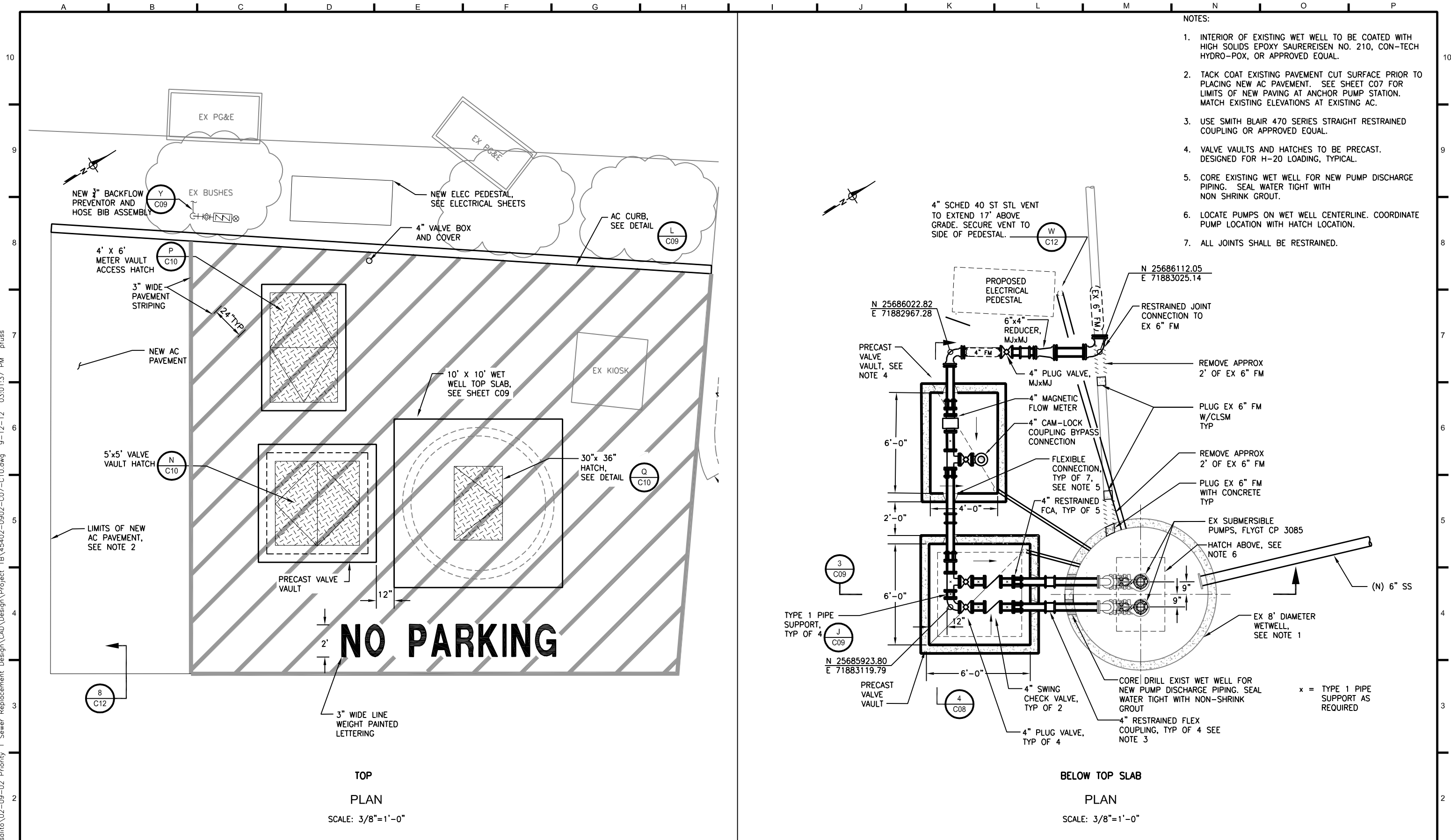


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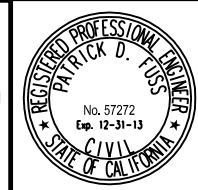


- NOTES:
1. INTERIOR OF EXISTING WET WELL TO BE COATED WITH HIGH SOLIDS EPOXY SAUREREISEN NO. 210, CON-TECH HYDRO-POX, OR APPROVED EQUAL.
 2. TACK COAT EXISTING PAVEMENT CUT SURFACE PRIOR TO PLACING NEW AC PAVEMENT. SEE SHEET C07 FOR LIMITS OF NEW PAVING AT ANCHOR PUMP STATION. MATCH EXISTING ELEVATIONS AT EXISTING AC.
 3. USE SMITH BLAIR 470 SERIES STRAIGHT RESTRAINED COUPLING OR APPROVED EQUAL.
 4. VALVE VAULTS AND HATCHES TO BE PRECAST. DESIGNED FOR H-20 LOADING, TYPICAL.
 5. CORE EXISTING WET WELL FOR NEW PUMP DISCHARGE PIPING. SEAL WATER TIGHT WITH NON SHRINK GROUT.
 6. LOCATE PUMPS ON WET WELL CENTERLINE. COORDINATE PUMP LOCATION WITH HATCH LOCATION.
 7. ALL JOINTS SHALL BE RESTRAINED.

NO PARKING

TOP
PLAN
SCALE: 3/8"=1'-0"

BELOW TOP SLAB
PLAN
SCALE: 3/8"=1'-0"



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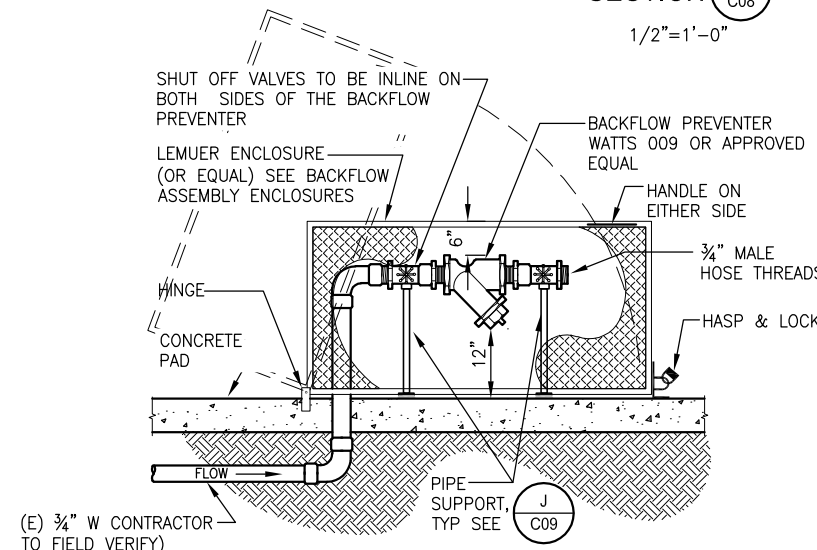
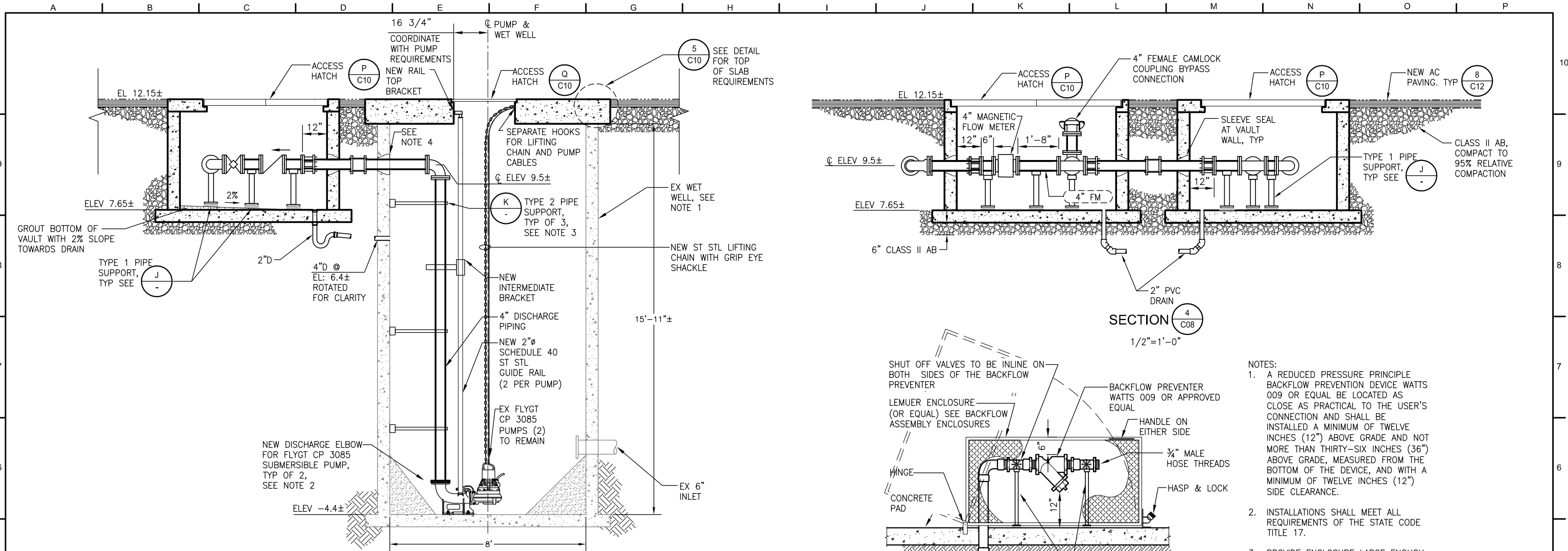
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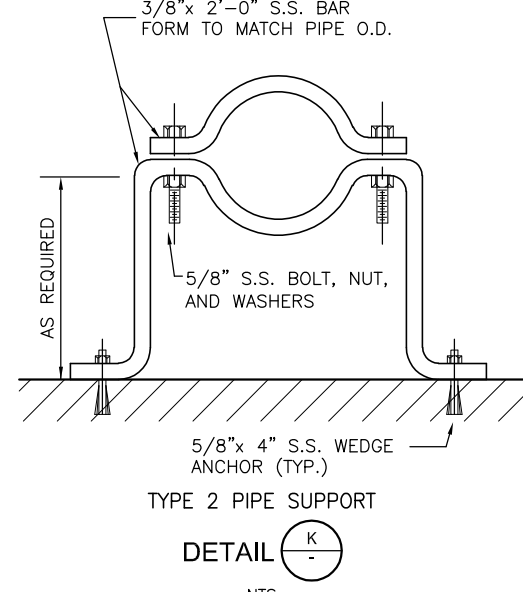
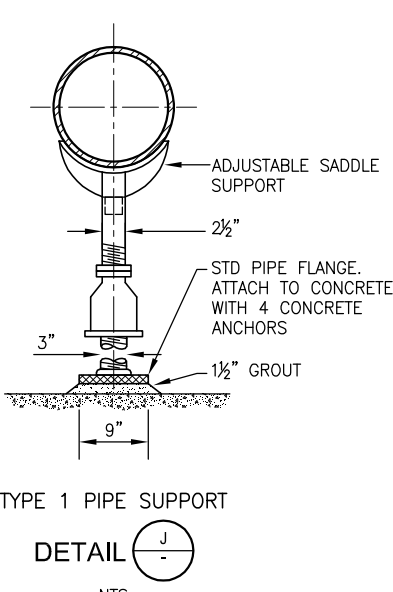
CITY OF SAUSALITO PRIORITY 1 SEWER REPLACEMENT PROJECT 1B
ANCHOR PUMP STATION
WET WELL/ VALVE VAULT
PLANS

JOB NUMBER 454-02-09-02
DRAWING NUMBER C08
SHEET NUMBER 11 of 28
REVISION

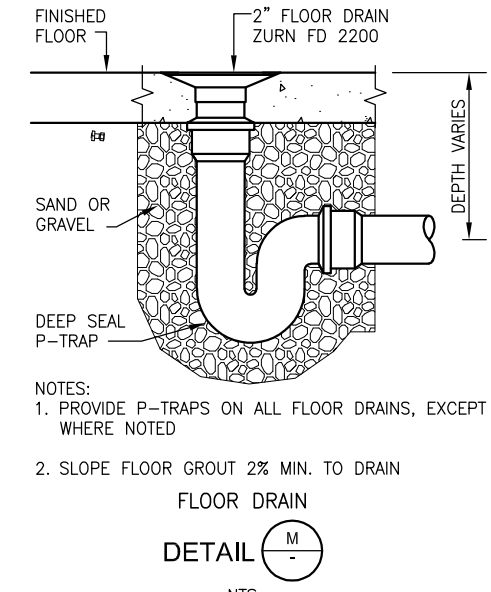
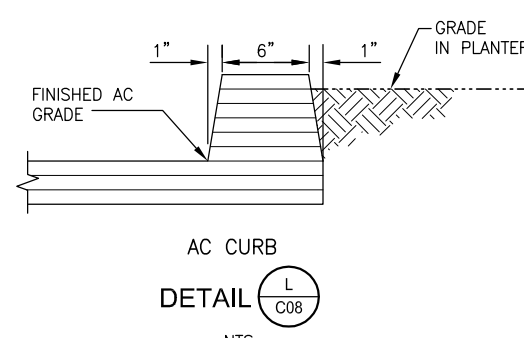
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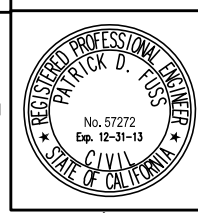
- NOTES:
1. A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTION DEVICE WATTS 009 OR EQUAL BE LOCATED AS CLOSE AS PRACTICAL TO THE USER'S CONNECTION AND SHALL BE INSTALLED A MINIMUM OF TWELVE INCHES (12") ABOVE GRADE AND NOT MORE THAN THIRTY-SIX INCHES (36") ABOVE GRADE, MEASURED FROM THE BOTTOM OF THE DEVICE, AND WITH A MINIMUM OF TWELVE INCHES (12") SIDE CLEARANCE.
 2. INSTALLATIONS SHALL MEET ALL REQUIREMENTS OF THE STATE CODE TITLE 17.
 3. PROVIDE ENCLOSURE LARGE ENOUGH FOR 50 FEET OF 3/4" HOSE TO BE ATTACHED TO THE BACKFLOW DEVICE.



- NOTES:
1. ENTIRE INTERIOR SURFACE OF EXISTING WETWELL AND UNDERSIDE OF NEW SLAB TO BE COATED WITH HIGH SOLIDS EPOXY SAUREREISEN NO. 210, CON-TECH HYDRO-POX, OR APPROVED EQUAL.
 2. EXISTING DISCHARGE ELBOW FOR FLYGT CP 3085 PUMPS TO BE REMOVED AND REPLACED. EXISTING ANCHOR BOLTS TO BE REMOVED AND NEW 3/4"x4 1/2" EMBED DIAMETER ANCHOR BOLTS TO BE INSTALLED WITH EPOXY, SIMPSON SET OR EQUAL.
 3. EXISTING WET WELL INTERIOR TO BE COATED PRIOR TO INSTALLATION OF TYPE 2 PIPE SUPPORTS.
 4. INSTALL TELLEBORG KOR-N-SEAL SERIES 104/106 FLEXIBLE CONNECTION OR APPROVED EQUAL. AT WALL PENETRATIONS OF VAULTS.



- NOTES:
1. PROVIDE P-TRAPS ON ALL FLOOR DRAINS, EXCEPT WHERE NOTED
 2. SLOPE FLOOR GROUT 2% MIN. TO DRAIN

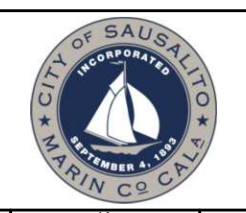


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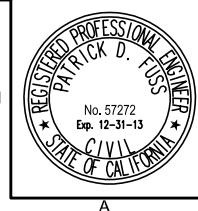
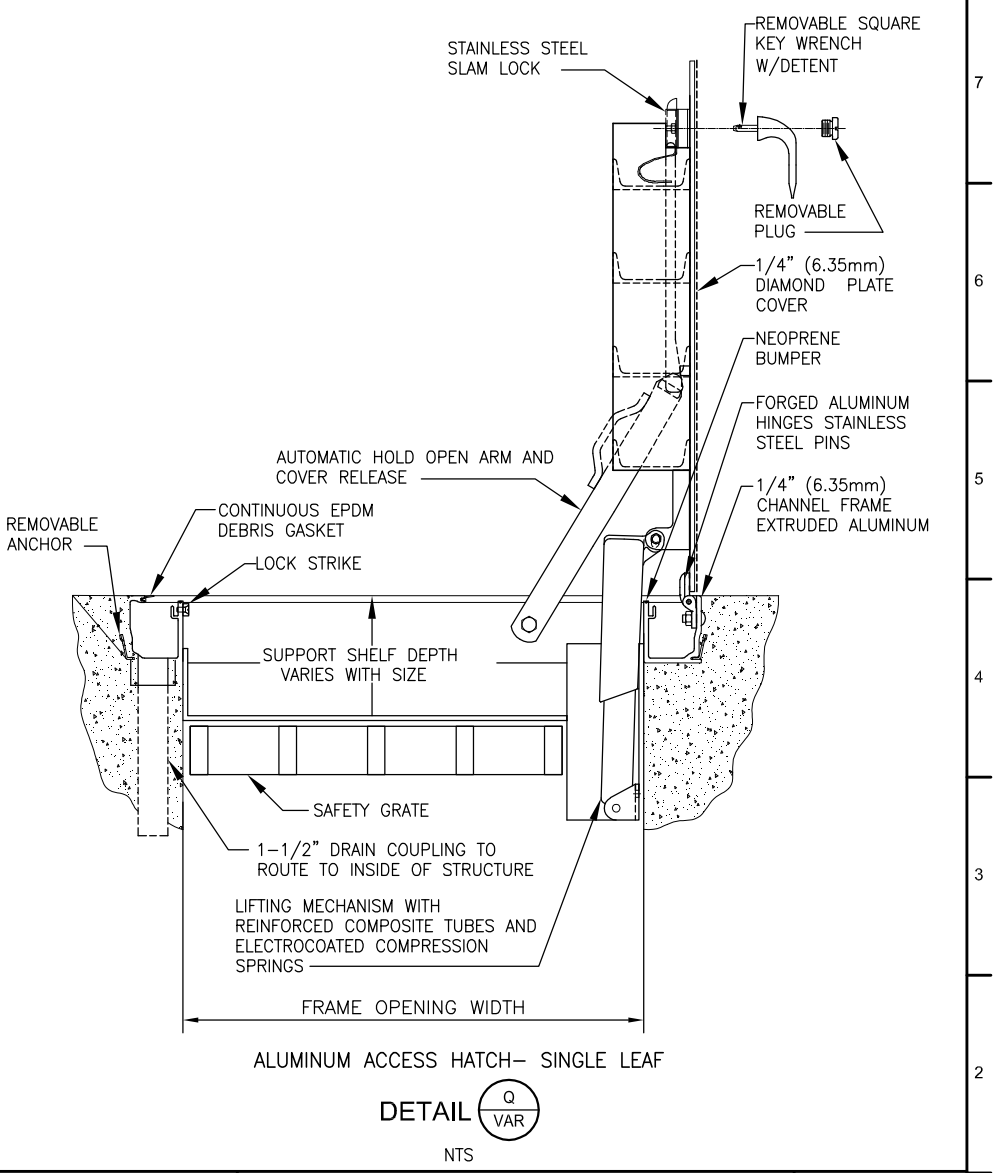
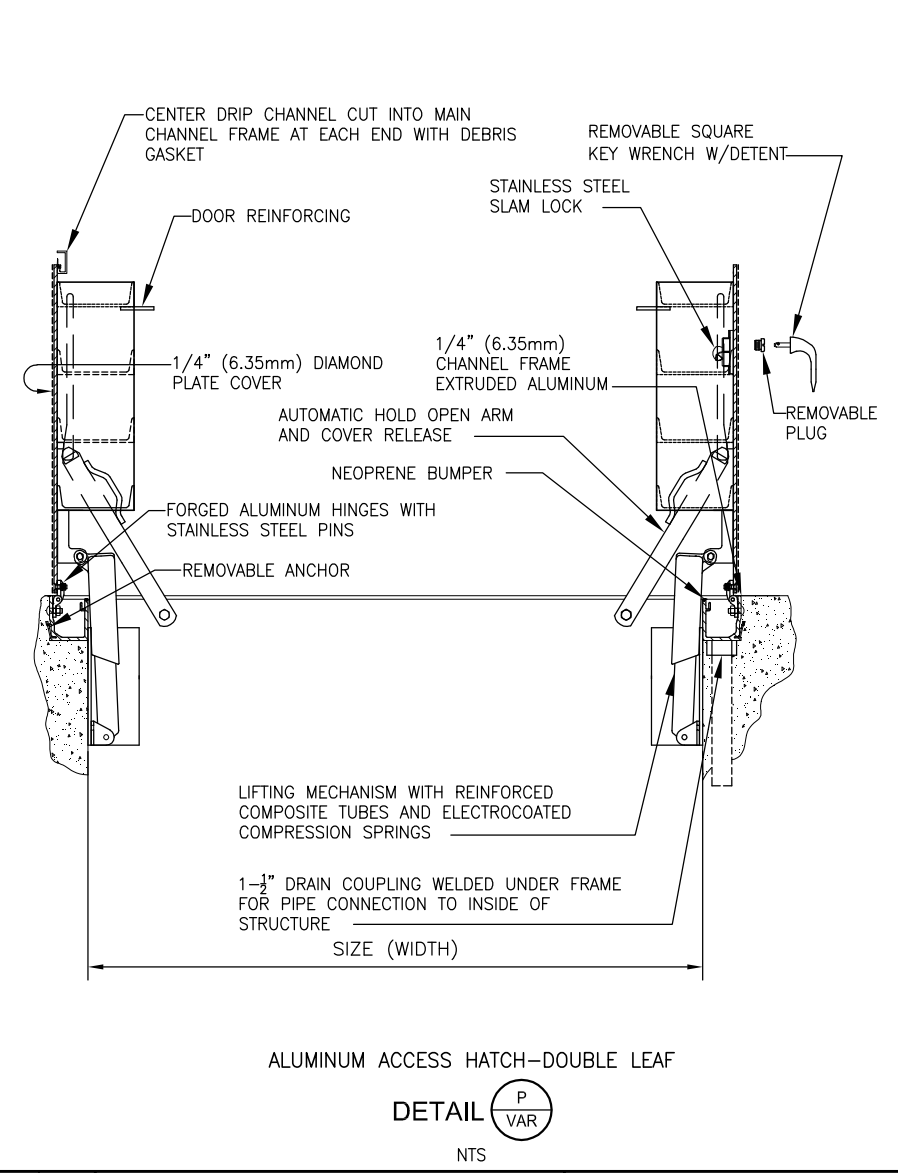
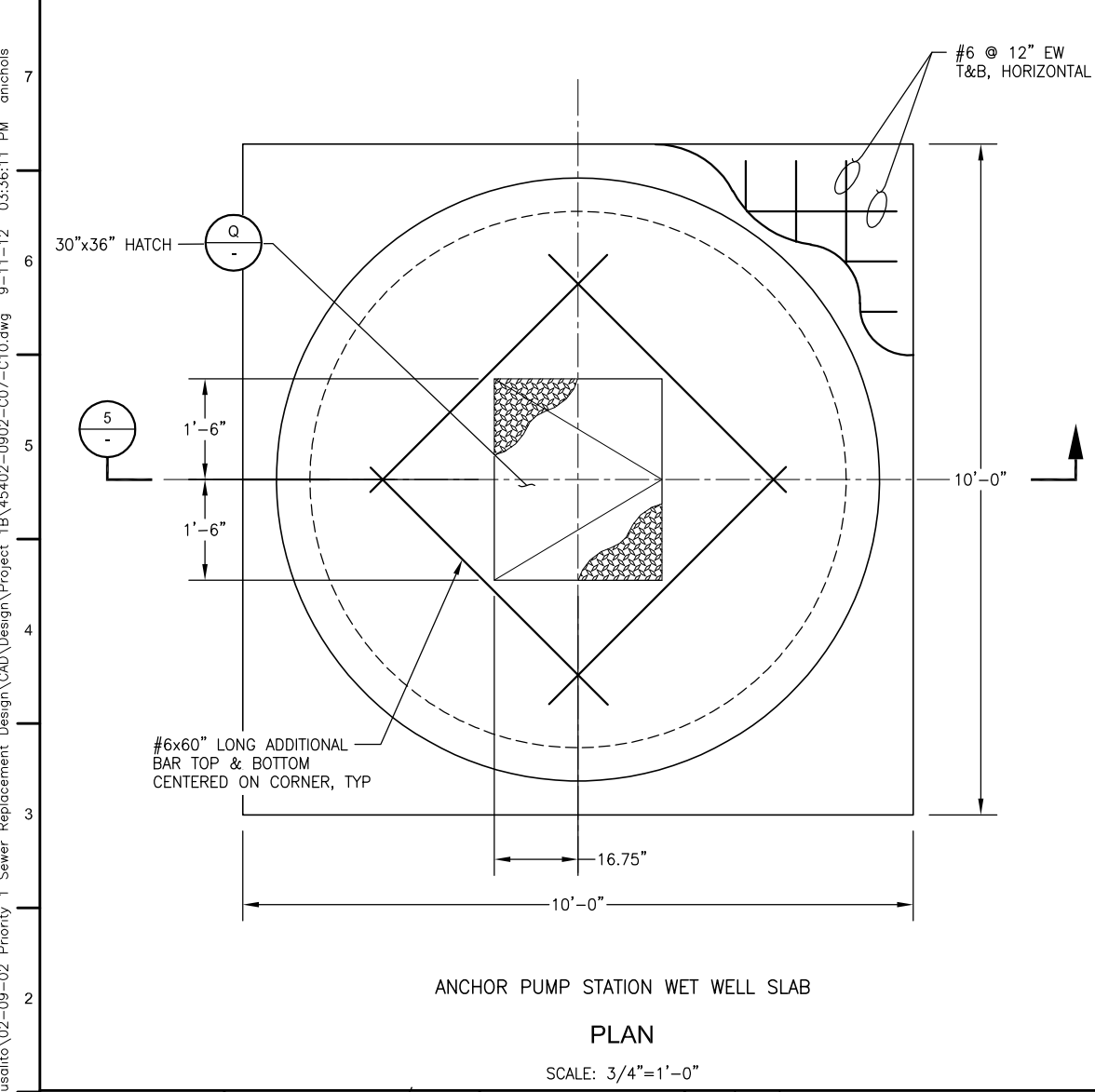
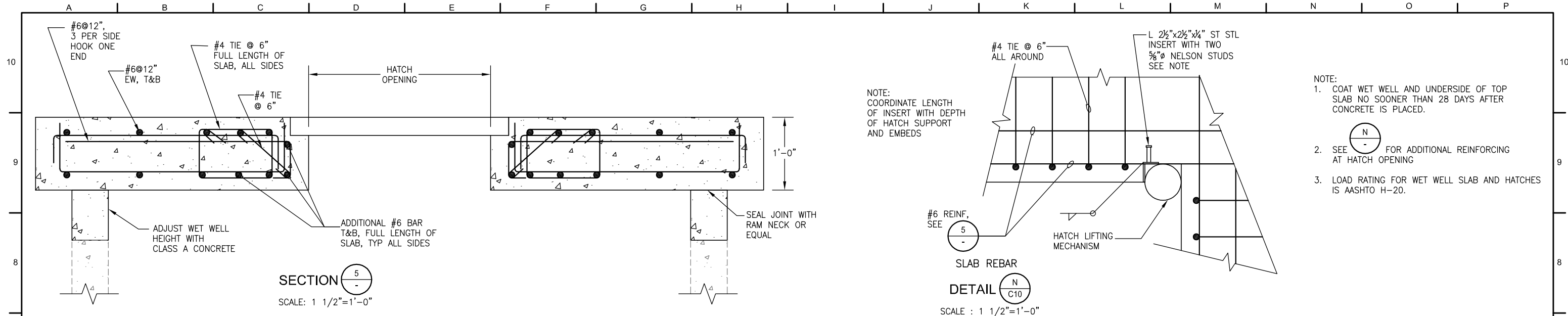
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CITY OF SAUSALITO PRIORITY 1 SEWER REPLACEMENT PROJECT 1B
 ANCHOR PUMP STATION WET WELL/ VALVE VAULT SECTIONS AND DETAILS

