

**NOTIFICATION OF ADDENDUM
ADDENDUM NO. THREE
DATED: May 2, 2022**

**PR North, Inc. Or Assignee on behalf of Northwest Williamson County Municipal Utility
District No. 2**

**Parmer Ranch Blvd Phase 2 and Parmer Ranch Off-Site Wastewater Interceptor - Phase B
City of Georgetown Williamson County, Texas**

NOTICE TO ALL BIDDERS:

This Addendum is issued to correct/clarify/modify the CONTRACT DOCUMENTS and SPECIFICATIONS and to provide additional information to the Bidder for the above referenced project as follows:

Plan Revisions:

- Sheets 3, 33, 45, 49 and 77 from the Parmer Ranch Blvd Phase 2 - Bid Set were Revised
- No Sheets from the Off-Site Wastewater Interceptor - Bid Set were Revised

Contract Documents and Specification Revisions:

- The following sections were updated in Addendum #3:

Section	Title
00020	Invitation to Bid
00300	Bid Form
00410	Bid Bond
00510	Notice of Award

Questions/Clarifications:

1. The street light locations on the electric design plans don't match with the locations on the civil plans. There is also a discrepancy in quantities of single and double lights. **The Boulevard lights will be per the locations shown on the SEC plans.**
2. There is no line item on the bid form for street lights. **The quantities table in the Bid Form has been updated to include single and double street lights.**
3. The Major Collector street cross section (sheet 49) shows 11" Flexible Base and the Bid Item states 10" Flexible Base. **The Bid Item has been updated to 11" Flexible Base for Parmer Ranch Blvd. 8" has been added to the bid form for Street L.**

4. Can you confirm or revise your quantity for 2” HMAC?
We confirmed the quantity of 2” HMAC Type D; 28,296 SY. You may have forgotten to subtract the medians from the area.
5. Will a bid item be added for the revegetation of the ROW, Swales, and other disturbed areas outside of the residential lots?
No, those areas will be revegetated with landscaping.
6. Will bid items be added for the irrigation services?
Bid item for the (2) two-inch irrigation services has been added. The (1) ¾” irrigation service will be deleted from the plans.
7. The plans call for 1,317 LF of 12” SDR-26 that appears to be included in your quantity for 8” SDR-26. Will a bid item be added for 12” pipe?
Bid Quantities has been updated to include the correct amount of 12” pipe as well as 8” pipe.
8. Plans call for 120’ of 8” DR-18 PVC and the Bid Form states 80’ of 8” DR-18 PVC.
The Bid Form has been updated to show the correct amount, 120’.
9. Plans show 17 STD 4’ Dia. WW Manhole while the Bid Item calls for 12.
The Bid Item has been updated to show the correct amount, 17 STD 4’ Dia. WW Manholes.
10. Plans show 6” DR-18 C900 while the Bid Item states 4” C150 C900 FM.
Bid Item has been updated to show the 6 and 8-inch line per the profile.
11. Can you confirm if we are to topsoil this area or if we will need to price a specific material?
Topsoil the area unless specified under concrete pads. All future pervious areas within the lift station yard will receive topsoil and reveg.
12. Can you provide detail or note that specify the street section for the lift station?
The lift station access drive shall be 2” HMAC over 11” of Base from the concrete SD-15 driveway north to the end.
13. Will the Wet Wall & Valve Vault require a pad around them? The drawing on sheet 69 show linework around them but does not include a hatch?
No, the linework being referenced is the detail window outline.
14. There are callouts for 2 Double Services and a clean out on sheet 51, will these items receive bid items?

Bid items for WW Double Services and WW clean-out have been added to the quantities table. We have also added the single and double water services along Street L to the bid form.

15. Will a bid item be added for the 36" SET on SS-F01?
Yes, a bid item was added for the 36" SET.
16. Plans show 298 Linear Feet of 66" RCP while the Bid Item table includes this segment in the 60" RCP. Is this segment intended to be 60"?
Bid Item was added for 66" RCP.
17. There is a structure drawn on sheet 33 that is not labeled. Is this the other 7'x7' Junction Box?
Yes, the sheet has been updated to include the proper label.
18. Confirm the number of 3'x3' junction boxes.
The Bid Item was updated to show the correct quantity of 3'x3' junction boxes, 2.
19. Plans show laterals SS-E02 and SS-E03 are capped to not include those inlets in this bid while the Bid Item quantity include these inlets.
The Bid Item has been updated to show the correct amount of curb inlets, 33.
20. We are not seeing any callouts for the 5'x5' TxDot Area Inlets? Please confirm their location.
This Bid Item line has been removed; we are not using any Area Inlets on this bid.
21. Sheet 45 appears to contain a scale that is incorrect, needs clarification.
Sheet 45 has been revised to show the correct plan view scale of 1"=100'. Profile Scales remain unchanged and are as noted.
22. Can you clarify how far above the PPE we are to extend the clay liner?
Extend the clay liner 1' above the PPE; Elevation 963'
23. The bid tab calls for a 4' Diameter Box the plans call for a 6'x6' please clarify.
The plans correctly call out a 6'x6', the bid item has been updated in the quantities table.
24. The bid tab calls for a 6" Butterfly Valve while the plan calls for a 8" valve, please clarify.
The bid item has been updated to properly represent the plans, 8" valve.
25. Is the tree well that is shown on sheet 45 subsidiary to the pond or is it included in the tree well item under ROUGH EXCAVATION/SUBGRADE/BASE PH 2?
The tree well is included in the Bid Item.

26. Should your quantity for the clay liner be the same as your quantity for fine grading?
Fine grading, top soil and liner quantities have been updated.
27. There is one double service called out on water line-K but there isn't a double service on the bid form. Please clarify.
A bid item line has been added to include double water service connection to the quantity table.
28. Plans show 1-Connect to existing 12" plug on WWLN T, but didn't see a bid item on the bid form. Where do we include the cost?
With the Blvd project connecting to the off-site wastewater being bid and built at the same time there will not be an existing plug to remove.
29. The bid form has 6" standard curb and gutter, but the plans call out mountable curb. Could you clarify which is being used on this job?
The bid item has been updated to properly reference the plans, 4" mountable curb and gutter.
30. Plans show 2 Concrete Valley Gutters, but there is no bid item on the bid form, please advise.
Bid Form has been updated to include Concrete Valley Gutters.

You are required to acknowledge receipt of this addendum by entering the date, which appears at the top of this letter on the addendum acknowledgement portion of your BID FORM.

Failure to acknowledge receipt of this or any other addendum in your BID FORM will result in your bid not being read.

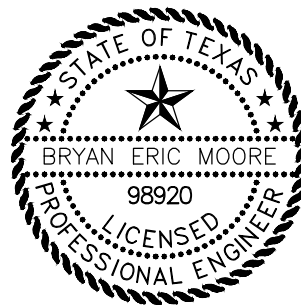


Bryan E. Moore, P.E.
Steger Bizzell, Georgetown, TX
F-181

05/02/2022

Date

Attachments



Addendum #3

INVITATION TO BID

Sealed bids will be received by the **PR North, Inc. Or Assignee** on behalf of **Northwest Williamson County Municipal Utility District No. 2** at the offices of **Steger Bizzell, 1978 South Austin Avenue, Georgetown, TX 78626**, on **Thursday May 5, 2022 at 3:00 p.m.** and immediately thereafter publicly opened and read, for constructing the following project:

Parmer Ranch Blvd Phase 2 and
Parmer Ranch Off-Site Wastewater Interceptor - Phase B
City of Georgetown
Williamson County, Texas

The project consists of furnishing, installing, and providing all labor and materials associated with the drainage, paving, water quality and detention ponds, wastewater, lift station and water systems infrastructure improvement associated with Parmer Ranch Blvd Phase 2 and off-site improvements for the Parmer Ranch Subdivision as more fully described in the Drawings and contract documents.

Bids must be submitted on the complete project. Bids must be enclosed in a sealed envelope, addressed to **PR North, Inc. Or Assignee – Northwest Williamson County Municipal Utility District No. 2** **ATTN: Project Engineer, Steger Bizzell, 1978 South Austin Avenue, Georgetown, Texas 78626** and the outside of the envelope must be marked **Parmer Ranch Blvd Phase 2 and Parmer Ranch Off-Site Wastewater Interceptor - Phase B**. All bids must be made on blank forms provided and included in the bound document. The name, address, and license number of the Bidder must be plainly marked thereon.

Bidding Documents will only be made available electronically. To obtain access to the files for no charge, please contact Steger Bizzell – bids@stegerbizzell.com, 1978 S. Austin Ave, Georgetown, TX 78626, (512) 930-9412. Bids not accompanied by cashier's check or bid bond will not be considered.

Each bid must be accompanied by cash or a certified cashier's check, drawn on a bank or trust company authorized to do business in the State of Texas, payable to **PR North, Inc. Or Assignee** in an amount at least equal to five percent (5%) of the total amount of the bid, as a guarantee that a contract will be entered into within ten (10) days of the award of the contract. In lieu of cash or a certified check, the Bidder may submit a bid bond in the form prescribed in the Instructions to Bidders.

Performance and Payment Bonds, when required, shall be executed on forms furnished by OWNER. Each bond shall be issued in an amount of one hundred percent (100%) of the Contract

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Amount by a solvent surety or insurance company licensed to do business in the State of Texas and as specifically prescribed in the General Conditions and Supplemental Conditions.

Minimum insurance requirements are specified in the General Conditions and Supplemental Conditions. The successful Bidder and its subcontractors shall pay to laborers, workmen, and mechanics the prevailing wage rates as required by the Supplemental Conditions.

The right is reserved to reject any or all bids, to waive minor technicalities, and to award a contract or contracts which, in the opinion of the Owner, appear to be in its best interest. A minor technicality is one that does not affect the competitiveness of the Bid. The Owner reserves the right to hold any or all proposals for the period of time from the opening of bids as specified in Section 00300, Bid Form.

A **non-mandatory pre-bid video/teleconference** for this project will be held on Tuesday, April 12, 2022, at 9:00 a.m. local time (CST) hosted by Steger Bizzell. The project site will be available for inspection by prospective bidders immediately following the pre-bid conference.

To obtain information on the bid, pre-bid conference and to register for the bid list, email bids@stegerbizzell.com.

Publication Dates:

Williamson County Sun:

Sunday, April 3, 2022

Wednesday, April 6, 2022

Sunday, April 10, 2022

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SECTION #00300

BID FORM

PROJECT IDENTIFICATION:

**PR North, Inc. Or Assignee
on behalf of
Northwest Williamson County Municipal Utility District No. 2**

**Parmer Ranch Blvd Phase 2 and
Parmer Ranch Off-Site Wastewater Interceptor - Phase B
City of Georgetown
Williamson County, Texas**

THIS BID IS SUBMITTED TO:

**Steger Bizzell
1978 South Austin Avenue
Georgetown, Texas 78626**

- 1.01** The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with OWNER in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.
- 1.02** BIDDER understands and agrees that the OWNER has the right to reject any or all Bids and to waive any minor technicalities.
- 2.01** Bidder accepts all of the terms and conditions of the Advertisement or Invitation to Bid and Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. The Bid will remain subject to acceptance for 90 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of OWNER.
- 3.01** In submitting this Bid, Bidder represents, as set forth in the Agreement, that:
 - A.** Bidder has examined and carefully studied the Bidding Documents, the other related data identified in the Bidding Documents, and the following Addenda, receipt of all which is hereby acknowledged.

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- B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and is satisfied as to all federal, state and local laws and regulations that may affect cost, progress and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site which have been identified in the Supplementary Conditions as provided in paragraph 4.02 of the General Conditions.
- E. Bidder has obtained and carefully studied (or assumes responsibility for having done so) all additional or supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents to be employed by Bidder, and safety precautions and programs incident thereto.
- F. Bidder does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by OWNER and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has correlated the information known to Bidder, information and observations obtained from visits to the Site, reports and drawings identified in the

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Bidding Documents, and all additional examinations, investigations, explorations, tests, studies, and data with the Bidding Documents.

- I. Bidder has given ENGINEER written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by ENGINEER is acceptable to Bidder.
- J. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.

4.01 Bidder further represents that this Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any individual or entity to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over OWNER.

5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

BID:

PARMER RANCH BLVD PHASE 2 AND PARMER RANCH OFF-SITE WASTEWATER INTERCEPTOR PHASE B (STA. 85+00 TO END) - BASE BID - ADDENDUM THREE

<i>Item</i>	<i>Description</i>	<i>Qty</i>	<i>Unit</i>	<i>Unit Price</i>	<i>Total</i>
	<i>Erosion and Sedimentation Control (PH 2)</i>				
	SWPPP Preparation and Monitoring	1	LS		
	Silt Fence	16,572	LF		
	Stabilized Construction Entrance	2	EA		
	10' Curb Inlet Protection	33	EA		
	Area Inlet Protection	6	EA		
	Tree Protection Fence	172	LF		
	Concrete Washout	1	EA		
	Clearing and Grubbing (Outside ROW)	29	AC		
	<i>Rough Excavation/Subgrade/Base (PH 2)</i>				
	3" ROW Stripping	46,461	SY		
	Excavation	1	LS		
	Embankment	1	LS		

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	Subgrade Preparation	31,039	SY		
	8" Flexible Base	2,100	SY		
	11" Flexible Base	28,939	SY		
	12" Flexible Base (TxDOT Turn Lane)	394	SY		
	8" Lime stabilized Subgrade (As Required)	28,939	SY		
	Street Name Signs w/Stop Signs	11	EA		
	24-inch White Stop Line	264	SF		
	Speed Limit Sign	2	EA		
	Removal and Restriping RM 2238	1	LS		
	4" White Bike Lane Striping	12,099	LF		
	Backfill Behind Curb	12,099	LF		
	2" HMAC Type D (All Roadways & TxDOT Turn Lane)	28,296	SY		
	8" HMAC Type B (TxDOT Turn Lane)	394	SY		
	Tree Well Per Detail 610S-6	123	SF		
	Water (PH 2)				
	8" Waterline - C900	1,057	LF		
	8" Gate Valve & Box	11	EA		
	12" Waterline - C900	5,451	LF		
	12" Gate Valve & Box	16	EA		
	5-1/4" Fire Hydrant Assembly	12	EA		
	Blue Reflectorized Buttons	12	EA		
	Single Service Water Connection	2	EA		
	Single Irrigation Water Service	2	EA		
	Double Service Water Connection	1	EA		
	Flowable Fill	106	LF		
	Trench Safety	6,508	LF		
	Testing	6,508	LF		
	4" SCH 40 PVC Irrigation Sleeves	2,107	LF		
	8" SCH 40 PVC Irrigation Sleeves	1,053	LF		
	Bore and Grout 24" Steel Casing	184	LF		
	12" Wet Connect to 12" Exiting Main	1	EA		

