

**REGULAR MEETING OF THE
CITY OF ALVARADO PLANNING AND ZONING COMMISSION
104 W. COLLEGE AVE.
MAY 16, 2024
6:30 PM
AGENDA**

The Planning and Zoning Commission of the City of Alvarado will meet in a regularly called session on Thursday, May 16, 2024 at 6:30 p.m. in the Council Chambers at City Hall for the following agenda items.

CALL TO ORDER - Roll Call

INVOCATION

PLEDGE OF ALLEGIANCE

CITIZEN PARTICIPATION AND PUBLIC INPUT:

This is an opportunity for citizens to address the convened board of this meeting on any matter. The presiding officer may ask for the citizen to hold his or her comment on an agenda item until that agenda item is reached. The convened board has no obligation to respond in any matter to comments or questions from the public. Any response from a member of the convened Board to comments related to items not on the agenda is limited to a statement of specific factual information, a recitation of existing policy, or direction to staff to place the subject on the agenda for a future meeting.

APPROVAL OF MINUTES

1. Consideration and action to approve Minutes from the 4/11/2024 Regular Planning and Zoning Commission Meeting.

CONSENT AGENDA: NA

NEW BUSINESS:

2. Consideration and action on the application of Chris Wall with JBI Partners, Inc. on behalf of GRBK Edgewood LLC & Century Land Holdings of Texas, LLC for approval of the Lone Oak Addition Phase 1 final plat on 70.219 acres known as tracts and portions of tracts out of the James B. Conger Survey, A-150, and the George S. McIntosh Survey, A-625, approximately addressed at 825 and 1029 CR 607. (French)

3. Consideration and action on the application of Heath Voyles with Westfall Engineering on behalf of Shaw Development Group, LLC for approval of the Parkview at Alvarado Apartments Addition preliminary plat on 29.021 acres known as Tract 161 in the I. Glaze Survey, A-313, Tract 29A in the J. Dixon Survey, A-214, and Tract 1A in the J. M. Ross Survey, A-737, approximately addressed at 600 N. Parkway Drive. (French)

EXECUTIVE SESSION: (OPTIONAL WITH ADVANCED NOTICE TO CITY ATTORNEY)

Pursuant to the Texas Open Meetings Act, Chapter 551 of the Texas Government Code, the City Council or other Board may convene in closed session to deliberate regarding the following matters: §551.071 Consultation with Attorney. The City Council or other Board may convene in Executive Session to conduct a private consultation with its Attorney on any legally posted agenda item, when the City Council or other Board seeks the advice of its attorney about pending or contemplated litigation, a settlement offer, or on a matter in which the duty of the Attorney to the governmental body under the Texas Disciplinary Rules of Professional Conduct of the State Bar of Texas clearly conflicts with the provisions of Chapter 551.

COMMISSIONER COMMENTS:

Pursuant to LGC Section 551.0415, Commission Members may make a report about items of Community interest during a meeting of the governing body without having given notice of the report. Items of community interest may include, but not necessarily limited to any of the following:

- Expressions of thanks, congratulations, or condolence;
- Information regarding holiday schedules;
- An honorary or salutary recognition of a public official, public employee, or other citizen, except that a discussion regarding a change in the status of the person's public office of public employment is not an honorary or salutary recognition for purposes of this subdivision;

- A reminder about an upcoming event organized or sponsored by the governing body;
- Information regarding a social, ceremonial, or community event organized or sponsored by an entity other than the governing body that was attended or is scheduled to be attended by a member of the governing body or an official or employee of the municipality; and
- Announcements involving an imminent threat to the public health and safety of people in the municipality that has arisen after the posting of the agenda.

ADJOURN

ACCESSIBILITY STATEMENT

The Alvarado City Hall and Council Chamber are wheelchair accessible. The exit and parking ramps are located in the front of the building. Persons with disabilities who plan to attend this meeting and who may need auxiliary aids or services such as interpreters for persons who are deaf or hearing impaired, readers, or large print, are requested to contact the City Secretary's Office at 817-790-3351, FAX: 817-783-7925, e-mail: wallsb@cityofalvarado.org. Please call at least two (2) working days prior to the meeting so that appropriate arrangements can be made.

NON-DISCRIMINATION STATEMENT

The City of Alvarado does not discriminate on the basis of race, color, national origin, sex, religion, or disability in the employment or the provision of services.

I, the undersigned authority, do hereby certify that the above agenda was posted on the bulletin board at the City Hall of the City of Alvarado, Texas, a place convenient and readily accessible to the general public at all times, and said agenda was posted on May 13, 2024 before 4:30 p.m. and remained so posted continuously for at least 72 hours preceding the scheduled time of said meeting.



Justin French, AICP
Community Development Director
City of Alvarado, Texas

**REGULAR MEETING OF
THE CITY OF ALVARADO PLANNING AND ZONING COMMISSION**

**104 W. COLLEGE
April 11, 2024 @ 6:30 PM**

MINUTES

The Planning and Zoning Commission of the City of Alvarado met in a regularly called session on Thursday, April 11, 2024 at 6:30 p.m. in the Council Chambers at City Hall. The following members were present for roll call:

Bryan Thornton
Barbara Fuller
Ryan Banister
Kelly Richardson
Joshua Rendon

The following member was absent for roll call:
Mike McBee

The following alternate was absent for roll call:
Flint Webb

City personnel present: Justin French, Community Development Director

Chairman Thornton called the meeting to order at 6:30 p.m.

INVOCATION

PLEDGE OF ALLEGIANCE

CITIZEN PARTICIPATION AND PUBLIC INPUT – None

APPROVAL OF MINUTES – Commissioner Bannister moved to approve the February 15, 2024 minutes as written. Commissioner Rendon seconded the motion. Motion passed with five votes in favor and none opposed.

CONSENT AGENDA – None

NEW BUSINESS

Consideration and action on the application of Heath Voyles with Westfall Engineering on behalf of Shaw Development Group, LLC for approval of the Parkview at Alvarado Apartments Addition preliminary plat on 29.021 acres known as Tract 161 in the I. Glaze Survey, A-313, Tract 29A in the J. Dixon Survey, A-214, and Tract 1A in the J. M. Ross Survey, A-737, approximately addressed at 600 N. Parkway Drive. Chairman Thornton noted that the applicant tabled action on the plat to the May 16th regular P&Z meeting.

Consideration and action on the application of Mike Homes with Atwell, LLC on behalf of BW Gas & Convenience Retail, LLC represented by Greg Gardner for approval of the Allsup's Addition preliminary plat on approximately 14.09 acres known as a portion of Tract 11 of the A. Spiva Survey, A-770. Mr. French presented a brief overview of the request. The applicant, Mike Holmes was present to answer questions. Being no one further to speak upon the request, Chairman Thornton asked for a motion. Commissioner Bannister moved to recommend conditional approval to City Council as presented. Commissioner Fuller seconded the motion. Motion passed with five votes in favor and none opposed.

Consideration and action on the application of Bloomfield Homes represented by Clint Vincent for approval of the Whisper Park Addition preliminary plat on 172.322 acres known as Blocks 3 and 4 of the Brown Addition Section 2, a tract out of the A. J. Patton Survey, A-684, Tract 36 of the A. Spiva Survey, A-770, and Tracts 21, 22, 25A, 26A, 27 and 27A of the R. Bell Survey, A-44. Mr. French presented a brief overview of the request. The applicant's engineer, Cameron Sloan was present to answer questions. Being no one further to speak upon the request, Chairman Thornton asked for a motion. Commissioner Bannister moved to recommend conditional approval to City Council as presented. Commissioner Richardson seconded the motion. Motion passed with five votes in favor and none opposed.

Public hearing, consideration and action on the application of 275 Alvarado LLC represented by Ron Welborn for approval of a zoning change from Agricultural (A) District and Light Manufacturing/Industrial District (M-1) with portions in the Floodplain (FP) Overlay to Planned Development (PD) District for Garden Home (GH) District uses and General Commercial (C-2) District uses with portions in the Floodplain (FP) Overlay plus self-storage use on 49.85 acres known as a portion of Tracts 20, 21, 22, and 34 of the A. Spiva Survey, A-770, approximately addressed at 804 E. Davis Avenue, with an amendment to the Future Land Use map in the Alvarado Comprehensive Plan and with concept plan approval and deviations. Chairman Thornton opened the public hearing, and Mr. French presented a brief overview of the request. The applicant's representatives were present to answer questions. Being no one further to speak upon the request, Chairman Thornton closed the public hearing and asked for a motion. Commissioner Rendon moved to recommend approval to City Council as presented. Commissioner Bannister seconded the motion. Motion passed with five votes in favor and none opposed.

Public hearing, consideration and action on the application of GRBK Edgewood LLC & Century Land Holdings of Texas, LLC for approval of a zoning change from Agricultural (A) District to Planned Development (PD) District for Single-Family Residential (SF-2) District uses on 428.755 acres known as a portion of Tract 1 of the J. Nicholson Survey, A-1079, portions of Tracts 2, 5, and 6 of the J. B. Conger Survey, A-150, and portions of Tracts 1-5 and 29 of the G. S. McIntosh Survey, A-625, approximately addressed at 825 and 1029 CR 607, with an amendment to the

Future Land Use map in the Alvarado Comprehensive Plan and with development plan approval and deviations. Chairman Thornton opened the public hearing, and Mr. French presented a brief overview of the request. The applicant, Bobby Samuel, was present to answer questions. Being no one further to speak upon the request, Chairman Thornton closed the public hearing and asked for a motion. Commissioner Fuller moved to recommend approval to City Council as presented. Commissioner Bannister seconded the motion. Motion passed with five votes in favor and none opposed.

ADJOURNMENT

Chairman Thornton adjourned the regular meeting at 8:18 p.m.

Passed and approved this _____ day of _____, 2024.

Bryan Thornton, Chairman

Attest:

Justin French, Community Development Director



Planning and Zoning Commission Meeting Management Report

Meeting Date: May 16, 2024

Contact: Justin French, Community Development Director

AGENDA ITEM:

Consideration and action to approve the application of Chris Wall with JBI Partners, Inc. on behalf of GRBK Edgewood LLC & Century Land Holdings of Texas, LLC for approval of the Lone Oak Addition Phase 1 final plat on 70.219 acres known as tracts and portions of tracts out of the James B. Conger Survey, A-150, and the George S. McIntosh Survey, A-625, approximately addressed at 825 and 1029 CR 607.

BACKGROUND & FINDINGS:

The final plat application was submitted and deemed administratively complete on April 22, 2024. Per Section 34-36.c of the Alvarado subdivision ordinance, the Planning and Zoning Commission shall:

- (1) Act within 30 days after the filing of final plat,
- (2) Submit one of the following recommendations to the City Council.
 - a. Approve.
 - b. Approve with conditions.
 - c. Disapprove with reasons.

The Future Lane Use (FLU) map within the Alvarado Comprehensive Plan designates the subject site for Low Density Residential. The proposed plat is consistent with the City's FLU map. Staff recommends disapproval of this final plat because of the comments in the drafted recommended disapproval letter attached. In addition, the final plat shall not be recorded unless and until all requirements of the subdivision regulations have been complied with and until such stipulations as may be set by the City council have been met.

FINANCIAL IMPACT:

None.

RECOMMENDATION:

Staff suggests the Commission recommend to Council disapproval because of the comments in the draft recommended disapproval letter attached.

MANAGEMENT REVIEW:

Paul DeBuff, City Manager

ATTACHMENTS:

Application
Location Map
Final Plat
Draft Recommended Disapproval Letter
Subdivision Construction Plans (available upon request)



PLAT APPLICATION

Office Use Only

Clerk: _____ Project#: _____
Fee: \$ _____
Date Pd: _____ Check# or Cash: _____
Receipt#: _____ Received by: _____

Please submit all plat documents and ensure they are in compliance with the City of Alvarado Subdivision Ordinance.

Type of Plat

☐ Preliminary Plat

☒ Final Plat

☐ Plat Revision

☐ Administrative Plat

Title of Plat LONE OAK PHASE 1
257 SF RESIDENTIAL
5 OPEN SPACE
1 AMENITY CENTER
1 FIRE STATION
Total Lots _____ Total Acres 70.219 Current Zoning PD
Subdivision Name LONE OAK Lots 1,657 Block(s) BLOCKS (A THROUGH TT)
Survey Name(s) JAMES B CONGER SURVEY DAVID MITCHELL SURVEY GEORGE S. MCINTOSH SURVEY JAMES NICHOLSON SURVEY Abstract No.(s) ABSTRACT NO. 150 ABSTRACT NO. 586 ABSTRACT NO. 625 ABSTRACT NO. 107 Tract(s) _____
Address/Location 1029 CR 607 ALVARADO, TEXAS 76009

Applicant

Company or Name JB PARTNERS, INC
Contact Name CHRIS WALL
Address 2121 MIDWAY ROAD,
SUITE 300 City CARROLLTON State TX Zip 75006
Telephone 972-738-0212 Email CWALL@JBIPARTNERS.COM

Owner (If Different)

Company or Name GRBK EDGEWOOD LLC & CENTURY LAND HOLDINGS OF TEXAS, LLC
Contact Name BOBBY SAMUEL
Address 5501 HEADQUARTERS DRIVE,
SUITE 300W City PLANO State TX Zip 75024
Telephone 817-658-2112 Email BSAMUEL@GREENBRICKPARTNERS.COM

I further understand that this request will be placed on the appropriate Planning & Zoning Commission and City Council agendas and must meet requirements of the Subdivision Regulations. All plats must be accepted in writing. A plat is not considered filed until accepted by the City Council.

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Signature of Applicant, Owner, or Authorized Agent

4/22/2024

Date

Planning Official

Fee: \$

Date of P&Z Meeting

Date of Council Meeting

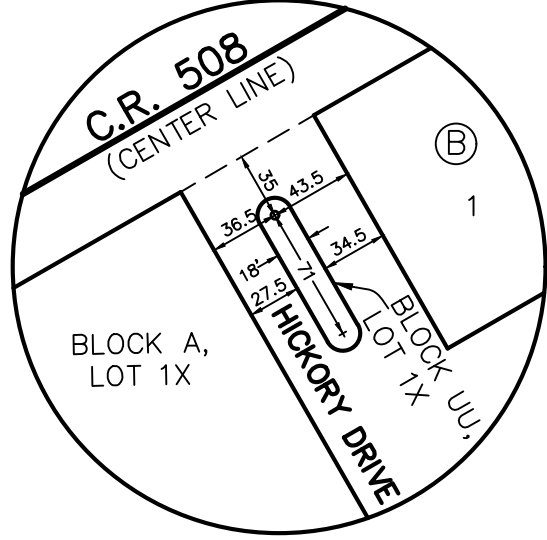
Signature of Planning Official

****FOR OFFICE USE ONLY****

Received By

Date Received

Date Approved



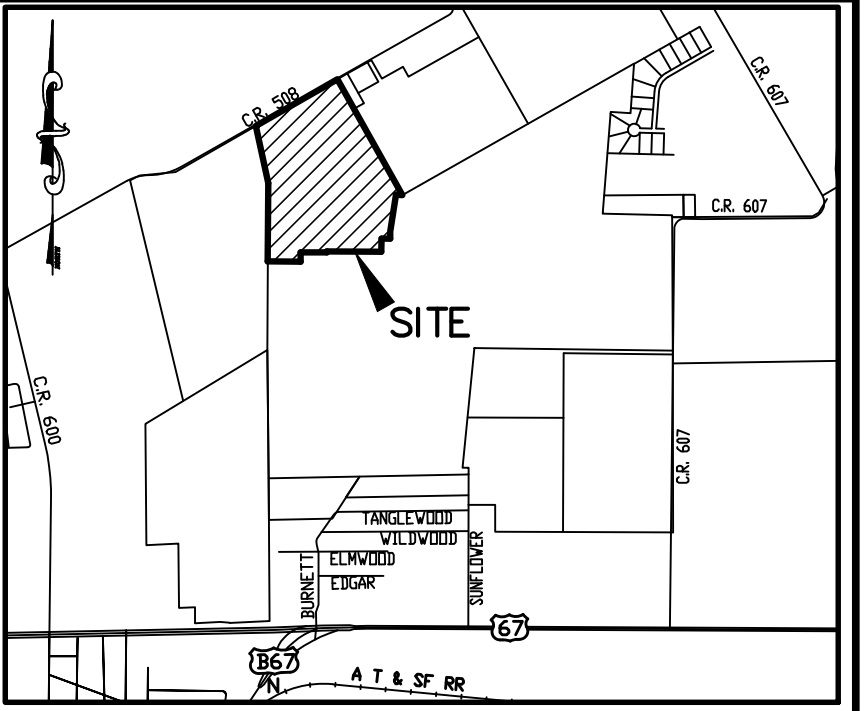
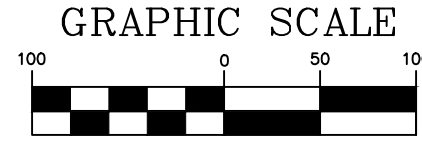
DETAIL "A"

INDIE CATCH, LLC
INST. NO. 2022-36624
CALLED 164.656 AC.

FIRE STATION LOT
LOT 11X, BLOCK B
(2.483 ACRES)

NAVA LEGACY 49 LLC
INST. NO. 2019-34549
D.R.J.C.T.
CALLED 58.71 AC.

LINE TABLE		
NO.	BEARING	LENGTH
L1	S00°19'20"W	50.00'
L2	S89°40'40"E	5.99'
L3	S89°41'21"E	15.30'
L4	N29°52'39"W	25.00'
L5	S29°52'39"E	25.00'
L6	S34°53'20"W	51.76'
L7	N00°19'20"E	25.00'
L8	S45°19'20"W	21.21'
L9	N59°46'39"W	17.30'



LOCATION MAP
NTS

CURVE TABLE					
NO.	LENGTH	DELTA	RADIUS	TANGENT	CHORD BEARING
C1	131.77'	030°11'59"	250.00'	67.45'	N75°13'21"E
C2	131.77'	030°11'59"	250.00'	67.45'	N75°13'21"E
C3	237.45'	054°25'09"	250.00'	128.54'	N02°09'39"W
C4	35.77'	008°11'50"	250.00'	17.91'	S04°25'16"W
C5	181.86'	037°53'24"	275.00'	94.40'	N10°25'31"W
C6	136.09'	031°11'22"	250.00'	69.78'	S40°38'36"W
C7	86.55'	016°31'44"	300.00'	43.58'	S16°47°03"W
C8	35.77'	008°11'50"	250.00'	17.91'	S04°25'16"W
C9	150.83'	034°34'00"	250.00'	77.79'	S17°36'20"W
C10	115.06'	026°22'09"	250.00'	58.57'	N21°42'15"E
C11	72.12'	016°31'44"	250.00'	36.31'	S16°47°03"W

LEGEND

- IRF IRON ROD FOUND
- IRS IRON ROD SET
- POB POINT OF BEGINNING
- ROW RIGHT-OF-WAY
- DE DRAINAGE EASEMENT
- SSE SANITARY SEWER EASEMENT
- WE WATER EASEMENT
- UE UTILITY EASEMENT
- WME WALL MAINTENANCE EASEMENT
- BL BUILDING LINE
- CO RD COUNTY ROAD
- FM FARM-TO-MARKET HIGHWAY
- DOC DOCUMENT
- NO. NUMBER
- O.P.R.J.C.T. OFFICIAL PUBLIC RECORDS JOHNSON COUNTY, TEXAS
- D.R.J.C.T. DEED RECORDS JOHNSON COUNTY, TEXAS
- VOL. VOLUME
- PAGE PAGE
- STREET NAME CHANGE INDICATOR

NOTES:

- NOTICE: SELLING A PORTION OF THIS ADDITION BY METES AND BOUNDS IS A VIOLATION OF CITY ORDINANCE AND STATE LAW, AND IS SUBJECT TO FINES AND/OR WITHHOLDING OF UTILITIES AND BUILDING PERMITS.
- A MANDATORY HOME OWNERS ASSOCIATION WILL BE RESPONSIBLE FOR THE MAINTENANCE OF DRAINAGE EASEMENTS, PRIVATE AMENITIES, OPEN SPACES, AND COMMON AREAS, INCLUDING BUT NOT LIMITED TO SCREENING WALLS AND FENCES AND THE PARKWAY BETWEEN A SCREENING WALL OR FENCE AND THE STREET; SUBDIVISION LANDSCAPING; MEDIANS; AMENITY CENTERS; AND ENHANCED ENTRYWAY FEATURES INCLUDING ENHANCED SCREENING WALLS, LANDSCAPING MONUMENTS, SIGNAGE AND ANY NON-STANDARD PAVEMENT.
- THIS MAP IS BASED ON A BOUNDARY VERIFICATION OF A SURVEY DONE BY BLUESTAR SURVEYING, DATED DECEMBER 15, 2020.
- ALL PROPERTY CORNERS ARE ONE-HALF INCH IRON ROD WITH CAP STAMPED "JBI" SET UNLESS NOTED OTHERWISE.
- ACCORDING TO COMMUNITY PANEL NO. 48251C0215J, DATED DECEMBER 4, 2012 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY, NATIONAL FLOOD INSURANCE PROGRAM MAP, A PORTION OF THIS PROPERTY IS WITHIN FLOOD ZONE "A", THE 1% ANNUAL CHANCE FLOOD (100-YEAR FLOOD), ALSO KNOWN AS THE BASE FLOOD, WITH NO BASE FLOOD ELEVATIONS DETERMINED.
- BASIS OF BEARING: The basis of bearing is based on the coordinate system (North Central Zone 4202 State Plane Coordinates, NAD83), distances shown hereon are grid distance values.

CITY PROJECT NO. FP ---

FINAL PLAT

LONE OAK PHASE 1

- 257 RESIDENTIAL LOTS
- 5 OPEN SPACE LOTS
- 1 AMENITY CENTER LOT
- 1 FIRE STATION LOT

BEING 70.219 ACRES OUT OF
JAMES B. CONGER SURVEY, ABSTRACT NO. 150
GEORGE S. MCINTOSH SURVEY, ABSTRACT NO. 625
JOHNSON COUNTY, TEXAS

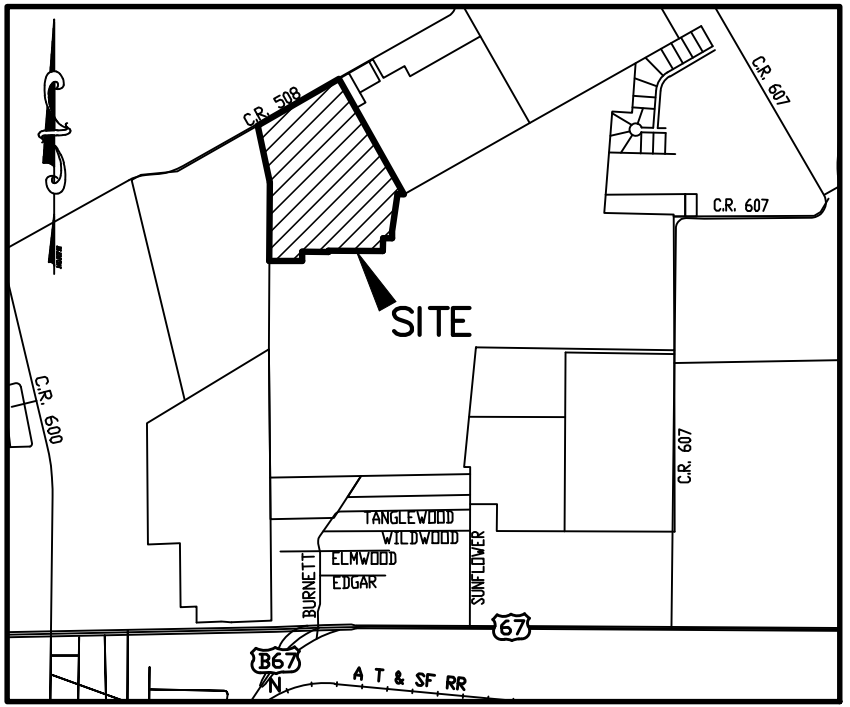
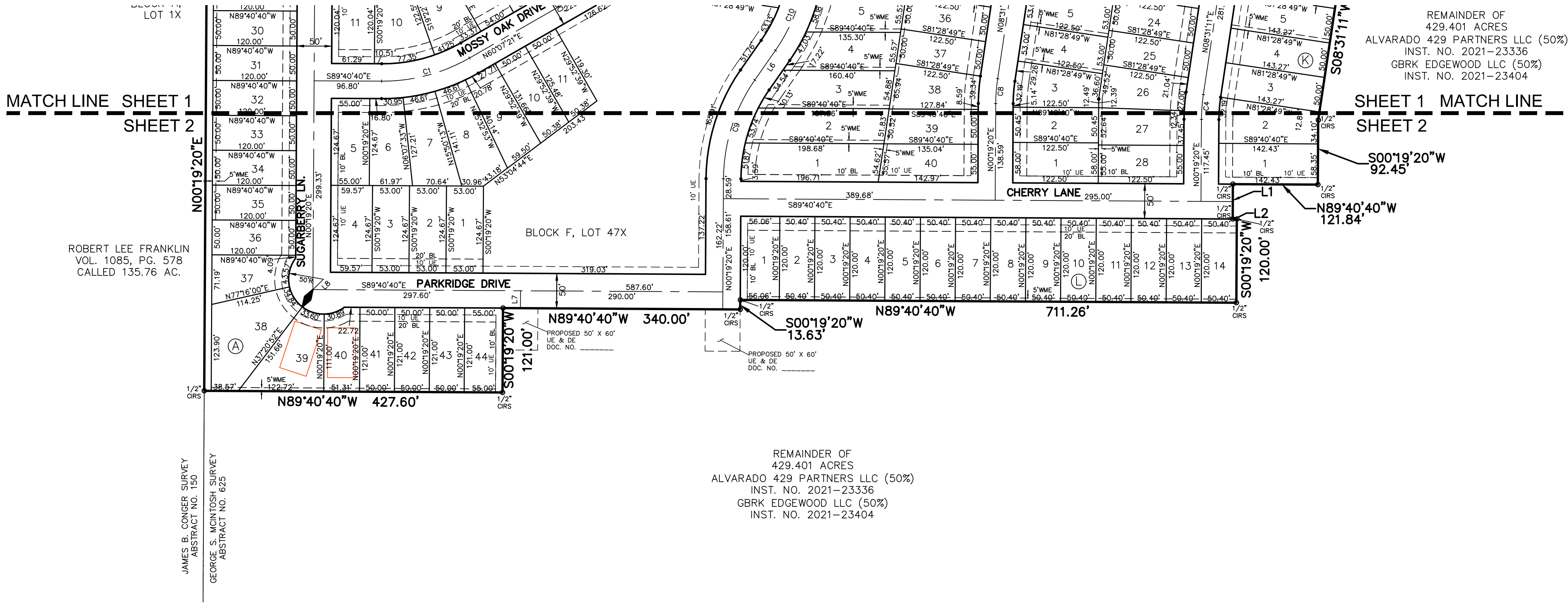
GRBK EDGEWOOD, LLC OWNER/DEVELOPER
2805 Dallas Parkway, Suite 400 (817)658-2112
Plano, Texas 75093
Contact: Bobby Samuel

ALVARADO 429 PARTNERS, LLC OWNER/DEVELOPER
5950 BERKSHIRE LANE SUITE 200 (817)944-0934
DALLAS, TX 75225
Contact: Clayton Snodgrass

JBI PARTNERS, INC. SURVEYOR/ENGINEER
2121 Midway Road, Suite 300 (972)248-7676
Carrollton, Texas 75006
Contact: Christopher Wall, P.E.
TBPE No. F-438 TBPLS No. 10076000

Date: February 20, 2024

Sheet 1 of 3



LOT AREA TABLE			LOT AREA TABLE			LOT AREA TABLE			LOT AREA TABLE			LOT AREA TABLE			LOT AREA TABLE		
BLOCK-LOT	SQUARE FEET	ACRES	BLOCK-LOT	SQUARE FEET	ACRES	BLOCK-LOT	SQUARE FEET	ACRES	BLOCK-LOT	SQUARE FEET	ACRES	BLOCK-LOT	SQUARE FEET	ACRES	BLOCK-LOT	SQUARE FEET	ACRES
A-1X	33,332	0.765	A-42	6,050	0.139	D-5	6,050	0.139	F-18	6,000	0.138	G-11	6,889	0.158	I-27	7,000	0.161
A-3	8,252	0.189	A-43	6,050	0.139	D-6	6,050	0.139	F-19	6,000	0.138	G-12	6,889	0.158	I-28	6,125	0.141
A-4	9,056	0.208	A-44	6,855	0.153	D-7	6,050	0.139	F-20	6,000	0.138	G-13	8,978	0.206	I-29	6,125	0.141
A-5	9,860	0.228	B-1	6,249	0.143	D-8	6,655	0.153	F-21	6,000	0.138	H-1	8,012	0.184	I-30	6,125	0.141
A-6	7,500	0.172	B-2	6,249	0.143	D-9	7,609	0.175	F-22	6,200	0.142	H-2	7,910	0.182	I-31	6,125	0.141
A-7	9,944	0.228	B-3	6,249	0.143	D-10	6,292	0.144	F-23	6,200	0.142	H-3	7,232	0.166	I-32	6,125	0.141
A-8	7,604	0.175	B-4	6,249	0.143	D-11	6,292	0.144	F-24	6,200	0.142	H-4	6,264	0.144	I-33	6,125	0.141
A-9	9,769	0.224	B-5	6,249	0.143	D-12	6,292	0.144	F-25	6,820	0.157	H-5	7,193	0.165	I-34	6,125	0.141
A-10	8,534	0.196	B-6	6,249	0.143	D-13	6,292	0.144	F-26	6,810	0.156	H-6	7,671	0.176	I-35	6,125	0.141
A-11	7,512	0.172	B-7	6,249	0.143	D-14	6,292	0.144	F-27	6,167	0.142	H-7	6,480	0.149	I-36	6,125	0.141
A-12	6,384	0.147	B-8	6,249	0.143	D-15	6,292	0.144	F-28	6,145	0.141	H-8	6,480	0.149	I-37	6,125	0.141
A-13	6,384	0.147	B-9	6,249	0.143	D-16	7,502	0.172	F-29	6,123	0.141	H-9	7,665	0.176	I-38	7,064	0.162
A-14	7,584	0.174	B-10X	7,713	0.177	E-1	6,000	0.138	F-30	6,123	0.141	H-10	8,123	0.186	I-39	6,572	0.151
A-15	6,600	0.152	B-11	108,173	2.483	E-2	6,000	0.138	F-31	6,150	0.141	H-11	7,357	0.169	I-40	7,645	0.176
A-16	6,000	0.138	C-1	8,031	0.184	E-3	6,000	0.138	F-32	6,150	0.141	I-1	10,936	0.251	J-1	7,105	0.163
A-17	6,000	0.138	C-2	7,309	0.168	E-4	6,000	0.138	F-33	6,150	0.141	I-2	9,783	0.225	J-2	6,180	0.142
A-18	6,103	0.140	C-3	7,309	0.168	E-5	6,600	0.152	F-34	6,150	0.141	I-3	9,496	0.218	J-3	7,083	0.163
A-19	10,269	0.236	C-4	8,045	0.185	E-6	6,600	0.152	F-35	6,781	0.156	I-4	8,066	0.185	J-4	6,493	0.149
A-20	6,858	0.157	C-5	6,544	0.150	E-7	6,000	0.138	F-36	7,151	0.164	I-5	7,088	0.163	J-5	6,493	0.149
A-21	6,000	0.138	C-6	6,544	0.150	E-8	6,000	0.138	F-37	6,150	0.141	I-6	6,879	0.158	J-6	6,493	0.149
A-22	6,000	0.138	C-7	6,544	0.150	E-9	6,000	0.138	F-38	6,150	0.141	I-7	6,297	0.145	J-7	6,493	0.149
A-23	6,000	0.138	C-8	6,544	0.150	E-10	6,000	0.138	F-39	6,150	0.141	I-8	6,297	0.145	J-8	6,493	0.149
A-24	6,000	0.138	C-9	6,544	0.150	E-11X	43,652	1.002	F-40	6,150	0.141	I-9	6,297	0.145	J-9	6,492	0.149
A-25	6,000	0.138	C-10	6,544	0.150	F-1	6,607	0.152	F-41	6,150	0.141	I-10	6,296	0.145	J-10	6,493	0.149
A-26	6,000	0.138	C-11	6,544	0.150	F-2	6,607	0.152	F-42	6,150	0.141	I-11	6,297	0.145	J-11	6,493	0.149
A-27	6,000	0.138	C-12	6,544	0.150	F-3	6,607	0.152	F-43	6,150	0.141	I-12	6,297	0.145	J-12	6,575	0.151
A-28	6,000	0.138	C-13	6,544	0.150	F-4	7,427	0.170	F-44	6,150	0.141	I-13	6,297	0.145	J-13	7,579	0.174
A-29	6,000	0.138	C-14	6,544	0.150	F-5	6,857	0.157	F-45	6,150	0.141	I-14	6,563	0.151	J-14	6,493	0.149
A-30	6,000	0.138	C-15	7,062	0.162	F-6	6,865	0.158	F-46	6,057	0.139	I-15	7,378	0.169	J-15	9,487	0.218
A-31	6,000	0.138	C-16	7,792	0.179	F-7	7,706	0.177	F-47X	245,617	5.639	I-16	6,307	0.145	J-16	9,263	0.213
A-32	6,000	0.138	C-17	8,855	0.203	F-8	8,565	0.197	G-1	10,414	0.239	I-17	6,296	0.145	J-17	7,130	0.164
A-33	6,000	0.138	C-18	11,492	0.264	F-9	7,284	0.167	G-2	6,344	0.146	I-18	6,297	0.145	J-18	6,125	0.141
A-34	6,000	0.138	C-19	7,959	0.183	F-10	6,429	0.148	G-3	6,344	0.146	I-19	6,296	0.145	J-19	6,125	0.141
A-35	6,000	0.138	C-20	7,163	0.164	F-11	6,120	0.140	G-4	6,344	0.146	I-20	8,419	0.193	J-20	6,125	0.141
A-36	6,000	0.138	C-21	7,880	0.181	F-12	6,075	0.139	G-5	6,344	0.146	I-21	12,039	0.276	J-21	6,125	0.141
A-37	6,570	0.151	C-166X	208,181	4.779	F-13	7,864	0.181	G-6	7,019	0.161	I-22	10,675	0.245	J-22	6,125	0.141
A-38	12,145	0.279	D-1	8,281	0.190	F-14	6,000	0.138	G-7	7,601	0.174	I-23	7,837	0.180	J-23	6,125	0.141
A-39	9,111	0.209	D-2	6,050	0.139	F-15	6,000	0.138	G-8	6,724	0.154	I-24	6,545	0.150	J-24	6,125	0.141
A-40	6,017	0.138	D-3	6,050	0.139	F-16	6,075	0.139	G-9	6,889	0.158	I-25	6,125	0.141	J-25	6,125	0.141
A-41	6,050	0.139	D-4	6,050	0.139	F-17	7,864	0.181	G-10	6,889	0.158	I-26	7,085	0.163	J-26	6,752	0.155

LINE TABLE		
NO.	BEARING	LENGTH
L1	S00°19'20"W	50.00'
L2	S89°40'40"E	5.99'
L3	S89°41'21"E	15.30'
L4	N29°52'39"W	25.00'
L5	S29°52'39"E	25.00'
L6	S34°53'20"W	51.76'
L7	N00°19'20"E	25.00'
L8	S45°19'20"W	21.21'
L9	N59°46'39"W	17.30'

CURVE TABLE						
NO.	LENGTH	DELTA	RADIUS	TANGENT	CHORD BEARING	CHORD
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C2	131.77'	030°11'59"	250.00'	67.45'	N75°13'21"E	130.25'
C3	237.45'	054°25'09"	250.00'	128.54'	N02°09'39"W	228.62'
C4	35.77'	008°11'50"	250.00'	17.91'	S04°25'16"W	35.74'
C5	181.86'	037°53'24"	275.00'	94.40'	N10°25'31"W	178.56'
C6	136.09'	031°11'22"	250.00'	69.78'	S40°38'36"W	134.42'
C7	86.55'	016°31'44"	300.00'	43.58'	S16°47'03"W	86.25'
C8	35.77'	008°11'50"	250.00'	17.91'	S04°25'16"W	35.74'
C9	150.83'	034°34'00"	250.00'	77.79'	S17°36'20"W	148.55'
C10	115.06'	026°22'09"	250.00'	58.57'	N21°42'15"E	114.04'
C11	72.12'	016°31'44"	250.00'	36.31'	S16°47'03"W	71.87'

CITY PROJECT NO. FP ____

FINAL PLAT

LONE OAK PHASE 1

257 RESIDENTIAL LOTS
5 OPEN SPACE LOTS
1 AMENITY CENTER LOT
1 FIRE STATION LOT

BEING 70.219 ACRES OUT OF
JAMES B. CONGER SURVEY, ABSTRACT NO. 150
GEORGE S. MCINTOSH SURVEY, ABSTRACT NO. 625
JOHNSON COUNTY, TEXAS

GBRK EDGEWOOD, LLC OWNER/DEVELOPER

2805 Dallas Parkway, Suite 400 (817)658-2112
Plano, Texas 75093
Contact: Bobby Samuel

ALVARADO 429 PARTNERS, LLC OWNER/DEVELOPER

5950 BERKSHIRE LANE SUITE 200 (817)944-0934
DALLAS, TX 75225
Contact: Clayton Snodgrass

JB PARTNERS, INC. SURVEYOR/ENGINEER

2121 Midway Road, Suite 300 (972)248-7676
Carrollton, Texas 75006
Contact: Christopher Wall, P.E.
TBPE No. F-438 TBPLS No. 10076000

OWNERS CERTIFICATION

WHEREAS Alvarado 429 Partners LLC and GRBK Edgewood, LLC are the owners of a tract of land located in the City of Alvarado, Johnson County, Texas, being a part of the James B. Conger Survey, Abstract No. 150, the George S. McIntosh Survey, Abstract No. 625, being part of that called 428.755 acre tract of land described in Correction Deeds to Alvarado 429 Partners LLC recorded as Instrument No. 2023-26643 and to GRBK Edgewood, LLC (50% interest) recorded as Instrument Number 2023-26644, Official Public Records, Johnson County, Texas, and being more particularly described by metes and bounds as follows:

BEGINNING at an 80d nail with washer stamped "BLUESTAR SURVEYING" found at the most westerly northwest corner of said 428.755 acre tract, said point also being the northeast corner of a called 135.76 acre tract of land described in a deed to Robert Lee Franklin, recorded in Volume 1085, Page 578, Deed Records, Tarrant County, Texas, said point being in the centerline of County Road 508, more or less;

THENCE, North 60 degrees 07 minutes 21 seconds East, along the north line of said 428.755 acre tract, and along the centerline of said County Road 508, more or less, a distance of 1,221.36 feet to a one-half inch iron rod with cap stamped "JBI" set for corner, being the common corner of said GRBK Edgewood tract, and a tract of land described in a deed to Simla Investments, LLC, recorded in Document Number 2018-05552, Deed Records, Johnson County, Texas, from which a one-half inch iron rod found bears South 19 degrees 08 minutes 32 seconds West, a distance of 1.15 feet;

THENCE, South 29 degrees 22 minutes 14 seconds East, along the common line of said 428.755 acre tract, and said Simla Investments, LLC tract, passing a one-half inch iron rod found on line at a distance of 23.38 feet, passing a one-half inch iron rod with cap stamped "FORTWORTH SURVEYING" found at the common corner of said Simla Investments, LLC tract, and a tract of land described in a deed to Nava Legacy 49, LLC, recorded in Document Number 2019-34549, Deed Records, Johnson County, Texas at a distance of 441.15 feet, and continuing a total distance of 1,730.13 feet to a 4 inch steel post found for the common corner of said 428.755 acre tract and said Nava Legacy 49, LLC tract;

THENCE, over and across 428.755 acre tract as follows:

North 87 degrees 07 minutes 12 seconds West for a distance of 85.65 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

South 08 degrees 31 minutes 11 seconds West for a distance of 485.24 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

South 00 degrees 19 minutes 20 seconds West for a distance of 92.45 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

North 89 degrees 40 minutes 40 seconds West for a distance of 121.84 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

South 00 degrees 19 minutes 20 seconds West for a distance of 50.00 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

South 89 degrees 40 minutes 40 seconds East for a distance of 5.99 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

South 00 degrees 19 minutes 20 seconds West for a distance of 120.00 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

North 89 degrees 40 minutes 40 seconds West for a distance of 711.26 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

South 00 degrees 19 minutes 20 seconds West for a distance of 13.63 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

North 89 degrees 40 minutes 40 seconds West for a distance of 340.00 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

South 00 degrees 19 minutes 20 seconds West for a distance of 121.00 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

North 89 degrees 40 minutes 40 seconds West for a distance of 427.60 feet to a one-half inch iron rod with cap stamped "JBI" set for corner, being in the west line of said 428.755 acre tract and the east line of aforementioned 135.76 acre Franklin tract;

THENCE along the east line of said 135.76 acre tract and the west line of said 428.755 acre tract as follows:

North 00 degrees 19 minutes 20 seconds East for a distance of 1,018.18 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

North 12 degrees 02 minutes 50 seconds West a distance of 761.63 feet to the POINT OF BEGINNING and containing 3,058,735 square feet or 70.219 acres of land more or less.

NOW THERFORE KNOW ALL MEN BY THESE PRESENTS:

That, ALVARADO 429 PARTNERS LLC and GRBK EDGEWOOD LLC are the owners of the herein described parcel, acting by and through the undersigned, its duly authorized agent, does hereby adopt the herein above describe property as LONE OAK, PHASE 1, an addition to Johnson County, Texas and does dedicate to the public use the streets and easements shown thereon.

WITNESS, my hand at Dallas, Texas, this the ____ day of _____, 2024.

ALVARADO 429 PARTNERS LLC, a limited liability company

STATE OF TEXAS §

COUNTY OF _____ §

BEFORE ME, the undersigned authority in and for the State of Texas, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed and in the capacity therein stated.

WITNESS MY HAND at Dallas, Texas, this ____ day of _____, 2024.

Notary Public in and for the State of Texas

WITNESS, my hand at Dallas, Texas, this the ____ day of _____, 2024.

GRBK EDGEWOOD LLC, a Texas limited liability company

STATE OF TEXAS §

COUNTY OF _____ §

BEFORE ME, the undersigned authority in and for the State of Texas, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed and in the capacity therein stated.

WITNESS MY HAND at Dallas, Texas, this ____ day of _____, 2024.

Notary Public in and for the State of Texas

SURVEYOR'S CERTIFICATE

This is to certify that I, WILLIAM J. JOHNSON, a Registered Professional Land Surveyor of the State of Texas, having platted the above subdivision from an actual survey on the ground, and that all lot corners, and angle points, and points of curve shall be properly marked on the ground, and that this plat correctly represents that survey made by me or under my direction and supervision.

Dated this ____ day of _____, 2024.

"PRELIMINARY, THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT."

WILLIAM J. JOHNSON, R.P.L.S. No. 5426

STATE OF TEXAS §

COUNTY OF DALLAS §

BEFORE ME, the undersigned, a Notary Public in and for The State of Texas, on this day personally appeared WILLIAM J. JOHNSON, known to me to be the person and officer whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this ____ day of _____, 2024.

Notary Public, State of Texas

CITY PROJECT NO. FP ____-____

FINAL PLAT

LONE OAK PHASE 1

257 RESIDENTIAL LOTS
5 OPEN SPACE LOTS
1 AMENITY CENTER LOT
1 FIRE STATION LOT

BEING 70.219 ACRES OUT OF
JAMES B. CONGER SURVEY, ABSTRACT NO. 150
GEORGE S. MCINTOSH SURVEY, ABSTRACT NO. 625
JOHNSON COUNTY, TEXAS

GRBK EDGEWOOD, LLC OWNER/DEVELOPER

2805 Dallas Parkway, Suite 400 (817)658-2112
Plano, Texas 75093
Contact: Bobby Samuel

ALVARADO 429 PARTNERS, LLC OWNER/DEVELOPER

5950 BERKSHIRE LANE SUITE 200 (817)944-0934
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JBI PARTNERS, INC. SURVEYOR/ENGINEER

2121 Midway Road, Suite 300 (972)248-7676
Carrollton, Texas 75006
Contact: Christopher Wall, P.E.
TBPE No. F-438 TBPLS No. 10076000



City of Alvarado
104 W. College Alvarado, TX 76009
817-790-3351 ♦ Fax 817-783-7925 ♦ www.cityofalvarado.org

May 16, 2024

JBIPartners, Inc.
Attn: Chris Wall
2121 Midway Road, Suite 300
Carrollton, TX 75006
cwall@jbipartners.com

Re: Lone Oak Addition Final Plat Phase 1

Dear Mr. Wall,

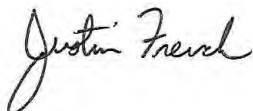
This letter is to inform you that the attached Lone Oak Addition Phase 1 final plat application provided on April 22, 2024 has generated the recommendation of disapproval from the Alvarado Planning and Zoning Commission due to the following comments not being adequately addressed to result in compliance with the Alvarado subdivision ordinance.

1. Clarify where on-street parking at the amenity center has been approved. The Alvarado zoning ordinance only allows on-street parking in the Central Business District.
2. On the final plat, change “(Unrecorded Right-of-Way)” to “Right-of-Way Dedication”.
3. Prior to final plat approval, adequate capacity to and at the Alvarado Wastewater Treatment Plant must be accessible to comply with the purpose of the Alvarado subdivision ordinance. The purpose of this chapter (Alvarado subdivision ordinance) is to provide for the orderly, safe, and healthful development of the area within the City and within the area surrounding the City and to promote the health, safety, morals, and transportation, water, drainage, sewage, and other facilities per Art. I, Sec. 34-4(b) of the Alvarado subdivision ordinance.
4. Provide JCSUD letter approving adequate water supply and fire flow plans. Per Art. VI, Sec. 34-165(b) of the Alvarado subdivision ordinance, the subdivider shall install all water and sanitary sewer facilities needed to serve the development and shall extend all water and sanitary sewer mains and appurtenances necessary to connect the development with the JCSUD’s water supply and distribution system and with the City’s sanitary sewer collection system.
5. Per Art. VI, Sec. 34-165(f) of the Alvarado subdivision ordinance, the location of all water and sanitary sewer lines and appurtenances thereto necessary to serve the platted land shall be in accordance with the City’s master plan for water and sanitary sewer facilities. Indicate sanitary sewer connection to the future sanitary sewer main to be constructed by Agave Trail Development LLC, and show the existing sanitary sewer pipe size (diameter) at the northern end of Sunflower Lane and provide its capacity and condition.
6. If Lone Oak Addition Phase 1 is to have temporary sanitary sewer service provided by the developer until adequate offsite sanitary service is available with the City of Alvarado then

add a note on the plat stating such and provide the contract or agreement for the pump & haul service along with location of proper disposal and the truck disposal route for review by the City.

7. Correct the leaders and location of the 5' WME along the side property line of Lot 21, Block J.
8. Provide the recording information for the offsite 15' SSE to the lift station.
9. Provide the recording information for the two offsite 50'x 60' UE and DE.
10. In the title blocks, owner's certification block, dedication statement, and owners signature block, update the ownership of record.
11. The surveyor's certificate needs not have a notary statement following.
12. Add the City's approval block for the Mayor to sign and the City Secretary to attest.
13. In the plat drawing, label "Private Open Space" on Lot 1X, Block A, and Lot 47X, Block F, and Lot 166X, Block C. Per Sec. 34-173(b) of the Alvarado subdivision ordinance, the specific use for which each piece of land is to be reserved must be shown by appropriate label or description on the subdivision plat.
14. Per Sec. 34-167(l) of the Alvarado subdivision ordinance, rear and side driveway access to major thoroughfares shall be prohibited. Add note stating such to final plat.
15. Per Sec. 34-170(a) of the Alvarado subdivision ordinance, easements alongside and rear lot lines shall be properly sized according to the municipal and other infrastructure (ie. natural gas, electric, cable, telephone, etc) necessary. The final plat shall be provided to appropriate utility companies for review and comment. Clarify what, if any, offsite utility easements to be dedicated by separate instrument will be necessary to extend natural gas, electric, cable, telephone, etc to subject site.
16. Per Sec. 34-66 of the Alvarado subdivision ordinance, the developer shall install sidewalks within and adjacent to the subdivision. Clarify if sidewalk construction is proposed and by whom if so along the subject site's frontage to CR 508. Include civil plans for sidewalks adjacent to the subdivision or provide cash deposit or other guarantee acceptable to the City for the payment of the cost of such sidewalk installations prior to City Council approval of the corresponding final plat.
17. Per Sec. 34-66(14) of the Alvarado subdivision ordinance, the developer shall install traffic signs, street signs, and sidewalks within and adjacent to the subdivision, or shall provide cash deposit or other guarantee acceptable to the City for the payment of the cost of such installations prior to the final approval by the City Council.
18. Attached remarks from the City Engineer must be adequately addressed prior to final plat approval.

Sincerely,



Justin French, AICP
Community Development Director
City of Alvarado
104 W. College Ave. | Alvarado, TX 76009
817.790.3351 | 817.240.9585 mobile
frenchj@cityofalvarado.org

Attachments: City Engineer Remarks on Final Plat and Civil Plans (available upon request)

Cc:

GRBK Edgewood LLC
Century Land Holdings of Texas, LLC
Attn: Bobby Samuel
5501 Headquarters Drive, Suite 300W
Plano, TX 75024
bsamuel@greenbrickpartners.com

ENGINEERING PLANS
FOR
LONE OAK PHASE 1
CITY OF ALVARADO
JOHNSON COUNTY, TEXAS
MARCH 2024

BHC Review Note:

Our review of the plans is for general compliance with the City of Alvarado's development requirements and good engineering practice, and does not relieve the engineer of record of their responsibilities under the Texas Engineering Practice Act

TIA, Lift Station and Floodstudy under separate review letter.

Include plans for improvements to CR 508

Verify compliance with all City Masterplans.

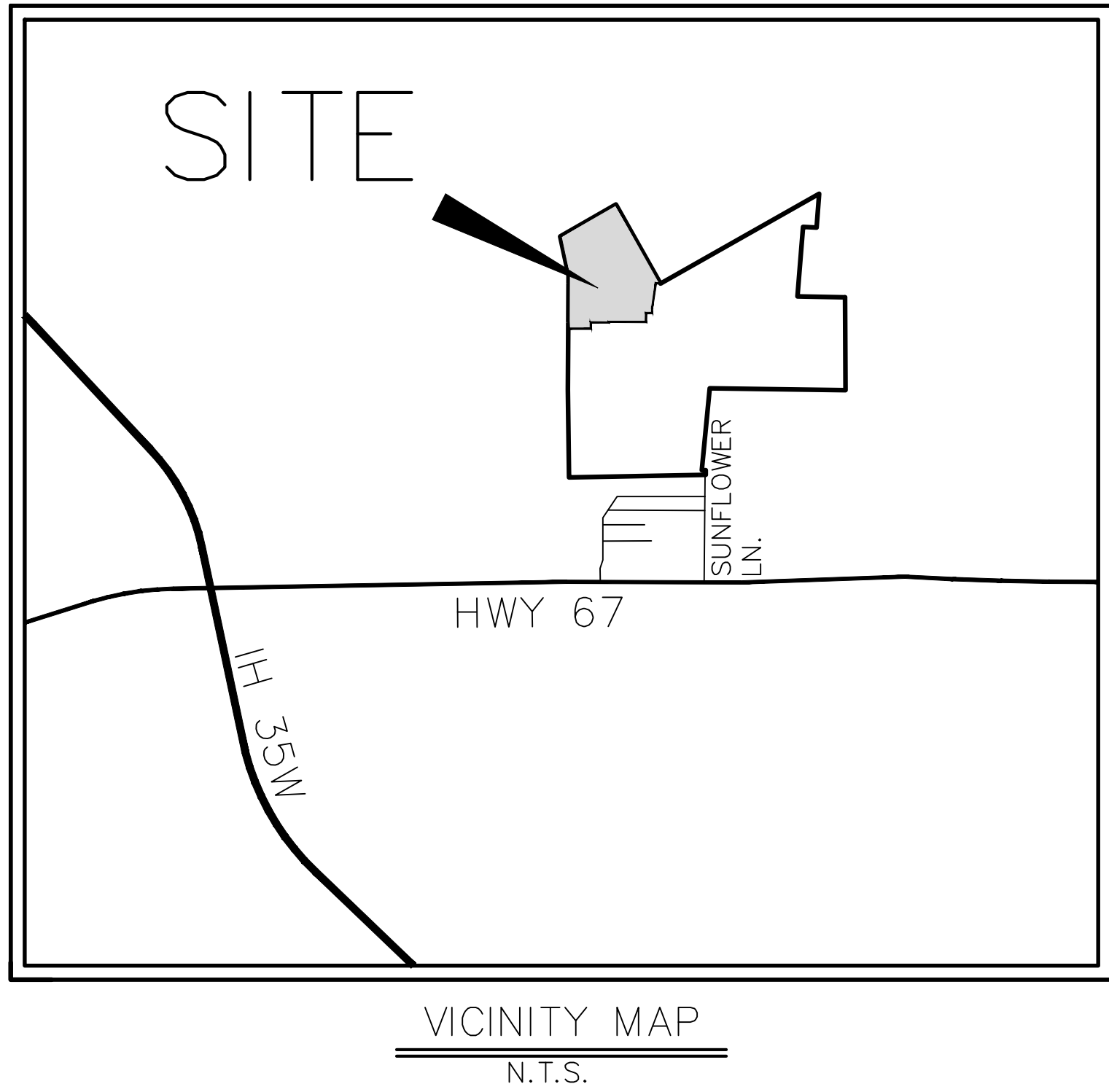
City's sanitary sewer system will not have additional capacity until the WWTP improvements are complete.

Downstream sanitary sewer lines are required to be installed and accepted by the City prior to any sewer service being available to this site. (or capacity provided in accordance with the agreement between the City and the development)

Mitigation for wetlands and waters of the US, as identified in the submitted report, is required.

Verify with City if roadway or utility stub-outs to adjacent properties or Baugh Drive are needed.

Any channel or storm water improvements outside the areas of platting with this phase will require an easement. While it is all one owner today, if a future phase is sold to a separate entity, then this phase cannot place encumbrances on that property without the proper easements in place.



OWNER/DEVELOPER

GRBK EDGEWOOD, LLC
2805 DALLAS PARKWAY, SUITE 400
PLANO, TEXAS 75093
817-658-2112
CONTACT: BOBBY L. SAMUEL III
EMAIL: BSAMUEL@GREENBRICKPARTNERS.COM

ENGINEER - SURVEYOR

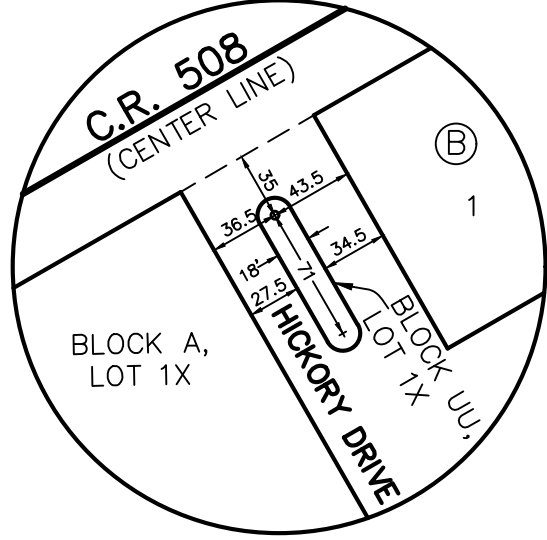
JBIPARTNERS

2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

CONTACT:
CHRIS WALL, PE
CWALL@JBIPARTNERS.COM
972-738-0212

PRELIMINARY
FOR REVIEW ONLY
NOT FOR CONSTRUCTION OR PERMIT PURPOSES

ENGINEER: Chris Wall, P.E.
P.E. No. 123372 Date: 03/25/2024



DETAIL "A"

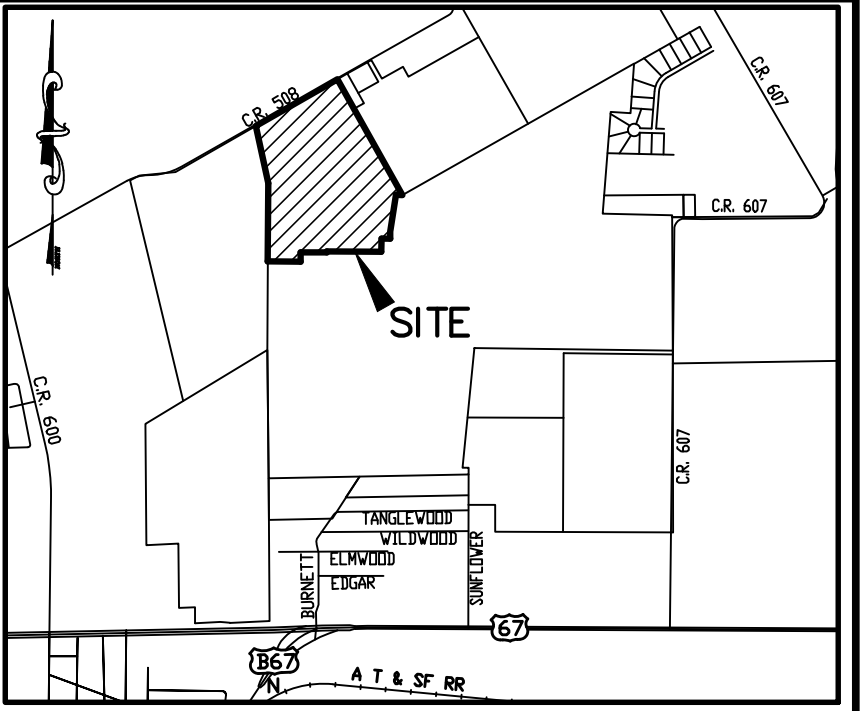
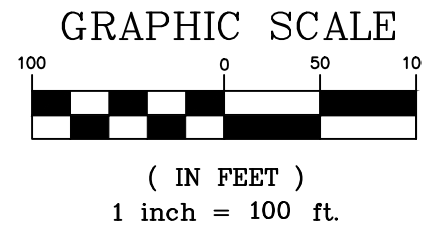
INDIE CATCH, LLC
INST. NO. 2022-36624
CALLED 164.656 AC.

FIRE STATION LOT
LOT 11X, BLOCK B
(2.483 ACRES)

SUMA INVESTMENTS, LLC
INST. NO. 2018-55522
CALLED 1.519 AC.

NAVA LEGACY 49 LLC
INST. NO. 2019-34549
D.R.J.C.T.
CALLED 58.71 AC.

LINE TABLE		
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L3	S89°41'21"E	15.30'
L4	N29°52'39"W	25.00'
L5	S29°52'39"E	25.00'
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L7	N00°19'20"E	25.00'
L8	S45°19'20"W	21.21'
L9	N59°46'39"W	17.30'



LOCATION MAP
NTS

CURVE TABLE					
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C11	72.12'	016°31'44"	250.00'	36.31'	S16°47°03"W

LEGEND

- IRF IRON ROD FOUND
IRS IRON ROD SET
POB POINT OF BEGINNING
ROW RIGHT-OF-WAY
DE DRAINAGE EASEMENT
SSE SANITARY SEWER EASEMENT
WE WATER EASEMENT
UE UTILITY EASEMENT
WME WALL MAINTENANCE EASEMENT
BL BUILDING LINE
CO RD COUNTY ROAD
FM FARM-TO-MARKET HIGHWAY
DOC DOCUMENT
NO. NUMBER
O.P.R.J.C.T. OFFICIAL PUBLIC RECORDS JOHNSON COUNTY, TEXAS
D.R.J.C.T. DEED RECORDS JOHNSON COUNTY, TEXAS
VOL. VOLUME
PG. PAGE
STREET NAME CHANGE INDICATOR

NOTES:

- NOTICE: SELLING A PORTION OF THIS ADDITION BY METES AND BOUNDS IS A VIOLATION OF CITY ORDINANCE AND STATE LAW, AND IS SUBJECT TO FINES AND/OR WITHHOLDING OF UTILITIES AND BUILDING PERMITS.
- A MANDATORY HOME OWNERS ASSOCIATION WILL BE RESPONSIBLE FOR THE MAINTENANCE OF DRAINAGE EASEMENTS, PRIVATE AMENITIES, OPEN SPACES, AND COMMON AREAS, INCLUDING BUT NOT LIMITED TO SCREENING WALLS AND FENCES AND THE PARKWAY BETWEEN A SCREENING WALL OR FENCE AND THE STREET; SUBDIVISION LANDSCAPING; MEDIANS; AMENITY CENTERS; AND ENHANCED ENTRYWAY FEATURES INCLUDING ENHANCED SCREENING WALLS, LANDSCAPING MONUMENTS, SIGNAGE AND ANY NON-STANDARD PAVEMENT.
- THIS MAP IS BASED ON A BOUNDARY VERIFICATION OF A SURVEY DONE BY BLUESTAR SURVEYING, DATED DECEMBER 15, 2020.
- ALL PROPERTY CORNERS ARE ONE-HALF INCH IRON ROD WITH CAP STAMPED "JBI" SET UNLESS NOTED OTHERWISE.
- ACCORDING TO COMMUNITY PANEL NO. 48251C0215J, DATED DECEMBER 4, 2012 OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY, NATIONAL FLOOD INSURANCE PROGRAM MAP, A PORTION OF THIS PROPERTY IS WITHIN FLOOD ZONE "A", THE 1% ANNUAL CHANCE FLOOD (100-YEAR FLOOD), ALSO KNOWN AS THE BASE FLOOD, WITH NO BASE FLOOD ELEVATIONS DETERMINED.
- BASIS OF BEARING: The basis of bearing is based on the coordinate system (North Central Zone 4202 State Plane Coordinates, NAD83), distances shown hereon are grid distance values.

