Vestavia Hills
Planning and Zoning Commission Agenda
May 14, 2026
6:00 PM

1. Roll Call
2. Pledge of Allegiance
3. Approval Of Minutes: April 9, 2026

Final Plats

4. FP-26-4 **Jason Kessler** is requesting **Final Plat Approval** for **Resurvey of Lot 7 of Five Oaks Residential Subdivision**. The purpose of this request is to resurvey existing lot in Five Oaks due to sanitary sewer line. The property is owned CGK Jr. LLC and is zoned Vestavia Hills R-2.
5. FP-26-5 **Jason Kessler** is requesting **Final Plat Approval** for **Wall Street Townhomes.** The purpose of this request is to resurvey existing lot into 6 lots for townhomes. The property is owned Kadco Homes and is zoned Vestavia Hills R-9.
6. FP-26-6 **Shelia Stephenson** is requesting **Final Plat Approval** for **The Bray Residential Phase II**. The purpose of this request is to resurvey existing acreage. The property is owned by Liberty Park Joint Venture and is zoned Vestavia Hills PUD-PB.
7. FP-26-7 **Shelia Stephenson** is requesting **Final Plat Approval** for **The Brayfield Residential Phase III Fourth Sector.** The purpose of this request is to resurvey existing acreage into 25 single-family lots. The property is owned by Liberty Park Joint Venture and is zoned Vestavia Hills PUD-PR-1
8. FP-26-8 **Jeff Lucas** is requesting **Final Plat Approval** for **Norris' Resurvey**. The purpose of this request is to resurvey two existing lots. The properties are owned by Robert Norris & Stephen Norris and is zoned Vestavia Hills R-2.

Consent Agenda

Rezoning

9. CU-26-3 **David Johnson** is requesting **Conditional Use Approval for a Donation Center** for **3253 Cahaba Heights Road.** The Property Is Owned By Conquest Holdings/Vapor and Is Zoned Vestavia Hills B-3

10. CU-26-4 **Tom Dekle** is Requesting **Conditional Use Approval** for **Pet Grooming** Located At **3155 Green Valley Road.** The Property Is Owned By **Jake Datnoff** and Is Zoned Vestavia Hills B-2.

11. RZ-26-7 **Bob Easley** is requesting **Rezoning f**or **3034 Green Valley Road** from **Vestavia Hills R-4 & R-8 to Vestavia Hills R-9,** for the purpose of a 19-lot single-family subdivision.

PUBLIC HEARING PROCEDURES

The following procedures shall be followed for every public hearing of the Commision:

- All comments shall be limited to **3 minutes**. A countdown clock will be provided on the video screens.
- Do not duplicate comments made by previous speakers. For example, if traffic is mentioned as an issue, do not readdress that issue.
- All comments shall be directed to the presiding officer. Do not address the audience or the applicant.
- Each speaker shall identify himself, including full name and address.

SPECIAL NOTICE CONCERNING P&Z COMMISSION MEETINGS

If you prefer not to attend a meeting or work session in person, you may participate remotely:

- **Videoconference:** To participate by videoconference, you may access the meeting via Zoom at https://us02web.zoom.us/j/7970217974. When the Zoom.us window opens in your browser, click "Allow" to be placed in a virtual "waiting room." The host will open the meeting and allow all participants to join the meeting at that time. All participants will be automatically muted upon entrance to the meeting. If you wish to speak during time(s) identified for public input, activate the "video" feature and unmute yourself by toggling the mute button. When the Chairman recognizes you and gives you the floor, state your name and address for the record and then you may address the Commission. Some useful Zoom functions include: microphone Mute/Unmute; Start/Stop Video; and View Participants – opens a pop-out screen that includes the "Raise Hand" icon that you may use to raise a virtual hand.
- **Teleconference:** To participate by telephone, dial 312.626.6799 and enter the meeting ID: 5539517181. All participants will be automatically muted upon entrance to the meeting. If you wish to speak during time(s) identified for public input, unmute yourself by pressing *6 on your keypad. Then state your name and wait for the Chairman to recognize you. When the Chairman recognizes you and gives you the floor, state your name and address for the record and then address the Commission.

Meetings may be recorded. By participating in the meeting, you are consenting to be recorded.

"Zoom-bombing." Zoom-bombing is a cyber-crime and is punishable by law. In the event of an attendee intruding into any City of Vestavia Hills Zoom meeting, the online broadcast will be terminated immediately. Council and/or board members may be readmitted but online attendees will not. Although Zoom-bombing is not a frequent occurrence, those wishing to make public comment should attend the meeting in person.

CITY OF VESTAVIA HILLS

PLANNING AND ZONING COMMISSION

MINUTES

April 9, 2026

6:00 P.M.

The Planning & Zoning Commission of Vestavia Hills met in regular session on this date at 6:00 PM, following publication and posting pursuant to Alabama law. Due to the COVID-19 pandemic, in coordination with a Proclamation from Governor Ivey and pursuant to orders from the Jefferson County Health Department Official requiring social distancing along with limits of attendees, this meeting was held with a portion of the Commission digitally attending the meeting via remote computer locations utilizing a Zoom.com application. Staff and general public/audience members also were invited to attend via Zoom.com following publication pursuant to Alabama law. Chairman Cochran called the meeting to order and the City Planner called the roll with the following:

MEMBERS PRESENT:
Lindsey Cochran, Chair
Jonathan Romeo
Rick Honeycutt
Ryan Blackenburg
Doug Dellaccio
Ryan Farrell
Hastings Sykes

MEMBERS ABSENT:
David Maluff
Rusty Weaver

OTHER OFFICIALS PRESENT:
Jack Wakefield, City Planner
Ethan Fisher, City Engineer

**Appeared via Zoom*

APPROVAL OF MINUTES

Ms. Cochran stated that the minutes of the March meeting are presented for approval.

MOTION Motion to approve minutes was made by Mr. Honeycutt and second was by Mr. Romeo. Voice vote as follows:

Mr. Romeo – yes	Mr. Weaver – yes
Mr. Honeycutt – yes	Mr. Blackenburg – yes
Mr. Farrell - yes	Mr. Dellaccio - yes
Mr. Sykes - yes	Ms. Cochran – yes

Motion Carried.

Consent Agenda

FP-26-2 City of Vestavia Hills is requesting Final Plat Approval for Resurvey Of Lot 1 Vestavia Sports Park Survey. The purpose of this request is to resurvey existing Lot 1 and adjacent acreage into two lots. The properties are owned By City of Vestavia Hills & Liberty Park Joint Venture and is zoned Vestavia Hills B-2 & INST-1.

FP-26-3 Shelia Stephenson is requesting Final Plat Approval for Resurvey of Lots 6 & 7 Brayfield Residential Phase I. The purpose of this request is to resurvey two existing lots and acreage into two new lots. The properties are owned Chad and Rashel Post & Patrick and Jessica Giadrosich and is zoned Vestavia Hills PUD-PR-1.

Both cases were introduced as Final Plats, as a part of the consent agenda. Mr. Wakefield presented both resurveys.

Mr. Wakefield explained FP-26-2 was a resurvey to follow up the previous rezoning for the SHAC car-wash and retail site, along with the adjacent city owned parcel. He also stated FP-26-3 was a resurvey of two lots and acreage in Liberty Park.

Mr. Wakefield explained FP-26-2 was a resurvey to follow up the previous rezoning for the

Ms. Cochran opened the floor for to the public. There being no one from the public to address the Commission concerning the requests, Ms. Cochran closed the public hearing.

MOTION Mr. Sykes made a motion to approve Final Plat Approval. Second was by Mr. Blackenburg. Motion was carried on a roll call; vote as follows:

Mr. Romeo – yes	Mr. Weaver – yes
Mr. Honeycutt – yes	Mr. Blackenburg – yes
Mr. Farrell - yes	Mr. Dellaccio - yes
Mr. Sykes - yes	Ms. Cochran – yes
Motion Carried.	

Rezoning

CU-26-2 Ben Pement is requesting Conditional Use Approval for a Car Wash for 2534 Rocky Ridge Road. The Property Is Owned By Tom Allen and Is Zoned Vestavia Hills B-2

RZ-26-2 Ben Pement is requesting Rezoning For 2530 Rocky Ridge Road from Vestavia Hills R-1 to Vestavia Hills B-2, for the purpose of a coffee shop.

Both cases were introduced they were a part of the same development.

John Benner was present for the case and stated that he has heard the concerns of the neighbors, and he is requesting to table the request to the next hearing so that his team can engage with the community regarding the project. He stated his team is working to reserve a location to hold a community meeting, but did not have a date and time at that moment.

Mr. Wakefield addressed the audience that since no action would be taken on these cases, no public comments will be heard.

Ms. Cochran stated that the request has been tabled.

RZ-26-3 Hardie Kimbrough is requesting a Rezoning for 2656 Alta Vista Drive from Jefferson County A-1 to Vestavia Hills A, for the purpose of annexation.

Mr. Wakefield stated that this is a compatible rezoning for a property in the annexation process.

There were no questions from the Commission.

Ms. Cochran opened the floor for to the public. There being no one from the public to address the Commission concerning the requests, Ms. Cochran closed the public hearing.

MOTION Mr. Honeycutt made a motion to approve Rezoning for 2656 Alta Vista Drive. Second was by Mr. Romeo. Motion was carried on a roll call; vote as follows:

Mr. Romeo – yes	Mr. Weaver – yes
Mr. Honeycutt – yes	Mr. Blackenburg – yes
Mr. Farrell - yes	Mr. Dellaccio - yes
Mr. Sykes - yes	Ms. Cochran – yes
Motion Carried.	

RZ-26-4 Suzane Echols is requesting a Rezoning for 2941 Old Rocky Ridge Road from Jefferson County E-2 (Lot 17) & Jefferson County R-2 (Part of Parcel A) to Vestavia Hills R-1, for the purpose of annexation

Mr. Wakefield stated that this is a compatible rezoning for a property in the annexation process.

There were no questions from the Commission.

Ms. Cochran opened the floor for to the public. There being no one from the public to address the Commission concerning the requests, Ms. Cochran closed the public hearing.

MOTION Mr. Blackenburg made a motion to approve Rezoning for 2941 Old Rocky Ridge Road. Second was by Mr. Sykes. Motion was carried on a roll call; vote as follows:

Mr. Romeo – yes	Mr. Weaver – yes
Mr. Honeycutt – yes	Mr. Blackenburg – yes
Mr. Farrell - yes	Mr. Dellaccio - yes
Mr. Sykes - yes	Ms. Cochran – yes
Motion Carried.	

RZ-26-5 Amanda Key is requesting a Rezoning for 2811 Acton Place from Jefferson County R-1 to Vestavia Hills R-2, for the purpose of annexation.

Mr. Wakefield stated that this is a compatible rezoning for a property in the annexation process.

There were no questions from the Commission.

Ms. Cochran opened the floor for to the public. There being no one from the public to address the Commission concerning the requests, Ms. Cochran closed the public hearing.

MOTION Mr. Honeycutt made a motion to approve Rezoning for 2811 Acton Place. Second was by Mr. Romeo. Motion was carried on a roll call; vote as follows:

Mr. Romeo – yes	Mr. Weaver – yes
Mr. Honeycutt – yes	Mr. Blackenburg – yes
Mr. Farrell - yes	Mr. Dellaccio - yes
Mr. Sykes - yes	Ms. Cochran – yes
Motion Carried.	

RZ-26-6 Russ Doyle LLC is requesting Rezoning For 3119 Timberlake Road from Vestavia Hills R-1 to Vestavia Hills O-1, for the purpose of an office building.

Mr. Wakefield stated that this is a rezoning for an office building in the Blue Lake area. Also, that this is the type of development that is consistent with what has been built there over the years. That being former single-family lots being converted to low scale offices.

Mr. Honeycutt asked if the access would be from the same entrance as the adjacent office building?

Russ Doyle stated that he was the developer, and that yes and also that they plan to combine the lots following rezoning.

A question was asked if they plan to widen the road.

Mr. Doyle stated that they do on their side.

City Engineer, Ethan Fisher, stated that it's the city's practice to have the developer widen their side of the road and add sidewalks.

Ms. Cochran opened the floor for to the public. There being no one from the public to address the Commission concerning the requests, Ms. Cochran closed the public hearing.

MOTION Mr. Sykes made a motion to approve Rezoning for 3119 Timberlake Road. Second was by Mr. Honeycutt. Motion was carried on a roll call; vote as follows:

Mr. Romeo – yes	Mr. Weaver – yes
Mr. Honeycutt – yes	Mr. Blackenburg – yes
Mr. Farrell - yes	Mr. Dellaccio - yes
Mr. Sykes - yes	Ms. Cochran – yes
Motion Carried.	

Jack Wakefield, City Planner

VESTAVIA HILLS

Planning and Zoning Commission
Planners Report

MEETING DATE
May 14, 2026

AGENDA ITEM

FP-26-4 **Jason Kessler** is requesting **Final Plat Approval** for **Resurvey of Lot 7 of Five Oaks Residential Subdivision**. The purpose of this request is to resurvey existing lot in Five Oaks due to sanitary sewer line. The property is owned CGK Jr. LLC and is zoned Vestavia Hills R-2.

BACKGROUND
Resurvey of Existing Lot

PLANNER'S REVIEW/RECOMMENDATION
This is already a platted lot. The current sanitary sewer main is located in the easement, but just outside the centerline. Jefferson County Environmental Services is requiring an adjustment of an easement to correct this.

ATTACHMENTS
1. Applicaiton
2. Plat
3. Owners Affidavit

Jack Wakefield
City Planner

Record No: FP-26-4

Final Plat Application

Status: Active

Submitted On: 4/21/2026

Primary Location

2800 FIVE OAKS LN
VESTAVIA HILLS, AL 35243

Owner

No owner information

Agenda Information

Agenda Scheduling

Comments/Delay/Explanation

Project Information

Property Address*

2800 Five Oaks Lane

Parcel ID Number

Legal Description*

Lot 7 Five Oaks Residential Subdivision

Current Zoning Classification*

residential

Acreage*

0.39

Application Submission Date*

April 22nd, 2026

Reason for Request*

This lot is already platted. Due to a sanitary sewer main being placed a few feet outside of the centerline of the easement, but still in the easement, Jefferson County Environmental Services requested we resurvey the lot to adjust the easement. This way, the main is in the centerline. No other lots are affected.

Owner Information

Applications must be either submitted by the owner of the property or a representative duly appointed by the owner by way of a notarized letter and/or power of attorney.

By clicking this box, I hereby declare that the above information is true and that am the current owner of this property and I will represent this case.

☑

Owner Name*

CGK Jr., LLC

Company Name

Mailing Address*

3505 Bent River Road Birmingham AL 35216

Owner Email

Phone Number*

2059857171

By checking this box, I hereby affirm that I am the representative of the owner duly authorized to represent this petition for rezoning. Simultaneously with this application, I am submitting notarized documentation from the owner which authorizes me to represent this case. If no authorization is provided, this application cannot be processed.

☑

Representative for Owner

Jason Kessler

Company Name

Email*

Mailing Address of Representative

3505 Bent River Road Birmingham, AL 35216

Phone No. of Representative

2053695187

Surveyor Information

Name*

Derrol Luker

Company*

Luker and Co.

Mailing Address*

PO Box 305 Pell City, AL 35125

Phone Number*

205-338-2425

Registration Number

Email*

Internal Use Only

Date of Meeting

–

Approved/Denied

FINAL PLAT
RESURVEY OF LOT 7 OF
FIVE OAKS RESIDENTIAL SUBDIVISION
MAP BOOK 264, PAGE 64
BEING IN THE SE 1/4 OF NW 1/4
SECTION 34, T18S, R2W
CITY OF VESTAVIA HILLS
JEFFERSON COUNTY, ALABAMA

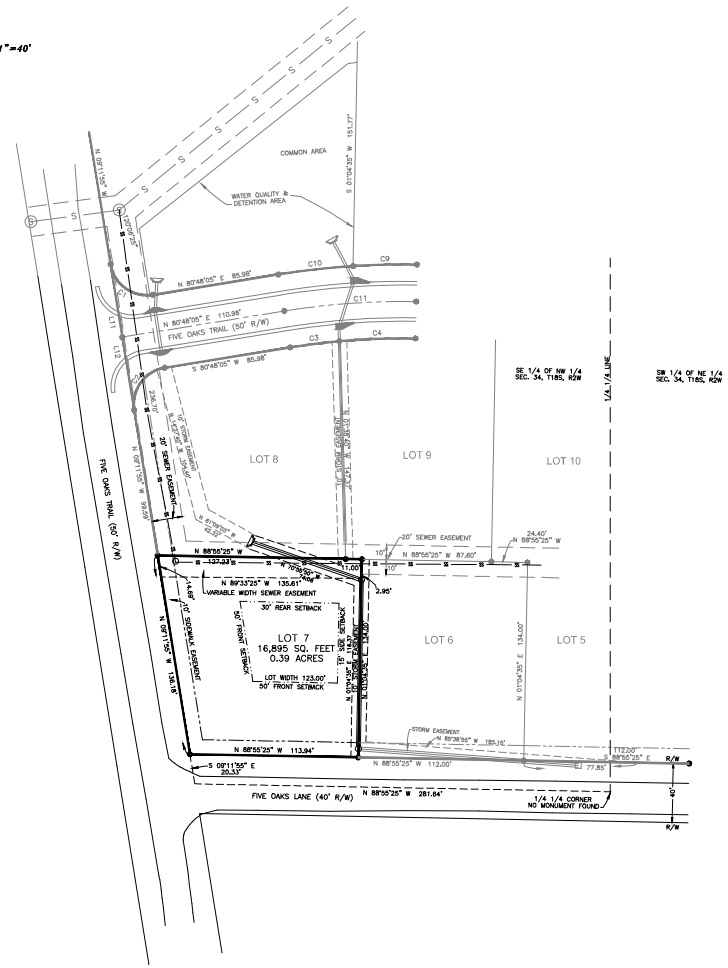
OCTOBER 29th, 2024

HUSK, LLC
3505 BENT RIVER ROAD
HOOVER, ALABAMA 35216
205-999-9881

LUKER AND COMPANY
LAND SURVEYING
DERROL D. LUKER
P.O. BOX 305
PELL CITY, AL 35125
(205) 999-9881

SCALE: 1"=40'

0 40 80 120



NOTES:

1. The subject parcel lies in Zone X, areas of minimal flood per FIRM Map 01073C586H for Jefferson County, Alabama dated 9/24/2021.
2. All easements shown hereon are for use inside and outside of said subdivision.
3. The purpose of this survey is to revise the sanitary sewer easement over lot 7.
4. R-2 Medium Density Residential District (Lot 7)
   Building Setback Lines: Front setback is 50 feet.
   Rear setback is 30 feet.
   Side setback is 15 feet.
   Minimum Lot width 100 feet, Minimum Lot size 15,000 square feet

STATE OF ALABAMA:

JEFFERSON COUNTY:

The undersigned, Derrol D. Luker, Licensed Land Surveyor and HUSK, LLC, Owner hereby certify that this plat or map was made pursuant to a survey made by said surveyor and that said survey and this plat or map were made at the instance of said owners; that this plat or map is a true and correct plat map of lands shown therein and known or to be known as the Resurvey of Lot 7 of Five Oaks Residential Subdivision, showing the subdivision into which it is proposed to divide said lands, giving the length and bearings of the boundaries of each lot and its number showing the subdivision streets, alleys and public grounds, giving the bearings, length, width and name of each Street, as well as the number of each lot and block and showing the relation of the lands to the Government Survey and being situated in the SE 1/4 of the NW 1/4 Section 34, Township 18 South, Range 2 West in Jefferson County, Alabama and that iron pins be installed at all lot corners and curve points as shown and designated by small open circles on said plat or map. Said owner(s) also certifies that they are the sole owner(s) of said lands and that the same are subject to a mortgage held by Metro Bank, Said owner(s) hereby irrevocably dedicate all new streets, alleys and public grounds, as well as easements for all utilities, as shown by said plat or map. Said Surveyor hereby certifies that all parts of this survey and drawing have been completed in accordance with the current requirements of the Standards of Practice for Land Surveying in the State of Alabama, to the best of my knowledge information and belief.

By_____ Date:_____
Derrol D. Luker, PLS 23006
Luker and Company Land Surveying
CA-587-LS

By_____ Date:_____
HUSK, LLC owner
Authorized Signature

By_____ Date_____
Metro Bank
Authorized Signature

STATE OF ALABAMA)

ST. CLAIR COUNTY)

I,_____, a Notary Public in and for said County and State, do hereby certify that Derrol D. Luker whose name is signed to foregoing certificate as Licensed Land Surveyor, and who is known to me, acknowledged before me on this date, that being duly informed of the contents of said certificate, he executed same voluntarily and with full authority therefor.

Given under my hand and seal, this the_____day of_____,2024

_____My Commission Expires_____

STATE OF ALABAMA)

JEFFERSON COUNTY)

I,_____, a Notary Public in and for said County and State, do hereby certify that Charles G. Kessler, Jr., whose name is signed to foregoing certificate as authorized signature for HUSK, LLC, as owner and who is known to me, acknowledged before me on this date, that being duly informed of the contents of said certificate, he executed same voluntarily and with full authority therefor.

Given under my hand and seal, this the_____day of_____,2024

_____My Commission Expires_____

STATE OF ALABAMA)

ST. CLAIR COUNTY)

I,_____, a Notary Public in and for said County and State, do hereby certify that _____Authorized Signature for Metro Bank whose name is signed to foregoing certificate as Mortgagee who is known to me, acknowledged before me on this date, that being duly informed of the contents of said certificate, he executed same voluntarily and with full authority therefor.

Given under my hand and seal, this the_____day of_____,2024

_____My Commission Expires_____

APPROVED:_____ Date_____
VESTAVIA HILLS PLANNING & ZONING COMMISSION

APPROVED:_____ Date_____
VESTAVIA HILLS CITY ENGINEER

APPROVED:_____ Date_____
VESTAVIA HILLS CITY CLERK

_____
DIRECTOR OF ENVIRONMENTAL SERVICES DATE

Environmental Services Department approval indicates that this document has been reviewed for provision of future or existing sanitary sewers; however this does not mean sanitary sewers have been built or will be built in the future. Any change in Right of Way or Easement boundaries after this date may void this approval.

FINAL PLAT OF THE RESURVEY OF LOT 7 OF FIVE OAKS RESIDENTIAL SUBDIVISION, SECTION 34, T18S, R2E IN VESTAVIA HILLS, JEFFERSON CO., ALABAMA		
DRAWN	DATE 10/29/2024	LUKER AND COMPANY LAND SURVEYING DERROL D. LUKER P.O. BOX 305 PELL CITY, AL 35125 (205) 338-2425
REVISIONS		
SCALE 1"=40'		lukerandco@gmail.com

City of Vestavia Hills
Office of the City Clerk

OWNER AFFIDAVIT (This form must be notarized):

I do hereby declare that the following statements are correct concerning the subject property located at: 2800 Five Oaks Lane, Vestavia Hills, Alabama and that statements submitted in my application are true and that I am: *(please check all that apply).*

____ the Property Owner and representing myself in said request.

X the Property Owner, but I am authorizing a Representing Agent by the name of: Jason Kessler to represent me in the following request:

And am requesting: (please check)

____ Rezoning Request
____ Preliminary Plat Approval
X Final Plat Approval
____ Conditional Use Approval
____ Request for Variance
____ Special Exception
____ Design Review Approval

Signed: _____ 4-21-26
Owner Signature/Date

STATE OF ALABAMA
COUNTY OF Jefferson

Given under my hand and seal
this 21 day of April, 2026.

_____
Notary Public

My commission expires 24th day of June, 2027.

Alabama State At Large
Notary Public
JUDITH JONES CVETETIC
My Commission Expires June 24, 2027

VESTAVIA HILLS

Planning and Zoning Commission
Planners Report

MEETING DATE
May 14, 2026

AGENDA ITEM

FP-26-5 **Jason Kessler** is requesting **Final Plat Approval** for **Wall Street Townhomes.** The purpose of this request is to resurvey existing lot into 6 lots for townhomes. The property is owned Kadco Homes and is zoned Vestavia Hills R-9.

BACKGROUND
Subdivision of Lot into 6 Lots

PLANNER'S REVIEW/RECOMMENDATION
The applicant is requesting Final Plat Approval to subdivide one lot into six townhome lots. This follows up the approved R-9 rezoning from the previous year.

ATTACHMENTS
1. Application
2. Plat
3. Owners Affidavit

Jack Wakefield
City Planner

Record No: FP-26-5

Final Plat Application

Status: Active

Submitted On: 4/24/2026

Primary Location

3951 WALL ST
VESTAVIA HILLS, AL 35243

Owner

No owner information

Agenda Information

Agenda Scheduling

Comments/Delay/Explanation

Project Information

Property Address*

3951 Wall Street Vestavia 35243

Parcel ID Number

Legal Description*

Wall Street

Current Zoning Classification*

R9

Acreage*

0.4

Application Submission Date*

April 24th 2026

Reason for Request*

Final Plat

Owner Information

Applications must be either submitted by the owner of the property or a representative duly appointed by the owner by way of a notarized letter and/or power of attorney.

By clicking this box, I hereby declare that the above information is true and that am the current owner of this property and I will represent this case.

☑

Owner Name*

KADCO Homes, LLC

Company Name

Mailing Address*

3505 Bent River Road Birmingham AL 35216

Owner Email

Phone Number*

2059857171

By checking this box, I hereby affirm that I am the representative of the owner duly authorized to represent this petition for rezoning. Simultaneously with this application, I am submitting notarized documentation from the owner which authorizes me to represent this case. If no authorization is provided, this application cannot be processed.

☐

Representative for Owner

Jason Kessler

Company Name

Email*

Mailing Address of Representative

Phone No. of Representative

Surveyor Information

Name*

Matt Dutton

Company*

EDG

Mailing Address*

120 Bishop Circle Pelham AL 35214

Phone Number*

2054039158

Registration Number

Email*

Internal Use Only

Date of Meeting

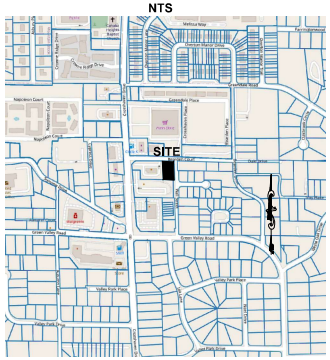
–

Approved/Denied

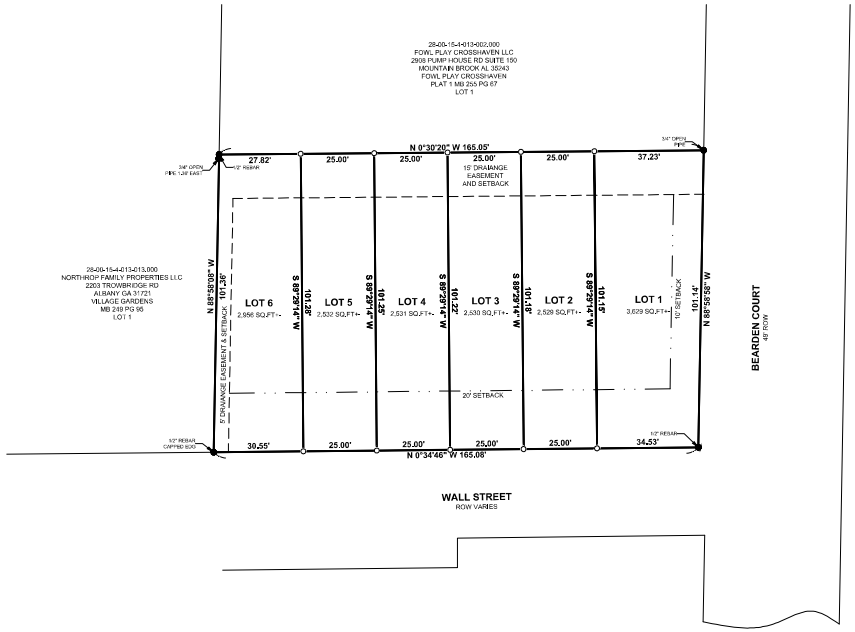
WALL STREET TOWNHOMES

SITUATED IN THE SE 1/4 OF THE SE 1/4 OF SECTION 15, TOWNSHIP 18 SOUTH, RANGE 2 WEST, JEFFERSON COUNTY, ALABAMA

VICINITY MAP
NTS



SCALE: 1" = 20'
0' 20' 40' 60'



NOTES:

1. ALL EASEMENTS AND RIGHT-OF-WAY OF WHICH THE SURVEYOR HAS KNOWLEDGE HAVE BEEN SHOWN HERON.
2. BEARINGS SHOWN HEREON ARE RELATIVE TO THE ALABAMA STATE PLANE COORDINATE SYSTEM GRID AZIMUTH (ALABAMA WEST ZONE) (NAD 83) AND WERE DETERMINED USING GPS OBSERVATION.
3. CONTRACTOR' AND/OR DEVELOPER ARE RESPONSIBLE FOR PROVIDING BUILDING SITES FREE OF DRAINAGE PROBLEM.
4. NO FURTHER SUBDIVISION OF ANY PARCEL SHOWN HEREON SHALL BE ALLOWED WITHOUT THE PRIOR APPROVAL OF THE CITY OF VESTAVIA HILLS PLANNING COMMISSION.
5. PROPERTY ZONED R-9.
6. NO TITLE INFORMATION WAS PROVIDED.

SURVEYOR:
ENGINEERING DESIGN GROUP LLC
120 BISHOP CIRCLE SUITE 300
PELHAM AL 35143
205-403-9158

OWNER:
KADCO HOMES, LLC
3505 BENT RIVER RD
BIRMINGHAM AL 35216

STATE OF ALABAMA
COUNTY OF JEFFERSON

THE UNDERSIGNED, RODNEY K. CUNNINGHAM, A REGISTERED LAND SURVEYOR, STATE OF ALABAMA, AND KADCO HOMES, LLC, OWNER, HEREBY CERTIFY THAT THIS PLAT OR MAP WAS MADE PURSUANT TO A SURVEY MADE BY SAID SURVEYOR AND THAT SAID SURVEY AND THIS PLAT OF MAP WERE MADE AT THE INSTANCE OF SAID OWNER; THAT THIS PLAT OR MAP IS A TRUE AND CORRECT MAP OF LANDS SHOWN THEREIN AND KNOWN AS "WALL STREET TOWNHOMES" SHOWING THE SUBDIVISIONS INTO WHICH IT IS PROPOSED TO DIVIDE SAID LANDS, GIVING THE LENGTH, AND ANGLES OF THE BOUNDARIES OF EACH LOT AND ITS NUMBER, SHOWING THE STREETS, ALLEYS AND PUBLIC GROUNDS, GIVING THE LENGTH, WIDTH AND NAME OF EACH STREET, AS WELL AS THE NUMBER OF EACH LOT AND BLOCK, SHOWING THE RELATIONS OF THE LANDS TO THE FOWL PLAY CROSSHAVEN PLAT NO. 1, AS RECORDED IN MAP BOOK 265, PAGE 67, IN THE PROBATE OFFICE OF JEFFERSON COUNTY, ALABAMA, AND THAT I/IRON PINS HAVE BEEN FOUND IRON OR SET AT ALL LOT CORNERS AND CURVE POINTS AS SHOWN AND DESIGNATED BY SMALL SOLID CIRCLES ON SAID PLAT OR MAP. SAID OWNER ALSO CERTIFIES THAT IT IS THE OWNER OF SAID LANDS AND THAT THE SAME IS SUBJECT TO A MORTGAGE HELD BY TRUSTMARK BANK.

I HEREBY STATE THAT ALL PARTS OF THIS SURVEY AND DRAWING HAVE BEEN COMPLETED IN ACCORDANCE WITH THE CURRENT REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR SURVEYING IN THE STATE OF ALABAMA TO THE BEST OF MY KNOWLEDGE, INFORMATION AND BELIEF.

SURVEYOR:

_____
RODNEY K. CUNNINGHAM
ALABAMA LIC. NO.28013

STATE OF ALABAMA
COUNTY OF SHELBY

I, RICHARD EARL STUBBS, A NOTARY PUBLIC IN AND FOR SAID COUNTY, IN SAID STATE, HEREBY CERTIFY THAT RODNEY K. CUNNINGHAM, WHOSE NAME IS SIGNED TO THE FOREGOING CERTIFICATE AS SURVEYOR, AND WHO IS KNOWN TO ME, ACKNOWLEDGE BEFORE ME ON THIS DATE THAT BEING DULY INFORMED OF THE CONTENTS OF SAID CERTIFICATE, HE EXECUTED THE SAME VOLUNTARILY, FOR AND AS THE ACT OF SAID CORPORATION.

GIVEN UNDER MY HAND AND SEAL THIS _____ DAY OF _____, 20___.

_____
NOTARY PUBLIC MY COMMISSION EXPIRES OCT. 12, 2029

OWNER: KADCO HOMES, LLC

_____
BY: JASON KESSLER: MANAGING MEMBER

STATE OF ALABAMA
COUNTY OF _____

I, _____, A NOTARY PUBLIC IN AND FOR SAID COUNTY, IN SAID STATE, HEREBY CERTIFY THAT JASON KESSLER, WHOSE NAMES ARE SIGNED TO THE FOREGOING CERTIFICATE AS MANAGING MEMBER OF KADCO HOMES, LLC, OWNER, AND WHO IS KNOWN TO ME, ACKNOWLEDGE BEFORE ME ON THIS DATE THAT BEING DULY INFORMED OF THE CONTENTS OF SAID CERTIFICATE, THEY EXECUTED THE SAME VOLUNTARILY, FOR AND AS THE ACT OF SAID CORPORATION.

GIVEN UNDER MY HAND AND SEAL THIS _____ DAY OF _____, 20___.

_____
NOTARY PUBLIC MY COMMISSION EXPIRES

MORTGAGEE: TRUSTMARK BANK

_____
BY: _____
ITS: _____

STATE OF ALABAMA
COUNTY OF _____

I, _____, A NOTARY PUBLIC IN AND FOR SAID COUNTY, IN SAID STATE, HEREBY CERTIFY THAT _____, WHOSE NAMES IS SIGNED TO THE FOREGOING CERTIFICATE AS _____ OF TRUSTMARK BANK, MORTGAGEE, AND WHO IS KNOWN TO ME, ACKNOWLEDGE BEFORE ME ON THIS DATE THAT BEING DULY INFORMED OF THE CONTENTS OF SAID CERTIFICATE, THEY EXECUTED THE SAME VOLUNTARILY, FOR AND AS THE ACT OF SAID CORPORATION.

GIVEN UNDER MY HAND AND SEAL THIS _____ DAY OF _____, 20___.

_____
NOTARY PUBLIC MY COMMISSION EXPIRES

APPROVED BY: _____
CITY ENGINEER DATE:

APPROVED BY: _____
VESTAVIA HILLS PLANNING & ZONING COMMISSION DATE:

APPROVED BY: _____
MANAGER AND CITY CLERK DATE:

_____ _____
DIRECTOR OF ENVIRONMENTAL SERVICES DATE
Environmental Services Department approval is limited to the conveyance of the sanitary sewer easement(s) shown and does not represent approval or guarantee of future approval of sanitary sewer plans or improvements.

DRAWN BY: RES
CHECKED BY: RKC
PROJECT No.: KADCO0003
CAD FILE: KADCO0003 WALL STREET TOWNHOMES.dwg
SCALE: 1" = 20'

PROJECT: SE 1/4 - SE 1/4 OF SECTION 15, TOWNSHIP 18 SOUTH, RANGE 2 WEST, JEFFERSON COUNTY, ALABAMA

TITLE: FINAL PLAT

120 BISHOP CIRCLE, SUITE 300
PELHAM, AL 35124
TEL - (205) 403-9158
FAX - (205) 403-9175

EDG
ENGINEERING DESIGN GROUP, LLC
CIVIL ENGINEERING • LAND SURVEYING
205-403-9158

SHEET NO.
1 OF 1

City of Vestavia Hills
Office of the City Clerk

OWNER AFFIDAVIT (This form must be notarized):

I do hereby declare that the following statements are correct concerning the subject property located at: 3951 Wall Street Vestavia Hills, AL 35243, Vestavia Hills, Alabama and that statements submitted in my application are true and that I am: *(please check all that apply).*

X the Property Owner and representing myself in said request.

____ the Property Owner, but I am authorizing a Representing Agent by the name of: _____ _____ to represent me in the following request:

And am requesting: (please check)

____ Rezoning Request
____ Preliminary Plat Approval
X Final Plat Approval
____ Conditional Use Approval
____ Request for Variance
____ Special Exception
____ Design Review Approval

Signed: _____ 4-23-26
Owner Signature/Date

STATE OF ALABAMA
COUNTY OF Jefferson

Given under my hand and seal
this 24 day of April, 2026.

Alabama State At Large
Notary Public
JUDITH JONES CVETETIC
My Commission Expires June 24, 2027

_____
Notary Public

My commission expires 24 day of June, 2027.

VESTAVIA HILLS

Planning and Zoning Commission
Planners Report

MEETING DATE
May 14, 2026

AGENDA ITEM

FP-26-6 **Shelia Stephenson** is requesting **Final Plat Approval** for **The Bray Residential Phase II**. The purpose of this request is to resurvey existing acreage. The property is owned by Liberty Park Joint Venture and is zoned Vestavia Hills PUD-PB.

BACKGROUND
Resurvey of Existing Acreage

PLANNER'S REVIEW/RECOMMENDATION
The applicant is seeking Final Plat Approval for a resurvey of existing acreage in Liberty Park The Bray development. This lot is for future development.

ATTACHMENTS
1. Application
2. Plat
3. Owners Affidavit

Jack Wakefield
City Planner

Record No: FP-26-6

Final Plat Application

Status: Active

Submitted On: 4/28/2026

Primary Location

1030 SOUTH LIBERTY RD
VESTAVIA HILLS, AL 35242

Owner

Liberty Park Joint Venture, LLP
Urban Center Dr 1000 Vestavia, AL 35242

Agenda Information

Agenda Scheduling

Comments/Delay/Explanation

Project Information

Property Address*

Brayfield Ln

Parcel ID Number

28-0013-1-000-001.002

Legal Description*

metes & bounds

Current Zoning Classification*

PUD-PB

Acreage*

0.639

Application Submission Date*

4/28/26

Reason for Request*

Subdividing acreage into one lot

Owner Information

Applications must be either submitted by the owner of the property or a representative duly appointed by the owner by way of a notarized letter and/or power of attorney.

By clicking this box, I hereby declare that the above information is true and that am the current owner of this property and I will represent this case.

☐

Owner Name*

Liberty Park Joint Venture, LLP

Company Name

Mailing Address*

1000 Urban Center Dr, Ste 235 Vestavia, AL 35242

Owner Email

Phone Number*

205-945-6401

By checking this box, I hereby affirm that I am the representative of the owner duly authorized to represent this petition for rezoning. Simultaneously with this application, I am submitting notarized documentation from the owner which authorizes me to represent this case. If no authorization is provided, this application cannot be processed.

☑

Representative for Owner

Mark W. Clark

Company Name

Schoel Engineering Company, Inc.

Email*

Mailing Address of Representative

1001 22nd St S Birmingham, AL 35205

Phone No. of Representative

205-313-1140

Surveyor Information

Name*

Mark W. Clark

Company*

Schoel Engineering Company, Inc.

Mailing Address*

1001 22nd St S Birmingham, AL 35205

Phone Number*

205-313-1140

Registration Number

19251

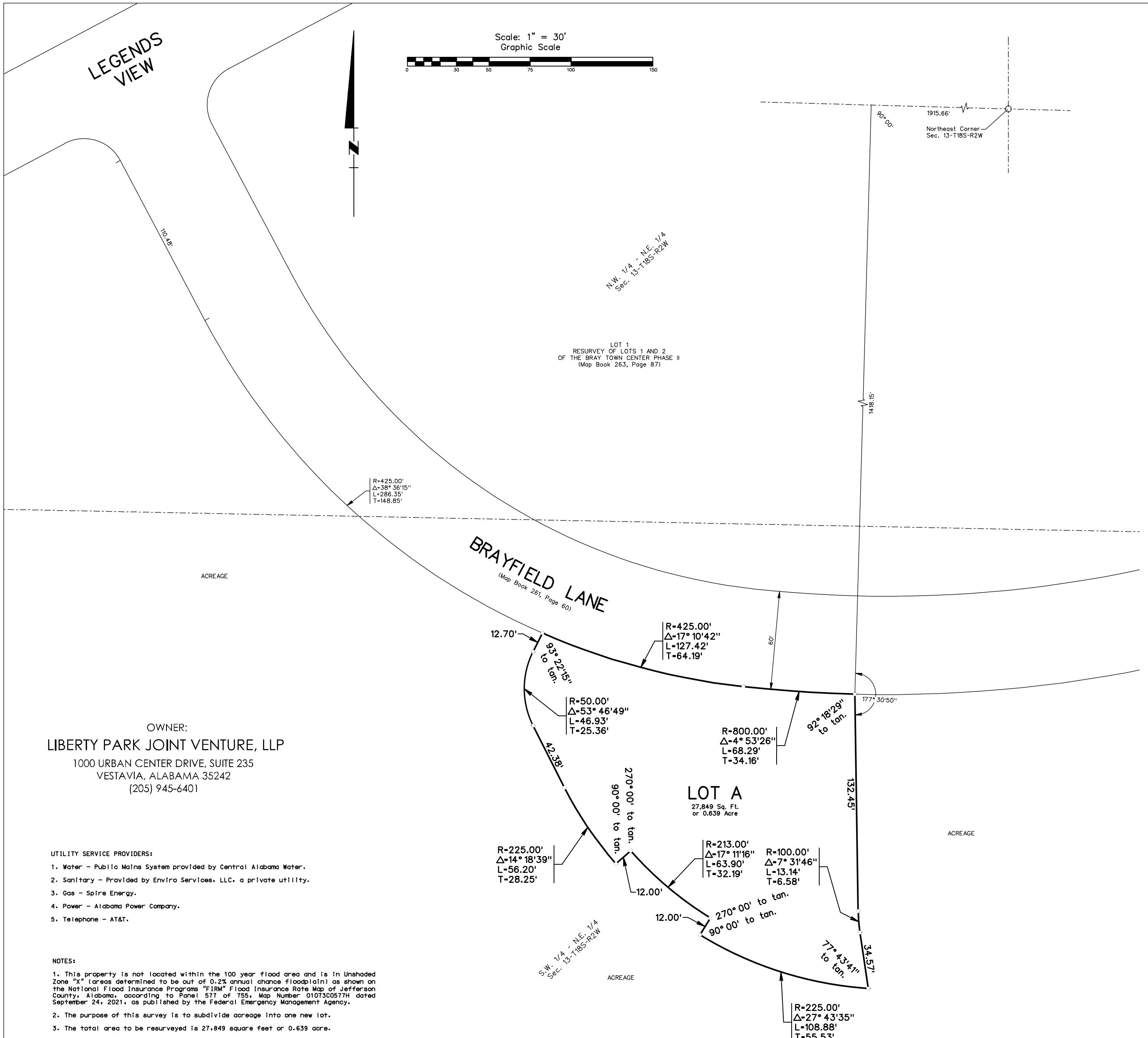
Email*

Internal Use Only

Date of Meeting

–

Approved/Denied



OWNER:
LIBERTY PARK JOINT VENTURE, LLP
1000 URBAN CENTER DRIVE, SUITE 235
VESTAVIA, ALABAMA 35242
(205) 945-6401

UTILITY SERVICE PROVIDERS:

1. Water - Public Mains System provided by Central Alabama Water.
2. Sanitary - Provided by Enviro Services, LLC, a private utility.
3. Gas - Spire Energy.
4. Power - Alabama Power Company.
5. Telephone - AT&T.

NOTES:

1. This property is not located within the 100 year flood area and is in Unshaded Zone "X" (areas determined to be out of 0.2% annual chance floodplain) as shown on the National Flood Insurance Programs "FIRM" Flood Insurance Rate Map of Jefferson County, Alabama, according to Panel 577 of 755, Map Number 01073C0577H dated September 24, 2021, as published by the Federal Emergency Management Agency.
2. The purpose of this survey is to subdivide acreage into one new lot.
3. The total area to be resurveyed is 27,849 square feet or 0.639 acre.
4. Access to utilities for installation, maintenance and repair shall be governed by private agreement between the owner and the utility company.
5. Unless otherwise noted, all property corners shown are 5/8" rebar with a Schoel Engineering Company cap (CA#003).

STATE OF ALABAMA
JEFFERSON COUNTY

I, Mark W. Clark, a Registered Professional Land Surveyor in the State of Alabama and Liberty Park Joint Venture, LLP, Owner, hereby certify that this plat or map was made pursuant to a survey made by said Surveyor and that said survey and this plat or map were made at the instance of said Owner; that this plat or map is a true and correct plat or map of the lands shown therein and known or to be known as The Bray Residential Phase II, showing the subdivisions into which it is proposed to divide said lands, giving the length and angles of the boundaries of each lot and its number, showing the streets, alleys and public grounds, giving the bearing, width, length, and name of each street, as well as the number of each lot and block and showing the relation of the lands to Bray Town Center Phase II, as recorded in Map Book 261, Page 60 and Resurvey of Lots 1 and 2 of the Bray Town Center Phase II, as recorded in Map Book 263, Page 87, both in the Probate Office of Jefferson County, Alabama, and the government survey, and being situated in Section 13, Township 18 South, Range 2 West, Jefferson County, Alabama; and that iron pins or other appropriate monumentation have been installed at all lot corners (or reference points to lot corners) and curve points as shown and designated by small open circles on said plat or map. Said Owner also certifies that they are the Sole Owner of said lands and that the same are not subject to any mortgage. The undersigned Surveyor further certifies that this survey and drawing of the parcel described hereon, were made by individuals under my supervision, based on knowledge and information in accordance with commonly accepted procedures consistent with applicable standards of practice and all parts of this survey and drawing have been completed in accordance with the current requirements of the Standards of Practice for Surveying in the State of Alabama to the best of my knowledge, information, and belief.

SCHOEL ENGINEERING COMPANY, INC.

ALABAMA REGISTERED No. 19251 PROFESSIONAL LAND SURVEYOR MARK W. CLARK

Mark W. Clark, Alabama License No. 19251

LIBERTY PARK JOINT VENTURE, LLP
A Limited Liability Partnership, Owner

James Parsons
President

STATE OF ALABAMA
JEFFERSON COUNTY

I, Ryan Forester, as Notary Public in and for said County and State, do hereby certify that Mark W. Clark, whose name is signed to the foregoing certificate as Surveyor, who is known to me, acknowledged before me, on this date that after having been duly informed of the contents of said certificate, he executed the same voluntarily as such Surveyor with full authority therefor.

GIVEN UNDER MY HAND AND OFFICIAL SEAL, this the__________day of______________,2026.

Notary Public
My Commission Expires:__________________

STATE OF ALABAMA NOTARY PUBLIC RYAN FORESTER

STATE OF ALABAMA
JEFFERSON COUNTY

I, ________________________, as Notary Public in and for said County and State, do hereby certify that James Parsons, whose name as President of Liberty Park Joint Venture, LLP, who is signed to the foregoing certificate as Owner, who is known to me, acknowledged before me, on this date that after having been duly informed of the contents of said certificate, he executed the same voluntarily as such officer with full authority therefor.

GIVEN UNDER MY HAND AND OFFICIAL SEAL, this the__________day of______________,2026.

Notary Public
My Commission Expires:__________________

APPROVED:________________________ DATE:______________
Vestavia Hills Planning & Zoning Commission

APPROVED:________________________ DATE:______________
Vestavia Hills City Engineer

APPROVED:________________________ DATE:______________
Vestavia Hills City Clerk

APPROVED IN FORMAT ONLY:

________________________ ________
Jefferson County Department of Health Date

APPROVED IN FORMAT ONLY:

________________________ ________
Director of Environmental Services Date

Environmental Services Department approval is limited to the conveyance of the sanitary sewer easement(s) shown and does not represent approval or guarantee of future approval of sanitary sewer plans or improvements. Environmental Services acknowledges that the mains serving this property are owned by others.

SCHOEL

BIRMINGHAM | HUNTSVILLE | TUSCALOOSA

SCHOEL.COM

THE BRAY RESIDENTIAL PHASE II

BEING A SUBDIVISION OF ACREAGE
SITUATED IN THE S.W. 1/4 OF THE N.E. 1/4 OF SECTION 13, TOWNSHIP 18 SOUTH, RANGE 2 WEST
JEFFERSON COUNTY, ALABAMA

REVISIONS:

FINAL PLAT

DATE: APRIL 2026
DRAWN BY: JWH
CHECKED BY: SDS & MWC
FIELD BOOK: #XXXX
FIELD CREW: XXX
FILE NAME: 25465_FINAL PLAT.DWG

1 OF 1

G:\LIB\25\465 - The Bray Residential Phase II\Survey\Plats

City of Vestavia Hills Owner Affidavit

I hereby declare that the following statements are correct concerning the subject property located at: Brayfield Lane (The Bray Residential Phase II) *(street address)* in Vestavia Hills, Alabama and that statements submitted in my application are true.

I am *(check all that apply)*:

- ☐ the Property Owner and representing myself in said request.
- ☒ the Property Owner, but I am authorizing a Representing Agent.

  Name of Representing Agent: Schoel Engineering Company, Inc.

I am requesting *(check all that apply)*:

- ☐ Rezoning Request
- ☐ Preliminary Plat Approval
- ☒ Final Plat Approval
- ☐ Conditional Use Approval
- ☐ Request for Variance
- ☐ Special Exception
- ☐ Design Review Approval

Owner's Name *(print)*: Liberty Park Joint Venture LLP

Signature: _____ Date: 4/28/26

THIS FORM MUST BE NOTARIZED.

STATE OF ALABAMA
COUNTY OF Jefferson

Given under my hand and seal this 28th day of April, 2026.

Barbara Perrin
Notary Public

My commission expires 20th day of June, 2029.

BARBARA PERRIN
MY COMMISSION EXPIRES
JUNE 20, 2029
NOTARY PUBLIC
STATE OF ALABAMA

VESTAVIA HILLS

Planning and Zoning Commission
Planners Report

MEETING DATE
May 14, 2026

AGENDA ITEM

FP-26-7 **Shelia Stephenson** is requesting **Final Plat Approval** for **The Brayfield Residential Phase III Fourth Sector.** The purpose of this request is to resurvey existing acreage into 25 single-family lots. The property is owned by Liberty Park Joint Venture and is zoned Vestavia Hills PUD-PR-1

BACKGROUND
Resurvey of Existing Acreage into 25 Single-Family Lots

PLANNER'S REVIEW/RECOMMENDATION
The applicant is seeking Final Plat Approval in Liberty Park Brayfield Residential. This resurvey will create twenty-five single-family lots. This will serve as the next extension of Brayfield Crest Drive.

ATTACHMENTS
1. Application
2. Plat
3. Owners Affidavit

Jack Wakefield
City Planner

Record No: FP-26-7

Final Plat Application

Status: Active

Submitted On: 4/28/2026

Primary Location

1300 U1 S LIBERTY RD
VESTAVIA HILLS, AL 35242

Owner

Liberty Park Joint Venture, LLP
Urban Center Dr 1000 Vestavia, AL 35242

Agenda Information

Agenda Scheduling

Comments/Delay/Explanation

Project Information

Property Address*

Brayfield Crest Dr

Parcel ID Number

2800134000001000

Legal Description*

Acreage

Current Zoning Classification*

PUD-PR-1

Acreage*

11.355

Application Submission Date*

4/28/26

Reason for Request*

Request to subdivide acreage into 25 new lots and 1 new road

Owner Information

Applications must be either submitted by the owner of the property or a representative duly appointed by the owner by way of a notarized letter and/or power of attorney.

By clicking this box, I hereby declare that the above information is true and that am the current owner of this property and I will represent this case.

☐

Owner Name*

Liberty Park Joint Venture

Company Name

Mailing Address*

1000 Urban Center Dr, STE 235

Owner Email

Phone Number*

205-945-6401

By checking this box, I hereby affirm that I am the representative of the owner duly authorized to represent this petition for rezoning. Simultaneously with this application, I am submitting notarized documentation from the owner which authorizes me to represent this case. If no authorization is provided, this application cannot be processed.

☑

Representative for Owner

Company Name

Schoel Engineering Company, Inc.

Email*

Mailing Address of Representative

1001 22nd St S Birmingham, AL 35205

Phone No. of Representative

205-313-1152

Surveyor Information

Name*

Mark W. Clark

Company*

Schoel Engineering Company, Inc

Mailing Address*

1001 22nd St S Birmingham, AL 35205

Phone Number*

205-313-1140

Registration Number

19251

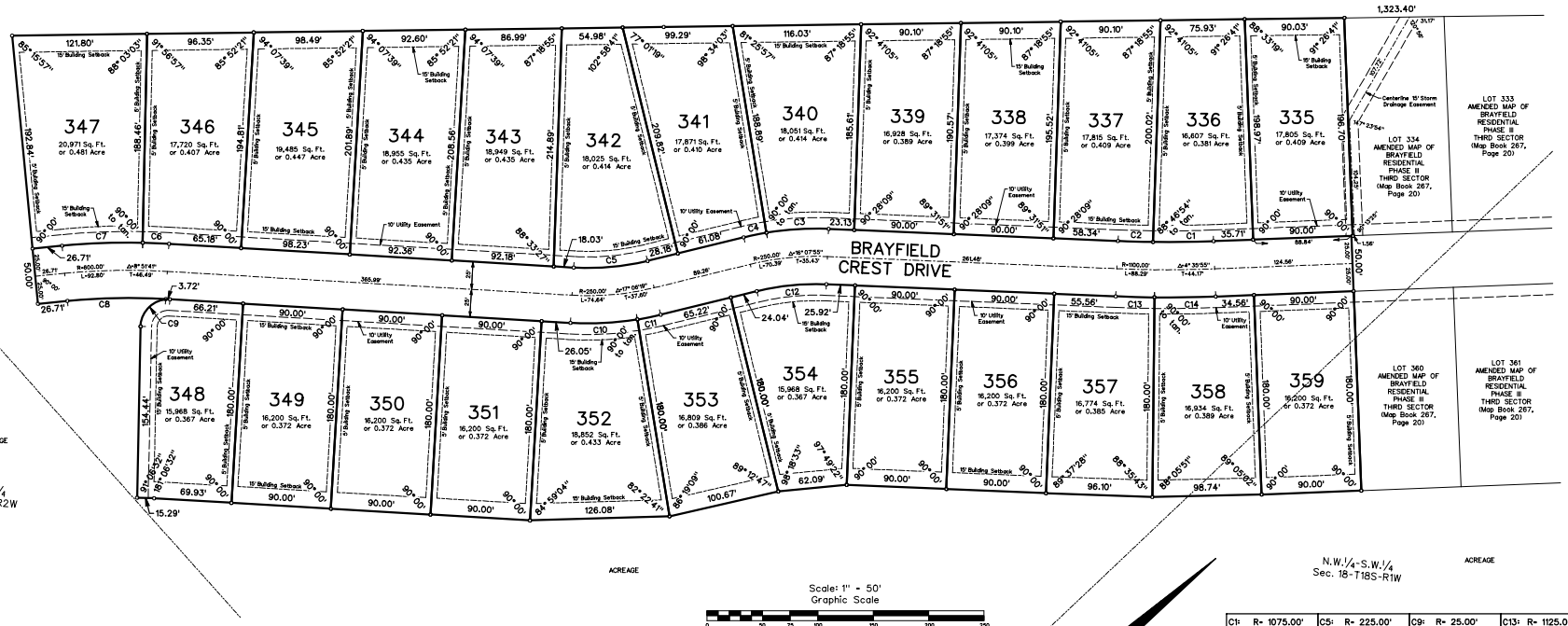
Email*

Internal Use Only

Date of Meeting

–

Approved/Denied



C1: R= 1075.00' Δ= 2°54'40" L= 54.62' T= 27.32'	C5: R= 225.00' Δ= 17°06'19" L= 67.17' T= 33.84'	C9: R= 25.00' Δ= 92°13'04" L= 40.24' T= 25.99'	C13: R= 1125.00' Δ= 1°46'49" L= 34.95' T= 17.48'
C2: R= 1075.00' Δ= 1°41'15" L= 31.66' T= 15.83'	C6: R= 625.00' Δ= 2°10'42" L= 23.76' T= 11.88'	C10: R= 275.00' Δ= 12°38'15" L= 60.66' T= 30.45'	C14: R= 1125.00' Δ= 2°49'07" L= 55.34' T= 27.68'
C3: R= 275.00' Δ= 11°43'17" L= 56.26' T= 28.23'	C7: R= 625.00' Δ= 6°40'59" L= 72.90' T= 36.49'	C11: R= 275.00' Δ= 4°28'04" L= 21.44' T= 10.73'	
C4: R= 275.00' Δ= 4°24'37" L= 21.17' T= 10.59'	C8: R= 575.00' Δ= 8°51'41" L= 88.93' T= 44.55'	C12: R= 225.00' Δ= 16°07'55" L= 63.35' T= 31.89'	

STATE OF ALABAMA
JEFFERSON COUNTY

I, Mark W. Clark, a Registered Professional Land Surveyor in the State of Alabama, and Liberty Park Joint Venture, LLP, Owner, hereby certify that this plat or map was made pursuant to a survey made by said Surveyor and that said survey and this plat or map were made at the instance of said Owner; that this plat or map is a true and correct plat or map of the lands shown thereon and known or to be known as BRAYFIELD RESIDENTIAL PHASE III FOURTH SECTOR, showing the subdivisions into which it is proposed to divide said lands, giving the length and angles of the boundaries of each lot and its number, showing the streets, alleys and public grounds, giving the bearing, width, length, and name of each street, as well as the number of each lot and block and showing the relation of the lands to the Amended Map of Brayfield Residential Phase III Second Sector, as recorded in Map Book 267, Page 20, all in the Probate Office of Jefferson County, Alabama; and being situated in the N.W. 1/4 of the S.W. 1/4 of Section 18, Township 18 South, Range 1 West, and the N.E. 1/4 of the S.E. 1/4 of Section 13, Township 18 South, Range 2 West, Jefferson County, Alabama and that iron pins or other appropriate monumentation have been installed at all lot corners (or reference points to lot corners) and curve points as shown and designated by small open circles on said plat or map. This survey and drawing of the parcel described hereon, were made by individuals under my supervision, based on knowledge and information in accordance with commonly accepted procedures consistent with applicable standards of practice and this survey and drawing have been completed in accordance with the current requirements of the Standards of Practice for Surveying in the State of Alabama to the best of my knowledge, information, and belief. Said Owner also certifies that they are the Owner of said lands and that the same are not subject to any mortgage.

SCHOEL ENGINEERING COMPANY, INC.

ALABAMA REGISTERED No. 19251 PROFESSIONAL LAND Surveyor MARK W. CLARK

Mark W. Clark, Jr., Alabama License No. 19251

LIBERTY PARK JOINT VENTURE, LLP
A Limited Liability Partnership, Owner

James Parsons
President

STATE OF ALABAMA
JEFFERSON COUNTY

I, Ryan Forester, as Notary Public in and for said County and State, do hereby certify that Mark W. Clark, whose name is signed to the foregoing certificate as Surveyor, who is known to me, acknowledged before me, on this date that after having been duly informed of the contents of said certificate, he executed the same voluntarily as such Surveyor with full authority therefor.

GIVEN UNDER MY HAND AND OFFICIAL SEAL, this the _____ day of _____, 2026.

Notary Public
My Commission Expires: _____

STATE OF ALABAMA NOTARY PUBLIC RYAN FORESTER

STATE OF ALABAMA
JEFFERSON COUNTY

I, _____, as Notary Public in and for said County and State, do hereby certify that James Parsons, whose name as President of Liberty Park Joint Venture, LLP, is signed to the foregoing certificate as Owner, who is known to me, acknowledged before me, on this date that after having been duly informed of the contents of said certificate, he executed the same voluntarily as such officer with full authority therefore.

GIVEN UNDER MY HAND AND OFFICIAL SEAL, this the _____ day of _____, 2026.

Notary Public
My Commission Expires: _____

APPROVED: _____ DATE: _____
Vestavia Hills Planning & Zoning Commission

APPROVED: _____ DATE: _____
Vestavia Hills City Engineer

APPROVED: _____ DATE: _____
Vestavia Hills City Clerk

APPROVED IN FORMAT ONLY:

_____ _____
Jefferson County Department of Health Date

APPROVED IN FORMAT ONLY:

_____ _____
Director of Environmental Services Date

Environmental Services Department approval is limited to the conveyance of the sanitary easement(s) shown and does not represent approval or guarantee of future approval of sanitary sewer plans or improvements. Environmental Services acknowledges that the mains serving this property are owned by others.

UTILITY SERVICE PROVIDERS:

1. Water - Public Mains System provided by Central Alabama Water.
2. Sanitary - Provided by Enviro Services, LLC, a private utility.
3. Gas - Spire Energy.
4. Power - Alabama Power Company.
5. Telephone - AT&T.

OWNER:
LIBERTY PARK JOINT VENTURE, LLP
1000 URBAN CENTER DRIVE, SUITE 235
VESTAVIA, ALABAMA 35242
(205) 945-6401

LOTS 335-359 LOW PRESSURE SEWER

NOTES:

1. Access to utilities for installation, maintenance and repair shall be governed by private agreement between the owner and the utility company.
2. The area within all setbacks is subject to easements for storm drainage.
3. This property is not located within the 100 year flood area and is in Unshaded Zone "X" (areas determined to be out of 0.2% annual chance floodplain) as shown on the National Flood Insurance Programs "FIRM" Flood Insurance Rate Map of Jefferson County, Alabama, according to Panel 577 of 755, Map Number 01073C0577H, and Panel 581 of 755, Map Number 01073C0581H, both dated September 24, 2021, as published by the Federal Emergency Management Agency.
4. The purpose of this plat is to subdivide acreage into twenty-five new lots and one road.

SCHOEL
BIRMINGHAM | HUNTSVILLE | TUSCALOOSA
SCHOEL.COM

BRAYFIELD RESIDENTIAL PHASE III
FOURTH SECTOR

BEING A SUBDIVISION OF ACREAGE SITUATED IN THE N.W. OF THE S.W. OF SECTION 18, TOWNSHIP 18 SOUTH, RANGE 1 WEST AND THE N.E. OF THE S.E. OF SECTION 13, TOWNSHIP 18 SOUTH, RANGE 2 WEST
JEFFERSON COUNTY, ALABAMA

REVISIONS:

FINAL
PLAT

DATE: APRIL 2026
DRAWN BY: J.W.H.
CHECKED BY: S.D.S. & M.W.C.
FILE NAME:
Brayfield Residential Phase III
Fourth Sector.dgn
g:\JOB\22\139\Survey\Final Plat\

1 OF 1

City of Vestavia Hills Owner Affidavit

I hereby declare that the following statements are correct concerning the subject property located at:

Brayfield Crest Drive (Brayfield Residential Phase III Fourth Sector) *(street address)*

in Vestavia Hills, Alabama and that statements submitted in my application are true.

I am *(check all that apply)*:

- ☐ the Property Owner and representing myself in said request.
- ☒ the Property Owner, but I am authorizing a Representing Agent.

  Name of Representing Agent: Schoel Engineering Company, Inc.

I am requesting *(check all that apply)*:

- ☐ Rezoning Request
- ☐ Preliminary Plat Approval
- ☒ Final Plat Approval
- ☐ Conditional Use Approval
- ☐ Request for Variance
- ☐ Special Exception
- ☐ Design Review Approval

Owner's Name *(print)*: Liberty Park Joint Venture LLP

Signature: _____ Date: 4/28/26

THIS FORM MUST BE NOTARIZED.

STATE OF ALABAMA
COUNTY OF Jefferson

Given under my hand and seal this 28th day of April, 2026.

Barbara Perrin
Notary Public

My commission expires 20th day of June, 2029.

BARBARA PERRIN
MY COMMISSION EXPIRES
JUNE 20, 2029
NOTARY PUBLIC
STATE OF ALABAMA

VESTAVIA HILLS

Planning and Zoning Commission
Planners Report

MEETING DATE
May 14, 2026

AGENDA ITEM
FP-26-8 **Jeff Lucas** is requesting **Final Plat Approval** for **Norris' Resurvey**. The purpose of this request is to resurvey two existing lots. The properties are owned by Robert Norris & Stephen Norris and is zoned Vestavia Hills R-2.

BACKGROUND
Resurvey of Two Lots

PLANNER'S REVIEW/RECOMMENDATION
The applicants are seeking Final Plat Approval to resurvey two lots. A father and son own separate abutting lots, and the father wants to give a portion of property in the back to accommodate his son's pool. While new lots are oddly shaped, both would meet R-2 regulations.

ATTACHMENTS
1. Application
2. Plat
3. Owners Affidavit

Jack Wakefield
City Planner

Record No: FP-26-8

Final Plat Application

Status: Active

Submitted On: 4/29/2026

Primary Location

2354 TYROL PL
VESTAVIA HILLS, AL 35216

Owner

Robert Norris
Tyrol 2354 Vestavia , AL 35216

Agenda Information

Agenda Scheduling

Comments/Delay/Explanation

Project Information

Property Address*

2354 Tyrol Place

Parcel ID Number

4000062005001000

Legal Description*

LOT 11 BLK 6 DERBY DOWNS HIGHLAND SECTOR 1ST ADD

Current Zoning Classification*

R2

Acreage*

0.54

Application Submission Date*

1/27/26

Reason for Request*

Father and son own 2354 Tyrol PLace and 3238 Tyrol Lane-- dad is giving a small strip in the back to son to accomidate around his pool

Owner Information

Applications must be either submitted by the owner of the property or a representative duly appointed by the owner by way of a notarized letter and/or power of attorney.

By clicking this box, I hereby declare that the above information is true and that am the current owner of this property and I will represent this case.

☐

Owner Name*

Robert Norris

Company Name

Mailing Address*

2354 Tyrol Place

Owner Email

Phone Number*

2052222224

By checking this box, I hereby affirm that I am the representative of the owner duly authorized to represent this petition for rezoning. Simultaneously with this application, I am submitting notarized documentation from the owner which authorizes me to represent this case. If no authorization is provided, this application cannot be processed.

☐

Representative for Owner

Mary Overby

Company Name

Weygand LLC

Email*

Mailing Address of Representative

173 Oxmoor Rd

Phone No. of Representative

2059420086

Surveyor Information

Name*

Jeff Lucas

Company*

Weygand

Mailing Address*

173 Oxmoor Rd

Phone Number*

2-59420086

Registration Number

CA50309

Email*

Internal Use Only

Date of Meeting

–

Approved/Denied

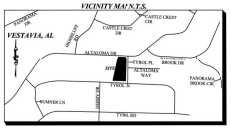
NORRIS' RESURVEY

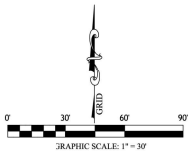
BEING A RESURVEY OF LOT 11 AND LOT 10, BLOCK 6, ACCORDING TO THE MAP OF DERBY DOWNS HIGHLAND SECTOR, FIRST ADDITION, AS RECORDED IN MAP BOOK 99, PAGES 57, IN THE OFFICE OF THE JUDGE OF PROBATE OF JEFFERSON COUNTY, ALABAMA.

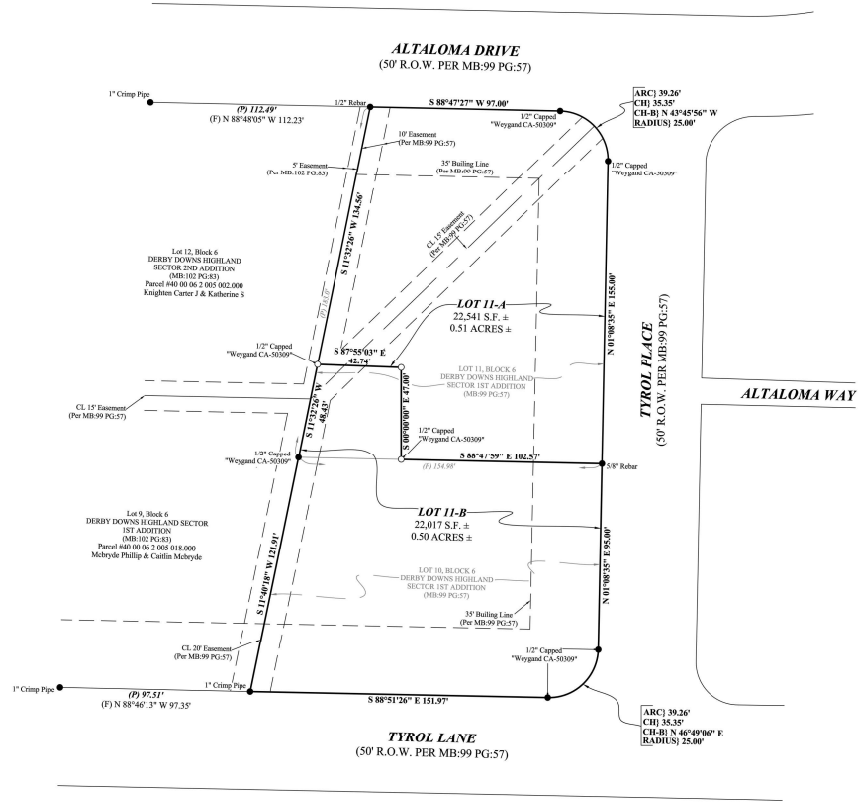
SITUATED IN THE NW 1/4 OF SECTION 6, TOWNSHIP 19 SOUTH. RANGE 2 WEST. JEFFERSON COUNTY, ALABAMA

DRAFT

LEGEND	
(F)	FIELD MEASURED
(D)	DEED/RECORD
(P)	PLAT/MAP
N/R	NOT RECOVERED
S.F.	SQUARE FEET
DB	DEED BOOK
PG	PAGE
MB	MAP/PLAT BOOK
○	SET IRON PIN AS DESCRIBED
●	FOUND IRON PIN AS DESCRIBED
△	CALCULATED POINT
———	SUBJECT PROPERTY LINE
———	ADJACENT PROPERTY LINE
———	OLD LOT LINE







APPROVED:_____ DATE:_____
CITY ENGINEER

APPROVED:_____ DATE:_____
VESTAVIA HILLS PLANNING & ZONING COMMISSION

APPROVED:_____ DATE:_____
MANAGER & CITY CLERK

APPROVED:_____ DATE:_____
DIRECTOR OF ENVIRONMENTAL SERVICE

NOTE:
ENVIRONMENTAL SERVICES DEPARTMENT APPROVAL INDICATES THAT THIS DOCUMENT HAS BEEN REVIEWED FOR PROVISION OF FUTURE OR EXISTING SANITARY SEWERS; HOWEVER THIS DOES NOT MEAN SANITARY SEWERS HAVE BEEN BUILT OR WILL BE BUILT IN THE FUTURE. ANY CHANGE IN RIGHT OF WAY OR EASEMENT BOUNDARIES AFTER THIS DATE MAY VOID THIS APPROVAL.

PREPAREDBY:
WEYGAND
173 OAKMOOR ROAD, BIRMINGHAM, AL 35209
EMAIL:INFO@WEYGAND.COM
OFFICE 205-942-0086
WEYGANDSURVEYOR.COM

DATE OF FIELDWORK: 12/16/2025	
DATE OF MAP: 01/29/2026	
FIELDWORK BY: SCOTT L.	
DRAWN BY: ALEX BAKER	
REVIEWED BY: JIMMY PINSON	
APPROVED BY: JEFFERY LUCAS	

REVISIONS

DATE	DESCRIPTION	BY

REFERENCES
> INST #20211-4570
> INST #202508-649
> MB: 99 PG: 57
> MB: 102 PG: 83

STATE OF ALABAMA)
JEFFERSON COUNTY)

The undersigned, Jeffery N. Lucas, Professional Land Surveyor, State of Alabama, and Robert Norris Jr. and Stephen Norris, as the Owners, hereby certify that this plat or map was made pursuant to a survey made by said surveyor, and that this plat or map was made at the instance of said owner, that this plat or map is a true and correct plat or map of land shown therein and known or to be known as NORRIS'S RESURVEY. showing the subdivision into which it is proposed to divide said lands, giving the length and bearings of the boundaries of each lot and its number, showing the streets, alleys and public grounds, giving the bearings, length width and name of each street, as well as the number of each lot and block, and showing the relation of the lands to the map of DERBY DOWNS HIGHLAND SECTOR, FIRST ADDITION (Map Book: 99, Pages57), and to government survey of Section 6, Township 19 South, Range 2 West, and that iron pins have been installed at all lot corners and curve points as shown and designated by small open circles on said plat or map. I, Jeffery N. Lucas, hereby state that all parts of this survey and drawing have been completed in accordance with the current requirements of the Standards of Practice for Surveying in the State of Alabama to the best of my knowledge, information and belief. Said owner also certifies that it is the owner of said lands.

In Witness Whereof, we have here unto set our hands this the ____ day of _____, _____.

By:_____ Date:_____
Jefferey N. Lucas, PLS AL 16680

By:_____ Date:_____
Robert Norris Jr. (Owner)

By:_____ Date:_____
Stephen Norris (Owner)

STATE OF ALABAMA)
JEFFERSON COUNTY)

I,_____ , a Notry Public in and for said County and State hereby certify that Jeffery N. Lucas, whose name is signed to the foregoing certificate as Land Surveyor and who is known to me, acknowledged before me, on this day, that being informed of the contents of the certificate, he executed the same voluntarily on the day the same bears date.

Given under my hand and seal this ____ day of _____, _____.

By:_____
Notary Public - My commission expires:

STATE OF ALABAMA)
JEFFERSON COUNTY)

I,_____ , a Noary Public in and for said County and State hereby certify that Robert Norris Jr., whose name is signed to the foregoing certificate as an Owner, and whois known to me, acknowledged before me, on this day that, being informed of the contents of the certificate, he executed same voluntarily on the day thesame bears date.

Given under my hand and seal this ____ day of _____, _____.

By:_____
Notary Public - My commission expires

STATE OF ALABAMA)
JEFFERSON COUNTY)

I,_____ , a Ntary Public in and for said County and State hereby certify that Stephen Norris, whose name is signed to the foregoing certificate as an Owner, and whois known to me, acknowledged before me, on this day that, being informed of the contents of the certificate, he executed same voluntarily on the day thesame bears date.

Given under my hand and seal this ____ day of _____, _____.

By:_____
Notary Public - My commission expires

NOTES:
ALL EASEMENTS ON THIS MAP ARE FOR PUBLIC UTILITIES, SANITARY SEWERS, STORM SEWERS, STORM DITCHES, PRIVATE TELEVISION CABLE SYSTEMS, AND MAY BE USED FOR SUCH PURPOSES TO SERVE PROPERTY BOTH WITHIN AND WITHOUT THIS SUBDIVISION (UNLESS OTHERWISE NOTED). NO PERMANENT STRUCTURE OR OTHER OBSTRUCTION SHALL BE LOCATED WITHIN THE LIMITS OF A DEDICATED EASEMENT.

BUILDER IS RESPONSIBLE FOR THE DRAINAGE ON EACH LOT AND IN AND AROUND EACH BUILDING.

BUILDER WILL BE RESPONSIBLE FOR ADJUSTING THE LIDS OR TOP ELEVATION FOR ALL MANHOLES AND YARD INLETS ON EACH LOT.

THE LOT OWNER/BUILDER SHALL USE APPROPRIATE METHODS, WHETHER PIPES UNDERDRAIN, DITCHES, GRADING OR OTHER MEANS, TO PROVIDE A BUILDING SITE FREE OF SURFACE OR SUBSURFACE DRAINAGE PROBLEMS WITHOUT ADVERSELY AFFECTING ADJACENT LOTS.

THE LOT OWNER/BUILDER SHALL FIELD VERIFY THE LOCATION AND ELEVATION OF SANITARY SEWER SERVICE LINE OR SEPTIC TANK LOCATION PRIOR TO CONSTRUCTION OF BUILDING FOUNDATIONS.

ELEVATION OF ALL SANITARY SEWER LATERALS TO EACH LOT SHOULD BE VERFIED BY BUILDER PRIOR TO SETTING LOWEST FLOOR OF RESIDENCE TO BE SERVICED.

NO HOUSE SHALL HAVE A FINISHED FLOOR ELEVATION LESS THAN TWO (2) FEET ABOVE TOP OF ANY ADJACENT STORM SEWER WITHOUT ENGINEER'S APPROVAL.

NO FENCE SHALL IMPEDE THE FLOW OF WATER IN ANY DRAINAGE WAY.

WEYGAND, L.C. IS NOT RESPONSIBLE FOR SOIL COMPACTIONS AND DID NOT CONDUCT ANY SURFACE OR SUBSURFACE INVESTIGATIONS.

NO TITLE SEARCH OF THE PUBLIC RECORDS HAS BEEN PERFORMED BY THIS FIRM, AND LAND SHOWN HEREON WAS NOT ABSTRACTED FOR EASEMENTS AND/OR RIGHTS-OF-WAY, RECORDED OR UNRECORDED.

THE PARCEL SHOWN HEREON IS SUBJECT TO SETBACKS, EASEMENTS, ZONING, AND RESTRICTIONS THAT MAY BE FOUND IN THE PUBLIC RECORDS OF SAID COUNTY AND/OR CITY.

UNDERGROUND PORTIONS OF FOUNDATIONS, FOOTINGS, AND/OR OTHER UNDERGROUND STRUCTURES, UTILITIES, CEMETERIES OR BURIAL SITES ARE NOT SHOWN UNLESS OTHERWISE NOTED.

THIS RESURVEY PLAT IS BASED ON A PROPERTY BOUNDARY SURVEY PERFORMED BY WEYGAND, LLC, UNDER THE RESPONSIBLE CHARGE OF JEFFERY N. LUCAS, PLS AL 16680. DATED 12/16/2025, JOB NO. 2025-737.

THIS PROPERTY IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA (ZONE "X") AS PER MAP NO. 01073C0566J, DATED 9/24/2021.

City of Vestavia Hills
Office of the City Clerk

OWNER AFFIDAVIT (This form must be notarized):

I do hereby declare that the following statements are correct concerning the subject property located at: 3238 Tyrol Ln, Vestavia, AL 35216, Vestavia Hills, Alabama and that statements submitted in my application are true and that I am: *(please check all that apply).*

____ the Property Owner and representing myself in said request.

✓ the Property Owner, but I am authorizing a Representing Agent by the name of: Mary Overby to represent me in the following request:

And am requesting: (please check)

____ Rezoning Request
____ Preliminary Plat Approval
✓ Final Plat Approval
____ Conditional Use Approval
____ Request for Variance
____ Special Exception
____ Design Review Approval

Signed: _____
Owner Signature/Date 3/3/2026

STATE OF ALABAMA
COUNTY OF Jefferson

Given under my hand and seal this 3rd day of March, 2026

Elizabeth S. Koury
Notary Public

ELIZABETH S. KOURY
MY COMMISSION EXPIRES
AUGUST 30, 2029
NOTARY PUBLIC
STATE OF ALABAMA

My commission expires 30th day of August, 2029.

City of Vestavia Hills
Office of the City Clerk

OWNER AFFIDAVIT (This form must be notarized):

I do hereby declare that the following statements are correct concerning the subject property located at: 2354 Tyrol Pl., Vestavia, AL 35216, Vestavia Hills, Alabama and that statements submitted in my application are true and that I am: *(please check all that apply).*

____ the Property Owner and representing myself in said request.

__✓__ the Property Owner, but I am authorizing a Representing Agent by the name of: Mary Overby to represent me in the following request:

And am requesting: (please check)

____ Rezoning Request
____ Preliminary Plat Approval
__✓__ Final Plat Approval
____ Conditional Use Approval
____ Request for Variance
____ Special Exception
____ Design Review Approval

Signed: _____
Owner Signature/Date 3-3-24

STATE OF ALABAMA
COUNTY OF Jefferson

Given under my hand and seal
this 3rd day of March, 2026.

