

00 91 04 ADDENDUM NUMBER NO. 4

Owner: Laguna Madre Water District
Project: Lift Station Nos. 1 and 37 Rehabilitation
Project No.: LMWD Bid # LS-20-07-01; TWDB Project No. 73730
Addendum No. 4
Addendum Date: September 1, 2020

The following additions, deletions, modifications, or clarifications shall be made to the appropriate portions of the Contract Documents. Offerors must acknowledge receipt of this Addendum in the space provided on the Bid Form.

ARTICLE 1 – ADDENDUM

- 1.01 Amend the Contract Documents
 Make the additions, modifications, or deletions to the Contract Documents described in this Addendum.
- 1.02 Acknowledge Addenda
 Acknowledge receipt of this Addendum in the Bid Form submitted for this Project. Failure to acknowledge receipt of this addendum in the Bid Form may render the Bid as non-responsive and serve as the basis for rejecting the Bid.

ARTICLE 2 – BID REQUIREMENTS

- 2.01 Section 00 41 16 “Bid Form Exhibit A”
 - A. Delete Section 00 41 16 “Bid Form Exhibit A” and replace it with Section 00 41 16 “Bid Form Exhibit A” included with this Addendum. Submit only the revised form with the Bid.

ARTICLE 3 – SPECIFICATIONS

3.01 Section 40 67 31.01 Control Systems PCS Software

Functionality Clarification to ALL Pump Control Panels:

- As a clarification, the Cellular based Monitoring system shall be included in all panels and shall have the capability of auto-dialing LMWD personnel to notify said personnel of alarms as programmed in the Monitoring system. The LMWD will provide a list of required personnel to be included in this list prior to final programming and startup of the Lift Station.

Functionality Clarification to LS 37 Control Panel:

It is the intent of this project that there will be a stand-alone RTU intended for local control only at Lift Station #37. The functionality shall be as described in the Plans and Specifications and as modified through this and other addenda and formal modifications of the Plans and Specifications.

The Intent of the Local stand-alone PLC equipped Control panel shall be as follows:

- PLC shall provide Control for the LS as described herein and in the Plans as specifications as described.
- At this point no communications shall be required to an MRTU or another facility. The Contractor shall leave provisions for this functionality to allow LMWD the ability to provide communications from this site to another site in the future if it so desires.
- No Laptop or Engineer workstations are required in this scope of work.
- No Operator Workstation computers are required in this scope of work.
- It is the intent of these plans and specifications that the Local Operator Interface or touchpad shall be the sole means of interaction with the PLC in this LS.
- It shall further be clarified that the Operator shall be able to adjust the following parameters via the LOI:
 - o Level Control
 - o Alarm Set Points
 - o Duration of Initial Full Speed ramp up of Self Priming Pumps in seconds with the lower limit being 0 and the upper limit being 30 seconds max.
 - o Duration of Full Speed ramp up of Self Priming Pumps, after stop command is received, in seconds with the lower limit being 0 and the upper limit being 30 seconds max.
 - NOTE: the intent of this ramp up at stop command is for normal operating conditions. There shall be a method to immediately stop the pumps in times of emergency.
- Historian or trending Software shall not be required with this scope of work unless it is part of the basic software package that is provided with the LOI software or the Software Suite.
- All software functionality shall be intended to work with the LOI
- All software shall be compatible with the latest version of MS Windows 10 or later version of windows as it applies.

For the purposes of this project the following changes/deletions shall be made to the specification Section 40 67 31.01:

- A. Paragraph 1.04 (A)(1) shall be intended to refer to the functionality of the LOI.
- B. Delete Paragraph 1.04 (A)(2) in its entirety.
- C. Delete Paragraph 1.04 (A)(3) in its entirety.
- D. Delete Paragraph 1.04 (A)(4) in its entirety.
- E. Delete Paragraph 1.04 (A)(5) in its entirety.
- F. Delete Paragraph 1.04 (A)(6) in its entirety.
- G. Delete Paragraph 1.04 (A)(7) in its entirety.
- H. Paragraph 1.04(A)(8) shall be intended to refer to the functionality of the LOI
- I. Paragraph 1.04 (B) shall be intended to refer to the functionality of the LOI.
- J. Paragraph 1.05 Submittals shall be intended to refer to the LOI and any software or hardware pertaining the proper functionality of said interface touchscreen.
- K. Paragraph 1.05 (G) Review Meeting Submittals shall be intended to refer to the LOI and any graphics and alarms pertaining to the intended functionality of said interface touchscreen. The Contractor shall remove all reference to Graphics Review Meetings 1 and 2.
- L. Paragraph 1.09 Sequencing - The Contractor shall remove reference to the following meetings:
 - 1. Graphics Meeting 1
 - 2. Graphics Meeting 2
 - 3. Reports Meeting 1
 - 4. Reports Meeting 2
 - 5. These meetings shall be replaced by these items being compiled in a submittal for review and acceptance by the Owner/Engineer via an Online/Phone Conference.

