

# Index to Plans

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#### Reference Documents:

Sheet No.

City Standard Specifications - August 2020 Edition City Engineering Standards - August 2020 Edition



san luis obispo county, california

CITY OF SAN LUIS OBISPO WATER TREATMENT PLANT OZONE CONTAINMENT **IMPROVEMENT PROJECT** 

APPROVED BY

Brian A. Nelson, City Engineer, R.C.E. C79870

2001026

JUNE 2024 FILE NO/LOCATION

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NOTE

GEND,

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#### GENERAL NOTES

- VERIFY DIMENSIONS AND CONDITIONS AT THE SITE BEFORE STARTING WORK. ANY CONFLICTS BETWEEN DETAILS OR DIMENSIONS ON THE DRAWINGS SHALL BE REPORTED PROMPTLY TO THE FINGINFER
- 2. TAKE PRECAUTIONARY MEASURES TO PROTECT UTILITIES AND STRUCTURES SHOWN AND ALL OTHERS NOT ON RECORD DRAWINGS OR NOT SHOWN ON THESE PLANS ALL SUCH IMPROVEMENTS OR STRUCTURES DAMAGED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR RECONSTRUCTED TO BETTER OR EQUAL THAN ORIGINAL CONDITION ANDIOR THE APPLICABLE REQUIREMENTS OF THE AFFECTED UTILITY AT THE CONTRACTOR'S EXPENSE. APPROVAL OF BEPAIRS OR PECONSTRUCTION BY CITY SHALL ALS OR BEPQUIPED.
- COORDINATE UNDERGROUND UTILITY MARKING WITH THE LOCAL UNDERGROUND SERVICE ALERT JURISDICTION (CALL 811) PRIOR TO CONSTRUCTION.
- VERIFY LOCATIONS AND DEPTHS OF EXISTING UTILITIES BEFORE BEGINNING ANY GRADING OPERATIONS. LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE AND FOR GENERAL INFORMATION ON IY.
- IMMEDIATELY NOTIFY THE CITY UPON LEARNING OF THE EXISTENCE AND LOCATIONS OF ANY UNDERCROUND FACILITIES NOT SHOWN OR SHOWN INACCURATELY ON THESE PLANS OR NOT PROPERLY MARKED BY THE UTILITY OWNER.
- 6. USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD OR UNDERGROUND POWER, GAS, OR OTHER UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT. PROTECT FROM DAMAGE INCURRED DURING CONSTRUCTION ALL OVERHEAD UTILITY LINES WHETHER SHOWN OR NOT SHOWN ON THESE PLANS. NOTIFY UTILITY COMPANIES PRIOR TO ANY WORK IN OVERHEAD LOCATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR COST INCURRED.
- PRESERVE ALL SURVEY MARKERS AND MONUMENTATION PER SPECIFICATION SECTION 5-1.36E.
  THOSE REQUIRING REMOVAL SHALL BE TIED DUT; A CORNER RECORDED; AND RE-ESTABLISHED
  IN ACCORDANCE WITH THE LOCAL GOVERNING AUTHORITY AND CITY STANDARDS.
- ALL SPECIFICATIONS, DRAWINGS, AND DETAILS INCLUDED IN THE CONTRACT DOCUMENTS SHALL FULLY APPLY TO THE WORK WHETHER SPECIFICALLY REFERENCED OR NOT.
- PROVIDE VIDEO DOCUMENTATION OF THE PRE-CONSTRUCTION CONDITIONS OF THE PROJECT SITE AND SURROUNDING AREA. SUBMIT THE VIDEO TO THE CITY PRIOR TO THE START OF CONSTRUCTION PER SPECIFICATION SECTION 19233.
- MAINTAIN THE WORK AREA IN A NEAT, CLEAN, AND SANITARY CONDITION AT ALL TIMES AND TO THE SATISFACTION OF THE CITY. STREETS AND DRIVEWAYS SHALL BE KEPT CLEAN OF DEBRIS, WITH DUST AND OTHER NUISANCES BEING CONTROLLED AT ALL TIMES.
- 11. MAINTAIN A COMPLETE AND ACCURATE RECORD OF ALL CHANGES IN CONSTRUCTION FROM THAT SHOWN IN THESE PLANS AND SPECIFICATIONS FOR THE PURPOSE OF PROVIDING A BASIS FOR RECORD DRAWNINGS. THE CONTRACTOR SHALL NOTE DEVIATIONS FROM THE PLANS ON A SET OF PLANS SPECIFICALLY SET ASIDE FOR THIS PURPOSE. ANY CHANGES SHALL BE MADE ON THE ORIGINALS OF THE PLANS AND SPECIFICATIONS SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE CITY.
- 12. RESTORE ALL PAVEMENT, CONCRETE, ASPHALT, SIDEWALKS, CURBS, TRUNCATED DOMES, AND DRIVEWAY SURFACES REMOVED OR DAMAGED DURING CONSTRUCTION INLESS INDICATED OTHERWISE ON THE PLANS. PAVEMENT SHALL BE PER CITY STANDARDS. OTHER SURFACES SHALL BE RESTORED IN-KIND UNLESS INDICATED OTHERWISE.
- CONSTRUCTION ACTIVITIES SHALL BE LIMITED TO THE HOURS REFERENCED IN THE CITY'S SPECIAL PROVISIONS AND AS LIMITED BY LOCAL ORDINANCE.
- 14. ALL FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF SAN LUIS OBISPO STANDARDS AND SPECIFICATIONS, UNLESS OTHERWISE INDICATED IN THE CONSTRUCTION DOCUMENTS.
- PROVIDE CHEMICAL TOILETS AND TRASH RECEPTACLES PER SPECIFICATION SECTION 015210. USE OF CITY FACILITIES IS PROHIBITED.
- 16. MAINTAIN OWNER ACCESS TO ALL FACILITIES AT ALL TIMES. THE PROJECT SITE IS ADJACENT TO THE PLANT AND LOOP ROAD. OBTAIN APPROVAL FROM THE CITY FOR PLANNED CLOSURES OR ACCESS RESTRICTIONS IN WRITING ONE (1) WEEK IN ADVANCE.

