-
Depth at Inlet (in)	= 5.90
Efficiency (%)	= 100
Gutter Spread (ft)	= 11.54
Gutter Vel (ft/s)	= -0-
Bypass Spread (ft)	= -0-
Bypass Depth (in)	= -0-



Inlet Report

CI-A2 (25 YEAR)

Curb Inlet

Location	= On grade
Curb Length (ft)	= 4.00
Throat Height (in)	= 4.00
Grate Area (sqft)	= -0-
Grate Width (ft)	= -0-
Grate Length (ft)	= -0-

Gutter

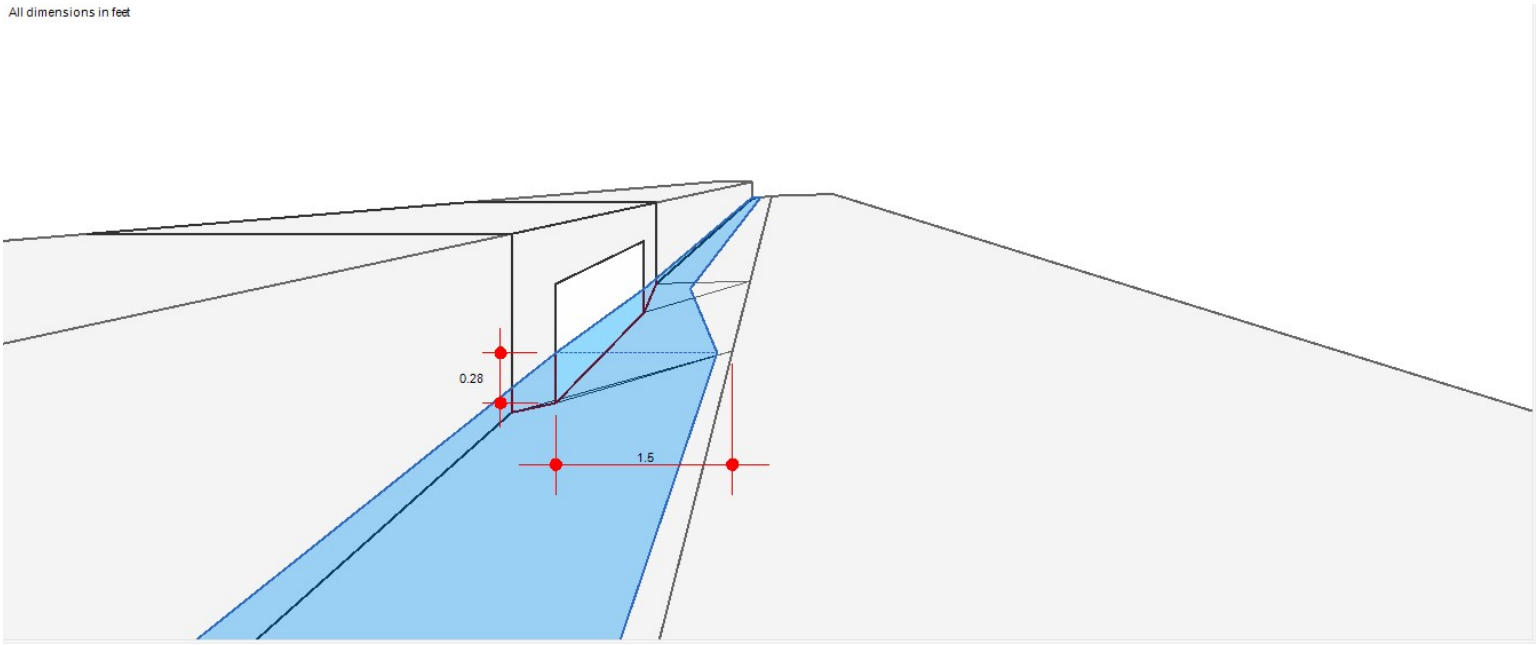
Slope, Sw (ft/ft)	= 0.083
Slope, Sx (ft/ft)	= 0.020
Local Depr (in)	= 2.00
Gutter Width (ft)	= 1.50
Gutter Slope (%)	= 8.40
Gutter n-value	= 0.016

Calculations

Compute by:	Known Q
Q (cfs)	= 0.37

Highlighted

Q Total (cfs)	= 0.37
Q Capt (cfs)	= 0.32
Q Bypass (cfs)	= 0.05
Depth at Inlet (in)	= 3.36
Efficiency (%)	= 86
Gutter Spread (ft)	= 1.37
Gutter Vel (ft/s)	= 4.75
Bypass Spread (ft)	= 0.65
Bypass Depth (in)	= 0.65



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Jul 23 2025

Pipe A1 (25 YEAR)

Circular

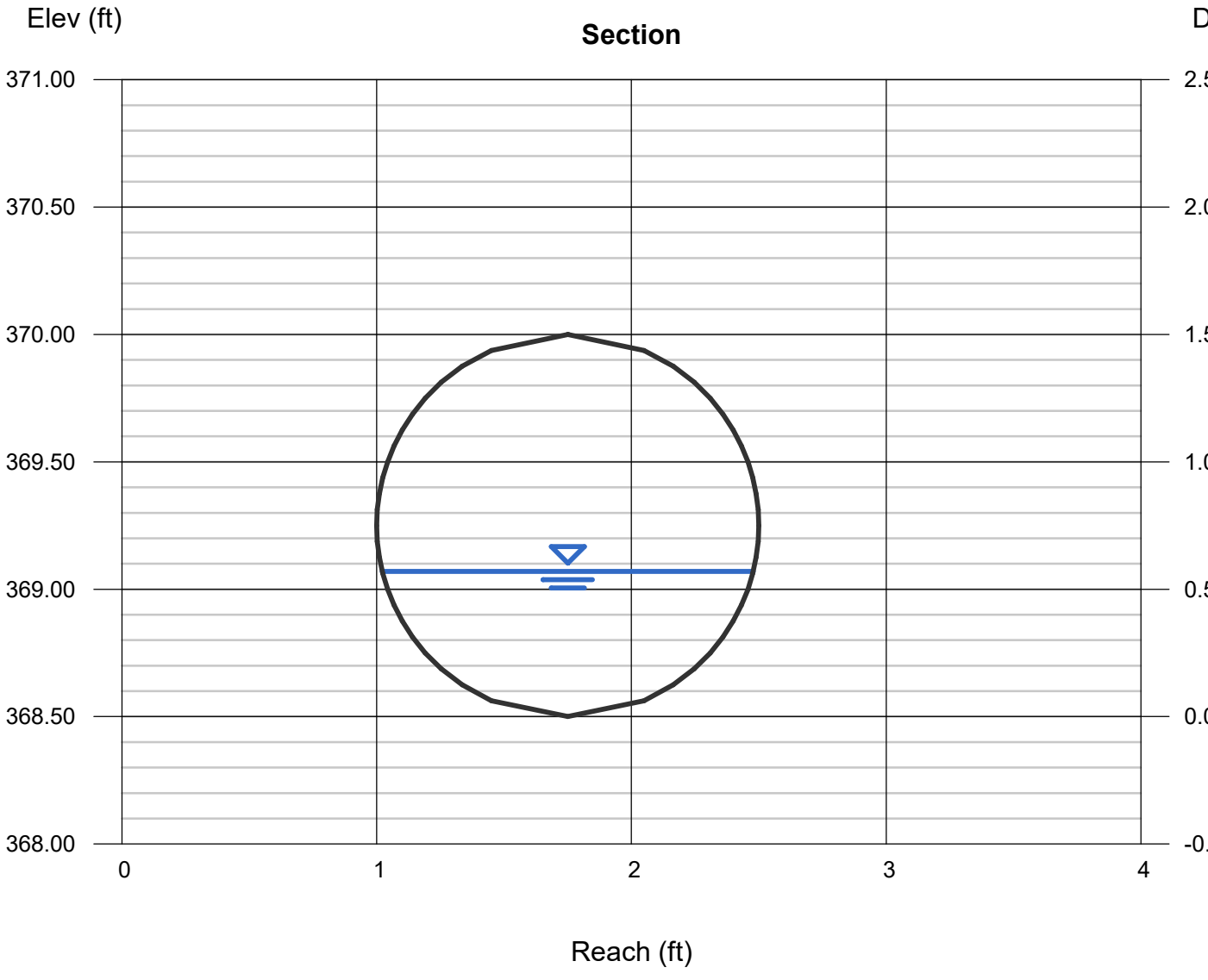
Diameter (ft)	= 1.50
Invert Elev (ft)	= 368.50
Slope (%)	= 0.26
N-Value	= 0.012

Calculations

Compute by:	Known Q
Known Q (cfs)	= 1.73

Highlighted

Depth (ft)	= 0.57
Q (cfs)	= 1.730
Area (sqft)	= 0.62
Velocity (ft/s)	= 2.80
Wetted Perim (ft)	= 1.99
Crit Depth, Yc (ft)	= 0.50
Top Width (ft)	= 1.46
EGL (ft)	= 0.69



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Jul 23 2025

Pipe A2 (25 YEAR)

Circular

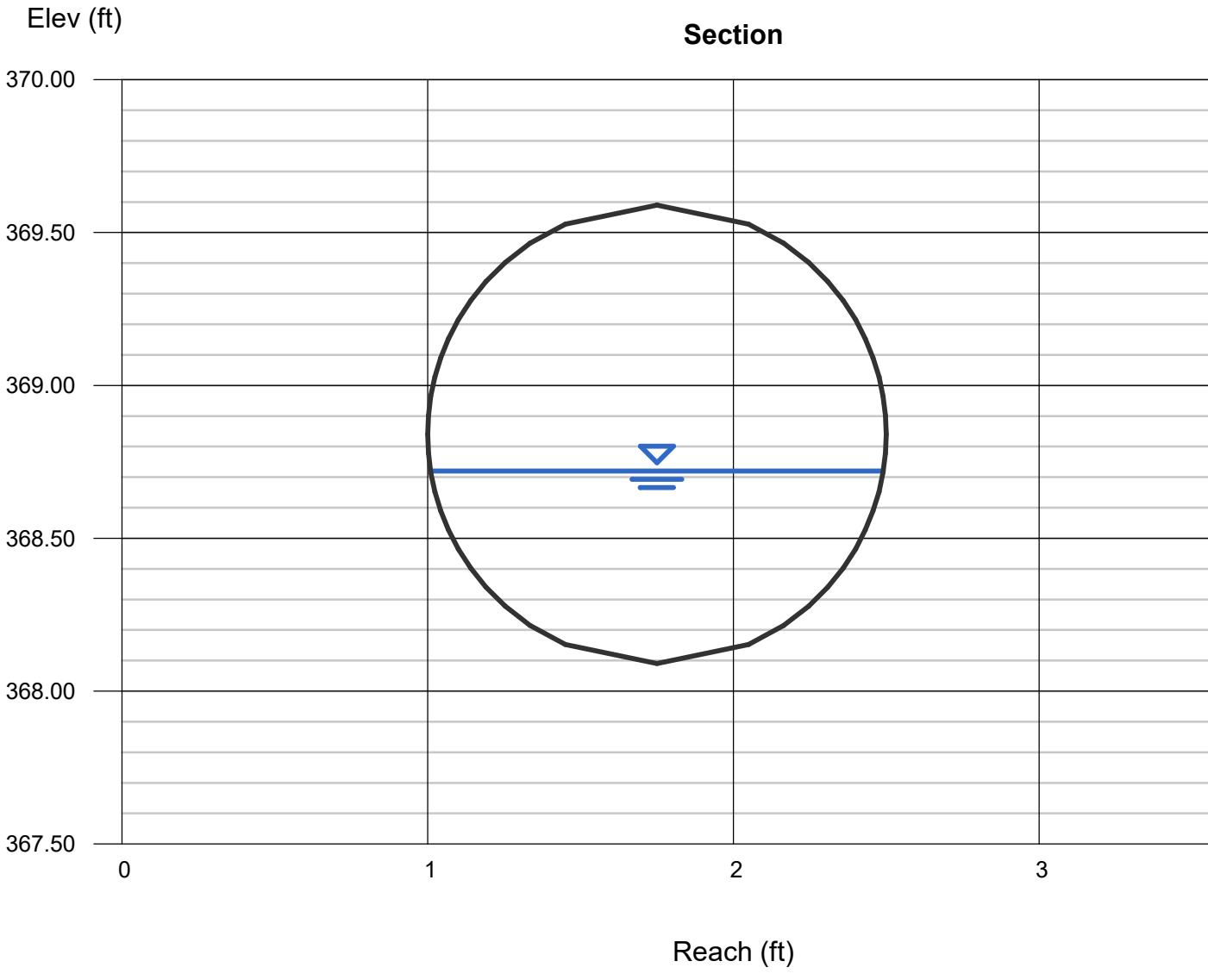
Diameter (ft)	= 1.50
Invert Elev (ft)	= 368.09
Slope (%)	= 0.26
N-Value	= 0.012

Calculations

Compute by:	Known Q
Known Q (cfs)	= 2.11

Highlighted

Depth (ft)	= 0.63
Q (cfs)	= 2.110
Area (sqft)	= 0.71
Velocity (ft/s)	= 2.97
Wetted Perim (ft)	= 2.12
Crit Depth, Yc (ft)	= 0.55
Top Width (ft)	= 1.48
EGL (ft)	= 0.77



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Jul 23 2025

Existing Pipe C1 (25 YEAR)

Circular

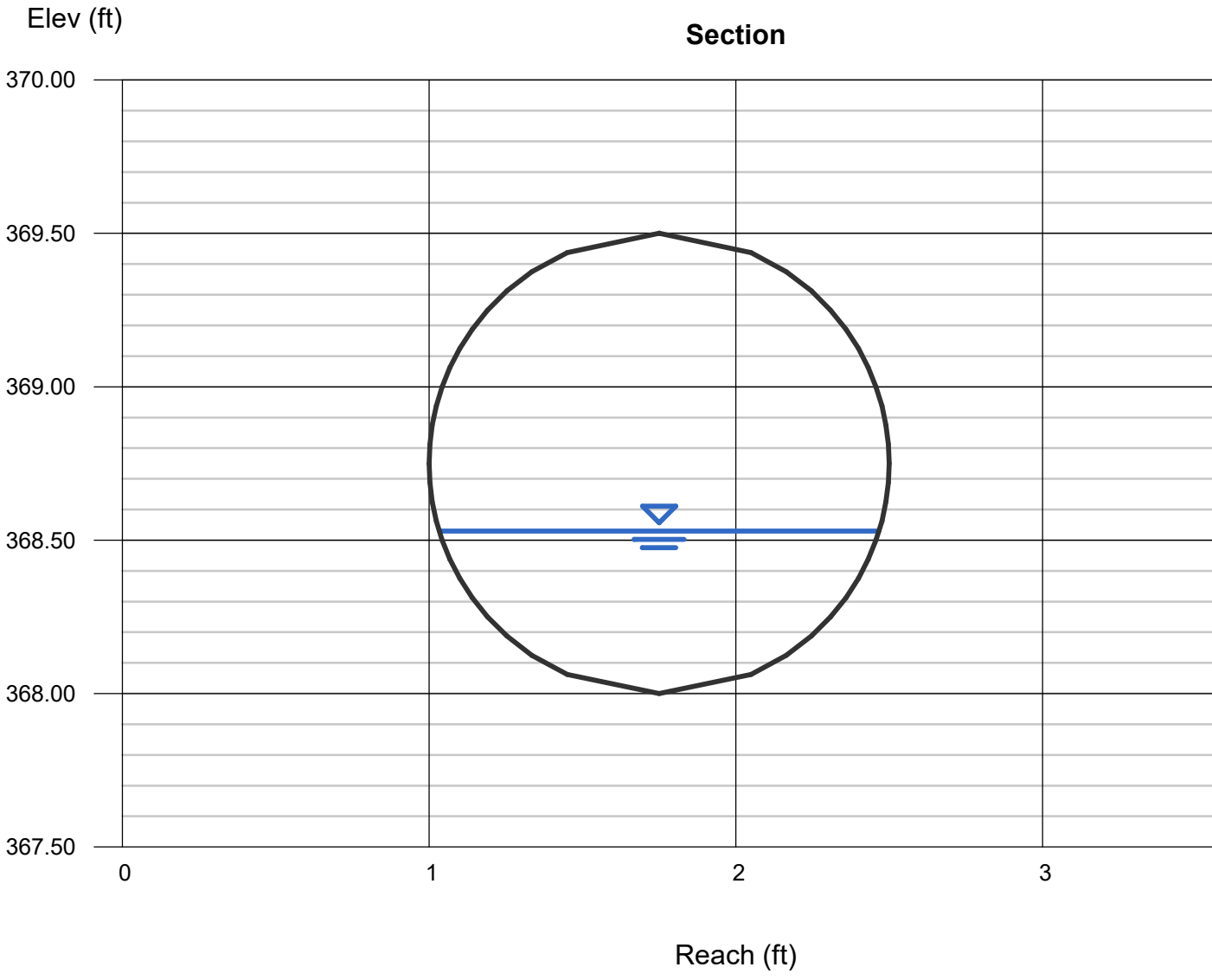
Diameter (ft)	= 1.50
Invert Elev (ft)	= 368.00
Slope (%)	= 1.14
N-Value	= 0.012

