


CHANGE ORDER NUMBER: 3

Contract Award Date:	12/12/2023
Project Number:	24IFB15
Funding Source:	P346
Roadway:	Liberty Hill Bypass
CSJ Number:	N/A

Each signatory hereby warrants that each has the authority to execute this Change Order (CO).

<p><i>The contractor must sign the Change Order and, by doing so, agrees to waive any and all claims for additional compensation due to any and all other expenses; additional changes for time, overhead and profit; or loss of compensation as a result of this change.</i></p> <p>THE CONTRACTOR _____ Date <u>6/25/24</u></p> <p>By <u></u> _____</p> <p>Typed/Printed Name <u>Chuck Glace</u></p> <p>Typed/Printed Title <u>President</u></p>	<p><i>The following information must be provided</i></p> <p>Time Ext. #: <u>N/A</u> Days added on this CO: <u>0</u></p> <p>Amount added by this change order: <u>\$229,702.00</u></p> <hr/> <p>Original Contract Amount: <u>\$14,149,449.00</u></p> <p>Total Change Orders To-Date: <u>\$280,462.00</u></p> <p>Percent Change in Original Contract: <u>1.98%</u></p>
--	---

RECOMMENDED FOR EXECUTION:

Eddie Church 6/26/24
Resident Construction Engineer Date

 6-27-2024

Project Manager Date

N/A	
3rd Party Signature	Date

RECOMMENDED FOR EXECUTION:

 6-27-2024

Department of Infrastructure
Williamson County

Date

APPROVED:

Presiding Officer of the Williamson County Commissioners Court Date

WILLIAMSON COUNTY, TEXAS

CHANGE ORDER NUMBER: 3

Project # 24IFB15

TABLE A: Force Account Work and Materials Placed into Stock

	LABOR	HOURLY RATE			HOURLY RATE

TABLE B: Contract Items:

				ORIGINAL + PREVIOUSLY REVISED		ADD or (DEDUCT)	NEW		
ITEM	DESCRIPTION	UNIT	UNIT PRICE	QUANTITY	ITEM COST	QUANTITY	QUANTITY	ITEM COST	OVERRUN/ UNDERRUN
COLH-01	FURN & INSTALL 6" C900, DR 18 WATER MAIN PVC (BLUE) AS PER PLANS & SPECS., COMPLETE IN PLACE:	LF	\$115.00	0.00	\$0.00	1,196.00	1,196.00	\$137,540.00	\$137,540.00
COLH-02	FURN & INSTALL 6" GATE VALVE w/VALVE BOX AS PER PLANS & SPECS., COMPLETE IN PLACE:	EA	\$2,750.00	0.00	\$0.00	2.00	2.00	\$5,500.00	\$5,500.00
COLH-03	FURNISH & INSTALL STANDARD FIRE HYDRANT ASSEMBLY AS PER PLANS & SPECS., COMPLETE IN PLACE:	EA	\$12,750.00	0.00	\$0.00	2.00	2.00	\$25,500.00	\$25,500.00
COLH-04	FURNISH & INSTALL 12"X6" CUT-IN-TEE	EA	\$7,550.00	0.00	\$0.00	2.00	2.00	\$15,100.00	\$15,100.00
COLH-05	FURNISH & INSTALL M.J. SSB CL-350 D.I. FITTINGS w/CEMENT MORTAR LINING AND RESTRAINTS GLANDS AS PER PLANS & SPECS., COMPLETE IN PLACE	LBS	\$30.00	0.00	\$0.00	160.00	160.00	\$4,800.00	\$4,800.00
COLH-06	FURNISH & INSTALL SILT FENCE FOR TEMPOARY EOSION CONTROL PER PLANS & SPECS., COMPLETE IN PLACE	LF	\$4.00	0.00	\$0.00	1,196.00	1,196.00	\$4,784.00	\$4,784.00
COLH-07	PROVIDE TRENCH & SHORING SAFETY AS REQ'D. AS PER PLANS & SPECS., COMPLETE IN PLACE	LF	\$2.50	0.00	\$0.00	1,196.00	1,196.00	\$2,990.00	\$2,990.00
COLH-08	PROVIDE CLEARING & CHIPPING AS REQ'D. AS PER PLANS & SPECS., COMPLETE IN PLACE	LF	\$12.00	0.00	\$0.00	1,196.00	1,196.00	\$14,352.00	\$14,352.00
COLH-09	FURNISH & INSTALL REVEGETATION IN AREAS DISTURBED BY CONSTRUCTION AS PER PLANS & SPECS., COMPLETE IN PLACE	LF	\$15.00	0.00	\$0.00	1,196.00	1,196.00	\$17,940.00	\$17,940.00
COLH-10	REMOVE SILT FENCING FOR TEMPORARY EROSION CONTROL PER PLANS & SPECS., COMPLETE IN PLACE	LF	\$1.00	0.00	\$0.00	1,196.00	1,196.00	\$1,196.00	\$1,196.00
TOTALS					\$0.00			\$229,702.00	\$229,702.00

CHANGE ORDER REASON(S) CODE CHART

1. Design Error or Omission	1A. Incorrect PS&E 1B. Other
2. Differing Site Conditions (unforeseeable)	2A. Dispute resolution (expense caused by conditions and/or resulting delay) 2B. Unavailable material 2C. New development (conditions changing after PS&E completed) 2D. Environmental remediation 2E. Miscellaneous difference in site conditions (unforeseeable)(Item 9) 2F. Site conditions altered by an act of nature 2G. Unadjusted utility (unforeseeable) 2H. Unacquired Right-of-Way (unforeseeable) 2I. Additional safety needs (unforeseeable) 2J. Other
3. County Convenience	3A. Dispute resolution (not resulting from error in plans or differing site conditions) 3B. Public relations improvement 3C. Implementation of a Value Engineering finding 3D. Achievement of an early project completion 3E. Reduction of future maintenance 3F. Additional work desired by the County 3G. Compliance requirements of new laws and/or policies 3H. Cost savings opportunity discovered during construction 3I. Implementation of improved technology or better process 3J. Price adjustment on finished work (price reduced in exchange for acceptance) 3K. Addition of stock account or material supplied by state provision 3L. Revising safety work/measures desired by the County 3M. Other
4. Third Party Accommodation	4A. Failure of a third party to meet commitment 4B. Third party requested work 4C. Compliance requirements of new laws and/or policies (impacting third party) 4D. Other
5. Contractor Convenience	5A. Contractor exercises option to change the traffic control plan 5B. Contractor requested change in the sequence and/or method of work 5C. Payment for Partnering workshop 5D. Additional safety work/measures desired by the contractor 5E. Other
6. Untimely ROW/Utilities	6A. Right-of-Way not clear (third party responsibility for ROW) 6B. Right-of-Way not clear (County responsibility for ROW) 6C. Utilities not clear 6D. Other

Williamson County Road Bond Program

Liberty Hill Bypass Williamson County Project No. 24IFB15

Change Order No. 3

Reason for Change

This Change Order allows the County's contractor to relocate an existing water line along Bagdad Road that is in conflict with the proposed Liberty Hill Bypass roadway construction. The City of Liberty Hill was scheduled to have this conflict cleared by October of 2024, but their project has now been delayed to the first quarter of 2025. It has been decided to add the water line work to the LHB roadway project via Change Order to Williamson County's project. This will help avoid delays of the roadway construction.

Following is a summary of new items required for this Change Order.

