UV DISINFECTION EQUIPMENT MODIFICATIONS PROJECT ELLIS CREEK WATER RECYCLING FACILITY C66401416 VOLUME 2 OF 2



SEPTEMBER 2022

MAYOR Teresa Barrett

COUNCIL MEMBERS Brian Barnacle D'Lynda Fischer Mike Healy Dave King Kevin McDonnell Dennis Pocekay

CITY MANAGER Peggy Flynn

DIRECTOR OF PUBLIC WORKS Christopher Bolt, P.E.



City of Petaluma, California

DOUGLAS WING P.E. C38950 DATE: TBD PROJECT MANAGER

DESIGNED BY:

JOHN MINSHALL DATE: TBD

APPROVED BY:



DATE: FEBRUARY 2021 DESIGNED BY: CE DRAWN BY: CE CHECKED BY: CE
C I T Y O F P E T A L U M A PUBLIC WORKS & UTILITIES 202 N. McDowell Blvd., PETALUMA, CALIFORNIA, 94954 PH. 707-778-4546 FAX. 707-778-4508
CITY OF PETALUMA TERTIARY PROCESS UPGRADES PROJECT TITLE SHEET, LOCATION MAP AND SIGNATURES
SHEET G01B 1 OF 56

		1		2	3	4	5
		SHEET		DESCRI	PTION		
58 PM		NOMBER	NOMBEIX	<u>GENERA</u>	L DRAWINGS		
Plot Date: 28-SEP-2022 12:39:5	A	1 2 3 4 5 6 7 8 9 10 11 12 13	G01B G02B G03B G04B G05B G06B G07B G08B G09B G10B G11B G12B G13B	COVERS DRAWIN DESIGN OVERAL PLANT F TERTIAF ABBREV GENERA CIVIL SY STRUCT STRUCT GENERA MECHAN	SHEET AND MAP G INDEX CRITERIA L SITE PLAN LOW SCHEMATIC - LIQUID PRO Y PROCESS HYDRAULIC PRO IATIONS L NOTES AND SYMBOLOGY MBOLOGY URAL NOTES - I URAL NOTES - I URAL NOTES - II L MECHANICAL SYMBOLOGY NICAL AND CIVIL NOTES	OCESS FILE	
				TYPICAL	. DETAILS		
User: svcPW	В	14 15 16 17 18 19 20 21	TA01B TA02B TC01B TM01B TN01B TP01B TS01B TS02B	TYPICAL TYPICAL TYPICAL TYPICAL TYPICAL TYPICAL TYPICAL TYPICAL	ARCHITECTURAL DETAILS ARCHITECTURAL DETAILS CIVIL DETAILS MECHANICAL DETAILS INSTRUMENTATION DETAILS PIPING DETAILS STRUCTURAL DETAILS		
				DEMOLI	ΓΙΟΝ		
	6	22 23 24	D01B 08D01 08D02	OVERAL UV DISIN TERTIAF	L SITE PLAN NFECTION - PLAN AND SECTIO RY EFFLUENT METER VAULT -	N PLAN AND SECTION	
		25 26	C01B C02B	OVERAL GRADIN	L SITE PLAN G AND DRAINAGE - PARTIAL P	LAN	
				<u>STRUCT</u>	URAL		
le: 1:1		27 28 29	08S01 08S02 08S03	UV DISIN UV DISIN UV DISIN	IFECTION CANOPY - FOUNDA IFECTION CANOPY - ROOF FR IFECTION CANOPY - SECTION	TION PLAN AMING PLAN S	
				MECHAN	NCAL		
	D	30 31 32	08M01 08M02 08M03	UV DISIN UV DISIN TERTIAF	IFECTION - PLAN IFECTION - SECTIONS RY EFFLUENT METER VAULT -	PLAN AND SECTION	
lotScale				ELECTR	ICAL		
∋signScript: Carollo_Std_Pen_v0905.pen_PlotScale: 1:1	Е	33 34 35 36 37 38 39 40 41 41 42 43 43 44 45 46	GE01B GE02B GE03B E01B E03B E05B E09B E10B E10B E11B 08E01B 08E02B 08E03B 09E01B	LEGEND ABBREV SCHEMA OVERAL PARTIAL DUCT BA 09-MCC- 09-MCC- NOT USI UV DISIN UV DISIN TERTIAF 09-MCC-	IATIONS ATIC SYMBOLS L SITE PLAN SITE PLAN - II ANK SECTIONS - I A ELEVATION MODIFICATION A ONE-LINE DIAGRAM - I MOD A ONE-LINE DIAGRAM - II MOD ED IFECTION - POWER PLAN - I IFECTION - POWER PLAN - I RY EFFLUENT METER VAULT - A BUILDING - POWER, GROUN	IFICATION DIFICATION POWER AND LIGHTING PLAN IDING AND LIGHTING PLANS	1
e.ctb D				INSTRUM	IENTATION & CONTROLS		
odel: Layout1 ColorTable: gshade	F	47 48 49 50 51 52 53 53 54 55 56	GN01B GN02B GN03B GN04B 00N01B 00N02B 08N01 08N02 08N03 08N03	SYMBOL SYMBOL SYMBOL NETWOF NETWOF UV DISIN UV DISIN UV DISIN UV DISIN	S AND ABBREVIATIONS - I S AND ABBREVIATIONS - II S AND ABBREVIATIONS - III S AND ABBREVIATIONS - IV RK DIAGRAM RK I/O TABLES IFECTION IFECTION CHANNEL 1 IFECTION CHANNEL 2 IFECTION CHANNEL 3		
Ŵ							
							I
, rwelch	G				PK DRAWN	PROFESS/ONAL	
VED BY					DPF CHECKED	→ No. 38950	
VST SAV					DWW DATE	OF CALIFORNIC	
Γ		REV DATE BY	DESC	RIPTION	SEPTEMBER 202	<u>4</u>	5
		PROJECT NO. 7310L10	FILE NAME: 73	10L10G02B.dgn			

6	7	8	9	10



11	12	13	
			Α
			в
			С
			Ŭ
			D
			E

				l l
CITY OF PETALUMA	CITY OF PETALUMA		JOB NO. 7310L.10	G
INFECTION UPGRADES PROJECT		BAR IS ONE INCH ON ORIGINAL DRAWING		
GENERAL		0 1"	GUZD	
DRAWING INDEX		IF NOT ONE INCH ON THIS SHEET, ADJUST	SHEET NO.	
		SCALES ACCORDINGLY	2 OF 56	
11	12	13		

		1 2	3	4	5
ЫМ					
9.49					
12:3(
, N					
-202	Α				
SEP			UNITS	EXISTING QUANTITY	NEW QUANTITY
28 <mark>-</mark>		FLOW			
ate:		AVERAGE DRY WEATHER FLOW (ADWF)	MGD	6.7	6.7
of D		AVERAGE ANNUAL FLOW (AAF) AVERAGE DAY MAXIMUM MONTH FLOW (ADMME	MGD	8 12	8 12
ሲ		PEAK HOUR WET WEATHER FLOW (PHWWF)	MGD	36	36
		AVERAGE ANNUAL BOD	PPD	18.348	26.021
		CONCENTRATION	MG/L	275	390
		AVERAGE ANNUAL TSS	PPD	18 348	18 682
		CONCENTRATION	MG/L	275	280
	В	TITLE 22 REUSE FLOW			
_		MINIMUM	MGD	0.5	0.5
/cPM			MGD	2	4
r: sv			MGD	5.2	7.0
Use		RECYCLED WATER TREATMENT AND PUMPING			
		TYPE		SUBMERSIBLE	SUBMERSIBLE
		NUMBER		<u>_</u>	
		LOW FLOW		2	4
			MGD	2@2.6, 1@1.3	4@2.6, 1@1.3
		MOTOR SIZE PRETREATMENT	HP	2@40, 1@5	4@40, 1@5
	С				
			 SEC	VERTICAL IMPELLER 10	VERTICAL IMPELLER 10
		BASIN DIMENSIONS	FT	4 x 4	4 x 4
		SWD MIXING GRADIENT	FT	4 - 6 600	4 - 6 600
		MIXING POWER	HP	1.5	1.5
		FLOCCULATION - STAGE 1 TYPE		VERTICAL IMPELLER	VERTICAL IMPELLER
		DETENTION TIME	MIN	7	7
		BASIN DIMENSIONS SWD	FT FT	12 x 12 16 - 18	12 x 12 16 - 18
		MIXING GRADIENT	G	60 - 110	60 - 110
		MIXING POWER FLOCCULATION - STAGE 2	HP	2	2
	ש	TYPE		VERTICAL IMPELLER	VERTICAL IMPELLER
<u>.</u>		DETENTION TIME BASIN DIMENSIONS	MIN FT	7 12 x 12	7 12 x 12
e.		SWD	FT	16 - 18	16 - 18
otSca		MIXING GRADIENT	G HP	20 - 60 1	20 - 60 1
ā				'	,
.pen					
3060					
en_<					
d P					
S_ol	F				
Caro					
ipt:					
nScr					
esig					
ц Д					
de.ct					
Jsha					
<u>e:</u>					
уrТаt					
Solo	F				
IT.	ľ.				
-ayoi					
lei: I					
Moc					
Ļ			DESIGNE	ED	
welc	G		PK	PROFESSIONAL	
3Ү: г			DRAWN		
/ED l			CHECKE	D No. 38950	
SAV			DWW		
AST			DATE SEPTEMBEP	2022	
_	l	1 2	.3	<u> </u>	5
	<u>i</u>		V		

6 7 8 9 10					
	6	7	8	9	10

	UNITS	EXISTING QUANTITY	NEW QUANTITY
<u>TERTIARY FILTERS 1 - 5</u>			
		CONTINUOUS BACKWASH	
FILTER CELLS		5	
MODULES/CELL		3	
SIZE OF MODULES	SF	50	
TOTAL FILTER AREA	SF	750	
HYDRAULIC LOADING			
AVERAGE DAY @ 2.0 MGD	GPM/SF	1.9	
MAXIMUM DAY @ 5.2 MGD	GPM/SF	4.8	
AIR CONSUMPTION	SCFM	45	
BACKWASH (BW)			
AVERAGE BW RATE @ 2.0 MGD	%	10	
MAXIMUM BW RATE @ 5.2 MGD	%	15	
TERTIARY FILTERS 6 & 7			
TYPE			
FILTER CELLS			
DISK PER FILTER		_	
FILTER AREA PER DISK	SF		
TOTAL FILTER AREA	SF		
DESIGN FLOWS			
AVERAGE DAY	MGD		
MAXIMUM DAY	MGD		
HYDRAULIC LOADING (BOTH UNITS ONLINE)			
AVERAGE DAY @ 4.0 MGD	GPM/SF		
	GPM/SF		
2 SOLIDS LOADING (BOTH LINITS ONLINE)			
AVERAGE DAY @ 4.0 MGD	PPD/SF		
MAXIMUM DAY @ 7.6 MGD	PPD/SF	-	
<u> </u>			
<u>UV DISINFECTION</u>			
NUMBER OF CHANNELS		2	-
FLOW	MGD	5.2	
DOSE	M-JOULE/CM2	100	
TRANSMITTANCE	%	55	



11	12	13	
	KEY NOTES:		

(1) BASED ON ORIGINAL DESIGN CRITERIA 2005.

BASED ON AVERAGE AND MAXIMUM TSS OF 10 MG/L AND 15 MG/L, RESPECTIVELY.

FUTURE BUILDOUT

- -----

CLOTH MEDIA DISK

2 16 53.8 1722	
4.0 7.6	
1.6 3.1	
0.29 0.55	
3 7.8 100	

				4
CITY OF PETALUMA	CITY OF PETALUMA			G
SINFECTION UPGRADES I	BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO.		
GENERAL	0 1"	G03B		
DESIGN CRITERIA		IF NOT ONE INCH ON THIS SHEET, ADJUST	SHEET NO.	
		SCALES ACCORDINGLY	3 OF 56	
11	12	13		



10	11	12		13		
·		KEY NOTES:				
			3S DRIVE PETALU	JMA, CA 94954.		
X			USTING TREES UN		NOTED	
			STING TREES ON		NOTED.	
~X	X>)				A
	\times					
\times		TREAT	<u>ÍMENT PLANT</u>	AREA DESIGNA	<u>TIONS</u>	
		(02A) O	XIDATION DITCH I	NO. 1		
		(02B) O	XIDATION DITCH N	√ O. 2		
		(02C) O		MCC BUILDING		
	×					
		(05A) R	AS PUMP STATIO	N		
N4800		05B V	AS PUMP STATIO	N		
N 18*		06A) T	ERTIARY PUMP S	FATION		
k.			ERTIARY FILTERS	ı.		
OOMERCE,		(07) F'	ILTER SUPPORT B	JUILDING		
		(08) U'	✓ DISINFECTION			
		(09B) R ¹	ECYCLED WATER	PUMP STATION		
\times		= (19) C		MCC BUILDING		
		(20) N	IAIN ELECTRICAL	BUILDING / STANDE	3Y GENERATOR	
		(22) E	QUIPMENT / PART	S STORAGE BUILD	ING	
]		2 ``				
		YARD	<u>STRUCTURE [</u>	<u> DESIGNATIONS</u>		
		© s	ECONDARY CLAR		ER	
		E R	ECONDARY EFFLU	JENT JUNCTION BO	VAULT	
		(G) SI	EWER LIFT STATIC	NC		
1						
	۷/ //					
		2				
	X	2				
						ļΕ
						\vdash
						F
	CONTROL	DESCRIPTION	COOF	RDINATES		
			NORTHING	EASTING		\vdash
			<u> </u>			
	$\overline{3}$					
	(4)					
CI	ITY OF PETALU	JMA	VE	RIFY SCALES	JOB NO. 7310L.10	G
UV DISINFE	CTION UPGRA	DES PROJECT	BA! OF	R IS ONE INCH ON RIGINAL DRAWING	DRAWING NO.	\neg

GENERAL

OVERALL SITE PLAN

11

G04B

SHEET NO.

4 OF 56

0 _____ 1

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY



6	7	8	9	10

GENERAL N 1. HYDRAU NEW AND KEY NOTES 1 1 EXISTING LEGEND: WSE WSE	NOTES: ULIC PROFILE CALCULATIONS INCLUDE FLOW METERS ON D EXISTING FILTER EFFLUENT PIPES EACH. S: G BAFFLE PLATE. EAK FLOW THROUGH NEW FILTERS ONLY (7.6 MGD) VERAGE FLOW THROUGH NEW FILTERS ONLY (5.2 MGD) NIMUM FLOW THROUGH NEW FILTERS ONLY (0.5 MGD)	A
		В
	30	
6.0	25	С
	20	
	15	
URW PS	10	D
WATER STORAGE BASIN	5	
		E
		F
CITY OF PETALUMA	VERIFY SCALES JOB NO. 7310L.10 BAR IS ONE INCH ON	G
SINFECTION UPGRADES PROJECT GENERAL Y PROCESS HYDRAULIC PRO	ORIGINAL DRAWING DRAWING NO. 0 0	
11	SCALES ACCORDINGLY60F561213	

	1	2	2	4	F	G	7	0	0	10	11	10 12	
									9			12 13	
	Δ	DEFLECTION ANGLE, CENTRAL ANGLE	CTR	CONTROL CENTER, CENTERED	FRPP	FIBERGLASS REINFORCED PLASTIC FIBERGLASS REINFORCED PLASTIC PIPE	MECH	MECHANICAL	RG	RETURN FAN RETURN GRILLE RUBBER GASKET	TS	THEAD THICKENER SUPERNATANT OR SUBNATANT	
	#	NUMBER (REBAR Ø)	CTSK	COUNTERSUNK	FRS	FROTH SPRAY	MET	METAL	RH	RIGHT HAND RIGHT HAND REVERSE	TSD	THICKENED SLUDGE DECANT	
Σ Δ			CUP	COPPER PIPE	FSTN	FASTEN(ED)	MG/L	MILLIGRAMS PER LITER	RHRA	RIGHT HAND REVERSE ACTIVE	TSTAT	THERMOSTAT	
- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	AB ABC	AGGREGATE BASE COURSE	CV CW/		FT or '	FOOT, FÉET		MILLION GALLONS PER DAY	RHRB	RIGHT HAND REVERSE BEVEL		TELEPHONE TERMINAL BOARD	
4	ABS	ACRYLONITRILE BUTADIENE STYRENE	CWV	COMBINATION WASTE AND VENT	FUP	FUEL DISPENSER	MIN	MINIMUM	RM	ROOM	TV	TURNING VANES	
7	ACACB	ASPHALTIC CONCRETE AIR CIRCUIT BREAKER	CY	CUBIC YARD	FV		MISC	MISCELLANEOUS	RO	ROUGH OPENING	TWV	THREE-WAY VALVE	
A 5	ACI		ר		FVV FX	FIRE EXTINGUISHER	MJ		RP	RADIUS POINT		TTFICAL	
^	ACP	ASBESTOS CEMENT PIPE	D/W	DEPTH, DIGITAL OR DISCRETE, DRAIN DRIVEWAY	FXC		M-JOULE/CM2	MILLI JOULE PER SQUARE CENTIMETER	RPM	REVOLUTIONS PER MINUTE	UC	UNDERCUT	r
	AD		DBL		FAE	FIRE EXTINGUISHER - ELECTRICAL	ML	MIXED LIQUOR	RR	RETURN REGISTER		UNDERGROUND	
58	ADDL	ADJINONAL ADJACENT, ADJUST, ADJUSTABLE	DEG or °	DEGREE	G _G	GAS, GROUND, GUTTER, VELOCITY GRADIANT	MO	MASONRY OPENING	RSR BT	RISER	UHMW	ULTRA HIGH MOLECULAR WEIGHT FOLTETHTLENE	
. .				DEMOLISH, DEMOLITION	GA		MOIST	MOISTURE	RTF	ROTARY FEEDER	UNO	UNLESS NOTED OTHERWISE	
Dat	AED	AREA EQUIPMENT DRAIN	DFL	DECANT/FILTRATE	GAL	GALLONS GALVANIZE(D)	MON	MONUMENT MOISTURE SEPARATOR	RTU RUD	ROOF TOP UNIT RUPTURE DISK	\mathbf{V}^{03}	UTILITY SINK	
	AER	AERAT(ION)(OR)	DG DIA or Ø	DOOR GRILLE	GAT		MPM	METERING PUMP	RW	RECLAIMED WATER, REUSE WATER	V, VLV	VALVE	
	AFC	ABOVE FINISHED FLOOR	DIAG	DIAMETER DIAGONAL	GAV GB	GRADE BREAK	MS MTD	MOP SINK MOUNTED	RWR	RECLAIMED WATER RETURN	VAR	VARIES	
	AFM		DIF	DIFFUSER	GBT		MT D	MOUNTED			VCP	VALVE BOX VITRIFIED CLAY PIPE	
	AIC	AIR COMPRESSOR	DIM	DIGESTER	GEL	GRAVITY EXHAUST LOUVER	NIN	NORTH, NEUTRAL	S s/w	SIDEWALK	VEC	VINYL ESTER COATING	
	AIL		DIP	DUCTILE IRON PIPE	GEN	GENERAL, GENERATOR	IN NA		S	SOUTH, SWITCH, SLOPE	VERT	VERTICAL VOLUMETRIC FEEDER	
	ALI	ALTERNATE	DISCH	DISCHARGE DEIONIZED WATER	GLV	GLASS GLOBE VALVE	NEV	VALVE, NEEDLE	SA	SAMPLE SECONDARY CLARIFIER	VG	VACUUM GAUGE, VALLEY GUTTER	
					GM	GAS METER	NG	NATURAL GRADE, NATURAL OR LP GAS	SCB	SCRUBBER	VOL VRV	VOLUME VACUUM REGULATING VALVE	
B	APPROX	APPROXIMATE, APPROXIMATELY		DOOR LOOVER	GPD	GROUND GALLONS PER DAY	NO., #	NUMBER	SCFM	SMORE CONTROL DAMPER STANDARD CUBIC FEET PER MINUTE	VAL VTR	VENT THROUGH ROOF	E
	ARCH		DMS	DIAPHRAGM SEAL	GPM	GALLONS PER MINUTE	NOM		SCH		VV		
≥	ASSY	ASSEMBLY	do	DITTO	GRTG	GRATING	NPW	NON-POTABLE WATER	SCO	BAR SCREEN	W W/	WEST, WIDTH WITH	
VC D	ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	DO		GRV		NS		SCR	SILICON CONTROL RECTIFIER	W/O	WITHOUT	
ίο L	AVG	AVERAGE	DP DPV	DIAPHRAGM VALVE	GSP	GALVANIZED STEEL PIPE GATE VALVE	N15	NOT TO SCALE	50	DRAIN	WAS WCO	WASTE ACTIVATED SLUDGE WALL CLEANOUT	
Use		AIR AND VACUUM VALVE			GYP	GYPSUM	O o	OPEN	SDL		WEF	WALL EXHAUST FAN	
-H	AVV		DRV	DRAIN VALVE	Н		OBD	OPPOSED BLADE DAMPER	SE	SECONDARY EFFLUENT	WF WH	WALL FITTING, WASH FOUNTAIN WATER HEATER	F
B	BC	BEGIN CURVE, BRASS CAP, BACK OF CURB, BOI T	DS	DIGESTED SLUDGE, DOWN SPOUT	∎ ∎ H H1E	EAPLUSION-PROOF, HIGH, HORIZONTAL HOOK ONE END	OD OD	ON GENTER OUTSIDE DIAMETER, OUTSIDE DIMENSION	SEC	SECONDARY, SECOND	WI	WEIGHT INDICATOR	
	DOVE		DUC	DISTILLED WATER, DOOR SWITCH DUST COLLECTOR	H2E		OED		SED	SEDIMENTATION	VVL VVM	WALL LOUVER, WATER LEVEL WATER METER	
	bukk BCM	BAUNER BUARD BATCHMETER			HAS HB	HEADED ANCHOR STUD HOSE BIBB	O.F. OFL	OVERFLOW	SEP		WOD		
	BD	BOARD	DWD	DISTILLED WATER DEWATERING DRAIN		HIGH DENSITY POLYEHTYLENE	OPNG	OPENING	SF SFW	SOFFLI FAN SOFTENED WATER	WP WPT	WEATHERPROOF, WATERPROOF WORKING POINT	
	BDR	BAGKUKAFT DAMPEK BASIN DRAIN LINE	DWG(S)	DRAWING(S)	HDWL	HEADWALL	OPP HND	OPPOSITE OPPOSITE HAND	SG		WRG	WEIR GATE	
	BF		DVVL(S)	DOWEL(S)	HEF	HOOD EXHAUST FAN HEIGHT	OZ	OUNCE	SGS SHD	STORE FRONT GLAZING SYSTEM SHOWER DRAIN	WRS WS	WATER SOFTENER WATER SURFACE	r
	BFG BFP	BELOW FINISHED GRADE	E	EAST, EXISTING	HORIZ	HORIZONTAL	P _		SHDR	SOLIDS HANDLING-RECYCLE	WSE	WATER SURFACE ELEVATION	
	BFV		EA		НР нол	HEAT PUMP, HORSEPOWER, HIGH PRESSURE	■ P PBL	POLE POLYMER BLENDER	SHT	SHEET	WSTP WT	WATERSTOP WALK THROUGH, WEIGHT	
	BKW	BREAK GLASS HAND SWITCH BACKWASH	EC ECC RED	END OF CURVE ECCENTRIC REDUCER	HPT	HIGH POINT	PC	POINT OF CURVATURE	SIM	SIMILAR	WTF	WATER TREATMENT FACILITY	
	BLDG	BUILDING	ECU	EVAPORATOR COOLING UNIT	HPU HR	HEAT PUMP UNIT AIR	PCC PCCP	PLANT CONTROL CENTER PRESTRESSED CONCRETE CYLINDER PIPE	SK	SLOPE, SLUDGE	WTP	WATER TREATMENT PLANT WATER	
	BLKHD	BULKHEAD	ED EF	EQUIPMENT DRAIN EXHAUST FAN, EACH FACE	HSF	HOOD SUPPLY FAN	PCP	PROGRESSIVE CAVITY PUMP	SLC	SLUDGE COLLECTOR DRIVE	WV	WATER CONTROL VALVE	
	BLR	PROCESS BLOWER	EFF	EFFLUENT	HSS HTX	HOLLOW STRUCTURAL SECTION (STEEL)	PD PD. PLD	POSITIVE DISPLACEMENT, PLANT DRAIN PULSATION DAMPENER	SLV	SLIDE GATE SLEEVE VALVE	WWF	WASTEWATER WELDED WIRE FABRIC	
	BM BOTT	BEAM, BENCH MARK BOTTOM	EG EIFS	EXHAUST GRILLE EXTERIOR INSULATION AND FINISH SYSTEM	HV	HOSE VALVE	PDP	POSITIVE DISPLACEMENT PUMP	SMP	SAMPLER, SUMP PUMP	WWTF	WASTEWATER TREATMENT FACILITY	
	BOTTS	BOTTOM SLUDGE	EJ	EXPANSION JOINT	HW	HOT WATER LEVEL	PE PERP	PLAIN END PERPENDICULAR	SOL	SOLUTION	V	WASTEWATER TREATMENT PLANT	
	BRG	BACK PRESSURE VALVE BEARING	EJR EL	INJECTOR/EDUCTOR ELEVATION	HWR	HOT WATER RETURN	PG	PRESSURE GAUGE	SP	STATIC PRESSURE, SET POINT	I Y	WYE	
	BSP	BLACK STEEL PIPE	ELEC	ELECTRICAL	HWS Hyw	HOT WATER SUPPLY	PH PI	PHASE, PHYSICALLY HANDICAPPED POINT OF INTERSECTION	SPD SPDT	SUMP PUMP DRAIN SINGLE POLE DOUBLE THROW	YCO	YARD CLEANOUT	
	BTWN	BRITISH THERMAL UNITS BETWEEN	ELL EMBED	ELBOW	HYD	HYDRANT	PIV	POST INDICATOR VALVE	SPEC(S)	SPECIFICATION(S)	ΥH	YARD HYDRANI	
	BV	BALL VALVE	EMH		1		PL PLAS	PLATE, PROPERTY LINE PLASTIC	SPL	SPARE			
	-		EP EPS	EDGE OF PAVEMENT EXPANDED POLYSTYRENE	IA		PLCS	PLACES	SPS	SAMPLE SINK			[
	C CA	CLOSE, CONDUIT CHANNEL (STRUCTURAL) CONCRETE ANCHOR	EPV	ECCENTRIC PLUG VALVE	I.F.	INSIDE DIAMETER, INSIDE DIMENSION, IDENTIFI		POLYMER SOLUTION	SPW SQ	SAMPLE WATER			
<u></u>	CAUSTIC	CAUSTIC SOLUTION (CONCENTRATED OR DILUTE)	EQ FQUIP	EQUAL EQUIPMENT	IN or "	INCHES	PMP	PUMP	SQ FT	SQUARE FEET			
<u></u>	CB	CATCH BASIN CENTER OF CURVATURE, CENTER TO CENTER	ER	EXHAUST REGISTER	INCL	INCLUDE, INCLUDING INFLUENT	PNL(S)	PANEL(S)	SQ IN(S) SR	SQUARE INCH(ES) SHORT RADIUS, SUPPLY REGISTER			
Sca	CCB	CHLORINE CONTACT BASIN	ES FSFW	EACH SIDE EMERGENCY SHOWER AND EYE WASH	INJ	INJECTOR	POLY	POLYETHYLENE	SRL	SCRUBBER RECIRCULATION LIQUID (CAUSTIC)			
	CD	CEILING DIFFUSER, CONDENSATE DRAIN	ESS	EMERGENCY HAND SWITCH	INSTR	INSTRUMENTATION INSULAT(E)(ED)(ING)(ION)	POS	POSITION DOTABLE WATER	SS SSK	SANITARY SEWER, SELECTOR SWITCH SERVICE SINK			
	CDT	CONDUIT	ET EUH	ELECTRICALLY HEAT TRACED ELECTRIC UNIT HEATER	INT		PP	POWER POLE	SSL	SECONDARY SLUDGE			
be	CEF	CEILING EXHAUST FAN	EVR	EVAPORATOR	INV IP	INVERT IRON PIPE		POUNDS PER DAY	SST	STAINLESS STEEL SLUDGE TRANSFER			
906	CFM	CUBIC FEET PER MINUTE	EW EWC	EACH WAY ELECTRIC WATER COOLER	ISR	INTRINSICALLY SAFE RELAY	PRC	POINT OF REVERSE CURVATURE	STA	STATION			
S	CFS CHEMD	CUBIC FEET PER SECOND	EWEF	EACH WAY EACH FACE		10107	PREFAB		STB STD(S)	STABILIZER STANDARDS(S)			
Per	CHF	CHEMICAL FEEDER	EVVH EX	ELECTRIC WATER HEATER, EXHAUST EXISTING	U JST JT	JOIST JOINT	PRI	PRIMARY	STIFF	STIFFENER			
Std	CHKD PL Cl	CHECKERED PLATE CAST IRON	EXIST	EXISTING	1/			PROJECTION PRESSURE OR VACUUM DELIEE VALVE	STIK	STEEL			
	CIP	CAST IRON PIPE	EXP EXPO	EXPANSION, EXPANSION TANK EXPOSED	К кgv	KNIFE GATE VALVE	PRV	PRESSURE REDUCING VALVE, PRESSURE	STM	STEAM			.
	CIRC CJ	CIRCUMFERENTIAL/CIRCUMFERENCE CONSTRUCTION JOINT	EXT	EXTERIOR	I		PS	REGULATION VALVE, PRESSURE RELIEF VALVE	STR	STEEL FIFE STRAINER			
	CKA	CHECK VALVE, ANGLE	-		L L	ANGLE (STRUCTURAL), LENGTH, LOUVER	PSF	POUNDS PER SQUARE FOOT	STRUCT				
crip	CKB CKF	CHECK VALVE, BALL	FACT FAD	FACTORY FOUL AIR DUCT	LAV	LAVATORY	PSG PSI	PRESSURE GAUGE	SUPT	PIPE SUPPORT, SUPPORT			
gnS	CKS	CHECK VALVE, SWING	FB	FLAT BAR	LB(S) I DF	POUND(S) LIQUID DIESEL EUEI	PSIG	POUNDS PER SQUARE INCH GAUGE	SV SW/	SERVICE VALVE, SHUTOFF VALVE, SOLENOID VAL	_VE		
Jesi	CL CLK	CHAIN LINK	⊢В\\ ЕС	FILTER BACKWASH FACE OF CURB, FLEXIBLE COUPLING	LDFR	LIQUID DIESEL FUEL RETURN	PT PV	POINT, POINT OF TANGENCY PLUG VALVE	SWR	SEAL WATER			
	CLD		FCA	FLANGE COUPLING ADAPTER	LF LG	LINEAL FEET LONG	PVC	POINT OF VERTICAL CURVATURE, POLYVINYL	SYM SYN	SYMMETRICAL SYNTHETIC			
	CLP	CHLORINE GAS (PRESSURE)	FCU	FLOOR GLEANOUT FAN COIL UNIT	LH		PVDF	CHLORIDE POLYVINYLIDENEFLUORIDE	—				
lad	CLR		FD	FIRE DAMPER, FLOOR DRAIN, FOUND	LHR LHRA	LEFT HAND REVERSE LEFT HAND REVERSE ACTIVE	PVI	POINT OF VERTICAL INTERSECTION	Т	TANGENT LENGTH, THERMOSTAT, TIMER			
gs	CLSM	CONTROLLED LOW STRENGTH MATERIAL	FDL	FIRE DEFARTMENT CONNECTION FLOOR DRAIN LINE	LHRB	LEFT HAND REVERSE BEVEL	PVM I PVT	PAVEMENT POINT OF VERTICAL TANGENCY	T&B taq	TOP AND BOTTOM			
ple:	CLV				LLH	LIVE LOAD LONG LEG HORIZONTAL	PLW	PLANT WATER	TBM	TEMPORARY BENCHMARK			
LTa	CMLC	CEMENT MORTAR LINED CEMENT MORTAR LINED AND COATED	FEFF	FINAL EFFLUENT	LLV				TC TCV	TOP OF CURB			
응 		CORRUGATED METAL PIPE	FG FH		LP LPA	LOW PRESSURE AIR		QUANTITY	TDH			GENERAL NUTES:	
∠ ⊢	CNV	CONVEYOR	FILT	FILTRATE	LPG	LIQUIFIED PROPANE GAS	R R/W	RIGHT OF WAY		TIME DELAY RELAY, TOWEL DISPENSER/RECEPTA	ACLE	1. NOT ALL ABBREVIATIONS SHOWN ON THIS DRAWING	JARE F
out1					LPT	LOVY POINT LONG RADIUS	RAD	RADIUS, RADIAL	TH	TEST HOLE		USED ON THIS PROJECT. SEE OTHER DRAWINGS AN SPECIFICATIONS FOR ADDITIONAL ARREVIATIONS	עו THAT
Lay	CONC	CONCRETE	FIN GR	FINISHED GRADE	LS		RAS RCP	RETURN ACTIVATED SLUDGE REINFORCED CONCRETE PIPE	THK TKS	THICKENER, THICKNESS, THICK		MAY BE USED ON THIS PROJECT.	
	CONN		FL		L I LWL	LEF I LOW WATER LEVEL	RD	ROOF DRAIN	TLV	TELESCOPING VALVE			
Mod	CONT	CONTINUOUS OR CONTINUATION OR (D) (OUS)	FLD	FILTER DRAIN	К <i>Л</i>		RDL RDOF	ROOF DRAIN LINE ROOF DRAIN OVERELOW	ТМН тмр	TELEPHONE MANHOLE		2. FUR FRUUESS FIFING ABBREVIATIONS, SEE SHEET	SUJ AND
	CORR		FEF FI FY	FILTER EFFLUENT FLEXIBLE	IVI M	MOTOR	RECIRC	RECIRCULATING	TNK	TANK			
H	CPLG	COUPLING	FLG	FLANGE, OR FLANGED	MAN	MANUAL	RED REF	REDUCER, ROOF EQUIPMENT DRAIN REFERENCE	T.O. TOC	IOP OF TOP OF CONCRETE		3. FOR STRUCTURAL ABBREVIATIONS, SEE SHEET G10	·
	CPT CPVC		FLR FM	FILTER FORCE MAIN	MASY	MASONRY	REG		TOG	TOP OF GRATING		4. FOR ELECTRICAL ABBREVIATIONS, SEE SHEETS GEO	01 AND
	CS	CARBON STEEL, CIRCULATING SLUDGE	FND	FOUNDATION	MATL		REJ	RUBBER EXPANSION JOINT	TOM TOS	TOP OF MASONRY TOP OF STEEL		GE02.	
	CSP CT	CHEMICAL SUMP PUMP, CORRUGATED STEEL PIPE	ЃО FPM	FUEL OIL FEET PER MINUTF	MAX		REQD	REQUIRED	<u>T.O.W.</u>	TOP OF WALL		5. FOR INSTRUMENTATION ABBREVIATIONS, SEE SHEE	<i>E</i> TS
	ĊŢĴ	CONTROL JOINT	FPP	FLEXIBLE PLASTIC PIPE	MC	MECHANICAL COUPLING	RES	RESERVOIR	IR	TRIAD (THREE CONDUCTOR SHIELDED CABLE), T	MING RELAY	GN01, GN02, GN03, AND GN04.	
					MCJ	MASONRY CONTROL JOINT	REV	REVISION, REVERSE					
				DESIGNED									JOB NO.
	1			PK				\$THUD	N				7310L.10
								R. San R. S.				S PROJECT BAR IS ONE INCH ON ORIGINAL DRAWING DF	RAWING NO.
							rgra		m				G07R
₩ 							-aiu]		GENERAL		
0	+ +			DATE CIVIL ANT					/	ABBR	REVIATIONS	S IF NOT ONE INCH ON THIS SHEET AD ULST	SHEET NO.
	DATE	BY DESCRIPTION		SEPTEMBER 2022				1858	•			SCALES ACCORDINGLY	7 OF 56
				09/28/22	-		_						
1	1	I 2		4	1 5	6	I /	I X I	9	10 1	11		

