

# **Bryant Development and Review Committee Meeting**

Boswell Municipal Complex - City Hall Conference Room

210 SW 3rd Street

Date: February 03, 2023 - Time: 9:00 AM

Call to Order

**Old Business** 

**New Business** 

1. Shady Pine Plaza - 2228 Shady Pine Ln

Richardson Engineering - Requesting Discussion and Comments For Site Plan

• 0657-PLN-01.pdf

#### 2. Cypress Valley Phase 2 - Final Plat

Hope Consulting - Requesting Recommendation for Approval

- 0658-LTR-01.pdf
- <u>0658-MTN-01.pdf</u>
- 0658-BND-01.pdf
- 0658-PLN-02.pdf
- <u>0658-PLT-01.pdf</u>
- <u>0658-PLN-01.pdf</u>

### 3. Aria Oil C-Store - Lowery and HWY 5

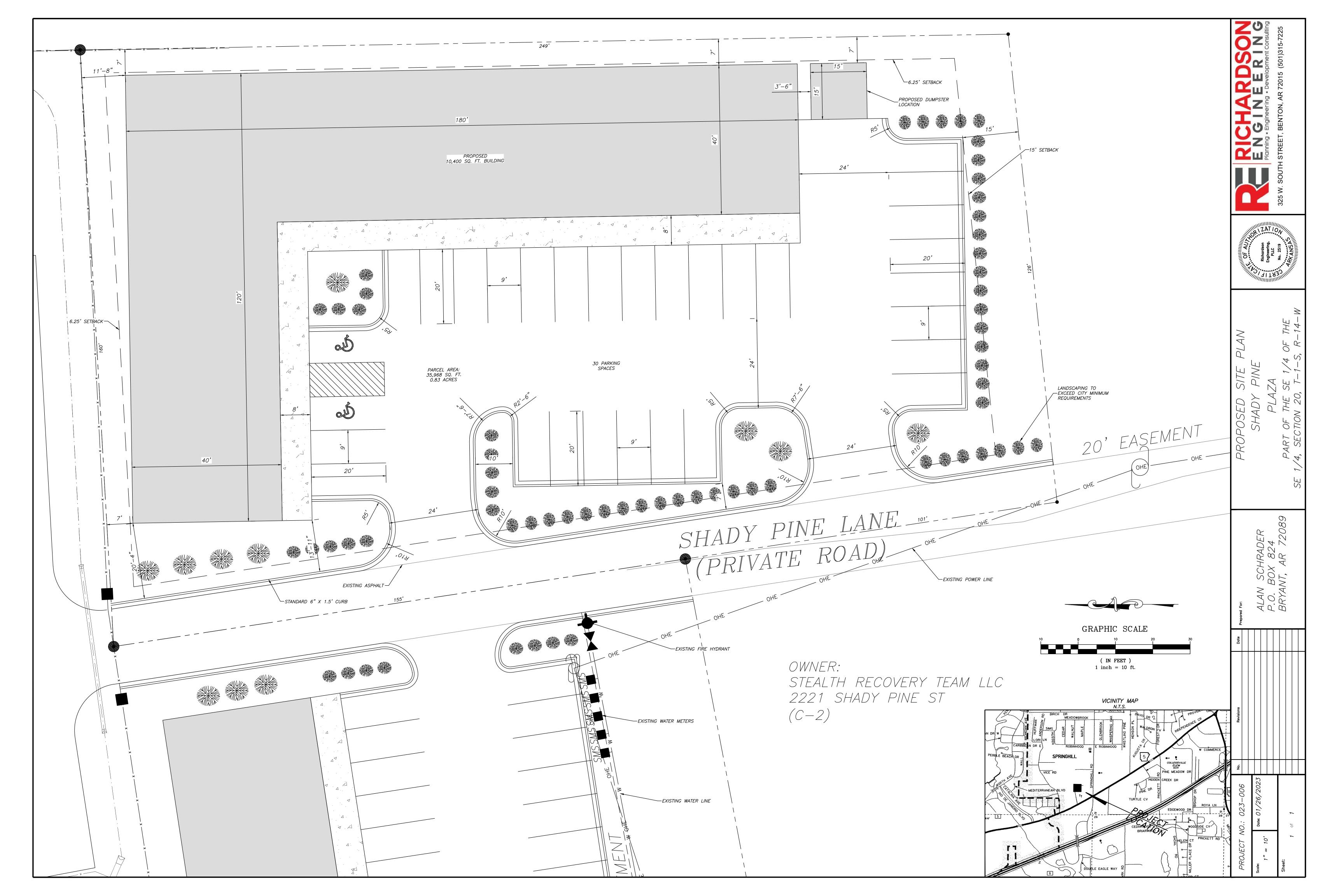
Hope Consulting - Requesting Site Plan Approval

- · 0468-APP-01.pdf
- 0468-DRN-01.pdf
- <u>0468-LTR-01.pdf</u>
- 0656-PLN-01.pdf

#### **Staff Approved**

**Permit Report** 

**Adjournments** 





January 25, 2023

Truett Smith City of Bryant 210 Southwest Third St., Bryant, AR 72022

RE: Cypress Valley Phase 2 Final Plat

Dear Truett:

On behalf of the property owner, Hope Consulting is requesting the review of the Final Plat and As-Builts of Cypress Valley Phase 2.

The developer of this project is Gary Kennedy of Kennedy Development, LLC.

Gary Kennedy braggconstruction@yahoo.com 501-626-6202

Please feel free to contact me with any questions or concerns or if I can be of any further assistance.

Sincerely,

Ionathan Hope

129N. MAIN ST. BENTON, ARKANSAS 72015 501-315-2626 WWW.HOPECONSULTING.COM



Stormwater Infrastructure Maintenance Plan Agreement

Gary Kennedy Kennedy Development, LLC braggconstruction@yahoo.com 501-626-6202

#### Cypress Valley Phase 2

All maintenance basin maintenance plans shall contain or uphold, without limitation, the following provisions:

- (1) A description of the property on which the stormwater management facility is located and all easements from the site to the facility;
- (2) Size and configuration of the facility;
- (3) A statement that properties which will be served by the facility are granted rights to construct, use, reconstruct, repair and maintain access to the facility;
- (4) A statement that each lot served by the facility is responsible for repairs and maintenance of the facility and any unpaid ad valorem taxes, public assessments for improvements, and unsafe building and public nuisance abatement liens charged against the facility, including all interest charges together with attorney fees, costs, and expenses of collection. If an association is delegated these responsibilities, then membership into the association shall be mandatory for each parcel served by the facility and any successive buyer. The association shall have the power to levy assessments for these obligations, and all that unpaid assessments levied by the association shall become a lien on the individual parcel;
- (5) All stormwater facilities must be designed to minimize the need for maintenance, to provide easy vehicle and personal access for maintenance purpose, and be structurally sound. It shall be the responsibility of the applicant to obtain any necessary easements or other property interested to allow access to the facilities for inspection or maintenance;
- (6) Detention/retention areas, earthen berms, intake structures, piping, discharge structures, trickle channels, spillways, pipe flares, weirs and fencing shall be regularly inspected, maintained and repaired to ensure their proper operation and to prevent the creation of any hazards or nuisances;
- (7) Major deposits of sediment shall be removed from the detention/retention area on an annual basis or after any extreme storm event. Excavated materials shall be properly disposed of off-site. Every five years the detention area(s) shall be

surveyed to confirm that the original as-constructed contours have been maintained;

- (8) Every three months piping and outlet structures shall be inspected and cleared of any accumulated debris;
- (9) Erosion in detention/retention areas shall be promptly repaired and stabilized with appropriate Best Management Practices (BMP's);
- (10) Detention/retention area shall be mowed during the growing season May through September to maintain the turf height of 6-inches or less. Any brush or trees that may grow within the detention areas bottom, slopes or banks shall be removed;
- (11) Litter and foreign materials shall be removed from the detention area(s) weekly. Large or noxious pieces of litter shall be removed immediately. The area(s) shall be inspected visually after rainfall events in excess of 1" in 24 hours;
- (12) Inspections of overall detention/retention area(s) and detention/retention components shall occur monthly with their conditions noted on an inspection form. If any remedial action is required, it should be noted and corrected;
- (13) All inspection forms must be retained on-site, including the "As-Built" drawings and photographs of the improvements in their original condition;
- (14) Items 1-13 shall be listed on the Stormwater Infrastructure Maintenance Plan Agreement.

(15) Inspection forms for Stormwater Infrastructure components are required. (An

example of inspection forms are attached.)		
Gary Kennedy	 signature	
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date



#### City of Bryant Stormwater Department

1019 SW 2<sup>nd</sup> St.

Bryant, Arkansas 72022 Office (501) 943-0453; Fax (501) 943-0851

#### WARRANTY BOND PROCEDURES

#### For Stormwater Infrastructure Public & Private

These procedures are applicable to Stormwater Infrastructure that is to be dedicated to the public and maintained by the City of Bryant and for Private Stormwater Infrastructure that will be connected to overall City of Bryant Stormwater Infrastructure.

In accordance with Ordinance No. 2019-32 Article V., The City of Bryant Stormwater Department will require a Maintenance Warranty Bond as part of the process for approving Stormwater Infrastructure. The purpose of the bond is to cover the cost of correcting deficiencies not addressed by the developer during the warranty period and to insure no adverse effects will occur to the overall function of the City of Bryant Stormwater Infrastructure.

#### ORDINANCE 2019-32 ARTICLE V. STORMWATER INFRASTRUCTURE WARRANTY BOND.

- 1. Stormwater Infrastructure Warranty Bond. A one year maintenance bond against defects in workmanship shall be required by the Administrative Authority for any portion of the stormwater management facilities privately owned or stormwater management improvements dedicated to the city, said maintenance bond is to be provide by cashier's check, irrevocable letter of credit or acceptable surety authorized to do business in the State of Arkansas. All forms of maintenance bonds shall be subject to approval by the Administrative Authority. The value of the bond shall be an amount equal to 100% of the value of the privately owned stormwater management facilities or stormwater system improvements being privately owned or dedicated to the city. A cost list must be provide to prove and verify the amount of the maintenance bond. The cost list shall include cost of stormwater infrastructure construction and components (piping, weirs, spillway structures, junction boxes, trickle channels, inlets, grates, riprap and site stabilization).
- 2. Procedurals. These procedures are applicable to Stormwater Infrastructure that is to be dedicated to the public and maintained by the City of Bryant and for Private Stormwater Infrastructure that will be connected to overall City of Bryant Stormwater Infrastructure.
  - In accordance with Ordinance No. 2019-32 Article V., City of Bryant Stormwater Department will require a Maintenance Warranty Bond as part of the process for approving Stormwater Infrastructure. The bond will be equal to 100% of the cost of construction of the Stormwater Infrastructure System at the time of completion of the Stormwater Infrastructure System. The purpose of the bond is to cover the cost of correcting deficiencies not addressed by the developer during the warranty period and to insure no adverse effects will occur to the overall function of the City of Bryant Stormwater Infrastructure.
- 3. Determining the Maintenance Warranty Bond Amount. During the final inspection process, the City of Bryant Stormwater Department will verify and approve the Warranty Bond estimate for all Stormwater Infrastructure within the proposed unit using:

- (a) The Warranty Bond cost list estimate shall be presented to the City of Bryant Stormwater Department by formal letter. The formal letter shall include project name, developer contact information and "Cost List for Construction of Stormwater Infrastructure Components" including but not limited to piping, weirs, spillway structures, junction boxes, trickle channels, riprap, inlets, grates, weirs and site stabilization;
- (b) The Bond amount will need to be re-evaluated if more than 18 months have passed from the time of the estimate review to the time of providing the bond to the City of Bryant Stormwater Department;
- 4. Submitting the bond to the city. After requesting a final inspection of the Stormwater Infrastructure and approval of completion by the City of Bryant Stormwater Department, the developer must provide the City of Bryant Stormwater Department with a bond equal to amount determined in Article V. Section 3. of this document. The Bond must be for a period of 12 months and be a financial guarantee in the form of a bond, letter of credit, or trust agreement executed by a surety company authorized to do business in the State of Arkansas. The Bond must be payable to the City of Bryant Public Works Department, conditioned that the developer will maintain the Stormwater Infrastructure in accordance with the Stormwater Management Manual Ordinance No. 2019-31 and the Stormwater Management Ordinance No. 2019-32.
- 5. Warranty period. After the Stormwater Infrastructure construction passes the final inspection—and the one year warranty bond is received, the one year maintenance warranty period will begin. The one-year warranty period will start on the date the Maintenance Warranty Bond is received and accepted. There shall be no separate warranty period start dates for Stormwater Infrastructure within a single unit.
- 6. Follow-up inspection. The City of Bryant Stormwater Department will conduct a follow-up inspection within the tenth month of the warranty period but in no event any later than two months prior to the bond expiring. The City of Bryant Stormwater Department will issue a punch list of deficiencies that will be sent to the developer or contractor for the unit. If no deficiencies are found and camera video passes inspection, release of the bond will proceed as set out and as listed in Article V. Section 10 of this document.
- 7. Correcting Deficiencies and Camera Video. The developer must contact the City of Bryant Stormwater Department at least 24 hours before correcting any decencies or performing camera video. The developer shall also camera all stormwater infrastructure to ensure that there is no sediment laden infrastructure. Upon notification by the developer that all deficiencies have been corrected and camera video has been completed, the City of Bryant Stormwater Department will re-inspect to verify compliance with correction of deficiencies and reviewing the camera video to assure the stormwater infrastructure is not sediment laden or defective.
- 8. Calling in the bond. If the developer does not contact the City of Bryant Stormwater Department, deficiencies have not been corrected and the stormwater infrastructures has not been camera videoed by the end of the 11th month or one (1) month prior to the expiration of the Bond, the City of Bryant Stormwater Department will prepare an estimate and list of work to be done to bring the stormwater infrastructure into compliance. The City of Bryant Stormwater Department will contact the bonding agency to submit the cost estimates for correcting the deficiencies.
- 9. Requesting Acceptance. Once all deficiencies have been corrected, the City of Bryant Stormwater Department will prepare the paperwork for the Stormwater Infrastructure within the unit accepted for maintenance by the City of Bryant 'if dedicated', or paperwork will be prepared to release the bond if infrastructure is a private unit.

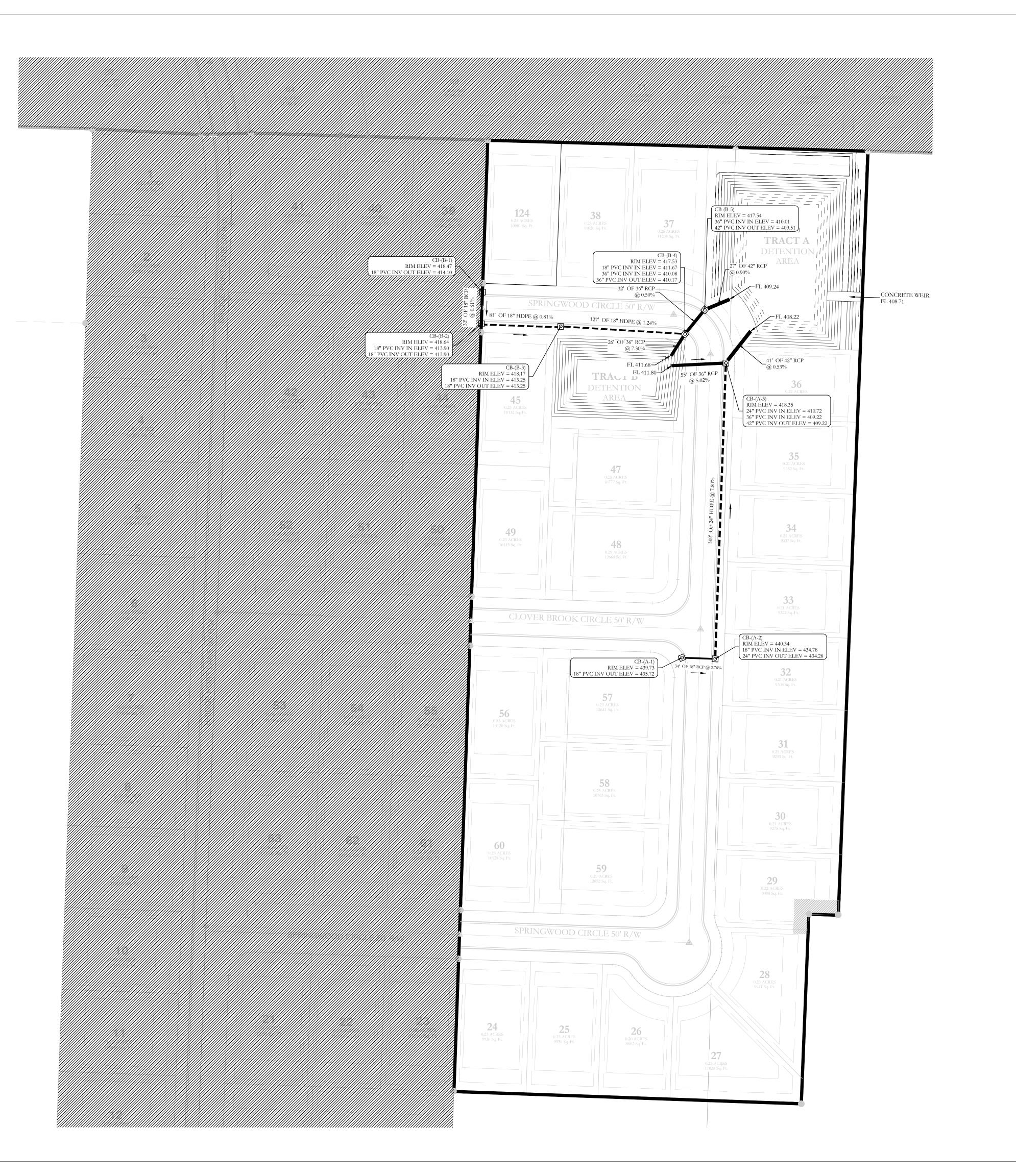
10. Bond Release. The Bond will be released once the City of Bryant has accepted the Stormwater Infrastructure for maintenance 'if dedicated', and an acceptance letter has been written by the City of Bryant Public Works. If all compliance has been met with a private Stormwater Infrastructure Unit(s) then the City of Bryant Stormwater Department shall contact the developer by formal letter and release the bond. No partial release of the Bond will be allowed at any time.

# ATTENTION: DO NOT FILL OUT INFORMATION BELOW UNTIL YOU ARE PRESENT WITH A NOTARY PUBLIC. (THIS DOCUMENT MUST BE NOTARIZED)

By filling out the information below, signing and dating, you are hereby acknowledging that you have read, understand and agree to adhere to the Stormwater Infrastructure Warranty Bond Procedures and Processes listed in this document. You the applicant are hereby responsible for upholding, without limitation, the Stormwater Infrastructure Warranty Bond Procedures.