#### PROJECT NOTES

- FILTER BACKWASH WATER WITH FLOW RATES UP TO 12,000 GPM WILL PASS THROUGH THE 24-INCH PIPING CONNECTED TO MANHOLE 11 WITHOUT WARNING.
   ENTRY INTO MANHOLE 11 IS PROHIBITED WHEN PLANT IS IN OPERATION. MODIFICATIONS TO MANHOLE 11, INCLUDING MODIFICATIONS TO THE 12-INCH PIPE FROM MH-12, IS PROHIBITED WHEN PLANT IS IN OPERATION. NIGHT WORK IS REQUIRED. REFER TO SPECIFICATION SECTION 011100.
- CONTINUOUSLY MONITOR AMBIENT OZONE CONCENTRATIONS WHEN WORKERS ARE IN EXCAVATIONS OR MANHOLES PER SPECIFICATION SECTION 011100.
- PRIOR TO BEGINNING OF CONSTRUCTION, LOCK OUT AND TAG OUT EXISTING 4-INCH PVC BALL VALVE ON THE DISCHARGE FROM EXISTING CHEMICAL TANK.
- 4. FIELD WELDING IS STRICTLY PROHIBITED WITHIN VICINITY OF THE LIQUID OZONE STORAGE TANK.

## **EROSION CONTROL NOTES**

- COMPLY WITH THE REQUIREMENTS OF THE CALIFORNIA STATE WATER RESOURCES CONTROL BOARD AND CITY STANDARD SPECIFICATIONS.
- PROJECT DRIVEWAYS AND CONSTRUCTION ENTRANCES SHALL BE PROTECTED AGAINST EROSION AND TRACKING OF MUD AND DEBRIS AT ALL TIMES, INCLUDING EVENINGS, WEIGHENDS AND HOUDAYS. SUCH PROTECTION MAY BE MODIFIED TO PROVIDE ACCESS TO THE WORK SITE DIRING WORK HOIRS.
- ALL STOCKPILES SHALL BE PROTECTED AGAINST WIND AND WATER EROSION, IMMEDIATELY
  UPON PLACEMENT AND REMOVED FROM STREET AT THE END OF EACH DAY. SUCH PROTECTION
  SHALL REMAIN IN PLACE UNTIL USE OR REMOVAL OF THE STOCKPILE, REGARDLESS OF THE TIME
  OF YEAR.
- ALL FRESH CUT AND FILL SLOPES SHALL BE IMMEDIATELY PROTECTED BY INSTALLATION OF EROSION CONTROL DEVICES. AND UNTIL PERMANENT EROSION CONTROL IS ESTABLISHED.
