

City of Turlock
Well 38 Arsenic Mitigation
And ICF Treatment

ADDENDUM NO. 2

TO CONTRACT DOCUMENTS

**FOR: CITY OF TURLOCK
WELL 38 ARSENIC MITIGATION
AND ICF TREATMENT**

June 24,2020

NOTICE TO BIDDERS

This Addendum is attached to and made a part of the above entitled Contract Documents for the City of Turlock.

This **Addendum No. 2** consists of 27 pages.

SPECIAL NOTE : THE BID PROPOSAL DUE DATE HAS BEEN POSTPONED TO 2:00 PM, WEDNESDAY, JULY 8, 2020. See item no. 7 under Revisions to Plans and Specifications.

Response to Bidder's Questions

Question No. 1: In Spec Section 43 41 43, we recommend specifying the materials of construction for the seismic restraints as the storage tank vendor's definition of chemical resistance may not agree with the Engineer's.

Answer No. 1: *Per 43 41 43 2.8 C Seismic and wind restraint system components likely to be exposed incidentally to the process chemical, shall be fabricated from materials resistant to the process chemical per the tank manufacturers recommendation.*

Question No. 2: 466121 2.11 C2 calls for AB panel view OIT, section 405130 2.01 calls for an automation direct OIT. Which is correct?

Answer No. 2: *Automation Direct will be used for all OIT.*

Question No. 3: E4.2 shows a single filter DP (30-DPIT-001), 466121 2.10 B1 specifies 4 PT's which are used to calculate DP. Which is correct?

Answer No. 3: *Four pressure transducers are required.*

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Question No. 4: 405000 1.02 B indicates a control system architecture block diagram is included. Where is the drawing? Is the communication between the FVCP and the main PLC IO done by 80 plus feet of CAT 6 cable?

Answer No. 4: No, the configuration is 2 PLC each with an ethernet switch and CAT-6 shield cable between the site PLC and FVCP cabinets.

Question No. 5: 466121 2.7 E calls filter valve actuators to be 120VAC, G-6 and E2.4 indicate 208/220 VAC. Which is correct?

Answer No. 5: Coordinate with Filter vendor, wiring shown will accommodate either voltage.

Question No. 6: Where is power for the filter control valves sourced from?

Answer No. 6: Power shall originate from the FVCP panel and the feeder to it is now 120/208V, 3 phase.

Question No. 7: What power is provided to the FVCP? E3.1 would seem to indicate 277/480V in conduit H38009.

Answer No. 7: Power is now shown coming from Panel "L1" with a 40A, 120/208V, 3 phase, 4 wire feeder. The 480V feeder is now spare.

Question No. 8: 405120 2.04 A calls for an automation Direct PLC, while 466121 2.11 C.1 calls for an AB compact logix PLC. Which is correct?

Answer No. 8: Automation Direct will be used for the PLC.

Question No. 9: Please specify the concrete foundation requirements for the Acoustiblok Sound Attenuator Panel called-out on in Item 16 on Sheet P10-01.

Answer No. 9: The foundation shall be 12" thick concrete with two layers of #5 rebar at 12" O.C.

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Question No. 10: Please specify the concrete foundation requirements for the Filter Control Panel shown on Sheet P30-01.

Answer No. 10: Refer to detail 3 on E4.0 for foundation requirements

Question No. 11: Note 11 on E0.1 states that the existing exhaust fan is to remain. This does not agree with Note 1 on Sheet S10.01.

Answer No. 11: Revised Plan Note #11 on E0.1 to read “DEMO (E) PLYWOOD BKBD W/WALL EXHAUST FANT & MOTOR RATED SWITCH. SEE REPLACEMENT FAN ON E1.3.”

Question No. 12: Detail 1 on Sheet E4.2 shows a dry type transformer installed outside. The dry type transformer for this project will be installed inside the existing building per Sheet E2.1. Please provide a revised detail.

Answer No. 12: See revisions to Detail 1/E4.2 to reflect installation onto an existing condition.

Question No. 13: Will AdEdge be approved as “An Equal” for the coagulation/filtration system?

Answer No. 13: Yes AdEdge Water Technologies, LLC shall be an approved equal for pressure filters

Question No. 14: Spec Section 26 32 13, Engine Generator, names Cummins or equal. The footer for this spec references Generac. Is this just a typo or is Generac considered an acceptable manufacturer?

Answer No. 14: Generac is considered an acceptable manufacturer as the supplied unit meets Part 2 of the specification section

Question No. 15: Sheet S10-01 requires us to enlarge the existing louver opening in the Well Building. As you can see in the photo below, there are electrical conduits present that will interfere with this work. Relocation of these conduits does not appear to be discussed in the drawings. Please address.

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Answer No. 15: Contractor shall preserve the existing conduit across the proposed enlarged louvered opening.

Question No. 16: Please provide the material and finish information for the interior walls of the bathroom in the Maintenance Shed.

Answer No. 16: Bathroom walls shall be sheet rock with 5 feet of FRP plastic sheeting from finished floor with a smooth finish over the sheet rock.

Question No. 17: Note 2 on Sheet P10-02 states that all tubing shall be insulated. Please provide details regarding the insulation and jacketing.

Answer No. 17: Pipe insulation shall be minimum 1" thick closed cell foam pipe insulation wrapped in minimum 20 mil pipe protection tape.

Question No. 18: Please confirm that removal of the dirt and debris piles at the north half of the site is to be included in the Contractor's scope of work. Is this off-haul included in the estimated cut volume on Sheet C-5?

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Answer No. 18: *The removal of the dirt and debris piles at the north half of the site shall be included in the Contractor's scope of work. The estimated informational grading quantities shown on Sheet C-5 do not include the debris and dirt piles.*

Question No. 19: Please confirm guy wire relocate by others.

Answer No. 19: *Guy Wire shall be relocated by TID*

Question No. 20: Section 5.09 "Public Safety" specifies concrete barrier rail between any lane carrying public traffic and any excavation work. Contractor believes we can utilize cones and lane closure as part of an "Approved" traffic control plan. Will this be permitted for frontage improvements (notes 5, 11, and 34)?

Answer No. 20: *Yes.*

Question No. 21: Please confirm Demolition Call-out [4] building foundation is scheduled for demolition and removal as well. If this foundation is scheduled for removal please provide a thickness for basis of bid.

Answer No. 21: *Confirmed callout 4 on Sheet C-3 includes demolition and removal of maintenance shed foundation. No Record Drawings of the existing Maintenance Shed are available to confirm thickness.*

Question No. 22: Drawing E2.1 Existing Well Building – this drawing shows multiple conduit and feeder runs under or in slab. A major portion of the concrete floor will have to be removed and replaced to accommodate access from the equipment line up long the North wall. None of this work is shown on the Civil or Structural Drawings. Please clarify.

Answer No. 22: *Concrete removal in the well building has been added to the Demolition Plan on C-3 and attached to this Addendum. The contractor shall replace the concrete in kind once conduit is placed and estimated extents of slab are shown on the revised Sheet P10-01 attached to this Addendum. See Plan Revision Item 11 this Addendum.*

Question No. 23: Drawing S60-03, section B shows girts on the inside of the columns. Is this required for all columns? What is the purpose?

Answer No. 23: *The girt positions have been updated in Drawing S60-03 and their inset position is required at all columns. See Plan Revision Item 10 this Addendum.*

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Question No. 24: In the GC spec section, is this under buy American act?

Answer No. 24: *No.*

Question No. 25: 13-34-19 2.2H There is mention of grouted columns in 13-34-19-8, 2.2(H) how much grout? And should I shorten columns for grout pack?

Answer No. 25: *This shall be determined by the Metal Building Manufacturer.*

Question No. 26: 13-34-19 2.3B Do we follow the insulation required outlined in 13-34, 2.3(B) for both buildings?

Answer No. 26: *The chemical storage enclosure does not require insulation.*

Question No. 27: Is there a 3070 man door hardware spec?

Answer No. 27: *Refer to Specification 08 11 00*

Question No. 28: Please clarify manner of determining cost for City of Turlock business license (i.e., is the fifty cents per thousand dollars of revenue for overall company revenue or upon revenue derived from work in the City of Turlock?).

Answer No. 28: *The costs of the license have been clarified per item no. 12 in the Revisions to Plans and Specifications, included with this addendum.*

Question No. 29: Demolition Call-out [7]. Please confirm flush saw cut & demo/removal of 4' wall will be permitted on existing slab.

Answer No. 29: *The mulch pile walls shall be over cut by 1" and removed per Callout 7 on Sheet C-3. Then patched to provide a smooth surface.*

Question No. 30: Demolition Call-out [9]. Please confirm piping and manifold removal is only the underground section necessary to cut-in new header and above ground piping in pump house is suitable for re-use on the project. (see attached).

Answer No. 30: *Confirmed.*

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Question No. 31: Demolition Call-out [17]. Please confirm existing bollards for removal? Call-out is not clear if City wants specific bollard(s) removed or all of them.

Answer No. 31: Confirmed that all of the bollards within the demolition hatch shown on Sheet C-3 shall be removed.

Question No. 32: Not used.

Answer No. 32: Not used.

Question No. 33: Can you provide details for the Sound Attenuator wall call out on plan sheet P10-01 Legend # 16?

Answer No. 33: The foundation shall be 12" thick concrete with two layers of #5 rebar at 12" O.C.

Question No. 34: The retaining walls that call to be demoed, do we leave the footings and slab in that area? (WE CAN FLUSH CUT THE WALLS AT THE SLAB ELEVATION)

Answer No. 34: The mulch pile walls shall be over cut by 1" and removed per Callout 7 on Sheet C-3. Then patched to provide a smooth surface.

Question No. 35: Is the hazardous building material survey done for this project?

Answer No. 35: A hazardous material survey has not been done for this project and shall be included in the Contractor's scope of work. The contractor shall assume, for bidding purposes, that no asbestos, lead, or other hazardous materials requiring special handling is needed. Should the report produced by the Contractor indicate a need to dispose of hazardous materials, a change order shall be granted per the terms of the agreement.

Question No. 36: Drawing S50-03 Note 9 states" Conc. walks, see civil Dwgs" The civil drawings do not show any conc. walkway or door entrance concrete. Are there any locations that will need conc. Walkways or door entrance concrete on the project?

Answer No. 36: No. The site surfacing shall be as shown on Sheet C-4 Site Plan.

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Question No. 37: Include an equipment list that bidders must include with their proposal.

Answer No. 37: *See Item 4 in Revision to Specifications in this Addendum*

Question No. 38: Establish an assumption for nesting birds (no impact to construction operations) that contractors can rely on for bidding purposes.

Answer No. 38: *For bidding purposes contractor shall assume no impact to construction operations.*

Question No. 39: There currently is not hot water in bathroom. Should an electric WH be installed inside bathroom?

Answer No. 39: *Yes a Stiebel Eltron Model #231045 or equal under sink wall mounted electric point of use water heater shall be installed inside the restroom.*

Question No. 40: Sheet C-3. Callout 9 – Remove & Dispose of (E) Piping & Manifold – Please confirm this is underground and needs to be removed from inside building Flange to future connection.

Answer No. 40: *Confirmed and removal needs to accommodate proposed piping shown on Sheet P10-02*

Question No. 41: Confirm Asbestos Clearance on Building demo for procurement of Dust Control Permit. Confirm no Lead present.

Answer No. 41: *A hazardous material survey has not been done for this project and shall be included in the Contractor's scope of work. The contractor shall assume, for bidding purposes, that no asbestos, lead, or other hazardous materials requiring special handling is needed. Should the report produced by the Contractor indicate a need to dispose of hazardous materials, a change order shall be granted per the terms of the agreement.*

Question No. 42: Confirm there are no restrictions for Heavy Equipment over Existing TID 30" Irrigation Line.

Answer No. 42: *Per TID the existing irrigation line is C76 Class 3 reinforced concrete pipe; and TID specified that the contractor shall not exceed acceptable loads for this class of pipe.*

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Question No. 43: Det. S-15/D-14 calls out Manhole to be 5'0" Diameter, Drawing C10 state 48" Manhole. Please clarify.

Answer No. 43: Manhole shall be 5'-0" diameter per City Standard C-15. See Plan Revision Item 5 per this addendum

Question No. 44: Please provide size of Existing Louvers in Well Building to be modified.

Answer No. 44: Existing louvers are approximately 40 inches by 24 inches.

Question No. 45: Please clarify the measure required to continue working if raptors are within ½ mile of the project. And how to project cost of Biologist Monitoring.

Answer No. 45: Contractor shall be responsible for hiring the Biological Resources specified in Section 01 57 19. For bidding purposes contractor shall assume that there will be no negative impact to construction operations due to biological resources in the vicinity of the project. Should future surveys prove to cause an impact to contractor's operations, a change order shall be granted per the terms of the agreement.

Question No. 46: Confirm Well Blow-off into Existing Storm drain.

Answer No. 46: The existing Well Blow-Off can be used and is shown on sheet P10-01 callout K.

Question No. 47: Confirm Existing Water piping and Electrical Conduits will be Capped and abandoned in Place. Callout 14 on Sheet C-3 states to remove.

Answer No. 47: Where accessible outside of the existing concrete slab, the water piping shall be removed. In locations where the water piping goes under the concrete slabs that remain shall be capped and abandoned in place.

Question No. 48: Confirm Spoils and debris onsite is in Estimated Grading Quantities.

Answer No. 48: Removal of the dirt and debris piles at the north half of the site shall be included in the Contractor's scope of work. The estimated informational grading quantities shown on Sheet C-5 do not include the debris and dirt piles.

Question No. 49: Drawing E2.1 shows various electrical conduits to the well pump, MCC and panel L1 being installed underground. Is it the intention to excavate the existing building slab to

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install these conduits or should all new conduits inside the existing well building be installed exposed on the walls and ceiling?

Answer No. 49: Concrete removal in the well building has been added to the Demolition Plan on C-3 and attached to this Addendum. The contractor shall replace the concrete in kind once conduit is placed and estimated extents of slab are shown on the revised Sheet P10-01 attached to this Addendum. See Plan Revision Item 11 this Addendum.

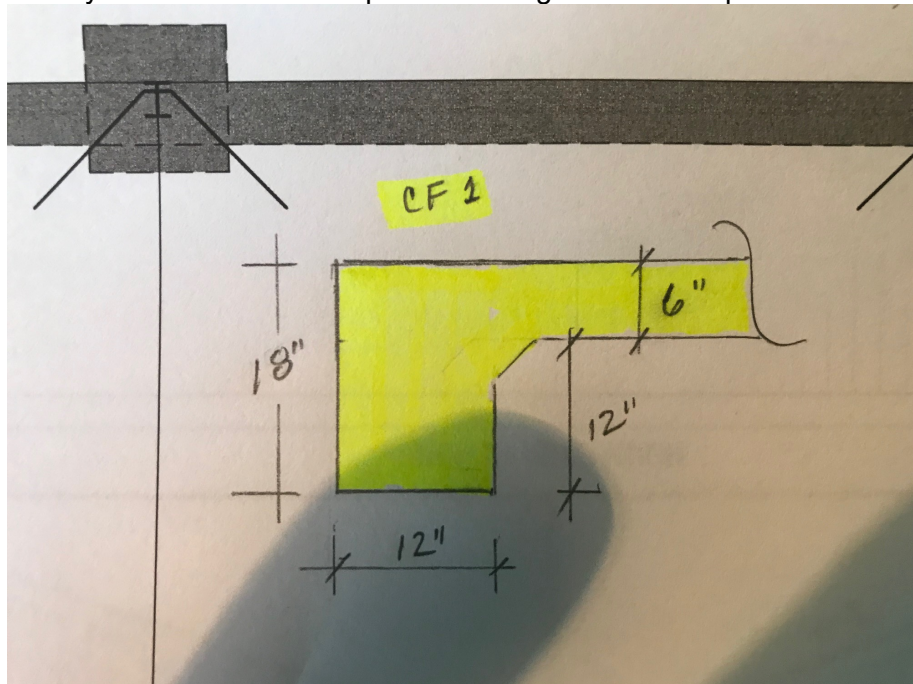
Question No. 50: Metal roofing section 07 41 13-2/2.1 C. specifies a 12" wide panel. However, Metal Building section 13 34 19-10 2.9 B/1 specifies a 16" wide panel. Please clarify...

Answer No. 50: Metal Roofing for the Maintenance Building shall be 16" per Specification 13 34 19.

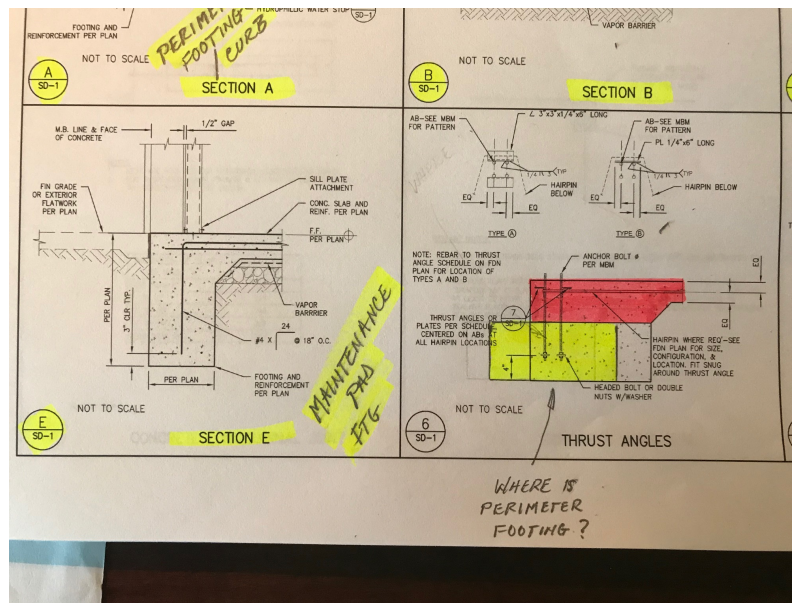
Question No. 51: For the chain link fence for the chemical storage building. Can they either provide a written spec. and/or add pipe sizes, wire gauges etc. to the drawings?

Answer No. 51: The poles for the chain link fence shall be 3" diameter standard pipe with 9 gauge wire. See Revision Item 9 this Addendum

Question No. 52: Footings shown on S60-01 (F1 & CF1) do not match/line-up with Detail 6 of SD-1. Please clarify elevation on from top of F1 footing in relationship to Finished Floor.