CYPRE	SS VALLEY PHASE 2					
Name o	Name of Project Site/Addition					
GARY KENNEDY						
Applicant Name (Print)	Applicant Name (Signature)					
KENNEDY DEVELOPMENT, LLC	1229 HOT SPRINGS HWY BENTON ,AR					
Applicant Business Name	Applicant Mailing Address					
	Notarization					
State of						
County of						
Subscribed and sworn before me, a Notary Public	c, on this day of					
Signature of Notary	My commission expires:					
Notary Seal Stamp Here:						





CONSULTING
ENGINEERS + SURVEYORS

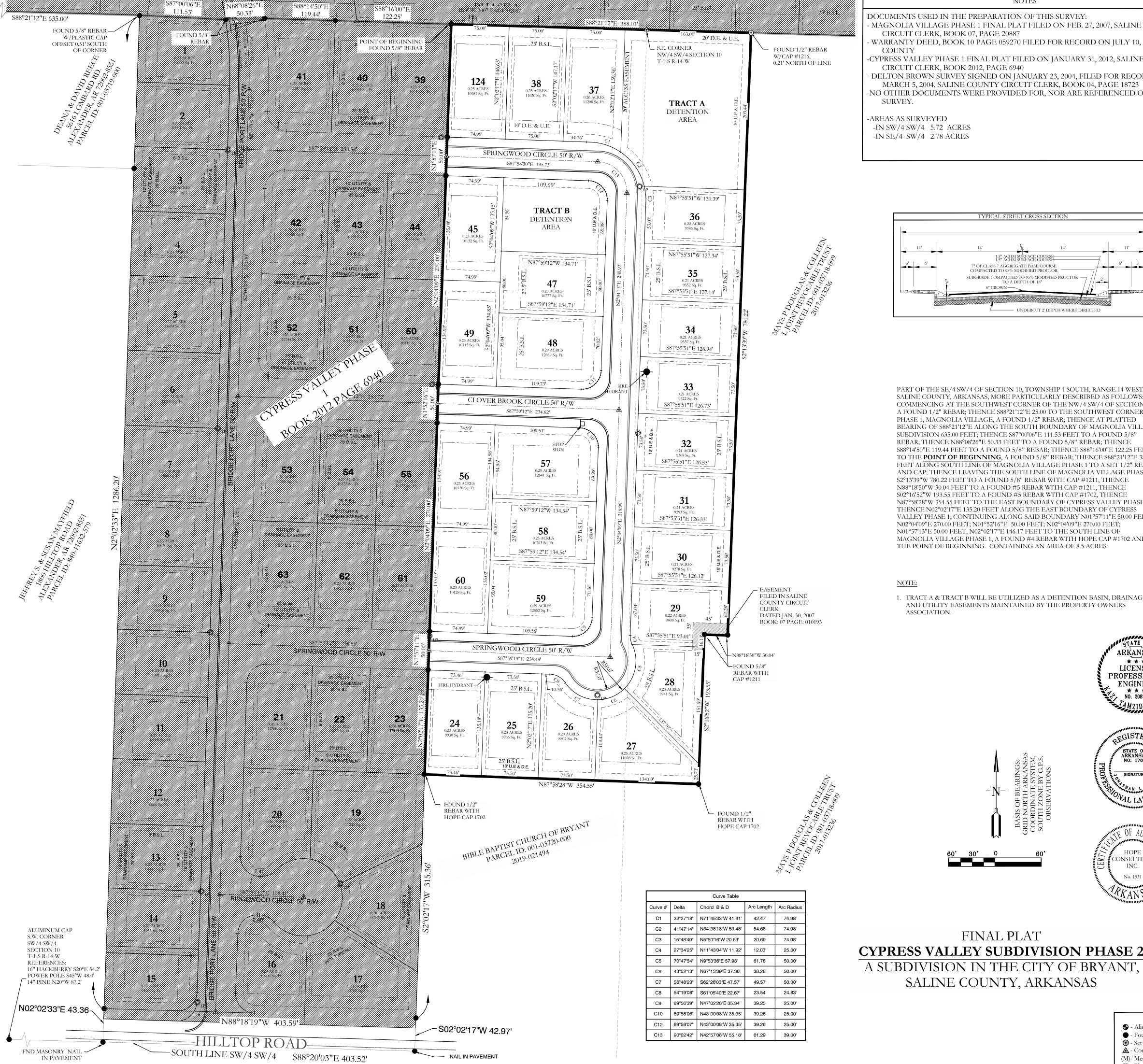
129 N. Main Street, Benton, Arkansas 72015 PH. (501)315-2626 FAX (501) 315-0024 www.hopeconsulting.com

FOR USE AND BENEFIT OF:

CYPRESS VALLEY

DRAINAGE AS-BUILTS
CYPRESS VALLY, PHASE 2
A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

DATE:	01	/17/2023	3	C.A.D.	BY:			DRA	WING NU	MBER:
REVISED:				CHECKE	O BY:				21	0421
SHEET:				SCALE:	1"=	= 50'			∠ 1 <sup>-</sup>	-0721
500		01S		14W	0	10	300	)	62	1762



FOUND 1/2" REBAR

- S88°21'12"E 25.00'

W/CAP #128

– POINT OF COMMENCEMENT

1/2" REBAR N78°51'49"E 14.43'

4.1' EAST OF PAVEMENT EDGE

FND 1/2" REBAR W/CAP

NW/4 SW/4 SECTION 10

POWER POLE S65°E 18.0'

S.W. CORNER

T-1-S R-14-W

REFERENCES:

NOTES

DOCUMENTS USED IN THE PREPARATION OF THIS SURVEY:

- MAGNOLIA VILLAGE PHASE 1 FINAL PLAT FILED ON FEB. 27. 2007. SALINE COUNTY

CIRCUIT CLERK, BOOK 07, PAGE 20887 WARRANTY DEED, BOOK 10 PAGE 059270 FILED FOR RECORD ON JULY 10, 2010 SALINE

-CYPRESS VALLEY PHASE 1 FINAL PLAT FILED ON JANUARY 31, 2012, SALINE COUNTY CIRCUIT CLERK, BOOK 2012, PAGE 6940

1.5" ACHM SURFACE COURSE 1.5" ACHM SURFACE COURSE

SUBGRADE COMPACTED TO 95% MODIFIED PROCTOR —

PART OF THE SE/4 SW/4 OF SECTION 10, TOWNSHIP 1 SOUTH, RANGE 14 WEST, IN

COMMENCING AT THE SOUTHWEST CORNER OF THE NW/4 SW/4 OF SECTION 10,

A FOUND 1/2" REBAR; THENCE S88°21'12"E 25.00 TO THE SOUTHWEST CORNER OF PHASE 1, MAGNOLIA VILLAGE, A FOUND 1/2" REBAR; THENCE AT PLATTED

BEARING OF S88°21'12"E ALONG THE SOUTH BOUNDARY OF MAGNOLIA VILLAGE

S88°14'50"E 119.44 FEET TO A FOUND 5/8" REBAR; THENCE S88°16'00"E 122.25 FEET

TO THE **POINT OF BEGINNING**, A FOUND 5/8" REBAR; THENCE S88°21'12"E 388.01

FEET ALONG SOUTH LINE OF MAGNOLIA VILLAGE PHASE 1 TO A SET 1/2" REBAR

AND CAP; THENCE LEAVING THE SOUTH LINE OF MAGNOLIA VILLAGE PHASE 1

N87°58'28"W 354.55 FEET TO THE EAST BOUNDARY OF CYPRESS VALLEY PHASE 1; THENCE N02°02'17"E 135.20 FEET ALONG THE EAST BOUNDARY OF CYPRESS

VALLEY PHASE 1; CONTINUING ALONG SAID BOUNDARY N01°57′11″E 50.00 FEET;

MAGNOLIA VILLAGE PHASE 1, A FOUND #4 REBAR WITH HOPE CAP #1702 AND

1. TRACT A & TRACT B WILL BE UTILIZED AS A DETENTION BASIN, DRAINAGE

AND UTILITY EASEMENTS MAINTAINED BY THE PROPERTY OWNERS

SUBDIVISION 635.00 FEET; THENCE S87°00'06"E 111.53 FEET TO A FOUND 5/8"

REBAR; THENCE N88°08'26"E 50.33 FEET TO A FOUND 5/8" REBAR; THENCE

S2°13'39"W 780.22 FEET TO A FOUND 5/8" REBAR WITH CAP #1211, THENCE

N88°18'50"W 30.04 FEET TO A FOUND #5 REBAR WITH CAP #1211, THENCE

S02°16'52"W 193.55 FEET TO A FOUND #5 REBAR WITH CAP #1702, THENCE

N02°04'09"E 270.00 FEET; N01°52'16"E 50.00 FEET; N02°04'09"E 270.00 FEET; N01°57'13"E 50.00 FEET; N02°02'17"E 146.17 FEET TO THE SOUTH LINE OF

THE POINT OF BEGINNING. CONTAINING AN AREA OF 8.5 ACRES.

FINAL PLAT

SALINE COUNTY, ARKANSAS

SALINE COUNTY, ARKANSAS, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

- UNDERCUT 2' DEPTH WHERE DIRECTED

7" OF CLASS 7 AGGREGATE BASE COURSE

COMPACTED TO 98% MODIFIED PROCTOR

- DELTON BROWN SURVEY SIGNED ON JANUARY 23, 2004, FILED FOR RECORD ON MARCH 5, 2004, SALINE COUNTY CIRCUIT CLERK, BOOK 04, PAGE 18723 -NO OTHER DOCUMENTS WERE PROVIDED FOR, NOR ARE REFERENCED ON THIS

-AREAS AS SURVEYED -IN SW/4 SW/4 5.72 ACRES

NOTE:

ASSOCIATION.

LOCATION MAPLE DR

VICINITY MAP:

Kennedy Development, LLC Address: 1229 Hot Springs Hwy Benton, AR 72089

OWNER

DEVELOPER:

Name: Kennedy Development, LLC 1229 Hot Springs Hwy Benton, AR 72089

#### 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 the within plat.

Date of Execution

Source of Title: 2021-010792

#### CERTIFICATE OF SURVEYING ACCURACY:

I, Jonathan L. Hope, hereby certify that this plat correctly represents a survey and a plan made by me or under my supervision; that all monuments shown hereon actually exist and their location, size, type and material are correctly shown; and that all interior lot lines have been adjusted to "as built conditions" and are accurately described on the plat and identified on the ground in terms of length and direction of the property side as required in accord with the City of Bryant Subdivision Regulation Ordinance.

Date of Execution

Jonathan L. Hope Registered Professional Land Surveyor No. 1762

#### CERTIFICATE OF FINAL ENGINEERING ACCURACY

I, Kazi Islam, hereby certify that this plat correctly represents a plat made by me, and that the engineering requirements of the City of Bryant Subdivision Rules and Regulations have been

Date of Execution

Kazi Islam Registered Professional Engineer, No. 20876

### CERTIFICATE OF FINAL APPROVAL

Pursuant to the City of Bryant Subdivision Rules and Regulations, this document was given approval by the Bryant Planning Commission at a meeting held \_\_\_\_\_\_, 20 \_\_\_\_\_. All of the document is hereby accepted, and this certificate executed under the authority of said rules and regulations.

Date of Execution

OWNER:

Rick Jordan, Bryant Planning Commission

SOURCE OF WATER: CITY OF BRYANT

SOURCE OF ELECTRIC: ENTERGY

SOURCE OF GAS: CENTERPOINT

PROPERTY SPECIFICATIONS: KENNEDY DEVELOPMENT LLC 1229 HOT SPRINGS HWY SOURCE OF SEWER: CITY OF BRYANT

BENTON, AR 72015 DEVELOPER/: KENNEDY DEVELOPMENT LLC SUBDIVIDER 1229 HOT SPRINGS HWY BENTON, AR 72015

ENGINEERS: HOPE CONSULTING INC BUILDING SETBACKS: 129 N. MAIN STREET FRONT-25' OR AS SHOWN REAR-25' OR AS SHOWN NAME OF SUBDIVISION: CYPRESS VALLEY PHASE 2

SOURCE OF TITLE: DEED BOOK 2021, PAGE 10792 CONING: PROPOSED R-2

SIDE-8' OR AS SHOWN I'ILITY & DRAINAGE EASEMENTS FRONT-10' OR AS SHOWN

REAR - 5' OR AS SHOWN

SIDE - 5' OR AS SHOWN

By affixing my seal and signature, I Jonathan L. Hope, Arkansas PLS No, 1762, hereby certify that this drawing correctly depicts a survey compiled by me or under my direct 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 Flood Insurance Rate Map, panel # 05125C0240E , Dated: 06/05/2020



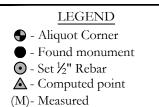
129 N. Main Street, Benton, Arkansas 72015 PH. (501)315-2626 FAX (501) 315-0024 www.hopeconsulting.com

FOR USE AND BENEFIT OF: KENNEDY DEVELOPMENT, LLC

FINAL PLAT

CYPRESS VALLEY SUBDIVISION PHASE 2 A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

01/13/2023 C.A.D. BY: DRAWING NUMBER: CHECKED BY: 21-0421 SCALE: 1"= 60' 500 01S 14W | 0 | 10 | 300 | 62



(P) - Plat/Deed

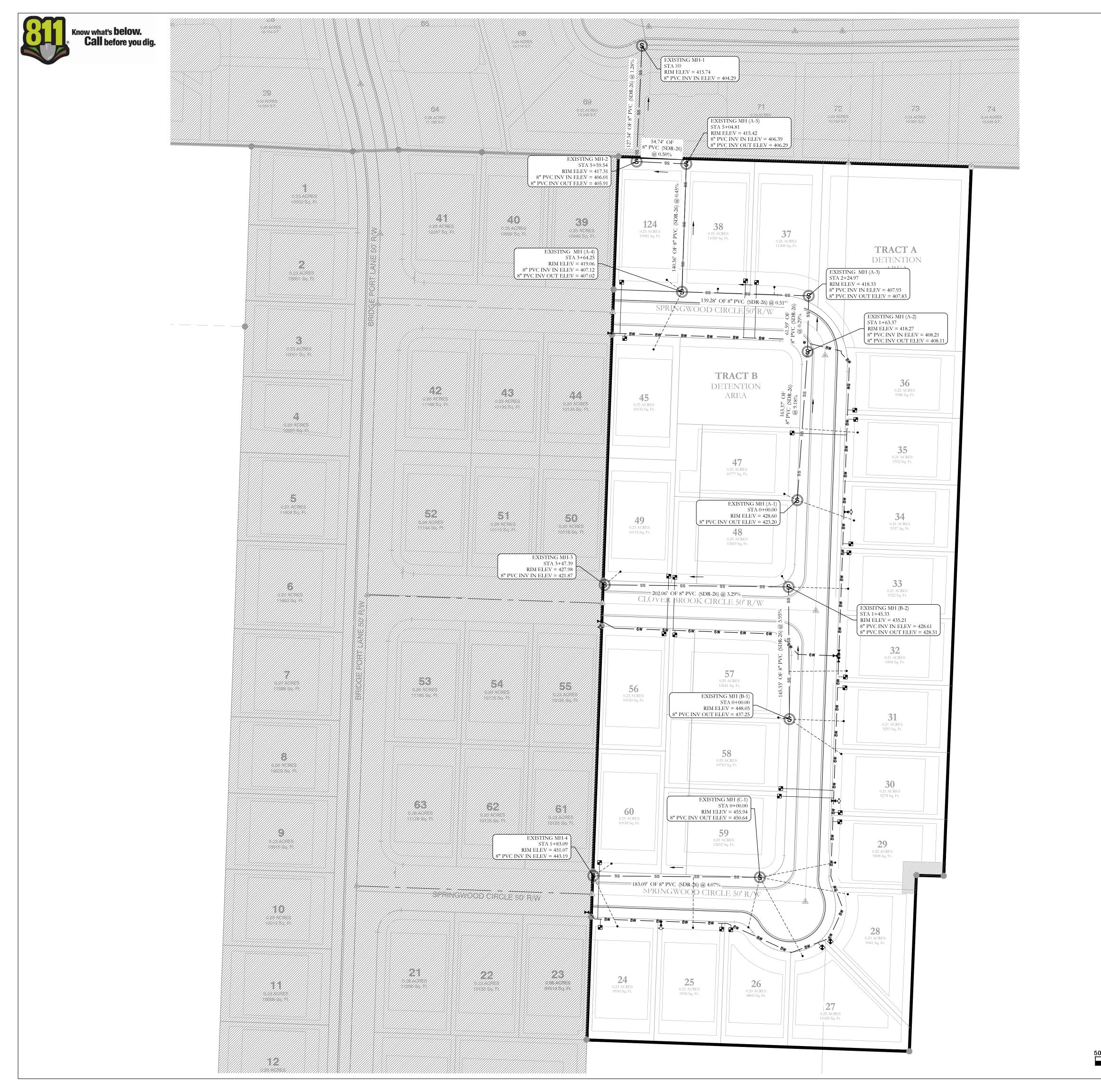
\* \* \*

LICENSED PROFESSIONAL

ENGINEER NO. 20876

HOPE

CONSULTING INC.



# SEWER CONSTRUCTION NOTES:

- ALL SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT " STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015
- ALL SEWER LINES CROSSING UNDER ALL CONCRETE STORM DRAINS OR ANY STORM DRAIN 30-INCH DIAMETER AND LARGER, OR ALL STORM DRAINS WITH MULTIPLE PIPE RUNS, SHALL BE STEEL ENCASED A MINIMUM OF 5 FEET EITHER SIDE OF THE STORM DRAIN.
- SPECIFICATION SECTION 5200-1.03.A.4 SANITARY SEWER FORCE MAIN SHALL BE INSTALLED IN ACCORDANCE WITH BRYANT WATER/WASTEWATER SPECIFICATIONS.

FORCE MAIN WILL BE TESTED IN ACCORDANCE WITH BRYANT WATER/WASTEWATER

CONNECTING MANHOLE FROM FORCE MAIN SHALL BE REQUIRED TO BE COATED WITH AN EPOXY COATING ACCORDANCE WITH BRYANT WATER/WASTEWATER SPECIFICATION SECTION

### WATER UTILITY NOTES:

ALL NEW 8-INCH AND 6-INCH WATER MAINS TO BE C900 DR 14 PVC

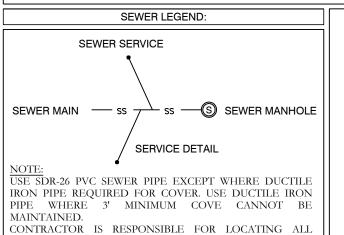
ALL WATER AND SEWER INSTALLATION TO BE IN ACCORDANCE WITH THE CITY OF BRYANT "STANDARD SPECIFICATIONS FOR DESIGN AND CONSTRUCTION OF WATER LINES AND SEWER LINES, 2015 EDITION"

WATER LINES UNDER CULVERTS, CREEKS, CONCRETE CHANNELS, RETAINING WALLS, OR OTHER DIFFICULT AND/OR DANGEROUS TO MAINTAIN AREAS SHALL BE ENCASED IN A SMOOTH STEEL ENCASEMENT PIPE. THE STEEL ENCASEMENT SHALL EXTEND FIVE FEET EITHER SIDE OF THE AREA.

EACH WATER SERVICE METER MUST HAVE ITS OWN SERVICE LINE CONNECTION TO THE MAIN (INCLUDES DOUBLE METERS DISPLAYED AS ONE SERVICE LINE ON THE PLAN).

THE SEWER/WATER MAIN CROSSINGS THAT REQUIRE ENCASEMENT REQUIRE TEN (10) LINEAR FEET OF PIPE ON EITHER SIDE OF THE CROSSING. ADH RULES PERTAINING TO PUBLIC WATER SYSTEMS NOTES REGARDING CROSS-CONNECTIONS

AND SEPARATIONS OF WATER AND SEWER- WATER AND SEWER WILL BE 10 FEET APART IN PARALLEL AND IN THE CASE OF WATER CROSSING SEWER WATER LINE SHOULD BE MINIMUM 18" ABOVE SEWER LINE. AT THE EVENT OF WATER CROSSING BELOW SWER EITHER ONE OF THE PIPE WILL NEED TO BE ENCASED.



