



Lemon Creek Ranch Lift Station RFCSP
Solicitation Number: CO-00490
Job No.: 21-3000

ADDENDUM 2
December 6, 2021

To Respondent of Record:

This addendum, applicable to work referenced above, is an amendment to the bid proposal, plans and specifications and as such will be a part of and included in the Contract Documents. Acknowledge receipt of this addendum by entering the Addendum number and issue date on the space provided in submitted copies of the Respondent Questionnaire.

CHANGES TO SPECIFICATIONS

1. Remove and replace entire “Bid Proposal” with the attached updated Bid Proposal. Line item 1 has been revised and an alternate (line item 41A) has been added. Bidders shall use the revised bid proposal when submitting a bid for this project. Failure to use the revised version may result in the bid being found non-responsive.
2. Remove and replace “Special Conditions” with the attached updated Special Conditions.

CHANGES TO PLANS

1. Remove and replace sheets C14 and C15 with the versions included with this addendum
2. Remove and replace sheets LS1, LS4, LS5, LS6, LS7, LS8, LS9, LS14, LS15 with the versions included with this addendum
3. Remove sheet S1 and replace with sheet S1/A included with this addendum
4. Remove and replace sheets S2, S3, S4, and S5 with the versions included with this addendum
5. Remove S6 and replace with sheet S6/A included with this addendum
6. Remove S7 and replace with sheet S7/A included with this addendum
7. Sheets S2A, S3A, S4A, and S5A have been added.

END OF ADDENDUM 1

This Addendum, including this page, is twenty-seven (27) pages in its entirety.

Attachments:

Bid Proposal (3 pages)

Special Conditions

Sheets C14, C15, LS1, LS4, LS5, LS6, LS7, LS8, LS9, LS14, LS15, S1/A, S2, S3, S4, S5, S6/A, S7/A, S2A, S3A, S4A, S5A (23 pages)



PRICE PROPOSAL

PROPOSAL OF _____, a
corporation

a partnership consisting of _____

an individual doing business as _____

THE SAN ANTONIO WATER SYSTEM:

Pursuant to Instructions and Request for Competitive Sealed Proposals, the undersigned proposes to furnish all labor and materials as specified and perform the work required for the project as specified, in accordance with the Plans and Specifications for the following prices in the bid proposal to wit:

PLEASE SEE ATTACHED LIST OF BID ITEMS.

RESPONDENT'S SIGNATURE & TITLE

FIRM'S NAME (TYPE OR PRINT)

FIRM'S ADDRESS

FIRM'S PHONE NO. /FAX NO.

FIRM'S EMAIL
ADDRESS

The Contractor herein acknowledges receipt of the following: Addendum Nos. _____

OWNER RESERVES THE RIGHT TO ACCEPT THE OVERALL MOST RESPONSIBLE PROPOSAL.

The Respondent offers to construct the Project in accordance with the Contract Documents for the contract price, and to complete the Project within **365** calendar days after the start date, as set forth in the Authorization to Proceed. **The Respondent understands and accepts the provisions of the contract Documents relating to liquidated damages of the project if not completed on time.**

Complete the additional requirements of the Proposal which are included on the following pages.

Statement on President's Executive Orders

Has your firm previously performed work subject to the President's Executive Orders Numbers 11246 and 11375 or any preceding similar executive orders (Numbers 10925 and 11114)?

Yes No

Texas Government Code Chapter 2274 Verifications

Are you, Contractor, held or controlled by individuals who are citizens of China, Iran, North Korea, Russia or a country designated by the Governor of the State of Texas pursuant to Texas Government Code Chapter 2274?

Yes No

Base Bid Quotes

Line No.	Item No.	Item Description	Unit	Quantity	Unit Price	Total
1		Lift Station - Base Bid (inclusive of 36-inch thick wet well walls, See Sheets S1-A, S2, S3, S4, S5, S6-A, S7-A.	LS	1		
2	103.1	Remove Concrete Curb	LF	90		
3	103.3	Remove Concrete Driveways	SF	60		
4	201.1	Cement Treated Base (6" Compacted Depth)	SY	1,872		
5	202.1	Prime Coat	GAL	474		
6	203.1	Tack Coat	GAL	237		
7	205.2	HMAC - Type B (10" Compacted Depth)	SY	1,520		
8	205.4	HMAC - Type D (2" Compacted Depth)	SY	2,322		
9	208.1	Salvaging, Hauling, & Stockpiling Reclaimable Asphaltic Pavement (2" Depth)	SY	654		
10	413.1	Flowable Fill (Low Strength)	CY	7		
11	500.1	Concrete Curb	LF	90		
12	503.1	Portland Cement Concrete Driveway	SY	69		
13	503.4	Asphaltic Concrete Driveway	SY	1,587		
14	513.1	Remove and Relocate Mailbox (All Types)	EA	11		
15	515.1	Topsoil (4" Depth)	CY	2,700		
16	520.1	Hydromulching	SY	24,244		
17	530.1	Barricades, Signs, and Traffic Handling	LS	1		
18	535.1	4" Wide Yellow Line	LF	2,520		
19	535.2	4" Wide White Line	LF	1,799		
20	535.7	24" Wide White Line	LF	45		
21	540	Temporary Erosion, Sediment, and Water Pollution Prevention and Control	LS	1		
22	550.1	Trench Excavation Safety Protection	LF	7,449		
23	828	16" Plug Valve	EA	6		
24	846	2" Dual Air Release Assembly	EA	2		
25	848	16" DR-11 HDPE Force Main	LF	13,713		
26	848A	24" PVC Gravity Sewer Pipe (ASTM F679, 0'-6' Depth)	LF	116		
27	848A	24" PVC Gravity Sewer Pipe (ASTM F679, 6'-10' Depth)	LF	229		

28	848A	24" PVC Gravity Sewer Pipe (ASTM F679, 10'-14' Depth)	LF	69		
29	848A	24" PVC Gravity Sewer Pipe (ASTM F679, 14'-18' Depth)	LF	77		
30	851	Existing Manhole Adjustments	EA	1		
31	853A	Fiber Reinforced Sanitary Sewer Manhole (5' Diameter)	EA	5		
32	853A	Extra Depth (>6') Fiberglass Manhole (5' Diameter)	VF	19		
33	865	Bypass Pumping, Small Diameter Sanitary Sewers (<24")	LS	1		
34	866	Sewer Main Television Inspection	LF	489		
35	ALW 1	CPS Energy Allowance	ALW	1		\$25,000
36	ALW 2	Start-Up/Commission Allowance	ALW	1		\$50,000

SUBTOTAL - (ITEMS 1-36)						
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37	100	Mobilization Maximum 5% of line items 1-36	LS	5%		
38	100A	Intermediate Mobilization and Demobilization (Open Cut Work)- This item shall include project move-in and move-out of personnel and equipment, for all work including furnishing all labor, materials, tools, equipment, and incidentals required to mobilize, demobilize, bond and insure the Work for the project in accordance with the Contract Documents, complete in place.	EA	2		
39	100B	Intermediate Mobilization and Demobilization (Lift Station Work) - This item shall include project move-in and move-out of personnel and equipment, for all work including furnishing all labor, materials, tools, equipment, and incidentals required to mobilize, demobilize, bond and insure the Work for the project in accordance with the Contract Documents, complete in place.	EA	1		
40		Preparation of Right-of-Way - This item shall include preparing the right-of-way for construction operations by removing and disposing all obstructions from the right-of-way and from designated easements where removal of such obstructions is not otherwise provided for in the contract documents. Maximum 5% of line items 1-36	LS	5%		

MOBILIZATION SHALL BE LIMITED TO THE MAXIMUM PERCENTAGE SHOWN. IF THE PERCENTAGE WRITTEN EXCEEDS THE ALLOWABLE MAXIMUM STATED FOR MOBILIZATION, SAWS RESERVES THE RIGHT TO CAP THE AMOUNT AT THE PERCENTAGES SHOWN AND ADJUST THE EXTENSIONS OF THE BID ITEMS ACCORDINGLY.

BASE BID PRICE - (TO INCLUDE LINE ITEMS 1-40)						
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Additive Alternatives

Alternate Bid Quotes

Line No.	Item No.	Item Description	Unit	Quantity	Unit Price	Total
1A		Lift Station - Alternate Bid (inclusive of 42-inch thick wet well walls, See Sheets S1-A, S2A, S3A, S4A, S5A, S6-A, 27-A.	LS	1		

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Special Conditions

SC 1.0 A Geotechnical Data Report has been developed for SAWS on this project and has been made available for Contractors for informational purposes only. SAWS will require the execution of a SAWS disclaimer form by the Contractor as a condition of and prior to the release of the report. To complete the disclaimer form and obtain the report, please go to the following link on the SAWS website:

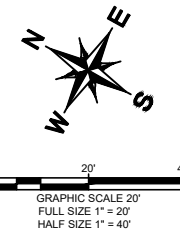
http://www.saws.org/business_center/ContractSol/

SC 2.0 The Wet Well has been revised to be 29-feet deep from what was previously shown (19-foot deep wet well). There will be a new 36-inch thick concrete wet well and 36-inch wet well foundation (unsealed sheets) re-issued to be part of the base bid. Contractor shall submit a price with the lift station line item 1 that includes the cost of the updated S1/A, S2, S3, S4, S5, S6/A, S7/A sheets.

In addition, there will be one Additive Alternate that Bid Quotes will be requested for.

Respondents shall prepare a unit price for Alternate Bid Item 1A.

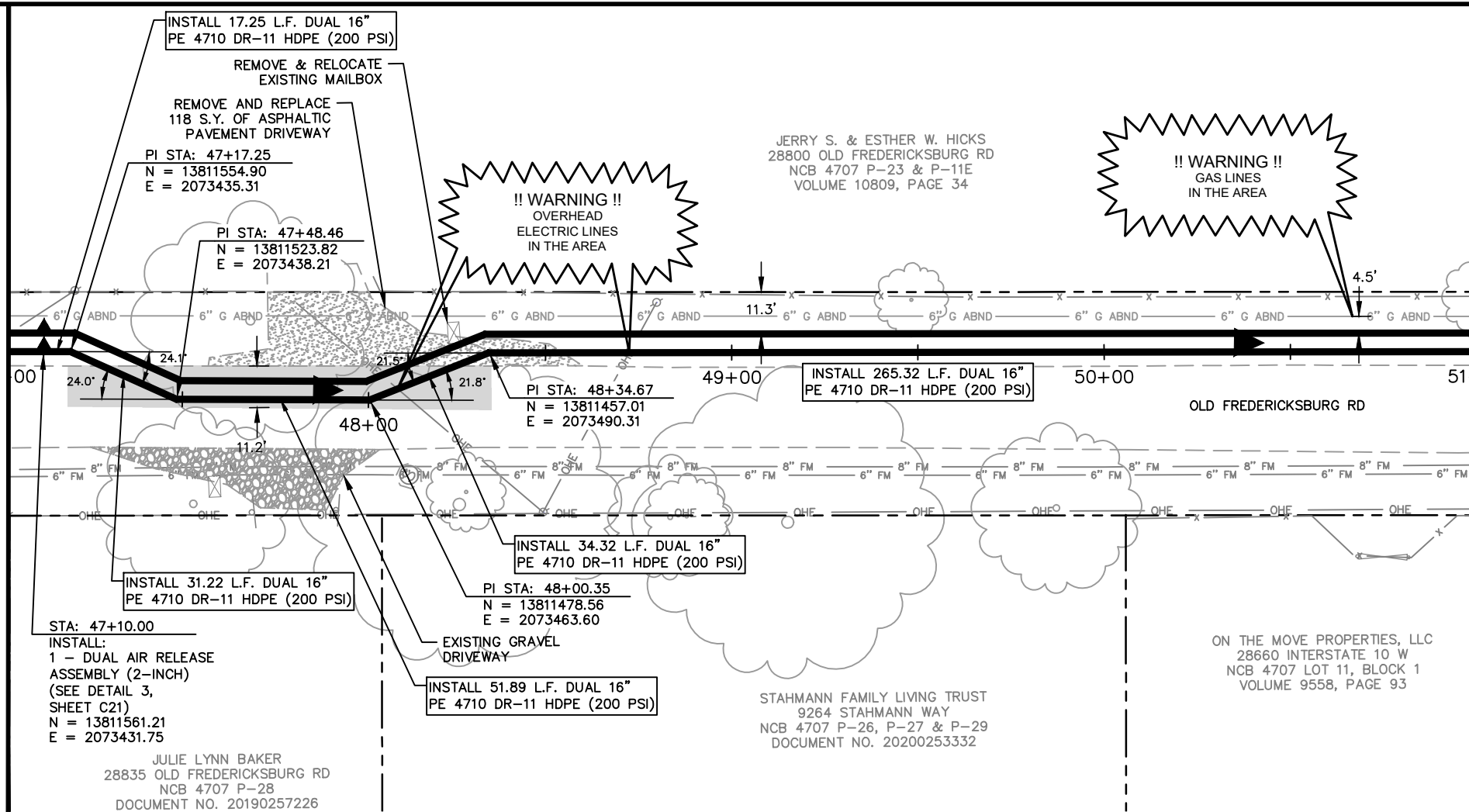
The unit cost for Alternate Bid Item 1A should include all lift station costs with construction of the lift station wet well with thicker concrete walls (42-inch thick) than the base bid as shown in Plan sheets S1-A, S2A, S3A, S5A, S6-A, and S7-A.



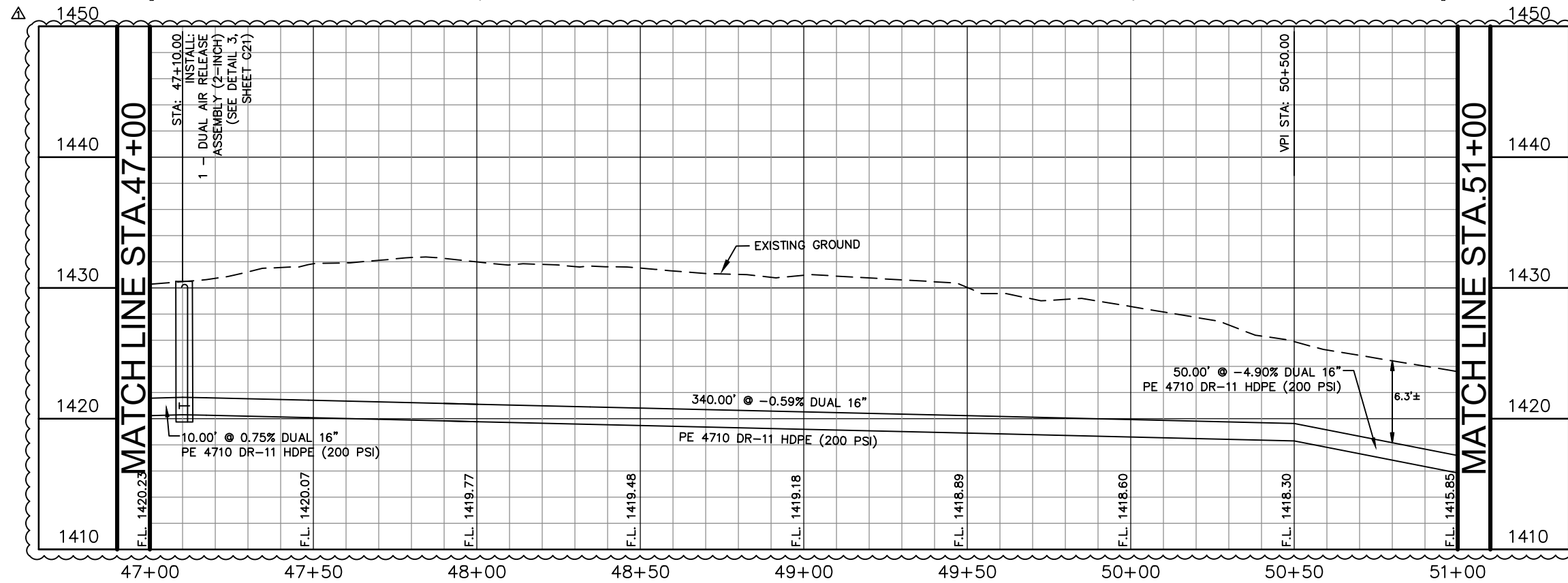
!! WARNING !!
CONTRACTOR IS TO VERIFY
PRESENCE AND EXACT LOCATION
OF ALL UTILITIES PRIOR TO
CONSTRUCTION.

MATCH LINE STA 47+00
SEE SHEET C14

MATCH LINE STA 51+00
SEE SHEET C16



ESTIMATED QUANTITIES			
ITEM NO.	DESCRIPTION	UNIT	QUANTITY
201.2	CEMENT TREATED BASE (6" COMP. DEPTH)	SY	161
202.1	PRIME COAT	GAL	30
203.1	TACK COAT	GAL	15
205.2	HOT MIX ASPHALTIC PAVEMENT - TYPE B (10" COMPACTED DEPTH) (COSA SPEC)	SY	89
205.4	HOT MIX ASPHALTIC PAVEMENT - TYPE D (2" COMPACTED DEPTH) (COSA SPEC)	SY	143
208.1	SALVAGING, HAULING & STOCKPILING RECLAIMABLE ASPHALTIC PAVEMENT (2" DEPTH) (COSA SPEC)	SY	44
503.4	ASPHALTIC CONCRETE DRIVEWAY	SY	118
513.1	REMOVE AND RELOCATE MAILBOX (ALL TYPES)	EA	1
515.1	TOPSOIL (4-INCH DEPTH)	CY	97
520.1	HYDROMULCHING	SY	873
535.1	4" WIDE YELLOW LINE	LF	230
535.2	4" WIDE WHITE LINE	LF	115
550.1	TRENCH EXCAVATION SAFETY PROTECTION	LF	400
846	DUAL AIR RELEASE ASSEMBLY (2-INCH)	EA	1
848	16-INCH DR-11 HDPE FORCE MAIN	LF	800



* NO SEPARATE PAY ITEM (N.S.P.I.)

LEGEND		FULL SIZE (22" x 34")	HALF SIZE (11" x 17")
		1" = 5' VERTICAL	1" = 10' VERTICAL
PROPOSED FORCE MAIN LINE	FM	—————	—————
EXISTING FORCE MAIN LINE	FM	—————	—————
EXISTING WATER LINE	W	—————	—————
EXISTING FIBER OPTIC LINE	FO	—————	—————
EXISTING GAS LINE	G	—————	—————
ABANDONED GAS LINE	G ABND	—————	—————
PROPERTY LINE/RIGHT OF WAY		—————	—————
PROPOSED TEMPORARY EASEMENT		—————	—————
PROPOSED PERMANENT EASEMENT		—————	—————
EDGE OF PAVEMENT		—————	—————
EXISTING PAVEMENT TO BE REPLACED		—————	—————
EXISTING OVERHEAD ELECTRIC LINE & POLE	OHE	⊗	⊗

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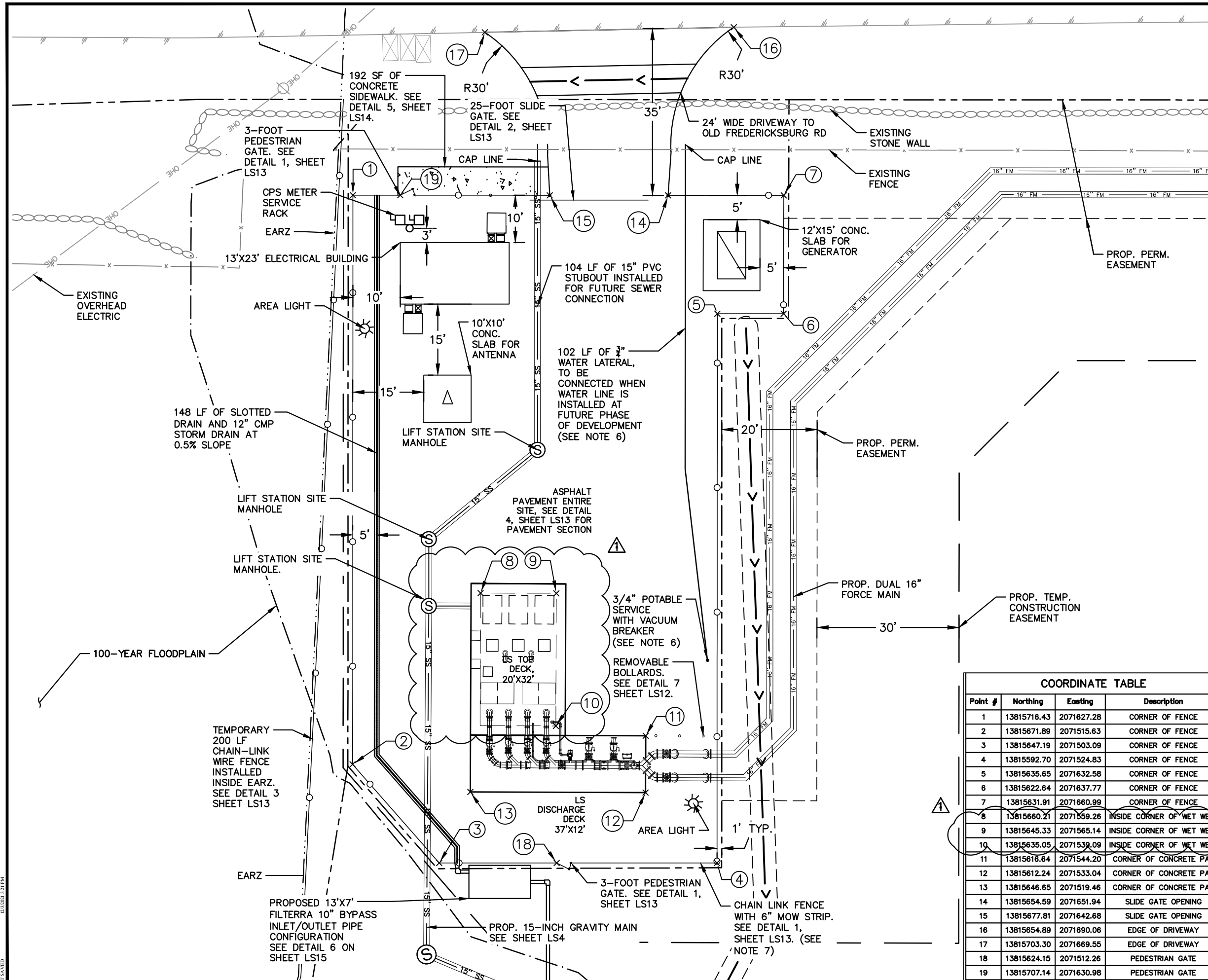
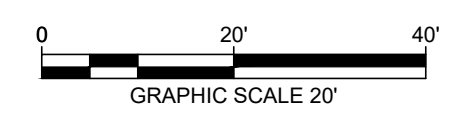
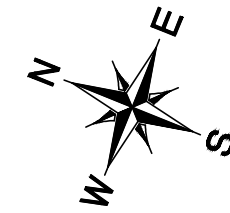
No.	Revision	By	Date
ADDENDUM NO. 2		MAV	12/03/2021

**LEMON CREEK RANCH –
UPSTREAM SANITARY SEWER
PHASE 1B**

SHEET
**16-INCH DUAL FORCE
MAIN PLAN AND PROFILE
STA. 47+00 TO 51+00**

DATE: SEPTEMBER 2021	SAWS PROJECT NO. 21-3000	C15
DESIGN: MAV	KHA PROJECT NO. 068716102	
DRAWN: ELR		
CHECKED: VRS		

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- NOTES:**
- CONTRACTOR SHALL NOT PERFORM ANY CONSTRUCTION ACTIVITIES OVER THE EDWARDS AQUIFER RECHARGE ZONE. CONTRACTOR WILL INSTALL APPROX. 200 LF OF TEMPORARY CHAIN-LINK WIRE FENCING ALONG EARZ BOUNDARY AS SHOWN ON PLANS TO PREVENT ENCROACHMENT. CONTRACTOR TO SURVEY AND STAKE EDWARDS AQUIFER RECHARGE ZONE (NSPI).
 - REFER TO ELECTRICAL SITE PLAN FOR BURIED ELECTRICAL CONDUITS NOT SHOWN HERE.
 - SEE SHEET LS2 FOR PAVING AND GRADING.
 - CONTRACTOR SHALL REMOVE ALL DEBRIS AND OBSTRUCTIONS FROM SITE (NSPI).
 - ALL REMOVABLE BOLLARDS TO BE 1'-0" FROM FACE OF STRUCTURES AND OUTSIDE WALL OF BURIED PIPE. THEY SHALL BE SPACED ON 5'0" CENTERS.
 - PROVIDE FREEZE PROTECTION TO HOSE BIB, PRESSURE TRANSMITTER ASSEMBLY AND PRESSURE GAUGE ASSEMBLY, AND TO ALL DISCHARGE LINES 6-INCH IN DIAMETER AND SMALLER. HOSE BIB SERVICE TO BE CONNECTED TO MAIN WATERLINE ALONG OLD FREDERICKSBURG ROAD WHEN THE WATERLINE IS INSTALLED.
 - FENCE MOW STRIP SHALL BE 6-INCHES ABOVE FINAL GRADE. MOW STRIP CUTOUTS SHALL BE PROVIDED ALONG NORTHERN FENCE LINE AT LOW POINTS AND CENTERED BETWEEN EACH FENCE POST.

