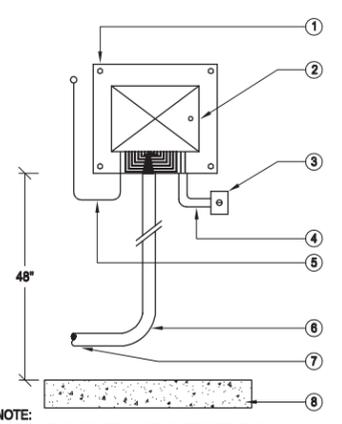


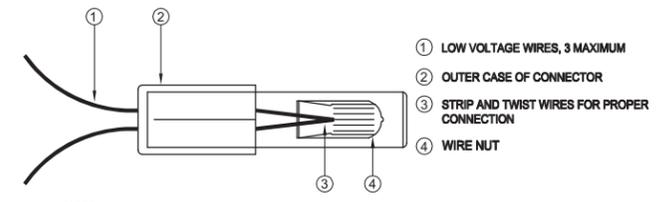
- 1 FINISH GRADE IN TURF AREAS
- 2 PLASTIC RECTANGULAR VALVE BOX WITH BOLT DOWN COVER, USE STAINLESS BOLT, NUT, AND WASHER. BOX TO BE PLACED AT RIGHT ANGLE TO HARDSCAPE EDGE. HEAT BRAND "MV" ONTO LID.
- 3 MASTER CONTROL VALVE, SEE LEGEND FOR SPEC.
- 4 FINISH GRADE IN SHRUB AREAS
- 5 24" WIRE LOOP
- 6 VALVE ID TAGS
- 7 PVC SCH 40 FEMALE ADAPTER, (1 OF 2)
- 8 PVC MAINLINE TO FLOW SENSOR, PIPE PER SPECS.
- 9 (4) BRICK SUPPORTS
- 10 BRASS UNION
- 11 BRASS NIPPLE (TYP.)
- 12 3/4" ROCK, 2 CUBIC FT.
- 13 LANDSCAPE FABRIC
- 14 PVC MAINLINE PIPE FROM BACKFLOW PER SPECS.

NOTE:
USE 45 DEGREE ELLS TO ACHIEVE MAINLINE DEPTH FROM SUPPLY SIDE OF THE MASTER VALVE ASSEMBLY. ALL THREADED CONNECTIONS TO HAVE TEFLON TAPE OR PASTE.



- 1 MOUNT ENCLOSURE AS PER MANUFACTURER'S RECOMMENDATION
- 2 CONTROLLER, SEE LEGEND FOR SPECIFICATION.
- 3 120 VOLT OUTLET BY OTHERS
- 4 ELECTRICAL CONDUIT
- 5 TO RAIN SENSOR IN RIGID CONDUIT
- 6 LOW VOLTAGE WIRE IN RIGID PVC CONDUIT PVC ELECTRICAL SWEEP
- 7 TO EXTERIOR BUILDING WALL THROUGH J-BOX
- 8 BUILDING FLOOR BY OTHERS

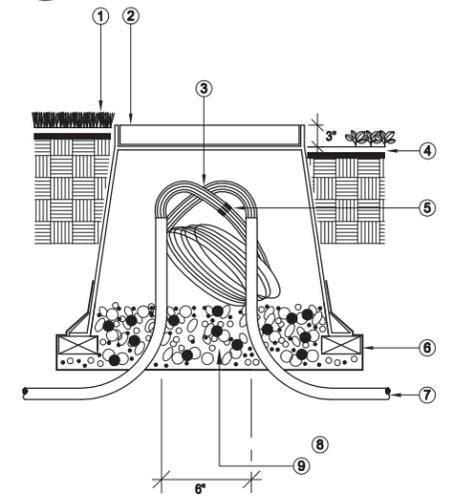
NOTE:
INSTALL ENCLOSURE AS INDICATED PER PLAN & MANUFACTURER'S RECOMMENDATION.
ROUTE WIRES AND SLEEVE THROUGH WALL TO RECTANGULAR PULL BOX AND TRANSITION TO DIRECT BURY WIRE.



- 1 LOW VOLTAGE WIRES, 3 MAXIMUM
- 2 OUTER CASE OF CONNECTOR
- 3 STRIP AND TWIST WIRES FOR PROPER CONNECTION
- 4 WIRE NUT

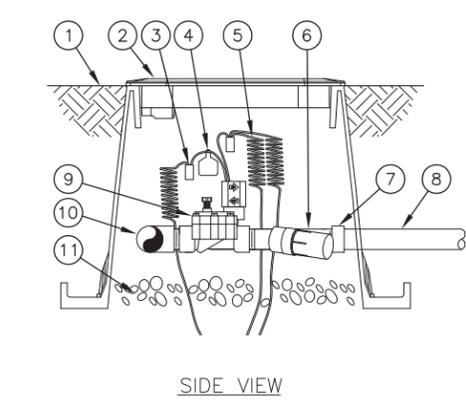
NOTE:
1. CONNECTOR SHALL BE OF A SIZE APPROPRIATE WITH THE SIZE OF WIRES TO BE CONNECTED. CONNECTORS THAT ARE TOO LARGE OR SMALL WILL BE REJECTED.
2. INSPECT, TEST, AND VERIFY PROPER SYSTEM CONNECTION BEFORE INSERTION INTO SEALANT CARTRIDGE. DO NOT RESUSE SEALANT CARTRIDGES.

A NOT USED
SCALE: N.T.S.



- 1 FINISHED GRADE IN TURF AREAS
- 2 10" ROUND PLASTIC VALVE BOX WITH BOLT DOWN COVER, USE STAINLESS BOLT, NUT, AND WASHER. HEAT BRAND "PB" ONTO LID.
- 3 24" WIRE EXPANSION LOOP (TYP.)
- 4 FINISH GRADE IN SHRUB AREAS
- 5 WATER PROOF WIRE CONNECTORS
- 6 (4) BRICK SUPPORTS
- 7 PVC ELECTRICAL SWEEP (IF INSTALLED IN CONDUIT)
- 8 LANDSCAPE FABRIC
- 9 3/4" ROCK, 1 CUBIC FT.

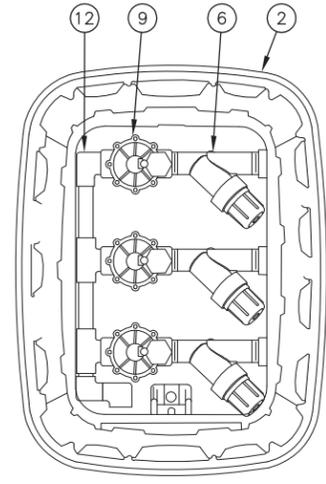
B MASTER VALVE
SCALE: N.T.S.



- 1 FINISH GRADE
- 2 STANDARD VALVE BOX WITH COVER:
RAIN BIRD VB-STD
- 3 WATERPROOF CONNECTION:
RAIN BIRD DB SERIES
- 4 VALVE ID TAG
- 5 30-INCH LINEAR LENGTH OF WIRE, COILED
- 6 PRESSURE REGULATING FILTER:
RAIN BIRD PRF-100-RBY
(INCLUDED IN XCZ-100-PRF KIT)
- 7 PVC SCH 40 FEMALE ADAPTOR
- 8 LATERAL PIPE
- 9 REMOTE CONTROL VALVE:
RAIN BIRD 100-DV (INCLUDED IN XCZ-100-PRF KIT)
- 10 PVC SCH 40 TEE OR ELL TO MANIFOLD
- 11 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL
- 12 MANIFOLD PIPE AND FITTINGS

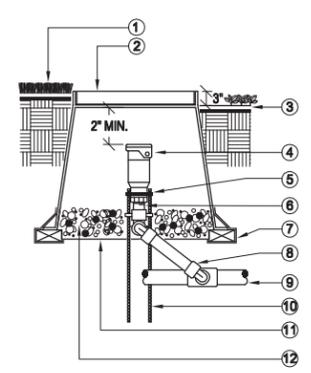
SIDE VIEW

C INTERIOR WALL MOUNT CONTROLLER
SCALE: N.T.S.



TOP VIEW

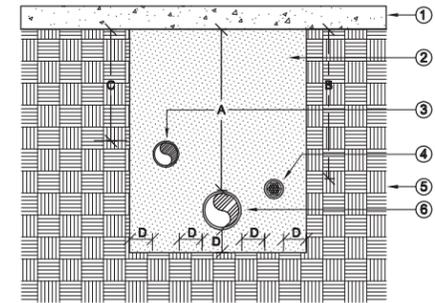
D WIRE CONNECTIONS
SCALE: N.T.S.



- 1 FINISH GRADE IN TURF AREAS
- 2 PLASTIC ROUND VALVE BOX WITH BOLT DOWN COVER, USE STAINLESS BOLT NUT AND WASHER. HEAT BRAND "QCV" ONTO LID.
- 3 FINISH GRADE IN SHRUB AREAS
- 4 QUICK COUPLER VALVE SEE LEGEND FOR SPEC.
- 5 STAINLESS STEEL CLAMP
- 6 BRASS NIPPLE (LENGTH AS REQUIRED)
- 7 (4) BRICK SUPPORTS
- 8 SCH. 80 TRIPLE SWING JOINT ASSEMBLY WITH DOUBLE O-RING SEAL
- 9 MAINLINE, SEE SPECS.
- 10 #4 x 36" REBAR STAKES, (1 of 2)
- 11 LANDSCAPE FABRIC
- 12 3/4" ROCK, 1 CUBIC FT.

NOTE:
ALL THREADED CONNECTIONS TO HAVE TEFLON TAPE OR PASTE. QUICK COUPLER VALVE KEY MUST SWIVEL FREELY WHEN INSERTED INTO LUG TRACK.

E ROUND PULL BOX
SCALE: N.T.S.

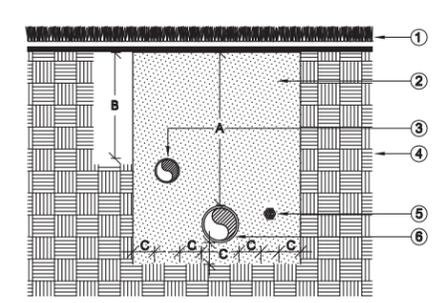


- 1 PAVING
- 2 SAND BACKFILL COMPACTED TO THE DENSITY OF EXISTING SOIL PER SOILS REPORT.
- 3 LATERAL LINE SEE LEGEND FOR SPECS
- 4 CONTROL WIRE SEE LEGEND FOR SPECS
- 5 UNDISTURBED SOIL
- 6 MAINLINE SLEEVE, SEE LEGEND FOR SPECS

DIMENSION- PEDESTRIAN	A	B	C	D
2" TO 12" SIZE	30"	24"	12"	4"
DIMENSION- VEHICLE	A	B	C	D
2" TO 12" SIZE	36"	30"	24"	4"

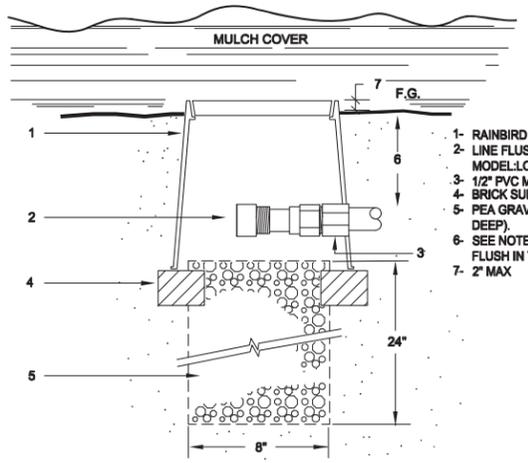
PVC SLEEVES TO BE TWICE THE DIAMETER OF THE PIPE OR WIRE BUNDLE CARRIED.

F XCZ-100-PRF 1" CONTROL ZONE KIT IN VALVE BOX
SCALE: N.T.S.

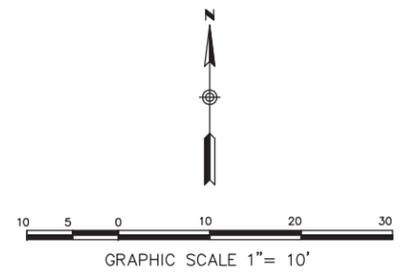


- 1 FINISH GRADE
- 2 CLEAN COMPACTED BACKFILL TO EXISTING SOIL PER SOILS REPORT.
- 3 LATERAL LINES, SEE SPECS.
- 4 UNDISTURBED SOIL
- 5 CONTROL WIRES, SEE SPECS.
- 6 PRESSURE MAINLINE, SEE SPECIFICATIONS

DIMENSION	A	B	C
1/2" TO 2-1/2" IN SIZE	18"	12"	4"
3" IN SIZE	24"		4"
4" AND LARGER	36"		4"



- 1- RAINBIRD SUB. EMITTER BOX SEB-6X
- 2- LINE FLUSHING VALVE RAINBIRD MODEL LOC 16FCap.
- 3- 1/2" PVC MALE ADAPTER AND PIPING.
- 4- BRICK SUPPORTS (TWO)
- 5- PEA GRAVEL SUMP (8" DIAMETER, 24" DEEP).
- 6- SEE NOTES AND SPECIFICATIONS. FLUSH IN TURF: 1" IN GROUND COVER.
- 7- 2" MAX



H SLEEVE INSTALLATION
SCALE: N.T.S.

I PIPE INSTALLATION
SCALE: N.T.S.

J DRIP END FLUSH CAP
SCALE: N.T.S.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: BLM
DRAWN BY: BLM
CHECKED BY: JCK
DATE: APRIL, 2012

CDM Smith
2295 Gateway Oaks Drive, Suite 240
Sacramento, CA 95833
Tel: (916) 567-9900



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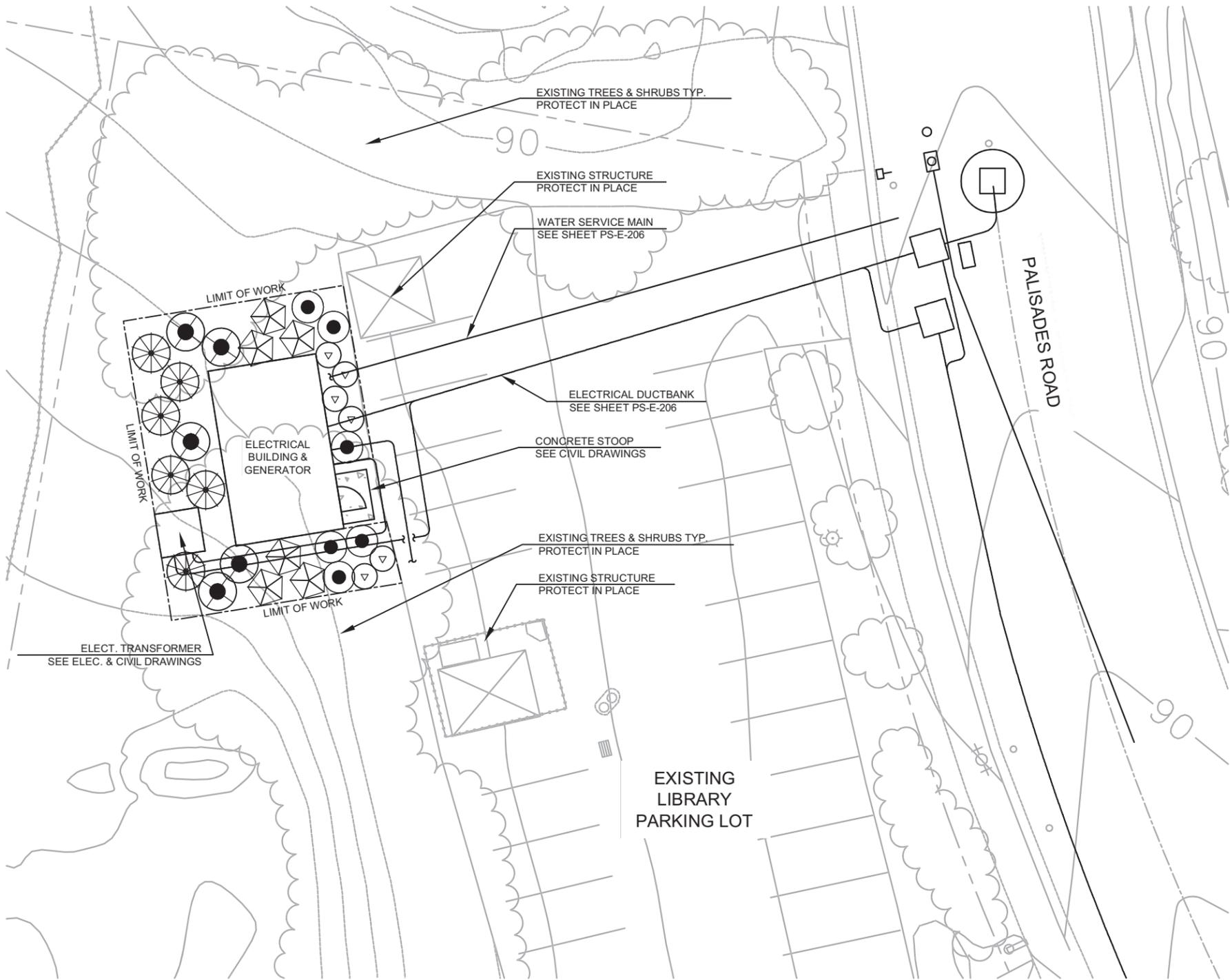


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REGISTERED COMPANY
7115 LINDEN ROAD, SUITE 110
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FAX: (916) 486-1101
www.rickirrigation.com

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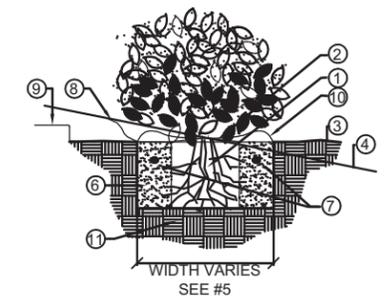
LOS OSOS WASTEWATER COLLECTION SYSTEM
MID-TOWN GENERATOR IRRIGATION DETAILS

SCALE:
HORZ:
VERT:
PROJECT NO. 42502-83120
FILE NAME: PS-L-207
SHEET NO.
PS-L-207



PLANT MATERIAL SCHEDULE

SCIENTIFIC NAME	COMMON NAME	SIZE	QTY
 SALVIA MELLIFERA	BLACK SAGE	1 GAL.	6
 MYRICA CALIFORNICA	PACIFIC WAX-LEAF MYRTLE	5 GAL.	5
 PRUNUS ILLICIFOLIA	HOLLYLEAF CHERRY	5 GAL.	6
 RHAMNUS CALIFORNICA	COFFEEBERRY	5 GAL.	6
 ROSA CALIFORNICA	CALIFORNIA ROSE	1 GAL.	6

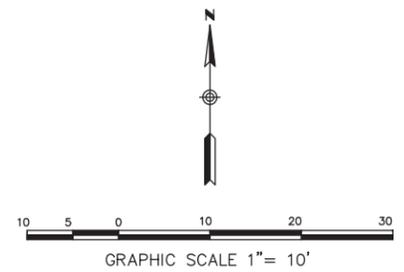


- ① ROOTBALL
- ② CROWN 1" ABOVE FINISH GRADE
- ③ FINISH GRADE
- ④ FINISH GRADE AT SLOPE
- ⑤ 2 X ROOTBALL DIAMETER
- ⑥ BACKFILL (SEE SPECS)
- ⑦ PLANT TABLETS (SEE SPECS)
- ⑧ MULCH (SEE SPECS)
- ⑨ TOP OF PAVING
- ⑩ 4" WATERING BASIN (IF REQ'D)
- ⑪ UNDISTURBED NATIVE SOIL

A SHRUB PLANTING
NOT TO SCALE-ELEVATION

PLANTING NOTES

1. ALL SYMBOLS AND CALLOUTS ARE TYPICAL.
2. THE PLANTING PLAN IS DIAGRAMMATIC. ALL PLANT LOCATIONS ARE APPROXIMATE. PLANT SYMBOLS TAKE PRECEDENCE OVER PLANT QUANTITIES SPECIFIED. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF DISCREPANCIES BETWEEN QUANTITIES AND SYMBOLS SHOWN.
3. THE CITY ENGINEER OR AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO MAKE SUBSTITUTIONS, ADDITIONS, AND DELETIONS TO THE PLANTING LAYOUT AS WORK PROGRESSES.
4. EXISTING INFORMATION ARE SHOWN FOR REFERENCE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF THE LOCATION OF UTILITIES IN THE FIELD.
5. CONTRACTOR SHALL INSTALL A 4" LAYER OF BARK MULCH IN ALL PLANTING AREAS AND A MIN. 12" BEYOND EXTENT OF ALL PLANTS.
6. ALL WORK SHALL CONFORM TO THE LATEST ADDITION OF THE HABITAT MANAGEMENT PLAN PERFORMED FOR THE LOS OSOS WWTP, BY SWCA ENVIRONMENTAL CONSULTANTS.
6. UPLAND SEED MIX TO BE COLLECTED FROM LOCAL SOURCE/PLAMTS. SEE PROJECT HABITAT MANAGEMENT PLAN. CONTRACTOR SHALL APPLY SEED MIX AS SPECIFIED IN PROJECT SPECIFICATIONS
7. ABOVE GROUND ITEMS (FENCE, METAL POSTS, PEDETALS, ELECTRICAL BOXES, ETC.) ARE TO BE PAINTED TO MATCH COUNTY APPROVED COLOR. BLACKENED BEAN 8646N.



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: BLM
 DRAWN BY: BLM
 CHECKED BY: JCK
 DATE: APRIL, 2012

CDM Smith
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 Tel: (916) 567-9900



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 IF THIS BAR DOES NOT MEASURE 1" THEN ADJUST SCALE ACCORDINGLY



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 www.rick-engineering.com

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 UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS WASTEWATER COLLECTION SYSTEM
MID-TOWN GENERATOR PLANTING PLAN

PROJECT NO. 42502-83120
 FILE NAME: PS-L-208
 SHEET NO.
PS-L-208

SCALE:
 HORZ: 1"=10'
 VERT: SCALE

LOS OSOS VALLEY ROAD

IRRIGATION LEGEND

IRRIGATION NOTES

SYMBOL	MANUFACTURER/MODEL	ARC	PSI	GPM	RADIUS	DETAIL
	Hunter RZWS-SLEEVE-36-50	360	30	0.50	1'	E/PS-L-001
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION					DETAIL
	Rain Bird XCZ-LF-100-PRF Drip Control Kit, 1" Low Flow valve, 3/4" pressure regulating RBY filter and 30psi pressure regulator.					D/PS-L-001
	Pipe Transition Point					C/PS-L-002
	Area to Receive Drip Emitters Rain Bird Xerf-Bug XB Single outlet pressure compensating drip emitter, barbed inlet, Blue=0.5gph, Black=1.0gph, Red=2.0gph. Emitter Notes: 1 gal plant to receive 1 1.0 GPH emitter. 5 gal plant to receive 2 1.0 GPH emitters. 15 gal plant to receive 1 2.0 GPH emitter.					F/PS-L-001
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION					DETAIL
	Rain Bird 44LRC 1" Quick Coupler Valve, two piece body, locking cover					C/PS-L-001
	Nibco T-113-K Class 125 bronze gate shut off valve with cross handle, same size as mainline pipe diameter at valve location. Size Range - 1/4" - 3"					B/PS-L-001
	Febco 825Y 1" Reduced Pressure Backflow Preventer					A/PS-L-001
	Irritrol TC-12IN-B Hybrid Controller, 12 stations, indoor model, with plastic cabinet					G/PS-L-001
	Irritrol - Climate Logic Wireless Rain/Freeze Sensor Transmitter and Receiver. Mount Sensor Transmitter as noted or approved, mount Sensor Receiver next to the Irrigation Controller as noted or approved, use controller power or optional transformer. Adjust shutoff points.					E/PS-L-002
	Wilkens Model YB Wye Strainer. Line Sized.					A/PS-L-001
	Irrigation Lateral Line: PVC Schedule 40 PVC Schedule 40 irrigation pipe. Only lateral transition pipe sizes 1" and above are indicated on the plan, with all others being 3/4" in size.					A/PS-L-002
	Irrigation Mainline: PVC Schedule 40					A/PS-L-002
	Valve Callout Valve Number Valve Flow Valve Size					

- IRRIGATION PLAN IS DIAGRAMMATIC. FINAL LOCATION OF PIPING WILL BE DETERMINED AT THE TIME OF INSTALLATION. MAINLINE AND LATERALS SHALL BE PLACED IN THE SAME TRENCH WHEN POSSIBLE. ALL O.C. VALVES ARE TO BE LOCATED 12" FROM SIDEWALKS, CURBS, ASPHALT & CONCRETE SURFACES.
- ALL EQUIPMENT REQUIRED BUT NOT SPECIFIED ON THE DRAWING, TO COMPLETE THE WORK, SHALL BE PROVIDED BY THE IRRIGATION CONTRACTOR.
- INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND/OR SPECIFICATIONS.
- CONTRACTOR SHALL COORDINATE POWER TO CONTROLLERS AND DEDICATE ONE (1) 20 AMP BREAKER FOR EACH CONTROLLER. THE AUTHORIZED REPRESENTATIVE SHALL REVIEW CONTROLLER LOCATIONS PRIOR TO INSTALLATION, 120 VOLT SERVICE AND HOOK-UP TO THE CONTROLLER SHALL BE COMPLETED BY A LICENSED ELECTRICAL CONTRACTOR. THIS COST IS TO BE A PART OF THE LANDSCAPE CONTRACTOR'S BID.
- CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PLANS AND SITE CONDITIONS PRIOR TO BEGINNING WORK. SHOULD CONFLICTING INFORMATION BE FOUND ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE PROJECT LANDSCAPE ARCHITECT BEFORE PROCEEDING WITH THE WORK IN QUESTION.
- DO NOT WILLFULLY INSTALL THE IRRIGATION SYSTEM AS SHOWN ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT OBSTRUCTIONS, GRADE DIFFERENCES OR DIFFERENCES IN THE AREA DIMENSIONS EXIST THAT MIGHT NOT HAVE BEEN CONSIDERED IN THE ENGINEERING. SUCH OBSTRUCTIONS OR DIFFERENCES SHOULD BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT. IN THE EVENT THIS NOTIFICATION IS NOT PERFORMED, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY AT NO EXPENSE TO THE AUTHORIZED REPRESENTATIVE.
- CONTRACTOR SHALL SLEEVE UNDER PAVING PER PLANS AND SPECIFICATIONS. ALL SLEEVES UNDER PAVING SHALL RECEIVE IDENTIFYING MARK ON TOP OF CONCRETE. EXTEND ALL SLEEVES 18" BEYOND EDGE OF PAVING.
- SPLICING OF 24 VOLT WIRES WILL NOT BE PERMITTED EXCEPT IN VALVE BOXES. LEAVE A 24" COIL OF EXCESS WIRE AT EACH SPLICE. LABEL ALL WIRES W/ WATERPROOF MARKERS AT ALL SPLICES AND VALVE MANIFOLDS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF ALL MATERIAL APPEARING ON PLAN.
- LOCATE ALL VALVES OUTSIDE OF TURF AREAS WHERE POSSIBLE.
- CONTRACTOR SHALL MAKE ALL NECESSARY ADJUSTMENTS TO THE IRRIGATION SYSTEM FOLLOWING A PRECIPITATION TEST PER THE AUTHORIZED REPRESENTATIVE. ADJUSTMENTS SHALL INCLUDE BUT WILL NOT BE LIMITED TO: DRIP LINE RELOCATION, CHANGING/ADDING EMITTERS, ADJUSTING NOZZLES IN ORDER TO PROVIDE ADEQUATE WATER COVERAGE FOR PLANT MATERIAL AS DETERMINED BY THE AUTHORIZED REPRESENTATIVE.
- CONTRACTOR SHALL NOT INSTALL ANY PLANTING UNTIL THE FOLLOWING ARE COMPLETED: 1. THE IRRIGATION SYSTEM SHALL BE FULLY OPERATIONAL. 2. HYDROSTATIC PRESSURE TESTS SHALL BE PERFORMED ON MAIN AND LATERAL LINES. 3. ALL ZONES SHALL PASS A COVERAGE TEST. 4. CONTROLLERS SHALL BE FULLY OPERATIONAL.
- WHERE APPLICABLE, ABOVE GROUND ITEMS (FENCE, METAL POSTS, PEDESTALS, ELECTRICAL BOXES, ETC.) ARE TO BE PAINTED TO MATCH COUNTY APPROVED COLOR. BLACKENED BEAN 8646N.