ARKANSAS LICENSED PROFESSIONAL ENGINEER
No. 20876

BURIED UTILITIES PRIOR TO CONSTRUCTION. CONSULTING

**ENGINEERS - SURVEYORS** 

01S

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

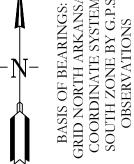
FOR USE AND BENEFIT OF: CYPRESS VALLEY

WATER & SEWER ASBUILTS CYPRESS VALLY, PHASE 2

14W 0 10 300 62 1762

A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS DATE: 01/17/2023 C.A.D. BY: DRAWING NUMBER: CHECKED BY: 21-0421

SCALE: 1"= 50'







WATER LEGEND:

♦ 90º FITTING 

CROSS FITTING

- FIRE HYDRANT



### SMALL SCALE DEVELOPMENT COMMERCIAL BUILDING CHECKLIST

CITY OF BRYANT 210 SW 3<sup>RD</sup> STREET BRYANT, AR 72022 501-943-0309

PC MEETING DATE:

THURSDAY OF EACH WEEK

TIME:

9:00 A.M.

PLACE:

ADMINISTRATION CONFERENCE ROOM-BRYANT OFFICE

COMPLEX

**AGENDA DEADLINE:** 

5:00 P.M. FRIDAY PRIOR TO SCHEDULED MEETING DATE

#### **REQUIREMENTS FOR SUBMISSION**

- 1. COMPLETED CHECKLIST (SUBDIVISION OR BUILDING)
- 2. ADA/ABA FORM COMPLETED
- 3. Two full sets of Building Plans
- 4. 12 FOLDED COPIES OF SITE PLAN (MINIMUM SIZE 17" X 34") THAT INCLUDES THE FOLLOWING:

A, VICINITY MAP

- **B. LEGAL DESCRIPTION**
- C. LANDSCAPING PLAN
- 5.\ 12 FOLDED COPIES OF FLOOR PLAN
- 6. 12 COPIES OF FRONT AND REAR BUILDING ELEVATIONS
- 7. A CD IN .PDF FORMAT
- 8. Copy of ADEQ Stormwater Pollution Prevention Plan for property parcel containing one acre or larger.
- 9. 2 COPIES OF STORMWATER DETENTION PLAN
- 10. \$250.00 FOR STORMWATER DETENTION AND DRAINAGE PLAN REVIEW

# <u>ALL REQUIREMENTS LISTED ABOVE MUST BE COMPLETED AND ATTACHED BEFORE</u> SUBMITTING APPLICATION TO BE PLACED ON THE PLANNING COMMISSION AGENDA.

NOTE: When making changes to an approved Site Plan, a revised Site Plan must be submitted to the Bryant Planning Commission for approval. This must be done prior to implementation. Failure to comply will result in penalties/fines being imposed in accordance with City ordinances.

I HAVE COMPLIED WITH THE REQUIREMENTS LISTED ABOVE AND HAVE CHECKED ALL OF THE BOXES ON THE CHECKLIST WHICH APPLY TO THIS PROJECT SUBMITTAL.

SIGNATURE 5-2-2021

DATE

#### City of Bryant Commercial Building Checklist

Name of	Aria Oil Convenience Store		
Site Loc	ationLowery and Highway 5 Intersection	On Current zoning C-2	
Owner	Outdoor Management Displays, LLC	Phone 501-860-0467	

#### I. BASIC INFORMATION NEEDED ON THE SITE PLAN

- ▲ 1. Name of Development
- 2. Current zoning
- ▲ 3. Name and Address of owner of Record
- ▲ 4. Name and address of the architect, landscape architect, engineer, surveyor, or other person involved in the preparation of the plan
- 5. Date of preparation of the plan
- ▲ 6. Vicinity map locating streets, highways, section lines, railroad, schools, & parks within ½ mile
- Legal description of the property with exact boundary lines
- ▲ 8. North arrow & Scale
- 9. Identification of any land areas within the 100 year floodplain and within the 100 year floodway
- ▲ 10. Lot area in square feet
- ▲ 11. Show scale (not less than 1" = 100') (paper size minimum 17" X 34")
- ▲ 12. Existing streams, drainage channels, and other bodies of water
- ▲ 13. Drainage easements for stormwater run-off and detention shown & labeled
- 14. Location and name of existing streets
- ▲ 15. Show source of water supply
- ▲ 16. Show location of waste water connection to municipal system & sanitary sewer layout
- ▲ 17. Fire Hydrant placement
- ▲ 18. Proposed location of buildings and other structures, parking areas, drives, loading areas, service areas, alleys, walks, screening, and public streets
- ▲ 19. Sufficient dimensions to indicate relationship between buildings, property lines, parking areas and other elements of the plan
- ▲ 20. Extent and character of proposed landscaping. Common and/or Botanical plant names and sizes of new vegetation must be clearly indicated.
- ▲ 21. Location, massing and pattern of existing vegetation to be retained
- ▲ 22. Existing structures on the site
- ▲ 23. Pedestrian and vehicular access points, sidewalks, crosswalks, etc.
- ▲ 24. Typical building elevations depicting the style, size and exterior construction materials of the buildings proposed. Where several building types are proposed on the plan, such as apartments and commercial buildings, a separate sketch shall be prepared for each type. The elevations shall be drawn at a minimum scale of 1/16" to a foot and must show adjoining context.
- 25. Any variance approvals

#### ADDITIONAL INFORMATION NEEDED, BUT NOT ON THE SITE PLAN

#### COMMERCIAL BUILDING WORKSHEET

	Yes	No
Site is compatible with Master Street Plan		
Proposed improvement is within building line setbacks Front $\underline{50'}$ ft. Side $\underline{25'}$ ft. CNR Side $\underline{0}$ ft. Back $\underline{15'}$ ft.	X	
Parking requirements can be satisfied  Floor Space $3.500$ sq.ft. divided by 300 = $11.6$ (no. of parking spaces required)	х	
Improvement is outside 100 year flood plain (if answer is no - Provide 404 Permit for site)		X
Lowest building floor level and all mechanical equipment are above FEMA 100 year flood elevation	X	
Will there be a dumpster located on the site?	X	
Will there be a construction site office?	X	
Have you made "One Call"?	X	
Structure and site complies with ADA (Americans with Disability Act) and ABA (Architectural Barriers Act) Accessibility Guidelines	X	
Design complies with Arkansas Plumbing Code and National Electric Code requirements	X	
Foundation and structure meet earthquake requirements for Zone 1.	X	
Structure meets Arkansas Energy Code for specified use.	X	
Complies with Arkansas Fire Prevention Code	X	
Complies with International Code Council regulations	X	
Will a Site Clearance Permit be required? (City Ordinance 2002-03)		X
Are you granted any variances by the Board of Adjustment?		X
If you have been granted a variance please explain in detail:		

#### III. LANDSCAPING COMPLIANCE WITH REQUIREMENTS

EANDSCAING COM EIANGE WITH REQUIREMENTS	YES	<u>NO</u>
No planting within 5 feet of a fire hydrant	X	-
Spacing will be 40' between trees	X	
Tree must be a minimum 3" in diameter at the base and 12' + tall	X	
Existing trees meeting the minimum size can be counted to meet above criteria	X	
No trees can be planted within 30 feet of a property corner or driveway	X	
Shrubs along street right-of-way lines cannot exceed 30 inches in height	X	

IV. SITE COVERAGE COMPLIANCE WITH REQUIREMENTS

(FOR YOUR CONVENIENCE WE HAVE LISTED THE THREE COMMERCIAL ZONING SITE COVERAGE REQUIREMENTS - CHOOSE THE ZONING FOR THIS PROJECT AND COMPLETE ONLY THAT SECTION)

		IE3	NO
1.	C-1 Zoning - Neighborhood Commercial		
	Lot area: minimum of 2,500 square feet; maximum 16,000 square feet		
	Front Yard: none required		
	Side Yard: minimum of 5 feet each side		
	Rear Yard: minimum of 55 feet		
	Maximum lot coverage of 70% of the total area of the site for all principal, accessory buildings, parking lots, sidewalks, private streets, or drives.		
	Parking: one space per each 200 sq. ft. of commercial use		
	Loading areas: physically separated from all streets with 10 ft grassy area		
	When abuts a residential district, a minimum 6' high wood, rock, or masonry fence is required with a landscape screen	:	
2	C-2 Zoning - Lots fronting along roadways designated as Interstate 30 an	d	
۷.	frontage roads, State Highway 5 and 183	u	
	Front Yard: not less than 50 feet from front property line		
	Side Yard: not required, except where they abut a street or a residential lot line then a minimum of 25 feet is required		
	Rear Yard: minimum of 15 feet, except where they abut residential area then a minimum of 55 feet is required		
	A maximum lot coverage of 35% of the total area of the site for all principal and accessory buildings		
	Parking: one space per each 300 sq. ft. of occupied space		
	When abuts a residential district, a minimum 6' high wood, rock, or masonry fence is required with a landscape screen		
3.	C-2 Zoning - Lots fronting along roadways designated as interior local.		
	Front Yard: none required	<b>X</b>	
	Side Yard: not required, except where they abut a street or a residential lot line		
	then a minimum of 25 percent of lot dimension	X	
	Rear Yard: minimum of 15 feet, except where they abut residential area then a minimum of 55 feet is required	x	
	A maximum lot coverage of 85% of the total area of the site for all principal, accessory buildings and parking	<u>x</u>	
	Parking: one space per each 300 sq. ft. of occupied space	X	
	When abuts a residential district, a minimum 6' high wood, rock, or masonry fence is required with a landscape screen	X	

#### V. SITE PLAN ATTACHMENTS

#### (APPLICATION WILL NOT BE ACCEPTED UNTIL ALL ATTACHMENT REQUIREMENTS ARE MET)

- ▲ 26. Letter to Planning Commission stating your request
- ▲ 27. Completed Checklist
- ▲ 28. Completed ADA/ABA Form
- ▲ 29. Two full sets of Building Plans
- ▲ 30. 20 copies of Site Plan (folded to no larger than 8 ½ X 14 size) that includes vicinity map and landscaping plan (minimum size 17" X 34" paper)
- ▲ 31. 20 copies of Landscaping Plan (folded to no larger than 8 ½ X 14 size)
- ▲ 32. 20 copies of building floor plan (folded to no larger than 8 ½ X 14 size)
- ▲ 33. Copy of Stormwater Detention approval
- ▲ 34. Copy of ADEQ Stormwater Pollution Prevention Plan for property containing one acre or larger.
- ▲ 35. IBM compatible diskette or CD with data in PDF format.
- ▲ 36. Receipt for \$250.00 for Stormwater Detention and Drainage Plan review

I CERTIFY that the design of Aria Oil Conv. complies with the above regulations, laws and co		in the City of Bryant, Arkansas
Outdoor Management Displays, LLC		Hope Consulting, LLC
Owner PO BOX 91		Engineer/Architect 501-315-2626
Mailing Address Bryant, Arkansas	_	Phone # 5/4/2021
City	<del>_</del> .	Date
Action Taken:  Special Conditions:	CITY USE	
Permit Issued: Date	Sq.Ft	Amount \$
Construction Completed Certified For Occupancy:		

Permit No.	P	eri	mit	No.	
------------	---	-----	-----	-----	--

#### **BUILDING PERMIT**

#### ADA/ABA ACCESSIBILITY STANDARDS

The Americans with Disability Act and Architectural Barriers Act Accessibility Guidelines were prepared by the U.S. Access Board and mandated by the U.S. Department of Justice regulations implementing Title III as the official ADA/ABA accessibility guidelines. All new construction, remodeling, and modifications must conform to these building standards for places of public accommodation and commercial facilities. Residential is exempt.

The ADA/ABA accessibility guidelines contain general design standards for building and site elements, such as accessible entrances and routes, ramps, parking spaces, stairs, elevators, restrooms, signage, etc. Also included are specific standards for restaurants, medical care facilities, libraries and transportation facilities and vehicles, and places of lodging.

The guidelines also include "scoping" requirements that outline the necessary features or appropriate quantity for achieving ready access. For example, at least 50 percent of all public entrances to buildings must be accessible with an accessible path of travel. In public restrooms, at least one bathroom stall must be accessible unless there are more than six stalls, in which case the number increases.

I hereby certify that I have read and examined the above notice and will comply with all guidelines of the ADA Accessibility Guidelines. I further understand that a copy of the ADA/ABA Regulations are available for inspection during business hours of City Hall or I may obtain a copy by writing:

The Access Board
1331 F Street, NW, Suite 1000
Washington, DC 20004-1111
(202) 272-0080 (v) (202) 272-0082 (TTY) (202) 272-0081 (fax)
(800) 872-2253 (v) (800) 993-2822 (TTY)
email: info@access-board.gov

Signature of Contractor or Authorized Agent	Date
Signature of Owner	
( if owner-builder)	Date
Application of Permit Approved:	Date
Commission - C	hairman

#### Bryant Water & Sewer Department

#### **GREASE TRAP STANDARDS**

The City of Bryant requires all commercial buildings comply with plumbing codes found in the Arkansas State Plumbing Code, Latest Edition. <u>All new construction, remodeling, and modifications must conform</u> to these plumbing standards for places of public accommodation and commercial facilities. These guidelines contain general design standards for construction and site elements relating to plumbing.

As of 7/27/04, the Bryant Sewer & Water Commission requires stringent specification standards for commercial or public businesses that involve any food preparation on the premise. The new standard requires calculations, and associated data to be submitted to the Bryant Water Utilities General Manager concurrent with the proposed building plumbing plans along with a grease trap calculation form. Building Permits will not be issued until this form has been received and approved by the Bryant Water Utilities General Manager.

All new buildings or strip centers containing sections designated for commercial enterprise are encouraged to provide a stub-out for a separate waste line for future grease interceptor installation. The owner of a new strip center shall consider suitable physical property space and sewer gradient that will be conducive for the installation of an exterior, in-ground grease interceptor(s) for any flex space contained within the strip center. Physical Property Restrictions and sewer gradient shall not be a defense for failure to install an exterior, in-ground grease interceptor.

I hereby certify that I have read and examined the above notice and will comply with all guidelines of the City of Bryant Water & Sewer Department. I further understand that copies of the Grease Interceptor Design and Structural Criteria regulations will be available from the Bryant Water/Wastewater Plant (501-847-8083) during business hours.

Droject Name	Aria Oil Convenience Store	
Signature of Contra or Authorized Agent	ctor :	Date
Signature of Owner ( if owner-builder)		Date
Calculations Approved:		Date
Bry	ant Water Utilities General Manager	

# DRAINAGE REPORT

STORM RUNOFF IMPACT

**FOR** 

# HIGHWAY 5 & LOWERY LN.

**C-STORE** 

7/30/2021 Bryant, AR

PREPARED FOR City of Bryant

By:



#### Summary

The calculations detailed in this report are related to the detention design of a proposed development of a property at the NE corner of the intersection of Highway 5 and Lowery Lane in Bryant. The study area considered is 2.11 acres  $\pm$  and accounts for areas that bypass the pond as well as upstream area being routed through the pond. The main tract under pre-development conditions is an undeveloped landscape. The proposed use of the site is a gas station/convenience store.

In particular these calculations detail the impact of a proposed development to a site on Highway 5, at the NE corner of the intersection with Lowery Lane in Bryant. The calculations on the following pages include:

- Pre and Post development C value for the Study area
- Rational method calculations for the pre and post development runoff leaving the pond.

The following summarized flows (cfs) are based upon a 100 year storm event: *Before routing to detention* 

Event	Pre-dev	Post-dev
100 year	6.04	11.21
50year	5.59	10.54
25 year	4.92	9.21
10 year	4.25	8.07
•	3.47	6.86
2 year	3.13	6.20
25 year 10 year 5 year	4.92 4.25 3.47	9.21 8.07 6.86

#### *After routing to detention*

<b>Event</b>	Pre-dev	Post with Pond
100 year	6.04	4.37
50year	5.59	3.60
25 year	4.92	2.89
10 year	4.25	2.62
5 year	3.47	2.32
2 year	3.13	2.15

#### **Composite C**

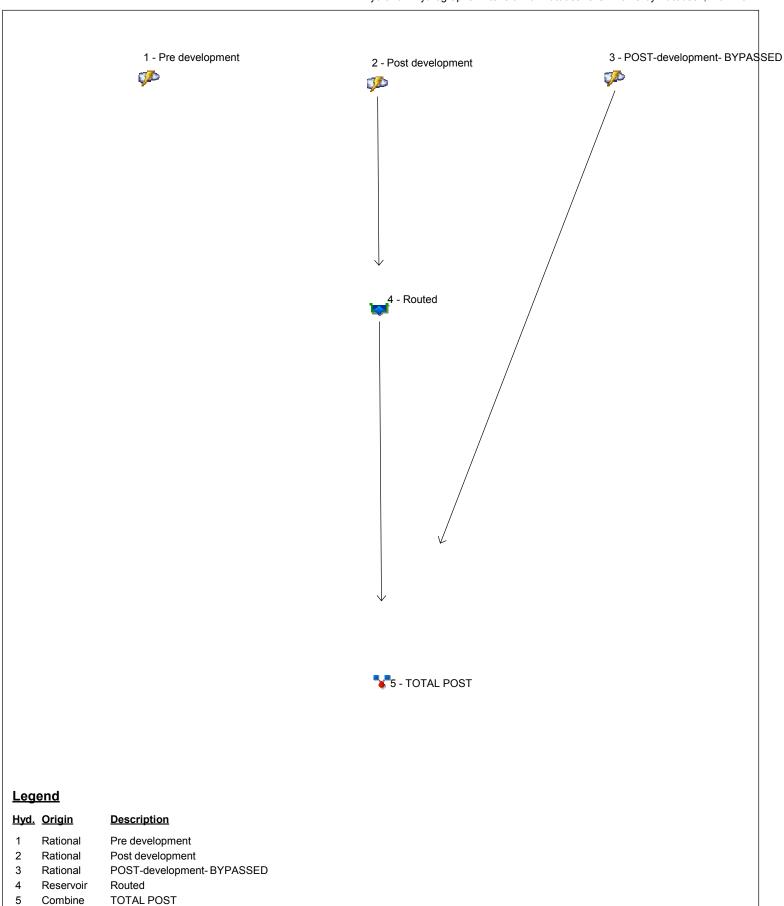
Composite Values for the acre impact study area (acres):

Pre-development	0.46
Post-development	0.79
By-pass	0.46

#### **Time of Concentration**

time of concentration (pre/post)

*30min/15min* 



Project: BRYANT C-STORE (bypass pond total)R3.gpw

Wednesday, 07 / 21 / 2021

# Hydrograph Return Period Recap Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

	Hydrograph	Inflow	Peak Outflow (cfs)								Hydrograph	
No.	type (origin)	type (origin)	hyd(s)	1-yr	2-yr	3-yr	5-yr	10-yr	25-yr	50-yr	100-yr	Description
	Rational			3.131		3.467	4.250	4.921	5.591	6.039	Pre development	
2	Rational			5.851		6.472	7.597	8.708	9.925	10.54	Post development	
	Rational			0.348		0.385	0.472	0.546	0.621	0.671	POST-development-BYPASSED	
	Reservoir	2		1.849		1.980	2.205	2.391	3.075	3.815	Routed	
	Combine	3, 4		2.150		2.317	2.623	2.885	3.600	4.373	TOTAL POST	