- PERMANENT EROSION CONTROL MEASURES SHALL BE FULLY ESTABLISHED TO THE SATISFACTION OF THE ENGINEER OR CITY. (TO BE COMPLETED NO LESS THAN 30 DAYS PRIOR TO BEOLIEST FOR INIMAL APPROVAL)
- WASTE MATERIALS SHALL NOT BE WASHED OFFSITE. THIS INCLUDES BUT IS NOT LIMITED TO SOIL, PAINT, GROUT, COLOR COAT, CONCRETE DUST, SAW RESIDUES, GRINDINGS, AND OIL.
- THE CONTRACTOR IS RESPONSIBLE FOR THE PLACEMENT OF EROSION CONTROL DEVICES IN ACCORDANCE WITH THE CITY'S STANDARDS AND SWRCB REQUIREMENTS.

#### SURVEY NOTES

#### DATUM:

MANHOLE INVERT ELEVATIONS ON THESE PLANS ARE BASED ON "PLANS FOR THE CONSTRUCTION OF WATER SYSTEM IMPROVEMENTS" BY PAUL J. ADAMSON CONSULTING, 1963.

#### **ABBREVIATIONS**

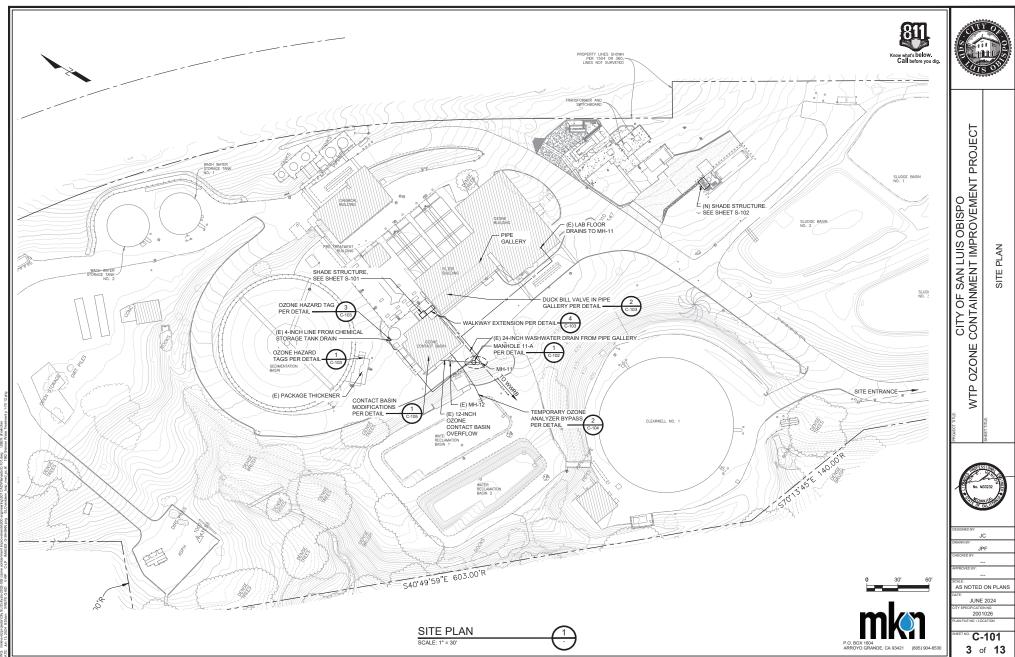
AC	ASPHALTIC CONCRETE	LOx	LIQUID OXYGEN
ARV	AIR RELEASE VALVE	MJ	MECHANICAL JOINT
ATS	AUTOMATIC TRANSFER	(N)	NEW
	SWITCH	NIC	NOT IN CONTRACT
AVV	AIR VACUUM VALVE	PD	PLANT DRAIN
Œ.	OFFITED INF	PC	POINT ON CURVE
	CENTERLINE	PCC	PORTLAND CONCRETE
CAV	COMBINATION AIR VALVE		PAVEMENT
DIA.	DIAMETER	PE	PLAIN END
DIP	DUCTILE IRON PIPE	PH	POTHOLE
(E)	EXISTING	PI	POINT OF INFLECTION
EC	END OF CURVE	PL	PROPERTY LINE
EL	ELEVATION	PP	POWER POLE
EXIST.	EXISTING	PRV	PRESSURE REDUCING VALVE
FLG	FLANGE	R/W	RIGHT-OF-WAY
FL	FLOW LINE	SD	STORM DRAIN
FCTF	FIELD CUT TO FIT	SS	SANITARY SEWER
FO	FIBER OPTIC	STA	STATION
GRS	GALVANIZED RIGID STEEL	TS	TRAFFIC SIGNAL
GOx	GASEOUS OXYGEN	WWRB	WASHWATER RECLAMATION
IT	INFORMATION TECHNOLOGY		BASIN