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Answer No. 52: Refer to A SD-1 and the depth of CF1 is 12" not 18"

Question No. 53: I am assuming from the Addenda 1 response that TESCO is to be the sole source supplier for this project?

Answer No. 53: Currently TESCO is approved. See Item 6 in Revisions to Specifications in this Addendum regarding prequal process.

Question No. 54: Does the pump require NSF61 certification? The specification asks for NSF61 approved coatings on the bowl but the column does not specify to be coated or lined.

Answer No. 54: The entire pump does not need to be certified but all materials in contact with potable water shall be NSF 61 certified per Section 43 21 52 1.5

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Revisions to Plans and Specifications

The following additions, deletions or modifications shall become part of the Contract Documents:

Strikethrough text (~~text~~) indicates deletions.

Bold Italicized text (***text***) indicates additions.

ITEM NO. 1:

Sheet E3.1

Replace with the attached. Conduit & Cable Schedule: Made changes to H38009

ITEM NO. 2

Sheet E3.2

Replace with the attached

- Conduit & Cable Schedule: Made various changes to L38019A through K and C38006.
 - Panel Schedule: Made various revisions to both boards which include breaker changes, reduced SCCR rating, and main breaker.
-

ITEM NO. 3:

Sheets E2.4, E3.0, E4.2, and E4.4

Replace with the attached sheets: Revised to incorporate a run permissive from the PLC from the PSHL and RTD motor protector circuits and updated transformer detail.

ITEM NO. 4:

Add the following **00 43 44 Material Suppliers Section** to the Specifications and shall be included with the submitted Bid Package (see following pages).

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SECTION 00 43 33

MATERIAL SUPPLIERS INFORMATION

The Bidder shall indicate opposite each item of equipment or material listed below the name of the manufacturer or supplier of the equipment or material proposed to be furnished under the Bid.

	<u>Equipment/Material</u>	<u>Manufacturer/Supplier</u>
1.	<u>Well Pump (Pump Bowls)</u>	<u></u>
2.	<u>Well Pump Motor</u>	<u></u>
3.	<u>3,000-GPM Filtration System</u>	<u></u>
4.	<u>Chemical Storage Tanks</u>	<u></u>
5.	<u>Chemical Metering Pumps</u>	<u></u>
6.	<u>Water Quality Analyzers</u>	<u></u>
7.	<u>Steel Tank</u>	<u></u>
8.	<u>Maintenance Building</u>	<u></u>
9.	<u>Electrical Equipment</u>	<u></u>
10.	<u>Instrumentation and Controls</u>	<u></u>
11.	<u>Standby Generator</u>	<u></u>
12.	<u></u>	<u></u>
13.	<u></u>	<u></u>
14.	<u></u>	<u></u>

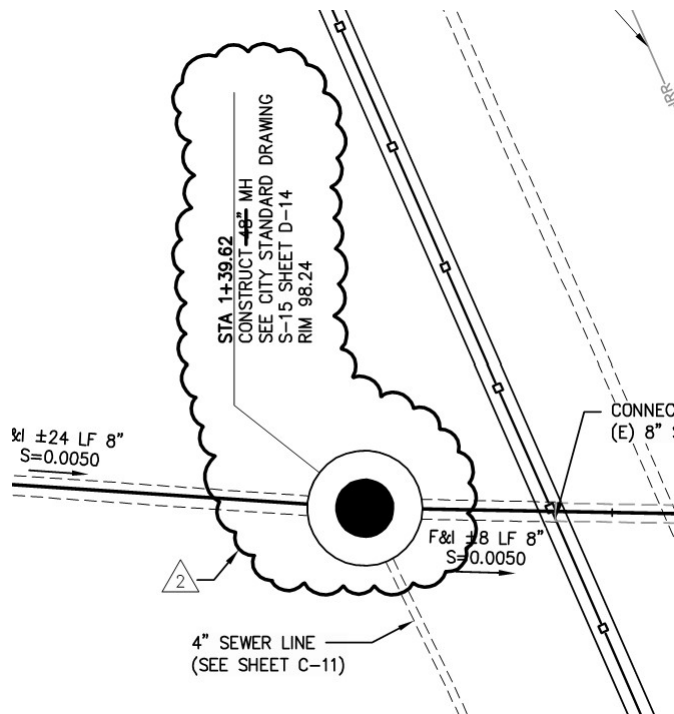
Awarding of a contract under this bid will not imply approval by the Owner of the manufacturers of suppliers listed by the Bidder. No substitution will be permitted after award of contract unless equipment of material of the listed manufacturer of supplier cannot meet the specifications.

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ITEM NO. 5:

Sheet C-10

Revise sheet as follows to clarify 5 foot diameter manhole per City Standard S-15



ITEM NO. 6

Section 40 50 00 I&C General Provisions

Revise Section 40 50 00 Part 1.06.F to read:

F. The listed approved PCSS's shall not be required to submit a qualification proposal. Suppliers interested in being listed as an equal shall submit three copies of a qualification proposal to the ENGINEER no later than ~~24 days~~ **10 days** before the bid opening date. A list of approved equals shall be issued no later than ~~13 days~~ **5 days** before the bid opening date.

ITEM NO. 7

NOTICE TO CONTRACTORS

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The bid opening date has been extended from June 30th to July 8th . Sealed proposals will now be received until 2:00 PM on Wednesday July 8th, 2020.

ITEM NO. 8:

Sheets C-3, C-4, C-5 and D-2B (new detail Sheet)

Replace with the attached to sheets. Revisions made to accommodate an accessible path of travel to the Maintenance Shed

ITEM NO. 9:

Sheet S50-02

Add the following note 4 to the sheet:

PRIVACY SLAT NOTES

1. PROVIDE PRIVACY SLATS FULL HEIGHT OF CHAIN-LINK FENCE AND GATES.
2. MATERIAL: TUBULAR POLYETHYLENE SLATS, MINIMUM 0.023" THICK, MANUFACTURED FOR CHAIN LINK FENCES FROM VIRGIN POLYETHYLENE WITH UV INHIBITOR, TO FIT MESH SPECIFIED FOR DIRECTION INDICATED WITH VANDAL RESISTANT FASTENERS AND LOCK STRIPS.
3. COLOR: PROVIDE COLOR SAMPLES FOR SELECTION BY OWNER.

**4. THE POLES FOR THE CHAIN LINK FENCE
SHALL BE 3" DIAMETER STANDARD PIPE WITH 9 GAUGE WIRE.**

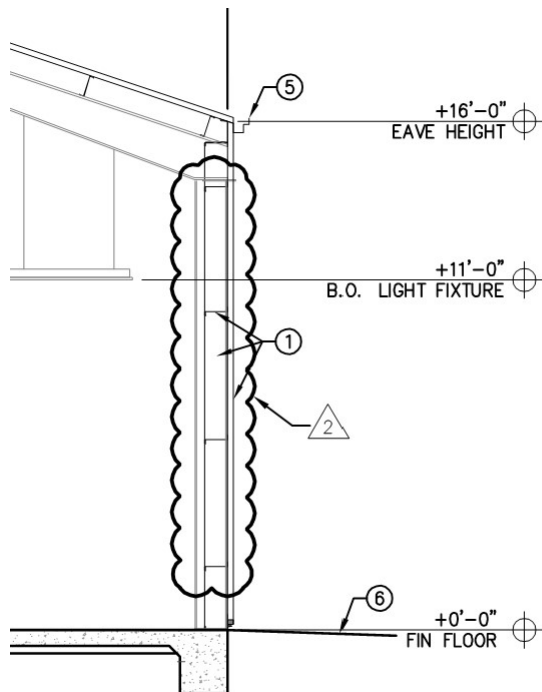


ITEM NO. 10:

Sheet S60-03

The girt positions have been updated and their inset position is required at all columns as follows:

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ITEM NO. 11:

Sheets P10-01 and SD-2

Replace with the attached to sheets. Revisions made to clarify concrete pad replacement required based on electrical conduit replacements

ITEM NO. 12:

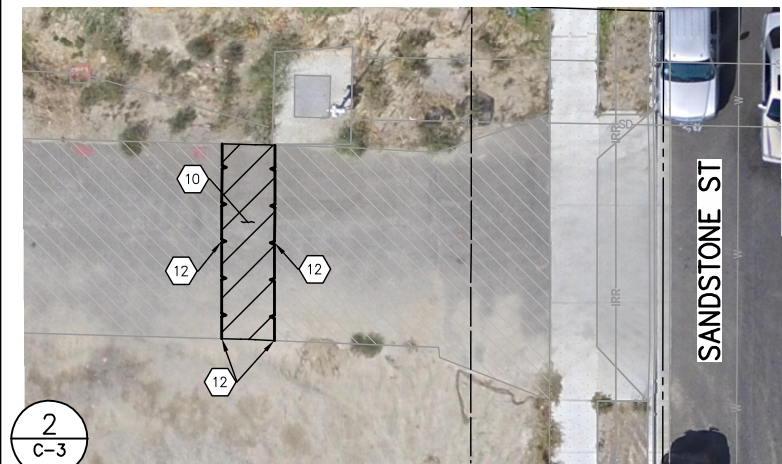
Special Provisions

Revise Part 5.26 to read:

5.26 BUSINESS LICENSE:

Contractor shall obtain a City of Turlock business license prior to issuance of the Notice to Proceed. The cost of the business license is a up-front fee of eighty four dollars (\$84) plus fifty cents per thousand dollars in revenue received for work performed on the project, made payable on a semi-annual basis. Business Licenses are obtained through the Finance Division at Turlock City Hall, 156 S. Broadway, Suite 114. Additional information can be found on the City's website at <http://ci.turlock.ca.us/doingbusinessinturlock/businesslicenses/newbusinesslicense.asp>.

Full compensation for obtaining a business license as specified above shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefore.



DEMOLITION CALLOUTS

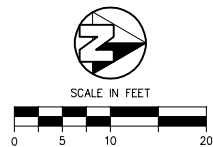
- | | |
|---|--|
| 1 REMOVE AND DISPOSE OF (E) CHAINLINK FENCE AND GATE | 10 REMOVE AND DISPOSE OF (E) AC |
| 2 REMOVE AND DISPOSE OF (E) MOWSTRIP | 11 REMOVE AND DISPOSE OF (E) HOSE BIB |
| 3 REMOVE AND DISPOSE OF (E) VALLEY GUTTER | 12 SAWCUT EXISTING PAVEMENT TO CLEAN STRAIGHT EDGE |
| 4 REMOVE AND DISPOSE OF (E) STRUCTURE | 13 REMOVE AND DISPOSE OF (E) IRRIGATION BOX AND CONNECTION |
| 5 REMOVE AND DISPOSE OF (E) DRIVE APPROACH, CURB & GUTTER, AND SIDEWALK | 14 REMOVE AND DISPOSE OF (E) WATER LINE |
| 6 RELOCATE (E) GUY WIRE BY TID | 15 REMOVE AND DISPOSE OF (E) ELECTRICAL EQUIPMENT |
| 7 REMOVE (E) 4' CONCRETE WALL | 16 REMOVE EXISTING IRRIGATION CONNECTION (SEE SHEET LA-2) |
| 8 REMOVE AND DISPOSE (E) EXHAUST FAN & PORTION OF (E) BUILDING AT PROPOSED LOUVER LOCATIONS (SEE SHEET P10-01 & S10-01) | 17 REMOVE AND DISPOSE OF (E) BOLLARD |
| 9 REMOVE AND DISPOSE OF (E) PIPING AND MANIFOLD | 18 REMOVE AND DISPOSE OF (E) CONCRETE SLAB |

NOTES

- DEMOLITION TO BE COORDINATED WITH CITY OF TURLOCK AND TID.
- EXISTING BURIED UTILITIES ARE SHOWN AT APPROXIMATE LOCATIONS. THE CONTRACTOR SHALL EXPOSE UTILITIES TO DETERMINE EXACT LOCATIONS AS A FIRST ORDER OF WORK, PRIOR TO DEMOLITION.
- ALL EQUIPMENT AND MATERIALS TO BE REMOVED AND/OR DEMOLISHED SHALL BE DISPOSED OF OFFSITE BY THE CONTRACTOR AFTER REVIEW BY CITY FOR REUSE.
- ANY SURFACING THAT IS DISTURBED OUTSIDE THE LIMITS SHOWN SHALL BE REMOVED AND REPLACED.
- THE CONTRACTOR SHALL BACKFILL AND COMPACT VOIDS, HOLES, AND UNEVEN GROUND RESULTING FROM DEMOLITION WITH ENGINEERED FILL IN CONFORMANCE WITH THE TRENCH BACKFILL DETAILS AND THE SPECIFICATIONS. FINISH SURFACING SHALL BE PLACED AS SPECIFIED ON THE GRADING PLANS.
- PROVIDE PERMANENT OR TEMPORARY FENCING ALONG ADJOINING PROPERTIES AT ALL TIMES.
- EXISTING TOPOGRAPHY NOT CALLED TO BE DEMOLISHED SHALL BE PROTECTED IN PLACE UNLESS OTHERWISE DIRECTED BY ENGINEER.

LEGEND

- /// (APPROXIMATE LIMITS OF AREA TO BE DEMOLISHED)
- (APPROXIMATE LOCATION TO DEMOLISH UTILITY OR FENCE)
- SAWCUT LINE
- EXISTING AC PAVING TO REMAIN
- EXISTING CONCRETE TO REMAIN

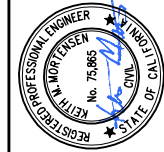


WELL 38 ARSENIC MITIGATION
AND ICF TREATMENT
CITY OF TURLOCK
CITY PROJECT NO. 20-009

CIVIL
DEMOLITION PLAN

EST-1918
PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company
286 WEST CROWMELL AVENUE
FRESNO, CALIFORNIA 93711-6162
559/449-2700 FAX 559/449-2715
www.ppgsg.com

DESIGN ENGINEER:
KEITH MORTENSEN
LICENSE NO:
75865
DRAFTED BY: JMN CHECKED BY: RKB
DATE: MAY 2020
JOB NO: 229219001
PROJECT NO:
PHASE: CD
0 1"
ONE INCH, ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.
SHEET **C-3**
10 OF 90



DATE SIGNED: 5/1/2020

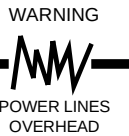
ISSUED FOR BIDDING
PURPOSES ONLY
5/1/20

NO.	REVISION	BY	DATE
1	ADDENDUM 2	KMM	06-24-2020

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WARNING
POWER LINES
OVERHEAD

811
Know what's below.
Call before you dig.



W CHRISTOFFERSEN PKWY

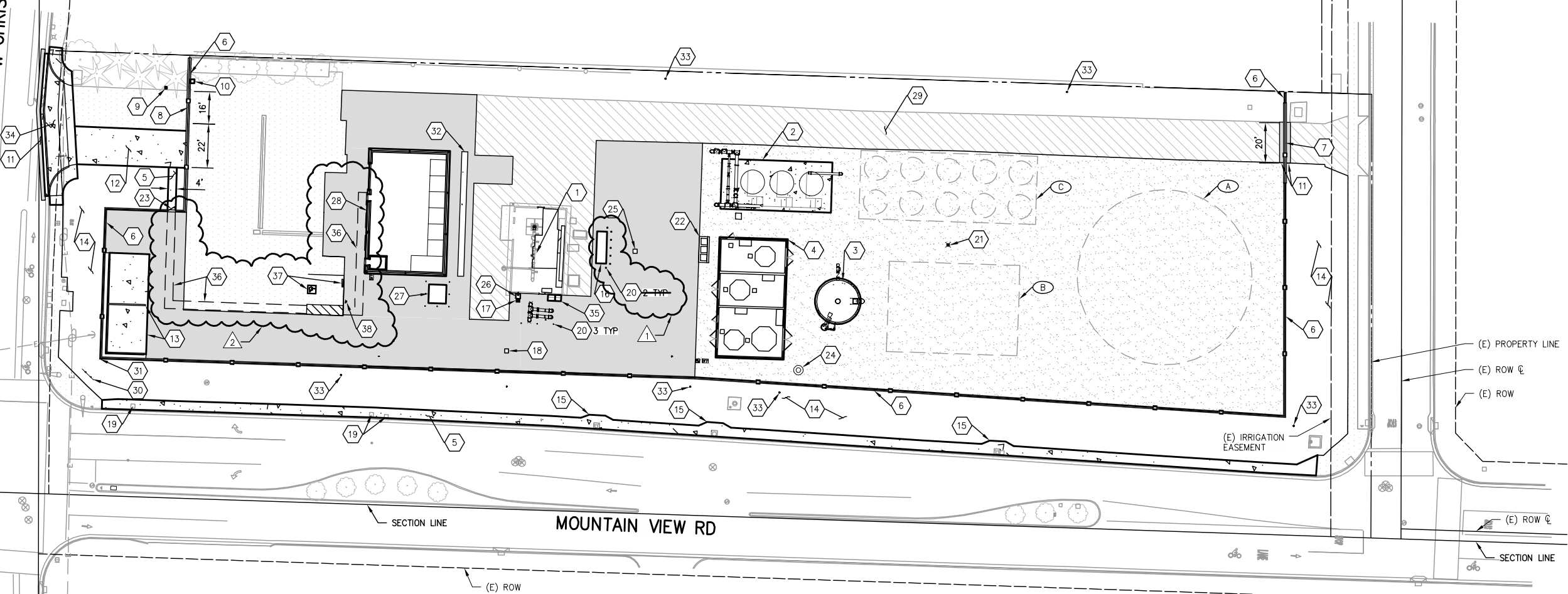
SECTION LINE

(E) ROW

(E) PROPERTY LINE
(E) ROW
(E) IRRIGATION EASEMENT
(E) PUBLIC UTILITY EASEMENT

SANDSTONE ST

(E) ROW
(E) ROW



FUTURE IMPROVEMENTS LEGEND

- (A) (F) FINISHED WATER STORAGE TANK (NIC)
(B) (F) PUMPING STATION (NIC)
(C) (F) GAC VESSELS (NIC)