Proj. file: BRYANT C-STORE (bypass pond total)R3.gpw

Wednesday, 07 / 21 / 2021

# **Hydrograph Summary Report**

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

yd. o.	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	6.039	1	30	10,870				Pre development
	Rational	10.54	1	15	9,490				Post development
	Rational	0.671	1	30	1,207				POST-development-BYPASSED
1	Reservoir	3.815	1	25	9,391	2	445.38	6,572	Routed
5	Combine	4.373	1	25	10,598	3, 4			TOTAL POST

BRYANT C-STORE (bypass pond total)R3.gpvReturn Period: 100 Year

Wednesday, 07 / 21 / 2021

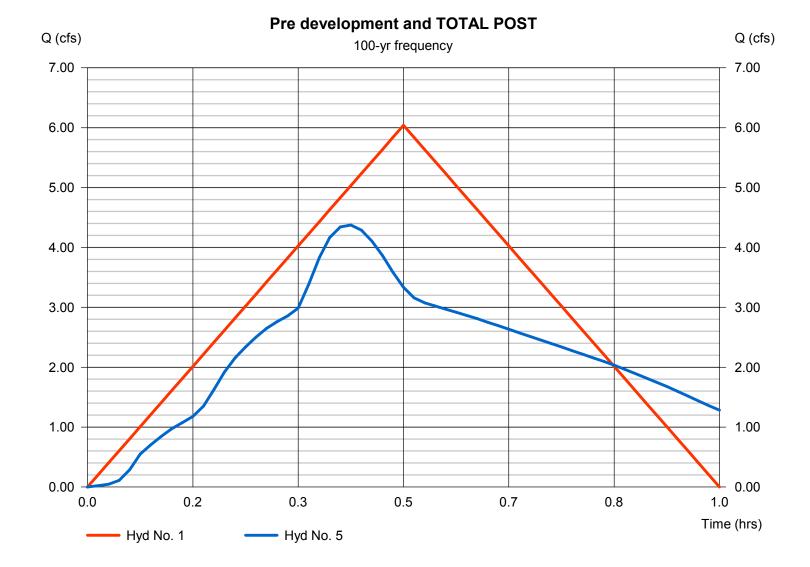
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No. 5

Hyd. No. 1

Pre development TOTAL POST

Hydrograph type = Rational Peak discharge = 6.039 cfs Time to peak = 0.50 hrs Hyd. Volume = 10,870 cuft Hydrograph type = Combine
Peak discharge = 4.37 cfs
Time to peak = 0.42 hrs
Hyd. Volume = 10,598 cuft

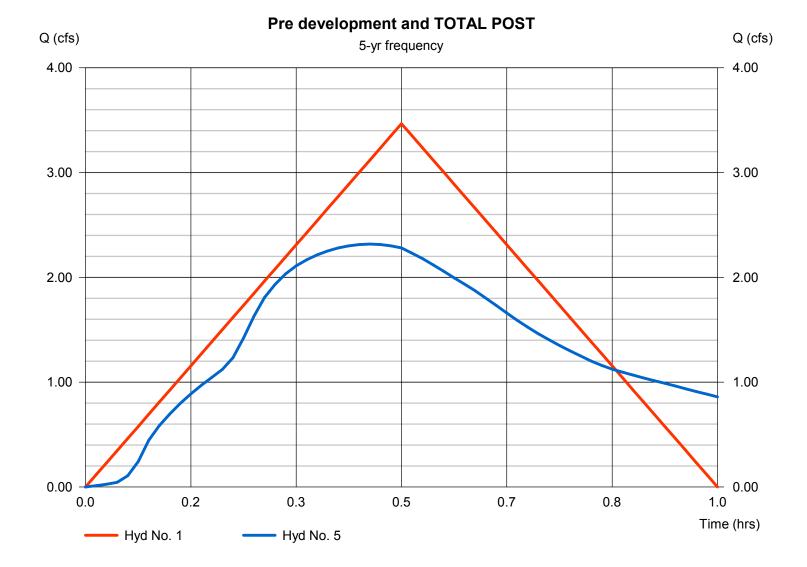


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No. 1 Hyd. No. 5

Pre development TOTAL POST

Hydrograph type Hydrograph type = Rational = Combine Peak discharge Peak discharge = 3.467 cfs= 2.32 cfsTime to peak = 0.50 hrsTime to peak  $= 0.45 \, hrs$ Hyd. Volume Hyd. Volume = 6,240 cuft= 6,419 cuft



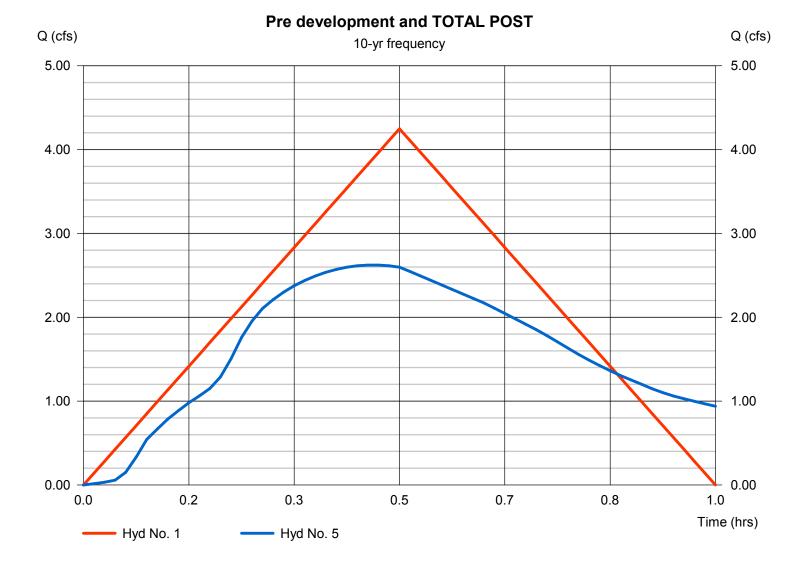
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No. 1 Hyd. No. 5

Pre development TOTAL POST

Hydrograph type = Rational Hydrograph type

Hydrograph type= RationalHydrograph type= CombinePeak discharge= 4.250 cfsPeak discharge= 2.62 cfsTime to peak= 0.50 hrsTime to peak= 0.47 hrsHyd. Volume= 7,649 cuftHyd. Volume= 7,588 cuft

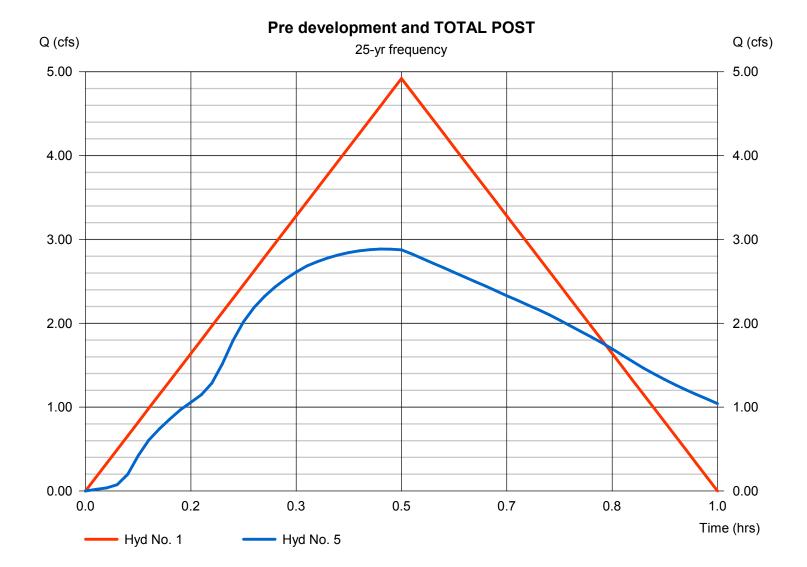


Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No. 1 Hyd. No. 5

Pre development TOTAL POST

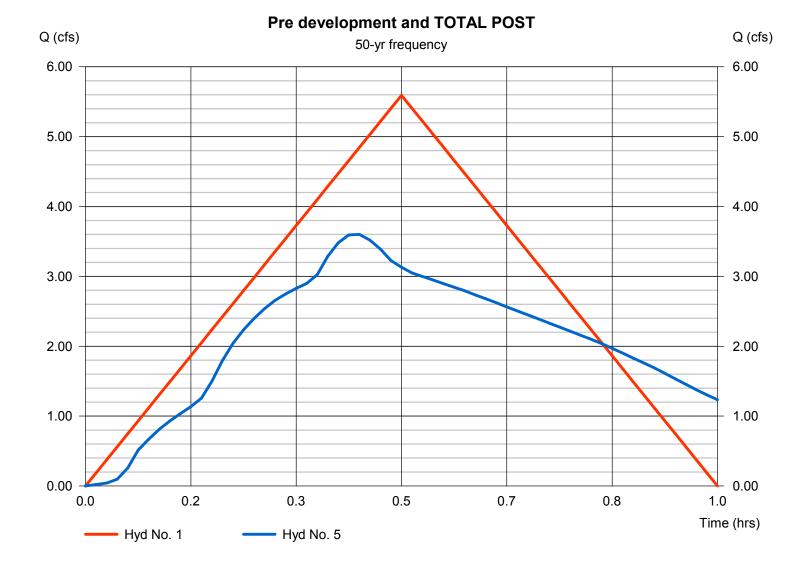
Hydrograph type = Rational Hydrograph type = Combine Peak discharge Peak discharge = 4.921 cfs= 2.88 cfsTime to peak = 0.50 hrsTime to peak = 0.47 hrsHyd. Volume Hyd. Volume = 8,722 cuft = 8,857 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No. 1Hyd. No. 5Pre developmentTOTAL POST

Hydrograph type = Rational Hydrograph type = Combine Peak discharge Peak discharge = 5.591 cfs= 3.60 cfsTime to peak = 0.50 hrsTime to peak = 0.43 hrsHyd. Volume Hyd. Volume = 10,065 cuft= 9,952 cuft



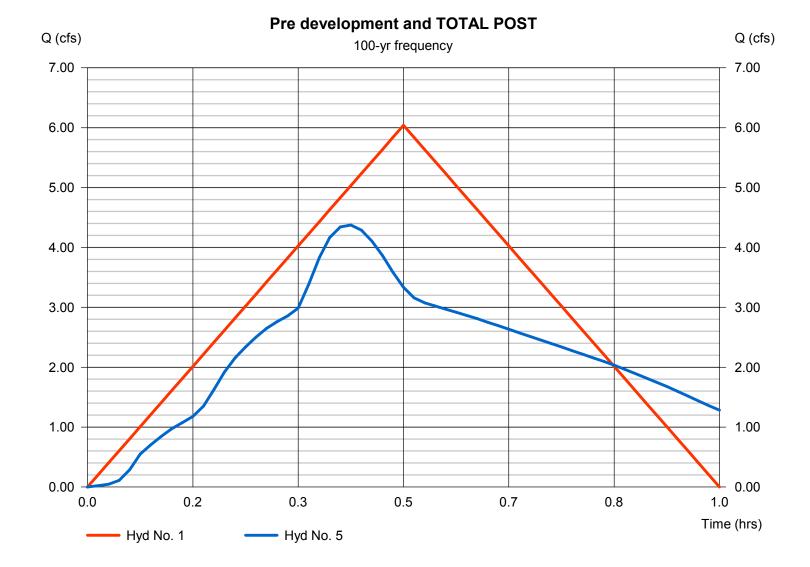
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Hyd. No. 5

Hyd. No. 1

Pre development TOTAL POST

Hydrograph type = Rational Peak discharge = 6.039 cfs Time to peak = 0.50 hrs Hyd. Volume = 10,870 cuft Hydrograph type = Combine
Peak discharge = 4.37 cfs
Time to peak = 0.42 hrs
Hyd. Volume = 10,598 cuft



Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

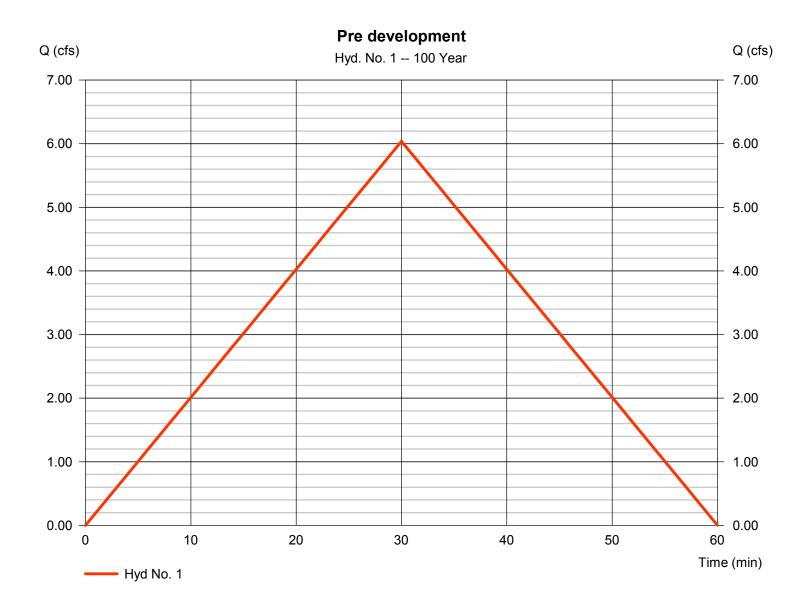
Wednesday, 07 / 21 / 2021

#### Hyd. No. 1

Pre development

Hydrograph type Peak discharge = 6.039 cfs= Rational Storm frequency = 100 yrsTime to peak = 30 min Time interval = 1 min Hyd. volume = 10,870 cuftRunoff coeff. Drainage area = 2.110 ac= 0.53\*Intensity = 5.400 in/hrTc by User  $= 30.00 \, \text{min}$ 

IDF Curve = bryant 2.idf Asc/Rec limb fact = 1/1



<sup>\*</sup> Composite (Area/C) =  $[(0.640 \times 0.70) + (0.260 \times 0.46) + (0.670 \times 0.46) + (0.270 \times 0.46) + (0.270 \times 0.46)] / 2.110$ 

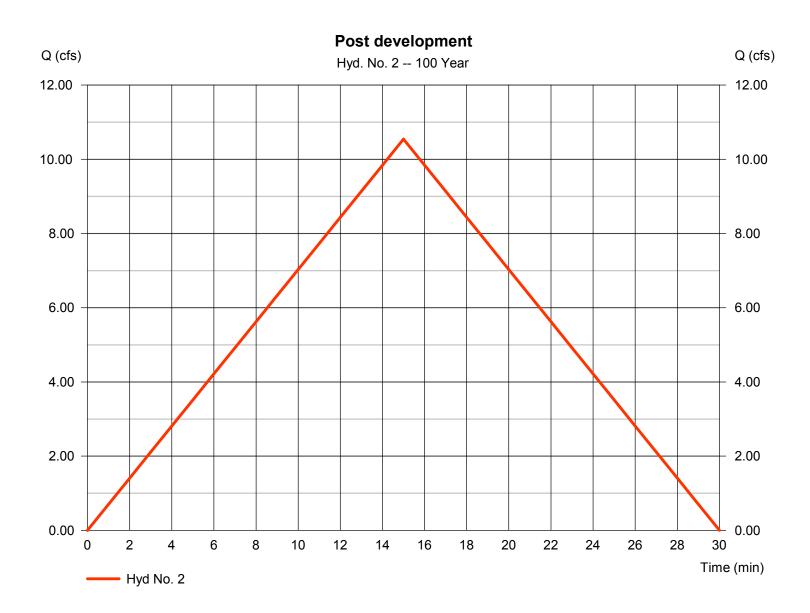
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Wednesday, 07 / 21 / 2021

#### Hyd. No. 2

Post development

Hydrograph type Peak discharge = 10.54 cfs= Rational Storm frequency = 100 yrsTime to peak = 15 min Time interval = 1 min Hyd. volume = 9,490 cuftRunoff coeff. = 0.79\*Drainage area = 1.840 acIntensity = 7.254 in/hrTc by User = 15.00 min IDF Curve Asc/Rec limb fact = 1/1= bryant 2.idf



<sup>\*</sup> Composite (Area/C) =  $[(0.640 \times 0.70) + (0.260 \times 0.46) + (0.670 \times 0.95) + (0.270 \times 0.95)] / 1.840$ 

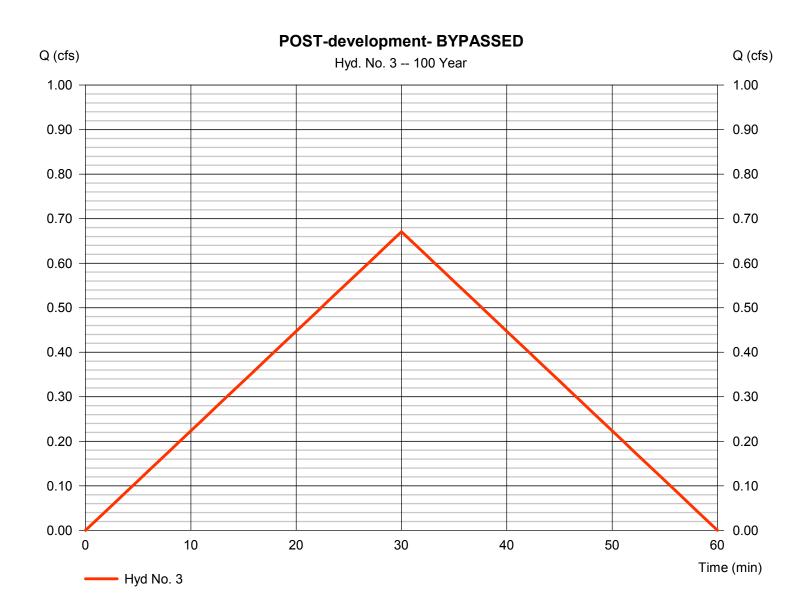
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Wednesday, 07 / 21 / 2021

#### Hyd. No. 3

POST-development-BYPASSED

Hydrograph type Peak discharge = 0.671 cfs= Rational Storm frequency = 100 yrsTime to peak = 30 min Time interval = 1 min Hyd. volume = 1,207 cuftRunoff coeff. Drainage area = 0.270 ac= 0.46\*Tc by User Intensity = 5.400 in/hr $= 30.00 \, \text{min}$ **IDF** Curve Asc/Rec limb fact = 1/1= bryant 2.idf



<sup>\*</sup> Composite (Area/C) = [(0.270 x 0.46)] / 0.270

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

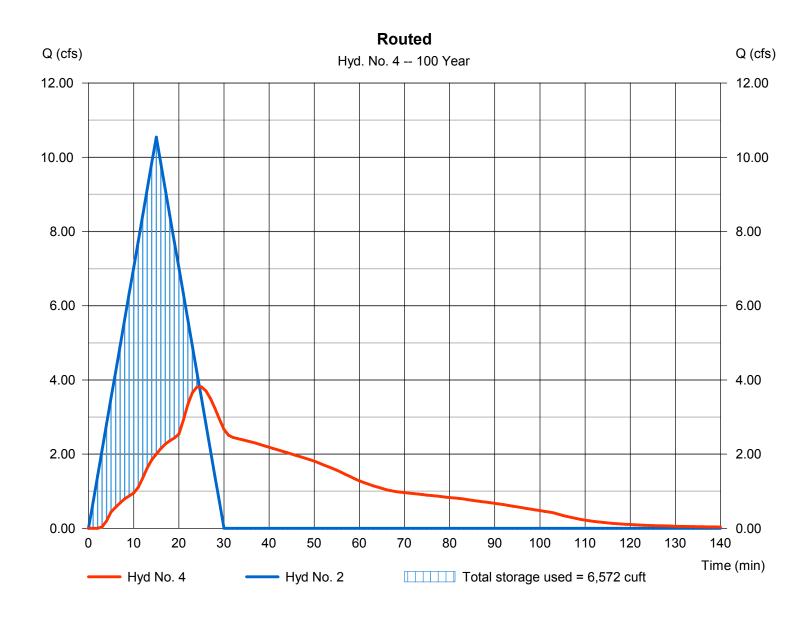
Wednesday, 07 / 21 / 2021

#### Hyd. No. 4

Routed

Hydrograph type Peak discharge = 3.815 cfs= Reservoir Storm frequency = 100 yrsTime to peak = 25 min Time interval = 1 min Hyd. volume = 9.391 cuftInflow hyd. No. Max. Elevation = 2 - Post development = 445.38 ft= North Pond Reservoir name Max. Storage = 6,572 cuft

Storage Indication method used.