_____
Notary Public

ELIZABETH S. KOURY
MY COMMISSION EXPIRES
AUGUST 30, 2029
NOTARY PUBLIC
STATE OF ALABAMA

My commission expires 30th day of August, 2029.

VESTAVIA HILLS

Planning and Zoning Commission
Planners Report

MEETING DATE
May 14, 2026

AGENDA ITEM
CU-26-3 **David Johnson** is requesting **Conditional Use Approval for a Donation Center** for **3253 Cahaba Heights Road.** The Property Is Owned By Conquest Holdings/Vapor and Is Zoned Vestavia Hills B-3

BACKGROUND
Conditional Use Approval for a Donation Center

PLANNER'S REVIEW/RECOMMENDATION
The applicant is seeking Conditional Use Approval for a drop-off donation center in Cahaba Heights. The drop-off center will be operated by Vapor, and will serve as a holding center for donated products that will be shipped to their stores. There will be no outdoor storage of any kind as a part of this request. Products will be transported via box trucks, and the drop-off location will have set hours and will be fully staffed. There will be no retail activities at this site, and storage will be temporary.

ATTACHMENTS
1. Application
2. Plans
3. Owners Affidavit

Jack Wakefield
City Planner

Record No: CU-26-3

Conditional Use Application

Status: Active

Submitted On: 3/26/2026

Primary Location

3253 CAHABA HEIGHTS RD
VESTAVIA HILLS, AL 35243

Owner

Conquest Holdings LLC
3253 Cahaba Heights Rd 1069
MONTGOMERY HWY VESTAVIA HILLS,
Alabama 35216

Agenda Information

Agenda Scheduling:

Comment/Delay/Reasons:

Owner Information

A notarized Owner's Affidavit must be submitted with this Conditional Use Application before it can be processed. Please prepare this affidavit prior to submission or it will not be properly filed. All documents must be filed prior to the application date to be considered on the next meeting date. If any required information is received after the application date, the application will be held until the next month.

Property Owner:*

Conquest Holdings LLC

Mailing Address of Property Owner Including City, State, Zip Code:*

400 Boardman Dr, Chelsea Al 35043

Property Owner Email:

Property Owner Telephone Number:

205-641-2992

Check Below if Property Owner is Responsible for Postage Costs

☑

Representing/Responsible Party

Representing Agent:

n/a

Mailing Address of Representing Agent Including City, State, Zip:

Representing Agent Email:

Representing Agent Telephone No.:

Check Below if Representing Agent is Responsible for Postage Charges

☐

Property Information

Property Address:*

3253 Cahaba Heights Road, Vestavia Hills, AL

County Parcel ID Number:

28 00 22 1 017 004.000

Legal Description of Subject Property:*

Metes and Bounds description on county website: P O B 125 FT S E OF E INTER OF BRASHER DRIVE & CAHABA HEIGHTS RD TH E 100 FT S ALONG CAHABA HEIGHTS RD TH S 165 FT S TH W 100 FT S TH N 165 FT S TO P O B LYING IN S E 1/4 OF N E 1/4 SEC 22 T 18 S R 2 W

Current Zoning Classification of Subject Property:*

B3

Requested Conditional Use Including Intended Use, Citing Appropriate Section of the Zoning Code, etc.:*

We desire to use the property as a staffed Donation Drop Off Center with set hours. This would involve the receipt of donated goods from customers and temporary storage of those goods until they can be transported to our stores by box truck. There will not be any outside donation boxes.

Explanation of Reasons for Conditional Use

Upon acceptance of an application, the Commission shall consider the application during a public hearing. The Commission shall, after the public hearing, make a recommendation to the Council. Following the recommendation by the Commission, the Council shall hold a public hearing regarding the application and upon completion of said hearing, shall approve with conditions or deny the request within the time limit required by law. The recommendation by the Commission may be to approve or deny the application, which said recommendation shall be advisory only. Zoning is a legislative matter decided by the Council. The Council shall not be bound by the recommendation of the Commission. A Conditional Use approval shall lapse and be of no effect if, after the expiration of one (1) year from the date of Council approval, no construction or change in use pursuant to such Conditional Use has taken place, provided that the Council may, for good cause shown, specify a longer period of time in conjunction with its action to approve a Conditional Use.

Determination. Conditional Uses shall only be approved upon a finding by the Governing Body that all of the following criteria are satisfied. Please FULLY explain each of these conditions relative to this Conditional Use Request.

1. The use will not, under the circumstances of the particular case, be detrimental to the health, safety or general welfare of the surrounding area:*

It will not. Our desire is to enhance and improve the existing facility.

2. The use is necessary or desirable and provides a service or facility that contributes to the general well-being of the surrounding area:*

Yes, We desire to offer citizens a convenient donation experience that allows them to contribute to a global faith based ministry that is doing tremendous good and impacting the lives of many. The donations received will support our retail stores with gently used items for resale including our existing retail store in Vestavia. We believe allowing citizens the opportunity to donate goods prevents many items from going to land fills thus having a positive impact on the envirnment. We have many customers and donors who already live and work in the area.

3. The request is consistent with all applicable provisions of the Comprehensive Plan:*

Yes

4. The request shall not adversely affect adjacent properties:*

It will not.

5. The request is compatible with the existing or allowable uses of adjacent properties:*

Yes

6. The request can demonstrate that adequate public facilities, including roads, drainage, potable water, sanitary sewer, and police and fire protection exist or will exist to serve the requested use at the time such facilities are needed:*

Yes

7. The request can demonstrate adequate provision for maintenance of the use and associated structures:*

Yes

8. The request has minimized, to the degree possible, adverse effects on the natural environment:*

Yes

9. The request will not create undue traffic congestion:*

No, The area will be servicing a limited number of vehicles per day. It is a drive thru situation where vehicles will drop off and exit. Our desire is a convenient drop off location that would allow customers to drop off on the same trip into Cahaba Heights to shop other retail operations.

That such development will comply with all applicable regulations and conditions specified within this Ordinance:*

Yes

New Custom Section

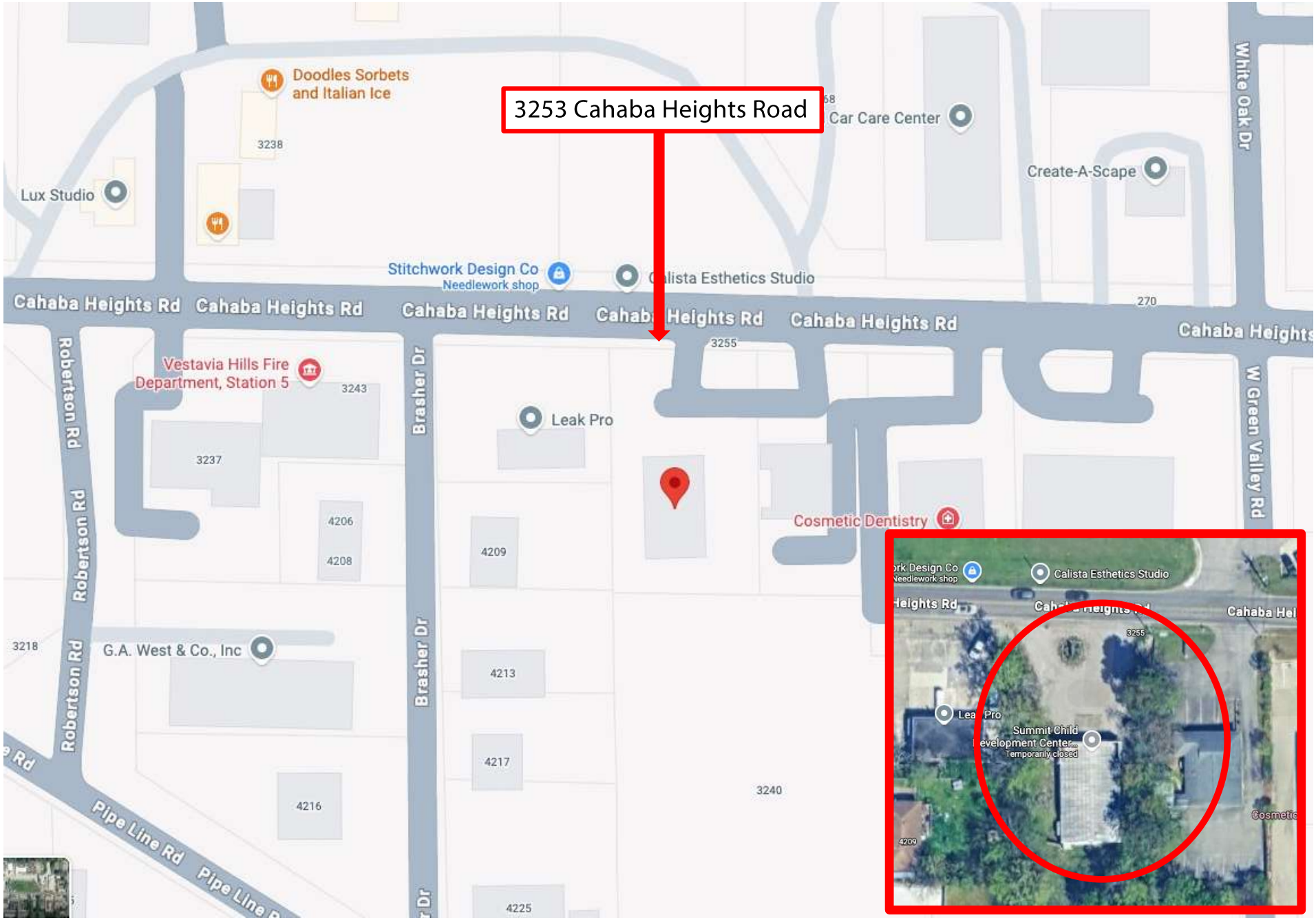
P&Z Meeting Date

P&Z Recommendation

City Council Meeting Date

Ordinance Number

Approve/Deny & Conditions



Vicinity Map

SITE PLAN NOTES – VAPOR CAHABA HEIGHTS

1. THE SITE PLAN IS PROVIDED IN TWO FORMATS:
   a. AN OVERALL PLAN ILLUSTRATING THE SUBJECT PROPERTY IN RELATION TO ADJACENT PARCELS, AND
   b. A DETAILED PLAN FOCUSED ON THE PROJECT SITE AND PROPOSED IMPROVEMENTS.

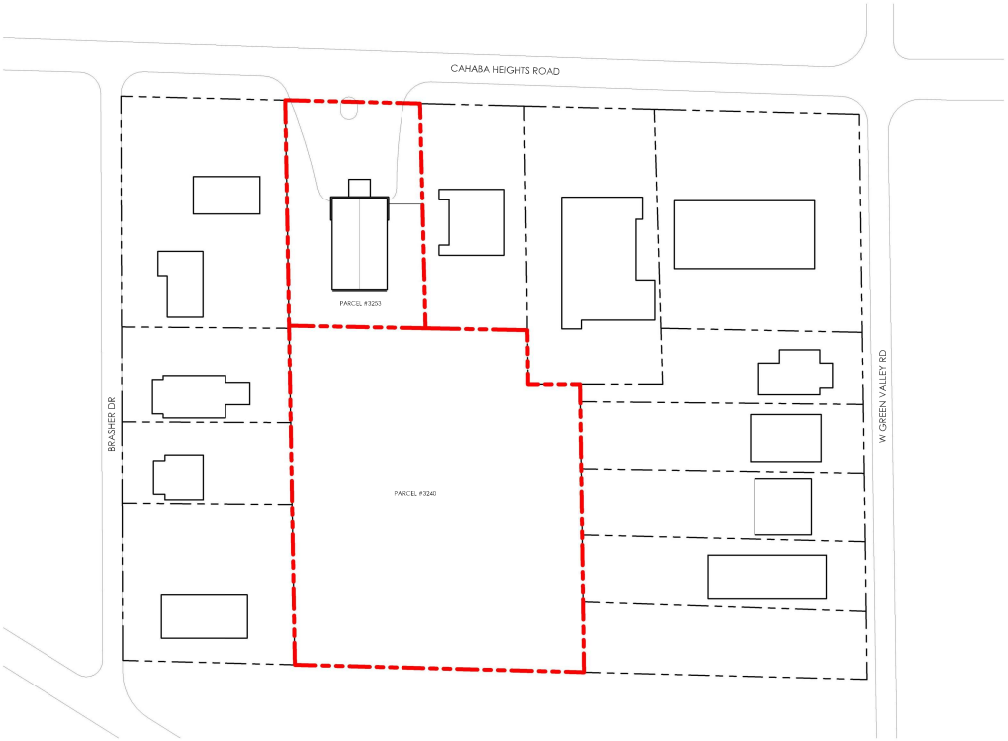
2. THE PROJECT IS INTENDED AS A MINIMAL-IMPACT SITE MODIFICATION, UTILIZING THE EXISTING DEVELOPED CONDITIONS OF THE PROPERTY.
3. EXISTING PARKING AREAS WILL REMAIN, WITH MINOR RESTRIPING AND ADJUSTMENTS AS NEEDED TO MAXIMIZE THE NUMBER OF PARKING SPACES WITHIN THE CURRENT PAVED FOOTPRINT.
4. A NEW VEHICULAR CIRCULATION LOOP WILL BE ESTABLISHED TO SUPPORT DONATION DROP-OFF OPERATIONS. THIS LOOP WILL ALLOW VEHICLES TO:
   a. QUEUE ON-SITE
   b. CIRCULATE EFFICIENTLY THROUGH THE PROPERTY
   c. ACCESS THE DESIGNATED DROP-OFF CANOPY AREA
   d. EXIT WITHOUT DISRUPTING STANDARD PARKING OPERATIONS

5. HE PROPOSED CIRCULATION PATTERN IS DESIGNED TO MAINTAIN SAFE AND EFFICIENT TRAFFIC FLOW WHILE MINIMIZING CONFLICTS BETWEEN DROP-OFF ACTIVITY AND PARKED VEHICLES.
6. NO MAJOR SITE MODIFICATIONS ARE ANTICIPATED, INCLUDING BUT NOT LIMITED TO:
   a. NO GRADING BEYOND MINOR ADJUSTMENTS REQUIRED FOR CANOPY INSTALLATION
   b. NO SIGNIFICANT CHANGES TO EXISTING DRAINAGE PATTERNS
   c. NO EXPANSION OF IMPERVIOUS SURFACES BEYOND LOCALIZED IMPROVEMENTS

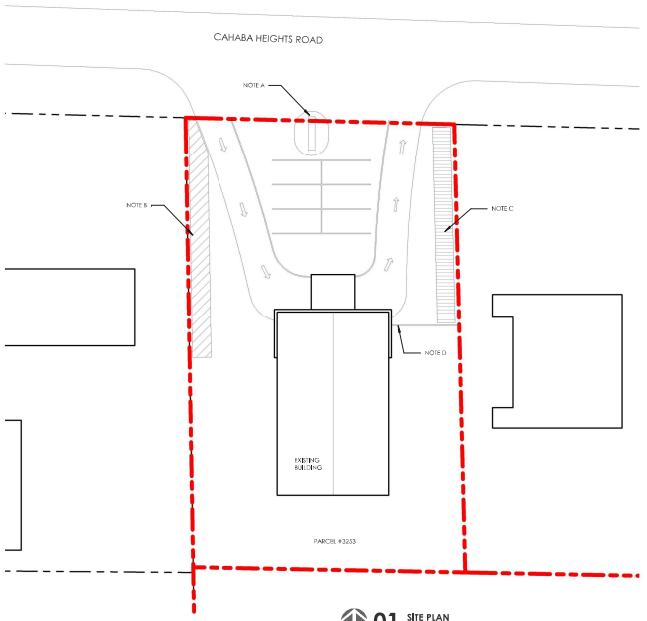
7. ALL IMPROVEMENTS ARE LIMITED TO THOSE NECESSARY TO SUPPORT THE VAPOR THRIFT DROP-OFF USE WHILE PRESERVING THE OVERALL CHARACTER AND FUNCTIONALITY OF THE EXISTING SITE.
8. STRIPING AND SIGNAGE SHALL COMPLY WITH APPLICABLE CODES, INCLUDING ACCESSIBLE PARKING REQUIREMENTS.

ADDITIONAL SITE IMPROVEMENTS:

A. LANDSCAPE ENHANCEMENTS SHALL BE PROVIDED AT THE PRIMARY ENTRY SIGN, INCLUDING A COMBINATION OF PERENNIAL AND SEASONAL ANNUAL PLANTINGS, WITH A NATURAL STONE BORDER TO DEFINE THE PLANTING AREA, AS DIRECTED BY OWNER/ARCHITECT.
B. AT THE WEST SIDE OF THE PROPERTY, WITHIN THE EXISTING DRAINAGE DITCH, NATURAL STONE SHALL BE ADDED AS NEEDED TO STABILIZE THE CHANNEL AND REDUCE EROSION.
C. ON THE EAST PROPERTY LINE, SOD SHALL BE INSTALLED TO ESTABLISH A CLEAN AND UNIFORM EDGE CONDITION ALONG THE BOUNDARY.
D. A SIX (6) FOOT TALL STAINED WOOD SCREEN WALL SHALL BE INSTALLED ALONG THE EAST SIDE OF THE BUILDING, LOCATION AS SHOWN ON PLAN, TO PROVIDE VISUAL SCREENING.



02 OVERALL SITE PLAN 1" = 40'-0"



01 SITE PLAN 1" = 20'-0"

difference architecture

VAPOR DONATION CENTER - CAHABA HEIGHTS

SITE PLAN

0032.003
scale: As indicated
date: 04/16/2026

SD-1

SCOPE OF WORK

PROJECT OVERVIEW

The project consists of the selective exterior modification of an existing facility to convert the building into a Vapor Thrift donation drop-off location. The intent is to adapt the building for operational use while maintaining the majority of the existing structure with minimal intervention.

GENERAL SCOPE

Work includes limited exterior demolition, façade enhancements, construction of a new drop-off canopy, and minor site/interface improvements necessary to support donation drop-off operations.

No interior renovations are included in this scope.

DEMOLITION

- Removal of the existing parapet / quasi-mansard roof element, including any tapered or sloped façade components associated with this feature
- Preparation of the roof edge for a simplified, flattened profile
- Removal of any associated trim, fascia, or façade materials necessary to complete the new exterior profile

EXTERIOR MODIFICATIONS

- Modification of the building roofline to create a clean, flattened parapet condition
- Installation of composite cladding elements consistent with Vapor Thrift branding standards
- Integration of new exterior finishes with existing construction

SIGNAGE

- Furnish and install new building signage for Vapor Thrift
- Coordinate placement and mounting with updated façade elements
- Provide necessary backing, blocking, and electrical provisions if required

CANOPY CONSTRUCTION

- Construction of a new donation drop-off canopy structure
- Canopy to be designed to allow vehicular pull-through access for efficient donation drop-off
- Structural system, roofing, and finishes to be coordinated with the overall building aesthetic
- Integration with existing pavement and circulation patterns

FRONT FAÇADE

- Adjust design to align with updated building appearance and branding
- Site Interface (Limited)
- Minor adjustments required to accommodate canopy installation and vehicle circulation
- Tie-in to existing drives and drop-off areas
- A six (6) foot tall stained wood screen wall shall be installed along the east side of the building.

EXCLUSIONS

- No interior demolition or construction
- No modifications to existing building systems (mechanical, electrical, plumbing), unless required for signage
- No full site redevelopment beyond canopy-related adjustments

INTENT

The overall intent of this project is to deliver a clean, recognizable Vapor Thrift drop-off location with minimal construction scope, focusing on branding, functionality, and ease of use for donors.

02 MONUMENT SIGN ELEVATION
1/2" = 1'-0"

01 FRONT BUILDING ELEVATION
3/8" = 1'-0"

difference architecture

VAPOR DONATION CENTER - CAHABA HEIGHTS

ELEVATIONS

0032.003
scale: As indicated
date: 04/16/2026

SD-2

VAPOR DONATION CENTER -
CAHABA HEIGHTS

Perspective View

City of Vestavia Hills
Office of the City Clerk

OWNER AFFIDAVIT (This form must be notarized):

I do hereby declare that the following statements are correct concerning the subject property located at: 3253 Cahaba Heights Rd, Vestavia Hills, Alabama and that statements submitted in my application are true and that I am: *(please check all that apply)*.

____ the Property Owner and representing myself in said request.

✓ the Property Owner, but I am authorizing a Representing Agent by the name of: David Johnson to represent me in the following request:

And am requesting: (please check)

____ Rezoning Request
____ Preliminary Plat Approval
____ Final Plat Approval
✓ Conditional Use Approval
____ Request for Variance
____ Special Exception
____ Design Review Approval

Signed: John Brice 3-26-26
Owner Signature/Date

STATE OF ALABAMA
COUNTY OF Jefferson

Given under my hand and seal this 26TH day of March, 2026

Janice F. Kent
Notary Public

My commission expires 12TH day of August 2029.

VESTAVIA HILLS

Planning and Zoning Commission
Planners Report

MEETING DATE
May 14, 2026

AGENDA ITEM
CU-26-4 **Tom Dekle** is Requesting **Conditional Use Approval** for **Pet Grooming** Located At **3155 Green Valley Road.** The Property Is Owned By **Jake Datnoff** and Is Zoned Vestavia Hills B-2.

BACKGROUND
Conditional Use Approval for Pet Grooming

PLANNER'S REVIEW/RECOMMENDATION
The applicant is seeking Conditional Use Approval for pet grooming in Cahaba Heights. This will reside in the strip retail center near the intersection of Green Valley Road and Crosshaven Drive. The business is named Scenthound, and will be a dog bathing and grooming operation. The business will not offer boarding or vetinary services.

ATTACHMENTS
1. Application
2. Business Model
3. Plans
4. Scenthound Cahaba Heights_layout with legend_5-8-26 (002)
5. Owners Affidavit

Jack Wakefield
City Planner

Record No: CU-26-4

Conditional Use Application

Status: Active

Submitted On: 4/9/2026

Primary Location

3155 GREEN VALLEY RD
VESTAVIA HILLS, AL 35243

Owner

Jake Datnoff
1st Avenue South 2301 Birmingham, AL 35233

Agenda Information

Agenda Scheduling:

Comment/Delay/Reasons:

Owner Information

A notarized Owner's Affidavit must be submitted with this Conditional Use Application before it can be processed. Please prepare this affidavit prior to submission or it will not be properly filed. All documents must be filed prior to the application date to be considered on the next meeting date. If any required information is received after the application date, the application will be held until the next month.

Property Owner:*

Jake Datnoff

Mailing Address of Property Owner Including City, State, Zip Code:*

2301 1st Avenue South, Suite 206,
Birmingham, AL 35233

Property Owner Email:

Property Owner Telephone Number:

205-795-4131

Check Below if Property Owner is Responsible for Postage Costs

☑

Representing/Responsible Party

Representing Agent:

Jake Datnoff

Mailing Address of Representing Agent Including City, State, Zip:

2301 1st Avenue South, Suite 206,
Birmingham, AL 35233

Representing Agent Email:

Representing Agent Telephone No.:

205-795-4131

Check Below if Representing Agent is Responsible for Postage Charges

☑

Property Information

Property Address:*

3155 Green Valley Road, Suite 6,
Vestavia Hills, AL 35243

County Parcel ID Number:

2800221004001000

Legal Description of Subject Property:*

COM NE COR OF NW 1/4 OF NE 1/4 SEC 22 TP 18 R 2W TH W 37 FT TH S 60.1 FT TO POB TH CONT S 270 FT TH W 456.6 FT TH NW 133.6 FT TH W 100 FT TH N 80 FT TH E 90 FT TH N 118.2 FT TH E 369.3 FT TO POB LESS EXC ROW

Current Zoning Classification of Subject Property:*

B-2

Requested Conditional Use Including Intended Use, Citing Appropriate Section of the Zoning Code, etc.:*

We are the local franchisee for Scenthound - a dog bathing and grooming business. We currently have 4 physical locations in the Birmingham area and would like to open a 5th location in Cahaba Heights (Vestavia Hills). The shopping center in Cahaba Heights we would like to be a part of is zoned B-2. It appears that dog grooming does not fall into an existing category. While there are approximately 8 dog grooming services in Vestavia, it does not appear that any are in locations zoned B-2. Therefore, we are requesting a Conditional Use approval for 3155 Green Valley Road, Suite 6, Vestavia Hills, AL 35243.

As a point of reference, we strictly provide dog bathing and grooming services. We do not offer boarding and we do not offer Veterinary services.

Explanation of Reasons for Conditional Use

Upon acceptance of an application, the Commission shall consider the application during a public hearing. The Commission shall, after the public hearing, make a recommendation to the Council. Following the recommendation by the Commission, the Council shall hold a public hearing regarding the application and upon completion of said hearing, shall approve with conditions or deny the request within the time limit required by law. The recommendation by the Commission may be to approve or deny the application, which said recommendation shall be advisory only. Zoning is a legislative matter decided by the Council. The Council shall not be bound by the recommendation of the Commission. A Conditional Use approval shall lapse and be of no effect if, after the expiration of one (1) year from the date of Council approval, no construction or change in use pursuant to such Conditional Use has taken place, provided that the Council may, for good cause shown, specify a longer period of time in conjunction with its action to approve a Conditional Use.

Determination. Conditional Uses shall only be approved upon a finding by the Governing Body that all of the following criteria are satisfied. Please FULLY explain each of these conditions relative to this Conditional Use Request.

1. The use will not, under the circumstances of the particular case, be detrimental to the health, safety or general welfare of the surrounding area:*

We (Scenthound) provide dog bathing and grooming services. We have 4 existing locations in the Birmingham area and they all have very high customer review ratings. Our current locations in the Birmingham area are in Greystone/Lee Branch, Hoover, Trussville and Homewood/Mt Brook. While there are approximately 8 pet grooming businesses in the City of Vestavia, we offer similar services through a different business model, i.e., membership based, highly convenient for customers with a recognized better value proposition. Dog ownership is an integral part of daily life . . . and growing. Our goal is to make this as easy and satisfying as possible for owners and their dogs.

2. The use is necessary or desirable and provides a service or facility that contributes to the general well-being of the surrounding area:*

Yes – dog grooming is a highly desirable service as evidenced by the presence of 8 other pet grooming business operating in The City of Vestavia. Our services are similar, but our business model is more attractive to a lot of customers as seen in our other locations. We welcome the opportunity to show you any of our Birmingham area locations. They are in Greystone/Lee Branch, Trussville, Hoover and Mt Brook/Homewood.

3. The request is consistent with all applicable provisions of the Comprehensive Plan:*

Yes - Our services are similar to the existing pet grooming businesses in The City of Vestavia Our business model has become very popular due to our value proposition and simplicity. We make it cost-effective and easy for our customers to have their dogs bathed and groomed.

4. The request shall not adversely affect adjacent properties:*

This request will not adversely affect adjacent properties or tenants:

1) Our model is highly efficient, requires minimal parking and has low foot-traffic at any given time.

2) The "design & construction" elements of our spaces are time-proven via 150+ locations scattered around the Southeast at the franchise level. This is done by continuous input from our store operators, licensed architects, licensed contractors and manufacturers that provide proven materials that are tested and backed by engineered specifications.

3) As a part of our space construction build-out, we install materials that are designed and manufactured to minimize sound transfer to adjoining spaces. E.g., we install Quiet Rock over fire-rated sheetrock on all walls and we install Rockwool on top of acoustical ceiling tile.

4) We do not offer any boarding or veterinary services and there are no dogs onsite other than during our business hours of Mon-Sat 8am-5pm.

5. The request is compatible with the existing or allowable uses of adjacent properties:*

Yes - The landlord/building owner has approved us and we are actively pursuing a lease at 3155 Green Valley Road, Suite 6, Vestavia Hills, AL 35243. In fact, our lease is contingent on us receiving this Conditional Use approval.

6. The request can demonstrate that adequate public facilities, including roads, drainage, potable water, sanitary sewer, and police and fire protection exist or will exist to serve the requested use at the time such facilities are needed:*

Yes - The space we are pursuing is located in an existing shopping center that has all of these services. Nothing we do or will do before, during or after construction will change or compromise any of these services.

7. The request can demonstrate adequate provision for maintenance of the use and associated structures:*

Yes - we have 4 locations in the Birmingham area and 4 locations in the Nashville area. All of our locations operate under signed legal multi-year leases. All of these lease contain requirements on behalf of the landlord and/or us as tenants to maintain our facilities and stay in compliance with all local codes and regulations.

We welcome access to any of our current leases, plus the lease we are negotiating for the space at 3155 Green Valley Road, Suite 6, Vestavia Hills, AL 35243 .

8. The request has minimized, to the degree possible, adverse effects on the natural environment:*

Our business services do not require the use of any hazardous materials. Our construction documents and mechanical systems are designed and built by licensed architects, licensed engineers and licensed contractors. All of our systems are approved and inspected during the permitting and construction processes . . . and signed off by inspectors before we receive our Certificates of Occupancy. Plus, we are routinely inspected by local authorities for ongoing compliance. We have no outstanding issues at any of our locations.

9. The request will not create undue traffic congestion:*

We will not contribute to traffic congestion. Our business model is simple, efficient and effective: 1) customers schedule their dog's appointment via our mobile app, 2) customers drop off their dog just prior to their scheduled appointment, 3) we perform the designated service, which takes 30 to 45 minutes, 4) the customer is text-notified as soon as their dog is ready and 5) the customer picks up their dog shortly thereafter.

Note that drop-off and pick-up only take a few minutes. Since appointments are prescheduled and spread out through the day, there are rarely more than 1 to 2 customers onsite and any given time.

FYI - Our business hours are Mon-Sat 8am-5pm.

That such development will comply with all applicable regulations and conditions specified within this Ordinance:*

We will definitely comply with all applicable regulations, requirements and conditions necessary. This will be evidenced by us doing so through obtaining and maintaining all proper approvals, leases, permits and licenses as required by our formal agreements and all State and Local authorities.

New Custom Section

P&Z Meeting Date

P&Z Recommendation

City Council Meeting Date

Ordinance Number

Approve/Deny & Conditions

Summary of our Scenthound business model

We (Scenthound) provide dog bathing and grooming services. We have 4 existing locations in the Birmingham area and they all have very high customer review ratings. Our current locations in the Birmingham area are in Greystone/Lee Branch, Hoover, Trussville and Homewood/Mt Brook. While there are approximately 8 pet grooming businesses in the City of Vestavia, we offer similar services through a different business model, i.e., membership based, highly convenient for customers with a recognized better value proposition. Dog ownership is an integral part of daily life for many people and families . . . and growing. Our goal is to make this as easy and satisfying as possible for owners and their dogs.

Our services are similar to the existing pet grooming businesses in The City of Vestavia Our business model has become very popular due to our value proposition and simplicity. We make it: 1) cost-effective and 2) easy for our customers to have their dogs bathed and groomed.

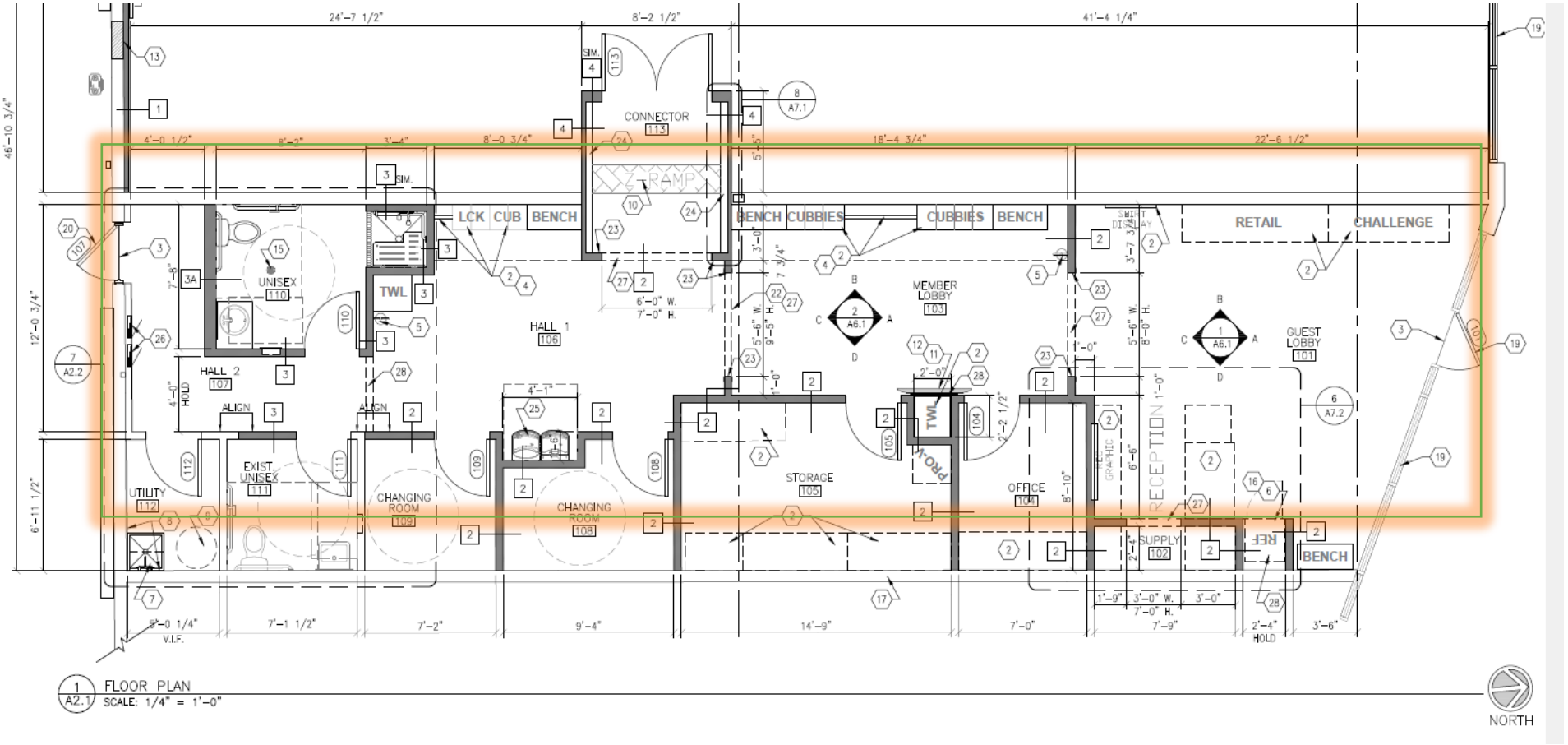
Notes of interest:

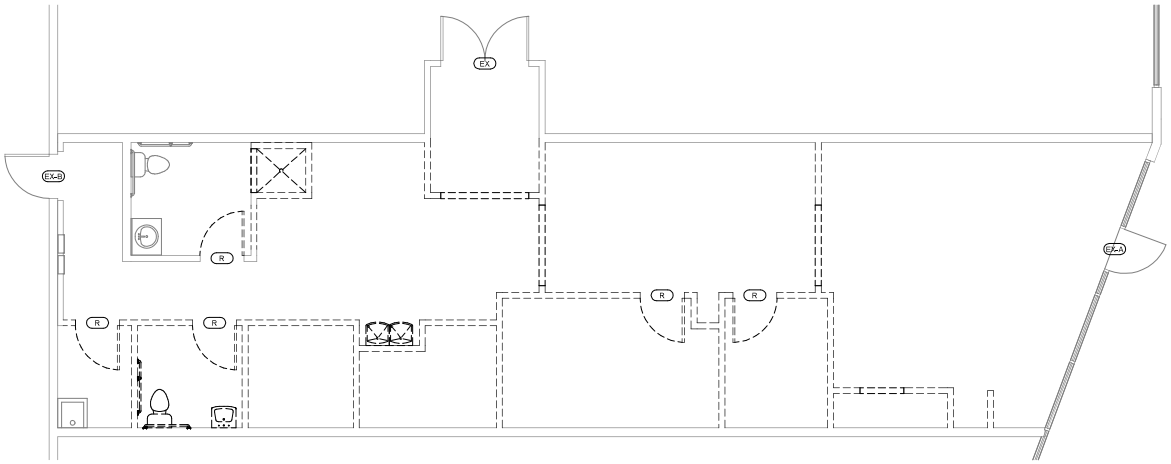
- Our model is highly efficient, requires minimal parking and has low foot-traffic at any given time.
- Operating hours are M-Sat 8am-5pm.
- We do not offer boarding and we do not offer Veterinary services.
- Dogs are only onsite during operating hours . . . no overnight stays.
- Typical experience: 1) customer books an appointment via our mobile app, 2) customer drops off their dog just before the appointment time, 3) we perform the specified service - which takes on average 30 to 45 minutes, 4) we text-notify the customer that their dog is ready for pick up immediately after service is completed and 5) customer picks up their dog shortly after notification.
- Because we run a highly efficient process, there are usually only 5 to 7 dogs being bathed and/or groomed at any given time.
- Typical staffing is 5 to 7 team members during operating hours.

Notes about the location we are pursuing - 3155 Green Valley Road, Suite 6, Vestavia Hills, 335233.

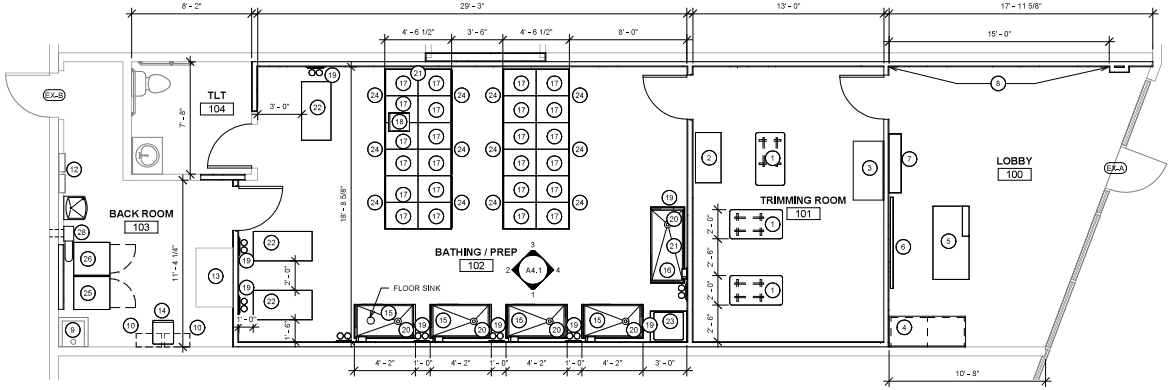
- As of 4/9/26 this space (suite 6 . . . see on page 2) and the space immediately next door (Suite 7) are currently built-out as a gym, but they are abandon by the previous tenant They are no longer in business.
- ***Scenthound Dog Grooming*** is actively pursuing a lease of Suite 6 and will remodel it to their operating design. This is contingent upon receiving Conditional Use approval from the City of Vestavia Hills, AL.
- We (Scenthound) have engaged a local licensed architect to draft our layout of this space, but the draft is not ready as of 4/9/26. We have 9 locations (4 in Birmingham and 5 in Nashville) and all of them are very similar in shape, size and layout. They all perform the exact dog grooming services. In order for the Committee(s) to see our proposed build-out in Vestavia, we uploaded a 2-page layout of our most recent location (currently under construction) in Franklin, TN in the “Engineering Drawings, Plans, etc.” section of the online application.
- **Please note** that we will bring the draft layout for the Vestavia space to the Planning & Zoning Department as soon as possible and no later than 5/13/13 . . . prior to the 5/14/26 Planning & Zoning Meeting.

3155 Green Valley Road, Suite 6, Vestavia Hills, 335233

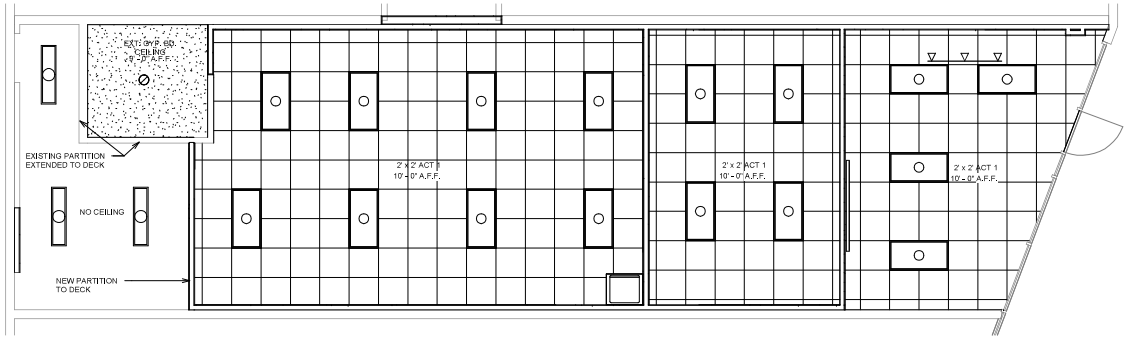




3 DEMOLITION PLAN
1/4" = 1'-0"



1 FLOOR PLAN
1/4" = 1'-0"



2 REFLECTED CEILING PLAN
1/4" = 1'-0"

DEMOLITION LEGEND

- EXISTING PARTITION TO REMAIN
- EXISTING PARTITION TO BE REMOVED
- EX — EXISTING DOOR TO REMAIN
- R — EXISTING DOOR AND FRAME TO BE REMOVED

(##) EQUIPMENT KEYNOTES

1. GROOMING TABLE
2. DOG SCALE
3. QC STATION AND DESK (24" X 48")
4. CREDENZA (62" X 25")
5. FRONT DESK (60" X 30")
6. MENU BOARD (65" MONITOR)
7. RETAIL SHELVES
8. KNOWLEDGE WALL
9. MOP SINK
10. TANKLESS WATER HEATER - MOUNTED AS HIGH ON WALL AS POSSIBLE
11. WIRE SHELVING 24"X48"
12. ELECTRICAL PANEL
13. BREAK TABLE
14. MINI-REFRIGERATOR
15. BATHING TUB (50")
16. BATHING TUB (62")
17. DOG CRATE (SMALL)
18. KENNEL DRYER
19. BLOW DRYER - PROVIDE BLOCKING
20. BATHER BOX - PROVIDE BLOCKING
21. OUTLET FOR CAGE DRYER, CONNECTED TO 30 MINUTE TIMER
22. DRYING TABLE
23. DEHUMIDIFIER - ON 24" X 30" STAINLESS STEEL SHELF 6'-0" A.F.F.
24. DOG CRATE (LARGE)
25. WASHING MACHINE
26. DRYER
27. —
28. DRYER LINT TRAP (DUNDAS JAFINE PCLT4WZW OR SIM.)

CONSTRUCTION LEGEND

- EXISTING PARTITION TO REMAIN
- A — NEW PARTITION - REFER TO PARTITION TYPES
- EX — EXISTING DOOR TO REMAIN - PROVIDE NEW CYLINDER LOCKSET
- 000 — NEW DOOR - REFER TO SCHEDULE

REFLECTED CEILING PLAN LEGEND

- 2X4 ACOUSTICAL LAY-IN CEILING SYSTEM. SYSTEM TO BE SUPPORTED FROM STRUCTURE ABOVE
- 2x4 LAY-IN LIGHT FIXTURE - REFER TO ELECTRICAL
- SUPPLY DIFFUSER - REFER TO MECHANICAL
- RETURN / EXHAUST GRILL - REFER TO MECHANICAL
- TRACK LIGHTING

REFLECTED CEILING PLAN NOTES

A. CEILING GRID TO BE SUPPORTED FROM STRUCTURE ABOVE. IF GRID SUPPORTS ARE BLOCKED BY UTILITIES ABOVE, TRAPEZE-TYPE SUPPORTS TO BE CONSTRUCTED FROM UNISTRUT TO SPAN BLOCKAGES.

B. LIGHT FIXTURES LOCATED WITHIN THE CEILING GRID TO BE SUPPORTED FROM THE STRUCTURAL ABOVE, INDEPENDENTLY OF THE CEILING GRID.

architecturalcooperative
1604 28th Avenue South, Birmingham, AL 35209 205.533.3563

SCENTHOUND FIT-OUT

Client:
SCENTHOUND

Project Location:
3155 GREEN VALLEY ROAD
BIRMINGHAM, AL
35242

REVISION	DATE

DATE: 4-14-26
DRAWING TITLE: FLOOR PLAN
PROJECT NUMBER: 24-26
FILE NUMBER:
SHEET of
DRAWING NUMBER
A2.1

(##) EQUIPMENT KEYNOTES

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5. FRONT DESK (60" X 30")
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7. RETAIL SHELVES
8. KNOWLEDGE WALL
9. MOP SINK
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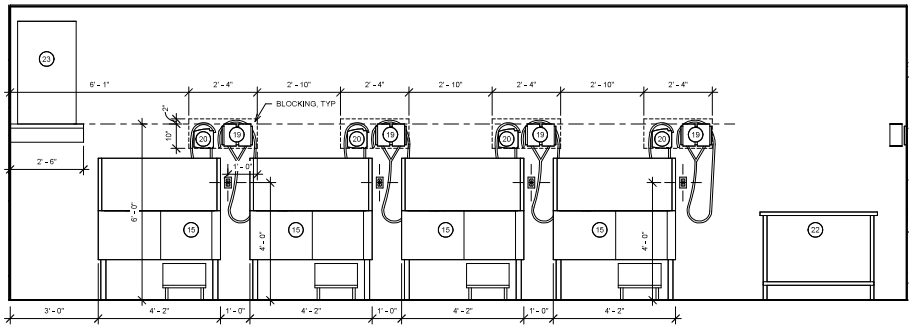
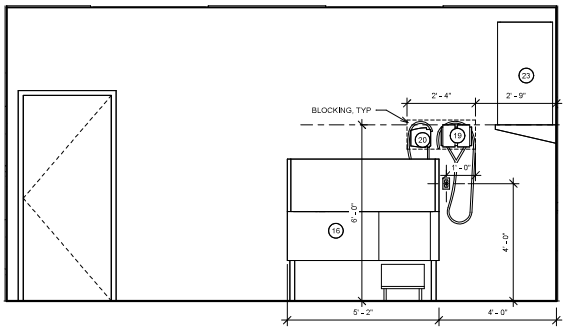
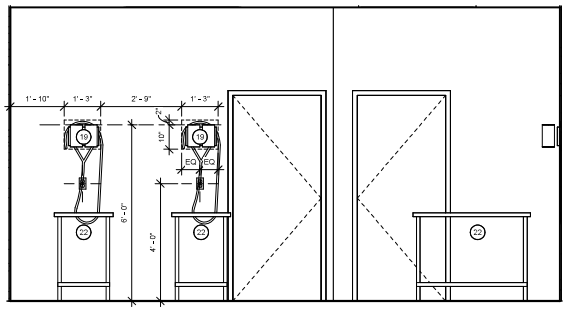


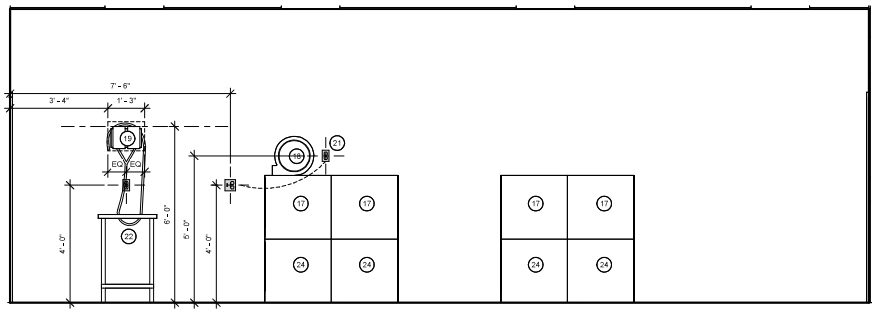
1 BATHING / PREP ELEVATION A
1/2" = 1'-0"



4 BATHING / PREP ELEVATION D
1/2" = 1'-0"



2 BATHING / PREP ELEVATION B
1/2" = 1'-0"



3 BATHING / PREP ELEVATION C
1/2" = 1'-0"

architectural cooperative
1604 28th Avenue South, Birmingham, AL 35209 205.533.3563

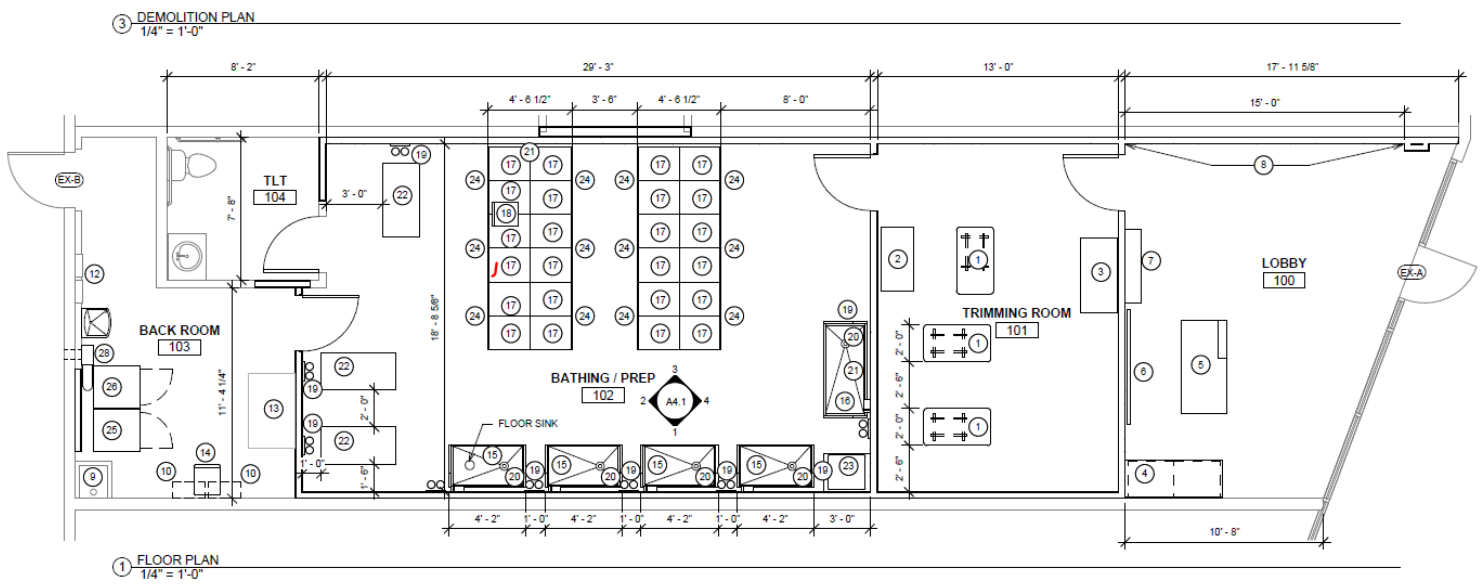
SCENTHOUND FIT-OUT

Client:
SCENTHOUND

Project Location:
3155 GREEN VALLEY ROAD
BIRMINGHAM, AL
35242

REVISION	DATE

DATE: 4-14-26
DRAWING TITLE: INTERIOR ELEVATIONS
PROJECT NUMBER: 24-26
FILE NUMBER:
SHEET of
DRAWING NUMBER A4.1



(##) EQUIPMENT KEYNOTES

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27. --
28. DRYER LINT TRAP (DUNDAS JAFINE POLT4WZW OR SIM.)

City of Vestavia Hills
Office of the City Clerk

OWNER AFFIDAVIT (This form must be notarized):

I do hereby declare that the following statements are correct concerning the subject property located at: 3155 Green Valley Rd., Vestavia Hills, Alabama and that statements submitted in my application are true and that I am: *(please check all that apply).*

____ the Property Owner and representing myself in said request.

_X_ the Property Owner, but I am authorizing a Representing Agent by the name of: Jake Datnoff to represent me in the following request:

And am requesting: (please check)

____ Rezoning Request
____ Preliminary Plat Approval
____ Final Plat Approval
_X_ Conditional Use Approval
____ Request for Variance
____ Special Exception
____ Design Review Approval

Owner:
CROSSHAVEN VENTURE,
an Alabama general partnership

By: J&J Investments, Ltd.
Its: Managing Joint Venture

By: Jami Wadkins
Jami Wadkins, its Authorized Agent

STATE OF ALABAMA
COUNTY OF Jefferson

Given under my hand and seal this 4th day of April, 2026.

Notary Public

ANGELA F. SOKOL
MY COMMISSION EXPIRES
JANUARY 4, 2027
NOTARY PUBLIC
STATE OF ALABAMA

My commission expires _____ day of _____, 20__

VESTAVIA HILLS

Planning and Zoning Commission
Planners Report

MEETING DATE
May 14, 2026

AGENDA ITEM
RZ-26-7 **Bob Easley** is requesting **Rezoning f**or **3034 Green Valley Road** from **Vestavia Hills R-4 & R-8 to Vestavia Hills R-9,** for the purpose of a 19-lot single-family subdivision.

BACKGROUND
Rezoning from Vestavia Hills R-4 & R-8 to Vestavia Hills R-9

PLANNER'S REVIEW/RECOMMENDATION
The applicant is seeking a rezoning of several lots between Green Valley Road and Sunview Drive for the construction of 19 single-family homes. The subdivision will be accessed off Sunview Drive and will be serviced by a 24' public ROW between the set of homes, with two entrances on Sunview Drive. There is proposed underground stormwater detention located on lots 14-16 on the site plan. Stormwater plan provided by the applicant shows a reduction in runoff. Lot widths will range from 50' to 60' wide, with the smallest lot being 6900sf and the largest lot being 9655sf. Sidewalks are proposed to be constructured on both Sunview Drive and Green Valley Road.

ATTACHMENTS
1. Application
2. Vicinity Map
3. Submittal Set
4. Elevation Renderings
5. Vestavia_Zoning_Comment_Letter
6. Engineering Review
7. Drainage Report
8. Owners Affidavit

Jack Wakefield
City Planner

Record No: RZ-26-7

Rezoning Application

Status: Active

Submitted On: 4/8/2026

Primary Location

3034 GREEN VALLEY RD
VESTAVIA HILLS, AL 35243

Owner

Sunview Development, LLC

Agenda Scheduling Information

Agenda Schedule

Comment/Reschedule/Delay & Reason

Property Information

Subject Property Address*

3034 Green Valley Rd

Tax Parcel ID Number

28 00 15 3 015 015.000

Legal Description

Lots 1, 2, 3, 4, 5, 11, 12 ,13, 14 in Block 1, according to the Survey of Meadowlawn Estates 1st Addition, as recorded in Map Book 47, Page 5, in the Probate Office of Jefferson County, Alabama.
and
Part of the SE 1/4 of SW 1/4 of Sec 15, T18S, R2W, Jefferson Co., AL,: Begin at the SW corner of said 1/4-1/4 section and run East along the South line for 264 feet; run thence in a northerly direction 15 feet to the North ROW line of Green Valley Rd; to the point of beginning; thence continue in a northerly direction 305.13 feet to the south ROW line of Sunview Dr; run thence in an easterly direction 131.5 feet along said ROW line; run thence in a southerly direction 301.38 feet to the north ROW line of said Green Valley Rd; run thence in a westerly direction 132.08 feet to the point of beginning.

Existing Parking Spaces

–

Proposed Parking Spaces

–

Submission Date*

04/08/2026

Type of Project*

New Residential Subdivision

Action Requested:

From Existing Zoning Classification*

R-4 and R-8

To Requested Zoning Classification*

R-9

For the Intended Purpose of:*

Resurvey of 9 existing lots and 2 acres parcels into a new 19 lot subdivision.

Acreage of Subject Property*

3.80

Acreage of Property to be Disturbed*

3.80

Setbacks

Front

15

Back

15

Side

5

Open Space

0

Lot Coverage Percentage

60

Tree Save Plan - I acknowledge that a if this is a new non-residential development or is a residential development in excess of 3 units, that I am required to submit a tree save plan concurrent with this application (excludes PUDs). *

☑

Owner Information

Applications must be either submitted by the owner of the property or a representative duly appointed by the owner by way of a notarized letter and/or power of attorney.

Property Owner Name*

Sunview Development, LLC

Company Name

Owner Address City State Zip*

3545 Market Street
Hoover, AL 35226

Owner's Phone Number*

205-989-5588

Email Address of Owner*

Jbelcher@E-Signaturehomes.com

By checking this box, I hereby affirm that I am the representative of the owner duly authorized to represent this petition for rezoning. Simultaneously with this application, I am submitting notarized documentation from the owner which authorizes me to represent this case. If no authorization is provided, this application cannot be processed.*

☑

Owner Representative/Responsible Party

Jonathan Belcher

Company Name

Sunview Development, LLC

Contact Email of Responsible Party

Jbelcher@E-Signaturehomes.com

Mailing Address of Responsible Party

3545 Market Street
Hoover, AL 35226

Phone No. of Responsible Party

205-989-5588

Email Address of Responsible Party

Jbelcher@E-Signaturehomes.com

Project Engineer Information (if applicable)

Name

Robert Easley

Company

Alabama Engineering Co., Inc.

Mailing Address

1214 Alford Ave, Hoover, AL 35226

Phone Number

205-803-2161

Email

bob@alaeng.com

Internal Reviews

Date of P&Z Meeting

—

P&Z Recommendation & Vote

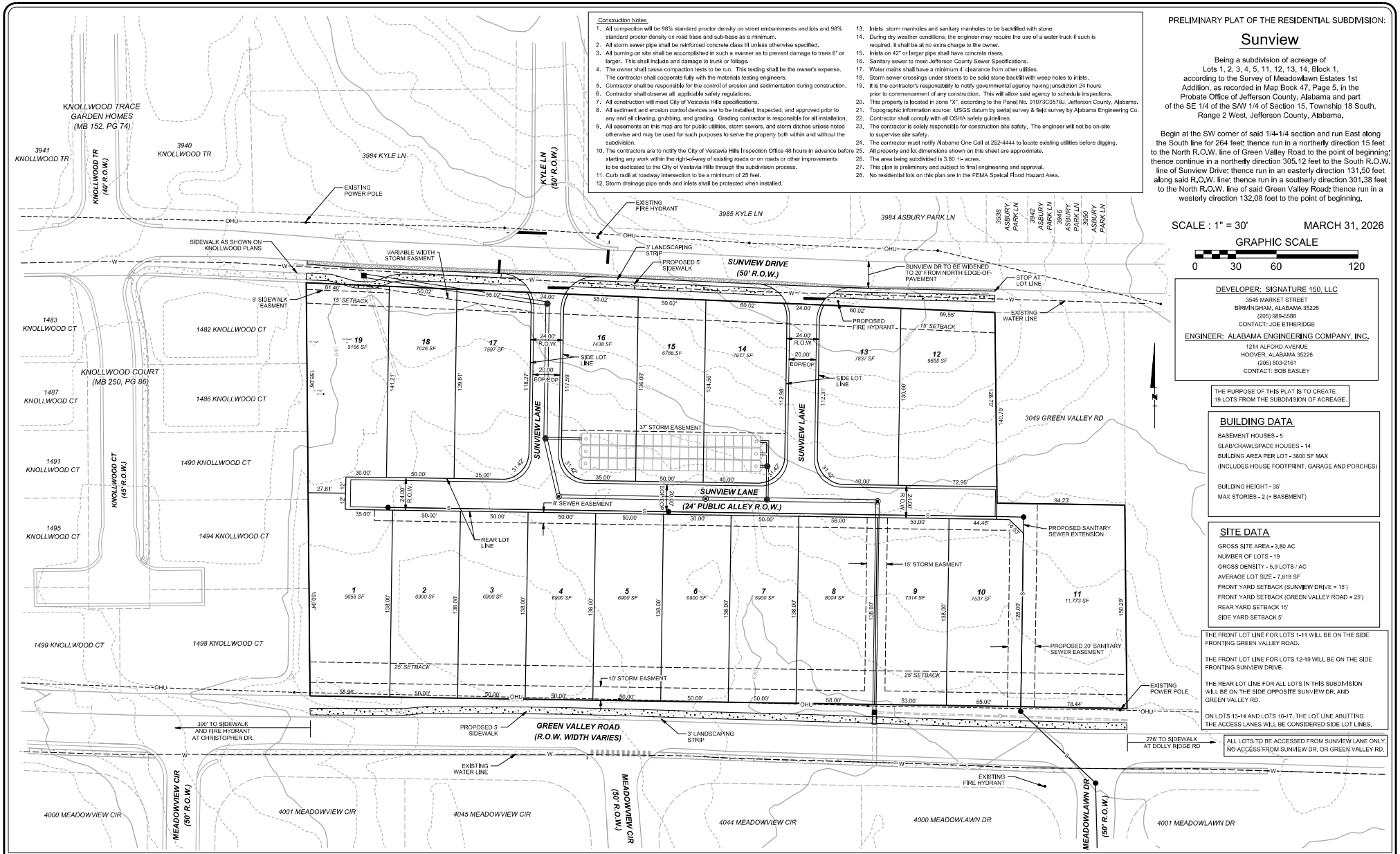
Date of City Council Presentation

—

Proposed Ordinance No.

City Council Decision, Conditions, Reason for Denial

VICINITY MAP
NOT TO SCALE



Construction Notes

1. All compaction will be 98% standard proctor density on street embankments and lots and 98% standard proctor density on road base and sub-base as a minimum.
2. All storm sewer pipe shall be reinforced concrete class III unless otherwise specified.
3. All burning on site shall be accomplished in such a manner as to prevent damage to trees 6" or larger. This shall include and damage to trunk or foliage.
4. The owner shall cause compaction tests to be run. This testing shall be the owner's expense. The contractor shall cooperate fully with the materials testing engineers.
5. Contractor shall be responsible for the control of erosion and sedimentation during construction.
6. Contractor shall observe all applicable safety regulations.
7. All construction will meet City of Vestavia Hills specifications.
8. All sediment and erosion control devices are to be installed, inspected, and approved prior to any and all clearing, grubbing, and grading. Grading contractor is responsible for all installation.
9. All easements on this map are for public utilities, storm sewers, and storm ditches unless noted otherwise and may be used for such purposes to serve the property both within and without the subdivision.
10. The contractors are to notify the City of Vestavia Hills Inspection Office 48 hours in advance before starting any work within the right-of-way of existing roads or on roads or other improvements to be dedicated to the City of Vestavia Hills through the subdivision process.
11. Curb radii at roadway intersection to be a minimum of 25 feet.
12. Storm drainage pipe ends and inlets shall be protected when installed.
13. Inlets, storm manholes and sanitary manholes to be backfilled with stone.
14. During dry weather conditions, the engineer may require the use of a water truck if such is required, it shall be at no extra charge to the owner.
15. Inlets on 42" or larger pipe shall have concrete risers.
16. Sanitary sewer to meet Jefferson County Sewer Specifications.
17. Water mains shall have a minimum 4' clearance from other utilities.
18. Storm sewer crossings under streets to be solid stone backfill with weep holes to inlets.
19. It is the contractor's responsibility to notify governmental agency having jurisdiction 24 hours prior to commencement of any construction. This will allow said agency to schedule inspections.
20. This property is located in zone "X", according to the Panel No. 01073C0578J, Jefferson County, Alabama.
21. Topographic information source: USGS datum by aerial survey & field survey by Alabama Engineering Co.
22. Contractor shall comply with all OSHA safety guidelines.
23. The contractor is solely responsible for construction site safety. The engineer will not be on-site to supervise site safety.
24. The contractor must notify Alabama One Call at 252-4444 to locate existing utilities before digging.
25. All property and lot dimensions shown on this sheet are approximate.
26. The area being subdivided is 3.80 +/- acres.
27. This plan is preliminary and subject to final engineering and approval.
28. No residential lots on this plan are in the FEMA Speical Flood Hazard Area.

PRELIMINARY PLAT OF THE RESIDENTIAL SUBDIVISION:

Sunview

Being a subdivision of acreage of Lots 1, 2, 3, 4, 5, 11, 12, 13, 14, Block 1, according to the Survey of Meadowlawn Estates 1st Addition, as recorded in Map Book 47, Page 5, in the Probate Office of Jefferson County, Alabama and part of the SE 1/4 of the S/W 1/4 of Section 15, Township 18 South, Range 2 West, Jefferson County, Alabama.

Begin at the SW corner of said 1/4-1/4 section and run East along the South line for 264 feet; thence run in a northerly direction 15 feet to the North R.O.W. line of Green Valley Road to the point of beginning; thence continue in a northerly direction 305.12 feet to the South R.O.W. line of Sunview Drive; thence run in an easterly direction 131.50 feet along said R.O.W. line; thence run in a southerly direction 301.38 feet to the North R.O.W. line of said Green Valley Road; thence run in a westerly direction 132.08 feet to the point of beginning.

SCALE : 1" = 30' MARCH 31, 2026

GRAPHIC SCALE

0 30 60 120

DEVELOPER: SIGNATURE 150, LLC
3545 MARKET STREET
BIRMINGHAM, ALABAMA 35226
(205) 989-5588
CONTACT: JOE ETHERIDGE

ENGINEER: ALABAMA ENGINEERING COMPANY, INC.
1214 ALFORD AVENUE
HOOVER, ALABAMA 35226
(205) 803-2161
CONTACT: BOB EASLEY

THE PURPOSE OF THIS PLAT IS TO CREATE 19 LOTS FROM THE SUBDIVISION OF ACREAGE.

BUILDING DATA

BASEMENT HOUSES - 5
SLAB/CRAWLSPACE HOUSES - 14
BUILDING AREA PER LOT - 3800 SF MAX
(INCLUDES HOUSE FOOTPRINT, GARAGE AND PORCHES)

BUILDING HEIGHT - 35'
MAX STORIES - 2 (+ BASEMENT)

SITE DATA

GROSS SITE AREA - 3.80 AC
NUMBER OF LOTS - 19
GROSS DENSITY - 5.0 LOTS / AC
AVERAGE LOT SIZE - 7,818 SF
FRONT YARD SETBACK (SUNVIEW DRIVE = 15')
FRONT YARD SETBACK (GREEN VALLEY ROAD = 25')
REAR YARD SETBACK 15'
SIDE YARD SETBACK 5'

THE FRONT LOT LINE FOR LOTS 1-11 WILL BE ON THE SIDE FRONTING GREEN VALLEY ROAD.

THE FRONT LOT LINE FOR LOTS 12-19 WILL BE ON THE SIDE FRONTING SUNVIEW DRIVE.

THE REAR LOT LINE FOR ALL LOTS IN THIS SUBDIVISION WILL BE ON THE SIDE OPPOSITE SUNVIEW DR. AND GREEN VALLEY RD.

ON LOTS 13-14 AND LOTS 16-17, THE LOT LINE ABUTTING THE ACCESS LANES WILL BE CONSIDERED SIDE LOT LINES.

ALL LOTS TO BE ACCESSED FROM SUNVIEW LANE ONLY. NO ACCESS FROM SUNVIEW DR. OR GREEN VALLEY RD.

No.	Date	By	Checked	Revision Description
1	5/6/26	BD	RWE	REVISED PER CITY COMMENTS. ADDED ROAD PLAN (SHEET 3).

Alabama Engineering Company, Inc.
1214 Alford Avenue
Hoover, Alabama 35226
Phone (205) 803-2161
Fax (205) 803-2162

Not valid for construction unless signed in this block

Robert W. Easley, IV, PE

Date

ALABAMA No. 21564 PROFESSIONAL ENGINEER ROBERT W. EASLEY, IV

Preliminary Plat

Sunview
Sunview Development, LLC
Vestavia, Alabama

Scale	1" = 30'
Drawn by	BD
Checked	RWE
File Name	PP1AT Sheet
Date	3.31.2026
Sheet No.	1
Sequence No.	1 of 3

No.	Date	By	Checked	Revision Description

Alabama Engineering Company, Inc.
1214 Alford Avenue, Suite 200
Hoover, Alabama 35226
Phone (205) 803-2161
Fax (205) 803-2162

Not valid for construction unless signed in this block

Robert W. Easley, IV, PE

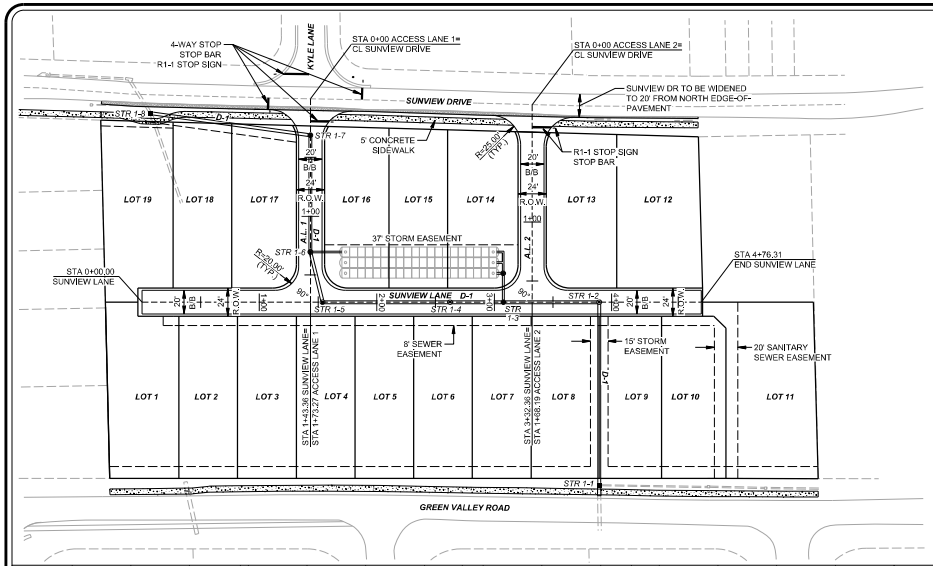
Date

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 21564 ROBERT W. EASLEY, IV

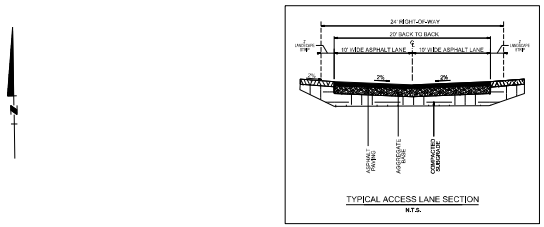
Grading & Drainage Plan

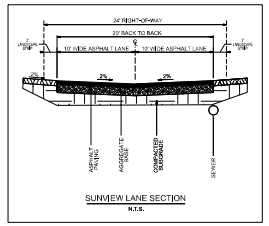
Sunview
Sunview Development, LLC
Vestavia, Alabama

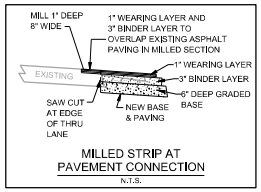
Scale	1" = 30'
Drawn by	BD
Checked	RWE
File Name	Sunview grading & drainage plan
Date	3/31/2026
Sheet No.	2
Sequence No.	2 of 3

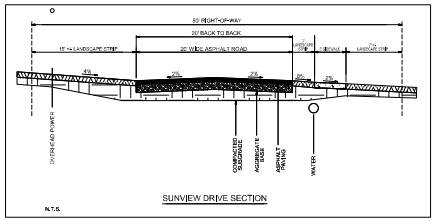


PLAN
SCALE: 1" = 50'

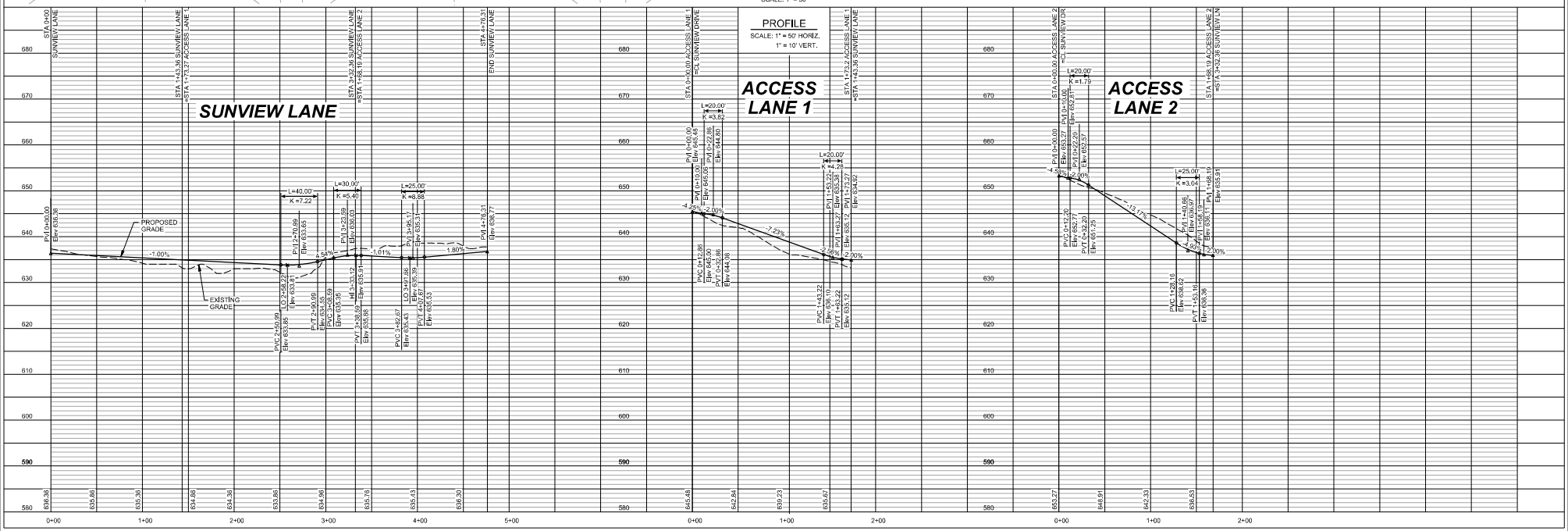








PROFILE
SCALE: 1" = 50' HORIZ.
1" = 10' VERT.



No.	Date	By	Checked	Revision Description

Alabama Engineering Company, Inc.
1214 Alford Avenue
Hoover, Alabama 35226
Phone (205) 803-2161
Fax (205) 803-2162

Not valid for construction unless signed in this block

Robert W. Easley, IV, PE

Date

ALABAMA No. 21564 PROFESSIONAL ENGINEER ROBERT W. EASLEY, IV

Sunview Lane

Sunview

Sunview Development, LLC

Vestavia Hills, Alabama

Scale	As Shown
Drawn by	BD
Checked	RWE
File Name	C3.0 Sunview Lane Road Sheet.dgn
Date	5/6/2026
Sheet No.	C3.0
Sequence No.	3 of 3

signature
HOMES

Sunview Drive - Cantor A

Sunview Drive - Cantor B

Sunview Drive - Gale A

Sunview Drive - Gale B

Sunview Drive - Hayes A

Sunview Drive - Hayes B


signature
HOMES

May 14, 2026

City of Vestavia Hills Planning and Zoning Committee

1032 Montgomery Highway

Vestavia Hills, Alabama 35216

RE: Formal Objection and Request for Additional Review — Signature Homes Proposed Development, Sunview Drive (19 Units / 3.8 Acres)

Dear Members of the Planning and Zoning Committee,

We have been proud residents of Kyle Lane for 26 years. I am submitting this formal written comment regarding the proposed Signature Homes development of 19 residential units on 3.8 acres along Sunview Drive and Green Valley Road.

We want to be clear: I am not opposed to this development. However, I have significant concerns regarding public safety, infrastructure capacity, stormwater management, and consistency with the City's own planning decisions. I respectfully ask this Committee to require answers to the following questions on the record before any vote is taken. The burden of proof lies with the applicant, not the surrounding community.

I. DENSITY INCONSISTENCY & PRECEDENT

The City recently approved 14 homes on 4.3 acres at Bellwood and Autumn Lane — a density of approximately 3.3 units per acre. The current proposal seeks 19 homes on 3.8 acres, a density of approximately 5 units per acre. We ask:

- What justifies this increased density when the surrounding infrastructure is demonstrably less capable of supporting it?
- How is this proposal consistent with the City's Comprehensive Plan and stated goals for neighborhood character?
- Approval of this project at this density will set a precedent for higher-density development that is incompatible with the character of existing neighborhoods in this area.

II. ROAD SAFETY — SUNVIEW DRIVE

Sunview Drive cannot accommodate simultaneous two-way vehicular traffic. This is not a matter of inconvenience — it is a documented public safety hazard. I respectfully ask the Committee to address:

- The developer shows a portion of Sunview to be widened however Sunview needs to be the same width beyond the proposed development. The width of Sunview and Asbury is below the required measurements. Who will widened this section?
- Documented blind spots along Sunview Drive create unacceptable risk, particularly as traffic volume will increase materially with 19 new households.
- When residents host gatherings, vehicles parked along the access points will obstruct emergency vehicle ingress and egress. How will the developer mitigate this?

III. KYLE LANE — CUT-THROUGH TRAFFIC & EXISTING SAFETY HAZARDS

Kyle Lane already functions as an unofficial cut-through route to Overton Road. Vehicles routinely run the stop sign at Cromwell Drive and travel at excessive speeds — a dangerous condition that currently exists without the added traffic from 19 new homes. We ask:

- Kyle Lane has a known blind spot that creates risk for drivers and pedestrians alike. Will the City commit to a safety study of Kyle Lane prior to approval?
- How will the City prevent Kyle Lane from becoming an even more heavily used cut-through corridor once this development is occupied?
- How will the City help to slow traffic down on Kyle Lane?

IV. PEDESTRIAN SAFETY

Sunview Drive and Kyle Lane are heavily used pedestrian corridors — by families, children, elderly residents, and walkers of all ages. We note:

- Sidewalks proposed within the development do not address the hazard created on the existing public road network that all residents must use to access the neighborhood.
- Increased traffic volume on roads that are already too narrow and have existing blind spots creates unreasonable and foreseeable pedestrian risk.
- What pedestrian safety improvements on Sunview Drive and Kyle Lane will be required of the developer as conditions of approval?

V. SOLID WASTE & MUNICIPAL SERVICES

The proposed alleyway access configuration raises unresolved questions about municipal services:

- Where will trash collection occur for 19 homes served by an alleyway? Can collection vehicles safely navigate the access points and turning radius?
- Has the Public Works Department reviewed and approved the waste collection plan for this development?
- I request the developer provide a documented service plan reviewed and approved by the City prior to any approval vote.

VI. STORMWATER MANAGEMENT & FLOODING

Existing drainage infrastructure in this area is already stressed. My neighbors and I have experience flooding on Kyle Lane and Dolly Ridge Road as a result of runoff that the local creeks cannot adequately handle. Adding 19 new homes — with the associated impervious surfaces of rooftops, driveways, and an alleyway — will materially increase stormwater runoff volume and velocity. We request:

- Has a stormwater management plan been submitted and reviewed by the City's engineering staff?
- The plan must demonstrate, with engineering data, that this development will not increase downstream flood risk to Dolly Ridge Road and surrounding properties.
- What on-site retention, detention, or infiltration measures will the developer install to manage increased runoff?
- The burden of proof is on the applicant. My neighbors and I should not bear the cost — in flooded streets and property damage — of inadequate stormwater planning.

VII. TREE CANOPY & GREEN SPACE

The City and its residents have repeatedly and consistently expressed a desire for green space preservation. This proposal includes none.

- I request the Committee requires the developer to dedicate a meaningful portion of the site as protected green space as a binding condition of approval.
- At minimum, a tree survey and canopy impact assessment should be required and made part of the public record.

CONCLUSION & REQUESTS

I respectfully request that this Committee:

- Require a traffic impact study for Sunview Drive and Kyle Lane before any approval vote.
- Require a stormwater management plan with engineering documentation before any approval vote.
- Require a solid waste and municipal services plan reviewed by Public Works.
- Require binding traffic calming conditions on Kyle Lane as part of any approval.
- Require a tree canopy survey and meaningful green space dedication.
- Explain on the record how a density of 5 units/acre is consistent with the 3.3 units/acre approved at Bellwood and Autumn Lane.

I request that this letter and all public comments be entered into the official record for this application. I further reserve the right to appeal any decision made without adequate consideration of the concerns raised herein.