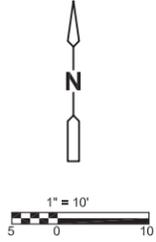
POINT OF CONNECTION NOTES:
CONTRACTOR SHALL VERIFY PRESSURE TO BE A MINIMUM OF 52 PSI AT POINT OF CONNECTION. NOTIFY LANDSCAPE ARCHITECT OF ACTUAL PRESSURE IN FIELD.

3/4" (MIN.) WATER METER PER COUNTY STDS.

POINT OF CONNECTION. SEE NOTES ABOVE.

IRRIGATION RAIN SENSOR. MOUNT AWAY FROM OVERHEAD OBSTRUCTIONS. TIE RECEIVER INTO CONTROLLER SENSORY PORT.

IRRIGATION CONTROLLER LOCATION. PROVIDE 120V_{ac} AT THIS LOCATION. CONNECT ALL VALVE WIRES TO CONTROLLER.



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: B.M.O.
DRAWN BY: C.D.
CHECKED BY: T.K.
DATE: April, 2012

2295 Gateway Oaks Drive, Suite 240
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Tel: (916) 567-9900



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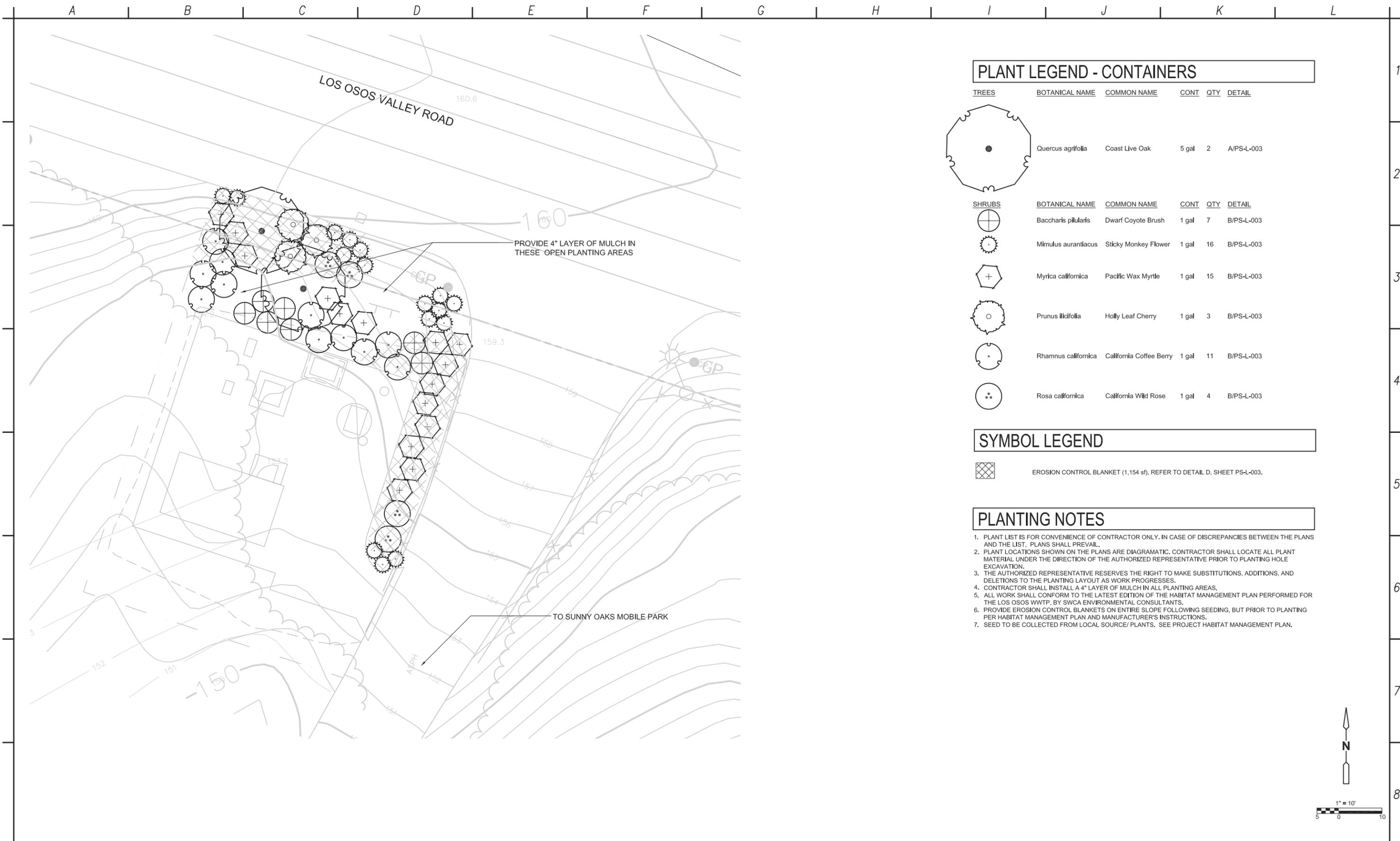


PROJECT NO. 2011080

DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS WASTEWATER COLLECTION SYSTEM
SUNNY OAKS PUMP STATION
IRRIGATION PLAN

PROJECT NO.42502-83120
FILE NAME:
SHEET NO.
PS-L-301



PLANT LEGEND - CONTAINERS

TREES	BOTANICAL NAME	COMMON NAME	CONT	QTY	DETAIL
	<i>Quercus agrifolia</i>	Coast Live Oak	5 gal	2	A/PS-L-003

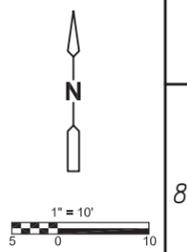
SHRUBS	BOTANICAL NAME	COMMON NAME	CONT	QTY	DETAIL
	<i>Baccharis pilularis</i>	Dwarf Coyote Brush	1 gal	7	B/PS-L-003
	<i>Mimulus aurantiacus</i>	Sticky Monkey Flower	1 gal	16	B/PS-L-003
	<i>Myrica californica</i>	Pacific Wax Myrtle	1 gal	15	B/PS-L-003
	<i>Prunus ilicifolia</i>	Holly Leaf Cherry	1 gal	3	B/PS-L-003
	<i>Rhamnus californica</i>	California Coffee Berry	1 gal	11	B/PS-L-003
	<i>Rosa californica</i>	California Wild Rose	1 gal	4	B/PS-L-003

SYMBOL LEGEND

EROSION CONTROL BLANKET (1,154 sf), REFER TO DETAIL D, SHEET PS-L-003.

PLANTING NOTES

1. PLANT LIST IS FOR CONVENIENCE OF CONTRACTOR ONLY. IN CASE OF DISCREPANCIES BETWEEN THE PLANS AND THE LIST, PLANS SHALL PREVAIL.
2. PLANT LOCATIONS SHOWN ON THE PLANS ARE DIAGRAMATIC. CONTRACTOR SHALL LOCATE ALL PLANT MATERIAL UNDER THE DIRECTION OF THE AUTHORIZED REPRESENTATIVE PRIOR TO PLANTING HOLE EXCAVATION.
3. THE AUTHORIZED REPRESENTATIVE RESERVES THE RIGHT TO MAKE SUBSTITUTIONS, ADDITIONS, AND DELETIONS TO THE PLANTING LAYOUT AS WORK PROGRESSES.
4. CONTRACTOR SHALL INSTALL A 4" LAYER OF MULCH IN ALL PLANTING AREAS.
5. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE HABITAT MANAGEMENT PLAN PERFORMED FOR THE LOS OSOS WWTP, BY SWCA ENVIRONMENTAL CONSULTANTS.
6. PROVIDE EROSION CONTROL BLANKETS ON ENTIRE SLOPE FOLLOWING SEEDING, BUT PRIOR TO PLANTING PER HABITAT MANAGEMENT PLAN AND MANUFACTURER'S INSTRUCTIONS.
7. SEED TO BE COLLECTED FROM LOCAL SOURCE/ PLANTS. SEE PROJECT HABITAT MANAGEMENT PLAN.



<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>REV. NO.</th> <th>DATE</th> <th>DRWN</th> <th>CHKD</th> <th>REMARKS</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>	REV. NO.	DATE	DRWN	CHKD	REMARKS																DESIGNED BY: <u> </u> B.M.O. DRAWN BY: <u> </u> C.D. CHECKED BY: <u> </u> T.K. DATE: <u> </u> April, 2012	<p>2295 Gateway Oaks Drive, Suite 240 Sacramento, CA 95833 Tel: (916) 567-9900</p>		<p>IF THIS BAR DOES NOT MEASURE 1" THEN ADJUST SCALE ACCORDINGLY</p>		<p>PROJECT NO. 2011080</p>	<p>DIAL TOLL FREE 1-800-642-2444 AT LEAST TWO DAYS BEFORE YOU DIG UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA</p>	LOS OSOS WASTEWATER COLLECTION SYSTEM SUNNY OAKS PUMP STATION PLANTING PLAN	PROJECT NO.42502-83120 FILE NAME: SHEET NO. PS-L-302
REV. NO.	DATE	DRWN	CHKD	REMARKS																									

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ELECTRICAL SYMBOLS

PLAN

SINGLE LINE DIAGRAM

<p>— EXPOSED OR CONCEALED CONDUIT</p> <p>- - - CONDUIT RUN UNDERGROUND OR IN CONCRETE</p> <p>— CONDUIT RUN - CHANGE IN ELEVATION</p> <p>○ CONDUIT TURNING UP</p> <p>● CONDUIT TURNING DOWN</p> <p>FROM FLOOR ABOVE TO FLOOR BELOW</p> <p>CONDUIT CAPPED, OR SEALED</p> <p>HOMERUN TO EQUIPMENT INDICATED (1" CONDUIT, 3 #10, 1 #10 GND UNLESS OTHERWISE INDICATED)</p> <p>RACEWAY BOX * - BOX TYPE MH - MANHOLE HH - HANDHOLE PB - PULLBOX FOMH - FIBER OPTIC MANHOLE MVMH - MEDIUM VOLTAGE MANHOLE EMH - ELECTRICAL MANHOLE</p> <p>Ⓝ JUNCTION BOX OR FITTING</p> <p>ⓧ X-#a INCANDESCENT, HPS OR MH FIXTURE X - LIGHTING PANEL DESIGNATION # - CIRCUIT NUMBER, a - SWITCH DESIGNATION</p> <p>UNSWITCHED FIXTURE (NIGHT LIGHT)</p> <p>WALL MOUNTED FIXTURE</p> <p>POLE, BRACKET, ARM AND STREETLIGHT</p> <p>FLUORESCENT LIGHTING FIXTURE</p> <p>FLUORESCENT LIGHT FIXTURE, UNSWITCHED</p> <p>EMERGENCY LIGHT FIXTURE, BATTERY OPERATED</p> <p>EXIT LIGHT, SHOWN WITH TWO ILLUMINATED SIDES, ARROWS INDICATE DIRECTION OF EXIT</p> <p>A - FIXTURE TYPE (SEE LIGHTING FIXTURE SCHEDULE FOR DETAILS) # INDICATES APPROX. MOUNTING HEIGHT ABOVE FINISHED FLOOR. CLG INDICATES CEILING MOUNT</p> <p>ⓧ X-#a LIGHT SWITCH X - LIGHTING PANEL DESIGNATION # - CIRCUIT DESIGNATION a - SWITCH DESIGNATION * - SWITCH TYPE 3 - 3 WAY 4 - 4 WAY D - DIMMER M - MANUAL MOTOR STARTER</p>	<p>ⓧ X-# 120V DUPLEX RECEPTACLE, NEMA CONFIGURATION 5-20R (WALL MOUNT) X - LIGHTING PANEL DESIGNATION # - CIRCUIT DESIGNATION * - TYPE WP - WEATHERPROOF XP - EXPLOSION PROOF GFCI - GROUND FAULT CIRCUIT INTERRUPTER</p> <p>120V DUPLEX RECEPTACLE, NEMA CONFIGURATION 5-20R (FLOOR MOUNT)</p> <p>ⓧ * SINGLE SPECIAL PURPOSE RECEPTACLE 240V 1 PHASE, ASTRISK INDICATES AMPERAGE</p> <p>ⓧ * WELDING RECEPTACLE ASTRISK INDICATES AMPERAGE</p> <p>ⓧ * SPECIAL PURPOSE RECEPTACLE 480 VAC, ASTRISK INDICATES AMPERAGE</p> <p>ⓧ FLOOR TYPE TELEPHONE OUTLET</p> <p>ⓧ WALL TYPE TELEPHONE SYSTEM OUTLET</p> <p>ⓧ WALL TYPE COMPUTER OUTLET</p> <p>■ LIGHTING PANEL</p> <p>□ POWER PANEL</p> <p>□ DISCONNECT SWITCH</p> <p>Ⓜ MOTOR</p> <p>Ⓣ THERMOSTAT</p> <p>Ⓜ HORN</p> <p>ⓧ GROUND ROD AND GROUND WELL</p> <p>ⓧ GROUND ROD 3/4" x 10' - 0" (UNLESS OTHERWISE NOTED)</p> <p>■ GROUND CONNECTION BOLTED TYPE</p> <p>● GROUND CONNECTION - EXOTHERMIC TYPE</p> <p>— BARE COPPER GROUND TO GROUND WIRE IN SLAB, OR UNDERGROUND GROUND GRID, SIZE AS NOTED</p>	<p>ⓕ ALARM HORN WITH STROBE</p> <p>ⓕ A F AMPLIFIER/LOUDSPEAKER</p> <p>ⓓ SMOKE DETECTOR</p> <p>ⓓ HD HEAT DETECTOR</p> <p>ⓕ FA FIRE ALARM PULL STATION</p> <p>ⓕ F ● SEPARATE OR ACCESSORY STROBE LIGHT</p> <p>ⓕ F ○ FIRE BELL WITH STROBE LIGHT</p> <p>ⓕ FS FIRE SUPPRESSION SWITCH</p> <p>ⓕ ER END-OF-LINE TERMINATOR</p> <p>ⓕ I * INTERCOM SPEAKER * INDICATES TYPE, REFER TO SPECIFICATIONS</p> <p>ⓕ I * INTERCOM SPEAKER WITH STROBE LIGHT * INDICATES TYPE, REFER TO SPECIFICATIONS</p> <p>ⓕ I ○ INTERCOM WALL JACK</p> <p>ⓕ HS ○ INTERCOM HANDSET, WALL MOUNTED</p> <p>ⓕ VC * VIDEO CAMERA * INDICATES TYPE F - FIXED PTZ - PAN-TILT-ZOOM</p> <p>ⓕ * SECURITY ACCESS DEVICE, * INDICATES TYPE CR - CARD READER KS - KEY SWITCH PS - DIGITAL KEYPAD</p>	<p>↑↑ MEDIUM VOLTAGE VACUUM DRAW-OUT STARTER</p> <p>52 MEDIUM VOLTAGE DRAWOUT BREAKER</p> <p>ⓕ (#) ANSI RELAY DEVICE * INDICATES ANSI DEVICE (#) INDICATES QUANTITY 25 - SYNCHRONISM CHECK RELAY 27 - UNDERVOLTAGE 27/47 - UNDERVOLTAGE, PHASE SEQUENCE, UNBALANCED VOLTAGE 32 - DIRECTIONAL POWER RELAY 41 - FIELD CONTACTOR 43 - SELECTOR SWITCH 49 - HIGH OIL TEMPERATURE 50/51 - INSTANTANEOUS AND TIME OVERCURRENT 50/51N - INSTANTANEOUS AND TIME RESIDUALLY CONNECTED GROUND OVERCURRENT 51G - GROUND FAULT 60 - VOLTAGE BALANCE 62 - TIME DELAY 63 - SUDDEN PRESSURE 67 - AC DIRECTIONAL CURRENT RELAY 71L - LOW OIL LEVEL 81 - FREQUENCY RELAY 83 - CONTROL POWER TRANSFORMER 86 - LOCKOUT 87TL - TRANSFORMER DIFFERENTIAL 87M - MOTOR DIFFERENTIAL</p> <p>THERMAL MAGNETIC 100/20 FRAME (AMPS) TRIP (AMPS)</p> <p>MCP 150/150 CONTINUOUS AMPS MCP TRIP SETTING BASED ON MOTOR HORSEPOWER</p> <p>100/20 LOW VOLTAGE DRAWOUT CIRCUIT BREAKER</p> <p>40/MCP COMBINATION NEMA RATED STARTER WITH MCP DISCONNECT AND CONTROL POWER TRANSFORMER ROMAN NUMERIAL - NEMA SIZE * - STARTER TYPE NO SUBSCRIPT - FULL VOLTAGE NON-REVERSING RVAT - REDUCED VOLTAGE AUTO TRANSFORMER FVR - FULL VOLTAGE REVERSING 2S2W - TWO SPEED TWO WINDING 2S1W - TWO SPEED ONE WINDING</p> <p>* VFD VARIABLE FREQUENCY DRIVE * INDICATES AMPERE RATING OR NEMA SIZE</p> <p>* RVSS REDUCED VOLTAGE SOLID STATE STARTER * INDICATES AMPERE RATING OR NEMA SIZE</p> <p>* PACKAGED EQUIPMENT * INDICATES KW, KVA OR HP RATING AS INDICATED</p> <p>ⓕ KEY INTERLOCK</p> <p>ⓕ GENERATOR, RATINGS AS INDICATED</p> <p>ⓕ MANUAL OR AUTOMATIC TRANSFER SWITCH RATINGS AS INDICATED</p>	<p>ⓕ * METERING DEVICE * INDICATES METER TYPE WHM - WATT HOUR METER WM - WATT METER AM - AMMETER VM - VOLTMETER PFM - POWER FACTOR METER</p> <p>AS AMMETER SWITCH</p> <p>VS VOLTMETER SWITCH</p> <p>480/120 POTENTIAL TRANSFORMER, RATIO AND NUMBER OF PT'S AS NOTED (3)</p> <p>100/5 CT (3) CURRENT TRANSFORMER, RATIO AND NUMBER OF CT'S AS NOTED</p> <p>5A FUSE, SIZED AS NOTED</p> <p>5 MOTOR, HORSEPOWER AS NOTED</p> <p>TRANSFORMER WITH GROUNDED SECONDARY, KVA SIZE & VOLTAGE RATIO AS INDICATED</p> <p>ⓕ FUSED CONTROL POWER TRANSFORMER</p> <p>MOV ELECTRICAL MOTOR OPERATED VALVE, WITH INTEGRAL REVERSING STARTER</p> <p>30A DISCONNECT SWITCH, SIZE AS NOTED</p> <p>30 FUSED DISCONNECT SWITCH, SIZED AS NOTED</p> <p>ⓕ CAPACITOR</p> <p>TVSS TRANSIENT VOLTAGE SURGE SUPPRESSOR</p> <p>EMAP ELECTRONIC METERING AND MONITORING ANALYZER PANEL</p> <p>SSMP SOLID STATE MOTOR PROTECTIVE DEVICE</p> <p>PM POWER MONITOR</p> <p>ⓕ LIGHTNING ARRESTOR AND SURGE CAPACITOR</p> <p>ⓕ CROSSING OF CONDUCTORS-NOT CONNECTED</p> <p>ⓕ CONDUCTORS CONNECTED</p>
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PROJECT NO.42502-83120
 FILE NAME: PS-E-001
 SHEET NO.
PS-E-001

ELECTRICAL SYMBOLS

SCHEMATIC DIAGRAM

LIGHTING FIXTURE SCHEDULE (NOTE 1)

TYPE	LAMPS NO/WATTS	VOLTS	DESCRIPTION
A	2 /32	120	4' FLUORESCENT FIXTURE ENCLOSED AND GASKETED FIBER GLASS HOUSING, ACRYLIC LENS STEEL CHANNEL, ANODIZED ALUMINUM REFLECTOR. ELECTRONIC BALLAST. DAY BRITE VAPOR LUME OR EQUAL.
B	LED	120	LED LIGHT SOURCE, INTERNAL BATTERY CHARGER, CORROSION RESISTANT THERMOPLASTIC HOUSING, ENERGY STAR COMPLIANT, CAPABLE OF OPERATING 1-1/2 HOURS ON NICKEL CADMIUM INTERNAL BATTERY, EMERGI-LITE: ELX SERIES OR EQUAL
D	1/70	120	WALLPACK EXTERIOR FIXTURE, FULLY SHIELDED, FULL CUTOFF, IDA DARK SKY FRIENDLY, WITH INTEGRAL PHOTO CELL, GLASS LENS, DIECAST ALUMINUM HOUSING WITH BRONZE FINISH. RAB LIGHTING WP1FC SERIES RUDD LIGHTING, 12" FULL CUTOFF GWCO SERIES, OR EQUAL.
E	18	120	SELF CONTAINED UNIT WITH LAMP HEADS, INTERNAL BATTERY CHARGER, CORROSION RESISTANT THERMOPLASTIC HOUSING, TEST SWITCH, INDICATOR LIGHTS, LOW VOLTAGE BATTERY DISCONNECT, BROWN OUT PROTECTION, BATTERY LOCKOUT, CAPABLE OF OPERATING 1-1/2 HOURS ON NICKEL CADMIUM INTERNAL BATTERY, EMERGI-LITE: ME SERIES OR EQUAL.

NOTES:

- LIGHTING FIXTURES SHALL MEET COUNTY DESIGN STANDARDS. THIS SHALL INCLUDE PROPER SHIELDING, PROPER ORIENTATION, AND APPLICABLE HEIGHT STANDARDS. ALL LIGHTING FIXTURES SHALL BE SHIELDED SO THAT NEITHER THE LAMP NOR THE RELATED REFLECTOR INTERIOR SURFACE IS VISIBLE FROM ADJACENT PROPERTIES OR PUBLIC AREAS. LIGHT HOODS SHALL BE DARK-COLORED. LIGHTING ASSOCIATED WITH ALL PROJECT COMPONENTS SHALL BE THE MINIMUM NEEDED FOR PUMP STATION OPERATIONS WHICH REQUIRE LIGHTING FOR OPERATIONS AND/OR DURING EMERGENCY SITUATIONS. LIGHTING FIXTURE SUBMITTALS SHALL PROVIDE CONFIRMATION OF COMPLIANCE WITH THESE REQUIREMENTS.

