



## ODOR CONTROL FACILITY IMPROVEMENTS PROJECT

Solicitation Number: CO-00704

Job No.: 22-6506

### ADDENDUM 2

May 17, 2024

To Bidder 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 bid proposal.

### RESPONSES TO QUESTIONS

**1. Question: Will there be a site visit?**

*Response:*

*No, a site visit is not planned. The Rilling Road and Brooks Sites are visible from street ROW. Addresses for these sites are noted below:*

*Rilling Road Address: 1718 Rilling Rd.*

*Brooks Site Address: 7629 Old Corpus Christi Rd.*

**2. Question: What's the address for that one (on Henderson Pass)?**

*Response:*

*The Henderson Pass Odor Control Station is an existing SAWS Odor Control Facility similar to those proposed at the Brooks, Leon Creek WRC, and Rilling Road Sites. The Henderson Pass Odor Control Station address is 17637 Henderson Pass. It is located near the intersection of Henderson Pass and the US 281 Frontage Rd. between the Sedona Ranch Apartment Complex and Office Max Store.*



3. **Question:** Specification Section 26 28 16.16 2.1 C.2 calls for the NEMA 4X to be stainless steel finished gray baked painted enamel paint.

*Response:*

*Please delete the painted finish as listed in Section 26 28 16.16 2.1 C.2. Refer to Item No. 3 of the Changes to the Specifications” section in this addendum.*

4. **Question:** Specification Section 26 43 13 2.1 A3 calls for the Surge Protective Device (SPD) to be the same manufacturer as the Safety Switch and 2.1 4 K calls for the be the same NEMA Type as the Safety Switch it’s protecting, would the SPD in NEMA 304 SS be acceptable from the same manufacturer? As not all the manufacturers listed on the Enclosed Switch specification sections manufactures SPDs in 316 SS and increases the lead times drastically.

*Response:*

*NEMA 304 SS is acceptable for the SPD material. Refer to Item No. 4 of the “Changes to the Specifications” section in this Addendum.*

5. **Question:** Please provide specifications for Mini Power Center. As it is missing from the specification Section. Will the Mini Power Center at the Rilling Road facility be acceptable as NEMA 3R 316 SS instead of NEMA 4X 316 SS shown on 80-E-401? Due to the internal transformer, NEMA 4X 316SS limits the available options for the manufacturers and increases the lead times drastically.

*Response:*

*No, the NEMA 3R 316 SS is not acceptable. Please provide NEMA 4X 316 SS as specified. Refer to attached specification Section 26 22 00, Low-Voltage Transformers in this Addendum.*

6. **Question:** Please provide specifications for the Site Security System Equipment (Camera) shown on 05-E-201.

*Response:*

*The Bill of Materials on Drawing 08-I-602 provides the specific model number for the camera.*

7. **Question:** Can you please Clarify the Mechanical Contractors relationship with the Prime Contractor for this project.

*Response:*

*The Mechanical Contractor (or SAWS Vendor) will supply and install the following odor control station components: chemical storage tank, chemical metering pumps, control skid, chemical interconnecting piping, 3-inch chemical fill line, and valves.*

*The Prime Contractor shall coordinate directly with SAWS during the installation of these odor control station components by the SAWS vendor.*

8. **Question:** Is the Mechanical Contractor, (Tank, Pumps, etc.) a totally separate contract with SAWS or does he need to be carried as a subcontractor to the Prime on this project?

*Response:*

*The SAWS Vendor is under an existing separate contract and will supply and install the odor control station components as noted on the Plans (C7 and C13), Specifications (01 11 00), and Response to Question No. 7. It is not a Subcontractor to the Prime Contractor.*

9. **Question:** Does the Prime Contractor on this project have to include any cost for the Mechanical Contractors items?

*Response:*

*No, the items designated on the Plans (Sheet C7 and C13), and Specifications (01 11 00), and Response to Question No. 7 are all being supplied and installed by the SAWS Vendor.*

*Coordination between SAWS and Prime Contractor is anticipated during the installation of the odor control station components.*

**10. Question: Will the Mechanical Contractor include any piping or equipment for the Fill line piping or Fill station?**

*Response:*

*The Prime Contractor is responsible for installing the Chemical Fill Station, 1 1/2" drain line, and 2-inch ball valve, quick coupling, and 2-inch fill line to and including the 3" X 2" Reducer. The SAWS Vendor will supply and install the 3-inch Fill Line from the Chemical Fill Station 3" X 2" Reducer to the Chemical Tank.*

*Refer to Item No. 4, 5, and 7 of the "Changes to the Plans" section in this Addendum.*

**11. Question: Has the Mechanical Contractor been selected?**

*Response:*

*SAWS will utilize an existing SAWS Vendor, under a separate contract, to supply and install odor control station components as noted on the Plans (Sheet C7 and C13), Specifications (01 11 00), and Response to Question No. 7.*

**12. Question: Can the Mechanical Subcontractor provide a Scope of Work for his contract with SAWS to the Bidding Contractors?**

*Response:*

*No, refer to Plans (Sheet C7 and Sheet C13), Specifications (01 11 00), and Response to Question No. 7 for a list of the odor control stations components that will be supplied and installed by the SAWS Vendor.*

**13. Question: Can SAWS provide any information or direction as to the Mechanical Subcontractors schedule for delivery and installation of his Tank, Pumps, Piping, etc. for all the sites?**

*Response:*

*This information will be provided to the selected Contractor. The existing SAWS Vendor will be informed of the selected Contractor's schedule.*

**14. Question: Is the Mechanical Contract included in SAWS project estimate for this project?**

*Response:*

*No, the Engineer's OPCC excludes the cost of the SAWS Vendor Scope. SAWS will pay the Vendor directly for the components and their installation via a separate contract between SAWS and the Vendor.*

**15. Question: Will the Prime Contractor for this Contract have to carry the Mechanical Contractor under his Bond and/or Insurance?**

*Response:*

*This decision is left to the Prime Contractor's discretion. However, SAWS will not require the Prime Contractor to include the SAWS Vendor under his Bond and/or Insurance.*

**16. Question: Please verify scale on the drawings for Rilling Road facilities. The Civil/Structural drawings are off by 2, could be related to half sized drawings, however, Electrical drawing 05-E-201 Site plan is off by a factor of 3.**

*Response:*

*Rilling Road drawings are printed half-size. The scale on Electrical Drawing 05-E-201 has been corrected and the revised plan is included in this Addendum.*

*Refer to Item No. 1 of the "Changes to the Plans" section in this Addendum.*

**CHANGES TO THE SPECIFICATIONS**

1. Section 01 11 00 Summary of Work, **Delete** Paragraph 1.2 B. in its entirety and **replace** with the following:  

“Chemical storage tank, chemical metering pumps, controls skid, chemical interconnecting piping, 3-inch fill line from the chemical fill station to the chemical tank, and valves within the secondary containment area will be provided and installed by others (SAWS Vendor) under a separate contract.”
2. Section 26 22 00 Low Voltage Transformers, **Add** Section 26 22 00 Low Voltage Transformers in its entirety attached to this addendum.
3. Section 26 28 16.16 Enclosed Switches 26 28 16.16-1 2.1 C.  

Paragraph 2.1 C. 2. - **Delete** in its entirety.
4. Section 26 43 13 Surge Protective Devices for Low Voltage Electrical Power Circuits.  

Paragraph 2.1 K. – **Delete** “Enclosure: Same NEMA type rating as switch.” and **replace** with “Enclosure: Same NEMA type rating as switch or NEMA 304 stainless steel if SPD unit is not available in same rating as switch.”
5. Section 40 95 80 Fiber Optic Communication System, Paragraph 3.03, **Add** the following sub-paragraph:  

“C” Follow SAWS Telecommunications Cable Color Scheme in the table below:

SAWS Telecommunications Cable Color Scheme

Color	Termination Point	Application
Orange	Demarcation	Backhaul, Radio SM uplink, HISA, Circuits
Brown	Radio Access Network	PMP Access
White	1st level interconnect	IS network backbone
Gray	2nd level interconnect	IS network backbone
Blue	Enterprise Devices	Work stations, phones, space apps, time clock, etc.
Yellow	Security	Security Devices, intercoms, gate controllers, cameras
Purple	Industrial Devices	SCADA Systems, HVAC, industrial network devices
Red	Fire Systems	Fire alarm, fire system devices

**CHANGES TO THE PLANS**

1. Rilling Road Drawing 05-E-201, Electrical Site Plan, remove in its entirety and replace it with the revised version attached to this addendum.
2. Rilling Road Drawing 05-L-201, Enlarged Tree Preservation Plan, remove in its entirety and replace with the revised version attached to this addendum.
3. Rilling Road Drawing 41-D-501, Liquid Treatment OCF Details, remove in its entirety and replace with the revised version attached to this Addendum.
4. Leon Creek Drawing C7, Mechanical and Structural Plan and Section, remove in its entirety and replace it with the revised version attached to this addendum.
5. Brooks Drawing C13, Mechanical and Structural Plan and Section, remove in its entirety and replace it with the revised version attached to this addendum.
6. Brooks Drawing C14, Brooks Tree Preservation Plan, remove in its entirety and replace it with the revised version attached to this addendum.
7. Leon Creek WRC and Brooks Drawing C19, Mechanical Details, remove in its entirety and replace it with the revised version attached to this addendum.

**END OF ADDENDUM**

This Addendum, including these five (5) pages, is fifteen (15) pages with attachments in its entirety.

- Attachments:
- Section 26 22 00, Low Voltage Transformers (3 pages)
  - Rilling Road Drawing 05-E-201, Site Plan (1 page)
  - Rilling Road Drawing 41-D-501, Liquid Treatment OCF Details (1 Page)
  - Rilling Road Drawing 05-L-201, Enlarged Tree Preservation Plan (1 page)
  - Leon Creek Drawing C7, Mechanical and Structural Plan and Section (1 page)
  - Brooks Drawing C13, Mechanical and Structural Plan and Section (1 page)
  - Brooks Drawing C14, Brooks Tree Preservation Plan (1 page)
  - Leon Creek WRC and Brooks Drawing C19, Mechanical Details (1 page)

  
  
Javier Garcia, P.E.  
Garcia Infrastructure Consultants, LLC

**SECTION 26 22 00**  
**LOW-VOLTAGE TRANSFORMERS**

**PART 1 GENERAL**

1.01 REFERENCES

- A. The following is a list of standards which may be referenced in this section:
1. Code of Federal Regulations (CFR): 10 CFR Part 431, DOE 2016 efficiency.
  2. Institute of Electrical and Electronics Engineers (IEEE): C57.96, Guide for Loading Dry Type Transformers.
  3. National Electrical Contractor's Association (NECA): 409, Recommended Practice for Installing and Maintaining Dry-Type Transformers.
  4. National Electrical Manufacturers Association (NEMA):
    - a. 250, Enclosures for Electrical Equipment (1,000 Volts Maximum).
    - b. ST 20, Dry-Type Transformers for General Applications.
  5. National Fire Protection Association (NFPA): 70, National Electrical Code (NEC).
  6. UL:
    - a. 486E, Standard for Equipment Wiring Terminals for use with Aluminum and/or Copper Conductors.
    - b. 489, Standard for Molded-Case Circuit Breakers, Molded-Case Switches, and Circuit Breaker Enclosures.
    - c. 1561, Standard for Dry-Type, General Purpose, and Power Transformers.

1.02 SUBMITTALS

- A. Action Submittals:
1. Descriptive information.
  2. Dimensions and weight.
  3. Transformer nameplate data, including efficiency.
  4. Schematic and connection diagrams.

**PART 2 PRODUCTS**

2.01 GENERAL

- A. UL 1561, NEMA ST 20, unless otherwise indicated.
- B. Dry-type, self-cooled, two-winding, with copper windings.

## ODOR CONTROL FACILITY IMPROVEMENTS

- C. Units larger than 5 kVA suitable for use with 75 degrees C wire at full NFPA 70, 75 degrees C ampacity.
- D. Efficiency: Meet or exceed DOE 2016 efficiency requirements.
- E. Maximum Sound Level per NEMA ST 20:
  - 1. 40 decibels for 0 kVA to 9 kVA.
  - 2. 45 decibels for 10 kVA to 50 kVA.
  - 3. 50 decibels for 51 kVA to 150 kVA.
  - 4. 55 decibels for 151 kVA to 300 kVA.
  - 5. 60 decibels for 301 kVA to 500 kVA.
- F. Overload capability: Short-term overload per IEEE C57.96.
- G. Wall Bracket: For single-phase units, 15 kVA to 37-1/2 kVA, and for three-phase units, 15 kVA to 30 kVA.
- H. Vibration Isolators:
  - 1. Rated for transformer's weight.
  - 2. Isolation Efficiency: 99 percent, at fundamental frequency of sound emitted by transformer.
  - 3. Less Than 30 kVA: Isolate entire unit from structure with external vibration isolators.
  - 4. 30 kVA and Above: Isolate core and coil assembly from transformer enclosure with integral vibration isolator.
- I. Manufacturers:
  - 1. General Electric Co.
  - 2. Square D Co.
  - 3. Eaton/Cutler-Hammer.

### 2.02 MINI-POWER CENTER (MPC)

- A. General: Transformer, primary, and secondary main circuit breakers, and secondary panelboard section enclosed in NEMA 250, Type 4X, Type 316 stainless steel enclosure.
- B. Transformer:
  - 1. Insulation Class and Temperature Rise: Manufacturer's standard.
  - 2. Efficiency: Manufacturer's standard (DOE 2016 efficiency).
  - 3. Core and Coil: Encapsulated.
  - 4. Full capacity, 5 percent voltage taps, two below normal voltage.
  - 5. Primary Voltage: 480, three-phase.