Calculations

Compute by:	Known Q
Known Q (cfs)	= 3.24

Highlighted

Depth (ft)	= 0.53
Q (cfs)	= 3.240
Area (sqft)	= 0.56
Velocity (ft/s)	= 5.78
Wetted Perim (ft)	= 1.91
Crit Depth, Yc (ft)	= 0.69
Top Width (ft)	= 1.43
EGL (ft)	= 1.05



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Jul 23 2025

Existing Pipe C2 (25 YEAR)

Circular

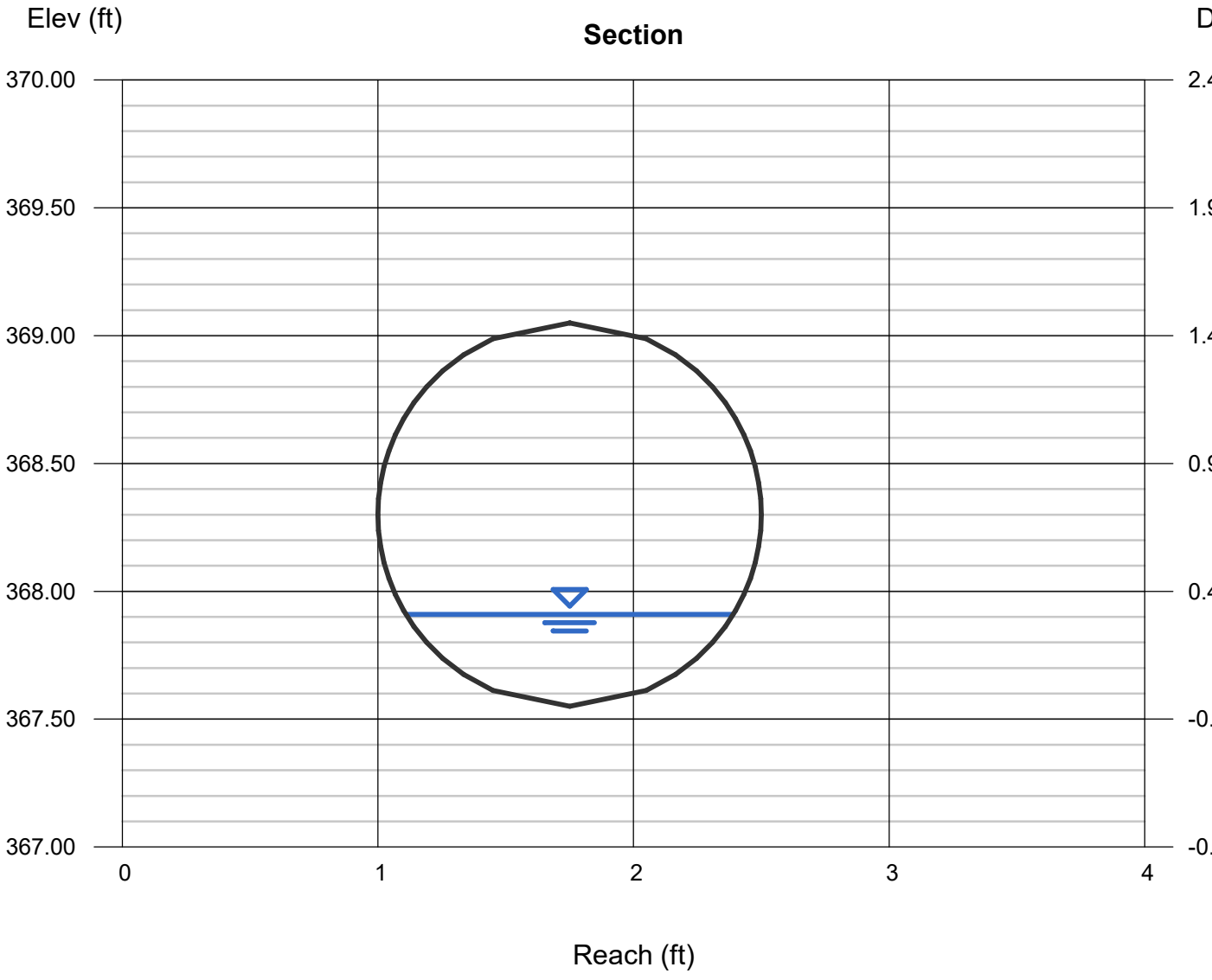
Diameter (ft)	= 1.50
Invert Elev (ft)	= 367.55
Slope (%)	= 6.06
N-Value	= 0.012

Calculations

Compute by:	Known Q
Known Q (cfs)	= 3.39

Highlighted

Depth (ft)	= 0.36
Q (cfs)	= 3.390
Area (sqft)	= 0.33
Velocity (ft/s)	= 10.37
Wetted Perim (ft)	= 1.54
Crit Depth, Yc (ft)	= 0.71
Top Width (ft)	= 1.28
EGL (ft)	= 2.03



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Jul 23 2025

Existing Pipe C3 (25 YEAR)

Circular

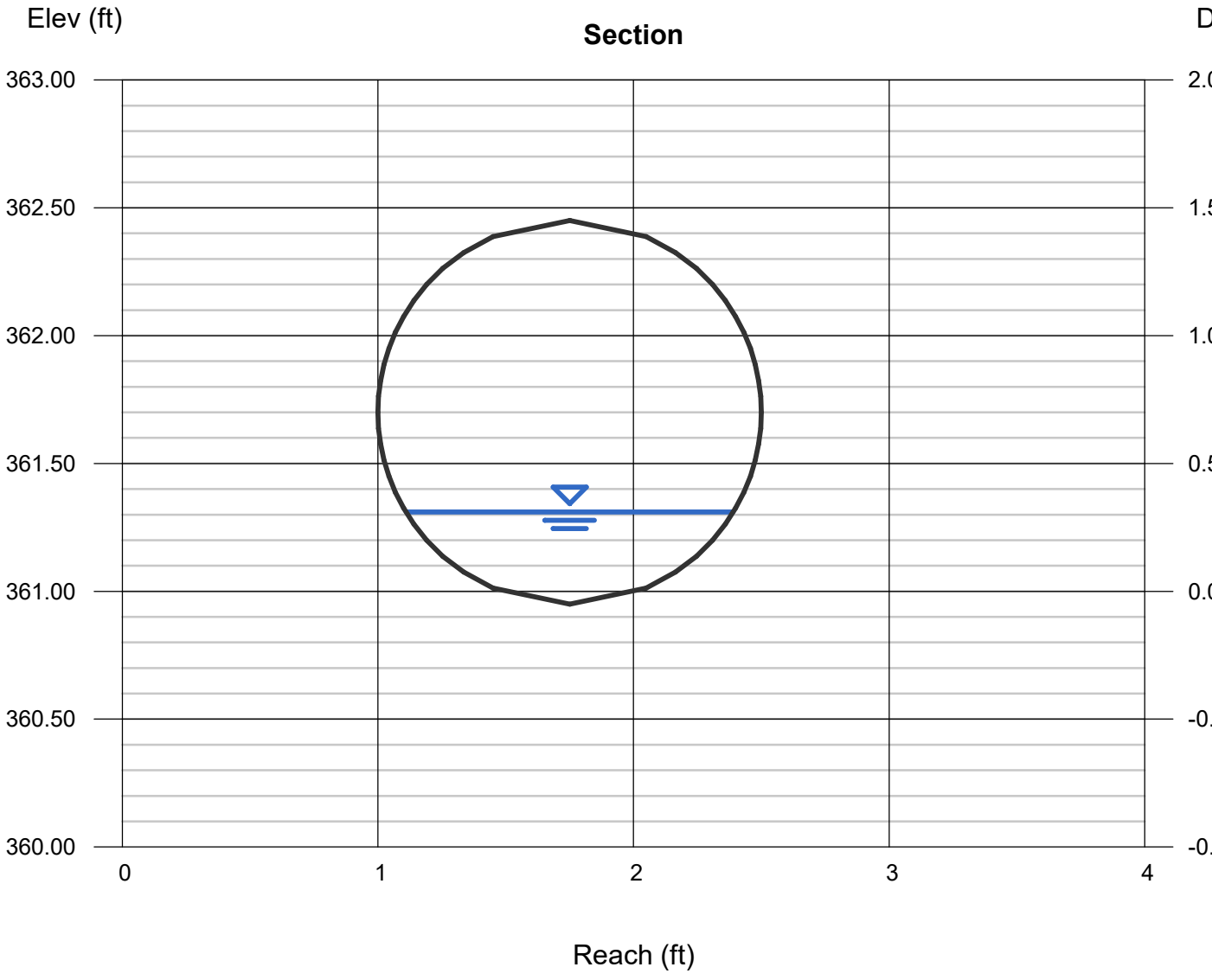
Diameter (ft)	= 1.50
Invert Elev (ft)	= 360.95
Slope (%)	= 5.91
N-Value	= 0.012

Calculations

Compute by:	Known Q
Known Q (cfs)	= 3.39

Highlighted

Depth (ft)	= 0.36
Q (cfs)	= 3.390
Area (sqft)	= 0.33
Velocity (ft/s)	= 10.37
Wetted Perim (ft)	= 1.54
Crit Depth, Yc (ft)	= 0.71
Top Width (ft)	= 1.28
EGL (ft)	= 2.03



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Jul 23 2025

Existing Pipe C4 (25 YEAR)

Circular

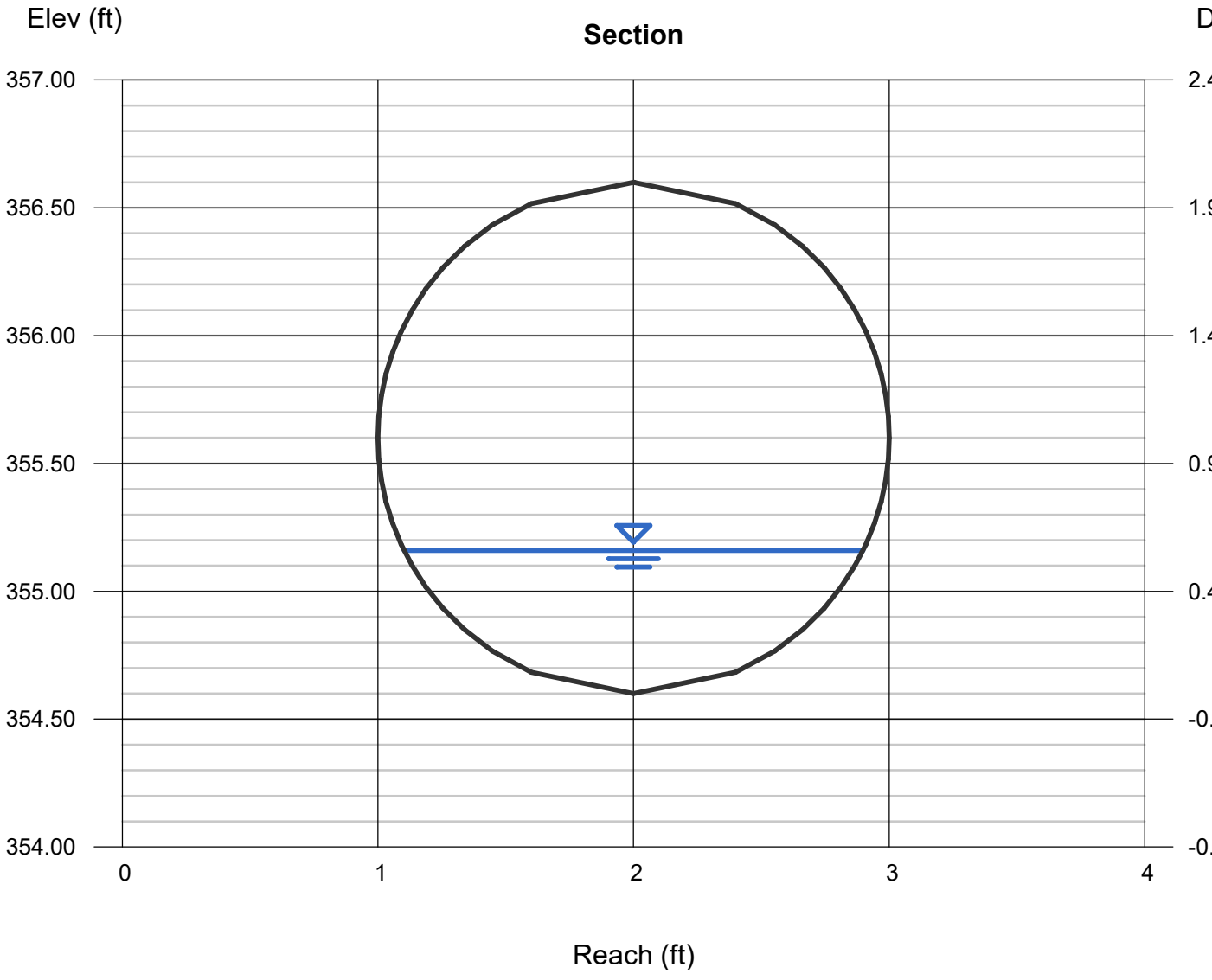
Diameter (ft)	= 2.00
Invert Elev (ft)	= 354.60
Slope (%)	= 2.91
N-Value	= 0.012

Calculations

Compute by:	Known Q
Known Q (cfs)	= 7.21

Highlighted

Depth (ft)	= 0.56
Q (cfs)	= 7.210
Area (sqft)	= 0.73
Velocity (ft/s)	= 9.91
Wetted Perim (ft)	= 2.24
Crit Depth, Yc (ft)	= 0.95
Top Width (ft)	= 1.80
EGL (ft)	= 2.09



Channel Report

Hydraflow Express Extension for Autodesk® Civil 3D® by Autodesk, Inc. Wednesday, Jul 23 2025