3.02 Section 44 42 56.04 “Submersible Pumps”

A. Delete Paragraph 3.04 entirely and insert the following in its place.

3.04 SCHEDULES

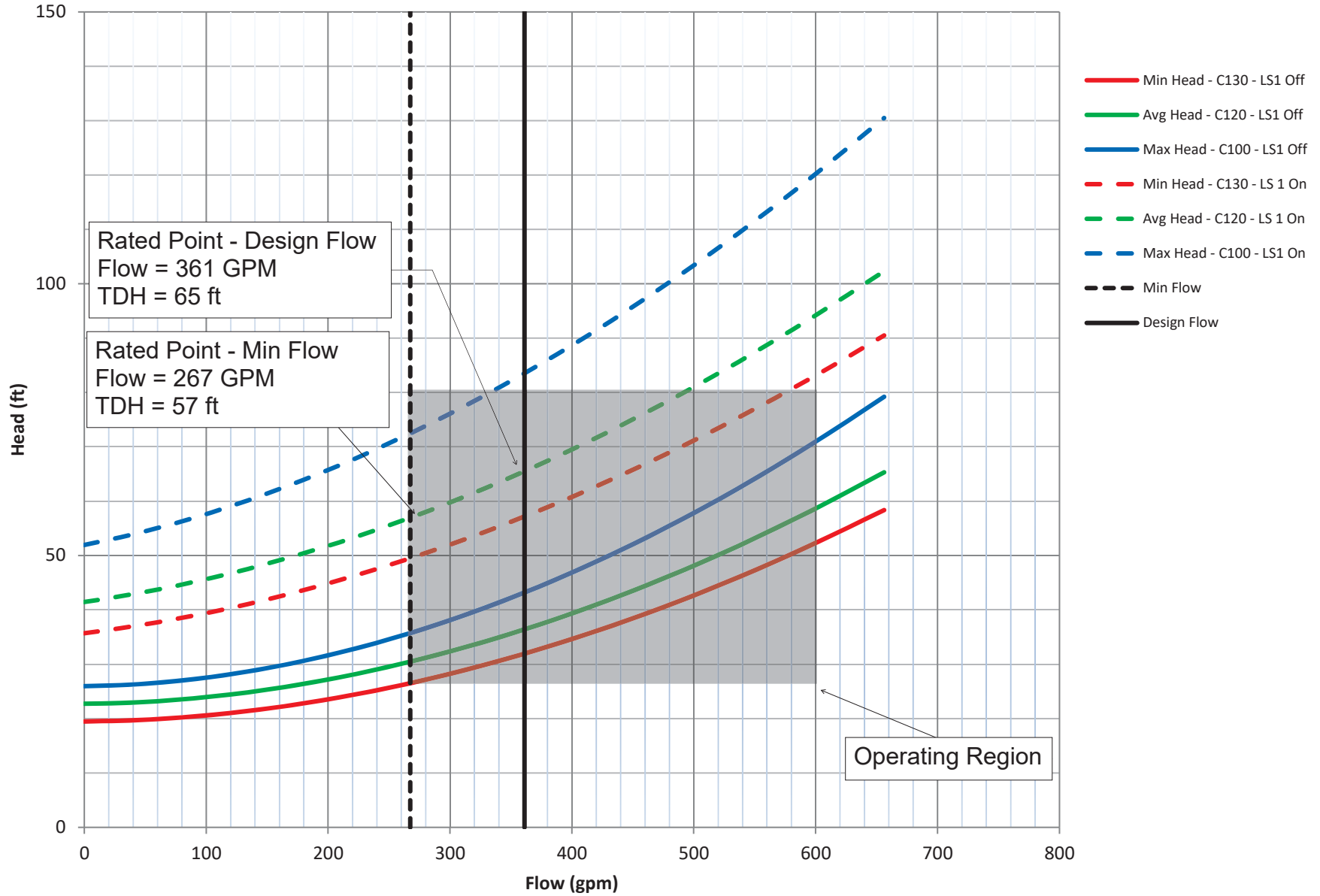
| Characteristic | Lift Station No. 1 Condition Requirements | Lift Station No. 37 Condition Requirements (Alternate No. 1) |
|--|---|--|
| System Curve | Figure 1 | Figure 2 |
| Equipment No. | Pump Nos. 1, 2, 3 | Pump Nos. 1,2 |
| Number of Units | 3 | 2 |
| Fixed or Variable Speed | Fixed Speed | Variable Speed |
| Rated Point * | Figure 1 – LS #1 System Curve | Figure 2 – LS #37 System Curve |
| Min Flow (GPM) per Pump | 736 gpm | 267 gpm |
| Min Head per pump, TDH (ft.) | 63 ft | 54 ft |
| Total Firm Capacity (GPM) | 1,125 gpm | 361 gpm |
| Total Head, TDH (ft.) | 85 ft | 65 ft |
| Hydraulic Efficiency at Rated Pt. | 70% (min.) | 60% (min.) |
| No. of Pumps in Parallel | 3 (2 firm, 1 spare) | 2 (1 firm, 1 spare) |
| Maximum Shutoff Head (ft.) | 125 ft. | 115 ft. |
| Maximum Horse Power (HP) | 25 HP | 15 HP |
| Maximum Speed (RPM) | 1,755 | - |
| Preferred Operating Region | 70% through 120% of BEP | 70% through 120% of BEP |
| Allowable Operating Region** | 50% through 130% of BEP | 50% through 130% of BEP |
| Minimum diameter of test sphere (in.) | 3 | 3 |
| NPSHa (Calculated based on the “All Pumps Off” elevation) | 33.5 ft. | 33.5 ft. |
| Minimum Rated (Full Load) Motor (Uncorrected) Power Factor (%) | 0.89 | 0.89 |
| Minimum Rated (Full Load) Motor Efficiency (%) | 0.88 | 0.88 |
| Rated Motor Frequency (Hz) | 60 | 60 |
| Rated Motor Voltage (V) | 460 | 460 |

*Rated operating points based on C-120 System Curve with other lift station on at full capacity.

**Proposed pump(s) must be able to operate within its allowable operating region for Rated Points for all system curves indicated with the NPSHa.

B. Insert Figure 2 – LS #37 System Curve immediately following Figure 1 – LS #1 System Curve.

Figure 2: Lift Station No. 37 - System Curve - One Pump



3.03 Add the following Specification Sections:

| Section | Section Title |
|----------|---------------------------|
| 01 23 10 | Alternates and Allowances |

ARTICLE 4 – DRAWINGS

4.01 Add the following Drawings:

| Drawing No. | Drawing Title |
|-------------|---|
| LS37-A1-1 | Site Plan (Alternate No. 1) |
| LS37-A1-2 | Mechanical Plan and Profile (Alternate No. 1) |
| LS37-A1-3 | Electrical Wet Well Details (Alternate No. 1) |