ITEM	DESCRIPTION	QTY	UNIT
COLH-01	FURNISH & INSTALL 6" C900, DR-18 WATER MAIN PVC (BLUE) AS PER PLANS & SPECS., COMPLETE IN PLACE	1196	LF
COLH-02	FURNISH & INSTALL 6" GATE VALVE w/VALVE BOX PER PLANS & SPECS., COMPLETE IN PLACE	2	EA
COLH-03	FURNISH & INSTALL STANDARD FIRE HYDRANT ASSEMBLY AS PER PLANS & SPECS., COMPLETE IN PLACE:	2	EA
COLH-04	FURNISH & INSTALL 12"X6" CUT-IN-TEE	2	EA
COLH-05	FURNISH & INSTALL M.J. SSB CL-350 D.I. FITTINGS w/CEMENT MORTAR LINING AND RESTRAINTS GLANDS AS PER PLANS & SPECS., COMPLETE IN PLACE	160	LBS
COLH-06	FURNISH & INSTALL SILT FENCE FOR TEMPORARY EROSION CONTROL PER PLANS & SPECS., COMPLETE IN PLACE	1196	LF
COLH-07	PROVIDE TRENCH & SHORING SAFETY AS REQ'D. AS PER PLANS & SPECS., COMPLETE IN PLACE	1196	LF
COLH-08	PROVIDE CLEARING & CHIPPING AS REQ'D. AS PER PLANS & SPECS., COMPLETE IN PLACE	1196	LF
COLH-09	FURNISH & INSTALL REVEGETATION IN AREAS	1196	LF

	DISTURBED BY CONSTRUCTION AS PER PLANS & SPECS., COMPLETE IN PLACE		
COLH-10	REMOVE SILT FENCING FOR TEMPORARY EROSION CONTROL PER PLANS & SPECS., COMPLETE IN PLACE	1196	LF

This Change Order results in a net increase of \$229,702.00 to the Contract amount, for an adjusted Contract total of \$14,429,911.00. The original Contract amount was \$14,149,449.00. As a result of this and all Change Orders to-date, \$280,462.00 has been added to the Contract, resulting in an 1.98% net increase in the Contract cost. No additional days will be added to or deducted from the Contract as a result of this Change Order.

HNTB Corporation

Oscar Salazar-Bueno, P.E.

JOB #23164 LIBERTY HILL BYPASS

CP 003 - COLH BAGDAD WATERLINE RELOCATION

5/29/2024

BID	TECH				UNIT	TOTAL
ITEM	SPEC	DESCRIPTION	QTY	UNIT	PRICE	PRICE

1	COLH-01	Furnish & Install 6" C900, DR-18 Water Main PVC (Blue) as per plans & specs., complete in place:	1,196	LF	\$115.00	\$137,540.00
2	COLH_02	Furnish & Install 6" Gate Valve w/Valve Box as per plans & specs., complete in place:	2	EA	\$2,750.00	\$5,500.00
3	COLH -03	Furnish & Install Standard Fire Hydrant Assembly as per plans & specs., complete in place:	2	EA	\$12,750.00	\$25,500.00
4	COLH-05	Furnish & Install M.J. SSB CL-350 D.I. Fittings w/Cement Mortar Lining and Restraints Glands as per plans & specs., complete in place	160	LBS	\$30.00	\$4,800.00
5	COLH-04	Furnish & Install 12"x6" Cut-In-Tee	2	EA	\$7,550.00	\$15,100.00
6	COLH-06	Furnish & Install Silt Fencing for temporary erosion control per plans & specs., complete in place:	1,196	LF	\$4.00	\$4,784.00
7	COLH-10	Remove Silt Fencing for temporary erosion control per plans & specs., complete in place:	1,196	LF	\$1.00	\$1,196.00
8	COLH -07	Provide Trench & Shoring Safety as req'd. as per plans & specs., complete in place:	1,196	LF	\$2.50	\$2,990.00
9	COLH -08	Provide Clearing & Chipping as req'd. as per plans & specs., complete in place:	1,196	LF	\$12.00	\$14,352.00
10	COLH-09	Furnish & Install Revegetation in areas Distrubed by Construction as per plans & specs., complete in place:	1,196	LF	\$15.00	\$17,940.00
						\$229,702.00

SUMMARY

TOTAL OF ALL CP ITEMS	\$229,702.00
TOTAL	\$229,702.00

Change Order Worksheet

Contract Name	Liberty Hill Bypass	Solicitation #	24IFB15	
Date awarded	12/12/2023			
Awarded Contract Amount		\$14,149,449.00		
			Percentage Change	
	Change order #1	\$29,260.00	0.21%	
	Change order #2	\$21,500.00	0.15%	
	Change order #3	\$229,702.00	1.62%	
	Total changes to date	<hr/> \$280,462.00	<hr/> 1.98%	(Running totals here)
	Adjusted contract amount	\$14,429,911.00		