CONTROL RELAY OR COIL
* INDICATES DEVICE
CR - - CONTROL RELAY
TD - - TIME DELAY RELAY
(TIMING RANGE AS INDICATED)
M - - MOTOR STARTER
PC - - PHOTOCLELL

|| NORMALLY OPEN CONTACT

⋈ NORMALLY CLOSED CONTACT

TIMED CONTACTS - CONTACT ACTION DELAYED AFTER COIL IS:

ENERGIZED

NORMALLY OPEN WITH TIME DELAY CLOSING

NORMALLY CLOSED WITH TIME DELAY OPENING

DE-ENERGIZED

NORMALLY OPEN WITH INSTANT CLOSING AND TIME DELAY OPENING

NORMALLY CLOSED WITH INSTANT OPENING AND TIME DELAY CLOSING

NORMALLY OPEN PUSHBUTTON

NORMALLY CLOSED PUSHBUTTON,

NO/NC MAINTAINED PUSHBUTTON

THREE-POSITION SELECTOR SWITCH.
H - - HAND
M - - MANUAL
R - - REMOTE
L - - LOCAL
A - - AUTOMATIC
O - - OFF

TWO-POSITION SELECTOR SWITCH:

THREE POSITION SPRING RETURN-TO-CENTER MOMENTARY CONTACT SWITCH

SINGLE POLE TOGGLE SWITCH

VACUUM OR PRESSURE SWITCH, CLOSE ON RISING PRESSURE

VACUUM OR PRESSURE SWITCH, OPEN ON RISING PRESSURE

FLOAT LEVEL SWITCH, CLOSE ON RISING LEVEL

FLOAT LEVEL SWITCH, OPEN ON RISING LEVEL

NORMALLY OPEN

NORMALLY CLOSED

NORMALLY OPEN HELD CLOSED

NORMALLY CLOSED HELD OPEN

MAINTAINED POSITION

TEMPERATURE SWITCH, CLOSE ON RISING TEMPERATURE

TEMPERATURE SWITCH, OPEN ON RISING TEMPERATURE

FLOW SWITCH, CLOSE ON INCREASING FLOW

FLOW SWITCH, OPEN ON INCREASING FLOW

TORQUE SWITCH OPENS ON INCREASING TORQUE

1 FIELD
2 LCS
3 LCP
4 MCC
5 PLC

LOCATION LEGEND
ALL DEVICES ARE LOCATED IN THE MOTOR CONTROLLER UNLESS INDICATED OTHERWISE

DIGITAL INPUT TO PLC/RTU/DCS

DIGITAL OUTPUT FROM PLC/RTU/DCS NORMALLY OPEN

DIGITAL OUTPUT FROM PLC/RTU/DCS NORMALLY CLOSED

ANALOG INPUT TO PLC/RTU/DCS 4-20 mA UNLESS OTHER OTHERWISE NOTED

ANALOG OUTPUT FROM PLC/RTU/DCS 4-20 mA UNLESS OTHER OTHERWISE NOTED

SOLENOID VALVE

PILOT LIGHT * INDICATES LENS COLOR
R - - RED
G - - GREEN
A - - AMBER
W - - WHITE

PILOT LIGHT PUSH-TO-TEST SEE ABOVE FOR LENS COLORS

HORN

ELAPSED TIME METER

HEATER

GROUND CONNECTION

CROSSING OF CONDUCTORS-NOT CONNECTED

CONDUCTORS CONNECTED

FUSE

VOLTAGE SURGE SUPPRESSOR

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PROJECT NO. 42502-83120
FILE NAME: PS-E-002
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A	B	C	D	E	F	G	H	I	J	K	L
ABBREVIATIONS						GENERAL NOTES					
A AMPERE, AUTOMATIC AC ALTERNATING CURRENT AF CIRCUIT BREAKER FRAME SIZE AM AMMETER ANN ANNUNCIATOR AS ADJUSTABLE SPEED AT AMPERE TRIP ATS AUTOMATIC TRANSFER SWITCH AUTO AUTOMATIC AWG AMERICAN WIRE GAUGE BATT BATTERY BC BARE COPPER BKR BREAKER C CONDUIT, CLOSED CAP CAPACITOR CB CIRCUIT BREAKER CKT CIRCUIT CLF CURRENT LIMITING FUSE COM COMMON COMP COMPARTMENT CP CONTROL PANEL CPT CONTROL POWER TRANSFORMER CR CONTROL RELAY, CARD READER CT CURRENT TRANSFORMER DCS DISTRIBUTED CONTROL SYSTEM DISC DISCONNECT DISTR DISTRIBUTION DPDP DOUBLE POLE DOUBLE THROW DPST DOUBLE POLE SINGLE THROW E EMERGENCY EMT ELECTRICAL METALLIC TUBING ENCL ENCLOSURE ETM ELAPSED TIME METER F FREQUENCY, FUSE, FIXED FDR FEEDER FLA FULL LOAD AMPS FLUOR FLUORESCENT FM FREQUENCY METER FO FIBER OPTIC FVR FULL VOLTAGE REVERSING FVNR FULL VOLTAGE NON-REVERSING GEN GENERATOR GFIC GROUND FAULT CIRCUIT INTERRUPTER GND GROUND H HAND HD HEAT DETECTOR HH HAND HOLE	HID HIGH INTENSITY DISCHARGE HOA HAND-OFF-AUTOMATIC HPS HIGH PRESSURE SODIUM HS HAND SWITCH HZ HERTZ IMC INTERMEDIATE METALLIC CONDUIT INCAND INCANDESCENT IND INDICATION INST INSTANTANEOUS I/O INPUT/OUTPUT I _{sc} SHORT CIRCUIT CURRENT, AMPS ISO ISOLATION J JUNCTION BOX KA THOUSAND AMPERES KAIC THOUSAND AMP INTERRUPTING CURRENT KCMIL THOUSAND CIRCULAR MILS KVA KILOVOLT AMPERE L LOCAL LCP LOCAL CONTROL PANEL LCS LOCAL CONTROL STATION LOC LOCAL LOR LOCAL-OFF-REMOTE LOS STOP LOCKOUT PUSHBUTTON LP LIGHTING PANEL LRA LOCKED ROTOR AMPS LS LEVEL SWITCH LTG LIGHTING LTS LIGHTS M MOTOR CONTACTOR COIL mA MILLIAMPERE MCP MOTOR CIRCUIT PROTECTOR MLO MAIN LUGS ONLY MOV MOTOR OPERATED VALVE MS MANUAL MOTOR STARTER MTS MANUAL TRANSFER SWITCH NEUT NEUTRAL NP NAMEPLATE O OPEN, OFF OL OVERLOAD PA PUBLIC ADDRESS PB PUSHBUTTON, PULLBOX PC PHOTOCELL PCM PROCESS CONTROL MODULE PF POWER FACTOR PFM POWER FACTOR METER PH PHASE	PL PILOT LIGHT PNLBD PANELBOARD PP POWER PANELBOARD POS POSITION POT POTENTIOMETER PRI PRIMARY PT POTENTIAL TRANSFORMER PTZ PAN-TILT-ZOOM PWR POWER R RECPT RECEPTACLE RGS RIGID GALVANIZED STEEL RMS ROOT MEAN SQUARE RTU REMOTE TERMINAL UNIT RVSS REDUCED VOLTAGE SOLID STATE SEL SW SELECTOR SWITCH SEQ SEQUENCE SHLD SHIELDED SIG SIGNAL SP SPARE SPDT SINGLE POLE DOUBLE THROW SSM SOLID STATE METER SSMP SOLID STATE MOTOR PROTECTOR SP HTR SPACE HEATER SPST SINGLE POLE SINGLE THROW ST, SH SHUNT TRIP STR STARTER SW SWITCH SWBD SWITCHBOARD SWGR SWITCHGEAR TACH TACHOMETER TB TERMINAL BOX TERM TERMINAL TM REPEAT CYCLE TIMER TD TIME DELAY RELAY TS TEMPERATURE SWITCH UPS UNINTERRUPTABLE POWER SUPPLY UON UNLESS OTHERWISE NOTED, SHOWN, INDICATED OR DESCRIBED V VOLTAGE, VOLTS VA VOLT AMPERE VAR VOLT AMPERE REACTIVE VFD VARIABLE FREQUENCY DRIVE VM VOLTMETER VP VAPOR PROOF W WATTS, WIRE WM WATT METER WP WEATHERPROOF XFMR TRANSFORMER XMTR TRANSMITTER XP EXPLOSION PROOF	1. ALL RACEWAYS AND EQUIPMENT SHALL BE INSTALLED AND GROUNDED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND APPLICABLE LOCAL CODES. 2. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF TERMINAL BOXES AND CONDUIT ENTRANCES OF ALL EQUIPMENT AGAINST APPROVED SHOP DRAWINGS BEFORE STUBBING UP CONDUITS. 3. REFER TO SPECIFICATION SECTION 16110 FOR REQUIREMENTS RELATED TO FLEXIBLE CONDUIT INSTALLATION 4. CONDUIT RUNS ARE SHOWN DIAGRAMMATICALLY ONLY AND SHALL BE INSTALLED IN A MANNER TO PREVENT CONFLICTS WITH EQUIPMENT OR STRUCTURAL CONDITIONS. EXPOSED CONDUIT SHALL BE INSTALLED PARALLEL OR PERPENDICULAR TO BEAMS AND WALLS. REFER TO SPECIFICATION 16110. 5. CONDUIT STUB-UPS SHALL NOT BE MORE THAN 6" FROM THE CENTER LINE OF TERMINAL BOXES. 6. IN THE EVENT OF INTERFERENCE BETWEEN ELECTRICAL EQUIPMENT SHOWN ON THE DRAWINGS AND OTHER EQUIPMENT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING AND THE ENGINEER SHALL APPROVE PROPOSED CHANGES BEFORE THEY ARE MADE. 7. ALL SURFACE MOUNTED PANELS AND PANELBOARDS ON THE INTERIOR OF EXTERIOR WALLS ABOVE GRADE OR IN OTHER LOCATIONS CONSIDERED DAMP OR WET SHALL BE MOUNTED SO AS TO MAINTAIN A 1/4" (MINIMUM) AIR SPACE BETWEEN THE ENCLOSURE AND THE WALL. 8. LOCATION OF PULLBOXES ARE APPROXIMATE. THE CONTRACTOR SHALL COORDINATE EXACT LOCATION OF PULLBOXES WITH MECHANICAL PIPING AND SHALL BE 6" (MINIMUM) AWAY FROM MECHANICAL PIPING FLOW LINES. 9. ONLY MAJOR PULLBOXES ARE SHOWN. THE CONTRACTOR SHALL PROVIDE ADDITIONAL PULLBOXES WHERE REQUIRED TO MAKE A WORKABLE INSTALLATION. 10. THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE DETAILS WHETHER OR NOT THEY ARE REFERENCED ON THE DRAWINGS. 11. ALL CONDUIT RUNS CROSSING EXPANSION JOINTS SHALL HAVE EXPANSION OR EXPANSION AND DEFLECTION TYPE FITTINGS. FOR LOCATIONS OF EXPANSION JOINTS, REFER TO THE STRUCTURAL DRAWINGS. 12. LIGHTING FIXTURES SHALL BE MOUNTED ACCORDING TO THE MOUNTING HEIGHT GIVEN ON THE DRAWINGS, WITH THE DISTANCE BEING MEASURED FROM THE BOTTOM OF THE FIXTURE TO THE FINISHED FLOOR. THE APPROPRIATE MOUNTING BRACKETS AND HARDWARE SHALL BE SUPPLIED. 13. ALL PANELBOARDS SHALL BE MOUNTED SO THAT THE DISTANCE FROM THE TOP CIRCUIT BREAKER OPERATING HANDLE TO THE FINISHED FLOOR SHALL NOT EXCEED 6'-7". 14. THE WIRING DIAGRAMS, QUANTITY AND SIZE OF WIRES AND CONDUIT REPRESENT A SUGGESTED ARRANGEMENT BASED UPON SELECTED STANDARD COMPONENTS OF ELECTRICAL EQUIPMENT. MODIFICATIONS ACCEPTABLE TO THE ENGINEER MAY BE MADE BY THE CONTRACTOR TO ACCOMMODATE EQUIPMENT ACTUALLY PURCHASED. THE BASIC SEQUENCE AND METHOD OF CONTROL MUST BE MAINTAINED AS INDICATED ON THE DRAWINGS AND/OR SPECIFICATIONS. 15. CONNECTIONS BETWEEN RIGID CONDUIT AND MOTOR TERMINAL BOXES OR SIMILAR EQUIPMENT SUBJECT TO VIBRATION SHALL BE FLEXIBLE LIQUID-TIGHT CONDUIT. 16. CONDUITS SHALL BE TERMINATED SO AS TO PERMIT NEAT CONNECTION TO MOTORS AND OTHER EQUIPMENT. 17. CONDUITS FOR FUTURE EQUIPMENT OR EXTENSION SHALL BE TERMINATED AS SHOWN IN DETAIL OR AS SPECIFIED. 18. MCC AND SWITCHGEAR COMPARTMENT DESIGNATIONS SHALL BE AS INDICATED BELOW: BLANK/SPACE: CONTAINS NECESSARY BUS AND HARDWARE FOR FUTURE ADDITION OF BREAKERS OR STARTERS. SPARE: CONTAINS A COMPLETE INSTALLED BREAKER OR STARTER AVAILABLE FOR FUTURE USE. 19. ALL MOTOR STARTER CONTROL POWER TRANSFORMERS SHALL BE SIZED TO PROVIDE SUFFICIENT VOLT-AMPERE CAPACITY FOR OPERATING ALL LOCAL AND REMOTE ELECTRICAL DEVICES ASSOCIATED WITH CONTROL OF THE MOTOR IN ADDITION TO THE STARTER COIL. 20. MOTOR CONTROL CENTERS AND ALL FREE STANDING PANELS SHALL BE SET ON CONCRETE HOUSEKEEPING PADS.	21. ALL RECEPTACLES IN OUTDOOR AND ANTICIPATED WET AREAS SHALL BE GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLES WITH WEATHERPROOF COVERS. 22. ELECTRICAL CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING THE PROJECT TO VERIFY THE SCOPE OF WORK WITH FIELD CONDITIONS. 23. EQUIPMENT LOCKOUTS SHALL BE IN STRICT ACCORDANCE WITH OWNER'S REQUIREMENTS. 24. CONTRACTOR SHALL COORDINATE ALL UTILITY WORK. CONTRACTOR SHALL OBTAIN PG&E APPROVAL FOR ALL WORK AND EQUIPMENT PRIOR TO COMMENCING OR PURCHASING. CONTRACTOR SHALL FURNISH INSTALL AND CONNECT ALL SUBSTRUCTURES, CONDUITS, PULL ROPES, POLES AND CONCRETE PADS NECESSARY TO INSTALL PG&E EQUIPMENT. PG&E SHALL PULL AND TERMINATE NECESSARY CONDUCTORS. 25. ALL OUTDOOR ENCLOSURES SHALL BE PADLOCKABLE. FURNISH, INSTALL AND CONNECT PADLOCK WITH TWO KEYS.							

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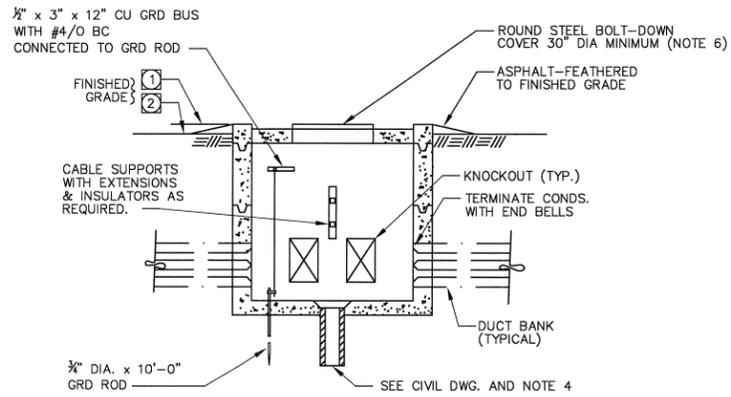


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**ELECTRICAL
 STANDARD ELECTRICAL
 ABBREVIATIONS & GENERAL NOTES**

PROJECT NO. 42502-83120
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PS-E-003

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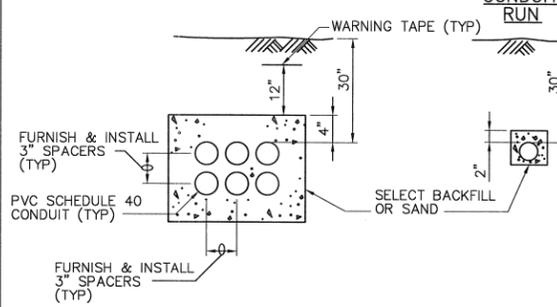
TYPICAL PULLBOX/MANHOLE

E-102

NOTES:

- 1 AT PAVED AREAS
- 2 UNPAVED AREAS.
3. PULL BOX INSTALLATION TO BE WATERTIGHT AFTER CONDUITS HAVE BEEN INSTALLED BY USING RAYCHEM RAYFLATE DUCT SEALING SYSTEM RDSS OR EQUAL.
4. FOR MANHOLE/PULL BOX NOT SHOWN WITH DRAINAGE PIPING ON CIVIL DRAWINGS, PROVIDE A MINIMUM OF 5 FT OF 4" PD TO A 5 FT CUBED TYPE DRAIN ROCK WITH FILTER FABRIC AROUND.
5. MANHOLE MINIMUM SIZE AS SHOWN ON DRAWINGS.
6. PROVIDE COLLAR OR CHIMNEY IF REQUIRED TO RAISE GRADE.

MORE THAN ONE CONDUIT IN A RUN

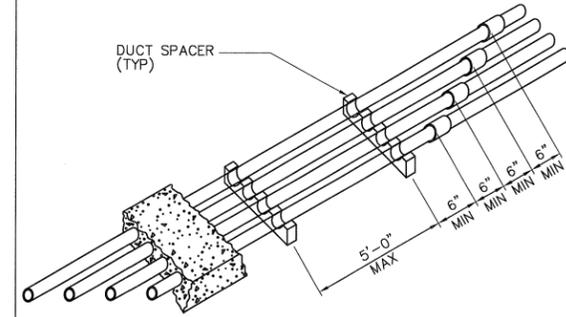


TYPICAL DUCTBANK

SELECT BACKFILL OR SAND

E-103

- NOTES:**
1. REFER TO DRAWINGS FOR ACTUAL CONDUIT SIZE AND NUMBER.



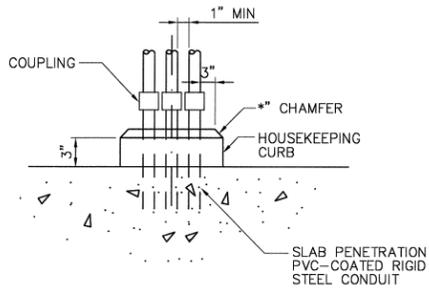
TYPICAL DUCTBANK

JOINT/SUPPORT SPACING

REV 042999 E-108

DETAIL SHEET NOTES:

1. STANDARD DETAILS SHALL BE USED IN ALL APPLICABLE LOCATIONS EVEN IF NOT SPECIFICALLY CALLED OUT ON THE DRAWINGS.

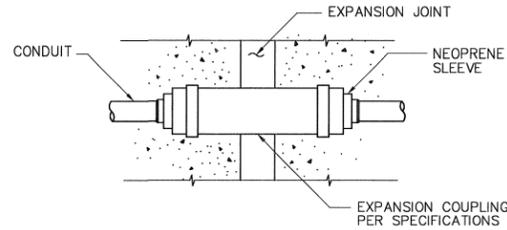


NOTE:
HOUSEKEEPING CURB REQUIRED AT ALL INTERIOR WALL LOCATIONS FOR SINGLE AND MULTIPLE RISERS.

CONCRETE HOUSEKEEPING CURB

NON-HAZARDOUS LOCATIONS REV 063099

E-203

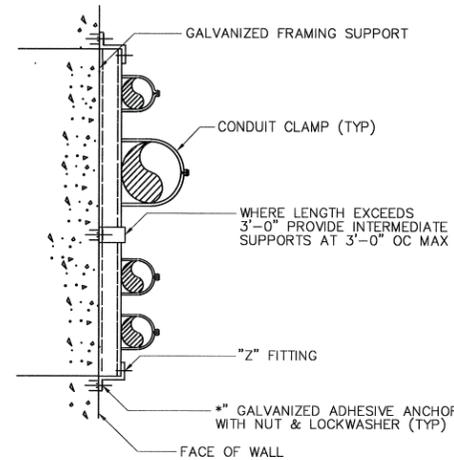


NOTE:
PROVIDE EXTERNAL BONDING JUMPER WITH METALLIC CONDUIT AND WHEN COUPLING HAS NO INTERNAL JUMPER.

EXPANSION COUPLING

REV 042999

E-204

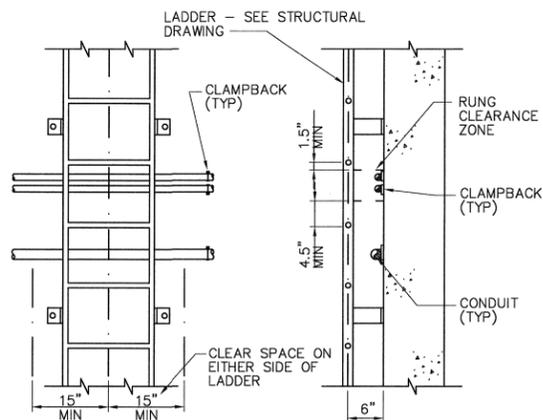


CONDUIT SUPPORT

FLUSH MOUNT

REV 042599

E-212

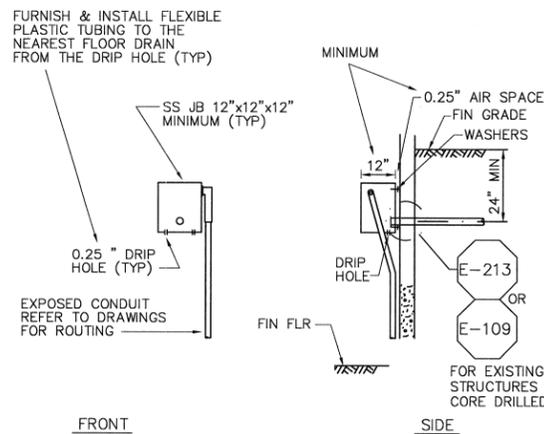


NOTE:
0.50" CLAMPBACK - DAMP OR BELOW GRADE
0.25" CLAMPBACK - DRY AND ABOVE GRADE

MINIMUM LADDER CLEARANCES

REV 072301

E-220

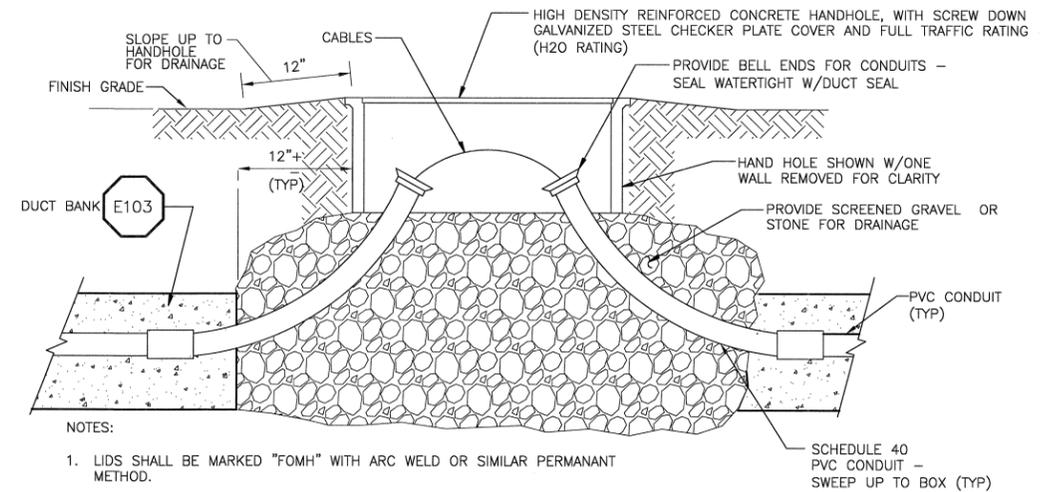


CONDUIT ENTRANCE PULLBOX

REQUIRED FOR BELOW GRADE CONDUIT WALL ENTRY

REV 030725

E-226



NOTES:

1. LIDS SHALL BE MARKED "FOMH" WITH ARC WELD OR SIMILAR PERMANENT METHOD.
2. NOMINAL MINIMUM INSIDE SIZE OF HANDHOLE 24"W X 36"L X 14"D UNLESS NOTED OTHERWISE. SEE SPECIFICATIONS FOR ADDITIONAL DETAIL.

