



PORTCORPUSCHRISTI

Project No. 16-033A

September 13, 2016

TO ALL POTENTIAL BIDDERS

Subject: Addendum No. 3 for Construction of Oil Dock 15

Ladies/Gentlemen:

This addendum is considered part of the Contract Documents and is issued to change, amplify, add to, delete from, or otherwise clarify the Contract Documents. Where provisions of this addendum differ from those of the original Contract Documents and previous addenda, this addendum will take precedence and will govern.

Bidders are hereby notified that they must incorporate this addendum into their bids, and it will be construed that the contractor's bid reflects with full knowledge all items, changes, and modifications to the Contract Documents herein specified. In order for a bid to be considered responsive, Bidders will acknowledge receipt of this addendum in the space provided on the Bid form.

NOTICE TO BIDDERS

The time and date of the bid opening has been changed to **Monday, 1:30 p.m., September 19, 2016.**

VOLUME 1-GENERAL CONTRACT DOCUMENTS, CIVIL, STRUCTURAL, AND DREDGING DRAWINGS AND TECHNICAL SPECIFICATIONS

BID BREAKDOWN

1. The Bid Breakdown has been reissued. Bidders must submit this Revised Bid Breakdown with your Bid. Revisions have been made to items 2.3.02 through 2.3.10, items 3.2.04 through 3.2.06 and item A1.3. See attached.

TECHNICAL SPECIFICATIONS

Section 26 05 27, "Grounding", Part 2 – Products, Paragraph 2.05, "Grounding Electrodes", Subparagraph A. Delete existing sentence and replace with new subparagraph 2.05-A as follows.

2.05 A Ground Rods: ¾-inch diameter, 10 feet long, copper clad plated.

Section 35 20 23, "Dredging", Part 3 – Execution, Paragraph 3.02, "Conduct of Dredging Work". Delete existing paragraph and replace with new subparagraph 3.02-H.2 as follows.



- 3.02 – H.2. The Contractor will not be paid for standby time or provided additional compensation or contract time related to encountering extraneous material during dredging that may be reasonable considered to be ancillary to the work. However, the Owner may consider compensation for standby time, granting additional contract time, or other equitable adjustment, related to encountering extraneous material during dredging wherein the Contractor experiences significant delays and to the extent that the Contractor can document and demonstrate, to the Owner's satisfaction, that a compensable delay and/or project schedule impact has occurred.

DRAWINGS – VOLUME 1

1. The following drawing sheets are reissued. See attached.

Drawing No. 06 - Civil Site Plan – Show location of light poles. Eliminated swale between Station 3+00 and Station 3+50 on north side of site. Show location of firewater monitors.

Drawing No. 06A - Utilities Site Plan – Show location of light poles with location coordinates. Show firewater monitors. Revised details of utility trench. Added callouts for sump tank, electrical building, transformer foundation, and service pole for power supply.

Drawing No. 12. – Site Cross Sections – Revised sections for Station 3+30.7 and Station 3+50 to reflect civil site plan revisions.

2. The following drawing sheets are added. See attached and add to drawing index (es).

Drawing No. 06B – Utilities Details

3. Drawing No. 024 – Dredge Material Placement Areas. Delete callout for “24” CMP” and “36” CMP”. Add new note:

5. Reference drawings have been included in Volume 3, for the Contractor's review and information only, depicting, to the best of the Owner's knowledge, current conditions that exist along the discharge pipeline route.

VOLUME 2-PIPING AND MECHANICAL DRAWINGS AND SPECIFICATIONS

DRAWING – VOLUME 2

1. Drawing No. CCCT – 00245 – Instrument Plan VCU Area, “Reference Drawings:”. Delete the following reference: “CCCT-00269 Instrumentation Installation Details Sht. 2”.

2. Drawing No. CCCT – 00246 – Instrument Plan Piperack Area, “Reference Drawings:”. Delete the following reference: “CCCT-00269 Instrumentation Installation Details Sht. 2”.
3. Drawing No. CCCT – 00247 – Instrument Plan Dock Area, “Reference Drawings:”. Delete the following reference: “ CCCT-00269 Instrumentation Installation Details Sht. 2”.
4. Drawing No. CCCT – 00274 – Underground Duct Bank Details, “Section A-A” and “Section D-D”. Delete callouts for underground conduit for “PVC SCHD-40” and replace with:

“PVC-Coated Rigid Steel”
5. Drawing No. CCCT - 00277 – Miscellaneous Details, Detail E3, Material List Item # 7 conduit clamp B20000 series; and #8 Strut 1-5/8-inch P1000. Delete and replace with the following:
 7. Conduit clamp (316 SS)
 8. Strut, 1-5/8 inch (316 SS)

VOLUME 3-REFERENCE DRAWINGS

DRAWINGS INDEX – VOLUME 3

1. Add the following new reference drawings, provided for the Contractor’s information only. See attached:

Joe Fulton International Trade Corridor Roadway Plan & Profile, Sta 580+50 to Sta 591+50, dated October 16, 2003.

Joe Fulton International Trade Corridor Drainage Structure Plans Sta 585+22 & Sta 591+85, dated February 12, 2004.

Joe Fulton International Trade Corridor Drainage Structure Details Headwall @ Sta 585+22, dated October 15, 2003.

GENERAL CLARIFICATIONS

The following General Clarifications are provided in response to Bidder’s questions. The clarifications provided below have been posted, in part or wholly, on the Port’s EBID website, or have been generally discussed at the Pre-bid Conference, and are herein incorporated into the Contract Documents.

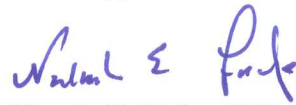
1. Contractor to supply air compressors. See Volume 1 Drawing No. 03 – Civil, Structural and Dredging Notes, “Materials Furnished by Owner and Installed by Contractor” and also Special Conditions, Paragraph 1.13 “Material to be Furnished by Owner”. In the event that information in the bid documents indicate otherwise, this addendum will govern.

To All Potential Bidders
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Project No. 16-033A
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2. This project includes a total of twelve (12) quick release hooks and four (4) capstans in the Base Bid and two (2) additional quick release hooks on the two (2) additional mooring structures in Additive Bid Item 1. Each quick release hook has two (2) each 100 ton hooks, and are manual type. Location of capstans can be seen in Volume 2, sheet CCCT-00249. Refer Volume 1 for marine structure plan (Sheet 08) as well as details for breasting structures, breasting monopiles, monopile mooring structures and dock corners for quick release hooks.

Sincerely,



Natasha E. Fudge, P.E.
Capital Program Manager



NEF/clh

Enclosures

Cc: Sean Strawbridge
David L. Krams
Sarah Garza
David L. Michaelson
Brett Flint
Sonya Lopez-Sosa

(Company Name)

**BID BREAKDOWN SHEET
CONSTRUCTION OF OIL DOCK 15
PORT OF CORPUS CHRISTI AUTHORITY**

BREAKDOWN OF BID PRICES

This breakdown is a part of the Contract Documents and is designed to help the PCCA evaluate the bids to detect possible errors or omissions and to establish values for the individual items of work so that modifications to the contract can be more easily resolved. Please fill out the items listed below so that the total matches the prices shown on the bid. The bidder is invited to include his own estimates if he so chooses.

Description	Design Quantity	Bidder's Quantity	Unit Amount	Total Amount
BASE BID - OIL DOCK				
ITEM NO. 1 - GENERAL				
1.1 Mobilization/Demobilization (excluding dredging)	1 LS		\$	\$
1.2 Bonds and Insurance	1 LS		\$	\$

ITEM NO. 2 - GENERAL CIVIL & SITE IMPROVEMENTS / MECHANICAL & ELECTRICAL

2.1 Sitework

2.1.01 Best Management Practices/StormWater Pollution Prevention Plan implementation and monitoring	1 LS		\$	\$
2.1.02 Site Demolition and Clearing	1 LS		\$	\$
2.1.03 Access Driveways with Culverts	1 LS		\$	\$
2.1.04 14-inch diameter pipe pile foundation system for Vapor Control Unit Skid & Stack/ Skid Blower	2,730 LF		\$	\$
2.1.05 Foundations for AEP Transformer, Cabke Tray, Air Compressor, Lighting	1 LS			

Description		Design Quantity	Bidder's Quantity	Unit Amount	Total Amount
2.1.06	Foundation for Electrical Building	1 LS			
2.1.07	Concrete Riprap	94 CY		\$	\$
2.1.08	Approach Slab	30 CY		\$	\$
2.1.09	Concrete Retaining Wall w/ Traffic Rail	88 LF		\$	\$
2.1.10	Concrete Abutment and Wingwall	1 EA		\$	\$
2.1.11	Parking/Backland Areas w/ Limestone Base	4,775 SY		\$	\$
2.1.12	Pipe Rack Supports Concrete (PS-3, PS-4, PS-5, & PS-6)	28 CY		\$	\$
2.1.13	Structural Steel for Pipe Rack Supports (PS-3, PS-4, PS-5, & PS-6)	1 LS		\$	\$
2.1.14	Security Improvements (perimeter fencing and gates)	1 LS		\$	\$
2.1.15	Topsoil and Seeding	1 LS		\$	\$
2.2 Site Utilities					
2.2.01	Power Distribution	1 LS		\$	\$
2.2.02	Electrical and Lighting	1 LS		\$	\$
2.2.03	Potable Water	1 LS		\$	\$
2.2.04	Firewater, Piping System and Fire Monitors, and Foundations	1 LS		\$	\$
2.2.05	Sump for Storage of Dock Storm Water Runoff	1 EA		\$	\$
2.2.06	Connections and Tie-in to City water, firewater, and gas systems	1 EA		\$	\$
2.3 Mechanical / Electrical / Instrumentation					
2.3.01	Air Compressor with air dryer, filters, auto drain tank, rain canopy and oil water separator mounted on 120 gallon tank, with back-up compressor)	2 LS		\$	\$
2.3.02	30-inch diameter carbon steel pipe with appurtenances	6 LF		\$	\$

Description		Design Quantity	Bidder's Quantity	Unit Amount	Total Amount
2.3.03	24-inch diameter carbon steel pipe with appurtenances	212 LF		\$	\$
2.3.04	16-inch diameter carbon steel pipe with appurtenances	155 LF		\$	\$
2.3.05	14-inch diameter carbon steel pipe with appurtenances	5 LF		\$	\$
2.3.06	12-inch diameter carbon steel pipe with appurtenances	21 LF		\$	\$
2.3.07	8-inch diameter carbon steel pipe with appurtenances	19 LF		\$	\$
2.3.08	6-inch diameter carbon steel pipe with appurtenances	16 LF		\$	\$
2.3.09	4-inch diameter carbon steel pipe with appurtenances	24 LF		\$	\$
2.3.10	3-inch diameter carbon steel pipe with appurtenances	359 LF		\$	\$
2.3.11	2-inch diameter carbon steel pipe with appurtenances	970 LF		\$	\$
2.3.12	1-inch diameter carbon steel pipe with appurtenances	56 LF		\$	\$
2.3.13	3/4-inch diameter carbon steel pipe with appurtenances	57 LF		\$	\$
2.3.14	1/2-inch diameter carbon steel pipe with appurtenances	11 LF		\$	\$
2.3.15	Pig Launcher/Receiver	1 LS		\$	\$
2.3.16	Pumps / Control Valves	1 LS		\$	\$
2.3.17	Sleeper Tees (pipe supports)	1 LS		\$	\$
2.3.18	Electrical and misc. site support work	1 LS		\$	\$
2.3.19	Commissioning, Testing and Integration, and Start Up Costs	1 LS		\$	\$
2.3.20	Scaffolding and temporary work structures.	1 LS		\$	\$
2.3.21	New Electrical Building	1 LS		\$	\$
2.4 Owner-Furnished Items					
2.4.01	Unload and Install New Loading Arms (Owner supplied loading arms)	1 LS		\$	\$

Description	Design Quantity	Bidder's Quantity	Unit Amount	Total Amount
2.4.02 Transport and Reinstall Existing Dock Safety Unit (Owner supplied Dock Safety Unit)	1 LS		\$	\$
2.4.03 Install Vapor Combustion Unit (VCU) (Owner supplied VCU) and instrumentation	1 LS		\$	\$
2.4.04 Relocate Exist dock house and affix to dock	1 LS		\$	\$

ITEM NO. 3 - DOCK FACILITIES

3.1 Dock Components

3.1.01 Bent # 1 - Approachway Abutment Piling (30-inch diameter. Steel)	190 LF		\$	\$
3.1.02 Bent # 1 - Approachway Abutment Cap (concrete)	9 CY		\$	\$
3.1.03 Bent #2 - Approachway Piling (36-inch diameter. Steel w/HDPE Sleeve)	340 LF		\$	\$
3.1.04 Bent #2 - Approachway Concrete Cap	14 CY		\$	\$
3.1.05 Bents # 1 &# 2 Box Beams	400 LF		\$	\$
3.1.06 Approachway Topping Slab (Concrete)	34 CY		\$	\$
3.1.07 Ty T221 Traffic Rail	250 LF		\$	\$
3.1.08 Pipe Piling for Dock Bent #1 (30-inch diameter Steel w/HDPE Sleeve)	1,512 LF		\$	\$
3.1.09 Pipe Piling for Approachway, Dock, Steel Platform, & Pipe Supports (24-inch diameter Steel w/HDPE Sleeve)	2,854 LF		\$	\$
3.1.10 Pilecaps for Dock (concrete)	145 CY		\$	\$
3.1.11 Steel Grate Platform Pilecaps	65 CY		\$	\$
3.1.12 Dock Precast Deck Panels	2,675 LF		\$	\$
3.1.13 Dock Surface (concrete)	70 CY		\$	\$

Description		Design Quantity	Bidder's Quantity	Unit Amount	Total Amount
3.1.14	Steel Grate Platform for Dock Safety Unit	1,140 SF		\$	\$
3.1.15	Marine Pipe rack Supports Conc (PS-1, PS-2)	1 LS		\$	\$
3.1.16	Structural Steel Supports for Dock Safety Unit Platform	1 LS		\$	\$
3.1.17	Standard Pipe Ladder (Outer Breasting Structures)	2 EA		\$	\$
3.1.18	Shoreline Bulkhead	222 LF		\$	\$
3.1.19	Shoreline Revetment	21,375 SF		\$	\$
3.1.20	Catwalks	324 LF		\$	\$

3.2 Mooring and Breasting Structures

3.2.01	Inner Breasting Structures	2 EA		\$	\$
3.2.02	Outer Breasting Structures	2 EA		\$	\$
3.2.03	Mooring Structures	4 EA		\$	\$
3.2.04	Fenders	4 EA		\$	\$
3.2.05	Furnish spare Fender and Panel (delivered, not installed)	2 EA		\$	\$
3.2.06	Quick Release Hooks	12 EA		\$	\$
3.2.07	Powered Capstans	4 EA		\$	\$