SOUTH SAN GABRIEL FORCE MAIN PROJECT

City of Liberty Hill

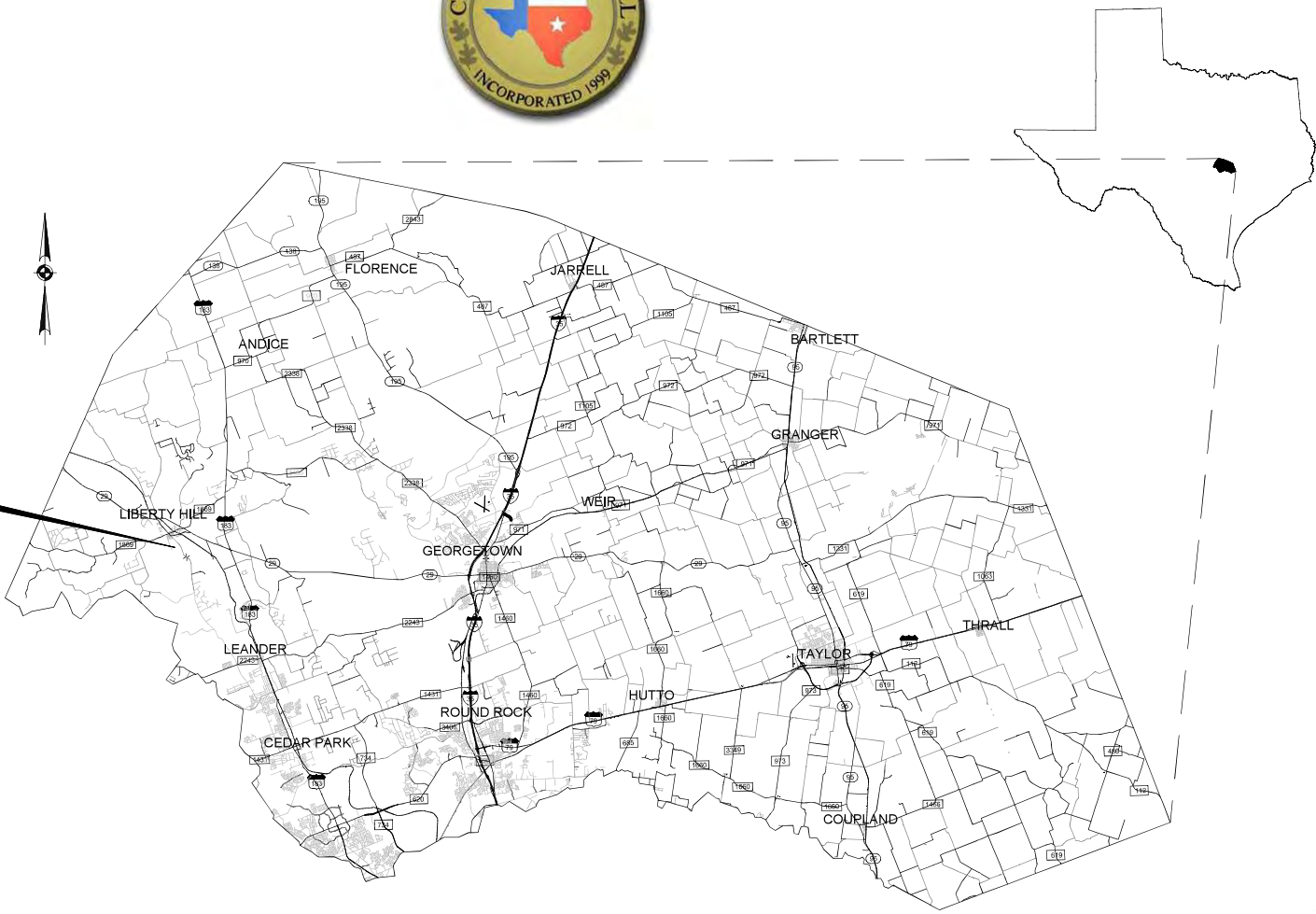
Williamson County, Texas

DISCONTINUED FOR CONSTRUCTION



Warning!
There are existing water pipelines, underground telephone cables and other above and below ground utilities in the vicinity of this project. The Contractor shall contact all appropriate companies prior to any construction in the area and determine if any conflicts exist. If so, the Contractor shall immediately contact the Engineer who shall revise the design as necessary.

PROJECT LOCATION:
30°39'35.33"N
97°55'36.50"W
Liberty Hill, TX 78642



Williamson County SCALE: 1"=4 MILES

Sheet List Table	
Sheet Number	Sheet Title
1	COVER SHEET
2	GENERAL NOTES
3	OVERALL PLAN
4	FORCE MAIN PLAN AND PROFILE (1+00 TO 8+00)
5	FORCE MAIN PLAN AND PROFILE (8+00 TO 15+00)
6	FORCE MAIN PLAN AND PROFILE (15+00 TO 22+00)
7	FORCE MAIN PLAN AND PROFILE (22+00 TO 28+50)
8	FORCE MAIN PLAN AND PROFILE (28+50 TO 35+00)
9	FORCE MAIN PLAN AND PROFILE (35+00 TO 42+50)
10	FORCE MAIN PLAN AND PROFILE (42+50 TO 49+50)
11	FORCE MAIN PLAN AND PROFILE (49+50 TO 56+50)
12	FORCE MAIN PLAN AND PROFILE (56+50 TO 63+50)
13	FORCE MAIN PLAN AND PROFILE (63+50 TO 71+50)
14	FORCE MAIN PLAN AND PROFILE (71+50 TO END)
15	6" WATER LINE RELOCATION
16	STANDARD WW DETAILS 1 OF 3
17	STANDARD WW DETAILS 2 OF 3
18	STANDARD WW DETAILS 3 OF 3
19	STANDARD WATER DETAILS

Mayor & City Council

Mayor

Mayor Pro Tem

Council Member Place 1

Council Member Place 2

Council Member Place 3

Council Member Place 4

Council Member Place 5

Crystal Mancilla

Chris Pezold

Michael Helbing

Crystal Mancilla

Amanda Young

Angela Jones

City Manager

Public Works Manager

Paul Brandenburg

David Thomison

CIVIL REVIEW

SUBMITTED BY:

CURTIS R. STEGER, P.E.



4/16/24
DATE



ADDRESS	1978 S. AUSTIN AVENUE	GEORGETOWN, TX 78626
METRO	512,930,8412	TEXAS REGISTERED ENGINEERING FIRM F-181 TBPLS FIRM No. 10003700
SERVICES	>>ENGINEERS >>PLANNERS >>SURVEYORS	

Project Number: 22849
Sheet No.: 01 of 19

These drawings are the sole property of STEGER & BIZZELL ENGINEERING, INC. The use of these drawings is hereby restricted to the original site for which they were prepared. Reproduction or reuse of these drawings in whole or in part without written permission of STEGER & BIZZELL ENGINEERING, INC. is strictly prohibited.

GENERAL NOTES:

1.

All construction shall be in conformance with the current International Building Code, National Electrical Code, American Concrete Institute 318-05 Building Code Requirements for Structural Concrete, and American Water Works Association standards.
2.

Blasting is not allowed on this project.
3.

Any pavement, curbs, sidewalks, etc. damaged or removed during construction will be replaced by the contractor at the contractor's expense.
4.

Verify location of existing utilities prior to construction of the facilities proposed in this contract. Take care to avoid damage to existing utilities; repair any utility damaged in the course of construction of any part of this contract to its original operating condition immediately, with repair crews working 24 hours per day until damage is repaired. There shall be no separate pay for repair work.
5.

No burning of trees, brush, rubbish vegetation or other objectionable material will be allowed on the project site. All cleared and grubbed material shall be disposed of in a manner satisfactory to the owner and in conformance with all federal, state and local rules and regulations.
6.

Before beginning construction, notify the engineer of any discrepancies or conflicts found in drawings and/or field dimensions.
7.

Other construction contracts may be ongoing in the project area. Coordinate activities with others to insure minimal conflicts. Afford utility and other contractors reasonable opportunity for access and execution of work.
8.

Maintain drainage of the site during all phases of construction. Do not block drainage from adjacent areas nor add flow to adjacent areas.
9.

The finished grade elevations shown are intended to provide drainage away from the treatment plant facilities. Minor field changes may be necessary to provide adequate drainage. Grade uniformly between elevations shown to provide positive drainage.
10.

Adjust manhole covers, valve boxes, electrical manholes, etc. to finished grade. There shall be no separate pay for this adjustment.
11.

All disturbed areas are to be hydro-mulched after construction in accordance with specification on landscape plan. Final payment will not be made until ground cover has been re-established.
12.

On all structures which hold a liquid, contractor shall guarantee the structure to be leak-proof.
13.

Coordinates shown for structure locations are referenced to the outside edge of concrete or to the centerline of the structure.
14.

Contractor shall give 48 hours notice to the following persons prior to commencement of work:

a.

Jay Holmes - City of Liberty Hill

512-745-1222

b.

Sam Davis - Steger Bizzell

512-930-9412
15.

All excavation shall be unclassified regardless of material encountered.
16.

Contractor shall make subsurface investigations as deemed necessary. No additional payment will be made for water, sand, gravel or other unstable conditions encountered in excavations.
17.

Detour of traffic around work activities, maintenance of traffic control signs, and flagmen are the contractor's responsibility. No separate payment will be made.
18.

Contractor shall be responsible for restoring all fences (whether shown on the plans or not) in the work area to their original condition prior to completion of this contract.
19.

Contractor shall preserve all construction stakes, survey control stakes, marks, etc. Any construction stakes, survey control stakes, marks, etc. disturbed, destroyed or otherwise made unusable by the contractor or his employees or subcontractors shall be replaced at the contractor's expense.
20.

Contractor shall remove and replace any traffic or road signs encountered with the notification and approval of the appropriate authority (TxDOT, County, U.S. Army Corps of Engineers, etc.) No separate payment will be made.
21.