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12" Wet Connect to 12" Exiting Main with 12"x12" Full Body Tapping Sleeve	1	EA		
Air Release Valves per W12 and W13	1	EA		
Wastewater (PH 2)				
8" SDR 26 WW 0-8' DEPTH	8	LF		
8" SDR 26 WW 8-10' DEPTH	150	LF		
8" DR 18 WW 8-10' DEPTH	20	LF		
8" SDR 26 WW 10-12' DEPTH	182	LF		
8" SDR 26 WW 12-14' DEPTH	288	LF		
8" DR 18 WW 12-14' DEPTH	40	LF		
8" SDR 26 WW 14-16' DEPTH	295	LF		
8" DR 18 WW 14-16' DEPTH	46	LF		
8" SDR 26 WW 16-18' DEPTH	373	LF		
8" DR 18 WW 16-18' DEPTH	14	LF		
8" SDR 26 WW 18-20' DEPTH	94	LF		
12" SDR 26 WW 0-8' DEPTH	47	LF		
12" SDR 26 WW 8-10' DEPTH	291	LF		
12" SDR 26 WW 10-12' DEPTH	452	LF		
12" SDR 26 WW 12-14' DEPTH	528	LF		
6" DR-18 C900 FM	2,569	LF		
8" DR-18 C900 FM	20	LF		
Flowable Fill	60	LF		
STD 4' Dia. WW Manhole	17	EA		
Extra Depth on 4' Dia. Manhole	61	LF		
Trench Safety	5,417	LF		
WW MH and Pipe Testing	5,417	LF		
Lift Station and Site Complete As Specified	1	LS		
Wastewater Double Services	2	EA		
Wastewater Clean-out	1	EA		
Drainage (PH 2)				
18" CL III RCP	2,119	LF		
24" CL III RCP	1,113	LF		
30" CL III RCP	566	LF		
36" CL III RCP	362	LF		

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42" CL III RCP	1,237	LF		
48" CL III RCP	1,657	LF		
54" CL III RCP	152	LF		
60" CL III RCP	414	LF		
66" CL III RCP	298	LF		
Trench Safety	7,917	LF		
Stormwater Manhole (Std. 3' x 3' x 5' J-Box)	2	EA		
Stormwater Manhole (Std. 4' x 4' x 5' J-Box)	4	EA		
Stormwater Manhole (Std. 5' x 5' x 5.5 J-Box)	6	EA		
Stormwater Manhole (Std. 6' x 6' x 5.5 J-Box)	3	EA		
Stormwater Manhole (Std. 7' x 7' x 5.5 J-Box)	2	EA		
Stormwater 5' Manhole	1	EA		
Std. 10' x 4' Curb Inlet	33	EA		
24" SD-19 Headwall (3:1)	1	EA		
42" TxDOT SET (6:1)	2	EA		
36" TxDOT SET (6:1)	1	EA		
Water Quality and Detention Pond (PH 2)				
Fine Grading	41,721	SY		
6" Top Soil and Revegetation	41,721	SY		
12" Clay Liner Complete and Installed	25,574	SY		
Rock Rip Rap (8-12" Graded with 6" Embedment)	222	SY		
8" Trash Rack Riser Pipe, Trash Rack and 5'x5' Concrete Slab	1	EA		
12" PVC Basin Outfall Pipe	100	LF		
6' x 6' Storm Junction Box w/Storm Manhole Lid	1	EA		
8" Butterfly Valve and Control Panel for Batch Detention	1	EA		
12" Headwall / Basin Outfall Structure	1	EA		
Sediment Depth Marker	1	EA		
24" SD-19 Headwall (3:1)	1	EA		
42" SD-19 Headwall w/Dissipators	2	EA		
54" SD-19 Headwall w/Dissipators	1	EA		
66" SD 19 Rip Rap Headwall (Triple) w/Dissipators	1	EA		
Reinforced Concrete Outfall Structure	1	LS		
Water Quality Pond Plantings and Fish	1	LS		
Rock Gabion	635	LF		
4' High Black Vinyl Coated Chain-link Fence	120	LF		

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	Concrete (PH 2)				
	4" Mountable Curb & Gutter	11,917	LF		
	Ribbon Curb	182	LF		
	Exp. Jt. 40' O.C. in Curb	302	EA		
	ADA Ramp at Street Intersection	38	EA		
	5' Sidewalk - Common Areas	7,641	LF		
	Concrete Valley Gutter	2	EA		
	Traffic Control (PH 2)				
	Roadway and Utility Tie-In Traffic Control	1	LS		
	Erosion and Sedimentation Control (OS WW)				
	SWPPP Preparation and Monitoring	1	LS		
	Silt Fence	2,950	LF		
	Stabilized Construction Entrance	1	EA		
	Tree Protection Fence	0	LF		
	Concrete Washout	1	EA		
	Clearing and Tree Removal (LOC)	3	AC		
	Four-Inches of Topsoil and/or Native Screened Top Soil	16,049	SY		
	Revegetation of All Disturbed Areas	16,049	SY		
	Wastewater (OS WW)				
	18" PS-115 PVC 8-10' Depth	629	LF		
	18" PS-115 PVC 10-12' Depth	1,873	LF		
	18" PS-115 PVC 12-14' Depth	524	LF		
	Install Pipe in Existing 24" Steel Casing Pipe	262	LF		
	STD 5' Dia. WW Manhole With Bolted Cover & 6" Extended Base, complete in place as detailed and specified	8	EA		
	STD 5' Dia. WW Manhole With Vent, Bolted Cover & 6" Extended Base	1	EA		
	Extra Depth on 5' Dia. Manhole	28	LF		
	Traffic Control (OS WW)				
	Traffic Control	1	LS		
	Total - Base Bid				

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PARMER RANCH BLVD PHASE 2 AND PARMER RANCH OFF-SITE WASTEWATER INTERCEPTOR PHASE B (STA. 85+00 TO END) - ADD ALTERNATE BID - ADDENDUM THREE

Item	Description	Qty	Unit	Unit Price	Total
	Add Alternate Bid Items				
	Export Excess Material Off-Site	1	LS		
	Haul, Place and Compact In Lifts Excess Material On-Site, as Directed	1	LS		
	17" HMAC Type B (TxDOT Turn Lane)	394	SY		
	Electric Improvements				
	3 Transformer Pad	1	EA		
	74 PSE & Combo Pad	1	EA		
	56 PSE & Combo Pad	2	EA		
	74 PSE & Pad	6	EA		
	56 PSA & Pad	1			
	Secondary Enclosures	5	EA		
	3" Conduit	20,477	LF		
	STLT Conduit, 2" & Light Wire	6,167	LF		
	Trench	7,325	LF		
	Single Arm Street Light	12	EA		
	Double Arm Street Light	2	EA		
	Gas Improvements				
	2" Poly Pipe	1,131	LF		
	4" Poly Pipe	120	LF		
	8" Poly Pipe	4,714	LF		
	Service Tap	3	LF		
	Bypass Tie-Ins	1	LF		
	4" Sleeve	464	LF		
	6" Sleeve	66	LF		
	10" Sleeve	179	LF		
	2" Valve	7	LF		
	4" Valve	1	LF		
	8" Valve	5	LF		
	Non-joint Trench	5,965	LF		
	Total - Alternate Bid				

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TOTAL (Base Bid) \$ _____
(in Figures)

(in Words)

TOTAL (Add Alternate Bid)
\$ _____
(in Figures)

(in Words)

Addendum #3

Unit Prices have been computed in accordance with paragraph 11.03.B of the General Conditions. Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities provided, determined as provided in the Contract Documents.

- 6.01 Bidder agrees that the Work will be substantially complete within 180 calendar days after the date of the written Notice-to-Proceed and to fully complete project and ready for final payment within 210 calendar days after the date of the written Notice to Proceed.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages in the event of failure to complete the Work within the times specified above, which shall be stated in the Supplemental Conditions.
- 6.03 The following documents are attached to and made a condition of this Bid:
- A. Required Bid security in the form of _____;
 - B. Section 00400, Statement of Bidder's Experience, including Attachments.
- 7.01 The terms used in this Bid with initial capital letters have the meanings indicated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

SUBMITTED on _____, 20____.

If Bidder is:

An Individual

Name (typed or printed): _____

By: _____ (SEAL)
(Individual's signature)

Doing business as: _____

Business address: _____

Phone No.: _____ FAX No.: _____

Addendum #3

A Partnership

Partnership Name: _____ (SEAL)

By: _____
(Signature of general partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Business address: _____

Phone No.: _____ FAX No.: _____

A Corporation

Corporation Name: _____ (SEAL)

State of Incorporation: _____

Type (General Business, Professional, Service, Limited Liability): _____

By: _____
(Signature -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

(CORPORATE SEAL)

Attest _____
(Signature of Corporate Secretary)

Business address: _____

Phone No.: _____ FAX No.: _____

Date of Qualification to do business is _____.

Addendum #3

A Joint Venture

Joint Venturer Name: _____ (SEAL)

By: _____
(Signature of joint venture partner -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Business address: _____

Phone No.: _____ FAX No.: _____

Joint Venturer Name: _____ (SEAL)

By: _____
(Signature -- attach evidence of authority to sign)

Name (typed or printed): _____

Title: _____

Business address: _____

Phone No.: _____ FAX No.: _____

Phone and FAX Number, and Address for receipt of official communications:

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above.)

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SECTION #00410

BID BOND

BIDDER (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

PR North, Inc. Or Assignee
6706 W Courtyard
Austin, Texas 78730

BID NO:

BID DUE DATE: Thursday May 5, 2022 at 3:00 p.m.

PROJECT:

Parmer Ranch Blvd Phase 2 and Parmer Ranch Off-Site
Wastewater Interceptor - Phase B
City of Georgetown
Williamson County, Texas

BOND

BOND NUMBER:

DATE (Not later than Bid due date):

PENAL SUM:

(Words)

(Figures)

IN WITNESS WHEREOF, Surety and Bidder, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Bid Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

BIDDER

SURETY

_____(Seal)

_____(Seal)

Bidder's Name and Corporate Seal

Surety's Name and Corporate Seal

By: _____

Signature and Title

By: _____

Signature and Title
(Attach Power of Attorney)

Attest: _____

Signature and Title

Attest: _____

Signature and Title

Note: (1) Above addresses are to be used for giving required notice.
(2) Any singular reference to Bidder, Surety, OWNER or other party shall be considered plural where applicable.

Addendum #3

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to pay to OWNER upon default of Bidder the penal sum set forth on the face of this Bond.

2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by OWNER) the executed Agreement required by the Bidding Documents and any Performance and Payment Bonds required by the Bidding Documents.

3. This obligation shall be null and void if:

3.1. OWNER accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by OWNER) the executed Agreement required by the Bidding Documents and any Performance and Payment Bonds required by the Bidding Documents, or

3.2. All Bids are rejected by OWNER, or

3.3. OWNER fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by paragraph 5 hereof).

4. Payment under this Bond will be due and payable upon default by Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from OWNER, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.

5. Surety waives notice of and any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by OWNER and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 90 days from Bid due date without Surety's written consent.

6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.

7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.

8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier or by

United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.

9. Surety shall cause to be attached to this Bond a current and effective Power or Attorney evidencing the authority of the officer, agent or representative who executed this Bond on behalf of Surety to execute, seal and deliver such Bond and bind the Surety thereby.

10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

11. The term "Bid" as used herein includes a Bid, offer or proposal as applicable.

Addendum #3

Engineers Joint Documents Committee Design and Construction Related Documents Instructions and License Agreement

Instructions

Before you use any EJCDC document:

1. Read the License Agreement. You agree to it and are bound by its terms when you use the EJCDC document.
2. Make sure that you have the correct version for your word processing software.

How to Use:

1. While EJCDC has expended considerable effort to make the software translations exact, it can be that a few document controls (e.g., bold, underline) did not carry over.
2. Similarly, your software may change the font specification if the font is not available in your system. It will choose a font that is close in appearance. In this event, the pagination may not match the control set.
3. If you modify the document, you must follow the instructions in the License Agreement about notification.
4. Also note the instruction in the License Agreement about the EJCDC copyright.

License Agreement

You should carefully read the following terms and conditions before using this document.

Commencement of use of this document indicates your acceptance of these terms and conditions. If you do not agree to them, you should promptly return the materials to the vendor, and your money will be refunded.

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text. You further acknowledge that EJCDC documents are protected by the copyright laws of the United States.

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You have a limited nonexclusive license to:

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2. Use **EJCDC Design and Construction Related Documents** in printed form for bona fide contract documents.
3. Copy **EJCDC Design and Construction Related Documents** into any machine readable or printed form for backup or modification purposes in support of your use of **EJCDC Design and Construction Related Documents**.

You agree that you will:

1. Reproduce and include EJCDC's copyright notice on any printed or machine-readable copy, modification, or portion merged into another document or program. All proprietary rights in **EJCDC Design and Construction Related Documents** are and shall remain the property of EJCDC.
2. Not represent that any of the contract documents you generate from **EJCDC Design and Construction Related Documents** are EJCDC documents unless (i) the document text is used without alteration or (ii) all additions and changes to, and deletions from, the text are clearly shown.

You may not use, copy, modify, or transfer EJCDC Design and Construction Related Documents, or any copy, modification or merged portion, in whole or in part, except as expressly provided for in this license. Reproduction of EJCDC Design and Construction Related Documents in printed or machine-readable format for resale or educational purposes is expressly prohibited.

If you transfer possession of any copy, modification or merged portion of EJCDC Design and Construction Related Documents to another party, your license is automatically terminated.

Term:

The license is effective until terminated. You may terminate it at any time by destroying **EJCDC Design and Construction Related Documents** altogether with all copies, modifications and merged portions in any form. It will also terminate upon conditions set forth elsewhere in this Agreement or if you fail to comply with any term or condition of this Agreement. You agree upon such termination to destroy **EJCDC Design and**

Addendum #3

Construction Related Documents along with all copies, modifications and merged portions in any form.

Limited Warranty:

EJCDC warrants the CDs and diskettes on which **EJCDC Design and Construction Related Documents** is furnished to be free from defects in materials and workmanship under normal use for a period of ninety (90) days from the date of delivery to you as evidenced by a copy of your receipt.

There is no other warranty of any kind, either expressed or implied, including, but not limited to the implied warranties of merchantability and fitness for a particular purpose. Some states do not allow the exclusion of implied warranties, so the above exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

EJCDC does not warrant that the functions contained in **EJCDC Design and Construction Related Documents** will meet your requirements or that the operation of **EJCDC Design and Construction Related Documents** will be uninterrupted or error free.