#### **LEGEND**

	COMMUNICATION LINE
SS4	SANITARY SEWER WITH SIZE
	WATER WITH SIZE
	SLUDGE LINE WITH SIZE
— E — E — E —	UNDERGROUND ELECTRICAL I
	OVERHEAD ELECTRICAL LINE
	TELEPHONE LINE
62	GAS LINE WITH SIZE
GOX	GOX LINE
ETC ETC	ELEC / TELEPHONE / CABLE
D24	DRAIN WITH SIZE









CITY OF SAN LUIS OBISPO WTP OZONE CONTAINMENT IMPROVEMENT PROJECT

DETAILS

No. M3232

JC

DRAWN BY:

JPF

CHECKED BY:

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APPROVED BY:

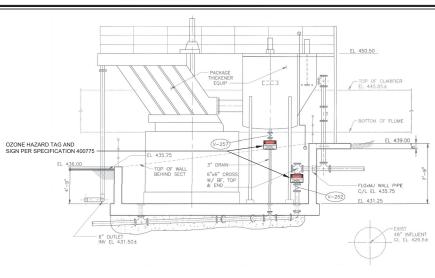
AS NOTED ON PLANS

JUNE 2024 SPECIFICATION NO. 2001026

<sup>№</sup> C-102 4 of 13

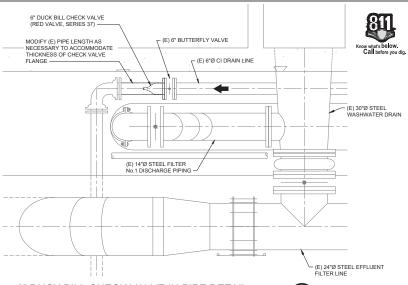
CIVIL DETAILS





PACKAGE THICKENER HAZARD TAG DETAIL











CHEMICAL STORAGE TANK HAZARD TAG DETAIL

OZONE HAZARD TAG AND SIGN PER SPECIFICATION





NOTE:

1. CONTRACTOR TO PROVIDE ELEVATIONS AND DIMENSIONS OF SIDEWALK EXTENSION PRIOR TO FORMING FOR CITY TO REVIEW FINAL LAYOUT.





4" DUCK BILL CHECK VALVE DETAIL





GESICNED BY:

JC

GRAWN BY:

DRAWN BY:

JPF
CHECKED BY:

--APPROVED BY:

SCALE:
AS NOTED ON PLANS

JUNE 2024

Y SPECIFICATION NO.