LEGEND

PROPOSED FORCE MAIN	16" FM
PROPOSED GRAVITY MAIN	15" SS
EDWARDS AQUIFER RECHARGE ZONE	
EXISTING FIBER OPTIC LINE	FO
PROPERTY LINE/RIGHT OF WAY	
EXISTING 100 YEAR FLOODPLAIN	
TEMPORARY EASEMENT LINE	
PERMANENT EASEMENT LINE	
EXISTING OVERHEAD ELECTRIC LINE & POLE	OHE
EXISTING WATER LINE	

COORDINATE TABLE

Point #	Northing	Eastng	Description
1	13815716.43	2071627.28	CORNER OF FENCE
2	13815671.89	2071515.63	CORNER OF FENCE
3	13815647.19	2071503.09	CORNER OF FENCE
4	13815592.70	2071524.83	CORNER OF FENCE
5	13815635.65	2071632.58	CORNER OF FENCE
6	13815622.64	2071637.77	CORNER OF FENCE
7	13815631.91	2071660.99	CORNER OF FENCE
8	13815660.21	2071559.26	INSIDE CORNER OF WET WELL
9	13815645.33	2071565.14	INSIDE CORNER OF WET WELL
10	13815635.05	2071539.09	INSIDE CORNER OF WET WELL
11	13815616.64	2071544.20	CORNER OF CONCRETE PAD
12	13815612.24	2071533.04	CORNER OF CONCRETE PAD
13	13815646.65	2071519.46	CORNER OF CONCRETE PAD
14	13815654.59	2071651.94	SLIDE GATE OPENING
15	13815677.81	2071642.68	SLIDE GATE OPENING
16	13815654.89	2071690.06	EDGE OF DRIVEWAY
17	13815703.30	2071669.55	EDGE OF DRIVEWAY
18	13815624.15	2071512.26	PEDESTRIAN GATE
19	13815707.14	2071630.98	PEDESTRIAN GATE

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 9/20/2021

No.	Revision	By	Date
▲	ADDENDUM NO. 2	MAV	12/03/2021

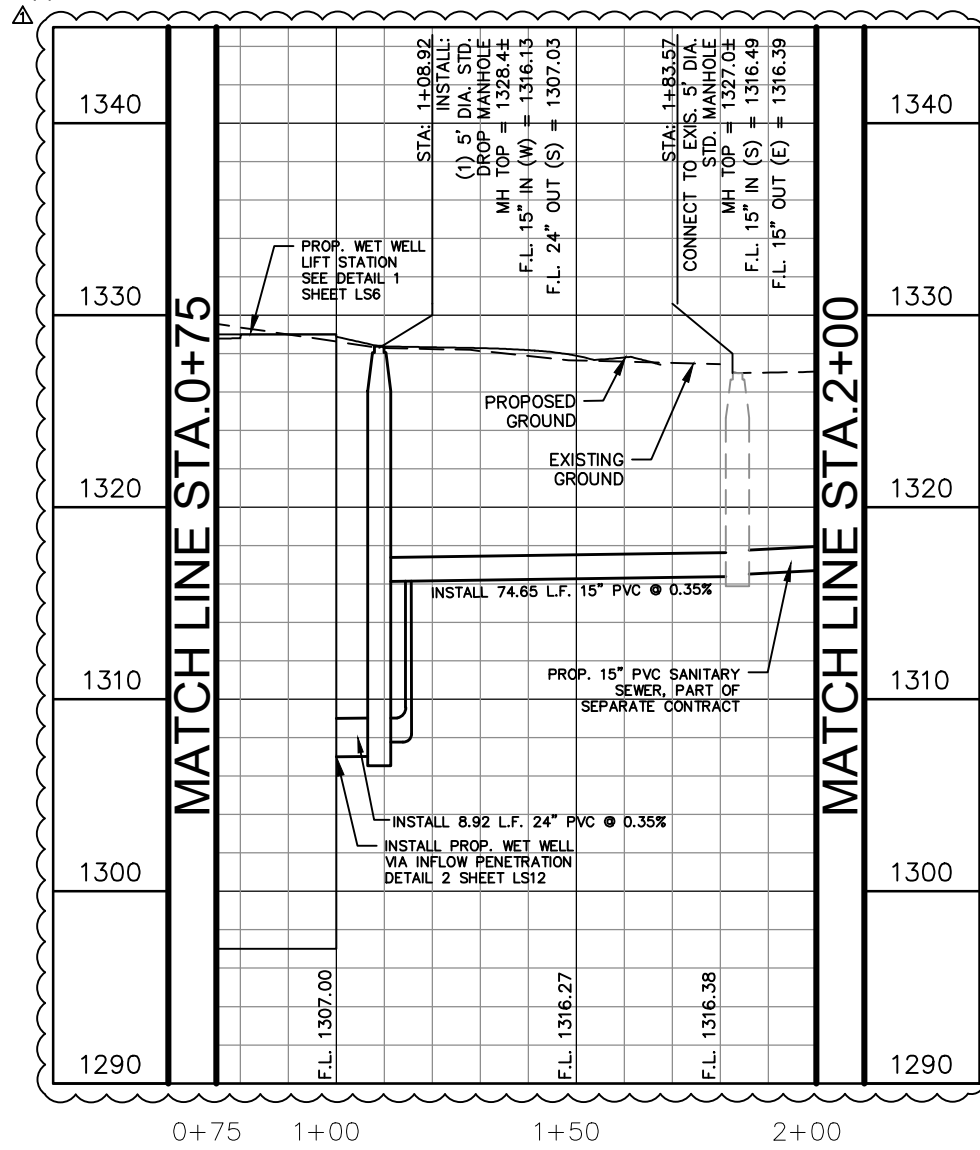
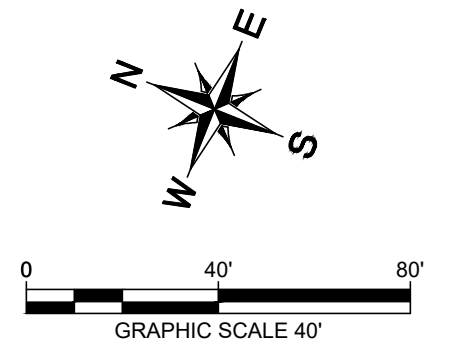
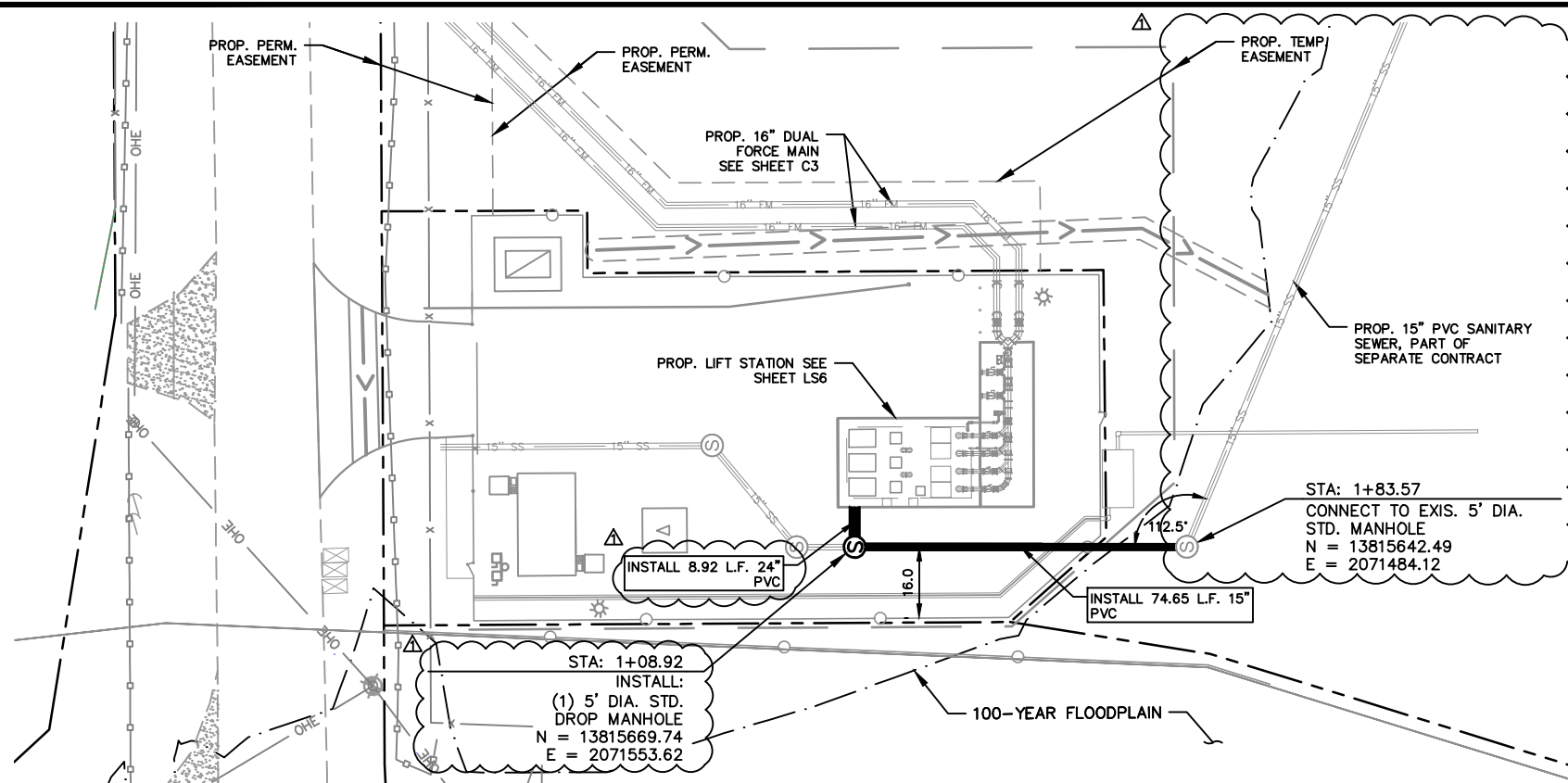
LEMON CREEK RANCH - UPSTREAM SANITARY SEWER PHASE 1B

SHEET
LIFT STATION SITE AND DIMENSION CONTROL PLAN

SAN ANTONIO WATER SYSTEM

DATE: SEPTEMBER 2021	SAWS PROJECT NO.	SHEET NO.
DESIGN: MAV	21-3000	LS1
DRAWN: TLS	KHA PROJECT NO.	
CHECKED: VRS	068716102	

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LEGEND

PROPOSED FORCE MAIN	16" FM
PROPOSED GRAVITY MAIN	15" SS
EDWARDS AQUIFER RECHARGE ZONE	
EXISTING FIBER OPTIC LINE	FO
PROPERTY LINE/RIGHT OF WAY	
EXISTING 100 YEAR FLOODPLAIN	
TEMPORARY EASEMENT LINE	
PERMANENT EASEMENT LINE	
EXISTING OVERHEAD ELECTRIC LINE & POLE	OHE
EXISTING WATER LINE	



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1	ADDENDUM NO. 2	MAV	12/03/2021

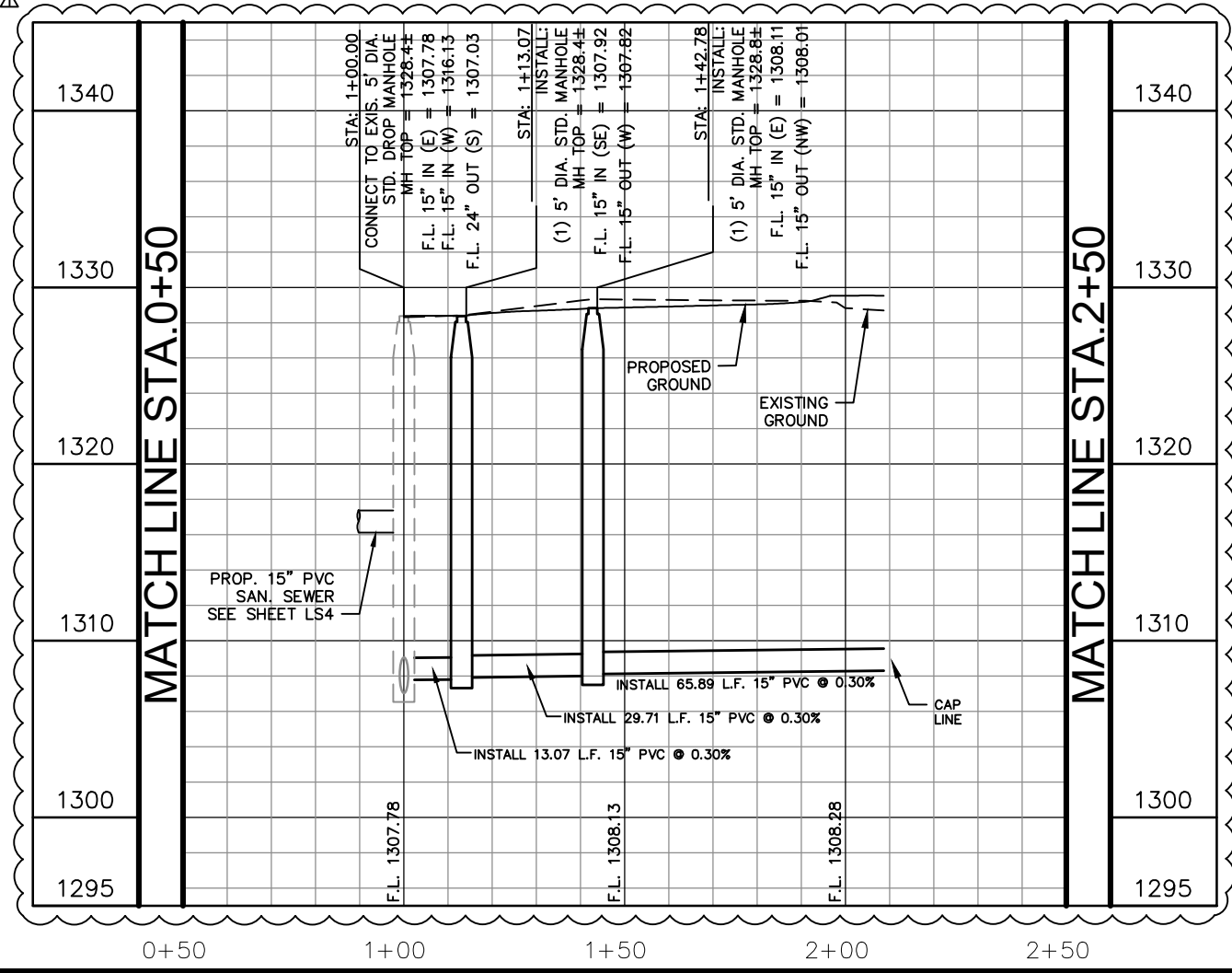
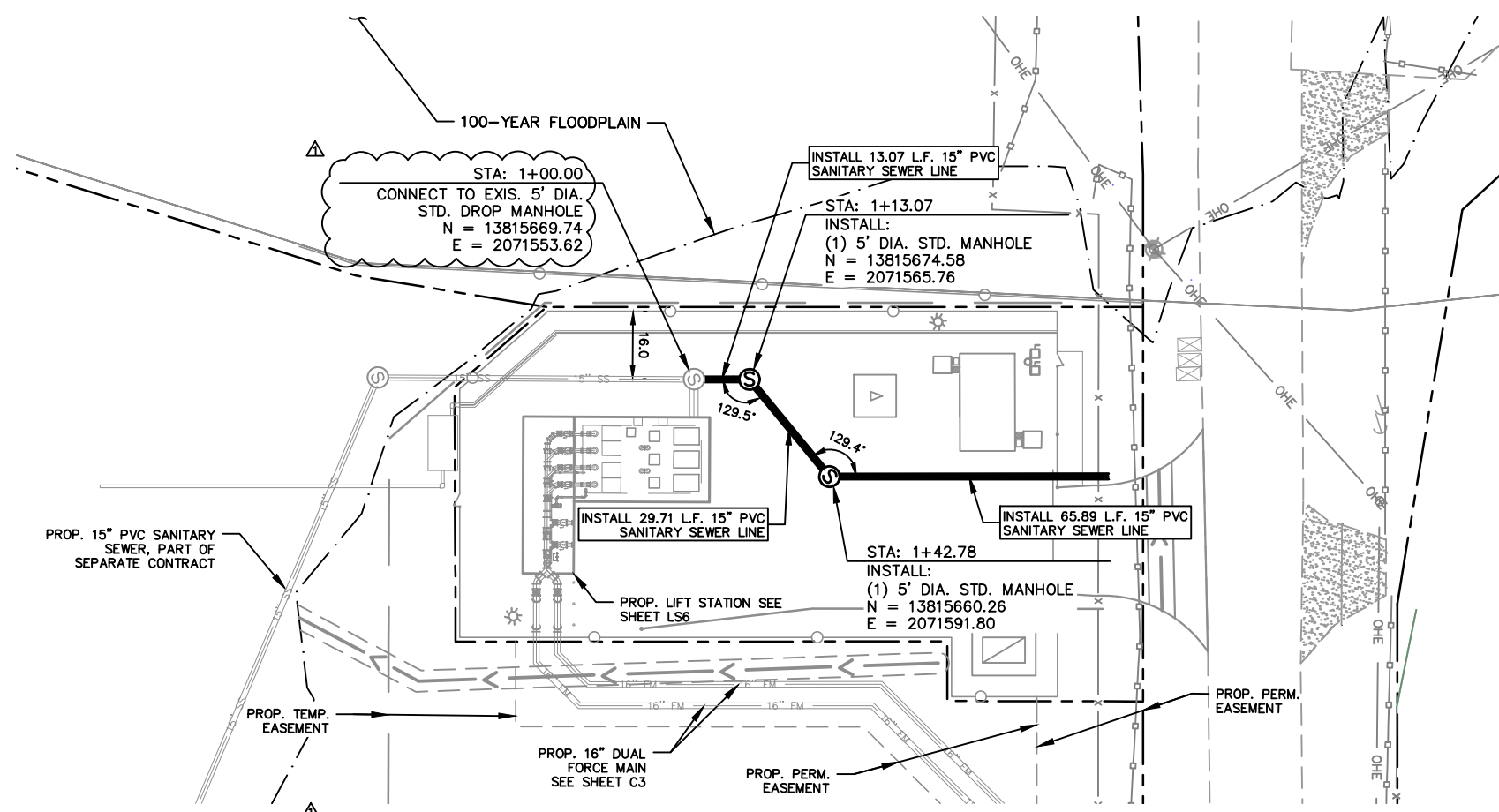
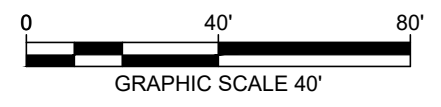
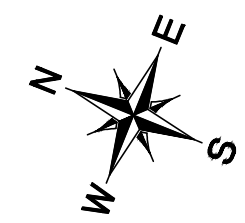


LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B

SHEET
 15-INCH GRAVITY MAIN PLAN AND PROFILE BEGIN TO END

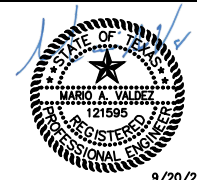
DATE: SEPTEMBER 2021	SAWS PROJECT NO. 21-3000	SHEET NO. LS4
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LEGEND

PROPOSED FORCE MAIN	16" FM
PROPOSED GRAVITY MAIN	15" SS
EDWARDS AQUIFER RECHARGE ZONE	
EXISTING FIBER OPTIC LINE	FO
PROPERTY LINE/RIGHT OF WAY	
EXISTING 100 YEAR FLOODPLAIN	
TEMPORARY EASEMENT LINE	
PERMANENT EASEMENT LINE	
EXISTING OVERHEAD ELECTRIC LINE & POLE	OHE
EXISTING WATER LINE	



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No.	Revision	By	Date
▲	ADDENDUM NO. 2	MAV	12/03/2021

LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B

SHEET

15-INCH GRAVITY MAIN PLAN AND PROFILE BEGIN TO END (STUB OUT)

DATE: SEPTEMBER 2021	SAWS PROJECT NO. 21-3000	SHEET NO. LS5
DESIGN: MAV	KHA PROJECT NO. 068716102	
DRAWN: TLS		
CHECKED: VRS		

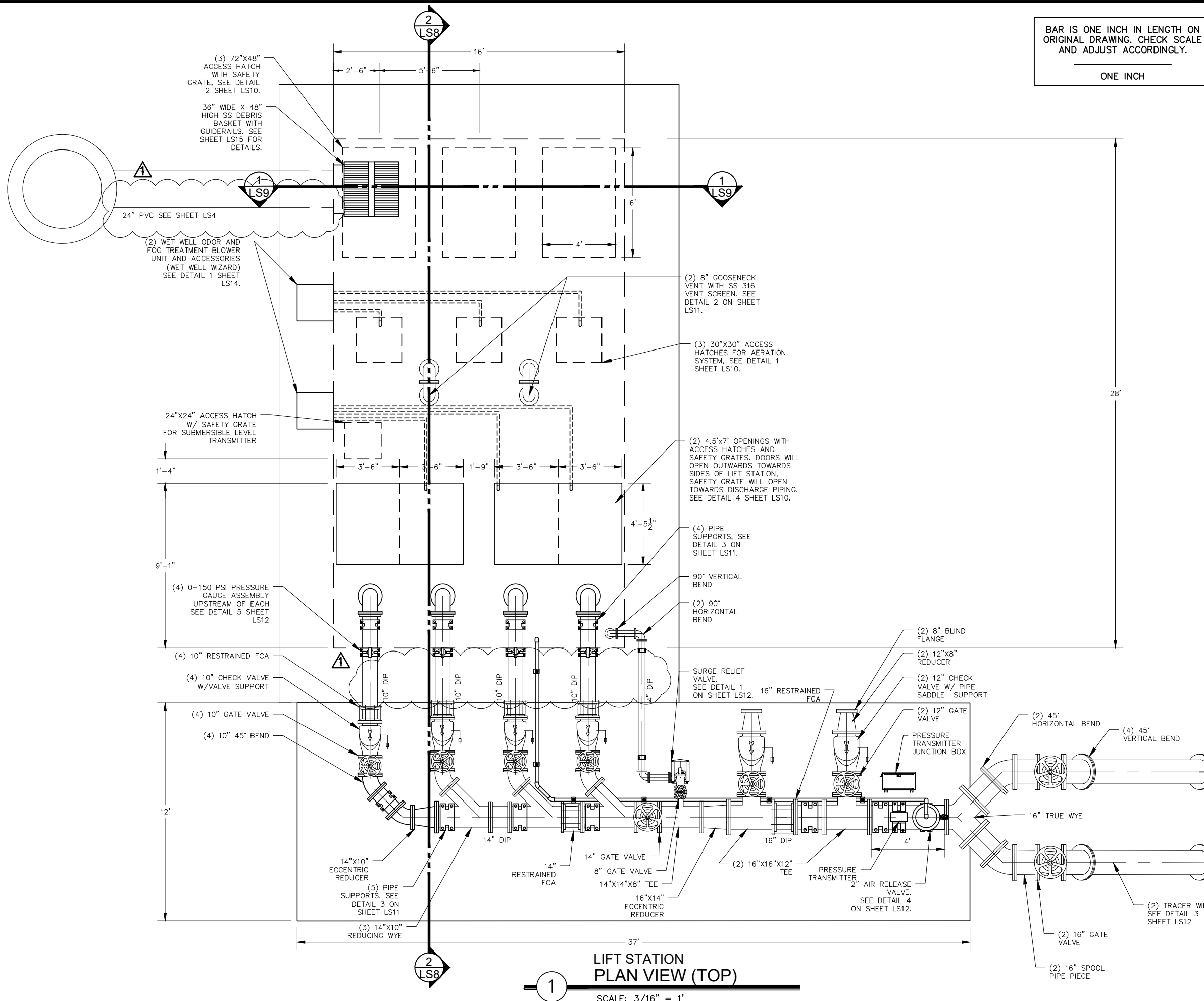
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BAR IS ONE INCH IN LENGTH ON ORIGINAL DRAWING. CHECK SCALE AND ADJUST ACCORDINGLY.