Contractor shall implement a trench and excavation system, program, and/or procedure for the proposed project. The implementation of this system, program and/or procedure shall provide for the adequate trench and excavation safety protection that complies with, as a minimum, OSHA standards for trench excavations. Specifically, the contractor and/or contractor's independently retained employee or safety consultant shall implement a trench and excavation safety program in accordance with OSHA standards governing the presence and activities of individuals working in and around trench excavation.
22.

Contractor shall notify utilities having facilities in the area at least 48 hours prior to commencing construction. The utility companies may include, but are not limited to, electric, telephone, cable, gas, cable television, water, wastewater and storm sewer.
23.

Contractor shall not place fill or waste material on any private property without prior written permission from the property owner. The contractor shall remove all surplus material and dispose of it at a location which has the appropriate agency approval to review that type of material. Disposal of all surplus materials shall be in conformance with all federal, state and local regulations. No separate payment will be made.
24.

No excess excavated material shall be deposited in low areas or along natural drainage ways.
25.

If contractor places excess material in areas without written permission, the contractor shall be responsible for all damage resulting from such fill and shall remove said material at his own expense.
26.

Before completion of this project, all roadways, slopes, ditches and berms shall be restored to their original condition.
27.

Contractor shall provide all required sheeting and shoring to protect existing utilities and structures.
28.

The contractor shall maintain access to residential and business driveways at all times except when construction activities actually obstruct the driveways. The contractor shall notify residents and businesses of the need to close their driveways five (5) days prior to the actual date of closure.

29.

Dimensions provided for equipment anchorage, controlling clearances and unit piping shall be verified by the contractor through the specific equipment manufacturer prior to construction.
30.

The details designated as "typical details" apply in general to the drawings in all areas where conditions are similar to those described in the details.
31.

Site piping drawings indicate the invert elevations for gravity flow lines. Slope the pipe uniformly between elevations shown. No valleys or peaks permitted in gravity flow lines.
32.

All construction shall be in accordance with the City of Round Rock Standard Specifications Manual or as shown on the plans.
33.

The Contractor shall verify all depths and locations of existing utilities prior to any construction. Any discrepancies with the construction plans found in the field shall be brought immediately to the attention of the Engineer who shall be responsible for revising the plans as appropriate.
34.

Prior to any construction, the Engineer shall convene a preconstruction conference between the City of Liberty Hill, himself, the Contractor, other utility companies, any affected parties and any other entity the City or Engineer may require.
35.

The Contractor and the Engineer shall keep accurate records of all construction that deviates from the plans. The Engineer shall furnish the City of Liberty Hill accurate "As-Built" drawings following completion of all construction. These "As-Built" drawings shall meet with the satisfaction of the City Engineer prior to final acceptance.
36.

When construction is being carried out within easements, the Contractor shall confine his work to within the permanent and any temporary easements. Prior to final acceptance, the Contractor shall be responsible for removing all trash and debris within the permanent and temporary easements. Clean-up shall be to the satisfaction of the City Engineer.
37.

Prior to any construction, the Contractor shall apply for and secure all proper permits from the appropriate authorities.
38.

If faults, caverns, or subsidence are discovered during construction, construction shall be halted to allow the features to be inspected by the design engineer or a geological or geotechnical engineer. Based on this inspection, revisions to the design may be required.

TEMPORARY EROSION AND SEDIMENTATION CONTROL

1.

Contractor shall use the temporary erosion and sedimentation control plans to prepare a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the requirements of the U.S. Environmental Protection Agency as defined in 40 CFR 122.26, pursuant to section 402 of the U.S. Clean Water Act and pursuant to section 26.040 of the Texas Water Code
2.

Contractor shall install all temporary erosion and sedimentation controls prior to any other site work (clearing, grubbing, excavation, etc.)
3.

Placement of temporary erosion and sedimentation controls shall be in accordance with the erosion and sedimentation control plan.
4.

Any major variation in materials or locations of controls or fences from those shown on the plans will require a revision and must be approved by the engineer. Minor changes to be made as field revisions to the temporary erosion and sedimentation control plan may be required by the engineer during the course of construction to correct control inadequacies.
5.

Contractor is required to inspect the controls and fences at weekly intervals and after significant rainfall events to insure that they have not been substantially disturbed and are functioning properly. Contractor is responsible for maintenance of controls and shall immediately make any necessary repairs to damaged areas. Silt accumulation at controls shall be removed when the depth reaches six (6) inches.
6.

Prior to final acceptance, haul roads and waterway crossings constructed for temporary contractor access shall be removed, accumulated sediment removed from the waterway and the area restored to the original grade and re-vegetated. All land clearing debris shall be disposed of in approved spoil sites in accordance with federal, state and local regulations.
7.

All work must stop if a void in the rock substrate is discovered which is one square foot in total area or blows air from within the substrate and/or constantly receives water during any rain event. It shall be the responsibility of the contractor to immediately contact the engineer for further investigation and to determine any necessary course of action.
8.

In erodible areas left bare and unworm for four weeks or longer, a temporary grass or mulch cover shall be provided. If temporary seeding or mulch is impractical, temporary terraces or berms perpendicular to the slope shall be used.
9.

Limits of temporary staging, storage and spoil areas shall be located within approved sites. Temporary erosion and sedimentation control measures shall be places at each site. Each site is subject to approval by the engineer.
10.

Vehicles used for construction shall be inspected for tracking control. If necessary, wheels shall be manually scraped or washed (if water is available) before driving on any roadway.
11.

Contractor shall prevent blowing and movement of dust from exposed soil surfaces.
12.

All areas within the public right-of-way exposed during construction shall be re-vegetated as directed by the engineer. Re-vegetation of all exposed areas shall consist of hydro-mulching in accordance with landscape plan specifications.
13.

Contractor shall be responsible for the maintenance of each temporary erosion and sedimentation control measure, device and scheme being used on the project and shall provide additional silt fence for any off-site discharges of silted water from any excavation.
14.

Contractor shall be responsible for cleaning up and properly disposing of all spilled pollutants, including oil, paint, fuels, antifreeze, solvents, etc. Contractor shall keep accurate records (such as receipts, copies of analytical results, etc.) indicating proper disposal of spilled materials. Contractor shall be responsible for insuring that all discharges from the construction area are in compliance with all applicable regulations. No substance shall be dumped or leaked onto the ground or allowed to runoff from the construction site that might cause pollution.
15.

Equipment shall be cleaned in a manner that does not create any discharge of cleaning agents, paint, oil or other pollutants to a storm sewer or waterway.
16.

Any trash or debris must be contained on site and disposed of in a manner to prevent wind or rain from carrying it off-site into a storm drain or waterway.

PERMANENT EROSION CONTROL NOTES

1.

All disturbed areas shall be restored as noted below:

a.

A minimum of four inches of imported sandy loam topsoil or approved equal shall be placed in all drainage channels (except rock) and on all cleared areas.

b.

The seeding for permanent erosion control shall be applied over areas disturbed by construction as follows, unless specified elsewhere:

i.

From September 15 to March 1, seeding shall be with a combination of 1 pound per 1,000 square feet of un-hulled Bermuda and 7 pounds per 1,000 square feet of Winter Rye with a purity of 95% with 90% germination.

ii.

From March 2 to September 14, seeding shall be with hulled Bermuda at a rate of 3 pounds per 1,000 square feet with a purity of 95% with 85% germination.

c.