Limitations of Remedies:

EJCDC's entire liability and your exclusive remedy shall be:

1. the replacement of any document not meeting EJCDC's "Limited Warranty" which is returned to EJCDC's selling agent with a copy of your receipt, or
2. if EJCDC's selling agent is unable to deliver a replacement CD or diskette which is free of defects in materials and workmanship, you may terminate this Agreement by returning EJCDC Document and your money will be refunded.

In no event will EJCDC be liable to you for any damages, including any lost profits, lost savings or other incidental or consequential damages arising out of the use or inability to use **EJCDC Design and Construction Related Documents** even if EJCDC has been advised of the possibility of such damages, or for any claim by any other party.

Some states do not allow the limitation or exclusion of liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you.

General:

You may not sublicense, assign, or transfer this license except as expressly provided in this Agreement. Any attempt otherwise to sublicense, assign, or transfer any of the rights, duties, or obligations hereunder is void.

This Agreement shall be governed by the laws of the State of Virginia. Should you have any questions concerning this Agreement, you may contact EJCDC by writing to:

Arthur Schwartz, Esq.
General Counsel
National Society of Professional Engineers
1420 King Street
Alexandria, VA 22314

Phone: (703) 684-2845
Fax: (703) 836-4875
e-mail: aschwartz@nspe.org

You acknowledge that you have read this agreement, understand it and agree to be bound by its terms and conditions. You further agree that it is the complete and exclusive statement of the agreement between you which supersedes any proposal or prior agreement, oral or written, and any other communications between us relating to the subject matter of this agreement.

Addendum #3

Notice of Award

Date: _____

Project: Parmer Ranch Blvd Phase 2 and Parmer Ranch Off-Site Wastewater Interceptor - Phase B	
Owner: PR North, Inc. Or Assignee	Owner's Bid No.:
Contract:	Engineer's Project No.: 22223
Bidder:	
Bidder's Address:	

You are notified that your Bid dated May 5, 2022 for the above Contract has been considered. You are the Successful Bidder and are awarded a Contract for Parmer Ranch Blvd Phase 2 and Parmer Ranch Off-Site Wastewater Interceptor - Phase B City of Georgetown Williamson County, Texas.

The Contract Price of your Contract is _____ Dollars and _____ Cents (\$_____).

4 copies of the proposed Contract Documents (except Drawings) accompany this Notice of Award.

3 sets of the Drawings will be delivered separately or otherwise made available to you immediately.

You must comply with the following conditions precedent within 15 days of the date you receive this Notice of Award.

1. Deliver to the Owner 4 fully executed counterparts of the Contract Documents.
2. Deliver with the executed Contract Documents the Contract security [Bonds] as specified in the Instructions to Bidders (Article 20), General Conditions (Paragraph 5.01), and Supplementary Conditions (Paragraph SC-5.01).
3. Other conditions precedent:

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within ten days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Contract Documents.

PR North, Inc. Or Assignee
Owner

By: _____
Authorized Signature

Title

Copy to Engineer

Addendum #3

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY ORGANIZED SEWAGE COLLECTION SYSTEM GENERAL CONSTRUCTION NOTES

- 1. This Organized Sewage Collection System must be designed and constructed in accordance with the Texas Commission on Environmental Quality's (TCEQ) Edwards Aquifer Rules 30 Texas Administrative Code (TAC) §§213.5(c) and 217.51 - 217.70 and 30 TAC Chapter 217, Subchapter D, and the City of Georgetown Standard Specifications.
2. All contractors conducting regulated activities associated with this proposed regulated project must be provided with copies of the Sewage Collection System plan and the TCEQ letter indicating the specific conditions of its approval.
3. No later than 48 hours prior to commencing any regulated activity, the applicant or his agent must notify the Austin Regional Office, in writing, of the date on which the regulated activity will begin.
4. Any modification to the activities described in the referenced SCS application following the date of approval may require the submission of an SCS application to modify this approval, including the payment of appropriate fees and all information necessary for its review and approval.
5. All temporary erosion and sedimentation controls must be installed prior to construction, must be maintained during construction, and must be removed when sufficient vegetation is established to control the erosion and sedimentation and the construction area is stabilized.
6. The sewer line trench details showing the cross section with the dimensions, pipe placement, and backfill instructions are included on Plan Sheet 57 & 58 of these plans.
7. Gravity lines must have a SDR-26 or less. Pressurized sewer systems must have pipe with a minimum working pressure rating of 150 psi.
8. If any sensitive features are discovered during the wastewater line trenching activities, all regulated activities near the sensitive feature must be suspended immediately.
9. Sewer lines located within or crossing the 5-year floodplain of a drainage way will be protected from inundation and stream velocities which could cause erosion and scouring of backfill.
10. Blasting procedures for protection of existing sewer lines and other utilities will be in accordance with the National Fire Protection Association criteria.
11. All manholes constructed or rehabilitated on this project must have watertight size on size resilient connectors allowing for differential settlement.
12. Where water lines and new sewer line are installed with a separation distance closer than nine feet (i.e., water lines crossing wastewater lines, water lines paralleling wastewater lines, or water lines next to manholes) the installation must meet the requirements of 30 TAC §217.53(d) (Pipe Design) and 30 TAC §290.44(e) (Water Distribution).
13. Where sewers lines deviate from straight alignment and uniform grade all curvature of sewer pipe must be achieved by the following procedure which is recommended by the pipe

manufacturer: NOT APPLICABLE

If pipe flexure is proposed, the following method of preventing deflection of the joint must be used: NOT APPLICABLE

Specific care must be taken to ensure that the joint is placed in the center of the trench and properly bedded in accordance with 30 TAC §217.54.

- 14. New sewage collection system lines must be constructed with stub outs for the connection of anticipated extensions.
15. Trenching, bedding and backfill must conform with 30 TAC §217.54.
16. Sewer lines must be tested from manhole to manhole.
17. All sewer lines must be tested in accordance with 30 TAC §217.57.
17.a. For a collection system pipe that will transport wastewater by gravity flow, the design must specify an infiltration and exfiltration test or a low-pressure air test.

If no stub-out is present an alternate method of joining laterals is shown in the detail on Plan Sheet 57. (For potential future laterals).

The private service lateral stub-outs must be installed as shown on the plan and profile sheets on Plan Sheet 57 and marked after backfilling as shown in the detail on Plan Sheet 57.

- 17.a.1. Low Pressure Air Test
17.a.1.A. A low pressure air test must follow the procedures described in American Society For Testing And Materials (ASTM) C-828, ASTM C-924, or ASTM F-1417 or other procedure approved by the executive director, except as to testing times as required in Table C.3 in subparagraph (C) of this paragraph or Equation C.3 in subparagraph (B)(ii) of this paragraph.
17.a.1.B. For sections of collection system pipe less than 36 inch average inside diameter, the following procedure must apply, unless a pipe is to be tested as required by paragraph (2) of this subsection.
17.a.1.B.a. A pipe must be pressurized to 3.5 pounds per square inch (psi) greater than the pressure exerted by groundwater above the pipe.
17.a.1.B.b. Once the pressure is stabilized, the minimum time allowable for the pressure to drop from 3.5 psi gauge to 2.5 psi gauge is computed from the following equation:

Equation C.3 T = 0.085 X D x K / Q
Where:
T = time for pressure to drop 1.0 pound per square inch gauge in seconds
K = 0.000419 X D X L, but not less than 1.0
D = average inside pipe diameter in inches
L = length of line of same size being tested, in feet
Q = rate of loss, 0.0015 cubic feet per minute per square foot internal surface

Since a K value of less than 1.0 may not be used, the minimum testing time for each pipe diameter is shown in the following Table C.3:

Table with 4 columns: PIPE DIAMETER (IN), MINIMUM TIME (SEC), MAXIMUM LENGTH FOR MINIMUM TIME (FT), TIME FOR LONGER LENGTH (SEC/FT)

- 17.a.1.C. An owner may stop a test if no pressure loss has occurred during the first 25% of the calculated testing time.
17.a.1.D. If any pressure loss or leakage has occurred during the first 25% of a testing period, then the test must continue for the entire test duration as outlined above or until failure.
17.a.1.E. Wastewater collection system pipes with a 27 inch or larger average inside diameter may be air tested at each joint instead of following the procedure outlined in this section.
17.a.1.F. A testing procedure for pipe with an inside diameter greater than 33 inches must be approved by the executive director.
17.a.2. Infiltration/Exfiltration Test.
17.a.2.A. The total exfiltration, as determined by a hydrostatic head test, must not exceed 50 gallons per inch of diameter per mile of pipe per 24 hours at a minimum test head of 2.0 feet above the crown of a pipe at an upstream manhole.
17.a.2.B. An owner shall use an infiltration test in lieu of an exfiltration test when pipes are installed below the groundwater level.
17.a.2.C. The total exfiltration, as determined by a hydrostatic head test, must not exceed 50 gallons per inch diameter per mile of pipe per 24 hours at a minimum test head of two feet above the crown of a pipe at an upstream manhole, or at least two feet above existing groundwater level, whichever is greater.
17.a.2.D. For construction within a 25-year flood plain, the infiltration or exfiltration must not exceed 10 gallons per inch diameter per mile of pipe per 24 hours at the same minimum test head as in subparagraph (C) of this paragraph.
17.a.2.E. If the quantity of infiltration or exfiltration exceeds the maximum quantity specified, an owner shall undertake remedial action in order to reduce the infiltration or exfiltration to an amount within the limits specified. An owner shall retest a pipe following a remediation action.

17.b. If a gravity collection pipe is composed of flexible pipe, deflection testing is also required. The following procedures must be followed:

- 17.b.1. For a collection pipe with inside diameter less than 27 inches, deflection measurement requires a rigid mandrel.
17.b.1.A. Mandrel Sizing.
17.b.1.A.a. A rigid mandrel must have an outside diameter (OD) not less than 95% of the base inside diameter (ID) or average ID of a pipe, as specified in the appropriate standard by the ASTMs, American Water Works Association, UNI-BELL, or American National Standards Institute, or any related appendix.
17.b.1.A.b. If a mandrel sizing diameter is not specified in the appropriate standard, the mandrel must have an OD equal to 95% of the ID of a pipe.
17.b.1.A.c. All dimensions must meet the appropriate standard.
17.b.1.B. Mandrel Design.
17.b.1.B.a. A rigid mandrel must be constructed of a metal or a rigid plastic material that can withstand 200 psi without being deformed.
17.b.1.B.b. A mandrel must have nine or more odd number of runners or legs.
17.b.1.B.c. A barrel section length must equal at least 75% of the inside diameter of a pipe.
17.b.1.B.d. Each size mandrel must use a separate proving ring.
17.b.1.C. Method Options.
17.b.1.C.a. An adjustable or flexible mandrel is prohibited.

- 17.b.1.C.b. A test may not use television inspection as a substitute for a deflection test.
17.b.1.C.c. If requested, the executive director may approve the use of a deflectometer or a mandrel with removable legs or runners on a case-by-case basis.
17.b.2. For a gravity collection system pipe with an inside diameter 27 inches and greater, other test methods may be used to determine vertical deflection.
17.b.3. A deflection test method must be accurate to within plus or minus 0.2% deflection.
17.b.4. An owner shall not conduct a deflection test until at least 30 days after the final backfill.
17.b.5. Gravity collection system pipe deflection must not exceed five percent (5%).
17.b.6. If a pipe section fails a deflection test, an owner shall correct the problem and conduct a second test after the final backfill has been in place at least 30 days.

- 18. All manholes must be tested to meet or exceed the requirements of 30 TAC §217.58.
19. All private service laterals must be inspected and certified in accordance with 30 TAC §213.5(c)(3)(I). After installation of and, prior to covering and connecting a private service lateral to an existing organized sewage collection system, a Texas Licensed Professional Engineer, Texas Registered Sanitarian, or appropriate city Inspector must visually inspect the private service lateral and the connection to the sewage collection system, and certify that it is constructed in conformity with the applicable provisions of this section.

THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS

MANHOLE TESTING

All manholes must pass a leakage test. An owner shall test each manhole (after assembly and backfilling) for leakage, separate and independent of the collection system pipes, by hydrostatic exfiltration testing, vacuum testing, or other method approved by the executive director.

HYDROSTATIC TESTING

The maximum leakage for hydrostatic testing or any alternative test methods is 0.025 gallons per foot diameter per foot of manhole depth per hour. To perform a hydrostatic exfiltration test, an owner shall seal all wastewater pipes coming into a manhole with an internal pipe plug, fill the manhole with water and maintain the test for at least one hour. A test for concrete manholes may use a 24 hour wetting period before testing to allow saturation of the concrete.

VACUUM TESTING

To perform a vacuum test, an owner shall plug all lift holes and exterior joints with a non-shrink grout and plug all pipes entering a manhole. No grout must be placed in horizontal joints before testing. Stub outs, manhole boots and pipe plugs must be secured to prevent movement while a vacuum is drawn. An owner shall use a minimum 60 inch/lb torque vacuum to tighten the external clamps that secure a test cover to the top of a manhole. A test head must be placed at the inside of the top of a cone section and the seal inflated in accordance with the manufacturer's recommendations. There must be a vacuum of 10 inches of mercury inside a manhole to perform a valid test. A test does not begin until after the vacuum pump is off. A manhole passes the test if after 2.0 minutes and with all valves closed, the vacuum is at least 9.0 inches of mercury.

NORTHWEST WILLIAMSON COUNTY MUNICIPAL UTILITY DISTRICT NO. 2 NOTES:

The District Engineer, Jones-Heroy & Associates, Inc. (Ken Heroy, Ph:512/989-2200) shall be contacted 48 hours prior to:
i) Pre-construction meetings;
ii) Beginning each phase of construction;
iii) Testing; and,
iv) Final walk-through of facilities.