## ODOR CONTROL FACILITY IMPROVEMENTS

6. Secondary Voltage: 208/120 volts, three-phase, four-wire.
- C. Panelboard: Full, UL 489, short-circuit current rated.
  1. Type: Thermal-magnetic, quick-make, quick-break, indicating, with noninterchangeable molded case circuit breakers.
  2. Number and Breaker Ampere Ratings: Refer to Panel Schedule.

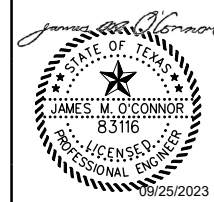
### **PART 3 EXECUTION**

#### 3.01 INSTALLATION

- A. Install in accordance with NECA and manufacturer's instructions.
- B. Load external vibration isolator such that no direct transformer unit metal is in direct contact with mounting surface.
- C. Provide moisture-proof, flexible conduit for electrical connections.
- D. Provide wall brackets for single-phase units, 15 kVA to 167-1/2 kVA, and three-phase units, 15 kVA to 30 kVA.

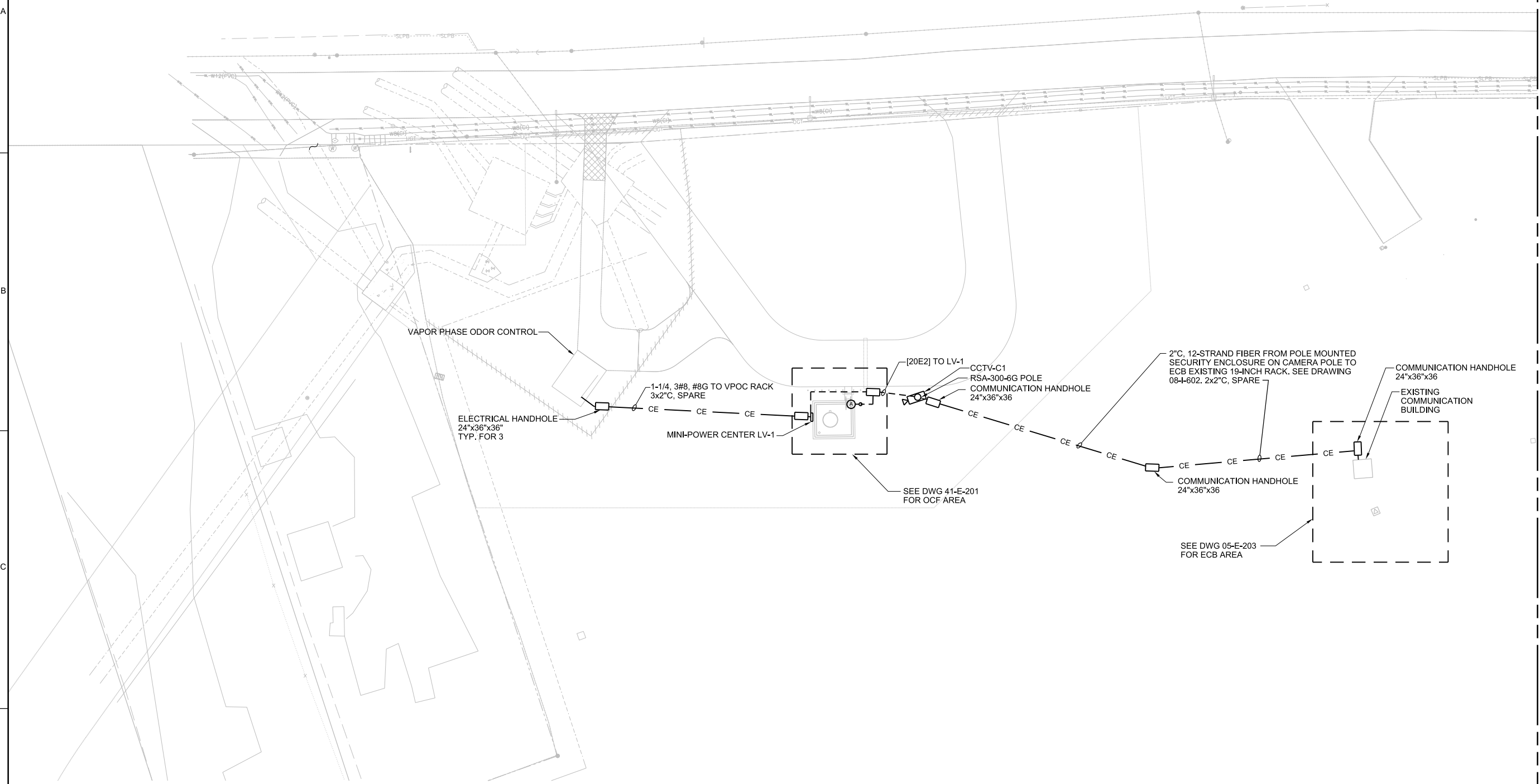
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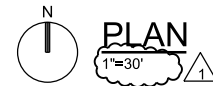
A  
B  
C  
D

1 2 3 4 5 6



LUMINAIRE SCHEDULE

NO.	TYPE	MODEL	MANUFACTURER	MOUNTING	DESCRIPTION
A	LED AREA LUMINAIRE	DSX2 LED-P5-30K-T2M-480-SPA WITH RSA-300-6G POLE	LITHONIA LIGHTING	POLE MOUNT	LITHONIA LIGHTING LED AREA LUMINARE, DIE-CAST ALUMINUM CONSTRUCTION, 3000K COLOR TEMPERATURE, 70CRI, IESNA TYPE 2 SHORT LIGHT DISTRIBUTION. LIGHT OUTPUT OF 35000 LUMENS, 321W. LIGHT POLE: LIGHTMART HD30RS57 HIGH-QUALITY HOT-DIP GALVANIZING STEEL, ROUND SHAPE, HEIGHT 30ft



NO.	DATE	REVISION	BY	APVD
1	05/13/24	ADDENDUM No. 2	TL	J. O'CONNOR
DR		CHK	APVD	J. O'CONNOR
			APVD	M. MONTROYA

**JACOBS** SAN ANTONIO WATER SYSTEM

SAWS Job No. 22-6506  
ODOR CONTROL FACILITY IMPROVEMENTS  
SAN ANTONIO, TEXAS

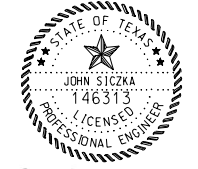
ELECTRICAL  
**SITE PLAN**

VERIFY SCALE  
BAR IS ONE INCH ON ORIGINAL DRAWING.

DATE: MAY 2024  
PROJ: WJXN5100  
DWG: 05-E-201  
SHEET: 24 of 43

**JACOBS** TBPE Firm No. 2966

**ADDENDUM**



9/25/2023

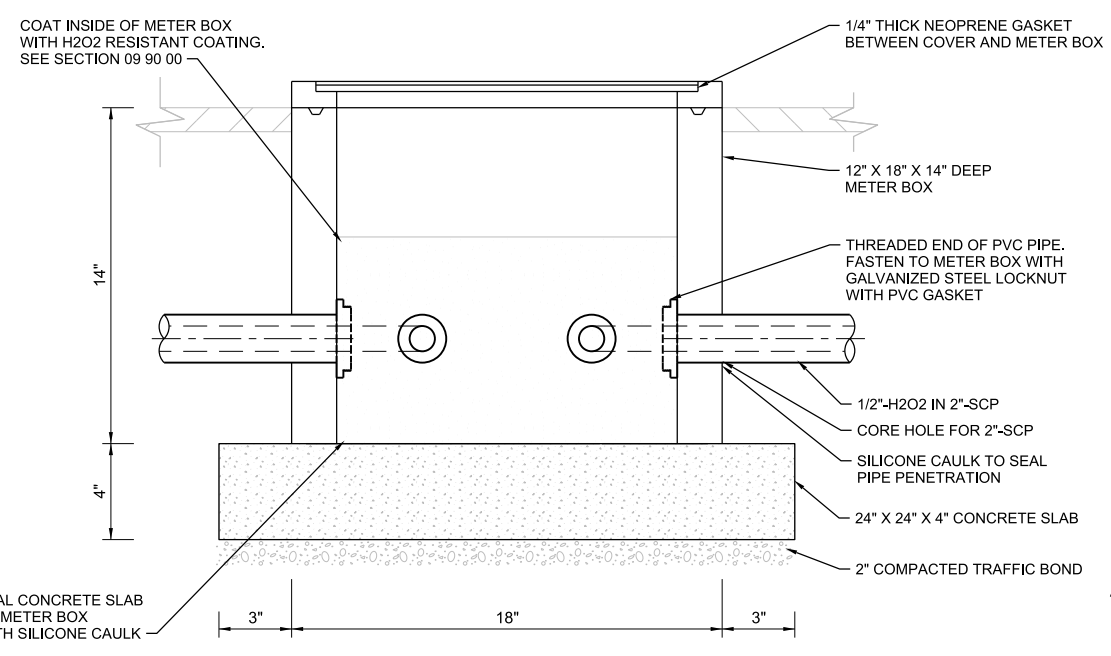
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NO.		DATE						J. SWIATKOWSKI
NO.		DATE						J. BALDWIN

**SAN ANTONIO WATER SYSTEM**  
 SAWS Job No. 22-6506  
 ODOR CONTROL FACILITY IMPROVEMENTS  
 SAN ANTONIO, TEXAS

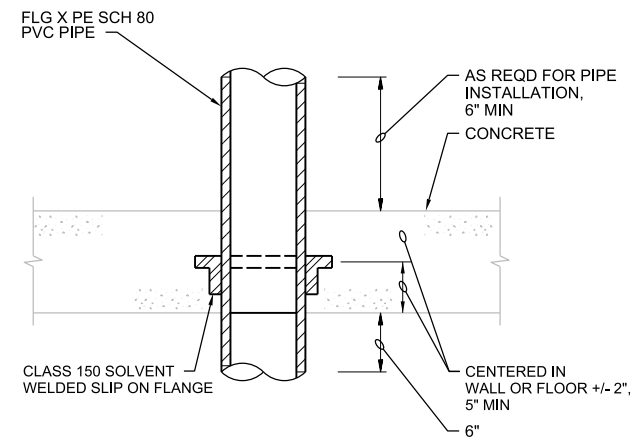
**JACOBS**  
 TBPE Firm No. 2966  
 PROCESS MECHANICAL  
 LIQUID TREATMENT OCF DETAILS

DATE	MAY 2024
PROJ	WJXN5100
DWG	41-D-501
SHEET	36 of 43

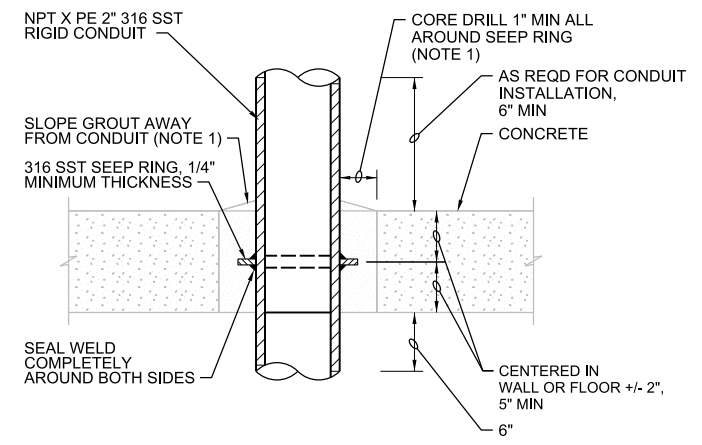
ADDENDUM



**1** TURN BOX - SECTION  
NTS

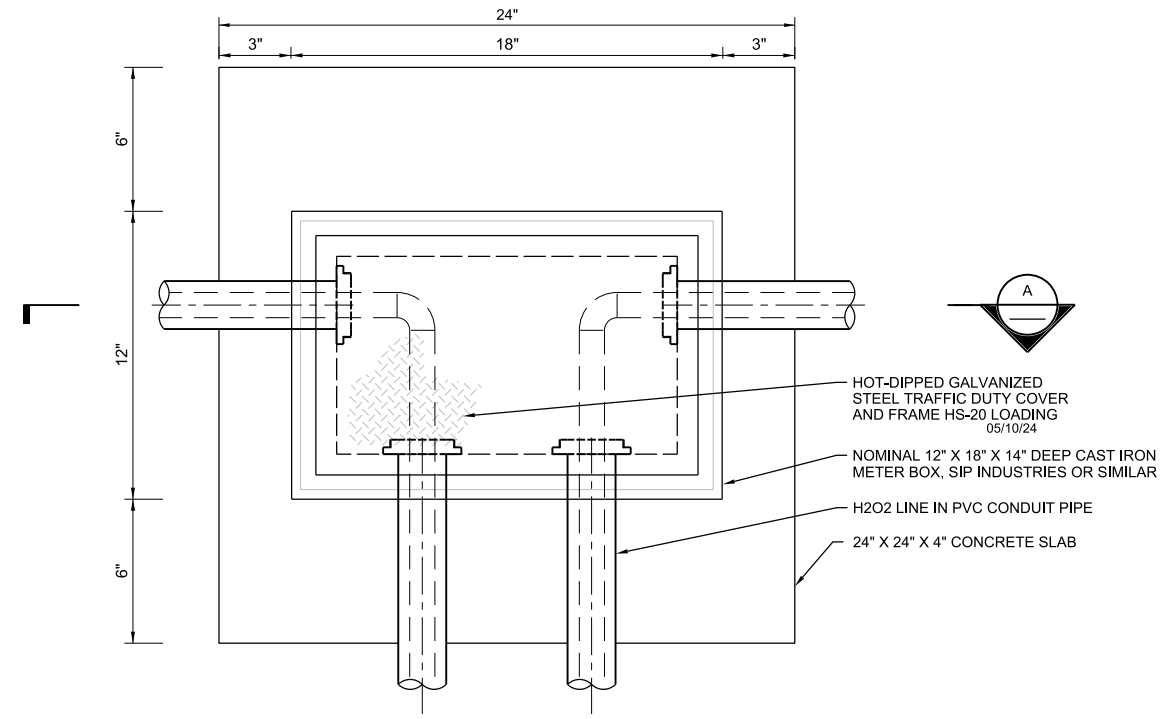


**2** PVC FLOOR AND WALL PIPE  
NTS  
41-D-201

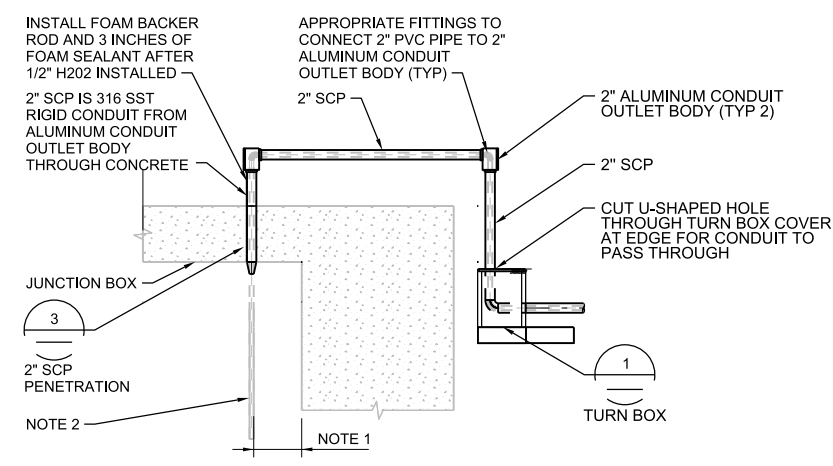


**3** 2" SCP PENETRATION  
NTS

**NOTES:**  
 1. CORE DRILL THROUGH SLAB, CLEAN CORED HOLE, AND COAT WITH BITUMINOUS DAMP PROOFING. VOIDS IN CONCRETE SHALL BE GROUTED PRIOR TO DAMP PROOFING.