CITY PROJECT NO. FP ---

FINAL PLAT

LONE OAK PHASE 1

- 257 RESIDENTIAL LOTS
5 OPEN SPACE LOTS
1 AMENITY CENTER LOT
1 FIRE STATION LOT

BEING 70.219 ACRES OUT OF
JAMES B. CONGER SURVEY, ABSTRACT NO. 150
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Contact: Bobby Samuel

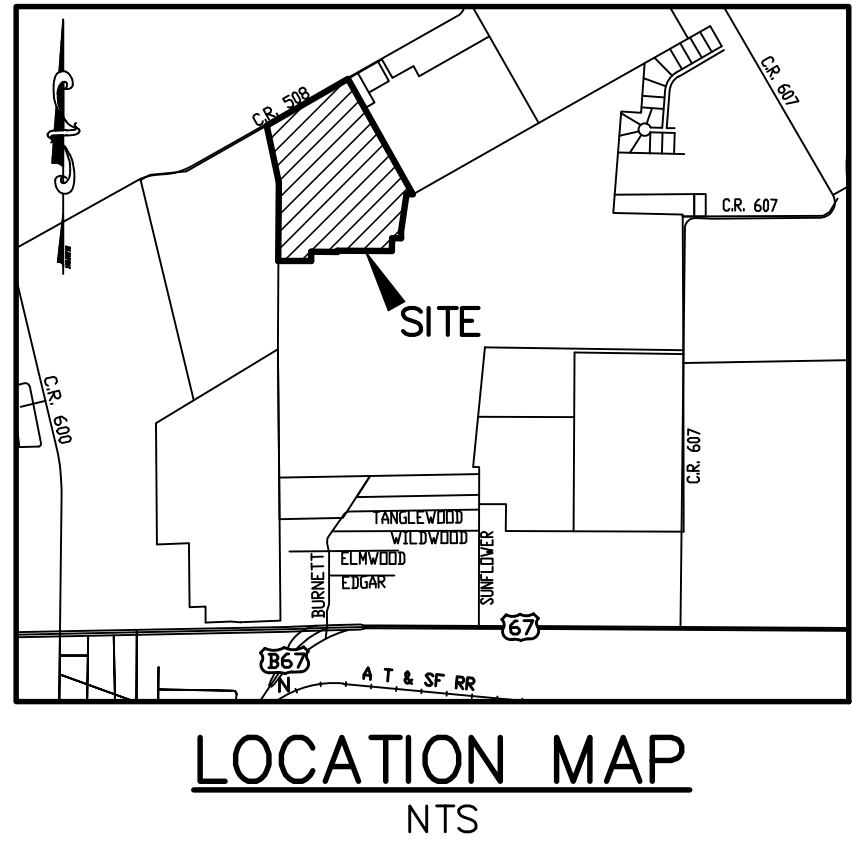
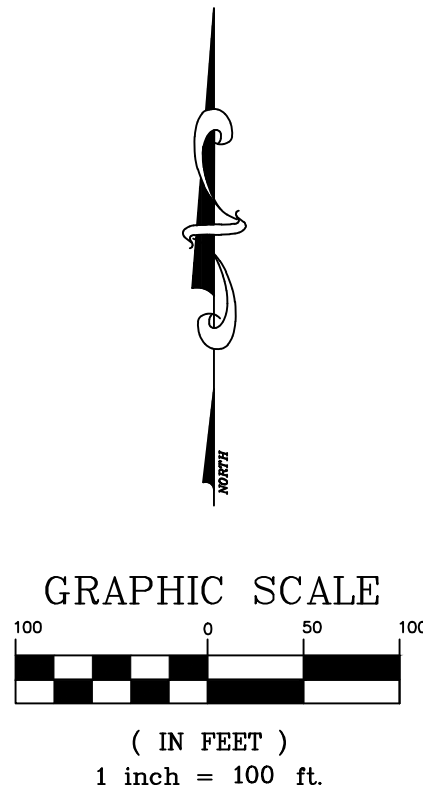
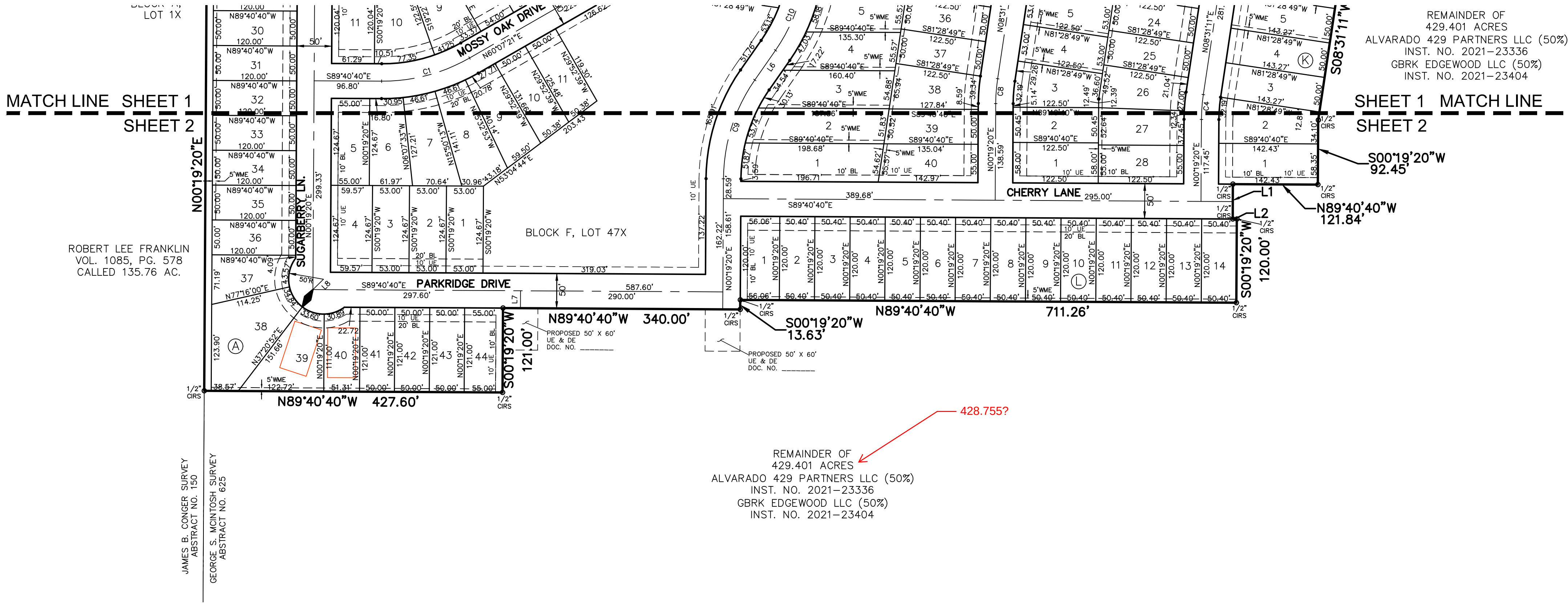
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5950 BERKSHIRE LANE SUITE 200 (817)944-0934
DALLAS, TX 75225
Contact: Clayton Snodgrass

JBI PARTNERS, INC. SURVEYOR/ENGINEER
2121 Midway Road, Suite 300 (972)248-7676
Carrollton, Texas 75006
Contact: Christopher Wall, P.E.
TBPE No. F-438 TBPLS No. 10076000

Date: February 20, 2024

Sheet 1 of 3

Drawing: H:\Projects\BBOC10-Stonewall\Phase 1\Surveying\dwg\BBOC10PT-1.dwg Saved By: acordero Save Time: 3/22/2024 3:27 PM Plotted by: vling Plot Date: 3/26/2024 5:03 PM



- LEGEND**
- IRF IRON ROD FOUND
IRS IRON ROD SET
POB POINT OF BEGINNING
ROW RIGHT-OF-WAY
DE DRAINAGE EASEMENT
SSE SANITARY SEWER EASEMENT
WE WATER EASEMENT
UE UTILITY EASEMENT
WME WALL MAINTENANCE EASEMENT
BL BUILDING LINE
CO RD COUNTY ROAD
FM FARM-TO-MARKET HIGHWAY
DOC. DOCUMENT
NO. NUMBER
O.P.R./J.C.T. OFFICIAL PUBLIC RECORDS JOHNSON COUNTY, TEXAS
D.R./J.C.T. DEED RECORDS JOHNSON COUNTY, TEXAS
VOL. VOLUME
PG. PAGE
STREET NAME CHANGE INDICATOR

LOT AREA TABLE			LOT AREA TABLE			LOT AREA TABLE			LOT AREA TABLE			LOT AREA TABLE			LOT AREA TABLE		
BLOCK-LOT	SQUARE FEET	ACRES	BLOCK-LOT	SQUARE FEET	ACRES	BLOCK-LOT	SQUARE FEET	ACRES	BLOCK-LOT	SQUARE FEET	ACRES	BLOCK-LOT	SQUARE FEET	ACRES	BLOCK-LOT	SQUARE FEET	ACRES
A-1X	33,332	0.765	A-42	6,050	0.139	D-5	6,050	0.139	F-18	6,000	0.138	G-11	6,889	0.158	I-27	7,000	0.161
A-3	8,252	0.189	A-43	6,050	0.139	D-6	6,050	0.139	F-19	6,000	0.138	G-12	6,889	0.158	I-28	6,125	0.141
A-4	9,056	0.208	A-44	6,655	0.153	D-7	6,050	0.139	F-20	6,000	0.138	G-13	8,978	0.206	I-29	6,125	0.141
A-5	9,860	0.228	B-1	6,249	0.143	D-8	6,655	0.153	F-21	6,000	0.138	H-1	8,012	0.184	I-30	6,125	0.141
A-6	7,500	0.172	B-2	6,249	0.143	D-9	7,609	0.175	F-22	6,200	0.142	H-2	7,910	0.182	I-31	6,125	0.141
A-7	9,944	0.228	B-3	6,249	0.143	D-10	6,292	0.144	F-23	6,200	0.142	H-3	7,232	0.166	I-32	6,125	0.141
A-8	7,604	0.175	B-4	6,249	0.143	D-11	6,292	0.144	F-24	6,200	0.142	H-4	6,264	0.144	I-33	6,125	0.141
A-9	9,769	0.224	B-5	6,249	0.143	D-12	6,292	0.144	F-25	6,820	0.157	H-5	7,193	0.165	I-34	6,125	0.141
A-10	8,534	0.196	B-6	6,249	0.143	D-13	6,292	0.144	F-26	6,810	0.156	H-6	7,671	0.176	I-35	6,125	0.141
A-11	7,512	0.172	B-7	6,249	0.143	D-14	6,292	0.144	F-27	6,167	0.142	H-7	6,480	0.149	I-36	6,125	0.141
A-12	6,384	0.147	B-8	6,249	0.143	D-15	6,292	0.144	F-28	6,145	0.141	H-8	6,480	0.149	I-37	6,125	0.141
A-13	6,384	0.147	B-9	6,249	0.143	D-16	7,502	0.172	F-29	6,123	0.141	H-9	7,665	0.176	I-38	7,064	0.162
A-14	7,584	0.174	B-10X	7,713	0.177	E-1	6,000	0.138	F-30	6,123	0.141	H-10	8,123	0.186	I-39	6,572	0.151
A-15	6,600	0.152	B-11	108,173	2.483	E-2	6,000	0.138	F-31	6,150	0.141	H-11	7,357	0.169	I-40	7,645	0.176
A-16	6,000	0.138	C-1	8,031	0.184	E-3	6,000	0.138	F-32	6,150	0.141	I-1	10,936	0.251	J-1	7,105	0.163
A-17	6,000	0.138	C-2	7,309	0.168	E-4	6,000	0.138	F-33	6,150	0.141	I-2	9,783	0.225	J-2	6,180	0.142
A-18	6,103	0.140	C-3	7,309	0.168	E-5	6,600	0.152	F-34	6,150	0.141	I-3	9,496	0.218	J-3	7,083	0.163
A-19	10,269	0.236	C-4	8,045	0.185	E-6	6,600	0.152	F-35	6,781	0.156	I-4	8,066	0.185	J-4	6,493	0.149
A-20	6,858	0.157	C-5	6,544	0.150	E-7	6,000	0.138	F-36	7,151	0.164	I-5	7,088	0.163	J-5	6,493	0.149
A-21	6,000	0.138	C-6	6,544	0.150	E-8	6,000	0.138	F-37	6,150	0.141	I-6	6,879	0.158	J-6	6,493	0.149
A-22	6,000	0.138	C-7	6,544	0.150	E-9	6,000	0.138	F-38	6,150	0.141	I-7	6,297	0.145	J-7	6,493	0.149
A-23	6,000	0.138	C-8	6,544	0.150	E-10	6,000	0.138	F-39	6,150	0.141	I-8	6,297	0.145	J-8	6,493	0.149
A-24	6,000	0.138	C-9	6,544	0.150	E-11X	43,652	1.002	F-40	6,150	0.141	I-9	6,297	0.145	J-9	6,492	0.149
A-25	6,000	0.138	C-10	6,544	0.150	F-1	6,607	0.152	F-41	6,150	0.141	I-10	6,296	0.145	J-10	6,493	0.149
A-26	6,000	0.138	C-11	6,544	0.150	F-2	6,607	0.152	F-42	6,150	0.141	I-11	6,297	0.145	J-11	6,493	0.149
A-27	6,000	0.138	C-12	6,544	0.150	F-3	6,607	0.152	F-43	6,150	0.141	I-12	6,297	0.145	J-12	6,575	0.151
A-28	6,000	0.138	C-13	6,544	0.150	F-4	7,427	0.170	F-44	6,150	0.141	I-13	6,297	0.145	J-13	7,579	0.174
A-29	6,000	0.138	C-14	6,544	0.150	F-5	6,857	0.157	F-45	6,150	0.141	I-14	6,563	0.151	J-14	6,493	0.149
A-30	6,000	0.138	C-15	7,062	0.162	F-6	6,865	0.158	F-46	6,057	0.139	I-15	7,378	0.169	J-15	9,487	0.218
A-31	6,000	0.138	C-16	7,792	0.179	F-7	7,706	0.177	F-47X	245,617	5.639	I-16	6,307	0.145	J-16	9,263	0.213
A-32	6,000	0.138	C-17	8,855	0.203	F-8	8,565	0.197	G-1	10,414	0.239	I-17	6,296	0.145	J-17	7,130	0.164
A-33	6,000	0.138	C-18	11,492	0.264	F-9	7,284	0.167	G-2	6,344	0.146	I-18	6,297	0.145	J-18	6,125	0.141
A-34	6,000	0.138	C-19	7,959	0.183	F-10	6,429	0.148	G-3	6,344	0.146	I-19	6,296	0.145	J-19	6,125	0.141
A-35	6,000	0.138	C-20	7,163	0.164	F-11	6,120	0.140	G-4	6,344	0.146	I-20	8,419	0.193	J-20	6,125	0.141
A-36	6,000	0.138	C-21	7,880	0.181	F-12	6,075	0.139	G-5	6,344	0.146	I-21	12,039	0.276	J-21	6,125	0.141
A-37	6,570	0.151	C-166X	208,181	4.779	F-13	7,864	0.181	G-6	7,019	0.161	I-22	10,675	0.245	J-22	6,125	0.141
A-38	12,145	0.279	D-1	8,281	0.190	F-14	6,000	0.138	G-7	7,601	0.174	I-23	7,837	0.180	J-23	6,125	0.141
A-39	9,111	0.209	D-2	6,050	0.139	F-15	6,000	0.138	G-8	6,724	0.154	I-24	6,545	0.150	J-24	6,125	0.141
A-40	6,017	0.138	D-3	6,050	0.139	F-16	6,075	0.139	G-9	6,889	0.158	I-25	6,125	0.141	J-25	6,125	0.141
A-41	6,050	0.139	D-4	6,050	0.139	F-17	7,864	0.181	G-10	6,889	0.158	I-26	7,085	0.163	J-26	6,752	0.155

LINE TABLE		
NO.	BEARING	LENGTH
L1	S00°19'20"W	50.00'
L2	S89°40'40"E	5.99'
L3	S89°41'21"E	15.30'
L4	N29°52'39"W	25.00'
L5	S29°52'39"E	25.00'
L6	S34°53'20"W	51.76'
L7	N00°19'20"E	25.00'
L8	S45°19'20"W	21.21'
L9	N59°46'39"W	17.30'

CURVE TABLE						
NO.	LENGTH	DELTA	RADIUS	TANGENT	CHORD BEARING	CHORD
C1	131.77'	030°11'59"	250.00'	67.45'	N75°13'21"E	130.25'
C2	131.77'	030°11'59"	250.00'	67.45'	N75°13'21"E	130.25'
C3	237.45'	054°25'09"	250.00'	128.54'	N02°09'39"W	228.62'
C4	35.77'	008°11'50"	250.00'	17.91'	S04°25'16"W	35.74'
C5	181.86'	037°53'24"	275.00'	94.40'	N10°25'31"W	178.56'
C6	136.09'	031°11'22"	250.00'	69.78'	S40°38'36"W	134.42'
C7	86.55'	016°31'44"	300.00'	43.58'	S16°47'03"W	86.25'
C8	35.77'	008°11'50"	250.00'	17.91'	S04°25'16"W	35.74'
C9	150.83'	034°34'00"	250.00'	77.79'	S17°36'20"W	148.55'
C10	115.06'	026°22'09"	250.00'	58.57'	N21°42'15"E	114.04'
C11	72.12'	016°31'44"	250.00'	36.31'	S16°47'03"W	71.87'

CITY PROJECT NO. FP ____

FINAL PLAT

LONE OAK PHASE 1

257 RESIDENTIAL LOTS
5 OPEN SPACE LOTS
1 AMENITY CENTER LOT
1 FIRE STATION LOT

BEING 70.219 ACRES OUT OF
JAMES B. CONGER SURVEY, ABSTRACT NO. 150
GEORGE S. MINTOSH SURVEY, ABSTRACT NO. 625
JOHNSON COUNTY, TEXAS

GBRK EDGEWOOD, LLC OWNER/DEVELOPER

2805 Dallas Parkway, Suite 400 (817)658-2112
Plano, Texas 75093
Contact: Bobby Samuel

ALVARADO 429 PARTNERS, LLC OWNER/DEVELOPER

5950 BERKSHIRE LANE SUITE 200 (817)944-0934
DALLAS, TX 75225
Contact: Clayton Snodgrass

JB PARTNERS, INC. SURVEYOR/ENGINEER

2121 Midway Road, Suite 300 (972)248-7676
Carrollton, Texas 75006
Contact: Christopher Wall, P.E.
TBPE No. F-438 TBPLS No. 10076000

OWNERS CERTIFICATION

WHEREAS Alvarado 429 Partners LLC and GRBK Edgewood, LLC are the owners of a tract of land located in the City of Alvarado, Johnson County, Texas, being a part of the James B. Conger Survey, Abstract No. 150, the George S. McIntosh Survey, Abstract No. 625, being part of that called 428.755 acre tract of land described in Correction Deeds to Alvarado 429 Partners LLC recorded as Instrument No. 2023-26643 and to GRBK Edgewood, LLC (50% interest) recorded as Instrument Number 2023-26644, Official Public Records, Johnson County, Texas, and being more particularly described by metes and bounds as follows:

BEGINNING at an 80d nail with washer stamped "BLUESTAR SURVEYING" found at the most westerly northwest corner of said 428.755 acre tract, said point also being the northeast corner of a called 135.76 acre tract of land described in a deed to Robert Lee Franklin, recorded in Volume 1085, Page 578, Deed Records, Tarrant County, Texas, said point being in the centerline of County Road 508, more or less;

THENCE, North 60 degrees 07 minutes 21 seconds East, along the north line of said 428.755 acre tract, and along the centerline of said County Road 508, more or less, a distance of 1,221.36 feet to a one-half inch iron rod with cap stamped "JBI" set for corner, being the common corner of said GRBK Edgewood tract, and a tract of land described in a deed to Simla Investments, LLC, recorded in Document Number 2018-05552, Deed Records, Johnson County, Texas, from which a one-half inch iron rod found bears South 19 degrees 38 minutes 32 seconds West, a distance of 1.15 feet;

THENCE, South 29 degrees 22 minutes 14 seconds East, along the common line of said 428.755 acre tract, and said Simla Investments, LLC tract, passing a one-half inch iron rod found on line at a distance of 23.38 feet, passing a one-half inch iron rod with cap stamped "FORTWORTH SURVEYING" found at the common corner of said Simla Investments, LLC tract, and a tract of land described in a deed to Nava Legacy 49, LLC, recorded in Document Number 2019-34549, Deed Records, Johnson County, Texas at a distance of 441.15 feet, and continuing a total distance of 1,730.13 feet to a 4 inch steel post found for the common corner of said 428.755 acre tract and said Nava Legacy 49, LLC tract;

THENCE, over and across 428.755 acre tract as follows:
North 87 degrees 07 minutes 12 seconds West for a distance of 85.65 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

South 08 degrees 31 minutes 11 seconds West for a distance of 485.24 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

South 00 degrees 19 minutes 20 seconds West for a distance of 92.45 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

North 89 degrees 40 minutes 40 seconds West for a distance of 121.84 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

South 00 degrees 19 minutes 20 seconds West for a distance of 50.00 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

South 89 degrees 40 minutes 40 seconds East for a distance of 5.99 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

South 00 degrees 19 minutes 20 seconds West for a distance of 120.00 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

North 89 degrees 40 minutes 40 seconds West for a distance of 711.26 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

South 00 degrees 19 minutes 20 seconds West for a distance of 13.63 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

North 89 degrees 40 minutes 40 seconds West for a distance of 340.00 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

South 00 degrees 19 minutes 20 seconds West for a distance of 121.00 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

North 89 degrees 40 minutes 40 seconds West for a distance of 427.60 feet to a one-half inch iron rod with cap stamped "JBI" set for corner, being in the west line of said 428.755 acre tract and the east line of aforementioned 135.76 acre Franklin tract;

THENCE along the east line of said 135.76 acre tract and the west line of said 428.755 acre tract as follows:
North 00 degrees 19 minutes 20 seconds East for a distance of 1,018.18 feet to a one-half inch iron rod with cap stamped "JBI" set for corner;

North 12 degrees 02 minutes 50 seconds West a distance of 761.63 feet to the POINT OF BEGINNING and containing 3,058,735 square feet or 70.219 acres of land more or less.

NOW THERFORE KNOW ALL MEN BY THESE PRESENTS:

That, ALVARADO 429 PARTNERS LLC and GRBK EDGEWOOD LLC are the owners of the herein described parcel, acting by and through the undersigned, its duly authorized agent, does hereby adopt the herein above describe property as LONE OAK, PHASE 1, an addition to Johnson County, Texas and does dedicate to the public use the streets and easements shown thereon.

WITNESS, my hand at Dallas, Texas, this the ____ day of _____, 2024.

ALVARADO 429 PARTNERS LLC, a limited liability company

STATE OF TEXAS §

COUNTY OF _____ §

BEFORE ME, the undersigned authority in and for the State of Texas, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed and in the capacity therein stated.

WITNESS MY HAND at Dallas, Texas, this ____ day of _____, 2024.

Notary Public in and for the State of Texas

WITNESS, my hand at Dallas, Texas, this the ____ day of _____, 2024.

GRBK EDGEWOOD LLC, a Texas limited liability company

STATE OF TEXAS §

COUNTY OF _____ §

BEFORE ME, the undersigned authority in and for the State of Texas, on this day personally appeared _____, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same for the purposes and consideration therein expressed and in the capacity therein stated.

WITNESS MY HAND at Dallas, Texas, this ____ day of _____, 2024.

Notary Public in and for the State of Texas

SURVEYOR'S CERTIFICATE

This is to certify that I, WILLIAM J. JOHNSON, a Registered Professional Land Surveyor of the State of Texas, having platted the above subdivision from an actual survey on the ground, and that all lot corners, and angle points, and points of curve shall be properly marked on the ground, and that this plat correctly represents that survey made by me or under my direction and supervision.

Dated this ____ day of _____, 2024.

"PRELIMINARY, THIS DOCUMENT SHALL NOT BE RECORDED FOR ANY PURPOSE AND SHALL NOT BE USED OR VIEWED OR RELIED UPON AS A FINAL SURVEY DOCUMENT."

WILLIAM J. JOHNSON, R.P.L.S. No. 5426

STATE OF TEXAS §

COUNTY OF DALLAS §

BEFORE ME, the undersigned, a Notary Public in and for The State of Texas, on this day personally appeared WILLIAM J. JOHNSON, known to me to be the person and officer whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed and in the capacity therein stated.

GIVEN UNDER MY HAND AND SEAL OF OFFICE this ____ day of _____, 2024.

Notary Public, State of Texas

CITY PROJECT NO. FP ____-____

FINAL PLAT

LONE OAK PHASE 1

257 RESIDENTIAL LOTS
5 OPEN SPACE LOTS
1 AMENITY CENTER LOT
1 FIRE STATION LOT

BEING 70.219 ACRES OUT OF
JAMES B. CONGER SURVEY, ABSTRACT NO. 150
GEORGE S. MCINTOSH SURVEY, ABSTRACT NO. 625
JOHNSON COUNTY, TEXAS

GRBK EDGEWOOD, LLC OWNER/DEVELOPER

2805 Dallas Parkway, Suite 400 (817)658-2112
Plano, Texas 75093
Contact: Bobby Samuel

ALVARADO 429 PARTNERS, LLC OWNER/DEVELOPER

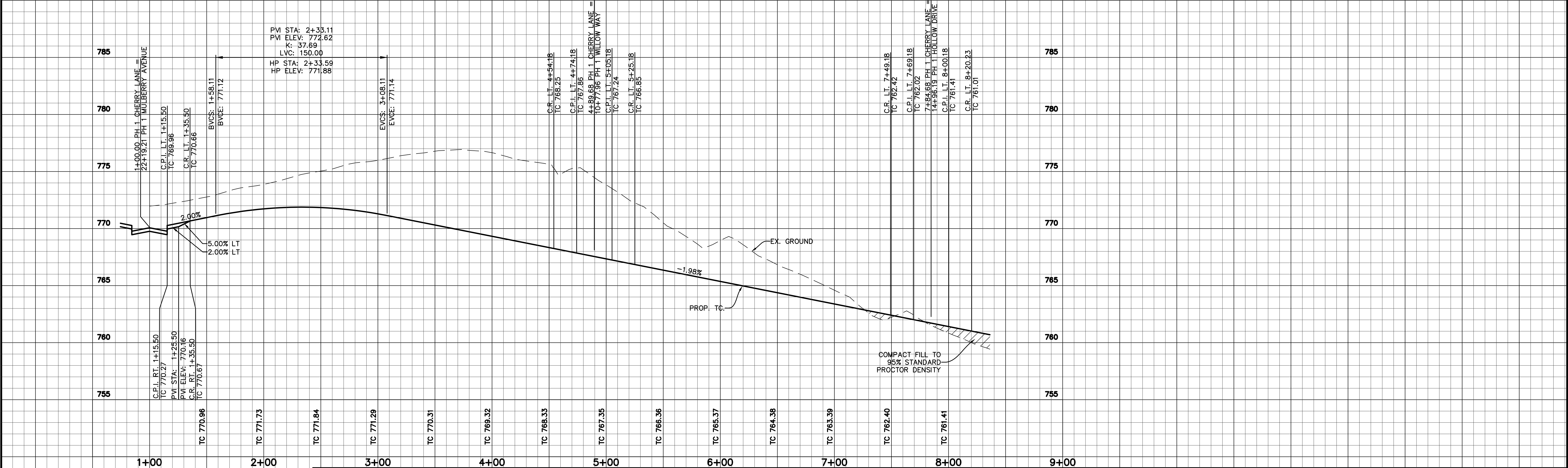
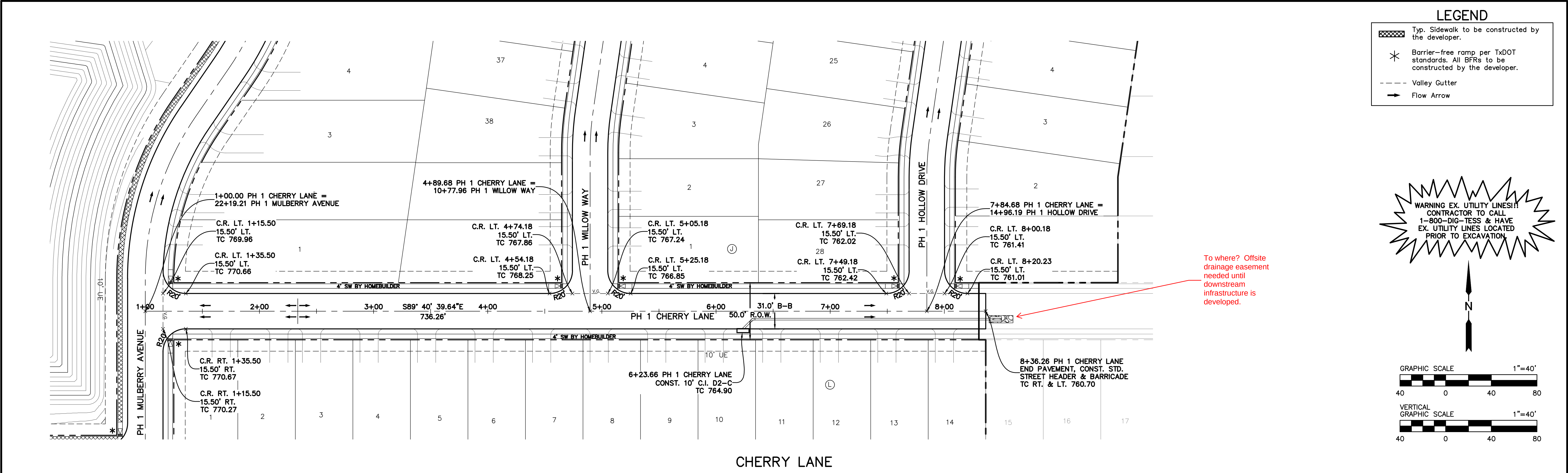
5950 BERKSHIRE LANE SUITE 200 (817)944-0934
DALLAS, TX 75225
Contact: Clayton Snodgrass

JBI PARTNERS, INC. SURVEYOR/ENGINEER

2121 Midway Road, Suite 300 (972)248-7676
Carrollton, Texas 75006
Contact: Christopher Wall, P.E.
TBPE No. F-438 TBPLS No. 10076000

Use consistent references

Inst/Doc # not consistent w/ exhibit



BENCHMARKS

BM 1) "X" cut on concrete driveway apron located on the southwest side of County Road No. 607, in fron of residence located at 1317 County Road No 607, approximately 300 feet northwest of County Road No. 505. ELEVATION = 707.20'

BM 2) "X" cut on concrete headwall located on the east side of County Road No. 607, approximately 3,500 feet north of U.S. Highway No. 67, near the most easterly south corner of subject tract. ELEVATION = 756.49'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	SUBMITTALS	DATE

DESIGNED BY: ---

DRAWN BY: ---

CHECKED BY: ---

PRELIMINARY
FOR REVIEW ONLY
NOT FOR CONSTRUCTION OR PERMIT PURPOSES

ENGINEER: Chris Wall, P.E.

P.E. No. 123372 Date: 03-25-2024

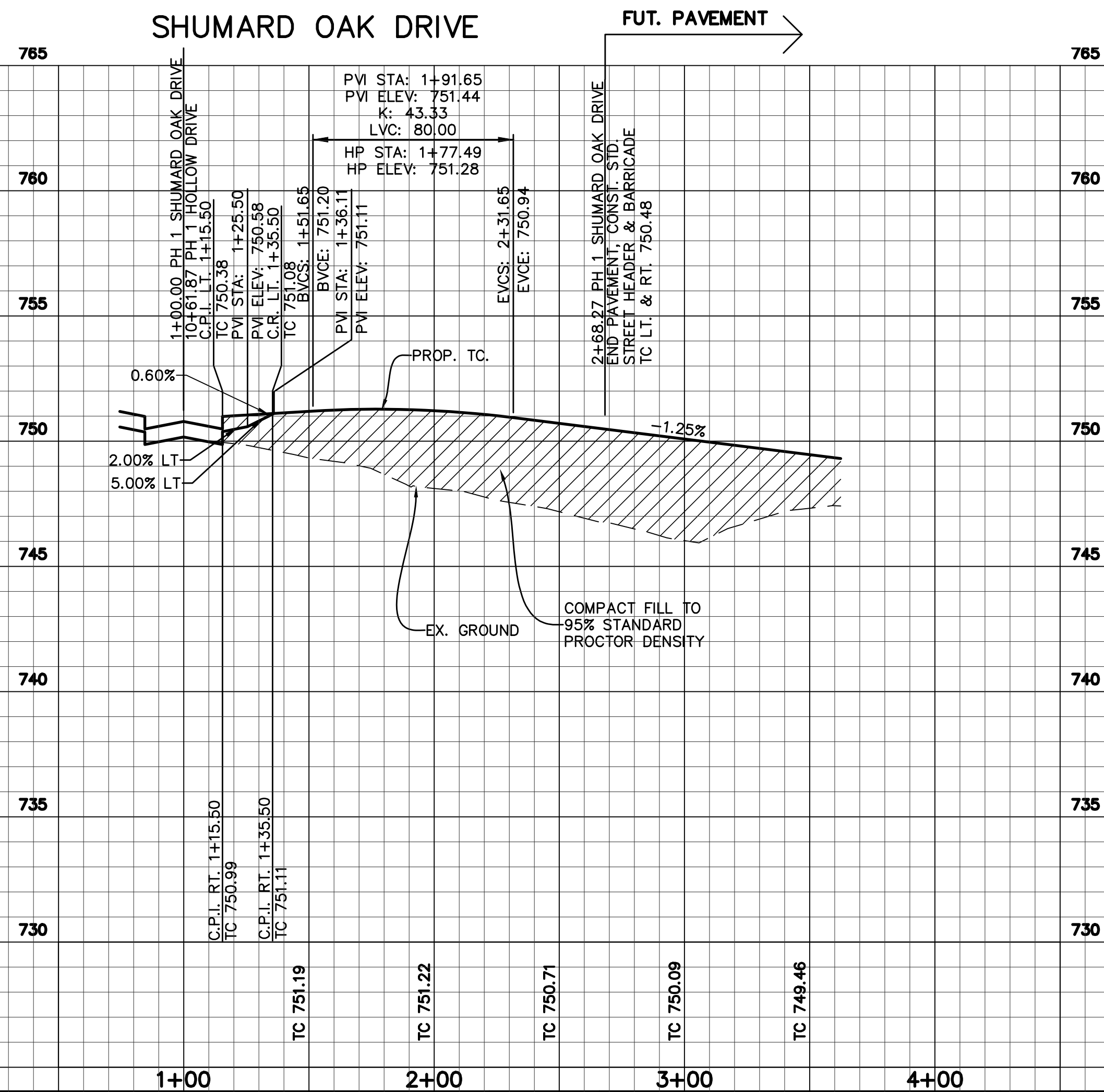
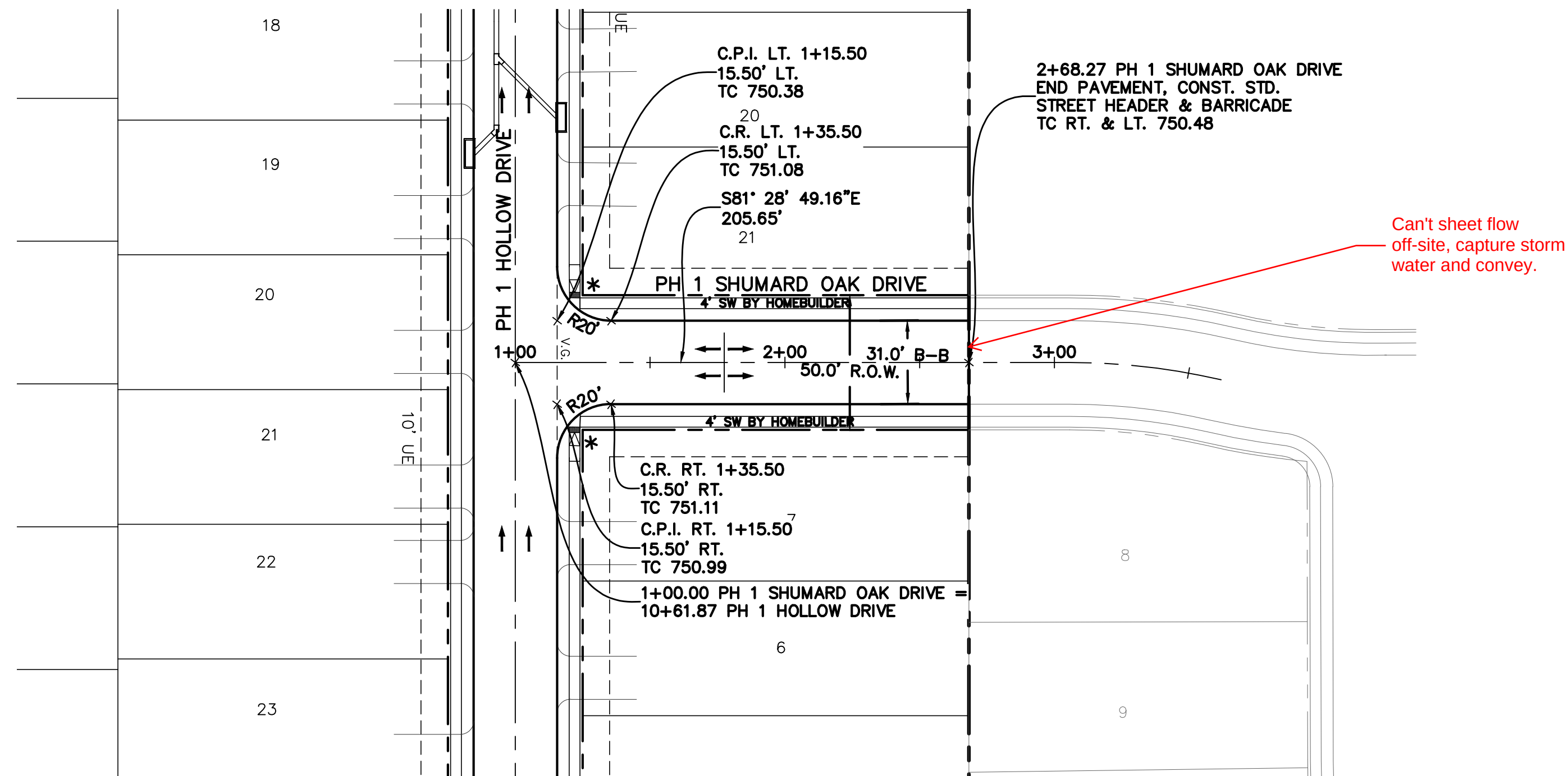
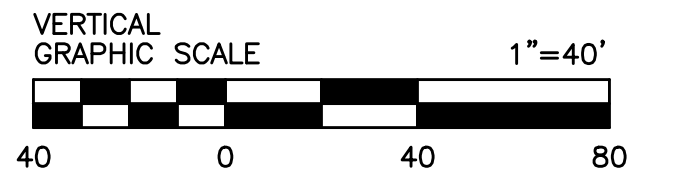
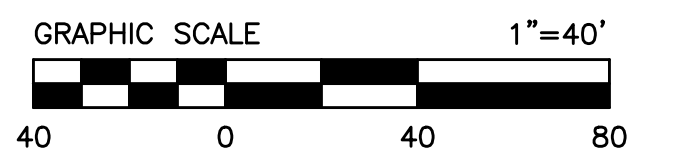
JBIPARTNERS

2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

PAVING PLAN & PROFILE		PROJECT NO.
CHERRY LANE		BBC010
LONE OAK, PHASE 1		SHEET NO.
City of Alvarado, Johnson County, Texas		1.21

	Typ. Sidewalk to be constructed by the developer.
	Barrier-free ramp per TxDOT standards. All BFRs to be constructed by the developer.
	Valley Gutter
	Flow Arrow

**WARNING EX. UTILITY LINES!!!
CONTRACTOR TO CALL
1-800-DIG-TESS & HAVE
EX. UTILITY LINES LOCATED
PRIOR TO EXCAVATION.**



BM 1) "X" cut on concrete driveway apron located on the southwest side of County Road No. 607, in front of residence located at 1317 County Road No. 607, approximately 300 feet northwest of County Road No. 505.
ELEVATION = 707.20'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	SUBMITTALS	DATE

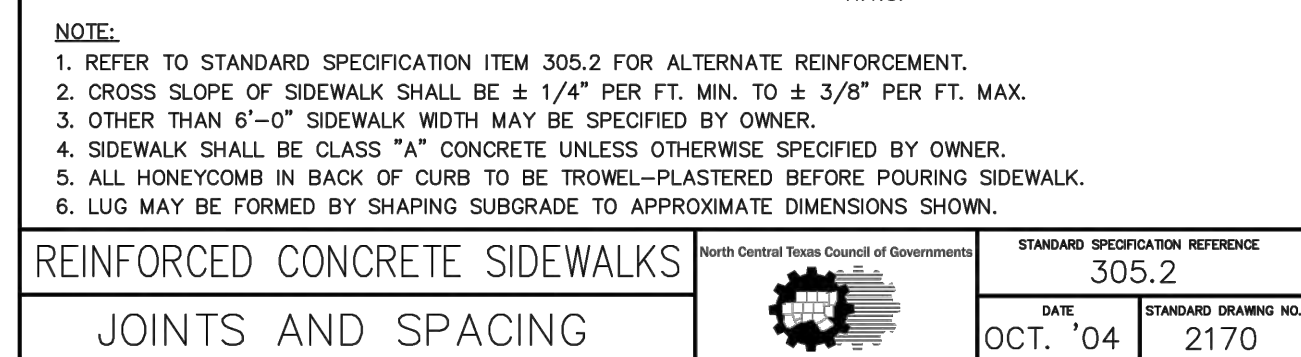
P.E. No. 123372 Date: 03-25-2024



2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

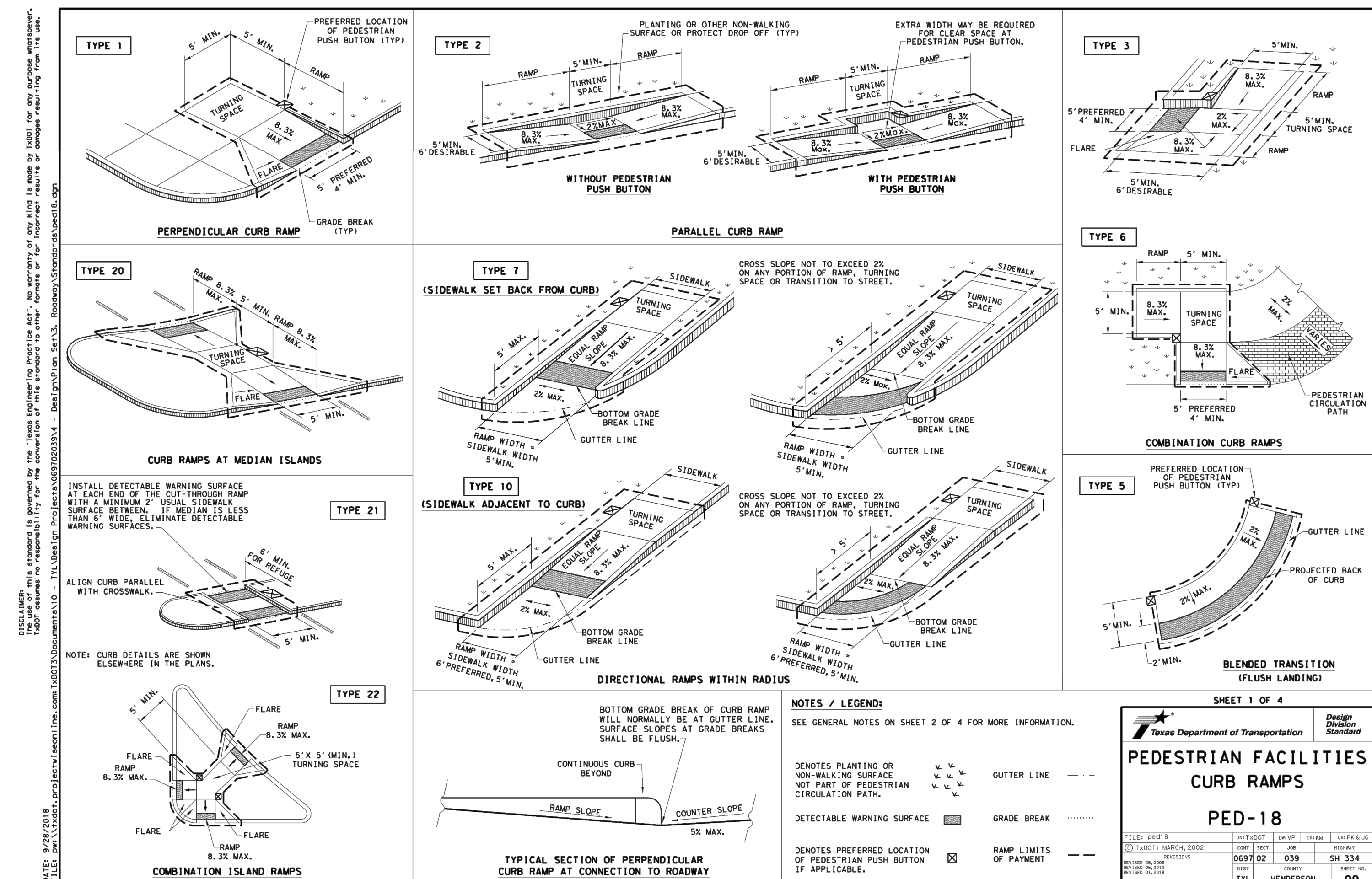
City of Alvarado, Johnson County, Texas

1.22



1. REINFORCED CONCRETE PAVEMENT:
 - A. ALL CURBS SHALL BE PLACED INTEGRAL WITH PAVEMENT UNLESS OTHERWISE APPROVED BY THE OWNER.
 - B. CURBS SHALL MEET THE SAME COMPRESSIVE STRENGTH AS SPECIFIED FOR THE PAVEMENT.
 - C. BAR LAPS SHALL BE 30 DIAMETERS.
 - D. REINFORCING BARS SHALL BE SUPPORTED BY CHAIRS OR OTHER DEVICES APPROVED BY THE OWNER.
2. SUBGRADE: (UNLESS OTHERWISE SPECIFIED BY OWNER)
 - A. SUBGRADE UNDER ALL PAVEMENTS SHALL BE STABILIZED TO A MINIMUM DEPTH OF 6" WITH HYDRATED LIME OR CEMENT WHEN THE P.I. OF THE INPLACE MATERIAL IS GREATER THAN 15. LABORATORY TESTS SHALL BE CONDUCTED TO DETERMINE THE AMOUNT OF LIME OR CEMENT REQUIRED TO LOWER THE P.I. TO 15 OR BELOW. SATURATION P.I. ($PH \geq 12.4$) WILL BE THE LIMIT WHEN A SOIL'S P.I. CANNOT BE BROUGHT TO 15 OR LOWER.
 - B. WHERE THE INPLACE MATERIAL HAS A P.I. OF LESS THAN 15, THE SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6" AND RECOMPACTED.
3. IF THE ROADWAY IS A DESIGNATED BIKE ROUTE OR BIKE USAGE IS ANTICIPATED, REFER TO NCTDGO'S REGIONAL BICYCLE AND PEDESTRIAN FACILITIES DESIGN MANUAL FOR DESIGN GUIDANCE.

PAVEMENT SYSTEMS		STANDARD SPECIFICATION REFERENCE	
GENERAL NOTES		302.303	
		DATE	STANDARD DRAWING NO.
		OCT. '04	2190



BM 2) "X" cut on concrete headwall located on the east side of County Road No. 607, approximately 3,500 feet north of U.S. Highway No. 67, near the most easterly south corner of subject tract.
ELEVATION = 756.49'

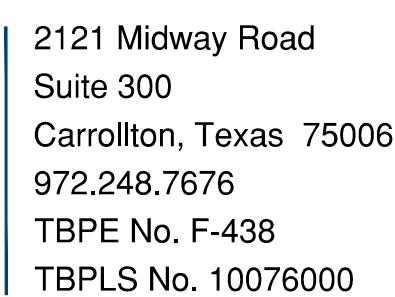
NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	SUBMITTALS	DATE

**PRELIMINARY
FOR REVIEW ONLY**

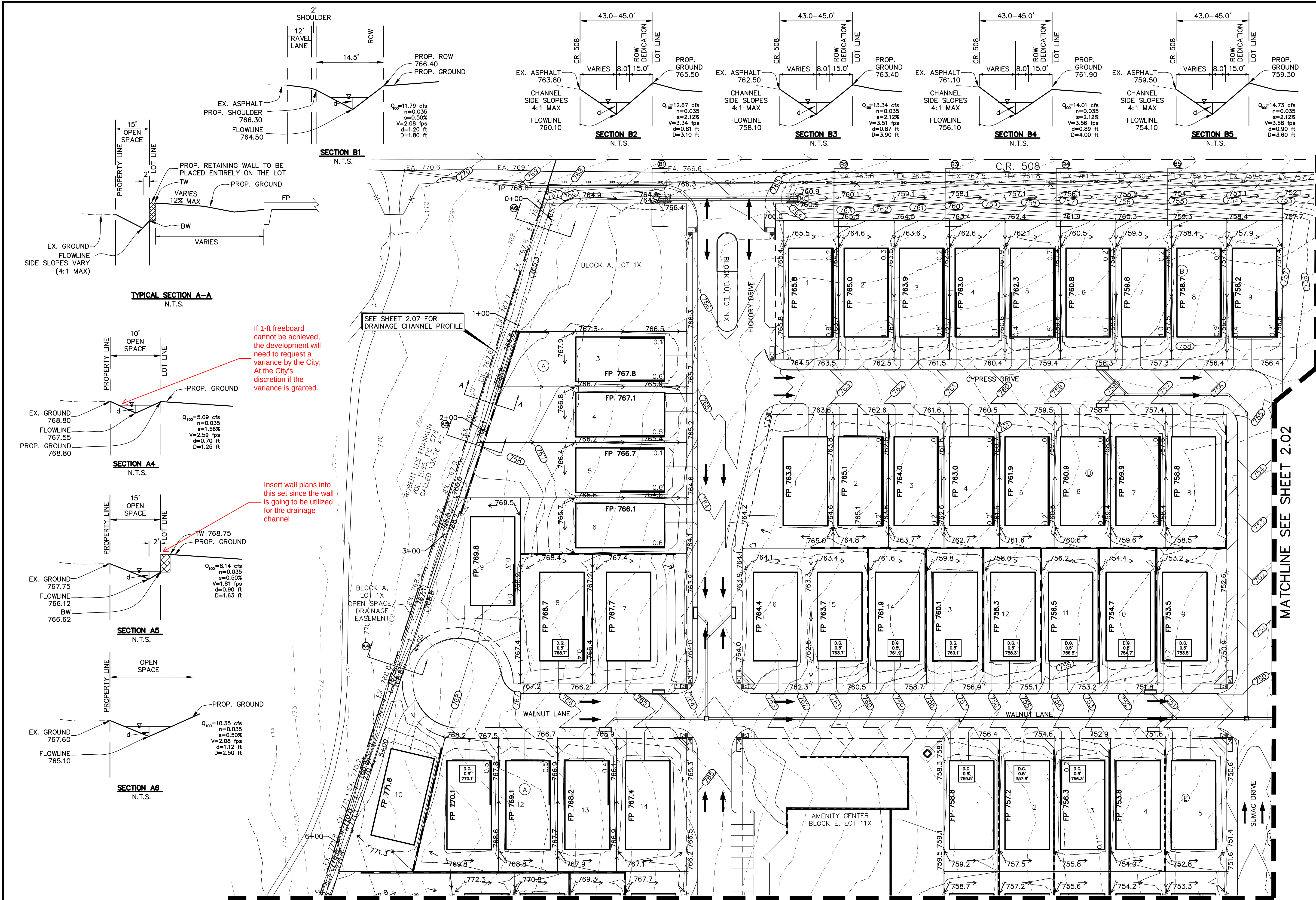
NOT FOR CONSTRUCTION OR PERMIT PURPOSES

ENGINEER: Chris Wall, P.E.

P.E. No. 123372 Date: 03-25-2024



PROJECT NO.	BBC010
SHEET NO.	1.40



LEGEND

FP 570.5 FINISHED PAD ELEVATION
(575) PROPOSED MAJOR CONTOUR
(574) PROPOSED MINOR CONTOUR
x570.5 PROPOSED GROUND
- 575 - - EXISTING MAJOR CONTOUR
- 574 - - EXISTING MINOR CONTOUR
x EX. 570.5 EXISTING GROUND

← PROP. STORM DRAINAGE FLOW
← PROP. DRAINAGE FLOW DIRECTION
— PROP. RETAINING WALL

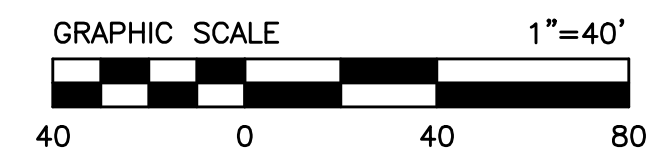
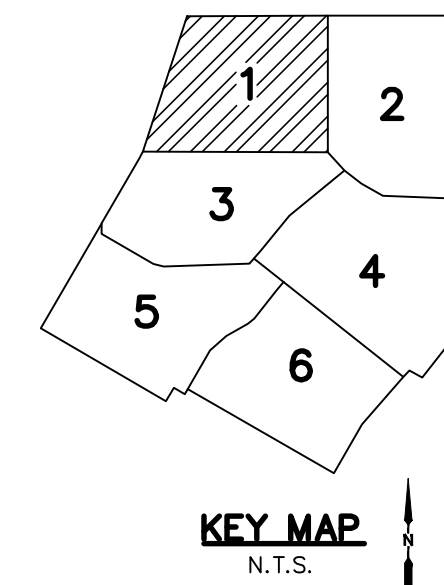
TW 537.4 ELEVATION OF GROUND AT TOP OF WALL / LOW SIDE OF WALL
BW 535.9 ELEVATION OF GROUND AT TOP OF WALL / LOW SIDE OF FUTURE WALL

D.G. DROP GARAGE
X.X' DROP GARAGE DELTA
XXX.X' DROP GARAGE ELEVATION AT FACE

1.5 EXPOSED GRADE BEAM-NOT TO EXCEED 18" W/ DESIGN

INTERIM DIVERSION DIKE/BERM
INTERIM DIVERSION SWALE

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 - The retaining wall contractor shall identify the locations of the screening walls and fences to coordinate the construction of any improvements affecting the retaining walls.
 - Retention ponds will be installed with aerating fountains. Fountains are to be maintained by the homeowners association.



BENCHMARKS

BM 1) "X" cut on concrete driveway apron located on the southwest side of County Road No. 607, in front of residence located at 1317 County Road No. 607, approximately 300 feet northwest of County Road No. 505. ELEVATION = 707.20'

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NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	SUBMITTALS	DATE

DESIGNED BY: ---
DRAWN BY: ---
CHECKED BY: ---

**PRELIMINARY
FOR REVIEW ONLY**

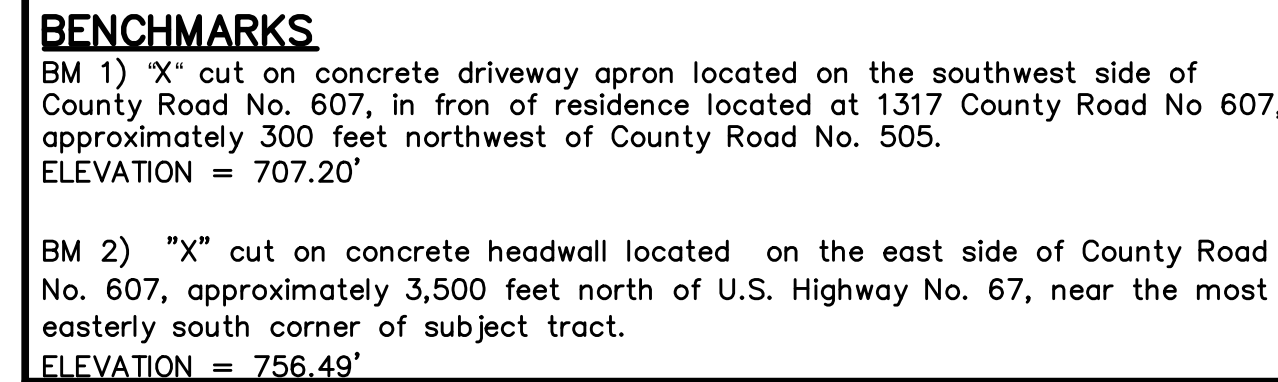
NOT FOR CONSTRUCTION OR PERMIT PURPOSES

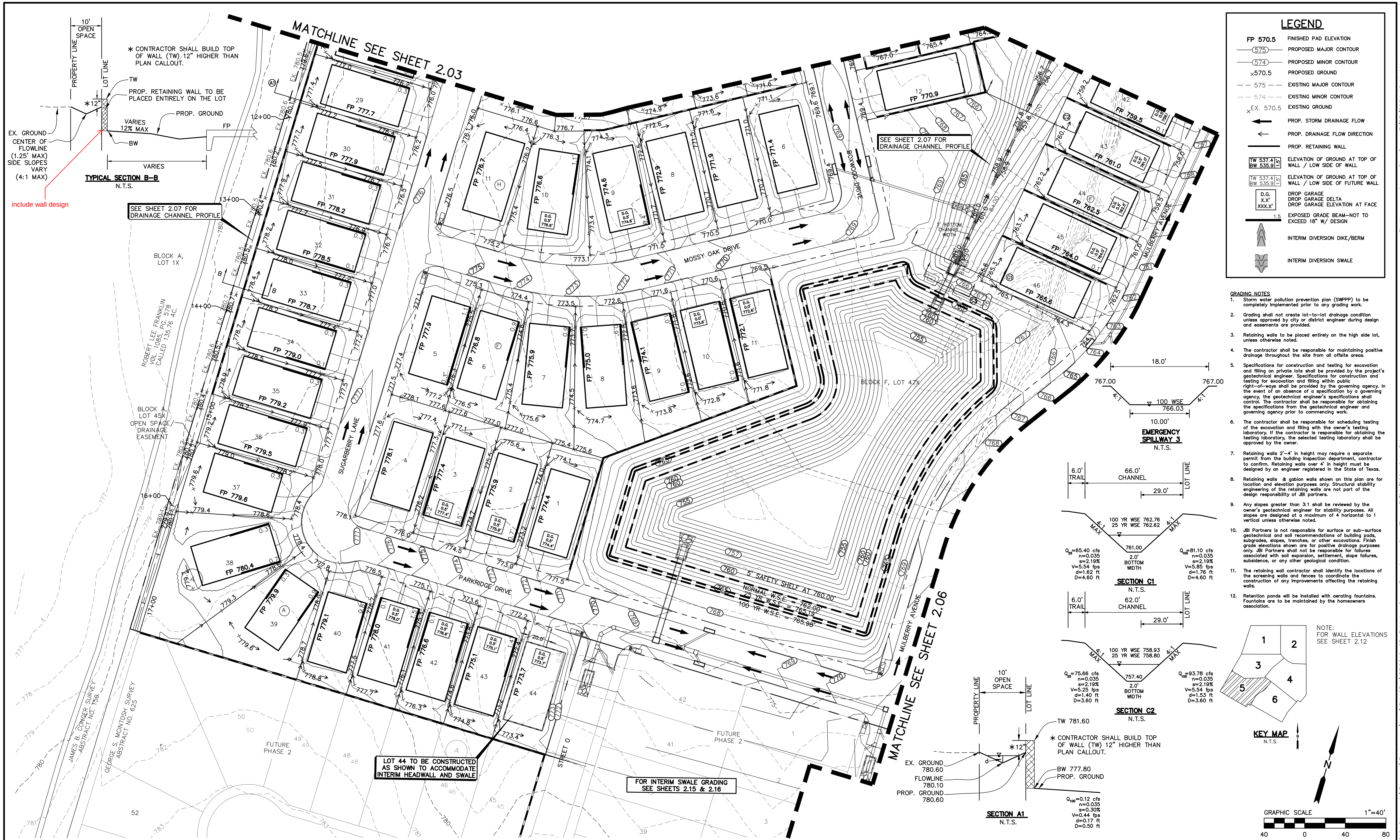
ENGINEER: Chris Wall, P.E.
P.E. No. 123372 Date: 03-25-2024

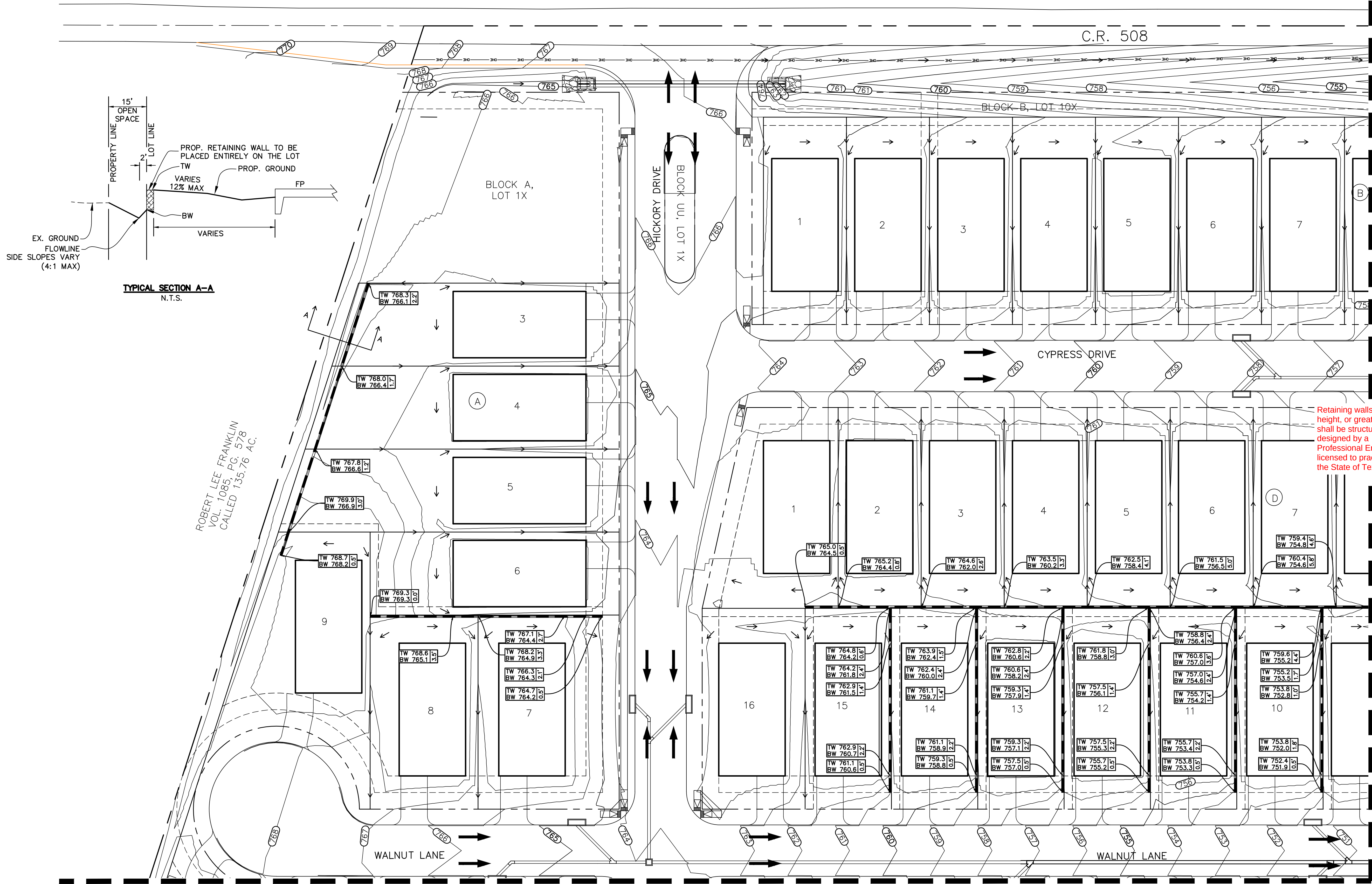


2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

GRADING PLAN		PROJECT NO.
SHEET 1 OF 6		BBC010
LONE OAK, PHASE 1		SHEET NO.
City of Alvarado, Johnson County, Texas		2.01







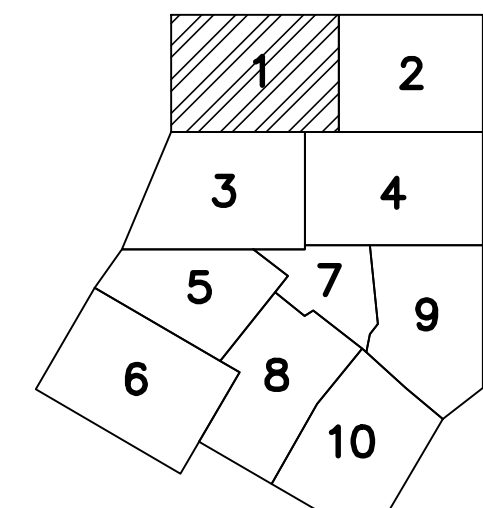
LEGEND

- (575)— PROPOSED MAJOR CONTOUR
- (574)— PROPOSED MINOR CONTOUR
- - 575 - - EXISTING MAJOR CONTOUR
- - 574 - - EXISTING MINOR CONTOUR
- ← PROP. STORM DRAINAGE FLOW
- ← PROP. DRAINAGE FLOW DIRECTION
- PROP. RETAINING WALL
- TW 537.4
BW 535.9

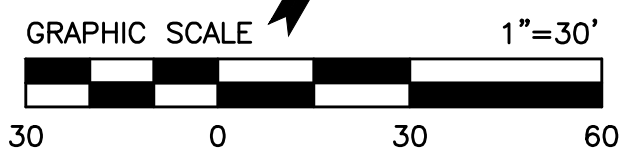
 ELEVATION OF GROUND AT TOP OF WALL / LOW SIDE OF WALL
- TW 537.4
BW 535.9

 ELEVATION OF GROUND AT TOP OF WALL / LOW SIDE OF FUTURE WALL

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KEY MAP
N.T.S.