Existing Pipe C5 (25 YEAR)

Circular

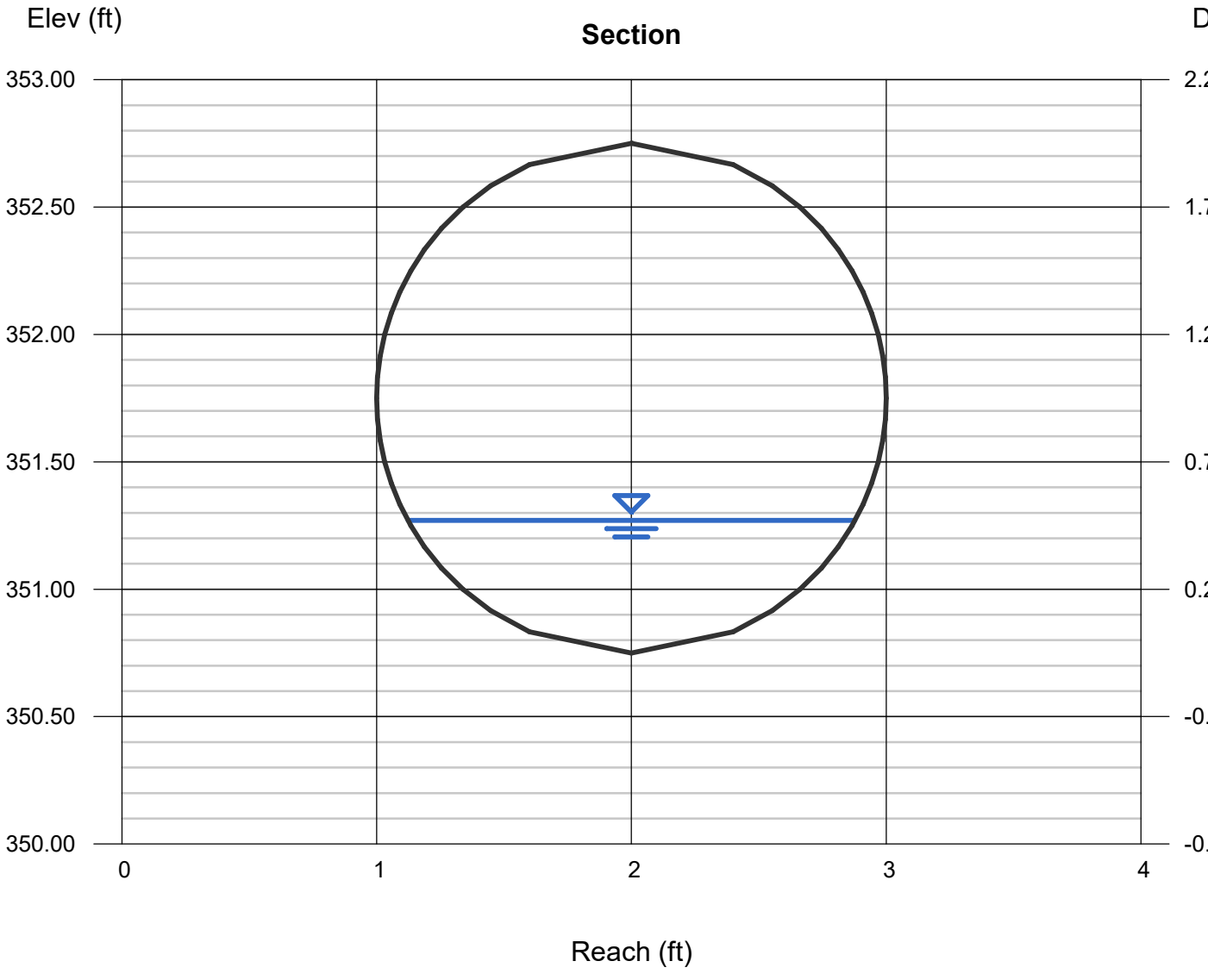
Diameter (ft)	= 2.00
Invert Elev (ft)	= 350.75
Slope (%)	= 7.25
N-Value	= 0.012

Calculations

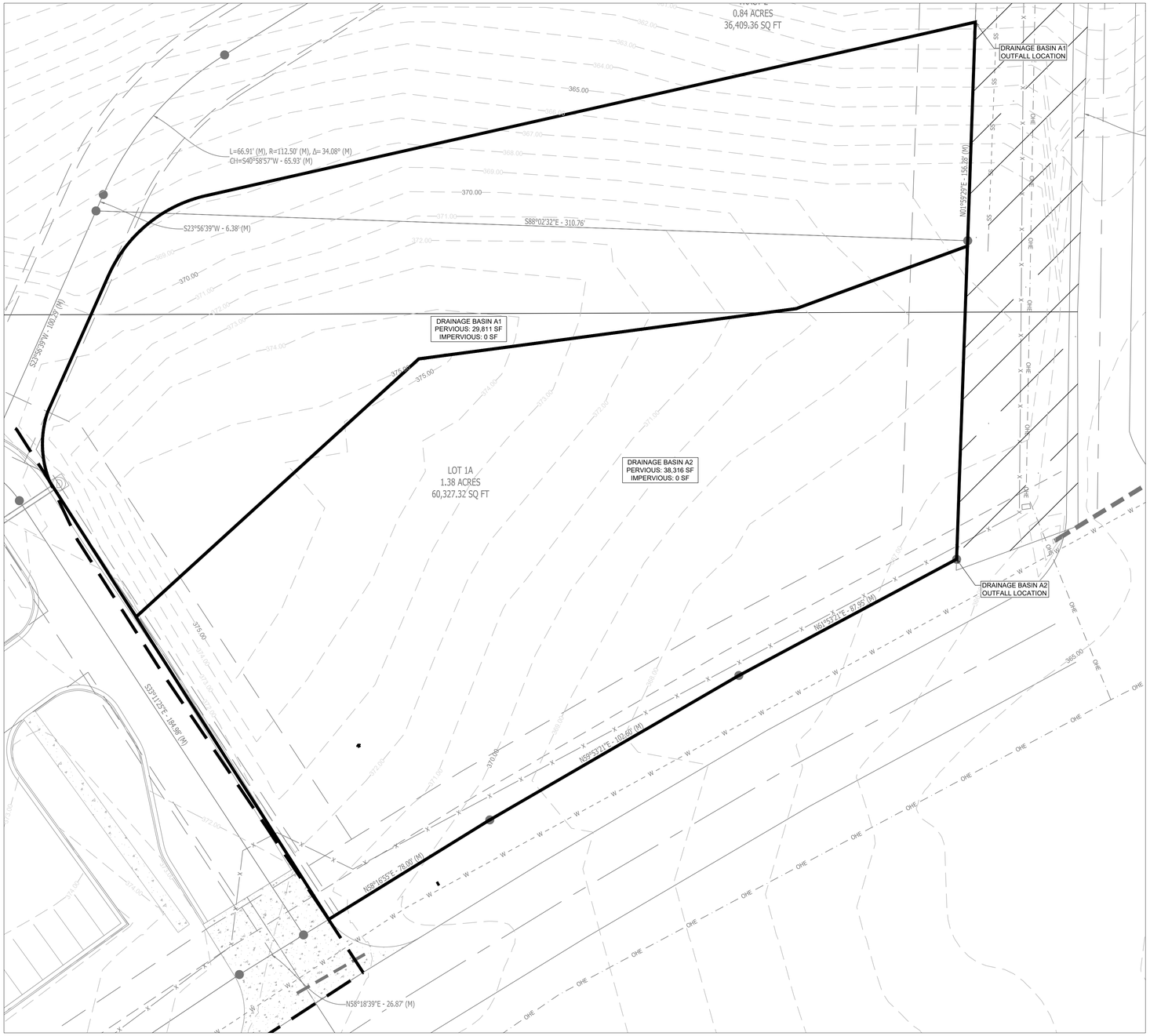
Compute by:	Known Q
Known Q (cfs)	= 9.59

Highlighted

Depth (ft)	= 0.52
Q (cfs)	= 9.590
Area (sqft)	= 0.66
Velocity (ft/s)	= 14.61
Wetted Perim (ft)	= 2.15
Crit Depth, Yc (ft)	= 1.11
Top Width (ft)	= 1.76
EGL (ft)	= 3.84



DRAINAGE BASIN MAPS



PRE-DEVELOPMENT DRAINAGE BASIN PLAN

SCALE 1" = 20'

PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

NEW BEGINNINGS
HIGHWAY 5
BRYANT, ARKANSAS

CERTIFICATE OF AUTHORIZATION
PHILLIP LEWIS ENGINEERING, INC.
No. 566
ARKANSAS ENGINEER

STATE OF ARKANSAS
REGISTERED PROFESSIONAL ENGINEER
No. 9540
PHILLIP A. LEWIS

N

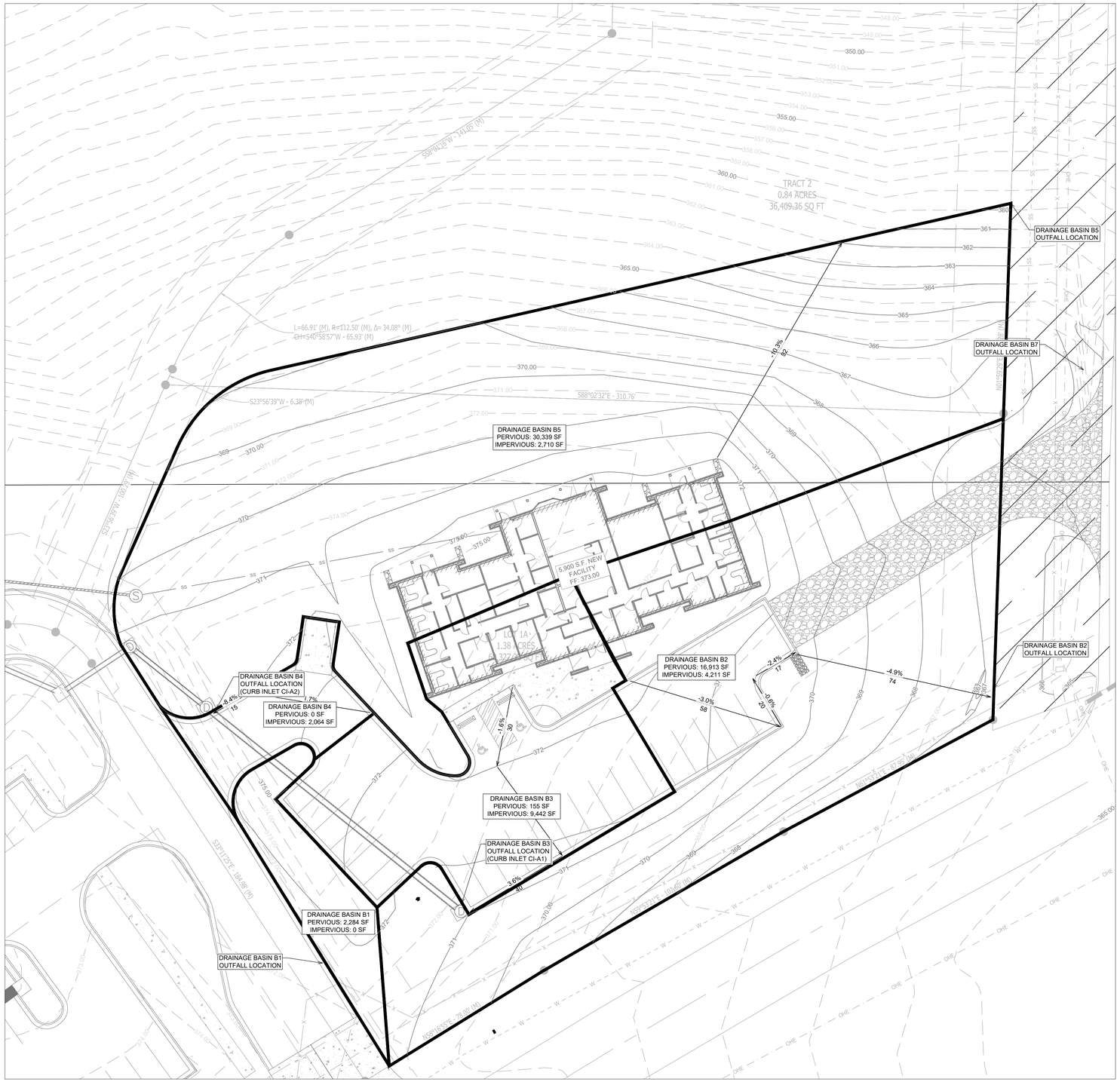
0 20'
1" = 20'-0"

PROJECT NUMBER:

SHEET ISSUE DATE:
08-06-2025

PAGE TITLE:
PRE-DEV DRAINAGE

SHEET NUMBER:
C1.10



POST-DEV DRAINAGE

SCALE 1" = 20'

PHILLIP LEWIS ENGINEERING, INC.
Structural + Civil Consultants
23620 Interstate 30 | Bryant, Arkansas
PH: 501-350-9840

REVISION:

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ARKANSAS
REGISTERED
PROFESSIONAL
ENGINEER
No. 9540
PHILLIP LEWIS

PROJECT NUMBER:

SHEET ISSUE DATE:
08-06-2025

PAGE TITLE:
POST-DEV
DRAINAGE

SHEET NUMBER:
C1.11

N

0 10'

1" = 10'-0"

SOIL CLASSIFICATION MAPS

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Saline County, Arkansas

August 30, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require

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Contents

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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

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

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

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

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

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

Soil Survey Area: Saline County, Arkansas
Survey Area Data: Version 20, Sep 12, 2023

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

Date(s) aerial images were photographed: May 1, 2022—May 29, 2022

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
16	Ouachita silt loam, 0 to 1 percent slopes, frequently flooded	3.6	25.0%
22	Savannah fine sandy loam, 3 to 8 percent slopes	2.5	17.8%
27	Smithdale loamy sand, 8 to 12 percent slopes	4.9	34.4%
29	Tiak silt loam, 3 to 8 percent slopes	3.3	22.9%
Totals for Area of Interest		**14.2**	**100.0%**

Map Unit Descriptions

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

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

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

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

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

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

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

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

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

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

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

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

Saline County, Arkansas

16—Ouachita silt loam, 0 to 1 percent slopes, frequently flooded

Map Unit Setting

National map unit symbol: 30g3t
Elevation: 120 to 250 feet
Mean annual precipitation: 48 to 64 inches
Mean annual air temperature: 52 to 75 degrees F
Frost-free period: 225 to 290 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Ouachita, frequently flooded, brief duration, and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ouachita, Frequently Flooded, Brief Duration

Setting

Landform: Flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Loamy alluvium

Typical profile

A - 0 to 4 inches: silt loam
Bw - 4 to 42 inches: silt loam
2C - 42 to 80 inches: very fine sandy loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Frequent
Frequency of ponding: None
Maximum salinity: Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 5w
Hydrologic Soil Group: C
Ecological site: F133BY017TX - Loamy Bottomland
Hydric soil rating: No

Minor Components

Ouachita, frequently flooded, long duration

Percent of map unit: 5 percent
Landform: Flood plains

Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F133BY017TX - Loamy Bottomland
Hydric soil rating: Yes

Aquents, frequently flooded
Percent of map unit: 5 percent
Landform: Depressions
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Convex
Ecological site: F133BY012TX - Wet Terrace
Hydric soil rating: Yes

Una, frequently flooded
Percent of map unit: 3 percent
Landform: Flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F133BY018TX - Clayey Bottomland
Hydric soil rating: Yes