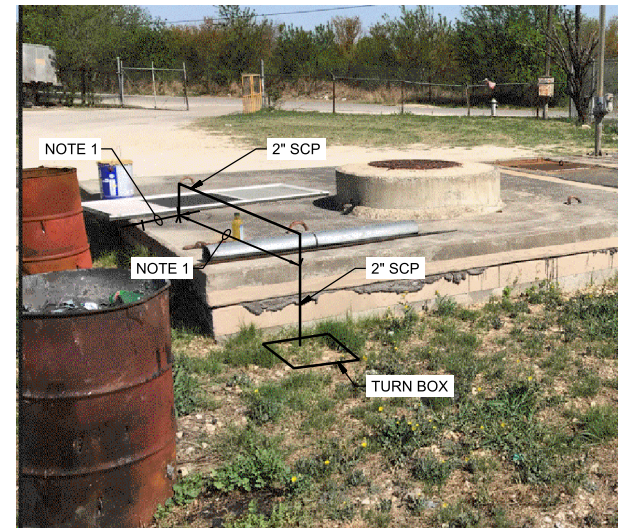


**1** TURN BOX - TOP VIEW  
NTS  
41-D-201



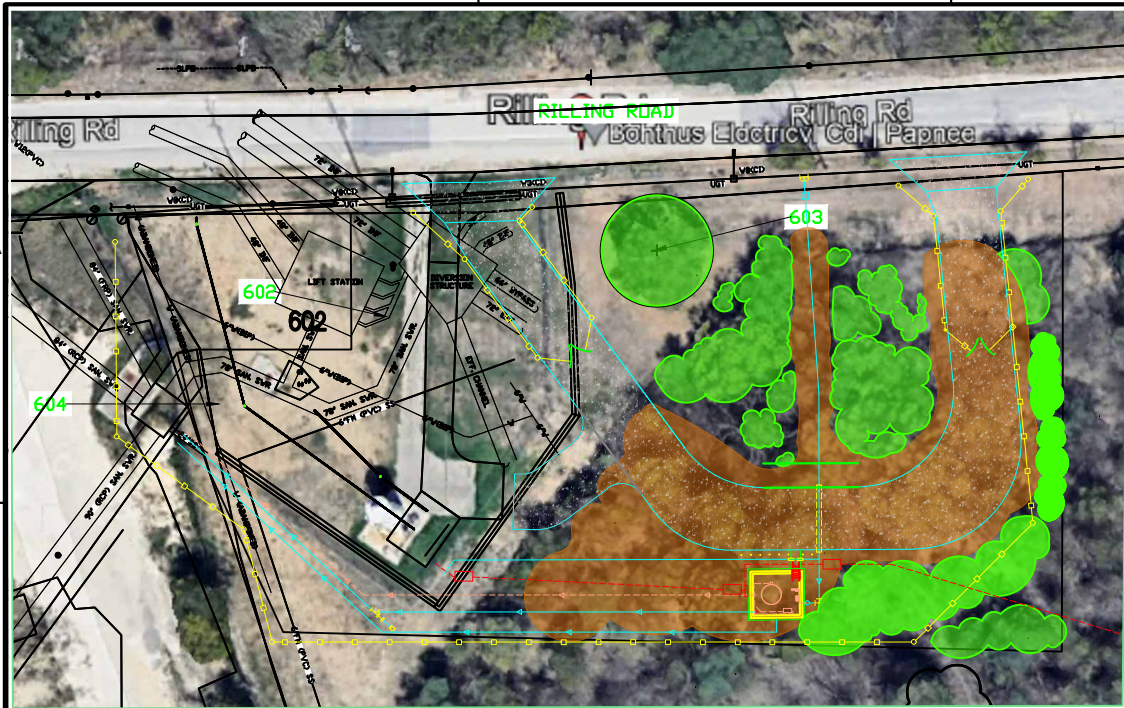
**2** CHEMICAL DOSING PORT-SECTION  
NTS

**NOTES:**  
 1. COORDINATE EXACT LOCATION OF WHERE 2" SCP PENETRATES THE CONCRETE SLAB WITH OWNER.  
 2. COORDINATE INSTALLATION OF 1/2" H2O2 WITH OWNER AND H2O2 VENDOR.



**NOTES:**  
 1. COORDINATE EXACT LOCATION OF 2" SCP PENETRATION THROUGH CONCRETE SLAB WITH OWNER. THE PENETRATION IS TO BE CENTERED OVER THE WATER FLOW IN THE JUNCTION BOX APPROXIMATELY 18" FROM THE SOUTHWEST WALL OF JUNCTION BOX.

**4** DETAIL  
NTS  
05-C-401



1 ENLARGED TREE PRESERVATION PLAN  
1" = 40'-0"



**LEGEND**

- EXISTING HERITAGE TREES TO REMAIN
- EXISTING HERITAGE TREES TO BE REMOVED
- BRUSH TO BE REMOVED, FOR CONSTRUCTION.
- TREES TO REMAIN.

2 LEGEND

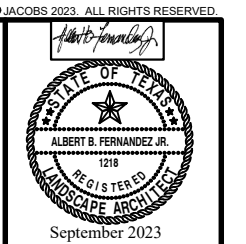
TREE CANOPY COVER REQUIREMENTS	Final Tree Canopy Coverage Requirement
Site Square Footage:	77,207
35% Canopy Cover Required:	27,022
Site Square Footage Preserved:	10,979
Tree Preservation Incentive (1.5x): (See Incentive Tree Canopy Square Footage Column below)	N/A
Energy Conservation Credit (See Table below)	Not Utilized
Final Site Tree Canopy Preservation:	16,043
Mitigation Trees (See Table below)	0
Square Footage to be Mitigated/(Surplus):	0

Mitigation Trees	Qty.	Value	Percentage	Total Value
Not Required	0	0	0%	0
Total Number of Mitigation Trees Provided:	0			0
Total Square Footage Mitigated:				0

Tree Canopy Mitigation Payment to Tree Fund:	
Square Footage to be Mitigated	0
Tree Canopy SF (875 @90%)	0
Number of Required Trees	0
Required Replacement Tree Caliper	0
Cost per Replacement Tree Caliper Inch	\$200.00
PAYMENT TO TREE FUND	\$0.00

TREE PRESERVATION SCHEDULE				TREES 6"+						SMALL TREE SPECIES 2"+					
TREE NUMBER	COSA Size Inches	SPECIES	FIELD NOTE	SIGNIFICANT TREES 6" - <24" (@40% MIN.)		SIGNIFICANT TREES 10" - <24" (@40% MIN.)		HERITAGE TREES 24"+ (@100%)		SIGNIFICANT TREES 5" - <12" (@40% MIN.)		HERITAGE TREES 12"+ (@100%)			
				TO REMAIN	TO BE REMOVED	TO REMAIN	TO BE REMOVED	TO REMAIN	TO BE REMOVED (3:1)	TO BE REMOVED (1:1)	TO REMAIN	TO BE REMOVED	TO REMAIN	TO BE REMOVED	
SUB-TOTAL INCHES:				0	0	0	0	0	0	0	0	0	0		
TOTAL ON-SITE INCHES:				0				0				0			
MIN. REQUIRED PRESERVED INCHES:				0				0				0			
% INCHES PRESERVED:				0.00%				0.00%				0.00%			
SURPLUS INCHES:				0				0				0			

3 TREE CANOPY COVER REQUIREMENT



NO.	DATE	REVISION	CHK	DR	APVD
1	05/2024	ADDENDUM No. 2			

**SAN ANTONIO WATER SYSTEM**  
 SAWS Job No. 22-0506  
 RILLING ROAD  
 ODOR CONTROL STATION  
 SAN ANTONIO, TEXAS

**JACOBS**  
 TBPE Firm No. 2966

ENLARGED TREE PRESERVATION PLAN

VERIFY SCALE  
 BAR IS ONE INCH ON ORIGINAL DRAWING.  
 0 1'