ADDITIONAL WASTEWATER NOTES

- 1. If a conflict exists between the various documents, the documents will take precedence in the following order:
a. Municipal Utility Specifications
b. Change Orders
c. Addenda Issue During Bidding
d. Construction Plans
e. Project Specifications
2. The following pipe diameters, pipe material and national standard specifications are proposed for this project:

Table with 5 columns: PIPE DIAMETER (IN), LINEAR FEET (FT), PIPE MATERIAL, NATIONAL STANDARD FOR PIPE MATERIAL, NATIONAL STANDARD FOR PIPE JOINTS

- 3. Watertight, size on size resilient connectors conforming to ASTM C 923 must be used for connecting pipe to manholes.
4. The bedding class for each diameter of flexible pipe and each flexible pipe material is as follows:

Table with 3 columns: PIPE DIAMETER (IN), PIPE MATERIAL, BEDDING CLASS

- 5. Brick manhole construction is not allowed. Use of brick for adjusting manhole covers to grade is also prohibited.
6. All manholes shall be of precast concrete construction.
7. The structural integrity of the collection line due to high soil P.I.'s will require the bedding around the pipe to be 6" minimum below the pipe, 6" minimum on each side of the pipe, and 12" minimum above the pipe.
8. 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.
9. The trench walls shall be vertical to at least one foot above the pipe.
10. The trench backfill shall be free of stones greater than 6 inches in diameter and free of organic or any other unstable material.
11. Manholes shown on the plans with sealed and gasketed covers are provided as protection against inflow for those manholes which lie 1) within a 100 year flood plain, 2) lie within a drainage way, 3) lie within a street subject to carrying drainage flows, and 4) additional locations as determined necessary by the Engineer.
12. No drop connections are proposed in these plans.
13. The minimum allowable tensile strength and cell class for each flexible pipe shall be as follows:

Table with 3 columns: PIPE MATERIAL, TENSILE STRENGTH, CELL CLASS (PVC ONLY)

- 14. All gravity lines utilizing flexible pipe must be tested for deflection by pulling a rigid mandrel through the installed pipe.
15. A leakage test is required for all gravity lines.
16. Manholes must be tested for leakage.
17. The hydrostatic manhole test shall comply with the test requirements detailed in Section 217.58(b)(1) of the TCEQ's rules.
18. Each manhole shall be tested immediately after assembly and prior to backfilling.
19. All lift holes and exterior joints shall be plugged with an approved non-shrink grout.
20. No grout shall be placed in horizontal joints before testing.
21. All pipes entering the manhole shall be plugged, taking care to securely brace the plugs from being drawn into the manhole.

- 22. Stubouts, manhole boots and pipe plugs shall be secured to prevent movement while the vacuum is drawn.
23. A minimum 60-inch/lb torque wrench shall be used to tighten the external clamps that secure the test cover to the top of the manhole.
24. The test head shall be placed at the inside of the top of the cone section and the seal inflated in accordance with the manufacturer's recommendation.
25. A vacuum of 10 inches of mercury shall be drawn and the vacuum pump shut off.
26. Inspection must be provided during critical phases of construction by a qualified inspector under the direction of a P.E.
27. TCEQ approval letters for plans and specifications review contain the requirement that once the project is completed, a P.E. registered in the state of Texas must certify that the construction was performed substantially in accordance with the approved plans and specifications.
28. The project plans and specifications must ensure that the pipe installation will adhere to the minimum separation distances allowed by 217.53 (d), TCEQ's rules.

Separation Distances. The following rules apply to separation distances between potable water and wastewater treatment plants, and waterlines and sanitary sewers.

- (a) Water line/new sewer line separation.
(b) SDF

- (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.
(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.
(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.
(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.
(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.

The separation distance between any unknown water lines which are discovered during the installation phase of the project, and, the gravity sanitary sewer pipe which will be installed, shall be sufficient to comply with the minimum separation distances allowed by 217.53(d) of the TCEQ's rules as stated above.

- 29. AN EROSION AND SEDIMENTATION CONTROL PLAN is included with these plans.
30. It is the intent of this project that portable ladders be used to access manholes during construction by the Contractor as well as for maintenance purposes after construction is complete by the City.
31. 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.

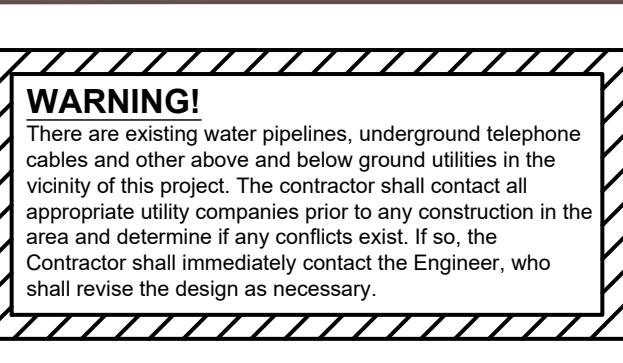


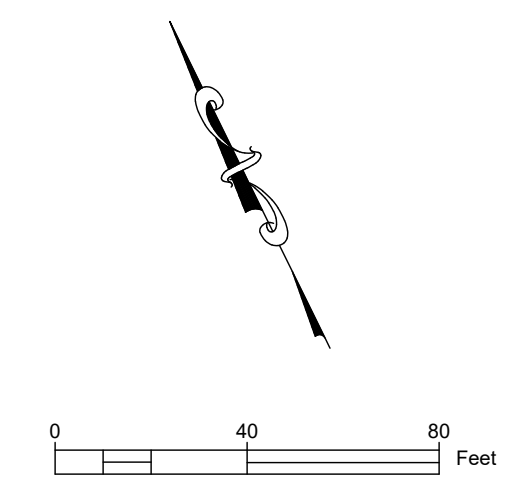
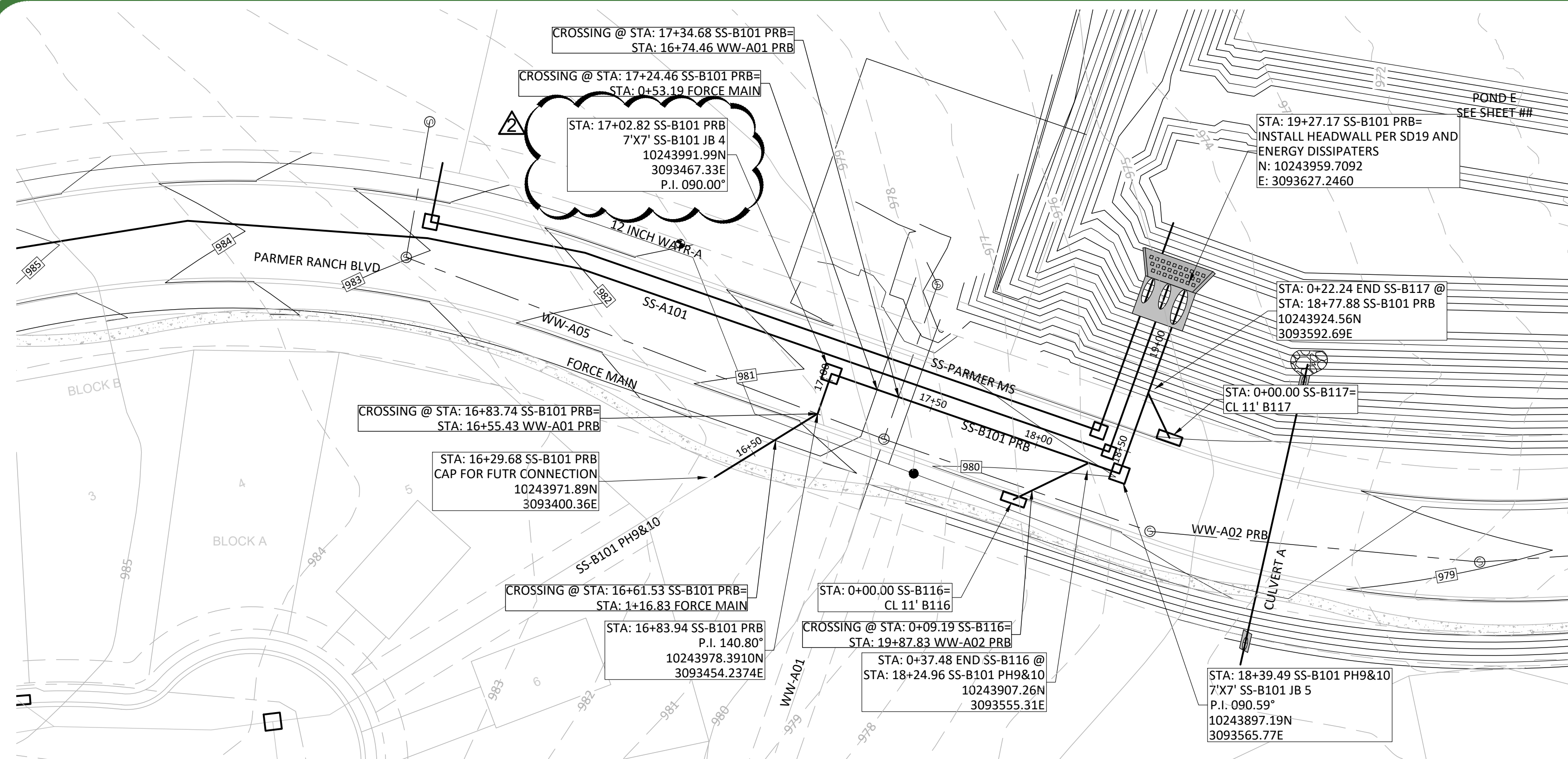
Table with 4 columns: NO., REVISION, BY, DATE. Row 1: 2, UPDATED WW PIPE LINEAR FEET, TG, 5/02/22



STEGER & BIZZELL logo and contact information: ADDRESS 1978 S. AUSTIN AVENUE, GEORGETOWN, TX 78626; METRO 512.930.9412; SERVICES >>ENGINEERS >>PLANNERS >>SURVEYORS

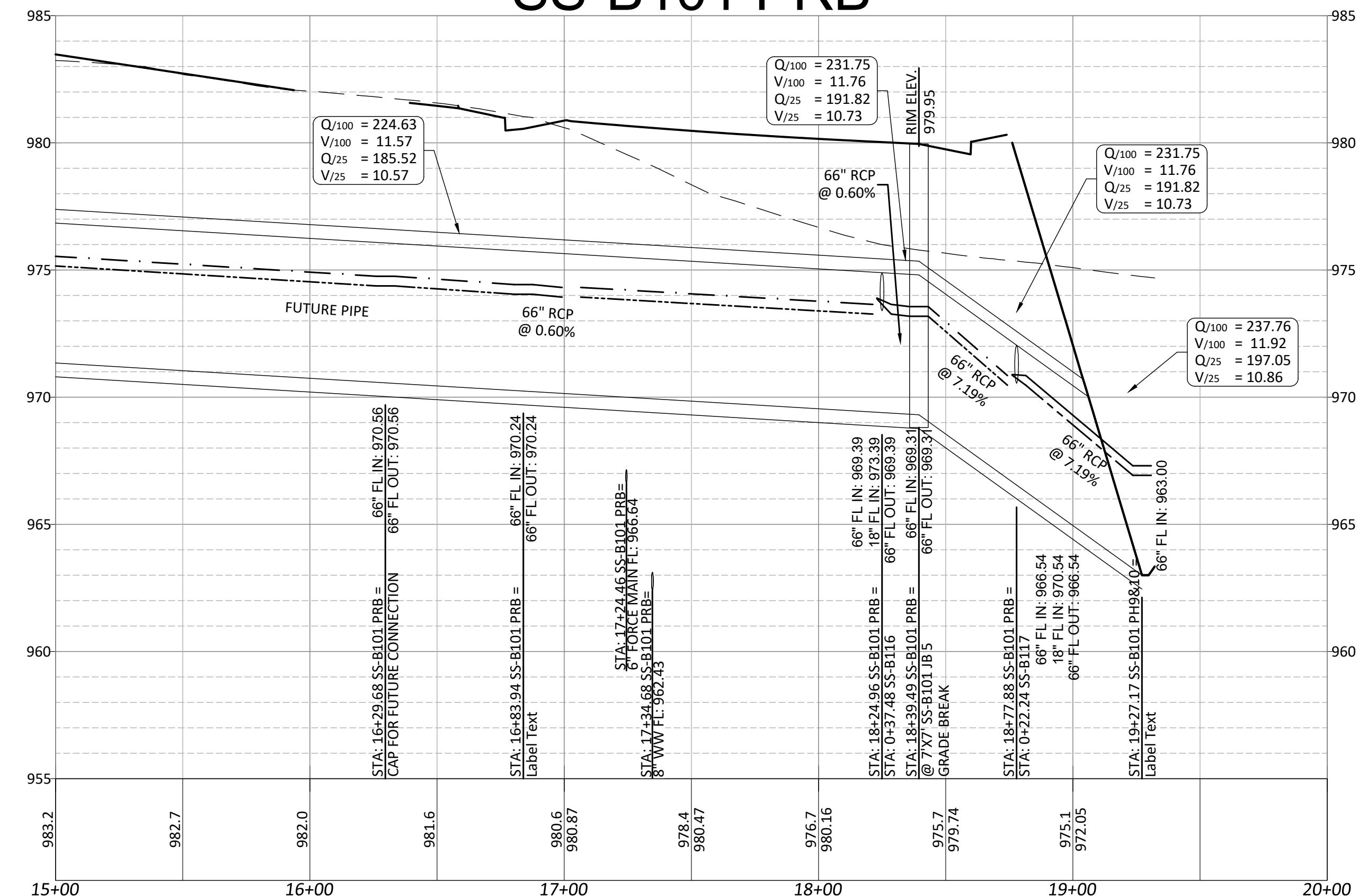
GENERAL NOTES (2 OF 2)
PARMER RANCH BLVD PHASE 2
City of Georgetown
Williamson County, Texas
Project Number: 22223-Phase 04
SCALE: AS NOTED
Project Path: P\22000-22999\22223
Project Name: Parmer Ranch
Drawing Path: CAD\Plans
Xref DWG FILE:
Sheet Number 03 of 110 sheets

