



County of El Paso Purchasing Department
800 E. Overland Room 300
El Paso, Texas 79901
(915) 546-2048 / Fax: (915) 546-8180
www.epcounty.com

ADDENDUM 1

To: All Interested Proposers

From: Araceli Hernandez, Inventory Bid Technician

Date: October 29, 2013

Subject: BID# 13-063, El Paso County Colonia Revolucion Water System Improvement Project Storage and Pump Station Facilities

This addendum has been issued to notify the vendors of the following modifications and questions:

1. What is the complete description of work of the project including the list of major bid items?

Response: Construction of a 50,000 gallon ground storage tank, a 150,000 gallon elevated reservoir, a package pump station with building enclosure and electrical work, and site work that includes a retention pond, 8 inch inlet/outlet waterlines, header curb with pavement overlay, fencing and access driveway.

List of Major Bid Items:

- 1 LS Mobilization/ Demobilization and Video Tape**
- 1 LS Elevated Tank and Appurtenances**
- 1 LS Ground Storage Tank and Appurtenances**
- 1 LS Furnish and Install Electrical and Instrumentation**
- 1 LS Furnish and Install Booster Pump Station and Appurtenances**
- 1 LS Site Work**
- 1 LS Allowance for Material Testing**

2. What is the approximate length, size and type of piping/ conduit to be installed on this project?

Response: approx. 540 LF 8” PVC, 25 LF 6” DIP

3. Are there crossings to be Jack & Bored or Directionally Bored?

Response: No

4. What are the approximate lengths of the portions to be bored?

Response: N.A.

5. What is the estimated cost of the project?

Response: \$ 1.3 million

6. What time and where is bid opening?

Response: The bid opens on Tuesday, November 5, 2013 at 2:00 p.m. in the El Paso Purchasing Department Room 300, El Paso TX 79901.

7. Is the pre-bid conference mandatory?

Response: No

8. What is the address of the project site?

Response: 1365 Berryville Street

9. Drawing Sheet ET-102

Can Burndy HYGND Compression connectors be used in lieu of exothermic welds?

Response: Yes. Only irreversible grounding methods may be used.

10. Drawing Sheet ET-103

A. The 1-Line diagram refers to specification section 16441 for the manual transfer switch. This section is not in the specifications. Please advice.

B. There is no specification for the service entrance disconnect. Please advice.

Response: Refer to attached Specification included in Addendum

11. Drawing Sheet ET-104

A. Tank Elevation- There is no specification for the exterior light fixture over the access door at the elevated storage tank. Please advice.

Response: Refer to attached changes to drawings.

B. Electrical Rack Detail- Can uncoated galvanized or aluminum strut be used in lieu of PVC coated? One rack is inside the elevated storage tank. Please advice.

Response: Electrical Racks to be constructed out of PVC Coated Strut as indicated in plans.

12. Will the Owner & Consultant consider other brand pump package other than what the Plans and Specification calls for ?

Response: Yes. The pump package must be an or equal to that specified in the Project Manual or pre-approved by the Engineer.



ADDENDUM NO: 1

TO: ALL PLANHOLDERS

FROM: PARKHILL, SMITH & COOPER, INC.

PROJECT NAME: Bid #13-063, El Paso County Colonia Revolucion Water System Improvement Project Storage and Pump Station Facilities

PROJECT NO.: 01.5005.11

DATE: October 29, 2013

Attention of all Prospective Bidders/Plan Holders is directed to the following modifications to the referenced Project Manual Specifications and Drawings. This Addendum forms a part of, and shall be attached to the Project Manual Specifications, and modifies the original Project Manual Specifications dated September 20, 2013 noted below:

This Addendum consists of 3 page(s)

I. CHANGES TO DIVISION 02 – SITE WORK

SECTION 02010 – SUBSURFACE INVESTIGATION PART 1, 1.2B delete the wording “Soil Investigation Report” and replace with “Geotechnical Soils Evaluation Report”.

II. CHANGES TO DIVISION 11 – SPECIAL EQUIPMENT

SECTION 11600 BOOSTER STATION PUMPS – PART 2, 2.1A-Add the following after paragraph one: The Flowtronex Model MCV-150-355-56 skid mounted triplex pump system is pre-approved by the Engineer as an “or equal” to the Canaris Pump System specified in this section.

SECTION 11700 GROUND STORAGE RESERVOIR – PART 3.1 A.5; Replace entire sentence to read: “Seismic Zone One according to IBC 2009”.

PART 3.4 add entire section: C: The proposed ring beam foundation should be supported by a minimum of 18 inches of compacted Select Fill soil material. The Select Fill should extend a minimum of 18 inches beyond the edges of the ring beam foundation. The Select Fill should be compacted to at least 95% of maximum dry density as determined per ASTM D-1557 and at $\pm 2\%$ of optimum moisture content.

Select Fill soils shall consist of granular sandy soils or gravel mixtures, free of clay lumps, deleterious materials, organic material, cobbles or boulders over 3 inches in nominal size. The Select Fill should have a liquid limit less than 30 and a plasticity index from 3 to 12. The Select Fill shall also exhibit an optimum dry density of at least 125 pcf determined in accordance with ASTM D 1557. Select Fill shall also meet the gradation requirements below.

Select Fill Gradation Requirements:

Sieve Size (square opening) - % Passing by Weight

3-inch - 100

3/4-inch - 85 – 100

No. 4 35 – 85

No. 200 5 – 35

Select Fill soils should classify as SP-SM, SC, SC-SM, GC, and GC-GM in accordance with the Unified Soil Classification System (USCS). Select Fill soils that meet the gradation, optimum dry density, and soil

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classification requirements indicated above, but are non-plastic by test, shall be accepted only if these soils exhibit a bar linear shrinkage of 3 to 7 percent determined by test method TEX-117E.

Native Soils suitable native soils shall consist of materials should consist of granular sandy soils or gravel mixtures, free of clay lumps, deleterious materials, organic material, cobbles or boulders over 3 inches in nominal size. The Native soils should have a liquid limit less than 40 and a plasticity index less than 15. Native Select Fill soils should meet the gradation requirements below.

III. CHANGES TO DIVISION 13 – ELEVATED TANK

SECTION 13121 – PRE-FABRICATED BUILDING PART 1 1.4B – Add following sentence after first sentence: Contractor shall provide manufacturer’s details on how the pre-fab building shell will mate with the concrete floor along the perimeter, and any requirements that the floor edge be recessed to accommodate the shell, and to prevent external moisture from entering the building through the shell to floor interface. Sealing details shall accompany this detail.