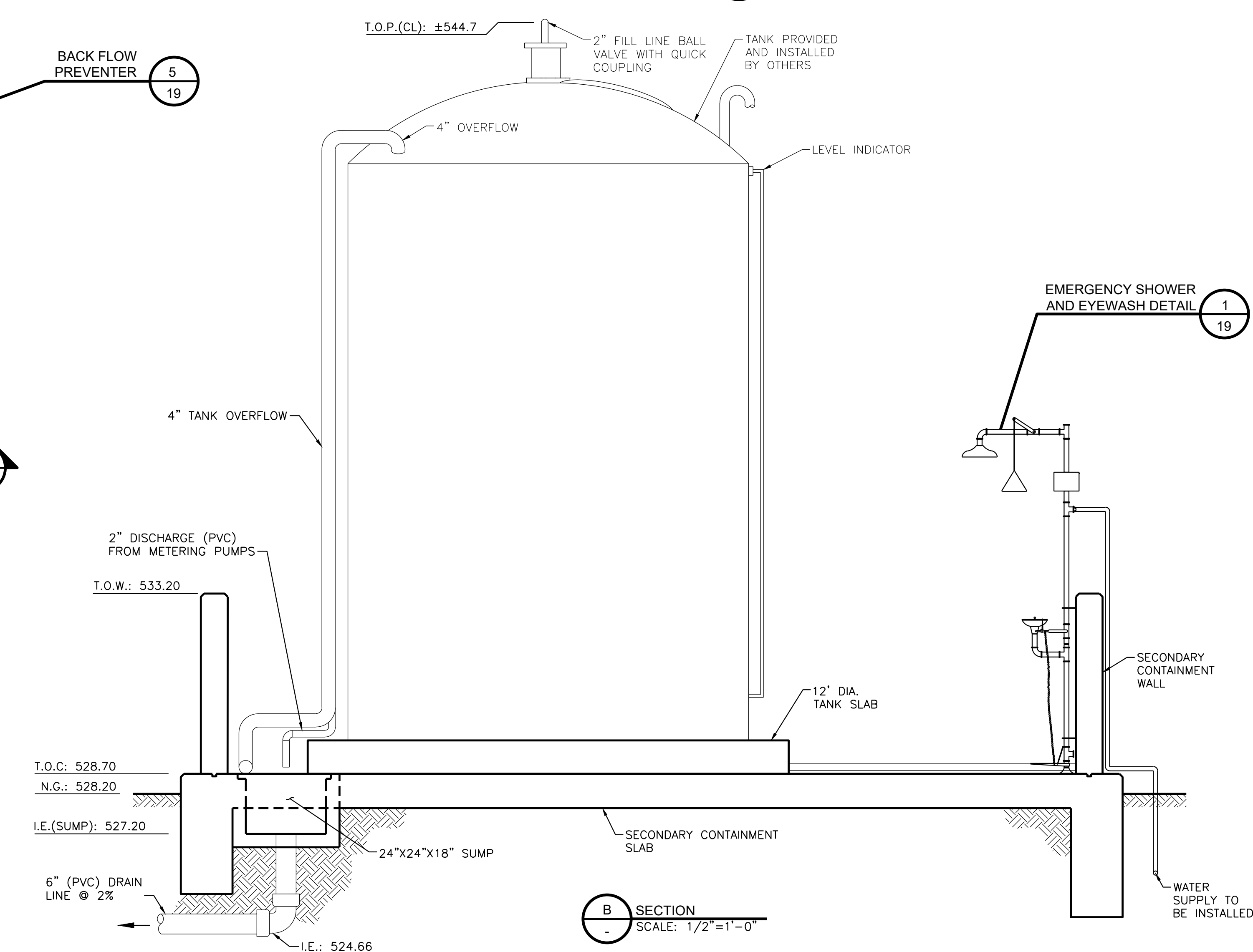
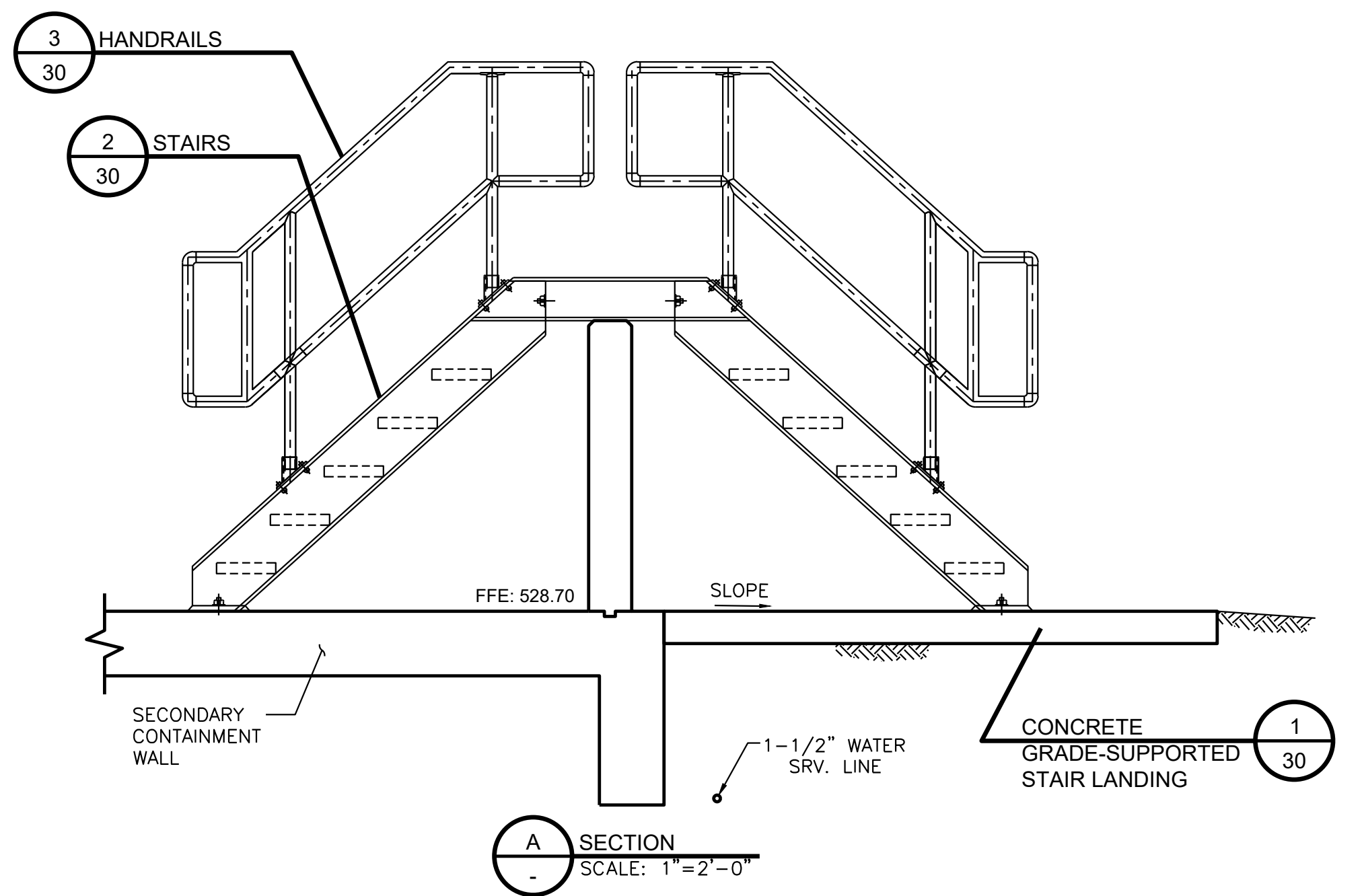
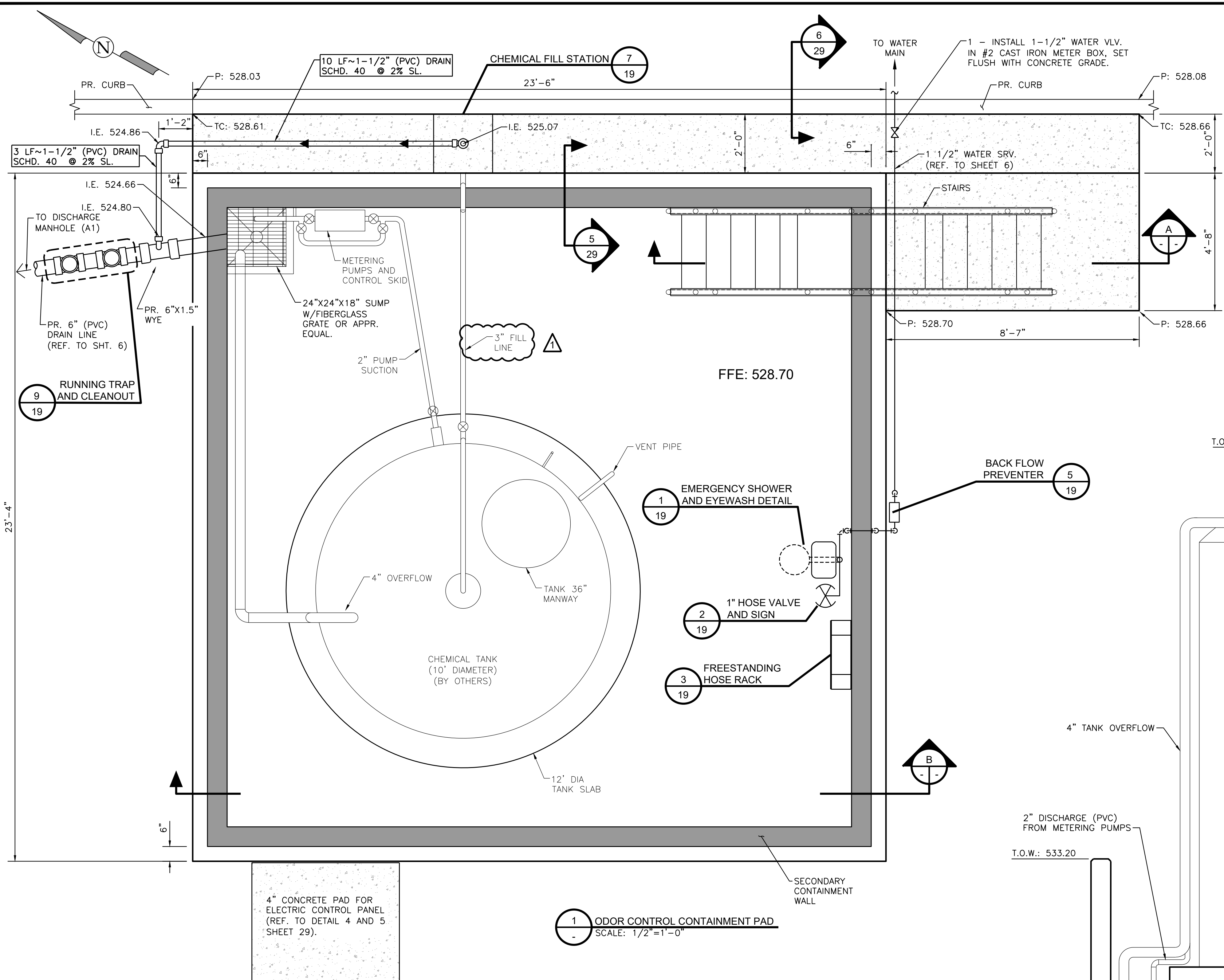
DATE	MAY 2024
PROJ	WJXN5100
DWG	05-L-201
SHEET	27 of 43



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ADDENDUM

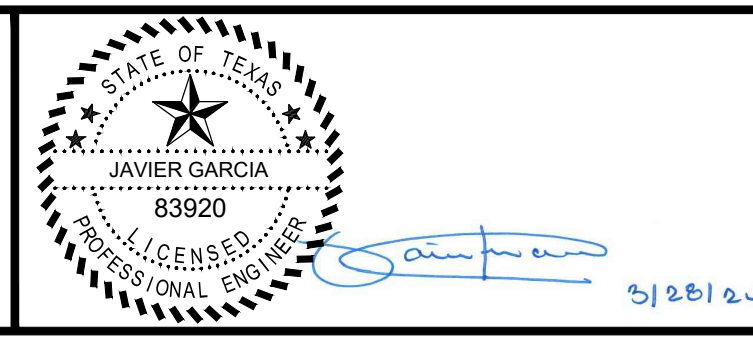
2/21/2024 L:\SHARE\ENGINEERING\SAWS\1106-LEON CREEK & BROOKS ODOR CONTROL\14- PRODUCTION\100-BID PHASE DRAWINGS\SHEETS\7-LEON OC PLAN AND SECT - A.DWG



- SHEET NOTES:**
- CHEMICAL STORAGE TANK, CHEMICAL METERING PUMPS, CONTROLS SKID, CHEMICAL INTERCONNECTING PIPING, 3" FILL LINE FROM THE CHEMICAL FILL STATION TO THE CHEMICAL TANK, AND VALVES WILL BE PROVIDED AND INSTALLED BY OTHERS (SAWS VENDOR) UNDER A SEPARATE CONTRACT.
  - ALL OTHER WORK TO INCLUDE SECONDARY CONTAINMENT STRUCTURE, TANK SLAB, DRAIN SUMP, STAIRWAY, EMERGENCY SHOWER AND EYEWASH STATION, HOSE VALVE, FREESTANDING HOSE RACK, CHEMICAL FILL STATION, FILL STATION 1 1/2" DRAIN LINE, FILL STATION BALL VALVE W/QUICK COUPLING, PIPE BOLLARDS, WATER SERVICE LATERAL, AND PVC DRAIN LINE WILL BE PROVIDED BY THE CONTRACTOR.
  - REFER TO SHEET 19 FOR MECHANICAL DETAILS.
  - REFER TO SHEETS 28, 29 AND 30 FOR STRUCTURAL DETAILS.
  - SECONDARY CONTAINMENT CONCRETE STRUCTURE WILL BE PAINTED BY THE FERRIC SUPPLIER UNDER A SEPARATE CONTRACT.

Proj. No.:	1106
Designed:	E.M.
Drawn:	H3
Approved:	J.G.
File:	

Revision	Date	Description
	5/13/24	ADDENDUM No. 2



Garcia Infrastructure Consultants, LLC  
 Texas Firm No. F-17794  
 12042 Blanco Rd., Ste. 175  
 San Antonio, Texas 78216  
 Ph. (210) 437-0323