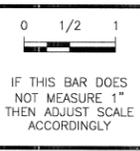
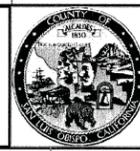
TYPICAL FOMH (FIBER OPTIC MANHOLE)

E104

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 DRAWN BY: JAW
 CHECKED BY: GNM
 DATE: APRIL 2012

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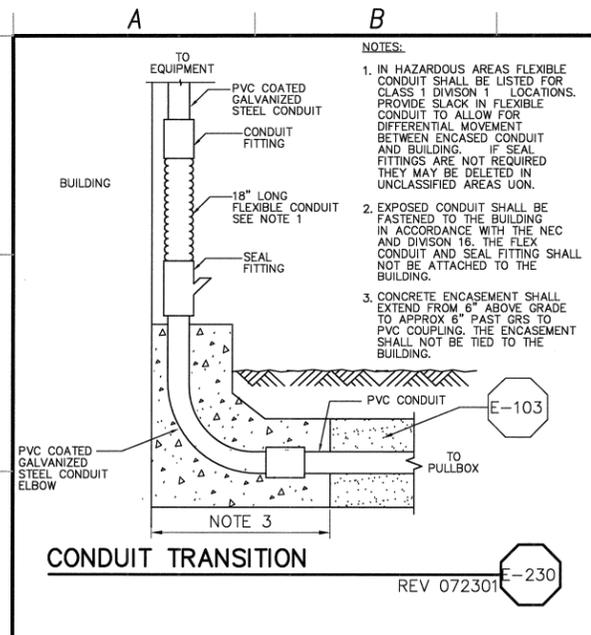


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ELECTRICAL STANDARD DETAILS - 1

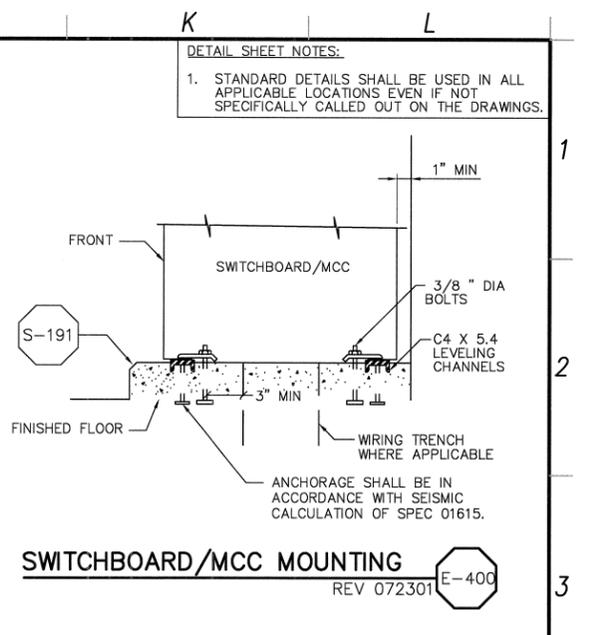
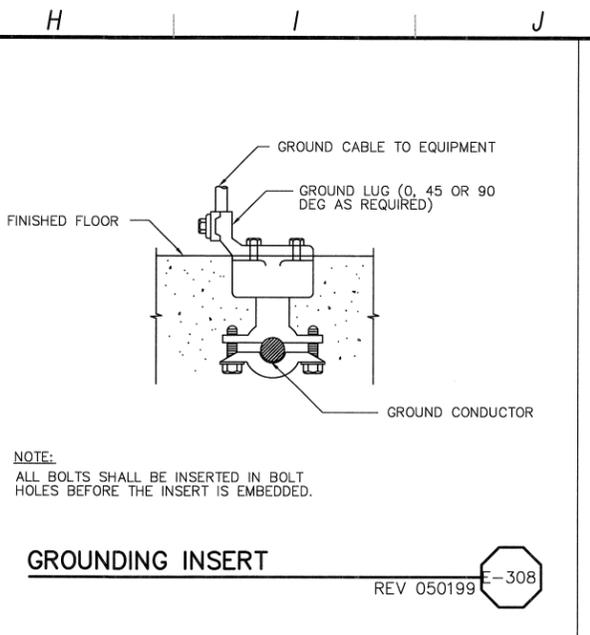
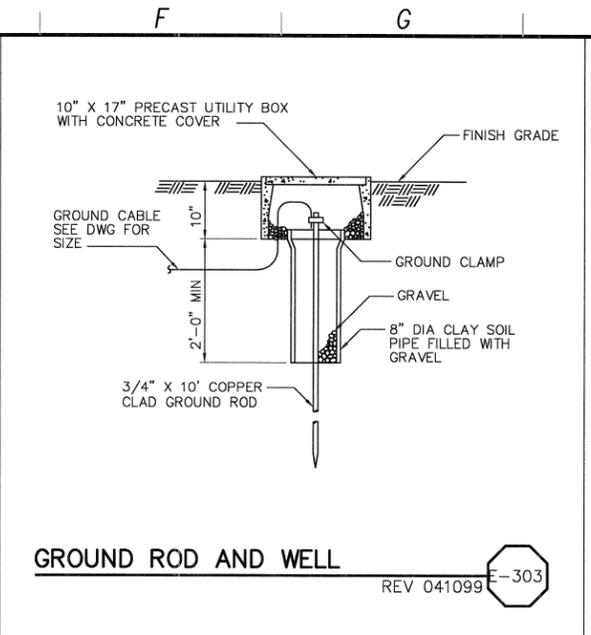
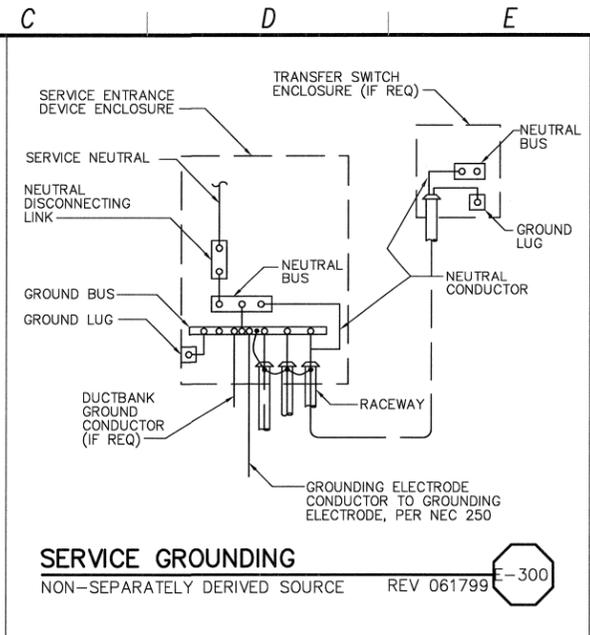
PROJECT NO. 42502-83120
 FILE NAME: PS-E-004
 SHEET NO.
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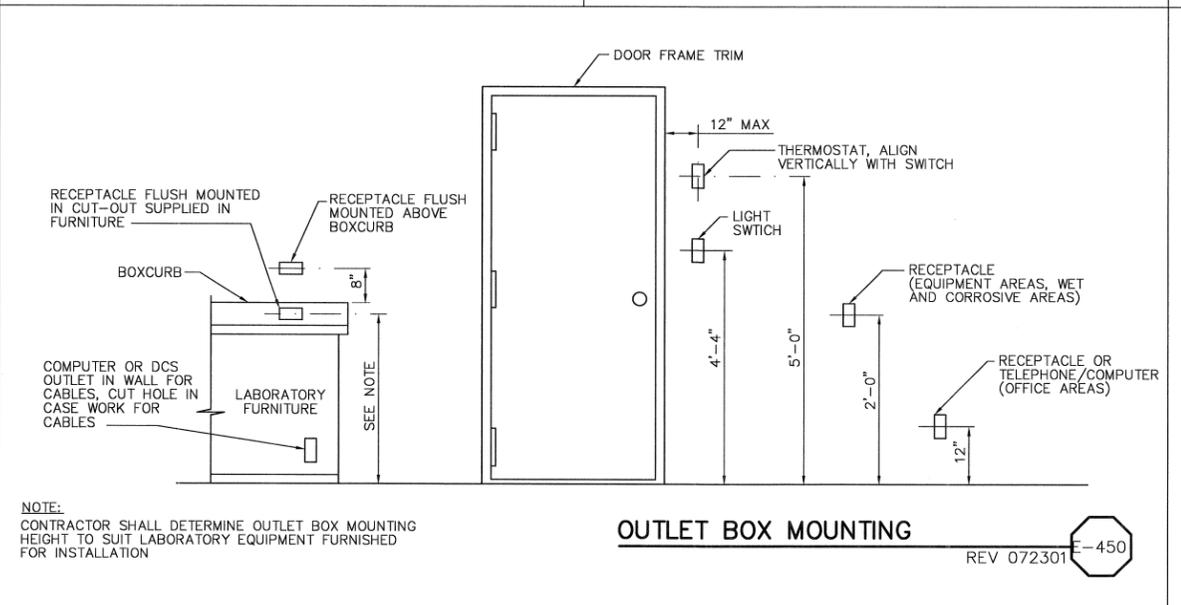
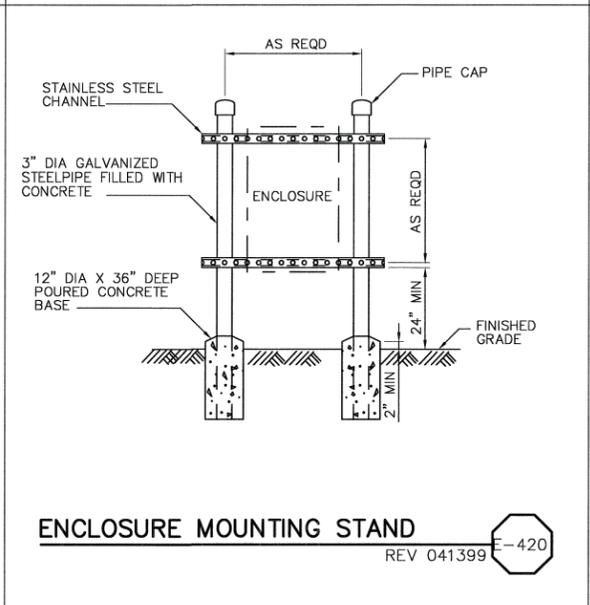
NOTES:

1. IN HAZARDOUS AREAS FLEXIBLE CONDUIT SHALL BE LISTED FOR CLASS 1 DIVISION 1 LOCATIONS. PROVIDE SLACK IN FLEXIBLE CONDUIT TO ALLOW FOR DIFFERENTIAL MOVEMENT BETWEEN ENCASED CONDUIT AND BUILDING. IF SEAL FITTINGS ARE NOT REQUIRED THEY MAY BE DELETED IN UNCLASSIFIED AREAS UON.
2. EXPOSED CONDUIT SHALL BE FASTENED TO THE BUILDING IN ACCORDANCE WITH THE NEC AND DIVISION 16. THE FLEX CONDUIT AND SEAL FITTING SHALL NOT BE ATTACHED TO THE BUILDING.
3. CONCRETE ENCASEMENT SHALL EXTEND FROM 6" ABOVE GRADE TO APPROX 6" PAST GRS TO PVC COUPLING. THE ENCASEMENT SHALL NOT BE TIED TO THE BUILDING.

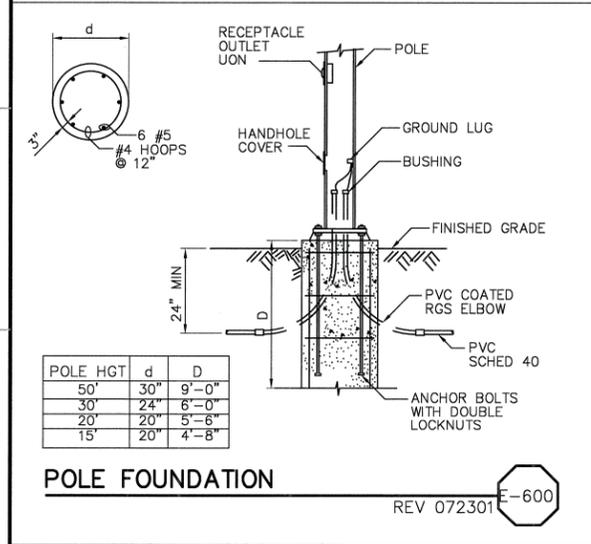


DETAIL SHEET NOTES:

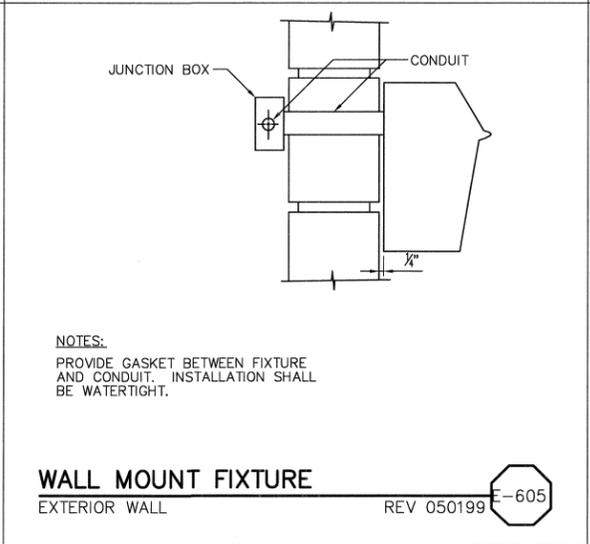
1. STANDARD DETAILS SHALL BE USED IN ALL APPLICABLE LOCATIONS EVEN IF NOT SPECIFICALLY CALLED OUT ON THE DRAWINGS.



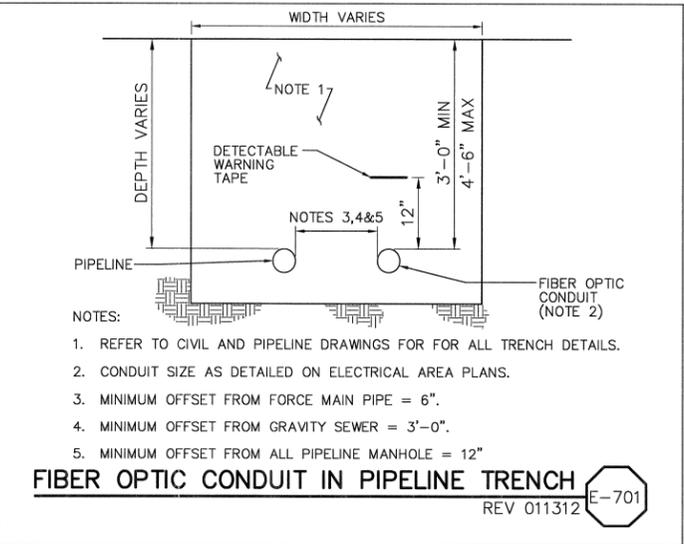
NOTE:
CONTRACTOR SHALL DETERMINE OUTLET BOX MOUNTING HEIGHT TO SUIT LABORATORY EQUIPMENT FURNISHED FOR INSTALLATION



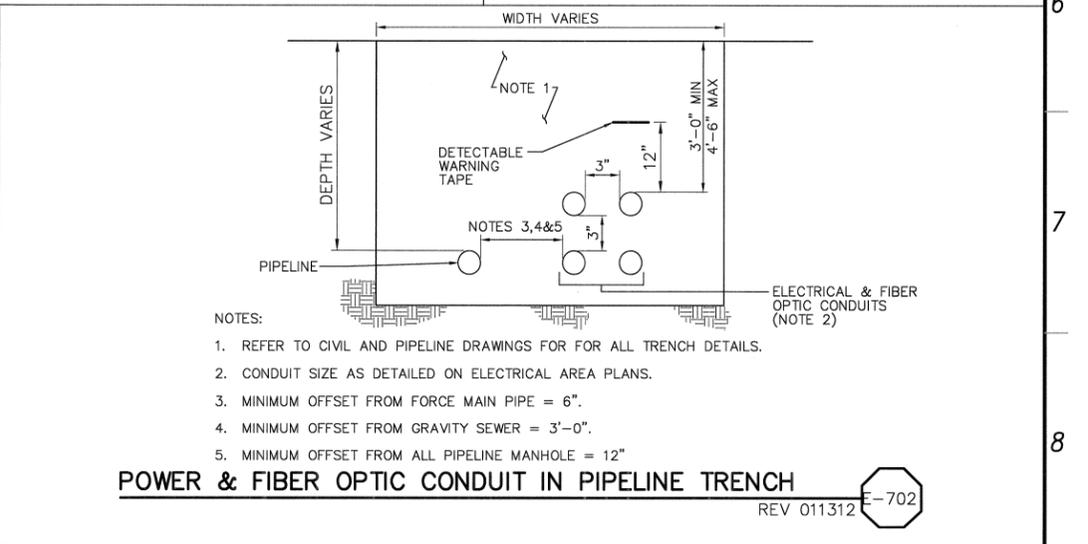
POLE HGT	d	D
50'	30"	9'-0"
30'	24"	6'-0"
20'	20"	5'-6"
15'	20"	4'-8"



NOTES:
PROVIDE GASKET BETWEEN FIXTURE AND CONDUIT. INSTALLATION SHALL BE WATERTIGHT.



- NOTES:**
1. REFER TO CIVIL AND PIPELINE DRAWINGS FOR ALL TRENCH DETAILS.
 2. CONDUIT SIZE AS DETAILED ON ELECTRICAL AREA PLANS.
 3. MINIMUM OFFSET FROM FORCE MAIN PIPE = 6".
 4. MINIMUM OFFSET FROM GRAVITY SEWER = 3'-0".
 5. MINIMUM OFFSET FROM ALL PIPELINE MANHOLE = 12"



- NOTES:**
1. REFER TO CIVIL AND PIPELINE DRAWINGS FOR ALL TRENCH DETAILS.
 2. CONDUIT SIZE AS DETAILED ON ELECTRICAL AREA PLANS.
 3. MINIMUM OFFSET FROM FORCE MAIN PIPE = 6".
 4. MINIMUM OFFSET FROM GRAVITY SEWER = 3'-0".
 5. MINIMUM OFFSET FROM ALL PIPELINE MANHOLE = 12"

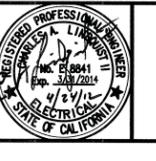
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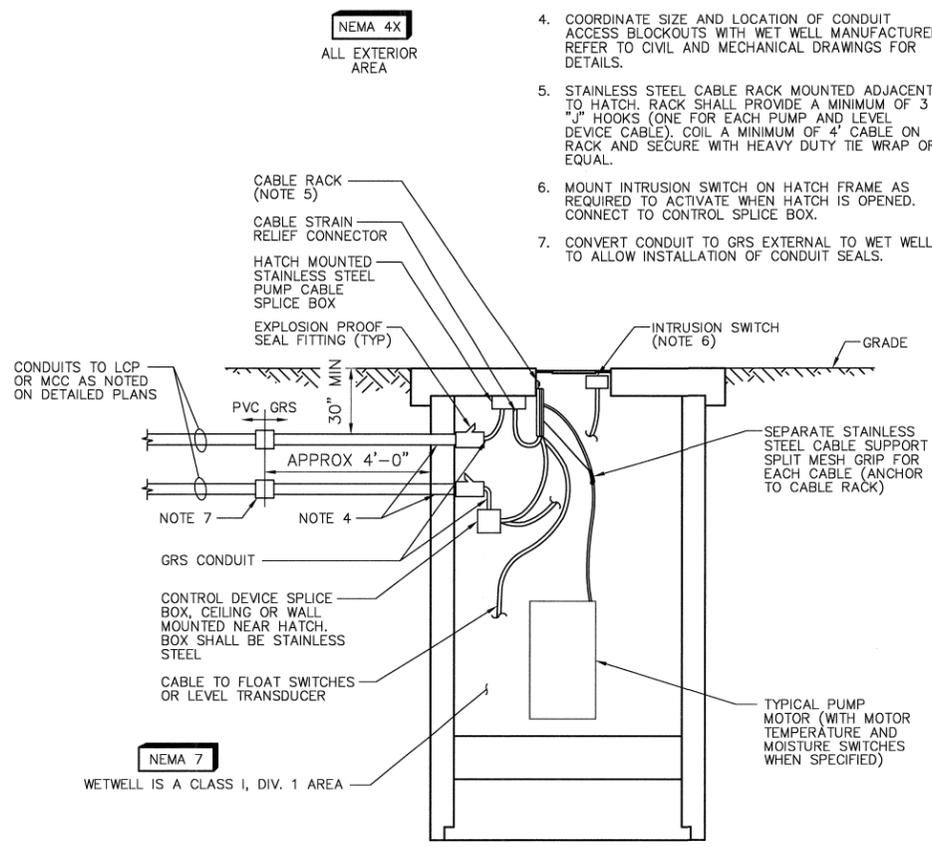
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A B C D E F G H I J K L

NOTES:

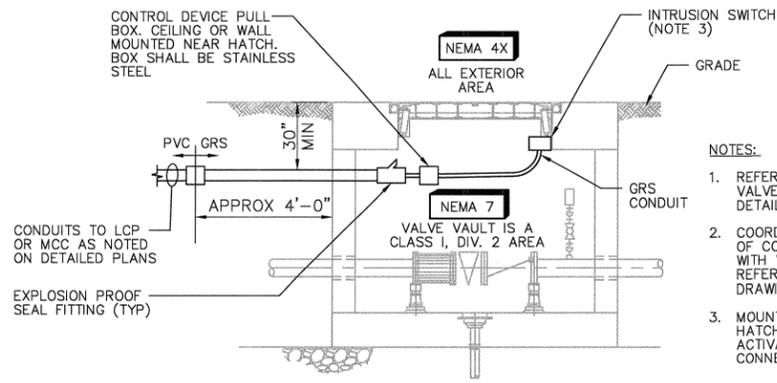
1. REFER TO CIVIL DRAWINGS FOR ALL WETWELL, PUMP, AND PIPING DETAILS.
2. DETAIL IS TYPICAL FOR SUBMERSIBLE PUMP STATIONS AND FOR POCKET PUMP STATIONS.
3. ALL CONTROL DEVICES SHALL BE PROVIDED WITH INTRINSIC SAFETY BARRIERS MOUNTED IN THE CONTROL PANEL.
4. COORDINATE SIZE AND LOCATION OF CONDUIT ACCESS BLOCKOUTS WITH WET WELL MANUFACTURER. REFER TO CIVIL AND MECHANICAL DRAWINGS FOR DETAILS.
5. STAINLESS STEEL CABLE RACK MOUNTED ADJACENT TO HATCH. RACK SHALL PROVIDE A MINIMUM OF 3 "J" HOOKS (ONE FOR EACH PUMP AND LEVEL DEVICE CABLE). COIL A MINIMUM OF 4' CABLE ON RACK AND SECURE WITH HEAVY DUTY TIE WRAP OR EQUAL.
6. MOUNT INTRUSION SWITCH ON HATCH FRAME AS REQUIRED TO ACTIVATE WHEN HATCH IS OPENED. CONNECT TO CONTROL SPLICE BOX.
7. CONVERT CONDUIT TO GRS EXTERNAL TO WET WELL TO ALLOW INSTALLATION OF CONDUIT SEALS.



PUMP STATION WET WELL DETAIL TYPICAL (NOTE 1) E-650

NOTES:

1. REFER TO CIVIL DRAWINGS FOR ALL VALVE VAULT, PUMP, AND PIPING DETAILS.
2. COORDINATE SIZE AND LOCATION OF CONDUIT ACCESS BLOCKOUTS WITH VALVE VAULT MANUFACTURER. REFER TO CIVIL AND MECHANICAL DRAWINGS FOR DETAILS.
3. MOUNT INTRUSION SWITCH ON HATCH FRAME AS REQUIRED TO ACTIVATE WHEN HATCH IS OPENED. CONNECT TO CONTROL SPLICE BOX.



VALVE VAULT - SUBMERSIBLE PUMP STATIONS TYPICAL (NOTE 1) E-651

70 AMP MAIN BREAKER		100 AMP BUS RATING		20 POLES		60 Hz.		10 KA SHORT CIRCUIT RATING		ENCLOSURE RATING:	
120/240 VOLTS		1 PHASE		3 WIRE						MOUNTING:	
CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES	CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES
		LINE 1	LINE 2					LINE 1	LINE 2		
1	MCC ENCLOSURE INTERNAL LIGHTING	0.2		20/1		2	MCC INTERNAL RECEPTACLE	0.2		20/1	
3	MCC ENCLOSURE AIR CONDITIONER		1.8	20/1		4	RTU PANEL AIR CONDITIONER		1.8	20/1	
5	MCC ENCLOSURE AIR CONDITIONER	1.8		20/1		6	RTU PANEL AIR CONDITIONER	1.8		20/1	
7	SPARE			20/1		8	SPARE			30/2	
9	RTU PANEL	1.8		20/2		10	IRRIGATION CONTROLLER	0.2		30/2	
11	SPARE			20/2		12	RTU PANEL SPACE HEATER		1	40/1	
13	MCC SPACE HEATER	1		20/1		14	SPARE			20/1	
15	SPARE			20/1		16	SPARE			20/1	
17	SPARE			20/1		18	SPARE			20/1	
19	SPARE			20/1		20	SPARE			20/1	
TOTAL LINE KVA THIS SIDE		4.8	1.8			TOTAL LINE KVA THIS SIDE		2.2	2.8		
						TOTAL KVA PER LINE		7	4.6		
						TOTAL KVA		11.6			

70 AMP MAIN BREAKER		100 AMP BUS RATING		20 POLES		60 Hz.		10 KA SHORT CIRCUIT RATING		ENCLOSURE RATING:	
120/240 VOLTS		1 PHASE		3 WIRE						MOUNTING:	
CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES	CIRCUIT NO.	DESCRIPTION	LOAD KVA		BREAKER AMPS/POLES	NOTES
		LINE 1	LINE 2					LINE 1	LINE 2		
1	INTERIOR BLDG LIGHTING	0.6		20/1		2	RECEPTACLE	0.8		20/1	
3	EXTERIOR BLDG LIGHTING		0.1	20/1		4	SPARE			20/1	
5	RTU PANEL	1.8		20/1		6	IRRIGATION CONTROLLER	0.2		20/1	
7	SPARE			20/1		8	BATTERY CHARGER		1.8	20/1	
9	STANDBY GEN JACKET HEATER	1.9		20/2		10	SPARE			20/1	
11	STANDBY GEN JACKET HEATER		1.9	20/2		12	SPARE			20/1	
13	SPARE			20/1		14	BUILDING EXHAUST FAN	0.8		20/1	
15	SPARE			20/1		16	BUILDING EXHAUST FAN	0.8		20/1	
17	SPARE			20/1		18	SPARE			20/1	
19	SPARE			20/1		20	SPARE			20/1	
TOTAL LINE KVA THIS SIDE		4.3	2			TOTAL LINE KVA THIS SIDE		1.8	2.6		
						TOTAL KVA PER LINE		6.1	4.6		
						TOTAL KVA		10.7			

LIGHTING PANEL NOTES:

1. THE PANEL SCHEDULES INDICATE TYPICAL LOADS ONLY. FOR LOCATIONS REQUIRING 120VAC CIRCUIT(S) TO DEVICE(S) NOT INDICATED ON THE TYPICAL SCHEDULE, USE A SPARE BREAKER AND 3/4" C; (2)#12 & 1#12 GND MIN CONDUIT & WIRE (OR AS REQUIRED BY NEC) TO CONNECT THE DEVICE.