FILE NAME: 7310L10G07B.dgn

	г		1	2	3		4	5
				GENERAL NO	TES			
15 PM		1.	FOLLOWING NOTES	S ARE GENERAL AND APPLY TO ALL SHEETS EN IN THEIR ENTIRETY ON EACH SHEET.	S OF THESE CONTRACT DOCUMENT	S AS IF		ſ
2022 12:40:	A	2.	CONTRACTOR SHAI THE ENGINEER OF A EXISTING CONDITIC UTILITIES. CONTRA	LL VERIFY ALL DIMENSIONS BEFORE START ANY DISCREPANCIES. CONTRACTOR SHAL DNS INCLUDING LOCATION AND DIMENSION ACTOR SHALL NOTIFY ENGINEER IF THERE I	TING WORK AND SHALL IMMEDIATEL L BE RESPONSIBLE FOR FIELD VER S OF ALL EXISTING CONSTRUCTION IS A CONFLICT BETWEEN THE CONT	LY NOTIFY IFYING ALL I AND TRACT	BRACKET	
28-SEP-		3.	UNLESS DETAILED, AS INDICATED IN TH	SPECIFIED, OR OTHERWISE INDICATED ON	THE DRAWINGS, CONSTRUCTION S	SHALL BE	BREAK LINE	\sim
ot Date: 2		4.	EVEN THOUGH NOT WHERE NO CONSTR IN THE SAME AS FO	REFERENCED AT SPECIFIC LOCATIONS ON RUCTION DETAILS ARE SHOWN OR NOTED F OR OTHER SIMILAR WORK.	FOR ANY PART OF WORK. DETAILS	SHALL BE	PIPE BREAK PLAN VIEW	Ŷ
		5.	CONTRACTOR SHAI DISCHARGE REGUL	LL COMPLY WITH STATE AND LOCAL CONST ATIONS AND REQUIREMENTS.	FRUCTION STORM WATER AND SAN	ITARY	PIPE BREAK CROSS SECTION	
	в	6.	PRIOR TO EXCAVAT AND/OR OTHER PRO LOCATION OF ALL E SHALL TEMPORARII AND REINSTALL TH OWNER.	FION FOR NEW STRUCTURES, ELECTRICAL (OPOSED UTILITIES, CONTRACTOR SHALL BE EXISTING PIPING AND UTILITIES IN THE CON LY RELOCATE CONFLICTING EXISTING UTIL EM AS REQUIRED TO ELIMINATE THE CONF	CONDUIT, FABRICATION OF NEW PI E RESPONSIBLE FOR VERIFYING TH STRUCTION AREA. THE CONTRACT ITIES AT TIE-IN/CONNECTION LOCA ⁻ LICT AT NO ADDITIONAL COST TO T	PING IE OR TIONS HE	SCALE	0
lser: svcPW		7.	ALL PIPELINES 12" A SPECIFICALLY INDIO OF 30" UNLESS NOT ARE NECESSARY TO FOR FURNISHING A ADDITIONAL COST	AND LARGER SHALL HAVE A MINIMUM COVE CATED ON THE DRAWINGS. PIPE SMALLER TED OTHERWISE. PIPES SHALL BE ROUTED O MISS EXISTING PIPES, STRUCTURES, ETC LL FITTINGS AND ADAPTERS REQUIRED TO TO THE OWNER. CONTRACTOR SHALL INCL	ER OF 36" UNLESS THE COVER DEPT THAN 12" SHALL HAVE A MINIMUM C AS SHOWN UNLESS MINOR REVISIO CONTRACTOR SHALL BE RESPON MAKE THE ROUTING CHANGES AT UDE COST FOR THIS IN THE BID.	TH IS OVER ONS SIBLE NO		
		8.	EXISTING FACILITY AVAILABLE RECORD RESPONSIBILITY FO THE CONTRACTOR SHOWN AROUND O	AND UTILITY INFORMATION SHOWN ON THE DS OR ELECTRONIC FILES. NEITHER THE OV DR FACILITIES AND UTILITIES NOT SHOWN O SHALL FIELD VERIFY ALL LOCATIONS, SIZES R NEAR AREAS OF NEW CONSTRUCTION PE	E DRAWINGS WAS OBTAINED FROM WNER NOR ENGINEER ASSUMES AN DR NOT IN THE LOCATION SHOWN. S, MATERIAL TYPES, AND ELEVATIO RIOR TO START OF CONSTRUCTION	IY DNS	NORTH ARROW/F	LANT NORTH
	с	9.	THE CONTRACTOR DAMAGE EXISTING ALL FACILITIES DAM OR RECONSTRUCT WITHOUT ADDITION	SHALL TAKE ALL PRECAUTIONARY MEASUF FACILITIES AND UTILITIES SHOWN OR NOT /AGED BY THE CONTRACTOR'S OPERATION ED TO THE ORIGINAL OR BETTER CONDITIC IAL COMPENSATION.	RES NECESSARY TO PROTECT FRO SHOWN THAT ARE TO REMAIN IN PL IS SHALL BE EXPEDITIOUSLY REPAI ON AT THE CONTRACTOR'S EXPENS	M _ACE. IRED E	EQUIPMENT/DEV TAG AND NUMBE	
		10.	CONTRACTOR SHAI SHALL PROVIDE ALL PROVIDE ALL SUPP	LL MAKE CONNECTIONS TO EXISTING PIPE, L FITTINGS, ADAPTERS, AND APPURTENANG ORTS REQUIRED FOR A RIGIDLY SUPPORTI	EQUIPMENT, ETC. AS REQUIRED AN CES REQUIRED TO MAKE THE CONN ED COMPLETE AND WORKING SYST	ND NECTIONS. TEM.		EF-EQUIP = FUTURE
		11.	ADJUST ALL VALVE WISE SHOWN OR DI GRADE AND VAULTS	BOXES, VAULTS, PULL BOXES, AND MANHO IRECTED. MANHOLES IN OPEN FIELDS SHAL S SHALL BE SIX INCHES ABOVE FINISHED G	DLES TO FINISHED GRADE UNLESS (LL BE SET TWELVE INCHES ABOVE F RADE.	OTHER- FINISHED	PIPE TAG PIPE	
		12.	THE CONTRACTOR QUESTIONS OR CO	SHALL CONTACT THE PROPER UTILITY REF ORDINATION OF CONSTRUCTION RELATED	PRESENTATIVE AS FOLLOWS FOR TO EXISTING UTILITIES.			SIZE FLOW S EX-SIZE FLOW STREA
		13.	CONTRACTOR SHAI IS NO LONGER IN SI THE PLANT.	LL VERIFY THAT PIPING SHOWN TO BE ABAI ERVICE. LINES IN SERVICE SHALL BE MAIN [.]	NDONED OR AS ABANDONED PREVI TAINED UNTIL NO LONGER REQUIRI	IOUSLY ED BY		EF-SIZE FLOW STRE
1:1	D	14.	ALL EXISTING PIPES WHERE PIPING IS T PHASES OF WORK, TO MAINTAIN SERVI	S THAT ARE TO BE ABANDONED IN PLACE C O BE ABANDONED AND MUST REMAIN IN SE AND IT CONFLICTS WITH NEW PIPING, TEM ICE BY THE PLANT.	OR REMOVED MAY NOT BE SHOWN. ERVICE UNTIL COMPLETION OF OTH PORARILY RELOCATE PIPING AS RE	IER EQUIRED		
PlotScale:		15.	CONTRACTOR SHAI THE EXISTING PIPE DOWNTIME SHALL E	LL REROUTE THE EXISTING PIPING IF REQU SHALL REMAIN IN SERVICE UNTIL NEW PIP BE A MAXIMUM OF 2 HOURS, UNLESS SPECI	IIRED TO MISS THE PROPOSED STR ING IS READY TO BE PLACED INTO S IFIED OR SHOWN OTHERWISE.	UCTURES. SERVICE.		
5.pen		16. 17.	ALL SIDEWALKS TO THE CONTRACTOR	BE 4'-0" WIDE UNLESS SHOWN OTHERWISE SHALL TAKE SPECIAL PRECAUTIONS IN THE	E. E VICINITY OF ANY OVERHEAD ELEC	CTRIC		
n_v090		4.0	LINES. CONTRACTO	OR SHALL ABIDE BY THE NATIONAL ELECTR ECTRIC LINES.				
Carollo_Std_P€	E	18. 19.	CONTRACTOR SHAL BEFORE PLACING A OPENINGS CONTRO VERIFIED BY THE C	LING/SHORING REQUIRED TO PROTECT EX LL VERIFY LOCATION OF ALL ARCHITECTUR NY STRUCTURAL STEEL OR CONCRETE. AL DLLED BY ARCHITECTURAL, MECHANICAL, C ONTRACTOR PRIOR TO CONSTRUCTION.	ISTING STRUCTURES, PIPES AND FA RAL, MECHANICAL, AND ELECTRICAL LSO, STRUCTURAL DIMENSIONS ANI DR ELECTRICAL EQUIPMENT SHALL	ACILITIES. _ ITEMS D BE		
ignScript:		20.	MECHANICAL AND E REVEALS NOT SHO DRAWINGS, SHALL	ELECTRICAL EQUIPMENT SUPPORTS, ANCH WN ON THE STRUCTURAL DRAWINGS, THAT BE PROVIDED PRIOR TO CASTING CONCRE	ORAGES, OPENINGS, RECESSES, A I ARE REQUIRED BY OTHER CONTR ETE.	ND ACT		
e ctb Des		21.	CONTRACTOR SHAI COMMUNICATION W AND INTERRUPTION	LL FOLLOW SPECIFICATION SECTION 01140 VITH OWNER AND FACILITY OPERATIONS ST N OF SERVICE.	REGARDING NOTIFICATION AND TAFF FOR START/STOP/TESTING			
le: gshade								
ColorTab	F							
Layout1								
Model:								
elch	G				DESIGNED PK	Ko	ROFESSION	
) BY: гм	-				DRAWN JBR			
T SAVEI	-				CHECKED DWW			
LAS		REV	DATE BY	DESCRIPTION	SEPTEMBER 202	22	OF CALIFU' 09/28/22	
l		PROJ	I ECT NO. 7310L10	∠ FILE NAME: 7310L10G08B.dgn	<u>ا</u> ک	1	4	1 5

	11	HATCH P	2 PATTERNS	13	
	ABC		CLASS "C" CONCRETE		
	ALUMINUM		GRATING		A
	ASPHALT PAVING		LANDSCAPING		
	BRICK OR BLOCK		RUBBER	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	В
	BRONZE, BRASS, OR COPPER		SOIL		
	CAST IRON OR FIBERGLASS		STEEL		
	CLASS "A", "B" AND "D" CONCRETE		TREAD PLATE		С
	STAGING AREA				
					D
					E
_					F
				JOB NO.	
			BAR IS ONE II	CALES 7310L.10	G
51 	GENERAL NOTES AND	SYMBOLOGY	0 IF NOT ONE II THIS SHEET, J	TI GO8B	
	11	1	2	13	

	г		1	2	3	r	4	5
				NOTES				LINE
31 PM		GEN	IERAL PIPELINE N	IOTES			NEW STRUCTURES	
12.41		1.	DIMENSIONS TO OTHER IMPROV VERIFY ALL DIM	D STRUCTURES, REFERENCED PIPING, PAVI /EMENTS IS APPROXIMATE. THE CONTRACT /ENSIONS AND CONDITIONS 14 DAYS BEFOR	ING, AND OR SHALL FIELD RE THE		EXISTING STRUCTURES (SC	REENED)
-2022	А	2.	CONSTRUCTION CONTRACTOR S	N BEGINS. SHALL MAINTAIN A MINIMUM CLEARANCE OI	F 10 FEET		NEW PIPING (TRIPLE LINES)	
28-SEF			HORIZONTAL AN EXISTING WATE	ND 3 FEET VERTICAL BETWEEN THE SEWER ER LINES.	R LINES AND		NEW PIPING (SINGLE LINE)	
Date:		3.	THE CONTRACT ADJACENT TO T	FOR SHALL MAINTAIN ACCESS TO ALL PROP THE WORK, THROUGHOUT THE CONSTRUCT	PERTIES FION PERIOD.		EXISTING PIPING (SINGLE LI	NE)(SCREENED)
Plot		4.	ALL OPEN TREN SHORING SYSTI REQUIREMENTS	VCHES, WORK AREAS AND SHAFTS SHALL H EM IN ACCORDANCE WITH OSHA, STATE AN S.	IAVE A ID LOCAL		HIDDEN LINE	
		5.	THE CONTRACT	FOR SHALL COMPLY WITH ALL FEDERAL, ST WS AND ORDINANCES RELATING TO THE SA	ATE, COUNTY, FFTY AND		CENTER, MONUMENT, OR SI	JRVEY LINE
			CHARACTER OF BUT IS NOT LIMI	F WORK, EQUIPMENT AND PERSONNEL. THIS ITED TO SHEETING, SHORING, BRACING, VE	S INCLUDES ENTILATION,		GUARDRAIL	
	в	6	BARRICADES AN	ND WARNING DEVICES.			EXISTING CONTOURS (SCRE	ENED)
N		0.	DISTURBANCES WHEREVER PRA	3 TO STREAMS, VEGETATION, TREES AND C ACTICAL LEAVE EXISTING TREES AND VEGE	ROP LANDS. ETATED AREAS		NEW CONTOURS (MAJOR)	
: svcP\		UTI	LITY NOTES				NEW CONTOURS (MINOR)	
User		1.	EXISTING UTILI	ITIES IN THE PROJECT MAY BE IN A FRAGILI SHALL EXERCISE NECESSARY CAUTION WI	E CONDITION. THE HEN WORKING		NEW FENCE	
		2.	NEAR EXISTING	G UTILITIES. ONS AND ELEVATIONS OF EXISTING UTILITIE	S ARE BASED ON		EXISTING FENCE (SCREENE REMOVE OR ABANDONED (C	D) CROSS
			RECORD DRAV CONSIDERED A NO INFORMATI	VINGS, POTHOLING AND SURVEY INFORMAT APPROXIMATE ONLY. WHERE NO ELEVATIO ION WAS AVAILABLE DURING THE DESIGN P	TION AND ARE NS ARE SHOWN, PERIOD.		HATCHING: FENCE SHOWN	AS EXAMPLE)
	С	3.	SOME UTILITY CONTRACTOR	SERVICES MAY NOT BE SHOWN ON THESE SHALL TAKE NECESSARY MEASURES TO L	DRAWINGS. THE OCATE AND		PROPERTY LINE OR RIGHT (DF WAY
		4.	PROTECT SER	VICE DURING CONSTRUCTION.	RGROUND		EDGE OF PAVEMENT	
			UTILITIES SHO FOR BIDDING F POTHOLING TO	WN ON THESE DRAWINGS ARE APPROXIMA PURPOSES. THE CONTRACTOR SHALL BE RI CONFIRM BURIED PIPING LOCATION / ELE	TE AND ARE SHOWN ESPONSIBLE FOR VATION PRIOR TO AN	Y	SLOPE	
			EXCAVATION A PROTECTION C	ACTIVITIES. THE CONTRACTOR SHALL BE RE OF EXISTING UTILITIES.	ESPONSIBLE FOR			
		<u>EAF</u> 1.	RTHWORK NOTES) NSTRUCTION AREA OF NATURAL OBSTRUC	CTIONS EXISTING			
			FOUNDATIONS WEEDS, RUBBI	5, BUILDINGS, FENCES, LUMBER, WALLS, STI ISH, TREES, BOULDERS, AND ANY OTHER IT	UMPS, BRUSH, EMS WHICH			
		2	FOR REMOVAL	D DISPOSE OF TREE TRUNKS AND ROOT MA			CURB & GUTTER)
	ש	2.	THE GROUND ST	SURFACE REMAINING AFTER CLEARING.			CURB	
ale: 1:1		5.	ESTIMATED TO SOIL CONDITIC) BE 12-INCHES BUT WILL BE DETERMINED I ONS DICTATE.	N THE FIELD AS		ROAD CENTERLINE SWALE ((3' WIDE)
PlotSc		4.	REPLACE STO	CKPILED SOIL AND RESTORE SITE AS SPEC			ROAD CROSS GUTTER (10' V	VIDE)
)5.pen		5.	EXCAVATING A BACKFILLING V	ANY SOILS CONTAINING ROCK OR AGGREGA NITH TOPSOIL. SOIL REMOVED MAY BE USE	ATE AND ED FOR TRENCH		FLOWLINE	
en_v09(6.	PROTECT TREE	ES AND LANDSCAPING UNLESS OTHERWISE	E NOTED.		FUTURE IMPROVEMENTS	
_Std_P							FUTURE CONSTRUCTION	
Carollo	E						GATE	
Script:							MATCH LINE	
Design								
de.ctb								
e: gshac								
lorTable								
t1 Co	F							
Layou								
Model								
elch	G					DESIGNED PK	or ROFESS/04/	
BY: rw						DRAWN JBR	GLAS W. 44 Stor L. W. H. H.	
SAVED						CHECKED DWW	₩ No. 38950	
LAST :		REV	DATE BY	DESCRIPTION		DATE SEPTEMBER 202	22 PJF OF CALIFORN 09/28/22	
	-		1 T NO 73101 10	Ell E NAME: 73101 10609B dap	3		4	5

	11	12			13		_
	SI	(MBOLS					
PTION	SYMBOL	DESCRIPTION	SY	'MBOL	DESCRIF	PTION]
IARK		TRANSIT POINT			FLANGE	1	
L CONTROL POINT	\bigtriangleup	ANCHOR POINT		\bowtie	VALVE		A
ENT		PARSHALL FLUME		\mathbf{H}	CLOSE) VALVE	
RING LOCATIONS	٥	GUARD POST		\bowtie	VALVE \ CONNE	N/ CTION	
RING LOCATIONS		HEADWALL) VALVE W/ CTION	
ATION CATIONS		ROCK WALL	٩	Ť	OPERA ⁻ OPERA ⁻	FOR/ FOR CLOSED	
E/ E NUMBER		RIP RAP		Ň	VALVE \	W/ OPERATOR	
I		SHRUB/HEDGE		M	CLOSEI W/ OPEI) VALVE RATOR	В
D	\bigcirc	TREE		Ň	VALVE \ AND CO	N/ OPERATOR NNECTION	
POINT		SIGN/SIGN POST		▶ ⊂) VALVE W/ FOR AND	
	Ø	LIGHT	_	\bowtie	CONNE VALVE \ CONNE	CTION N/ TWO CTIONS	-
	×	LIGHT POLE	_	\mathbf{H}	CLOSEI TWO CO) VALVE W/ DNNECTIONS	
	×	HIGH LIGHT POLE	_	Ň	VALVE \ AND TW	W/ OPERATOR O CONNECTIONS	
ROW	0 <u> </u>	TRAFFIC LIGHT POLE	_	ЙС	CLOSEE W/ OPEI) VALVE RATOR AND	C
.OPE ON		TRAFFIC LIGHT POLE			TWO CC GATE V BLIND F	DNNECTIONS ALVE W/ LANGE	
ON ARROW		SINGLE TRAFFIC LIGHT POLE	N	\mathbb{N}	AND CO CHECK	NNECTION VALVE	
ТҮ НООК	∲—)X	GUYED LIGHT POLE		\bowtie	PLUG V	ALVE	
F (PLAN)	-0-	UTILITY POLE			CLOSEI PLUG V) ALVE	
_ ()	<u>(</u>	UTILITY POLE GUY WIRE]	PIPE CA CONNE	P OR CTION	
E (PROFILE)	PP ●	POWER POLE		$\left(\right.$	CAP OR	TURN DOWN	
		PA SPEAKER			CROSS		
ANHOLE		2 WAY PA SPEAKER	\triangleright		REDUCI	ER	
ASIN (SQUARE)		3 WAY PA SPEAKER	\bowtie			ER W/ CTION	
ASIN (ROUND)		4 WAY PA SPEAKER	\supset	> 🗲		ER W/ CTION	
LET	Q	FIRE HYDRANT - 2 WAY	\bowtie		REDUC	ER FLANGED	E
ANHOLE	-0	FIRE HYDRANT - 3 WAY	\supset		REDUCI FLANGE	ER W/ AND	
CAL MANHOLE L BOX	Ţ	YARD HYDRANT	\supset	╶┣	CONNE	CTION ER W/ TWO	
х	o _{co}	CLEANOUT			CONNE	CTIONS	
ONE PEDESTAL	<u> </u>	AIR RELEASE VALVE	F	Τ	FLANGE	DTEE	
V	• 	BLOW OFF VALVE	3	Τ _C	TEE W/ CONNE	CTIONS	
ION BOX	⊕ ⊥	HOSE BIBB	3	Τ _C	TEE W/ AND CO	FLANGE NNECTIONS	F
ON BOX	Y	SERVICE CONNECTION					
ON BOX	\otimes	BURIED VALVE					
TOWER	\square	GAS VALVE OPEN/CLOSED					-
	$\bigcirc \bullet$	GAS METER			*** ALL SYN	MBOLS SHOWN AS	
					NEW. E ARE SC	XISTING SYMBOLS REENED.	
CITY OF	PETALUM	4		VERIFY	SCALES	JOB NO. 7310L.10	G
SINFECTION	UPGRADE	S PROJECT			DRAWING		1
	GENERAL VIL SYMB	OLOGY		IF NOT ON	NE INCH ON ET. ADJUST	SHEET NO.	-
				SCALES AC	CORDINGLY	9 OF 56	