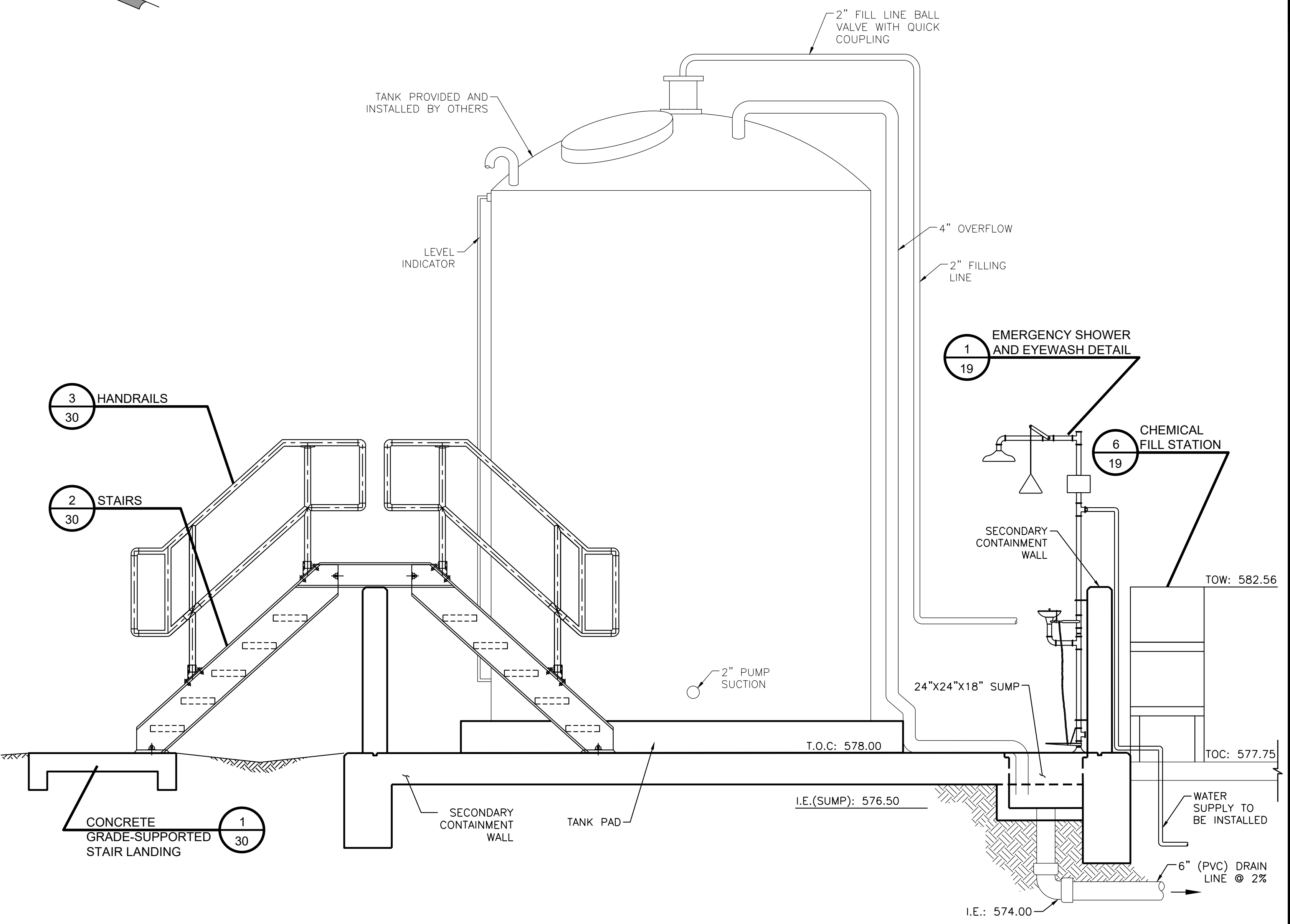
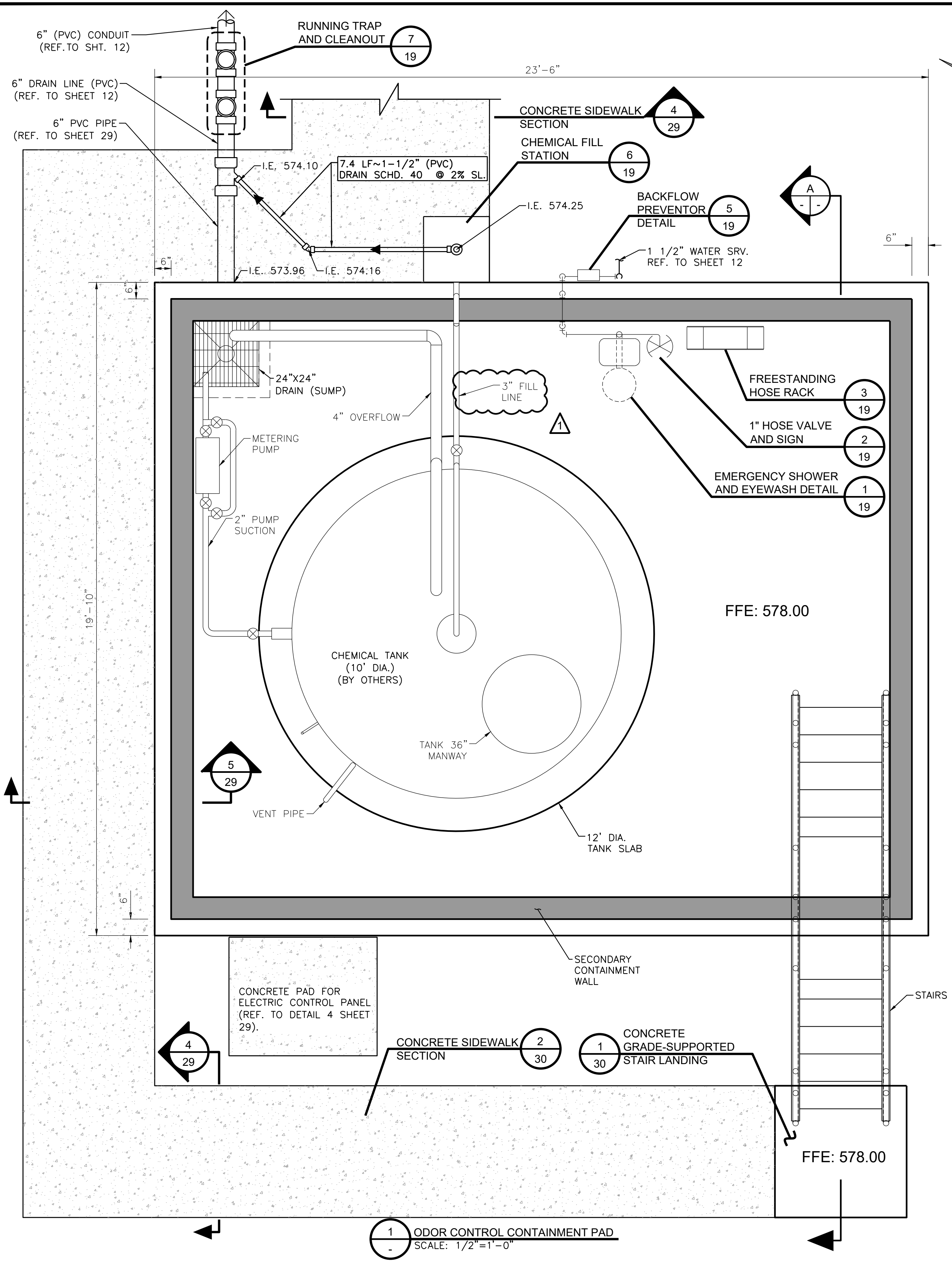
SAN ANTONIO WATER SYSTEM  
 LEON CREEK WRC and BROOKS  
 ODOR CONTROL STATIONS  
 SAWS Job No. 22-6506  
 San Antonio, Texas

LEON CREEK WRC AND BROOKS ODOR CONTROL FACILITY IMPROVEMENTS  
**LEON CREEK**  
 MECHANICAL AND STRUCTURAL  
 PLAN AND SECTION

**C7**  
 SHT 7 OF 34

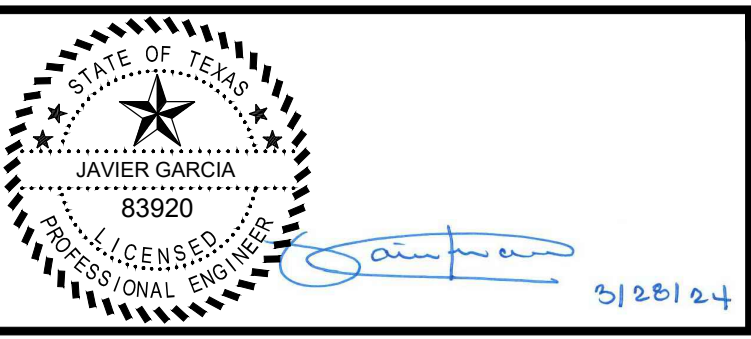
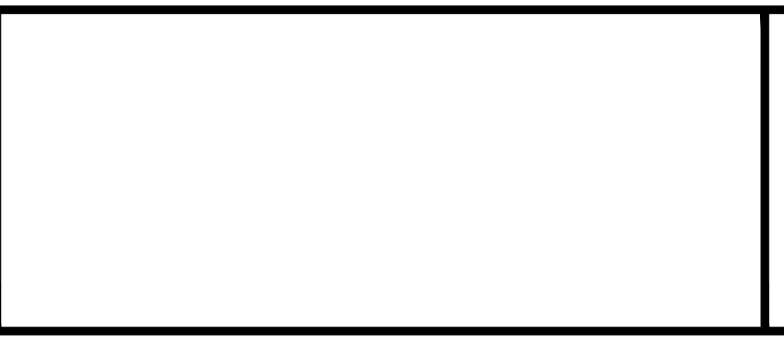
100% SUBMITTAL-ISSUED FOR BID

5/13/2024 L:\SHARE\ENGINEERING\SAWS\1106-LEON CREEK & BROOKS ODOR CONTROL\14- PRODUCTION\100-BID PHASE DRAWINGS\SHEETS\513-BROOKS OC PLAN AND SECT - A.DWG



- SHEET NOTES:**
- CHEMICAL STORAGE TANK, CHEMICAL METERING PUMPS, CONTROLS SKID, CHEMICAL INTERCONNECTING PIPING, 3" FILL LINE FROM THE CHEMICAL FILL STATION TO THE CHEMICAL TANK, AND VALVES WILL BE PROVIDED AND INSTALLED BY OTHERS (SAWS VENDOR) UNDER A SEPARATE CONTRACT.
  - ALL OTHER WORK TO INCLUDE SECONDARY CONTAINMENT STRUCTURE, TANK SLAB, DRAIN SUMP, STAIRWAY, EMERGENCY SHOWER AND EYEWASH STATION, HOSE VALVE, FREESTANDING HOSE RACK, CHEMICAL FILL STATION, FILL STATION 1 1/2" DRAIN LINE, FILL STATION BALL VALVE W/QUICK COUPLING, PIPE BOLLARDS, WATER SERVICE LATERAL, AND PVC DRAIN LINE WILL BE PROVIDED BY THE CONTRACTOR.
  - REFER TO SHEET 19 FOR MECHANICAL DETAILS.
  - REFER TO SHEETS 28, 29 AND 30 FOR STRUCTURAL DETAILS.
  - SECONDARY CONTAINMENT CONCRETE STRUCTURE WILL BE PAINTED BY THE FERRIC SUPPLIER UNDER A SEPARATE CONTRACT.

Proj. No.:	1106	
Designed:	E.M.	
Drawn:	H3	
Approved:	J.G.	
File:		
Revision	Date	Description
	5/13/24	ADDENDUM No. 2



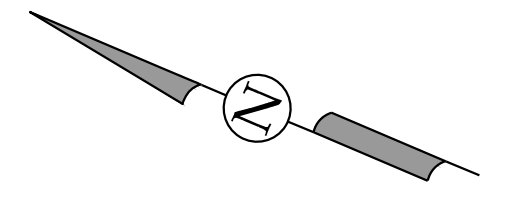
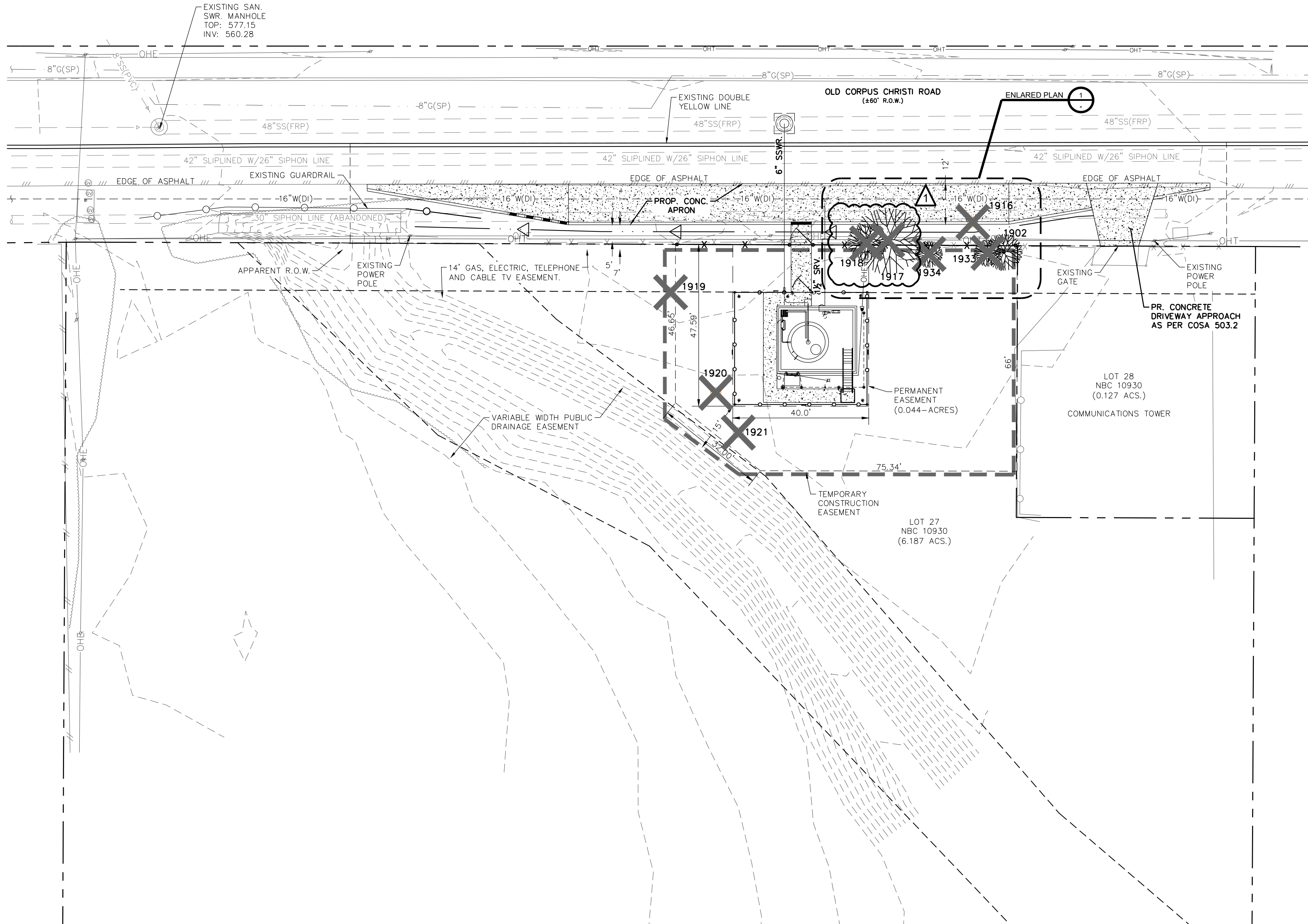
Garcia Infrastructure Consultants, LLC  
 Texas Firm No. F-17794  
 12042 Blanco Rd., Ste. 175  
 San Antonio, Texas 78216  
 Ph. (210) 437-0323

SAN ANTONIO WATER SYSTEM  
 LEON CREEK WRC and BROOKS  
 ODOR CONTROL STATIONS  
 SAWS Job No. 22-6506  
 San Antonio, Texas

LEON CREEK WRC AND BROOKS ODOR CONTROL FACILITY IMPROVEMENTS  
**BROOKS**  
 MECHANICAL AND STRUCTURAL  
 PLAN AND SECTION