Fertilizer shall be slow release granular or pelleted type and shall have an analysis of 15-15-15 and shall be applied at the rate of 23 pounds per acre once at the time of planting and again once during the time of establishment.

d.

The planted area shall be irrigated or sprinkled in a manner that will not erode the top soil, but will sufficiently soak the soil to a depth of six inches. The irrigation shall occur at ten-day intervals during the first two months. Rainfall occurrences of 1/2 inch or more shall postpone the watering schedule for one week.

e.

Mulch type used shall be Mulch, applied at a rate of 1,500 pounds per acre.
- JOB SITE SAFETY
1.

Contractor shall be responsible for maintaining clearances required by the National Electrical Safety Code, Occupational Safety and Health Administration (OSHA) regulations and Texas State Law (Vernon's Annotated Texas Statutes, Article 1436 (c) pertaining to clearances when working in close proximity to overhead electrical lines and equipment. All cost incurred because of failing to comply with the required clearances will be charged to the contractor.

2.

All construction operations shall be accomplished in accordance with all applicable regulations of the United States Occupational Safety and Health Administration (OSHA) and in compliance with Texas House Bills 662 and 665.

3.

In accordance with the Laws of the State of Texas and the U. S. Occupational Safety and Health Administration regulations, all trenches over 5 feet in depth in either hard and compact or soft and unstable soil shall be sloped, shored, sheeted, braced or otherwise supported. Furthermore, all trenches less than 5 feet in depth shall also be effectively protected when hazardous ground movement may be expected.

4.

In accordance with the U. S. Occupational Safety and Health Administration regulations, when persons are in trenches 4 feet deep or more, adequate means of exit, such as a ladder or steps, must be provided and located so as to require no more than 25 feet of lateral travel.

5.

Contractor is responsible for all trench safety plans.

6.

It is the intent of this project that personal gas detectors are required for wear by all personnel whose jobs require entering enclosed spaces (such as manholes and lift stations) capable of accumulations of hydrogen sulfide or other harmful gases. It shall be the responsibility of the Contractor to ensure these detectors are provided to the appropriate personnel during the construction of this project.
- WASTEWATER NOTES:
1.

Pipe material for gravity wastewater mains shall be Green PVC (ASTM D2241 or D3034, SDR-26) or, Ductile Iron (AWWA C-100, min. class 200).

2.

The Contractor shall contact the City Engineer at 512-930-9412 to coordinate utility tie-ins and notify him at least 48 hours prior to connecting to existing lines.

3.

All manholes shall be concrete with cast iron ring and cover. (See Manhole Detail Specifications). Tapping of fiberglass manholes shall not be allowed.

4.

The Contractor must obtain a bulk water permit or purchase and install a water meter for all water used during construction. A copy of this permit must be carried at all times by all who use water.

5.

Line flushing or any activity using a large quantity of water must be scheduled with the City Engineer, at telephone 512-930-9412.

6.

The Contractor, at his expense, shall perform quality testing for all wastewater pipe installed and pressure pipe hydrostatic testing of all water lines constructed and shall provide all equipment (including pumps and gauges), supplies and labor necessary to perform the tests. Quality and pressure testing shall be monitored by City of Liberty Hill personnel.

7.

The Contractor shall coordinate testing with the City of Liberty Hill Inspector and provide no less than 24 hours notice prior to performing sterilization, quality testing or pressure testing.

8.

Sand, as described in Specification item 510 pipe, shall not be used as bedding for water and wastewater lines. Acceptable bedding materials are pipe bedding stone, pea gravel and in lieu of sand, a naturally occurring or manufactured stone material conforming to ASTM C33 for stone quality and meeting the following gradation specification:
- | Sieve Size | Percent Retained By Weight |
|------------|----------------------------|
| 1/2" | 0 |
| 3/8" | 0-2 |
| #4 | 40-85 |
| #10 | 95-100 |
9.

The Contractor is hereby notified that connecting to, shutting down, or terminating existing utility lines, may have to occur at off-peak hours. Such hours are usually outside normal working hours and possibly between 12 a.m. and 6 a.m.
10.

All wastewater construction shall be in accordance with the Texas Commission on Environmental Quality (TCEQ) Regulations, 30 TAC Chapter 213 and 217, as applicable. Whenever TCEQ and City of Liberty Hill Specifications conflict, the more stringent shall apply.
- TRAFFIC MARKING NOTES:
1.

Any methods, street markings and signage necessary for warning motorists, warning pedestrians or diverting traffic during construction shall conform to the Texas Manual of Uniform Traffic Control Devices for Streets and Highways, latest edition.

2.

All pavement markings, markers, paint, traffic buttons, traffic controls and signs shall be installed in accordance with the Texas Department of Transportation Standard Specifications for Construction of Highways, Streets and Bridges and, the Texas Manual of Uniform Traffic Control Devices for Streets and Highways, latest editions.

3.

Contractor is responsible for all traffic control required for the project and will include all cost associated with traffic control in the base bid.
- SEQUENCE OF CONSTRUCTION
- Other contractors could be working on this site. Coordinate all activities with the activities of others.
1.

Call all affected parties at least 48 hours prior to beginning any construction to schedule a pre-construction conference and secure all required permits.

2.

Conduct a pre-construction conference with the City of Liberty Hill, the Engineer, and all affected utilities.

3.

Install temporary erosion controls prior to any clearing and grubbing. Notify the City Engineer at 512-930-9412 when installed.

4.

Install traffic controls.

5.

Locate all connection points to existing underground utilities. Notify the Engineer of any discrepancies.

6.

Install all utility mains & on-site piping.

7.

Insure that all underground utility installations are complete.

8.

Complete final site grading and re-vegetation.