SECTION 13210 – ELEVATED TANK – PART 1 – Delete 1.3A in its entirety and replace with: 1.3A. The work shall include all labor, materials and equipment necessary to construct the elevated tank and coordinate other work at the site as shown on the drawings and specified herein. Reference is also made to Section 09905 – Coating Systems, Section 16100 – Impressed Current Cathodic Protection Systems for Steel Tanks.

SECTION 13210 – ELEVATED TANK – PART 2.1A – Add Section O: The design criteria for the tank foundation are further defined to include the following requirements. It is anticipated that the tank foundation will consist of drilled shafts with a ring beam. The width of the ring beam shall be the diameter of the drilled shaft plus 1’-0” or six (6”) on each side of the shaft. The depth of the ring beam shall be such to provide tension anchorage for the vertical shaft reinforcing, and for the anchor bolt length that secures the steel foundation cone plate to the concrete ring beam.

Drilled shafts shall be reinforced to withstand the uplift force or an amount equal to 1% of the shaft cross sectional area. The shaft reinforcing shall extend the full depth of the shaft.

Reinforcing shall be adequately tied to prevent deformation of the steel cage during placement. Pier sleds and centralizers shall be used to place the reinforcing cages to maintain proper alignment.

The piping shall not penetrate the concrete ring beam. Orientation and placement shall be such that the piping is located (centered) between the drilled shafts.

The minimum clear spacing between drilled shafts shall be 2.5’ times the shaft diameter. The skin friction capacity in the top fifteen feet (15’) of the drilled shafts shall not be considered in the shaft design.

The allowable skin friction value for the uplift for overturning shall not exceed forty percent (40%) of the value for the downward skin friction value.

It is anticipated that the drilling of the shafts will utilize a slurry drilling method with the top section of the shaft using a steel casing to prevent sloughing.

The Foundation drilling subcontractor selected by the Contractor shall show a minimum of five years’ experience and ten projects using drilled shafts similar to this project using the methods proposed for use on this project. The Contractor shall submit a list of projects for the drilling subcontractor similar to those required for the Tank Supplier.

IV. CHANGES TO DIVISION 16 – ELECTRICAL

SECTION 16441 – ENCLOSED SWITCHES – Add Section in its entirety.

V. CHANGES TO DRAWINGS

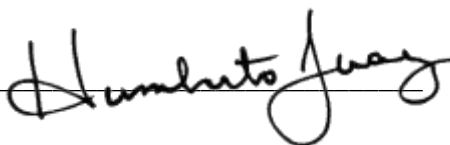
1. Sheet CT-201R-Replace entire sheet with attached.
2. Sheet CT-501R- Replace entire sheet with attached.
3. Sheet CT-503R-Replace entire sheet with attached.
4. Sheet CT-505-Replace entire sheet with attached.
5. Sheet CT-507R-Replace entire sheet with attached.
6. On Sheet ET-102, Detail A, Contractor shall include a #2 bare copper wire from the pump skid to the Ground Ring. Route in ¾" PVC conduit under building slab.

END OF ADDENDUM NO. 1



Respectfully submitted,

PARKHILL, SMITH & COOPER, INC.

By: 

Receipt of this addendum shall be acknowledged by the Bidder, below and on the bid Proposal. This entire addendum, or a copy thereof, shall be attached to the bid Proposal submitted.

ACKNOWLEDGED:

By: _____

SECTION 16441

ENCLOSED SWITCHES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings, Standard General Conditions of the Construction Contract Funding Agency Edition, Supplemental Contract Conditions, and Division 1 – General Requirements apply to Work of this Section.

1.2 SECTION INCLUDES

- A. Fusible switches.
- B. Non-fusible switches.
- C. Manual Transfer Switches.

1.3 REFERENCES

- A. NEMA KS 1 - Enclosed Switches.
- B. NFPA 70 - National Electrical Code.

1.4 SUBMITTALS

- A. Submit under provisions of General Conditions.
- B. Product Data: Provide switch ratings and enclosure dimensions.

1.5 QUALITY ASSURANCE

- A. Perform Work in accordance with NECA Standard of Installation.

1.6 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing Products specified in this Section with minimum three years documented experience.

1.7 REGULATORY REQUIREMENTS

- A. Conform to requirements of NFPA 70.
- B. Furnish products listed and classified by UL as suitable for purpose specified and shown.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Square D.
- B. Eaton

- C. General Electric
- D. Approved Equal

2.2 MANUAL TRANSFER SWITCH

- A. Switch shall be used to transfer a single load between two sources, utility and portable generator power.
- B. Rating: 600 VAC, 3 Pole, 4 Wire, 200Amp Main.
- C. Switch shall be Service Entrance Rated.
- D. Fusible Switch Assembly: NEMA KS 1, Type HD load interrupter enclosed knife switch with externally operable handle interlocked to prevent opening front cover with switch in ON position. Handle lockable in Source 1, Source 2 and OFF positions.
- E. Fuse clips: Designed to accommodate Class RK1 fuses
- F. A NEMA 4 rated termination box containing five (5) terminal blocks shall be mounted externally to the switch and wired into the Source 2 connection of the switch.
- G. Contractor to provide fuses as indicated on plans.
- H. Site Tests: An installation check shall be performed by the manufacturer's local representative, the engineer, regular operators, and the maintenance staff shall be notified of the time and date of the site test. The Owner shall provide portable generator system for testing, coordinate with Owner. The tests shall include manual start-up by means of simulated power outage to test manual starting, transfer of the load, and manual shutdown.

2.3 DISCONNECT SWITCHES

- A. Fusible and non-fusible Switch Assemblies: NEMA KS 1, Type HD load interrupter enclosed knife switch with externally operable handle interlocked to prevent opening front cover with switch in ON position. Handle lockable in ON and OFF position. Number of poles, amperage, and voltage ratings to be as shown on contract drawings.
- B. Enclosures: NEMA KS 1.
 - 1. Interior Dry Locations: Type 1.
 - 2. Exterior Locations: Type 3R or 4.
 - 3. NEMA ratings of enclosures as specified on drawings take precedence over location specification.
- C. Provide fuses as indicated on plans.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Enclosure to be securely mounted to structure.
- B. Install disconnect switches and transfer switches where indicated.
- C. Install fuses in fusible disconnect switches.
- D. Provide adhesive label on inside door of each switch having fuses indicating UL fuse class and size for replacement.