#### Pond No. 2 - North Pond

#### **Pond Data**

Trapezoid -Bottom L x W = 130.0 x 5.0 ft, Side slope = 3.00:1, Bottom elev. = 442.20 ft, Depth = 5.50 ft

#### Stage / Storage Table

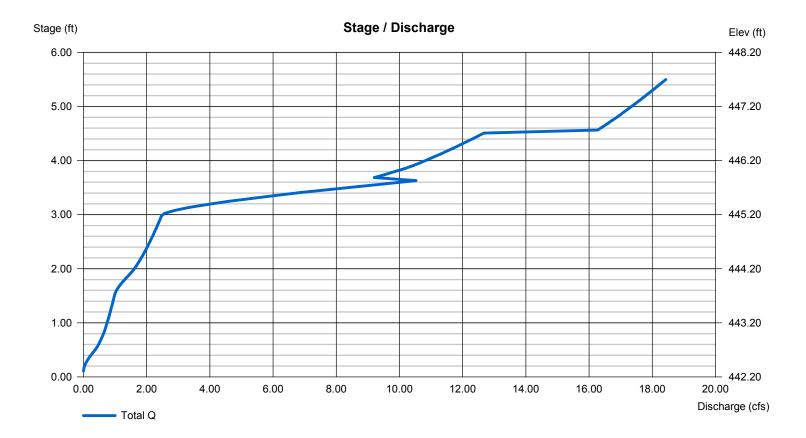
Stage (ft) Elevation (ft)		Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)		
0.00	442.20	650	0	0		
0.55	442.75	1,106	482	482		
1.10	443.30	1,585	739	1,221		
1.65	443.85	2,085	1,008	2,229		
2.20	444.40	2,606	1,289	3,518		
2.75	444.95	3,150	1,582	5,100		
3.30	445.50	3,715	1,887	6,987		
3.85	446.05	4,302	2,204	9,190		
4.40	446.60	4,911	2,533	11,723		
4.95	447.15	5,542	2,873	14,596		
5.50	447.70	6,194	3,226	17,823		

#### **Culvert / Orifice Structures**

#### **Weir Structures**

	[A]	[B]	[C]	[PrfRsr]		[A]	[B]	[C]	[D]
Rise (in)	= 18.00	6.00	6.00	Inactive	Crest Len (ft)	= 5.00	Inactive	Inactive	0.00
Span (in)	= 18.00	6.00	6.00	0.00	Crest El. (ft)	= 445.20	442.50	0.00	0.00
No. Barrels	= 1	1	1	0	Weir Coeff.	= 3.33	3.33	3.33	3.33
Invert El. (ft)	= 442.20	442.30	443.70	0.00	Weir Type	= 1	Rect		
Length (ft)	= 30.00	0.50	0.50	0.00	Multi-Stage	= Yes	Yes	No	No
Slope (%)	= 1.50	0.00	0.00	n/a					
N-Value	= .013	.013	.013	n/a					
Orifice Coeff.	= 0.60	0.60	0.60	0.60	Exfil.(in/hr)	= 0.000 (by	Wet area)		
Multi-Stage	= n/a	Yes	Yes	No	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).



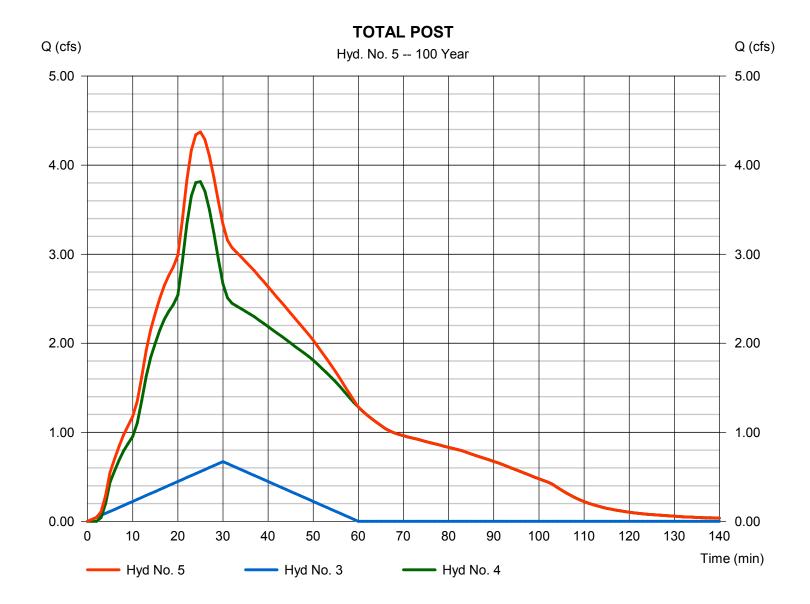
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2021

Wednesday, 07 / 21 / 2021

#### Hyd. No. 5

**TOTAL POST** 

= 4.373 cfsHydrograph type = Combine Peak discharge Storm frequency Time to peak = 100 yrs= 25 min Time interval = 1 min Hyd. volume = 10,598 cuft Inflow hyds. Contrib. drain. area = 3, 4= 0.270 ac





July 6, 2021

Truett Smith City of Bryant 210 Southwest Third St., Bryant, AR 72022

RE: Site Oil Convivence Store

Dear Truett:

On behalf of the Aria Oil, Hope Consulting is requesting the review of this small commercial project located in the City of Bryant. This subdivision development consists of water and sewer provided by Bryant, Electric provided by Entergy.

The developer of this project is Blake Smith of Aria Oil.

Blake Smith: blake@standard-devco.com 501-554-4400

Please feel free to contact me with any questions or concerns or if I can be of any further assistance.

Sincerely,

Jonathan Hope

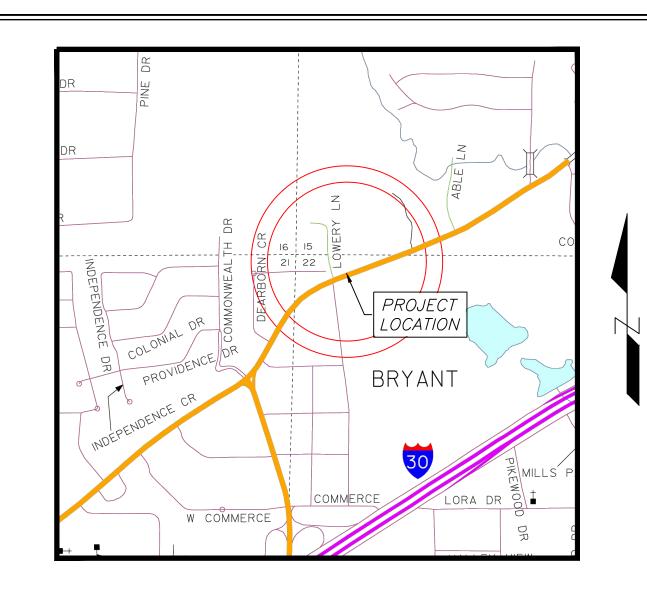
### LEGAL DESCRIPTION

22, AND THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER, SECTION 15, ALL IN T-1-S. NORTHWEST CORNER OF SAID NW ¼ OF NW ¼ OF SECTION 22; THENCE S88°06'16"E, ALON DISTANCE OF 275.04 FEET TO A FOUND ½" REBAR; THENCE S70°18'52"W, A DISTANCE OF 66.65 FEET TO A FOUND ½" REBAR; THENCE LEAVING NORTH RIGHT-OF-WAY LINE, N01°58'40"E, A DISTANCE OF 272.07 FEET TO A PK NAIL IN ASPHALT; THENCE N00°58'25"W, A DISTANCE OF 23.07 FEET TO THE POINT OF BEGINNING. CONTAINING 78,864 SQUARE FEET, OR 1.81 ACRES

# CONSTRUCTION PLANS BRYANT, AR C-STORE

# STANDARD DEVELOPMENT CO, LLC

HIGHWAY 5 NORTH OLD STAGECOACH CITY OF BRYANT



VICINITY MAP

## DRAWING INDEX

SHEET NO.

C-1.0

N/AC-1.1 PAVING PLAN C-1.2GRADING C-2.0

UTILITY PLAN C-3.0

PLAT

SITE PLAN

SEWER PLAN & PROFILE C-3.1N/AC-3.2

N/ATRENCH DETAILS C-4.0

CIVIL SPECS C-5.0C-6.0DETENTION PLAN

DRAINAGE PLAN C-6.1N/AC-6.2

C-6.3 N/AC-6.4

N/AN/AC-6.5

C-7.0EROSION CONTROL PLAN

C-8.0DEMO PLAN N/A

C-8.1

LANDSCAPE PLAN L-1.0LOWERY PROFILE C-9.0

C-9.2 N/A

TITLE

# PREPARED BY:



**ARCHITECT** 

WILLIAMS & DEAN

18 CORPORATE HILL DRIVE #210

LITTLE ROCK, AR 72205 CONTACT: JOHN JOHNSON

PHONE: 501.224.1900

EMAIL: jjohnson@williamsdean.com

CIVIL ENGINEER

HOPE CONSULTING INC

129 N. MAIN STREET

BENTON, AR 72015

CONTACT: KAZI ISLAM

PHONE: 501.315.2626

EMAIL: kazi@hopeconsulting.com

CURRENT ZONING

MINIMUM LOT AREA (SF)

MINIMUM LOT WIDTH (FT)

FRONT YARD SETBACK (FT)

MAXIMUM LOT COVERAGE

MAXIMUM HEIGHT (FT)

REAR YARD (NORTH) SETBACK (FT)

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

> GEOTECHNICAL ENGINEER MATERIALS TESTING OF ARKANSAS 8001 NATIONAL DRIVE LITTLE ROCK, AR 72209 CONTACT: KELTON PRICE PHONE: 501.753.2526 EMAIL: keltonp@mtaengineers.com

**ZONING INFORMATION** C-2 (HIGHWAY COMMERCIAL) N/A N/A NOT REQ UNLESS ABUT ROAD OR EXTERIOR SIDE YARD SETBACK (FT) RESIDENTIAL LOT LINE THEN 25'

45' OR NO MORE THAN3 STORIES

OF THE TOTAL AREA OF THE SITE

PRINCIPAL & ACCESSORY BLDG 35%

OWNER: STANDARD DEVELOPMENT CO, LLC Address: 2917 KAVANAUGH BOULEVARD LITTLE ROCK, AR 72205

STANDARD DEVELOPMENT CO, LLC 2917 KAVANAUGH BOULEVARD LITTLE ROCK, AR 72205

**DEVELOPER:** 

STRUCTURAL ENGINEER

N/A

HOPE CONSULTING

INC.

CONSULTING FAX (501) 315-2020 FAX (501) 315-0024 ENGINEERS - SURVEYORS www.hopeconsulting.com

Benton, Arkansas 72015 PH. (501)315-2626

FOR USE AND BENEFIT OF: STANCDARD DEVELOPMENT COMPANY, LLC

BRYANT C-STORE

500 01S 14W 0 15/22 304 04 1762

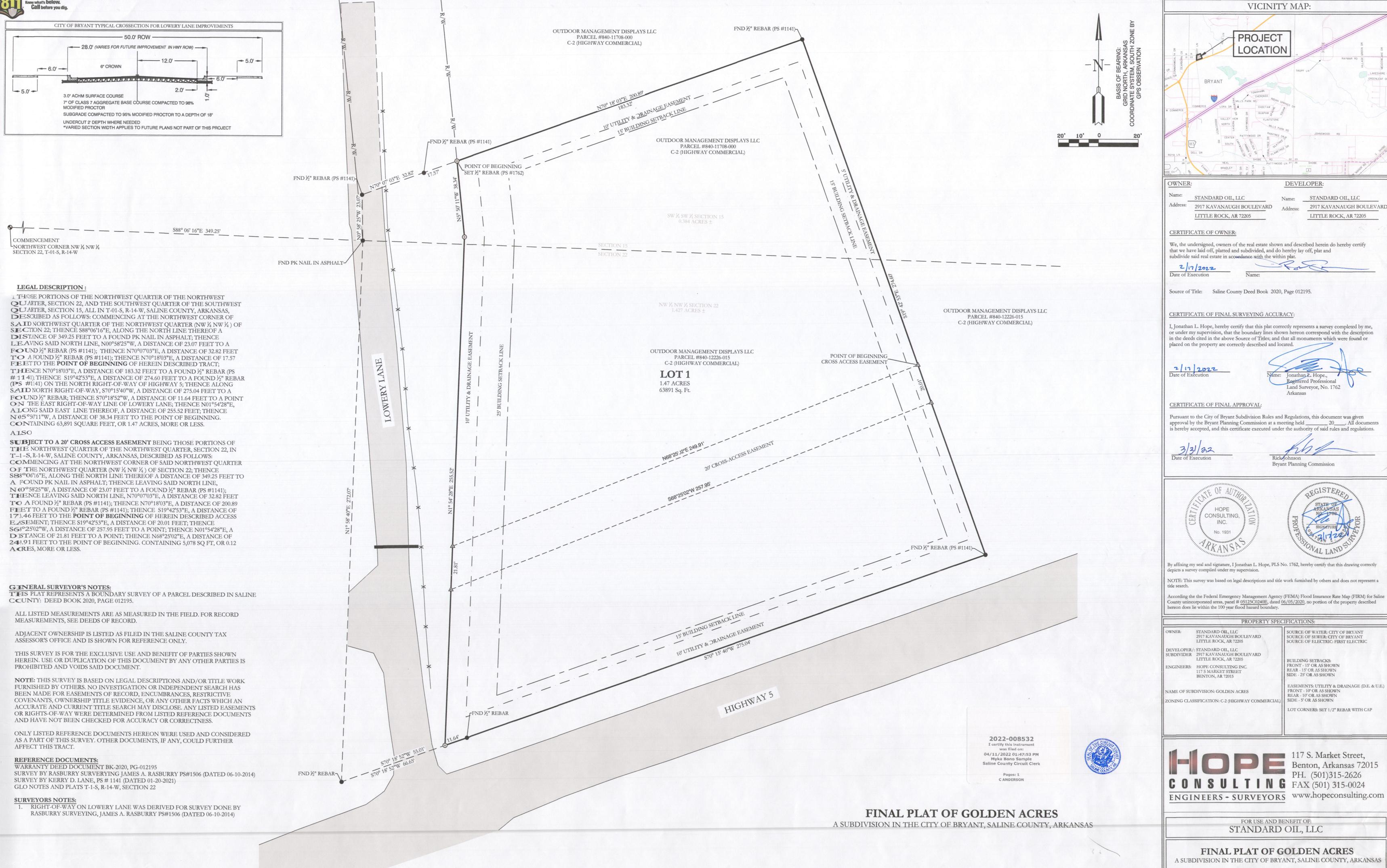
CITY OF BRYANT, SALINE COUNTY, ARKANSAS DRAWING NUMBER: 09-20-2022 C.A.D. BY: REVISED: 01/05/2023 CHECKED BY: 21-0275 SCALE:

## FLOODPLAIN CERTIFICATION:

By affixing my seal and signature, I Robert L. Johnston Jr., PLS No. 1626, 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

According the the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Benton County City of Rogers areas, panel # 05125C0240E, dated 06/05/2020, no portion of the property described hereon lies within the 100 year flood hazard boundary.



VICINITY MAP: **PROJECT** LOCATION

DEVELOPER:

STANDARD OIL, LLC 2917 KAVANAUGH BOULEVARD LITTLE ROCK, AR 72205

2917 KAVANAUGH BOULEVARD LITTLE ROCK, AR 72205

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 the within plat.

Date of Execution

Source of Title: Saline County Deed Book 2020, Page 012195.

CERTIFICATE OF FINAL SURVEYING ACCURACY:

I, Jonathan L. Hope, hereby certify that this plat correctly represents a survey completed by me, or under my supervision, that the boundary lines shown hereon correspond with the description in the deeds cited in the above Source of Titles; and that all monuments which were found or placed on the property are correctly described and located

2 11 2022 Date of Execution

CERTIFICATE OF FINAL APPROVAL:

Pursuant to the City of Bryant Subdivision Rules and Regulations, this document was given approval by the Bryant Planning Commission at a meeting held \_\_\_\_\_\_ 20\_\_\_\_. All documents is hereby accepted, and this certificate executed under the authority of said rules and regulations.

CONSULTING INC.

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

According the the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) for Saline

County unincorporated areas, panel # 05125C0240E, dated 06/05/2020, no portion of the property described hereon does lie within the 100 year flood hazard boundary.

