Bryant Development and Review Committee Meeting

Boswell Municipal Complex - City Hall Conference Room

210 SW 3rd Street

Date: November 26, 2025 - **Time:** 9:00 AM

Call to Order

Old Business

New Business

1. 2525 Birch St - Conditional Use Permit

Maco Builders - Requesting Recommendation for Approval of CUP for Duplex in R-M Zoning

- 1003-APP-01.pdf

2. 6717 Lombard Rd - Conditional Use Permit

Paul Kingsolver - Requesting Recommendation for Approval of CUP for Short Term Rental

- 1004-APP-01.pdf

3. 12 Paisley Park - Minor Modification from Midtown Code

HD Homes - Requesting Minor modification from Midtown Code on Sidewalk Location

- 0999-PLN-02.pdf

4. Meadowlake Phase 3 - Replat - Storm Sewer Detention Basin Tract

Zane Robbins - Requesting Recommendation for Approval of Replat

- 1005-PLT-01.pdf

5. 6128 Hwy 5 - Site Plan - Lot 22R of Marketplace II Subdivision Ph3

Hope Consulting - Requesting Recommendation for Site Plan Approval

- 0986-PLN-02.pdf
- 0986-RSP-01.pdf

6. 25300 I-30 - Site Plan Addition

Hope Consulting - Requesting Recommendation for Site Plan Approval

- 1001-PLN-02b.pdf
- 1001-DRN-02.pdf
- 1001-PLN-02a.pdf

7. Progressive Tractor & Implement Co. - 22576 I-30 - Sign Permit

Gibko Nursery & Signs - Requesting Approval for Freestanding Sign

- 94415-SGNAPP-01.pdf

8. REQUEST TO ADD: Senor Tequila - 2919 Reynolds Road - Site Plan Addition

- Requesting Site Plan Approval for new Accessory Structure

- 1006-PLN-01.pdf

Staff Approved

9. The Local Tavern - 3429 Market Place Ave, STE A - Sign Permit

Jeried Offutt - Requesting Sign Permit Approval - STAFF APPROVED

- The Local Tavern Sign Rendering.pdf

10. Enjoy Shawarma - 5311 Hwy 5, STE 206 - Sign Permit

Greg Decker - Requesting Sign Permit Approval - STAFF APPROVED

- 94412-SGNAPP-01.pdf

11. Gassy's Fuel Station - 6101 Hwy 5 - Sign Permit

James Griffin - Requesting Sign Permit Approval - STAFF APPROVED

- Gassys Sign Permit Rendering 1.pdf

Permit Report

Adjournments

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

Conditional Use Permit Application

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

Date: 10/23/2025

Applicant or Designee:

Name MaCo Builders of Arkansas, LLC.

Address 309 Abrielle Ln Benton, AR 72109

Phone 501-993-6295

Email Address: macobuildersar@gmail.com

Project Location:

Property Address 2525 Birch St Bryant, AR 72019

Parcel Number 840-08802-000

Zoning Classification R-M

Property Owner (If different from Applicant):

Name _____

Phone _____

Address _____

Email Address _____

Additional Information:

Legal Description (Attach description if necessary)

2022-006476 Sherwood Forest Subdivision Lot 3, Block 001

Description of Conditional Use Request (Attach any necessary drawings or images)

Removal of existing condemned (total loss - fire) home and construct one single duplex structure. Each unit will have 3 bedrooms and 2 full bathrooms.

Proposed/Current Use of Property Multi Family Dwelling

Application Checklist

Requirements for Submission

- ☑ Letter stating request of Conditional Use and reasoning for request
- ☑ Completed Conditional Use Permit Application
- ☑ Submit Conditional Use Permit Application Fee ($125)
- ☑ Submit Copy of completed Public Notice
- ☐ Publication: Public Notice shall be published at least one (1) time fifteen (15) days prior to the public hearing at which the variance will be heard. Once published please provide a proof of publication to the Community Development office.
- ☐ Posting of Property: The city shall provide a sign to post on the property involved for the fifteen (15) consecutive days leading up to Public hearing. One (1) sign is required for every two hundred (200) feet of street frontage.
- ☐ Submit eight (8) Copies of the Development Plan (Site Plan) showing:
  - Location, size, and use of buildings/signs/land or improvements
  - Location, size, and arrangement of driveways and parking. Ingress/Egress
  - Existing topography and proposed grading
  - Proposed and existing lighting
  - Proposed landscaping and screening
  - Use of adjacent properties
  - Scale, North Arrow, Vicinity Map
  - Additional information that may be requested by the administrative official due to unique conditions of the site.

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

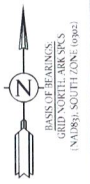
Note: that this is not an exhaustive guideline regarding the Conditional Use Permit Process. Additional information is available in the Bryant Zoning Ordinance.

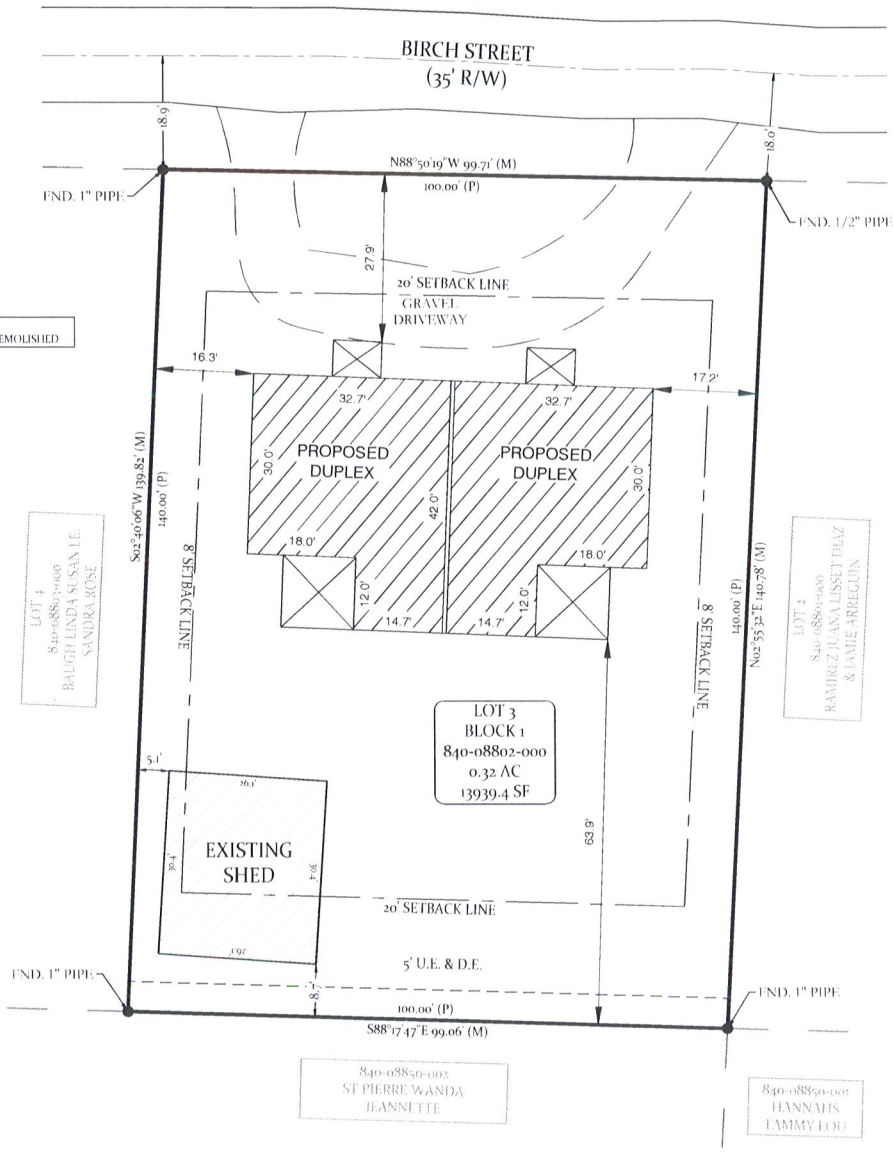
READ CAREFULLY BEFORE SIGNING

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

811

25-1261
Drawing No.





EXISTING STRUCTURE NOTE
- EXISTING DWELLING TO BE DEMOLISHED

RECORD PROPERTY DESCRIPTION
SALINE COUNTY INSTRUMENT 2022-006476

LOT 3, BLOCK 1, SHERWOOD FOREST SUBDIVISION, NOW IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS.

SURVEY DETAILS AND NOTES

OWNER OF RECORD:	DRYSDALE JUSTIN
PHYSICAL ADDRESS:	2525 BIRCH STREET, BRYANT, AR 72019.
COUNTY PARCEL TAX ID:	840-08802-000.

ALL DIMENSIONS LISTED ARE AS MEASURED BY THIS SURVEYOR UNLESS OTHERWISE NOTED. FOR RECORD DIMENSIONS SEE DOCUMENTS OF RECORD.

OWNERSHIP INFORMATION, IF SHOWN, IS LISTED AS PUBLISHED BY THE LOCAL COUNTY TAX ASSESSOR AND IS LISTED FOR REFERENCE ONLY. NO STATEMENTS OF OWNERSHIP, RIGHTS, OR INTERESTS ARE MADE.

THIS SURVEY IS BASED ON PUBLIC RECORDS AND/OR TITLE INVESTIGATIONS FURNISHED BY THIRD PARTIES. NO INDEPENDENT SEARCH OR INVESTIGATION HAS BEEN MADE BY THIS FIRM FOR ANY RECORDS, PUBLIC OR PRIVATE. LISTED REFERENCE DOCUMENTS HEREON WERE USED AND CONSIDERED AS A PART OF THIS SURVEY. HOWEVER OTHER RECORDS, IF ANY, COULD FURTHER AFFECT THIS SURVEY. NO STATEMENT OR GUARANTEES OF OWNERSHIP, RIGHTS, OR OTHER INTRESTS ARE MADE BY THIS SURVEY PLAT.

CERTIFICATE OF AUTHORIZATION
HOPE CONSULTING, INC.
No. 931
ARKANSAS

REGISTERED
STATE OF ARKANSAS
No. 1664
WILLIAM CORBITT R. SHOWALTER
PROFESSIONAL LAND SURVEYOR
10/29/25

HOPE CONSULTING
ENGINEERS • SURVEYORS
129 North Main Street
Benton, Arkansas 72015
office: (501) 315-2626
fax: (501) 315-0024
HopeConsulting.com

For the Exclusive Use and Benefit of:
MaCo Builders, LLC

Address 2525 Birch Street
Bryant, Arkansas, 72022
Date 10/29/25

500	01S	14W	0	20	110	62	1664

GENERAL DISCLAIMER
This survey is for the exclusive use and benefit of parties shown hereon. Use or duplication of this document by any other parties is prohibited and voids said document.
This survey is based on public records and/or title investigations furnished by third parties. No independent search or investigation has been made by this firm for any records, public or private. Listed reference documents hereon were used and considered as a part of this survey, however other records, if any, could further affect this survey. No statement or guarantees of ownership, rights, or other interests are made by this survey plat.

FLOOD STATEMENT
No portion of the property described hereon lies within the 100 year flood plain, according to the Flood Insurance Rate Map panel # 05125C0360J dated 06/05/2020

20' 10' 0' 20'

LEGEND
- Found Monument
- Set 1/2" Rebar #1664
- Computed Point Location
- (M) Measured by Surveyor
- (R/D/P) Record/Deed/Plat Measurements
- B.S.L. Building Setback Line Restriction
- U.E./D.E. Utility/Drainage Easement
- Property Boundary Line
- Fence Lines
- Centerlines
- Parcel Lines/Misc Lines

Drawn By: NCD/OV Checked

MACO
BUILDERS

309 Abrielle Ln Benton, AR 72019

Letter of Intent – Site Plan and Conditional Use Permit Applications for

MaCo Builders of Arkansas, LLC.

Located at 2525 Birch St. Bryant, AR 72019

Dated November 18, 2025

Preface

The purpose for this letter is to describe, in detail, the intentions of this project including demolition of the existing structures, site clearing, construction and use, for consideration by the City of Bryant, Arkansas Planning Commission.

Project Purpose

The intent of this project is to demolish an existing 1,152 sq ft (approx) home that had previously been a total loss claim (fire) by the previous owner(s). The remnants from the previous dwelling, and detached shop, will be hauled off to the local Saline Country Landfill, and all utilities will be removed prior to this process.

After the site has been cleaned of all existing materials, one large oak tree, and one dead tree, and part of another oak tree will be removed and hauled off-site. After this, and upon approval by the City of Bryant, a new, 2,340 sq ft heated and cooled (2,724 sq ft outside of structure) will be constructed, which will consist of a duplex that will mirror each other with 3 bedrooms and 2 bathrooms. The structure will be built on a monolithic foundation, a 2' brick skirt around the entire perimeter, and vinyl lap siding to the roof line. Vinyl soffit will also be installed around the perimeter. The roof will be constructed of architectural shingles with a 12:6 pitch.

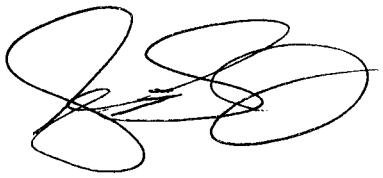
Due to the fact that there is no City of Bryant Sewer or Water services available at this site, a new septic system will be installed, per a licensed installer and approved by the Arkansas Health Department. The septic system will be installed in the rear of the structure and throughout the back yard area (permit and drawings will be provided, as needed, as they become available). The main water feed will be renewed via 2 separate water meters, one for each tenant space, through Salem Water Users.

Tenants will each have their own separate concrete driveway and pad for parking. The pad will be approx 20' wide, will butt up to the structure, and will tie into Birch St with appropriate culvert(s). There will be a requirement of a maximum of 2 vehicles per unit, with a variance on non-residents to 1 vehicle. It will also be advised that no parking is allowed on Birch St.

There is an existing fence that runs along the east side of the property to the south and along the south to the west corner. This fence will remain, but the existing fence on the west side will be removed and a new fence constructed and will connect to the structure with an 8' double gate; on the east side the fence will connect to the structure as well with an 8' gate. At this time, it has not been determined if a divider fence will be installed on the rear of the property to separate the tenant yard space.

If you have any questions or need additional information, please do not hesitate to contact me.

Sincerely;



Steve Lucas, Jr.

MaCo Builders of Arkansas, LLC.

Owner

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

Conditional Use Permit Application

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

Date: 11/20/25

Applicant or Designee:

Name PAUL KINGSOLVER

Address 6717 LOMBARD RD

Phone 702 371 2341

Email: pkingcolver@gmail.com

Project Location:

Property Address Same

Parcel Number

Zoning Classification

Property Owner (If different from Applicant):

Name

Phone

Address

Email Address

Additional Information:

Subdivision Lot and Block Number or Legal Description (Attach Legal Description to Application)

Current Use of Property Air bnb

Description of Conditional Use Request / Proposed Use of Property (Attach any necessary drawings or images)

Short Term Rental

Application Checklist

Requirements for Submission

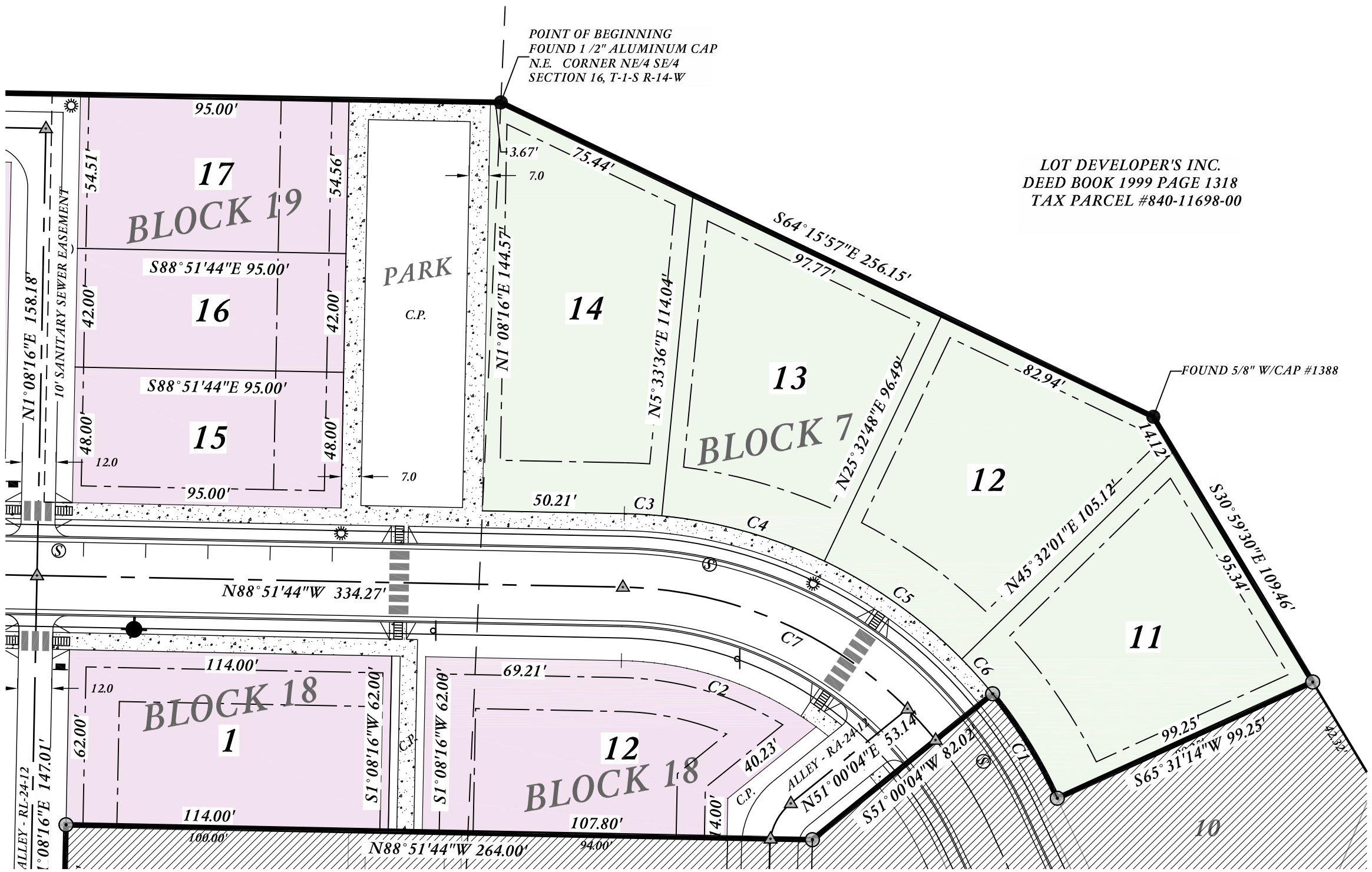
- ☐ Letter stating request of Conditional Use and reasoning for request
- ☐ Completed Conditional Use Permit Application
- ☐ Submit Conditional Use Permit Application Fee ($125)
- ☐ Submit Copy of completed Public Notice [Attachment 1]
- ☐ Submit one (1) copy of the Development Plan (Site Plan) showing: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

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

READ CAREFULLY BEFORE SIGNING

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

25-0767
Drawing No.



LEGEND

- Found Monument
- Set 1/2" Rebar #1664
- Computed Point Location
- (M) Measured by Surveyor
- (R/D/P) Record/Deed/Plat Measurements
- B.S.L. Building Setback Line Restriction
- U.E./D.E. Utility/Drainage Easement
- Property Boundary Line
- Fence Lines
- Centerlines
- Parcel Lines/Misc Lines

0' 20' 0' 40'

Drawn By: QV Checked:

GENERAL DISCLAIMER

This survey is for the exclusive use and benefit of parties shown hereon. Use or duplication of this document by any other parties is prohibited and voids said document.

This survey is based on public records and/or title investigations furnished by third parties. No independent search or investigation has been made by this firm for any records, public or private. Listed reference documents hereon were used and considered as a part of this survey; however other records, if any, could further affect this survey. No statement or guarantees of ownership, rights, or other interests are made by this survey plat.

FLOOD STATEMENT

No portion of the property described hereon lies within the 100 year flood plain, according to the Flood Insurance Rate Map, Panel # 05125C0240E dated: 06/05/2020

LOT 12, BLOCK 18
SIDEWALK & ADA RAMP
PROPOSAL

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

HOPE CONSULTING
ENGINEERS - SURVEYORS
129 North Main Street
Benton, Arkansas 72015
office: (501) 315-2626
fax: (501) 315-0024
HopeConsulting.com

For the Exclusive Use and Benefit of:
HD Homes

Address 12 Pasley Park
Bryant, Arkansas, 72022

Date 11/19/2025

500	01S	14W	0	15	340	62	1664

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

Z:\Land Projects 2004\Subdivisions\2007\07-0093 MIDTOWN BRYANT (AARON JONES)\DWG\OTHER DWGS\Final Plat Phase 3\07-0093-FP-Phase 3 11-19-25 SW EXHIBIT.dwg | Plotted: 11/19/2025 12:11 PM | ©2025 Hope Consulting, Inc.

CERTIFICATE OF SURVEY ACCURACY

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

_____
DATE OF EXECUTION

Zane Robbins
REGISTERED PROFESSIONAL LAND SURVEYOR
NO. 1853 ARKANSAS

CERTIFICATE OF OWNER

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

DATE OF EXECUTION _____

SIGNED _____

NAME CALAIS COURT INC

ADDRESS 422 N MAIN ST,
BENTON AR 72015

SOURCE OF TITLE:

0 20 40 Feet

LAND DESCRIPTION AS SURVEYED:

A PART OF MEADOWLAKE PHASE 3 IN THE NE¼ OF SECTION 23, TOWNSHIP 1 SOUTH, RANGE 14 WEST MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT THE NORTHEAST CORNER OF LOT 55, MEADOWLAKE PHASE 4 ON THE SOUTH RIGHT OF WAY LINE OF SHADOWCREEK DRIVE; THENCE SOUTH 86°50'17" EAST, A DISTANCE O 159.60 FEET; THENCE LEAVING SAID RIGHT OF WAY, SOUTH 03°00'34" WEST, A DISTANCE OF 101.21 FEET; THENCE NORTH 89°05'39" WEST, A DISTANCE OF 159.51 FEET; THENCE NORTH 02°54'14" EAST, A DISTANCE OF 107.49 FEET TO THE POINT OF BEGINNING.

LEGEND

- SET 1/2" REBAR W/ CAP
- FOUND MONUMENT
- R/W — RIGHT-OF-WAY
- OHE — OVERHEAD UTILITIES
- x — FENCE
- ROADWAY CENTERLINE
- GUY WIRE
- POWER/LIGHT POLE
- (M) MEASURED
- (R) RECORDED DISTANCE
- (D) PER DEED
- BUILDING SETBACK LINE
- UTILITY EASEMENT
- WV WATER VALVE
- FIRE HYDRANT
- W WATER METER
- T TELEPHONE PEDESTAL
- LIGHT POLE
- S SANITARY SEWER MANHOLE
- E ELECTRIC BOX
- D STORM SEWER MANHOLE

SHADOWCREEK DR. (50' R.O.W.)

Fnd rf5 | Fnd rf5 | Fnd cr5 | Fnd cr4 | Fnd rf5 | Fnd cr4 | fnd cr4

P.O.B.

S86°50'17"E - 19.60' (M)
S86°50'17"E - 70.00' (M)
S86°50'17"E - 70.00' (M)
S87°26'11"E - 49.81' (M)

5' EASEMENT

25' SETBACK | 25' SETBACK | 25' SETBACK | 25' SETBACK

42" CULVERT

LOT 55
MEADOWLAKE PH. IV

N02°54'14"E - 107.49' (M)
N02°57'32"E - 106.72' (M)
N02°59'01"E - 103.96' (M)
S03°00'34"W - 101.21' (M)
S02°55'14"W - 99.76' (M)

7' SETBACK | 7' SETBACK | 7' SETBACK | 7' SETBACK

LOT 1
0.17 ACRES
7,371.60 SQ FT

LOT 2
0.16 ACRES
7,178.70 SQ FT

PUMP STATION
0.12 ACRES
5,013.18 SQ FT

STORM WATER TRACT
0.05 ACRES
2,093.69 SQ FT

ZONE "X" | ZONE "X"

10' EASEMENT

GRAVEL DRIVE

N89°05'39"W - 19.51' (M)
N89°05'39"W - 70.00' (M)
N89°05'39"W - 70.00' (M)
N89°05'39"W - 50.00' (M)

CERTIFICATE OF AUTHORIZATION
ROBBINS PROFESSIONAL LAND SERVICES #4151
ARKANSAS - SURVEYOR

REGISTERED
STATE OF ARKANSAS
NO. 1853
SIGNATURE
Zane Robbins
9/25/2024
ZANE ROBBINS
PROFESSIONAL LAND SURVEYOR

GENERAL NOTES

1. BASIS OF BEARING FOR THIS SURVEY IS ARKANSAS GRID SOUTH. DISTANCES SHOWN ARE GROUND DISTANCES.
2. REFERENCES:
   A. PHASES 3, 4, AND 5 MEADOWLAKE SUBDIVISION.
3. ZONING CLASSIFCATION: R-E

CURRENT OWNER OF RECORD
CALAIS COURT INC
422 N MAIN ST
BENTON AR 72015

PROPERTY ADDRESS
SHADOW CREEK DR
BRYANT, AR 72002

FLOOD STATEMENT

BY GRAPHIC PLOTTING ALONE, ACCORDING TO FEMA FIRM #05125C0380E, DATED JUNE 5, 2020, THIS PROPERTY LIES IN ZONE "X", 0.2% ANNUAL CHANCE FLOOD HAZARD

UTILITIES DISCLAIMER

UTILITIES SHOWN ARE NOTED BY VISIBLE OBSERVATION ONLY. UNDERGROUND UTILITIES ARE TAKEN FROM UTILITY MAPS; EXACT LOCATION OF UNDERGROUND UTILITIES ARE APPROXIMATE AS NO EXCAVATION HAS TAKEN PLACE AS OF THIS DATE TO DETERMINE THE EXACT LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON THIS DRAWING.

CERTIFICATION

I HEREBY CERTIFY THAT THE ABOVE PLAT REPRESENTS A SURVEY MADE BY ME OR UNDER MY SUPERVISION ON THIS DAY AND THAT ALL CORNERS ARE SET AS SHOWN. NO INDEPENDENT SEARCH FOR EASEMENTS, COVENANTS, ENCUMBRANCES, OR ANY OTHER FACTS WHICH AN ACCURATE TITLE SEARCH MAY DISCLOSE WAS PERFORMED.

Zane Robbins
ZANE ROBBINS, AR PLS #1853

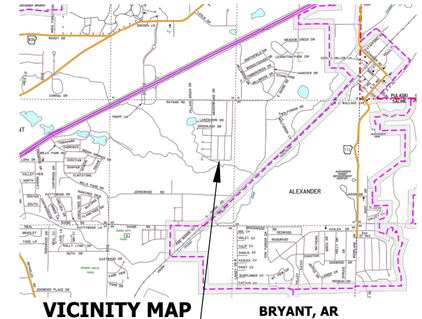
CERTIFICATE OF FINAL PLAT APPROVAL

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

SIGNED,

_____
DATE OF EXECUTION

_____
BRYANT PLANNING COMMISSION



VICINITY MAP (NTS) BRYANT, AR

SITE LOCATION

DATE	REVISIONS

LOTS 1 AND 2, A REPLAT OF STORM SEWER DETENTION BASIN PHASE 3, CITY OF BRYANT SALINE COUNTY, ARKANSAS

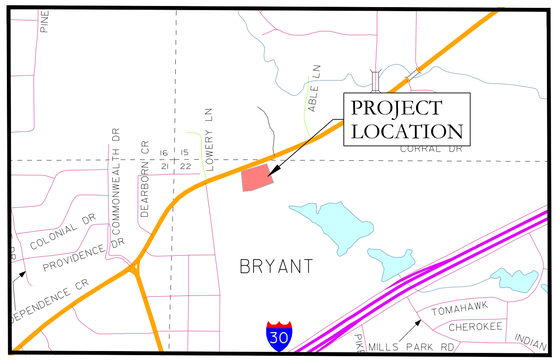
REPLAT

ROBBINS PROFESSIONAL LAND SERVICES
INCORPORATED
SURVEYING | GIS | CONSTRUCTION STAKING
P.O. BOX 939 | BRYANT, ARKANSAS 72089
OFFICE: 501.425.6380 | EMAIL: ZANEROBBINS8@GMAIL.COM

DRAWN BY	ZR
CHECKED BY	ZR
DATE	09/25/2025
SCALE	1"=20'
PROJECT No.	2025745
PAGE	1 of 1

Y:\2025\2025745 PENFIELD MEADOWLAKE REPLAT\2025745.dwg | PLOTTED BY: Ray | PLOT DATE: 10/31/2025 9:38:28 AM | ©2024 ROBBINS PROFESSIONAL LAND SERVICES INCORPORATED

CONSTRUCTION PLANS
MARKET PLACE II
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, AR



VICINITY MAP

N

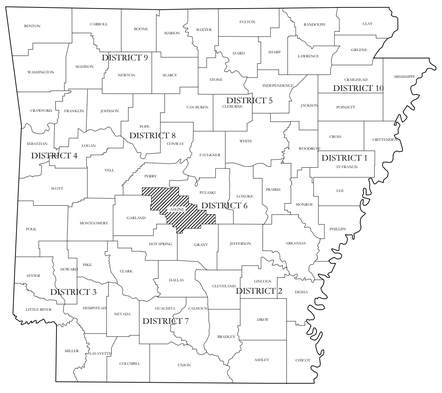
PREPARED BY:

HOPE CONSULTING
ENGINEERS - SURVEYORS

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

DRAWING INDEX

SHEET NO.	TITLE
C-1.0	SITE PLAN
C-2.0	GRADING PLAN
C-3.0	UTILITY PLAN
C-3.1-3.6	SEWER DETAILS
C-3.7-3.11	WATER DETAILS
C-4.1-4.2	PRE & POST DEV. CALCULATION
C-4.3	DRAINAGE CALCULATION
C-4.4	DRAINAGE PATH
C-5.0	EROSION CONTROL PLAN
C-6.0	LANDSCAPE PLAN



CIVIL ENGINEER

HOPE CONSULTING INC
129 N. MAIN STREET
BENTON, AR 72015

ARCHITECH

N/A

STRUCTURAL ENGINEER

N/A

GEOTECHNICAL ENGINEER

N/A

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
NO. 20875
TAMZIDUL ISLAM
11-19-2025

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

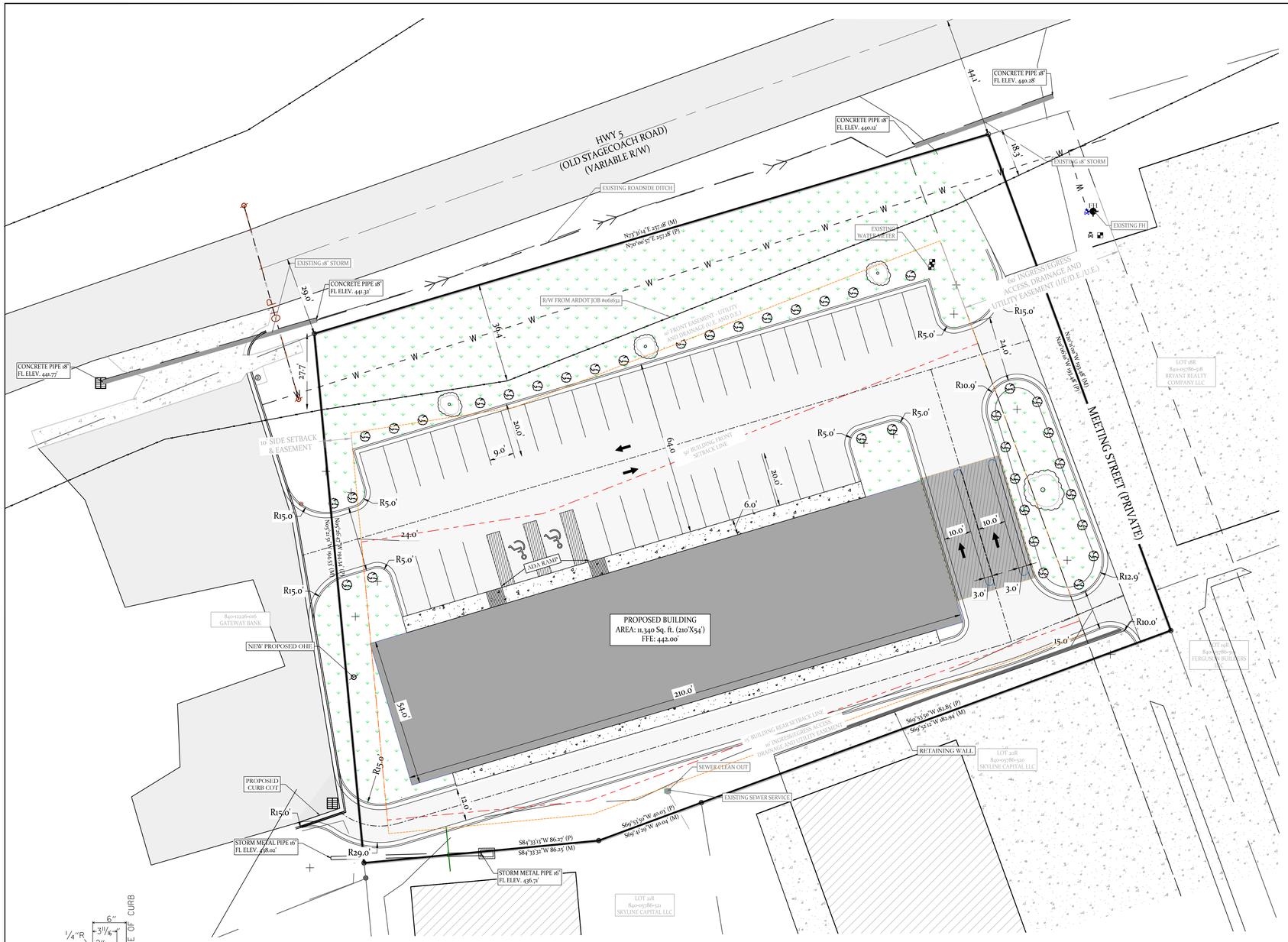
HOPE CONSULTING
ENGINEERS - SURVEYORS
129 N. Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

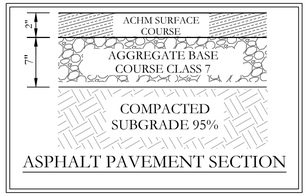
MARKET PLACE II
COVER SHEET

DATE:	11/11/2025	C.A.D. BY:				DRAWING NUMBER:	
REVISED:	date	CHECKED BY:				25-0608	
SHEET:	C-0.0	SCALE:					
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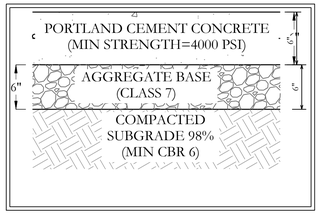
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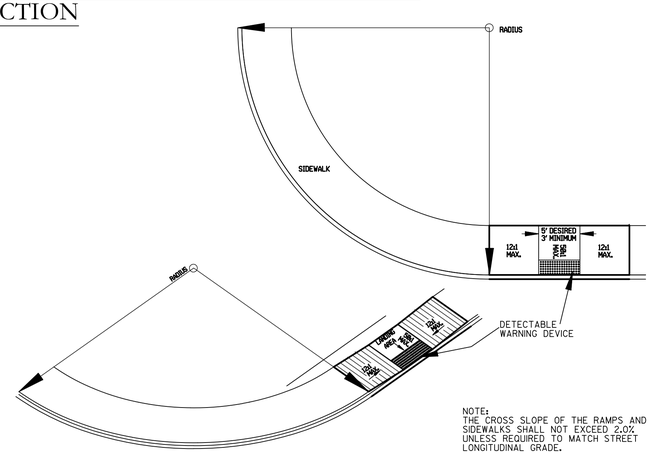
CURB DETAILS



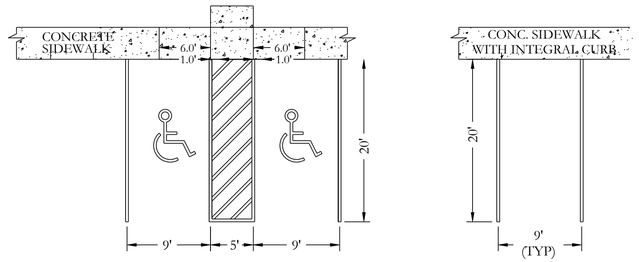
ASPHALT PAVEMENT SECTION



HEAVY DUTY CONCRETE PAVEMENT SECTION



NOTE:
THE CROSS SLOPE OF THE RAMPS AND SIDEWALKS SHALL NOT EXCEED 2.0% UNLESS REQUIRED TO MATCH STREET LONGITUDINAL GRADE.

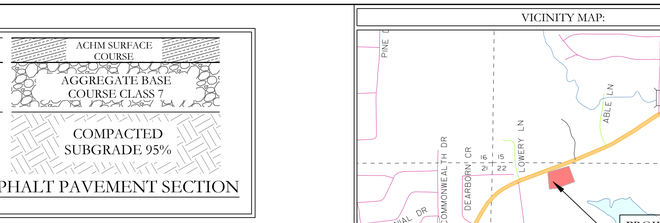


USE DIMENSIONS ABOVE UNLESS OTHERWISE NOTED

PARKING STALL & SIDEWALK DETAIL

NOT TO SCALE

10' FOR END STALLS



OWNER:	DEVELOPER:
Name: PHILLIP RYE	Name: RYE GENERAL CONTRACTORS
Address: 7416 PALM BEACH, BENTON AR 72019	Address: 6128 HIGHWAY 5 NORTH AR 72022
Phone: 501-317-9883	Phone:
Email: philliprye@phillipprye.com	Email:

BASIS OF BEARING: GRID NORTH, ARKANSAS COORDINATE SYSTEM, SOUTH ZONE BY GPS OBSERVATION

20' 10' 0 20'

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
JAMES W. HOPE
NO. 20878
11-19-2025

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

SITE DATA	
TOTAL SITE AREA	1.30 ACRES
TOTAL DEVELOPMENT AREA	1.30 ACRES
GROSS BUILDING AREA	BUILDING 11340 SQ. FT.
BUILDING SETBACKS	FRONT SETBACK LINE: 50' RIGHT SIDE SETBACK LINE: AS SHOWN REAR SETBACK LINE: 15' LEFT SIDE SETBACK LINE: 10'
BUILDING HEIGHTS	1 STORY
BUSINESS TYPE	RETAIL
PARKING CALCULATION (PROVIDED)	PROVIDED PARKING SPACES 41 (2 ADA SPACES)

ZONING INFORMATION	
CURRENT ZONING	C-2 HIGHWAY COMMERCIAL

LEGEND

- PLSS Aliquot Corner
- Fnd. Corner Monument
- Set 1/2" Rebar/Cap (1664)
- Computed Point
- (M)- As Measured
- (P)- Per Deed or Plat Records
- ESMT - Easement
- B.S.L. - Building Setback Lines
- Clean Out
- Water Meter
- Power Pole
- Sewer Manhole
- Light Pole
- Telephone Pedestal
- Drainage Manhole
- Gas Meter
- Fence
- Overhead Power
- Sewer Line
- Water Line
- Telephone Line
- Electric Line
- Gas Line
- Existing Access Agreement
- Public Right-of-Way Dedication

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129 N. Main Street,
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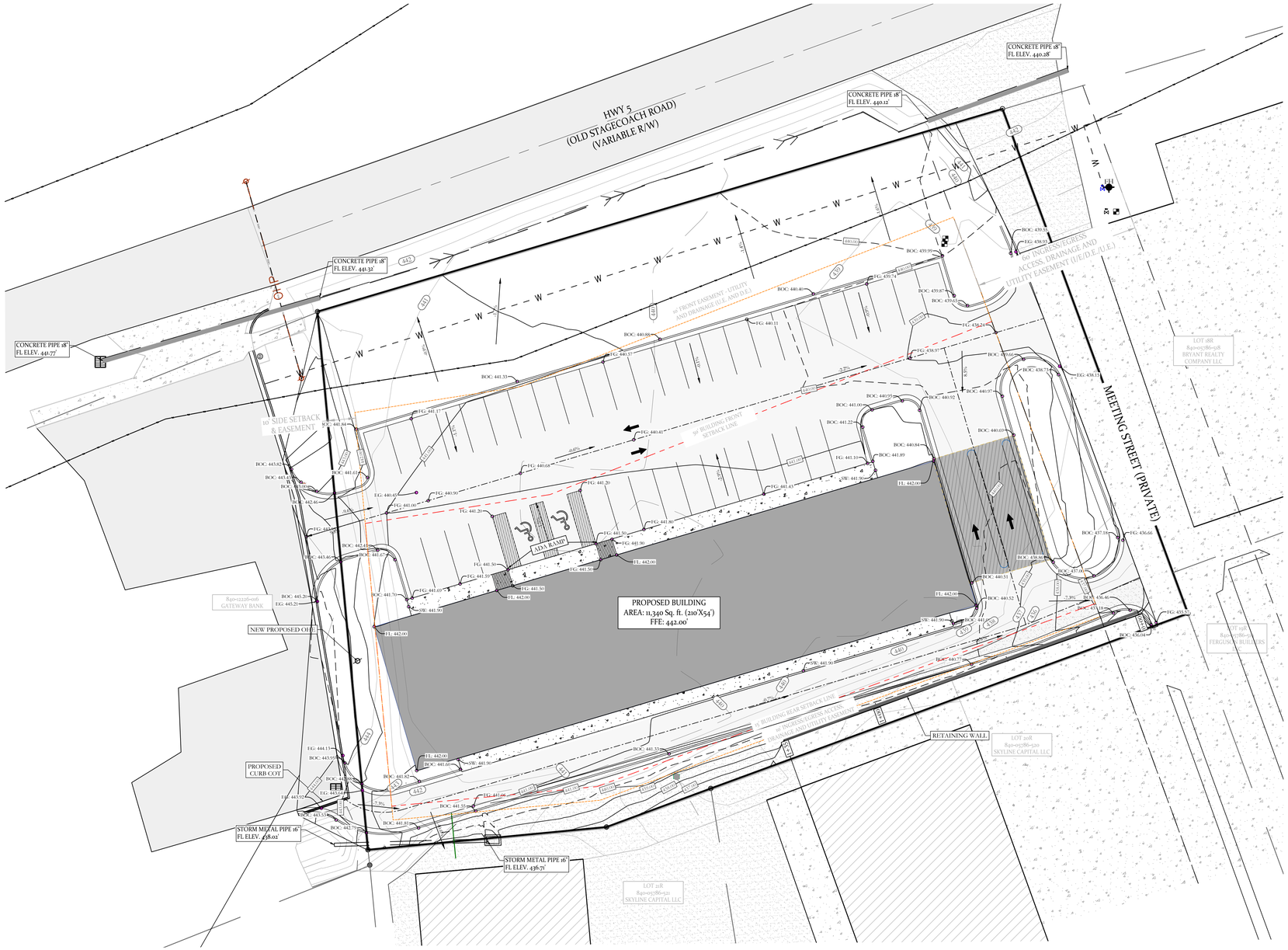
FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

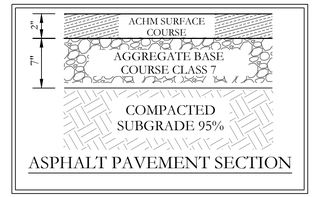
MARKET PLACE II
PRELIMINARY SITE PLAN
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

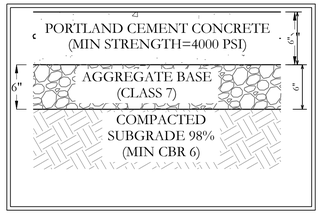
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REVISED:		CHECKED BY:	25-0608
SHEET:	C-1.0	SCALE:	

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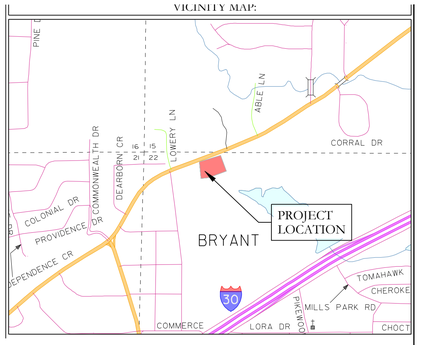
E:\2 HOPE CONSULTING\1. PROJECTS FILES\9. 25-0608 LOT 22R MARKET PLACE-II PH\CIVIL\DWG\25-0608 LOT 22R MARKET PLACE-II PH 11.05.25.DWG



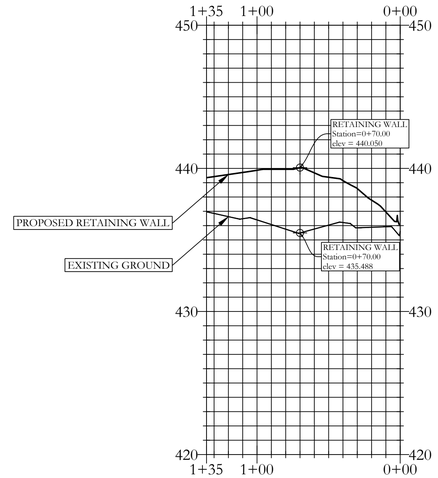




HEAVY DUTY CONCRETE PAVEMENT SECTION



RETAINING WALL PROFILE



GRADING PLAN NOTES

1. DESIGN CONTOURS SHOWN ARE FINISHED GRADE.
2. SPOT ELEVATIONS SHOWN ARE FINISHED ASPHALT, GROUND OR CONCRETE ELEVATIONS.
3. CLEAR AND GRUB AREAS OF THE SITE WHERE CUT OR FILL IS TO OCCUR.
4. FILL SHALL BE COMPACTED AT LEAST 98% OF THE MATERIALS MAXIMUM STANDARD PROCTOR DRY DENSITY.
5. THE MOISTURE CONTENT OF 1% BELOW TO 3% ABOVE THE OPTIMUM MOISTURE CONTENT.
6. SUB-GRADES SHALL BE PROOF-ROLLED WITH A LOADED DUMP TRUCK TO DETECT ZONES OF UNSUITABLE AND/OR EXCESSIVELY WET SOILS. IF PUMPING BEGINS, COMPACTION SHALL BE STOPPED IMMEDIATELY AND RESUMED ONLY WHEN THE MATERIAL IS SUFFICIENTLY DRY THAT PUMPING DOES NOT OCCUR.
7. ALL UNUSABLE SOILS SHALL BE USED ON SITE FOR FILL PURPOSES OUTSIDE THE AREAS OF BUILDING AND PAVEMENT CONSTRUCTION.
8. PROPER DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE PROJECT SITE TO PREVENT THE INCREASE OF THE IN-SITU SOILS MOISTURE CONTENT.

MARKET PLACE-II PHASE 3

PRELIMINARY SITE PLAN

BASIS OF BEARING:
GRID NORTH, ARKANSAS
COORDINATE SYSTEM, SOUTH ZONE
BY GPS OBSERVATION

20' 10' 0 20'

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
NO. 20878
11-19-2025

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

LEGEND
BOC = TOP OF BACK OF CURB
FG = FINISHED GRADE
EG = EXISTING GRADE
SW = TOP OF SIDEWALK

SITE DATA	
TOTAL SITE AREA	1.30 ACRES
TOTAL DEVELOPMENT AREA	1.30 ACRES
GROSS BUILDING AREA	BUILDING 10476 SQ. FT.
BUILDING SETBACKS	FRONT SETBACK LINE: 50' RIGHT SIDE SETBACK LINE: AS SHOWN REAR SETBACK LINE: 15' LEFT SIDE SETBACK LINE: 15'
BUILDING HEIGHTS	1 STORY
BUSINESS TYPE	RETAIL
PARKING CALCULATION (PROVIDED)	PROVIDED PARKING SPACES 51 (3 ADA SPACES)

OWNER:
Name: PHILLIP RYE
Address: 7416 PALM BEACH, BENTON
AR 72019
Phone: 501-317-9883
Email: philliprye@philliprye.com

DEVELOPER:
Name: RYE GENERAL CONTRACTORS
Address: 6128 HIGHWAY 5 NORTH
AR 72022
Phone:
Email:

LEGEND
- PLSS Aliquot Corner
- Fnd. Corner Monument
- Set 1/2" Rebar/Cap (1664)
- Computed Point
(M)- As Measured
(P)- Per Deed or Plat Records
ESMT - Easement
B.S.L. - Building Setback Lines
- Clean Out
- Water Meter
- Power Pole
- Sewer Manhole
- Light Pole
- Telephone Pedestal
- Drainage Manhole
- Gas Meter
- Fence
- Overhead Power
- Sewer Line
- Water Line
- Telephone Line
- Electric Line
- Gas Line
- Existing Access Agreement
- Public Right-of-Way Dedication

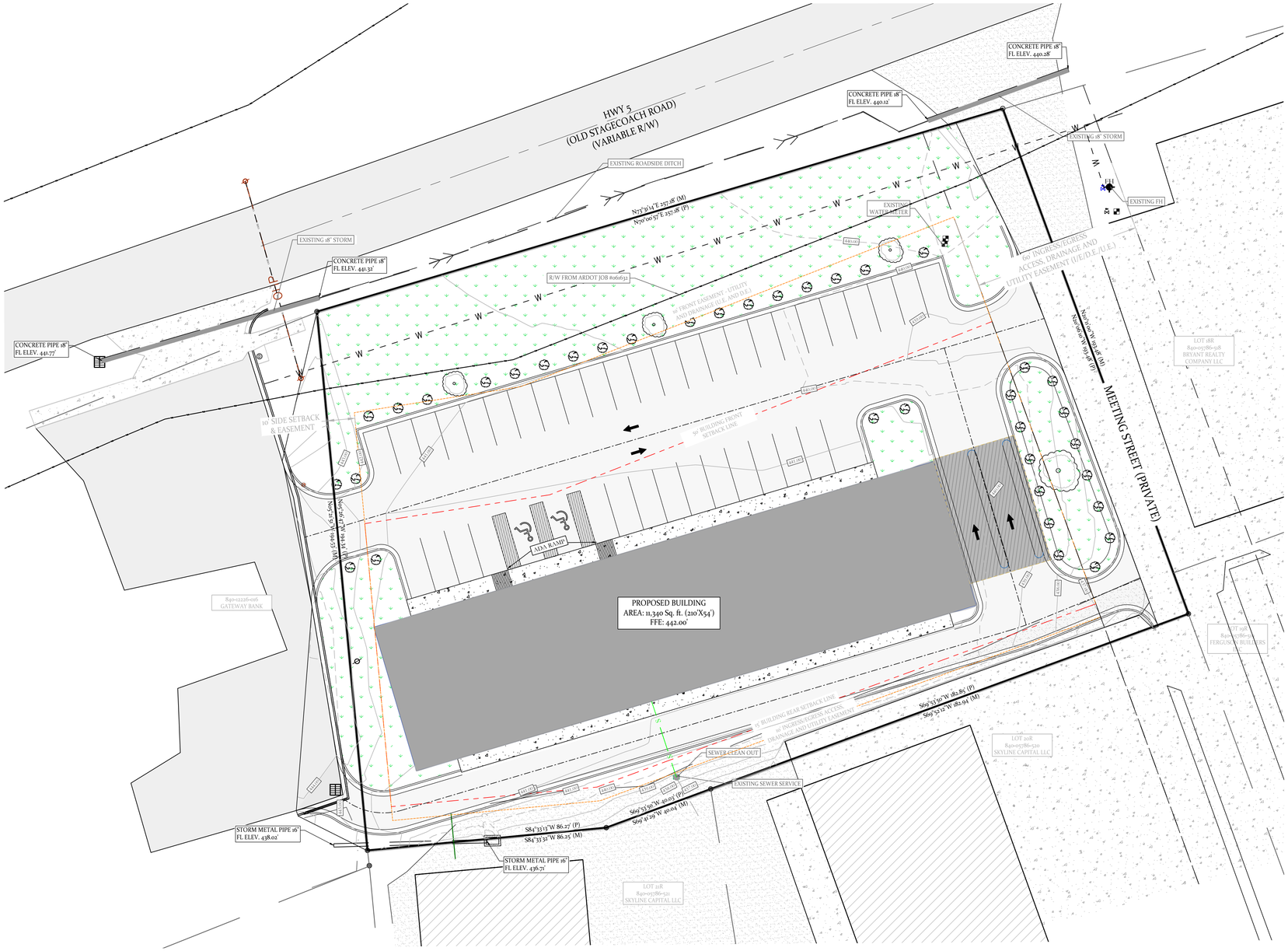
HOPE CONSULTING
ENGINEERS - SURVEYORS
129 N. Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

MARKET PLACE II
GRADING PLAN
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	11.11.25	C.A.D. BY:	DRAWING NUMBER:
REVISED:		CHECKED BY:	25-0608
SHEET:	C-2.0	SCALE:	

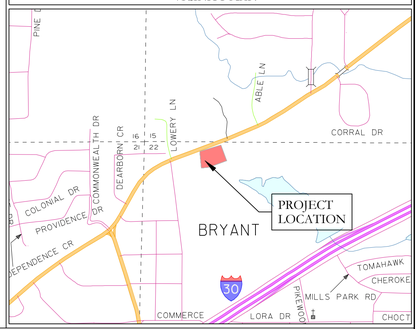
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MARKET PLACE-II PHASE 3

UTILITY PLAN

VICINITY MAP:



SEWER CONSTRUCTION NOTES:

1. ALL SEWER CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION FOR WATER LINES AND SEWER LINES" 2015 EDITION.

WATER CONSTRUCTION NOTES:

1. ALL WATER INSTALLATION SHALL BE DONE IN ACCORDANCE WITH CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION FOR WATER LINES AND SEWER LINES" 2015 EDITION.

ADH NOTES:

ADH RULES PERTAINING TO PUBLIC WATER SYSTEMS, SECTION XIV . DISTRIBUTION SYSTEM, PART A SANITARY AND SAFETY HAZARDS. A MINIMUM HORIZONTAL DISTANCE OF TEN FEET SHOULD BE MAINTAINED BETWEEN WATER LINES AND SEWER LINES OR OTHER SOURCES OF CONTAMINATION. WATER LINES AND SEWERS SHALL NOT BE LAID IN THE SAME TRENCH EXCEPT ON THE WRITTEN APPROVAL OF THE ARKANSAS DEPARTMENT OF HEALTH. WATER MAINS NECESSARILY IN CLOSE PROXIMITY TO SEWERS MUST BE PLACED SO THAT THE BOTTOM OF THE WATER LINE WILL BE AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER LINE AT ITS HIGHEST POINT. IF THIS DISTANCE MUST UNAVOIDABLY BE REDUCED, THE WATER LINE OR THE SEWER LINE MUST BE ENCASED IN WATERTIGHT PIPE WITH SEALED WATERTIGHT ENDS.

EXTENDING AT LEAST TEN FEET EITHER SIDE OF THE CROSSING. ANY JOINT IN THE ENCASEMENT PIPE IS TO BE MECHANICALLY RESTRAINED. THE ENCASEMENT PIPE MAY BE VENTED TO THE SURFACE IF CARRYING WATER OR SEWER UNDER PRESSURE. WHERE A WATER LINE MUST UNAVOIDABLY PASS BENEATH THE SEWER LINE, AT LEAST 18 INCHES OF SEPARATION MUST BE MAINTAINED BETWEEN THE OUTSIDE OF THE TWO PIPES IN ADDITION TO THE PRECEDING ENCASEMENT REQUIREMENT.

A MINIMUM HORIZONTAL DISTANCE OF THREE FEET SHALL BE MAINTAINED BETWEEN WATER LINES AND OTHER UNDERGROUND UTILITIES OF A NON SANITARY NATURE (GAS, ELECTRIC, ETC.).