Guyton, frequently flooded
Percent of map unit: 2 percent
Landform: Flood plains
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F133BY017TX - Loamy Bottomland
Hydric soil rating: Yes

22—Savannah fine sandy loam, 3 to 8 percent slopes

Map Unit Setting
National map unit symbol: 2tzrt
Elevation: 50 to 250 feet
Mean annual precipitation: 38 to 61 inches
Mean annual air temperature: 52 to 73 degrees F
Frost-free period: 220 to 260 days
Farmland classification: Farmland of statewide importance

Map Unit Composition
Savannah and similar soils: 95 percent
Minor components: 5 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Savannah

Setting

Landform: Interfluves
Landform position (three-dimensional): Riser
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loamy marine deposits

Typical profile

Ap - 0 to 9 inches: fine sandy loam
Bt - 9 to 24 inches: loam
Btx - 24 to 59 inches: loam
BC - 59 to 72 inches: sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 16 to 32 inches to fragipan
Drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 16 to 30 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Ecological site: F133BY005TX - Loamy Upland
Hydric soil rating: No

Minor Components

Amy

Percent of map unit: 5 percent
Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Linear
Ecological site: F133BY017TX - Loamy Bottomland
Hydric soil rating: Yes

27—Smithdale loamy sand, 8 to 12 percent slopes

Map Unit Setting

National map unit symbol: m06n
Elevation: 70 to 620 feet

Mean annual precipitation: 44 to 61 inches
Mean annual air temperature: 49 to 74 degrees F
Frost-free period: 185 to 230 days
Farmland classification: Not prime farmland

Map Unit Composition
Smithdale and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Smithdale

Setting
Landform: Interfluves
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loamy marine deposits

Typical profile
A - 0 to 6 inches: loamy sand
BA - 6 to 15 inches: fine sandy loam
Bt1 - 15 to 26 inches: sandy clay loam
Bt2 - 26 to 102 inches: fine sandy loam
BC - 102 to 123 inches: loamy fine sand

Properties and qualities
Slope: 8 to 12 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4e
Hydrologic Soil Group: B
Ecological site: F133BY005TX - Loamy Upland
Hydric soil rating: No

29—Tiak silt loam, 3 to 8 percent slopes

Map Unit Setting
National map unit symbol: m06q
Elevation: 70 to 570 feet
Mean annual precipitation: 44 to 61 inches
Mean annual air temperature: 49 to 74 degrees F
Frost-free period: 185 to 230 days
Farmland classification: Not prime farmland

Map Unit Composition

Tiak and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tiak

Setting

Landform: Interfluves
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loamy and clayey marine deposits

Typical profile

A - 0 to 7 inches: silt loam
E - 7 to 9 inches: loam
Bt1 - 9 to 32 inches: clay
Bt2 - 32 to 72 inches: clay

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 12 to 24 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C/D
Ecological site: F133BY002TX - Seasonally Wet Upland
Hydric soil rating: No

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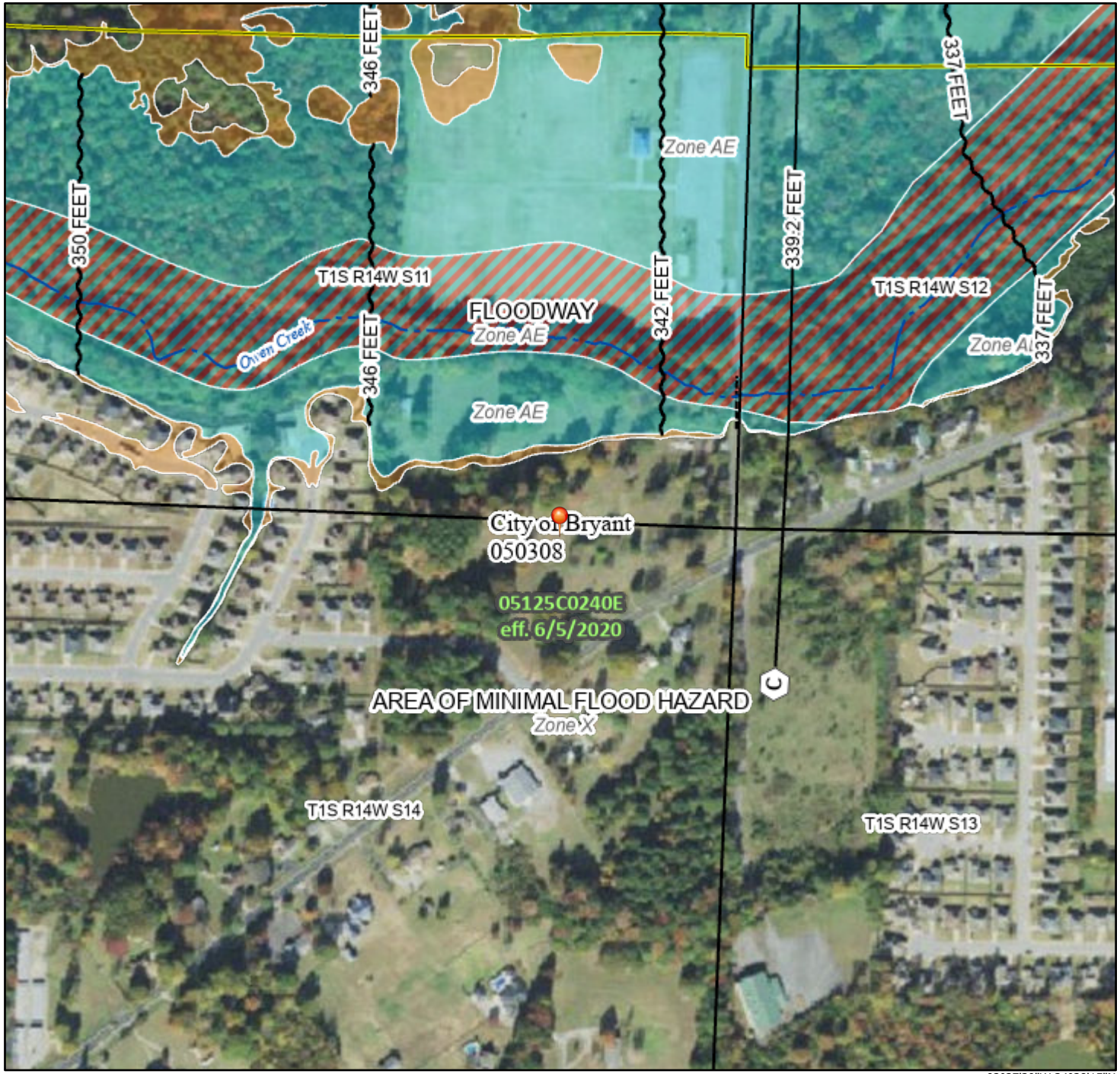
FEMA FLOOD INSURANCE RATE MAP

National Flood Hazard Layer FIRMette

FEMA

92°28'7"W 34°38'45"N



92°27'30"W 34°38'15"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

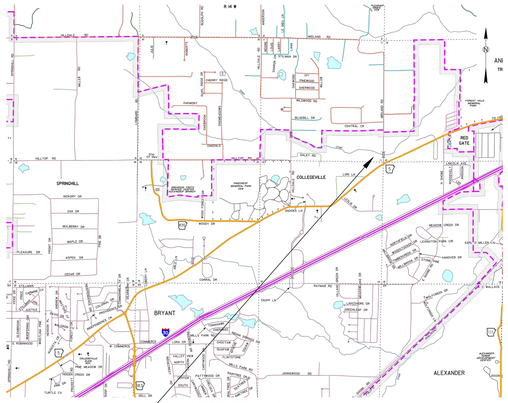
N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/9/2024 at 5:29 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



LEGEND OF SYMBOLS & ABBREVIATIONS

Ⓖ	GAS METER
Ⓦ	WATER METER
	GUY WIRE
	POWER/UTILITY POLE
🅃	TELEPHONE PEDESTAL
Ⓢ	SEWER MANHOLE
⋈	WATER VALVE
	FIRE HYDRANT
	SIGNS
☼	LIGHT POLE
Ⓣ	TELEPHONE MANHOLE
⋈ GV	GAS VALVE
— — SS — — —	SANITARY SEWER LINE
— — W — — —	WATER LINE
▬ ▬ ▬ ▬	STORM SEWER PIPE
——— – ———	ROADWAY CENTERLINE
—— —— ——	UTILITY EASEMENT
——— ———	BUILDING SETBACK LINE
— — R/W — — —	ROADWAY RIGHT-OF-WAY
— · — OHE — · —	OVERHEAD ELECTRIC LINES
— — — UGT — — —	UNDERGROUND TELEPHONE
—— — — G — — ——	UNDERGROUND GAS
— · — F.O. — · —	UNDERGROUND FIBER OPTIC
—— X —— X ——	FENCE
—□——□——□—	STEEL GUARD RAIL
- - - - [100] - - - - - -	SURFACE CONTOUR LINE & ELEVATION

Ⓓ	STORM DRAIN MANHOLE
C/O	SEWER CLEANOUT
N	NORTH
S	SOUTH
E	EAST
W	WEST
(M)	AS MEASURED
(D)	PER DEED
(R)	RECORDED
R/W	RIGHT-OF-WAY
L.A.	LANDSCAPED AREA
CR4	CAPPED 1/2" REBAR
CONC.	CONCRETE
P.O.C.	POINT OF COMMENCEMENT
P.O.B.	POINT OF BEGINNING
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
ESMT	EASEMENT
HDPE	HIGH DENSITY POLYETHYLENE
SUBD	SUBDIVISION
FDC	FIRE DEPARTMENT CONNECTION
CPS	COTTON PICKER SPINDLE
P5	5/8" PIPE
R5	5/8" REBAR
R4	1/2" REBAR
PK	SURVEY NAIL
PB	TELEPHONE PULL BOX

▨	ASPHALT
▨	CONCRETE
●	SET 1/2" REBAR w/ CAP #1853
⬟	SET COTTON-PICKER SPINDLE
○	FOUND MONUMENT (DESC. NOTED)
△	COMPUTED CORNER (NOT SET)

0 15' 30' 60'

SCALE: 1" = 30'

VICINITY MAP
(NTS)

BRYANT, AR

PLAT NOTES

S1. BASIS OF BEARING FOR THIS SURVEY IS BASED ON ARKANSAS STATE PLANE GRID SOUTH COORDINATES (NAD83 DATUM). MEASURED DISTANCES ARE GROUND DISTANCES.

S2. SURVEY & DOCUMENT REFERENCES:
- a. WARRANTY DEED TO DANA-PAGA IN DEED BOOK 344, PAGE 456.
- b. DEED TO CENTRAL ARKANSAS DEVELOPERS, LLC. INSTRUMENT NO. 2006-058158.
- c. DEED TO CITY OF BRYANT. INSTRUMENT NO. 2006-058193.
- d. RIGHT OF WAY DEDICATION TO CITY OF BRYANT. INSTRUMENT NO. 2006-058190.
- e. RIGHT OF WAY PERMIT TO THE CITY OF BRYANT. INSTRUMENT NO. 2006-058188.
- f. PLAT OF KING'S CROSSING PHASE 1.

S3. ZONING CLASSIFICATION: C2
SOURCE OF WATER: CITY OF BRYANT
SOURCE OF SEWER: CITY OF BRYANT

S4. EACH LOT SHALL HAVE SITE PLAN APPROVAL FROM THE CITY OF BRYANT PRIOR TO ANY CONSTRUCTION.

S5. SETBACKS
FRONT - 20' (UNLESS NOTED)
SIDE - 15' (UNLESS NOTED)
REAR - 15' (UNLESS NOTED)

CURRENT OWNERSHIP INFORMATION

OWNER:
EAST NORTH REAL ESTATE XI LLC
1500 CHRISTY LN
ALEXANDER AR 72002
PARCEL #840-11659-001

SOURCE:
SALINE COUNTY ASSESSOR

ZANE ROBBINS NO. 1853
Zane Robbins
07/23/2025

ROBBINS PROFESSIONAL LAND SERVICES #4151

UTILITY NOTES

U1. UTILITIES SHOWN ON THIS SURVEY ARE NOTED BY VISIBLE OBSERVATION COMBINED WITH INFORMATION OBTAINED FROM AVAILABLE SURVEYS AND UTILITY MAPS. LOCATION OF UNDERGROUND UTILITIES SHOWN ON THIS SURVEY MUST BE CONSIDERED TO BE APPROXIMATE AS NO EXCAVATION HAS TAKEN PLACE AS OF THIS DATE TO DETERMINE THEIR EXACT LOCATION. OTHER UTILITIES, TO WHICH THE EXISTENCE AND LOCATION ARE UNKNOWN, MAY BE LOCATED ON OR NEAR THE SUBJECT PROPERTY.

LAND DESCRIPTION AS SURVEYED

PART OF THE SOUTHEAST QUARTER OF SOUTHEAST QUARTER, SECTION 11, AND A PART OF THE NORTHEAST QUARTER OF NORTHEAST QUARTER, SECTION 14, TOWNSHIP 1 SOUTH, RANGE 14 WEST, SALINE COUNTY, ARKANSAS, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS: COMMENCING AT THE SOUTHEAST CORNER OF SAID SE 1/4 SE 1/4 SECTION 11; THENCE NORTH O1 DEG. 59 MIN. 29 SEC. EAST 180.26 FEET; THENCE NORTH 88 DEG. 00 MIN. 31 SEC. WEST 40.00 FEET TO THE POINT OF BEGINNING; THENCE NORTH 87 DEG. 14 MIN. 28 SEC. WEST 150.15 FEET; THENCE SOUTH 01 DEG. 26 MIN. 32 SEC. WEST 22.51 FEET; THENCE SOUTH 58 DEG. 01 MIN. 16 SEC. WEST 141.05 FEET TO A CURVE TO THE LEFT; THENCE ALONG SAID CURVE WITH A RADIUS OF 112.50 FEET, LENGTH OF 66.91 FEET AND A CHORD BEARING OF SOUTH 40 DEG. 58 MIN. 57 SEC. WEST AND DISTANCE OF 65.93 FEET; THENCE SOUTH 23 DEG. 56 MIN. 39 SEC. WEST 106.67 FEET TO A CURVE TO THE RIGHT; THENCE ALONG SAID CURVE WITH A RADIUS OF 32.50 FEET, LENGTH OF 17.96 FEET, AND A CHORD BEARING OF SOUTH 49 DEG. 00 MIN. 53 SEC. EAST AND DISTANCE OF 17.73 FEET; THENCE SOUTH 33 DEG. 11 MIN. 25 SEC. EAST 184.98 FEET TO THE NORTH RIGHT OF WAY OF ARKANSAS STATE HIGHWAY #5; THENCE ALONG SAID RIGHT OF WAY THE FOLLOWING 3 COURSES; THENCE NORTH 58 DEG. 16 MIN. 55 SEC. EAST 78.00 FEET; THENCE NORTH 59 DEG. 53 MIN. 21 SEC. EAST 102.60 FEET; THENCE NORTH 61 DEG. 53 MIN. 21 SEC. EAST 87.95 FEET; THENCE LEAVING SAID RIGHT OF WAY NORTH 01 DEG. 59 MIN. 29 SEC. EAST 269.90 FEET TO THE POINT OF BEGINNING CONTAINING 2.22 ACRES (96,736.68 S.F.) MORE OR LESS.