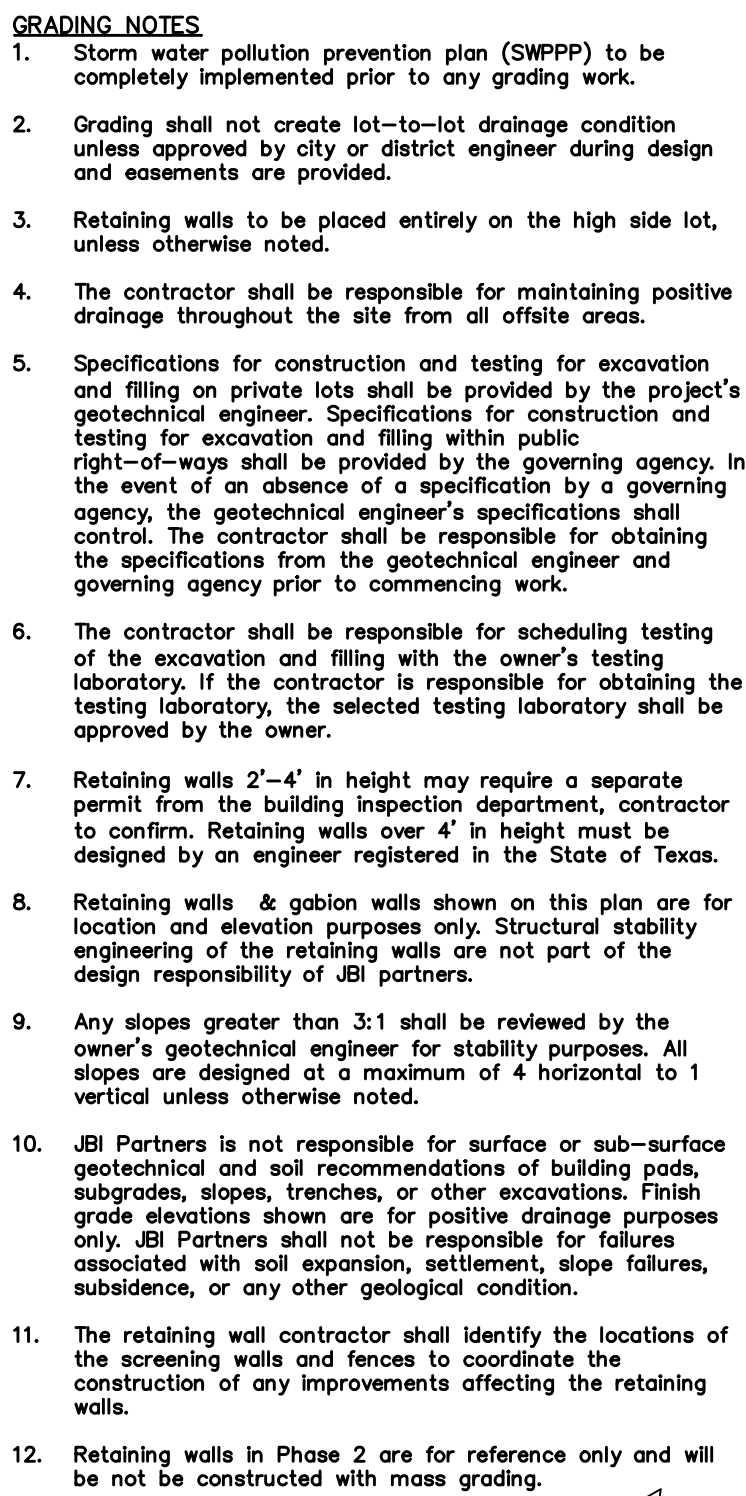
BENCHMARKS
BM 1) "X" cut on concrete driveway apron located on the southwest side of County Road No. 607, in front of residence located at 1317 County Road No. 607, approximately 300 feet northwest of County Road No. 505. ELEVATION = 707.20'
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NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	SUBMITTALS	DATE

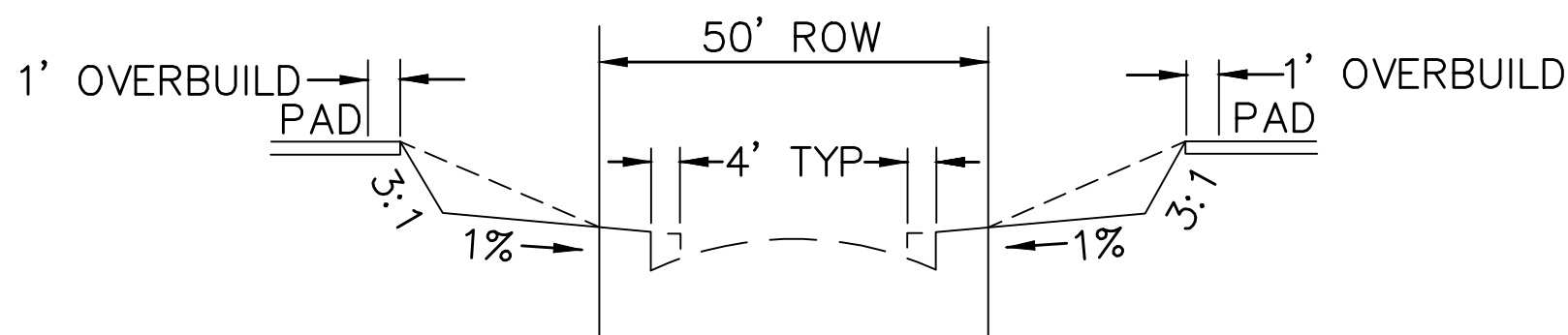
DESIGNED BY:	---
DRAWN BY:	---
CHECKED BY:	---
PRELIMINARY FOR REVIEW ONLY	
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ENGINEER:	Chris Wall, P.E.
P.E. No.	123372
Date	03-25-2024

2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

RETAINING WALL PLAN		PROJECT NO.
SHEET 1 OF 10		BBC010
LONE OAK, PHASE 1		SHEET NO.
City of Alvarado, Johnson County, Texas		2.08

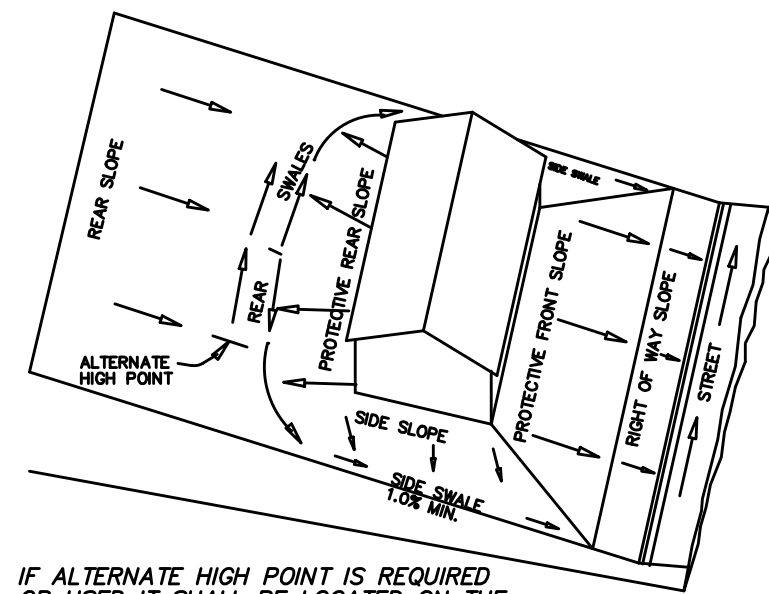


GRADING PLAN – PH 2	PROJECT NO.
SHEET 01 OF 06	BBC010
LONE OAK, PHASE 1	SHEET NO.
City of Alvarado, Johnson County, Texas	2.19



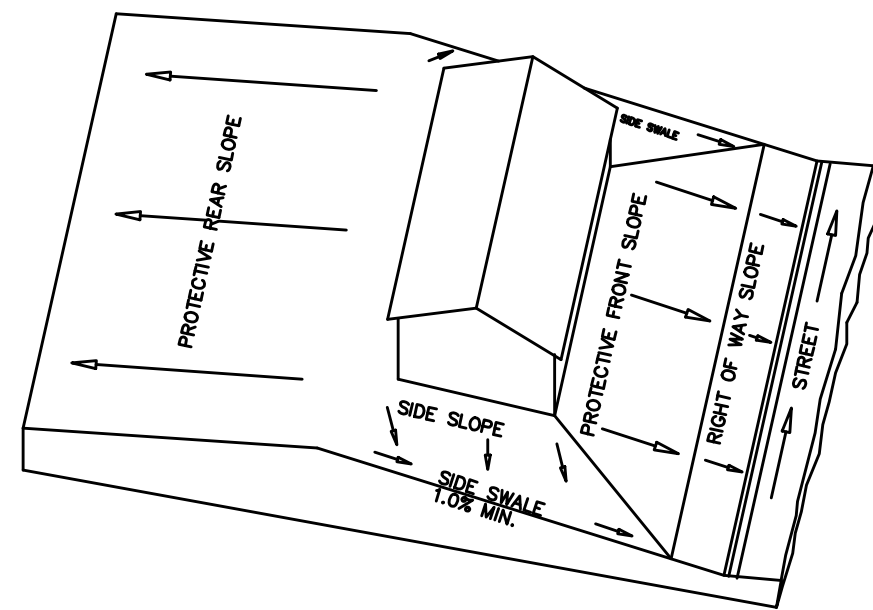
CONTRACTOR TO SLOPE FRONT YARD FROM ROW AT 1% THEN UP AT 3:1 TO FINAL PAD ELEVATION

TYPICAL GRADING CROSS SECTION
N.T.S.

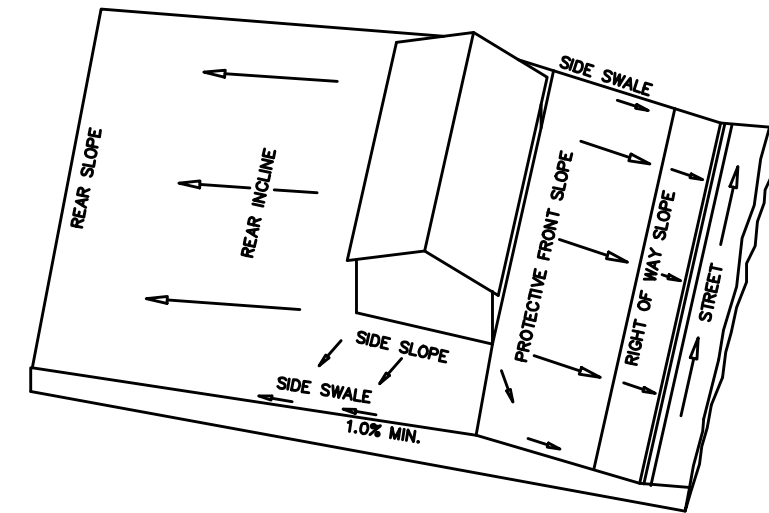


IF ALTERNATE HIGH POINT IS REQUIRED OR USED IT SHALL BE LOCATED ON THE HIGH SIDE OF THE LOT.

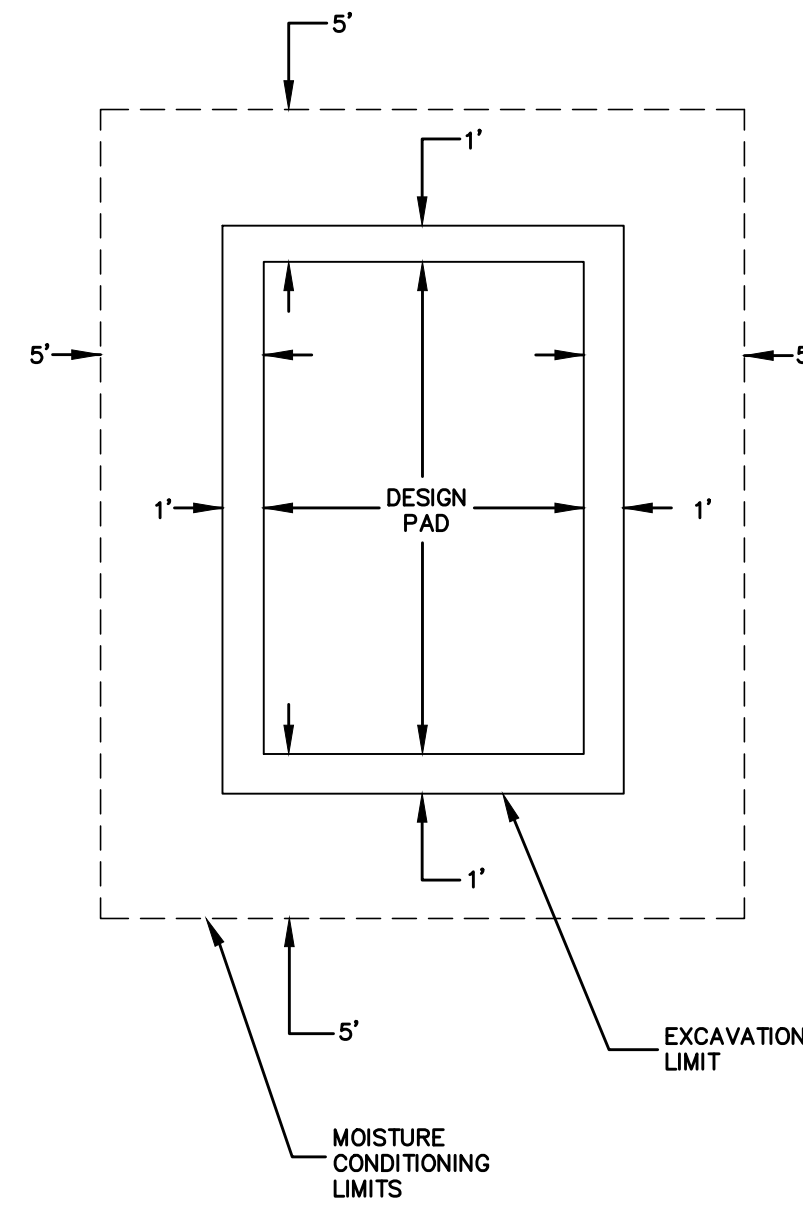
LOT GRADING TYPE A



LOT GRADING TYPE B

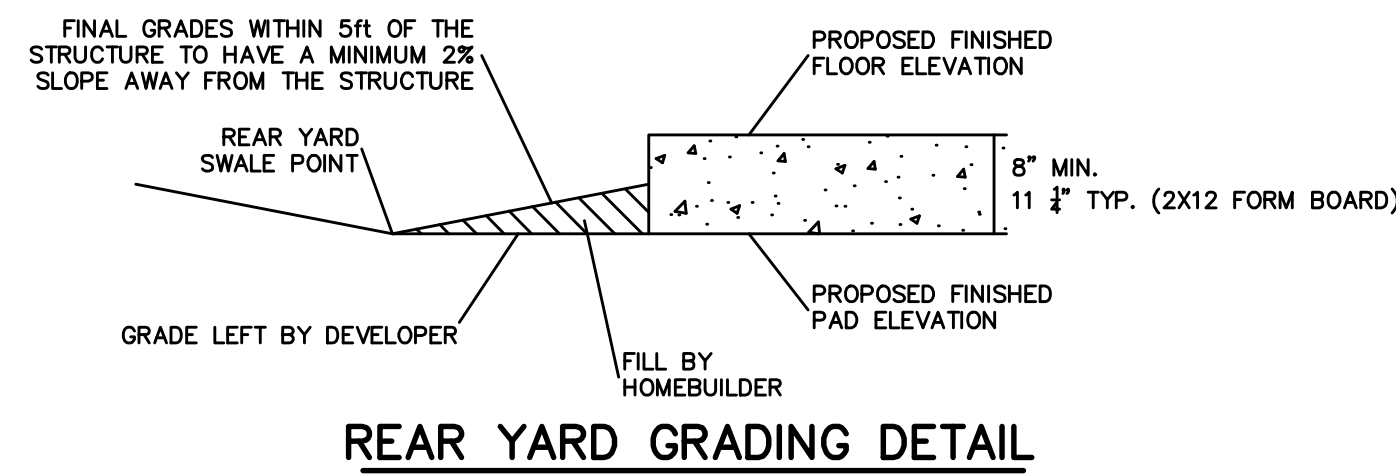


LOT GRADING TYPE D

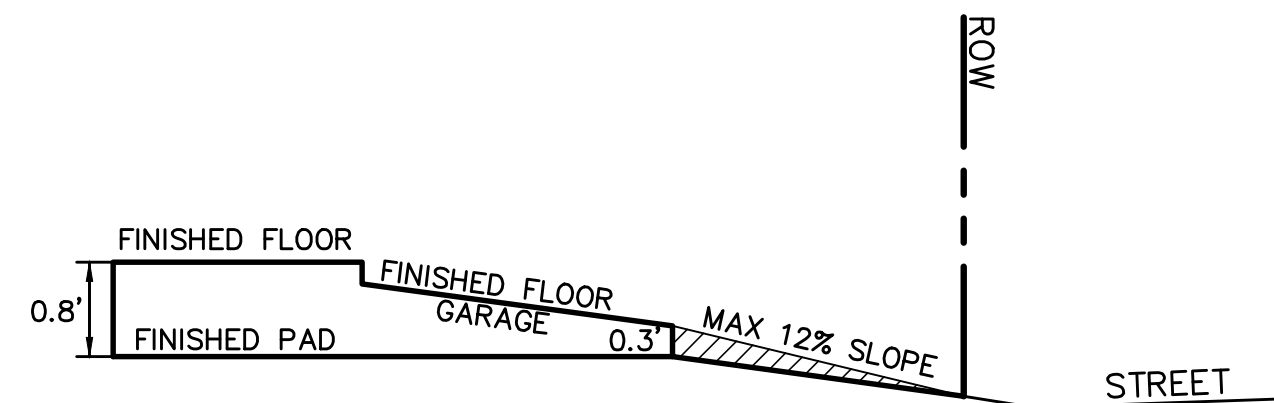


EXCAVATION NOTES:
1. CONTRACTOR TO BUILD PAD 1' BEYOND DESIGN PAD.
2. CONTRACTOR TO MOISTURE CONDITION 5' BEYOND PAD PER GEOTECH RECOMMENDATIONS.

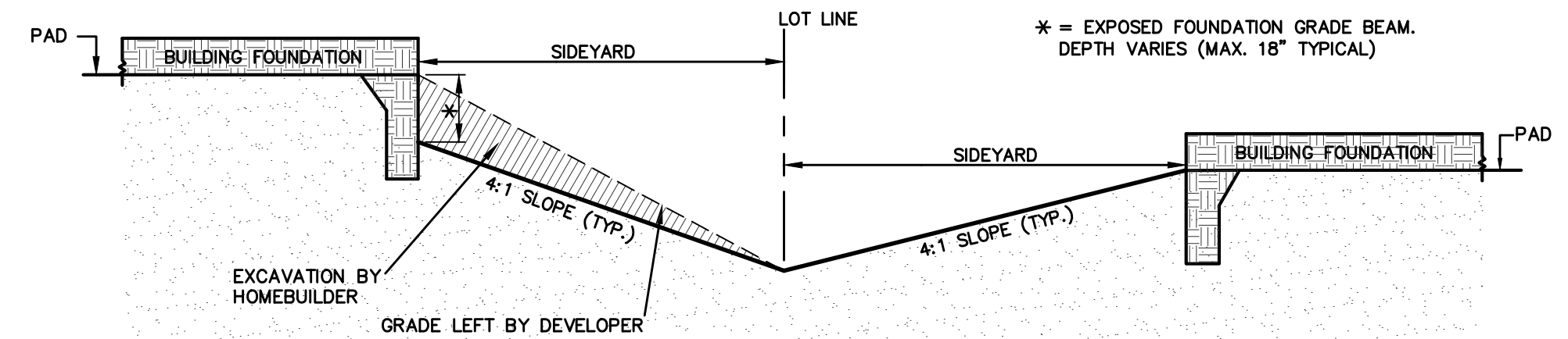
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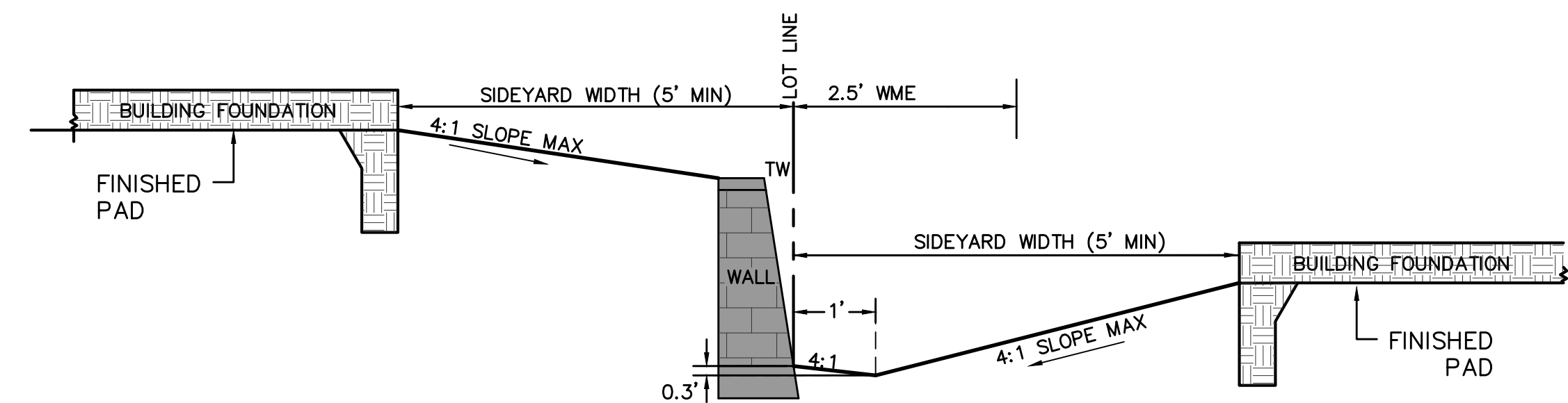
REAR YARD GRADING DETAIL



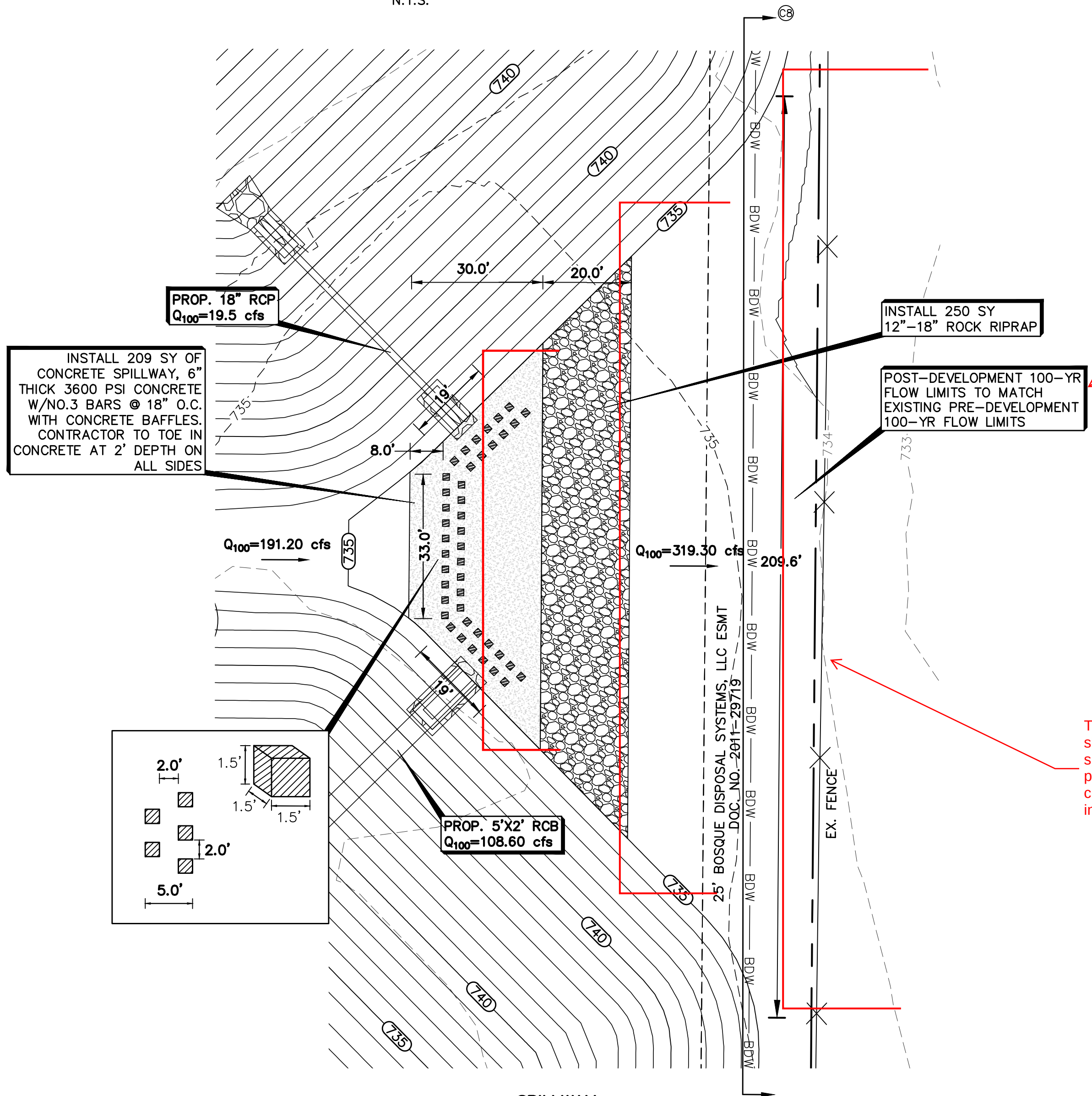
DRIVEWAY DETAIL
N.T.S.



TYPICAL SECTION OF SIDEYARD SWALE W/ DROPPED GRADE BEAM.
N.T.S.

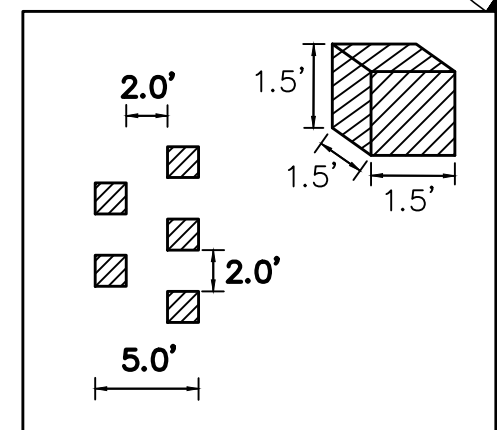


TYPICAL SECTION OF SIDEYARD SWALE W/ WALL
N.T.S.

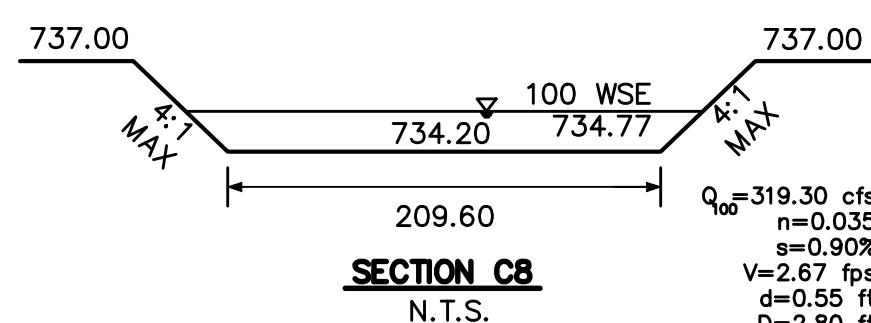


Label the flow rates

To be able to clearly show the attempt to spread the flow, provide cross-sections at increments

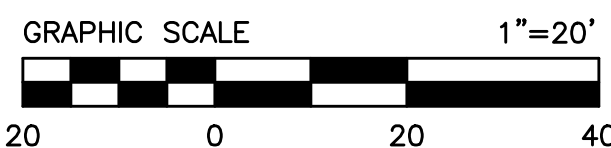


SPILLWAY Baffle DETAIL
1"=20'



SECTION C8
N.T.S.

Q₁₀₀=319.30 cfs
n=0.035
s=0.008
V=2.67 fps
d=0.55 ft
D=2.80 ft



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DRAWN BY: ---
CHECKED BY: ---
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ENGINEER: Chris Wall, P.E.
P.E. No. 123372 Date: 03-25-2024



2121 Midway Road
Suite 300
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972.248.7676
TBPE No. F-438
TBPLS No. 10076000

GRADING DETAILS

LONE OAK, PHASE 1

City of Alvarado, Johnson County, Texas

PROJECT NO. BBC010
SHEET NO. 2.25

DRAINAGE AREAS

Basin ID	Area	Runoff Coefficient	Time of Concentration	25-Year Intensity	25-Year Runoff	100-Year Intensity	100-Year Runoff
	A	C	Tc	I	Q	I	Q
	(acres)	-	(min)	(in/hr)	(cfs)	(in/hr)2	(cfs)2
A1-A	0.99	0.65	15	6.42	4.13	7.93	5.10
A1-B	1.17	0.65	15	6.42	4.88	7.93	6.03
A2-AN	1.33	0.65	15	6.42	5.55	7.93	6.86
A2-AS	0.4	0.65	15	6.42	1.67	7.93	2.06
A2-BN	0.22	0.65	15	6.42	0.92	7.93	1.13
A2-BS	0.15	0.65	15	6.42	0.63	7.93	0.77
A2-C	0.49	0.65	15	6.42	2.04	7.93	2.53
A2-D	0.68	0.65	15	6.42	2.84	7.93	3.51
A2-E	1.18	0.65	15	6.42	4.92	7.93	6.08
A2-F	1.09	0.65	15	6.42	4.55	7.93	5.62
A2-G	1.66	0.65	15	6.42	6.93	7.93	8.96
A2-H	2.4	0.65	15	6.42	13.87	7.93	17.13
A3-A	0.81	0.65	15	6.42	3.38	7.93	4.18
A3-B	0.67	0.65	15	6.42	2.80	7.93	3.45
A4-AN	0.95	0.65	15	6.42	3.96	7.93	4.90
A4-AS	0.17	0.65	15	6.42	0.71	7.93	0.88
CUL-01A	4.35	0.30	15	6.42	8.38	7.93	10.35
CUL-01B	0.28	0.65	15	6.42	1.17	7.93	1.44
CUL-01C	1.00	0.65	15	6.42	4.17	7.93	5.15
UD-01	0.37	0.65	15	6.42	1.54	7.93	1.91
Basin A Total	20.36				79.04		97.63
B1-A	1.87	0.65	15	6.42	7.80	7.93	9.64
B1-B	1.65	0.65	15	6.42	6.89	7.93	8.50
B1-C	0.83	0.65	15	6.42	3.46	7.93	4.28
B1-D	1.82	0.65	15	6.42	7.59	7.93	9.38
B2-A	0.23	0.65	15	6.42	0.96	7.93	1.19
B2-B	1.42	0.65	15	6.42	5.93	7.93	7.32
B2-C	1.70	0.65	15	6.42	7.09	7.93	8.76
B2-D	1.78	0.65	15	6.42	7.43	7.93	9.18
B2-E	1.24	0.65	15	6.42	5.17	7.93	6.39
B2-FE	1.61	0.65	15	6.42	6.72	7.93	8.30
B2-FW	0.05	0.65	15	6.42	0.21	7.93	0.26
B2-GE	0.92	0.65	15	6.42	3.84	7.93	4.74
B2-GW	1.34	0.65	15	6.42	5.59	7.93	6.91
B3-A	1.60	0.65	15	6.42	6.68	7.93	8.25
B3-B	1.24	0.65	15	6.42	5.17	7.93	6.39
B3-C	1.66	0.65	15	6.42	6.93	7.93	8.56
B3-D	1.45	0.65	15	6.42	6.05	7.93	7.47
Basin B Total	22.41				93.52		115.51

Basin ID	Area	Runoff Coefficient	Time of Concentration	25-Year Intensity	25-Year Runoff	100-Year Intensity	100-Year Runoff
	A	C	Tc	I	Q	I	Q
	(acres)	-	(min)	(in/hr)	(cfs)	(in/hr)2	(cfs)2
C1-A	0.45	0.65	15	6.42	1.88	7.93	2.32
C1-B	2.06	0.65	15	6.42	8.60	7.93	10.62
C1-C	0.79	0.65	15	6.42	3.30	7.93	4.07
C1-D	1.94	0.65	15	6.42	8.10	7.93	10.00
C1-E	0.49	0.65	15	6.42	2.04	7.93	2.53
C4-AN	0.06	0.65	15	6.42	0.25	7.93	0.31
C4-AS	1.31	0.65	15	6.42	5.47	7.93	6.75
C4-BN	0.17	0.65	15	6.42	0.71	7.93	0.88
C4-BS	1.80	0.65	15	6.42	7.51	7.93	9.28
C2-AN	0.10	0.65	15	6.42	0.42	7.93	0.52
C2-AS	1.37	0.65	15	6.42	5.72	7.93	7.06
C2-BN	0.12	0.65	15	6.42	0.50	7.93	0.62
C2-BS	1.72	0.65	15	6.42	7.18	7.93	8.87
C3-AN	0.10	0.65	15	6.42	0.42	7.93	0.52
C3-AS	0.98	0.65	15	6.42	4.09	7.93	5.05
C3-BN	0.18	0.65	15	6.42	0.75	7.93	0.93
C3-BS	1.70	0.65	15	6.42	7.09	7.93	8.76
C5-FUT	13.77	0.65	15	6.42	57.46	7.93	70.98
C5-E	0.39	0.65	15	6.42	1.63	7.93	2.01
C5-F	0.99	0.65	15	6.42	4.13	7.93	5.10
C6-FUT	3.27	0.65	15	6.42	13.65	7.93	16.86
C6-EE	0.29	0.65	15	6.42	1.21	7.93	1.49
C6-EW	1.25	0.65	15	6.42	5.22	7.93	6.44
C6-FE	0.11	0.65	15	6.42	0.46	7.93	0.57
C6-FW	0.68	0.65	15	6.42	2.84	7.93	3.51
C6-C	1.40	0.65	15	6.42	5.84	7.93	7.22
C6-D	2.71	0.65	15	6.42	11.31	7.93	13.97
C8-AN	0.34	0.65	15	6.42	1.42	7.93	1.75
C8-AS	0.14	0.65	15	6.42	0.58	7.93	0.72
C8-BN	0.42	0.65	15	6.42	1.75	7.93	2.16
C8-BS	0.16	0.65	15	6.42	0.67	7.93	0.82
C8-W	0.54	0.65	15	6.42	2.25	8.93	3.13
C-CH1	2.74	0.30	15	6.42	5.28	8.93	7.34
C-CH2	0.74	0.30	15	6.42	1.43	8.93	1.98
Basin C Total	45.28				181.13		225.13
D2-A	0.31	0.65	15	6.42	1.29	7.93	1.60
D2-B	1.47	0.65	15	6.42	6.13	7.93	7.58
D2-C	1.39	0.65	15	6.42	5.80	7.93	7.16
Future Basin D Total	3.17				13.23		16.34
POND 1	2.06	1.00	15	6.42	13.23	7.93	16.34
POND 2	0.89	1.00	15	6.42	5.71	7.93	7.06
POND 3	2.56	1.00	15	6.42	16.44	7.93	20.30
POND 4	0.42	1.00	15	6.42	2.70	7.93	3.33
Ponds Total	5.51				35.37		47.02
UD-02	0.36	0.30	15	6.42	0.69	7.93	0.86
UD-03	0.17	0.30	15	6.42	0.33	7.93	0.40
Offsite Total	0.53				1.02		1.26

25-YR DROP INLET CALCULATIONS

Inlet Number	Drainage Area Numbers	Q (c.f.s.)	Inlet Dimensions		Perimeter "P" (ft)	Weir Discharge coeff.	Head "H" (ft)	Maximum Head Allow. (ft)	Type	Capacity of Inlet (c.f.s.)	Q ₁₀₀ Intercepted at Inlet (c.f.s.)
			Length (in)	Width (in)							
A2-H	A2-H	10.02	48"	48"	16.0	3.00	0.50'	1.00'	NCTCOG Drop Inlet	48.00	10.02
A2-C	A2-C	2.04	48"	48"	8.0	3.00	0.50'	1.00'	NCTCOG Drop Inlet	24.00	2.04
C1-E	C1-E	2.04	48"	48"	8.0	3.00	0.50'	1.00'	NCTCOG Drop Inlet	24.00	2.04

NOTE:
EQUATION FROM ISWM TECHNICAL MANUAL FIGURE 1.14.
Q/P=3.0Y²/3

Verify this is the correct size

25-YR CURB INLET CALCULATIONS

Design Point	Inlet No.	Drainage Areas					25-year Intensity (in/hr)	25-year Runoff (cfs)	25-year Carryover Flow (cfs)	25-year Gutter + Carryover Q (cfs)	Sag Inlet Percentage of flow from:		Sag Inlet Split Runoff (cfs)	Cross Over Flow (cfs)	Adjusted Total 25-year Gutter Q (cfs)	Cross Over Target Inlet	"SL" Street Long. Slope (%)	1/2 Street Crown Capacity (cfs)		25-Year Depth of Flow (ft)	25-year Spread of Flow "T" (ft)	Equivalent Cross Slope "Se" (%)	25-year Required Length "L" (ft)	Length provided "L" (ft)	Inlet Efficiency "E"	25-year Captured Flow "Qc" (cfs)	25-year Carryover Flow "Qo" (cfs)	Adjusted Area per Overflow (acres)	Carryover Flow Target Inlet	Comments				
		Area No.	Area (acres)	Runoff "c"	Conc. Time (min.)	Lower Station					Higher Station	Lower Station						Higher Station																
1	A1-A	A1-A	0.99	0.65	15	6.42	4.13		4.13		12	13	14	15	0.00	4.13		26	27	28	29	30	31	36	37	38	39	40	42	43	44	45		
2	A1-B	A1-B	1.17	0.65	15	6.42	4.88		4.88					0.00	4.88		2.08%		12.13		0.22		9.99	13.53%	13.52	10	0.91	3.76	0.37	0.90	A2-G	On Grade		
3	A2-A	A2-AN & A2-AS	1.73	0.65	15	6.42	7.22		7.22	77%	23%	5.55	1.67	0.00	7.22		1.10%	1.50%	8.82	10.30	0.31	0.29	13.88	13.10	11.23%	3.21	10	1.00	7.22	0.00	1.73	-	Sag	
4	A2-B	A2-BN & A2-BS	0.37	0.65	15	6.42	1.54		1.54	59%	41%	0.92	0.63	0.00	1.54		1.10%	1.50%	8.82	10.30	0.17	0.16	7.78	7.34	15.91%	2.14	10	1.00	1.54	0.00	0.37	-	Sag	
5	A2-D	A2-D	0.68	0.65	15	6.42	2.84		2.84					0.00	2.84		3.50%		15.74		0.17		7.87	15.42%	12.48	10	0.95	2.68	0.15	0.64	A2-F	On Grade		
6	A2-E	A2-E	1.18	0.65	15	6.42	4.92		4.92					0.00	4.92		3.50%		15.74		0.22		9.68	13.79%	16.82	10	0.80	3.95	0.97	0.95	A2-G	On Grade		
7	A2-F	A2-F	1.09	0.65	15	6.42	4.55	0.15	4.70					0.00	4.70		1.40%		9.95		0.25		11.30	12.48%	13.31	15	1.00	4.70	0.00	1.13	C8-B	On Grade		
8	A2-G	A2-G	1.66	0.65	15	6.42	6.93	1.99	8.92					0.00	8.92		1.40%		9.95		0.32		14.36	10.47%	19.35	20	1.00	8.92	0.00	2.14	C8-B	On Grade		
9	A3-A	A3-A	0.81	0.65	15	6.42	3.38		3.38					0.00	3.38		1.50%		10.30		0.22		9.85	13.65%	11.21	10	0.98	3.32	0.06	0.80	A2-A	On Grade		
10	A3-B	A3-B	0.67	0.65	15	6.42	2.80		2.80					0.00	2.80		1.50%		10.30		0.20		9.18	14.23%	10.09	10	1.00	2.80	0.00	0.67	-	On Grade		
11	A4-A	A4-A	1.12	0.65	15	6.42	4.67		4.67					0.00	4.67		0.50%		5.95		0.30		13.67	10.87%	0.81	10	1.00	4.67	0.00	1.12	-	On Grade		
12	B1-A	B1-A	1.87	0.65	15	6.42	7.80		7.80					0.00	7.80		1.14%		8.98		0.32		14.20	10.56%	17.11	10	0.79	6.20	1.61	1.49	B1-D	On Grade		
13	B1-B	B1-B	1.65	0.65	15	6.42	6.89		6.89					0.00	6.89		1.14%		8.98		0.30		13.55	10.95%	15.89	10	0.83	5.73	1.15	1.37	B1-C	On Grade		
14	B1-C	B1-C	0.83	0.65	15	6.42	3.46	1.61	5.07					0.80%	5.07	B1-D	0.60%	6.52		0.36		15.00	10.12%	13.76	10	0.90	6.24	0.67	1.50	B1-F	On Grade			
15	B1-D	B1-D	1.82	0.65	15	6.42	7.59	1.15	8.75					-1.84	6.91	B1-C	0.60%	6.52		0.30		15.00	10.12%	13.76	10	0.83	5.73	1.15	1.37	B1-F	On Grade			
16	B2-A	B2-A	0.23	0.65	15	6.42	0.96		0.96					0.00	0.96		3.00%		14.57		0.12		5.40	17.61%	6.98	10	1.00	0.96	0.00	0.23	B2-C	On Grade		
17	B2-B	B2-B	1.23	0.65	15	6.42	5.93	1.88	7.81					0.00	7.81		3.00%		14.57		0.26		11.84	12.08%	21.11	10	0.69	5.35	2.46	1.28	B2-D	On Grade		
18	B2-C	B2-C	1.70	0.65	15	6.42	7.09		7.09					0.00	7.09		1.61%		10.67		0.29		12.84	11.39%	17.12	10	0.78	5.57	1.53	1.33	B2-E	On Grade		
19	B2-D	B2-D	1.78	0.65	15	6.42	7.43	2.46	9.89					0.00	9.89		1.61%		10.67		0.32		14.54	10.37%	21.49	10	0.68	6.75	3.13	1.62	B2-F	On Grade		
20	B2-E	B2-E	1.24	0.65	15	6.42	5.17	1.53	6.70					0.00	6.70		0.70%		7.04		0.33		14.69	10.29%	14.09	10	0.89	5.98	0.72	1.43	C8-B	On Grade		
21	B2-F	B2-FE & B2-FW	1.66	0.65	15	6.42	6.93	0.67	7.59	97%	3%	7.37	0.23	4.01	11.61		0.60%	2.00%	6.52	11.90	0.41	0.33	15.00	14.83	10.21%	7.35	10	1.00	11.61	0.00	2.78	-	Sag	
22	B2-G	B2-GE & B2-GW	2.26	0.65	15	6.42	9.43	6.19	15.62	41%	59%	6.36	9.26	-4.01	11.61		0.60%	2.00%	6.52	11.90	0.41	0.33	15.00	14.83	10.21%	7.35	10	1.00	11.61	0.00	2.78	-	Sag	
23	B3-A	B3-A	1.60	0.65	15	6.42	6.68		6.68					0.00	6.68		3.60%		15.96		0.24		10.79	12.87%	20.10	10	0.71	4.74	1.93	1.14	B3-D	On Grade		
24	B3-B	B3-B	1.24	0.65	15	6.42	5.17		5.17					0.00	5.17		3.60%		15.96		0.22		9.81	13.68%	17.41	10	0.75	4.06	1.11	0.97	B3-C	On Grade		
25	B3-C	B3-C	1.66	0.65	15	6.42	6.53	1.93	8.86					-0.85	8.01		0.70%		7.04		0.35		15.00	10.12%	15.33	10	0.89	6.81	1.20	1.63	B1-E	On Grade		
26	B3-D	B3-D	1.45	0.65	15	6.42	6.05	1.11	7.16					0.85	8.01		0.70%		7.04		0.30		13.55	10.12%	15.33	10	0.85	6.05	1.20	1.63	B1-E	On Grade		
27	C1-A	C1-A	0.45	0.65	15	6.42	1.88		1.88					0.30	1.88	C1-B	0.50%	13.51	10.97%	0.30		13.51	10.97%	10.30	10	0.51	0.51	0.00	1.08	C2-A	On Grade			
28	C1-B	C1-B	2.06	0.65	15	6.42	8.60		8.60					-2.65	5.95		0.50%		5.95		0.33		15.97	10.14%	12.22	10	0.95	5.67	0.28	1.96	C1-D	On Grade		
29	C1-C	C1-C	0.79	0.65	15	6.42	3.30		3.30					0.00	3.30		3.10%		14.81		0.19		8.52	14.83%	13.12	10	0.92	3.05	0.25	0.73	C1-E	On Grade		
30	C1-D	C1-D	1.94	0.65	15	6.42	8.10	0.28	8.37					0.00	8.37		3.10%		14.81		0.27		12.08	11.91%	22.14	15	0.87	7.28	1.09	1.74	C1-F	On Grade		
31	C4-A	C4-AN & C4-AS	1.37	0.65	15	6.42	5.72	1.09	6.81		4%	96%	0.30	6.51	0.83	7.64	C4-B	0.50%	0.50%	5.95	5.95	0.37	0.37	15.00	15.00	10.12%	3.60	10	1.00	7.64	0.00	1.83	-	Sag
32	C4-B	C4-BN & C4-BS	1.97	0.65	15	6.42	8.22	0.25	8.47	9%	91%	0.73	7.74	-0.83	7.64	C4-A	0.50%	0.50%	5.95	5.95	0.37	0.37	15.00	15.00	10.12%	3.60	10	1.00	7.64	0.00	1.83	-	Sag	
33	C2-A	C2-AN & C2-AS	1.47	0.65	15	6.42	6.13		6.13	7%	93%	0.42	5.72	0.78	6.91	C2-B	0.50%	0.50%	5.95	5.95	0.35	0.35	15.00	15.00	10.12%	2.92	10	1.00	6.91	0.00	1.66	-	Sag	
34	C2-B	C2-BN & C2-BS	1.84	0.65	15	6.42	7.68	0.01	7.69	7%	93%	0.50	7.19	-0.78	6.91	C2-A	0.50%	0.50%	5.95	5.95	0.35	0.35	15.00	15.00	10.12%	2.92	10	1.00	6.91	0.00	1.66	-	Sag	
35	C3-A	C3-AN & C3-AS	1.08	0.65	15	6.42	4.51		4.51	9%	91%	0.42	4.09	1.67	6.18		0.50%	0.50%	5.95	5.95	0.34	0.34	15.00	15.00	10.12%	2.22	10	1.00	6.18	0.00	1.48	-	Sag	
36	C3-B	C3-BN & C3-BS	1.88	0.65	15	6.42	7.85		7.85	10%	90%	0.75	7.09	-1.67	6.18		0.50%	0.50%	5.95	5.95	0.34	0.34	15.00	15.00	10.12%	2.22	10	1.00	6.18	0.00	1.48	-	Sag	
38	C5-E	C5-E	0.39	0.65	15	6.42	1.63		1.63					0.00	1.63		2.60%		13.57		0.15	0.00	6.76	16.45%	8.69	10	1.00	1.63	0.00	0.39	C2-A	On Grade		
39	C5-F	C5-F	0.99	0.65	15	6.42	4.13		4.13					0.00	4.13		2.60%		13.57		0.21	0.00	9.58	13.88%	14.24	10	0.89	3.66	0.47	0.88	C1-D	On Grade		
41	C6-C	C6-C	1.40	0.65	15	6.42	5.84		5.84					2.73	6.58	C6-D	0.50%	15.00	14.41		0.30	0.00	15.00	14.72%	17.68	10	0.78	6.58	1.88	1.60	B1-E	On Grade		
42	C6-D	C6-D	2.71	0.65	15	6.42	11.31		11.31					2.73	8.58	C6-C	1.00%		8.41		0.33	0.00	15.00	10.12%	17.68	10	0.78	6.58	1.88	1.60	B1-E	On Grade		
43	C6-E	C6-EE & C6-EW	1.54	0.65	15	6.42	6.43	2.35	8.77	19%	81%	1.65	7.12	0.00	8.77		2.85%	2.00%	14.20	11.90	0.00	0.30	0.00	13.35	11.07%	4.87	10	1.00	8.77	0.00	2.10	-	Sag	
44	C6-F	C6-FE & C6-FW	0.79	0.65	15	6.42	3.30		3.30	14%	86%	0.46	2.84	0.00	3.30		2.85%	2.00%	14.20	11.90	0.00	0.21	0.00	9.25	14.17%	0.49	10	1.00	3.30	0.00	0.79	-	Sag	
45	C8-A	C8-AN & C8-AS	0.48	0.65	15	6.42	2.00		2.00	71%	29%	1.42	0.58	0.00	2.00		0.70%	15.95	7.04	0.00	0.21	0.00	10.38	13.21%	1.71	10	1.00	2.00	0.00	0.48	-	Sag		
46	C8-B	C8-BN, C8-BS & C8-BW	1.12	0.65	15	6.42	4.67		4.67	72%	28%	3.38	1.29	0.00	4.67		0.50%	0.70%	5.95	7.04	0.00	0.29	0.00	14.26	10.53%	0.81	10	1.00	4.67	0.00	1.12	-	Sag	
47	D1-C	D1-C	1.39	0.65	15	6.42	5.80		5.80		100%			0.00	5.80		1.98%	0	11.84		0.25	0.00	12.72	11.47%	16.97	10	0.80	4.63	1.17	1.11	-	On Grade		

If sizing the storm drain for the 25-yr event (the minimum by FTW iSWM manual) then show the structural overflow at each sag inlet for the remainder of the flood mitigation.

UPSTREAM STATION	DOWNSTREAM STATION	Distance	Drainage Area				Rainfall Intensity					Design Flow			Design Conduit			Friction Losses						Hydraulic Grade		Velocities		Minor Losses								Ground/ HGL Elev	Inlet Freeboard				
			Area No.	Drainage Area "A"	Runoff Coeff. "C" (Weighted "c")	Accumulated "CA"	Design Flood	Inlet Time	Travel Time in Conduit	Time of Concentration	Intensity "I"	Design Runoff	Inlet Bypass	Pipe Discharge	No. of Pipes or Boxes	Span (Box Culvert)	Pipe Diameter (Culvert Rise)	Friction Slope	Manning's n	C=(1.486R ² /3A)/n	Hydraulic Radius "R" = A / P	Perimeter "P"	Area "A"	Friction Loss = Sf x L	Upstream Hydraulic Grade	Downstream Hydraulic Grade	Upstream Velocity V1	Downstream Velocity V2	Upstream Velocity Head (V ² /2g)	Downstream Velocity Head (V ² /2g)	Head loss Coeffs. K _f , K _c , K _e	Junction Losses (Manhole or Inlet) (KV ² /2g)	Junction Losses (Wyes) (V1 ² /2g) - K _j (V2 ² /2g)	Bend Losses (KBV _c ² /2g)	Transition Losses K _j (V ² /2g)	Junction Type	Inlet TC or FG Elevation				
sta	sta	ft		acres		acres	hrs	min	min	min	(inches/hr)	cfs	cfs	cfs		ft	ft / in	ft/ft					ft	ft	ft	ft	fps	fps	ft	ft		ft		ft					ft		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39			
LINE A1																																									
415.74	403.72	12.02	A1-A	0.90	0.65	0.59	25	15	0.09	15.09	6.42	3.76		3.76	1		18	0.0013	0.0130	105.0434	0.3750	4.7124	1.767	0.02	745.91	746.00	2.13	2.13	0.07	0.07	1.25	0.09	-	-	-	-	Inlet	758.40	12.40	A1-A	
403.72	389.80	13.92	Bend		0.65	0.59		15.09	0.11	15.20	6.40	3.76		3.76	1		18	0.0013	0.0130	105.0434	0.3750	4.7124	1.767	0.02	745.87	745.85	2.13	4.51	0.07	0.32	0.35	-	-	0.02	-	45° Bend			Bend		
389.80	298.92	90.88	A1-B	1.01	0.65	1.25		15.20	0.34	15.54	6.38	7.94		7.94	1		18	0.0057	0.0130	105.0434	0.3750	4.7124	1.767	0.52	745.78	745.26	4.51	4.51	0.32	0.32	0.75	-	0.08	-	-	-	45° Wye			A1-B	
298.92	275.31	23.61	Bend		0.65	1.25		15.54	0.09	15.63	6.32	7.94		7.94	1		18	0.0057	0.0130	105.0434	0.3750	4.7124	1.767	0.14	745.15	745.01	4.51	4.51	0.32	0.32	0.35	-	-	0.11	-	-	45° Bend			Bend	
275.31	0.00	275.31	Bend		0.65	1.25		15.63	1.02	16.64	6.31	7.94		7.94	1		18	0.0057	0.0130	105.0434	0.3750	4.7124	1.767	1.57	744.90	743.33	4.51	7.55	0.32	0.89	0.35	-	-	0.11	-	-	45° Bend			Bend	
				1.92																																					
LINE A1-B																																									
31.77	0.00	31.77	A1-B	1.01	0.65	0.66	25	15	0.22	15.22	6.42	4.23		4.23	1		18	0.0016	0.0130	105.0434	0.3750	4.7124	1.767	0.05	745.83	746.22	2.40	4.51	0.09	0.32	1.25	0.39	-	-	-	-	Inlet	758.40	12.18	A1-B	
				1.01																																					
LINE A2																																									
966.97	954.95	12.02	A2-A	1.73	0.65	1.12	25	15	0.05	15.05	6.42	7.22		7.22	1		18	0.0047	0.0130	105.0434	0.3750	4.7124	1.767	0.06	750.16	750.48	4.09	4.09	0.26	0.26	1.25	0.33	-	-	-	-	Inlet	763.53	13.04	A2-A	
954.95	945.95	9.00	Bend		0.65	1.12		15.05	0.04	15.09	6.41	7.22		7.22	1		18	0.0047	0.0130	105.0434	0.3750	4.7124	1.767	0.04	750.01	749.97	4.09	3.01	0.26	0.14	0.35	-	-	0.09	-	45° Bend			Bend		
945.95	940.95	5.00	Pipe Size Change			1.12		15.09	0.03	15.11	6.40	7.22		7.22	1		21	0.0021	0.0130	158.4504	0.4375	5.4978	2.405	0.01	749.95	749.94	3.01	3.64	0.14	0.21	0.10	-	-	-	-	0.01	Pipe Size Change			Pipe Size Change	
940.95	868.22	72.73	A2-B	0.37	0.65	1.37		15.11	0.33	15.45	6.40	8.73		8.73	1		21	0.0030	0.0130	158.4504	0.4375	5.4978	2.405	0.22	749.52	749.30	3.64	6.12	0.21	0.58	0.75	-	0.43	-	-	-	45° Wye			A2-B	
868.22	644.33	223.89	MH, A3	1.47	0.65	2.32		15.45	0.61	16.06	6.34	14.69		14.69	1		21	0.0086	0.0130	158.4504	0.4375	5.4978	2.405	1.92	748.71	746.79	6.12	4.69	0.58	0.34	1.00	0.58	-	-	-	-	Manhole			MH, A3	
644.33	637.73	6.60	Pipe Size Change		0.65	2.32		16.06	0.02	16.08	6.23	14.69		14.69	1		24	0.0042	0.0130	226.2240	0.5000	6.2832	3.142	0.03	746.76	746.73	4.69	4.69	0.34	0.34	0.10	-	-	-	0.03	-	Pipe Size Change			Pipe Size Change	
637.73	491.81	145.92	PVI		0.65	2.32		16.08	0.52	16.60	6.23	14.69		14.69	1		24	0.0042	0.0130	226.2240	0.5000	6.2832	3.142	0.61	746.63	746.01	4.69	5.17	0.34	0.41	0.10	-	-	-	-	0.10	PVI			PVI	
491.81	456.87	34.94	A2-C	0.49	0.65	2.64		16.60	0.11	16.71	6.14	16.19		16.19	1		24	0.0051	0.0130	226.2240	0.5000	6.2832	3.142	0.18	745.77	745.59	5.17	5.97	0.41	0.55	0.75	-	0.24	-	-	-	45° Wye			A2-C	
456.87	445.87	11.00	A2-D	0.64	0.65	3.05		16.71	0.03	16.74	6.12	18.70		18.70	1		24	0.0068	0.0130	226.2240	0.5000	6.2832	3.142	0.08	745.21	745.13	5.97	7.17	0.55	0.80	0.75	-	0.38	-	-	-	45° Wye			A2-D	
445.87	381.33	64.54	A2-E	0.95	0.65	3.67		16.74	0.15	16.89	6.12	22.45		22.45	1		24	0.0099	0.0130	226.2240	0.5000	6.2832	3.142	0.64	744.85	744.21	7.17	7.55	0.80	0.89	0.75	-	0.29	-	-	-	45° Wye			A2-E	
381.33	177.85	203.48	MH, A1	1.92	0.65	4.91		16.89	0.45	17.34	6.09	29.95		29.95	1		27	0.0094	0.0130	309.7030	0.5625	7.0686	3.976	1.90	743.33	741.42	7.55	7.55	0.89	0.89	1.00	0.89	-	-	-	-	Manhole			MH, A1	
177.85	168.66	9.19	PVI		0.65	4.91		17.34	0.02	17.36	6.02	29.95		29.95	1		27	0.0094	0.0130	309.7030	0.5625	7.0686	3.976	0.09	741.32	741.24	7.55	3.12	0.89	0.15	0.10	-	-	-	0.10	-	PVI			PVI	
168.66	158.66	10.00	Pipe Size Change		0.65	4.91		17.36	0.05	17.41	6.02	29.95		29.95	1		42	0.0009	0.0130	1006.0976	0.8750	10.9956	9.621	0.01	741.18	741.17	3.12	3.54	0.15	0.19	0.35	-	-	-	0.05	-	Pipe Size Change			Pipe Size Change	
158.66	144.73	13.93	A2-F	1.13	0.65	5.65		17.41	0.07	17.48	6.01	33.95		33.95	1		42	0.0011	0.0130	1006.0976	0.8750	10.9956	9.621	0.02	741.02	741.00	3.54	4.40	0.19	0.30	0.75	-	0.15	-	-	-	45° Wye			A2-F	
144.73	78.84	65.89	A2-G	2.14	0.65	7.04		17.48	0.25	17.73	6.00	42.23		42.23	1		42	0.0018	0.0130	1006.0976	0.8750	10.9956	9.621	0.12	740.79	740.67	4.40	5.34	0.30	0.44	0.75	-	0.22	-	-	-	45° Wye			A2-G	
78.84	21.06	57.78	A2-H	2.40	0.65	8.60		17.73	0.18	17.91	5.96	51.26		51.26	1		42	0.0026	0.0130	1006.0976	0.8750	10.9956	9.621	0.15	740.67	740.52	5.34	0.00	0.44	0.00	0.75	-	0.00	-	-	-	45° Wye			A2-H	
				13.23																																					
LINE A2-H																																									
60.00	0.00	60.00	A2-H	2.40	0.90	2.16	25	15	0.13	15.13	6.42	13.86		13.86	1		18	0.0174	0.0130	105.0434	0.3750	4.7124	1.767	1.04	741.71	740.67	7.86	5.34	0.96	0.44	1.25	0.55	-	-	-	-	Inlet	744.58	2.31	A2-H	
				2.40																																					
LINE A2-G																																									
31.77	0.00	31.77	A2-G	2.14	0.65	1.39	25	15	0.10	15.10	6.42	8.91		8.91	1		18	0.0072	0.0130	105.0434	0.3750	4.7124	1.767	0.23	741.01	740.79	5.06	4.40	0.40	0.30	1.25	0.38	-	-	-	-	Inlet	746.11	4.72	A2-G	
				2.14																																					
LINE A2-F																																									
12.02	0.00	12.02	A2-F	1.13	0.65	0.73	25	15	0.08	15.08	6.42	4.70		4.70	1		18	0.0020	0.0130	105.0434	0.3750	4.7124	1.767	0.02	741.04	741.02	2.67	3.54	0.11	0.19	1.25	0.24	-	-	-	-	Inlet	746.11	4.82	A2-F	
				1.13																																					
LINE A2-E																																									
31.82	0.00	31.82	A2-E	0.95	0.65	0.62	25	15	0.24	15.24	6.42	3.95		3.95	1		18	0.0014	0.0130	105.0434	0.3750	4.7124	1.767	0.05	744.89	745.89	2.24	7.17	0.08	0.80	1.25	1.00	-	-	-	-	Inlet	751.77	5.88	A2-E	
				0.95																																					
LINE A2-D																																									
12.02	0.00	12.02	A2-D	0.64	0.65	0.42	25	15	0.13	15.13	6.42	2.68		2.68	1		18	0.0007	0.0130	105.0434	0.3750	4.7124	1.767	0.01	745.22	745.21	1.52	5.97	0.04	0.55	1.25	0.69	-	-	-	-	Inlet	751.70	5.79	A2-D	
				0.64																																					
LINE A2-C																																									
144.61	100.00	44.61	A2-C	0.49	0.65	0.32	25	15	0.64	15.64	6.42	2.04		2.04	1		18	0.0004	0.0130	105.0434	0.3750	4.7124	1.767	0.02	745.79	745.77	1.16	5.17	0.02	0.41	1.25	0.52	-	-	-</						

BENCHMARKS

BM 1) "X" cut on concrete driveway apron located on the southwest side of County Road No. 607, in front of residence located at 1317 County Road No 607, approximately 300 feet northwest of County Road No. 505.
ELEVATION = 707.20'

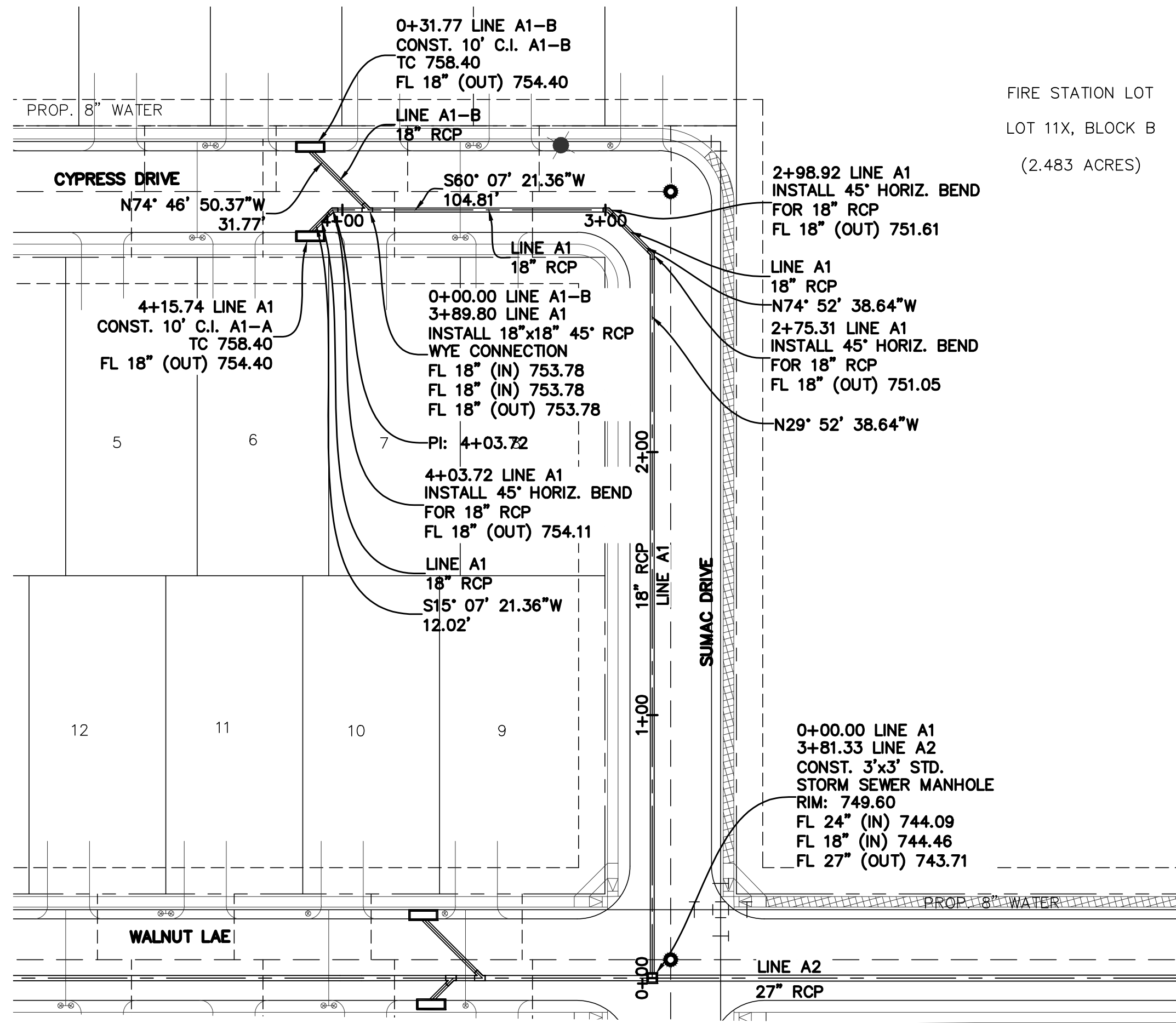
BM 2) "X" cut on concrete headwall located on the east side of County Road No. 607, approximately 3,500 feet north of U.S. Highway No. 67, near the most easterly south corner of subject tract.
ELEVATION = 756.49'

							DESIGNED BY:	PRELIMINARY FOR REVIEW ONLY NOT FOR CONSTRUCTION OR PERMIT PURPOSES	JBI PARTNERS 2121 Midway Road Suite 300 Carrollton, Texas 75006 972.248.7676 TBPE No. F-438 TBPLS No. 10076000	DRAINAGE CALCULATIONS		PROJECT NO.	
							---					BBC010	
							DRAWN BY:						SHEET NO.