ITEM NO. 4 - DREDGING / EARTHWORKS

4.1	Dredge Mobilization / Demobilization	1 EA		\$	\$
4.2	Dredge Pipeline Installation and Maintenance and Dredge Material Placement Area Maintenance	1 LS		\$	\$
4.3	Dredging 750 Foot Slip	76,260 CY			
Total Base Bid					\$

ADDITIVE BID ITEM 1 -TWO ADDITIONAL MONOPILE MOORING STRUCTURES

A1.1	Mooring Structures (concrete)	2 EA		\$	\$
A1.2	Quick Release Hooks	2 EA		\$	\$

Description	Design Quantity	Bidder's Quantity	Unit Amount	Total Amount
A1.3 Catwalks	44 LF		\$	\$
Total Amount - Additive Bid Item 1				\$

ADDITIVE BID ITEM 2 - BARGE ACCESS AND FENDER SYSTEM

A2.1 Barge Access Stairs	1 LS		\$	\$
A2.2 Dock Platform Fendering System (Barge)	83 LF		\$	\$
A2.3 Safety Ladders for Barge Fender System	2 EA		\$	\$
A2.4 Swing down Gangway and Gangway Support	1 EA		\$	\$
Total Amount - Additive Bid Item 2				\$

ADDITIVE BID ITEM 3 - EXPANSION TO AN 1,100 FOOT SLIP

A3.1 Dredge Pipeline Installation and Maintenance and Dredge Material Placement Area Maintenance	1 LS		\$	\$
A3.2 Additional Dredging to extend to 1100 foot slip	32,085 CY		\$	\$
Total Amount - Additive Bid Item 3				\$

ADDITIVE BID ITEM 4 - ALTERNATE DREDGE MATERIAL PLACEMENT AREA

A4.1 Additional cost for disposal of dredge material in DMPA Cell B	1 LS		\$	\$
Total Amount - Additive Bid Item 4				\$

ADDITIVE BID ITEM 5 - DREDGING UNIT COST ADJUSTMENT

A5.1 Overdepth Dredging between -47 foot MLT and -49 foot MLT above and beyond Base Bid and Additive Bid Item 3, if awarded	11,081 CY		\$	\$
Total Amount - Additive Bid Item 5				\$

LIST OF SUBCONTRACTORS AND SUPPLIERS

Please list all intended subcontractors and major suppliers below. The bidder awarded the contract

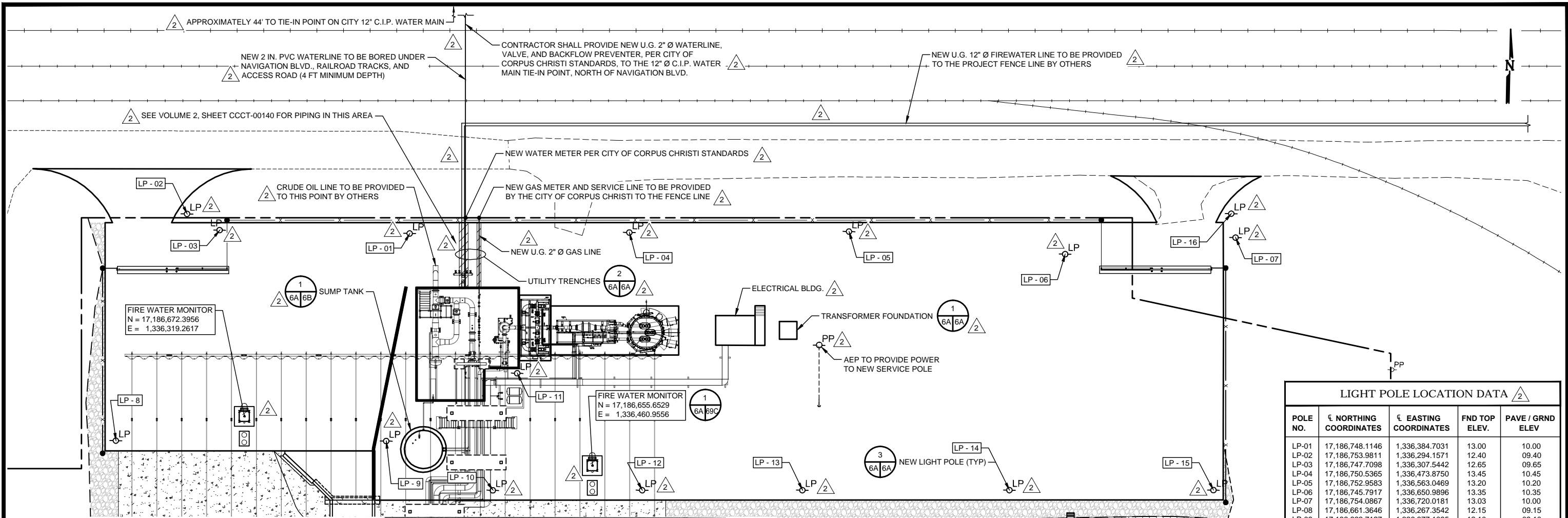
Material Item:

Name of Supplier:

Concrete	
Reinforcing Steel	
Precast Concrete	
Steel Piling	
Mooring Hooks and Capstans	
Concrete Piling	
Structural Steel	
Fenders	
Electrical System	
Piping/Mechanical	
Instrument System	

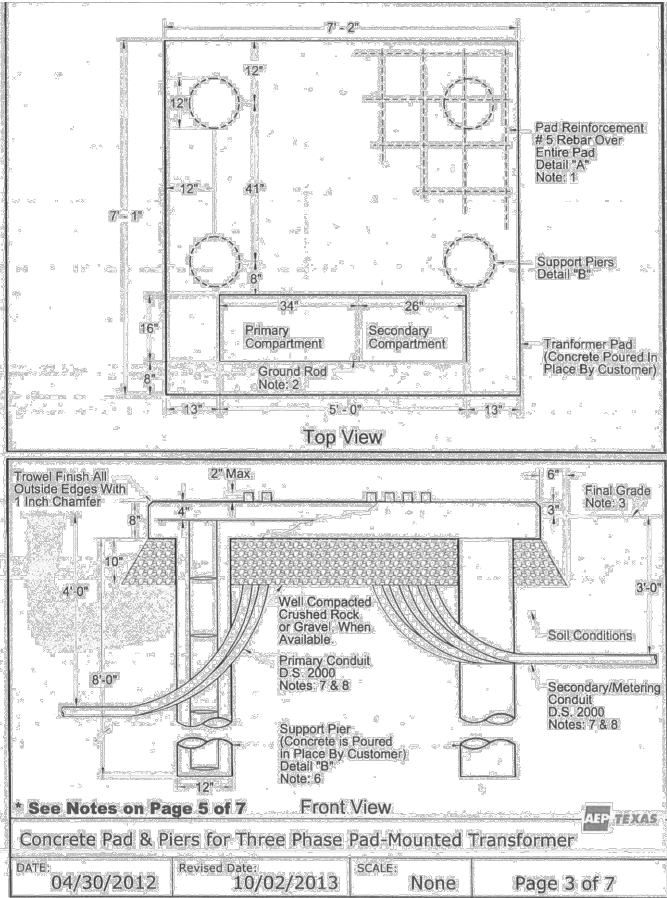
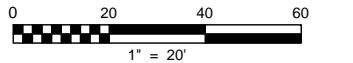
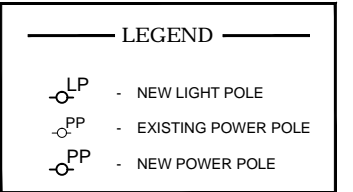
Subcontractors: *(If Any)*

The preceding design quantities are approximate and are not guaranteed. Bidders will prepare their own estimate of work and bid accordingly. Bidders will indicate their own estimate of work under the column labeled "Bidder's Quantity" and calculate the "Total Amount" based on same. If this column is left blank, the bidder will be deemed to be in agreement with the design quantities and no adjustment in contract price will be made for variance.

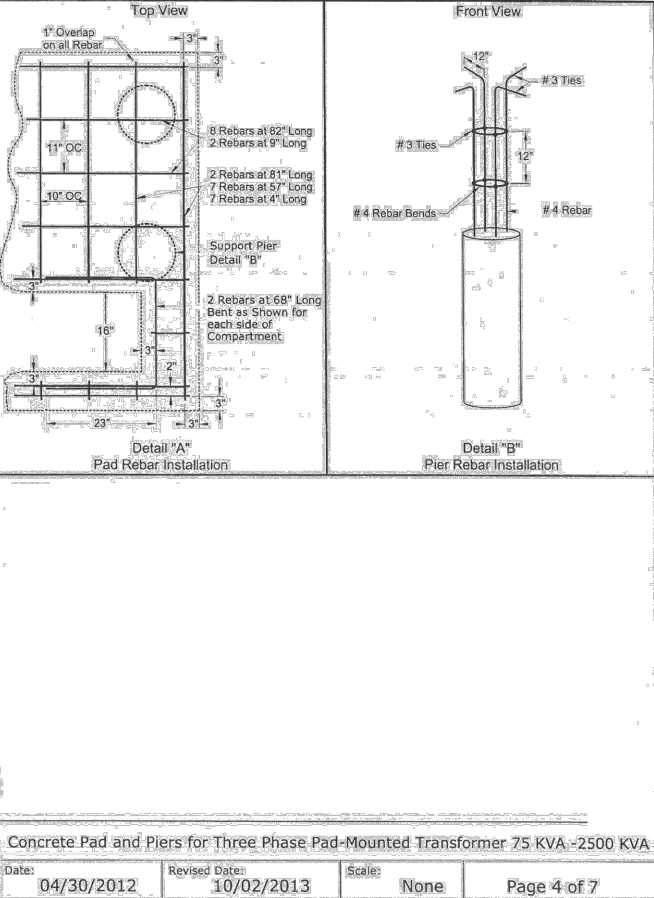


LIGHT POLE LOCATION DATA				
POLE NO.	ℳ NORTHING COORDINATES	ℳ EASTING COORDINATES	FND TOP ELEV.	PAVE / GRND ELEV
LP-01	17,186,748.1146	1,336,384.7031	13.00	10.00
LP-02	17,186,753.9811	1,336,294.1571	12.40	09.40
LP-03	17,186,747.7098	1,336,307.5442	12.65	09.65
LP-04	17,186,750.5365	1,336,473.8750	13.45	10.45
LP-05	17,186,752.9583	1,336,563.0469	13.20	10.20
LP-06	17,186,745.7917	1,336,650.9896	13.35	10.35
LP-07	17,186,754.0867	1,336,720.0181	13.03	10.00
LP-08	17,186,661.3646	1,336,267.3542	12.15	09.15
LP-09	17,186,663.7127	1,336,377.1095	12.10	09.10
LP-10	17,186,644.7140	1,336,420.8399	12.00	09.00
LP-11	17,186,692.4183	1,336,429.6549	12.50	09.50
LP-12	17,186,646.1215	1,336,481.4535	12.00	09.00
LP-13	17,186,647.6317	1,336,546.5081	11.10	08.10
LP-14	17,186,649.5751	1,336,630.5651	11.00	08.00
LP-15	17,186,651.4866	1,336,713.3675	11.00	08.00
LP-16	17,186,763.7532	1,336,718.0453	12.00	09.00

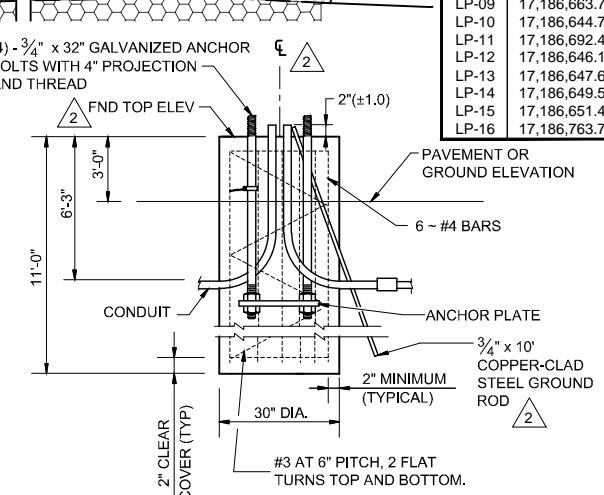
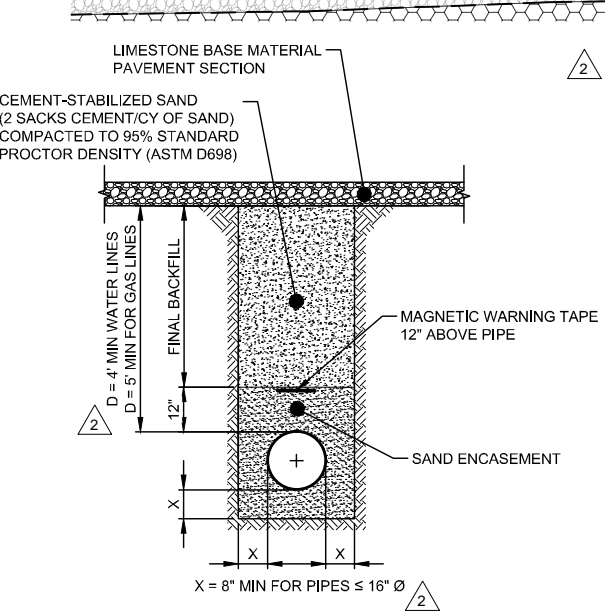
- NOTE:
- ALL LIGHT POLES SHOWN ARE TO BE 30' IN LENGTH.
 - SEE UTILITY DETAILS VOL. 2, SHEETS CCCT-00249 AND CCCT-00284.



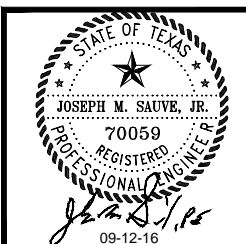
1
6A 6A
REQUIRED AEP FOUNDATION DETAILS
SCALE: N.T.S.



2
6A 6A
TYPICAL UTILITY TRENCH DETAIL
SCALE: N.T.S.



3
6A 6A
LIGHT POLE FOUNDATION DETAILS
SCALE: N.T.S.