PROPERTY SPECIFICATIONS: SOURCE OF WATER: CITY OF BRYANT

STANDARD OIL, LLC 2917 KAVANAUGH BOULEVARD LITTLE ROCK, AR 72205 DEVELOPER/: STANDARD OIL, LLC

SUBDIVIDER 2917 KAVANAUGH BOULEVARD LITTLE ROCK, AR 72205 ENGINEERS: HOPE CONSULTING INC. 117 S MARKET STREET

NAME OF SUBDIVISION: GOLDEN ACRES

EASEMENTS: UTILITY & DRAINAGE (D.E. & U.E.) FRONT - 10' OR AS SHOWN REAR - 10' OR AS SHOWN

ZONING CLASSIFICATION: C-2 (HIGHWAY COMMERCIAL) SIDE - 5' OR AS SHOWN

LOT CORNERS: SET 1/2" REBAR WITH CAP

SOURCE OF SEWER: CITY OF BRYANT

BUILDING SETBACKS: FRONT - 15' OR AS SHOWN REAR - 15' OR AS SHOWN

SIDE - 25' OR AS SHOWN

SOURCE OF ELECTRIC: FIRST ELECTRIC



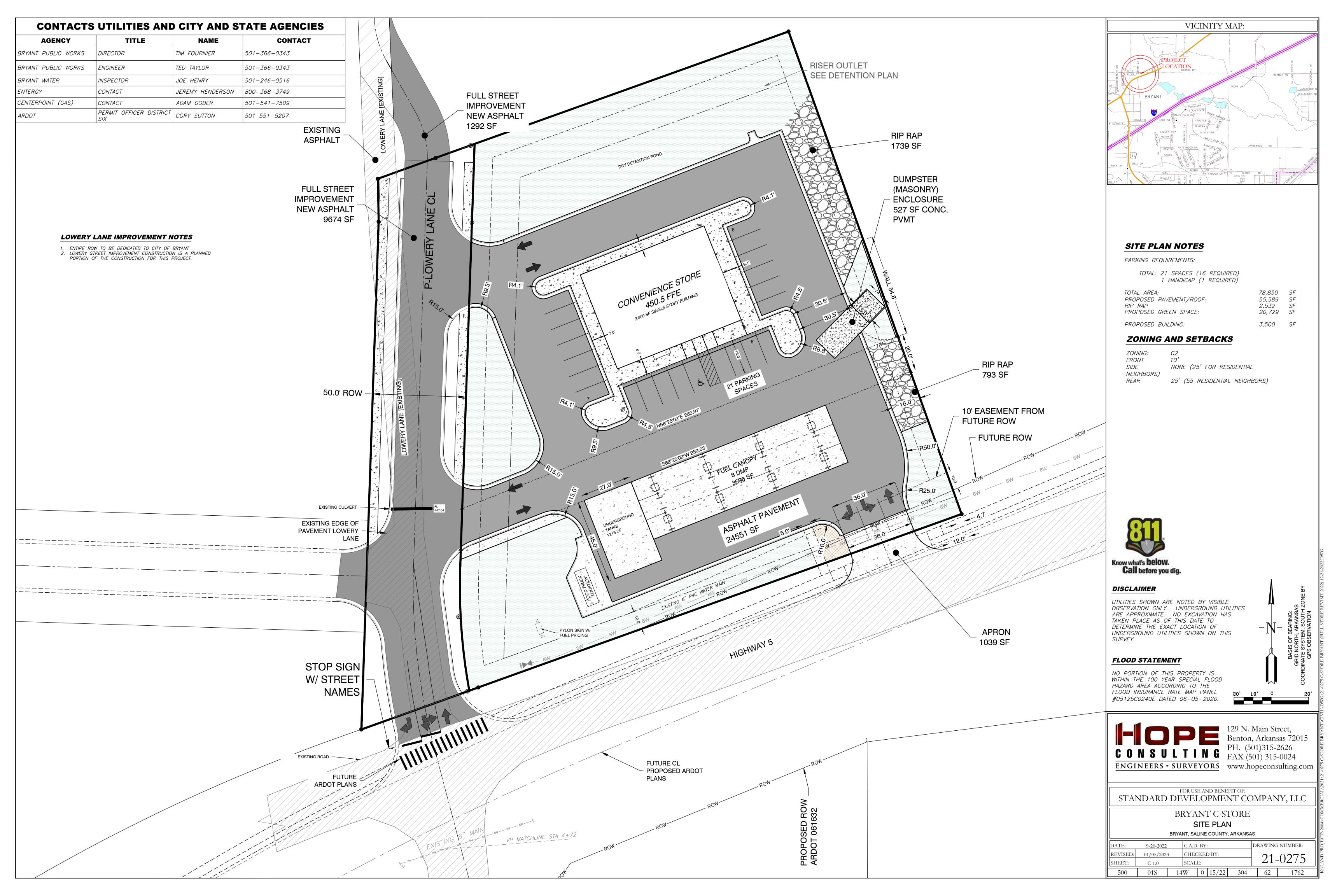
FOR USE AND BENEFIT OF:

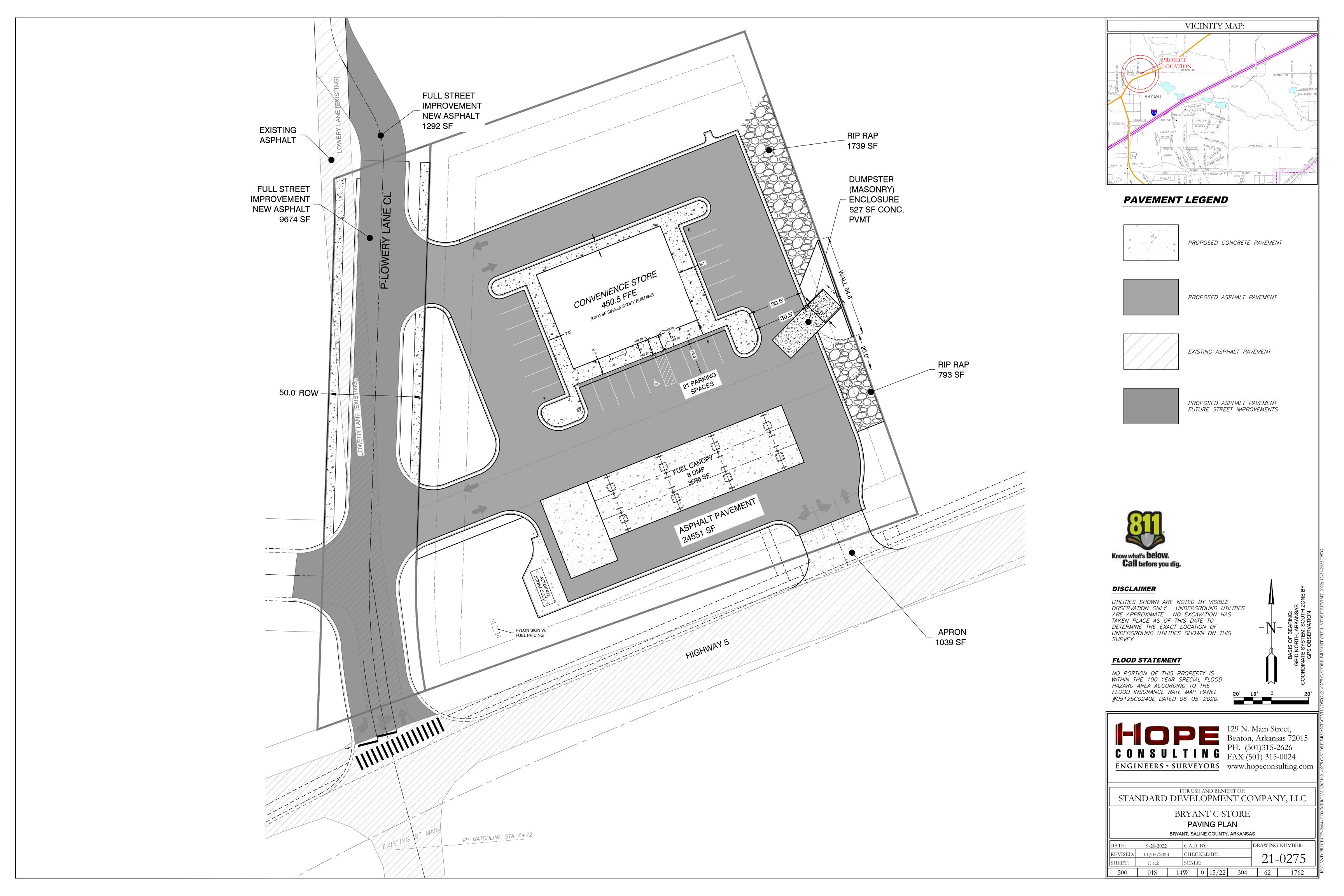
STANDARD OIL, LLC

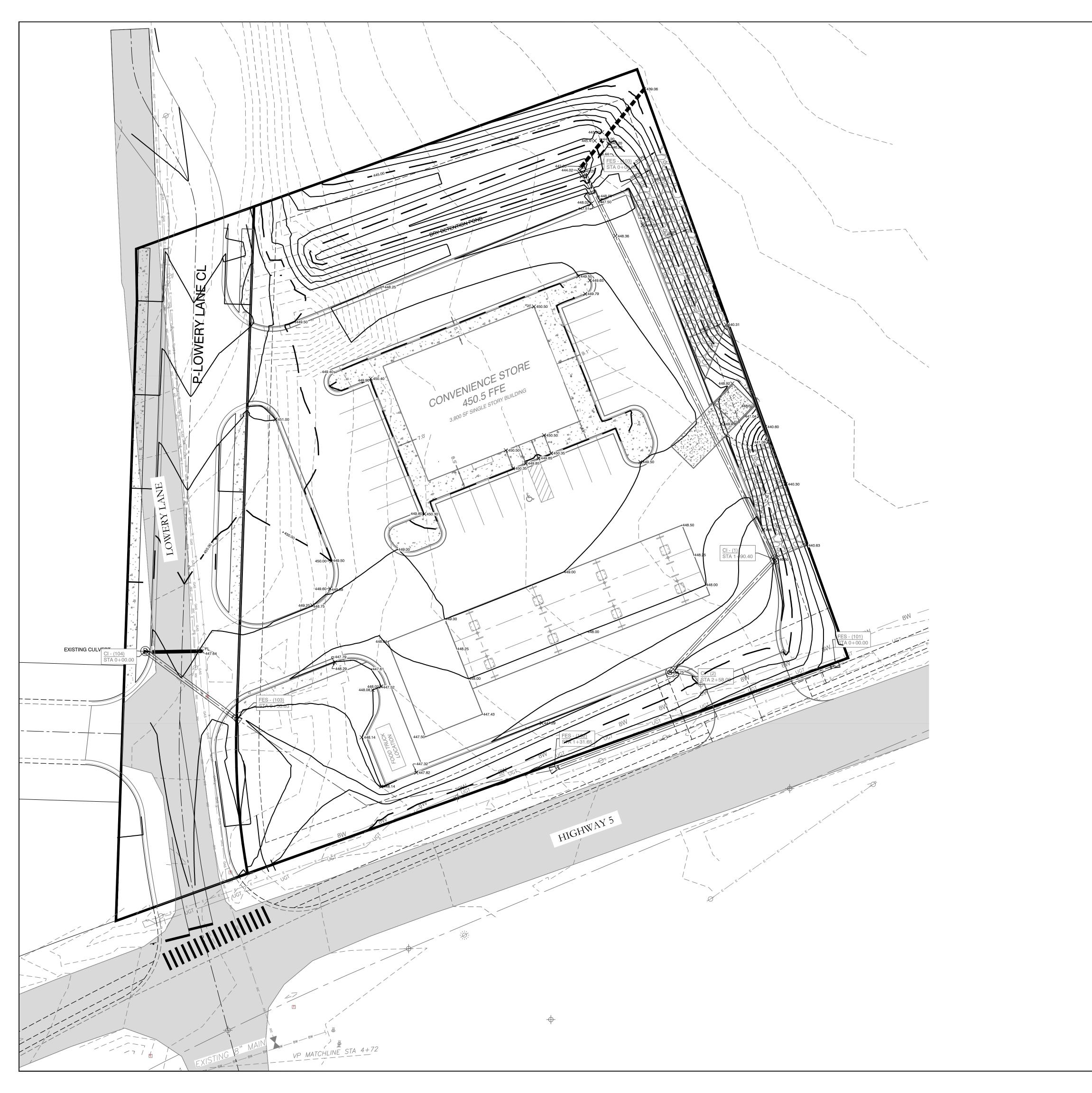
FINAL PLAT OF GOLDEN ACRES A SUBDIVISION IN THE CITY OF BRYANT, SALINE COUNTY, ARKANSAS

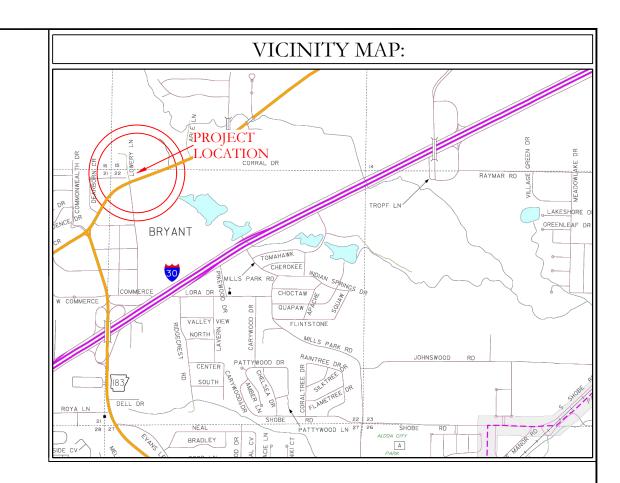
DRAWING NUMBER: C.A.D. BY: 11/24/2021 REVISED:

CHECKED BY: SCALE: 1"= 20"



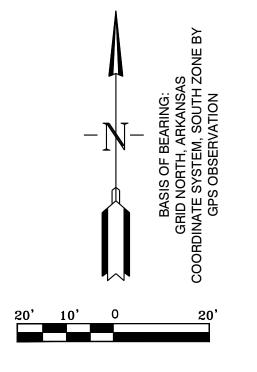






#### **GRADING PLAN NOTES**

- 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. MAXIMUM SLOPE IN ANY DIRECTION IN ADA PARKING AREA IS 2%. IF SLOPES IN THESE AREAS EXCEED 2%, NOTIFY THE DESIGNER IMMEDIATELY. THE MAXIMUM LONGITUDINAL SLOPE OF SIDEWALKS IS 5% WITH A 2% MAXIMUM CROSS SLOPE.
- 5. STORM DRAINAGE PIPES ARE TO BE HDPE.
- 6. FILL SHALL BE COMPACTED TO AT LEAST 98% OF THE MATERIAL'S MAXIMUM STANDARD PROCTOR DRY DENSITY.
- 7. THE MOISTURE CONTENT OF FILL MATERIAL SHALL BE WITHIN THE RANGE OF 1% BELOW TO 3% ABOVE THE OPTIMUM MOISTURE CONTENT.
- 8. 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.
- 9. ALL UNUSABLE SOILS SHALL BE USED ON SITE FOR FILL PURPOSES OUTSIDE THE AREAS OF BUILDING AND PAVEMENT CONSTRUCTION.
- 10. PROPER DRAINAGE SHALL BE MAINTAINED THROUGHOUT THE PROJECT SITE TO PREVENT THE INCREASE OF THE IN-SITU SOILS MOISTURE CONTENT.



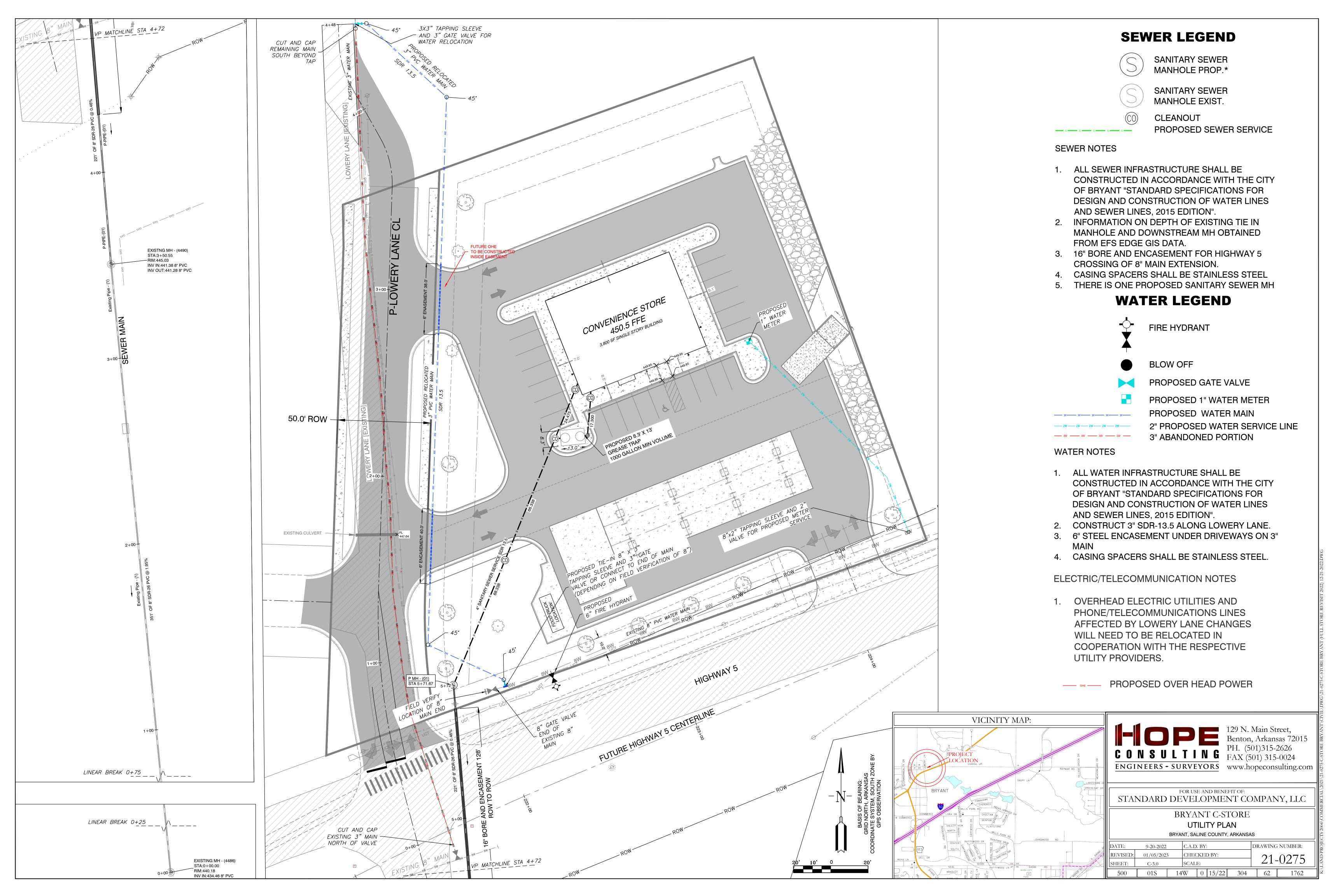


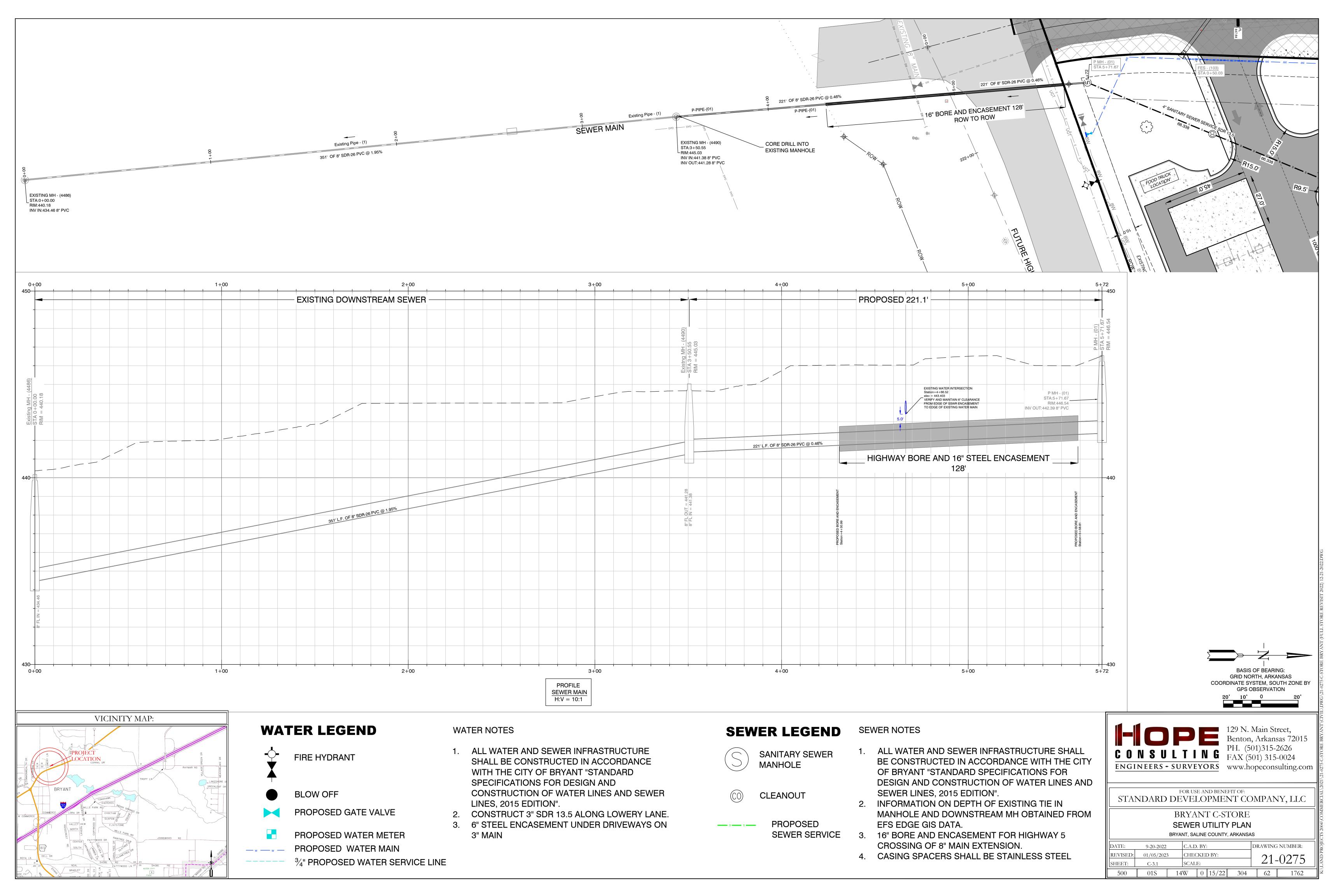
FOR USE AND BENEFIT OF:
STANDARD DEVELOPMENT COMPANY, LLC