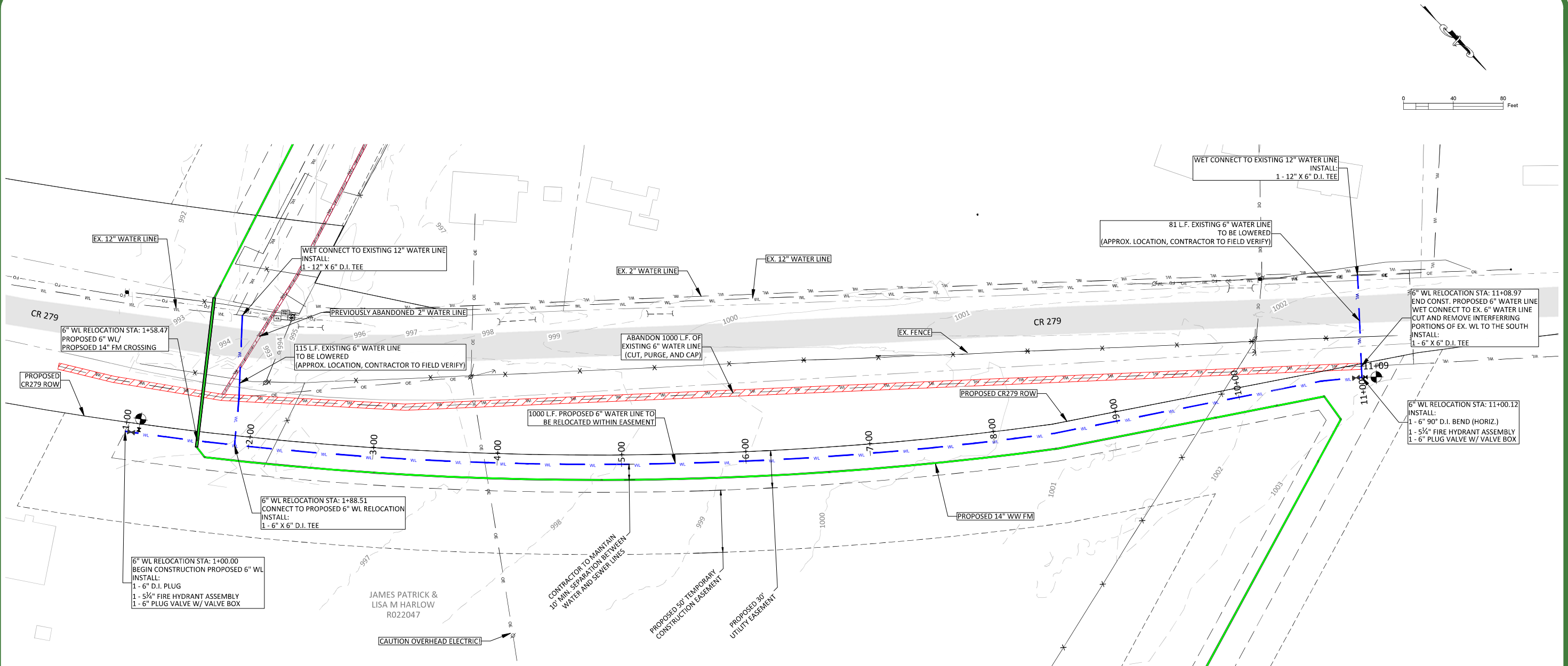
9.

Remove and dispose of temporary erosion controls.

10.

Complete any necessary final dress-up.
- SEPARATION DISTANCES
- The following rules apply to separation distances between potable water and sanitary sewers.
- (a) Water line/new sewer line separation. When new sanitary sewers are installed, they shall be installed no closer to waterlines than nine feet in all directions. Sewers that parallel waterlines must be installed in separate trenches. Where the nine foot separation distance cannot be achieved, the following guidelines will apply:
- (1) Where a sanitary sewer parallels a waterline, the sewer shall be constructed of cast iron, ductile iron or PVC meeting ASTM specifications with a pressure rating for both the pipe and joints of 150 psi. The vertical separation shall be a minimum of two feet between outside diameters and the horizontal separation shall be a minimum of four feet between outside diameters. The sewer shall be located below the waterline.
- (2) Where a sanitary sewer crosses a waterline and the sewer is constructed of cast iron, ductile iron or PVC with a minimum pressure rating of 150 psi, an absolute minimum distance of 6 inches between outside diameters shall be maintained. In addition the sewer shall be located below the waterline where possible and one length of the sewer pipe must be centered on the waterline.
- (3) Where a sewer crosses under a waterline and the sewer is constructed of ABS truss pipe, similar semi-rigid plastic composite pipe, clay pipe or concrete pipe with gasketed joints, a minimum two foot separation distance shall be maintained. The initial backfill shall be cement stabilized sand (two or more bags of cement per cubic yard of sand) for all sections of sewer within nine feet of the waterline. This initial backfill shall be from one quarter diameter below the centerline of the pipe to one pipe diameter (but not less than 12 inches) above the top of the pipe.
- (4) Where a sewer crosses over a waterline all portions of the sewer within nine feet of the waterline shall be constructed of cast iron, ductile iron, or PVC pipe with a pressure rating of at least 150 psi using appropriate adapters. In lieu of this procedure the new conveyance may be encased in a joint of 150 psi pressure class pipe at least 18 feet long and two nominal sizes larger than the new conveyance. The space around the carrier pipe shall be supported at 5 feet intervals with spacers or be filled to the springline with washed sand. The encasement pipe should be centered on the crossing and both ends sealed with cement grout or manufactured seal.
- (b) Water line/manhole separation. Unless sanitary sewer manholes and the connecting sewer can be made watertight and tested for no leakage, they must be installed so as to provide a minimum of nine feet of horizontal clearance from an existing or proposed waterline. Where the nine foot separation distance cannot be achieved, a carrier pipe as described in subsection (a)(4) of this section may be used where appropriate.
- FOR
CONSTRUCTION
- | NO. | REVISION | BY | DATE |
|-----|----------|----|------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
- | | |
|--------------|------------|
| CC | 2024-04-16 |
| DESIGNED BY: | DATE |
| CC | 2024-04-16 |
| DRAWN BY: | DATE |
| SHD, CRS | 2024-04-16 |
| CHECKED BY: | DATE |
| APPROVED BY: | DATE |
-
-
- | | | |
|----------|-----------------------|---|
| ADDRESS | 1978 S. AUSTIN AVENUE | GEORGETOWN, TX 78626 |
| METRO | 512.930.9412 | TEXAS REGISTERED ENGINEERING FIRM F-181 |
| SERVICES | 512.930.9412 | TBPLS FIRM No. 10003700 |
| | >>ENGINEERS | >>PLANNERS |
| | | >>SURVEYORS |
- GENERAL NOTES
for
SOUTH SAN GABRIEL FORCE MAIN PROJECT
City of Liberty Hill
WILLIAMSON COUNTY, TEXAS
- Project No:
22849
- 02
SHEET
2
of 10
- p:\22849\22849.dwg c:\community\lfr\lfr.dwg 04/22/2024 5:17:51 AM

These drawings are the sole property of STEGER & BIZZELL ENGINEERING, INC. The use of these drawings is hereby restricted to the original site for which they were prepared. Reproduction or reuse of these drawings in whole or in part without written permission of STEGER & BIZZELL ENGINEERING, INC. is strictly prohibited.



CONSTRUCTION NOTES:

1. MINIMUM COVER OF PROPOSED WATER MAIN SHALL BE 3'.
2. CONTRACTOR TO CUT AND REMOVE INTERFERING PORTIONS OF EXISTING WATER LINE AT CONNECTIONS.
3. ALL FITTINGS SHALL BE DUCTILE IRON.

CONTRACTOR FIELD VERIFICATION NOTE:

1. CONTRACTOR TO FIELD LOCATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING CITY OF LIBERTY HILL UTILITIES PRIOR TO CONSTRUCTION.
2. CONTRACTOR TO FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ANY PROPOSED CITY OF LIBERTY HILL UTILITY CONNECTION PRIOR TO CONSTRUCTION.
3. NO CONNECTION OR MODIFICATION TO AN EXISTING CITY OF LIBERTY HILL UTILITY SHALL BE MADE WITHOUT THE PRESENCE OF A CITY OF LIBERTY HILL REPRESENTATIVE.

WARNING!
There are existing water pipelines, underground telephone cables and other above and below ground utilities in the vicinity of this project. The Contractor shall contact all appropriate companies prior to any construction in the area and determine if any conflicts exist. If so, the Contractor shall immediately contact the Engineer who shall revise the design as necessary.