-							
	[1 GENERAL NOTES:	2	3	GEO	4 DTECHNICAL REPORT	5 / FOUNDATION D
~		1. USE STRUCTURAL DRAWINGS IN DISCIPLINES AND WITH THE SPE	N CONJUNCTION WITH PROJECT DF	AWINGS BY OTHER	1. GEC	DTECHNICAL INVESTIGATION RE	PORT:
41.08 PN		2. UNLESS DETAILED, SPECIFIED, INDICATED IN THE GENERAL NC	OR INDICATED OTHERWISE, CONST TES AND TYPICAL DETAILS.	RUCTION SHALL BE AS	TIT PRI REI	LE: PROPOSED TERTIARY PROC EPARED BY: KLEINFELDER PORT NO: 20193762.004A DATE	ESS UPGRADES D: APRIL 23rd, 2020.
2 12		3. PRESENTATION CONVENTIONS	FOR STRUCTURAL DRAWINGS:		2. FOU INVE	INDATION DESIGNS ARE BASED ESTIGATION REPORT.	ON RECOMMENDATIONS
3-SEP-202	A	A. SCREENED LINE WORK INDIC B. WRITTEN DIMENSIONS TAKE C. PLANS ARE TREATED AS HOF SHOWS CONSTRUCTION AT /	ATES EXISTING CONDITIONS. PRECEDENCE OVER SCALED SIZES NZONTAL SECTIONS. (I.E.: "PLAN AT AND BELOW ELEVATION 110.)	S. ELEVATION 110"	A. N B. L	NET ALLOWABLE BEARING PRES ATERAL EARTH PRESSURE (UN	SURE SEE PLANS. O):
lot Date: 28		4. VERIFY DIMENSIONS AND COND IMMEDIATELY OF DISCREPANCI DIMENSIONS, AND INFORMATIO FOLLOWING BEFORE PREPARA	ITIONS BEFORE BEGINNING WORK. ES BETWEEN EXISTING CONDITION N SHOWN ON THESE DRAWINGS. C FION AND SUBMITTAL OF SHOP DR/	. ADVISE ENGINEER S AND ONFIRM THE AWINGS:		ULTIMATE ACTIVE (PSF/FT): ALLOWABLE PASSIVE (PSF/FT): ALLOWABLE COEFFICIENT OF FI *1/3 INCREASE FOR LOAD COMB	ABOVE (45 250* RICTION: 0.25* INATIONS INCLUDING SE
LL .		A. DIMENSIONS AND WEIGHTS F B. SIZES AND LOCATIONS OF EC 5. TYPICAL DETAILS ARE INCLUDE	OR EQUIPMENT SELECTED. &UIPMENT PADS FOR EQUIPMENT S D ON THE "TS" DRAWINGS.	ELECTED.	C. (GROUNDWATER DESIGN EL: 10.50 SEISMIC/ WIND DESIGN EL: 5.50	
		A. TYPICAL DETAILS ARE INTENI	DED TO APPLY AT LOCATIONS DES		TYPI	CAL STRUCTURAL M	ATERIALS:
	в	B. IN STRUCTURAL TYPICAL DE REINFORCEMENT (WHETHER CONCRETE) IS GENERALLY A	FAILS, ORIENTATION OF BARS IN EA "LINES" OR "DOTS"ARE CLOSER TO RBITRARY. SEE DRAWINGS OF EAC	ACH MAT OF D THE FACE OF THE CH STRUCTURE FOR	1. MAT OTH	ERIALS SHALL CONFORM TO TH ERWISE INDICATED ON THE DRA	E FOLLOWING REQUIREN WINGS.
сРW		6. SEE CIVIL DRAWINGS FOR STRU	ICTURE COORDINATES. POINTS ON	I THE STRUCTURES	FOR REINFO	RCING STEEL (FOR CONCRETE	AND MASONRY):
User: sv		 TO WHICH SITE COORDINATES F 7. DRAWINGS PREPARED BY OTHE CONDUITS, AND OTHER ITEMS 1 	R DISCIPLINES INCLUDE OPENING	S, ANCHORS, PIPES, S THROUGH	1. DEF A. T` B. W	ORMED BARS: YPICAL: ASTM A615, GRADE 60. /HERE INDICATED ON THE DRAV	/INGS: ASTM A706.
		A. CONFIRM SIZE AND LOCATIO	NS OF OPENINGS, PENETRATIONS	AND EMBEDMENT FOR	2. WEL	.DED WIRE FABRIC: ASTM A1064 ETE:	
		ITEMS AND EQUIPMENT FURI B. IN GENERAL, OPENINGS, EME DIAMETER ARE NOT SHOWN	VISHED. 3EDMENTS, AND PENETRATIONS LE ON THE STRUCTURAL DRAWINGS	ESS THAN 12 INCHES IN	1. NOR	MAL DENSITY.	
		C. SEE MECHANICAL DRAWINGS AND ASSOCIATED STRUCTUF	FOR DETAILS OF PIPE PENETRATI	ONS, PIPE SUPPORTS,	2. MINI		MPRESSIVE STRENGTH, f
	С	8. SEE ARCHITECTURAL DRAWING	S FOR EQUIPMENT PADS AND PIPES	SUPPORTS.	B. FI C. El	LL: "CLASS C" fc = 2500 PSI. LECTRICAL DUCT ENCASEMENT	: "CLASS CE" f'c = 2500 PS
			CRITERIA - GENERAL:		STRUCI	TURAL STEEL: TIONS:	
		SEE DRAWINGS OF INDIVIDUAL ST		CRITERIA BASED ON	A. S B. S	SHAPES W, WT: ASTM A992 (Fy SHAPES S, ST, M, MT, C, MC, L: A	= 50 KSI) ASTM A36 (Fy = 36 KSI)
		1. BUILDING CODE:				SHAPES HP: ASTM A572, GRADE PLATES AND BARS: ASTM A36 (F PIPES: ASTM A53, GRADE B (Fv =	50 (Fy = 50 KSI) y = 36 KSI) 35 KSI)
		A. 2019 CALIFORNIA BUILDING	CODE (CBC 2019) WITH ASCE 7-16.		F. 1	HOLLOW STRUCTURAL SECTION ROUND: ASTM A500, GRADE	S: C (Fy = 46 KSI)
		2. STRUCTURE RISK CATEGORY:			2. CON	SQUARE AND RECTANGULA	C (I
	D	4. LIVE LOADS: CALCULATED FC	R STRUCTURE SELF-WEIGHT.		A. E	BOLTS - STEEL TO STEEL:	
ale: 1:1		 A. FLOOR LIVE LOAD: SEE PLA B. GRATING, GRATING PLANKS C. ROOF LIVE LOAD: SEE PLAN D. EQUIPMENT LOADS: SEE PL 	NS. 3 AND CHECKERED PLATE: 100 PSF IS (20 PSF MINIMUM). ANS.	(UNO).	B. E	ASTM F3125 GRADE A325 HIG BOLTS - STEEL TO CONCRETE O ANCHOR BOLTS WITH HEX F ASTM F593, STAINLESS TYPE ASTM F1554, GRADE 36 GALV WELDS - SHIELDED METAL ARC	A-STRENGTH BOLTS, WI R MASONRY: DRGED HEAD. 316 (304) ANIZED. PROCESS USING E70-XX
PlotSc		5. FLUID PRESSURE LOADS: 63 PS	ST LOADS: SEE PLANS.		STAINLE	ESS STEEL:	
5.pen		6. WIND DESIGN DATA:			1. ANS	TYPE 316/316L EXCEPT WHERE	: TYPE 304/304L IS INDIC4 M A276
;060v		A. SPECIAL WIND REGION: NO B. WIND-BORNE DEBRIS REGIO			3. BOL	TED CONNECTIONS - BOLTS AN	D ANCHOR BOLTS:
Std_Pen		C. BASIC WIND SPEED (3 SEC (D. EXPOSURE CATEGORY: C.	JUST, 33 FEET ABOVE GROUND): 99) MPH.	A. M B	MATCH ALLOY OF THE STRUCTU TYPE 316/316L: ASTM F593, GRAI	RAL MEMBERS CONNEC DE B8M, CLASS 1, HEAVY
carollo	E	A. SITE CLASS: D.			4. WEL	DED CONNECTIONS:	JE 20, OLAOO 1, HEAVI H
cript: 0		C. SEISMIC DESIGN CATEGOR D. MAPPED SPECTRAL RESPO	Y: D. NSE ACCELERATIONS: Ss = 1.78	$\frac{100}{9} = \frac{*1.0 \text{ SECOND}}{1000}$	A B	TYPE 316L: E316L-XX ELECTROD TYPE 308L: E308L-XX ELECTROD	ES. ES.
esignS		E. SITE COEFFICIENTS: F. MAXIMUM CONSIDERED AC(G. DESIGN SPECTRAL RESPON	Fa = 1.0 CELERATIONS:* Sms =1.78 ISE ACCELERATIONS:* Sds = 1.187	Fv = 1.7** g Sm1 = 1.151** g g Sd1 = 0.767** g	STRUCT	<u>FURAL ALUMINUM:</u>	
.ctb		(* 5% DAMPED) (** SEE ASC H. LONG-PERIOD TRANSITION	E 7-16 § 11.4.8 EXCEPTION #2) PERIOD, TL: 8 SEC.		A. S	SHAPES: ASTM B308, ALLOY 606	1-T6.
jshade		8. FLOOD LOADS:			2. BOL	TED CONNECTIONS - BOLTS AN	D ANCHOR BOLTS:
able: ç		9. RAIN LOADS:			A. 5	STAINLESS STEEL - TYPE 316, AS	STM A193, GRADE B8M, C
1 ColorT	F	A. DESIGN RAINFALL INTENSIT	Y: i = 1.32 INCHES / HOUR. (100 YEA	R/1 HOUR EVENT)	3. WEL	DED CONNECTIONS: GAS METAL ARC (MIG) OR GAS T	UNGSTEN ARC (TIG) PRC
Layout		10. <u>CONSTRUCTION LOADS:</u> STRUCTURES HAVE BEEN DESI	GNED FOR OPERATING LOADS ON	COMPLETED	,		
Model:		FACILITIES. UNTIL CONSTRUCT THEIR DESIGN STRENGTH, PRC BRACING, AND BALANCING.	ION IS COMPLETE AND MEMBERS H TECT STRUCTURES AS REQUIRED	IAVE ACHIEVED BY SHORING,			
Ě				DES	SIGNED		
, rwelc	G			DI	EJW RAWN	SEP ROFESSIONAL	
ΈD BY				Сн	JG ECKED	₩ No. 6370	
T SAV	-					RUCTURA A	
LAS	ŀ	REV DATE BY		SEPTE	MBER 202	22 OF CALIFU 09/28/22	-
		I	Ζ	3		4	1 5

FILE NAME: 7310L10G10B.dgn

6	6	7	8		9	10		11		12		13	
ESIGN CRITERIA:				<u>P</u>	RE-ENGINEE	RED METAL BUILDING	SYSTEM	<u>S</u>	<u>STF</u>	RUCTURAL ABBREV	ATIONS:		
	THE DRAWINGS.	FOLLOWING REQUIREMENTS C	NLESS OTHERWISE INDICATED ON	1.	THE PRE-ENGIN ACCORDANCE	IEERED METAL BUILDING/CANOPY WITH SPECIFICATION SECTION 13	Y SHALL BE DE 122. LOAD CRIT	SIGNED IN FERIA	1. SE	E SHEET G07 FOR GENERAL I	IST OF ABBREVIATIO	NS USED ON DRAWINGS	\$.
		<u>BACKFILLING:</u>			SHALL BE AS IN DRAWINGS, AN	DICATED IN THE GENERAL STRUC D IN THE SPECIFICATIONS.	CTURAL NOTES	3,	2. AE PF	BREVIATIONS FOR NAMES OF OJECT SPECIFICATIONS.	TECHNICAL GROUP	S MAY BE FOUND IN THE	
IN THE GEOTECHNICAL	OBTAIN GEOTEC	CHNICAL ENGINEER'S OBSERV AS PREPARED, BEFORE PROCE	ATION OF SUBGRADE SURFACES, AS EDING WITH FOUNDATION	2.	THE COLLATER	AL LOAD LISTED IN THE SPECIFIC	ATION INCLUDI	ES	3. ST	RUCTURAL MEMBERS:			
					ELECTRICAL/PI ROOF PANELS,	PING; IT DOES NOT INCLUDE ANY METAL DECK, LINER PANELS, INS	OF THE ROOF ULATION, ETC.	MEMBERS, , NOR DOES	A.	STEEL: ABBREVIATIONS AND THE AMERICAN INSTITUTE C	DESIGNATIONS ARE	IN ACCORDANCE WITH	A
SW BELOW GW	OF THE WALL AF	RE IN PLACE, ARE COMPLETE, J RE MINIMUM SPECIFIED 28-DAY	IL STRUCTURES SUPPORTING THE TO ND (IN THE CASE OF CONCRETE) HAV COMPRESSIVE STRENGTH.	Ξ	IT INCLUDE SPE SHOWN ON THE	CIFIC POINT LOADS FROM PIPE C DRAWINGS.	OR EQUIPMENT	SUPPORTS		CONSTRUCTION MANUAL, C	JRRENT EDITION.		
85 125*	3. WHERE BACKFIL		VALLS BEFORE STRUCTURES ABOVE	3.	PRE-ENGINEER	ED METAL BUILDING/CANOPY MAI		SHALL	В.	ALUMINUM: ABBREVIATIONS WITH THE ALUMINUM ASSOC	AND DESIGNATIONS CIATION'S ALUMINUM	ARE IN ACCORDANCE DESIGN MANUAL,	
ISMIC OR WIND	STRUCTURE AB	, PROVIDE BRACING FOR WALL OVE IS COMPLETE AND (IN THE PECIFIED 28-DAY COMPRESSIV!	S. KEEP BRACING IN PLACE UNTIL THE CASE OF CONCRETE) HAS CURED TO STRENGTH.		LOAD COMBINA ON THE DESIGN	TIONS) IMPARTED TO THE FOUND	DATION SYSTEM	MS BASED	Δ ΔΕ	CURRENT EDITION.	RAL DRAWINGS		
	CONCRETE:			4.	ALL STRUCTUR	AL STEEL WHICH CONNECTS TO (S WITH THE	WI AB	HEN USED ON THE STRUCTUF	AL DRAWINGS, THE I	OLLOWING	
	1. SEE S101/TYP FOLLENGTH REQUIR	OR CONCRETE NOTES, INCLUD REMENTS FOR REINFORCING.	ING CLEAR COVER AND LAP SPLICE		METAL BUILDIN BUILDING SYST	G/CANOPY SHALL BE PROVIDED A EM.	AS PART OF TH	EMETAL		REINFORCEMENT:	OTHER:		
	2. SUBMIT LOCATIO		S NOT SHOWN ON THE DRAWINGS FOR	5.	THE MANUFAC	URER SHALL PLACE ROOF AND V I ON THE DRAWINGS AND SO IT W	/ERTICAL CROS /ILL NOT INTER	SS BRACING FERE WITH		B.O. BOTTOM OF	L AN	GLE	
IENTS UNLESS	3. PROVIDE CHAMI	FER AT EXPOSED EDGES OF C	AST-IN-PLACE CONCRETE. SEE	6		NGS.		PESIST		EF EACH FACE I.F. INSIDE FACE	PL PL/ CJ CO	ATE NSTRUCTION JOINT	В
OF SPECIFIC STRUCTURES	4 PROVIDE REINE	03102 FOR CHAMFERS.		0.	ALL LOADS TRA	NSFERRED FROM THE METAL BU SOLTS SHALL BE DESIGNED IN AC	ILDING/CANOP CORDANCE WI	Y TO THE TH ACI 318		T.O. TOP OF UMBER	EW EA	P AND BOTTOM CH WAY IMINUM	
	A. AT CORNERS	AND JUNCTIONS - AS INDICAT	ED IN S144/TYP, SUPPLEMENT WITH	7	CHAPTER 17.					(REINFORCING BAR SI	ZE)		
	B. AT OPENINGS	S - AS INDICATED IN S180/TYP.	AWINGS.	/.	CONSIDERATIO	NS FOR STEEL BUILDINGS".	SERVICEABILI	I I DESIGN	DEF	ERRED DESIGN SU	BMITTALS		
	5. WELDING OF RE DRAWINGS OR A	INFORCING IS NOT PERMITTEE	UNLESS DETAILED ON THE ENGINEER.	8.	METAL BUILDIN OVERALL LATE	G/CANOPY SHALL BE DESIGNED T RAL BUILDING DRIFT IN ANY DIREC	TO LIMIT THE M	AXIMUM FOR LOAD	AS DI SUBN	EFINED IN THE CALIFORNIA BU MITTALS ARE PORTIONS OF TH	JILDING CODE, DEFE IE DESIGN THAT ARE	RRED DESIGN NOT SUBMITTED AT THE	:
	6. MAINTAIN MINIM AND EMBEDMEN	IUM 3 INCHES CLEAR CONCRET NTS.	E COVER BETWEEN REINFORCING		INCLUDING WIN WHERE 'H' IS TI	D UNLESS INDICATED OTHERWIS E MAXIMUM HEIGHT OF THE BUIL	E ON THE DRA	WINGS,	TIME REGI BUILT	OF PERMIT APPLICATION, ANI STERED DESIGN PROFESSION DING OFFICIAL	D THAT ARE TO BE RI IAL AND SUBSEQUEN	EVIEWED BY THE ITLY SUBMITTED TO THE	
c (AT 28 DAYS UNO).	7. FINISH CONCRE	TE AS SPECIFIED IN SECTION (3366.	9.	MINOR VARIATI	ONS IN THE METAL BUILDING/CAN	IOPY MAY BE S	UBMITTED		DEFERRE	D SUBMITTALS		1
1	8. CONCRETE PAD	S			SYSTEM SUPPL	. IF REQUIRED TO CONFORM TO T IER'S STANDARD SHAPES OR SIZI FAR DIMENSIONS SHALL NOT BE F	THE METAL BUI ES. THE CLEAF REDUCED	LDING R HEIGHT		ITEM		SPECIFICATION	c
		ENT PAD SEE S302/TYP.		10.	THE FOUNDATI	ON SHALL NOT BE POURED UNTIL	THE METAL BU	JILDING		IPMENT ANCHORAGE		01612, 01614, 05190	
					SYSTEM, INCLU	DING ANCHOR BOLTS, IS APPROV	/ED BY THE EN	GINEER.	GRA	TING AND PLANK GRATING		05500	
	STEEL, STAINLESS	STEEL, AND ALUMINUM - CONN	IECTIONS:	1	SPECIAL INSPECT	ION IS REQUIRED FOR THE FOLL	OWING STRUC		GUA PRE	RDRAIL -ENGINEERED METAL BUILDIN	IG SYSTEMS	05500	
	A. MADE USING	3/4-INCH DIAMETER BOLTS.		M/ DE	ATERIALS AND CO TAILS.	NSTRUCTION. SEE SPECIFICATION	N SECTION 014	55 FOR					ı
	CENTER.	ANCE OF AT LEAST 1 1/2 INCHE	S FROM CENTER OF BOLT TO ANY	2.	DIVISION 2 SITE	CONSTRUCTION (EARTHWORK)							
y - 30 ((3))	EDGE OF A P	LATE OR STRUCTURAL ELEMEN	NT.		A. EXCAVATION D B. ADEQUACY OF	EPTH. EXPOSED SURFACE TO PROVIDE	EREQUIRED						
TH LOAD INDICATOR WASHERS	A. FILLET WELD	S: PER AWS CODE BASED ON	HE THICKNESS OF THE MATERIALS		C. PREPARATION D. FILL AND BACK	OF SOILS/SURFACES SUPPORTIN FILL.	IG CONSTRUC	TION.					D
THEORD INDICATOR WASHERS.		D, AND FULL LENGTH OF THE J	DINT.	3.	DIVISION 3 CONC	RETE:							
FLECTRODES	A. AT BOLTED C	CONNECTIONS THAT INCLUDE [IFFERENT METALS (E.G.: STEEL		A. LOCATIONS. B. FORMWORK A	ND MEMBER SIZES.							
	AND STAINLE ISOLATING SI	SS STEEL, OR ALUMINUM AND LEEVES AND WASHERS AS SPE	STAINLESS STEEL) PROVIDE CIFIED IN SECTION 05190. SONRY OR CONCRETE, COAT		C. REINFORCING D. ANCHORS: CAS	STEEL. ST-IN AND POST-INSTALLED. K AND PLACEMENT							
TED ON THE DRAWINGS.	ALUMINUM SI	URFACES AS SPECIFIED IN SEC	TION 09960.		F. PROTECTION A	ND CURING PROCEDURES.							
	4. POST-INSTALLE	D ANCHORS IN CONCRETE AND	MASONRY:	4.	DIVISION 4 METAL	.S METALS:							
	EVALUATION B. DO NOT CUT,	REPORT AND MANUFACTUREF, DAMAGE, OR INTERRUPT EXIS	'S INSTRUCTIONS. TING REINFORCEMENT TO INSTALL		1) MEMBER LO 2) MEMBER S	DCATIONS. ZES/TYPES.							
EX.	LOCATIONS C ANCHORS.	OF REINFORCEMENT IN MEMBE	RS BEFORE DRILLING HOLES FOR		4) ANCHORS	POST-IN AND BUILT-IN ANCHOR E POST-INSTALLED MECHANICAL A	AND ADHESIVE.						
	METAL FABRICATIO	<u>DNS:</u>			B. STRUCTURAL (1) BOLTING.	ALUMINUM.							
	1. HANDRAILS AND) GUARDRAILS:		S	STRUCTURA	L SYMBOLS:							
	A. ALUMINUM, E	XCEPT WHERE OTHER MATER	ALS ARE NOTED.	1.	SEE SHEET G08	FOR KEY TO DRAWING TITLES ANI	D SECTION CU	TS, AND FOR					
	A. ALUMINUM W	VITH TYPE 316 STAINLESS STEE	L FASTENERS, UNLESS	2.	WELDING: SYMB	OLS: IN ACCORDANCE WITH AMER	RICAN WELDING	G SOCIETY					
	B. GRATING ANI	NOTED. D ITS SEATS OR SUPPORTS SH CATED ON THE DRAWINGS AS	ALL BE OF THE SAME MATERIAL. REMOVABLE GRATING", SECURELY		(AWS) A2.4.								
LASS 1, HEAVY HEX.	FASTEN GRA	TING TO SUPPORTS AS INDICA	TED IN S559/TYP.										
			ALT	\sim			CITY C)Ε ΡΕΤΔΙΙ	ΙΜΔ		VERIFY SCA	LES JOB NO.	\dashv_{\sim}
			A Low Q	12		ווא חופות					BAR IS ONE INCH ORIGINAL DRAW	ON 7310L.10 ING DRAWING NO.	-
	C	aroll						GENERAL			0	_ 1" G10B	
						GENER	RAL STF	RUCTURA	AL NO	DTES - I	IF NOT ONE INCH THIS SHEET, ADJ	ON SHEET NO.	1
6	6	7	8		9	10		11		12		10 OF 56	

	1	2 3			4		5
SPEC	IAL INSPECTION:						
1. SPECIA CODE C	L INSPECTION SHALL BE IN ACC CHAPTER 17. SPECIAL INSPECTI	CORDANCE WITH THE CALIFORNIA BUILDING ON IS REQUIRED FOR THE FOLLOWING					
STRUC 01455 F	TURAL MATERIALS AND CONSTI FOR DETAILS.	RUCTION. SEE SPECIFICATION SECTION					
2. SPECIA	AL INSPECTION TABLES:				NETRUCTION		
		A: REQUIRED SPECIAL INSPECTIONS					IBC
		ТҮРЕ	SPECIAL INSPECT	SPECIAL INSPECT	STANDARD	0 (NOTE 1)	REFERENC
	1. INSPECT REINFORCE TENDONS, AND VERIF	MENT, INCLUDING PRESTRESSING Y PLACEMENT.	-	x	ACI 318 CH 25.3, 26.6.	I. 20, 25.2, .1 - 26.6.3	1908.4
-	2. REINFORCING BAR W		-	x			
	THAN ASTM A70)6;		v	AWS ACI 318:	D1.4 : 26.6.4	-
	B. INSPECT SINGLI	E-PASS FILLET WELDS, MAXIMUM 5/16";	×				
	3. INSPECT ANCHORS C	AST IN CONCRETE.	-	X	ACI 318:	17.8.2	
3	4. INSPECT ANCHORS P CONCRETE MEMBER	OST-INSTALLED IN HARDENED (NOTE 2).					
	A. ADHESIVE ANCH UPWARDLY INC	HORS INSTALLED IN HORIZONTALLY OR LINED ORIENTATIONS TO RESIST	x		ACI 318:	17.8.2.4	
	SUSTAINED TEN	NSION LOADS.					-
	B. MECHANICAL A NOT DEFINED IN	NCHORS AND ADHESIVE ANCHORS N 4. A.		x	ACI 318:	: 17.8.2	
	5. VERIFY USE OF REQU	IIRED DESIGN MIX.	-	X	ACI 318: 26.4.3, 2	CH. 19, 26.4.4	1904.1, 1904 1908.2, 1908
	6. PRIOR TO CONCRETE STRENGTH TESTS, PE	PLACEMENT, FABRICATE SPECIMENS FOR ERFORM SLUMP AND AIR CONTENT TESTS,	X	-	ASTM ASTM	C172 C31	1908.10
	AND DETERMINE THE 7. INSPECT CONCRETE	AND SHOTCRETE PLACEMENT FOR PROPER	x		ACI 318: 20	6.5, 26.12 3: 26.5	1908.6, 1908
	APPLICATION TECHN 8. VERIFY MAINTENANC	IQUES. E OF SPECIFIED CURING TEMPERATURE	-	X	ACI 318: 26	.5.3 - 26.5 5	1908.8 1908.9
	AND TECHNIQUES. 9. INSPECT PRESTRESS	ED CONCRETE FOR:					
	A. APPLICATION O	F PRESTRESSING FORCES;.	x	-	ACI 318	: 26.10	-
	B. GROUTING OF E	ONDED PRESTRESSING TENDONS	x _	- X	ACI 318:	CH. 26.9	
-	11. VERIFY IN-SITU CON TENDONS IN POST-T	CRETE STRENGTH, PRIOR TO STRESSING OF ENSIONED CONCRETE AND PRIOR TO					
	REMOVAL OF SHORI STRUCTURAL SLAB	ES AND FORMS FROM BEAM AND S.	-	X	ACI 318:	26.11.2	-
	12. INSPECT FORMWOR DIMENSIONS OF THE	K FOR SHAPE, LOCATIONS, AND E CONCRETE MEMBER BEING FORMED.	-	x	ACI 318: 26.1	1.1 (NOTE 2)	-
	NOT PROVIDED, SPE APPROVED BY THE I	CIAL INSPECTION REQUIREMENTS SHALL BE BUILDING OFFICIAL PRIOR TO THE COMMENCE B: ESSENTIAL ARCHITECTURAL, MECHA	SPECIFIED BY EMENT OF THE	THE REGISTERE WORK. CTRICAL INSPE	ED DESIGN PROFI	ESSIONAL AN	D SHALL BE
-			DEEEDEN	FRE IN	EQUENCY OF		
		VERIFICATION AND INSPECTION	STANDAR	CE CONTINUO DURING	US PERIODIC DURING	2	
		1. ANCHORAGE OF ELECTRICAL EQUIPME	NT	TASK LIST	ED TASK LISTE	ED	
		2. ANCHORAGE OF OTHER ELECTRICAL O					
-		MECHANICAL EQUIPMENT OVER 1,000 LBS. ON FLOORS OR ROOFS.	-	-	X		
		3. ANCHORAGE OF DUCTS GREATER THA 6 S.F. IN CROSS-SECTION.	N _	-	X		
		4. ANCHORAGE OF PIPELINES GREATER THAN 8" IN DIAMETER.	-	-	X		
		5. STEEL STORAGE RACKS SUPPORTING PIPELINES.	-	-	X		
		C: REQUIRED SPECIA	L INSPECTIONS	AND TESTS OF	SOIL		
		ТҮРЕ		CONTINUOUS	PERIODIC		
				INSPECTION	INSPECTION		
-		1. VERIFY MATERIALS BELOW F ARE ADEQUATE TO ACHIEVE BEARING CAPACITY.	OUNDATIONS THE DESIGN	-	x		
		2. VERIFY EXCAVATIONS ARE E PROPER DEPTH AND HAVE RI	XTENDED TO EACHED	-	x		
		3. PERFORM CLASSIFICATION A OF COMPACTED FILL MATER	ND TESTING ALS.	-	x		
		4. VERIFY USE OF PROPER MAT DENSITIES, AND LIFT THICKN	ERIALS, ESSES	x			
		DURING PLACEMENT AND CO OF COMPACTED FILL.	MPACTION				
		FILL,INSPECT SUBGRADE ANI THAT SITE HAS BEEN PREPAR PROPERLY.	D VERIFY RED	-	x		
 	1 1	гГ			·		
3			EJW	ED PROF	ESSIONAL WILD		
			JG		6370		
			CHE <mark>CKED</mark> JAD				
	BY	DESCRIPTION			CALIFORNI		
	- <u> ~' </u> 1	2 2			09/28/22 A		<u>5</u>

FILE NAME: 7310L10G11B.dgn

6	7	8	9	10

			А
			В
			С
			D
			E
			F
CITY OF PETALUMA INFECTION UPGRADES PROJECT GENERAL RAL STRUCTURAL NOTES - II	VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY 13	JOB NO. 7310L.10 DRAWING NO. G11B SHEET NO. 11 OF 56	G