ONE INCH

NOTES

1. CONTRACTOR TO CONSTRUCT LIFT STATION IN ACCORDANCE WITH SAWS SEPTEMBER 2020 LIFT STATION DESIGN GUIDELINES.
2. CONFIGURATIONS AND DIMENSIONS SHOWN ARE BASED ON THE EQUIPMENT SPECIFIED. THE CONTRACTOR SHALL VERIFY THE LAYOUT AND ALL DIMENSIONS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT, TO THE ENGINEER, SHOP DRAWINGS SHOWING THE FINAL LAYOUT AND DIMENSIONS PRIOR TO CONSTRUCTION.
3. REFERENCE SPECIFICATIONS FOR LIFT STATION EQUIPMENT.
4. EPOXY GROUT SEAL PIPING GOING THROUGH CONCRETE WET WELL WALLS.
5. VENT PIPE SHALL BE STAINLESS STEEL AND INSTALLED W/A STAINLESS STEEL INSECT SCREEN. THE OPENING SHALL BE 12" ABOVE THE TOP SLAB.
6. INSTALL ISOLATION KITS BETWEEN DISSIMILAR METAL PIPING.
7. ALL CONCRETE SURFACES WITHIN THE WET WELL SHALL BE COATED WITH A CEMENTITIOUS COATING. EITHER KERNEOS SEWPER COAT 2,000 HS AND PG OR APM PERMACAST MS-10,000 WITH CONSHIELD APPLIED AT THE REQUIRED ONE-INCH THICK APPLICATION. NO APPROVED EQUALS WILL BE ACCEPTED. COATINGS SHALL BE APPLIED PER MANUFACTURER'S RECOMMENDATION.
8. ALL LIFT STATION PIPING, FLANGES, AND FITTINGS SHALL BE MADE OF DUCTILE IRON. ALL DUCTILE IRON PIPING SHALL BE RATED FOR A WORKING PRESSURE OF 200 PSI. ALL DUCTILE IRON PIPING INSTALLED ABOVE GROUND SHALL BE FLANGED.
9. ALL BURIED FITTINGS BETWEEN DUCTILE IRON PIPE SHALL BE RESTRAINED WITH MEGALUG FITTINGS AS MANUFACTURED BY EBAA IRON INC., OR APPROVED EQUAL.
10. WET WELL EXCAVATION METHODS SHALL BE SUBMITTED TO THE ENGINEER.
11. ALL PIPES, VALVES, FLANGES, AND FITTINGS OUTSIDE THE WET WELL SHALL RECEIVE AFTER INSTALLATION A 100% SOLIDS EPOXY SYSTEM WITH A TOP COAT SYSTEM OF URETHANE. COLOR SHALL BE GRAY PANTONE #431-U. REFER TO TECHNICAL SPECIFICATION 09900.
12. CONTRACTOR SHALL INSTALL SAFETY GRATE UNDER WET WELL ACCESS HATCH IN ACCORDANCE WITH TECHNICAL SPECIFICATION 11300. THE SAFETY GRATES SHALL BE ORIENTED WITH THE ACCESS HATCH SO THAT AN OPENING NO GREATER THAN 4" EXISTS AROUND THE GRATES.
13. SLEEVED OR CORED DISCHARGE PIPING SHALL BE SEALED WITH LINK SEAL (OR APPROVED EQUAL). MAY BE SUBSTITUTED FOR POURED IN PLACE WALL PIPES TO ACCOMMODATE CONSTRUCTION METHOD.



LIFT STATION
PLAN VIEW (TOP)
SCALE: 3/16" = 1'

PLOTTED BY: RODRIGUEZ, EDUARDO 12/30/2021 1:29 PM
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 DATE: 12/30/2021 1:29 PM

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San Antonio, TX 78216

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Fax No. 210-541-8699

9/20/2021

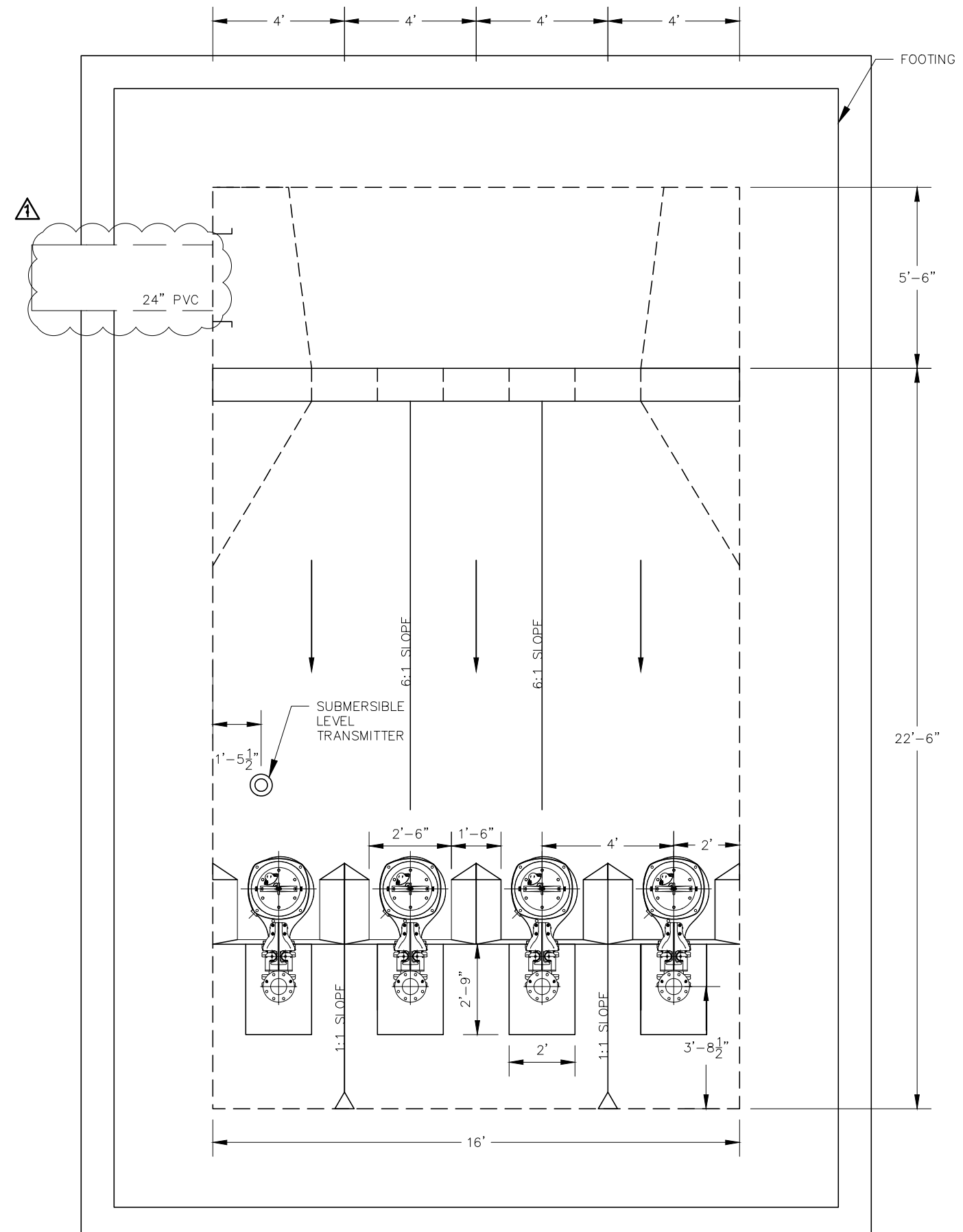
No.	Revision	By	Date
A	ADDENDUM NO. 2	MAV	12/03/2021

**LEMON CREEK RANCH –
UPSTREAM SANITARY SEWER
PHASE 1B**

SHEET
**LIFT STATION
MECHANICAL TOP PLAN**

DATE: SEPTEMBER 2021	SAWS PROJECT NO. 21-3000	SHEET NO. LS6
DESIGN: MAV	KHA PROJECT NO. 068716102	
DRAWN: TLS		
CHECKED: VRS		

PLOTTED BY: RODRIGUEZ, EDUARDO 12/30/2021 3:11 PM
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 USER: EDUARDO

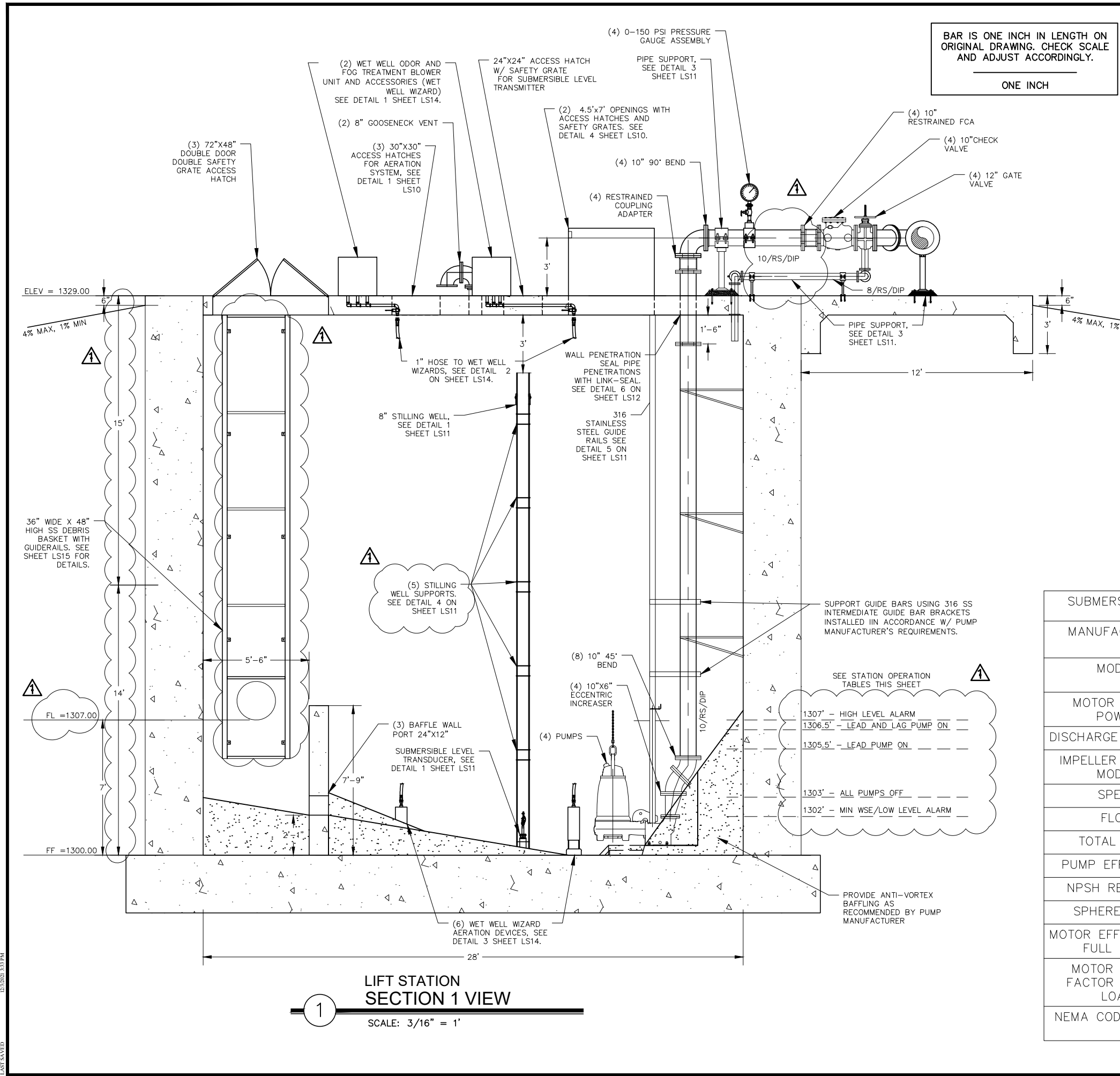


BAR IS ONE INCH IN LENGTH ON ORIGINAL DRAWING. CHECK SCALE AND ADJUST ACCORDINGLY.
 ONE INCH

1. SEE STRUCTURAL SHEETS FOR WET WELL DESIGN REGARDING WALL/SLAB/FOUNDATION THICKNESS AND REINFORCEMENT.

1 LIFT STATION
 PLAN VIEW (BOTTOM)
 SCALE: 1/4" = 1'

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No.	Revision	By	Date
1	ADDENDUM NO. 2	MAV	12/03/2021
		LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B SHEET LIFT STATION MECHANICAL BOTTOM PLAN	
DATE: SEPTEMBER 2021	SAWS PROJECT NO. 21-3000	SHEET NO. LS7	
DESIGN: MAV	KHA PROJECT NO. 068716102		
DRAWN: TLS			
CHECKED: VRS			



BAR IS ONE INCH IN LENGTH ON ORIGINAL DRAWING. CHECK SCALE AND ADJUST ACCORDINGLY.

ONE INCH

STATION OPERATING LEVELS		
RISING LEVEL CYCLE		
WATER LEVEL ELEVATION	ACTION	PUMP(S) IN OPERATION
1303.00	ALL PUMPS OFF LEVEL	ALL PUMPS ARE OFF
1305.50	LEAD PUMP LEVEL	LEAD PUMP ON
1306.50	LAG PUMP 1 LEVEL	LEAD AND LAG PUMP ON
1307.00	HIGH LEVEL ALARM LEVEL	HIGH LEVEL ALARM ACTIVATES
FALLING LEVEL CYCLE		
WATER LEVEL ELEVATION	ACTION	PUMP(S) IN OPERATION
1306.50	LAG PUMP LEVEL	LEAD AND LAG PUMPS ON
1305.50	LEAD PUMP LEVEL	LEAD PUMP ON
1303.00	ALL PUMPS OFF LEVEL	ALL PUMPS STOPPED - LAG PUMP SWITCHES TO LEAD PUMP
1302.00	LOW LEVEL ALARM	LOW LEVEL ALARM ACTIVATES

SUBMERSIBLE PUMP INFORMATION	
MANUFACTURER	FLYGT
MODEL	NP 3301 HT 3~464
MOTOR RATED POWER	85 HP
DISCHARGE DIAMETER	6 INCHES
IMPELLER SIZE OR MODEL	370 MM
SPEED	1775 RPM
FLOW	1630 GPM
TOTAL HEAD	133 FEET
PUMP EFFICIENCY	71.10%
NPSH REQUIRED	19.9 FEET
SPHERE PASS	6 INCHES
MOTOR EFFICIENCY @ FULL LOAD	92.50%
MOTOR POWER FACTOR @ FULL LOAD	0.8500
NEMA CODE LETTER	E

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1	ADDENDUM NO. 2	MAV	12/03/2021

LEMON CREEK RANCH - UPSTREAM SANITARY SEWER PHASE 1B

SHEET
LIFT STATION MECHANICAL SECTION (SHEET 1 OF 2)

DATE: SEPTEMBER 2021	SAWS PROJECT NO. 21-3000	SHEET NO. LS8
DESIGN: MAV	KHA PROJECT NO. 068716102	
DRAWN: TLS		
CHECKED: VRS		

LIFT STATION SECTION 1 VIEW

SCALE: 3/16" = 1'

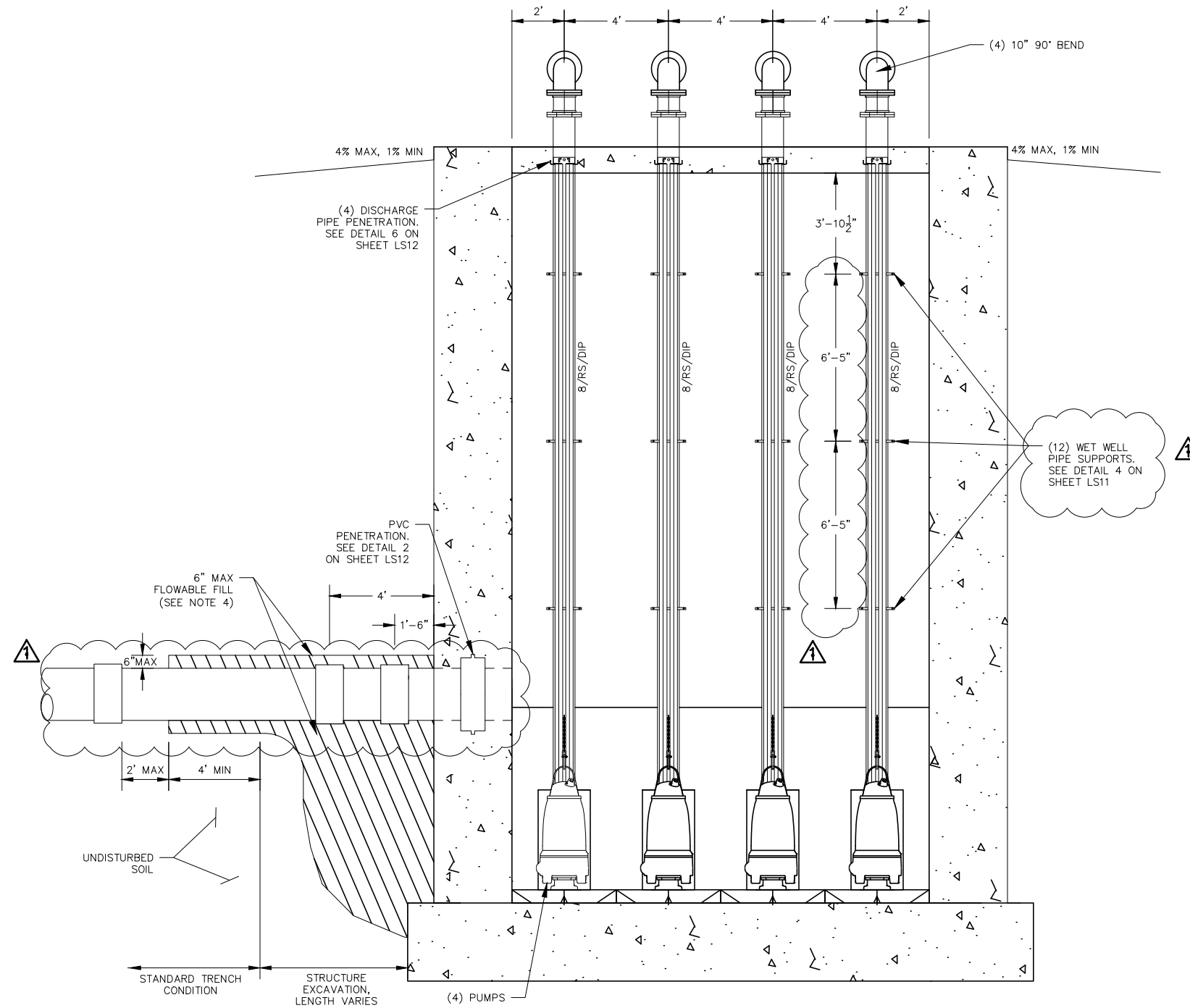
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BAR IS ONE INCH IN LENGTH ON ORIGINAL DRAWING. CHECK SCALE AND ADJUST ACCORDINGLY.

ONE INCH

NOTES

1. BAFFLE WALL NOT SHOWN FOR CLARITY
2. PAD UNDER DISCHARGE HEADER NOT SHOWN FOR CLARITY.
3. SEE STRUCTURAL SHEETS FOR WET WELL DESIGN REGARDING WALL/SLAB/FOUNDATION THICKNESS AND REINFORCEMENT.
4. PROVIDE FLOWABLE FILL BACKFILL FOR PIPELINE TRENCH UP TO 6" ABOVE PIPELINE. REFER TO SHEET S1 FOR BACKFILL INFORMATION. (DO NOT USE FLOWABLE FILL TO BACKFILL AROUND THE WET WELL EXCEPT FOR INCOMING PIPELINE.)