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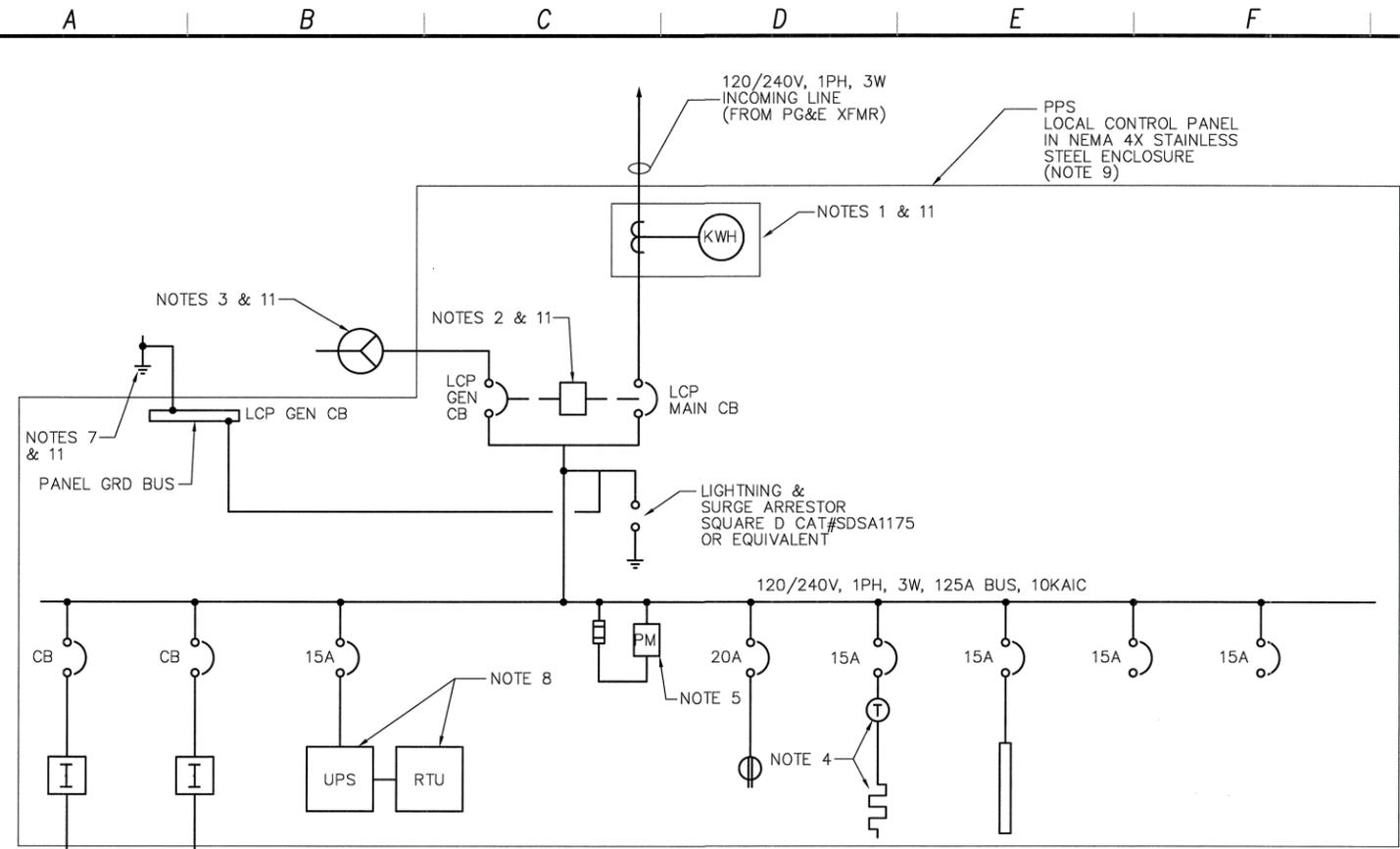


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ELECTRICAL STANDARD ELECTRICAL DETAIL AND PANEL SCHEDULES

PROJECT NO. 42502-83120
 FILE NAME: PS-E-006
 SHEET NO.
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PPS-LCP SINGLE LINE (TYPICAL)
(NOTE 9)

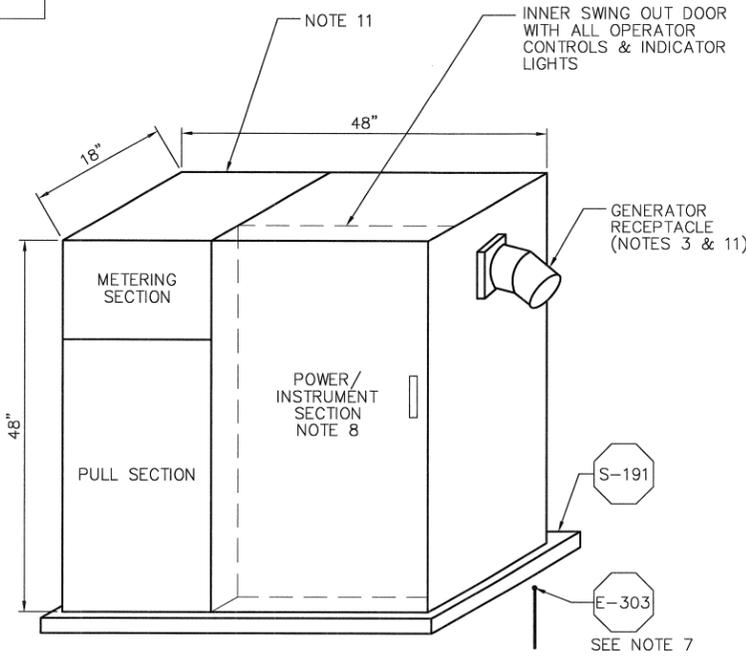
ITEM	TYPICAL - PPS LCP LOADS		AMPS @ 240V, 1P	
	KVA	HP	CONNECTED	DEMAND
P-1	--	3.0	17.0	11.9
P-2	--	3.0	17.0	11.9
PLC	1.0	--	--	--
MISC	0.5	--	--	--
TOTAL	--	--	34.0	23.8

TABLE 1
POCKET PUMP STATIONS
LOCAL CONTROL PANEL SINGLE LINE DIAGRAM

LOCAL CONTROL PANEL (ELEC)	PUMP NUMBERS	PUMP STATION IDENTIFICATION	AREA	PUMP MOTOR HP	CB	LCP MAIN CB	MOTOR FEEDER FROM LCP	RTU
LCP-4A	4A-P-1, 2, 3	04A	A	3	25A/2P	100A	1" C, 2#10 & 1#10 GND	RTU 4A
LCP-7A	7A-P-1, 2	07A	A	3	25A/2P	100A	1" C, 2#10 & 1#10 GND	RTU 7A
LCP-8A	8A-P-1, 2	08A	A	3	25A/2P	100A	1" C, 2#10 & 1#10 GND	RTU 8A
LCP-9A	9A-P-1, 2	09A	A	3	25A/2P	100A	1" C, 2#10 & 1#10 GND	RTU 9A
LCP-10A	10A-P-1, 2	10A	A	3	25A/2P	100A	1" C, 2#10 & 1#10 GND	RTU 10A
LCP-11A	11A-P-1, 2	11A	A	3	25A/2P	100A	1" C, 2#10 & 1#10 GND	RTU 11A
LCP-12A	12A-P-1, 2	12A	A	3	25A/2P	100A	1" C, 2#10 & 1#10 GND	RTU 12A
LCP-13A	13A-P-1, 2	13A	A	3	25A/2P	100A	1" C, 2#10 & 1#10 GND	RTU 13A
LCP-5A (NOTE 11)	5A-P-1,2	05A	B	3.5	30A/2P	100A	1" C, 2#10 & 1#10 GND	RTU 5A
LCP-9B	9B-P-1, 2, 3	09B	D	3	25A/2P	100A	1" C, 2#10 & 1#10 GND	RTU 9B
LCP-9C	9C-P-1, 2	09C	D	3.5	30A/2P	100A	1" C, 2#10 & 1#10 GND	RTU 9C
LCP-15B	15B-P-1, 2	15B	D	3	25A/2P	100A	1" C, 2#10 & 1#10 GND	RTU 15B

NOTES:

- METERING DEVICE MOUNTED IN ENCLOSURE, COMPLETE WITH METER SOCKET, AND TEST BY-PASS SWITCHES, WHICH SHALL BE IN COMPLIANCE WITH PG&E. METER FURNISHED BY PG&E.
- MECHANICAL OR KEY INTERLOCK TO ALLOW ONLY ONE BREAKER TO BE CLOSED AT ONCE.
- 100A, 4 POLE, 600V, HEAVY DUTY WEATHERPROOF RECEPTACLE. RECEPTACLE SHALL BE APPLETON STYLE 2 REVERSE SERVICE CAT. NO. ADJA1034-200-RS WITH BACK BOX, ANGLE ADAPTER, SPRING COVER, AND MATCHING PLUGS. MOUNT RECEPTACLE ON EXTERIOR OF ENCLOSURE.
- ANTICONDENSATION SPACE HEATER. RATED FOR 500 WATTS 240V, AND OPERATED AT 125 WATTS 120 VOLTS. THERMOSTAT SHALL BE SET TO OPEN AT 60 DEGREES FAHRENHEIT.
- PM SINGLE PHASE UNDER VOLTAGE RELAY. DIVERSIFIED ELECTRONICS CATALOG NUMBER UOA-240-ALA OR EQUAL.
- SEE SHEET PS-E-102, PS-E-103, PS-E-206, & PS-E-402 FOR DUCTBANK ROUTING.
- ACCESSIBLE GROUND ROD FOR GENERATOR. CONNECT GROUND ROD TO PANEL GROUND BUS.
- RTU AND UPS PROVIDED BY INSTRUMENTATION SYSTEM SUPPLIER. REFER TO INSTRUMENTATION SPECIFICATIONS (13421) AND DRAWINGS FOR DETAILS.
- PPS LCP FURNISHED WITH PUMPS. (REFER TO SPEC 11310)
- REFER TO CIVIL DRAWINGS FOR ADDITIONAL INSTALLATION REQUIREMENTS AND TRAFFIC BOLLARD DETAILS.
- PPS-LCP-5A DIFFERS FROM THE TYPICAL PANEL SHOWN. LCP-5A SHALL BE APPROX 36"Wx18"Dx48"H AND SUITABLE FOR WALL MOUNTING WITHIN THE MID-TOWN STANDBY POWER BUILDING. LCP-5A DOES NOT INCLUDE THE FOLLOWING EQUIPMENT AND FEATURES:
 - PG&E PULL SECTION AND METERING. (LCP-5A WILL BE POWERED BY THE STANDBY POWER BUILDING LIGHTING PANEL.)
 - GENERATOR RECEPTACLE, GENERATOR BREAKER, AND INTERLOCK WITH MAIN BREAKER.
 - ACCESSIBLE GROUND ROD.
 - NEMA 4X ENCLOSURE WITH SWINGOUT PANEL. PROVIDE NEMA 12 ENCLOSURE WITH CONTROLS AND INDICATORS ON FRONT DOOR FOR LCP-5A.

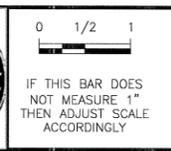
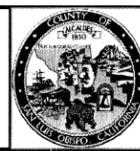


PPS-LCP (LOCAL CONTROL PANEL)
TYPICAL ELEVATION
(NOTE 9 & 10)

REV. NO.	DATE	DRWN	CHKD	REMARKS

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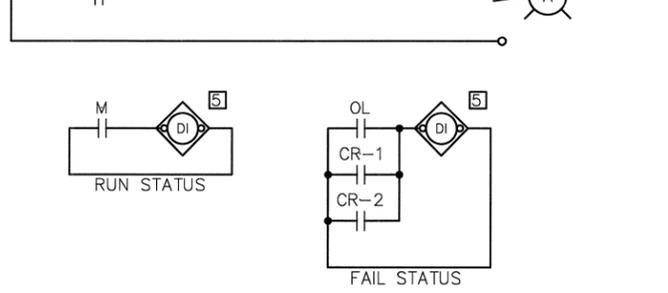
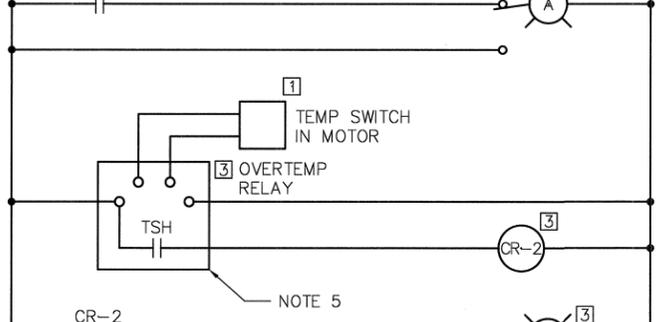
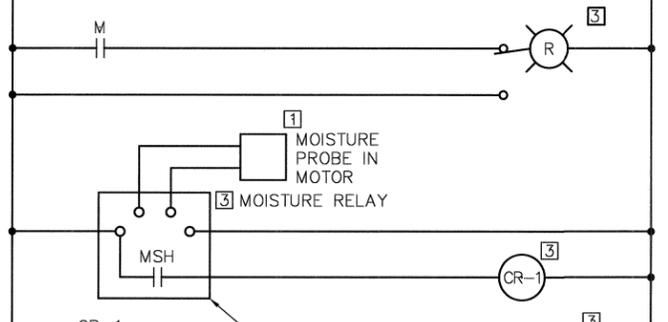
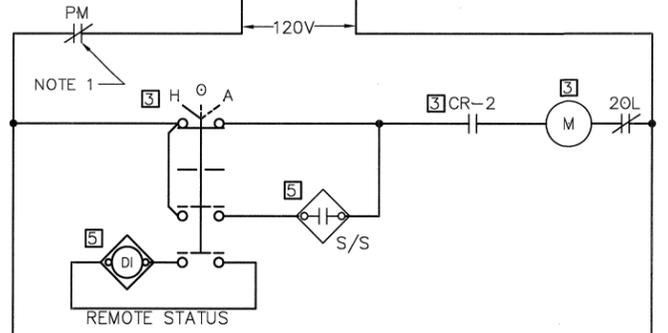
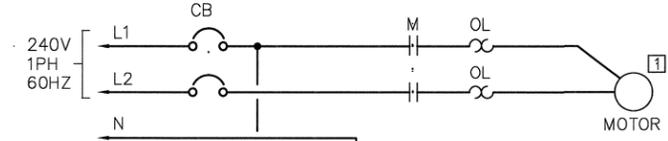
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LOS OSOS WASTEWATER COLLECTION SYSTEM
ELECTRICAL
POCKET PUMP STATIONS
TYPICAL SINGLE LINE DIAGRAM

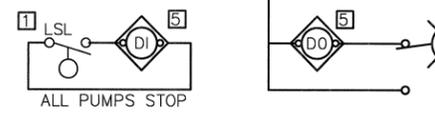
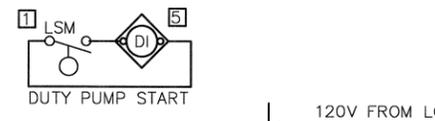
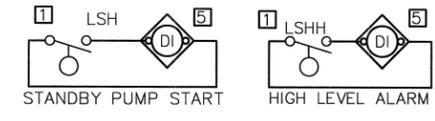
PROJECT NO. 42502-83120
 FILE NAME: PS-E-007
 SHEET NO.
PS-E-007

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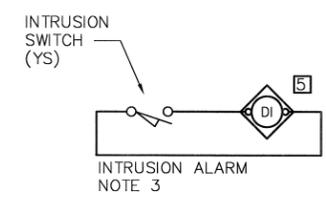
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TYPICAL POCKET STATION PUMP
(TYP FOR EACH PUMP) (NOTES 2 & 5)



**POCKET PUMP STATIONS
LEVEL CONTROL**
(TYP FOR EACH WET WELL) (NOTE 2)



**POCKET PUMP STATIONS
INTRUSION ALARM SYSTEM**
(TYP FOR EACH WET WELL) (NOTE 2)

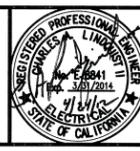
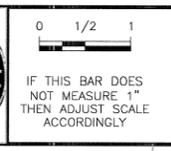
- LOCATION LEGEND:
- 1 FIELD
 - 2 LCS
 - 3 LCP
 - 4 MCC
 - 5 PLC

- NOTES:
1. EACH PUMP SHALL HAVE UNDER VOLTAGE PROTECTION FROM THE POWER MONITOR. SEE PS-E-007.
 2. INTRINSIC SAFETY BARRIER IS REQUIRED (BUT NOT SHOWN) FOR ALL CONTROL DEVICES IN WETWELL.
 3. INTRUSION ALARM SWITCH SHALL BE INSTALLED AT POCKET PUMP STATION. FOR PANELS WITH MULTIPLE INTRUSION SWITCHES, CONNECT ALL IN PARALLEL FOR ONE PLC INPUT.
 4. REFER TO SPEC 11305 (GRINDER PUMPS) FOR ADDITIONAL MOISTURE (MSH) RELAY DETAILS.
 5. PUMP CONTROL SCHEMATIC IS TYPICAL ONLY. PANEL MANUFACTURER SHALL COORDINATE WITH PUMP MANUFACTURER AND PROVIDE MOISTURE CIRCUIT AND TEMPERATURE RELAY AS REQUIRED. OVERTEMP RELAY SHALL BE ATC/DIVERSIFIED ELECTRICAL MODEL SPM-120-ADA OR EQUAL.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: _____ CAL
 DRAWN BY: _____ WKT
 CHECKED BY: _____ GNM
 DATE: _____ APRIL 2012

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LOS OSOS WASTEWATER COLLECTION SYSTEM
ELECTRICAL
POCKET PUMP STATIONS
TYPICAL CONTROL DIAGRAM

PROJECT NO. 42502-83120
 FILE NAME: PS-E-008
 SHEET NO.
PS-E-008

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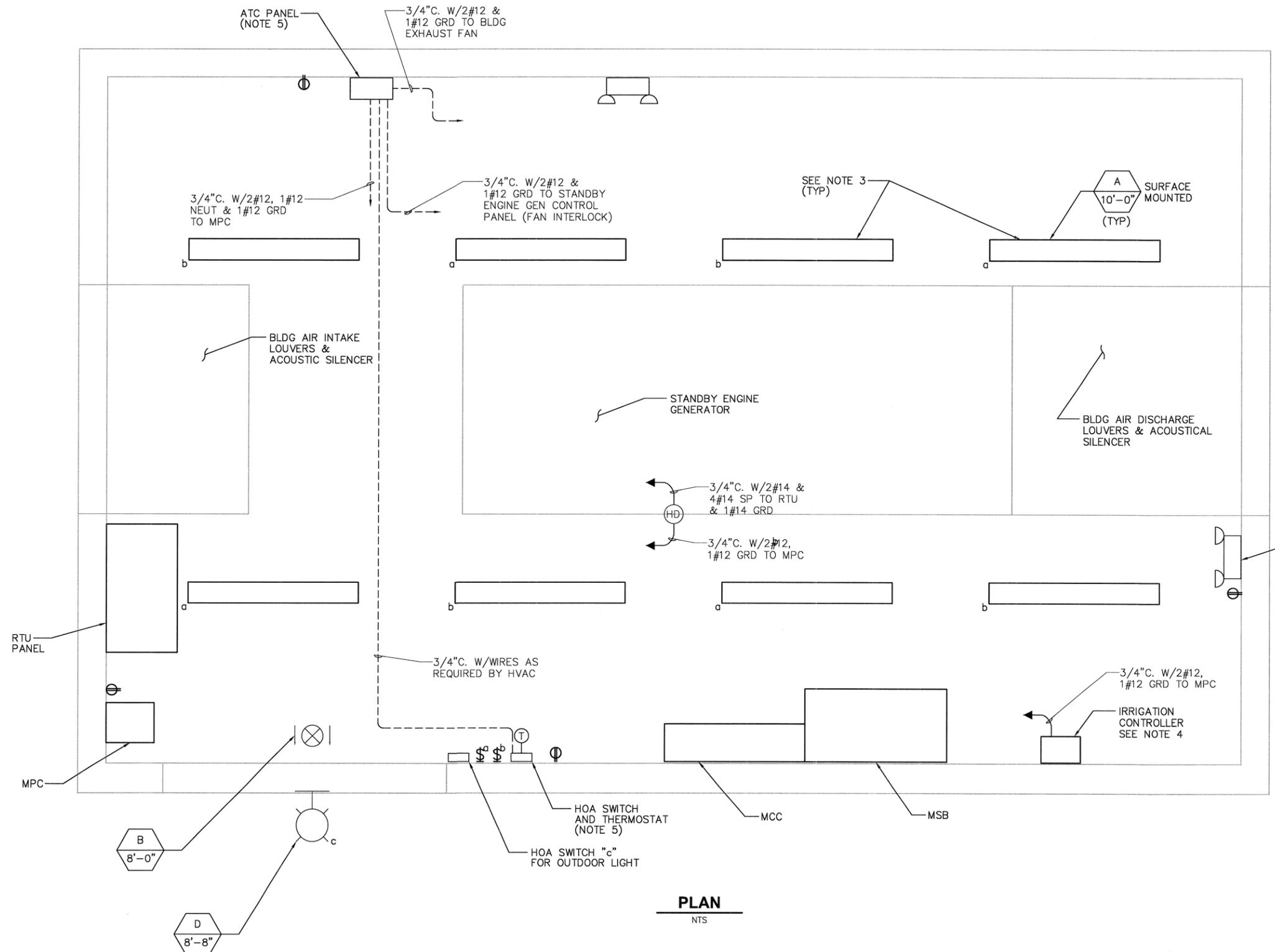
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TABLE 2
STANDBY POWER FACILITIES

STANDBY POWER BUILDING LOCATION	AREA	MCC AND ATS DIMENSIONS (REFER TO SHEET NOTED)	NUMBER OF LIGHT FIXTURES (NOTE 3)
BAYWOOD & WEST PASO	A	PS-E-107	8
EAST PASO	A	PS-E-109	6
EAST YSABEL	A	PS-E-111	6
LUPINE	B	PS-E-203	8
SOLANO	B	PS-E-205	6
MID-TOWN	B	PS-E-207	8
SUNNY OAKS	C	PS-E-303	6
MOUNTAIN VIEW	D	PS-E-404	8

NOTES:

- THIS DRAWING INDICATES ONLY THE LIGHTING, FIRE ALARM DEVICES, AND MISCELLANEOUS EQUIPMENT THAT IS REQUIRED AT EACH OF THE STANDBY POWER BUILDINGS. THE EXACT EQUIPMENT LOCATION SHALL BE INDIVIDUALLY DETERMINED BY THE LAYOUT OF EACH BUILDING.
- REFER TO THE STRUCTURAL, MECHANICAL, AND INDIVIDUAL ELECTRICAL DRAWINGS FOR ADDITIONAL DETAILS.
- FURNISH AND INSTALL THE NUMBER LIGHT FIXTURES AT LOCATIONS NOTED. ADJUST FIXTURE SPACING TO PROVIDE UNIFORM ILLUMINATION AND AVOID EQUIPMENT INTERFERENCE.
- VERIFY LOCATION OF CONTROLLER WITH IRRIGATION DWGS.
- REFER TO DWG PS-E-011 FOR ADDITIONAL ATC & HVAC REQUIREMENTS.



PLAN
NTS

REV. NO.	DATE	DRWN	CHKD	REMARKS

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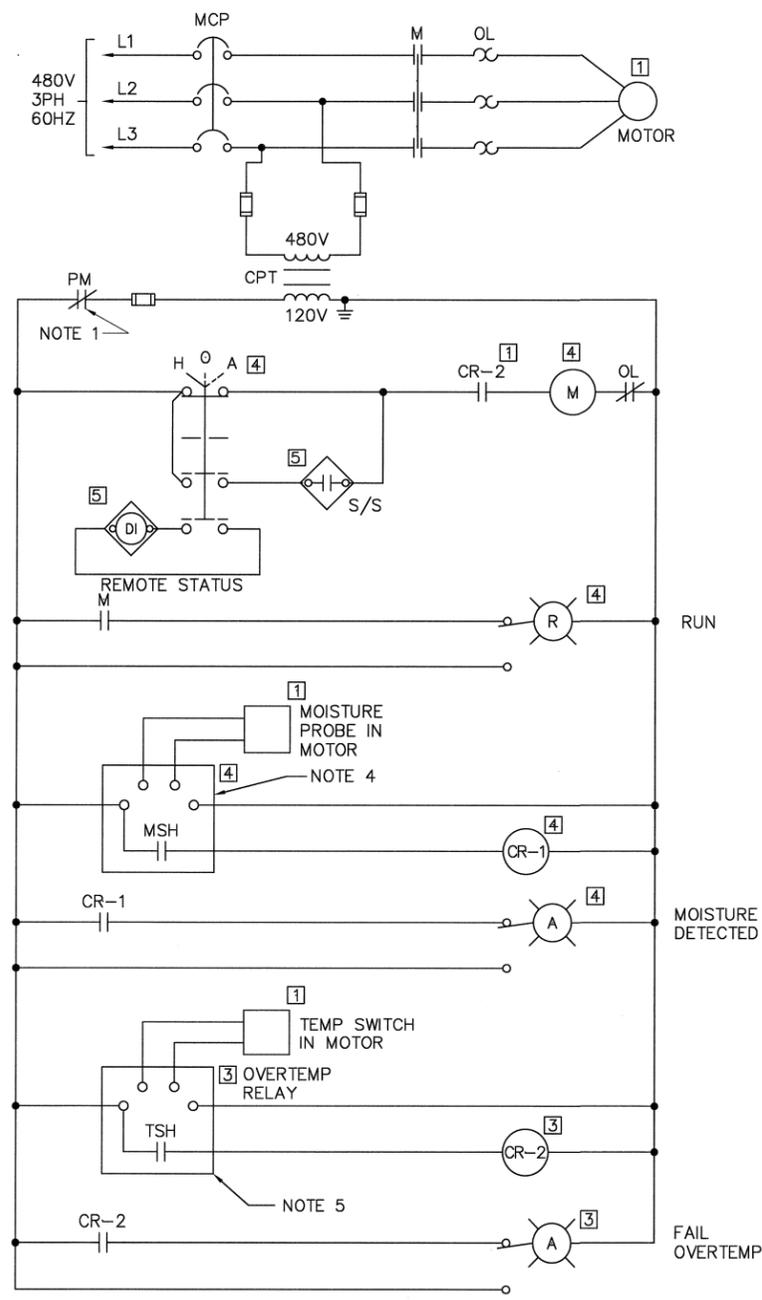
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LOS OSOS WASTEWATER COLLECTION SYSTEM
 ELECTRICAL
 STANDBY POWER BUILDING - TYPICAL
 120VAC POWER, LIGHTING
 AND FIRE DETECTION PLAN

PROJECT NO. 42502-83120
 FILE NAME: PS-E-009
 SHEET NO.
PS-E-009

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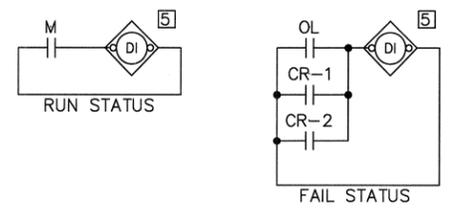


LOCATION LEGEND

- 1 FIELD
- 2 LCS
- 3 LCP
- 4 MCC
- 5 PLC

NOTES:

1. EACH PUMP SHALL HAVE UNDER VOLTAGE/PHASE REVERSE PROTECTION FROM THE POWER MONITOR. SEE SINGLE LINES FOR DETAILS.
2. INTRINSIC SAFETY BARRIER IS REQUIRED (BUT NOT SHOWN) FOR ALL CONTROL DEVICES IN WETWELL AND VALVE VAULTS.
3. PUMP MOTOR STARTERS FOR THE NOTED STATIONS ARE RVSS TYPE. ALL FUNCTIONALITY OF THE TYPICAL CONTROL SCHEMATIC SHALL BE IMPLEMENTED IN THE RVSS PROVIDED.
4. REFER TO SPEC 11306 (SUBMERSIBLE PUMPS) FOR ADDITIONAL MOISTURE (MSH) RELAY DETAILS.
5. PUMP CONTROL SCHEMATIC IS TYPICAL ONLY. PANEL MANUFACTURER SHALL COORDINATE WITH PUMP MANUFACTURER AND PROVIDE MOISTURE CIRCUIT AND TEMPERATURE RELAY AS REQUIRED. OVERTEMP RELAY SHALL BE ATC/DIVERSIFIED ELECTRIC MODEL SPM-120-ADA OR EQUAL.