SEWER LEGEND:	WATER LEGEND:
SEWER SERVICE SEWER MAIN — S — S — (S) SEWER MANHOLE NOTE: USE SDR-26 PVC SEWER PIPE EXCEPT WHERE DUCTILE IRON PIPE REQUIRED FOR COVER. USE DUCTILE IRON PIPE WHERE 3' MINIMUM COVE CANNOT BE MAINTAINED. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL BURIED UTILITIES PRIOR TO CONSTRUCTION.	DUAL WATER METERS SINGLE WATER METER GATE VALVE 45° FITTING 90° FITTING TEE FITTING CROSS FITTING FH FIRE HYDRANT

N

BASIS OF BEARING:
GRID NORTH, ARKANSAS
COORDINATE SYSTEM, NAD83 ZONE
BY CPS OBSERVATION

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
NO. 20876
AMZIDU
11-19-2025

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

20' 10' 0 20'

HOPE CONSULTING
ENGINEERS - SURVEYORS
129 N. Main Street,
Benton, Arkansas 72015
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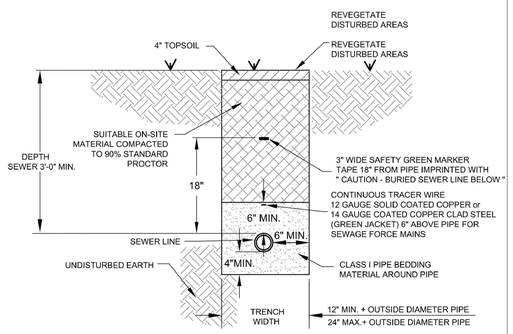
FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

MARKET PLACE II
UTILITY PLAN
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	11.11.25	C.A.D. BY:	DRAWING NUMBER: 25-0608
REVISED:		CHECKED BY:	
SHEET:	C-3.0	SCALE:	

500	01S	14W	0	22	440	62	1762

E:\2. HOPE CONSULTING\1. PROJECTS FILES\9. 25-0608 LOT 22R MARKET PLACE-II PH3\CIVIL\DWG\25-0608 LOT 22R MARKET PLACE-II PH3 11.05.25.DWG



NOTES:

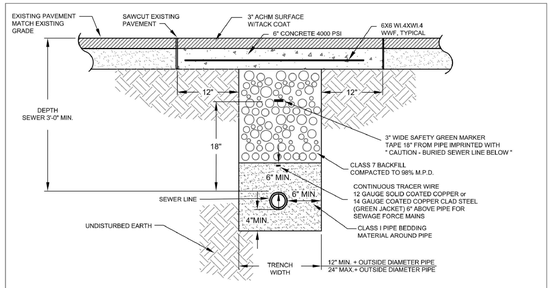
1. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING SEWER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE SEWER SYSTEM.
2. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART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

SEWER TRENCH

(NON-PAVED AREA)

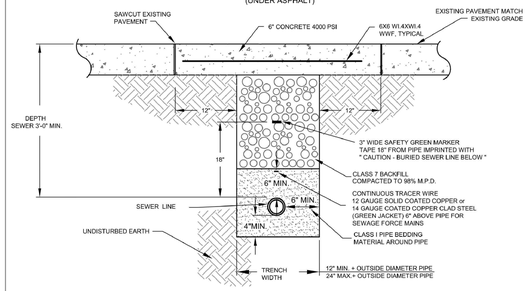
CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **SEWER DETAILS** DESCRIPTION: **SEWER TRENCH (NON-PAVED AREA)** DRAWN BY: CHECKED BY: FILE: S1-Sewer Trench (Non-Paved Area).dwg	DATE: APRIL 2015 REVISED --- --- --- --- ---	SHEET: **S1**

4/16/2015 10:56:07 AM



SEWER TRENCH

(UNDER ASPHALT)



SEWER TRENCH

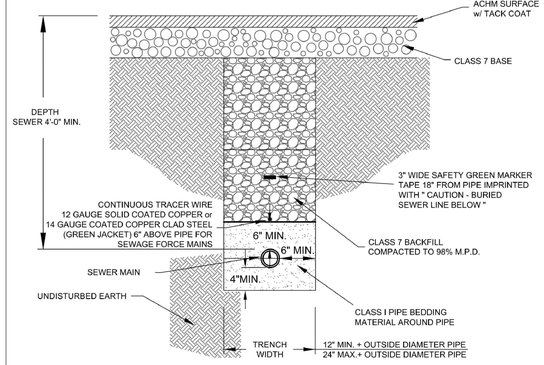
(UNDER CONCRETE)

NOTES:

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

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **SEWER DETAILS** DESCRIPTION: **SEWER TRENCH (UNDER PAVEMENT)** DRAWN BY: CHECKED BY: FILE: S2-Sewer Trench (Under Pavement).dwg	DATE: APRIL 2015 REVISED --- --- --- --- ---	SHEET: **S2**

4/16/2015 10:56:31 AM



SEWER MAIN INSTALLATION
PRIOR TO ROADWAY CONSTRUCTION

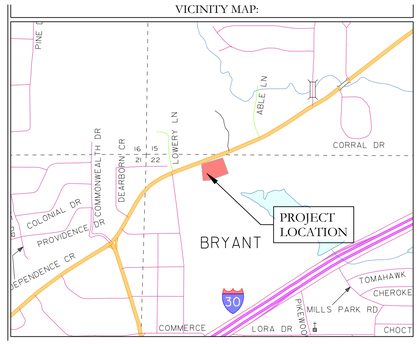
NOTES:

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

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **SEWER DETAILS** DESCRIPTION: **SEWER MAIN INSTALLATION PRIOR TO ROADWAY CONSTRUCTION** DRAWN BY: CHECKED BY: FILE: S3-Sewer Main Installation Prior to Roadway Const.dwg	DATE: APRIL 2015 REVISED --- --- --- --- ---	SHEET: **S3**

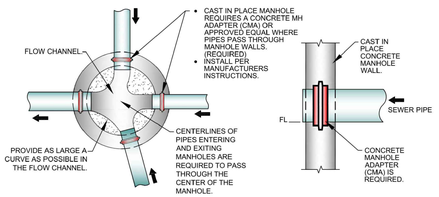
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VICINITY MAP:



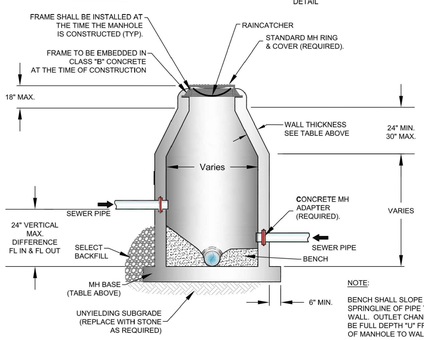
Inside Diameter of Manhole	Minimum Wall Thickness	Base Thickness	Minimum Ring & Cover Size
4' DIA	6"	6"	24" (< or Equal to 24" Pipes)
5' DIA	8"	8"	36" (> 24" Pipes)
6' DIA	8"	12"	

MANHOLE INFORMATION TABLE



MANHOLE FLOW CHANNEL

CONCRETE MANHOLE ADAPTER (CMA) DETAIL



NOTE:

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

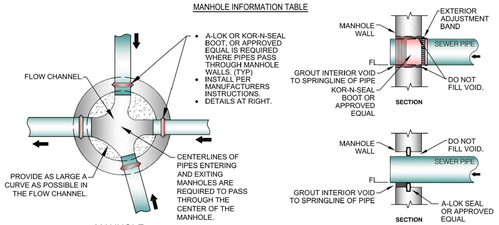
CAST-IN-PLACE MANHOLE

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **SEWER DETAILS** DESCRIPTION: **CAST-IN-PLACE MANHOLE** DRAWN BY: CHECKED BY: FILE: S4-Cast In Place Manhole.dwg	DATE: APRIL 2015 REVISED --- --- --- --- ---	SHEET: **S4**

4/16/2015 10:57:27 AM

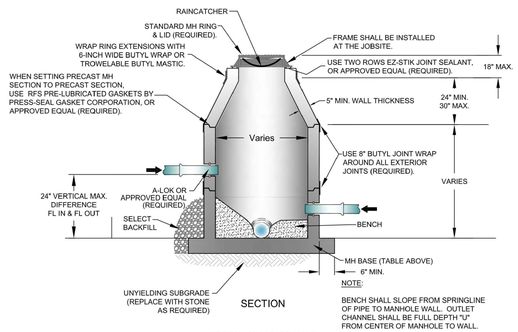
Inside Diameter of Manhole	Minimum Wall Thickness	Base Thickness	Minimum Ring & Cover Size
4' DIA	5"	6"	24" (< or Equal to 24" Pipes)
5' DIA	7"	8"	36" (> 24" Pipes)
6' DIA	7"	8"	

MANHOLE INFORMATION TABLE



MANHOLE FLOW CHANNEL

CONNECTION DETAILS



SECTION

NOTE:

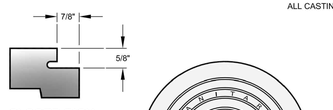
BENCH SHALL SLOPE FROM SPRINGLINE OF PIPE TO MANHOLE WALL. OUTLET CHANNEL SHALL BE FULL DEPTH "U" FROM CENTER OF MANHOLE TO WALL.

PRECAST MANHOLE

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **SEWER DETAILS** DESCRIPTION: **PRECAST MANHOLE** DRAWN BY: CHECKED BY: FILE: S5-Precast Manhole.dwg	DATE: APRIL 2015 REVISED --- --- --- --- ---	SHEET: **S5**

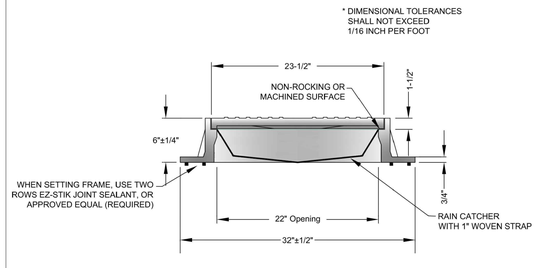
4/16/2015 10:58:01 AM

ALL CASTINGS SHALL BE "MADE IN USA"



COVER DETAIL

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



FRAME AND COVER DETAIL

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **SEWER DETAILS** DESCRIPTION: **MANHOLE FRAME AND COVER** DRAWN BY: CHECKED BY: FILE: S6-Manhole Frame and Cover.dwg	DATE: APRIL 2015 REVISED --- --- --- --- ---	SHEET: **S6**

4/16/2015 10:58:23 AM

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER NO. 20876 ALEX JAMZIDUL ISLAM

11-19-2025

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

HOPE CONSULTING
ENGINEERS - SURVEYORS

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

FOR USE AND BENEFIT OF:

RYE GENERAL CONTRACTORS

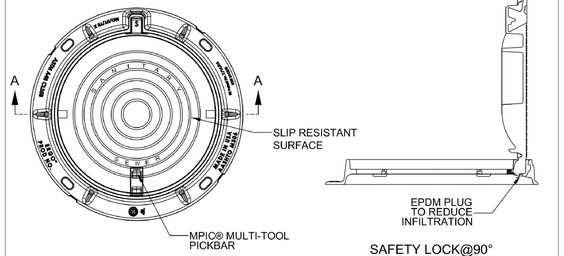
MARKET PLACE II

SEWER DETAILS 1

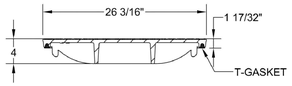
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

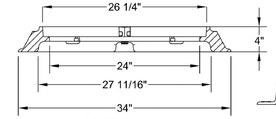
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REVISED:		CHECKED BY:			
SHEET:	C-3.1	SCALE:			

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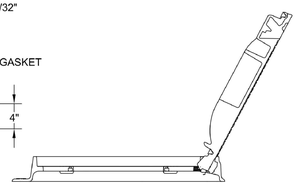


SAFETY LOCK@90°





SECTION A-A

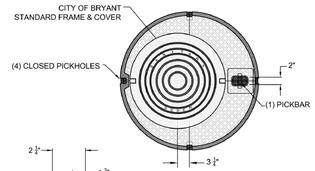


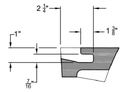
FULLY OPENED@120°

HINGED FRAME AND COVER DETAIL

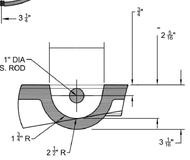
CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE:		DATE: APRIL 2015 REVISED	SHEET:
	DESCRIPTION: HINGED MANHOLE FRAME AND COVER			S7
	DRAWN BY:	CHECKED BY:	FILE: S7--Hinged Manhole Frame and Cover-OLD.dwg	

4/24/2015 10:04:58 AM

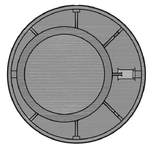




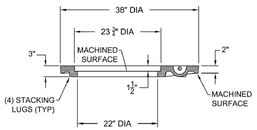
PICKHOLE DETAIL



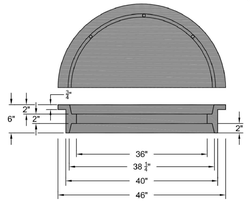
PICKBAR DETAIL



COVER BACK



COVER SECTION



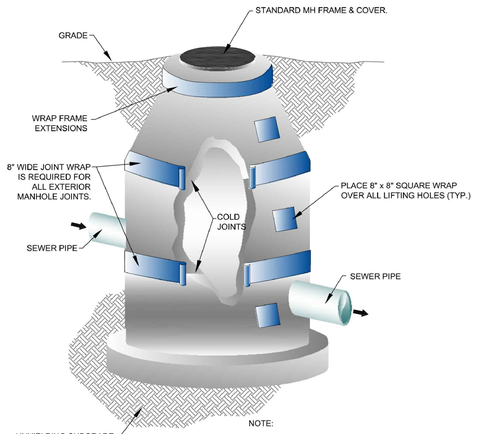
REVERSIBLE FRAME
EST WEIGHT 360 POUNDS

NOTE:

ALL CASTINGS SHALL BE "MADE IN USA"

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: SEWER DETAILS		DATE: APRIL 2015 REVISED	SHEET:
	DESCRIPTION: 36-INCH MANHOLE FRAME AND COVER			S8
	DRAWN BY:	CHECKED BY:	FILE: S8--36 Inch Manhole Frame and Cover.dwg	

4/24/2015 10:57:06 AM



NOTE:

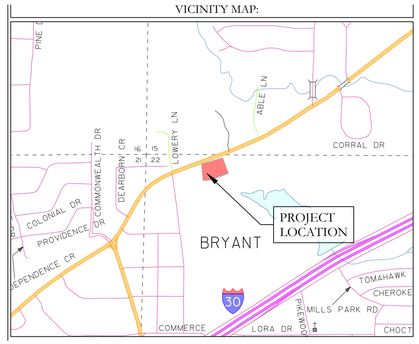
JOINT WRAP TO BE USED:
- ON OUTSIDE OF COLD JOINTS
- ON EXTERIOR OF ALL PRECAST MANHOLE JOINTS
- ON LIFT HOLES / SOCKETS

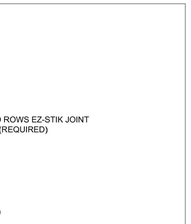
MANHOLE JOINT WRAP

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: SEWER DETAILS		DATE: APRIL 2015 REVISED	SHEET:
	DESCRIPTION: MANHOLE JOINT WRAP			S9
	DRAWN BY:	CHECKED BY:	FILE: S9--Manhole Joint Wrap.dwg	

4/24/2015 10:57:09 AM

VICINITY MAP:





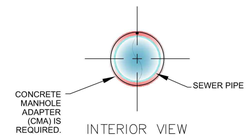
★ THE CONNECTIONS TO EXISTING MANHOLES ARE TO BE CORE-DRILLED WITH THE USE OF A WATER-STOP AND NON-SHRINK GROUT.

DROP MANHOLE

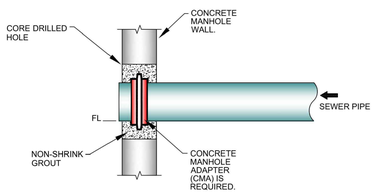
CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: SEWER DETAILS		DATE: APRIL 2015 REVISED	SHEET:
	DESCRIPTION: DROP MANHOLE			S10
	DRAWN BY:	CHECKED BY:	FILE: S10--Drop Manhole.dwg	

4/24/2015 10:57:14 AM

THE INSTALLATION SHALL BE DYE TESTED FOR ACCEPTANCE.



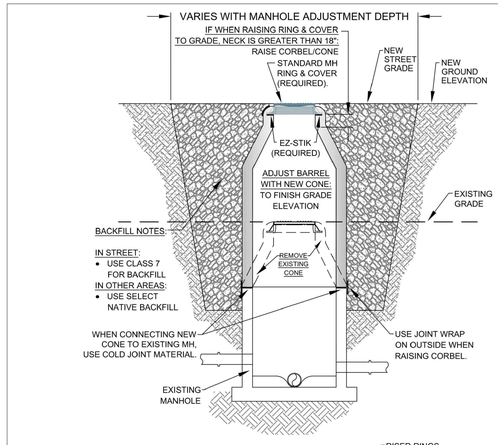
INTERIOR VIEW

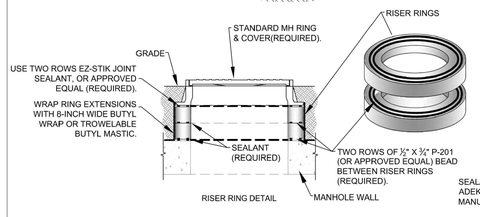


MANHOLE CORING DETAILS

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: SEWER DETAILS		DATE: APRIL 2015 REVISED	SHEET:
	DESCRIPTION: MANHOLE CORING			S11
	DRAWN BY:	CHECKED BY:	FILE: S11--Manhole Coring.dwg	

4/24/2015 10:57:19 AM





TYPICAL MANHOLE ADJUST TO GRADE DETAIL

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: SEWER DETAILS		DATE: APRIL 2015 REVISED	SHEET:
	DESCRIPTION: MANHOLE ADJUST TO GRADE			S12
	DRAWN BY:	CHECKED BY:	FILE: S12--Manhole Adjust to Grade.dwg	

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 20076
JAMZIDUL ISLAM
11-19-2025

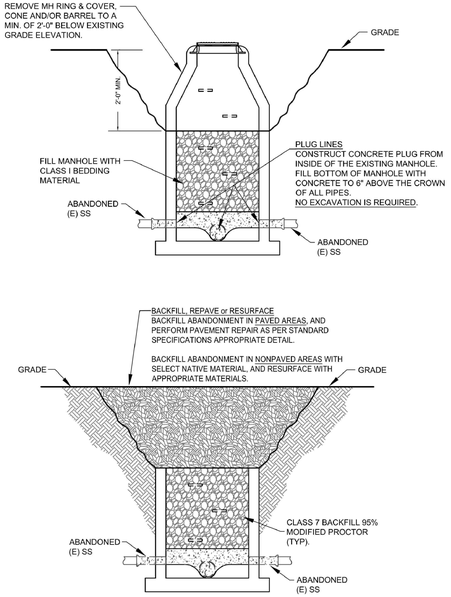
CERTIFICATE OF AUTHORIZATION
HOPE CONSULTING, INC.
No. 1931
ARKANSAS

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

FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

MARKET PLACE II
SEWER DETAILS 2
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

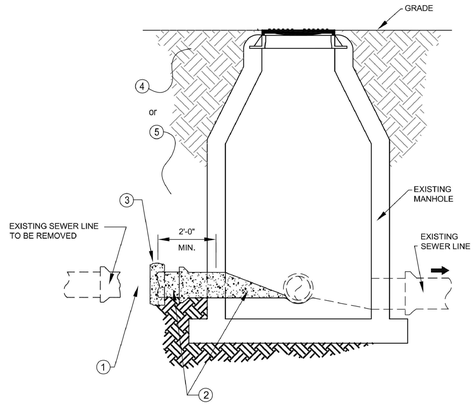
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REVISED:		CHECKED BY:		25-0608				
SHEET:	C-3.2	SCALE:						
500	01S	14W	0	22	440	62	1762	



EXISTING MANHOLE ABANDONMENT DETAIL

CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	DESCRIPTION: MANHOLE ABANDONMENT	REVISED	S13
	DRAWN BY: CHECKED BY: FILE: S13-Manhole Abandonment.dwg		

4/26/2015 10:57:55 AM



1. EXPOSE EXISTING LINE AND PHYSICALLY DISCONNECT THE LINE SEGMENT TO BE REMOVED. (REQUIRED)
2. FILL REMAINING SEWER PIPE TO BE SEALED WITH CONCRETE AND REINFORCEMENT. (REQUIRED)
3. CONSTRUCT A CONCRETE CAP AROUND PIPE CONNECTED TO EXISTING MANHOLE. (REQUIRED)
4. IF THE MANHOLE IS LOCATED IN A PAVED AREA, BACKFILL THE EXCAVATED AREA AND PERFORM PAVEMENT REPAIR. (REQUIRED)
5. IF THE MANHOLE IS LOCATED IN A NON-PAVED AREA, BACKFILL THE EXCAVATED AREA WITH SELECT NATIVE MATERIAL, AND RESURFACE WITH THE APPROPRIATE MATERIALS. (REQUIRED)

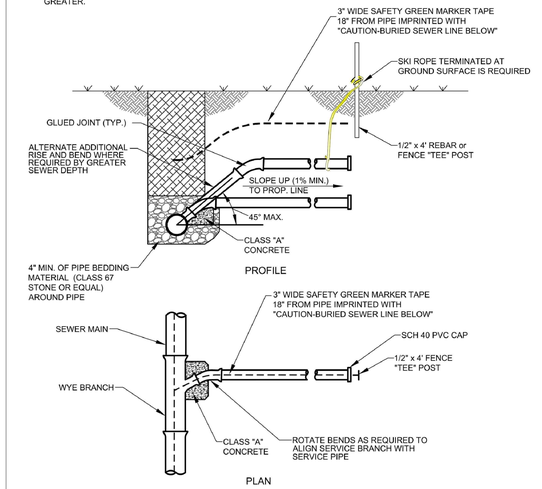
SEWER LINE DISCONNECT & SEAL DETAIL

CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	DESCRIPTION: SEWER LINE DISCONNECT AND SEAL	REVISED	S14
	DRAWN BY: CHECKED BY: FILE: S14-Sewer Line Disconnect and Seal.dwg		

4/26/2015 10:58:01 AM

NOTES:

1. MODIFIED RISER LATERAL SHALL BE USED WHEN DEPTH OF COVER EXCEEDS 7'-0"
2. PLACE CLASS "A" CONCRETE UNDER EACH WYE BRANCH TO PREVENT CRACKING OR TWISTING UNDER EARTH LOADS.
3. SERVICE LATERAL STUBS SHALL TERMINATE AT LEAST 2 FEET INSIDE THE PROPERTY LINE BUT IN NO CASE SHALL THE SERVICE LATERAL STUB TERMINATE AT A DISTANCE LESS THAN 8 FEET FROM THE SANITARY SEWER MAIN.
4. BURY A 1/2" x 4' STEEL TEE FENCE POST AT END OF SERVICE LATERAL STUB AND BACKFILL TO FINISHED GRADE OF PROPERTY.
5. 4" DUCTILE IRON PIPE, LINED FOR SANITARY SEWER AND 4" DUCTILE IRON M.J. FITTINGS, LINED FOR SANITARY SEWER, SHALL BE INSTALLED FOR SERVICES BURIED AT DEPTHS OF 14 FEET AND GREATER.

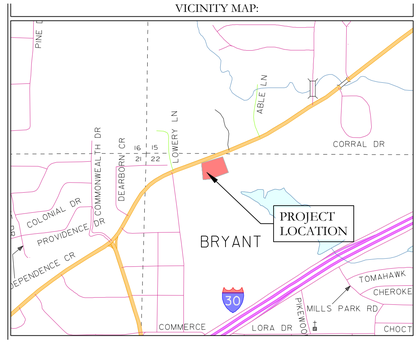


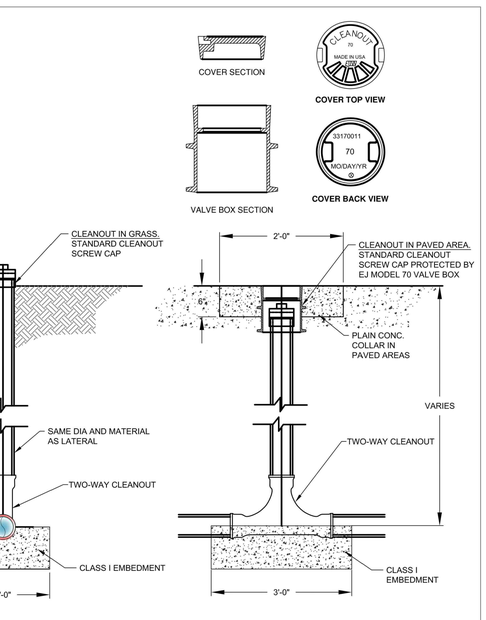
SEWER SERVICE LATERAL

CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	DESCRIPTION: SEWER SERVICE LATERAL	REVISED	S15
	DRAWN BY: CHECKED BY: FILE: S15-Sewer Service Lateral.dwg		

4/26/2015 10:58:04 AM

VICINITY MAP:



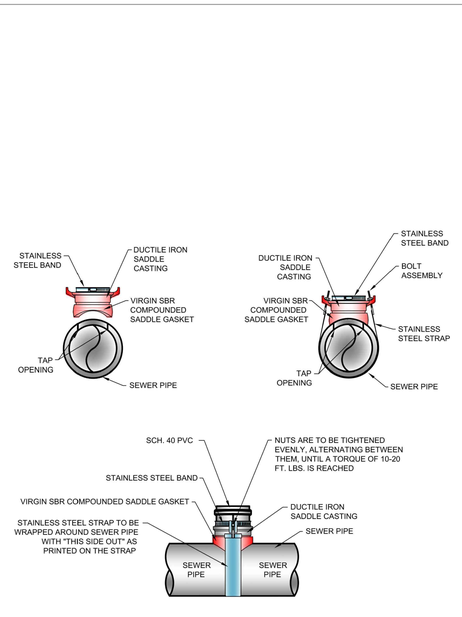


END VIEW SIDE VIEW

TYPICAL CLEANOUT

CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	DESCRIPTION: SEWER SERVICE CLEANOUT	REVISED	S16
	DRAWN BY: CHECKED BY: FILE: S16-Sewer Service Cleanout.dwg		

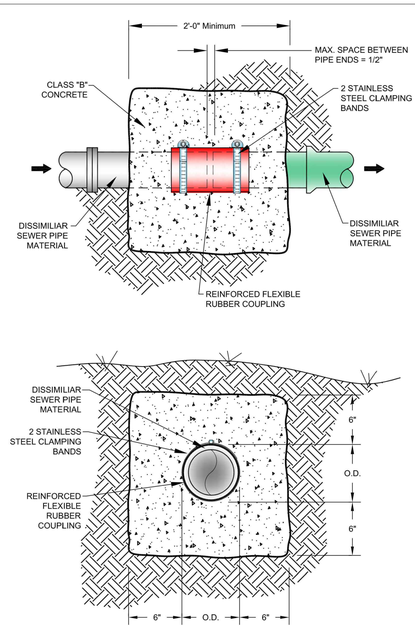
4/26/2015 10:58:13 AM



SEWER SERVICE SADDLE

CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	DESCRIPTION: SEWER SERVICE SADDLE	REVISED	S17
	DRAWN BY: CHECKED BY: FILE: S17-Sewer Service Saddle.dwg		

4/26/2015 10:58:39 AM



REINFORCE FLEXIBLE COUPLING

CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	DESCRIPTION: REINFORCED FLEXIBLE COUPLING	REVISED	S18
	DRAWN BY: CHECKED BY: FILE: S18-Reinforced Flexible Coupling.dwg		

STATE OF ARKANSAS LICENSED PROFESSIONAL ENGINEER No. 20870 — 11-19-2025

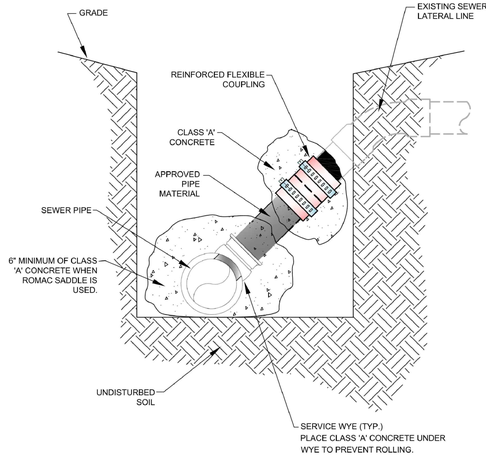
CERTIFICATE OF AUTHORIZATION — HOPE CONSULTING, INC. No. 1931 — ARKANSAS

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

FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

MARKET PLACE II
SEWER DETAILS 3
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	11.11.25	C.A.D. BY:		DRAWING NUMBER:				
REVISED:		CHECKED BY:		25-0608				
SHEET:	C-3.3	SCALE:						
500	01S	14W	0	22	440	62	1762	

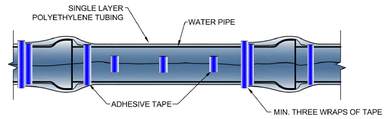


CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

TITLE: **SEWER DETAILS**
DESCRIPTION: **CONNECT TO EXISTING SEWER SERVICE**
DRAWN BY: | CHECKED BY: | FILE: S19-Connect to Existing Sewer Service.dwg

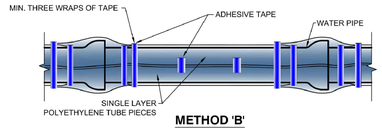
DATE: APRIL 2015 | REVISED: ----- ----- ----- ----- -----
SHEET: **S19**

4/16/2015 10:58:18 AM



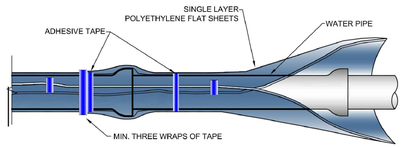
METHOD 'A'

METHOD 'A' USES ONE LENGTH OF POLYETHYLENE TUBE, OVERLAPPED AT THE JOINTS A MINIMUM OF 2 FEET.



METHOD 'B'

METHOD 'B' USES SEPARATE PIECES OF POLYETHYLENE TUBE FOR THE BARREL OF THE PIPE AND THE JOINTS. SHORT PIECES SHALL BE APPROXIMATELY 6' LONG AND OVERLAP BARREL SECTION BY A MINIMUM OF 2 FEET.



METHOD 'C'

METHOD 'C' - USED FOR PIPE-SHAPED AND ODD- SHAPED APPURTENANCES SUCH AS BENDS, REDUCERS, OFFSETS, VALVES, TEES, ETC.

ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE POLY WRAPPED.

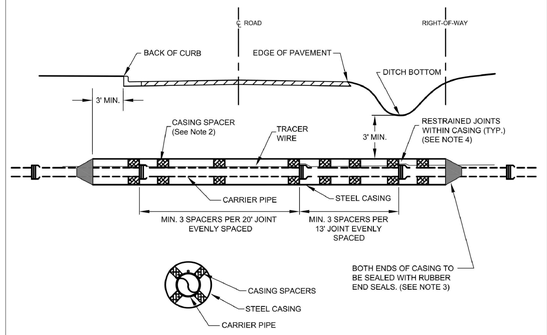
THE ANSI/AWWA C105/A21.5 STANDARD OUTLINES THREE METHODS OF INSTALLING POLYETHYLENE ENCASEMENT/ SLEEVING.

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

TITLE: **SEWER DETAILS**
DESCRIPTION: **POLYETHYLENE PROTECTION MATERIAL**
DRAWN BY: | CHECKED BY: | FILE: S20-Poly Wrap.dwg

DATE: APRIL 2015 | REVISED: ----- ----- ----- ----- -----
SHEET: **S20**

4/16/2015 10:58:26 AM



NOTES:

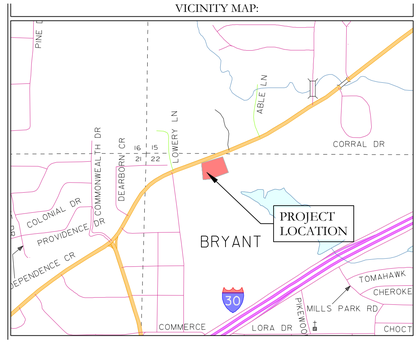
1. STEEL CASING SHALL BE CONSTRUCTED OF SPIRAL OR STRAIGHT WELDED STEEL WITH A MINIMUM DIAMETER AND THICKNESS AS SHOWN BELOW (SEE TABLE).
2. PROVIDE CASING SPACERS BY CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATERWORKS MFG. CO., OR APPROVED EQUAL, MINIMUM 12-INCHES WIDE..
3. PROVIDE END SEALS BY CASCADE MODEL CCES AS MANUFACTURED BY CASCADE WATERWORKS MFG. CO., OR APPROVED EQUAL.
4. ONE CASING SPACER SHALL BE PLACED AT THE INSERTION STOP LINE TO RESIST OVER INSERTION.
5. ALL FORCE MAINS SHALL BE FULLY RESTRAINED WHERE ENCASEMENTS ARE GREATER THAN 25 FEET IN LENGTH. SELF-RESTRAINING GASKETS OR BELL RESTRAINTS SHALL BE USED FOR ALL JOINTS INSIDE THE ENCASEMENT PIPE AND FOR THE FIRST JOINT IN EACH DIRECTION OUTSIDE THE ENCASEMENT PIPE.
6. DIRECT BURY STEEL ENCASEMENT SHALL BE POLY WRAPPED.

CARRIER AND CASING SIZES

CARRIER (ID)	2"	3"	4"	6"	8	10"	12"
CASING (ID)	5"	6"	8"	12"	16"	20"	24"
CASING WALL THICKNESS	0.250	0.250	0.250	0.250	0.250	0.250	0.375
CARRIER (ID)	14" - 16"	18" - 20"	24"	30"	36"	42"	48"
CASING (ID)	30"	36"	42"	48"	54"	60"	72"
CASING WALL THICKNESS	0.375	0.500	0.625	0.625	0.625	0.625	0.750

STEEL ENCASEMENT

VICINITY MAP:

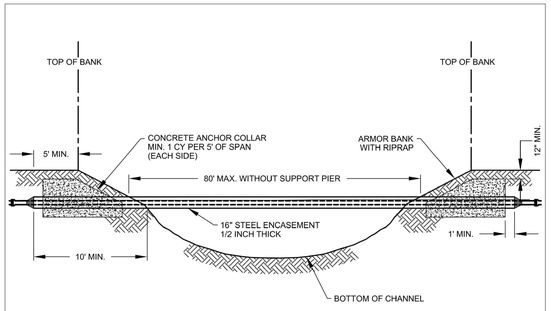


CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

TITLE: **SEWER DETAILS**
DESCRIPTION: **STEEL ENCASEMENT**
DRAWN BY: | CHECKED BY: | FILE: S21-Steel Encasement.dwg

DATE: APRIL 2015 | REVISED: ----- ----- ----- ----- -----
SHEET: **S21**

4/16/2015 10:59:01 AM



NOTES:

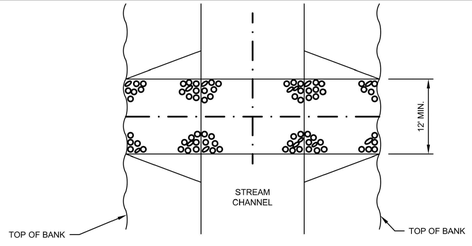
1. DETAIL SHOWN IS FOR 16" ENCASEMENT WITH 8" SEWER PIPE AT 0.50% GRADE. OTHER SIZES WILL REQUIRE A DETAILED DESIGN WITH A MAXIMUM DEFLECTION OF L/360.
2. REFER TO STEEL ENCASEMENT DETAIL FOR ADDITIONAL INSTALLATION REQUIREMENTS.
3. STEEL CASING SHALL BE CONSTRUCTED OF SPIRAL OR STRAIGHT WELDED STEEL.
4. PROVIDE CASING SPACERS BY CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATERWORKS MFG. CO., OR APPROVED EQUAL, MINIMUM 12-INCHES WIDE.
5. PROVIDE END SEALS BY CASCADE MODEL CCES AS MANUFACTURED BY CASCADE WATERWORKS MFG. CO., OR APPROVED EQUAL.
6. ONE CASING SPACER SHALL BE PLACED AT THE INSERTION STOP LINE TO RESIST OVER INSERTION.
7. ALL FORCE MAINS SHALL BE FULLY RESTRAINED WHERE ENCASEMENTS ARE GREATER THAN 25 FEET IN LENGTH. SELF-RESTRAINING GASKETS OR BELL RESTRAINTS SHALL BE USED FOR ALL JOINTS INSIDE THE ENCASEMENT PIPE AND FOR THE FIRST JOINT IN EACH DIRECTION OUTSIDE THE ENCASEMENT PIPE.
8. BELL RESTRAINTS FOR PVC SHALL BE SERIES1900 RESTRAINT HARNESS AND BELL RESTRAINTS FOR DIP SHALL BE SERIES 1700 RESTRAINT HARNESS BY EBAA IRON INC., OR APPROVED EQUAL.
9. DIRECT BURY STEEL ENCASEMENT SHALL BE POLY WRAPPED.

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

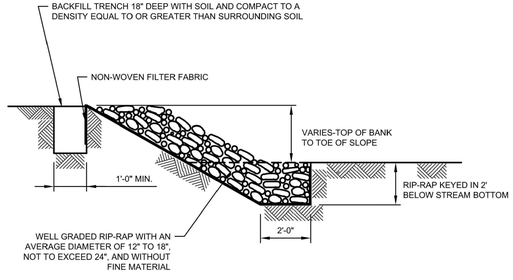
TITLE: **SEWER DETAILS**
DESCRIPTION: **STEEL ENCASEMENT AERIAL CROSSING**
DRAWN BY: | CHECKED BY: | FILE: S22-Steel Encasement-Aerial Crossing.dwg

DATE: APRIL 2015 | REVISED: ----- ----- ----- ----- -----
SHEET: **S22**

4/16/2015 10:59:20 AM



PLAN VIEW



SECTION

NOTE:

1. ALL DISTURBED STREAMBANKS SHALL BE STABILIZED AS SHOWN AND RESTORED TO PRE-CONSTRUCTION GRADES.
2. MINIMUM WIDTH OF RESTORATION SHALL BE 12 FEET.

BANK STABILIZATION

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

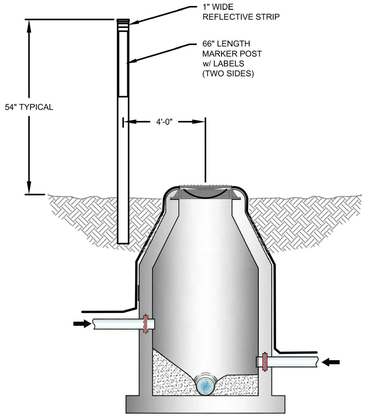
TITLE: **SEWER DETAILS**
DESCRIPTION: **BANK STABILIZATION**
DRAWN BY: | CHECKED BY: | FILE: S23-Bank Stabilization.dwg

DATE: APRIL 2015 | REVISED: ----- ----- ----- ----- -----
SHEET: **S23**

4/16/2015 10:59:33 AM

NOTES:

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



SEWER MARKER

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

TITLE: **SEWER DETAILS**
DESCRIPTION: **SEWER MARKER**
DRAWN BY: | CHECKED BY: | FILE: S24-Sewer Marker.dwg

DATE: APRIL 2015 | REVISED: ----- ----- ----- ----- -----
SHEET: **S24**

4/16/2015 10:59:41 AM

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
JAMIL SHAWKI TAMZIDUL
11-19-2025

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

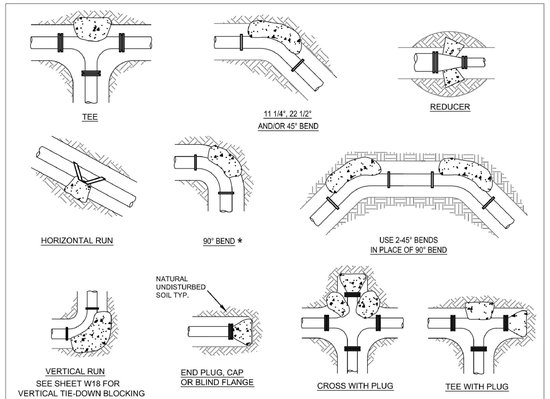
HOPE CONSULTING
ENGINEERS - SURVEYORS
129 N. Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

MARKET PLACE II
SEWER DETAILS 4
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	11.11.25	C.A.D. BY:	DRAWING NUMBER:
REVISED:		CHECKED BY:	25-0608
SHEET:	C-3.4	SCALE:	

500	01S	14W	0	22	440	62	1762



THRUST BLOCK SCHEDULE

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

BEARING AREA OF THRUST BLOCKS IN SQ. FT. (HORIZONTAL BENDS)						VOLUME OF THRUST BLOCK IN CU. FEET (VERTICAL BENDS)							
FITTING SIZE	PLUG TEE OR CAP	BEND ANGLE 90° *	45°	22 1/2°	11 1/4°	FITTING SIZE	BEND ANGLE 90° *	45°	22 1/2°	11 1/4°	TOO DAM	EMBED MENT
2, 3, & 4	1.9	2.7	1.4	0.7	0.4	2, 3, & 4	35.5	19.2	9.8	4.9	.50"	30"
6	5.6	7.9	4.3	2.2	1.1	6	105.8	57.2	29.2	14.7	.75"	30"
8	9.6	13.8	7.4	3.8	1.9	8	181.9	98.5	50.2	25.2	.75"	30"
12	20.8	29.0	15.7	8.0	4.0	12	397.1	209.5	106.8	53.7	1.0"	30"
16	35.7	50.4	27.3	13.9	7.0	16	672.6	354.0	185.6	93.2	1.0"	36"
18	44.8	63.4	34.3	17.5	18.8	18	844.7	457.2	233.1	117.1	1.0"	36"
24	78.4	110.9	60.0	30.8	15.4	24	1478.7	800.3	408.8	205.0	1.5"	36"

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

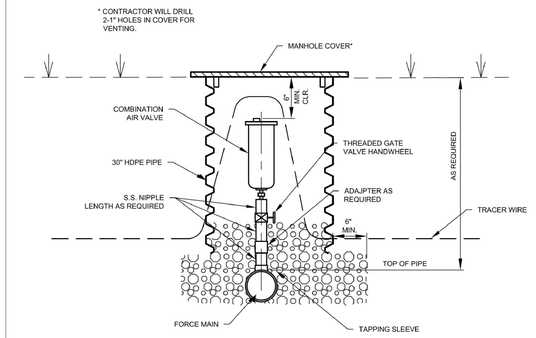
THRUST BLOCK NOTES:

1. CONCRETE FOR THRUST BLOCKS - CLASS A CONCRETE SHALL DEVELOP NOT LESS THAN 3000 P.S.I. COMPRESSIVE STRENGTH AT 28 DAYS AND BE PLACED AGAINST UNDISTURBED SOIL.
2. ALL BENDS, BOTH HORIZONTAL AND VERTICAL, SHALL BE BACKED WITH CONCRETE. VERTICAL BENDS SHALL BE PLACED ON CONCRETE PADS WHERE BENDS TURN UP, OR LOADED WHERE BENDS TURN DOWN.
3. WRAP PIPE JOINTS IN 8 MIL "POLYETHLENE" BEFORE PLACING CONCRETE.
4. BEARING AREA SHOWN IN TABLE, IS BASED UPON A 2000 LB/SF. SOIL BEARING, AND UPON A PIPELINE PRESSURE OF 200 psi. PLUS 100 psi. WATER HAMMER. AREAS SHOWN SHALL BE ADJUSTED, SHOULD FIELD CONDITIONS VARY.
5. MJ RESTRAINTS ARE REQUIRED FOR ALL FITTINGS.
6. USE LONG-RADIUS FITTINGS WHEREVER POSSIBLE
7. ALL BOLTS FOR FITTINGS SHALL BE 316 STAINLESS STEEL.
8. ALL DUCTILE IRON FITTINGS SHALL BE FUSION-BONDED EPOXY COATED INSIDE AND OUTSIDE IN ACCORDANCE WITH ANSI/AWWA C115/A21.16.
9. UNIT WEIGHT OF CONCRETE FOR VERTICAL THRUST BLOCKS IS 150 LBS/CU. FT.

THRUST BLOCKING

4/16/2015 10:59:46 AM

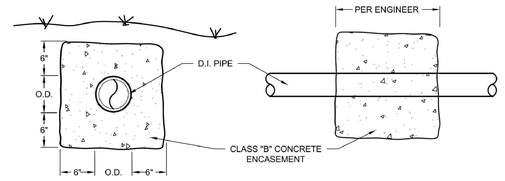
CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015 REVISED -----	SHEET: S25
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0488	DESCRIPTION: FORCE MAIN THRUST BLOCKING	----- ----- -----	
	DRAWN BY: CHECKED BY: FILE: S25-Thrust Blocking.dwg	-----	



AIR RELEASE VALVE

4/16/2015 10:39:53 AM

CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015 REVISED -----	SHEET: S26
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0488	DESCRIPTION: AIR RELEASE VALVE	----- ----- -----	
	DRAWN BY: CHECKED BY: FILE: S26-Air Release Valve.dwg	-----	

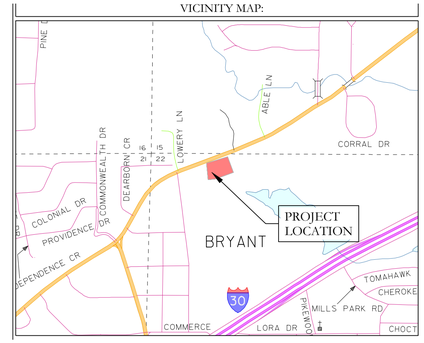


CONCRETE ENCASEMENT

4/16/2015 10:59:58 AM

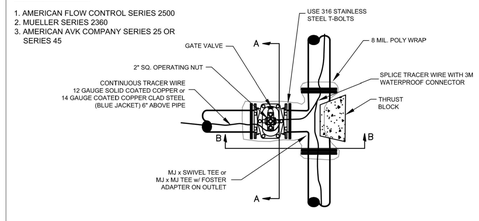
CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015 REVISED -----	SHEET: S27
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0488	DESCRIPTION: CONCRETE ENCASEMENT DETAIL	----- ----- -----	
	DRAWN BY: CHECKED BY: FILE: S27-Concrete Encasement.dwg	-----	

VICINITY MAP:

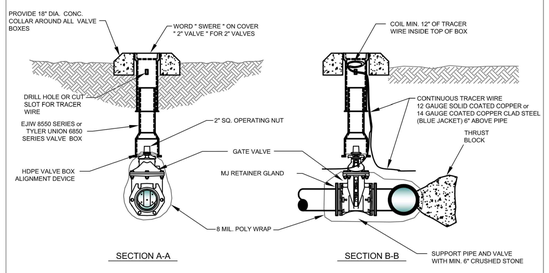


PERMITTED VALVES

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



PLAN



SECTION A-A SECTION B-B

NOTES:

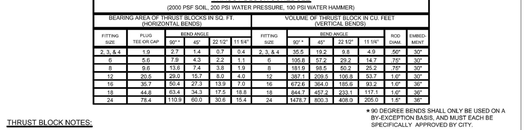
1. ALL VALVES SHALL BE SECURELY ANCHORED TO THE TEE.
2. ALL HARDWARE SHALL BE 316 STAINLESS STEEL.
3. IF DEPTH OF BURY EXCEEDS 4 FT., A VALVE STEM EXTENSION SHALL BE REQUIRED. THE VALVE STEM EXTENSION NUT SHALL BE WITHIN 24-INCHES TO 12-INCHES OF THE FINISHED SURFACE.

GATE VALVE DETAIL

2" - 12"

4/16/2015 11:00:08 AM

CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015 REVISED -----	SHEET: S29
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0488	DESCRIPTION: GATE VALVE	----- ----- -----	
	DRAWN BY: CHECKED BY: FILE: S29-Gate Valve.dwg	-----	



NOTE:
1. RETAINER GLANDS REQUIRED ON ALL MJ FITTINGS.

ELEVATION

EMERGENCY PUMP CONNECTION DETAILS

4/16/2015 11:00:03 AM

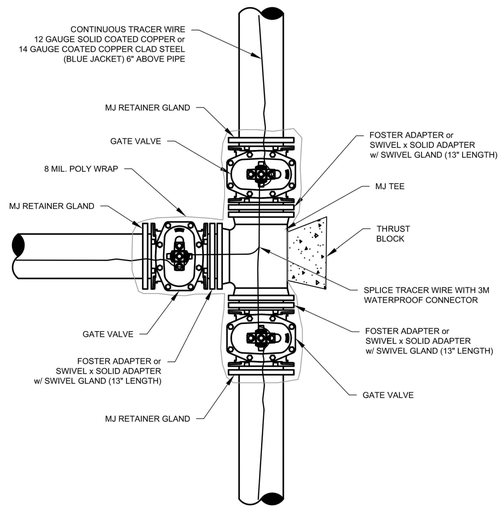
CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015 REVISED -----	SHEET: S28
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0488	DESCRIPTION: EMERGENCY PUMP CONNECTION	----- ----- -----	
	DRAWN BY: CHECKED BY: FILE: S28-EMERGENCY PUMP CONNECTION.dwg	-----	

PERMITTED VALVES

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

NOTES:

1. ALL VALVES SHALL BE SECURELY ANCHORED TO THE TEE.
2. ALL HARDWARE SHALL BE 316 STAINLESS STEEL.
3. IF DEPTH OF BURY EXCEEDS 4 FT., A VALVE STEM EXTENSION SHALL BE REQUIRED. THE VALVE STEM EXTENSION NUT SHALL BE WITHIN 24-INCHES TO 12-INCHES OF THE FINISHED SURFACE.
4. A FLEX T-3 AS MANUFACTURED BY INFACT CORPORATION MAY BE USED IN LIEU OF MJ TEE W/ FOSTER ADAPTERS.



3-WAY GATE VALVE DETAIL

4/16/2015 11:00:14 AM

CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015 REVISED -----	SHEET: S30
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0488	DESCRIPTION: 3-WAY GATE VALVES	----- ----- -----	
	DRAWN BY: CHECKED BY: FILE: S30-3-Way Gate Valves.dwg	-----	

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
NO. 09870
11-19-2025

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

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

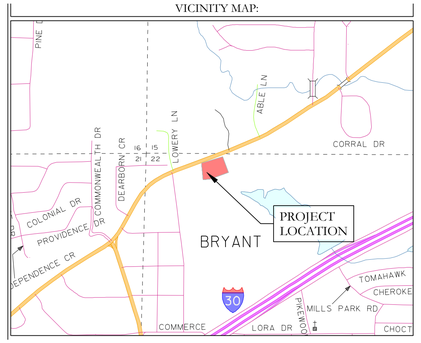
FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

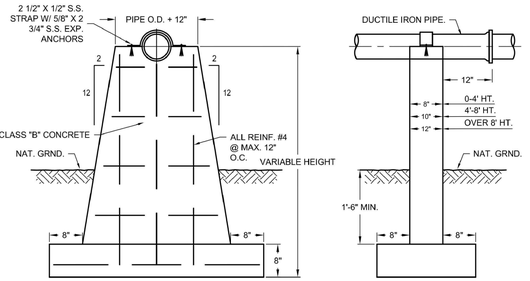
MARKET PLACE II
SEWER DETAILS 5
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	11.11.25	C.A.D. BY:		DRAWING NUMBER:
REVISED:		CHECKED BY:		25-0608
SHEET:	C-3.5	SCALE:		

500	01S	14W	0	22	440	62	1762

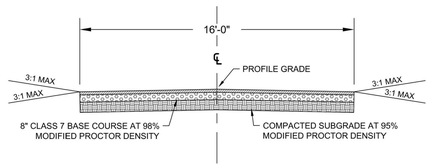
VICINITY MAP:





CONCRETE PIER

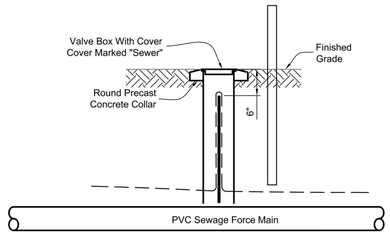
CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	DESCRIPTION: CONCRETE PIER	REVISED ----- ----- ----- -----	S31
	DRAWN BY: CHECKED BY: FILE: S31-Concrete Pier.dwg	-----	



GRAVEL DRIVE FOR SEWAGE PUMP STATION

GENERAL NOTES
1. CRUSHED STONE - MATERIAL IN EACH COURSE SHALL BE COMPACTED TO A DENSITY OF 98% MAXIMUM MODIFIED DENSITY.

CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	DESCRIPTION: GRAVEL DRIVE FOR SEWAGE PUMP STATION	REVISED ----- ----- ----- -----	S32
	DRAWN BY: CHECKED BY: FILE: S32-Gravel Drive For Sewage Pump Station.dwg	-----	



Notes:
1. Tracer Wire Test Station Shall Be Installed Every 1,000 Ft. Minimum And At Every Fiberglass Post Utility Marker.
2. Do Not Install Test Stations At Posts Located At Valves, Clean-out Stations Or Air Release Valves That Have Ground Rod Inside Access Vault

TRACER WIRE TEST STATION

CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	DESCRIPTION: TRACER WIRE TEST STATION	REVISED ----- ----- ----- -----	S33
	DRAWN BY: CHECKED BY: FILE: S33-Tracer Wire Test Station.dwg	-----	

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 20870
AMZIDUL ISLAM

11-19-2025

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

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

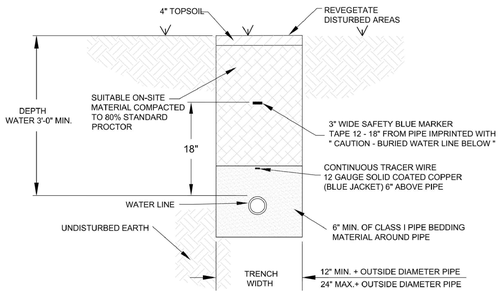
FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

MARKET PLACE II
SEWER DETAILS 6
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	11.11.25	C.A.D. BY:	DRAWING NUMBER:
REVISED:		CHECKED BY:	25-0608
SHEET:	C-3.6	SCALE:	

500	01S	14W	0	22	440	62	1762

4/15/2015 11:00:20 AM



NOTES:

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

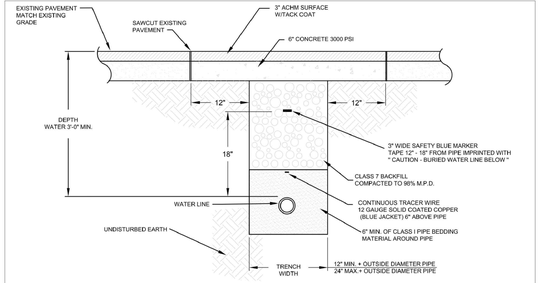
WATER MAIN TRENCH

(NON-PAVED AREA)

4/16/2015 11:45:13 AM

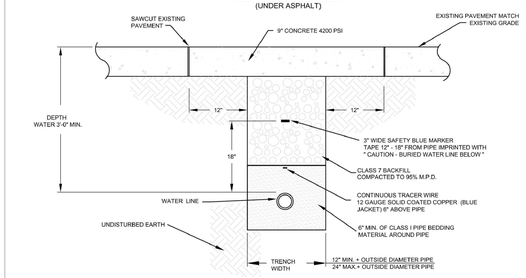
CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0468

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



WATER MAIN TRENCH

(UNDER ASPHALT)



WATER MAIN TRENCH

(UNDER CONCRETE)

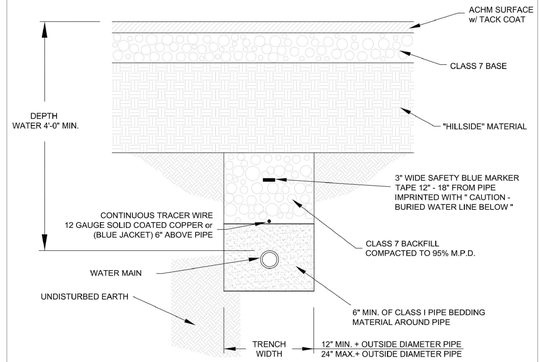
NOTES:

1. ALL VALVES, BENDS, ETC. SHALL BE RESTRAINED.
2. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING WATER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE WATER SYSTEM.
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4/16/2015 11:45:06 AM

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

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



WATER MAIN INSTALLATION
PRIOR TO ROADWAY CONSTRUCTION

NOTES:

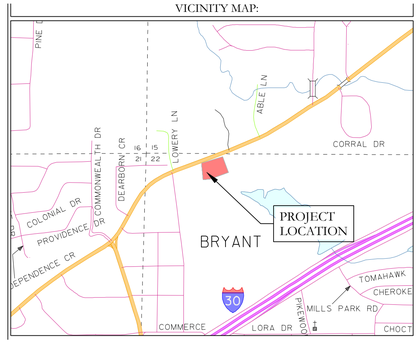
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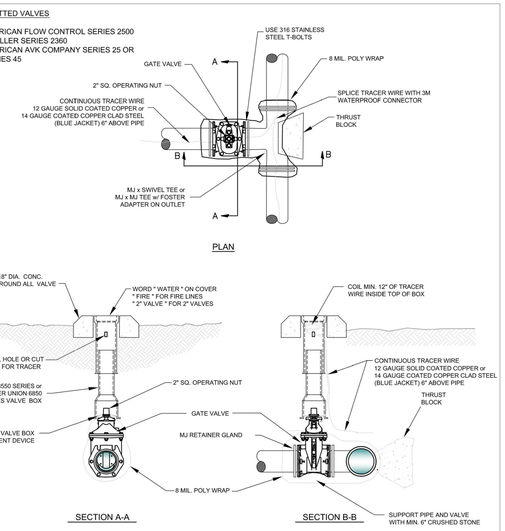
4/16/2015 11:45:06 AM

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

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	WATER MAIN INSTALLATION PRIOR TO ROADWAY CONSTRUCTION	REVISED ----- ----- ----- ----- -----	W3
DRAWN BY:	CHECKED BY:	FILE: W3-Water Main Installation Prior to Roadway Const.dwg	

VICINITY MAP:





NOTES:

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

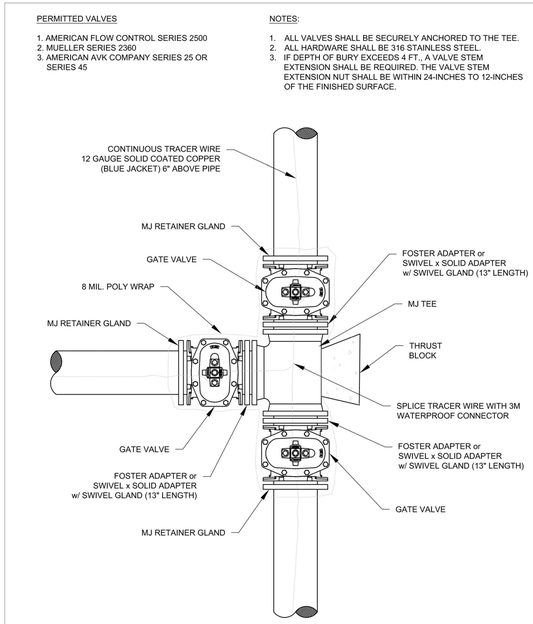
GATE VALVE DETAIL

2" - 12"

4/16/2015 11:45:52 AM

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

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

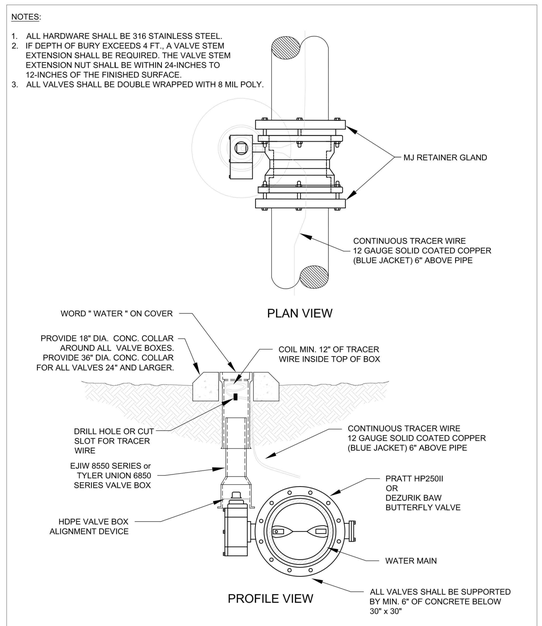


3-WAY GATE VALVE DETAIL

4/16/2015 11:45:58 AM

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

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	3-WAY GATE VALVES	REVISED ----- ----- ----- ----- -----	W5
DRAWN BY:	CHECKED BY:	FILE: W5-3-Way Gate Valves.dwg	



BUTTERFLY VALVE DETAIL

14-INCH WATER MAINS AND LARGER

4/16/2015 11:45:51 AM

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

TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
DESCRIPTION:	BUTTERFLY VALVE	REVISED ----- ----- ----- ----- -----	W6
DRAWN BY:	CHECKED BY:	FILE: W6-Butterfly Valve.dwg	

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
NO. 20816
ALI R. AMZIDUX
11-19-2025

CERTIFICATE OF AUTHORIZATION
HOPE CONSULTING, INC
No. 1931
ARKANSAS

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

FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

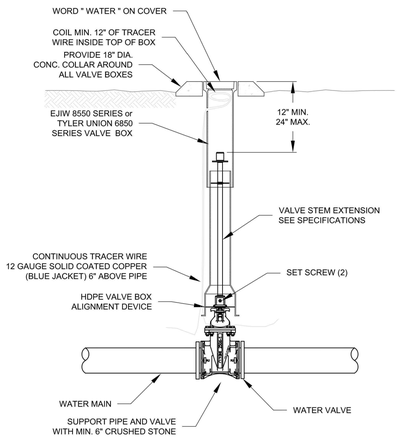
MARKET PLACE II
WATER DETAILS 1

6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	11.11.25	C.A.D. BY:		DRAWING NUMBER:			
REVISED:		CHECKED BY:		25-0608			
SHEET:	C-3.7	SCALE:					
500	01S	14W	0	22	440	62	1762

NOTES:

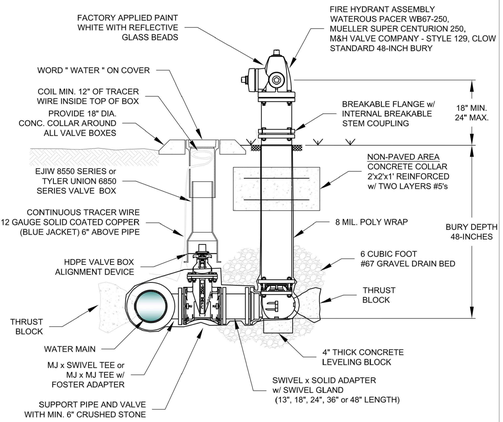
1. OPERATING NUT EXTENSIONS SHALL BE USED WHEN THE TOP OF THE OPERATING NUT IS GREATER THAN 4 FEET FROM THE TOP OF FINISHED SURFACE.
2. THE STEM EXTENSION SHALL BE OF ADEQUATE LENGTH TO REACH FROM THE VALVE OPERATING NUT TO A POINT WITHIN 24-INCHES TO 12-INCHES OF THE FINISHED SURFACE.