JOB NUMBER: 454-02-09-02
 DRAWING NUMBER: C09
 SHEET NUMBER: 12 OF 28
 REVISION: _____

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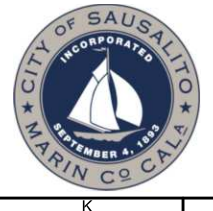


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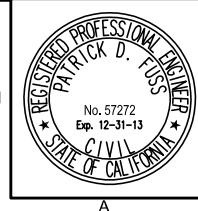
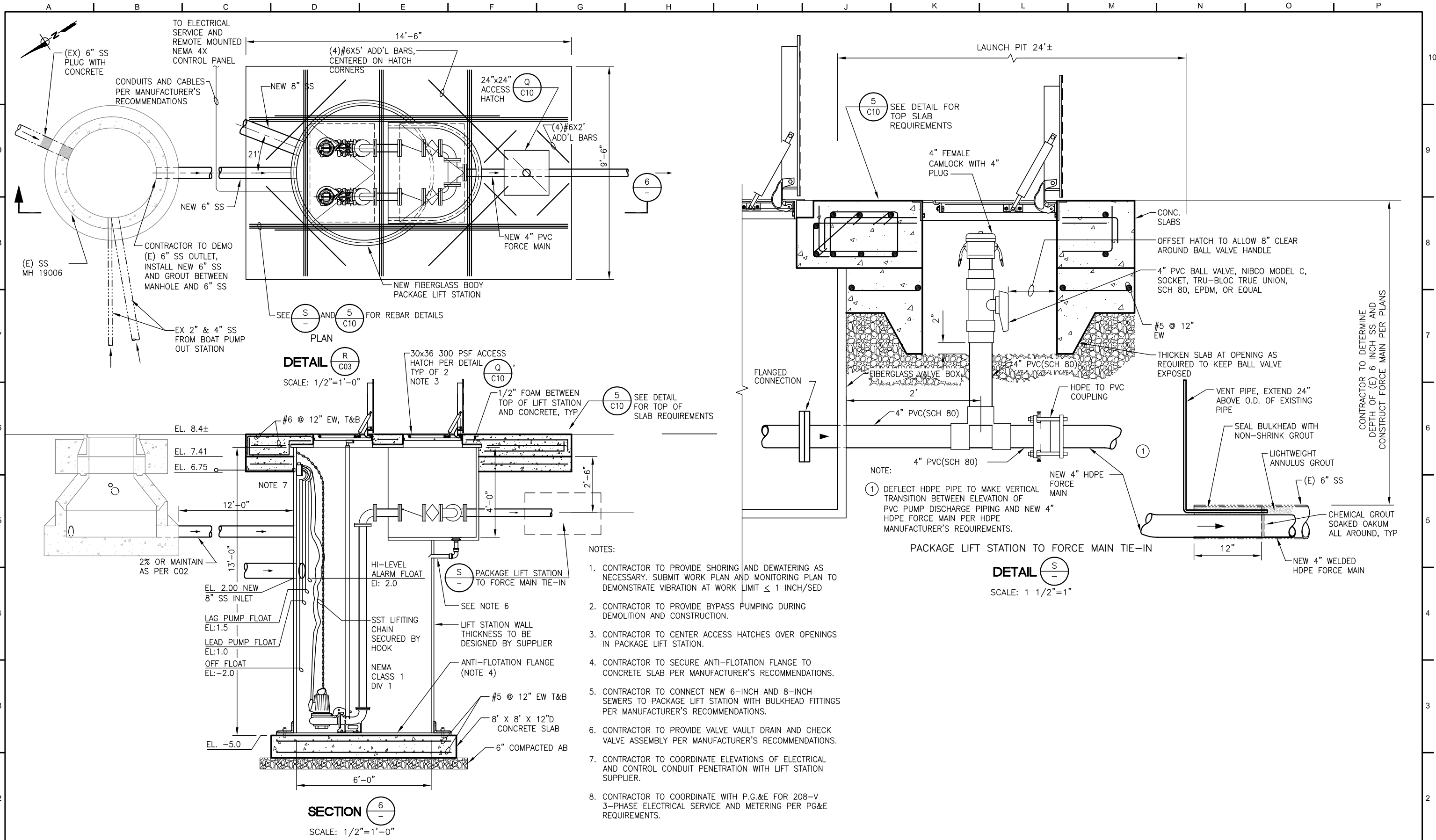
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CITY OF SAUSALITO PRIORITY 1 SEWER REPLACEMENT PROJECT 1B
ANCHOR PUMP STATION WET WELL/ VALVE VAULT SECTIONS AND DETAILS

JOB NUMBER 454-02-09-02
DRAWING NUMBER C10
SHEET NUMBER 13 OF 28
REVISION

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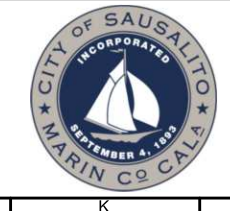
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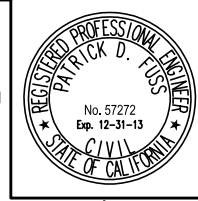
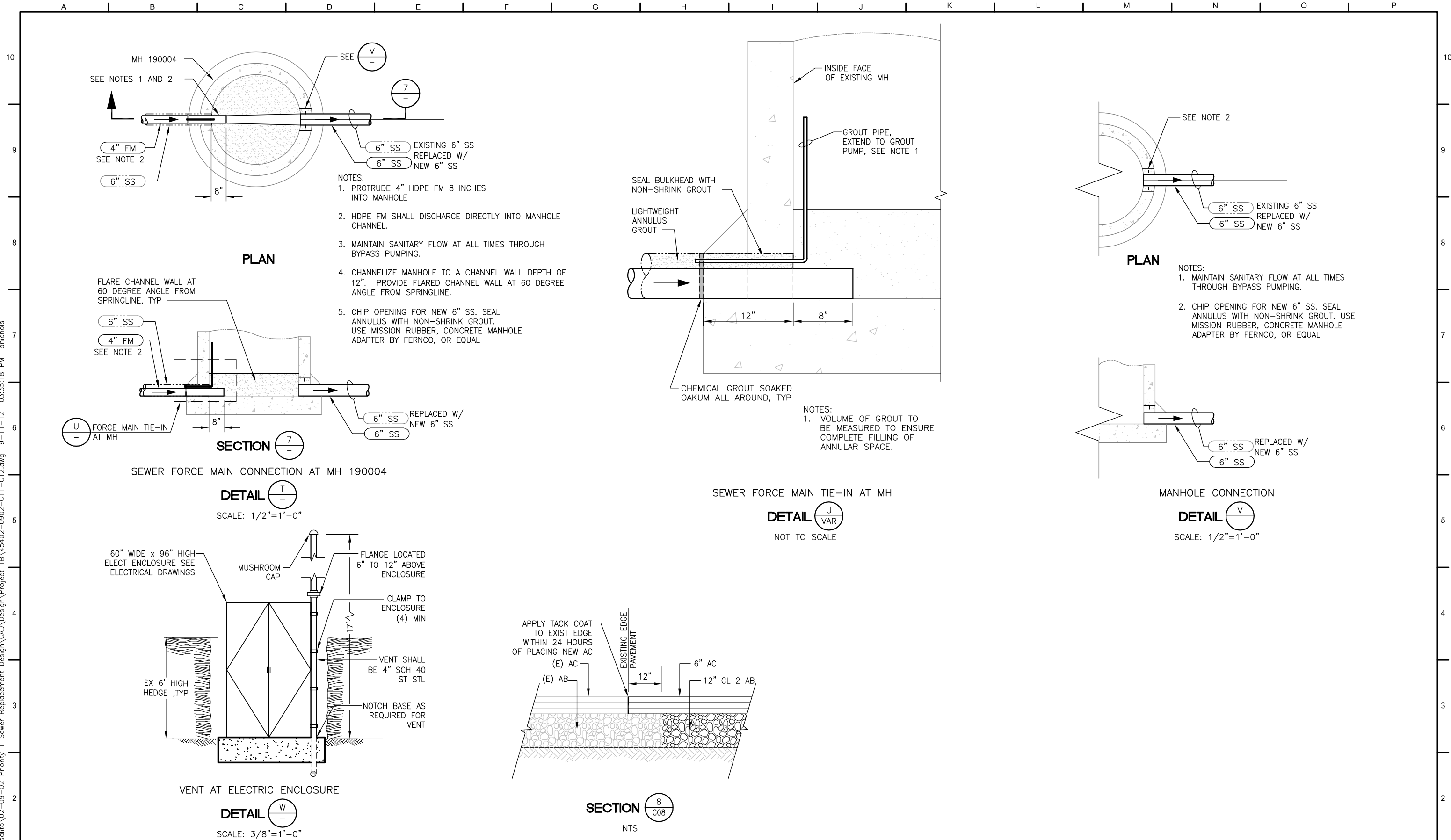


CITY OF SAUSALITO PRIORITY 1 SEWER REPLACEMENT PROJECT 1B

MANHOLE 190006
PACKAGE LIFT STATION
STA 18+89

JOB NUMBER 454-02-09-02
DRAWING NUMBER C11
SHEET NUMBER 14 OF 28
REVISION

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CITY OF SAUSALITO PRIORITY 1 SEWER REPLACEMENT PROJECT 1B
MANHOLE DETAILS

JOB NUMBER 454-02-09-02
DRAWING NUMBER C12
SHEET NUMBER 15 OF 28
REVISION

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MISCELLANEOUS ELECTRICAL & INSTRUMENTATION ABBREVIATIONS			
&	AND	MUX	MULTIPLEXER
@	AT	MV	MEDIUM VOLTAGE
A	AMBER, AMPERES	N	NEUTRAL
AC	ALTERNATING CURRENT	NC	NORMALLY CLOSED
AFF	ABOVE FINISHED FLOOR	NIC	NOT IN CONTRACT
AI	ANALOG INPUT	NL	NIGHT LIGHT
AIC	AMP INTERRUPTING CAPACITY SYMMETRICAL	NO	NORMALLY OPEN
ALT	ALTERNATOR	NP	NAMEPLATE
AM	AMMETER	NTS	NOT TO SCALE
AO	ANALOG OUTPUT	(N)	NEW
AWG	AMERICAN WIRE GAUGE	OC	ON CENTER
B	BLUE	OL	OVERLOAD
BC	BARE COPPER	ORP	OXIDATION REDUCTION POTENTIAL
BFC	BELOW FINISHED CEILING	P	PHASE, POLE
BOD	BIOCHEMICAL OXYGEN DEMAND	PB	PUSHBUTTON
C	CONDUIT	PB#	PULL BOX #
CAP	CAPACITOR	PB#	PULL BOX (HIGH VOLTAGE) #
CB	CIRCUIT BREAKER	PC	PERSONAL COMPUTER
CKT	CIRCUIT	PE	PHOTOCELL
COAX	COAXIAL CABLE	PF	POWER FAIL
COMM	COMMUNICATION PORT	PFR	POWER (PHASE) FAIL RELAY
CPT	CONTROL POWER TRANSFORMER	PH	HYDROGEN ION CONCENTRATION
CR	CONTROL RELAY	PI	PULSE INPUT
CT	CURRENT TRANSFORMER	PLC	PROGRAMMABLE LOGIC CONTROLLER
CTQ	CONSTANT TORQUE	PMP	PUMP
CTR	CYCLE COUNTER	PNL	PANEL
CU	COPPER	POT	POTENTIOMETER
DC	DIRECT CURRENT	PR	PAIR, TWISTED & SHIELDED CABLE
DET	DETAIL	PRESS	PRESSURE
DI	DIGITAL INPUT	PRI	PRIMARY
DIAG	DIAGRAM	PROVIDE	FURNISH, INSTALL & CONNECT
DISC	DISCONNECT	PRR	POWER RELAY
DO	DIGITAL OUTPUT	PS	PRESSURE SWITCH
DPDT	DOUBLE POLE DOUBLE THROW	PT	POTENTIAL TRANSFORMER
DWG	DRAWING	PTT	PUSH TO TEST
ELEV	ELEVATION	PV	PROCESS VARIABLE
EMT	ELECTRICAL METALLIC TUBING	PVC	POLY VINYL CHLORIDE
ETM	ELAPSED TIME METER	PWM	PULSE WIDTH MODULATION
(E)	EXISTING	PWR	POWER
F	FRAME	R	RED
FC	FAIL CLOSED	RCT	REPEAT CYCLE TIMER
FCS	FIELD CONTROL STATION	REF	REFERENCE
FLA	FULL LOAD AMPS	RIO	REMOTE I/O
FLP	FAIL LAST POSITION	RMS	ROOT MEAN SQUARED
FO	FAIL OPEN	RT	RESET TIMER
FLR	FLASHER RELAY	RTD	RESISTANCE TEMPERATURE DETECTOR
FLUOR	FLUORESCENT	RTM	RUN TIME METER
FLEX	FLEXIBLE, METAL LIQUID TIGHT CONDUIT	RTU	REMOTE TELEMTRY UNIT
FS	FLOW SWITCH OR FULL SPEED	RVNR	REDUCED VOLTAGE NON-REVERSING
FV, FVNR	FULL VOLTAGE NON-REVERSING	(R)	REWIRE, RELOCATE, REVISE, REUSE, REPLACE
FVR	FULL VOLTAGE REVERSING	S	SWITCH
FWD	FORWARD	SCH	SCHEDULE
(F)	FUTURE	SEC	SECONDARY
G	GREEN	SECS	SECONDS
GALV	GALVANIZED	SEL	SELECTOR
GFI	GROUND FAULT CIRCUIT INTERRUPTER	SFA	SERVICE FACTOR AMPS
GND	GROUND	SP	SET POINT
GRS	GALVANIZED RIGID STEEL CONDUIT	SPEC	SPECIFICATION
GRS-PVC	PVC COATED GRS CONDUIT	SR	SENSING RELAY
HI	HIGH	SS	STAINLESS STEEL
HID	HIGH INTENSITY DISCHARGE	SSS	SOLID STATE SOFT STARTER
HIM	HUMAN INTERFACE MODULE	STT	START
HOA	HAND-OFF-AUTO	STP	STOP
HP	HORSEPOWER	SV	SOLENOID VALVE
HPS	HIGH PRESSURE SODIUM	SW	SWITCH
HS	HAND SWITCH	SWBD	SWITCHBOARD
HTR	HEATER	SYMM	SYMMETRICAL
HZ	HERTZ (CYCLES PER SECOND)	T	TRIP
HZD	HAZARDOUS AREA, EXPLOSION PROOF	TB	TERMINAL BLOCK
I	INTERLOCK	TC	TIME CLOCK
I/O	INPUT/OUTPUT	TDOD	TIME DELAY ON DE-ENERGIZATION
IC	SHORT CKT INTERRUPTING CURRENT (SYMM)	TDOE	TIME DELAY ON ENERGIZATION
ICR	INSTRUMENTATION CONTROL RELAY	TEL	TELEMETRY
INCAN	INCANDESCENT	TELCO	TELEPHONE COMPANY
INST	INSTANTANEOUS	TM	THERMAL MAGNETIC
ISR	INTRINSICALLY SAFE RELAY	TEMP	TEMPERATURE
J	JUNCTION BOX	TOC	TOTAL ORGANIC CARBON
K	KILO, PREFIX	TR	TIME DELAY RELAY
LA	LIGHTNING ARRESTOR	TRIAD	TWISTED & SHIELDED 3 CONDUCTOR
LC	LIGHTING CONTACTOR	TS	TEMPERATURE SWITCH
LEL	LOWER EXPLOSIVE LIMIT	TSPR	TWISTED & SHIELDED PAIR
LO	LOW	TYP	TYPICAL
LOS	LOCK-OUT STOP SWITCH	UG	UNDERGROUND
LPU	LINE PROTECTION UNIT	UON	UNLESS OTHERWISE NOTED
LR	LATCHING RELAY	V	VOLTAGE
LS	LEVEL SWITCH	VA	VOLT AMPS
M	MOTOR CONTACTOR	VAR	VOLT AMP REACTIVE
MAX	MAXIMUM	VFD	VARIABLE FREQUENCY DRIVE
MCC	MOTOR CONTROL CENTER	VLV	VALVE
MCM	THOUSAND CIRCULAR MILS	VM	VOLTMETER
MCP	MOTOR CIRCUIT PROTECTOR	VTQ	VARIABLE TORQUE
MD	MOISTURE DETECTION	W	WHITE, WATTS
MH	MANHOLE	WHM	WATT-HOUR METER
MHD	METAL HALIDE	WM	WATTMETER
MIN	MINIMUM	WP	WATERPROOF, WEATHER PROOF
MIN5	MINUTES	WS	TORQUE SWITCH, WATER SURFACE
MNFR	MANUFACTURER	XFMR	TRANSFORMER
MODEM	MODULATOR/DEMULATOR	XS	MISCELLANEOUS SWITCH
MOV	MOTOR OPERATED VALVE	Y	YELLOW
MPS	MOTOR PROTECTION SYSTEM	Z	IMPEDANCE
MTR	MOTOR	ZS	LIMIT SWITCH