NO.	DATE	REVISION
1	09-02-16	ADDENDUM NO. 1
2	09-12-16	ADDENDUM NO. 2



555 N. CARANCAHUA, SUITE 320
CORPUS CHRISTI, TEXAS 78401
TEL: 1.361.888.8100
FAX: 1.361.888.8600
TBPE FIRM NO. F-3699

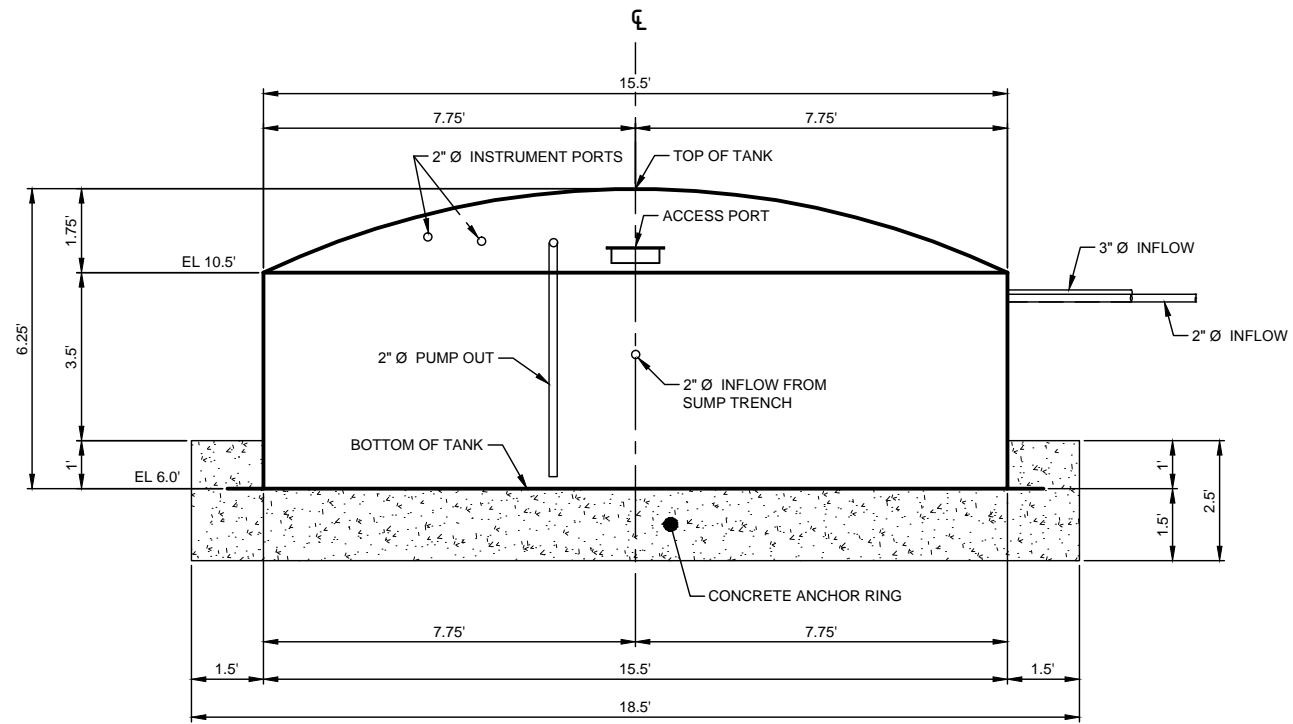
PORT OF CORPUS CHRISTI AUTHORITY

OIL DOCK 15

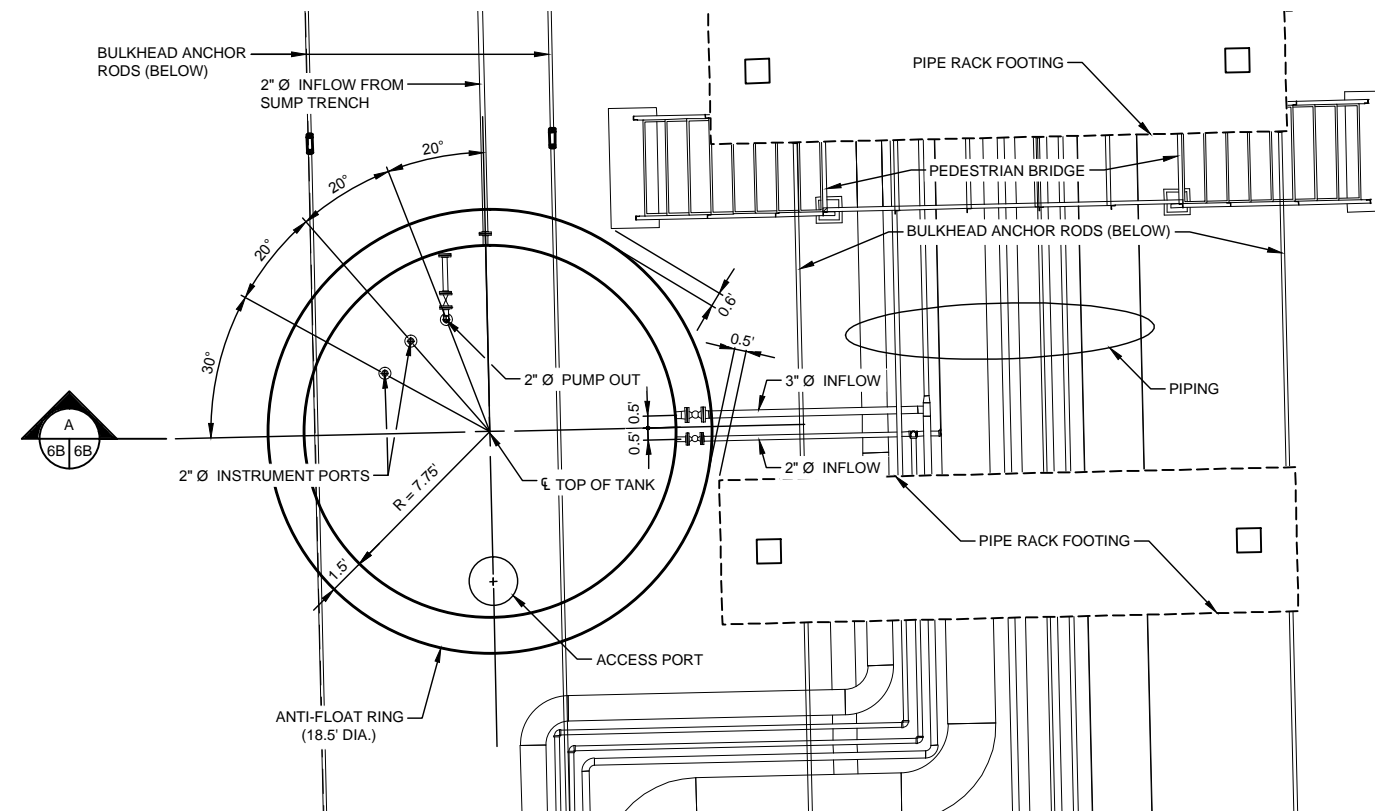
UTILITIES SITE PLAN

DATE: 09/12/16
DWN. BY: JMS
DWG. NO. 16-033A-006A

CH2MHILL-000000000000-V-SN006A.dwg



SECTION - TYPICAL SUMP TANK (SEE REF 1)
SCALE: 1" = 2'



TYPICAL SUMP TANK DETAIL
SCALE: 1" = 4'

W&W Fiberglass Tank CO.

Phone: (806) 669-1128 Fax: (806) 669-1129 Pampa, TX
VERTICAL TANK DRAWING FOR CUSTOMER APPROVAL

CUSTOMER: CH2M
CONTACT: Brian Conner
DATE: 08-12-2016
SALESMAN: Diana Irlbeck
TANK SIZE: 15'-6" x 4'-6", 152bbl CT

MARK	SIZE	FITTING	DESCRIPTION	PROJ.	DEG	ELV. E	COMMENT
A	2"	FLANGE		7"	DNTR	TOP	
B	2"	GUSSET		7"	90	38" UP	
C	2"	GUSSET		7"	180	38" UP	
D	2"	GUSSET		7"	180	14" UP	
E	3"	GUSSET		7"	270	38" UP	
F	2"	FLANGE		7"	180	TOP	
G	24"	MANWAY		8"	0	TOP	12" FROM EDGE
H	2"	FIBERGLASS INSPECTION		2"	135	6" UP	24" FROM EDGE
I	1"	HEAVY D-RING		2"	45	12" DOWN	
J	1"	HEAVY D-RING		2"	225	12" DOWN	
K	18"	ANTI-FLOAT RING				BOTTOM	
L		ANTI-SKID TOP				TOP	

TANK CONSTRUCTION: DUAL WALL
LINER RESIN: ISO
STRUCTURAL RESIN: ISO
3" REINFORCEMENT RIB @ 2'-3" UP

WALL THICKNESS:
SHELL: INNER - 300mils
OUTER - 500mils
BTM: INNER - 300mils
OUTER - 500mils

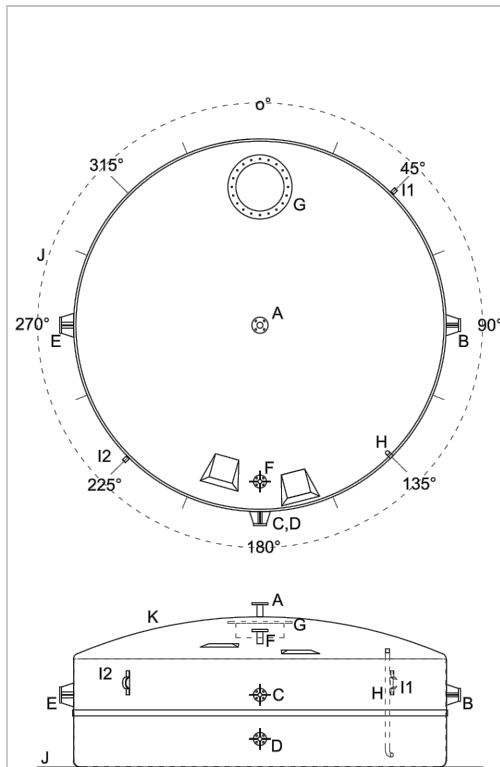
TANK CONTENTS: WASTE OIL /
WASTE WATER
MAX FLUID TEMP: 120° F
MAX PRESSURE, PSI: AMBIENT

CUSTOMER APPROVAL:

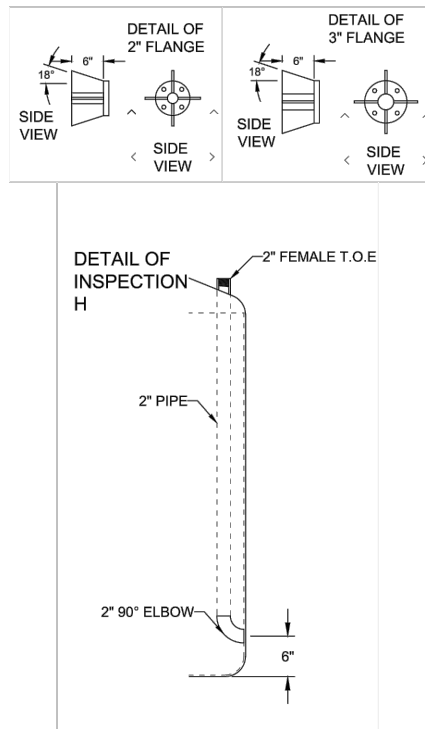
BY: _____

DATE: _____

JUDD WILSON _____ DATE _____



REFERENCE 1
SCALE: N.T.S.



REVISION DATE: 08-12-2016
REVISION: NUM. 1
REFERENCE NUMBER: Q-11364
DRAWN BY: Joel A. Shultz

NOTE:

- THESE SUMP TANK DETAILS REPRESENT A TYPICAL SUMP TANK INSTALLATION FOR THE PHYSICAL DIMENSIONS, AND INFLOW AND OUTFLOW PIPES SHOWN. THE ACTUAL TANK DESIGN MUST BE AS DETERMINED BY THE MANUFACTURER BASED ON THE SOIL CHARACTERISTICS, BUOYANCY FORCES, AND STRUCTURAL PROPERTIES OF THE ACTUAL TANK TO BE INSTALLED.
- REFERENCE 1 IS FOR REFERENCE ONLY. THE TANK TO BE USED SHALL MEET THE REQUIREMENTS SHOWN, BUT MAY BE AN APPROVED EQUAL FROM ANY OTHER MANUFACTURER.

PCCA PROJ. # 16-033A

ch2m:

555 N. CARANCAHUA, SUITE 320
CORPUS CHRISTI, TEXAS 78401
TEL: 1.361.888.8100
FAX: 1.361.888.8600
TBPE FIRM NO. F-3699

SHEET 06B OF 70

PORT OF CORPUS CHRISTI AUTHORITY

OIL DOCK 15

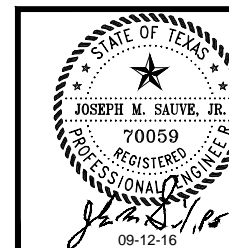
SCALE: NOTED

DWN. BY: JMS

UTILITIES DETAILS

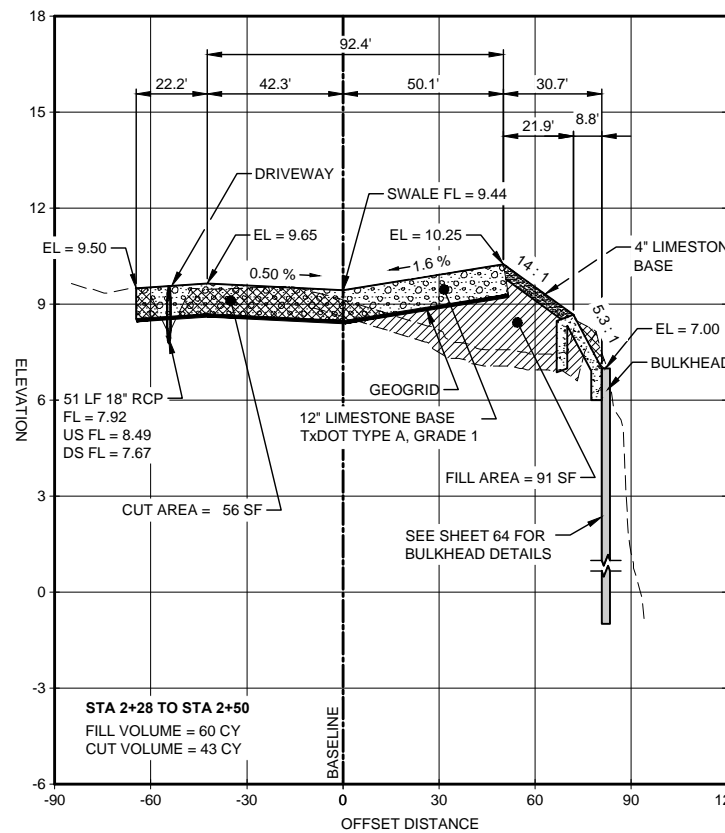
DATE: 09/12/16

DWG. NO. 16-033A-06B

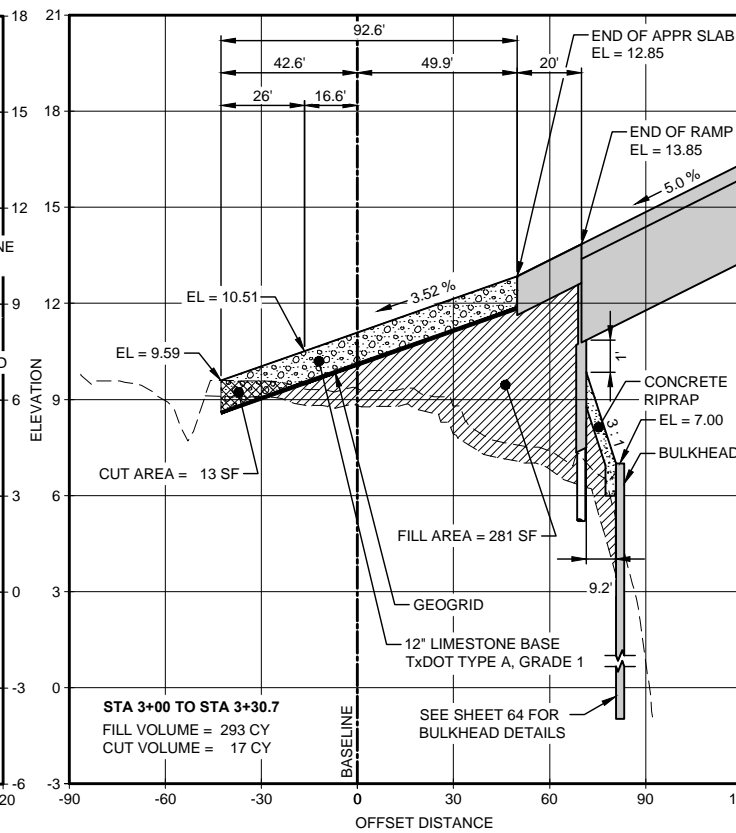


NO.	DATE	REVISION
2	09-12-16	ADDENDUM NO. 2

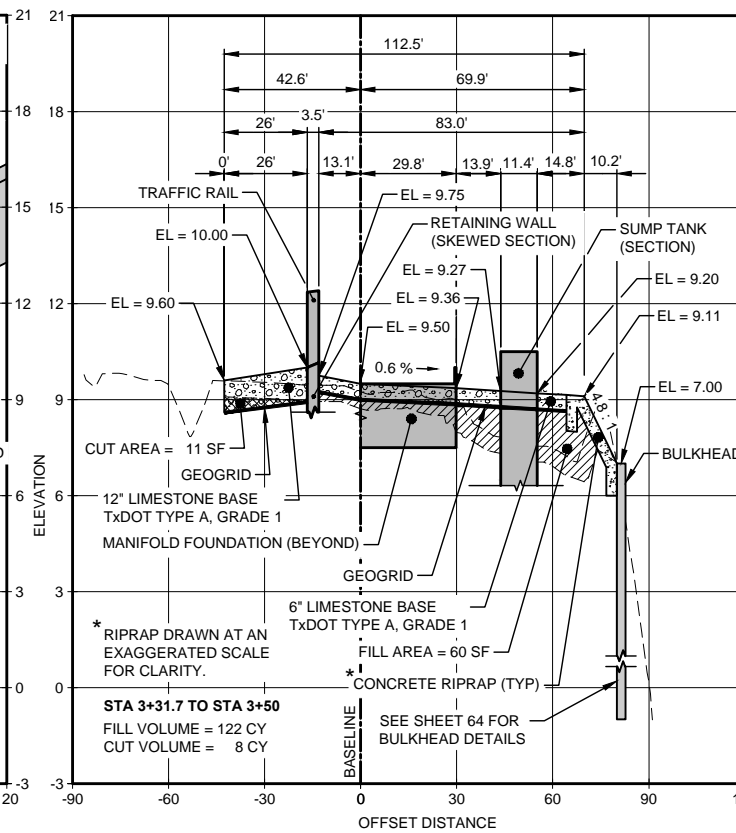




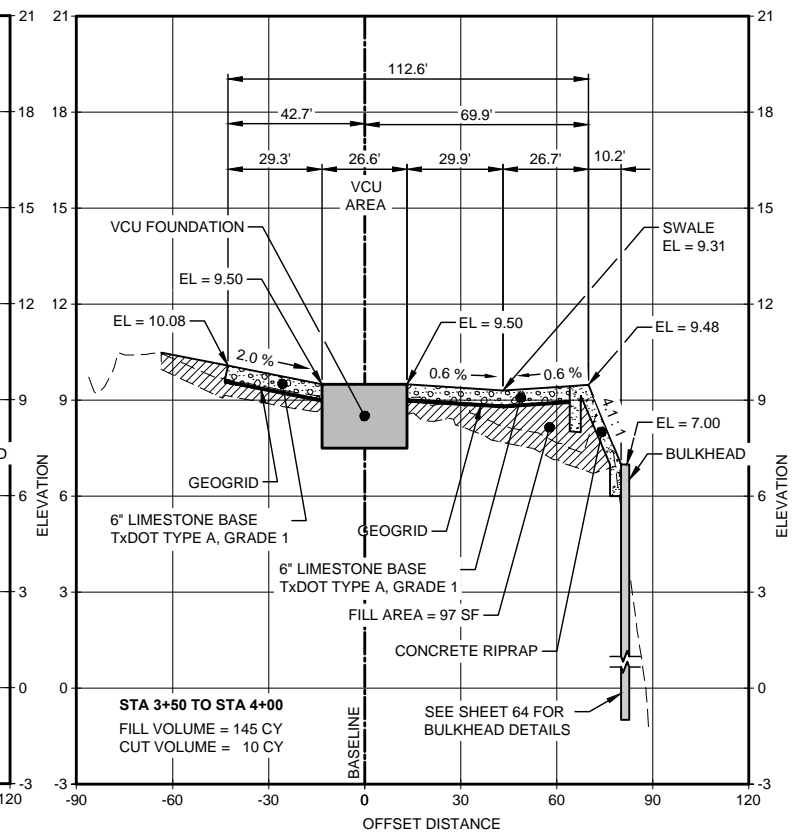
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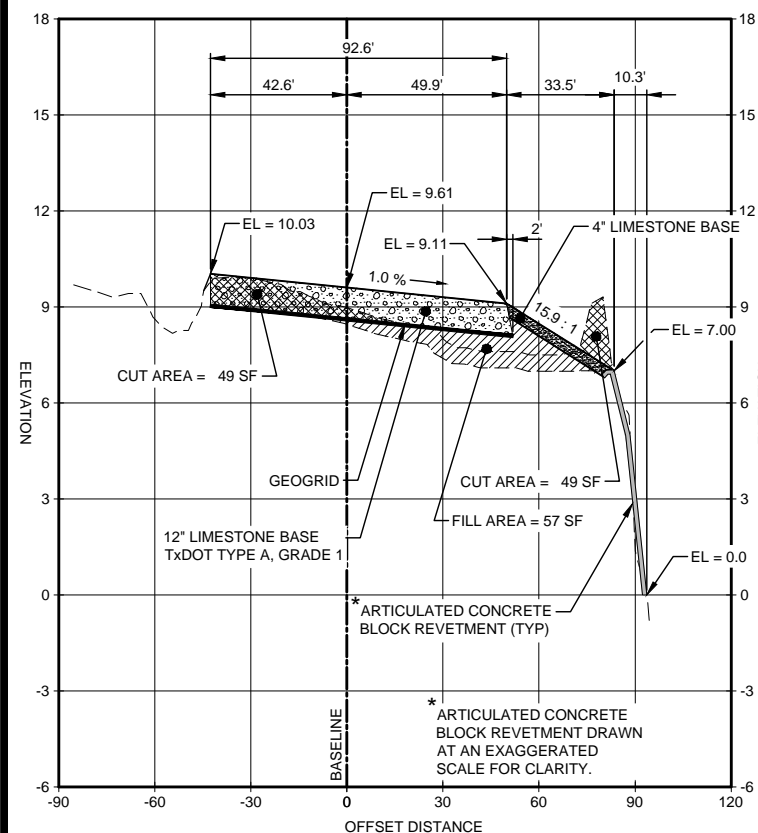
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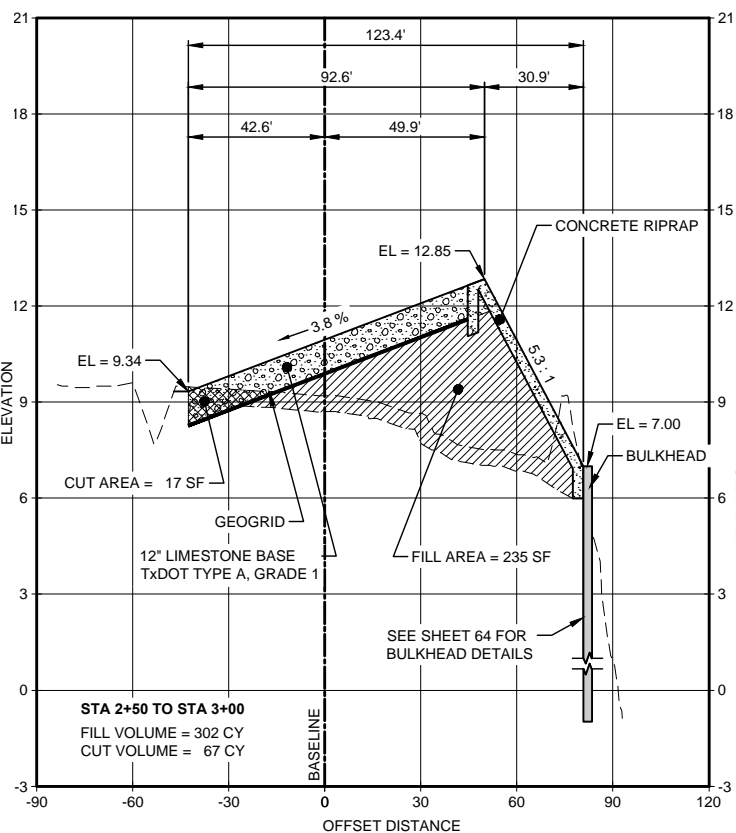
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4+00



2+28

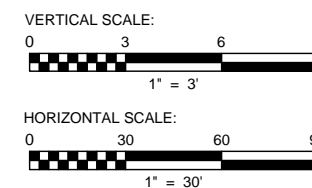


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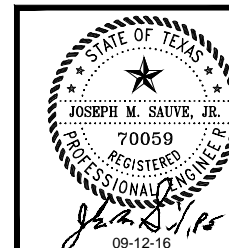
NOTE:
HORIZONTAL ALIGNMENT STATIONING IS SHOWN ON SHEET 6.

LEGEND

- FILL AREA
 - CUT AREA



PCCA PROJ. # 16-033A



NO.	DATE	REVISION
A	03-28-16	ISSUED FOR REVIEW
B	06-07-16	ISSUED FOR REVIEW
C	07-28-16	ISSUED FOR REVIEW
D	08-25-16	ISSUED FOR BID
1	09-02-16	ADDENDUM NO. 1
2	09-12-16	ADDENDUM NO. 2



ch2m

555 N. CARANCAHUA, SUITE 320
CORPUS CHRISTI, TEXAS 78401
TEL: 1.361.888.8100
FAX: 1.361.888.8600
TBPE FIRM NO. F-3699

SHEET 12 OF 70

PORT OF CORPUS CHRISTI AUTHORITY

OIL DOCK 15

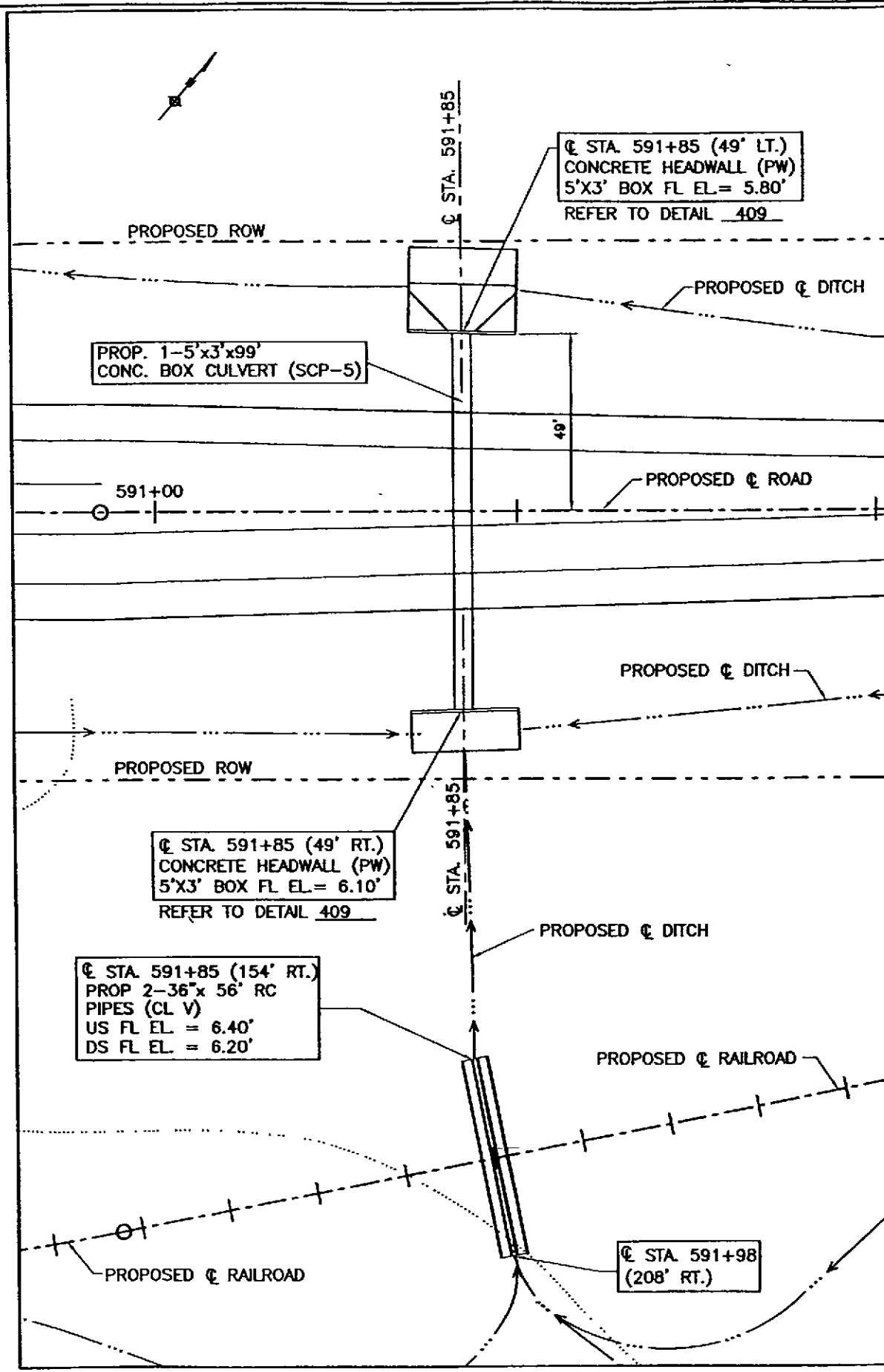
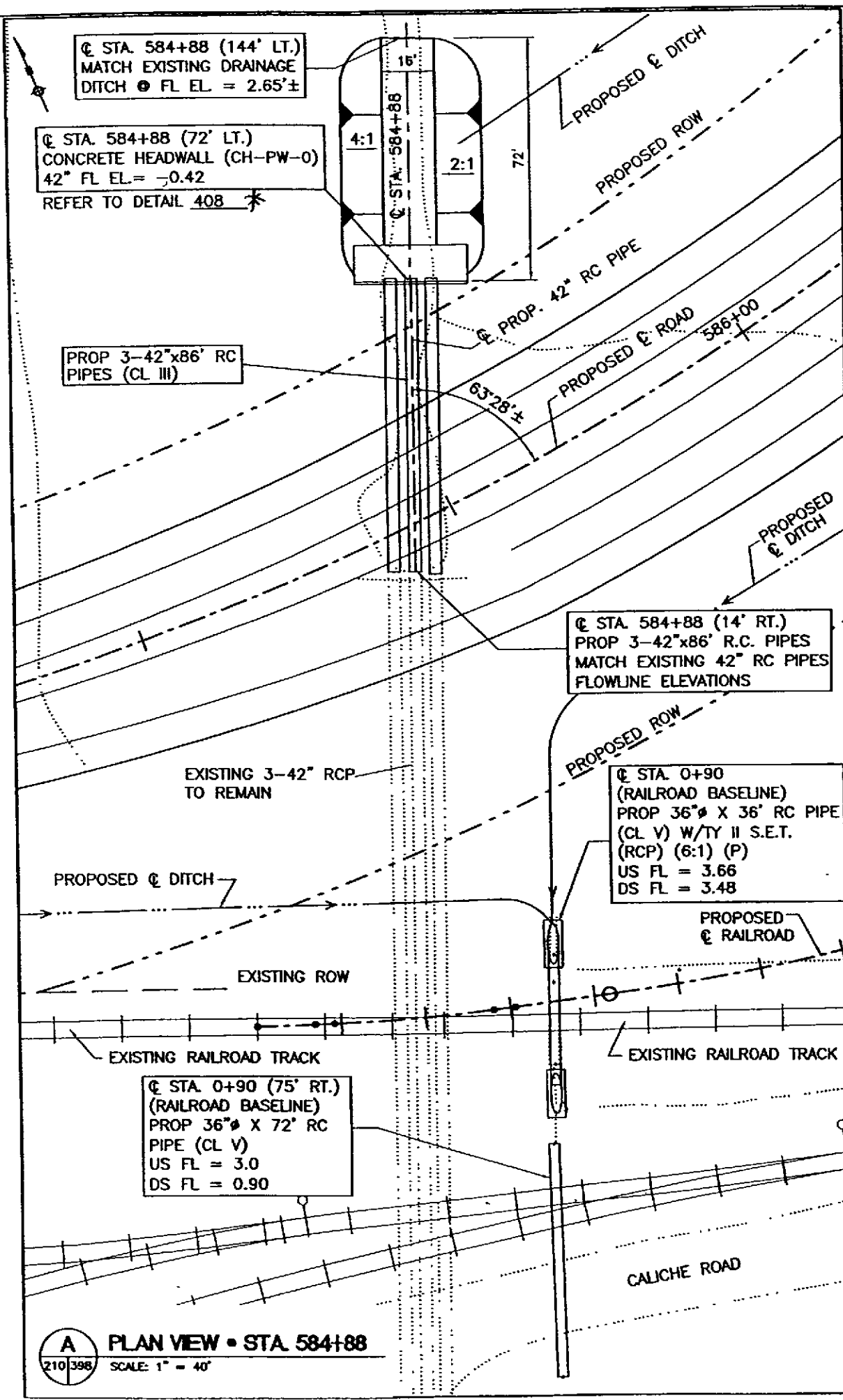
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DWN. BY: JMS	DWG. NO. 16-033A-012