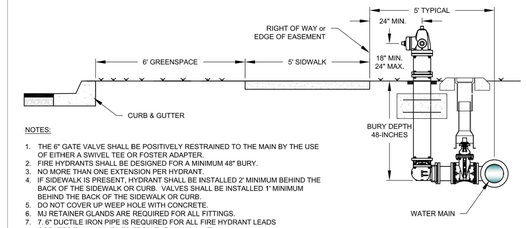
VALVE WITH STEM EXTENSION

NOTES:

1. THE 6" GATE VALVE SHALL BE POSITIVELY RESTRAINED TO THE MAIN BY THE USE OF EITHER A SWIVEL TEE OR FOSTER ADAPTER.
2. FIRE HYDRANTS SHALL BE DESIGNED FOR A MINIMUM 48" BURY.
3. BURY LINE OF HYDRANT SHALL BE NO LESS THAN THE PROPOSED FINISHED ELEVATION OF BACK OF CURB, OR SIDEWALK, WHICHEVER IS GREATER.
4. NO MORE THAN ONE EXTENSION PER HYDRANT.
5. IF SIDEWALK IS PRESENT, HYDRANT SHALL BE INSTALLED 2' MINIMUM BEHIND THE BACK OF THE SIDEWALK OR CURB. VALVES SHALL BE INSTALLED 1' MINIMUM BEHIND THE BACK OF THE SIDEWALK OR CURB.
6. DO NOT COVER UP WEEP HOLE WITH CONCRETE.
7. MJ RETAINER GLANDS ARE REQUIRED FOR ALL FITTINGS.
8. 7. 6" DUCTILE IRON PIPE IS REQUIRED FOR ALL FIRE HYDRANT LEADS GREATER THAN 48-INCHES FROM THE MAIN VALVE.
9. AN ADDITIONAL GUARDIAN VALVE IS REQUIRED FOR ALL FIRE HYDRANT LEADS GREATER THAN 30 FEET IN LENGTH.

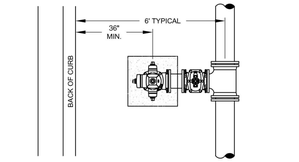


FIRE HYDRANT & VALVE CONNECTION

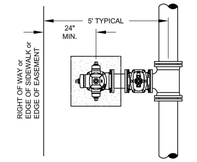


NOTES:

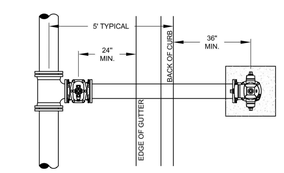
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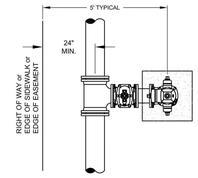
WATER LINE BEHIND CURB
INSIDE ROW



WATER LINE IN EASEMENT
OUTSIDE ROW

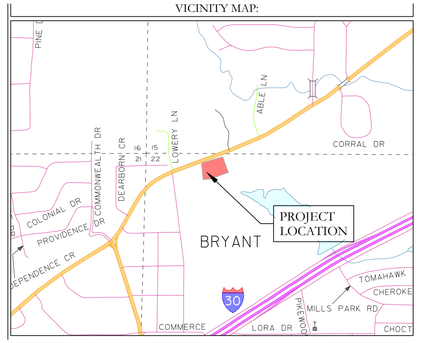


WATER LINE IN STREET
INSIDE ROW



WATER LINE IN EASEMENT
OUTSIDE ROW

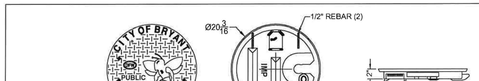
VICINITY MAP:



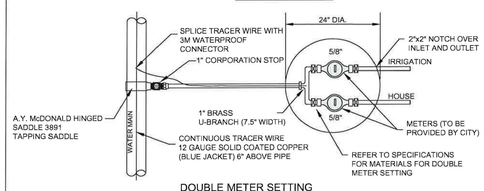
CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS**	DATE: APRIL 2015 REVISED ----- ----- ----- -----	SHEET: **W7**
	DESCRIPTION: **VALVE STEM EXTENSION**		
	DRAWN BY: / CHECKED BY: / FILE: W7-Valve Stem Extension.dwg		

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS**	DATE: APRIL 2015 REVISED ----- ----- ----- -----	SHEET: **W8**
	DESCRIPTION: **FIRE HYDRANT AND VALVE CONNECTION**		
	DRAWN BY: / CHECKED BY: / FILE: W8-Fire Hydrant and Valve.dwg		

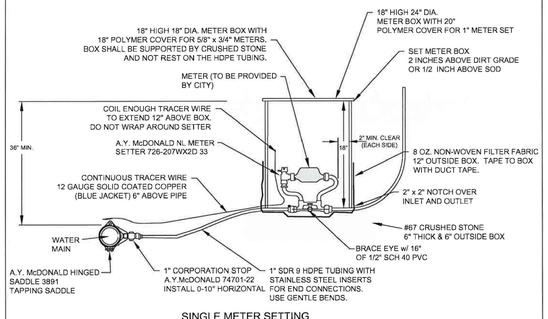
CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS**	DATE: APRIL 2015 REVISED ----- ----- ----- -----	SHEET: **W9**
	DESCRIPTION: **FIRE HYDRANT PLACEMENT**		
	DRAWN BY: / CHECKED BY: / FILE: W9-Fire Hydrant Placement.dwg		



WATER METER LID

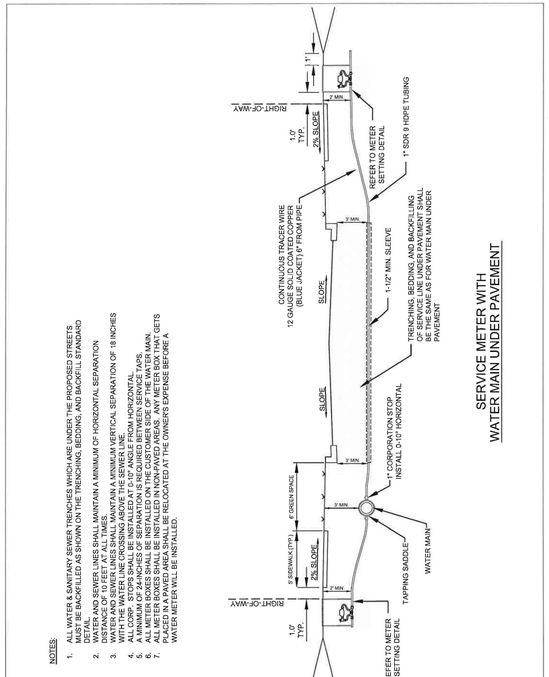


DOUBLE METER SETTING
ONLY FOR 1 LOT



SINGLE METER SETTING

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS**	DATE: APRIL 2015 REVISED ----- ----- ----- -----	SHEET: **W10**
	DESCRIPTION: **METER SETTINGS**		
	DRAWN BY: / CHECKED BY: / FILE: W10-Meter Settings.dwg		



NOTES:

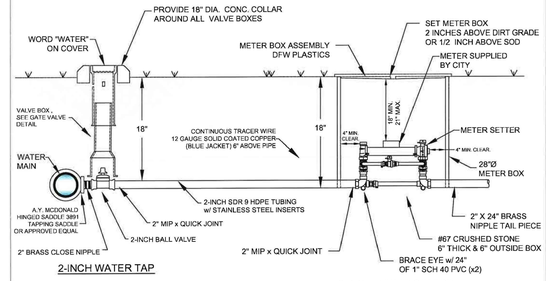
1. ALL WATER & SANITARY SEWER TRENCHES WHICH ARE UNDER THE PROPOSED STREETS MUST BE BACKFILLED AS SHOWN ON THE TRENCHING, BEDDING, AND BACKFILL STANDARD DETAIL.
2. WATER AND SEWER LINES SHALL MAINTAIN A MINIMUM OF HORIZONTAL SEPARATION DISTANCE OF 10 FEET AT ALL TIMES.
3. WATER AND SEWER LINES SHALL MAINTAIN A MINIMUM VERTICAL SEPARATION OF 18 INCHES WITH THE WATER LINE CROSSING ABOVE THE SEWER LINE.
4. ALL CORP. STOPS SHALL BE INSTALLED AT 0-10° ANGLE FROM HORIZONTAL.
5. ALL METER BOXES SHALL BE INSTALLED ON THE CUSTOMER SIDE OF THE WATER MAIN.
6. ALL METER BOXES SHALL BE INSTALLED IN NON-PAVED AREAS. ANY METER BOX THAT GETS PLACED IN A PAVED AREA SHALL BE RELOCATED AT THE OWNER'S EXPENSE BEFORE A WATER METER WILL BE INSTALLED.

SERVICE METER WITH WATER MAIN UNDER PAVEMENT

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS**	DATE: APRIL 2015 REVISED ----- ----- ----- -----	SHEET: **W11**
	DESCRIPTION: **METER SERVICE LINE UNDER PAVEMENT**		
	DRAWN BY: / CHECKED BY: / FILE: W11-Water Service Line Under Pavement.dwg		



WATER METER LID



2-INCH WATER TAP

2-INCH METER SETTER

NOTES:

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

2" WATER SERVICE AND WATER METER

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS**	DATE: APRIL 2015 REVISED ----- ----- ----- -----	SHEET: **W12**
	DESCRIPTION: **2" WATER METER**		
	DRAWN BY: / CHECKED BY: / FILE: W12-2 Inch Water Meter.dwg		

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 23076
TAMZIDUL HOQUE
11-19-2025

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

HOPE CONSULTING
ENGINEERS - SURVEYORS

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

FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

MARKET PLACE II
WATER DETAILS 2
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

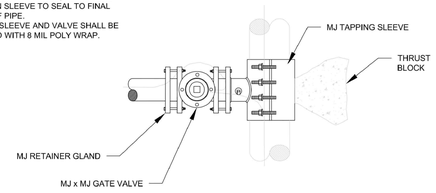
DATE:	11.11.25	C.A.D. BY:		DRAWING NUMBER:
REVISED:		CHECKED BY:		25-0608
SHEET:	C-3.8	SCALE:		

500	01S	14W	0	22	440	62	1762

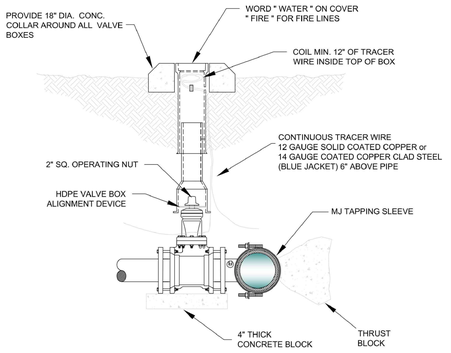
4/14/2015 11:45:48 AM

NOTES:

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



PLAN VIEW



PROFILE VIEW

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS** DESCRIPTION: **TAPPING SLEEVE AND VALVE** DRAWN BY: CHECKED BY: FILE: W13-Tapping Sleeve and Valve.dwg	DATE: APRIL 2015 REVISED SHEET: **W13**

4/24/2015 11:46:24 AM

POLYETHYLENE TUBING
WATER PIPE
ADHESIVE TAPE
MIN. THREE WRAPS OF TAPE

METHOD 'A'

METHOD 'A' USES ONE LENGTH OF POLYETHYLENE TUBE, OVERLAPPED AT THE JOINTS A MINIMUM OF 2 FEET.

MIN. THREE WRAPS OF TAPE
ADHESIVE TAPE
WATER PIPE
POLYETHYLENE TUBE PIECES

METHOD 'B'

METHOD 'B' USES SEPARATE PIECES OF POLYETHYLENE TUBE FOR THE BARREL OF THE PIPE AND THE JOINTS. SHORT PIECES SHALL BE APPROXIMATELY 6' LONG AND OVERLAP BARREL SECTION BY A MINIMUM OF 2 FEET.

POLYETHYLENE FLAT SHEETS
ADHESIVE TAPE
WATER PIPE
MIN. THREE WRAPS OF TAPE

METHOD 'C'

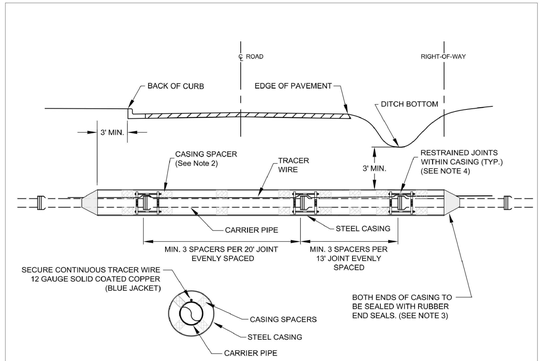
METHOD 'C' - USED FOR PIPE-SHAPED AND ODD- SHAPED APPURTENANCES SUCH AS BENDS, REDUCERS, OFFSETS, VALVES, TEES, ETC.

ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE POLY WRAPPED.

THE ANSI/AWWA C105/A21.5 STANDARD OUTLINES THREE METHODS OF INSTALLING POLYETHYLENE ENCASEMENT/ SLEEVING.

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS** DESCRIPTION: **POLYETHYLENE PROTECTION MATERIAL** DRAWN BY: CHECKED BY: FILE: W14-Poly Wrap.dwg	DATE: APRIL 2015 REVISED SHEET: **W14**

4/24/2015 11:46:29 AM



NOTES:

1. STEEL CASING SHALL BE CONSTRUCTED OF SPIRAL OR STRAIGHT WELDED STEEL WITH A MINIMUM DIAMETER AND THICKNESS AS SHOWN BELOW (SEE TABLE).
2. PROVIDE CASING SPACERS BY CASCADE MODEL CCS AS MANUFACTURED BY CASCADE WATERWORKS MFG. CO., OR APPROVED EQUAL.
3. PROVIDE END SEALS BY CASCADE MODEL CCES AS MANUFACTURED BY CASCADE WATERWORKS MFG. CO., OR APPROVED EQUAL.
4. WHERE ENCASEMENTS ARE GREATER THAN 25 FEET IN LENGTH, SELF-RESTRAINING GASKETS OR BELL RESTRAINTS SHALL BE USED FOR ALL JOINTS INSIDE THE ENCASEMENT PIPE AND FOR THE FIRST JOINT IN EACH DIRECTION OUTSIDE THE ENCASEMENT PIPE.
5. BELL RESTRAINTS FOR PVC SHALL BE SERIES1900 RESTRAINT HARNESS AND BELL RESTRAINTS FOR DIP SHALL BE SERIES 1700 RESTRAINT HARNESS BY EBAA IRON INC., OR APPROVED EQUAL.
6. DIRECT BURY STEEL ENCASEMENT SHALL BE POLY WRAPPED.
7. JACK AND BORE STEEL ENCASEMENT SHALL HAVE 17# HP MAGNESIUM ANODES CAD WELDED TO THE END OF THE ENCASEMENT PIPE.

CARRIER AND CASING SIZES

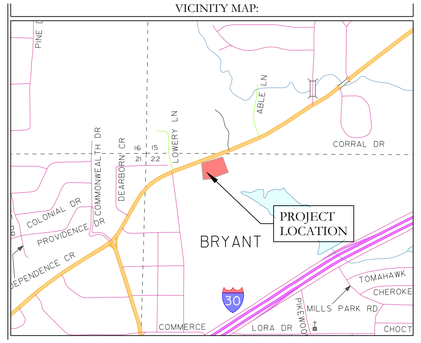
CARRIER (ID)	2"	3"	4"	6"	8	10"	12"
CASING (ID)	5"	6"	8"	12"	10"	20"	24"
CASING WALL THICKNESS	0.250	0.250	0.250	0.250	0.250	0.250	0.375
CARRIER (ID)	14" - 16"	18" - 20"	24"	30"	36"	42"	48"
CASING (ID)	30"	36"	42"	48"	54"	60"	72"
CASING WALL THICKNESS	0.375	0.500	0.625	0.625	0.625	0.625	0.750

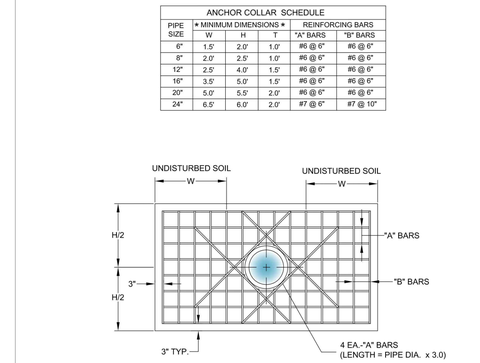
STEEL ENCASEMENT

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS** DESCRIPTION: **STEEL ENCASEMENT** DRAWN BY: CHECKED BY: FILE: W15-Steel Encasement.dwg	DATE: APRIL 2015 REVISED SHEET: **W15**

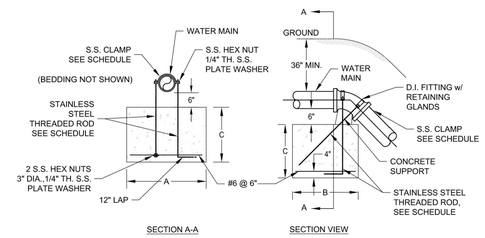
4/24/2015 11:46:01 AM

VICINITY MAP:





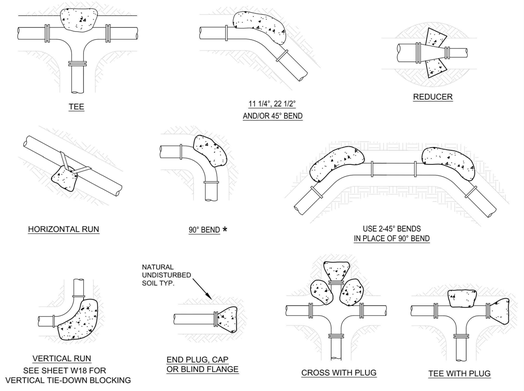
ALL FITTINGS SHALL BE MECHANICAL JOINTS WITH RETAINING GLANDS. BEDDING NOT SHOWN



VERTICAL TIE-DOWN BLOCKING

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS** DESCRIPTION: **VERTICAL TIE-DOWN BLOCKING** DRAWN BY: CHECKED BY: FILE: W17-Vertical Tie-Down Blocking.dwg	DATE: APRIL 2015 REVISED SHEET: **W17**

4/24/2015 11:47:09 AM



THRUST BLOCK SCHEDULE

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

BEARING AREA OF THRUST BLOCKS IN SQ. FT. (HORIZONTAL BENDS)						VOLUME OF THRUST BLOCK IN CU. FEET (VERTICAL BENDS)						
FITTING SIZE	PLUG TEE OR CAP	BEND ANGLE 90° *	45°	22 1/2°	11 1/4°	FITTING SIZE	BEND ANGLE 90° *	45°	22 1/2°	11 1/4°	ROD DIAM.	EMBED-MENT
2, 3, & 4	1.9	2.7	1.4	0.7	0.4	2, 3, & 4	35.5	19.2	9.8	4.9	.50"	30"
6	5.6	7.9	4.3	2.2	1.1	6	105.8	57.2	29.2	14.7	.75"	30"
8	9.6	13.6	7.4	3.8	1.9	8	181.9	98.5	50.2	25.2	.75"	30"
12	20.5	29.0	15.7	8.0	4.0	12	387.1	209.5	106.8	53.7	1.0"	30"
16	35.7	50.4	27.3	13.9	7.0	16	672.6	364.0	185.6	93.2	1.0"	30"
18	44.8	63.4	34.3	17.5	18.8	18	844.7	457.2	233.1	117.1	1.0"	36"
24	78.4	110.9	60.0	30.6	15.4	24	1478.7	800.3	408.0	205.0	1.5"	30"

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

THRUST BLOCK NOTES:

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

THRUST BLOCKING

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS** DESCRIPTION: **THRUST BLOCKING** DRAWN BY: CHECKED BY: FILE: W16-Thrust Blocking.dwg	DATE: APRIL 2015 REVISED SHEET: **W16**

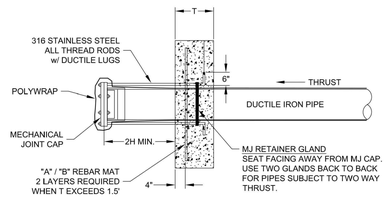
4/24/2015 11:46:57 AM

ANCHOR COLLAR SCHEDULE

PIPE SIZE	* MINIMUM DIMENSIONS * W	H	T	REINFORCING BARS "A" BARS	"B" BARS
6"	1.5'	2.0'	1.0'	#6 @ 6"	#6 @ 6"
8"	2.0'	2.5'	1.0'	#6 @ 6"	#6 @ 6"
12"	2.5'	4.0'	1.5'	#6 @ 6"	#6 @ 6"
16"	3.5'	5.0'	1.5'	#6 @ 6"	#6 @ 6"
20"	5.0'	5.5'	2.0'	#6 @ 6"	#6 @ 6"
24"	6.5'	6.0'	2.0'	#7 @ 6"	#7 @ 10"

NOTES:

1. DESIGN PRESSURE IS 200 PSI PLUS 100 PSI SURGE AND 2,000 PSI SOIL BEARING.
2. ALL DIMENSIONS ARE MINIMUM REQUIREMENTS. ACTUAL FIELD CONDITIONS MAY REQUIRE LARGER DIMENSIONS.
3. ALL RETAINER GLANDS SHALL BE MEGA-LUG BY EBAA IRON.



CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS** DESCRIPTION: **ANCHOR COLLAR** DRAWN BY: CHECKED BY: FILE: W18-Anchor Collar.dwg	DATE: APRIL 2015 REVISED SHEET: **W18**

4/24/2015 11:47:20 AM

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
JAMES M. HOPE
NO. 20870
11-19-2025

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

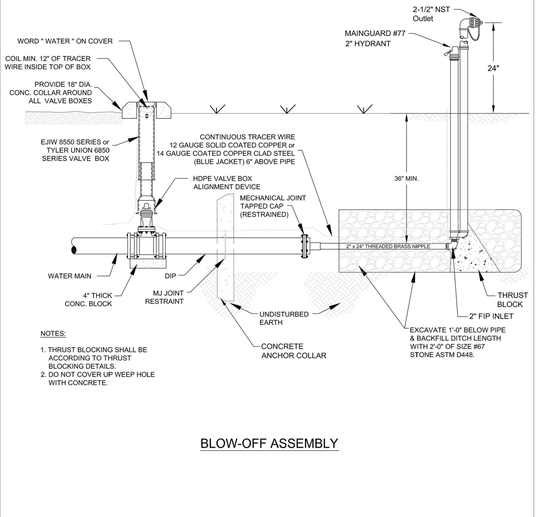
HOPE CONSULTING
ENGINEERS - SURVEYORS
129 N. Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

MARKET PLACE II
WATER DETAILS 3
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	11.11.25	C.A.D. BY:	DRAWING NUMBER: 25-0608
REVISED:		CHECKED BY:	
SHEET:	C-3.9	SCALE:	

500	01S	14W	0	22	440	62	1762



NOTES:

1. THRUST BLOCKING SHALL BE ACCORDING TO THRUST BLOCKING DETAILS.
2. DO NOT COVER UP WEEP HOLE WITH CONCRETE.

BLOW-OFF ASSEMBLY

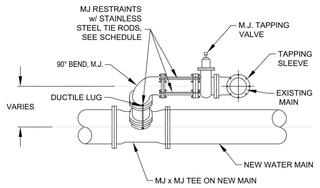
CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS**	DATE: APRIL 2015 REVISED ----- ----- ----- -----	SHEET: **W19**
	DESCRIPTION: **BLOW-OFF ASSEMBLY**		
	DRAWN BY: CHECKED BY: FILE: W19-Blow-off Assembly.dwg		

4/26/2015 11:47:16 AM

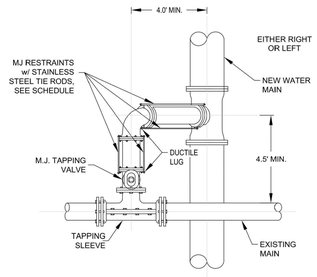
NOTES:

1. SWING CONNECTIONS USING 90° BENDS SHALL BE PERMITTED BY THE CITY ON A CASE BY CASE BASIS.
2. CONTRACTOR SHALL LOCATE EXISTING MAIN IN ADVANCE OF LAYING NEW LINE IN ORDER TO ASSURE ADEQUATE LENGTH TO ADJUST DEPTH OF NEW MAIN.
3. DIMENSIONS SHOWN ARE RECOMMENDED MINIMUMS TO PROVIDE ADEQUATE ROOM FOR TIGHTENING BOLTS ON JOINTS (OTHER DIMENSIONS MAY BE USED).
4. PROVIDE ALL THREAD STAINLESS STEEL TIE RODS WITH DUCTILE LUGS FOR ANCHORING ALL JOINTS.
5. ROTATE TEE UP & ELBOW DOWN AS REQUIRED TO MATCH.
6. TRACER WIRE SHALL BE INSTALLED ON ALL NEW WATER LINES.
7. ALL FITTINGS, VALVES, AND DIP SHALL BE POLY WRAPPED.

SCHEDULE OF TIE RODS		
SIZE	NUMBER OF ROD PER FITTING	DIAMETER OF S.S. RODS
8"	4	3/4"
12"	4	3/4"



SECTION VIEW



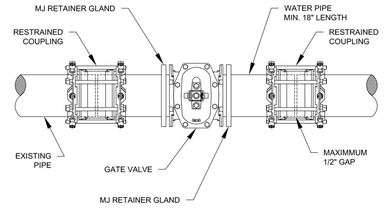
PLAN VIEW

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS**	DATE: APRIL 2015 REVISED ----- ----- ----- -----	SHEET: **W20**
	DESCRIPTION: **SWING CONNECTION - NEW MAIN TO EXISTING MAIN**		
	DRAWN BY: CHECKED BY: FILE: W20-Swing Connection.dwg		

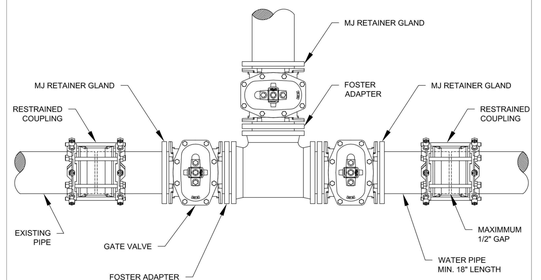
4/26/2015 11:47:21 AM

NOTES:

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



VALVE CUT-IN

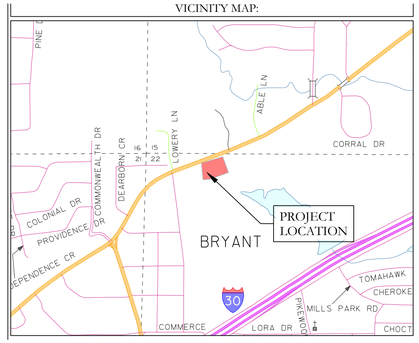


TEE AND VALVES CUT-IN

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS**	DATE: APRIL 2015 REVISED ----- ----- ----- -----	SHEET: **W21**
	DESCRIPTION: **VALVE CUT-IN**		
	DRAWN BY: CHECKED BY: FILE: W21-Valve Cut In.dwg		

4/26/2015 11:47:27 AM

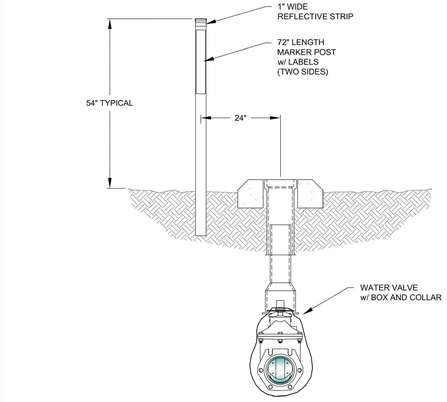
VICINITY MAP:





11-19-2025

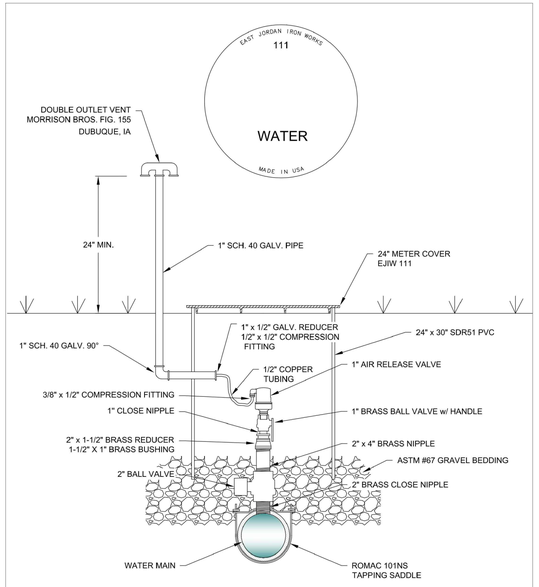




VALVE MARKER

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS**	DATE: APRIL 2015 REVISED ----- ----- ----- -----	SHEET: **W22**
	DESCRIPTION: **VALVE MARKER**		
	DRAWN BY: CHECKED BY: FILE: W22-Valve Marker.dwg		

4/26/2015 11:47:32 AM

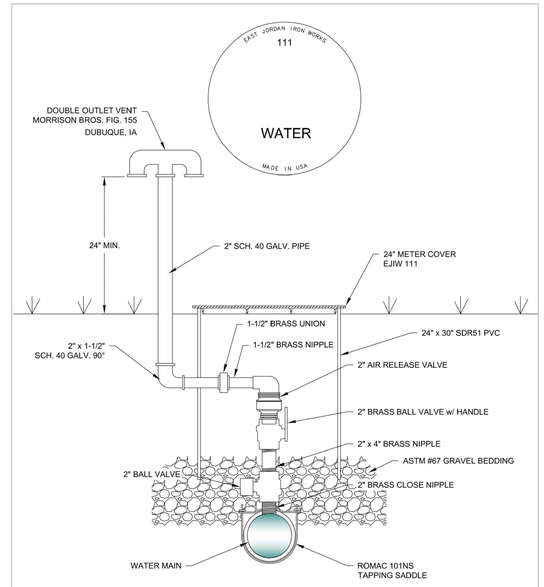


NOTES:

1. AIR VALVES SHALL HAVE NPT INLET AND OUTLETS.
2. TOP OF AIR VALVE SHALL BE MIN. 12" BELOW GROUND.
3. SEAL WALL PENETRATIONS WITH BUTYL SEALANT..

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS**	DATE: APRIL 2015 REVISED ----- ----- ----- -----	SHEET: **W23**
	DESCRIPTION: **1" COMBINATION AIR VALVE**		
	DRAWN BY: CHECKED BY: FILE: W23-1inch Air Release.dwg		

4/26/2015 11:47:37 AM



NOTES:

1. AIR VALVES SHALL HAVE NPT INLET AND OUTLETS.
2. TOP OF AIR VALVE SHALL BE MIN. 12" BELOW GROUND.
3. SEAL WALL PENETRATIONS WITH BUTYL SEALANT..

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **WATER DETAILS**	DATE: APRIL 2015 REVISED ----- ----- ----- -----	SHEET: **W24**
	DESCRIPTION: **2" COMBINATION AIR VALVE**		
	DRAWN BY: CHECKED BY: FILE: W24-2inch Air Release.dwg		

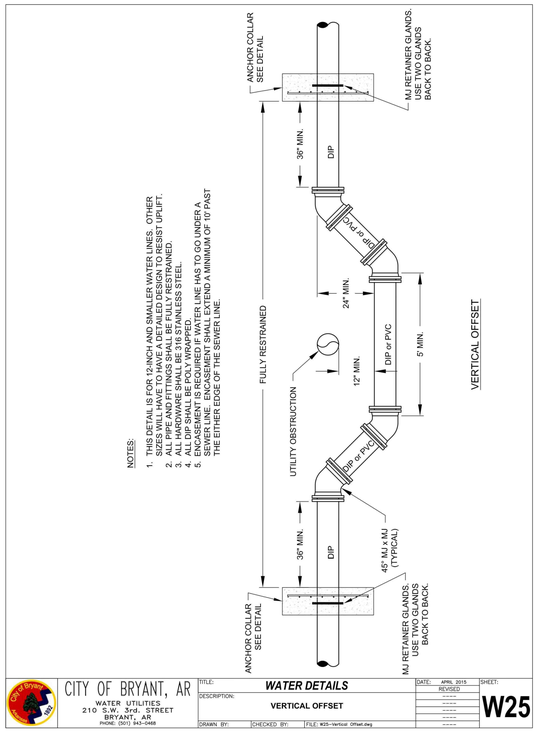
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FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

MARKET PLACE II
WATER DETAILS 4
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	11.11.25	C.A.D. BY:		DRAWING NUMBER:
REVISED:		CHECKED BY:		25-0608
SHEET:	C-3.10	SCALE:		

500	01S	14W	0	22	440	62	1762



NOTES:

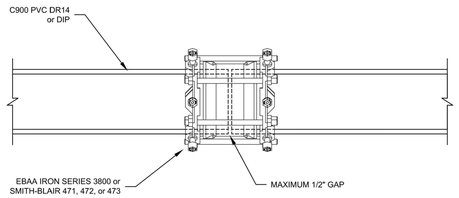
1. THIS DETAIL IS FOR 12-INCH AND SMALLER WATER LINES. OTHER SIZES WILL HAVE TO HAVE A DETAILED DESIGN TO RESIST UPLIFT.
2. ALL MJ FITTINGS AND VALVES SHALL BE RESTRAINED.
3. ALL HARDWARE SHALL BE 316 STAINLESS STEEL.
4. ALL DIP SHALL BE POLY WRAPPED.
5. ENCASEMENT IS REQUIRED IF WATER LINE HAS TO GO UNDER A SEWER LINE. ENCASEMENT SHALL EXTEND A MINIMUM OF 10' PAST THE EITHER EDGE OF THE SEWER LINE.

CITY OF BRYANT, AR	TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	DESCRIPTION:	VERTICAL OFFSET	REVISED	W25
	DRAWN BY:	CHECKED BY:	FILE: W25-Vertical Offset.dwg	

4/16/2015 11:47:58 AM

NOTE:

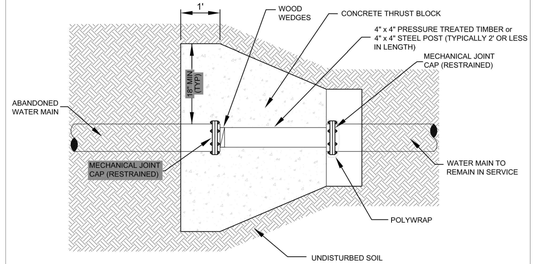
RESTRAINED COUPLINGS SHALL BE USED WHEN JOINING TWO CUT PIECES OF PIPE, GENERALLY WHEN CUTTING IN VALVES AND TEES.



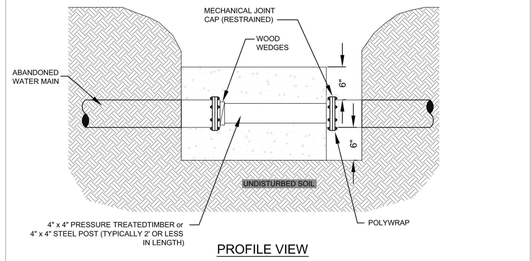
RESTRAINED COUPLING

CITY OF BRYANT, AR	TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	DESCRIPTION:	RESTRAINED COUPLING	REVISED	W26
	DRAWN BY:	CHECKED BY:	FILE: W26-Restrained Coupling.dwg	

4/16/2015 11:47:53 AM



PLAN VIEW

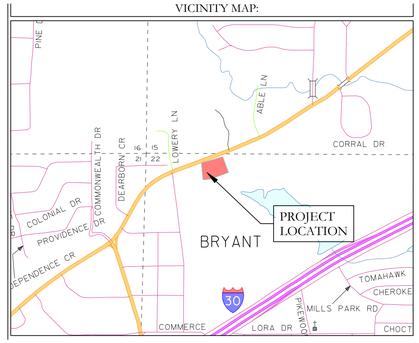


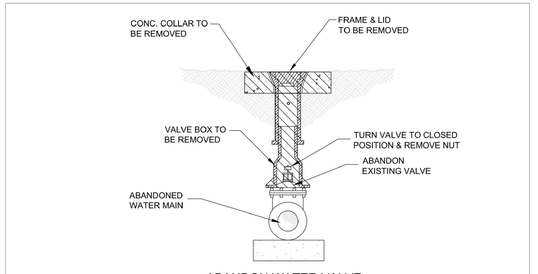
PROFILE VIEW

CITY OF BRYANT, AR	TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	DESCRIPTION:	CUT AND CAP WATER LINE	REVISED	W27
	DRAWN BY:	CHECKED BY:	FILE: W27-Cut and Cap.dwg	

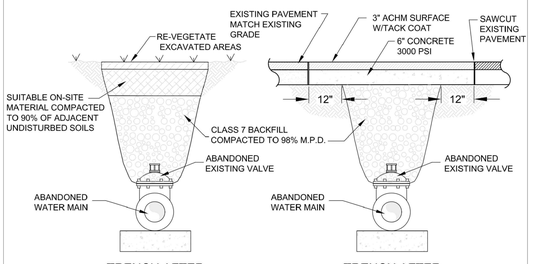
4/16/2015 11:47:58 AM

VICINITY MAP:





ABANDON WATER VALVE

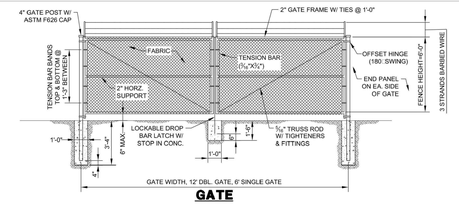


TRENCH AFTER VALVE BOX REMOVED (NON-PAVED AREA)

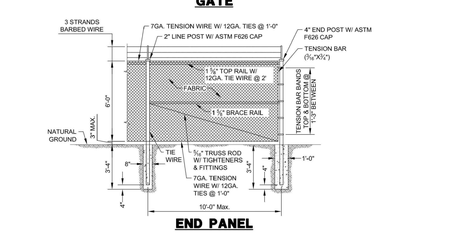
TRENCH AFTER VALVE BOX REMOVED (UNDER ASPHALT)

CITY OF BRYANT, AR	TITLE:	WATER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	DESCRIPTION:	ABANDON WATER VALVE	REVISED	W28
	DRAWN BY:	CHECKED BY:	FILE: W28-Abandon Water Valve.dwg	

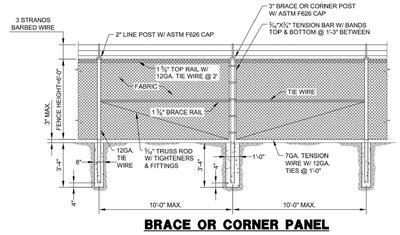
4/16/2015 11:48:01 AM



GATE



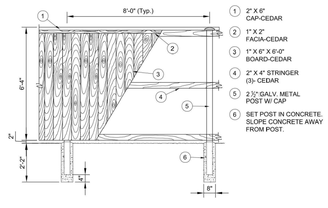
END PANEL



BRACE OR CORNER PANEL

CITY OF BRYANT, AR	TITLE:	WATER DETAILS	DATE: Sept. 10, 2014	SHEET:
WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	DESCRIPTION:	CHAIN LINK FENCE DETAILS	REVISED	W29
	DRAWN BY: ???	CHECKED BY: ???	FILE: W29-Chain Link Fence Details.dwg	

4/16/2015 11:52:24 AM



BOARD & BATT CEDAR FENCE



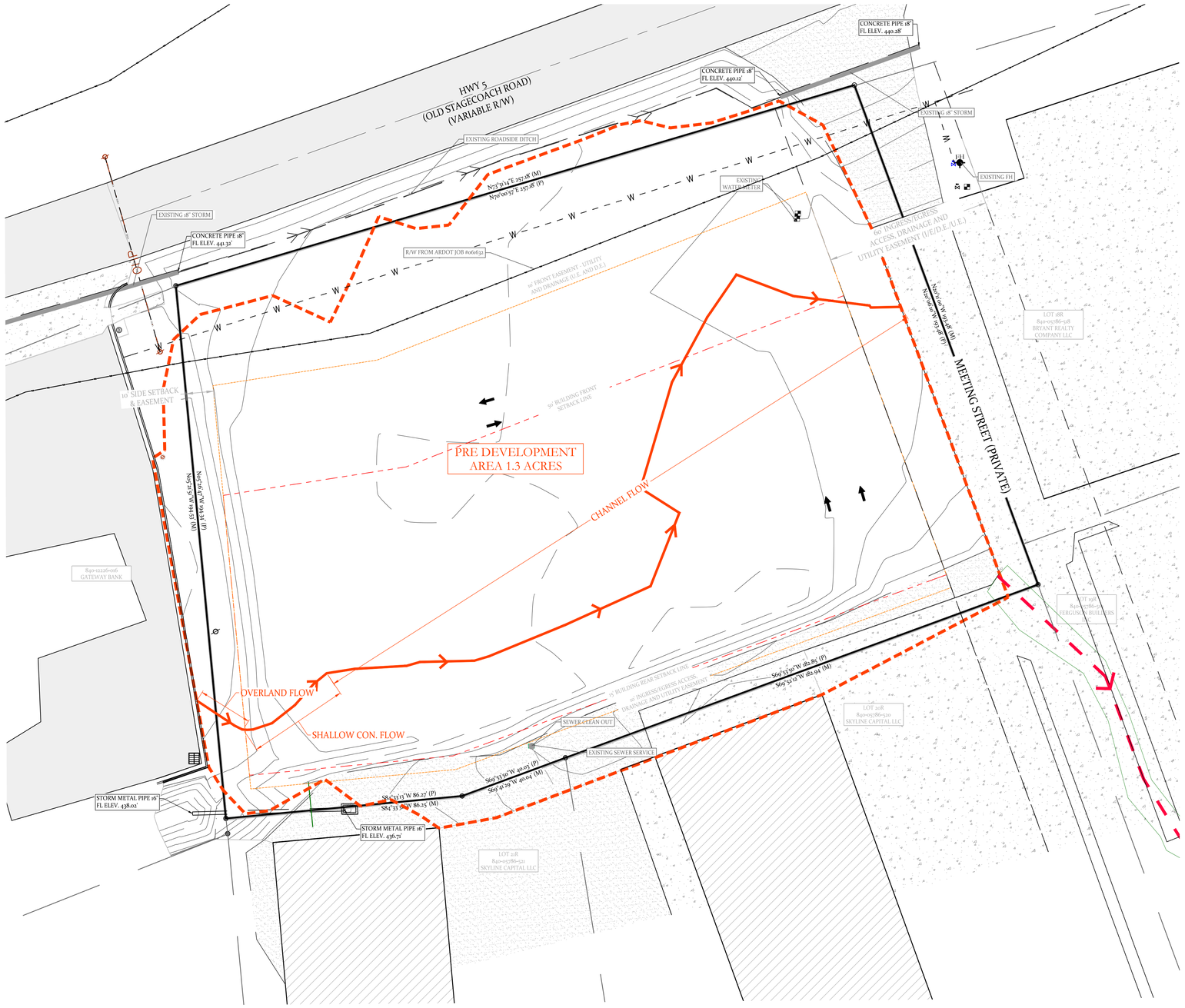


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ENGINEERS - SURVEYORS
129 N. Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

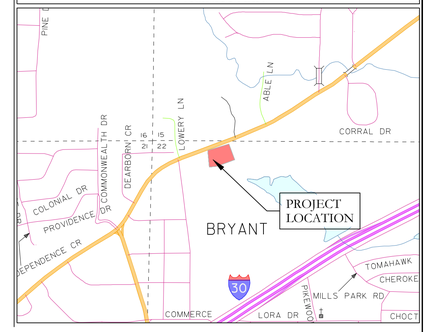
FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

MARKET PLACE II
WATER DETAILS 5
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	11.11.25	C.A.D. BY:		DRAWING NUMBER:				
REVISED:		CHECKED BY:		25-0608				
SHEET:	C-3.11	SCALE:						
500	01S	14W	0	22	440	62	1762	



VICINITY MAP:



PRE DEVELOPMENT AREA TOC:

Area A

Time of Concentration, tc (min)							
Area (ft2)	56814.3						
Area (Acre)	*1.30*						
Total Length, L (ft)	***374.3***						
Change in Elevation (ft)	5.5						
Slope, S (ft/ft)	*0.015*						
N (Coeff. Of roughness, Table 400-3)	0.100						
L_i (overland/sheet flow, ft)	10.0						
L_{scs}(shallow concentrated, ft)	40.0	Velocity, V	Length,	Height,	Slope,	Mannings,	Hydraulic
L_{cs} (channel , ft)	324.3	(ft/sec)	L (ft)	h (ft)	S (ft/ft)	n	Radius, R
$t_i = 0.83\frac{(N L_i)^{0.467}}{S^{0.5}}$, (min)	*2.62*		10.0	1.0	*0.100*		
$t_{scs} = \frac{L_{scs}}{60\,V}$, (min) , unpaved *V=16.1345(S^0.5)*	*0.17*	*4.03*	40.0	2.5	*0.063*		
$t_{cs} = \frac{L_{cs}}{60\,V}$, (min) $V = \frac{1.49}{n} R^{\frac{2}{3}} S^{\frac{1}{2}}$ Ch1	*4.80*	*1.12*	324.3	2.0	*0.006*	0.050	*0.333*
Total time of concentration, tc (min)	**7.59**						
USE	**7.50**						

MARKET PLACE-II PHASE 3

PRE DEVELOPMENT DRAINAGE AREA

BASIS OF BEARING:
GRID NORTH, ARKANSAS
COORDINATE SYSTEM, SOUTH ZONE
BY GPS OBSERVATION

20' 10' 0 20'

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
SEAL
No. 20876
SEAL TAMZIDUL ISLAM
11-19-2025

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

OWNER:	DEVELOPER:
Name: PHILLIP RYE	Name: RYE GENERAL CONTRACTORS
Address: 7416 PALM BEACH, BENTON	Address: 6128 HIGHWAY 5 NORTH
AR 72019	AR 72022
Phone: 501-317-9883	Phone:
Email: philliprye@phillipryc.com	Email:

SITE DATA	
TOTAL SITE AREA	*1.30 ACRES*
TOTAL DEVELOPMENT AREA	*1.30 ACRES*
GROSS BUILDING AREA	*BUILDING 111340 SQ. FT.*
BUILDING SETBACKS	*FRONT SETBACK LINE: 50'* *RIGHT SIDE SETBACK LINE: AS SHOWN* *REAR SETBACK LINE: 15'* *LEFT SIDE SETBACK LINE: 10'*
BUILDING HEIGHTS	*1 STORY*
BUSINESS TYPE	*RETAIL*
PARKING CALCULATION (PROVIDED)	*PROVIDED PARKING SPACES 41 (2 ADA SPACES)*

LEGEND

- PLSS Aliquot Corner
- Fnd. Corner Monument
- Set 1/2" Rebar/Cap (1664)
- Computed Point
(M)- As Measured
(P)- Per Deed or Plat Records
ESMT - Easement
B.S.L. - Building Setback Lines
- Clean Out
- Water Meter
- Power Pole
- Sewer Manhole
- Light Pole
- Telephone Pedestal
- Drainage Manhole
- Gas Meter
- Fence
- Overhead Power
- Sewer Line
- Water Line
- Telephone Line
- Electric Line
- Gas Line
- Existing Access Agreement
- Public Right-of-Way Dedication

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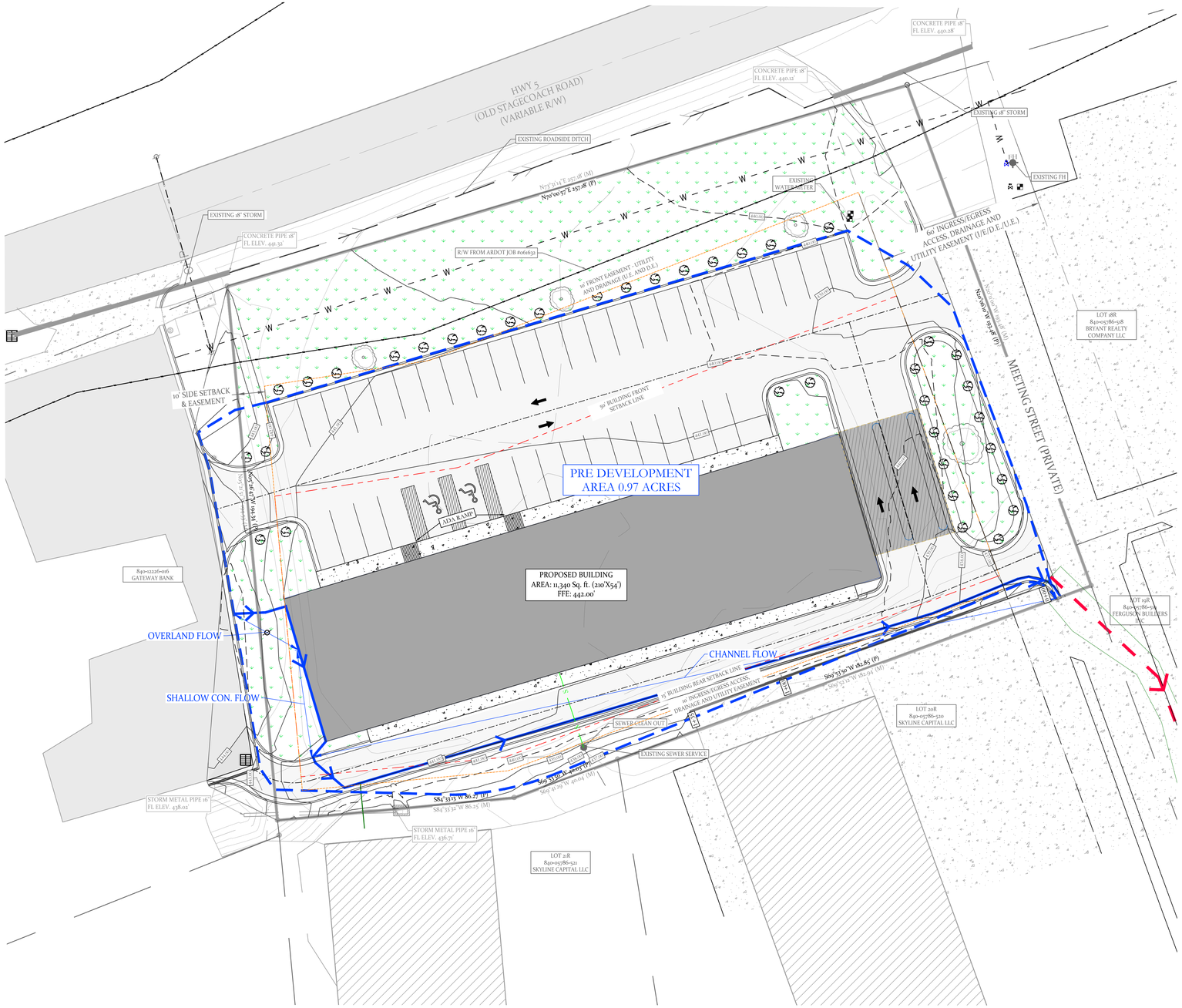
FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

MARKET PLACE II
PRE DEVELOPMENT AREA TOC CALULATION
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

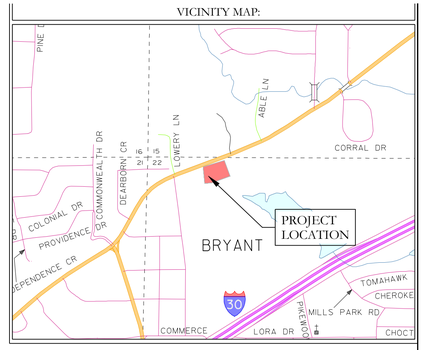
DATE:	11.11.25	C.A.D. BY:		DRAWING NUMBER:
REVISED:		CHECKED BY:		25-0608
SHEET:	C-4.1	SCALE:		

500	01S	14W	0	22	440	62	1762

E:\2- HOPE CONSULTING\1. PROJECTS FILES\25-0608 LOT 22R MARKET PLACE-II PH3\CIVIL\DWG\25-0608 LOT 22R MARKET PLACE-II PH3 11.05.25.DWG



VICINITY MAP:



POST DEVELOPMENT AREA TOC:

Time of Concentration, tc (min)

Area (ft2)	42090.7							
Area (Acre)	*0.97*							
Total Length, L (ft)	***370.0***							
Change in Elevation (ft)	10.8							
Slope, S (ft/ft)	*0.029*							
N (Coeff. Of roughness, Table 400-3)	0.400							
L_i (overland/sheet flow, ft)	*30.0*							
L_{scs}(shallow concentrated, ft)	*40.0*	Velocity, V (ft/sec)	Length, L (ft)	Height, h (ft)	Slope, S (ft/ft)	Mannings, n	Hydraulic Radius, R
L_{cs} (channel , ft)	300.0						
$t_i = 0.42\frac{(N\,L_i)^{0.8}}{P^{0.5}*S^{0.4}}$, (min)	*3.72*		30.0	3.6	*0.120*		
$t_{scs} = \frac{L_{scs}}{60\,V}$, (min) , unpaved							
V=16.1345(S^0.5)	*0.83*	*0.81*	40.0	0.1	*0.003*		
$t_{cs} = \frac{L_{cs}}{60\,V}$, (min)							
$V = \frac{1.49}{n} R^{\frac{2}{3}} S^{\frac{1}{2}}$ Ch1	*0.54*	*9.35*	300.0	7.1	*0.024*	0.011	*0.300*
Total time of concentration, tc (min)	**5.08**						
USE	**5.00**	**min**					

MARKET PLACE-II PHASE 3

POST DEVELOPMENT AREA

BASIS OF BEARING:
GRID NORTH, ARKANSAS
COORDINATE SYSTEM, SOUTH ZONE
BY GPS OBSERVATION

20' 10' 0 20'

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 20078
11-19-2025

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

SITE DATA	
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TOTAL DEVELOPMENT AREA	*1.30 ACRES*
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BUILDING HEIGHTS	*1 STORY*
BUSINESS TYPE	*RETAIL*
PARKING CALCULATION (PROVIDED)	*PROVIDED PARKING SPACES 41 (2 ADA SPACES)*

LEGEND

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- Fnd. Corner Monument
- Set 1/2" Rebar/Cap (1664)
- Computed Point
(M)- As Measured
(P) - Per Deed or Plat Records
ESMT - Easement
B.S.L. - Building Setback Lines
- Clean Out
- Water Meter
- Power Pole
- Sewer Manhole
- Light Pole
- Telephone Pedestal
- Drainage Manhole
- Gas Meter
- Fence
- Overhead Power
- Sewer Line
- Water Line
- Telephone Line
- Electric Line
- Gas Line
- Existing Access Agreement
- Public Right-of-Way Dedication

OWNER:
Name: PHILLIP RYE
Address: 7416 PALM BEACH, BENTON
AR 72019
Phone: 501-317-9883
Email: philliprye@philliprye.com

DEVELOPER:
Name: RYE GENERAL CONTRACTORS
Address: 6128 HIGHWAY 5 NORTH
AR 72022
Phone:
Email:

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129 N. Main Street,
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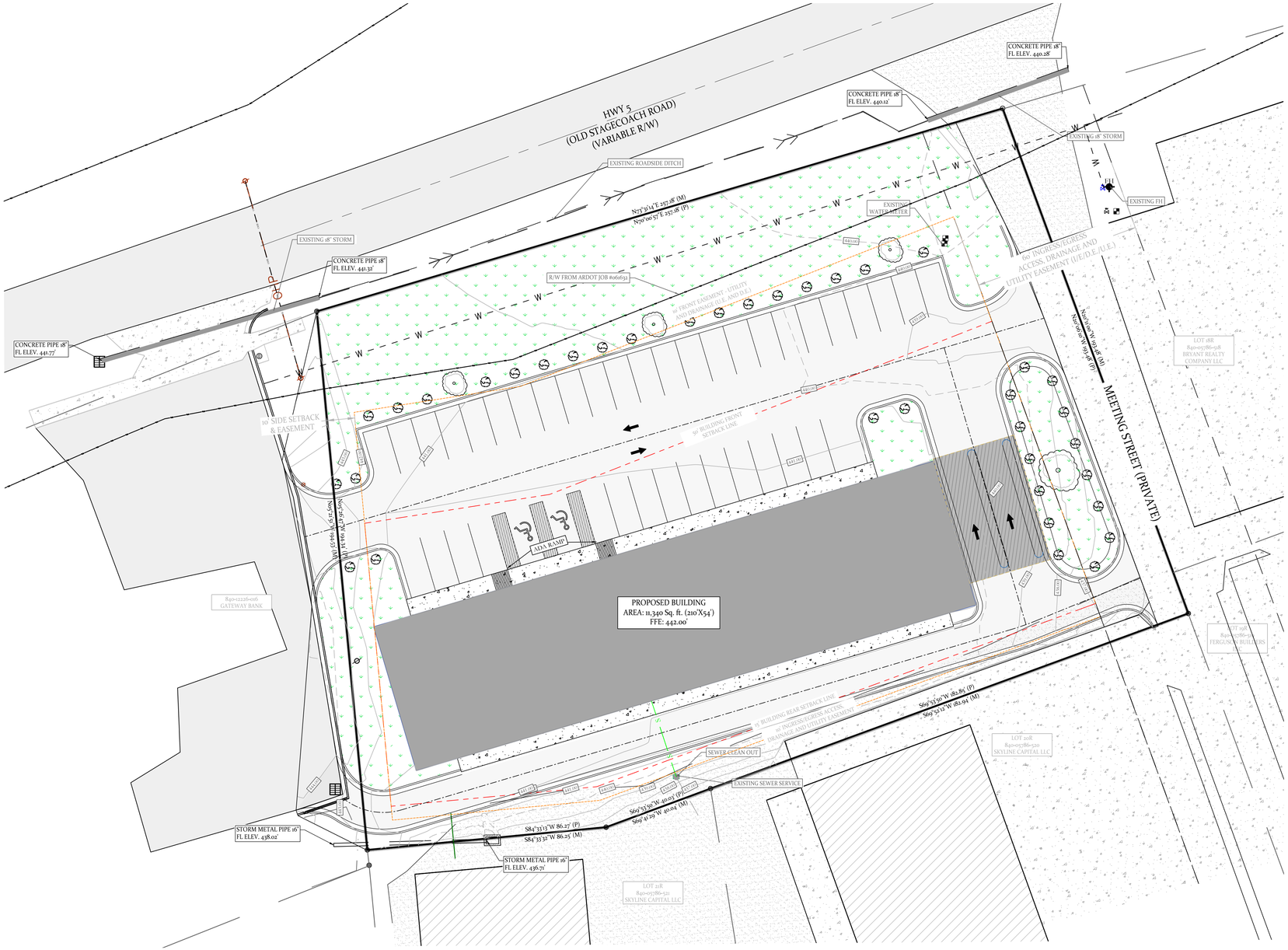
FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

MARKET PLACE II
POST DEVELOPMET AREA TOC CALCULATION
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

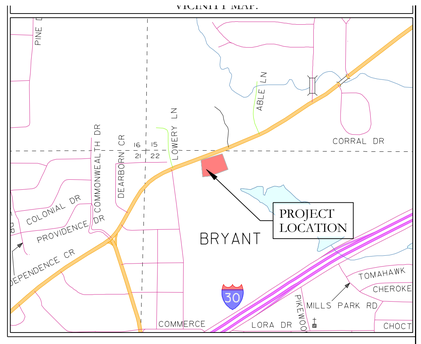
DATE:	11.11.25	C.A.D. BY:	DRAWING NUMBER: 25-0608
REVISED:		CHECKED BY:	
SHEET:	C-4.2	SCALE:	

500	01S	14W	0	22	440	62	1762

E:\2- HOPE CONSULTING\1. PROJECTS FILES\9. 25\0608 LOT 22R MARKET PLACE-II PH3\CIVIL\DWG\25-0608 LOT 22R MARKET PLACE-II PH3 11.05.25.DWG



MARKET PLACE-II PHASE 3

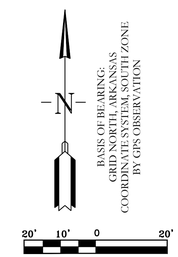


RUNOFF CO-EFFICIENT FOR SURFACE TYPE

HATCH TYPE	SURFACE TYPE	RUNOFF CO-EFFICIENTS
	ASPHALTIC	0.95
	GREEN AREA	0.46
	ROOF	0.97
	CONCRETE	0.97

DRAINAGE CALCULATION

SURFACE TYPE	RUNOFF CO-EFFICIENT	AREA (ha)	TOTAL AREA (ha), A	AVG. RUNOFF CO-EFFICIENT, C	RAINFALL INTENSITY (inches/hr) (5 min Duration Rain) 5 YEAR	10 YEAR	25 YEAR	100 YEAR
ASPHALTIC	0.95	0.6	0.99	0.88	7.28	8.21	9.43	11.2
GREEN AREA	0.46	0.15						
ROOF	0.97	0.2						
CONCRETE	0.97	0.04						
PEAK DISCHARGE,Q = CIA					6.35 cfs	7.16 cfs	8.22 cfs	9.76 cfs



STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
WILLIAM DOUGLAS HOPE
NO. 20876
11-19-2025

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

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FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

MARKET PLACE II
DRAINAGE CALCULATION
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	11.11.25	C.A.D. BY:	DRAWING NUMBER: 25-0608
REVISED:		CHECKED BY:	
SHEET:	C-4.3	SCALE:	

500	01S	14W	0	22	440	62	1762

I:\2-7 HOPE CONSULTING\7 PROJECTS\PROJECTS\2-7 Client\LOT 7\8 MARKET PLACE II\CAD FILES\DWG\C-5 Grade LOT 7 8 MARKET PLACE II.dwg

DRAINAGE FLOW PATH

PROPOSED BUILDING
8000 sq.ft. No. 8 Ave/Sign
FFE: 440.00

5125
SDMH
426.41

5039
SDMH
426.63

5039
SDMH
426.84

MARKET PLACE-II PHASE 3

DRAINAGE FLOW PATH

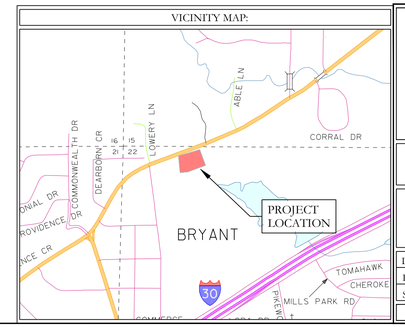
STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
No. 20016
TAWZIDUL ISLAM
11-19-2025

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

BASIS OF BEARING:
GRID NORTH, ARKANSAS
COORDINATE SYSTEM, SOUTH ZONE
BY GPS OBSERVATION

50' 25' 0 50'

VICINITY MAP:



HOPE CONSULTING
ENGINEERS - SURVEYORS

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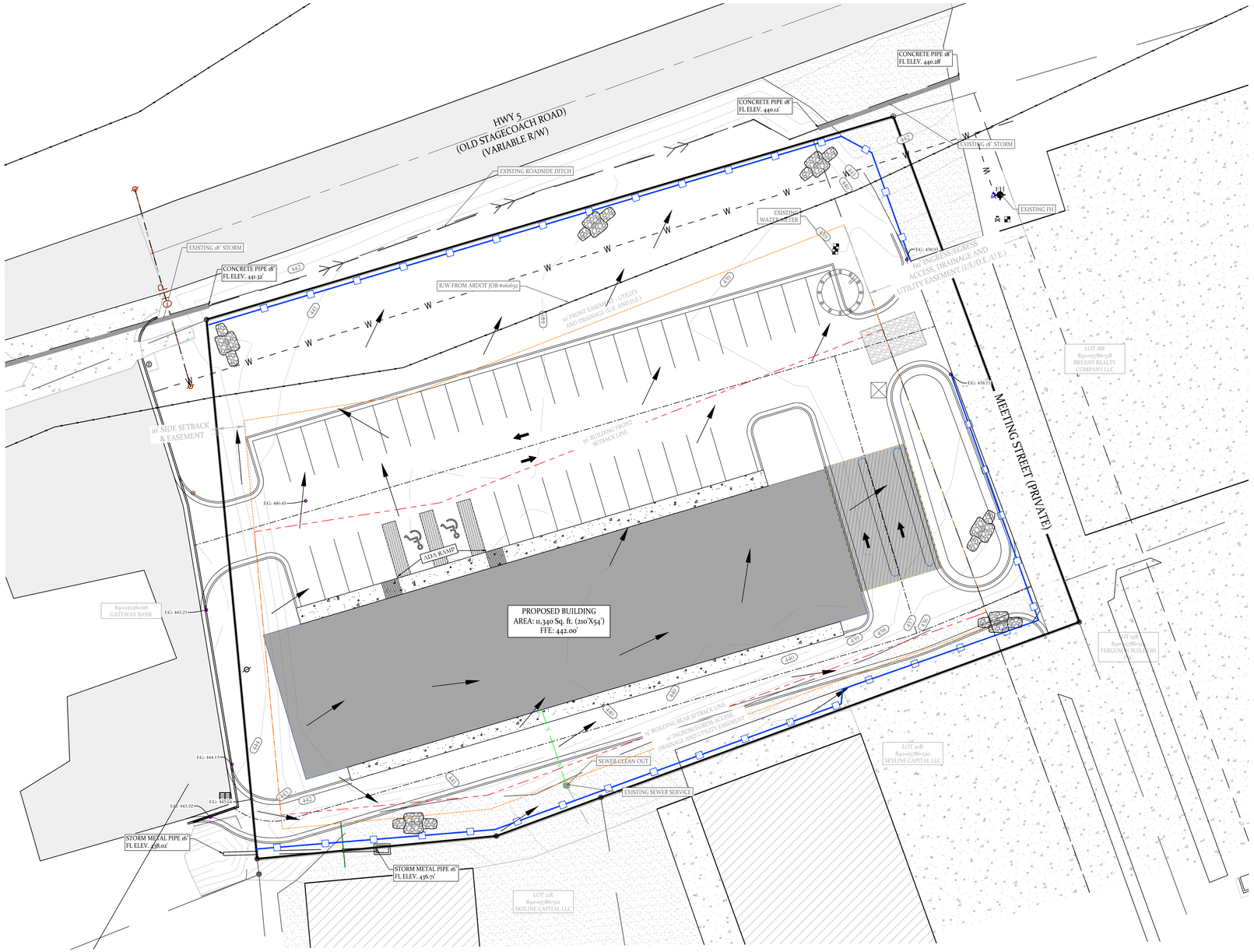
FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

MARKET PLACE II
DRAINAGE FLOW PATH
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	11.11.25	C.A.D. BY:	DRAWING NUMBER:
REVISED:		CHECKED BY:	25-0608
SHEET:	C-4.4	SCALE:	

500	01S	14W	0	22	440	62	1762

I:\2-7 HOPE CONSULTING\25 PROJECTS\25-0608 GFP 798 MARKET PLACE II\DWG\25-0608 GFP 798 MARKET PLACE II DWG 11-05-25.DWG



MARKET PLACE-II PHASE 3

ERC LEGEND

SITE POSTING

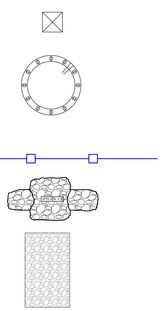
CONC. WASHOUT

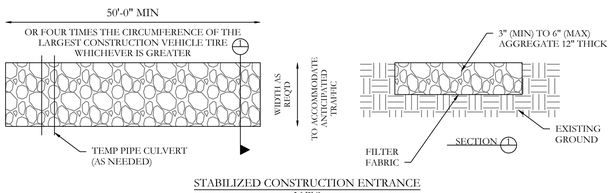
DETENTION AREA

SILT FENCE

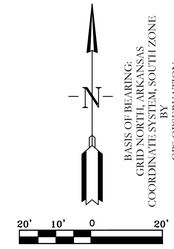
RIP RAP CHECK DAM

CONSTRUCTION ENTRANCE

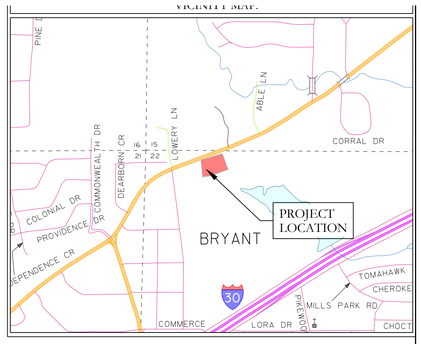




STABILIZED CONSTRUCTION ENTRANCE
N.T.S



BASIS OF BEARING:
GRID NORTH, ARKANSAS
COORDINATE SYSTEM, SOUTH ZONE
GPS OBSERVATION

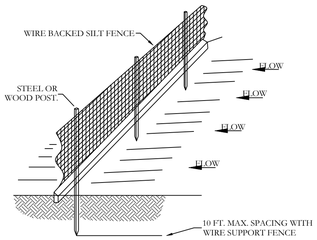


NOTE:
1.) INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.

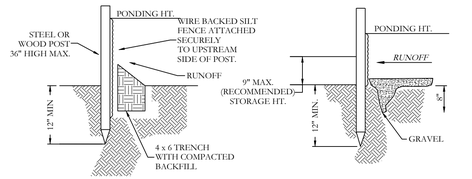
2.) REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

3.) SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

4.) USE ONLY WIRE BACKED SILT FENCE.

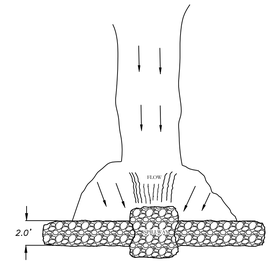


SILT FENCE



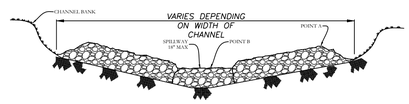
STANDARD DETAIL
TRENCH WITH NATIVE BACKFILL

ALTERNATE DETAIL
TRENCH WITH GRAVEL



PLAN

RIP-RAP
CHECK DAM



VIEW LOOKING UPSTREAM

NOTES:

1.) POINT 'A' MUST BE HIGHER THAN POINT 'B' (SPILLWAY HEIGHT)
2.) PLACE RIP-RAP BARRIER PERPENDICULAR TO THE FLOW WITH TIGHT GROUPING. USE STRAW, ROCKS, OR FILTER FABRIC TO FILL ANY GAPS AND TAMP BACKFILL MATERIAL TO PREVENT EROSION OR FLOW AROUND THE DAM.
3.) SPILLWAY HEIGHT SHALL NOT EXEED 18"-24".
4.) INSPECT AFTER EACH SIGNIFICANT STORM, MAINTAIN AND REPAIR PROMPTLY.

EROSION CONTROL NOTES

SOD DETENTION AREA POST-CONSTRUCTION (IF APPLICABLE) MAXIMUM SLOPE OF 3H:1V ON DETENTION POND LEVEES CONTRACTOR MUST HAVE INLET PROTECTION MEASURES INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF DRAINAGE INLETS/STRUCTURES IS COMPLETE. SEDIMENT BARRIERS SHALL BE MAINTAINED THROUGHOUT AND INSPECTED THROUGHOUT CONSTRUCTION PROCESS UNTIL PROJECT IS COMPLETE

RIP RAP SEDIMENT BARRIERS SHALL BE USED AT ALL STORMWATER DISCHARGE POINTS SHOWN ON PLANS ASAP

CONTRACTOR SHOULD WORK WITH ENGINEER TO ESTABLISH EFFECTIVE AND EFFICIENT PLAN TO PREVENT SEDIMENT RUNOFF BY DETERMINING WHERE SILT FENCING OR OTHER TYPES OF CONTROLS ARE NECESSARY

SOME EROSION CONTROL MEASURES, SILT FENCING, OR CHECK DAMS MAY NOT BE NECESSARY DURING INITIAL ROW CLEARING BUT MAY BE NEEDED ONCE LOT CLEARING AND HOME BUILDING BEGINS

EXISTING VEGETATION WILL ONLY BE REMOVED INSIDE ROW AND WITHIN HOUSE FOOTPRINTS AS THEY ARE CONSTRUCTED. ADDITIONAL WIRE-BACKED SILT FENCING WILL BE ADDED TO INDIVIDUAL LOTS AS HOME CONSTRUCTION TAKES PLACE.

STATE OF ARKANSAS
LICENSED PROFESSIONAL ENGINEER
NO. 20876
11-19-2025

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

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

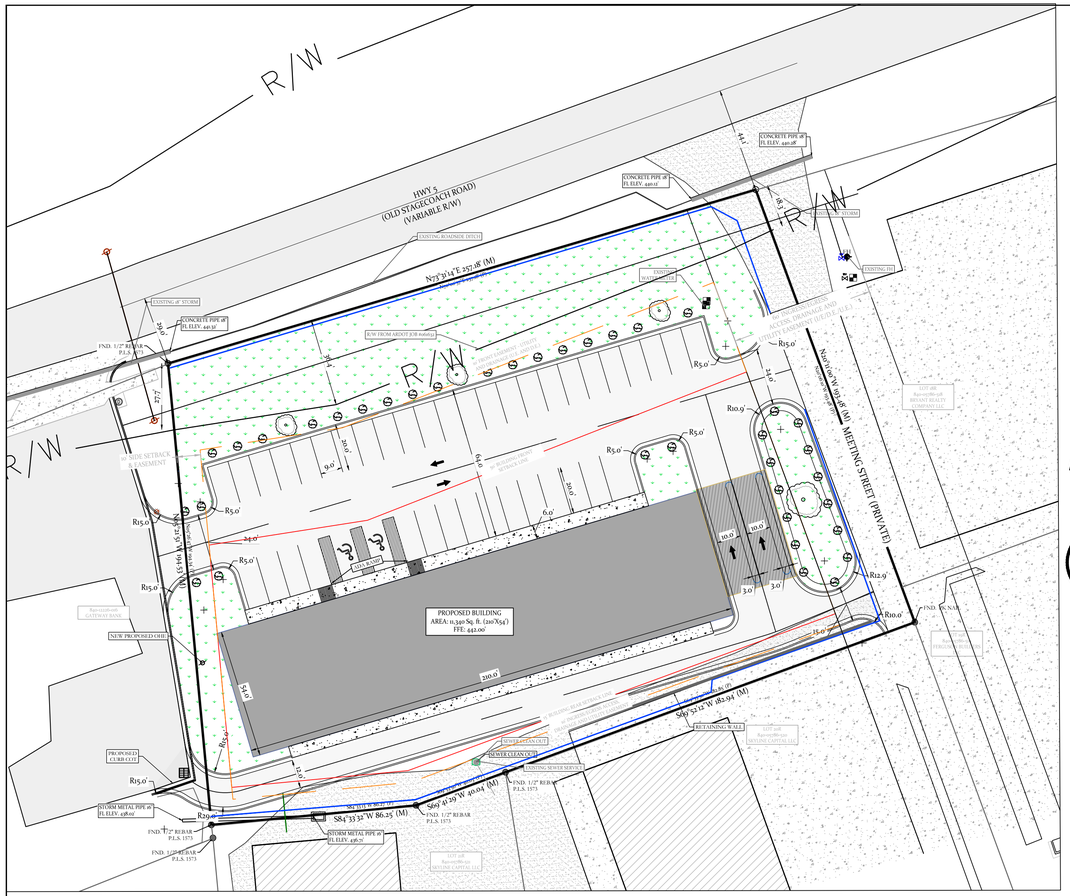
FOR USE AND BENEFIT OF:
RYE GENERAL CONTRACTORS

MARKET PLACE II
EROSION CONTROL PLAN
6128 HIGHWAY 5, BRYANT, SALINE COUNTY, ARKANSAS

DATE:	11.11.25	C.A.D. BY:	DRAWING NUMBER:
REVISED:		CHECKED BY:	25-0608
SHEET:	C-5.0	SCALE:	

500	01S	14W	0	22	440	62	1762

E:\2-HOPE CONSULTING\1 PROJECTS\PROJECTS\2025\25-0608 MARKET PLACE II\CAD\EROSION CONTROL\25-0608 MARKET PLACE II EROSION CONTROL.dwg


HWY 5
(OLD STAGECOACH ROAD)
(VARIABLE R/W)
R/W
N72°31'4"E 257.08' (M)
EXISTING 8" STORM
CONCRETE PIPE ø1
FL ELEV. 440.18'
CONCRETE PIPE ø1
FL ELEV. 440.01'
EXISTING ROADSIDE DITCH
EXISTING 8" STORM
EXISTING FH
EXISTING 8" STORM
CONCRETE PIPE ø1
FL ELEV. 440.18'
EXISTING ROADSIDE DITCH
EXISTING ROADSIDE DITCH
EXISTING FH
EXISTING 8" STORM
CONCRETE PIPE ø1
FL ELEV. 440.18'
FND. 1/2" REBAR
P.L.S. 1373
BUILDING SETBACK LINE
& UTILITY EASEMENT
R/W
R/W
R/W

Hope Consulting
Project 25-0608

Comment Response Letter

Public Works

Comment no.1- Meter services shown on plans are not existing.

Response- Our survey department has confirmed that there are water meters existing.

Comment no.2- Water Impact fees?

Response- Client will make the payment.

Engineering

Comment no.1- Clearly show easement and setbacks.

Response- In sheet C-1.0 all the easements and setbacks are shown clearly.

Comment no.2- Does drainage from this site go to the regional pond?

Response-Yes. The flow path is shown in sheet C-4.4.

Comment no.3- Submit drainage calculations (small scale development).

Response- Drainage calculations are added in Sheet C-4.1, C-4.2, C-4.3.

Comment no.4- Will downstream drainage infrastructure have the capacity for added flow?

Response- Yes

Comment no.5- Submit utility plan

Response- Utility plan has been added in the Sheet C-3.0.

Comment no.6- Proposed versus existing contours are difficult to distinguish

Response- The proposed and existing contours are shown in sheet C-2.0 with different styles.

Comment no.7- Label index contours

Response- The contours are labeled in sheet C-2.0.

Comment no.8- Label street names

Response-The streets are labeled in sheet C-1.0.

Hope Consulting
Project 25-0608

Planning

Comment no.1- Submit building elevations showing materials used.

Response- Client will submit the detail before the building permit application.

Comment no.2- ADA Ramps not shown to sidewalk areas.

Response- ADA Ramps have shown in Sheet C-1.0.

Comment no.3- Add landscaping legend.

Response- Landscaping legends are added in sheet C-6.0

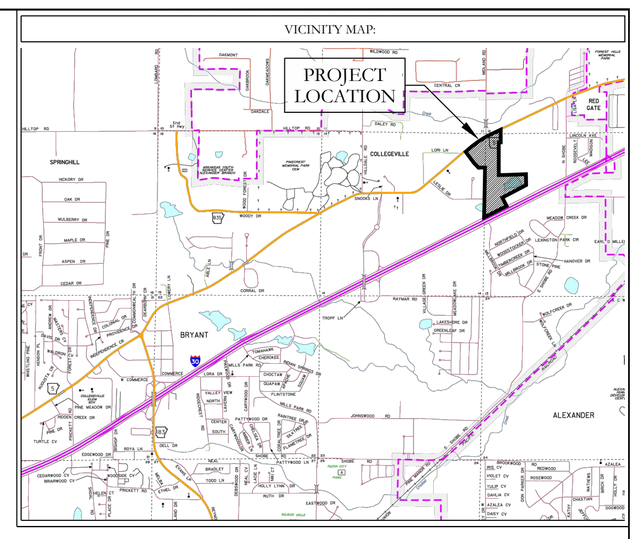
Fire

Comment no.1- Indicate grade on parking lot south entrance. Grade may not exceed 10 percent. [D103.2]

Response- The grade will not exceed 10% in south entrance. See sheet C-2.0

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

VICINITY MAP:



840-11640-124
ARKANSAS STORAGE
CENTER XIV LLC

N68°44'33"E 334.66

S88°04'08"E 145.03

25' BUILDING SETBACK LINE

DETENTION AREA

PROPOSED
80' x 140' WAREHOUSE
11,200 SQ. FT.

LOT 2
3.95 ACRES
171998 Sq. Ft.

75' BUILDING SETBACK LINE

S2°45'07"W 371.64

EAST RIDGE SUBDIVISION
PHASE I

[SON ALFRED A III
& TONYA N
340-11660-500

N2°17'18"E 245.95

UTILITY EASEMENTS

EXISTING BUILDING

N2°17'18"E 189.88

25' BUILDING SETBACK LINE

S68°25'37"W 490.93

LOT 1
FINLEY SUBDIVISION PARK

REGISTERED
STATE OF ARKANSAS
NO. 1762
SIGNATURE
JONATHAN L. HOPE
PROFESSIONAL LAND SURVEYOR

By affixing my seal and signature, I Jonathan L. Hope PLS No, 1762, hereby certify that this drawing correctly depicts a survey compiled under my supervision.

NOTE: This survey was based on legal descriptions and title work furnished by others and does not represent a title search.

No portion of the property described hereon lies within the 100 year floodplain, according to the Federal Insurance Rate Map, panel #05125C0365e, Dated: 06/05/2020 .

PROPERTY SPECIFICATIONS:

OWNER: ARKANSAS STORAGE XIV, LLC PO BOX 10 BRYANT, AR 72022	NUMBER OF LOTS: 1
DEVELOPER/: SUBDIVIDER ARKANSAS STORAGE XIV, LLC PO BOX 10 BRYANT, AR 72022	SOURCE OF WATER: CITY OF BRYANT SOURCE OF SEWER: CITY OF BRYANT SOURCE OF ELECTRIC: FIRST ELECTRIC COOP SOURCE OF GAS: SUMMIT UTILITIES
ENGINEERS: HOPE CONSULTING INC. 129 N. MAIN STREET BENTON, AR 72015	BUILDING SETBACKS: FRONT - AS SHOWN REAR - OR AS SHOWN SIDE - OR AS SHOWN
NAME OF SUBDIVISION: FINLEY BUSINESS PARK	EASEMENTS: UTILITY & DRAINAGE (D.E. & U.E.) FRONT - AS SHOWN REAR - AS SHOWN SIDE - AS SHOWN
ZONING CLASSIFICATION: C-2	LOT CORNERS: SET 1/2" REBAR WITH CAP
SOURCE OF TITLE: SALINE COUNTY DOCUMENT 2023-015797 2023-015796 2023-010005 2023-017298	

BASIS OF BEARING:
GRID NORTH, ARKANSAS
COORDINATE SYSTEM, SOUTH ZONE
BY GPS OBSERVATION

30' 15' 0 30'

LEGEND
- Computed point
- Found monument
- Set Iron Pipe
(M) - Measured
(R) - Record
(D) - Deed

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Benton, Arkansas 72015
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FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
ARKANSAS STORAGE XIV, LLC

LOT 2
FINLEY BUSINESS PARK
A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS.

DATE: 11/20/2025	C.A.D. BY: B.JOHNSON	DRAWING NUMBER:	
REVISED:	CHECKED BY:	22-0800	
SHEET:	SCALE: 1" = 30'		

500	01S	14W	0	14	110	62	1762
500	01S	14W	0	13	400	62	1762

K:\Land Projects 2044\Commercial\2022\22-0800 Stuart Finley\130122-0800-Lot 2 recover.dwg

PROPOSED COMMERCIAL

25300 I30 N

DRAINAGE REPORT

FOR
City of Bryant, Saline County, AR

November 2025



Vicinity Map

Owner & Developer: FINLEY & COMPANY

By:

HOPE CONSULTING
ENGINEERS • SURVEYORS

129 N. Main Street
Benton, Arkansas 72015
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TABLE OF CONTENTS

ITEM DESCRIPTION

1. Narrative & Summary
2. Pre Development Area & Calculation
3. Post Development Area & Calculation
4. Ditch Area & Calculation
5. North East Detention Pond
6. Hydrograph Summary Report
7. Precipitation Data of NOAA

Narrative & Summary

PROJECT TITLE

25300 I30 N COMMERCIAL

PROJECT PROPERTY OWNER

Stuart Finley

PROJECT LOCATION

Bryant, Saline County, AR

PROJECT DESCRIPTION

The proposed commercial development is at the city of Bryant, AR. Total development site area is 0.90 acres.

DRAINAGE ANALYSIS

On Site Drainage- Rational method was used to determine the existing and proposed flow from proposed site. There will be one detention pond to detain water from this development. Detailed drainage calculation considering the future expected development has been conducted to determine the required pond and culvert dimension. Summary of the calculation is below:

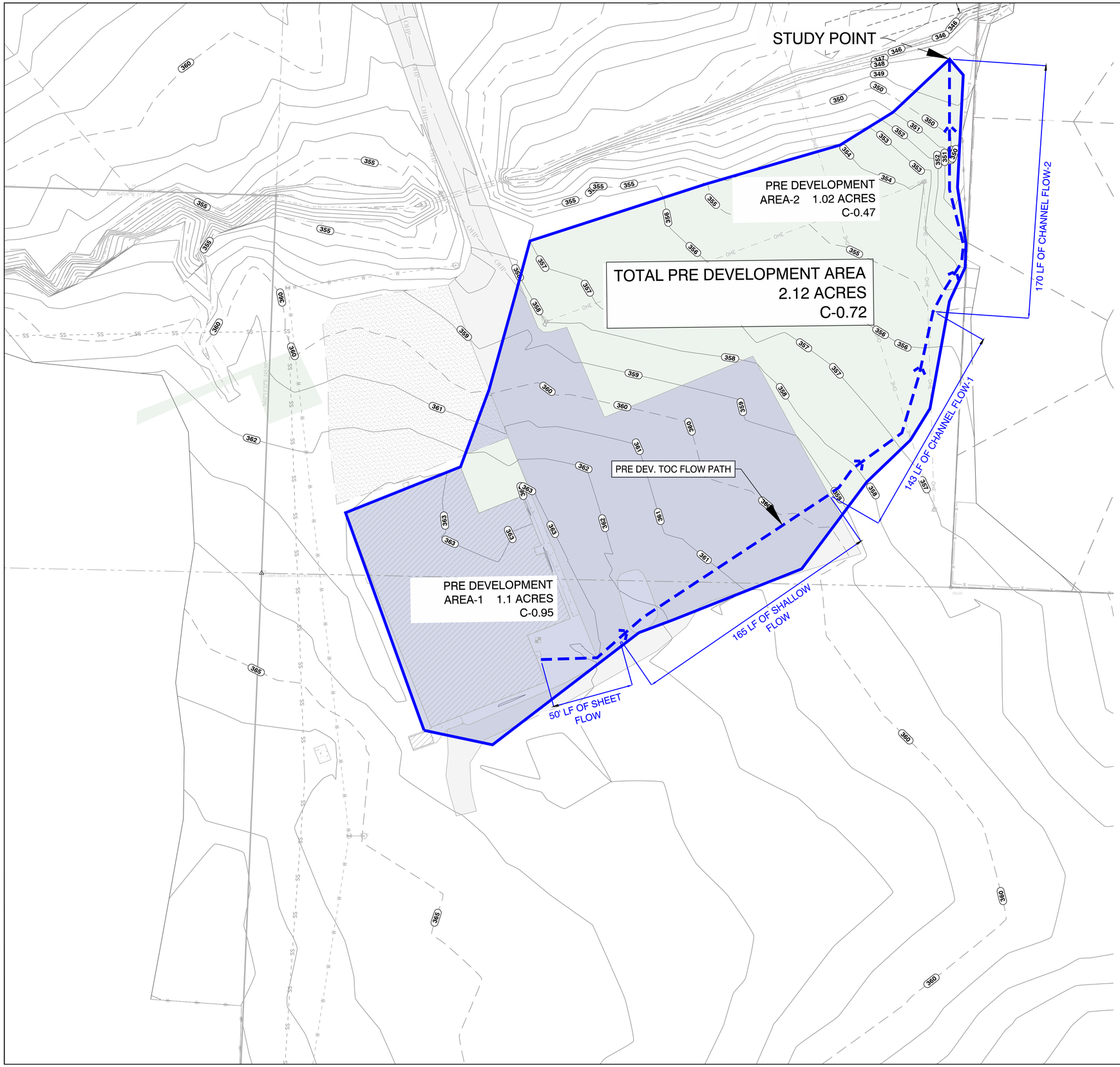
Detention Pond –North East Pond:

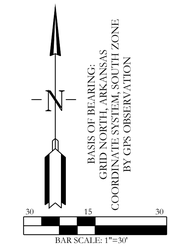
- Pond is situated on the north east side of the property.
- Pre-development area 2.12 acres.
- Post-development area 2.04 acres.
- Pre-development runoff coefficient 0.72.
- Post-development runoff coefficient 0.80.
- Pond has a bottom elevation of 351.00'.
- One 18" RCP with 0.72% slope is proposed for outflow culverts.

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

Period of time	Pre-development	Post-dev. Without detention	Post-dev. With detention
	Peak Flow (cfs)	Peak Flow (cfs)	Peak Flow (cfs)
2-Year	9.308	9.952	2.162
5-Year	11.05	11.81	2.705
10-Year	12.44	13.31	3.523
25-Year	14.28	15.27	4.816
50--Year	15.72	16.81	5.980
100-Year	16.91	18.08	6.950

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





VICINITY MAP:



PRE DEVELOPMENT TOC:

Time of Concentration, tc (min)

Area (ft2)	92233.0						
Area (Acre)	*2.12*						
Total Length, L (ft)	***528.0***						
Change in Elevation (ft)	16						
Slope, S (ft/ft)	*0.030*						
N (Coeff. Of roughness, Table 400-3)	0.020						
L_i (overland/sheet flow, ft)	50.0						
L_{scs}(shallow concentrated, ft)	165.0	Velocity, V (ft/sec)	Length, L (ft)	Height, h (ft)	Slope, S (ft/ft)	Mannings, n	Hydraulic Radius, R
L_{cs} (channel , ft)	313.0						
$t_i = 0.83\frac{(N L_i)^{0.467}}{S^{0.5}}$, (min)	*2.07*		50.0	1.0	*0.020*		
$t_{scs} = \frac{L_{scs}}{60\,V}$, (min) , paved							
V=20.3282(S^0.5)	*1.00*	*2.74*	165.0	3.0	*0.018*		
$t_{cs} = \frac{L_{cs}}{60\,V}$, (min)							
$V = \frac{1.49}{n} R^{\frac{2}{3}} S^{\frac{1}{2}}$ Channel flow-1	*1.00*	*2.37*	143.0	5.0	*0.035*	0.050	*0.278*
Channel flow-2	*0.68*	*4.17*	170.0	7.0	*0.041*	0.050	*0.573*
Total time of concentration, tc (min)	**4.76**						
USE	**5**						

PRE DEVELOPMENT RUNOFF COEFFICIENT

	Area (acer)	C 100 year	Corrected C 100 year
PRE DEV. AREA-1	1.10	0.95	1.045
PRE DEV. AREA-2	1.02	0.47	0.4794
Tot =	2.12		0.72

CERTIFICATE OF AUTHORIZATION
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ARKANSAS

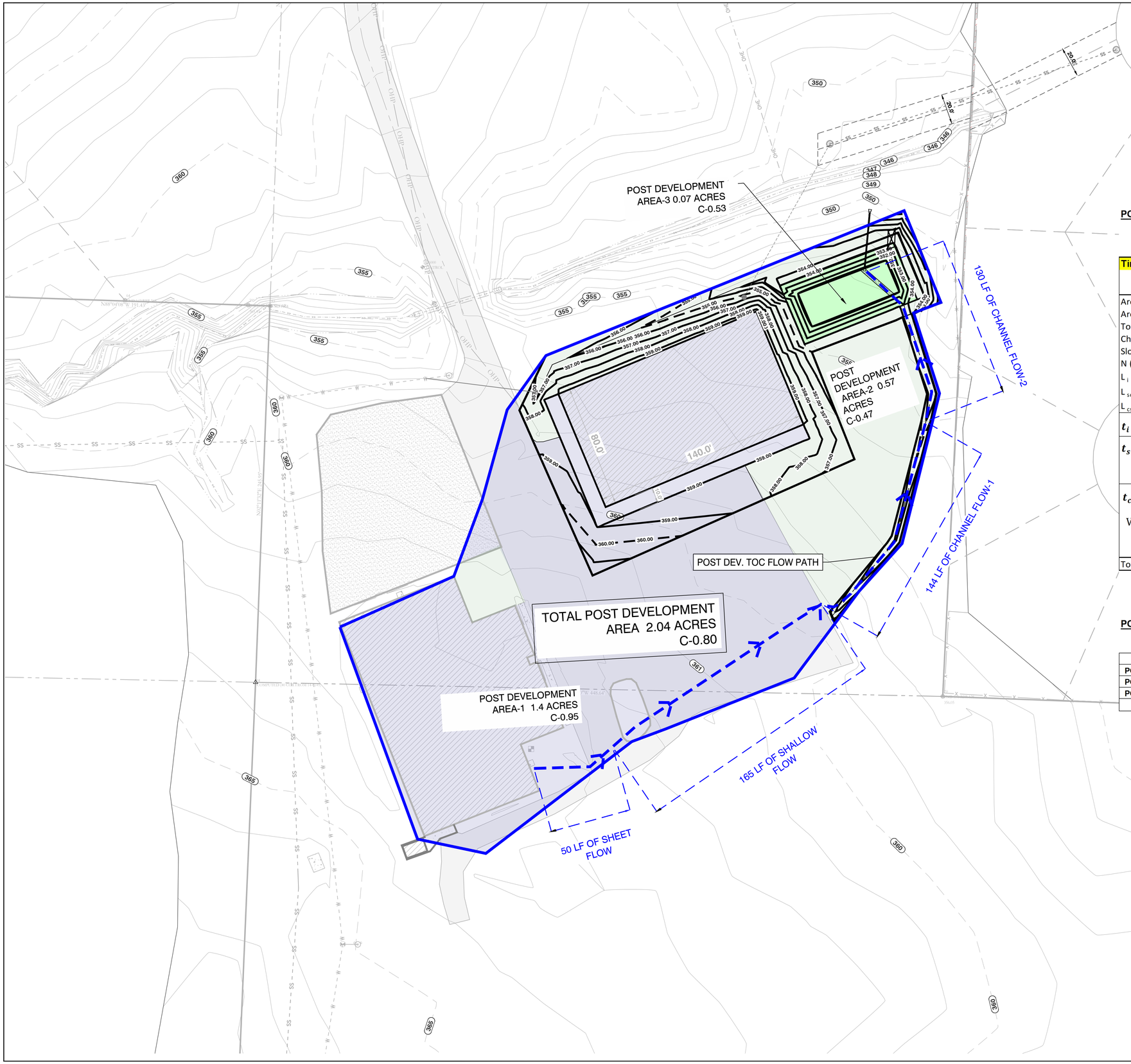
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ENGINEERS - SURVEYORS
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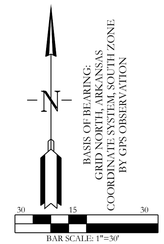
FOR USE AND BENEFIT OF:
STUART FINLEY

25-1210 Comm./ 25300 I30 N
PRE DEVELOPMENT DRAINAGE EXHIBITION
A COMMERCIAL IN BRYANT CITY, SALINE COUNTY, ARKANSAS

DATE:	11/19/2025	C.A.D. BY:	DRAWING NUMBER:
REVISED:	##	CHECKED BY:	25-1210
SHEET:		SCALE: 1"=30'	

500	01S	14W	0	13	400	62	1664





VICINITY MAP:



POST DEVELOPMENT TOC:

Time of Concentration, tc (min)

Area (ft2)	88645.3						
Area (Acre)-Total	*2.04*						
Total Length, L (ft)	***489.0***						
Change in Elevation (ft)	13						
Slope, S (ft/ft)	*0.027*						
N (Coeff. Of roughness, Table 400-3)	0.020						
L_i (overland/sheet flow, ft)	*50.0*						
L_{scs}(shallow concentrated, ft)	*165.0*	Velocity, V (ft/sec)	Length, L (ft)	Height, h (ft)	Slope, S (ft/ft)	Mannings, n	Hydraulic Radius, R
L_{cs} (channel , ft)	274.0						
$t_i = 0.83\frac{(N\,L_i)^{0.467}}{S^{0.5}}$, (min)	*2.07*		50.0	1.0	*0.020*		
$t_{scs} = \frac{L_{scs}}{60\,V}$, (min) , paved							
V=20.3282(S^0.5)	*1.00*	*2.74*	165.0	3.0	*0.018*		
$t_{cs} = \frac{L_{cs}}{60\,V}$, (min)							
$V = \frac{1.49}{n} R^{\frac{2}{3}} S^{\frac{1}{2}}$ Channel flow-1	*0.96*	*2.49*	144.0	5.0	*0.035*	0.050	*0.300*
Channel flow-2	*0.60*	*3.61*	130.0	4.0	*0.031*	0.050	*0.573*
Total time of concentration, tc (min)	**4.64**						
USE	**5**						

POST DEVELOPMENT RUNOFF COEFFICIENT

	Area (acer)	C 25 year	Corrected C 100 year
POST DEV. AREA-1	1.40	0.95	1.33
POST DEV. AREA-2	0.57	0.47	0.2679
POST DEV. AREA-3	0.07	0.53	0.0371
Tot =	2.04		0.80

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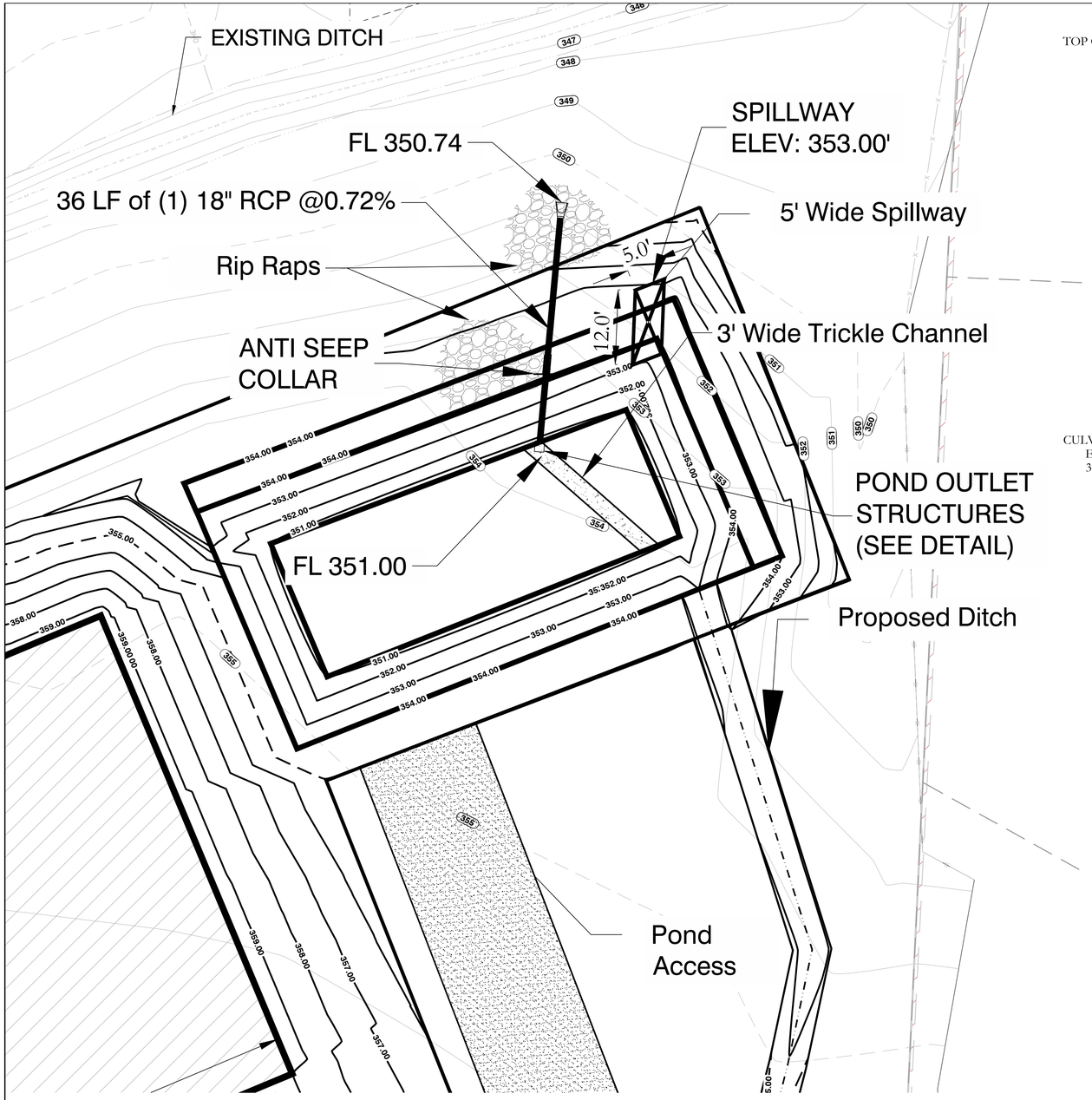
FOR USE AND BENEFIT OF:
STUART FINLEY

25-1210 Comm./ 25300 I30 N
POST DEVELOPMENT DRAINAGE EXHIBITION
A COMMERCIAL IN BRYANT CITY, SALINE COUNTY, ARKANSAS

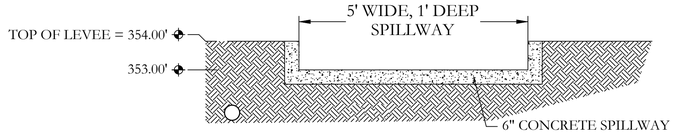
DATE:	11/19/2025	C.A.D. BY:	DRAWING NUMBER:
REVISED:	##	CHECKED BY:	25-1210
SHEET:		SCALE: 1"=30'	

500	01S	14W	0	13	400	62	1664

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NORTH EAST DETENTION POND



SPILLWAY END VIEW
NTS

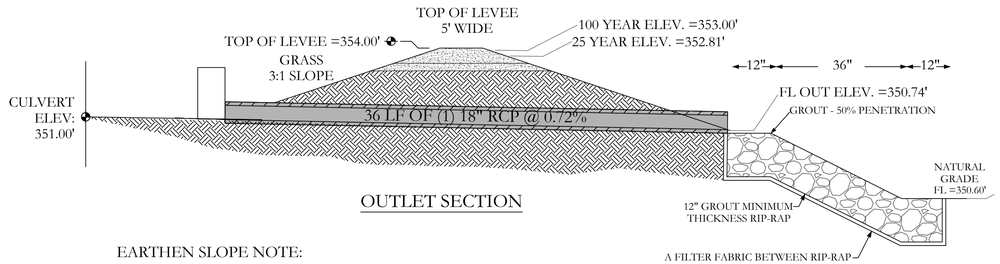
SPILLWAY DESIGN

Spillway Capacity, Q=CLH^(3/2)

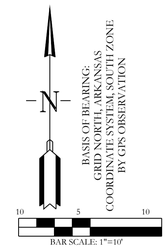
C Discharge Coefficient	L Spillway Width (ft)	H Head over Crest (ft)	
2.5	5	1	
	Spillway Capacity (cfs)	12.5	Adequate
	100 year Flow(cfs)	6.9	

VICINITY MAP:





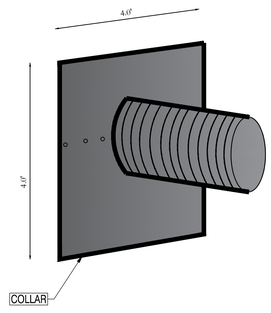
OUTLET SECTION



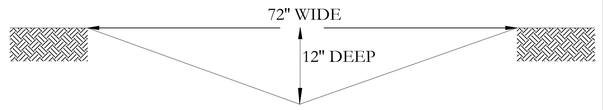
EARTHEN SLOPE NOTE:
EARTHEN DETENTION POND SLOPES ON BOTH THE INTERIOR AND EXTERIOR OF THE POND SHALL HAVE A MAXIMUM SLOPE OF 3:1.

NOTE:

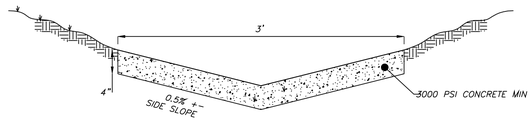
1. DETENTION POND WILL BE REQUIRED TO BE STABILIZED WITH SOLID SOD/SEED STABILIZATION PER THE STORM WATER MANAGEMENT MANUAL.
2. DETENTION POND WILL HAVE A 5' WIDE LEVEE.
3. DETENTION POND REQUIRED STORAGE 5,420 CUFT. THE DESIGNED DETENTION POND'S AVAILABLE STORAGE 6,758 CUFT.
4. THE EXISTING DITCH HAS FLOW FOR 100 YEAR 116 CFS. THE FLOW FROM POND IS 6.9 CFS FOR 100 YEAR



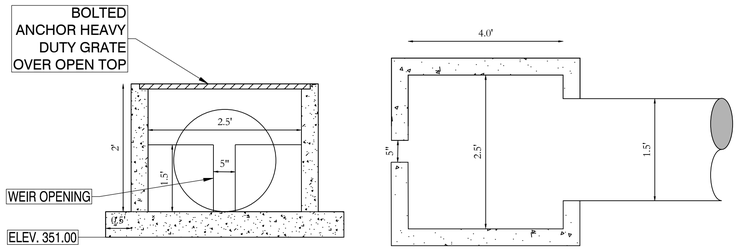
ANTI SEEP COLLAR



PROPOSED DITCH SECTION



DETAIL (NTS)
TRICKLE CHANNEL SECTION



POND OUTLET STRUCTURE

DETENTION POND MAINTENANCE PLAN

Background
The Detention pond is located at the North East of the subjected property. It is designed to temporarily detain stormwater to meet water quantity criteria before discharging off the property.

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

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

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

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

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

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

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

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

-Existing ditch will be maintained by regular inspection, sediment removal, clearing debris, controlling vegetation.