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
SWITCHES - PROCESS				DEVICES - RELAY			
	FLOW SWITCH - CLOSSES UPON INCREASING FLOW		CONTROL RELAY CR1 WITH NORMALLY OPEN CONTACT ON LINE 28 & NORMALLY CLOSED CONTACT ON LINE 111		RESISTOR		PANEL OR EQUIPMENT WIRING
	FLOW SWITCH - OPENS UPON INCREASING FLOW		TIME DELAY RELAY TR2 - ADJUSTABLE TIME DELAY RANGE & SETTING AS SHOWN		POTENTIOMETER		FIELD WIRING
	LEVEL SWITCH - CLOSSES UPON INCREASING LEVEL	TD0E TD0D	TIME DELAY ON ENERGIZATION TIME DELAY ON DE-ENERGIZATION		CAPACITOR, FIXED		CONDUCTORS - NOT CONNECTED
	LEVEL SWITCH - OPENS UPON INCREASING LEVEL	M1	CONTACTOR OR STARTER M1		CAPACITOR, ADJUSTABLE		CONDUCTORS - CONNECTED
	PRESSURE SWITCH - CLOSSES UPON INCREASING PRESSURE (INCREASING VACUUM)	SV	SOLENOID		DIODE		GROUND
	PRESSURE SWITCH - OPENS UPON INCREASING PRESSURE (INCREASING VACUUM)	CR1 (105)	NORMALLY OPEN, RELAY CONTACT - ACTUATED BY RELAY CR1 COIL LOCATED ON LINE 105		DIODE, ZENER		CHASSIS OR FRAME GROUND
	TEMPERATURE SWITCH - CLOSSES UPON INCREASING TEMPERATURE	CR1	NORMALLY CLOSED, RELAY CONTACT - ACTUATED BY RELAY CR1		VARISTOR TRANSIENT VOLTAGE SUPPRESSOR		PLUG AND RECEPTACLE
	TEMPERATURE SWITCH - OPENS UPON INCREASING TEMPERATURE	CR1	NORMALLY OPEN, TIME DELAY RELAY CONTACT - CONTACT CLOSSES AFTER TR2 IS ENERGIZED		VOLTAGE SURGE SUPPRESSOR, AC		INCOMING LINE
	LIMIT SWITCH - CLOSSES AT SET LIMIT	TR2	NORMALLY OPEN, TIME DELAY RELAY CONTACT - CONTACT CLOSSES AFTER TR2 IS ENERGIZED		LIGHT EMITTING DIODE		TERMINAL BLOCKS
	LIMIT SWITCH - OPENS AT SET LIMIT	TR2	NORMALLY CLOSED, TIME DELAY RELAY CONTACT - CONTACT CLOSSES AFTER TR2 IS DE-ENERGIZED		TRANSISTOR		TERMINALS
	PROXIMITY SWITCH - CLOSSES UPON DECREASING DISTANCE	TR2	NORMALLY OPEN, TIME DELAY RELAY CONTACT - CONTACT CLOSSES AFTER TR2 IS DE-ENERGIZED		RESISTANCE TEMPERATURE DETECTOR (RTD)		SHIELDED CABLE
	PROXIMITY SWITCH - OPENS UPON DECREASING DISTANCE	TR2	NORMALLY CLOSED, TIME DELAY RELAY CONTACT - CONTACT CLOSSES AFTER TR2 IS DE-ENERGIZED		THERMISTOR	PLAN - SYMBOLS	
	TORQUE SWITCH - CLOSSES UPON INCREASING TORQUE	TR2	CONTACT OPENS AND CLOSSES IN A TIMED REPEAT CYCLE	DEVICES - MISCELLANEOUS			
	TORQUE SWITCH - OPENS UPON INCREASING TORQUE	DEVICES - OPERATOR				DEVICES - PROTECTIVE	
	TOGGLE OR DISCONNECT SWITCH		INDICATING LIGHT, LETTER "X" INDICATES COLOR: R=RED G=GREEN, A=AMBER, W=WHITE Y=YELLOW, B=BLUE		DISCONNECT, 3 POLE		
	PUSHBUTTON - NORMALLY OPEN, MOMENTARY ACTION		INDICATING LIGHT, PUSH TO TEST		CIRCUIT BREAKER, 3 POLE THERMAL MAGNETIC (TM) OR MOTOR CIRCUIT PROTECT (MCP)		
	PUSHBUTTON - NORMALLY CLOSED, MOMENTARY ACTION		AMP METER		THERMAL MAGNETIC (TM) OR MOTOR CIRCUIT PROTECT (MCP)		
	PUSHBUTTON, MECHANICALLY INTERLOCKED, DOUBLE CIRCUIT - NORMALLY CLOSED AND NORMALLY OPEN, MAINTAINED ACTION		VOLT METER		THERMAL OVERLOAD CONTACT		
	SELECTOR SWITCH, 3 POSITION - CONTACT STATUS SHOWN EXISTS AT POSITION OF H-HAND, O-OFF, OR A-AUTO		ELAPSED TIME METER		THERMAL OVERLOAD ELEMENT		
	SELECTOR SWITCH, 2 POSITION - CONTACT STATUS SHOWN EXISTS AT POSITION AS SHOWN		RUN TIME METER		FUSE WITH BLOWN FUSE INDICATING LIGHT		

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 STATE OF CALIFORNIA

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 INCORPORATED
 SEPTEMBER 4, 1855
 MARIN CO CALIF.

CITY OF SAUSALITO PRIORITY 1 SEWER REPLACEMENT PROJECT 1B

ELECTRICAL SYMBOLS & ABBREVIATIONS

JOB NUMBER 454-02-09-02
DRAWING NUMBER E1
SHEET NUMBER 16 OF 28
REVISION

DWG REF: E02		MOUNTING: FLUSH		VOLTS: 120 / 208		BUS AMPS: 100		ENTRY: NEMA:	
NAMEPLATE: LP		PHASE: 3		PHASE: 3		MAIN BKR: 30		SPD:	
LOCATION:		WIRE: 4		WIRE: 4		KAIC RATING: 10			

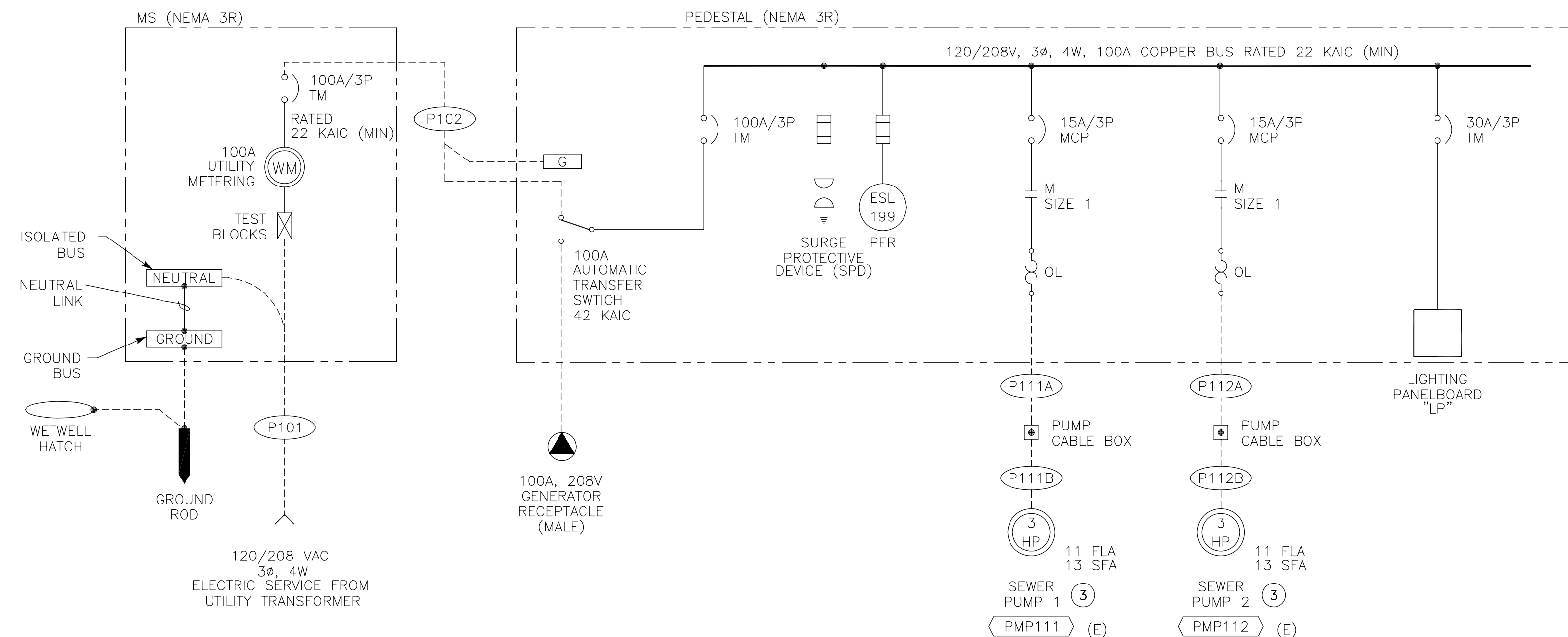
BKR NO.	LOAD DESCRIPTION	LOAD VA	LINE AMPS	BKR AMP/POLE	BKR NO.	PHASE	BKR AMP/POLE	LINE AMPS	LOAD VA	LOAD DESCRIPTION	BKR NO.
1	RTU CONTROLS	500	4	20/1	1	A	2	20/1	200	PED LIGHTS & HEATERS	2
3	MOTOR CONTROLS	500	4	20/1	3	B	4	20/1	180	RECPT	4
5	SPARE	0	0	20/1	5	C	6	20/1	180	TELCO RECEPT	6
7	SPARE	0	0	20/1	7	A	8	20/1	0	SPARE	8

PHASE	A	B	C	
LEFT SIDE AMPS	4	4	0	
LEFT SIDE KVA	0.50	0.50	0.00	
TOTAL KVA	1.56			
TOTAL AMPS @ 240V, 3P	7.5			
DIVERSITY FACTOR	0.90			
LOAD KVA	1.40			

PHASE	A	B	C	
RIGHT SIDE AMPS	2	2	2	
RIGHT SIDE KVA	0.20	0.18	0.18	
LEFT SIDE KVA	0.50	0.50	0.00	
TOTAL PHASE KVA	0.70	0.68	0.18	
TOTAL PHASE AMPS	6	6	2	
% OF AVERAGE	135	131	35	

NOTES: 1. MEANS OF WIRE COLOR CODING SHALL BE POSTED ON PANELBOARD PER NEC 210 (5).

LOAD CALCULATIONS	UTILITY SERVICE					
	LOAD AMPS	QTY	LOAD VA	RUN AMPS	QTY RUN	RUN VA
3 PUMP	11	2	7,638		2	7,638
LIGHTING PANEL LP	3.9	1	1,404		1	1,404
SUBTOTAL	25		9,042	25		9,042
DIVERSITY FACTOR	100 %					
3 HP Largest motor @ 25% additional				3,819	0.25	955
TOTAL						9,996
/ 208 V, 3 Phase 4 Wire Service Amps = 28 Amps						
Service Size = 35 Amps						
Feeder Breaker Size = 100 Amps						
% Feeder Breaker Load = 34.7%						



ONE LINE DIAGRAM ①②

- NOTES: ① ALL LUGS SHALL BE COPPER, SIZE FOR WIRES LISTED IN "CONDUIT & WIRE ROUTING SCHEDULE".
- ② TYPICAL FOR BOTH ANCHOR PS AND SPINNAKER PS.
- ③ SEWER PUMPS SHALL BE REPLACED AT SPINNAKER PS.

POWER UTILITY SERVICE DIVISION OF WORK	Electrical Contractor	Utility Company
Primary Conduits	N/A	
Primary Conductors	N/A	
Transformer Pad	N/A	
Transformer		N/A
Transformer Connections		N/A
Transformer Ground Rod	N/A	
Secondary Conduits	X	
Secondary Conductors		X
Power Pull Box	N/A	
Bollards	N/A	
Meter Enclosure/Base	X	
Utility Meter		X
C/T Enclosure	N/A	
Current Transformers C/T		N/A
Meter Room Lock Box	N/A	

Power Company Information:

Contact Name: _____

Power Utility: Pacific Gas & Electric

Address: _____

City/State/Zip: _____

Phone: _____

Fax: _____

Pager: _____

E-mail: _____

Notes:

- All Utility Service installation work shall be done by Contractor per Power Utility Engineered drawings (which supersedes what is shown on Contract Drawings).
- Contractor shall coordinate and schedule all Power Utility inspections and tests in strict compliance with Power Utility requirements.

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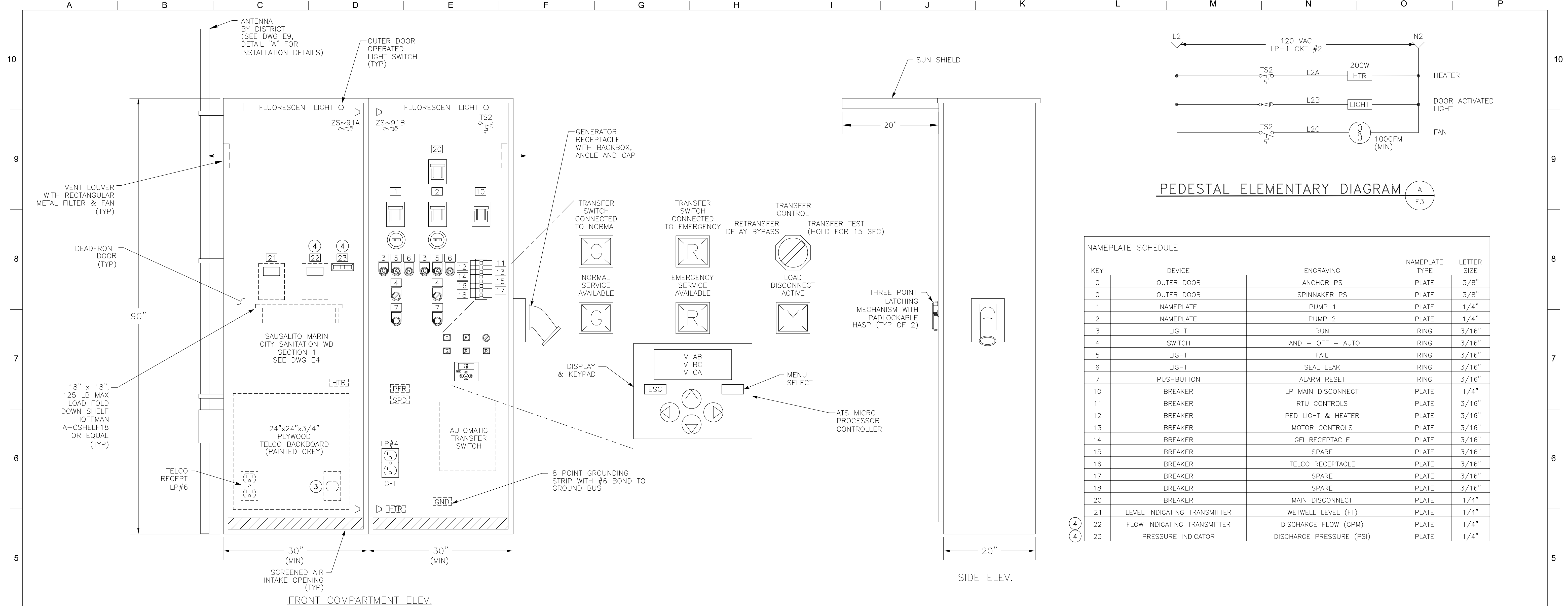
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CITY OF SAUSALITO
 INCORPORATED SEPTEMBER 4, 1965
 MARIN COUNTY CALIFORNIA

CITY OF SAUSALITO PRIORITY 1 SEWER REPLACEMENT PROJECT 1B

TYPICAL ONE LINE DIAGRAM

JOB NUMBER	454-02-09-02
DRAWING NUMBER	E2
SHEET NUMBER	17 OF 28
REVISION	

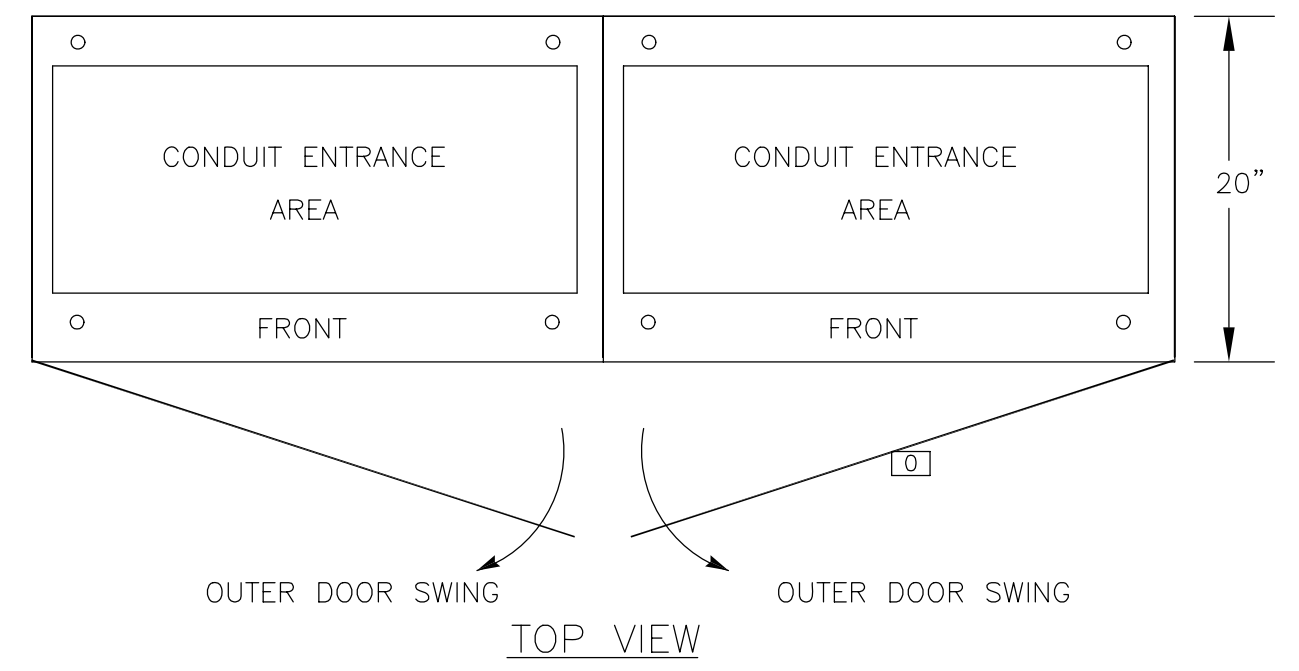


PEDESTAL ELEMENTARY DIAGRAM (A) E3

KEY	DEVICE	ENGRAVING	NAMEPLATE TYPE	LETTER SIZE
0	OUTER DOOR	ANCHOR PS	PLATE	3/8"
0	OUTER DOOR	SPINNAKER PS	PLATE	3/8"
1	NAMEPLATE	PUMP 1	PLATE	1/4"
2	NAMEPLATE	PUMP 2	PLATE	1/4"
3	LIGHT	RUN	RING	3/16"
4	SWITCH	HAND - OFF - AUTO	RING	3/16"
5	LIGHT	FAIL	RING	3/16"
6	LIGHT	SEAL LEAK	RING	3/16"
7	PUSHBUTTON	ALARM RESET	RING	3/16"
10	BREAKER	LP MAIN DISCONNECT	PLATE	1/4"
11	BREAKER	RTU CONTROLS	PLATE	3/16"
12	BREAKER	PED LIGHT & HEATER	PLATE	3/16"
13	BREAKER	MOTOR CONTROLS	PLATE	3/16"
14	BREAKER	GFI RECEPTACLE	PLATE	3/16"
15	BREAKER	SPARE	PLATE	3/16"
16	BREAKER	TELCO RECEPTACLE	PLATE	3/16"
17	BREAKER	SPARE	PLATE	3/16"
18	BREAKER	SPARE	PLATE	3/16"
20	BREAKER	MAIN DISCONNECT	PLATE	1/4"
21	LEVEL INDICATING TRANSMITTER	WETWELL LEVEL (FT)	PLATE	1/4"
22	FLOW INDICATING TRANSMITTER	DISCHARGE FLOW (GPM)	PLATE	1/4"
23	PRESSURE INDICATOR	DISCHARGE PRESSURE (PSI)	PLATE	1/4"

PEDESTAL ELEVATION ① ②

- NOTES: ① ITEMS DRAWN IN DASHED LINES ARE TO BE LOCATED BEHIND DEADFRONT DOORS. OUTER DOORS ARE NOT SHOWN ON FRONT VIEWS FOR ELEVATION CLARITY. ② EACH BREAKER SHALL HAVE PADLOCKABLE PROVISION TO LOCK BREAKER IN THE OFF POSITION. ③ FOR CAT 5 CONNECTORS: 2 FOR TELEPHONE AND 2 FOR T1 LINE. ④ NOT APPLICABLE FOR SPINNAKER PS PER DWG I3.



ELECTRICAL PEDESTAL BASE PLAN

FABRICATION METHODS

- NEMA 4X WEATHER-PROOFED FOR OUTSIDE INSTALLATION.
- ALL OUTER DOORS SEALED WITH PERMANENT TYPE GASKETING.
- EXTERIOR FABRICATED FROM 316 STAINLESS STEEL.
- 12 GAUGE EXTERIOR AND 14 GAUGE INTERIOR.
- ALL SEAMS CONTINUOUS WELDED.
- OUTER DOORS TO BE PADLOCKABLE WITH HEAVY DUTY 3 POINT LATCHES.
- DOOR HINGES AND PINS SHALL BE 316 STAINLESS STEEL.
- NO SCREWS, RIVETS, OR BOLTS SHALL PROTRUDE EXTERNALLY.
- INTERNAL SCREWS, RIVETS, BOLTS, AND NUTS SHALL BE STAINLESS STEEL.
- AS - BUILT WIRING DIAGRAMS SHALL BE SHIPPED WITH EQUIPMENT.
- EXTERIOR PANEL COLOR: TBD, SUBMIT PAINT CHIP DURING SUBMITTAL PROCESS.
- INTERIOR DEADFRONT DOOR COLOR: WHITE.
- PHENOLIC SCREW MOUNTED NAMEPLATES SHALL BE PROVIDED FOR ALL DEVICES ON DEADFRONT.
- FABRICATION AND WIRING SHALL CONFORM TO U.L. AND NEMA STANDARDS.
- ALL WIRING SHALL BE PERMANENTLY LABELED WITH WIRE MARKERS ON BOTH ENDS.
- WIRING DIAGRAMS SHALL BE PLACED IN A PLASTIC DRAWING HOLDER PERMANENTLY ATTACHED TO THE INSIDE OF THE FRONT DOOR.