TYPICAL FOR THE FOLLOWING PUMP STATIONS:

- BAYWOOD P.S.
- WEST PASO P.S. (NOTE 3)
- EAST PASO P.S.
- EAST YSABEL P.S.
- LUPINE P.S. (NOTE 3)
- SOLANO P.S.
- MID-TOWN P.S. (NOTE 3)
- SUNNY OAKS P.S.
- MOUNTAIN VIEW P.S.

TYPICAL SUBMERSIBLE STATION PUMP:
(NOTES 2 & 5)

REV. NO.	DATE	DRWN	CHKD	REMARKS

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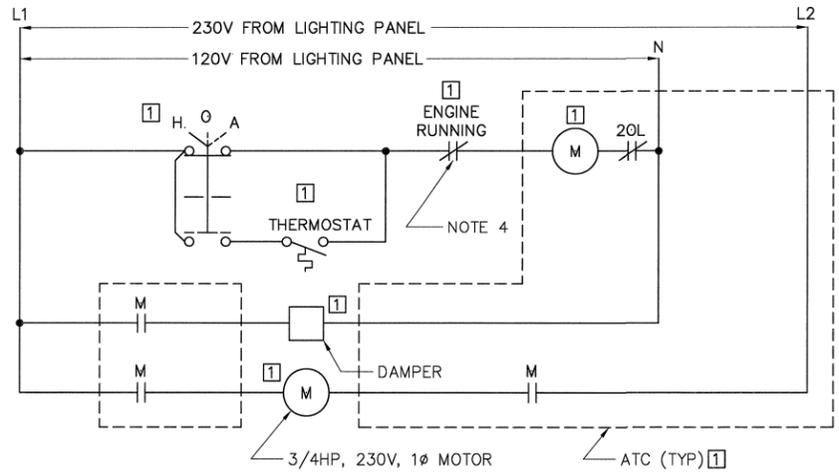


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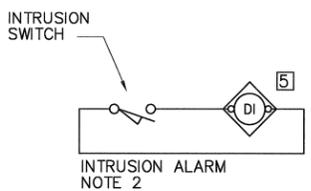
LOS OSOS WASTEWATER COLLECTION SYSTEM
ELECTRICAL
 SUBMERSIBLE PS & STANDBY POWER
 TYPICAL CONTROL DIAGRAM - 1

PROJECT NO. 42502-83120
 FILE NAME: PS-E-010
 SHEET NO.
PS-E-010

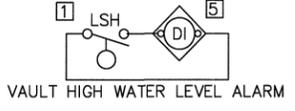
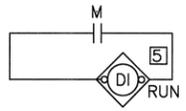
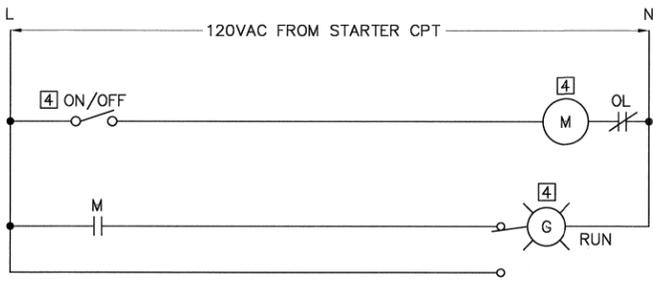
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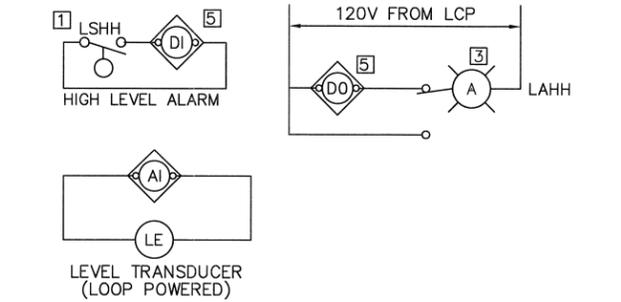
**STANDBY POWER BLDG
EXHAUST FAN (NOTE 3)**



**INTRUSION ALARM SYSTEM
(NOTE 1)**



MIDTOWN PS ODOR CONTROL FAN SYSTEM



**LEVEL CONTROL -
SUBMERSIBLE PUMP STATIONS
(TYP FOR EACH WET WELL) (NOTE 1)**

- LOCATION LEGEND**
- 1 FIELD
 - 2 LCS
 - 3 LCP
 - 4 MCC
 - 5 PLC

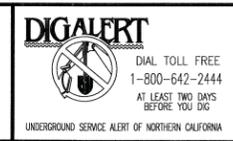
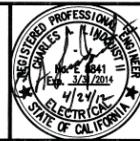
- NOTES:**
- INTRINSIC SAFETY BARRIER IS REQUIRED (BUT NOT SHOWN) FOR ALL CONTROL DEVICES IN WETWELL AND VALVE VAULTS.
 - INTRUSION ALARM SHALL BE INSTALLED AT THE WET WELL, VALVE VAULT, LCP DOOR AND STANDBY POWER FACILITY DOOR FOR EACH SUBMERSIBLE PUMP STATION. FOR PANELS WITH MULTIPLE SWITCHES CONNECT ALL IN PARALLEL FOR ONE PLC INPUT.
 - EXHAUST FAN MOTOR STARTER & CONTROLS ARE LOCATED IN THE ATC PANEL. COORDINATE WITH AND PROVIDE WIRE & CONDUIT AS REQUIRED BY MECHANICAL HVAC EQUIPMENT PROVIDED. REFER TO MECHANICAL DRAWINGS FOR ADDITIONAL DETAILS.
 - INTERLOCK WITH STANDBY ENGINE GENERATOR TO PREVENT BLDG EXHAUST FAN FROM OPERATING DURING ENGINE GENERATOR OPERATION.

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 CHECKED BY: GNM
 DATE: APRIL 2012



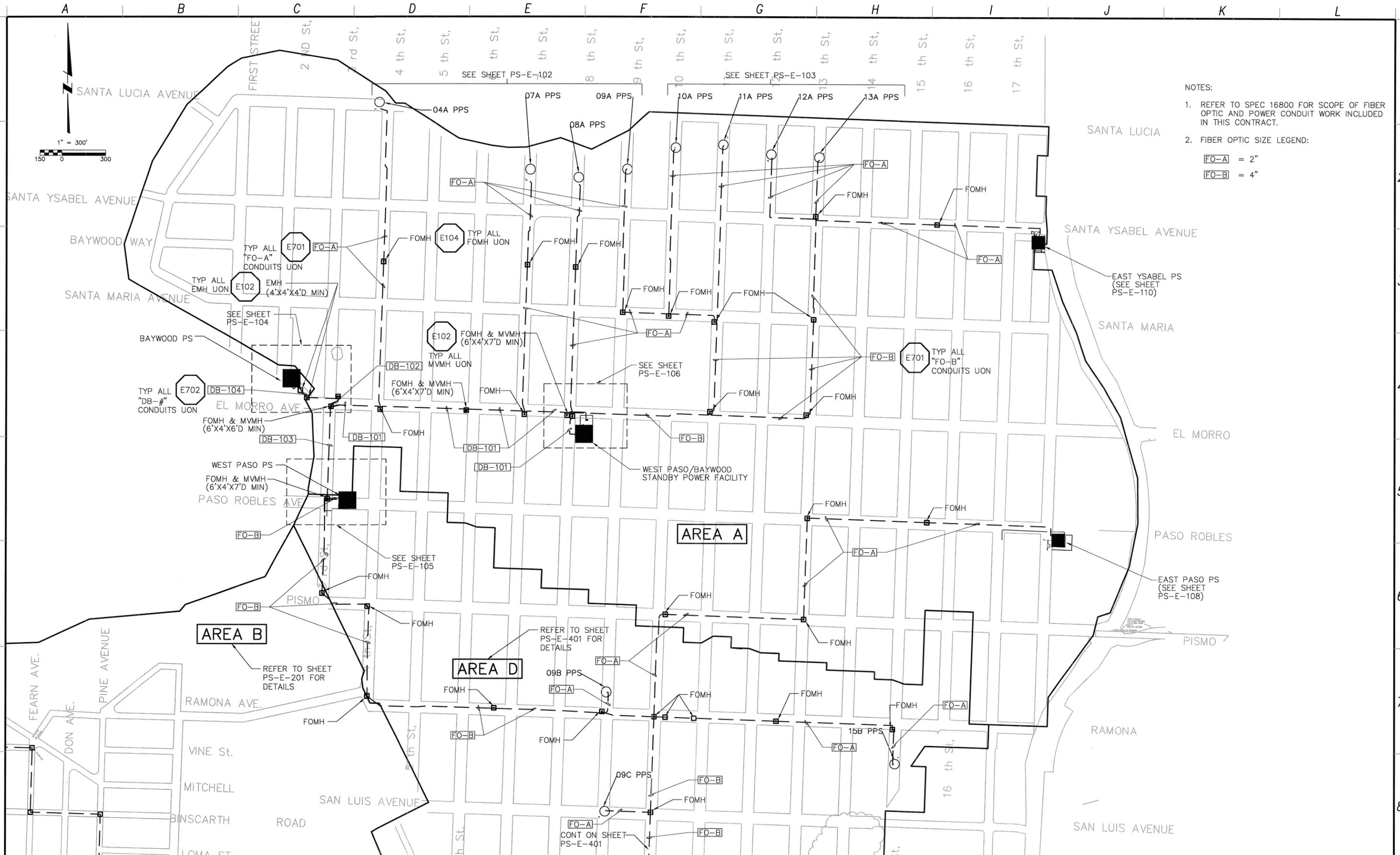
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LOS OSOS WASTEWATER COLLECTION SYSTEM
ELECTRICAL
 SUBMERSIBLE PS & STANDBY POWER
 TYPICAL CONTROL DIAGRAM - 2

PROJECT NO. 42502-83120
 FILE NAME: PS-E-011
 SHEET NO.
PS-E-011

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- NOTES:
- REFER TO SPEC 16800 FOR SCOPE OF FIBER OPTIC AND POWER CONDUIT WORK INCLUDED IN THIS CONTRACT.
 - FIBER OPTIC SIZE LEGEND:
 - FO-A = 2"
 - FO-B = 4"

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: CAL
 DRAWN BY: WKT
 CHECKED BY: GNM
 DATE: APRIL 2012

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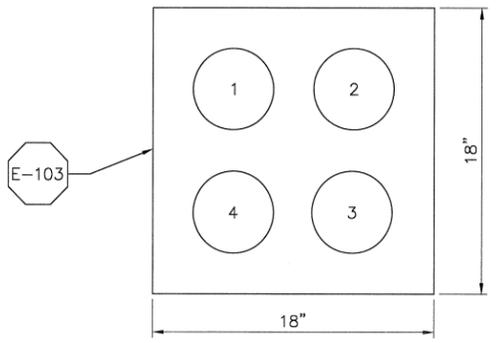
LOS OSOS WASTEWATER COLLECTION SYSTEM
ELECTRICAL GENERAL AREA PLAN AREA A
 PROJECT NO. 42502-83120
 FILE NAME: PS-E-101
 SHEET NO. PS-E-101

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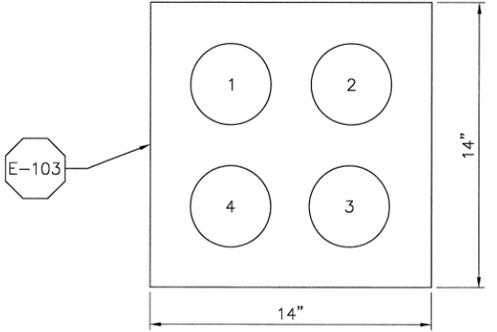


DB-102 DUCTBANK SCHEDULE

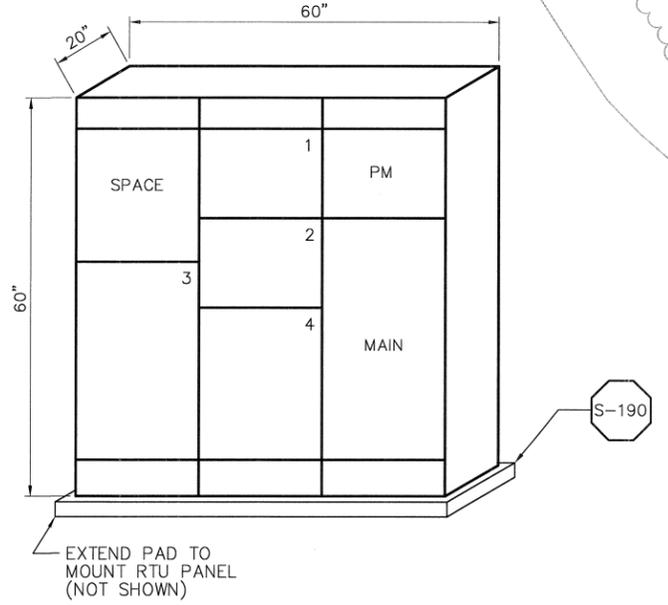


DUCT	CONDUIT	REMARKS
1	4" C; (REFER TO SPEC 16800)	FIBER OPTICS
2	4" C; CONDUIT ONLY (WITH PULL ROPE)	F.O. SPARE
3	4" C; CONDUIT ONLY (WITH PULL ROPE)	MV SPARE
4	4" C; (3) #2 15KV 133% INSUL 105°C & (1) #2-600V INSUL GND	BW MV POWER

DB-104 DUCTBANK SCHEDULE

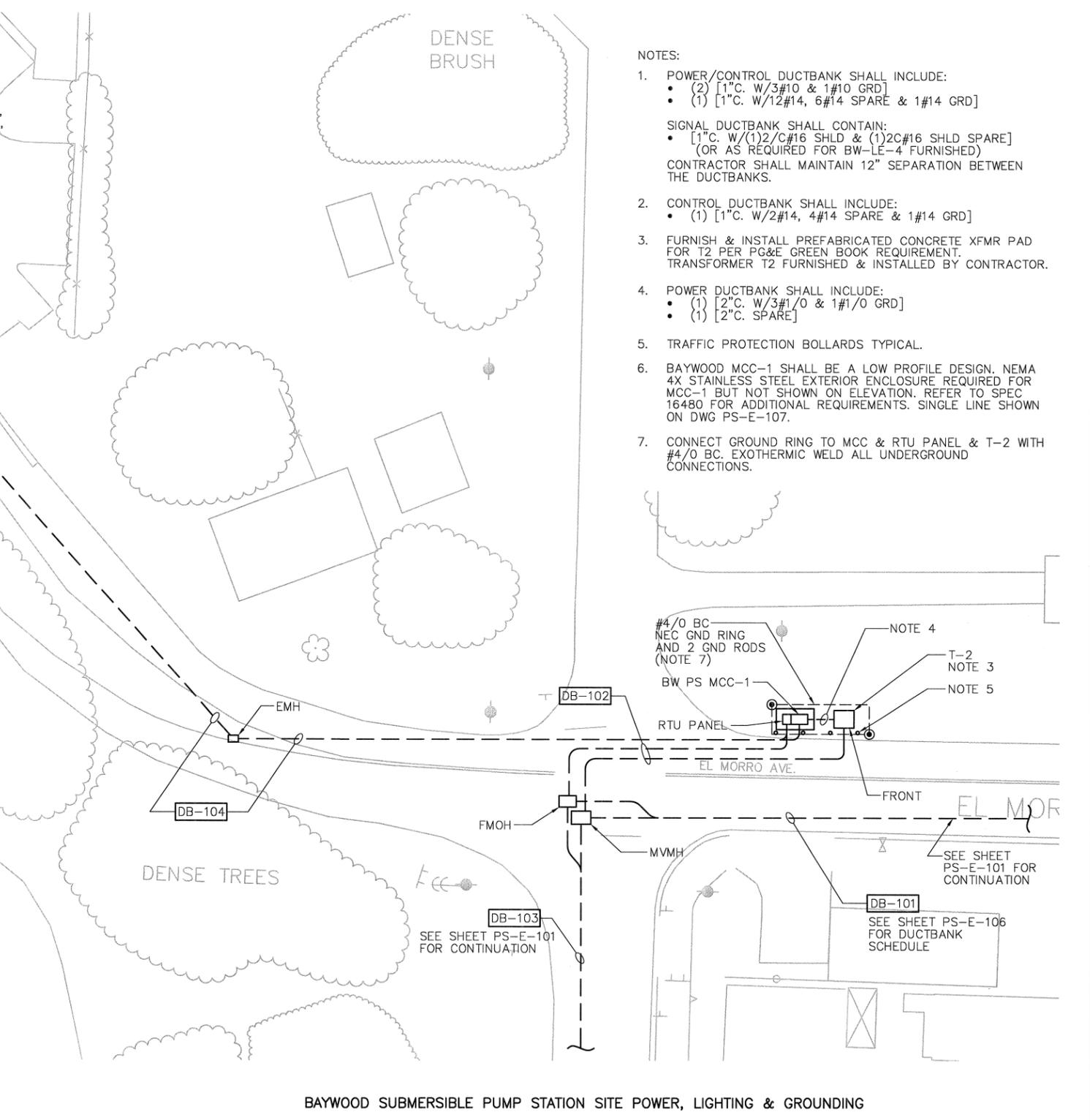


DUCT	CONDUIT	REMARKS
1	2" C; (WITH WIRES PER NOTES 1 & 2)	BW CONTROL
2	2" C; (WITH WIRE PER NOTE 1)	BW SIGNAL
3	2" C; (WITH WIRE PER NOTE 1)	BW-P-1A POWER
4	2" C; (WITH WIRE PER NOTE 1)	BW-P-2A POWER



BAYWOOD MCC-1 ELEVATION
NTS - NOTE 6

- NOTES:
- POWER/CONTROL DUCTBANK SHALL INCLUDE:
 - (2) [1" C. W/3#10 & 1#10 GRD]
 - (1) [1" C. W/12#14, 6#14 SPARE & 1#14 GRD]
 SIGNAL DUCTBANK SHALL CONTAIN:
 - [1" C. W/(1)2/C#16 SHLD & (1)2C#16 SHLD SPARE] (OR AS REQUIRED FOR BW-LE-4 FURNISHED)
 CONTRACTOR SHALL MAINTAIN 12" SEPARATION BETWEEN THE DUCTBANKS.
 - CONTROL DUCTBANK SHALL INCLUDE:
 - (1) [1" C. W/2#14, 4#14 SPARE & 1#14 GRD]
 - FURNISH & INSTALL PREFABRICATED CONCRETE XFMR PAD FOR T2 PER PG&E GREEN BOOK REQUIREMENT. TRANSFORMER T2 FURNISHED & INSTALLED BY CONTRACTOR.
 - POWER DUCTBANK SHALL INCLUDE:
 - (1) [2" C. W/3#1/0 & 1#1/0 GRD]
 - (1) [2" C. SPARE]
 - TRAFFIC PROTECTION BOLLARDS TYPICAL.
 - BAYWOOD MCC-1 SHALL BE A LOW PROFILE DESIGN. NEMA 4X STAINLESS STEEL EXTERIOR ENCLOSURE REQUIRED FOR MCC-1 BUT NOT SHOWN ON ELEVATION. REFER TO SPEC 16480 FOR ADDITIONAL REQUIREMENTS. SINGLE LINE SHOWN ON DWG PS-E-107.
 - CONNECT GROUND RING TO MCC & RTU PANEL & T-2 WITH #4/0 BC. EXOTHERMIC WELD ALL UNDERGROUND CONNECTIONS.

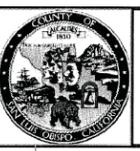


BAYWOOD SUBMERSIBLE PUMP STATION SITE POWER, LIGHTING & GROUNDING
PLAN
1" = 20'
10 0 20

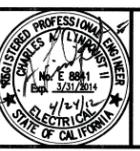
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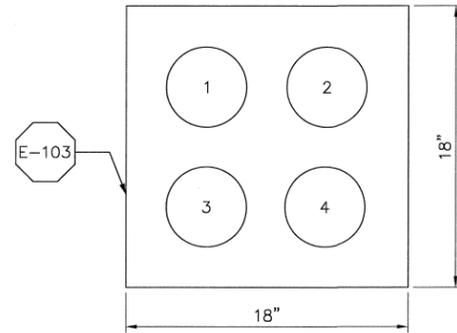


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LOS OSOS WASTEWATER COLLECTION SYSTEM
ELECTRICAL
BAYWOOD SUBMERSIBLE PUMP STATION SITE
POWER, LIGHTING & GROUNDING PLAN

PROJECT NO. 42502-83120
FILE NAME: PS-E-104
SHEET NO.
PS-E-104

DB-103
DUCTBANK SCHEDULE



DUCT	CONDUIT	REMARKS
1	4"C;(3) #2-15KV 133% INSUL 105°C & (1) #2-600V INSUL GND	WP PS POWER
2	4"C; CONDUIT ONLY (WITH PULL ROPE)	SPARE MV
3	4"C; (REFER TO SPEC 16800)	FIBER OPTICS
4	4"C; CONDUIT ONLY (WITH PULL ROPE)	F.O. SPARE

NOTES:

1. POWER/CONTROL DUCTBANK SHALL INCLUDE:

- (3) [2"C, W/ 3#10 & 1#4 GND]
- (1) [2"C, W/ 16#14 & 8#14 SPARE & 1#14 GRD]

SIGNAL DUCTBANK SHALL INCLUDE:

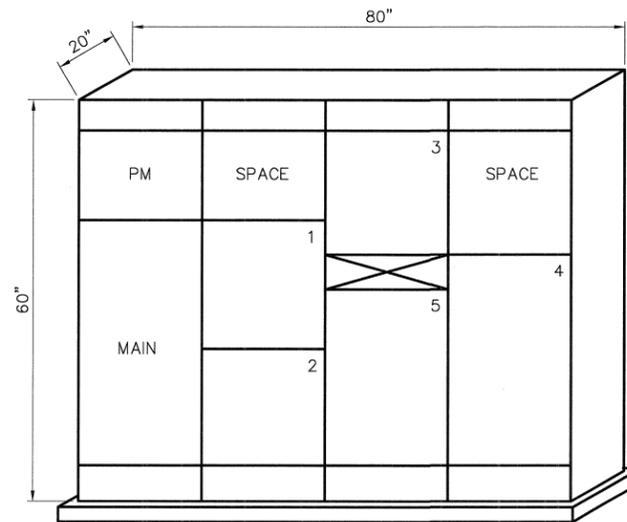
- [1"C, W/(2) 2/C #16 SHLD & (2) 2/C #16 SHLD SPARE] (OR AS REQUIRED FOR WP-LE-4 FURNISHED)

CONTRACTOR SHALL MAINTAIN 12" SEPARATION BETWEEN DUCTBANKS.

2. WEST PASO MCC-1 SHALL BE A LOW PROFILE DESIGN. NEMA 4X STAINLESS STEEL EXTERIOR ENCLOSURE REQUIRED FOR MCC-1 BUT NOT SHOWN ON ELEVATION. REFER TO SPEC 16480 FOR ADDITIONAL REQUIREMENTS. SINGLE LINE SHOWN ON DWG PS-E-107.

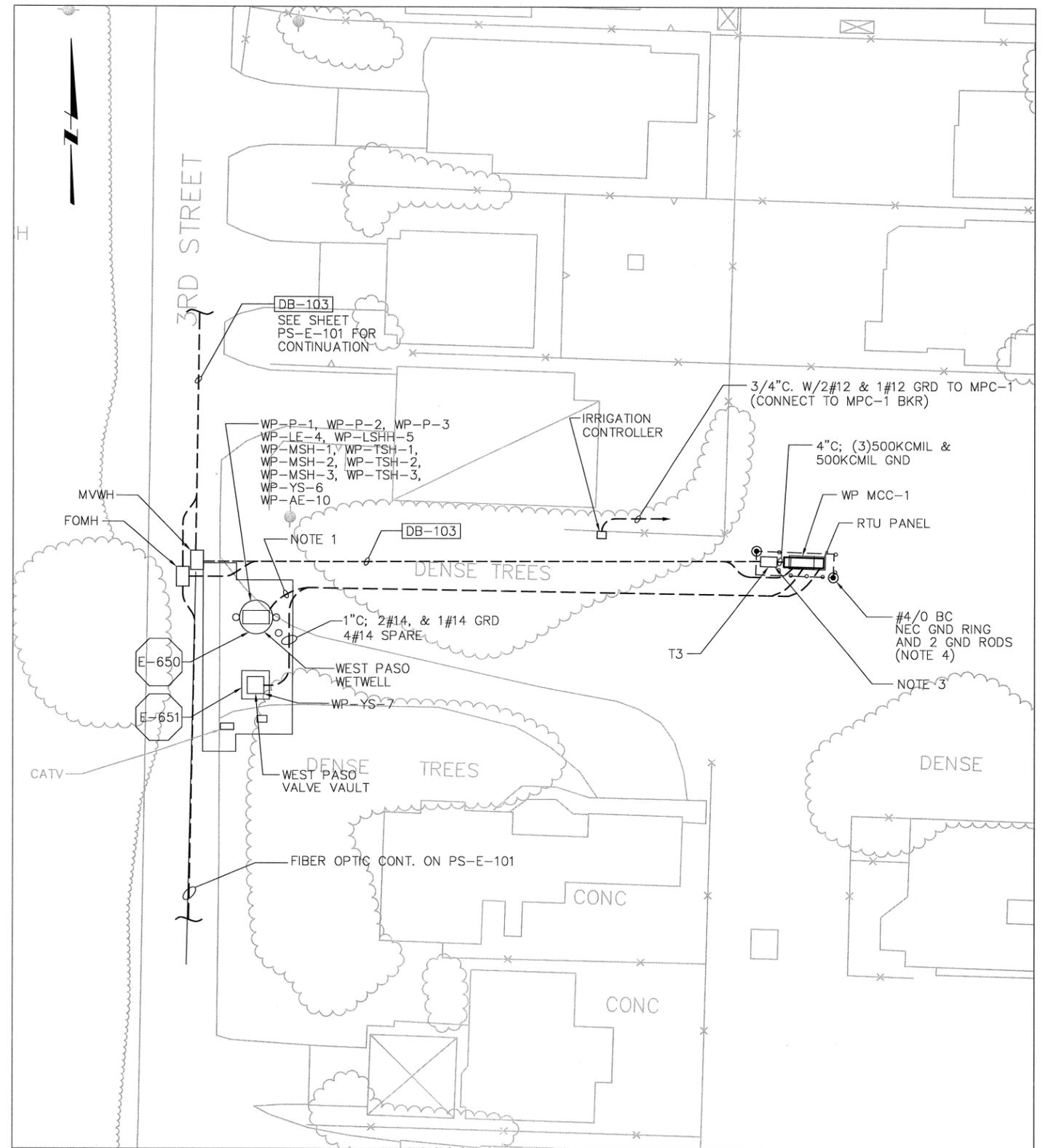
3. FURNISH & INSTALL PREFABRICATED CONCRETE XFMR PAD FOR T3 PER PG&E GREENBOOK REQUIREMENTS. TRANSFORMER T3 FURNISHED AND INSTALLED BY CONTRACTOR.