-Any other maintenance or repairs which would minimize other maintenance to the pond or outfall structures.
-For questions or concerns about Tract "A", contact at **(501)315-2626.**

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

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

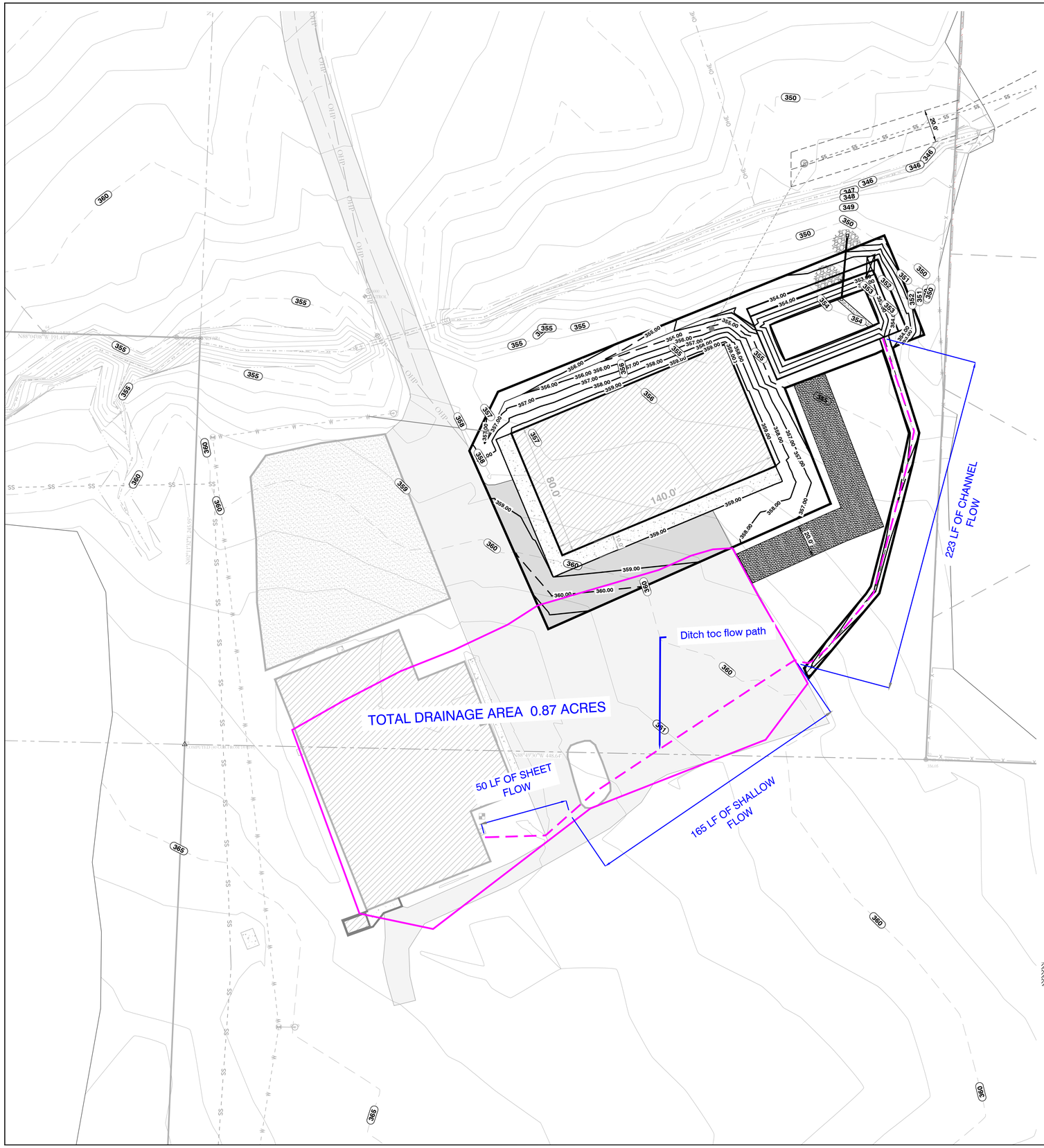
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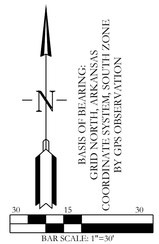
FOR USE AND BENEFIT OF:
STUART FINLEY

25-1210 Comm./ 25300 I30 N
NORTH EAST DETENTION POND
A COMMERCIAL IN BRYANT CITY, SALINE COUNTY, ARKANSAS

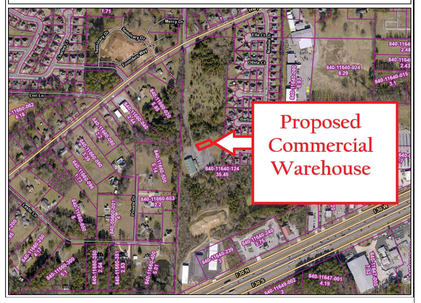
DATE:	11/19/2025	C.A.D. BY:		DRAWING NUMBER:	
REVISED:	##	CHECKED BY:		25-1210	
SHEET:	C-3.0	SCALE:	1"=10'		

500	01S	14W	0	13	400	62	1664





VICINITY MAP:



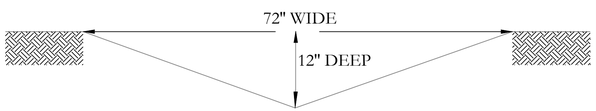
Ditch Size Calculation

Time of Concentration, tc (min)								
Area (ft2)	37737.2							
Area (Acre)	*0.87*							
Total Length, L (ft)	***438.0***							
Change in Elevation (ft)	10							
Gross Slope, S (ft/ft)	*0.023*							
N (Coeff. Of roughness, Table 400	*0.020*							
L_i (overland/sheet flow, ft)	50.0							
L_{scs}(shallow concentrated, ft)	165.0	Velocity, V (ft/sec)	Length, L (ft)	Height, h (ft)	Slope, S (ft/ft)	Mannings, n	Hydraulic Radius, R	
L_{cs} (channel , ft)	223.0							
$t_i = 0.83 \frac{(N L_i)^{0.467}}{S^{0.5}}$, (min)	*2.07*	-	50.0	1.0	*0.020*	0.020	-	
$t_{scs} = \frac{L_{scs}}{60\,V}$, (min) , paved								
V=20.3282(S^0.5)	*1.00*	*2.74*	165.0	3.0	*0.018*	-	-	
$t_{cs} = \frac{L_{cs}}{60\,V}$, (min)								
$V = \frac{1.49}{n} R^{\frac{2}{3}} S^{\frac{1}{2}}$ Ch1	*1.80*	*2.07*	223.0	6.0	*0.027*	0.050	*0.275*	
Total time of concentration, tc (m	**4.87**							
USE MIN	**5**							

Design Peak Runoff Rates, Qp (cfs)				
tc =	5.00	Runoff	Toal A	Q
	Intensity, I (in/hr)	Coefficient,		
100year	11.10	**0.950**	**0.87 acer**	**9.14**

Channel/ Ditch Dimension Calculation												
Total Length, L (ft)	***223.0***											
Total Change in Elevation (ft)	6											
Slope, S (ft/ft)	*0.027*											
Target Discharge, Q (ft^3/s)	***9.1***											
		Channel Dimenstion										
$Q = V A$		Velocity, V (ft/sec)	Bottom Width, (ft)	Depth, (ft)	Top Width, (ft)	Ch Side Slope 1:Z	Area, (ft^2)	Length, L (ft)	Elevation, h (ft)	Slope, S (ft/ft)	Mannings, n	Hydraulic Radius, R
$V = \frac{1.49}{n} R^{\frac{2}{3}} S^{\frac{1}{2}}$												
C Flow	*14.87*	*4.96*	0.00	1.00	*6.00*	3	*3.00*	223.0	6.0	*0.0269*	0.030	*0.474*
Discharge Capacity, Q =	**14.87**	ft^3/s										

Adequate size



DITCH SECTION

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

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

FOR USE AND BENEFIT OF:
STUART FINLEY

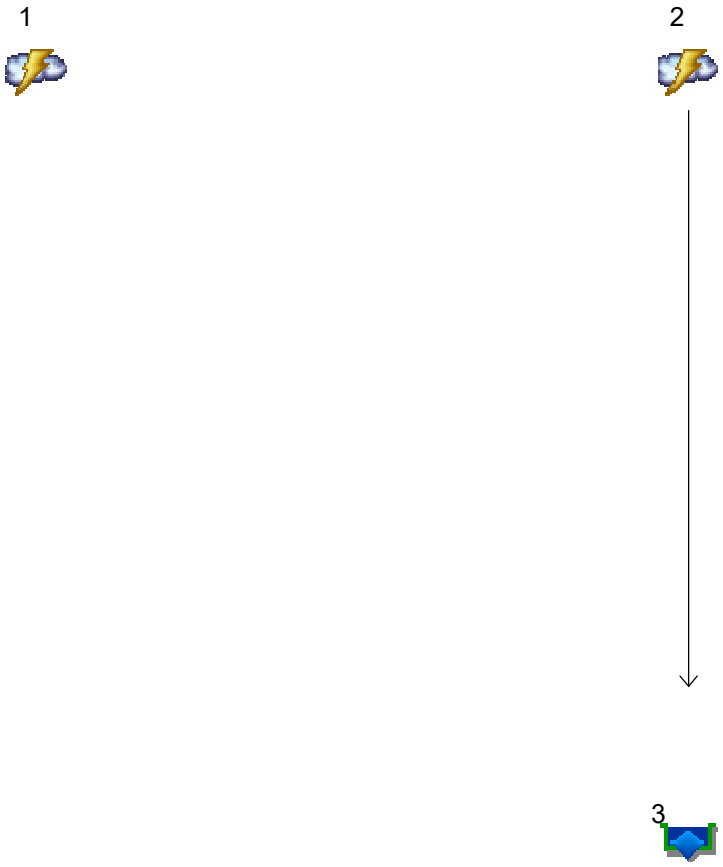
25-1210 Comm./ 25300 I30 N
DITCH CALCULATION
A COMMERCIAL IN BRYANT CITY, SALINE COUNTY, ARKANSAS

DATE:	11/19/2025	C.A.D. BY:	DRAWING NUMBER:
REVISED:	##	CHECKED BY:	25-1210
SHEET:		SCALE: 1"=30'	

500	01S	14W	0	13	400	62	1664

Hydrograph Summary Report
North East Detention Pond

Watershed Model Schematic



Legend

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

Multi-Hydrograph Plot

Hyd. No. 1

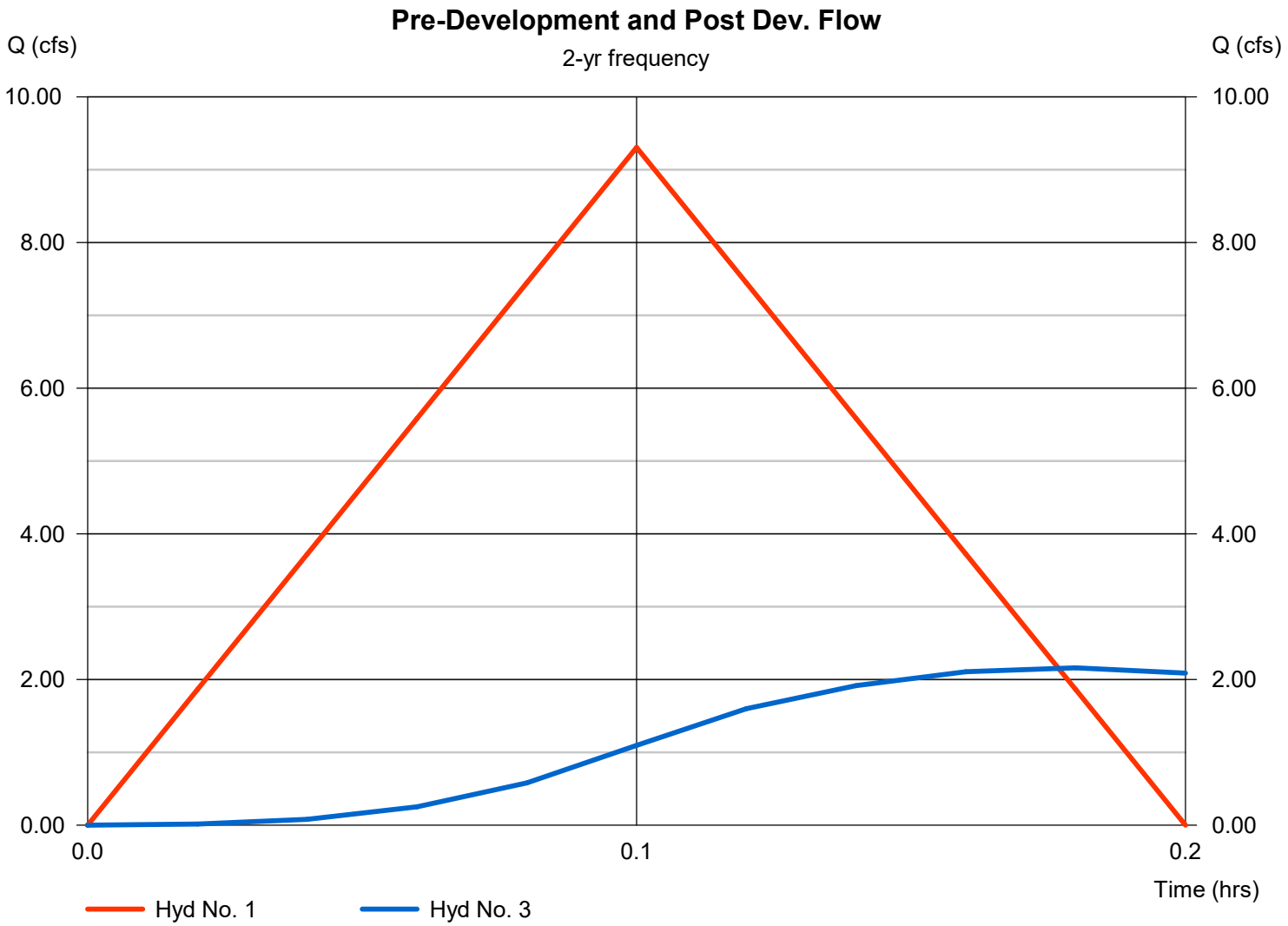
Pre-Development

Hydrograph type	=	Rational
Peak discharge	=	9.308 cfs
Time to peak	=	0.08 hrs
Hyd. Volume	=	2,792 cuft

Hyd. No. 3

Post Dev. Flow

Hydrograph type	=	Reservoir
Peak discharge	=	2.16 cfs
Time to peak	=	0.15 hrs
Hyd. Volume	=	2,982 cuft



Multi-Hydrograph Plot

Hyd. No. 1

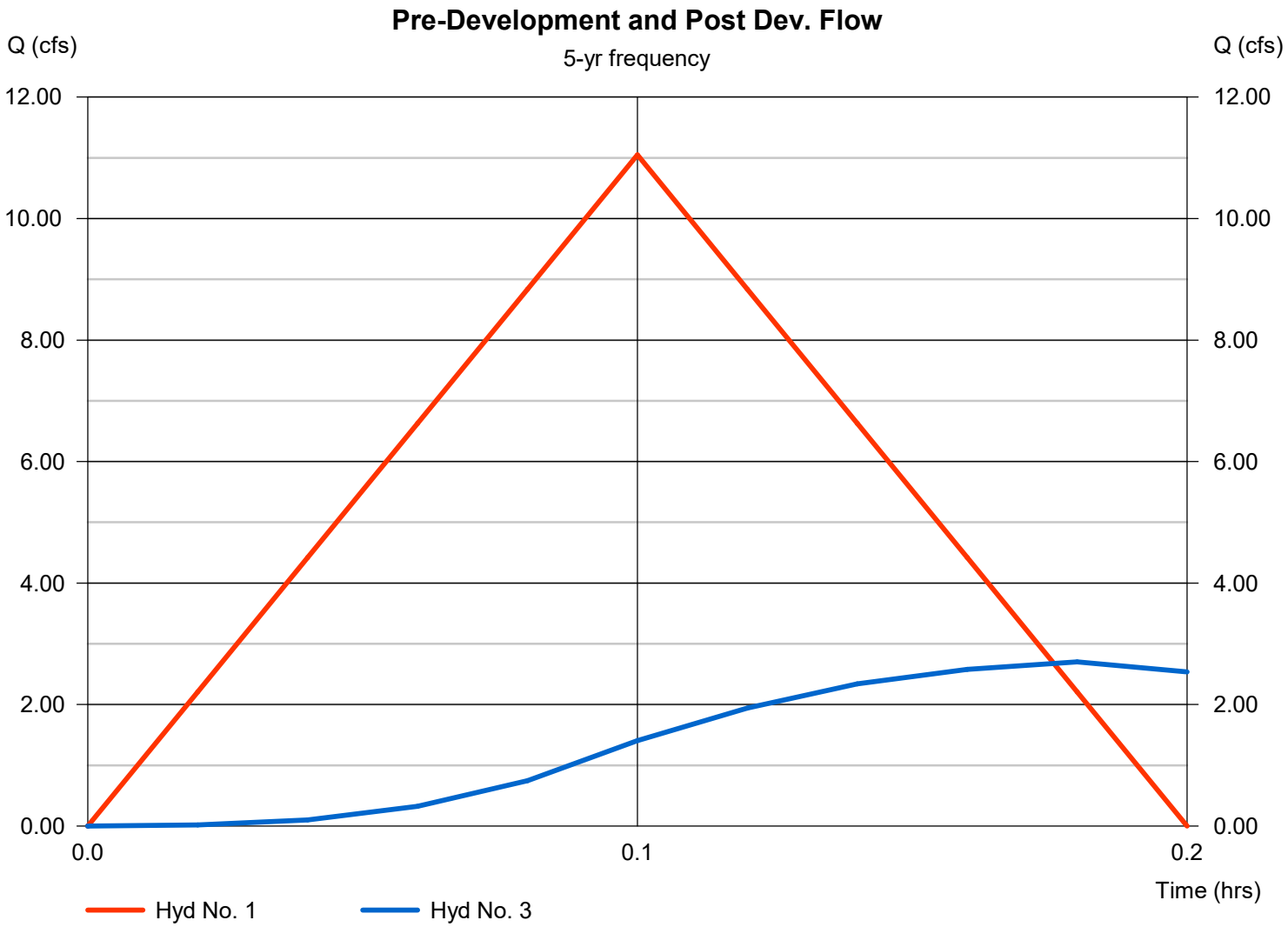
Pre-Development

Hydrograph type	=	Rational
Peak discharge	=	11.05 cfs
Time to peak	=	0.08 hrs
Hyd. Volume	=	3,314 cuft

Hyd. No. 3

Post Dev. Flow

Hydrograph type	=	Reservoir
Peak discharge	=	2.70 cfs
Time to peak	=	0.15 hrs
Hyd. Volume	=	3,540 cuft



Multi-Hydrograph Plot

Hyd. No. 1

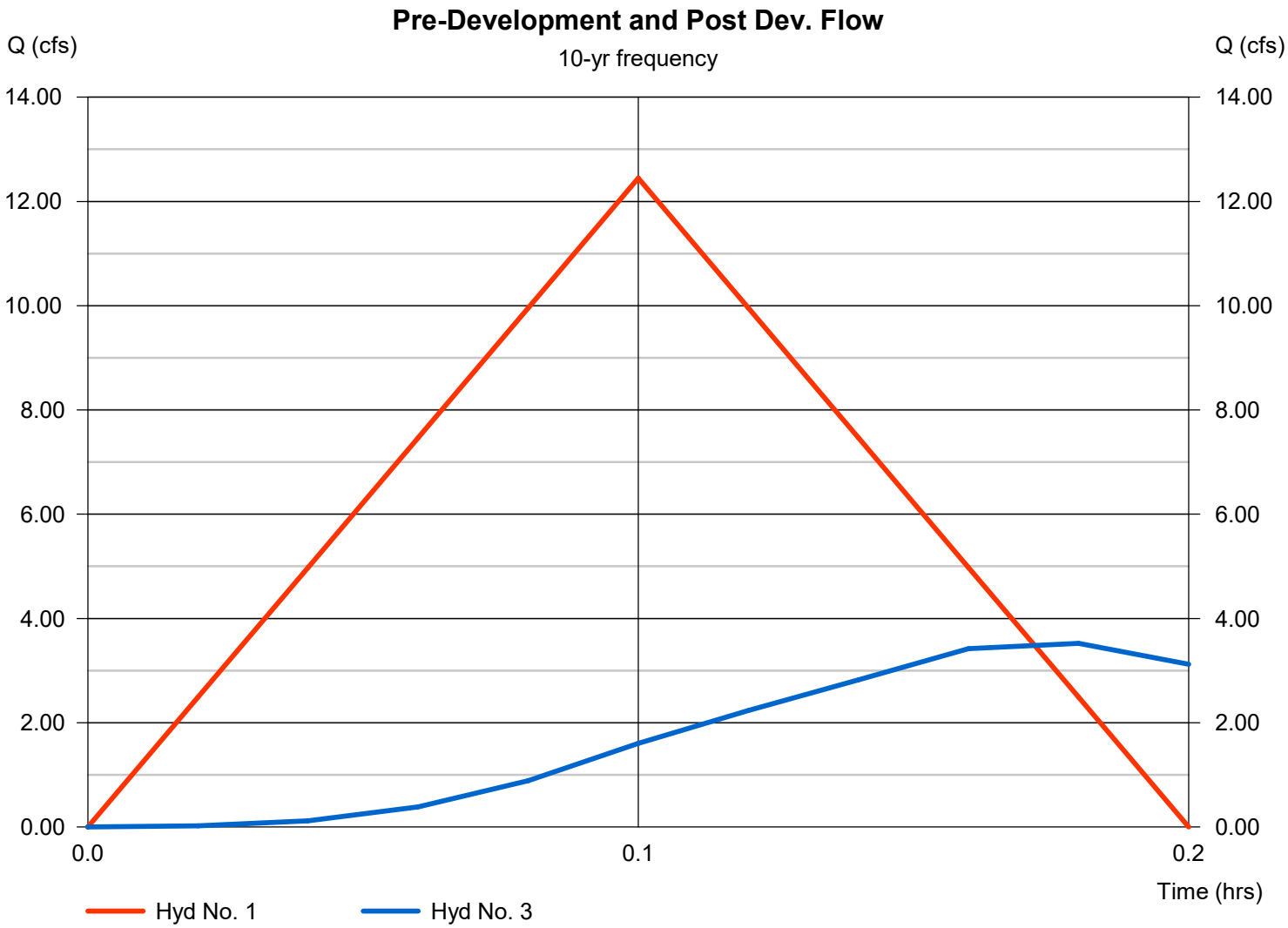
Pre-Development

Hydrograph type	=	Rational
Peak discharge	=	12.44 cfs
Time to peak	=	0.08 hrs
Hyd. Volume	=	3,733 cuft

Hyd. No. 3

Post Dev. Flow

Hydrograph type	=	Reservoir
Peak discharge	=	3.52 cfs
Time to peak	=	0.15 hrs
Hyd. Volume	=	3,988 cuft



Multi-Hydrograph Plot

Hyd. No. 1

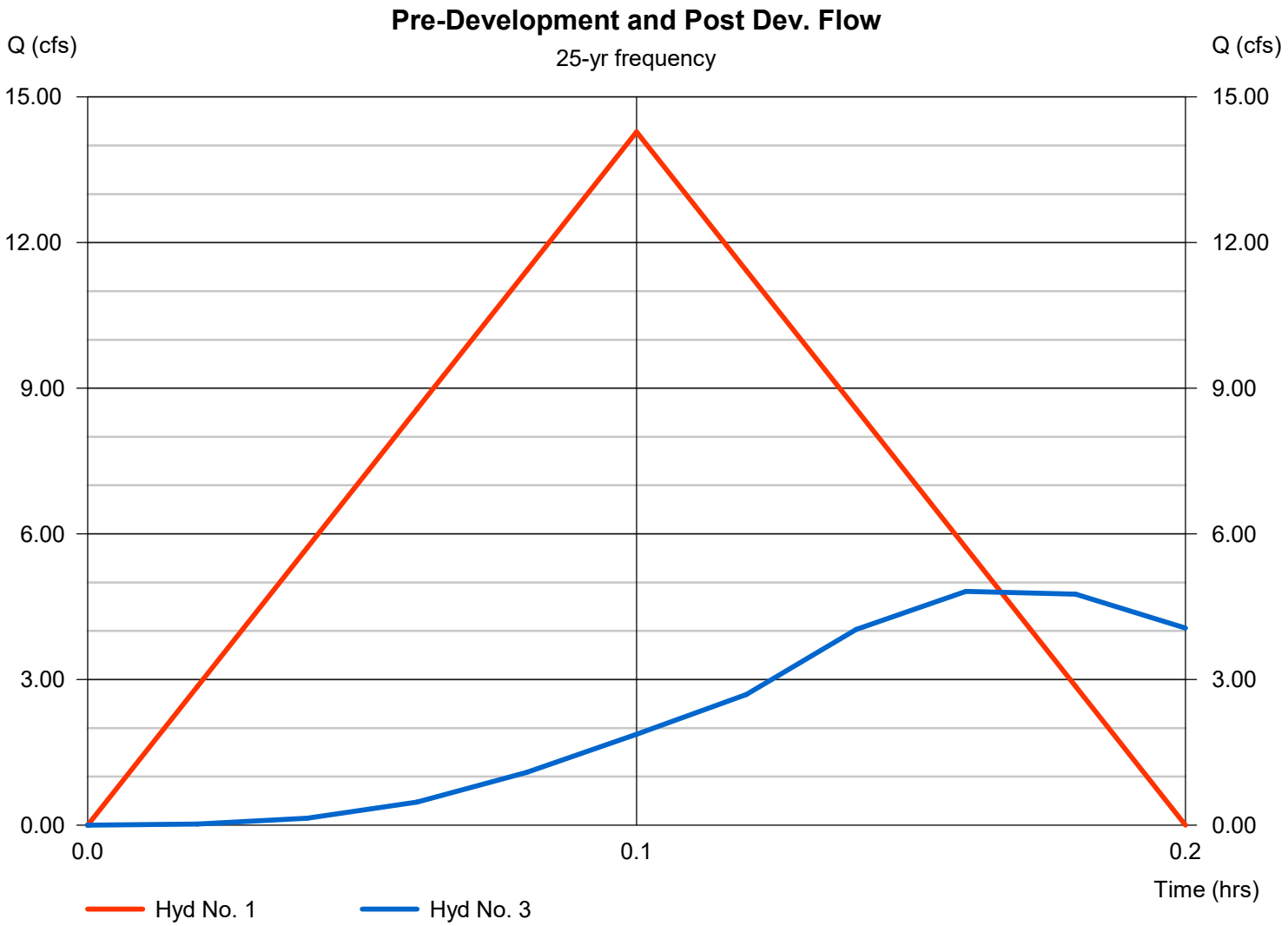
Pre-Development

Hydrograph type	=	Rational
Peak discharge	=	14.28 cfs
Time to peak	=	0.08 hrs
Hyd. Volume	=	4,284 cuft

Hyd. No. 3

Post Dev. Flow

Hydrograph type	=	Reservoir
Peak discharge	=	4.82 cfs
Time to peak	=	0.13 hrs
Hyd. Volume	=	4,577 cuft



Multi-Hydrograph Plot

Hyd. No. 1

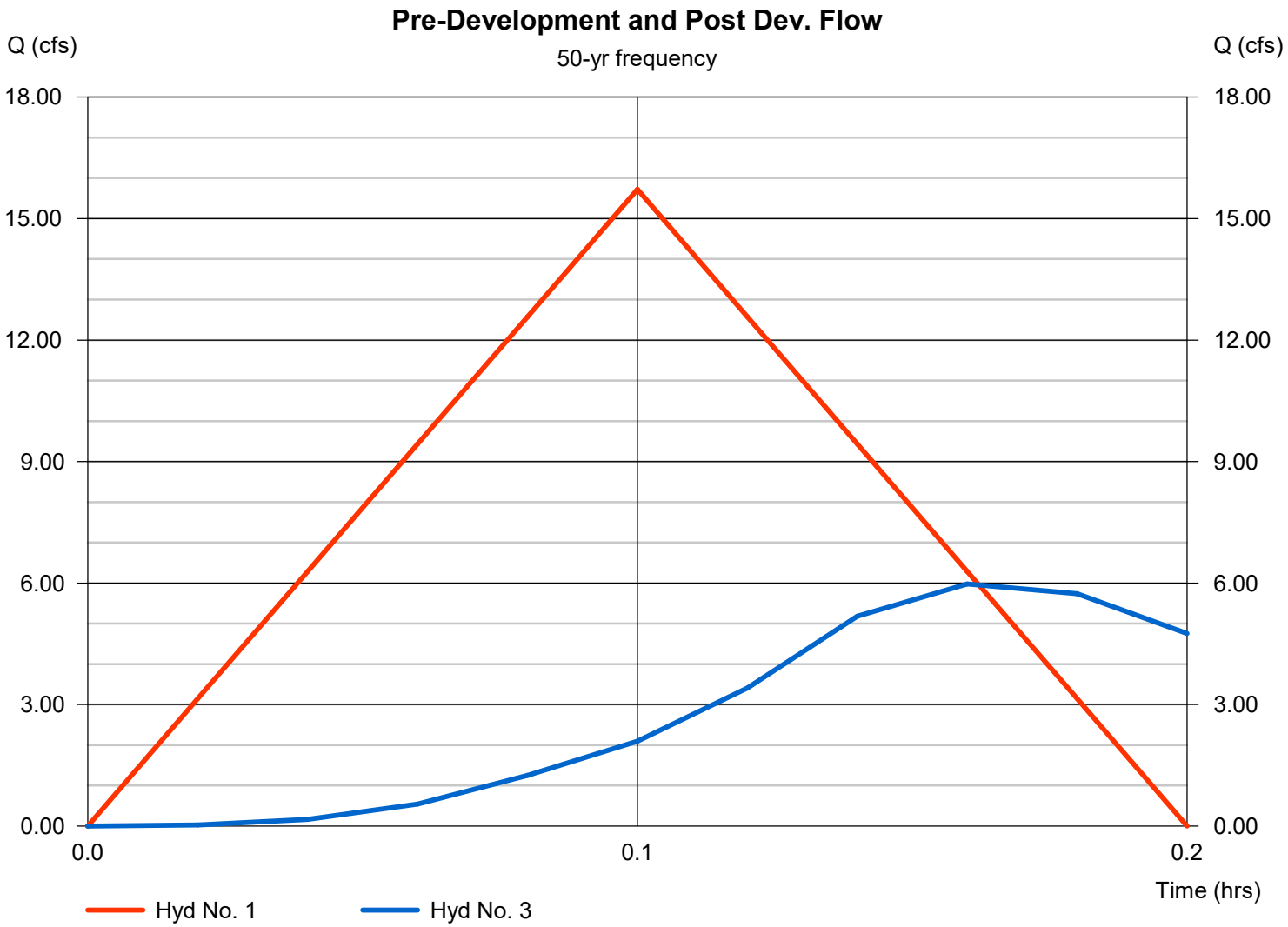
Pre-Development

Hydrograph type	=	Rational
Peak discharge	=	15.72 cfs
Time to peak	=	0.08 hrs
Hyd. Volume	=	4,716 cuft

Hyd. No. 3

Post Dev. Flow

Hydrograph type	=	Reservoir
Peak discharge	=	5.98 cfs
Time to peak	=	0.13 hrs
Hyd. Volume	=	5,039 cuft



Multi-Hydrograph Plot

Hyd. No. 1

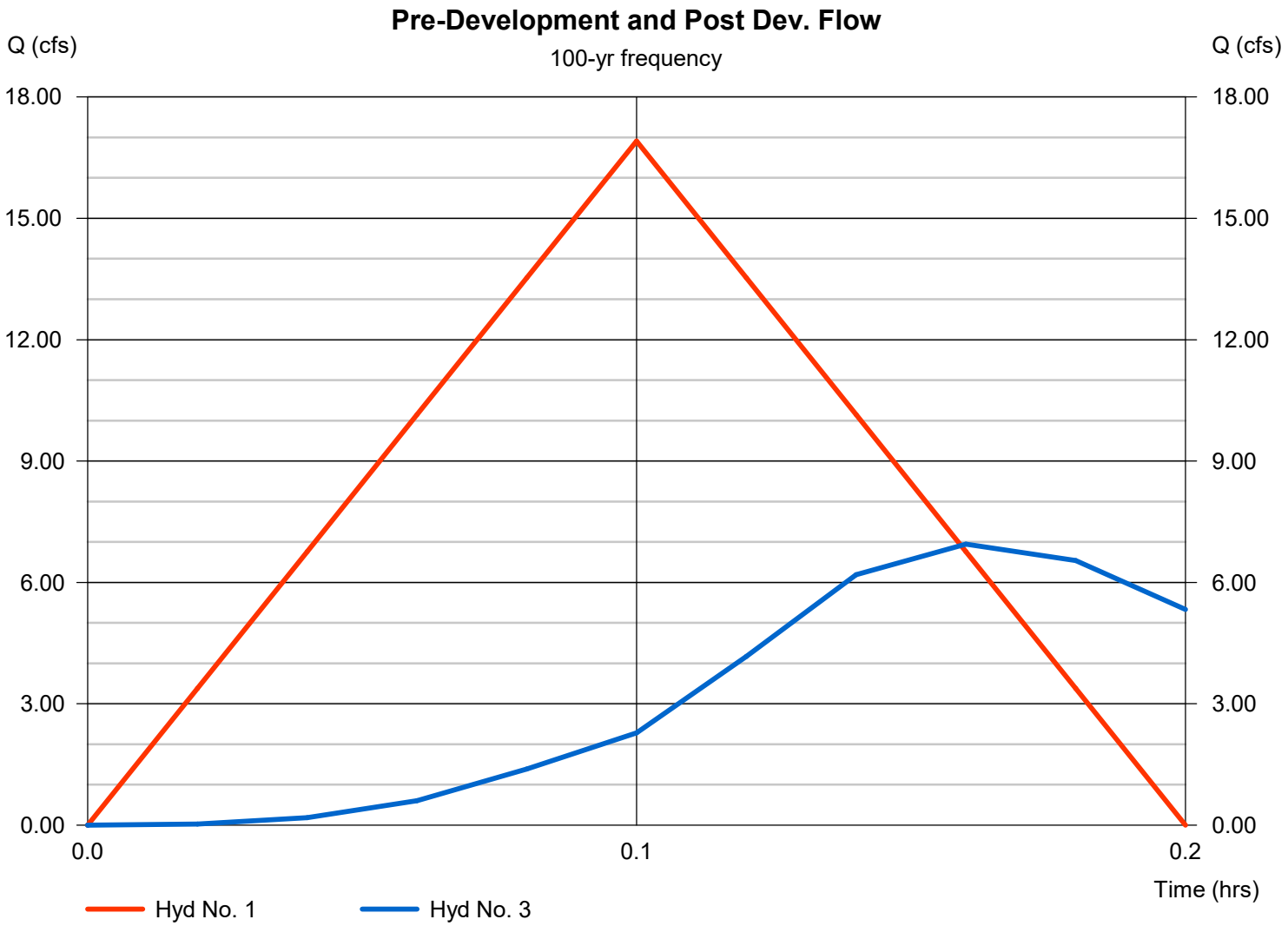
Pre-Development

Hydrograph type	=	Rational
Peak discharge	=	16.91 cfs
Time to peak	=	0.08 hrs
Hyd. Volume	=	5,073 cuft

Hyd. No. 3

Post Dev. Flow

Hydrograph type	=	Reservoir
Peak discharge	=	6.95 cfs
Time to peak	=	0.13 hrs
Hyd. Volume	=	5,420 cuft



Hydrograph Return Period Recap

Hyd. No.	Hydrograph type (origin)	Inflow hyd(s)	Peak Outflow (cfs)								Hydrograph Description
			1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	
1	Rational	------	-------	9.308	-------	11.05	12.44	14.28	15.72	16.91	Pre-Development
2	Rational	------	-------	9.952	-------	11.81	13.31	15.27	16.81	18.08	Dev. Generated Flow
3	Reservoir	2	-------	2.162	-------	2.705	3.523	4.816	5.980	6.950	Post Dev. Flow

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	9.308	1	5	2,792	------	------	------	Pre-Development
2	Rational	9.952	1	5	2,985	------	------	------	Dev. Generated Flow
3	Reservoir	2.162	1	9	2,982	2	352.34	2,402	Post Dev. Flow

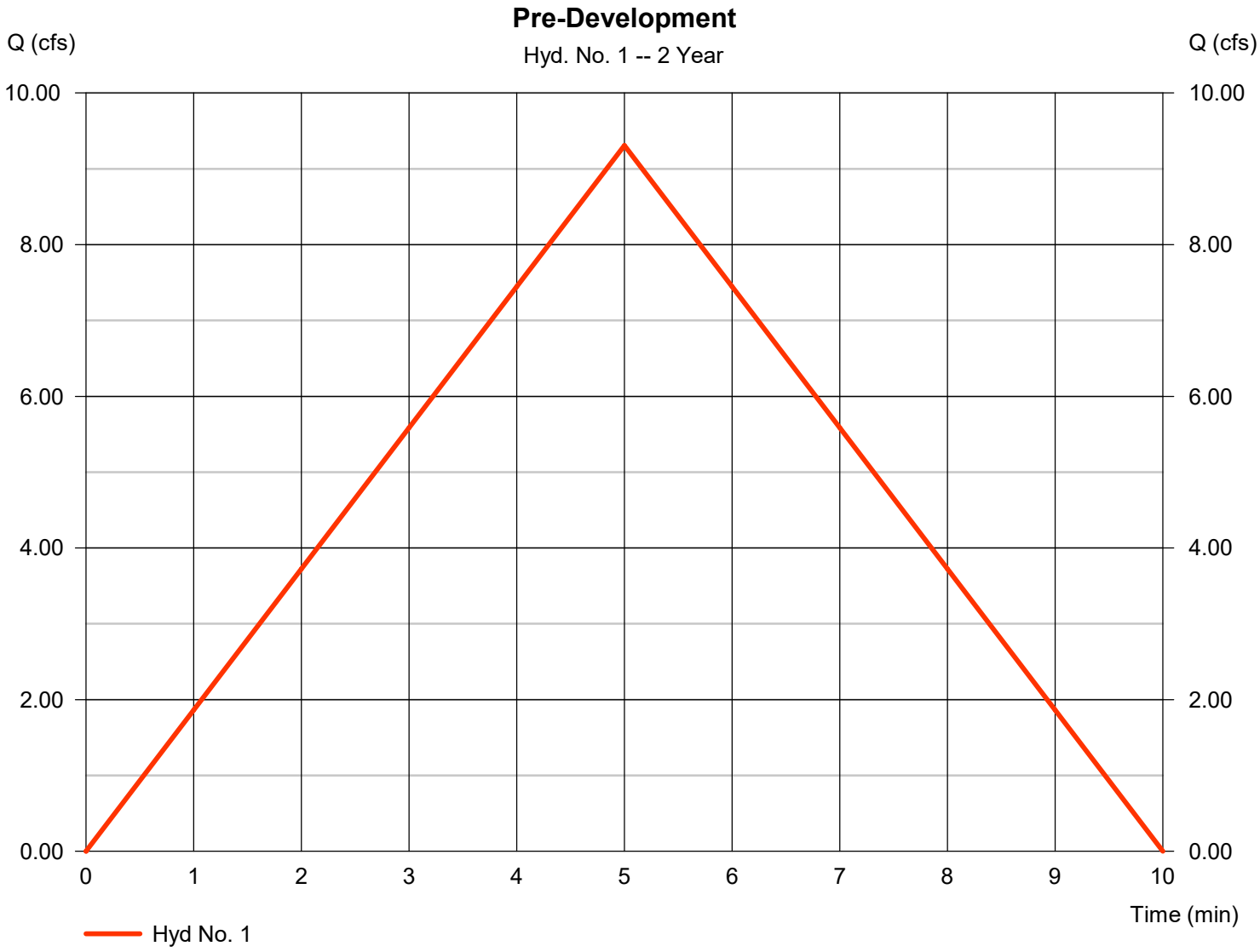
Hydrograph Report

Hyd. No. 1

Pre-Development

Hydrograph type	=	Rational	Peak discharge	=	9.308 cfs
Storm frequency	=	2 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	2,792 cuft
Drainage area	=	2.120 ac	Runoff coeff.	=	0.72*
Intensity	=	6.098 in/hr	Tc by User	=	5.00 min
IDF Curve	=	BRYANT.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(11.990 x 0.44) + (4.630 x 0.90)] / 2.120



Hydrograph Report

Hyd. No. 2

Dev. Generated Flow

Hydrograph type	=	Rational	Peak discharge	=	9.952 cfs
Storm frequency	=	2 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	2,985 cuft
Drainage area	=	2.040 ac	Runoff coeff.	=	0.8
Intensity	=	6.098 in/hr	Tc by User	=	5.00 min
IDF Curve	=	BRYANT.IDF	Asc/Rec limb fact	=	1/1



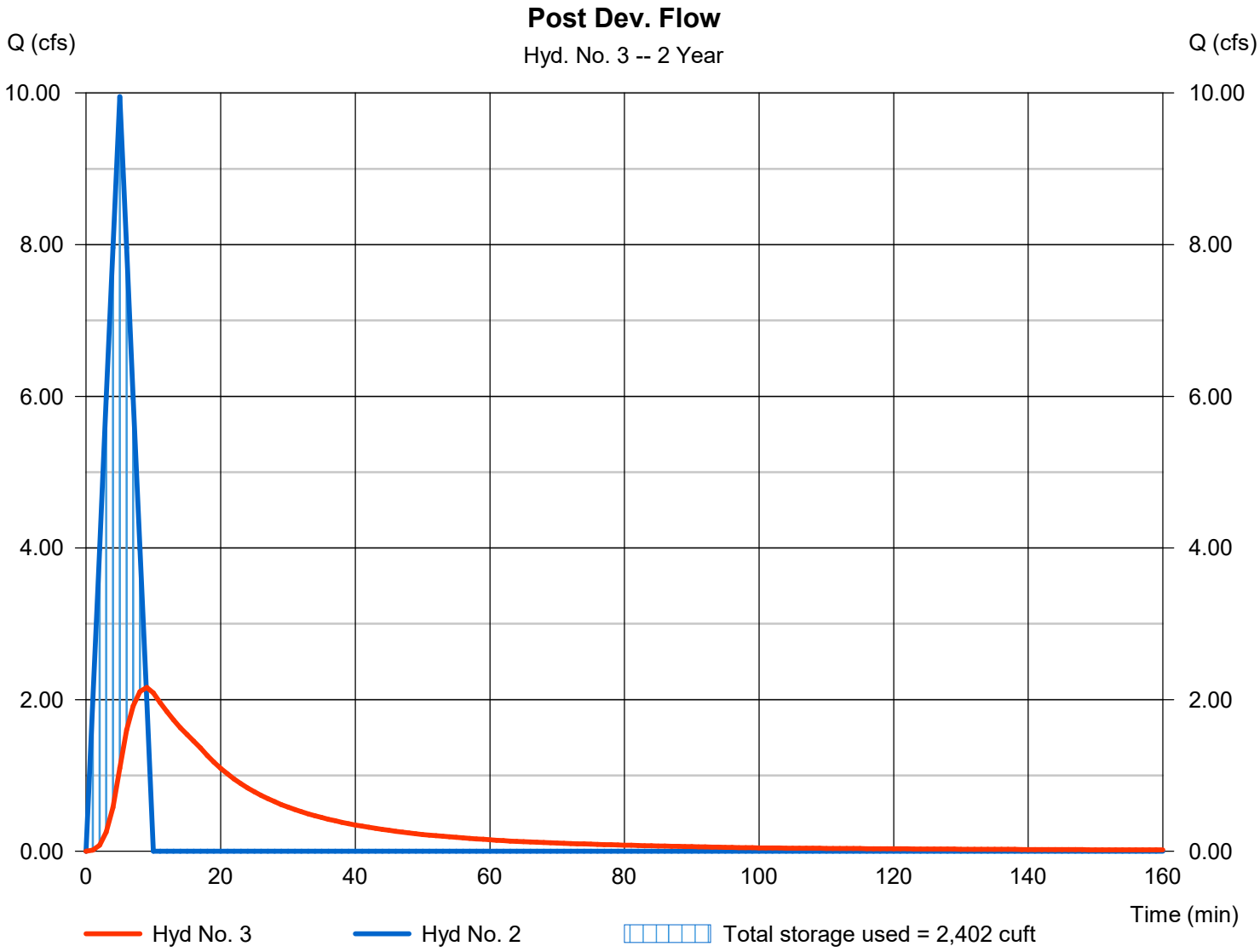
Hydrograph Report

Hyd. No. 3

Post Dev. Flow

Hydrograph type	=	Reservoir	Peak discharge	=	2.162 cfs
Storm frequency	=	2 yrs	Time to peak	=	9 min
Time interval	=	1 min	Hyd. volume	=	2,982 cuft
Inflow hyd. No.	=	2 - Dev. Generated Flow	Max. Elevation	=	352.34 ft
Reservoir name	=	detention	Max. Storage	=	2,402 cuft

Storage Indication method used.



Pond Report

Pond No. 1 - detention

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 351.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	351.00	1,390	0	0
1.00	352.00	1,930	1,652	1,652
2.00	353.00	2,542	2,229	3,881
3.00	354.00	3,225	2,876	6,758

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	Inactive	Inactive	Inactive	0.00
Span (in)	= 18.00	0.00	0.00	0.00
No. Barrels	= 1	1	0	0
Invert El. (ft)	= 351.00	0.00	0.00	0.00
Length (ft)	= 36.00	0.00	0.00	0.00
Slope (%)	= 0.72	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	No	No	No

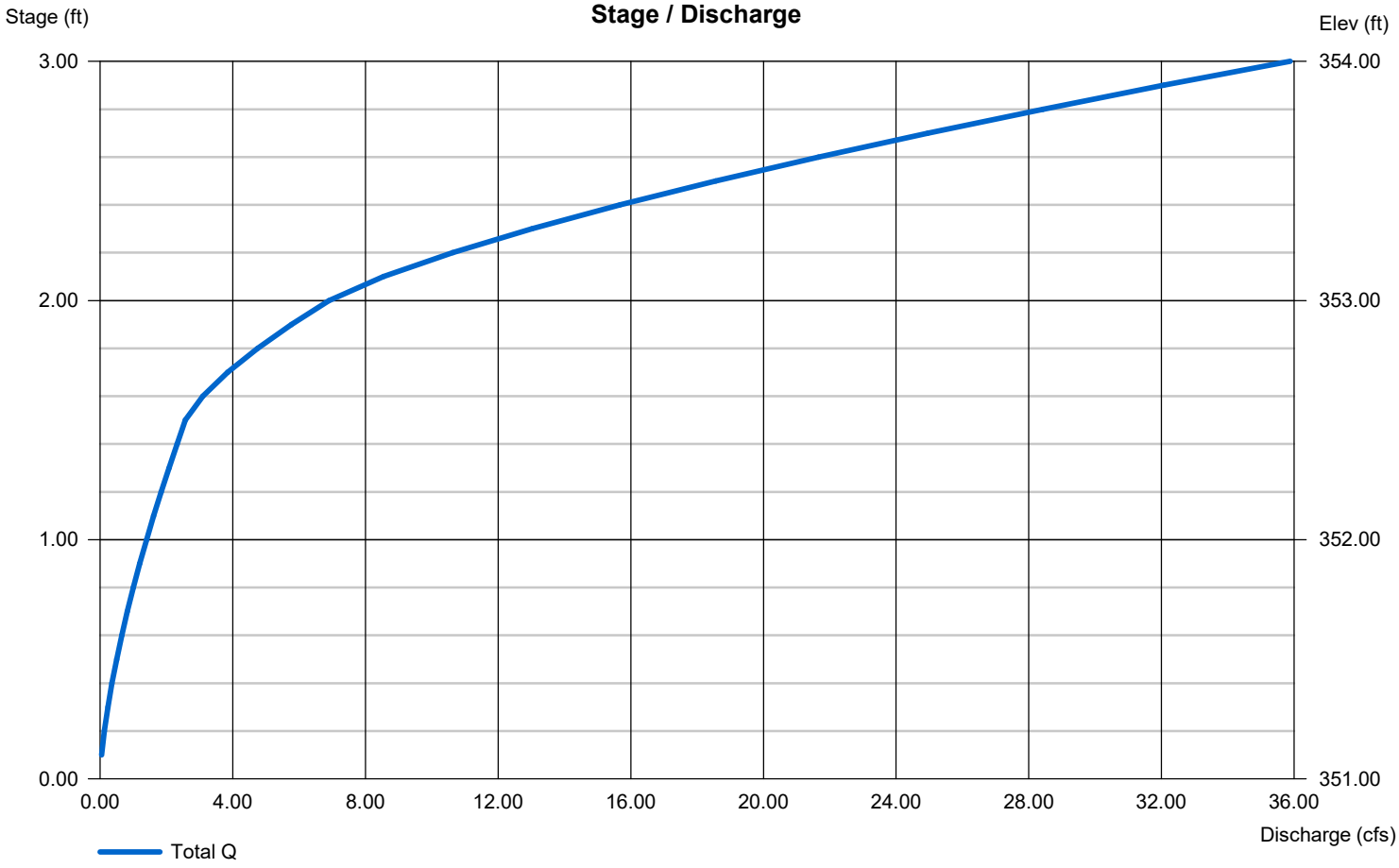
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 0.42	2.50	4.00	0.00
Crest El. (ft)	= 351.00	352.50	353.00	0.00
Weir Coeff.	= 3.33	3.33	3.33	3.33
Weir Type	= Rect	Rect	Rect	---
Multi-Stage	= No	No	No	No

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

TW Elev. (ft) = 0.00

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



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	11.05	1	5	3,314	------	------	------	Pre-Development
2	Rational	11.81	1	5	3,543	------	------	------	Dev. Generated Flow
3	Reservoir	2.705	1	9	3,540	2	352.53	2,824	Post Dev. Flow

Hydrograph Report

Hyd. No. 1

Pre-Development

Hydrograph type	=	Rational	Peak discharge	=	11.05 cfs
Storm frequency	=	5 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	3,314 cuft
Drainage area	=	2.120 ac	Runoff coeff.	=	0.72*
Intensity	=	7.237 in/hr	Tc by User	=	5.00 min
IDF Curve	=	BRYANT.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(11.990 x 0.44) + (4.630 x 0.90)] / 2.120

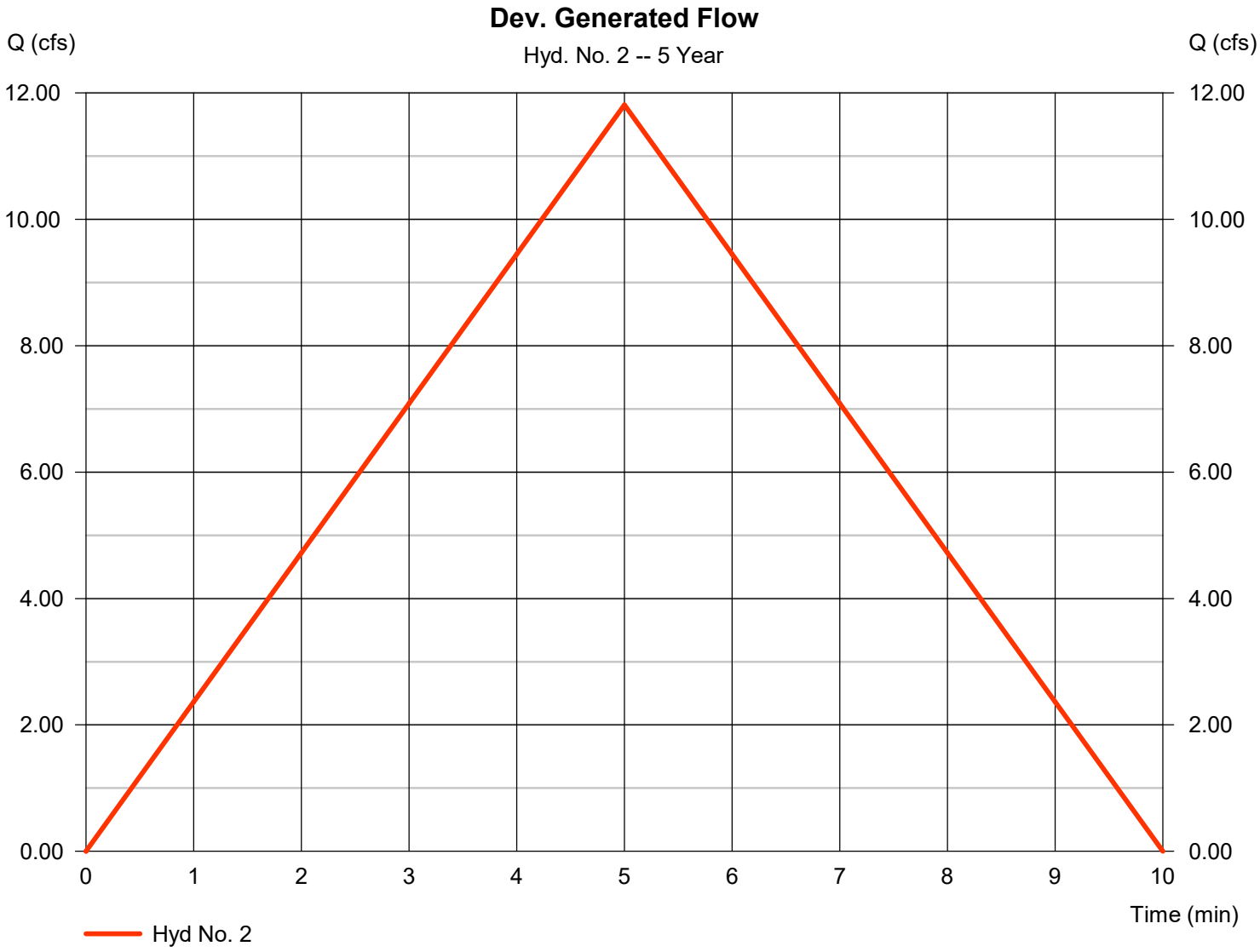


Hydrograph Report

Hyd. No. 2

Dev. Generated Flow

Hydrograph type	=	Rational	Peak discharge	=	11.81 cfs
Storm frequency	=	5 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	3,543 cuft
Drainage area	=	2.040 ac	Runoff coeff.	=	0.8
Intensity	=	7.237 in/hr	Tc by User	=	5.00 min
IDF Curve	=	BRYANT.IDF	Asc/Rec limb fact	=	1/1



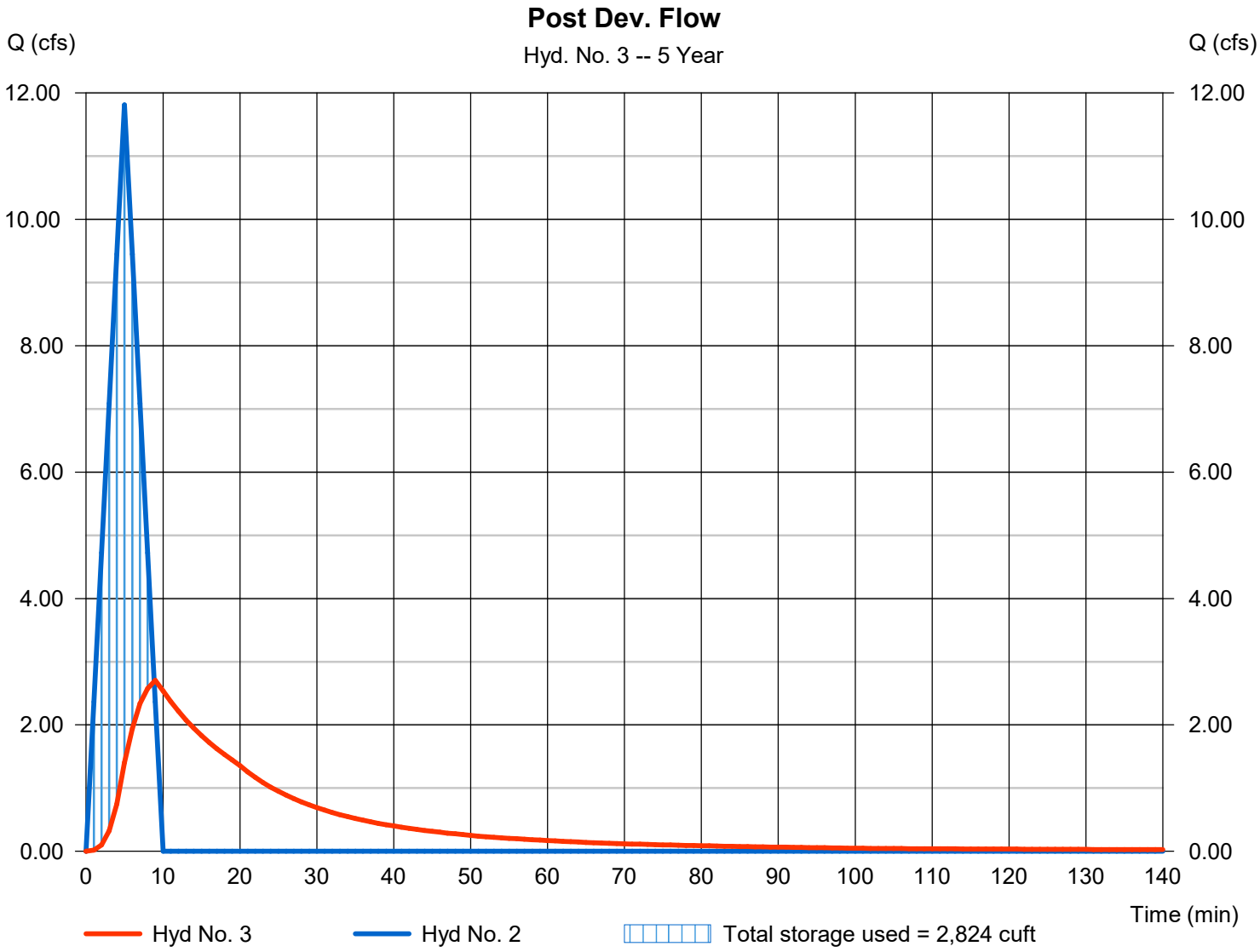
Hydrograph Report

Hyd. No. 3

Post Dev. Flow

Hydrograph type	=	Reservoir	Peak discharge	=	2.705 cfs
Storm frequency	=	5 yrs	Time to peak	=	9 min
Time interval	=	1 min	Hyd. volume	=	3,540 cuft
Inflow hyd. No.	=	2 - Dev. Generated Flow	Max. Elevation	=	352.53 ft
Reservoir name	=	detention	Max. Storage	=	2,824 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	12.44	1	5	3,733	------	------	------	Pre-Development
2	Rational	13.31	1	5	3,992	------	------	------	Dev. Generated Flow
3	Reservoir	3.523	1	9	3,988	2	352.66	3,117	Post Dev. Flow

Hydrograph Report

Hyd. No. 1

Pre-Development

Hydrograph type	=	Rational	Peak discharge	=	12.44 cfs
Storm frequency	=	10 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	3,733 cuft
Drainage area	=	2.120 ac	Runoff coeff.	=	0.72*
Intensity	=	8.153 in/hr	Tc by User	=	5.00 min
IDF Curve	=	BRYANT.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(11.990 x 0.44) + (4.630 x 0.90)] / 2.120

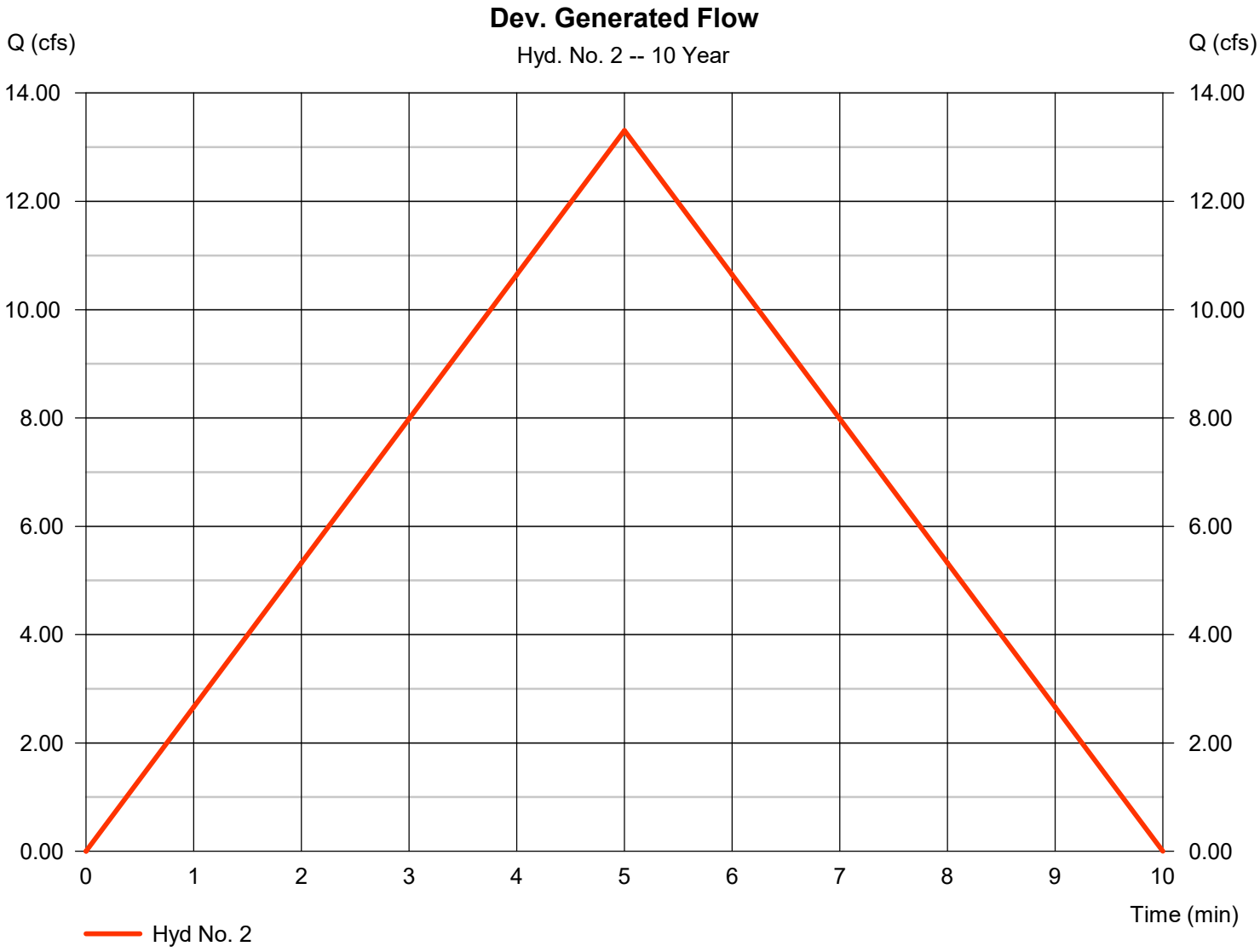


Hydrograph Report

Hyd. No. 2

Dev. Generated Flow

Hydrograph type	=	Rational	Peak discharge	=	13.31 cfs
Storm frequency	=	10 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	3,992 cuft
Drainage area	=	2.040 ac	Runoff coeff.	=	0.8
Intensity	=	8.153 in/hr	Tc by User	=	5.00 min
IDF Curve	=	BRYANT.IDF	Asc/Rec limb fact	=	1/1