3.2 PAYMENT

- A. Payment will be made for all work covered in this section at the contract lump sum price as shown in the proposal. Such payment shall be complete compensation for the complete

TANK

performance of the work in accordance with the drawings and the provisions of these specifications.

END OF SECTION

Xrefs: X-TBLK-5005.11

13:41:23

10/18/2013

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PARKHILL SMITH & COOPER



EL PASO COUNTY
COLONIA REVOLUCION
WATER SYSTEM
IMPROVEMENTS PROJECT
STORAGE & PUMP STATION FACILITIES

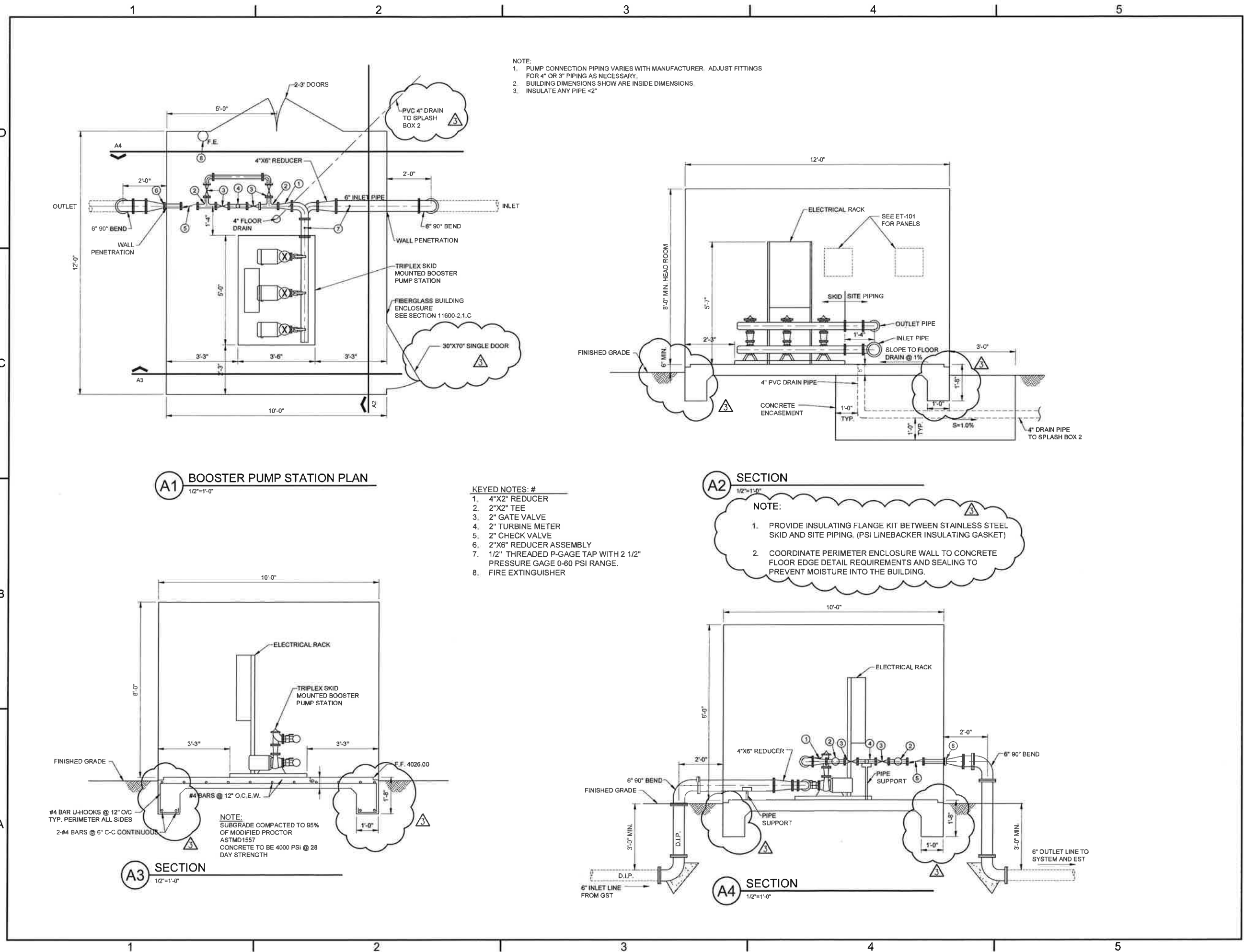
KEY PLAN



3	10-28-13	ADDENDUM 1
2	10-15-13	ISSUE FOR CONSTRUCTION
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NO	DATE	DESCRIPTION
ISSUING OFFICE: EL PASO		PROJECT NO.: 5005.11

PUMP STATION
DETAILS

CT-201R



NOTE:
 1. PUMP CONNECTION PIPING VARIES WITH MANUFACTURER. ADJUST FITTINGS FOR 4" OR 3" PIPING AS NECESSARY.
 2. BUILDING DIMENSIONS SHOW ARE INSIDE DIMENSIONS.
 3. INSULATE ANY PIPE <2"

A1 BOOSTER PUMP STATION PLAN
1/2"=1'-0"

- KEYED NOTES: #
1. 4"x2" REDUCER
 2. 2"x2" TEE
 3. 2" GATE VALVE
 4. 2" TURBINE METER
 5. 2" CHECK VALVE
 6. 2"x6" REDUCER ASSEMBLY
 7. 1/2" THREADED P-GAGE TAP WITH 2 1/2" PRESSURE GAGE 0-60 PSI RANGE.
 8. FIRE EXTINGUISHER

A2 SECTION
1/2"=1'-0"