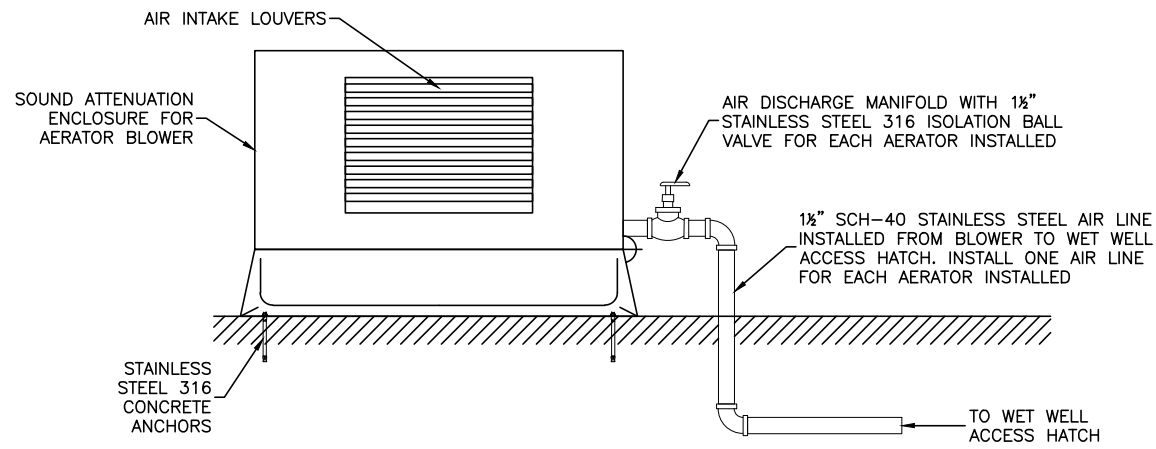


LIFT STATION SECTION 2 VIEW

SCALE: 3/16" = 1'

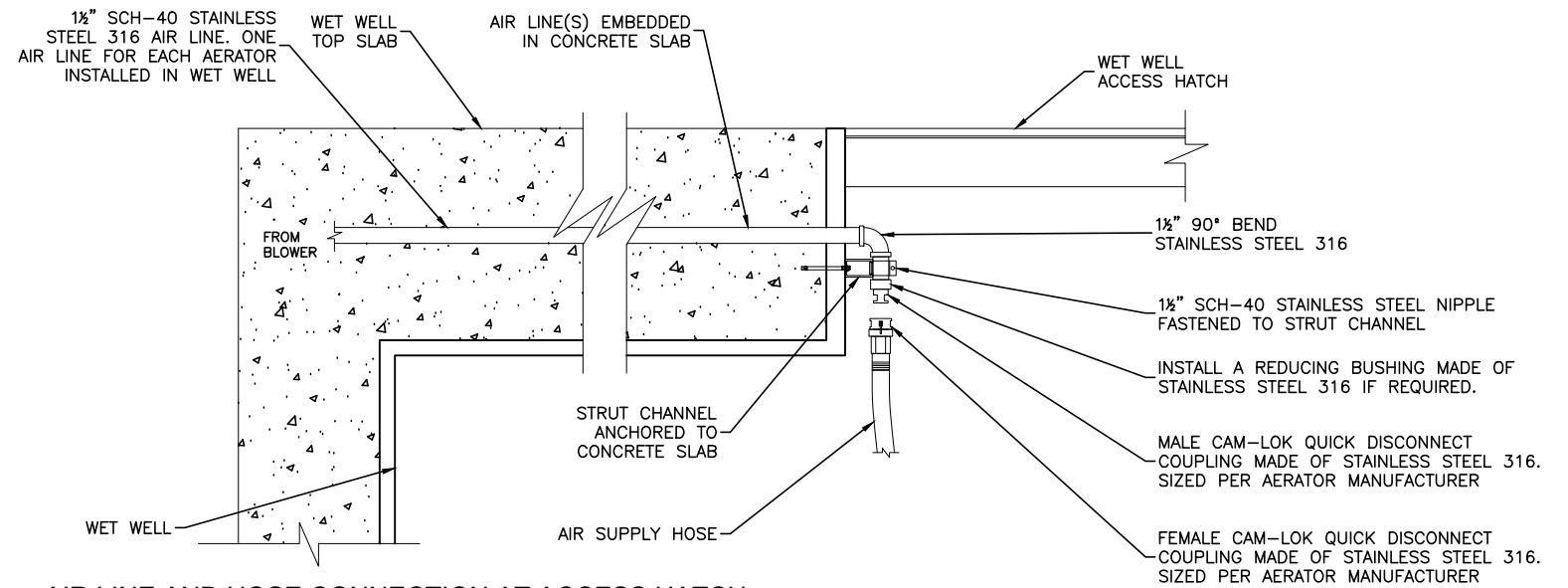
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No.	Revision	By	Date
▲	ADDENDUM NO. 2	MAV	12/03/2021
		LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B SHEET LIFT STATION MECHANICAL SECTION (SHEET 2 OF 2)	
DATE: SEPTEMBER 2021	SAWS PROJECT NO. 21-3000	SHEET NO. LS9	
DESIGN: MAV	KHA PROJECT NO. 068716102		
DRAWN: TLS			
CHECKED: VRS			



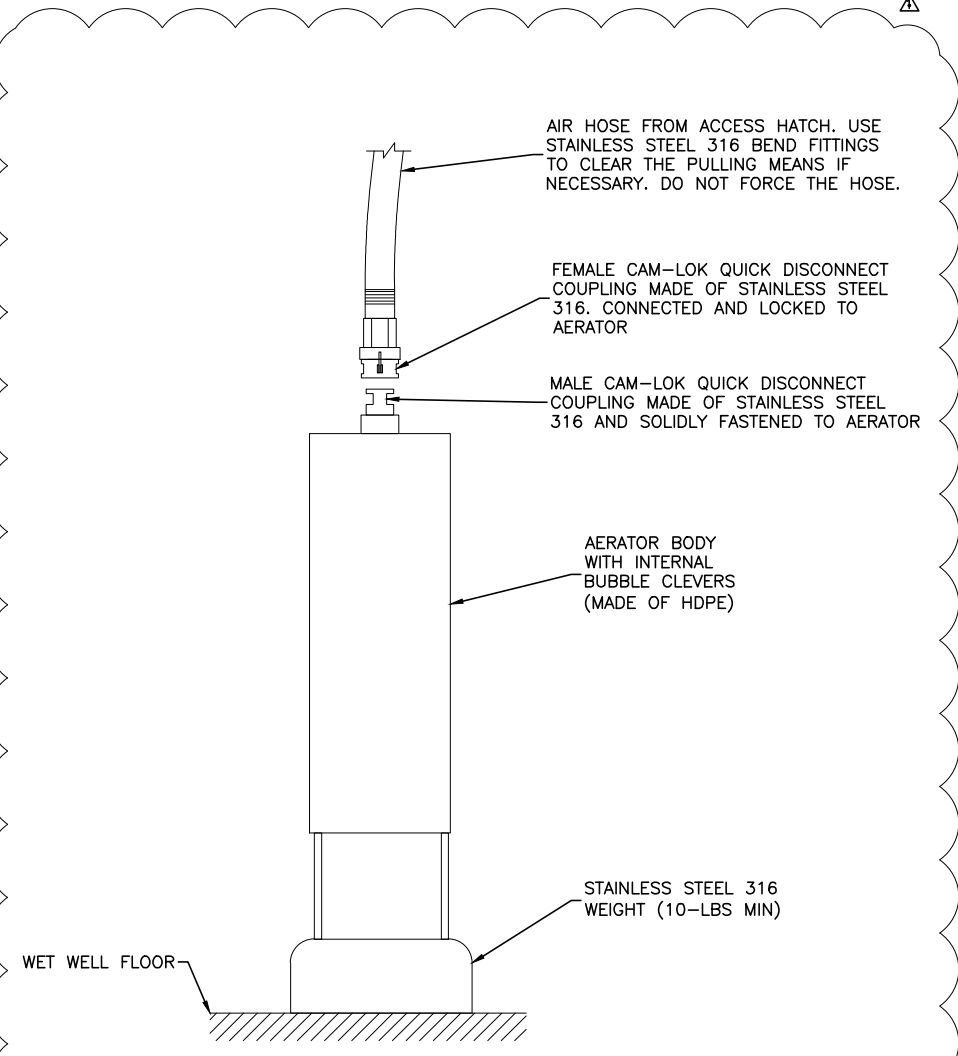
1 BLOWER INSTALLATION
DETAIL

SCALE: NTS



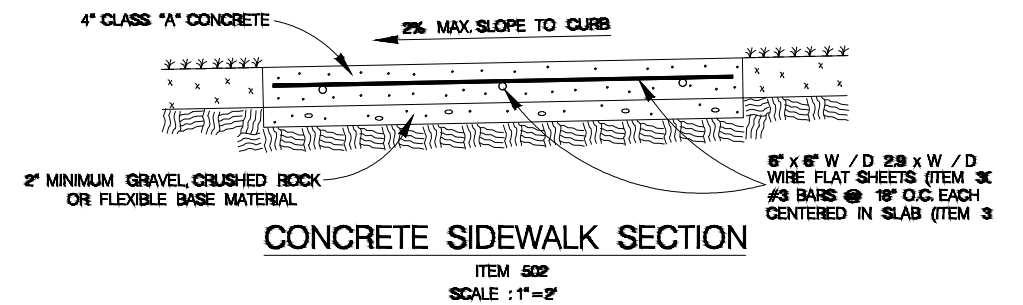
2 AIR LINE AND HOSE CONNECTION AT ACCESS HATCH
DETAIL

SCALE: NTS



3 AERATOR INSTALLATION DETAILS
DETAIL

SCALE: NTS



5 CONCRETE SIDEWALK
DETAIL

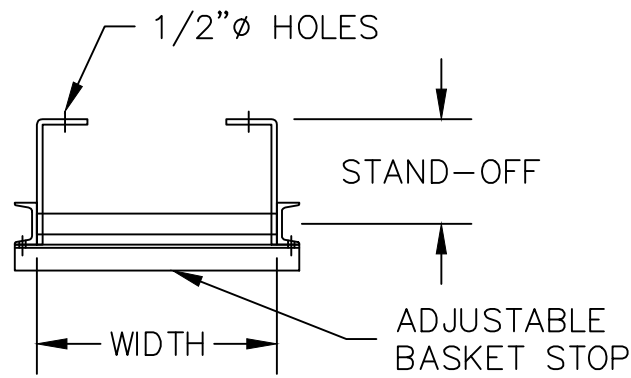
ITEM 502
SCALE : 1" = 2"

5 CONCRETE SIDEWALK
DETAIL

SCALE: NTS

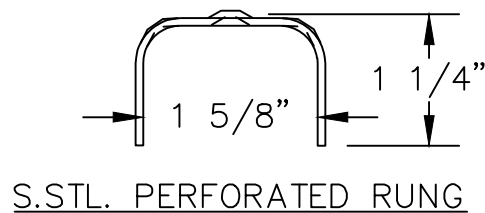
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No.	Revision	By	Date
▲	ADDENDUM NO. 2	MAV	12/03/2021
		LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B SHEET LIFT STATION DETAILS (SHEET 5 OF 6)	
DATE: SEPTEMBER 2021	SAWS PROJECT NO. 21-3000	SHEET NO. LS14	
DESIGN: MAV	KHA PROJECT NO. 068716102		
DRAWN: ELR			
CHECKED: VRS			



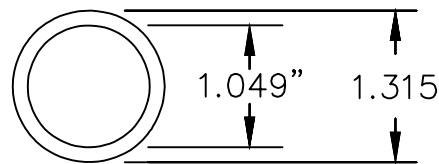
1 FLAT WALL APPLICATION DETAIL

SCALE: NTS

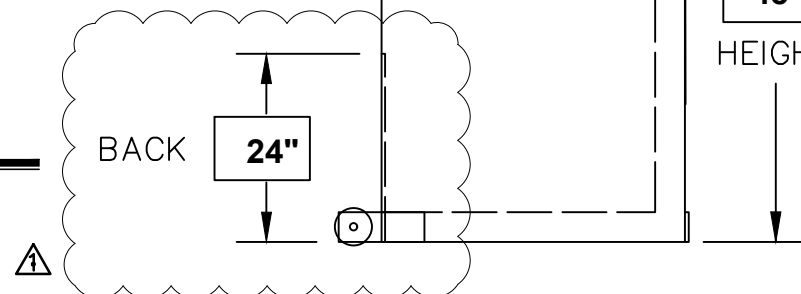


2 S.S.T.L. GUIDERAIL SPACER PERFORATED RUNG AND GUIDERAIL DETAIL

SCALE: NTS

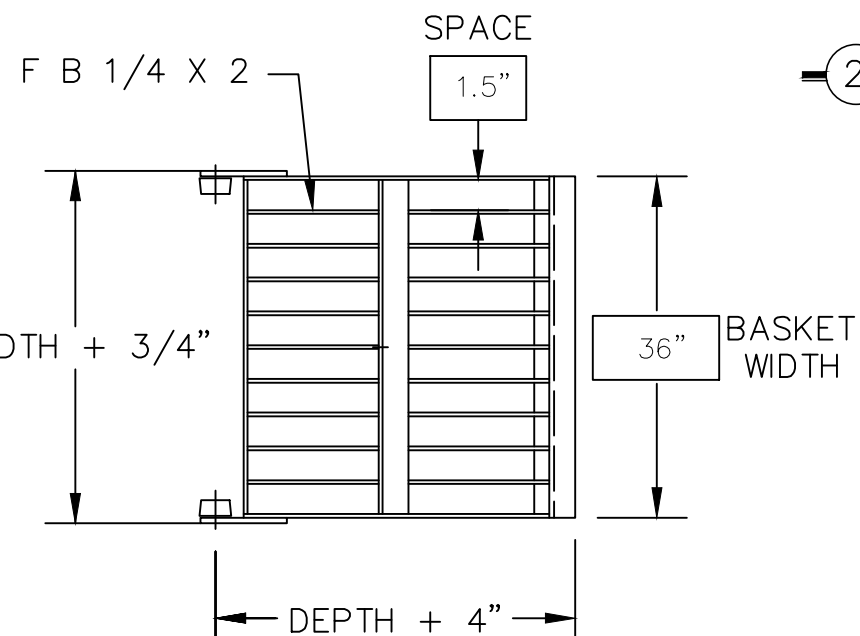


SOLID WHEELS (4)



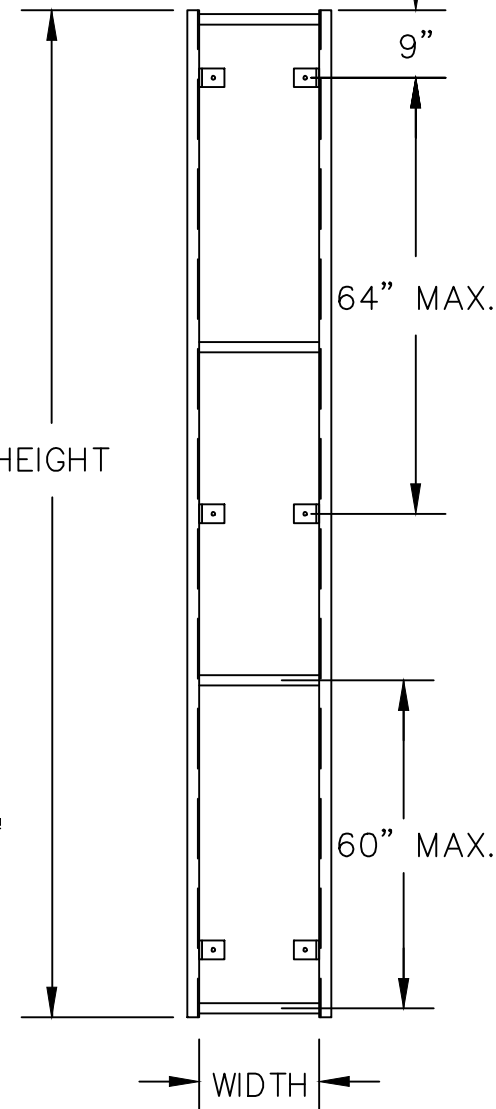
3 SQUARE DEBRIS BASKET PROFILE DETAIL

SCALE: NTS



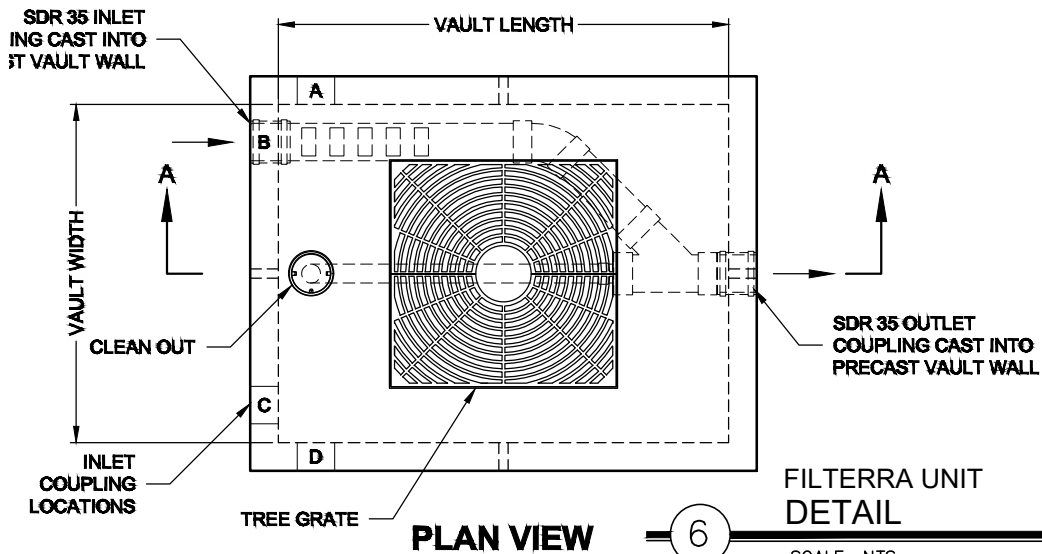
5 SQUARE DEBRIS BASKET PLAN VIEW DETAIL

SCALE: NTS



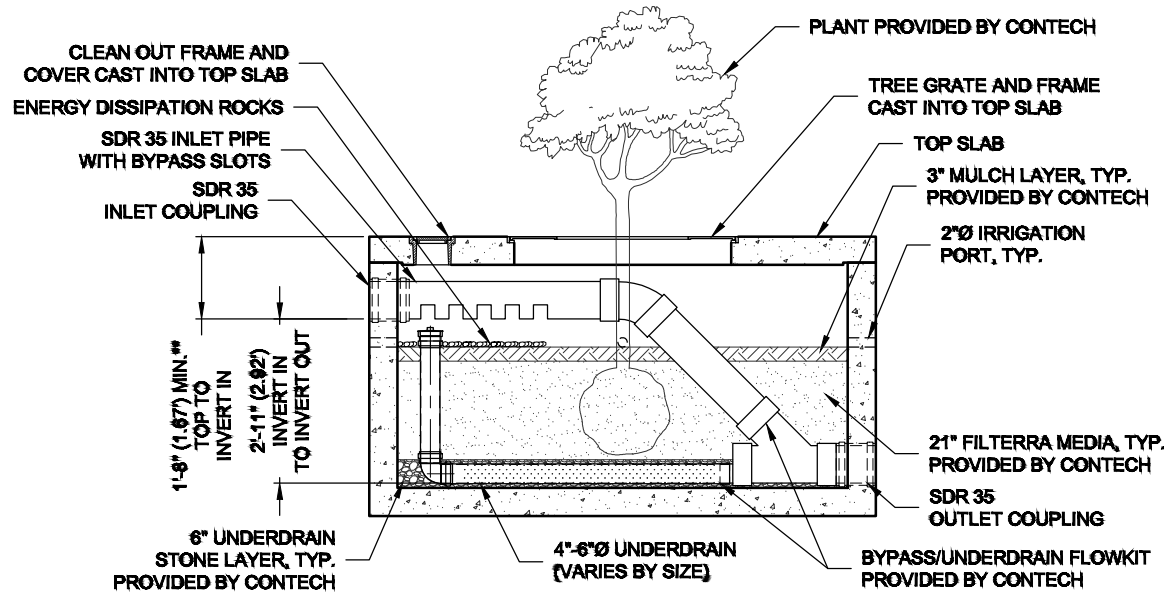
4 DEBRIS BASKET GUIDERAIL DETAIL

SCALE: NTS



6 FILTERRA UNIT DETAIL

SCALE: NTS



SECTION A-A

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▲	ADDENDUM NO. 2	MAV	12/03/2021

LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B
SHEET
LIFT STATION DETAILS (SHEET 6 OF 6)

DATE: SEPTEMBER 2021	SAWS PROJECT NO. 21-3000	SHEET NO. LS15
DESIGN: MAV	KHA PROJECT NO. 068716102	
DRAWN: ELR		
CHECKED: VRS		

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GENERAL

G-1. ALL WORK SHALL COMPLY WITH THE 2018 INTERNATIONAL BUILDING CODE.

G-2. SECTION AND DETAILS SHOWN ON DRAWINGS ARE TYPICAL. USE SIMILAR CONSTRUCTION AT LOCATIONS NOT SPECIFICALLY DETAILED.

G-3. VERIFY LOCATION OF EXISTING UNDERGROUND SITE UTILITIES PRIOR TO THE START OF WORK, AND COORDINATE LOCATION WITH STRUCTURAL DRAWINGS. NOTIFY THE ENGINEER OF ANY CONFLICTS IN WRITING. DO NOT PROCEED WITH AFFECTED WORK UNTIL CONFLICTS HAVE BEEN RESOLVED.

G-4. STRUCTURAL DRAWINGS ARE NOT STAND-ALONE DOCUMENTS AND ARE INTENDED TO BE USED TOGETHER WITH CIVIL, ARCHITECTURAL, MECHANICAL, ELECTRICAL LAYOUTS.

G-5. THE MORE STRINGENT SPECIFICATION SHALL APPLY WHERE DISCREPANCIES OCCUR BETWEEN DRAWINGS AND OTHER DOCUMENTS. NOTIFY ENGINEER OF ANY DISCREPANCIES.

G-6. ALL DIMENSIONS ARE SHOWN IN FEET AND INCHES.

G-7. NO DIMENSIONS ARE TO BE SCALED FROM DRAWINGS.

G-8. THE STRUCTURES HAVE BEEN DESIGNED TO RESIST DESIGN LOADS ONLY WHEN COMPLETED. CONSTRUCTION LOADS ON THE PARTIALLY COMPLETED STRUCTURES SHALL BE CONSIDERED BY THE CONTRACTOR AND INCLUDED IN THE DESIGN OF SHORING, BRACING, FORMWORK, AND ANY OTHER SUPPORTING ELEMENTS PROVIDED FOR CONSTRUCTION OF THE STRUCTURE. DURING CONSTRUCTION AND UNTIL ALL PERMANENT CONNECTIONS ARE MADE, THE CONTRACTOR MUST PROVIDE TEMPORARY BRACING FOR THE STRUCTURE IN ALL DIRECTIONS.

G-9. THE CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND DIMENSIONS PRIOR TO THE START OF WORK.

FOUNDATION

F-1. FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL BASELINE REPORT BY ROCK ENGINEERING AND TESTING LABORATORY, INC. DATED APRIL 22, 2021.
a. ALLOWABLE SOIL BEARING PRESSURE: 2,500 PSF.

F-2. COMPACTED (INSITU) SOILS SHALL BE COMPACTED TO NOT LESS THAN 95% OF MODIFIED PROCTOR ACCORDING TO ASTM D698/AASHTO T-99. PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH. PRIOR TO PLACING STRUCTURES OR NEW LIFTS / LAYERS.

F-3. BACKFILL TO TOP OF FOOTINGS OR FINISHED GRADES AS SHOWN ON PLANS AS SOON AS POSSIBLE AFTER CONCRETE CURES AND FORMS ARE REMOVED.

F-4. BACKFILL AGAINST BELOW GRADE WALLS AFTER SLAB IS SUPPORTING TOP OF WALL OR PROVIDE TEMPORARY SUPPORT FOR TOP OF WALL UNTIL FLOOR SLAB IS IN PLACE AND HAS REACHED DESIGN STRENGTH.