4. CONNECT GROUND RING TO MCC & RTU & T3 WITH #4/0 BC. EXOTHERMIC WELD ALL UNDERGROUND CONNECTIONS.



WEST PASO MCC-1 ELEVATION

NTS - NOTE 2



WEST PASO SUBMERSIBLE PUMP STATION SITE POWER, LIGHTING & GROUNDING

PLAN



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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: _____ CAL
 DRAWN BY: _____ WKT
 CHECKED BY: _____ GNM
 DATE: _____ APRIL 2012

CDM Smith
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 Sacramento, CA 95833
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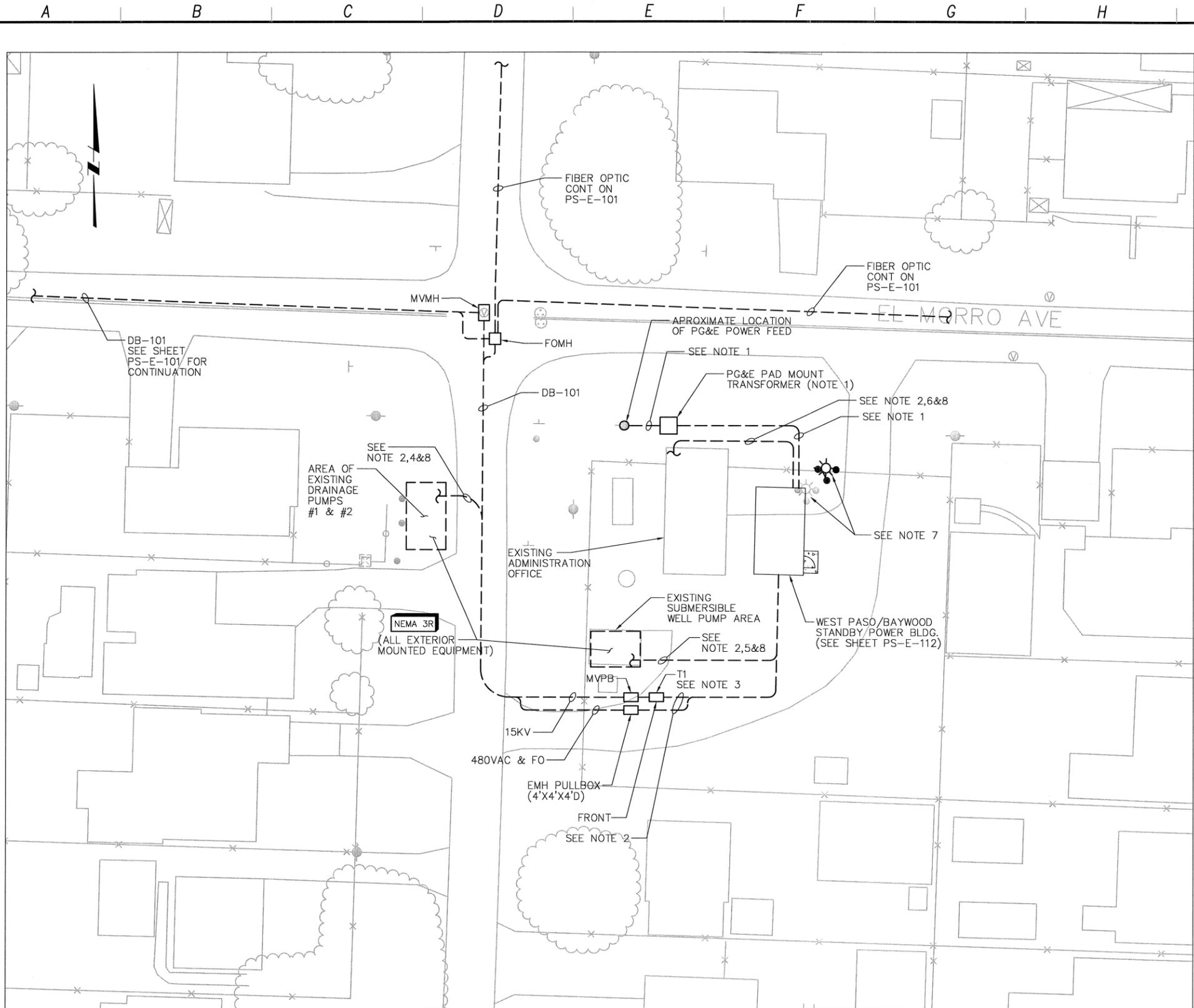


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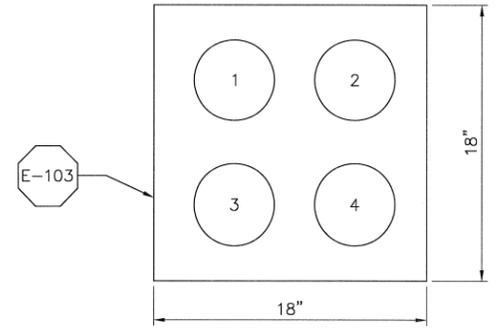
LOS OSOS WASTEWATER COLLECTION SYSTEM
ELECTRICAL
 WEST PASO SUBMERSIBLE PUMP STATION SITE
 POWER, LIGHTING & GROUNDING PLAN

PROJECT NO. 42502-83120
 FILE NAME: PS-E-105
 SHEET NO.
PS-E-105

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DB-101 DUCTBANK SCHEDULE

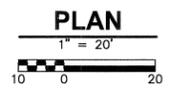


DUCT	CONDUIT	REMARKS
1	4" C; (3) #2-15KV 133% INSUL 105°C & (1) #2-600V INSUL GND	BW & WP POWER
2	4" C; (REFER TO SPEC 16800)	FIBER OPTIC
3	4" C; CONDUIT ONLY (WITH PULL ROPE)	MV SPARE
4	4" C; CONDUIT ONLY (WITH PULL ROPE)	F. O. SPARE

NOTES:

- PG&E SERVICE: CONTRACTOR SHALL FURNISH, INSTALL AND COORDINATE ALL WORK INCLUDING AS A MINIMUM THE FOLLOWING:
 - SERVICE POLE RISER CONDUIT
 - PRIMARY CONDUIT: 1 - 4" C WITH PULL ROPE
 - SECONDARY CONDUIT: 2 - 5" C WITH PULL ROPE
 - TRANSFORMER PAD
 - OBTAIN PG&E APPROVAL PRIOR TO CONSTRUCTION
 - ALL WORK AND MATERIAL SHALL BE PER PG&E REQUIREMENTS
- SEE SHEET PS-E-107 FOR CONDUIT AND CABLE SIZE.
- FURNISH, INSTALL & CONNECT PREFABRICATED CONCRETE XFMR PAD FOR T1 PER PG&E GREENBOOK REQUIREMENTS. TRANSFORMER T1 FURNISHED AND INSTALLED BY CONTRACTOR.
- DRAINAGE PUMPS: DEMO OLD PG&E SERVICE AND INSTALL NEW ELECTRICAL EQUIPMENT AND FEEDER AS REQUIRED. REFER TO PS-E-107 FOR ADDITIONAL DETAILS.
- WELL PUMP: DEMO OLD PG&E SERVICE AND INSTALL NEW ELECTRICAL EQUIPMENT AND FEEDER AS REQUIRED. REFER TO PS-E-107 FOR ADDITIONAL DETAILS.
- ADMIN OFFICE: DEMO OLD PG&E SERVICE AND INSTALL NEW ELECTRICAL EQUIPMENT AND FEEDER AS REQUIRED. REFER TO PS-E-107 FOR ADDITIONAL DETAILS.
- RELOCATE EXISTING LIGHTING FIXTURE AND CONDUIT/WIRE AS REQUIRED.
- FIELD DETERMINE THE EXACT LOCATION OF THE NEW EQUIPMENT. FURNISH ALL LABOR AND MATERIAL REQUIRED TO INSTALL NEW EQUIPMENT.

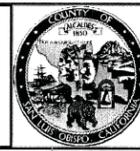
MID-TOWN PS AREA PLAN



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: CAL
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 DATE: APRIL 2012

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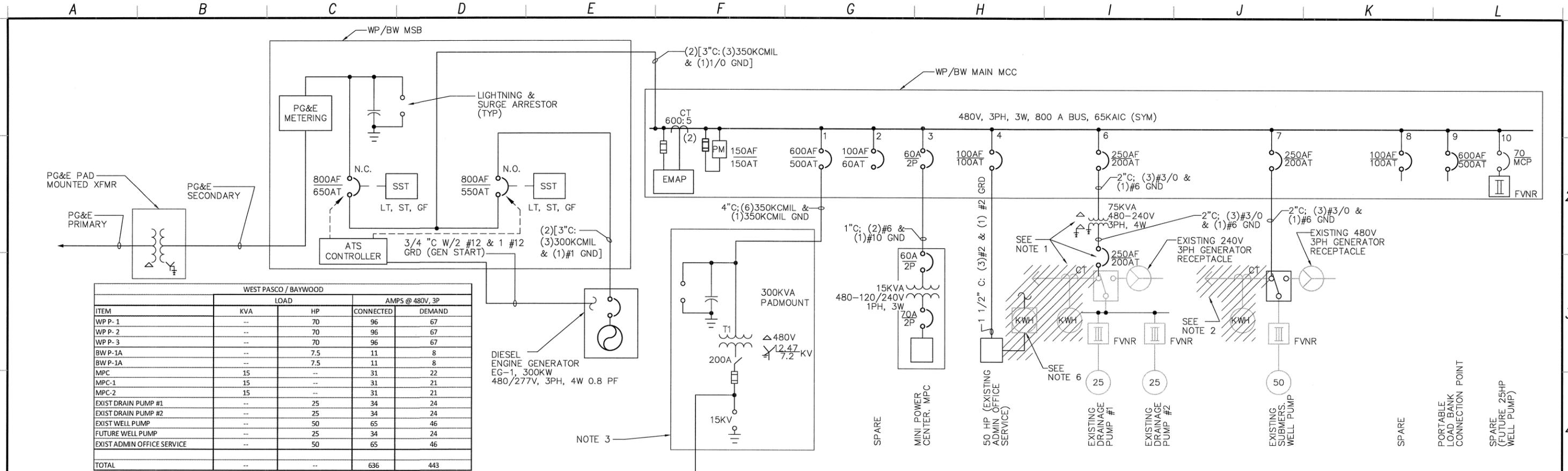


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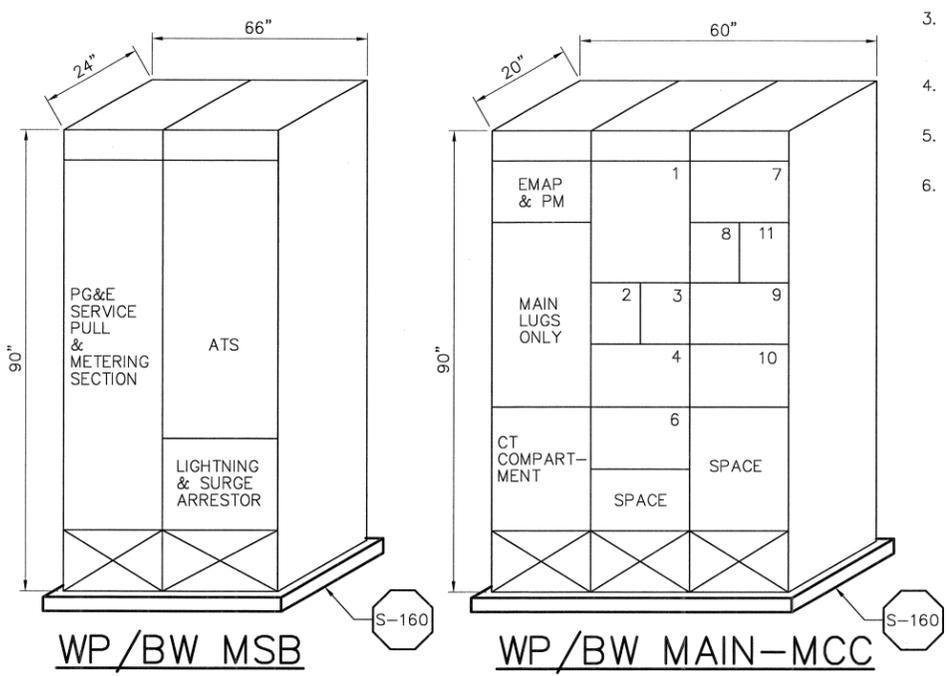
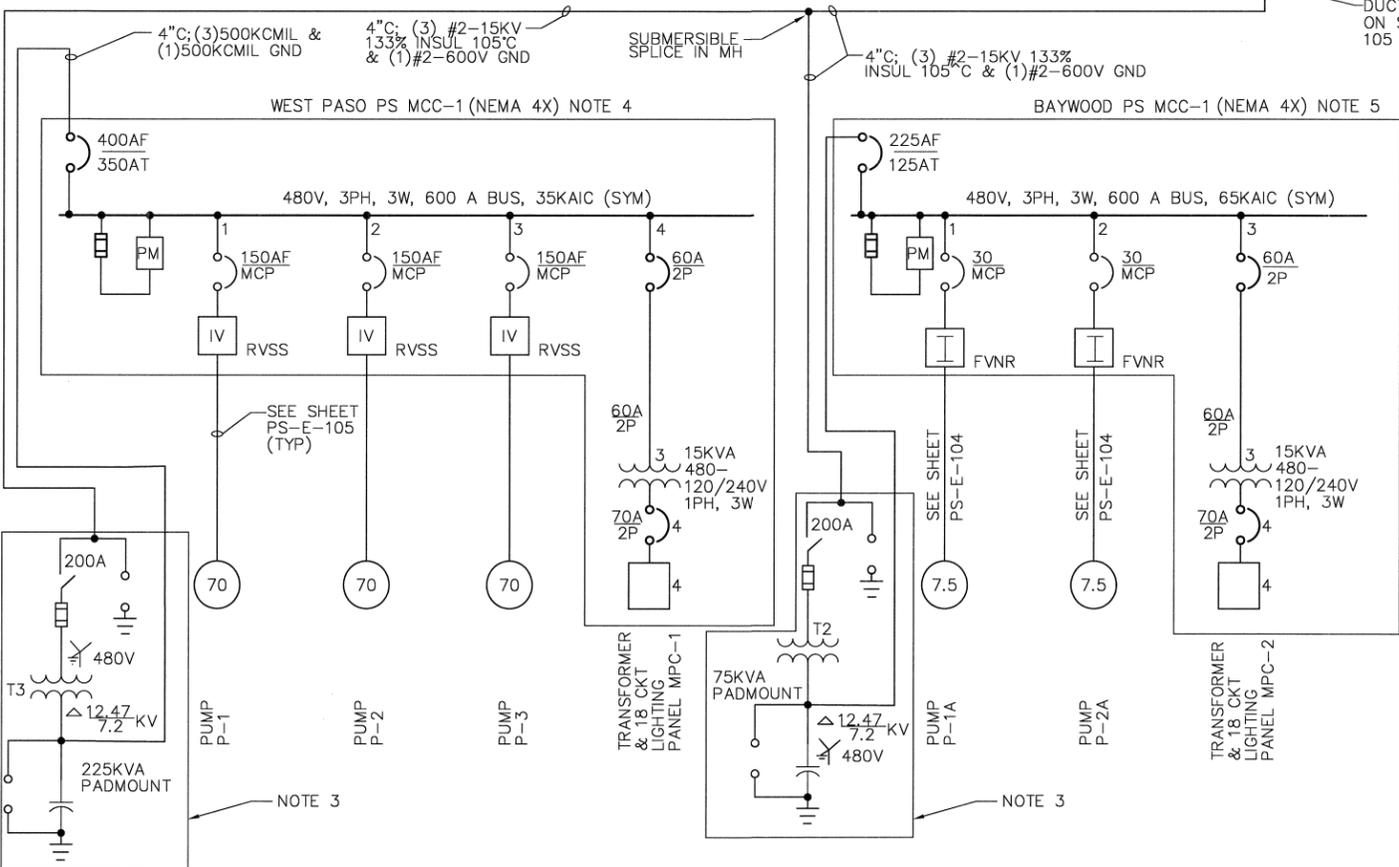
LOS OSOS WASTEWATER COLLECTION SYSTEM
ELECTRICAL
POWER, LIGHTING & GROUNDING PLAN
WEST PASO/BAYWOOD STANDBY POWER FACILITY

PROJECT NO. 42502-83120
 FILE NAME: PS-E-106
 SHEET NO.
PS-E-106

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WEST PASCO / BAYWOOD				
ITEM	LOAD		AMPS @ 480V, 3P	
	KVA	HP	CONNECTED	DEMAND
WP P-1	-	70	96	67
WP P-2	-	70	96	67
WP P-3	-	70	96	67
BWP-1A	-	7.5	11	8
BWP-1A	-	7.5	11	8
MPC	15	-	31	22
MPC-1	15	-	31	21
MPC-2	15	-	31	21
EXIST DRAIN PUMP #1	-	25	34	24
EXIST DRAIN PUMP #2	-	25	34	24
EXIST WELL PUMP	-	50	65	46
FUTURE WELL PUMP	-	25	34	24
EXIST ADMIN OFFICE SERVICE	-	50	65	46
TOTAL	-	-	636	443

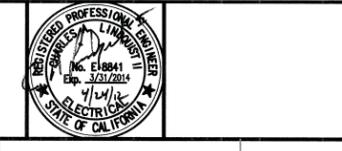
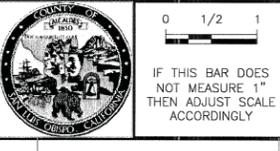


- NOTES:
- DRAINAGE PUMPS: EXISTING PG&E SERVICE AND METER SHALL BE REMOVED BY PG&E, CONTRACTOR SHALL FURNISH AND INSTALL A NEW 75KVA XFMR AND BREAKER FOR DRAINAGE PUMPS.
 - WELL PUMP: EXISTING PG&E SERVICE AND METER SHALL BE REMOVED BY PG&E.
 - XFMR T1,T2,T3: SHALL BE FURNISHED & INSTALLED BY CONTRACTOR. REFER TO SPEC 16431 FOR ADDITIONAL DETAILS.
 - REFER TO DWG PS-E-105 FOR WEST PASO PS MCC-1 ELEVATIONS.
 - REFER TO DWG PS-E-104 FOR BAYWOOD PS MCC-1 ELEVATIONS.
 - ADMIN BUILDING: EXISTING PG&E SERVICE AND METER SHALL BE REMOVED BY PG&E.

REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: CAL
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 DATE: APRIL 2012

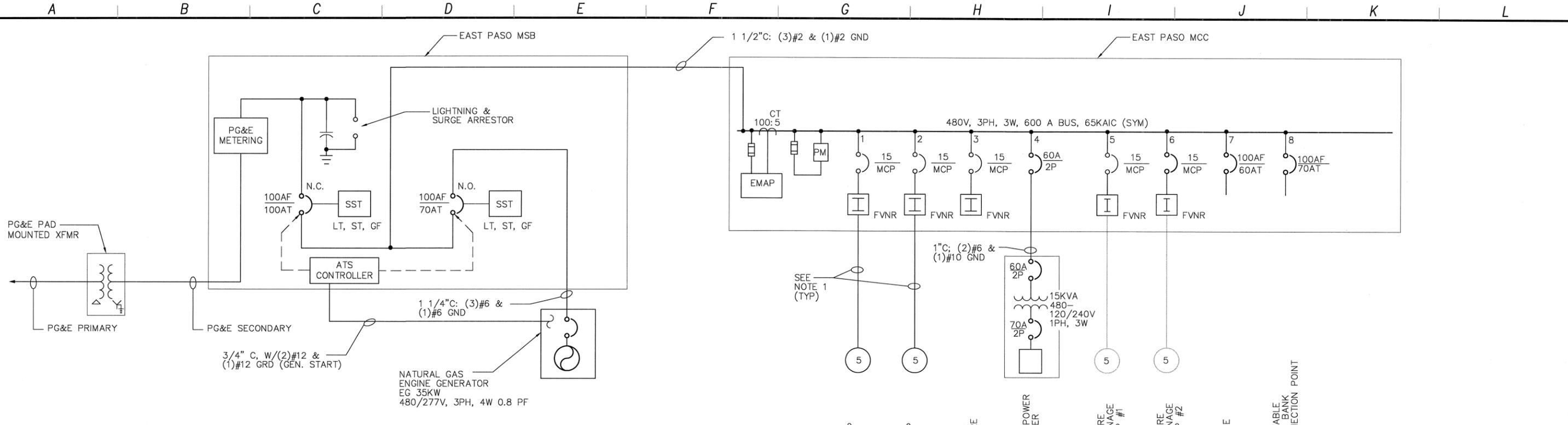
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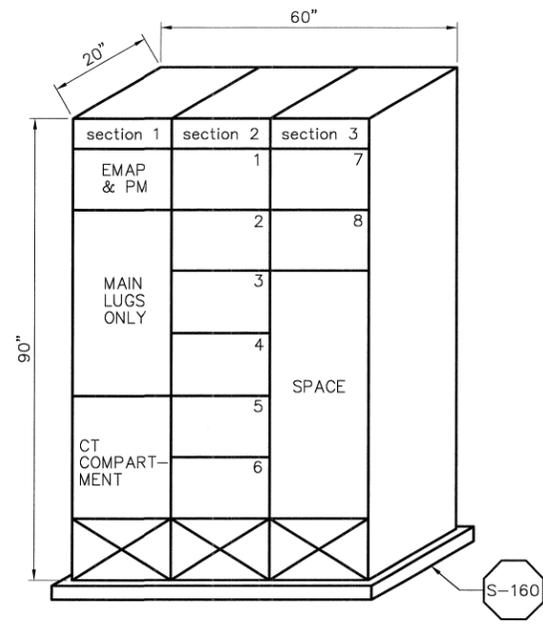
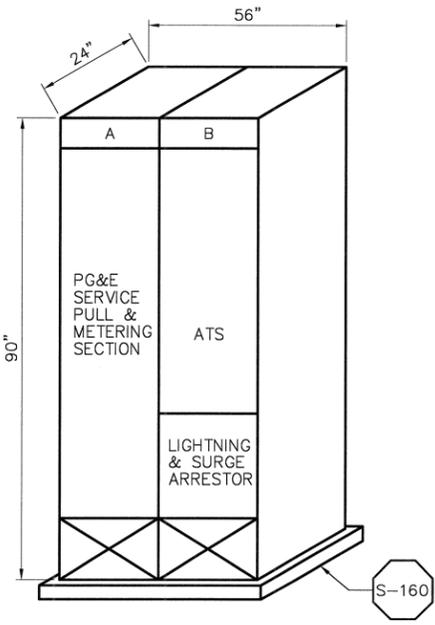
LOS OSOS WASTEWATER COLLECTION SYSTEM
 ELECTRICAL
 WEST PASO/BAYWOOD PS &
 STANDBY POWER
 SINGLE LINE

PROJECT NO. 42502-83120
 FILE NAME: PS-E-107
 SHEET NO.
PS-E-107

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 N:\VACAD2008\los osos\01-sheets\PS-08-ELE\PS-E-109 04/20/12 18:01 rushmc XRES: LosOsos-br, Co-cd



EAST PASCO				
ITEM	LOAD		AMPS @ 480V, 3P	
	KVA	HP	CONNECTED	DEMAND
P-1	--	5	7.6	5
P-2	--	5	7.6	5
MPC	15	--	31	21
FUTURE DRAIN PUMP #1	--	5	7.6	5
FUTURE DRAIN PUMP #2	--	5	7.6	5
TOTAL	--	--	62	42



NOTE:
 1. SEE SHEET PS-E-108 FOR CONDUIT AND WIRE SIZE

REV. NO.	DATE	DRWN	CHKD	REMARKS

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REGISTERED PROFESSIONAL ENGINEER
 W. E. 8841
 Exp. 3/31/2014
 STATE OF CALIFORNIA