CERTIFICATE OF
REPLAT APPROVAL

ALL REQUIREMENTS OF THE BRYANT SUBDIVISION RULES AND REGULATIONS RELATIVE TO THE PREPARATION AND SUBMITTAL TO A REPLAT HAVE BEEN FULFILLED, APPROVAL OF THIS REPLAT IS HEREBY GRANTED, SUBJECT TO FURTHER PROVISIONS OF SAID RULES AND REGULATIONS.

SIGNED,

____
DATE OF EXECUTION

____
BRYANT PLANNING COMMISSION

FLOOD STATEMENT

BY GRAPHIC PLOTTING ALONE, ACCORDING TO FEMA FIRM #05125C0240E, DATED JUNE 5, 2020, PORTIONS OF THIS PROPERTY LIES IN ZONE "X", AREAS DETERMINED TO BE IN THE 0.2% ANNUAL CHANCE FLOOD HAZARD AND ZONE "AE" AREAS IN THE SPECIAL FLOOD HAZARD.

CERTIFICATE OF SURVEY ACCURACY

I, ZANE ROBBINS, HEREBY CERTIFY THAT THIS PLAT CORRECTLY REPRESENTS A BOUNDARY SURVEY MADE OR VERIFIED BY ME, THAT ALL SURVEYING REQUIREMENTS OF THE STATE OF ARKANSAS AND CITY OF BRYANT SUBDIVISION RULES AND REGULATIONS HAVE BEEN COMPLIED WITH AND FILED FOR RECORD AS REQUIRED.

____
DATE OF EXECUTION

Zane Robbins
REGISTERED PROFESSIONAL LAND SURVEYOR
NO. 1853 ARKANSAS

CERTIFICATE OF OWNER

WE, THE UNDERSIGNED, OWNERS OF THE REAL ESTATE SHOWN AND DESCRIBED HEREIN, DO HEREBY CERTIFY THAT WE HAVE LAID OFF, PLATTED AND SUBDIVIDED, AND DO HEREBY LAY OFF, PLAT AND SUBDIVIDE SAID REAL ESTATE IN ACCORDANCE WITH THIS PLAT.

DATE OF EXECUTION ________ SIGNED ____________________

NAME DOUG HENDRIX
ADDRESS 1500 Christy Lane
Alexander, AR 72002

SOURCE OF TITLE: INSTRUMENT No. 2024-005384

DATE	REVISIONS

PROPERTY ADDRESS:
AR. STATE HWY NO. 5
BRYANT, AR. 72022

LOT 1A & 1B, A REPLAT OF LOTS 2, 3 AND 4 OF BLESSINGS ADDITION
CITY OF BRYANT
SALINE COUNTY, ARKANSAS

REPLAT

ROBBINS PROFESSIONAL LAND SERVICES
INCORPORATED
SURVEYING | GIS | CONSTRUCTION STAKING
P.O. BOX 939 | BRYANT, ARKANSAS 72089
OFFICE: 501.425.6380 | EMAIL: ZANEROBBINS3@GMAIL.COM

DRAWN BY	ZR
CHECKED BY	ZR
DATE	7-23-25
SCALE	1"=30'
PROJECT No.	2024105
SHEET	--
PAGE	1 of 1

Article 2. Anticipated revenues shall be established at $16,888.89 in fund 3506-7010 State Grants.
Article 3. It is deemed necessary for the smooth operation of Saline County Government that this ordinance be approved.
DATE: JULY 21, 2025. APPROVED: MATT BRUMLEY, SALINE COUNTY JUDGE
This publication paid for by the Saline County's Judge Financial Mgt. Dept. and cost $98.10.

Legal Notices

EMERGENCY ORDINANCE NO. 2025 – 11
BE IT ORDAINED BY THE QUORUM COURT OF SALINE COUNTY, STATE OF ARKANSAS, AN ORDINANCE TO BE ENTITLED: AN ORDINANCE TO ESTABLISH A SUB-FUND OF COUNTY GENERAL TO BE CALLED THE SUT GENERAL FUND; AND TO DECLARE AN EMERGENCY.
Article 1. Affirmation. It comes before this Court that there is a need to establish a fund on the books of the county as a sub fund of the County General Fund No. 1000 to track the revenues, expenditures and/or appropriated transfers of additional SUT funds as received by the county from the State of Arkansas. This Court recognizes and affirms the need for such a fund to property account for and control all such revenues received and expenditures made in compliance with all applicable laws.
Article 2. Establishment of Fund. There is hereby created on the books of the Saline County Treasurer and the books of the Saline County Clerk or Comptroller a fund to be known as the SUT General Fund with a fund number of 1801 as assigned by Arkansas Legislative Audit. The revenue code for revenues received in such fund will be assigned in accordance with the County Financial Management System Manual revised by Legislative Audit in October 2022.
Article 3. Operation of Fund. The SUT General Fund is subject to all the normal county budgeting, appropriation and expenditure regulations of Arkansas Code Annotated, Title 14 and the County Financial Management System. As a sub fund of the County General Fund any balance in the fund is considered accruable to County General and is part of the general fund balance in aggregate as defined in A.C.A. 14-15-805(3). Any revenue received is unrestricted county revenue and may be expended for any legal county expense.
Article 4. Emergency Clause. It is found by this Court that the revenue related to such fund makes it necessary to establish the SUT General Fund, a sub fund of County General in order to be able to properly track the revenue, appropriated expenditures and/or appropriated transfers. Therefore, an emergency is declared to exist and this ordinance shall be in full force and effect from the date of passage and approval.
Dated: JULY 21, 2025 APPROVED: MATT BRUMLEY, SALINE COUNTY JUDGE
This publication paid for by the Saline County Judge's Financial Mgt. Dept. and cost $148.20.

Business Op-

Legal Notices

NOTICE OF PUBLIC HEARING
A public hearing will be held by City of Bryant, AR Planning Commission on Monday, Sept. 8, 2025 at 6:00 P.M. at the Bryant City Office Complex, 210 Southwest 33rd Street, for the purpose of public comment on the application for David Harris to obtain a Conditional Use for the purpose of adding a side shed to existing building with a zone at the site of 20 Tanglewood Dr. A legal description of this property can be obtained by contacting the Bryant Planning and Development Department at 501-943-0488.

Legal Notices

LEGAL NOTICE?
REQUEST FOR QUALIFICATIONS (RFQ)?
Saline County- Airport Engineer
Saline County is requesting Statements of Qualifications from qualified firms to provide professional engineering services for The Saline County Regional Municipal Airport, located in Saline County, AR.
Interested parties may obtain the full RFQ documents and instructions by visiting www.salinecounty.org.
Submittals must be received no later than Au-

NO. 63PR-25-359-IV IN THE CIRCUIT COURT OF SALINE COUNTY ARKANSAS, PROBATE DIVISION.

IN THE MATTER OF THE ESTATE OF ROBERT EARL BALLENTINE, DECEASED.
Last known address of decedent: 708 Sheffield Drive, Bryant, AR 72022. Date of Death: June 3, 2025.

A Petition for Appointment of Administrator was admitted to probate on July 9, 2025, and the undersigned, Terry Yazz, has been appointed Administrator thereunder. A contest of the probate of the estate can be effected only by filing a petition within the time provided by law.

All persons having claims against the estate must exhibit them, duly verified, to the undersigned within six (6) months from the date of the first publication of this notice, or they shall be forever barred and precluded from any benefit in the estate.

This notice first published the 22nd day of July 2025.

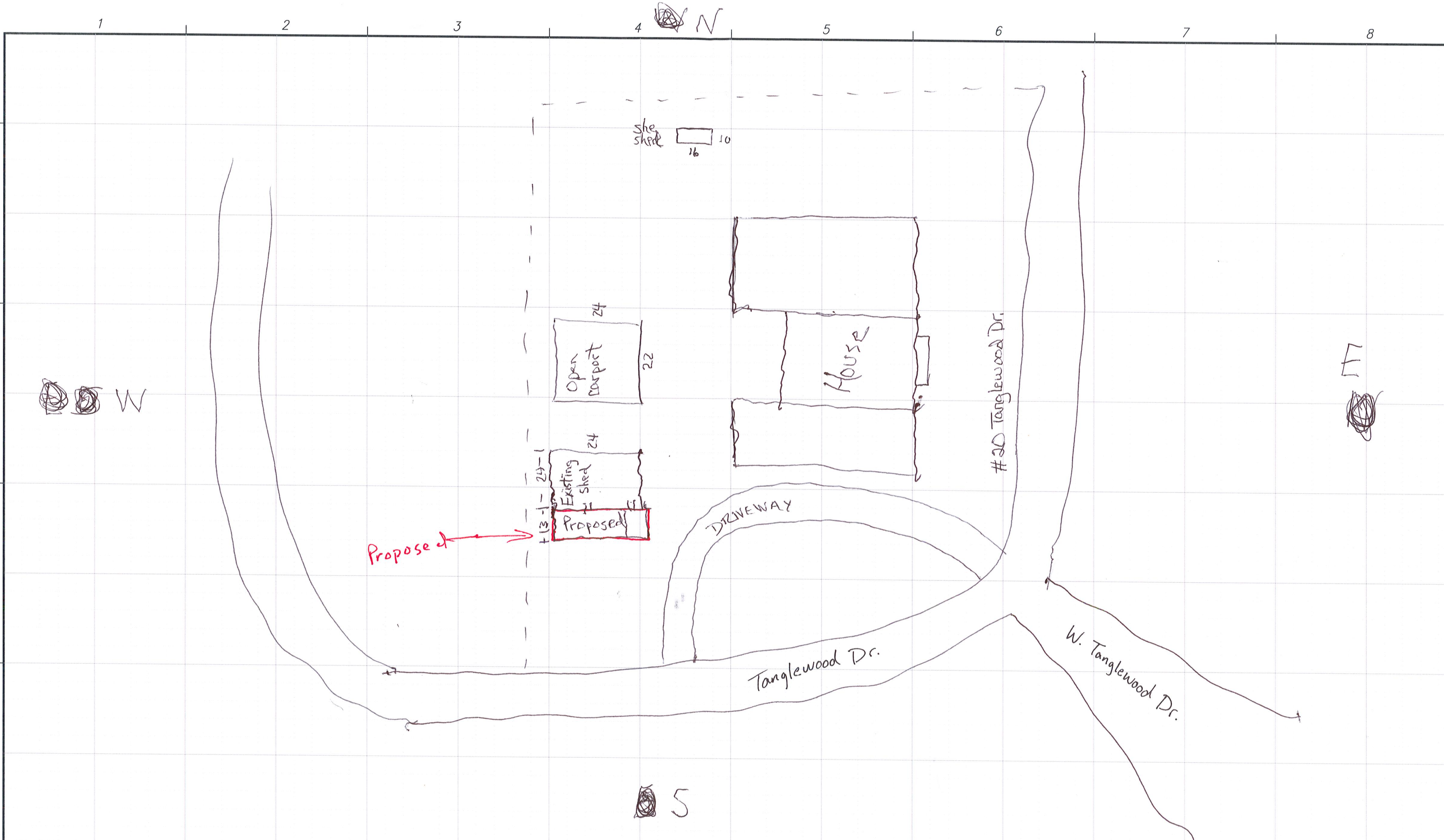
Terry Yazza, Administrator

Colin C. Heaton
Heaton & Harris LLP
Attorneys at Law
P.O. Box 111
Hot Springs, AR 71902-0111

Legal Notices

EMERGENCY ORDINANCE NO. 2025 – 10
BE IT ORDAINED BY THE QUORUM COURT OF SALINE COUNTY, STATE OF ARKANSAS, AN ORDINANCE TO BE ENTITLED: AN ORDINANCE TO ESTABLISH A SPECIAL REVENUE FUND TO BE CALLED THE PASSPORT ACCEPTANCE FACILITY FUND; AND TO DECLARE AN EMERGENCY.
Article 1. Affirmation. It comes before this Court that there is a need to establish a special revenue fund on the books of the county to track the revenues, expenditures and/or appropriated transfers of passport fees collected by a County office that has been authorized as a passport acceptance facility. This Court recognizes and affirms the need for such a fund to properly account for and control all such revenues received and expenditures made in compliance with all applicable laws and guidance by from the State of Arkansas.
Article 2. Establishment of Fund. There is hereby created on the books of the Saline County Treasurer and the books of the Saline County Comptroller and Financial Management Department a special revenue fund to be known as the Passport Acceptance Facility Fund with a fund number of 3049 as assigned by the Saline County Quorum Court. The revenue code for the collections from passport fees received will continue to be "Passport Application Fees – Revenue Code 7617."
Article 3. Operation of Fund. The Passport Acceptance Facility Fund is

Business & Service Directory



APPROVED BY:

TITLE	SIGNATURE	DATE
TITLE	SIGNATURE	DATE
TITLE	SIGNATURE	DATE

DESIGNED BY:

DRAWN BY:

CHECKED BY:

REV	DESCRIPTION	BY	DATE

NORTH:

INDICATE NORTH ABOVE

SCALE:

0'

GRAPHIC SCALE

INDICATE SCALE OF GRID ABOVE IN 1' PER FEET EXAMPLE 1" = 50'

NAME: David Harris

ADDRESS: 20 Tanglewood Dr.

STREET:

PHONE:

BRYANT, ARKANSAS 72022

CITY OF BRYANT ARKANSAS Est. 1892

STRUCTURE TYPE:

SQUARE FT:

LOT SIZE:

SUBMITTAL DATE:

WORK ORDER NO.:

SHEET NO.: OF

XXX###XXX.DWG

City of Bryant, Arkansas
Planning and Development
210 SW 3rd Street Bryant, AR 72022
501-943-0943

Conditional Use Permit Application

Applicants are advised to read the Conditional Use Permit section of Bryant Zoning Code prior to completing and signing this form. The Zoning Code is available at www.cityofbryant.com under the Planning and Community Development tab.

Date: 7-28-25

Applicant or Designee:

Name David Harris
Address 20 Tanglewood Dr

Phone 501-860-8907
Email: drdavidharris@hotmail.com

Project Location:

Property Address 20 Tanglewood Dr

Parcel Number 840-09528-000
Zoning Classification R-F

Property Owner (If different from Applicant):

Name
Phone
Address
Email Address

Additional Information:

Subdivision Lot and Block Number or Legal Description (Attach Legal Description to Application)
Lot 20 - Tanglewood Acres. Lot is .88ac in size

Current Use of Property Primary Residence

Description of Conditional Use Request / Proposed Use of Property (Attach any necessary drawings or images)
side shed to existing building → 13'x24'

Application Checklist

Requirements for Submission

- ☐ Letter stating request of Conditional Use and reasoning for request
- ☐ Completed Conditional Use Permit Application
- ☐ Submit Conditional Use Permit Application Fee ($125)
- ☐ Submit Copy of completed Public Notice [Attachment 1]
- ☐ Submit one (1) copy of the Development Plan (Site Plan) showing:
  - Location, size, and use of buildings/signs/land or improvements
  - Location, size, and arrangement of driveways and parking. Ingress/Egress
  - Existing topography and proposed grading
  - Proposed and existing lighting
  - Proposed landscaping and screening
  - Use of adjacent properties
  - Scale, North Arrow, Vicinity Map
  - Additional information that may be requested by the administrative official due to unique conditions of the site.
- ☐ Public Notice Requirements: **NOTE: Failure to provide notice in the following manners shall require delay of the public hearing until notice has been properly made.**
  - Publication: Public Notice shall be published at least one (1) time **fifteen (15) days prior to the public hearing** at which the variance will be heard. A copy of the public notice is provided on last page of application. [Attachment 1] Once published, the proof of publication must be provided to the Planning and Development office.
  - Posting of Property: The city shall provide a sign to post on the property involved for the **fifteen (15) consecutive days leading up to the public hearing.** One (1) sign is required for every two hundred (200) feet of street frontage.