SITE CROSS SECTIONS

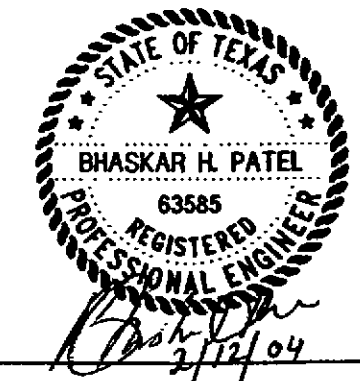
CRS10 ATTACHED XREFS X=FULLON X=JULIK X=TOP202

2020 DOWNS P&C 0003-502 CALICHO L000 FINAL SUBMITTAL FINAL J.F.I.C. REV. 10-15-03 CULVERT-08-DU.dwg 1-20 02/10

FILE INFO C:\OFFICE\PLANS



NOTE:
FOR STORM DRAINAGE CULVERT CROSS
SECTIONS REFER TO DRAINAGE
STRUCTURE PROFILE SHEETS.

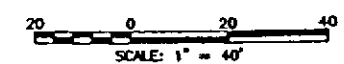


MEI **GOVIND**
 CONSULTING & ENGINEERING
 TEL: 361 289 1385 P.O. BOX 9094
 FAX: 361 289 0712 CORPUS CHRISTI,
 TEXAS 78469



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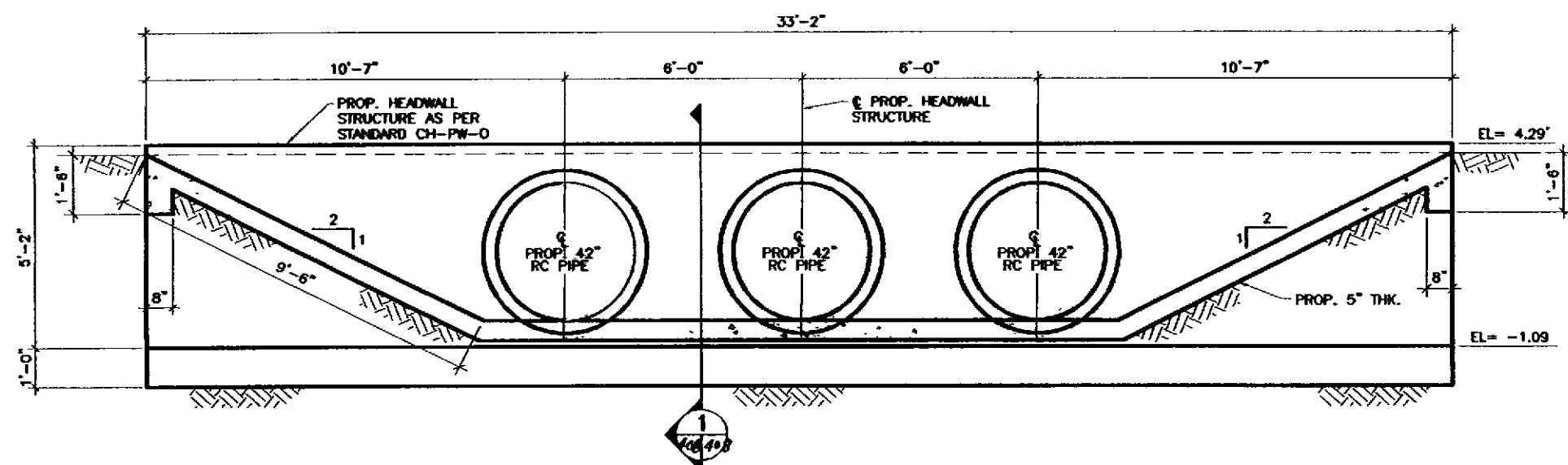
**JOE FULTON INTERNATIONAL
 TRADE CORRIDOR**
 DRAINAGE STRUCTURE PLANS
 STA 585+22 & STA 591+85



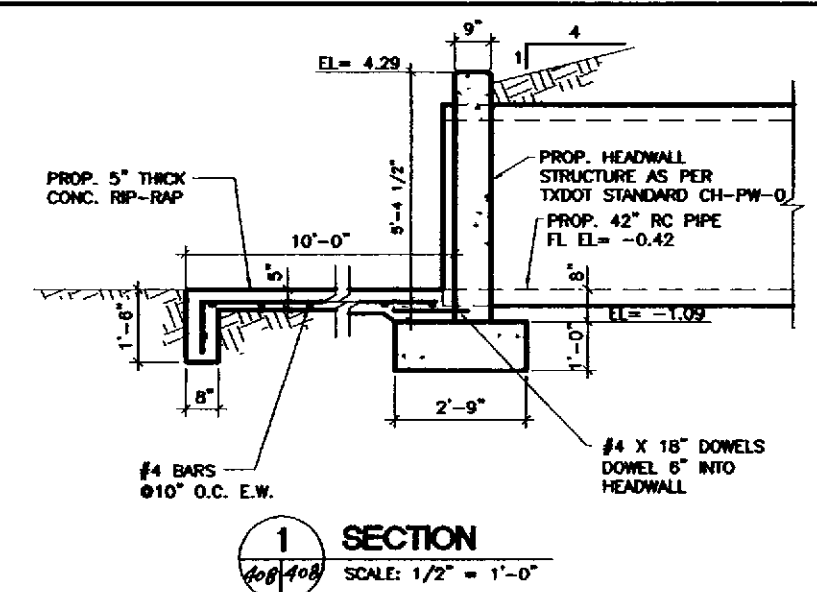
SHEET 6 OF 9 SHEETS

REV NO	FEDERAL PROJECT NO	SHEET NO
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STATE	CRP	COUNTY
TEXAS		NUECES
CONF	SECT	JOB
0818	35	048

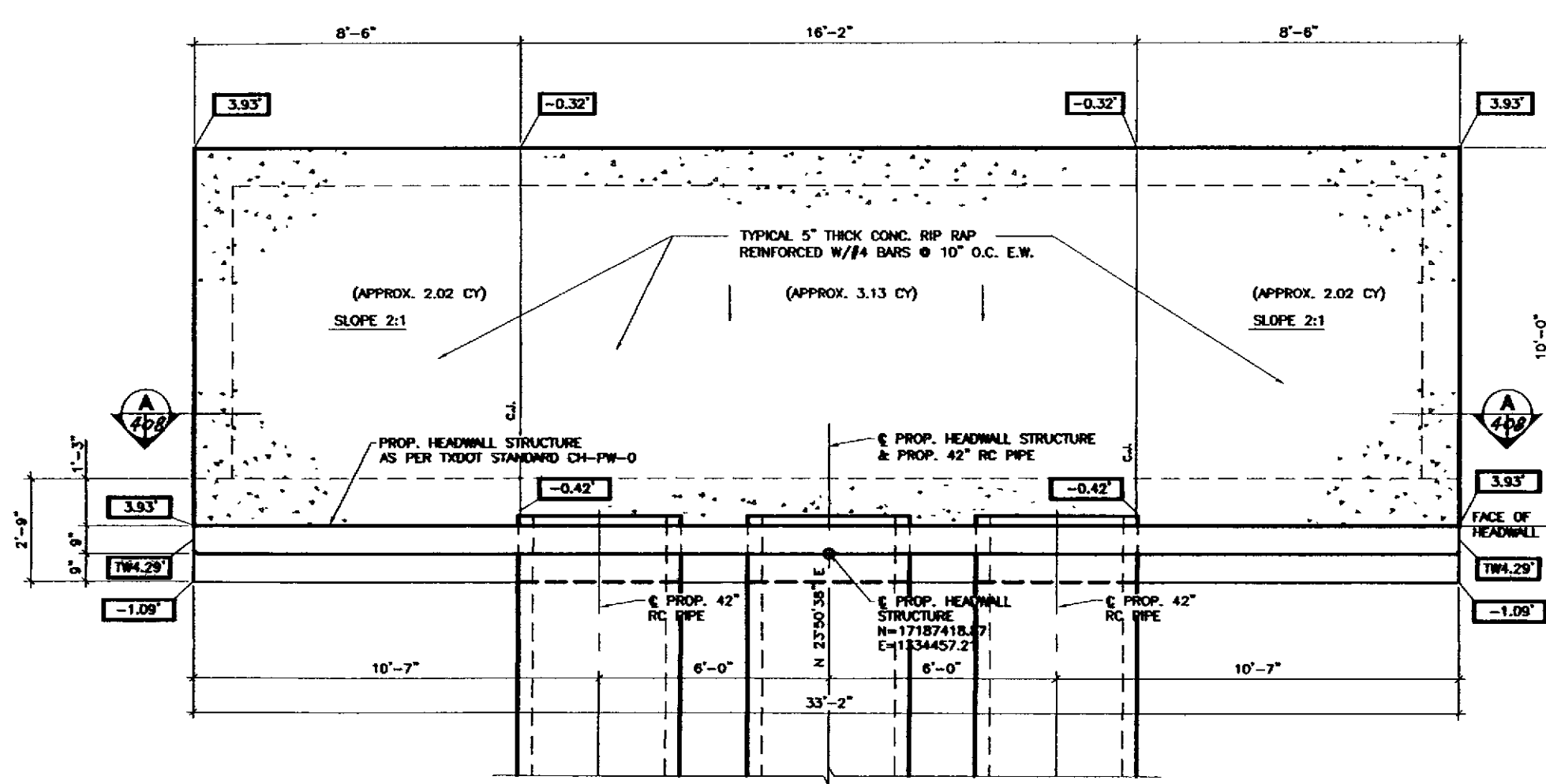
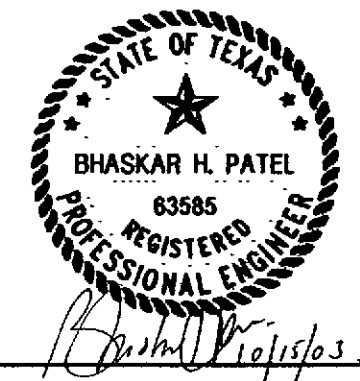
*revised 2-24-04 Addendum



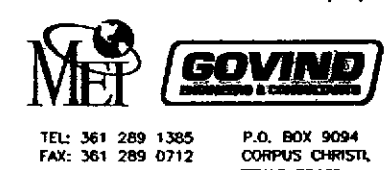
A ELEVATION
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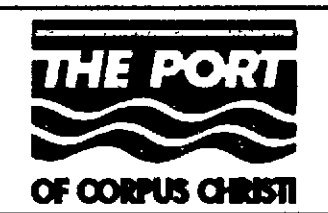
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SCALE: 1/2" = 1'-0"



B PROP. HEADWALL STRUCTURE • STA. 585+22
SCALE: 1/4" = 1'-0"

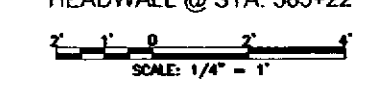


TEL: 361 289 1385 P.O. BOX 9094
FAX: 361 289 0712 CORPUS CHRISTI, TEXAS 78469



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**JOE FULTON INTERNATIONAL
TRADE CORRIDOR**
DRAINAGE STRUCTURE DETAILS
HEADWALL @ STA. 585+22



SHEET OF SHEETS			
FED. PROJ. NO.	FEDERAL PROJECT NO.		SHEET NO.
6	HP (485) 1		408
STATE	STATE DIST. NO.	COUNTY	
TEXAS	CRP	NUECES	
CONT.	SECT.	JOB	HIGHWAY NO.
0916	35	048	



PORTCORPUSCHRISTI

Project No. 16-033A

September 15, 2016

TO ALL POTENTIAL BIDDERS

Subject: Addendum No. 4 for Construction of Oil Dock 15

Ladies/Gentlemen:

This addendum is considered part of the Contract Documents and is issued to change, amplify, add to, delete from, or otherwise clarify the Contract Documents. Where provisions of this addendum differ from those of the original Contract Documents and previous addenda, this addendum will take precedence and will govern.