12

13

	1		2	3	4	5		6	7	8	9	10
			PIPING SY	YMBOLS					MECHA	NICAL SYMBOL	S	
1:35 PM	DOUBLE LINE	SINGLE LINE	DESCRIPTION	DOUBLE LINE	SINGLE LINE	DESCRIPTION	SINGLE LINE	DESCRIPTION	SINGLE LINE	DESCRIPTION	SINGLE LINE	DESCRIPTION
2 12:4			WELDED JOINT		$-\!$	GATE VALVE		AIR OR CHEMICAL DIFFUSER		PRIMARY LEVEL ELEMENT: RADAR		STRAINER: WYE TYPE WITH BLOWOFF
28-SEP-202			GROOVED END JOINT FLANGED JOINT	<u>}</u>	—К —К	KNIFE GATE VALVE		QUICK DISCONNECT HIGH PRESSURE AIR OR FLUSHING		PRIMARY LEVEL ELEMENT: ULTRASONIC	I	THERMOMETER
)ate: 2			HUB & SPIGOT JOINT (RUBBER GASKET)	9	\&_	BUTTERFLY VALVE		BATCHMETER		PRIMARY FLOW ELEMENT: FLUME		VALVE: ANGLE
Plot D			PUSH-ON JOINT (RESTRAINED)		V X	CHARACTERIZED BALL CONTROL VALVE		AIR VENT	X	PRIMARY FLOW ELEMENT: X = C - CORIOLIS X = M - MAGNETIC		VALVE: AIR RELIEF
		<u>==</u>	GROOVED END ADAPTER FLANGE		—Q—	BALL VALVE	$\overline{\nabla}$	BASKET STRAINER		X = P - PROPELLER $X = PT - PITOT TUBE$ $X = R - ROTAMETER$		VALVE: BALL VALVE: BALL CHECK
В		——(<u>聿</u>)	FLANGED COUPLING ADAPTER WITH THRUST TIES			GLOBE VALVE		BLOWER		X = T - TURBINE X = TH - THERMAL X = U - ULTRASONIC X = D - DENSITY		VALVE: BUTTERFLY
Md			FLEXIBLE COUPLING			3-WAY GLOBE TYPE		CALIBRATION COLUMN		PRIMARY FLOW ELEMENT:		VALVE: CONE
User: svo		(<u></u>]	FLEXIBLE COUPLING WITH THRUST TIES		\sim	MIXING VALVE		COMPRESSOR/TURBINE		PRIMARY FLOW ELEMENT:		VALVE: DIAPHRAGM
		+	METAL BELLOWS EXP JOINT			DIAPHRAGM VALVE		COMPRESSOR: RECIPROCATING			$-\overline{K}$	VALVE: FLAPPER CHECK
		+()+	ELASTOMER BELLOWS EXP JOINT					DIAPHRAGM SEAL		PRIMARY FLOW ELEMENT: WEIR		VALVE: FOUR WAY
С			DISMANTLING JOINT					DRAIN				VALVE: GATE
			RESTRAINED FLEX COUPLING			LUULINING FLUG VALVE		EJECTOR OR EDUCTOR		I GIVILI ULNI NIFUGAL		VALVE: GLOBE
	<u> </u>		EXPANSION COMPENSATOR			SWING CHECK VALVE	M .	ELECTRIC MOTOR		PUMP: DIAPHRAGM	<u> </u>	VALVE: HOSE
		⊚∔	ELBOW UP			WAFER CHECK VALVE	\bigcirc	EQUIPMENT DRAIN		PUMP: METERING	7	VALVE: NEEDLE
		CI	ELBOW DOWN			PINCH VALVE		EXPANSION JOINT, FLEXIBLE VIBRATION JOINT		PUMP: PLUNGER	<u> </u>	VALVE: PINCH
			TEE UP			BALL CHECK VALVE		FAN: EXHAUST/SUPPLY		PUMP: PERISTALTIC TUBE METER		VALVE: PLUG CONCENTRIC
D		— 0 						FILTER		PUMP: PROGRESSIVE CAVITY		VALVE: PLUG ECCENTRIC
scale: 1:			LATERAL OP		Ť	MUD VALVE (PLAN VIEW)	Q	FIRE HYDRANT		PUMP: RECIPROCATING		VALVE: PRESSURE RELIEF PRESSURE-REDUCING REGULATOR
en PlotS			CONCENTRIC REDUCER		I∆I	NEEDLE VALVE				PUMP: ROTARY		VALVE: SWING CHECK
0905.pe		— <u>D</u> —	ECCENTRIC REDUCER TF, BF			CHECK BACKFLOW PREVENTER		THERMALLY OPERATED VAL	.VE	- PUMP: SCREW	Ų	VALVE: TELESCOPING
Std_Pen_		 	UNION					FLOOR DRAIN				
Carollo S		[CAP		Ť	PIPE MATERIAL CHANGE		GAUGE: PRESSURE		PUMP: SUBMERSIBLE	К М	AIR OPERATED
Script: 0			ANCHOR					GAUGE: DIFFERENTIAL	<u> </u>	PUMP: VERTICAL LIFT		VALVE: THREE WAY MOTOR OPERATED
Design		_	ELBOW, 90 DEGREE					PRESSURE		PIPE REDUCER: CONCENTRIC		VALVE: THREE WAY SOLENOID OPERATED
hade.ctb		 +	CROSS					MIXER		PIPE REDUCER: ECCENTRIC		VALVE: VACUUM
able: gs		·-+_++	TEE					OIL OR MOISTURE TRAP		ROTARY CHEMICAL FEEDER		
		X	ELBOW. 45 DEGREE							RUPTURE DISK		SELF-CONTAINED BACKPRESSURE REGULATOR
: Layout′								PRIMARY LEVEL ELEMENT:	\bigtriangledown			W/ EXTERNAL PRESSURE TAP
Model			LLUUW, 22.0 DEGREE					ELECTRODE PRIMARY LEVEL ELEMENT:			—_伏 子	REGULATOR: SELF-CONTAINED
		— 	ELBOW, 11.25 DEGREE					FLOAT SWITCH				REGULATOR W/EXTERNAL PRESSURE TAP
		+	LATERAL					FLUID PRIMARY LEVEL ELEMENT		SLUICE GATE		
ch Ch				DESIGNED							I	
BY: rwel				PK DRAWN JBR	ROFESSIONAL SCASWING						C IN D	
SAVED				CHECKED DWW	No. 38950			C	aroli			
LAST	REV DATE BY	[DESCRIPTION	DATE SEPTEMBER 2022	Pre OF CALIFORNIA 09/28/2	2				18:	58	
	1 PROJECT NO. 7310L10	FILE NAME	2 2	3	4	5		6	7	8	9	10

11 12 13 FLOW STREAM IDENTIFIER

A

P

C

D

ABBREVIATION

<u>SERVICE</u>

AL CD	
D FBA FE	۱.
FEF FI FIL	
FRV FTV	V
HPA LPA	
PD POL POL	s
PSE SA)
2W 3W	-

ALUM CHEMICAL DRAIN DRAIN FILTER BACKWASH AIR FINAL EFFLUENT FILTER EFFLUENT FILTER INFLUENT FILTER INFLUENT FILTER REJECT WATER FILTER REJECT WATER FILTER REJECT WATER FILTER TO WASTE HYPOCHLORITE SOLUTION HIGH PRESSURE AIR DOLYMER POLYMER POLYMER POLYMER POLYMER SOLUTION PLANT STORM DRAIN SAMPLE TERTIARY PLANT EFFLUENT NON-POTABLE WATER UTILITY WATER

				1
CITY OF PETALUMA	VERIFY SCALES	JOB NO. 7310L.10	G	
SINFECTION UPGRADES	BAR IS ONE INCH ON ORIGINAL DRAWING			
GENERAL	0 1"	GIZD		
RAL MECHANICAL SYM	IF NOT ONE INCH ON THIS SHEET, ADJUST	SHEET NO.		
	SCALES ACCORDINGLY	12 OF 56		
11	12	13		

		1	2	3		4	5
		GENERAL MECHANIC	AL NOTES:			GENERAL CIVIL NOTES:	
User: svcPW Plot Date: 28-SEP-2022 12:41:22 PM	B	 GENERAL MECHANICAL NOTE 1. GENERAL MECHANICAL NOTE 2. THE EXISTING PUMP AND PIP SUBSEQUENT TO THE GENEF SHALL VERIFY ALL EQUIPMEN 3. NOT ALL REQUIRED FITTINGS PROVIDE ALL THE FITTINGS REQUIPMENT FURNISHED. 4. SUCTION AND DISCHARGE PI IN SUCH A MANNER SO THAT BASE. 5. PIPING IS SHOWN DIAGRAMM FITTING OR STRUCTURAL DIF ON THE DRAWINGS. THE CON ALIGNMENT WHERE NECESS, COST TO THE OWNER AND SI 6. NOT ALL ITEMS ARE SHOWN A ISOMETRICS, AND P&ID DRAV EVEN IF THEY ARE SHOWN A THE SPECIFICATIONS ONLY. 7. THE CONTRACTOR SHALL PR WHETHER OR NOT THEY ARE 8. IN CASE OF A CONFLICT BETA REQUIREMENTS SHALL GOVE ENGINEER. 9. SIZES OF EQUIPMENT PADS I DIMENSIONS SHALL BE DETE FLOOR MOUNTED EQUIPMEN STRUCTURAL DRAWINGS. 10. OVERALL PHYSICAL SIZE OF NOT EXCEED THE SIZE SHOW SPECIFICATIONS. CLEARANC DRAWINGS SHALL BE MAINTA SUBMITTED FOR OWNER'S RI AND AT NO ADDITIONAL COST 	AL NOTES: S APPLY TO ALL MECHANICAL DRA ING LAYOUT IS APPROXIMATE AND ATION OF THE BACKGROUND DRA IT AND PIPING CONFIGURATIONS A ARE SHOWN ON THE DRAWINGS AND AD NGEMENTS SHOWN ON THE DRAW PING OF EQUIPMENT SHALL BE INS THEY SHALL NOT IMPART STRAIN (ATICALLY ON THE DRAWINGS. NOT FICULTY THAT MAY BE ENCOUNTE ITRACTOR SHALL MAKE MODIFICAT ARY. MODIFICATIONS SHALL BE DO 1ALL BE DONE AFTER OWNER'S AP N ALL PLANS, SECTIONS, DETAILS, VINGS. THE CONTRACTOR SHALL P T ANY ONE LOCATION ON THE DRA' OVIDE ALL THE ITEMS REQUIRED F SHOWN ON THE DRAWINGS. WEEN THE DRAWINGS, THE MOST S ERN UNLESS SPECIFICALLY APPRO NDICATED ON THE DRAWINGS ARE RMINED BY THE CONTRACTOR FOF T SHALL BE SET ON CONCRETE PA THE EQUIPMENT SELECTED BY THI (N ON THE DRAWINGS OR SPECIFIE ES, DIMENSIONS, OR SCALED DIST INED. ALL PROPOSED CHANGES A EVIEW AND SHALL BE DONE ONLY I T TO THE OWNER. THE CONTRACTOR	AWINGS. HAS BEEN MODIFIED WINGS. CONTRACTOR ND SIZES. THE CONTRACTOR SHO DITIONAL FITTINGS A 'INGS AND PER STALLED AND SUPPOF ON PUMPS AND PUMP FEVERY OFFSET AND RED HAS BEEN SHOW TONS TO PIPING ONE AT NO ADDITIONA 'PROVAL. SCHEMATICS, 'ROVIDE ALL THE ITEM WINGS OR SPECIFIED PER SPECIFICATIONS STRINGENT VED OTHERWISE BY T E APPROXIMATE. EXAC R THE EQUIPMENT. ALL DS AS SHOWN ON TH ND ADDITIONS SHALL F APPROVED BY OWN OR SHALL BEAR ALL	R HALL S RTED /N L MS IN THE CT L E L L HE BE	 GENERAL CIVIL NOTES: GENERAL CIVIL NOTES: TYPES, LOCATIONS, SIZES, AND SHOWN ON THESE PLANS WERE REASONABLE EFFORT HAS BEE UNDERGROUND FACILITIES. HO' RESPONSIBILITY FOR COMPLET UNDERGROUND FACILITIES, NO FACILITIES WHICH ARE ENCOUN CONTRACTOR IS RESPONSIBLE FACILITIES SHOWN AND ANY WE COMMENCEMENT OF ANY WORE FACILITIES THAT ARE TO BE COU IMPROVEMENTS FOR VERIFICAT DETERMINE LOCATION OF CONF OF THAT PORTION OF WORK TH FACILITIES. MINOR CHANGES, (< LOCATION, DEPTH, AND CONFIG CONSTITUTE A CHANGED SITE O BE ALLOWED. ALL PIPING BEYOND THE LIMITS PER DETAIL CP111/TYP AND SPE UNLESS SHOWN OTHERWISE, TI TOP OF PIPING SHALL BE 36". UNLESS OTHERWISE INDICATED OF 12" CLEARANCE FROM NEAR WARNING TAPE OVER BURIED P SPECIFICATION SECTION 15076. LOCATION SHOWN FOR ALL NEW APPROXIMATE AND DEPENDS O IMPROVEMENTS. CONTRACTOR CLOSELY AS POSSIBLE AFTER D COORDINATE ALL PIPING WITH S ELECTRICAL CONDUITS AND DU PROTECTED IN PLACE OR REPL. SELECT CONSTRUCTION EQUIPING SELECT CONSTRUCTION EQUIPING 	DEPTHS OF EXISTING UNI OBTAINED FROM SOURC NADE TO LOCATE AND ENG ENESS OR ACCURACY OF R FOR EXISTENCE OF OTH ITERED BUT WHICH ARE N FOR DETERMINING EXACT ICH MAY EXIST AND ARE CONTRACTOR SHALL EX NNECTED TO OR THAT AR ION OF LOCATION AND EL FLICTS, IF ANY, PRIOR TO CO AT WOULD BE AFFECTED S FT HORIZONTAL, <1 FT N URATION OF EXISTING PIF CONDITION AND THEREFO OF EXCAVATION FOR STR ECIFICATIONS. HE MINIMUM COVER OR BU ON THE DRAWINGS, ALL EST PIPELINE. IPING SHALL BE PROVIDED V PIPING AND CONNECTION N LOCATION OF EXISTING IS REQUIRED TO FOLLOW DETERMINING EXACT LOCA SITE ELECTRICAL WORK. IC CT BANKS ARE LOCATED. ING, AND OTHER EXISTING NG, AND OTHER EXISTING ING CONSTRUCTION OF IN ACED IN KIND. MENT TO MINIMIZE DAMAGE
Carollo_Std_Pen_v0905.pen_PlotScale: 1:1	D	 AND AT NO ADDITIONAL COS COSTS OF THE ASSOCIATED BUILDINGS AND STRUCTURE 11. WARNING SIGNS SHALL BE PI REMOTELY CONTROLLED EQ 12. SEE STRUCTURAL DRAWINGS 13. PIPING JOINTS SHALL BE PEF SPECIFICATIONS. 14. REFER TO SPECIFICATION SE WORK RESTRICTIONS AND CO 15. VERIFY LOCATIONS, SIZES, A EQUIPMENT BEFORE FABRIC. 16. ALL PIPING UNDER STRUCTU BELOW THE STRUCTURE AND TO THE DISTANCE FROM BOT OTHERWISE, PER TYPICAL DE 17. ALL FLEXIBLE COUPLINGS SF P110/TYP, UNLESS SPECIFICA 18. THE FIRST PIPE JOINT OUT O SHALL BE AT THE EDGE OF W OF CONCRETE. ENCASEMENT (4) FEET ON CENTER UNLESS 19. WHETHER SHOWN ON THE DI INSULATION SCHEDULE. 20. PLUG VALVE INSTALLATION: I SPECIFICATIONS. 21. ALL STAINLESS STEEL SHALL OTHERWISE. 22. UNLESS SPECIFICALLY NOTE 	TO THE OWNER. THE CONTRACTO CHANGES AND ADDITIONS INCLUDI SIZES AND OWNER'S ENGINEERING ROVIDED PER SPECIFICATIONS ON JIPMENT. FOR ALL EQUIPMENT BASE DETAI PIPE SCHEDULE AND IN ACCORDA CTION 01140 AND OTHER APPLICAT ONSTRAINTS. ND CONNECTION MATERIALS OF EXATING NEW PIPE. RES OR CONCRETE SLABS SHALL E D BEYOND THE EDGE OF FOOTING TOM OF FOOTING TO TOP OF PIPE ETAIL CP119/TYP, WHETHER SHOW IALL BE RESTRAINED PER APPLICA ALL OR WITHIN TWO (2) FEET FROI F. THE NEXT TWO (2) JOINTS SHALL NOTED OTHERWISE. RAWINGS OR NOT, PROVIDE PIPE II FOR ORIENTATION OF SEAT AND V/ BE TYPE 316 OR TYPE 316L UNLES	DR SHALL BEAR ALL ING CHANGES TO G COSTS. FRONT AND BACK OF ILS. ANCE WITH THE BLE SECTIONS FOR XISTING PIPING AND BE CONCRETE ENCAS TO A DIMENSION EQU , UNLESS NOTED N OR NOT. BLE TYPICAL DETAILS RETE ENCASEMENTS M EDGE OF WALL OR BE MAXIMUM OF FOU NSULATION PER ALVE STEM, REFER TO SS SPECIFICALLY NOT	FALL SED AL S END JR D ED ED RTS	 SELECT CONSTRUCTION EQUIP PROJECT SITE AND AT ALL ROAL FROM PROJECT. REPLACE DAM, WITH CONTRACT DOCUMENTS. AND PORTLAND CEMENT CONCI- INSTALLATION OF PAVEMENT PA CONSTRUCTION SHALL BE SAW COMPLY WITH ALL STATE AND C AND CHARACTER OF WORK, EQ BUT NOT LIMITED TO, SHORING CONFORMANCE TO TRAFFIC CO MAINTENANCE OF BARRICADES CONTROL PLANS AS REQUIRED. ARRANGE FOR ALL REQUIRED IN WILL NOT RELIEVE CONTRACTO PERFORMANCE OF WORK. CON PERFORMED WITHOUT PROPER SHOWN WORK TO BE RESTRICT CONSTRUCTION EASEMENTS, P CONTRACTOR SHALL VERIFY AL OR FABRICATING MATERIAL. WHEN EXCAVATION IS REQUIRE UTILITIES SHALL BE SUPPORTED ALL STANDARD STREET MONUM MONUMENTS DISTURBED DURIN REPLACED AND A RECORD OF S PROFESSIONAL LAND SURVEYO IMPROVEMENTS BY THE CITY. C RECORDS SHALL BE SUBMITTED CONTRACTOR SHALL KEEP UP-T CONTRACTOR SHALL KEEP UP-T CONTRACTOR SHALL KEEP UP-T 	MENT TO MINIMIZE DAMAG DS USED TO MOVE MATER AGED ASPHALT CONCRET ALL PAVEMENT, INCLUDIN RETE (PCC) PAVING, SHAL ATCH. ROUGH EDGES THA CUT PRIOR TO INSTALLAT COUNTY LAWS AND ORDIN UIPMENT, AND LABOR PER OF TRENCHES, VENTILATI INTROL REQUIREMENTS, I AND PREPARATION AND I SPECTION. PRESENCE O R OF FULL RESPONSIBILIT TRACTOR WILL BE REQUIR INSPECTION. ED TO LIMITS OF OWNERS ERMANENT EASEMENTS, I L CONTROLLING FIELD DI D AROUND EXISTING UTIL D USING STEEL BEAMS OF IENTS, LOT CORNER PIPES IG THE PROCESS OF CON SURVEY OR CORNER RECO DIS ACT FILED BEFORE AG OPIES OF ANY RECORD O D TO THE CITY. TO-DATE A COMPLETE RECO G EVERY CHANGE FROM
el: Layout1 ColorTable: gshade.ctb DesignScript: (F	THAT ARE PICKLED AND PASS 23. REFER TO P&ID DRAWINGS F DRAWINGS FOR CATHODIC P TO ALL MECHANICAL AND HV	3IVATED FOR STAINLESS STEEL PIF OR INSTALLATION OF INSTRUMENT ROTECTION NOTES. CATHODIC PR(AC DRAWINGS.	PING. IS. REFER TO CIVIL OTECTION NOTES API	PLY	 RECORD DRAWING PRINTS SHA ACCEPTANCE FOR REVIEW AND AS-BUILTS IN ELECTRONIC PDF 17. CONTRACTOR SHALL COORDINA INSTALLATION OF PG&E, CABLE DETAILS. 18. IT IS THE CONTRACTOR'S RESPONDENTION OF PG&E, CABLE DETAILS. 18. IT IS THE CONTRACTOR'S RESPONDENTION OF PG&E, CABLE DETAILS. 19. IT IS THE CONTRACTOR'S RESPONDENTION OF PG&E, CABLE SHALL BE REPLACED TO THE SA 19. IT IS THE CONTRACTOR'S RESPONDENTION OF PG&EST AVAILABLE INFORMATION. LOCATION, AND DEPTH OF ALL TARE CORRECT AS SHOWN. NO CONTRACTOR'S AND CATERALS) ARE SHOWN. 	LL BE SUBMITTED TO THE APPROVAL BY THE ENGIN OR CADD FORMAT WITH A ATE UTILITY INFORMATION , TELEPHONE, AND/OR JOI ONSIBILITY TO POTHOLE A IG LOCATIONS. CONTRAC LS FROM DAMAGE DUE TO ATERALS THAT ARE DAMA TISFACTION OF THE CITY ONSIBILITY TO VERIFY THE TE AGENCIES. ING NEW PIPELINES ARE S THE CONTRACTOR SHALL THE UTILITY CROSSINGS (I GUARANTEE IS MADE THAT
LAST SAVED BY: rwelch Mode	G	Image: Second	DESCRIPTION	SE	DESIGNED PK DRAWN JBR CHECKED DWW DATE PTEMBER 20	 21. CONTRACTOR SHALL FAMILIARI. MANAGEMENT PRACTICES HANIAND EMPLOY ITS PROVISIONS T 22. ALL CONSTRUCTION MATERIALS MUST BE DONE ON-SITE AND THAND FREE OF DEBRIS. 	ZE HIMSELF WITH THE ST/ DBOOK FOR APPLICABLE F HROUGHOUT ALL CONSTF S, EQUIPMENT, STORAGE, IE PUBLIC RIGHT-OF-WAY/

FILE NAME: 7310L10G13B.dgn

	6	7	8	9	10
	(GENERAL CIVIL NOTES (C	CONT) :		
NG UNDERGROU SOURCES OF VA	UND FACILITIES AS 2 ARYING RELIABILITY. A	3. ALL STATIONING SHOWN IS APPRO FIELD PRIOR TO FABRICATION OF F	XIMATE. CONTRACTOR SHALL VER PIPING AND SUBMIT SHOP DRAWING	IFY LENGTHS IN GS FOR REVIEW.	
E AND DELINEAT	E ALL KNOWN AN ASSUME NO 2 TION OF SUCH	4. ALL CLEAN OUTS SHALL BE CONST JOINTS SHALL BE PROVIDED INSTE	RUCTED PER DETAIL CP411/TYP. R EAD OF THRUST BLOCKS. USE TYPE	ESTRAINED E 1, 2, OR 3 AS	
OF OTHER BURI ARE NOT SHOV EXACT LOCATIO	ED OBJECTS OR VN ON THESE PLANS. ON OF THOSE 2	25. REFER TO SPECIFICATION SECTION	N 01140 AND OTHER APPLICABLE S	ECTIONS FOR	
D ARE NOT SHO IALL EXPOSE AL IAT ARE IN THE	WN PRIOR TO LL UNDERGROUND PATH OF PROPOSED 2	6. TIE-IN TO EXISTING SYSTEMS SHAL SERVICE, UNLESS NOTED OTHERW	LL BE MADE WITHOUT INTERRUPTIC	ON OF EXISTING	
AND ELEVATION OR TO COMMEN ECTED BY A CON	I. CONTRACTOR SHALL CING CONSTRUCTION NFLICT WITH EXISTING	SECTION 01140 AND SUBMIT A PRO ACCORDANCE WITH THE SPECIFIC	ATIONS.	ION OF SERVICE IN	
<1 FT VERTICAL ING PIPING SYS EREFORE NO EX	.), IN ACTUAL 2 TEMS DOES NOT (TRA PAYMENT WILL	7. THE CONTRACTOR SHALL REPLAC THE CONTRACTOR'S ACTIVITIES. N DRAWINGS. THE DRAWINGS OF TH ON REQUEST, SUBMISSION OF A BI	E IN KIND, OR REPAIR EXISTING ITE IOT ALL THE EXISTING ITEMS ARE S E EXISTING ITEMS ARE AVAILABLE	EMS DAMAGED BY SHOWN ON THE FROM THE OWNER THE CONTRACTOR	
OR STRUCTURE	S SHALL BE TRENCHED	HAS REVIEWED THE DRAWING OF	ALL THE EXISTING ITEMS.	AGE AT THE SITE	
R OR BURY FROI	M FINISH GRADE TO	WATER SHALL NOT BE ALLOWED T ACTIVITIES.	O POND OR STAND DUE TO THE CC	DNTRACTORS	
S, ALL PIPING SI	HALL HAVE A MINIMUM 2	9. REPLACE SIGNS, POSTS AND MARI TO THEIR ORIGINAL LOCATION AND	KERS REMOVED OR DISTURBED DU D CONDITIONS.	JRING CONSTRUCTION	
OVIDED IN ACC	ORDANCE WITH				
NECTIONS TO EX ISTING PIPING A OLLOW ALIGNME	KISTING PIPING IS ND OTHER ENT SHOWN AS				
/ORK. DO NOT S	TART PIPING UNTIL				
XISTING FACILIT	IES NOT DESIGNATED ILITIES TO BE				
DAMAGE TO EXI MATERIAL AND	ISTING PAVEMENT AT EQUIPMENT TO AND				
NCRETE PAVEM CLUDING ASPHA 6, SHALL BE SAW	LT CONCRETE (AC)				
TALLATION OF P	PAVEMENT PATCH.				
ORDINANCES R OR PERSONNEL NTILATION OF CO ENTS, INCLUDIN N AND IMPLEMEN	LEATING TO SAFETY . THIS SHALL INCLUDE, ONFINED SPACES, G PROVISION AND NTATION OF TRAFFIC				
NCE OR ABSEN SIBILITY FOR PI REQUIRED TO U	CE OF AN INSPECTOR ROPER NCOVER WORK				
WNERS PROPEF ENTS. AND RIGH	RTY, TEMPORARY ITS-OF-WAYS.				
ELD DIMENSION	S BEFORE ORDERING				
IG UTILITIES, TH	OSE EXISTING SUITABLE SUPPORTS.				
R PIPES, AND 01 F CONSTRUCTION R RECORD PER	THER PERMANENT ON SHALL BE SECTION 8771 OF THE				
ORE ACCEPTAN ORD OF SURVE	CE OF THE Y OR CORNER				
TE RECORD SE	T OF PRINTS OF THE SINAL DRAWINGS MADE				
CORRECTED A	NTON, SIZES, ND COMPLETED ER PRIOR TO FINAL				
WITH ALL CHAN	GES NOTED.				
OR JOINT TREN	CH LAYOUT AND				
HOLE AND/OR U NTRACTOR TO P DUE TO CONTR/	NCOVER AND EXPOSE ROTECT ALL EXISTING ACTOR'S OPERATIONS.				
E DAMAGED DUI E CITY ENGINEE	RING CONSTRUCTION ER.				
S ARE SHOWN A R SHALL VERIFY SINGS (BOTH MA DE THAT ALL EXIS	CCORDING TO THE THE TYPE, SIZE, INS AND LATERALS) STING UTILITIES (BOTH				
THE STATE OF CA CABLE EROSION	ALIFORNIA BEST CONTROL MEASURES				
CONSTRUCTION.	LING, AND STAGING				
WAY/STREET N	NUST BE KEPT CLEAR				
			WTA	LUA	
		caroll			UV DI
					GENERA
	6	7	8	9	10

11	12	13	

CITY OF PETALUMA	VERIFY SCALES	JOB NO. 7310L.10	G	
SINFECTION UPGRADES F	BAR IS ONE INCH ON ORIGINAL DRAWING			
GENERAL	0 1"	GISB		
L MECHANICAL AND C	IF NOT ONE INCH ON THIS SHEET, ADJUST	SHEET NO.		
	SCALES ACCORDINGLY	13 OF 56		
11	12	13		

	υν ε ΤΥΡ
6 7 8 9	10

	11	12	13	
I				A
				В
_				С
				D
				E
				F
SINF	CITY OF PETALUMA FECTION UPGRADES F TYPICALS	PROJECT	VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" T IF NOT ONE INCH ON SP	JOB NO. 7310L.10 G AWING NO. A02B
		12	THIS SHEET, ADJUST SCALES ACCORDINGLY 15	OF 56

U	9	

	11	12	13]	
					A
					В
				-	С
					D
					E
					F
	CITY OF PFTALLIMA		VERIFY SCALES	JOB NO.	C
SINF	FECTION UPGRADES F	PROJECT	BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO.	
ΤY	TYPICALS	_S	IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SHEET NO.	
	11	12	13		

OR — ACI STD HOOK (TYP). MATCH REINF FROM CP119. CONCRETE SLAB. SEE DRAWINGS FOR REINE	7	8	9	10	11	12	1:	3	
									А
									в
$ \begin{array}{c} \begin{array}{c} \begin{array}{c} \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \end{array} \\ \begin{array}{c} \end{array} \\ \end{array} $									С
B SECTION AT SLAB									
PE ENCASEMENT - CONNECTION									
SHEET 2 OF 2 06/21/21									
									D
									E
									F
		OWTALU14			CITY OF PETALU		VERIFY SCAL	ES JOB NO. 7310L.10	G
Car	Olo [®]			UV DISINI TYPIC	TYPICALS	- DETAILS	ORIGINAL DRAWIN 0 IF NOT ONE INCH O THIS SHEET, ADJUS SCALES ACCORDING	1" TM01B N SHEET NO. ST SLY	-
6	7	8	9	10	11	12	I1;	3	l