**FOR
CONSTRUCTION**

NO.	REVISION	BY	DATE

CC	2024-04-16
DESIGNED BY:	DATE
CC	2024-04-16
DRAWN BY:	DATE
SHD, CRS	2024-04-16
CHECKED BY:	DATE
APPROVED BY:	DATE

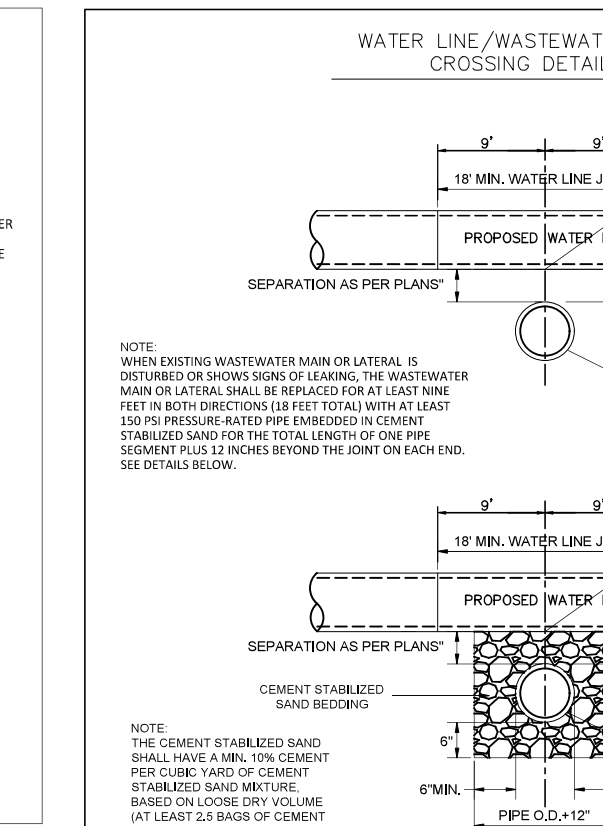
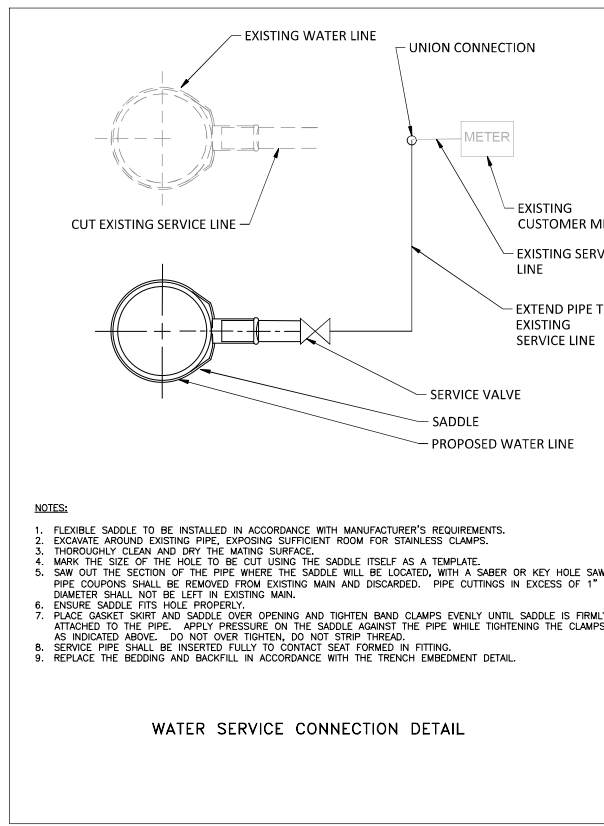
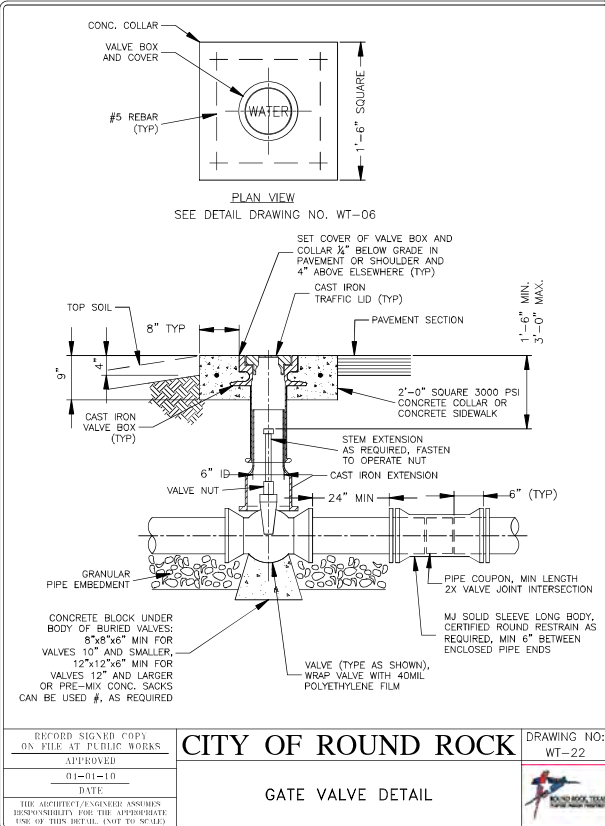
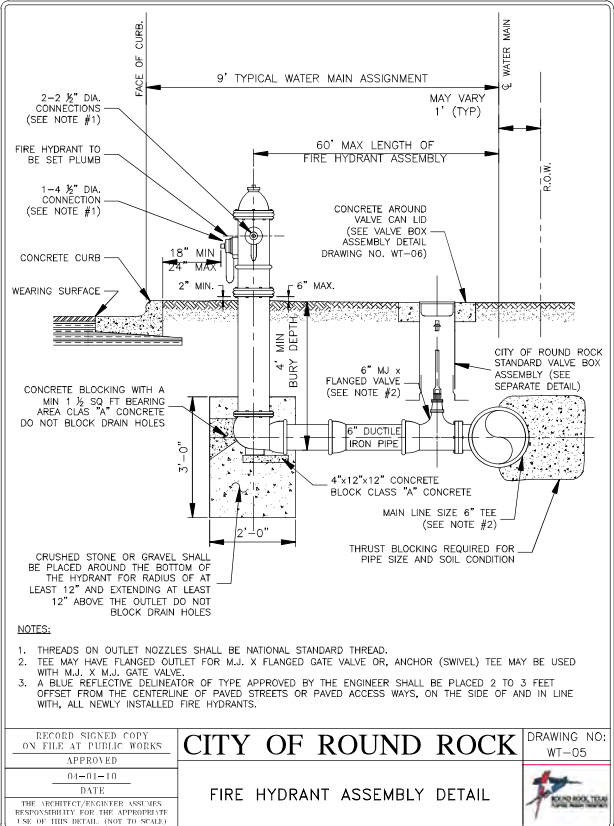
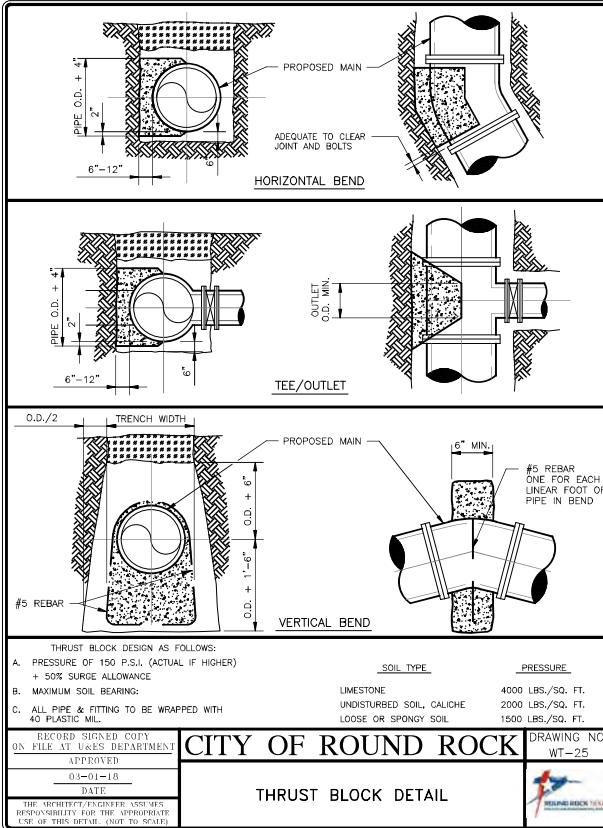
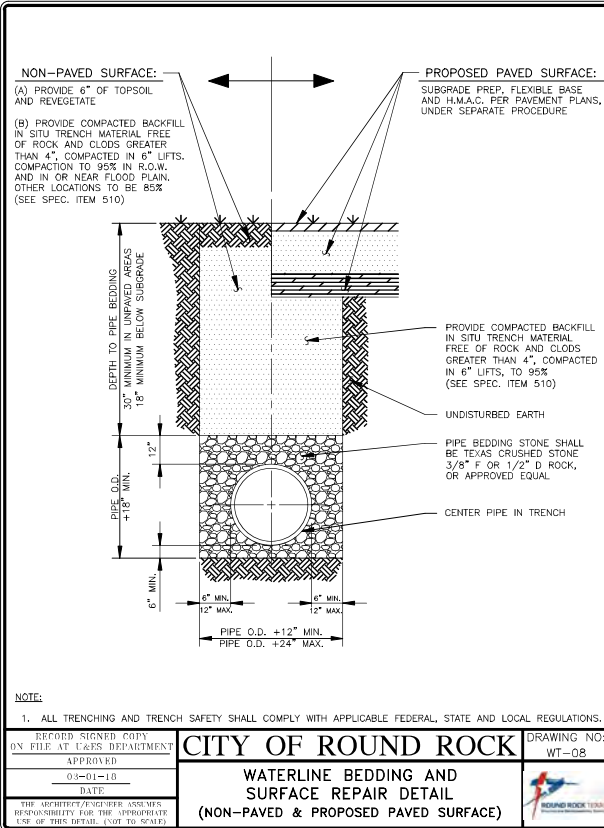
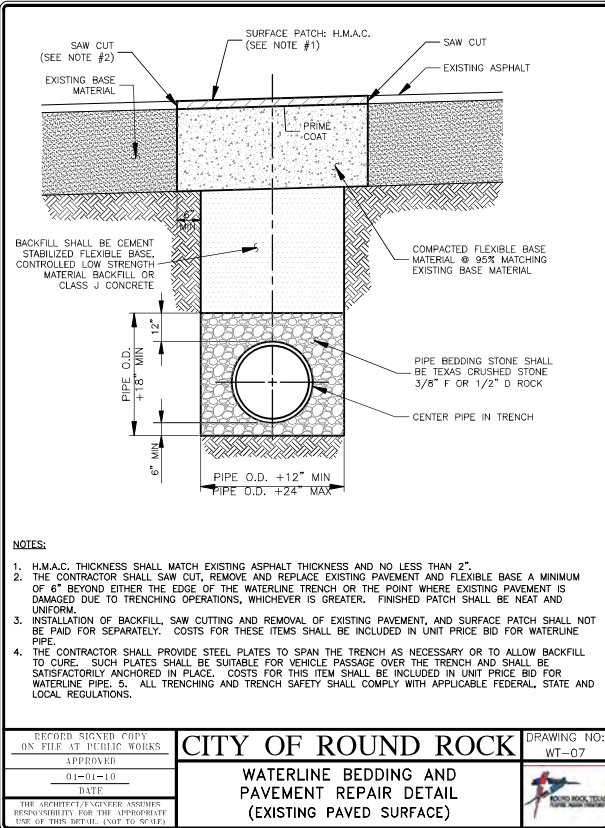
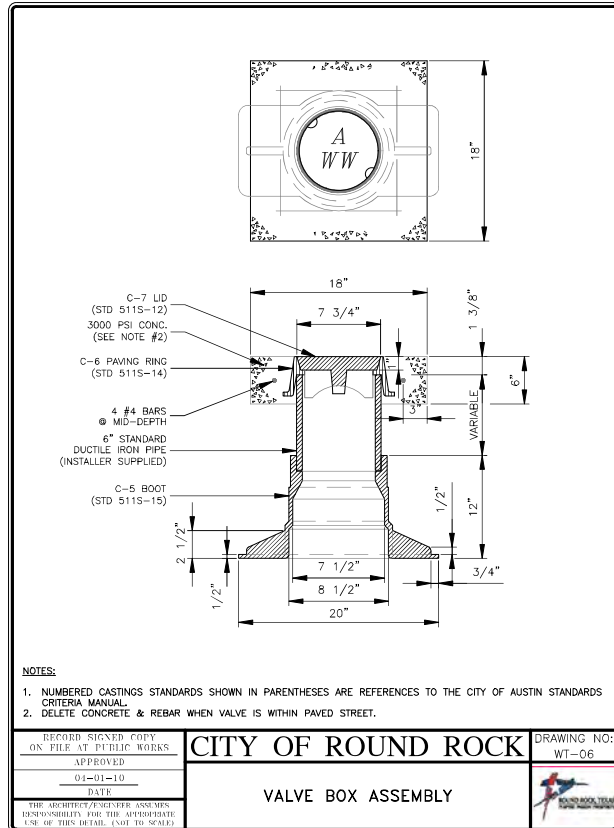