END OF ADDENDUM NO. 4



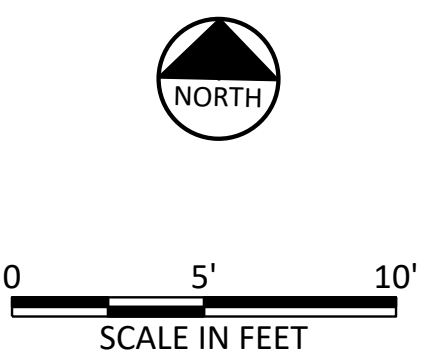
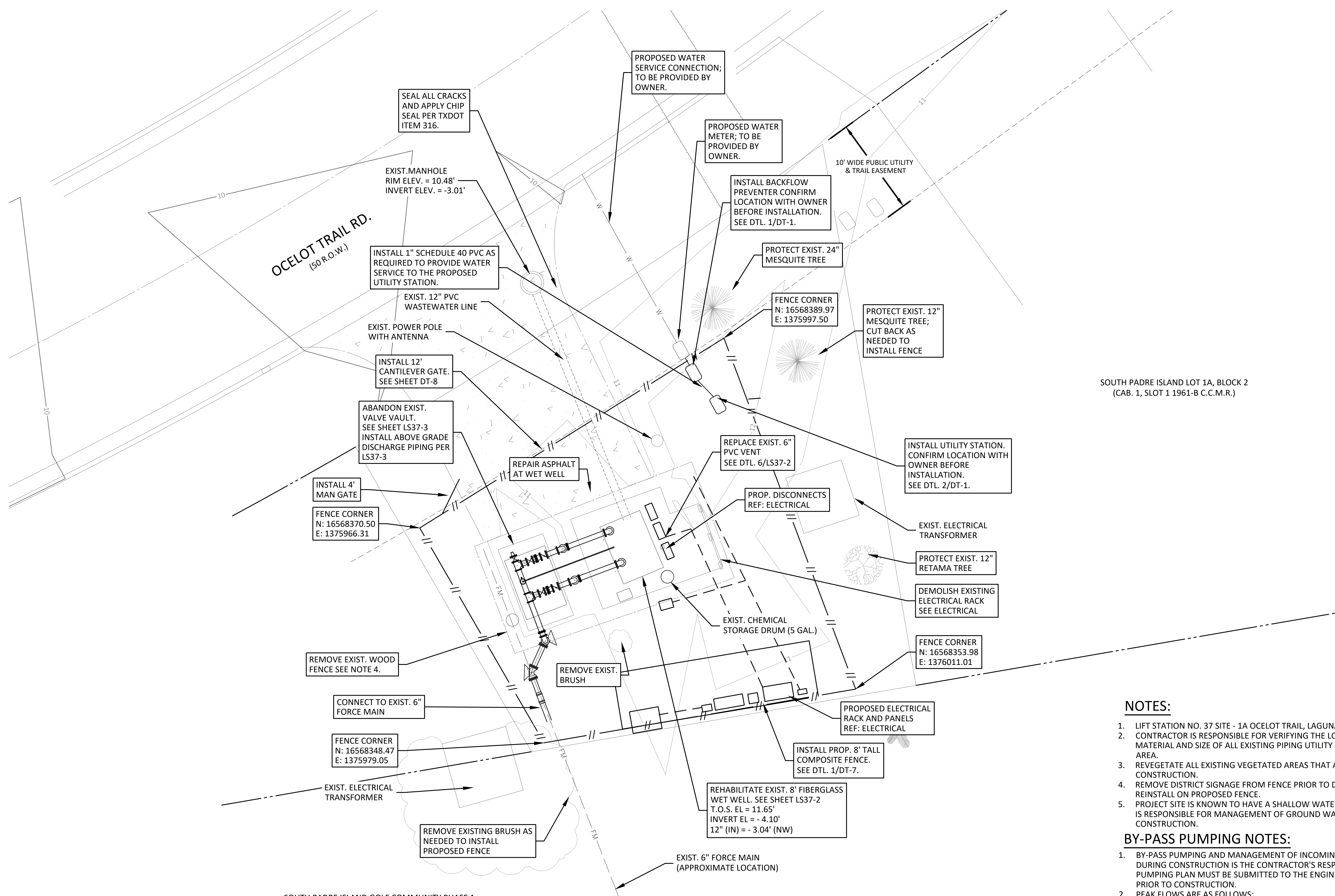
FREESE AND NICHOLS, INC.
TEXAS REGISTERED
ENGINEERING FIRM
F-2144

| |
|---|
| <p>SPECIFICATIONS 00 41 16 Bid Form Exhibit A 01 23 10 Alternates and Allowances 44 42 56.04 Submersible Pumps</p> |
|---|



9/1/2020
Square E Engineering, LLC
Texas Registered Engineering
Firm - 12247

| |
|---|
| <p>SPECIFICATIONS 40 61 31.01 Control Systems PCS Software</p> |
|---|



OCELOT TRAIL RD.
(50 R.O.W.)

SOUTH PADRE ISLAND GOLF COMMUNITY PHASE 1
(CAB. 1, SLOT 1732-A&B, 1733-A C.C.M.R.)

SOUTH PADRE ISLAND LOT 1A, BLOCK 2
(CAB. 1, SLOT 1 1961-B C.C.M.R.)

LAGUNA MADRE WATER DISTRICT
LIFT STATION NOS. 1 AND 37 REHABILITATION
LIFT STATION NO. 37
SITE PLAN (ALTERNATE NO. 1)

NOTES:

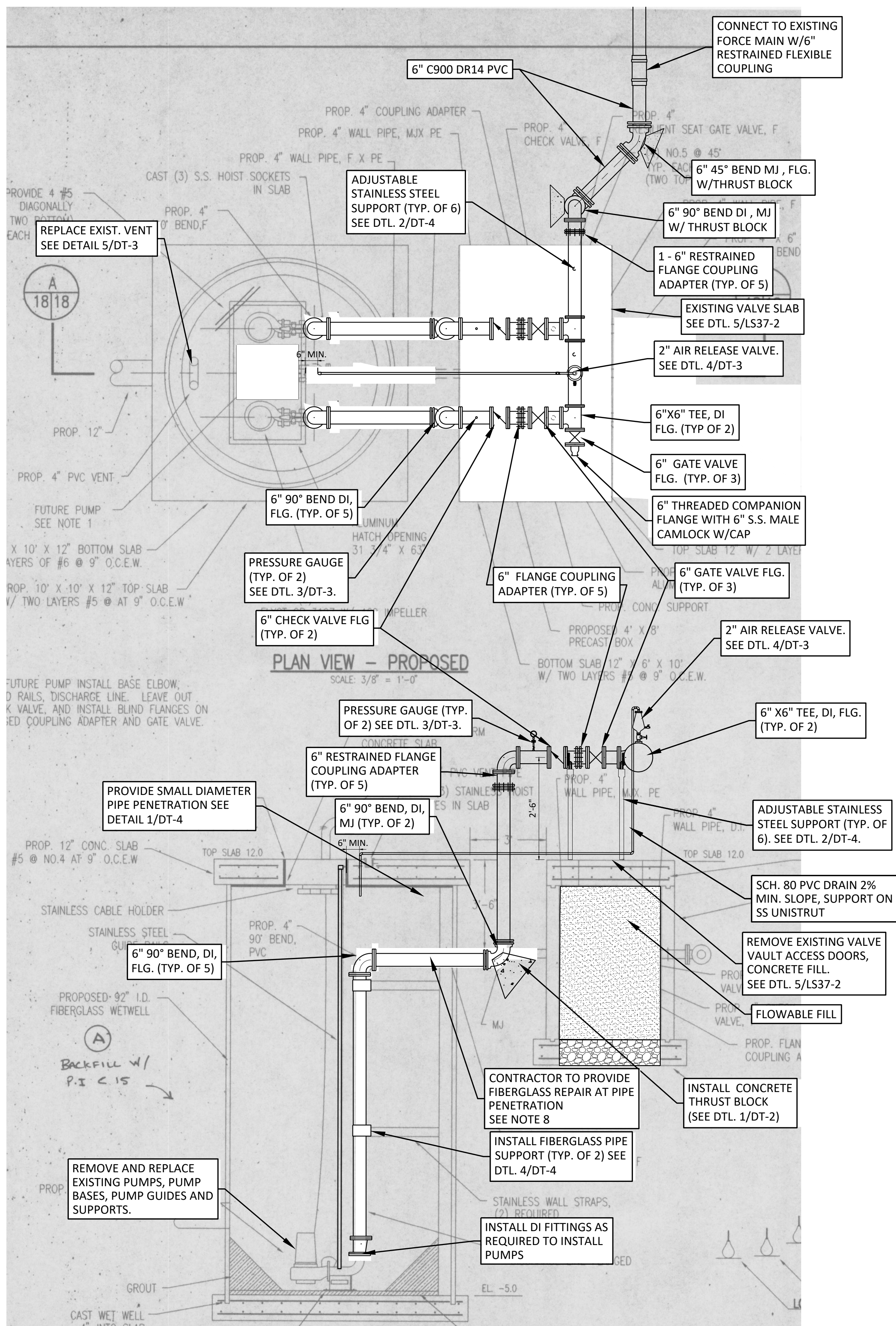
- 1. LIFT STATION NO. 37 SITE - 1A OCELOT TRAIL, LAGUNA VISTA, TX
- 2. CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE LOCATION, DEPTH, MATERIAL AND SIZE OF ALL EXISTING PIPING UTILITY IN THE CONSTRUCTION AREA.
- 3. REVEGETATE ALL EXISTING VEGETATED AREAS THAT ARE DISTURBED DURING CONSTRUCTION.
- 4. REMOVE DISTRICT SIGNAGE FROM FENCE PRIOR TO DEMOLITION AND REINSTALL ON PROPOSED FENCE.
- 5. PROJECT SITE IS KNOWN TO HAVE A SHALLOW WATER TABLE. CONTRACTOR IS RESPONSIBLE FOR MANAGEMENT OF GROUND WATER AS REQUIRED FOR CONSTRUCTION.