			10		10 10	
EINISH GRADE	δ 	9	10			
#4 @ 10" EW T&B						A
PPORT WITH FOOTINGSCHEDULESTRAP SIZEANCHOR BOLT DIAFB 1/4" x 4"1/2"FB 5/16" x 4"5/8"FB 3/8" x 4"3/4"						В
OCATED BELOW THE TOP OF WALL IN WATER BEARING HOR BOLTS AND STRAP SHALL BE STAINLESS STEEL. IN ALL PR ANCHOR BOLTS AND STRAP SHALL BE HOT-DIP ERWISE INDICATED ON THE DRAWINGS. = 2'-6". THE LENGTH OF THE FOOTING = "D" + 2'-0". ESUPPORT SHEET 2 OF 2 11/30/08						C
						D
						E
						F
6 7	6110 ® 8	NALUTION NO CONTRACTOR NO CONT	UV DISINF TYF 10	CITY OF PETALUMA ECTION UPGRADES PROJECT TYPICALS PICAL PIPING DETAILS 11	VERIFY SCALE BAR IS ONE INCH ON O IF NOT ONE INCH ON THIS SHEET, ADJUS' SCALES ACCORDINGE 12	G JOB NO. 7310L.10 DRAWING NO. TP01B SHEET NO. 19 OF 56

	6	7		8		9	10
FACES FOR DRY R FACES EXPOSED L OR FLUIDS I GRADE:	CONDITIONS: 1" 1 1/2" TO WEATHER, 2"		C. (5 D. ' 12. FORM OTHE	JNLESS OTHERWIS SPLICE SHALL BE IN 'TOP BARS" ARE HO THAN 12 INCHES OF M EXPOSED CONCR ERWISE INDICATED	E INDICATED ON THE DRAV CONTACT WITH EACH OTH RIZONTAL REINFORCEMEN FRESH CONCRETE IS CAS ETE CORNERS AND EDGES ON THE DRAWINGS.	VINGS, BARS AT A LAP IER. IT AT LOCATIONS WHE T IN THE MEMBER BELO S WITH 3/4" CHAMFER U	RE MORE OW THE BAR. INLESS
RETE SURFACES	52"		TABL	E 1: REINFORC	ING BAR LAP SPLIC	ES: f'c = 4000 PSI	, Fy = 60,000 PSI
E SURFACES CAS	ST AGAINST SOIL, ROCK, 3"		BAR	MINIMUM	MINIMUM CLEAR BAR SPACING	LAP SPLICE LE	NGTH (INCHES)
IGS AND SLABS	SAME AS SLABS		SIZE	(BAR DIA)	(BAR DIA)	TOP BARS	OTHER BARS
			#4	MORE THAN 1	MORE THAN 2	32 *	25 *
T JOINTS IN SLAI	BS AND WALLS OF LIQUID-CONTAIN	IING		MORE THAN 2	MORE THAN 4	20	16
PS CONTINUOUS	THROUGH STRUCTURE SPLICING	DVVATER	#5	MORE THAN 1	MORE THAN 2	40 *	31 *
VITH WATERSTOP	PS IN WALLS.			MORE THAN 2	MORE THAN 4	26	20
OW TOP OF WAL	LS. WHERE TOP OF WALL IS COVE	RED BY	#6	MORE THAN 1	MORE THAN 2	48 *	37 *
STOPS, CONTINU	E WATERSTOP TO WALL/SLAB JOIN	IT. WHERE		MORE THAN 2	MORE THAN 4	30	24
VATERSTOPS IN	WALLS WITH WATERSTOPS IN SLAF	B.	#7	MORE THAN 1	MORE THAN 2	70 *	54 *
		(ATED		MORE THAN 2	MORE THAN 4	43	33
ANCE WITH THE C	SONTRACT DOCUMENTS. WHERE V	VATER	#8	MORE THAN 1	MORE THAN 2	81 *	62 *
				MORE THAN 2	MORE THAN 4	50	38
KNED THAT WATE	ER CURING IS DIFFICULT AT TIMES	JUE TO JRNISH	#9	MORE THAN 1	MORE THAN 2	90 *	70 *
PROVIDE WATER	CURING WHERE REQUIRED.			MORE THAN 2	MORE THAN 4	56	42

#10

#11

MORE THAN 1

MORE THAN 2

MORE THAN 1

MORE THAN 2

REINFORCING BAR LAP SPLICE TABLE NOTES:

MORE THAN 2

MORE THAN 4

MORE THAN 2

MORE THAN 4

1. TABULATED SPLICE LENGTHS ARE APPLICABLE ONLY WHEN BOTH REQUIREMENTS FOR MINIMUM COVER AND FOR MINIMUM CLEAR BAR SPACING ARE SATISFIED.

*= IF THE CLEAR BAR SPACING IS LESS THAN OR EQUAL TO TWO BAR DIAMETERS, OR THE COVER IS LESS THAN OR EQUAL TO ONE BAR DIAMETER, THE LAP SPLICE LENGTH SHALL BE INCREASED BY 50 PERCENT.

S101 REINFORCED CONCRETE NOTES
S, J SHEET 3 OF 3 04/13/20
NOTE 3 CL CONSTRUCTION JOINT NOTE 5 ONTE 4 ONTE 4
WATER BEARING SLAB LESS THAN 12" THICK
CL CONSTRUCTION JOINT
<u>VVATER BEARING SLAB OR VVALL</u>
 "S" EQUALS TYPICAL BAR SPACING INDICATED ON THE DRAWINGS. "T" EQUALS SLAB OR WALL THICKNESS. WATER-BLAST EXPOSED JOINT FACE AND PROJECTING REINFORCEMENT BEFORE
 JOINT EDGES: A. FOR WALLS AND BOTTOM OF EXPOSED SLABS: FORM EDGES WITH 1/2" CHAMFER. B. FOR SLABS: EDGE TOP AND ENDS WITH 1/4" RADIUS.
6" WATERSTOP CENTERED ON JOINT - SEE DETAIL S106/TYP. PROVIDE WIRE TIES MAX 2'-0" O HOG RINGS MAY BE USED IN LIEU OF WIRE LOOPS. THOROUGHLY CLEAN WATERSTOP BEFO PLACING CONCRETE IN SECOND POUR.
5. STOP REINFORCING 2" CLEAR OF JOINT.
S110 CONSTRUCTION JOINT

81 *****

48

54

88 *

104 *****

114 *****

62

69

\sim s SHEET Z OF Z 07/11/10 AL UV DIS Carolo TYP 10 9

							1			
	11				12			13		
					"A"					
		-"E" = NUI RIBS PEF				F"		^^ "D"		A
		(MINIMUI	M)							
	TYPE	"A"	"B"	"C"	"D"	"E"	"F"	APPLIC	ATION	
	W/O CENTERBULB	6"	-	3/8"	3/8"	7	-	CONSTRUC CONTRO	CTION AND L JOINTS	
	<u>NOTES:</u> 1. SEE SPE(2. DIMENSI	CIFICATIO ONS ARE I	NS FOR VINIMUN	MATERIA 1, UNLES	AL REQUIE S OTHER	REMENTS WISE NOT	ED.			С
-	S106 PVC	WAT	ERST	OP S	CHEE	DULE		2/21/20		-
							0	2/2 1/20		
										D
										E
										F
-							1	T	JOB NO	
			PRO	JFCT			VERIF BAR IS ORIGIN	Y SCALES ONE INCH ON AL DRAWING	7310L.10 DRAWING NO	G D.
ICAL	TYPICALS		ETA	ILS				ONE INCH ON IEET, ADJUST	TS01B	
	11				12		JUALES /		20 OF 56	

	11	12	13	
				A
				В
				C
				D
				E
				F
SINF	CITY OF PETALUMA ECTION UPGRADES F TYPICALS	PROJECT ETAILS	VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	JOB NO. 7310L.10 G DRAWING NO. TS02B SHEET NO. 21 OF 56

FILE NAME: 7310L1000D01B.dgn

12

1. NOT ALL DEMOLITION WORK REQUIRED ON THIS PROJECT IS SHOWN ON THE DEMOLITION DRAWINGS. SEE OTHER CONTRACT DWGS FOR ADDITIONAL DEMOLITION WORK REQUIRED. SEE YARD PIPING DRAWINGS FOR BELOW GRADE PIPING DEMOLITION.

- 2. COORDINATE DEMOLITION WORK WITH SPECIFICATION SECTIONS 01140.
- 3. THE DEMOLITION DRAWINGS HEREIN ARE PROVIDED TO THE CONTRACTOR FOR REFERENCE IN DETERMINING THE SCOPE OF DEMOLITION REQUIRED. THE CONTRACTOR SHALL MAKE SUCH INVESTIGATIONS AS NECESSARY TO SATISFY HIMSELF AS TO FIELD CONDITIONS. THE USE OF THESE DRAWINGS SHALL BE AT CONTRACTOR'S DISCRETION. THE CONTRACTOR IS CAUTIONED TO REVIEW THE GENERAL CONDITIONS OUTLINED IN VOLUME.
- 4. ALL AREAS WHERE CONCRETE FILL IS CALLED FOR SHALL BE SANDBLASTED AND COATED WITH EPOXY BONDING AGENT PRIOR TO PLACING CONCRETE.
- 5. WHERE EQUIPMENT, BRACKETS, CLAMPS, ETC. ARE REMOVED. FASTENER SHALL BE CUT OFF 1/2-INCH BELOW SURFACE. PATCH HOLE WITH NON-SHRINK GROUT.
- 6. SALVAGE EQUIPMENT PER OWNER'S INSTRUCTION.
- 7. PROVIDE 30 DAYS WRITTEN NOTICE TO OWNER PRIOR TO DEMOLISHING ANY STRUCTURE OR BUILDING.
- 8. DISCONNECT AND REMOVE POWER AND CONTROL WIRING BETWEEN THE DEMOLISHED EQUIPMENT AND IT'S ASSOCIATED MCC OR CONTROL PANEL. PALLETIZE CONDUITS AND WIRES AND RETURN TO OWNER.
- REFER TO SPEC SECTION 02200 FOR CLEARING, GRUBBING, AND 9. STRIPPING REQUIREMENTS.
- 10. SITE DEMOLITION WILL IMPACT EXISTING DRAINAGE PATTERNS. MAINTAIN SITE DRAINAGE PATTERNS DURING CONSTRUCTION. REROUTE EARTHEN SWALES AND PROVIDE TEMPORARY FACILITIES AS NECESSARY.

CITY OF PETALUMA	VERIFY SCALES	JOB NO. 7310L.10	G	
SINFECTION UPGRADES F	BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO.		
DEMOLITION	0 1"	D01B		
OVERALL SITE PLAN	IF NOT ONE INCH ON THIS SHEET, ADJUST	SHEET NO.		
		SCALES ACCORDINGLY	22 OF 56	
11	12	13		

11	12	13	
	KEY NOTES:		
NOTES, REFER TO DRAWING DUT.	1 REUSE PIPE SUPPORTS AS I		
	REQUIRED.	IRED FOR NEW DIF TANK, MODIFT AS	
	3 PROTECT EXISTING PANELS MODIFICATIONS.	5, SEE ELECTRICAL DRAWINGS FOR	
	4 REMOVE EXISTING ANALYZE	ER / TRANSMITTER, SEE MECHANICAL	A
	AND ELECTRICAL DRAWING 5 REMOVE AND PRESERVE EX	(ISTING UV MODULES FOR OWNER'S	
	CONTRACTOR TO REMOVE A TREADPLATE AND UV LIGHT INSTALLATION	AND PRESERVE EXISTING GRATING, SHIELDS FOR REUSE IN NEW	
	PROTECT GRATING REBATE	S.	
	T SEE DRAWING 08M01 FOR E		
	8 CONTRACTOR TO VERIFY EL EXISTING EFFLUENT WEIRS	LEVATIONS AND DIMENSIONS OF AND VERIFY CHANNEL DIMENSION	
	AND I LOOK LLEVATIONO.		в
<u> </u>	B		
		EX-24" FEF	
R-210			
	J		
EX-08-GAT-201			
			D
R-110			
		UV TRANSMITTANCE	
EX-DCC-01	EX-UV-PDC		
3			
			E
STL PL (TYP)			
			F
\checkmark			
CITY OF PETALUMA		VERIFY SCALES JOB NO. 7310L.10	G
SINFECTION UPGRADES F	PROJECT	BAR IS ONE INCH ON ORIGINAL DRAWING DRAWING NO.	
DEMOLITION		0 1" 08D01	
INFECTION - PLAN AND	SECTION	IF NOT ONE INCH ON THIS SHEET, ADJUST	
		23 OF 56	

12

23 OF 56

										_
6		7	8	9	10	11	12 	13		
							1. FOR GENERAL DEMO <u>KEY NOTES:</u> 1 DEMOLISH EXISTING 2 REMOVE TOP STRAP BOLTS FOR REINSTA	DLITION NOTES, REFER TO DRAWIN ADJUSTABLE PIPE SUPPORTS. , RETAIN STRAP AND NUTS AND PE	NG D01.	A
									E	В
CONCRETE SAL	DDLE SUPPORT									
				¢2					0	С
	EX-24" TPE		EX-24" TPE	TOC 16.7±	EX-12" FEF					
	OM UV DISINFECTION		INV 10.8±		EX-6" D	INV 6.2±		EX-24" TPE INV 10.6±	[D
						SECTION SCALE: 1/4" = 1'-0" FILE: 7310L1000YS225				E
										F
		aroll	D ®	A RETALUTA	UV D	CITY OF PETA ISINFECTION UPGF DEMOLITION	ALUMA RADES PROJECT	VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 0 IF NOT ONE INCH ON THIS SHEET AD UST	OB NO. 7310L.10 WING NO. 8D02	G
		7	8	9	10	PLAN AND SE	ECTION 12	SCALES ACCORDINGLY 24	OF 56	

1	1	

GENERAL NOTES:

1. FOR GENERAL CIVIL NOTES, REFERENCE SHEET G13.

12

2. SEE STRUCTURAL DRAWINGS FOR COORDINATE LOCATION DETAILS.

13

3. SEE GEOTECHNICAL REPORT FOR SITE PREPARATION AND ENGINEERED FILL RECOMMENDATIONS.

KEY NOTES:

- 2 UV DISINFECTION AREA, SEE DRAWING 08S01.
- CONSTRUCT 15'-0" BY 20'-0" CONCRETE PAD AS SHOWN AND PER S300/TYP. PAD SHALL BE FLUSH WITH EXISTING WALKWAY ON NORTH SIDE AND SLOPE TO THE SOUTH FOR DRAINAGE. PROVIDE EXPANSION JOINT PER S130/TYP BETWEEN NEW AND EXISTING SLABS. GRADE AROUND THE NEW PAD SHALL REMAIN PER EXISTING GRADE.

				1
CITY OF PETALUMA	VERIFY SCALES	JOB NO. 7310L.10	G	
SINFECTION UPGRADES F	BAR IS ONE INCH ON ORIGINAL DRAWING			
CIVIL		0 1"	CUZD	
GRADING AND DRAINA	IF NOT ONE INCH ON THIS SHEET, ADJUST	SHEET NO.	-	
PARTIAL PLAN		SCALES ACCORDINGLY	26 OF 56	
11	12	13		-

	6	7	8	9	10
				GENERAL NOTES 1. SEE SHEETS G1	0 & G11 FOR GENERAL STRU
				2. DIMENSIONS SH TITLED "ELLIS C	IOWN ARE BASED OFF THE RE REEK WATER RECYCLING FAC
				BY CAROLLO EN SHALL FIELD VE CONSTRUCTION	IGINEERS DATED JULY 2005. (RIFY ALL DIMENSIONS PRIOR I.
				3. PRELIMINARY C REINFORCEMEN	ANOPY FOUNDATION DIMENS
				DIMENSIONS AN WITH THE ACTU	ID REINFORCEMENT SHALL BI AL CANOPY LOADS AS DETER
				4. CONTRACTOR S	SHALL TAKE EXTREME CARE T
				CANOPY FOUNE FOR WORK RES	ATION. SEE SPECIFICATION S TRICTIONS.
 	3 EO SI	87'-0"			
	3 LQ 31				
¢L COL					
<u>)" 4'-</u>	-0" 9'-6"	9'-6"	4'-0" 4'-0"		Y OF PRE-ENGINEERED
				CANOPY B ROOF FRA	Y CONTRACTOR. SEE MING ON SHEET 08S02.
				/	
		S110 TYP			
		^			
		,			
		<u>CHANNEL 3</u>		x 3	
			<u>) </u>		
		CHANNEL 2		2 3	
		CHANNEL 1		<u>2</u> 23>	
		<u> </u>			
J			08503		
				▲	
TH		S110 TYP			
	」 キ				
/					EXISTING LIGHT
/				↓	POLE SUPPORTS
	A FOL		<u>AN</u>		
	FILE: 7310	DL1008Š100			
			A STATE	A LA	UV DIS
		caroi			
			185	8	U
	I				

FILE NAME: 7310L1008S02.dgn

FILE NAME: 7310L1008S03.dgn

11		12		13	
	<u>KEY</u>	NOTES:			
ERAL STRUCTURAL NOTES.	$\langle 1 \rangle$	PRE-ENGINEERED MI	ETAL CANOPY BY	CONTRACTOR. SEE	
OFF THE RECORD DRAWINGS YCLING FACILITY PROJECT" BY Y 2005. CONTRACTOR SHALL RIOR TO INITIATION	2	UV CANOPY ANCHOR INSTALLED BY CONT FOR ADDITIONAL INF CONTRACTOR SHALL METAL BUILDING MAI	RAGE TO BE DESIG RACTOR. SEE SPI ORMATION. . PROVIDE LEVEL	3NED, FURNISHED AND ECIFICATION SECTION 13122 ING NUTS AS REQUIRED BY	A
ON DIMENSIONS AND I THIS SHEET. FINAL IT SHALL BE COORDINATED S AS DETERMINED FROM THE	$\langle 3 \rangle$	ANCHOR REINFORCE CALCULATIONS. REIN DETAILED BY CONTR	EMENT AS REQUIE IFORCEMENT SHA ACTOR.	RED BY ANCHORAGE ALL BE DESIGNED AND	
HALL HAVE THE FOLLOWING ER CBC 2019 AND ASCE 7-16:	$\langle 4 \rangle$	12" AGGREGATE BAS GEOTEXTILE. REFER 02300 FOR ADDITION	E COURSE WRAP TO SPECIFICATION AL INFORMATION	PED IN WOVEN ON SECTIONS 02050 AND	
SYSTEM: FRAME WITH ACTOR, R= 3½.	5	CONTRACTOR SHALL DIMENSION OF CHAN	. INSPECT CHANN INEL 3 MATCHES	IELS AND CONFIRM THE CHANNELS 1 AND 2.	
CATION: EAR WIND FLOW. NG PRESSURE: OR LOAD		CONTRACTOR SHALL CHANNEL WALLS AND SPECIFICATION SECT APPLIED FOR THE EN	. THOROUGHLY C D APPLY COATING FION 09960. COAT ITIRE LENGTH OF	LEAN EXISTING UV SYSTEM EPX-C-6-SC PER ING SYSTEM SHALL BE WALLS.	В
SEISMIC OR WIND.	7	INSTALL INDUSTRIAL USE BIRD-B-GONE HI EQUAL. INCLUDE FAS INSTALLATION DETAI WITH CANOPY SUPPI	MESH NETTING (EAVY DUTY BIRD STENERS IN SCOP LS PER SUPPLIEF LIER. COLOR AS S	ON UNDERSIDE OF RAFTERS. NETTING 3/4-INCH OR 'E OF SUPPLY. ?. TO BE COORDINATED SELECTED BY OWNER.	
					C
		$\widehat{)}$			
			#8@8" EW T&B		D
					E
4 (4) (08S01)	#8@8" EW SECTI SCALE: 3/4" = 1 FILE: 7310L100	ON '-0" 8S300			F
CITY OF PETAL	.UMA		VERIF	Y SCALES JOB NO. 73101 10	G
SINFECTION UPGRA	ADES PRO	DJECT	BAR IS O ORIGIN	DNE INCH ON AL DRAWING N	10. 10.
STRUCTURAL			0		5

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

13

12

11

SHEET NO.

29 OF 56

	 GENERAL NOTES: 1. FOR GENERAL MECHANIC TO DRAWINGS G12 AND 0 2. UV EQUIPMENT LOCATIO OZONIA AQUARAY 40 HO 3. SEE SPECIFICATION SEC ELEMENTS PROVIDED BY 4. GENERAL CONTRACTOR PROVIDED BY SUPPLIER 	CAL NOTES AND SYMBOLS, REFER G13. N AND DIMENSIONS BASED ON THE GENERATION 2 SYSTEM. TION 11289 FOR COMPLETE LIST OF / THE UV SUPPLIER. TO INSTALL UV EQUIPMENT , SEE SPECIFICATION SECTION 1128	$\frac{9}{1}$ $\frac{1}{1}$ $\frac{1}{2}$ $\frac{2}{3}$ $\frac{3}{3}$ $\frac{3}{3}$ $\frac{3}{3}$ $\frac{3}{3}$ $\frac{5}{6}$ $\frac{5}{6}$ $\frac{7}{7}$ $\frac{8}{3}$	 <u>10</u> <u>NOTES:</u> REPLACE EXISTING MODUL AQUARAY 40 HO GENERATI INSTALL NEW AQUARAY 40 CHANNEL 3. BAFFLE PLATE FOR ALL THI BY UV SUPPLIER AND MUST REPLACE EXISTING MANUA ACTUATOR AS SHOWN. SEE ELECTRICAL DRAWING CONTRACTOR TO REPLACE CONTRACTOR SHALL POTH DEPTH OF EXISTING VALVE REPLACE EXISTING 6" PLUC VALVE. INSTALL CHEMICAL INSTALLATION. CONTRACTOR SHALL POTH LOCATION, PIPE MATERIAL, DEMOLITION OF CONCRETE PIPE. CONCRETE ENCASE F
				ULTRAS SENSOF PROVID CONTRA
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	08-UVR-304 08-UVR-305 08-UVR-305 08-UVR 304 305 306 306 306 307 308 308 308 308 308 308 308 308	$\begin{array}{c c} \hline & \hline $	08-UVR-308 MODULE 308 08-UVR-208 0 MODULE 208	08-UVR-309 08-UVR-310 MODULE 309 8-UVR-209 08-UVR-210 MODULE 209 08-UVR-210 MODULE 209
	MODULE 104 08-UVR-104 08-UVR-105 08-UVR-105			MODULE 109 8-UVR-109 08-UVR-110
<u>4" D</u> (TYP) EX-4" D	A PL SCALE: FILE: 73	AN 1/4" = 1'-0" 310L1008M9101		UV DIS

.

SCALES ACCORDINGLY

30 OF 56

6	7	0	0	10	11	10	10		—
6		8	9			I2 GENERAL NOTES: 1. FOR GENERAL MECHANIC TO DRAWINGS G12 AND CONTACTOR SHALL VER DIMETER PRIOR TO PIPING KEY NOTES: 1 CONTRACTOR SHALL VER METER PRIOR TO PIPING 2 CONTRACTOR SHALL VER PRIOR TO PIPING FABRIC 3 CONTRACTOR SHALL VER PRIOR TO PIPING FABRIC 3 CONTRACTOR SHALL VER PRIOR TO PIPING FABRIC	LIS CAL SYMBOLS AND NOTE G13. RIFY LAY LENGTH OF THE FABRICATION. RIFY EXISTING FITTING D ATION. RIFY OVERALL PIPING AN IPING FABRICATION.	ES, REFER E NEW FLOW DIMENSIONS ND FITTING	
									B
EX-24" FROM DISINFEC	TPE UV CTION	TOC 16.7±	? ? ? ? ?			~			C
EX-2" 3W		TOC 9.0±							D
			(- SECTIO SCALE: 1/4" = 1'-0" FILE: 7310L10008M	N 1301				E
									F
		RALM		Cľ	TY OF PETALUMA		VERIFY SCALES	JOB NO.	 _
		REAL		UV DISINFEC	CTION UPGRADES F	PROJECT	BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO.	+
	caroio							08M03	
		1858			AN AND SECTION	T VAULI	THIS SHEET, ADJUST SCALES ACCORDINGLY	32 OF 56	
6	7	8	9	10	11	12	13		

_										
	Γ		1	2	3	<u> </u>	4 AL PLAN SYMBO	LS	5	6
46 AM		IDE		ION SYMBOLS		SWITCHE	S/RECEPTACLE	S		RACEWAY
22 11:08:		EQUIP #	EQUIPMENT AND	INSTRUMENT IDENTIFICATION	c C a	SINGLE POLE SWI a = CIRCUIT DES				- EXPOSED CONDUIT
SEP-20			EQUIPMENT/INST	RUMENT LOCATOR		c = TYPE 2 = DOUBLE	POLE SWITCH		<i>s _</i>	 BREAK AND CONTINUATION I
Plot Date: 29-		$b \langle x \rangle c^a$	LUMINAIRE IDENT a = CIRCUIT DE b = DEVICE SWI c = MOUNTING	TIFICATION ESIGNATION ITCHED FROM HEIGHT IN FEET TO		3 = THREE-\ 3P = THREE F 4 = FOUR-W K = KEY OPE F = SWITCH P = SWITCH	VAY SWITCH POSITION SWITCH AY SWITCH ERATED SWITCH AND FUSESTAT HOLDER AND PILOT LIGHT			 EXPOSED CONDUIT HIDDEN I FLOORS OR OTHER STRUCTI UNDERGROUND CONDUIT, D OR IN DUCT BANK
		XXXX	BOTTOM O CONDUIT IDENTIF XXXX = CONDUI REFER TO CONI	FICATION TICATION IT NUMBER, DUIT SCHEDULE		T = THERMO D = DIMMER L = LOW VO M = MANUAL N = NETWOF MULTIPL	STAT SWITCH LTAGE LIGHT SWITCH MOTOR STARTER RKED SINGLE OR E SWITCH LOCATIONS			CONDUIT IN SLABCONDUIT VERTICAL CHANGE
	в		ARE LABELED LEI	FT TO RIGHT OR TOP TO BOTTOM.			/IATIONS LEGEND		'l'	CONDUIT CAP
~		$\langle \! \times \! \rangle$	INDICATES KEYNO	OTE X	^b a	OCCUPANCY SENS	DR		U 	JUNCTION BOX
: svcP\		~	(PERTAINS ONE)	TO SHEET WHERE NOTE IS FOUND)		X = REFERENCE a = CIRCUIT DESI b = DEVICE SWIT	LIGHTING CONTROL COMPONENT GNATION CHED DESIGNATION	I SCHEDULE	── <u></u> ──	CONDUIT TEE
User		Υ Α	DISCONNECT SWIT A = TYPE, REFEF	ICH R TO DISCONNECT SCHEDULE			EIGHT IN FEET TO BOTTOM OF SE	ENSOR	Ţ	
			LUMIN	<u>IAIRES</u>	(PE) -⊖ ^a _b	SWITCH AND SING				DUCT BANK APPROXIMATE DIMENSIONS SHOWN ON DUCT BANK SEC
			LINEAR FIXTURE			b = DEVICE TYPE	E DESIGNATION			
(C		2' X 2' LAY-IN TRO	FFER	⇒ ^a b	DUPLEX RECEPTA	CLE			
	r								<u>INDIVIDUAL CON</u> W"C-(3-X (Ø), 1- ^v	<u>NDUCTORS</u> Y (N) & 1-Z (G))
			2' X 4' LAY-IN TRO	FFER	● b ● b	IN FLOOR QUADRU	JPLEX RECEPTACLE		W"C (WHERE IN	DICATED): W = CONDUIT TRADE
-	-	\sim	LUMINAIRE POLE	MOUNTED	a ⇒ab	DUPLEX RECEPTA	CLE w/SPLIT WIRE		3-X (Ø): 3 = QI	
		`о́ ∨ R H	GO/NO-GO PANEL R = RED LIGHT	STROBE AND HORN	æ a b	APPLIANCE RECEP	PTACLE		$(\emptyset) = DI$	ESIGNATES PHASE CONDUCTOR
			G = GREEN LIG H = HORN	HT	-©¦å b	SPECIAL PURPOSI	ERECEPTACLE		1-Y (N)(WHERE 1 = QI Y = SI	INDICATED): UANTITY ZE OF CONDUCTORS
	כ		GO/NO-GO PANEL GO/NO-GO PANEL	SOLID STROBE	ı ■ ¶	WELDING RECEPT a = CIRCUIT DES b = DISCONNEC	ACLE IGNATION ГТҮРЕ		(N) = DE 1-Z (G)(WHERE 1 = QI	ESIGNATES NEUTRAL CONDUCT(INDICATED): UANTITY
PlotScale: 1			LUMINAIRE, EMEF	RGENCY BATTERY-POWERED	O _a	TWIST LOCK RECE a = AMP RATING	PTACLE		Z = SI (G) = DI U{3-X (Ø) & 1-X (ZE OF CONDUCTORS ESIGNATES GROUND CONDUCTO [G]}
5.pen	-		LUMINAIRE, EMEF	RGENCY/EXIT BATTERY-POWERED	Øå b	TELEPHONE OUTL	ET		U = NUMBER OF	PARALLEL RUNS
n_v090			LUMINAIRE, EMEF	RGENCY BATTERY-POWERED REMOTE		a = CIRCUIT DES b = MOUNTING F	IGNATION IEIGHT		MULTI CONDUC	TOR CABLES
ollo_Std_Pe	E	\bigcirc	LUMINAIRE, SURF	FACE OR PENDANT MOUNTED	∣∎ a b	DATA COMMUNICA a = CIRCUIT DES b = MOUNTING H	TIONS OUTLET IGNATION IEIGHT		K (WHERE 2/C#16S = SHI	E INDICATED) = NUMBER OF PAIR TWO CONDUCTOR, 16 GAUGE, 1 ELDED PAIR
ipt: Car		$\vdash \bigcirc$	LUMINAIRE, WALL	- MOUNTED					K/3/C#16S K (WHERE 3/C#16S =	E INDICATED) = NUMBER OF TRIP
signScr		\leftarrow	LUMINAIRE, FLOC	DD/SPOT	<i>ත</i> ප	<u>F I</u>				SHIELDED TRIPLETS
ade.ctb De	_	Č Č	LUMINAIRE, EXIT ARROW POINTS II	ONE OR TWO FACES AS INDICATED. N DIRECTION OF EGRESS.	ß	SMOKE DETECTOR a = TYPE I = IONIZATION P = PHOTOELEC	R		N/CX N = NUMB X = SIZE (ER OF CONDUCTORS IN THE CA OF CONDUCTORS
le: gsh			LUMINAIRE, WALL	WASHER		d = DUCT DETE	CTOR		FIBER OPTIC CA	ABLES
colorTab					FACP	FIRE ALARM CONT	ROL PANEL		N = NUMB	ER OF INDIVIDUAL FIBERS
out1 C	F				F	FIRE ALARM PULL	STATION			<u>GROUNDING</u>
del: Lay					FÅ	FIRE ALARM HORN	I/STROBE COMBINATION			UNDERGROUND GROUND CA
ΜŌ					F	FIRE ALARM STRO	BE			#4/0 SDBC UNLESS OTHERWIS
ſ					(F)	FIRE SPRINKLER				GROUND ROD AND GROUND
						F = FLOW SWITCH T = TAMPER SWIT	H CH		\checkmark	
delon					 	DESIGNED	-OFF COL			
ST SAVED BY: Ibor						CAC DRAWN EYP CHECKED JGB DATE	RUPESSION			
LAS	R	EV DATE	вү	DESCRIPTION 2		SEPTEMBER 2022	<u>UF CALIFO</u> 09/28/22 4		5	6
							•		-	~