Bidders are hereby notified that they must incorporate this addendum into their bids, and it will be construed that the contractor's bid reflects with full knowledge all items, changes, and modifications to the Contract Documents herein specified. In order for a bid to be considered responsive, Bidders will acknowledge receipt of this addendum in the space provided on the Bid form.

NOTICE TO BIDDERS

The time and date of the bid opening has been changed to **Tuesday, 2:00 p.m., September 27, 2016.**

VOLUME 1-GENERAL CONTRACT DOCUMENTS, CIVIL, STRUCTURAL, AND DREDGING DRAWINGS AND TECHNICAL SPECIFICATIONS

BID BREAKDOWN

The Bid Breakdown has been reissued. *Bidders must submit this Revised Bid Breakdown with your Bid.* A revision has been made to item 3.1.19 Shoreline Revetment. See attached.

SPECIAL CONDITIONS

Section 1.24 "Construction Materials Testing Schedule" Add new footnote to bottom of existing table:



222 Power Street 78401 | PO Box 1541 78403 | Corpus Christi, Texas | T 361 882 5633 F 361 882 7110 | portofcorpuschristi.com

“Dynamic Pile Tests on two outer breasting dolphin piles shall be performed on the front row piles having a 1:12 batter.”

DRAWINGS – VOLUME 1

1. The following drawing sheets are reissued. See attached.

Drawing No. 06B - Utilities Details – Added Detail No. 2 "Typical Pipeline Crossing Details" illustrating pipe casing requirements.

Drawing No. 011 - Site Details - Added Callouts for TYM-HYD-B Gate Operator to Detail 1 "Sliding Gate Detail". Added new Detail No. 7 "Typical Gate Operator - Plan". Added new Detail No. 8 "Typical Gate Operator - Elevation" as well as new Section A "Section at Operator".

1. Drawing No. 012 – Site Cross Sections. Add new note:

“GENERAL NOTES:

1. Fill material shall be free of all organics and debris and consist of low expansive (inert) soil such as silty or sandy (lean) clay. Fill material shall have plasticity index (PI) between 7% and 17%. At least 20% of the material (by weight) shall pass the No. 200 sieve. The fill material shall not have any particles greater than 2 ½”.

GENERAL CLARIFICATIONS

The following General Clarifications are provided in response to Bidder’s questions. The clarifications provided below have been posted, in part or wholly, on the Port’s EBID website, or have been generally discussed at the Pre-bid Conference, and are herein incorporated into the Contract Documents.

1. The EMCO Loading Arms should be flushed and cleaned per the same requirements as the incoming piping designated as Crude Oil service:
 - a. Hydrotest to 427 psig
 - b. Air dry – free of gross liquids
 - c. Nitrogen Blanket piping to 20 psig until placed into service
2. The Sliding gate depicted on, Detail 1, Civil Site Details, calls for a "Rail Drive". The gates shall be automated and the Operator shall be Tymetal Corp TYM-VS, with controls as follows:
 - a. Reversing Device (Loop Detector) – Model PEEK 625X

- b. Digital Keypad (480 codes) – Model AC-480
- c. Card Reader/Programming Deck (3500 Codes) – Model 11-3500
- d. Proximity Card Reader – Model 23-106
- e. Exterior 3 Button Station – Model 3-BXT
- f. Radio Receiver – Model R-3028
- g. Radio Transmitter – Model R-4120

Equipment shall be as noted above or Engineer approved equal.

- 3. The mix design requirements in Technical Specification Section 03 30 00 “Cast-In-Place Concrete” are also to be applied to all pre-cast mix designs.
- 4. The following are the hydrotest, drying, preservation, and testing requirements for each piping system:

CO (Crude Oil Supply)

- Hydrotest to 427 psig
- Air dry – free of gross liquids
- Nitrogen Blanket piping to 20 psig until placed into service

HC (Hydrocarbon Liquids – Miscellaneous)

- Hydrotest to 427 psig
- Air dry – free of gross liquids
- Nitrogen Blanket piping to 20 psig until placed into service

HCV (Hydrocarbon Vapor)

- Hydrotest to 427 psig
- Air dry – free of gross liquids
- Nitrogen Blanket piping to 20 psig until placed into service

DR (Drain Piping – Hydrocarbon service)

- Hydrotest to 427 psig
- Air dry – free of gross liquids
- Nitrogen Blanket piping to 20 psig until placed into service

NG (Natural Gas)

- Hydrotest to 427 psig
- Air dry – free of gross liquids
- Nitrogen Blanket piping to 20 psig until placed into service

IA (Instrument Air)

- Service test with Air at 125 psig
- Air dry – free of gross liquids

DW (Drinking / Potable Water)

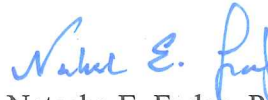
- Service Test with Potable Water at City Supply Pressure

To All Potential Bidders
Page 4
September 15, 2016

Project No. 16-033A
Addendum No. 4

- System Flush free of contaminants until Potable water quality is verified by sampling/testing.

Sincerely,



Natasha E. Fudge, P.E.
Capital Program Manager



NEF/clh

Enclosures

Cc: Sean Strawbridge
David L. Krams
Sarah Garza
David L. Michaelson
Brett Flint
Sonya Lopez-Sosa

(Company Name)

**BID BREAKDOWN SHEET
CONSTRUCTION OF OIL DOCK 15
PORT OF CORPUS CHRISTI AUTHORITY**

BREAKDOWN OF BID PRICES

This breakdown is a part of the Contract Documents and is designed to help the PCCA evaluate the bids to detect possible errors or omissions and to establish values for the individual items of work so that modifications to the contract can be more easily resolved. Please fill out the items listed below so that the total matches the prices shown on the bid. The bidder is invited to include his own estimates if he so chooses.

Description	Design Quantity	Bidder's Quantity	Unit Amount	Total Amount
BASE BID - OIL DOCK				
ITEM NO. 1 - GENERAL				
1.1 Mobilization/Demobilization (excluding dredging)	1 LS		\$	\$
1.2 Bonds and Insurance	1 LS		\$	\$

ITEM NO. 2 - GENERAL CIVIL & SITE IMPROVEMENTS / MECHANICAL & ELECTRICAL

2.1 Sitework

2.1.01 Best Management Practices/StormWater Pollution Prevention Plan implementation and monitoring	1 LS		\$	\$
2.1.02 Site Demolition and Clearing	1 LS		\$	\$
2.1.03 Access Driveways with Culverts	1 LS		\$	\$
2.1.04 14-inch diameter pipe pile foundation system for Vapor Control Unit Skid & Stack/ Skid Blower	2,730 LF		\$	\$
2.1.05 Foundations for AEP Transformer, Cabke Tray, Air Compressor, Lighting	1 LS			

Description		Design Quantity	Bidder's Quantity	Unit Amount	Total Amount
2.1.06	Foundation for Electrical Building	1 LS			
2.1.07	Concrete Riprap	94 CY		\$	\$
2.1.08	Approach Slab	30 CY		\$	\$
2.1.09	Concrete Retaining Wall w/ Traffic Rail	88 LF		\$	\$
2.1.10	Concrete Abutment and Wingwall	1 EA		\$	\$
2.1.11	Parking/Backland Areas w/ Limestone Base	4,775 SY		\$	\$
2.1.12	Pipe Rack Supports Concrete (PS-3, PS-4, PS-5, & PS-6)	28 CY		\$	\$
2.1.13	Structural Steel for Pipe Rack Supports (PS-3, PS-4, PS-5, & PS-6)	1 LS		\$	\$
2.1.14	Security Improvements (perimeter fencing and gates)	1 LS		\$	\$
2.1.15	Topsoil and Seeding	1 LS		\$	\$
2.2 Site Utilities					
2.2.01	Power Distribution	1 LS		\$	\$
2.2.02	Electrical and Lighting	1 LS		\$	\$
2.2.03	Potable Water	1 LS		\$	\$
2.2.04	Firewater, Piping System and Fire Monitors, and Foundations	1 LS		\$	\$
2.2.05	Sump for Storage of Dock Storm Water Runoff	1 EA		\$	\$
2.2.06	Connections and Tie-in to City water, firewater, and gas systems	1 EA		\$	\$
2.3 Mechanical / Electrical / Instrumentation					
2.3.01	Air Compressor with air dryer, filters, auto drain tank, rain canopy and oil water separator mounted on 120 gallon tank, with back-up compressor)	2 LS		\$	\$
2.3.02	30-inch diameter carbon steel pipe with appurtenances	6 LF		\$	\$

Description		Design Quantity	Bidder's Quantity	Unit Amount	Total Amount
2.3.03	24-inch diameter carbon steel pipe with appurtenances	212 LF		\$	\$
2.3.04	16-inch diameter carbon steel pipe with appurtenances	155 LF		\$	\$
2.3.05	14-inch diameter carbon steel pipe with appurtenances	5 LF		\$	\$
2.3.06	12-inch diameter carbon steel pipe with appurtenances	21 LF		\$	\$
2.3.07	8-inch diameter carbon steel pipe with appurtenances	19 LF		\$	\$
2.3.08	6-inch diameter carbon steel pipe with appurtenances	16 LF		\$	\$
2.3.09	4-inch diameter carbon steel pipe with appurtenances	24 LF		\$	\$
2.3.10	3-inch diameter carbon steel pipe with appurtenances	359 LF		\$	\$
2.3.11	2-inch diameter carbon steel pipe with appurtenances	970 LF		\$	\$
2.3.12	1-inch diameter carbon steel pipe with appurtenances	56 LF		\$	\$
2.3.13	3/4-inch diameter carbon steel pipe with appurtenances	57 LF		\$	\$
2.3.14	1/2-inch diameter carbon steel pipe with appurtenances	11 LF		\$	\$
2.3.15	Pig Launcher/Receiver	1 LS		\$	\$
2.3.16	Pumps / Control Valves	1 LS		\$	\$
2.3.17	Sleeper Tees (pipe supports)	1 LS		\$	\$
2.3.18	Electrical and misc. site support work	1 LS		\$	\$
2.3.19	Commissioning, Testing and Integration, and Start Up Costs	1 LS		\$	\$
2.3.20	Scaffolding and temporary work structures.	1 LS		\$	\$
2.3.21	New Electrical Building	1 LS		\$	\$
2.4 Owner-Furnished Items					
2.4.01	Unload and Install New Loading Arms (Owner supplied loading arms)	1 LS		\$	\$

Description	Design Quantity	Bidder's Quantity	Unit Amount	Total Amount
2.4.02 Transport and Reinstall Existing Dock Safety Unit (Owner supplied Dock Safety Unit)	1 LS		\$	\$
2.4.03 Install Vapor Combustion Unit (VCU) (Owner supplied VCU) and instrumentation	1 LS		\$	\$
2.4.04 Relocate Exist dock house and affix to dock	1 LS		\$	\$

ITEM NO. 3 - DOCK FACILITIES

3.1 Dock Components

3.1.01 Bent # 1 - Approachway Abutment Piling (30-inch diameter. Steel)	190 LF		\$	\$
3.1.02 Bent # 1 - Approachway Abutment Cap (concrete)	9 CY		\$	\$
3.1.03 Bent #2 - Approachway Piling (36-inch diameter. Steel w/HDPE Sleeve)	340 LF		\$	\$
3.1.04 Bent #2 - Approachway Concrete Cap	14 CY		\$	\$
3.1.05 Bents # 1 &# 2 Box Beams	400 LF		\$	\$
3.1.06 Approachway Topping Slab (Concrete)	34 CY		\$	\$
3.1.07 Ty T221 Traffic Rail	250 LF		\$	\$
3.1.08 Pipe Piling for Dock Bent #1 (30-inch diameter Steel w/HDPE Sleeve)	1,512 LF		\$	\$
3.1.09 Pipe Piling for Approachway, Dock, Steel Platform, & Pipe Supports (24-inch diameter Steel w/HDPE Sleeve)	2,854 LF		\$	\$
3.1.10 Pilecaps for Dock (concrete)	145 CY		\$	\$
3.1.11 Steel Grate Platform Pilecaps	65 CY		\$	\$
3.1.12 Dock Precast Deck Panels	2,675 LF		\$	\$
3.1.13 Dock Surface (concrete)	70 CY		\$	\$

Description		Design Quantity	Bidder's Quantity	Unit Amount	Total Amount
3.1.14	Steel Grate Platform for Dock Safety Unit	1,140 SF		\$	\$
3.1.15	Marine Pipe rack Supports Conc (PS-1, PS-2)	1 LS		\$	\$
3.1.16	Structural Steel Supports for Dock Safety Unit Platform	1 LS		\$	\$
3.1.17	Standard Pipe Ladder (Outer Breasting Structures)	2 EA		\$	\$
3.1.18	Shoreline Bulkhead	222 LF		\$	\$
3.1.19	Shoreline Revetment	4,780 SF		\$	\$
3.1.20	Catwalks	324 LF		\$	\$

3.2 Mooring and Breasting Structures

3.2.01	Inner Breasting Structures	2 EA		\$	\$
3.2.02	Outer Breasting Structures	2 EA		\$	\$
3.2.03	Mooring Structures	4 EA		\$	\$
3.2.04	Fenders	4 EA		\$	\$
3.2.05	Furnish spare Fender and Panel (delivered, not installed)	2 EA		\$	\$
3.2.06	Quick Release Hooks	12 EA		\$	\$
3.2.07	Powered Capstans	4 EA		\$	\$

ITEM NO. 4 - DREDGING / EARTHWORKS

4.1	Dredge Mobilization / Demobilization	1 EA		\$	\$
4.2	Dredge Pipeline Installation and Maintenance and Dredge Material Placement Area Maintenance	1 LS		\$	\$
4.3	Dredging 750 Foot Slip	76,260 CY			
Total Base Bid					\$

ADDITIVE BID ITEM 1 -TWO ADDITIONAL MONOPILE MOORING STRUCTURES

A1.1	Mooring Structures (concrete)	2 EA		\$	\$
A1.2	Quick Release Hooks	2 EA		\$	\$

Description	Design Quantity	Bidder's Quantity	Unit Amount	Total Amount
A1.3 Catwalks	44 LF		\$	\$
Total Amount - Additive Bid Item 1				\$

ADDITIVE BID ITEM 2 - BARGE ACCESS AND FENDER SYSTEM

A2.1 Barge Access Stairs	1 LS		\$	\$
A2.2 Dock Platform Fendering System (Barge)	83 LF		\$	\$
A2.3 Safety Ladders for Barge Fender System	2 EA		\$	\$
A2.4 Swing down Gangway and Gangway Support	1 EA		\$	\$
Total Amount - Additive Bid Item 2				\$