SITE LEGEND

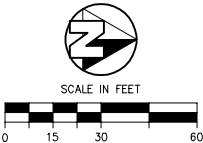
- 1 WELLHEAD MODIFICATIONS (SEE SHEET P10-01 & P10-02)
2 VERTICAL PRESSURE FILTERS (SEE SHEET P30-01)
3 EQUALIZATION TANK (SEE SHEET P40-01)
4 CHEMICAL STORAGE ENCLOSURE (SEE SHEET P50-01)
5 SIDEWALK (SEE CITY STANDARD DETAIL C-3 SHEET D-12)
6 METAL SECURITY FENCE WITH MOWSTRIP (SEE SHEET D-1)
7 MANUAL ROLLING DRIVE GATE (SEE DETAILS SHEET D-1)
8 AUTOMATIC ROLLING DRIVE GATE (SEE DETAILS SHEET D-1)
9 KEY CARD READER
10 FENCE GATE OPERATOR
11 FULL DEPTH AC PLUG
12 CONCRETE DRIVE (SEE DETAIL 1 SHEET D-2)
13 CONCRETE SLAB (SEE DETAIL 1 SHEET D-2) & 4' CONCRETE WALL, MULCH STORAGE (SEE DETAIL 3 SHEET SD-3)
14 LANDSCAPING (SEE SHEET LA-1)
15 SIDEWALK OBSTRUCTION TRANSITION (SEE CITY STANDARD DETAIL C-4 SHEET D-12)
16 GENERATOR PAD (SEE ELECTRICAL SHEETS)
17 DROP INLET (SEE DETAIL 1 SHEET D-6)
18 ADJUST GRADE (E) DROP INLET TO FLUSH WITH FINISHED SURFACE
19 ADJUST GRADE (E) PULL BOX TO FLUSH WITH FINISHED SURFACE
20 BOLLARD (SEE CITY STANDARD DETAIL ST-23 SHEET D-12)
21 NEW LIGHT POLE (SEE ELECTRICAL SHEETS)
22 CHEMICAL FILL STATION (SEE SHEET P50-03)
23 METAL PEDESTRIAN GATE (SEE DETAIL 5 SHEET D-1)
24 INDUSTRIAL MANHOLE (SEE CITY STANDARD DETAIL S-15 SHEET D-14)
25 ADJUST GRADE (E) ELECTRIC VAULT TO FLUSH WITH FINISHED SURFACE
26 CONCRETE SPLASH GUARD (SEE SHEET D-11)
27 TRANSFORMER (SEE ELECTRICAL SHEETS)
28 MAINTENANCE SHED ON CONCRETE FOUNDATION (SEE SHEET P60-01 & S60-01)
29 SLURRY SEAL EXISTING AC PAVING, ADD ALTERNATE BID ITEM
30 SITE SIGN (SEE DETAIL 1 SHEET D-14)
31 CONTRACTOR TO CONFIRM LOCATION OF GAS LINE BEFORE CONSTRUCTING FENCE LINE
32 VALLEY GUTTER (SEE DETAIL 4 SHEET D-2)
33 ATRIUM GRATE INLET (SEE DETAIL 2 SHEET D-6)
34 CONCRETE DRIVE APPROACH (SEE CITY STANDARD DETAIL C-9 SHEET D-12)
35 MAIN SWITCHBOARD (SEE ELECTRICAL SHEETS)
36 ACCESSIBLE PATH OF TRAVEL
37 ACCESSIBLE VAN PARKING STALL STRIPING AND WHEEL STOP (SEE DETAIL 2 SHEET D-2B)
38 ADA PARKING SIGNAGE (SEE DETAIL 1 SHEET D-11)

NOTES

1. SITE UTILITY LINES NOT SHOWN FOR CLARITY, REFER TO SITE PIPING PLAN.
2. CONTRACTOR MAY USE ANY PORTION OF THE SITE WITHIN THE FINAL PROPERTY LINE AS A STAGING AREA.

LEGEND

- EXISTING AC PAVING (SLURRY SEAL)
PROPOSED AC PAVING (SEE DETAIL 2 SHEET D-2)
EXISTING CONCRETE
PROPOSED CONCRETE
6" THICK CLASS II AB COMPACTED TO 95% RD OVER NATIVE SOIL SCARIFIED 6" DEEP AND COMPACTED TO 95% RD



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5/1/20



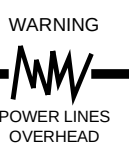
WELL 38 ARSENIC MITIGATION
AND ICF TREATMENT
CITY OF TURLOCK
CITY PROJECT NO. 20-009
CIVIL

SITE PLAN

EST. 1988
PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company
286 WEST CROMWELL AVENUE
FRESNO, CALIFORNIA 93711-6162
559/449-2700 FAX 559/449-2715
www.pprg.com

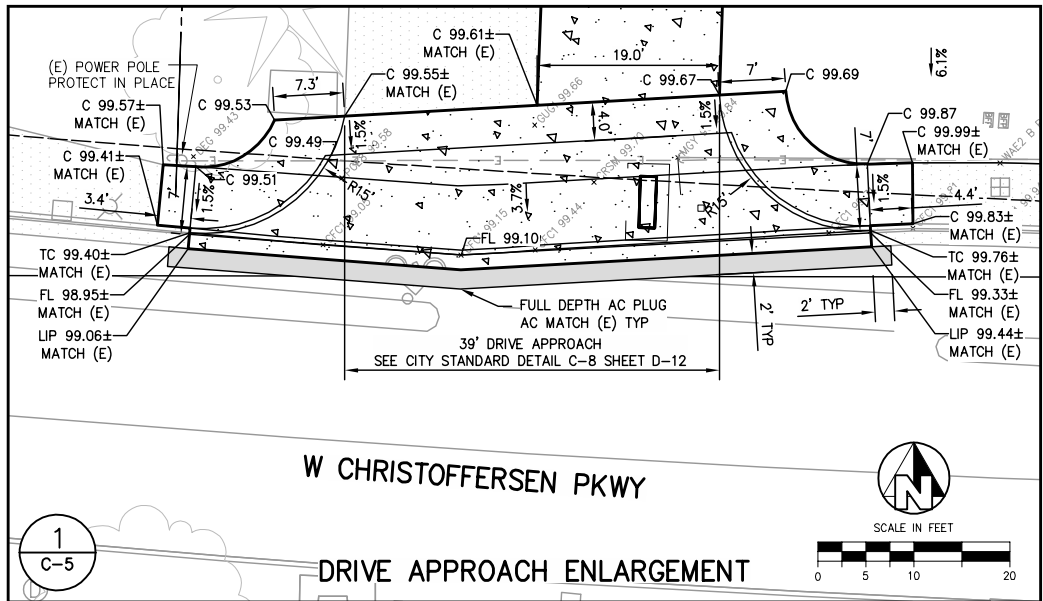
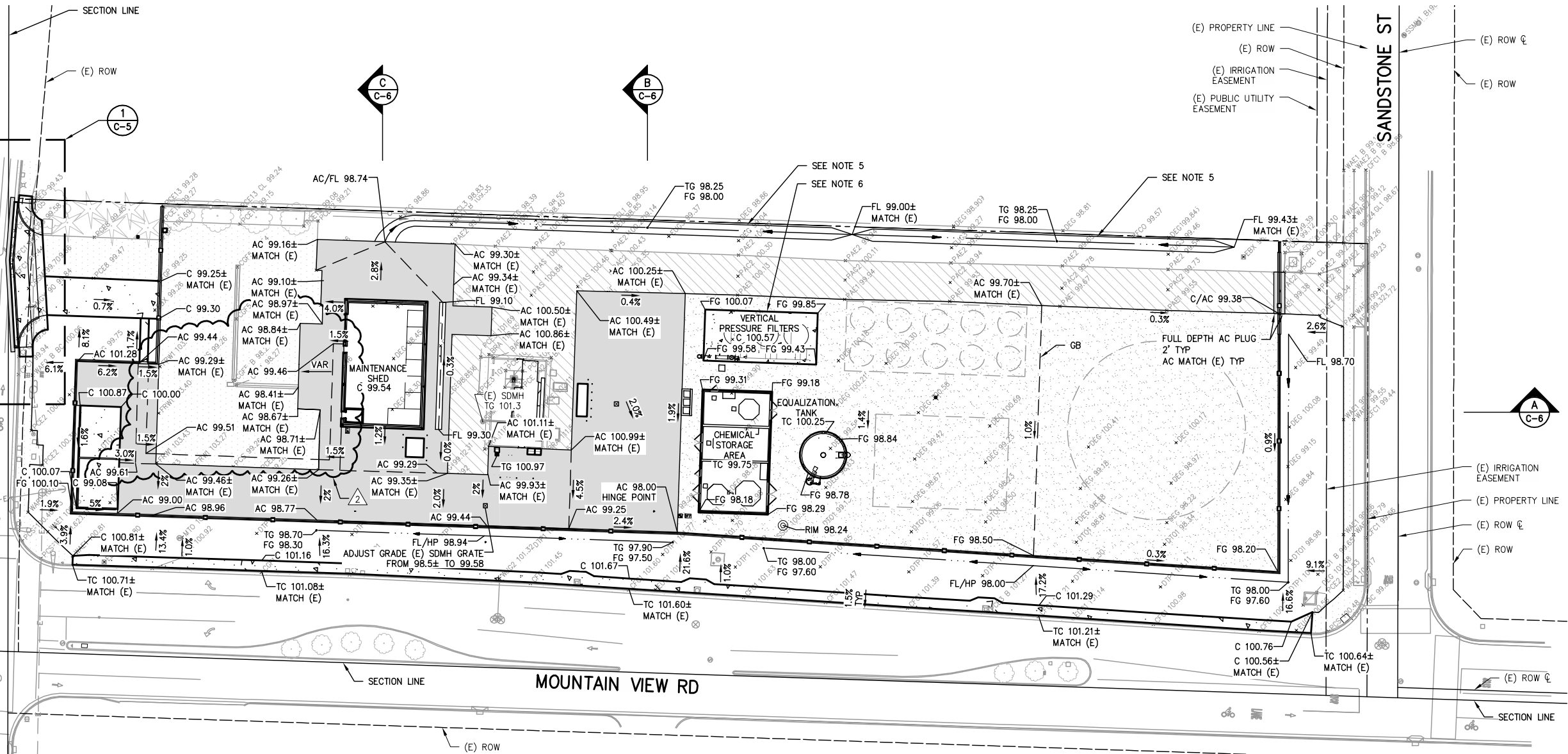
DESIGN ENGINEER:
KEITH MORTENSEN
LICENSE NO:
75865
DRAFTED BY:
JMN
CHECKED BY:
RKB
DATE: MAY 2020
JOB NO: 229219001
PROJECT NO:
PHASE: CD
ORIGINAL SCALE SHOWN IS
ONE INCH. ADJUST SCALE FOR
REDUCED OR ENLARGED PLANS.
SHEET
C-4

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W CHRISTOFFERSEN PKWY

W CHRISTOFFERSEN PKWY

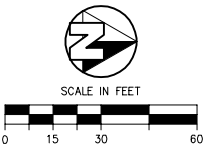


LEGEND

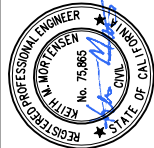
- GRADE BREAK
- DIRECTION OF SURFACE FLOW
- PROPOSED DRAINAGE SWALE
- EXISTING AC PAVING (SLURRY SEAL)
- CONSTRUCT AC PAVING DRIVE
- EXISTING CONCRETE
- CONSTRUCT DRIVE APPROACH, CONCRETE PAD, SIDEWALK, OR FOUNDATION. SEE STRUCTURAL DETAILS
- 6" THICK CLASS II AB COMPACTED TO 95% RD OVER NATIVE SOIL SCARIFIED 6" DEEP AND COMPACTED TO 95% RD
- AC AC PAVING
- C CONCRETE ELEV
- DEG EXISTING GROUND, DIRT
- (E) EXISTING
- FG FINISH GRADE ELEV
- FL FLOW LINE
- GB GRADE BREAK
- LIP GUTTER LIP
- TC TOP OF CURB
- TG TOP OF GRATE

NOTES

- SITE UTILITY LINES NOT SHOWN FOR CLARITY, REFER TO SITE PIPING PLAN.
- CONTRACTOR MAY USE ANY PORTION OF THE SITE WITHIN THE FINAL PROPERTY LINE AS A STAGING AREA.
- GRADE TO REAR FACE OF SIDEWALK, AS SHOWN
- RESTRIPE DAMAGED OR REMOVED PAVEMENT MARKINGS AND LINES.
- GRADE SURROUNDING AREA TO ATRIUM GRATE INLET
- CONCRETE PAD SET A MINIMUM OF 6" ABOVE FINISHED GRADE
- GRADING QUANTITIES ARE INFORMATIONAL ONLY AND DO NOT ACCOUNT FOR SHRINKAGE OR EXPANSION. CONTRACTOR TO PREPARE OWN ESTIMATE FOR BIDDING PURPOSES
- ESTIMATED GRADING QUANTITIES
CUT = 1800 CUBIC YARDS
FILL = 300 CUBIC YARDS



ISSUED FOR BIDDING
PURPOSES ONLY
5/1/20



WELL 38 ARSENIC MITIGATION
AND ICF TREATMENT
CITY OF TURLOCK
CITY PROJECT NO. 20-009

CIVIL

GRADING PLAN

EST-15158
PROVOST & PRITCHARD
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FRESNO, CALIFORNIA 93711-6162
559/449-2700 FAX 559/449-2715
www.pprg.com

DESIGN ENGINEER:
KEITH MORTENSEN
LICENSE NO:
75865

DRAFTED BY: JMN
CHECKED BY: RKB

DATE: MAY 2020
JOB NO: 229219001

PROJECT NO:

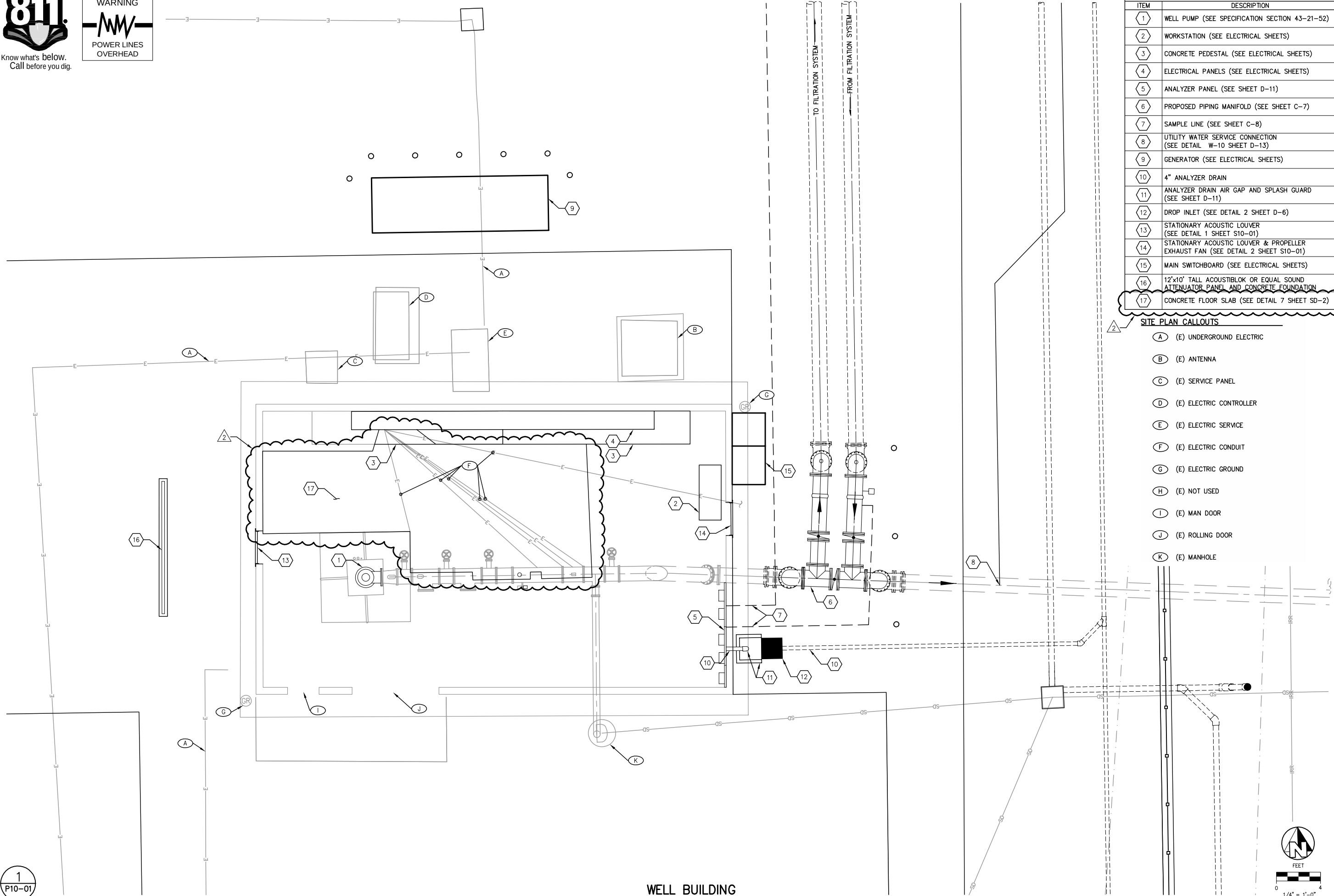
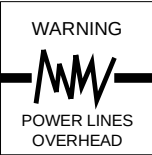
PHASE: CD

0 1"
ONE INCH SCALE SHOWN IS
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SHEET
C-5

12 OF 90

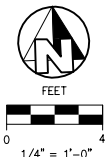
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LEGEND	
ITEM	DESCRIPTION
1	WELL PUMP (SEE SPECIFICATION SECTION 43-21-52)
2	WORKSTATION (SEE ELECTRICAL SHEETS)
3	CONCRETE PEDESTAL (SEE ELECTRICAL SHEETS)
4	ELECTRICAL PANELS (SEE ELECTRICAL SHEETS)
5	ANALYZER PANEL (SEE SHEET D-11)
6	PROPOSED PIPING MANIFOLD (SEE SHEET C-7)
7	SAMPLE LINE (SEE SHEET C-8)
8	UTILITY WATER SERVICE CONNECTION (SEE DETAIL W-10 SHEET D-13)
9	GENERATOR (SEE ELECTRICAL SHEETS)
10	4" ANALYZER DRAIN
11	ANALYZER DRAIN AIR GAP AND SPLASH GUARD (SEE SHEET D-11)
12	DROP INLET (SEE DETAIL 2 SHEET D-6)
13	STATIONARY ACOUSTIC LOUVER (SEE DETAIL 1 SHEET S10-01)
14	STATIONARY ACOUSTIC LOUVER & PROPELLER EXHAUST FAN (SEE DETAIL 2 SHEET S10-01)
15	MAIN SWITCHBOARD (SEE ELECTRICAL SHEETS)
16	12'x10' TALL ACOUSTIBLOK OR EQUAL SOUND ATTENUATOR PANEL AND CONCRETE FOUNDATION
17	CONCRETE FLOOR SLAB (SEE DETAIL 7 SHEET SD-2)

SITE PLAN CALLOUTS

- (A) (E) UNDERGROUND ELECTRIC
- (B) (E) ANTENNA
- (C) (E) SERVICE PANEL
- (D) (E) ELECTRIC CONTROLLER
- (E) (E) ELECTRIC SERVICE
- (F) (E) ELECTRIC CONDUIT
- (G) (E) ELECTRIC GROUND
- (H) (E) NOT USED
- (I) (E) MAN DOOR
- (J) (E) ROLLING DOOR
- (K) (E) MANHOLE



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559/449-2700 FAX 559/449-2715

www.pprg.com

DESIGN ENGINEER:

KEITH MORTENSEN

LICENSE NO:

75865

DRAFTED BY:

JMN

CHECKED BY:

RKB

DATE:

MAY 2020

JOB NO:

229219001

PROJECT NO:

PHASE: CD

ORIGINAL SCALE SHOWN IS

ONE INCH, ADJUST SCALE FOR

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SHEET

P10-01

19

OF

90

ISSUED FOR BIDDING

PURPOSES ONLY

5/1/20

DATE SIGNED: 5/1/2020

DATE: 06-24-2020

BY: KMM

REVISION: ADDENDUM 2

No.