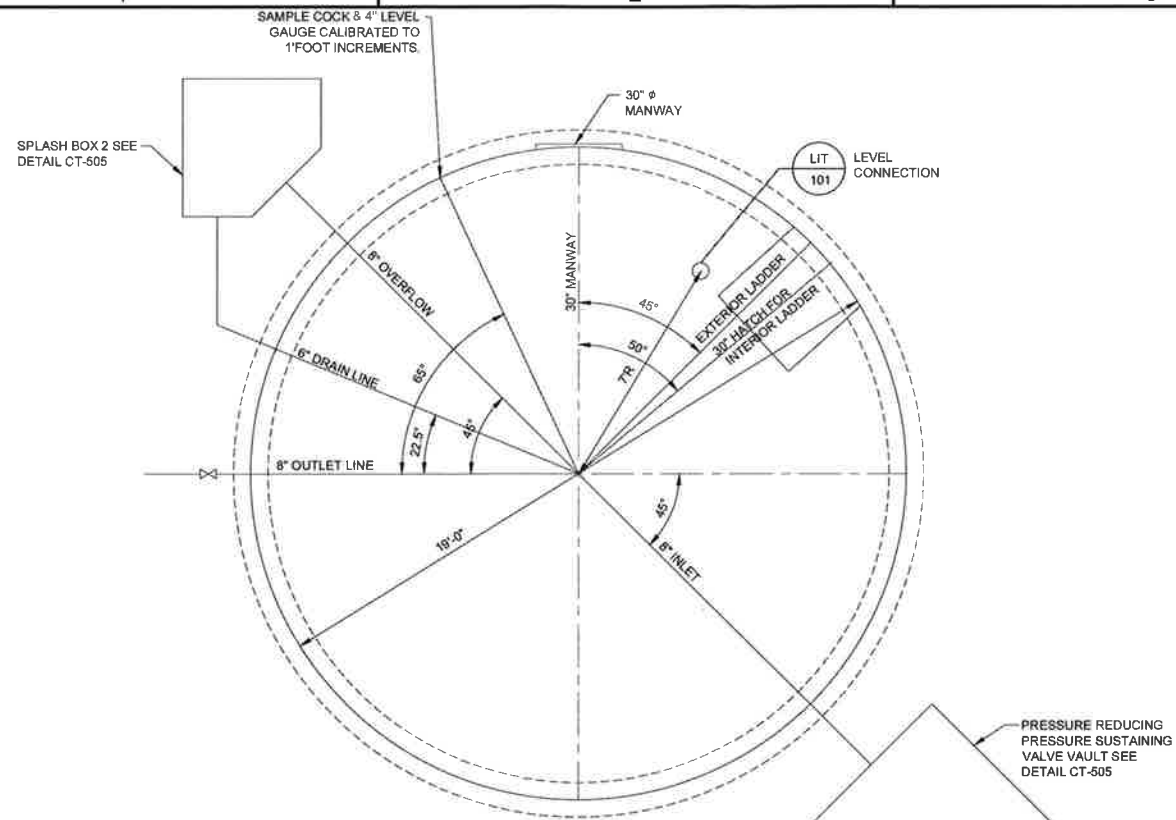
NOTE:

1. PROVIDE INSULATING FLANGE KIT BETWEEN STAINLESS STEEL SKID AND SITE PIPING. (PSI LINEBACKER INSULATING GASKET)
2. COORDINATE PERIMETER ENCLOSURE WALL TO CONCRETE FLOOR EDGE DETAIL REQUIREMENTS AND SEALING TO PREVENT MOISTURE INTO THE BUILDING.

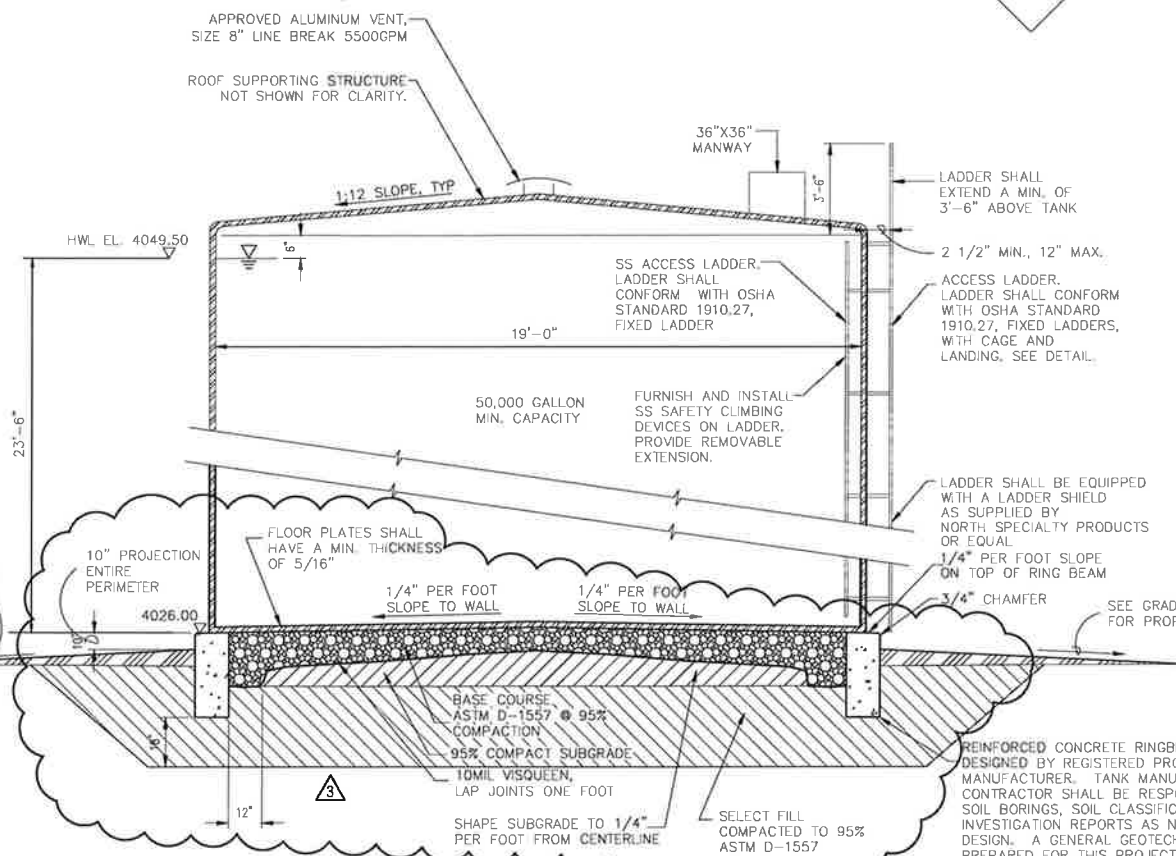
A3 SECTION
1/2"=1'-0"

A4 SECTION
1/2"=1'-0"

13/2/2013
 Xrefs: X-TBLU-5005.11
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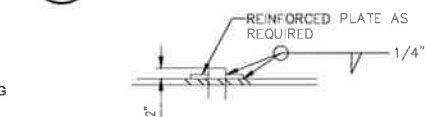
C1 GST ACCESSORY DETAIL PLAN
NTS



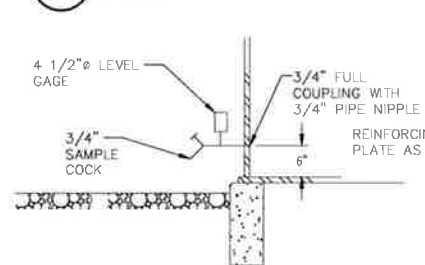
A1 GROUND STORAGE TANK SECTION
NO SCALE

NOTE:
ROOF RAFTERS TO BE ABOVE OVERFLOW WATER LEVEL.