ADDRESS	1978 S. AUSTIN AVENUE	GEORGETOWN, TX 78626
METRO	512.930.9412	TEXAS REGISTERED ENGINEERING FIRM F-181
SERVICES	512.930.9412	WEB: STEGERBIZZELL.COM
	>>ENGINEERS	>>PLANNERS
	>>SURVEYORS	

6" WATER LINE RELOCATION
for
SOUTH SAN GABRIEL FORCE MAIN PROJECT
City of Liberty Hill
WILLIAMSON COUNTY, TEXAS

Project No:
22849
03
SHEET
15
of 19

These drawings are the sole property of STEGER & BIZZELL ENGINEERING, INC. The use of these drawings is hereby restricted to the original site for which they were prepared. Reproduction or reuse of these drawings in whole or in part without written permission of STEGER & BIZZELL ENGINEERING, INC. is strictly prohibited.



FOR CONSTRUCTION

NO.	REVISION	BY	DATE

CC	2024-04-16
DESIGNED BY:	DATE
CC	2024-04-16
DRAWN BY:	DATE
SHD, CRS	2024-04-16
CHECKED BY:	DATE
APPROVED BY:	DATE



STEGER & BIZZELL

ADDRESS 1978 S. AUSTIN AVENUE GEORGETOWN, TX 78626

METRO 512.930.3412 TEXAS REGISTERED ENGINEERING FIRM F-181 WEB STEGERBIZZELL.COM

SERVICES >>ENGINEERS >>PLANNERS >>SURVEYORS

STANDARD WATER DETAILS

for

SOUTH SAN GABRIEL FORCE MAIN PROJECT

City of Liberty Hill

WILLIAMSON COUNTY, TEXAS

Project No: 22849

04 SHEET 19

of 19