							CHECKED BY:	ENGINEER: Chris Wall, P.E.					
							---	P.E. No. 123372 Date: 03-25-2024					
NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	SUBMITTALS	DATE							

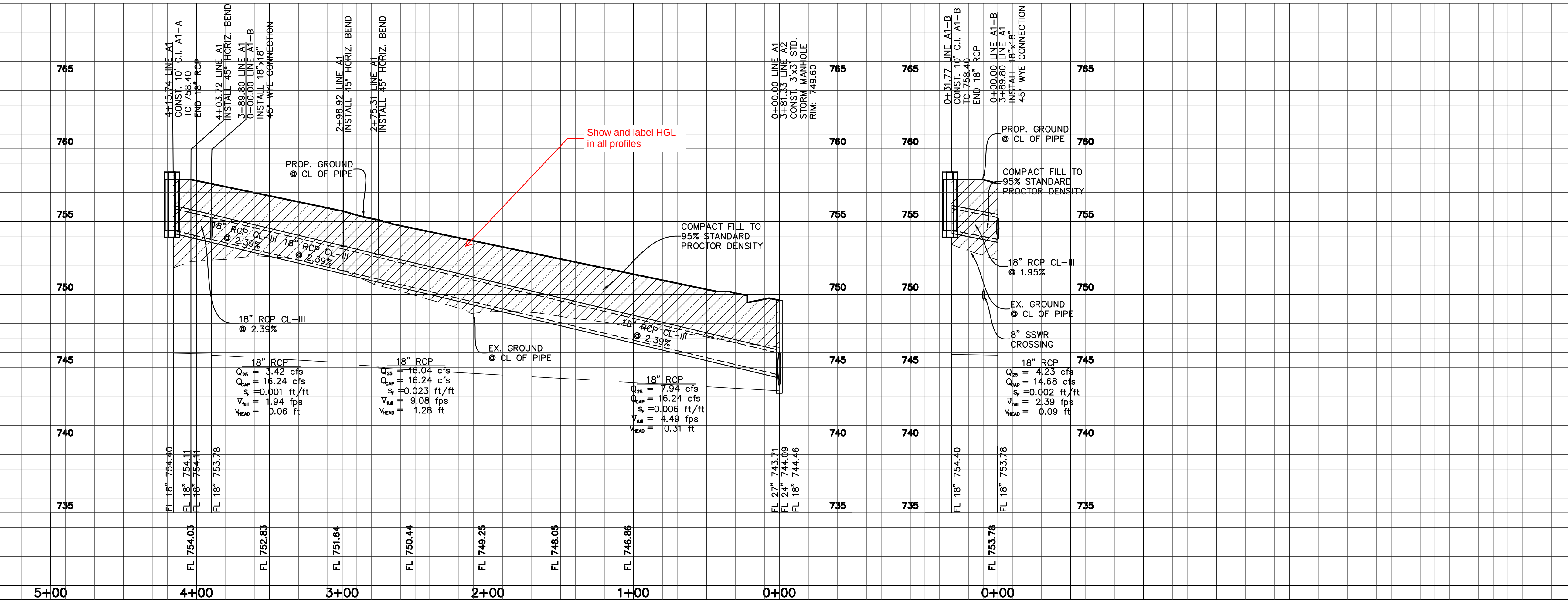
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STM A1

STM A1-B



BENCHMARKS
BM 1) "X" cut on concrete driveway apron located on the southwest side of County Road No. 607, in fron of residence located at 1317 County Road No 607, approximately 300 feet northwest of County Road No. 505. ELEVATION = 707.20'
BM 2) "X" cut on concrete headwall located on the east side of County Road No. 607, approximately 3,500 feet north of U.S. Highway No. 67, near the most easterly south corner of subject tract. ELEVATION = 756.49'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	SUBMITTALS	DATE

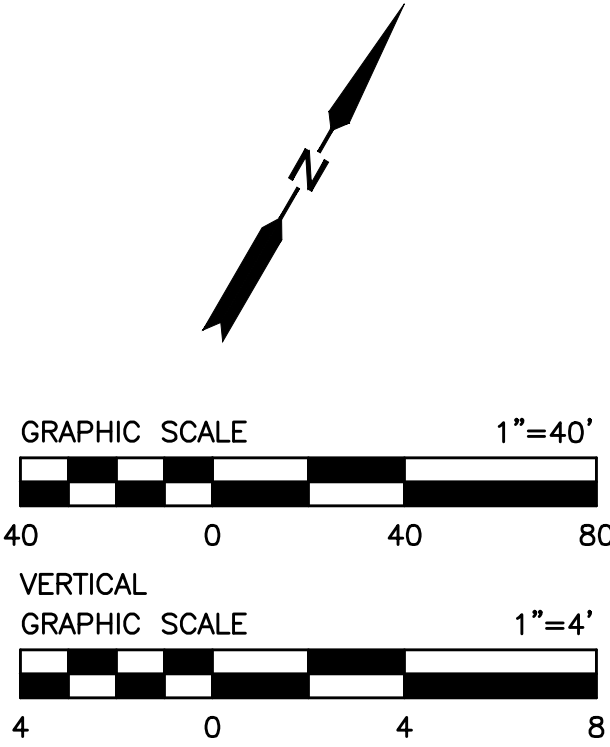
DESIGNED BY: ---
DRAWN BY: ---
CHECKED BY: ---
**PRELIMINARY
FOR REVIEW ONLY**
NOT FOR CONSTRUCTION OR PERMIT PURPOSES
ENGINEER: Chris Wall, P.E.
P.E. No. 123372 Date: 03-25-2024



2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

LINE A1		PROJECT NO.
STORM SEWER PLAN & PROFILE		BBC010
LONE OAK, PHASE 1		SHEET NO.
City of Alvarado, Johnson County, Texas		5.01

NOTE: CONCRETE COLLAR TO BE INSTALLED AT ALL PVI'S AND PIPE SIZE CHANGES. PER NCTCOG S.T.D



LEGEND	
	STORM SEWER
	STORM SEWER MANHOLE
	SANITARY SEWER LINE
	SANITARY SEWER MANHOLE
	WATER LINE & VALVE
	FIRE HYDRANT

CAUTION: Existing underground utilities. Contractor to call for location (1-800-DIG-TESS) and field verify the location of all existing utilities prior to excavation.

MATCHLINE STA. 6+50 SEE SHEET 5.03

MATCHLINE STA. 6+50 SEE SHEET 5.03

STM A2

STM A2-D

STM A2-E

STM A2-F

STM A2-G

BENCHMARKS
BM 1) "X" cut on concrete driveway apron located on the southwest side of County Road No. 607, in fron of residence located at 1317 County Road No 607, approximately 300 feet northwest of County Road No. 505. ELEVATION = 707.20'
BM 2) "X" cut on concrete headwall located on the east side of County Road No. 607, approximately 3,500 feet north of U.S. Highway No. 67, near the most easterly south corner of subject tract. ELEVATION = 756.49'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	SUBMITTALS	DATE

DESIGNED BY: ---
DRAWN BY: ---
CHECKED BY: ---
PRELIMINARY
FOR REVIEW ONLY
NOT FOR CONSTRUCTION OR PERMIT PURPOSES
ENGINEER: Chris Wall, P.E.
P.E. No. 123372 Date: 03-25-2024

JBI
PARTNERS
2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

LINE A2 STA. 0+00 - 6+00
STORM SEWER PLAN & PROFILE
LONE OAK, PHASE 1
City of Alvarado, Johnson County, Texas
PROJECT NO. BBC010
SHEET NO. 5.02

MATCHLINE STA. 6+50 SEE SHEET 5.03

MATCHLINE STA. 6+50 SEE SHEET 5.03

STM A2

STM A2-D

STM A2-E

STM A2-F

STM A2-G

BENCHMARKS
BM 1) "X" cut on concrete driveway apron located on the southwest side of County Road No. 607, in fron of residence located at 1317 County Road No 607, approximately 300 feet northwest of County Road No. 505. ELEVATION = 707.20'
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NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	SUBMITTALS	DATE

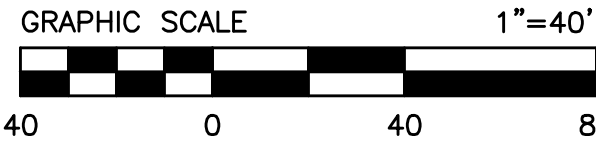
DESIGNED BY: ---
DRAWN BY: ---
CHECKED BY: ---
PRELIMINARY
FOR REVIEW ONLY
NOT FOR CONSTRUCTION OR PERMIT PURPOSES
ENGINEER: Chris Wall, P.E.
P.E. No. 123372 Date: 03-25-2024

JBI
PARTNERS
2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

LINE A2 STA. 0+00 - 6+00
STORM SEWER PLAN & PROFILE
LONE OAK, PHASE 1
City of Alvarado, Johnson County, Texas
PROJECT NO. BBC010
SHEET NO. 5.02

STM A2-H

NOTE: CONCRETE COLLAR TO BE INSTALLED AT ALL PVI'S AND PIPE SIZE CHANGES. PER NCTCOG S.T.D

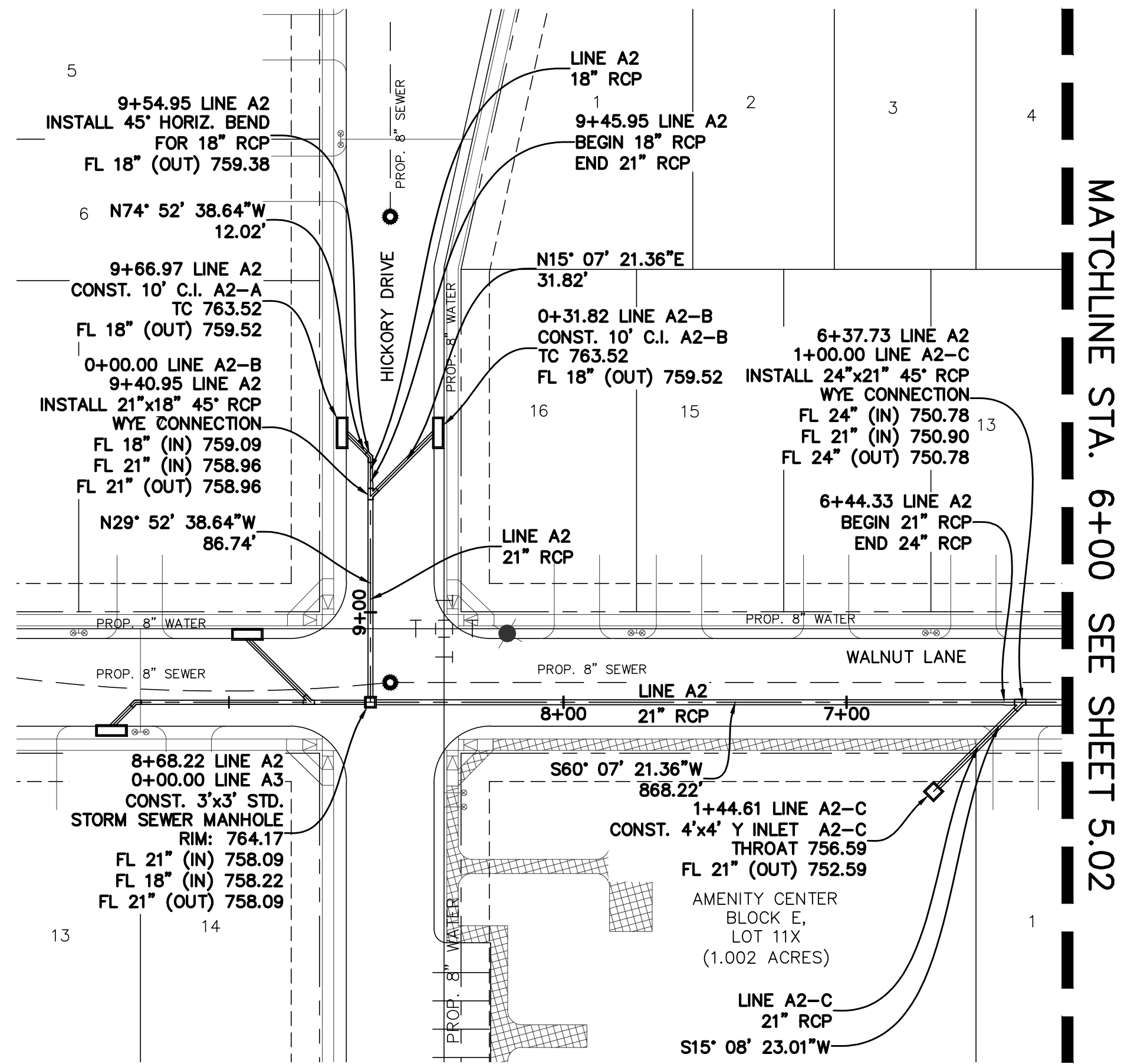


LEGEND

- STORM SEWER
- STORM SEWER MANHOLE
- SANITARY SEWER LINE
- SANITARY SEWER MANHOLE
- WATER LINE & VALVE
- FIRE HYDRANT

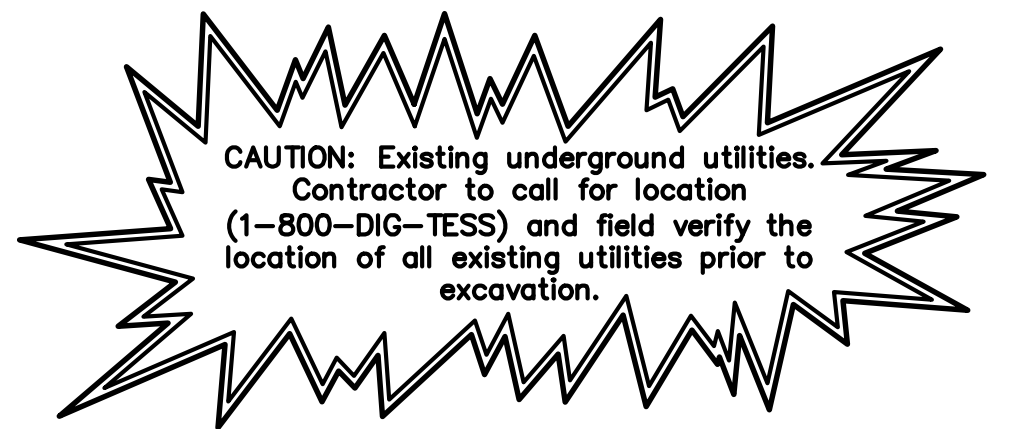
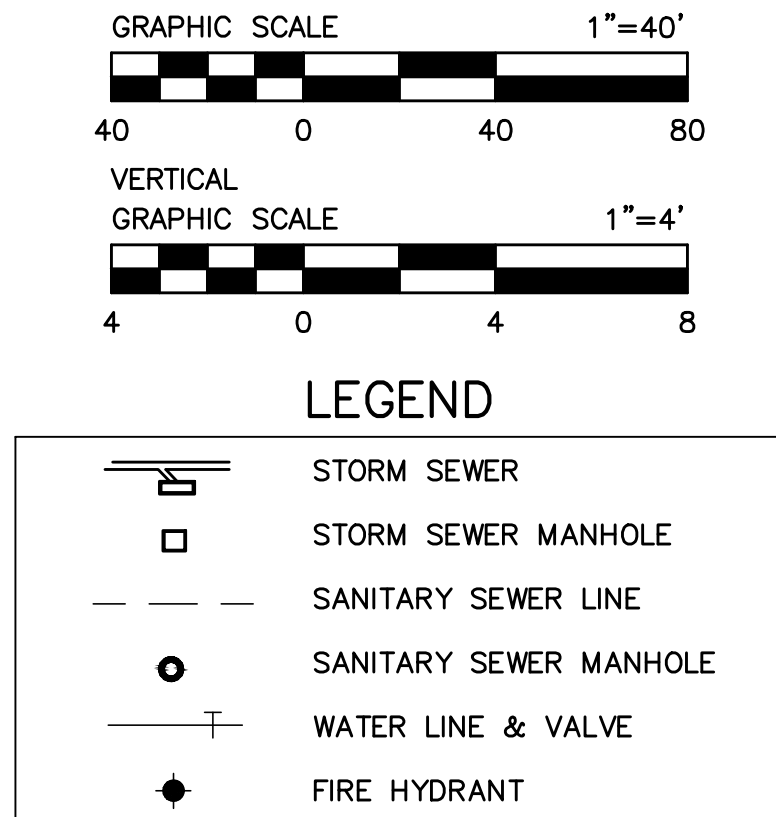
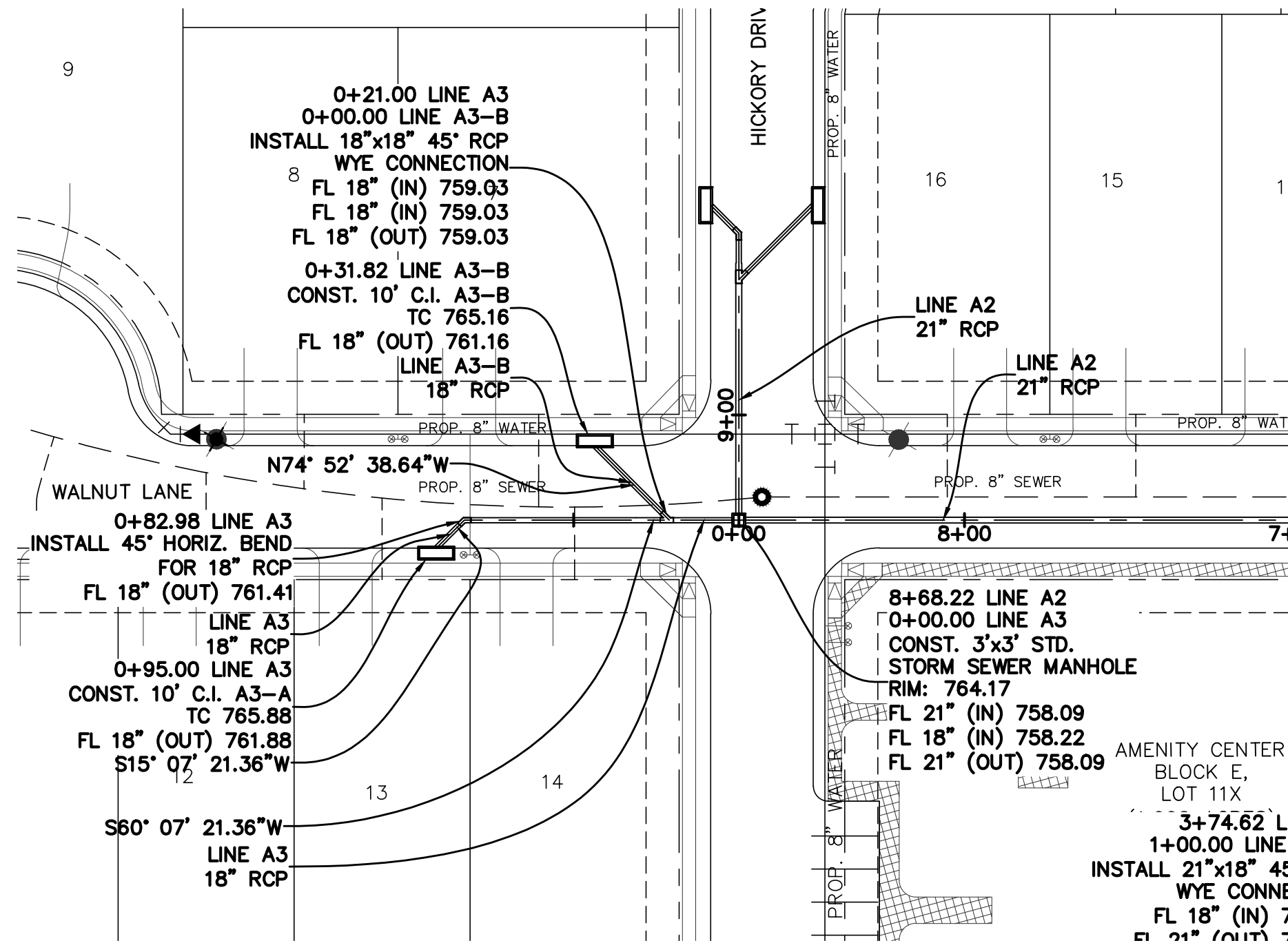
CAUTION: Existing underground utilities. Contractor to call for location (1-800-DIG-TESS) and field verify the location of all existing utilities prior to excavation.

Recommend aerators in the retention pond



MATCHLINE STA. 6+00 SEE SHEET 5.02

NOTE: CONCRETE COLLAR TO BE INSTALLED AT ALL PVI'S AND PIPE SIZE CHANGES. PER NCTCOG S.T.D

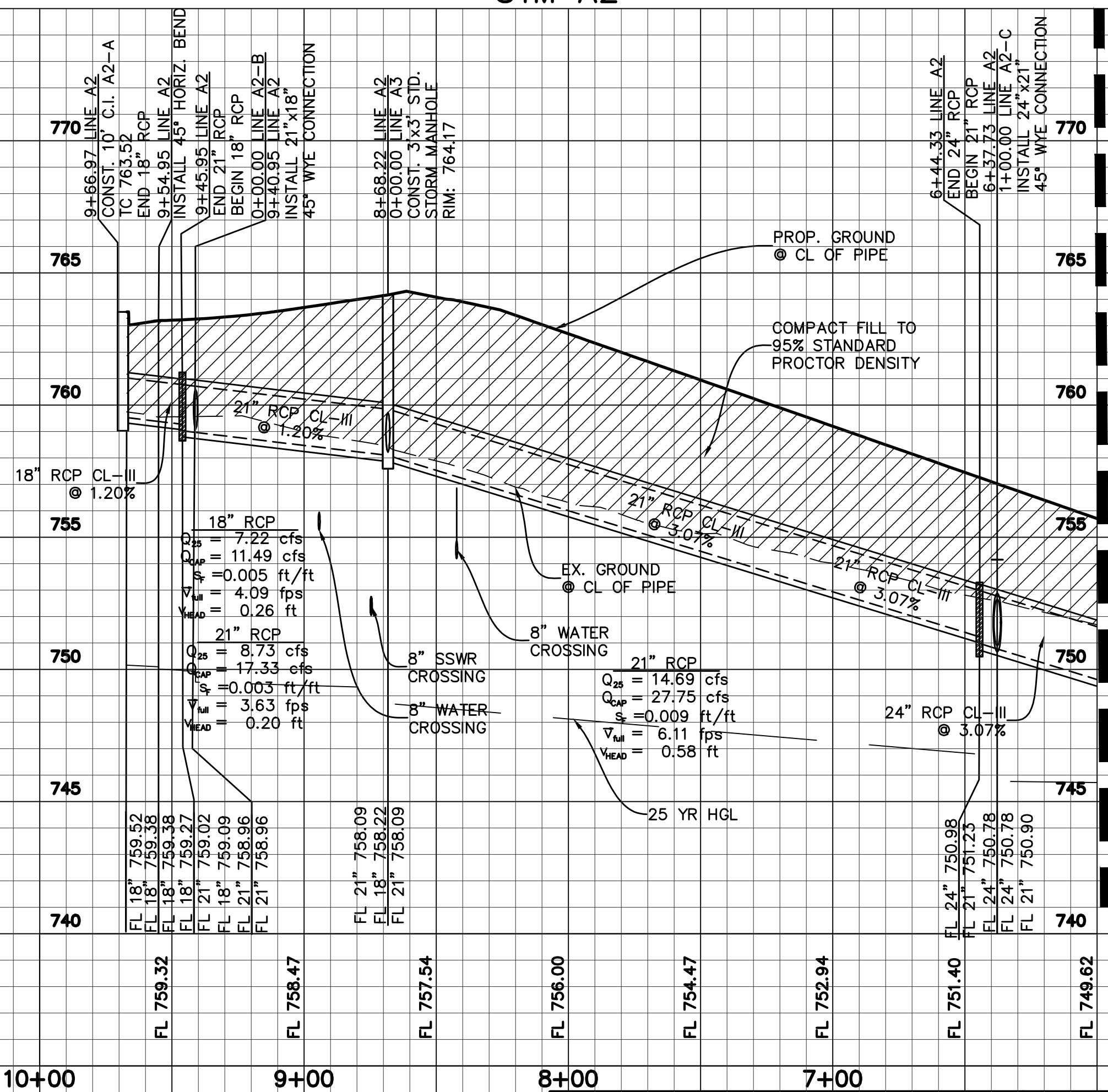


STM A2

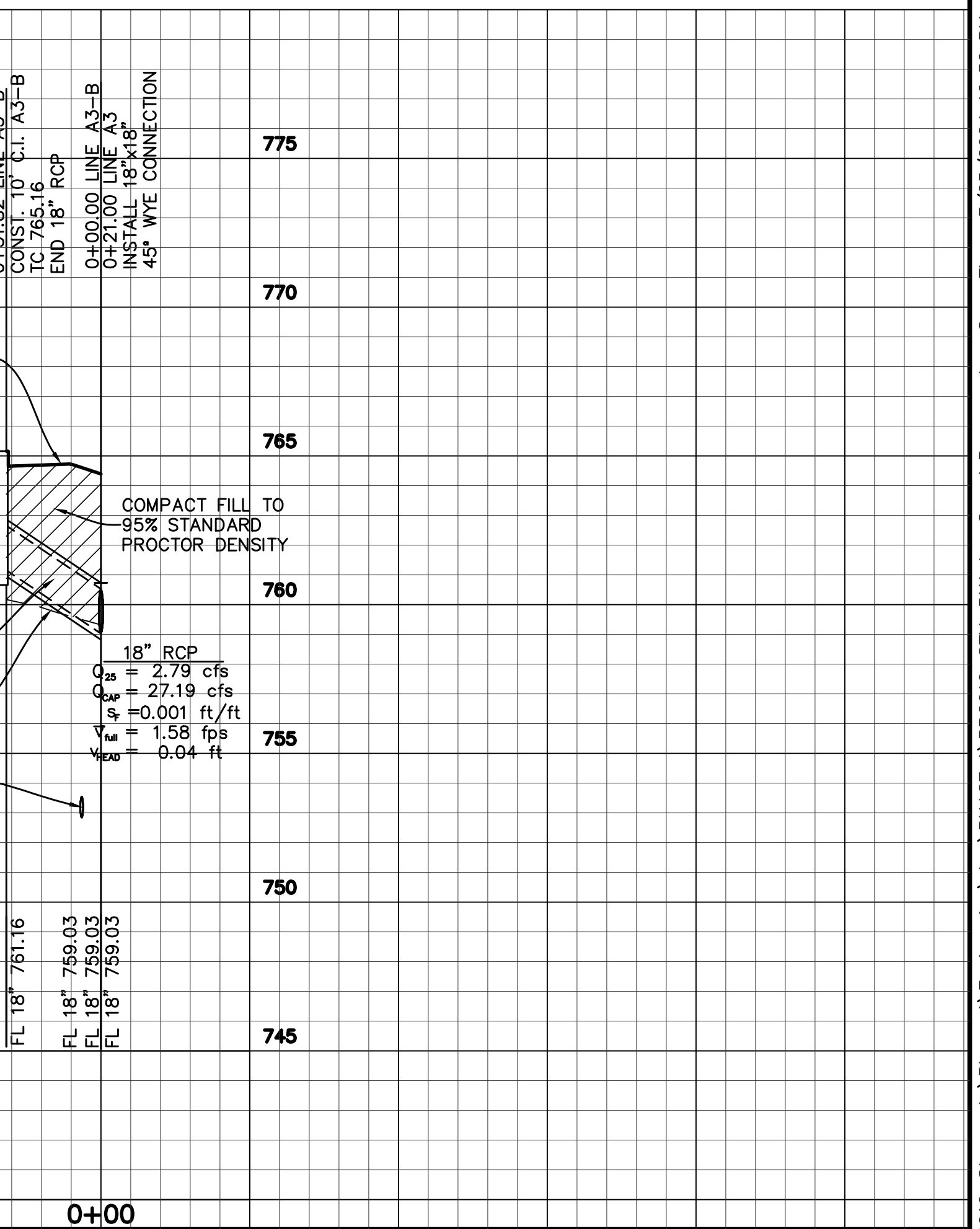
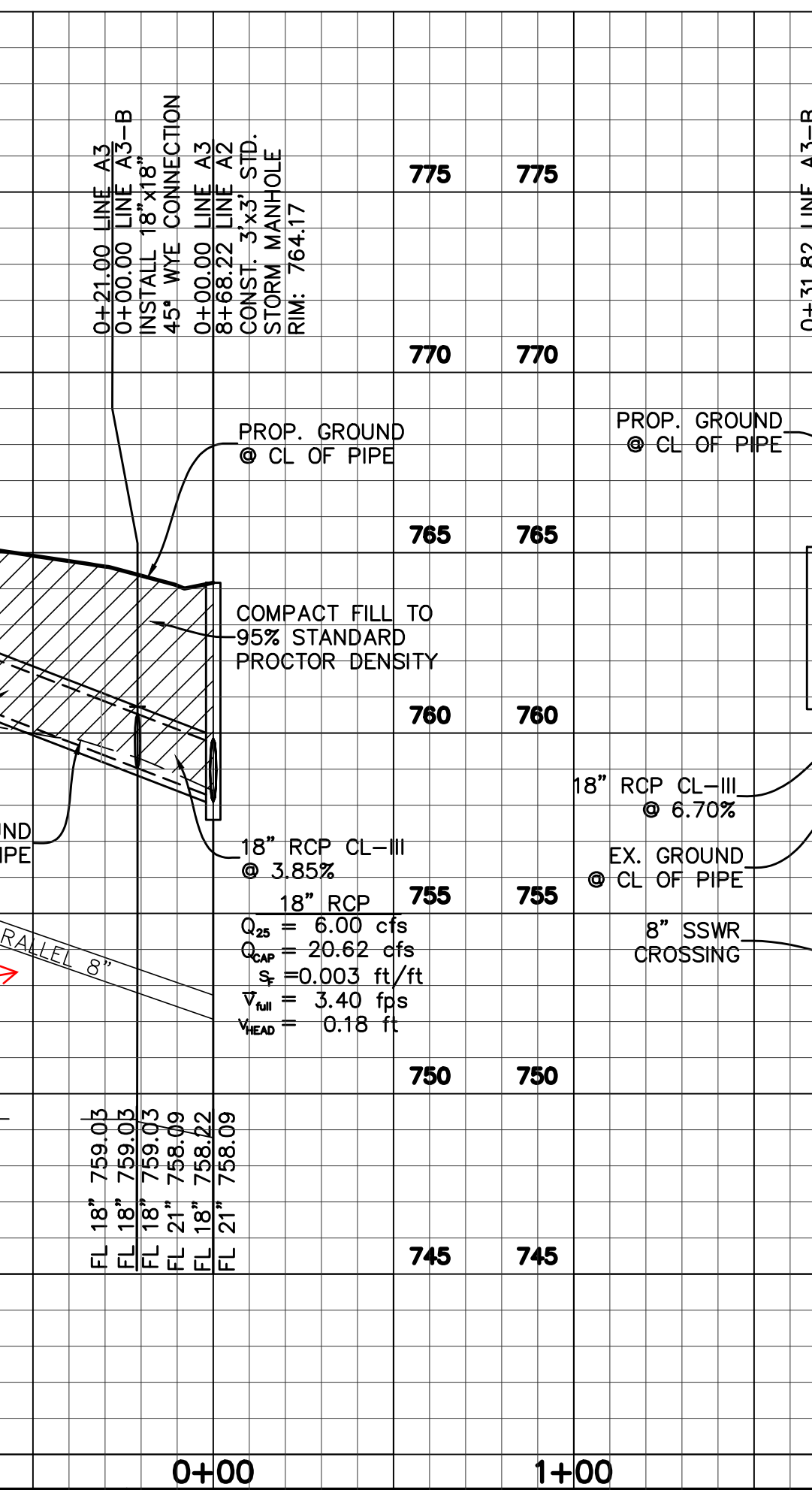
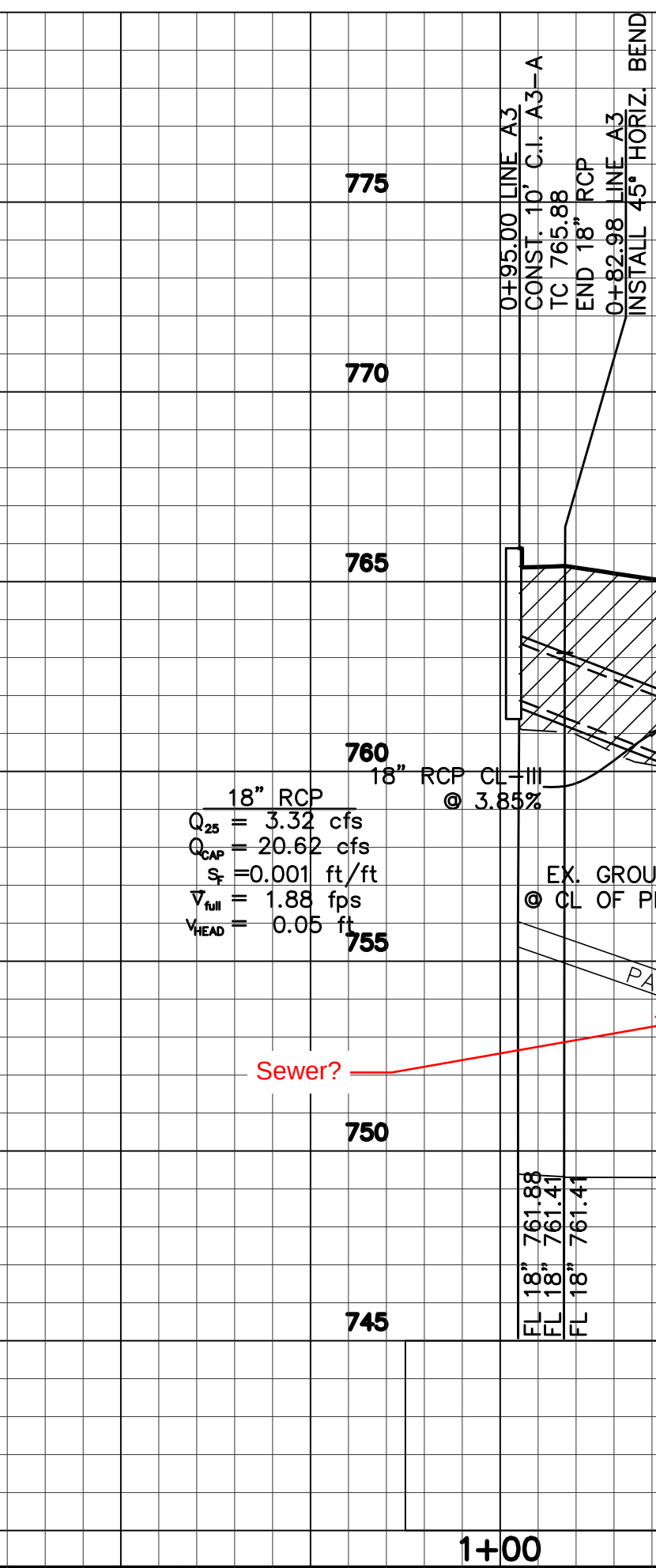
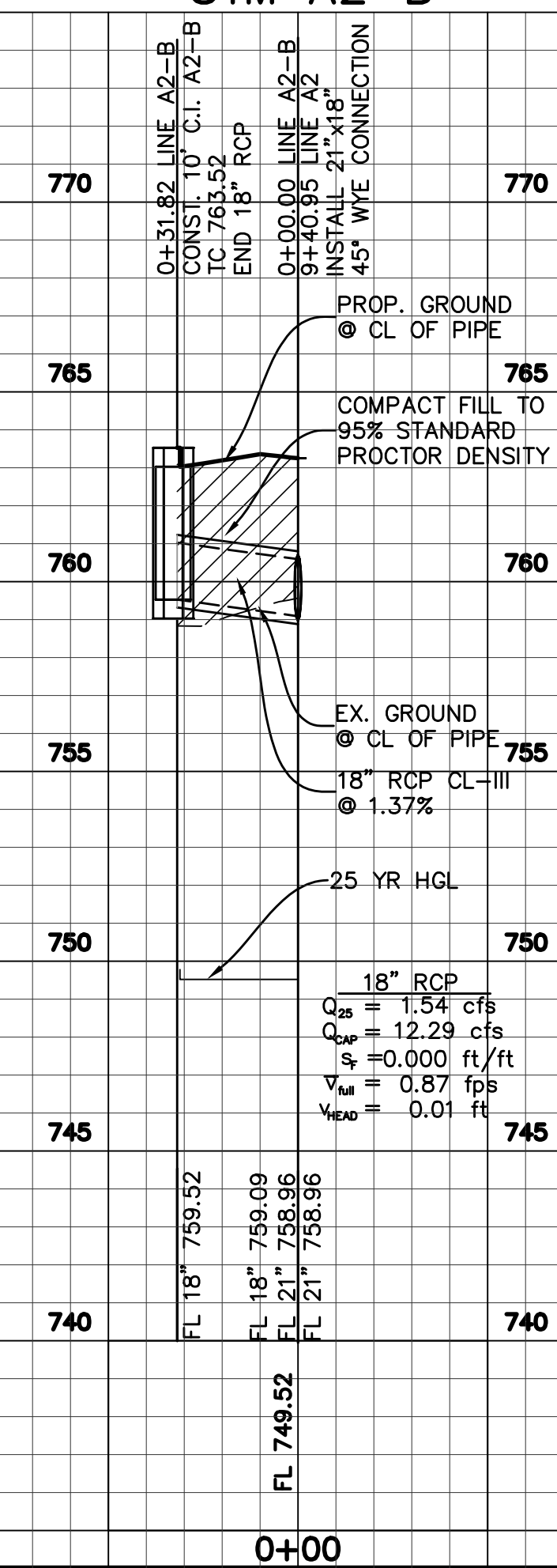
STM A2-B

STM A3

STM A3-B



MATCHLINE STA. 6+00 SEE SHEET 5.02



BENCHMARKS
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NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	SUBMITTALS	DATE

DESIGNED BY: ---
DRAWN BY: ---
CHECKED BY: ---
PRELIMINARY
FOR REVIEW ONLY
NOT FOR CONSTRUCTION OR PERMIT PURPOSES
ENGINEER: Chris Wall, P.E.
P.E. No. 123372 Date: 03-25-2024

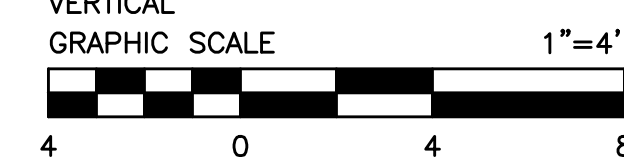
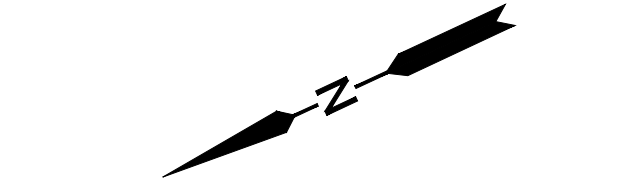


2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

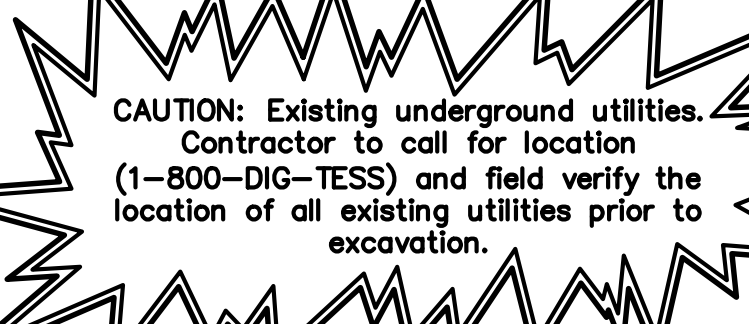
LINE A2 STA. 6+00 – END & LINE A3		PROJECT NO.
STORM SEWER PLAN & PROFILE		BBC010
LONE OAK, PHASE 1		SHEET NO.
City of Alvarado, Johnson County, Texas		5.03



STM B2-F



	STORM SEWER
	STORM SEWER MANHOLE
	SANITARY SEWER LINE
	SANITARY SEWER MANHOLE
	WATER LINE & VALVE
	FIRE HYDRANT



CAUTION: Existing underground utilities.
Contractor to call for location
(1-800-DIG-TESS) and field verify the
location of all existing utilities prior to
excavation.

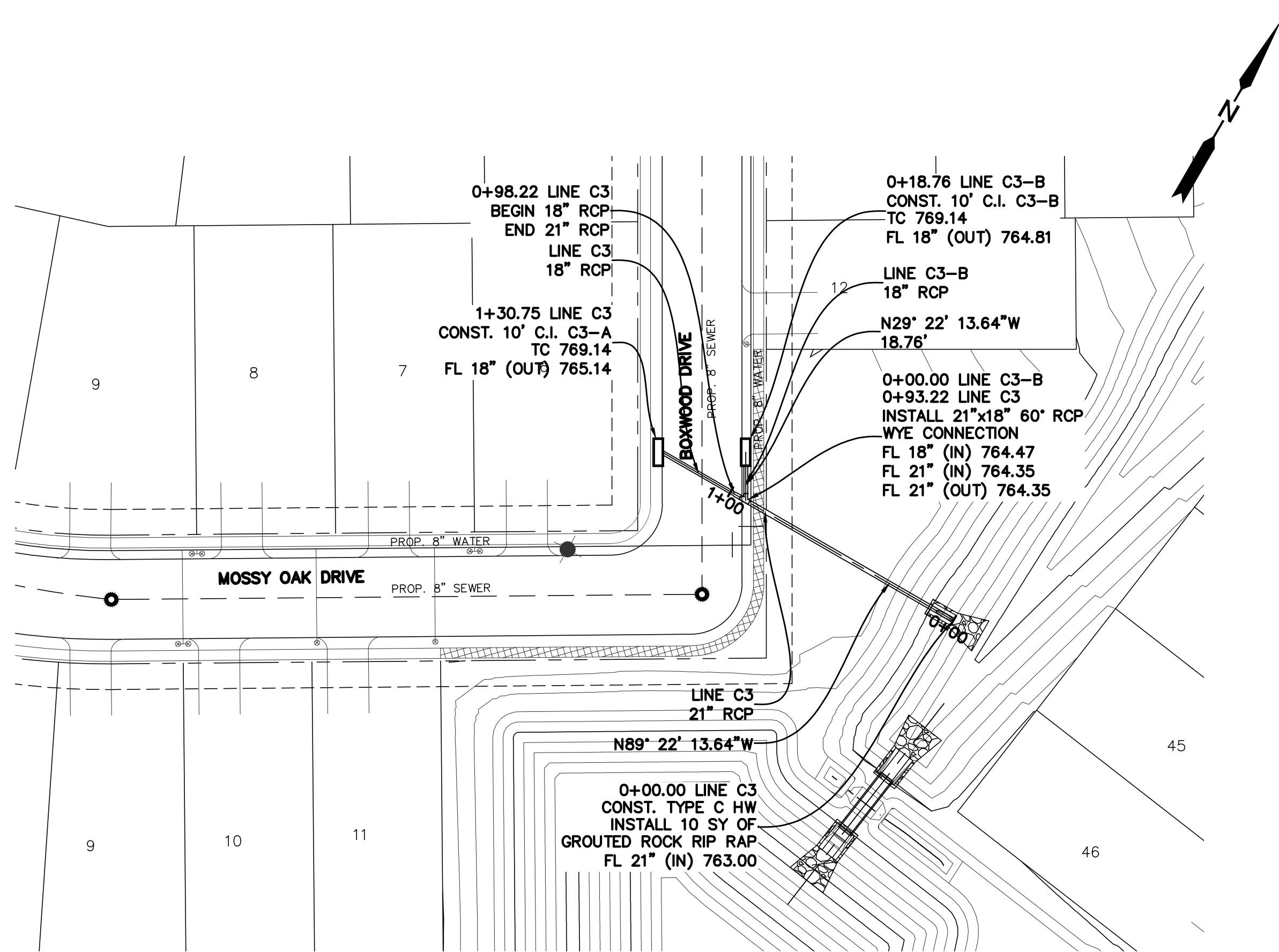


DESIGNED BY: _____ _____ _____	PRELIMINARY FOR REVIEW ONLY NOT FOR CONSTRUCTION OR PERMIT PURPOSES
DRAWN BY: _____ _____ _____	
CHECKED BY: _____ _____ _____	

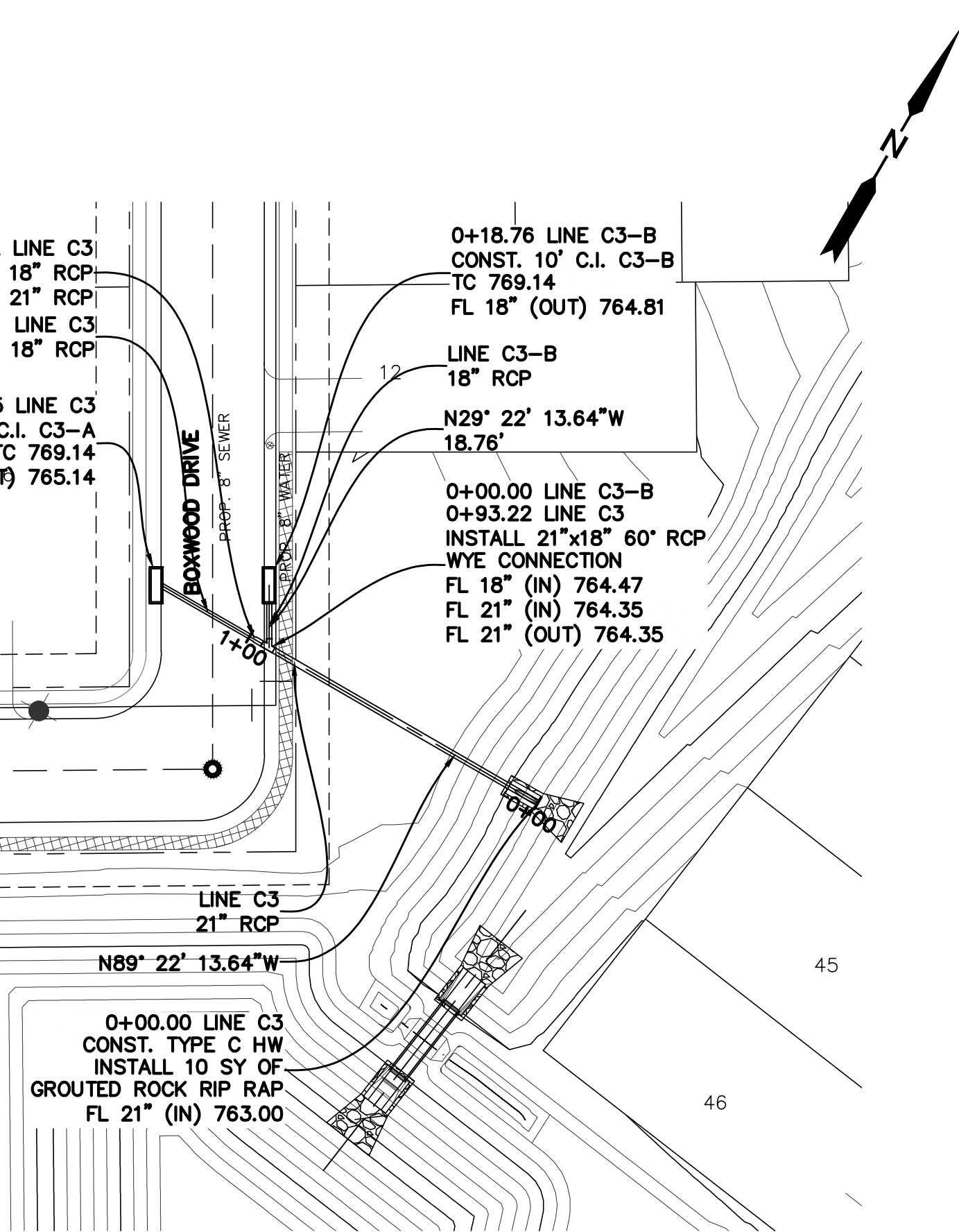
2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

City of Alvarado, Johnson County, Texas

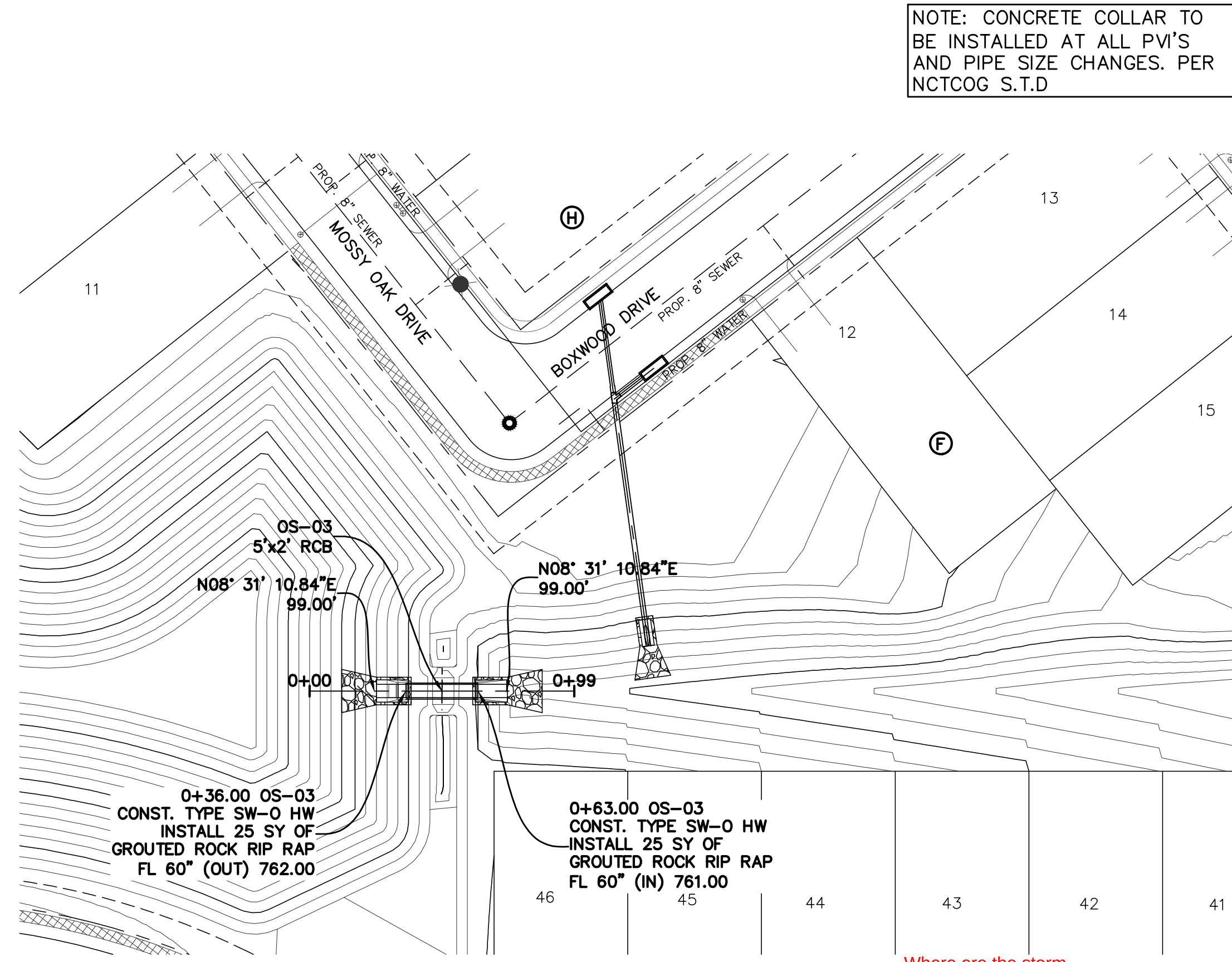
PROJECT NO.	BBC010
SHEET NO.	5.06



STM C3-B



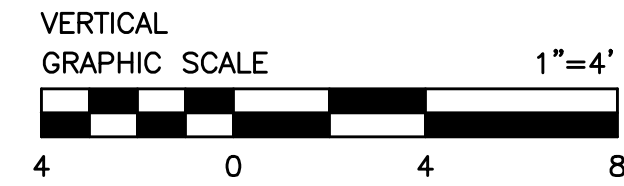
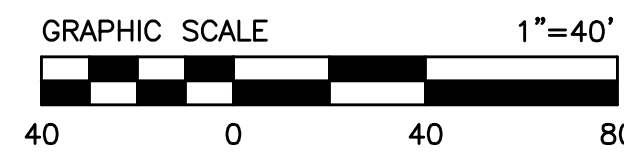
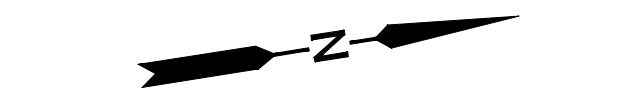
STM C3



STM OS-03

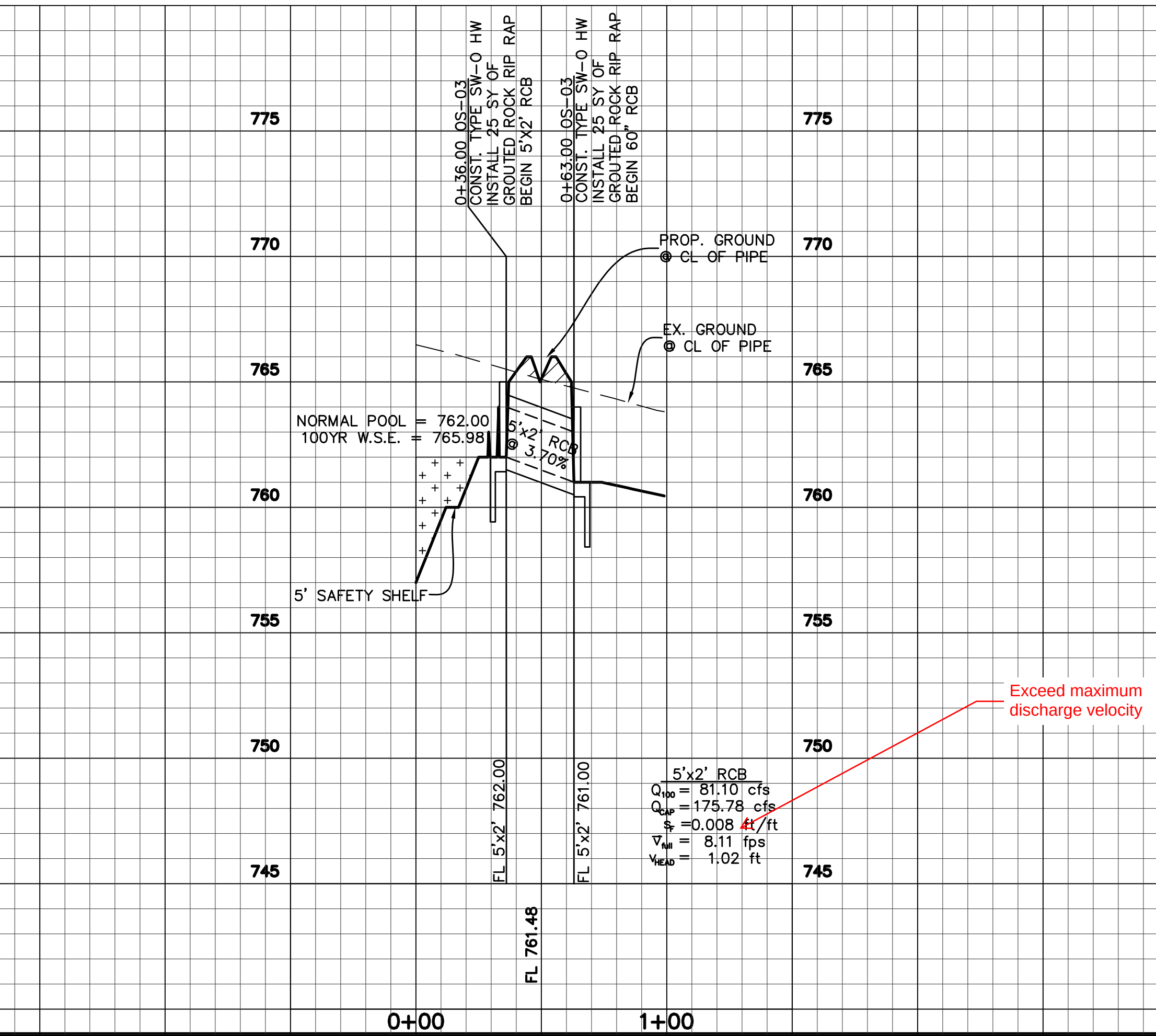
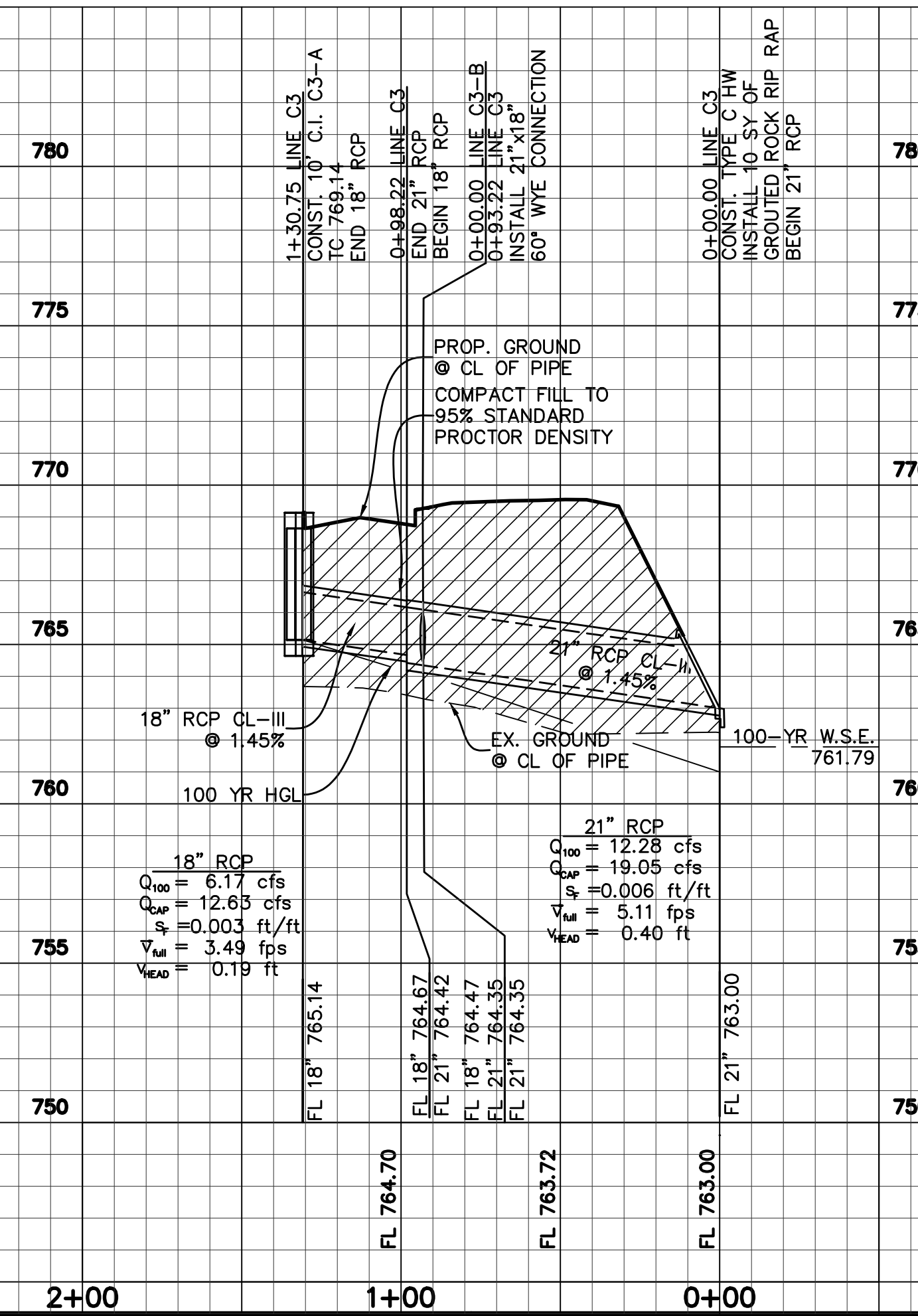
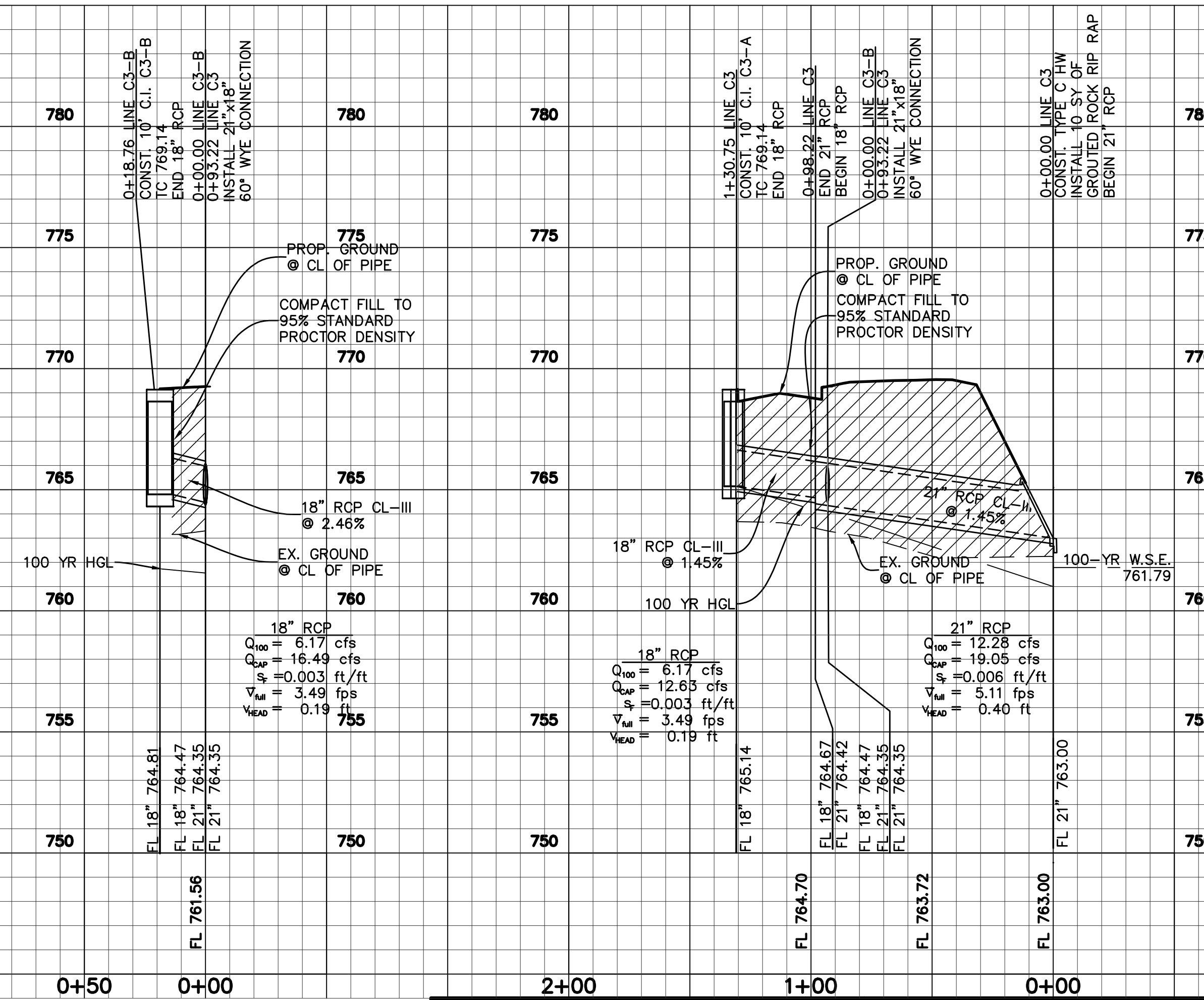
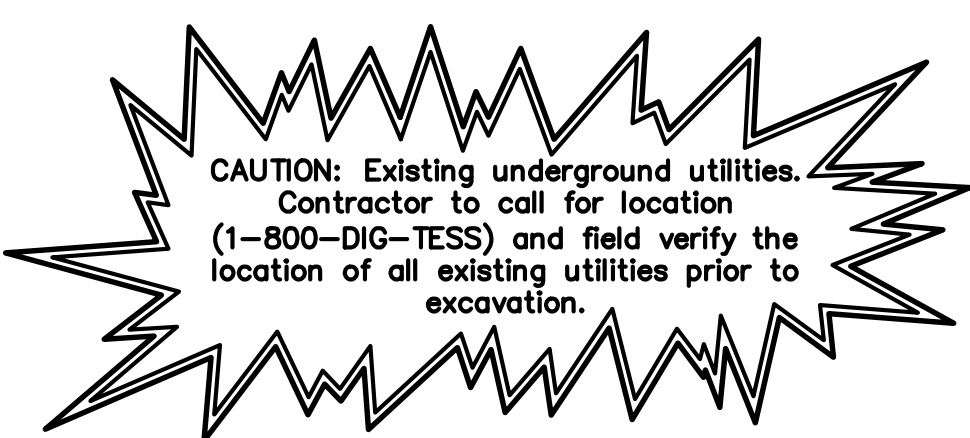
Where are the storm calculations for the box culverts?