BY-PASS PUMPING NOTES:

- 1. BY-PASS PUMPING AND MANAGEMENT OF INCOMING LIFT STATION FLOWS DURING CONSTRUCTION IS THE CONTRACTOR'S RESPONSIBILITY. BY-PASS PUMPING PLAN MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
- 2. PEAK FLOWS ARE AS FOLLOWS:
A. 12" WASTEWATER LINE = 288 GPM AT 30 TDH WHEN LIFT STATION NO. 1 IS OFF; 55 TDH WHEN LIFT STATION NO. 1 IS ON.
- 3. AT ALL MANHOLES USED FOR BYPASS PUMPING, WHEN BYPASS OPERATION IS COMPLETE, REPLACE EXISTING MANHOLE LID WITH COMPOSITE MANHOLE LID AND CARBON INSERT. SEE SHEET DT-5.
- 4. IF ADDITIONAL MANHOLE(S) OR OTHER IMPROVEMENTS ARE REQUIRED TO FACILITATE BY-PASS PUMPING, THEY MUST BE PROVIDED PER DISTRICT STANDARDS AT NO ADDITIONAL COST.

ACAD Ref: 23.0s (LMS Tech)
Filename: N:\WTU\Drawings\C-LMW-LS37-SITE01A.dwg
Last Saved: 8/31/2020 4:36 PM. Saved By: 03704

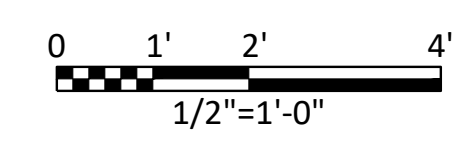
| | | | | | |
|--------------|--------------|-----|-----------|-------------|------------------------|
| NO. | ISSUE | BY | DATE | FRN JOB NO. | LMW19354 |
| | | | | DATE | 8/31/2020 |
| ADDENDUM NO. | VERIFY SCALE | CAK | 8/31/2020 | DESIGNED | JMM/CAK |
| | 0 | | | DRAWN | EWL |
| SEQ. | | | | CHECKED | CAK/DTB |
| | | | | FILE NAME | C-LMW-LS37-SITE01A.dwg |



PROPOSED MECHANICAL PIPING PLAN AND PROFILE

1
LS37-A1-2

1/2"=1'-0"



NOTES:

- REFER TO ELECTRICAL AND INSTRUMENTATION DRAWINGS FOR ELECTRICAL WIRING ROUTING, LEVEL SENSORS AND OTHER PERTINENT DETAILS.
- ALL HARDWARE FOR APPURTENANCES, DUCTILE IRON FITTINGS, ETC. USED IN THE WET WELL MUST BE 316 STAINLESS STEEL.
- ALL VALVES AND DISCHARGE PIPING MUST BE FLANGED DUCTILE IRON.
- SUPPORT VERTICAL AND HORIZONTAL ARV DRAIN PIPING WITH S.S. UNI-STRUT.
- CONTRACTOR MUST PROVIDE SUPPORT BRACKETS FOR THE SUBMERSIBLE PUMP GUIDE RAILS. BRACKETS MUST BE 316 STAINLESS STEEL. INTERMEDIATE GUIDE RAIL SUPPORTS MUST BE USED EVERY 12 TO 15 FEET OR AS RECOMMENDED BY THE PUMP MANUFACTURER. SUBMIT DESIGN TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
- DEWATER AND CLEAN WET WELL PRIOR TO INSTALLATION OF PUMPS AND DISCHARGE PIPING.
- CONTRACTOR MUST PATCH CONCRETE AND PROVIDE COATING FOR DISCHARGE PIPE PENETRATION THROUGH FIBERGLASS ON UNDERSIDE OF TOP SLAB. NO EXPOSED CONCRETE OR GROUT ON THE INTERIOR OF THE WET WELL IS ACCEPTABLE.
- DESIGN OF ALL FIBERGLASS REPAIRS AND ATTACHMENTS OF PIPE SUPPORTS TO WET WELL ARE TO BE DESIGNED BY THE CONTRACTOR. SUBMIT SHOP DRAWINGS TO ENGINEER FOR REVIEW.

PUMP CONTROL SCHEDULE

| RISING LEVEL CYCLE | | |
|------------------------------|--|---------------------------|
| WATER LEVEL ELEVATION (FEET) | ACTION | PUMP(S) IN OPERATION |
| -3.5 | ALL PUMPS OFF | ALL PUMPS OFF |
| -2.75 | | PUMP NO. 1 ON @ MIN SPEED |
| -2.0 | PUMP NO. 1 TURNS ON @ MAX SPEED | PUMP 1 ON @ MAX SPEED |
| -1.5 | HIGH LEVEL ALARM / PUMP NO. 2 TURNS ON @ MAX SPEED | ALL PUMPS ON |

| FALLING LEVEL CYCLE | | |
|------------------------------|----------------------------------|---------------------------|
| WATER LEVEL ELEVATION (FEET) | ACTION | PUMP(S) IN OPERATION |
| -1.5 | HIGH WATER LEVEL ALARM OFF | ALL PUMPS ON |
| -2.0 | PUMP NO. 2 ON AT MIN SPEED / OFF | PUMP NO. 1 ON @ MAX SPEED |
| -2.75 | PUMP NO. 1 @ MIN SPEED | PUMP NO. 1 ON @ MIN SPEED |
| -3.5 | PUMP NO. 1 @ MIN SPEED / OFF | ALL PUMPS OFF |
| -4.0 | LOW WATER LEVEL ALARM ON | EMERGENCY - ALL PUMPS OFF |