Respectfully submitted,

Holly Bratton

3953 Kyle Lane, Vestavia Hills, Alabama

[redacted]

[redacted]

City of Vestavia Hills
1032 Montgomery Highway
Vestavia, Hills, AL 35216

VESTAVIA HILLS

Reviewed - Corrections Required
Application No. 3034 Green Valley Road

Description :
Address :
Record Type :
Document Filename : Rezoning Submittal Set 04082026.pdf

Comment Author Contact Information:

Author Name	Author Email	Author Phone No.:
Ethan Fisher	efisher@vhal.org	205-978-0214

General Comments

Corrections in the following table need to be applied before a permit can be issued

Comment ID	Page Reference	Annotation Type	Author : Department	Status	Review Comments	Applicant Response Comments
1	1	Callout	Ethan Fisher : Engineering	Open	Is this 4 way based on site distance?	Yes
2	1	Callout	Ethan Fisher : Engineering	Open	What is the width of Sunview Drive? It will need to be widened if not atleast 20'.	Sunview Drive widened to 20' from the existing North edge-of-pavement.
3	1	Callout	Ethan Fisher : Engineering	Open	Is this all private? Note on drawings.	This will be a public street.
4	1	Callout	Ethan Fisher : Engineering	Open	Include all other necessary easements to facilitate utilities and a typical section needs to be added to shown how everything will fit.	Water and power will be served from Sunview Dr. and Green Valley Rd. Storm and sanitary will be in the alley.
5	1	Callout	Ethan Fisher : Engineering	Open	Green Valley Road is a Jefferson County through road and permits will be required through them for sidewalk and any modifications to Green Valley. The will not approve a mid block crossing at this location and the the city is in agreement.	The mid block crossing across Green Valley Rd. was removed from plans.
6	1	Callout	Ethan Fisher : Engineering	Open	Sidewalk to be extended to Dolly Ridge Road if crossing is desired.	No change made.

Comment ID	Page Reference	Annotation Type	Author : Department	Status	Review Comments	Applicant Response Comments
7	1	Callout	Ethan Fisher : Engineering	Open	Provide Road Name	Sunview Lane
9	1	Callout	Ethan Fisher : Engineering	Open	Note will need to be added stating that lots are to be accessed only through the internal drive.	Note added to Preliminary Plat Sheet
10	1	Callout	Ethan Fisher : Engineering	Open	Curb and gutter or valley gutter will be required along edge of pavement.	Not added per discussion with Ethan
8	2	Note	Ethan Fisher : Engineering	Open	Provide information from items 10-14 on the preliminary plat checklist found in the subdivision regulations.	Road sheet and cross sections added.

Sunview
Vestavia Hills, Alabama

DRAINAGE REPORT

April 8, 2026

Prepared by:

ALABAMA ENGINEERING COMPANY, INC.
1214 Alford Avenue
Hoover, Alabama, 35226

Alabama Engineering Company, Inc.
1214 Alford Avenue
Hoover, Alabama 35226
PHONE (205) 803-2161
FAX (205) 803-2162

April 8, 2026

City of Vestavia Hills
1032 Montgomery Hwy
Vestavia Hills, AL 35216

Attention: Christopher Brady, PE
Reference: Sunview Drainage – Zoning Plan Submittal

Dear Mr. Brady:

With this letter, Sunview Development, LLC is submitting plans and supporting information to rezone this parcel to R-9 zoning. This letter addresses the impacts to storm drainage downstream of this development.

The site itself is approximately 3.8 acres, but approximately 12 acres of offsite drainage area, including the existing neighborhoods of Knollwood Court, Knollwood Trace and Gravlee's add to Hermitage Forest, flows onto the project site. Our drainage calculations address the drainage of the site area and the full drainage from both on- and off-site. Most of the storm drainage is in Basin 2 and currently flows onto the site from the northwest. The water from this basin drains under Green Valley Road through a 30 inch equivalent arch pipe and into a ditch in an easement on the south side of Green Valley Rd.

Basin 1 includes approximately 0.4 acres of the site and 3.4 acres of offsite drainage area, including the discharge from the Knollwood Court stormwater detention system. The water from this basin drains under Green Valley Road through a 36 inch pipe and into a ditch in an easement on the south side of Green Valley Rd.

The storm drainage plan for this site includes collecting the stormwater from pervious and impervious areas upstream and piping the stormwater to an underground stormwater system. This stormwater system is planned as a series of polypropylene corrugated chambers that will be bedded in, and covered by, ALDOT 57 coarse aggregate. The total volume of the system is 16,620 cubic feet for both water quality volume and stormwater detention.

There in an increase of 57,614 square feet of impervious area on this site compared with predeveloped conditions. For the post-construction runoff to mimic the pre-construction hydrology for the 1.1-inch storm we are providing a water quality storage volume of 5281 cubic feet in the chambers and stone voids. This volume is equal to 1.1 inches of rainfall on 57,614 square feet.

A summary table of the 2, 5, 10, 25 and 100 year storm data is presented in the attached "Drainage Summary" table and provided with more detail on the attached drainage calculations. These results show that the post-development peak flow rates are lower than the pre-development peak flow rates for all of the studied storm events. We calculated peak flow rates

for both the outfall points. The stormwater system produces a decrease between 0.3% and 10.3% for the two basins.

In summary, the proposed development of the Sunview development will not increase peak flow rates down stream. Please call me at 205-803-2161 if you have any questions, or if I can be of any assistance.

Yours very truly,

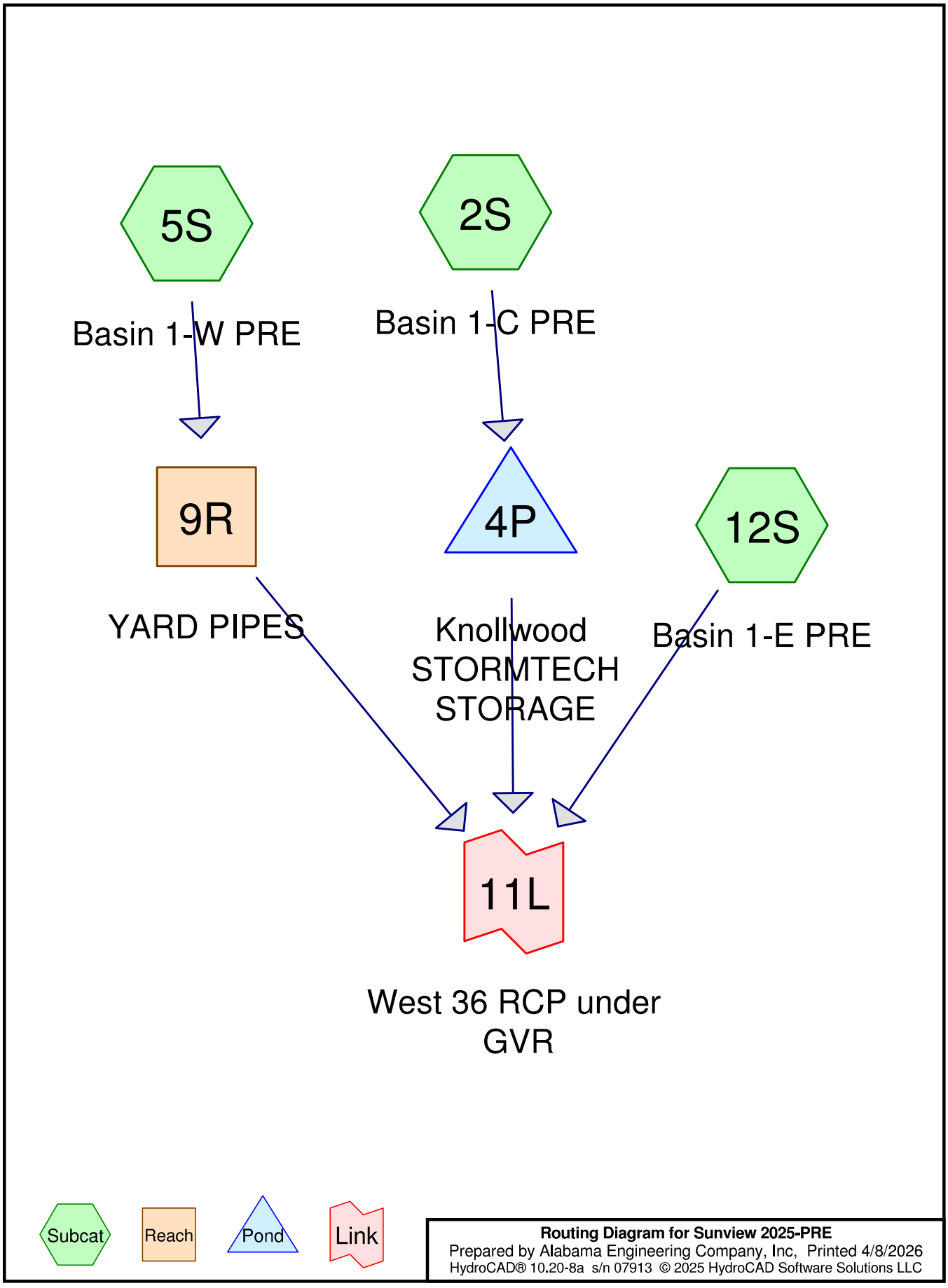
Alabama Engineering Company, Inc.

Robert W. Easley, IV, PE. PLS

Sunview Subdivision
Storm Drainage Summary
4/8/2026

			---STORM EVENT PEAK FLOW RATE (CFS)---				
		DA (Ac)	2 Year	5 Year	10 Year	25 Year	100 Year
Basin 1	Predevelopment	3.87	3.47	4.93	6.38	9.87	15.85
Basin 1	Postdevelopment	3.82	3.46	4.90	6.32	9.78	15.65
Post development change	CFS		-0.01	-0.03	-0.06	-0.09	-0.2
Post development change	%		-0.3%	-0.6%	-0.9%	-0.9%	-1.3%
Basin 2	Predevelopment	11.61	21.03	28.26	35.06	45.70	64.65
Basin 2	Postdevelopment	11.63	18.87	26.75	34.25	45.10	63.50
Post development change	CFS		-2.16	-1.51	-0.81	-0.6	-1.15
Post development change	%		-10.3%	-5.3%	-2.3%	-1.3%	-1.8%

Pre-development Calculations



Routing Diagram for Sunview 2025-PRE
Prepared by Alabama Engineering Company, Inc, Printed 4/8/2026
HydroCAD® 10.20-8a s/n 07913 © 2025 HydroCAD Software Solutions LLC

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-Year	Type III 24-hr		Default	24.00	1	4.13	2
2	5-Year	Type III 24-hr		Default	24.00	1	5.04	2
3	10-Year	Type III 24-hr		Default	24.00	1	5.89	2
4	25-Year	Type III 24-hr		Default	24.00	1	7.21	2
5	100-Year	Type III 24-hr		Default	24.00	1	9.56	2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.520	82	(2S)
1.880	72	(5S)
0.470	80	1/2 acre lots, 25% imp, HSG C (12S)
3.870	**77**	**TOTAL AREA**

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	9R	641.00	635.00	415.0	0.0145	0.012	0.0	18.0	0.0	
2	4P	635.15	634.00	12.0	0.0958	0.012	0.0	10.0	0.0	

Summary for Subcatchment 2S: Basin 1-C PRE

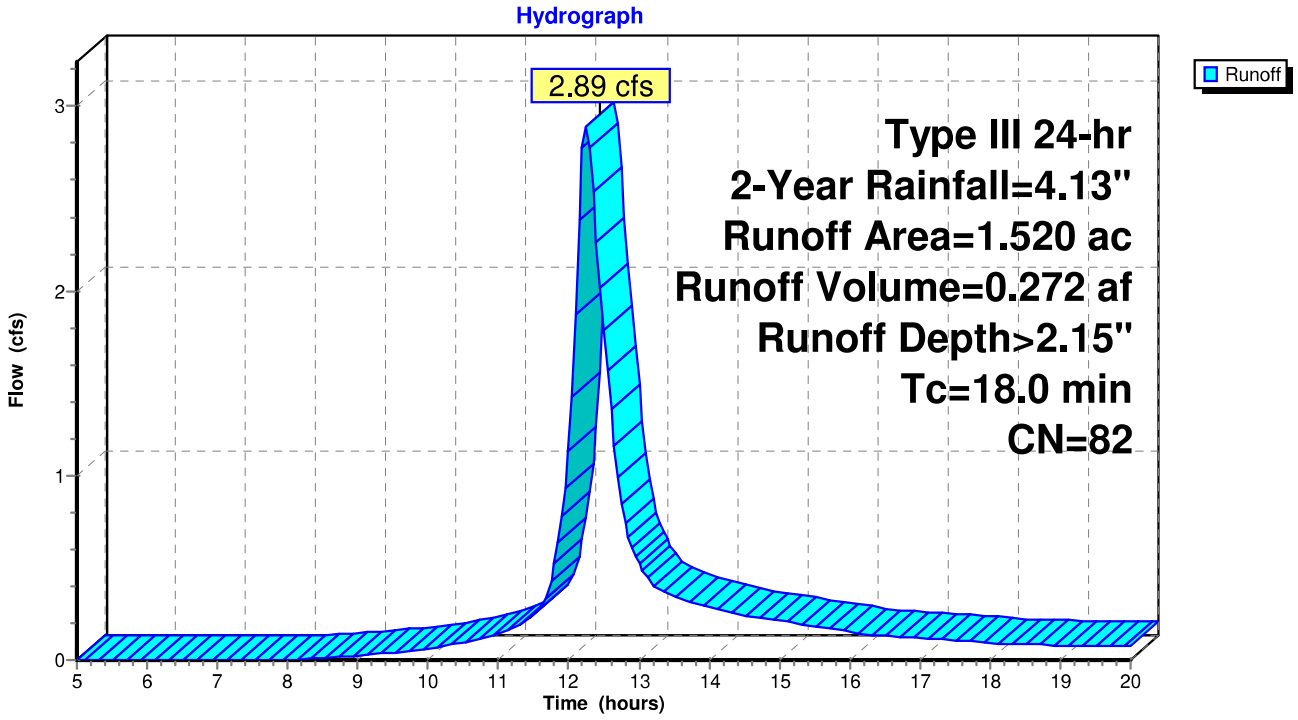
Runoff = 2.89 cfs @ 12.25 hrs, Volume= 0.272 af, Depth> 2.15"
Routed to Pond 4P : Knollwood STORMTECH STORAGE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=4.13"

	Area (ac)	CN	Description
*	1.520	82	
	1.520		100.00% Pervious Area

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

Subcatchment 2S: Basin 1-C PRE



Summary for Subcatchment 5S: Basin 1-W PRE

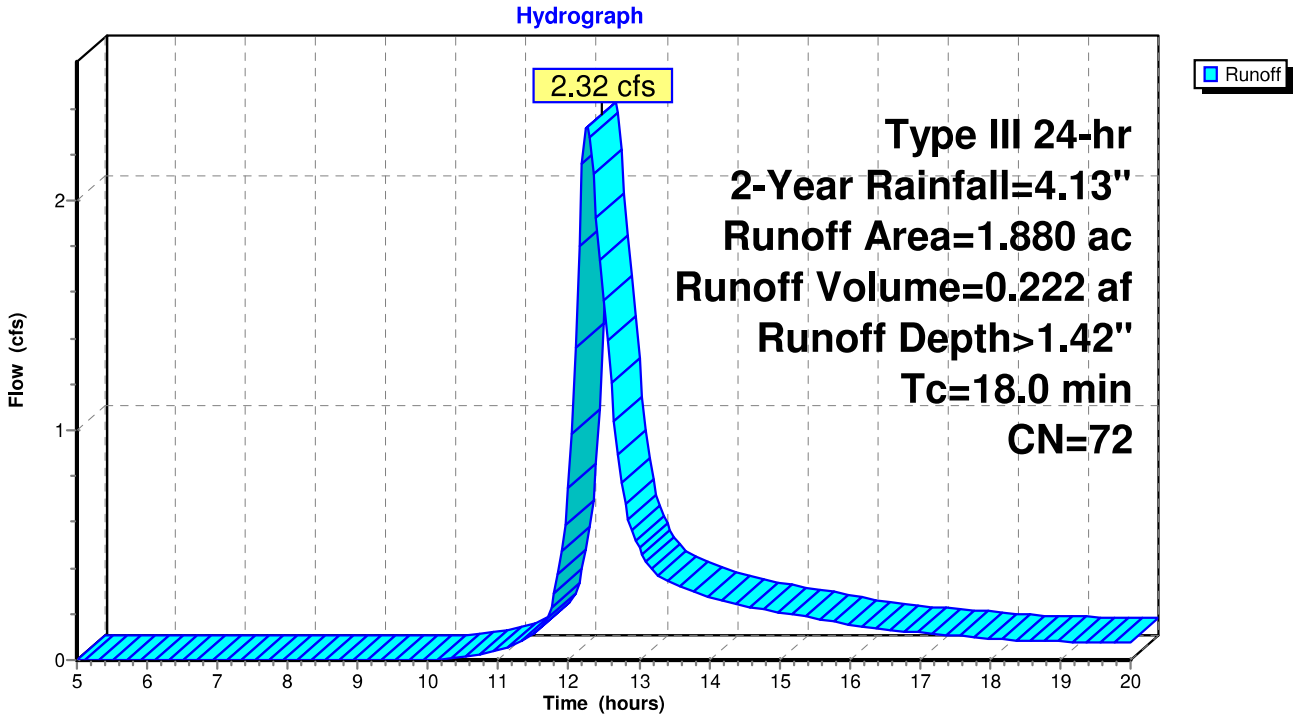
Runoff = 2.32 cfs @ 12.26 hrs, Volume= 0.222 af, Depth> 1.42"
Routed to Reach 9R : YARD PIPES

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=4.13"

	Area (ac)	CN	Description
*	1.880	72	
	1.880		100.00% Pervious Area

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

Subcatchment 5S: Basin 1-W PRE



Summary for Subcatchment 12S: Basin 1-E PRE

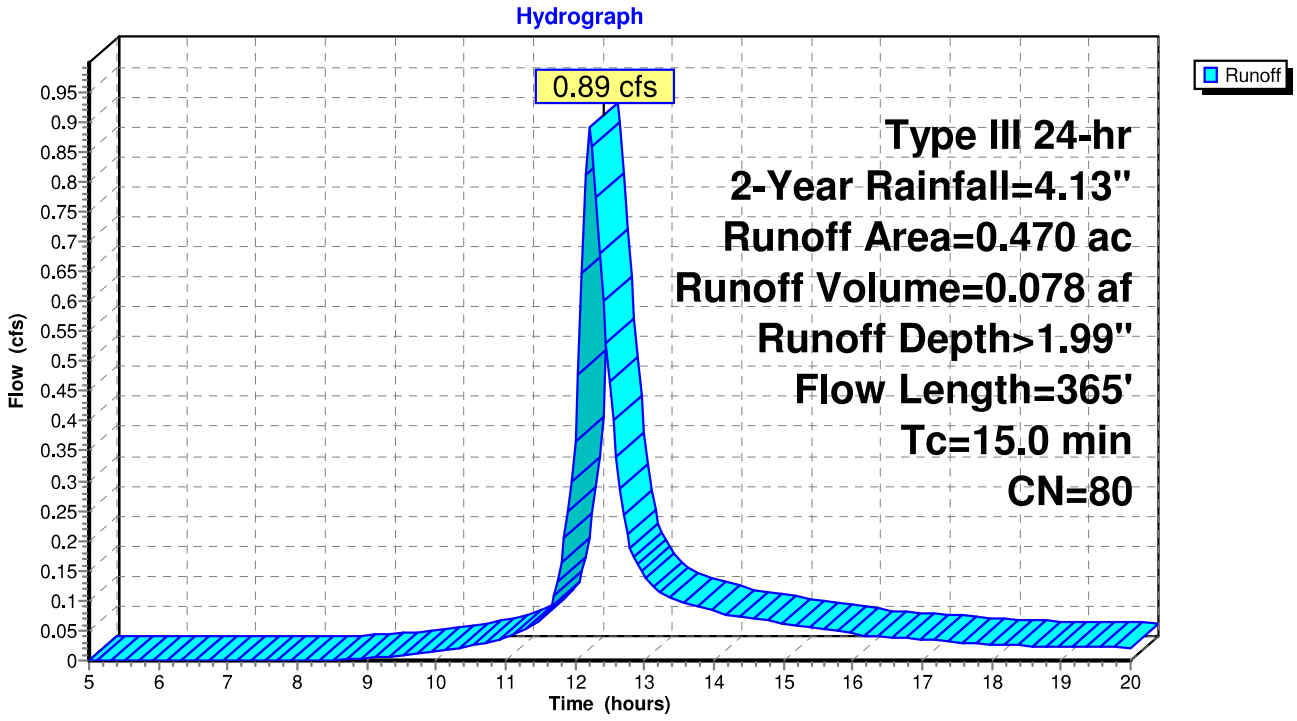
Runoff = 0.89 cfs @ 12.21 hrs, Volume= 0.078 af, Depth> 1.99"
Routed to Link 11L : West 36 RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=4.13"

Area (ac)	CN	Description
0.470	80	1/2 acre lots, 25% imp, HSG C
0.353		75.00% Pervious Area
0.117		25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	75	0.0250	0.09		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
0.8	290	0.0400	6.04	9.06	**Channel Flow, channel flow** Area= 1.5 sf Perim= 2.5' r= 0.60' n= 0.035
15.0	365	Total			

Subcatchment 12S: Basin 1-E PRE



Summary for Reach 9R: YARD PIPES

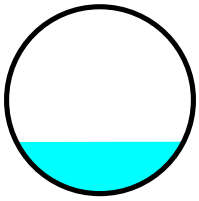
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.880 ac, 0.00% Impervious, Inflow Depth > 1.42" for 2-Year event
Inflow = 2.32 cfs @ 12.26 hrs, Volume= 0.222 af
Outflow = 2.29 cfs @ 12.30 hrs, Volume= 0.222 af, Atten= 1%, Lag= 2.3 min
Routed to Link 11L : West 36 RCP under GVR

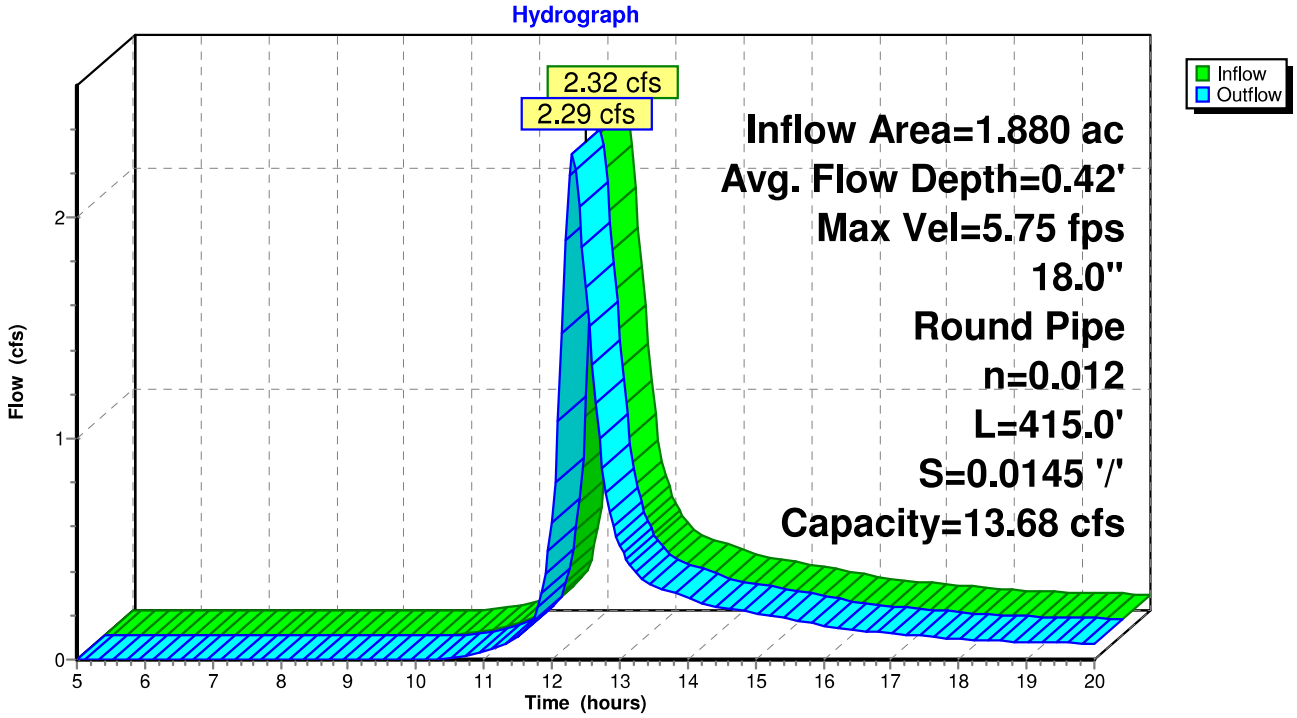
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 5.75 fps, Min. Travel Time= 1.2 min
Avg. Velocity = 2.67 fps, Avg. Travel Time= 2.6 min

Peak Storage= 166 cf @ 12.28 hrs
Average Depth at Peak Storage= 0.42' , Surface Width= 1.34'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 13.68 cfs

18.0" Round Pipe
n= 0.012
Length= 415.0' Slope= 0.0145 '/'
Inlet Invert= 641.00', Outlet Invert= 635.00'



Reach 9R: YARD PIPES



Summary for Pond 4P: Knollwood STORMTECH STORAGE

Inflow Area = 1.520 ac, 0.00% Impervious, Inflow Depth > 2.15" for 2-Year event
Inflow = 2.89 cfs @ 12.25 hrs, Volume= 0.272 af
Outflow = 0.66 cfs @ 12.86 hrs, Volume= 0.253 af, Atten= 77%, Lag= 36.6 min
Discarded = 0.12 cfs @ 11.00 hrs, Volume= 0.101 af
Primary = 0.54 cfs @ 12.86 hrs, Volume= 0.153 af
Routed to Link 11L : West 36 RCP under GVR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 636.39' @ 12.86 hrs Surf.Area= 5,222 sf Storage= 4,796 cf

Plug-Flow detention time= 93.9 min calculated for 0.252 af (93% of inflow)
Center-of-Mass det. time= 70.3 min (868.9 - 798.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	634.75'	5,777 cf	**20.75'W x 251.64'L x 4.00'H Field A** 20,886 cf Overall - 6,443 cf Embedded = 14,443 cf x 40.0% Voids
#2A	635.75'	6,443 cf	**ADS_StormTech SC-740** x 140 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 4 rows
		12,220 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	635.15'	**10.0" Round Culvert** L= 12.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 635.15' / 634.00' S= 0.0958 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf
#2	Discarded	634.75'	**1.000 in/hr Exfiltration over Surface area**
#3	Device 1	635.25'	**5.0" W x 3.2" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	636.50'	**24.0" W x 6.0" H Vert. Orifice/Grate X 0.00** C= 0.600 Limited to weir flow at low heads
#5	Device 1	636.75'	**18.8" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.12 cfs @ 11.00 hrs HW=634.79' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.12 cfs)

Primary OutFlow Max=0.54 cfs @ 12.86 hrs HW=636.39' (Free Discharge)
└**1=Culvert** (Passes 0.54 cfs of 2.38 cfs potential flow)
  ├**3=Orifice/Grate** (Orifice Controls 0.54 cfs @ 4.82 fps)
  ├**4=Orifice/Grate** (Controls 0.00 cfs)
  └**5=Orifice/Grate** (Controls 0.00 cfs)

Pond 4P: Knollwood STORMTECH STORAGE - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 (ADS StormTech® SC-740 without end caps)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
Row Length Adjustment= +0.44' x 6.45 sf x 4 rows

51.0" Wide + 7.0" Spacing = 58.0" C-C Row Spacing

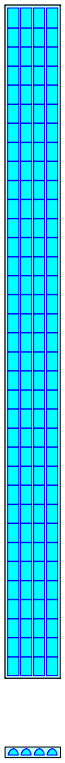
35 Chambers/Row x 7.12' Long +0.44' Row Adjustment = 249.64' Row Length +12.0" End Stone x 2 = 251.64' Base Length
4 Rows x 51.0" Wide + 7.0" Spacing x 3 + 12.0" Side Stone x 2 = 20.75' Base Width
12.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 4.00' Field Height

140 Chambers x 45.9 cf +0.44' Row Adjustment x 6.45 sf x 4 Rows = 6,443.0 cf Chamber Storage

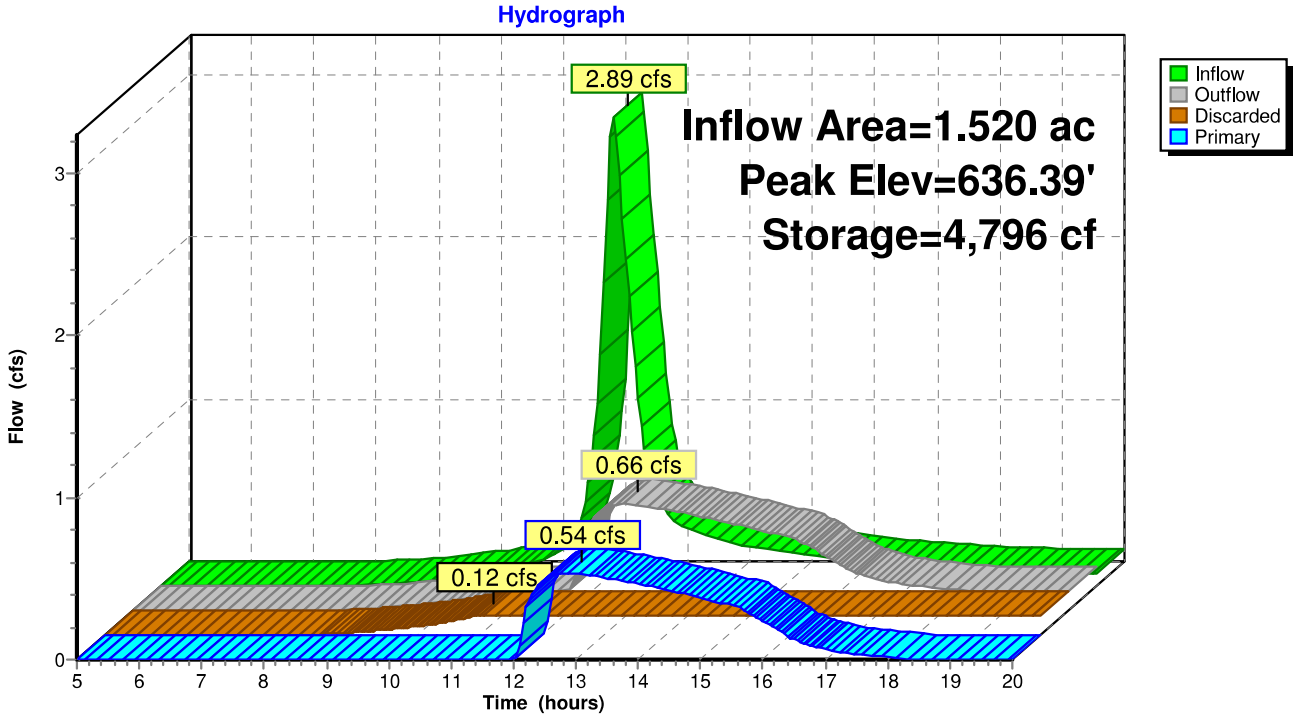
20,886.1 cf Field - 6,443.0 cf Chambers = 14,443.2 cf Stone x 40.0% Voids = 5,777.3 cf Stone Storage

Chamber Storage + Stone Storage = 12,220.2 cf = 0.281 af
Overall Storage Efficiency = 58.5%
Overall System Size = 251.64' x 20.75' x 4.00'

140 Chambers
773.6 cy Field
534.9 cy Stone



Pond 4P: Knollwood STORMTECH STORAGE

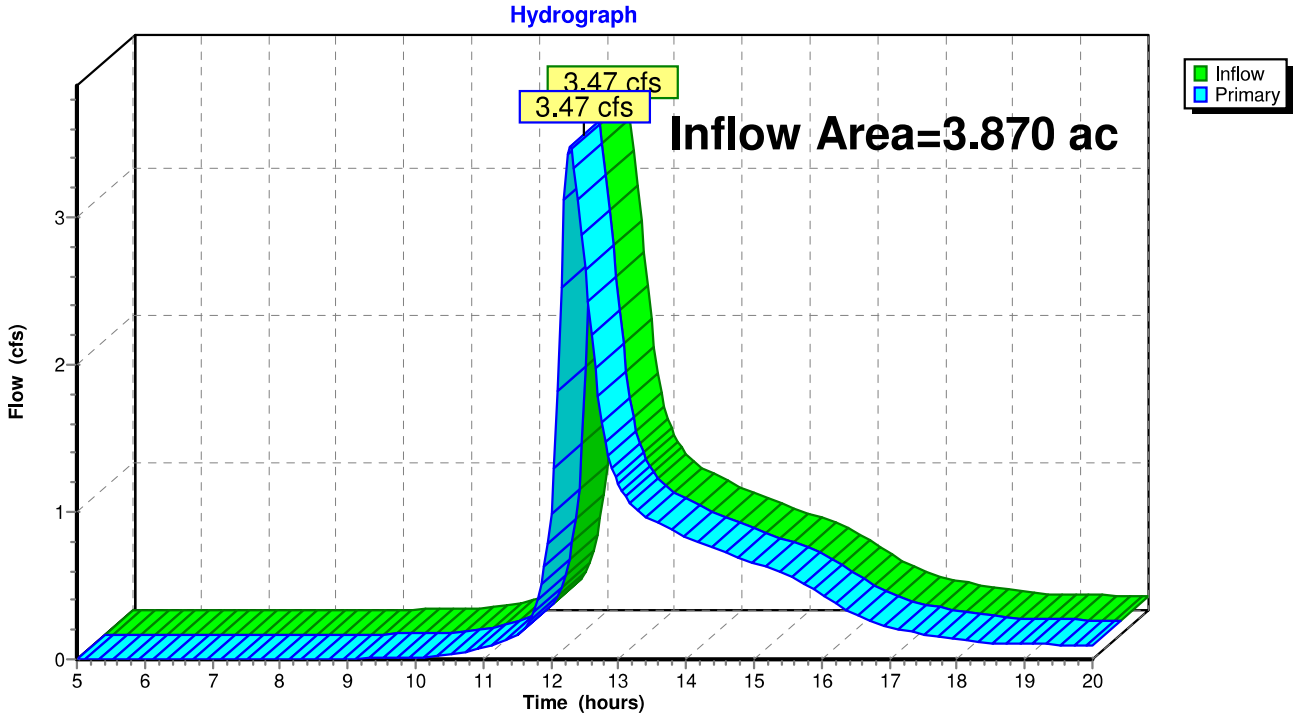


Summary for Link 11L: West 36 RCP under GVR

Inflow Area = 3.870 ac, 3.04% Impervious, Inflow Depth > 1.40" for 2-Year event
Inflow = 3.47 cfs @ 12.29 hrs, Volume= 0.452 af
Primary = 3.47 cfs @ 12.29 hrs, Volume= 0.452 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 11L: West 36 RCP under GVR



Summary for Subcatchment 2S: Basin 1-C PRE

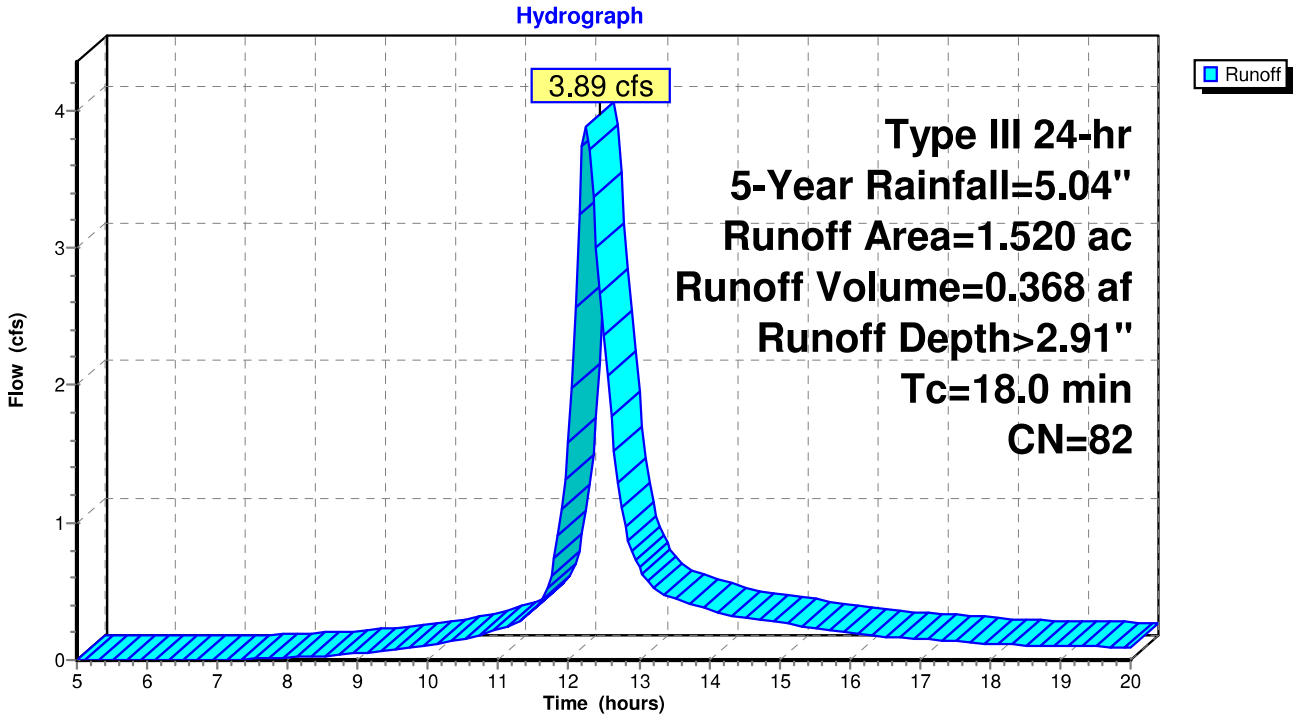
Runoff = 3.89 cfs @ 12.25 hrs, Volume= 0.368 af, Depth> 2.91"
Routed to Pond 4P : Knollwood STORMTECH STORAGE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 5-Year Rainfall=5.04"

	Area (ac)	CN	Description
*	1.520	82	
	1.520		100.00% Pervious Area

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

Subcatchment 2S: Basin 1-C PRE



Summary for Subcatchment 5S: Basin 1-W PRE

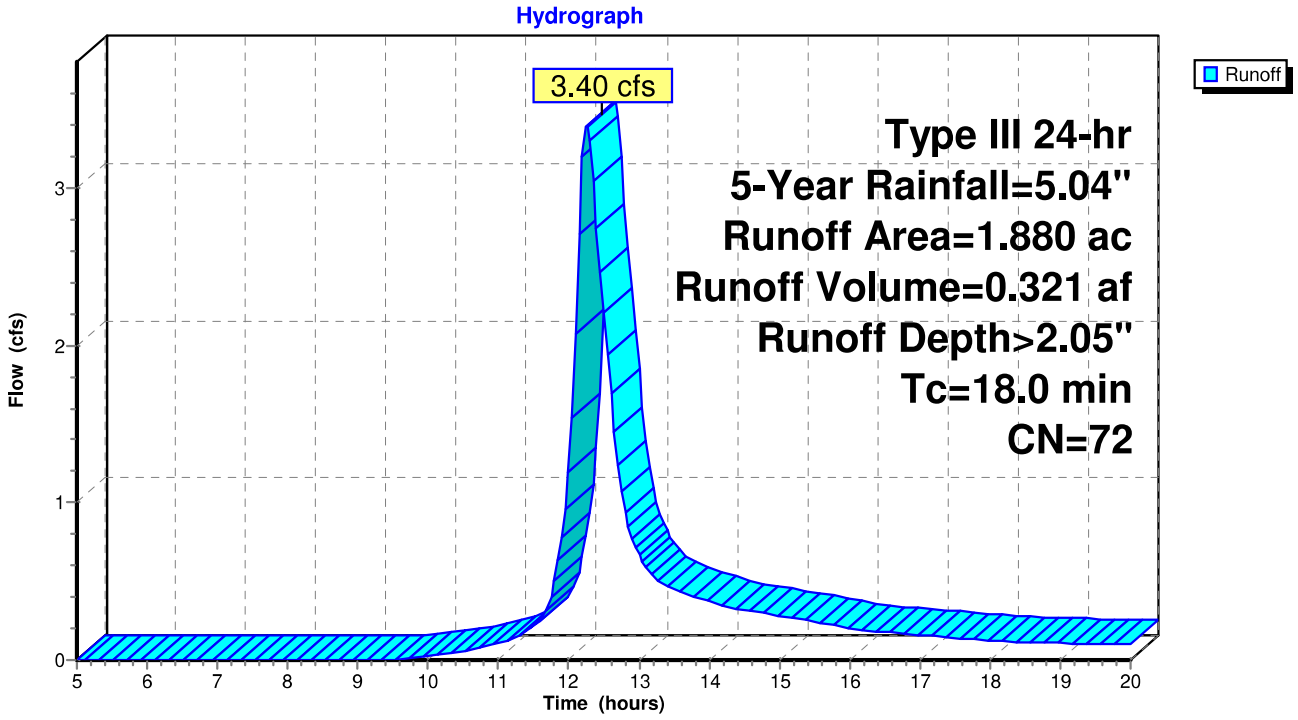
Runoff = 3.40 cfs @ 12.26 hrs, Volume= 0.321 af, Depth> 2.05"
Routed to Reach 9R : YARD PIPES

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 5-Year Rainfall=5.04"

	Area (ac)	CN	Description
*	1.880	72	
	1.880		100.00% Pervious Area

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

Subcatchment 5S: Basin 1-W PRE



Summary for Subcatchment 12S: Basin 1-E PRE

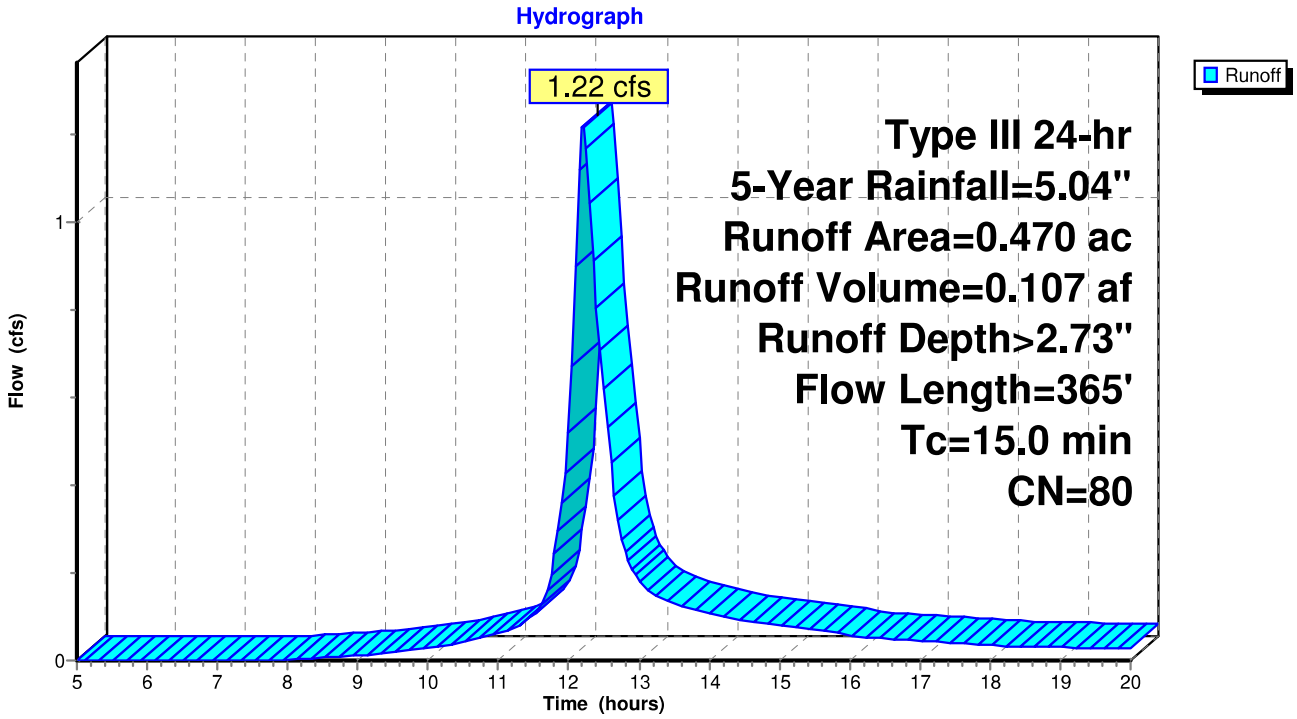
Runoff = 1.22 cfs @ 12.21 hrs, Volume= 0.107 af, Depth> 2.73"
Routed to Link 11L : West 36 RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 5-Year Rainfall=5.04"

Area (ac)	CN	Description
0.470	80	1/2 acre lots, 25% imp, HSG C
0.353		75.00% Pervious Area
0.117		25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	75	0.0250	0.09		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
0.8	290	0.0400	6.04	9.06	**Channel Flow, channel flow** Area= 1.5 sf Perim= 2.5' r= 0.60' n= 0.035
15.0	365	Total			

Subcatchment 12S: Basin 1-E PRE



Summary for Reach 9R: YARD PIPES

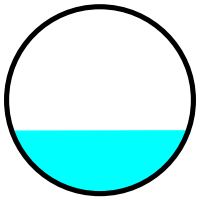
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.880 ac, 0.00% Impervious, Inflow Depth > 2.05" for 5-Year event
Inflow = 3.40 cfs @ 12.26 hrs, Volume= 0.321 af
Outflow = 3.36 cfs @ 12.29 hrs, Volume= 0.321 af, Atten= 1%, Lag= 2.1 min
Routed to Link 11L : West 36 RCP under GVR

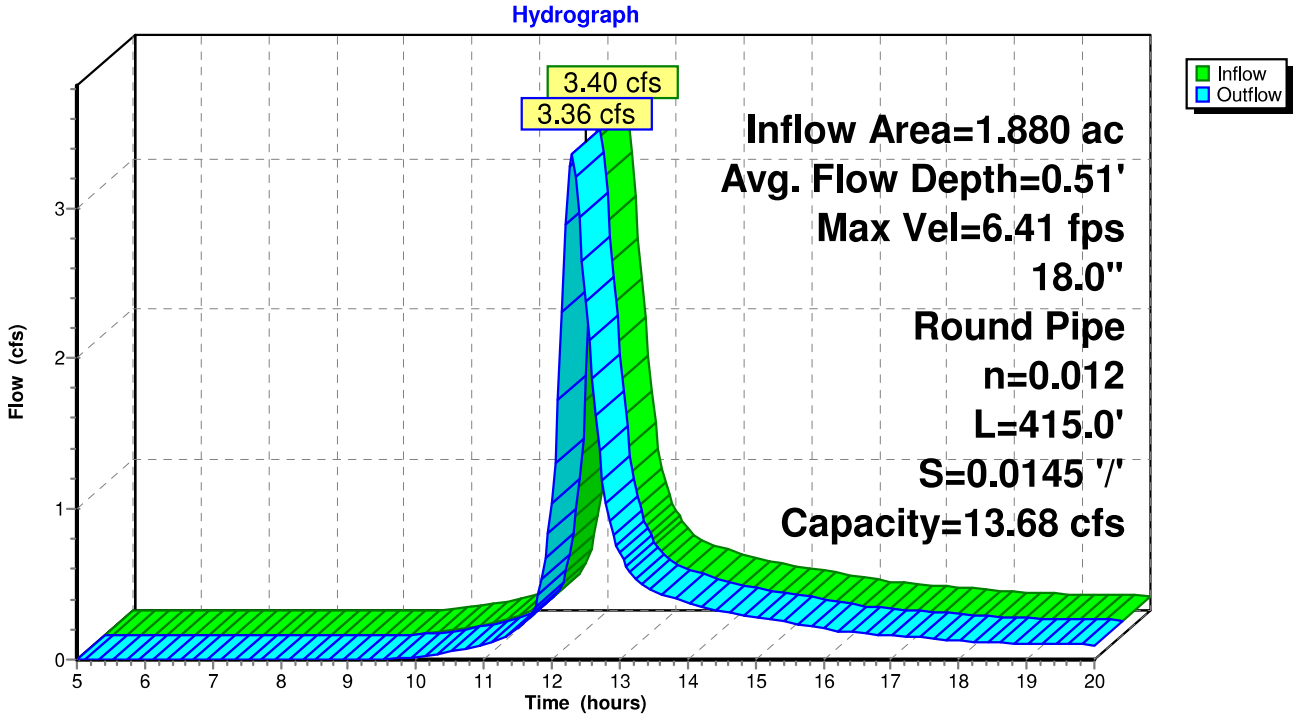
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 6.41 fps, Min. Travel Time= 1.1 min
Avg. Velocity = 2.87 fps, Avg. Travel Time= 2.4 min

Peak Storage= 219 cf @ 12.27 hrs
Average Depth at Peak Storage= 0.51' , Surface Width= 1.42'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 13.68 cfs

18.0" Round Pipe
n= 0.012
Length= 415.0' Slope= 0.0145 '/'
Inlet Invert= 641.00', Outlet Invert= 635.00'



Reach 9R: YARD PIPES



Summary for Pond 4P: Knollwood STORMTECH STORAGE

Inflow Area = 1.520 ac, 0.00% Impervious, Inflow Depth > 2.91" for 5-Year event
Inflow = 3.89 cfs @ 12.25 hrs, Volume= 0.368 af
Outflow = 0.99 cfs @ 12.80 hrs, Volume= 0.344 af, Atten= 75%, Lag= 33.0 min
Discarded = 0.12 cfs @ 10.35 hrs, Volume= 0.108 af
Primary = 0.87 cfs @ 12.80 hrs, Volume= 0.236 af
Routed to Link 11L : West 36 RCP under GVR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 636.87' @ 12.80 hrs Surf.Area= 5,222 sf Storage= 6,752 cf

Plug-Flow detention time= 103.0 min calculated for 0.344 af (93% of inflow)
Center-of-Mass det. time= 80.3 min (872.1 - 791.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	634.75'	5,777 cf	**20.75'W x 251.64'L x 4.00'H Field A** 20,886 cf Overall - 6,443 cf Embedded = 14,443 cf x 40.0% Voids
#2A	635.75'	6,443 cf	**ADS_StormTech SC-740** x 140 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 4 rows
		12,220 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	635.15'	**10.0" Round Culvert** L= 12.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 635.15' / 634.00' S= 0.0958 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf
#2	Discarded	634.75'	**1.000 in/hr Exfiltration over Surface area**
#3	Device 1	635.25'	**5.0" W x 3.2" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	636.50'	**24.0" W x 6.0" H Vert. Orifice/Grate X 0.00** C= 0.600 Limited to weir flow at low heads
#5	Device 1	636.75'	**18.8" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.12 cfs @ 10.35 hrs HW=634.79' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.12 cfs)

Primary OutFlow Max=0.86 cfs @ 12.80 hrs HW=636.87' (Free Discharge)
└**1=Culvert** (Passes 0.86 cfs of 3.00 cfs potential flow)
  ├**3=Orifice/Grate** (Orifice Controls 0.65 cfs @ 5.87 fps)
  ├**4=Orifice/Grate** (Controls 0.00 cfs)
  └**5=Orifice/Grate** (Orifice Controls 0.21 cfs @ 1.12 fps)

Pond 4P: Knollwood STORMTECH STORAGE - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 (ADS StormTech® SC-740 without end caps)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
Row Length Adjustment= +0.44' x 6.45 sf x 4 rows

51.0" Wide + 7.0" Spacing = 58.0" C-C Row Spacing

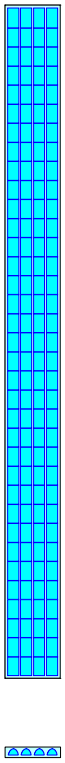
35 Chambers/Row x 7.12' Long +0.44' Row Adjustment = 249.64' Row Length +12.0" End Stone x 2 = 251.64' Base Length
4 Rows x 51.0" Wide + 7.0" Spacing x 3 + 12.0" Side Stone x 2 = 20.75' Base Width
12.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 4.00' Field Height

140 Chambers x 45.9 cf +0.44' Row Adjustment x 6.45 sf x 4 Rows = 6,443.0 cf Chamber Storage

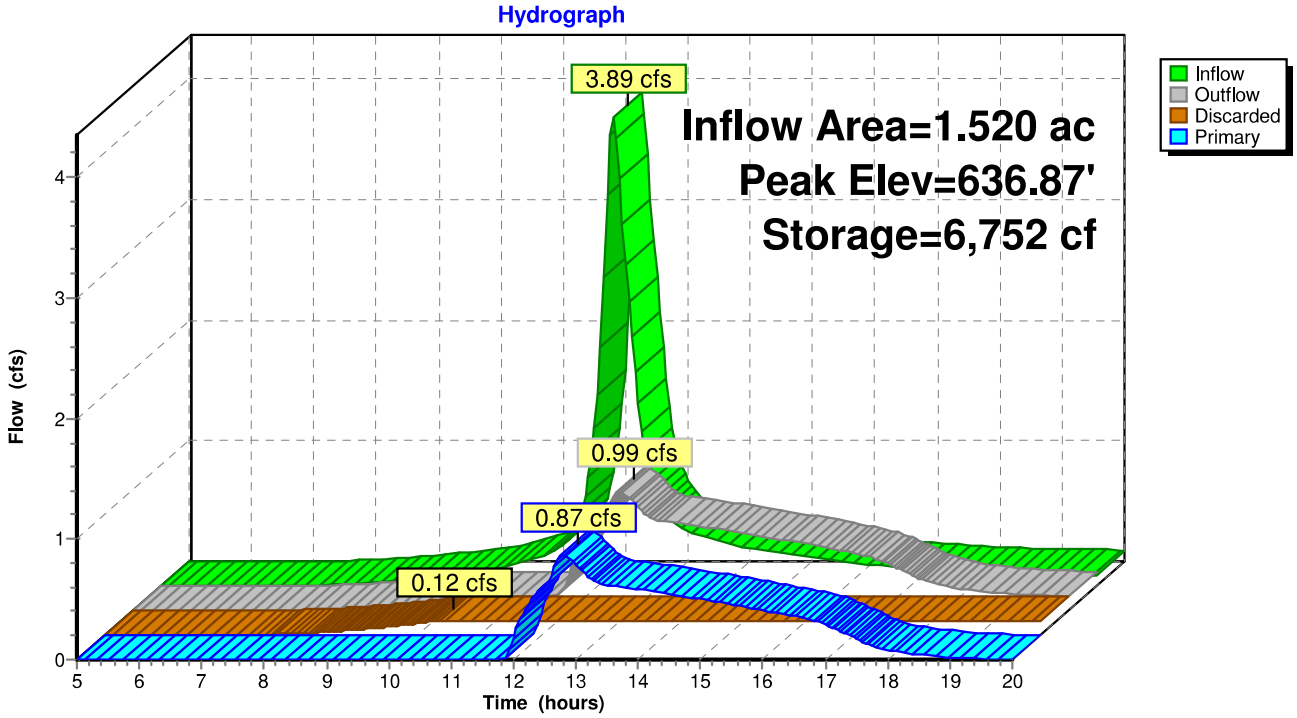
20,886.1 cf Field - 6,443.0 cf Chambers = 14,443.2 cf Stone x 40.0% Voids = 5,777.3 cf Stone Storage

Chamber Storage + Stone Storage = 12,220.2 cf = 0.281 af
Overall Storage Efficiency = 58.5%
Overall System Size = 251.64' x 20.75' x 4.00'

140 Chambers
773.6 cy Field
534.9 cy Stone



Pond 4P: Knollwood STORMTECH STORAGE

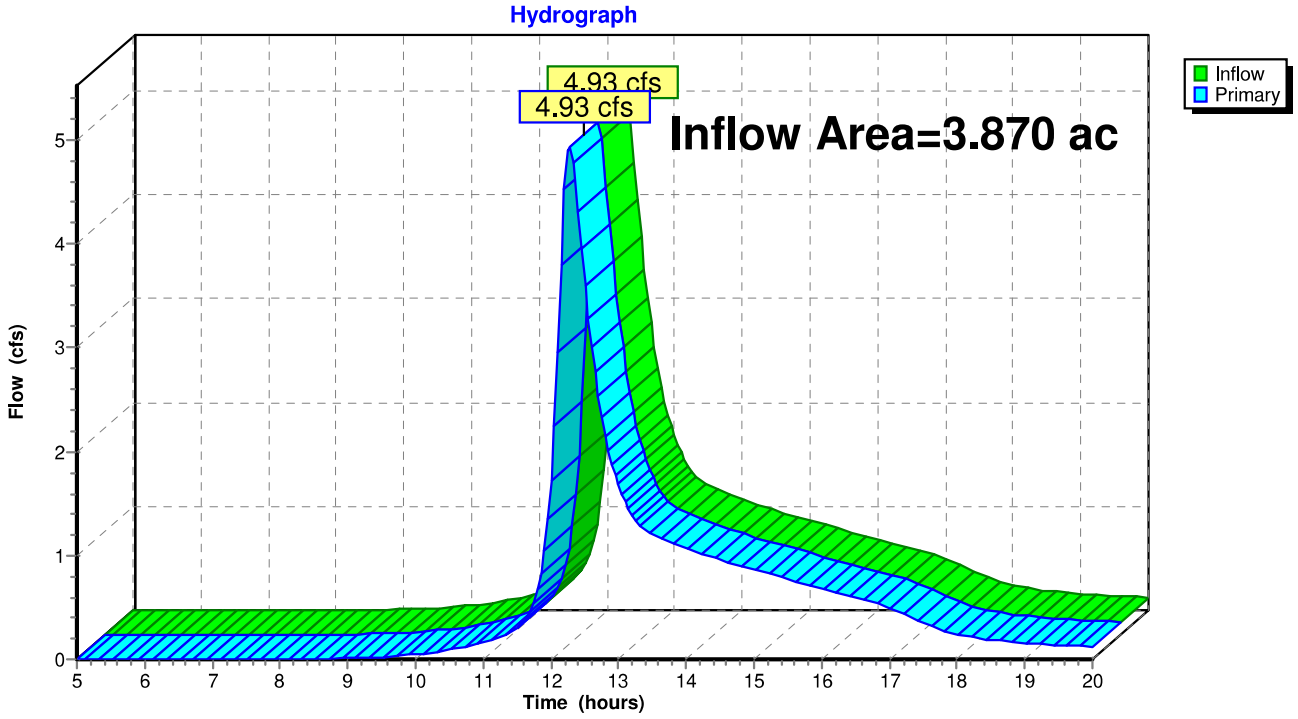


Summary for Link 11L: West 36 RCP under GVR

Inflow Area = 3.870 ac, 3.04% Impervious, Inflow Depth > 2.06" for 5-Year event
Inflow = 4.93 cfs @ 12.28 hrs, Volume= 0.664 af
Primary = 4.93 cfs @ 12.28 hrs, Volume= 0.664 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 11L: West 36 RCP under GVR



Summary for Subcatchment 2S: Basin 1-C PRE

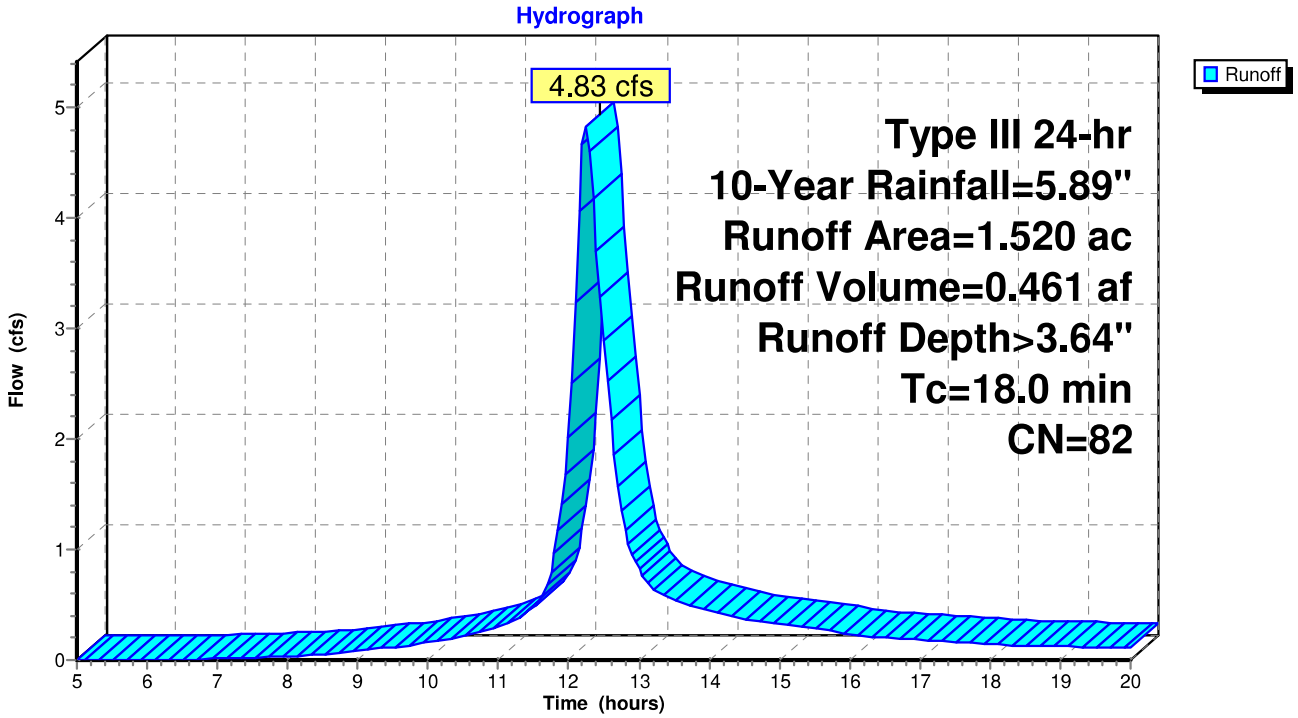
Runoff = 4.83 cfs @ 12.25 hrs, Volume= 0.461 af, Depth> 3.64"
Routed to Pond 4P : Knollwood STORMTECH STORAGE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.89"

	Area (ac)	CN	Description
*	1.520	82	
	1.520		100.00% Pervious Area

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

Subcatchment 2S: Basin 1-C PRE



Summary for Subcatchment 5S: Basin 1-W PRE

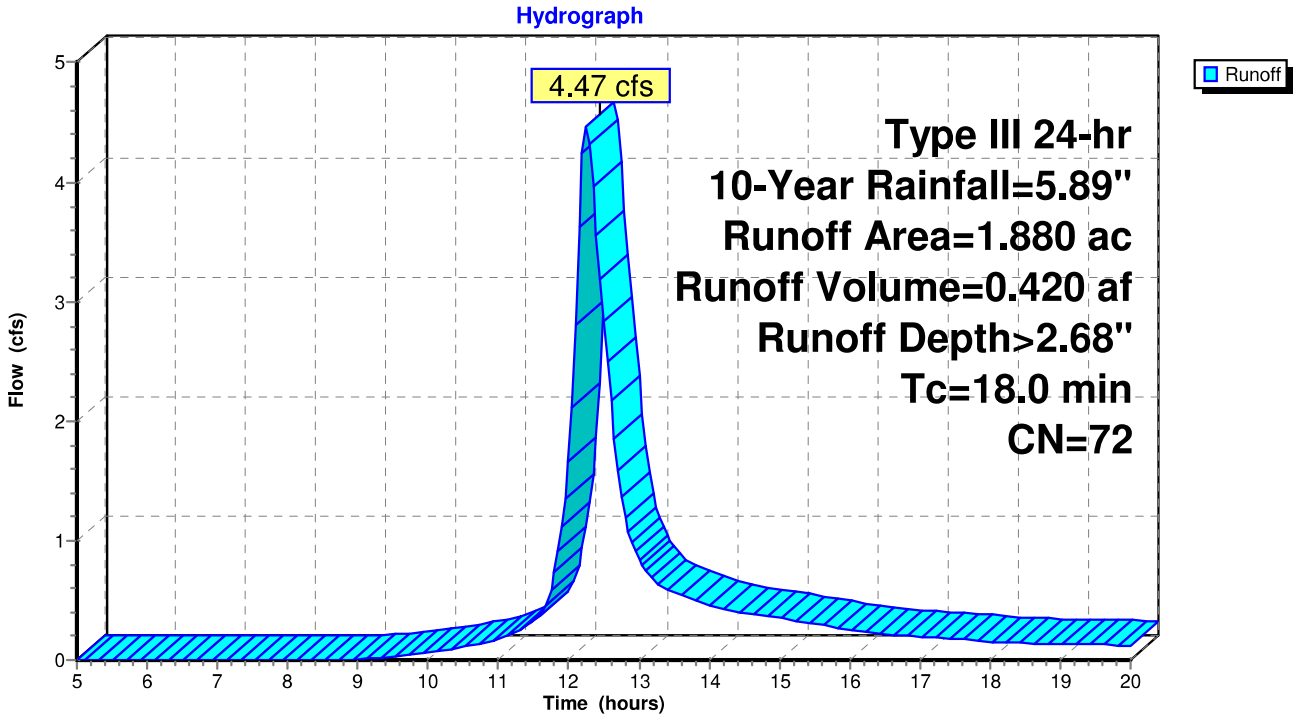
Runoff = 4.47 cfs @ 12.25 hrs, Volume= 0.420 af, Depth> 2.68"
Routed to Reach 9R : YARD PIPES

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.89"

	Area (ac)	CN	Description
*	1.880	72	
	1.880		100.00% Pervious Area

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

Subcatchment 5S: Basin 1-W PRE



Summary for Subcatchment 12S: Basin 1-E PRE

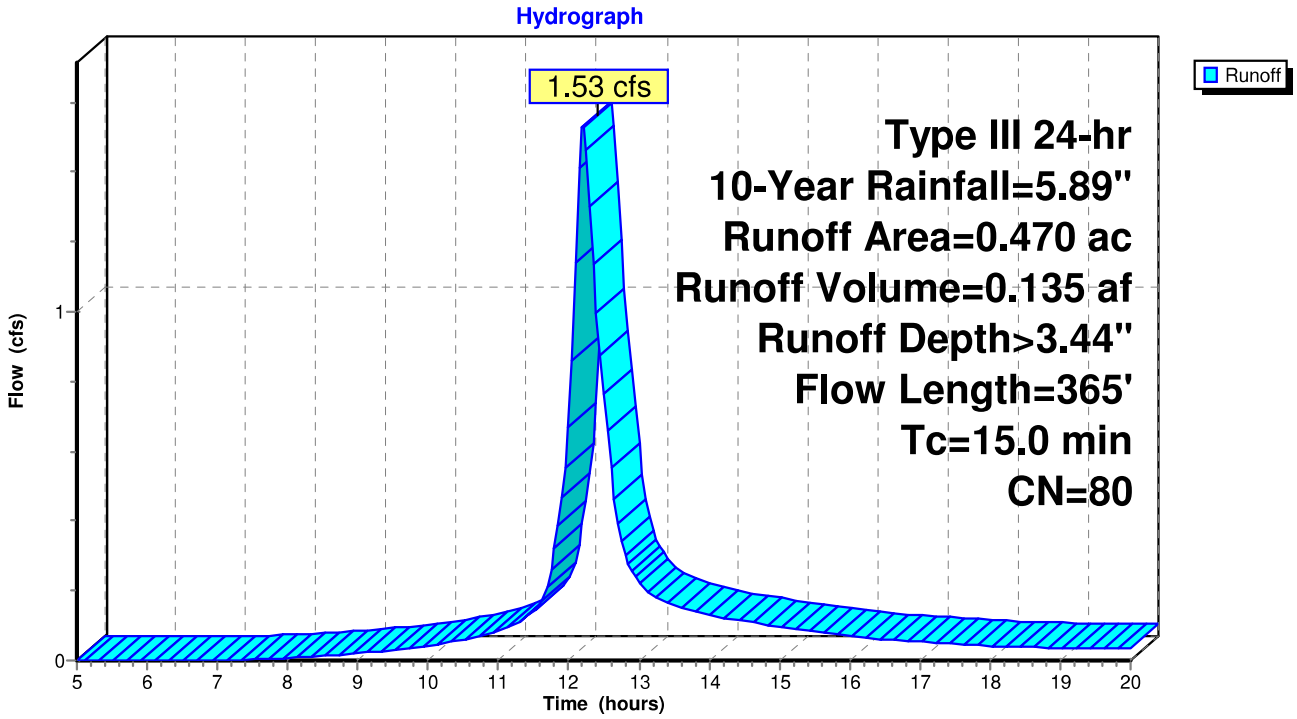
Runoff = 1.53 cfs @ 12.21 hrs, Volume= 0.135 af, Depth> 3.44"
Routed to Link 11L : West 36 RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.89"

Area (ac)	CN	Description
0.470	80	1/2 acre lots, 25% imp, HSG C
0.353		75.00% Pervious Area
0.117		25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	75	0.0250	0.09		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
0.8	290	0.0400	6.04	9.06	**Channel Flow, channel flow** Area= 1.5 sf Perim= 2.5' r= 0.60' n= 0.035
15.0	365	Total			

Subcatchment 12S: Basin 1-E PRE



Summary for Reach 9R: YARD PIPES

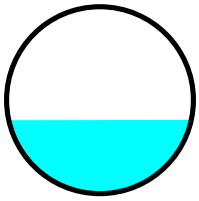
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.880 ac, 0.00% Impervious, Inflow Depth > 2.68" for 10-Year event
Inflow = 4.47 cfs @ 12.25 hrs, Volume= 0.420 af
Outflow = 4.41 cfs @ 12.29 hrs, Volume= 0.420 af, Atten= 1%, Lag= 1.9 min
Routed to Link 11L : West 36 RCP under GVR

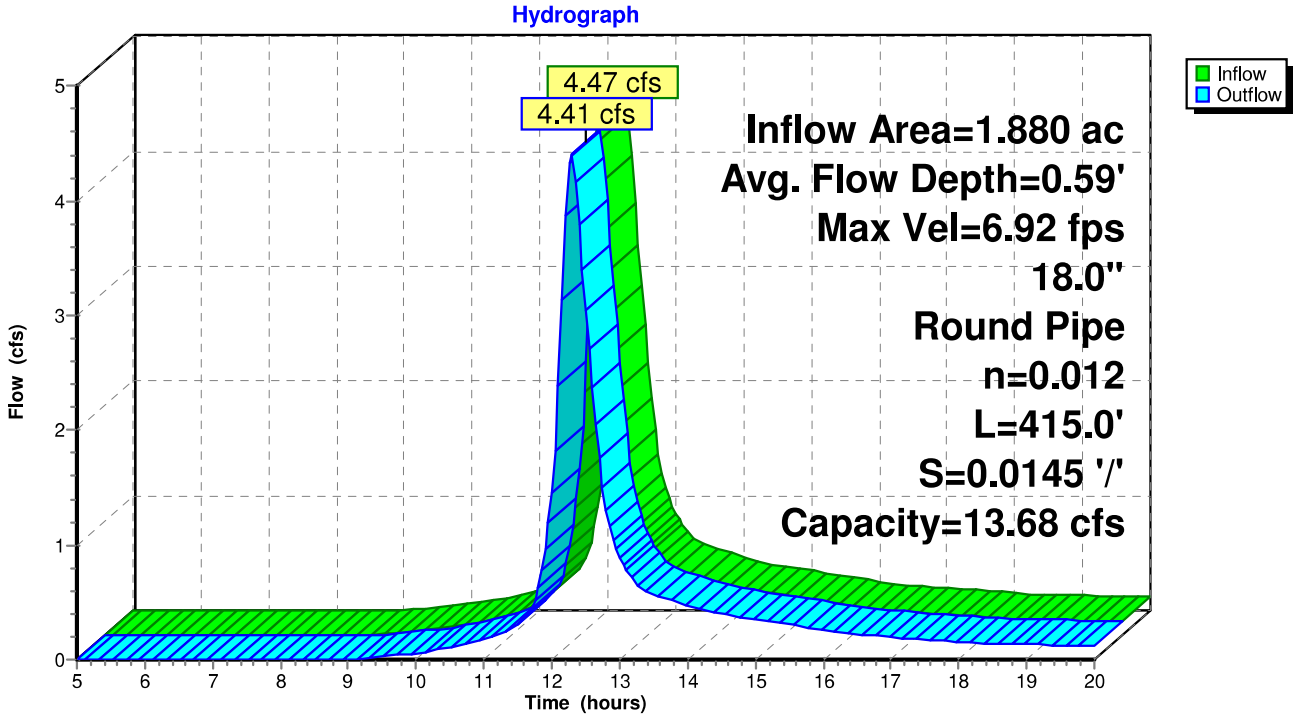
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 6.92 fps, Min. Travel Time= 1.0 min
Avg. Velocity = 3.03 fps, Avg. Travel Time= 2.3 min

Peak Storage= 268 cf @ 12.27 hrs
Average Depth at Peak Storage= 0.59' , Surface Width= 1.47'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 13.68 cfs

18.0" Round Pipe
n= 0.012
Length= 415.0' Slope= 0.0145 '/'
Inlet Invert= 641.00', Outlet Invert= 635.00'



Reach 9R: YARD PIPES



Summary for Pond 4P: Knollwood STORMTECH STORAGE

Inflow Area = 1.520 ac, 0.00% Impervious, Inflow Depth > 3.64" for 10-Year event
Inflow = 4.83 cfs @ 12.25 hrs, Volume= 0.461 af
Outflow = 2.04 cfs @ 12.62 hrs, Volume= 0.434 af, Atten= 58%, Lag= 22.6 min
Discarded = 0.12 cfs @ 9.75 hrs, Volume= 0.114 af
Primary = 1.92 cfs @ 12.62 hrs, Volume= 0.320 af
Routed to Link 11L : West 36 RCP under GVR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 637.14' @ 12.62 hrs Surf.Area= 5,222 sf Storage= 7,770 cf

Plug-Flow detention time= 95.0 min calculated for 0.434 af (94% of inflow)
Center-of-Mass det. time= 74.7 min (861.2 - 786.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	634.75'	5,777 cf	**20.75'W x 251.64'L x 4.00'H Field A** 20,886 cf Overall - 6,443 cf Embedded = 14,443 cf x 40.0% Voids
#2A	635.75'	6,443 cf	**ADS_StormTech SC-740** x 140 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 4 rows
		12,220 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	635.15'	**10.0" Round Culvert** L= 12.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 635.15' / 634.00' S= 0.0958 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf
#2	Discarded	634.75'	**1.000 in/hr Exfiltration over Surface area**
#3	Device 1	635.25'	**5.0" W x 3.2" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	636.50'	**24.0" W x 6.0" H Vert. Orifice/Grate X 0.00** C= 0.600 Limited to weir flow at low heads
#5	Device 1	636.75'	**18.8" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.12 cfs @ 9.75 hrs HW=634.79' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.12 cfs)

Primary OutFlow Max=1.91 cfs @ 12.62 hrs HW=637.14' (Free Discharge)
└**1=Culvert** (Passes 1.91 cfs of 3.29 cfs potential flow)
  ├**3=Orifice/Grate** (Orifice Controls 0.71 cfs @ 6.37 fps)
  ├**4=Orifice/Grate** (Controls 0.00 cfs)
  └**5=Orifice/Grate** (Orifice Controls 1.20 cfs @ 1.99 fps)

Pond 4P: Knollwood STORMTECH STORAGE - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 (ADS StormTech® SC-740 without end caps)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
Row Length Adjustment= +0.44' x 6.45 sf x 4 rows

51.0" Wide + 7.0" Spacing = 58.0" C-C Row Spacing

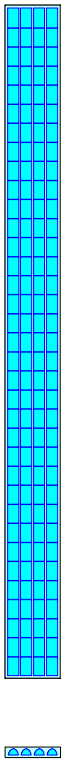
35 Chambers/Row x 7.12' Long +0.44' Row Adjustment = 249.64' Row Length +12.0" End Stone x 2 = 251.64' Base Length
4 Rows x 51.0" Wide + 7.0" Spacing x 3 + 12.0" Side Stone x 2 = 20.75' Base Width
12.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 4.00' Field Height

140 Chambers x 45.9 cf +0.44' Row Adjustment x 6.45 sf x 4 Rows = 6,443.0 cf Chamber Storage

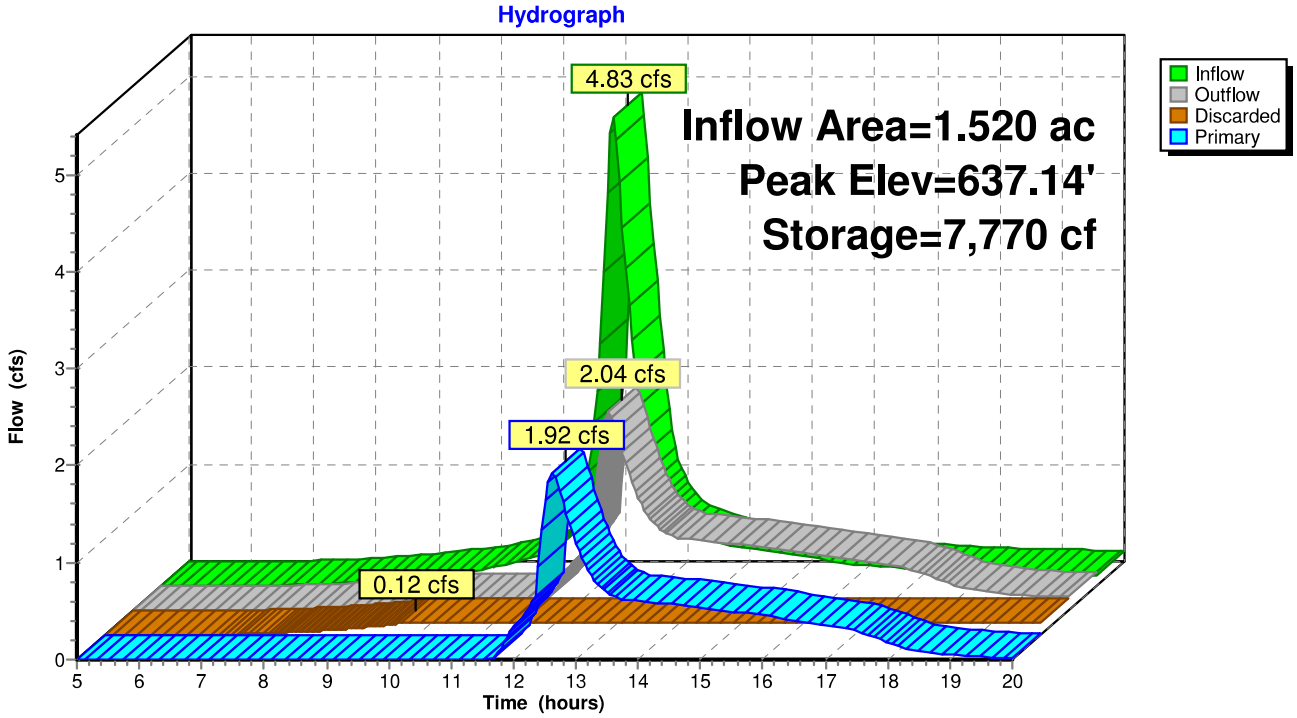
20,886.1 cf Field - 6,443.0 cf Chambers = 14,443.2 cf Stone x 40.0% Voids = 5,777.3 cf Stone Storage

Chamber Storage + Stone Storage = 12,220.2 cf = 0.281 af
Overall Storage Efficiency = 58.5%
Overall System Size = 251.64' x 20.75' x 4.00'