Once the application is received, the material will be reviewed to make sure all the required information is provided. The applicant will be notified if additional information is required. The application will then go before the Development and Review Committee (DRC) for a recommendation to the Planning Commission. A public hearing will be held at this meeting for comments on the Conditional Use. After the public hearing, the Planning Commission will make a decision on the use.

READ CAREFULLY BEFORE SIGNING

I _____, do hereby certify that all information contained within this application is true and correct. I further certify that the owner of the property authorizes this proposed application. I understand that I must comply with all City Codes and that it is my responsibility to obtain all necessary permits required.

David Harris
20 Tanglewood Dr
Bryant, AR 72022

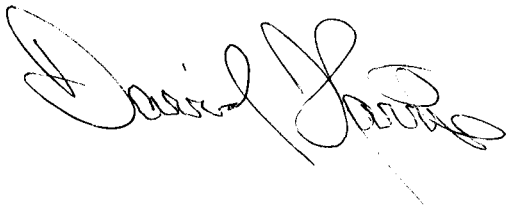
City of Bryant
Planning and Development
210 SW 3rd Street
Bryant, AR 72022

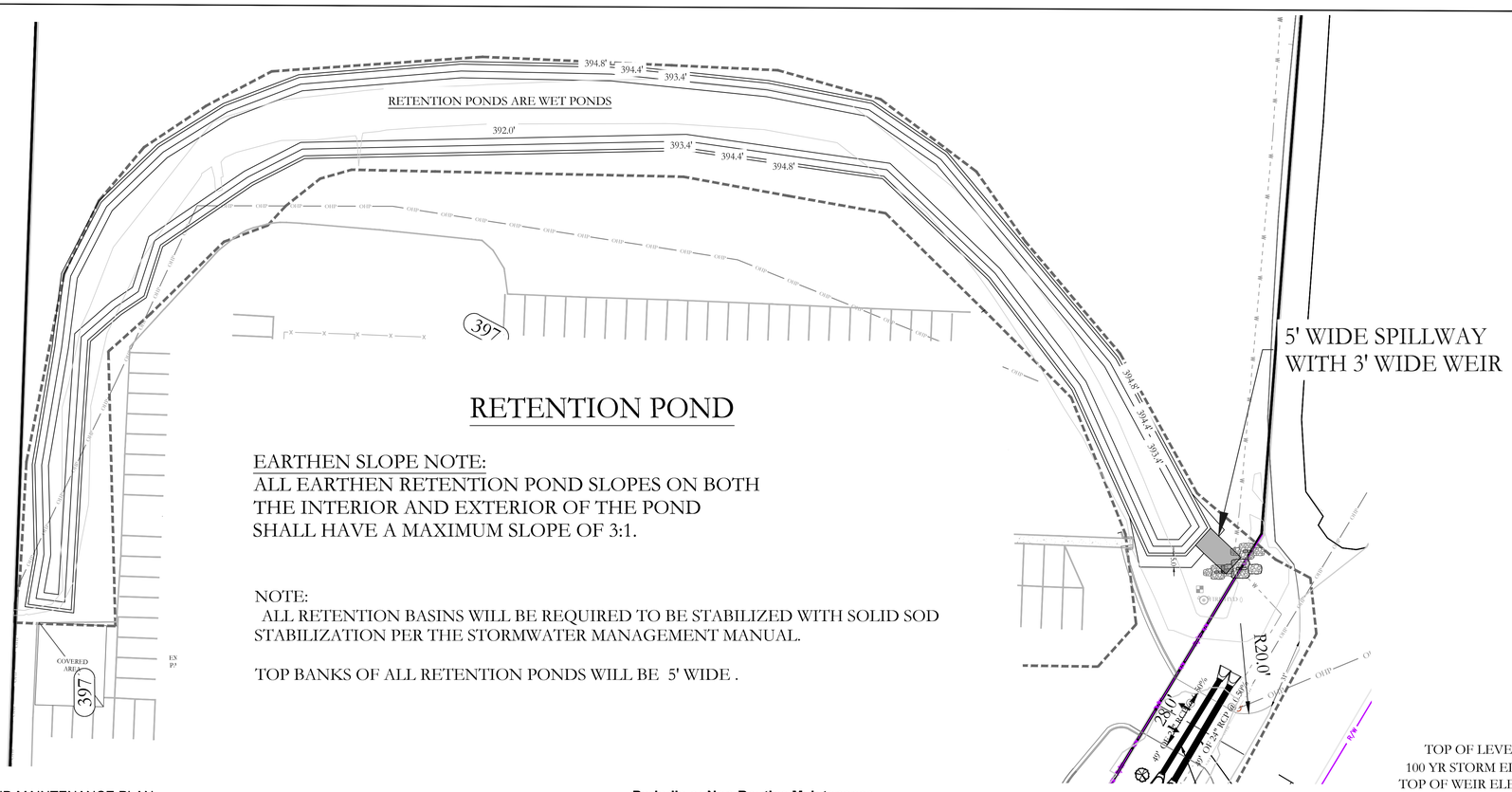
July 30, 2025

Greetings:

The purpose of this request for a conditional use permit is to be allowed to add a side shed to an existing building for storage and personal use.

Thank you for your consideration.





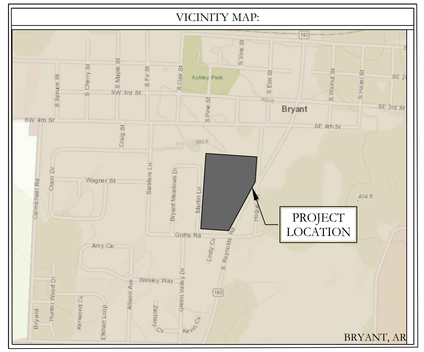
RETENTION POND

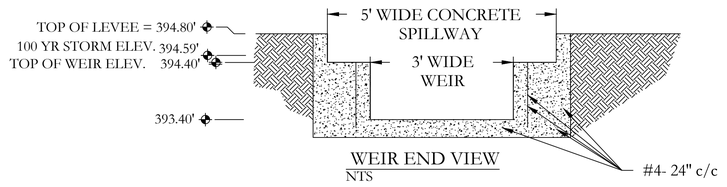
EARTHEN SLOPE NOTE:
ALL EARTHEN RETENTION POND SLOPES ON BOTH THE INTERIOR AND EXTERIOR OF THE POND SHALL HAVE A MAXIMUM SLOPE OF 3:1.

NOTE:
ALL RETENTION BASINS WILL BE REQUIRED TO BE STABILIZED WITH SOLID SOD STABILIZATION PER THE STORMWATER MANAGEMENT MANUAL.

TOP BANKS OF ALL RETENTION PONDS WILL BE 5' WIDE .

VICINITY MAP:





WEIR END VIEW
NTS

DETENTION POND MAINTENANCE PLAN

Background
The Retention pond is located on the north-east of the property.It is designed to temporarily detain storm water to meet water quantity criteria before discharging off the property.

Routine Maintenance:
The property owner will maintain the drainage easements . Routine maintenance will include but not be limited to:
-Mowing of the bank slopes and area around the pond on a monthly basis during the growing season and as needed during the cooler months.

-The outlet pipe from the pond and other areas will be inspected monthly for debris which could inhibit the proper flow of discharge. Any debris will be removed immediately and disposed of or placed in a location to prevent future maintenance and to not cause impact up or downstream of the structure.

-Trash will be removed from around the pond to prevent entering the pond. Generally, the site should be kept free of loose trash which could be carried off site by wind or rain.

-Inspect the pond and outlet pipe for non-routine maintenance need.

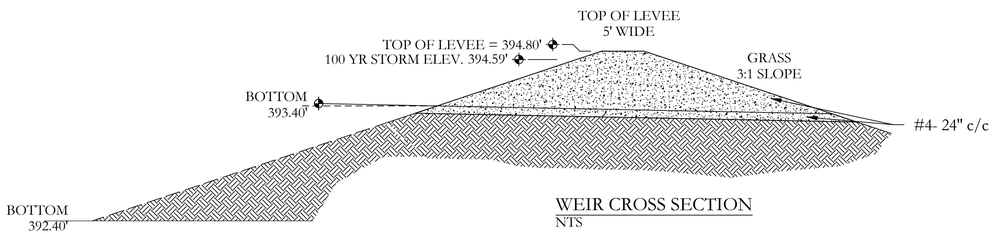
Periodic or Non-Routine Maintenance
The routine inspection of the ponds areas and discharge pipes will identify needed repairs and non-routine maintenance. These items may include but not be limited to:

-Re-growth of trees on or around the pond bank. These should be cut and removed from the pond area.

-Sediment from the site may accumulate in the pond bottom and reduce the pond to below design volume requirements. The pond should be excavated if the pond bottom elevation reached a level that allows excessive aquatic growth or reduces the pond efficiency such, that the sediments are passing the discharge structure and release off site.

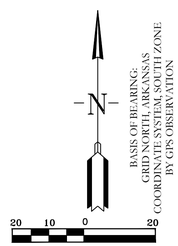
-Stabilization or re-grading of side slopes may be required periodically or after excessive rain events. Any disturbance of slopes should be reseeded or may require installation of erosion control materials until seeding can reestablish adequate grasses to prevent future erosion.

-Any other maintenance or repairs which would minimize other maintenance to the pond or outfall structures.



WEIR CROSS SECTION
NTS

CERTIFICATE OF AUTHORIZATION
HOPE CONSULTING, INC.
No. 1931
ARKANSAS



RETENTION POND

HOPE CONSULTING
ENGINEERS - SURVEYORS
129 N. Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
FIRST SOUTHERN BAPTIST CHURCH OF BRYANT

FSCB EXPANSION & REMODEL PHASE 1
RETENTION POND PLAN AND DETAILS
604 S REYNOLDS ROAD
BRYANT, SALINE COUNTY, ARKANSAS

DATE:	05-16-2025	C.A.D. BY:	DRAWING NUMBER:
REVISED:		CHECKED BY:	24-0260
SHEET:	C-6.0	SCALE:	

500	01S	14W	0	34	310	62	1664

K:\CLAND PROJECTS 2024\COMMERCIAL\2024-24-0260 FSCB EXPANSION AND REMODEL\CIVIL\DWG\24-0260 FSCB EXPANSION & REMODEL_8.5_2025.DWG

First Southern Baptist Church of Bryant

604 S REYNOLDS ROAD, BRYANT, AR 72022

DRAINAGE REPORT

FOR
City of Bryant, Saline County, AR

September 2024

Owner & Developer: Peter Cunningham.

By:

HOPE
CONSULTING
ENGINEERS - SURVEYORS

TABLE OF CONTENTS

ITEM DESCRIPTION

Narrative & Summary

PROJECT TITLE

First Southern Baptist Church of Bryant

PROJECT PROPERTY OWNER

Peter Cunningham

PROJECT LOCATION

604 S Reynolds Road, Bryant, AR

PROJECT DESCRIPTION

The proposed development is on South Reynolds Road, Bryant, AR. Total development site area is 7.58 acres.

DRAINAGE ANALYSIS

On Site Drainage- Rational method was used to determine the existing and proposed flows from proposed site. There will be one retention pond to detain water from this development. Detailed drainage calculations considering the future expected development have been conducted to determine the required detention pond and culvert dimensions. Summary of the calculations are below:

Retention Pond

- Pond is situated on the north-east side of the property.
- Pre-development area 7.36 acres.
- Post-development area 7.34 acres.
- Pre-development runoff cumulative coefficient 0.65.
- Post-development runoff cumulative coefficient 0.72
- Pond has a bottom area of 16,570 sqft with bottom elevation of 393.4'.
- A 5' wide spillway with a 3' wide weir outlet structure.

Peak flows for Pre and post development phase of onsite area have been tabulated below-

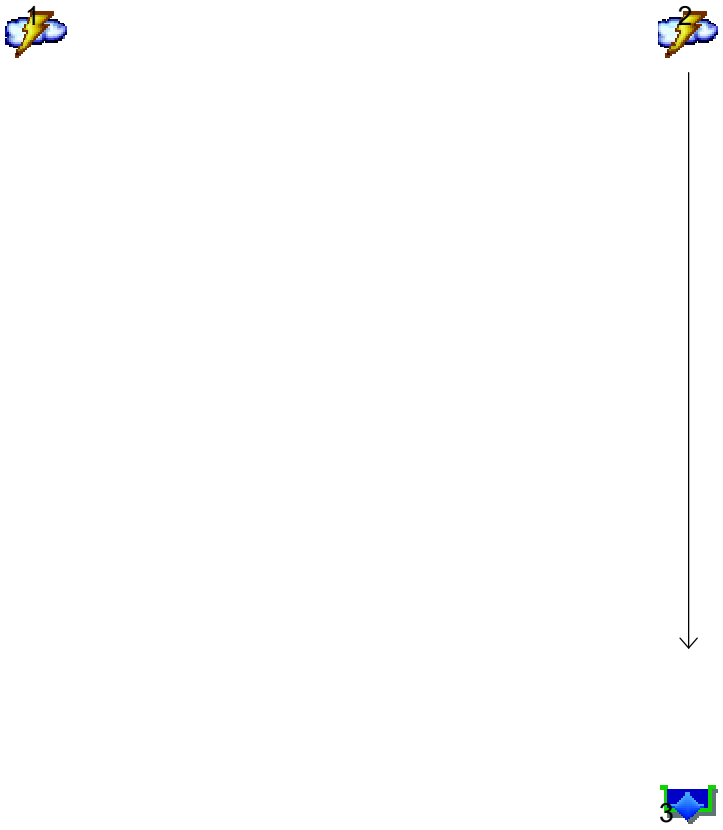
Period of time	Pre-development	Post-dev. Without detention	Post-dev. With detention
	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)
2-Year	18.69	22.67	5.733
5-Year	20.65	25.15	6.587
10-Year	24.35	29.23	8.068
25-Year	27.93	33.44	9.693
50-Year	31.84	38.07	11.94
100-Year	33.86	40.40	13.17

CONCLUSION

From the onsite drainage calculation, it is seen that there is decrease in flow for all storm events due to the proposed retention pond.