WELL 38 ARSENIC MITIGATION

AND ICF TREATMENT

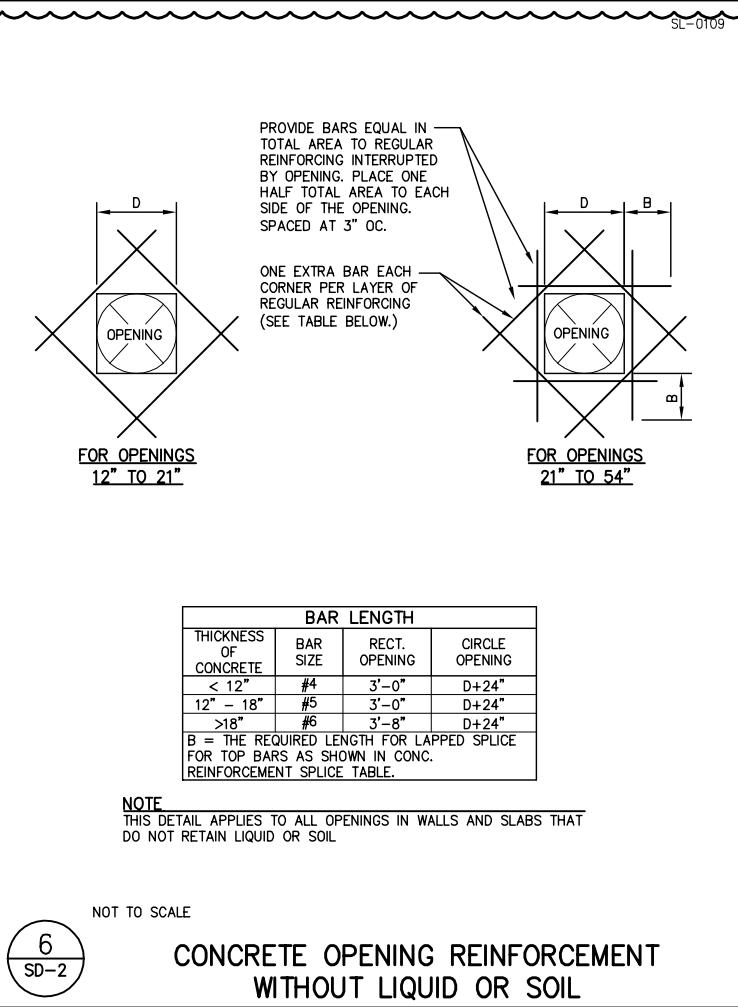
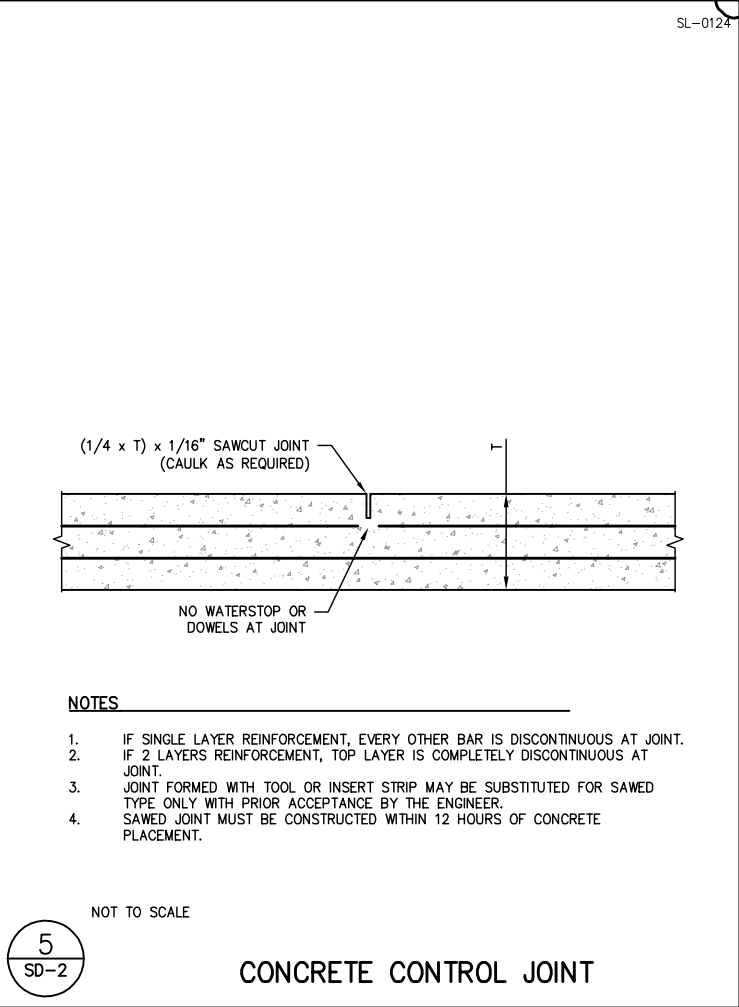
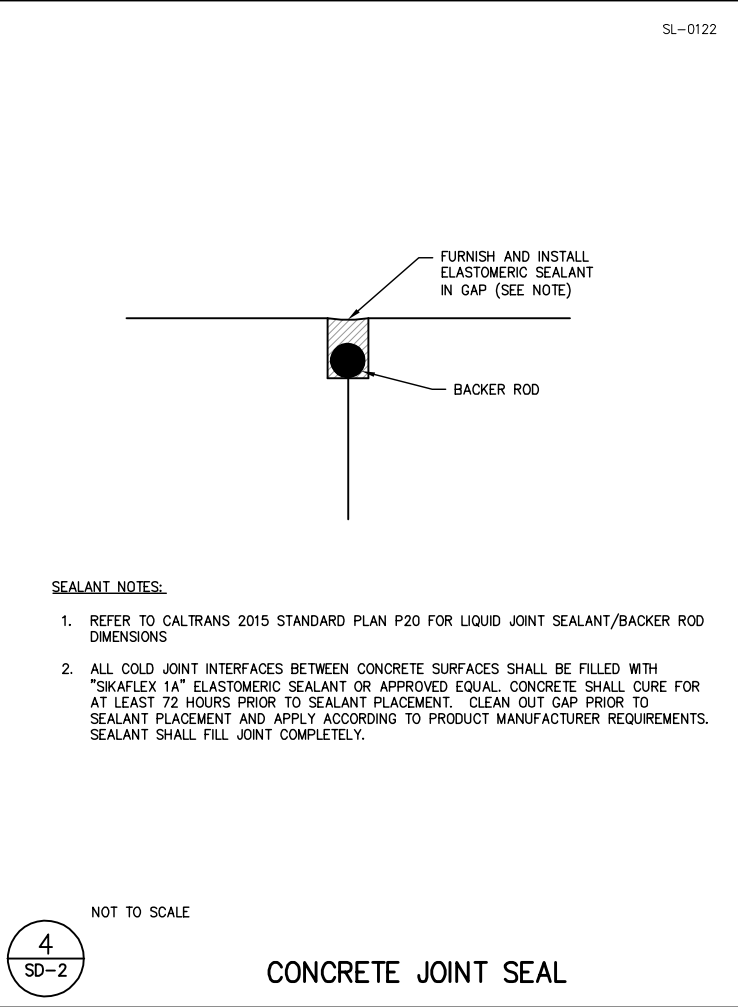
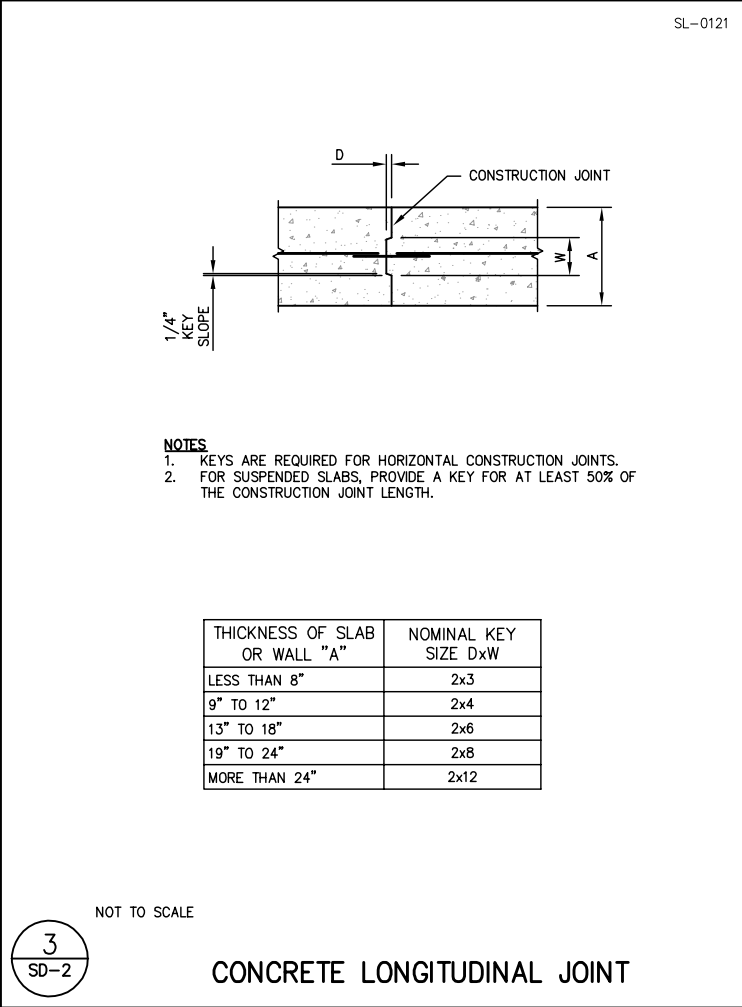
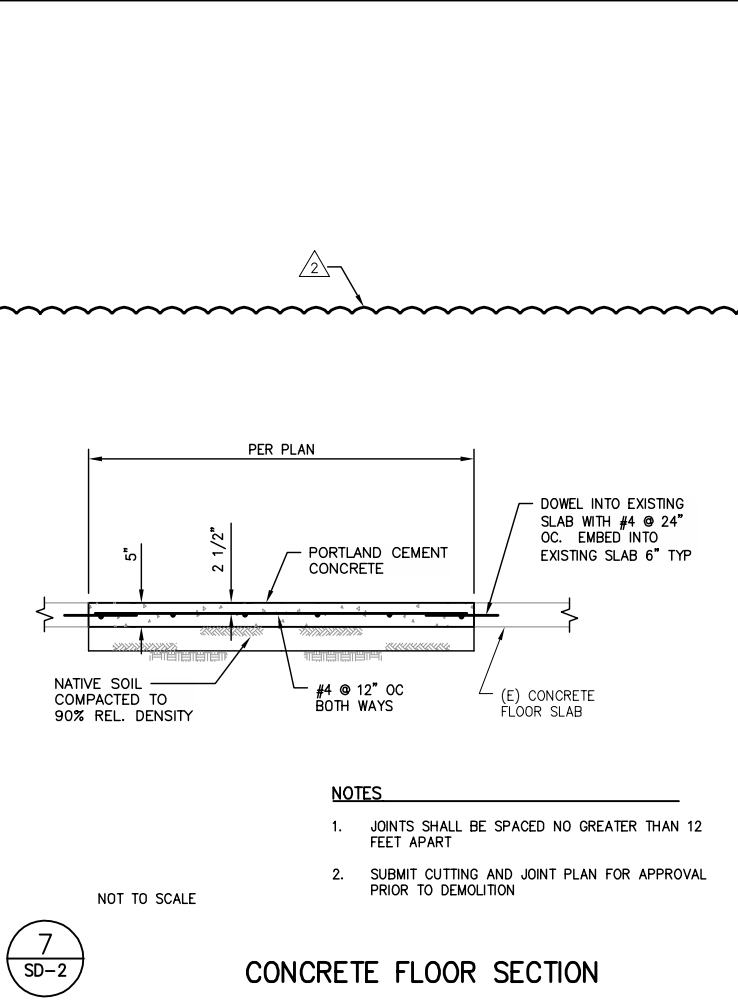
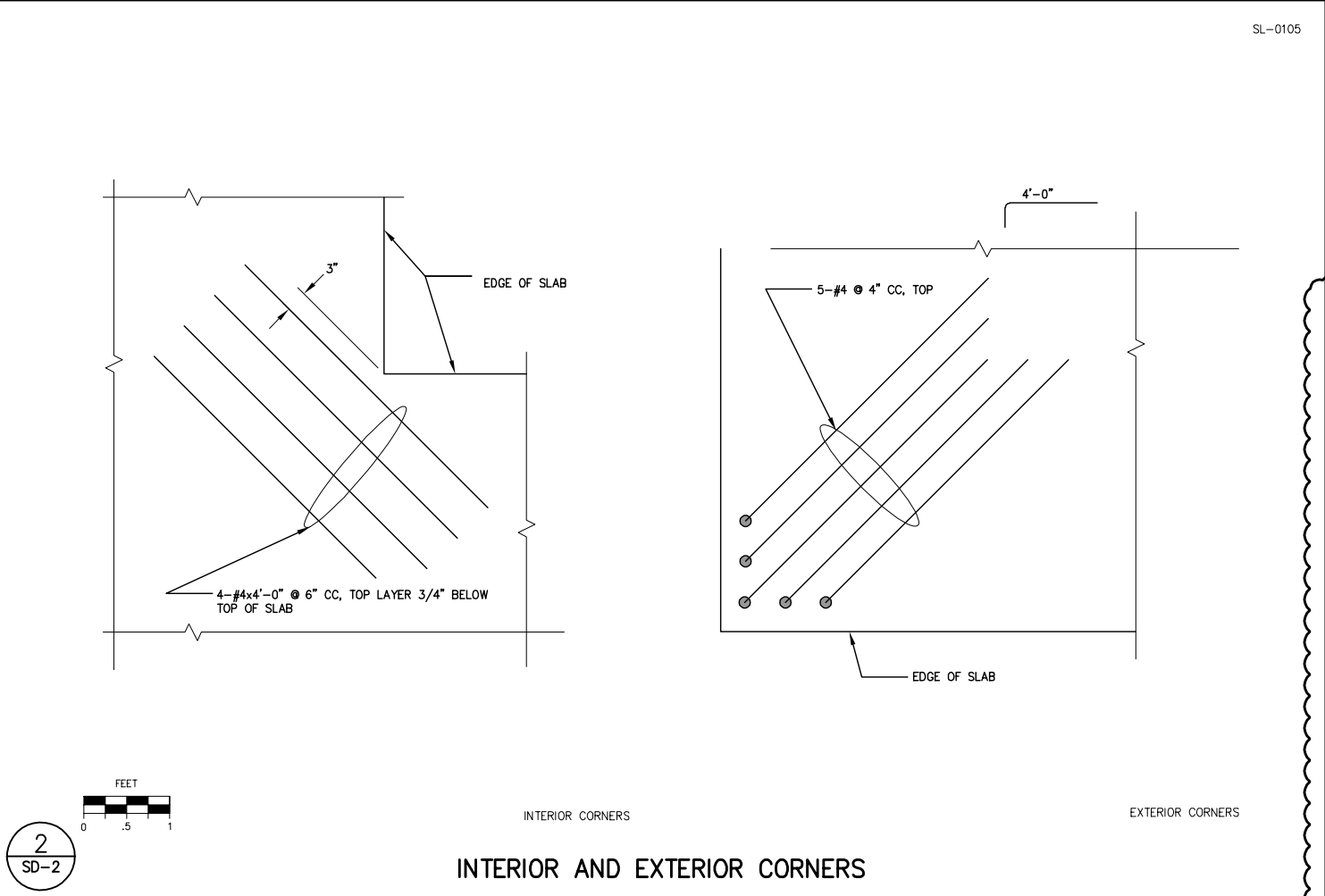
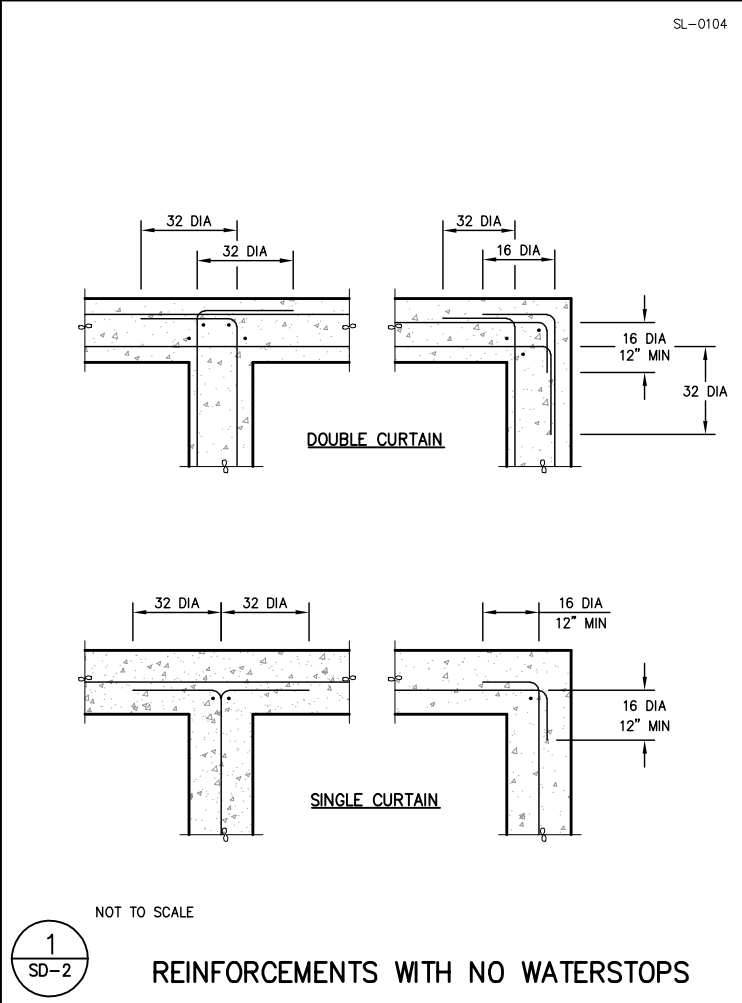
CITY OF TURLOCK