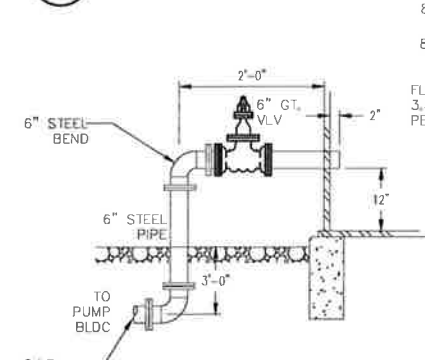
D3 LEVEL CONNECTION DETAIL
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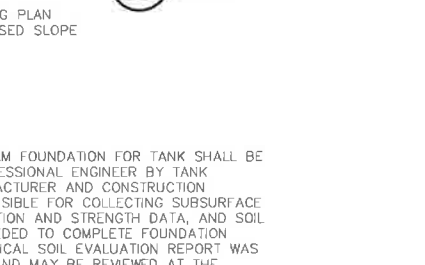
C3 TYPICAL SEAL WELD
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C2 SAMPLE GAUGE DETAIL
NO SCALE

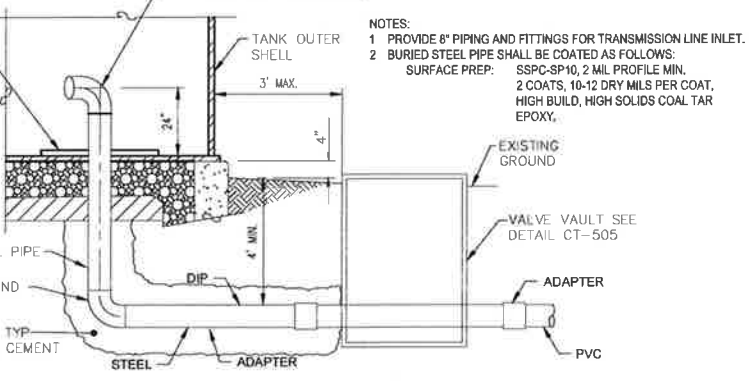
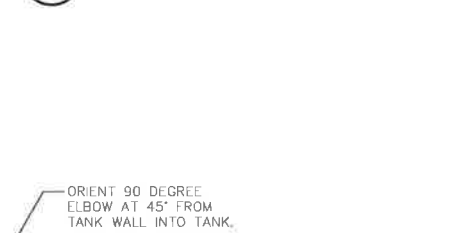


B5 OUTLET DETAIL
NO SCALE

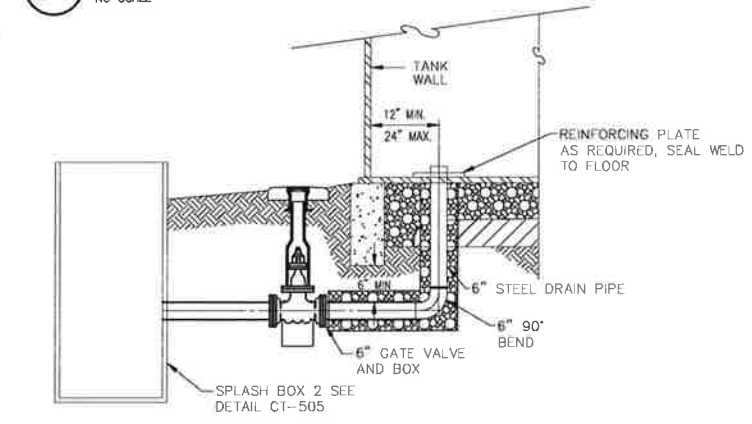


- NOTE:**
- CONTRACTOR TO PROVIDE ROOF PLAN SUBMITTAL FOR OTHER PENETRATIONS AS PER SPECIFICATIONS SECTION 11700
 - PROVIDE FLEX SEALANT AT ANNULAR SPACE AT ALL PIPE TO VAULT PENETRATIONS
 - INSULATE EXTERIOR PIPING.

C4 OVERFLOW DETAIL
NO SCALE



B4 INLET DETAIL
NO SCALE



A4 DRAIN DETAIL
NO SCALE

EL PASO COUNTY
COLONIA REVOLUCION
WATER SYSTEM
IMPROVEMENTS PROJECT
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GROUND STORAGE TANK DETAILS