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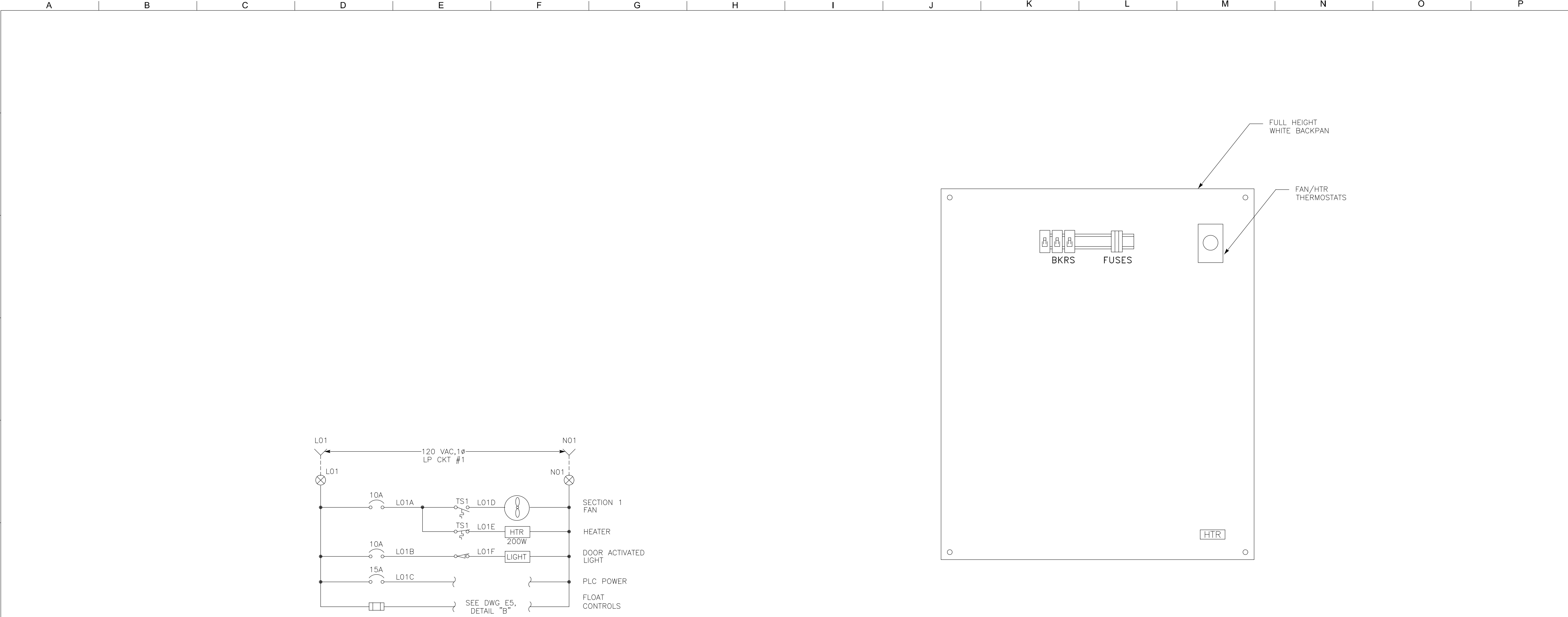
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 MARIN CO CALIF.

CITY OF SAUSALITO PRIORITY 1 SEWER REPLACEMENT PROJECT 1B

TYPICAL PEDESTAL ELEVATION

JOB NUMBER 454-02-09-02
DRAWING NUMBER E3
SHEET NUMBER 18 OF 28
REVISION

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DISTRICT 120 VAC POWER DISTRIBUTION DIAGRAM A
E4 ①

NOTES: ① DISTRIBUTION DIAGRAM REPRESENTATIVE OF MAJOR COMPONENTS ONLY. ADDITIONAL FUSES, CIRCUITS, AND COMPONENT CONNECTIONS MAY BE REQUIRED FOR A FUNCTIONAL SYSTEM.

DISTRICT RTU BACKPAN LAYOUT B
E4

- NOTES:
- ① WIRE ALL DEVICES TO TERMINAL BLOCKS FOR FUTURE MODIFICATIONS.
 - ② PROVIDE 2/3 HEIGHT BACKPAN. LOWER SPACE TO BE USED FOR TELCO BACKBOARD.
 - ③ PROVIDE FULL HEIGHT REMOVABLE DEADFRONT DOOR.
 - ④ PROVIDE BACKPAN & DEARFRONT DOOR TO DISTRICT FOR DISTRICT'S USE. INSTALL RETURNED PANEL & DOOR PRIOR TO INSTALLATION IN FIELD.

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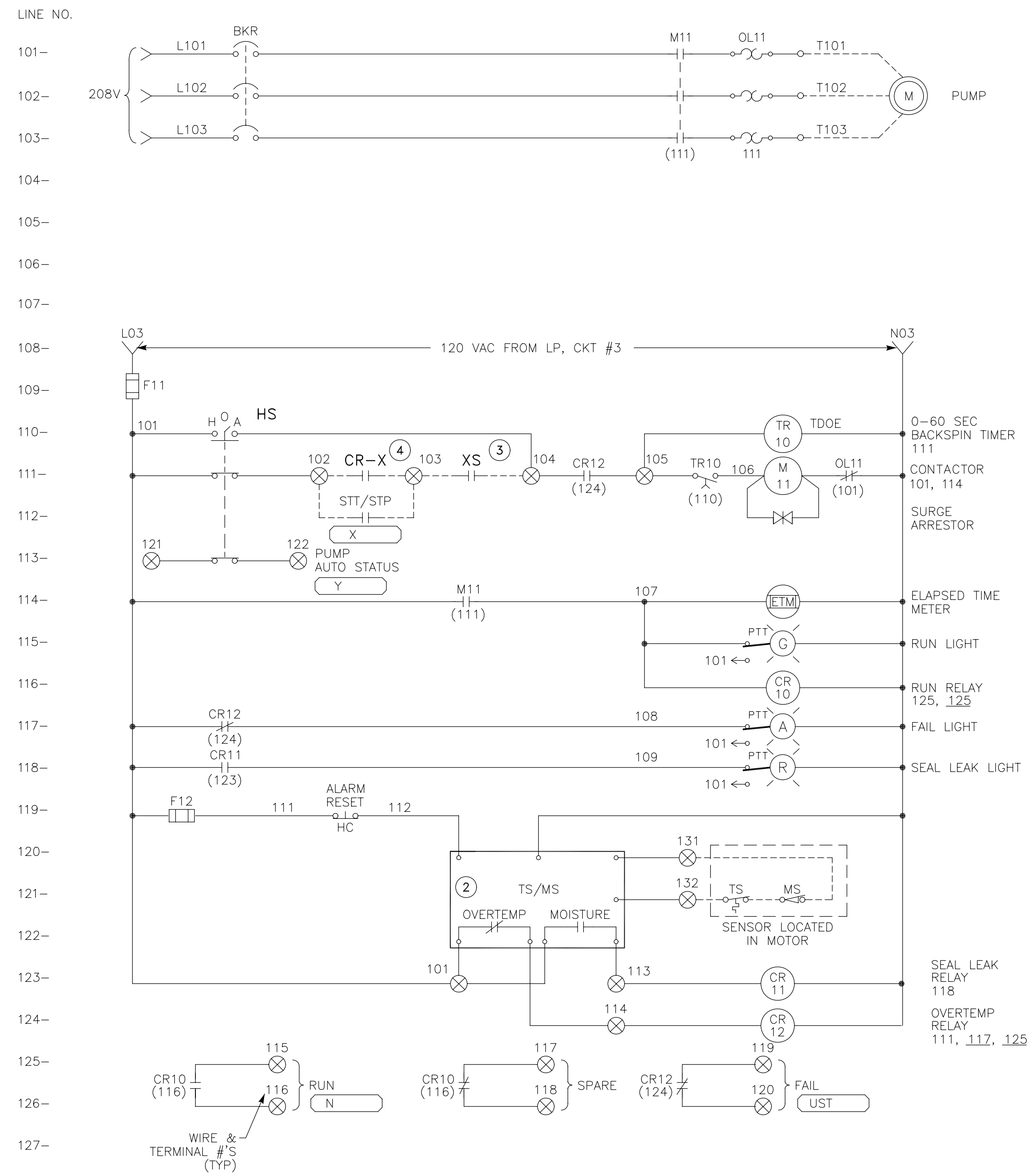
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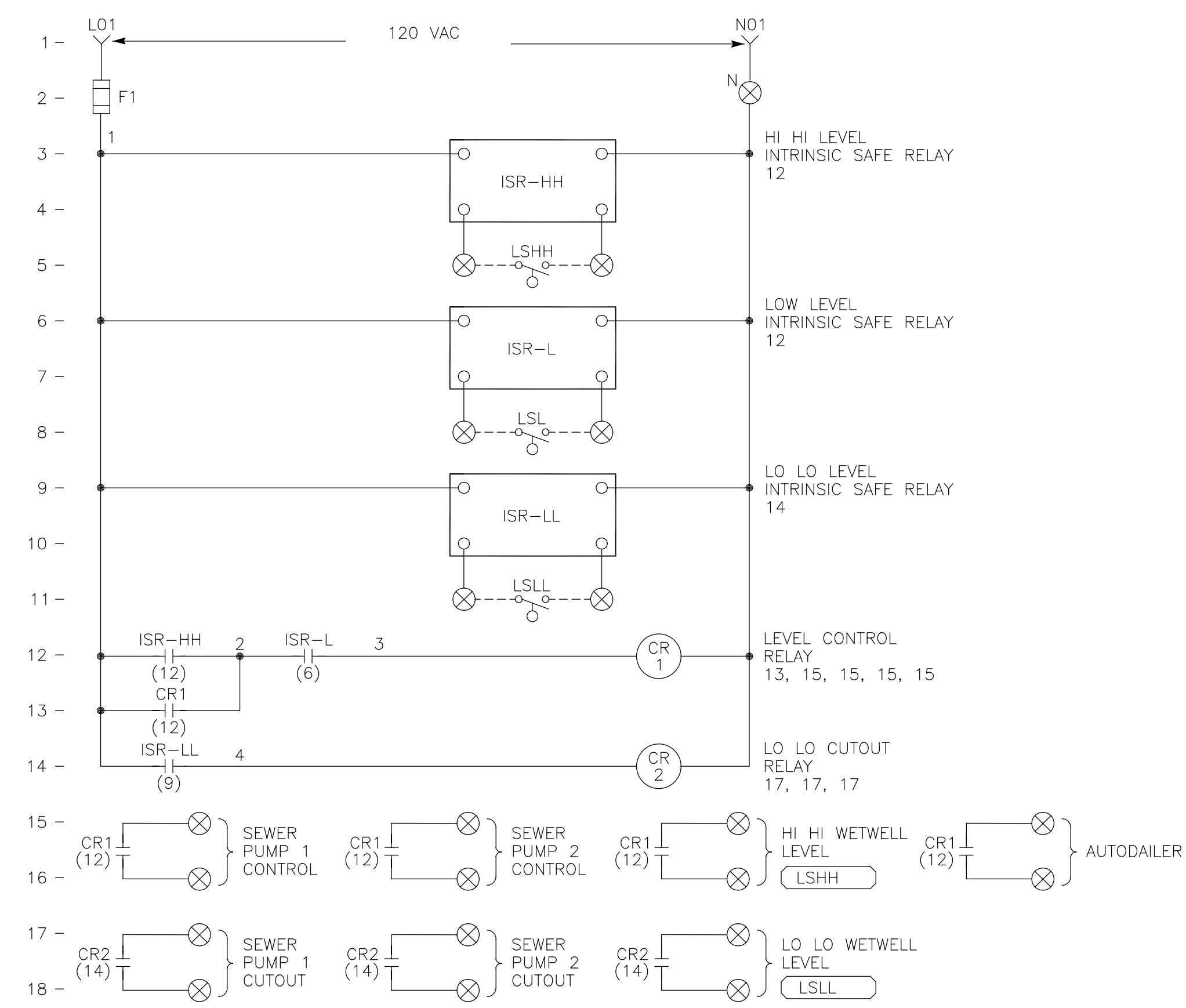
DISTRICT RTU LAYOUT & DISTRIBUTION DIAGRAM

JOB NUMBER 454-02-09-02
DRAWING NUMBER E4
SHEET NUMBER 19 OF 28
REVISION



PUMP ELEMENTARY DIAGRAM A E5 1

- NOTES:
- 1 USE 100 SERIES & TERMINAL #S FOR PUMP 1, 200 #S FOR PUMP 2 SERIES. ETC
 - 2 EXISTING SUBMERSIBLE MOTOR MOISTURE & OVERTEMPORATURE MODULE TO BE INSTALLED & WIRED BY PEDESTAL MANUFACTURER PER DWGS SUPPLIED WITH MODULE IF AVAILABLE.
 - 3 REMOTE SHUTDOWN XS => LSL, ZSH, PSH, ECT., PER P&ID. JUMPER IF NOT USED, THESE ARE TO BE CONTACTS OFF AUXILIARY RELAY CONTACTS LOCATED IN MCC CONTROL PANEL DRIVEN FROM FIELD DEVICE.
 - 4 SEE DWG E5, DETAIL "B" FOR FLOAT BACKUP CONTROL.



FLOAT BACKUP CONTROL ELEMENTARY B E5

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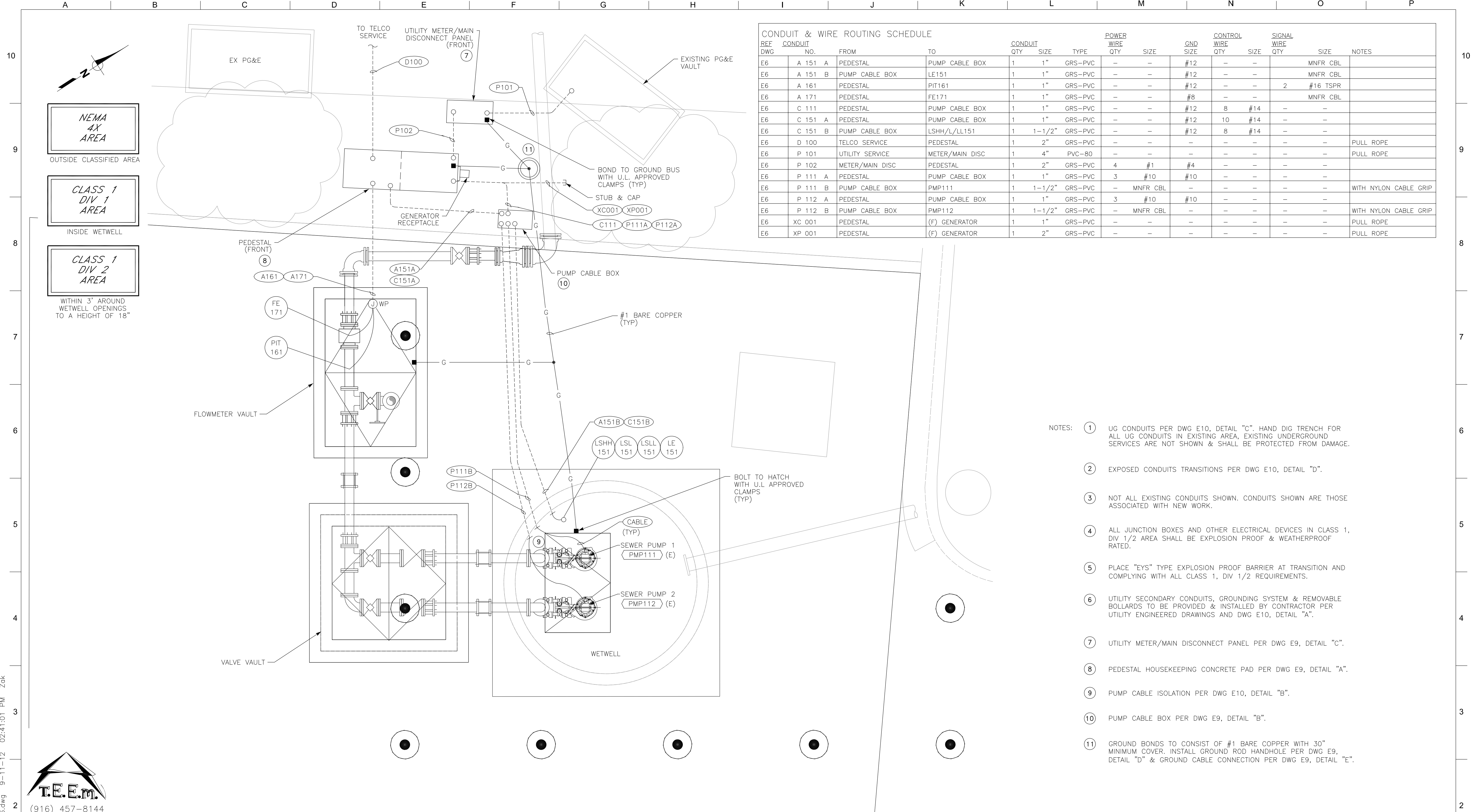
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CITY OF SAUSALITO PRIORITY 1 SEWER REPLACEMENT PROJECT 1B

TYPICAL PUMP ELEMENTARY DIAGRAM

JOB NUMBER 454-02-09-02
DRAWING NUMBER E5
SHEET NUMBER 20 OF 28
REVISION



CONDUIT & WIRE ROUTING SCHEDULE

REF DWG	CONDUIT NO.	FROM	TO	CONDUIT QTY	CONDUIT SIZE	TYPE	POWER WIRE QTY	POWER WIRE SIZE	GND WIRE SIZE	CONTROL WIRE QTY	CONTROL WIRE SIZE	SIGNAL WIRE QTY	SIGNAL WIRE SIZE	NOTES
E6	A 151 A	PEDESTAL	PUMP CABLE BOX	1	1"	GRS-PVC	-	-	#12	-	-	-	-	MNFR CBL
E6	A 151 B	PUMP CABLE BOX	LE151	1	1"	GRS-PVC	-	-	#12	-	-	-	-	MNFR CBL
E6	A 161	PEDESTAL	PIT161	1	1"	GRS-PVC	-	-	#12	-	-	2	#16 TSPR	
E6	A 171	PEDESTAL	FE171	1	1"	GRS-PVC	-	-	#8	-	-	-	-	MNFR CBL
E6	C 111	PEDESTAL	PUMP CABLE BOX	1	1"	GRS-PVC	-	-	#12	8	#14	-	-	
E6	C 151 A	PEDESTAL	PUMP CABLE BOX	1	1"	GRS-PVC	-	-	#12	10	#14	-	-	
E6	C 151 B	PUMP CABLE BOX	LSHH/L/LL151	1	1-1/2"	GRS-PVC	-	-	#12	8	#14	-	-	
E6	D 100	TELCO SERVICE	PEDESTAL	1	2"	GRS-PVC	-	-	-	-	-	-	-	PULL ROPE
E6	P 101	UTILITY SERVICE	METER/MAIN DISC	1	4"	PVC-80	-	-	-	-	-	-	-	PULL ROPE
E6	P 102	METER/MAIN DISC	PEDESTAL	1	2"	GRS-PVC	4	#1	#4	-	-	-	-	
E6	P 111 A	PEDESTAL	PUMP CABLE BOX	1	1"	GRS-PVC	3	#10	#10	-	-	-	-	
E6	P 111 B	PUMP CABLE BOX	PMP111	1	1-1/2"	GRS-PVC	-	-	-	-	-	-	-	WITH NYLON CABLE GRIP
E6	P 112 A	PEDESTAL	PUMP CABLE BOX	1	1"	GRS-PVC	3	#10	#10	-	-	-	-	
E6	P 112 B	PUMP CABLE BOX	PMP112	1	1-1/2"	GRS-PVC	-	-	-	-	-	-	-	WITH NYLON CABLE GRIP
E6	XC 001	PEDESTAL	(F) GENERATOR	1	1"	GRS-PVC	-	-	-	-	-	-	-	PULL ROPE
E6	XP 001	PEDESTAL	(F) GENERATOR	1	2"	GRS-PVC	-	-	-	-	-	-	-	PULL ROPE

- NOTES:
- UG CONDUITS PER DWG E10, DETAIL "C". HAND DIG TRENCH FOR ALL UG CONDUITS IN EXISTING AREA, EXISTING UNDERGROUND SERVICES ARE NOT SHOWN & SHALL BE PROTECTED FROM DAMAGE.
 - EXPOSED CONDUITS TRANSITIONS PER DWG E10, DETAIL "D".
 - NOT ALL EXISTING CONDUITS SHOWN. CONDUITS SHOWN ARE THOSE ASSOCIATED WITH NEW WORK.
 - ALL JUNCTION BOXES AND OTHER ELECTRICAL DEVICES IN CLASS 1, DIV 1/2 AREA SHALL BE EXPLOSION PROOF & WEATHERPROOF RATED.
 - PLACE "EYS" TYPE EXPLOSION PROOF BARRIER AT TRANSITION AND COMPLYING WITH ALL CLASS 1, DIV 1/2 REQUIREMENTS.
 - UTILITY SECONDARY CONDUITS, GROUNDING SYSTEM & REMOVABLE BOLLARDS TO BE PROVIDED & INSTALLED BY CONTRACTOR PER UTILITY ENGINEERED DRAWINGS AND DWG E10, DETAIL "A".
 - UTILITY METER/MAIN DISCONNECT PANEL PER DWG E9, DETAIL "C".
 - PEDESTAL HOUSEKEEPING CONCRETE PAD PER DWG E9, DETAIL "A".
 - PUMP CABLE ISOLATION PER DWG E10, DETAIL "B".
 - PUMP CABLE BOX PER DWG E9, DETAIL "B".
 - GROUND BONDS TO CONSIST OF #1 BARE COPPER WITH 30" MINIMUM COVER. INSTALL GROUND ROD HANDHOLE PER DWG E9, DETAIL "D" & GROUND CABLE CONNECTION PER DWG E9, DETAIL "E".