CITY PROJECT NO. 20-009

PROCESS

WELL BUILDING

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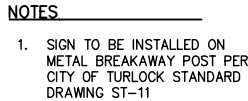


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WELL 38 ARSENIC MITIGATION AND ICF TREATMENT CITY OF TURLOCK CITY PROJECT NO. 20-009 STRUCTURAL DETAILS

DESIGN ENGINEER: KEITH MORTENSEN LICENSE NO: 75865 DRAFTED BY: JMN CHECKED BY: RKB DATE: MAY 2020 JOB NO: 229219001 PROJECT NO: PHASE: CD ORIGINAL SCALE SHOWN IS ONE INCH. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS. SHEET 42 OF 90



ACCESSIBLE PARKING SIGN



ACCESSIBLE PARKING STALL

EST. 1961

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DESIGN ENGINEER:
KEITH MORTENSEN
LICENSE NO:
75865

DRAFTED BY: JMN	CHECKED BY: RKB
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DATE: MAY 2020
JOB NO: 229219001

PROJECT NO:

PHASE: CD	
0	1"

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REDUCED OR ENLARGED PLANS

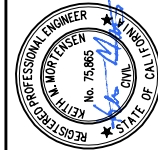
SHEET **D-2B**

OF 90

WELL 38 ARSENIC MITIGATION
AND ICF TREATMENT
CITY OF TURLOCK
CITY PROJECT NO. 20-009

DETAILS

CIVIL DETAILS



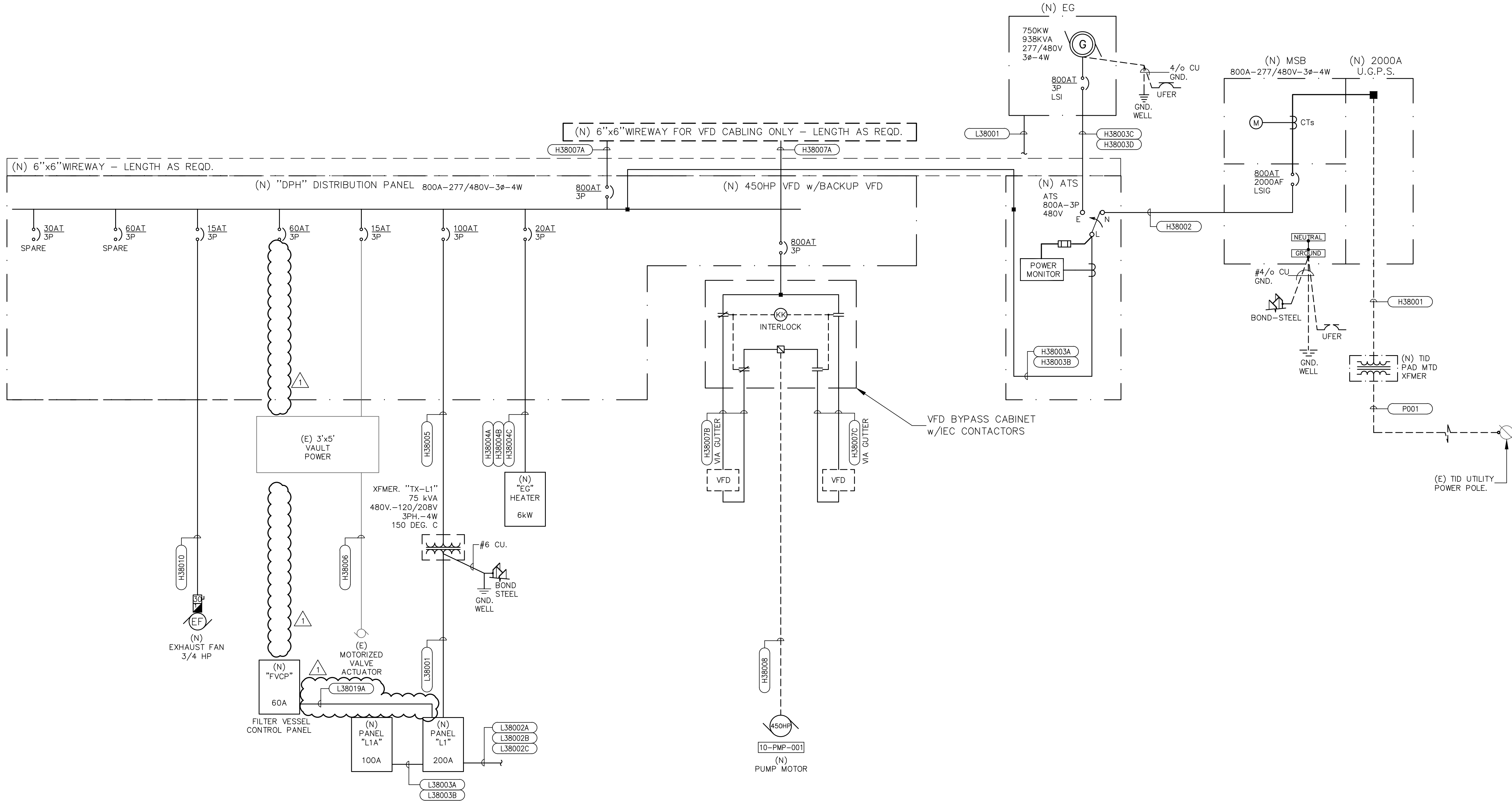
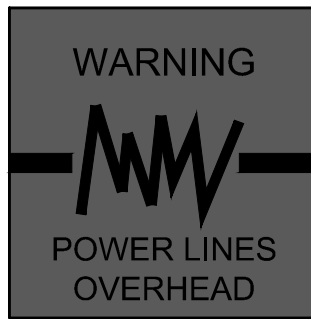
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 IS FOR ANS.
 BY:
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2	ADDENDUM 2	KMM	06-24-2020
No.	REVISION	BY	DATE

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SINGLE LINE DIAGRAM

1 SCALE: NONE

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CONSULTING ELECTRICAL ENGINEERS
1150 9TH Street, Suite #1415 Modesto, CA 95354
PHONE: 209-554-4602
HTTP://WWW.PEZZONGR.COM

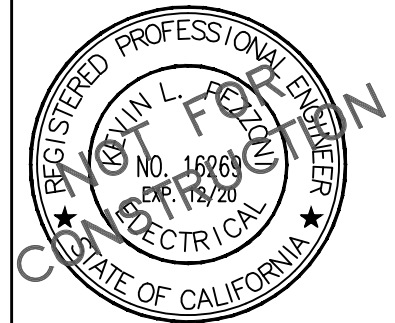
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FRESNO, CALIFORNIA 93711-6162
559/449-2700 FAX 559/449-2715
www.ppgent.com

DESIGN ENGINEER:	KP
LICENSE NO:	16269
DRAFTED BY:	CCM
CHECKED BY:	KP
DATE:	FEBRUARY 2020
JOB NO:	19-377

PHASE:	-
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SHEET	E3.0
74	OF 90

WELL 38 ARSENIC MITIGATION
AND ICF TREATMENT
CITY OF TURLOCK
CITY PROJECT NO. 20-009

SINGLE LINE DIAGRAM



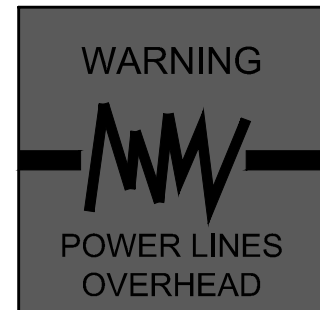
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CONDUIT & CABLE SCHEDULE

CONDUIT ID#	FROM	TO	CONDUIT QNTY	SIZE	TYPE	CONDUCTOR SIZE	(Cu) GND	CABLE QNTY	TYPE	NOTES
P 001	(E) TID POLE	TID XFMR PAD	1	4"	PVC40			1	PULL ROPE	PRIMARY PER TID
H 38001	TID SERVICE XFMR	(N) UGPS/MSB	4	5"	PVC40	24	1000MCM AL			[1] SECONDARY PER TID
H 38002	(N) MSB	(N) ATS	2	4"	RMC	8	#500 #1/o			[1]
H 38003 A	(N) ATS	(N) 6"x6" GUTTER	6"x6" GUTTER			8	#500 #1/o			[1] 2-4" RISERS UP
H 38003 B	(N) 6"x6" GUTTER	(N) DPH	6"x6" GUTTER			8	#500 #1/o			[1] 2-4" RISERS DN
H 38003 C	(N) ATS	(N) 36"x36"x6" J BOX	2	4"	RMC	8	#500 #1/o			[1] 2-4" THRU BLOCK WALL
H 38003 D	(N) 36"x36"x6" J BOX	(N) EG	2	4"	RMC	8	#500 #1/o			[1][2][3] 800A PARALLEL FEEDER
H 38004 A	(N) DPH	(N) 6"x6" GUTTER	1	3/4"	RMC	3	#12 #12			EG HEATER RISER UP
H 38004 B	(N) 6"x6" GUTTER	(N) 36"x36"x6" J BOX	1	3/4"	RMC	3	#12 #12			EG HEATER RISER DN
H 38004 C	(N) 36"x36"x6" J BOX	(N) EG	1	3/4"	RMC	3	#12 #12			[2][3] U.G. FEEDER EG HEATER
H 38005	(N) DPH	(N) TX-L1	1	1 1/2"	RMC	3	#2 #8			[3] 75KVA PRIMARY
H 38006	(N) DPH	EXIST 460V, MOTORIZED VALVE				3	#12 #12			(E) RACEWAY (N) CONDUCTORS
H 38007 A	(N) DPH	BYPASS CABINET	6"x6" GUTTER			6	#500 #1/o			800A PARALLEL FEED VIA GUTTER
H 38007 B	(N) 450HP VFD	BYPASS CABINET	6"x6" GUTTER			6	#500 #1/o			800A PARALLEL FEED VIA GUTTER
H 38007 C	(N) 450HP VFD	BYPASS CABINET	6"x6" GUTTER			6	#500 #1/o			800A PARALLEL FEED VIA GUTTER
H 38008	BYPASS CABINET	EXIST 10-PMP-001	2	3"	RMC	6	#500 #1/o			[1][3] 800A PARALLEL FEED
H 38009	EXIST 3x5 ELECT. VAULT	(N) FVCP	1	1"	RMC					[2] FILTER VESSEL CONT PNL
H 38010 A	(N) DPH	(N) 30A/3P DISC/SIZE 1 STARTER	1	3/4"	RMC	3	#12 #12			460V-3/4HP EXHAUST FAN
H 38010 B	(N) 30A/3P DISC/SIZE 1 STARTER	(N) 3/4 HP EXHAUST FAN	1	3/4"	RMC	3	#12 #12			
L 38001	(N) TX-L1	(N) PANEL L1	1	2 1/2"	LFMC	4	#3/o #6			200A SECONDARY
L 38002 A	(N) PANEL L1	(N) 6"x6" GUTTER	1	3/4"	RMC	6	#12 #12			RISER UP FROM L1
L 38002 B	(N) 6"x6" GUTTER	(N) 36"x36"x6" J BOX	1	3/4"	RMC	3	#12 #12			120V POWER AT EG
L 38002 C	(N) 36"x36"x6" J BOX	(N) EG	1	3/4"	RMC	3	#12 #12			[2][3] U.G. L1-1,3,5
L 38003 A	(N) PANEL L1	RISER AT EXTERIOR	1	1 1/2"	RMC	4	#2 #8			[2] 100A FEEDER FOR L1A
L 38003 B	UNDERGROUND	RISER AT (N) PANEL "L1A"	1	1 1/2"	RMC	4	#2 #8			[2] 100A FEEDER
L 38004 A	(N) PANEL "L1A"	(N) LED LIGHT	1	3/4"	RMC	2	#12 #12			[2] L1A-1 HOMERUN
L 38004 B	(N) LED LIGHT	(N) LED LIGHT	1	3/4"	RMC	3	#12 #12			[2] L1A-1
L 38004 C	(N) LED LIGHT	(N) SINGLE LT. SWITCH	1	3/4"	RMC	2	#12 #12			[2] L1A-1
L 38004 D	(N) LED LIGHT	(N) LED LIGHT	1	3/4"	RMC	3	#12 #12			[2] L1A-1
L 38004 E	(N) LED LIGHT	(N) LED LIGHT	1	3/4"	RMC	2	#12 #12			[2] L1A-1
L 38004 F	(N) LED LIGHT	(N) LED LIGHT	1	3/4"	RMC	2	#12 #12			[2] L1A-1
L 38004 G	(N) LED LIGHT	(N) LED LIGHT	1	3/4"	RMC	2	#12 #12			[2] L1A-1
L 38004 H	(N) LED LIGHT	(N) LED LIGHT	1	3/4"	RMC	2	#12 #12			[2] L1A-1
L 38004 J	(N) LED LIGHT	(N) LED LIGHT	1	3/4"	RMC	2	#12 #12			[2] L1A-1
L 38004 K	(N) LED LIGHT	(N) LED LIGHT	1	3/4"	RMC	2	#12 #12			[2] L1A-1
L 38004 M	(N) LED LIGHT	(N) LED LIGHT R/R	1	3/4"	RMC	2	#12 #12			[2] L1A-1
L 38004 N	(N) LED LIGHT R/R	(N) WALL SW OCC SENSOR	1	3/4"	RMC	3	#12 #12			[2] L1A-1
L 38004 P	(N) WALL SW OCC SENSOR	(N) DUPLEX RECP. GFCI	1	3/4"	RMC	2	#12 #12			[2] L1A-1
L 38005 A	(N) PANEL "L1A"	(N) 4-PLEX RECP. GFCI	1	3/4"	EMT	6	#12 #12			L1A-2,4,6 HOMERUN
L 38005 B	(N) 4-PLEX RECP. GFCI	(N) 4-PLEX RECP. GFCI	1	3/4"	EMT	6	#12 #12			L1A-2,4,6
L 38005 C	(N) 4-PLEX RECP. GFCI	(N) 4-PLEX RECP. GFCI	1	3/4"	EMT	6	#12 #12			L1A-2,4,6
L 38005 D	(N) 4-PLEX RECP. GFCI	(N) 4-PLEX RECP. GFCI	1	3/4"	EMT	4	#12 #12			L1A-4,6
L 38005 E	(N) 4-PLEX RECP. GFCI	(N) 4-PLEX RECP. GFCI	1	3/4"	EMT	4	#12 #12			L1A-4,6
L 38005 F	(N) 4-PLEX RECP. GFCI	(N) 4-PLEX RECP. GFCI	1	3/4"	EMT	4	#12 #12			L1A-4,6
L 38005 G	(N) 4-PLEX RECP. GFCI	(N) 4-PLEX RECP. GFCI	1	3/4"	EMT	2	#12 #12			L1A-4
L 38005 H	(N) 4-PLEX RECP. GFCI	(N) 4-PLEX RECP. GFCI	1	3/4"	EMT	2	#12 #12			L1A-4
L 38005 J	(N) 4-PLEX RECP. GFCI	(N) 4-PLEX RECP. GFCI	1	3/4"	EMT	2	#12 #12			L1A-4
L 38006 A	(N) PANEL "L1A"	(N) 4-PLEX RECP. GFCI	1	3/4"	EMT	4	#12 #12			L1A-10,12 HOMERUN
L 38006 B	(N) 4-PLEX RECP. GFCI	(N) 4-PLEX RECP. GFCI	1	3/4"	EMT	4	#12 #12			L1A-10,12
L 38006 C	(N) 4-PLEX RECP. GFCI	(N) 4-PLEX RECP. GFCI	1	3/4"	EMT	4	#12 #12			L1A-10,12
L 38006 D	(N) 4-PLEX RECP. GFCI	(N) 4-PLEX RECP. GFCI	1	3/4"	EMT	2	#12 #12			L1A-12
L 38006 E	(N) 4-PLEX RECP. GFCI	(N) 4-PLEX RECP. GFCI	1	3/4"	EMT	2	#12 #12			L1A-12
L 38006 F	(N) 4-PLEX RECP. GFCI	(N) 4-PLEX RECP. GFCI	1	3/4"	EMT	2	#12 #12			L1A-12
L 38007	(N) PANEL "L1A"	6-50R OUTLET	1	1"	EMT	2	#6 #10			L1A- 3-5 HOMERUN
L 38008	(N) PANEL "L1A"	6-50R OUTLET	1	1"	EMT	2	#6 #10			L1A- 7-9 HOMERUN
L 38009 A	(N) PANEL L1A	(N) N-16 PWR PULL BOX	1	1"	RMC	2	#12 #12			[2] L1A-16
L 38009 B	(N) N-16 PWR PULL BOX	GATE OPERATOR	1	3/4"	RMC	2	#12 #12			[2] [3] L1A-16 .5HP MOTOR
L 38009 C	(N) N-16 PWR PULL BOX	GATE MAGNETIC LOCK	1	3/4"	RMC	2	#12 #12			[2] L1A-16
L 38010	(N) PANEL L1	LIT-10-001	1	3/4"	RMC	2	#12 #12			[2] L1-28 LEVEL TRANS INDICATOR
L 38011 A	(N) PANEL L1	WP J BOX @ FLOW MTR	1	3/4"	RMC	2	#12 #12			[2] L1-20
L 38011 B	WP J BOX @ FLOW MTR	10-FIT/FE-001 FLOW METER	1	3/4"	LFMC	2	#12 #12			L1-20
L 38012 A	(N) PANEL L1	4-PLEX RECP WELL BLDG	1	3/4"	RMC	3	#12 #12			L1-17,19,21
L 38012 B	4-PLEX RECP WELL BLDG	PWR J BOX WATER SAMPLING STATION	1	3/4"	RMC	2	#12 #12			L1-19 AIT's
L 38012 C	PWR J BOX WATER SAMPLING STATION	DUPLEX RECP WELL BLDG	1	3/4"	RMC	2	#12 #12			L1-21
L 38012 D	PWR J BOX WATER SAMPLING STATION	WP J BOX @ PIT-10-002	1	3/4"	RMC	2	#12 #12			L1-19 [2] [3]
L 38012 E	DUPLEX RECP WELL BLDG	120V T-STAT (N) 460V. EXHAUST FAN	1	3/4"	RMC	2	#12 #12			[1] L1-17
L 38012 F	120V. T-STAT	(N) 30A/3P DISC/SIZE 1 STARTER	1	3/4"	RMC	2	#12 #12			[1] [3] L1-17
L 38013 A	EXIST 3x5 ELECT. VAULT	(N) H.R. J BOX CHEM BLDG	1	3/4"	CRMC	6	#12 #12			[2] L1-22,24,26
L 38013 B	(N) H.R. J BOX CHEM BLDG	(N) J BOX AT 2-GANG SWS	1	3/4"	CRMC	2	#12 #12			L1-22
L 38013 C	(N) J BOX AT 2 GANG SWS	(N) INTERIOR LIGHT	1	3/4"	CRMC	2	#12 #12			L1-22o
L 38013 D	(N) LIGHT	(N) LIGHT	1	3/4"	CRMC	2	#12 #12			L1-22o
L 38013 E	(N) LIGHT	(N) LIGHT	1	3/4"	CRMC	2	#12 #12			L1-22o
L 38013 F	(N) LIGHT	(N) LIGHT	1	3/4"	CRMC	2	#12 #12			L1-22o
L 38013 G	(N) LIGHT	(N) LIGHT	1	3/4"	CRMC	2	#12 #12			L1-22o
L 38013 H	(N) LIGHT	(N) LIGHT	1	3/4"	CRMC	2	#12 #12			L1-22o
L 38013 J	(N) J BOX AT 2 GANG SWS	(N) EXTERIOR LIGHT	1	3/4"	CRMC	2	#12 #12			L1-22b
L 38013 K	(N) EXTERIOR LIGHT	(N) EXTERIOR LIGHT	1	3/4"	CRMC	2	#12 #12			L1-22b
L 38013 M	(N) EXTERIOR LIGHT	(N) EXTERIOR LIGHT	1	3/4"	CRMC	2	#12 #12			L1-22b
L 38013 N	(N) EXTERIOR LIGHT	(N) EXTERIOR LIGHT	1	3/4"	CRMC	2	#12 #12			L1-22b
L 38013 P	(N) EXTERIOR LIGHT	(N) EXTERIOR LIGHT	1	3/4"	CRMC	2	#12 #12			L1-22b
L 38013 R	(N) EXTERIOR LIGHT	(N) EXTERIOR LIGHT	1	3/4"	CRMC	2	#12 #12			L1-22b
L 38013 S	(N) EXTERIOR LIHJT	(N) EXTERIOR LIGHT	1	3/4"	CRMC	2	#12 #12			L1-22b
L 38013 T	(N) H.R. J BOX CHEM BLDG	(N) RECP GFCI/WP SUMP	1	3/4"	CRMC	4	#12 #12			[2] L1-24,26
L 38013 U	(N) RECP GFCI/WP SUMP	(N) J BOX AT CHEM BLDG	1	3/4"	CRMC	4	#12 #12			[2] L1-24,26
L 38013 V	(N) J BOX AT CHEM BLDG	(N) OVERFILL ALARM PANEL	1	3/4"	CRMC	2	#12 #12			[2] L1-26
L 38013 W	(N) J BOX AT CHEM BLDG	(N) RECP GFCI/WP SUMP	1	3/4"	CRMC	2	#12 #12			[2] L1-24
L 38013 X	(N) RECP GFCI/WP SUMP	(N) RECP GFCI/WP SUMP	1	3/4"	CRMC	2	#12 #12			[2] L1-24
L 38014 A	EXIST 3x5 ELECT. VAULT	(N) RECP GFCI/WP SULFURIC ACID	1	3/4"	CRMC	4	#12 #12			[2] L1-32,34
L 38014 B	(N) RECP GFCI/WP SULFURIC ACID	(N) WP J BOX @ (N) RECP GFCI/WP FERRIC CHLORIDE	1	3/4"	CRMC	4	#12 #12			[2] L1-32,34
L 38014 C	(N) WP J BOX @ (N) RECP GFCI/WP FERRIC CHLORIDE	(N) RECP GFCI/WP FERRIC CHLORIDE	1	3/4"	CRMC	4	#12 #12			[2] L1-32,34
L 38015 A	EXIST 3x5 ELECT. VAULT	(N) RECP GFCI/WP SODIUM HYPOCHLORITE	1	1"	CRMC	6	#12 #12			[2] L1-30,36,38
L 38015 B	(N) RECP GFCI/WP SODIUM HYPOCHLORITE	(N) RECP GFCI/WP SODIUM HYDROXIDE	1	1"	CRMC	6	#12 #12			[2] L1-30,36,38
L 38015 C	(N) WP J BOX AT LIT-50-011	HEAT TRACE @ SODIUM HYDROXIDE TANK	1	3/4"	LFMC	2	#12 #12			[2] L1-30
L 38016 A	EXIST 3x5 ELECT. VAULT	LEVEL TRANSDUCER PEDESTAL	1	3/4"	RMC	2	#12 #12			[2] L1-40
L 38016 B	LEVEL TRANSDUCER PEDESTAL	WP J BOX @ FIT/FE-40-001	1	3/4"	RMC	2	#12 #12			
L 38016 C	WP J BOX @ FIT/FE-40-001	FIT/FE-40-001	1	3/4"	LFMC	2	#12 #12			FLOW METER
L 38017	EXIST 3x5 ELECT. VAULT	SITE POLE LIGHT	1	3/4"	RMC	2	#12 #12			[2] L1-42