**C13**  
 SHT 13 OF 34

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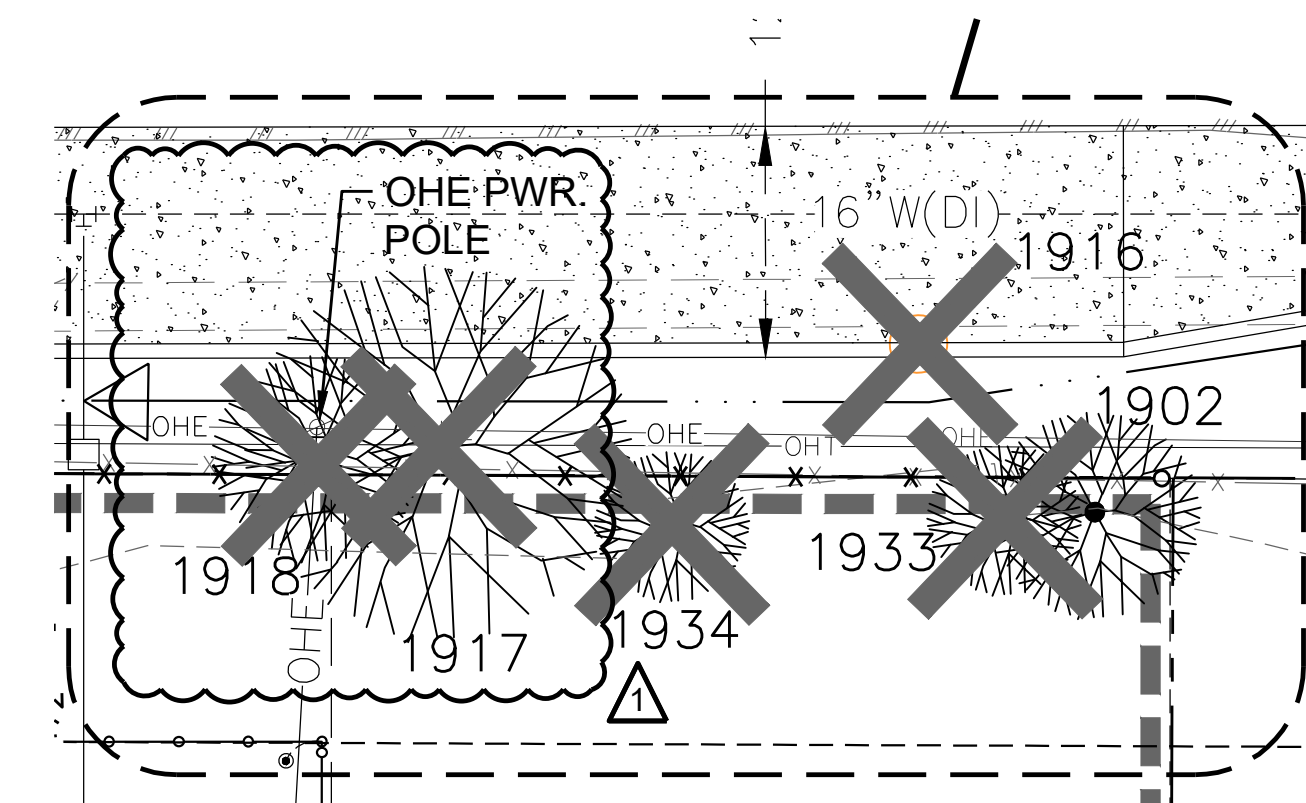
HORIZ. SCALE: 1"=20'  
 0 20 40  
 SCALE IN FEET

TREE TABLE						
TAG #	DIA.(in.)	SPECIES	ACTION	LEVEL	NON-SIG	SIGNIFICANT
1919	9	DEAD	REMOVE	NONE	9	
1920	6	DEAD	REMOVE	NONE	6	
1921	6	DEAD	REMOVE	NONE	6	
1918	11	ASH	REMOVE	NONE		11
1917	20	ASH	REMOVE	NONE		20
1934	8	ASH	REMOVE	NONE	8	
1916	6	DEAD	REMOVE	NONE	6	
1933	8	ASH	REMOVE	NONE	8	
1902	11	ASH	PROTECT	II-A		11
TOTAL INCHES					43	42
TO BE PRESERVED					0	42
TO BE MITIGATED					0	0

**TREE LEGEND**

- ASH (PROTECTED)
- DEAD TREE
- TO BE REMOVED

- NOTES:**
- ALL TREES SHOWN AS "PROTECT" WITHIN CONSTRUCTION EASEMENT SHALL BE PROTECTED AT ALL TIMES.
  - CONTRACTOR SHALL TAKE EXTRA PROTECTION MEASURE FOR ALL TREES IN CLOSE PROXIMITY TO THE PROPOSED ODOR CONTROL FACILITY IN ACCORDANCE TO THE TREE PROTECTION DETAILS PROVIDED ON SHEET 25
  - BRANCH PRUNING SHALL BE ACCOMPLISHED AS REQUIRED IN ACCORDANCE TO THE STANDARD DETAIL ON SHEET 25.
  - DID PRICE SHALL INCLUDE "TREE PROTECTION, TREE PRUNING, TREE REMOVAL, AND TREE REPLACEMENT" AS NEEDED (NO SEPARATED PAY ITEM).
  - CONTRACTOR SHALL PROTECT ALL TREES SHOWN AS PROTECTED AT ALL TIMES DURING CONSTRUCTION AND INSTALLATION OF THE SW3P STABILIZED CONSTRUCTION ENTRANCE AND ROUTINE MAINTENANCE OF THE CONSTRUCTION ENTRANCE.



**1 ENLARGED PLAN**  
 SCALE: 1"=10'

**1 TREE PRESERVATION PLAN**  
 SCALE: 1"=20'

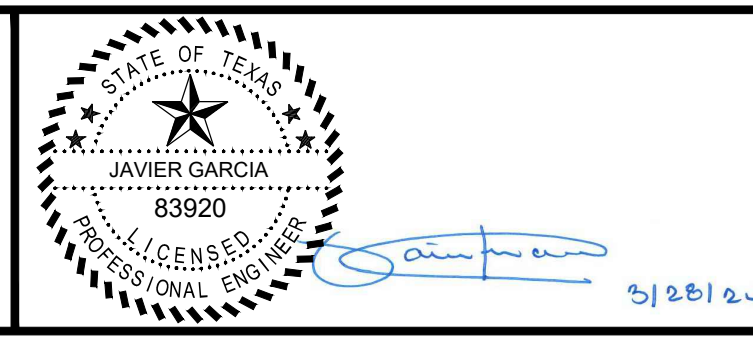
**CALL BEFORE YOU DIG**  
 TEXAS ONE CALL PARTICIPANTS REQUEST  
 72 HOURS NOTICE BEFORE YOU DIG, DRILL  
 OR BLAST - STOP CALL  
 TEXAS ONE CALL SYSTEM  
 1-800-245-4545

**TRENCH EXCAVATION SAFETY PROTECTION NOTE**  
 CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR STRUCTURE/DESIGN/GEOTECHNICAL/SAFETY/ EQUIPMENT CONSULTANT, IF ANY, SHALL REVIEW THESE PLANS AND AVAILABLE GEOTECHNICAL INFORMATION AND THE ANTICIPATED INSTALLATION SITE(S) WITHIN THE PROJECT WORK AREA IN ORDER TO IMPLEMENT CONTRACTOR'S TRENCH EXCAVATION SAFETY PROTECTION SYSTEMS, PROGRAMS AND/OR PROCEDURES. THE CONTRACTOR'S IMPLEMENTATION OF THE SYSTEMS, PROGRAMS AND/OR PROCEDURES SHALL PROVIDE FOR ADEQUATE TRENCH EXCAVATION SAFETY PROTECTION THAT COMPLIES WITH, AS A MINIMUM, OSHA STANDARDS FOR TRENCH EXCAVATIONS. SPECIFICALLY, CONTRACTOR AND/OR CONTRACTOR'S INDEPENDENTLY RETAINED EMPLOYEE OR SAFETY CONSULTANT SHALL IMPLEMENT A TRENCH SAFETY PROGRAM IN ACCORDANCE WITH OSHA STANDARDS GOVERNING THE PRESENCE AND ACTIVITIES OF INDIVIDUALS WORKING IN AND AROUND TRENCH EXCAVATION.

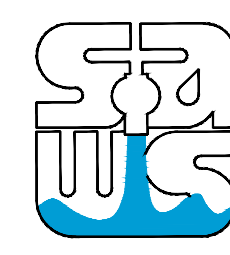
**UTILITY LOCATION NOTE**  
 THE EXISTING UTILITIES AS SHOWN ARE FROM INFORMATION PROVIDED BY THE UTILITY COMPANIES AND FIELD OBSERVATIONS. HOWEVER, NOT ALL EXISTING UTILITY LINES HAVE NOT BEEN FIELD LOCATED, AND ARE SHOWN IN THE APPROXIMATE LOCATION FOR THE CONVENIENCE OF THE CONTRACTOR. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE EXACT LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO COMMENCING EXCAVATION, AND TO NOTIFY THE OWNERS OF THOSE UTILITIES AT LEAST FORTY-EIGHT HOURS IN ADVANCE OF CONSTRUCTION. THE CONTRACTOR SHALL MAKE PROVISIONS TO PROTECT OR SUPPORT ALL EXISTING UTILITIES DURING CONSTRUCTION. ANY DAMAGE TO EXISTING UTILITIES DURING CONSTRUCTION SHALL BE REPAIRED TO THE CURRENT STANDARDS OF THE OWNER OF THE UTILITY AT THE EXPENSE OF THE CONTRACTOR.

Proj. No.: 1106  
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 Drawn: H3  
 Approved: J.G.  
 File:

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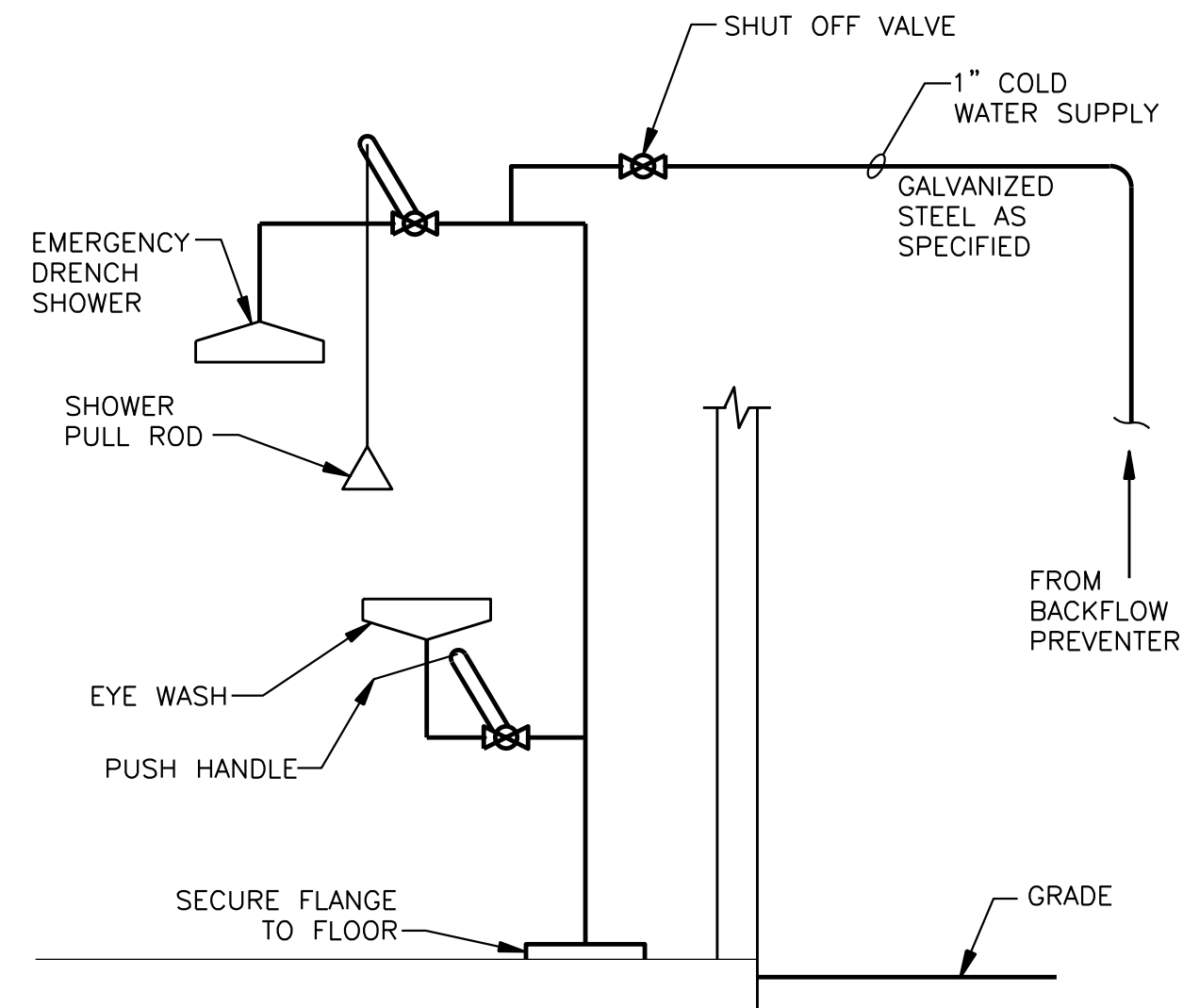
SAN ANTONIO WATER SYSTEM  
 LEON CREEK WRC and BROOKS  
 ODOR CONTROL STATIONS  
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LEON CREEK WRC AND BROOKS ODOR  
 CONTROL FACILITY IMPROVEMENTS  
**BROOKS**  
 TREE PRESERVATION PLAN