NOTE: CONCRETE COLLAR TO BE INSTALLED AT ALL PVI'S AND PIPE SIZE CHANGES. PER NCTCOG S.T.D



LEGEND

- STORM SEWER
- STORM SEWER MANHOLE
- SANITARY SEWER LINE
- SANITARY SEWER MANHOLE
- WATER LINE & VALVE
- FIRE HYDRANT



Exceed maximum discharge velocity

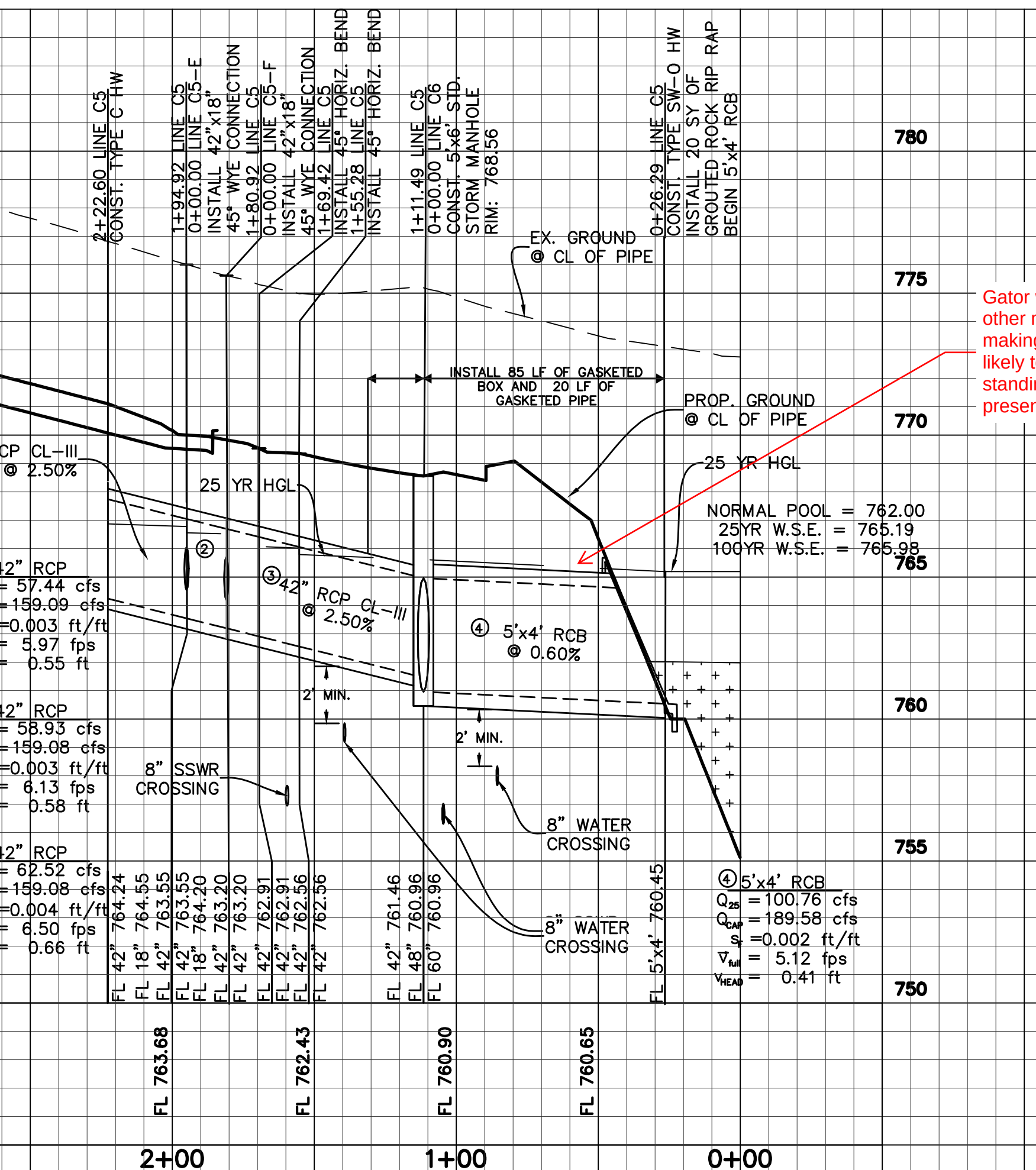
BENCHMARKS
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NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	SUBMITTALS	DATE

DESIGNED BY: ---
DRAWN BY: ---
CHECKED BY: ---
PRELIMINARY FOR REVIEW ONLY
NOT FOR CONSTRUCTION OR PERMIT PURPOSES
ENGINEER: Chris Wall, P.E.
P.E. No. 123372 Date: 03-25-2024

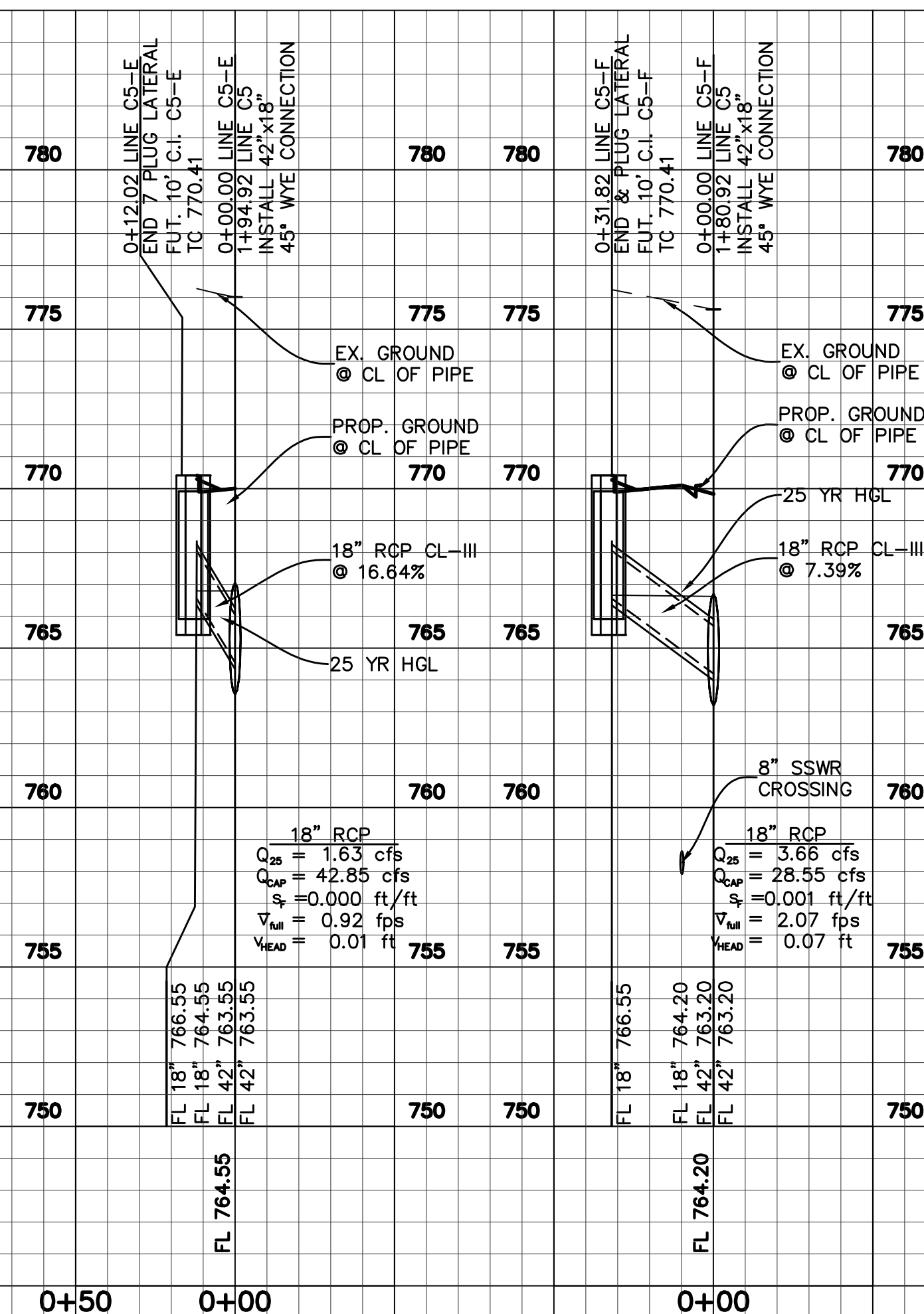
JBI PARTNERS
2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

LINE C3		PROJECT NO.
STORM SEWER PLAN & PROFILE		BBC010
LONE OAK, PHASE 1		SHEET NO.
City of Alvarado, Johnson County, Texas		5.12



	STORM SEWER
	STORM SEWER MANHOLE
	SANITARY SEWER LINE
	SANITARY SEWER MANHOLE
	WATER LINE & VALVE
	FIRE HYDRANT

STM C5-F

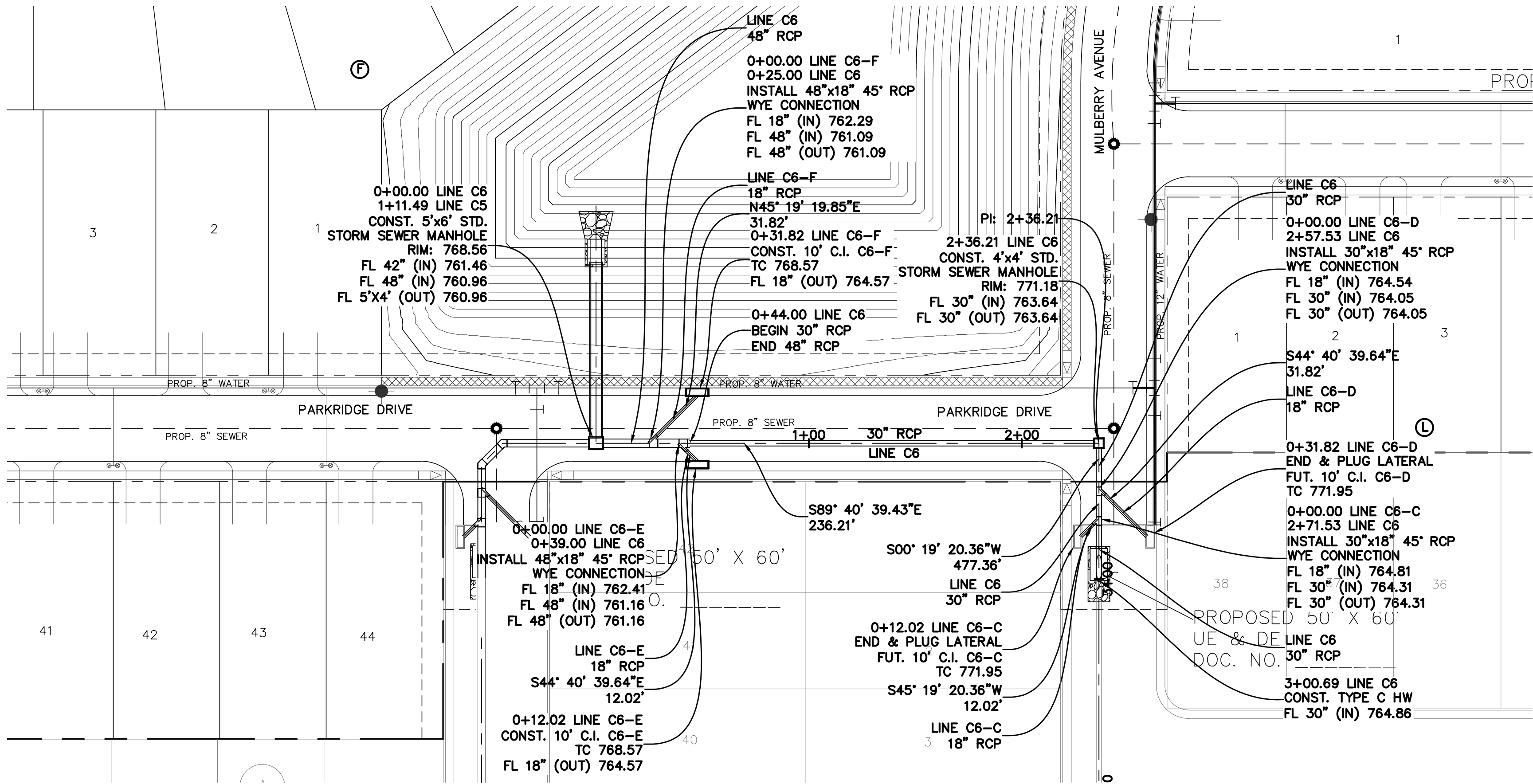


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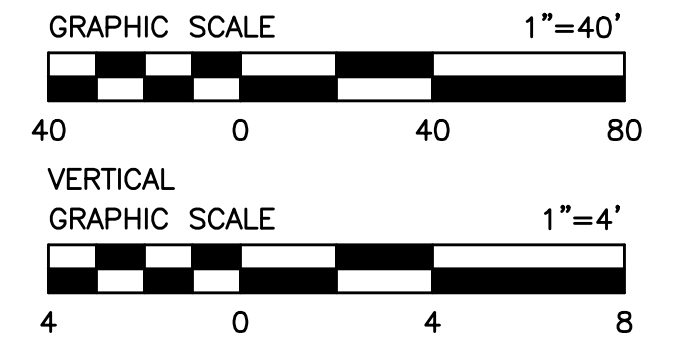


LINE C5
STORM SEWER PLAN & PROFILE
LONE OAK, PHASE 1
City of Alvarado, Johnson County, TX

PROJECT NO.	BBC010
SHEET NO.	5.13

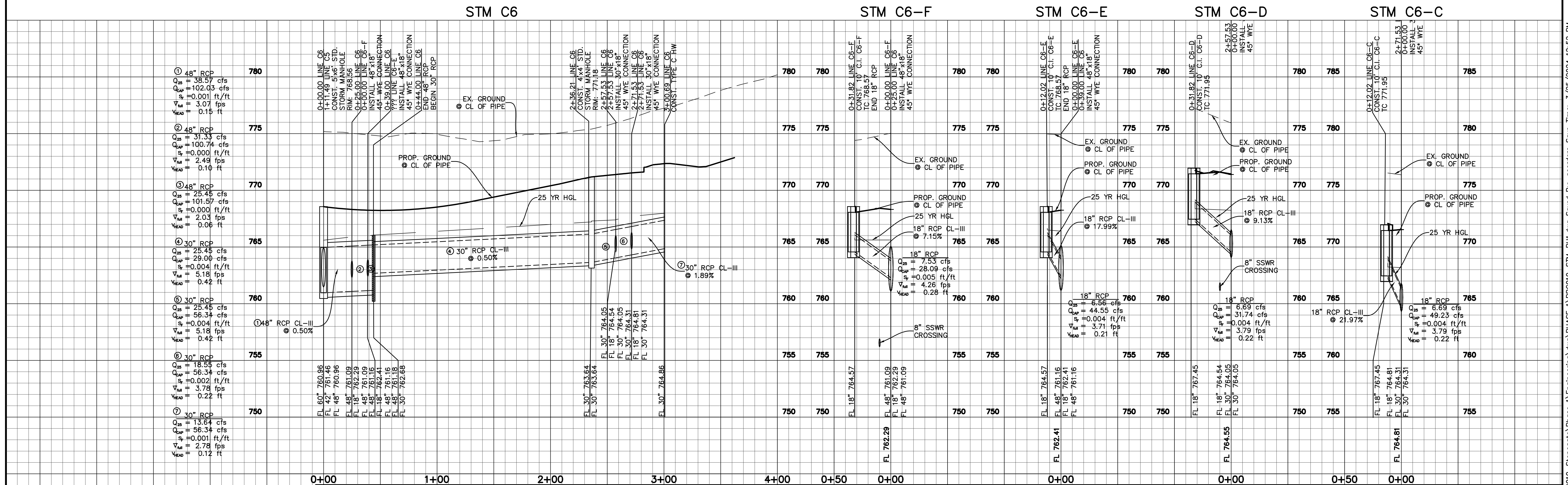
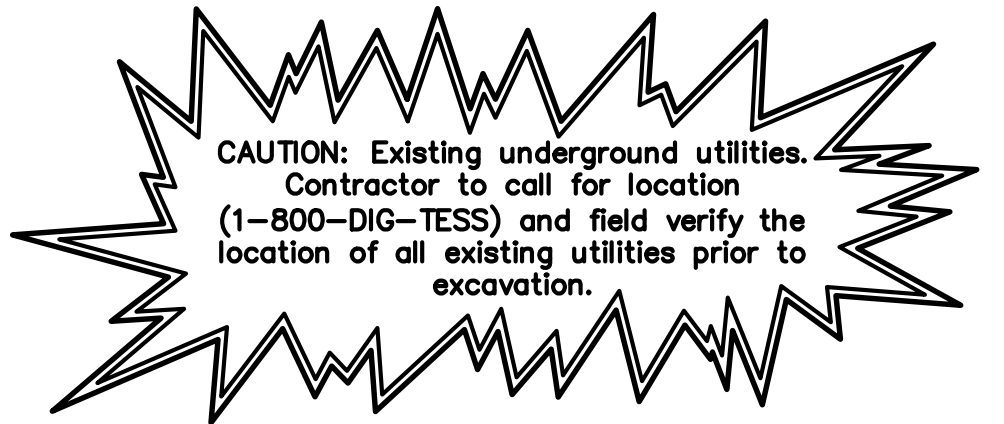


NOTE: CONCRETE COLLAR TO BE INSTALLED AT ALL PVI'S AND PIPE SIZE CHANGES. PER NCTCOG S.T.D



LEGEND

	STORM SEWER
	STORM SEWER MANHOLE
	SANITARY SEWER LINE
	SANITARY SEWER MANHOLE
	WATER LINE & VALVE
	FIRE HYDRANT



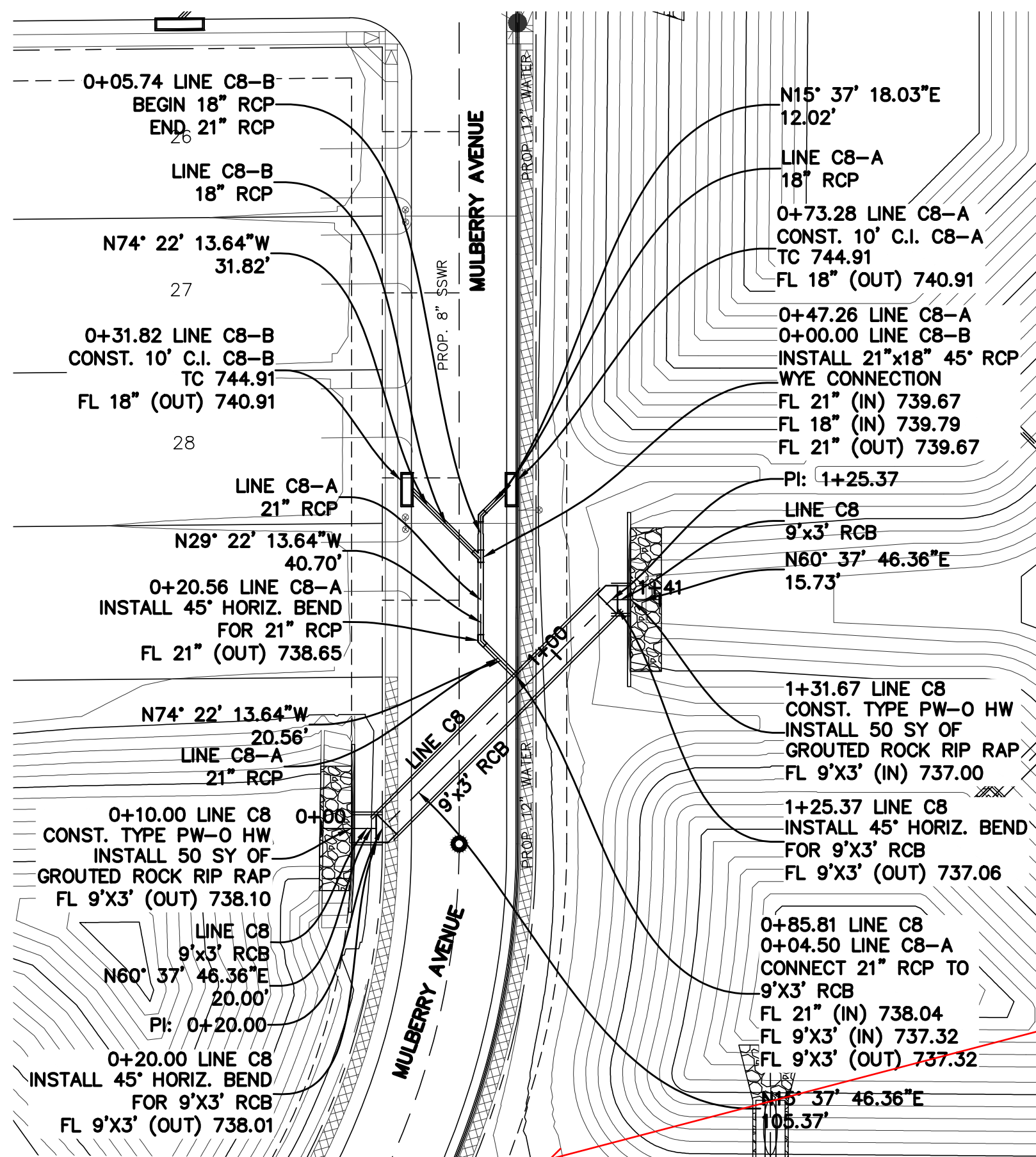
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P.E. No. 123372 Date: 03-25-2024

JBIPARTNERS
2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

LINE C6		PROJECT NO.
STORM SEWER PLAN & PROFILE		BBC010
LONE OAK, PHASE 1		SHEET NO.
City of Alvarado, Johnson County, Texas		5.14



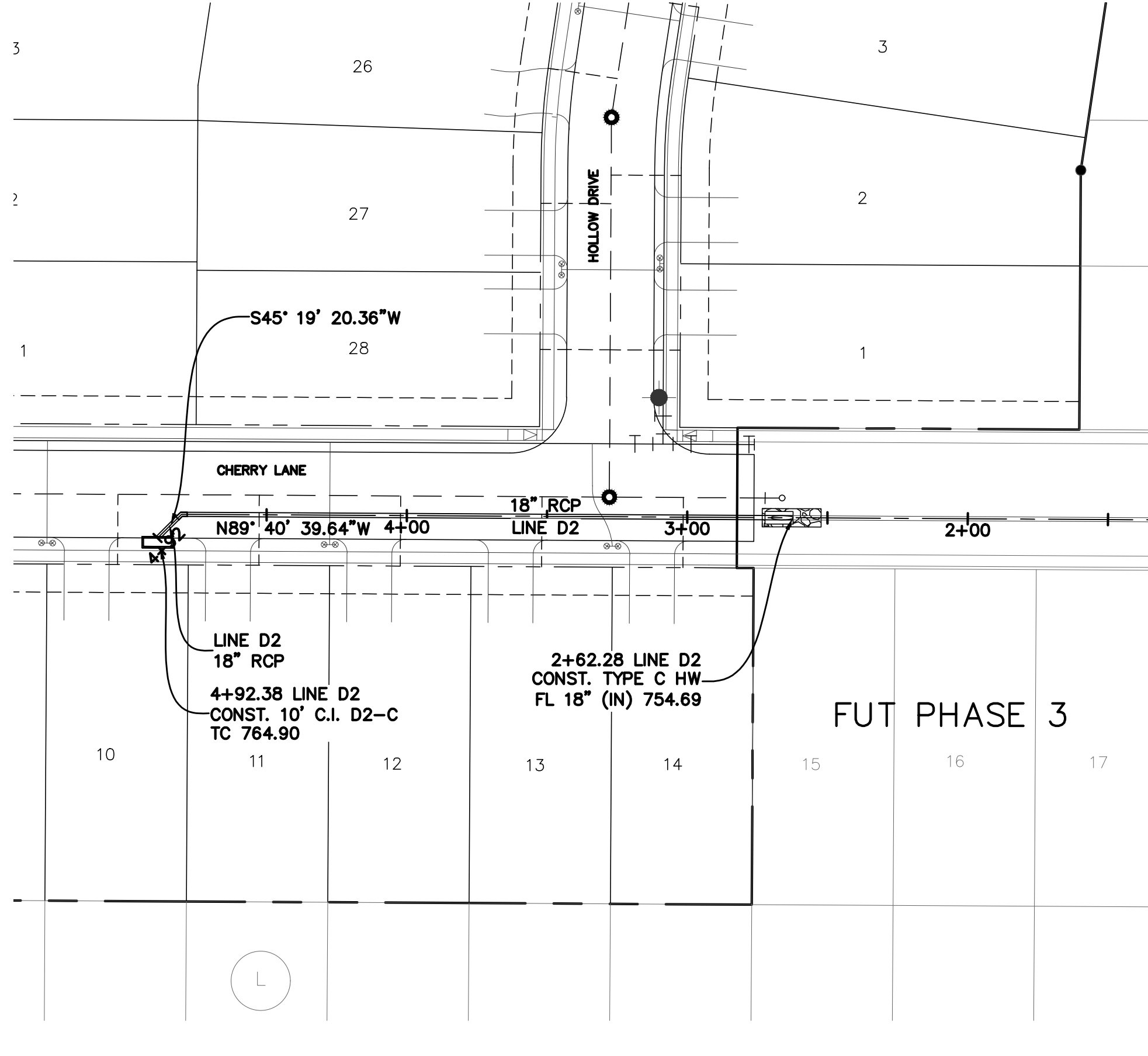
STM C8



STM C8-B

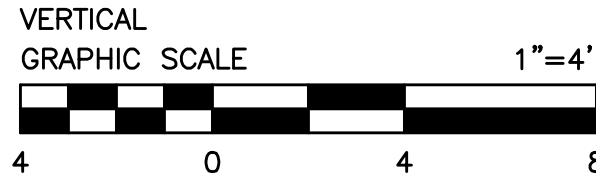
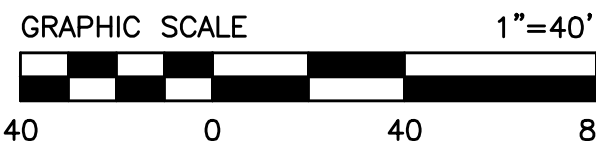


STM C8-A



STM D2

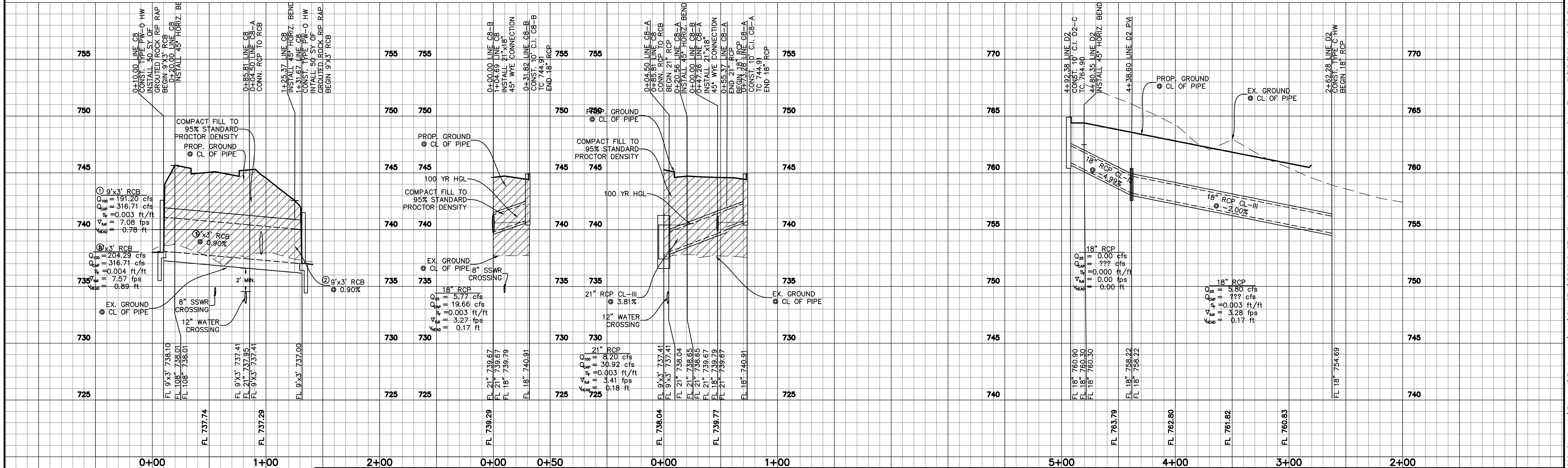
NOTE: CONCRETE COLLAR TO BE INSTALLED AT ALL PVI'S AND PIPE SIZE CHANGES. PER NCTCOG S.T.D



LEGEND

- STORM SEWER
- STORM SEWER MANHOLE
- SANITARY SEWER LINE
- SANITARY SEWER MANHOLE
- WATER LINE & VALVE
- FIRE HYDRANT

CAUTION: Existing underground utilities. Contractor to call for location (1-800-DIG-TESS) and field verify the location of all existing utilities prior to excavation.



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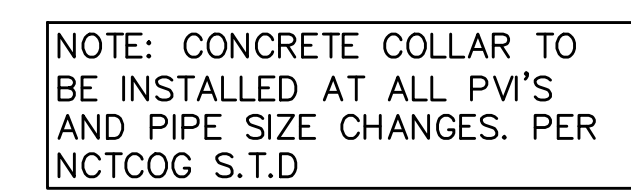
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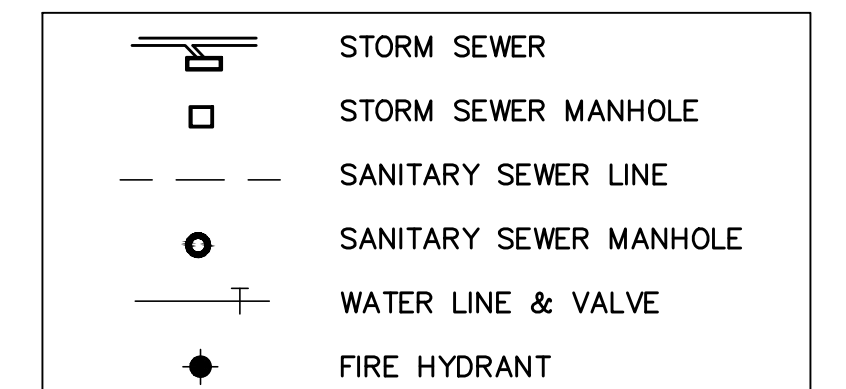


2121 Midway Road
Suite 300
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972.248.7676
TBPE No. F-438
TBPLS No. 10076000

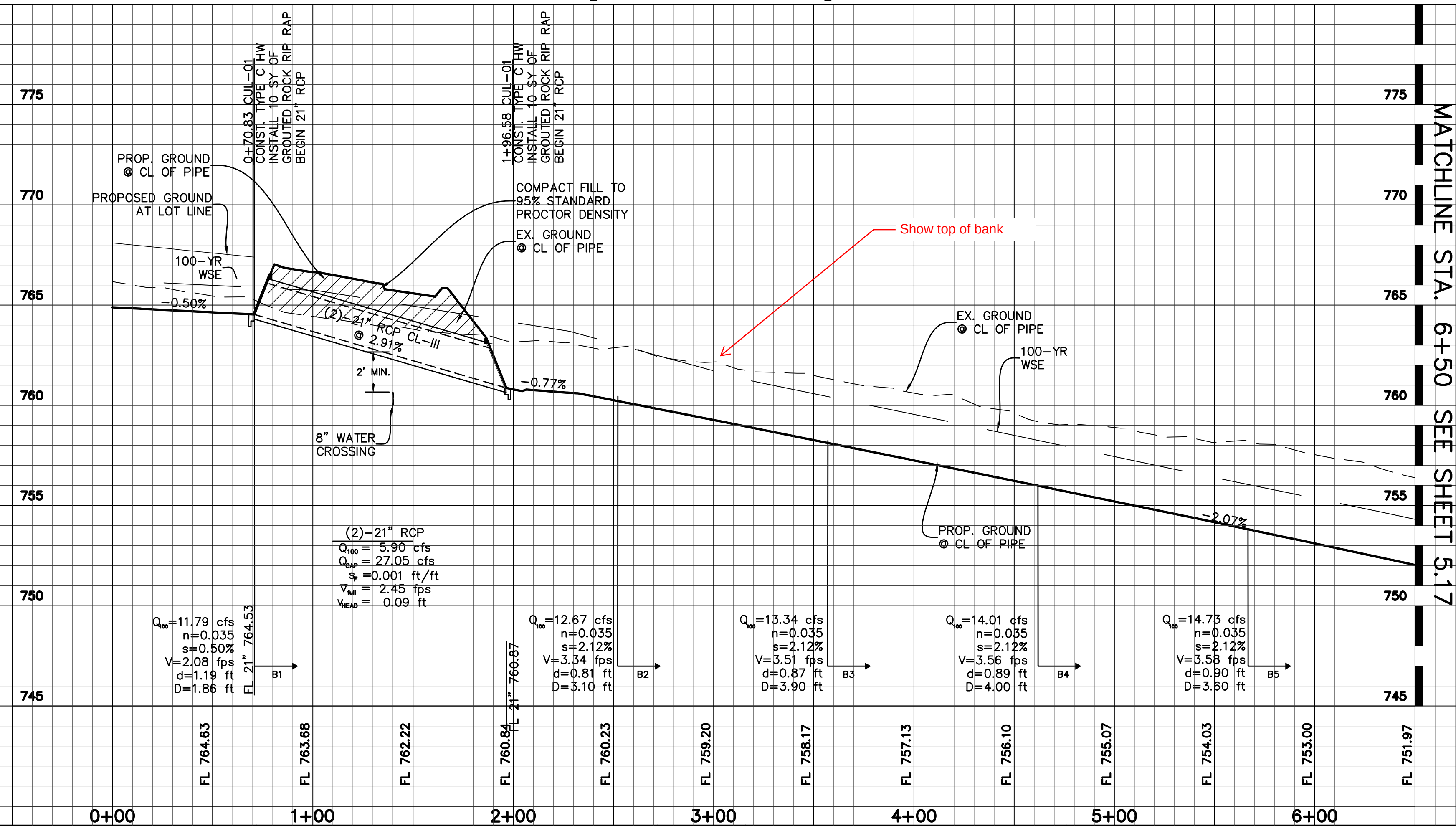
LINE C8 & D2		PROJECT NO.
STORM SEWER PLAN & PROFILE		BBC010
LONE OAK, PHASE 1		SHEET NO.
City of Alvarado, Johnson County, Texas		5.15



LEGEND



CAUTION: Existing underground utilities.
Contractor to call for location
(1-800-DIG-TESS) and field verify the
location of all existing utilities prior to
excavation.



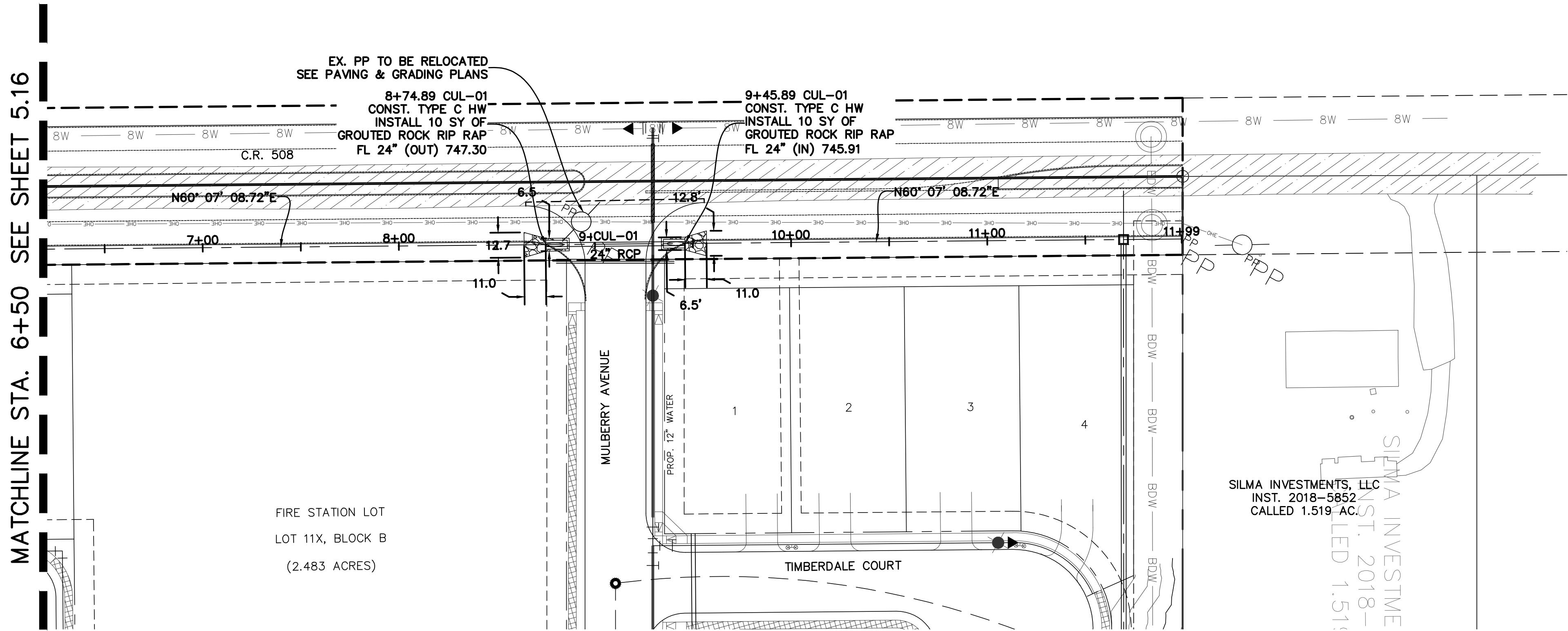
0.00				1.00				2.00			
NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	SUBMITTALS					DATE	

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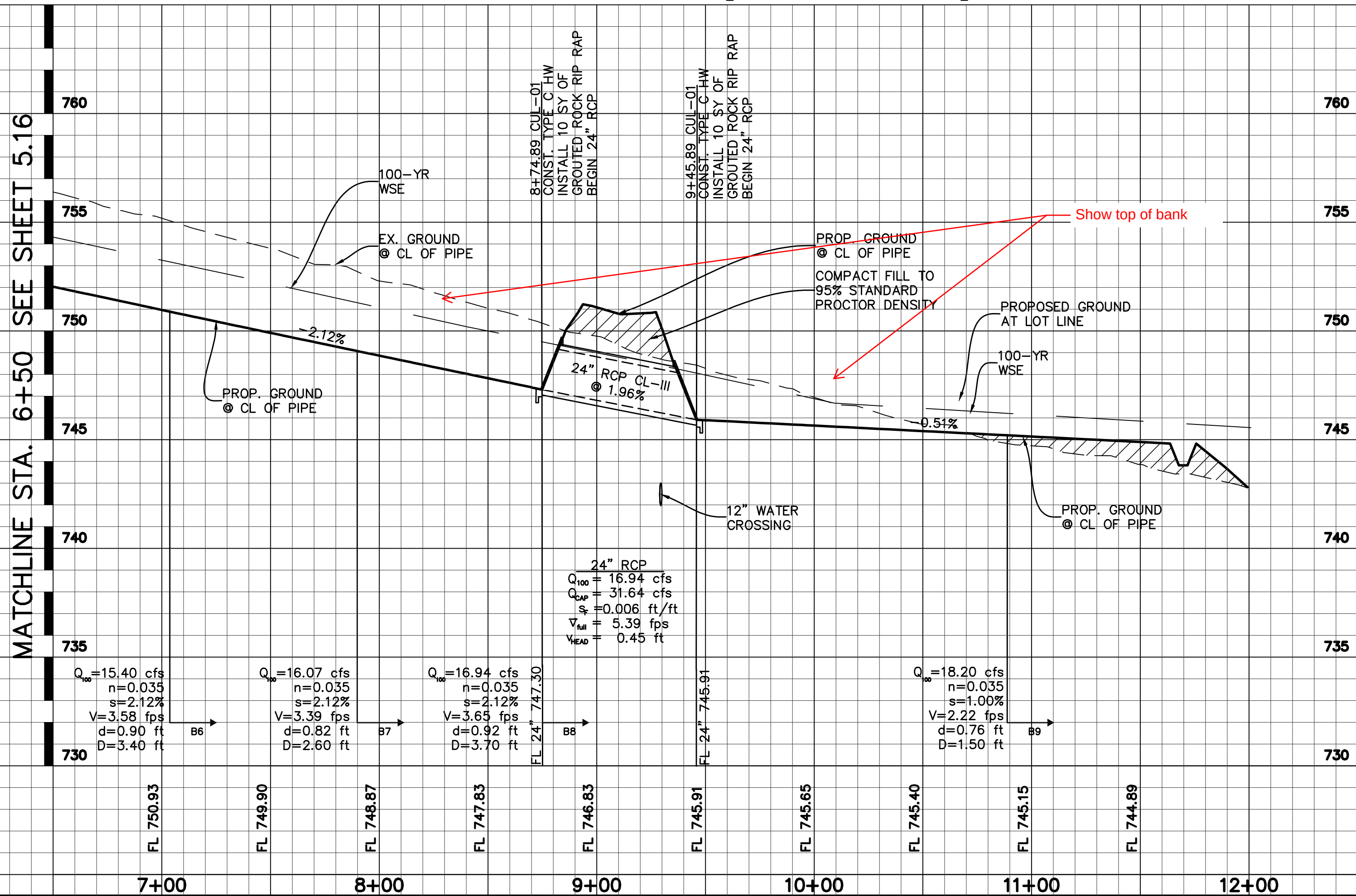


City of Alvarado, Johnson County, Texas

5.16 wing:



STM CUL-01 [STA: 6+50-END]



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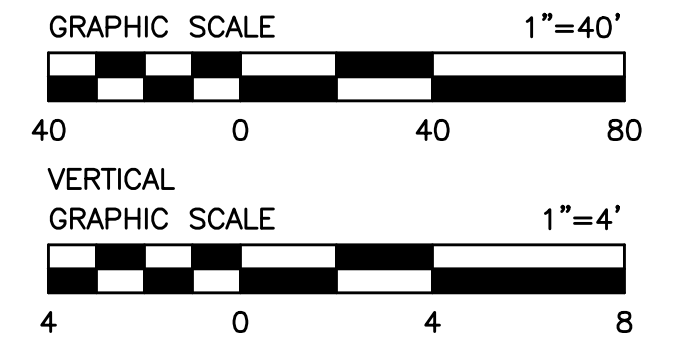
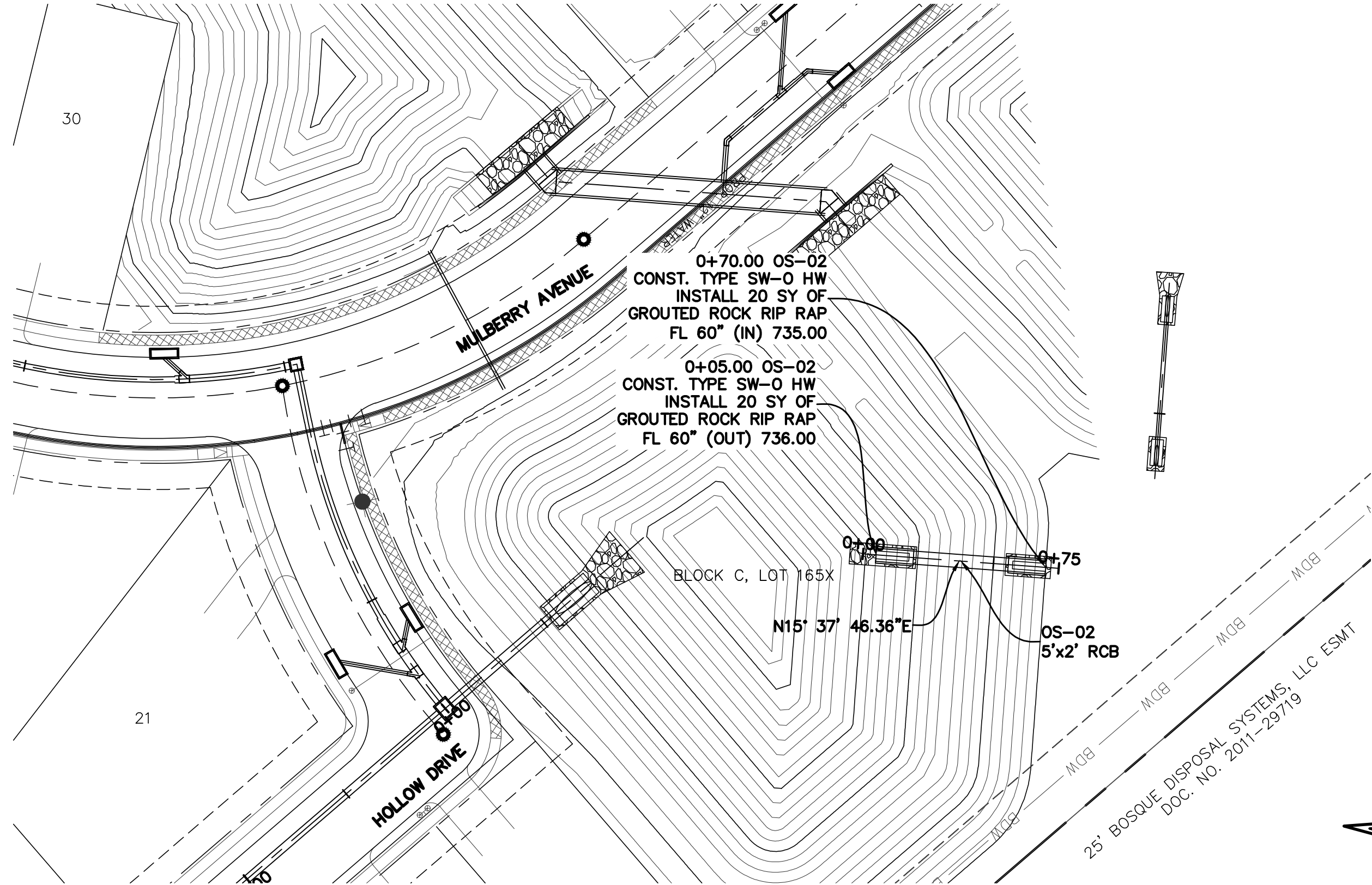
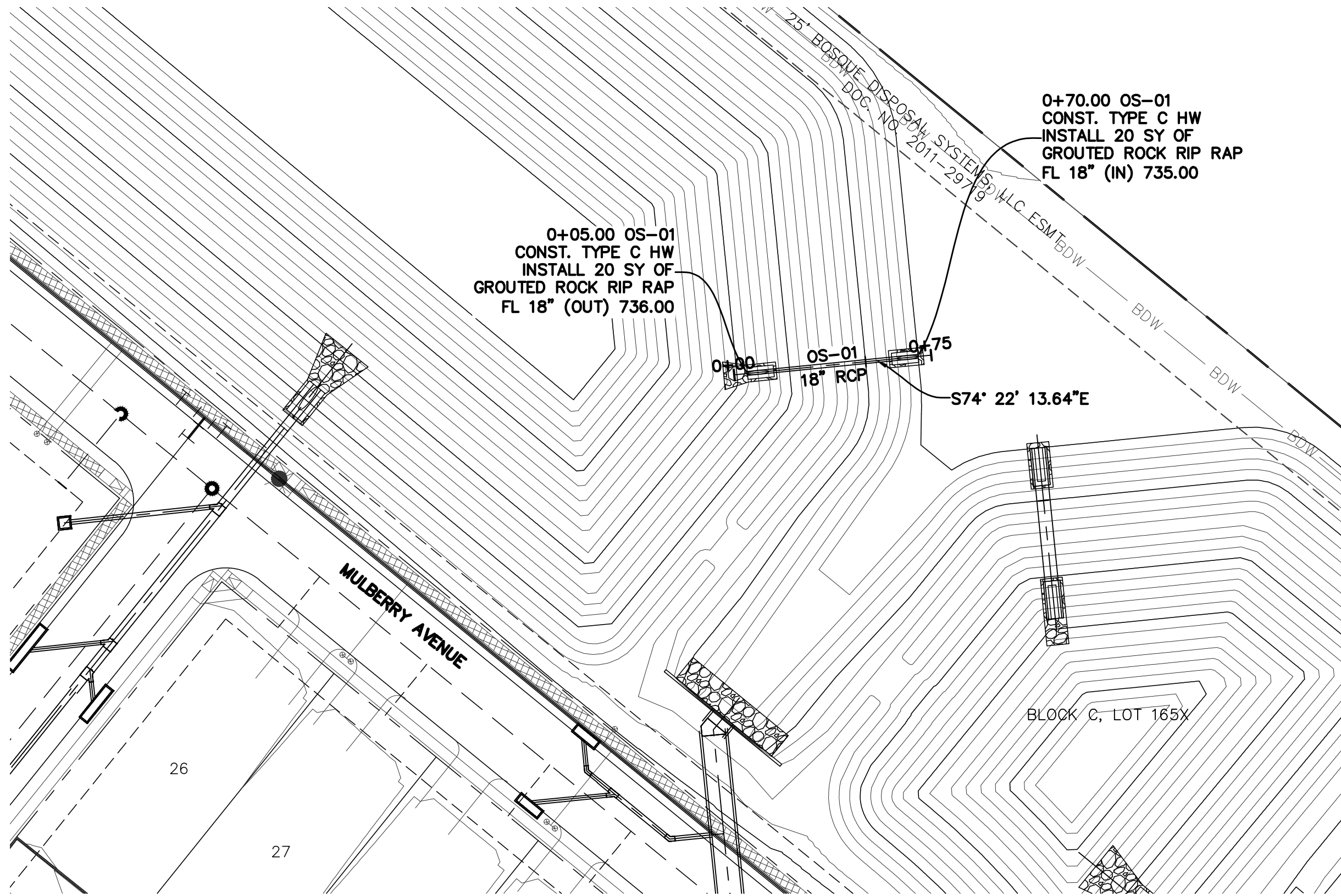
CUL-01 STA. 6+50 - END

STORM SEWER PLAN & PROFILE

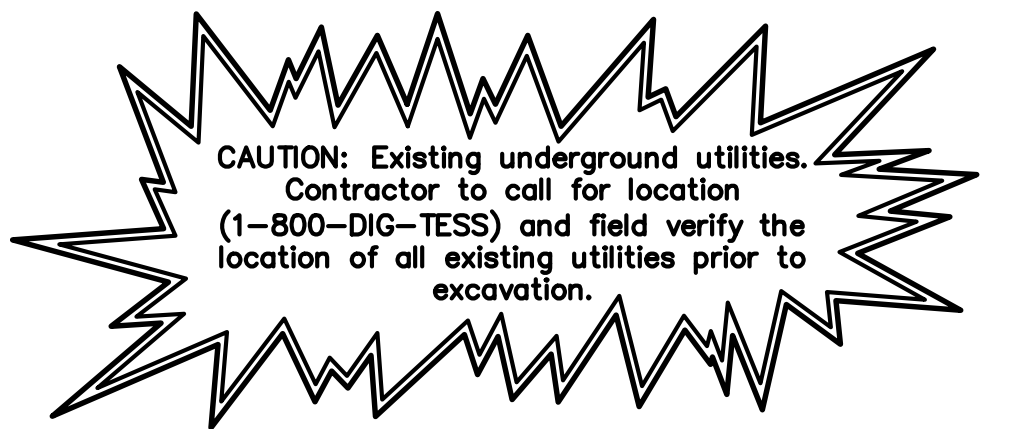
LONE OAK, PHASE 1

City of Alvarado, Johnson County, Texas

PROJECT NO.	BBC010
SHEET NO.	5.17

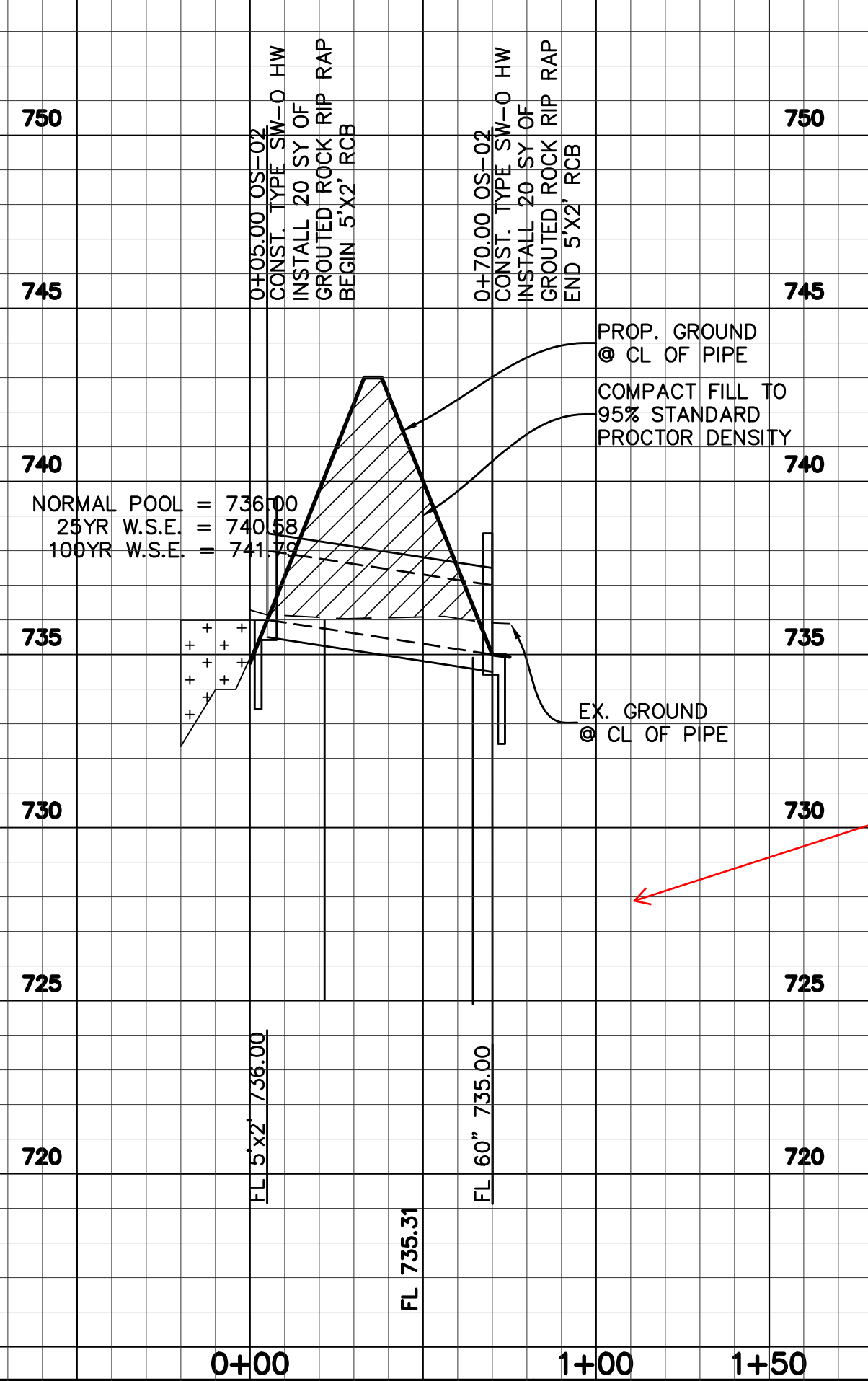
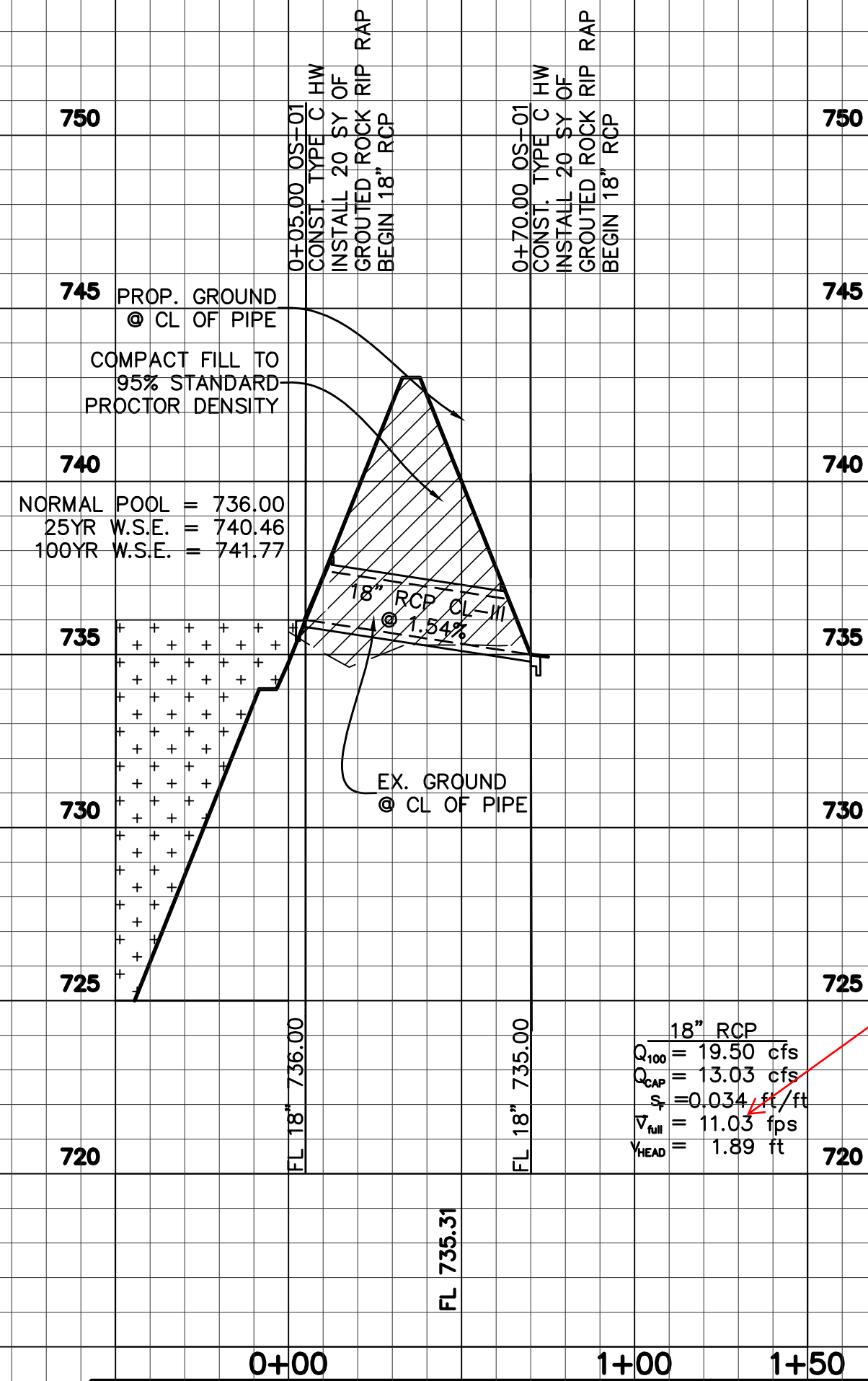


LEGEND	
	STORM SEWER
	STORM SEWER MANHOLE
	SANITARY SEWER LINE
	SANITARY SEWER MANHOLE
	WATER LINE & VALVE
	FIRE HYDRANT



OS-01

OS-02



NOTE: CONCRETE COLLAR TO BE INSTALLED AT ALL PVI'S AND PIPE SIZE CHANGES; PER NCTCOG S.T.D

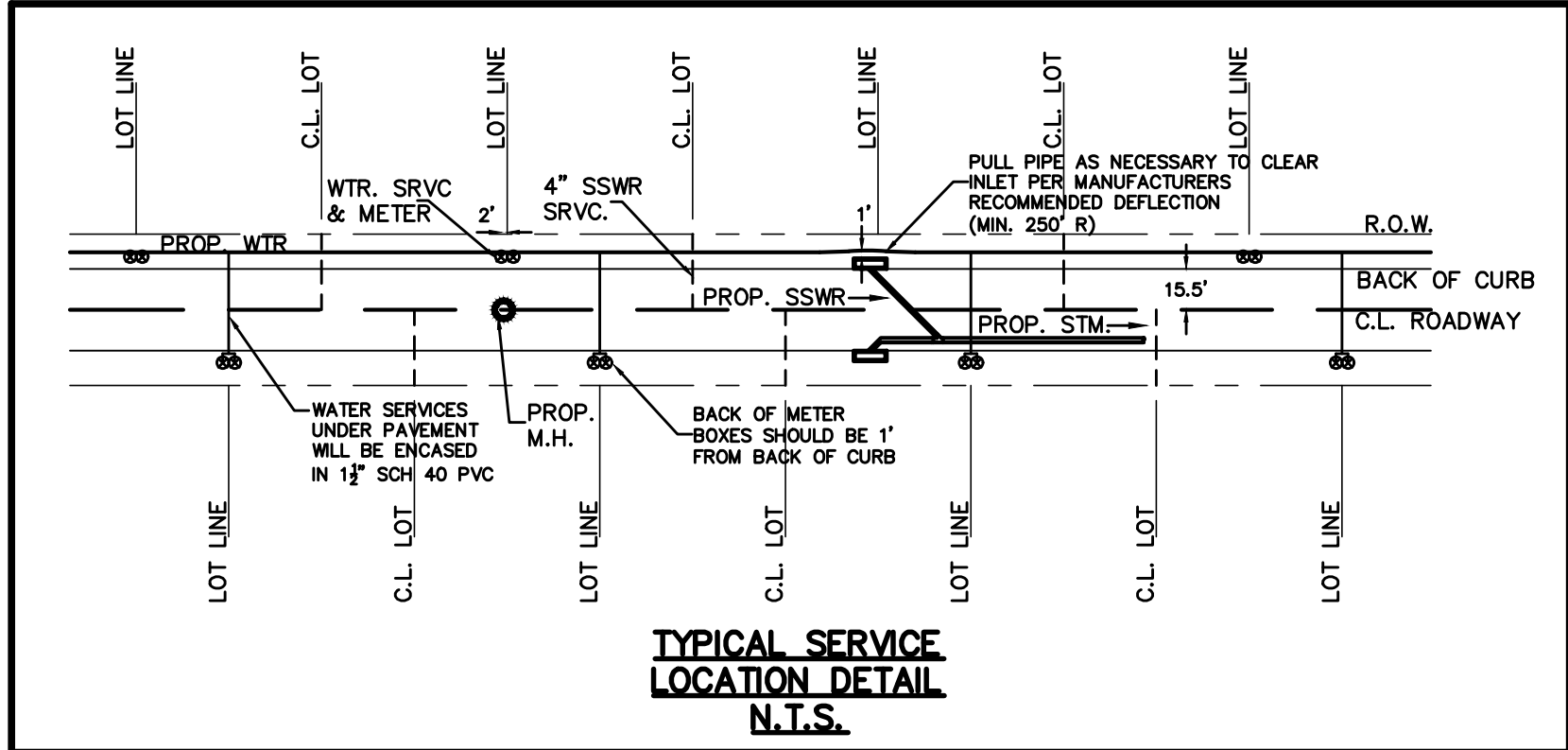
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CHECKED BY:	---
ENGINEER:	Chris Wall, P.E.
P.E. No.	123372
Date:	03-25-2024

JBI PARTNERS	2121 Midway Road Suite 300 Carrollton, Texas 75006 972.248.7676 TBPE No. F-438 TBPLS No. 10076000
------------------------	--

OS-1 & OS-2		PROJECT NO.
STORM SEWER PLAN & PROFILE		BBC010
LONE OAK, PHASE 1		SHEET NO.
City of Alvarado, Johnson County, Texas		5.18



CAUTION: Existing underground utilities. Contractor to call for location (1-800-DIG-TESS) and field verify the location of all existing utilities prior to excavation.