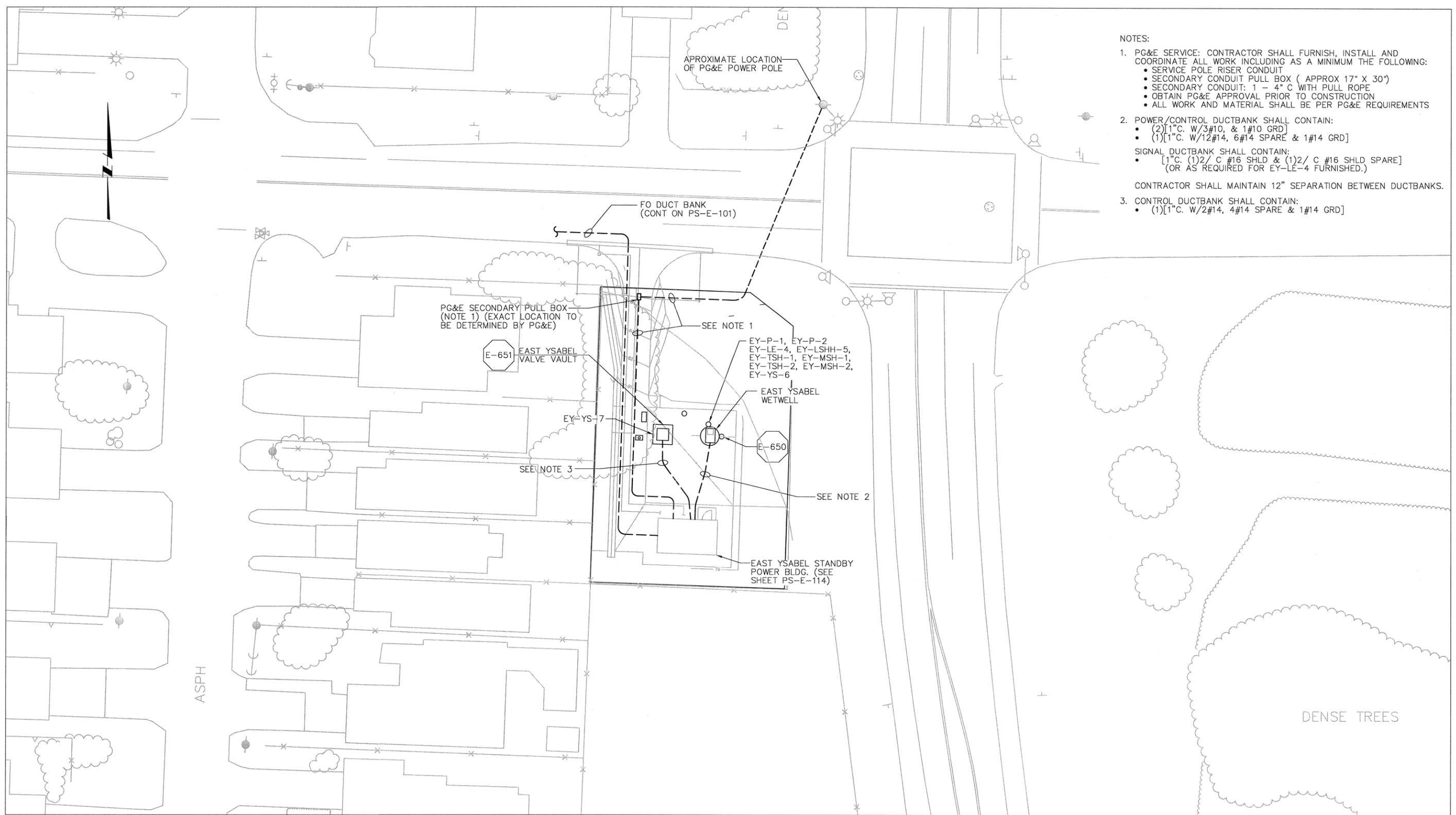
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LOS OSOS WASTEWATER COLLECTION SYSTEM
ELECTRICAL EAST PASO PS & STANDBY POWER SINGLE LINE

PROJECT NO. 42502-83120
 FILE NAME: PS-E-109
 SHEET NO.
PS-E-109

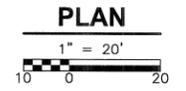
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- NOTES:
- PG&E SERVICE: CONTRACTOR SHALL FURNISH, INSTALL AND COORDINATE ALL WORK INCLUDING AS A MINIMUM THE FOLLOWING:
 - SERVICE POLE RISER CONDUIT
 - SECONDARY CONDUIT PULL BOX (APPROX 17" X 30")
 - SECONDARY CONDUIT: 1 - 4" C WITH PULL ROPE
 - OBTAIN PG&E APPROVAL PRIOR TO CONSTRUCTION
 - ALL WORK AND MATERIAL SHALL BE PER PG&E REQUIREMENTS
 - POWER/CONTROL DUCTBANK SHALL CONTAIN:
 - (2) [1" C. W/3#10, & 1#10 GRD]
 - (1) [1" C. W/12#14, 6#14 SPARE & 1#14 GRD]
 SIGNAL DUCTBANK SHALL CONTAIN:
 - [1" C. (1)2/ C #16 SHLD & (1)2/ C #16 SHLD SPARE]
 - (OR AS REQUIRED FOR EY-LE-4 FURNISHED.)
 CONTRACTOR SHALL MAINTAIN 12" SEPARATION BETWEEN DUCTBANKS.
 - CONTROL DUCTBANK SHALL CONTAIN:
 - (1) [1" C. W/2#14, 4#14 SPARE & 1#14 GRD]

EAST YSABEL SUBMERSIBLE PUMP STATION SITE POWER, LIGHTING & GROUNDING

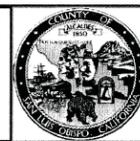


REV. NO.	DATE	DRWN	CHKD	REMARKS

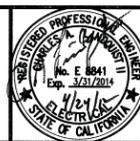
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LOS OSOS WASTEWATER COLLECTION SYSTEM

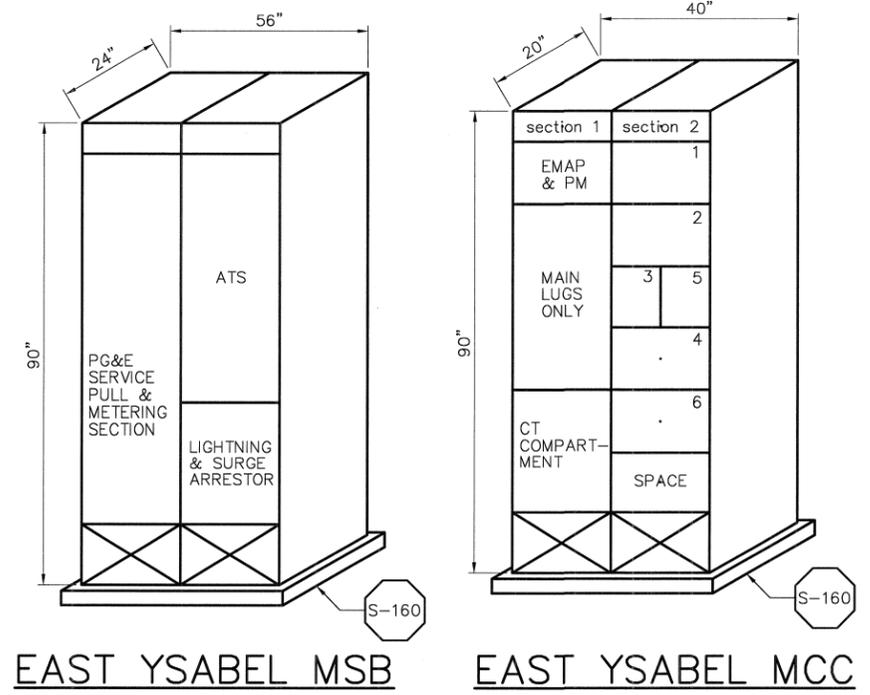
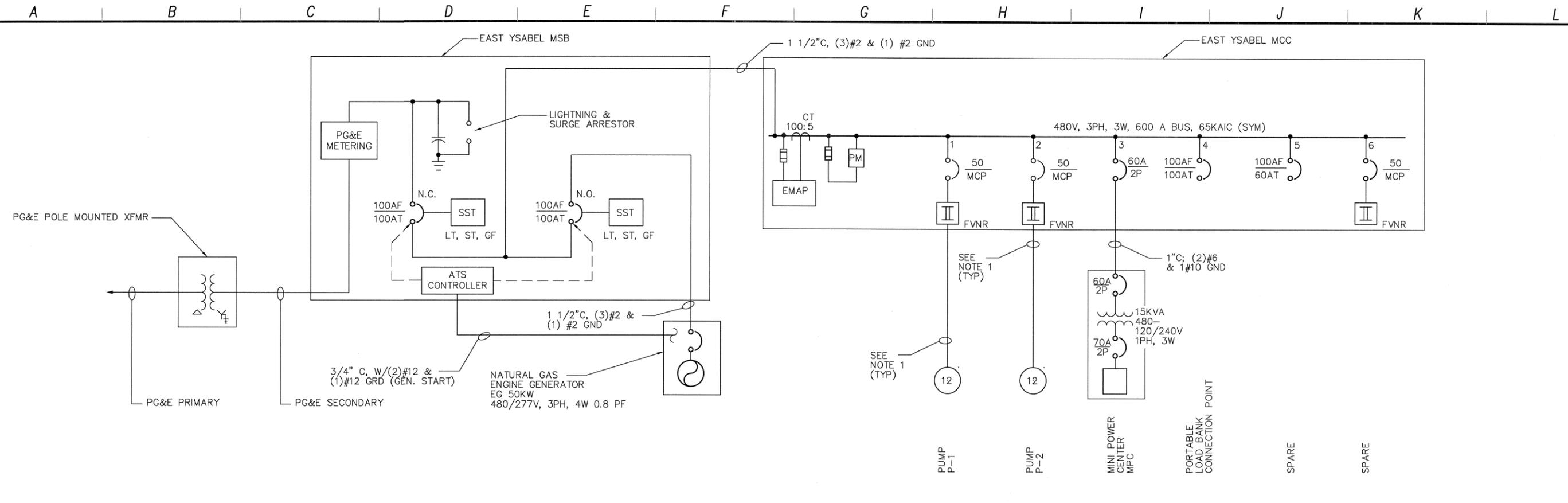
ELECTRICAL

EAST YSABEL SUBMERSIBLE PUMP STATION SITE

ELECTRICAL PLAN

PROJECT NO. 42502-83120
 FILE NAME: PS-E-110
 SHEET NO.
PS-E-110

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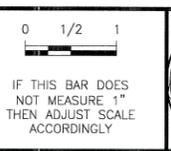
ITEM	EAST YSABEL			
	LOAD		AMPS @ 480V, 3P	
	KVA	HP	CONNECTED	DEMAND
P-1	--	15	21	15
P-2	--	15	21	15
MPC	15	--	31	21
TOTAL	--	--	73	50

NOTE:
1. SEE SHEET PS-E-110 FOR CONDUIT AND WIRE SIZE

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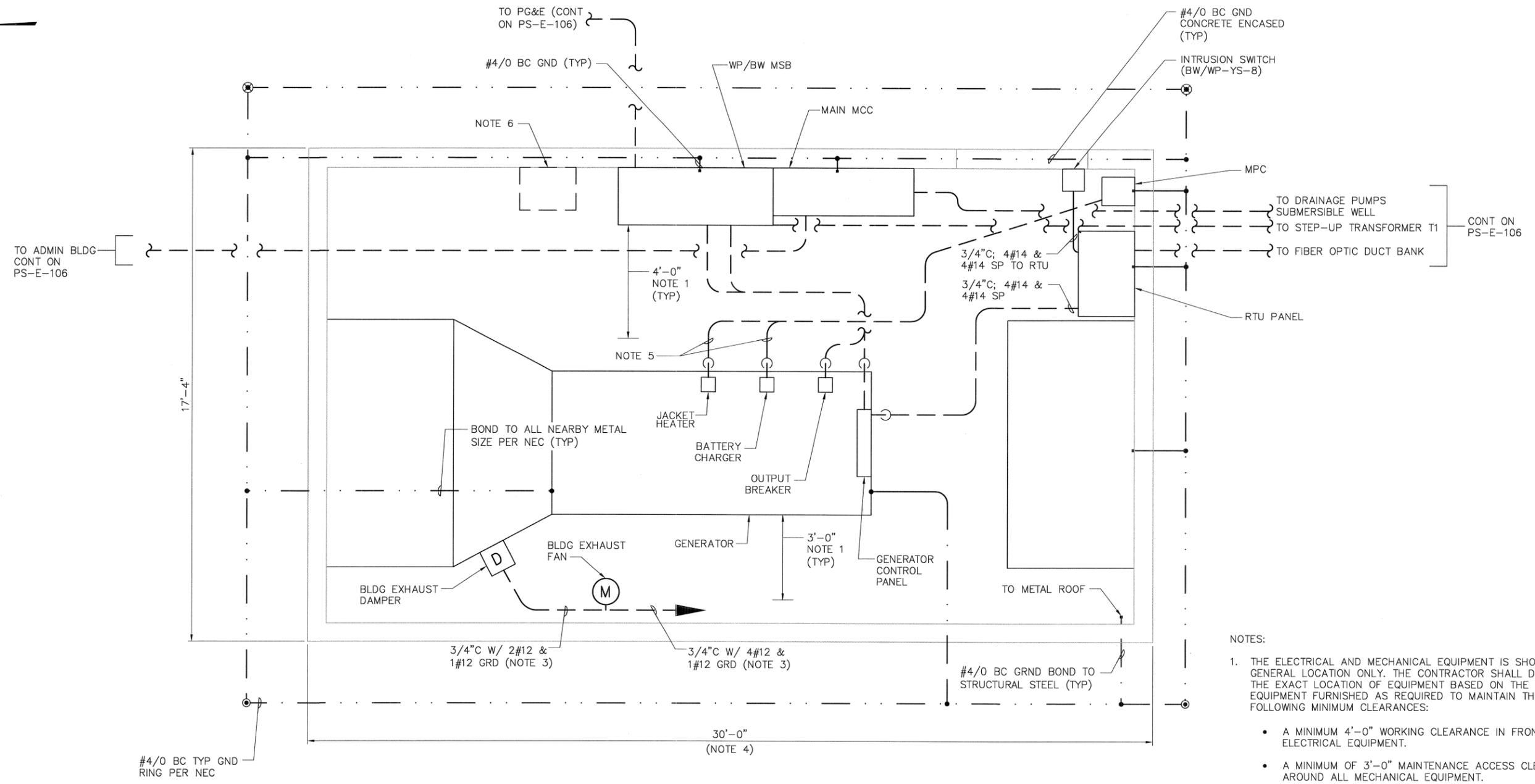
LOS OSOS WASTEWATER COLLECTION SYSTEM
ELECTRICAL
EAST YSABEL PS & STANDBY POWER
SINGLE LINE

PROJECT NO. 42502-83120
 FILE NAME: PS-E-111
 SHEET NO.
PS-E-111

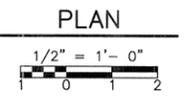
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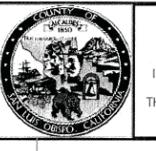
- NOTES:
- THE ELECTRICAL AND MECHANICAL EQUIPMENT IS SHOWN IN GENERAL LOCATION ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EQUIPMENT BASED ON THE EQUIPMENT FURNISHED AS REQUIRED TO MAINTAIN THE FOLLOWING MINIMUM CLEARANCES:
 - A MINIMUM 4'-0" WORKING CLEARANCE IN FRONT OF ALL ELECTRICAL EQUIPMENT.
 - A MINIMUM OF 3'-0" MAINTENANCE ACCESS CLEARANCE AROUND ALL MECHANICAL EQUIPMENT.
 - REFER TO SHEET PS-E-009 FOR LIGHTING AND FIRE DETECTION DETAILS.
 - CONNECT EXHAUST FAN TO MPC VIA ATC. (REFER TO SHEET PS-E-009.)
 - REFER TO STRUCTURAL AND MECHANICAL DRAWINGS FOR ADDITIONAL BUILDING DETAILS.
 - 3/4"C. W/WIRES PER GENERATOR MANUFACTURER'S REQUIREMENTS.
 - OWS FURNISHED AND INSTALLED BY OTHERS. REFER TO PS-I-003 & PS-I-004 FOR DETAILS.



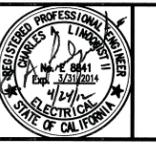
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 CHECKED BY: GNM
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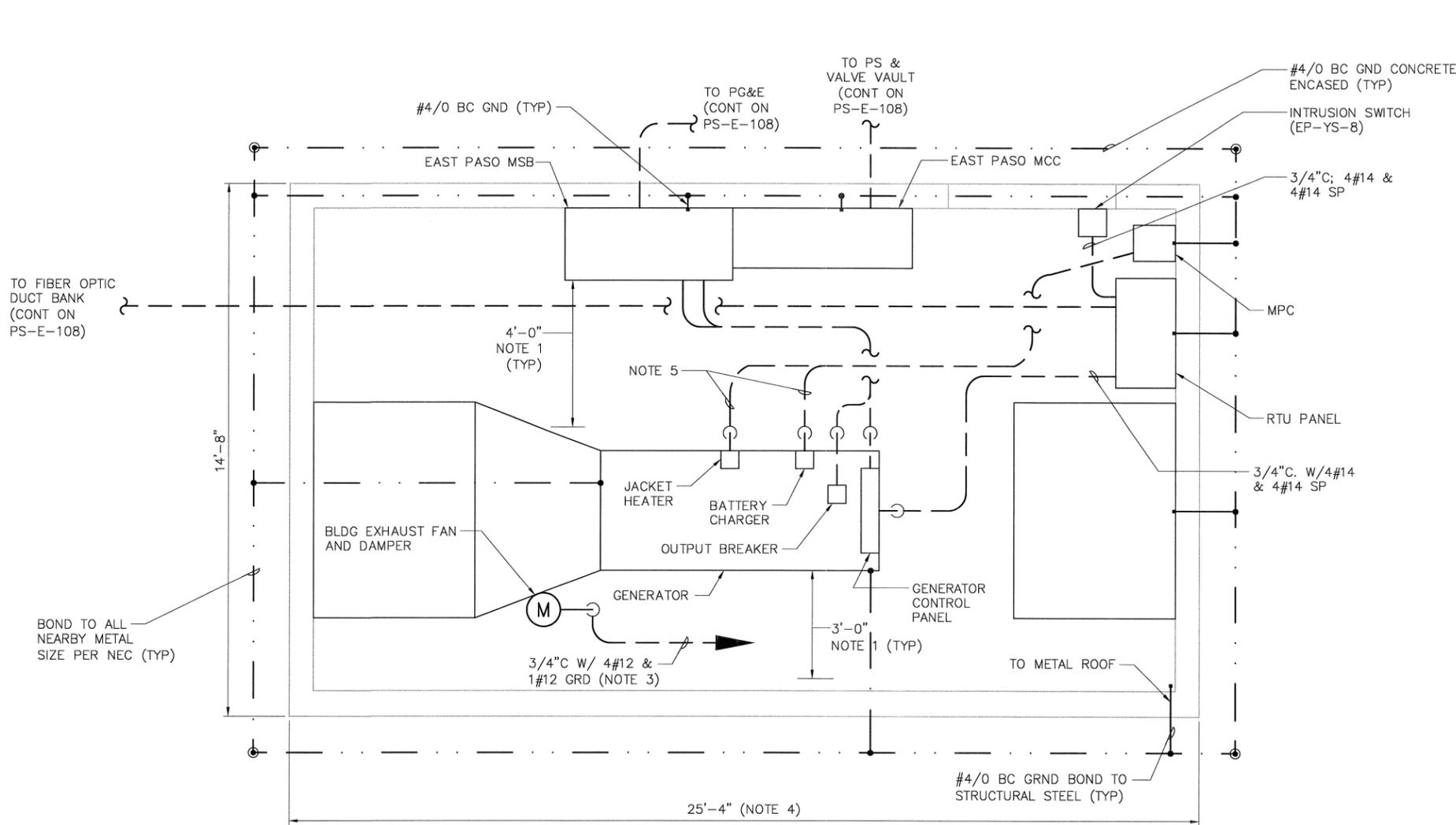
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LOS OSOS WASTEWATER COLLECTION SYSTEM
ELECTRICAL WEST PASO/BAYWOOD STANDBY POWER BUILDING POWER INSTRUMENTATION, & GROUNDING PLAN

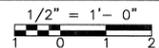
PROJECT NO. 42502-83120
 FILE NAME: PS-E-112
 SHEET NO.
PS-E-112

NOTES:

1. THE ELECTRICAL AND MECHANICAL EQUIPMENT IS SHOWN IN GENERAL LOCATION ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EQUIPMENT BASED ON THE EQUIPMENT FURNISHED AS REQUIRED TO MAINTAIN THE FOLLOWING MINIMUM CLEARANCES:
 - A MINIMUM 4'-0" WORKING CLEARANCE IN FRONT OF ALL ELECTRICAL EQUIPMENT.
 - A MINIMUM 3'-0" MAINTENANCE ACCESS CLEARANCE AROUND ALL MECHANICAL EQUIPMENT.
2. REFER TO PS-E-009 FOR LIGHTING AND FIRE DETECTION DETAILS.
3. CONNECT EXHAUST FAN TO MPC VIA ATC. (REFER TO SHEET PS-E-009.)
4. REFER TO STRUCTURAL AND MECHANICAL DRAWINGS FOR ADDITIONAL BUILDING DETAILS.
5. 3/4"C. W/WIRES PER GENERATOR MANUFACTURER'S REQUIREMENTS



PLAN



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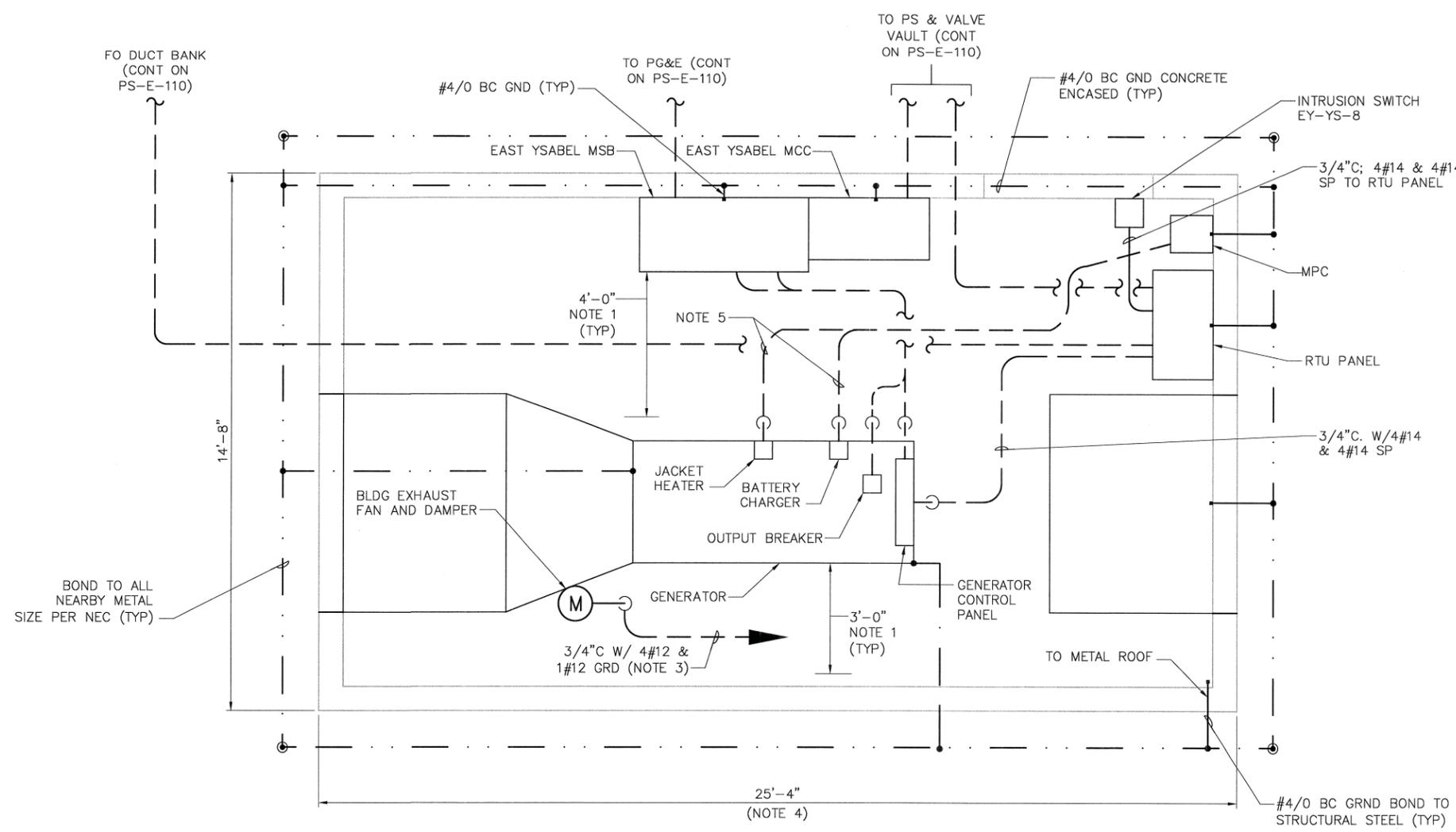


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LOS OSOS WASTEWATER COLLECTION SYSTEM
ELECTRICAL
EAST PASO STANDBY POWER BUILDING
POWER, INST, & GROUNDING PLAN

PROJECT NO. 42502-83120
 FILE NAME: PS-E-113
 SHEET NO.
PS-E-113

- NOTES:
1. THE ELECTRICAL AND MECHANICAL EQUIPMENT IS SHOWN IN GENERAL LOCATION ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF EQUIPMENT BASED ON THE EQUIPMENT FURNISHED AS REQUIRED TO MAINTAIN THE FOLLOWING MINIMUM CLEARANCES:
 - A MINIMUM 4'-0" WORKING CLEARANCE IN FRONT OF ALL ELECTRICAL EQUIPMENT.
 - A MINIMUM 3'-0" MAINTENANCE ACCESS CLEARANCE AROUND ALL MECHANICAL EQUIPMENT.
 2. REFER TO PS-E-009 FOR LIGHTING AND FIRE DETECTION DETAILS.
 3. CONNECT EXHAUST FAN TO MPC VIA ATC. (REFER TO SHEET PS-E-009.)
 4. REFER TO STRUCTURAL AND MECHANICAL DRAWINGS FOR ADDITIONAL BUILDING DETAILS.
 5. 3/4"C. W/WIRES PER GENERATOR MANUFACTURER'S REQUIREMENTS



PLAN
1/2" = 1'-0"

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REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: CAL
 DRAWN BY: JAW
 CHECKED BY: GNM
 DATE: APRIL 2012

CDM Smith
 2295 Gateway Oaks Drive, Suite 240
 Sacramento, CA 95833
 Tel: (916) 567-9900



0 1/2 1
 IF THIS BAR DOES NOT MEASURE 1" THEN ADJUST SCALE ACCORDINGLY



DIGALERT
 DIAL TOLL FREE 1-800-642-2444
 AT LEAST TWO DAYS BEFORE YOU DIG
 UNDERGROUND SERVICE ALERT OF NORTHERN CALIFORNIA

LOS OSOS WASTEWATER COLLECTION SYSTEM
**ELECTRICAL EAST YSABEL
 STANDBY POWER BUILDING
 POWER, INSTRUMENTATION, & GRD PLAN**

PROJECT NO. 42502-83120
 FILE NAME: PS-E-114
 SHEET NO.
PS-E-114