FRESE AND NICHOLS
 1251 Sadler Drive
 Building 1 Suite 1150
 San Marcos, Texas 78666
 Phone - (512) 213-3200
 Web - www.frese.com

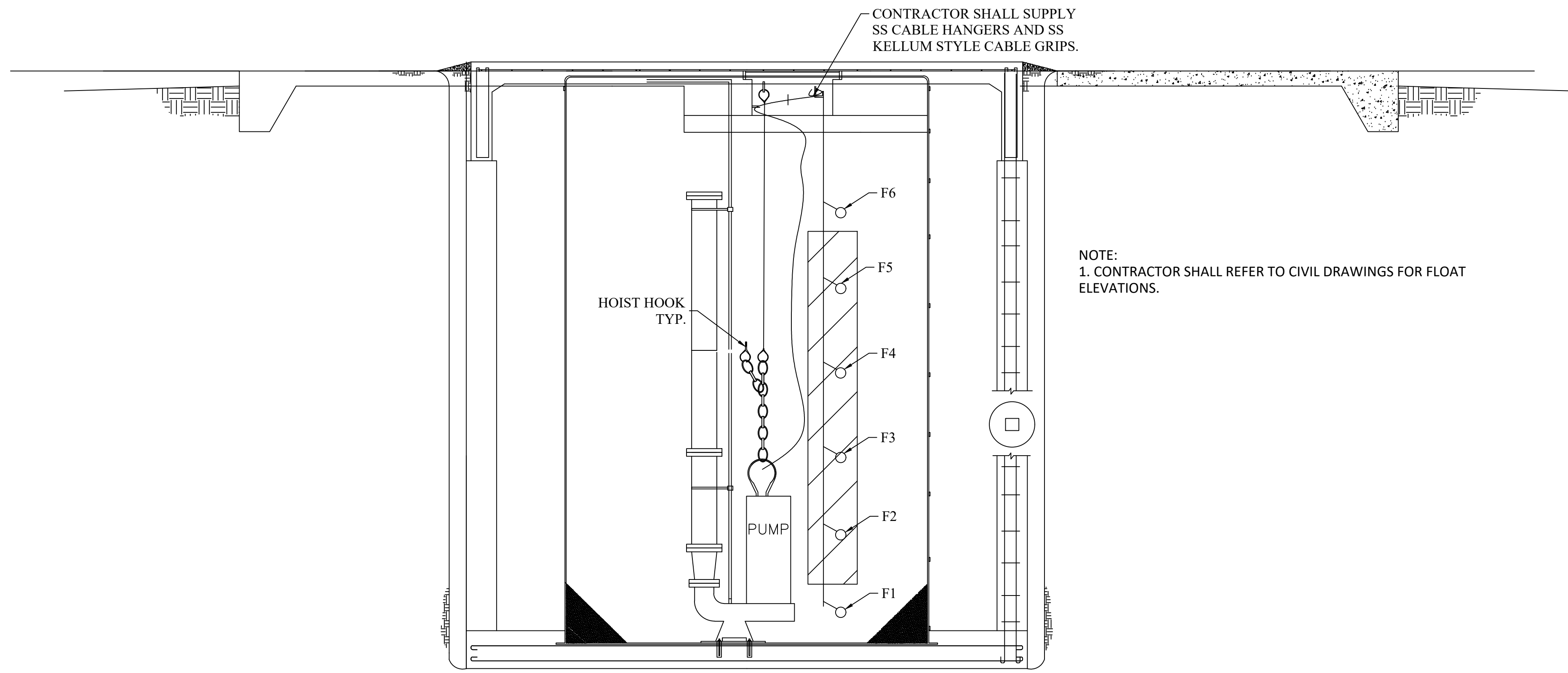
LAGUNA MADRE WATER DISTRICT
LIFT STATION NOS. 1 AND 37 REHABILITATION
 LIFT STATION NO. 37
MECHANICAL PLAN AND PROFILE
(ALTERNATE NO. 1)

| | | | | | | |
|-----|-------|-----------|-----|-----------|-----|------------------------|
| NO. | ISSUE | DATE | BY | DATE | BY | FILE NAME |
| 1 | ISSUE | 8/31/2020 | CAK | 8/31/2020 | CAK | C-LMW-LS37-MECH01A.dwg |

ADDENDUM NO. 4
 VERIFY SCALE
 Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.

1
0

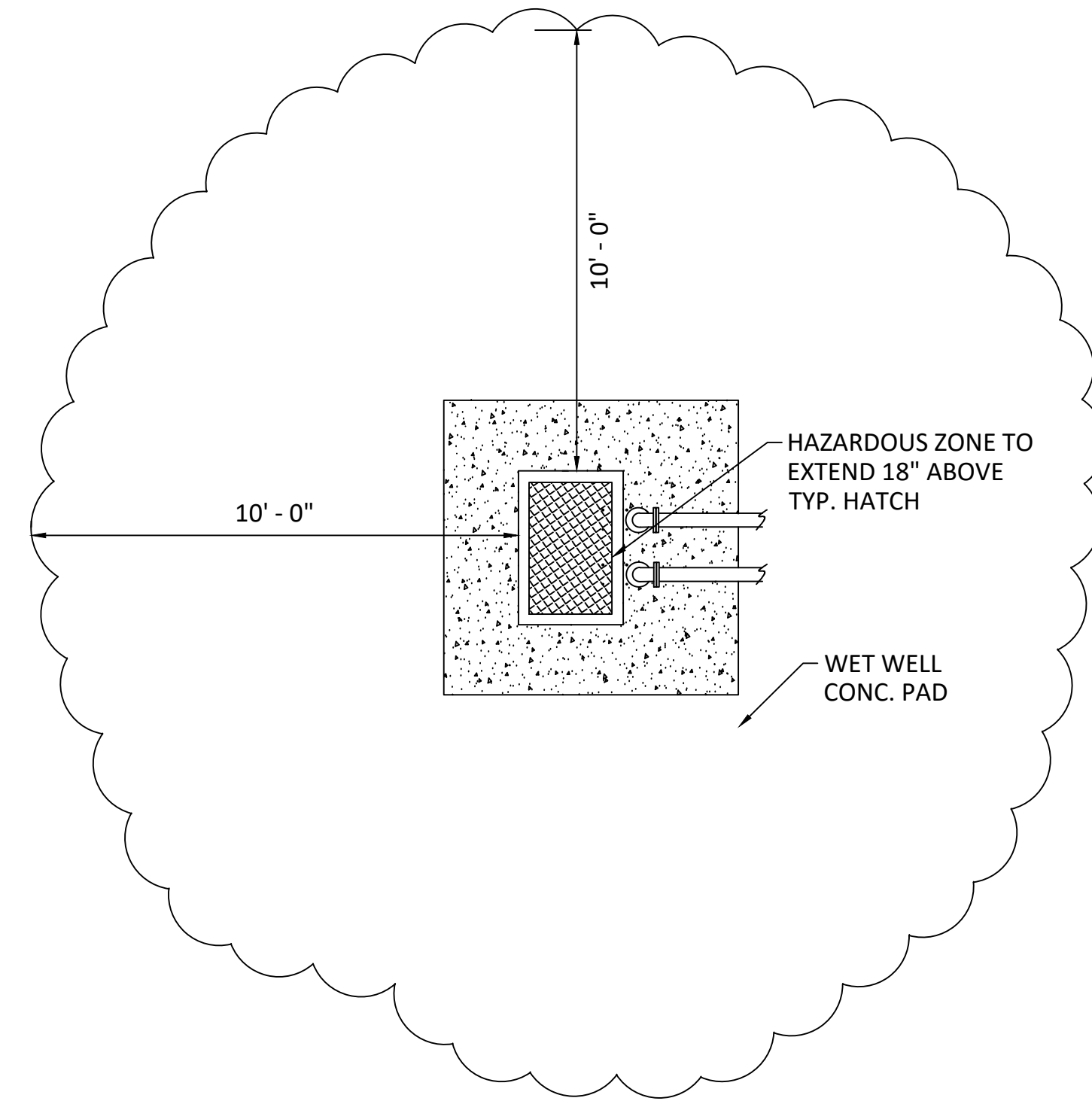
SHEET
LS37-A1-2
 SEQ.