F-5. TOPSOIL, ORGANIC MATERIAL AND ANY NATURAL OR MANMADE DEBRIS SHALL BE STRIPPED FROM THE SITE TO THE DEPTHS REQUIRED OR NOTED. THESE AND OTHER DELETERIOUS MATERIAL SHALL NOT BE USED AS BACKFILL UNDER ANY STRUCTURAL AREA & SHALL BE REMOVED FROM THE SITE.

F-6. UNSUITABLE SUBGRADE, IF ENCOUNTERED, SHALL BE UNDERCUT AND REPLACED WITH LEAN CONCRETE OR SELECT GRANULAR FILL MATERIAL AS ORDERED BY THE GEOTECHNICAL ENGINEER OR EOR.

F-7. THE CONTRACTOR SHALL PROVIDE SUPPORTS, WHETHER SHEETING, SHORING OR BRACING SUCH THAT NO HORIZONTAL MOVEMENT OR VERTICAL SETTLEMENT OCCURS TO EXISTING STRUCTURES, STREETS OR UTILITIES ADJACENT TO, OR ON THE PROJECT SITE.

F-8. THE CONTRACTOR SHALL PROVIDE STABLE SIDES AND BOTTOM OF EXCAVATION DURING CONSTRUCTION BY SHORES, SLOPES OR BENCHED SIDES. THE DESIGN AND INSTALLATION OF THE EXCAVATION BRACING SHALL BE IN ACCORDANCE WITH OSHA SHORING PRACTICES AND BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

F-9. THE CONTRACTOR SHALL NOTIFY THE EOR IMMEDIATELY OF ANY EXISTING FOUNDATION CONDITIONS OR DETAILS THAT ARE IN CONFLICT WITH THOSE INDICATED IN THE GEOTECHNICAL SOILS REPORT.

F-10. BACKFILLING, WHERE REQUIRED, SHALL BE IN ACCORDANCE WITH THE GEOTECHNICAL REPORT.

STRUCTURAL STEEL

S-1. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE A.I.S.C. "MANUAL OF STEEL CONSTRUCTION", FIFTEENTH EDITION AND THE A.I.S.C. "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", 2016. STRUCTURAL STEEL SHAPES, PLATES, BRACKETS, SEATS AND OTHER

S-2. STRUCTURAL STEEL SHAPES, PLATES, BRACKETS, SEATS AND OTHER FABRICATIONS SHALL BE OF STEEL CONFORMING TO A.S.T.M. A-36, WITH A MINIMUM YIELD STRESS OF 36 KSI OR A992 GRADE 50.

S-3. TUBE STEEL SHAPES SHALL CONFORM TO A.S.T.M. A-500, GRADE B WITH A MINIMUM YIELD STRESS OF 46 KSI, PIPE COLUMNS SHALL CONFORM TO A.S.T.M. A-501 OR A-53, TYPES E OR S, WITH A MINIMUM YIELD STRESS OF 36 KSI. THE CONTRACTOR MAY SUBSTITUTE F = 50 KSI STEEL FOR F = 36 KSI STEEL.

S-4. BOLTS WHICH ARE TO BE CAST INTO CONCRETE SHALL BE A.S.T.M. A-36 OR A-307, UNLESS NOTED OTHERWISE

S-5. SHOP AND FIELD WELDING SHALL BE PERFORMED BY CURRENTLY CERTIFIED WELDERS IN ACCORDANCE WITH THE AWS "STRUCTURAL WELDING CODE", LATEST EDITION. ALL CONNECTIONS SHALL USE E70XX ELECTRODES.

S-6. SUBMIT STRUCTURAL STEEL AND MISCELLANEOUS FABRICATIONS SHOP AND ERECTION DRAWINGS FOR REVIEW BY THE EOR.

REINFORCED CONCRETE

C-1. CONCRETE WORK SHALL CONFORM TO REQUIREMENTS OF THE AMERICAN CONCRETE INSTITUTE (ACI) 301, "SPECIFICATIONS FOR STRUCTURAL CONCRETE", ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE".

C-2. ALL STRUCTURAL CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH (F_c), AT THE AGE OF 28 DAYS MEASURED ON TEST CYLINDERS ACCORDING TO ACI METHODS, OF 4000 PSI WITH A MAX WATER CEMENT RATIO (w/c OF 0.45)

C-3. LEAN CONCRETE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH (F_c), AT THE AGE OF 28 DAYS MEASURED ON TEST CYLINDERS ACCORDING TO ACI METHODS OF 750 PSI. (U.O.I.)

C-4. PORTLAND CEMENT USED FOR CONCRETE WORK SHALL COMPLY WITH ASTM C-150 FOR TYPE I / II CEMENT.

C-5. AGGREGATE SHALL BE #57 STONE OR APPROVED ALTERNATE. THE MAXIMUM DIAMETER OF COARSE AGGREGATES IS 1 1/2".

C-6. REINFORCED CONCRETE MUST COMPLY WITH A SLUMP CONE MEASURE (ABRAMS CONE) OF 5" WITH A TOLERANCE OF +/- 1 INCH

C-7. THE CONTRACTOR SHALL APPLY CONSHIELD ANTIMICROBIAL ADDITIVE TO THE STRUCTURAL CONCRETE MIX DESIGN PRIOR TO PLACEMENT PER MANUFACTURER RECOMMENDATION.

C-8. IF CONCRETE IS PUMPED, SLUMP MAY BE INCREASED USING HIGH RANGE WATER REDUCING AGENT, PROVIDED THE SLUMP SPECIFIED ABOVE IS MAINTAINED AT THE DISCHARGE END. USE A MINIMUM 4 INCH PUMP. FOR PUMPED CONCRETE, TAKE CONCRETE SAMPLES FOR CYLINDER TESTING AT DISCHARGE END OF HOSE.

C-9. WHENEVER POSSIBLE, CONCRETE SHOULD BE PLACED INTO FORMS CONTINUOUSLY IN HORIZONTAL LIFTS NOT EXCEEDING 1.5 FT. DEPTH. CONCRETE SHOULD NOT BE ALLOWED TO FALL INTO FORMS FROM A HEIGHT OF MORE THAN 5'-0", AS THIS CAUSES THE CONCRETE TO SEGREGATE. FOR HIGHER DROPS, THE CONCRETE SHOULD BE DEPOSITED THROUGH A SUITABLE VERTICAL PIPE. THE CONCRETE SHOULD NOT BE DEPOSITED IN A PILE BUT SHOULD BE SPREAD OUT AND LEVELED BY RAKING OR SHOVELING. VIBRATORS MAY BE USED TO CONSOLIDATE THE CONCRETE BUT SHOULD NOT BE USED TO ASSIST PLACEMENT. CONCRETE CAN ALSO BE PLACED BY PUMPING.

C-10. WHEN THE AMBIENT TEMPERATURE EXCEEDS 77°F, THE CONTRACTOR SHALL MAKE SPECIAL PREPARATIONS TO ENSURE THAT THE CONCRETE WILL BE TRANSPORTED, PLACED, CONSOLIDATED, AND FINISHED AT THE FASTEST RATE POSSIBLE COMPATIBLE WITH OTHER REQUIREMENTS FOR GOOD CONSTRUCTION PRACTICE; AND SPECIAL MEANS SHALL BE TAKEN IN CONVEYING THE CONCRETE TO THE FORMWORKS, SO THAT LARGE SURFACE AREAS OF FRESH CONCRETE ARE NOT EXPOSED TO THE SUN AND HOT WINDS.

C-11. SLABS.
a. THE CONTRACTOR SHALL FOLLOW CONCRETE SEQUENCE BASED ON THE RESPECTIVE DRAWINGS, AND MAY PROPOSE ALTERNATIVES, WHICH SHALL BE APPROVED BY THE STRUCTURAL ENGINEER.
b. CONCRETE SLABS ON GRADE SHALL BE PLACED SO THAT THE SLAB THICKNESS IS AT NO POINT LESS THAN THAT INDICATED ON THE CONTRACT DRAWINGS. ADJUST SUBGRADE LEVELS TO ACCOUNT FOR SLOPED SLAB ON GRADE SURFACES.
c. LEAN CONCRETE SHALL BE WET UNTIL SATURATION, BEFORE PLACING THE CONCRETE ON THE BOTTOM SLAB.
d. IN CASE OF HIGH TEMPERATURES AND WIND, THE CONTRACTOR SHALL USE ADEQUATE PROTECTION AGAINST THE SUN AND WIND.

C-12. CURING OF CONCRETE
a. IN SLABS, THE CURING SHALL BEGIN IMMEDIATELY UPON THE DISAPPEARANCE OF THE SUPERFICIAL MOISTURE PRODUCED BY THE EXUDATION OF THE CONCRETE. SLABS SHALL BE WET CURED A MINIMUM OF 7 DAYS AND JOINTS CUT WITHIN 8 HOURS OF PLACEMENT.

C-13. ALL CONCRETE JOINTS SHALL BE SCHEDULED BY THE CONTRACTOR AND REVIEWED AND APPROVED BY THE EOR.

C-14. ALL CONCRETE JOINTS IN SLABS SHALL BE CUT PERPENDICULAR TO THE SLAB SURFACE.

C-15. ALL CONCRETE JOINTS SHALL BE PREPARED ACCORDING TO THE FOLLOWING:
a. ALL SURFACES AGAINST WHICH NEW CONCRETE IS TO BE PLACED, SHALL BE CLEAN, SOLID AND FREE FROM LOOSE OR UNSOUND FRAGMENTS, OBJECTIONABLE COATINGS AND ANY OTHER SUBSTANCES OR DEBRIS. IT SHALL BE SUFFICIENTLY ROUGH TO ENSURE THAT A FULL BOND IS DEVELOPED WITH THE NEW CONCRETE.
b. BEFORE FRESH CONCRETE IS PLACED, THE SURFACES SHALL BE CHIPPED OR ROUGHENED 3/4" - 1 3/16" AND CLEANED OF ALL DEBRIS AND FOREIGN MATERIAL WITH AN AIR-OPERATED WATER JET WITH AIR PRESSURES IN EXCESS OF 90 PSI TO PROVIDE A THOROUGHLY CLEAN SURFACE. FREE WATER SHALL BE REMOVED FROM THE SURFACES WITH THE AIR JET.
c. AFTER SEVEN DAYS OR AFTER CURING HAS FINISHED, A BONDING AGENT SHALL BE APPLIED TO PREVIOUSLY PLACED CONCRETE PRIOR TO RESUMING CONCRETE POUR.
d. COVER: JOINTS SHOULD NOT BE LOCATED WITHIN THREE (3) BAR DIAMETERS OF NEAREST REINFORCING STEEL. COVER SHALL BE MAINTAINED AND EMBEDMENT SHALL NOT CONTACT REINFORCEMENT.

C-16. REINFORCEMENT WORK OF DETAILING, FABRICATION AND ERECTION SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (A.C.I. 318)", "A.C.I. DETAILING MANUAL", "CRS MANUAL OF STANDARD PRACTICE (MSP I)" AND "STRUCTURAL WELDING CODE - REINFORCING STEEL (A.W.S. D1.4)"

REINFORCED CONCRETE (CONT'D)

C-17. STEEL REINFORCING, UNLESS NOTED OTHERWISE, SHALL CONFORM TO THE FOLLOWING:
a. BARS, TIES AND STIRRUPS A.S.T.M. A615 GRADE (FY = 60,000 P.S.I.)
b. REINFORCING TO BE WELDED SHALL CONFORM TO A.S.T.M. A706 (FY = 60,000 P.S.I.) OR MILL TEST REPORTS SHALL BE SUBMITTED SHOWING CARBON EQUIVALENT.

C-18. MINIMUM CONCRETE PROTECTIVE COVER FOR REINFORCEMENT OF ENGINEERED CONCRETE STRUCTURES SHALL BE AS FOLLOWS U.O.N.:
a. UNFORMED SURFACES CAST AGAINST AND PERMANENTLY IN CONTACT WITH EARTH3.0"
b. BUILDING SURFACES FORMED IN CONTACT WITH EARTH OR EXPOSED TO WEATHER,
#6 THROUGH #18 BARS2.0"
#5 BARS AND SMALLER1.5"
c. BUILDING SURFACES NOT IN CONTACT WITH EARTH OR EXPOSED TO WEATHER (WALLS AND SLABS),
#11 BARS AND SMALLER1.0"
d. BUILDING BEAMS, GIRDERS AND COLUMNS - PRINCIPAL REINFORCEMENT, TIES, STIRRUPS AND SPIRALS.....1.5"

C-19. WHERE CONTINUOUS REINFORCEMENT IS CALLED FOR, IT SHALL BE EXTENDED CONTINUOUSLY AROUND CORNERS AND LAPPED AT NECESSARY SPLICES OR HOOKED AT DISCONTINUOUS ENDS. SEE DETAILS ON DRAWINGS.

C-20. WHERE REINFORCING IS NOT SHOWN ON THE CONTRACT DRAWINGS, PROVIDE REINFORCEMENT IN ACCORDANCE WITH APPLICABLE DETAILS AS DETERMINED BY THE ENGINEER. IN NO CASE SHALL REINFORCEMENT BE LESS THAN THE MINIMUM REINFORCEMENT PERMITTED BY THE APPLICABLE CODES NOR LESS THAN THE FOLLOWING:
a. DOWELS FROM TOP OF WALLS TO CONCRETE SLABS:
b. MAIN SLAB REINFORCING: SEE DRAWINGS.
c. TEMPERATURE & SHRINKAGE: SEE DRAWINGS.

C-21. WHERE REINFORCEMENT IS SHOWN IN SECTION, REINFORCEMENT IS CONSIDERED TYPICAL WHEREVER THE SECTION APPLIES.

C-22. REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONSTRUCTION JOINTS UNLESS OTHERWISE SHOWN.

C-23. PROVIDE DOWELS FROM FOUNDATION TO MATCH BAR SIZE AND NUMBER OF REINFORCING IN THE SUPPORTED ELEMENT, UNLESS NOTED OTHERWISE.

C-24. REINFORCEMENT SHALL NOT BE TACK WELDED OR HEATED FOR BENDING.

C-25. INSTALLATION OF REINFORCEMENT SHALL BE COMPLETED AT LEAST 24 HOURS PRIOR TO THE SCHEDULED CONCRETE PLACEMENT. NOTIFY INSPECTOR OF COMPLETION AT LEAST 24 HOURS PRIOR TO THE SCHEDULED COMPLETION OF THE INSTALLATION OF REINFORCEMENT.

C-26. WELDING OF REINFORCEMENT SHALL CONFORM TO A.W.S. D1.4 (INCLUDING PREHEAT REQUIREMENTS). ONLY BARS INDICATED ON DRAWINGS TO BE WELDED SHALL BE WELDED.

C-27. REBARS SHALL BE PLACED CLEAN, FREE OF DUST, MUD, RUST, GREASE, OIL, PAINT, LAITANCE OR HARDENED CONCRETE, AND ANY OTHER SUBSTANCE CAPABLE OF REDUCING THE BOND WITH THE CONCRETE.

C-28. UNLESS NOTED OTHERWISE, OVERLAPS & ANCHORS, SHALL BE AT LEAST 60 TIMES THE DIAMETER OF THE BIGGEST BAR DIAMETER.

C-29. STEEL REINFORCING MESH NOT INDICATED IN DRAWINGS, MAY NOT OVERLAP MORE THAN 20% OF ITSELF IN THE SAME POSITION.

C-30. ACCESSORIES NECESSARY TO PROPERLY SUPPORT REINFORCING AT POSITIONS SHOWN ON PLANS SHALL BE PROVIDED. ALL REINFORCING, DOWELS, BOLTS AND COLLAR FLANGES SHALL BE SET AND TIED IN PLACE BEFORE THE CONCRETE IS POURED. "STABBING" INTO PREVIOUSLY PLACED CONCRETE IS NOT PERMITTED.

C-31. CHAMFER EXPOSED CORNERS AND EDGES OF CONCRETE 3/4"

C-32. LAPS SHALL BE CLASS B TENSION LAP SPLICES, UNLESS NOTED OTHERWISE

CLASS B SPLICES FOR REINFORCEMENT, OTHER THAN TOP BARS:

BAR SIZE	3,000 PSI	4,000 PSI	5,000 PSI
#3	22"	19"	17"
#4	29"	25"	23"
#5	36"	31"	28"
#6	43"	37"	34"
#8	72"	62"	56"

CLASS B SPLICES FOR REINFORCEMENT AS TOP BARS:

BAR SIZE	3,000 PSI	4,000 PSI	5,000 PSI
#3	28"	25"	22"
#4	36"	33"	29"
#5	47"	41"	36"
#6	56"	49"	44"
#8	93"	81"	72"

SHOP DRAWINGS AND SUBMITTALS

SS-1. REVIEW OF SUBMITTALS BY THE ENGINEER IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AS PRESENTED BY THE CONTRACT DOCUMENTS. NO DETAILED CHECK OF QUANTITIES OR DIMENSIONS WILL BE MADE. ONLY THOSE SUBMITTALS REQUIRED TO BE SUBMITTED WILL BE REVIEWED. ALL OTHERS WILL BE RETURNED WITHOUT REVIEW.

SS-2. ALL SUBMITTALS SHALL BE ACCOMPANIED BY A LETTER OF TRANSMITTAL. CONTRACTOR'S SUBMITTAL NUMBER SHALL BE INDICATED ON TRANSMITTAL. DO NOT COMBINE DIFFERENT SUBMITTALS ON THE SAME TRANSMITTAL. SUBMIT SHOP DRAWINGS IN A TIMELY MANNER, CONSISTENT WITH THE ABOVE, AND PRIOR TO FABRICATION, INSTALLATION OR COMMENCEMENT OF THE WORK. ALLOW UP TO 10 WORKING DAYS FOR ENGINEER TO REVIEW AND RETURN SHOP DRAWINGS. NUMBER OF COPIES OF EACH SUBMITTED SHOP DRAWING SHALL BE SUFFICIENT FOR ENGINEER TO RETAIN 2 COPIES.

SS-3. ALL SUBMITTALS MUST BEAR EVIDENCE OF CONTRACTOR'S REVIEW (INCLUDING COMPANY STAMP AND DATED SIGNATURE OF REVIEWER) AND MUST BE APPROVED OR APPROVED AS NOTED BY HIM PRIOR TO SUBMITTING TO THE ENGINEER.

SS-4. ALL CHANGES AND ADDITIONS MADE ON RESUBMITTALS MUST BE CLEARLY FLAGGED AND NOTED. THE PURPOSE OF THE RESUBMITTALS MUST BE CLEARLY NOTED ON THE LETTER OF TRANSMITTAL. ENGINEER REVIEW WILL BE LIMITED TO THOSE ITEMS CAUSING THE RESUBMITTAL.

SS-5. DO NOT REPRODUCE THE STRUCTURAL DRAWINGS FOR USE AS ERECTION, PLACING OR FABRICATION DRAWINGS.

SS-6. SUBMITTALS NOT MEETING THE ABOVE CRITERIA OR SUBMITTED AFTER FABRICATION WILL NOT BE REVIEWED.

SS-7. SUBMITTALS:
AS A MINIMUM, THE FOLLOWING SHALL BE SUBMITTED, AS APPLICABLE, TO THE ENGINEER FOR REVIEW AND COMPLIANCE WITH THE INTENT OF THE CONTRACT DOCUMENTS PRIOR TO FABRICATION, INSTALLATION, OR COMMENCEMENT OF THE WORK:
A. CONCRETE, MORTAR AND GROUT MIX DESIGNS, INCLUDING ADMIXTURE DATA SHEETS.
B. BILL OF REINFORCING AND LAYOUT.
C. MISCELLANEOUS METAL FABRICATIONS.
D. PAINT, SEALANT, TOPPING AND OTHER FINISH PRODUCTS.
E. SHORING.

IN ADDITION, CUT SHEETS FOR WATERPROOFING, VAPOR BARRIERS, WATERSTOPS, PROPRIETARY ANCHORS, FASTENERS, OTHER STANDARD ATTACHMENTS, EXPANSION JOINTS, MORTAR, BONDING AGENT, DOORS, WINDOWS, INSULATION, AND OTHER MATERIALS AND APPROPRIATE CERTIFICATIONS SHALL ALSO BE SUBMITTED.

WELDER CERTIFICATIONS FOR ALL WELDERS SHALL BE SUBMITTED. CERTIFICATIONS MUST HAVE BEEN ISSUED WITHIN 3 YEARS PRIOR TO PERFORMING WORK ON THE PROJECT.

SS-8. REQUESTS FOR SUBSTITUTIONS SHALL BE SUBMITTED IN WRITING TO THE ENGINEER FOR REVIEW. SUBMIT 3 COPIES OF ALL PRODUCT DATA AND CUT SHEETS AS NECESSARY TO SHOW COMPLIANCE WITH THE PROJECT REQUIREMENTS. CONTRACTOR SHALL BEAR THE BURDEN OF OBTAINING AUTHORIZATION FOR USE OF ITEMS TO BE SUBSTITUTED. ENGINEER'S DECISION REGARDING SUBSTITUTION SHALL BE FINAL.

SS-9. FOR ADDITIONAL CRITERIA APPLICABLE TO SUBMITTALS REQUIRING ENGINEERING INPUT BY A DELEGATED ENGINEER, SEE BELOW.

SS-10. DELEGATED ENGINEER:
A. DEFINITION - A TEXAS PROFESSIONAL ENGINEER WHO UNDERTAKES A SPECIALTY SERVICE AND PROVIDES SERVICES OR CREATIVE WORK (DELEGATED ENGINEERING DOCUMENT) REGARDING A PORTION OF THE ENGINEERING PROJECT. THE DELEGATED ENGINEER IS THE ENGINEER OF RECORD FOR THAT PORTION OF THE ENGINEERING PROJECT.
B. SHALL BE: (1) AN INDEPENDENT CONSULTANT, (2) AN EMPLOYEE OR OFFICER OF AN ENTITY SUPPLYING COMPONENTS TO A FABRICATOR OR CONTRACTOR, SO LONG AS THE ENGINEER ACTS AS AN INDEPENDENT CONSULTANT OR THROUGH A DULY QUALIFIED ENGINEERING CORPORATION, OR (3) AN EMPLOYEE OR OFFICER OF A FABRICATOR OR CONTRACTOR, SO LONG AS THE ENGINEER ACTS AS AN INDEPENDENT CONSULTANT OR THROUGH A DULY QUALIFIED ENGINEERING CORPORATION.

SS-11. SUBMITTALS FOR CUSTOM DESIGNED, MANUFACTURED OR FABRICATED LOAD-CARRYING ITEMS AND CUSTOM FABRICATED ITEMS WHICH ARE REQUIRED BY CODES OR STANDARDS TO RESIST FORCES AND STRESSES, INCLUDING THEIR CONNECTIONS, ANCHORAGES AND ATTACHMENTS REQUIRE A DELEGATED ENGINEER.

SS-12. AS A MINIMUM, THE FOLLOWING SYSTEMS AND COMPONENTS REQUIRE FABRICATION AND ERECTION DRAWINGS WITH INPUT BY A DELEGATED ENGINEER:
A. ALUMINUM ENTRY GATE

SS-13. FOR EACH CATEGORY OF SUBMITTALS REQUIRING INPUT FROM A DELEGATED ENGINEER, THE CONTRACTOR SHALL ATTACH TO THE FIRST SUBMITTAL A SIGNED AND SEALED LETTER FROM THE RESPONSIBLE DELEGATED ENGINEER STATING "I CERTIFY THAT THE DESIGN AND DRAFTING OF THE SHOP DRAWINGS WHICH ARE SIGNED AND SEALED BY ME WERE PREPARED UNDER MY DIRECT SUPERVISION AND CONTROL, AND TO THE BEST OF MY KNOWLEDGE, THE SHOP DRAWINGS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE CONTRACT DOCUMENTS."