ANCHOR PUMP STATION ELECTRICAL SITE PLAN ①②③④⑤⑥

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 NO. 15698
 Exp. 6-30-2014
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 STATE OF CALIFORNIA

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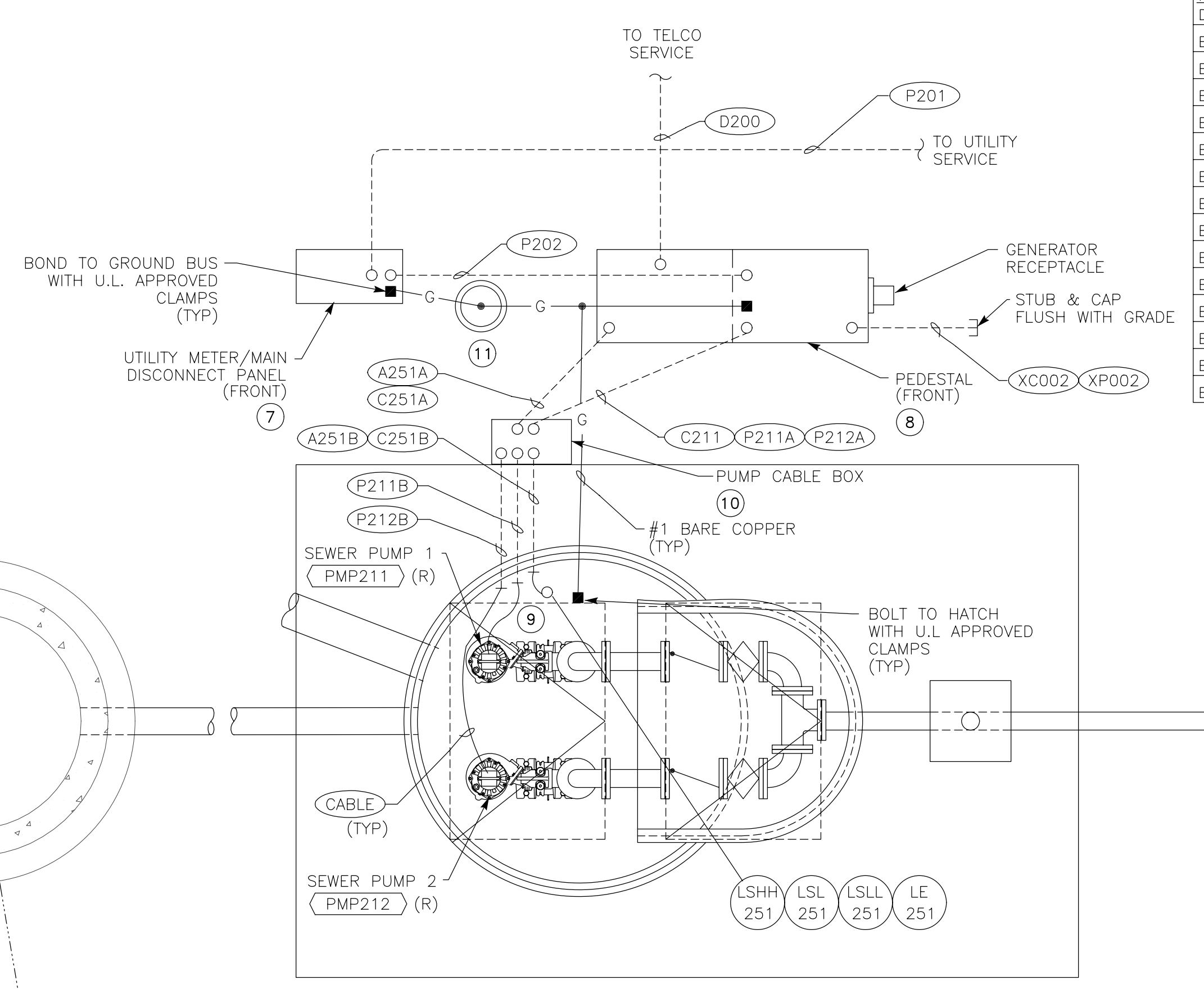
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 ANCHOR PUMP STATION ELECTRICAL SITE PLAN

JOB NUMBER 454-02-09-02
DRAWING NUMBER E6
SHEET NUMBER 21 OF 28
REVISION

NEMA 4X AREA
OUTSIDE CLASSIFIED AREA

CLASS 1 DIV 1 AREA
INSIDE WETWELL

CLASS 1 DIV 2 AREA
WITHIN 3' AROUND WETWELL OPENINGS TO A HEIGHT OF 18"



REF DWG	CONDUIT NO.	FROM	TO	CONDUIT QTY	CONDUIT SIZE	CONDUIT TYPE	POWER WIRE QTY	POWER WIRE SIZE	POWER WIRE TYPE	GND SIZE	CONTROL WIRE QTY	CONTROL WIRE SIZE	SIGNAL WIRE QTY	SIGNAL WIRE SIZE	NOTES
E7	A 251 A	PEDESTAL	PUMP CABLE BOX	1	1"	GRS-PVC	-	-	-	#12	-	-	-	-	MNFR CBL
E7	A 251 B	PUMP CABLE BOX	LE251	1	1"	GRS-PVC	-	-	-	#12	-	-	-	-	MNFR CBL
E7	C 211	PEDESTAL	PUMP CABLE BOX	1	1"	GRS-PVC	-	-	-	#12	8	#14	-	-	
E7	C 251 A	PEDESTAL	PUMP CABLE BOX	1	1"	GRS-PVC	-	-	-	#12	10	#14	-	-	
E7	C 251 B	PUMP CABLE BOX	LSHH/L/LL251	1	1-1/2"	GRS-PVC	-	-	-	#12	8	#14	-	-	
E7	D 200	TELCO SERVICE	PEDESTAL	1	2"	GRS-PVC	-	-	-	-	-	-	-	-	PULL ROPE
E7	P 201	UTILITY SERVICE	METER/MAIN DISC	1	4"	PVC-80	-	-	-	-	-	-	-	-	PULL ROPE
E7	P 202	METER/MAIN DISC	PEDESTAL	1	2"	GRS-PVC	4	#1	-	#4	-	-	-	-	
E7	P 211 A	PEDESTAL	PUMP CABLE BOX	1	1"	GRS-PVC	3	#10	-	#10	-	-	-	-	
E7	P 211 B	PUMP CABLE BOX	PMP211	1	1-1/2"	GRS-PVC	-	-	-	-	-	-	-	-	WITH NYLON CABLE GRIP
E7	P 212 A	PEDESTAL	PUMP CABLE BOX	1	1"	GRS-PVC	3	#10	-	#10	-	-	-	-	
E7	P 212 B	PUMP CABLE BOX	PMP212	1	1-1/2"	GRS-PVC	-	-	-	-	-	-	-	-	WITH NYLON CABLE GRIP
E7	XC 002	PEDESTAL	(F) GENERATOR	1	1"	GRS-PVC	-	-	-	-	-	-	-	-	PULL ROPE
E7	XP 002	PEDESTAL	(F) GENERATOR	1	2"	GRS-PVC	-	-	-	-	-	-	-	-	PULL ROPE

SPINNAKER PUMP STATION ELECTRICAL SITE PLAN ①②③④⑤⑥

- NOTES:
- UG CONDUITS PER DWG E10, DETAIL "C". HAND DIG TRENCH FOR ALL UG CONDUITS IN EXISTING AREA, EXISTING UNDERGROUND SERVICES ARE NOT SHOWN & SHALL BE PROTECTED FROM DAMAGE.
 - EXPOSED CONDUITS TRANSITIONS PER DWG E10, DETAIL "D".
 - NOT ALL EXISTING CONDUITS SHOWN. CONDUITS SHOWN ARE THOSE ASSOCIATED WITH NEW WORK.
 - ALL JUNCTION BOXES AND OTHER ELECTRICAL DEVICES IN CLASS 1, DIV 1/2 AREA SHALL BE EXPLOSION PROOF & WEATHERPROOF RATED.
 - PLACE "EYS" TYPE EXPLOSION PROOF BARRIER AT TRANSITION AND COMPLYING WITH ALL CLASS 1, DIV 1/2 REQUIREMENTS.
 - UTILITY SECONDARY CONDUITS, GROUNDING SYSTEM & REMOVABLE BOLLARDS TO BE PROVIDED & INSTALLED BY CONTRACTOR PER UTILITY ENGINEERED DRAWINGS AND DWG E10, DETAIL "A".
 - UTILITY METER/MAIN DISCONNECT PANEL PER DWG E9, DETAIL "C".
 - PEDESTAL HOUSEKEEPING CONCRETE PAD PER DWG E9, DETAIL "A".
 - PUMP CABLE ISOLATION PER DWG E10, DETAIL "B".
 - PUMP CABLE BOX PER DWG E9, DETAIL "B".
 - GROUND BONDS TO CONSIST OF #1 BARE COPPER WITH 30" MINIMUM COVER. INSTALL GROUND ROD HANDHOLE PER DWG E9, DETAIL "D" & GROUND CABLE CONNECTION PER DWG E9, DETAIL "E".

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Exp. 6-30-2014
ELECTRICAL
STATE OF CALIFORNIA

SUBMITTED: *Sharon M. Kimbly*
DATE: 9/11/12

APPROVED: _____
DATE: _____

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CITY OF SAUSALITO PRIORITY 1 SEWER REPLACEMENT PROJECT 1B

SPINNAKER PUMP STATION ELECTRICAL SITE PLAN

JOB NUMBER 454-02-09-02
DRAWING NUMBER E7
SHEET NUMBER 22 OF 28
REVISION

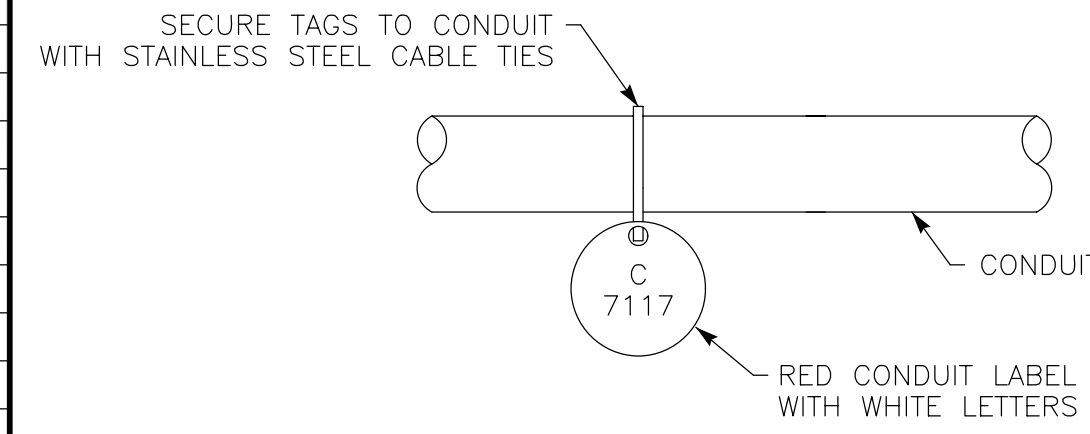
NOTES:

- ① CONDUIT SIZE & TYPE; WIRE FILL FOR CONDUITS TO BE DESIGNATED NEXT TO CONDUIT NUMBER ELLIPSE.
- ② THESE ARE THE CONTRACTOR DESIGNATED DRAWING NUMBERS.
- ③ NOT MORE THAN TWO WIRES PER TERMINAL BLOCK.
- ④ ALL TERMINAL BLOCKS TO BE PLACED IN NUMERICAL ORDER.
- ⑤ ALL NEUTRALS SHALL BE WHITE WIRE COLOR.
- ⑥ #12 GND TO DEVICES SHALL BE BONDED TO #8 GND LUG.

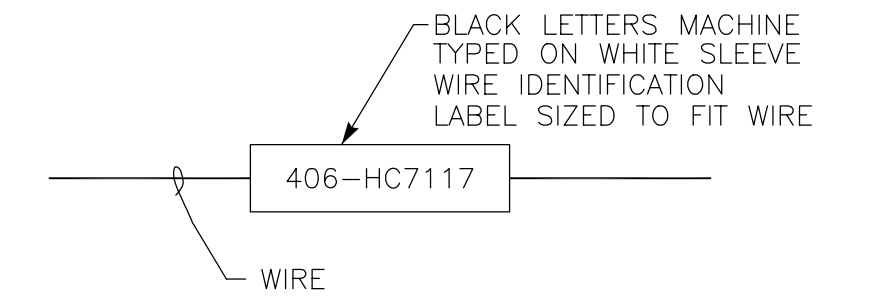
REFERENCE DOCUMENTS

DRAWING #	DESCRIPTION	MANUFACTURER
P712	P&ID DIAGRAM	DESIGN
E717	ELECTRICAL SITE PLAN	DESIGN
PAGE 32, 36	CONDUIT AND CABLE SCHEDULE	DESIGN
② 1354-11	LOOP DIAGRAM	CONTRACTOR
② 1354-68	ELEMENTARY DIAGRAM	CONTRACTOR

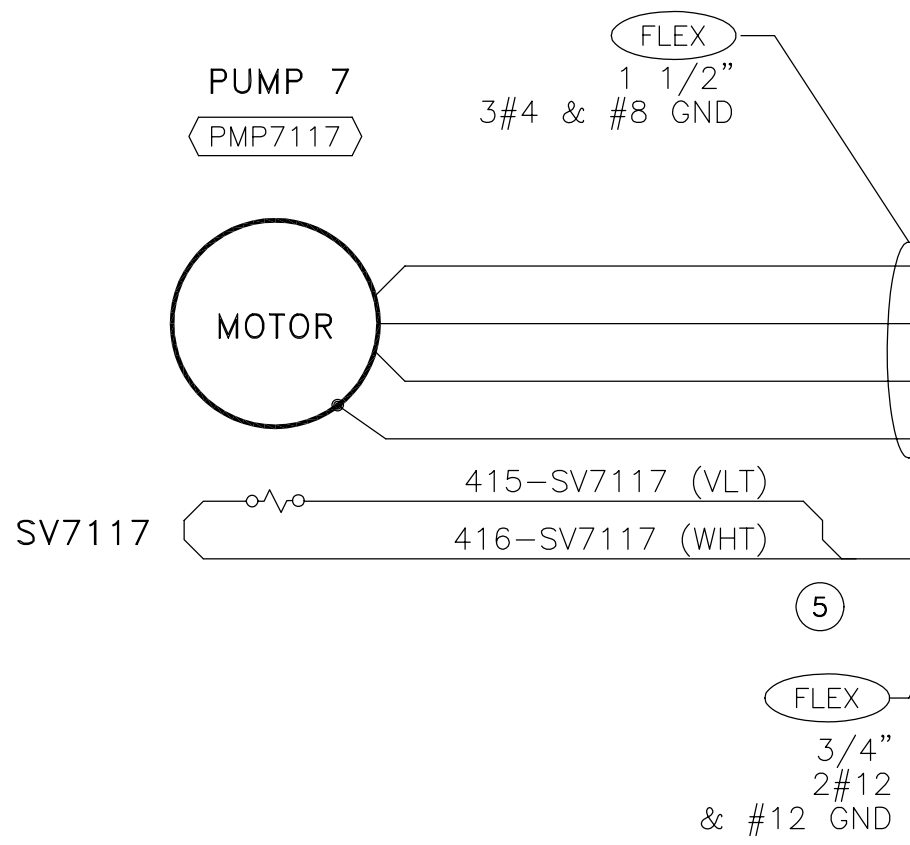
TYPICAL CONDUIT MARKING SYSTEM



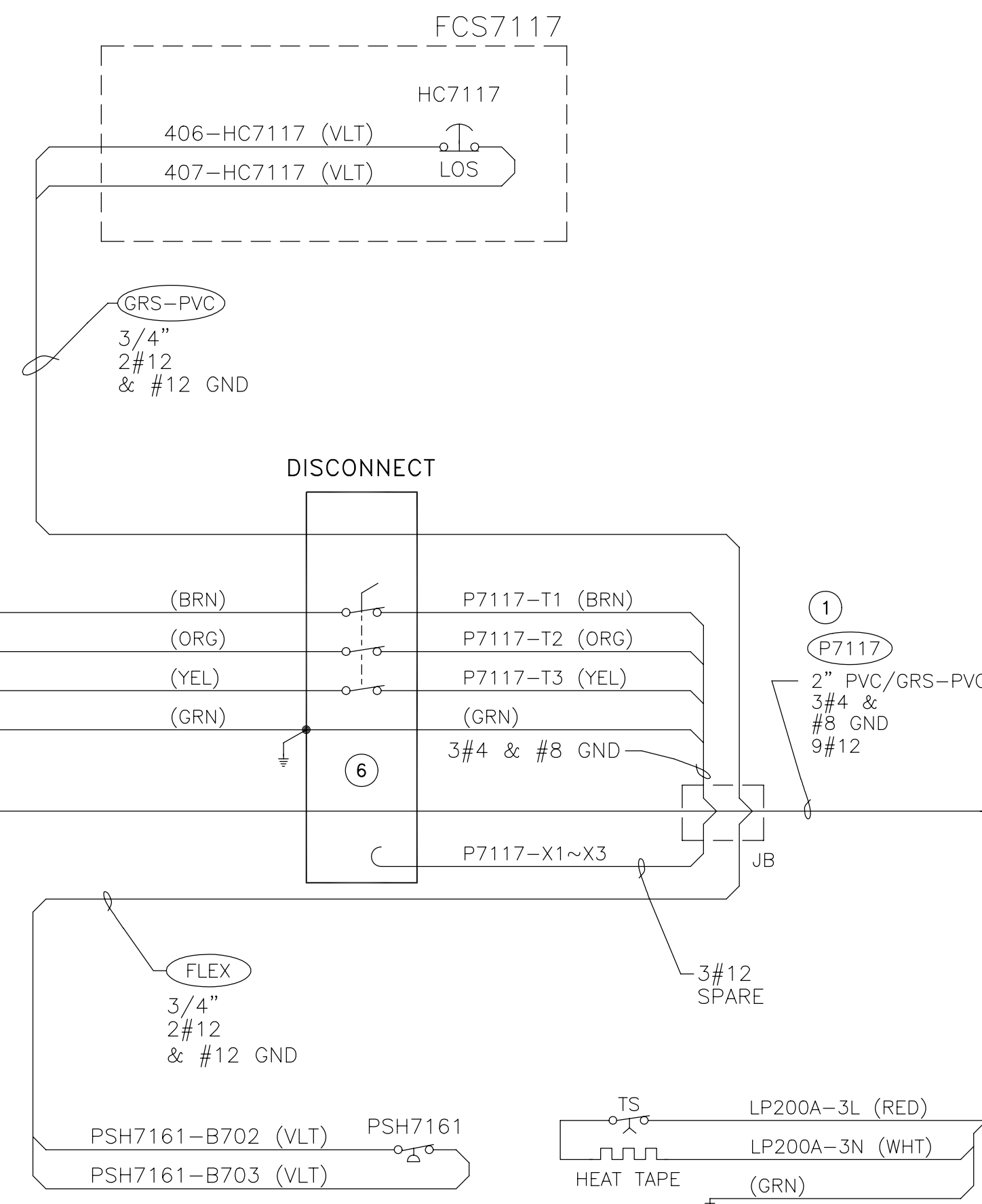
TYPICAL WIRE LABEL



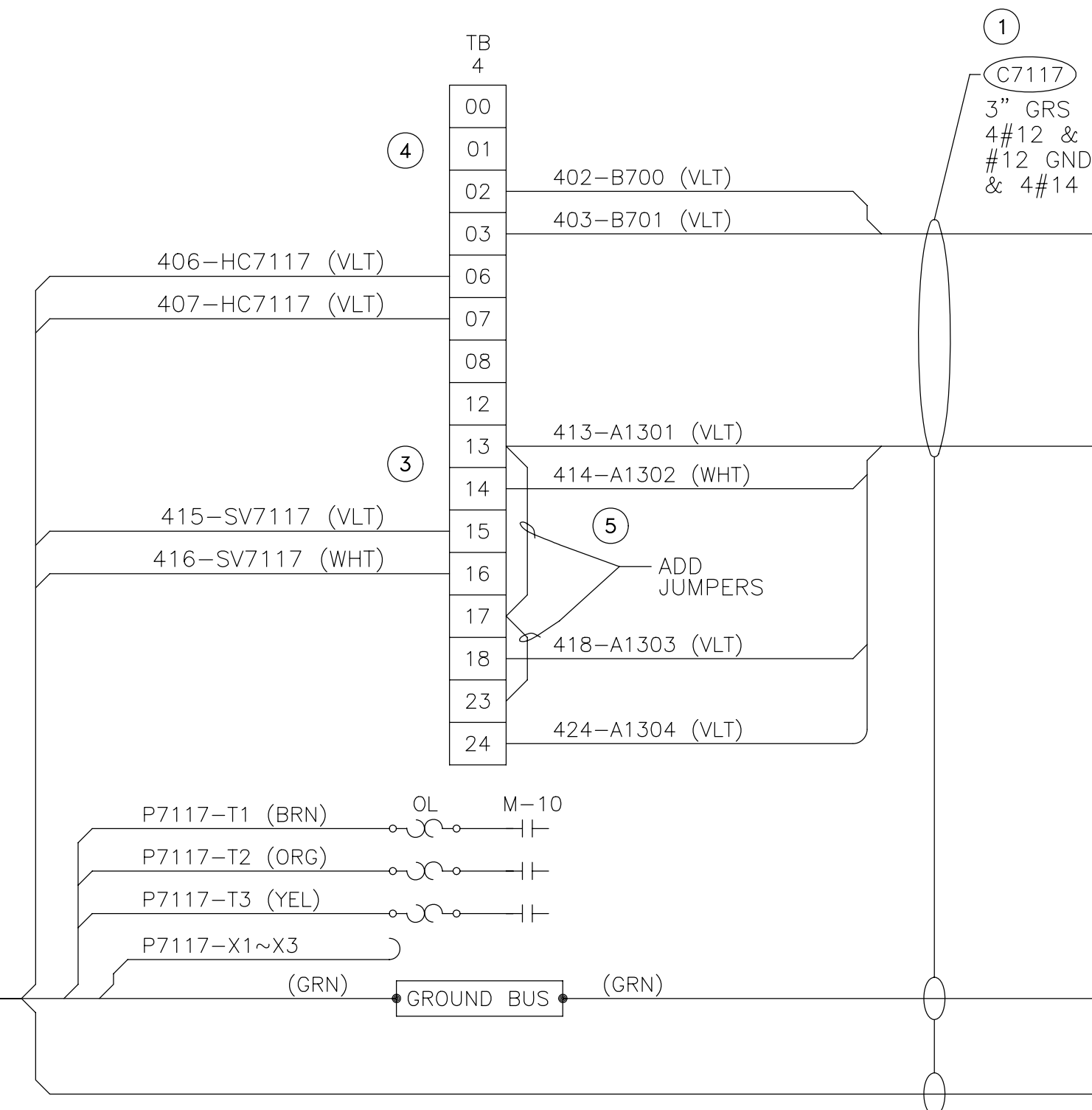
EQUIPMENT



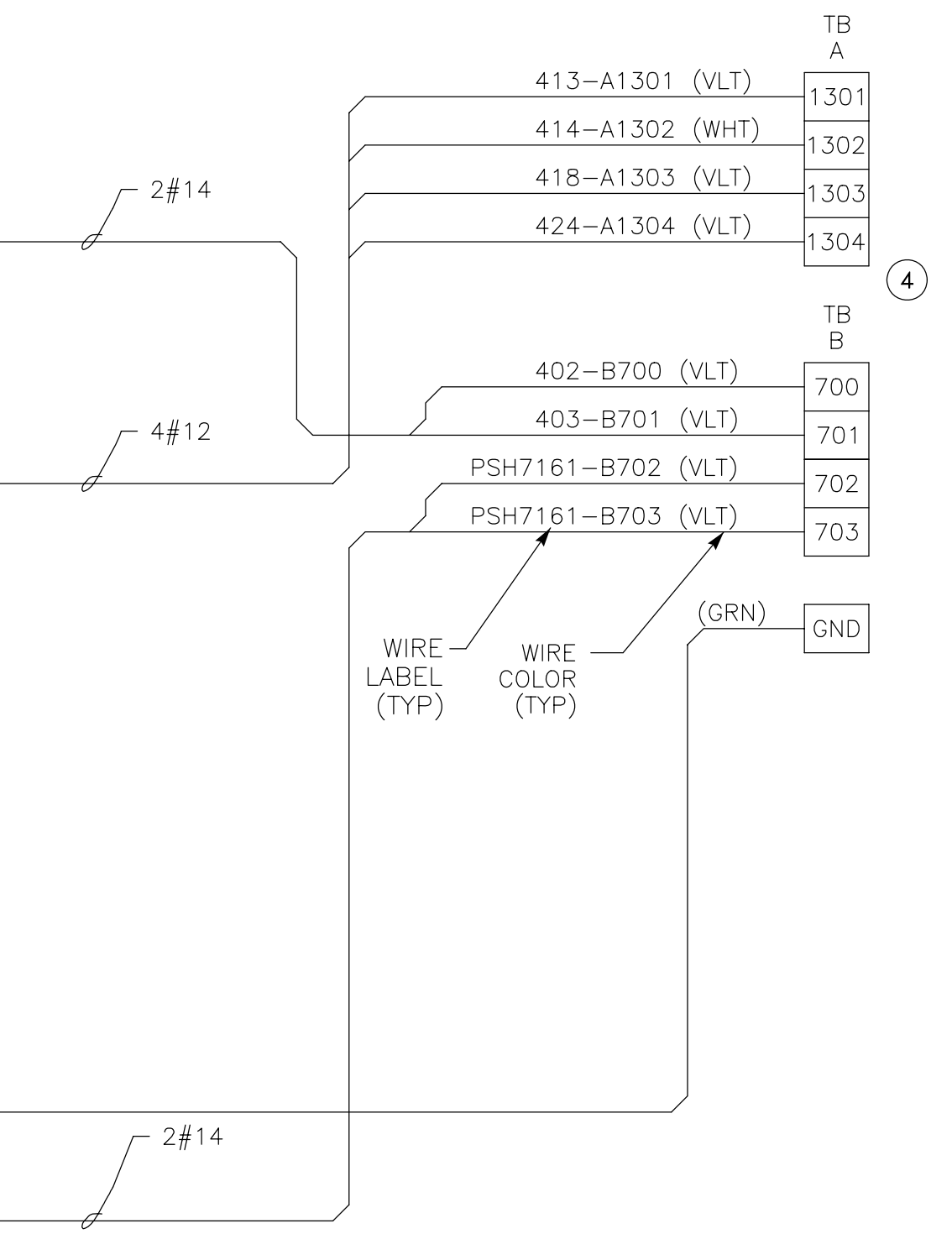
FIELD



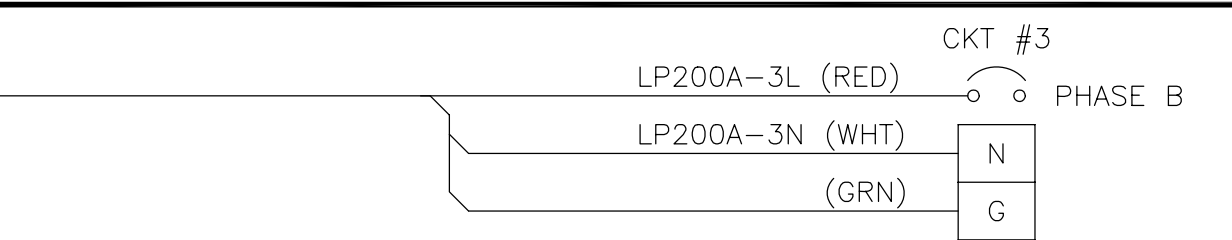
MCC-4 SECTION 1 CUBICLE A~E



CONTROL PANEL NO.2



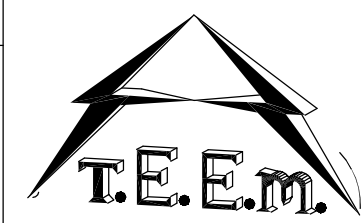
PANELBOARD LP200A



EXAMPLE INTERCONNECTION DIAGRAM

(THIS DRAWING ILLUSTRATES THE FORMAT THAT SHALL BE FOLLOWED IN PREPARATION OF ALL INTERCONNECT DWGS)