140 Chambers
773.6 cy Field
534.9 cy Stone



Pond 4P: Knollwood STORMTECH STORAGE

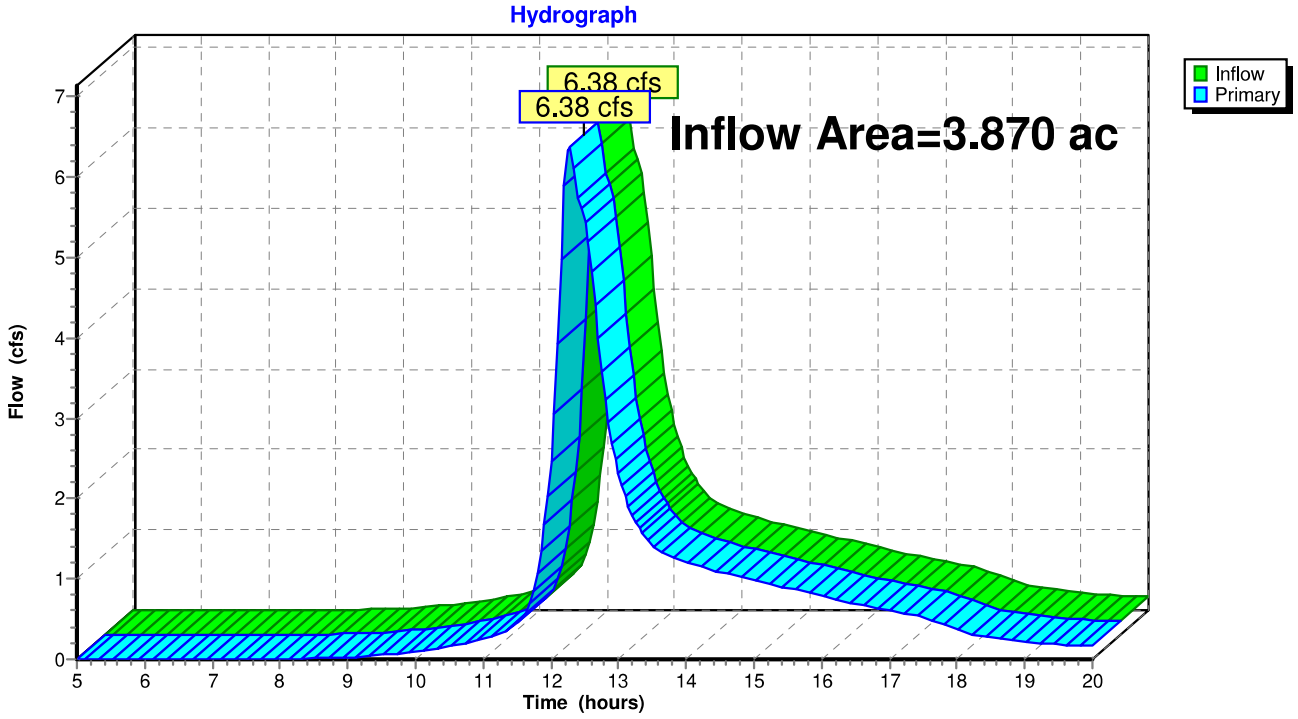


Summary for Link 11L: West 36 RCP under GVR

Inflow Area = 3.870 ac, 3.04% Impervious, Inflow Depth > 2.71" for 10-Year event
Inflow = 6.38 cfs @ 12.27 hrs, Volume= 0.875 af
Primary = 6.38 cfs @ 12.27 hrs, Volume= 0.875 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 11L: West 36 RCP under GVR



Summary for Subcatchment 2S: Basin 1-C PRE

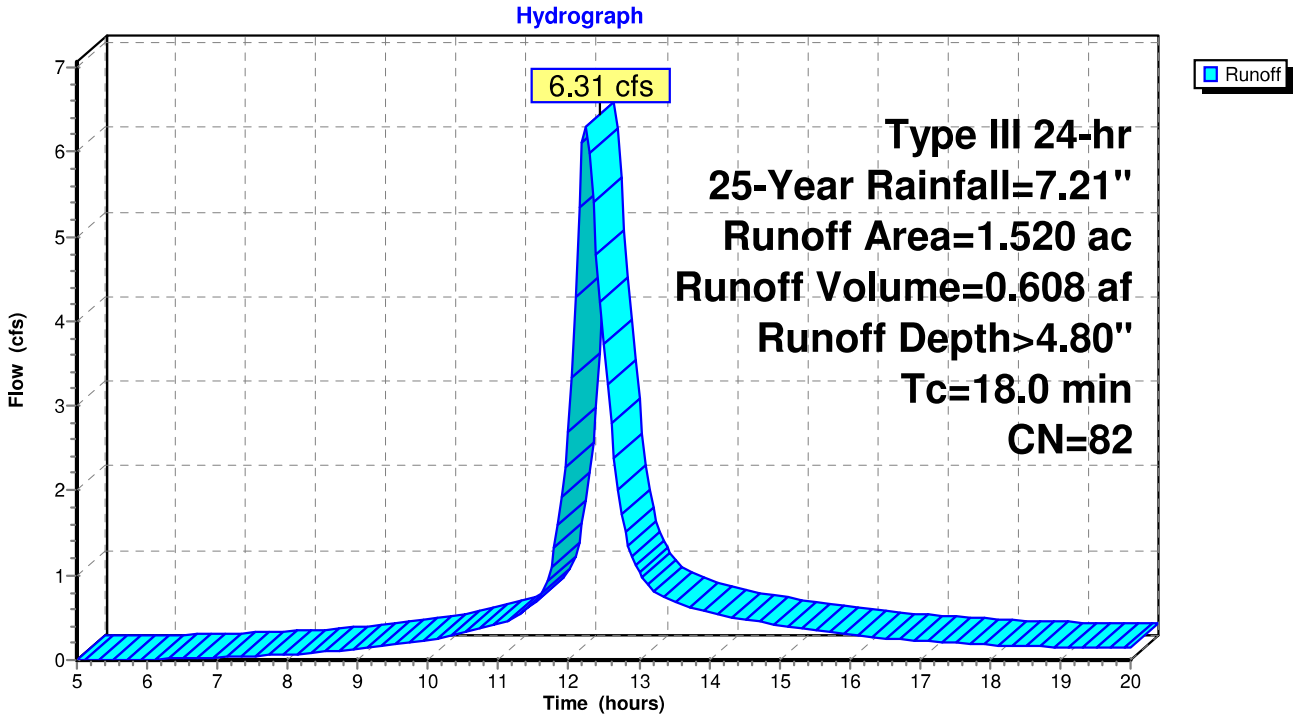
Runoff = 6.31 cfs @ 12.24 hrs, Volume= 0.608 af, Depth> 4.80"
Routed to Pond 4P : Knollwood STORMTECH STORAGE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=7.21"

	Area (ac)	CN	Description
*	1.520	82	
	1.520		100.00% Pervious Area

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

Subcatchment 2S: Basin 1-C PRE



Summary for Subcatchment 5S: Basin 1-W PRE

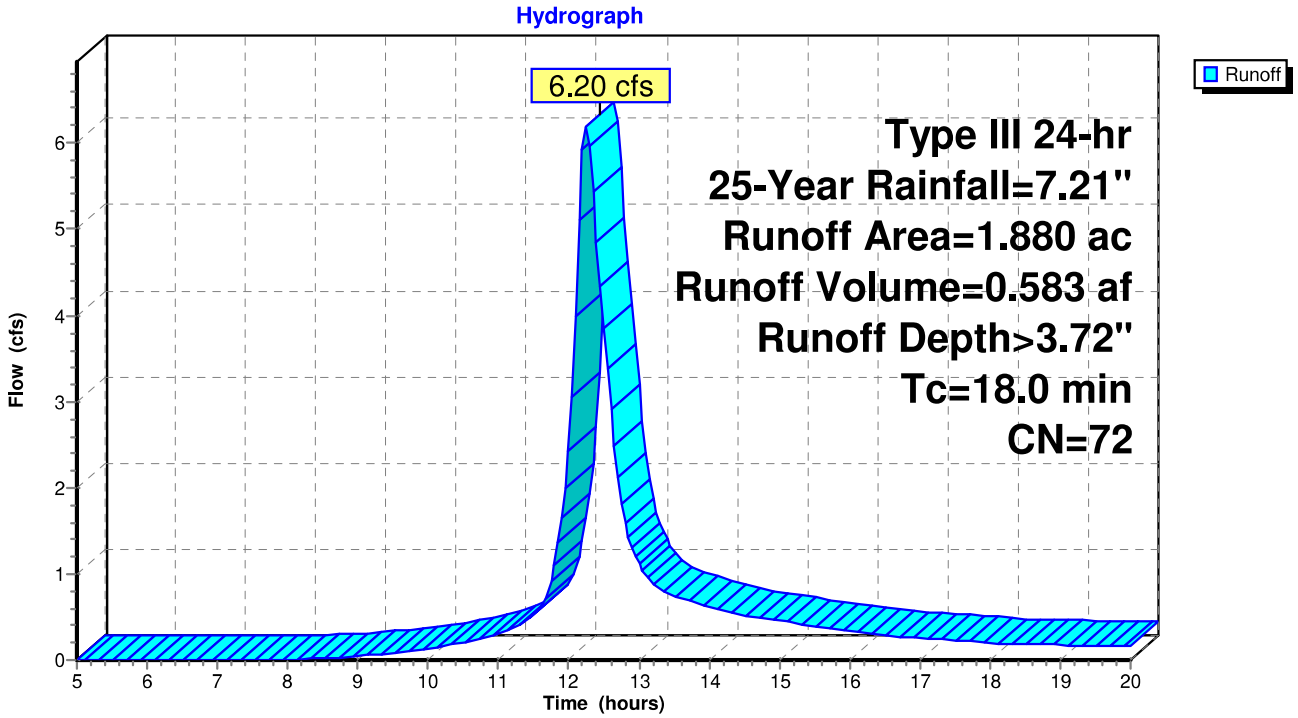
Runoff = 6.20 cfs @ 12.25 hrs, Volume= 0.583 af, Depth> 3.72"
Routed to Reach 9R : YARD PIPES

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=7.21"

	Area (ac)	CN	Description
*	1.880	72	
	1.880		100.00% Pervious Area

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

Subcatchment 5S: Basin 1-W PRE



Summary for Subcatchment 12S: Basin 1-E PRE

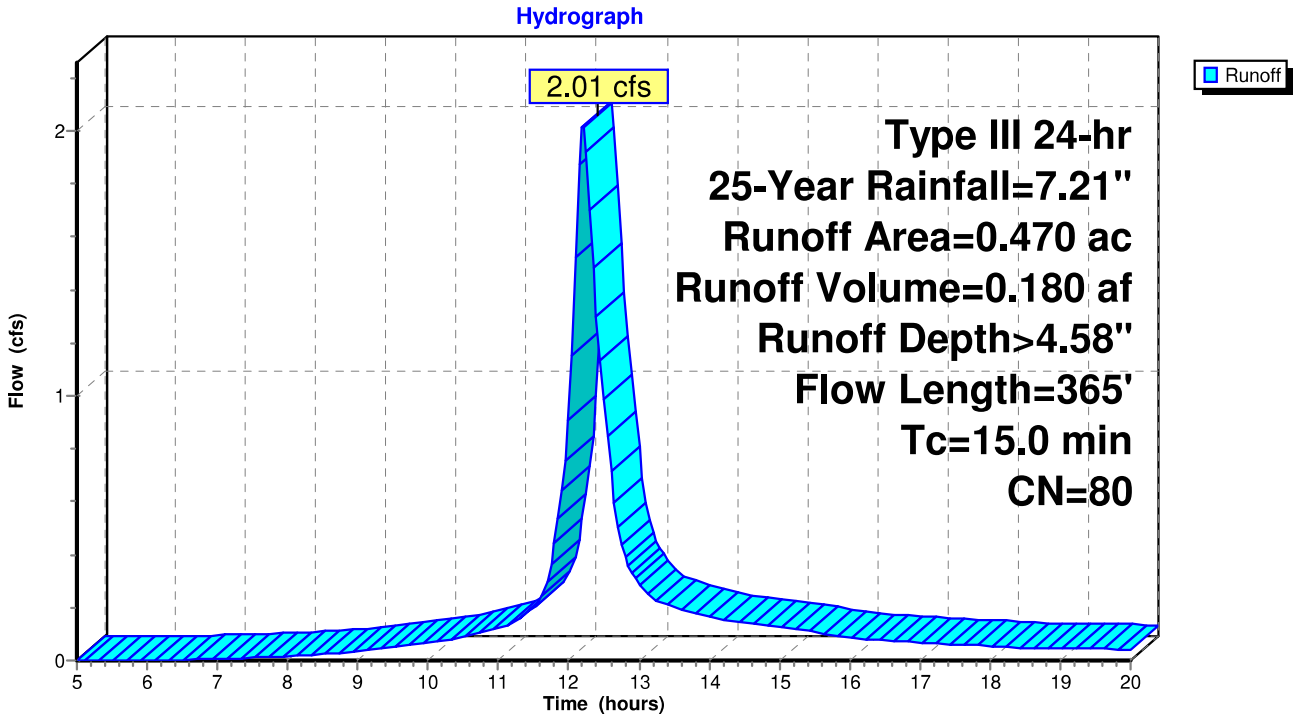
Runoff = 2.01 cfs @ 12.20 hrs, Volume= 0.180 af, Depth> 4.58"
Routed to Link 11L : West 36 RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=7.21"

Area (ac)	CN	Description
0.470	80	1/2 acre lots, 25% imp, HSG C
0.353		75.00% Pervious Area
0.117		25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	75	0.0250	0.09		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
0.8	290	0.0400	6.04	9.06	**Channel Flow, channel flow** Area= 1.5 sf Perim= 2.5' r= 0.60' n= 0.035
15.0	365	Total			

Subcatchment 12S: Basin 1-E PRE



Summary for Reach 9R: YARD PIPES

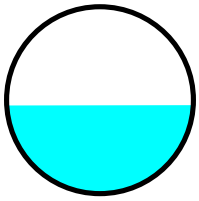
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.880 ac, 0.00% Impervious, Inflow Depth > 3.72" for 25-Year event
Inflow = 6.20 cfs @ 12.25 hrs, Volume= 0.583 af
Outflow = 6.12 cfs @ 12.28 hrs, Volume= 0.583 af, Atten= 1%, Lag= 1.7 min
Routed to Link 11L : West 36 RCP under GVR

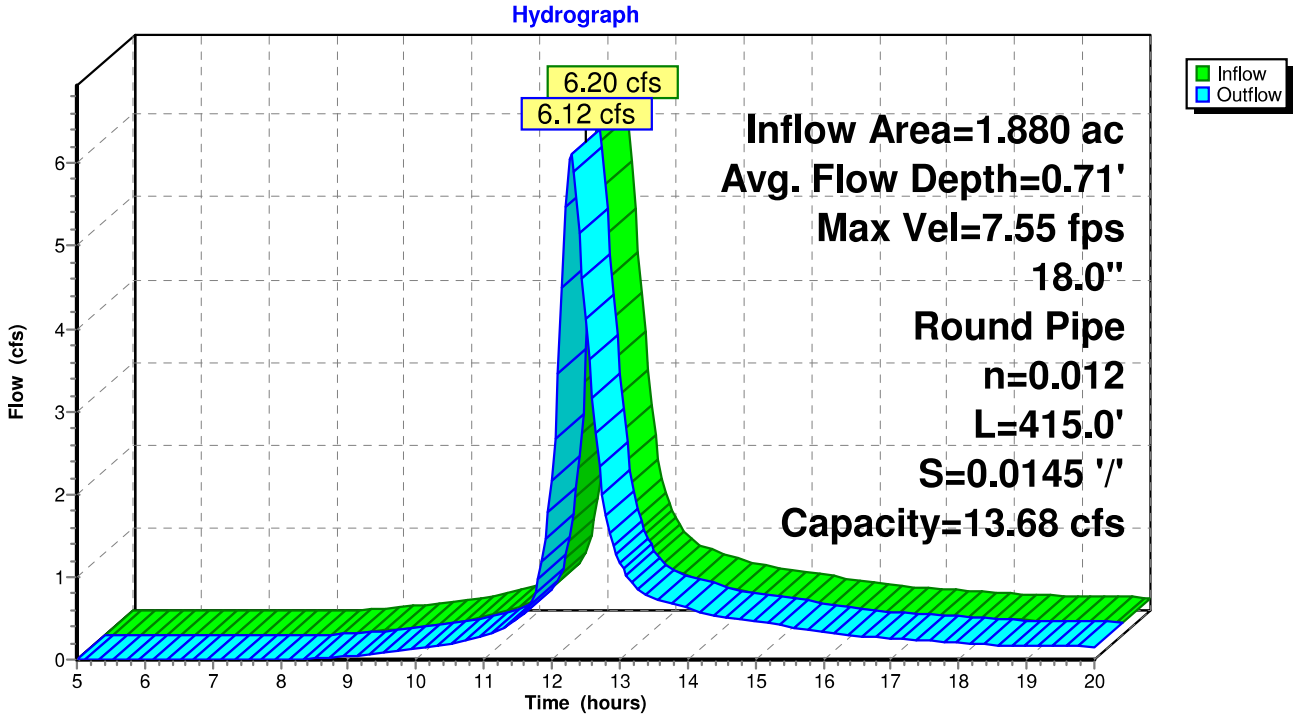
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 7.55 fps, Min. Travel Time= 0.9 min
Avg. Velocity = 3.24 fps, Avg. Travel Time= 2.1 min

Peak Storage= 340 cf @ 12.26 hrs
Average Depth at Peak Storage= 0.71' , Surface Width= 1.50'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 13.68 cfs

18.0" Round Pipe
n= 0.012
Length= 415.0' Slope= 0.0145 '/'
Inlet Invert= 641.00', Outlet Invert= 635.00'



Reach 9R: YARD PIPES



Summary for Pond 4P: Knollwood STORMTECH STORAGE

Inflow Area = 1.520 ac, 0.00% Impervious, Inflow Depth > 4.80" for 25-Year event
Inflow = 6.31 cfs @ 12.24 hrs, Volume= 0.608 af
Outflow = 3.72 cfs @ 12.51 hrs, Volume= 0.579 af, Atten= 41%, Lag= 15.9 min
Discarded = 0.12 cfs @ 9.05 hrs, Volume= 0.122 af
Primary = 3.60 cfs @ 12.51 hrs, Volume= 0.457 af
Routed to Link 11L : West 36 RCP under GVR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 637.44' @ 12.50 hrs Surf.Area= 5,222 sf Storage= 8,874 cf

Plug-Flow detention time= 84.5 min calculated for 0.577 af (95% of inflow)
Center-of-Mass det. time= 66.9 min (846.9 - 779.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	634.75'	5,777 cf	**20.75'W x 251.64'L x 4.00'H Field A** 20,886 cf Overall - 6,443 cf Embedded = 14,443 cf x 40.0% Voids
#2A	635.75'	6,443 cf	**ADS_StormTech SC-740** x 140 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 4 rows
		12,220 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	635.15'	**10.0" Round Culvert** L= 12.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 635.15' / 634.00' S= 0.0958 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf
#2	Discarded	634.75'	**1.000 in/hr Exfiltration over Surface area**
#3	Device 1	635.25'	**5.0" W x 3.2" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	636.50'	**24.0" W x 6.0" H Vert. Orifice/Grate X 0.00** C= 0.600 Limited to weir flow at low heads
#5	Device 1	636.75'	**18.8" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.12 cfs @ 9.05 hrs HW=634.79' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.12 cfs)

Primary OutFlow Max=3.59 cfs @ 12.51 hrs HW=637.44' (Free Discharge)
└**1=Culvert** (Inlet Controls 3.59 cfs @ 6.59 fps)
  ├**3=Orifice/Grate** (Passes < 0.77 cfs potential flow)
  ├**4=Orifice/Grate** (Controls 0.00 cfs)
  └**5=Orifice/Grate** (Passes < 2.89 cfs potential flow)

Pond 4P: Knollwood STORMTECH STORAGE - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 (ADS StormTech® SC-740 without end caps)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
Row Length Adjustment= +0.44' x 6.45 sf x 4 rows

51.0" Wide + 7.0" Spacing = 58.0" C-C Row Spacing

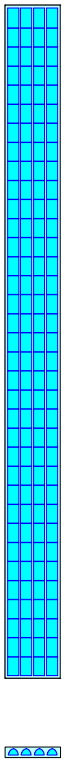
35 Chambers/Row x 7.12' Long +0.44' Row Adjustment = 249.64' Row Length +12.0" End Stone x 2 = 251.64' Base Length
4 Rows x 51.0" Wide + 7.0" Spacing x 3 + 12.0" Side Stone x 2 = 20.75' Base Width
12.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 4.00' Field Height

140 Chambers x 45.9 cf +0.44' Row Adjustment x 6.45 sf x 4 Rows = 6,443.0 cf Chamber Storage

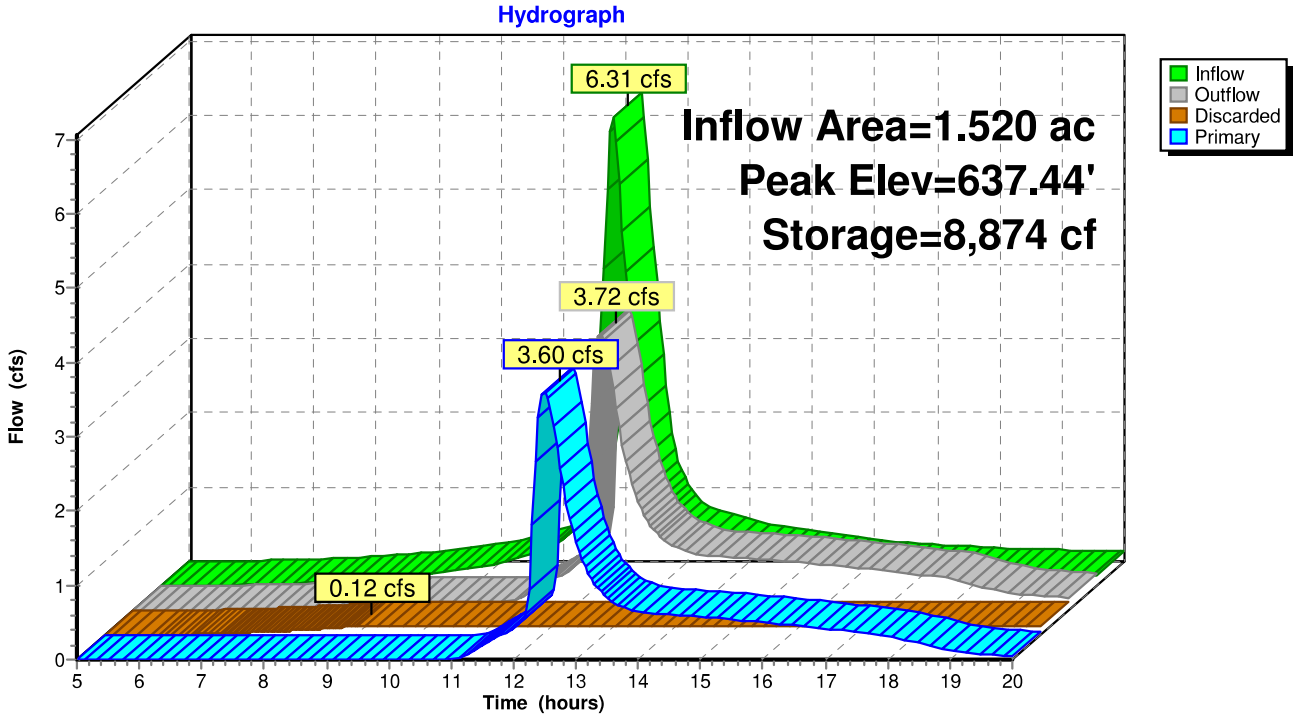
20,886.1 cf Field - 6,443.0 cf Chambers = 14,443.2 cf Stone x 40.0% Voids = 5,777.3 cf Stone Storage

Chamber Storage + Stone Storage = 12,220.2 cf = 0.281 af
Overall Storage Efficiency = 58.5%
Overall System Size = 251.64' x 20.75' x 4.00'

140 Chambers
773.6 cy Field
534.9 cy Stone



Pond 4P: Knollwood STORMTECH STORAGE

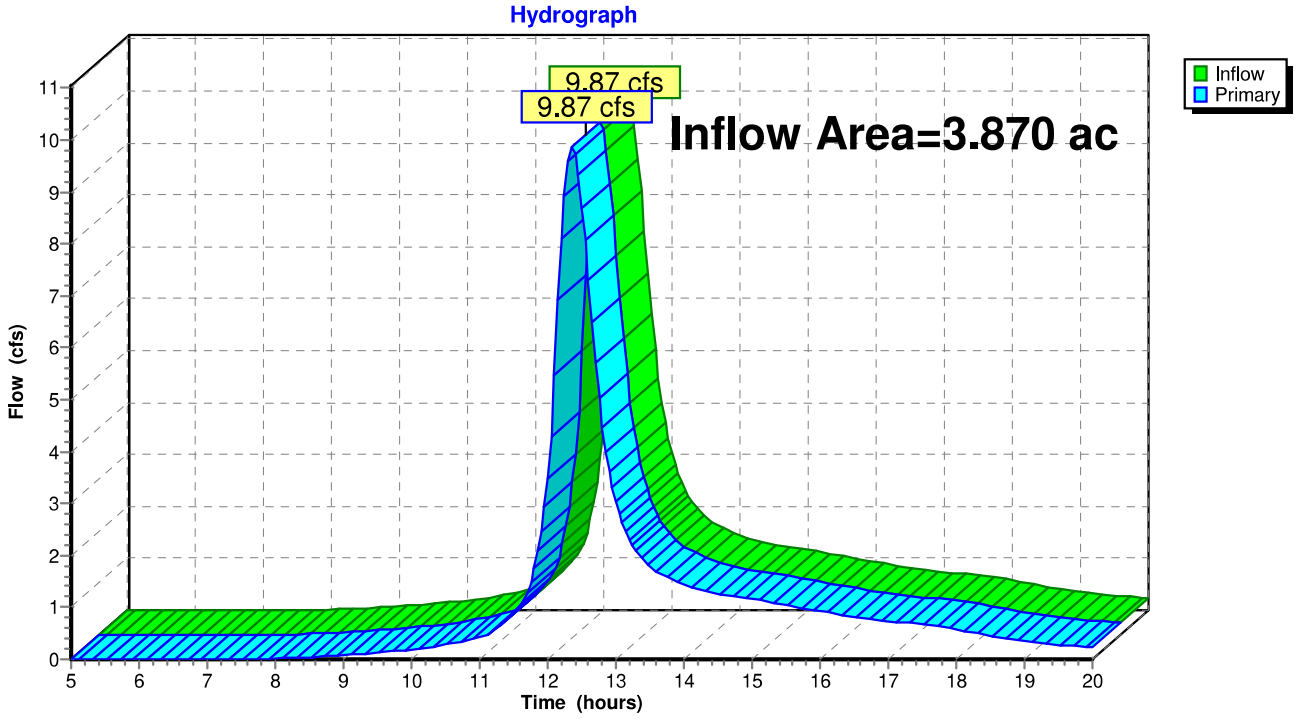


Summary for Link 11L: West 36 RCP under GVR

Inflow Area = 3.870 ac, 3.04% Impervious, Inflow Depth > 3.78" for 25-Year event
Inflow = 9.87 cfs @ 12.36 hrs, Volume= 1.219 af
Primary = 9.87 cfs @ 12.36 hrs, Volume= 1.219 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 11L: West 36 RCP under GVR



Summary for Subcatchment 2S: Basin 1-C PRE

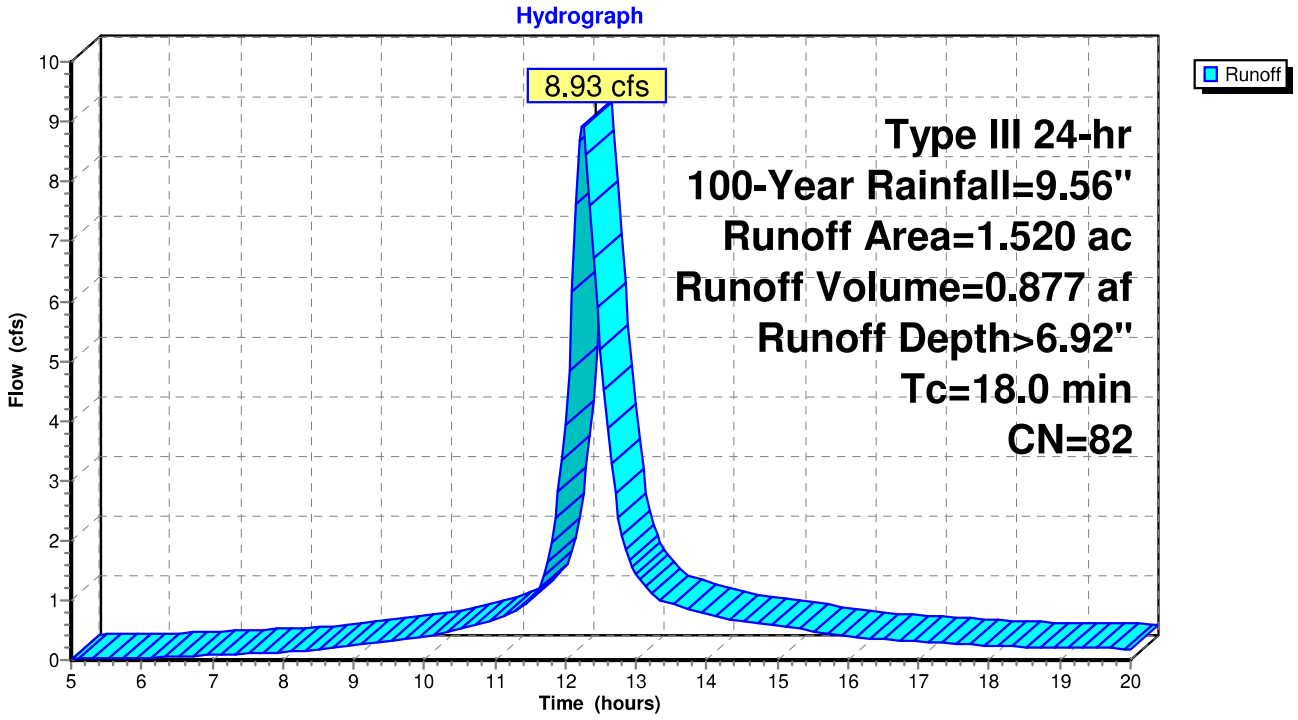
Runoff = 8.93 cfs @ 12.24 hrs, Volume= 0.877 af, Depth> 6.92"
Routed to Pond 4P : Knollwood STORMTECH STORAGE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=9.56"

	Area (ac)	CN	Description
*	1.520	82	
	1.520		100.00% Pervious Area

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

Subcatchment 2S: Basin 1-C PRE



Summary for Subcatchment 5S: Basin 1-W PRE

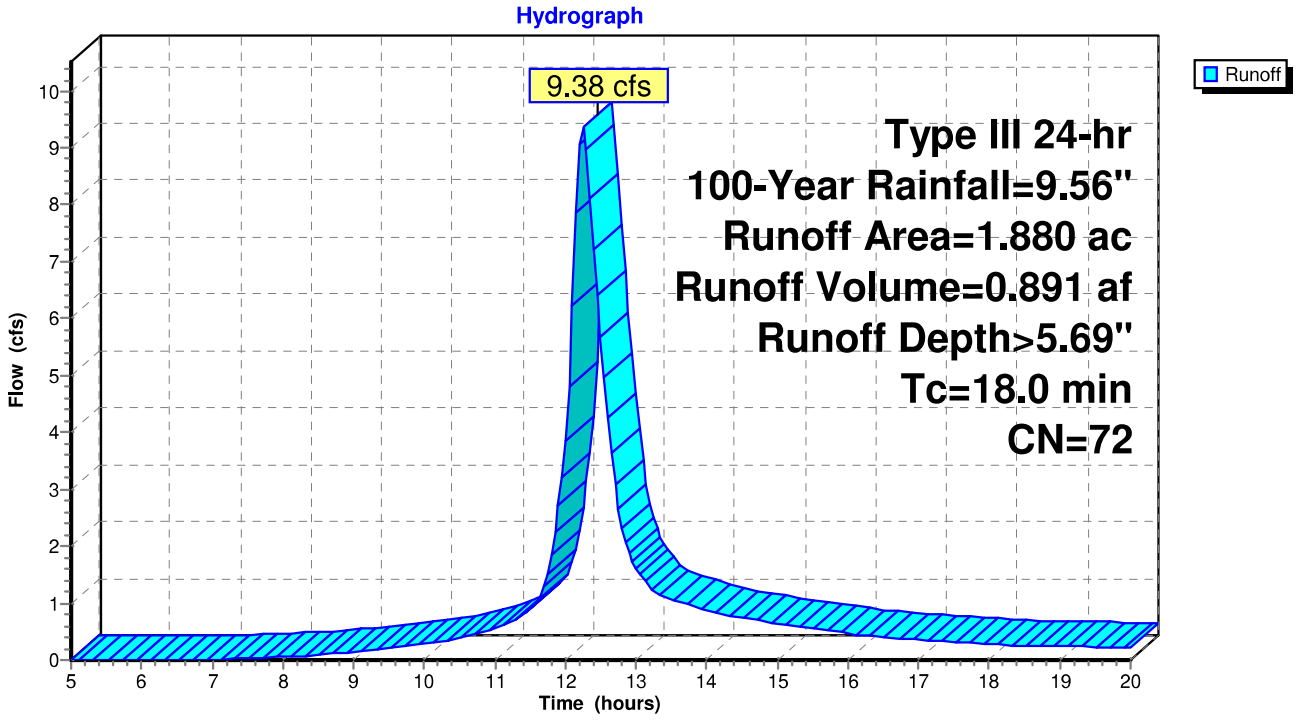
Runoff = 9.38 cfs @ 12.25 hrs, Volume= 0.891 af, Depth> 5.69"
Routed to Reach 9R : YARD PIPES

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=9.56"

	Area (ac)	CN	Description
*	1.880	72	
	1.880		100.00% Pervious Area

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

Subcatchment 5S: Basin 1-W PRE



Summary for Subcatchment 12S: Basin 1-E PRE

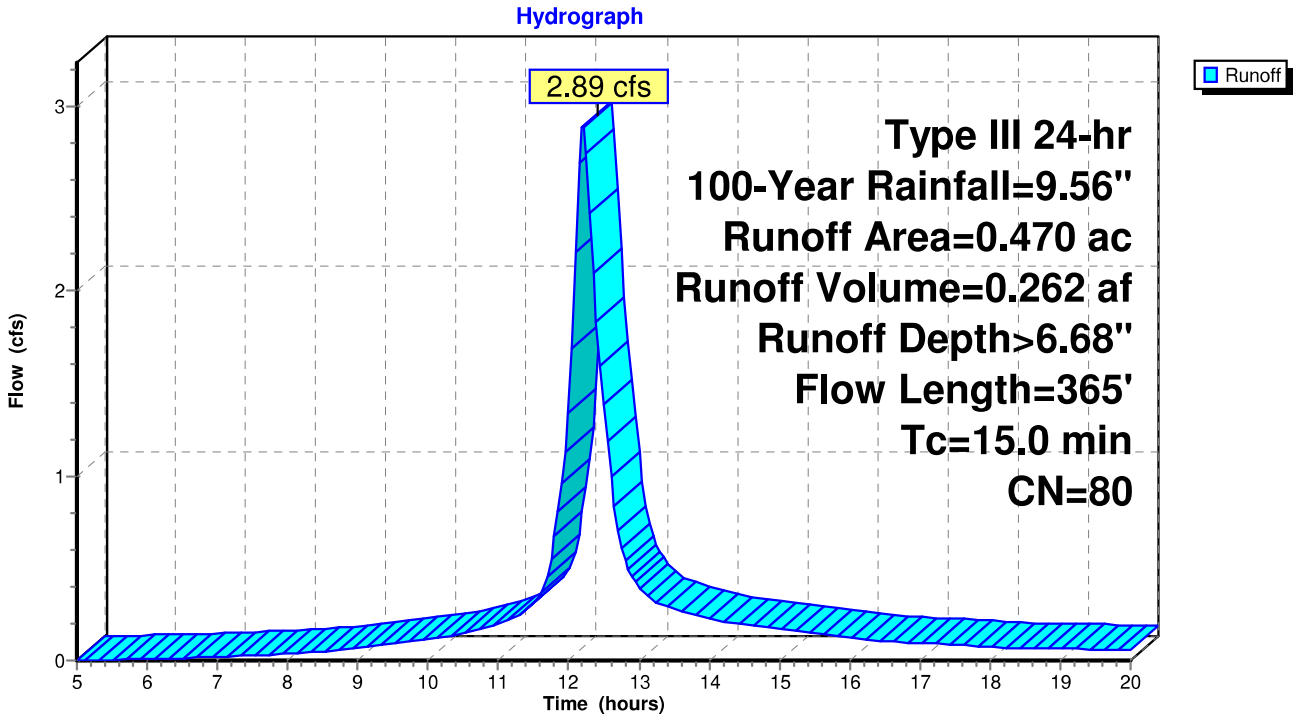
Runoff = 2.89 cfs @ 12.20 hrs, Volume= 0.262 af, Depth> 6.68"
Routed to Link 11L : West 36 RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=9.56"

Area (ac)	CN	Description
0.470	80	1/2 acre lots, 25% imp, HSG C
0.353		75.00% Pervious Area
0.117		25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	75	0.0250	0.09		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
0.8	290	0.0400	6.04	9.06	**Channel Flow, channel flow** Area= 1.5 sf Perim= 2.5' r= 0.60' n= 0.035
15.0	365	Total			

Subcatchment 12S: Basin 1-E PRE



Summary for Reach 9R: YARD PIPES

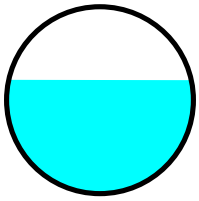
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.880 ac, 0.00% Impervious, Inflow Depth > 5.69" for 100-Year event
Inflow = 9.38 cfs @ 12.25 hrs, Volume= 0.891 af
Outflow = 9.30 cfs @ 12.27 hrs, Volume= 0.890 af, Atten= 1%, Lag= 1.5 min
Routed to Link 11L : West 36 RCP under GVR

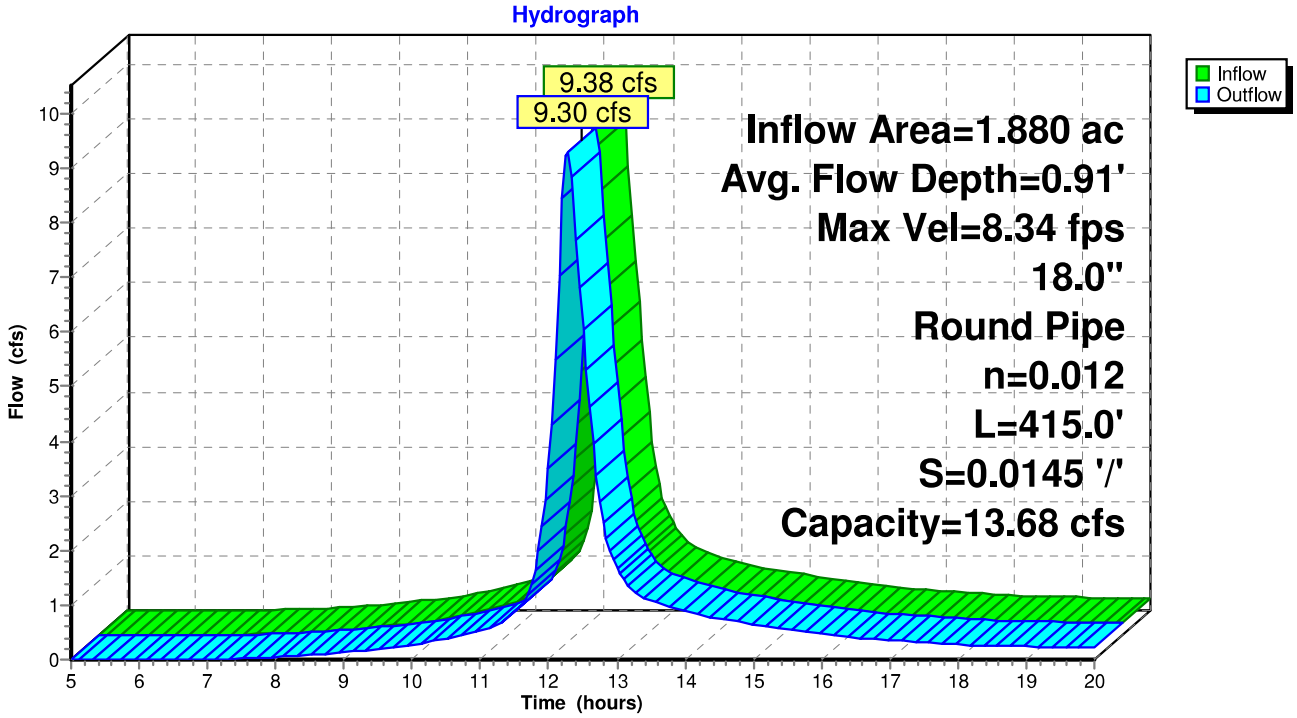
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 8.34 fps, Min. Travel Time= 0.8 min
Avg. Velocity = 3.52 fps, Avg. Travel Time= 2.0 min

Peak Storage= 467 cf @ 12.26 hrs
Average Depth at Peak Storage= 0.91' , Surface Width= 1.46'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 13.68 cfs

18.0" Round Pipe
n= 0.012
Length= 415.0' Slope= 0.0145 '/'
Inlet Invert= 641.00', Outlet Invert= 635.00'



Reach 9R: YARD PIPES



Summary for Pond 4P: Knollwood STORMTECH STORAGE

[82] Warning: Early inflow requires earlier time span

Inflow Area = 1.520 ac, 0.00% Impervious, Inflow Depth > 6.92" for 100-Year event
Inflow = 8.93 cfs @ 12.24 hrs, Volume= 0.877 af
Outflow = 4.74 cfs @ 12.53 hrs, Volume= 0.842 af, Atten= 47%, Lag= 17.6 min
Discarded = 0.12 cfs @ 8.00 hrs, Volume= 0.133 af
Primary = 4.62 cfs @ 12.53 hrs, Volume= 0.708 af
Routed to Link 11L : West 36 RCP under GVR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 638.66' @ 12.53 hrs Surf.Area= 5,222 sf Storage= 12,028 cf

Plug-Flow detention time= 75.4 min calculated for 0.839 af (96% of inflow)
Center-of-Mass det. time= 60.1 min (831.4 - 771.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	634.75'	5,777 cf	**20.75'W x 251.64'L x 4.00'H Field A** 20,886 cf Overall - 6,443 cf Embedded = 14,443 cf x 40.0% Voids
#2A	635.75'	6,443 cf	**ADS_StormTech SC-740** x 140 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 4 rows
		12,220 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	635.15'	**10.0" Round Culvert** L= 12.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 635.15' / 634.00' S= 0.0958 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf
#2	Discarded	634.75'	**1.000 in/hr Exfiltration over Surface area**
#3	Device 1	635.25'	**5.0" W x 3.2" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	636.50'	**24.0" W x 6.0" H Vert. Orifice/Grate X 0.00** C= 0.600 Limited to weir flow at low heads
#5	Device 1	636.75'	**18.8" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.12 cfs @ 8.00 hrs HW=634.79' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.12 cfs)

Primary OutFlow Max=4.61 cfs @ 12.53 hrs HW=638.65' (Free Discharge)
└**1=Culvert** (Inlet Controls 4.61 cfs @ 8.46 fps)
├**3=Orifice/Grate** (Passes < 0.97 cfs potential flow)
├**4=Orifice/Grate** (Controls 0.00 cfs)
└**5=Orifice/Grate** (Passes < 8.88 cfs potential flow)

Pond 4P: Knollwood STORMTECH STORAGE - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 (ADS StormTech® SC-740 without end caps)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
Row Length Adjustment= +0.44' x 6.45 sf x 4 rows

51.0" Wide + 7.0" Spacing = 58.0" C-C Row Spacing

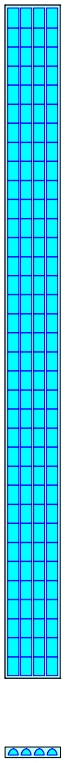
35 Chambers/Row x 7.12' Long +0.44' Row Adjustment = 249.64' Row Length +12.0" End Stone x 2 = 251.64' Base Length
4 Rows x 51.0" Wide + 7.0" Spacing x 3 + 12.0" Side Stone x 2 = 20.75' Base Width
12.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 4.00' Field Height

140 Chambers x 45.9 cf +0.44' Row Adjustment x 6.45 sf x 4 Rows = 6,443.0 cf Chamber Storage

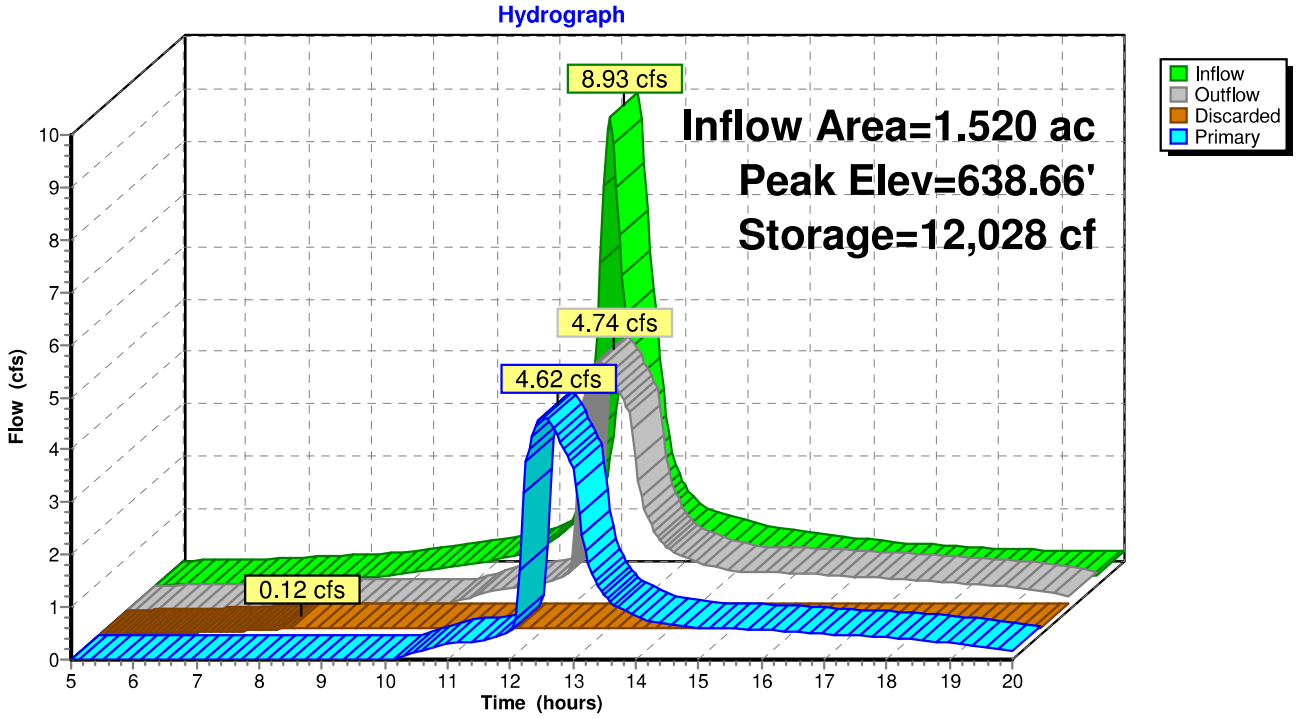
20,886.1 cf Field - 6,443.0 cf Chambers = 14,443.2 cf Stone x 40.0% Voids = 5,777.3 cf Stone Storage

Chamber Storage + Stone Storage = 12,220.2 cf = 0.281 af
Overall Storage Efficiency = 58.5%
Overall System Size = 251.64' x 20.75' x 4.00'

140 Chambers
773.6 cy Field
534.9 cy Stone



Pond 4P: Knollwood STORMTECH STORAGE

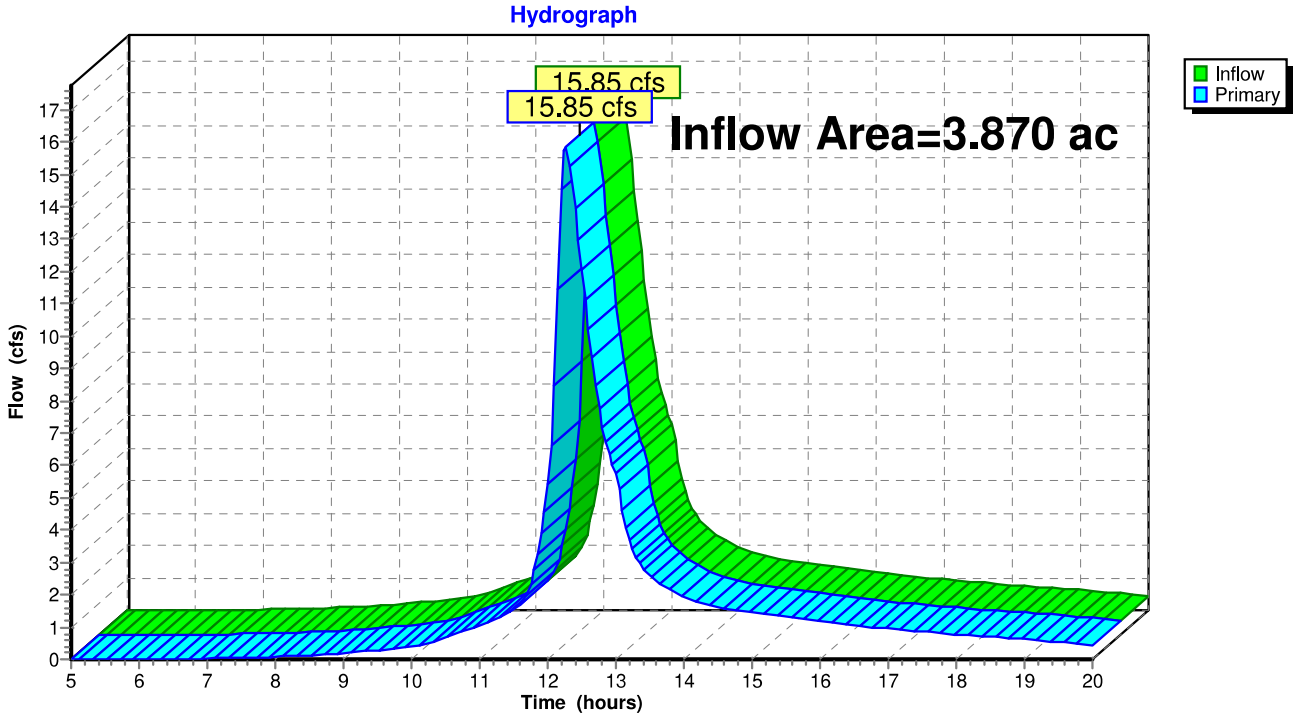


Summary for Link 11L: West 36 RCP under GVR

Inflow Area = 3.870 ac, 3.04% Impervious, Inflow Depth > 5.77" for 100-Year event
Inflow = 15.85 cfs @ 12.27 hrs, Volume= 1.860 af
Primary = 15.85 cfs @ 12.27 hrs, Volume= 1.860 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 11L: West 36 RCP under GVR



Sunview 2025-PRE
Prepared by Alabama Engineering Company, Inc

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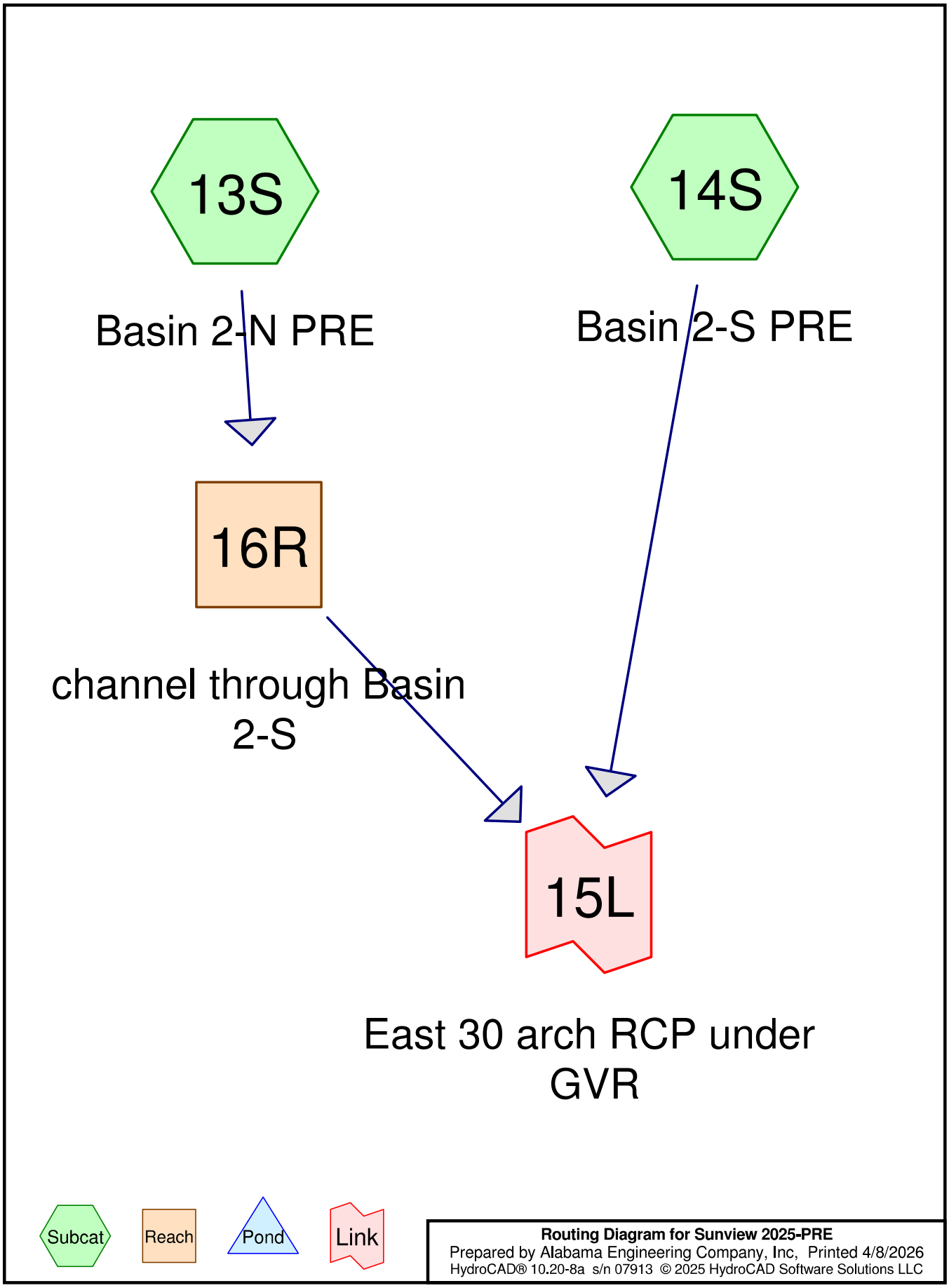
13S
14S
Basin 2-N PRE
Basin 2-S PRE
16R
channel through Basin 2-S
15L
East 30 arch RCP under GVR
Subcat
Reach
Pond
Link
Routing Diagram for Sunview 2025-PRE
Prepared by Alabama Engineering Company, Inc, Printed 4/8/2026
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Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-Year	Type III 24-hr		Default	24.00	1	4.13	2
2	5-Year	Type III 24-hr		Default	24.00	1	5.04	2
3	10-Year	Type III 24-hr		Default	24.00	1	5.89	2
4	25-Year	Type III 24-hr		Default	24.00	1	7.21	2
5	100-Year	Type III 24-hr		Default	24.00	1	9.56	2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
9.180	80	1/2 acre lots, 25% imp, HSG C (13S, 14S)
2.430	90	1/8 acre lots, 65% imp, HSG C (13S)
11.610	**82**	**TOTAL AREA**

Summary for Subcatchment 13S: Basin 2-N PRE

[47] Hint: Peak is 128% of capacity of segment #2

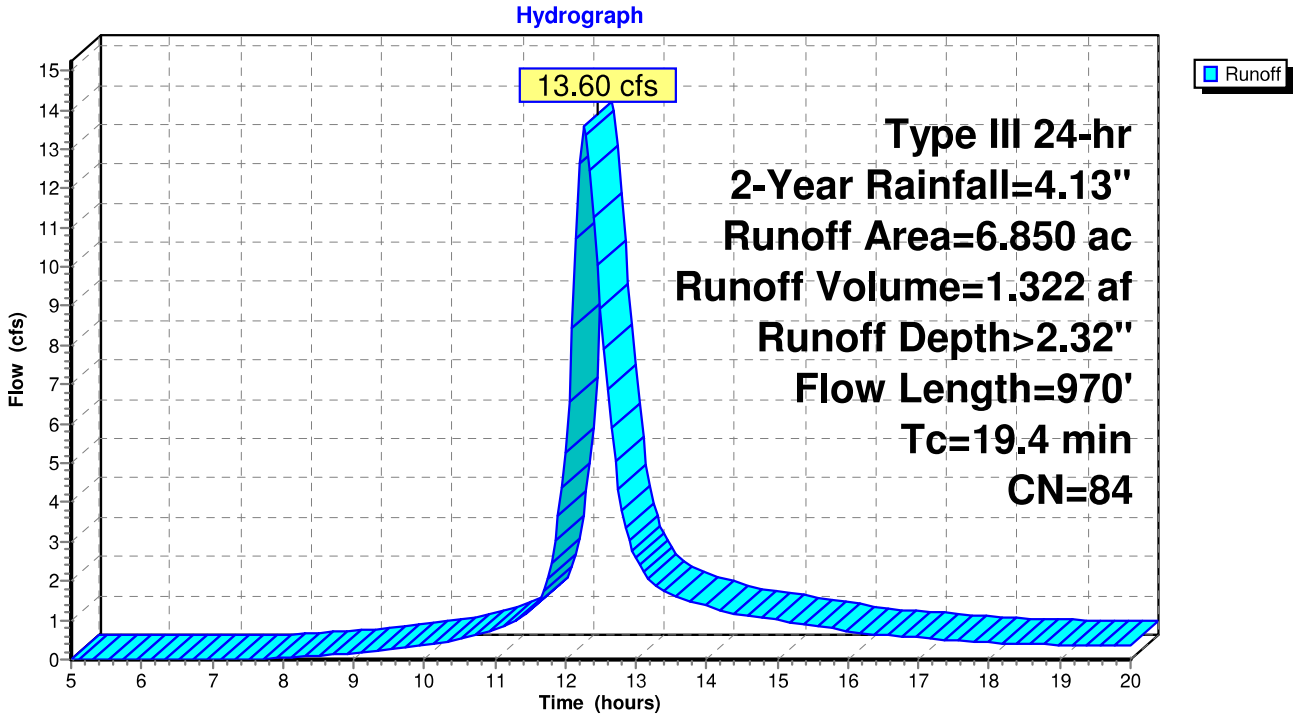
Runoff = 13.60 cfs @ 12.27 hrs, Volume= 1.322 af, Depth> 2.32"
Routed to Reach 16R : channel through Basin 2-S

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=4.13"

Area (ac)	CN	Description
2.430	90	1/8 acre lots, 65% imp, HSG C
4.420	80	1/2 acre lots, 25% imp, HSG C
6.850	84	Weighted Average
4.166		60.81% Pervious Area
2.685		39.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	180	0.0940	0.18		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
2.5	790	0.0200	5.30	10.59	**Channel Flow, ditch/pipe** Area= 2.0 sf Perim= 4.0' r= 0.50' n= 0.025
19.4	970	Total			

Subcatchment 13S: Basin 2-N PRE



Summary for Subcatchment 14S: Basin 2-S PRE

[47] Hint: Peak is 159% of capacity of segment #2

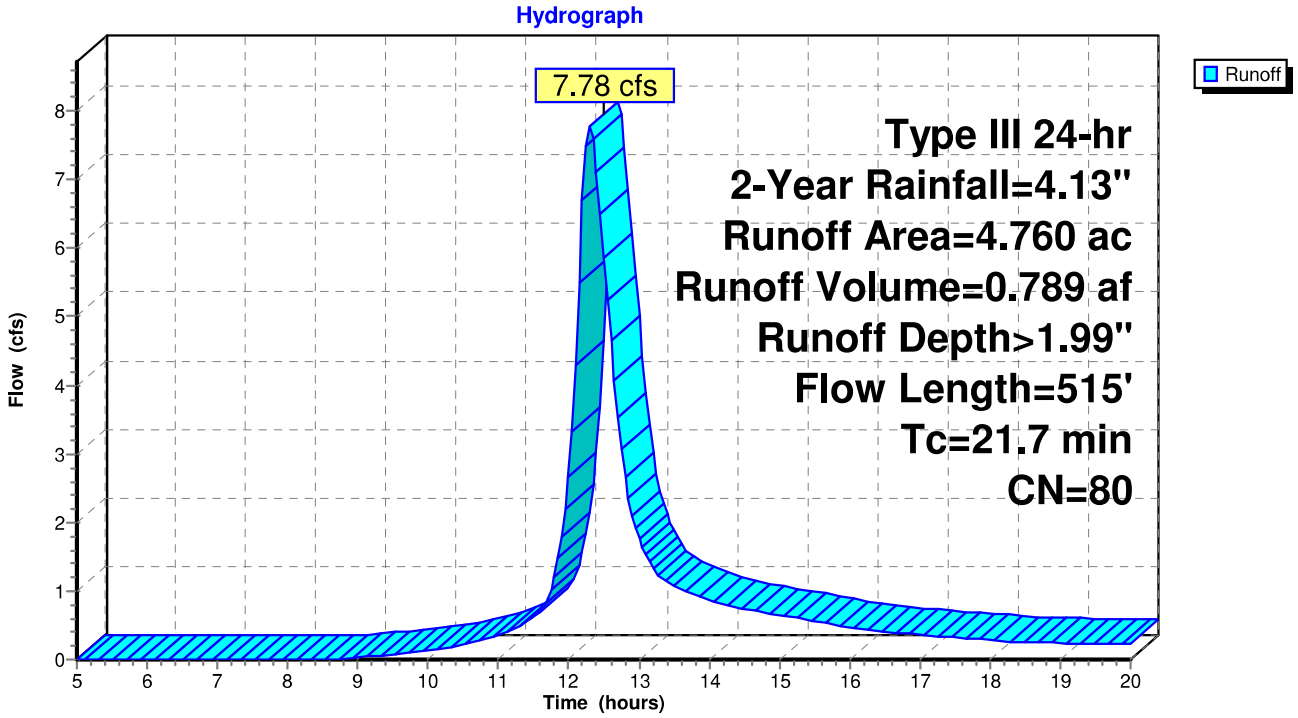
Runoff = 7.78 cfs @ 12.31 hrs, Volume= 0.789 af, Depth> 1.99"
Routed to Link 15L : East 30 arch RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=4.13"

Area (ac)	CN	Description
4.760	80	1/2 acre lots, 25% imp, HSG C
3.570		75.00% Pervious Area
1.190		25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.9	107	0.0250	0.09		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
2.8	408	0.0210	2.45	4.91	**Channel Flow, Channel flow** Area= 2.0 sf Perim= 10.0' r= 0.20' n= 0.030
21.7	515	Total			

Subcatchment 14S: Basin 2-S PRE



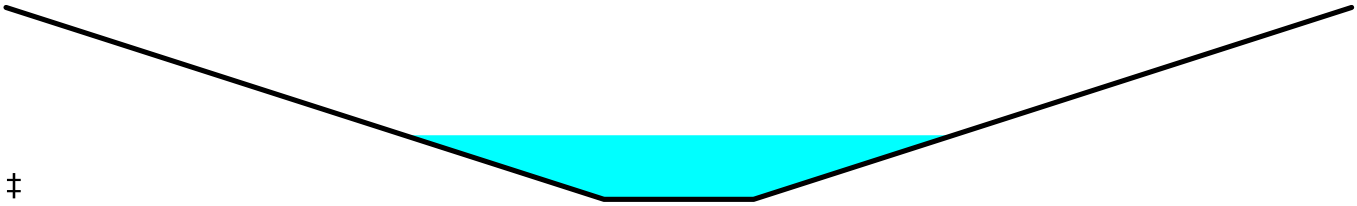
Summary for Reach 16R: channel through Basin 2-S

Inflow Area = 6.850 ac, 39.19% Impervious, Inflow Depth > 2.32" for 2-Year event
Inflow = 13.60 cfs @ 12.27 hrs, Volume= 1.322 af
Outflow = 13.33 cfs @ 12.34 hrs, Volume= 1.318 af, Atten= 2%, Lag= 4.2 min
Routed to Link 15L : East 30 arch RCP under GVR

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 4.29 fps, Min. Travel Time= 2.3 min
Avg. Velocity = 1.83 fps, Avg. Travel Time= 5.3 min

Peak Storage= 1,819 cf @ 12.30 hrs
Average Depth at Peak Storage= 0.67' , Surface Width= 7.35'
Bank-Full Depth= 2.00' Flow Area= 20.0 sf, Capacity= 162.03 cfs

2.00' x 2.00' deep channel, n= 0.030
Side Slope Z-value= 4.0 '/' Top Width= 18.00'
Length= 581.0' Slope= 0.0241 '/'
Inlet Invert= 640.00', Outlet Invert= 626.00'



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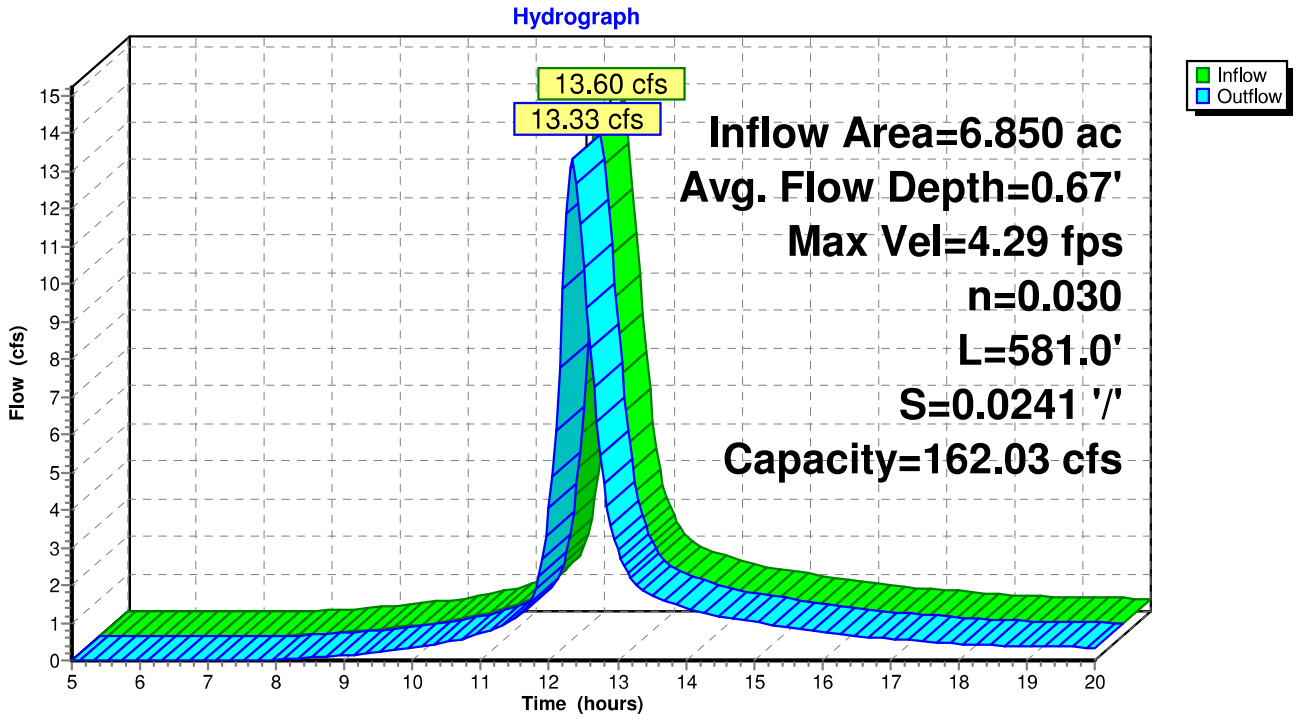
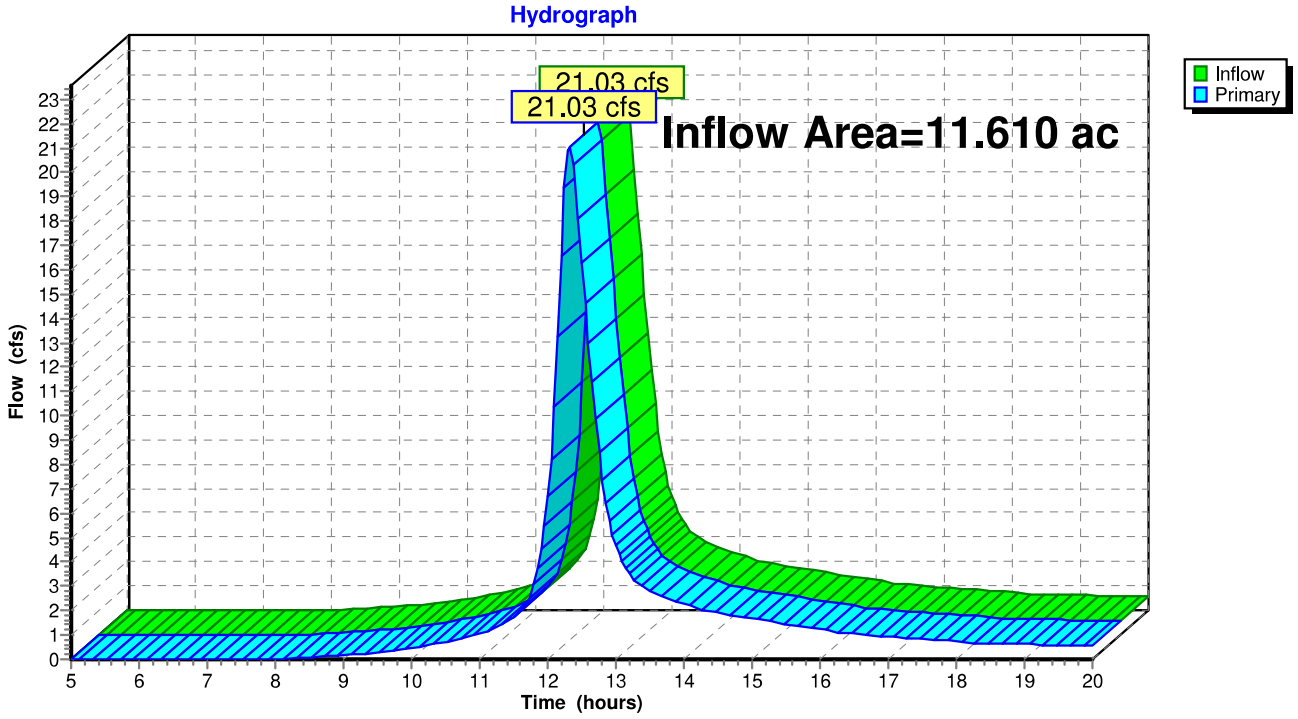


Summary for Link 15L: East 30 arch RCP under GVR

Inflow Area = 11.610 ac, 33.37% Impervious, Inflow Depth > 2.18" for 2-Year event
Inflow = 21.03 cfs @ 12.33 hrs, Volume= 2.107 af
Primary = 21.03 cfs @ 12.33 hrs, Volume= 2.107 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 15L: East 30 arch RCP under GVR



Summary for Subcatchment 13S: Basin 2-N PRE

[47] Hint: Peak is 170% of capacity of segment #2

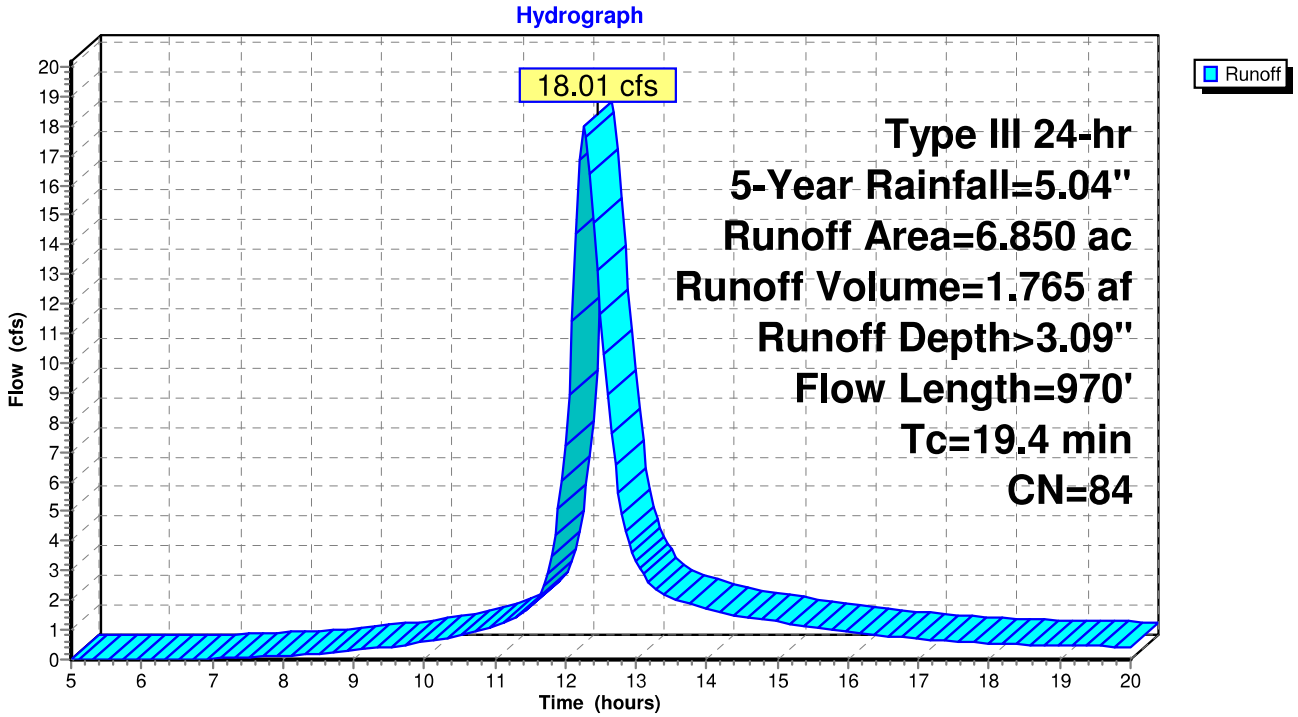
Runoff = 18.01 cfs @ 12.26 hrs, Volume= 1.765 af, Depth> 3.09"
Routed to Reach 16R : channel through Basin 2-S

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 5-Year Rainfall=5.04"

Area (ac)	CN	Description
2.430	90	1/8 acre lots, 65% imp, HSG C
4.420	80	1/2 acre lots, 25% imp, HSG C
6.850	84	Weighted Average
4.166		60.81% Pervious Area
2.685		39.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	180	0.0940	0.18		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
2.5	790	0.0200	5.30	10.59	**Channel Flow, ditch/pipe** Area= 2.0 sf Perim= 4.0' r= 0.50' n= 0.025
19.4	970	Total			

Subcatchment 13S: Basin 2-N PRE



Summary for Subcatchment 14S: Basin 2-S PRE

[47] Hint: Peak is 216% of capacity of segment #2

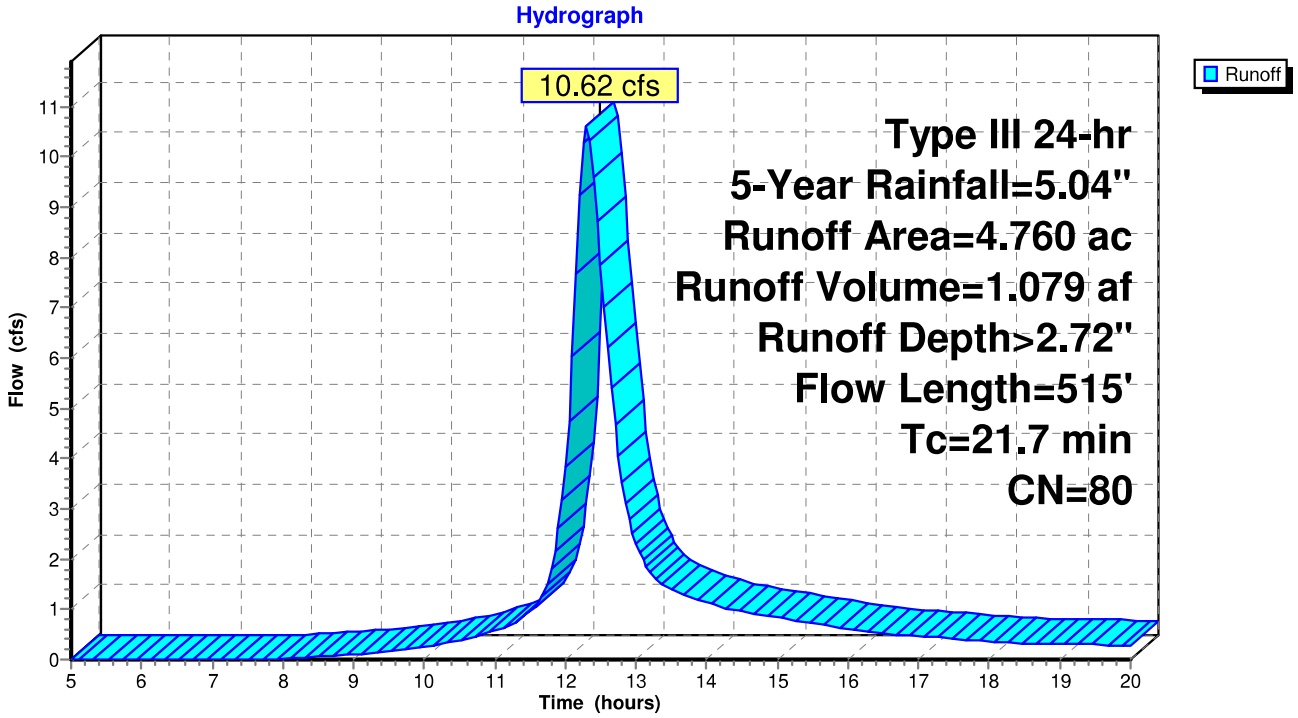
Runoff = 10.62 cfs @ 12.30 hrs, Volume= 1.079 af, Depth> 2.72"
Routed to Link 15L : East 30 arch RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 5-Year Rainfall=5.04"

Area (ac)	CN	Description
4.760	80	1/2 acre lots, 25% imp, HSG C
3.570		75.00% Pervious Area
1.190		25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.9	107	0.0250	0.09		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
2.8	408	0.0210	2.45	4.91	**Channel Flow, Channel flow** Area= 2.0 sf Perim= 10.0' r= 0.20' n= 0.030
21.7	515	Total			

Subcatchment 14S: Basin 2-S PRE



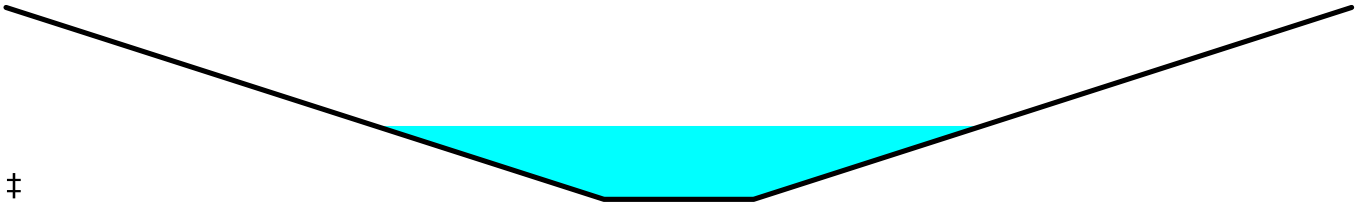
Summary for Reach 16R: channel through Basin 2-S