LEGEND

PROPOSED WATER LINE AND VALVE

PROPOSED SANITARY SEWER AND MANHOLE

EXISTING WATER LINE AND VALVE

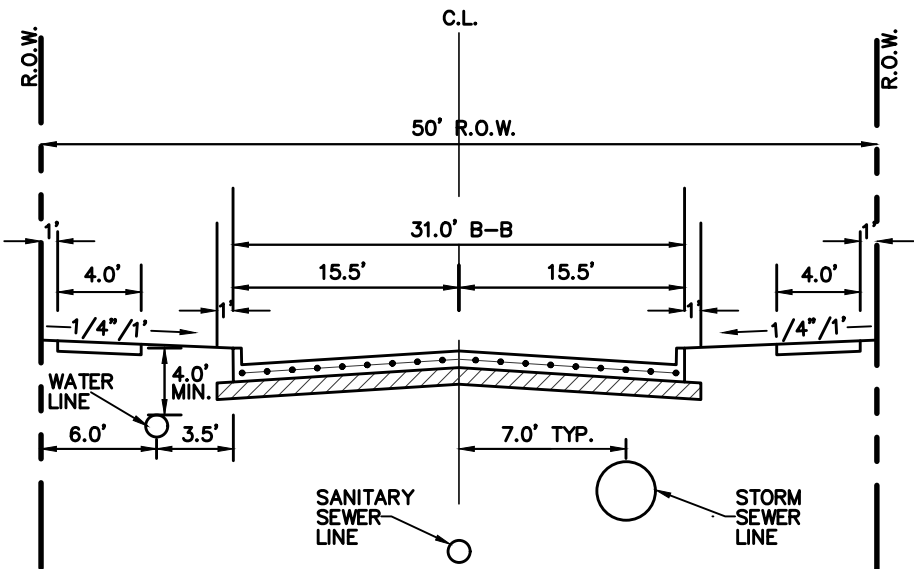
PROPOSED STORM SEWER AND INLET

PROPOSED FIRE HYDRANT

PROPOSED WATER SERVICE AND METER

PROPOSED SANITARY SEWER SERVICE

BARRIER FREE RAMPS

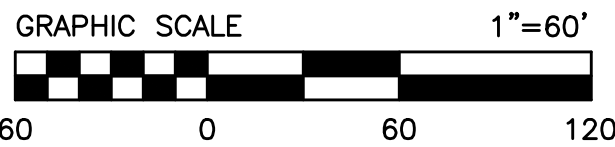
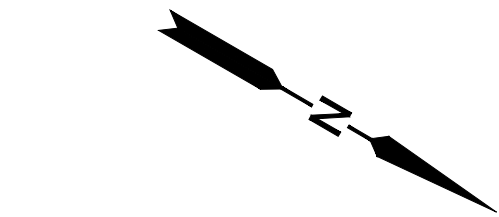


UTILITY LOCATIONS FOR
TYPICAL RESIDENTIAL
STREET SECTION
(N.T.S.)

- NOTE:
- FOR LINE LOCATES CALL 811-(CALL ONE).
 - WATER PROVIDER SHALL BE JCSUD
 - NOTIFY JCSUD 48 HRS BEFORE CONSTRUCTION STARTS. 817-760-5200
 - THERE SHOULD BE AT LEAST 2' OF SEPARATION AT ALL WL CROSSINGS.
 - THERE SHOULD BE AT LEAST 42" OF COVER FROM THE TOP OF THE PIPE.
 - THE DEVELOPER AND CONTRACTOR ARE RESPONSIBLE FOR NOTIFYING PROPERTY OWNERS PRIOR TO CONSTRUCTION OF ANY OFF-SITE GRADING/UTILITY WORK.

Approval letter from
JSUD required prior to
construction, including
fire flow coverage.

Fire Chief shall approve
all fire hydrant
locations.



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ENGINEER: Chris Wall, P.E.

P.E. No. 123372 Date: 03-25-2024



2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

OVERALL WATER PLAN		PROJECT NO.
		BBC010
LONE OAK, PHASE 1		SHEET NO.
City of Alvarado, Johnson County, Texas		6.00

MATCHLINE STA. 9+50 SEE SHEET 7.18

MATCHLINE STA. 9+50 SEE SHEET 7.18

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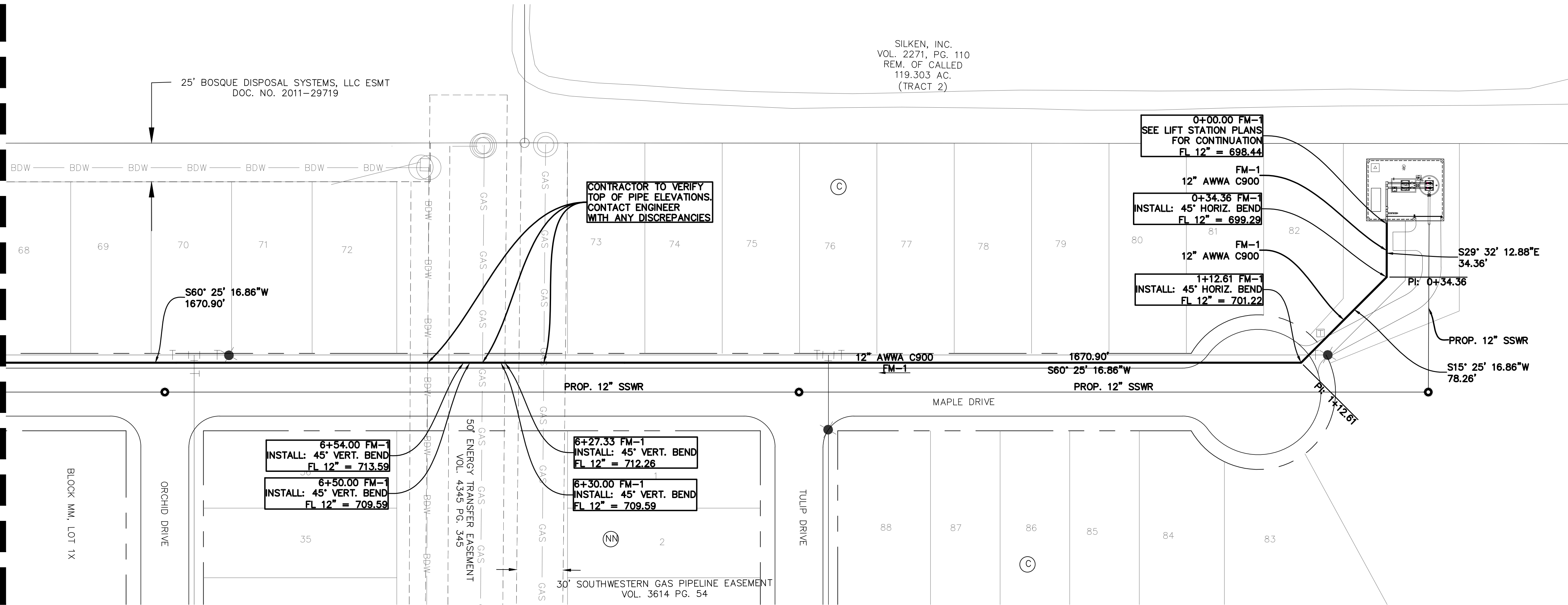
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ENGINEER: Chris Wall, P.E.
P.E. No. 123372 Date: 03-25-2024

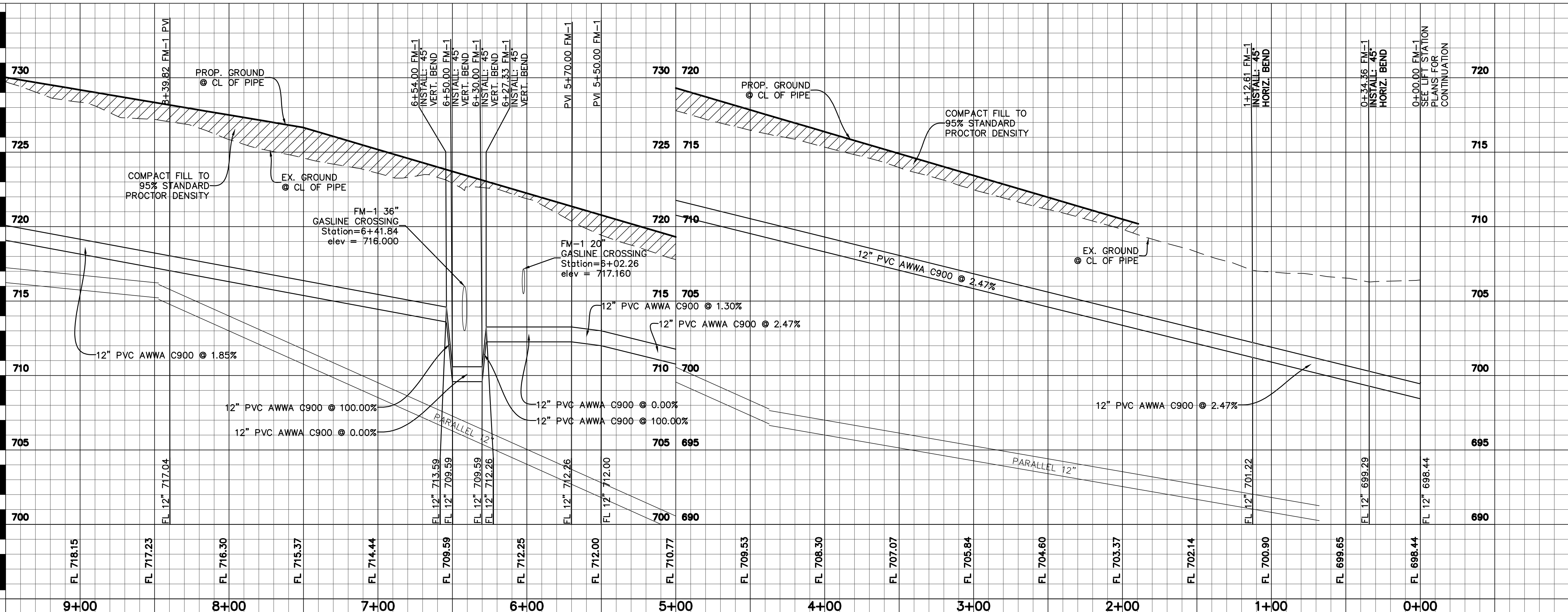


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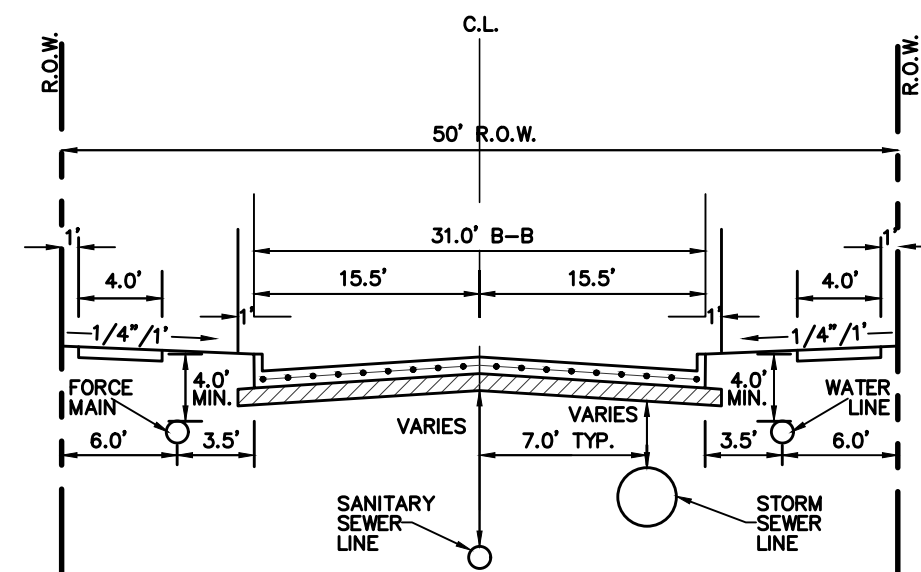
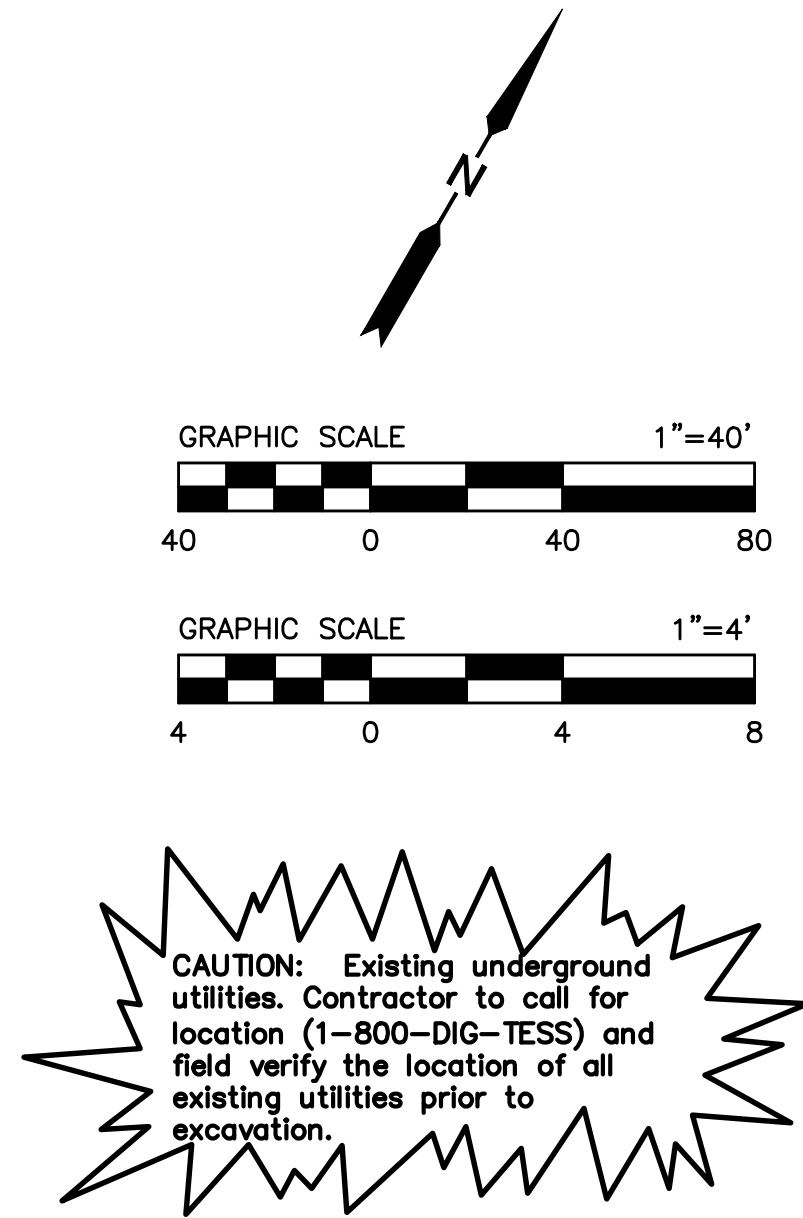
SANITARY SEWER		PROJECT NO.
FM-1 ST. 0+00 TO ST. 9+50		BBC010
LONE OAK, PHASE 1		SHEET NO.
City of Alvarado, Johnson County, Texas		7.17



FM-1 (STA. 0+00 TO STA. 9+50)



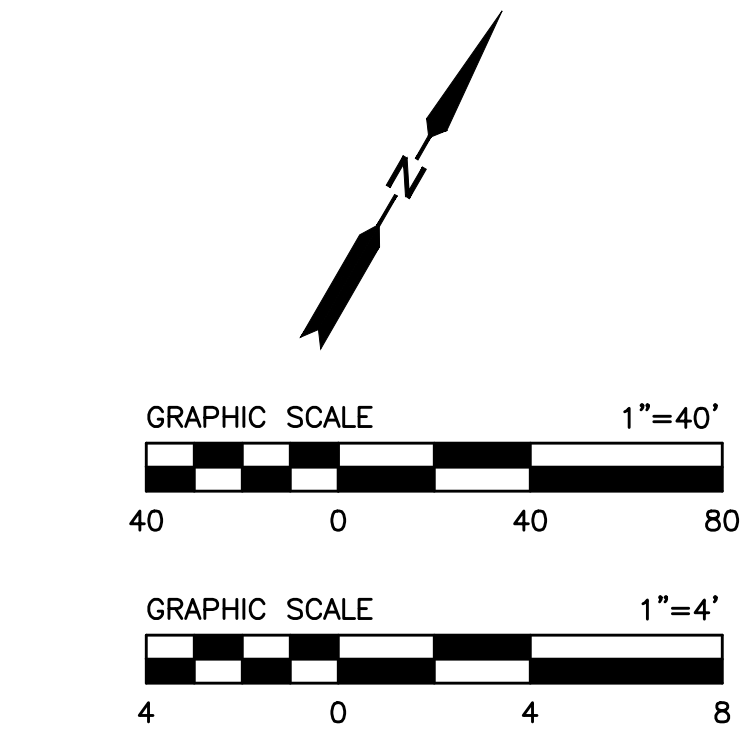
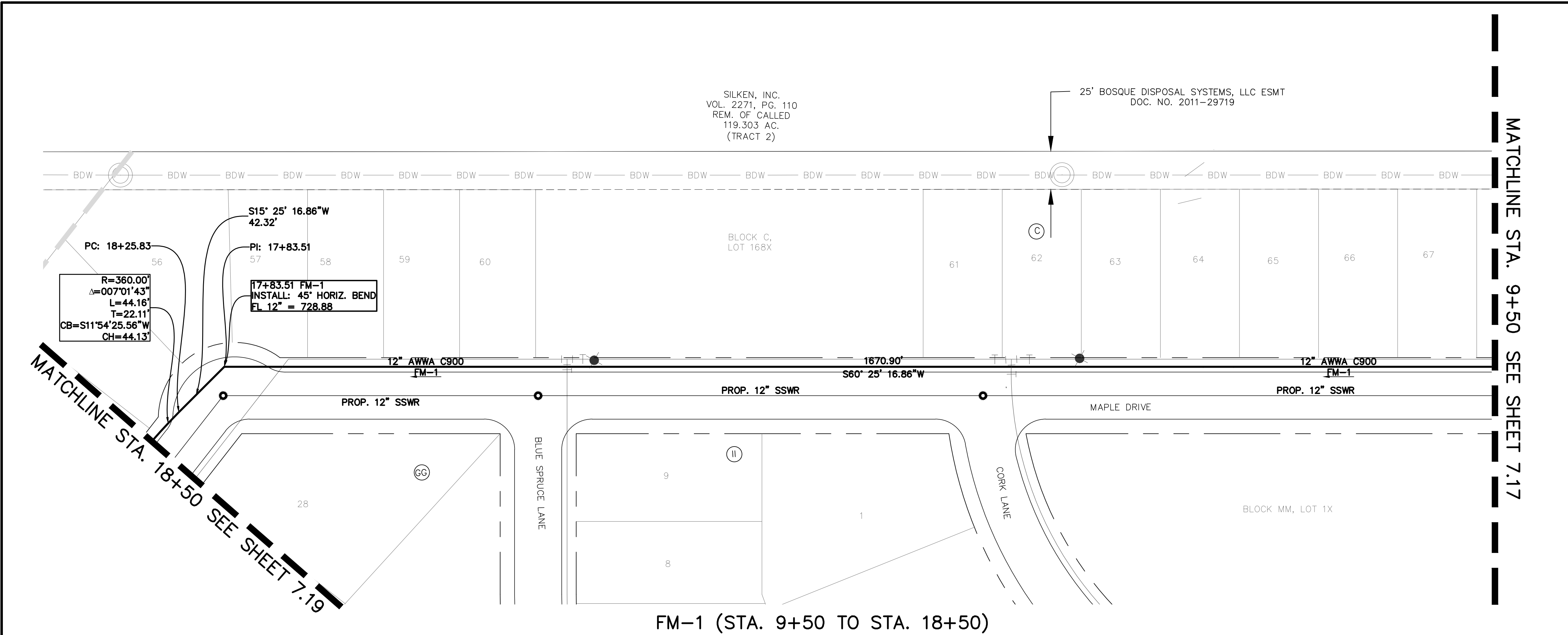
Force main sizing will be confirmed with the lift station review



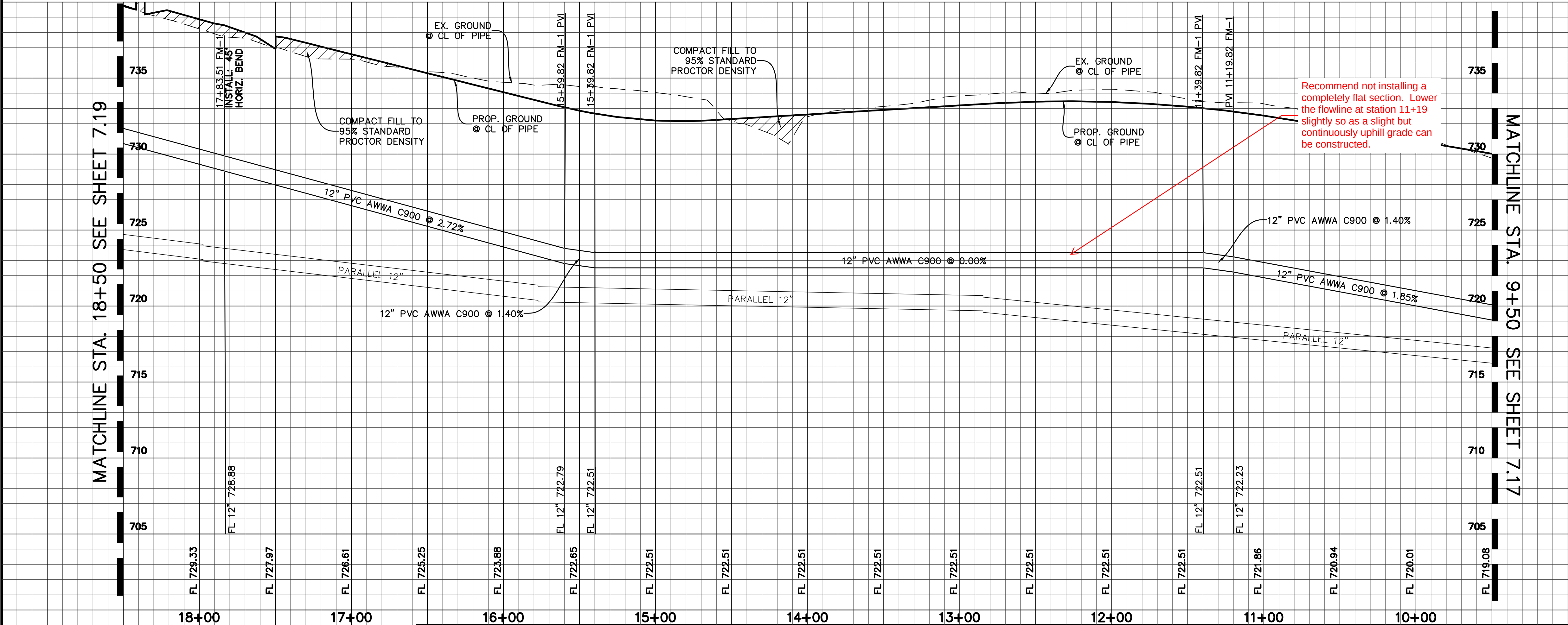
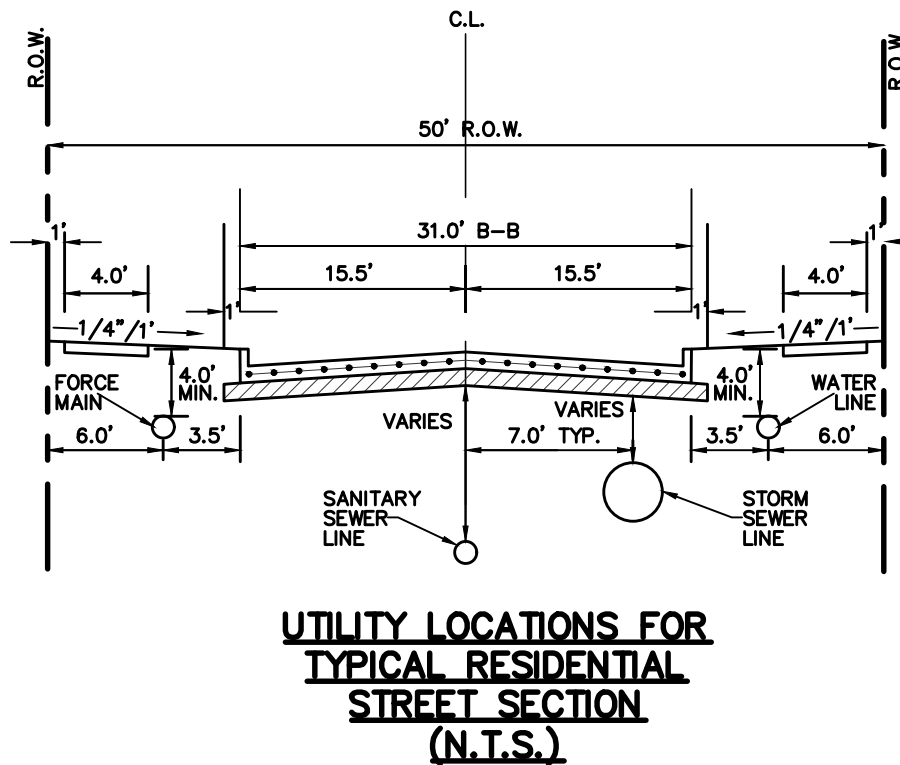
UTILITY LOCATIONS FOR
TYPICAL RESIDENTIAL
STREET SECTION
(N.T.S.)

NOTE: BOSQUE DISPOSAL SYSTEMS LINE TO BE POTHOLED BEFORE CONSTRUCTION. ENGINEER TO BE NOTIFIED OF TOP OF PIPE ELEVATION AND PIPE SIZE.

LEGEND	
	PROPOSED WATER LINE AND VALVE
	PROPOSED SANITARY SEWER AND MANHOLE
	PROPOSED FORCE MAIN



CAUTION: Existing underground utilities. Contractor to call for location (1-800-DIG-TESS) and field verify the location of all existing utilities prior to excavation.



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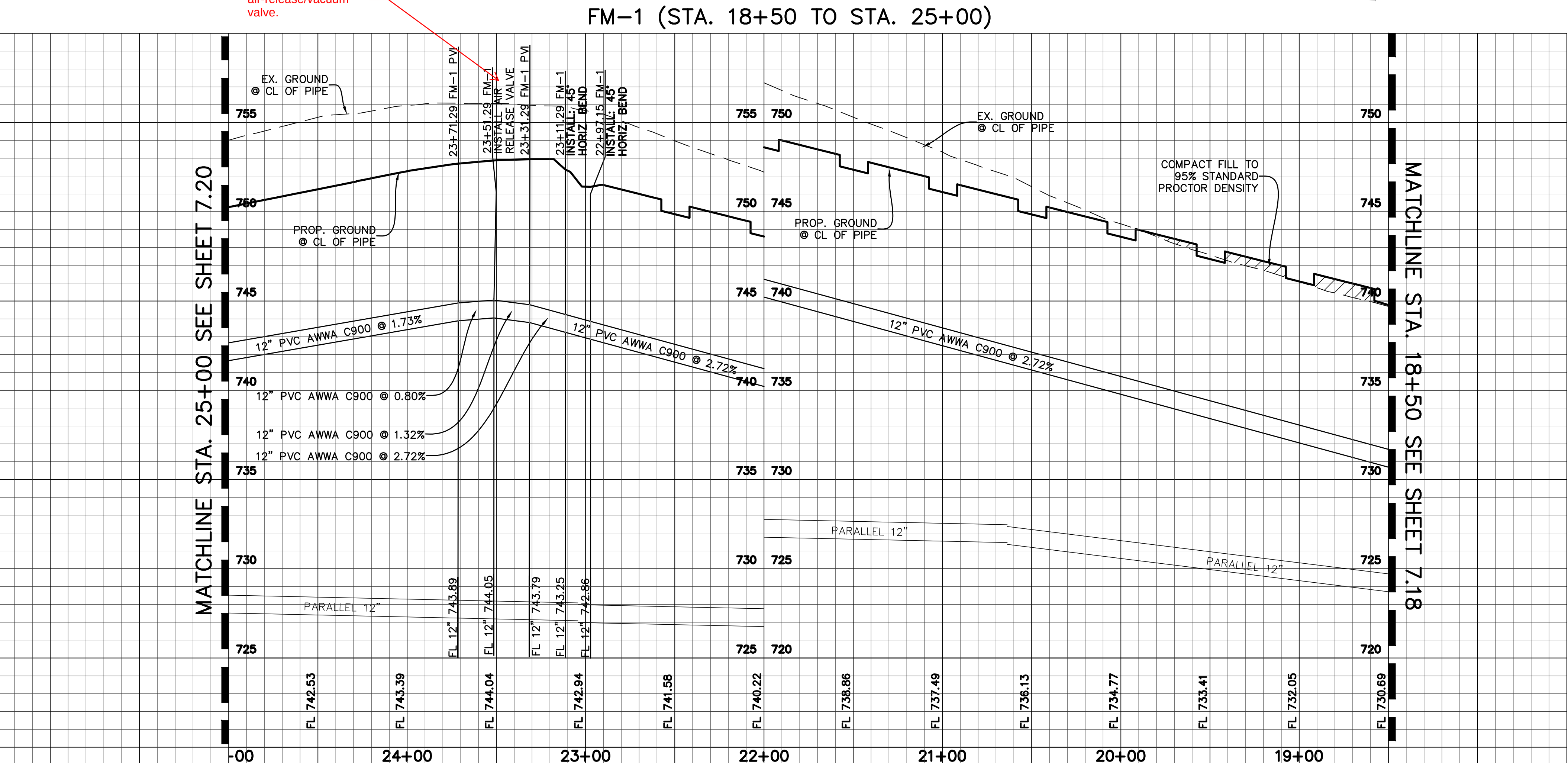
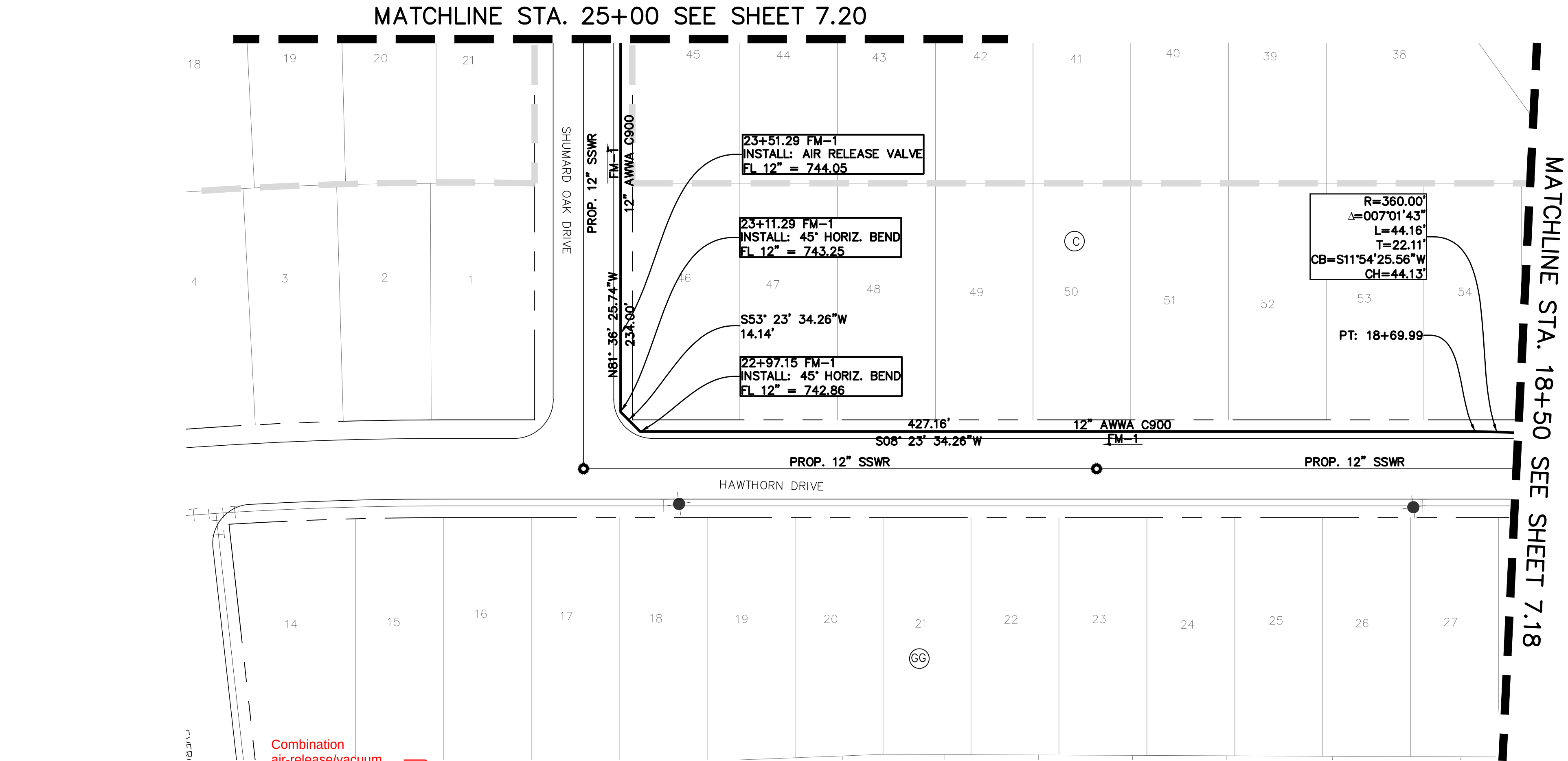
ENGINEER: Chris Wall, P.E.

P.E. No. 123372 Date: 03-25-2024



2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

SANITARY SEWER		PROJECT NO.
FM-1 ST. 9+50 TO ST. 18+50		BBC010
LONE OAK, PHASE 1		SHEET NO.
City of Alvarado, Johnson County, Texas		7.18



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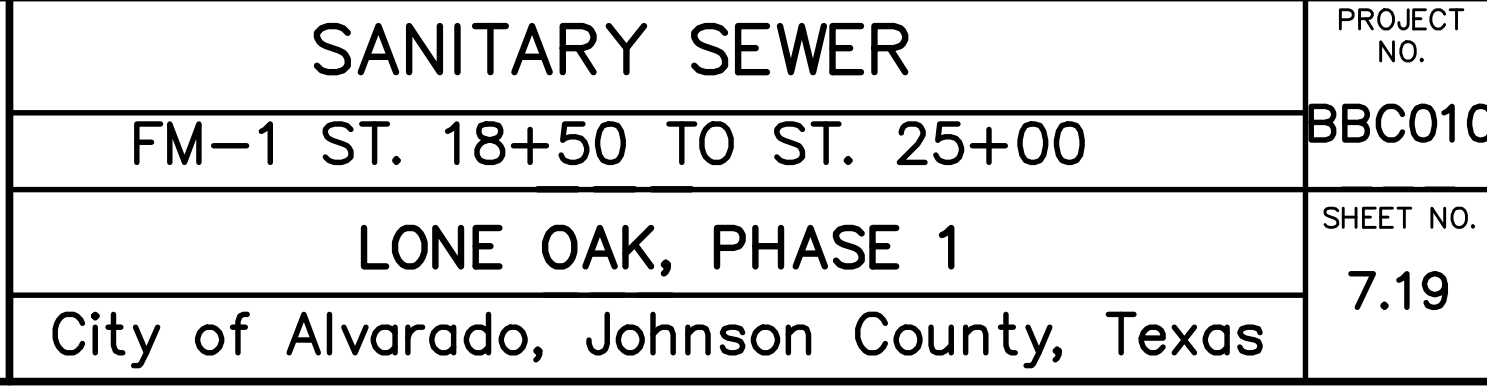
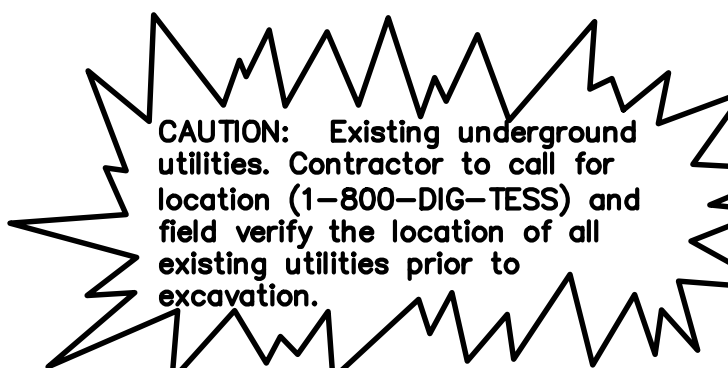
ENGINEER: Chris Wall, P.E.

P.E. No. 123372 Date: 03-25-2024



2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

SANITARY SEWER		PROJECT NO.
FM-1 ST. 18+50 TO ST. 25+00		BBC010
LONE OAK, PHASE 1		SHEET NO.
City of Alvarado, Johnson County, Texas		7.19

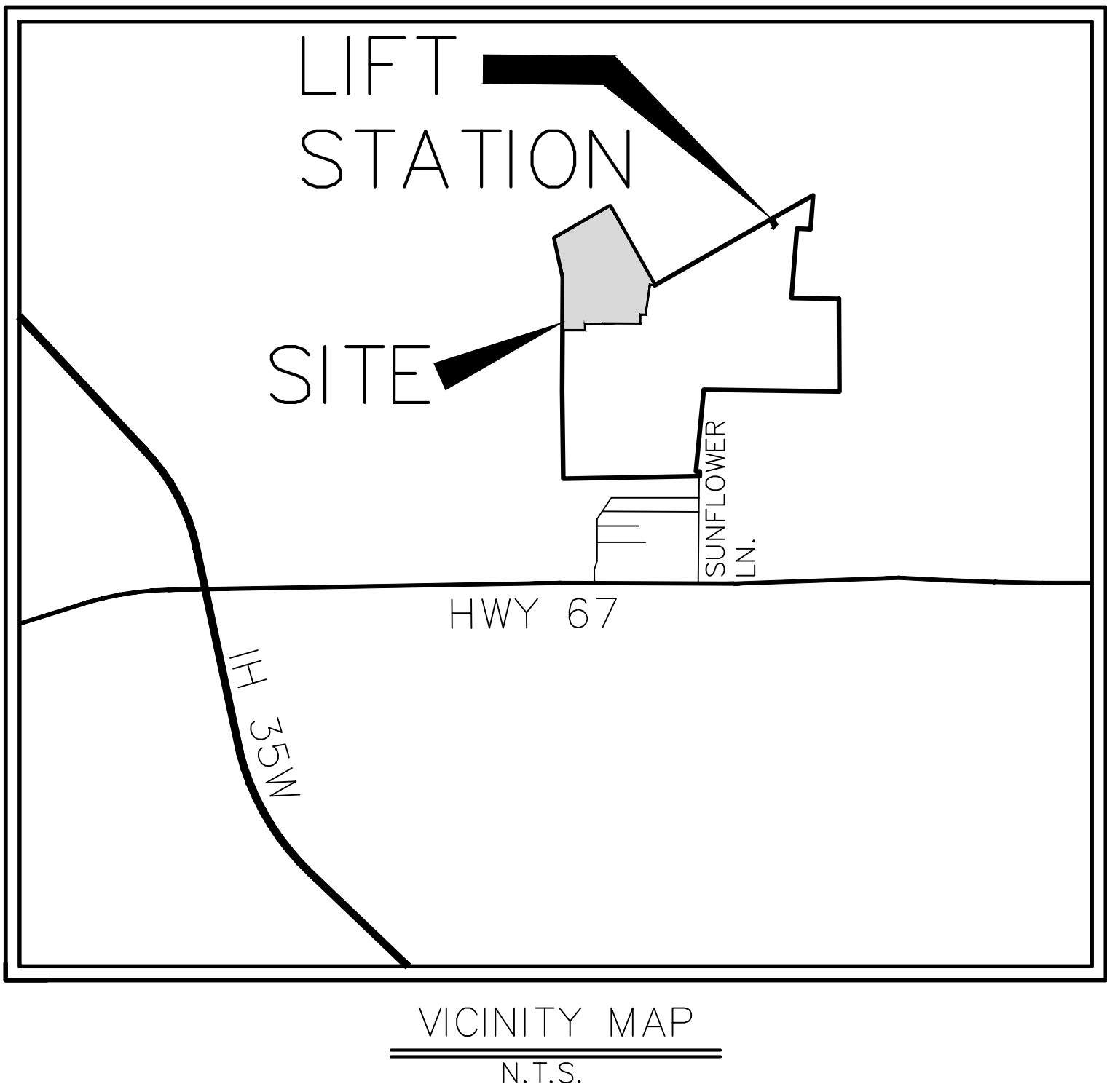


ENGINEERING PLANS
FOR
LONE OAK PHASE 1
LIFT STATION
CITY OF ALVARADO
JOHNSON COUNTY, TEXAS
APRIL 2024

Preliminary Plat not reviewed with this submittal.

Downstream capacity is limited in the existing SS system. Improvements cannot be accepted by the City prior to downstream capacity being provided or an alternate agreement with the City.

BHC Review Note: Our review of the plans is for general compliance with the City of Alvarado's development requirements and good engineering practice, and does not relieve the engineer of record of their responsibilities under the Texas Engineering Practice Act



LONE OAK, PHASE 1
LIFT STATION
INDEX

SHEET NO.	DESCRIPTION
LS-00	COVER SHEET
PPT1-PPT8	PRELIMINARY PLAT
LS-01	SITE PLAN
LS-02	LAYOUT & DIMENSION PLAN
LS-03	SECTION A
LS-04	SECTION B
LS-05	CALCULATIONS
LS-06	PUMP DETAILS
LS-07	ODOR CONTROL DETAILS
LS-08	SUBGRADE & BACKFILL REQUIREMENTS
LS-09	MISCELLANEOUS DETAILS
LS-10	THRUST BLOCKING & PIPE SUPPORT DETAILS
LS-11	SLIDING GATE DETAILS
LS-12	FENCE DETAILS
EXHIBIT	BASIN AREA MAP - FOR REFERENCE
EXHIBIT	ALTERNATE HAUL ROUTE - FOR REFERENCE

ELECTRICAL DRAWINGS BY BAIRD GILROY & DIXON, LLC

E-01	ELECTRICAL LEGENDS, SCHEDULES, AND NOTES
E-02	ELECTRICAL SITE PLAN
E-03	ELECTRICAL WET WELL LAYOUT
E-04	ELECTRICAL ONE-LINE DIAGRAM
E-05	ELECTRICAL CONTROL DIAGRAMS SHEET 1
E-06	ELECTRICAL CONTROL DIAGRAMS SHEET 2
E-07	ELECTRICAL CONTROL DIAGRAMS SHEET 3
E-08	ELECTRICAL DETAILS SHEET 1
E-09	ELECTRICAL DETAILS SHEET 2
E-10	ELECTRICAL DETAILS SHEET 3
E-11	ELECTRICAL DETAILS SHEET 4

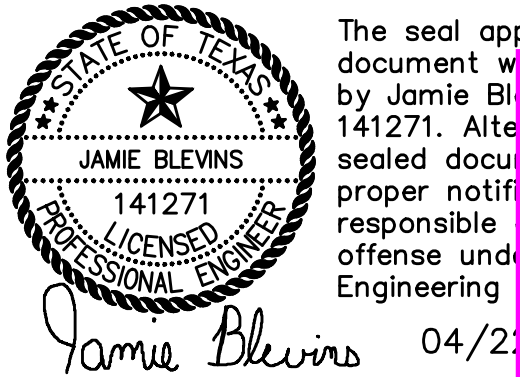
OWNER/DEVELOPER

GRBK EDGEWOOD, LLC
2805 DALLAS PARKWAY, SUITE 400
PLANO, TEXAS 75093
817-658-2112
CONTACT: BOBBY L. SAMUEL III
EMAIL: BSAMUEL@GREENBRICKPARTNERS.COM

ENGINEER - SURVEYOR

JBIPARTNERS
2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

CONTACT:
JAMIE BLEVINS, PE
JBLEVINS@JBIPARTNERS.COM
817-323-7984



BHC Fourth Review
05-09-2024

Fourth review of the Lone Oak Phase 1 Lift Station Electrical Plans submittal. Our review is for general compliance with the City of Alvarado development requirements. It is based on the City's Code of Ordinances and Good Engineering Practice, and does not relieve the design engineer of their responsibilities as the Engineer of Record under the Texas Engineering Practice Act.

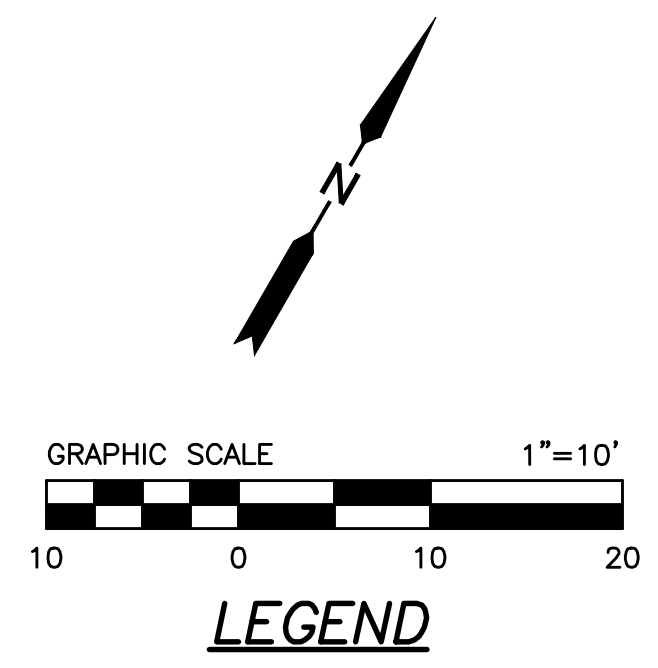
Resubmittal shall include previous review comments and the Engineer's responses to each comment, either on the marked up sheets or as a separate response letter.

Andrew Mata Jr., P.E.

FINAL ELECTRICAL PLANS SHALL BE , SIGNED, SEALED, AND DATED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TEXAS

PRELIMINARY PLANS SHALL NOT BE REVIEWED. THE INTENT OF REVIEW BY THE CITY IS ON FINAL COMPLETE PLANS.

CONFIRM FINAL ELECTRICAL PLANS HAVE BEEN QA/QC'ED WHEN SUBMITTING



- | | |
|---|---------------------------------|
|  | PROPOSED SANITARY SEWER MANHOLE |
| <u>PROP. SS</u> | PROPOSED SANITARY SEWER LINE |
| <u>PROP. FM</u> | PROPOSED FORCE MAIN |
| <u>PROP. 8" W</u> | PROPOSED WATER LINE |
| <u>575</u> | PROPOSED MAJOR CONTOUR |
| <u>574</u> | PROPOSED MINOR CONTOUR |
| × 570.5 | PROPOSED GROUND |
| × TP 570.5 | PROPOSED TOP OF PAD/PAVEMENT |
| --- 575 --- | EXISTING MAJOR CONTOUR |
| --- 574 --- | EXISTING MINOR CONTOUR |
|  | PHASE LINE |



CAUTION: Existing underground utilities.
Contractor to call for location
(1-800-DIG-TESS) and field verify the
location of all existing utilities prior to
excavation.



***NOTE**
FOR SUBGRADE STABILIZATION AND BACK
FILL REQUIREMENTS (SEE SHEET LS-08)

SEE REFERENCE SHEET
ALTERNATE HAUL ROUTE EXHIBIT
FOR DETAILS ON TEMPORARY
ACCESS ROAD TO LIFT STATION.

SCADA SYSTEM
COMPANY: WALLACE ELECTRIC
CONTACT: PAYTON WALLACE
PHONE: 254-495-7901

CONTRACTOR SHALL PURCHASE
PUMPS FROM GLOBAL PUMP
SOLUTIONS
CONTACT: CHARLES NORMAN
PHONE: 817-781-5858

- ALL GUIDE RAILS, TOP MOUNTING BRACKETS FOR GUIDE RAILS, SIDE BRACKETS GUIDE RAILS, POWER CABLE, CABLE HOLDER, SAFETY CHAIN, & CONTROL PANEL FOR PUMP ARE TO BE PROVIDED BY THE PUMP SUPPLIER

PUMP NOTES:
CONTRACTOR TO PROVIDE SHOP
DRAWINGS FOR APPROVAL PRIOR TO
INSTALLATION.

1. CONTROLS & CONTROL PANEL TO BE
SUPPLIED BY PUMP MANUFACTURER
& CONSTRUCTED BY CONTRACTOR.
2. INTERMEDIATE GUIDE BAR HOLDERS
SHALL BE PLACED AS PER PUMP
MANUFACTURER'S RECOMMENDATION.
3. 5 FLOAT LEVEL SWITCHES SUPPLIED
BY PUMP SUPPLIER TO BE
INSTALLED AT DESIGNATED PUMP
CUTOFF LEVELS.

GRADING NOTES:

1. ALL EARTHWORK SHALL CONFORM TO SITE GEOTECHNICAL REPORT SPECIFICATIONS.
2. THE LIFT STATION SITE IS OUTSIDE THE LIMITS OF THE 100-YEAR FLOOD PLAIN.
3. SEE SECTION DETAILS FOR ELEVATIONS WITHIN THE LIFT STATION.
4. ANY SLOPES GREATER THAN 3:1 SHALL BE REVIEWED BY THE OWNER'S GEOTECHNICAL ENGINEER FOR STABILITY PURPOSES. ALL SLOPES ARE DESIGNED AT A MAXIMUM OF 4 HORIZONTAL TO 1 VERTICAL UNLESS OTHERWISE NOTED.