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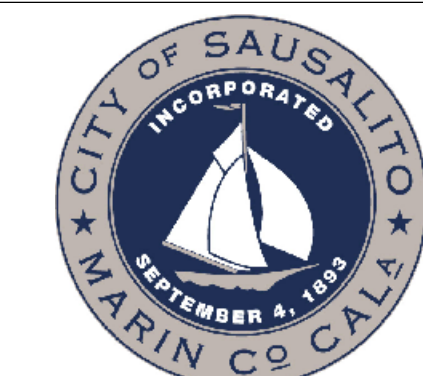
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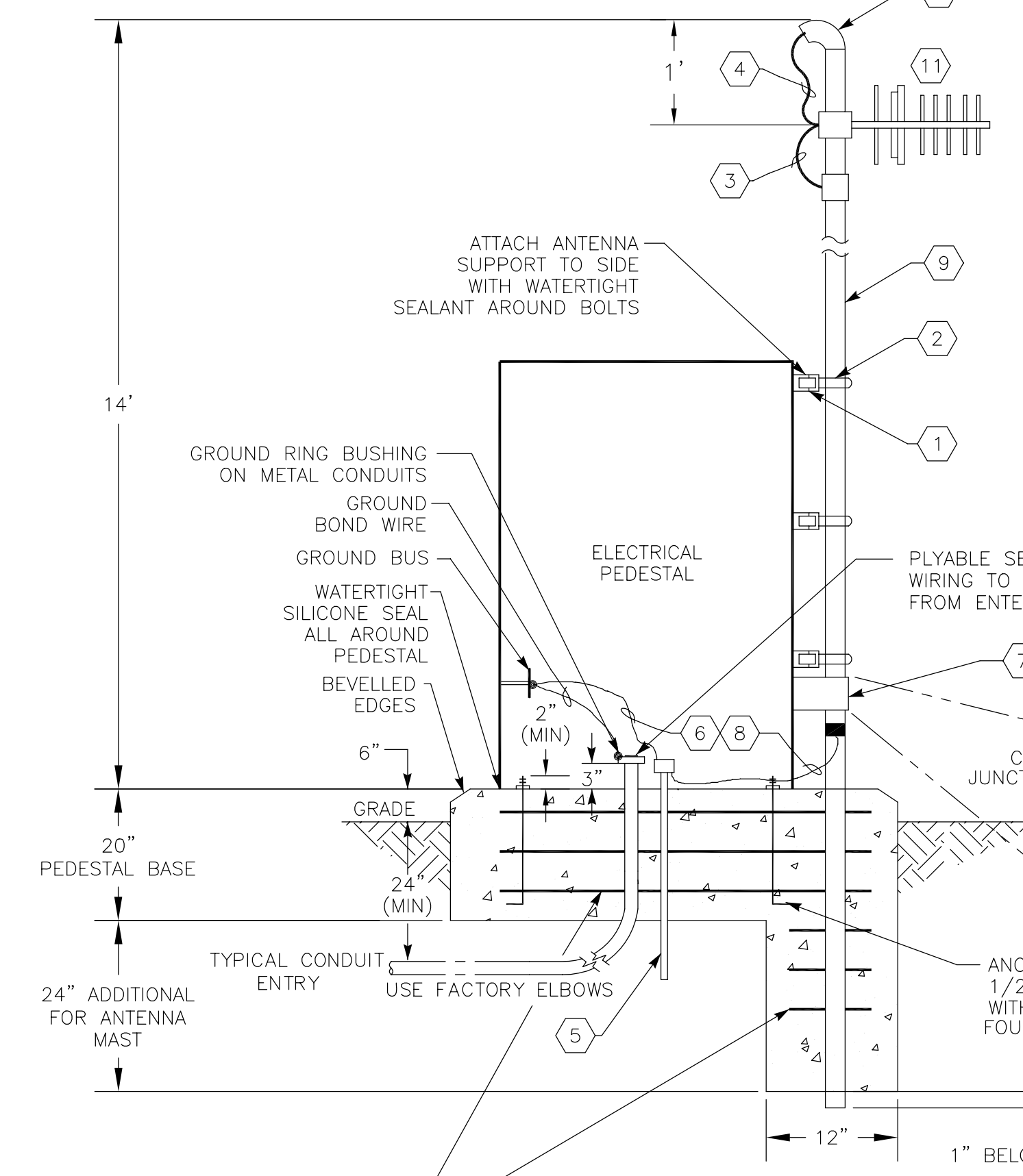
CITY OF SAUSALITO PRIORITY 1 SEWER REPLACEMENT PROJECT 1B

EXAMPLE INTERCONNECT DIAGRAM

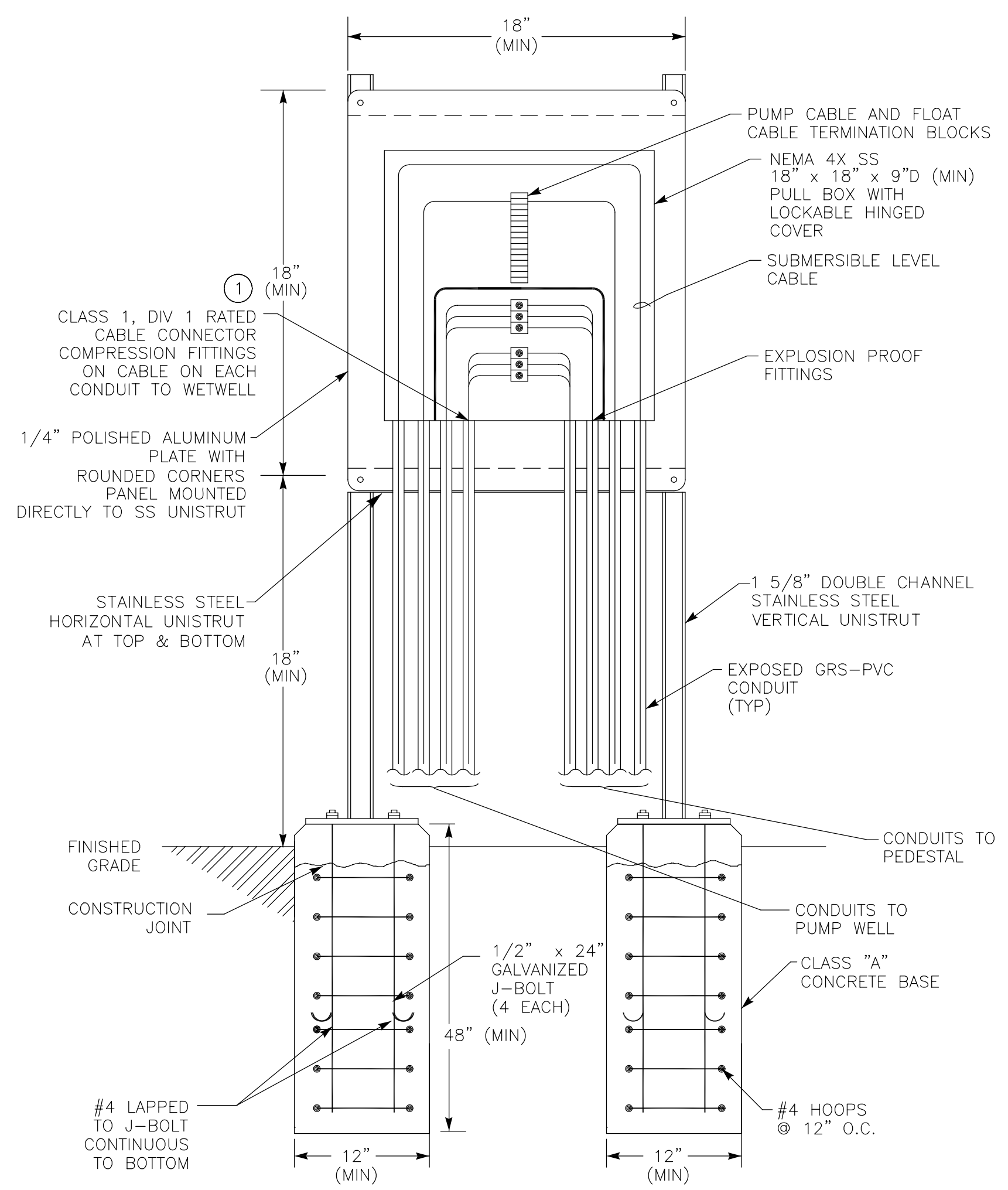
JOB NUMBER 454-02-09-02
DRAWING NUMBER E8
SHEET NUMBER 23 OF 28
REVISION

KEY NOTES

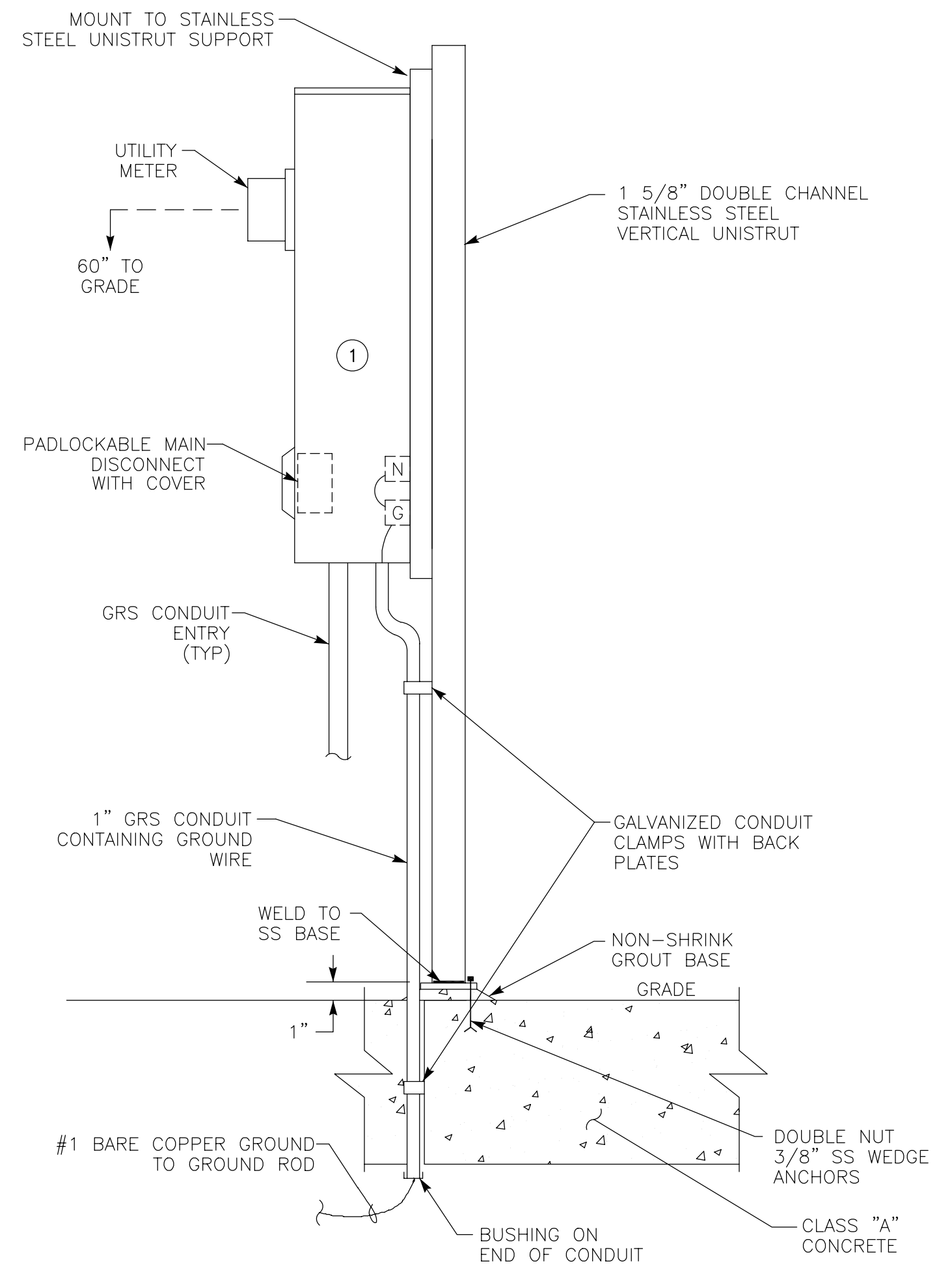
- ① 316 SS UNISTRUT. (TYP)
- ② 316 SS CLAMP (TYP).
- ③ COAXIAL CABLE GROUNDING KIT.
- ④ 1/2" SUPERFLEX COAXIAL CABLE CONNECTED TO ANTENNA WITH CONNECTOR THAT HAS WEATHER SEAL COVERING.
- ⑤ 3/4" DIA x 10' GROUND ROD, INSIDE FRONT PEDESTAL COMPARTMENT.
- ⑥ #1 COPPER GROUND WIRE.
- ⑦ NEMA 3R 6" x 6" x 4" (MIN) COAX JUNCTION BOX WITH SCREW ON ACCESS COVER, PAINTED TO MATCH PEDESTAL. BULKHEAD FEED THRU LIGHTNING ARRESTOR TO BE MOUNTED INSIDE BOX. LOCATE BOX ADJACENT TO MAST & PROVIDE A 2" "T" FOR COAX CABLE PASS THRU.
- ⑧ CONNECT TO GROUND ROD USING CADWELD CONNECTION.
- ⑨ 2" GRS, 14' IN LENGTH
- ⑩ 2" WEATHERHEAD
- ⑪ ANTENNA BY DISTRICT.



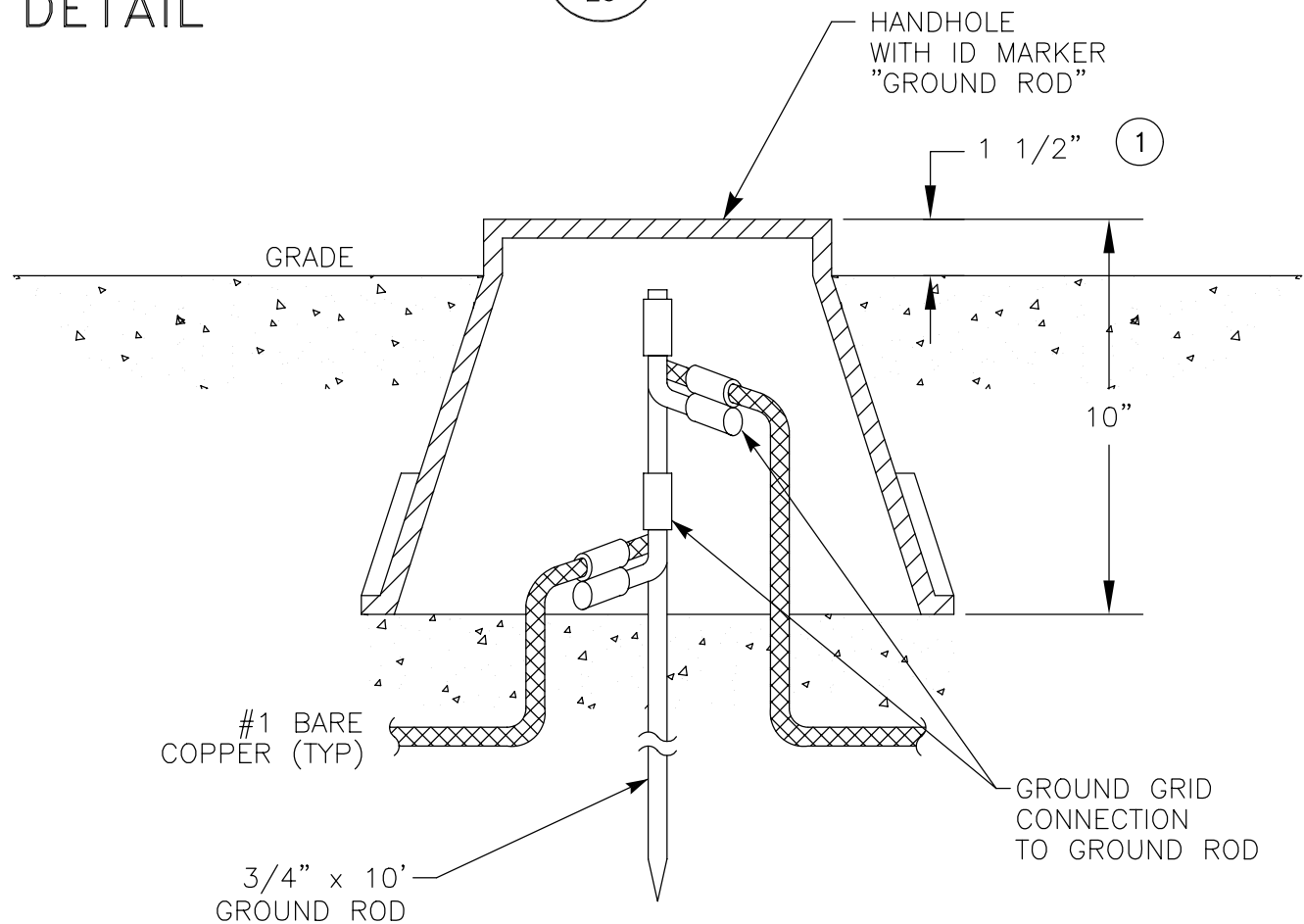
PEDESTAL PLAN & ANTENNA
NOT TO SCALE
DETAIL



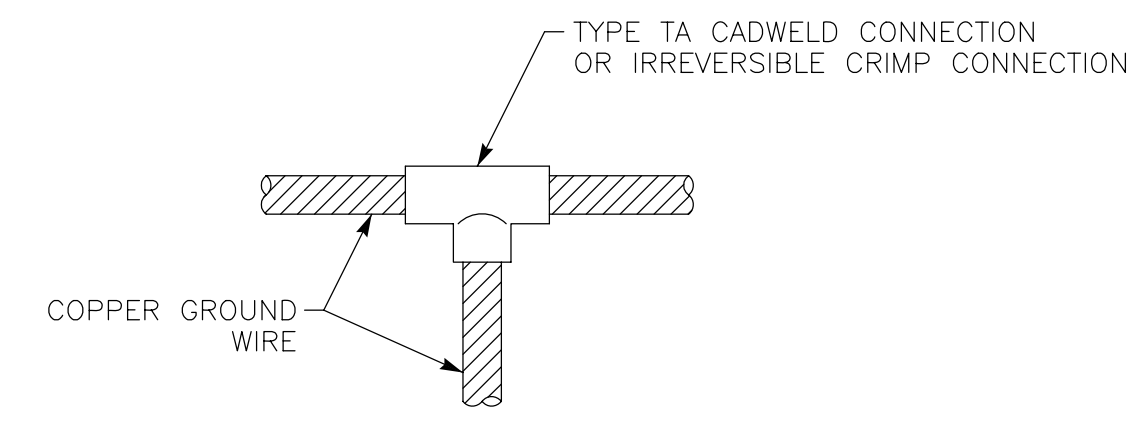
PUMP CABLE BOX
NOT TO SCALE
DETAIL



METER/MAIN DISCONNECT
NOT TO SCALE
DETAIL



HANDHOLE GROUNDING
NOT TO SCALE
DETAIL



GROUND CABLE CONNECTION
NOT TO SCALE
DETAIL

NOTES: ① HUBBELL CORROSION - RESISTANT STRAIGHT NYLON CONNECTORS, MODEL SHC SERIES.

NOTES: ① PAINT ENCLOSURE, SUPPORT & ALL CONDUITS TO MATCH COLOR OF PANEL.

NOTES: ① FLUSH IN PAVED AREAS.