Inflow Area = 6.850 ac, 39.19% Impervious, Inflow Depth > 3.09" for 5-Year event
Inflow = 18.01 cfs @ 12.26 hrs, Volume= 1.765 af
Outflow = 17.66 cfs @ 12.33 hrs, Volume= 1.760 af, Atten= 2%, Lag= 3.9 min
Routed to Link 15L : East 30 arch RCP under GVR

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 4.61 fps, Min. Travel Time= 2.1 min
Avg. Velocity = 1.93 fps, Avg. Travel Time= 5.0 min

Peak Storage= 2,241 cf @ 12.29 hrs
Average Depth at Peak Storage= 0.76' , Surface Width= 8.11'
Bank-Full Depth= 2.00' Flow Area= 20.0 sf, Capacity= 162.03 cfs

2.00' x 2.00' deep channel, n= 0.030
Side Slope Z-value= 4.0 '/' Top Width= 18.00'
Length= 581.0' Slope= 0.0241 '/'
Inlet Invert= 640.00', Outlet Invert= 626.00'



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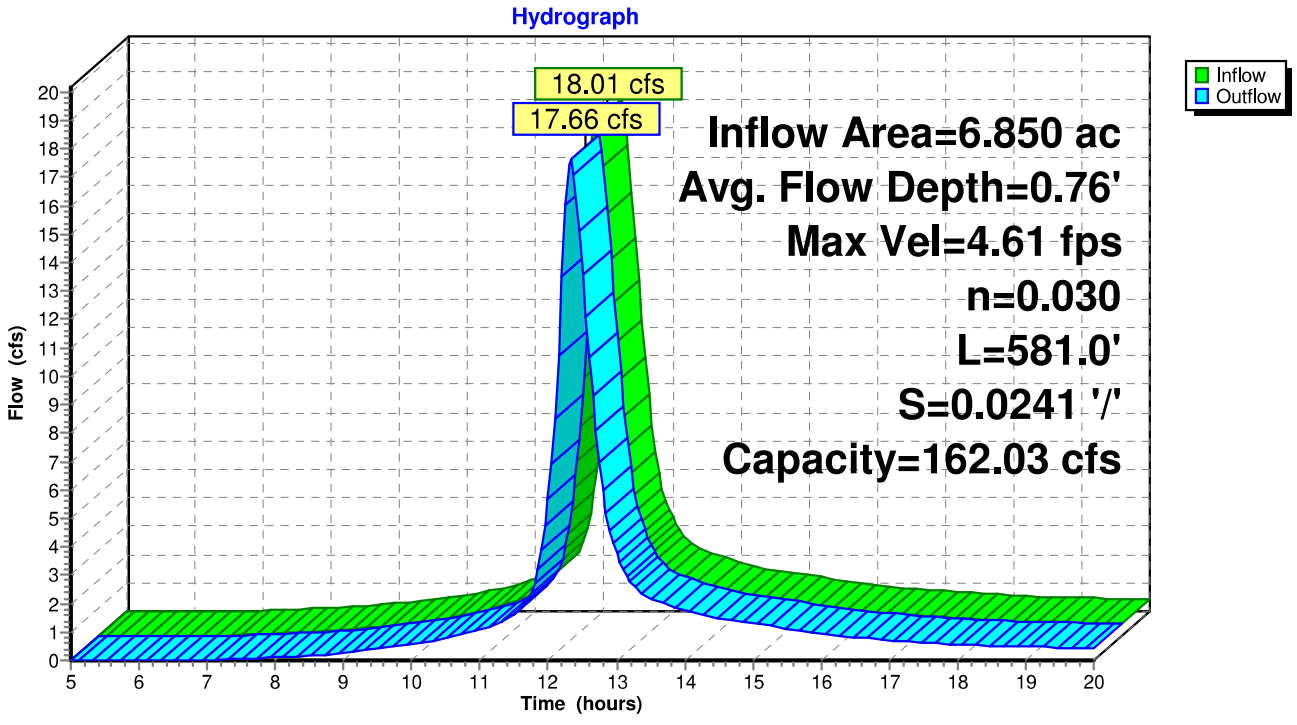
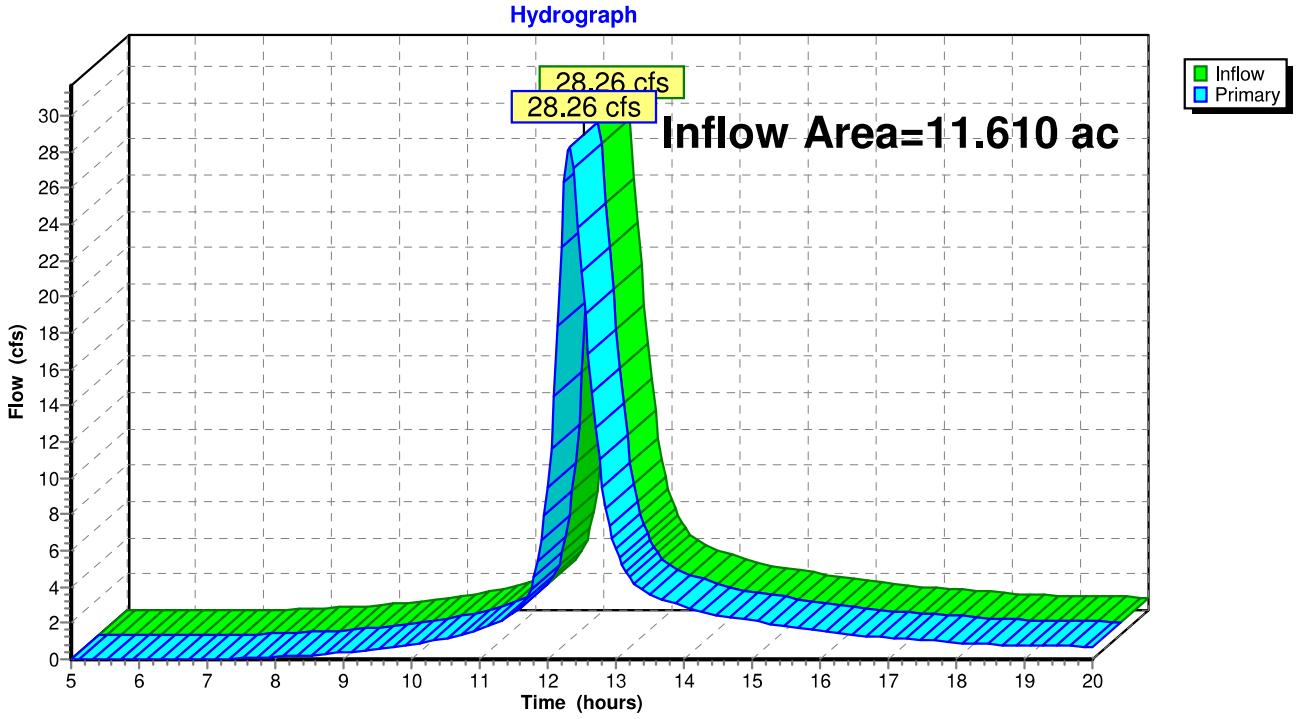


Summary for Link 15L: East 30 arch RCP under GVR

Inflow Area = 11.610 ac, 33.37% Impervious, Inflow Depth > 2.94" for 5-Year event
Inflow = 28.26 cfs @ 12.32 hrs, Volume= 2.840 af
Primary = 28.26 cfs @ 12.32 hrs, Volume= 2.840 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 15L: East 30 arch RCP under GVR



Summary for Subcatchment 13S: Basin 2-N PRE

[47] Hint: Peak is 209% of capacity of segment #2

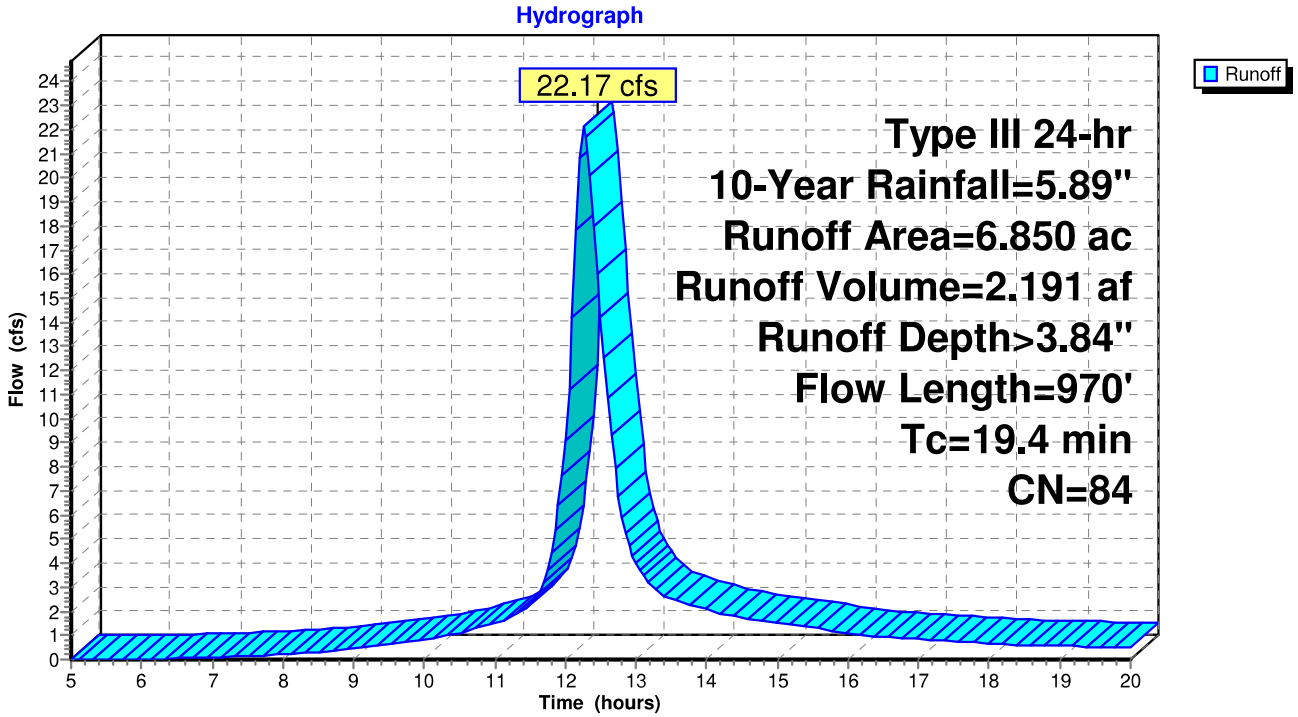
Runoff = 22.17 cfs @ 12.26 hrs, Volume= 2.191 af, Depth> 3.84"
Routed to Reach 16R : channel through Basin 2-S

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.89"

Area (ac)	CN	Description
2.430	90	1/8 acre lots, 65% imp, HSG C
4.420	80	1/2 acre lots, 25% imp, HSG C
6.850	84	Weighted Average
4.166		60.81% Pervious Area
2.685		39.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	180	0.0940	0.18		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
2.5	790	0.0200	5.30	10.59	**Channel Flow, ditch/pipe** Area= 2.0 sf Perim= 4.0' r= 0.50' n= 0.025
19.4	970	Total			

Subcatchment 13S: Basin 2-N PRE



Summary for Subcatchment 14S: Basin 2-S PRE

[47] Hint: Peak is 272% of capacity of segment #2

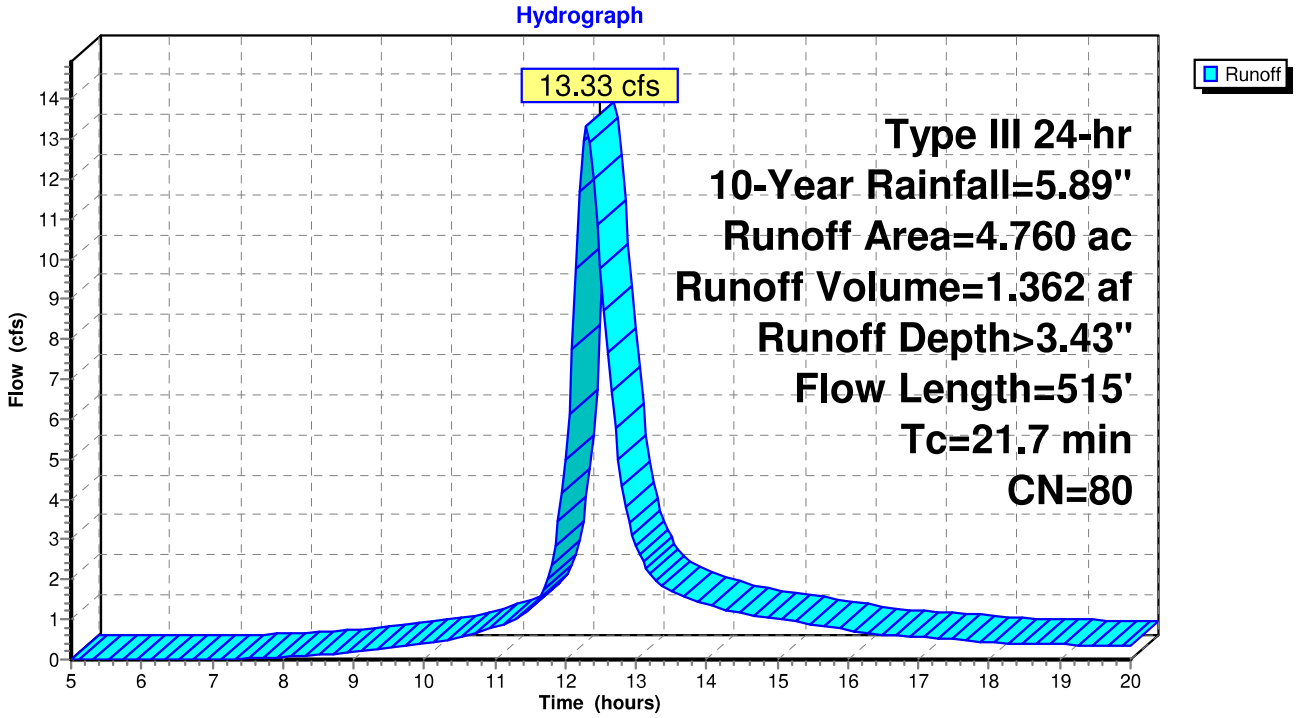
Runoff = 13.33 cfs @ 12.30 hrs, Volume= 1.362 af, Depth> 3.43"
Routed to Link 15L : East 30 arch RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.89"

Area (ac)	CN	Description
4.760	80	1/2 acre lots, 25% imp, HSG C
3.570		75.00% Pervious Area
1.190		25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.9	107	0.0250	0.09		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
2.8	408	0.0210	2.45	4.91	**Channel Flow, Channel flow** Area= 2.0 sf Perim= 10.0' r= 0.20' n= 0.030
21.7	515	Total			

Subcatchment 14S: Basin 2-S PRE



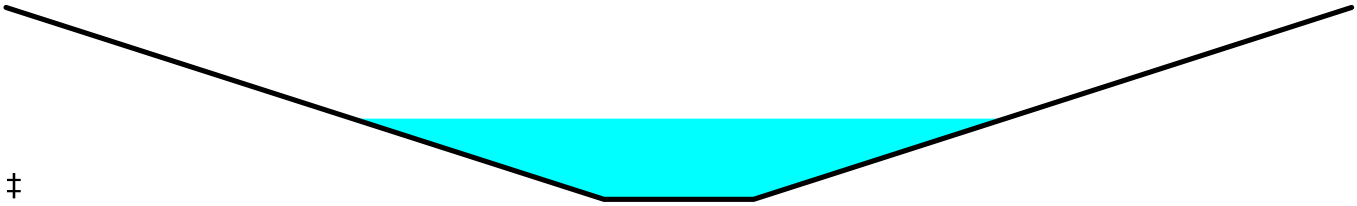
Summary for Reach 16R: channel through Basin 2-S

Inflow Area = 6.850 ac, 39.19% Impervious, Inflow Depth > 3.84" for 10-Year event
Inflow = 22.17 cfs @ 12.26 hrs, Volume= 2.191 af
Outflow = 21.79 cfs @ 12.32 hrs, Volume= 2.185 af, Atten= 2%, Lag= 3.6 min
Routed to Link 15L : East 30 arch RCP under GVR

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 4.87 fps, Min. Travel Time= 2.0 min
Avg. Velocity = 2.03 fps, Avg. Travel Time= 4.8 min

Peak Storage= 2,615 cf @ 12.29 hrs
Average Depth at Peak Storage= 0.84' , Surface Width= 8.72'
Bank-Full Depth= 2.00' Flow Area= 20.0 sf, Capacity= 162.03 cfs

2.00' x 2.00' deep channel, n= 0.030
Side Slope Z-value= 4.0 '/' Top Width= 18.00'
Length= 581.0' Slope= 0.0241 '/'
Inlet Invert= 640.00', Outlet Invert= 626.00'



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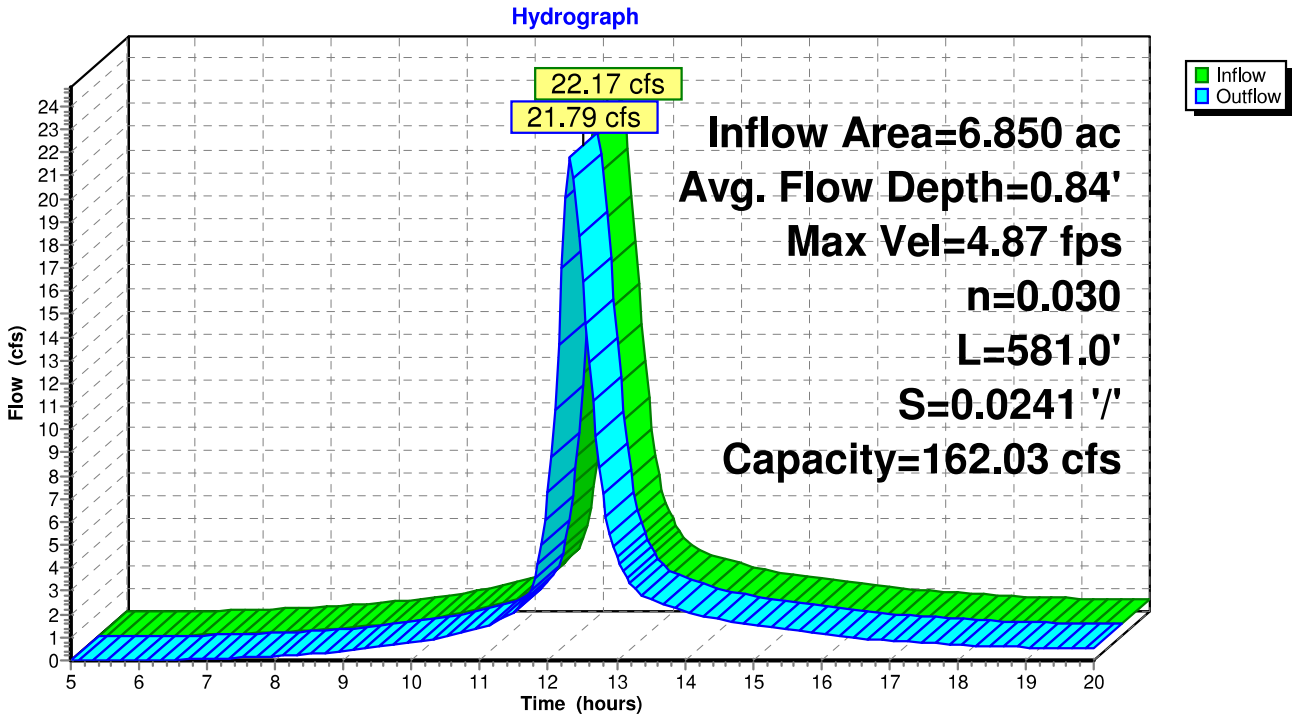
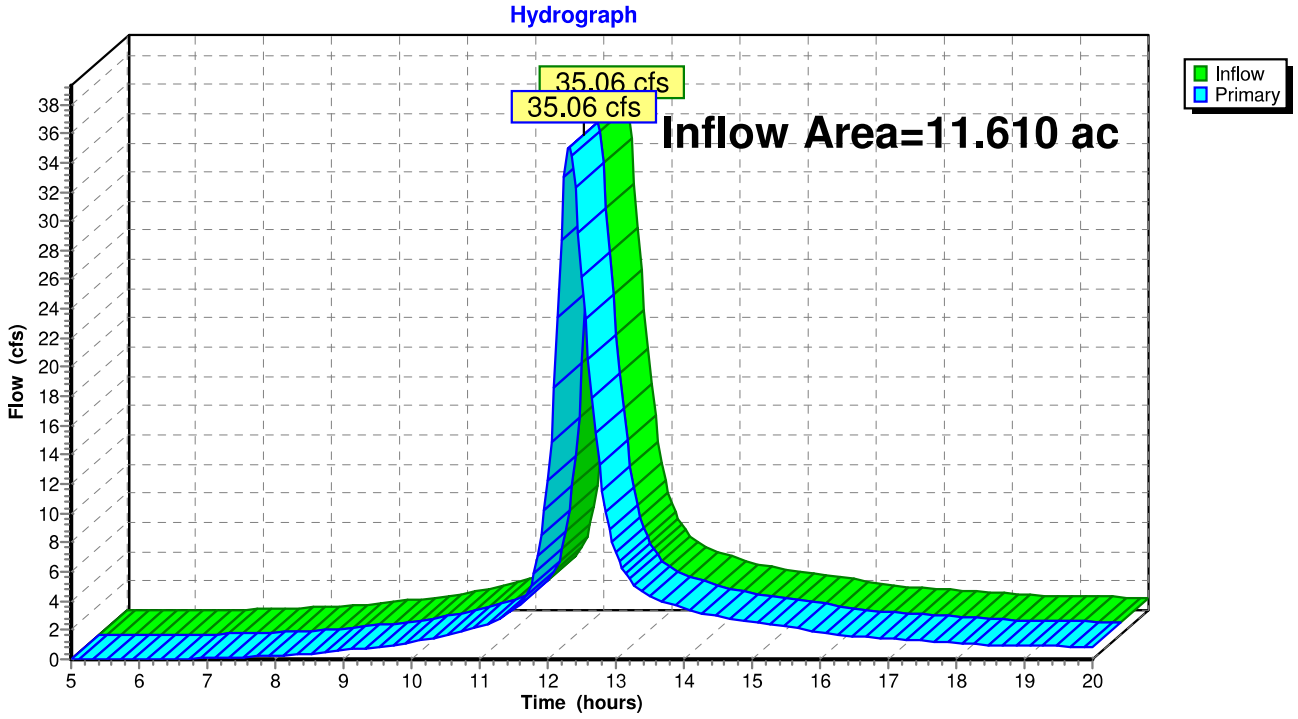


Summary for Link 15L: East 30 arch RCP under GVR

Inflow Area = 11.610 ac, 33.37% Impervious, Inflow Depth > 3.67" for 10-Year event
Inflow = 35.06 cfs @ 12.32 hrs, Volume= 3.547 af
Primary = 35.06 cfs @ 12.32 hrs, Volume= 3.547 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 15L: East 30 arch RCP under GVR



Summary for Subcatchment 13S: Basin 2-N PRE

[47] Hint: Peak is 270% of capacity of segment #2

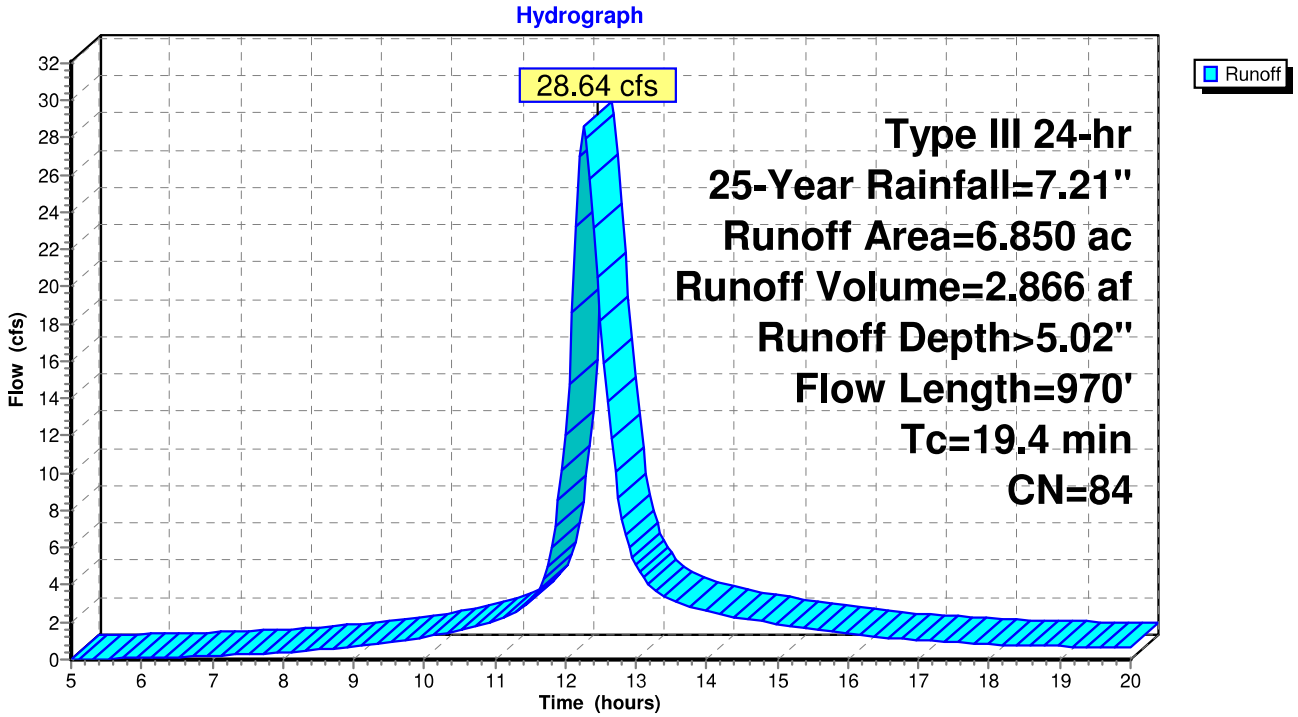
Runoff = 28.64 cfs @ 12.26 hrs, Volume= 2.866 af, Depth> 5.02"
Routed to Reach 16R : channel through Basin 2-S

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=7.21"

Area (ac)	CN	Description
2.430	90	1/8 acre lots, 65% imp, HSG C
4.420	80	1/2 acre lots, 25% imp, HSG C
6.850	84	Weighted Average
4.166		60.81% Pervious Area
2.685		39.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	180	0.0940	0.18		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
2.5	790	0.0200	5.30	10.59	**Channel Flow, ditch/pipe** Area= 2.0 sf Perim= 4.0' r= 0.50' n= 0.025
19.4	970	Total			

Subcatchment 13S: Basin 2-N PRE



Summary for Subcatchment 14S: Basin 2-S PRE

[47] Hint: Peak is 358% of capacity of segment #2

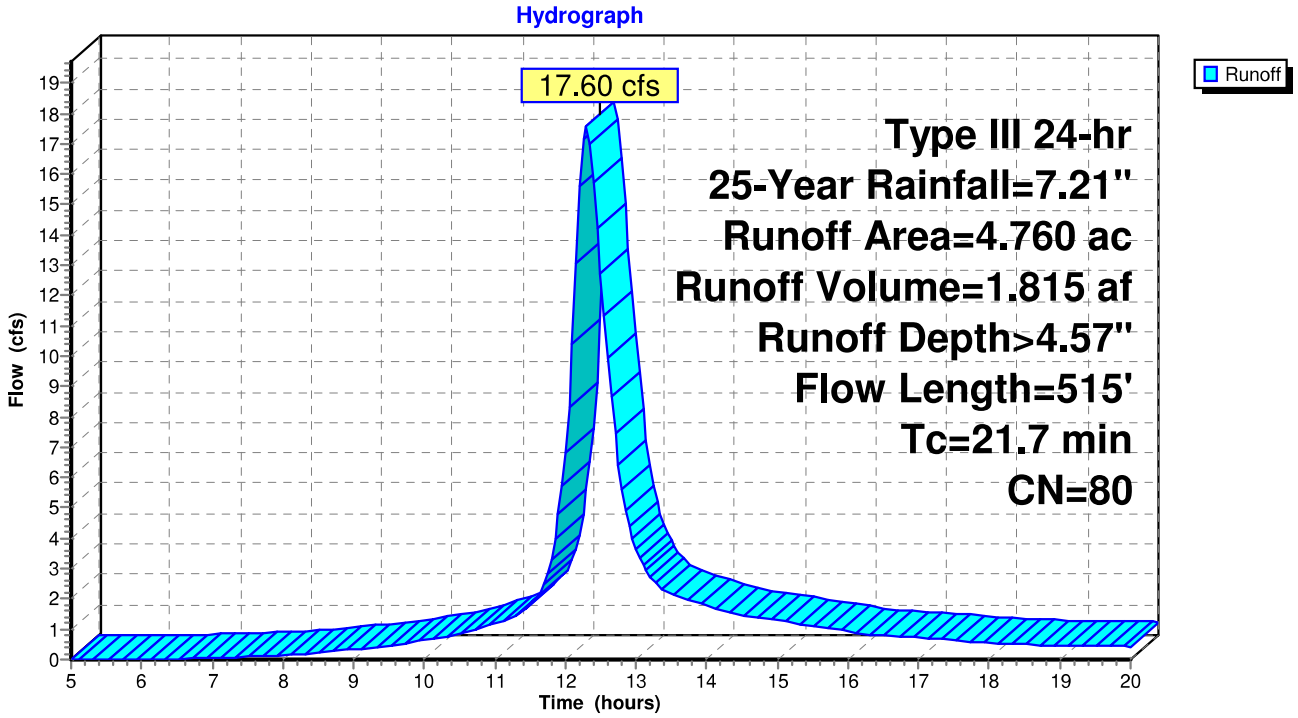
Runoff = 17.60 cfs @ 12.30 hrs, Volume= 1.815 af, Depth> 4.57"
Routed to Link 15L : East 30 arch RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=7.21"

Area (ac)	CN	Description
4.760	80	1/2 acre lots, 25% imp, HSG C
3.570		75.00% Pervious Area
1.190		25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.9	107	0.0250	0.09		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
2.8	408	0.0210	2.45	4.91	**Channel Flow, Channel flow** Area= 2.0 sf Perim= 10.0' r= 0.20' n= 0.030
21.7	515	Total			

Subcatchment 14S: Basin 2-S PRE



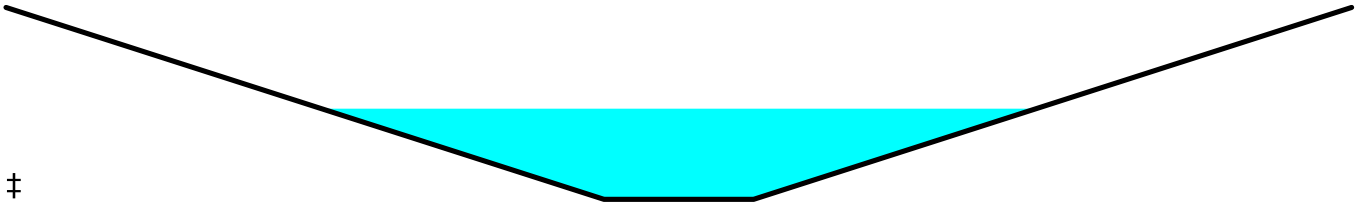
Summary for Reach 16R: channel through Basin 2-S

Inflow Area = 6.850 ac, 39.19% Impervious, Inflow Depth > 5.02" for 25-Year event
Inflow = 28.64 cfs @ 12.26 hrs, Volume= 2.866 af
Outflow = 28.17 cfs @ 12.32 hrs, Volume= 2.859 af, Atten= 2%, Lag= 3.4 min
Routed to Link 15L : East 30 arch RCP under GVR

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 5.20 fps, Min. Travel Time= 1.9 min
Avg. Velocity = 2.16 fps, Avg. Travel Time= 4.5 min

Peak Storage= 3,165 cf @ 12.29 hrs
Average Depth at Peak Storage= 0.94' , Surface Width= 9.55'
Bank-Full Depth= 2.00' Flow Area= 20.0 sf, Capacity= 162.03 cfs

2.00' x 2.00' deep channel, n= 0.030
Side Slope Z-value= 4.0 '/' Top Width= 18.00'
Length= 581.0' Slope= 0.0241 '/'
Inlet Invert= 640.00', Outlet Invert= 626.00'



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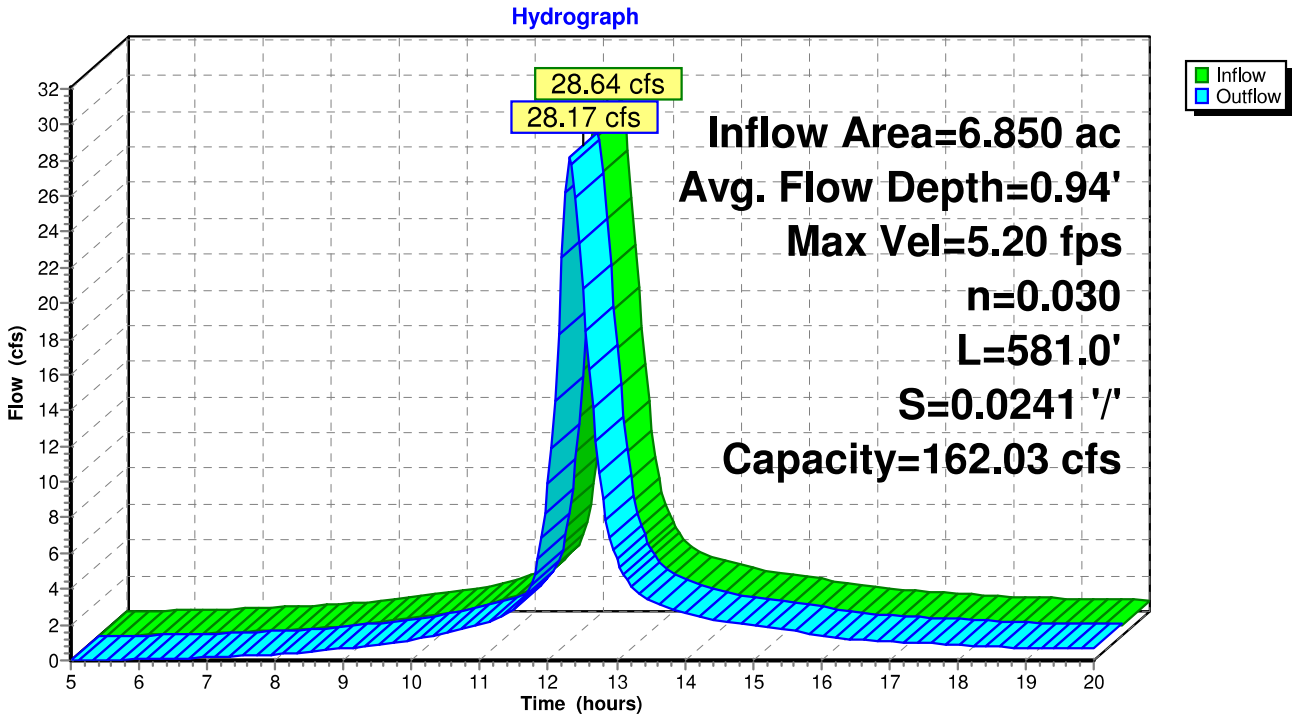
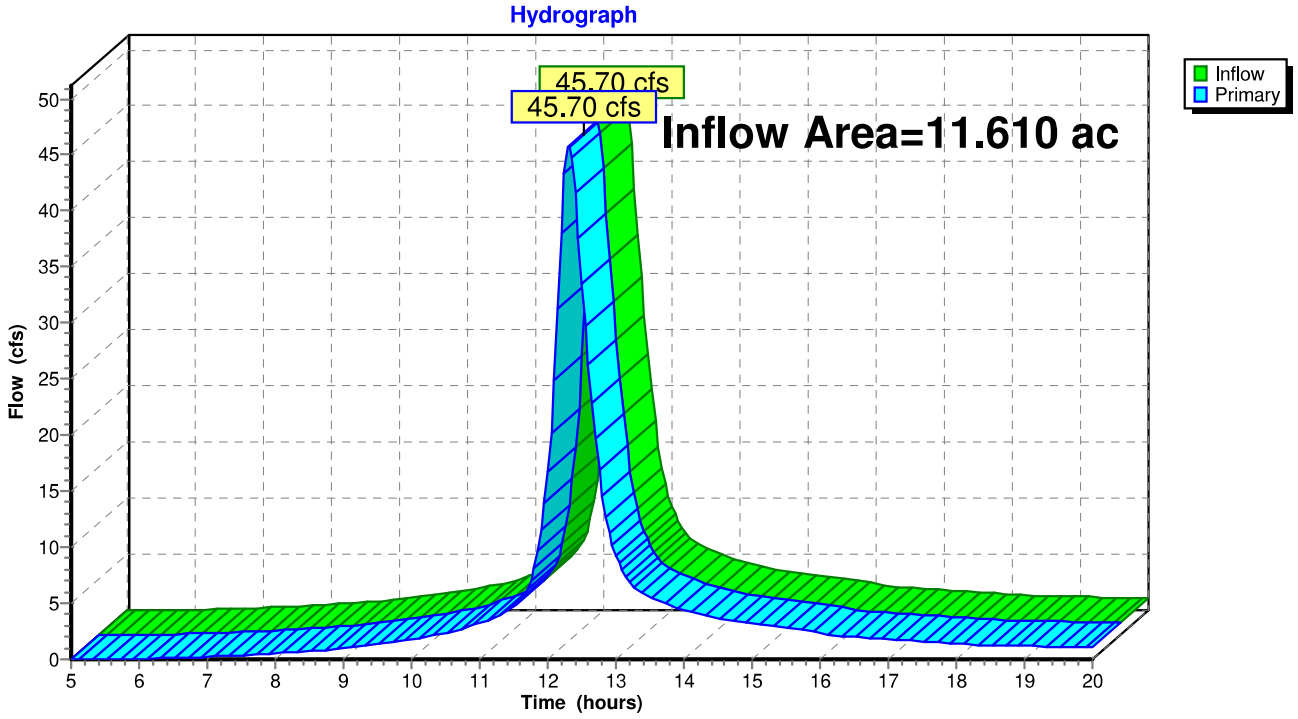


Summary for Link 15L: East 30 arch RCP under GVR

Inflow Area = 11.610 ac, 33.37% Impervious, Inflow Depth > 4.83" for 25-Year event
Inflow = 45.70 cfs @ 12.31 hrs, Volume= 4.674 af
Primary = 45.70 cfs @ 12.31 hrs, Volume= 4.674 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 15L: East 30 arch RCP under GVR



Summary for Subcatchment 13S: Basin 2-N PRE

[47] Hint: Peak is 379% of capacity of segment #2

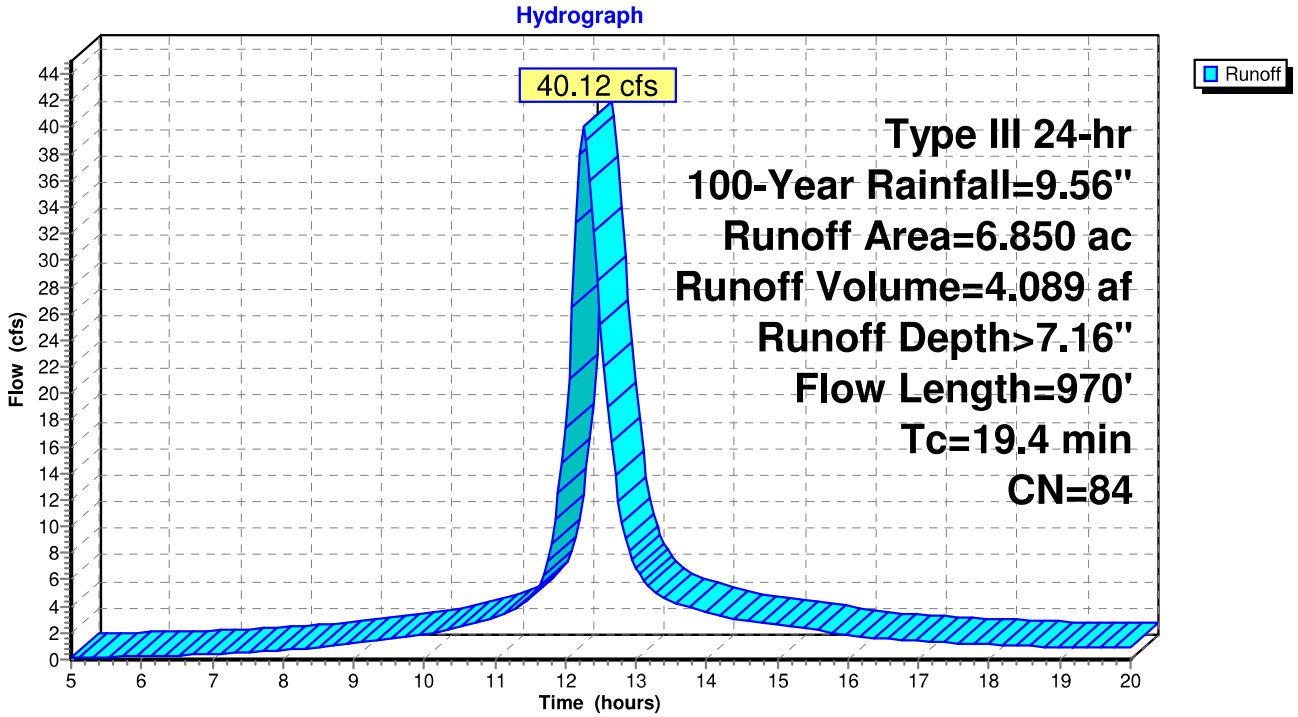
Runoff = 40.12 cfs @ 12.26 hrs, Volume= 4.089 af, Depth> 7.16"
Routed to Reach 16R : channel through Basin 2-S

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=9.56"

Area (ac)	CN	Description
2.430	90	1/8 acre lots, 65% imp, HSG C
4.420	80	1/2 acre lots, 25% imp, HSG C
6.850	84	Weighted Average
4.166		60.81% Pervious Area
2.685		39.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	180	0.0940	0.18		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
2.5	790	0.0200	5.30	10.59	**Channel Flow, ditch/pipe** Area= 2.0 sf Perim= 4.0' r= 0.50' n= 0.025
19.4	970	Total			

Subcatchment 13S: Basin 2-N PRE



Summary for Subcatchment 14S: Basin 2-S PRE

[47] Hint: Peak is 514% of capacity of segment #2

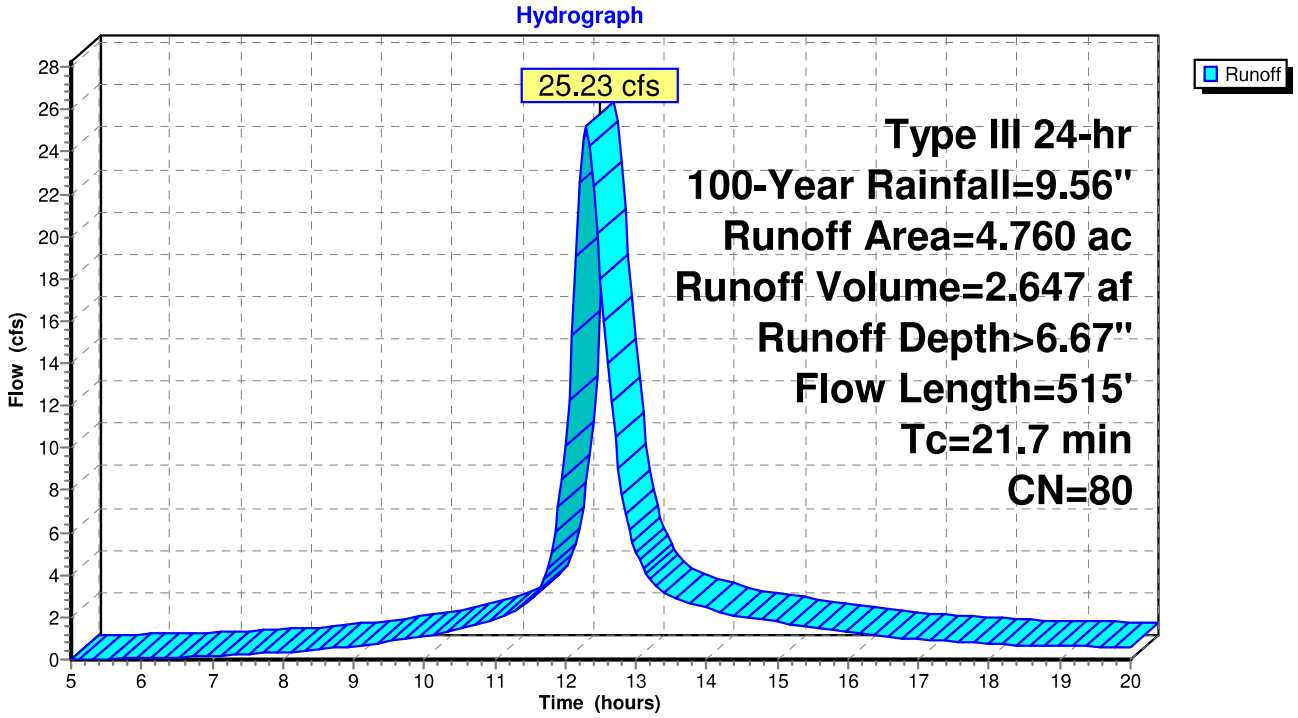
Runoff = 25.23 cfs @ 12.29 hrs, Volume= 2.647 af, Depth> 6.67"
Routed to Link 15L : East 30 arch RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=9.56"

Area (ac)	CN	Description
4.760	80	1/2 acre lots, 25% imp, HSG C
3.570		75.00% Pervious Area
1.190		25.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
18.9	107	0.0250	0.09		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
2.8	408	0.0210	2.45	4.91	**Channel Flow, Channel flow** Area= 2.0 sf Perim= 10.0' r= 0.20' n= 0.030
21.7	515	Total			

Subcatchment 14S: Basin 2-S PRE



Summary for Reach 16R: channel through Basin 2-S

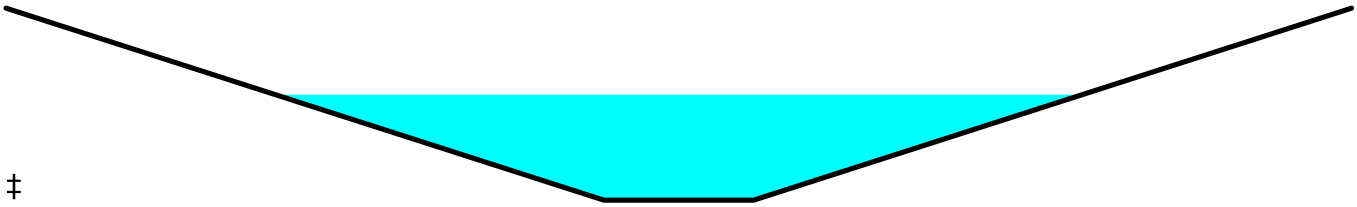
[82] Warning: Early inflow requires earlier time span

Inflow Area = 6.850 ac, 39.19% Impervious, Inflow Depth > 7.16" for 100-Year event
Inflow = 40.12 cfs @ 12.26 hrs, Volume= 4.089 af
Outflow = 39.50 cfs @ 12.31 hrs, Volume= 4.080 af, Atten= 2%, Lag= 3.2 min
Routed to Link 15L : East 30 arch RCP under GVR

Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 5.67 fps, Min. Travel Time= 1.7 min
Avg. Velocity = 2.46 fps, Avg. Travel Time= 3.9 min

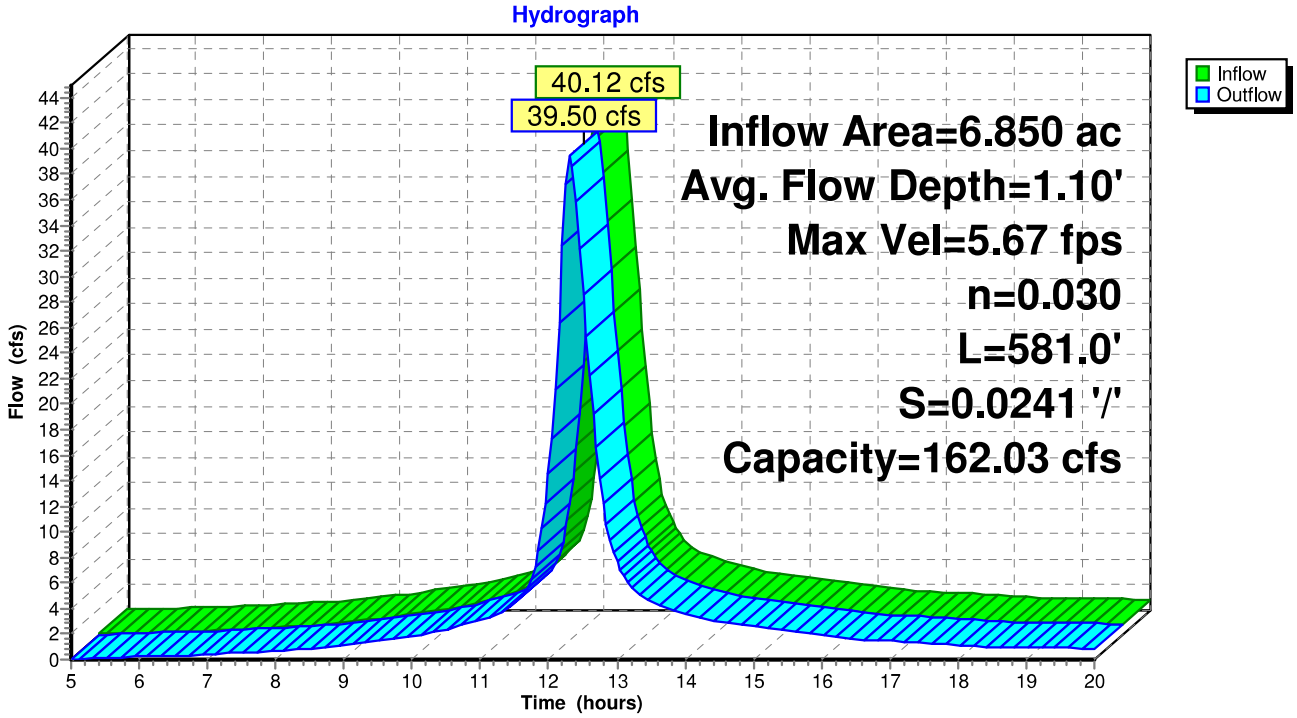
Peak Storage= 4,071 cf @ 12.28 hrs
Average Depth at Peak Storage= 1.10' , Surface Width= 10.78'
Bank-Full Depth= 2.00' Flow Area= 20.0 sf, Capacity= 162.03 cfs

2.00' x 2.00' deep channel, n= 0.030
Side Slope Z-value= 4.0 '/' Top Width= 18.00'
Length= 581.0' Slope= 0.0241 '/'
Inlet Invert= 640.00', Outlet Invert= 626.00'



‡

Reach 16R: channel through Basin 2-S

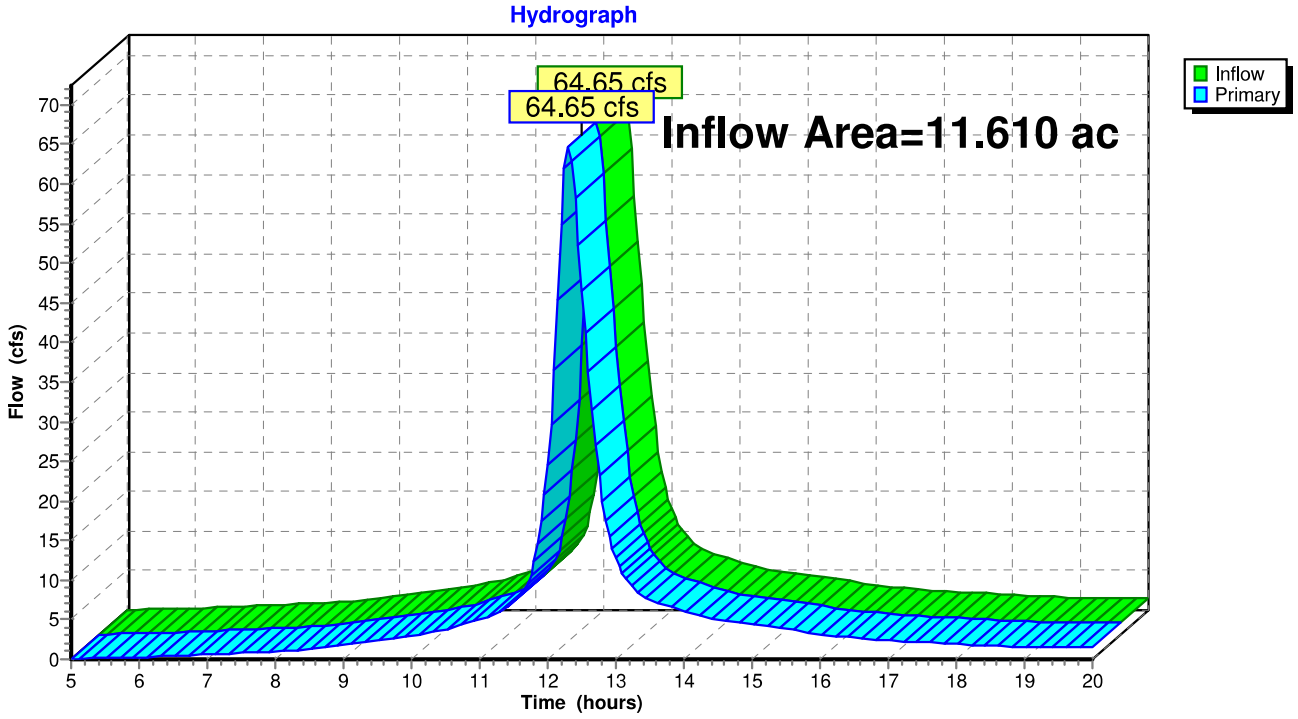


Summary for Link 15L: East 30 arch RCP under GVR

Inflow Area = 11.610 ac, 33.37% Impervious, Inflow Depth > 6.95" for 100-Year event
Inflow = 64.65 cfs @ 12.30 hrs, Volume= 6.727 af
Primary = 64.65 cfs @ 12.30 hrs, Volume= 6.727 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 15L: East 30 arch RCP under GVR



Sunview 2025-PRE
Prepared by Alabama Engineering Company, Inc

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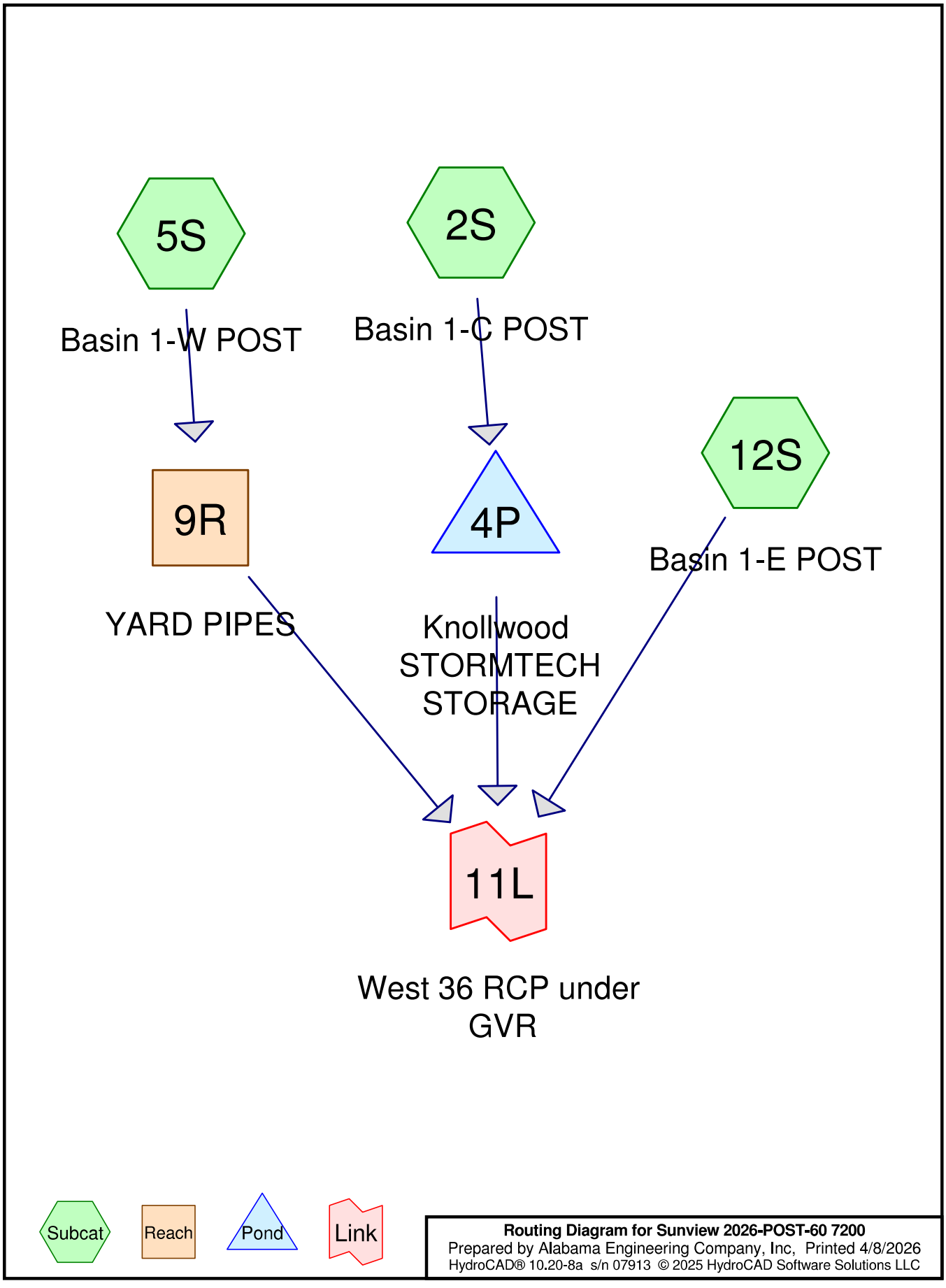
5S
2S
Basin 1-W POST
Basin 1-C POST
12S
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4P
Basin 1-E POST
YARD PIPES
Knollwood
STORMTECH
STORAGE
11L
West 36 RCP under
GVR
Subcat
Reach
Pond
Link
Routing Diagram for Sunview 2026-POST-60 7200
Prepared by Alabama Engineering Company, Inc, Printed 4/8/2026
HydroCAD® 10.20-8a s/n 07913 © 2025 HydroCAD Software Solutions LLC

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-Year	Type III 24-hr		Default	24.00	1	4.13	2
2	5-Year	Type III 24-hr		Default	24.00	1	5.04	2
3	10-Year	Type III 24-hr		Default	24.00	1	5.89	2
4	25-Year	Type III 24-hr		Default	24.00	1	7.21	2
5	100-Year	Type III 24-hr		Default	24.00	1	9.56	2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
1.520	82	(2S)
1.880	72	(5S)
0.420	83	1/4 acre lots, 38% imp, HSG C (12S)
3.820	**77**	**TOTAL AREA**

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	9R	641.00	635.00	415.0	0.0145	0.012	0.0	18.0	0.0	
2	4P	635.15	634.00	12.0	0.0958	0.012	0.0	10.0	0.0	

Summary for Subcatchment 2S: Basin 1-C POST

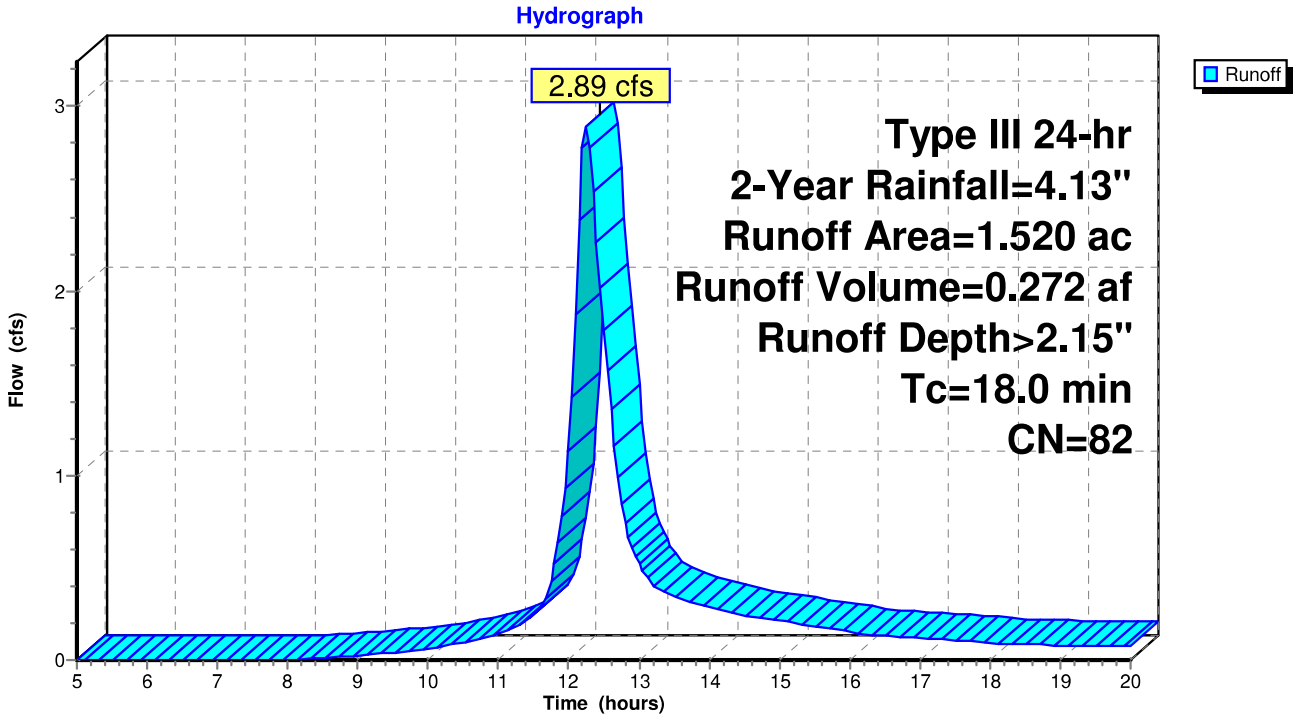
Runoff = 2.89 cfs @ 12.25 hrs, Volume= 0.272 af, Depth> 2.15"
Routed to Pond 4P : Knollwood STORMTECH STORAGE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=4.13"

	Area (ac)	CN	Description
*	1.520	82	
	1.520		100.00% Pervious Area

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

Subcatchment 2S: Basin 1-C POST



Summary for Subcatchment 5S: Basin 1-W POST

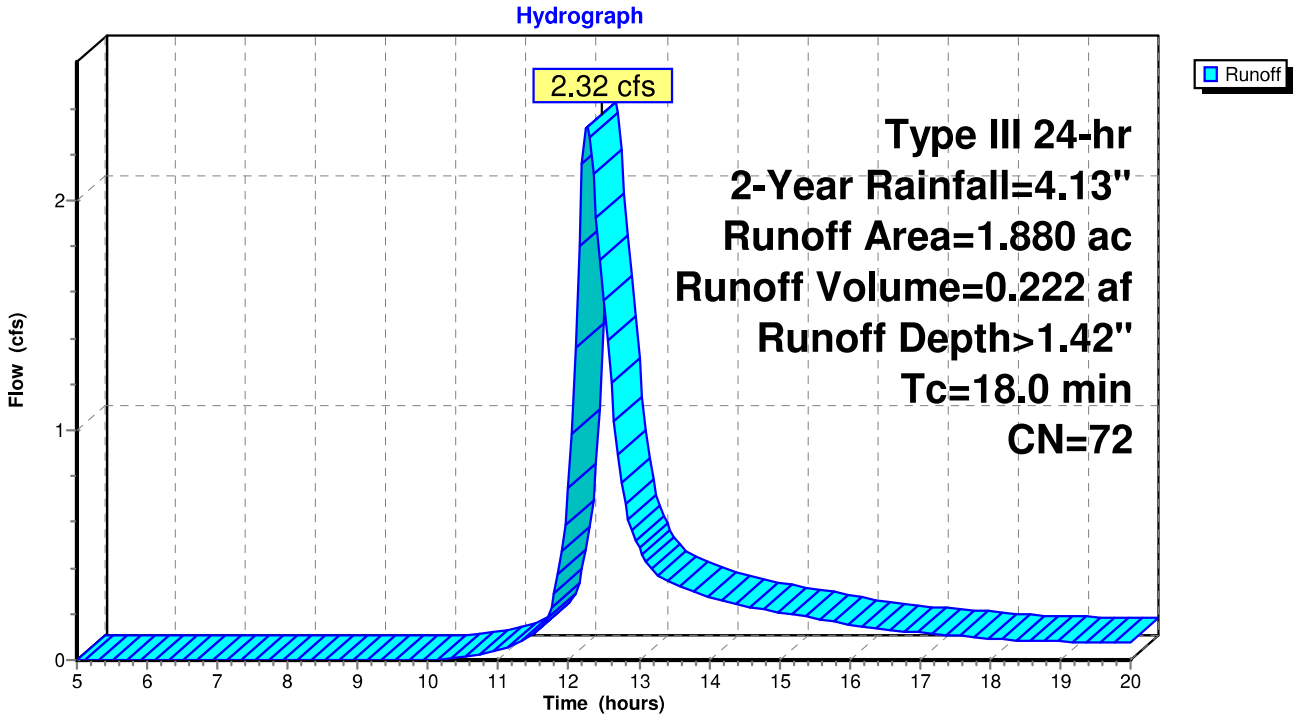
Runoff = 2.32 cfs @ 12.26 hrs, Volume= 0.222 af, Depth> 1.42"
Routed to Reach 9R : YARD PIPES

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=4.13"

	Area (ac)	CN	Description
*	1.880	72	
	1.880		100.00% Pervious Area

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

Subcatchment 5S: Basin 1-W POST



Summary for Subcatchment 12S: Basin 1-E POST

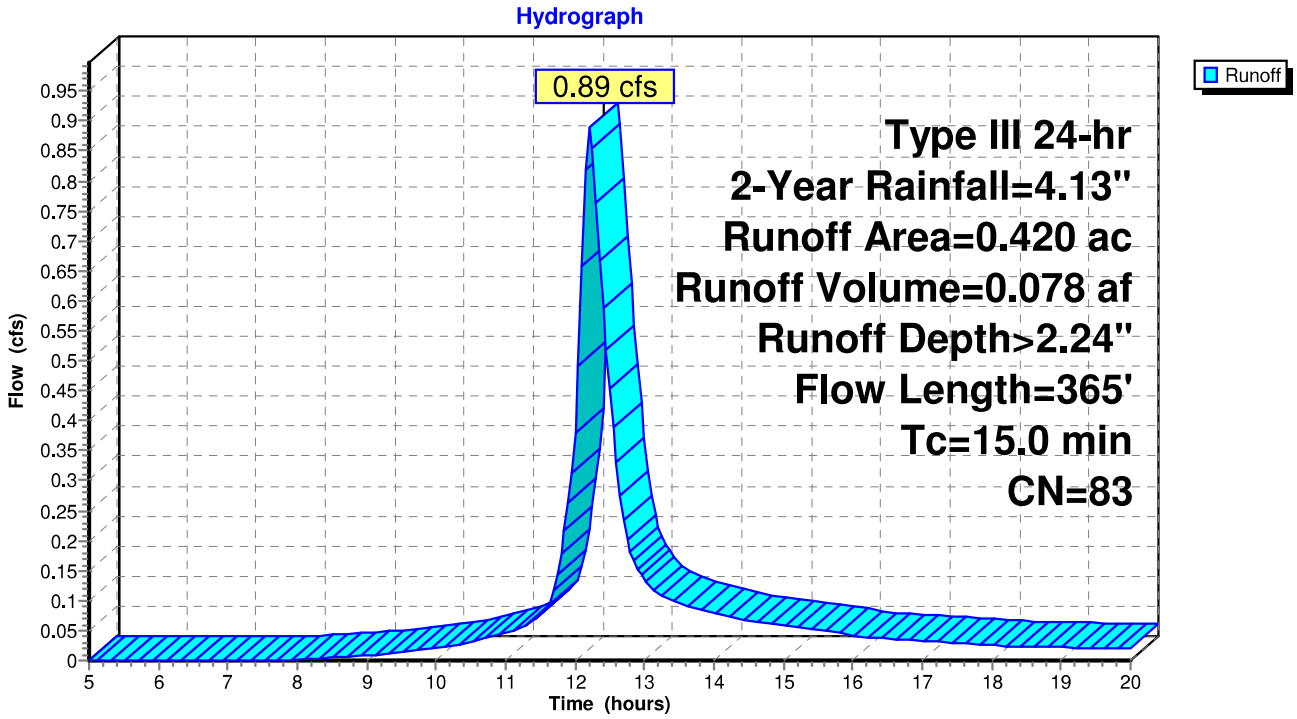
Runoff = 0.89 cfs @ 12.21 hrs, Volume= 0.078 af, Depth> 2.24"
Routed to Link 11L : West 36 RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=4.13"

Area (ac)	CN	Description
0.420	83	1/4 acre lots, 38% imp, HSG C
0.260		62.00% Pervious Area
0.160		38.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	75	0.0250	0.09		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
0.8	290	0.0400	6.04	9.06	**Channel Flow, channel flow** Area= 1.5 sf Perim= 2.5' r= 0.60' n= 0.035
15.0	365	Total			

Subcatchment 12S: Basin 1-E POST



Summary for Reach 9R: YARD PIPES

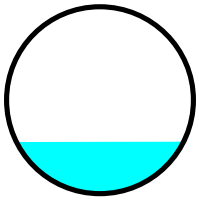
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.880 ac, 0.00% Impervious, Inflow Depth > 1.42" for 2-Year event
Inflow = 2.32 cfs @ 12.26 hrs, Volume= 0.222 af
Outflow = 2.29 cfs @ 12.30 hrs, Volume= 0.222 af, Atten= 1%, Lag= 2.3 min
Routed to Link 11L : West 36 RCP under GVR

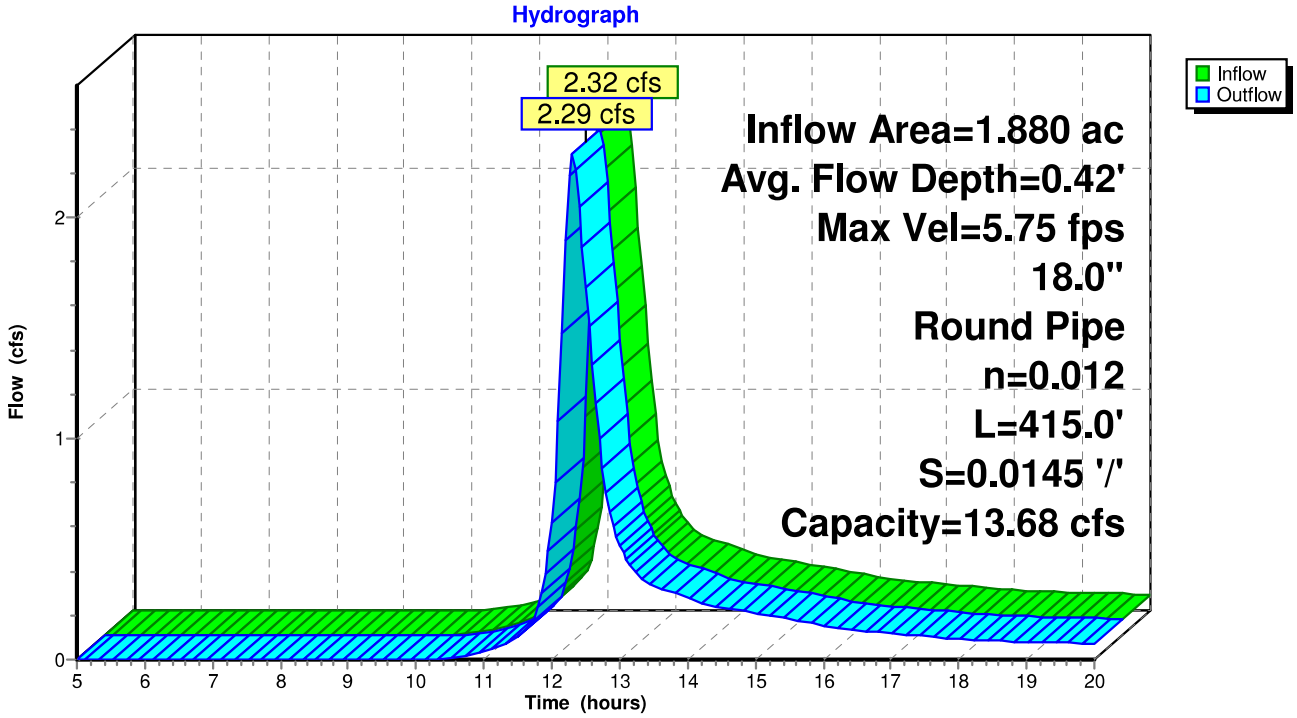
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 5.75 fps, Min. Travel Time= 1.2 min
Avg. Velocity = 2.67 fps, Avg. Travel Time= 2.6 min

Peak Storage= 166 cf @ 12.28 hrs
Average Depth at Peak Storage= 0.42' , Surface Width= 1.34'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 13.68 cfs

18.0" Round Pipe
n= 0.012
Length= 415.0' Slope= 0.0145 '/'
Inlet Invert= 641.00', Outlet Invert= 635.00'



Reach 9R: YARD PIPES



Summary for Pond 4P: Knollwood STORMTECH STORAGE

Inflow Area = 1.520 ac, 0.00% Impervious, Inflow Depth > 2.15" for 2-Year event
Inflow = 2.89 cfs @ 12.25 hrs, Volume= 0.272 af
Outflow = 0.66 cfs @ 12.86 hrs, Volume= 0.253 af, Atten= 77%, Lag= 36.6 min
Discarded = 0.12 cfs @ 11.00 hrs, Volume= 0.101 af
Primary = 0.54 cfs @ 12.86 hrs, Volume= 0.153 af
Routed to Link 11L : West 36 RCP under GVR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 636.39' @ 12.86 hrs Surf.Area= 5,222 sf Storage= 4,796 cf

Plug-Flow detention time= 93.9 min calculated for 0.252 af (93% of inflow)
Center-of-Mass det. time= 70.3 min (868.9 - 798.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	634.75'	5,777 cf	**20.75'W x 251.64'L x 4.00'H Field A** 20,886 cf Overall - 6,443 cf Embedded = 14,443 cf x 40.0% Voids
#2A	635.75'	6,443 cf	**ADS_StormTech SC-740** x 140 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 4 rows
		12,220 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	635.15'	**10.0" Round Culvert** L= 12.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 635.15' / 634.00' S= 0.0958 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf
#2	Discarded	634.75'	**1.000 in/hr Exfiltration over Surface area**
#3	Device 1	635.25'	**5.0" W x 3.2" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	636.50'	**24.0" W x 6.0" H Vert. Orifice/Grate X 0.00** C= 0.600 Limited to weir flow at low heads
#5	Device 1	636.75'	**18.8" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.12 cfs @ 11.00 hrs HW=634.79' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.12 cfs)

Primary OutFlow Max=0.54 cfs @ 12.86 hrs HW=636.39' (Free Discharge)
└**1=Culvert** (Passes 0.54 cfs of 2.38 cfs potential flow)
  ├**3=Orifice/Grate** (Orifice Controls 0.54 cfs @ 4.82 fps)
  ├**4=Orifice/Grate** (Controls 0.00 cfs)
  └**5=Orifice/Grate** (Controls 0.00 cfs)

Pond 4P: Knollwood STORMTECH STORAGE - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 (ADS StormTech® SC-740 without end caps)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
Row Length Adjustment= +0.44' x 6.45 sf x 4 rows

51.0" Wide + 7.0" Spacing = 58.0" C-C Row Spacing

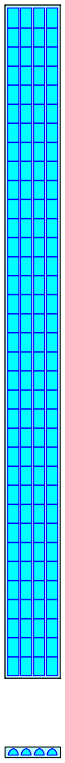
35 Chambers/Row x 7.12' Long +0.44' Row Adjustment = 249.64' Row Length +12.0" End Stone x 2 = 251.64' Base Length
4 Rows x 51.0" Wide + 7.0" Spacing x 3 + 12.0" Side Stone x 2 = 20.75' Base Width
12.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 4.00' Field Height

140 Chambers x 45.9 cf +0.44' Row Adjustment x 6.45 sf x 4 Rows = 6,443.0 cf Chamber Storage

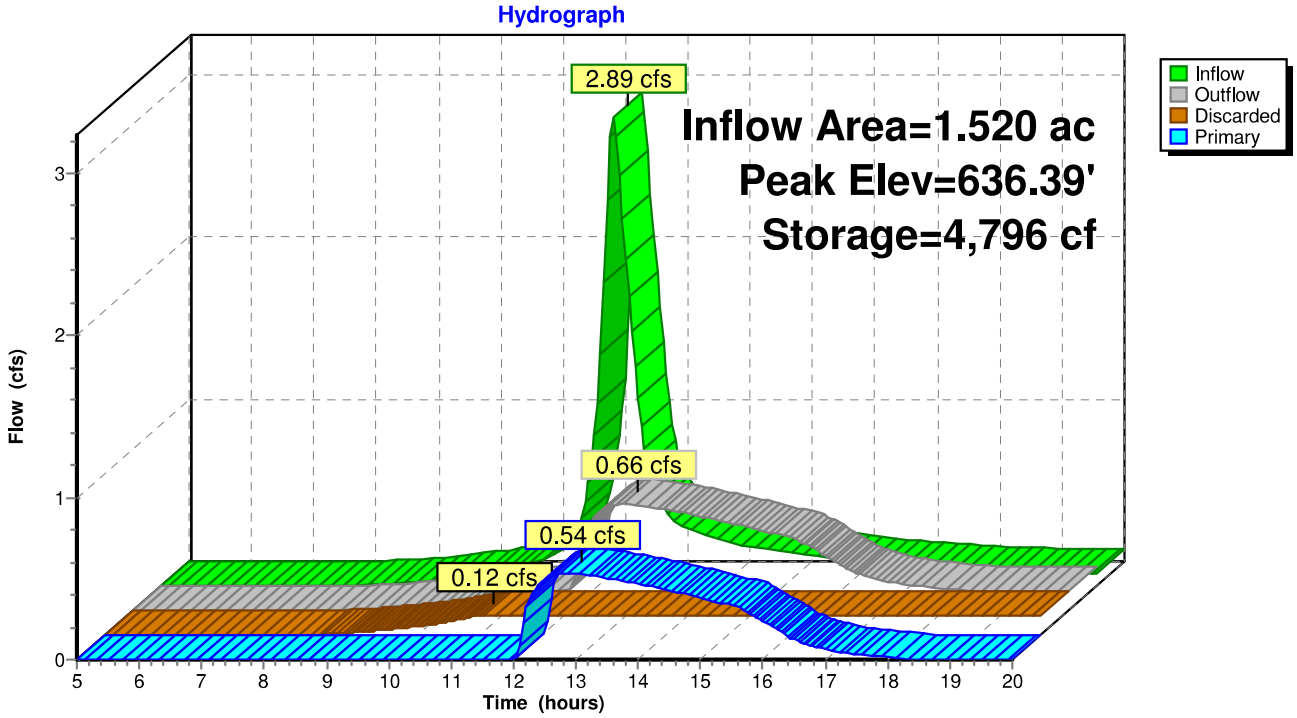
20,886.1 cf Field - 6,443.0 cf Chambers = 14,443.2 cf Stone x 40.0% Voids = 5,777.3 cf Stone Storage