		_	_								
_ PLAN SYMBOLS	5 6 7	7	8	9		ELECT	10 11 RICAL ONE-LINE SYMBOLS	12	13]
/RECEPTACLES	RACEWAY			TAGE			LOW VOLTAGE		MISCELLANEOUS		
H NATION HED DESIGNATION	EXPOSED CONDUIT BREAK AND CONTINUATION IN CONDUIT RUN	a 52 b	CIRCUIT BREAKER, ME a = CIRCUIT BREAKE b = FRAME SIZE	EDIUM VOLTAGE ER NUMBER		b O a c d O f	LOW VOLTAGE CIRCUIT BREAKER a = TYPE MCP = MOTOR CIRCUIT PROTECTOR TM = THERMAL MAGNETIC	HP	MOTOR HP = HORSEPOWER RATING FULL LOAD AMPS AS NOTED		А
OLE SWITCH Y SWITCH SITION SWITCH Y SWITCH ATED SWITCH	EXPOSED CONDUIT HIDDEN BEHIND WALLS, FLOORS OR OTHER STRUCTURES	ab	ANSI RELAY DEVICE a = ANSI DEVICE FUI b = QUANTITY	NCTION			SS = SOLID STATE b = FRAME SIZE (MANUFACTURER TO DETERMINE FRAME SIZE UNLESS INDICATED) c = NUMBER OF POLES d = TRIP SETTING (AT = AMP TRIP)	a b	PACKAGED EQUIPMENT LOAD RATING AS INDICATED a = RATED LOAD b = UNIT(HP, KW, KVA) AS INDIO	CATED	
ND FUSESTAT HOLDER ND PILOT LIGHT TAT WITCH AGE LIGHT SWITCH OTOR STARTER ED SINGLE OR SWITCH LOCATIONS	OR IN DUCT BANK OR IN DUCT BANK CONDUIT IN SLAB CONDUIT VERTICAL CHANGE IN DIRECTION		MEDIUM VOLTAGE DISCONNECT SWITCH NON-FUSED CUT OUT			°)–(*)	e = DESIGNATION f = INTERRUPTING RATING LOW VOLTAGE CIRCUIT BREAKER AUXILIARY OPERATOR * = S = SHUNT TRIP = G = GROUND FAULT INTERRUPTER	f g_	TRANSFORMER a a = DEVICE I.D. b b = KVA RATING c c = NUMBER OF PHASES d d = PRIMARY VOLTAGE e e = SECONDARY VOLTAGE		
ATIONS LEGEND SIGNATIONS.	JUNCTION BOX	5	MEDIUM VOLTAGE DISCONNECTING FUSI SINGLE FUSE CUT OU	E T		비지	= V = SOLENOID KEY RELEASE	\searrow	 f,g = CONNECTION TYPE SYM h = IMPEDANCE GROUNDED WYE CONNECTION 	30L	В
GHTING CONTROL COMPONENT SCHEDULE NATION IED DESIGNATION GHT IN FEET TO BOTTOM OF SENSOR	CONDUIT TEE		MEDIUM VOLTAGE DISCONNECTING FUSI DOUBLE FUSE CUT OU	Ξ JT		Ŷ	DISCONNECT SWITCH A = TYPE, REFER TO DISCONNECT SCHEDULE		DELTA CONNECTION ENGINE-GENERATOR RATINGS A	AS INDICATED ON	
RECEPTACLE NATION DESIGNATION			MEDIUM VOLTAGE SIN	IGLE FUSE		B Y	FUSED DISCONNECT SWITCH B = TYPE, REFER TO DISCONNECT SCHEDULE b = FUSE RATING	G C d e	a = KVA/KW b = VOLTAGE/CONNECTION c = PHASE d = WIRE e = PF		
E PTACLE	INDIVIDUAL CONDUCTORS		MEDIUM VOLTAGE DO	UBLE FUSE					CURRENT TRANSFORMER WITH SHORTING TERMINAL BLOCK a = QUANTITY b = RATIO		С
ECEPTACLE LEX RECEPTACLE	W"C-(3-X (Ø), 1-Y (N) & 1-Z (G)) W"C (WHERE INDICATED): W = CONDUIT TRADE SIZE 3-X (Ø):	•	MEDIUM VOLTAGE LIVE FRONT TERMINATO	DR			FUSE	c a d b b	POTENTIAL TRANSFORMER a = QUANTITY b = RATIO		
E w/SPLIT WIRE ACLE	3 = QUANTITY X = SIZE OF CONDUCTORS (\emptyset) = DESIGNATES PHASE CONDUCTORS 1 X (N)(M(HERE INDICATED))		MEDIUM VOLTAGE ELBO	W		 0\ a		SSM	c,d = CONNECTION TYPE SYI	MBOL	
	1 = QUANTITY $Y = SIZE OF CONDUCTORS$ $(N) = DESIGNATES NEUTRAL CONDUCTORS$ $4.7 (O)(MUERE INDICATED)$	>>	MEDIUM VOLTAGE TEE			о) ь с	WITH CONTROL POWER TRANSFORMER a = CIRCUIT BREAKER DISCONNECT, TYPE AS NOTED b = STARTER TYPE a = NEMA STARTER SIZE	ATP	AMPERE TEST POINT		D
TACLE	1-Z (G)(WHERE INDICATED): 1 = QUANTITY Z = SIZE OF CONDUCTORS (G) = DESIGNATES GROUND CONDUCTORS		MEDIUM VOLTAGE CON	TACTOR		لے م	d = OVERLOAD	VTP →>	VOLTAGE TEST POINT		
NATION	U{3-X (Ø) & 1-X (G)} U = NUMBER OF PARALLEL RUNS		MEDIUM VOLTAGE STAF	RTER		°) !	MOTOR STARTER/DRIVES: a = DEVICE TYPE VFD-6 = 6-PULSE VFD				
GHT ONS OUTLET NATION GHT	K/2/C#16S K (WHERE INDICATED) = NUMBER OF PAIRS 2/C#16S = TWO CONDUCTOR, 16 GAUGE, TWISTED SHIELDED PAIR K/3/C#16S K (WHERE INDICATED) = NUMBER OF TRIPLETS		MOV-ELBOW ARRESTER	2		b a c	VFD-18 = 18-PULSE VFD RVSS = REDUCED VOLTAGE SOLID STATE STARTER RVAT = REDUCED VOLTAGE AUTO TRANSFORMER a/B = DEVICE WITH BYPASS STARTER. REFER TO THE SPECIFICATIONS		LIGHTNING ARRESTER		E
<u>E ALARM</u>	3/C#16S = THREE CONDUCTOR, 16 GAUGE, TWISTED SHIELDED TRIPLETS N/CX N = NUMBER OF CONDUCTORS IN THE CABLE						b = INPUT OPTIONS LL = LINE REACTOR PHF = PASSIVE HARMONIC FILTER	SPD	SURGE PROTECTIVE DEVICE		
RIC OR	X = SIZE OF CONDUCTORS FIBER OPTIC CABLES						c = OUTPUT OPTIONS LR = LOAD REACTOR DV/DT = Dv/dt FILTER SWF = SINE WAVE FILTER		DRAWOUT CONNECTION		
DL PANEL	FO/N N = NUMBER OF INDIVIDUAL FIBERS				.		EQUIPMENT ENCLOSURE		GROUND		
ATION	GROUNDING							\uparrow	CAPACITOR		F
TROBE COMBINATION									BATTERY		
	GROUND ROD GROUND ROD AND GROUND WELL							—(K)	KIRK KEY INTERLOCK LOAD BANK		
Η											
PROFESS/ON/A P	Car		e e	A L U AH			CITY OF PETALUMA UV DISINFECTION UPGRADES ELECTRICAL	PROJECT	VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0	JOB NO. 7310L.10 DRAWING NO. GE01B	G
09/28/22 4	5 6 7	7	8	9			10 <u>11</u>	12	IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SHEET NO. 33 OF 56	

FILE NAME: 7310L1000GE01B.dgn

	1 2	3 4 ABBREV	5 6 IATIONS	7 8 9	10 11 POWER DEVIC	12 13 CE FUNCTION NUMBERS	
	AAMPABSABSOLUTEACALTERNATING CURRENTACKACKNOWLEDGEACTRACTUATORAFAMP FRAMEAFCAUTOMATIC FREQUENCY CONTROLAICAMP INTERRUPTING CAPACITYAMAMMETERANNANNUNCIATORANTANTENNAAPUAUXILIARY POWER UNITARMARMORED CABLEASAMMETER SWITCHASYMASYMMETRICALATAMP TRIP	J JUNCTION BOX TACH TB - X TB - X K KEY INTERLOCK TC KA KILOAMP TD KV KILOVOLT TE KVA KILOVOLT AMPERE TEFC KVAR KILOVAR (REACTANCE) TENV KW KILOWATT DEMAND TJB KWH KILOWATT DEMAND TJB KWH KILOWATT HOUR TM TP L LONG-TIME TS L-B LINE-BUS TS1W L-G LINE-GROUND TS2W LA LIGHTNING ARRESTOR TSTAT	TACHOMETER TERMINAL BLOCK - UNIT X THERMOCOUPLE / TIME CLOCK / TRAY CABLE TEMPERATURE DETECTOR RELAY TOTALLY ENCLOSED TOTALLY ENCLOSED FAN COOLED TOTALLY ENCLOSED FAN COOLED TOTALLY ENCLOSED NON-VENTILATED TERMINAL TERMINAL TERMINAL JUNCTION BOX THERMAL MAGNETIC TWISTED PAIR TEMPERATURE SWITCH TWO SPEED CONSEQUENT POLE, ONE WINDING TWO SPEED SEPARATE WINDING THERMOSTAT	1 2 3 4 5 6 7 8 9 10 11 11 12 13 14 15	MASTER ELEMENT TIME-DELAY STARTING OR CLOSING RELAY CHECKING OR INTERLOCKING RELAY MASTER CONTACTOR STOPPING DEVICE STARTING CIRCUIT BREAKER ANODE CIRCUIT BREAKER CONTROL POWER DISCONNECTING DEVICE REVERSING DEVICE UNIT SEQUENCE SWITCH MULTIFUNCTION DEVICE OVER-SPEED DEVICE SYNCHRONOUS-SPEED DEVICE UNDER-SPEED DEVICE SPEED OR FREQUENCY MATCHING DEVICE DATA COMMUNICATIONS DEVICE	 83 AUTOMATIC SELECTIVE CONTROL OR TRANSFER RELAY 84 OPERATING MECHANISM 85 PILOT COMMUNICATIONS, CARRIER OR PILOT-WIRE RELAY 86 LOCKOUT RELAY 87 DIFFERENTIAL PROTECTIVE RELAY 88 AUXILIARY MOTOR OR MOTOR GENERATOR 89 LINE SWITCH 90 REGULATING DEVICE 91 VOLTAGE DIRECTIONAL RELAY 92 VOLTAGE AND POWER DIRECTIONAL RELAY 93 FIELD-CHANGING CONTACTOR 94 TRIPPING OR TRIP-FREE RELAY 	ļ,
B B C	ATOAUTOMATIC THROW OVERATPAMMETER TEST POINTATSAUTOMATIC TRANSFER SWITCHAUTO XFMR AUTOMATIC TRANSFORMERAUXAUXILIARYAWGAMERICAN WIRE GAGEBBELLBATBATTERYBFGBELOW FINISHED GRADEBHPBRAKE HORSEPOWERBKRBREAKERBRFBELOW RAISED FLOORCCONDUIT / CONTINUOUS LOADCBCIRCUIT BREAKERCCTVCLOSED CIRCUIT TELEVISIONCCWCOUNTER CLOCKWISECKTCIRCUITCOAXCOAXIAL CABLECOMCOMMONCOMMCOMMONCOMMCONTROL POWER TRANSFORMERCRCONTROL POWER TRANSFORMERCRCONTROL SWITCHCTCURRENT TRANSFORMERCVCONTROL VALVECWCLOCKWISE / COOL WHITEDCDIRECT CURRENTDCDIRECT CURRENT	LCLIGHTING CONTACT ORUHFLCP-XLOCAL CONTROL PANEL NO. XUNGLLLEAD-LAG LOAD REACTORUPSLPLIGHT POLEUVRLP-XLIGHTING PANEL NO. XVLTGLIGHTING CONTROLLER NO. XVALVLOW VOLTAGEVALVLLEVELVARMAMILLIAMPEREVHFMCAMOTOR CONTROLLER NO. XVPMAMILLIAMPEREVHFMCAMOTOR CONTROL CENTER NO. XVPMCPMOTOR CONTROL CENTER NO. XVPMCPMOTOR CONTROL CENTER NO. XVPMCDMOTOR CONTROL CENTER NO. XVPMCDMOTOR CONTROL CENTER NO. XVPMCDMOTOR CORCUIT PROTECTORVRMHMANHOLE / MOUNTING HEIGHTVSMLOMAIN LUGS ONLYVTMODMOTOR PROTECTION RELAYWMS-XMOTOR STARTER NO. XWTMSPMOTOR STARTING PANELWPMTOMANUAL THROW OVERWTMTR-XMOTOR NO. XXFMRMTSMANUAL TRANSFER SWITCHWVMVAMEGAVOLTWVMVAMEGAVOLTMVMVAMEGAVOLTMVMVAMEGAWATTNNNEUTRALNONONORDMALLY CLOCEDNORDMALLY CLOCED	ULTRA HIGH FREQUENCY UNGROUNDED UNINTERRUPTABLE POWER SUPPLY UNDER VOLTAGE RELAY VOLT VOLT VOLT AMPERE VARMETER VARMETER VARIABLE FREQUENCY DRIVE VERY HIGH FREQUENCY VOLTMETER VAPORPROOF VOLTAGE REGULATOR VOLTAGE REGULATOR VOLTAGE TRANSFORMER VOLTAGE TEST POINT WATT / WEST WATER TIGHT WEATHER PROOF TRANSFORMER	17 18 19 20 21 22 23 24 25 26 27 27 27 28 29 30 31 32 29 30 31 32 33 34 45 36 37 38 39 41 42 43 44 45 44 45 44 45 45 46 46 46 47 46 46 46 46 46 46 46 46 46 46	SHUNTING OR DISCHARGE SWITCH ACCELERATING OR DECELERATING DEVICE STARTING-TO-RUNNING TRANSITION CONTACTOR ELECTRICALLY OPERATED VALVE DISTANCE RELAY EQUALIZER CIRCUIT BREAKER TEMPERATURE CONTROL DEVICE VOLTS PER HERTZ RELAY SYNCHRONIZING OR SYNCHRONISM-CHECK DEVICE APPARATUS THERMAL DEVICE UNDERVOLTAGE RELAY SGROUND FAULT UNDERVOLTAGE RELAY FLAME DETECTOR ISOLATING CONTACTOR ANNUNCIATOR RELAY SEPARATE EXCITATION DEVICE DIRECTIONAL POWER RELAY POSITION SWITCH MASTER SEQUENCE DEVICE BRUSH-OPERATING OR SLIP-RING SHORT-CIRCUITING DEVICE POLARITY DEVICE UNDERCURRENT OR UNDERPOWER RELAY BEARING PROTECTIVE DEVICE MECHANICAL CONDITION MONITOR FIELD RELAY FIELD CIRCUIT BREAKER RUNNING CIRCUIT BREAKER MANUAL TRANSFER OR SELECTOR DEVICE UNIT SEQUENCE STARTING RELAY ABNORMAL ATMOSPHERIC CONDITION MONITOR	A ALARM ONLY B BUS PROTECTION G GROUND FAULT PROTECTION (RELAY CT IN A SYSTEM NEUTRAL CIRCUIT OR GENERATOR PROTECTION (RELAY CT IN TOROIDAL OR GROUND SENSOR TYPE) L LINE PROTECTION M MOTOR PROTECTION M MOTOR PROTECTION (RELAY COIL CONNECTED IN RESIDUAL CT CIRCUIT) T TRANSFORMER PROTECTION V VOLTAGE P PHASE PROTECTION AED - ARC FLASH DETECTOR CLK - CLOCK OR TIMING SOURCE DDR - DYNAMIC DISTURBANCE RECORDER DFR - DIGITAL FAULT RECORDER ENV - ENVIRONMENTAL DATA HIZ - HIGH IMPEDANCE FAULT DETECTOR HMI - HUMAN MACHINE INTERFACE HST - HISTORIAN LGC - SCHEME LOGIC MET - SUBSTATION METERING PDC - PHASOR DATA CONCENTRATOR	J) E
	DCSDISTRIBUTED CONTROL SYSTEMDCU - XDISTRIBUTED CONTROL UNIT NO. XDEMODEMOLITIONDISCDISCONNECT SWITCHDMDEMAND METERDPDTDOUBLE POLE DOUBLE THROWDPSTDOUBLE POLE SINGLE THROWDSDOOR SWITCHE/GEMERGENCY GENERATOREMEMERGENCYEMTELECTRICAL METALLIC TUBINGENCLENCLOSUREENGENGINEENTELECTRICAL NON-METALLIC TUBINGEPEXPLOSION PROOFETMELAPSED TIME METERFSUB-FEDFAFIRE ALARMFACPFIRE ALARM CONTROL PANELFDRFEEDERFLAFULL LOAD AMPSFLXFLEXIBLE CONDUITFOFIBER OPTICFRCFIBERGLASS RIGID CONDUITFREQFREQUENCYFUFUSEFUSW FUSED SWITCHFVNRFULL VOLTAGE REVERSINGFVRFULL VOLTAGE REVERSINGFVRFULL VOLTAGE REVERSINGFVRFULL VOLTAGE REVERSINGFVRFORWARDGGROUND / EQUIPMENT GROUND / GROUND FAULTCENERATOR	NCNORMALLY CLOSEDNECNATIONAL ELECTRICAL CODENFCNONMETALLIC FLEXIBLE CONDUITNLNIGHT LIGHTNONORMALLY OPENNPNAMEPLATEOOPEN OR OPENEDOHOVERLOAD RELAYPPOLEPAPUBLIC ADDRESSPBPUSHBUTTON / PULL BOXPCSPVC COATED GALVANIZED STEEL CONDUITPCMPROCESS CONTROL MODULEPEPHOTOCELLPFPOWER FACTORPFRPHASE FAILURE RELAYPHPHASEPNLPANELPXPOWER PANEL NO. XPRIPRIMARYPTPOTENTIAL TRANSFORMERPVCPOUERRACRIGID ALUMINUM CONDUITRACRIGID ALUMINUM CONDUITRECPTRECEPTACLERFRADIO FREQUENCYRMSROOT MEAN SQUAREDRVATREDUCED VOLTAGE AUTO TRANSFORMERPUAPPOWER		46 47 48 49 50 51 52 53 53 54 55 56 57 58 59 60 61 61 62 63 64 64 65 66 67 67 68 69 70 70 71 71 72 73 73 74 75 78	REVERSE-PHASE OR BALANCE CURRENT RELAY PHASE-BALANCE OR PHASE-SEQUENCE VOLTAGE RELAY INCOMPLETE SEQUENCE RELAY MACHINE OR TRANSFORMER THERMAL RELAY INSTANTANEOUS OVERCURRENT RELAY AC TIME OVERCURRENT RELAY AC CIRCUIT BREAKER FIELD EXCITATION RELAY TURNING GEAR ENGAGING DEVICE POWER FACTOR RELAY FIELD APPLICATION RELAY SHORT-CIRCUITING OR GROUNDING DEVICE RECTIFICATION FAILURE RELAY OVERVOLTAGE RELAY VOLTAGE OR CURRENT BALANCE RELAY DENSITY SWITCH OR SENSOR TIME-DELAY STOPPING OR OPENING RELAY PRESSURE SWITCH GROUND DETECTOR RELAY GOVERNOR NOTCHING OR JOGGING DEVICE AC DIRECTIONAL OVERCURRENT RELAY BLOCKING OR OUT OF STEP RELAY PERMISSIVE CONTROL DEVICE RHEOSTAT LIQUID LEVEL SWITCH DC CIRCUIT BREAKER LOAD-RESISTOR CONTACTOR ALARM RELAY POSITION CHANGING MECHANISM DC OVERCURRENT RELAY TELEMETERING DEVICE PHASE-ANGLE MEASURING RELAY PASE-ANGLE MEASURING RELAY POSITION CHANGING MECHANISM DC OVERCURRENT RELAY	 PMU - PHASOR MEASUREMENT UNIT PQM - POWER QUALITY MONITOR RIO - REMOTE I/O DEVICE RTU - REMOTE TELEMETRY UNIT/REMOTE TERMINAL UNIT SE - SEQUENCE OF EVENTS RECORDER TCM - TRIP CIRCUIT MONITOR 	E
Model: Layourt Color Lable: gsnade.ctp Designsc	GENGENERATORGRCGALVANIZED STEEL RIGID CONDUITGFCIGROUND FAULT CIRCUIT INTERRUPTER (RECEPTACLE)GFIGROUND FAULT NTERRUPTER (BREAKER)GFRGROUND FAULT RELAYHHOT-LEGHFHIGH FREQUENCYHPHORSEPOWERHPSHIGH PRESSURE SODIUMHRHOURHSTATHUMIDISTATHVHIGH VOLTAGEHVACHEATING/VENTILATION/AIR CONDITIONINGHZHERTZIINSTANTANEOUS / INTERMITTENT LOADICINTERRUPTING CAPACITYIJBINSTRUMENT JUNCTION BOXIMCINTERMEDIATE METAL CONDUITINSTINSTANTANEOUSINTINTERLOCKINTERCOM INTERCOMMUNICATION	RVNRREDUCED VOLTAGE NON-REVERSINGRVSSREDUCED VOLTAGE SOLID STATESSHIELD / SHORT-TIMESASURGE ARRESTERSCSHORT CIRCUITSDBCSOFT DRAWN BARE COPPERSFLSUB FEED LUGSSLTSEALTIGHT LIQUIDTIGHT FLEXIBLE CONDUITSMSURFACE MOUNTEDSPSINGLE POLESPDSURGE PROTECTIVE DEVICESPDTSINGLE POLE DOUBLE THROWSPSTSINGLE POLE SINGLE THROWSPKRSPEAKERSSSOLID STATESTBSHORTING TERMINAL BLOCKSWBDSWITCHBOARDSWGRSWITCHGEARSYMSYMMETRICAL		80 81 82	FLOW SWITCH FREQUENCY RELAY DC LOAD MEASURING RECLOSING RELAY		F
	NOTES: 1. REFER TO SPECIFICATIONS AND OTHER DRAWINGS FOR ADDITION	AL ABBREVIATIONS.			CITY OF PETA UV DISINFECTION UPGR ELECTRICAL ABBREVIAT	LUMA VERIFY SCALES JOB NO. ADES PROJECT BAR IS ONE INCH ON ORIGINAL DRAWING DRAWING NO. 0 1" GE02B IONS IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY SHEET NO.).).