**WETWELL SIDE VIEW
(4 PUMP TOTAL)**

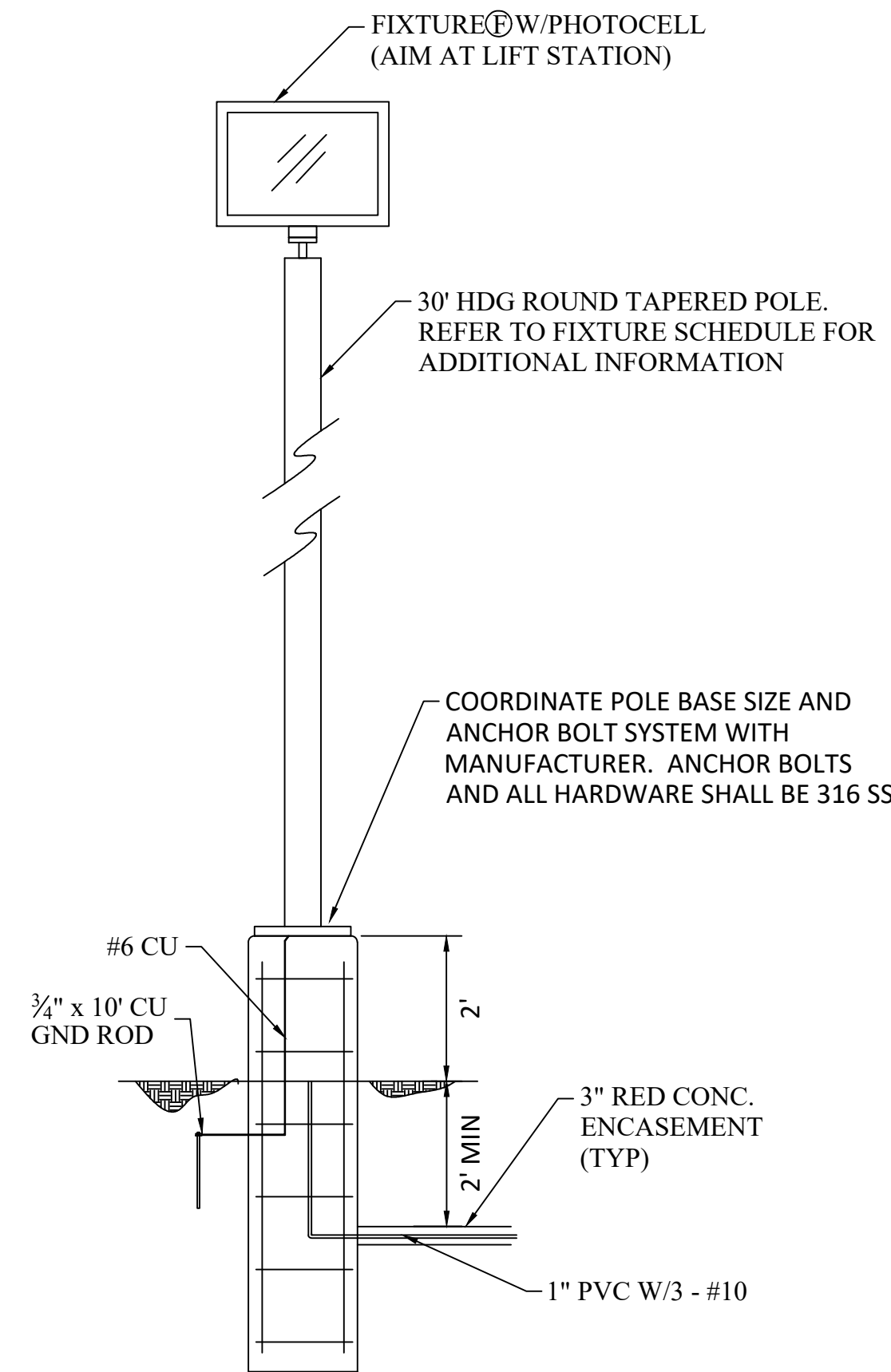
SCALE: N.T.S.

NOTE:
1. CONTRACTOR SHALL REFER TO CIVIL DRAWINGS FOR FLOAT ELEVATIONS.



HAZARDOUS ZONE DETAIL
SCALE: N.T.S.

- NOTES:
1. AREA 10 FOOT AROUND AND 18 INCHES ABOVE WET WELL OPENING SHALL BE CONSIDERED A CLASS 1 DIV 2 HAZARDOUS AREA PROVIDE SEAL-OFFS FILLED WITH SILICONE THROUGH A GUTTER BOX AS SHOWN FOR CONDUITS ENTERING OR LEAVING THIS ZONE
 2. ALL PENETRATIONS TO ALL PANELS SHALL HAVE DUCTSEAL APPLIED TO THEM
 3. NO PANEL PENETRATIONS SHALL BE ALLOWED UNSEALED WITH SEWER IN WETWELL.
 4. ALL WET WELL PENETRATIONS SHALL HAVE MECHANICAL SEAL AS PER DETAIL INSTALLED WHEN CABLE IS INSTALLED. SEWER SHALL NOT BE ALLOWED IN WET WELL PRIOR TO THIS SEAL BEING APPLIED.