SS-14. SUBMITTALS SHALL CLEARLY IDENTIFY THE SPECIFIC PROJECT AND APPLICABLE CODES, LIST THE DESIGN CRITERIA, AND SHOW ALL DETAILS AND PLANS NECESSARY FOR PROPER FABRICATION AND INSTALLATION. CALCULATIONS AND SHOP DRAWINGS SHALL IDENTIFY SPECIFIC PRODUCTS UTILIZED. GENERIC PRODUCTS WILL NOT BE ACCEPTED.

SS-15. SHOP DRAWINGS AND CALCULATIONS REQUIRE THE IMPRESSED SEAL, DATE AND SIGNATURE OF THE DELEGATED ENGINEER. COMPUTER PRINTOUTS ARE AN ACCEPTABLE SUBSTITUTE FOR MANUAL COMPUTATIONS PROVIDED THEY ARE ACCOMPANIED BY SUFFICIENT DESCRIPTIVE INFORMATION TO PERMIT THEIR PROPER EVALUATION. SUCH DESCRIPTIVE INFORMATION SHALL BEAR THE IMPRESSED SEAL AND SIGNATURE OF THE DELEGATED ENGINEER AS AN INDICATION THAT HE HAS ACCEPTED RESPONSIBILITY FOR THE RESULTS. IF ACCOMPANYING SIGNED AND SEALED BLUELINE PRINTS ARE PROVIDED, SEPIAS DO NOT REQUIRE SIGNATURE AND SEAL. THE ENGINEER WILL RETAIN 2 SIGNED AND SEALED BLUELINE PRINTS FOR HIS RECORDS.

SHOP DRAWINGS AND SUBMITTALS (CONT'D)

SS-16. CALCULATIONS ARE THE SOLE RESPONSIBILITY OF THE DELEGATED ENGINEER. CALCULATIONS ARE SUBMITTED TO THE ENGINEER FOR HIS RECORDS.

SS-17. CATALOG INFORMATION ON STANDARD PRODUCTS (i.e. "CUT SHEETS") DOES NOT REQUIRE THE SEAL OF A DELEGATED ENGINEER.

REVIEW BY THE PROJECT ENGINEER OF RECORD OF SUBMITTALS IS LIMITED TO VERIFYING THE FOLLOWING:
A. THAT THE SPECIFIED STRUCTURAL SUBMITTALS HAVE BEEN FURNISHED.
B. THAT THE STRUCTURAL SUBMITTALS HAVE BEEN SIGNED AND SEALED BY THE DELEGATED ENGINEER.
C. THAT THE DELEGATED ENGINEER HAS UNDERSTOOD THE DESIGN INTENT AND HAS USED THE SPECIFIED STRUCTURAL CRITERIA. (NO DETAILED CHECK OF CALCULATIONS WILL BE MADE.)
D. THAT THE CONFIGURATION SET FORTH IN THE STRUCTURAL SUBMITTALS IS CONSISTENT WITH THE CONTRACT DOCUMENTS. (NO DETAILED CHECK OF DIMENSIONS OR QUANTITIES WILL BE MADE.)

SS-18. SUBMITTALS NOT MEETING THE ABOVE CRITERIA, OR SUBMITTED AFTER FABRICATION, WILL NOT BE REVIEWED.

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No.	Revision	By	Date

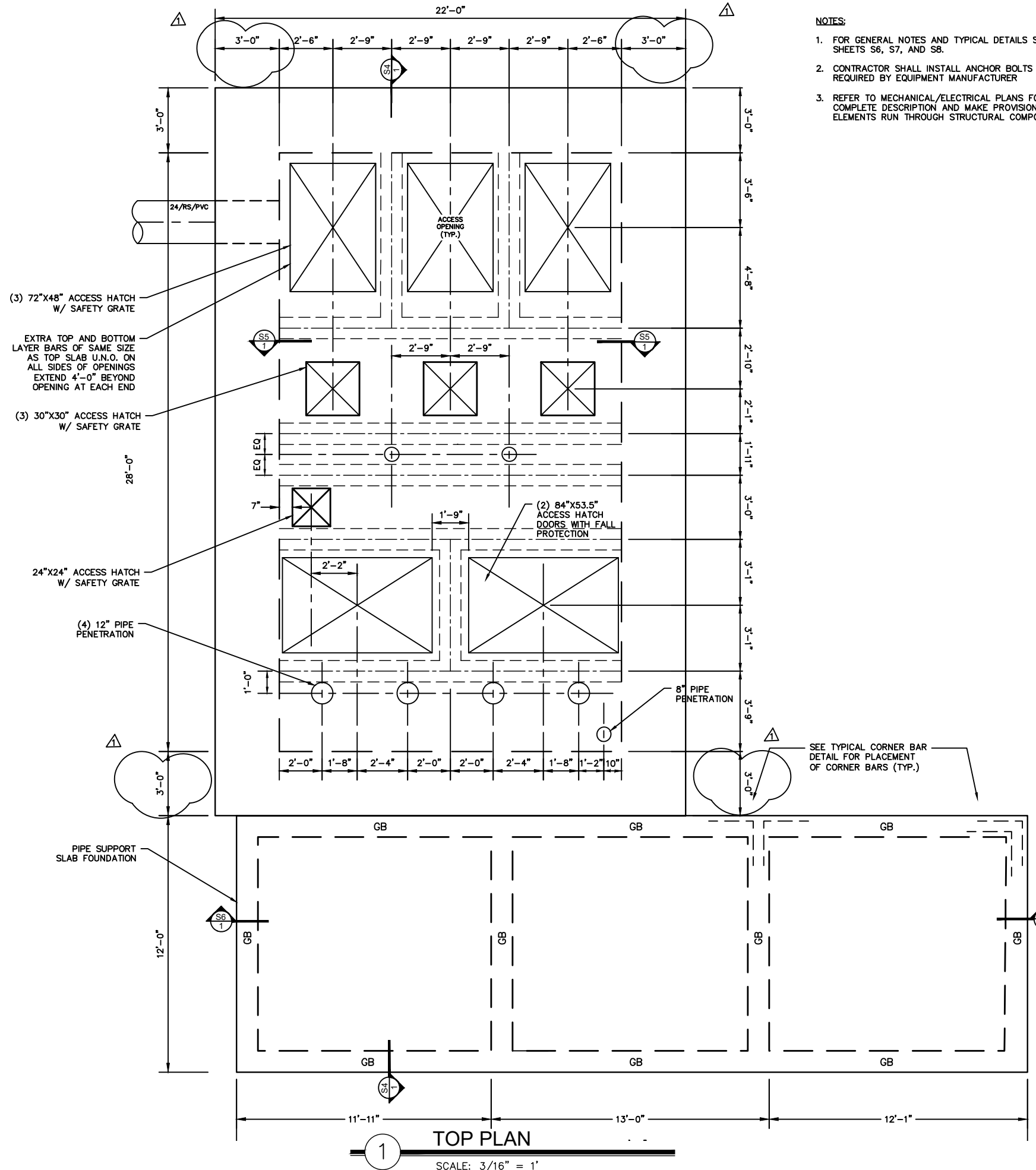
LEMON CREEK RANCH - UPSTREAM SANITARY SEWER PHASE 1B

SAN ANTONIO WATER SYSTEM

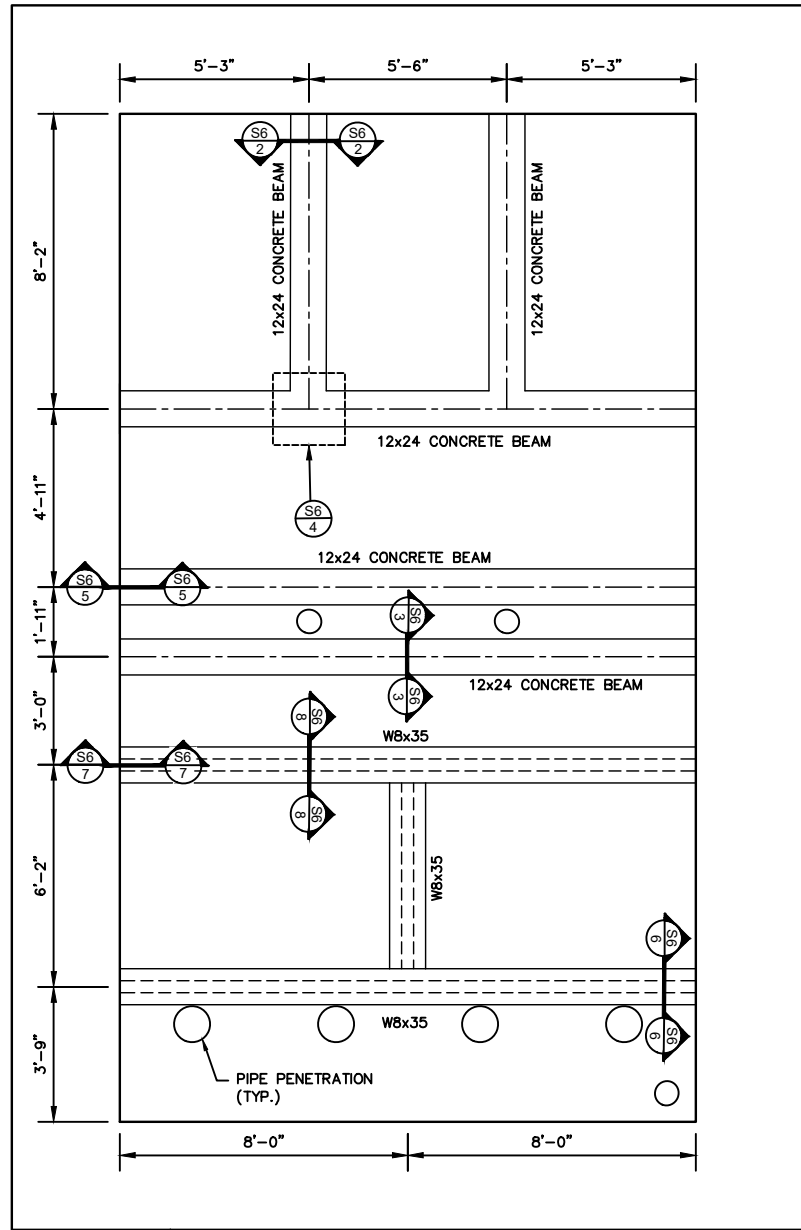
SHEET
STRUCTURAL GENERAL NOTES

DATE: AUGUST 2021	SAWS PROJECT NO.	SHEET NO.
DESIGN: JEL	21-3000	S1-A
DRAWN: ELR	KHA PROJECT NO.	
CHECKED: AF	068716102	

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12/20/2021 3:47 PM
PLOTTED BY
DWG NAME
C:\SNA\



- NOTES:**
- FOR GENERAL NOTES AND TYPICAL DETAILS SEE SHEETS S6, S7, AND S8.
 - CONTRACTOR SHALL INSTALL ANCHOR BOLTS AS REQUIRED BY EQUIPMENT MANUFACTURER
 - REFER TO MECHANICAL/ELECTRICAL PLANS FOR A COMPLETE DESCRIPTION AND MAKE PROVISIONS WHEN ELEMENTS RUN THROUGH STRUCTURAL COMPONENTS.



- HATCH NOTES:**
- CONTRACTOR SHALL PROVIDE EXTRA TOP AND BOTTOM LAYER BARS OF THE SAME SIZE ON ALL SIDES OF OPENINGS IN THE TOP SLAB. BARS SHALL BE #4'S AND EXTEND 4'-0" MINIMUM.
 - CONTRACTOR SHALL PROVIDE (2) - #4 BARS CENTERED AT ALL OPENING CORNERS EXTENDING 4'-0" MINIMUM.

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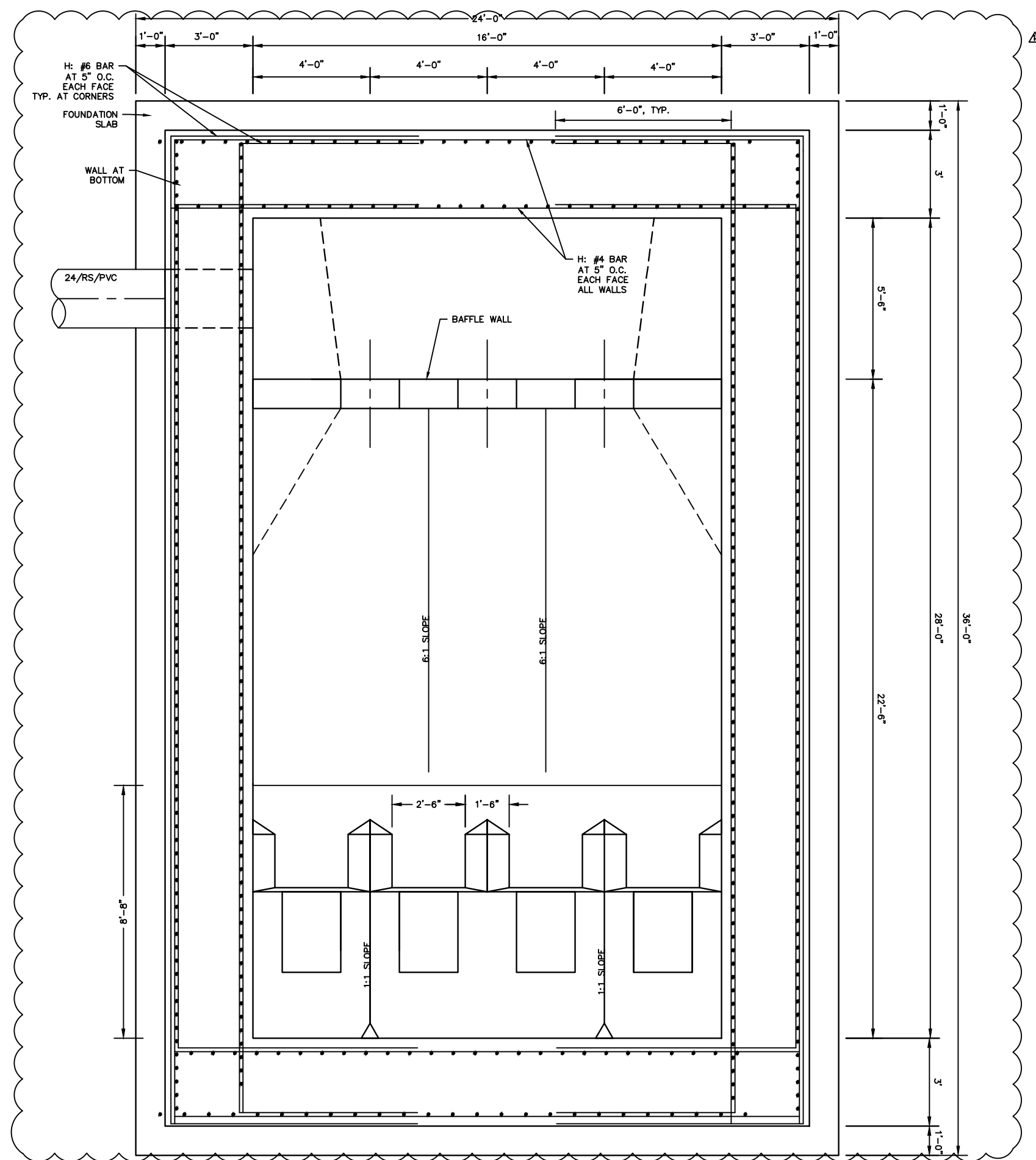
No.	Revision	By	Date
1	ADDENDUM NO. 2	MAV	12/3/2021

LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B

SHEET
STRUCTURAL PLAN VIEW (TOP)

DATE: AUGUST 2021	SAWS PROJECT NO. 21-3000	SHEET NO. S2
DESIGN: JEL	KHA PROJECT NO. 068716102	
DRAWN: ELR		
CHECKED: AF		

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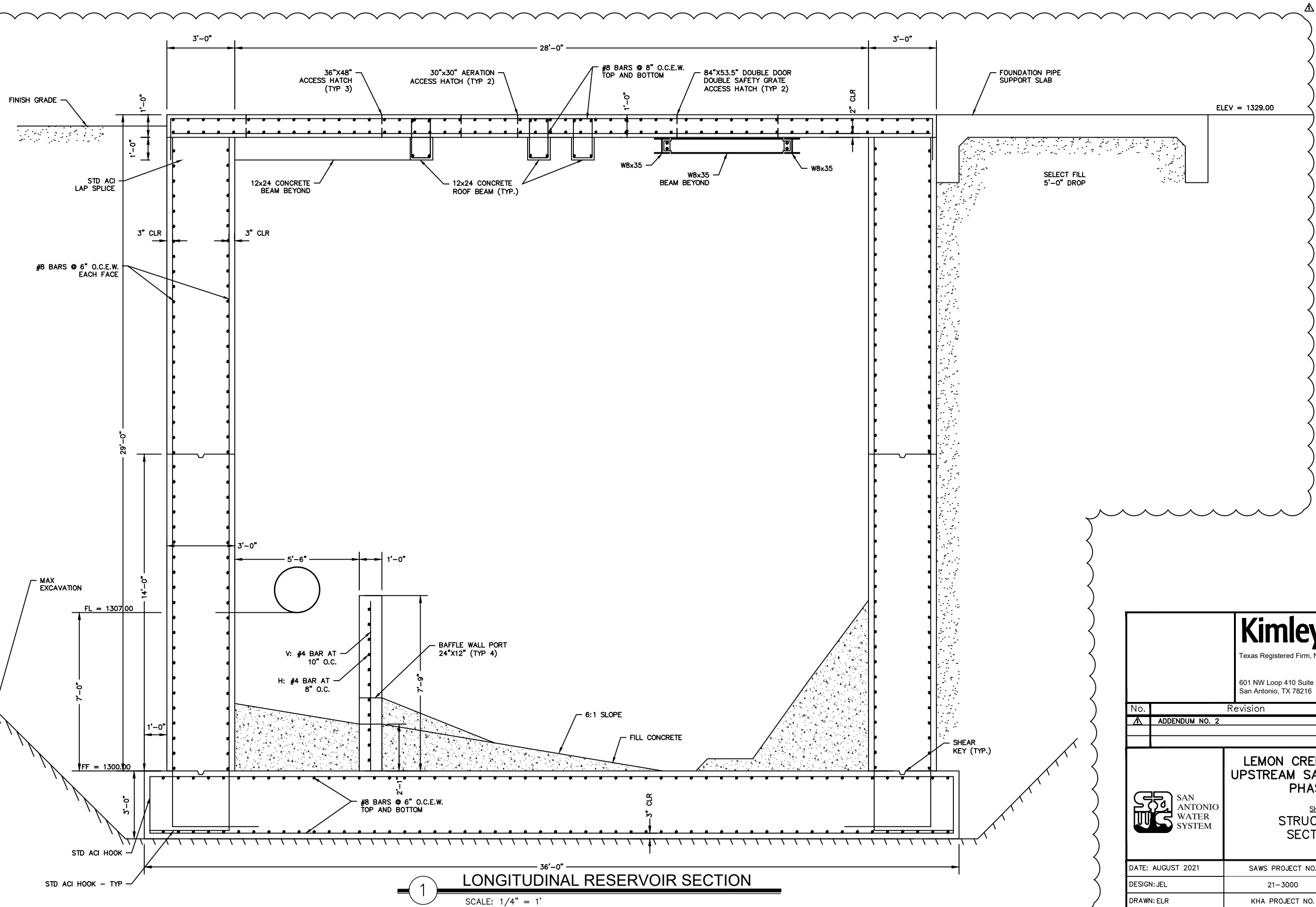


1 **BOTTOM PLAN**
SCALE: 1/4" = 1'

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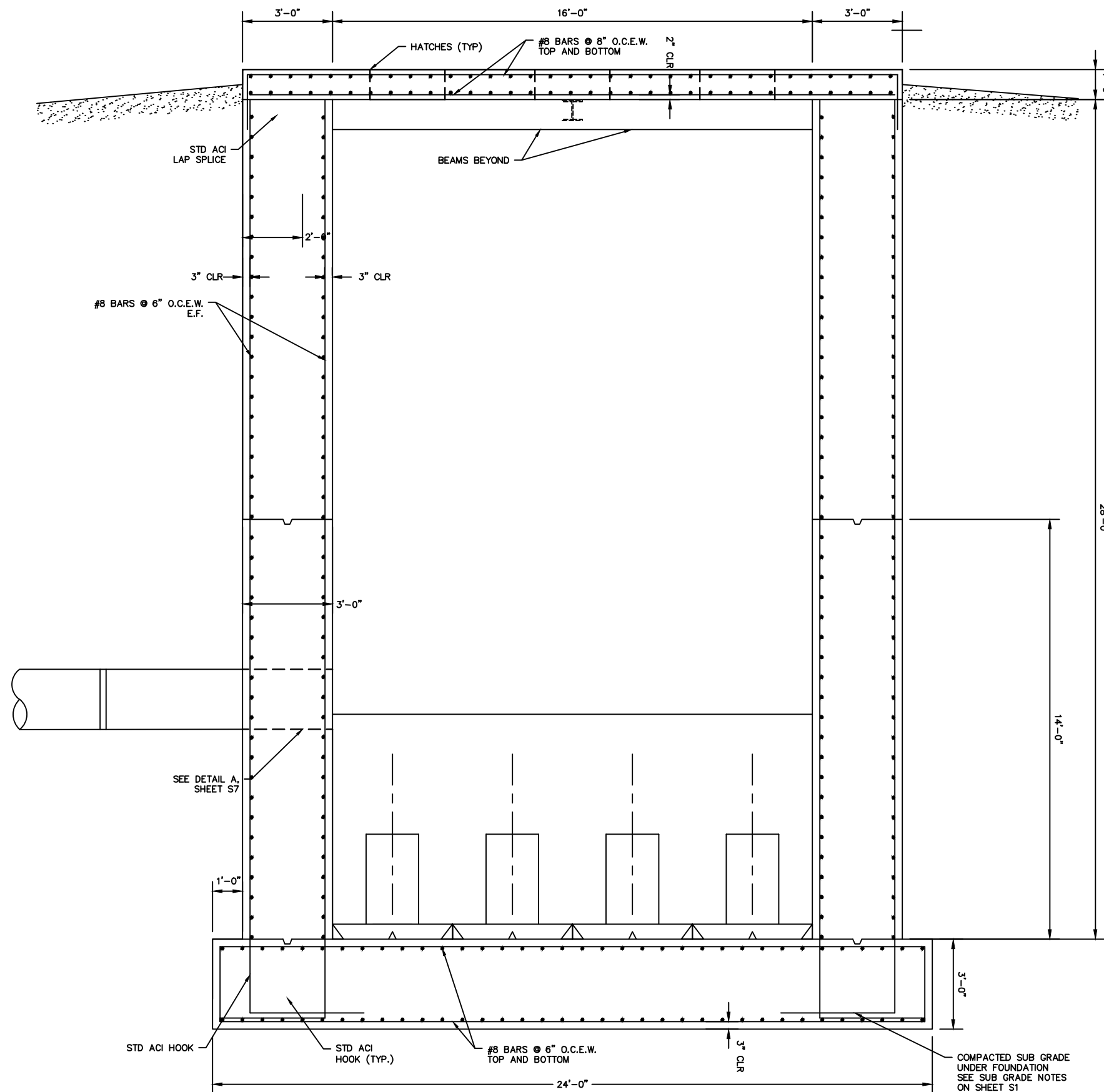
Kimley»Horn		Texas Registered Firm, No. F-928	
601 NW Loop 410 Suite 350 San Antonio, TX 78216		Tel No. 210-541-9166 Fax No. 210-541-8699	
No.	Revision	By	Date
A	ADDENDUM NO. 2	MAV	12/03/2021
SAN ANTONIO WATER SYSTEM		LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B SHEET STRUCTURAL PLAN VIEW (BOTTOM)	
DATE: AUGUST 2021	SAWS PROJECT NO. 21-3000	S3	
DESIGN: JEL	KHA PROJECT NO.		
DRAWN: ELR	068716102		
CHECKED: AF	068716102		