Hydrograph Summary Report

Watershed Model Schematic



Legend

Hyd.	Origin	Description
1	Rational	Pre-Dev Flow
2	Rational	Development Generated Flow
3	Reservoir	Post Development Flow

Multi-Hydrograph Plot

Hyd. No. 1

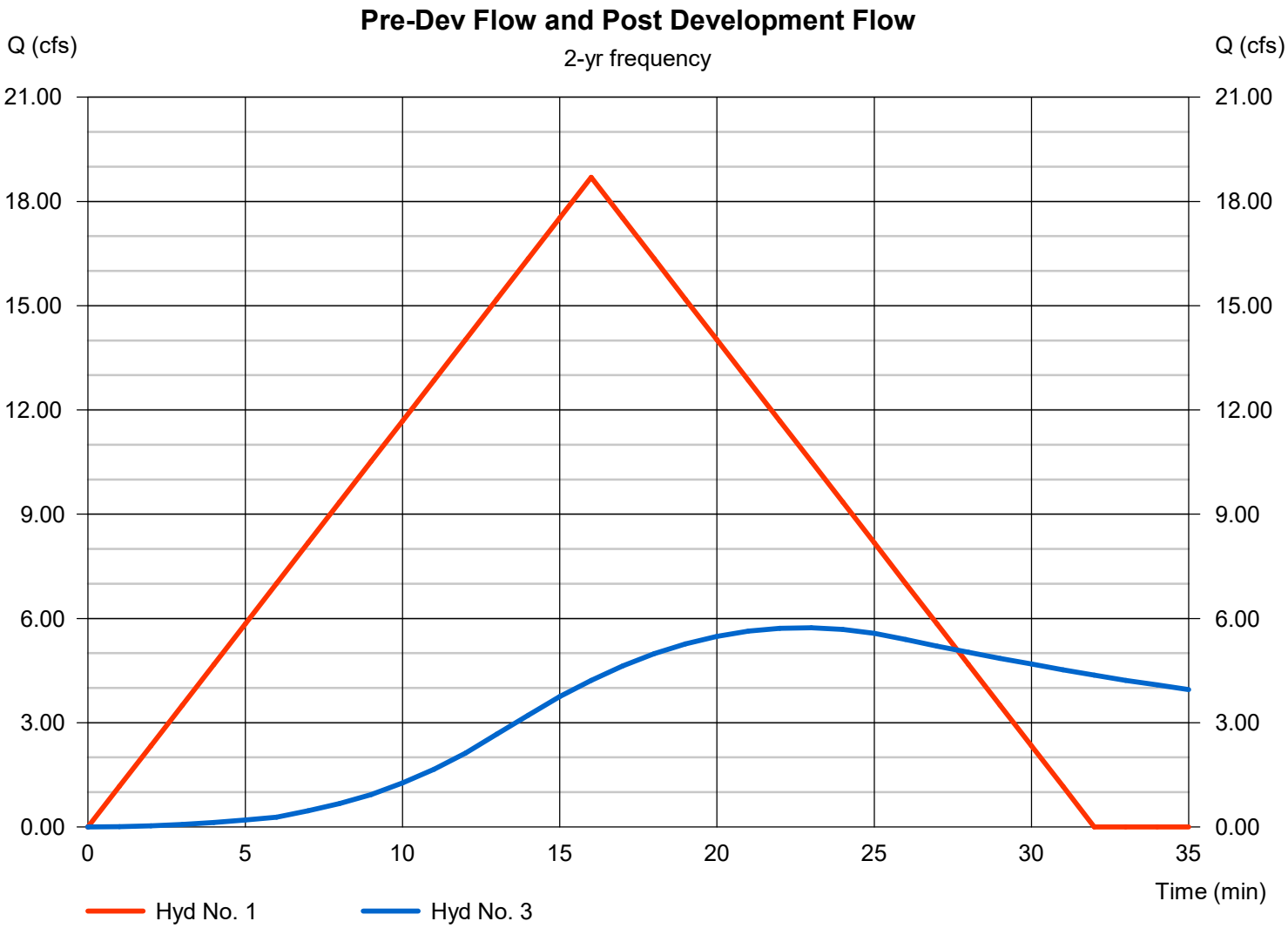
Pre-Dev Flow

Hydrograph type	=	Rational
Peak discharge	=	18.69 cfs
Time to peak	=	16 min
Hyd. Volume	=	17,943 cuft

Hyd. No. 3

Post Development Flow

Hydrograph type	=	Reservoir
Peak discharge	=	5.73 cfs
Time to peak	=	23 min
Hyd. Volume	=	17,672 cuft



Multi-Hydrograph Plot

Hyd. No. 1

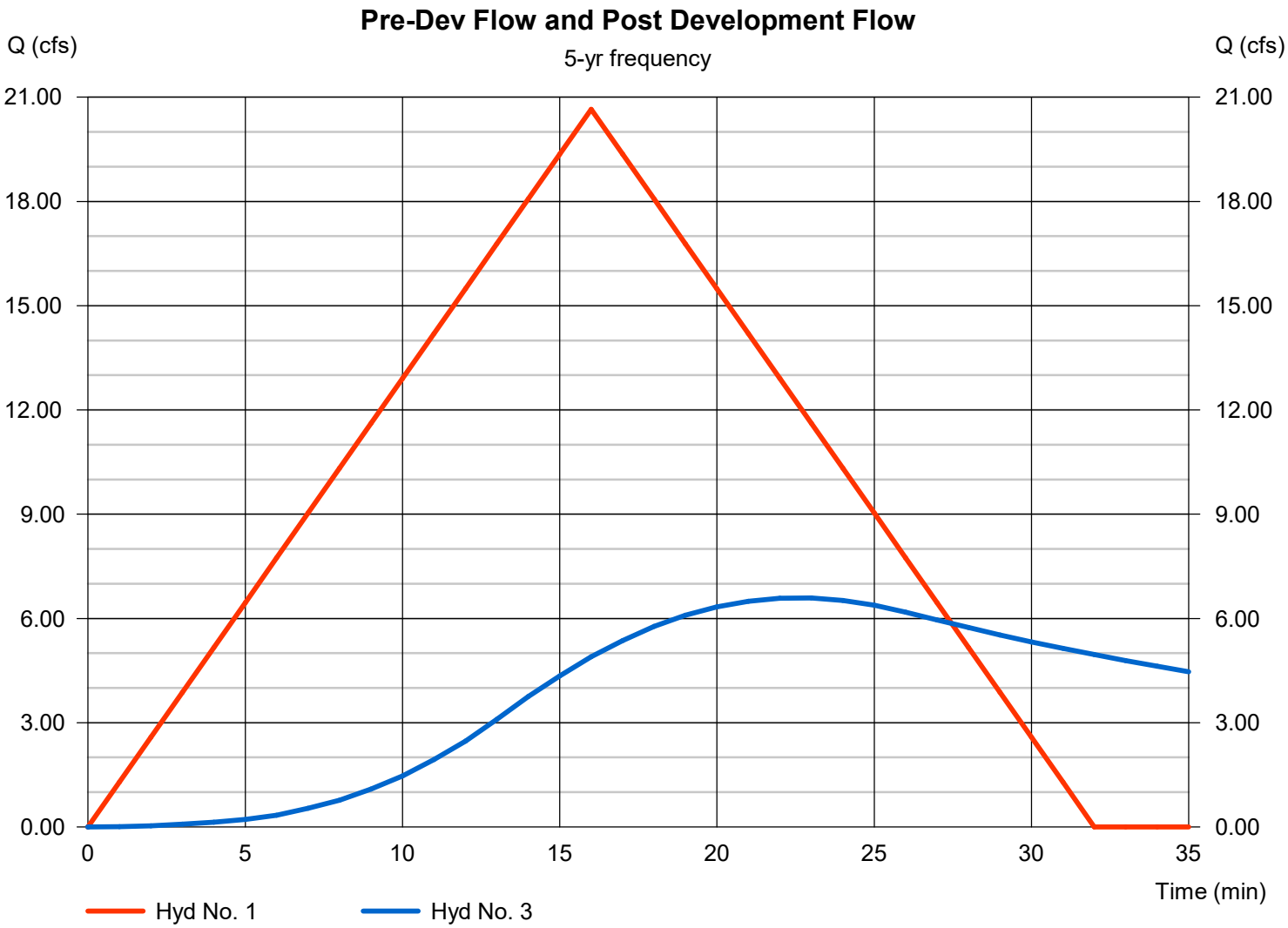
Pre-Dev Flow

Hydrograph type	=	Rational
Peak discharge	=	20.65 cfs
Time to peak	=	16 min
Hyd. Volume	=	19,826 cuft

Hyd. No. 3

Post Development Flow

Hydrograph type	=	Reservoir
Peak discharge	=	6.59 cfs
Time to peak	=	23 min
Hyd. Volume	=	19,608 cuft



Multi-Hydrograph Plot

Hyd. No. 1

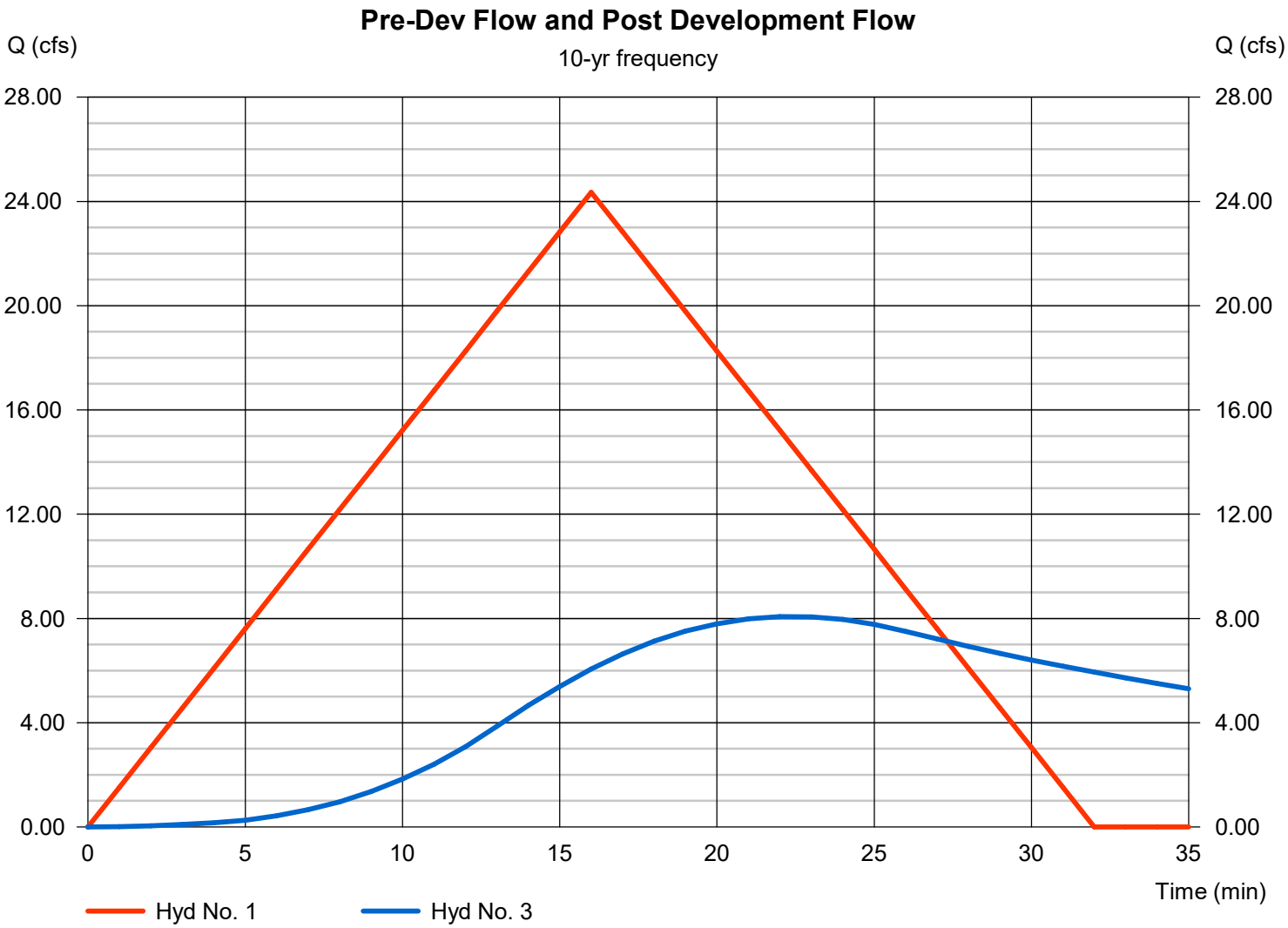
Pre-Dev Flow

Hydrograph type	=	Rational
Peak discharge	=	24.35 cfs
Time to peak	=	16 min
Hyd. Volume	=	23,373 cuft

Hyd. No. 3

Post Development Flow

Hydrograph type	=	Reservoir
Peak discharge	=	8.07 cfs
Time to peak	=	22 min
Hyd. Volume	=	22,791 cuft



Multi-Hydrograph Plot

Hyd. No. 1

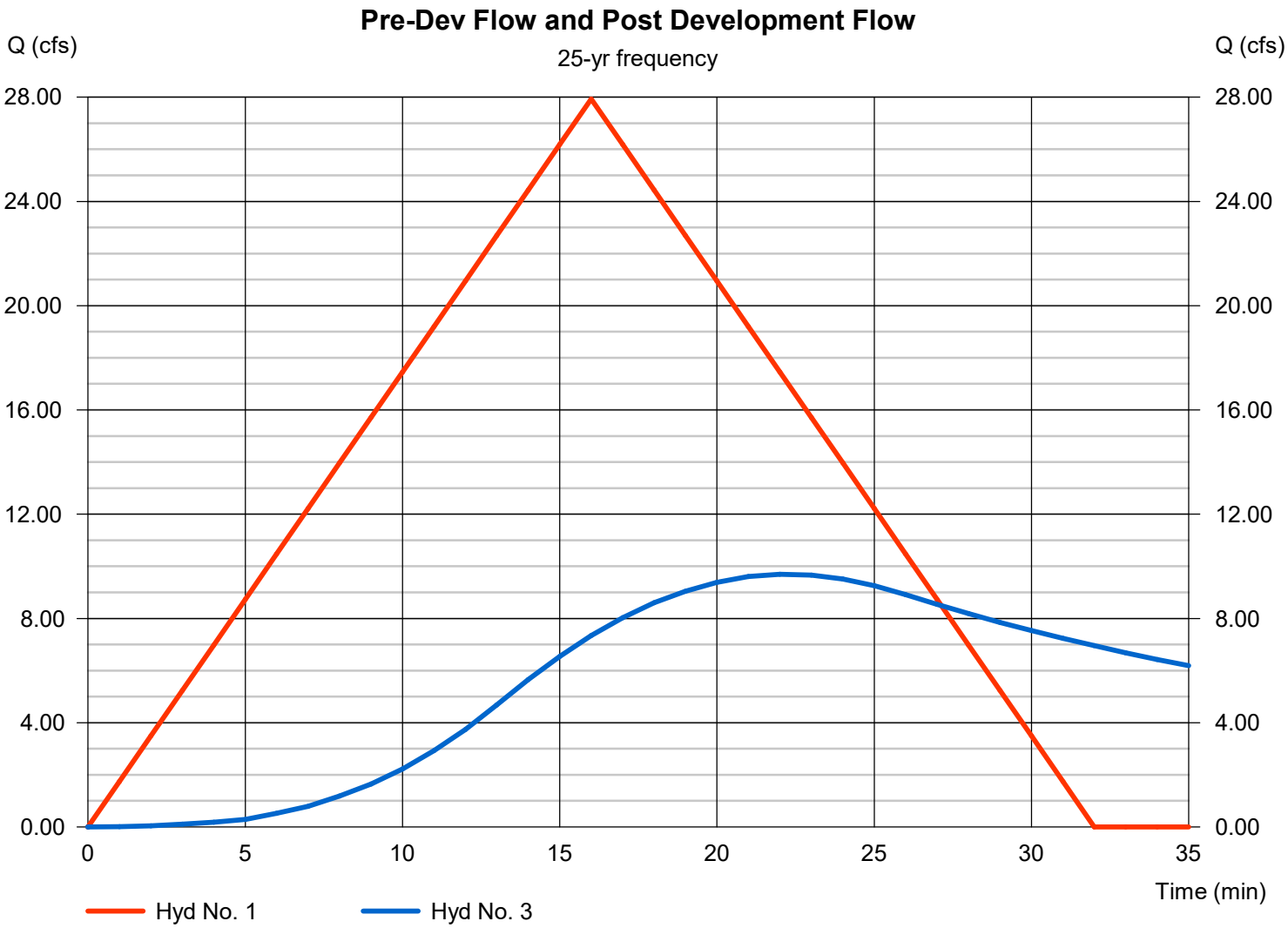
Pre-Dev Flow

Hydrograph type	=	Rational
Peak discharge	=	27.93 cfs
Time to peak	=	16 min
Hyd. Volume	=	26,812 cuft