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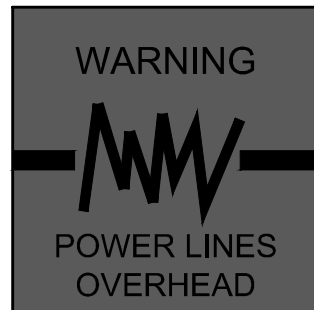
CONDUIT ID#	FROM	TO	QNTY	SIZE	TYPE	CONDUCTOR QNTY	SIZE	(Cu)	CABLE QNTY	TYPE	NOTES
L 38018	(N) PANEL "L1A"	IRRIGATION CONTROLLER	1	3/4"	RMC	2	#12	#12			[2] L1A-14
L 38019 A	EXIST 3x5 ELECT. VAULT	FVCP	1	1"	RMC	4	#8	#10			[1] L1-14-16-18
L 38019 B	(N) FVCP	WP J BOX @ 30-FE/FIT-01	1	3/4"	RMC	2	#12	#12			[1] [3] PWR FROM FVCP
L 38019 C	(N) FVCP	FIT/FE-30-011	1	3/4"	RMC	2	#12	#12			[1] [3] PWR FROM FVCP
L 38019 D	(N) FVCP	30-DPIT-001	1	3/4"	RMC	1	3/4"				[1] [3] CAP @ +4"AFG
L 38019 E	(N) FVCP	POWER J BOX P1 AT VESSEL 1	1	3/4"	RMC	6	#12	#12			[1] [3] LFMC TO FIT/FE
L 38019 F	POWER J BOX P1 AT VESSEL 1	POWER J BOX P2 AT VESSEL 1	1	3/4"	RMC	4	#12	#12			[1] [3] w/LFMC TO (5)
L 38019 G	POWER J BOX P1 AT VESSEL 1	POWER J BOX P1 AT VESSEL 2	1	3/4"	RMC	6	#12	#12			[1] [3] LFMC TO FIT/FE
L 38019 H	POWER J BOX P1 AT VESSEL 2	POWER J BOX P2 AT VESSEL 2	1	3/4"	RMC	4	#12	#12			[1] [3] w/LFMC TO (5)
L 38019 J	POWER J BOX P1 AT VESSEL 2	POWER J BOX P1 AT VESSEL 3	1	3/4"	RMC	6	#12	#12			[1] [3] LFMC TO FIT/FE
L 38019 K	POWER J BOX P1 AT VESSEL 3	POWER J BOX P2 AT VESSEL 3	1	3/4"	RMC	4	#12	#12			[1] [3] w/LFMC TO (5)
L 38020 A	(N) PANEL L1	WP J BOX @ PRESSURE SW	1	3/4"	RMC	2	#12	#12			[2] L1-20
L 38020 B	WP J BOX @ PRESSURE SW	PSHL-10-001	1	3/4"	LFMC	2	#12	#12			[2] [3] L1-20
L 38020 C	WP J BOX @ PRESSURE SW	PIT-10-001	1	3/4"	LFMC	2	#12	#12			[2] [3] L1-20
C 38001	(N) PCM/RTU	(N) ATS	1	1"	RMC	10	#14	#14			SIGNAL/CONTROLS
C 38002 A	(N) ATS	(N) 36"x36"x6" J BOX @ EXT.	1	1"	RMC	6	#14	#14			SIGNAL/CONTROLS
C 38002 B	36"x36"x6" J BOX @ EXT.	EG	1	1"	RMC	8	#14	#14			[2] [3] SIGNAL/CONTROLS
C 38003 A	(N) PCM/RTU	2-2" RISERS & SURFACE	2	2"	RMC	8	#14	#14	2	4C/18 SHLD	[2] STUBS SIGNAL
C 38003 B	UNDERGROUND	(N) MAINTENANCE SHED	2	2"	RMC	8	#14	#14	2	4C/18 SHLD	[2]
C 38004 A	(N) MAINTENANCE SHED	(N) N-16 SIGNAL PULL BOX	1	1"	RMC	4	#14	#14	1	4C/18 SHLD	[2] GATE OPERATOR
C 38004 B	(N) N16 SIGNAL PULL BOX BOX	GATE OPERATOR	1	1"	RMC	4	#14	#14			[2] CONTROLS
C 38004 C	(N) N-16 SIGNAL PULL BOX	CARD READER	1	1"	RMC				1	4C/18 SHLD	[2] MOTORIZED GATE
C 38005 A	(N) MAINTENANCE SHED	(N) N-16 SIGNAL PULL BOX	1	1"	RMC	4	#14	#14	1	4C/18 SHLD	[2] MAN GATE
C 38005 B	(N) N-16 SIGNAL PULL BOX	CARD READER	1	1"	RMC				1	4C/18 SHLD	[2] MAN GATE
C 38005 C	(N) N-16 SIGNAL PULL BOX	MAG LOCK AT MAN GATE	1	1"	RMC	4	#14	#14			[2] MAG LOCK AT MAN GATE
C 38006	(N) PCM/RTU	LIT-10-001 & PUMP MOTOR RTD CKT	1	1 1/2"	RMC	6	#14	#14	1	2C/16 STP	[2] [3] SIGNAL/CONTROLS
C 38007 A	(N) PCM/RTU	WP J BOX @ FLOW MTR	1	1"	RMC				1	2C/16 STP	[2] SIGNAL/CONTROLS
C 38007 B	WP J BOX @ FLOW MTR	10-FIT/FE-001 FLOW METER	1	1"	LFMC				1	2C/16 STP	[3] SIGNAL/CONTROLS
C 38008 A	(N) PCM/RTU	J BOX @ WATER SAMPLING STATION	2	1 1/2"	RMC				6	2C/16 STP	SIGNAL/CONTROLS
C 38008 B	J BOX @ WATER SAMPLING STATION	WP J BOX @ PIT-10-002	1	1"	RMC						[2] [3]
C 38009 A	(N) 36"x36"x6" SIG J BOX	(N)FVCP	2	1 1/2"	RMC				1	4STP6-OSP	[2] SIGNAL/CONTROLS
C 38009 B	(N) FVCP	WP J BOX @ 30-FY-FIT-001	1	1"	RMC				1	2C/16 STP	[1] [2] [3] BYPASS BACKWASH
C 38009 C	(N) FVCP	WP J BOX AT FIT/FE-30-011	1	1"	RMC				1	2C/16 STP	[1] [2] [3] FLOW METER
C 38009 D	(N) FVCP	30-DPIT-001	1	1"	RMC				1	2C/16 STP	[1] [2] [3]
C 38009 E	(N) FVCP	WP SIGNAL J BOX S1 AT VESSEL 1	1	1"	RMC				1	2C/16 STP	[1] [2] [3] FLOW METER
C 38009 F	WP SIGNAL J BOX P1 AT VESSEL 1	WP SIGNAL J BOX S1 AT VESSEL 2	1	1"	RMC				1	2C/16 STP	[1] [2] [3] FLOW METER
C 38009 G	SIGNAL J BOX S1 AT VESSEL 2	WP SIGNAL J BOX S1 AT VESSEL 3	1	1"	RMC				1	2C/16 STP	[1] [2] [3] FLOW METER
C 38010	(N) 36"x36"x6" SIG J BOX	OVERFILL ALARM PANEL	1	1 1/2"	CRMC	6	#14	#14			CHEM FILL STATION
C 38011 A	(N) 36"x36"x6" SIG J BOX	SIG BOX SULFURIC ACID	2	1 1/4"	CRMC	20	#14	#14	5	2C/16 STP	[2] CHEM BLDG AREA A
C 38011 B	SIG BOX SULFURIC ACID	LE/LIT-50-041	1	1"	CRMC				1	2C/16 STP	[2] CHEM BLDG AREA A
C 38011 C	SIG BOX SULFURIC ACID	50-PMP-041	1	1"	LFMC	10	#14	#14	2	2C/16 STP	CHEM BLDG AREA A
C 38011 D	SIG BOX SULFURIC ACID	50-PMP-042	1	1"	LFMC	10	#14	#14	2	2C/16 STP	CHEM BLDG AREA A
C 38012 A	(N) 36"x36"x6" SIG J BOX	SIG BOX FURRIC CHLORIDE	2	1 1/4"	CRMC	20	#14	#14	6	2C/16 STP	[2] CHEM BLDG AREA B
C 38012 B	SIG BOX FURRIC	LE/LIT-50-031	1	1"	CRMC				1	2C/16 STP	[2] CHEM BLDG AREA B
C 38012 C	SIG BOX FURRIC CHLORIDE	50-PMP-031	1	1"	LFMC	10	#14	#14	2	2C/16 STP	CHEM BLDG AREA B
C 38012 D	SIG BOX FURRIC CHLORIDE	50-PMP-032	1	1"	LFMC	10	#14	#14	2	2C/16 STP	CHEM BLDG AREA B
C 38013 A	(N) 36"x36"x6" SIG J BOX	SIG BOX SODIUM HYDROXIDE	2	1 1/4"	CRMC	20	#14	#14	5	2C/16 STP	[2] CHEM BLDG AREA C1
C 38013 B	SIG BOX SODIUM HYDROXIDE	LE/LIT-50-011	1	1"	CRMC				1	2C/16 STP	[2] CHEM BLDG AREA C1
C 38013 C	SIG BOX SODIUM HYDROXIDE	50-PMP-011	1	1"	LFMC	10	#14	#14	2	2C/16 STP	CHEM BLDG AREA C1
C 38013 D	SIG BOX SODIUM HYDROXIDE	50-PMP-012	1	1"	LFMC	10	#14	#14	2	2C/16 STP	CHEM BLDG AREA C1
C 38014 A	(N) 36"x36"x6" SIG J BOX	SIG BOX SODIUM HYPOCHLORITE	2	1 1/4"	CRMC	20	#14	#14	5	2C/16 STP	[2] CHEM BLDG AREA C2
C 38014 B	SIG BOX SODIUM HYPOCHLORITE	LE/LIT-50-021	1	1"	CRMC				1	2C/16 STP	[2]CHEM BLDG AREA C2
C 38014 C	SIG BOX SODIUM HYPOCHLORITE	50-PMP-021	2	1"	LFMC	10	#14	#14	2	2C/16 STP	CHEM BLDG AREA C2
C 38014 D	SIG BOX SODIUM HYPOCHLORITE	50-PMP-022	2	1"	LFMC	10	#14	#14	2	2C/16 STP	CHEM BLDG AREA C2
C 38015 A	(N) 36"x36"x6" SIG J BOX	LEVEL TRANSDUCER PEDESTAL	1	1 1/2"	RMC						[2] WATER TANK
C 38015 B	LEVEL TRANSDUCER PEDESTAL	LT-40-001	1	1"	LFMC						LEVEL TRANSDUCER
C 38015 C	LEVEL TRANSDUCER PEDESTAL	LE-40-001	1	1"	LFMC						LEVEL INDICATOR
C 38015 D	LEVEL TRANSDUCER PEDESTAL	WP J BOX @ FIT/FE-40-001	1	1"	RMC						
C 38015 E	WP J BOX @ FIT/FE-40-001	FIT/FE-40-001	1	1"	LFMC						FLOW METER
C 38016 A	(N) PCM/RTU	WP J BOX @ PRESSURE SW	1	1"	RMC	2	#14	#14	1	2C/16 STP	[2] SIGNAL/CONTROLS
C 38016 B	WP J BOX @ PRESSURE SW	PIT-10-001	1	1"	LFMC				1	2C/16 STP	[3] SIGNAL/CONTROLS
C 38016 C	WP J BOX @ PRESSURE SW	PSHL-10-001	1	1"	LFMC	2	#14	#14			[3] SIGNAL/CONTROLS
C 38017	(N) FVCP	WP SIGNAL J BOX S2 AT VESSEL 1	2	1"	RMC	50	#14	#14			[1] [2] [3] w/LFMC TO (5)
C 38018	(N) FVCP	WP SIGNAL J BOX S2 AT VESSEL 2	2	1"	RMC	50	#14	#14			[1] [2] [3] w/LFMC TO (5)
C 38019	(N) FVCP	WP SIGNAL J BOX S2 AT VESSEL 3	2	1"	RMC	50	#14	#14			[1] [2] [3] w/LFMC TO (5)

P MEDIUM VOLTAGE 12KV
H 277/480V
L 120/208V
XH SPARE POWER
C COMM/SIGNAL
XC SPARE COMM

NOTES:
[1] = PROVIDE CONDUCTOR/CABLES IN ALL CONDUITS
[2] = CONDUIT BELOW GRADE MAY BE PVC SCH40
[3] = PROVIDE SS CONNECTIONS & TYPE LFMC FLEX TO EQUIPMENT



Know what's below.
Call before you dig.