**C14**  
 SHT 14 OF 34

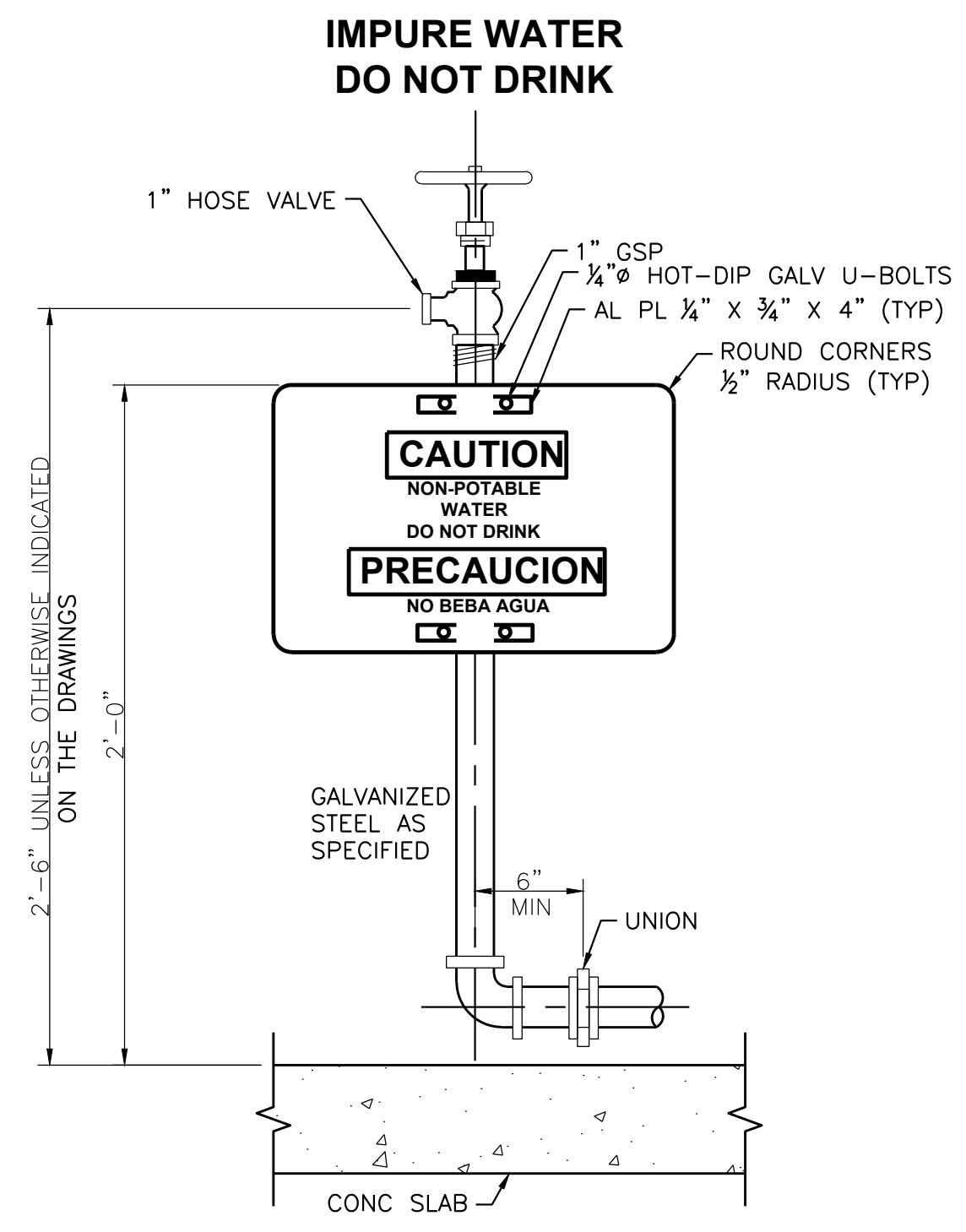
5/9/2024 L:\SHARE1\ENGINEERING\SAWS\1106\_LEON\_CREEK & BROOKS ODOR CONTROL\14\_PRODUCTION\100-BID PHASE DRAWINGS\SHEETS\14-BROOKS\_TPP - A.DWG

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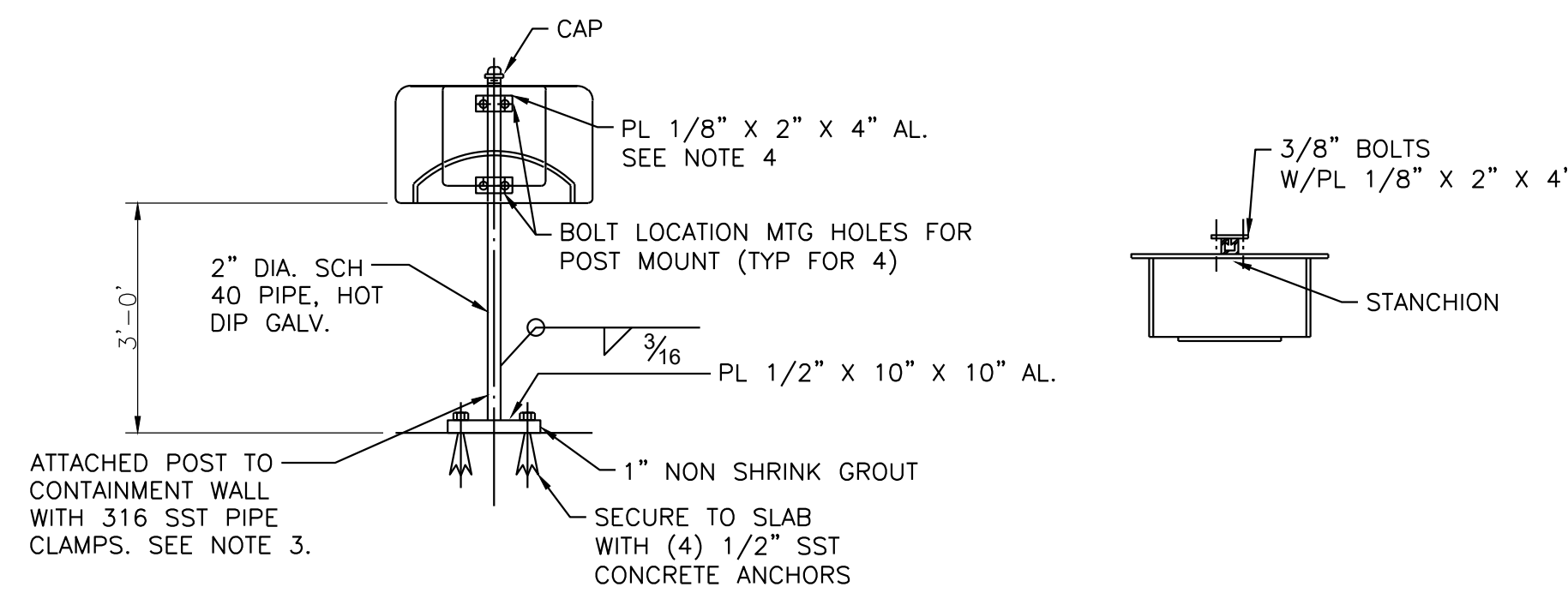


- NOTES:**
1. PROVIDE CORROSION RESISTANT TYPE IN CHEMICAL AREAS.
  2. PROVIDE FREEZE PROOF WITH INSULATION AND HEAT TRACING FOR EXTERIOR WALL UNITS.

**1 COMBINATION EMERGENCY SHOWER/EYEWASH STATION**  
SCALE: NONE



**2 1\"/>**

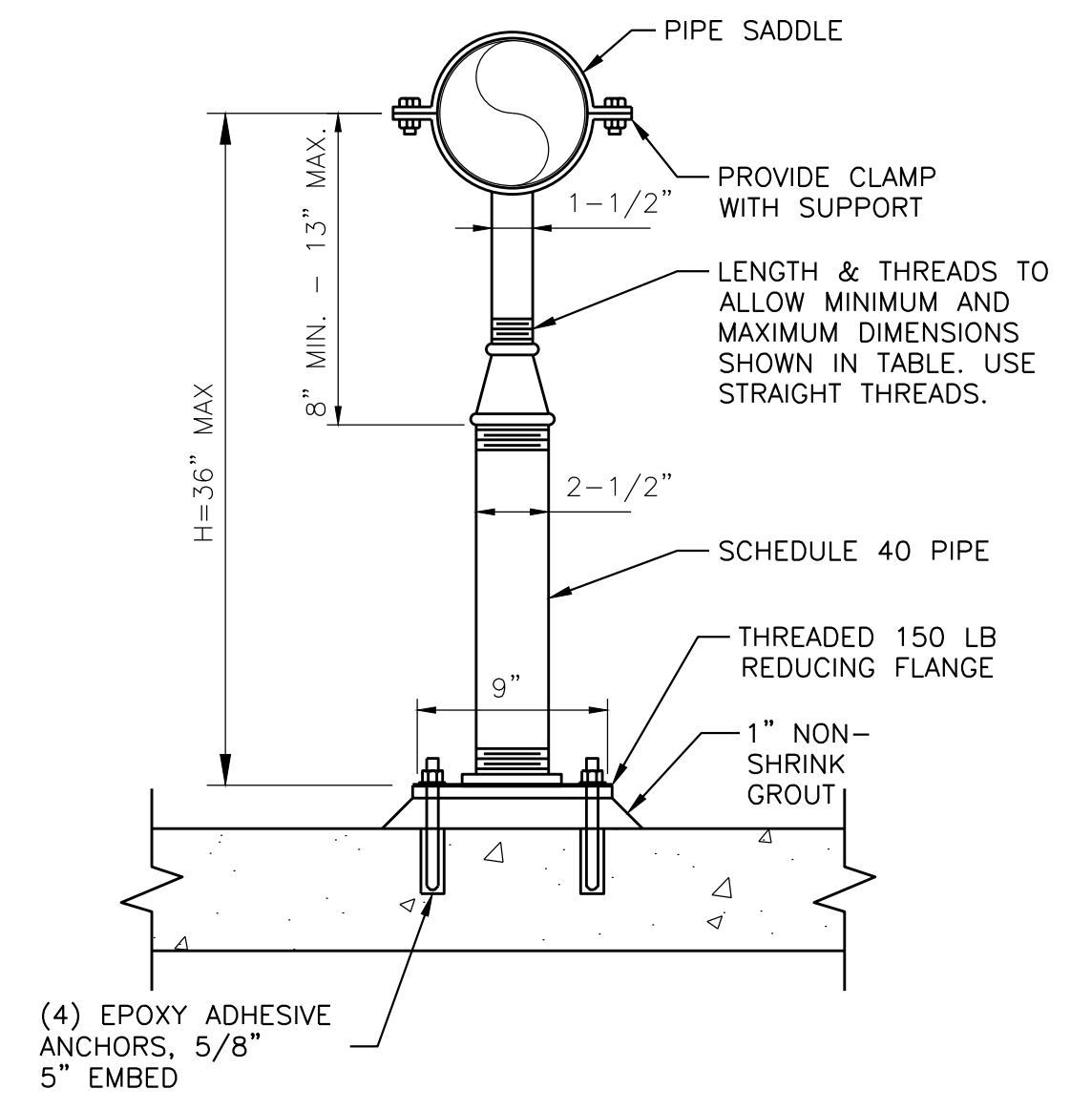


**3 FREESTANDING HOSE RACK**  
SCALE: NONE

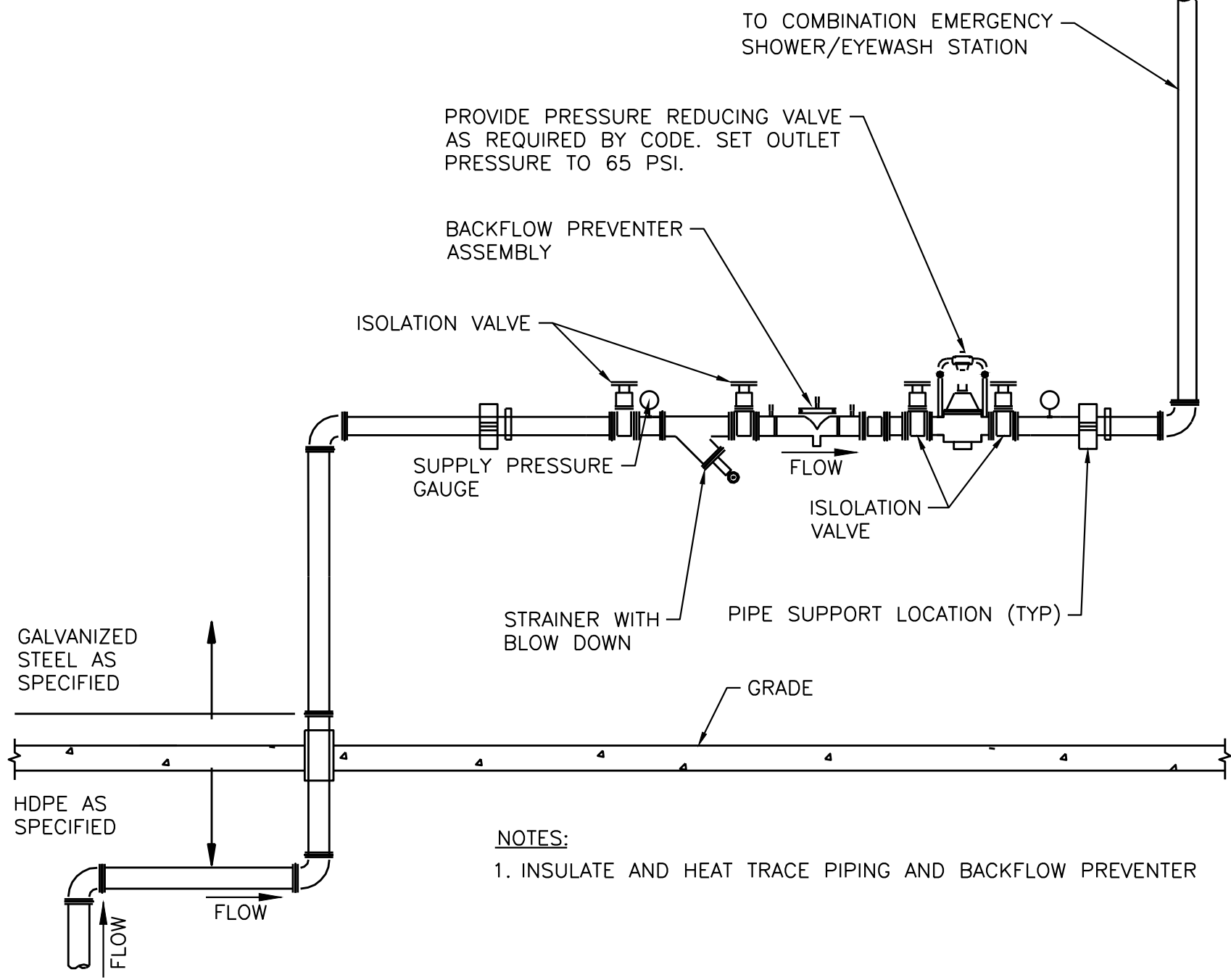
DIMENSION IN INCHES

RACK TYPE	A	B	C	D	E	F	G	H	J
TYPE A-3/4" & 1" HOSE	10-1/2	9	9	18	3	6	7-1/2	9-3/4	1-1/2

- NOTES:**
1. UNITS SHALL BE FABRICATED FROM 3/16" 6061-T6 ALUMINUM ALLOY PLATE.
  2. ATTACH TO INDIVIDUAL POST WITH PLATES AND (4)-3/8" TYPE 316 STAINLESS STEEL BOLTS.
  3. ATTACH PIPE CLAMPS TO CONCRETE WALL WITH 3/8" TYPE STAINLESS STEEL STUD TYPE WEDGE ANCHORS.
  4. ATTACH TO POST WITH PLATES AND (4)-3/8" TYPE 316 STAINLESS STEEL BOLTS.