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1
LONGITUDINAL RESERVOIR SECTION
 SCALE: 1/4" = 1'

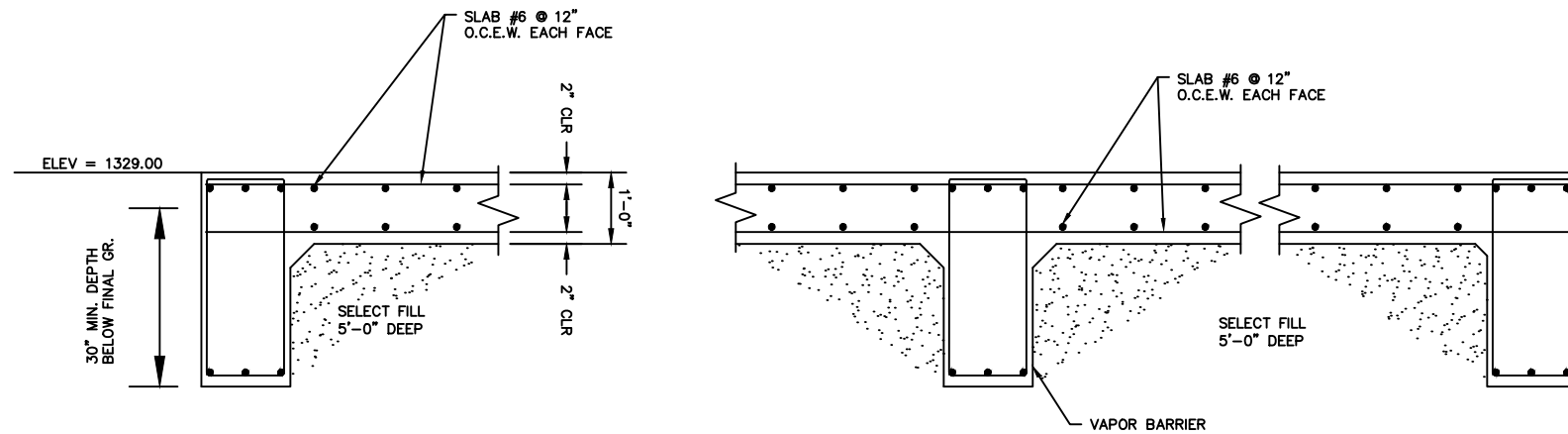
Kimley»Horn		Texas Registered Firm, No. F-928	
601 NW Loop 410 Suite 350 San Antonio, TX 78216		Tel No. 210-541-9166 Fax No. 210-541-8699	
No.	Revision	By	Date
A	ADDENDUM NO. 2	MAV	12/03/2021
 SAN ANTONIO WATER SYSTEM		LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B SHEET STRUCTURAL SECTION 1	
DATE: AUGUST 2021	SAWS PROJECT NO. 21-3000	S4	
DESIGN: JEL	KHA PROJECT NO.		
DRAWN: ELR	068716102		
CHECKED: AF			



1
TRANSVERSE RESERVOIR SECTION
 SCALE: 3/8" = 1'

PLOTTED BY: VALDEZ MARIO 12/23/2021 3:50 PM
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 DATE: 12/23/2021 3:50 PM

<p style="text-align: right;"> Kimley»Horn Texas Registered Firm, No. F-928 601 NW Loop 410 Suite 350 Tel No. 210-541-9166 San Antonio, TX 78216 Fax No. 210-541-8699 </p>			
No.	Revision	By	Date
A	ADDENDUM NO. 2	MAV	12/03/2021
<p style="text-align: center;"> LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B SHEET STRUCTURAL SECTION 2 </p>			
DATE: AUGUST 2021	SAWS PROJECT NO. 21-3000	SHEET NO. S5	
DESIGN: JEL	KHA PROJECT NO.		
DRAWN: ELR	068716102		
CHECKED: AF	068716102		

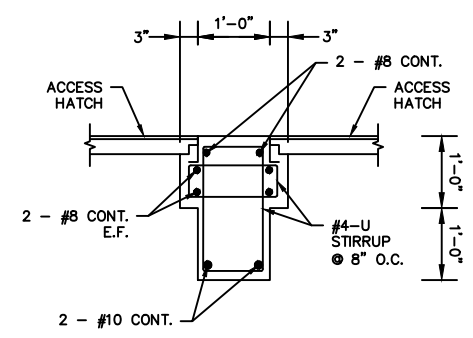


1 SLAB REINFORCEMENT DETAIL
SCALE: 3/8" = 1'

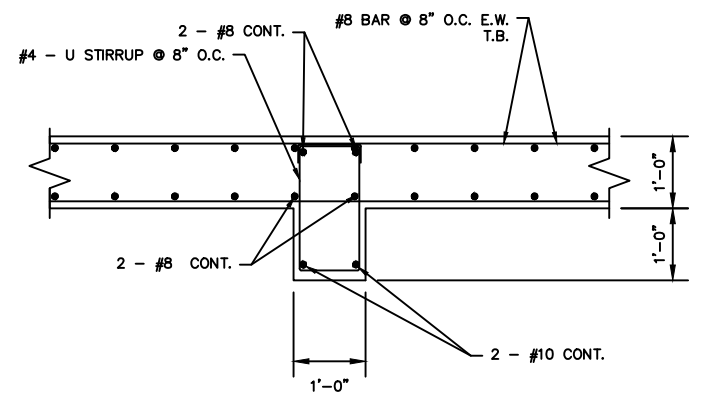
GENERAL NOTES:
1) CONTRACTOR SHALL COORDINATE DIMENSIONS WITH HATCH MANUFACTURER TO ADJUST TOP OF WALL HEIGHT, AS NEEDED, TO PROVIDE FLUSH WALKING SURFACES BETWEEN CONCRETE AND HATCHES.

FABRICATION NOTES:
2) PAINT ALL STAINLESS STEEL SURFACES IN CONTACT DISSIMILAR METALS WITH A SHOP COAT OF BITUMINOUS PAINT
3) ALL ANGLES SHALL BE STAINLESS STEEL 316
4) STAINLESS STEEL BOLTS: ASTM F593, TYPE 316
5) ADHESIVE ANCHORS: ASTM A193 GRADE B8M, STAINLESS STEEL THREADED ROD.
6) STAINLESS STEEL NUTS: ASTM F954 TYPE 315.
7) STAINLESS STEEL WASHERS: COMPATIBLE WITH BOLTS, NUTS AND THREADED RODS.
8) STAINLESS STEEL 316 WASHERS REQUIRED AT ALL BOLTED CONNECTIONS.
9) ADHESIVE BONDING MATERIALS SHALL BE HILTI HIT-RE 500 V3 OR APPROVED EQUAL.
10) CONTRACTOR TO COPE BEAMS AS NECESSARY.
11) CONTRACTOR TO PROVIDE SHORING AS REQUIRED FOR INSTALLATION OF PROPOSED BEAMS.

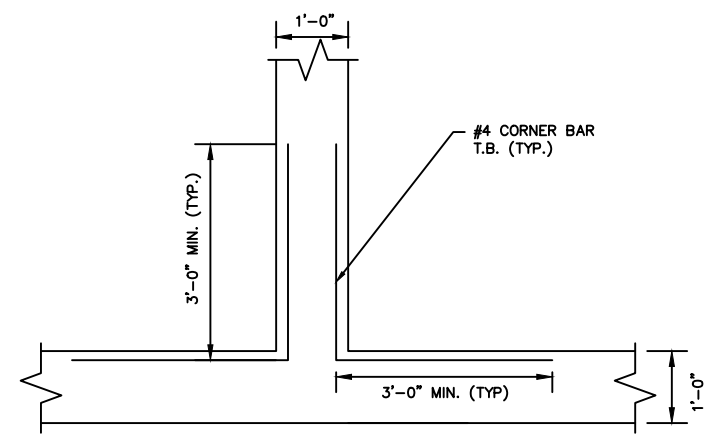
BEARING PAD NOTES:
12) BEARING PAD SHALL BE AN UNREINFORCED PLAIN ELASTOMERIC PAD.
13) BEARING PAD SHALL HAVE SHEAR MODULUS (G) OF 95 PSI AND HAVE A SHORING A HARDNESS OF 50



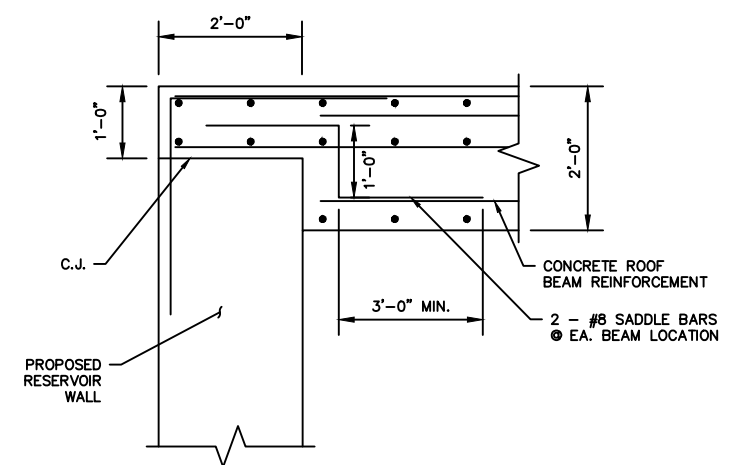
2 CONCRETE BEAM REINFORCEMENT DETAIL
SCALE: 3/8" = 1'



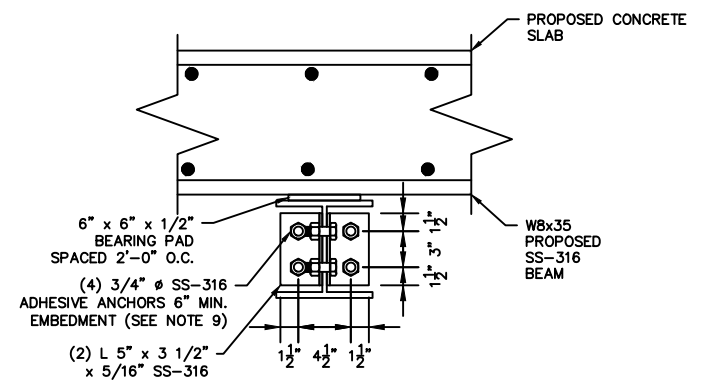
3 CONCRETE BEAM REINFORCEMENT DETAIL
SCALE: 3/8" = 1'



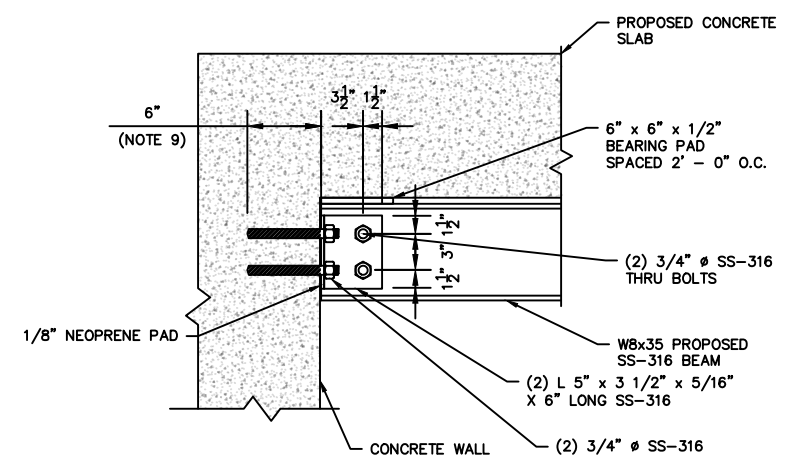
4 BEAM INTERSECTION REINFORCEMENT DETAIL
SCALE: 3/8" = 1'



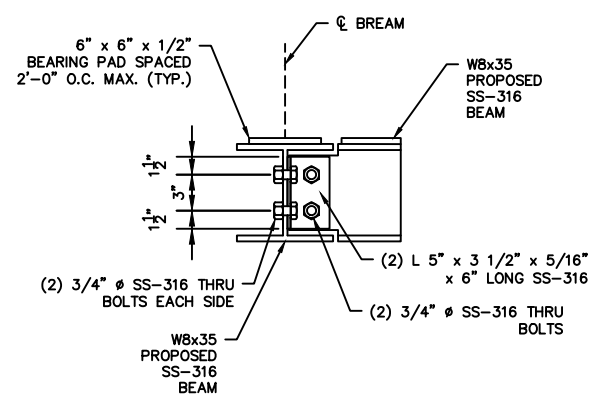
5 CONCRETE BEAM TO WALL CONNECTION DETAIL
SCALE: 3/8" = 1'



6 W-BEAM TO WALL CONNECTION DETAIL
SCALE: 3/4" = 1'



7 W-BEAM TO WALL CONNECTION DETAIL
SCALE: 3/4" = 1'



8 W-BEAM TO W-BEAM CONNECTION DETAIL
SCALE: 3/4" = 1'

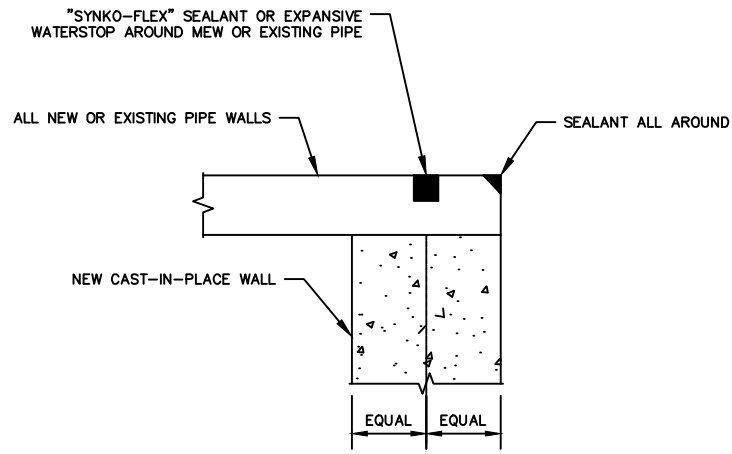
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No.	Revision	By	Date

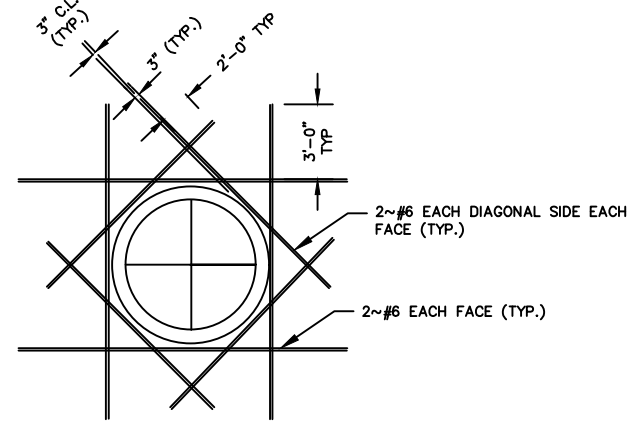
LEMON CREEK RANCH - UPSTREAM SANITARY SEWER PHASE 1B
SHEET
STRUCTURAL DETAILS 1

DATE: AUGUST 2021	SAWS PROJECT NO. 21-3000	SHEET NO. S6-A
DESIGN: JEL	KHA PROJECT NO. 068716102	
DRAWN: ELR		
CHECKED: AF		

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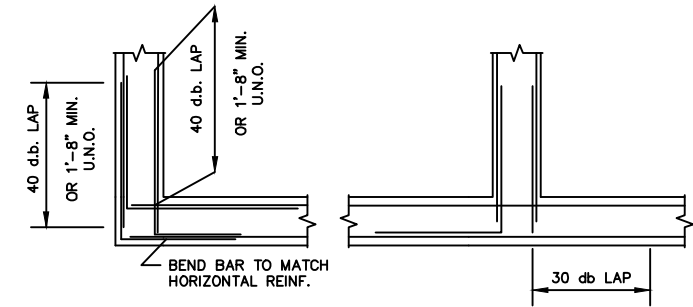


1 **DETAIL A**
SCALE: NTS

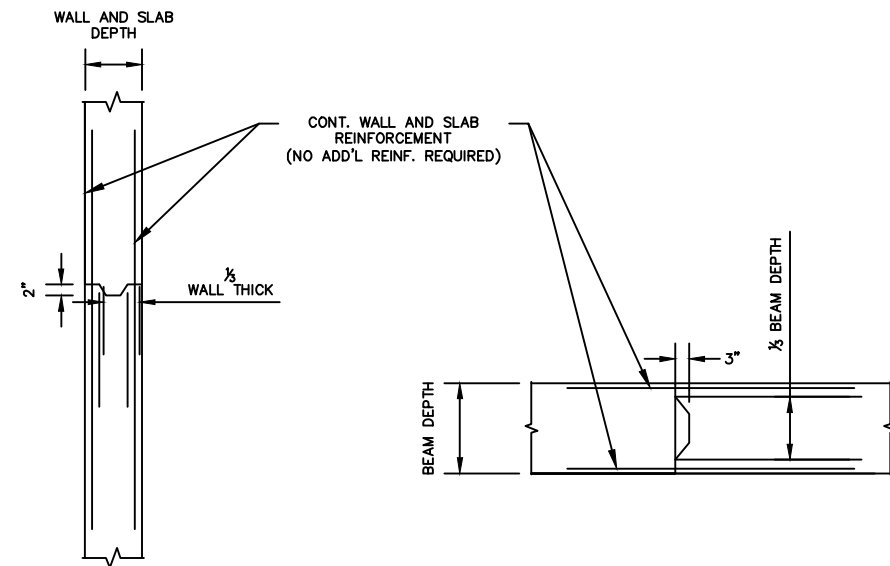


NO ADDITION ADDITIONAL REINFORCEMENT IS REQUIRED FOR SINGLE OPENINGS LESS THAN 10" WIDE/DIAMETER

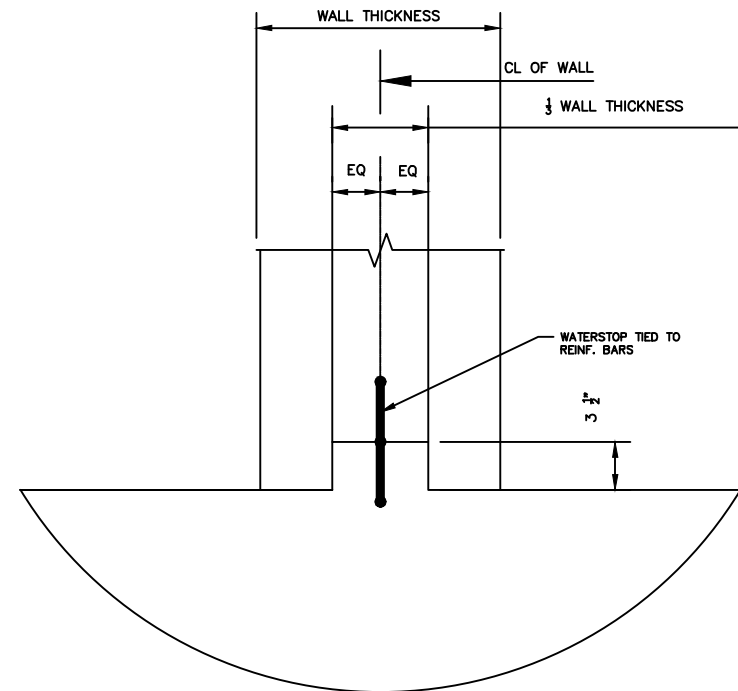
2 **TYPICAL SLAB/WALL PENETRATION DETAIL**
SCALE: NTS