CT-501R

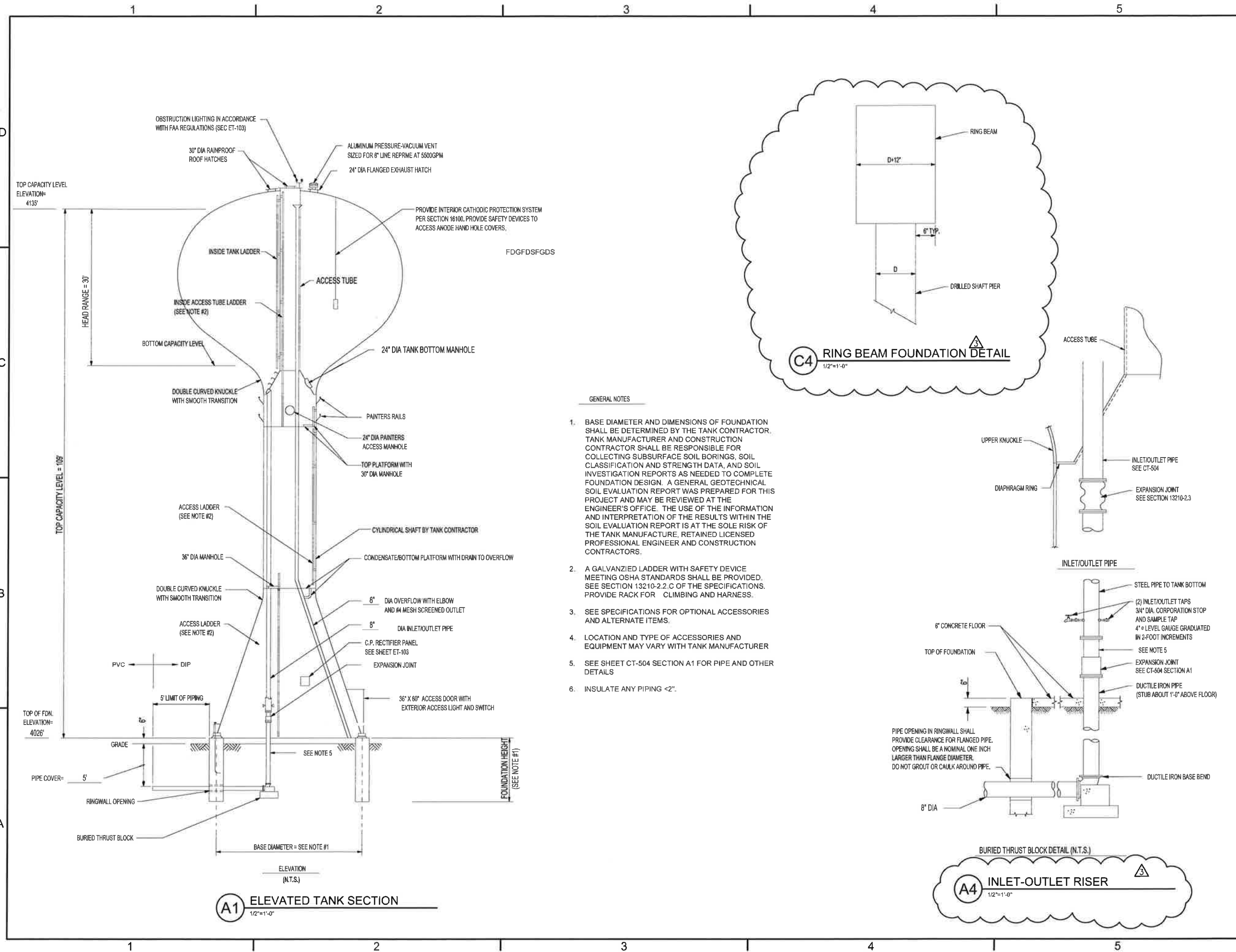
PARKHILL SMITH & COOPER
 REGISTERED PROFESSIONAL ENGINEER
 STATE OF TEXAS
 LICENSE NO. 50872
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Xrefs: X-181K-5005.11

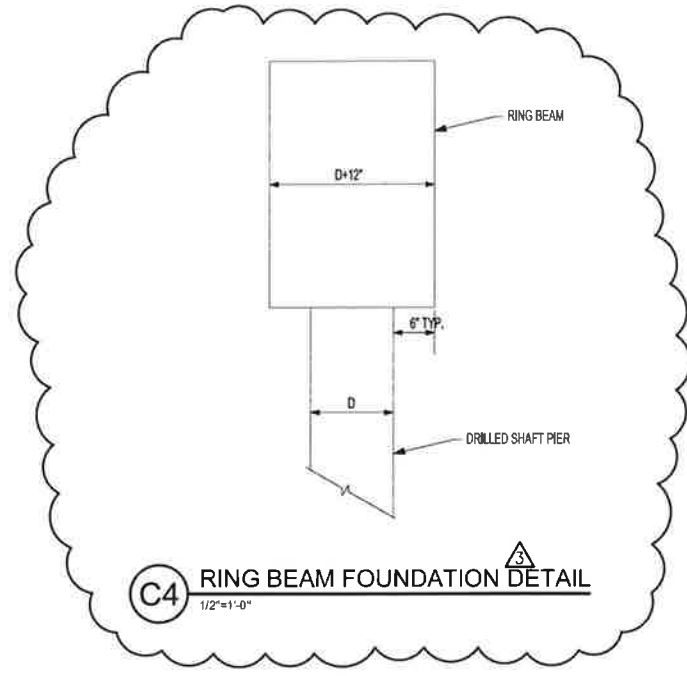
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10/18/2013

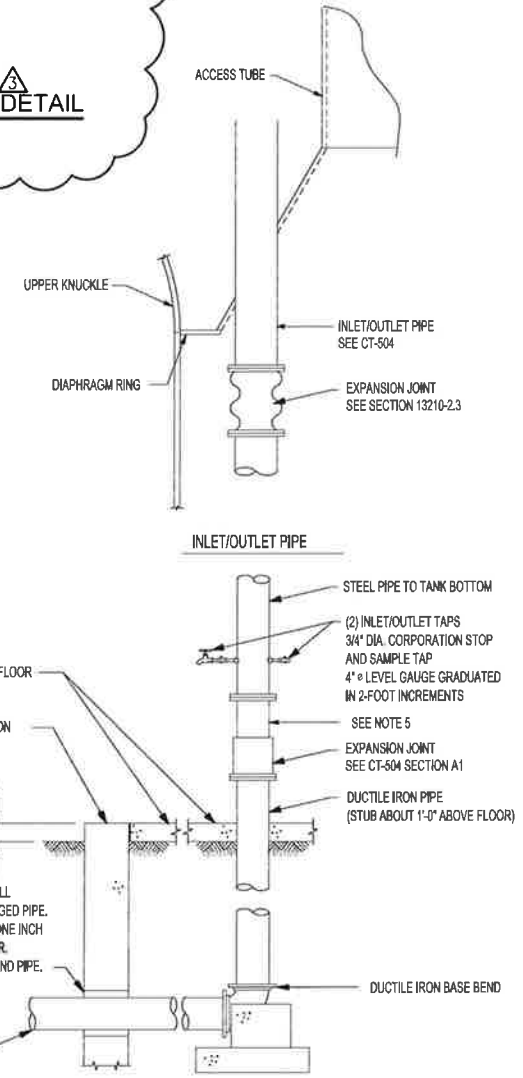
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A1 ELEVATED TANK SECTION
1/2"=1'-0"



C4 RING BEAM FOUNDATION DETAIL
1/2"=1'-0"



A4 INLET-OUTLET RISER
1/2"=1'-0"