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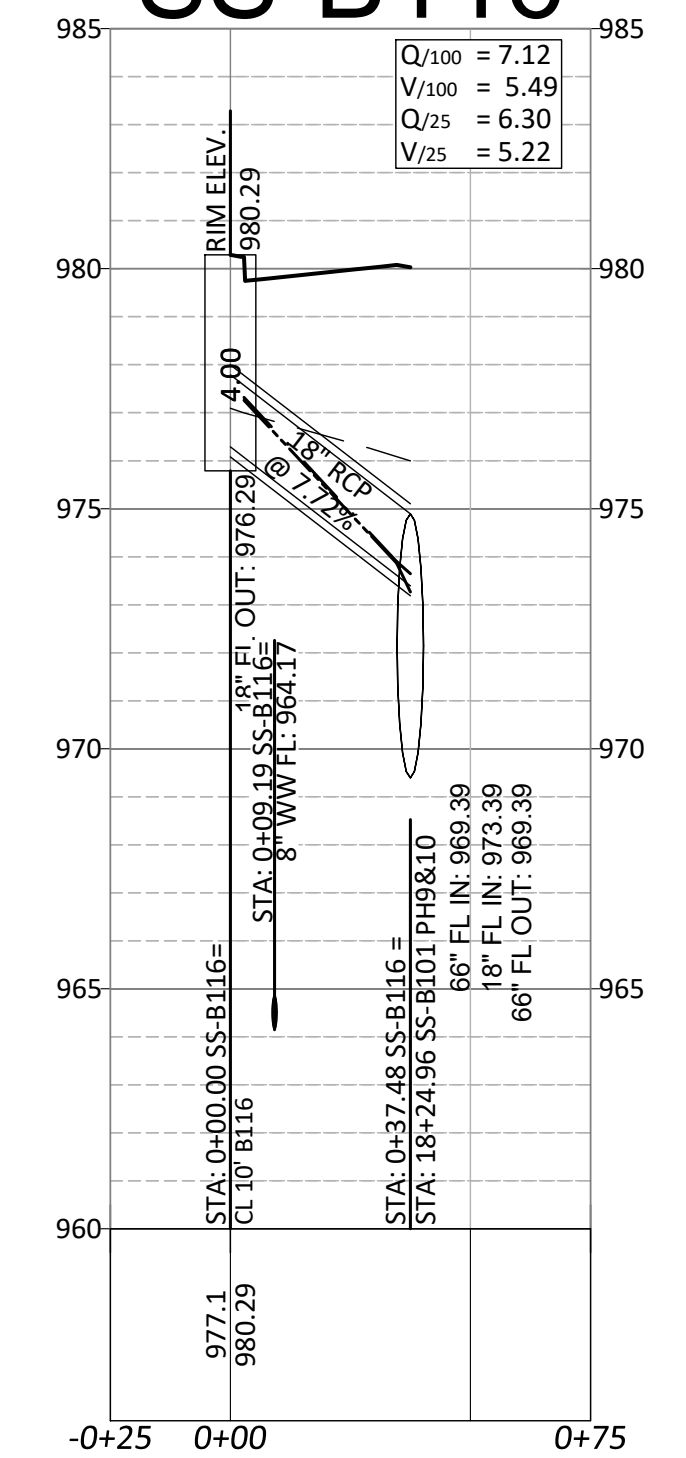
- LEGEND**
- STORM MANHOLE
 - STORM JUNCTION BOX
 - WASTEWATER MANHOLE
 - CURB INLET
 - AREA INLET
 - PROPOSED PROFILE
 - EXISTING GRADE AT PROPOSED CENTERLINE
 - HYDRAULIC GRADE LINE (100YR)
 - HYDRAULIC GRADE LINE (25 YR)
 - MAJOR EXISTING CONTOUR
 - MINOR EXISTING CONTOUR
 - MAJOR PROPOSED CONTOUR
 - MINOR PROPOSED CONTOUR
 - PROPERTY BOUNDARY

SS-B101 PRB

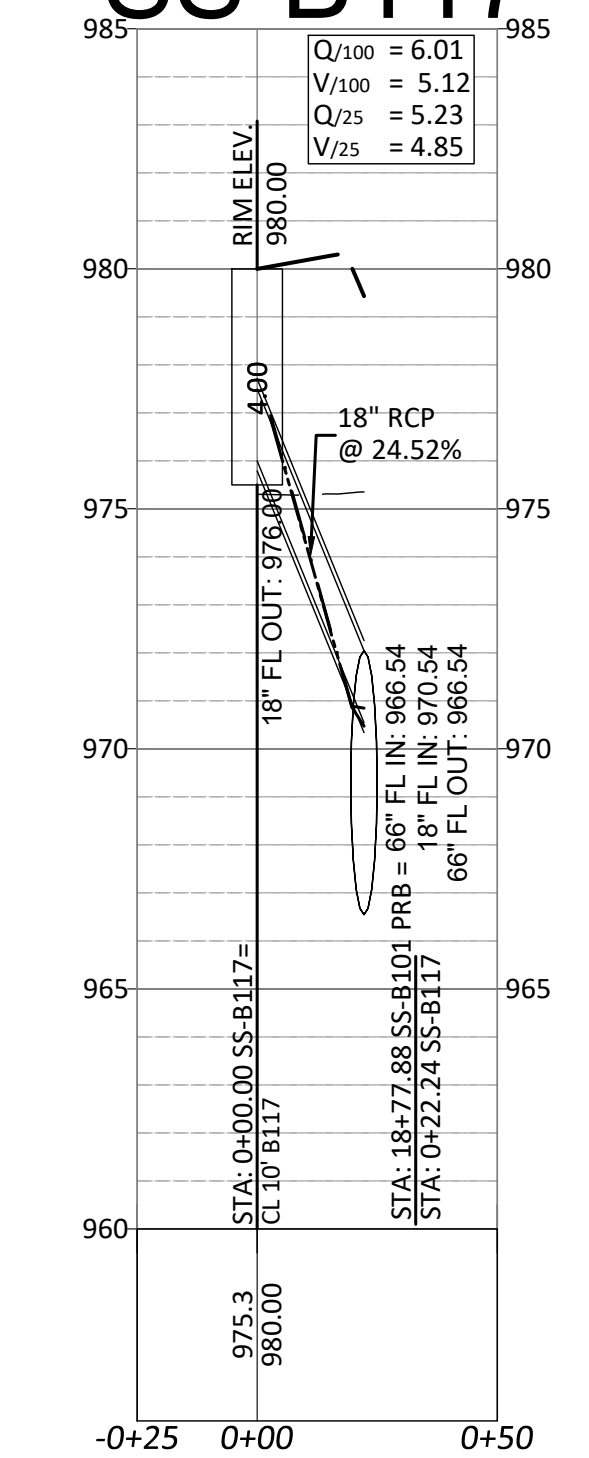


SCALE
 1" = 40' HORIZONTAL
 1" = 4' VERTICAL

SS-B116



SS-B117



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 utility 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.

NO.	REVISION	BY	DATE
2	ADDED MISSING LABEL	TG	5/02/22

EJH, L.B. SJT DESIGNED BY:	2021-09-20 DATE
EJH, L.B. SJT DRAWN BY:	2021-09-20 DATE
CHECKED BY:	DATE
APPROVED BY:	DATE

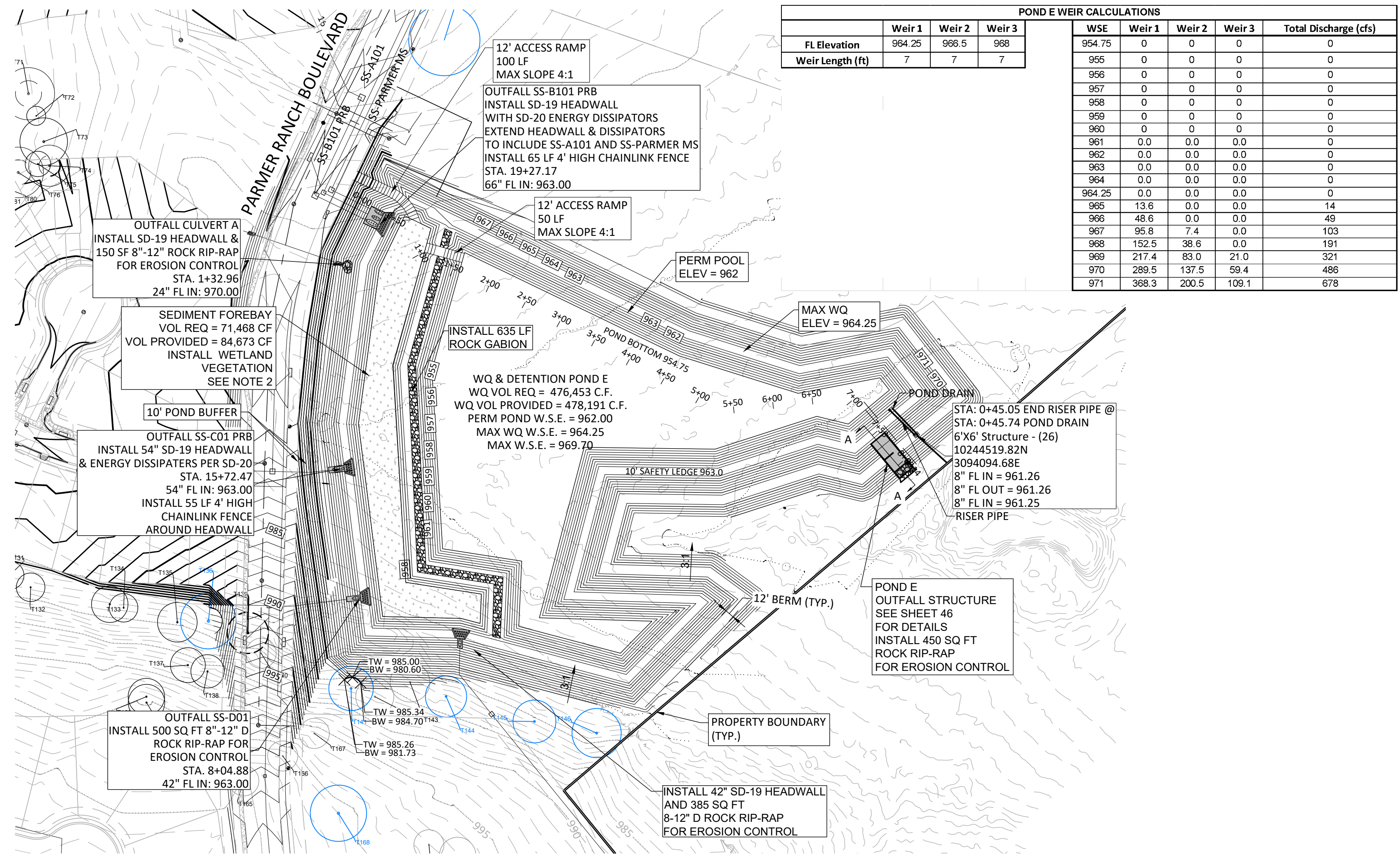


ADDRESS	1978 S. AUSTIN AVENUE	GEORGETOWN, TX 78626
METRO	512.930.9412	Texas Registered Engineering Firm F-181
SERVICES	TBPLS Firm No. 10003700 >>ENGINEERS >>PLANNERS >>SURVEYORS	
WEB	STEGERBIZZELL.COM	

STRM B101 PLAN & PROFILE
PARMER RANCH BLVD PHASE 2
 City of Georgetown
 Williamson County, Texas

Project Number:	22223-Phase 04
SCALE:	AS NOTED
Project Path:	P:\22000-22999\22223
Project Name:	Parmar Ranch
Drawing Path:	CAD\Plans
Xref DWG File:	
Sheet Number:	33 of 110 sheets

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FL Elevation	Weir 1	Weir 2	Weir 3	WSE	Weir 1	Weir 2	Weir 3	Total Discharge (cfs)
964.25	964.25	966.5	968	954.75	0	0	0	0
				955	0	0	0	0
				956	0	0	0	0
				957	0	0	0	0
				958	0	0	0	0
				959	0	0	0	0
				960	0	0	0	0
				961	0.0	0.0	0.0	0
				962	0.0	0.0	0.0	0
				963	0.0	0.0	0.0	0
				964	0.0	0.0	0.0	0
				964.25	0.0	0.0	0.0	0
				965	13.6	0.0	0.0	14
				966	48.6	0.0	0.0	49
				967	95.8	7.4	0.0	103
				968	152.5	38.6	0.0	191
				969	217.4	83.0	21.0	321
				970	289.5	137.5	59.4	486
				971	368.3	200.5	109.1	678

2. Drainage Basin Parameters (This information should be provided for each basin):

Drainage Basin/Outfall Area No. = **POND-E**

Total drainage basin/outfall area = **143.92** acres
 Predevelopment impervious area within drainage basin/outfall area = **0.00** acres
 Post-development impervious area within drainage basin/outfall area = **69.72** acres
 Post-development impervious fraction within drainage basin/outfall area = **0.48**
 L_M THIS BASIN = **60684** lbs.

3. Indicate the proposed BMP Code for this basin.

Proposed BMP = **Wet Basin**
 Removal efficiency = **93** percent

4. Calculate Maximum TSS Load Removed (L_r) for this Drainage Basin by the selected BMP Type.

RG-348 Page 3-33 Equation 3.7: L_r = (BMP efficiency) x P x (A_i x 34.6 + A_p x 0.54)

where:
 A_c = Total On-Site drainage area in the BMP catchment area
 A_i = Impervious area proposed in the BMP catchment area
 A_p = Pervious area remaining in the BMP catchment area
 L_r = TSS Load removed from this catchment area by the proposed BMP

A_c = **136.55** acres
 A_i = **69.72** acres
 A_p = **66.83** acres
 L_r = **72864** lbs.

5. Calculate Fraction of Annual Runoff to Treat the drainage basin / outfall area

Desired L_M THIS BASIN = **68128** lbs. **68120.91817**
 F = **0.93**

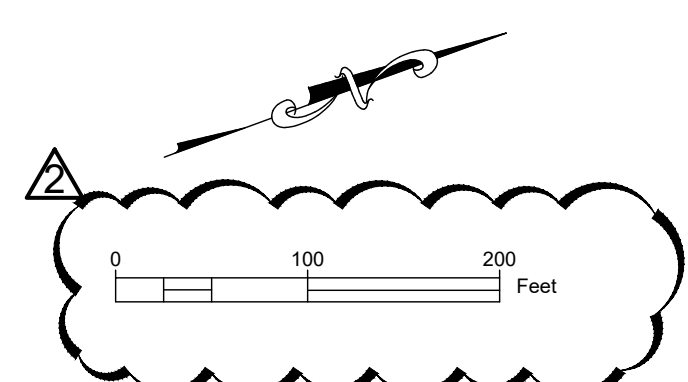
6. Calculate Capture Volume required by the BMP Type for this drainage basin / outfall area. Calculations from RG-348

Rainfall Depth = **2.20** inches
 Post Development Runoff Coefficient = **0.36**
 On-site Water Quality Volume = **396273** cubic feet