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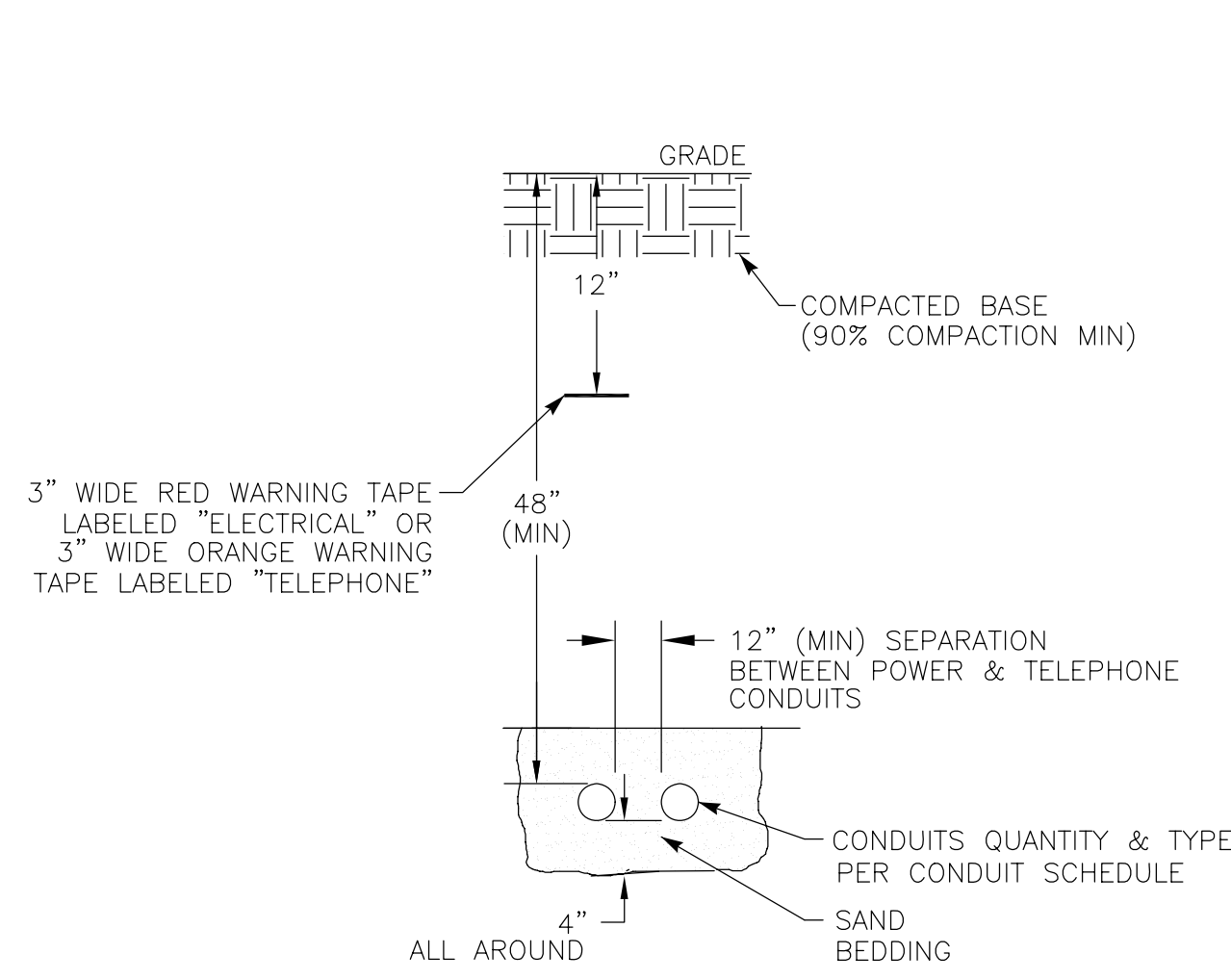
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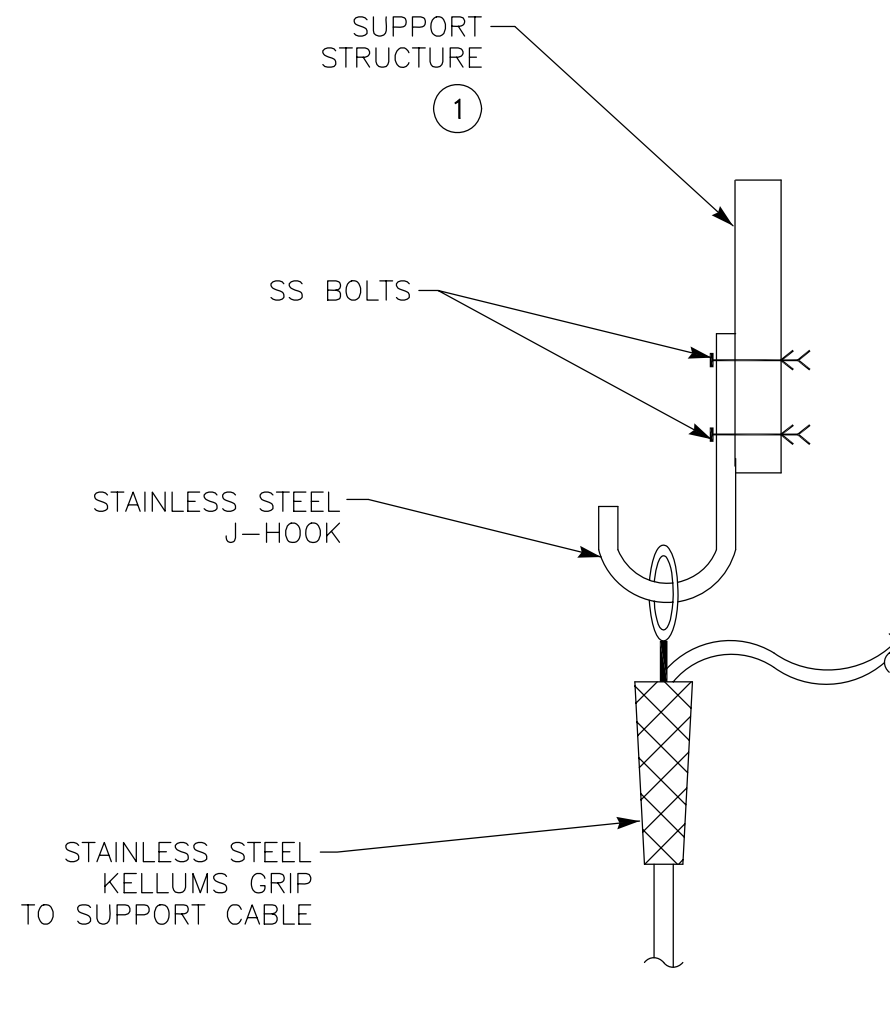


CITY OF SAUSALITO PRIORITY 1 SEWER REPLACEMENT PROJECT 1B
TYPICAL ELECTRICAL DETAILS NO.1

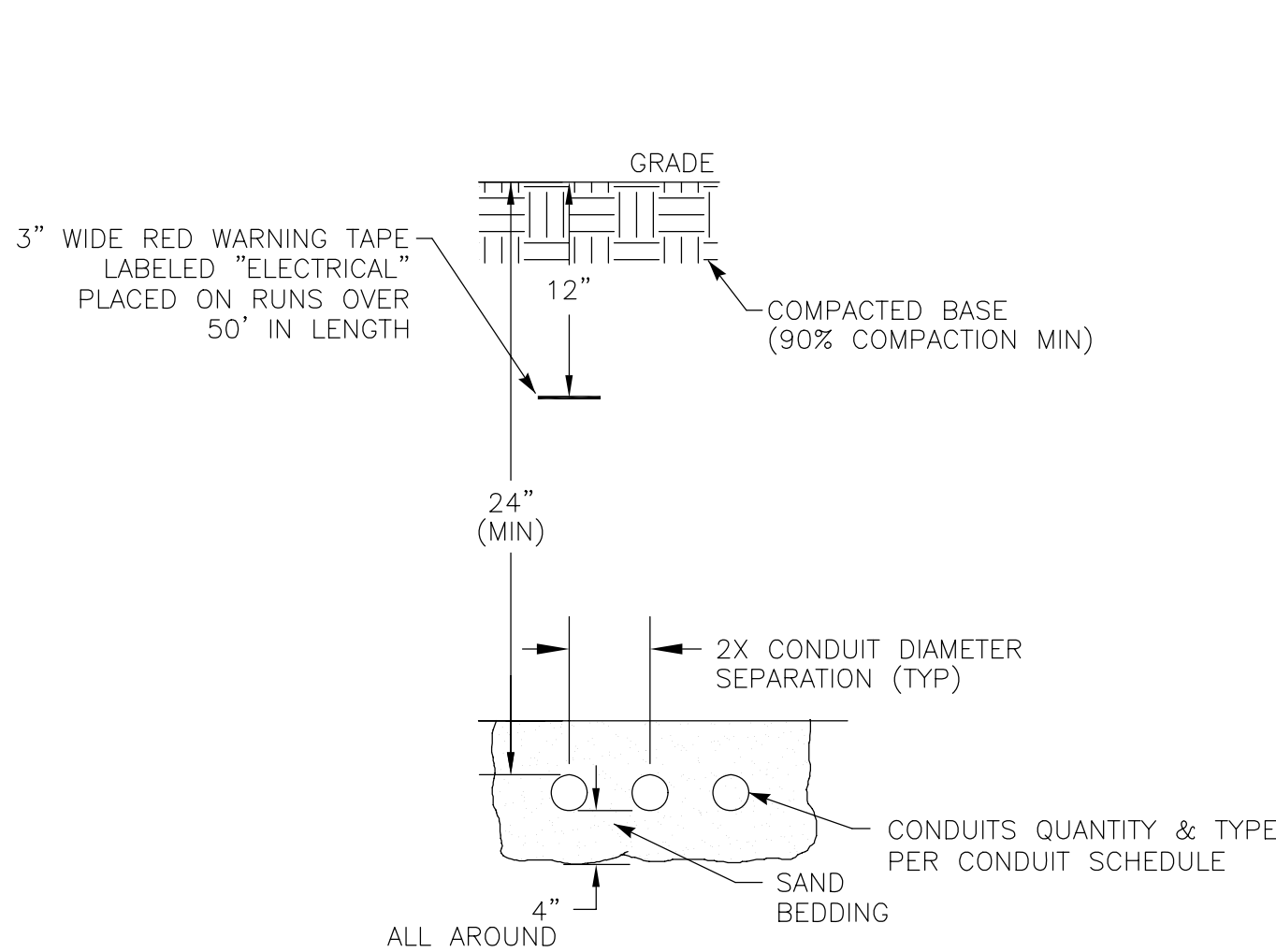
JOB NUMBER 454-02-09-02
DRAWING NUMBER E9
SHEET NUMBER 24 OF 28
REVISION



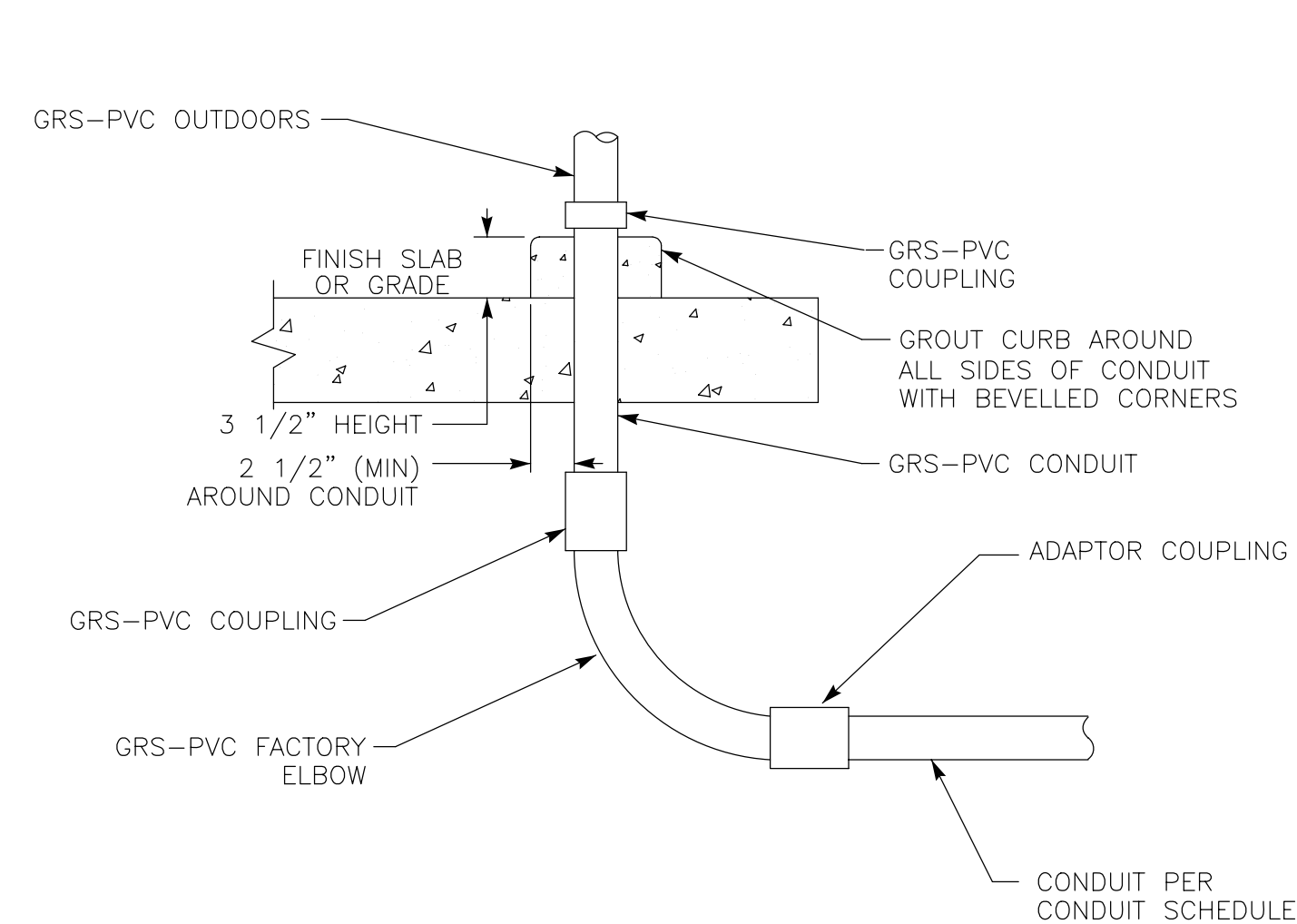
UTILITY CONDUITS
NOT TO SCALE **DETAIL** (A) E10



CABLE SUPPORT
NOT TO SCALE **DETAIL** (B) E10

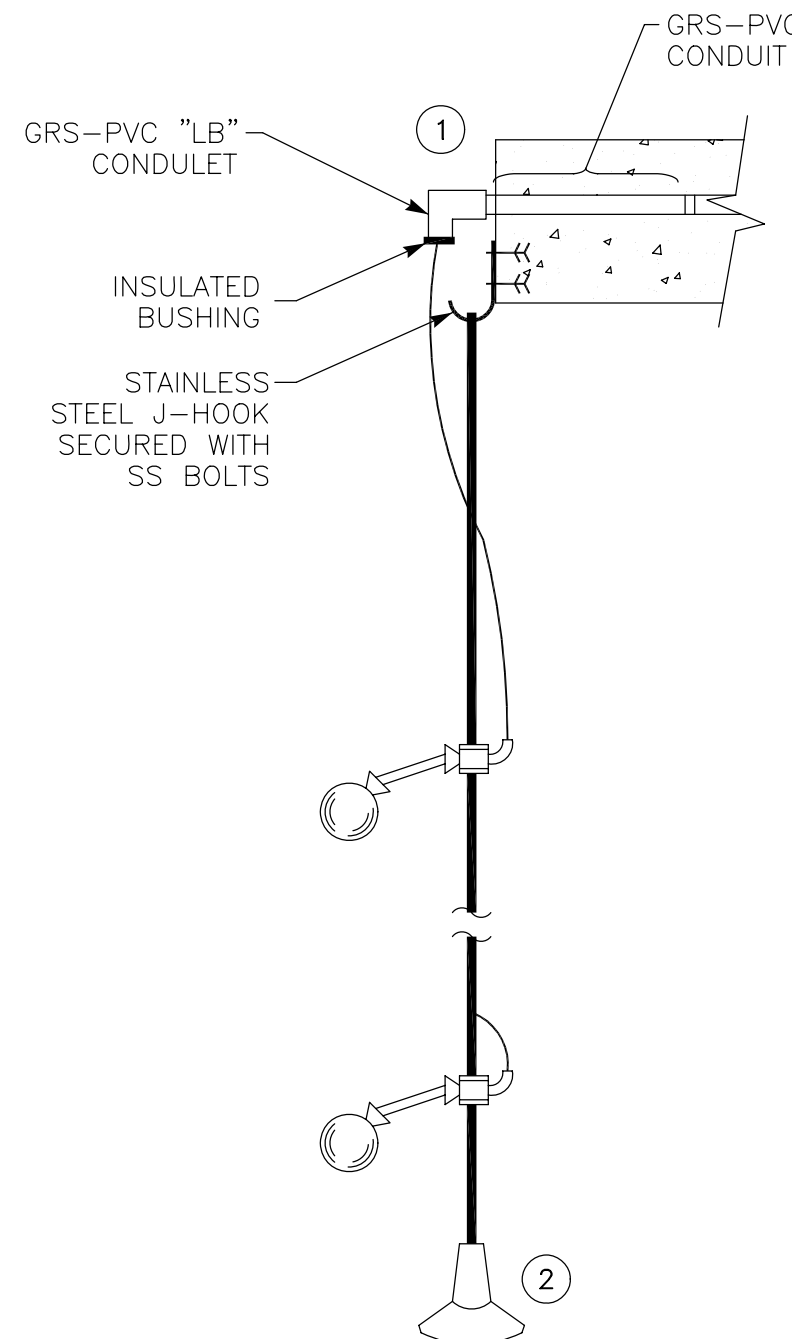


CONDUITS INSTALLATION
NOT TO SCALE **DETAIL** (C) E10

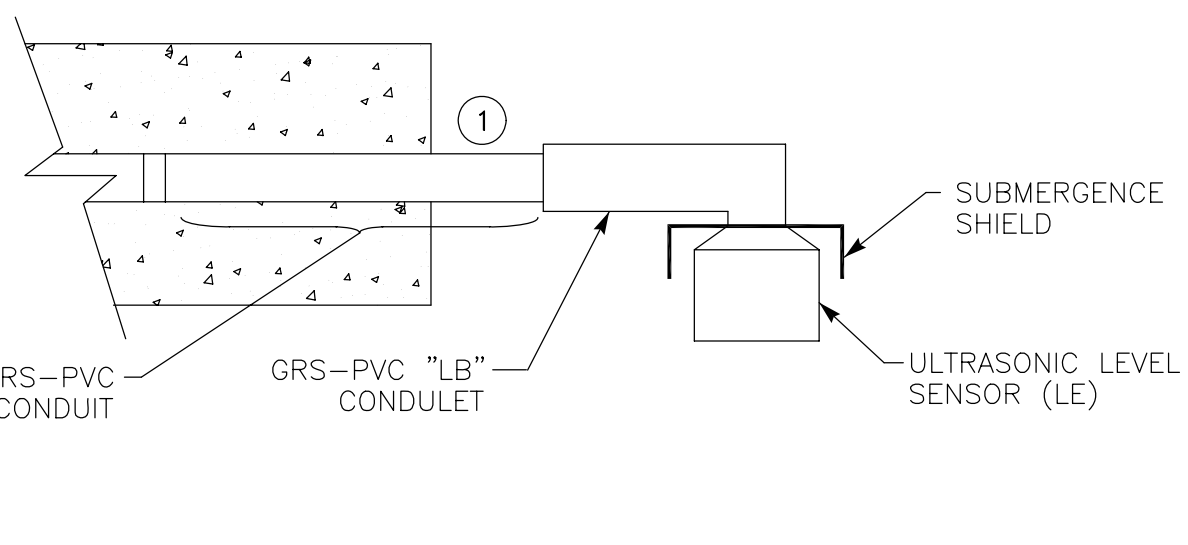


EXPOSED CONDUIT TRANSITION
NOT TO SCALE **DETAIL** (D) E10

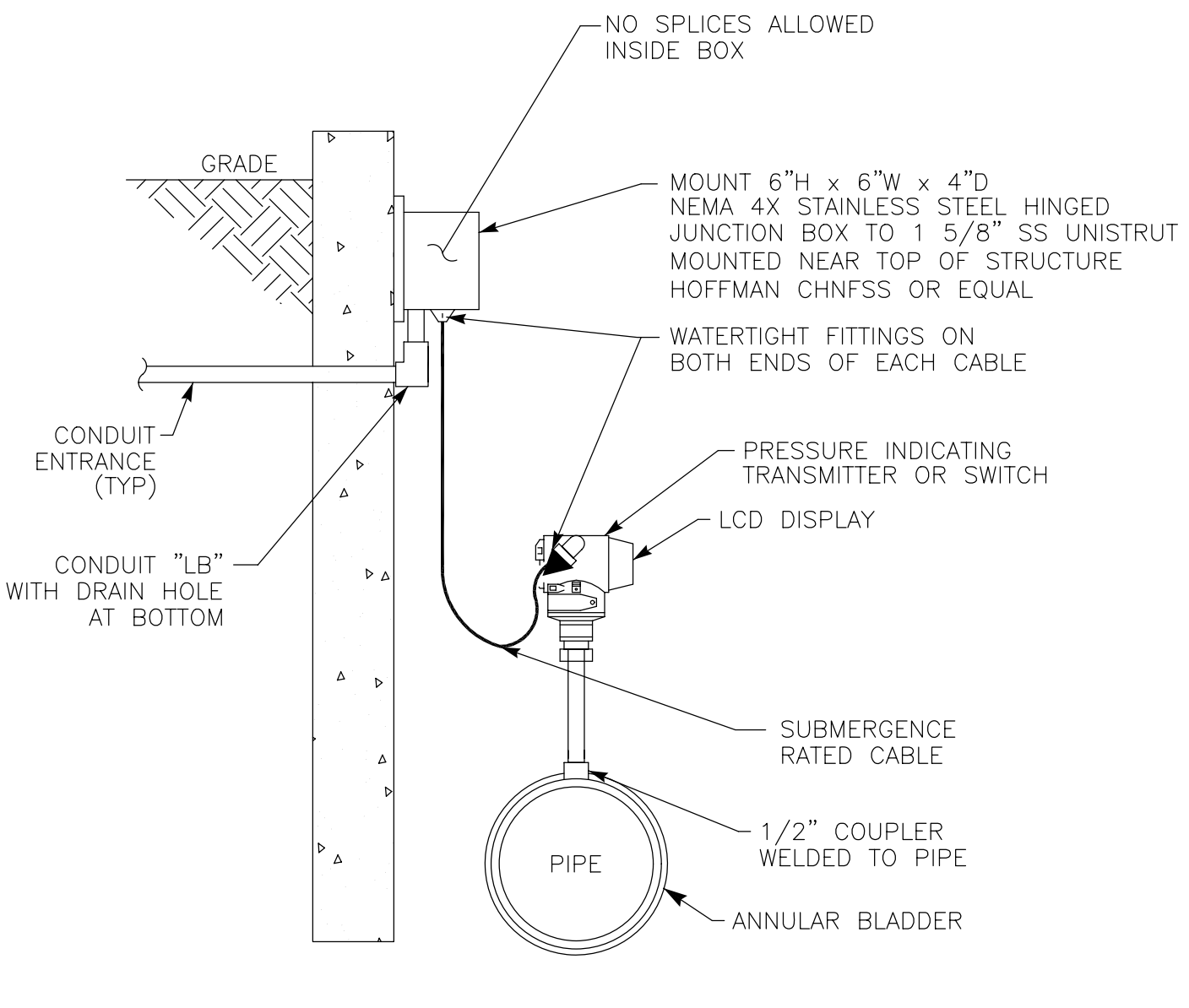
NOTES: (1) SECURE TO CONCRETE ROOF AT SPINNAKER PS.