Chamber Storage + Stone Storage = 12,220.2 cf = 0.281 af
Overall Storage Efficiency = 58.5%
Overall System Size = 251.64' x 20.75' x 4.00'

140 Chambers
773.6 cy Field
534.9 cy Stone



Pond 4P: Knollwood STORMTECH STORAGE

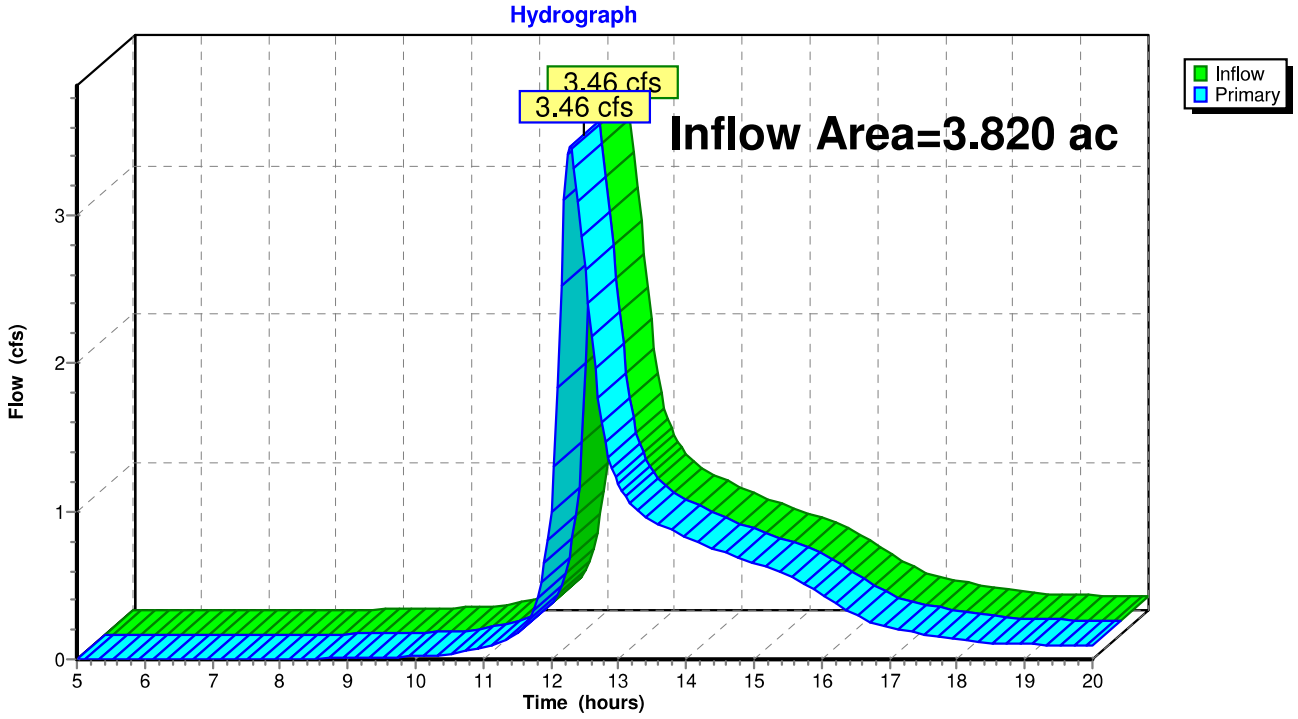


Summary for Link 11L: West 36 RCP under GVR

Inflow Area = 3.820 ac, 4.18% Impervious, Inflow Depth > 1.42" for 2-Year event
Inflow = 3.46 cfs @ 12.29 hrs, Volume= 0.453 af
Primary = 3.46 cfs @ 12.29 hrs, Volume= 0.453 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 11L: West 36 RCP under GVR



Summary for Subcatchment 2S: Basin 1-C POST

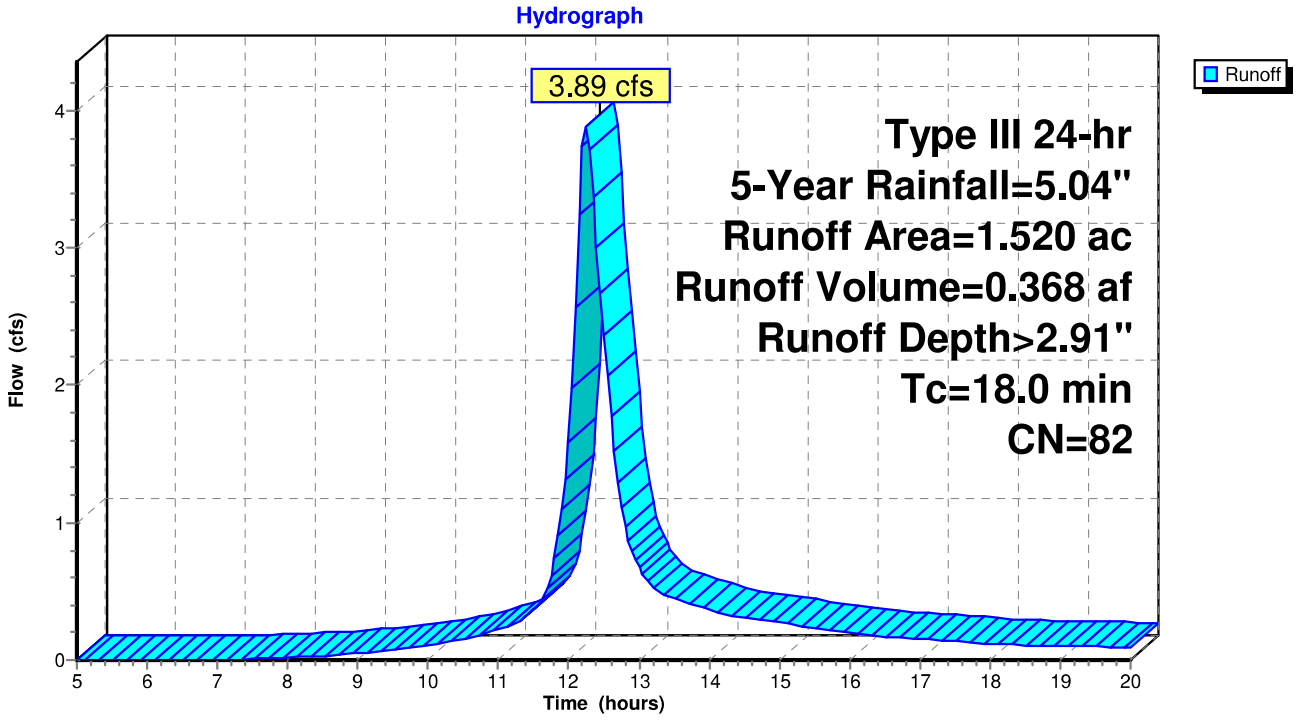
Runoff = 3.89 cfs @ 12.25 hrs, Volume= 0.368 af, Depth> 2.91"
Routed to Pond 4P : Knollwood STORMTECH STORAGE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 5-Year Rainfall=5.04"

	Area (ac)	CN	Description
*	1.520	82	
	1.520		100.00% Pervious Area

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

Subcatchment 2S: Basin 1-C POST



Summary for Subcatchment 5S: Basin 1-W POST

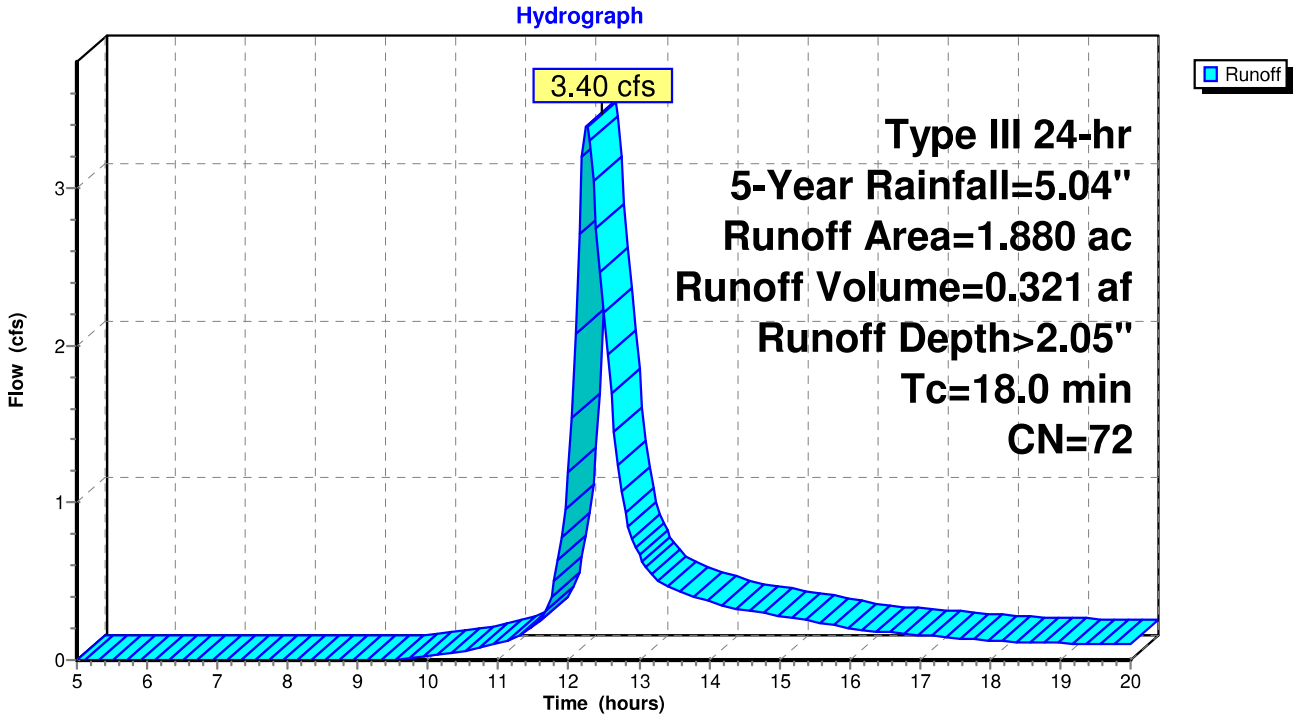
Runoff = 3.40 cfs @ 12.26 hrs, Volume= 0.321 af, Depth> 2.05"
Routed to Reach 9R : YARD PIPES

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 5-Year Rainfall=5.04"

	Area (ac)	CN	Description
*	1.880	72	
	1.880		100.00% Pervious Area

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

Subcatchment 5S: Basin 1-W POST



Summary for Subcatchment 12S: Basin 1-E POST

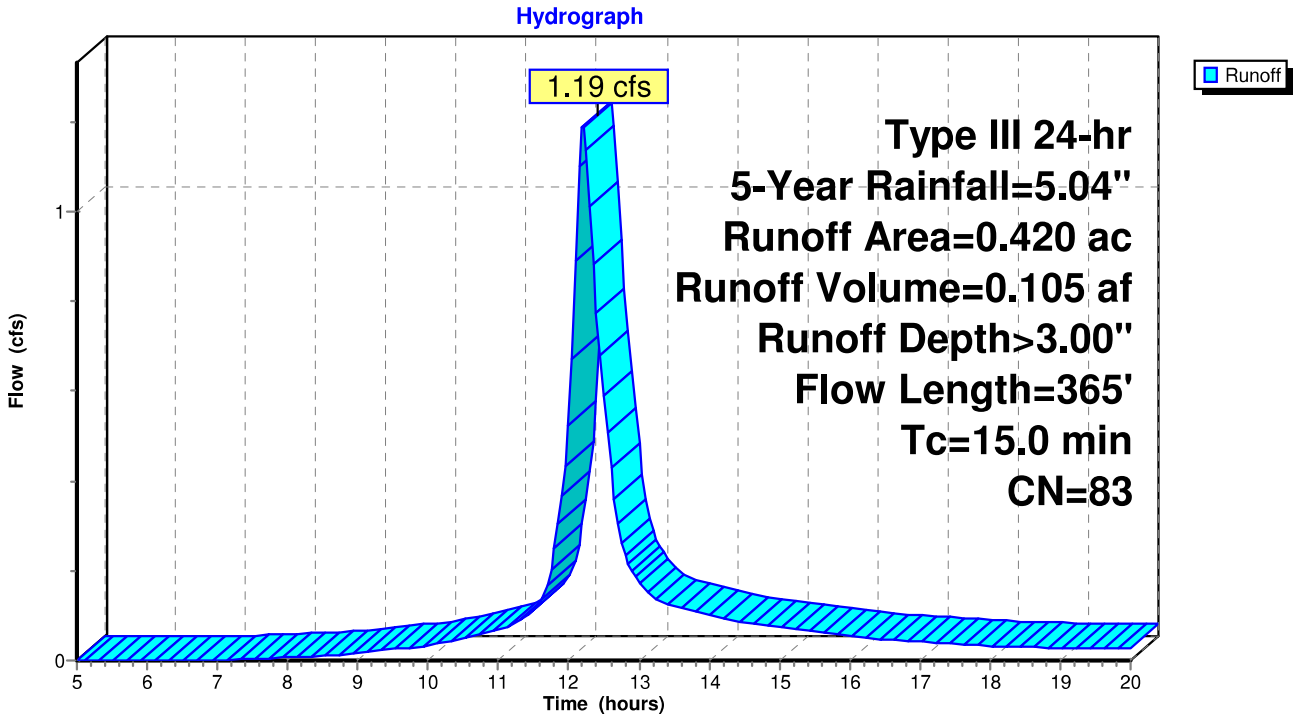
Runoff = 1.19 cfs @ 12.21 hrs, Volume= 0.105 af, Depth> 3.00"
Routed to Link 11L : West 36 RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 5-Year Rainfall=5.04"

Area (ac)	CN	Description
0.420	83	1/4 acre lots, 38% imp, HSG C
0.260		62.00% Pervious Area
0.160		38.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	75	0.0250	0.09		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
0.8	290	0.0400	6.04	9.06	**Channel Flow, channel flow** Area= 1.5 sf Perim= 2.5' r= 0.60' n= 0.035
15.0	365	Total			

Subcatchment 12S: Basin 1-E POST



Summary for Reach 9R: YARD PIPES

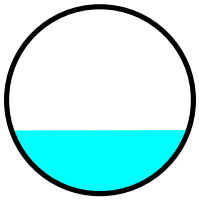
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.880 ac, 0.00% Impervious, Inflow Depth > 2.05" for 5-Year event
Inflow = 3.40 cfs @ 12.26 hrs, Volume= 0.321 af
Outflow = 3.36 cfs @ 12.29 hrs, Volume= 0.321 af, Atten= 1%, Lag= 2.1 min
Routed to Link 11L : West 36 RCP under GVR

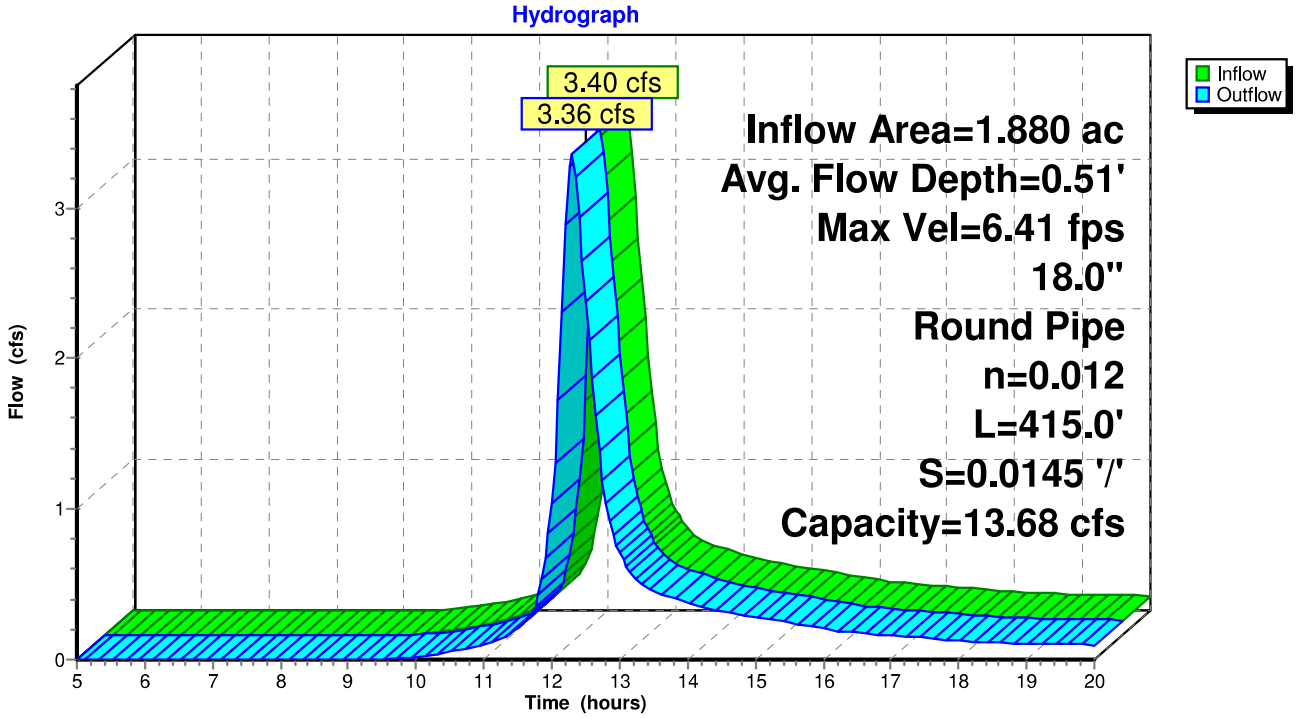
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 6.41 fps, Min. Travel Time= 1.1 min
Avg. Velocity = 2.87 fps, Avg. Travel Time= 2.4 min

Peak Storage= 219 cf @ 12.27 hrs
Average Depth at Peak Storage= 0.51' , Surface Width= 1.42'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 13.68 cfs

18.0" Round Pipe
n= 0.012
Length= 415.0' Slope= 0.0145 '/'
Inlet Invert= 641.00', Outlet Invert= 635.00'



Reach 9R: YARD PIPES



Summary for Pond 4P: Knollwood STORMTECH STORAGE

Inflow Area = 1.520 ac, 0.00% Impervious, Inflow Depth > 2.91" for 5-Year event
Inflow = 3.89 cfs @ 12.25 hrs, Volume= 0.368 af
Outflow = 0.99 cfs @ 12.80 hrs, Volume= 0.344 af, Atten= 75%, Lag= 33.0 min
Discarded = 0.12 cfs @ 10.35 hrs, Volume= 0.108 af
Primary = 0.87 cfs @ 12.80 hrs, Volume= 0.236 af
Routed to Link 11L : West 36 RCP under GVR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 636.87' @ 12.80 hrs Surf.Area= 5,222 sf Storage= 6,752 cf

Plug-Flow detention time= 103.0 min calculated for 0.344 af (93% of inflow)
Center-of-Mass det. time= 80.3 min (872.1 - 791.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	634.75'	5,777 cf	**20.75'W x 251.64'L x 4.00'H Field A** 20,886 cf Overall - 6,443 cf Embedded = 14,443 cf x 40.0% Voids
#2A	635.75'	6,443 cf	**ADS_StormTech SC-740** x 140 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 4 rows
		12,220 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	635.15'	**10.0" Round Culvert** L= 12.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 635.15' / 634.00' S= 0.0958 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf
#2	Discarded	634.75'	**1.000 in/hr Exfiltration over Surface area**
#3	Device 1	635.25'	**5.0" W x 3.2" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	636.50'	**24.0" W x 6.0" H Vert. Orifice/Grate X 0.00** C= 0.600 Limited to weir flow at low heads
#5	Device 1	636.75'	**18.8" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.12 cfs @ 10.35 hrs HW=634.79' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.12 cfs)

Primary OutFlow Max=0.86 cfs @ 12.80 hrs HW=636.87' (Free Discharge)
└**1=Culvert** (Passes 0.86 cfs of 3.00 cfs potential flow)
  ├**3=Orifice/Grate** (Orifice Controls 0.65 cfs @ 5.87 fps)
  ├**4=Orifice/Grate** (Controls 0.00 cfs)
  └**5=Orifice/Grate** (Orifice Controls 0.21 cfs @ 1.12 fps)

Pond 4P: Knollwood STORMTECH STORAGE - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 (ADS StormTech® SC-740 without end caps)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
Row Length Adjustment= +0.44' x 6.45 sf x 4 rows

51.0" Wide + 7.0" Spacing = 58.0" C-C Row Spacing

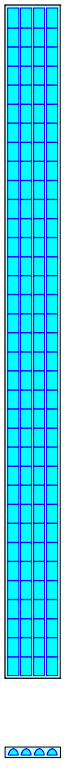
35 Chambers/Row x 7.12' Long +0.44' Row Adjustment = 249.64' Row Length +12.0" End Stone x 2 = 251.64' Base Length
4 Rows x 51.0" Wide + 7.0" Spacing x 3 + 12.0" Side Stone x 2 = 20.75' Base Width
12.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 4.00' Field Height

140 Chambers x 45.9 cf +0.44' Row Adjustment x 6.45 sf x 4 Rows = 6,443.0 cf Chamber Storage

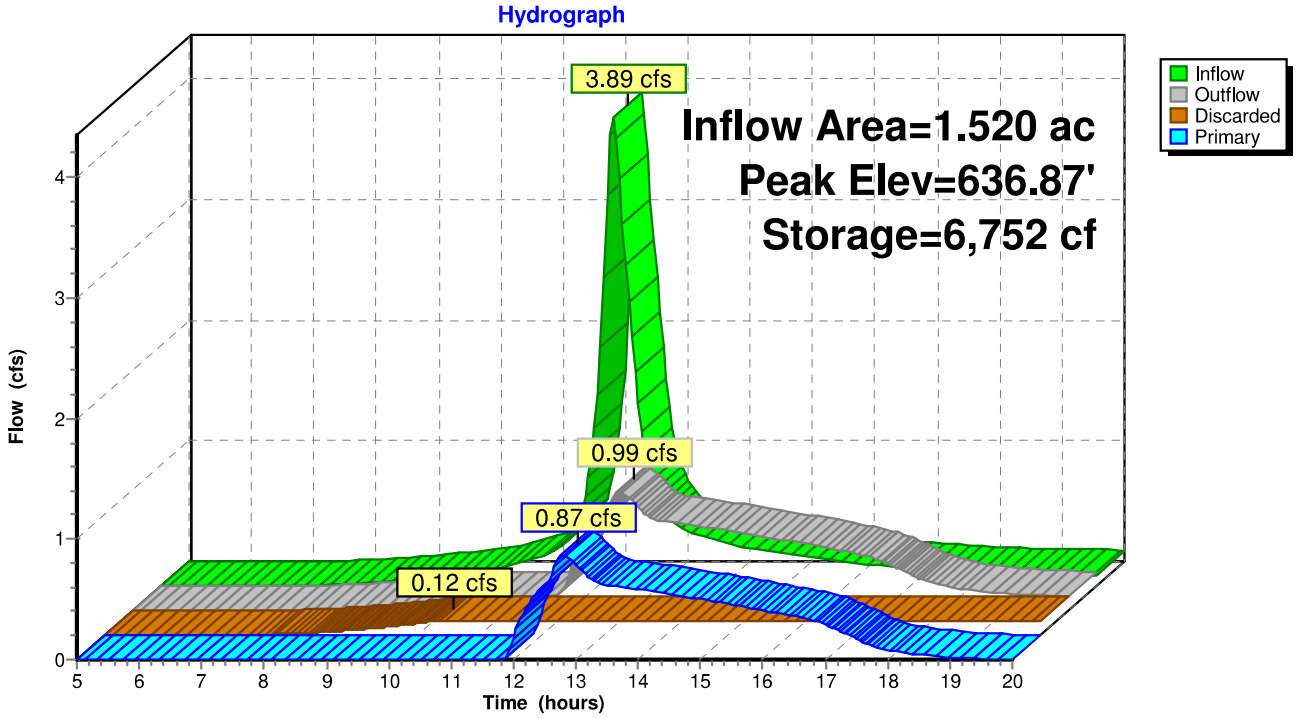
20,886.1 cf Field - 6,443.0 cf Chambers = 14,443.2 cf Stone x 40.0% Voids = 5,777.3 cf Stone Storage

Chamber Storage + Stone Storage = 12,220.2 cf = 0.281 af
Overall Storage Efficiency = 58.5%
Overall System Size = 251.64' x 20.75' x 4.00'

140 Chambers
773.6 cy Field
534.9 cy Stone



Pond 4P: Knollwood STORMTECH STORAGE

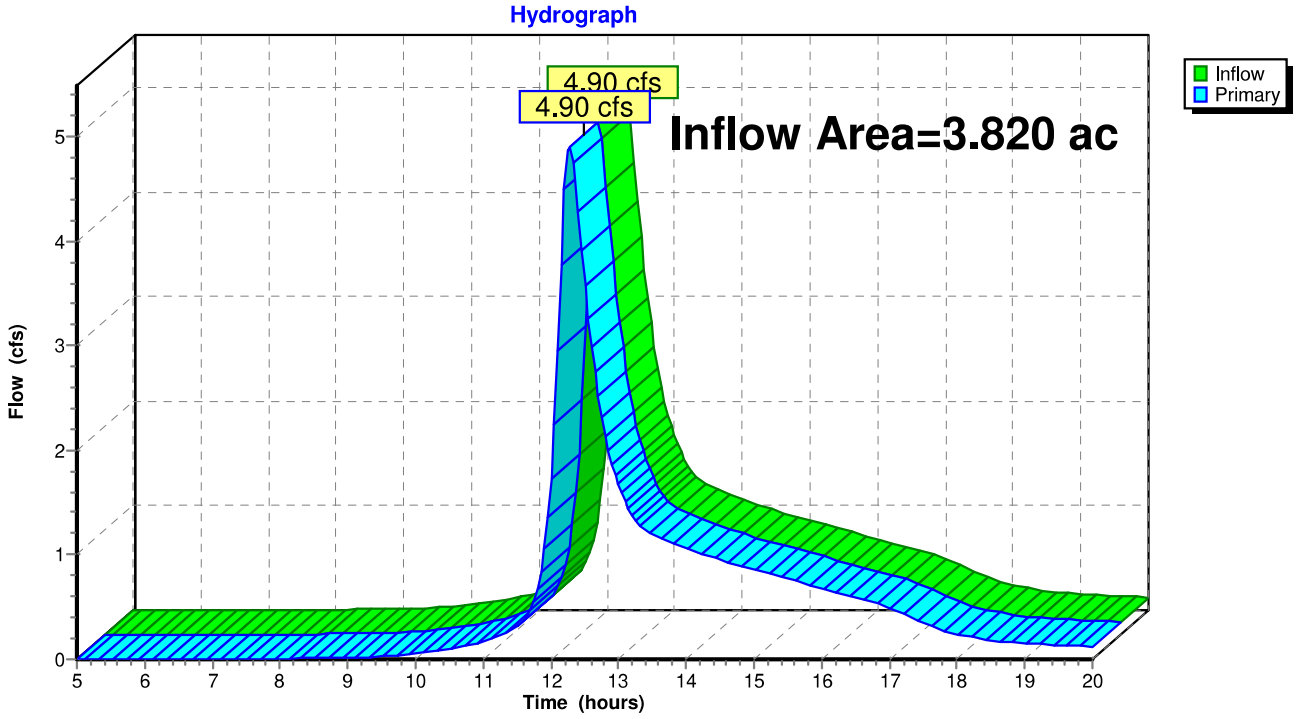


Summary for Link 11L: West 36 RCP under GVR

Inflow Area = 3.820 ac, 4.18% Impervious, Inflow Depth > 2.08" for 5-Year event
Inflow = 4.90 cfs @ 12.28 hrs, Volume= 0.662 af
Primary = 4.90 cfs @ 12.28 hrs, Volume= 0.662 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 11L: West 36 RCP under GVR



Summary for Subcatchment 2S: Basin 1-C POST

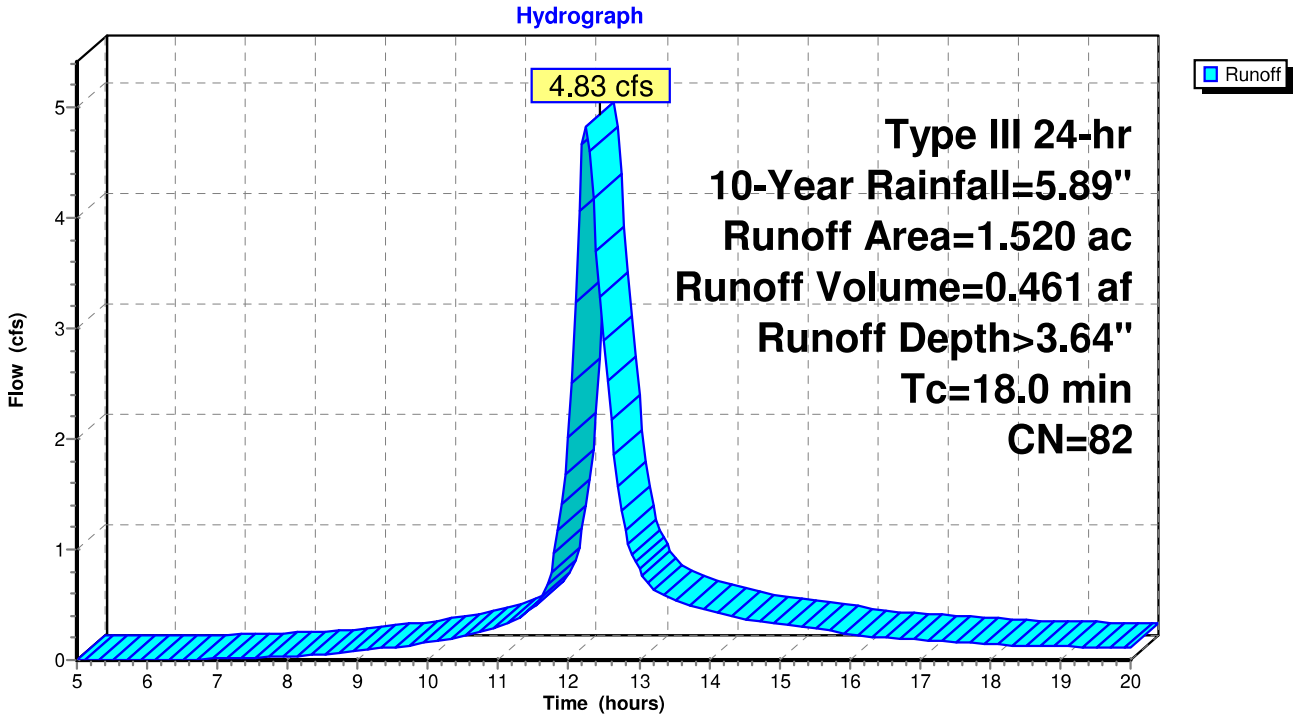
Runoff = 4.83 cfs @ 12.25 hrs, Volume= 0.461 af, Depth> 3.64"
Routed to Pond 4P : Knollwood STORMTECH STORAGE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.89"

	Area (ac)	CN	Description
*	1.520	82	
	1.520		100.00% Pervious Area

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

Subcatchment 2S: Basin 1-C POST



Summary for Subcatchment 5S: Basin 1-W POST

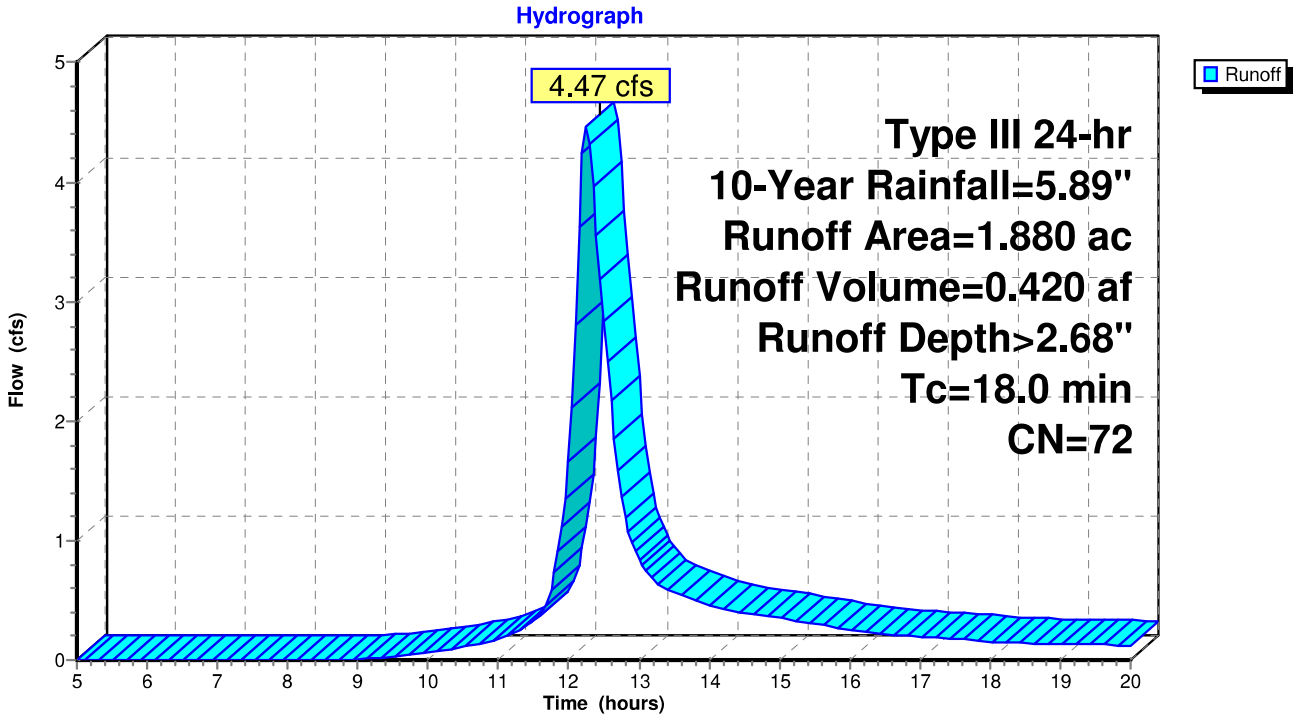
Runoff = 4.47 cfs @ 12.25 hrs, Volume= 0.420 af, Depth> 2.68"
Routed to Reach 9R : YARD PIPES

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.89"

	Area (ac)	CN	Description
*	1.880	72	
	1.880		100.00% Pervious Area

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

Subcatchment 5S: Basin 1-W POST



Summary for Subcatchment 12S: Basin 1-E POST

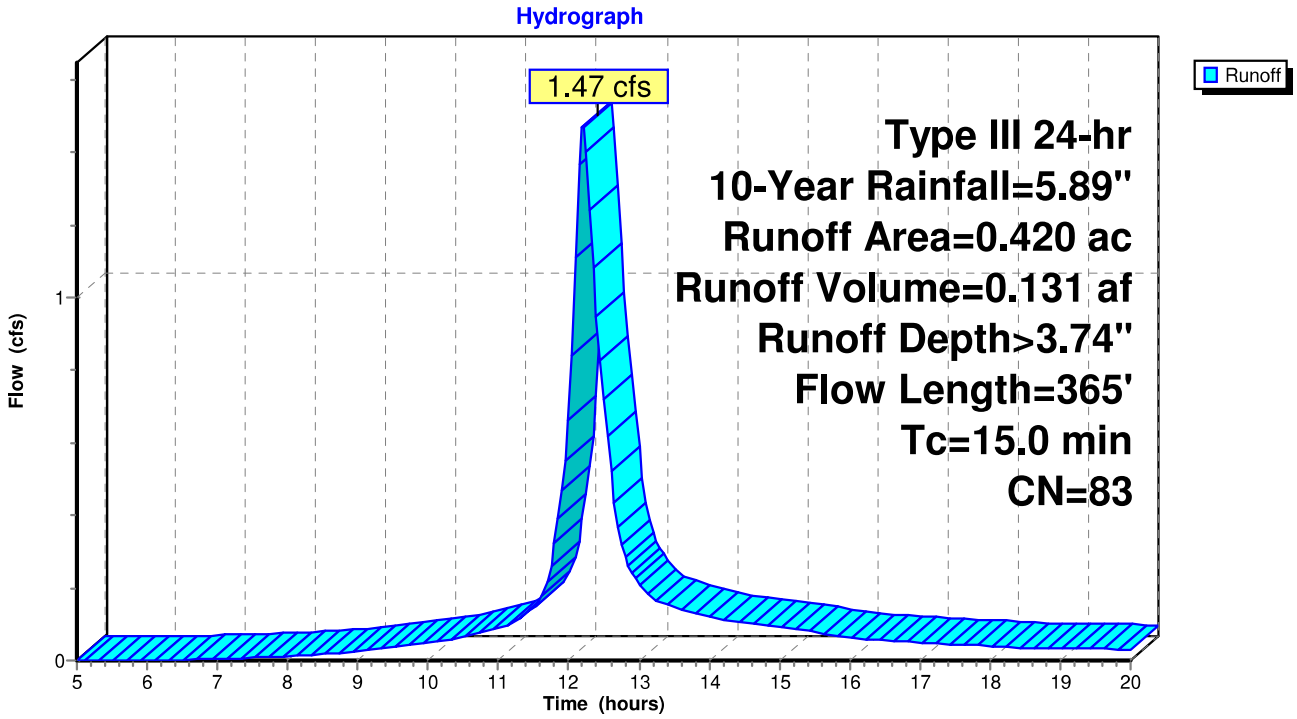
Runoff = 1.47 cfs @ 12.20 hrs, Volume= 0.131 af, Depth> 3.74"
Routed to Link 11L : West 36 RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.89"

Area (ac)	CN	Description
0.420	83	1/4 acre lots, 38% imp, HSG C
0.260		62.00% Pervious Area
0.160		38.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	75	0.0250	0.09		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
0.8	290	0.0400	6.04	9.06	**Channel Flow, channel flow** Area= 1.5 sf Perim= 2.5' r= 0.60' n= 0.035
15.0	365	Total			

Subcatchment 12S: Basin 1-E POST



Summary for Reach 9R: YARD PIPES

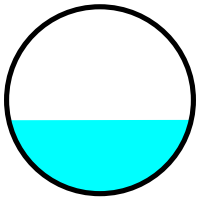
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.880 ac, 0.00% Impervious, Inflow Depth > 2.68" for 10-Year event
Inflow = 4.47 cfs @ 12.25 hrs, Volume= 0.420 af
Outflow = 4.41 cfs @ 12.29 hrs, Volume= 0.420 af, Atten= 1%, Lag= 1.9 min
Routed to Link 11L : West 36 RCP under GVR

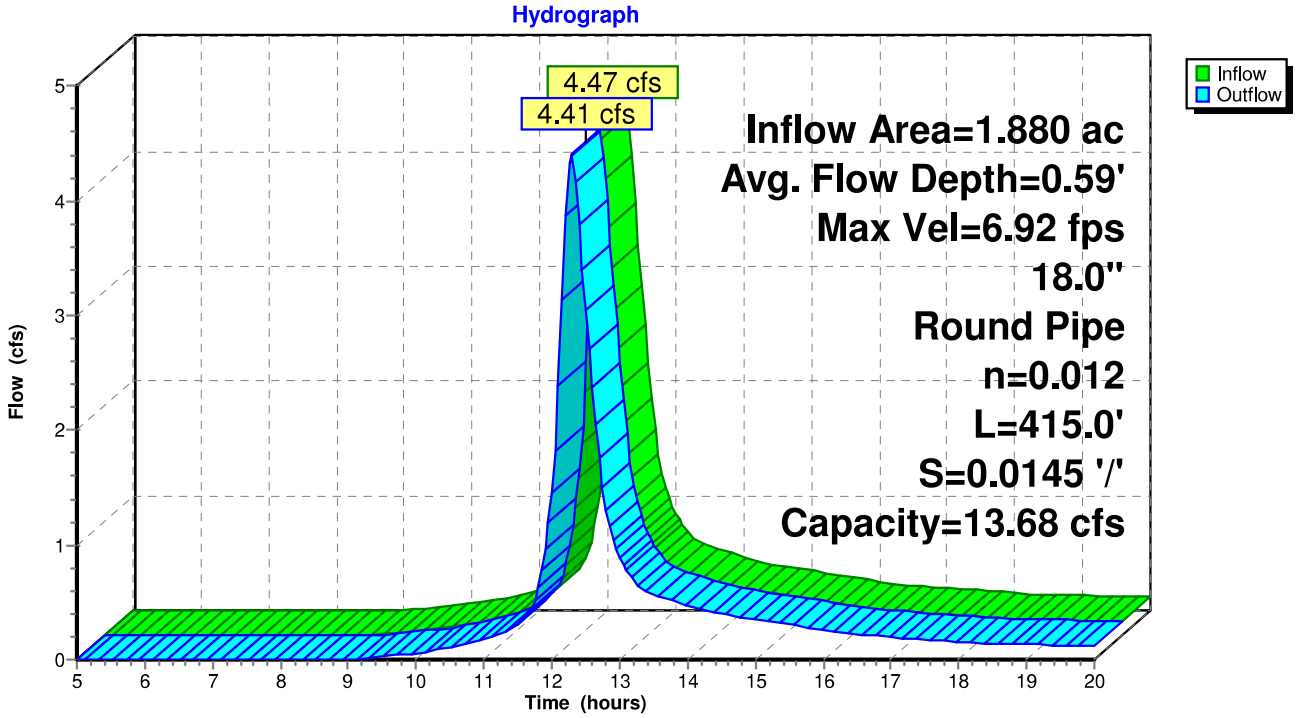
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 6.92 fps, Min. Travel Time= 1.0 min
Avg. Velocity = 3.03 fps, Avg. Travel Time= 2.3 min

Peak Storage= 268 cf @ 12.27 hrs
Average Depth at Peak Storage= 0.59' , Surface Width= 1.47'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 13.68 cfs

18.0" Round Pipe
n= 0.012
Length= 415.0' Slope= 0.0145 '/'
Inlet Invert= 641.00', Outlet Invert= 635.00'



Reach 9R: YARD PIPES



Summary for Pond 4P: Knollwood STORMTECH STORAGE

Inflow Area = 1.520 ac, 0.00% Impervious, Inflow Depth > 3.64" for 10-Year event
Inflow = 4.83 cfs @ 12.25 hrs, Volume= 0.461 af
Outflow = 2.04 cfs @ 12.62 hrs, Volume= 0.434 af, Atten= 58%, Lag= 22.6 min
Discarded = 0.12 cfs @ 9.75 hrs, Volume= 0.114 af
Primary = 1.92 cfs @ 12.62 hrs, Volume= 0.320 af
Routed to Link 11L : West 36 RCP under GVR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 637.14' @ 12.62 hrs Surf.Area= 5,222 sf Storage= 7,770 cf

Plug-Flow detention time= 95.0 min calculated for 0.434 af (94% of inflow)
Center-of-Mass det. time= 74.7 min (861.2 - 786.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	634.75'	5,777 cf	**20.75'W x 251.64'L x 4.00'H Field A** 20,886 cf Overall - 6,443 cf Embedded = 14,443 cf x 40.0% Voids
#2A	635.75'	6,443 cf	**ADS_StormTech SC-740** x 140 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 4 rows
		12,220 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	635.15'	**10.0" Round Culvert** L= 12.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 635.15' / 634.00' S= 0.0958 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf
#2	Discarded	634.75'	**1.000 in/hr Exfiltration over Surface area**
#3	Device 1	635.25'	**5.0" W x 3.2" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	636.50'	**24.0" W x 6.0" H Vert. Orifice/Grate X 0.00** C= 0.600 Limited to weir flow at low heads
#5	Device 1	636.75'	**18.8" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.12 cfs @ 9.75 hrs HW=634.79' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.12 cfs)

Primary OutFlow Max=1.91 cfs @ 12.62 hrs HW=637.14' (Free Discharge)
└**1=Culvert** (Passes 1.91 cfs of 3.29 cfs potential flow)
  ├**3=Orifice/Grate** (Orifice Controls 0.71 cfs @ 6.37 fps)
  ├**4=Orifice/Grate** (Controls 0.00 cfs)
  └**5=Orifice/Grate** (Orifice Controls 1.20 cfs @ 1.99 fps)

Pond 4P: Knollwood STORMTECH STORAGE - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 (ADS StormTech® SC-740 without end caps)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
Row Length Adjustment= +0.44' x 6.45 sf x 4 rows

51.0" Wide + 7.0" Spacing = 58.0" C-C Row Spacing

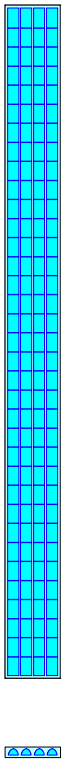
35 Chambers/Row x 7.12' Long +0.44' Row Adjustment = 249.64' Row Length +12.0" End Stone x 2 = 251.64' Base Length
4 Rows x 51.0" Wide + 7.0" Spacing x 3 + 12.0" Side Stone x 2 = 20.75' Base Width
12.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 4.00' Field Height

140 Chambers x 45.9 cf +0.44' Row Adjustment x 6.45 sf x 4 Rows = 6,443.0 cf Chamber Storage

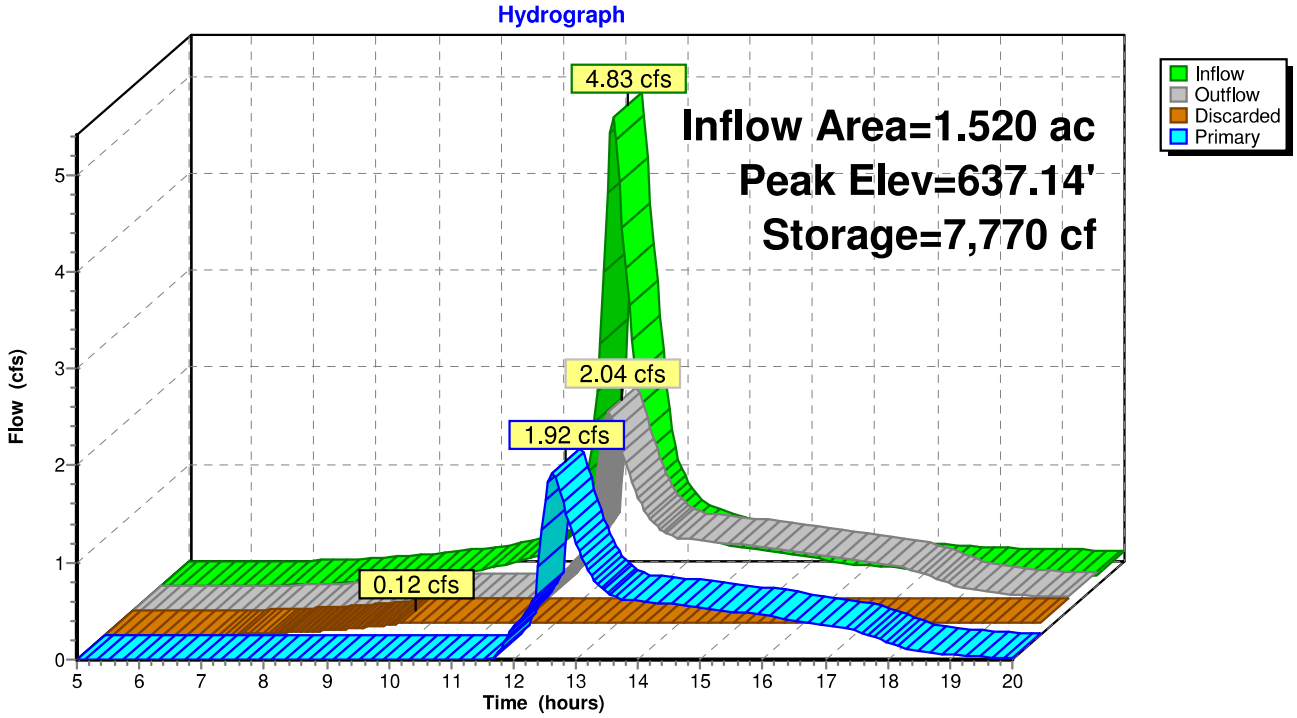
20,886.1 cf Field - 6,443.0 cf Chambers = 14,443.2 cf Stone x 40.0% Voids = 5,777.3 cf Stone Storage

Chamber Storage + Stone Storage = 12,220.2 cf = 0.281 af
Overall Storage Efficiency = 58.5%
Overall System Size = 251.64' x 20.75' x 4.00'

140 Chambers
773.6 cy Field
534.9 cy Stone



Pond 4P: Knollwood STORMTECH STORAGE

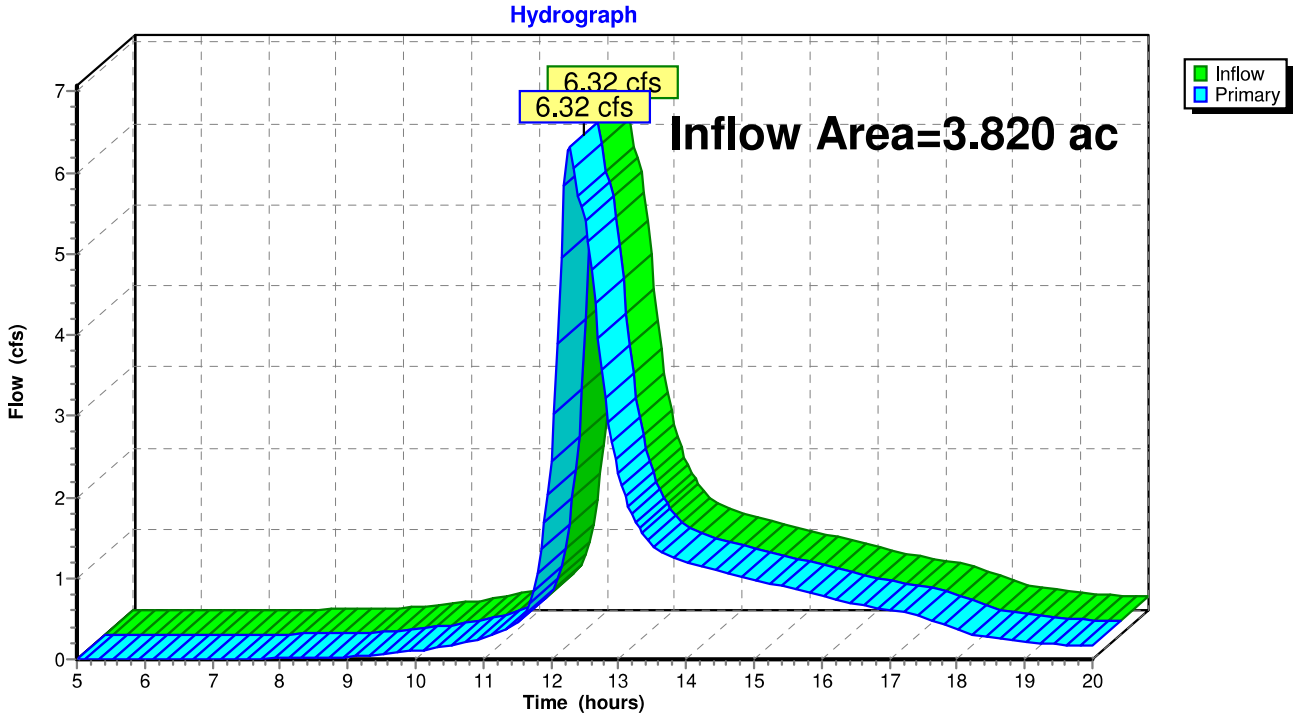


Summary for Link 11L: West 36 RCP under GVR

Inflow Area = 3.820 ac, 4.18% Impervious, Inflow Depth > 2.74" for 10-Year event
Inflow = 6.32 cfs @ 12.27 hrs, Volume= 0.871 af
Primary = 6.32 cfs @ 12.27 hrs, Volume= 0.871 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 11L: West 36 RCP under GVR



Summary for Subcatchment 2S: Basin 1-C POST

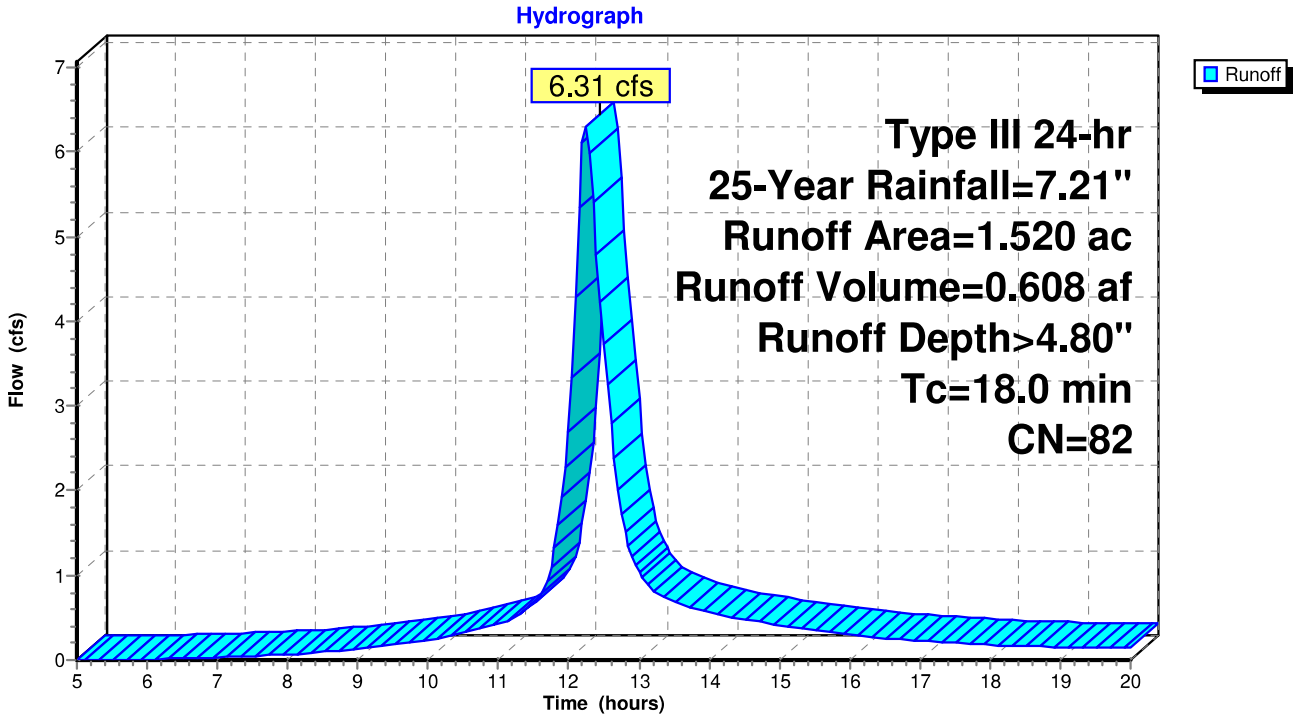
Runoff = 6.31 cfs @ 12.24 hrs, Volume= 0.608 af, Depth> 4.80"
Routed to Pond 4P : Knollwood STORMTECH STORAGE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=7.21"

	Area (ac)	CN	Description
*	1.520	82	
	1.520		100.00% Pervious Area

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

Subcatchment 2S: Basin 1-C POST



Summary for Subcatchment 5S: Basin 1-W POST

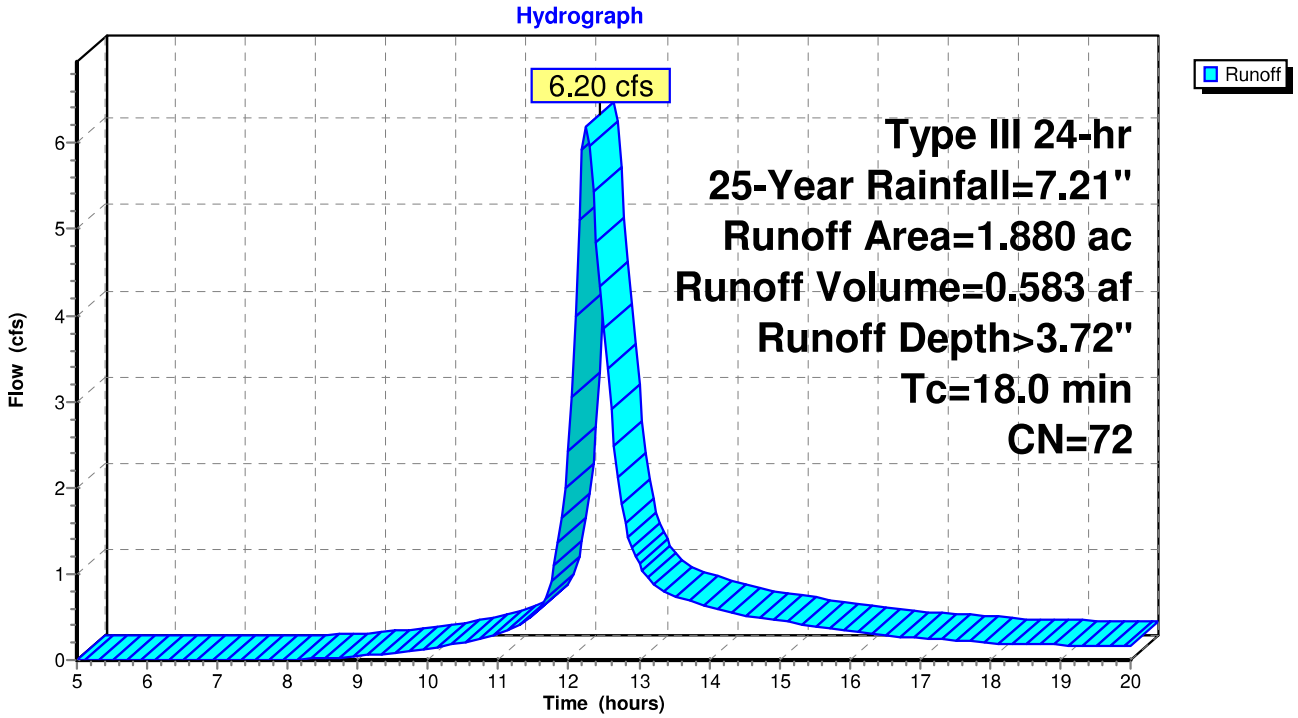
Runoff = 6.20 cfs @ 12.25 hrs, Volume= 0.583 af, Depth> 3.72"
Routed to Reach 9R : YARD PIPES

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=7.21"

	Area (ac)	CN	Description
*	1.880	72	
	1.880		100.00% Pervious Area

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

Subcatchment 5S: Basin 1-W POST



Summary for Subcatchment 12S: Basin 1-E POST

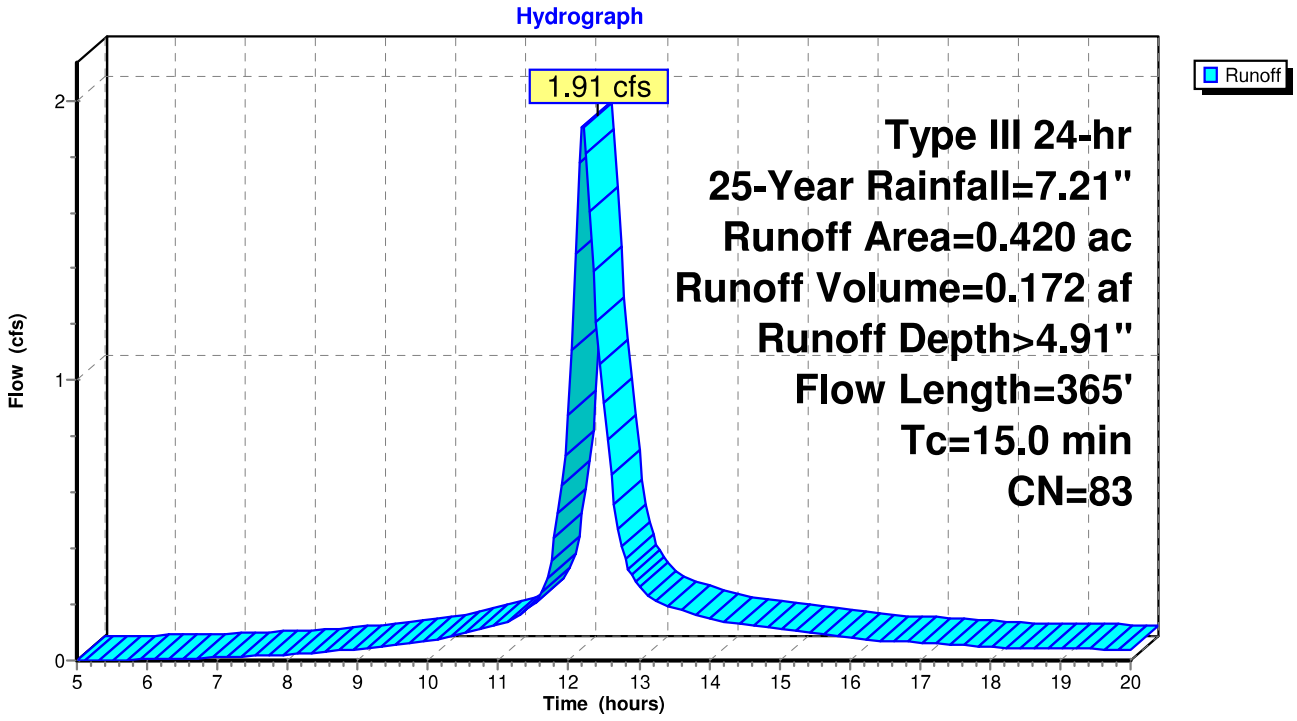
Runoff = 1.91 cfs @ 12.20 hrs, Volume= 0.172 af, Depth> 4.91"
Routed to Link 11L : West 36 RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=7.21"

Area (ac)	CN	Description
0.420	83	1/4 acre lots, 38% imp, HSG C
0.260		62.00% Pervious Area
0.160		38.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	75	0.0250	0.09		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
0.8	290	0.0400	6.04	9.06	**Channel Flow, channel flow** Area= 1.5 sf Perim= 2.5' r= 0.60' n= 0.035
15.0	365	Total			

Subcatchment 12S: Basin 1-E POST



Summary for Reach 9R: YARD PIPES

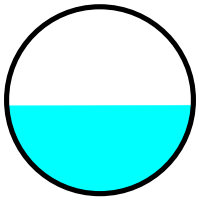
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.880 ac, 0.00% Impervious, Inflow Depth > 3.72" for 25-Year event
Inflow = 6.20 cfs @ 12.25 hrs, Volume= 0.583 af
Outflow = 6.12 cfs @ 12.28 hrs, Volume= 0.583 af, Atten= 1%, Lag= 1.7 min
Routed to Link 11L : West 36 RCP under GVR

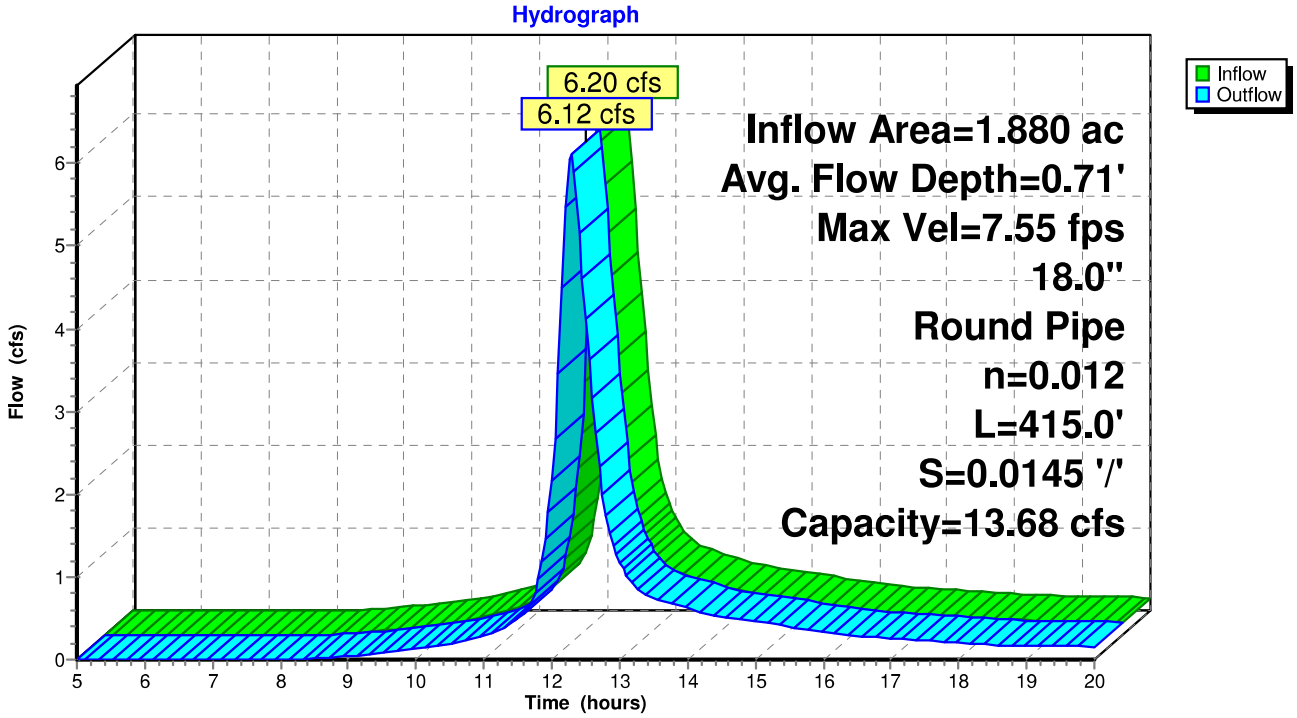
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 7.55 fps, Min. Travel Time= 0.9 min
Avg. Velocity = 3.24 fps, Avg. Travel Time= 2.1 min

Peak Storage= 340 cf @ 12.26 hrs
Average Depth at Peak Storage= 0.71' , Surface Width= 1.50'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 13.68 cfs

18.0" Round Pipe
n= 0.012
Length= 415.0' Slope= 0.0145 '/'
Inlet Invert= 641.00', Outlet Invert= 635.00'



Reach 9R: YARD PIPES



Summary for Pond 4P: Knollwood STORMTECH STORAGE

Inflow Area = 1.520 ac, 0.00% Impervious, Inflow Depth > 4.80" for 25-Year event
Inflow = 6.31 cfs @ 12.24 hrs, Volume= 0.608 af
Outflow = 3.72 cfs @ 12.51 hrs, Volume= 0.579 af, Atten= 41%, Lag= 15.9 min
Discarded = 0.12 cfs @ 9.05 hrs, Volume= 0.122 af
Primary = 3.60 cfs @ 12.51 hrs, Volume= 0.457 af
Routed to Link 11L : West 36 RCP under GVR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 637.44' @ 12.50 hrs Surf.Area= 5,222 sf Storage= 8,874 cf

Plug-Flow detention time= 84.5 min calculated for 0.577 af (95% of inflow)
Center-of-Mass det. time= 66.9 min (846.9 - 779.9)

Volume	Invert	Avail.Storage	Storage Description
#1A	634.75'	5,777 cf	**20.75'W x 251.64'L x 4.00'H Field A** 20,886 cf Overall - 6,443 cf Embedded = 14,443 cf x 40.0% Voids
#2A	635.75'	6,443 cf	**ADS_StormTech SC-740** x 140 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 4 rows
		12,220 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	635.15'	**10.0" Round Culvert** L= 12.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 635.15' / 634.00' S= 0.0958 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf
#2	Discarded	634.75'	**1.000 in/hr Exfiltration over Surface area**
#3	Device 1	635.25'	**5.0" W x 3.2" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	636.50'	**24.0" W x 6.0" H Vert. Orifice/Grate X 0.00** C= 0.600 Limited to weir flow at low heads
#5	Device 1	636.75'	**18.8" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.12 cfs @ 9.05 hrs HW=634.79' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.12 cfs)

Primary OutFlow Max=3.59 cfs @ 12.51 hrs HW=637.44' (Free Discharge)
└**1=Culvert** (Inlet Controls 3.59 cfs @ 6.59 fps)
  ├**3=Orifice/Grate** (Passes < 0.77 cfs potential flow)
  ├**4=Orifice/Grate** (Controls 0.00 cfs)
  └**5=Orifice/Grate** (Passes < 2.89 cfs potential flow)

Pond 4P: Knollwood STORMTECH STORAGE - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 (ADS StormTech® SC-740 without end caps)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
Row Length Adjustment= +0.44' x 6.45 sf x 4 rows

51.0" Wide + 7.0" Spacing = 58.0" C-C Row Spacing

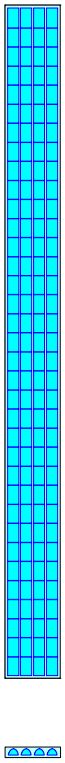
35 Chambers/Row x 7.12' Long +0.44' Row Adjustment = 249.64' Row Length +12.0" End Stone x 2 = 251.64' Base Length
4 Rows x 51.0" Wide + 7.0" Spacing x 3 + 12.0" Side Stone x 2 = 20.75' Base Width
12.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 4.00' Field Height

140 Chambers x 45.9 cf +0.44' Row Adjustment x 6.45 sf x 4 Rows = 6,443.0 cf Chamber Storage

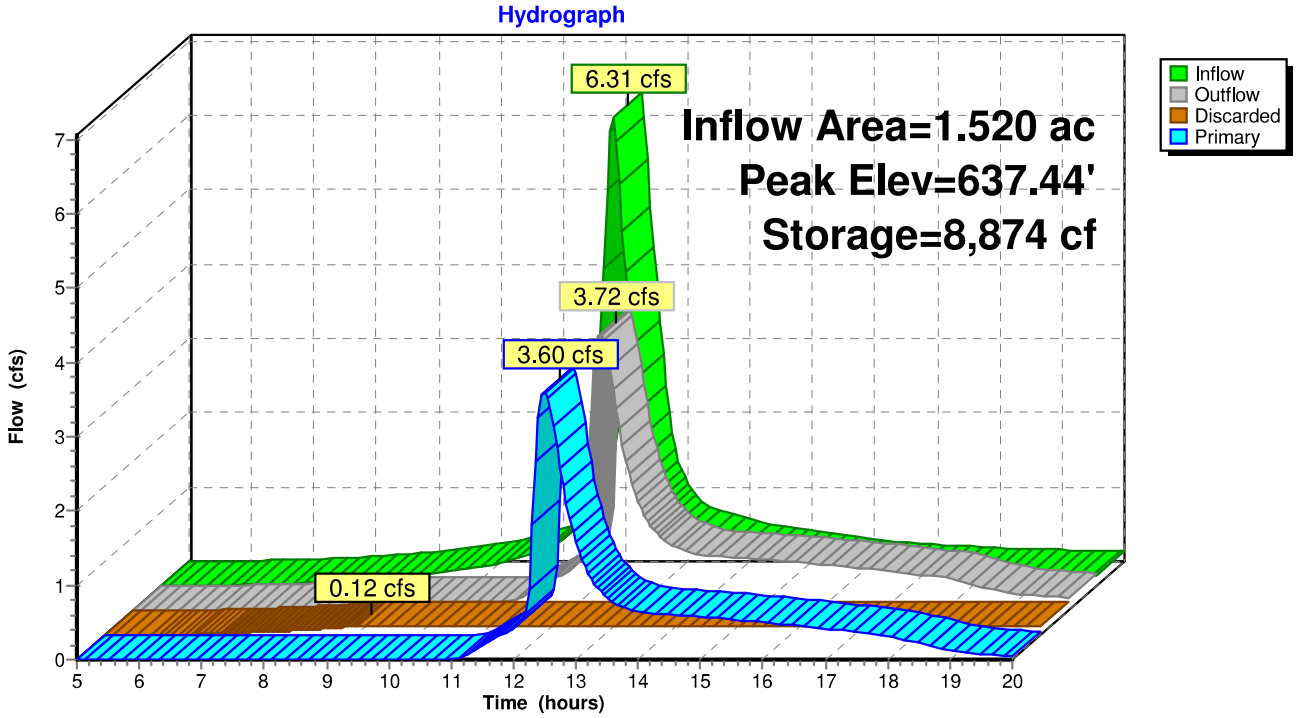
20,886.1 cf Field - 6,443.0 cf Chambers = 14,443.2 cf Stone x 40.0% Voids = 5,777.3 cf Stone Storage

Chamber Storage + Stone Storage = 12,220.2 cf = 0.281 af
Overall Storage Efficiency = 58.5%
Overall System Size = 251.64' x 20.75' x 4.00'

140 Chambers
773.6 cy Field
534.9 cy Stone



Pond 4P: Knollwood STORMTECH STORAGE

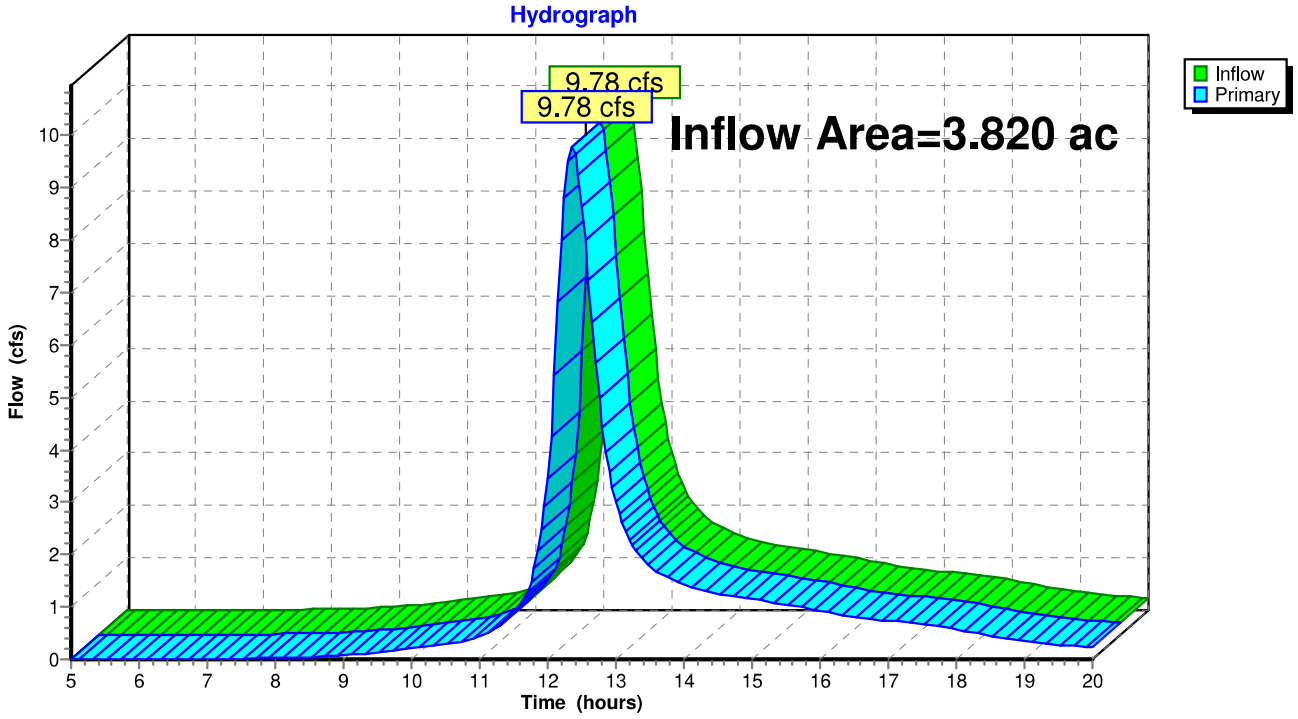


Summary for Link 11L: West 36 RCP under GVR

Inflow Area = 3.820 ac, 4.18% Impervious, Inflow Depth > 3.81" for 25-Year event
Inflow = 9.78 cfs @ 12.36 hrs, Volume= 1.212 af
Primary = 9.78 cfs @ 12.36 hrs, Volume= 1.212 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 11L: West 36 RCP under GVR



Summary for Subcatchment 2S: Basin 1-C POST

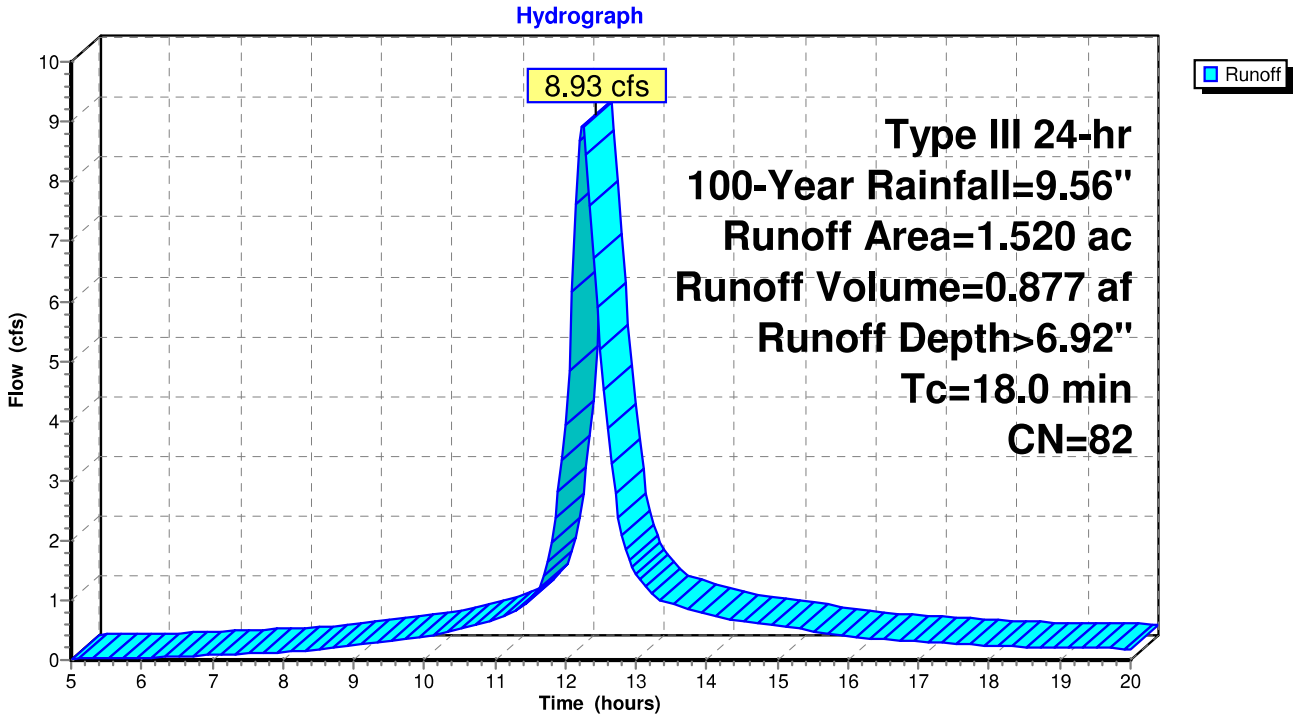
Runoff = 8.93 cfs @ 12.24 hrs, Volume= 0.877 af, Depth> 6.92"
Routed to Pond 4P : Knollwood STORMTECH STORAGE

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=9.56"