NOTES:
LIGHT POLE FOUNDATION: 24" DIAMETER, 8FT EMBEDDED INTO THE GROUND, REINFORCE WITH (8) #6 VERTICAL BARS, #4 CLOSED TIES @ 12" C/C WITH TWO CLOSED TIES @ 3" C/C NEAR TOP. CLEAR COVER TO TIES IS 3" AND TO END OF VERTICAL BARS IS 3"

LIGHT POLE DETAIL
SCALE: N.T.S.

| PROPOSED LIGHTING FIXTURE SCHEDULE | | | | | | | |
|------------------------------------|-------------|----------|---------------------------------------|----------|--|--------------|--------------------------------|
| MARK | DESCRIPTION | VOLTAGE | LAMPS | MOUNTING | POLE DATA | MANUFACTURER | CATALOG NUMBER |
| (F) | AREA LIGHT | 120-277V | 180W LED 24K LUMENS 5000K COLOR | POLE | GPRTH30GAL RTS HDG GSF20 FITTING | APPELTON | IAMLHL1CG6BU W / PHOTOCCELL |

9/1/2020

Square E Engineering, LLC
Texas Registered Engineering Firm F-12247



SQUARE ENGINEERING
FIRM # 12247
PHONE: (956) 466-3492
32238 WHIPPLE RD.
LOS FRESNOS TX. 78566

LAGUNA MADRE WATER DISTRICT
LIFT STATION NOS. 1 AND 37 REHABILITATION

LIFT STATION NO. 37
ELECTRICAL WETWELL DETAILS (ALTERNATE #1)

| | | | | | | | | |
|----|------|--------------|----------|----------|-------|----------|---------|---------------------|
| BY | DATE | FERN JOB NO. | DATE | DESIGNED | DRAWN | REVISION | CHECKED | FILE NAME |
| | | LMW19282 | 9/1/2020 | JPC | AJM | | | SQE_LMW-LS37_Alt #1 |

Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.

VERIFY SCALE: 1/0

SHEET: **LS37-A1-3**

SEQ.

01 23 10 ALTERNATES AND ALLOWANCES

PART 1 - GENERAL

1.01 SUMMARY

A. Alternates:

1. This Section describes each alternate by number and describes the basic changes to be incorporated into the Work when this alternate is made a part of the Work in the Agreement.
2. The Drawings and Specifications will outline the extent of Work to be included in the alternate Contract Price.
3. Coordinate related Work and modify surrounding Work as required to properly integrate the Work under each alternate, and provide a complete and functional Project as required by the Contract Documents.
4. Alternate Bids or Proposals may be accepted or rejected at the option of the Owner.
5. Owner may incorporate these alternates in the Contract when executed, or may issue a Change Order to incorporate these alternates within 120 days of the opening of Contractor's Bid or Proposal at the prices offered in the Contractor's Bid or Proposal, unless noted otherwise. A Request for a Change Proposal may be issued after 120 days or other designated time period to negotiate a new price for incorporating the Work into the Project.

1.02 DOCUMENTATION

- ##### **A. Provide documents for materials furnished as part of each alternate in accordance with Section 01 33 00 "Document Management."**

1.03 DESCRIPTION OF ALTERNATES

A. Alternate No. 1 – Lift Station No. 37 Rehabilitation with Submersible Pumps

1. Add or deduct to install two (2) submersible pumps with VFDs, bases, guide rails, discharge piping, pressure gauges, all appurtenance work and all electrical and instrumentation to provide a complete and working system as indicated in the plans and as specified. See Section 44 42 56.04 for submersible pump design parameters.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

00 42 16 BID FORM EXHIBIT 'A'

| LIFT STATION REHABILITATION GENERAL BASE BID ITEMS | | | | | |
|---|---|-------------|---------------------------|-------------------|------------------------|
| Item No. | Description | Unit | Estimated Quantity | Unit Price | Extended Amount |
| 1. | For Mobilization and Demobilization described in the Contract Documents for the lump sum (Maximum 5% of total contract of the Lift Station Rehabilitation Project) of: | LS | 1 | \$ _____ | \$ _____ |
| 2. | Design, install, maintain, and remove Traffic Control Plan and devices, complete as specified and indicated in the plans. | LS | 1 | \$ _____ | \$ _____ |
| 3. | Project sign, complete as specified and indicated in the plans. | EA | 1 | \$ _____ | \$ _____ |
| 4. | For development, design, and implementation of a trench safety system as required by the Occupational Safety and Health Administration and the assumption of responsibility for said system, including all required trench safety for alternate bid items, and structures complete as specified and indicated in the plans. (Contractor shall insert quantity of trench safety required for the project. Contractor will only be paid for trench safety installed.) | LF | _____ 50 LF minimum | \$ _____ | \$ _____ |
| TOTAL BID AMOUNT (GENERAL BASE BID ITEMS) | | | | | \$ _____ |

| LIFT STATION NO. 1 REHABILITATION BASE BID ITEMS | | | | | |
|---|--|-------------|---------------------------|-------------------|------------------------|
| Item No. | Description | Unit | Estimated Quantity | Unit Price | Extended Amount |
| 5. | For rehabilitation of the Lift Station No. 1, including foundation structural improvements, concrete crack repairs, site rehabilitation, hydro mulching, dewatering, testing, and all other appurtenant work and items not specifically included in other bid items, complete as specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |
| 6. | Install water supply line, backflow preventer, and hose bib complete as specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |
| 7. | Clean out well and prepare for rehabilitation, complete as specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |
| 8. | Remove and replace existing submersible sewage pumps, bases and guiderails, including all appurtenant work, complete and specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |
| 9. | Remove existing pump discharge piping and install ductile iron discharge piping within the wet well, including stainless steel pipe supports, and all appurtenances, complete as specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |
| 10. | Remove and replace existing above grade and buried ductile iron discharge piping and fittings, check valves and gate valves, including all appurtenances, complete as specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |
| 11. | Install tie-in for proposed discharge piping to existing force main, including all fittings, restraints, thrust blocking, and appurtenant work, complete as specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |

| | | | | | |
|-----|---|----|---|----------|----------|
| 12. | Install air release valve on proposed ductile iron discharge piping, complete as specified and indicated in the plans. | EA | 1 | \$ _____ | \$ _____ |
| 13. | Install pressure gauge on proposed ductile iron discharge piping, complete as specified and indicated in the plans. | EA | 3 | \$ _____ | \$ _____ |
| 14. | Demolish existing concrete pipe supports on above grade discharge piping, complete as specified and indicated in the plans. | LS | 1 | \$ _____ | \$ _____ |
| 15. | Install stainless steel pipe supports on above grade discharge piping, including all appurtenances, complete as specified and indicated in the plans. | EA | 7 | \$ _____ | \$ _____ |
| 16. | Install safety grating on existing wet well hatch, complete as specified and indicated in the plans. | LS | 1 | \$ _____ | \$ _____ |
| 17. | Install stainless steel cable holders for pump cables and instrumentation, complete as specified and indicated in the plans. | EA | 3 | \$ _____ | \$ _____ |
| 18. | Remove and replace existing vent and vent support, complete as specified and indicated in the plans. | LS | 1 | \$ _____ | \$ _____ |
| 19. | Install concrete repairs on the interior of the wet well and coat with epoxy coating, complete as specified and indicated in the plans. | LS | 1 | \$ _____ | \$ _____ |
| 20. | Install fiberglass repairs to wet well, complete as specified and indicated in the plans. | LS | 1 | \$ _____ | \$ _____ |
| 21. | Install protective coatings on all ductile iron piping and valves, above grade and within the wet well, complete as specified and indicated in the plans. | LS | 1 | \$ _____ | \$ _____ |

| | | | | | |
|---|--|----|-----|---------|---------|
| 22. | Provide by-pass pumping for the completion of the project, including all temporary and permanent connections, and all appurtenant work, complete as specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |
| 23. | Remove existing fence and replace with composite fencing and all appurtenant work, complete as specified and indicated in the plans. | LF | 213 | \$_____ | \$_____ |
| 24. | Install 4-foot composite man gate, complete as specified and indicated in the plans. | EA | 1 | \$_____ | \$_____ |
| 25. | Install 12-foot composite cantilever gate, complete as specified and indicated in the plans. | EA | 1 | \$_____ | \$_____ |
| 26. | Install 6-inch crushed stone driveway, including excavation, compaction, and all appurtenant work, complete as specified and indicated in the plans. | SY | 40 | \$_____ | \$_____ |
| 27. | Demolish existing electrical rack, conduits, lighting, instrumentation, etc., including all appurtenant work, complete as specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |
| 28. | For the installation of all electrical equipment, foundations, lighting, conduit, instrumentation and wiring improvements, and all appurtenant work, complete as specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |
| TOTAL BID AMOUNT (LIFT STATION NO. 1 BASE BID ITEMS) | | | | | \$_____ |

| LIFT STATION NO. 37 REHABILITATION BASE BID ITEMS | | | | | |
|---|---|------|--------------------|------------|-----------------|
| Item No. | Description | Unit | Estimated Quantity | Unit Price | Extended Amount |
| 29. | For rehabilitation of the Lift Station No. 37, including foundation structural improvements, site rehabilitation, hydro mulching, dewatering, testing, and all other appurtenant work and items not specifically included in other bid items, complete as specified and indicated in the plans. | LS | 1 | \$ _____ | \$ _____ |
| 30. | Seal cracks and chip seal driveway, complete as specified and indicated in the plans. | SY | 63 | \$ _____ | \$ _____ |
| 31. | Install water supply line, backflow preventer, and hose bib complete as specified and indicated in the plans. | LS | 1 | \$ _____ | \$ _____ |
| 32. | Clean out well and prepare for rehabilitation, complete as specified and indicated in the plans. | LS | 1 | \$ _____ | \$ _____ |
| 33. | Remove existing wet well submersible sewage pumps, bases and guiderails and replace with above grade non clog self-priming centrifugal pumps including pressure gauge, air release valve, and all appurtenant work, complete and specified and indicated in the plans. | LS | 1 | \$ _____ | \$ _____ |
| 34. | Remove existing wet well pump discharge piping and install ductile iron suction piping within the wet well, including stainless steel pipe supports, and all appurtenances, complete as specified and indicated in the plans. | LS | 1 | \$ _____ | \$ _____ |
| 35. | Abandon existing valve vault structure; including removal of existing access hatch; flowable fill placement and installation of new concrete valve slab complete as specified and indicated in the plans. | LS | 1 | \$ _____ | \$ _____ |

| | | | | | |
|-----|---|----|---|---------|---------|
| 36. | Install above grade ductile iron discharge piping and fittings, check valves and gate valves, including all appurtenances, complete as specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |
| 37. | Install air release valve on proposed ductile iron discharge piping, complete as specified and indicated in the plans. | EA | 1 | \$_____ | \$_____ |
| 38. | Install safety grating on existing wet well hatch, complete as specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |
| 39. | Install stainless steel pipe supports on above grade discharge piping, including all appurtenances, complete as specified and indicated in the plans. | EA | 8 | \$_____ | \$_____ |
| 40. | Install stainless steel cable holders for instrumentation, complete as specified and indicated in the plans. | EA | 2 | \$_____ | \$_____ |
| 41. | Remove and replace existing vent and vent support, complete as specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |
| 42. | Install concrete repairs on the interior of the wet well and coat with epoxy coating, complete as specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |
| 43. | Install fiberglass repairs to wet well, complete as specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |
| 44. | Install protective coatings on all ductile iron piping and valves, above grade and within the wet well, complete as specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |
| 45. | Provide by-pass pumping for the completion of the project, including all temporary and permanent connections, and all appurtenant work, complete as specified and indicated in the plans. | LS | 1 | \$_____ | \$_____ |

| | | | | | |
|--|--|----|-----|----------|----------|
| 46. | Remove existing fence and replace with composite fencing, complete as specified and indicated in the plans. | LF | 118 | \$ _____ | \$ _____ |
| 47. | Install 4-foot composite man gate, complete as specified and indicated in the plans. | EA | 1 | \$ _____ | \$ _____ |
| 48. | Install 12-foot composite cantilever gate, complete as specified and indicated in the plans. | EA | 1 | \$ _____ | \$ _____ |
| 49. | Demolish existing electrical rack, conduits, lighting, instrumentation, etc., including all appurtenant work, complete as specified and indicated in the plans. | LS | 1 | \$ _____ | \$ _____ |
| 50. | For the installation of all electrical equipment, foundations, lighting, conduit, instrumentation and wiring improvements, and all appurtenant work, complete as specified and indicated in the plans. | LS | 1 | \$ _____ | \$ _____ |
| TOTAL BID AMOUNT (LIFT STATION NO. 37 BASE BID ITEMS) | | | | | \$ _____ |

| | |
|--|----------|
| TOTAL BID AMOUNT (ALL BASE BID ITEMS) | \$ _____ |
|--|----------|

| ALTERNATE BID ITEMS | | | | | |
|---------------------|---|------|--------------------|------------|-----------------|
| Item No. | Description | Unit | Estimated Quantity | Unit Price | Extended Amount |
| 1. | Add/Deduct: Furnish and install two (2) submersible pumps with VFDs, bases, guide rails, discharge piping, pressure gauges, all appurtenance work and all electrical and instrumentation to provide a complete and working system for Lift Station No. 37 as indicated in the plans and as specified. | LS | 1 | \$ _____ | \$ _____ |