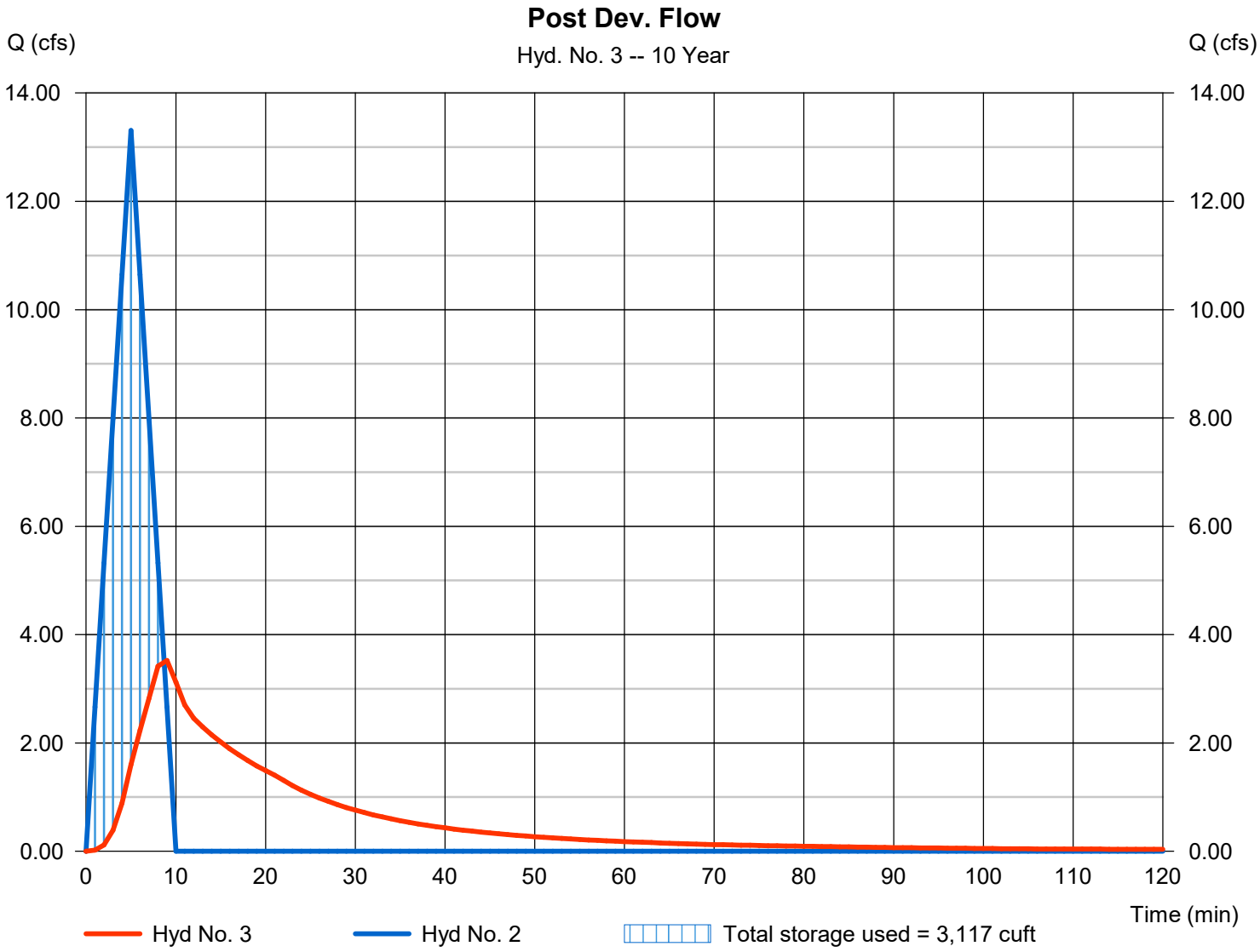
Hydrograph Report

Hyd. No. 3

Post Dev. Flow

Hydrograph type	=	Reservoir	Peak discharge	=	3.523 cfs
Storm frequency	=	10 yrs	Time to peak	=	9 min
Time interval	=	1 min	Hyd. volume	=	3,988 cuft
Inflow hyd. No.	=	2 - Dev. Generated Flow	Max. Elevation	=	352.66 ft
Reservoir name	=	detention	Max. Storage	=	3,117 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	14.28	1	5	4,284	------	------	------	Pre-Development
2	Rational	15.27	1	5	4,581	------	------	------	Dev. Generated Flow
3	Reservoir	4.816	1	8	4,577	2	352.81	3,451	Post Dev. Flow

Hydrograph Report

Hyd. No. 1

Pre-Development

Hydrograph type	=	Rational	Peak discharge	=	14.28 cfs
Storm frequency	=	25 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	4,284 cuft
Drainage area	=	2.120 ac	Runoff coeff.	=	0.72*
Intensity	=	9.356 in/hr	Tc by User	=	5.00 min
IDF Curve	=	BRYANT.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(11.990 x 0.44) + (4.630 x 0.90)] / 2.120

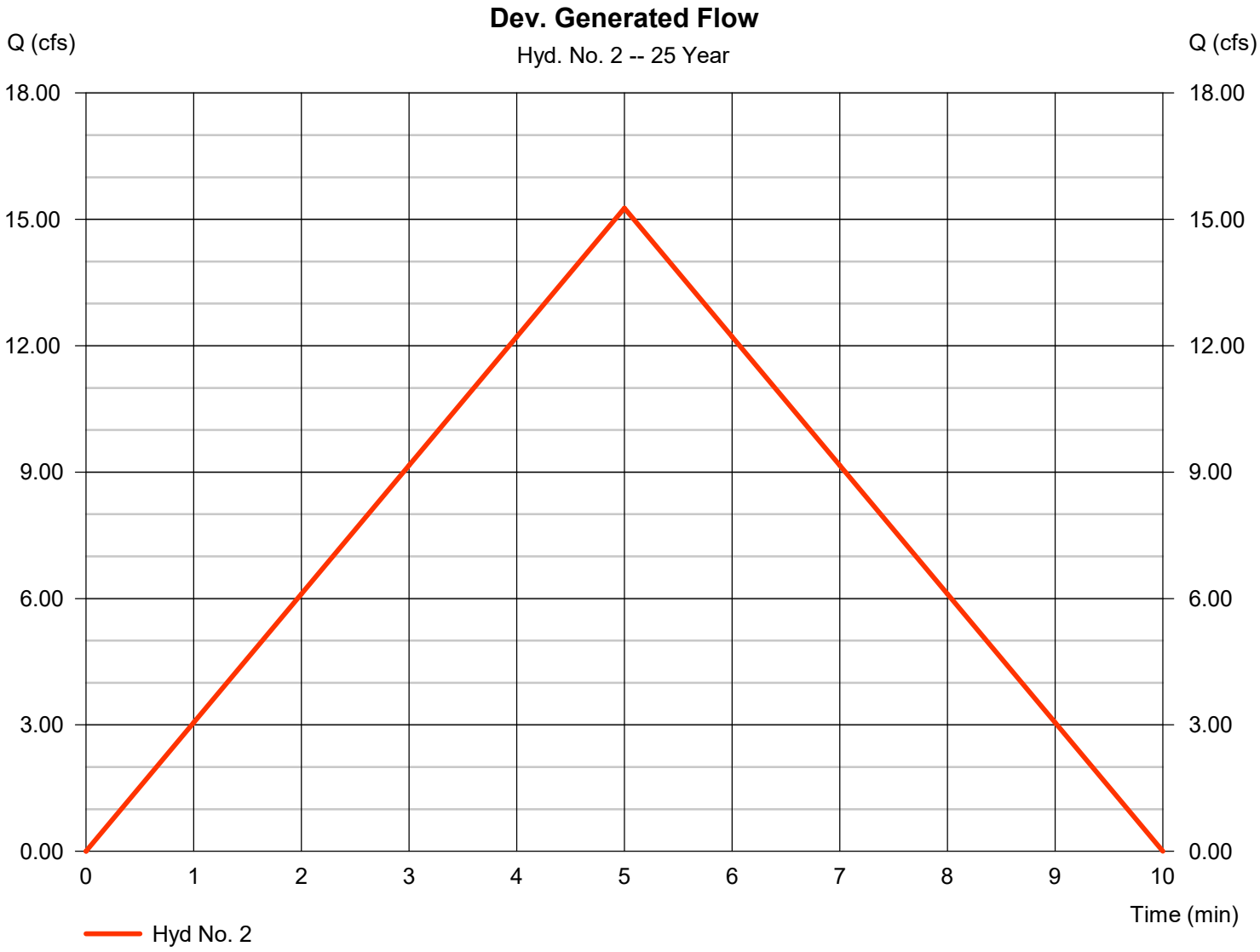


Hydrograph Report

Hyd. No. 2

Dev. Generated Flow

Hydrograph type	=	Rational	Peak discharge	=	15.27 cfs
Storm frequency	=	25 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	4,581 cuft
Drainage area	=	2.040 ac	Runoff coeff.	=	0.8
Intensity	=	9.356 in/hr	Tc by User	=	5.00 min
IDF Curve	=	BRYANT.IDF	Asc/Rec limb fact	=	1/1



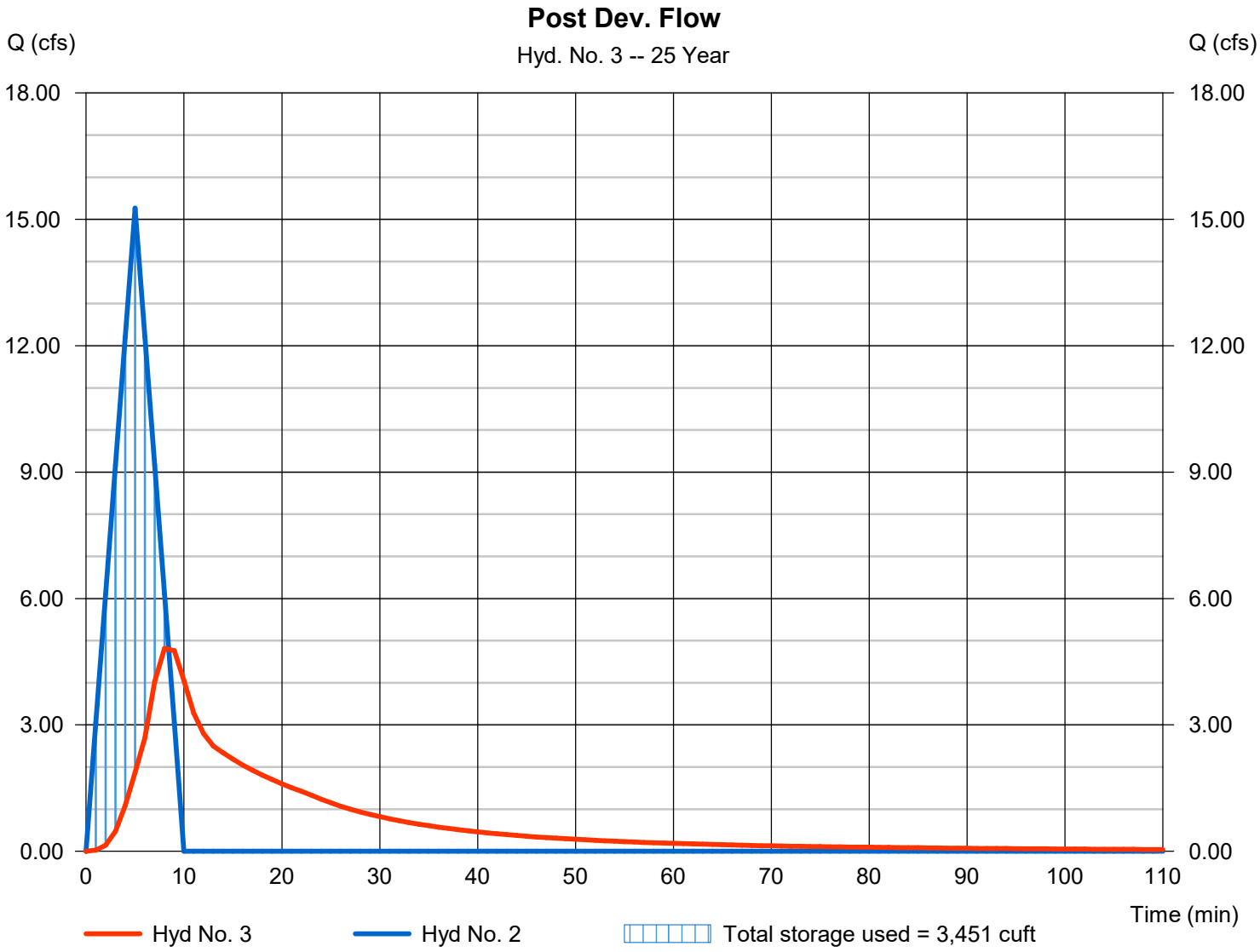
Hydrograph Report

Hyd. No. 3

Post Dev. Flow

Hydrograph type	=	Reservoir	Peak discharge	=	4.816 cfs
Storm frequency	=	25 yrs	Time to peak	=	8 min
Time interval	=	1 min	Hyd. volume	=	4,577 cuft
Inflow hyd. No.	=	2 - Dev. Generated Flow	Max. Elevation	=	352.81 ft
Reservoir name	=	detention	Max. Storage	=	3,451 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	15.72	1	5	4,716	------	------	------	Pre-Development
2	Rational	16.81	1	5	5,043	------	------	------	Dev. Generated Flow
3	Reservoir	5.980	1	8	5,039	2	352.92	3,700	Post Dev. Flow

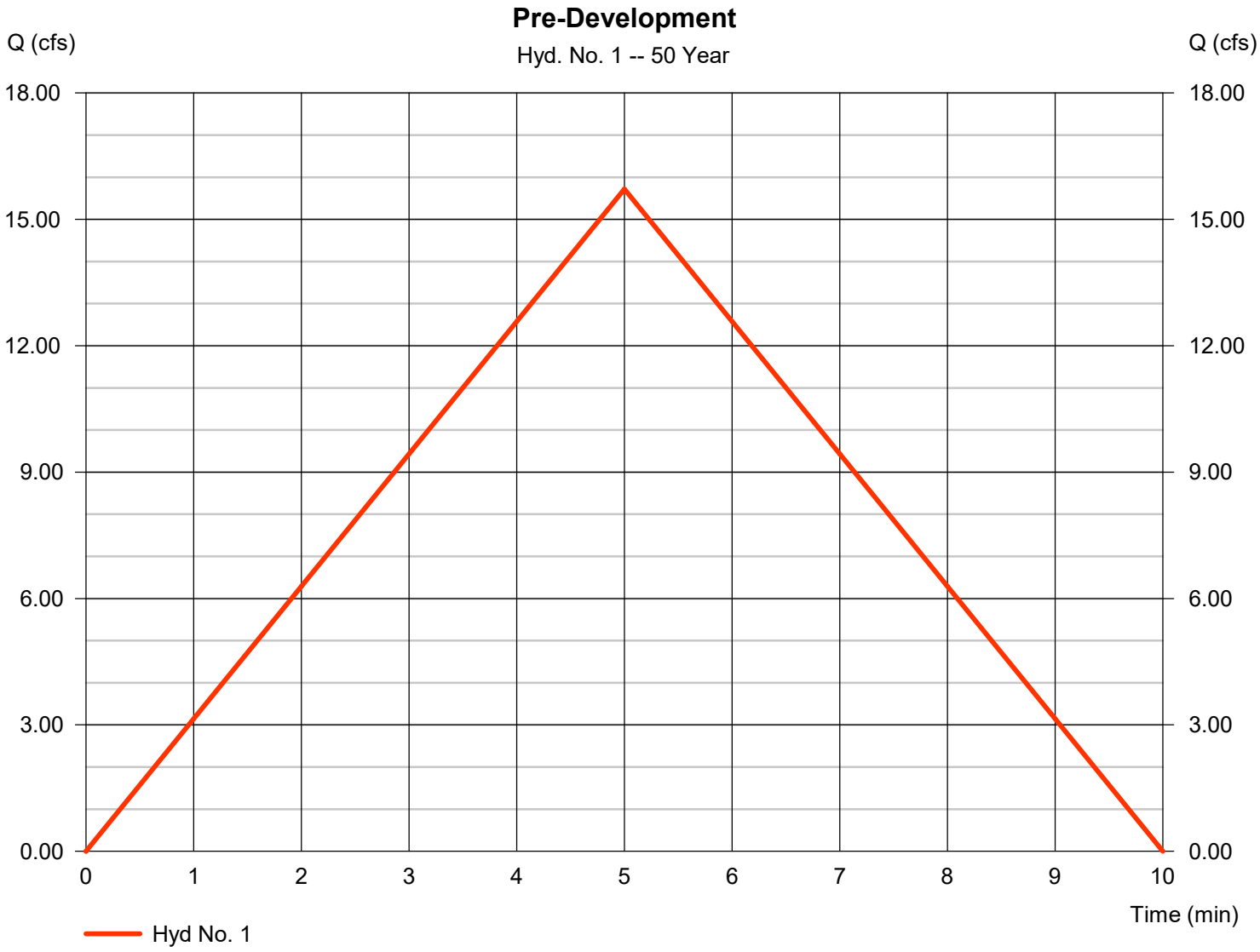
Hydrograph Report

Hyd. No. 1

Pre-Development

Hydrograph type	=	Rational	Peak discharge	=	15.72 cfs
Storm frequency	=	50 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	4,716 cuft
Drainage area	=	2.120 ac	Runoff coeff.	=	0.72*
Intensity	=	10.300 in/hr	Tc by User	=	5.00 min
IDF Curve	=	BRYANT.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(11.990 x 0.44) + (4.630 x 0.90)] / 2.120

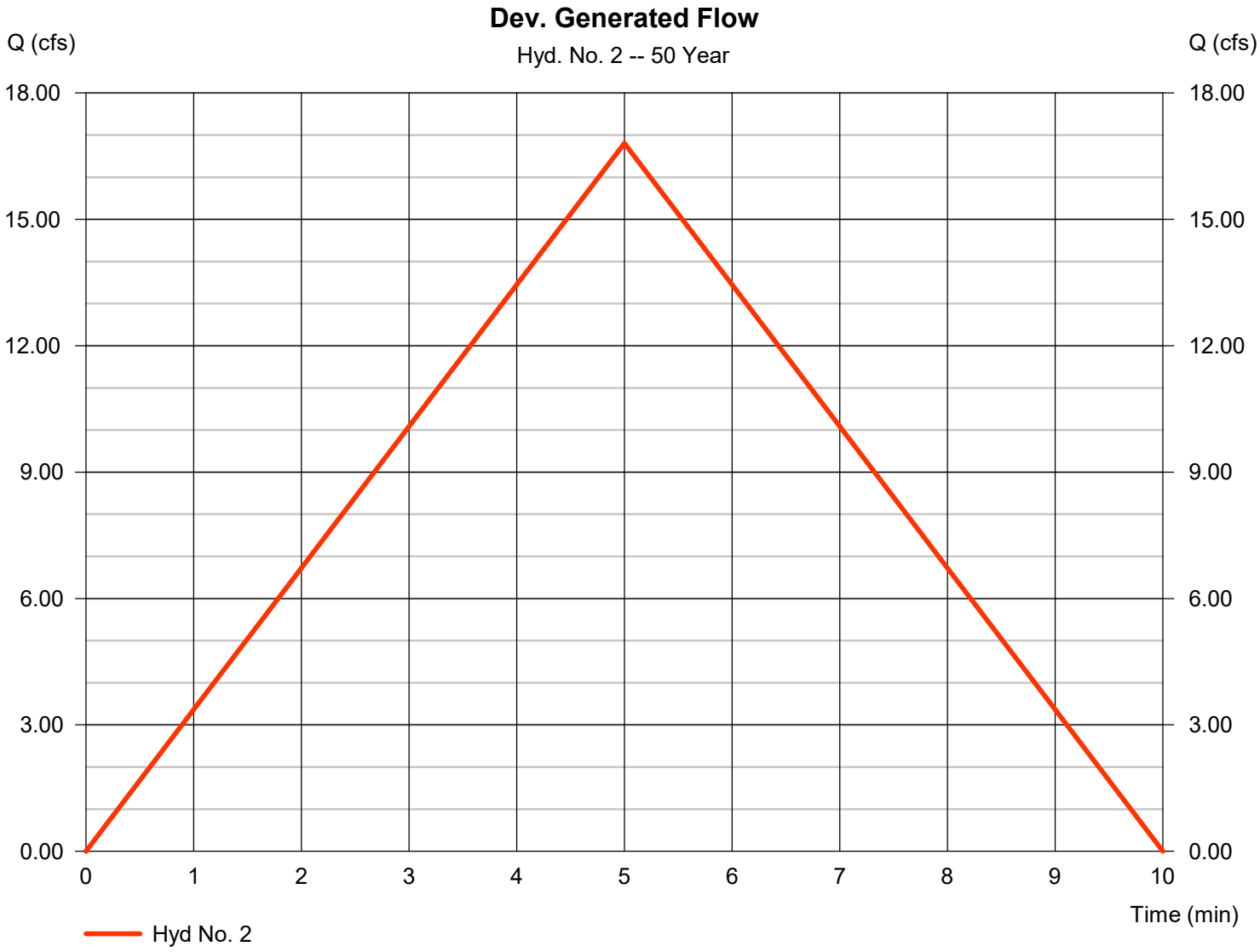


Hydrograph Report

Hyd. No. 2

Dev. Generated Flow

Hydrograph type	=	Rational	Peak discharge	=	16.81 cfs
Storm frequency	=	50 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	5,043 cuft
Drainage area	=	2.040 ac	Runoff coeff.	=	0.8
Intensity	=	10.300 in/hr	Tc by User	=	5.00 min
IDF Curve	=	BRYANT.IDF	Asc/Rec limb fact	=	1/1



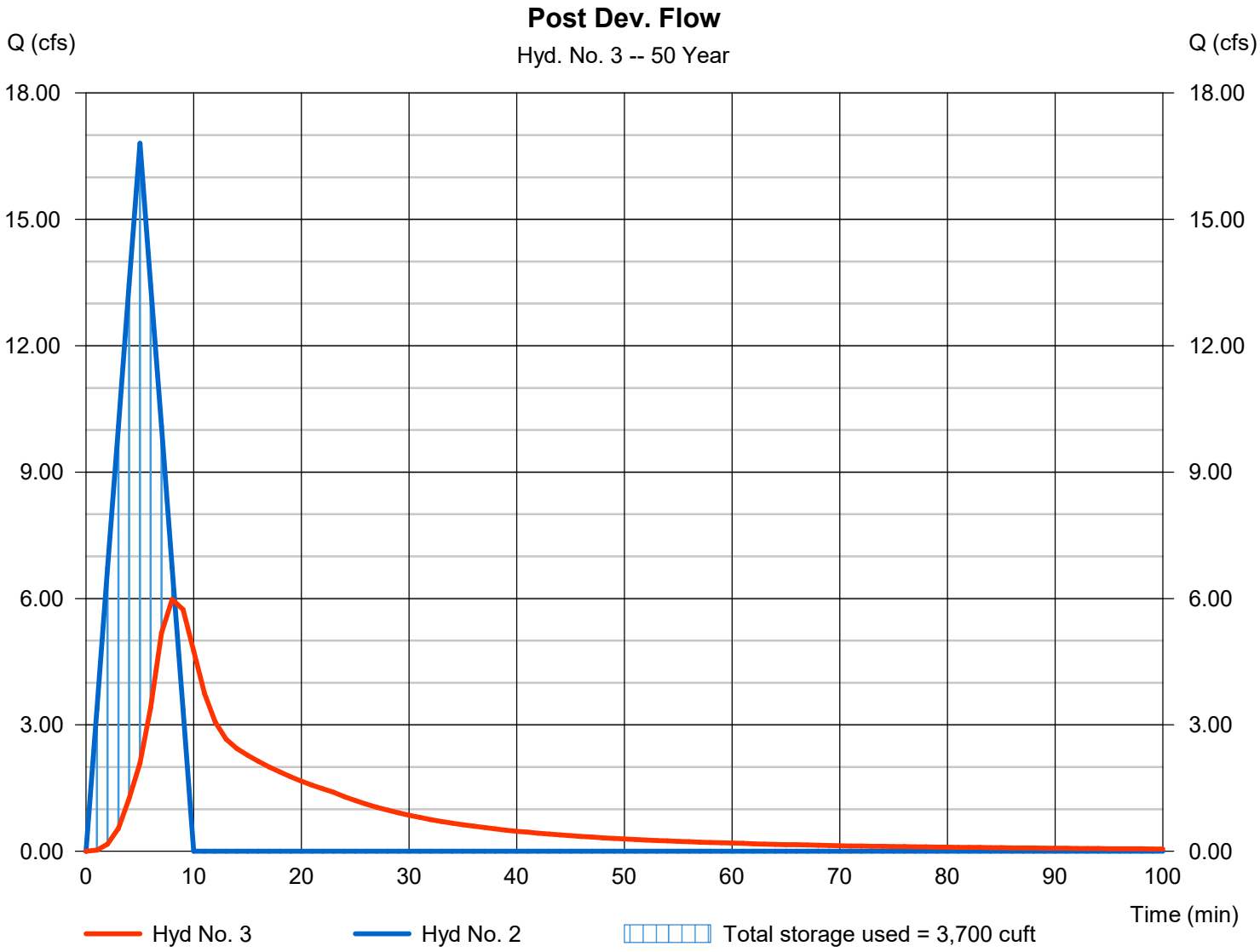
Hydrograph Report

Hyd. No. 3

Post Dev. Flow

Hydrograph type	=	Reservoir	Peak discharge	=	5.980 cfs
Storm frequency	=	50 yrs	Time to peak	=	8 min
Time interval	=	1 min	Hyd. volume	=	5,039 cuft
Inflow hyd. No.	=	2 - Dev. Generated Flow	Max. Elevation	=	352.92 ft
Reservoir name	=	detention	Max. Storage	=	3,700 cuft

Storage Indication method used.



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2025

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	16.91	1	5	5,073	------	------	------	Pre-Development
2	Rational	18.08	1	5	5,424	------	------	------	Dev. Generated Flow
3	Reservoir	6.950	1	8	5,420	2	353.00	3,890	Post Dev. Flow

Hydrograph Report

Hyd. No. 1

Pre-Development

Hydrograph type	=	Rational	Peak discharge	=	16.91 cfs
Storm frequency	=	100 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	5,073 cuft
Drainage area	=	2.120 ac	Runoff coeff.	=	0.72*
Intensity	=	11.078 in/hr	Tc by User	=	5.00 min
IDF Curve	=	BRYANT.IDF	Asc/Rec limb fact	=	1/1

* Composite (Area/C) = [(11.990 x 0.44) + (4.630 x 0.90)] / 2.120

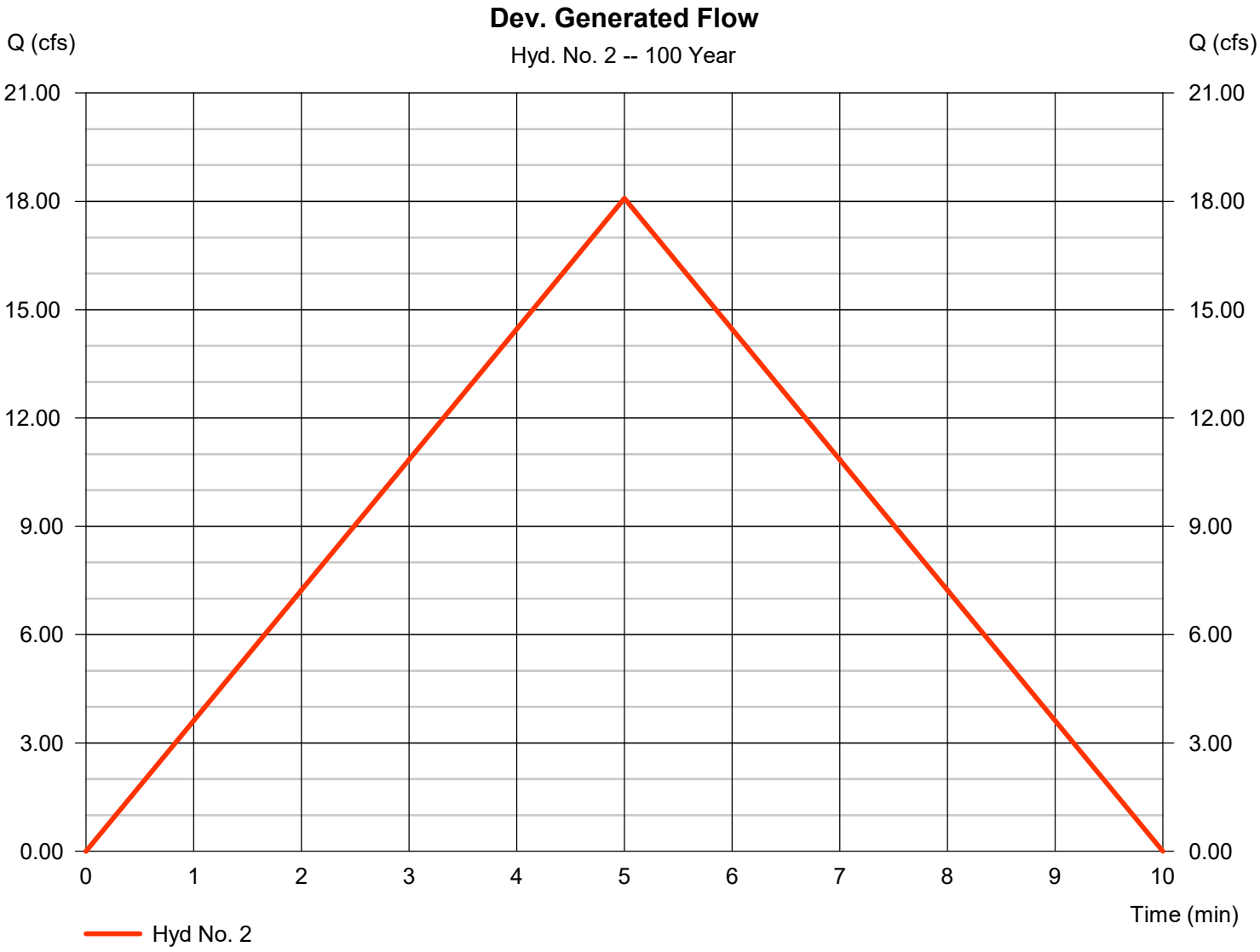


Hydrograph Report

Hyd. No. 2

Dev. Generated Flow

Hydrograph type	=	Rational	Peak discharge	=	18.08 cfs
Storm frequency	=	100 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	5,424 cuft
Drainage area	=	2.040 ac	Runoff coeff.	=	0.8
Intensity	=	11.078 in/hr	Tc by User	=	5.00 min
IDF Curve	=	BRYANT.IDF	Asc/Rec limb fact	=	1/1



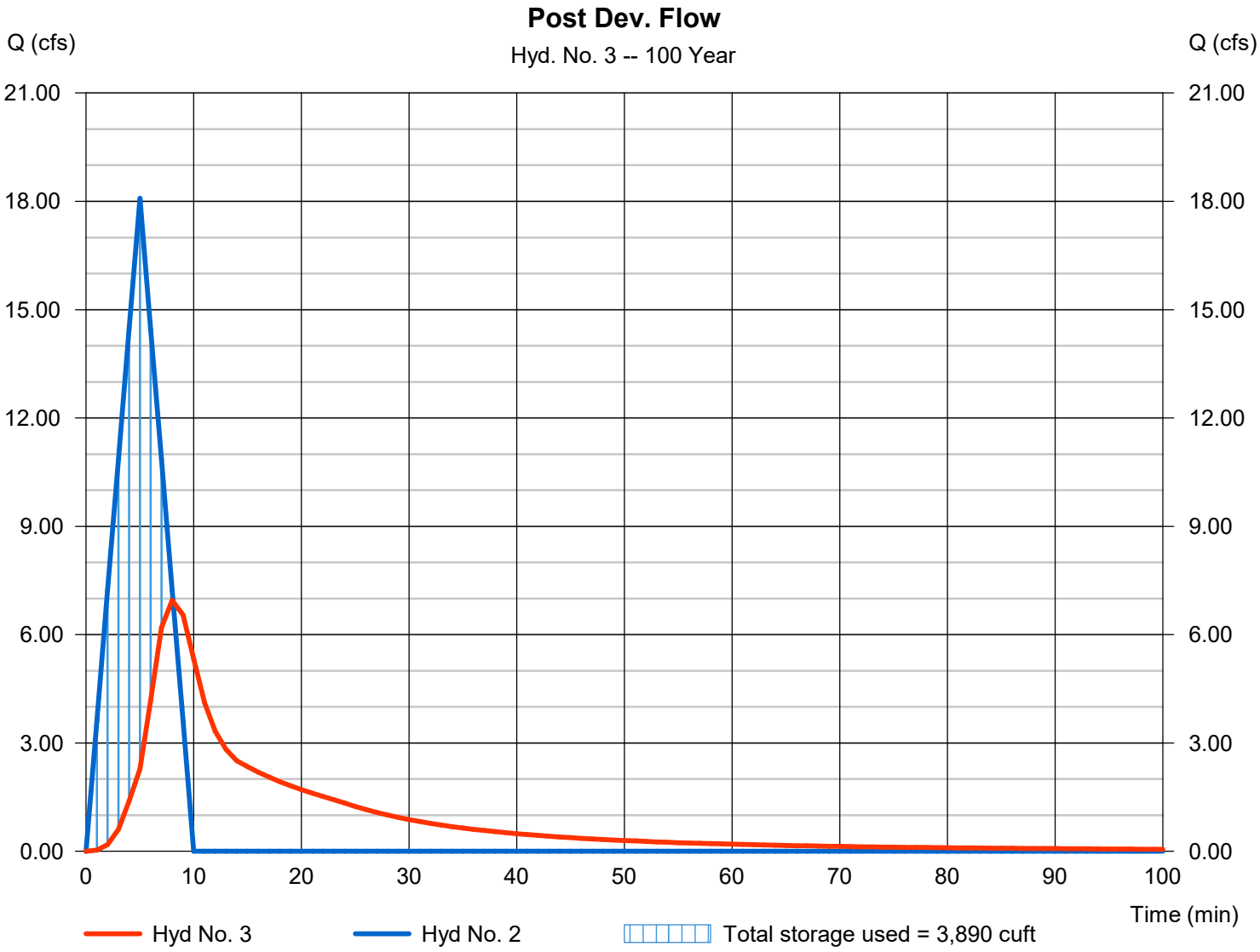
Hydrograph Report

Hyd. No. 3

Post Dev. Flow

Hydrograph type	=	Reservoir	Peak discharge	=	6.950 cfs
Storm frequency	=	100 yrs	Time to peak	=	8 min
Time interval	=	1 min	Hyd. volume	=	5,420 cuft
Inflow hyd. No.	=	2 - Dev. Generated Flow	Max. Elevation	=	353.00 ft
Reservoir name	=	detention	Max. Storage	=	3,890 cuft

Storage Indication method used.



Hydraflow Rainfall Report

Return Period (Yrs)	Intensity-Duration-Frequency Equation Coefficients (FHA)			
	B	D	E	(N/A)
1	23.7902	4.9000	0.6469	--------
2	29.4041	5.6000	0.6664	--------
3	0.0000	0.0000	0.0000	--------
5	34.6508	5.6000	0.6634	--------
10	39.6208	5.7000	0.6670	--------
25	45.2262	5.7000	0.6648	--------
50	46.6831	5.2000	0.6507	--------
100	48.6942	5.1000	0.6402	--------

File name: BRYANT.IDF

Intensity = B / (Tc + D)^E

Return Period (Yrs)	Intensity Values (in/hr)											
	5 min	10	15	20	25	30	35	40	45	50	55	60
1	5.40	4.14	3.44	2.97	2.64	2.39	2.19	2.03	1.90	1.78	1.69	1.60
2	6.10	4.71	3.92	3.39	3.01	2.72	2.49	2.31	2.15	2.02	1.91	1.81
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	7.24	5.60	4.66	4.03	3.58	3.24	2.97	2.75	2.57	2.41	2.28	2.16
10	8.15	6.31	5.25	4.54	4.04	3.65	3.34	3.10	2.89	2.71	2.56	2.43
25	9.36	7.25	6.03	5.23	4.64	4.20	3.85	3.56	3.33	3.12	2.95	2.80
50	10.30	7.94	6.60	5.72	5.08	4.60	4.22	3.91	3.65	3.43	3.24	3.08
100	11.08	8.56	7.13	6.19	5.51	4.99	4.58	4.25	3.97	3.74	3.54	3.36

Tc = time in minutes. Values may exceed 60.

Precip. file name: C:\Documents and Settings\Will\Desktop\Fleming\fleming.pcp

Storm Distribution	Rainfall Precipitation Table (in)							
	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr
SCS 24-hour	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SCS 6-Hr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-1st	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-2nd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-3rd	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-4th	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Huff-Indy	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Custom	0.00	3.50	0.00	0.00	4.80	5.40	0.00	6.70

NOAA Atlas 14, Volume 9, Version 2
Location name: Bryant, Arkansas, USA*
Latitude: 34.6406°, Longitude: -92.4706°
Elevation: 388 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Deborah Martin, Sandra Pavlovic, Ishani Roy, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Michael Yekta, Geoffery Bonnin

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.450** (0.363-0.553)	**0.510** (0.411-0.627)	**0.605** (0.486-0.745)	**0.681** (0.544-0.843)	**0.782** (0.603-0.990)	**0.858** (0.647-1.10)	**0.930** (0.679-1.22)	**1.00** (0.703-1.35)	**1.09** (0.738-1.51)	**1.16** (0.764-1.64)
10-min	**0.659** (0.532-0.809)	**0.746** (0.602-0.917)	**0.885** (0.711-1.09)	**0.997** (0.797-1.23)	**1.15** (0.883-1.45)	**1.26** (0.948-1.61)	**1.36** (0.995-1.79)	**1.47** (1.03-1.98)	**1.60** (1.08-2.22)	**1.69** (1.12-2.40)
15-min	**0.803** (0.648-0.987)	**0.910** (0.734-1.12)	**1.08** (0.867-1.33)	**1.22** (0.972-1.50)	**1.40** (1.08-1.77)	**1.53** (1.16-1.97)	**1.66** (1.21-2.18)	**1.79** (1.26-2.41)	**1.95** (1.32-2.70)	**2.06** (1.36-2.92)
30-min	**1.20** (0.966-1.47)	**1.36** (1.10-1.67)	**1.62** (1.30-2.00)	**1.83** (1.46-2.26)	**2.10** (1.62-2.66)	**2.30** (1.74-2.96)	**2.50** (1.82-3.28)	**2.68** (1.88-3.62)	**2.92** (1.97-4.05)	**3.09** (2.04-4.37)
60-min	**1.60** (1.29-1.97)	**1.81** (1.46-2.23)	**2.16** (1.73-2.66)	**2.43** (1.94-3.01)	**2.80** (2.16-3.55)	**3.08** (2.33-3.96)	**3.36** (2.45-4.42)	**3.63** (2.55-4.90)	**3.98** (2.69-5.52)	**4.23** (2.80-5.98)
2-hr	**2.01** (1.63-2.44)	**2.27** (1.84-2.77)	**2.69** (2.18-3.29)	**3.04** (2.45-3.73)	**3.51** (2.73-4.42)	**3.86** (2.94-4.94)	**4.22** (3.11-5.52)	**4.57** (3.23-6.14)	**5.03** (3.43-6.94)	**5.37** (3.57-7.55)
3-hr	**2.26** (1.85-2.74)	**2.55** (2.08-3.10)	**3.03** (2.47-3.69)	**3.43** (2.78-4.19)	**3.98** (3.12-5.01)	**4.41** (3.38-5.63)	**4.84** (3.59-6.32)	**5.28** (3.76-7.08)	**5.87** (4.02-8.08)	**6.31** (4.21-8.83)
6-hr	**2.71** (2.24-3.26)	**3.08** (2.54-3.71)	**3.70** (3.04-4.47)	**4.23** (3.46-5.13)	**4.99** (3.95-6.26)	**5.60** (4.33-7.10)	**6.22** (4.65-8.08)	**6.86** (4.92-9.16)	**7.75** (5.35-10.6)	**8.43** (5.67-11.7)
12-hr	**3.20** (2.66-3.81)	**3.68** (3.06-4.39)	**4.50** (3.73-5.39)	**5.23** (4.30-6.28)	**6.27** (5.02-7.83)	**7.12** (5.56-9.00)	**8.00** (6.03-10.4)	**8.93** (6.46-11.9)	**10.2** (7.11-14.0)	**11.2** (7.60-15.5)
24-hr	**3.74** (3.14-4.43)	**4.34** (3.64-5.14)	**5.36** (4.48-6.37)	**6.27** (5.21-7.48)	**7.60** (6.14-9.44)	**8.68** (6.84-10.9)	**9.83** (7.47-12.6)	**11.0** (8.05-14.6)	**12.7** (8.93-17.3)	**14.1** (9.59-19.3)
2-day	**4.38** (3.71-5.14)	**5.05** (4.27-5.94)	**6.22** (5.24-7.32)	**7.25** (6.07-8.57)	**8.76** (7.14-10.8)	**10.0** (7.94-12.5)	**11.3** (8.67-14.5)	**12.7** (9.34-16.7)	**14.7** (10.4-19.8)	**16.2** (11.1-22.1)
3-day	**4.80** (4.08-5.60)	**5.51** (4.69-6.45)	**6.75** (5.72-7.91)	**7.83** (6.60-9.22)	**9.42** (7.70-11.5)	**10.7** (8.54-13.3)	**12.1** (9.28-15.3)	**13.5** (9.95-17.6)	**15.5** (11.0-20.8)	**17.1** (11.7-23.2)
4-day	**5.12** (4.38-5.97)	**5.88** (5.02-6.85)	**7.17** (6.09-8.37)	**8.29** (7.01-9.73)	**9.91** (8.13-12.1)	**11.2** (8.98-13.9)	**12.6** (9.72-15.9)	**14.0** (10.4-18.3)	**16.0** (11.4-21.5)	**17.6** (12.2-23.9)
7-day	**5.94** (5.11-6.87)	**6.77** (5.82-7.83)	**8.16** (6.99-9.47)	**9.36** (7.97-10.9)	**11.1** (9.13-13.4)	**12.4** (10.0-15.2)	**13.9** (10.8-17.4)	**15.3** (11.4-19.8)	**17.3** (12.4-23.0)	**18.9** (13.1-25.5)
10-day	**6.72** (5.81-7.74)	**7.58** (6.55-8.74)	**9.03** (7.77-10.4)	**10.3** (8.77-11.9)	**12.0** (9.93-14.4)	**13.4** (10.8-16.3)	**14.8** (11.5-18.5)	**16.3** (12.1-20.9)	**18.3** (13.1-24.2)	**19.8** (13.8-26.6)
20-day	**9.11** (7.94-10.4)	**10.0** (8.75-11.5)	**11.6** (10.1-13.3)	**12.9** (11.1-14.8)	**14.7** (12.2-17.4)	**16.0** (13.1-19.3)	**17.4** (13.7-21.5)	**18.9** (14.2-24.0)	**20.7** (15.0-27.2)	**22.2** (15.6-29.6)
30-day	**11.1** (9.69-12.6)	**12.1** (10.6-13.8)	**13.9** (12.1-15.8)	**15.4** (13.3-17.6)	**17.3** (14.5-20.4)	**18.8** (15.4-22.5)	**20.3** (16.0-24.9)	**21.8** (16.4-27.5)	**23.7** (17.1-30.9)	**25.1** (17.7-33.4)
45-day	**13.4** (11.8-15.1)	**14.8** (13.0-16.7)	**17.0** (15.0-19.3)	**18.9** (16.4-21.5)	**21.3** (17.8-24.9)	**23.1** (18.9-27.4)	**24.8** (19.6-30.2)	**26.5** (20.0-33.3)	**28.7** (20.8-37.1)	**30.2** (21.4-40.0)
60-day	**15.3** (13.5-17.2)	**17.1** (15.1-19.2)	**19.9** (17.5-22.5)	**22.1** (19.4-25.1)	**25.1** (21.1-29.2)	**27.2** (22.4-32.2)	**29.3** (23.2-35.6)	**31.3** (23.7-39.2)	**33.8** (24.6-43.6)	**35.6** (25.2-47.0)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

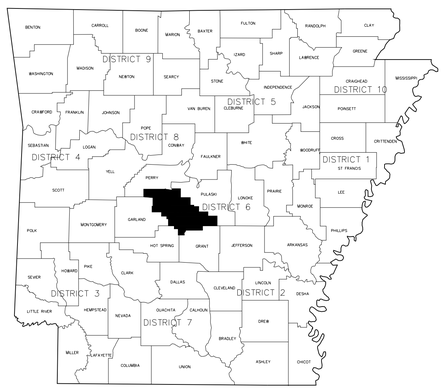
Back to Top

PF graphical

CONSTRUCTION PLANS
25300 I30N COMMERCIAL
BRYANT, AR



VICINITY MAP



PREPARED BY:

HOPE CONSULTING
ENGINEERS - SURVEYORS

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

DRAWING INDEX

SHEET NO.	TITLE
C-1.0	SITE PLAN
C-2.0	UTILITY PLAN
C-2.1-2.2	BRYANT WATER UTILITIES
C-2.3-2.4	BRYANT SEWER UTILITIES
C-3.0	NORTH EAST DETENTION POND
C-4.0	EROSION CONTROL PLAN
C-5.0	GRADING PLAN
C-6.0	LANDSCAPE PLAN
C-7.0	SOIL LOSS CALCULATION

OWNER
STUART FINLEY
FINLEY & COMPANY
P.O. BOX 10, BRYANT, AR 72089

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

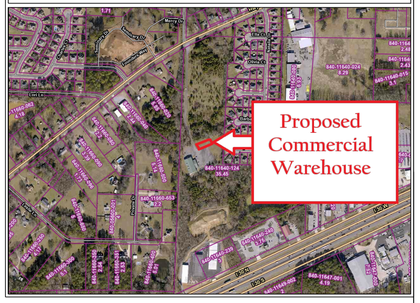
FOR USE AND BENEFIT OF:
STUART FINLEY

25300 I30 N COMMERCIAL

BRYANT , SALINE COUNTY, AR

DATE:	11/20/2025	C.A.D. BY:		DRAWING NUMBER:			
REVISED:		CHECKED BY:		25-1210			
SHEET:		SCALE:					
500	01S	14W	0	13	400	62	1664

VICINITY MAP:



OVERALL BOUNDARY
47.00 AC
2047380.2 SF

PROPOSED 20' EASEMENT LINE

EXISTING EASEMENT LINE

WALKER FAMILY REVOCABLE TRUST
840-03970-048
ZONED-R-1

NICHOLS KOURTNEY & WHITNEY
840-03970-047
ZONED-R-1

RATLIFF LADONNA & CARL
840-03970-038
ZONED-R-1

FARMER TYRON GYRON & TONISHA SHAUNICE
840-03970-037
ZONED-R-1

WILLIAMS MARIE & JEFFIE
840-03970-036
ZONED-R-1

EXISTING ELECTRIC LINE

EXISTING POWER POLE

PROPOSED 4" SEWER SERVICE LINE

PROPOSED DETENTION POND

DETENTION AREA
3,225 SQ.FT.

EXISTING FENCE

PROPOSED WATER SERVICE

EXISTING FIRE HYDRANT

PROPOSED DEVELOPMENT
AREA 0.90 ACRES

PROPOSED
WAREHOUSE
BUILDING
11,200 SQ.FT.

80.0'

140.0'

60" KNOX BOX

16.4'

10.0'

26.6'

20.0'

EXISTING 6" WATER LINE

POND ACCESS

PROPOSED SIDEWALK

PROPOSED DITCH

PROPOSED ASPHALT
SURFACE MODIFICATION

ESISTING ASHPHALT DRIVE

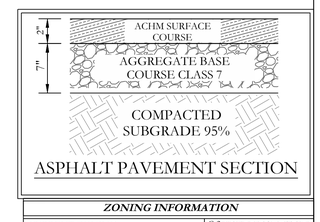
N

BASIS OF BEARINGS
GRID NORTH, ARKANSAS
COORDINATE SYSTEM, SOUTH ZONE
BY GPS OBSERVATION

BAR SCALE: 1"=20'

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

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



ASPHALT PAVEMENT SECTION

ZONING INFORMATION	
CURRENT ZONING	C-2 HIGHWAY COMMERCIAL DISTRICT
MINIMUM LOT WIDTH (FT)	N/A
FRONT YARD SETBACK (FT)	N/A
REAR YARD SETBACK (FT)	N/A
SIDE YARD SETBACK (FT)	N/A
MAXIMUM BUILDING COVERAGE (SF)	11,200

SITE DATA	
TOTAL SITE AREA	3.95 ACRES
TOTAL DEVELOPMENT AREA	0.90 ACRES
GROSS BUILDING AREA	11,200 SQ. FT.
BUILDING HEIGHTS	1 STORY
BUSINESS TYPE	WAREHOUSE BUILDING

OWNER:
Name: STUART FINLEY
Address: P.O. BOX 10
BRYANT, AR 72089
Phone: 501-666-1300 or 501-258-9646
Email: stuart@finleyandcompany.com

DEVELOPER:
Name: FINLEY & COMPANY
Address: P.O. BOX 10
BRYANT, AR 72089
Phone: 501-666-1300 or 501-258-9646
Email: stuart@finleyandcompany.com

LEGEND

- PLSS Aliquot Corner
- Fnd. Corner Monument
- Set 1/2" Rebar/Cap (1664)
- Computed Point
(M)- As Measured
(P) - Per Deed or Plat Records
ESMT - Easement
B.S.L. - Building Setback Lines
- Clean Out
- Water Meter
- Power Pole
- Sewer Manhole
- Light Pole
- Telephone Pedestal
- Drainage Manhole
- Gas Meter
- Fence
- Overhead Power
- Sewer Line
- Water Line
- Telephone Line
- Electric Line
- Gas Line
Water Flow Path

HOPE CONSULTING
ENGINEERS - SURVEYORS
117 S. Market Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
STUART FINLEY

COMM./25300 130N
SITE PLAT
IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

DATE:	11/19/2025	C.A.D. BY:	DRAWING NUMBER:
REVISED:		CHECKED BY:	25-1210
SHEET:	C-1.0	SCALE:1"=20'	

500	01S	14W	0	13	400	62	1664

THE UTILITY PLAN

OVERALL BOUNDARY
47.00 AC
2047380.2 SF

EXISTING SEWER MANHOLE
RIM ELEV. :349.00
FL IN:341.60
FL OUT:341.50

PROPOSED 20' EASEMENT LINE

EXISTING EASEMENT LINE

PROPOSED MH-1
0+00.08 (SEWER-A)
RIM:349.44
INV OUT:342.58 E

196.81' OF 8" PVC (SDR-26) @ 0.50%

EG. 36" HDPE PIPE
ELEV. 345.17'

EXISTING CREEK

EXISTING ELECTRIC LINE

EXISTING POWER POLE

EG. 36" HDPE PIPE
ELEV. 348.61'

PROPOSED 4" SEWER SERVICE LINE

PROPOSED WATER SERVICE

EXISTING FENCE

EXISTING POWER POLE
WILL BE REMOVED

EXISTING FIRE HYDRANT

EXISTING 6" WATER LINE

POND ACCESS

EXISTING POWER POLE
WILL BE REMOVED

PROPOSED DITCH

N

BASIS OF BEARING:
GRID NORTH, ARKANSAS
COORDINATE SYSTEM, SOUTH ZONE
BY GPS OBSERVATION

20 10 20
BAR SCALE: 1"=20'

VICINITY MAP:



WATER UTILITY NOTES:

- ALL WATER CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH BRYANT UTILITIES' "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION FOR WATER LINES AND SEWER LINES" 2015 EDITION.
- ALL SERVICE CROSSINGS SHALL BE 1" DRISCO SERVICE LINE ENCASED IN A 2" PVC SLEEVE.

UTILITY NOTES:

- MINIMUM DEPTH OF ALL WATER SERVICE LINES FROM THE MAIN TO THE WATER METER SHALL BE 30-INCHES.
- FOR THE PROTECTION OF THE SANITARY SEWER LINES FROM DAMAGE CAUSED BY UTILITIES INSTALLED AFTER THE SANITARY SEWER HAS BEEN CONSTRUCTED, THE MINIMUM DEPTH TO CROWN OF ALL GRAVITY SANITARY SEWERS SHALL BE 30-INCHES FOR PVC, AND 24-INCHES FOR DUCTILE IRON.THE MINIMUM DEPTH TO CROWN OF ALL FORCE MAIN SANITARY SEWERS SHALL BE 30-INCHES.
- ALL WATER AND SEWER INFRASTRUCTURE SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF BRYANT SPECIFICATIONS "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION FOR WATER LINES AND SEWER LINES" 2015 EDITION.
- EASEMENTS SHOWN ARE UTILITY EASEMENTS.
- PRIOR TO CONSTRUCTION PROVIDE APPROVAL LETTERS FROM HEALTH DEPARTMENT AND ALL UTILITIES SERVING THIS PROJECT.

WATER LEGEND:

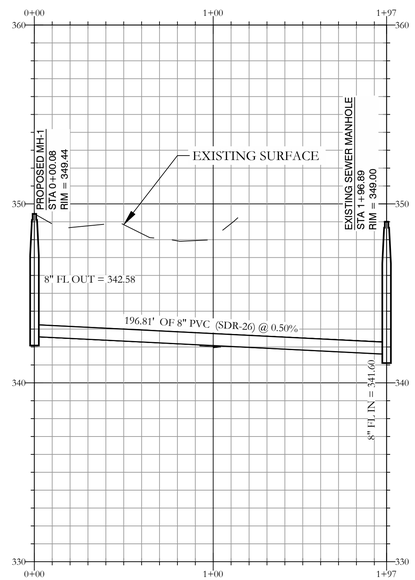
SINGLE WATER METER

SEWER LEGEND:

SEWER SERVICE
SEWER MAIN — SEWER MANHOLE

NOTE:
USE SDR-26 PVC SEWER PIPE EXCEPT WHERE DUCTILE IRON PIPE REQUIRED FOR COVER. USE DUCTILE IRON PIPE WHERE 3' MINIMUM COVE CANNOT BE MAINTAINED.

CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL BURIED UTILITIES PRIOR TO CONSTRUCTION.



PROPOSED SEWER A PROFILE
VERTICAL SCALE 1" = 5'
HORIZONTAL SCALE 1" = 50'

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

CERTIFICATE OF AUTHORIZATION
HOPE CONSULTING, INC.
No. 1031
ARKANSAS

LEGEND

⊕ - PLSS Aliquot Corner	○ - Clean Out
● - Fnd. Corner Monument	■ - Water Meter
⊙ - Set 1/2" Rebar/Cap (1664)	ø - Power Pole
△ - Computed Point	◦ - Sewer Manhole
(M)- As Measured	⊘ - Light Pole
(P) - Per Deed or Plat Records	☐ - Telephone Pedestal
ESMT - Easement	◎ - Drainage Manhole
B.S.L. - Building Setback Lines	⊠ - Gas Meter

x—x—x	- Fence
OHP	- Overhead Power
SS	- Sewer Line
W	- Water Line
UGT	- Telephone Line
UGE	- Electric Line
GAS	- Gas Line
←	Water Flow Path

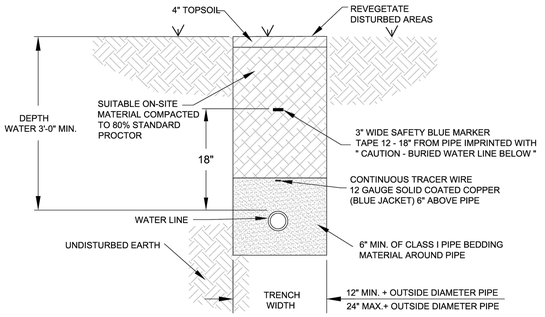
HOPE CONSULTING
ENGINEERS - SURVEYORS
129 N. Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
STUART FINLEY

COMM./25300 I30 N
UTILITY PLAN
A COMMERCIAL IN BRYANT CITY, SALINE COUNTY, ARKANSAS

DATE:	11/19/2025	C.A.D. BY:	DRAWING NUMBER:
REVISED:	##	CHECKED BY:	25-1210
SHEET:	C-2.0	SCALE: 1"=20'	

500	01S	14W	0	13	400	62	1664



NOTES:

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

WATER MAIN TRENCH

(NON-PAVED AREA)

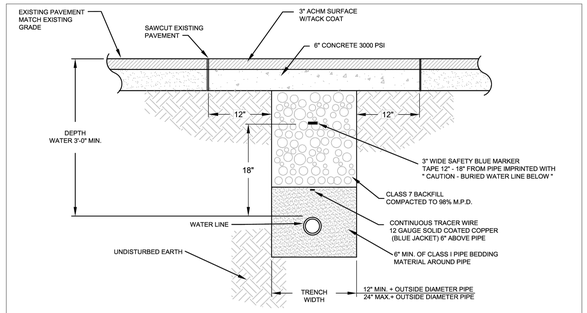
4/16/2025 11:49:51 AM

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

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

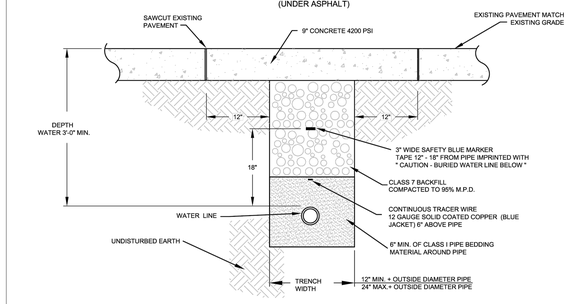
DATE:	APRIL 2015
REVISED	

SHEET: **W1**



WATER MAIN TRENCH

(UNDER ASPHALT)



NOTES:

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

WATER MAIN TRENCH

(UNDER CONCRETE)

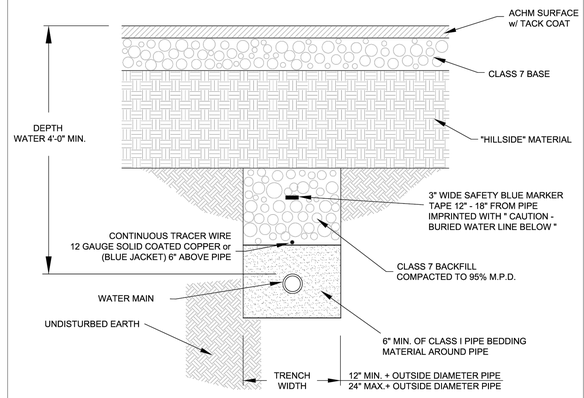
4/16/2025 11:45:26 AM

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

TITLE: **WATER DETAILS**
DESCRIPTION: **WATER MAIN TRENCH (UNDER PAVEMENT)**
DRAWN BY: CHECKED BY: FILE: W2-Water Trench (Under Pavement).dwg

DATE:	APRIL 2015
REVISED	

SHEET: **W2**



WATER MAIN INSTALLATION
PRIOR TO ROADWAY CONSTRUCTION

NOTES:

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

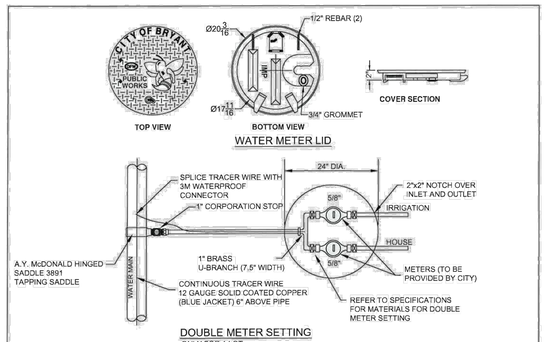
4/16/2025 11:43:56 AM

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

TITLE: **WATER DETAILS**
DESCRIPTION: **WATER MAIN INSTALLATION PRIOR TO ROADWAY CONSTRUCTION**
DRAWN BY: CHECKED BY: FILE: W3-Water Main Installation Prior to Roadway Const.dwg

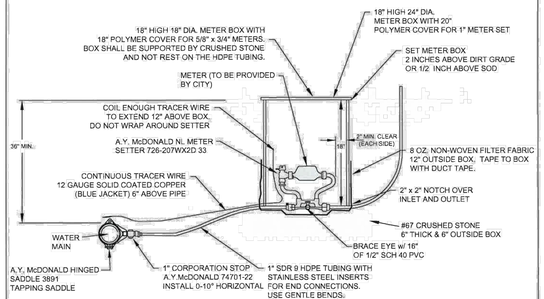
DATE:	APRIL 2015
REVISED	

SHEET: **W3**



WATER METER LID

DOUBLE METER SETTING
ONLY FOR 1 LOT



SINGLE METER SETTING

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

TITLE: **WATER DETAILS**
DESCRIPTION: **METER SETTINGS**
DRAWN BY: CHECKED BY: FILE: W10-Water Settings.dwg

DATE:	APRIL 2015
REVISED	

SHEET: **W10**

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

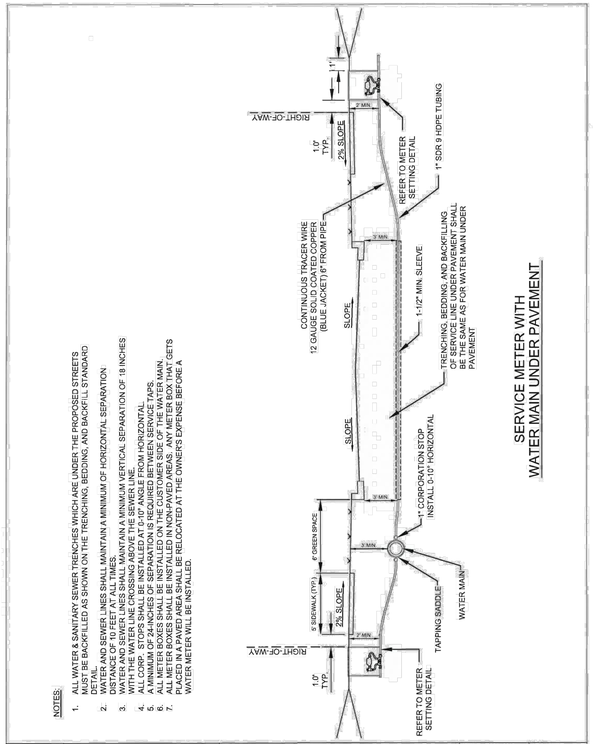
HOPE CONSULTING
ENGINEERS - SURVEYORS
129 N. Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
STUART FINLEY

COMM./25300 I30 N
BRYANT WATER UTILITIES
A COMMERCIAL IN BRYANT CITY, SALINE COUNTY, ARKANSAS

DATE:	11/19/2025	C.A.D. BY:	DRAWING NUMBER:
REVISED:	##	CHECKED BY:	25-1210
SHEET:	C-2.1	SCALE:	

500	01S	14W	0	13	400	62	1664



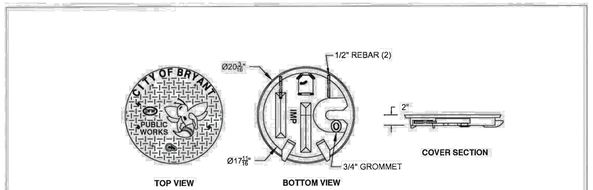
SERVICE METER WITH WATER MAIN UNDER PAVEMENT

NOTES:

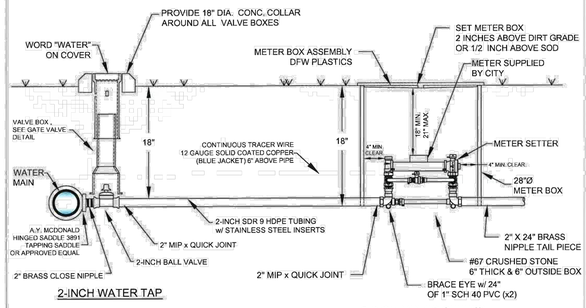
1. ALL WATER & SANITARY SEWER TRENCHES WHICH ARE UNDER THE PROPOSED STREETS MUST BE BACKFILLED AS SHOWN ON THE TRENCHING, BEDDING, AND BACKFILL STANDARD DETAIL.
2. WATER AND SEWER LINES SHALL MAINTAIN A MINIMUM VERTICAL SEPARATION OF 18 INCHES AND A MINIMUM HORIZONTAL SEPARATION OF 10 FEET.
3. WATER AND SEWER LINES SHALL MAINTAIN A MINIMUM OF HORIZONTAL SEPARATION DISTANCE OF 10 FEET 'A' ALL TIMES.
4. ALL CORP. STOPS SHALL BE INSTALLED AT 0-10° ANGLE FROM HORIZONTAL.
5. A MINIMUM OF 24-INCHES OF SEPARATION IS REQUIRED BETWEEN SERVICE TAPS.
6. ALL METER BOXES SHALL BE INSTALLED IN THE RIGHT-OF-WAY ADJACENT TO THE MAIN.
7. ALL METER BOXES SHALL BE INSTALLED IN NON-PAVED AREAS. ANY METER BOX THAT GETS PLACED IN A PAVED AREA SHALL BE RELOCATED AT THE OWNER'S EXPENSE BEFORE A WATER METER WILL BE INSTALLED.