CONCRETE STRUCTURE NOTES:
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2. CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR APPROVAL OF THRUST BLOCKING, RESTRAINED JOINTS, & WALL PENETRATIONS PRIOR TO INSTALLATION.
3. PROVIDE 1" WATERPROOF EXPANSION JOINTS ALONG ALL EDGES AT ALL COLD JOINTS BETWEEN CONCRETE SLAB AND ISOLATED STRUCTURES. (WET WELL & VALVE VAULT.)
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5. SAFETY GRATES TO OPEN OPPOSITE OF PIPE, GUIDE RAILS

PIPING NOTES:
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4. ALL WASTEWATER PIPING SHALL BE LINED WITH 40 MIL PROTECTO 401 CERAMIC EPOXY OR APPROVED EQUAL.
5. ALL EXPOSED PIPING SHALL BE COATED WITH (2) TWO 6 MIL DFT COATS (12 MIL TOTAL) OF DEVOE BAR-RUST 233H HIGH PERFORMANCE EPOXY COATING OR APPROVED EQUAL.
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BENCHMARKS

BM 1) "X" cut on concrete driveway apron located on the southwest side of County Road No. 607, in front of residence located at 1317 County Road No. 607, approximately 300 feet northwest of County Road No. 505.
ELEVATION = 707.20'

BM 2) "X" cut on concrete headwall located on the east side of County Road No. 607, approximately 3,500 feet north of U.S. Highway No. 67, near the most easterly south corner of subject tract.
ELEVATION = 756.49'

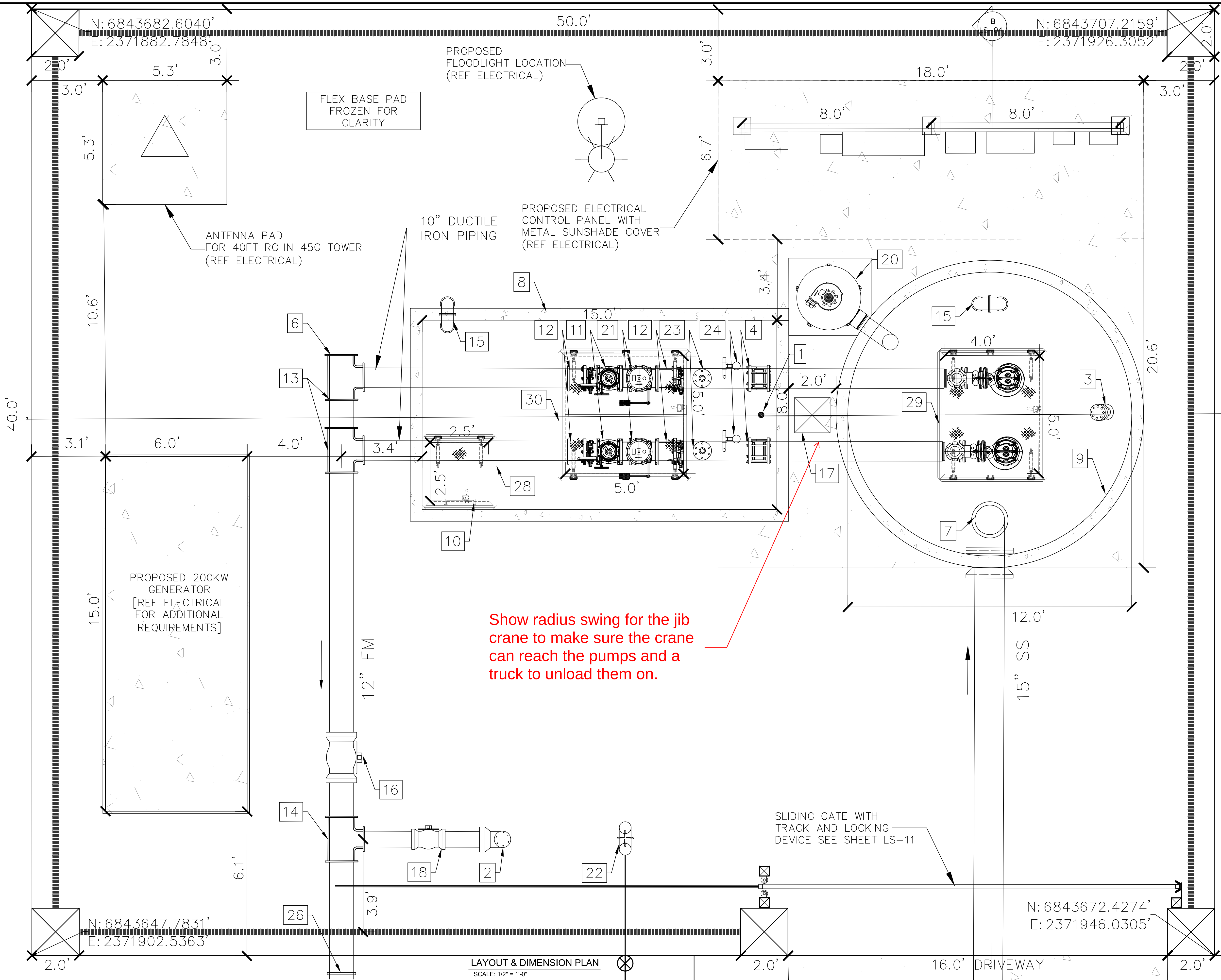
NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	SUBMITTALS	DATE

DESIGNED BY:		The seal appearing on this document was authorized by Jamie Blevins, P.E. 141271. Alteration of a sealed document without proper notification to the responsible engineer is an offense under the Texas Engineering Practice Act.
JB		
DRAWN BY:		
JB		
CHECKED BY:		04/22/2022
CW		



2121 Midway Road
Suite 300
Carrollton, Texas 75006
972.248.7676
TBPE No. F-438
TBPLS No. 10076000

LIFT STATION	PROJECT NO.
SITE PLAN	BBC010
LONE OAK, PHASE 1	SHEET NO.
City of Alvarado, Johnson County, Texas	LS-01



SCADA SYSTEM
COMPANY: WALLACE ELECTRIC
CONTACT: PAYTON WALLACE
PHONE: 254-495-7901

CONTRACTOR SHALL PURCHASE
PUMPS FROM GLOBAL PUMP
SOLUTIONS

CONTACT: CHARLES NORMAN
PHONE: 817-781-5858

- ALL GUIDE RAILS, TOP MOUNTING BRACKETS FOR GUIDE RAILS, SIDE BRACKETS GUIDE RAILS, POWER CABLE, CABLE HOLDER, SAFETY CHAIN, & CONTROL PANEL FOR PUMP ARE TO BE PROVIDED BY THE PUMP SUPPLIER

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*NOTE
FOR SUBGRADE STABILIZATION AND BACK
FILL REQUIREMENTS (SEE SHEET LS-08)

PAD IS SLOPED, SEE SHEET
LS-01 FOR CORNER ELEVATIONS

NUMBER REFERENCE TO NOTE

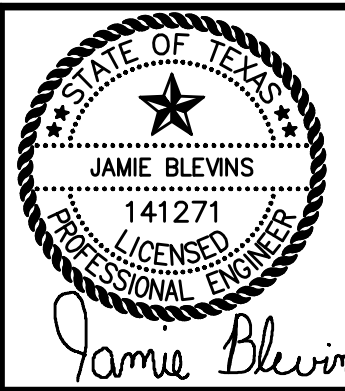
LIFT STATION ITEM KEY

1. FLOOR DRAIN IN VALVE VAULT WITH P-TRAP WITH SPRING ASSISTED FLAP CHECK VALVE INSIDE WET WELL.
2. 8" EMERGENCY BYPASS WITH PRESSURE RATED QDC CONNECTION AND DUST CAP.
3. 8" EMERGENCY BYPASS SUCTION LINE.
4. 10" RESTRAINT COUPLING (SMITH BLAIR 471 OR EQUAL) (2~TOTAL)
5. 10" 90° BEND (FL-FL) (2~TOTAL)
6. BLIND FLANGE ON 12" BRANCH OF TEE (MJ)
7. 24" RELINER DROP BOWL FOR 15" INLET PIPE.
8. 8'x15' PRECAST CONCRETE VAULT, CONTRACTOR TO PROVIDE STRUCTURAL SHOP DRAWINGS WITH SUBMITTALS.
9. 12" Ø ARMOROCK WET WELL. CONTRACTOR TO PROVIDE STRUCTURAL SHOP DRAWINGS WITH SUBMITTALS.
10. 18" WIDE ALUMINUM LADDER FOR ACCESS (SEE SHEET LS-09 FOR DETAILS)
11. 10" PLUG VALVE (FJ). (SEE PIPING NOTE 8) (2~TOTAL)
12. 10" DISMANTLING JOINT (SMITH BLAIR 973 OR APPROVED EQUAL) (4~TOTAL)
13. 12"x10" TEE (MJ) 90° HORIZ. THRUST BLOCKING. (2~TOTAL)
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19. PROVIDE "S-316" LINK SEAL MODULAR SEALS OR APPROVED EQUAL AT ALL CONCRETE PENETRATIONS FOR CONCRETE PENETRATIONS.
20. ODOR CONTROL UNIT (GC2-3B450) BY CARBTROL CORPORATION OR APPROVED EQUAL. (SEE SHEET LS-07 FOR DETAILS)
21. 10" SWING CHECK VALVE (FL-FL) APCO OR APPROVED EQUAL (2~TOTAL)
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26. 12" STEEL RESTRAINT COUPLING FOR TRANSITION FROM DUCTILE IRON TO PVC
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28. STAINLESS STEEL PEDESTRIAN ACCESS DOOR (USF, TPS 30"x30" ALUM) OR APPROVED EQUAL WITH FALL PROTECTION. LOCK IN THE OPEN POSITION. (SEE SHEET LS-09)
29. STAINLESS STEEL WET WELL ACCESS DOORS (USF, APD 55"x67") OR APPROVED EQUAL WITH FALL PROTECTION. LOCK IN THE OPEN POSITION. (SEE SHEET LS-09)
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REVISIONS DURING CONSTRUCTION				SUBMITTALS			
NO.	BY	DATE		NO.	DATE		

DESIGNED BY:
JB
DRAWN BY:
JB
CHECKED BY:
CW



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2121 Midway Road
Suite 300
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972.248.7676
TBPE No. F-438
TBPLS No. 10076000

LIFT STATION LAYOUT & DIMENSION PLAN		PROJECT NO. BBC010
LONE OAK, PHASE 1		SHEET NO. LS-02
City of Alvarado, Johnson County, Texas		

CONTRACTOR SHALL PURCHASE
PUMPS FROM GLOBAL PUMP
SOLUTIONS
CONTACT: CHARLES NORMAN
PHONE: 817-781-5858

- ALL GUIDE RAILS, TOP MOUNTING BRACKETS FOR GUIDE RAILS, SIDE BRACKETS GUIDE RAILS, POWER CABLE, CABLE HOLDER, SAFETY CHAIN, & CONTROL PANEL FOR PUMP ARE TO BE PROVIDED BY THE PUMP SUPPLIER

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FOR LIFT STATION BACK FILL REQUIREMENTS
(SEE SHEET LS-08)

1:1 FLOOR FILLET PER
HYDRAULIC INSTITUTE STANDARDS

14' x 14' x 1' CONCRETE BASE
TO PREVENT WET WELL FROM FLOATING

3"-5" LEAN CONCRETE MUD
SLAB 2,000 PSI AT 28 DAYS
TO BE PLACED DIRECTLY-
BELOW MAT FOUNDATION OF
WET WELL. (SEE SHEET LS-08)

B SECTION
SCALE: 1/2" = 1'-0"

DESIGNED BY:

DRAWN BY:

CHECKED BY:

CW

STATE OF TEXAS
JAMIE BLEVINS
141271
LICENSED
PROFESSIONAL ENGINEER

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04/22/2022



2121 Midway Road
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LIFT STATION

SECTION B

LONE OAK, PHASE 1

City of Alvarado, Johnson County, Texas

PROJECT
NO.

BBC010

SHEET NO.

11 S-04

Design Flow Calculations												
Land Use Assumption	Service Area (Acre)	No. of Units	Persons Per Unit	Population	Unit Flowrate (gal/person/day)	Average Service Flow (gpd)	Average Service Flow (MGD)	Infiltration (gal/acre/day)	Infiltration Total (mgd)	Peak Factor (City)	Peak Flowrate (mgd)	Peak Flowrate (gpm)
Phase 1	70.23	257	3.50	900	100	89,950	0.0900	650	0.0456	4.0	0.4054	281.6
Phase 2	68.39	362	3.50	1267	100	126,700	0.1267	650	0.0445	4.0	0.5513	382.8
Phase 3	99.06	314	3.50	1099	100	109,900	0.1099	650	0.0644	4.0	0.5040	350.0
Phase 4	96.09	245	3.50	858	100	85,750	0.0858	650	0.0625	4.0	0.4055	281.6
TOTAL	333.77	1178	-	4123	-	412,300	0.4123	-	0.2170	-	1.8662	1296

the column
to clarify that

Peak Design Flow	1,296 gpm		
Force Main Velocity			
Size	12 Inches		
Area	0.785 Sq. ft.		
Flow (Q=V*A)	1,296 gpm	*Min. velocity per TCEQ = 3.0 fps	
	2.887 c.f.s.		
Velocity	3.676 f.p.s.	*Per TCEQ 3 < V < 6	GOOD
Wet Well Storage			
		*Min. 6 minute cycle time per TCEQ for <50 hP Pumps	
Pump Capacity	1,296 gpm	*Min. 10 minute cycle time per TCEQ for >50 hP Pumps	
Diameter	12 feet	*Min. 15 minute cycle time per TCEQ for >100 hP Pumps	
Cycle Time	10 minutes		
Total Volume Required	433.134 ft^3	3240 gallons	Volume required
Area per foot Wet Well	113.097 ft^2		
Depth Required	3.830 ft.		

Floor = Wet well bottom (referenced as 0.00 ft)	
Min = minimum depth requirement from top of pump volume to floor	
Off = Pump shutdown level	formula for Off : Min. pump volume + 0.5 foot
Lead = Lead Pump start level	formula for Lead : Off + (Vmin/volume per foot)
Lag = Lag Pump start level	formula for Lag : Lead + 0.5 foot (arbitrary, adjust if desired)
Hi = High Water Alarm level	formula for Hi : Lag + 0.5 feet (arbitrary, adjust if desired)
Overflow(minimum ft) = Lowest SS overflow point in system	formula for Overflow: Lead + wet well depth req'd for 20 minutes

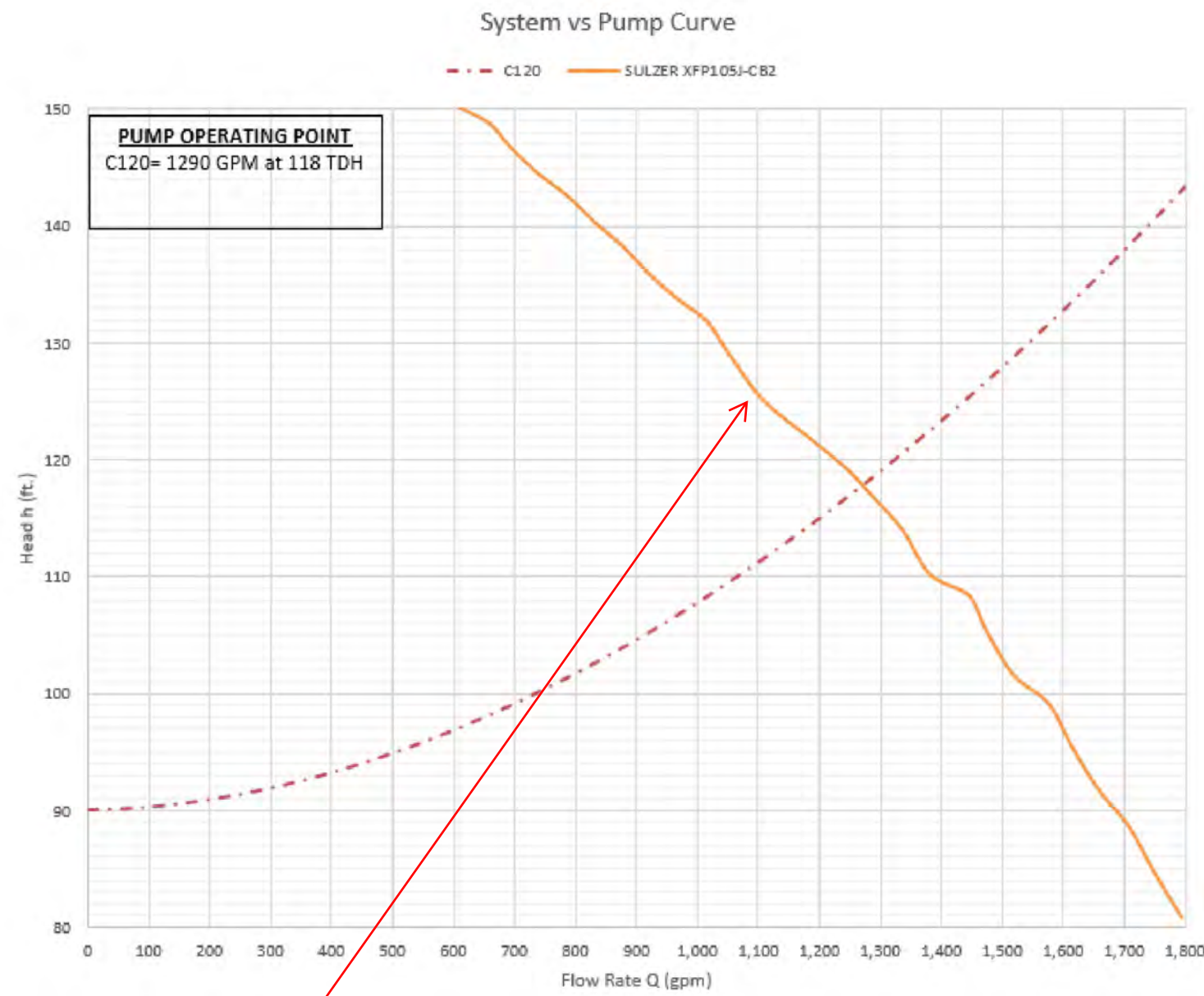
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Surge Pressure Calculations	
PVC Force Main DR	18
Pressure Class	235 psi
Max Surge allowed for PVC = 1.6^*PC	376 psi
Maximum Operational Pressure (P_{op})	51.1 psi
Surge Pressure (P_{surge})	63.9 psi
Occasional Total Surge Pressure = $P_{op} + P_{surge}$	115.0 psi
Occasional Total Surge Pressure < Max Allowed	OK
w = Density of Water	62.4 pcf
V = Max Velocity	3.68 fps
E (PVC)	400000 psi
K (Water)	300000 psi

Cycle Time Analysis				
Phase	Units	Inflow (Q) gpm	Pump Flow Qp (gpm)	Cycle Time (min)
	300	330	1290	17.5
	500	550	1290	13.7
	800	880	1290	15.4
	1000	1100	1290	26.6
Buildout	1178	1296	1290	-722.3
	Wet Well Volume		4309 gallons	
	gpm per unit		1.10	
	Pumping Rate		1,290 gpm	

- Update cycle time

Emergency Wet Well Storage		*Per TCEQ: Assume 20 min. power outage
Min. Elevation in sewer system	704.84 (SS-01, Sta. 2+08.06)	Lowest Manhole Rim or top of WW - 1 ft of freeboard
Storage Req. for 20 min. Outage		
Peak Flow	1,296 gpm	
Time	20 min	
Storage Volume	25,919 gal 3,465 ft. ³	
Volume in Wet Well per Foot		
Square Wet Well	12 ft.	
Height	1 ft.	
Volume	144,000 ft. ³ 1077 gallons	Volume Provided Per Foot
Volume of storage		
Min. Elevation in sewer system	704.84 ft.	Lowest Manhole or Wet Well with 1' Freeboard
Lead Pump	687.00 ft.	
Elevation Diff.	17.84 ft.	
Volume	2568.96 ft. ³ 19217 gallons	Total Volume Provided to Min. elevation in system
Emergency Generator with automatic transfer swith is being provided.		

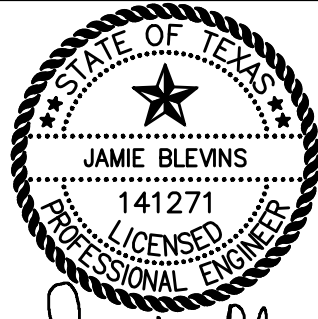


BM 1) "X" cut on concrete driveway apron located on the southwest side of County Road No. 607, in front of residence located at 1317 County Road No 607, approximately 300 feet northwest of County Road No. 505.
ELEVATION = 707.20'

BM 2) "X" cut on concrete headwall located on the east side of County Road No. 607, approximately 3,500 feet north of U.S. Highway No. 67, near the most easterly south corner of subject tract.
ELEVATION = 756.49'

NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	SUBMITTALS	DATE

015015B (B)



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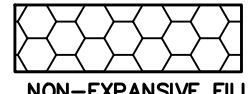


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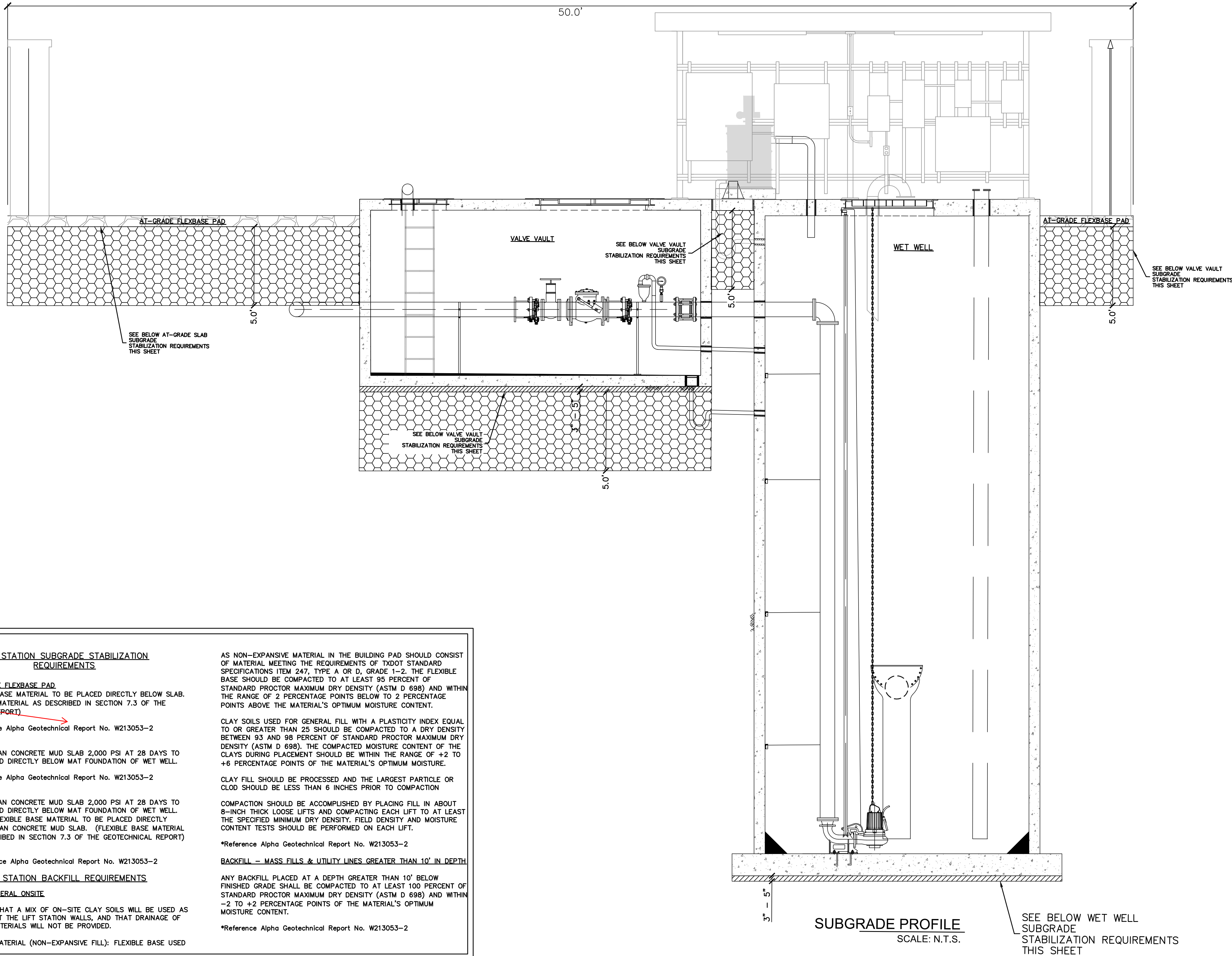
City of Alvarado, Johnson County, Texas

LS-05

LEGEND



NON-EXPANSIVE FILL



Submit geotech report.

LIFT STATION SUBGRADE STABILIZATION REQUIREMENTS

BELOW AT-GRADE FLEXBASE PAD
5' OF FLEXIBLE BASE MATERIAL TO BE PLACED DIRECTLY BELOW SLAB. (FLEXIBLE BASE MATERIAL AS DESCRIBED IN SECTION 7.3 OF THE GEOTECHNICAL REPORT)

*Reference Alpha Geotechnical Report No. W213053-2

BELOW WET WELL
1. 3"-5" LEAN CONCRETE MUD SLAB 2,000 PSI AT 28 DAYS TO BE PLACED DIRECTLY BELOW MAT FOUNDATION OF WET WELL.

*Reference Alpha Geotechnical Report No. W213053-2

VALVE VAULT
1. 3"-5" LEAN CONCRETE MUD SLAB 2,000 PSI AT 28 DAYS TO BE PLACED DIRECTLY BELOW MAT FOUNDATION OF WET WELL.
2. 5' OF FLEXIBLE BASE MATERIAL TO BE PLACED DIRECTLY BELOW LEAN CONCRETE MUD SLAB. (FLEXIBLE BASE MATERIAL AS DESCRIBED IN SECTION 7.3 OF THE GEOTECHNICAL REPORT)

*Reference Alpha Geotechnical Report No. W213053-2

LIFT STATION BACKFILL REQUIREMENTS

BACK FILL - GENERAL ONSITE
IT IS EXPECTED THAT A MIX OF ON-SITE CLAY SOILS WILL BE USED AS BACKFILL AGAINST THE LIFT STATION WALLS, AND THAT DRAINAGE OF THE BACKFILL MATERIALS WILL NOT BE PROVIDED.

FLEXIBLE BASE MATERIAL (NON-EXPANSIVE FILL): FLEXIBLE BASE USED

AS NON-EXPANSIVE MATERIAL IN THE BUILDING PAD SHOULD CONSIST OF MATERIAL MEETING THE REQUIREMENTS OF TxDOT STANDARD SPECIFICATIONS ITEM 247, TYPE A OR D, GRADE 1-2. THE FLEXIBLE BASE SHOULD BE COMPACTED TO AT LEAST 98 PERCENT OF STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698) AND WITHIN THE RANGE OF 2 PERCENTAGE POINTS BELOW TO 2 PERCENTAGE POINTS ABOVE THE MATERIAL'S OPTIMUM MOISTURE CONTENT.

CLAY SOILS USED FOR GENERAL FILL WITH A PLASTICITY INDEX EQUAL TO OR GREATER THAN 25 SHOULD BE COMPACTED TO A DRY DENSITY BETWEEN 93 AND 98 PERCENT OF STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698). THE COMPACTED MOISTURE CONTENT OF THE CLAYS DURING PLACEMENT SHOULD BE WITHIN THE RANGE OF +2 TO +6 PERCENTAGE POINTS OF THE MATERIAL'S OPTIMUM MOISTURE.

CLAY FILL SHOULD BE PROCESSED AND THE LARGEST PARTICLE OR CLOD SHOULD BE LESS THAN 6 INCHES PRIOR TO COMPACTION

COMPACTION SHOULD BE ACCOMPLISHED BY PLACING FILL IN ABOUT 8-INCH THICK LOOSE LIFTS AND COMPACTING EACH LIFT TO AT LEAST THE SPECIFIED MINIMUM DRY DENSITY. FIELD DENSITY AND MOISTURE CONTENT TESTS SHOULD BE PERFORMED ON EACH LIFT.

*Reference Alpha Geotechnical Report No. W213053-2

BACKFILL - MASS FILLS & UTILITY LINES GREATER THAN 10' IN DEPTH
ANY BACKFILL PLACED AT A DEPTH GREATER THAN 10' BELOW FINISHED GRADE SHALL BE COMPACTED TO AT LEAST 100 PERCENT OF STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698) AND WITHIN -2 TO +2 PERCENTAGE POINTS OF THE MATERIAL'S OPTIMUM MOISTURE CONTENT.

*Reference Alpha Geotechnical Report No. W213053-2

BENCHMARKS
BM 1) "X" cut on concrete driveway apron located on the southwest side of County Road No. 607, in fron of residence located at 1317 County Road No 607, approximately 300 feet northwest of County Road No. 505.
ELEVATION = 707.20'

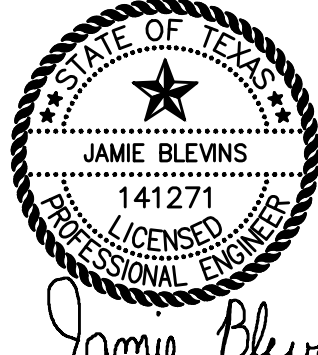
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NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	SUBMITTALS	DATE			

DESIGNED BY:
JB

DRAWN BY:
JB

CHECKED BY:
CW



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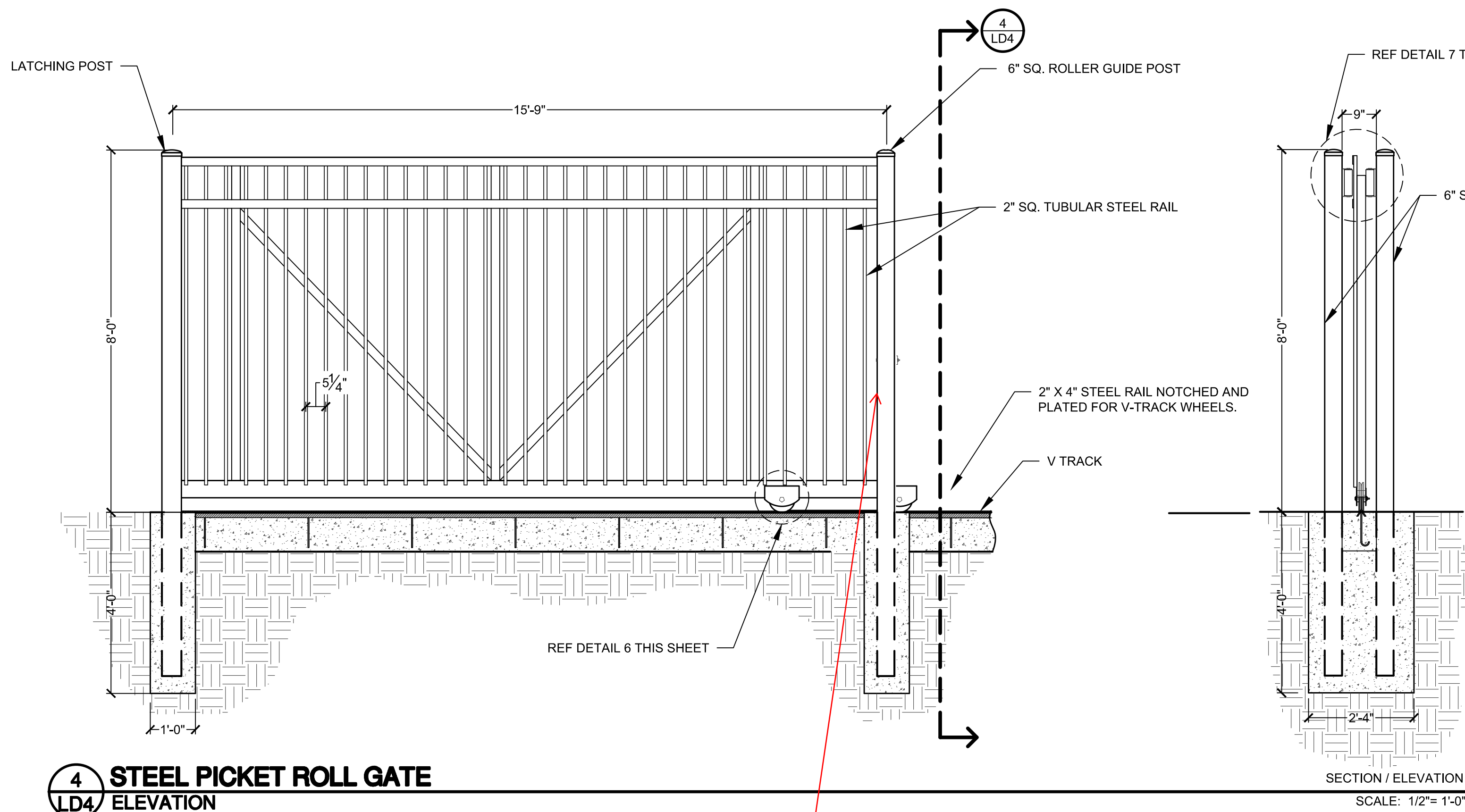
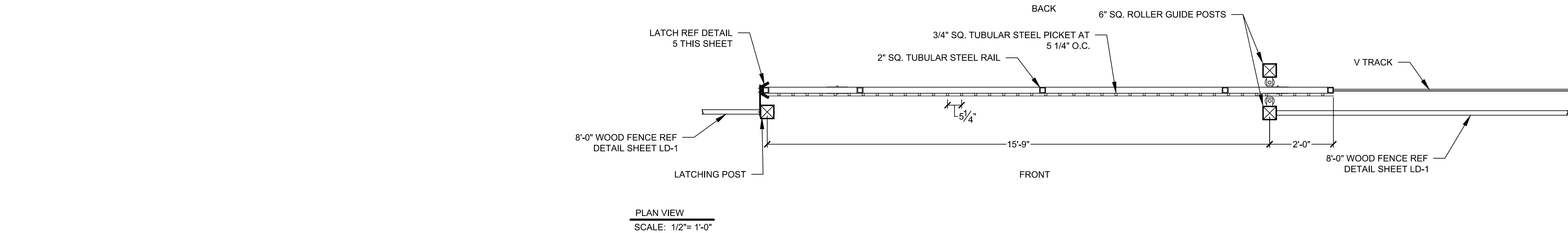
Jamie Blevins 04/22/2022



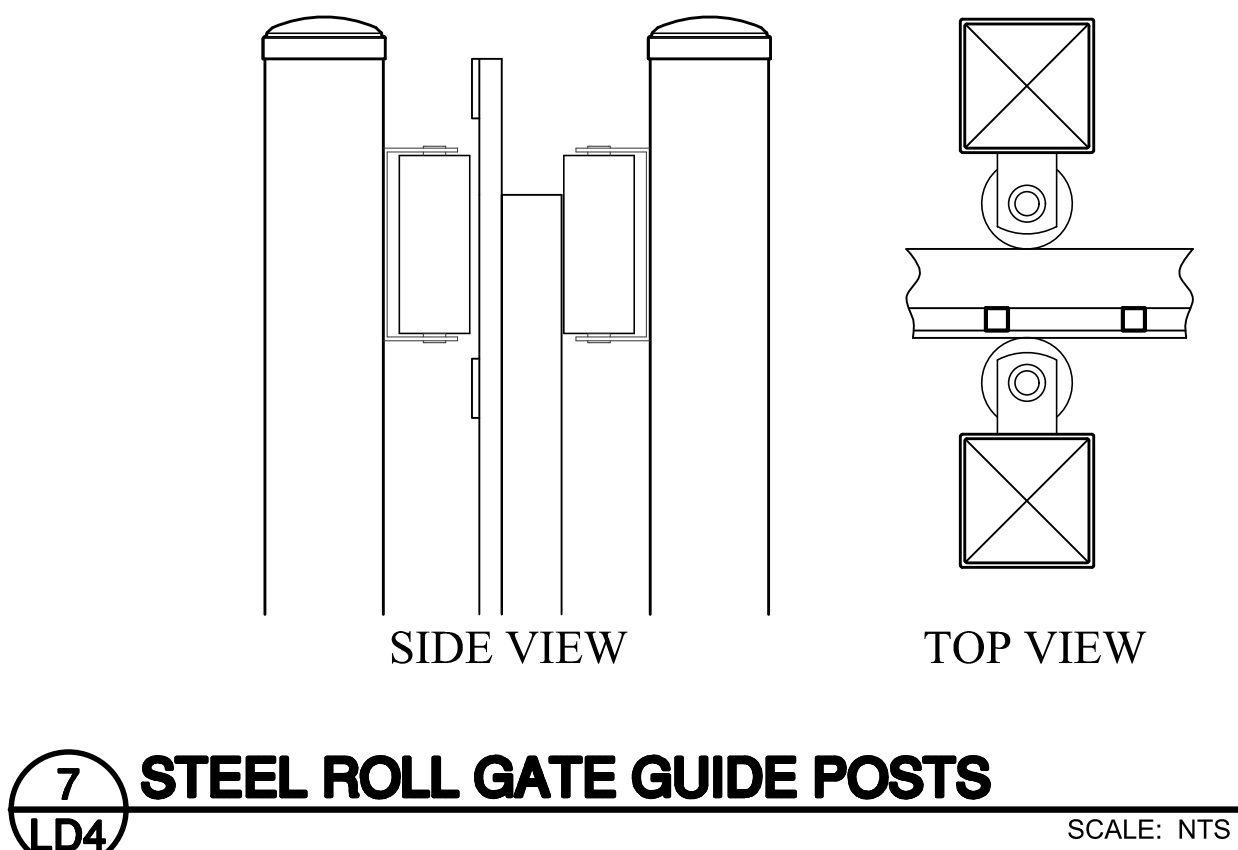
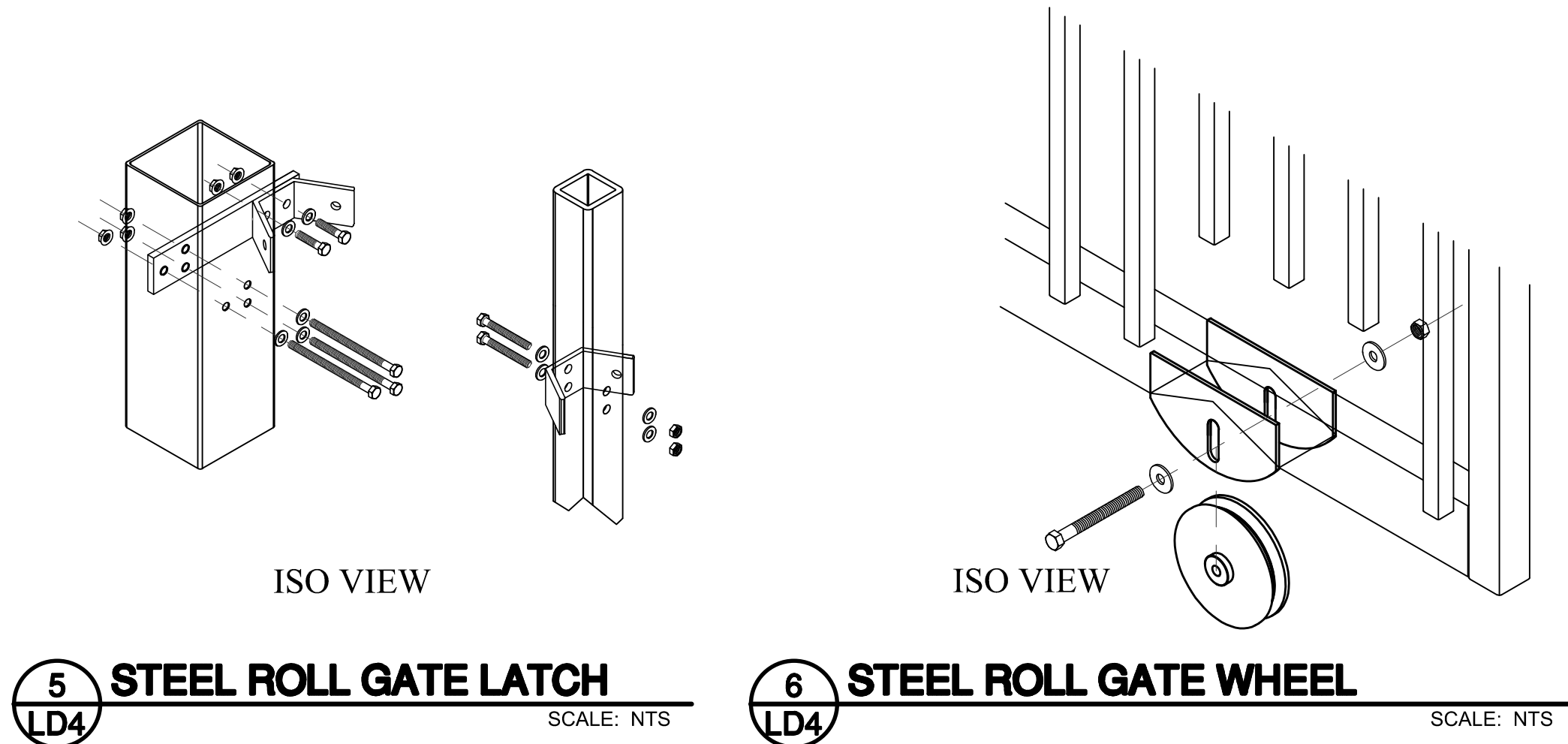
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LIFT STATION		PROJECT NO.
SUBGRADE & BACKFILL REQUIREMENTS		BBC010
LONE OAK, PHASE 1		SHEET NO.
City of Alvarado, Johnson County, Texas		LS-08





Include locking rings
for padlocks



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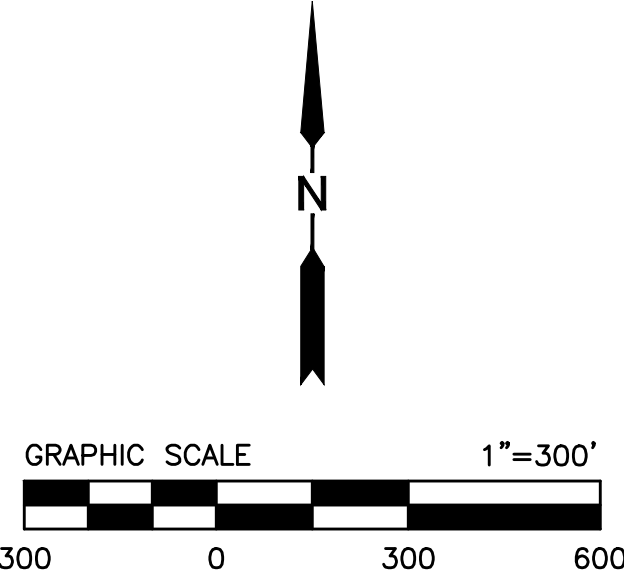
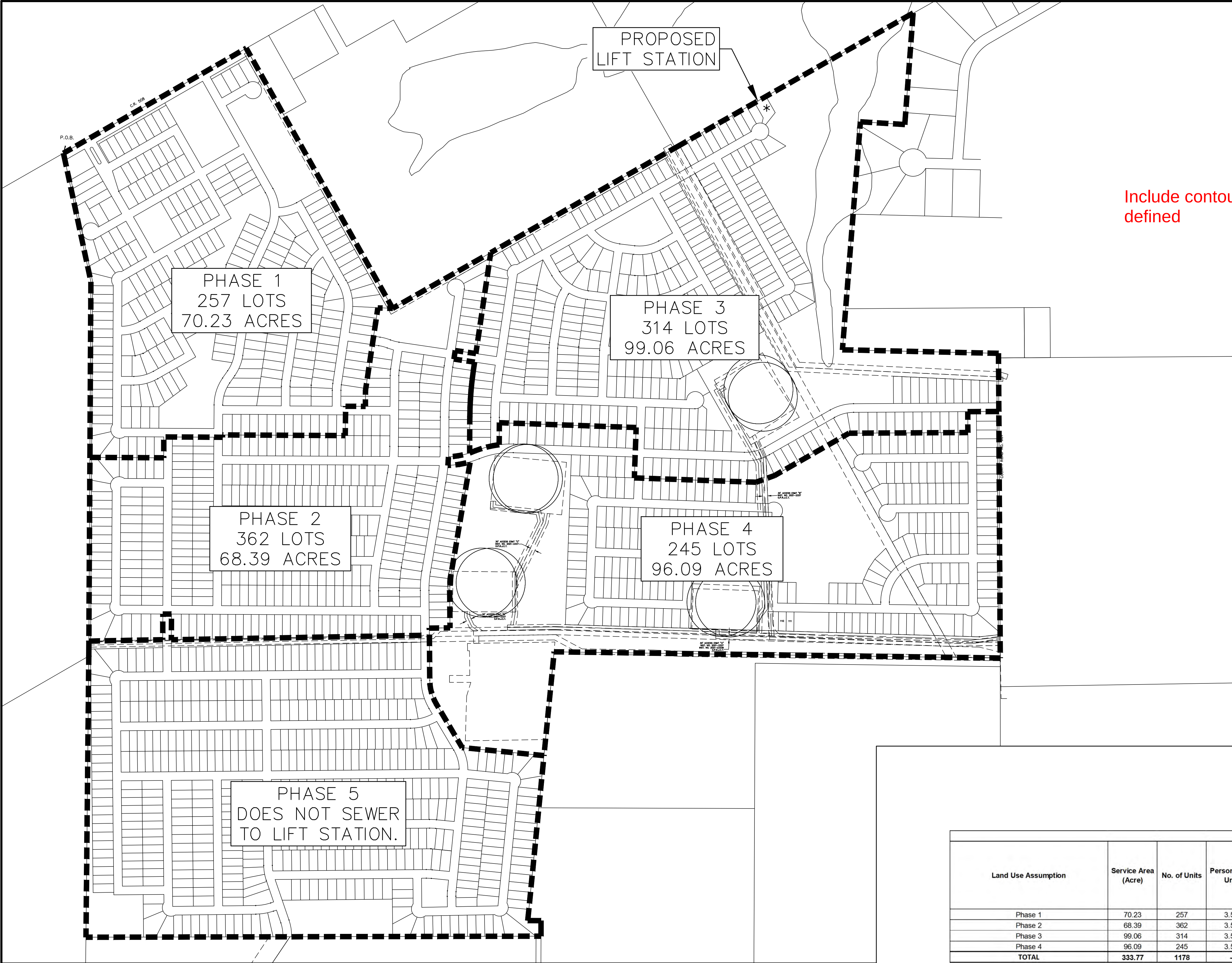
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TBPE No. F-438
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LIFT STATION	PROJECT NO.
SLIDING GATE DETAILS	BBC010
LONE OAK, PHASE 1	SHEET NO.
City of Alvarado, Johnson County, Texas	LS-11



Design Flow Calculations												
Land Use Assumption	Service Area (Acre)	No. of Units	Persons Per Unit	Population	Unit Flowrate (gal/person/day)	Average Service Flow (gpd)	Average Service Flow (MGD)	Infiltration (gal/acre/day)	Infiltration Total (mgd)	Peak Factor (City)	Peak Flowrate (mgd)	Peak Flowrate (gpm)
Phase 1	70.23	257	3.50	900	100	89,950	0.0900	650	0.0456	4.0	0.4054	281.6
Phase 2	68.39	362	3.50	1267	100	126,700	0.1267	651	0.0445	4.0	0.5513	382.9
Phase 3	99.06	314	3.50	1099	100	109,900	0.1099	652	0.0646	4.0	0.5042	350.1
Phase 4	96.09	245	3.50	858	100	85,750	0.0858	653	0.0627	4.0	0.4057	281.8
TOTAL	333.77	1178	-	4123	-	412,300	0.4123	-	0.2175	-	1.8867	1296

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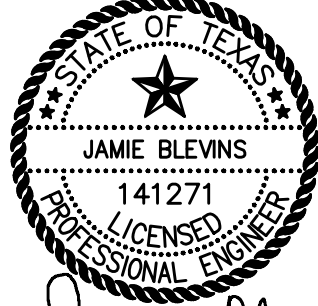
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Basin Area Map		PROJECT NO.
		BBC010
LONE OAK, PHASE 1		SHEET NO.
City of Alvarado, Johnson County, Texas		Exhibit

ELECTRICAL PLAN LEGEND	
SYMBOL	DESCRIPTION
	ABOVE GROUND CONDUIT
	UNDERGROUND CONDUIT
	GROUND CONDUCTOR
	GROUND WELL
	FLOODLIGHT
	20A, LIGHT SWITCH IN WEATHER-PROOF FS BOX
	PHOTO ELECTRIC SWITCH
	PRESSURE SWITCH
	FLOW INDICATING TRANSMITTER
	TEMPERATURE INDICATING TRANSMITTER
	20A, 125V, GFI RECEPTACLE IN METAL-CLAD WEATHER PROOF WHILE-IN-USE COVER
	JUNCTION BOX
	ALARM BEACON
	WEATHERHEAD
	CONDUIT MARKER (SEE CONDUIT SCHEDULE THIS SHEET)

ONE-LINE DIAGRAM LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	MOLDED CASE CIRCUIT BREAKER		OILER HEATER WITH THERMOSTAT
	STARTER (SIZE NOTED)		MOTOR WINDING THERMOSTAT
	THREE-PHASE MOTOR (HORSEPOWER NOTED)		POWER FACTOR CORRECTION CAPACITOR
	ELECTRICAL GROUND		POWER QUALITY MONITOR
	PHASE FAILURE RELAY		NEUTRAL/GROUND BOND
	PRESSURE SWITCH		ELAPSED TIME METER
	OILER SOLENOID		INDICATING LIGHT (COLOR AS SHOWN: G=GREEN, R=RED, A=AMBER, B=BLUE, W=WHITE)
	TEMPERATURE INDICATING TRANSMITTER		HAND-OFF-AUTO SWITCH
	LOCAL LOCK STOP		OFF-AUTO SWITCH
	TEMPERATURE SWITCH		TIME DELAY RELAY
	VIBRATION SWITCH		CONDUIT MARKER (SEE CONDUIT SCHEDULE THIS SHEET)
	FLOW METER		ITEM LOCATED ON LIFT STATION CONTROL PANEL SWING-OUT PANEL
	SURGE PROTECTIVE DEVICE		SOLID STATE REDUCED VOLTAGE STARTER
	MOTOR SPACE HEATER		
	SPECIAL DEVICE (SEE SCHEDULE THIS SHEET)		
	SOLID STATE OVERLOAD		

CONTROL DIAGRAM LEGEND	
SYMBOL	DESCRIPTION
	MOLDED CASE CIRCUIT BREAKER
	SELECTOR SWITCH
	PUSH BUTTON
	CONTROL/ TIME-DELAY RELAY - PLUG IN
	RELAY CONTACT (NORMALLY OPEN - NORMALLY CLOSED)
	TIME-DELAY RELAY CONTACT
	MOTOR STARTER COIL
	MOTOR OVERLOAD
	ELAPSED TIME METER
	INDICATING LIGHT - LED TYPE - PUSH-TO-TEST (COLOR AS SHOWN: G=GREEN, R=RED, A=AMBER, B=BLUE, W=WHITE)
	MOTOR SPACE HEATER
	TEMPERATURE SWITCH
	FLOAT SWITCH
	SPECIAL DEVICE (SEE SCHEDULE THIS SHEET)
	ITEM LOCATED ON LIFT STATION CONTROL PANEL SWING-OUT PANEL
	ITEM LOCATED ON SCADA PANEL SWING-OUT PANEL

ABBREVIATIONS

#PDT - # POLE, DOUBLE THROW;
WHERE # IS # OF POLES (S=SINGLE, D=DOUBLE)
A - AMPS OR AMPERES
ASP - AUTOSENSORY PANEL
BC - BARE COPPER
C - CONDUIT
CC - COPPER CLAD
CCB - CABLE GLAND BUSHING
CLR - CLEARANCE
CR - CONTROL RELAY
DTL - DETAIL
ETM - ELAPSED TIME METER
EW - EACH WAY
FG - FINISHED GRADE
FIN - FINISHED (AS IN FINISHED GRADE)
G; GND - GROUND
HDG - HOT DIPPED GALVANIZED
HTR - HEATER
M - MOTOR
MIN - MINIMUM
MLO - MAIN LUGS ONLY
MSH - MOTOR SPACE HEATER
NEMA - NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
N; NEU - NEUTRAL
NG - NEUTRAL/GROUND BOND
NTS - NOT TO SCALE
OC - OFF CENTER
OL - OVERLOAD
P - POLES
PFCC - POWER FACTOR CORRECTION CAPACITOR
PROP - PROPOSED
PVC - POLYVINYL CHLORIDE
RGS - RIGID GALVANIZED STEEL
SCH - SCHEDULE
SHT - SHEET
SPD - SURGE PROTECTIVE DEVICE
S.S.; STN STL - STAINLESS STEEL
TD - TIME DELAY RELAY
TYP - TYPICAL
V - VOLT/VOLTAGE
W/ - WITH
WIU - WHILE IN USE
WP - WEATHERPROOF OR WEATHER PROTECTED
GFCI - GROUND FAULT CIRCUIT INTERRUPTER

GENERAL NOTES:

- ALL CONSTRUCTION SHALL COMPLY WITH LOCAL AND NATIONAL CODES AND REQUIREMENTS.
- CONDUITS SHALL NOT BE ROUTED ACROSS WALKWAYS, PATHS OF ACCESS, TRAVEL, OR EGRESS. ROUTE BENEATH GRATINGS, IN CONCRETE STRUCTURES, OR AROUND EQUIPMENT. DO NOT ROUTE IN CONFLICT WITH OTHER PIPING, CONDUITS, EQUIPMENT, OR STRUCTURES.
- CONDUITS SHOWN ARE FOR SIGNIFICANT PIECES OF ELECTRICAL EQUIPMENT AND IN A DIAGRAMMATICAL ORIENTATION FOR CLARITY. INSTALL ALL CONDUITS AND CONDUCTOR SPECIFIED IN OTHER ELECTRICAL SCHEMATICS, SCHEDULES, SPECIFICATIONS, AND AS REQUIRED FOR VENDOR SUPPLIED EQUIPMENT. ROUTE CONDUITS THE BEST WAY TO MINIMIZE BENDS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY AND ALL PERMITS ASSOCIATED WITH THE WORK. THE COSTS OF THE PERMITS, IF ANY, SHALL BE BORNE BY THE CONTRACTOR.
- VERIFY BY FIELD INVESTIGATION THE LOCATIONS OF ALL UTILITY FACILITIES WITHIN AND ADJACENT TO THE LIMITS OF THE WORK THAT MAY BE AFFECTED BY THE WORK. CONFLICTS WHICH ARISE DUE TO THE NEGLIGENCE OF THE CONTRACTOR TO LOCATE, HORIZONTALLY AND VERTICALLY, EXISTING UTILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- ALL RECEPTACLES INSTALLED OUTDOORS AND INDOOR RECEPTACLES MARKED AS "WPWU" ON THE PLANS SHALL BE GFI TYPE WITH METAL WEATHERPROOF WHILE-IN-USE COVERS.
- ALL EXTERIOR ABOVE GRADE CONDUIT INSTALLED OUTDOORS AND OTHER WET AND OR CORROSIVE AREAS SHALL BE PVC-COATED ALUMINUM CONDUIT WITH STAINLESS STEEL MOUNTING HARDWARE.
- PROVIDE TRADITIONAL "NEMA" DEVICES AS DEFINED IN NEMA STANDARDS PUBLICATION NO. ICS 2.4.2003. IEC COMPONENTS ARE NOT ALLOWED.

SPECIAL DEVICE SCHEDULE			
ITEM	DESCRIPTION	ITEM	DESCRIPTION
	CABINET FAN - HOFFMAN CAT NO. A-PA4AXFN, 21 WATT, 120V (WITH RAIN SHIELD GRILLE)		PHOTOELECTRIC SWITCH - INTERMATIC SERIES K1100, 120 VOLT - MODEL NO. K1121
	CABINET HEATER - HOFFMAN CAT NO. DAH1001A, 115 VAC, 100 WATT		PROGRAMMABLE LOGIC CONTROLLER -SCHNEIDER SCADAPACK PLC - SEE SPECIFICATION 13321 FOR ADDITIONAL REQUIREMENTS
	CONTROL RELAY - WITH 4 S.P.D.T. SWITCHES RATED 10 AMPS AT 120 VOLT, COIL VOLTAGE AS NEEDED, FLAG AND LED STATUS INDICATORS, REMOVABLE LOCK-DOWN DOOR, COLOR-CODED PUSH-TO-TEST BUTTON, PLUG IN BASE AND SOCKET		PUMP PROTECTION MODULE - SEAL LEAK AND WINDING OVERTEMP ALARM, INDICATION, AND PROTECTION AS SHOWN AND PER MANUFACTURER'S REQUIREMENTS
	EXHAUST GRILLE - HOFFMAN CAT NO. A-VK66 LOUVER WITH CAT NO. A-FLT66 FILTER K.T. (WITH RAIN SHIELD GRILLE)		PHASE FAILURE RELAY - DIVERSIFIED ELECTRONICS MODEL NO. SLD-440-ALE, 480 VOLT, THREE-PHASE
	ETHERNET SWITCH - 16-PORT SMART ETHERNET SWITCH, W/MODBUS TCP COMMUNICATIONS, MOXA SDS-3016		POWER SYSTEM MONITOR - EATON POWER XPERT MONITOR MODEL NO. PXM2260 W/ HARMONICS AND ETHERNET GATEWAY OR APPROVED EQUAL
	ELAPSED TIME METER - CRAMER #653S, 120 VOLT		24 VDC POWER SUPPLY WITH UPS - PHOENIX CONTACT TRIO SERIES W/QUINT-BAT - SIZE POWER SUPPLY FOR 50% GREATER THAN LOAD AND BATTERY FOR 15 MIN
	FLASHING BEACON - LED, 65FPM, 120V, RED POLYCARBONATE LENS, EDWARDS #48XBMR120A		900MHZ INDUSTRIAL SERIAL RADIO FREEWAVE FGR3-CE-U, 24VDC, 902-928 MHZ, RF DATA RATE 80KBPS/115.2KBPS
	FLOAT SWITCH - DIRECT ACTING FLOAT SWITCH WITH 50 FOOT CABLE - SIEMENS MODEL 9G OR ANCHOR SCIENTIFIC ROTO-FLOAT-SST. PROVIDE CAST-IRON ADJUSTABLE WEIGHT FOR EACH FLOAT.		SURGE PROTECTION DEVICE - UL 1449, STATUS INDICATING LIGHTS, MOV TYPE SURGE ARRESTOR; RATED 50,000 AMPS PROTECTION MINIMUM
	VIBRATING PANEL MOUNT HORN - NEMA 4X, 120 VOLT - EDWARDS MODEL NO. 870P-N5		SURGE PROTECTIVE DEVICE - UL 1449 4TH EDITION, NOMINAL 120V, DIN RAIL MOUNTED; PHOENIX CONTACT MODEL PT2-PE/S-120 AC/FM PART #2856812 APPROVED EQUAL
	INTRINSICALLY SAFE RELAY - LOW CURRENT ISOLATION SWITCH, 5 AMPS, 24VDC CONTACTS		ANALOG SIGNAL SURGE PROTECTIVE DEVICE - PHOENIX CONTACT TT-2-PE/S1-24DC
	INDICATING LIGHT - PUSH TO TEST, LED, 30MM, OIL TIGHT, PLASTIC LENS, 120 VOLT, 60 HZ. - COLOR AS INDICATED		SURGE PROTECTIVE DEVICE - 100KA PER PHASE, UL 1449 4TH EDITION, SQUARE D SURGELOGIC SERIES OR EQUAL
	UPS MAINTENANCE BYPASS SWITCH-EATON MODEL EHBPL1500R-PDU1U OR APPROVED EQUAL		SUBMERSIBLE TRANSDUCER - WIKA LS-10 SUBMERSIBLE TRANSDUCER WITH LEVELGAURD ANTI-CLOG ATTACHMENT
	TWO-PUMP ALTERNATOR - WITH PUMP OMIT SWITCH, ATC DIVERSIFIED ELECTRONICS MODEL ARA-120-AHE		TIME DELAY RELAY - WITH 2 S.P.D.T. SWITCHES RATED 7 AMPS AT 120 VOLT, CONTACTS AND COIL, PLUG IN BASE AND SOCKET, 3 RANGES, 0.1 TO 100 SEC, ATC MODEL NO. 319D-134
	PROCESS DISPLAY - 4-20MA OUTPUT AND 2 RELAYS, NEMA 4X, IP65 FRONT, 24VDC, 6-DIGIT DISPLAY, SUNBRIGHT DISPLAY - PRECISION DIGITAL PD6000-6H5 OR EQUAL		UNINTERRUPTIBLE POWER SUPPLY - EATON 9SX SERIES W/RELAY OUTPUT CARD FOR CONNECTION TO ATD. PROVIDE ADDITIONAL BATTERY PACKS FOR 60MIN RUNTIME

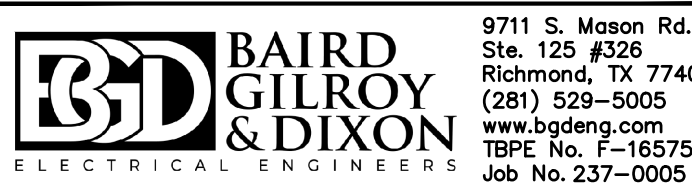
CONDUIT SCHEDULE					
NO.	SIZE & CONDUCTORS	FROM	TO	HP/AMP	DESCRIPTION
ATD-100	1" C, W/2 - #12 + #12 GND	PUMP CONTROL PANEL	AUTODIALER ENCLOSURE	-	AUTODIALER POWER
ATD-101	1" C, W/16-#14 + #12 GND	PUMP CONTROL PANEL	AUTODIALER ENCLOSURE	-	ALARMS
ANT-100	2" C, W/COAX CABLE + #12 GND	SCADA ANTENNA	PUMP CONTROL PANEL	-	SCADA SIGNAL
ATS-101	1 1/2" C, W/8 - #12 + 8-#14 + #12 GND	AUTOMATIC TRANSFER SWITCH	PUMP CONTROL PANEL	-	GENERATOR CONTROLS & MISC POWER
CRN-100	1" C, W/2-#10+ #10 GND	PUMP CONTROL PANEL	DAVIT CRANE	-	120V POWER FOR CRANE
FL-101	1" C, W/4-#12 + #12 GND	PUMP CONTROL PANEL	AREA LIGHT	-	AREA FLOODLIGHT & RECEPTACLE
FS-100	2" C, W/10-#14 + #12 GND	PUMP CONTROL PANEL	FLOATS/TRANSDUCER TERMINAL BOX	-	FLOAT SWITCHES
FS-101	2" C, W/MANUFACTURER'S CABLES	FLOATS	FLOATS/TRANSDUCER TERMINAL BOX	-	FLOAT SWITCHES
GEN-101	3" C, W/3-350 KCMIL + #1/0 NEU + #1/0 GND	GENERATOR	AUTOMATIC TRANSFER SWITCH	300A	GENERATOR POWER
GEN-102	1 1/2" C, W/8 - #12 + 8-#14 + #12 GND	GENERATOR	AUTOMATIC TRANSFER SWITCH	-	GENERATOR CONTROLS & MISC POWER
GEN-103	1" C, W/ ANNUNCIATOR CABLE	GENERATOR	AUTOMATIC TRANSFER SWITCH	-	GENERATOR ANNUNCIATOR
LP-100	1 1/2" C, W/3-#1 + #6 GND	PUMP CONTROL PANEL	LIFT PUMP NO. 1 TERMINAL BOX	70 HP	LIFT PUMP NO. 1 POWER & ALAR
LP-101	3" C, W/MANUFACTURER'S PUMP CABLE	LIFT PUMP NO. 1 TERMINAL BOX	LIFT PUMP NO. 1	-	LIFT PUMP NO. 1 SUBMERSIBLE
LP-200	1 1/2" C, W/3-#1 + #6 GND	PUMP CONTROL PANEL	LIFT PUMP NO. 2 TERMINAL BOX	70 HP	LIFT PUMP NO. 2 POWER & ALAR
LP-201	3" C, W/MANUFACTURER'S PUMP CABLE	LIFT PUMP NO. 2 TERMINAL BOX	LIFT PUMP NO. 2	-	LIFT PUMP NO. 2 SUBMERSIBLE
LT-100	1" C, W/#18 SHIELDED PAIR CABLE	PUMP CONTROL PANEL	FLOATS/TRANSDUCER TERMINAL BOX	-	LEVEL TRANSDUCER
LT-101	2" C, W/MANUFACTURER'S CABLES	LEVEL TRANSDUCER	FLOATS/TRANSDUCER TERMINAL BOX	-	LEVEL TRANSDUCER
ODR-100	1" C, W/2 - #10 + #10 GND + 4-#14	PUMP CONTROL PANEL	ODOR CONTROL	-	ODOR CONTROL POWER AND A
PWR-001	6" C, W/ CONDUCTORS BY POWER COMPANY	POWER COMPANY	UTILITY TRANSFORMER	-	UTILITY PRIMARY FEEDER
PWR-002	6" C, W/ CONDUCTORS BY POWER COMPANY	POWER COMPANY	UTILITY TRANSFORMER	-	UTILITY PRIMARY FEEDER
PWR-101	3" C, W/3-350 KCMIL + #1/0 NEU	UTILITY TRANSFORMER	METER	300A	UTILITY POWER
PWR-102	3" C, W/3-350 KCMIL + #1/0 NEU	METER	MAIN BREAKER	300A	UTILITY POWER
PWR-103	3" C, W/3-350 KCMIL + #1/0 NEU + #1/0 GND	MAIN BREAKER	AUTOMATIC TRANSFER SWITCH	300A	UTILITY POWER
PWR-104	3" C, W/3-350 KCMIL + #1/0 GND	AUTOMATIC TRANSFER SWITCH	PUMP CONTROL PANEL	300A	PUMP CONTROL PANEL FEEDER
VLT-101	1" C, W/2-#14 + #12 GND	PUMP CONTROL PANEL	VALVE VAULT	-	VALVE VAULT HIGHT LEVEL FLOA
VLT-102	1" C, W/4-#12 + #12 GND	PUMP CONTROL PANEL	VALVE VAULT	-	VALVE VAULT SIGNAL

LIGHT FIXTURE SCHEDULE							
TYPE	MANUFACTURER & MODEL NUMBER	VOLTAGE	INPUT POWER	MOUNTING	LAMP		REMARKS
					NO.	TYPE	
FL-1	LITHONIA DSXF2 LED P1 50K FL 120, DSXF1/2TS & UBV	120	54W	SLIP-FITTER	2	LED 5,000K 7,686 LUMENS	D-SERIES W/ UPPER-BOTTOM VISOR
B	EATON/CROUSE-HINDS MLLA4-UNV1-S903-TF-P	120	62W	SURFACE	2	LED 5,000K 7,900 LUMENS	4' WIDE OPTIC, CLEAR POLYCARBONATE LENS

FINAL ELECTRICAL PLANS SHALL BE , SIGNED, SEALED, AND DATED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF TEXAS

PRELIMINARY PLANS SHALL NOT BE REVIEWED. THE INTENT OF REVIEW BY THE CITY IS ON FINAL COMPLETE PLANS.

CONFIRM FINAL ELECTRICAL PLANS HAVE BEEN QA/QC'ED WHEN SUBMITTING



						DESIGNED BY:	ISSUED FOR INTERIM REVIEW ONLY THIS PLAN IS NOT COMPLETE AND IS NOT INTENDED FOR BIDDING, CONSTRUCTION, OR PERMIT PURPOSES. ENGINEER: JON-PAUL A. DIXON, P.E. TX. LICENSE No. 112808 ISSUED: APRIL 2024	JBIPARTNERS 2121 Midway Road Suite 300 Carrollton, Texas 75006 972.248.7676 TBPE No. F-438 TBPLS No. 10076000	LIFT STATION		PROJECT NO.
						DRAWN BY:			ELECTRICAL LEGENDS SCHEDULES AND NOTES		BBC010
						TJJ			LONE OAK, PHASE 1		SHEET NO.
						CHECKED BY:			City of Alvarado, Johnson County, Texas		E-01
NO.	REVISIONS DURING CONSTRUCTION	BY	DATE	NO.	SUBMITTALS	DATE	JAD				



Planning and Zoning Commission Meeting Management Report

Meeting Date: May 16, 2024

Contact: Justin French, Community Development Director

AGENDA ITEM:

Consideration and action on the application of Heath Voyles with Westfall Engineering on behalf of Shaw Development Group, LLC for approval of the Parkview at Alvarado Apartments Addition preliminary plat on 29.021 acres known as Tract 161 in the I. Glaze Survey, A-313, Tract 29A in the J. Dixon Survey, A-214, and Tract 1A in the J. M. Ross Survey, A-737, approximately addressed at 600 N. Parkway Drive.