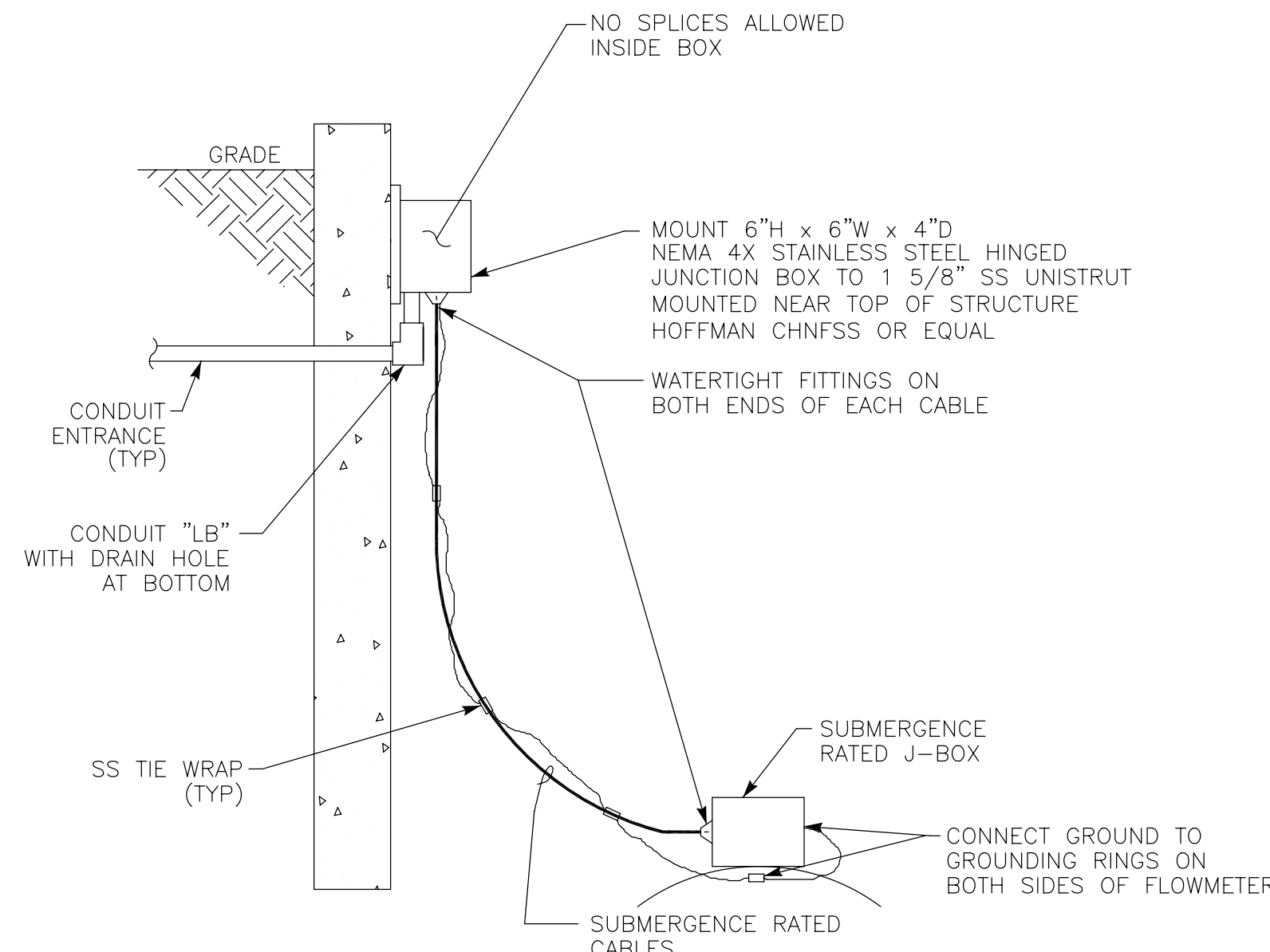
FLOAT SWITCH CABLE
NOT TO SCALE **DETAIL** (E) E10



ULTRASONIC SENSOR
NOT TO SCALE **DETAIL** (F) E10



BELOW GRADE PRESSURE TRANSMITTER
NOT TO SCALE **DETAIL** (G) E10



BELOW GRADE FLOWMETER INSTALLATION
NOT TO SCALE **DETAIL** (H) E10

NOTE: (1) CONDUIT TO ENTER THROUGH SIDE OF WETWELL ACCESS OPENNING. NOTES: (1) CONDUIT TO ENTER THROUGH SIDE OF WETWELL ACCESS OPENNING.

(2) LEVEL SWITCHES TO BE SUSPENDED WITH STAINLESS STEEL CABLE/WEIGHT MOUNTING KIT. CONSOLIDATED ELECTRIC OR APPROVED EQUAL.

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REGISTERED PROFESSIONAL ENGINEER
SHARON M. KIMBURA
NO. 15698
Exp. 6-30-2014
ELECTRICAL
STATE OF CALIFORNIA

SUBMITTED: *Sharon M. Kimbura*
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TYPICAL ELECTRICAL DETAILS NO.2

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DRAWING NUMBER E10
SHEET NUMBER 25 OF 28
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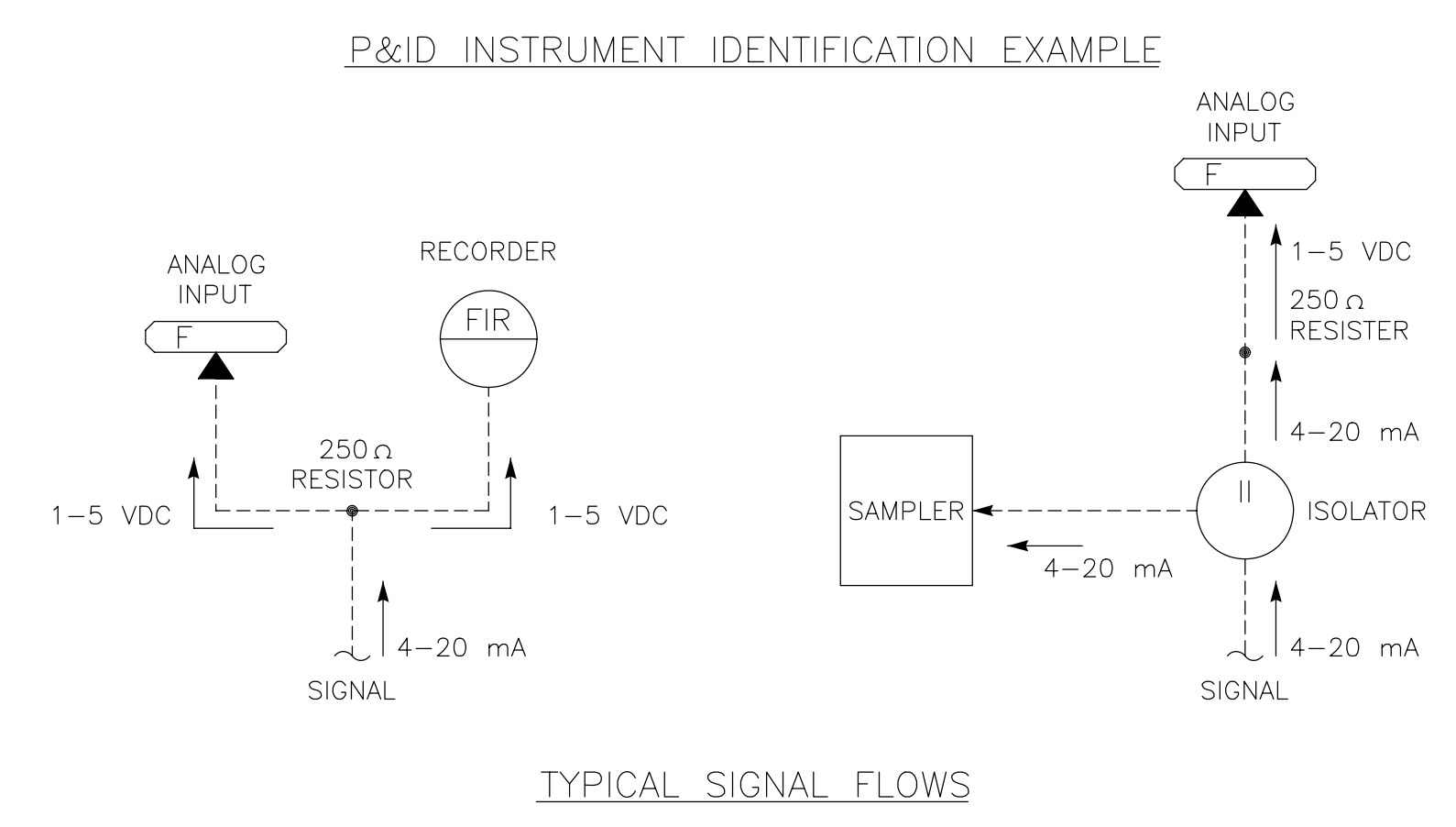
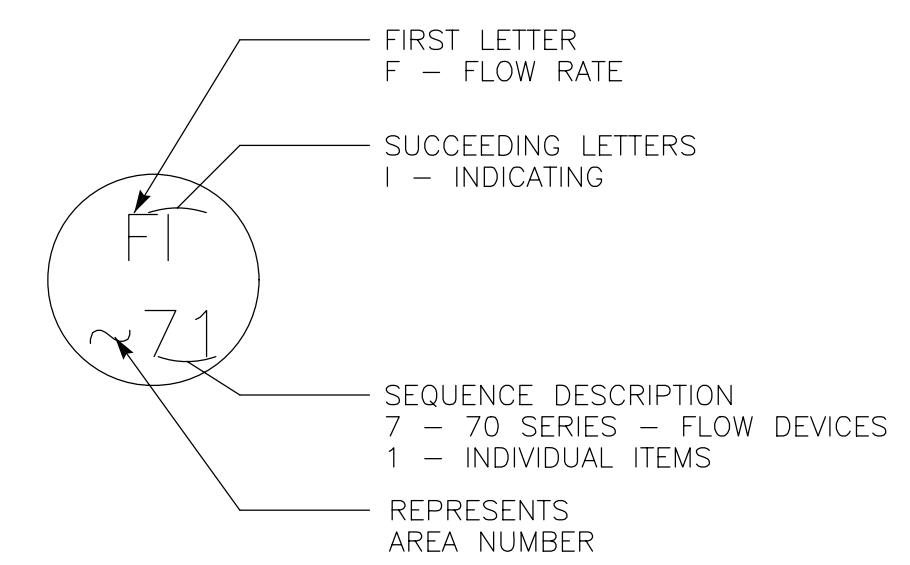
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SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
P & I DIAGRAM SYMBOLS			
	FIELD MOUNTED INSTRUMENT		VALVE (GENERAL)
	FACE MOUNTED INSTRUMENT ON LOCAL PANEL, OPERATOR ACCESSIBLE		GATE (GENERAL)
	FACE MOUNTED INSTRUMENT ON FIELD PANEL, OPERATOR ACCESSIBLE		CHECK VALVE (GENERAL)
	INSTRUMENT MOUNTED IN LOCAL PANEL, OPERATOR INACCESSIBLE		PUMP (GENERAL)
	INSTRUMENT MOUNTED IN FIELD PANEL, OPERATOR INACCESSIBLE		
	OPERATION PERFORMED WITH LOGIC OR HARDWIRED DEVICES		VALVE/GATE NUMBER
	DWG # - REFERENCE ELEMENTARY DWG. #		EQUIPMENT NUMBER
	PLC OR COMPUTER FUNCTION PERFORMING OPERATION WITH VISUAL INDICATION		ELECTRIC SIGNAL
	PLC OR COMPUTER FUNCTION PERFORMING OPERATION WITH VISUAL ALARM INDICATION		LOGIC OR DATA SIGNAL
	PLC OR COMPUTER PERFORMING INTERNAL OPERATION		PNEUMATIC SIGNAL
	PLC OR COMPUTER PERFORMING INTERNAL ALARM OPERATION		CAPILLARY TUBING (FILLED SYSTEM)
	PROPORTIONAL, INTEGRAL, AND DIFFERENTIAL PARAMETERS		HYDRAULIC SIGNAL
	RATIO AND BIAS PARAMETERS		SONIC OR ELECTROMAGNETIC SIGNAL
	AUDIBLE ALARM (BUZZER OR HORN)		ELECTRIC SUPPLY FROM PANELBOARD CKT
	ANNUNCIATOR WINDOW R - ROW # C - COLUMN #		SERVICE AIR
	LAMP INDICATION (STATUS OR ALARM)		INSTRUMENT AIR
	DISCRETE INPUT		
	DISCRETE OUTPUT		
	ANALOG INPUT		
	ANALOG OUTPUT		
	JUMP TAG FROM ONE AREA TO ANOTHER AREA OF DRAWING "o" TAG CONNECT POINT ON EACH DRAWING		
	CONTINUED ON DWG P-X		
	AUTODIALER PRIORITY # PC BASED SOFTWARE		

INSTRUMENT IDENTIFICATION LETTERS				
FIRST - LETTER	SUCCEEDING - LETTER			
MEASURED OF INITIATING VARIABLE	MODIFIER	READOUT PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A ANALYSIS		ALARM		
B BURNER, COMBUSTION		USER'S CHOICE	USER'S CHOICE	USER'S CHOICE
C CONDUCTIVITY			CONTROLLER	
D DENSITY	DIFFERENTIAL			
E VOLTAGE		SENSOR, PRIMARY ELEMENT		
F FLOW RATE	RATIO (FRACTION)			
G GENERAL		GLASS VIEWING DEVICE		
H HAND				HIGH, OPENED
I CURRENT (ELEC.)		INDICATING, INDICATOR		
J POWER	SCAN			
K TIME, TIME SCHEDULE	TIME RATE OF CHANGE		CONTROL STATION	
L LEVEL		LIGHT		LOW, CLOSED
M MOISTURE	MOMENTARY			MIDDLE
N STATUS		STATUS	USER'S CHOICE	USER'S CHOICE
O OPERATOR		ORIFICE, RESTRICTION		
P PRESSURE, VACUUM		POINT (TEST) CONNECTION		
Q QUANTITY	INTERGRATE, TOTALIZE			
R RESET		RECORD		
S SPEED, FREQUENCY	SAFETY		SWITCH	
T TEMPERATURE			TRANSMITTER	TEST
U MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION
V VIBRATION, MECH. ANALYSIS			VALVE, DAMPER LOUVER	
W WEIGHT, FORCE		WELL		
X SWITCH	X AXIS	UNCLASSIFIED	UNCLASSIFIED	UNCLASSIFIED
Y EVENT, STATE OR PRESENCE	Y AXIS		RELAY, COMPUTER, CONVERTOR	
Z POSITION	Z AXIS		DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT	



NUMBERING SEQUENCE	
SEQUENCE NUMBER	DESCRIPTION
00	COMMON ALARM
01-09	INDIVIDUAL ITEMS
10	MECHANICAL
20	MECHANICAL
30	MECHANICAL
40	MECHANICAL
50	LEVEL DEVICES
60	PRESSURE DEVICES
70	FLOW DEVICES
80	ANALYTICAL DEVICES
90	SAFETY & SECURITY DEVICES

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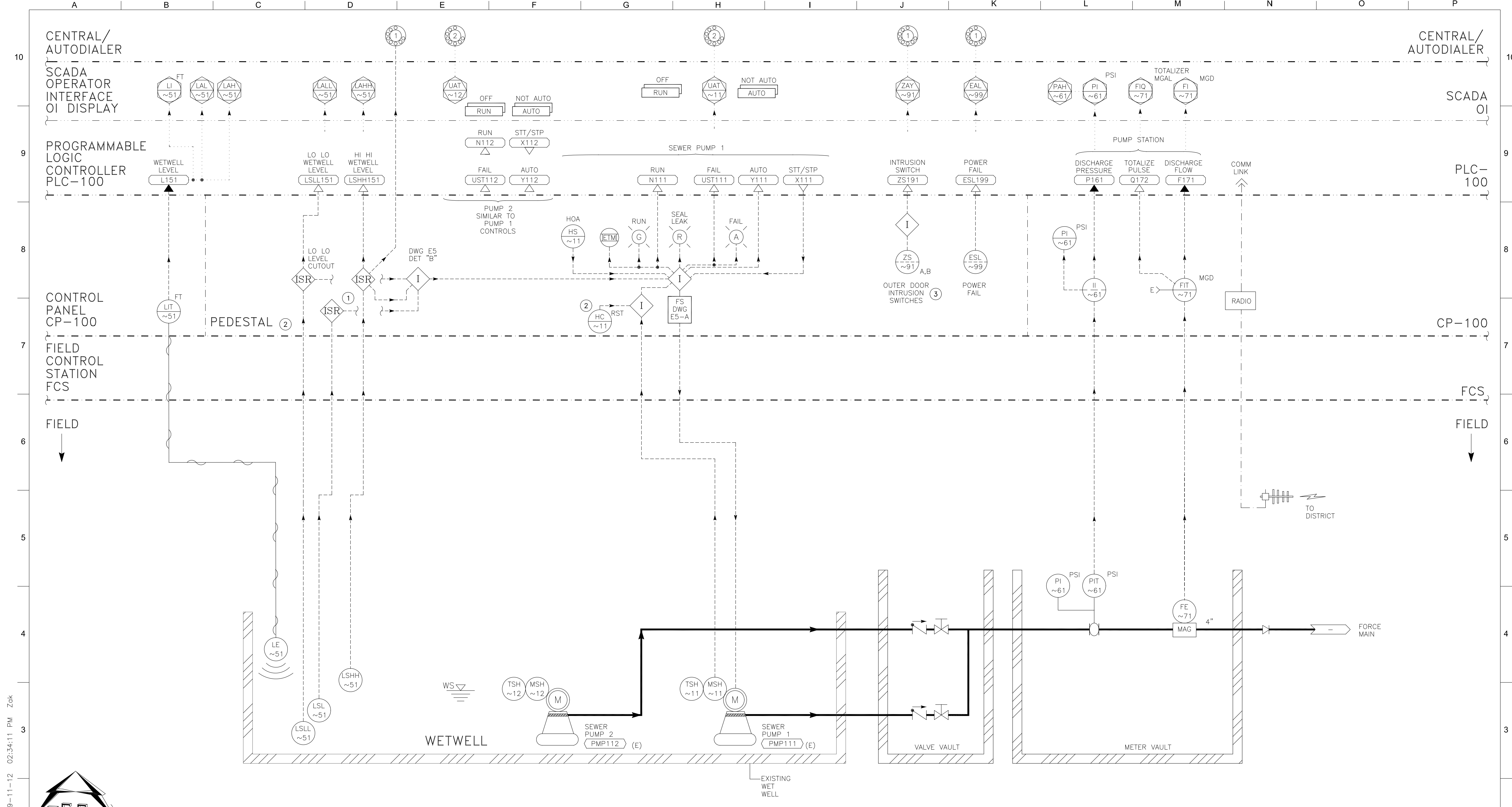
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INSTRUMENTATION SYMBOLS & ABBREVIATIONS

JOB NUMBER 454-02-09-02
DRAWING NUMBER 11
SHEET NUMBER 26 OF 28
REVISION



ANCHOR PUMP STATION

NOTES: ① ISB=> INTRINSIC SAFE BARRIER. ISR=> INTRINSIC SAFE RELAY. ② MOISTURE/OVERTEMP RELAYS TO BE INSTALLED IN PEDESTAL. ③ WIRE INTRUSION SWITCHES WIRING IN SERIES ON TERMINAL BLOCKS AND INSTALL ISOLATION RELAY.

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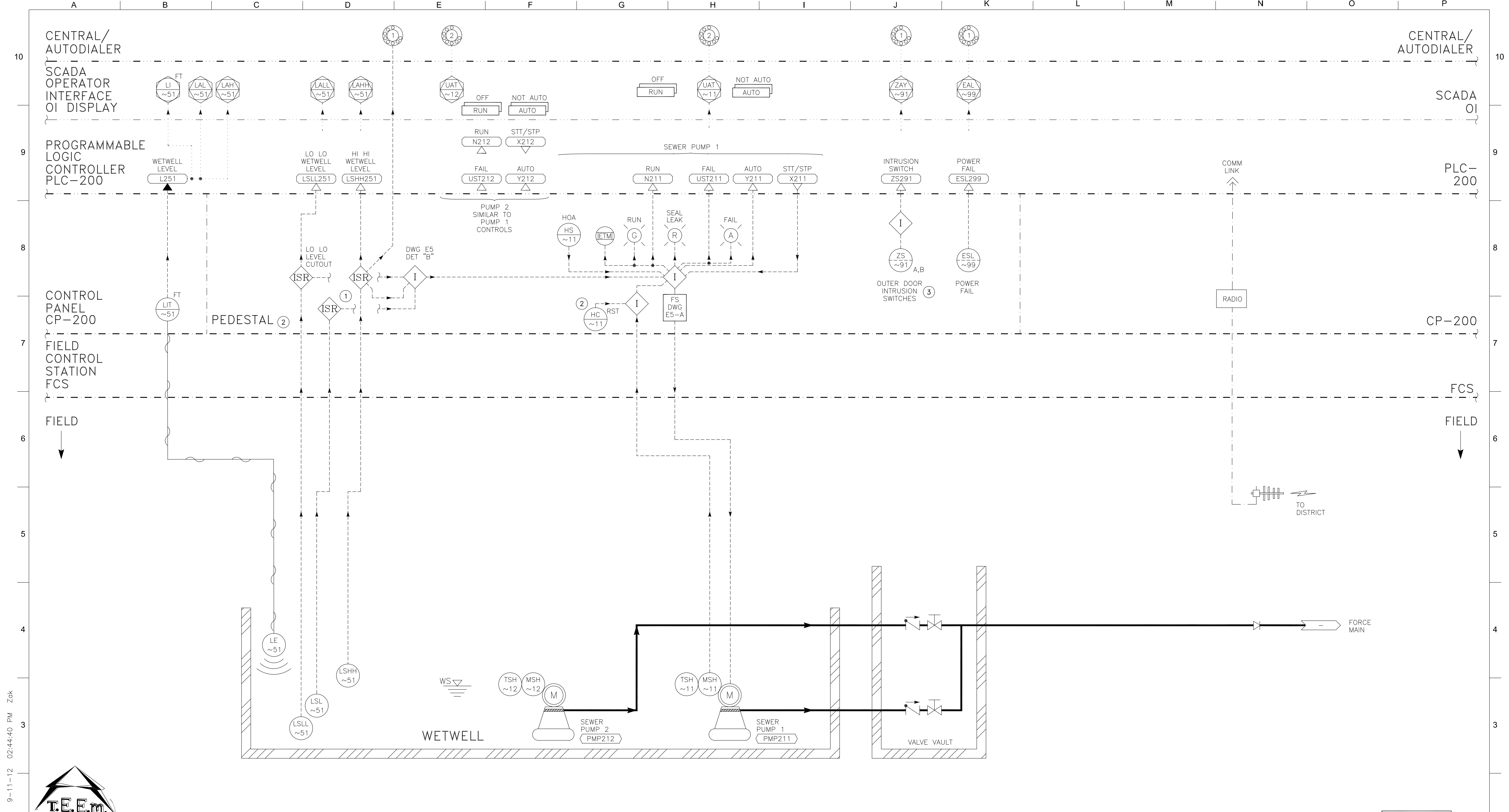
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ANCHOR PUMP STATION P&ID

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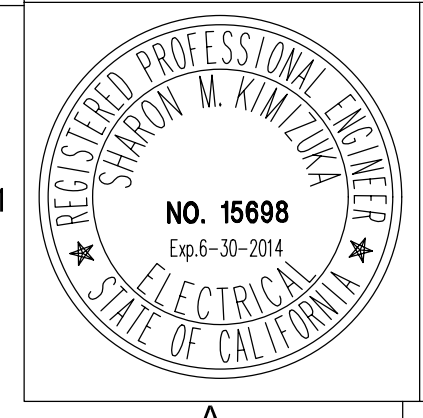
SPINNAKER PUMP STATION

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