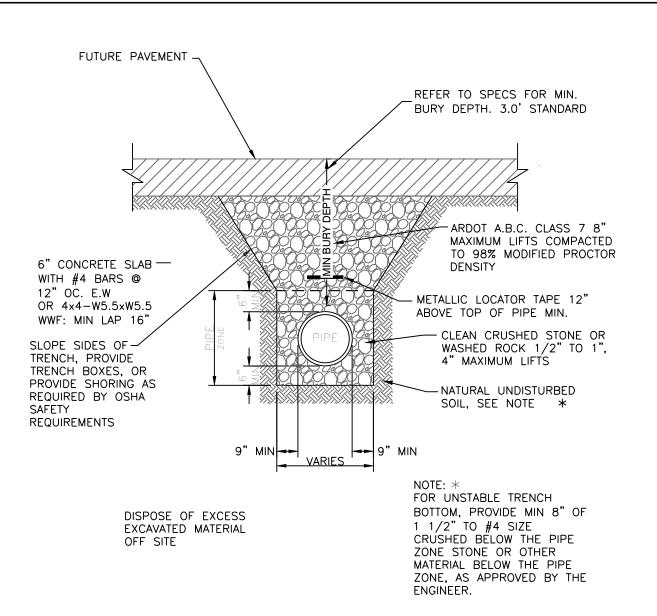
BRYANT C-STORE **GRADING PLAN** 

BRYANT, SALINE COUNTY, ARKANSAS

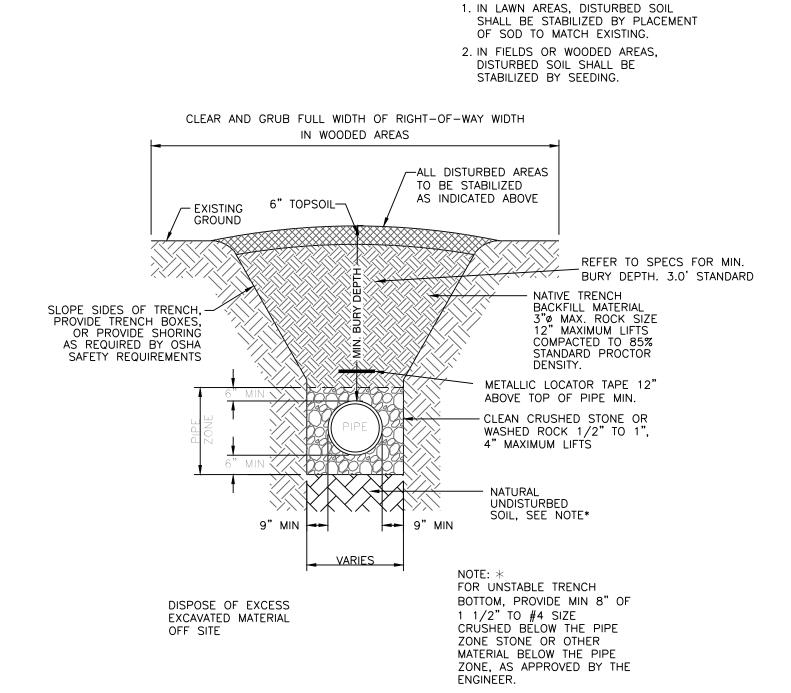
DATE:	9-20-2022		C.A.D. BY:			DRAWING NUMBER:	
REVISED:	01/05/2023	3 C	CHECKED BY:			21	0275
SHEET:	C-1.0		SCALE:				-02/3
500	01S	14W	7 0	15/22	304	62	1762





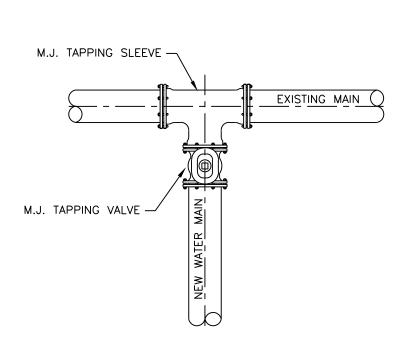


## **PVC SEWER TRENCH UNDER FUTURE ASPHALT STREET** N.T.S.



**SOIL STABILIZATION REQUIREMENTS:** 

## PVC SEWER TRENCH IN UNPAVED AREAS



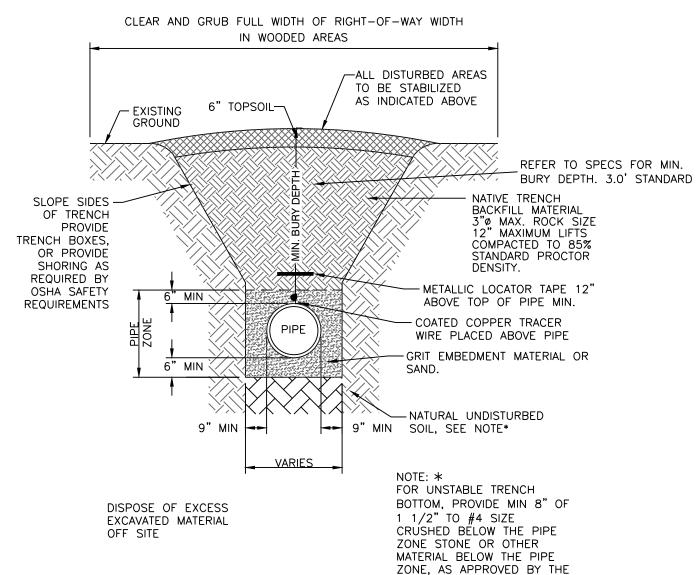
WATER MAIN CONNECTION DETAIL

#### FUTURE PAVEMENT REFER TO SPECS FOR MIN. BURY DEPTH. 3.0' STANDARD -ARDOT A.B.C. CLASS 7 8" MAXIMUM LIFTS COMPACTED TO 98% MODIFIED PROCTOR SLOPE SIDES -OF TRENCH - METALLIC LOCATOR TAPE 12" PROVIDE ABOVE TOP OF PIPE MIN. TRENCH BOXES, OR PROVIDE - COATED COPPER TRACER SHORING AS WIRE PLACED ABOVE PIPE REQUIRED BY GRIT EMBEDMENT MATERIAL OR OSHA SAFETY REQUIREMENTS — NATURAL UNDISTURBED SOIL, SEE NOTE \* VARIES ' NOTE: \* FOR UNSTABLE TRENCH BOTTOM, PROVIDE MIN 8" OF DISPOSE OF EXCESS 1 1/2" TO #4 SIZE EXCAVATED MATERIAL CRUSHED BËLOW THE PIPE OFF SITE ZONE STONE OR OTHER MATERIAL BELOW THE PIPE ZONE, AS APPROVED BY THE

## **PVC WATER LINE TRENCH UNDER FUTURE ASPHALT STREET**

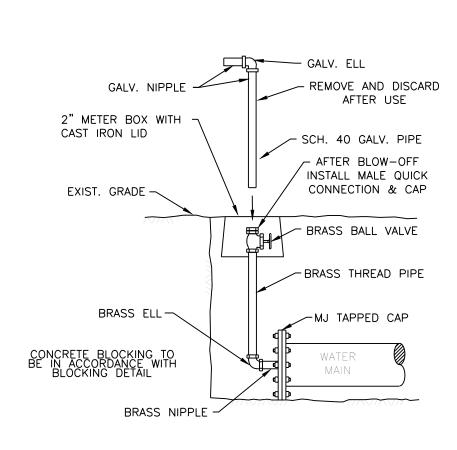
**SOIL STABILIZATION REQUIREMENTS:** 1. IN LAWN AREAS, DISTURBED SOIL SHALL BE STABILIZED BY PLACEMENT OF SOD TO MATCH EXISTING. 2. IN FIELDS OR WOODED AREAS, DISTURBED SOIL SHALL BE STABILIZED BY SEEDING.

ENGINEER.

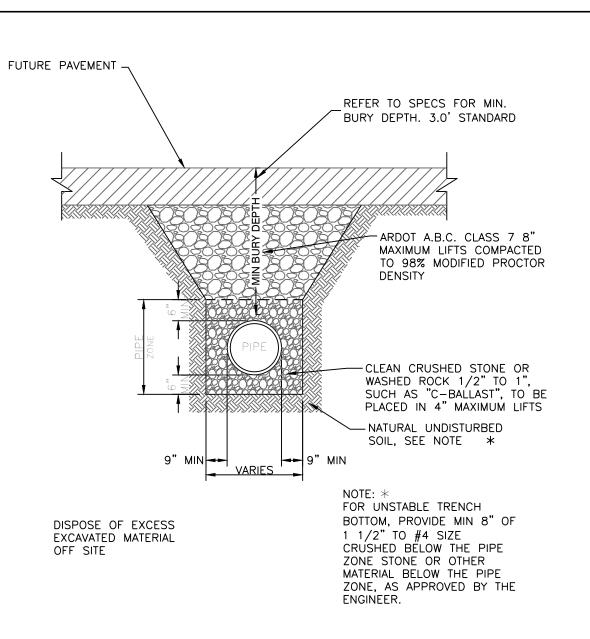


ENGINEER.

## **PVC WATER LINE TRENCH** IN UNPAVED AREAS N.T.S.

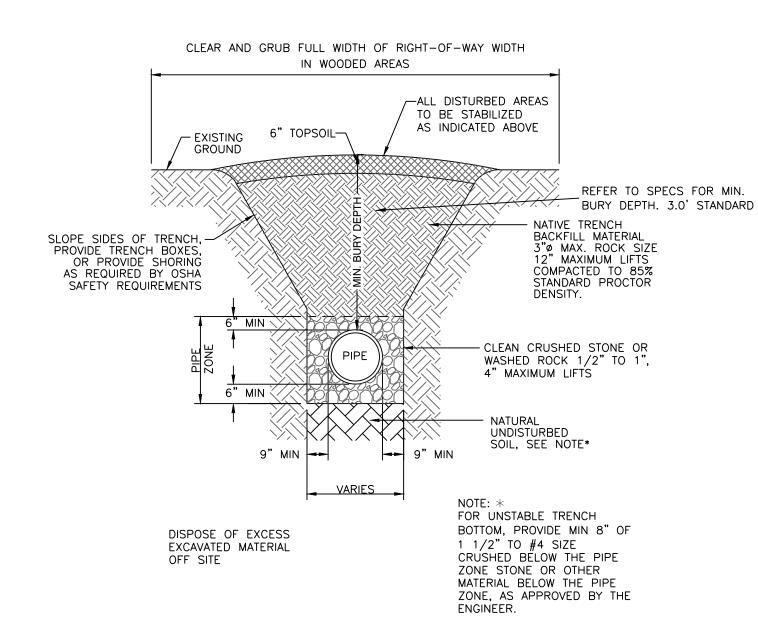


2" BLOW-OFF RISER

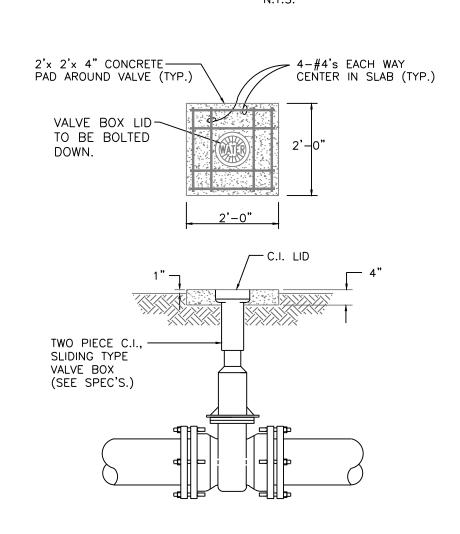


## DRAINAGE PIPE TRENCH UNDER **FUTURE ASPHALT STREET**

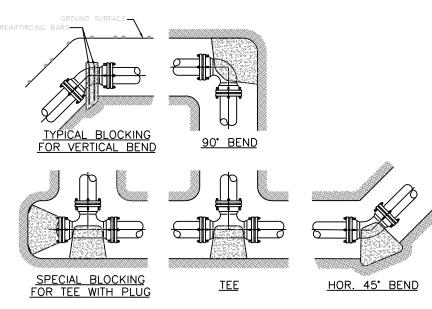
SOIL STABILIZATION REQUIREMENTS: 1. IN LAWN AREAS, DISTURBED SOIL SHALL BE STABILIZED BY PLACEMENT OF SOD TO MATCH EXISTING. 2. IN FIELDS OR WOODED AREAS, DISTURBED SOIL SHALL BE STABILIZED BY SEEDING.



## DRAINAGE PIPES IN UNPAVED AREAS



**DETAIL-VALVE BOX** 



CONTRACTOR TO INSTALL ALL FIRE HYDRANTS TO

THE POSITION SHOWN.

6 CU. FT. OF -

KEEP CONCRETE -

CLEAR OF FH

WEEP HOLE

SHALL BE PLACED BETWEEN CONCRETE

& DUCTILE IRON

VISQUEEN LINING -

CONCRETE SUPPORT -

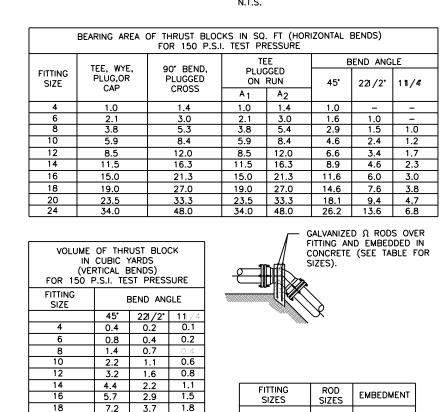
EQUAL TO ONE 80LB

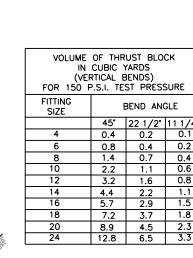
BAG OF SAKRETE OR

0.025 CY

WASHED GRAVEL

FIRE HYDRANT





FINISHED GRADE

`M.J. GATE VALVE

SWIVEL TEE

W/VALVE BOX

MAIN

-SWIVEL ADAPTER

FIRE HYDRANT

CONNECTION

## THRUST BLOCK NOTES:

. KEEP CONCRETE CLEAR OF JOINT 2. CONCRETE THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED

B. REQUIRED VOLUMES OF BEARING AREAS AT FITTINGS SHALL BE AS INDICATED IN THE TABLES PROVIDED AND ADJUSTED, IF NECESSARY, TO CONFORM TO THE TEST PRESSURE(S)
STATED IN THE SPECIFICATIONS. AND

ALLOWABLE SOIL BEARING STRESS(ES)
STATED IN THE SPECIFICATIONS. 4. THRUST BLOCK VOLUMES FOR VERTICAL BENDS HAVING UPWARD RESULTANT THRUSTS ARE BASED ON TEST PRESSURE OF 150 PSIG AND THE WEIGHT OF CONCRETE (4,050 LB/CY). TO COMPUTE VOLUMES FOR DIFFERENT TEST PRESSURES, USE THE FOLLOWING EQUATION: VOLUME = (TEST\_PRESSURE / 150) X (TABLE

5. BEARING AREAS FOR HORIZONTAL BEND THRUST BLOCKS ARE BASED ON TEST PRESSURE OF 150 PSIG AND AN ALLOWABLE SOIL BEARING STRESS OF 2,000 LB/SF TO COMPUTE BEARING STRESSES, USE THE FOLLOWING PRESSURE / 150) X (2,000 / SOIL BEARING STRESS) X (TABLE VALUE).

6. THRUST BLOCKS FOR VERTICAL BENDS HAVING DOWNWARD RESULTANT THRUST SHALL BE THE SAME AS FOR HORIZONTAL BENDS. 7. BEARING AREAS, VOLUMES, AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER THIS

SHALL NOT BE LESS THAN 1.0 SF. 9. VERTICAL BENDS THAT REQUIRE A THRUST BLOCK VOLUME EXCEEDING 5 CY REQUIRE SPECIAL BLOCKING DETAILS. SEE PLANS.

## TYPICAL BLOCKING **DETAILS**

N.T.S.

12" AND LESS #6'S 14" - 24" #8's



129 N. Main Street, Benton, Arkansas 72015 PH. (501)315-2626

FOR USE AND BENEFIT OF: STANDARD DEVELOPMENT COMPANY, LLC

> BRYANT C-STORE TRENCH DETAILS

DRAWING NUMBER: 9-20-2022 REVISED: 01/05/2023 CHECKED BY SHEET: SCALE: 14W 0 15/22 304 62 1762 01S

BRYANT, SALINE COUNTY, ARKANSAS

#### SUBGRADE MATERIAL

- A. Subgrade soils shall be all materials used for subgrade including in-situ materials and fill materials.
- B. Subrades for pavement shall be stabilized by mechanical compaction. Stabilization methods such as fabrics and chemical stabilization may be submitted for approval when supported by engineering data and calculations to substantiate the adequacy of the stabilized procedure.
- C. Subgrade shall be compacted to 95 percent modified proctor density minimum. Moisture content shall be +/- 3% of optimum moisture unless otherwise supported by the site specific geotechnical data and approved by City. D. Subgrade shall be prepared in such a manner that the base course shall be placed on a firm foundation that is stable and free from soft spots, pumping, dust pockets, wheel ruts, or other defects.
- E. The top 24 inches of the subgrade shall be a material not susceptible to frost action unless modified with cement, lime or another method approved specifically by the City to resist frost action. Soils classified as A-4 and A-5 including sandy silts, fine silty sand or lean clays are highly susceptible to frost
- F. In-situ soils meeting the requirements outlined in these specifications may be utilized as subgrade shall be scarified to a minimum depth of 8-inches below finish subgrade, recompacted and tested as described below. Fill material for subgrade shall be placed in lifts not to exceed 8-inches compacted depth.
- G. Methods and procedures for establishing the total depth of soil replacement and/or modification shall be as specified by the design engineer and geotechnical investigations. The adequacy of in-situ soils and fill materials as pavement subgrade shall be evaluated based upon the soils classification, liquid
- H. Soils with a liquid limit greater than 40, or a plasticity index greater than 15 shall be undercut and removed from the street section or improved by a design method of stabilization approved by the City.
- I. Quality control testing shall be as specified below.
- Undercut 24" of soil below finished street base course. Proof roll to verify stability
- K. Backfill the undercut subgrade with Class 7 aggregate or soil meeting the requirements of this section and compact in lifts not exceeding 8".