GENERAL NOTES

1. BASE DIAMETER AND DIMENSIONS OF FOUNDATION SHALL BE DETERMINED BY THE TANK CONTRACTOR. TANK MANUFACTURER AND CONSTRUCTION CONTRACTOR SHALL BE RESPONSIBLE FOR COLLECTING SUBSURFACE SOIL BORINGS, SOIL CLASSIFICATION AND STRENGTH DATA, AND SOIL INVESTIGATION REPORTS AS NEEDED TO COMPLETE FOUNDATION DESIGN. A GENERAL GEOTECHNICAL SOIL EVALUATION REPORT WAS PREPARED FOR THIS PROJECT AND MAY BE REVIEWED AT THE ENGINEER'S OFFICE. THE USE OF THE INFORMATION AND INTERPRETATION OF THE RESULTS WITHIN THE SOIL EVALUATION REPORT IS AT THE SOLE RISK OF THE TANK MANUFACTURE, RETAINED LICENSED PROFESSIONAL ENGINEER AND CONSTRUCTION CONTRACTORS.
2. A GALVANIZED LADDER WITH SAFETY DEVICE MEETING OSHA STANDARDS SHALL BE PROVIDED. SEE SECTION 13210-2.2.C OF THE SPECIFICATIONS. PROVIDE RACK FOR CLIMBING AND HARNESS.
3. SEE SPECIFICATIONS FOR OPTIONAL ACCESSORIES AND ALTERNATE ITEMS.
4. LOCATION AND TYPE OF ACCESSORIES AND EQUIPMENT MAY VARY WITH TANK MANUFACTURER
5. SEE SHEET CT-504 SECTION A1 FOR PIPE AND OTHER DETAILS
6. INSULATE ANY PIPING <2".