PROJECT NO. 7310L10

FILE NAME: 7310L1000GE02B.dgn

	1	2 3		4 5		6 7		8 9		10 11		12 13	
		PROCESS SWITCHES	+	HAND SWITCHES		RELAYS		TERMINAL BLOCKS		I/O		MISC	
:09:14 AM	6	FLOAT SWITCH CLOSE ON RISING LEVEL		NORMALLY OPEN MOMENTARY PUSHBUTTON	d a)b	RELAY COIL a = TYPE		TERMINAL IN PLC/PCM PANEL	∢ a≫	PLC DISCRETE a = INPUT OR OUTPUT AS INDICATED	010	SOLENOID	
P-2022 11:	oTo	FLOAT SWITCH OPEN ON RISING LEVEL	ماه	NORMALLY CLOSED MOMENTARY PUSHBUTTON	C	CR - CONTROL RELAY TD - TIME DELAY RELAY M - MOTOR STARTER COIL L - MOTOR STARTER COIL - LOW SPEED H - MOTOR STARTER COIL - HIGH SPEED		TERMINAL IN MOTOR CONTROL CENTER	ANALOG	PLC ANALOG a = INPUT OR OUTPUT AS INDICATED	M	METER UNIT M = TYPE	A
ate: 29-SE	20	PRESSURE SWITCH CLOSE ON RISING PRESSURE	<u>↓</u> <u> ↓</u> <u> ↓</u> xoo	THREE POSITION SELECTOR SWITCH x - DENOTES POSITION CONTACTS CLOSED IN		 F - MOTOR STARTER COIL - FORWARD R - MOTOR STARTER COIL - REVERSE b = TDON - TIME DELAY ON ENERGIZATION 		TERMINAL IN LOCAL STARTER CONTROL PANEL	≪ ≪DIGITAL ≫	DIGITAL BUS	HP	MOTOR	
Plot D	Jo	PRESSURE SWITCH OPEN ON RISING PRESSURE	→ o o _{xo}	TWO POSITION SELECTOR SWITCH x - DENOTES POSITION CONTACTS CLOSED IN		c = TIMING RANGE/SETTING d = DESCRIPTION		TERMINAL AT FIELD DEVICE	BUS		\bigcirc	CIRCUIT BREAKER	
		TEMPERATURE SWITCH CLOSE ON RISING TEMPERATURE	مآه	MUSHROOM HEAD PUSHBUTTON	$\dashv\vdash$	NORMALLY OPEN CONTROL CONTACT		TERMINAL IN RTU			0~0	DISCONNECT	
В	مل مل	TEMPERATURE SWITCH OPEN ON RISING TEMPERATURE		PUSH-PULL PUSHBUTTON MAINTAINED CONTACT	- // -	NORMALLY CLOSED CONTROL CONTACT		TERMINAL IN FIELD PANEL				FUSE	E
Jser: svcPW	~~°	FLOW SWITCH CLOSE ON INCREASE IN FLOW	xox	PADLOCK SWITCH x - DENOTES POSITION CONTACTS CLOSED IN		TIME DELAY CONTACT NORMALLY OPEN TIMED CLOSING		TERMINAL IN (USER CHOICE)			\bowtie	TRANSIENT SURGE PROTECTION	
	oto	FLOW SWITCH OPEN ON INCREASE IN FLOW		PULL CORD SWITCH	OTONCTO	TIME DELAY CONTACT NORMALLY CLOSED	*	DIGITAL BUS CONNECTOR * = D - DEVICENET * = PA - PROFIBUS PA			MWH-* ofco	MOTOR WINDING HEATER * - MOTOR TAG I.D.	
	070 11	VIBRATION SWITCH OPEN ON RISING VIBRATION		STOP-LOCKOUT PUSHBUTTON		TIME DELAY CONTACT NORMALLY OPEN TIMED OPENING		 * = DP - PROFIBUS DP * = H1 - FOUNDATION FIELDBUS H1 * = H2 - FOUNDATION FIELDBUS H2 			പ്പിം	SPACE HEATER	
C		VIBRATION SWITCH CLOSE ON RISING VIBRATION	xoo	SPRING-RETURN x - DENOTES POSITION CONTACTS CLOSED IN		TIME DELAY CONTACT NORMALLY CLOSED TIMED CLOSING						VARISTOR	
	00	TORQUE SWITCH OPEN ON HIGH TORQUE	F	PILOT LIGHTS								CAPACITOR	
		TORQUE SWITCH CLOSE ON HIGH TORQUE	a	PILOT LIGHT a = LENS COLOR R = RED							-///-	RESISTOR	
D	040	NORMALLY CLOSED LIMIT SWITCH		G = GREEN W = WHITE A = AMBER								BATTERY	
cale: 1:1		NORMALLY CLOSED HELD OPEN LIMIT SWITCH										DIODE	
pen PlotS	~~~	NORMALLY OPEN LIMIT SWITCH									-~~-	MOTOR OVERLOAD HEATERS	
Penv0905	070	NORMALLY OPEN HELD CLOSED LIMIT SWITCH									-¥	OVERLOAD CONTACT	
Carollo_Std												DRAWOUT CONNECTION	E
JesignScript:											÷	GROUND	
gshade.ctb E												LIGHTNING ARRESTOR	
ColorTable:													
lel: Layout1												CONTROL POWER TRANSFORMER	
Mod											KI-*	ELAPSED TIME METER	
delon			DESIGNED								 \ N/A	VERIEV SCALES	JOB NO.
JIC				SOPROFESS/ONAL CONTRACTOR				2 State 14				BAR IS ONE INCH ON ORIGINAL DRAWING	7310L.10 G
VED B				H No. 20740 H H H		Car						0 1"	GE03B
AST S/				THE OF CALIFORNIT				IREQ		SCHEMATIC S	YMBOLS	IF NOT ONE INCH ON THIS SHEET, ADJUST	SHEET NO.
⊐ L	REV DATE BY	DESCRIPTION S 2 3	SEPTEMBER 2022	4 5		6 7		8 9		10 11		12 13	35 OF 56

FILE NAME: 7310L1000GE03B.dgn

FILE NAME: 7310L1001E01B.dgn

ELECTRICAL					
OVERALL SITE PLAN					

	7310E.10				
NE INCH ON ₋ DRAWING	DRAWING NO.				
 1"	E01B				
NE INCH ON	SHEET NO.				
CORDINGLY	36 OF 56				
13					

6	7	8	9	10

	A	
	В	
	С	
	D	
	E	
	F	
CITY OF PETALUMA VERIFY SCALES JOB NO. INFECTION UPGRADES PROJECT BAR IS ONE INCH ON ORIGINAL DRAWING DRAWING NO. ELECTRICAL 0 1" E03B PARTIAL SITE PLAN - II IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY SHEET NO.	G	

11	12	13

FILE NAME: 7310L1001E05B.dgn

6	7	8	9	10

				l
CITY OF PETALUMA	VERIFY SCALES	JOB NO. 7310L.10	G	
SINFECTION UPGRADES	BAR IS ONE INCH ON ORIGINAL DRAWING			
ELECTRICAL	0 1"	E02B		
DUCT BANK SECTIONS - I		IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SHEET NO. 38 OF 56	
11	12	13		

11	12	13

6	7	8	9	10

7AL-	OVER 08-CR	HEAD	CRA

- STRAINER 09-STR-004
- 7CL- INFLUENT CHANNEL 8CL- FUTURE STORAGE BLDG.
- 4 7EL- INFLUENT CHANNEL 8EL- AIR HANDLING GATE NO. 3 09-ACU-001
 - BLOWER

SIDE VIEW SCALE: 3/4"=1'-0" FILE: 7310L1003E623

21"

- 9G- 30 KVA 480-208Y/120V 09-XFMR-B

BREAKER

9

UV DIS

10

1	1
-	-

KEY NOTES

12

<u> </u>	<u>LINOILS.</u>
<	EXISTING MCC: EATON/CUTLER-HAMMER FREEDOM SERIES 2100 MCC, CAT NO.: MLA01487.
<	2 REMOVE EXISTING COVER PLATE. INSTALL NEW COVER PLATE

AND NAMEPLATE AS INDICATED ON THIS DRAWING.

 $\langle 3 \rangle$ REMOVE EXISTING COVER PLATE. INSTALL BLANK COVER PLATE.

4 PULL POWER CONDUCTORS THROUGH EXISTING CONDUIT FROM FEEDER BREAKER TO INFLUENT CHANNEL GATE NO. 3 DISCONNECT SWITCH. REFER TO DRAWING 08E01 THE LOCATION OF INFLUENT CHANNEL GATE NO. 3 DISCONNECT SWITCH.

5 NEW MCC SECTION: EATON/CUTLER-HAMMER FREEDOM SERIES 2100 MCC SECTION.

				1
CITY OF PETALUMA		VERIFY SCALES	JOB NO. 7310L.10	G
SINFECTION UPGRADES PROJECT		BAR IS ONE INCH ON ORIGINAL DRAWING		
ELECTRICAL		0 1"	E09B	
09-MCC-A ELEVATIO	N	IF NOT ONE INCH ON THIS SHEET, ADJUST	SHEET NO.	
MODIFICATION		SCALES ACCORDINGLY	39 OF 56	
11	12	13		

11	12	13

<u>KEY NOTES:</u>

480V, 3P, 4-WIRE, 1000A, PORTABLE GENERATOR TAP BOX. NEMA 3R ENCLOSURE, GCD-101B OR EQUAL.

CITY OF PETALUMA		VERIFY SCALES	JOB NO. 7310L.10	G
SINFECTION UPGRADES PROJECT		BAR IS ONE INCH ON ORIGINAL DRAWING		
ELECTRICAL	0 1"	E11B		
MCC-A ONE-LINE DIAG	RAM - II	IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SHEET NO.	
			41 01 30	
11	12	13		

6	7 8	9	10	11	12	13
	 GENERAL NOTES: 1. UV CHANNEL 3 SHALL BE INSTAL WORK BEGINS ON CHANNELS 1 A 2. SOME SIGNALS MUST BE ROUTE PANEL, UV-DCC-01 TO THE NEW ORDER TO START UV CHANNEL 3 DETAILS. 3. THE SHOP DRAWINGS ON THE EXIST BEFORE MAKING ANY TERMINAT KEY NOTES: 1 INSTALL CONDUCTORS IN EXIST DESIGNATED EQUIPMENT LOCAT 2 REPLACE THE EXISTING UVT ANA EXISTING WIRING TO UV-DCC-01. 3 PROVIDE SIGNAL ISOLATORS IN PANEL UV-DCC-01 AND SPLIT THE BETWEEN THE TWO UV CONTRO 4 PROVIDE A CONDUIT AND CONDUCTION OF A CONDUIT AND CONDUCTION OF A CONDUIT AND CONDUCTION OF A CONDUCTION OF	LED AND OPERATIONAL BEFORE ND 2, EXCEPT AS NOTED BELOW. D FROM THE EXISTING UV CONTROL JV CONTROL PANEL, UV-MCP-800 IN , REFER TO THE KEY NOTES FOR (ISTING UV SYSTEM ARE AVAILABLE ALL EXISTING TERMINATIONS, ONS. NG CONDUITS STUBBED TO ION. LYZER, 08-AIT-805. REUSE THE THE EXISTING UV CONTROL FOLLOWING ANALOG SIGNALS PANELS: UVT, FLOW, TURBIDITY. ICTORS TO CONNECT THE -301.	 PROVIDE A CONDUIT FOR THE MAN BETWEEN 08-LE-803 AND 08-LIT-803 RUN CONDUITS OVERHEAD SUPPO INSTALL THE CONDUITS OVER THE DEMOLISH THE EXISTING 08-LE/LIT WIRING. DEMOLISH THE SIGNAL CA THE EXISTING CONTROL PANEL UC CONTROL PANEL UV-MCP-800. DEMOLISH EXISTING CONTROL WIR CONTROL WIRING THROUGH THE E UC-DCC-02 TO THE NEW CONTROL INSTALL THE NEW CHANNEL 2 LAM EXISTING CONTROL PANEL, UC-DC PANEL UV-MCP-800. INSTALL THE NEW CHANNEL 2 LAM EXISTING CONTROL PANEL, UC-DC PANEL UV-MCP-800. TRANSFORMER 08-PDC-XFMR-2 IS SUPPLIER TO POWER CHANNEL 3. DETAILS. 	NUFACTURER'S CABLE 3. ORTED FROM THE CANOPY. BRIDGE CRANE. -802. RECONNECT THE POWER ABLE AND PULL IT THROUGH C-DCC-01 TO THE NEW RE FOR 08-EDR-201. PULL NEW EXISTING CONTROL PANEL, . PANEL UV-MCP-800. IP CONTROL CABLES FROM THE C-01 TO THE NEW CONTROL PROVIDED BY THE UV REFER TO SECTION 11289 FOR 08-PDC-XFMR-1 (1) 08-PDC-XFMR-2	 FIELD ROUTE THE COND WIREWAY TO AVOID OBS AND PREVENT TRIPPING THROUGH THE WIREWAY AND LSL-211 WILL CONTI UV-MCP-800. ROUTE CONDUIT S801 OF UV-MCP-800. MAKE THE OB BOTTOM. CHANNEL 3 INFLUENT GA 	UIT FROM THE LEVEL SWITCH TO THE TRUCTING ACCESS TO THE CHANNEL HAZARDS. CONTINUE THE WIRING TO THE UV CONTROL PANELS. LSL-111 NUE THROUGH NEW CONDUITS TO N THE SIDE OF UV STRUCTURE TO REACH CONNECTION TO UV-MCP-800 FROM THE ATE DISCONNECT SWITCH.
301 08-UVR-302 08-UVR-303 08-L JLE MODULE MODULE CHANNEL 3 MO 32 P833 S833 P834 S834 S834 201 08-UVR-202 08-UVR-203 08-UV 08-UV JLE MODULE CHANNEL 2 MC JLE MODULE CHANNEL 2 MC	VR-304 08-UVR-305 08-UVR-306 DULE MODULE MODULE 304 305 306 P835 P836 S835 S835 S836 08-UVR-206 DULE MODULE MODULE P835 P836 S836 VR-204 08-UVR-205 08-UVR-206 DULE MODULE 206	08-UVR-307 08-UVR-207 08-UVR-207 08-UVR-208 08-UVR-207 08-UVR-208 08-UVR-208 08-UVR-207 08-UVR-208 08-UVR-208 08-UVR-207 08-UVR-208 08-UVR	08-LE-804 08-LE-804 08-UVR-309 08-UVR-310 MODULE 309 9 9 9 9 9 9 9 9 08-LE-803 08-UVR-209 08-UVR-210 MODULE 08-UVR-210 08-LE-802	11 08-PDC-XFMR-2 P7548B P7548C V-PDC-800 1 P800I 1 P800J 1 P800L 08-EDR-301 08-EDR-201 08-EDR-201 P80L 08-LIT-803 08-LIT-802 08-LIT-802	1 P7545 P7545 P7545 P800 C800P S804 S804 S800 C8000 S804 S800 C8000 S801 S8001 S8002 S8001 S8002	
	DULE MODULE MODULE 106 VR-104 08-UVR-105 08-UVR-106			UV-DCC-01		S801 13 TIT-811 UPS 08-AIT-801 0 08-AIT-805 2
	7 8	1858	UV DISINFE	ECTION UPGRADES ELECTRICAL JV DISINFECTION POWER PLAN - I	PROJECT	VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0

		<u> </u>		
R-301 08-UVR-302	08-UVR-303	08-UVR-304 08-UVR-305 08-UVR-306	08-UVR-307	08-LE-8 08-UVR-308 08-UVR-309 08-UVR-31
	MODULE CHANNEL 3	MODULE MODULE MODULE 304 305 306		MODULE MODULE MODULE
P832 P833 5832 S833	P834 S834	P835 P836 S835 S836	P837 P838 S837 S838	P839 P840 S839 S840 08-LE-803
R-201 08-UVR-202	08-UVR-203	08-UVR-204 08-UVR-205 08-UVR-206	08-UVR-207	08-UVR-208 08-UVR-209 08-UVR-210
DULE MODULE 202	MODULE CHANNEL 2 203	MODULE MODULE 206		MODULE MODULE MODULE 208 209 210
				08-LE-802
	CHANNEL 1 MODULE 103	MODULE MODULE MODULE		MODULE MODULE MODULE
R-101 08-UVR-102	08-UVR-103	08-UVR-104 08-UVR-105 08-UVR-106	08-UVR-107	08-UVR-108 08-UVR-109 08-UVR-110
				,,,,,,,

		caroll	D ®	RETA 185	B B	UV DIS
	6	7	8		9	10

FILE NAME: 7310L1008E02B.dgn

0	7	0	0	10	4.4	10	12	
6	/) X	9	10	11	12	13	1
			GEN 1. KEY (1) (2)	IERAL NOTES: AFTER CHANNELS 2 AND 3 ARE CO PERFORM THE WORK TO MIGRATE CONTROL UV-MCP-08. <u>NOTES:</u> 06-UV-PDC WILL REMAIN IN SERVIC DEMOLISH THE EXISTING 08-LE/LIT WIRING. DEMOLISH THE SIGNAL CA THE EXISTING CONTROL PANEL UV CONTROL PANEL UV-MCP-800.	OMPLETE AND OPERATIONAL, E CHANNEL 1 TO THE NEW CE. -802. RECONNECT THE POWER ABLE AND PULL IT THROUGH Y-DCC-01 TO THE NEW	 DEMOLISH THE EXISTING NEW CONTROL WIRING UV-DCC-01 TO THE NEW INSTALL THE NEW CHAN EXISTING CONTROL PAN PANEL UV-MCP-800. DUCT BANK SECTION CF 	G CONTROL WIRING FOR 08-EDR-101. PULL THROUGH THE EXISTING CONTROL PANEL UV CONTROL PANEL UV-MCP-800. NEL 1 LAMP CONTROL CABLES FROM THE IEL, UV-DCC-01 TO THE NEW CONTROL	Α
						$\langle 5 \rangle$		┢
						<u>איל</u>		1

< P8711 > LVPB-12 P8712 🕂 P7547A 🔪 08-PDC-XFMR-1 08-PDC-XFMR-2-IPB-31 P7548B P7548C - s¹¹ s - - - - - - s/s - - - - s₁ s - - -UV-PDC-800 P7549 11 P800I P800J _ _ _ _ _ P800K P800L UV-MCP-800 S841 P800 C800P P800P P804 S804 В _ _ - - - - - |# _ __ __ _ ____ ____ 08-EDR-301 08-LIT-804 08-EDR-201 S8000 C8000 P8000 S8001 4 ____ S8002 08-LIT-803 08-LIT-802 08-EDR-101 S801 **N** TIT-811 $\langle 3 \rangle$ - 06-UV-PDC UV-DCC-01

CITY OF PETALUMA		VERIFY SCALES	JOB NO. 7310L.10	G
SINFECTION UPGRADES F	PROJECT	BAR IS ONE INCH ON ORIGINAL DRAWING		
ELECTRICAL		0 1"	08E02B	
UV DISINFECTION POWER PLAN - II		IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SHEET NO. 44 OF 56	
11	12	13		

6	7	8	9	10

11	12	13	
	KEY NOTES:		
	<u>KET NOTES:</u>		

CONNECT THE NEW FLOW METER TO THE EXISTING WIRING. PROVIDE NEW FLEXIBLE CONDUIT AS REQUIRED TO REMAKE THE CONNECTIONS.

				1						
CITY OF PETALUMA	CITY OF PETALUMA									
SINFECTION UPGRADES F	PROJECT	BAR IS ONE INCH ON ORIGINAL DRAWING								
ELECTRICAL		0 1"	UOEUSB							
ARY EFFLUENT METER	R VAULT	IF NOT ONE INCH ON THIS SHEET, ADJUST	SHEET NO.							
POWER PLAN		SCALES ACCORDINGLY	45 OF 56							
11	10	13								

11	12 13	T
	GENERAL NOTES:	
	 EXISTING MCC IS EATON FREEDOM SERIES 2100, ORDER NUMBER MLA01487 IT.016FVC. KEY NOTES: 	
	 1. DEMOLISH THE CONDUIT AND CONDUCTORS BETWEEN 09-MCC-A AND 09-VFD-PMP-003. RELOCATE THE VFD TO ALLOW FOR THE NEW MCC SECTION TO BE INSTALLED. 	`
	2. DEMOLISH A PORTION OF THE CONDUIT BETWEEN 09-VFD-PMP-003 AND PLC-7 AND DEMOLISH EXISTING CONDUCTORS.	
	3. INTERCEPT CONDUIT AND ROUTE TO NEW 09-VFD-PMP-003 LOCATION. PULL NEW CONDUCTORS IN AND TERMINATE.	
	 ROUTE NEW 09-PMP-003 FEED CONDUCTORS FROM 09-VFD-PMP-003 TO 09-MCC-A AND SPLICE TO EXISTING 09-PMP-003 FEED CONDUCTORS. 	
	5. ROUTE NEW 09-PMP-003 CONTROL CONDUCTORS FROM 09-VFD-PMP-003 TO 09-MCC-A AND SPLICE TO EXISTING 09-PMP-003 CONTROL CONDUCTORS. TERMINATE LOW-LOW LEVEL SHUTDOWN INTERLOCK IN 09-MCC-A.	3
09-MCC-A	6. BUS-SPLICE NEW SECTION TO EXISTING MCC BUS.	
	C	;
DWG EC		
		_
NEW MCC SECTION 6		
)
		_
P9000 P9001		
P9002 P9003		-
		_
	F	-
		-
CITY OF PETALUMA	VERIFY SCALES JOB NO. 7310L.10	÷
SINFECTION UPGRADES F	PROJECT BAR IS ONE INCH ON ORIGINAL DRAWING DRAWING NO.	
ELECTRICAL 09-MCC-A BUILDING BROUNDING AND LIGH	IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY 46 OF 56	

11

46 OF 56

	6	7	8		9	10	1	1	12	13	
FIELD - 4	FIELD - 5	FIELD - 6	SYMBOL	DRAWING VISIBLE FIELDS	FIELD - 1	FIELD - 2	FIELD - 3	FIELD - 4	FIELD - 5	FIELD - 6	ן ר
				4 740		DESED	DECODIDITION	DECODIDITION			
	DESCRIPTION	F - FUTURE	PRIMARY ELEMENT $6 \int \frac{3}{4}$	2 - LOOP NUMBER 3 - FUNCTION					AREA NO. BUILDING NO. ROOM NO.	F - FUTURE	
				4 - FURNISHED BY 5 - LOCATION 6 - EXISTING/FUTURE							
			INSTRUMENT/CONTROL ELEMENT PRIMARY FUNCTION	1 - TAG 2- LOOP NUMBER	REFER	REFER		DESCRIPTION	DESCRIPTION	E - EXISTING F - FUTURE	- A
DESCRIPTION		E - EXISTING	OPERATOR ACCESSIBLE $6 1 3$	3 - FUNCTION 4 - FURNISHED BY			< <u>5</u>	6			
DESCRIPTION	AUTOMATION CONTROLLER NO.	F - FUTURE		6 - EXISTING/FUTURE							
	PLC - PROGRAMMABLE LOGIC CONTROLLER NO.		INSTRUMENT/CONTROL ELEMENT	1 - TAG 2 - LOOP NUMBER	REFER	REFER	DESCRIPTION	DESCRIPTION	DESCRIPTION	E - EXISTING F - FUTURE	-
	RIO - REMOTE I/O VCP - VENDOR CONTROL		OPERATOR ACCESSIBLE	3 - FUNCTION 4 - FURNISHED BY							
	PANEL NO.			6 - EXISTING/FUTURE							
DESCRIPTION	PAC - PROGRAMMABLE AUTOMATION CONTROLLER NO	E - EXISTING F - FUTURE	INSTRUMENT/CONTROL ELEMENT	1 - TAG	REFER	REFER	DESCRIPTION	DESCRIPTION	LCP - LOCAL CONTROL	E - EXISTING	
	PLC - PROGRAMMABLE LOGIC		OPERATOR INACCESSIBLE	3 - FUNCTION 4 - FURNISHED BY	XR - PROTECTION	$\langle 3 \rangle$			MCC - MOTOR CONTROL CENTER NO.	-	D
	RIO - REMOTE I/O VCP - VENDOR CONTROL		$6\left(-\frac{1}{2}\right)^{3}$	6 - EXISTING/FUTURE	RELAY CR - CONTROL RELAY				MODULE NO.		
	PANEL NO.		5	;	IR - INTERPOSING RELAY				PANEL NO.		
			INSTRUMENT/CONTROL ELEMENT AUXILIARY FUNCTION OPERATOR INACCESSIBLE	1 - TAG 2 - LOOP NUMBER 3 - FUNCTION	REFER	REFER	DESCRIPTION		LCP - LOCAL CONTROL PANEL NO. MCC - MOTOR CONTROL	E - EXISTING F - FUTURE	
				4 - FURNISHED BY 5 - LOCATION	XR - PROTECTION RELAY			× ·	CENTER NO. PCM - PROCESS CONTR	OL	
	LOI - LOCAL OPERATOR INTERFACE NO.	E - EXISTING F - FUTURE	$\left(\begin{array}{c} \frac{1}{2} \end{array} \right)^4$		RELAY IR - INTERPOSING				VCP - VENDOR CONTRC PANEL NO.	DL	
2/3/	LCP - LOCAL CONTROL PANEL NO. PCM - PROCESS CONTROL					05555				5 5)/(0711)/0	С
	MODULE NO. VCP - VENDOR CONTROL		NON-POWERED	2 - LOOP NUMBER 3 - FUNCTION/SIZE		REFER 3	DESCRIPTION	DESCRIPTION	AREA NO. BUILDING NO. ROOM NO.	F - FUTURE	
			$\left(\begin{array}{c}1\\2\end{array}\right)^4$	4 - FURNISHED BY 5 - LOCATION 6 - EXISTING/FUTURE							
DESCRIPTION	PANEL NO. MCC - MOTOR CONTROL	F - EXISTING F - FUTURE	5 FIELD EQUIPMENT	1 - TAG	REFER	REFER	DESCRIPTION	DESCRIPTION	AREA NO.	E - EXISTING	_
	CENTER NO. PCM - PROCESS CONTROL MODULE NO		PRIMARY FUNCTION POWERED 6 3	2 - LOOP NUMBER 3 - FUNCTION	3	$\langle 3 \rangle$		6	BUILDING NO. ROOM NO.	F - FUTURE	
	RVSS - REDUCED VOLTAGE SOLID STARTER NO.		$\begin{pmatrix} 1 \\ 2 \end{pmatrix}^4$	5 - LOCATION 6 - EXISTING/FUTURE							
	VCP - VENDOR CONTROL PANEL NO. VFD - VARIABLE			1 - TAG	MWH - MOTOR	REFER	DESCRIPTION	DESCRIPTION	DESCRIPTION	E - EXISTING	
	FREQUENCY DRIVE NO.		POWERED 6 3	3 - FUNCTION 4 - FURNISHED BY	HEATER TSH - TEMPERATURE					F - FUTURE	D
				5 - DESCRIPTION 6 - EXISTING/FUTURE	SWITCH XSH - TORQUE SWITCH						
			FIELD EQUIPMENT STARTER/DRIVE CUBICLE/CABINET	1 - TAG 2 - LOOP NUMBER 3 - TYPE	NS - MOTOR STARTER RVAT - REDUCED	REFER 3	FVNR - FULL VOLTAGE NON-REVERSING STAF FVR - FULL VOLTAGE REVER	120VAC - 1P RTER 208VAC - 2P RSING 208VAC - 3P	PANEL NO. MCC - MOTOR CONTROL	F - FUTURE	
			6 1 - 2	4 - VOLTAGE-POLE 5 - POWER SOURCE 6 - EXISTING/FUTURE	VOLTAGE AUTO TRANSFORMER STARTER		STARTER PWS - PART-WINDING START RVAT - REDUCED VOLTAGE A	240VAC - 2P ER 240VAC - 3P UTO 480VAC - 3P	CENTER NO. PCM - PROCESS CONTR MODULE NO.	OL	
			3 4		RVSS - REDUCED VOLTAGE		TRANSFORMER START RVSS - REDUCED VOLTAGE S	FER 2400VAC - 3P OLID 4160VAC - 3P	VCP - VENDOR CONTRO PANEL NO.	DL	
24VDC - 1P	DP - DISTRIBUTION	E - EXISTING	5		STARTER VFD - VARIABLE		TS1W- TWO SPEED SINGLE WINDING				
120VAC - 1P 208VAC - 2P	PANEL NO. LCP - LOCAL CONTROL	F - FUTURE			FREQUENCY DRIVE		TS2W- TWO SPEED TWO WIN VFD - VARIABLE FREQUENC DRIVE	DINGS Y			E
240VAC - 3P 240VAC - 2P	LP - LIGHTING PANEL NO MCC - MOTOR CONTROL).	INSTRI		BLE LOCATIONS	1			NOTES		
480VAC - 3P 2400VAC - 3P 4160VAC - 3P	CENTER NO. PCM - PROCESS CONTROL MODULE NO.									ABLE	-
	PP - POWER PANEL NO. VCP - VENDOR CONTROL PANEL NO		S S S S S S S S S S S S S S S S S S S					2 OPERATOR PILOT I	DEVICE LEGEND		
DESCRIPTION	DESCRIPTION	E - EXISTING						3 EQUIPMENT TAGGI	NG TABLE		
								4 I/O TYPE DESIGNAT	TIONS TABLE		
				\frown			SINGLE INSTRUMENT WITH INTEGRAL	5 INSTRUMENT TYPE	DESIGNATIONS TABLE		
							IRANOWITTER	6 FURNISHED BY: F	во FURNISHED BY OV BV FURNISHED BY VE	VNER NDOR	F
120VAC - 1P 208VAC - 2P	PANEL NO. LCP - LOCAL CONTROL	F - FUTURE									
208VAC - 3P 240VAC - 2P 240VAC - 3P	PANEL NO. LP - LIGHTING PANEL NO MCC - MOTOR CONTROL).	WER OURCE								
480VAC - 3P 2400VAC - 3P 4160VAC - 3P	CENTER NO. PCM - PROCESS CONTROL MODULE NO										
	PP - POWER PANEL NO. VCP - VENDOR CONTROL				$(-) (-) \bigcirc (-)) \bigcirc (-) (-) \bigcirc (-) \bigcirc (-)) \bigcirc (-) (-) \bigcirc (-)) \bigcirc (-) (-)) \bigcirc (-) (-)) \bigcirc (-) (-) (-)) (-) (-)) (-) (-) (-)) (-) (-$	$\supset \subset$	SINGLE INSTRUMENT WITH REMOTE				
	PANEL NU.					-					J
			<u> </u>								JOB NO.
				ATALUN			CITY OF PE			HIFY SCALES	7310L.10 G
		car				UV [JISINFECTION UP	GRADES PROJE			GN01B
						S	YMBOLS & ABB	REVIATIONS -		F NOT ONE INCH ON HIS SHEET, ADJUST	SHEET NO.
		-		1858		40		A		CALES ACCORDINGLY	47 OF 56