ADDITIVE BID ITEM 3 - EXPANSION TO AN 1,100 FOOT SLIP

A3.1 Dredge Pipeline Installation and Maintenance and Dredge Material Placement Area Maintenance	1 LS		\$	\$
A3.2 Additional Dredging to extend to 1100 foot slip	32,085 CY		\$	\$
Total Amount - Additive Bid Item 3				\$

ADDITIVE BID ITEM 4 - ALTERNATE DREDGE MATERIAL PLACEMENT AREA

A4.1 Additional cost for disposal of dredge material in DMPA Cell B	1 LS		\$	\$
Total Amount - Additive Bid Item 4				\$

ADDITIVE BID ITEM 5 - DREDGING UNIT COST ADJUSTMENT

A5.1 Overdepth Dredging between -47 foot MLT and -49 foot MLT above and beyond Base Bid and Additive Bid Item 3, if awarded	11,081 CY		\$	\$
Total Amount - Additive Bid Item 5				\$

LIST OF SUBCONTRACTORS AND SUPPLIERS

Please list all intended subcontractors and major suppliers below. The bidder awarded the contract

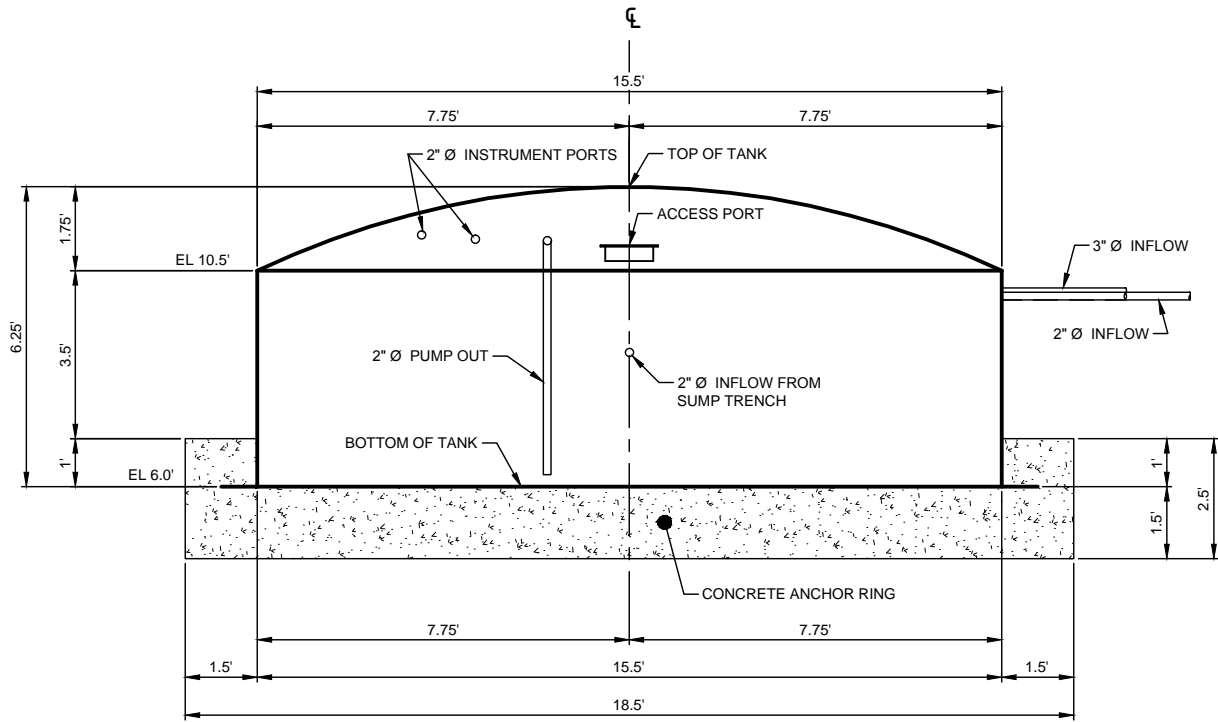
Material Item:

Name of Supplier:

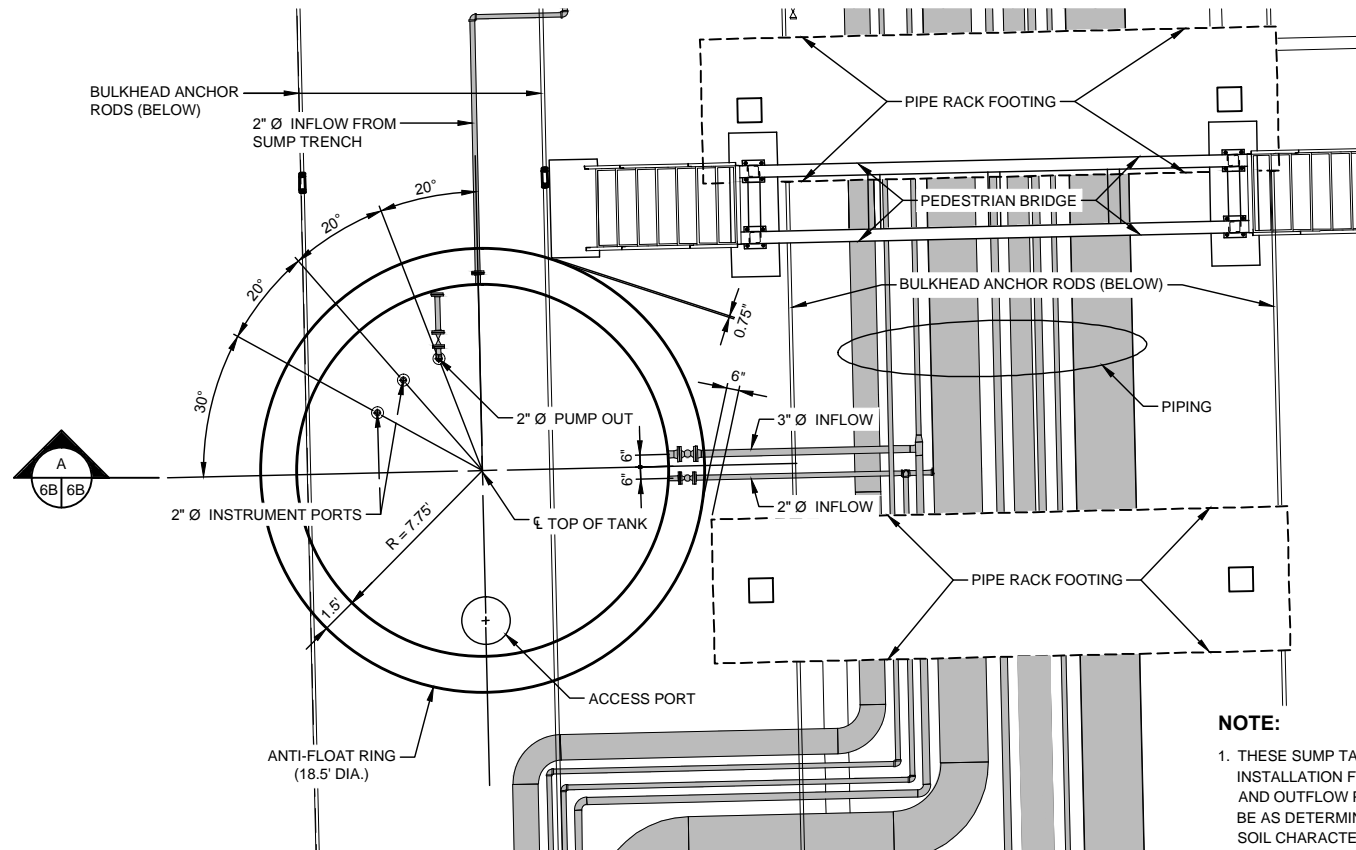
Concrete	
Reinforcing Steel	
Precast Concrete	
Steel Piling	
Mooring Hooks and Capstans	
Concrete Piling	
Structural Steel	
Fenders	
Electrical System	
Piping/Mechanical	
Instrument System	

Subcontractors: *(If Any)*

The preceding design quantities are approximate and are not guaranteed. Bidders will prepare their own estimate of work and bid accordingly. Bidders will indicate their own estimate of work under the column labeled "Bidder's Quantity" and calculate the "Total Amount" based on same. If this column is left blank, the bidder will be deemed to be in agreement with the design quantities and no adjustment in contract price will be made for variance.



SECTION - TYPICAL SUMP TANK (SEE REF 1)
1" = 2'



TYPICAL SUMP TANK DETAIL
1" = 4'

- NOTE:**
1. THESE SUMP TANK DETAILS REPRESENT A TYPICAL SUMP TANK INSTALLATION FOR THE PHYSICAL DIMENSIONS, AND INFLOW AND OUTFLOW PIPES SHOWN. THE ACTUAL TANK DESIGN MUST BE AS DETERMINED BY THE MANUFACTURER BASED ON THE SOIL CHARACTERISTICS, BUOYANCY FORCES, AND STRUCTURAL PROPERTIES OF THE ACTUAL TANK TO BE INSTALLED.
 2. REFERENCE 1 IS FOR REFERENCE ONLY. THE TANK TO BE USED SHALL MEET THE REQUIREMENTS SHOWN, BUT MAY BE AN APPROVED EQUAL FROM ANY OTHER MANUFACTURER.

CUSTOMER: CH2M
CONTACT: Brian Conner
DATE: 08-12-2016
SALESMAN: Diana Irbeck
TANK SIZE: 15'-6" x 4'-6", 152bbl CT

MARK	SIZE	FITTING	DESCRIPTION	PROJ. DES.	ELV. %	COMMENT
A	2"	FLANGE		1"	90	30° UP
B	2"	FLANGE		1"	90	30° UP
C	2"	FLANGE		1"	180	30° UP
D	2"	FLANGE		1"	180	14° UP
E	2"	FLANGE		1"	270	30° UP
F	2"	FLANGE		1"	180	TOP
G	24"		MANWAY	8"	0	TOP
H	2"		FIBERGLASS INSPECTOR'S	2"	135	6° UP
I			HEAVY DURING	2"	45	12° DOWN
J	18"		ANTI-FLOAT RING	2"	125	12° DOWN
K			ANTI-SKID TOP			TOP

TANK CONSTRUCTION: DUAL WALL
LINER RESIN: ISO
STRUCTURAL RESIN: ISO
3" REINFORCEMENT RIB @ 2'-3" UP

WALL THICKNESS:
SHELL: INNER - 300mils
OUTER - 500mils
BTM: INNER - 300mils
OUTER - 500mils

TANK CONTENTS: WASTE OIL /
WASTE WATER
MAX FLUID TEMP: 120° F
MAX PRESSURE, PSI: AMBIENT

CUSTOMER APPROVAL:

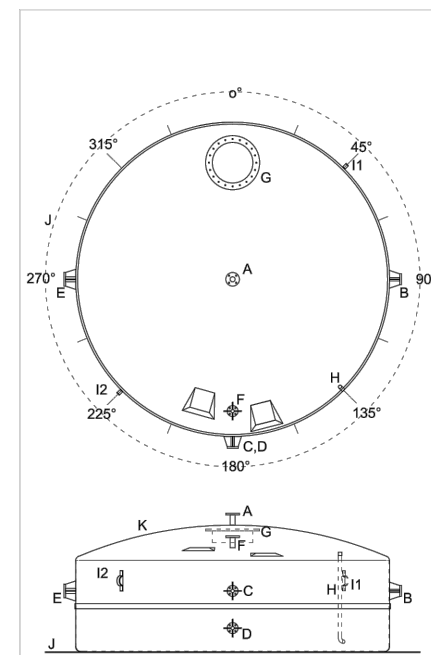
BY: _____

DATE: _____

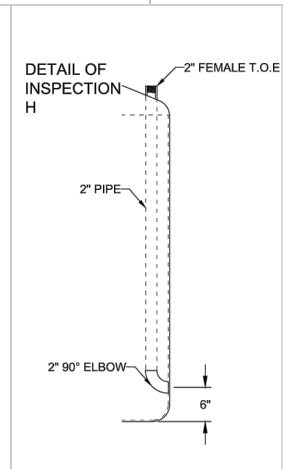
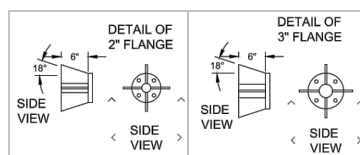
JUDD WILSON _____ DATE: _____

W&W Fiberglass Tank CO.

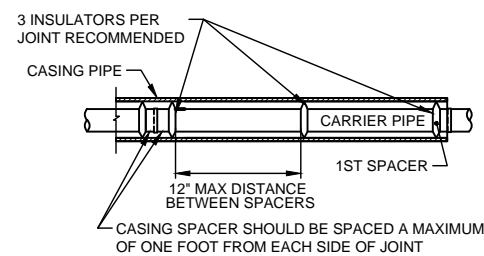
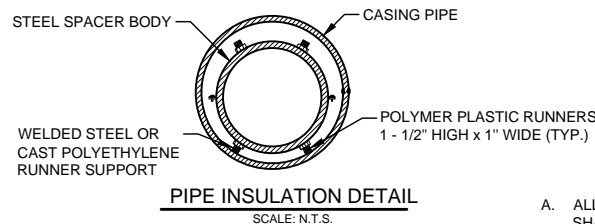
Phone: (806) 669-1128 Fax: (806) 669-1129 Pampa, TX
VERTICAL TANK DRAWING FOR CUSTOMER APPROVAL



REFERENCE 1
N.T.S.



REVISION DATE: 08-12-2016
REVISION: NUM. 1
REFERENCE NUMBER: Q-11384
DRAWN BY: Joel A. Shields



INSULATOR SPACING DETAIL
SCALE: N.T.S.

TYPICAL PIPELINE CROSSING DETAILS
SCALE: N.T.S.

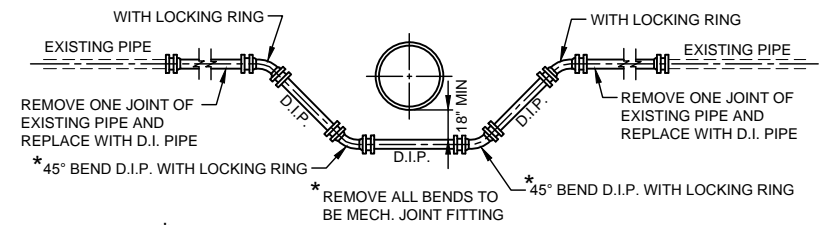


NO.	DATE	REVISION
2	09-12-16	ADDENDUM NO. 2
4	09-15-16	ADDENDUM NO. 4

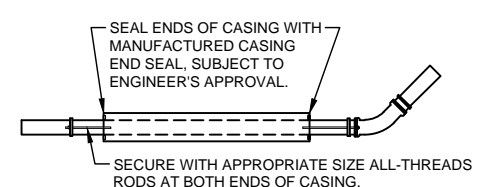


PORT **CORPUSCHRISTI**

PCCA PROJ. # 16-033A



WATERLINE ADJUSTMENT DETAIL
SCALE: N.T.S.