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PANELBOARD SCHEDULE

NEW PANEL: L1												LOCATION:			
BUS RATING: 200 A.				PHASE: 3ø				SCCR: (100) Δ				NEMA TYPE: 1			
VOLTAGE: 120/208 V.				WIRE: 4				BUSSING: CU				MOUNTING: SURFACE			
CKT	DESCRIPTION	BRKR	TYPE	LOAD	A (va)	B (va)	C (va)	LOAD	TYPE	BRKR	DESCRIPTION	CKT			
1	EXIST SECURITY SYSTEM	20/1			0					20/1	EXIST FLOW METER	2			
3	EXIST PRESSURE RECORDER	20/1				0				20/1	EXIST CL2 RECIP.	4			
5	EXIST RECPS NORTH WALL	20/1					0			20/1	EXIST LIGHTS INTERIOR	6			
7	EXIST TIME/CLOCK	20/1			0					20/1	EXIST RECPS SOUTH WALL	8			
9	EXIST LIGHTS EXTERIOR	20/1				0				20/1	EXIST RTU	10			
11	EXIST WATER METER ANTENNA	20/1					0			20/1	EXIST EXHAUST FAN	12			
13	EXIST AC	30/2			1000			1000	R	40/3	FVCP	14			
15	"					1000			R			16			
17	RECIP WORK STATION	20/1	R	180			1180	1000				18			
19	WTR SAMP STA & PIT 10-002	20/1	C	200	400			200	C	20/1	FIT/FE-10-001 PIT-10-001	20			
21	RECIP WTR SAMPLING STA	20/1	C	180		542		362	L	20/1	CHEMICAL BLDG LTG	22			
23	EG1 BATT. CHARGER	20/1	N	1000			2200	1200	R	20/1	RECPS (3) SUMP PUMPS	24			
25	EG1 RECIP WP/GFCI	20/1	R	280				100	C	20/1	OVERFILL ALARM PNL	26			
27	SPARE	20/1						100	C	20/1	LIT-10-001	28			
29	SPARE	20/1								20/1	HEAT TRACE	30			
31	SPARE	20/1			740			740	R	20/1	RECPS CHEM BLDG.	32			
33	SITE POLE LIGHTS	20/1	L	146			686			20/1	RECPS CHEM BLDG.	34			
35	RECPS WP/GFCI POLES	20/1	R				500	500	R	20/1	RECPS CHEM BLDG	36			
37	NEW PANEL L1A	100/3	N	7104	7004			500	R	20/1	RECPS CHEM BLDG	38			
39	"	/	N	10480			10580		C	20/1	120V. PWR FE/FIT-40-001	40			
41	"	/	N	6416			6416			20/1	SPARE	42			
CONTINUOUS (C):					1100 VA	MCB: 200/3					MAX. PHASE @125% = 134.5 A. DEMAND TOTAL = 34.4 kVA = 95.6 A. @125% = 119.5 A.				
NON-CONTINUOUS (N):					28000 VA	MLO: 100 Δ									
RECEP. (R):					4840 VA										
MOTOR (M) OR (M1):					0 VA										
LIGHTING (L):					508 VA										
KITCHEN >1750W (K):					0 VA										
DEMAND CALC. PER ART 220															

PANELBOARD SCHEDULE

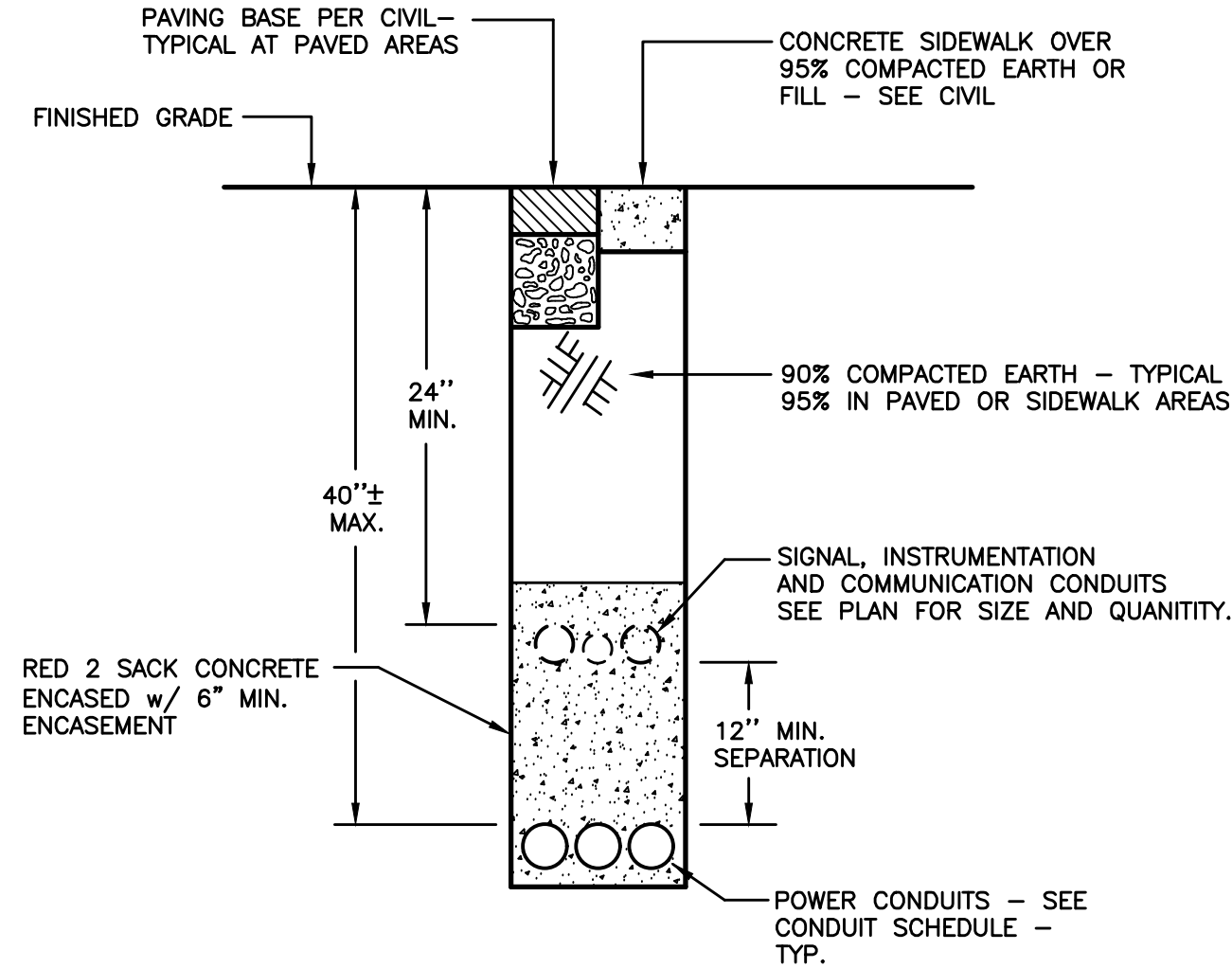
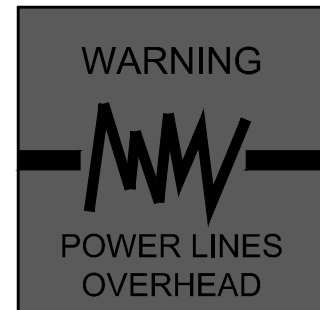
NEW PANEL: L1A				POWER METERING ION 7550 SERIES METERING				LOCATION:				
BUS RATING: 100 A.				PHASE: 3ø		SCCR: 100 Δ		NEMA TYPE: 1				
VOLTAGE: 120/208 V.				WIRE: 4		BUSSING: CU		MOUNTING: SURFACE				
CKT	DESCRIPTION	BRKR	TYPE	LOAD	A (va)	B (va)	C (va)	LOAD	TYPE	BRKR	DESCRIPTION	CKT
1	LITG MAINT. SHED R/R RECIP	20/1	L	894	1974			1080	R	20/1	RECPS. GFCI	2
3	50A OUTLET 6-50R	50/2	R	4180		5240		1080	R	20/1	RECPS. GFCI	4
5												6
7	50A OUTLET 6-50R	50/2	R	4180	5240			1080	R	20/1	RECPS. GFCI	8
9			R	4180		5240		1080	R	20/1	RECPS. GFCI	10
11								1080	R	20/1	RECPS. GFCI	12
13					100			100	C	20/1	IRRIG. CONTROLLER	14
15						1178		1178	M	20/1	GATE OPERATOR .5HP	16
17							0					18
19					0							20
21						0						22
23							0					24
25					0							26
27							0					28
29												30
31					0							32
33							0					34
35								0				36
37												38
39					0							40
41							0					42

CONTINUOUS (C):		125 VA
NON-CONTINUOUS (N):		0 VA
RECEP. (R):		16000 VA
MOTOR (M) OR (M1):		1178 VA
LIGHTING (L):		0 VA
KITCHEN >1750W (K):		0 VA

MCB: 100/3	
MLO: NO	

MAX. PHASE Ø125% = 121.4 A.	
DEMAND TOTAL = 18.8 KVA	
= 52.1 A.	
Ø125% = 65.1 A.	

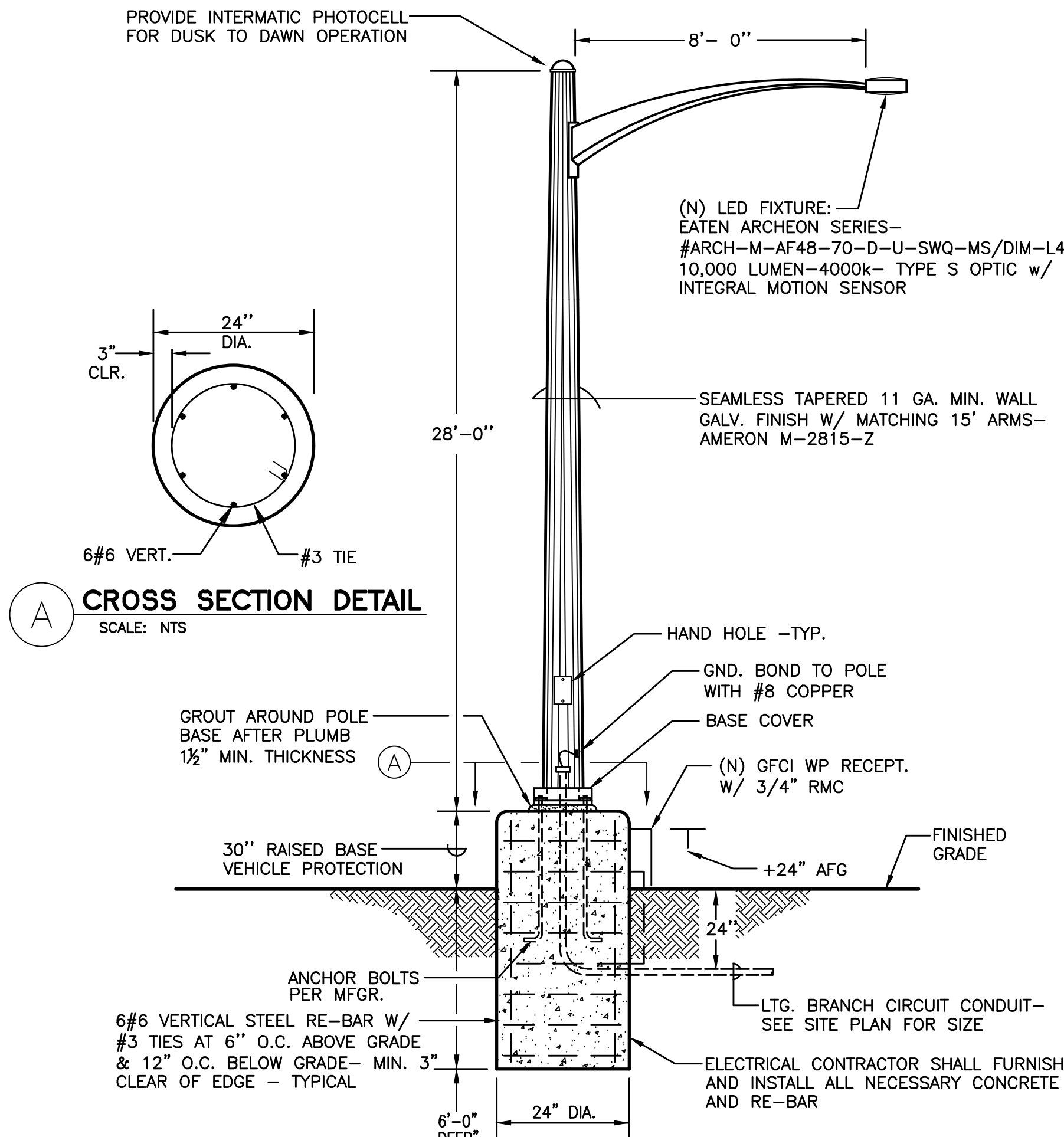
DEMAND CALC. PER ART 220



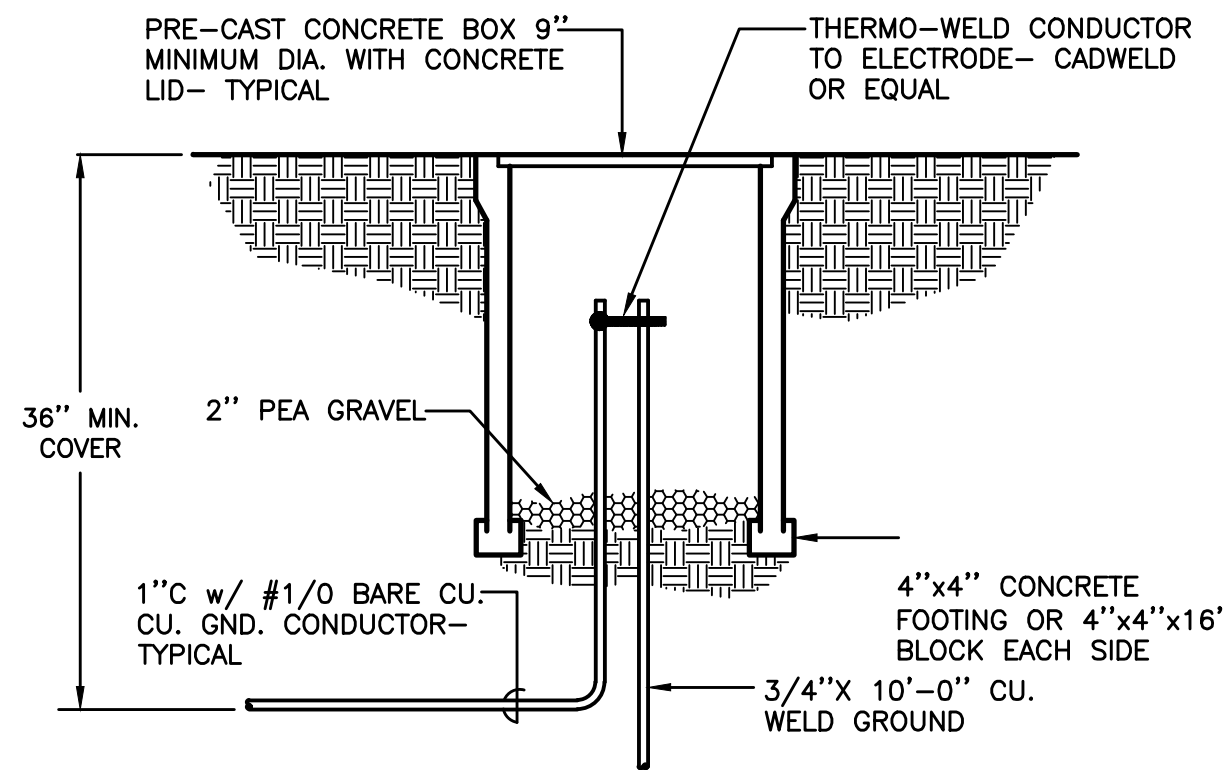
SECTION

- NOTES:
- 1 PLACE CONDUIT RUNS OF 4 CONDUITS OR GREATER IN PLASTIC SPACERS (RATED FOR DIRECT BURIAL) EVERY 5' ALONG LENGTH OF RUN.
 - 2 PROVIDE 1 1/2" OR 2X TRADE DIAMETER OF CONDUIT, WHICHEVER IS GREATER, BETWEEN BUNDLED CONDUITS.