Г		1		2		3				4			Ę	5			6				7				8			9				10
			I					I												<u> </u>			1									
											1112	IRUN		IAG	IDEN				IIER	3												
t Date: 29-SEP-2022 11:13:16 AM	4			I MEASURED VAR	INSTRUMENT FUNCTION	ELEMENT	TRANSMITTER	INDICATING TRANSMITTER	CONVERTER TRANSDUCER, RELAY SPECIAL DEVICES	INDICATOR	RECORDER	CONTROLLER	INDICATING CONTROLLER	RECORDING CONTROLLER	SWITCH	SWITCH LOW LOW	SWITCH LOW	SWITCH HIGH	SWITCH HIGH HIGH	SWITCH COMBINATION HIGH LOW	ACTION	ALARM LOW LOW	ALARM LOW	ALARM HIGH	ALARM HIGH HIGH	TOTALIZE INDICATOR TRANSMITTER	VALVE	GAUGE	LIGHT	SPEED SETTING		
– Plot			_	<u> </u>							15			150																	4	
			L	A	ANALYSIS	AE	AT	AIT	AY	AI	AR	AC	AIC	ARC	AS	ASLL	ASL	ASH	ASHH	ASHL		AALL	AAL	AAH	AAHH				AL		4	
				BB	BURNER FLAME	BE	BT	BIT	BY	BI	BR	BC	BIC	BRC	BS	BSLL	BSL	BSH	BSHH			BALL	BAL	BAH	BAHH				BL		4	
			L	ССС	CONDUCTIVITY	CE	СТ	CIT	CY	CI	CR	CC	CIC	CRC	CS	CSLL	CSL	CSH	CSHH	CSHL		CALL	CAL	CAH	CAHH				CL		4	
				D	DENSITY	DE	DT	DIT	DY	DI	DR	DC	DIC	DRC	DS	DSLL	DSL	DSH	DSHH	DSHL		DALL	DAL	DAH	DAHH				DL			
			L	E																												
l E	3		L	F	FLOW	FE	FT	FIT	FY	FI	FR	FC	FIC	FRC	FS	FSLL	FSL	FSH	FSHH	FSHL		FALL	FAL	FAH	FAHH	FQI	FCV	FG	FL			
			L	FF	FLOW RATIO				FFY	FFI		FFC	FFIC		FFS														FFL			
>			L	G GAUG	GING (DIMENSION)																											
/cPV			L	Н Н/	AND (MANUAL)*							HC			HS*						HA*						ΗV		HL	HSS		
: s			L	1	CURRENT		IT	IIT	IY	II	IR	IC	IIC	IRC	IS	ISLL	ISL	ISH	ISHH			IALL	IAL	IAH	IAHH				IL			
Use			L	J	POWER																											
				К	TIME				KY	KI	KR	KC	KIC	KRC	KS	KSLL	KSL	KSH	KSHH			KALL	KAL	KAH	KAHH		KV		KL		1	
			L	L	LEVEL	LE	LT	LIT	LY	LI	LR	LC	LIC	LRC	LS	LSLL	LSL	LSH	LSHH	LSHL		LALL	LAL	LAH	LAHH		LCV	LG	LL		4	
			_	M MOIST		ME	MT	MIT	MY	MI	MR	MC	MIC	MRC	MS	MSLL	MSL	MSH	MSHH			MALL	MAL	MAH	MAHH				ML		-	
			F	IN EMER	GENCY SHUIDOWN	-										 										 	┦──┤		 		4	
			F									D 2		000	DO++			DOLL								 			D '		4	
			F							רי <u>י</u> ם צו	PR PR			PRC	2000	PSLL		PSH	PSHH	PSHL		PALL		PAH							-	
ľ			-			05						PDC	PDIC	PDRC	PDS	PDSLL	PDSL	PDSH	PDSHH			PDALL	PDAL	PDAH			PDCV		PDL		-	
						QE	QI	QII	QY	QI	QR				Q5	QSLL	QSL	Q5H	QSHH			QALL	QAL	QAH	QAHH						-	
			-	s IV	SPEED	SF	ST	SIT	SY	SI	SR	SC	SIC	SRC	SS	SSU	SSI	SSH	SSHH			SALL	SAI	SAH	SAHH							
			F	ТТТ	TEMPERATURE	TE	ТТ	ТІТ	TY	TI	TR	TC	TIC	TRC	TS	TSLL	TSL	TSH	тѕнн	TSHL		TALL	TAL	TAH	ТАНН		TCV		TL		1	
				TD DIFFEREI	NTIAL TEMPERATURE		TDT	TDIT	TDY	TDI	TDR	TDC	TDIC	TDRC	TDS	TDSLL	TDSL	TDSH	TDSHH			TDALL	TDAL	TDAH	TDAHH		TDCV		TDL		1	
				U M	IULTIVARIABLE					UI	UR	UC	UIC	URC	US														UL		1	
				V	VISCOSITY	VE	VT	VIT	VY	VI	VR	VC	VIC	VRC	VS	VSLL	VSL	VSH	VSHH			VALL	VAL	VAH	VAHH				VL		1	
				W	WEIGHT	WE	WT	WIT	WY	WI	WR				WS	WSLL	WSL	WSH	WSHH			WALL	WAL	WAH	WAHH							
				X L	JNCLASSIFIED	XE	ХТ	XIT	XY	XI	XR	XC	XIC	XRC	XS	XSLL	XSL	XSH	XSHH			XALL	XAL	ХАН	ХАНН		XCV	XG	XL			
				XV	VIBRATION	XVE	XVT		XVY	XVI	XVR				XVS			XVSH	XVSHH					XVAH	XVAHH				XVL			
١r				Y	STATUS***					YI***																			YL			
۱ ^۲				Z	POSITION	ZE	ZT	ZIT	ZY	ZI					ZS**												ZV		ZL**			
<u>.</u>				* R	EFER TO OPERATOR PILOT		EGEND													**** COUL	D ALSO	BE PIS - F	OR PRESS		CATING S	WITCH					-	
е: -				** Lt *** P	ETTER INDICATES POSITIO	N (O=OPEN EPRESENT	N, C=CLOS TS A UNIQI	SED, R=RA JE IDENT	AISE, L=LO IFIER ANI	OWER, ET DIS APPL	C) ICABLE T(O ALL ITE	MS IN TH	E TABLE A	ABOVE																	
tSca			Г																GEN													
Plo																														<u> </u>		
DesignScript: Carollo_Std_Pen_v0905.pen	Ξ			PIL DEVICE TYF	LOT DEVICE FUNCTION	LOCAL-OFF-REMOTE (LOR) OR LOCAL-STOP-REMOTE (LSR)	STOP (SP)	START (ST)	HAND-OFF-AUTO (HOA)	0FF-ON (00)	SELECT (SEL)	OPEN-STOP-CLOSE (OSC)	JOG OPEN-HOLD-CLOSE (JOHC)	SEMIAUTO-AUTO-MANUAL (SAAM)	LEAD-LAG-STANDBY (LLGS)	JOG OPEN-JOG CLOSE (JOJC)	ONLINE-OFFLINE (OLOF)	AUTO-MANUAL (AM)	FIXED RATE-LEVEL RATE (FRLR)	OPEN-CLOSE (OC)	NO OFFLINE- OFFLINE TRANSITION (NOOT)	(нт) нын-мот	RESET (RST)	SPEED (SPD)	START-STOP (STSP)	E-STOP (E-SP)	BYPASS (BYP)			SILENCE	POSITION (POS)	
ctb	-		F	PILOT DEVICE TA	AG (HAND SWITCHES)	HSA*	HSB	HSC	HSD*	HSE	HSF	HSG*	HSH*	HSI	HSJ*	HSK*	HSL*	HSM*	HSN	HSO*	HSP	HSQ*	HSR	HSS	HST*	HSU	HSV	HSW	HSX	HSY	HSZ	
hade			L	SCADA/HMI T/					HAD		HAF	HAG	HAH	HAI	HAJ	HAK	HAL	HAM	HAN	HAO	HAP	HAQ	HAR	HAS	HAT	HAU	HAV	HAW	HAX	HAY	HAZ	
gs gs						POSITION		(R) R = RE	EMOTE, H	SD(A) A =																						
able			1/0	I YPE DE	SIGNATIONS						ISIR			IYPE		SIGN	ATIC	NNS						S	PECI	FIC /	ABBR		4110	NS		
olorT		AUX1	RUNNING		MSL MOTOR START LC	W	AM	AMM	ONIA			O3	OZONE				SH	SOD	IUM HYPO	CHLORITE		APH	A PHASE				MWH	H MOTO	OR WINDI	NG HEAT	ER	
Ŭ	F	AUX2	FAILED/F	AULT	MSM VALVE MODULATI	Ξ	CAP	CAPA	ACITANCE			ORP	OXIDA	TION RED	JCTION F	POTENTIA	L TDF	R TIME	DOMAIN I	REFLECTO	METRY	BPH	B PHASE				SSG	SECO	ONDARY S	SWITCHG	EAR	
out1		AUXF1	RUNNING	FORWARD	MSP MOTOR STOP		CGD) COM	BUSTIBLE	E GAS DE	TECTOR	Р	PRESS	URE			ТН	THEF	RMAL			BRB	BEARING	BOTTOM	Λ		SV*	SOLE	ENOID VAI	LVE		
Lay		AUXH1	RUNNING	HIGH	MSR MOTOR START RE	EVERSE	CL	CHLC	DRINE			P-SUB	PRESS	URE SUB	MERSIBLE	Ξ	TSS	S TOTA	AL SUSPEI	NDED SOLI	DS	BRT	BEARING	G TOP			SPD	SURG	GE PROTE	ECTIVE D	EVICE	
del:		AUXL1			MOTOR START							PC			IEK		TUR	B TURE				BIFLY	BUITER	⊢∟Y -			UPS			IRLF 60/	WER SUPPLY	
Mo					30 SPEED SIGNAL								PHOSP		ПСИТ													SIAT		,)T⊏		
		SVC SVC	SOLENO						אייחאט. איייסחר		NI. WAVE		PULSE			IT									LOIVIN			SIAI CTAT				
		MS								ETY RAP	RIFR	ROT	ROTAM		JUNKEN					ANUE		HTU	HFAT TP		-		۲۱ ۷۶)/FALII T		
		MSF	MOTOR						ER EXPL			RTD	RESIST			CTOR	VAC															
		MSH	MOTOR	TART HIGH				6 MAG				SC	STREA		RENT	• • • •							ŕ	* CC# AN	ND SV# #	# = 1, 2. 3	ETC. AND	REPRES	ENTS A U	NIQUE ID	ENTIFIER	
		L																						/ M		, _, U		0		<u> </u>		
uo		Ļ,																														
orde	G	+ $+$							PRO	ESS/ONA																ATA	LUN					
a ≻		+ $+$					ORAWN	\neg		ALATOR															14	2	14					ים או
D B)		+ +					ESW	[4		20710 -														B	(CQ	AL IA	~				
AVE		+ $+$									¥∥										7 (U		(]				
ST S/							DATE		NOT REC	TRICAL															\backslash			/				SYI
LAS	REV DATE	BY		DESCRIPTION	N	SEP	TEMBER 2	022	· OF	CALIFU 09	/28/22															185	58					
		1		2		3				4			Ę	5			6				7				8			9				10

FILE NAME: 7310L1000GN002B.dgn

			6				7				8			9			10	11	12	13		_
AG		ITIFIC			TTFR	S												INSTRUME	NT LINE SYMBOL	S]
						-											_			-	-1	
]	INSTRUMENT OR CONNECTION TO PROCESS				
.LER						Z						r						PNEUMATIC SIGNAL				
TROL		гом	M	ΗS	HIGH	JATIC V		LOW	≥	표	HGH	ATOF ER				UNG.						
CON	ІТСН	LOW	сн го	ИН Н	HIGH	MBIN H LOV	TION	LOW	M LO		IHD		ILVE	NGE	ЭНТ	SETT						A
DING	SW	тсн	WITO	WITC	LCH F	H CC HIGF	AC	ARM I	ALAR	ILARI	RM H	LIZE I RANS	۸۷	GA	LIG	EED		HYDRAULIC SIGNAL -	— L — L — L —	– L —— L ——		
COR		SWI	S	S	LIWS	NITC		ALA		∢	ALAI	OTAL				SP		CAPILLARY TUBE	<u> </u>	— <u>X X</u>		
REC						SV						⊢						ELECTROMAGNETIC OR SONIC SIGNAL	\sim			
																	-	(GUIDED) ELECTROMAGNETIC OR SONIC SIGNAL		0 0		
	AS BS	ASLL BSU	ASL BSI	ASH BSH	ASHH BSHH	ASHL		AALL	AAL BAI	ААН ВАН	ААНН ВАНН				AL BI		-	(NOT GUIDED)		\sim \sim		
CRC	CS	CSLL	CSL	CSH	CSHH	CSHL		CALL	CAL	CAH	CAHH				CL		1	INTERNAL SYSTEM LINK (SOFTWARE OR DATA LINK)	0 0 0 0	o o		
DRC	DS	DSLL	DSL	DSH	DSHH	DSHL		DALL	DAL	DAH	DAHH				DL			COPPER ETHERNET -	— c — c — c —	– c — c —		
-00	50	5011	501	FOLL	501111	5011						501		50			4			г г		
-RC	FS	FOLL	FOL	г э п	гопп	FORL		FALL	FAL	ГАП	ГАПП	FQI	FUV	FG	FFL		-		— F — F — F —	- F F		B
]	WIRELESS ETHERNET -	— w — w — w —	– w — — w —		
	HS*						HA*						ΗV		HL	HSS		PROFIBUS DP	— PBD — PBD — PBD —	– PBD —– PBD —–––		
RC	IS	ISLL	ISL	ISH	ISHH			IALL	IAL	IAH	IAHH				IL		-					
RC	KS	KSLL	KSL	KSH	KSHH			KALL	KAL	KAH	КАНН		KV		KL		1		— FBA — FBA — FBA —			
RC	LS	LSLL	LSL	LSH	LSHH	LSHL		LALL	LAL	LAH	LAHH		LCV	LG	LL			DEVICENET -	— DN — DN — DN —	– DN —– DN —–––		
/IRC	MS	MSLL	MSL	MSH	MSHH			MALL	MAL	MAH	MAHH				ML		4	FOUNDATION FIELDBUS	FF FF FF	– FF — FF — —		
																	-				-	
PRC	PS****	PSLL	PSL	PSH	PSHH	PSHL		PALL	PAL	PAH	PAHH		PCV		PL			PROCESS	S LINE SYMBOLS			
DRC	PDS	PDSLL	PDSL	PDSH	PDSHH			PDALL	PDAL	PDAH	PDAHH		PDCV		PDL						-	C
	QS	QSLL	QSL	QSH	QSHH			QALL	QAL	QAH	QAHH						-	PRIMARY PROCESS FLOW		_		
SRC	SS	SSLL	SSL	SSH	SSHH			SALL	SAL	SAH	SAHH						1	SECONDARY PROCESS FLOW				
RC	TS	TSLL	TSL	TSH	TSHH	TSHL		TALL	TAL	TAH	ТАНН		TCV		TL			IN PIPE		_		
DRC	TDS	TDSLL	TDSL	TDSH	TDSHH			TDALL	TDAL	TDAH	TDAHH		TDCV		TDL			PRIMARY PROCESS FLOW		_		
JRC	US VS	VSU	VSI	VSH	ИЗНН			\/Δ[]	\/Δ1	νан	∖∕∆нн				UL		-	SECONDARY PROCESS FLOW				
	WS	WSLL	WSL	WSH	WSHH			WALL	WAL	WAH	WAHH				VL			IN CHANNEL		_		
(RC	XS	XSLL	XSL	XSH	XSHH			XALL	XAL	XAH	XAHH		XCV	XG	XL]				-	
	XVS			XVSH	XVSHH					XVAH	XVAHH				XVL		-	DES	IGNATIONS			
	ZS**												ZV		ZL**		-					D
						**** COU	LD ALSO	BE PIS - F	OR PRES	SURE IND	ICATING S	SWITCH					1	EQUIPMENT ENCLOSURE				
ABLE	ABOVE																	EXISTING -				
OF		D TC	EVIC	ELE	EGEN	D												FUTURE				
																		L				
		Û			LR)		Ē											MISCELLANE	OUS P&ID SYMBC	DLS		
j I	LLGS	ror)	OF)	ŝ	E (FR	ŵ	OON				Э Э										-	
)BY (OSE	E (OI	AL (AI	RATI	00)	NON ((H)	ST)	(Od	(STS	SP)	(YP)			ш	(SOd					
	TAND	lG CL		ANUA	EVEL	ISOJI	FFLII NSIT	HGH	ET (R	ED (SI	TOP	DP (E	SS (E			ENC	NO		NO.			
	AG-S	0 ^- N	E-OF	-0-W		O-V-U	VO O TRA	4-WO	RESE	SPEE	RT-S	-STC	ΥΡΑ			SIL	ILISC		HEHEM			
	AD-L/	OPE	NLIN	AUT) RAT	ЧО				••	STA	ш	ш				ă		o o			
	ΓE	JOG	0		IXEC		OFF															
)					-													CHEMICAL INJECTION POINT				
51	HSJ*	HSK*	HSL*	HSM*	HSN	HSO*	HSP	HSQ*	HSR	HSS	HST*	HSU	HSV	HSW	HSX	HSY	HSZ					-
J	HAJ	HAK	HAL	HAM	HAN	HAO	HAP	HAQ	HAR	HAS	HAT	HAU	HAV	HAW	HAX	HAY	HAZ		FROM SHEET			
																		CONTINUATION TAG				
۲E	DES	SIGN		<u>NS</u>		<u></u>			<u> </u>	<u></u>	PEC		<u> </u>			<u> </u>			CONTINUATION			
			SH TOP				MFTRV	APH RPH	A PHAS	E			MWH	MOT								_
			TH	THE	ERMAL			BRB	BEARIN	– G BOTTOI	M		SV*	SOLE	ENOID VAL	.VE		PIPE CALLOUT	PIPE SIZE			
E SUB			TSS	тот	AL SUSPEN	NDED SOLI	DS	BRT	BEARIN	G TOP			SPD	SURC	GE PROTE	CTIVE D	EVICE					
COUN	MERSIBLE				RBIDITY			BTFLY	BUTTEF	RFLY			UPS	UNIN		IBLE PO	WER SUPPLY					
<u> RO</u> US	MERSIBLE	Ē	TUR										YA	STAT	US AUTO	T E						
E OE	MERSIBLE				RASONIC			CPH					V R	STAT	'US REMO			SIGNAL CONTINUATION $ \rightarrow$ TO DRAW	ING FROM DRAWING ⊢ – 🕨			
E OF CE TC	MERSIBLE ITER FLIGHT	T	TURE US UVI UVT	ULTI UV I	RASONIC NTENSITY TRANSMITT	ANCE		CPH CC* HTR	C PHAS CALIBR HEATEF	ATION CO	LUMN		YR Y1	STAT STAT	US REMO	ING		SIGNAL CONTINUATION $ \rightarrow$ TO DRAW	ING FROM DRAWING $ \rightarrow$			
E OF CE TC ER	MERSIBLE ITER FLIGHT CURREN	E T	TURE US UVI UVT VAC	ULTI UV I UV I UV 1 VAC	RASONIC INTENSITY TRANSMITT	ANCE		CPH CC* HTR HTU	C PHAS CALIBR HEATER HEAT TI	E ATION CO R RACE UNI	LUMN T		YR Y1 Y2	STAT STAT ALAR	US REMO US RUNN RM FAILED	ING /FAULT		SIGNAL CONTINUATION $ \rightarrow$ TO DRAW	ING FROM DRAWING>			
	MERSIBLE ITER FLIGHT CURREN MP DETEC	T CTOR	TURE US UVI UVT VAC	ULTI UV I UV I VAC	RASONIC INTENSITY TRANSMITT	ANCE		CPH CC* HTR HTU	C PHAS CALIBR HEATEF HEAT TI				YR Y1 Y2	STAT STAT ALAR	US REMO	ING /FAULT		SIGNAL CONTINUATION $ \rightarrow$ TO DRAW	ING FROM DRAWING>			
E OF CE TO ER CE TE G CU	MERSIBLE ITER FLIGHT CURREN MP DETEC RRENT	T CTOR	TURE US UVI UVT VAC	ULTI UV I UV I VAC	RASONIC INTENSITY TRANSMITT	ANCE		CPH CC* HTR HTU	C PHAS CALIBR HEATEF HEAT TI	ATION CO R RACE UNI * CC# A	LUMN T ND SV#	# = 1, 2, 3	YR Y1 Y2 ETC. AND	STAT STAT ALAR REPRES	US REMO US RUNN RM FAILED ENTS A UI	IE ING /FAULT NIQUE IE	PENTIFIER	SIGNAL CONTINUATION $$ TO DRAW	ING FROM DRAWING>			
E OF CE TO R CE TE G CU	MERSIBLE ITER FLIGHT CURREN MP DETEC	T CTOR	TURE US UVI UVT VAC	ULTI UV I UV I VAC	RASONIC INTENSITY TRANSMITT	ANCE		CPH CC* HTR HTU	C PHAS CALIBR HEATEF HEAT TI	ATION CO R RACE UNI * CC# A	LUMN T ND SV#	# = 1, 2, 3	YR Y1 Y2 ETC. AND	STAT STAT ALAR REPRES	US REMO TUS RUNN RM FAILED ENTS A UI	IE ING /FAULT NIQUE IE	PENTIFIER	SIGNAL CONTINUATION — — ▶ TO DRAW	ING FROM DRAWING>			
E OF CE TO R CE TE G CU	MERSIBLE ITER FLIGHT CURREN MP DETEC	T CTOR	TURE US UVI UVT VAC	ULTI UV I UV I VAC	RASONIC INTENSITY TRANSMITT	ANCE		CPH CC* HTR HTU	C PHAS CALIBR HEATEF HEAT TI	ATION CO RACE UNI * CC# A	LUMN T ND SV#	# = 1, 2, 3	YR Y1 Y2 ETC. AND	STAT STAT ALAR REPRES	US REMO TUS RUNN RM FAILED ENTS A UI	IE ING /FAULT NIQUE IE	DENTIFIER	SIGNAL CONTINUATION→ TO DRAW	ING FROM DRAWING – – ►	VERIFY SCALES	JOB NO. 7310L.10	G
E OF CE TC R CE TE G CU	MERSIBLE ITER FLIGHT CURREN MP DETEC	T CTOR	TURE US UVI UVT VAC	ULTI UV I UV I VAC	RASONIC INTENSITY TRANSMITT CUUM	ANCE		CPH CC* HTR HTU	C PHAS CALIBR HEATEF HEAT T	ATION CO RACE UNI * CC# A	LUMN T ND SV#	# = 1, 2, 3	YR Y1 Y2 ETC. AND	STAT STAT ALAR REPRES	US REMO		DENTIFIER	SIGNAL CONTINUATION> TO DRAW	ING FROM DRAWING>	VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING	JOB NO. 7310L.10 DRAWING NO.	G
E OF CE TC R CE TE G CU	MERSIBLE ITER FLIGHT CURREN MP DETEC	T	TURE US UVI UVT VAC		RASONIC INTENSITY TRANSMITT CUUM			CPH CC* HTR HTU	C PHAS CALIBR HEATEF HEAT T	RACE UNI * CC# A	LUMN T ND SV#	# = 1, 2, 3	YR Y1 Y2 ETC. AND	STAT STAT ALAR REPRES	US REMO		PENTIFIER	SIGNAL CONTINUATION> TO DRAW	ROJECT	VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1"	JOB NO. 7310L.10 DRAWING NO. GN02B	G
E OF CE TO R CE TE G CU	MERSIBLE ITER FLIGHT CURREN MP DETEC	T	TURE US UVI UVT VAC					CPH CC* HTR HTU	C PHAS CALIBR HEATEF HEAT TH	E ATION CO RACE UNI * CC# A	LUMN T ND SV#	# = 1, 2, 3	YR Y1 Y2 ETC. AND	STAT STAT ALAR REPRES	US REMO		DENTIFIER UV DI	SIGNAL CONTINUATION> TO DRAW CITY OF PETALUMA SINFECTION UPGRADES PF INSTRUMENTATION MBOLS & ABBREVIATION	NG FROM DRAWING> ROJECT IS - II	VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET AD UTOT	JOB NO. 7310L.10 DRAWING NO. GN02B SHEET NO.	 G
E OF CE TO R CE TE G CU	MERSIBLE ITER FLIGHT CURREN MP DETEC RRENT	T	TURE US UVI UVT VAC		RASONIC INTENSITY TRANSMITT CUUM			CPH CC* HTR HTU	C PHAS CALIBR HEATEF HEAT T	RACE UNI CC# A	LUMN T ND SV#	# = 1, 2, 3	YR Y1 Y2 ETC. AND	STAT STAT ALAR REPRES	US REMO TUS RUNN RM FAILED ENTS A UI		DENTIFIER UV DI SY	SIGNAL CONTINUATION> TO DRAW CITY OF PETALUMA SINFECTION UPGRADES PF INSTRUMENTATION MBOLS & ABBREVIATION	NG FROM DRAWING – → ROJECT IS - II	VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	JOB NO. 7310L.10 DRAWING NO. GN02B SHEET NO. 48 OF 56	G
E OF CE TO R CE TE G CU	MERSIBLE ITER FLIGHT OCURREN MP DETEC RRENT	T	TURE US UVI UVT VAC				7	CPH CC* HTR HTU	C PHAS CALIBR HEATEF HEAT TH	RACE UNI CC# A	LUMN T ND SV#	# = 1, 2, 3	YR Y1 Y2 ETC. AND	STAT STAT ALAR REPRES	US REMO		DENTIFIER UV DI SY 10	SIGNAL CONTINUATION> TO DRAW CITY OF PETALUMA SINFECTION UPGRADES PF INSTRUMENTATION MBOLS & ABBREVIATION 11	ROJECT IS - II 12	VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY 13	JOB NO. 7310L.10 DRAWING NO. GN02B SHEET NO. 48 OF 56	

	11			12		13		
PUMF				12	BL COMI	OWERS/ PRESSORS]
	SUBMERSIBLE VERTICAL TURBINE					CENTRIFUGAL SINGLE STAGE BLOWER CENTRIFUGAL MULTI STAGE BLOWER RECIPROCATING COMPRESSOR		A
	VERTICAL CHOPPER					FAN LIQUID RING COMPRESSOR ROTARY LOBE BLOWER		в
ÌII	WATER CHAMP							
SC								С
		MIXER		[VAPORIZER		
DR		MOTOR NOZZLE ORIFICE RESTRICTION PERISTALTIC				VENT TO ATMOSPHERE		D
R		COMPOSITE SAMPLER PULSATION DAMPENER REFRIGERATE	D					
		RUPTURE DISP	ζ					E
	┥──┤╸	SIGHT TUBE						
R	S S	SMOKE DETEC STRAINER - MECHANICALL CLEANED	TOR Y					F
N		STRAINER WITH BLOW OI	Ŧ					
ER		STRAINER WYE TYPE						
		VAPOR HEATE	R					
(CITY OF PET	ALUMA				VERIFY SCALES	JOB NO. 7310L.10	G
SINFI	ECTION UPG	RADES F	ROJEC	CT		BAR IS ONE INCH ON ORIGINAL DRAWING	drawing no.	
/BOI	LS & ABBRI	EVIATIO	NS - II	I		IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SHEET NO. 49 OF 56	
	11			12		13	סנ דע עד	1

	1					1
TEMPE	ERATURE	WEIGHT		8	9	10
	TEMPERATURE					
	w/THERMOWELL					
$\langle \cdot \rangle$	GAUGE	STRAIN GAUGE				
T	THERMOMETER					
RESSUF	RE/VACUUM					
DIFFEREN	TIAL PRESSURE	PRESSURE SEALS				
PDI		SEAL ANNULAR				
	DIFFERENTIAL INDICATOR	SEAL DIAPHRAGM				
PDSL						
PDE	DIFFERENTIAL PRESSURE					
PDIT	SWITCH					
	DIFFERENTIAL PRESSURE TRANSMITTER	EXAMPLE				
		PSH				
		PRESSURE SWITCH				
				\$TA	LUA	
		Caro	B			UV DIS
		7		18:	9	

	A
	В
	С
	D
	E
	F
CITY OF PETALUMA VERIFY SCALES JOB NO. INFECTION UPGRADES PROJECT BAR IS ONE INCH ON ORIGINAL DRAWING DRAWING NO. INSTRUMENTATION 0 1" BOLS & ABBREVIATIONS - IV IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY SHEET NO.	G

11	12	13

6	7	8	9	10

- 1	1

GENERAL NOTES:

- 1. ALL NEW FIBER OPTIC CABLE IS INDOOR/OUTDOOR, MULTIMODE, AND LOOSE TUBE UNLESS OTHERWISE NOTED.
- 3. ALL NEW NETWORK PROTOCOLS ARE MODBUS TCP UNLESS OTHERWISE NOTED.

KEY NOTES:

2 INSTALL NEW MODBUS TCP/IP MODULE IN SPARE SLOT. 3 EXISTING UV-DCC-01 TO BE KEPT FUNCTIONAL DURING INSTALLATION OF UV-MCP-800 AND NEW CHANNEL 2 AND 3

MODULES. CONVERT TO JUNCTION BOX AFTER NEW CHANNEL 1 MODULES HAVE BEEN CONNECTED TO UV-MCP-800.

				4
CITY OF PETALUMA	VERIFY SCALES	JOB NO. 7310L.10	G	
SINFECTION UPGRADES F	BAR IS ONE INCH ON ORIGINAL DRAWING	DRAWING NO.		
INSTRUMENTATION	0 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	00N01B SHEET NO. 51 OF 56		
11	12	13		1

FILE NAME: 7310L1000N002B.dgn

5

6	7	8	9	10

11	12	13	
			Α

CITY OF PETALUMA	VERIFY SCALES	JOB NO. 7310L.10	G	
SINFECTION UPGRADES F	BAR IS ONE INCH ON ORIGINAL DRAWING			
INSTRUMENTATION NETWORK I/O TABLES		0 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY	SHEET NO. 52 OF 56	
11	12	13		•

14	40	12	
	☐ IZ <u>GENERAL NOTES:</u> 1. ALL TAGS ARE PRECEDE OTHERWISE NOTED.	D BY AREA CODE "08" UNLESS	
	KEY NOTES: CONNECT THE NEW MAGN ANALOG INPUT. REFER TO NETWORK I/O T.	IETIC FLOWMETER TO THE EXISTING ABLES ON DRAWING 00N02.	A
			В
			С
		STORM DRAIN	D
		MANHOLE RECYCLED WATER STORAGE BASIN	E
			F
CITY OF PETALUMA INFECTION UPGRADES INSTRUMENTATION UV DISINFECTION	PROJECT	VERIFY SCALES BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" 08N01 IF NOT ONE INCH ON THIS SHEET, ADJUST	G
11	12	13]

6	7	8	9	10

Carol		358 358	UV DIS UV
6 7	8	9	10

6	7	8	9	10

	caroll		58	UV DIS UV
 6	7	8	9	10

FILE NAME: 7310L1008N003.dwg

6	7	8	9	10

		caroll		S58	UV DIS UV
	6	7	8	9	10

FILE NAME: 7310L1008N004.dwg

PROJECT NO. 7310L10