Hyd. No. 3

Post Development Flow

Hydrograph type	=	Reservoir
Peak discharge	=	9.69 cfs
Time to peak	=	22 min
Hyd. Volume	=	26,080 cuft



Multi-Hydrograph Plot

Hyd. No. 1

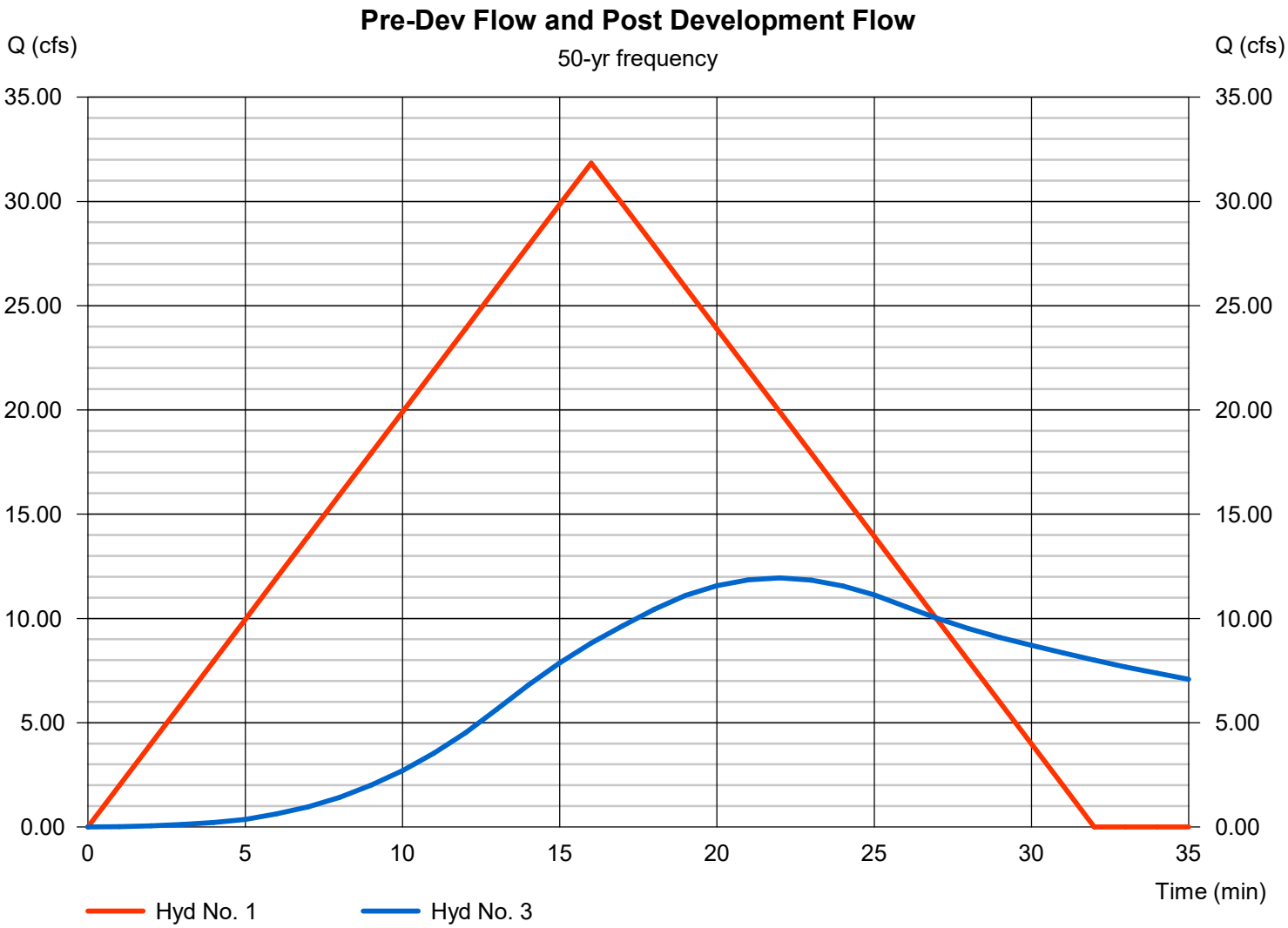
Pre-Dev Flow

Hydrograph type	=	Rational
Peak discharge	=	31.84 cfs
Time to peak	=	16 min
Hyd. Volume	=	30,570 cuft

Hyd. No. 3

Post Development Flow

Hydrograph type	=	Reservoir
Peak discharge	=	11.94 cfs
Time to peak	=	22 min
Hyd. Volume	=	29,692 cuft



Multi-Hydrograph Plot

Hyd. No. 1

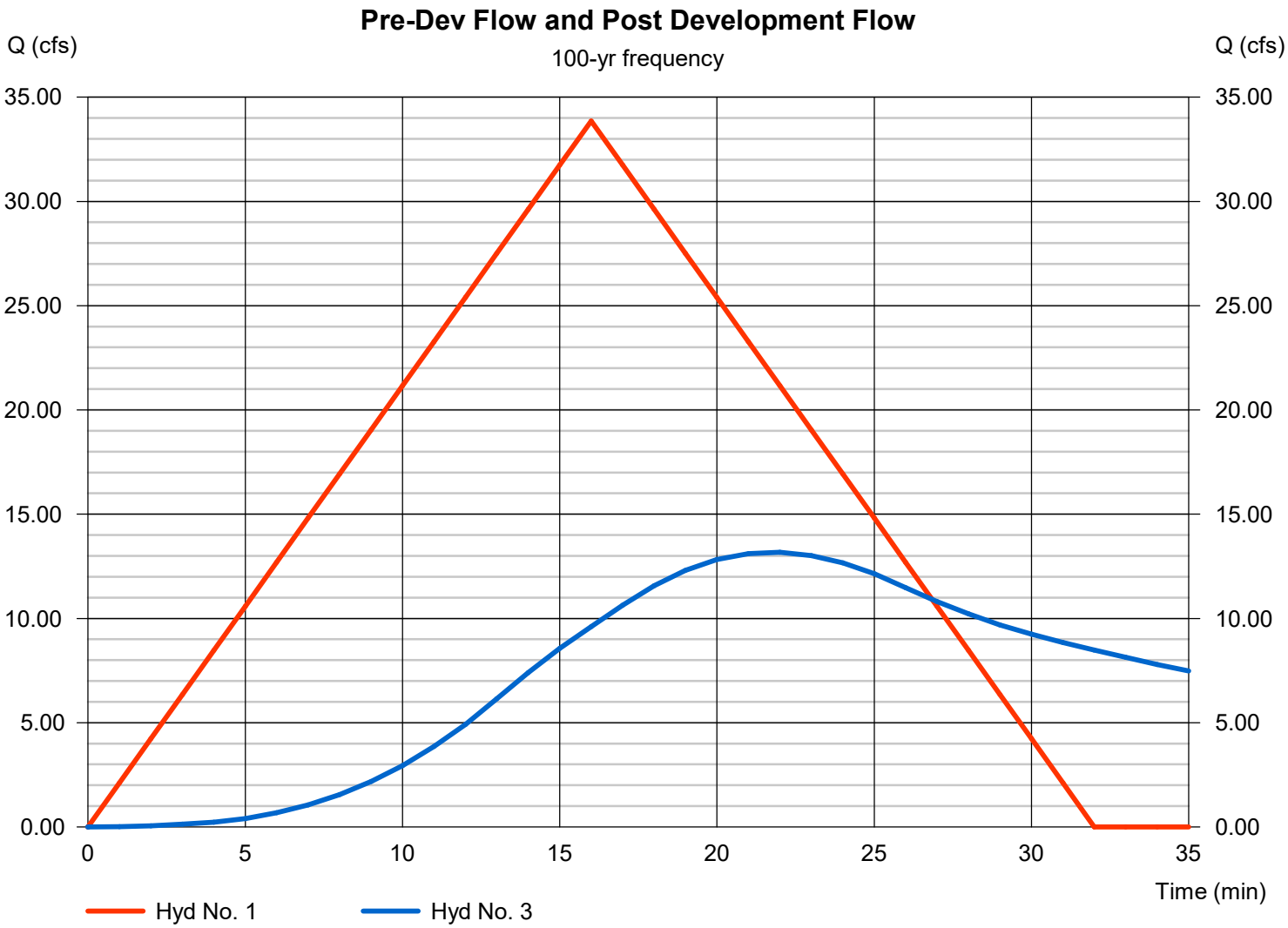
Pre-Dev Flow

Hydrograph type	=	Rational
Peak discharge	=	33.86 cfs
Time to peak	=	16 min
Hyd. Volume	=	32,504 cuft

Hyd. No. 3

Post Development Flow

Hydrograph type	=	Reservoir
Peak discharge	=	13.17 cfs
Time to peak	=	22 min
Hyd. Volume	=	31,502 cuft



Pond Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2026 Thursday, 08 / 7 / 2025

Pond No. 1 - Retention Pond

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 393.40 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	393.40	16,570	0	0
1.00	394.40	21,182	18,827	18,827
1.40	394.80	23,045	8,842	27,669

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	Inactive	Inactive	Inactive	Inactive
Span (in)	= 8.00	8.00	0.00	0.00
No. Barrels	= 1	1	0	0
Invert El. (ft)	= 393.40	393.40	0.00	0.00
Length (ft)	= 25.00	25.00	0.00	0.00
Slope (%)	= 0.52	0.52	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

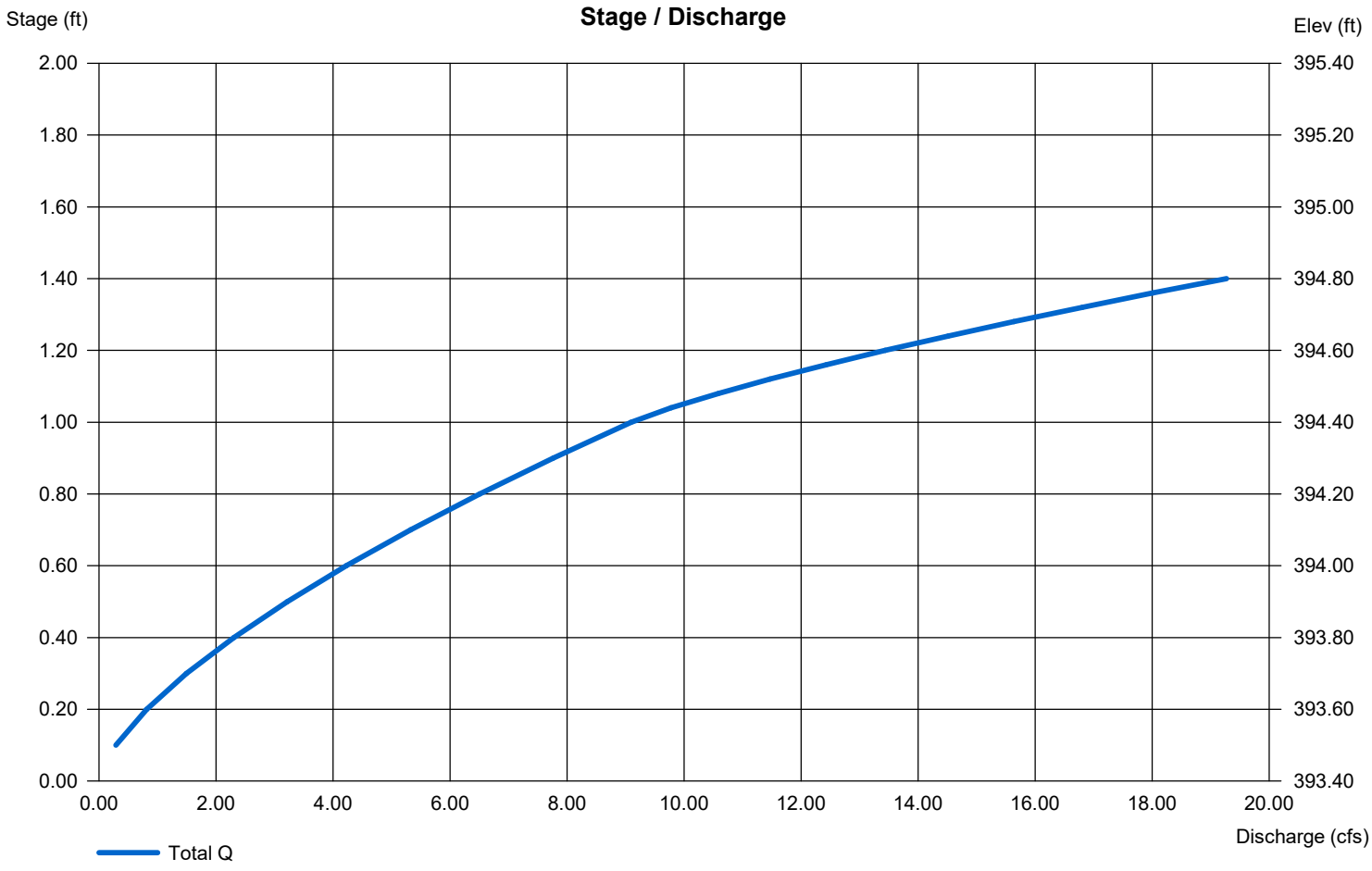
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 3.00	5.00	0.00	0.00
Crest El. (ft)	= 393.40	394.40	0.00	0.00
Weir Coeff.	= 3.03	3.33	3.33	3.33
Weir Type	= Rect	Rect	---	---
Multi-Stage	= No	No	No	No

Exfil.(in/hr) = 0.000 (by Contour)

TW Elev. (ft) = 0.00

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



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2026

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	18.69	1	16	17,943	------	------	------	Pre-Dev Flow
2	Rational	22.67	1	13	17,679	------	------	------	Development Generated Flow
3	Reservoir	5.733	1	23	17,672	2	394.13	13,831	Post Development Flow

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2026

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	20.65	1	16	19,826	------	------	------	Pre-Dev Flow
2	Rational	25.15	1	13	19,614	------	------	------	Development Generated Flow
3	Reservoir	6.587	1	23	19,608	2	394.21	15,185	Post Development Flow

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2026

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	24.35	1	16	23,373	------	------	------	Pre-Dev Flow
2	Rational	29.23	1	13	22,797	------	------	------	Development Generated Flow
3	Reservoir	8.068	1	22	22,791	2	394.32	17,379	Post Development Flow

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2026

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	27.93	1	16	26,812	------	------	------	Pre-Dev Flow
2	Rational	33.44	1	13	26,086	------	------	------	Development Generated Flow
3	Reservoir	9.693	1	22	26,080	2	394.44	19,606	Post Development Flow

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2026

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	31.84	1	16	30,570	------	------	------	Pre-Dev Flow
2	Rational	38.07	1	13	29,698	------	------	------	Development Generated Flow
3	Reservoir	11.94	1	22	29,692	2	394.54	21,917	Post Development Flow

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2026

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	33.86	1	16	32,504	------	------	------	Pre-Dev Flow
2	Rational	40.40	1	13	31,509	------	------	------	Development Generated Flow
3	Reservoir	13.17	1	22	31,502	2	394.59	23,012	Post Development Flow