#### BASE COURSE

- A. Base course material shall be crushed stone meeting the requirements of ArDOT Class 7 aggregate base course as specified in the latest edition of ArDOT Standard Specifications.
- B. Base course shall be compacted to 98 percent modified proctor density minimum. Moisture content shall be +/- 3% of optimum moisture.

#### SURFACE COURSE

A. Surface course for flexible pavement designs shall utilize plant mix bituminous base and binder courses conforming to ArDOT Standard Specifications.

#### CURB AND GUTTER

- A. Curb and gutter shall be Portland Cement Concrete with a minimum 28-day compressive strength of 4,000 psi. Concrete shall be air-entrained with a maximum of 4-inch slump.
- B. Compaction requirements under curb and gutter shall conform to the requirements for street subgrade materials. Compaction requirements shall extend to a minimum of 1 foot beyond the back of curb and gutter removing all soft spots and replacing with suitable material. C. Curb and gutter shall conform to the typical detail within these specifications or ArDOT Standard Roadway Drawing Details for curbing.
- D. Expansion joints shall be made with 1/2-inch preformed expansion joint filler of a non-extruding type. Expansion joints shall be placed at intervals not exceeding 195 feet, intersection radii, driveways, stationary structures, and sidewalks.
- E. Contraction joints shall be sawed or formed at intervals not greater than 20 feet. Depth of saw-cut hall be 1 1/2-inch and have a width of 1/4-inch. Contraction joints shall be sealed in accordance with ArDOT Standard Specifications. F. Forms shall be made of metal or wood and shall be properly braced. The minimum length of each section of form used shall be uniform and free from undesirable bends or warps. Forms shall be of such cross section and strength and so secured as to resist the
- pressure of the impact and vibration on any equipment which they support without springing or settlement.
- G. Curb and gutter placed with slip form or extruding equipment will be acceptable providing it complies with all of the above requirements. H. After curing, the curb shall be immediately backfilled to within 4 inches of the top curb to eliminate the possibility of washing beneath the curb. The remaining 4 inches shall be topsoil.
- I. Cold weather protection shall meet the requirements of the latest edition of ArDOT Standard Specifications.

#### **SIDEWALKS**

#### General

- A. Sidewalks shall be Portland Cement Concrete with a minimum 28-day compressive strength of 4,000 psi.
- B. Sidewalks shall be on both sides of streets in line with sidewalks on opposite corners of roads.
- C. All sidewalks including ramps shall meet all current Federal Americans with Disabilities (ADA) design guidelines or requirements.
- D. Traverse slopes shall not exceed 2 percent.
- E. Subgrade under sidewalks shall be compacted to 90 percent modified proctor density minimum.
- F. Sidewalks shall not be placed upon grassy or organic materials.
- G. Sidewalks which extend or link existing sidewalks shall adjoin the existing sidewalks to form a continuous, even pathway.
- H. Utility poles, utility boxes, mailboxes, fire hydrants, and other similar obstructions shall not be located in sidewalks Sidewalk location may vary at the discretion of the City to avoid such obstacles.

#### Minimum thickness and reinforcement

- A. Sidewalks shall have a minimum thickness of 4 inches.
- B. Sidewalks shall be reinforced, at a minimum, with woven wire fabric reinforcement.

#### Contraction and expansion joints

- A. Contraction joints shall be provided perpendicular to the sidewalk at intervals equal to the sidewalk width.
- B. Expansion joints shall be constructed perpendicular to the sidewalk at intervals equal to five times the sidewalk width. Expansion joints shall be made with 1/2-inch preformed expansion joints shall be placed at driveways, drop inlets, and curbs.

#### Quality control testing and inspection by the City

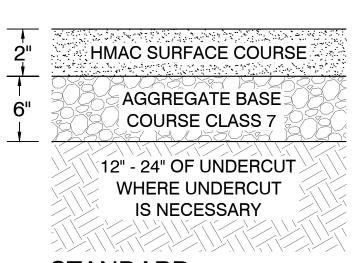
- A. Subgrade and formwork for sidewalks shall be inspected by the City prior to pouring of the sidewalk.
- B. All testing of materials and construction shall be provided and paid for by the Developer/Owner.
- C. All field tests required for a project shall be witnessed by the City, contractor, or their authorized representatives.
- All testing shall be accomplished by a testing firm approved by the City and shall be performed under the supervision of a licensed Professional Engineer.
- E. Sampling and testing locations shall be subject to approval by the City.
- F. Density tests on subgrades shall be taken every 300 feet or portion thereof.
- G. The City shall be notified at least one day in advance of the need to inspect subgrade and formwork of sidewalks.

### Subgrade

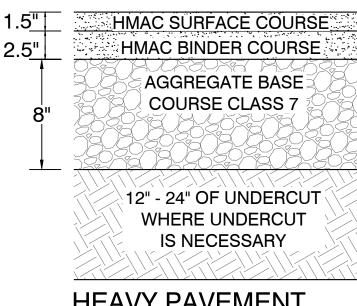
- A. Subgrade soils shall be all materials used for subgrade including in-situ materials and fill materials.
- B. Subgrade shall be compacted to 90 percent modified proctor density minimum. Moisture content shall be +/- 3% of optimum moisture unless otherwise supported by the site specific geotechnical data and approved by City. C. Subgrade shall be prepared in such a manner that the base course shall be placed on a firm foundation that is stable and free from soft spots, pumping, dust pockets, wheel ruts, or other defects.
- D. The top 24 inches of the subgrade shall be a material not susceptible to frost action unless modified with cement, lime or another method approved specifically by the City to resist frost action. Soils classified as A-4 and A-5 including sandy silts, fine silty sand or lean clays are highly susceptible to frost
- QUALITY CONTROL TESTING AND INSPECTIONS

### General

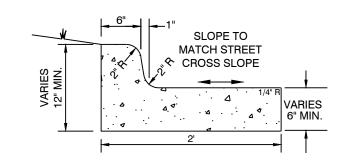
- A. Materials and construction employed in street improvements shall be subject to inspection and quality control testing. All testing of materials and construction shall be provided and paid for by the Developer/Owner.
- B. The Developer/Owner shall provide for inspections of street improvements during construction. The Engineer of Record. The Engineer of Record shall provide certification that all materials and construction conform to the approved plans and specifications and with these minimum street standards.
- C. The Engineer of Record shall furnish inspection whenever a critical construction activity is taking place. This means that a representative of the Engineer of Record must be on-site whenever a critical construction activity is taking place.
- D. All field tests required for a project shall be witnessed by the City, Engineer of Record, contractor, or other authorized representatives. E. The City shall be notified at least one day in advance of any test(s). It is the responsibility of the contractor to coordinated the scheduling of all tests with the City.



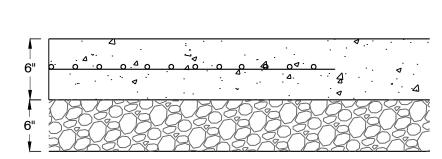
STANDARD **PAVEMENT SECTION** NOT TO SCALE



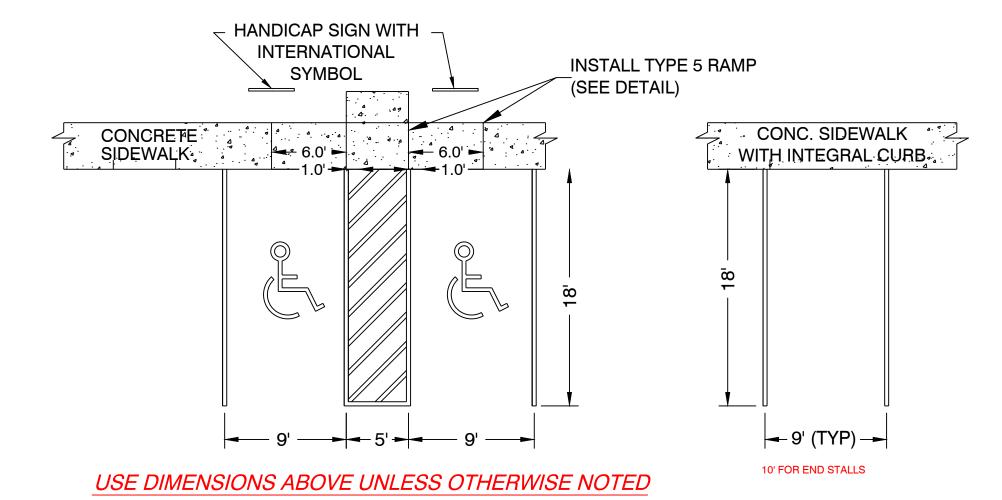
**HEAVY PAVEMENT SECTION NOT TO SCALE** 



TYPICAL CURB AND GUTTER DETAILS 4,000 PSI CONCRETE NOT TO SCALE



CONCRETE PAVEMENT SECTION DETAIL NOT TO SCALE



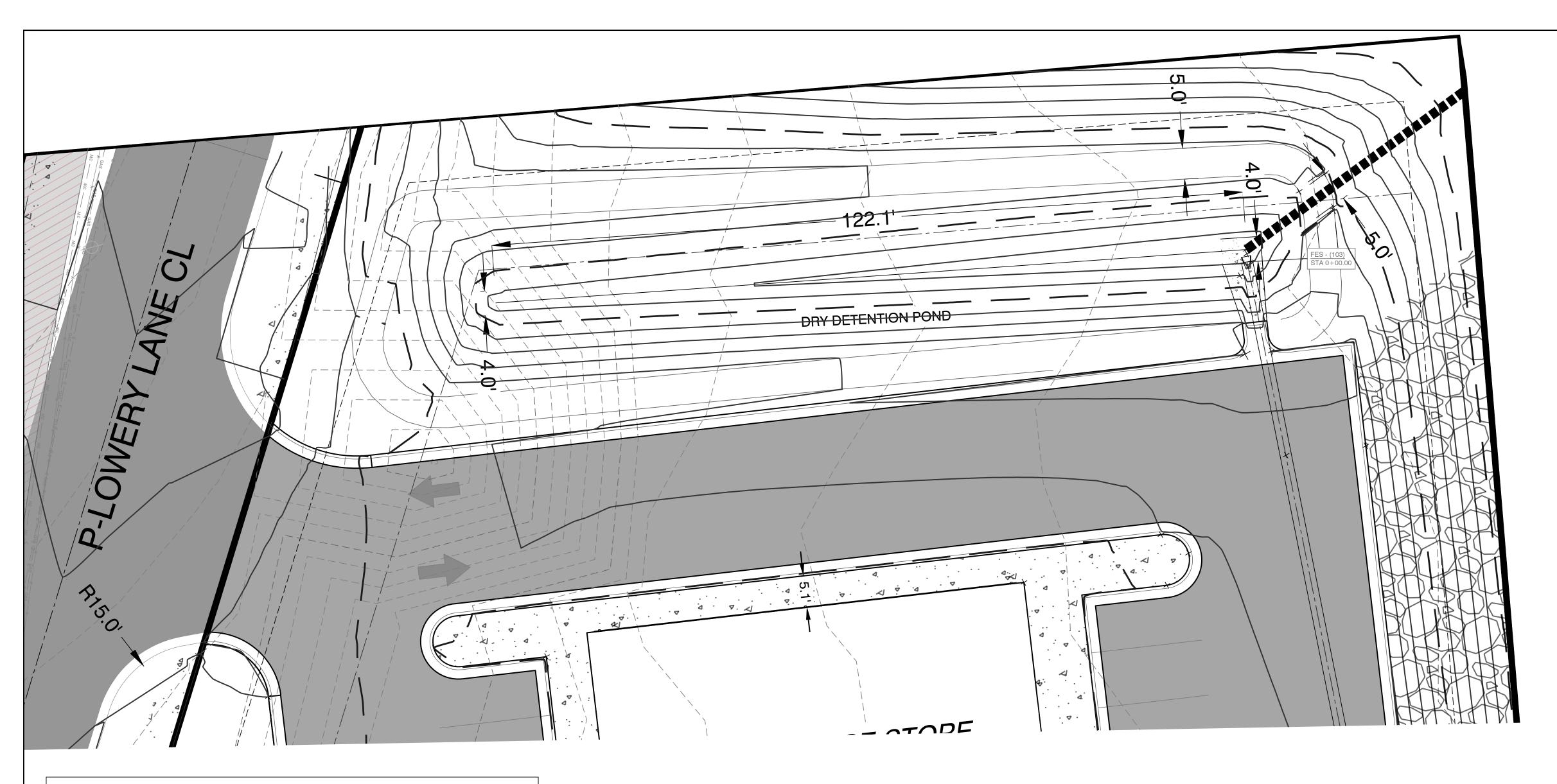
PARKING STALL & SIDEWALK DETAIL NOT TO SCALE

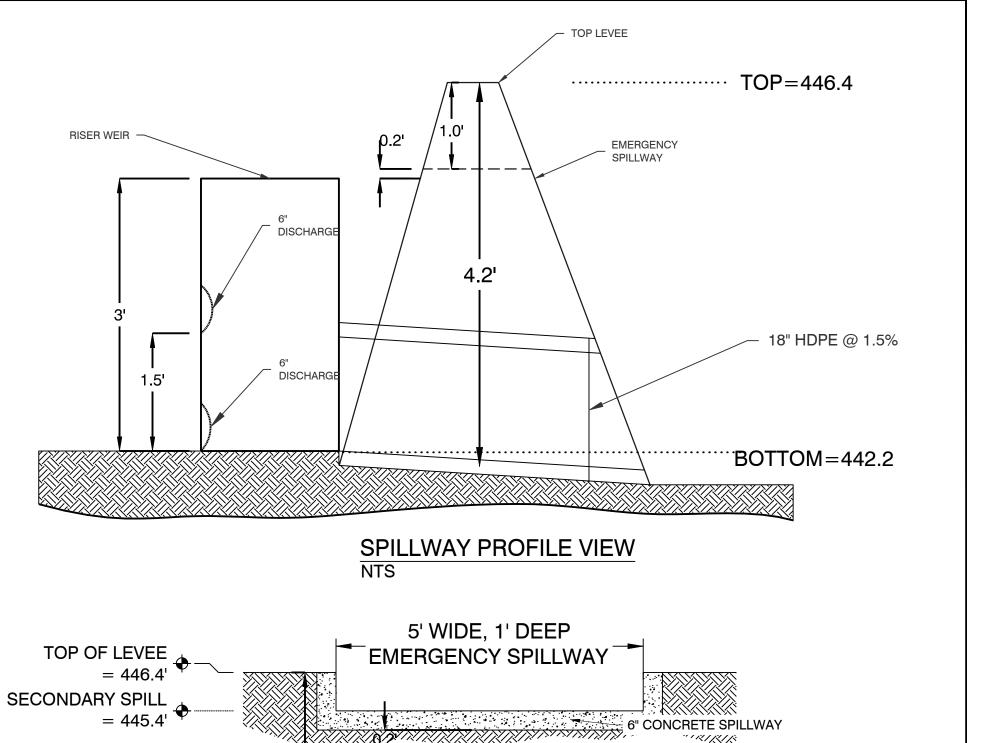


FOR USE AND BENEFIT OF: STANDARD DEVELOPMENT COMPANY, LLC

> BRYANT C-STORE CIVIL SPECS BRYANT, SALINE COUNTY, ARKANSAS

DRAWING NUMBER: 9-20-2022 C.A.D. BY: REVISED: 01/05/2022 CHECKED BY: 21-0275 C-5.0 SHEET: 14W 0 15/22 304 01S 62





SPILLWAY END VIEW

### **DETENTION POND MAINTENANCE PLAN**

The detention pond is located along the north boundary of the property. The modifications are designed to temporarily detain stormwater to meet the City of Bryant's water quantity criteria before discharging from the pond.

#### **Routine Maintenance** Routine maintenance will include but not be limited to:

- -The primary discharge (1 HDPE 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 discharge weir for non-routine maintenance need.

## **Periodic or Non-Routine Maintenance**

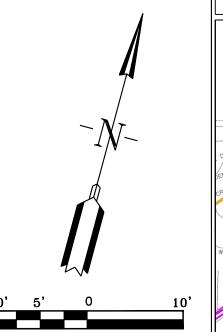
The routine inspection of the pond area and discharge weir will identify needed repairs and non-routine maintenance. These items may include but not be limited to:

-Bottom of pond will be sodded (except where trickle channel is located). -Embankments sloped 2:1 will be concrete stabilized, 3:1 slopes shall be sodded

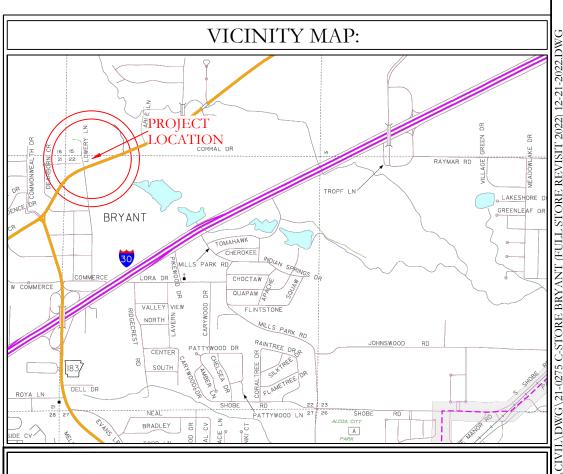
-Re-growth of trees on or around the pond bank shall be cut and removed from the pond area.

-Stabilization of slopes may be required periodically or after excessive rain events. Any disturbance of slopes should be reseeded or may require installation of erosion control materials until seeding can reestablish adequate grasses to prevent future erosion. -Any other maintenance or repairs which would minimize other maintenance to the pond or outfall structures.

For questions or concerns about the pond, contact \_\_\_\_ at 501-\_\_\_\_.



4.2



RISER WEIR

6" DIAMETER

6" ORIFICE DISCHARGE



ENGINEERS - SURVEYORS www.hopeconsulting.com

FOR USE AND BENEFIT OF: STANDARD DEVELOPMENT COMPANY, LLC

> BRYANT C-STORE **DETENTION PLAN** BRYANT, SALINE COUNTY, ARKANSAS

C.A.D. BY: DRAWING NUMBER: 9-20-2022 REVISED: 01/05/2023 CHECKED BY: 21-0275 SHEET: SCALE: C-6.0