3 **TYP. HORIZ. REINFORCEMENT AT ALL INTERSECTIONS OF WALLS & GRADE BEAMS**
SCALE: NTS



4 **TYP. HORIZ. REINFORCEMENT AT ALL INTERSECTIONS OF WALLS & GRADE BEAMS**
SCALE: NTS



5 **NEW STRUCTURAL CONSTRUCTION JOINT**
SCALE: NTS

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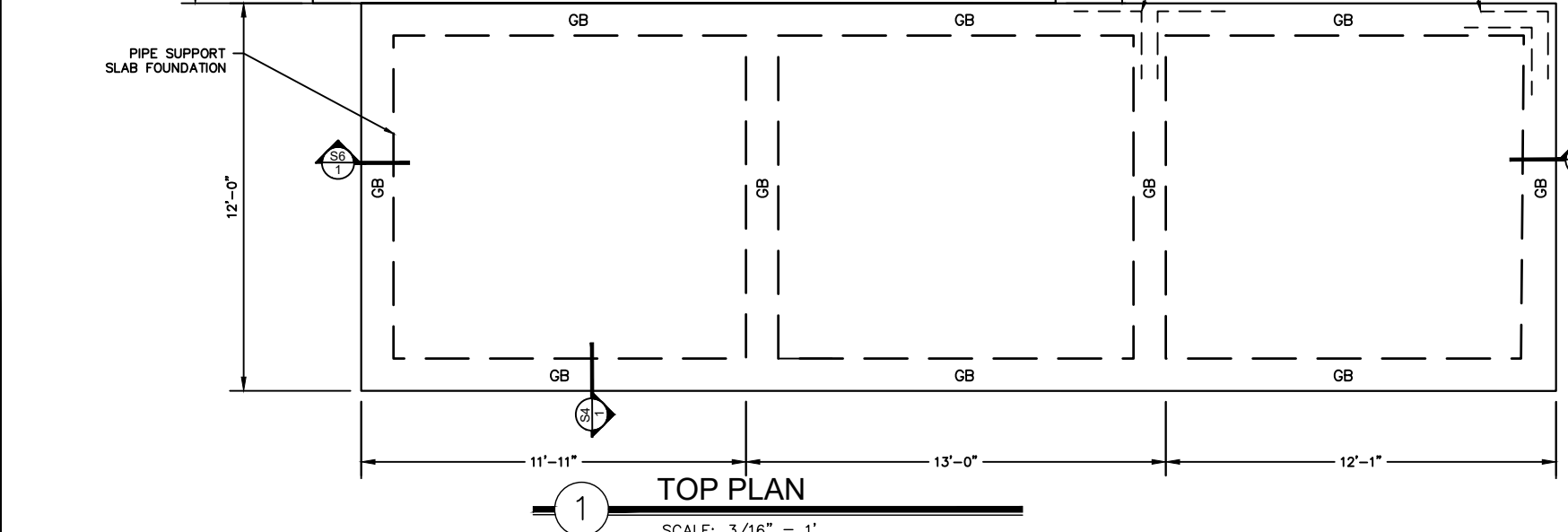
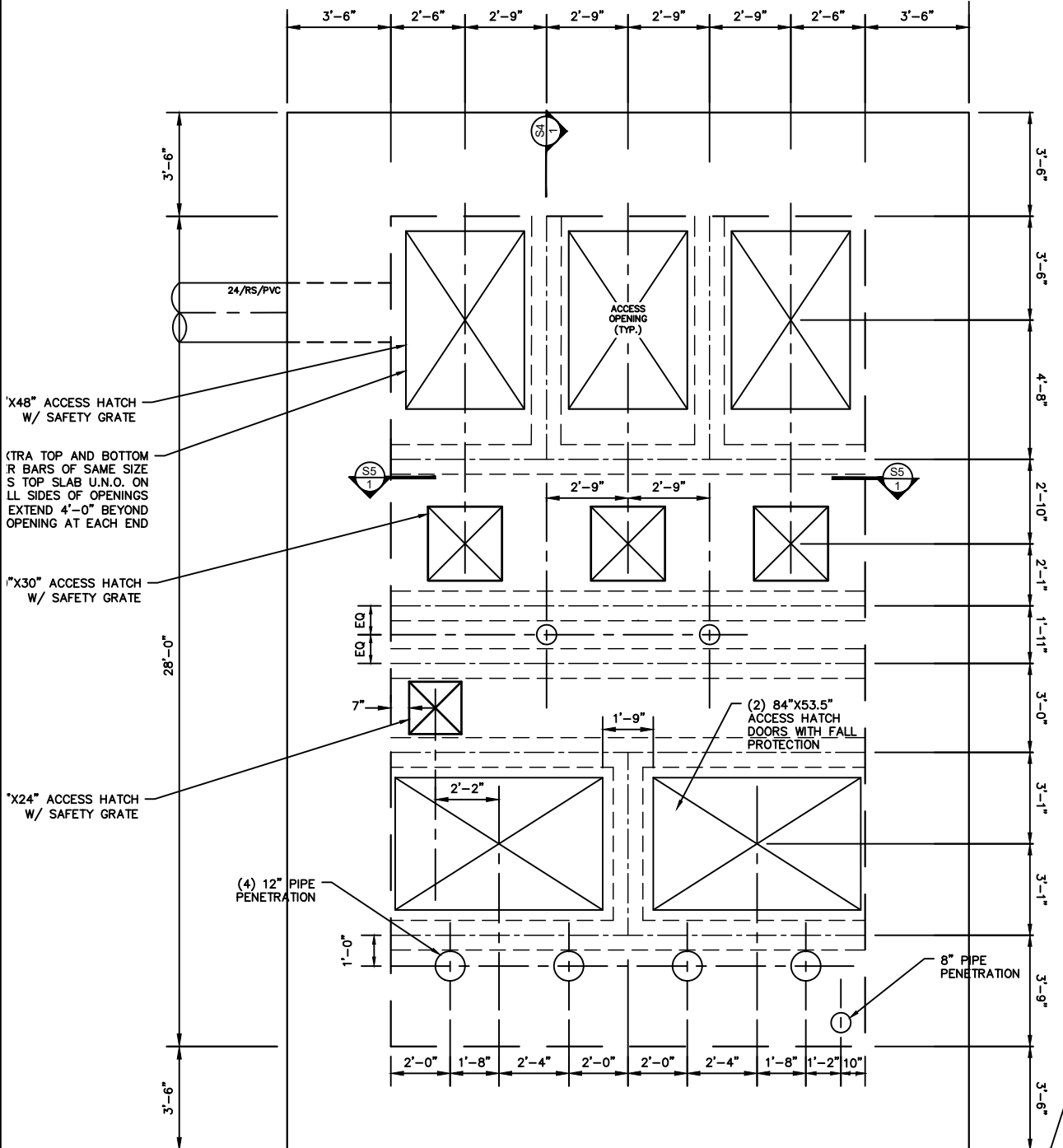
No.	Revision	By	Date
1	ADDENDUM NO. 2	MAV	12/03/2021

SAN ANTONIO WATER SYSTEM
LEMON CREEK RANCH - UPSTREAM SANITARY SEWER PHASE 1B
SHEET
STRUCTURAL DETAILS 2

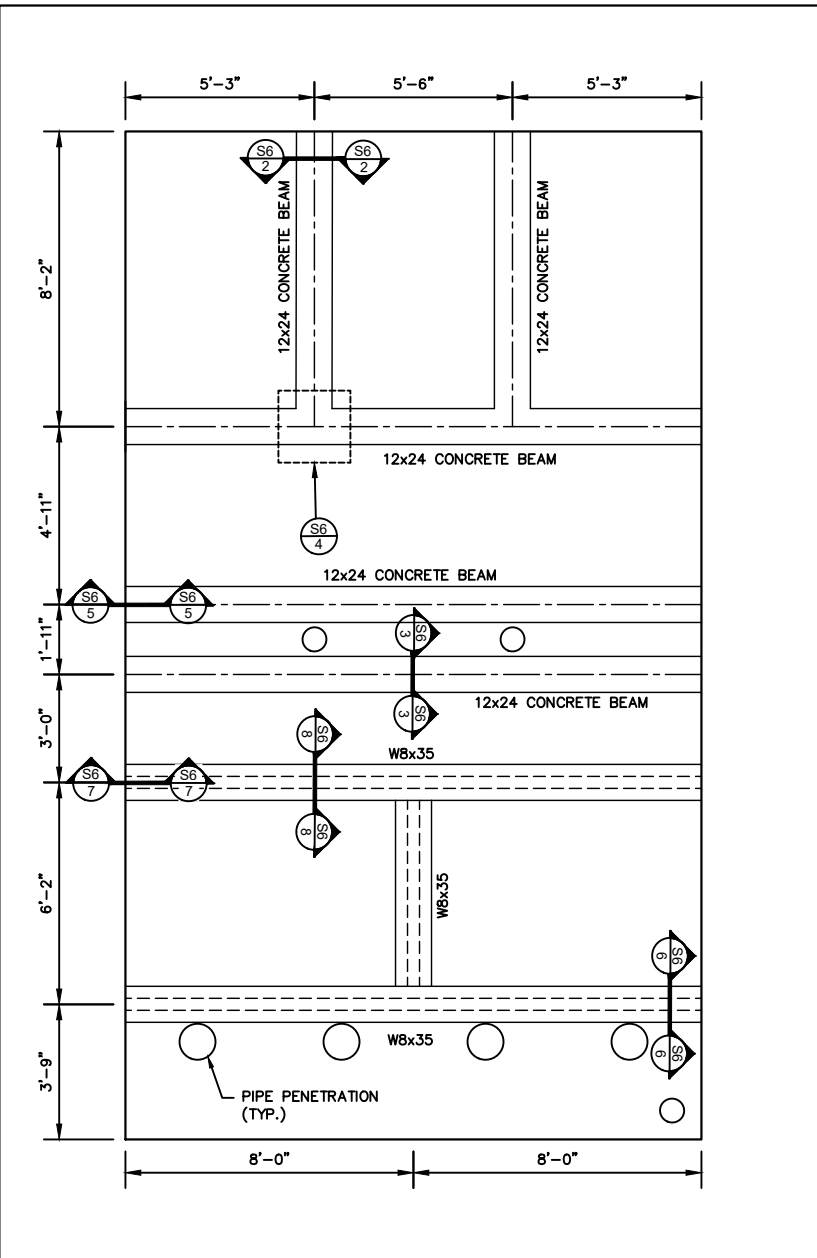
DATE: AUGUST 2021	SAWS PROJECT NO. 21-3000	SHEET NO. S7-A
DESIGN: JEL	KHA PROJECT NO. 068716102	
DRAWN: ELR		
CHECKED: AF		

NOTES:

1. FOR GENERAL NOTES AND TYPICAL DETAILS SEE SHEETS S6, S7, AND S8.
2. CONTRACTOR SHALL INSTALL ANCHOR BOLTS AS REQUIRED BY EQUIPMENT MANUFACTURER
3. REFER TO MECHANICAL/ELECTRICAL PLANS FOR A COMPLETE DESCRIPTION AND MAKE PROVISIONS WHEN ELEMENTS RUN THROUGH STRUCTURAL COMPONENTS.



1 TOP PLAN
SCALE: 3/16" = 1'



2 TOP SLAB BEAM PLAN
SCALE: 3/16" = 1'

HATCH NOTES:

- 1) CONTRACTOR SHALL PROVIDE EXTRA TOP AND BOTTOM LAYER BARS OF THE SAME SIZE ON ALL SIDES OF OPENINGS IN THE TOP SLAB. BARS SHALL BE #4'S AND EXTEND 4'-0" MINIMUM.
- 2) CONTRACTOR SHALL PROVIDE (2) - #4 BARS CENTERED AT ALL OPENING CORNERS EXTENDING 4'-0" MINIMUM.

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No.	Revision	By	Date

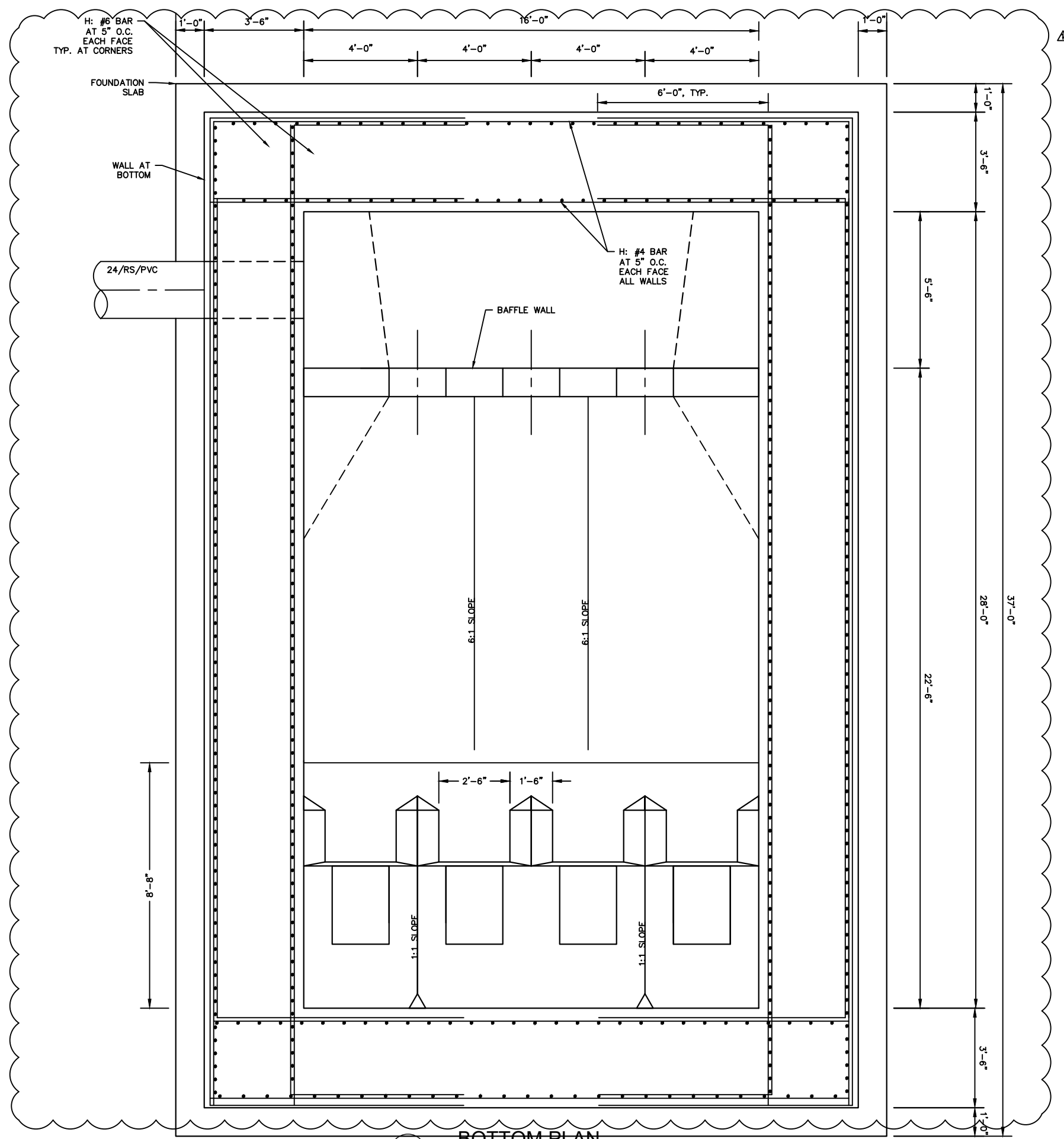


LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B

SHEET
STRUCTURAL PLAN VIEW (TOP) ALTERNATE BID A

DATE: AUGUST 2021	SAWS PROJECT NO. 21-3000	SHEET NO. S2A
DESIGN: JEL	KHA PROJECT NO. 068716102	
DRAWN: ELR		
CHECKED: AF		

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H: #6 BAR
AT 5" O.C.
EACH FACE
TYP. AT CORNERS

FOUNDATION
SLAB

WALL AT
BOTTOM

24"RS/PVC

H: #4 BAR
AT 5" O.C.
EACH FACE
ALL WALLS

BAFFLE WALL

6:1 SLOPE

6:1 SLOPE

1:1 SLOPE

1:1 SLOPE

8'-8"

1

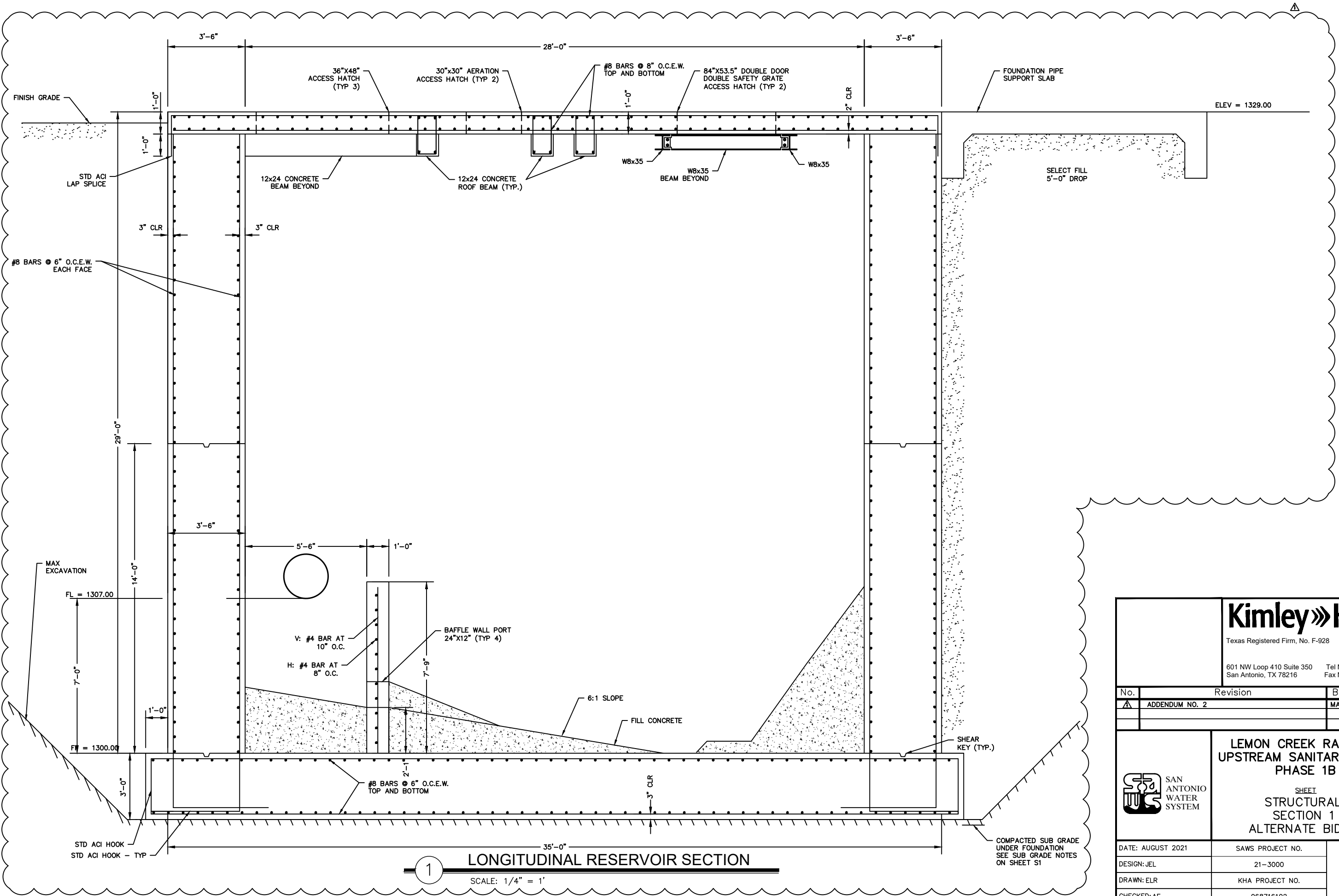
BOTTOM PLAN

SCALE: 1/4" = 1'

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 DWG NAME: K:\SNA UTILITIES\06671602\CAD\PLANS\STRUCTURAL\PLAN\06671602.DWG
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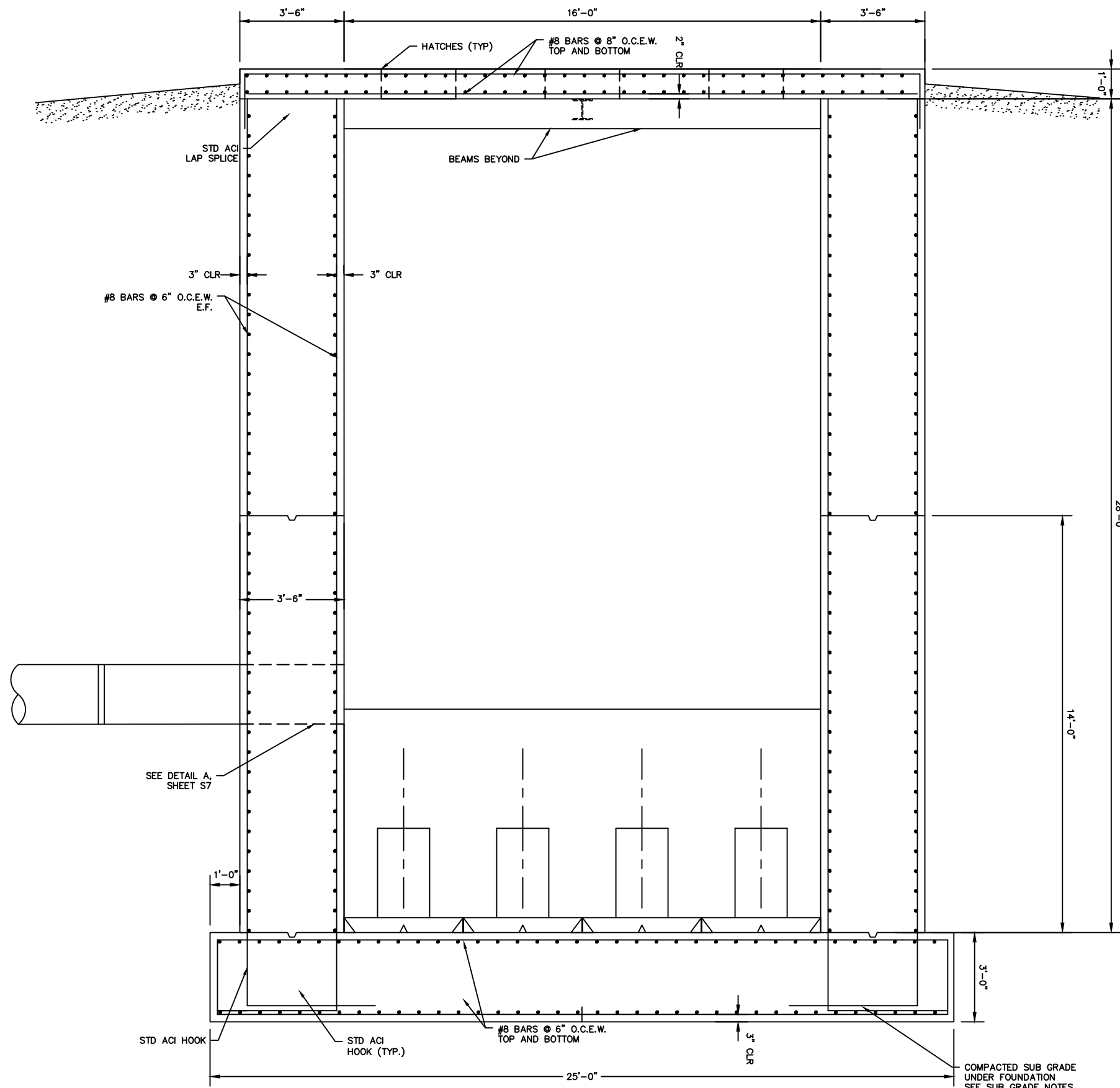
		Texas Registered Firm, No. F-928 601 NW Loop 410 Suite 350 San Antonio, TX 78216 Tel No. 210-541-9166 Fax No. 210-541-8699	
		No.	Revision
		LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B	
DATE: AUGUST 2021 DESIGN: JEL DRAWN: ELR CHECKED: AF		SAWS PROJECT NO. 21-3000 KHA PROJECT NO. 068716102	
SHEET NO. S3A		SHEET NO. S3A	

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1
LONGITUDINAL RESERVOIR SECTION
 SCALE: 1/4" = 1'

<p>Kimley»Horn Texas Registered Firm, No. F-928</p> <p>601 NW Loop 410 Suite 350 Tel No. 210-541-9166 San Antonio, TX 78216 Fax No. 210-541-8699</p>			
No.	Revision	By	Date
A	ADDENDUM NO. 2	MAV	12/03/2021
<p>SAN ANTONIO WATER SYSTEM</p>		<p>LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B</p> <p>SHEET STRUCTURAL SECTION 1 ALTERNATE BID A</p>	
DATE: AUGUST 2021	SAWS PROJECT NO. 21-3000	SHEET NO. S4A	
DESIGN: JEL	KHA PROJECT NO. 068716102		
DRAWN: ELR			
CHECKED: AF			



1
TRANSVERSE RESERVOIR SECTION
 SCALE: 3/8" = 1'

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<h2 style="margin: 0;">Kimley»Horn</h2> <p style="margin: 0; font-size: small;">Texas Registered Firm, No. F-928</p> <p style="margin: 0; font-size: x-small;">601 NW Loop 410 Suite 350 Tel No. 210-541-9166 San Antonio, TX 78216 Fax No. 210-541-8699</p>			
No.	Revision	By	Date
A	ADDENDUM NO. 2	MAV	12/03/2021
<p style="margin: 0; font-size: small;">SAN ANTONIO WATER SYSTEM</p>		<p style="margin: 0; font-weight: bold;">LEMON CREEK RANCH – UPSTREAM SANITARY SEWER PHASE 1B</p> <p style="margin: 0; font-size: x-small;">SHEET</p> <p style="margin: 0; font-weight: bold;">STRUCTURAL SECTION 2</p> <p style="margin: 0; font-weight: bold;">ALTERNATE BID A</p>	
DATE: AUGUST 2021	SAWS PROJECT NO.	S5A	
DESIGN: JEL	21-3000		
DRAWN: ELR	KHA PROJECT NO.		
CHECKED: AF	068716102		