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0466

TITLE: **WATER DETAILS**
DESCRIPTION: **METER SERVICE LINE UNDER PAVEMENT**
DRAWN BY: CHECKED BY: FILE: W11-Meter Service Line Under Pavement.dwg
DATE: APRIL 2015 REVISED
SHEET: **W11**



WATER METER LID



2-INCH WATER TAP

2-INCH METER SETTER

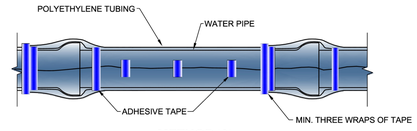
NOTES:

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

2" WATER SERVICE AND WATER METER

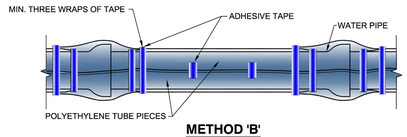
CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0466

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



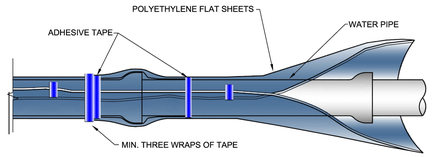
METHOD 'A'

METHOD 'A' USES ONE LENGTH OF POLYETHYLENE TUBE, OVERLAPPED AT THE JOINTS A MINIMUM OF 2 FEET.



METHOD 'B'

METHOD 'B' USES SEPARATE PIECES OF POLYETHYLENE TUBE FOR THE BARREL OF THE PIPE AND THE JOINTS. SHORT PIECES SHALL BE APPROXIMATELY 6' LONG AND OVERLAP BARREL SECTION BY A MINIMUM OF 2 FEET.



METHOD 'C'

METHOD 'C' - USED FOR PIPE-SHAPED AND ODD- SHAPED APPURTENANCES SUCH AS BENDS, REDUCERS, OFFSETS, VALVES, TEES, ETC.

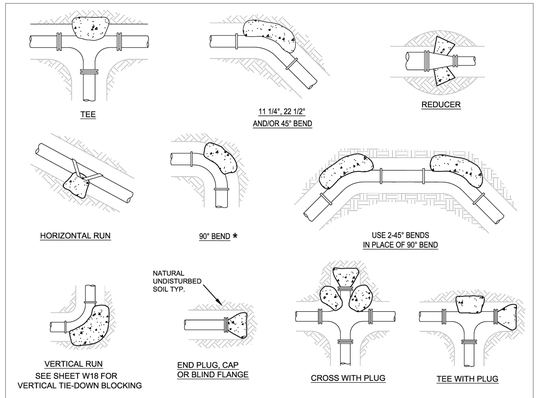
ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE POLY WRAPPED.

THE ANSI/AWWA C105/A21.5 STANDARD OUTLINES THREE METHODS OF INSTALLING POLYETHYLENE ENCASEMENT/ SLEEVING.

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0466

TITLE: **WATER DETAILS**
DESCRIPTION: **POLYETHYLENE PROTECTION MATERIAL**
DRAWN BY: CHECKED BY: FILE: W14-Poly Wrap.dwg
DATE: APRIL 2015 REVISED
SHEET: **W14**

4/24/2015 11:48:29 AM



THRUST BLOCK SCHEDULE

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

BEARING AREA OF THRUST BLOCKS IN SQ. FT. (HORIZONTAL BENDS)						VOLUME OF THRUST BLOCK IN CU. FEET (VERTICAL BENDS)						
FITTING SIZE	PLUG TEE OR CAP	BEND ANGLE 90° *	45°	22 1/2°	11 1/4°	FITTING SIZE	BEND ANGLE 90° *	45°	22 1/2°	11 1/4°	ROD DIAM.	EMBEDMENT
2, 3, & 4	1.9	2.7	1.4	0.7	0.4	2, 3, & 4	35.5	19.2	9.8	4.9	.50"	30"
6	5.6	7.9	4.3	2.2	1.1	6	105.8	57.2	29.2	14.7	.75"	30"
8	9.6	13.8	7.4	3.8	1.9	8	181.9	98.5	50.2	25.2	.75"	30"
12	20.5	29.0	15.7	8.0	4.0	12	387.1	209.9	106.8	53.7	1.0"	30"
16	35.7	50.4	27.3	13.9	7.0	16	672.6	364.0	185.6	93.2	1.0"	36"
18	44.8	63.4	34.3	17.5	15.8	18	844.7	457.2	233.1	117.1	1.0"	36"
24	78.4	110.9	60.0	30.6	15.4	24	1478.7	800.3	408.0	205.0	1.5"	36"

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

THRUST BLOCK NOTES:

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

THRUST BLOCKING

CITY OF BRYANT, AR
WATER UTILITIES
210 S.W. 3rd. STREET
BRYANT, AR
PHONE: (501) 943-0466

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

4/24/2015 11:48:57 AM

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

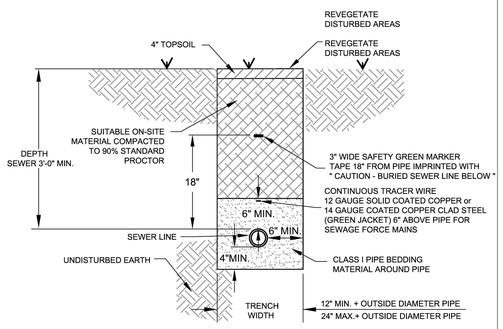
HOPE CONSULTING
ENGINEERS - SURVEYORS
129 N. Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
STUART FINLEY

COMM./25300 I30 N
BRYANT WATER UTILITIES
A COMMERCIAL IN BRYANT CITY, SALINE COUNTY, ARKANSAS

DATE:	11/19/2025	C.A.D. BY:	DRAWING NUMBER:
REVISED:	##	CHECKED BY:	25-1210
SHEET:	C-2.2	SCALE:	

500	01S	14W	0	13	400	62	1664



NOTES:

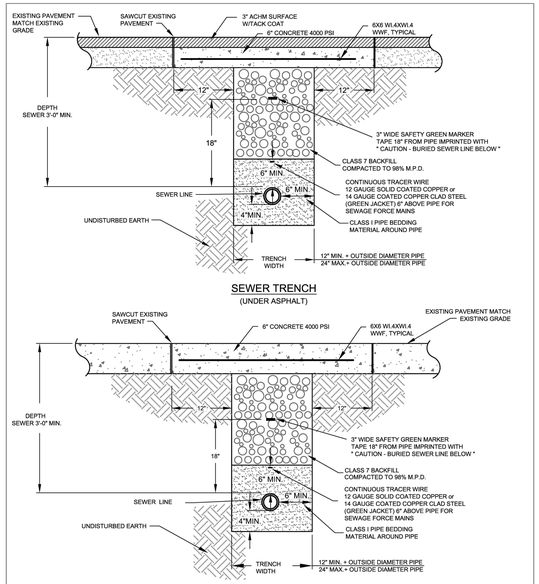
1. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING SEWER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE SEWER SYSTEM.
2. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART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

SEWER TRENCH

(NON-PAVED AREA)

CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES	DESCRIPTION: SEWER TRENCH (NON-PAVED AREA)	REVISED: -----	S1
210 S.W. 3rd. STREET		-----	
BRYANT, AR		-----	
PHONE: (501) 943-0488	DRAWN BY: CHECKED BY: FILE: S1--Sewer Trench (Non-Paved Area).dwg	-----	

4/16/2015 10:56:59 AM



SEWER TRENCH

(UNDER ASPHALT)

SEWER TRENCH

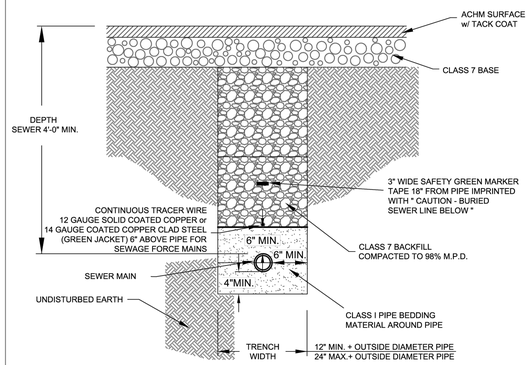
(UNDER CONCRETE)

NOTES:

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

CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES	DESCRIPTION: SEWER TRENCH (UNDER PAVEMENT)	REVISED: -----	S2
210 S.W. 3rd. STREET		-----	
BRYANT, AR		-----	
PHONE: (501) 943-0488	DRAWN BY: CHECKED BY: FILE: S2--Sewer Trench (Under Pavement).dwg	-----	

4/16/2015 10:56:11 AM



SEWER MAIN INSTALLATION PRIOR TO ROADWAY CONSTRUCTION

NOTES:

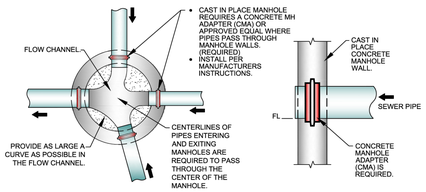
1. THE CONTRACTOR SHALL PROVIDE ALL ITEMS NECESSARY TO CONNECT WITH ANY PART OF THE EXISTING SEWER SYSTEM THAT WILL REMAIN IN ORDER TO ESTABLISH A SATISFACTORY AND ACCEPTABLE SEWER SYSTEM.
2. CONTRACTOR TO CONSTRUCT ALL TRENCH EXCAVATION IN ACCORDANCE WITH ALL OSHA REGULATIONS (29 CFR CH.XVII, SUBPART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

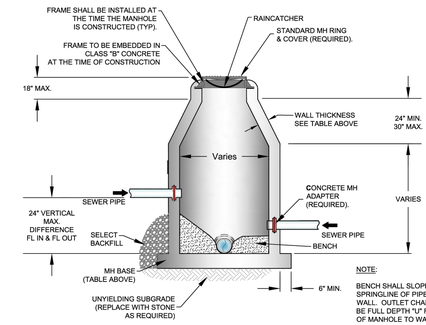
CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES	DESCRIPTION: SEWER MAIN INSTALLATION PRIOR TO ROADWAY CONSTRUCTION	REVISED: -----	S3
210 S.W. 3rd. STREET		-----	
BRYANT, AR		-----	
PHONE: (501) 943-0488	DRAWN BY: CHECKED BY: FILE: S3--Sewer Main Installation Prior to Roadwlay Const.dwg-----	-----	

4/16/2015 10:56:18 AM

Inside Diameter of Manhole	Minimum Wall Thickness	Base Thickness	Minimum Ring & Cover Size
4' DIA	6"	6"	24" (< or Equal to 24" Pipes)
5' DIA	8"	8"	
6' DIA	8"	12"	36" (> 24" Pipes)

MANHOLE INFORMATION TABLE





NOTE:

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

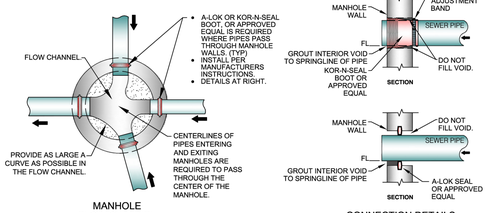
CAST-IN-PLACE MANHOLE

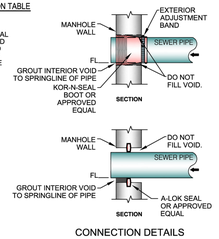
CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES	DESCRIPTION: CAST-IN-PLACE MANHOLE	REVISED: -----	S4
210 S.W. 3rd. STREET		-----	
BRYANT, AR		-----	
PHONE: (501) 943-0488	DRAWN BY: CHECKED BY: FILE: S4--Cast In Place Manhole.dwg	-----	

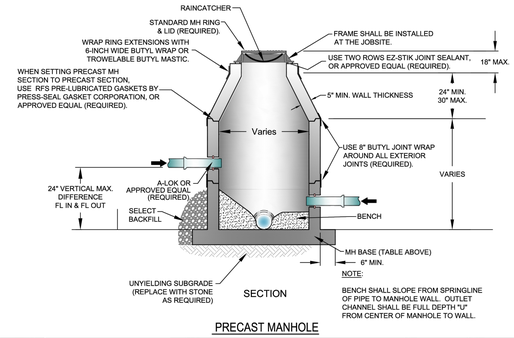
4/16/2015 10:59:22 AM

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

MANHOLE INFORMATION TABLE







NOTE:

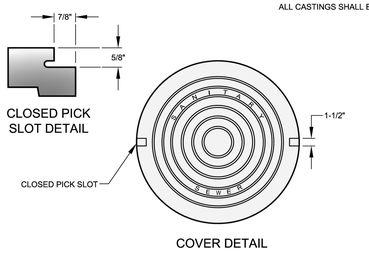
BENCH SHALL SLOPE FROM SPRINGLINE OF PIPE TO MANHOLE WALL. OUTLET CHANNEL SHALL BE FULL DEPTH "U" FROM CENTER OF MANHOLE TO WALL.

PRECAST MANHOLE

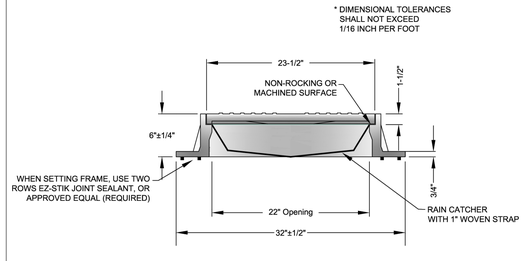
CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES	DESCRIPTION: PRECAST MANHOLE	REVISED: -----	S5
210 S.W. 3rd. STREET		-----	
BRYANT, AR		-----	
PHONE: (501) 943-0488	DRAWN BY: CHECKED BY: FILE: S5--Precast Manhole.dwg	-----	

4/16/2015 10:58:57 AM

ALL CASTINGS SHALL BE "MADE IN USA"



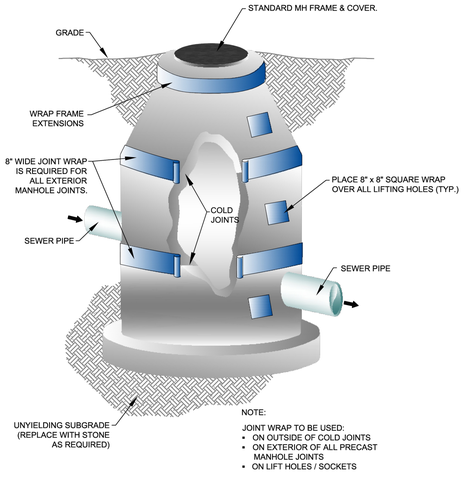
1. MINIMUM WEIGHT OF RING: 100 POUNDS
2. MINIMUM WEIGHT OF COVER: 110 POUNDS
3. COVERS ARE FURNISHED WITH TWO CLOSED PICK SLOTS.
4. CASTINGS SHALL BE "MADE IN USA"



FRAME AND COVER DETAIL

CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES	DESCRIPTION: MANHOLE FRAME AND COVER	REVISED: -----	S6
210 S.W. 3rd. STREET		-----	
BRYANT, AR		-----	
PHONE: (501) 943-0488	DRAWN BY: CHECKED BY: FILE: S6--Manhole Frame and Cover.dwg	-----	

4/16/2015 10:59:51 AM



NOTE:

JOINT WRAP TO BE USED:

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

MANHOLE JOINT WRAP

CITY OF BRYANT, AR	TITLE: SEWER DETAILS	DATE: APRIL 2015	SHEET:
WATER UTILITIES	DESCRIPTION: MANHOLE JOINT WRAP	REVISED: -----	S9
210 S.W. 3rd. STREET		-----	
BRYANT, AR		-----	
PHONE: (501) 943-0488	DRAWN BY: CHECKED BY: FILE: S9--Manhole Joint Wrap.dwg	-----	

4/16/2015 10:57:09 AM

CERTIFICATE OF AUTHORIZATION — HOPE CONSULTING, INC. — No. 1091 — ARKANSAS

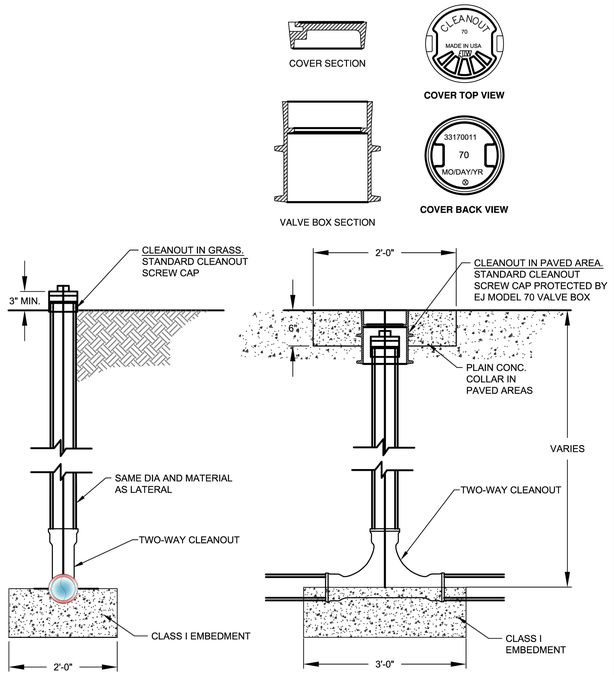
HOPE CONSULTING
ENGINEERS - SURVEYORS
129 N. Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
STUART FINLEY

COMM./25300 130 N
BRYANT SEWER UTILITIES
A COMMERCIAL IN BRYANT CITY, SALINE COUNTY, ARKANSAS

DATE:	11/19/2025	C.A.D. BY:		DRAWING NUMBER: 25-1210
REVISED:	##	CHECKED BY:		
SHEET:	C-2.3	SCALE:		

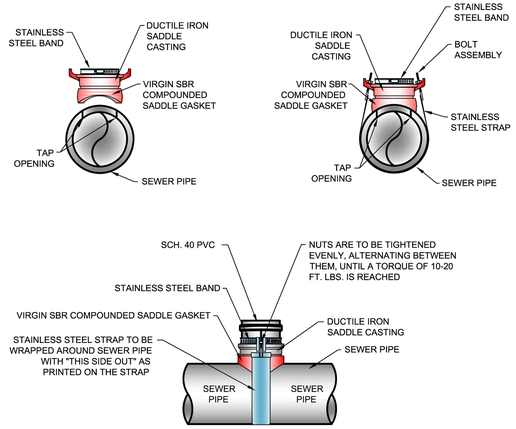
500	01S	14W	0	13	400	62	1664



TYPICAL CLEANOUT

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **SEWER DETAILS**		DATE: APRIL 2015 REVISED --- --- --- --- ---	SHEET: **S16**
	DESCRIPTION: **SEWER SERVICE CLEANOUT**			
	DRAWN BY:	CHECKED BY:	FILE: S16-Sewer Service Cleanout.dwg	

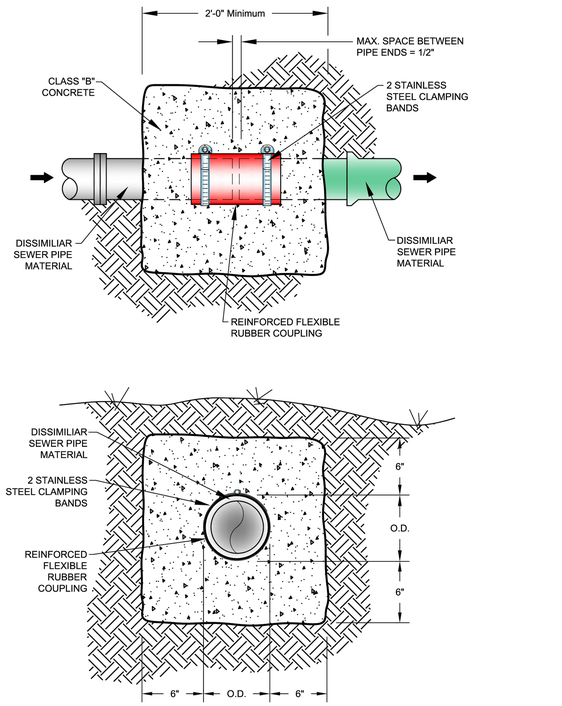
4/6/2015 10:58:13 AM



SEWER SERVICE SADDLE

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **SEWER DETAILS**		DATE: APRIL 2015 REVISED --- --- --- --- ---	SHEET: **S17**
	DESCRIPTION: **SEWER SERVICE SADDLE**			
	DRAWN BY:	CHECKED BY:	FILE: S17-Sewer Service Saddle.dwg	

4/6/2015 10:58:19 AM



REINFORCE FLEXIBLE COUPLING

CITY OF BRYANT, AR WATER UTILITIES 210 S.W. 3rd. STREET BRYANT, AR PHONE: (501) 943-0468	TITLE: **SEWER DETAILS**		DATE: APRIL 2015 REVISED --- --- --- --- ---	SHEET: **S18**
	DESCRIPTION: **REINFORCED FLEXIBLE COUPLING**			
	DRAWN BY:	CHECKED BY:	FILE: S18-Reinforced Flexible Coupling.dwg	

4/6/2015 10:58:30 AM

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

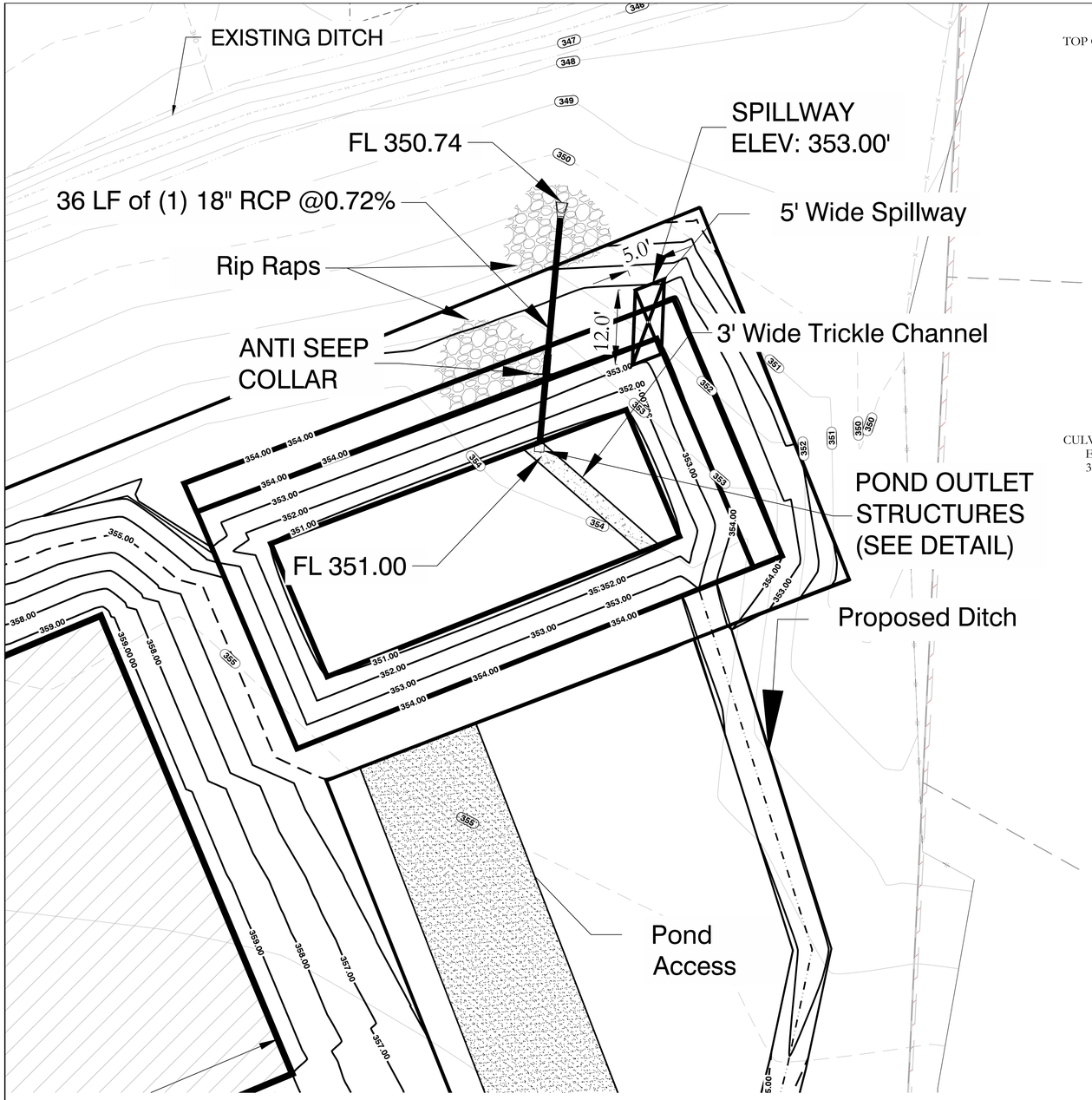
HOPE CONSULTING
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Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

FOR USE AND BENEFIT OF:
STUART FINLEY

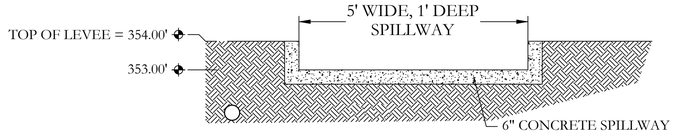
COMM./25300 I30 N
BRYANT SEWER UTILITIES
A COMMERCIAL IN BRYANT CITY, SALINE COUNTY, ARKANSAS

DATE:	11/19/2025	C.A.D. BY:	DRAWING NUMBER: 25-1210
REVISED:	##	CHECKED BY:	
SHEET:	C-2.4	SCALE:	

500	01S	14W	0	13	400	62	1664



NORTH EAST DETENTION POND



SPILLWAY END VIEW
NTS

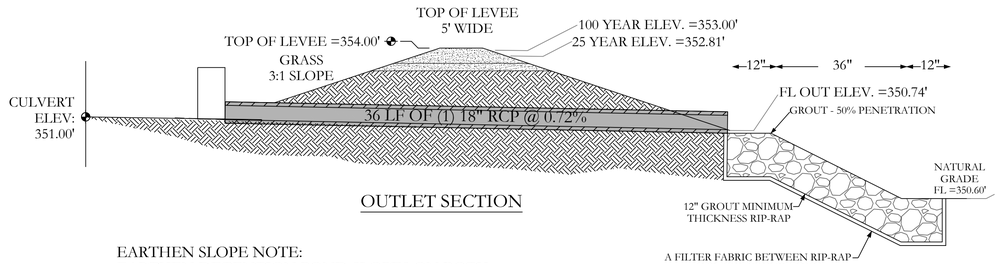
SPILLWAY DESIGN

Spillway Capacity, Q=CLH^(3/2)

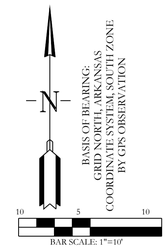
C Discharge Coefficient	L Spillway Width (ft)	H Head over Crest (ft)	
2.5	5	1	
	Spillway Capacity (cfs)	12.5	Adequate
	100 year Flow(cfs)	6.9	

VICINITY MAP:





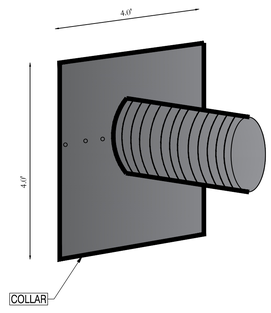
OUTLET SECTION



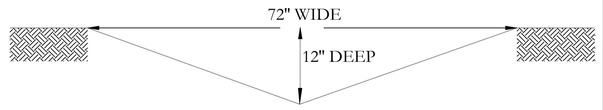
EARTHEN SLOPE NOTE:
EARTHEN DETENTION POND SLOPES ON BOTH THE INTERIOR AND EXTERIOR OF THE POND SHALL HAVE A MAXIMUM SLOPE OF 3:1.

NOTE:

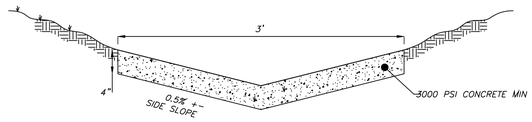
1. DETENTION POND WILL BE REQUIRED TO BE STABILIZED WITH SOLID SOD/SEED STABILIZATION PER THE STORM WATER MANAGEMENT MANUAL.
2. DETENTION POND WILL HAVE A 5' WIDE LEVEE.
3. DETENTION POND REQUIRED STORAGE 5,420 CUFT. THE DESIGNED DETENTION POND'S AVAILABLE STORAGE 6,758 CUFT.
4. THE EXISTING DITCH HAS FLOW FOR 100 YEAR 116 CFS. THE FLOW FROM POND IS 6.9 CFS FOR 100 YEAR



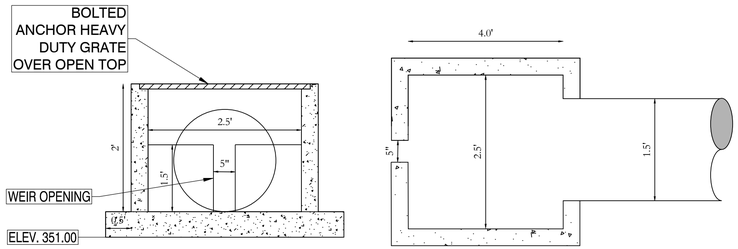
ANTI SEEP COLLAR



PROPOSED DITCH SECTION



DETAIL (NTS)
TRICKLE CHANNEL SECTION



POND OUTLET STRUCTURE

DETENTION POND MAINTENANCE PLAN

Background
The Detention pond is located at the North East of the subjected property. It is designed to temporarily detain stormwater to meet water quantity criteria before discharging off the property.

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

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

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

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

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

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

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

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

-Existing ditch will be maintained by regular inspection, sediment removal, clearing debris, controlling vegetation.

-Any other maintenance or repairs which would minimize other maintenance to the pond or outfall structures.
-For questions or concerns about Tract "A", contact at **(501)315-2626.**

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

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

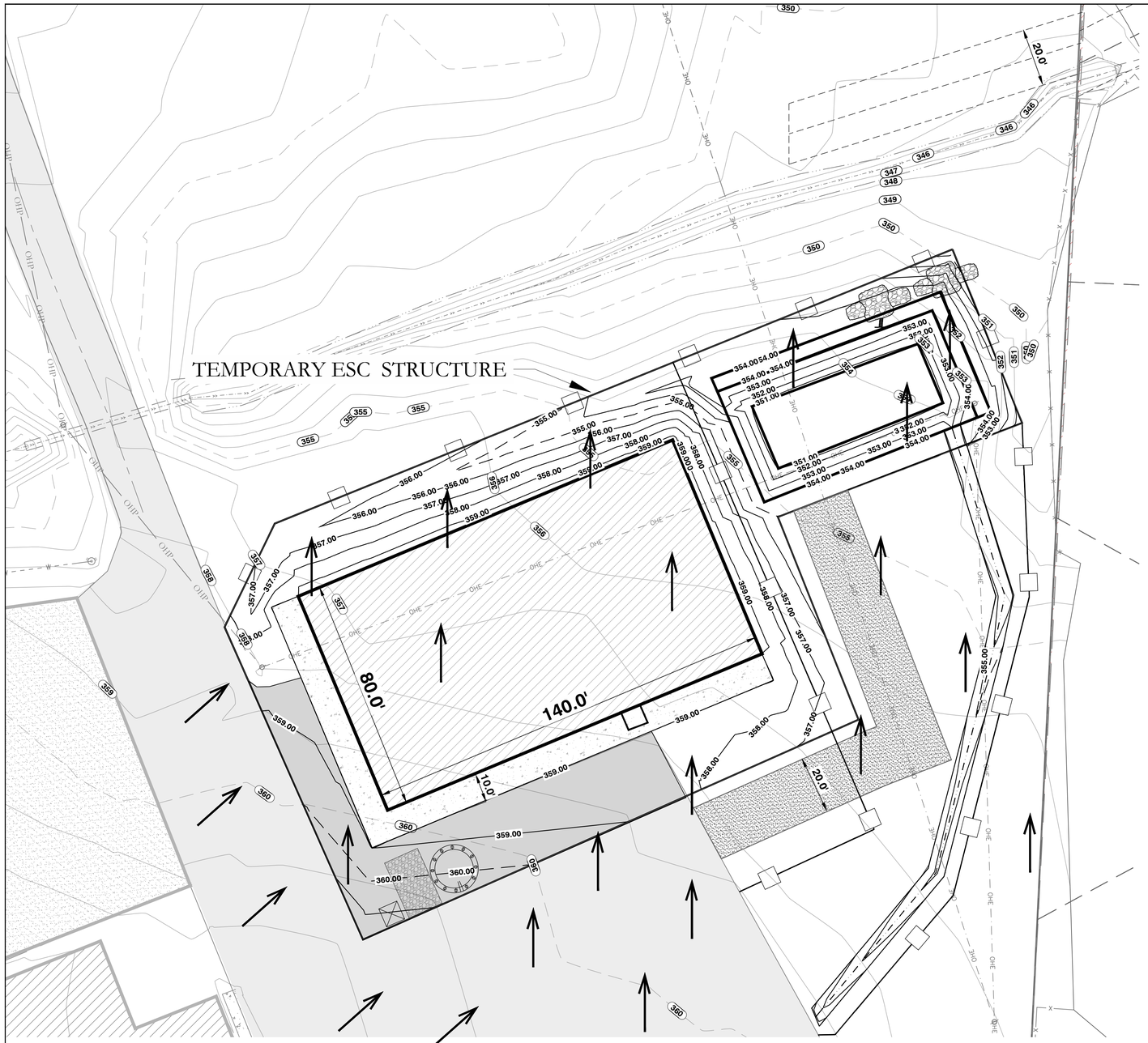
HOPE CONSULTING
ENGINEERS - SURVEYORS
129 N. Main Street,
Benton, Arkansas 72015
PH. (501)315-2626
FAX (501) 315-0024
www.hopeconsulting.com

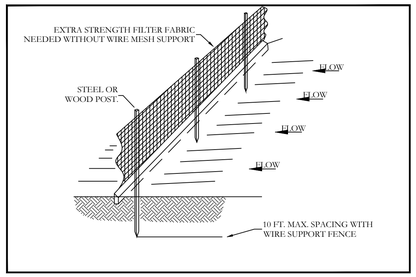
FOR USE AND BENEFIT OF:
STUART FINLEY

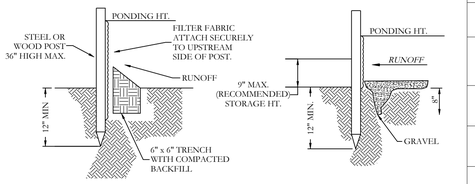
25-1210 Comm./ 25300 I30 N
NORTH EAST DETENTION POND
A COMMERCIAL IN BRYANT CITY, SALINE COUNTY, ARKANSAS

DATE:	11/19/2025	C.A.D. BY:		DRAWING NUMBER:	
REVISED:	##	CHECKED BY:		25-1210	
SHEET:	C-3.0	SCALE:	1"=10'		

500	01S	14W	0	13	400	62	1664







SILT FENCE MATERIAL: IT SHALL BE GEOTEXTILE FABRIC, MINIMUM 3 FT HEIGHT, HAVING 10 FT MAXIMUM SPACING WITH STEEL WIRE SUPPORT FENCE.

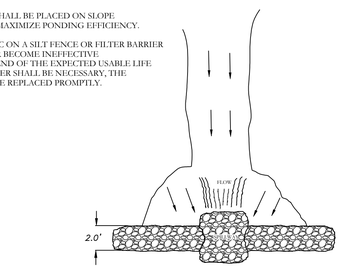
NOTE:
1.) INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY.

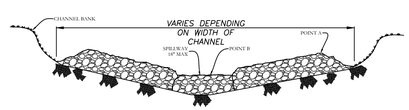
2.) REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.

3.) SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.

4.) IF THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER SHALL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.

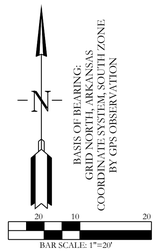
SILT FENCE



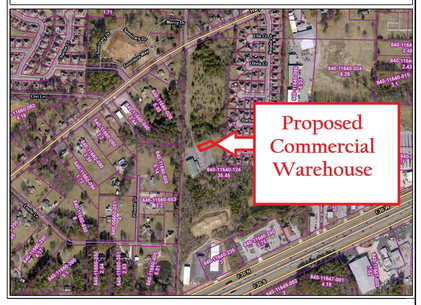


NOTES:
1) POINT 'A' MUST BE HIGHER THAN POINT 'B' (SPILLWAY HEIGHT)
2) PLACE RIP-RAP BARRIER PERPENDICULAR TO THE FLOW WITH TIGHT GROUPING.
3) PLACE FILTER FABRIC UNDER RIP-RAP TO PREVENT LOSS OF BACKFILL MATERIAL TO PREVENT EROSION OR FLOW AROUND THE DAM.
3) SPILLWAY HEIGHT SHALL NOT EXEED 18"-24".
4) INSPECT AFTER EACH SIGNIFICANT STORM, MAINTAIN AND REPAIR PROMPTLY.

RIP-RAP CHECK DAM



VICINITY MAP:



SEQUENCE OF CONSTRUCTION PLAN

Step	Activity	ESC / Control Measures	Notes
1.	Install temporary ESC	Silt fence, construction entrance, riprap	Must be installed before any land disturbing activity
2.	Site Clearing	Maintain temporary ESC, protect sensitive areas	Limit disturbance to only necessary areas
3.	Pond Construction	Temporary ESC continues	Cover disturbed areas not immediately worked
4.	Final Grading / Slope Stabilization	Temporary ESC still in place	Install permanent measures where needed
5.	Permanent Control Installation	Permanent pond structures, spillway, riprap, ditches	Remove temporary ESC only after permanent controls installed and stabilized
6.	Vegetation / Stabilization	Permanent seeding / sod	Stabilize slopes and disturbed areas as soon as possible
7.	Monitoring & Maintenance	Weekly inspections, repair damaged ESC measures	Follow SWPPP inspection schedule (every 7 days or after rain ≥0.5")
8.	Site Final Stabilization	Confirm 80% vegetative cover or equivalent permanent measures	Required before filing Notice of Termination (NOT
9.	Project Completion / Termination	Remove temporary measures, submit NOT	Only after full stabilization

(Reference: Bryant Stormwater Management Manual,Sections 1104.4.1-1104.4.7)

INSPECTION & MAINTENANCE PLAN

1. Inspect all disturbed areas weekly and within 24 hours after any storm ≥0.5 inches.
2. Maintain in effective condition:
   - Vegetation
   - Erosion & sediment control measures
   - Other protective measures shown on the plan

(Ref: Bryant Stormwater Management Manual, Section 1104.4.7)

EROSION CONTROL NOTES

SOD OR NO SEED DETENTION AREA POST-CONSTRUCTION (IF APPLICABLE)

MAXIMUM SLOPE OF 3H:1V ON DETENTION POND LEVEES

CONTRACTOR MUST HAVE INLET PROTECTION MEASURES INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF DRAINAGE INLETS/STRUCTURES IS COMPLETE. SEDIMENT BARRIERS SHALL BE MAINTAINED THROUGHOUT AND INSPECTED THROUGHOUT CONSTRUCTION PROCESS UNTIL PROJECT IS COMPLETE

RIP RAP SEDIMENT BARRIERS SHALL BE USED AT ALL STORMWATER DISCHARGE POINTS SHOWN ON PLANS ASAP

CONTRACTOR SHOULD WORK WITH ENGINEER TO ESTABLISH EFFECTIVE AND EFFICIENT PLAN TO PREVENT SEDIMENT RUNOFF BY DETERMINING WHERE SILT FENCING OR OTHER TYPES OF CONTROLS ARE NECESSARY

SOME EROSION CONTROL MEASURES, SILT FENCING, OR CHECK DAMS MAY NOT BE NECESSARY DURING INITIAL ROW CLEARING BUT MAY BE NEEDED ONCE LOT CLEARING AND HOME BUILDING BEGINS

ERC LEGEND

SITE POSTING

CONC. WASHOUT DETENTION AREA

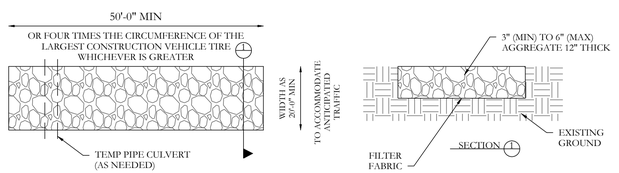
SILT FENCE

RIP RAP CHECK DAM

CONSTRUCTION ENTRANCE

DISTURBED AREA

WATER FLOW



STABILIZED CONSTRUCTION ENTRANCE
N.T.S

Know what's below. Call before you dig.

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

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

FOR USE AND BENEFIT OF:
STUART FINLEY

25-1210 Comm./ 25300 I30 N
EROSION CONTROL PLAN
A COMMERCIAL IN BRYANT CITY, SALINE COUNTY, ARKANSAS

DATE:	11/19/2025	C.A.D. BY:	DRAWING NUMBER:
REVISED:	##	CHECKED BY:	25-1210
SHEET:	C-4.0	SCALE: 1"=20'	

500	01S	14W	0	13	400	62	1664

EG 349.70
EG 349.35
EG 352.30
EG 349.87
EG 353.09
EG 351.44
EG 353.59
EG 351.51
EG 354.99
EG 356.02
EG 352.88
EG 356.63
FG 354.00
EG 354.42
EG 356.82
FG 354.94
FG 353.10
EG 354.79
EG 356.92
FG 355.78
FG 353.15
EG 357.28
EG 355.49
FG 353.23
FG 357.00
EG 355.84
SW 359.40
FG 358.54
FG 358.94
FG 355.02
FG 358.59
FG 359.19
EG 354.76
EG 358.88
FG 358.88
EG 356.33
FG 359.06
EG 358.84
FG 358.71
EG 359.17
SW 359.40
FG 358.48
EG 356.88
FG 358.53
EG 359.49
FG 359.02
FG 355.41
FG 359.00
FG 358.81
EG 358.00
FG 358.88
EG 359.63
SW 359.40
FG 359.00
FG 355.75
EG 360.66
FG 356.84
EG 361.75
FG 359.37

PROPOSED WAREHOUSE BUILDING
AREA 11,200 SQ.FT.
FFE 359.50'

20.0'

EXISTING POWER POLE
WILL BE REMOVED

EXISTING POWER POLE
WILL BE REMOVED

-N-

BASIS OF BEARING:
GRID NORTH, ARKANSAS
COORDINATE SYSTEM, SOUTH ZONE
BY GPS OBSERVATION

15 7.5 15
BAR SCALE: 1"=15'

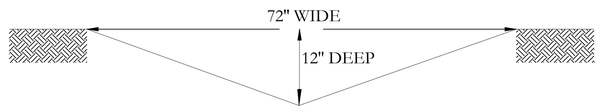
VICINITY MAP:



GRADING PLAN NOTES

1. DESIGN CONTOURS SHOWN ARE FINISHED GRADE.
2. SPOT ELEVATIONS SHOWN ARE FINISHED GROUND,SIDEWALK ELEVATIONS, EXISTING GROUND.
3. CLEAR AND GRUB AREAS OF THE SITE WHERE CUT OR FILL IS TO OCCUR.
4. FILL SHALL BE COMPACTED TO AT LEAST 98% OF THE MATERIAL'S MAXIMUM STANDARD PROCTOR DRY DENSITY.
5. THE MOISTURE CONTENT OF FILL MATERIAL SHALL BE WITHIN THE RANGE OF 1% BELOW TO 3% ABOVE THE OPTIMUM MOISTURE CONTENT.
6. SUBGRADES SHALL BE PROOF-ROLLED WITH A LOADED DUMP TRUCK TO DETECT ZONES OF UNSUITABLE AND/OR EXCESSIVELY WET SOILS. IF PUMPING BEGINS, COMPACTION SHALL BE STOPPED IMMEDIATELY AND RESUMED ONLY WHEN THE MATERIAL IS SUFFICIENTLY DRY THAT PUMPING DOES NOT OCCUR.
7. ALL UNUSABLE SOILS SHALL BE USED ON SITE FOR FILL PURPOSES OUTSIDE THE AREAS OF BUILDING AND PAVEMENT CONSTRUCTION.
8. OWNER IS RECOMMENDED TO HAVE FENCE AROUND DETENTION POND.

Note: Detention pond will be built before construction



DITCH SECTION



ASPHALT PAVEMENT SECTION

LEGEND
FG = FINISHED GRADE
EG = EXISTING GRADE
SW = TOP OF SIDEWALK

LEGEND

- PLSS Aliquot Corner	- Clean Out	- Fence
- Fnd. Corner Monument	- Water Meter	- Overhead Power
- Set 1/2" Rebar/Cap (1664)	- Power Pole	- Sewer Line
- Computed Point	- Sewer Manhole	- Water Line
(M)- As Measured	- Light Pole	- Telephone Line
(P) - Per Deed or Plat Records	- Telephone Pedestal	- Electric Line
ESMT - Easement	- Drainage Manhole	- Gas Line
B.S.L. - Building Setback Lines	- Gas Meter	Water Flow Path

Know what's below. Call before you dig.

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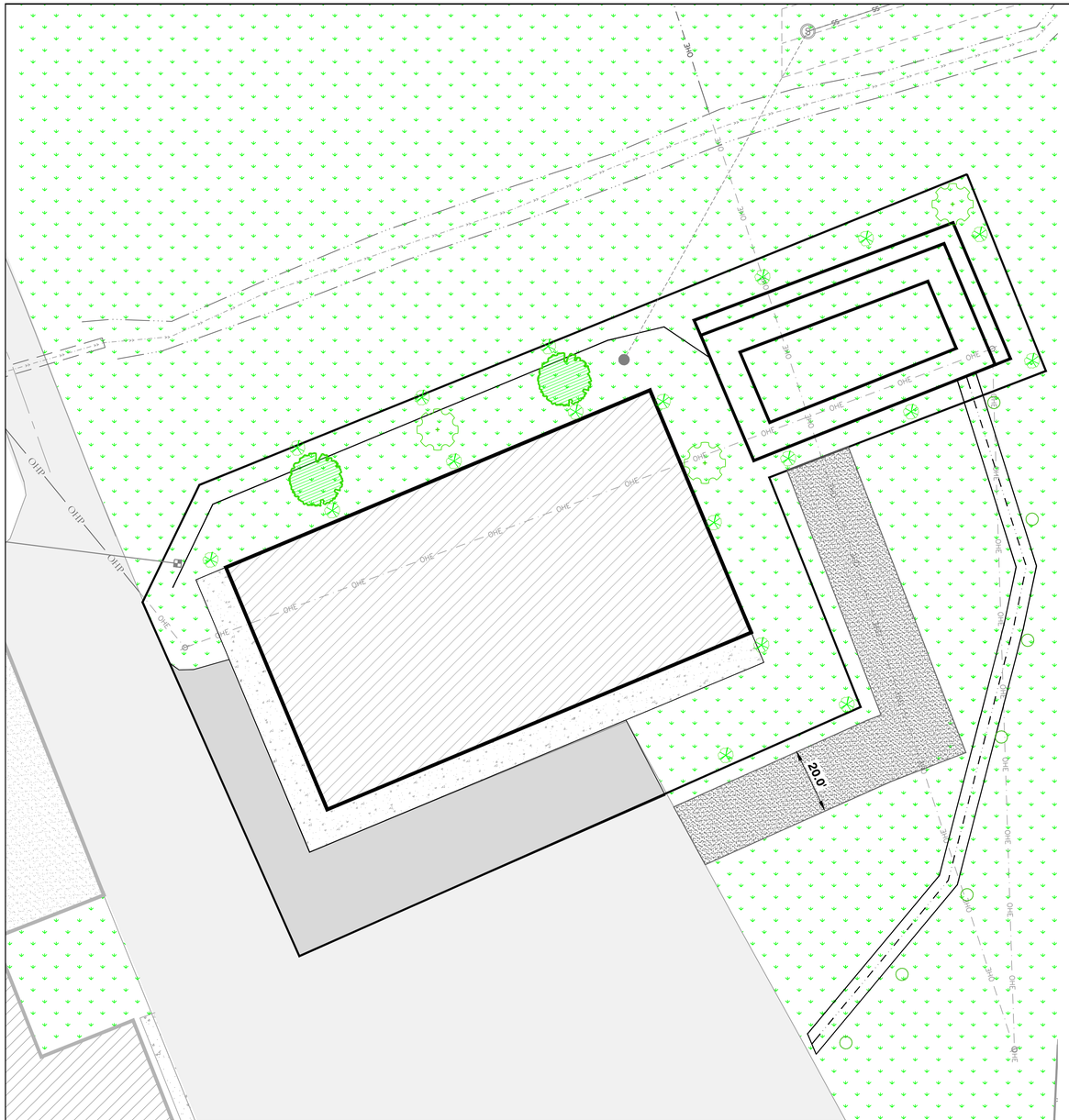
HOPE CONSULTING, INC. No. 1931 CERTIFICATE OF AUTHORIZATION ARKANSAS

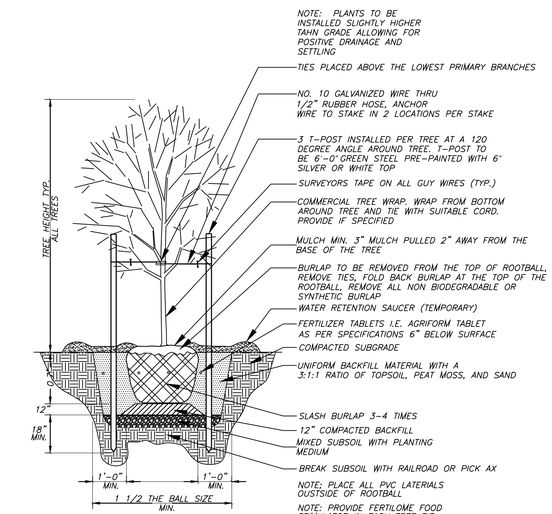
FOR USE AND BENEFIT OF:
STUART FINLEY

25-1210 Comm./ 25300 I30 N
GRADING PLAN
A COMMERCIAL IN BRYANT CITY, SALINE COUNTY, ARKANSAS

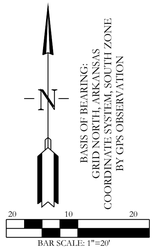
DATE:	11/19/2025	C.A.D. BY:	DRAWING NUMBER:
REVISED:	##	CHECKED BY:	25-1210
SHEET:	C-5.0	SCALE: 1"=15'	

500	01S	14W	0	13	400	62	1664



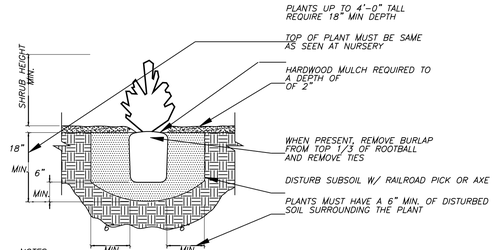


1 TREE PLANTING DETAIL
No Scale



VICINITY MAP:





NOTES:
1. PROVIDE WEED CONTROL AND/OR FERTILIZER AS SPECIFIED BELOW.
2. WEED CONTROL AND FERTILIZER MAY BE APPLIED AT A LATER DATE TO COMPLY WITH SEASONAL CONDITIONS AND THE GROWING PERIOD.
3. PROVIDE AGRIFORM TABLETS AS PER MANUFACTURERS RECOMMENDATIONS.
4. PROVIDE HOMOGENOUS BACKFILL PLANTING MIXTURE OF 3:1 RATIO TOPSOIL TO PEATMOSS AND/OR OTHER APPROVED SOIL ADMENDMENTS.
5. PROVIDE FERTILOME ROOT STIMULATOR OR APPROVED EQUAL IN PITS.
6. APPLY BALAN PREEMERGENT WEED CONTROL OR APPROVED EQUAL TREATMENT ON ALL SHRUB AND GROUNDCOVER BEDS.

2 SHRUB PLANTING DETAIL
NTS

GENERAL NOTES:

NO PLANTING WITHIN 5 FEET OF A FIRE HYDRANT.

SPACING WILL BE 40' BETWEEN TREES.

TREE MUST BE A MINIMUM 3" IN DIAMETER @ THE BASE AND 12'+ TALL.

EXISTING TREES MEETING THE MINIMUM SIZE CAN BE COUNTED TO MEET THE CRITERIA.

NO TREES CAN BE PLANTED WITHIN THIRTY-FOOT (30') OF A PROPERTY COMER OR DRIVEWAY.

SHRUBS ALONG STREET FIGHT-OF-WAY LINES CANNOT EXCEED THIRTY INCHES (30") IN HEIGHT.

SEPARATIONS NOTED IN THE ZONING REGULATIONS MUST BE BERMED OR SCREENED WITH LANDSCAPING AND GROUND COVER OR GRASS.