PARKHILL SMITH & COOPER



**EL PASO COUNTY
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ISSUING OFFICE: EL PASO PROJECT NO: 5005.11

ELEVATED TANK DETAILS

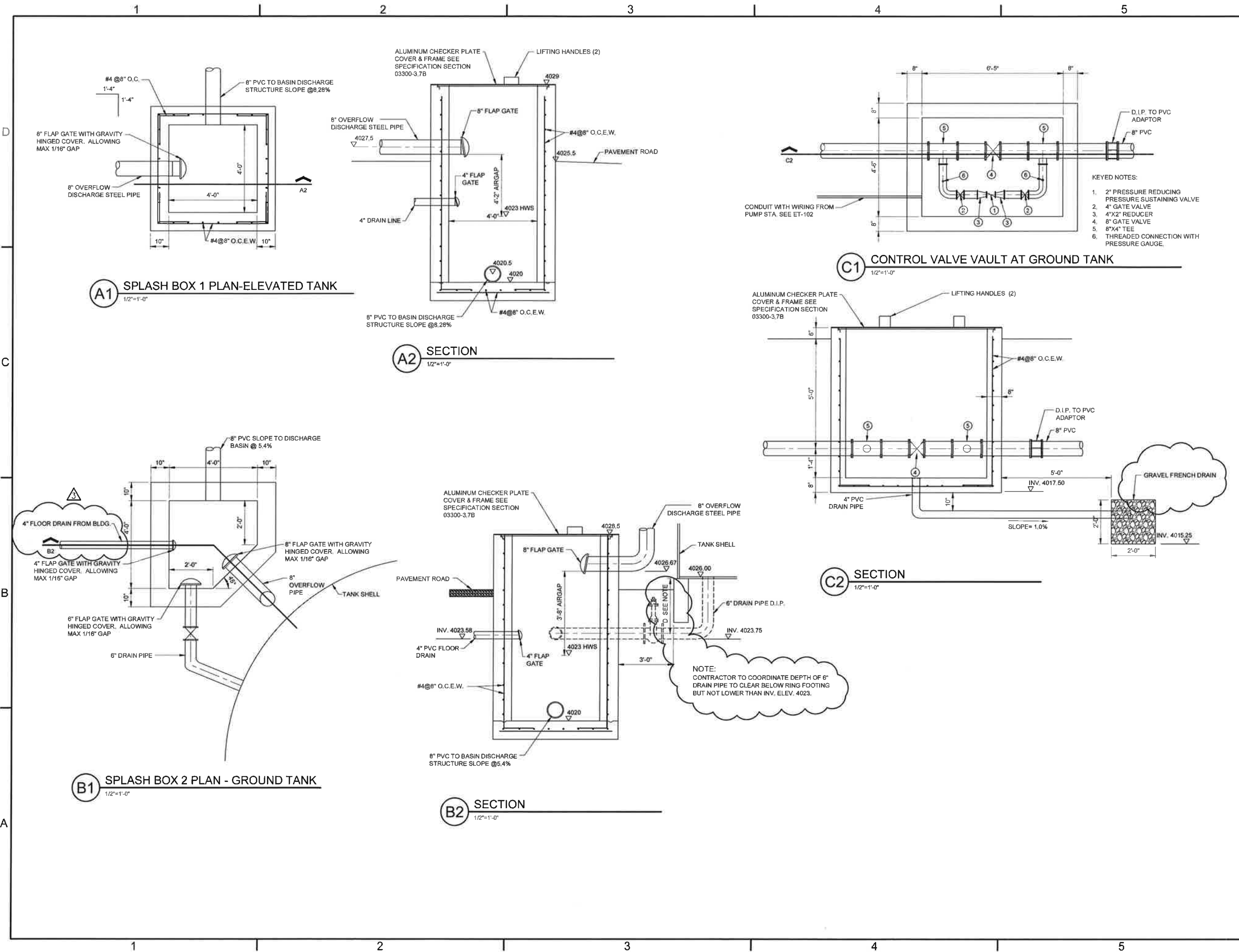
CT-503R

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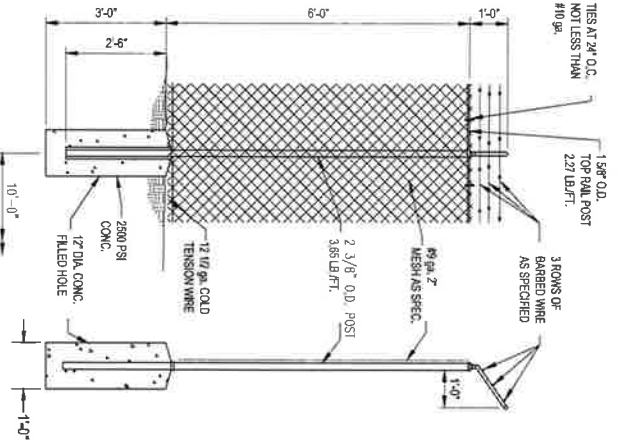
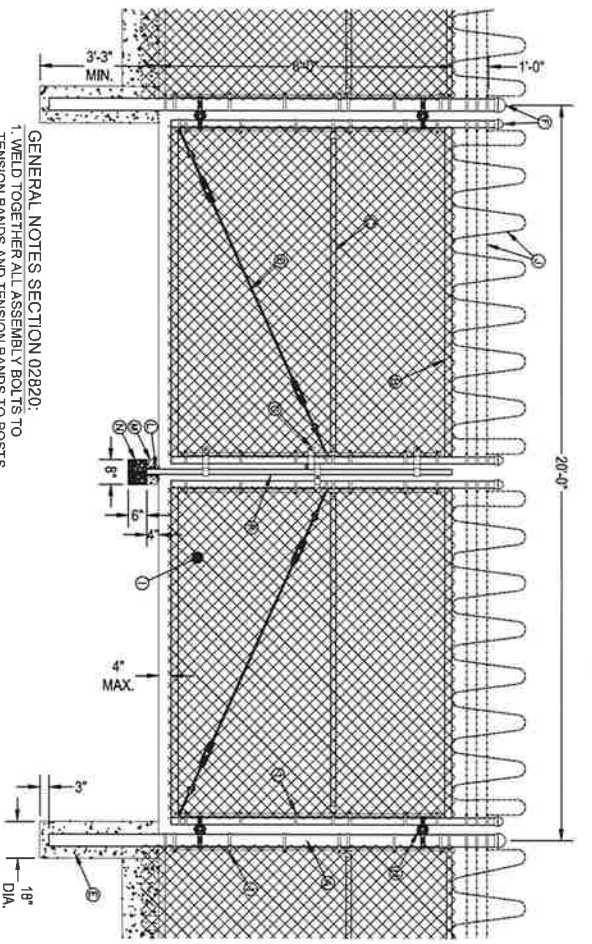
PSC
 PARKHILL SMITH & COOPER
 HUMBERTO JUAREZ
 50872
 PROFESSIONAL ENGINEER
 STATE OF TEXAS
 10-28-2013

**EL PASO COUNTY
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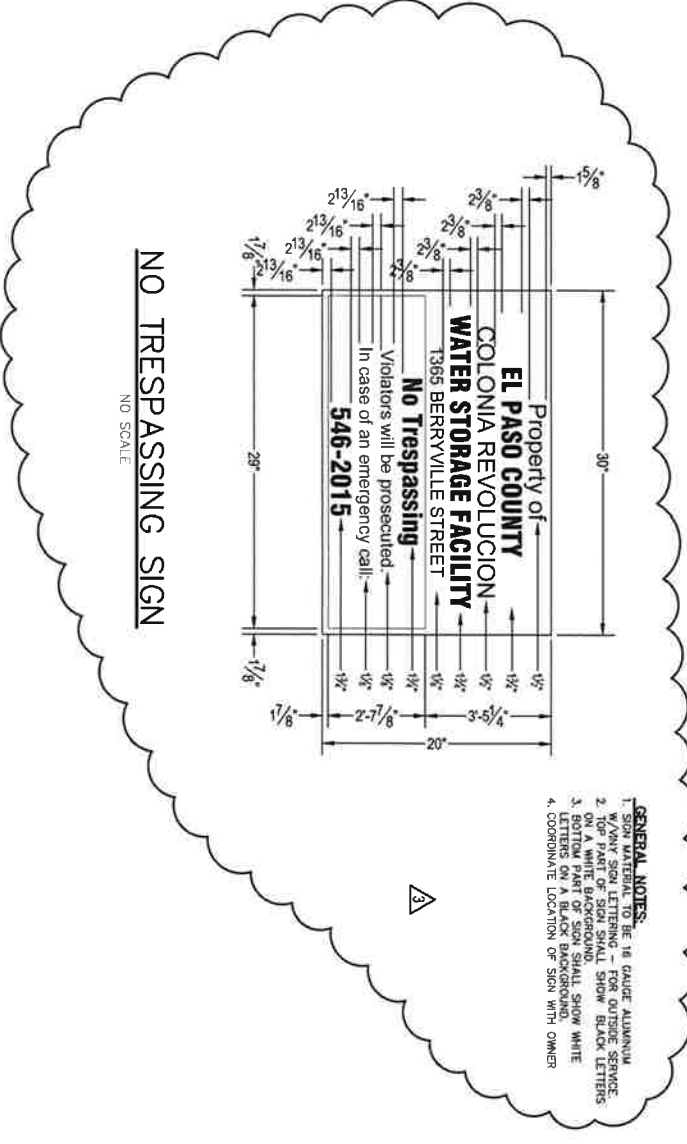
**SPLASH BOXES AND
 VALVE BOX DETAILS**



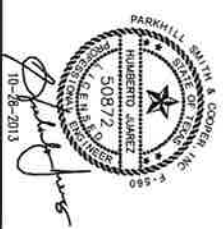
CHAIN LINK FENCE DETAIL
 NO SCALE

CONSTRUCTION KEY NOTES:

- A. 4" O.D. PIPE (8.11 LB/FT.)
- B. 1 1/2" O.D. PIPE (3.65 LB/FT.) GATE FRAME WELDED AT ALL JOINTS TO MAKE A SOLID FRAME
- C. 1 1/2" O.D. PIPE (2.27 LB/FT.)
- D. 3/4" DIA. TRUSS ROD WITH TRUSS TIGHTENER (TYP)
- E. 2500 PSI CONCRETE
- F. POST CAP (TYP)
- G. PLUNGER ROD LATCH. BOLTS WELDED TO PREVENT DISASSEMBLY
- H. HINGE ASSEMBLY. BOLTS WELDED TO PREVENT DISASSEMBLY
- I. 9 GA. GALVANIZED 2" CHAIN-LINK FABRIC
- J. BARBED TAPE, 24" COIL WITH 3 ROWS OF 3 STRAND BARBED WIRE
- K. 1 1/2" O.D. PIPE (2.27 LB/FT.) PLUNGER ROD GUIDE
- L. 2 3/8" O.D. PIPE (3.65 LB/FT.) PLUNGER ROD GUIDE
- M. 2500 PSI CONCRETE COLLAR AROUND ROD GUIDE
- N. GRAVEL SWMP



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PARKHILL SMITH & COOPER

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FENCE DETAILS

CT-507R