Calculations from RG-348 Pages 3-36 to 3-37

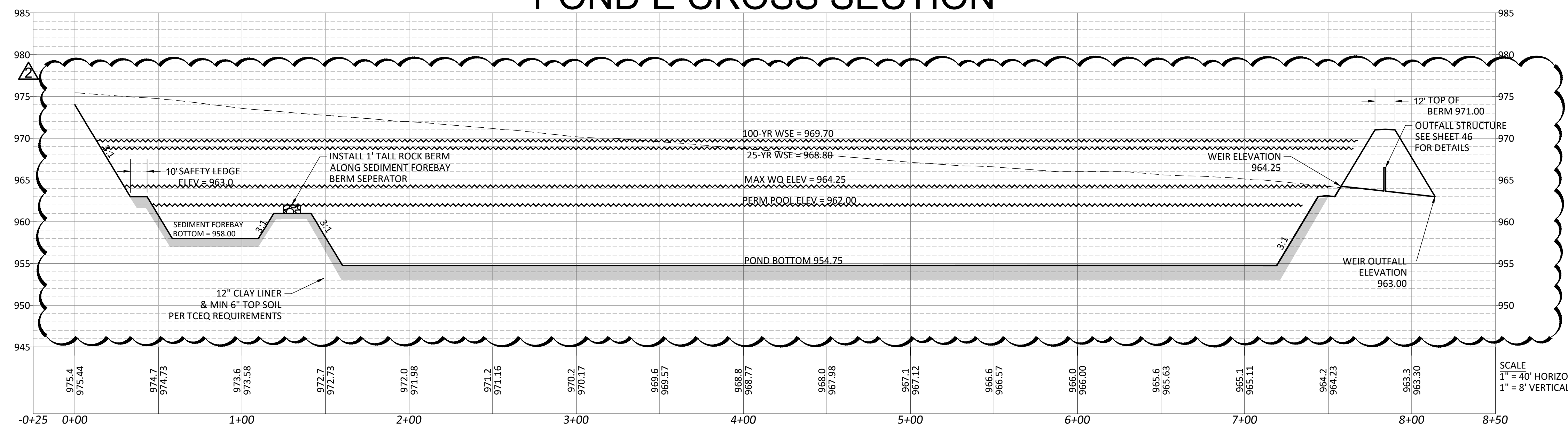
Off-site area draining to BMP = **7.37** acres
 Off-site Impervious cover draining to BMP = **0.00** acres
 Impervious fraction of off-site area = **0.00**
 Off-site Runoff Coefficient = **0.02**
 Off-site Water Quality Volume = **1177** cubic feet

Storage for Sediment = **79490**
 Total Capture Volume (required water quality volume(s) x 1.20) = **476940** cubic feet



- NOTES:**
- ALL VOLUMES WERE CALCULATED USING THE AVERAGE END VOLUME METHOD.
 - POND E WEIRS WERE DESIGNED TO CONVEY THE 100 YEAR STORM FLOW WITH A WATER SURFACE ELEVATION 1' BELOW THE BERM
 - WETLAND VEGETATION SHALL INCLUDE: BULRUSH IN CLUMPS, WITH INDIVIDUAL PLANTS SPACED THREE TO FOUR FEET ON CENTER. SPECIES: SCIRPUS VALIDUS, BULRUSH SCIRPUS AMERICANUS, THREE SQUARE BULRUSH
- MARSH PLANTS SHALL BE INSTALLED IN CLUMPS IN SHALLOW WATER WITH PLANTS SPACED APPROXIMATELY THREE FEET ON CENTER. SPECIES: ECHINODORUS ROSTRATUS, BURHEAD NAJAS GUADALUPENSIS, WATER-NAID
- INSTALL SPIKERUSH AT OR NEAR WATER'S EDGE, WITH INDIVIDUAL PLANTS SPACED APPROXIMATELY THREE TO SIX FEET ON CENTER. SPECIES: ELEOCHARIS MONTEVIDENSIS, SPIKERUSH ELEOCHARIS QUADRANGULATA, SPIKERUSH
- INSTALL ARROWHEAD IN CLUMPS IN SHALLOW WATER, WITH INDIVIDUAL PLANTS SPACED THREE FEET ON CENTER. SPECIES: SAGGITARIA LATIFOLIA, ARROWHEAD
- FLOATING LEAF AQUATIC PLANTS SHALL BE USED AND PLACED AT RANDOM LOCATIONS THROUGHOUT THE POND. SPECIES: POTOMAGETON PECTINATUS, SAGO PONDWEED CABOMBA CAROLINIANA, FANWORT
- POND E WATER TO BE PROVIDED BY AN ON-SITE PRIVATE WELL.

POND E CROSS SECTION



Stage (ft)	Main Pond Area (sf)	Sediment Forebay Area (sf)	Total Area (sf)	Avg End Area Volume (cf)	Avg End Cumulative Volume (cf)
954.75	100169	0	100,169	0	0
955	101749	0	101,749	25,240	25,240
956	108,120	0	108,120	104,934	130,174
957	114,572	0	114,572	111,346	241,520
958	121,107	24,063	145,169	129,871	371,391
959	127,723	27,955	155,678	150,424	521,815
960	134,421	31,882.76	166,304	160,991	682,806
961	141,201	35,839.73	177,041	171,672	854,478
962	148,063	39,890.96	187,954	182,498	1,036,976
963	161,169	44,014.77	205,184	196,569	1,233,545
964	180,170	48,211.56	238,382	221,783	1,455,328
964.25	191,058	49,272.00	240,330	59,839	1,515,167
965	193,734	52,480.55	246,214	242,298	1,697,626
966	254,118		254,118	250,166	1,947,792
967	262,088		262,088	258,103	2,205,895
968	270,124		270,124	266,106	2,472,001
969	278,227		278,227	540,314	2,746,209
970	286,395		286,395	282,311	3,028,520
971	294,630		294,630	290,513	3,319,033
TOTALS				Required	Provided
Sediment Forebay Vol Req. =				155,546	169,607
Perm Pool Volume Required =				476,940	1,036,976
Water Quality Volume =				476,940	478,191
Permanent Pool and Water Quality Volume =				953,881	1,515,167

WARNING!
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NO.	REVISION	BY	DATE
2	UPDATED PLAN SCALE AND CLAY LINER	TG	5/02/22

EJH, L.B. SJT
 DESIGNED BY: DATE: 2021-09-20
 EJH, L.B. SJT
 DRAWN BY: DATE: 2021-09-20
 CHECKED BY: DATE: _____
 APPROVED BY: DATE: _____



STEGER & BIZZELL

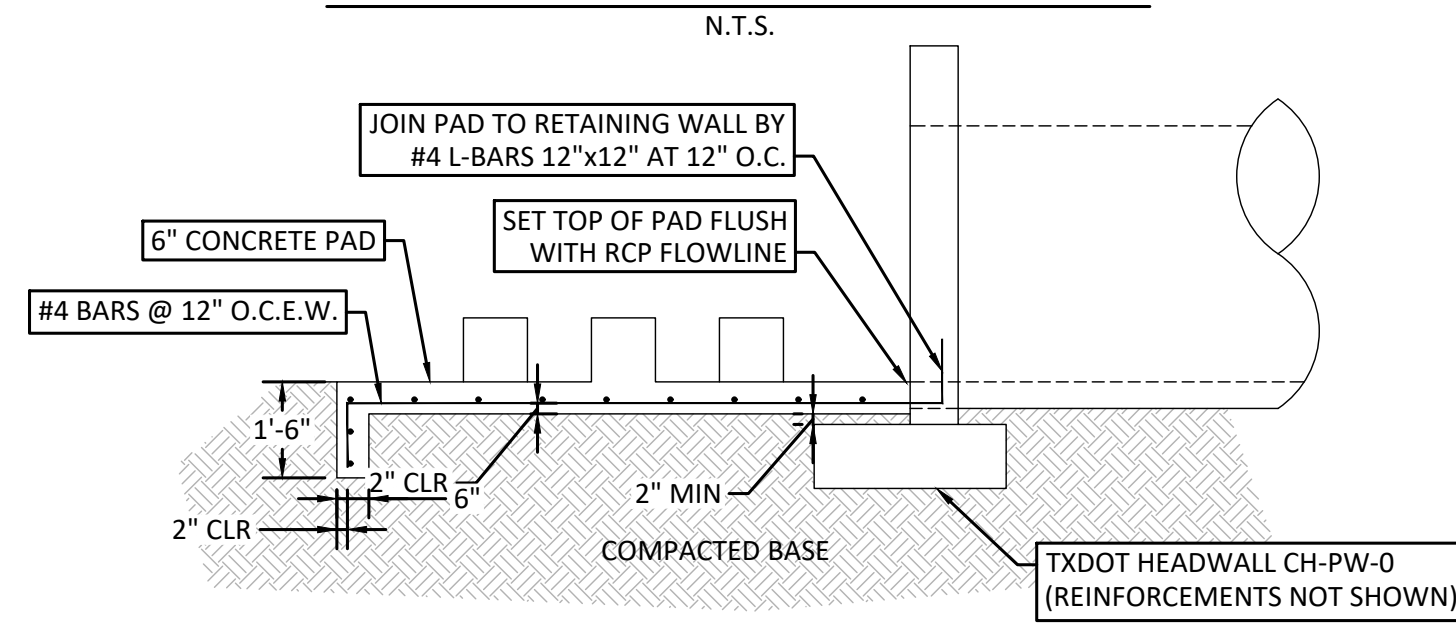
ADDRESS: 1978 S. AUSTIN AVENUE, GEORGETOWN, TX 78626
 METRO: 512.930.9412, SERVICES: >>ENGINEERS >>PLANNERS >>SURVEYORS
 TEXAS REGISTERED ENGINEERING FIRM F-181, TBPLS FIRM No. 10003700, WEB: STEGERBIZZELL.COM

DETENTION & WATER QUALITY POND E PLAN
PARMER RANCH BLVD PHASE 2
 City of Georgetown
 Williamson County, Texas

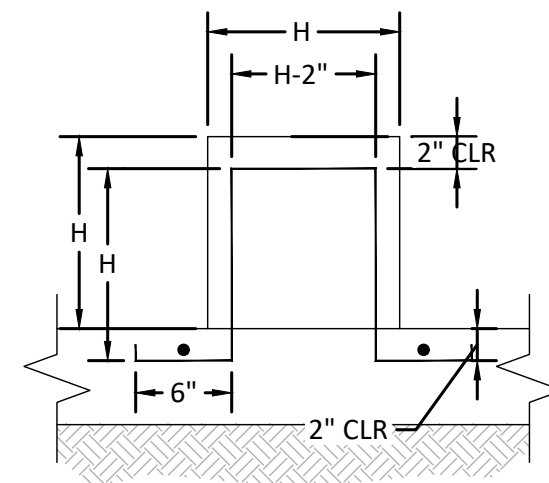
Project Number: 22223-Phase 04
 SCALE: AS NOTED
 Project Path: P:\22000-22999\22223
 Project Name: Parmer Ranch
 Drawing Path: CAD\Plans
 Xref DWG FILE:
 Sheet Number: 45 of 110 sheets

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ENERGY DISSIPATER SECTION A-A