BACKGROUND & FINDINGS:

The preliminary plat application was submitted and deemed administratively complete on April 17, 2023, then recommended for disapproval by the Planning and Zoning Commission on May 9, 2023. The applicant then requested that action on preliminary plat be tabled prior to City Council consideration and has now resubmitted to address the reasons for the recommendation of disapproval. Per Section 34-34.c of the Alvarado subdivision ordinance, the Planning and Zoning Commission shall:

- (1) Act within 30 days after the filing of preliminary plat,
- (2) Submit one of the following recommendations to the City Council.
 - a. Approve.
 - b. Approve with conditions.
 - c. Disapprove with reasons.

The Future Lane Use (FLU) map within the Alvarado Comprehensive Plan designates the north portion of the subject site for Local Business with Medium Density Residential behind. The west side of the subject site is primarily Floodplain with a smaller portion designated Interstate Business having frontage to N. Parkway Drive (aka IH 35W Business Route). On April 4, 2022, City Council approved a rezoning of the site to the Planned Development (PD) District, and the rezoning in effect amended the Medium Density Residential on the Future Land Use map to High Density Residential. Staff finds the preliminary plat to comply with the minimum standards of the Alvarado subdivision ordinance and all other ordinances with the exceptions being stated in the attached recommended conditional approval letter.

FINANCIAL IMPACT:

None.

RECOMMENDATION:

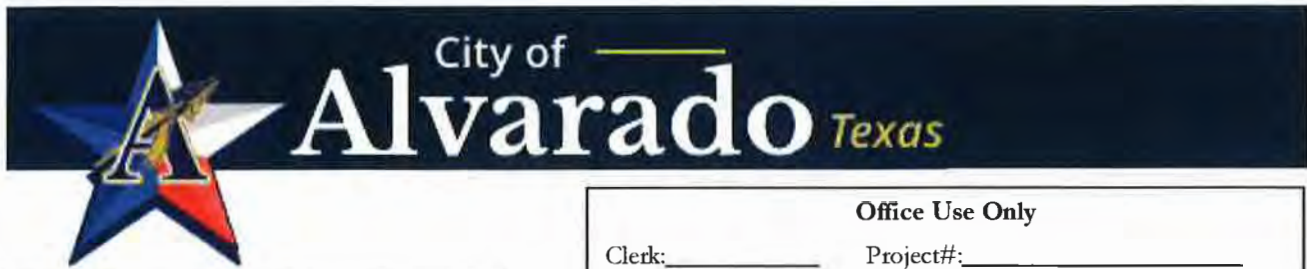
Staff suggests the Commission recommend to Council approval with conditions listed in the recommended conditions of approval letter attached.

MANAGEMENT REVIEW:

Paul DeBuff, City Manager

ATTACHMENTS:

Application Draft Recommended Conditions of Approval Letter
Location Map Preliminary Plat



PLAT APPLICATION

Office Use Only

Clerk: _____ Project#: _____
Fee: \$ _____
Date Pd: _____ Check# or Cash: _____
Receipt#: _____ Received by: _____

Please submit all plat documents and ensure they are in compliance with the City of Alvarado Subdivision Ordinance.

Type of Plat

☒ Preliminary Plat ☐ Final Plat ☐ Plat Revision ☐ Administrative Plat

Title of Plat Parkview at Alvarado Apartments

Total Lots 6 Total Acres 29.021 Current Zoning PD

Subdivision Name Parkview at Alvarado Apartments Lots 6 Block(s) 1

Survey Name(s) Ira Glaze Abstract No.(s) 313 Tract(s) _____

Address/Location Generally located at the SEC of HWY 67 and Parkway Dr.

Applicant

Company or Name Westfall Engineering

Contact Name Heath Voyles, PE

Address 1719 Angel Pkwy, Ste 400-206 City Allen State TX Zip 75002

Telephone 817-657-4759 Email HEATH@WESTFALLEENGINEERING.COM

Owner (If Different)

Company or Name Shaw Development Group, LLC

Contact Name Massey Shaw

Address 6255 Woodland Dr City Dallas State TX Zip 75225

Telephone _____ Email _____

I further understand that this request will be placed on the appropriate Planning & Zoning Commission and City Council agendas and must meet requirements of the Subdivision Regulations. All plats must be accepted in writing. A plat is not considered filed until accepted by the City Council.



Signature of Applicant, Owner, or Authorized Agent

4/5/23

Date

Planning Official

Fee: \$

Date of P&Z Meeting

Date of Council Meeting

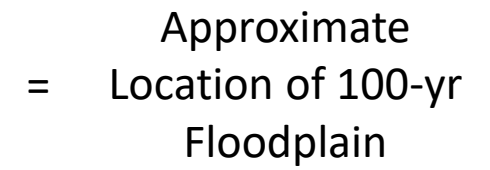
Signature of Planning Official

****FOR OFFICE USE ONLY****

Received By

Date Received

Date Approved





City of Alvarado
104 W. College Alvarado, TX 76009
817-790-3351 ♦ Fax 817-783-7925 ♦ www.cityofalvarado.org

April 11, 2024

Westfall Engineering
Attn: Heath Voyles, PE
1719 Angel Pkwy, Ste 400-206
Allen, TX 75002
817.657.4759
heath@westfallengineering.com

Re: Parkview at Alvarado Apartments Addition Preliminary Plat

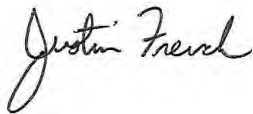
Dear Mr. Voyles,

This letter is to inform you that on April 11, 2024, the Alvarado Planning and Zoning Commission recommended approval of the preliminary plat for the Parkview at Alvarado Apartments Addition with the following conditions.

1. A 20-foot utility easement shall be dedicated along the plat's frontage to N. Parkway Drive. Sec. 34-170 of the Alvarado subdivision ordinance.
2. The tennis court may not be constructed within a sanitary sewer easement unless an easement use agreement is executed. Sec. 34-175 of the Alvarado subdivision ordinance.
3. F.L. must be added to the legend.
4. The purpose of the 30' Easement dedicated by instrument no. 20130018574 along the southern property line shall be noted as 30' Private Access Easement.
5. Lots 5 and 6 must be included in the final plat submittal for Lot 1.
6. Access to N. Parkway Drive must be constructed and pass City inspection prior to any building permits for vertical construction in Phase 2.
7. Per of the Alvarado subdivision ordinance, subdivisions within the city must provide an approved water supply and distribution system. An adequate water supply and distribution system, consistent with the master plan for water, must be a condition of plat approval.
8. If not already existing, the developer shall clarify how the undersized 12" sanitary sewer main between W. Patton Street and IH 35W will be upsized for the development's needs. The City's Wastewater Masterplan calls for this line to have a minimum 18" pipe size. A development agreement to oversize this wastewater main may be an option if the development does not warrant an 18" sanitary sewer main. Sec. 34-165(a) and Sec. 34-130 of the Alvarado subdivision ordinance
9. The City's wastewater treatment plant must be in conformance with TCEQ requirements prior to the recording of any final plat of this development.

10. Prior to the submittal of the final plat, construction plans for the recommendations in the approved **traffic impact analysis** (TIA) must be submitted for review.
11. To increase traffic safety and efficiency, drive approaches on N. Parkway Drive shall be limited and to facilitate this a dedication of a 24-foot-wide **private access easement** along N. Parkway Drive right-of-way (offset at least 18 feet) traversing from the N. Parkway Drive entrance to Lot 1, Block 1 of the L&T Thompson Addition will satisfy this comment. (Reference Sec. 34-176 of the Alvarado subdivision ordinance).
12. It was presented to the City that cross access between proposed Lots 1-3 and the EZ Mart property is provided by showing a fire lane on the plat; however, fire lanes may be gated as is evident on proposed Lot 1. Therefore, on the revised preliminary plat show a **private access easement** provide cross connectivity between at least Lots 1, 3, and the EZ Mart property. Then provide a note on the revised preliminary plat stating who the private access easement serves.
13. Per Sec. 34-66(14) of the Alvarado subdivision ordinance, the developer shall install **traffic signs, street signs, and sidewalks** within and adjacent to the subdivision, or shall provide cash deposit or other guarantee acceptable to the City for the payment of the cost of such installations prior to the final approval by the City Council.
14. Per Sec. 34-91(2)a.6 of the Alvarado subdivision ordinance, proposed boundaries of park dedications will provide reasonable access to improved street frontage for readily accessible entry into the park area by the public, and per Sec. 34.91(2)b, each park must have access to a public street. Dedication of a 24-foot-wide **private access easement** from the N. Parkway Drive entrance to Lot 1, Block 1 of the L&T Thompson Addition will satisfy this comment.

Sincerely,



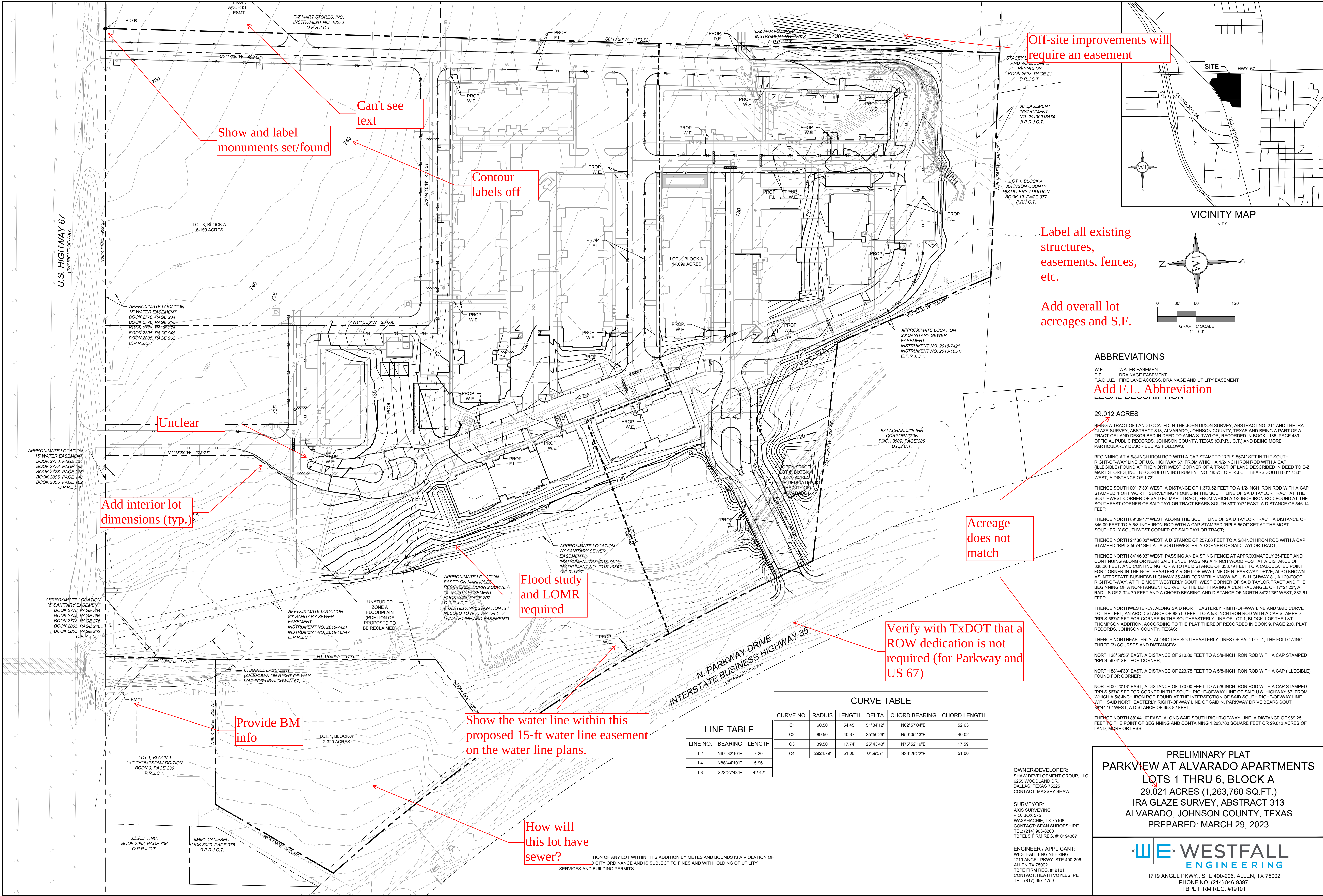
Justin French, AICP
Community Development Director
City of Alvarado
104 W. College Ave. | Alvarado, TX 76009
817.790.3351 | 817.240.9585 mobile
frenchj@cityofalvarado.org

cc.

Shaw Development Group, LLC
Attn: Massey Shaw and Brian Shaw
6255 Woodland Drive
Dallas, TX 75225
masseyshaw@gmail.com
brian@shawdevelopmentgroup.com

Att.

City Engineer Remarks on Preliminary Plat and Preliminary Engineering



Off-site improvements will require an easement

Show and label monuments set/found

Can't see text

Contour labels off

Label all existing structures, easements, fences, etc.

Add overall lot acreages and S.F.

Unclear

Add interior lot dimensions (typ.)

Acreage does not match

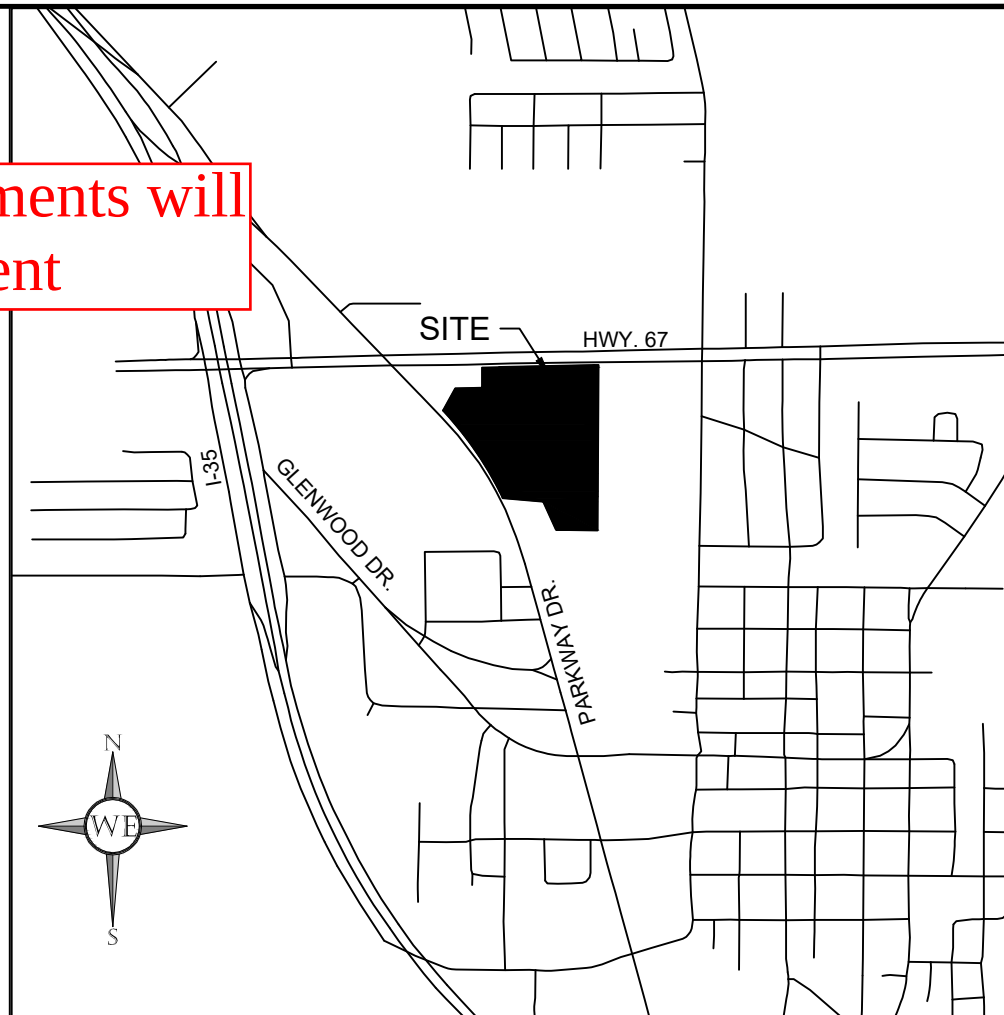
Flood study and LOMR required

Verify with TxDOT that a ROW dedication is not required (for Parkway and US 67)

Provide BM info

Show the water line within this proposed 15-ft water line easement on the water line plans.

How will this lot have sewer?



ABBREVIATIONS
W.E. WATER EASEMENT
D.E. DRAINAGE EASEMENT
F.A.D.U.E. FIRE LANE ACCESS, DRAINAGE AND UTILITY EASEMENT
Add F.L. Abbreviation
LEGEND

29.012 ACRES
BEING A TRACT OF LAND LOCATED IN THE JOHN DIXON SURVEY, ABSTRACT NO. 214 AND THE IRA GLAZE SURVEY, ABSTRACT 313, ALVARADO, JOHNSON COUNTY, TEXAS AND BEING A PART OF A TRACT OF LAND DESCRIBED IN DEED TO ANNA S. TAYLOR, RECORDED IN BOOK 1185, PAGE 489, OFFICIAL PUBLIC RECORDS, JOHNSON COUNTY, TEXAS (O.P.R.J.C.T.) AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 5/8-INCH IRON ROD WITH A CAP STAMPED "RPLS 5674" SET IN THE SOUTH RIGHT-OF-WAY LINE OF U.S. HIGHWAY 67, FROM WHICH A 1/2-INCH IRON ROD WITH A CAP (ILLEGIBLE) FOUND AT THE NORTHWEST CORNER OF A TRACT OF LAND DESCRIBED IN DEED TO E-Z MART STORES, INC., RECORDED IN INSTRUMENT NO. 18573, O.P.R.J.C.T., BEARS SOUTH 00°17'30" WEST, A DISTANCE OF 1.73';

THENCE SOUTH 00°17'30" WEST, A DISTANCE OF 1,379.52 FEET TO A 1/2-INCH IRON ROD WITH A CAP STAMPED "FORT WORTH SURVEYING" FOUND IN THE SOUTH LINE OF SAID TAYLOR TRACT AT THE SOUTHWEST CORNER OF SAID E-Z MART TRACT, FROM WHICH A 1/2-INCH IRON ROD FOUND AT THE SOUTHEAST CORNER OF SAID TAYLOR TRACT BEARS SOUTH 89°09'47" EAST, A DISTANCE OF 546.14 FEET;

THENCE NORTH 89°09'47" WEST, ALONG THE SOUTH LINE OF SAID TAYLOR TRACT, A DISTANCE OF 346.09 FEET TO A 5/8-INCH IRON ROD WITH A CAP STAMPED "RPLS 5674" SET AT THE MOST SOUTHERLY SOUTHWEST CORNER OF SAID TAYLOR TRACT;

THENCE NORTH 24°36'03" WEST, A DISTANCE OF 257.66 FEET TO A 5/8-INCH IRON ROD WITH A CAP STAMPED "RPLS 5674" SET AT A SOUTHWESTERLY CORNER OF SAID TAYLOR TRACT;

THENCE NORTH 84°46'03" WEST, PASSING AN EXISTING FENCE AT APPROXIMATELY 25-FEET AND CONTINUING ALONG OR NEAR SAID FENCE, PASSING A 4-INCH WOOD POST AT A DISTANCE OF 338.26 FEET, AND CONTINUING FOR A TOTAL DISTANCE OF 338.79 FEET TO A CALCULATED POINT FOR CORNER IN THE NORTHEASTLY RIGHT-OF-WAY LINE OF N. PARKWAY DRIVE, ALSO KNOWN AS INTERSTATE BUSINESS HIGHWAY 35 AND FORMERLY KNOWN AS U.S. HIGHWAY 81, A 120-FOOT RIGHT-OF-WAY, AT THE MOST WESTERLY SOUTHWEST CORNER OF SAID TAYLOR TRACT AND THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT HAVING A CENTRAL ANGLE OF 17°21'23", A RADIUS OF 2,324.78 FEET AND A CHORD BEARING AND DISTANCE OF NORTH 34°21'30" WEST, 882.61 FEET;

THENCE NORTHWESTERLY, ALONG SAID NORTHEASTLY RIGHT-OF-WAY LINE AND SAID CURVE TO THE LEFT, AN ARC DISTANCE OF 885.99 FEET TO A 5/8-INCH IRON ROD WITH A CAP STAMPED "RPLS 5674" SET FOR CORNER IN THE SOUTHEASTERLY LINE OF LOT 1, BLOCK 1 OF THE L&T THOMPSON ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN BOOK 9, PAGE 230, PLAT RECORDS, JOHNSON COUNTY, TEXAS;

THENCE NORTHEASTERLY, ALONG THE SOUTHEASTERLY LINES OF SAID LOT 1, THE FOLLOWING THREE (3) COURSES AND DISTANCES:

NORTH 28°58'55" EAST, A DISTANCE OF 210.80 FEET TO A 5/8-INCH IRON ROD WITH A CAP STAMPED "RPLS 5674" SET FOR CORNER;

NORTH 88°44'39" EAST, A DISTANCE OF 223.75 FEET TO A 5/8-INCH IRON ROD WITH A CAP (ILLEGIBLE) FOUND FOR CORNER;

NORTH 00°20'13" EAST, A DISTANCE OF 170.00 FEET TO A 5/8-INCH IRON ROD WITH A CAP STAMPED "RPLS 5674" SET FOR CORNER IN THE SOUTH RIGHT-OF-WAY LINE OF SAID U.S. HIGHWAY 67, FROM WHICH A 5/8-INCH IRON ROD FOUND AT THE INTERSECTION OF SAID SOUTH RIGHT-OF-WAY LINE WITH SAID NORTHEASTLY RIGHT-OF-WAY LINE OF SAID N. PARKWAY DRIVE BEARS SOUTH 88°44'10" WEST, A DISTANCE OF 658.82 FEET;

THENCE NORTH 88°44'10" EAST, ALONG SAID SOUTH RIGHT-OF-WAY LINE, A DISTANCE OF 969.25 FEET TO THE POINT OF BEGINNING AND CONTAINING 1,263,760 SQUARE FEET OR 29.012 ACRES OF LAND, MORE OR LESS.

PRELIMINARY PLAT
PARKVIEW AT ALVARADO APARTMENTS
LOTS 1 THRU 6, BLOCK A
29.021 ACRES (1,263,760 SQ.FT.)
IRA GLAZE SURVEY, ABSTRACT 313
ALVARADO, JOHNSON COUNTY, TEXAS
PREPARED: MARCH 29, 2023

WE WESTFALL ENGINEERING
1719 ANGEL PKWY., STE 400-206, ALLEN, TX 75002
PHONE NO. (214) 846-9397
TBPE FIRM REG. #19101

OWNER/DEVELOPER:
SHAW DEVELOPMENT GROUP, LLC
6255 WOODLAND DR.
DALLAS, TEXAS 75225
CONTACT: SEAN SHROPSHIRE
TEL: (214) 903-8200
TBPELS FIRM REG. #10194367

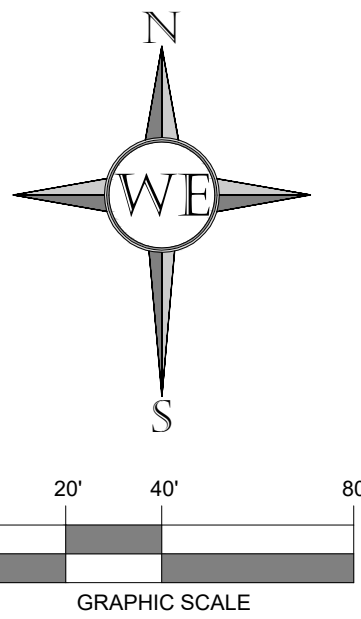
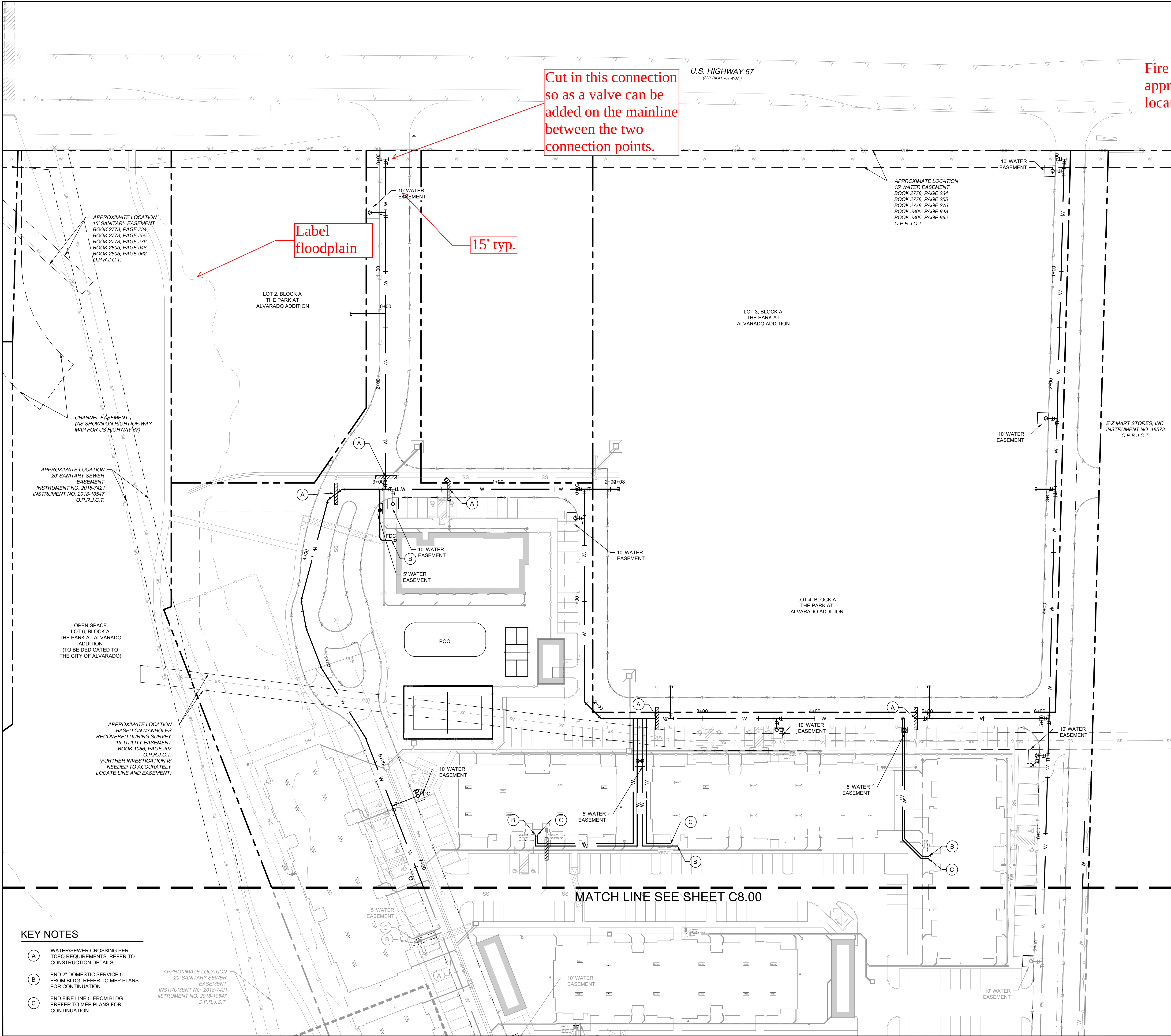
SURVEYOR:
AXIS SURVEYING
P.O. BOX 575
WAXAHACHIE, TX 75168
CONTACT: SEAN SHROPSHIRE
TEL: (214) 903-8200
TBPELS FIRM REG. #10194367

ENGINEER / APPLICANT:
WESTFALL ENGINEERING
1719 ANGEL PKWY., STE 400-206
ALLEN TX 75002
TBPE FIRM REG. #19101
CONTACT: HEATH VOYLES, PE
TEL: (817) 657-4759

CURVE TABLE					
CURVE NO.	RADIUS	LENGTH	DELTA	CHORD BEARING	CHORD LENGTH
C1	80.50'	54.45'	51°34'12"	N62°57'04"E	52.83'
C2	89.50'	40.37'	25°50'29"	N50°05'13"E	40.02'
C3	39.50'	17.74'	25°43'43"	N75°52'19"E	17.59'
C4	2924.79'	51.00'	0°59'57"	S26°26'22"E	51.00'

LINE TABLE		
LINE NO.	BEARING	LENGTH
L2	N67°32'10"E	7.20'
L4	N88°44'10"E	5.96'
L3	S22°27'43"E	42.42'

VIOLATION OF ANY LOT WITHIN THIS ADDITION BY METES AND BOUNDS IS A VIOLATION OF CITY ORDINANCE AND IS SUBJECT TO FINES AND WITHHOLDING OF UTILITY SERVICES AND BUILDING PERMITS



LEGEND

- PROPERTY LINE
- PROPOSED EASEMENT
- SS --- PROPOSED SANITARY SEWER LINE
- W --- PROPOSED WATER LINE
- PROPOSED STORM SEWER LINE
- OH --- EXISTING OVERHEAD POWER LINE
- CBL --- EXISTING CABLE LINE
- GA --- EXISTING GAS LINE
- W --- EXISTING WATER LINE
- SS --- EXISTING SANITARY SEWER LINE
- ⊙ --- PROPOSED SANITARY SEWER MANHOLE (SS MH)
- ⊙ --- PROPOSED DOUBLE CLEAN-OUT
- ⊙ --- PROPOSED CLEAN-OUT
- ⊙ --- PROPOSED FIRE HYDRANT (FH)
- ⊙ --- PROPOSED FIRE DEPARTMENT CONNECTION (FDC)
- ⊙ --- PROPOSED WATER METER
- ⊙ --- PROPOSED WATER VALVE
- ⊙ --- PROPOSED TEE
- ⊙ --- PROPOSED BEND
- ⊙ --- PROPOSED REDUCER
- ⊙ --- PROPOSED LIGHT POLE
- ⊙ --- EXISTING POWER POLE
- ⊙ --- EXISTING LIGHT POLE
- ⊙ --- EXISTING FIRE HYDRANT
- ⊙ --- EXISTING STORM MANHOLE
- ⊙ --- EXISTING SSWR MANHOLE
- ⊙ --- EXISTING SIGN

UTILITY NOTES

- SEE MEP PLANS FOR ALL UTILITY CONNECTIONS INTO BUILDING.
- WATER AND SEWER LINES SHALL STUB 5 FEET FROM BUILDING FOR SERVICE CONNECTIONS UNLESS OTHERWISE NOTED.
- A FIVE FOOT CLEARANCE SHALL BE MAINTAINED AROUND ALL FIRE HYDRANTS.
- REFER TO DETAILS FOR WATER METER, METER BOX, FIRE HYDRANTS, VALVES, VALVE BOXES AND SERVICE INSTALLATION.
- REFER TO DETAILS FOR SANITARY SEWER MANHOLE REQUIREMENTS.
- REFER TO DETAILS FOR TRENCHING, BEDDING, BACK FILL, AND TRENCH COMPACTION REQUIREMENTS.
- WATER AND SANITARY SEWER PIPE SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, ASBESTOS-CEMENT PRESSURE PIPE, PRETREATED CONCRETE PIPE, OR PVC PIPE.
- PVC SLEEVES SHALL CONSIST OF 2 - 4" SCHEDULE 40 PVC CONDUITS, BURIED 2 MIN. BELOW FINISHED GRADE. SLEEVES SHALL EXTEND A MINIMUM OF 2' BEYOND PAVING.

BENCHMARK

BM#1 - "X" SET ON THE SOUTHEAST CORNER OF A CONCRETE SIGN BASE LOCATED AT THE NORTHEAST CORNER OF A CAR WASH ON THE SOUTH SIDE OF US HIGHWAY 67, 472' SOUTH OF THE SOUTH EDGE OF PAVING OF US HIGHWAY 67 AND 475' EAST OF THE INTERSECTION OF SAID US HIGHWAY 67 WITH BUSINESS 35 (OLD US HIGHWAY 81). ELEVATION = 734.30

BM#2 - "X" SET ON THE SOUTHEAST CORNER OF A CONCRETE CURB 4740' SOUTHEAST OF THE INTERSECTION OF BUSINESS 35 (OLD US HIGHWAY 81) WITH US HIGHWAY 67, 410' NORTHEAST OF THE EDGE OF A CONCRETE DRIVEWAY AND 445' SOUTHWEST OF THE SOUTHWEST EDGE OF PAVING OF SAID BUSINESS 35. ELEVATION = 743.17



Know what's below.
Call before you dig.

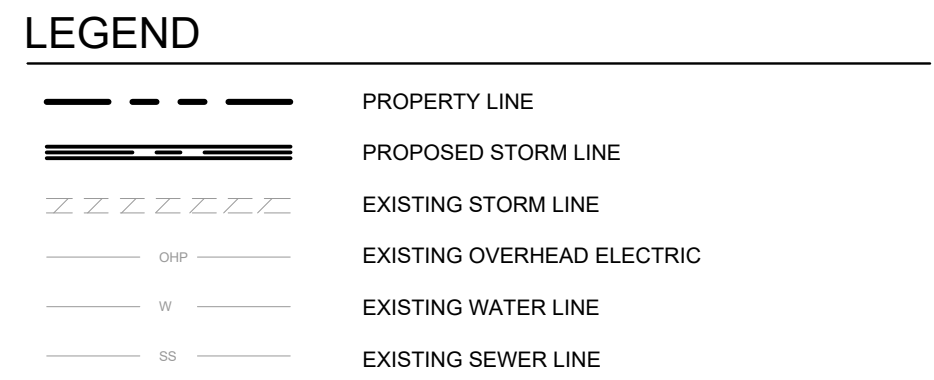
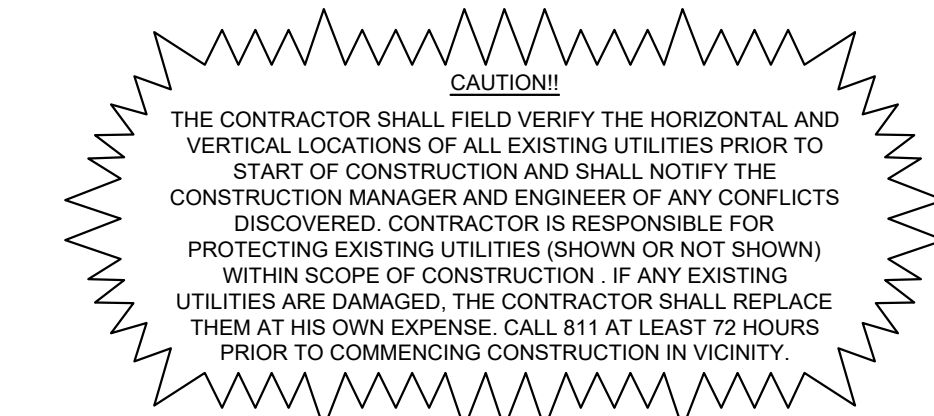
CAUTION!

THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AND SHALL NOTIFY THE CONSTRUCTION MANAGER AND ENGINEER OF ANY CONFLICTS DISCOVERED. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES (SHOWN OR NOT SHOWN) WITHIN SCOPE OF CONSTRUCTION. IF ANY EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM AT HIS OWN EXPENSE. CALL 811 AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION IN VICINITY.

KEY NOTES

- (A) WATER/SEWER CROSSING PER TCEQ REQUIREMENTS. REFER TO CONSTRUCTION DETAILS
- (B) END 2" DOMESTIC SERVICE 5' FROM BLDG. REFER TO MEP PLANS FOR CONTINUATION
- (C) END FIRE LINE 5' FROM BLDG. REFER TO MEP PLANS FOR CONTINUATION.

APPROXIMATE LOCATION
20' SANITARY SEWER
EASEMENT
INSTRUMENT NO. 2018-10547
O.P.R.J.C.T.



1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/or ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES.
2. CONTRACTOR SHALL FIELD VERIFY THE EXACT HORIZONTAL AND VERTICAL LOCATION OF ALL UTILITIES PRIOR TO ANY EXCAVATION OR TRENCHING. CONSTRUCTION. NOTIFY ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
3. STORM PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:
 - a. RCP - ASTM C78 CLASS III
 - b. HDPE - AASHTO M252 TYPE S, M224 TYPE S R ASTM F 2306 SMOOTH WALL C. PVC - ASTM D 3034 SDR35
4. ALL EXISTING AND PROPOSED PIPES AND STRUCTURES ARE TO BE CLEANED OUT AT THE COMPLETION OF CONSTRUCTION TO REMOVE ALL SILT AND DEBRIS.
5. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATER TIGHT.
6. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE PAVED ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
7. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.

(A) NYLOPLAST 8" DOME GRATE INLET (REFER TO GRADING PLAN FOR FG ELEVATION AT BASE OF GRATE INLET. FLOWLINE OF GRATE INLET IS 2.0' BELOW FINISHED GRADE.

(B) CONNECT ROOF DRAIN TO BUILDING. REFERENCE MEP PLANS FOR CONTINUATION.

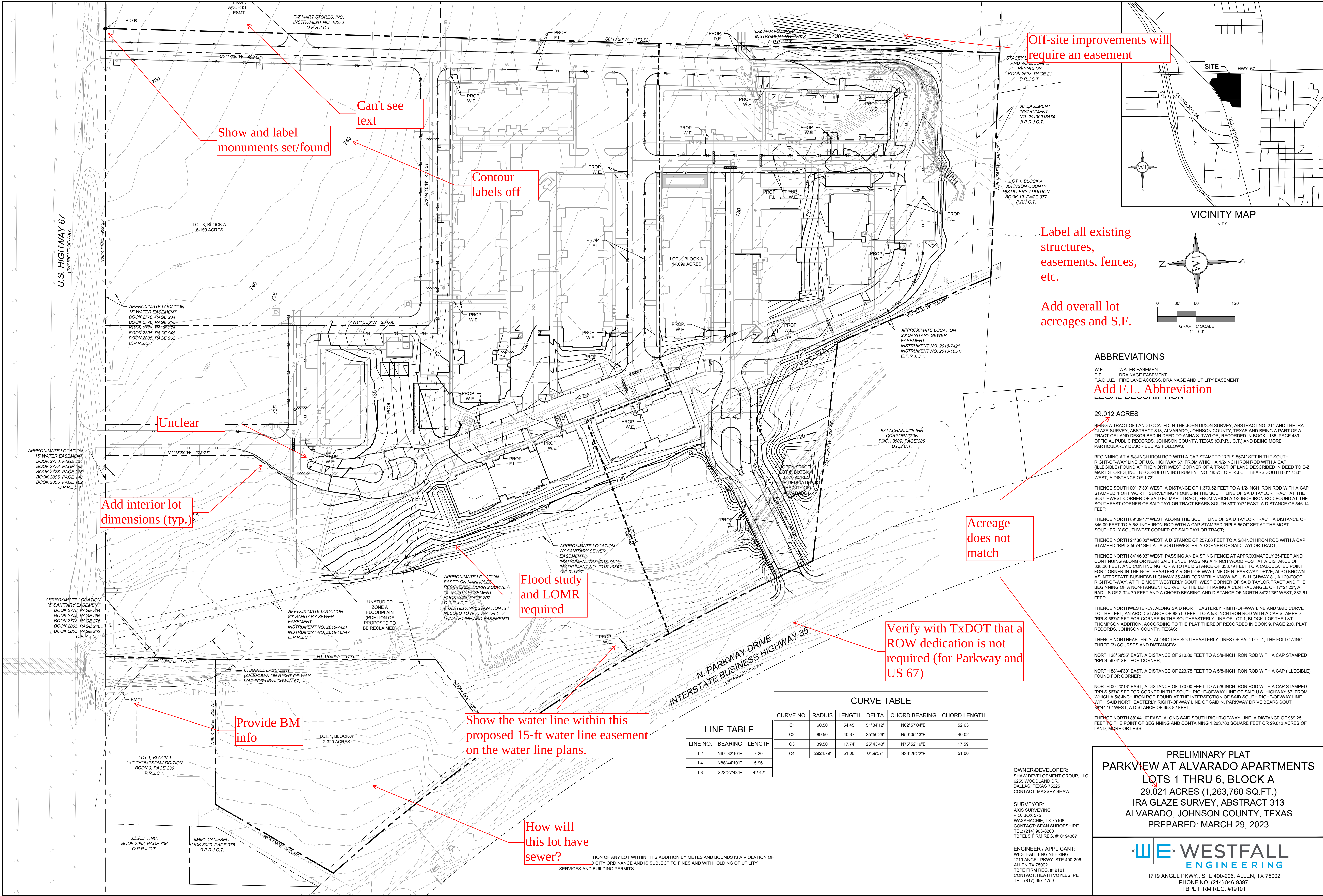
(C) PROPOSED CLEAN OUT

**BM#1 - "X" SET ON THE SOUTHEAST CORNER OF A CONCRETE SIGN BASE
LOCATED AT THE NORTHEAST CORNER OF A CAR WASH ON THE SOUTH SIDE
OF US HIGHWAY 67, 212' SOUTH OF THE SOUTH EDGE OF PAVING OF
SAID BUSINESS 35 AND 4760' EAST OF THE INTERSECTION OF SAID US HIGHWAY 67
WITH BUSINESS 35 (OLD US HIGHWAY 81).
ELEVATION = 734.30**

**BM#2 - "X" SET ON THE SOUTHEAST CORNER OF A CONCRETE CURB ±740'
SOUTHEAST OF THE INTERSECTION OF BUSINESS 35 (OLD US HIGHWAY 81)
WITH US HIGHWAY 67, ±10' NORTHEAST OF THE EDGE OF A CONCRETE
DRIVEWAY AND 345' SOUTHWEST OF THE SOUTHWEST EDGE OF PAVING OF
SAID BUSINESS 35.
ELEVATION = 743.17**

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

 WESTFALL ENGINEERING 1719 ANGEL PARKWAY SUITE 100 HOUSTON, TEXAS 77057 PHONE NO. (214) 846-9307 TBPB FIRM REG. #19101	THIS DOCUMENT IS RELEASED FOR REVIEW PURPOSES ONLY UNDER THE AUTHORITY OF HEATH VOYLES, P.E. 104356 IN MAY, 2023. IT IS NOT TO BE USED FOR CONSTRUCTION.	
	PARKVIEW AT ALVARADO APARTMENTS HENDERSON DRIVE CITY OF ALVARADO, TEXAS	
STORM DRAINAGE PLAN		
2	No.	DATE
	REVISIONS	
DATE 05/25/2023		
PROJECT NO. 2101017		
SHEET NO. C6.01		



Off-site improvements will require an easement

Show and label monuments set/found

Can't see text

Contour labels off

Label all existing structures, easements, fences, etc.

Add overall lot acreages and S.F.

Unclear

Add interior lot dimensions (typ.)

Acreage does not match

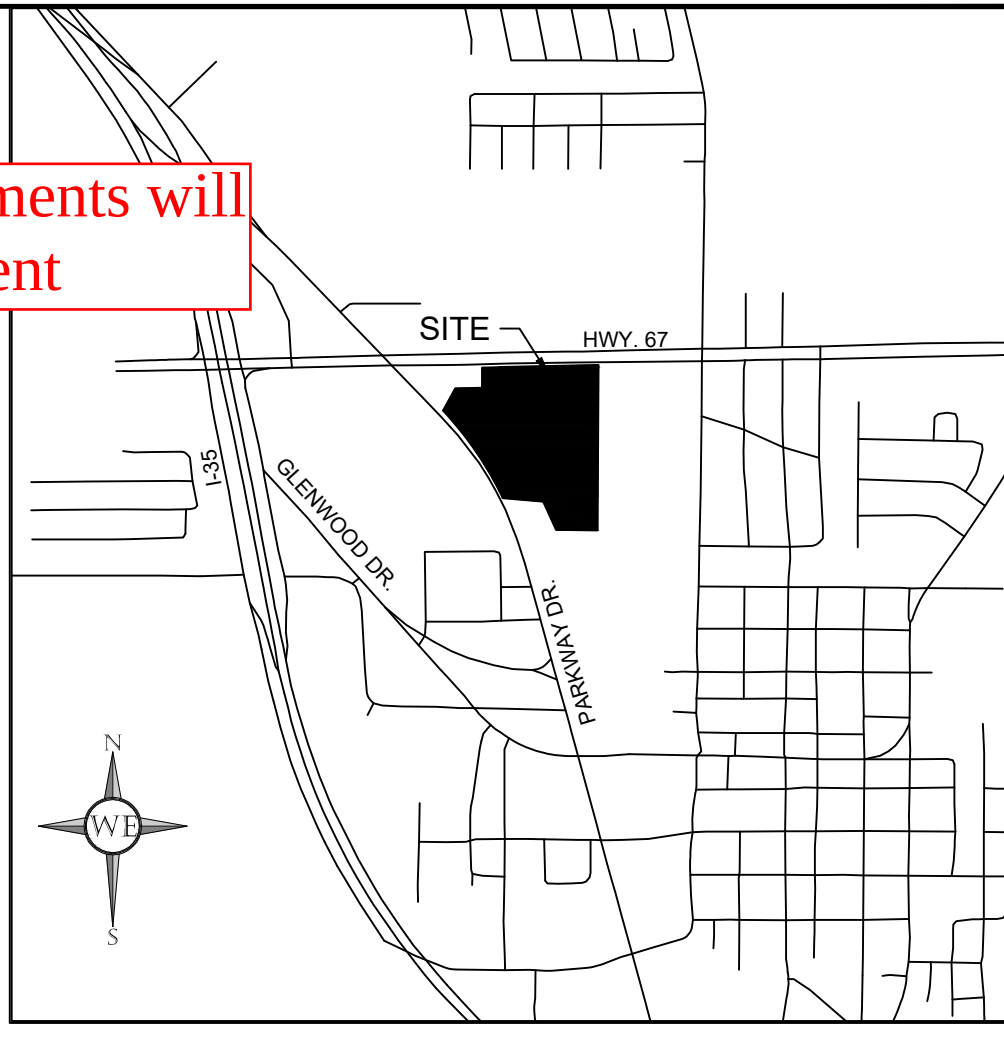
Flood study and LOMR required

Verify with TxDOT that a ROW dedication is not required (for Parkway and US 67)

Provide BM info

Show the water line within this proposed 15-ft water line easement on the water line plans.

How will this lot have sewer?



ABBREVIATIONS
W.E. WATER EASEMENT
D.E. DRAINAGE EASEMENT
F.A.D.U.E. FIRE LANE ACCESS, DRAINAGE AND UTILITY EASEMENT
Add F.L. Abbreviation
LEGEND

29.012 ACRES
BEING A TRACT OF LAND LOCATED IN THE JOHN DIXON SURVEY, ABSTRACT NO. 214 AND THE IRA GLAZE SURVEY, ABSTRACT 313, ALVARADO, JOHNSON COUNTY, TEXAS AND BEING A PART OF A TRACT OF LAND DESCRIBED IN DEED TO ANNA S. TAYLOR, RECORDED IN BOOK 1185, PAGE 489, OFFICIAL PUBLIC RECORDS, JOHNSON COUNTY, TEXAS (O.P.R.J.C.T.) AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT A 5/8-INCH IRON ROD WITH A CAP STAMPED "RPLS 5674" SET IN THE SOUTH RIGHT-OF-WAY LINE OF U.S. HIGHWAY 67, FROM WHICH A 1/2-INCH IRON ROD WITH A CAP (ILLEGIBLE) FOUND AT THE NORTHWEST CORNER OF A TRACT OF LAND DESCRIBED IN DEED TO E-Z MART STORES, INC., RECORDED IN INSTRUMENT NO. 18573, O.P.R.J.C.T., BEARS SOUTH 00°17'30" WEST, A DISTANCE OF 1.73';

THENCE SOUTH 00°17'30" WEST, A DISTANCE OF 1,379.52 FEET TO A 1/2-INCH IRON ROD WITH A CAP STAMPED "FORT WORTH SURVEYING" FOUND IN THE SOUTH LINE OF SAID TAYLOR TRACT AT THE SOUTHWEST CORNER OF SAID E-Z MART TRACT, FROM WHICH A 1/2-INCH IRON ROD FOUND AT THE SOUTHEAST CORNER OF SAID TAYLOR TRACT BEARS SOUTH 89°09'47" EAST, A DISTANCE OF 546.14 FEET;

THENCE NORTH 89°09'47" WEST, ALONG THE SOUTH LINE OF SAID TAYLOR TRACT, A DISTANCE OF 346.09 FEET TO A 5/8-INCH IRON ROD WITH A CAP STAMPED "RPLS 5674" SET AT THE MOST SOUTHERLY SOUTHWEST CORNER OF SAID TAYLOR TRACT;

THENCE NORTH 24°36'03" WEST, A DISTANCE OF 257.66 FEET TO A 5/8-INCH IRON ROD WITH A CAP STAMPED "RPLS 5674" SET AT A SOUTHWESTERLY CORNER OF SAID TAYLOR TRACT;

THENCE NORTH 84°46'03" WEST, PASSING AN EXISTING FENCE AT APPROXIMATELY 25-FEET AND CONTINUING ALONG OR NEAR SAID FENCE, PASSING A 4-INCH WOOD POST AT A DISTANCE OF 338.26 FEET, AND CONTINUING FOR A TOTAL DISTANCE OF 338.79 FEET TO A CALCULATED POINT FOR CORNER IN THE NORTHEASTLY RIGHT-OF-WAY LINE OF N. PARKWAY DRIVE, ALSO KNOWN AS INTERSTATE BUSINESS HIGHWAY 35 AND FORMERLY KNOWN AS U.S. HIGHWAY 81, A 120-FOOT RIGHT-OF-WAY, AT THE MOST WESTERLY SOUTHWEST CORNER OF SAID TAYLOR TRACT AND THE BEGINNING OF A NON-TANGENT CURVE TO THE LEFT HAVING A CENTRAL ANGLE OF 17°21'23", A RADIUS OF 2,324.78 FEET AND A CHORD BEARING AND DISTANCE OF NORTH 34°21'30" WEST, 882.61 FEET;

THENCE NORTHWESTERLY, ALONG SAID NORTHEASTLY RIGHT-OF-WAY LINE AND SAID CURVE TO THE LEFT, AN ARC DISTANCE OF 885.99 FEET TO A 5/8-INCH IRON ROD WITH A CAP STAMPED "RPLS 5674" SET FOR CORNER IN THE SOUTHEASTERLY LINE OF LOT 1, BLOCK 1 OF THE L&T THOMPSON ADDITION, ACCORDING TO THE PLAT THEREOF RECORDED IN BOOK 9, PAGE 230, PLAT RECORDS, JOHNSON COUNTY, TEXAS;

THENCE NORTHEASTERLY, ALONG THE SOUTHEASTERLY LINES OF SAID LOT 1, THE FOLLOWING THREE (3) COURSES AND DISTANCES:

NORTH 28°58'55" EAST, A DISTANCE OF 210.80 FEET TO A 5/8-INCH IRON ROD WITH A CAP STAMPED "RPLS 5674" SET FOR CORNER;

NORTH 88°44'39" EAST, A DISTANCE OF 223.75 FEET TO A 5/8-INCH IRON ROD WITH A CAP (ILLEGIBLE) FOUND FOR CORNER;

NORTH 00°20'13" EAST, A DISTANCE OF 170.00 FEET TO A 5/8-INCH IRON ROD WITH A CAP STAMPED "RPLS 5674" SET FOR CORNER IN THE SOUTH RIGHT-OF-WAY LINE OF SAID U.S. HIGHWAY 67, FROM WHICH A 5/8-INCH IRON ROD FOUND AT THE INTERSECTION OF SAID SOUTH RIGHT-OF-WAY LINE WITH SAID NORTHEASTLY RIGHT-OF-WAY LINE OF SAID N. PARKWAY DRIVE BEARS SOUTH 88°44'10" WEST, A DISTANCE OF 658.82 FEET;

THENCE NORTH 88°44'10" EAST, ALONG SAID SOUTH RIGHT-OF-WAY LINE, A DISTANCE OF 969.25 FEET TO THE POINT OF BEGINNING AND CONTAINING 1,263,760 SQUARE FEET OR 29.012 ACRES OF LAND, MORE OR LESS.

PRELIMINARY PLAT
PARKVIEW AT ALVARADO APARTMENTS
LOTS 1 THRU 6, BLOCK A
29.021 ACRES (1,263,760 SQ.FT.)
IRA GLAZE SURVEY, ABSTRACT 313
ALVARADO, JOHNSON COUNTY, TEXAS
PREPARED: MARCH 29, 2023

WE WESTFALL ENGINEERING
1719 ANGEL PKWY., STE 400-206, ALLEN, TX 75002
PHONE NO. (214) 846-9397
TBPE FIRM REG. #19101

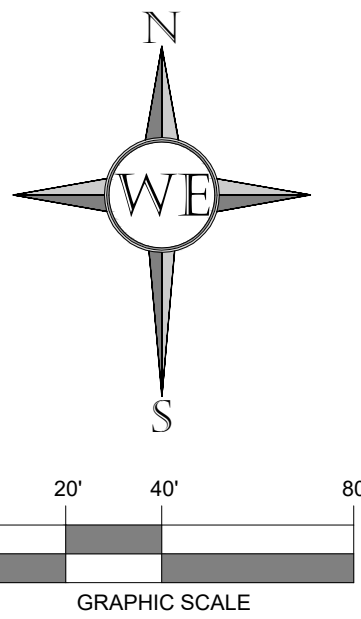
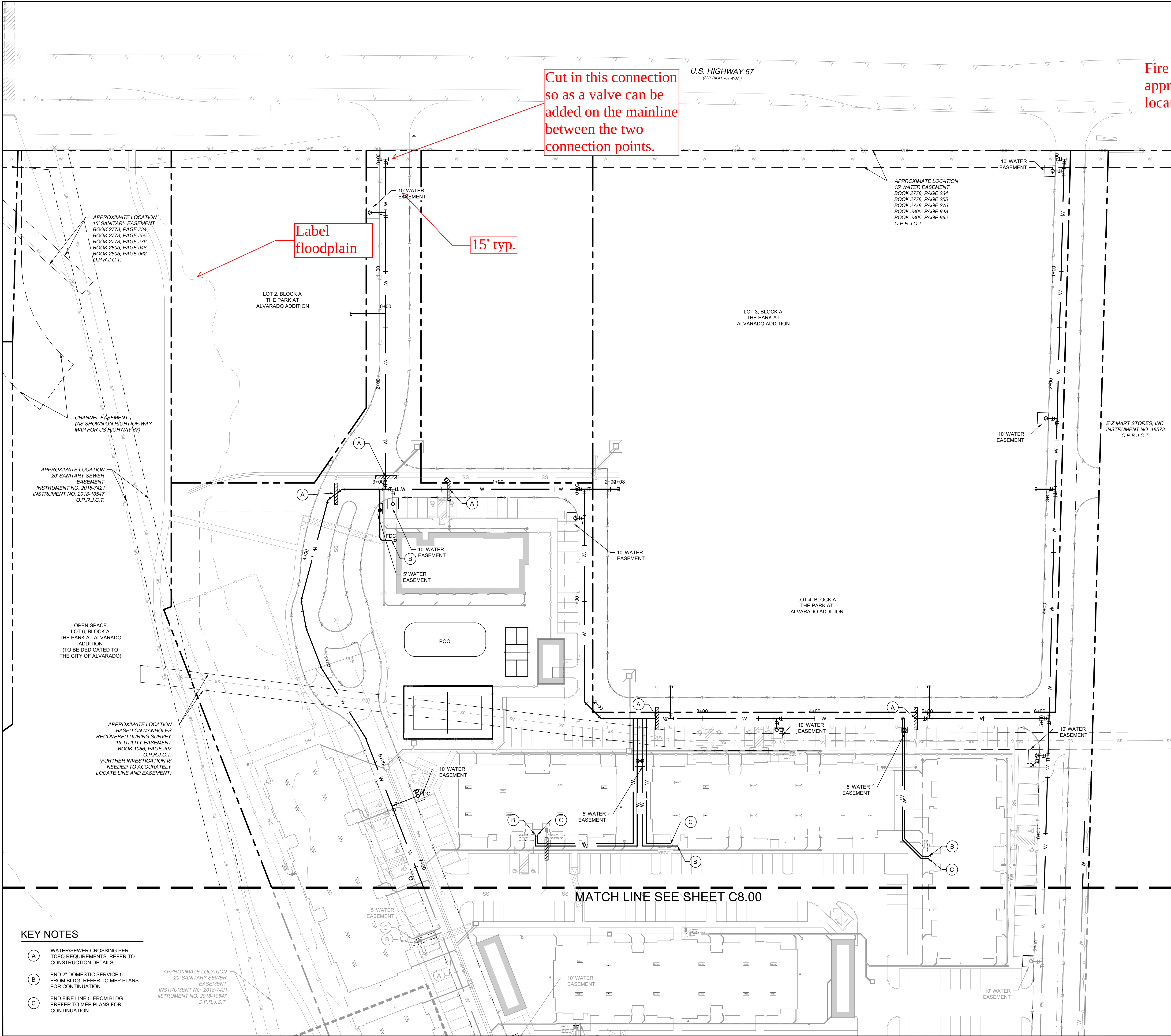
OWNER/DEVELOPER:
SHAW DEVELOPMENT GROUP, LLC
6255 WOODLAND DR.
DALLAS, TEXAS 75225
CONTACT: SEAN SHROPSHIRE
TEL: (214) 903-8200
TBPELS FIRM REG. #10194367

SURVEYOR:
AXIS SURVEYING
P.O. BOX 575
WAXAHACHIE, TX 75168
CONTACT: SEAN SHROPSHIRE
TEL: (214) 903-8200
TBPELS FIRM REG. #19101

ENGINEER / APPLICANT:
WESTFALL ENGINEERING
1719 ANGEL PKWY., STE 400-206
ALLEN TX 75002
TBPE FIRM REG. #19101
CONTACT: HEATH VOYLES, PE
TEL: (817) 657-4759

CURVE TABLE					
CURVE NO.	RADIUS	LENGTH	DELTA	CHORD BEARING	CHORD LENGTH
C1	80.50'	54.45'	51°34'12"	N62°57'04"E	52.83'
C2	89.50'	40.37'	25°50'29"	N50°05'13"E	40.02'
C3	39.50'	17.74'	25°43'43"	N75°52'19"E	17.59'
C4	2924.79'	51.00'	0°59'57"	S26°26'22"E	51.00'

LINE TABLE		
LINE NO.	BEARING	LENGTH
L2	N67°32'10"E	7.20'
L4	N88°44'10"E	5.96'
L3	S22°27'43"E	42.42'



LEGEND

- PROPERTY LINE
- PROPOSED EASEMENT
- SS PROPOSED SANITARY SEWER LINE
- W PROPOSED WATER LINE
- PROPOSED STORM SEWER LINE
- OHP EXISTING OVERHEAD POWER LINE
- CBL EXISTING CABLE LINE
- GAS EXISTING GAS LINE
- W EXISTING WATER LINE
- SS EXISTING SANITARY SEWER LINE
- PROPOSED SANITARY SEWER MANHOLE (SS MH)
- PROPOSED DOUBLE CLEAN-OUT
- PROPOSED CLEAN-OUT
- PROPOSED FIRE HYDRANT (FH)
- PROPOSED FIRE DEPARTMENT CONNECTION (FDC)
- PROPOSED WATER METER
- PROPOSED WATER VALVE
- PROPOSED TEE
- PROPOSED BEND
- PROPOSED REDUCER
- PROPOSED LIGHT POLE
- EXISTING POWER POLE
- EXISTING LIGHT POLE
- EXISTING FIRE HYDRANT
- EXISTING STORM MANHOLE
- EXISTING SSWR MANHOLE
- EXISTING SIGN

UTILITY NOTES

- SEE MEP PLANS FOR ALL UTILITY CONNECTIONS INTO BUILDING.
- WATER AND SEWER LINES SHALL STUB 5 FEET FROM BUILDING FOR SERVICE CONNECTIONS UNLESS OTHERWISE NOTED.
- A FIVE FOOT CLEARANCE SHALL BE MAINTAINED AROUND ALL FIRE HYDRANTS.
- REFER TO DETAILS FOR WATER METER, METER BOX, FIRE HYDRANTS, VALVES, VALVE BOXES AND SERVICE INSTALLATION.
- REFER TO DETAILS FOR SANITARY SEWER MANHOLE REQUIREMENTS.
- REFER TO DETAILS FOR TRENCHING, BEDDING, BACK FILL, AND TRENCH COMPACTION REQUIREMENTS.
- WATER AND SANITARY SEWER PIPE SHALL BE CONSTRUCTED OF SLIP-ON OR MECHANICAL JOINT CAST OR DUCTILE IRON PIPE, ASBESTOS-CEMENT PRESSURE PIPE, PRETREATED CONCRETE PIPE, OR PVC PIPE.
- PVC SLEEVES SHALL CONSIST OF 2 - 4" SCHEDULE 40 PVC CONDUITS, BURIED 2 MIN. BELOW FINISHED GRADE. SLEEVES SHALL EXTEND A MINIMUM OF 2' BEYOND PAVING.

BENCHMARK

BM#1 - "X" SET ON THE SOUTHEAST CORNER OF A CONCRETE SIGN BASE LOCATED AT THE NORTHEAST CORNER OF A CAR WASH ON THE SOUTH SIDE OF US HIGHWAY 67, 472' SOUTH OF THE SOUTH EDGE OF PAVING OF US HIGHWAY 67 AND 475' EAST OF THE INTERSECTION OF SAID US HIGHWAY 67 WITH BUSINESS 35 (OLD US HIGHWAY 81). ELEVATION = 734.30

BM#2 - "X" SET ON THE SOUTHEAST CORNER OF A CONCRETE CURB 4740' SOUTHEAST OF THE INTERSECTION OF BUSINESS 35 (OLD US HIGHWAY 81) WITH US HIGHWAY 67, 410' NORTHEAST OF THE EDGE OF A CONCRETE DRIVEWAY AND 445' SOUTHWEST OF THE SOUTHWEST EDGE OF PAVING OF SAID BUSINESS 35. ELEVATION = 743.17



Know what's below.
Call before you dig.

CAUTION!!

THE CONTRACTOR SHALL FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES PRIOR TO START OF CONSTRUCTION AND SHALL NOTIFY THE CONSTRUCTION MANAGER AND ENGINEER OF ANY CONFLICTS DISCOVERED. CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES (SHOWN OR NOT SHOWN) WITHIN SCOPE OF CONSTRUCTION. IF ANY EXISTING UTILITIES ARE DAMAGED, THE CONTRACTOR SHALL REPLACE THEM AT HIS OWN EXPENSE. CALL 811 AT LEAST 72 HOURS PRIOR TO COMMENCING CONSTRUCTION IN VICINITY.

KEY NOTES

- (A) WATER/SEWER CROSSING PER TCEQ REQUIREMENTS. REFER TO CONSTRUCTION DETAILS
- (B) END 2" DOMESTIC SERVICE 5' FROM BLDG. REFER TO MEP PLANS FOR CONTINUATION
- (C) END FIRE LINE 5' FROM BLDG. REFER TO MEP PLANS FOR CONTINUATION.

APPROXIMATE LOCATION
20" SANITARY SEWER
EASEMENT
INSTRUMENT NO. 2018-10547
O.P.R.J.C.T.