MAINTENANCE:

THE DEVELOPER, HIS SUCCESSOR AND THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR REGULAR WEEDING, IRRIGATING, FERTILIZING, PRUNING AND OTHER MAINTENANCE OF ALL PLANTING ON PRIVATE PROPERTY OF A DEVELOPMENT. PLANT MATERIALS WHICH ARE INSTALLED FOR COMPLIANCE WITH THIS ORDINANCE, BOTH ON PRIVATE PROPERTY AND THE PUBLIC RIGHT-OF-WAY, WHICH EXHIBIT EVIDENCE OF INSECT PESTS, DISEASE AND/OR DAMAGE, SHALL BE APPROPRIATELY TREATED AND DEAD PLANT MATERIALS SHALL BEREPLACED.

THE OWNER OF LAND ABUTTING A CONSTRUCTED PUBLIC RIGHT-OF-WAY SHALL BE RESPONSIBLE FOR THE TREE PLANTING STRIP LYING BETWEEN THE PRIVATE PROPERTY LINE AND THE CURBLINE OR BACKSLOPE LINE AND SHALL BE REQUIRED TO REGULARLY WEED, MOW, PRUNE AND MAINTAIN PLANTINGS IN COMPLIANCE WITH GOOD HORTICULTURAL PRACTICES.

IF THE OWNER OF LAND THUS SITUATED AS IN ABOVE, NEGLECTS OR REFUSES TO MAINTAIN THE AREAS AS PROSCRIBED, AFTER HAVING BEEN GIVEN TEN (10) DAYS NOTICE IN WRITING TO MAINTAIN BY THE CITY, THE OWNER SHALL BE GUILTY OF A MISDEMEANOR.

THE CITY OF BRYANT PLANNING COMMISSION WILL REVIEW AND ACT ON ALL LANDSCAPING PROPOSALS AT THE TIME BUILDING PLANS ARE SUBMITTED AND IN THE CASE OF SUBDIVISION AT THE PRELIMINARY PLAT SUBMITTAL.

A CERTIFICATE OF OCCUPANCY WILL NOT BE ISSUED FOR A COMMERCIAL ESTABLISHMENT NOR WILL THE FINAL SUBDIVISION PLAT BE APPROVED UNTIL LANDSCAPING REQUIREMENTS ARE SATISFIED.

TREE LEGENDS

TREE TYPES:	TREE SPECIES:	HEIGHT AT PLANTING:	QTY.:
SHURBS			
EVERGREEN HOLLIES –	ILEX SPECIES		20
NANDINA –	NANDINA DOMESTICA		7
TREES			
AMERICAN HOLLY –	ILEX OPACA	12'-0"	03
SOUTHERN MAGNOLIA –	MONGNOLIA GRANDIFLORA	12'-0"	02
SOD (INCLUDES MULCH BEDS)	BERMUDA		
MULCH BEDS (OPTIONAL)	PLANTER/FLOWER BED		
P.L.S.	PLANTER/FLOWER BED		

LANDSCAPE CALCULATION:

GREEN SPACE	TOTAL DEVELOPMENT AREA: 39,204 SF GREEN SPACE: 15,720 SF (15,720 / 39,204 = 0.40=40%)
LANDSCAPE (REQUIRED)	TREE REQUIRED FOR EACH ½ ACRE (39,204 SF OR 0.90 AC/0.5 = 1.8=2) SHRUB REQUIRED FOR EACH 2,000 SF OF TOTAL LAND AREA FOR DEVELOPMENT (39,204 SF /2000 SF =19.6 =20)
LANDSCAPE (PROVIDED)	TREE PROVIDED = 5 TREES. SHRUB PROVIDED =27

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No. 1931
ARKANSAS

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ENGINEERS - SURVEYORS
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PH. (501)315-2626
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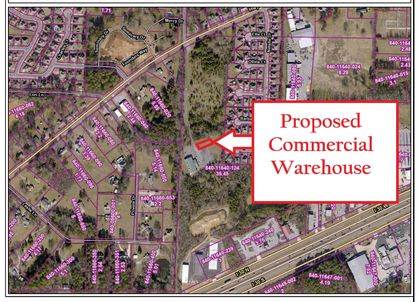
FOR USE AND BENEFIT OF:
STUART FINLEY

25-1210 Comm./ 25300 I30 N
LANDSCAPE PLANNING
A COMMERCIAL IN BRYANT CITY, SALINE COUNTY, ARKANSAS

DATE:	11/19/2025	C.A.D. BY:	DRAWING NUMBER:
REVISED:	##	CHECKED BY:	25-1210
SHEET:	C-6.0	SCALE: 1"=20'	

500	01S	14W	0	13	400	62	1664

VICINITY MAP:



Soil Loss Calculation for Ware house (25300 I30N)

25300 I30 N a commercial development site is being proposed in city of Bryant. A site plan has already submitted to the city for review. The site will be cleared prior to building construction. The site is not located within the 100-year flood hazard boundary.

Total site area = 3.95 acres

Total disturbed area = 0.90 acres

The volume of excavation will exceed 3,000 cubic yards.

Initial soil loss calculation:

Soil loss in tons per acre per year, A = 300 (K) (LS) (C) (P)

Site soil was previously identified from the Soil Survey of Saline County.

From the site topography, a 2% slope is observed over the length of 215-foot length of the major disturbed area. Soil erodibility factor, K of 0.49 has collected (https://websoilsurvey.nrcs.usda.gov/app/).

City of Bryant Stormwater & Drainage Manual, identifies the slope length factor, LS = 0.51 for 2% slope and 215-foot slope length. **(Calculated using RUSLE)**

Assuming the soil will need to be mulched and seeded with grass to at least a 60 percent ground cover, C = 0.042

Buffer zone, filter strips, natural vegetation, interceptor swales control practices are being implemented and therefore practice factor, P=0.5.

Soil Loss in tons/acres/years= 300*0.49*0.51*0.042*0.5=1.57 tons/acres/years

The potential soil loss of 1.57 tons/acre/year is within the allowable soil loss of 8 tons/acre/year.**(Ref: Bryant Stormwater Drainage & Manual, section:200.3**)

Initial soil calculation with no erosion control measures = 300 (0.49) (0.51) = **74.97 tons/acre/year.**

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

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

FOR USE AND BENEFIT OF:
STUART FINLEY

25-1210 Comm./ 25300 I30 N
SOIL LOSS CALCULATION
A COMMERCIAL IN BRYANT CITY, SALINE COUNTY, ARKANSAS

DATE:	11/19/2025	C.A.D. BY:	DRAWING NUMBER:
REVISED:	##	CHECKED BY:	25-1210
SHEET:	C-7.0	SCALE:	

500	01S	14W	0	13	400	62	1664

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

SIGN PERMIT APPLICATION

Applicants are advised to read the Sign Ordinance prior to completing and signing this form. The Sign Ordinance is available at www.cityofbryant.com under the Planning and Community Development tab.

Note: Electrical Permits may be Required, Please contact the Community Development Office for more information.

Date: 11/17/2025

Sign Co. or Sign Owner

Name GIBKO NURSERY & SIGNS, INC.
Address 110 EVERGREEN STREET
City, State, Zip BUNKIE LA 71322
Phone 318-346-2345
Alternate Phone

Property Owner

Name PROGRESSIVE TRACTOR & IMPLEMENT CO
Address 5017 INTERSTATE 49
City, State, Zip OPELOUSAS LA 70570
Phone 318-346-6361
Alternate Phone

GENERAL INFORMATION

Name of Business PROGRESSIVE TRACTOR & IMPLEMENT CO
Address/Location of sign 22576 INTERSTATE 30 FRONTAGE ROAD, 72022
Zoning Classification C-3

Please use following page to provide details on the signs requesting approval. Along with information provided on this application, **a Site Plan showing placement of sign(s) and any existing sign(s) on the property is required** to be submitted. **Renderings of the sign(s) showing the correct dimensions is also required** to be submitted with the application. A thirty-five dollar ($35) per sign payment will be collected at the time of permit issuance. According to the Sign Ordinance a fee for and sign variance or special sign permit request shall be one hundred dollars ($100). Additional documentation may be required by Sign Administrator.

READ CAREFULLY BEFORE SIGNING

I _____, do hereby certify that all information contained within this application is true and correct. I fully understand that the terms of the Sign Ordinance supersede the Sign Administrator's approval and that all signs must fully comply with all terms of the Sign Ordinance regardless of approval. I further certify that the proposed sign is authorized by the owner of the property and that I am authorized by the property owner to make this application. I understand

that no sign may be placed in public right of way. I understand that I must comply with all Building and Electrical Codes and that it is my responsibility to obtain all necessary permits.

Use table below to enter information regarding each sign for approval. Please use each letter to reference each sign rendering.

SIGN	**Type** (Façade, Pole, Monument, other)	**Dimensions** (Height, Length, Width)	**Sqft** (Measured in whole as rectangle)	**Height of Sign** (Measured from lot surface)		Column for Admin Certifying Approval
				Top of Sign	Bottom of Sign	
A	MONUMENT	15'0" X 10'0" X 2'0"	150	15'0"	GRADE	
B	FACADE	3'0" X 9'3" X2 2'6" X 12'6" X 1	87.25	16'0"	12'0"	
C						
E						
F						
G						

Front Facade = 59 SF

Side Facade = 27.75 SF

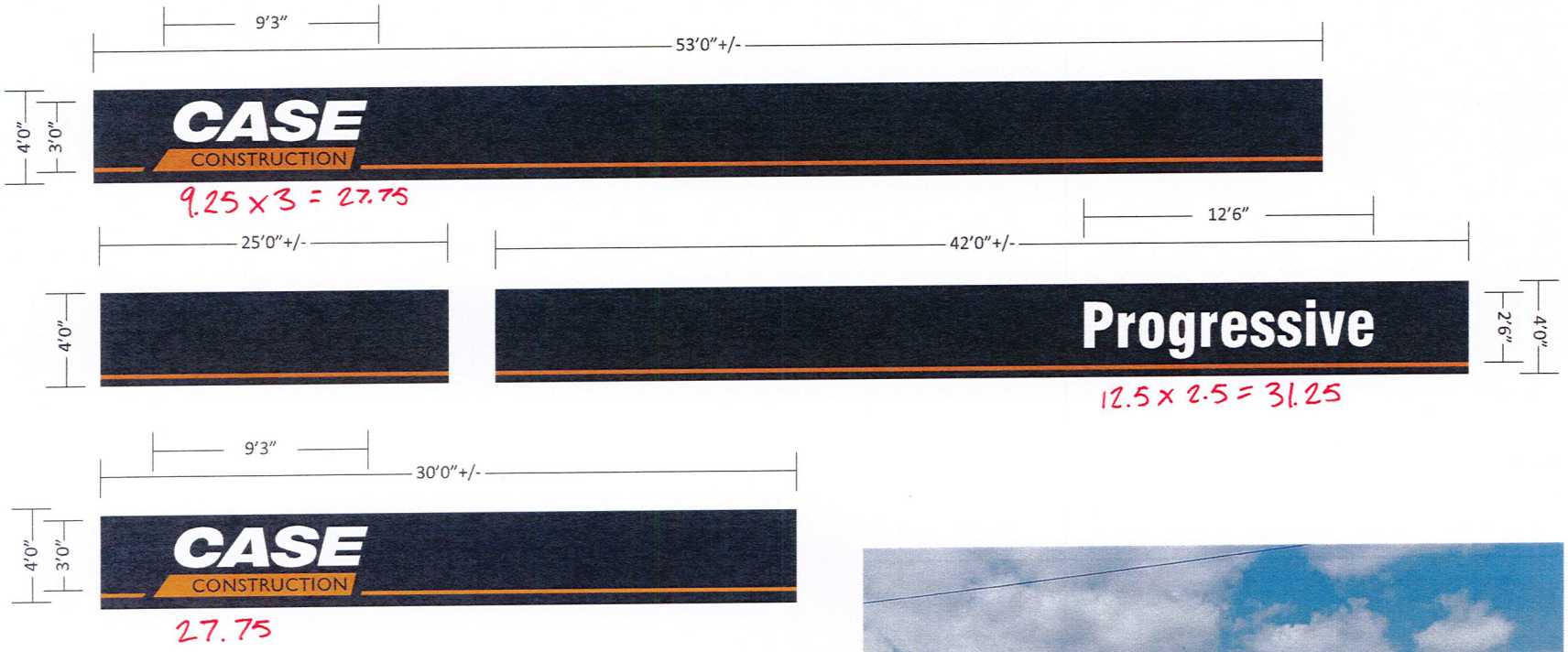
Monument Sign = 150 SF

↳ Height 15 Ft → Within Parameters of Freestanding sign in Interstate Sign Zone.

B

New Aluminum Wall Panel Sign - Qty = 4 panels

Flat aluminum composite face painted Pantone 426C with 1st surface vinyl graphics.
Built in sections.





CONCEPT VIEW

GIBKO SIGNS
"The Custom Manufacturing Sign Company"
471 NW Main St · Bunkie, La. 318-346-2345

PRESENTATION DRAWING

Project ID#
GST-25-101979 - Page 3 of 3

Client: PTI

Location:
PROGRESSIVE TRACTOR
22576 INT 30 FRONTAGE RD.
BRYANT, AR 72022

Project Manager: T. Bordelon

Date: 10/29/25

Revision:

Description:
Provide and install facia panel wall sign set.

COLOR SCHEME

- 7725-105 Harvest Gold
- Pantone 426C
- 7725-20 White

"THIS SIGN IS INTENDED TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 600 OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER APPLICABLE LOCAL CODES. THIS INCLUDES PROPER GROUNDING AND BONDING OF THE SIGN."

Primary wires provided by customer. Sign voltage based upon 120v.

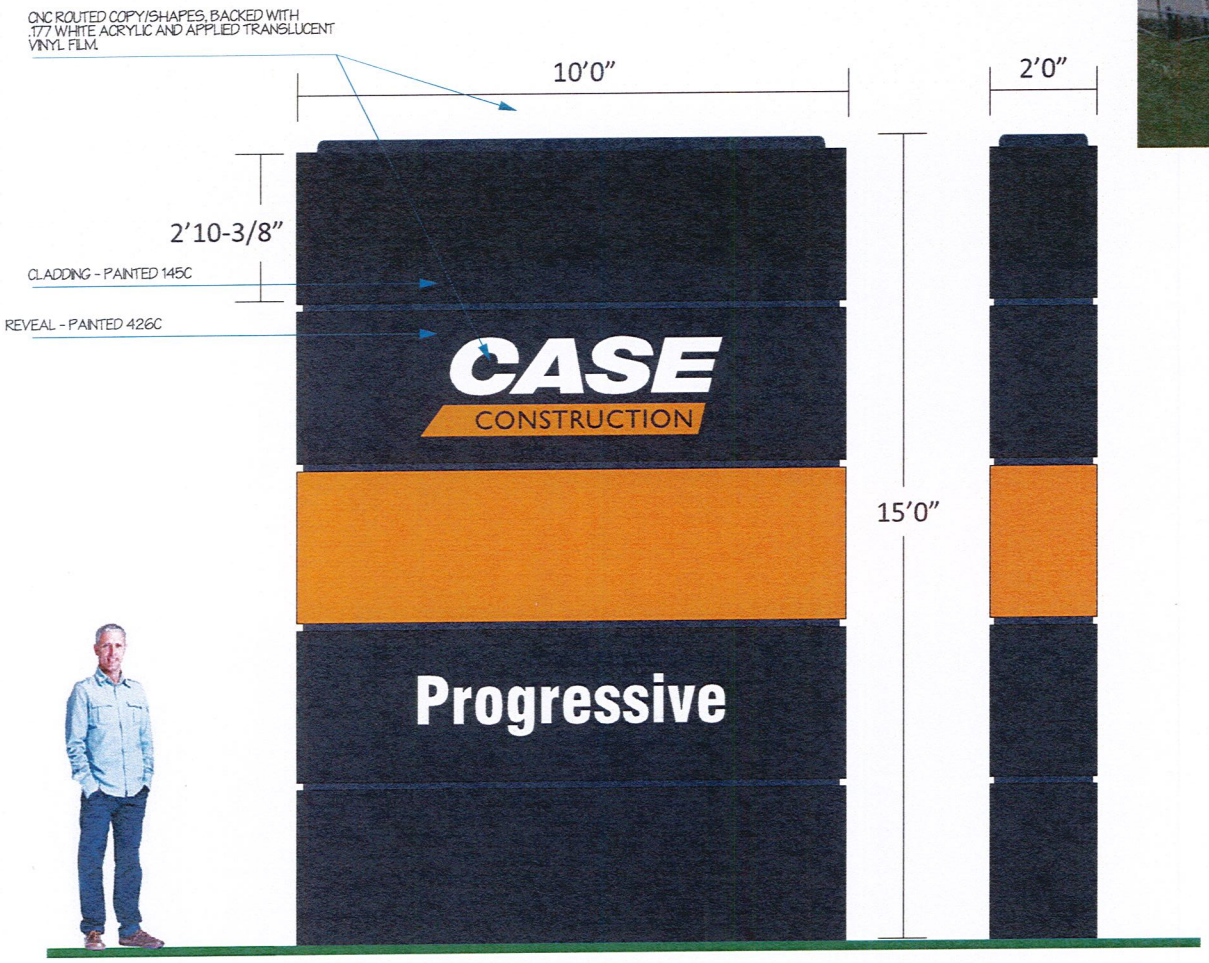
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Customer Approval:

A New Illuminated D/F Monument Sign - Qty = 1

Routed aluminum faces, backed with white acrylic. Aluminum cabinet and cladding, painted. White led internal illumination. Existing Single Pole steel support.





GIBKO SIGNS
"The Custom Manufacturing Sign Company"
471 NW Main St · Bunkie, La. 318-346-2345

PRESENTATION DRAWING

Project ID#
GST-25-101979 - Page 2 of 3

Client: PTI

Location:
PROGRESSIVE TRACTOR
22576 INT 30 FRONTAGE RD.
BRYANT, AR 72022

Project Manager: T. Bordelon

Date: 11/10/25

Revision:

Description:
Provide and install one new illum. monument sign.

COLOR SCHEME

- 3630-3572 Power Tan
- Pantone 426C
- White Acrylic

"THIS SIGN IS INTENDED TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 600 OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER APPLICABLE LOCAL CODES. THIS INCLUDES PROPER GROUNDING AND BONDING OF THE SIGN."

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Customer Approval:

SITE - 22576 INTERSTATE 30 FRONTAGE RD.



SITE - LEGEND

GIBKO SIGNS
"The Custom Manufacturing Sign Company"
471 NW Main St Bunkie, La. 318-346-2345

PRESENTATION DRAWING

Project ID#
GST-25-101979 - Page 1 of 3

Client: PTI

Location:
PROGRESSIVE TRACTOR
22576 INT 30 FRONTAGE RD.
BRYANT, AR 72022

Project Manager: T. Bordelon

Date: 10/29/25

Revision:

Description:
Site - satellite view

"THIS SIGN IS INTENDED TO BE INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 600 OF THE NATIONAL ELECTRICAL CODE AND/OR OTHER APPLICABLE LOCAL CODES. THIS INCLUDES PROPER GROUNDING AND BONDING OF THE SIGN."

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Customer Approval:

2919 N Reynolds Rd

American National

Commercial Real Estate
Due Diligence Management
3465 South Arlington Rd Suite E#183
Akron, OH 44312
866.290.8121
www.amnational.net

ALTA/NSPS Land Title Survey

2919 N Reynolds Rd, Bryant, AR

Surveyor Certification

Pizza Hut

2919 N Reynolds Rd
Bryant, AR 72022
County of Saline

To: Cressler & Bryant Prop., LLC; 2919 Reynolds, LLC; The American National Bank of Texas; Fidelity National Title Insurance Company; Fairchild Title Company; and American National, LLC

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1, 2, 3, 4, 6a, 6b, 7a, 7b1, 7c, 8, 9, 10a, 13, 14, 16, 17, 18, 19, 20, of Table A thereof. The fieldwork was completed on 25 October 2019.

Robert Paul Bannerman, PLS

Land Surveyor Number: 1512
In state of Arkansas
Date of Plat or Map: 08 October 2019
Date of last revision: 07 November 2019
Date of second revision: 11 December 2019
Date of last revision: 13 January 2020

Network reference #20191374-1

Survey Prepared By:
All Terrain Surveying, LLC
7619 Parkmont Drive
Memphis, TN 38125
Survey Updates: surveys@amnational.net

Title Commitment Description

Lot 1, James Addition, as shown on plat of record in Saline County Plat Book 69, Page 14473

Notes:

1. The above description being the same Schedule A description in commitment for title insurance File No: 19-004426-180, Commitment Date: November 19, 2019, 08:00 am, issued by Fidelity National Insurance Company.

2. The above description mathematically closes.

Legend of Symbols & Abbreviations

- utility pole
- electrical pedestal
- C — overhead utility line
- light pole
- telephone splice box
- x — fence
- R recorded
- S surveyed
- BH building height
- handicap parking space
- parking space
- sewer manhole
- sewer clean out
- fire hydrant
- water valve
- water meter
- gas valve
- gas meter

Encroachment Statement

(A) No encroachments

ALTA/NSPS Surveyor's Notes

A2 Address 2919 North Reynolds Road, Bryant, Arkansas per Saline County GIS website

A4 Gross land area 33.758 ± square feet, being 0.77 acres

A10 There are no party walls on the subject property

A14 The site is located 175' ± North of the Reynolds Street intersection Loving Commercial Street and North Reynolds Road

A16 No observable evidence of current earth moving, building construction or building additions

A17 No known proposed changes in street right of way lines. No observable evidence of recent street or sidewalk construction or repairs

A18 No wetlands are located on the subject properties per the U.S. Fish & Wildlife Service National Wetlands Inventory website (http://www.fws.gov/wetlands/Data/Mapper.html). The owner provided no wetlands maps or studies and there were no wetlands flagged or marked at the time of the field survey for this site.

Other ALTA/NSPS Notes:

5 B II The property has direct access to North Reynolds Road a dedicated public right of way. The property has ingress and egress easement access to Office Park Road via instrument number 2001-30329 and ingress and egress easement access to Commerce Street via instrument number 2000-31181

5 F No cemeteries, graveyards or burial grounds observed on the subject property

Notes Corresponding to Schedule B

(A) Future Assessments of the Saline Water and Regional Water Distribution District
No documents

(B) No documents

(C) No documents

(D) No documents

(E) No documents

(F) No documents

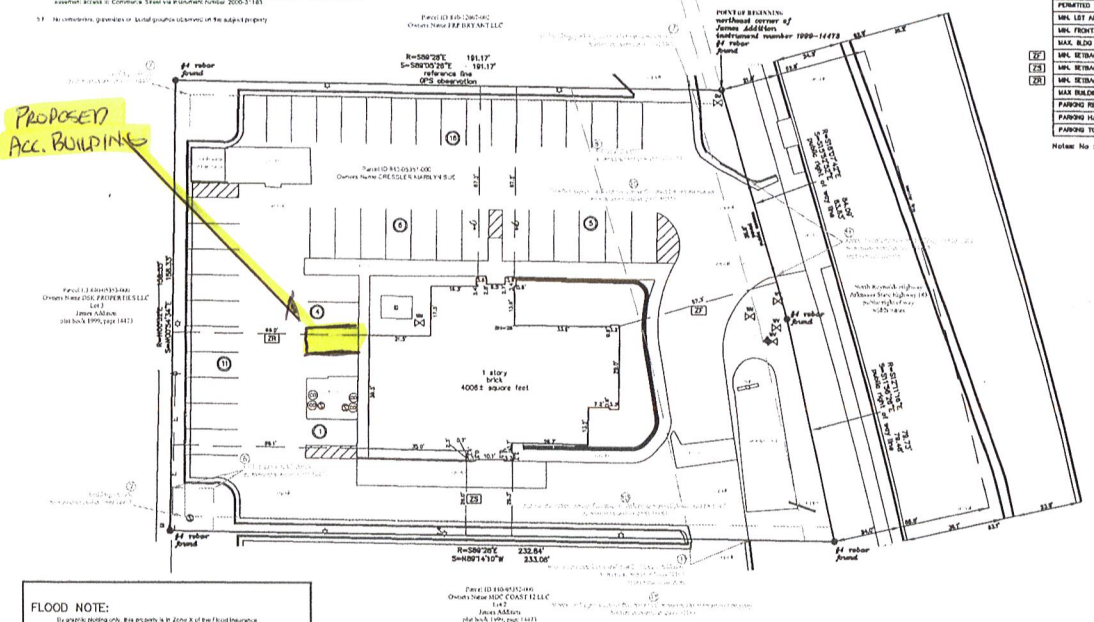
(G) No documents

13. Terms and provisions of a lease agreement dated April 2001 as evidenced by a Memorandum of Lease executed by Cressler and Bryant Properties, LLC ("Landlord") and Hire Island Pizza, L.L.C., an Arkansas limited liability company ("Lessee"), dated February 8, 2001 and recorded May 9, 2001 as Instrument No. 2001-13334 records of Saline County, Arkansas.
Blanket in nature

Zoning Information

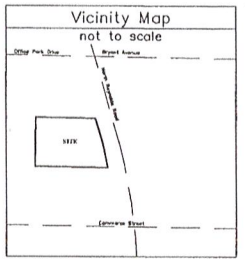
STATUS	Zoning Information		STATUS
ITEM	REQUIRED	OBSERVED	Contact Infor.
PERMITTED USE		restaurant	
MIN. LOT AREA		33758± sq. ft.	
MIN. FRONTAGE		183.31'	
MAX. BLDG COVERAGE		12%	
[2'] MIN. SETBACKS FRONT		97.3'	
[2S] MIN. SETBACKS SIDE		36.0'	Notes:
[2R] MIN. SETBACKS REAR		86.0'	Please note there may be a need for interpretation of the applicable zoning codes, we refer you to the City of Bryant for zoning laws and applicable codes.
MAX BUILDING HEIGHT		35'	
PARKING REGULAR		43	
PARKING HANDICAP		2	
PARKING TOTAL		45	

Notes: No zoning report provided.



Vicinity Map

not to scale

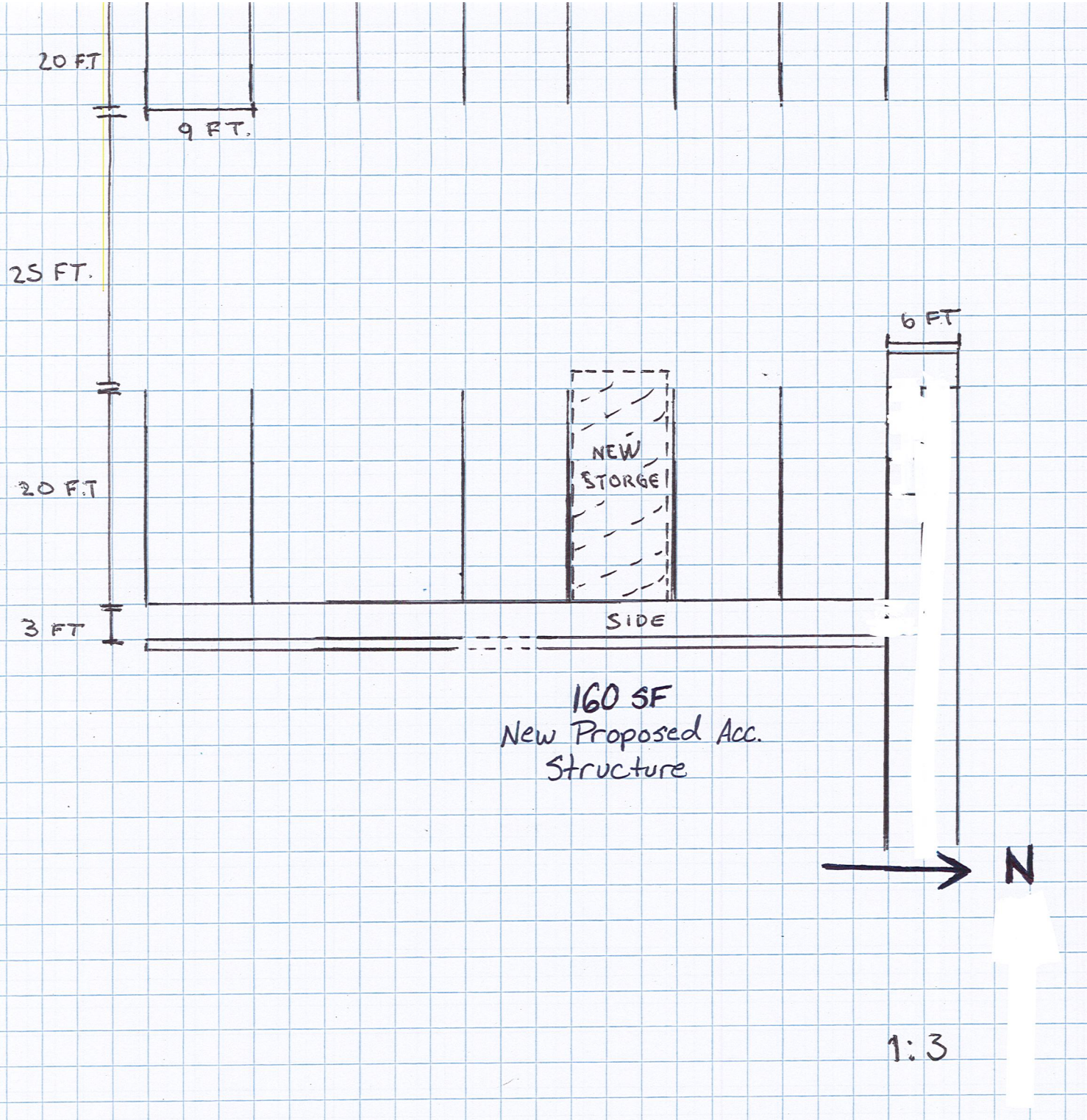


grid north

SCALE: 1" = 20'

FLOOD NOTE:

By graphic plotting only, this property is in Zone X of the Flood Insurance Rate Map 05125C0018D, Community Panel No. 0180, which bears an effective date of June 19, 2012 and is not in a Special Flood Hazard Area.


20 FT
9 FT.
25 FT.
6 FT
NEW STORGE
20 FT
3 FT
SIDE
160 SF
New Proposed Acc.
Structure
N
1:3


8'
4'
THE LOCAL
TAVERN
BURGERS · WINGS · FRIES
3429

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

SIGN PERMIT APPLICATION

Applicants are advised to read the Sign Ordinance prior to completing and signing this form. The Sign Ordinance is available at www.cityofbryant.com under the Community Development tab.

Note: Electrical Permits may be Required, Please contact the Community Development Office for more information.

Date: 11/13/2025

Sign Co. or Sign Owner

Name Greg Ducker
Address 4318 Maple St
City, State, Zip NLR AR 72118
Phone 501 992-6505
Email pseudo greg@yahoo.com

Property Owner

Name Zeyad Abdelhadi
Address ~~5311 Highway 5 N. Ste 206~~ 12021 Payt Wells Dr Apt 105
City, State, Zip ~~Bryant AR 72022~~ NLR 72113
Phone ~~501 515 5523~~ 316 207 5312
Email enjoyshawarma23@gmail.com

GENERAL INFORMATION

Name of Business Enjoy Shawarma
Address/Location of sign 5311 Highway 5 N. St 206
Zoning Classification C-2

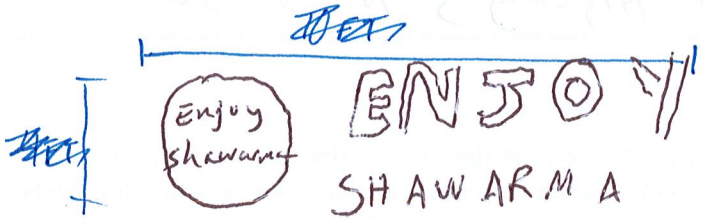
Please use following page to provide details on the signs requesting approval. Along with information provided on this application, **a Site Plan showing placement of sign(s) and any existing sign(s) on the property is required** to be submitted**. Renderings of the sign(s) showing the correct dimensions is also required** to be submitted with the application. A fifty dollar ($50) per sign payment will be collected at the time of permit issuance. According to the Sign Ordinance a fee for a sign variance or Alternative Signage Plan request shall be two hundred and fifty dollars ($250). Additional documentation may be required by Sign Administrator.

READ CAREFULLY BEFORE SIGNING

I Greg Ducker, do hereby certify that all information contained within this application is true and correct. I fully understand that the terms of the Sign Ordinance supersede the Sign Administrator's approval and that all signs must fully comply with all terms of the Sign Ordinance regardless of approval. I further certify that the proposed sign is authorized by the owner of the property and that I am authorized by the property owner to make this application. I understand that no sign may be placed in public right of way. I understand that I must comply with all Building and Electrical Codes and that it is my responsibility to obtain all necessary permits.

Use table below to enter information regarding each sign for approval. Please use each letter to reference each sign rendering in packet.

SIGN	**Type** (Façade, Pole, Monument, other)	**Dimensions** (Height, Length, Width)	**Sqft** (Measurement standards found on Pg.7 of Sign Code)	**Façade Width** (Linear Ft of building façade where wall sign is being installed)	**Height** To Top	To Bottom
A	Facade	36" H 4' rwid L 10'	9,40	20FT		
B						
C						
D						
E						
F						



40 SF Overall



BIG RED ROOSTER FLOW
Marmon Retail Solutions – Berkshire Hathaway
2 Northfield Plaza, Ste 250, Northfield, IL 60093
P: (847) 441-1818 F: (847) 592-9564

PROJECT LOCATION:

6101 HIGHWAY 5,
BRYANT , AR 72022

PROJECT OVERVIEW:

- A Site Map
- B Canopy Visuals
- C Dispenser Visuals
- D Main ID Visuals



SITE - EXISTING



SITE - PROPOSED

approval signature
I have reviewed the visuals within this document and

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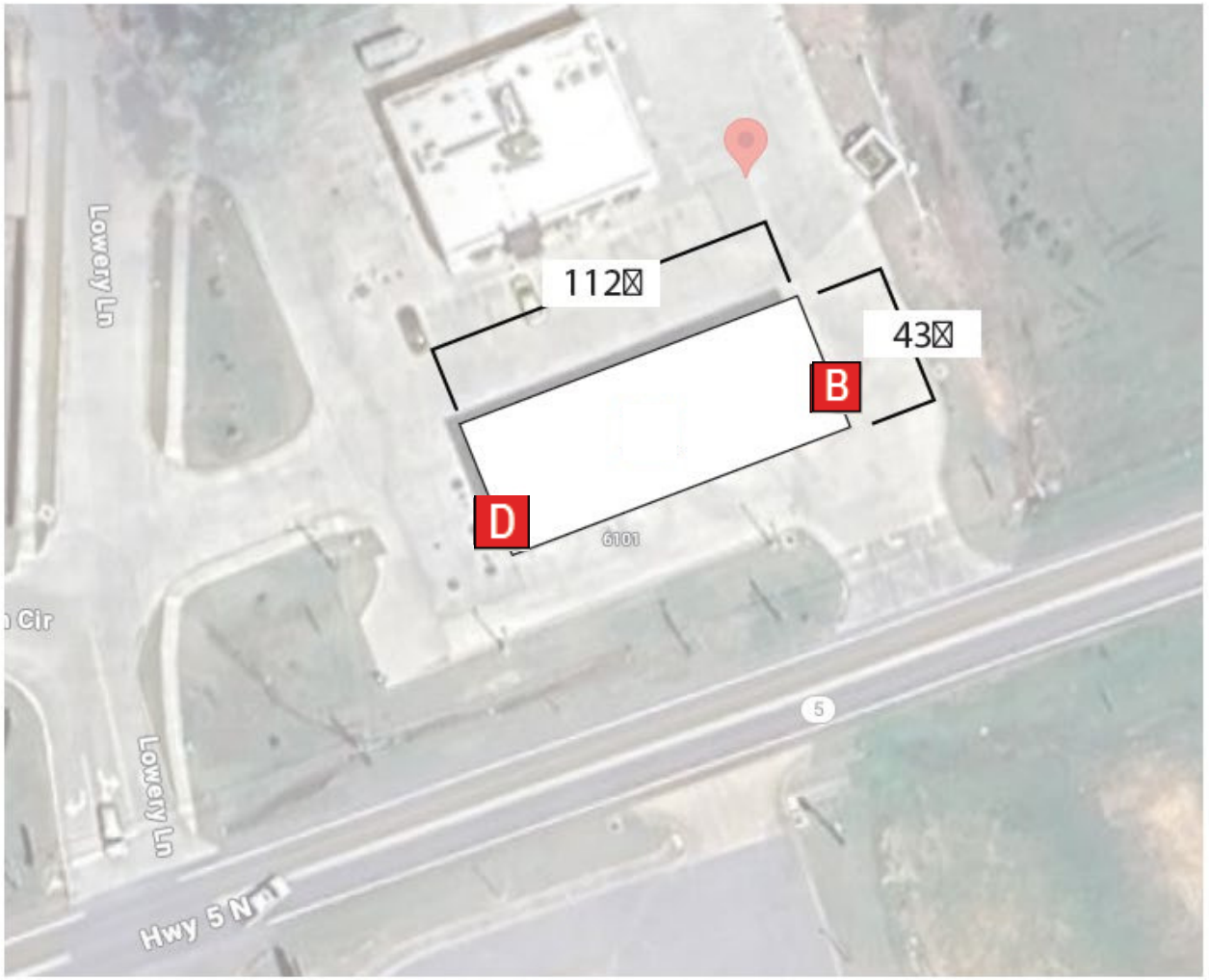
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Northfield, IL 60093
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SITE PLAN

B Canopy Logos

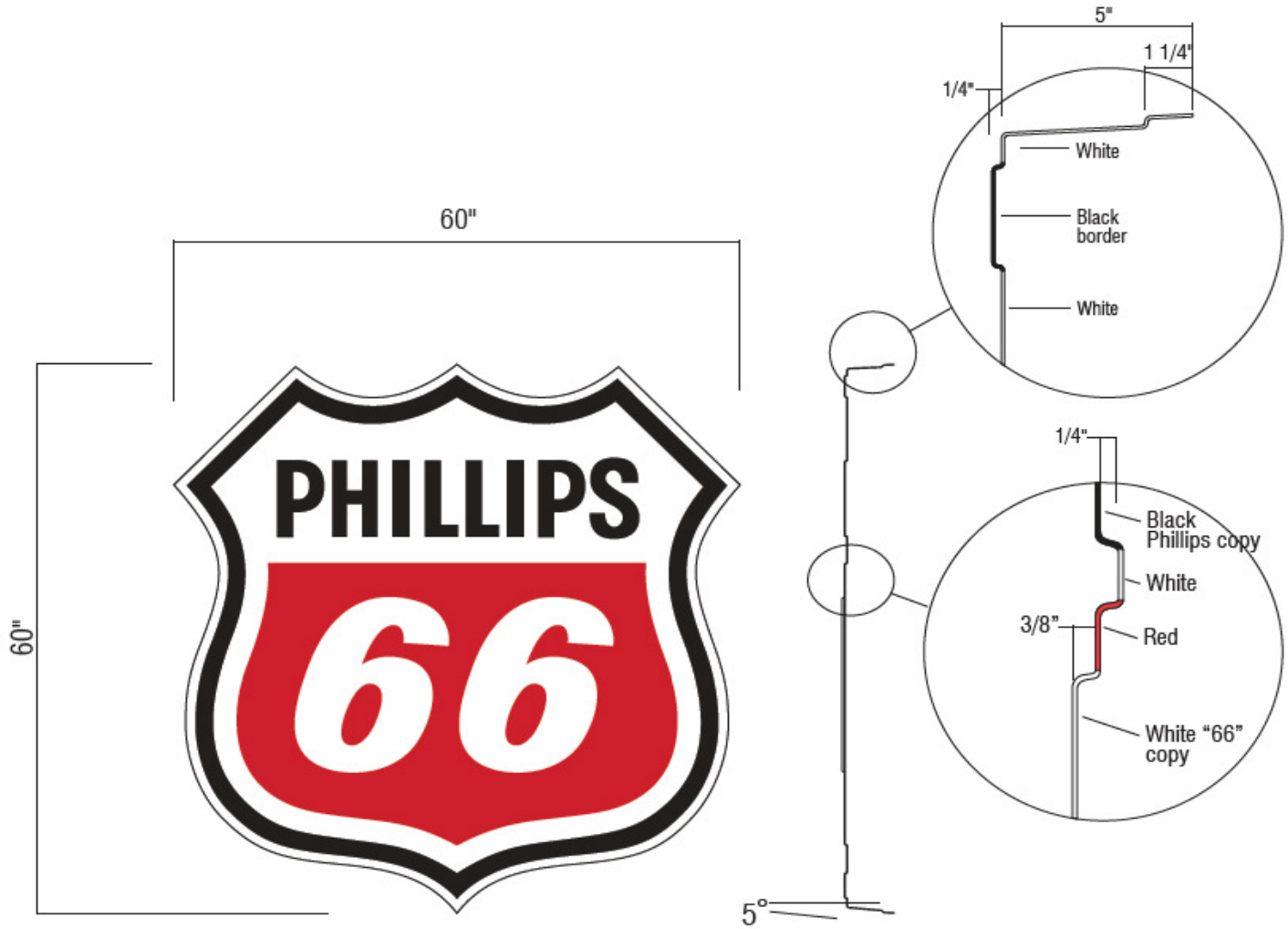
D Canopy Logos



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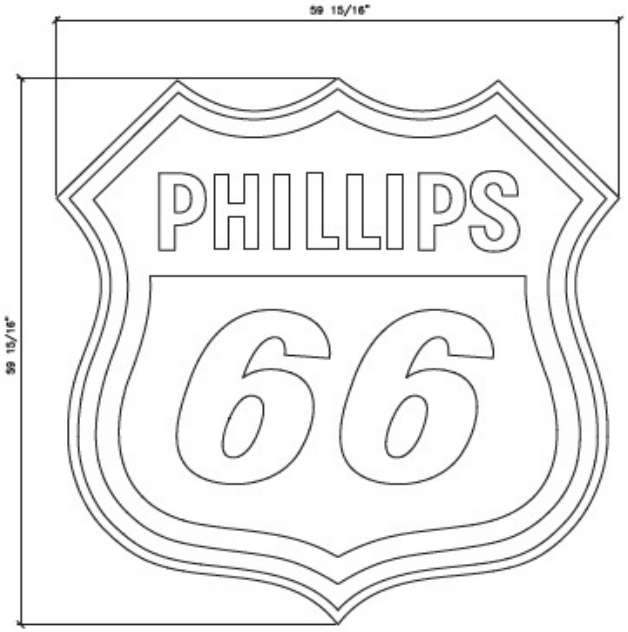
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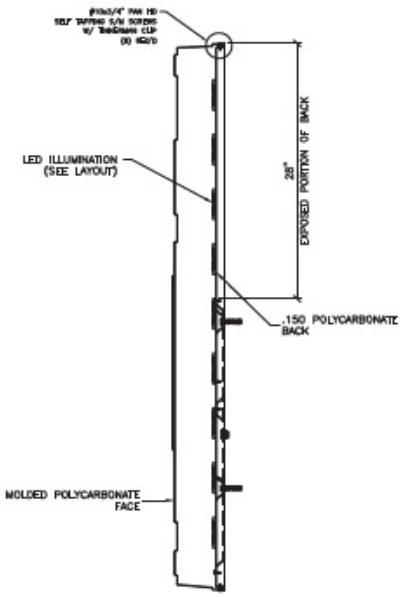
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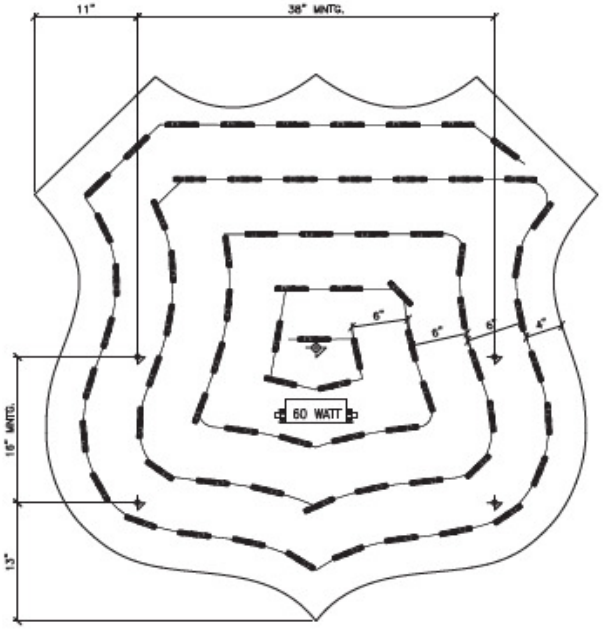
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ELEVATION VIEW
SCALE: 1"=1'-0"



SIDE VIEW
SCALE: 1"=1'-0"



74 MOD.

SIGN SPECIFICATIONS:

SIGN SIZE:
ACTUAL SIZE ... 59-15/16" H x 59-15/16" L
BOX AREA ... 24.9475 SQ.FT
APPROXIMATE WEIGHT ... T.B.D. LBS
DESIGNED WINDLOAD ... 110 MPH (3 SEC. GUST EXPOSURE C)
COMPLIENT w/ NATIONAL BUILDING CODES & STANDARDS
(IBC, UBC, BOCA, AISC, ASCE7, ACI, & ALUM. DSGN. MANUAL)

ELECTRICAL:
LED's ... SLOAN VL PLUS WHITE LONG
AMPS ... 1.0 TOTAL AMPS
CIRCUITS ... (1) 20
VOLTS ... 120v

1- VALUE LINE PLUS WHITE LONG LAID OUT (2) MODULES PER FOOT, 6" ON CENTER
2- EACH MODULE 60 POWER SUPPLY CAN RUN UP TO 130 WHITE LONG MODULES
3- LAYOUT BASED ON 6" CAN DEPTH
4- DIMENSIONS ARE IN INCHES UNLESS STATED OTHERWISE

ESTIMATED PRODUCT B.O.M. PER SIGN:
74 VALUE LINE PLUS WHITE LONG MODULES - 37"
1 MOD. 60 POWER SUPPLIES 120VDC (@ 1.0 AMPS 60WATTS ea.)
1 100FT ROLL OF JACKETED CABLE

ELECTRICAL / LED LAYOUT DETAIL VIEW
SCALE: 1"=1'-0"

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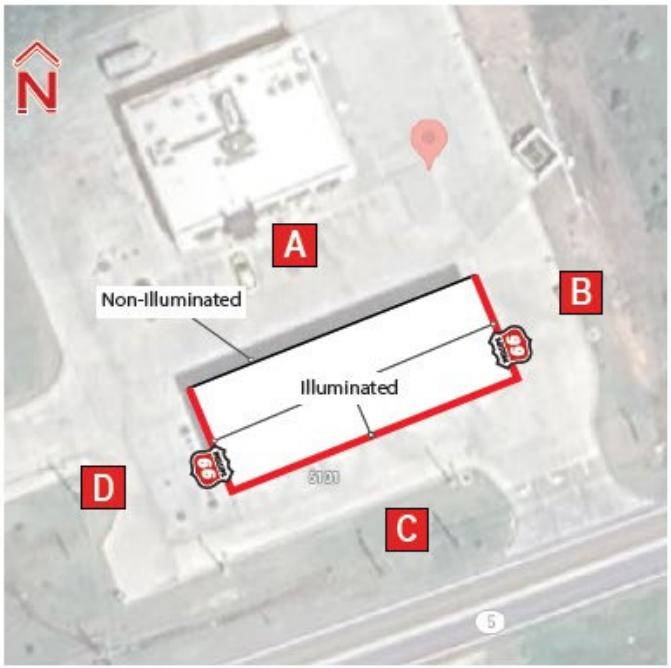
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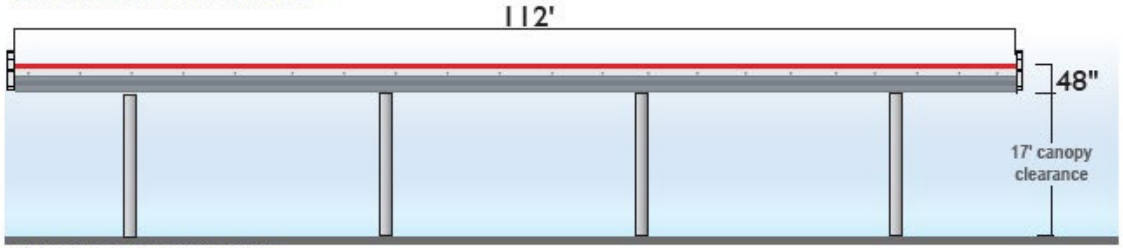
B CANOPY FASCIA

Marketer/Dealer: FROST OIL CO

Site Name: GASSY'S FUEL STATION 2



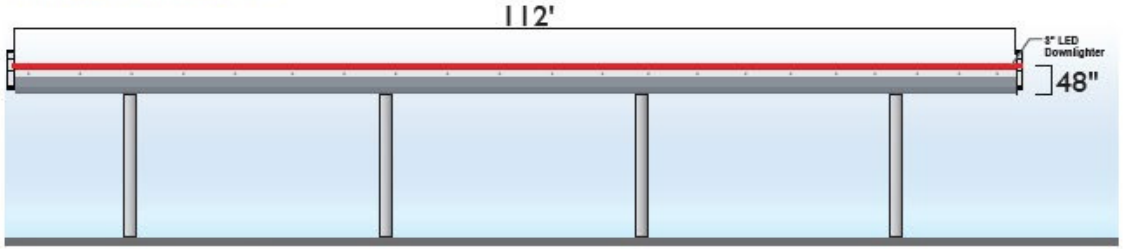
ELEVATION A: NON-ILLUMINATED



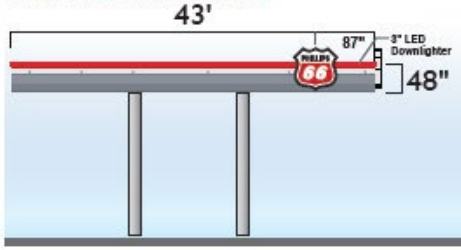
ELEVATION B: ILLUMINATED



ELEVATION C: ILLUMINATED



ELEVATION D: ILLUMINATED



***Note:**

LED canopy light bar (or downlighter) is not in the standard Signature image package and is not included in the imaging allowance provided by Phillips 66. Any items outside the standard package will be settled with the customer directly.

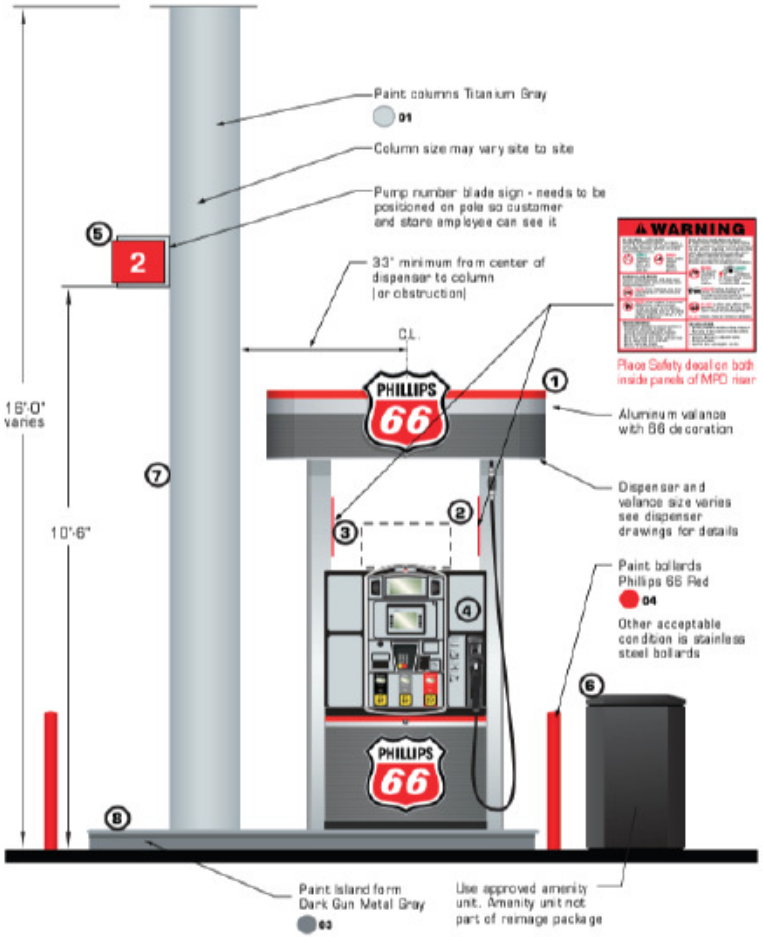


CANOPY PERSPECTIVE

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Phillips 66 Rivet brings a bright new appearance to the fueling area that complements the Main ID sign (MID) and canopy image. There are several elements of the fuel islands that are required for Phillips 66 Rivet standard image package as shown below.

All dispensers must comply with the "minimum site requirements" as detailed on BizLink. For example this includes that pumps must have Card Reader in Dispenser (CRINDS) and remain clean and free of unprofessional discretionary signage. These requirements are regularly measured as part of the Mystery Shop program.

1 Valance

Aluminum decorated valance. All valances have rounded corners. No square corners are permitted on the valance. Follow visual graphics as defined in visual standards. Approved Phillips 66 supplier has complete art work for all valance sizes to fit all dispensers.

2 Pump Topper Frame

Pump toppers are horizontally centered in between the pump's uprights.

3 Safety Decal

The Consolidated Safety Decal is a brand requirement. It contains the latest API and NFPA recommended safety notices. Mounted to bothe inside faces of risers.

4 Dispensers

See dispenser detail in the Phillips 66 Rivet Forecourt Image Standards section of this document. Gray poly-carb overlays are applied to the bezel area of dispenser. This is part of the new reimage program. Add pump numbers to the pump itself.

5 Pump Number Blade sign

Should be visible for both the consumer and convenience store. Flag signs are mounted on the canopy columns. Decals are installed on dispenser bezels.

6 Amenity Units

Use approved amenity units. Should be located near each dispenser. May be charcoal, gray, or dark grey. There is an approved Column mounted windshield bucket available. New amenity units are not part of the Phillips 66 Rivet reimage package.

7 Canopy columns

Should have a clean and uncluttered appearance. Columns should be cleaned, repaired if needed, primed, and painted with approved color.

May not be used to post prices or advertising.

Columns that are unpainted brick or natural stone will be excused from the Phillips 66 Rivet column color and does not need a required exception. All other canopy column materials will be imaged to Titanium Gray or must be approved through the exception process.

Painting instructions:
Paint column Titanium Gray from bottom of column to roof deck of canopy.

8 Curbs, Island Forms & Bollards

All bollards in the fueling area will be painted Phillips 66 Red or leave if stainless steel. Island forms are painted Dark Gun Metal Gray.

Natural concrete and stainless steel are acceptable substitutes to painting.

Horizontal surface of the island must be natural concrete (preferred) or paint Dark Gun Metal Gray or can be tiled (natural stone).

Bollards outside the fueling area should be painted a consistent color. Color may match Phillips 66 Rivet fuel image or building image, as desired. No stripes.

For curbs outside the fueling area natural concrete is preferred to paint. If painted, it should be Dark Gun Metal Grey.

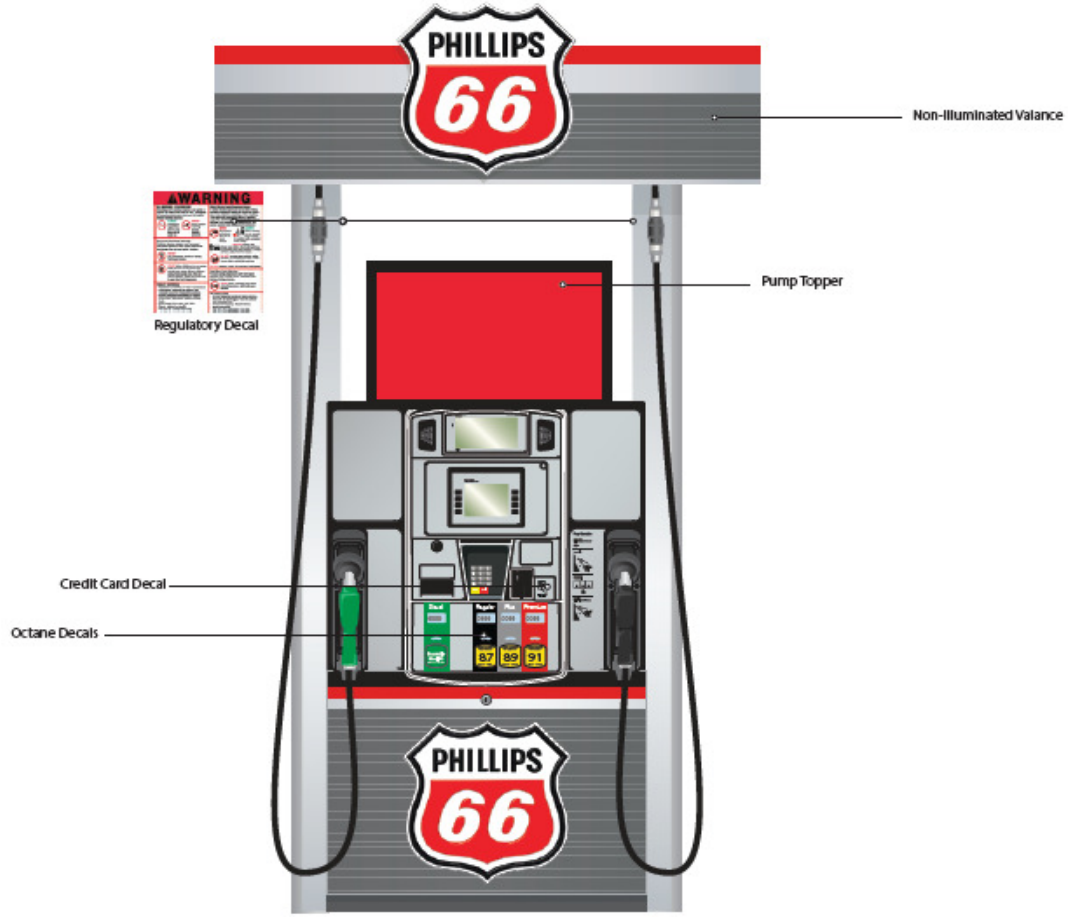
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WARNING:The following example is for visual purposes only.



Existing



Dispenser Type: Gilbarco Encore 500/700S 3+1

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