ENERGY DISSIPATER BLOCK REINFORCEMENT DETAIL



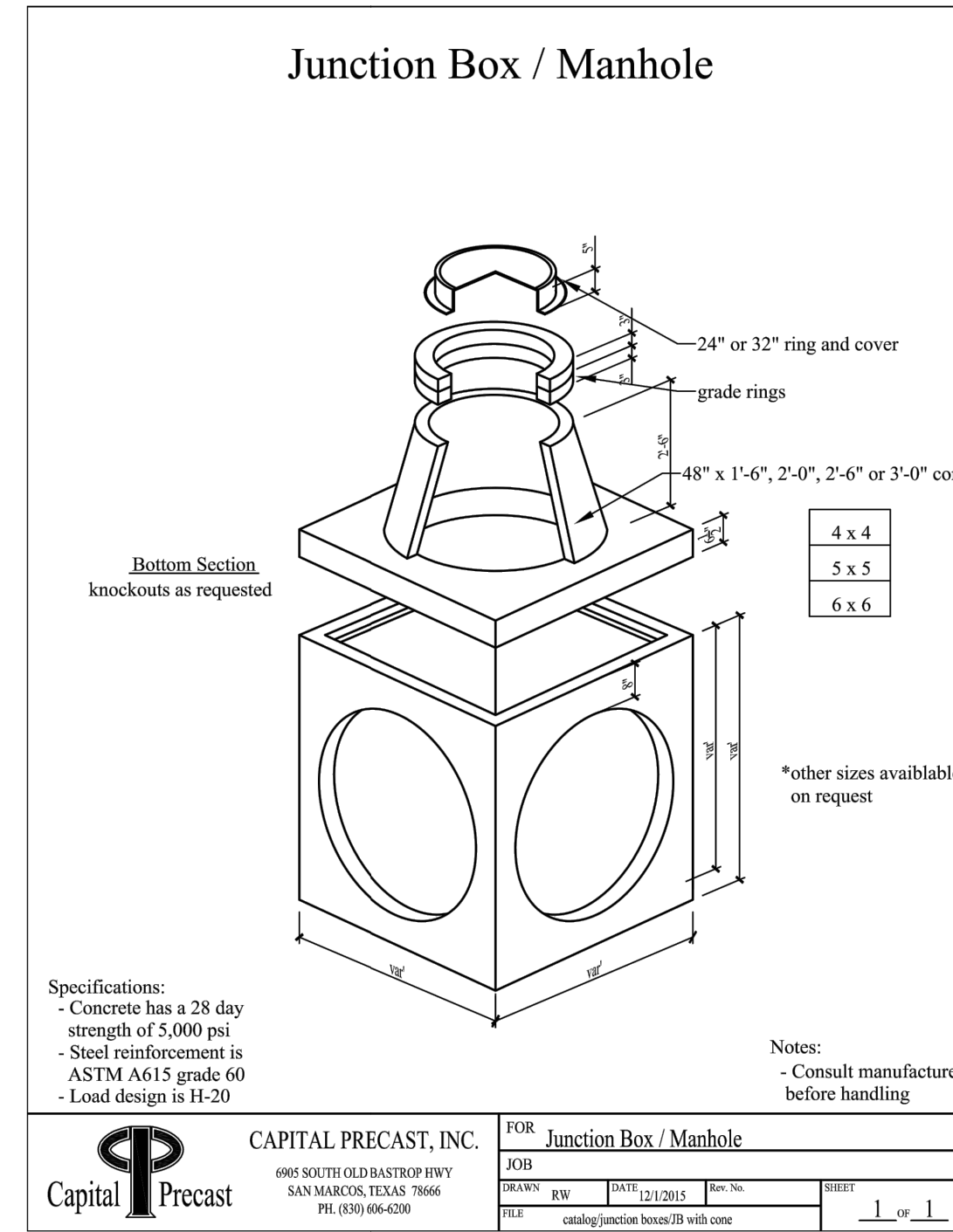
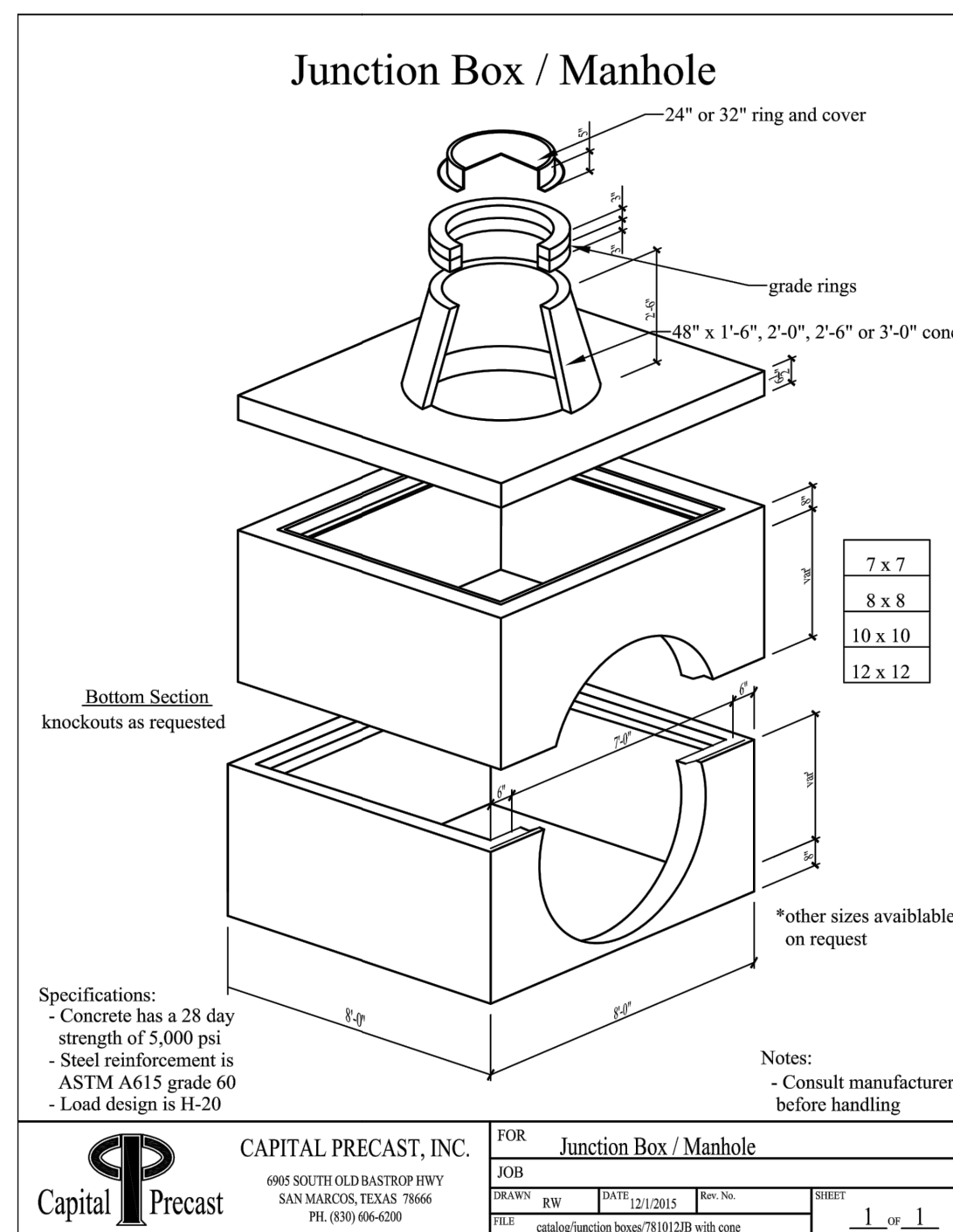
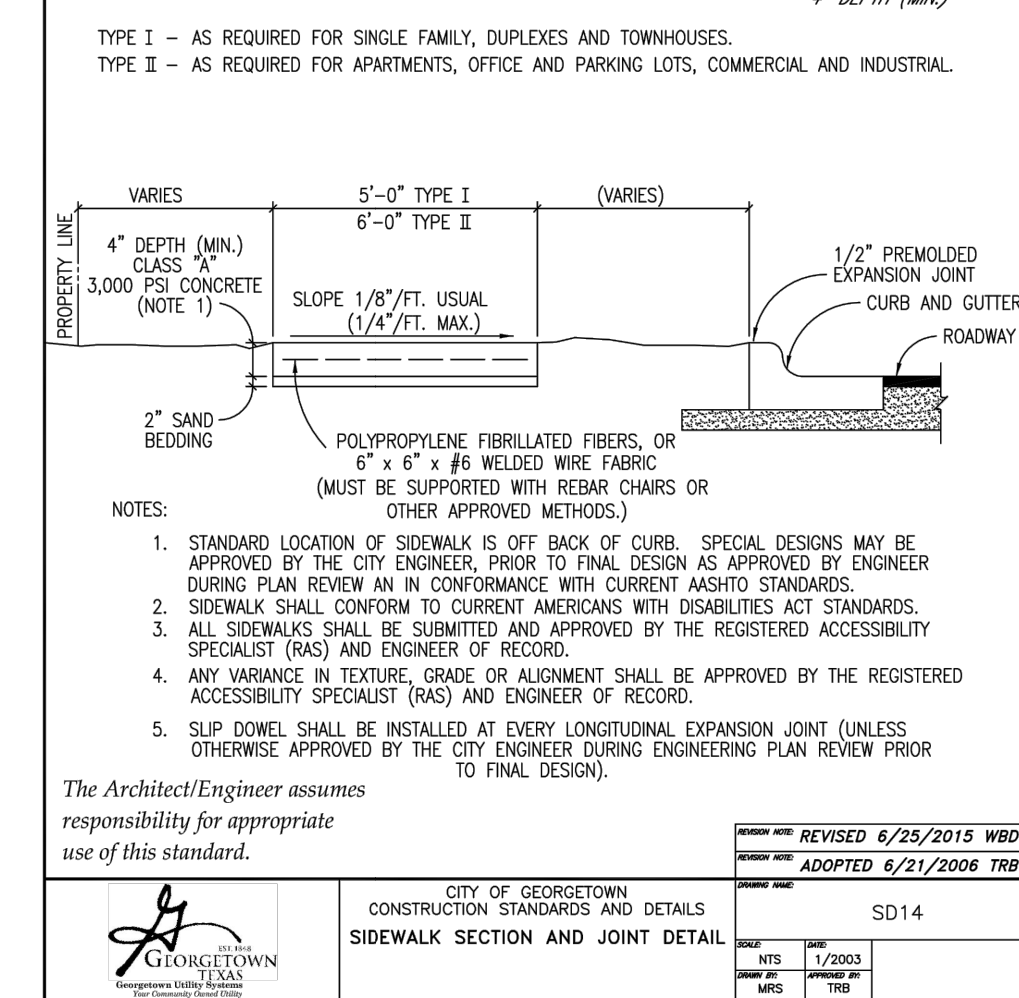
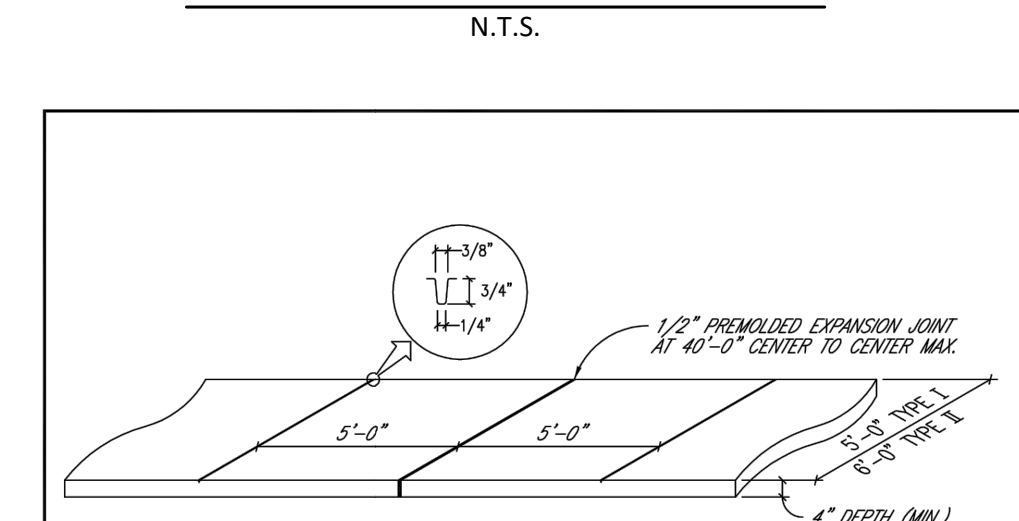
ENERGY DISSIPATER NOTES:

1. USE CLASS "A" CONCRETE, 3,000 PSI AT 28 DAYS, UNLESS NOTED.
2. REINFORCING STEEL - ASTM A615, GRADE 40, UNLESS NOTED.
3. LAP REINFORCING 30 BAR DIAMETERS MIN. AT SPLICES, UNLESS NOTED.
4. CHAMFER EXPOSED EDGES OF CONCRETE 3/4", UNLESS NOTED.
5. PLACE REINFORCING WITH THE CENTER OF THE OUTSIDE BARS 2 INCHES FROM THE SURFACE OF THE CONCRETE.

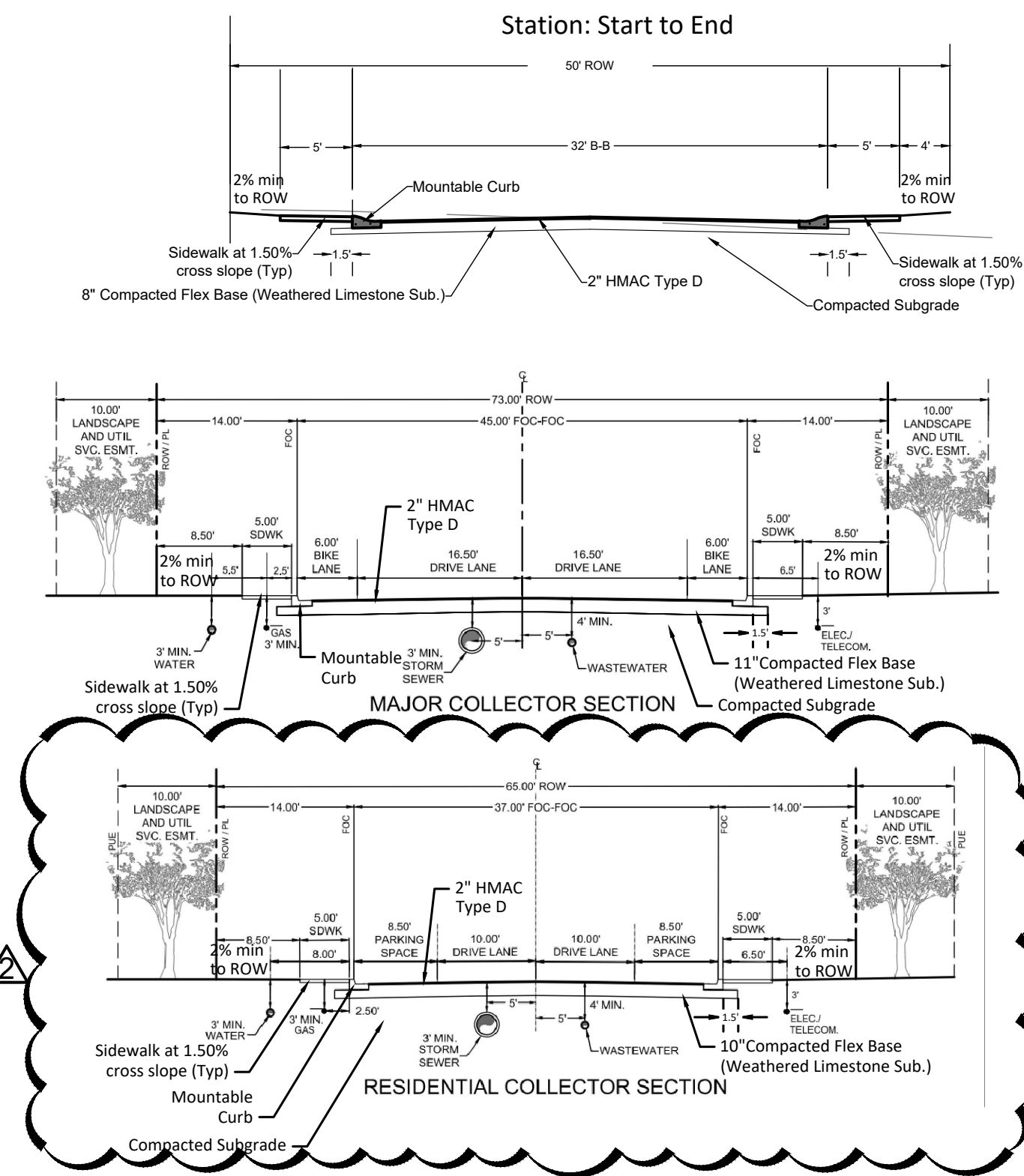
TABLE OF DIMENSIONS FOR ENERGY DISSIPATER DETAIL

D PIPE DIAMETER (INCHES)	NUMBER OF ROWS OF DISSIPATERS	NUMBER OF DISSIPATERS IN FRONT ROW	H (INCHES)	A (INCHES)	B (INCHES)
12	1	3	4	4	9 3/16
18	2	4	4 1/2	9 1/2	15 9/16
24	2	5	6	14 3/4	16 1/2
30	3	6	7 1/2	12 1/2	14 3/8
36	3	6	9	16 1/4	18 5/16
42	3	6	10 1/2	20	22 1/4
48	3	6	12	23 3/4	26 1/4
54	3	6	13 1/2	27 1/2	27 3/4
60	3	6	15	31 1/4	31 5/8

ENERGY DISSIPATER PLAN



Residential Streets (Typ.)



NOTES:

1. The pavement design and construction recommendations are summarized hereon to aid the contractor. Contractor shall obtain, read and comply with all geotechnical recommendations contained in the Geotechnical Investigation and Pavement Thickness Design Recommendations prepared by geotechnical engineer for Parmer Ranch Partners, L.P. for construction of Parmer Ranch Phases 2, 3, and 4.

Pavement Thickness Design

The recommendations below constitute a pavement design intended to address the subsurface and traffic conditions for each street classification. This information is intended to be incorporated into a set of civil engineering plans such that the pavement cross sections (including curb and gutter details) and street classifications specific to each street (which are unknown at this time) can be appropriately addressed.

Street Classification	Subgrade Material	Subgrade PI < 20*	Subgrade PI > 20*
Local Street	Subgrade PI < 20*	2.8	8
Residential Collector	Subgrade PI < 20*	2.8	10
Major Collector	Subgrade PI < 20*	2.8	11

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CONSTRUCTION CONSIDERATIONS

Ground Water
Should ground water become a problem during excavation, or if surface water accumulates during a rainy period, saturated soil should be dried out and/or removed and replaced with crushed limestone base.