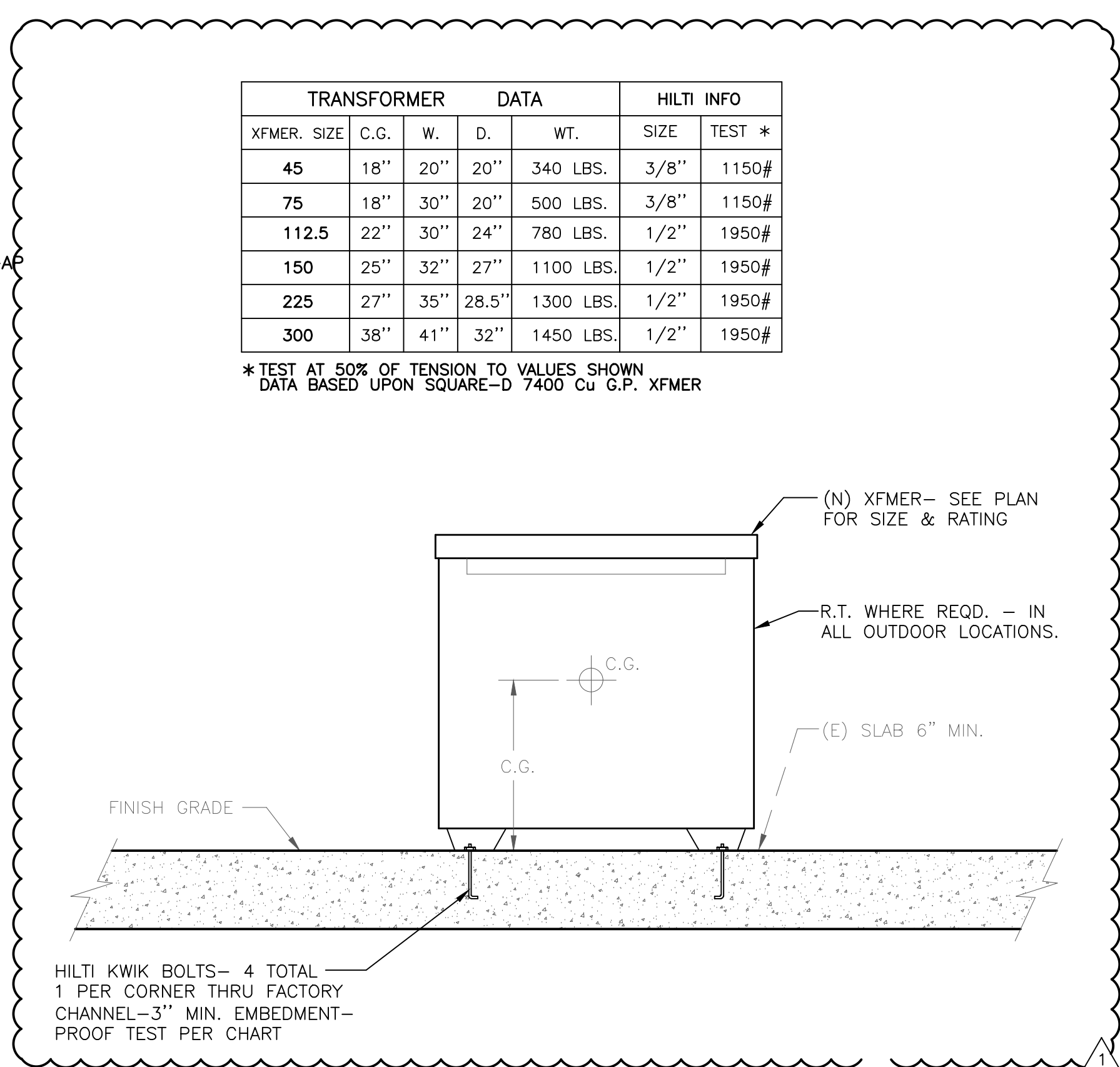
3 CONCRETE ENCASED CONDUITS
SCALE: N.T.S.



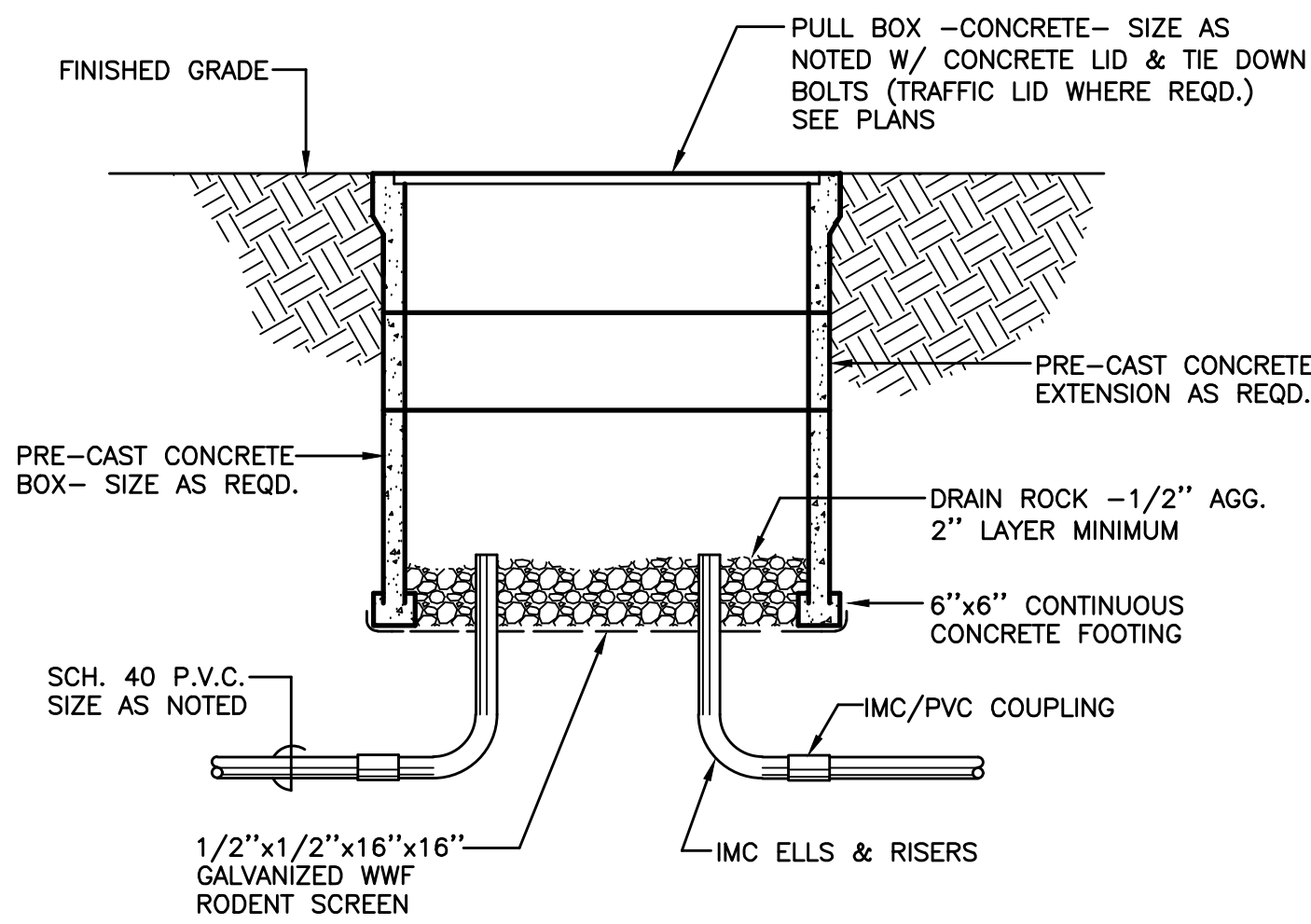
2 POLE MOUNTED SITE LIGHT AND BASE
SCALE: N.T.S.



5 GROUNDING ELECTRODE
SCALE: N.T.S.



1 (N) PAD MTD. DRY TYPE TRANSFORMER
SCALE: N.T.S.



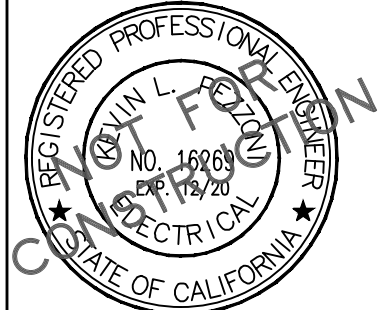
4 PULL BOX - TYPICAL
SCALE: N.T.S.

TRANSFORMER DATA					HILTI INFO	
XFMR. SIZE	C.G.	W.	D.	WT.	SIZE	TEST *
45	18"	20"	20"	340 LBS.	3/8"	1150#
75	18"	30"	20"	500 LBS.	3/8"	1150#
112.5	22"	30"	24"	780 LBS.	1/2"	1950#
150	25"	32"	27"	1100 LBS.	1/2"	1950#
225	27"	35"	28.5"	1300 LBS.	1/2"	1950#
300	38"	41"	32"	1450 LBS.	1/2"	1950#

* TEST AT 50% OF TENSION TO VALUES SHOWN
DATA BASED UPON SQUARE-D 7400 Cu G.P. XFMR

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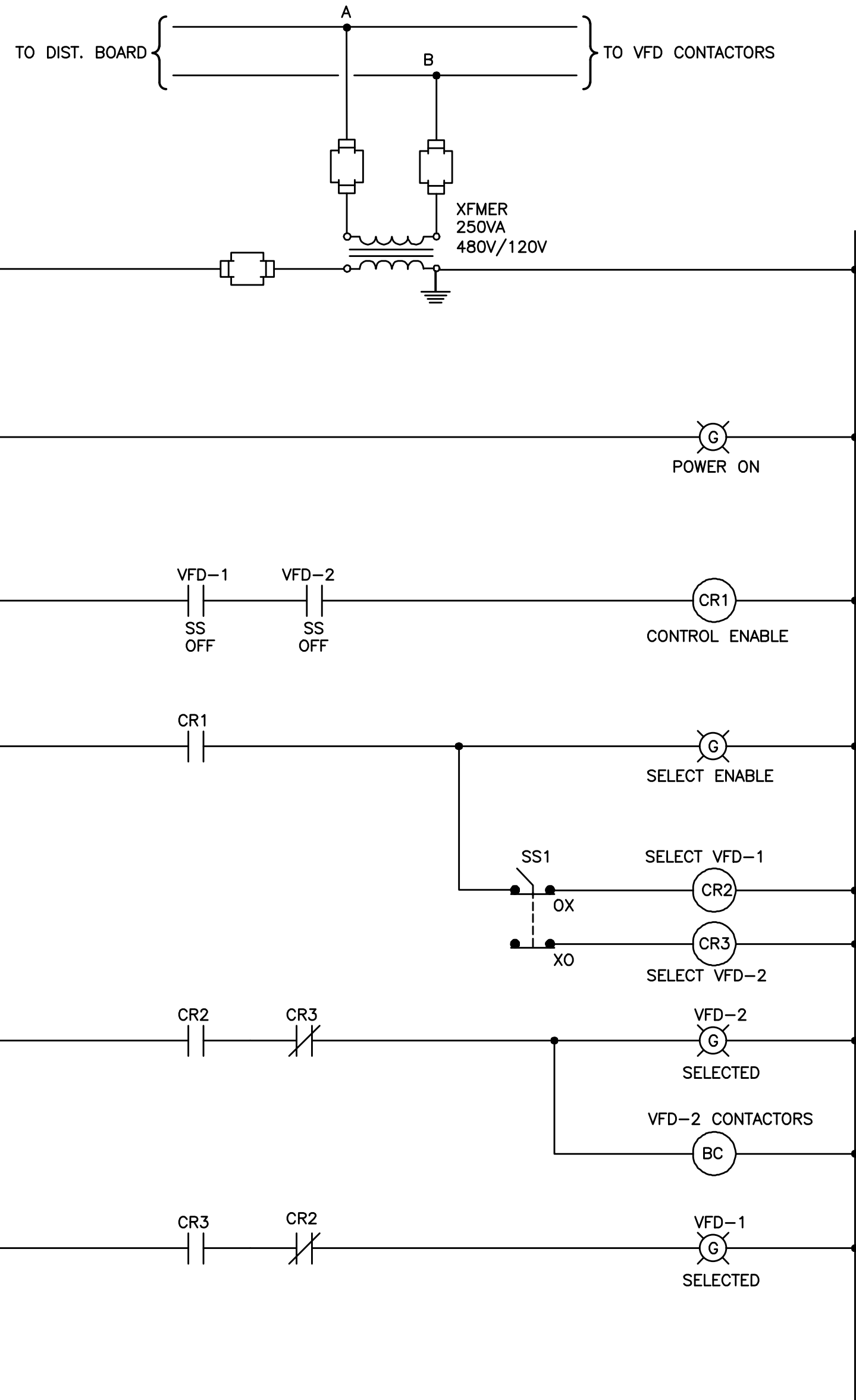
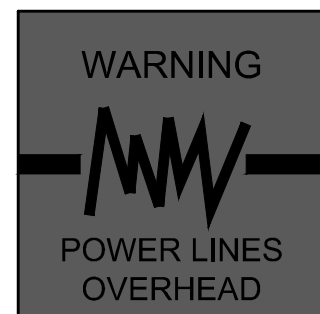
WELL 38 ARSENIC MITIGATION AND ICF TREATMENT
CITY OF TURLOCK
CITY PROJECT NO. 20-009
ELECTRICAL DETAILS

EST. 1985
PROVOST & PRITCHARD
CONSULTING GROUP
An Employee Owned Company
208 WEST COMBELL AVENUE
FRESNO, CALIFORNIA 93711-6162
559/448-2700 FAX 559/448-2715
www.ppeng.com

DESIGN ENGINEER: KP
LICENSE NO: 16269
DRAFTED BY: CCM
CHECKED BY: KP
DATE: FEBRUARY 2020
JOB NO: 19-377

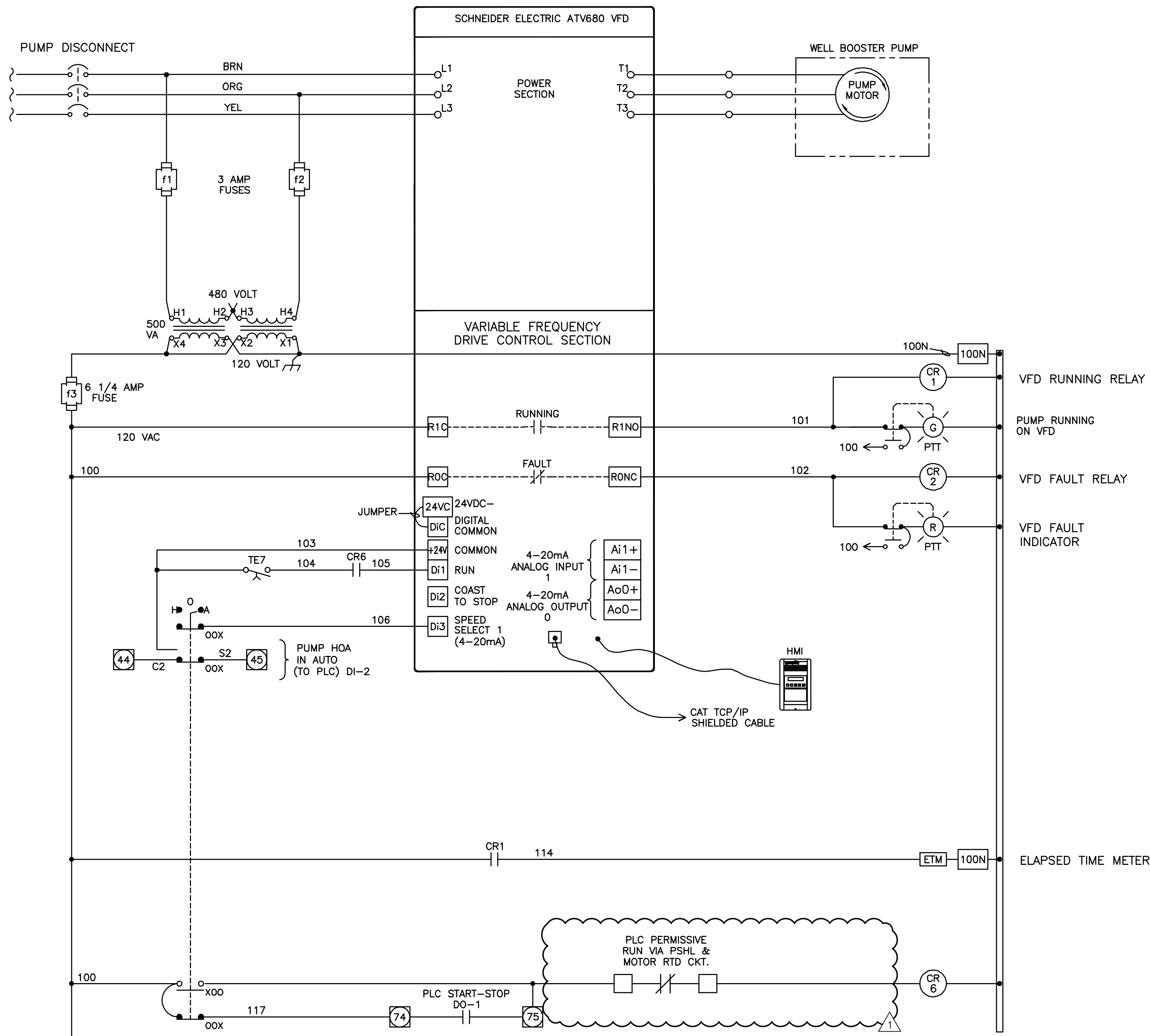
PHASE: -
0 1"
ORIGINAL SCALE SHOWN IS ONE INCH. ADJUST SCALE FOR REDUCED OR ENLARGED PLANS.
SHEET E4.2
79 OF 90

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CONSULTING ELECTRICAL ENGINEERS
1150 9th Street Suite #1425 Modesto, CA 95354
PHONE: 209.554.4602
HTTP://WWW.PEZZENGR.COM



BYPASS CONTROL CABINET

SCALE: NONE



WELL PUMP CONTROL WIRING DIAGRAM

SCALE: NONE

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4/21/20

REGISTERED PROFESSIONAL
ELECTRICAL ENGINEER
STATE OF CALIFORNIA
No. 10011

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SHEET
E4.4
81 OF 90

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