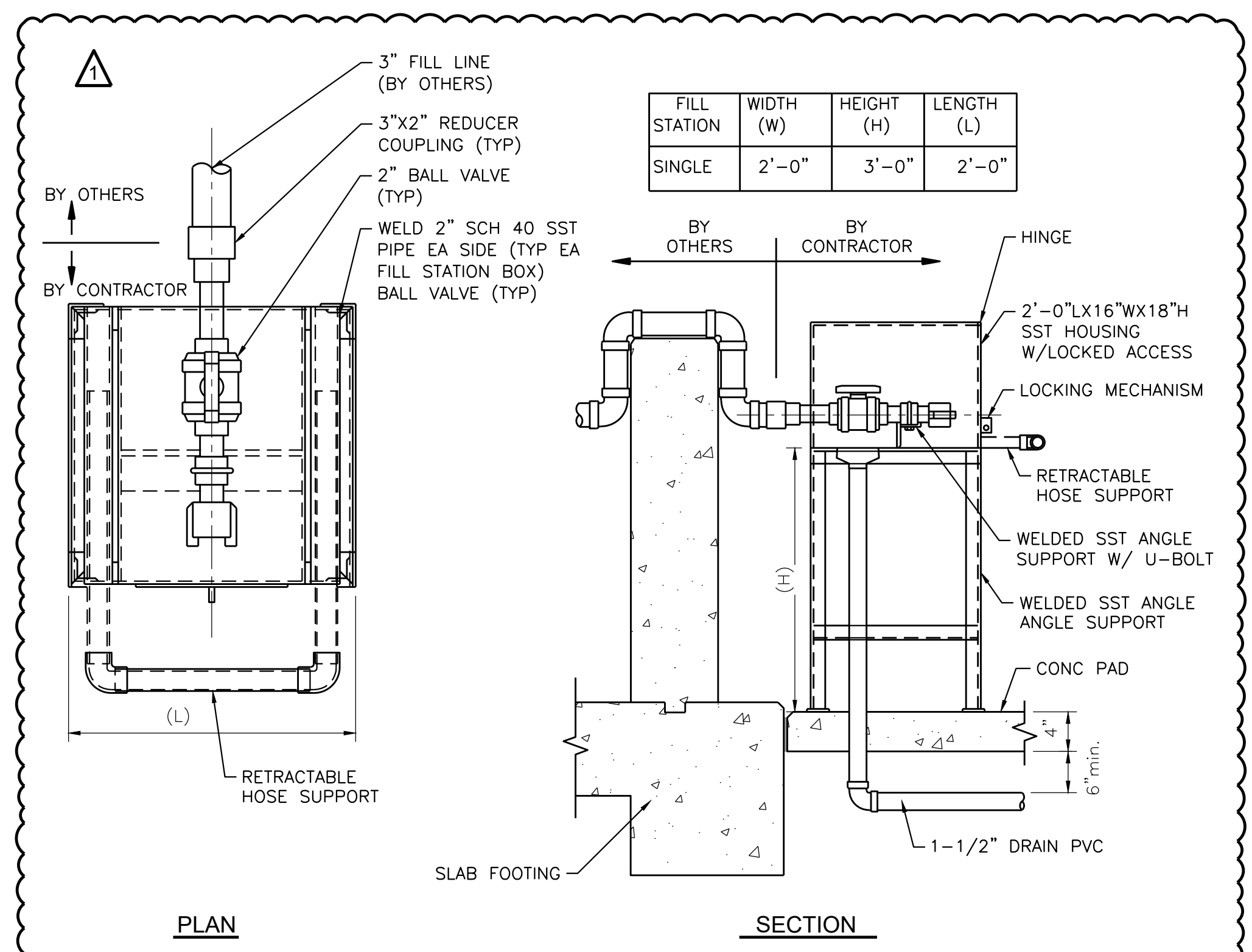


**4 PIPE SUPPORT DETAIL**  
SCALE: NONE



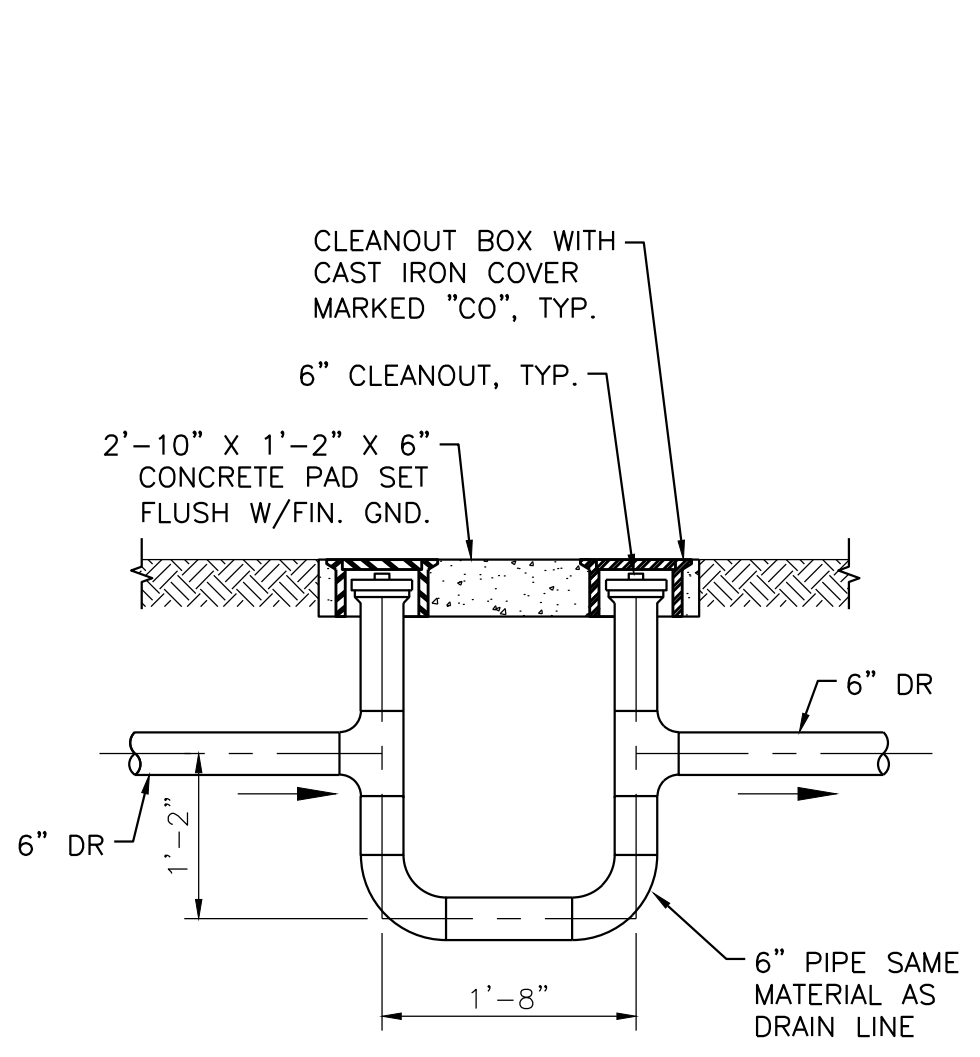
- NOTES:**
1. INSULATE AND HEAT TRACE PIPING AND BACKFLOW PREVENTER

**5 BACKFLOW PREVENTER DETAIL**  
SCALE: NONE

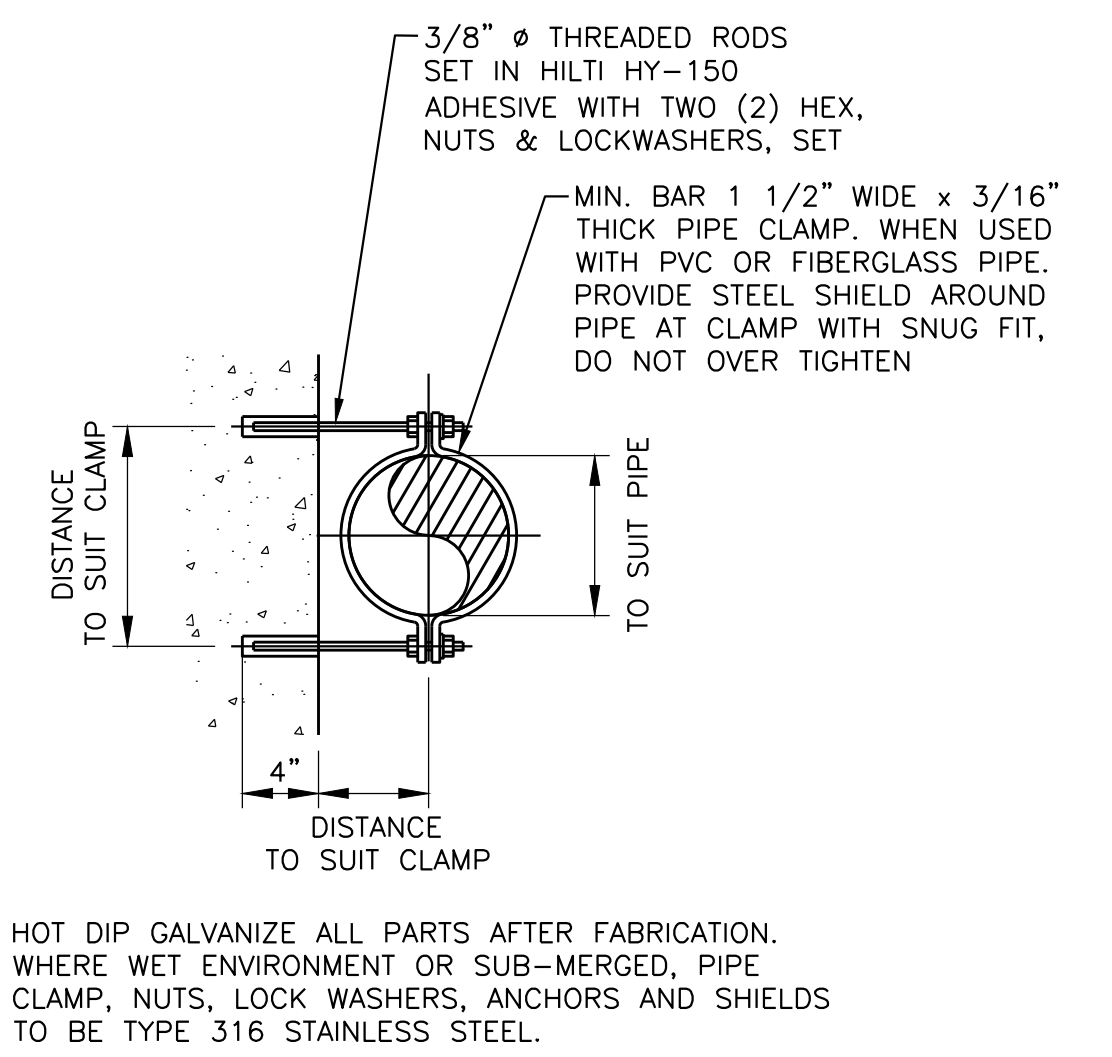


FILL STATION	WIDTH (W)	HEIGHT (H)	LENGTH (L)
SINGLE	2'-0"	3'-0"	2'-0"

**6 CHEMICAL FILL STATION**  
SCALE: NONE



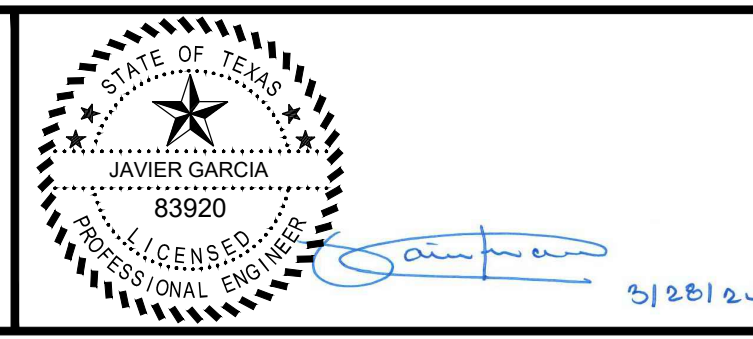
**7 RUNNING TRAP AND CLEANOUT**  
SCALE: NONE



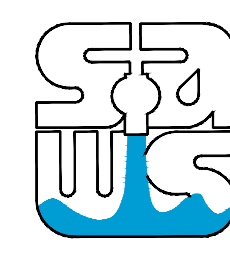
**8 PIPE CLAMP DETAIL**  
SCALE: NONE

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LEON CREEK WRC AND BROOKS ODOR CONTROL FACILITY IMPROVEMENTS

MECHANICAL DETAILS

C19

SHT 19 OF 34

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