TYPICAL CASING DETAIL
SCALE: N.T.S.



555 N. CARANCAHUA, SUITE 320
CORPUS CHRISTI, TEXAS 78401
TEL: 1.361.888.8100
FAX: 1.361.888.8600
TBPE FIRM NO. F-3699

SHEET 06B OF 70

PORT OF CORPUS CHRISTI AUTHORITY

OIL DOCK 15

SCALE: NOTED

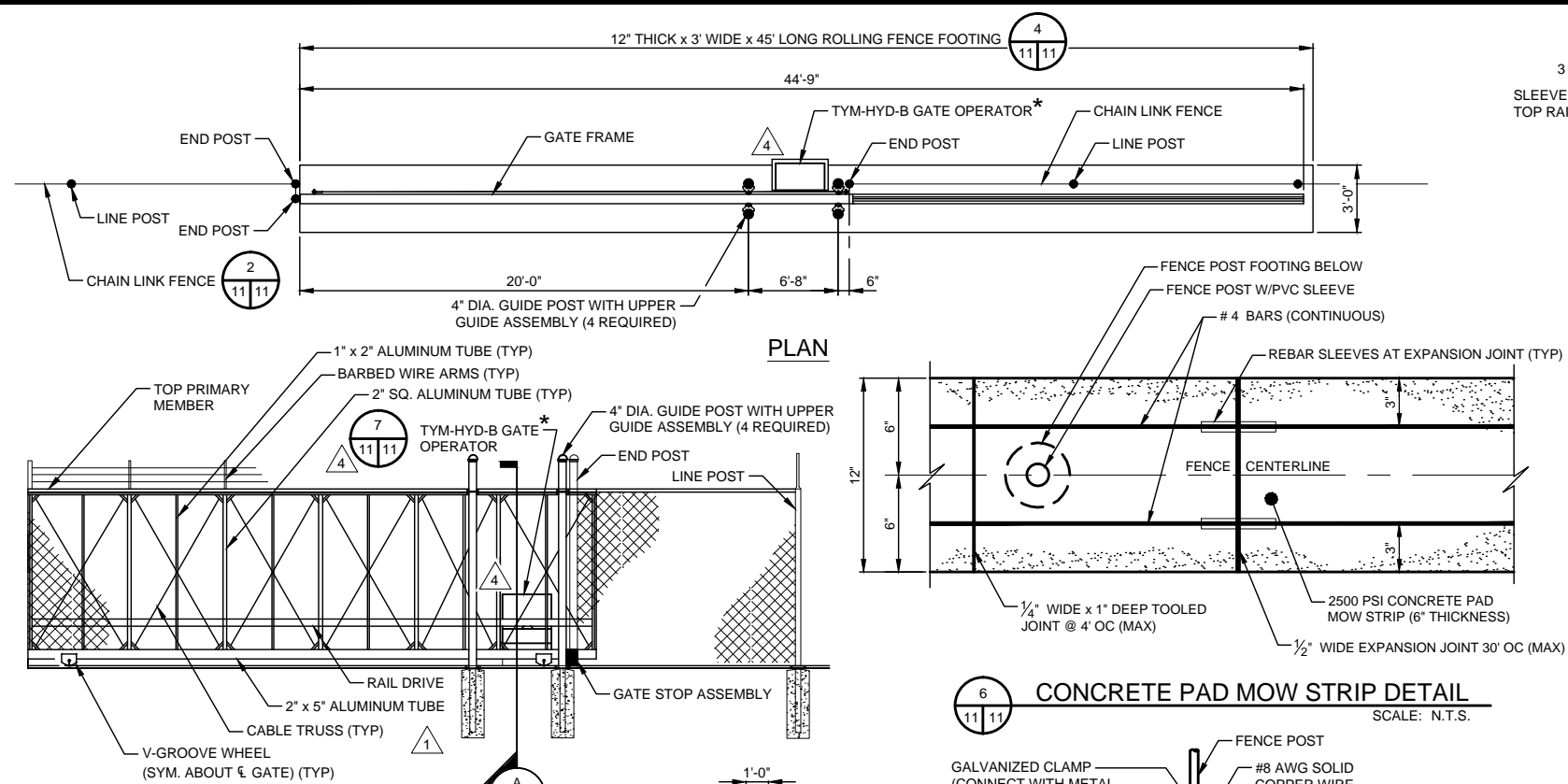
DWN. BY: JMS

UTILITIES DETAILS

DATE: 09/15/16

DWG. NO. 16-033A-06B

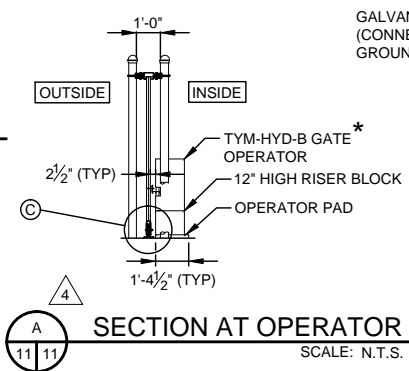
CH2M HILL CONSULTING V-SN011.dwg



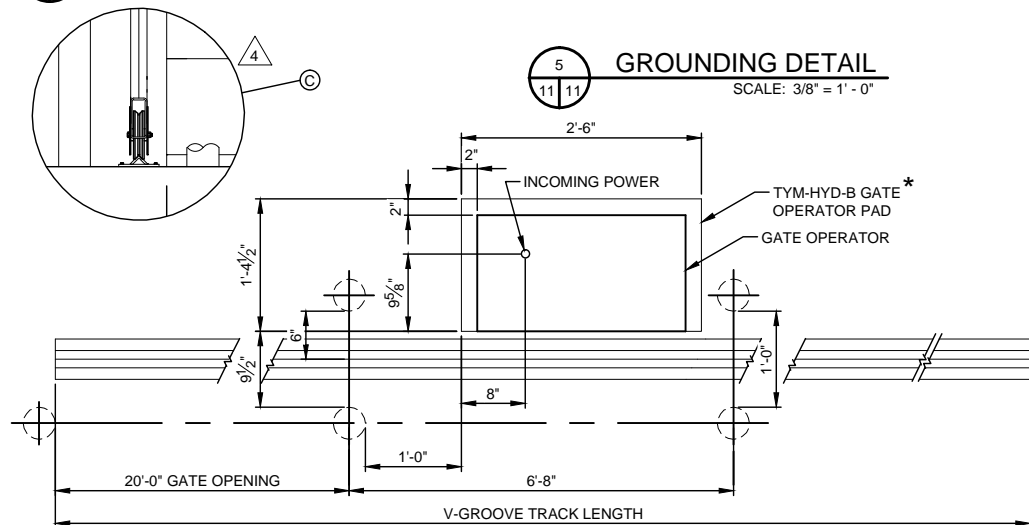
SLIDING GATE DETAIL
SCALE: 1/4" = 1' - 0"

CHAIN LINK FENCE QUANTITY & POST COORDINATES

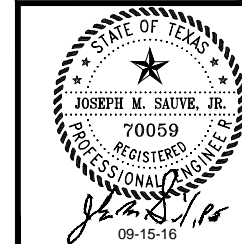
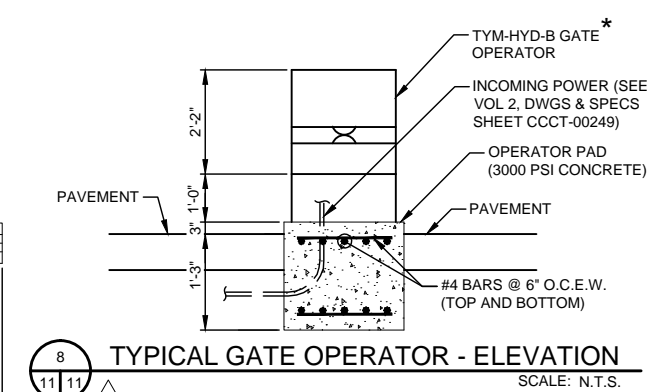
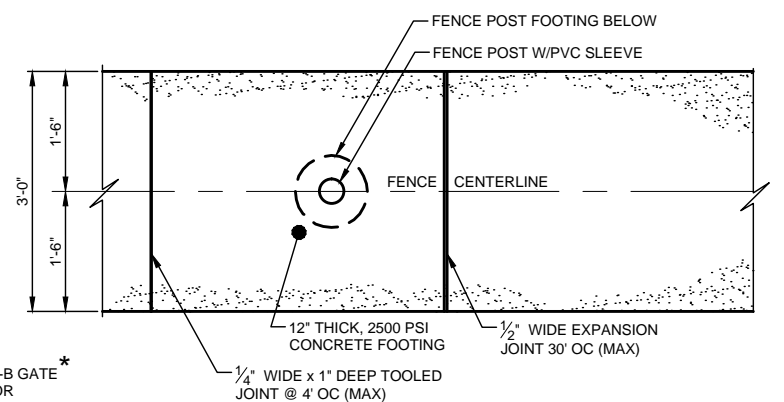
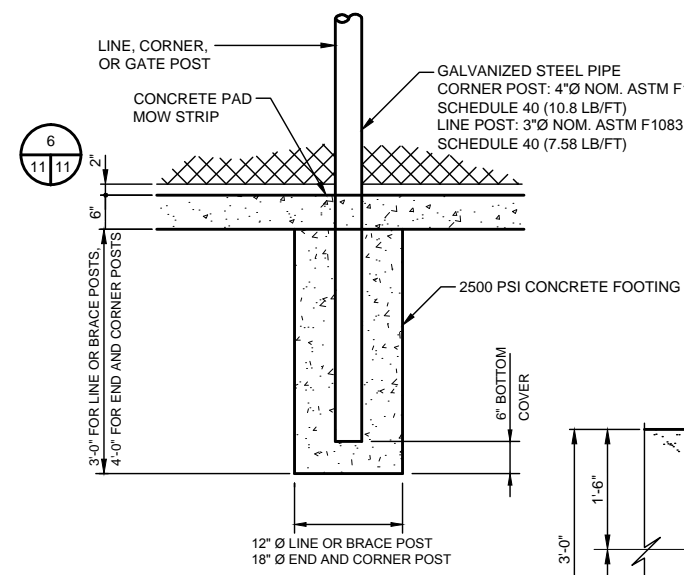
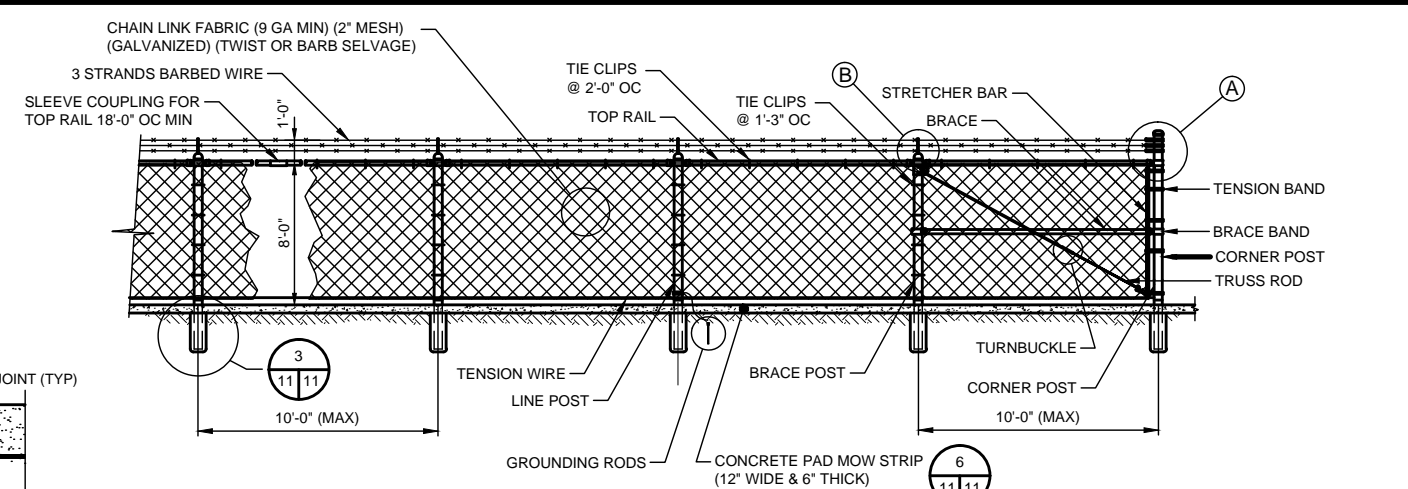
POST #	NORTHING	EASTING	DISTANCE
FP 1	17,186,656.08	1,336,262.12	
FP 2	17,186,731.14	1,336,260.40	75.1
FP 3	17,186,731.27	1,336,266.22	5.8
FP 4	17,186,730.61	1,336,266.23	0.7
		SUBTOTAL	81.6
FP 5	17,186,731.84	1,336,290.90	
FP 6	17,186,732.06	1,336,300.90	10.0
FP 7	17,186,732.29	1,336,310.90	10.0
FP 8	17,186,751.79	1,336,310.45	19.5
FP 9	17,186,759.96	1,336,665.37	355.0
FP 10	17,186,740.47	1,336,665.82	19.5
FP 11	17,186,740.71	1,336,675.81	10.0
FP 12	17,186,740.94	1,336,685.00	9.2
		SUBTOTAL	433.2
FP 13	17,186,740.85	1,336,710.50	
FP 14	17,186,741.51	1,336,710.49	0.7
FP 15	17,186,741.65	1,336,716.29	5.8
FP 16	17,186,646.61	1,336,718.48	95.1
		SUBTOTAL	101.5
		TOTAL	617



NOTES:
1. PROVIDE GROUNDING RODS AT BRACE PANELS, FENCE CORNERS, AND ALL GATE POSTS. (MAX 500 FT SPACING)



* TYPICAL DETAILS FOR TYMETAL CORP GATE OPERATOR ARE PROVIDED AS A REFERENCE ONLY. THE CONTRACTOR SHALL PROVIDE PRODUCT SPECIFIC SHOP DRAWINGS DESIGNED TO MEET SPECIFICATIONS.



NO.	DATE	REVISION
A	03-28-16	ISSUED FOR REVIEW
B	06-07-16	ISSUED FOR REVIEW
C	07-28-16	ISSUED FOR REVIEW
D	08-25-16	ISSUED FOR BID
1	09-02-16	ADDENDUM NO. 1
4	09-15-16	ADDENDUM NO. 4



ch2m

555 N. CARANCAHUA, SUITE 320
CORPUS CHRISTI, TEXAS 78401
TEL: 1.361.888.8100
FAX: 1.361.888.8600
TBPE FIRM NO. F-3699

SHEET 11 OF 70

PORT OF CORPUS CHRISTI AUTHORITY

OIL DOCK 15

SCALE: NOTED
DWN. BY: JMS

SITE DETAILS

DATE: 09/15/16
DWG. NO. 16-033A-011