	Area (ac)	CN	Description
*	1.520	82	
	1.520		100.00% Pervious Area

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

Subcatchment 2S: Basin 1-C POST



Summary for Subcatchment 5S: Basin 1-W POST

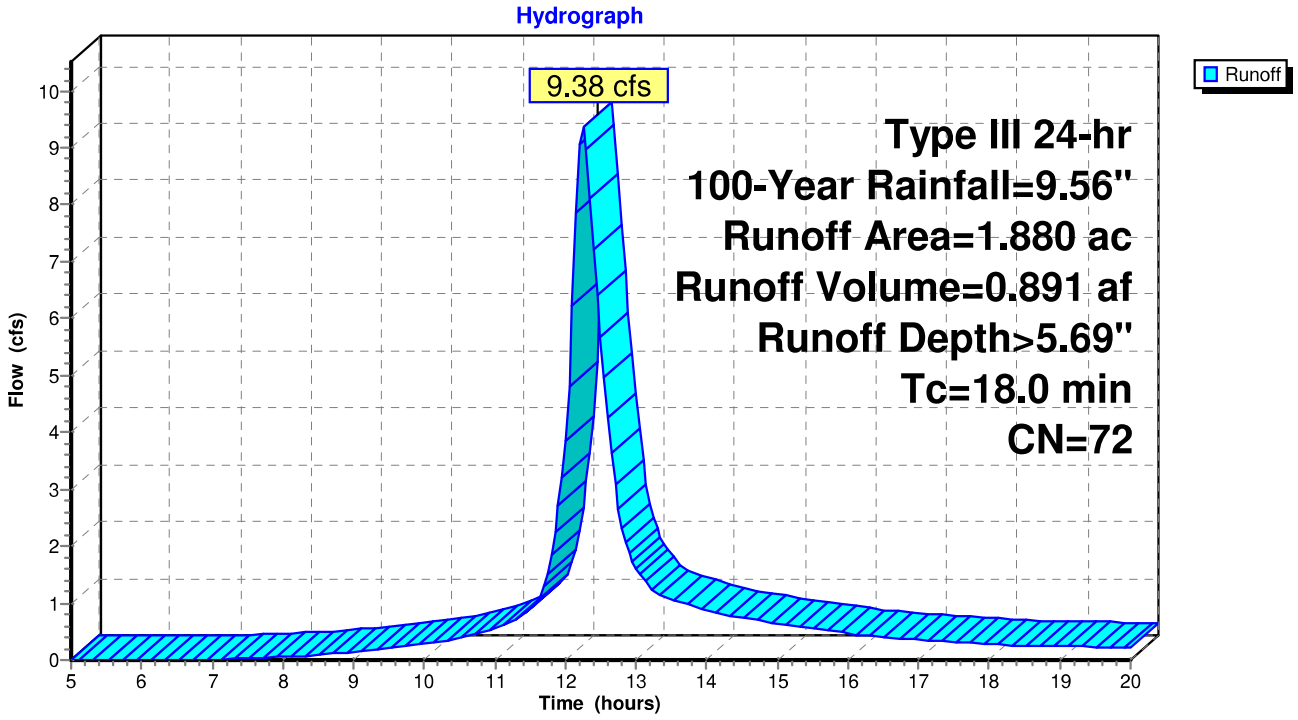
Runoff = 9.38 cfs @ 12.25 hrs, Volume= 0.891 af, Depth> 5.69"
Routed to Reach 9R : YARD PIPES

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=9.56"

	Area (ac)	CN	Description
*	1.880	72	
	1.880		100.00% Pervious Area

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

Subcatchment 5S: Basin 1-W POST



Summary for Subcatchment 12S: Basin 1-E POST

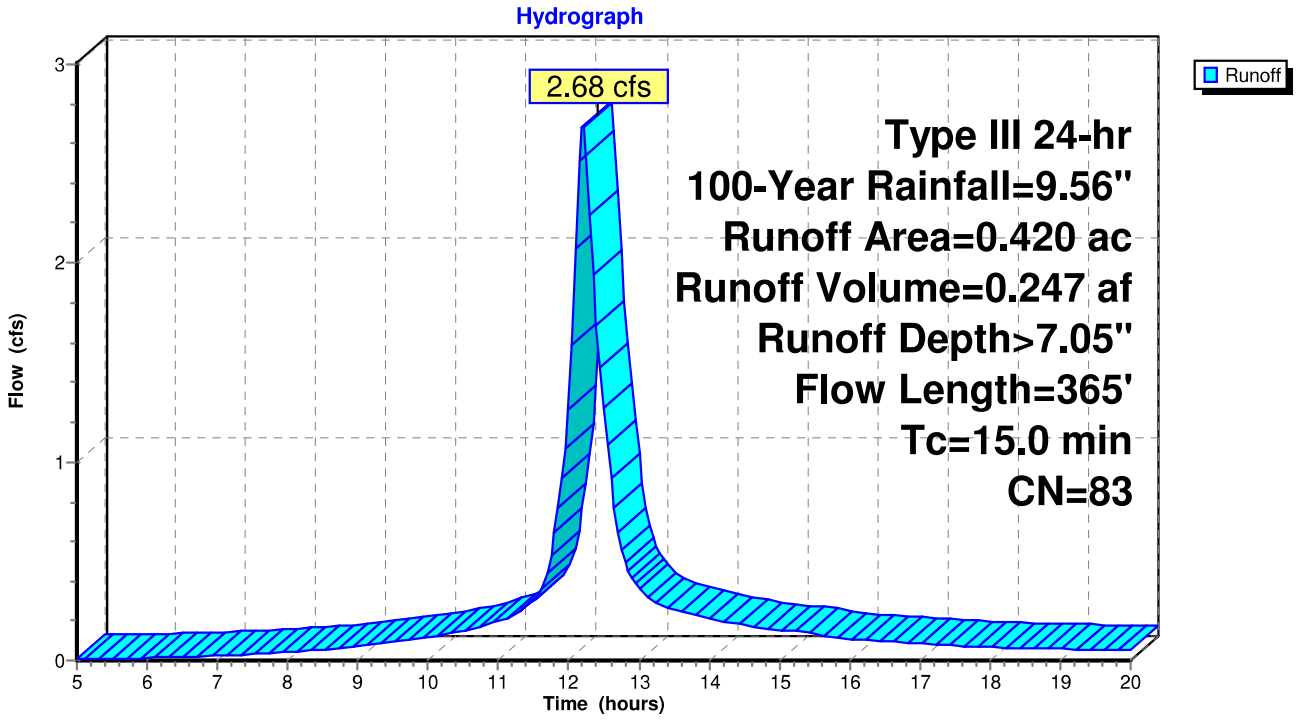
Runoff = 2.68 cfs @ 12.20 hrs, Volume= 0.247 af, Depth> 7.05"
Routed to Link 11L : West 36 RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=9.56"

Area (ac)	CN	Description
0.420	83	1/4 acre lots, 38% imp, HSG C
0.260		62.00% Pervious Area
0.160		38.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
14.2	75	0.0250	0.09		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
0.8	290	0.0400	6.04	9.06	**Channel Flow, channel flow** Area= 1.5 sf Perim= 2.5' r= 0.60' n= 0.035
15.0	365	Total			

Subcatchment 12S: Basin 1-E POST



Summary for Reach 9R: YARD PIPES

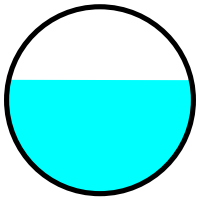
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 1.880 ac, 0.00% Impervious, Inflow Depth > 5.69" for 100-Year event
Inflow = 9.38 cfs @ 12.25 hrs, Volume= 0.891 af
Outflow = 9.30 cfs @ 12.27 hrs, Volume= 0.890 af, Atten= 1%, Lag= 1.5 min
Routed to Link 11L : West 36 RCP under GVR

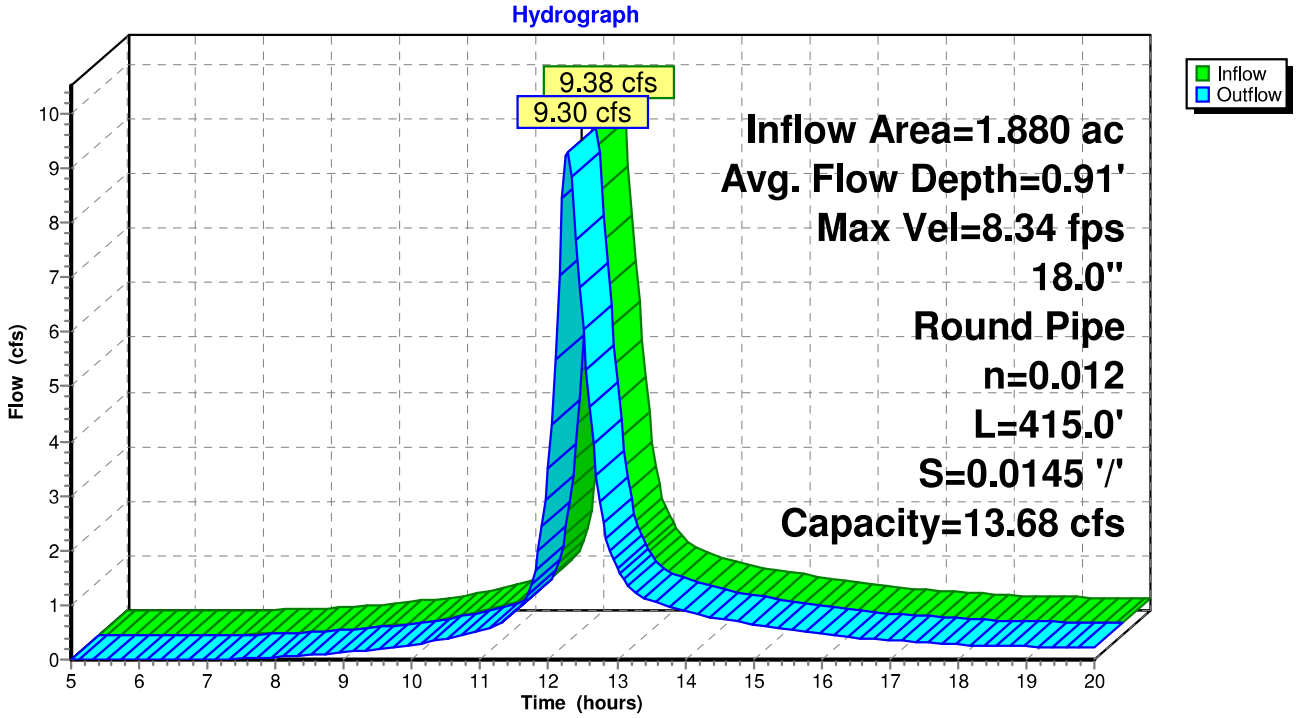
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 8.34 fps, Min. Travel Time= 0.8 min
Avg. Velocity = 3.52 fps, Avg. Travel Time= 2.0 min

Peak Storage= 467 cf @ 12.26 hrs
Average Depth at Peak Storage= 0.91' , Surface Width= 1.46'
Bank-Full Depth= 1.50' Flow Area= 1.8 sf, Capacity= 13.68 cfs

18.0" Round Pipe
n= 0.012
Length= 415.0' Slope= 0.0145 '/'
Inlet Invert= 641.00', Outlet Invert= 635.00'



Reach 9R: YARD PIPES



Summary for Pond 4P: Knollwood STORMTECH STORAGE

[82] Warning: Early inflow requires earlier time span

Inflow Area = 1.520 ac, 0.00% Impervious, Inflow Depth > 6.92" for 100-Year event
Inflow = 8.93 cfs @ 12.24 hrs, Volume= 0.877 af
Outflow = 4.74 cfs @ 12.53 hrs, Volume= 0.842 af, Atten= 47%, Lag= 17.6 min
Discarded = 0.12 cfs @ 8.00 hrs, Volume= 0.133 af
Primary = 4.62 cfs @ 12.53 hrs, Volume= 0.708 af
Routed to Link 11L : West 36 RCP under GVR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 638.66' @ 12.53 hrs Surf.Area= 5,222 sf Storage= 12,028 cf

Plug-Flow detention time= 75.4 min calculated for 0.839 af (96% of inflow)
Center-of-Mass det. time= 60.1 min (831.4 - 771.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	634.75'	5,777 cf	**20.75'W x 251.64'L x 4.00'H Field A** 20,886 cf Overall - 6,443 cf Embedded = 14,443 cf x 40.0% Voids
#2A	635.75'	6,443 cf	**ADS_StormTech SC-740** x 140 Inside #1 Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap Row Length Adjustment= +0.44' x 6.45 sf x 4 rows
		12,220 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	635.15'	**10.0" Round Culvert** L= 12.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 635.15' / 634.00' S= 0.0958 '/' Cc= 0.900 n= 0.012, Flow Area= 0.55 sf
#2	Discarded	634.75'	**1.000 in/hr Exfiltration over Surface area**
#3	Device 1	635.25'	**5.0" W x 3.2" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads
#4	Device 1	636.50'	**24.0" W x 6.0" H Vert. Orifice/Grate X 0.00** C= 0.600 Limited to weir flow at low heads
#5	Device 1	636.75'	**18.8" W x 12.0" H Vert. Orifice/Grate** C= 0.600 Limited to weir flow at low heads

Discarded OutFlow Max=0.12 cfs @ 8.00 hrs HW=634.79' (Free Discharge)
└**2=Exfiltration** (Exfiltration Controls 0.12 cfs)

Primary OutFlow Max=4.61 cfs @ 12.53 hrs HW=638.65' (Free Discharge)
└**1=Culvert** (Inlet Controls 4.61 cfs @ 8.46 fps)
├**3=Orifice/Grate** (Passes < 0.97 cfs potential flow)
├**4=Orifice/Grate** (Controls 0.00 cfs)
└**5=Orifice/Grate** (Passes < 8.88 cfs potential flow)

Pond 4P: Knollwood STORMTECH STORAGE - Chamber Wizard Field A

Chamber Model = ADS_StormTech SC-740 (ADS StormTech® SC-740 without end caps)
Effective Size= 44.6"W x 30.0"H => 6.45 sf x 7.12'L = 45.9 cf
Overall Size= 51.0"W x 30.0"H x 7.56'L with 0.44' Overlap
Row Length Adjustment= +0.44' x 6.45 sf x 4 rows

51.0" Wide + 7.0" Spacing = 58.0" C-C Row Spacing

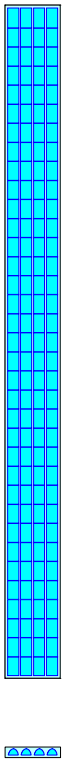
35 Chambers/Row x 7.12' Long +0.44' Row Adjustment = 249.64' Row Length +12.0" End Stone x 2 = 251.64' Base Length
4 Rows x 51.0" Wide + 7.0" Spacing x 3 + 12.0" Side Stone x 2 = 20.75' Base Width
12.0" Stone Base + 30.0" Chamber Height + 6.0" Stone Cover = 4.00' Field Height

140 Chambers x 45.9 cf +0.44' Row Adjustment x 6.45 sf x 4 Rows = 6,443.0 cf Chamber Storage

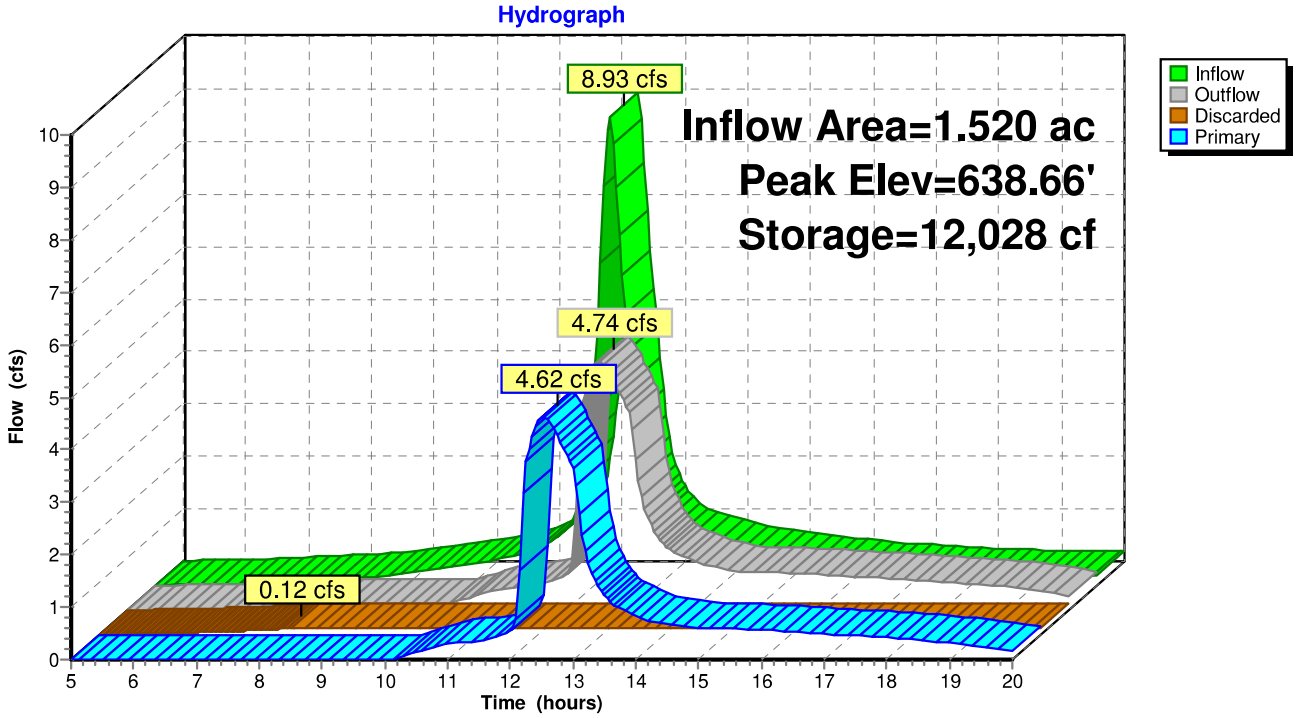
20,886.1 cf Field - 6,443.0 cf Chambers = 14,443.2 cf Stone x 40.0% Voids = 5,777.3 cf Stone Storage

Chamber Storage + Stone Storage = 12,220.2 cf = 0.281 af
Overall Storage Efficiency = 58.5%
Overall System Size = 251.64' x 20.75' x 4.00'

140 Chambers
773.6 cy Field
534.9 cy Stone



Pond 4P: Knollwood STORMTECH STORAGE

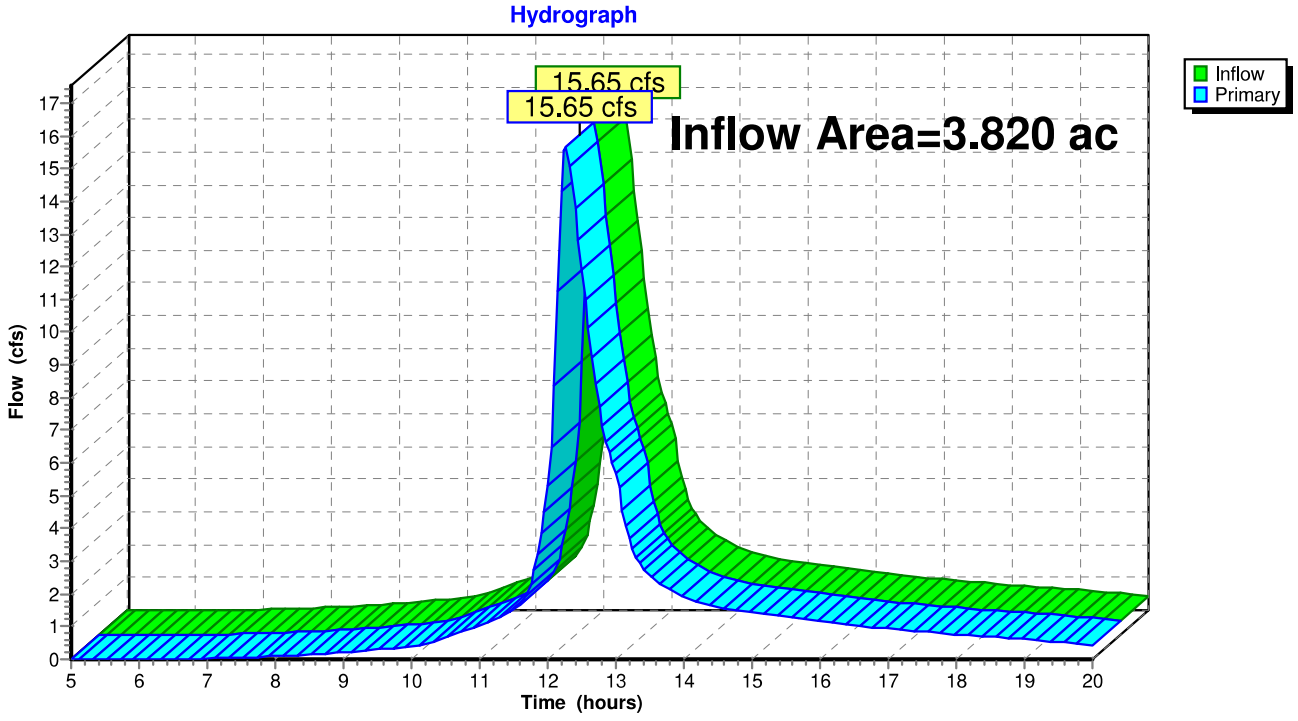


Summary for Link 11L: West 36 RCP under GVR

Inflow Area = 3.820 ac, 4.18% Impervious, Inflow Depth > 5.80" for 100-Year event
Inflow = 15.65 cfs @ 12.27 hrs, Volume= 1.845 af
Primary = 15.65 cfs @ 12.27 hrs, Volume= 1.845 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 11L: West 36 RCP under GVR



Sunview 2026-POST-60 7200
Prepared by Alabama Engineering Company, Inc

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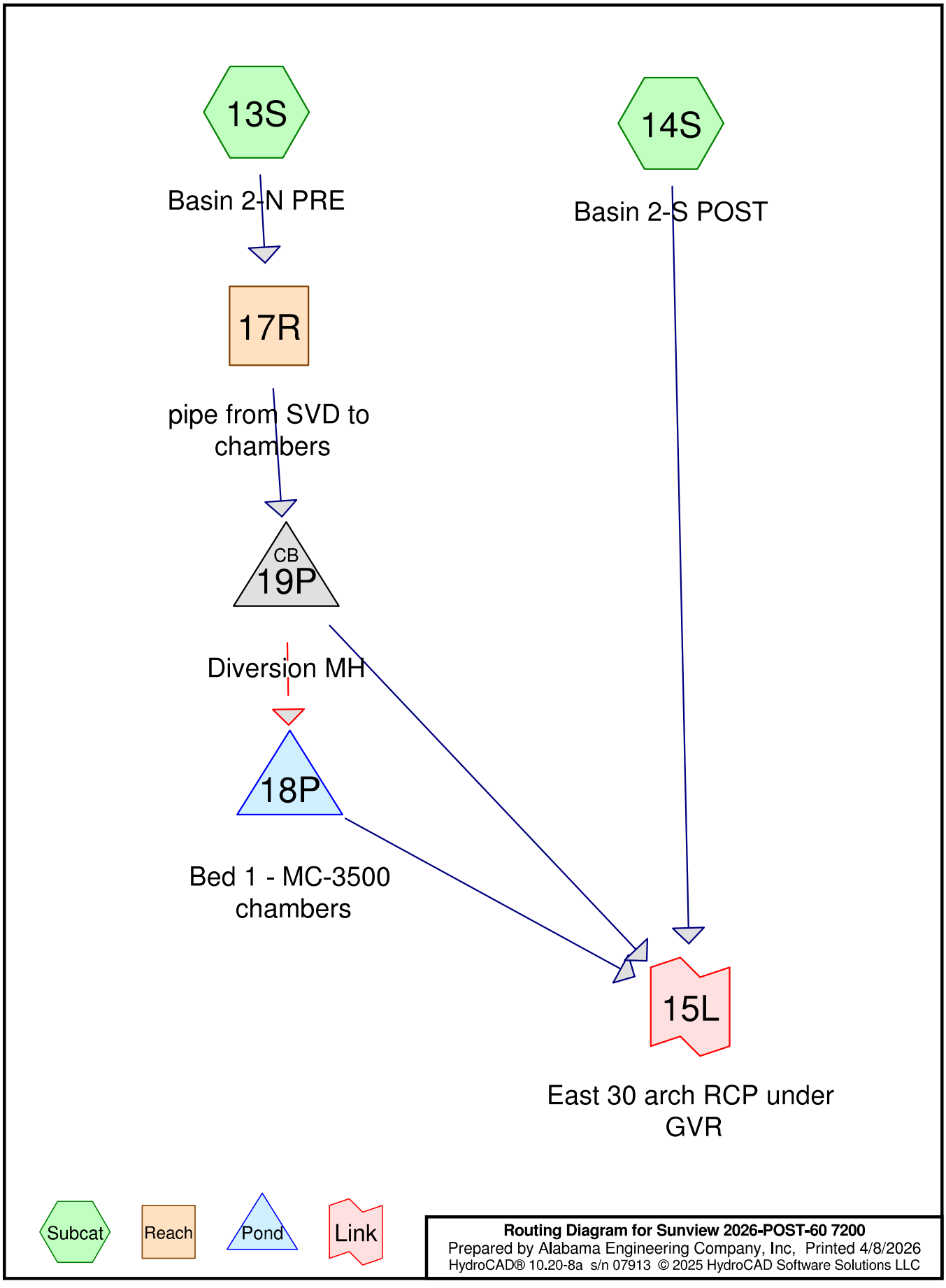


Routing Diagram for Sunview 2026-POST-60 7200
Prepared by Alabama Engineering Company, Inc, Printed 4/8/2026
HydroCAD® 10.20-8a s/n 07913 © 2025 HydroCAD Software Solutions LLC

Rainfall Events Listing

Event#	Event Name	Storm Type	Curve	Mode	Duration (hours)	B/B	Depth (inches)	AMC
1	2-Year	Type III 24-hr		Default	24.00	1	4.13	2
2	5-Year	Type III 24-hr		Default	24.00	1	5.04	2
3	10-Year	Type III 24-hr		Default	24.00	1	5.89	2
4	25-Year	Type III 24-hr		Default	24.00	1	7.21	2
5	100-Year	Type III 24-hr		Default	24.00	1	9.56	2

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
5.370	80	1/2 acre lots, 25% imp, HSG C (13S, 14S)
3.830	87	1/6 acre lots, 55% imp, HSG C (13S, 14S)
2.430	90	1/8 acre lots, 65% imp, HSG C (13S)
11.630	**84**	**TOTAL AREA**

Pipe Listing (selected nodes)

Line#	Node Number	In-Invert (feet)	Out-Invert (feet)	Length (feet)	Slope (ft/ft)	n	Width (inches)	Diam/Height (inches)	Inside-Fill (inches)	Node Name
1	17R	640.00	634.00	260.0	0.0231	0.013	0.0	30.0	0.0	
2	18P	628.75	625.00	30.0	0.1250	0.013	0.0	12.0	0.0	
3	19P	631.10	627.75	20.0	0.1675	0.013	0.0	18.0	0.0	
4	19P	631.00	629.50	44.0	0.0341	0.013	0.0	30.0	0.0	

Summary for Subcatchment 13S: Basin 2-N PRE

[47] Hint: Peak is 128% of capacity of segment #2

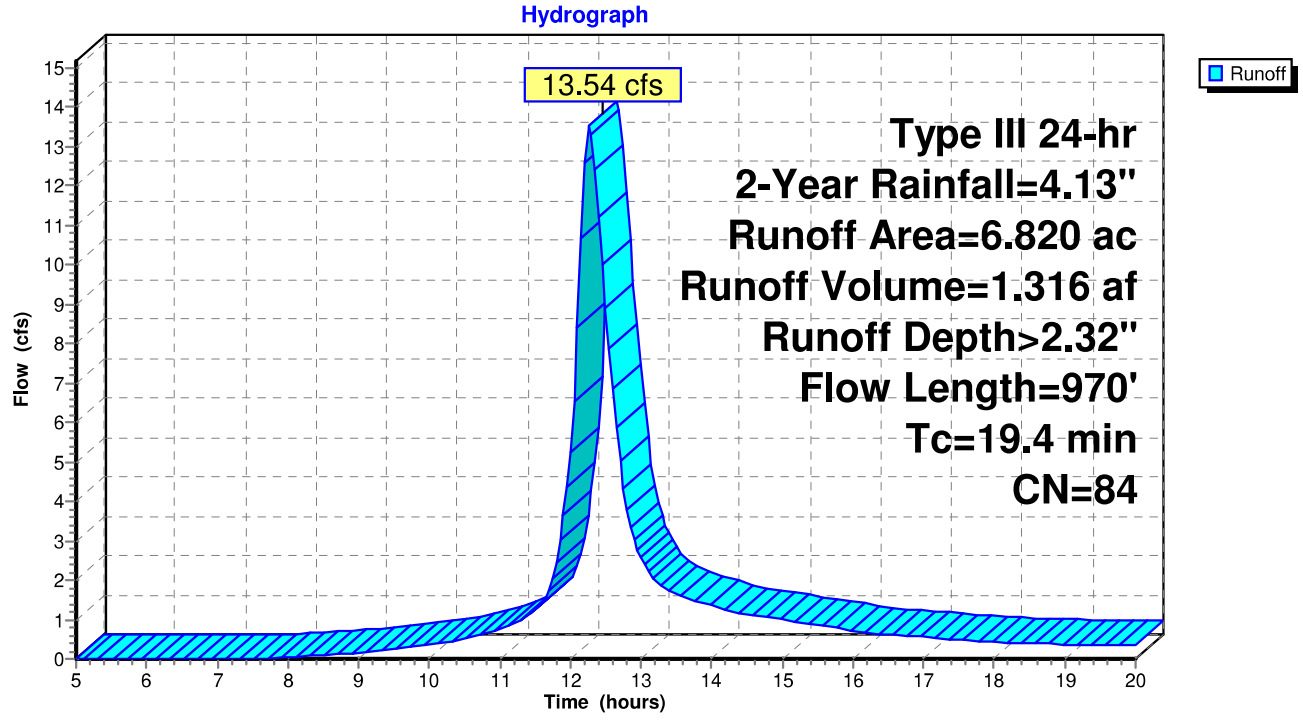
Runoff = 13.54 cfs @ 12.27 hrs, Volume= 1.316 af, Depth> 2.32"
Routed to Reach 17R : pipe from SVD to chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=4.13"

	Area (ac)	CN	Description
	2.430	90	1/8 acre lots, 65% imp, HSG C
	4.090	80	1/2 acre lots, 25% imp, HSG C
*	0.300	87	1/6 acre lots, 55% imp, HSG C
	6.820	84	Weighted Average
	4.053		59.43% Pervious Area
	2.767		40.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	180	0.0940	0.18		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
2.5	790	0.0200	5.30	10.59	**Channel Flow, ditch/pipe** Area= 2.0 sf Perim= 4.0' r= 0.50' n= 0.025
19.4	970	Total			

Subcatchment 13S: Basin 2-N PRE



Summary for Subcatchment 14S: Basin 2-S POST

[47] Hint: Peak is 215% of capacity of segment #2

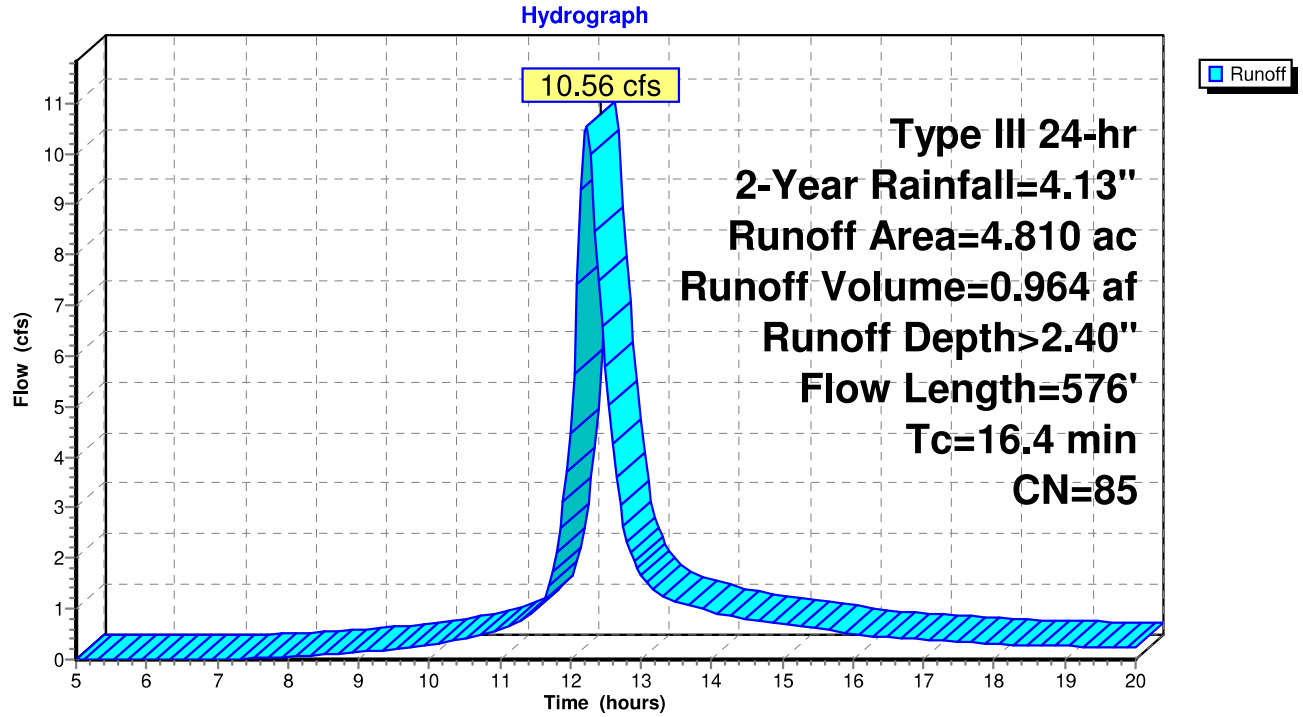
Runoff = 10.56 cfs @ 12.22 hrs, Volume= 0.964 af, Depth> 2.40"
Routed to Link 15L : East 30 arch RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-Year Rainfall=4.13"

	Area (ac)	CN	Description
	1.280	80	1/2 acre lots, 25% imp, HSG C
*	3.530	87	1/6 acre lots, 55% imp, HSG C
	4.810	85	Weighted Average
	2.548		52.98% Pervious Area
	2.261		47.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	96	0.0500	0.12		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
3.3	480	0.0210	2.45	4.91	**Channel Flow, Channel flow** Area= 2.0 sf Perim= 10.0' r= 0.20' n= 0.030
16.4	576	Total			

Subcatchment 14S: Basin 2-S POST



Summary for Reach 17R: pipe from SVD to chambers

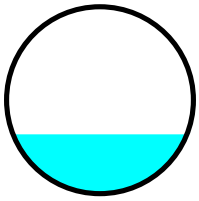
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 6.820 ac, 40.57% Impervious, Inflow Depth > 2.32" for 2-Year event
Inflow = 13.54 cfs @ 12.27 hrs, Volume= 1.316 af
Outflow = 13.44 cfs @ 12.28 hrs, Volume= 1.315 af, Atten= 1%, Lag= 0.8 min
Routed to Pond 19P : Diversion MH

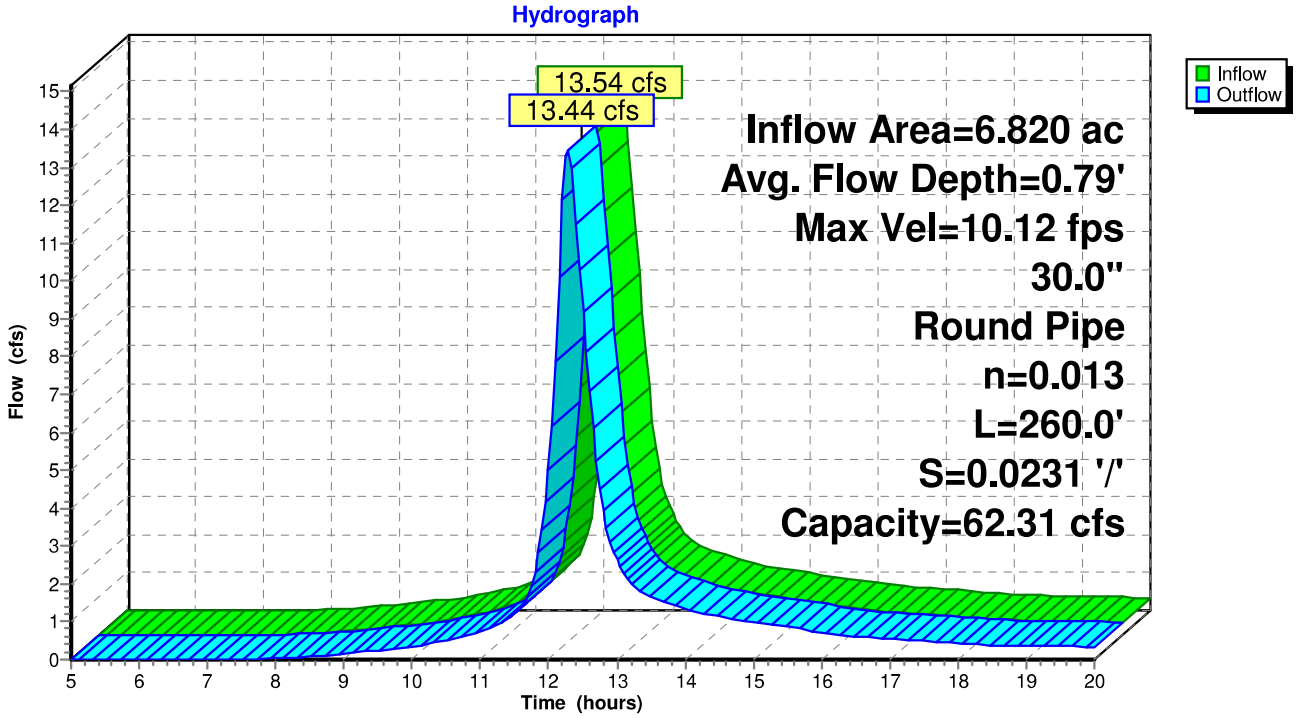
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 10.12 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 4.21 fps, Avg. Travel Time= 1.0 min

Peak Storage= 347 cf @ 12.27 hrs
Average Depth at Peak Storage= 0.79' , Surface Width= 2.33'
Bank-Full Depth= 2.50' Flow Area= 4.9 sf, Capacity= 62.31 cfs

30.0" Round Pipe
n= 0.013
Length= 260.0' Slope= 0.0231 '/'
Inlet Invert= 640.00', Outlet Invert= 634.00'



Reach 17R: pipe from SVD to chambers



Summary for Pond 18P: Bed 1 - MC-3500 chambers

[79] Warning: Submerged Pond 19P Secondary device # 1 OUTLET by 1.92'

Inflow = 4.89 cfs @ 12.28 hrs, Volume= 0.406 af
Outflow = 2.48 cfs @ 12.61 hrs, Volume= 0.272 af, Atten= 49%, Lag= 20.1 min
Primary = 2.48 cfs @ 12.61 hrs, Volume= 0.272 af
Routed to Link 15L : East 30 arch RCP under GVR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 629.67' @ 12.61 hrs Surf.Area= 3,970 sf Storage= 8,387 cf

Plug-Flow detention time= 108.3 min calculated for 0.272 af (67% of inflow)
Center-of-Mass det. time= 56.8 min (840.4 - 783.6)

Volume	Invert	Avail.Storage	Storage Description
#1A	626.75'	6,403 cf	**28.50'W x 139.30'L x 6.75'H Field A** 26,798 cf Overall - 10,790 cf Embedded = 16,008 cf x 40.0% Voids
#2A	627.50'	10,790 cf	**ADS_StormTech MC-7200 +Cap** x 60 Inside #1 Effective Size= 91.2"W x 60.0"H => 26.68 sf x 6.59'L = 175.9 cf Overall Size= 100.0"W x 60.0"H x 6.95'L with 0.36' Overlap 60 Chambers in 3 Rows Cap Storage= 39.5 cf x 2 x 3 rows = 237.0 cf
		17,193 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	628.75'	**12.0" Round Culvert to outfall** L= 30.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 628.75' / 625.00' S= 0.1250 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=2.47 cfs @ 12.61 hrs HW=629.67' (Free Discharge)
1=Culvert to outfall (Inlet Controls 2.47 cfs @ 3.27 fps)

Pond 18P: Bed 1 - MC-3500 chambers - Chamber Wizard Field A

Chamber Model = ADS_StormTech MC-7200 +Cap (ADS StormTech® MC-7200 with cap volume)
Effective Size= 91.2"W x 60.0"H => 26.68 sf x 6.59'L = 175.9 cf
Overall Size= 100.0"W x 60.0"H x 6.95'L with 0.36' Overlap
Cap Storage= 39.5 cf x 2 x 3 rows = 237.0 cf

100.0" Wide + 9.0" Spacing = 109.0" C-C Row Spacing

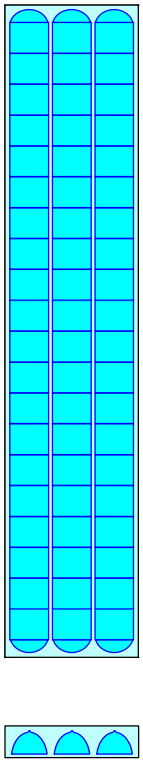
20 Chambers/Row x 6.59' Long +2.73' Cap Length x 2 = 137.30' Row Length +12.0" End Stone x 2 = 139.30' Base Length
3 Rows x 100.0" Wide + 9.0" Spacing x 2 + 12.0" Side Stone x 2 = 28.50' Base Width
9.0" Stone Base + 60.0" Chamber Height + 12.0" Stone Cover = 6.75' Field Height

60 Chambers x 175.9 cf + 39.5 cf Cap Volume x 2 x 3 Rows = 10,789.5 cf Chamber Storage

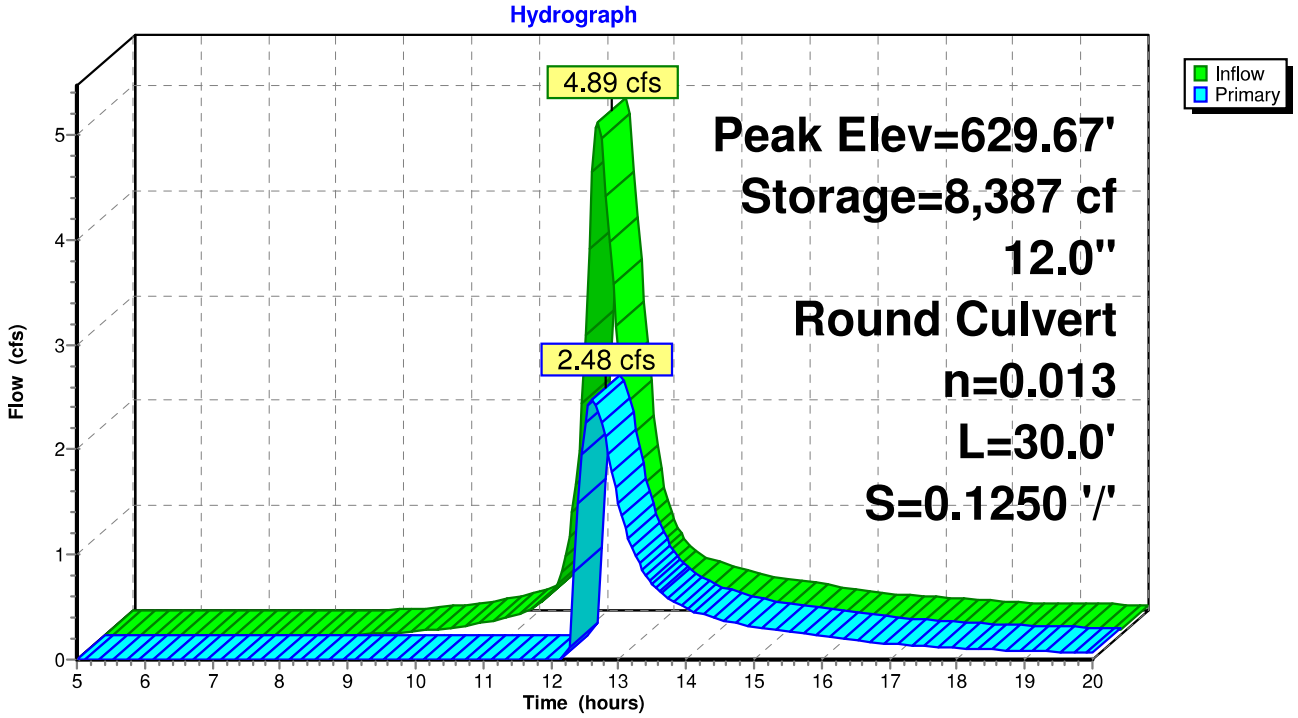
26,797.8 cf Field - 10,789.5 cf Chambers = 16,008.3 cf Stone x 40.0% Voids = 6,403.3 cf Stone Storage

Chamber Storage + Stone Storage = 17,192.9 cf = 0.395 af
Overall Storage Efficiency = 64.2%
Overall System Size = 139.30' x 28.50' x 6.75'

60 Chambers
992.5 cy Field
592.9 cy Stone



Pond 18P: Bed 1 - MC-3500 chambers



Summary for Pond 19P: Diversion MH

[57] Hint: Peaked at 632.19' (Flood elevation advised)

Inflow Area = 6.820 ac, 40.57% Impervious, Inflow Depth > 2.31" for 2-Year event
Inflow = 13.44 cfs @ 12.28 hrs, Volume= 1.315 af
Outflow = 13.44 cfs @ 12.28 hrs, Volume= 1.315 af, Atten= 0%, Lag= 0.0 min
Primary = 8.55 cfs @ 12.28 hrs, Volume= 0.910 af
Routed to Link 15L : East 30 arch RCP under GVR
Secondary = 4.89 cfs @ 12.28 hrs, Volume= 0.406 af
Routed to Pond 18P : Bed 1 - MC-3500 chambers

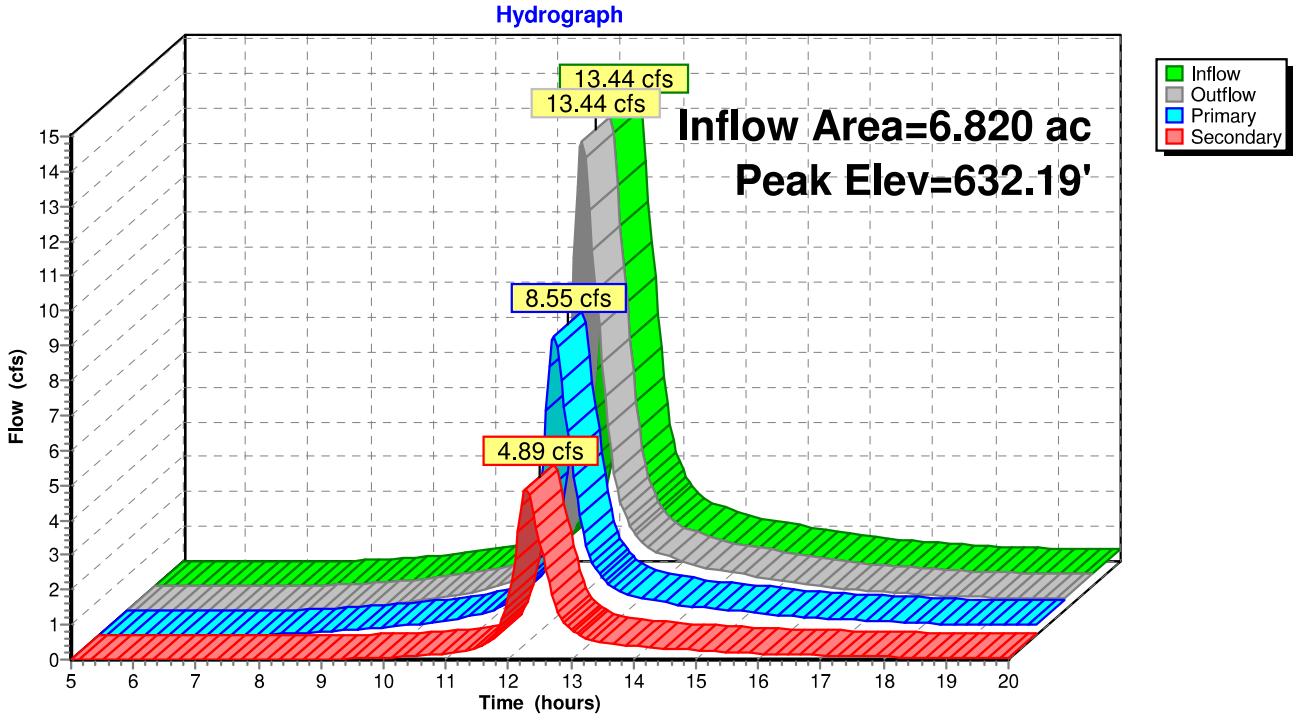
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 632.19' @ 12.28 hrs

Device	Routing	Invert	Outlet Devices
#1	Secondary	631.10'	**18.0" Round Pipe to chambers** L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 631.10' / 627.75' S= 0.1675 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Primary	631.00'	**30.0" Round Bypass pipe** L= 44.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 631.00' / 629.50' S= 0.0341 '/' Cc= 0.900 n= 0.013, Flow Area= 4.91 sf

Primary OutFlow Max=8.49 cfs @ 12.28 hrs HW=632.18' (Free Discharge)
↑—**2=Bypass pipe** (Inlet Controls 8.49 cfs @ 3.71 fps)

Secondary OutFlow Max=4.85 cfs @ 12.28 hrs HW=632.18' (Free Discharge)
↑—**1=Pipe to chambers** (Inlet Controls 4.85 cfs @ 3.55 fps)

Pond 19P: Diversion MH

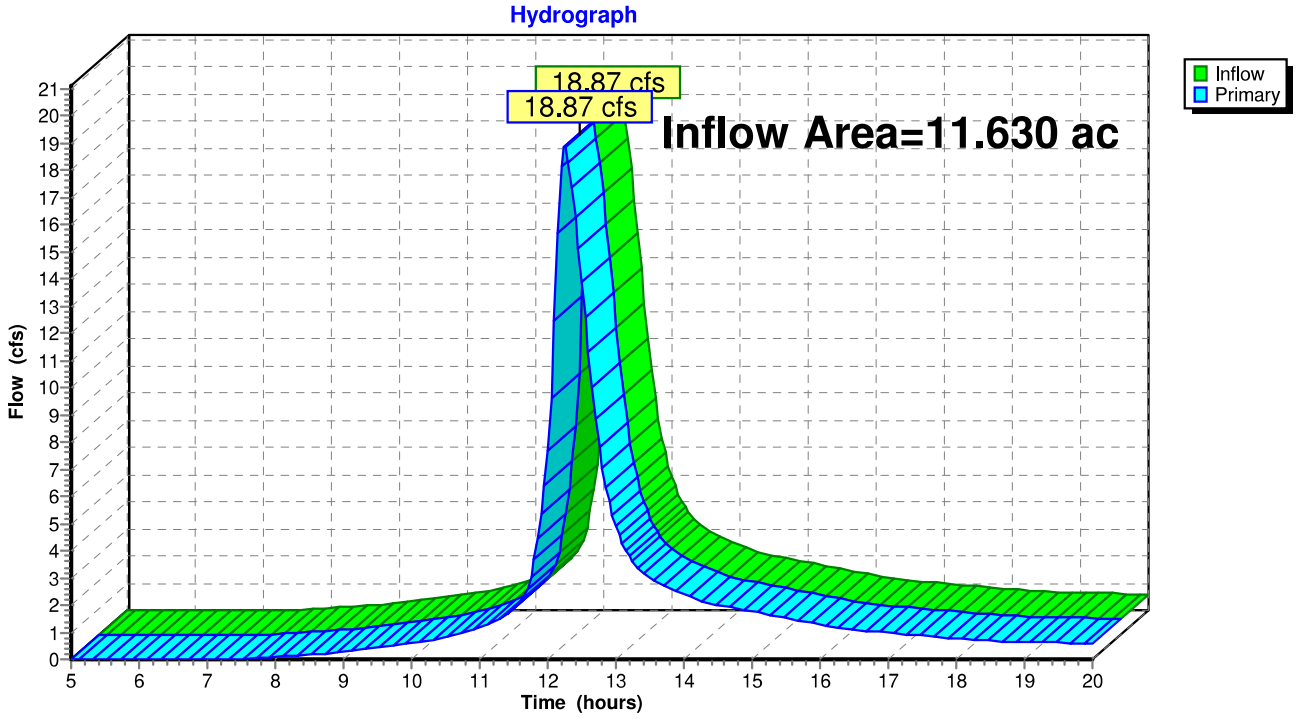


Summary for Link 15L: East 30 arch RCP under GVR

Inflow Area = 11.630 ac, 43.24% Impervious, Inflow Depth > 2.21" for 2-Year event
Inflow = 18.87 cfs @ 12.25 hrs, Volume= 2.146 af
Primary = 18.87 cfs @ 12.25 hrs, Volume= 2.146 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 15L: East 30 arch RCP under GVR



Summary for Subcatchment 13S: Basin 2-N PRE

[47] Hint: Peak is 169% of capacity of segment #2

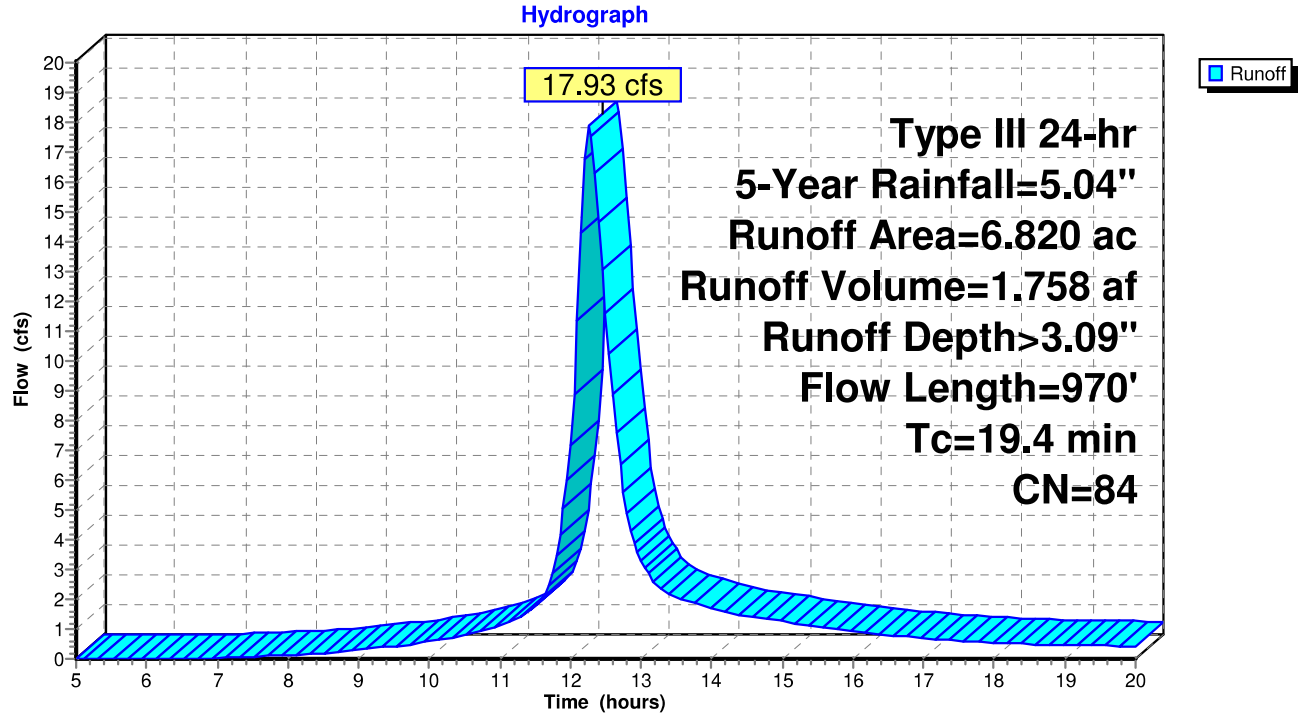
Runoff = 17.93 cfs @ 12.26 hrs, Volume= 1.758 af, Depth> 3.09"
Routed to Reach 17R : pipe from SVD to chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 5-Year Rainfall=5.04"

	Area (ac)	CN	Description
	2.430	90	1/8 acre lots, 65% imp, HSG C
	4.090	80	1/2 acre lots, 25% imp, HSG C
*	0.300	87	1/6 acre lots, 55% imp, HSG C
	6.820	84	Weighted Average
	4.053		59.43% Pervious Area
	2.767		40.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	180	0.0940	0.18		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
2.5	790	0.0200	5.30	10.59	**Channel Flow, ditch/pipe** Area= 2.0 sf Perim= 4.0' r= 0.50' n= 0.025
19.4	970	Total			

Subcatchment 13S: Basin 2-N PRE



Summary for Subcatchment 14S: Basin 2-S POST

[47] Hint: Peak is 283% of capacity of segment #2

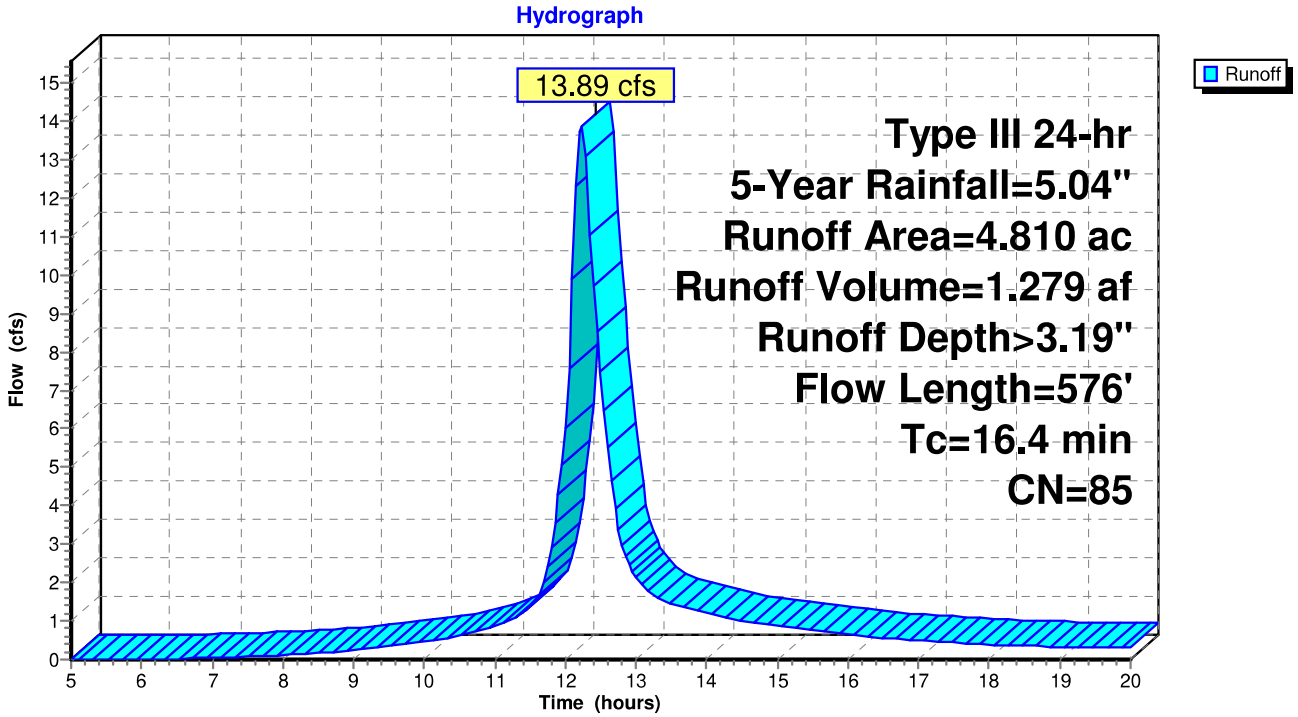
Runoff = 13.89 cfs @ 12.22 hrs, Volume= 1.279 af, Depth> 3.19"
Routed to Link 15L : East 30 arch RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 5-Year Rainfall=5.04"

	Area (ac)	CN	Description
	1.280	80	1/2 acre lots, 25% imp, HSG C
*	3.530	87	1/6 acre lots, 55% imp, HSG C
	4.810	85	Weighted Average
	2.548		52.98% Pervious Area
	2.261		47.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	96	0.0500	0.12		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
3.3	480	0.0210	2.45	4.91	**Channel Flow, Channel flow** Area= 2.0 sf Perim= 10.0' r= 0.20' n= 0.030
16.4	576	Total			

Subcatchment 14S: Basin 2-S POST



Summary for Reach 17R: pipe from SVD to chambers

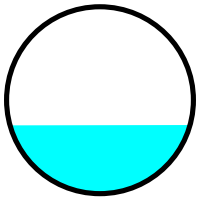
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 6.820 ac, 40.57% Impervious, Inflow Depth > 3.09" for 5-Year event
Inflow = 17.93 cfs @ 12.26 hrs, Volume= 1.758 af
Outflow = 17.80 cfs @ 12.28 hrs, Volume= 1.757 af, Atten= 1%, Lag= 0.7 min
Routed to Pond 19P : Diversion MH

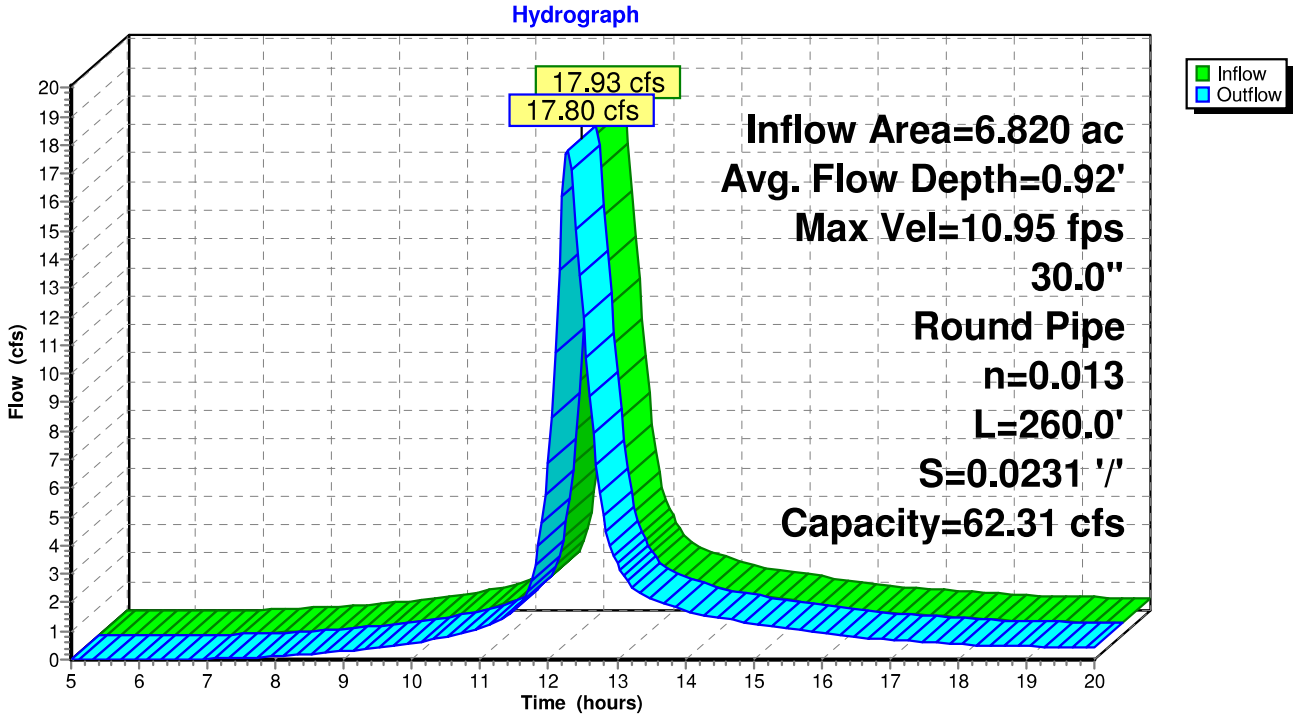
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 10.95 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 4.47 fps, Avg. Travel Time= 1.0 min

Peak Storage= 425 cf @ 12.27 hrs
Average Depth at Peak Storage= 0.92' , Surface Width= 2.41'
Bank-Full Depth= 2.50' Flow Area= 4.9 sf, Capacity= 62.31 cfs

30.0" Round Pipe
n= 0.013
Length= 260.0' Slope= 0.0231 '/'
Inlet Invert= 640.00', Outlet Invert= 634.00'



Reach 17R: pipe from SVD to chambers



Summary for Pond 18P: Bed 1 - MC-3500 chambers

[79] Warning: Submerged Pond 19P Secondary device # 1 OUTLET by 2.46'

Inflow	=	6.35 cfs @	12.28 hrs, Volume=	0.557 af
Outflow	=	3.71 cfs @	12.57 hrs, Volume=	0.422 af, Atten= 42%, Lag= 17.4 min
Primary	=	3.71 cfs @	12.57 hrs, Volume=	0.422 af

Routed to Link 15L : East 30 arch RCP under GVR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 630.21' @ 12.57 hrs Surf.Area= 3,970 sf Storage= 10,035 cf

Plug-Flow detention time= 95.1 min calculated for 0.422 af (76% of inflow)
Center-of-Mass det. time= 47.3 min (828.3 - 781.0)

Volume	Invert	Avail.Storage	Storage Description
#1A	626.75'	6,403 cf	**28.50'W x 139.30'L x 6.75'H Field A** 26,798 cf Overall - 10,790 cf Embedded = 16,008 cf x 40.0% Voids
#2A	627.50'	10,790 cf	**ADS_StormTech MC-7200 +Cap** x 60 Inside #1 Effective Size= 91.2"W x 60.0"H => 26.68 sf x 6.59'L = 175.9 cf Overall Size= 100.0"W x 60.0"H x 6.95'L with 0.36' Overlap 60 Chambers in 3 Rows Cap Storage= 39.5 cf x 2 x 3 rows = 237.0 cf
		17,193 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	628.75'	**12.0" Round Culvert to outfall** L= 30.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 628.75' / 625.00' S= 0.1250 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=3.70 cfs @ 12.57 hrs HW=630.21' (Free Discharge)
1=Culvert to outfall (Inlet Controls 3.70 cfs @ 4.71 fps)

Pond 18P: Bed 1 - MC-3500 chambers - Chamber Wizard Field A

Chamber Model = ADS_StormTech MC-7200 +Cap (ADS StormTech® MC-7200 with cap volume)
Effective Size= 91.2"W x 60.0"H => 26.68 sf x 6.59'L = 175.9 cf
Overall Size= 100.0"W x 60.0"H x 6.95'L with 0.36' Overlap
Cap Storage= 39.5 cf x 2 x 3 rows = 237.0 cf

100.0" Wide + 9.0" Spacing = 109.0" C-C Row Spacing

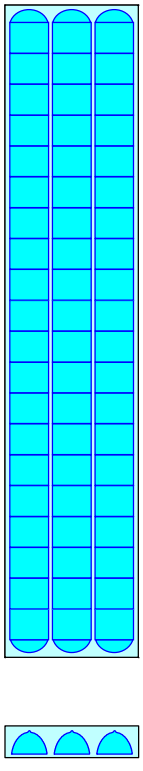
20 Chambers/Row x 6.59' Long +2.73' Cap Length x 2 = 137.30' Row Length +12.0" End Stone x 2 = 139.30' Base Length
3 Rows x 100.0" Wide + 9.0" Spacing x 2 + 12.0" Side Stone x 2 = 28.50' Base Width
9.0" Stone Base + 60.0" Chamber Height + 12.0" Stone Cover = 6.75' Field Height

60 Chambers x 175.9 cf + 39.5 cf Cap Volume x 2 x 3 Rows = 10,789.5 cf Chamber Storage

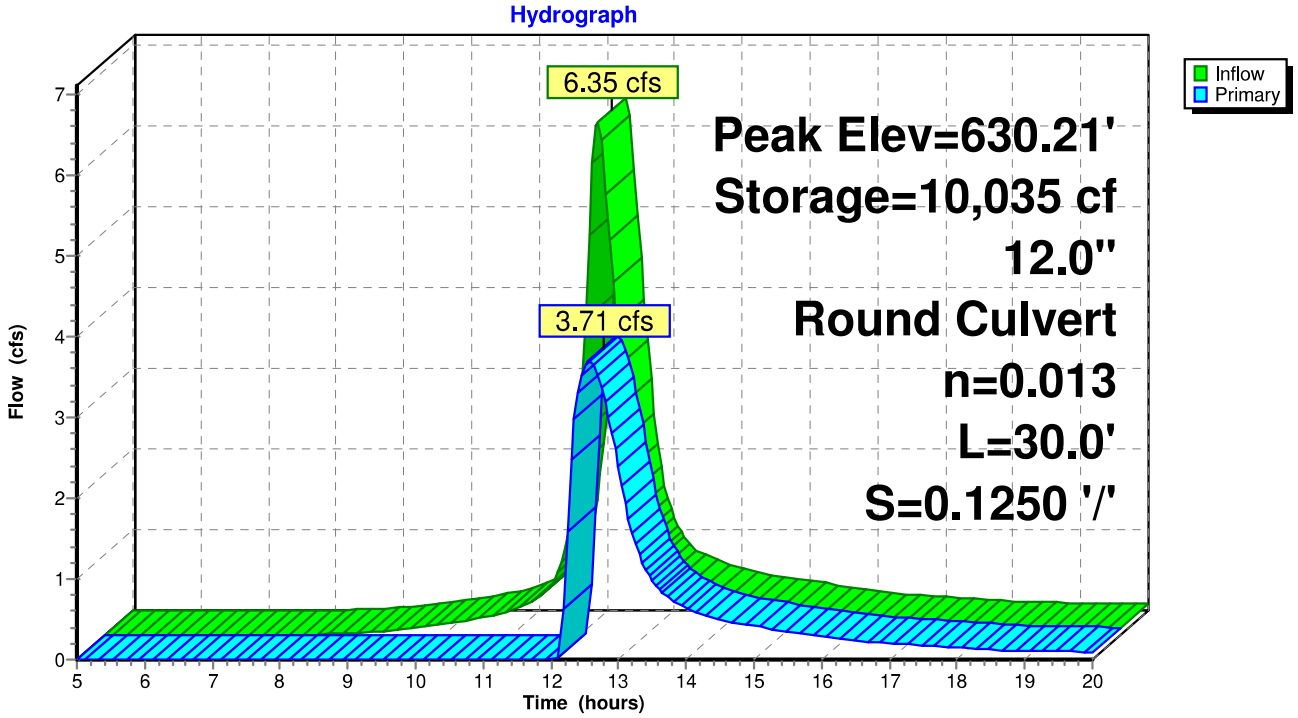
26,797.8 cf Field - 10,789.5 cf Chambers = 16,008.3 cf Stone x 40.0% Voids = 6,403.3 cf Stone Storage

Chamber Storage + Stone Storage = 17,192.9 cf = 0.395 af
Overall Storage Efficiency = 64.2%
Overall System Size = 139.30' x 28.50' x 6.75'

60 Chambers
992.5 cy Field
592.9 cy Stone



Pond 18P: Bed 1 - MC-3500 chambers



Summary for Pond 19P: Diversion MH

[57] Hint: Peaked at 632.40' (Flood elevation advised)

Inflow Area = 6.820 ac, 40.57% Impervious, Inflow Depth > 3.09" for 5-Year event
Inflow = 17.80 cfs @ 12.28 hrs, Volume= 1.757 af
Outflow = 17.80 cfs @ 12.28 hrs, Volume= 1.757 af, Atten= 0%, Lag= 0.0 min
Primary = 11.46 cfs @ 12.28 hrs, Volume= 1.199 af
Routed to Link 15L : East 30 arch RCP under GVR
Secondary = 6.35 cfs @ 12.28 hrs, Volume= 0.557 af
Routed to Pond 18P : Bed 1 - MC-3500 chambers

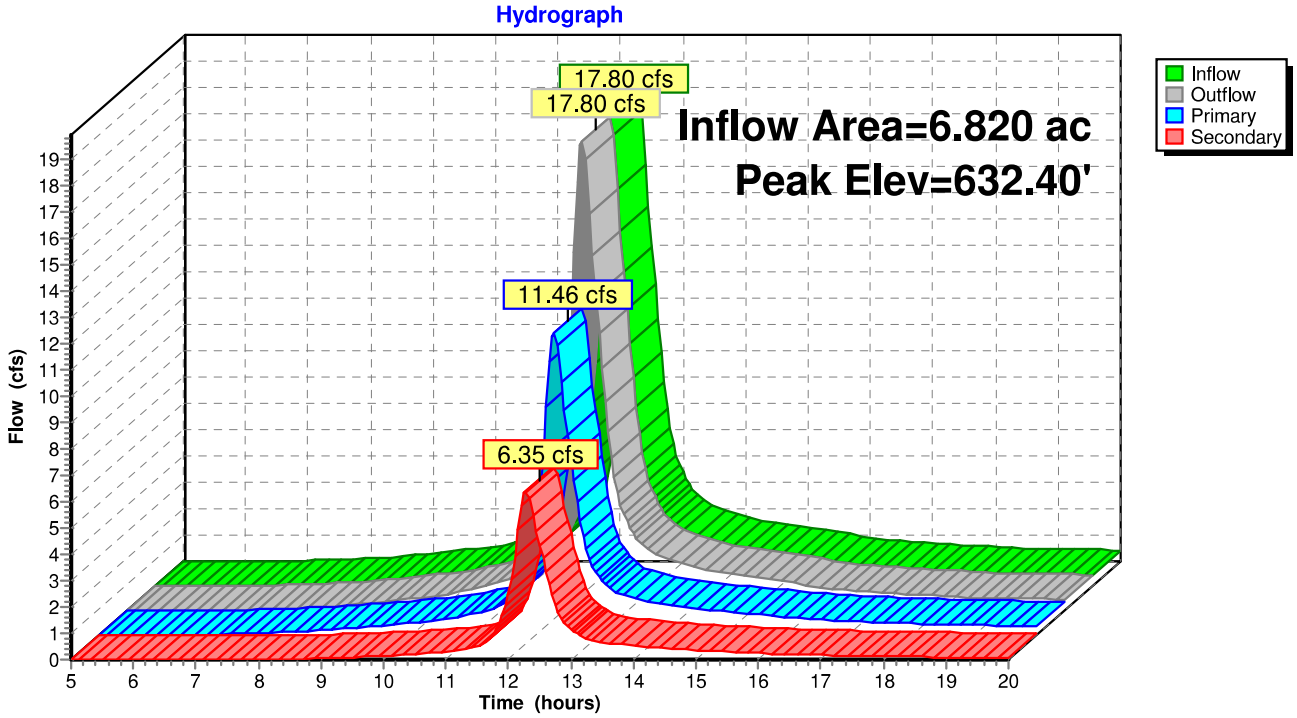
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 632.40' @ 12.28 hrs

Device	Routing	Invert	Outlet Devices
#1	Secondary	631.10'	**18.0" Round Pipe to chambers** L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 631.10' / 627.75' S= 0.1675 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Primary	631.00'	**30.0" Round Bypass pipe** L= 44.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 631.00' / 629.50' S= 0.0341 '/' Cc= 0.900 n= 0.013, Flow Area= 4.91 sf

Primary OutFlow Max=11.37 cfs @ 12.28 hrs HW=632.40' (Free Discharge)
↑—**2=Bypass pipe** (Inlet Controls 11.37 cfs @ 4.03 fps)

Secondary OutFlow Max=6.30 cfs @ 12.28 hrs HW=632.40' (Free Discharge)
↑—**1=Pipe to chambers** (Inlet Controls 6.30 cfs @ 3.88 fps)

Pond 19P: Diversion MH

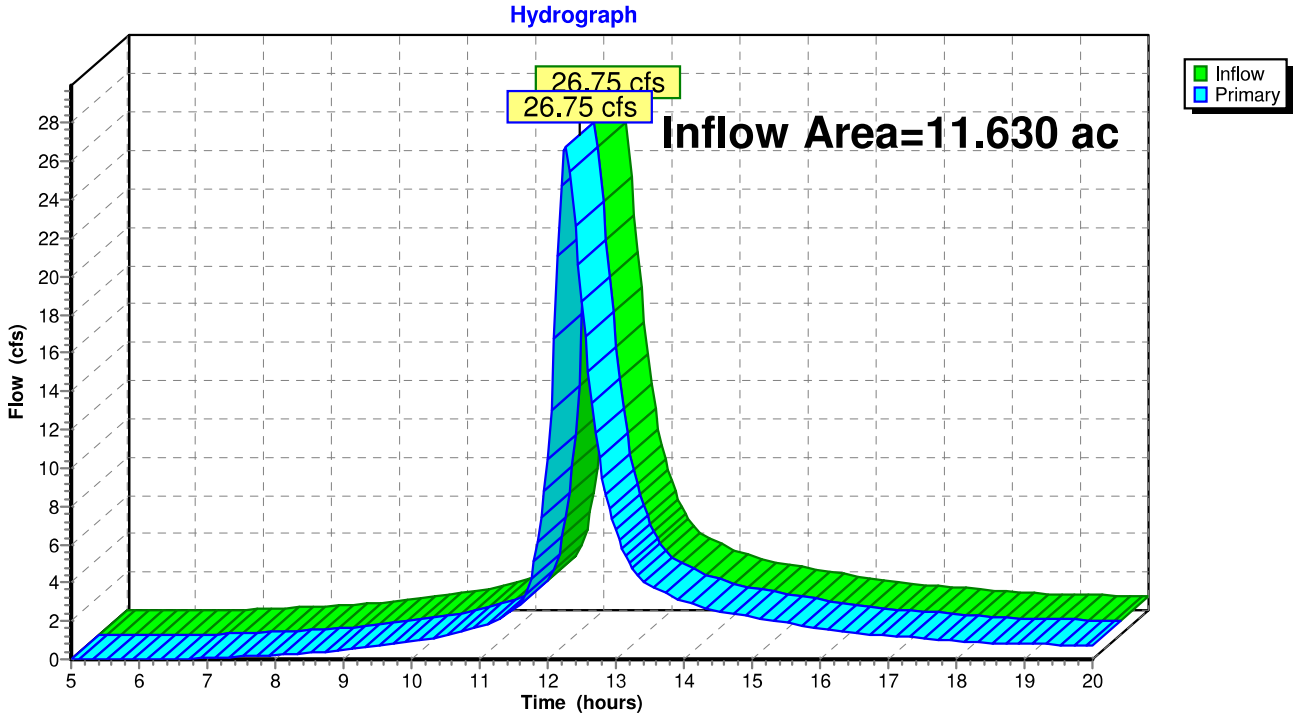


Summary for Link 15L: East 30 arch RCP under GVR

Inflow Area = 11.630 ac, 43.24% Impervious, Inflow Depth > 2.99" for 5-Year event
Inflow = 26.75 cfs @ 12.27 hrs, Volume= 2.901 af
Primary = 26.75 cfs @ 12.27 hrs, Volume= 2.901 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 15L: East 30 arch RCP under GVR