- Pavement**
1. Strip and remove from construction area any top soil, organics and vegetation to a minimum depth of 6 inches below the existing natural ground surface.
 2. Fill sections may be composed of low PI (PI < 20) on-site material excluding top soil, vegetation, and organics. Fills should be compacted in lifts not exceeding 8 inches after compaction and meet Section SD3 of the City of Georgetown's "Construction Specifications and Standards (5)."
 3. Compaction of cut areas, on-grade areas, and fill sections should be to 95 percent

of TxDOT TEX-114-E. Compaction should be performed with the moisture content of the soil adjusted to within 3 percent of optimum for soils with a PI less than 20. For soils with a PI greater than 20, the moisture content should range from optimum to 3 percent above optimum. If exposed limestone is suspected the geotechnical engineer should be notified to provide a field confirmation.

4. Proof-roll the subgrade as per City of Georgetown's current "Construction Specifications and Standards" Item No. 216 prior to placement of the first course of flexible base.
2. Lime Stabilized Subgrade
 - a. Lime stabilization of the subgrade should be performed in accordance with TxDOT Item 260, as applicable.
 - b. The surface clay should be tested for sulfate reaction to make sure that lime stabilization is feasible.
 - c. The surface clay shall be tested using the Atterberg Limits procedure (ASTM D) to determine the percent lime to be added. This should be done by adding varying percentages of lime to samples of the surface soil and then determining the Plasticity Index of each sample. The lowest percentage of lime added that significantly reduces the Plasticity Index of the lime-clay sample, as determined by the Geotechnical Engineer, shall be the percent lime to be added in the field.

Base Course

- a. Base material shall meet the specifications outlined by City of Georgetown's Construction Specifications and Standards.
- b. Thickness of the base course should be as shown on the enclosed Recommendations - Pavement Thickness Sections.
- c. Base course compaction shall be 100 percent of TxDOT TEX-113-E using 13.26 ft. lbs./cu.in. compaction effort. The moisture content during compaction shall be maintained within 3 percent of optimum moisture content. Density control by means of field density determination shall be exercised.

Surface Course Options

- a. The recommended surfacing option consists of hot-mix asphalt. This surfacing shall consist of a hot-mix asphaltic concrete (HMAC) meeting the requirement of Item 340, Type "D" of the current City of Georgetown's Construction Specifications and Standards.
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- a. Base material shall meet the specifications outlined by City of Georgetown's Construction Specifications and Standards.
- b. Thickness of the base course should be as shown on the enclosed Recommendations - Pavement Thickness Sections.
- c. Base course compaction shall be 100 percent of TxDOT TEX-113-E using 13.26 ft. lbs./cu.in. compaction effort. The moisture content during compaction shall be maintained within 3 percent of optimum moisture content. Density control by means of field density determination shall be exercised.

Surface Course Options

- a. The recommended surfacing option consists of hot-mix asphalt. This surfacing shall consist of a hot-mix asphaltic concrete (HMAC) meeting the requirement of Item 340, Type "D" of the current City of Georgetown's Construction Specifications and Standards.
- b. The surface clay should be tested for sulfate reaction to make sure that lime stabilization is feasible.
- c. The surface clay shall be tested using the Atterberg Limits procedure (ASTM D) to determine the percent lime to be added. This should be done by adding varying percentages of lime to samples of the surface soil and then determining the Plasticity Index of each sample. The lowest percentage of lime added that significantly reduces the Plasticity Index of the lime-clay sample, as determined by the Geotechnical Engineer, shall be the percent lime to be added in the field.

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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 utility 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.

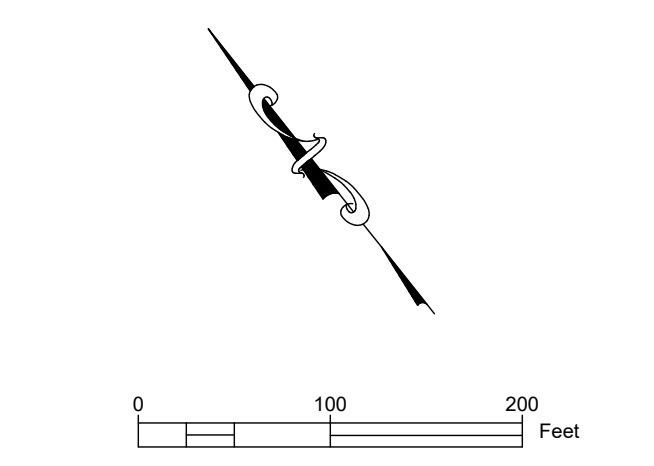
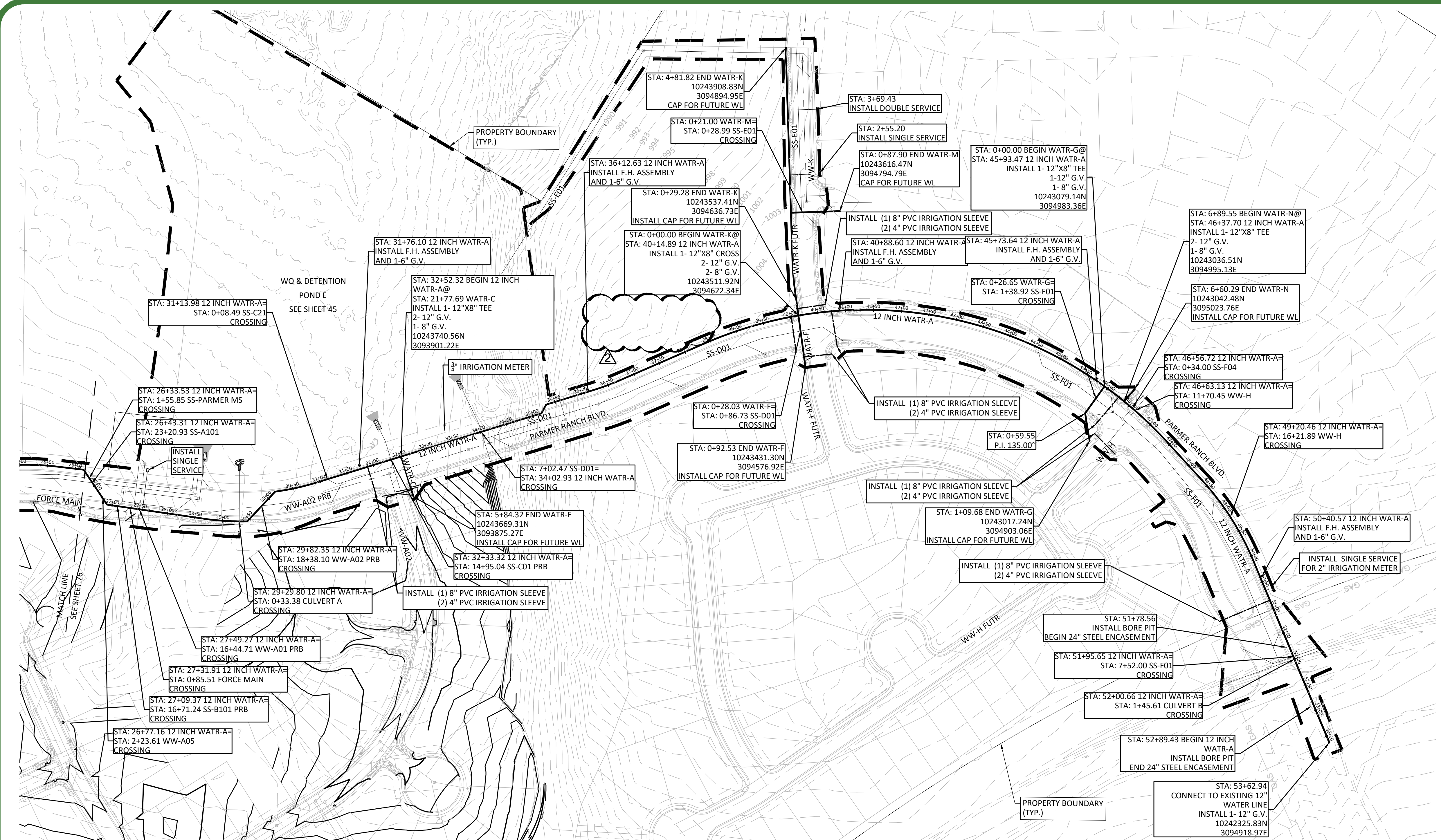
NO.	REVISION	BY	DATE	DATE
2	ADDED STREET CROSS SECTION	TG	5/02/22	2021-09-20

STEGER & BIZZELL
1978 S. AUSTIN AVENUE GEORGETOWN, TX 78626
512.930.9412 TEXAS REGISTERED ENGINEERING FIRM F-181
SERVICES >>ENGINEERS >>PLANNERS >>SURVEYORS

PAVING DRAINAGE DETAILS (3 OF 3)
PARMER RANCH BLVD PHASE 2
City of Georgetown
Williamson County, Texas

Project Number:	22223-Phase 04
SCALE:	AS NOTED
Project Path:	P:\22000-22999\22223
Project Name:	Parmer Ranch
Drawing Path:	CAD\Plans
Xref DWG FILE:	
Sheet Number:	49 of 110 sheets

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LEGEND

	PROPOSED WATER LINE
	EXISTING WATER LINE
	PROPOSED WASTEWATER MANHOLE
	EXISTING WASTEWATER MANHOLE
	PROPOSED GATE VALVE
	EXISTING GATE VALVE
	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT
	CURB INLET
	DOUBLE WATER SERVICE
	SINGLE WATER SERVICE
	DOUBLE SEWER SERVICE
	SINGLE SEWER SERVICE
	MAJOR EXISTING CONTOUR
	MINOR EXISTING CONTOUR
	PROPERTY BOUNDARY
	LIMITS OF CONSTRUCTION

* SEE MODIFIED DETAIL "W01A" FOR TYPICAL UTILITY ASSIGNMENTS

- NOTES:**
- INDIVIDUAL PRESSURE REDUCING VALVES (PRV) REQUIRED ON ALL LOTS WHERE STATIC PRESSURE IS GREATER THAN 80 PSI. OTHERWISE NOTED.
 - AT THE CONCLUSION OF CONSTRUCTION, FIRE HYDRANTS SHALL BE FLOW TESTED AND COLOR CODED IN ACCORDANCE TO CITY'S STANDARDS, AND RESULTS SHALL BE EMAILED TO THE FIRE DEPARTMENT. IFC 507.5 FIRE HYDRANTS SYSTEMS.
 - CAUTION, IF PRESSURE REDUCING VALVES WERE INSTALLED IN THIS PHASING THEY MUST BE SET PRIOR TO FIRE HYDRANT FLOW TESTING.

- PIPE MATERIAL NOTES:**
- ALL WATER LINE SHALL BE 8" C900 (150 PSI) PVC UNLESS OTHERWISE NOTED.
 - WATER VALVES SHALL NOT BE INSTALLED IN SIDEWALKS, RAMPS OR CURBS.
 - ALL JOINTS WHERE REQUIRED SHALL BE RESTRAINED.

- CITY OF GEORGETOWN GENERAL NOTES**
- These construction plans were prepared, sealed, signed and dated by a Texas Licensed Professional Engineer. Therefore based on the engineer's concurrence of compliance, the construction plans for construction of the proposed project are hereby approved subject to the standard Construction Specifications and Details Manual and all other applicable City, State and Federal Requirements and Codes.
 - This project is subject to all City Standard Specifications and Details in effect at the time of submittal of the project to the City.
 - The site construction plans shall meet all requirements of the approved site plan.
 - Wastewater mains and service lines shall be SDR 26 PVC.
 - Wastewater mains shall be installed without horizontal or vertical bends.
 - Maximum distance between wastewater manholes is 500 feet.
 - Wastewater mains shall be low pressure air tested and mandrel tested by the contractor according to the City of Georgetown and TCEQ requirements.
 - Wastewater manholes shall be vacuum tested and coated by the contractor according to City of Georgetown and TCEQ requirements.
 - Wastewater mains shall be camera tested by the contractor and submitted to the City on DVD format prior to paving the streets.
 - Private water system fire lines shall be tested by the contractor to 200 psi for 2 hours.
 - Private water system fire lines shall be ductile iron piping from the water main to the building sprinkler system, and 200 psi C900 PVC for all others.
 - Public water system mains shall be 150 psi C900 PVC and tested by the contractor at 150 psi for 4 hours.
 - All bends and changes in direction on water mains shall be restrained and thrust blocked.
 - Long fire hydrant leads shall be restrained.
 - Water and Sewer main crossings shall meet all requirements of the TCEQ and the City.
 - Flexible base material for public streets shall be TXDOT Type A Grade 1.
 - Hot mix asphaltic concrete pavement shall be Type D unless otherwise specified and shall be a minimum of 2 inches thick on public streets and roadways.
 - All sidewalk ramps are to be installed with the public infrastructure.
 - A maintenance bond is required to be submitted to the City prior to acceptance of the public improvements. This bond shall be established for 2 years in the amount of 10% of the cost of the public improvements and shall follow the City format.
 - Record drawings of the public improvements shall be submitted to the City by the design engineer prior to acceptance of the project. These drawings shall be PDF (300 dpi).

Per City Ordinance Sec. 13.15.120. - Private fire hydrant maintenance.

A. All private hydrant barrels will be painted red with the bonnet painted using the hydrant flow standard in Paragraph C of this Section to indicate flow. It will be the customer's responsibility to test and maintain their private fire hydrant(s).

B. All private fire hydrants should be tested annually and shall be color coded to indicate the expected fire flow from the hydrant during normal operation. Such color applied to the fire hydrant by painting the bonnet the appropriate color for the expected flow condition.

C. Hydrant Flow Coding Standards. Public hydrants will have the bonnets painted silver, the hydrants will be flow tested, and the bonnet painted using the hydrant flow standard in paragraph C.

Flow will be determined at 20 Psi Residual Pressure

FLOWCOLOR
 Greater than 1500 GPM - BLUE
 1000 to 1500 GPM - GREEN
 500 to 999 GPM - ORANGE
 Less than 500 GPM - RED
 NOT WORKING - BLACK OR BAGGED

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NO.	REVISION	BY	DATE
2	REMOVED IRRIGATION SERVICE	TG	5/02/22

EJH, L.B. SJT DESIGNED BY:	2021-09-20 DATE
EJH, L.B. SJT DRAWN BY:	2021-09-20 DATE
CHECKED BY:	DATE
APPROVED BY:	DATE

STEGER & BIZZELL

ADDRESS: 1978 S. AUSTIN AVENUE, GEORGETOWN, TX 78626
 METRO: 512.930.9412, SERVICES: >>ENGINEERS >>PLANNERS >>SURVEYORS
 TEXAS REGISTERED ENGINEERING FIRM F-181, TBPLS FIRM No. 10003700, WEB: STEGERBIZZELL.COM

OVERALL WATER PLAN (2 OF 2)
PARMER RANCH BLVD PHASE 2
 City of Georgetown
 Williamson County, Texas

Project Number:	22223-Phase 04
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