Summary for Subcatchment 13S: Basin 2-N PRE

[47] Hint: Peak is 208% of capacity of segment #2

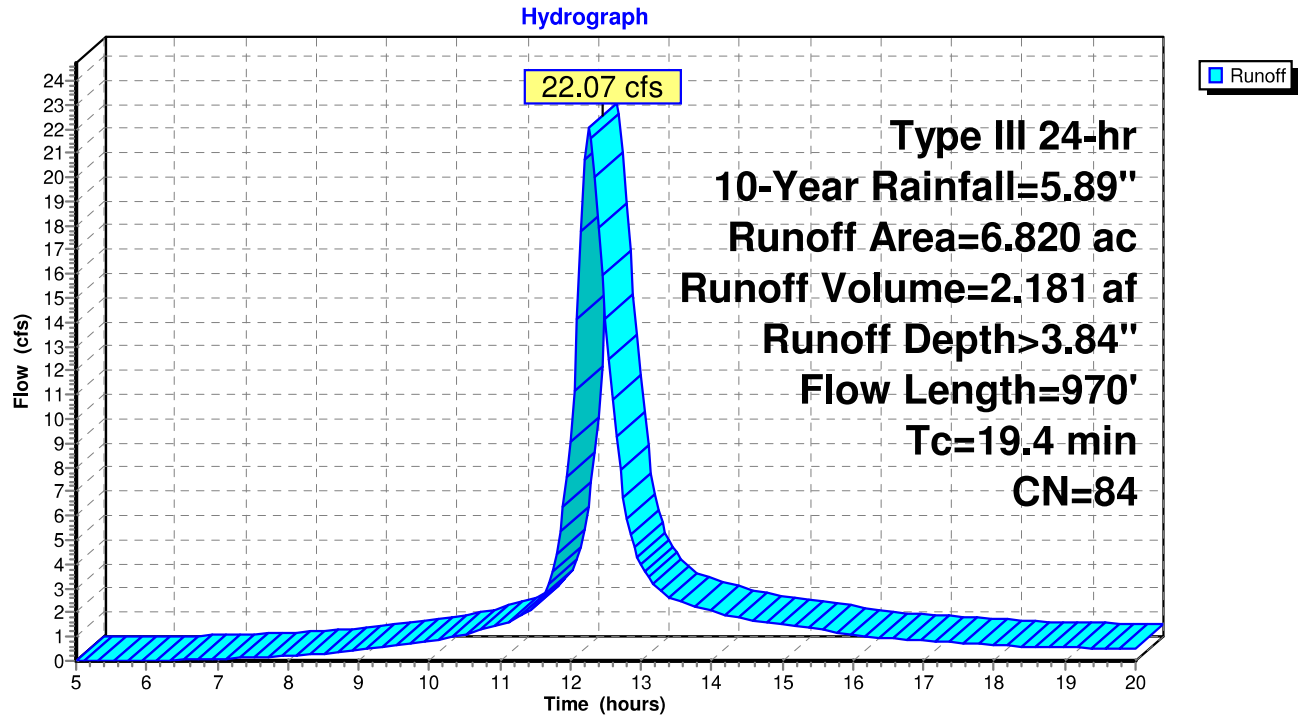
Runoff = 22.07 cfs @ 12.26 hrs, Volume= 2.181 af, Depth> 3.84"
Routed to Reach 17R : pipe from SVD to chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.89"

	Area (ac)	CN	Description
	2.430	90	1/8 acre lots, 65% imp, HSG C
	4.090	80	1/2 acre lots, 25% imp, HSG C
*	0.300	87	1/6 acre lots, 55% imp, HSG C
	6.820	84	Weighted Average
	4.053		59.43% Pervious Area
	2.767		40.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	180	0.0940	0.18		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
2.5	790	0.0200	5.30	10.59	**Channel Flow, ditch/pipe** Area= 2.0 sf Perim= 4.0' r= 0.50' n= 0.025
19.4	970	Total			

Subcatchment 13S: Basin 2-N PRE



Summary for Subcatchment 14S: Basin 2-S POST

[47] Hint: Peak is 346% of capacity of segment #2

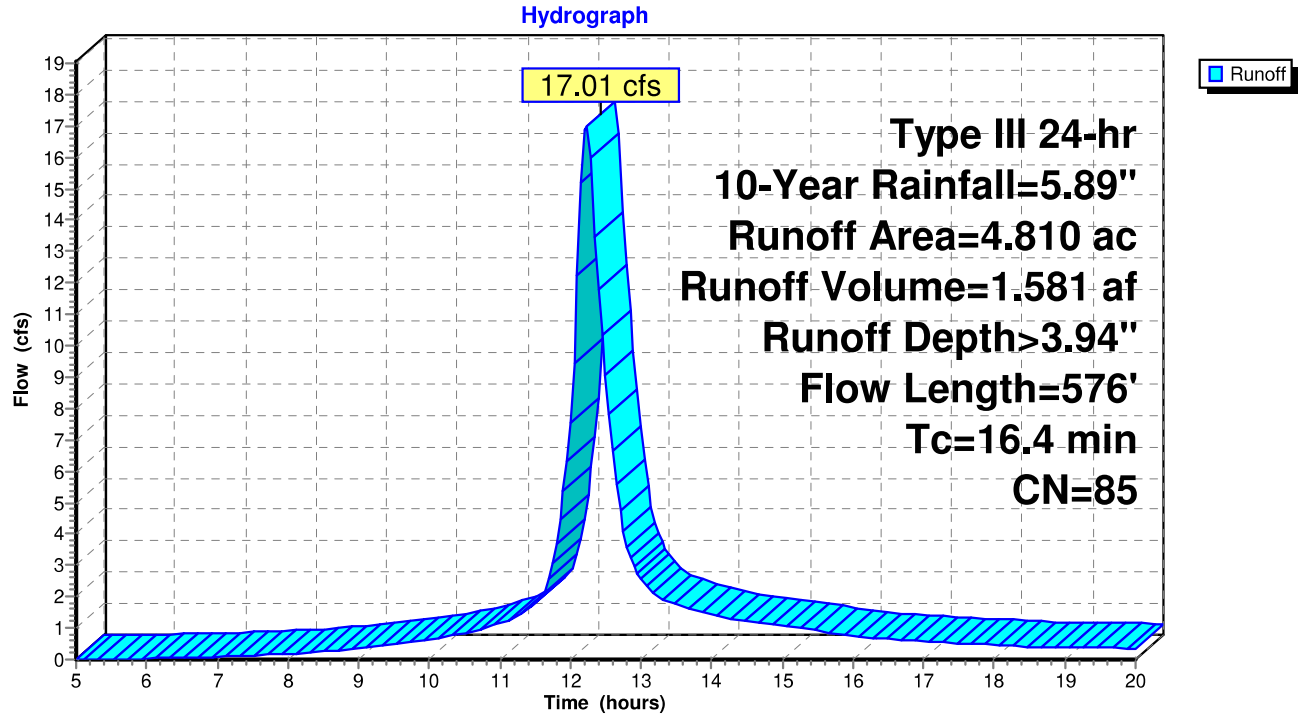
Runoff = 17.01 cfs @ 12.22 hrs, Volume= 1.581 af, Depth> 3.94"
Routed to Link 15L : East 30 arch RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 10-Year Rainfall=5.89"

	Area (ac)	CN	Description
	1.280	80	1/2 acre lots, 25% imp, HSG C
*	3.530	87	1/6 acre lots, 55% imp, HSG C
	4.810	85	Weighted Average
	2.548		52.98% Pervious Area
	2.261		47.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	96	0.0500	0.12		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
3.3	480	0.0210	2.45	4.91	**Channel Flow, Channel flow** Area= 2.0 sf Perim= 10.0' r= 0.20' n= 0.030
16.4	576	Total			

Subcatchment 14S: Basin 2-S POST



Summary for Reach 17R: pipe from SVD to chambers

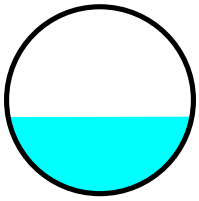
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 6.820 ac, 40.57% Impervious, Inflow Depth > 3.84" for 10-Year event
Inflow = 22.07 cfs @ 12.26 hrs, Volume= 2.181 af
Outflow = 21.98 cfs @ 12.27 hrs, Volume= 2.180 af, Atten= 0%, Lag= 0.6 min
Routed to Pond 19P : Diversion MH

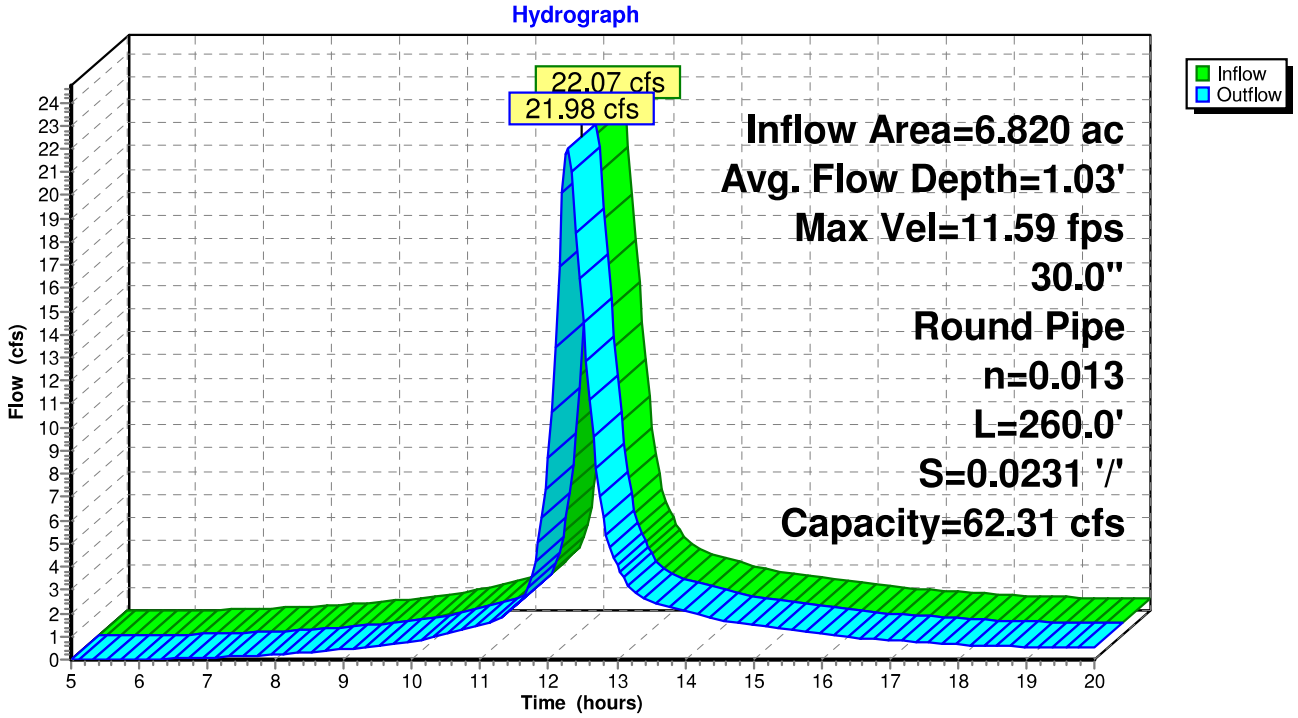
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 11.59 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 4.67 fps, Avg. Travel Time= 0.9 min

Peak Storage= 494 cf @ 12.27 hrs
Average Depth at Peak Storage= 1.03' , Surface Width= 2.46'
Bank-Full Depth= 2.50' Flow Area= 4.9 sf, Capacity= 62.31 cfs

30.0" Round Pipe
n= 0.013
Length= 260.0' Slope= 0.0231 '/'
Inlet Invert= 640.00', Outlet Invert= 634.00'



Reach 17R: pipe from SVD to chambers



Summary for Pond 18P: Bed 1 - MC-3500 chambers

[79] Warning: Submerged Pond 19P Secondary device # 1 OUTLET by 3.00'

Inflow = 7.44 cfs @ 12.27 hrs, Volume= 0.700 af
Outflow = 4.63 cfs @ 12.55 hrs, Volume= 0.563 af, Atten= 38%, Lag= 16.9 min
Primary = 4.63 cfs @ 12.55 hrs, Volume= 0.563 af
Routed to Link 15L : East 30 arch RCP under GVR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 630.75' @ 12.55 hrs Surf.Area= 3,970 sf Storage= 11,597 cf

Plug-Flow detention time= 87.1 min calculated for 0.561 af (80% of inflow)
Center-of-Mass det. time= 44.3 min (823.0 - 778.7)

Volume	Invert	Avail.Storage	Storage Description
#1A	626.75'	6,403 cf	**28.50'W x 139.30'L x 6.75'H Field A** 26,798 cf Overall - 10,790 cf Embedded = 16,008 cf x 40.0% Voids
#2A	627.50'	10,790 cf	**ADS_StormTech MC-7200 +Cap** x 60 Inside #1 Effective Size= 91.2"W x 60.0"H => 26.68 sf x 6.59'L = 175.9 cf Overall Size= 100.0"W x 60.0"H x 6.95'L with 0.36' Overlap 60 Chambers in 3 Rows Cap Storage= 39.5 cf x 2 x 3 rows = 237.0 cf
		17,193 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	628.75'	**12.0" Round Culvert to outfall** L= 30.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 628.75' / 625.00' S= 0.1250 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=4.62 cfs @ 12.55 hrs HW=630.74' (Free Discharge)
1=Culvert to outfall (Inlet Controls 4.62 cfs @ 5.89 fps)

Pond 18P: Bed 1 - MC-3500 chambers - Chamber Wizard Field A

Chamber Model = ADS_StormTech MC-7200 +Cap (ADS StormTech® MC-7200 with cap volume)
Effective Size= 91.2"W x 60.0"H => 26.68 sf x 6.59'L = 175.9 cf
Overall Size= 100.0"W x 60.0"H x 6.95'L with 0.36' Overlap
Cap Storage= 39.5 cf x 2 x 3 rows = 237.0 cf

100.0" Wide + 9.0" Spacing = 109.0" C-C Row Spacing

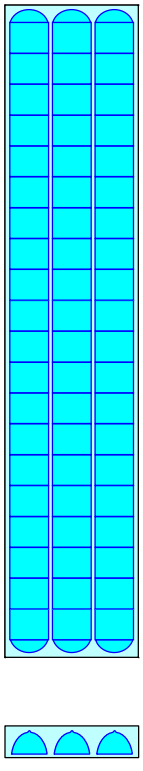
20 Chambers/Row x 6.59' Long +2.73' Cap Length x 2 = 137.30' Row Length +12.0" End Stone x 2 = 139.30' Base Length
3 Rows x 100.0" Wide + 9.0" Spacing x 2 + 12.0" Side Stone x 2 = 28.50' Base Width
9.0" Stone Base + 60.0" Chamber Height + 12.0" Stone Cover = 6.75' Field Height

60 Chambers x 175.9 cf + 39.5 cf Cap Volume x 2 x 3 Rows = 10,789.5 cf Chamber Storage

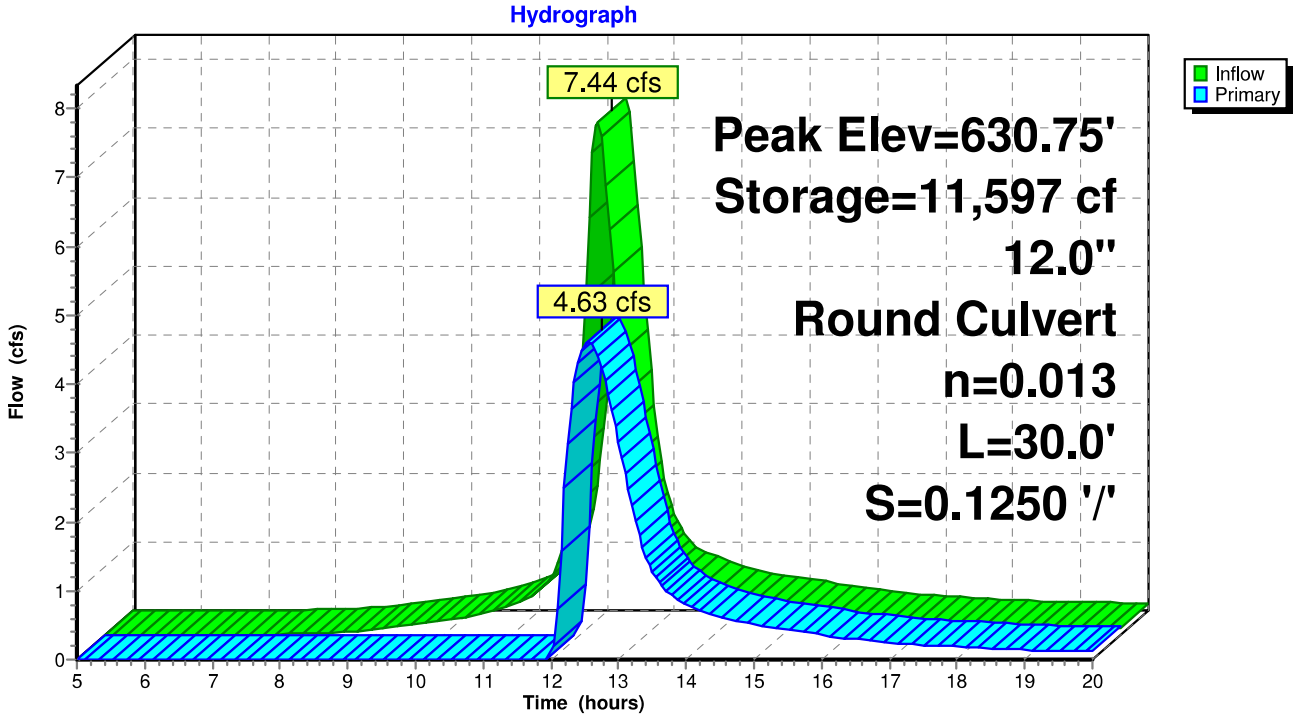
26,797.8 cf Field - 10,789.5 cf Chambers = 16,008.3 cf Stone x 40.0% Voids = 6,403.3 cf Stone Storage

Chamber Storage + Stone Storage = 17,192.9 cf = 0.395 af
Overall Storage Efficiency = 64.2%
Overall System Size = 139.30' x 28.50' x 6.75'

60 Chambers
992.5 cy Field
592.9 cy Stone



Pond 18P: Bed 1 - MC-3500 chambers



Summary for Pond 19P: Diversion MH

[57] Hint: Peaked at 632.62' (Flood elevation advised)

Inflow Area = 6.820 ac, 40.57% Impervious, Inflow Depth > 3.84" for 10-Year event
Inflow = 21.98 cfs @ 12.27 hrs, Volume= 2.180 af
Outflow = 21.98 cfs @ 12.27 hrs, Volume= 2.180 af, Atten= 0%, Lag= 0.0 min
Primary = 14.53 cfs @ 12.27 hrs, Volume= 1.481 af
Routed to Link 15L : East 30 arch RCP under GVR
Secondary = 7.44 cfs @ 12.27 hrs, Volume= 0.700 af
Routed to Pond 18P : Bed 1 - MC-3500 chambers

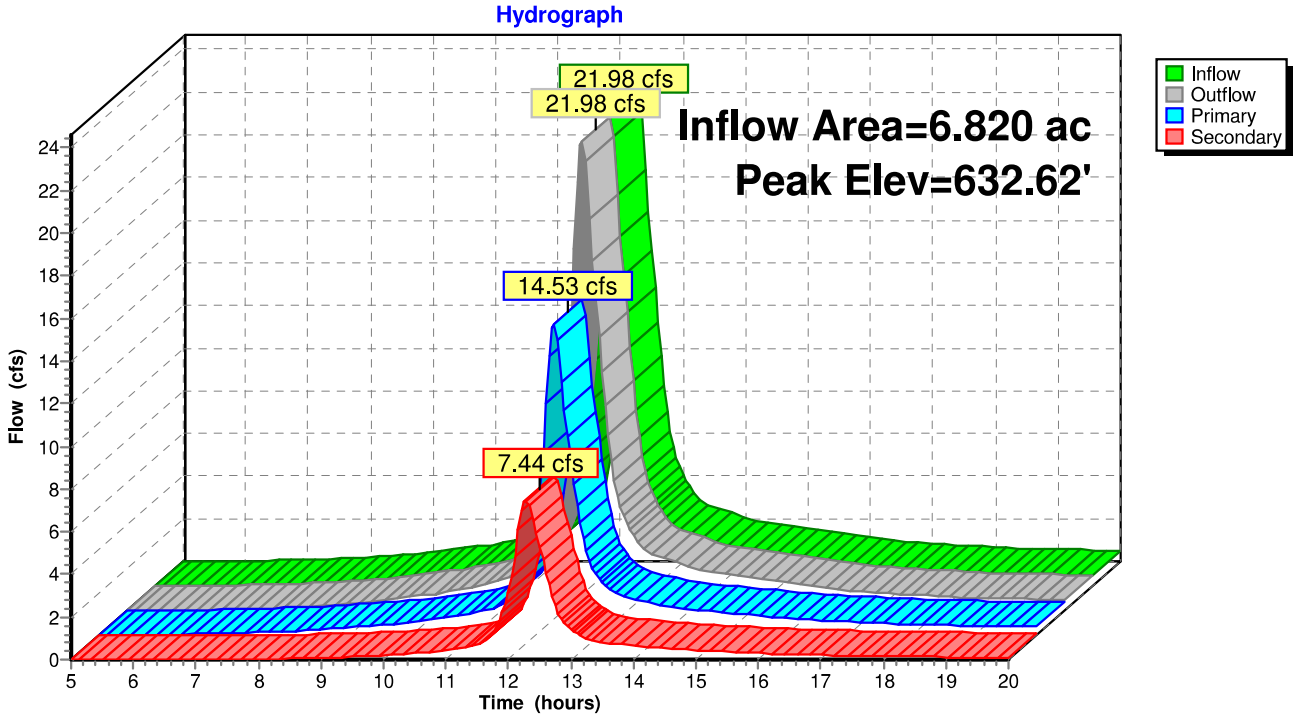
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 632.62' @ 12.27 hrs

Device	Routing	Invert	Outlet Devices
#1	Secondary	631.10'	**18.0" Round Pipe to chambers** L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 631.10' / 627.75' S= 0.1675 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Primary	631.00'	**30.0" Round Bypass pipe** L= 44.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 631.00' / 629.50' S= 0.0341 '/' Cc= 0.900 n= 0.013, Flow Area= 4.91 sf

Primary OutFlow Max=14.36 cfs @ 12.27 hrs HW=632.61' (Free Discharge)
↑—**2=Bypass pipe** (Inlet Controls 14.36 cfs @ 4.31 fps)

Secondary OutFlow Max=7.39 cfs @ 12.27 hrs HW=632.61' (Free Discharge)
↑—**1=Pipe to chambers** (Inlet Controls 7.39 cfs @ 4.18 fps)

Pond 19P: Diversion MH

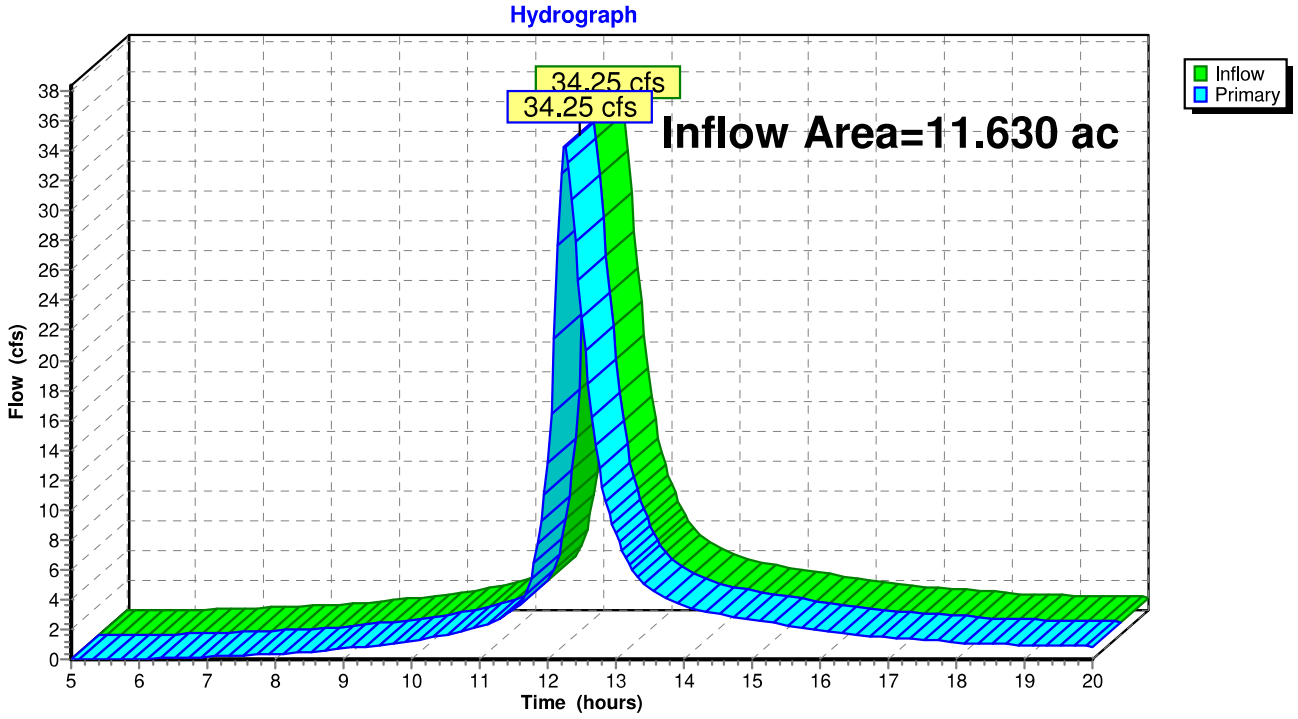


Summary for Link 15L: East 30 arch RCP under GVR

Inflow Area = 11.630 ac, 43.24% Impervious, Inflow Depth > 3.74" for 10-Year event
Inflow = 34.25 cfs @ 12.26 hrs, Volume= 3.624 af
Primary = 34.25 cfs @ 12.26 hrs, Volume= 3.624 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 15L: East 30 arch RCP under GVR



Summary for Subcatchment 13S: Basin 2-N PRE

[47] Hint: Peak is 269% of capacity of segment #2

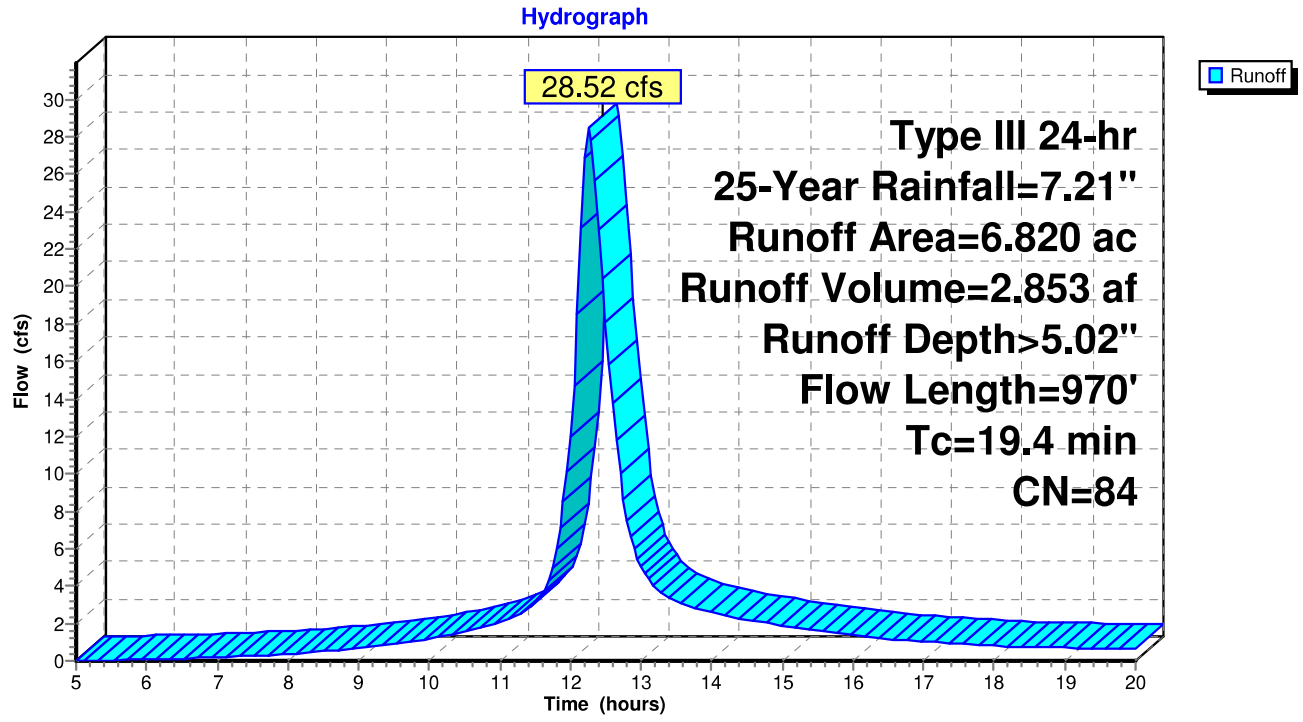
Runoff = 28.52 cfs @ 12.26 hrs, Volume= 2.853 af, Depth> 5.02"
Routed to Reach 17R : pipe from SVD to chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=7.21"

	Area (ac)	CN	Description
	2.430	90	1/8 acre lots, 65% imp, HSG C
	4.090	80	1/2 acre lots, 25% imp, HSG C
*	0.300	87	1/6 acre lots, 55% imp, HSG C
	6.820	84	Weighted Average
	4.053		59.43% Pervious Area
	2.767		40.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	180	0.0940	0.18		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
2.5	790	0.0200	5.30	10.59	**Channel Flow, ditch/pipe** Area= 2.0 sf Perim= 4.0' r= 0.50' n= 0.025
19.4	970	Total			

Subcatchment 13S: Basin 2-N PRE



Summary for Subcatchment 14S: Basin 2-S POST

[47] Hint: Peak is 445% of capacity of segment #2

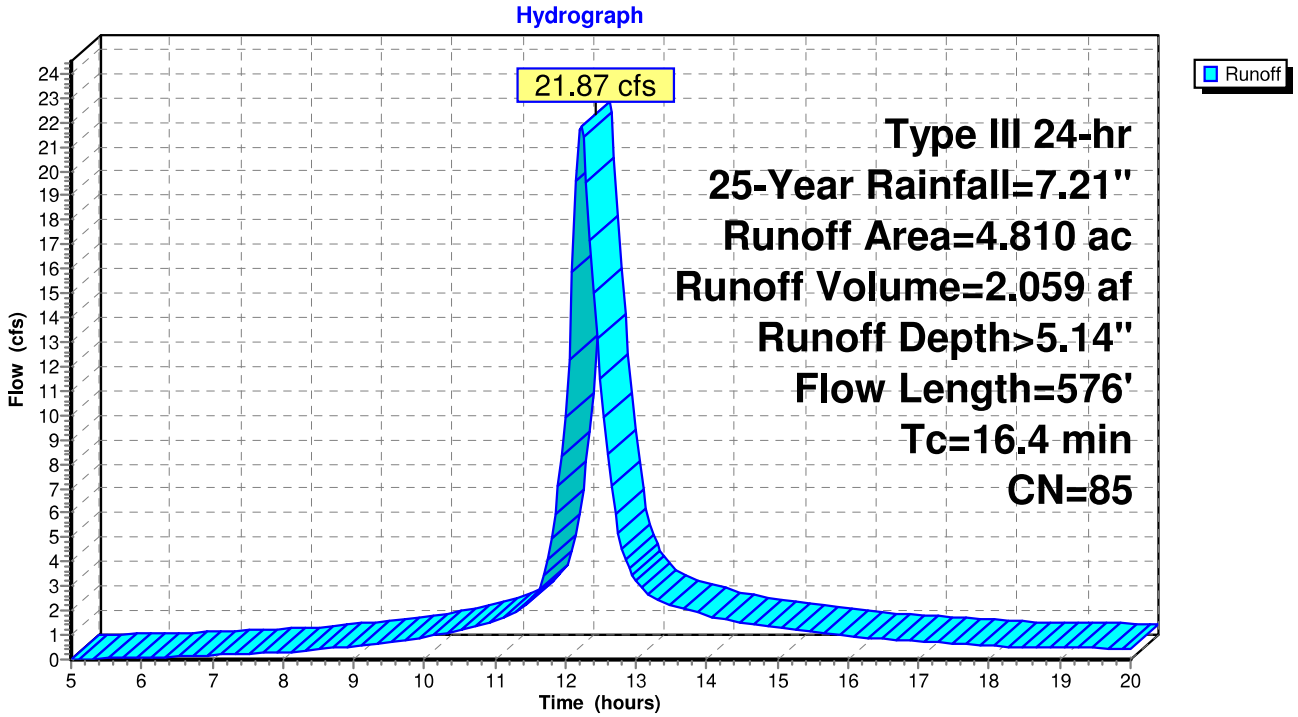
Runoff = 21.87 cfs @ 12.22 hrs, Volume= 2.059 af, Depth> 5.14"
Routed to Link 15L : East 30 arch RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 25-Year Rainfall=7.21"

	Area (ac)	CN	Description
	1.280	80	1/2 acre lots, 25% imp, HSG C
*	3.530	87	1/6 acre lots, 55% imp, HSG C
	4.810	85	Weighted Average
	2.548		52.98% Pervious Area
	2.261		47.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	96	0.0500	0.12		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
3.3	480	0.0210	2.45	4.91	**Channel Flow, Channel flow** Area= 2.0 sf Perim= 10.0' r= 0.20' n= 0.030
16.4	576	Total			

Subcatchment 14S: Basin 2-S POST



Summary for Reach 17R: pipe from SVD to chambers

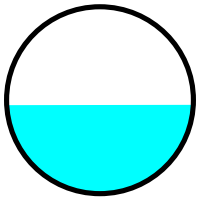
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 6.820 ac, 40.57% Impervious, Inflow Depth > 5.02" for 25-Year event
Inflow = 28.52 cfs @ 12.26 hrs, Volume= 2.853 af
Outflow = 28.40 cfs @ 12.27 hrs, Volume= 2.852 af, Atten= 0%, Lag= 0.6 min
Routed to Pond 19P : Diversion MH

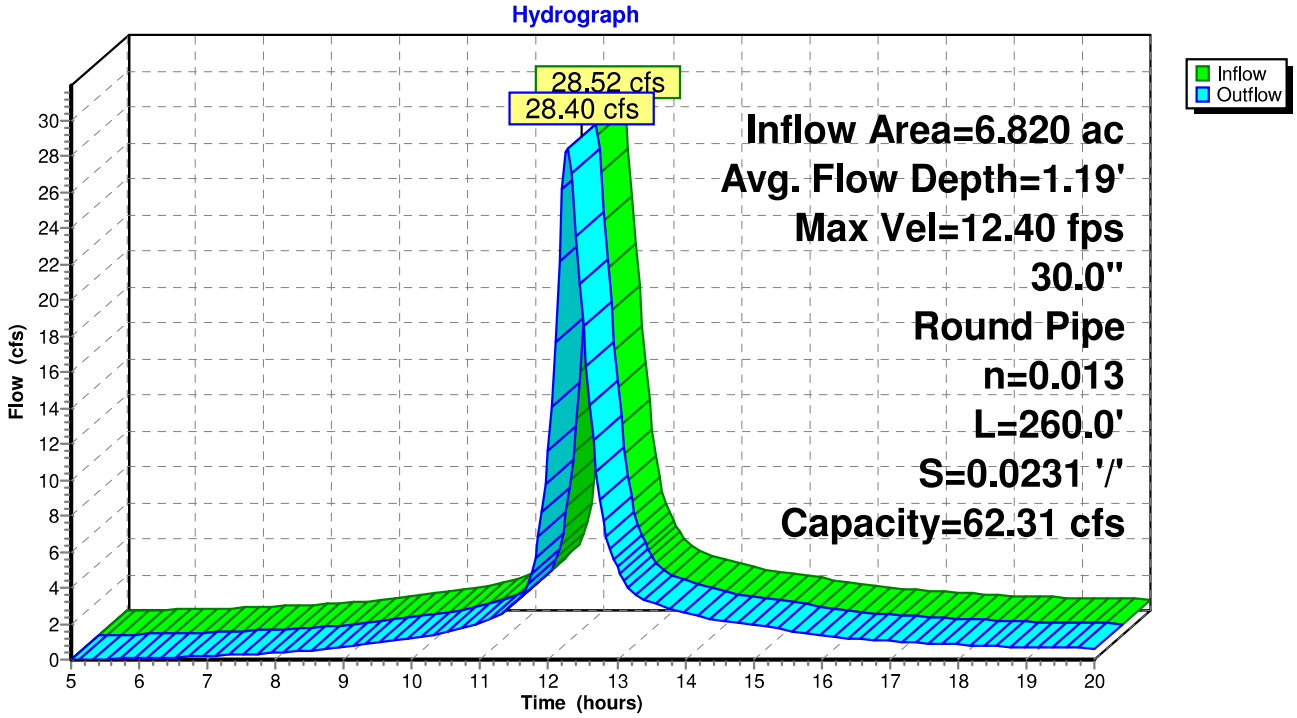
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 12.40 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 4.99 fps, Avg. Travel Time= 0.9 min

Peak Storage= 597 cf @ 12.26 hrs
Average Depth at Peak Storage= 1.19' , Surface Width= 2.50'
Bank-Full Depth= 2.50' Flow Area= 4.9 sf, Capacity= 62.31 cfs

30.0" Round Pipe
n= 0.013
Length= 260.0' Slope= 0.0231 '/'
Inlet Invert= 640.00', Outlet Invert= 634.00'



Reach 17R: pipe from SVD to chambers



Summary for Pond 18P: Bed 1 - MC-3500 chambers

[79] Warning: Submerged Pond 19P Secondary device # 1 INLET by 0.45'

Inflow = 8.91 cfs @ 12.27 hrs, Volume= 0.917 af
Outflow = 5.73 cfs @ 12.56 hrs, Volume= 0.779 af, Atten= 36%, Lag= 17.4 min
Primary = 5.73 cfs @ 12.56 hrs, Volume= 0.779 af
Routed to Link 15L : East 30 arch RCP under GVR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 631.55' @ 12.56 hrs Surf.Area= 3,970 sf Storage= 13,717 cf

Plug-Flow detention time= 80.7 min calculated for 0.776 af (85% of inflow)
Center-of-Mass det. time= 42.9 min (818.4 - 775.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	626.75'	6,403 cf	**28.50'W x 139.30'L x 6.75'H Field A** 26,798 cf Overall - 10,790 cf Embedded = 16,008 cf x 40.0% Voids
#2A	627.50'	10,790 cf	**ADS_StormTech MC-7200 +Cap** x 60 Inside #1 Effective Size= 91.2"W x 60.0"H => 26.68 sf x 6.59'L = 175.9 cf Overall Size= 100.0"W x 60.0"H x 6.95'L with 0.36' Overlap 60 Chambers in 3 Rows Cap Storage= 39.5 cf x 2 x 3 rows = 237.0 cf
		17,193 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	628.75'	**12.0" Round Culvert to outfall** L= 30.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 628.75' / 625.00' S= 0.1250 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=5.73 cfs @ 12.56 hrs HW=631.54' (Free Discharge)
1=Culvert to outfall (Inlet Controls 5.73 cfs @ 7.29 fps)

Pond 18P: Bed 1 - MC-3500 chambers - Chamber Wizard Field A

Chamber Model = ADS_StormTech MC-7200 +Cap (ADS StormTech® MC-7200 with cap volume)
Effective Size= 91.2"W x 60.0"H => 26.68 sf x 6.59'L = 175.9 cf
Overall Size= 100.0"W x 60.0"H x 6.95'L with 0.36' Overlap
Cap Storage= 39.5 cf x 2 x 3 rows = 237.0 cf

100.0" Wide + 9.0" Spacing = 109.0" C-C Row Spacing

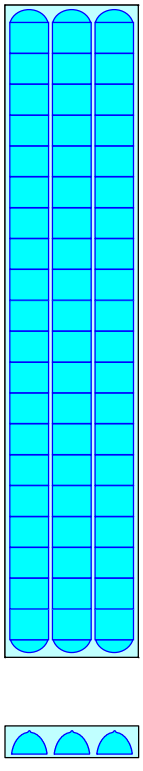
20 Chambers/Row x 6.59' Long +2.73' Cap Length x 2 = 137.30' Row Length +12.0" End Stone x 2 = 139.30' Base Length
3 Rows x 100.0" Wide + 9.0" Spacing x 2 + 12.0" Side Stone x 2 = 28.50' Base Width
9.0" Stone Base + 60.0" Chamber Height + 12.0" Stone Cover = 6.75' Field Height

60 Chambers x 175.9 cf + 39.5 cf Cap Volume x 2 x 3 Rows = 10,789.5 cf Chamber Storage

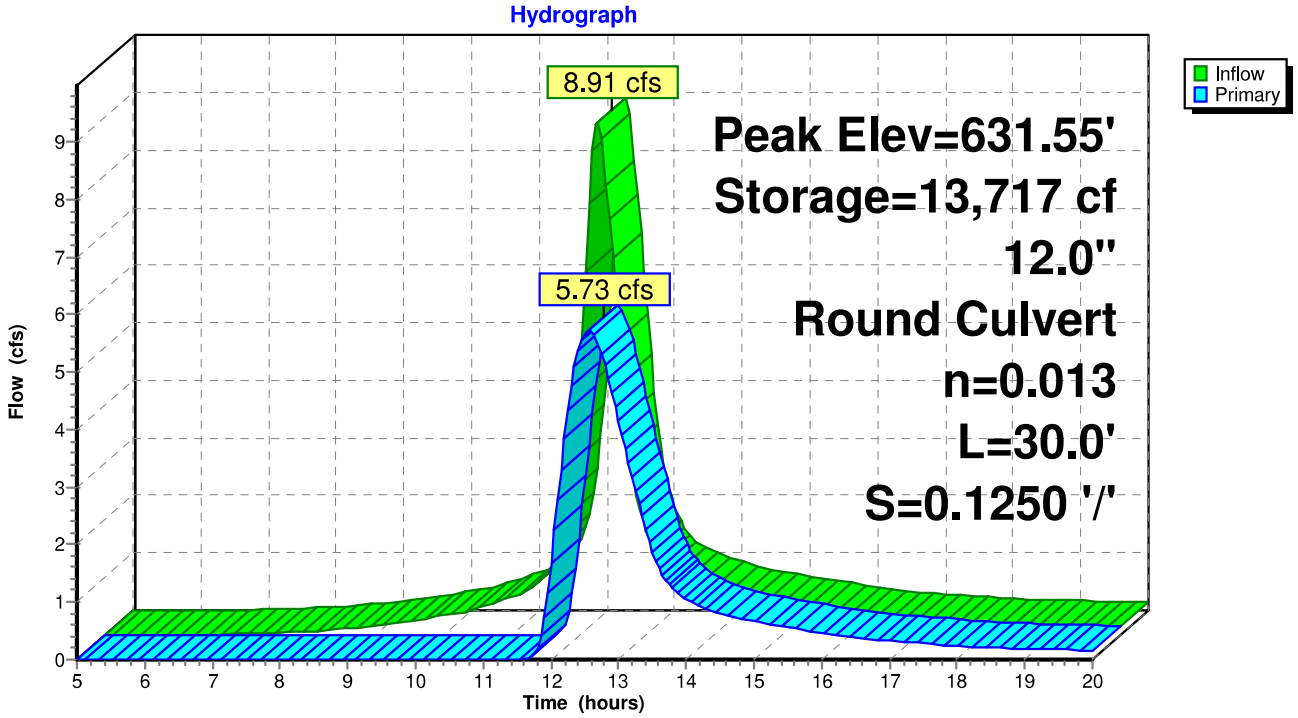
26,797.8 cf Field - 10,789.5 cf Chambers = 16,008.3 cf Stone x 40.0% Voids = 6,403.3 cf Stone Storage

Chamber Storage + Stone Storage = 17,192.9 cf = 0.395 af
Overall Storage Efficiency = 64.2%
Overall System Size = 139.30' x 28.50' x 6.75'

60 Chambers
992.5 cy Field
592.9 cy Stone



Pond 18P: Bed 1 - MC-3500 chambers



Summary for Pond 19P: Diversion MH

[57] Hint: Peaked at 632.95' (Flood elevation advised)

Inflow Area = 6.820 ac, 40.57% Impervious, Inflow Depth > 5.02" for 25-Year event
Inflow = 28.40 cfs @ 12.27 hrs, Volume= 2.852 af
Outflow = 28.40 cfs @ 12.27 hrs, Volume= 2.852 af, Atten= 0%, Lag= 0.0 min
Primary = 19.49 cfs @ 12.27 hrs, Volume= 1.935 af
Routed to Link 15L : East 30 arch RCP under GVR
Secondary = 8.91 cfs @ 12.27 hrs, Volume= 0.917 af
Routed to Pond 18P : Bed 1 - MC-3500 chambers

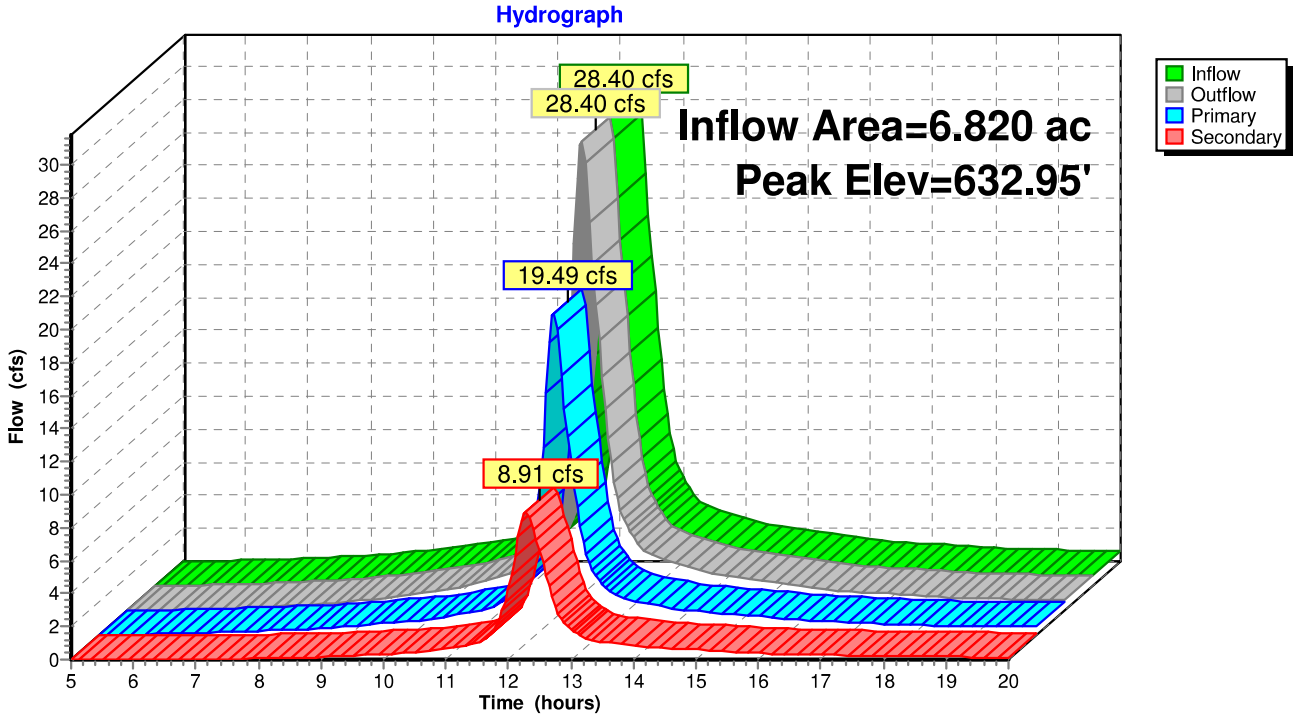
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 632.95' @ 12.27 hrs

Device	Routing	Invert	Outlet Devices
#1	Secondary	631.10'	**18.0" Round Pipe to chambers** L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 631.10' / 627.75' S= 0.1675 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Primary	631.00'	**30.0" Round Bypass pipe** L= 44.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 631.00' / 629.50' S= 0.0341 '/' Cc= 0.900 n= 0.013, Flow Area= 4.91 sf

Primary OutFlow Max=19.28 cfs @ 12.27 hrs HW=632.93' (Free Discharge)
↑—**2=Bypass pipe** (Inlet Controls 19.28 cfs @ 4.73 fps)

Secondary OutFlow Max=8.85 cfs @ 12.27 hrs HW=632.93' (Free Discharge)
↑—**1=Pipe to chambers** (Inlet Controls 8.85 cfs @ 5.01 fps)

Pond 19P: Diversion MH

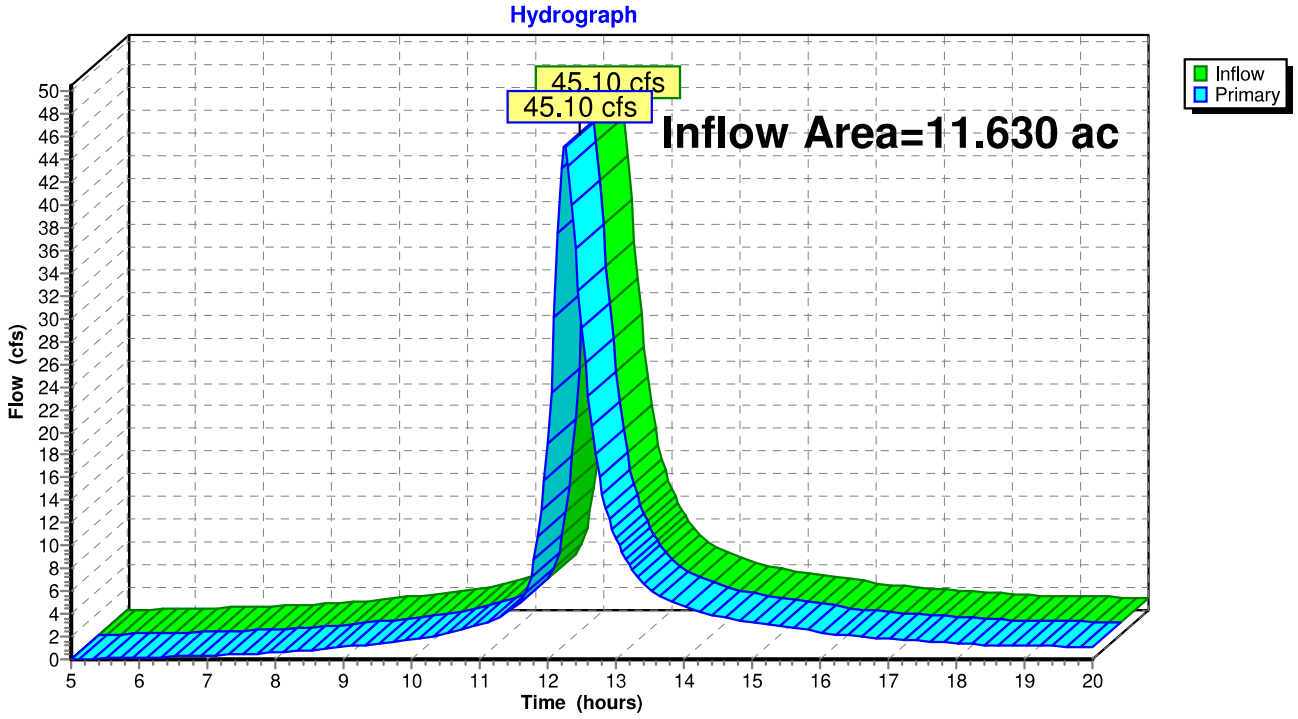


Summary for Link 15L: East 30 arch RCP under GVR

Inflow Area = 11.630 ac, 43.24% Impervious, Inflow Depth > 4.92" for 25-Year event
Inflow = 45.10 cfs @ 12.25 hrs, Volume= 4.772 af
Primary = 45.10 cfs @ 12.25 hrs, Volume= 4.772 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 15L: East 30 arch RCP under GVR



Summary for Subcatchment 13S: Basin 2-N PRE

[47] Hint: Peak is 377% of capacity of segment #2

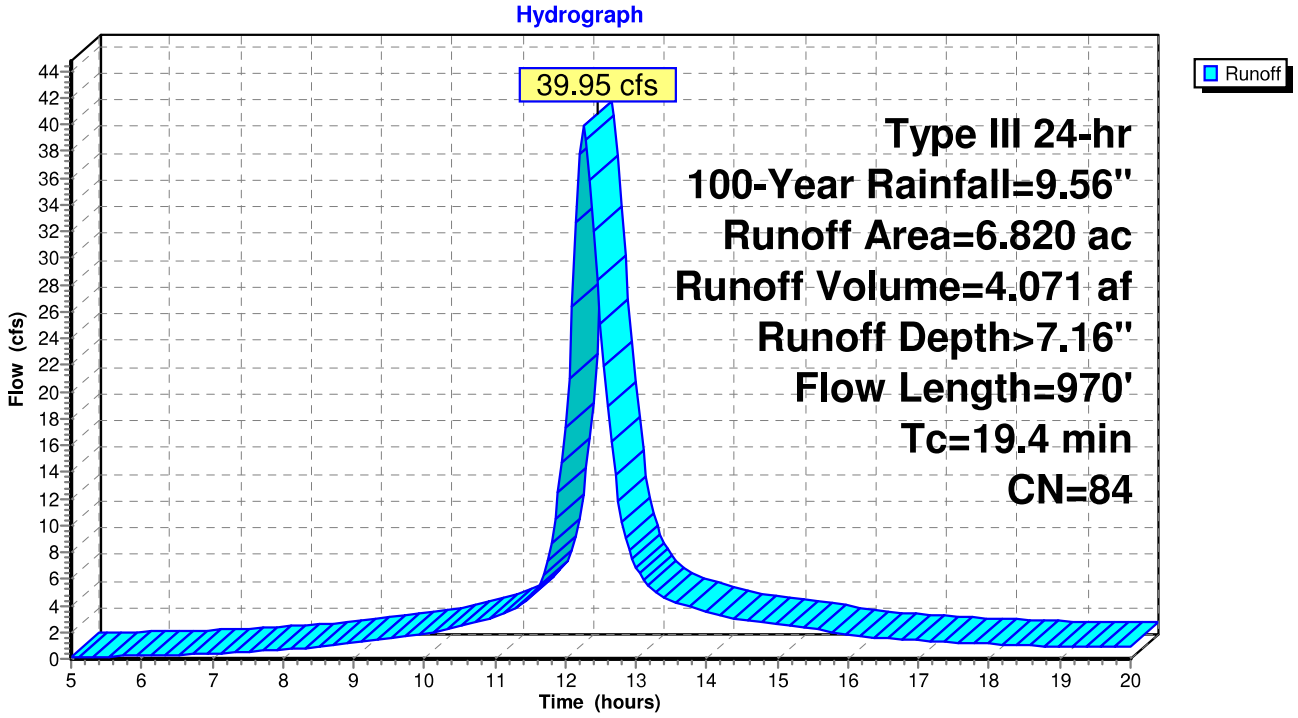
Runoff = 39.95 cfs @ 12.26 hrs, Volume= 4.071 af, Depth> 7.16"
Routed to Reach 17R : pipe from SVD to chambers

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=9.56"

	Area (ac)	CN	Description
	2.430	90	1/8 acre lots, 65% imp, HSG C
	4.090	80	1/2 acre lots, 25% imp, HSG C
*	0.300	87	1/6 acre lots, 55% imp, HSG C
	6.820	84	Weighted Average
	4.053		59.43% Pervious Area
	2.767		40.57% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
16.9	180	0.0940	0.18		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
2.5	790	0.0200	5.30	10.59	**Channel Flow, ditch/pipe** Area= 2.0 sf Perim= 4.0' r= 0.50' n= 0.025
19.4	970	Total			

Subcatchment 13S: Basin 2-N PRE



Summary for Subcatchment 14S: Basin 2-S POST

[47] Hint: Peak is 620% of capacity of segment #2

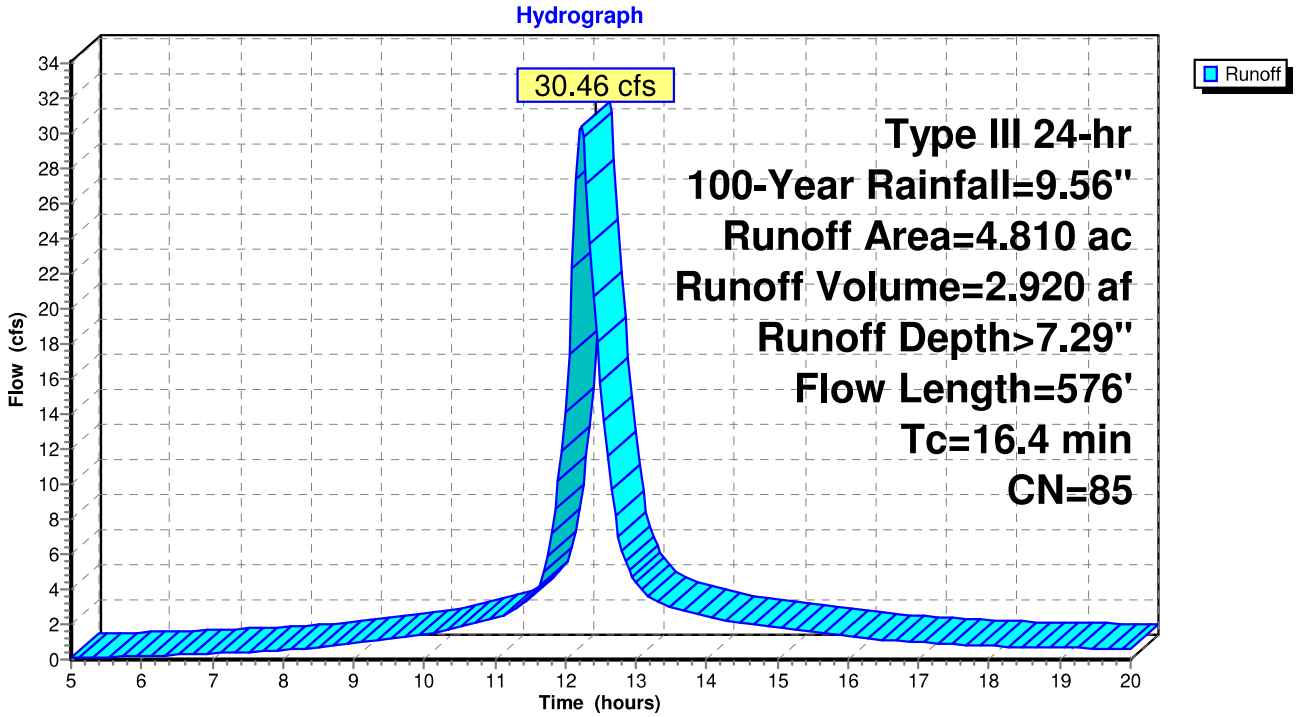
Runoff = 30.46 cfs @ 12.22 hrs, Volume= 2.920 af, Depth> 7.29"
Routed to Link 15L : East 30 arch RCP under GVR

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Type III 24-hr 100-Year Rainfall=9.56"

	Area (ac)	CN	Description
	1.280	80	1/2 acre lots, 25% imp, HSG C
*	3.530	87	1/6 acre lots, 55% imp, HSG C
	4.810	85	Weighted Average
	2.548		52.98% Pervious Area
	2.261		47.02% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
13.1	96	0.0500	0.12		**Sheet Flow, sheet flow** Grass: Bermuda n= 0.410 P2= 4.00"
3.3	480	0.0210	2.45	4.91	**Channel Flow, Channel flow** Area= 2.0 sf Perim= 10.0' r= 0.20' n= 0.030
16.4	576	Total			

Subcatchment 14S: Basin 2-S POST



Summary for Reach 17R: pipe from SVD to chambers

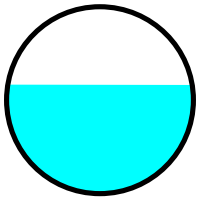
[52] Hint: Inlet/Outlet conditions not evaluated
[82] Warning: Early inflow requires earlier time span

Inflow Area = 6.820 ac, 40.57% Impervious, Inflow Depth > 7.16" for 100-Year event
Inflow = 39.95 cfs @ 12.26 hrs, Volume= 4.071 af
Outflow = 39.80 cfs @ 12.27 hrs, Volume= 4.069 af, Atten= 0%, Lag= 0.6 min
Routed to Pond 19P : Diversion MH

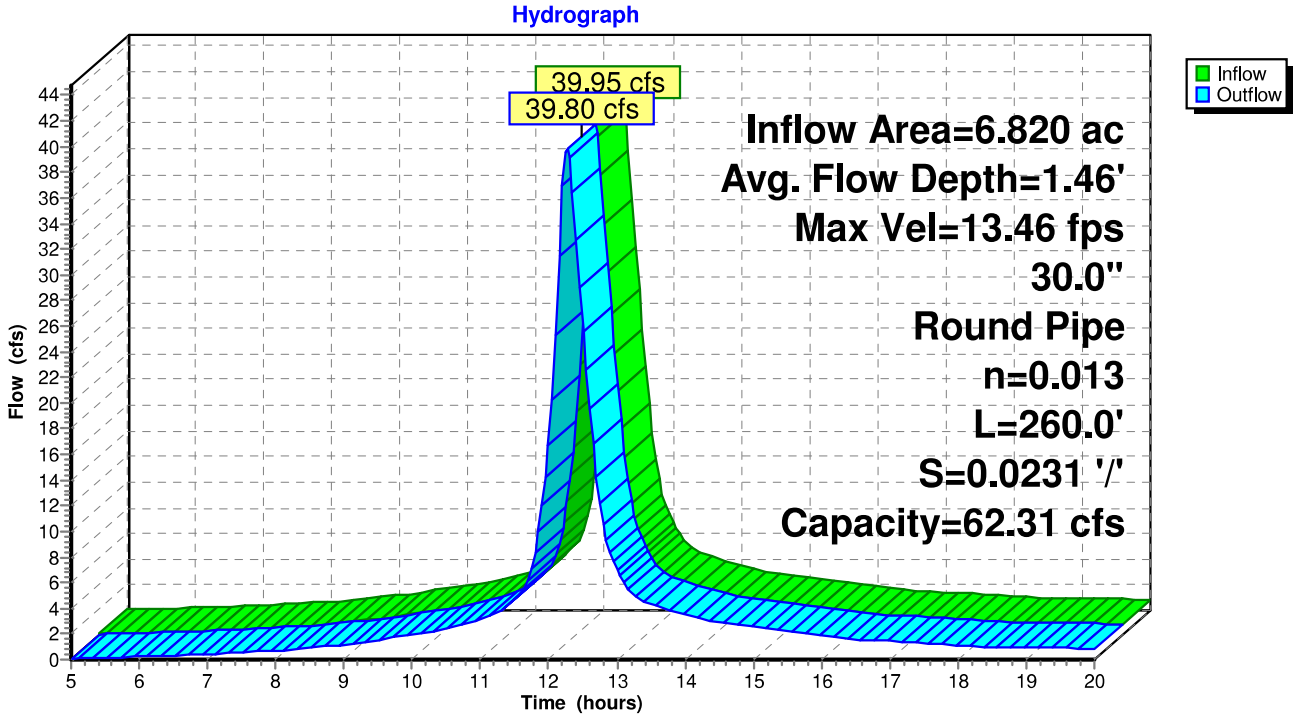
Routing by Stor-Ind+Trans method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Max. Velocity= 13.46 fps, Min. Travel Time= 0.3 min
Avg. Velocity = 5.67 fps, Avg. Travel Time= 0.8 min

Peak Storage= 771 cf @ 12.26 hrs
Average Depth at Peak Storage= 1.46' , Surface Width= 2.47'
Bank-Full Depth= 2.50' Flow Area= 4.9 sf, Capacity= 62.31 cfs

30.0" Round Pipe
n= 0.013
Length= 260.0' Slope= 0.0231 '/'
Inlet Invert= 640.00', Outlet Invert= 634.00'



Reach 17R: pipe from SVD to chambers



Summary for Pond 18P: Bed 1 - MC-3500 chambers

[81] Warning: Exceeded Pond 19P by 0.65' @ 12.65 hrs

Inflow	=	11.52 cfs @	12.27 hrs, Volume=	1.302 af
Outflow	=	7.46 cfs @	12.56 hrs, Volume=	1.160 af, Atten= 35%, Lag= 17.5 min
Primary	=	7.46 cfs @	12.56 hrs, Volume=	1.160 af

Routed to Link 15L : East 30 arch RCP under GVR

Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 633.14' @ 12.56 hrs Surf.Area= 3,970 sf Storage= 16,620 cf

Plug-Flow detention time= 73.6 min calculated for 1.160 af (89% of inflow)
Center-of-Mass det. time= 41.5 min (811.8 - 770.3)

Volume	Invert	Avail.Storage	Storage Description
#1A	626.75'	6,403 cf	**28.50'W x 139.30'L x 6.75'H Field A** 26,798 cf Overall - 10,790 cf Embedded = 16,008 cf x 40.0% Voids
#2A	627.50'	10,790 cf	**ADS_StormTech MC-7200 +Cap** x 60 Inside #1 Effective Size= 91.2"W x 60.0"H => 26.68 sf x 6.59'L = 175.9 cf Overall Size= 100.0"W x 60.0"H x 6.95'L with 0.36' Overlap 60 Chambers in 3 Rows Cap Storage= 39.5 cf x 2 x 3 rows = 237.0 cf
		17,193 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Device	Routing	Invert	Outlet Devices
#1	Primary	628.75'	**12.0" Round Culvert to outfall** L= 30.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 628.75' / 625.00' S= 0.1250 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf

Primary OutFlow Max=7.45 cfs @ 12.56 hrs HW=633.13' (Free Discharge)
1=Culvert to outfall (Inlet Controls 7.45 cfs @ 9.49 fps)

Pond 18P: Bed 1 - MC-3500 chambers - Chamber Wizard Field A

Chamber Model = ADS_StormTech MC-7200 +Cap (ADS StormTech® MC-7200 with cap volume)
Effective Size= 91.2"W x 60.0"H => 26.68 sf x 6.59'L = 175.9 cf
Overall Size= 100.0"W x 60.0"H x 6.95'L with 0.36' Overlap
Cap Storage= 39.5 cf x 2 x 3 rows = 237.0 cf

100.0" Wide + 9.0" Spacing = 109.0" C-C Row Spacing

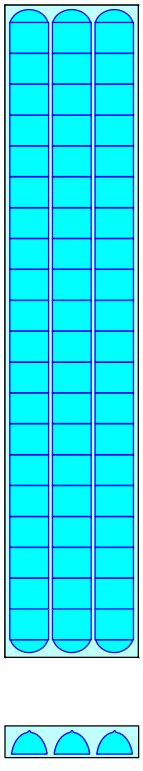
20 Chambers/Row x 6.59' Long +2.73' Cap Length x 2 = 137.30' Row Length +12.0" End Stone x 2 = 139.30' Base Length
3 Rows x 100.0" Wide + 9.0" Spacing x 2 + 12.0" Side Stone x 2 = 28.50' Base Width
9.0" Stone Base + 60.0" Chamber Height + 12.0" Stone Cover = 6.75' Field Height

60 Chambers x 175.9 cf + 39.5 cf Cap Volume x 2 x 3 Rows = 10,789.5 cf Chamber Storage

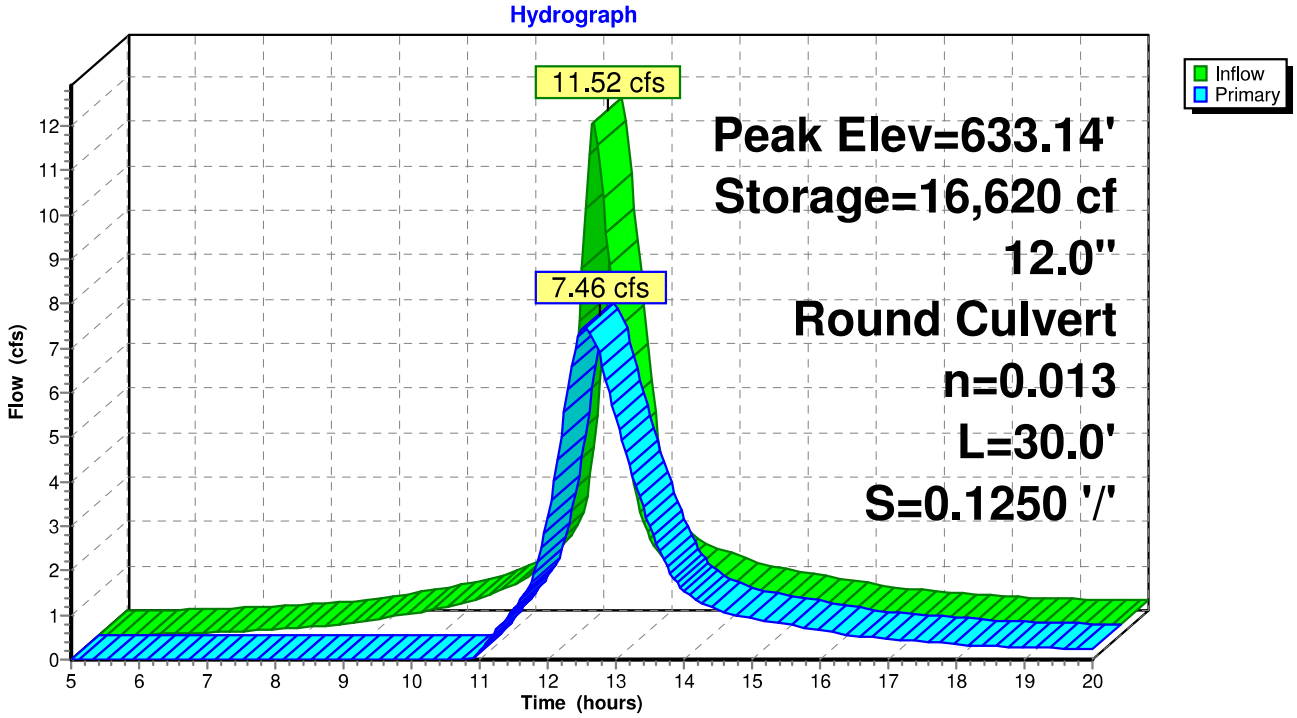
26,797.8 cf Field - 10,789.5 cf Chambers = 16,008.3 cf Stone x 40.0% Voids = 6,403.3 cf Stone Storage

Chamber Storage + Stone Storage = 17,192.9 cf = 0.395 af
Overall Storage Efficiency = 64.2%
Overall System Size = 139.30' x 28.50' x 6.75'

60 Chambers
992.5 cy Field
592.9 cy Stone



Pond 18P: Bed 1 - MC-3500 chambers



Summary for Pond 19P: Diversion MH

[57] Hint: Peaked at 633.68' (Flood elevation advised)

Inflow Area = 6.820 ac, 40.57% Impervious, Inflow Depth > 7.16" for 100-Year event
Inflow = 39.80 cfs @ 12.27 hrs, Volume= 4.069 af
Outflow = 39.80 cfs @ 12.27 hrs, Volume= 4.069 af, Atten= 0%, Lag= 0.0 min
Primary = 28.28 cfs @ 12.27 hrs, Volume= 2.767 af
Routed to Link 15L : East 30 arch RCP under GVR
Secondary = 11.52 cfs @ 12.27 hrs, Volume= 1.302 af
Routed to Pond 18P : Bed 1 - MC-3500 chambers

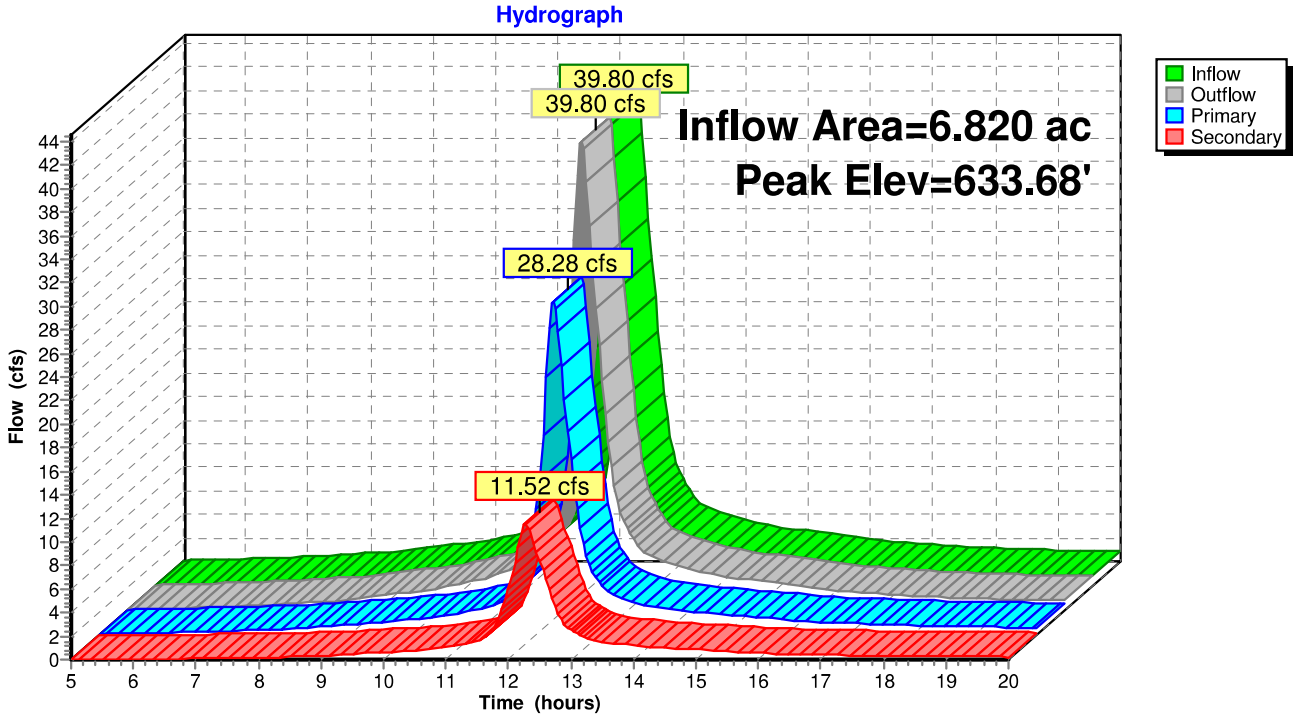
Routing by Stor-Ind method, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs
Peak Elev= 633.68' @ 12.27 hrs

Device	Routing	Invert	Outlet Devices
#1	Secondary	631.10'	**18.0" Round Pipe to chambers** L= 20.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 631.10' / 627.75' S= 0.1675 '/' Cc= 0.900 n= 0.013, Flow Area= 1.77 sf
#2	Primary	631.00'	**30.0" Round Bypass pipe** L= 44.0' RCP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 631.00' / 629.50' S= 0.0341 '/' Cc= 0.900 n= 0.013, Flow Area= 4.91 sf

Primary OutFlow Max=28.01 cfs @ 12.27 hrs HW=633.65' (Free Discharge)
↑—**2=Bypass pipe** (Inlet Controls 28.01 cfs @ 5.71 fps)

Secondary OutFlow Max=11.43 cfs @ 12.27 hrs HW=633.65' (Free Discharge)
↑—**1=Pipe to chambers** (Inlet Controls 11.43 cfs @ 6.47 fps)

Pond 19P: Diversion MH

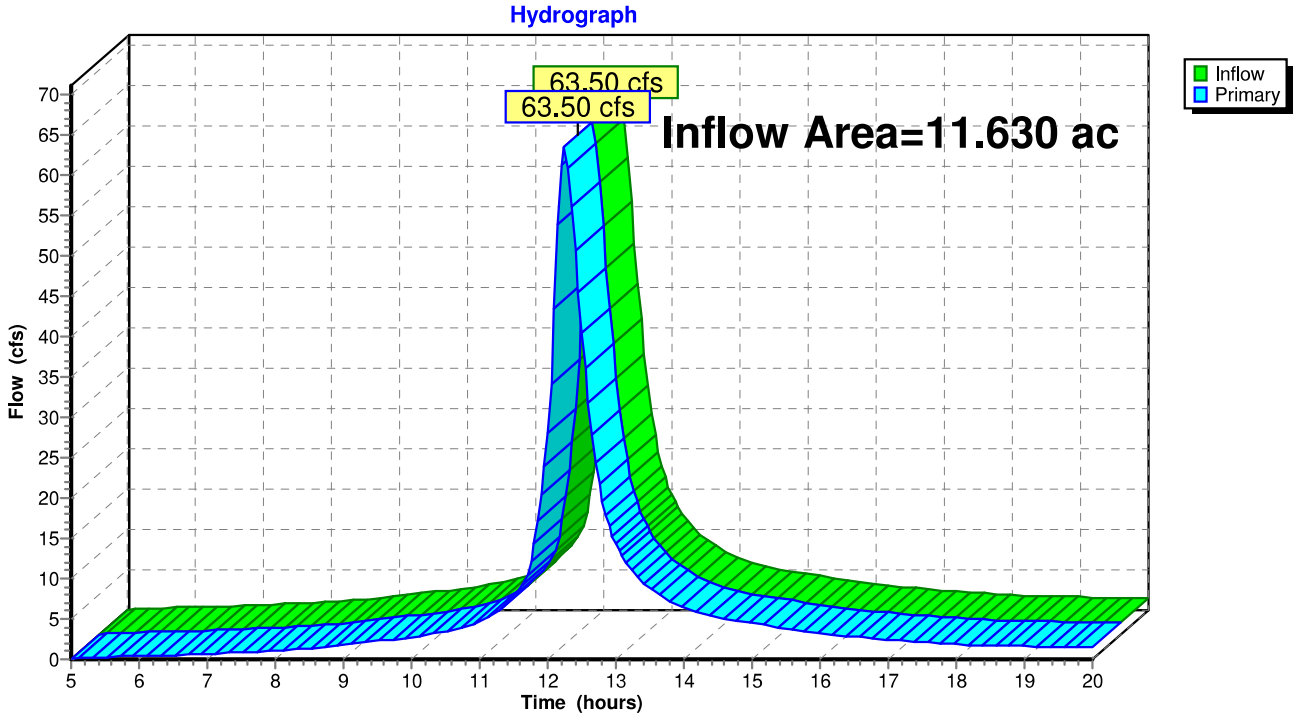


Summary for Link 15L: East 30 arch RCP under GVR

Inflow Area = 11.630 ac, 43.24% Impervious, Inflow Depth > 7.07" for 100-Year event
Inflow = 63.50 cfs @ 12.25 hrs, Volume= 6.847 af
Primary = 63.50 cfs @ 12.25 hrs, Volume= 6.847 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 5.00-20.00 hrs, dt= 0.05 hrs

Link 15L: East 30 arch RCP under GVR



Sunview 2026-POST-60 7200
Prepared by Alabama Engineering Company, Inc

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City of Vestavia Hills
Office of the City Clerk

OWNER AFFIDAVIT (This form must be notarized):

I do hereby declare that the following statements are correct concerning the subject property located at: see addresses listed below., Vestavia Hills, Alabama and that statements submitted in my application are true and that I am: *(please check all that apply).* 3034, 3036, 3040, 3044, 3048 Green Valley Rd and 3021, 3033, 3037, 3041, 3045 Sunview Dr

__x__ the Property Owner and representing myself in said request.

____ the Property Owner, but I am authorizing a Representing Agent by the name of: _____ to represent me in the following request:

And am requesting: (please check)

__x__ Rezoning Request
____ Preliminary Plat Approval
____ Final Plat Approval
____ Conditional Use Approval
____ Request for Variance
____ Special Exception
____ Design Review Approval

Signed: _____
Owner Signature/Date

STATE OF ALABAMA
COUNTY OF Jefferson

ELIZABETH GRACE BRAMBLETTTE
Notary Public, Alabama State at Large
My Commission Expires July 12, 2027

Given under my hand and seal this 8th day of April, 2026.

_____
Notary Public

My commission expires 12 day of July, 2026.