2001026

TNO C-103 5 of 13

CIVIL DETAILS

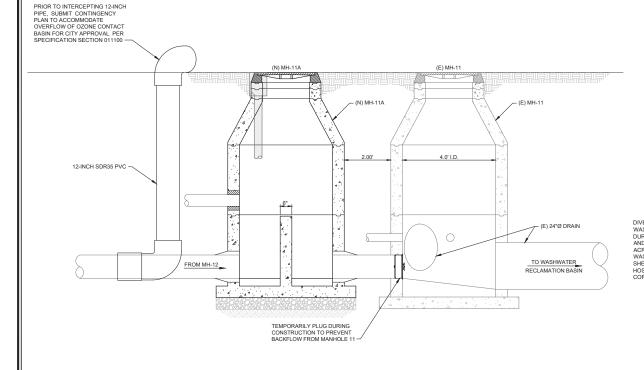






AS NOTED ON PLANS

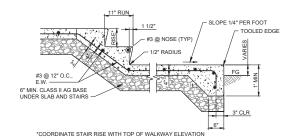
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12" OZONE CONTACT BASIN OVERFLOW — DIVERT FLOW FROM OZONE ANALYZERS TO WASHWATER RECLAMATION BASIN FOR DURATION OF CONSTRUCTION. FURNISH AND INSTALL 2-INCH LAYFLAT HOSE
ACROSS DRIVEWAY TO DIVERT FLOW TO
WASHWATER RECLAMATION BASIN PER
SHEET C-101. TEMPORARILY CONNECT HOSE TO 2" PVC PIPE. RECONNECT PIPE TO CORPSTOP AT PROJECT COMPLETION.

# TEMPORARY CONTACTOR OVERFLOW PIPE CONTINGENCY PLAN

SCALE: 3/4" = 1'-0"



# TEMPORARY OZONE ANALYZER BYPASS

-MATCH (E) OR 3" AC SURFACE COURSE, WHICHEVER IS GREATER 12" CLASS 2 AGG. BASE COURSE. COMPACT TO 95% RELATIVE COMPACTION

-12" SCARIFY & COMPACT NATIVE MATERIAL TO 95% RELATIVE COMPACTION PER SECTION 312300

# NOTE:

ASPHALT PAVING SHALL BE PER CITY STANDARD SPECIFICATION 30. (T.I. = 4.5)

ASPHALT PAVEMENT SECTION SCALE: NTS



CONCRETE STEP AND FLATWORK SCALE: NTS



JUNE 2024 2001026

C-104





CITY OF SAN LUIS OBISPO WTP OZONE CONTAINMENT IMPROVEMENT PROJECT

OZONE CONTACT BASIN MODIFICATIONS

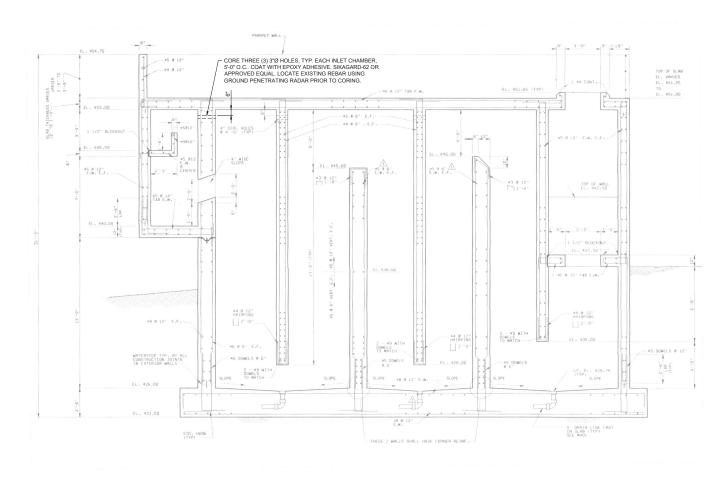
JEH

AS NOTED ON PLANS

JUNE 2024

2001026

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OZONE CONTACT BASIN MODIFICATIONS
SCALE: 3/8" = 1'-0"





#### STRUCTURAL NOTES

#### GENERAL NOTES

- The following notes, typical details and schedules shall apply to all phases of this project unless otherwise shown or noted.
- 2. Specific notes and details shall take precedence over general notes and typical details.
- All materials and workmarship shall conform to the minimum standards of the 2022 edition of the California Building Code (CRC) and such other regulating agencies exercising authority over any portion of the work. The contractor shall have a current copy of the CBC (print or digital version) on the job site.
- All specifications, including but not limited to materials and products, shall be those put forth in the Construction Documents. No substitutions shall be permitted to be used or assumed to be used in the bidding or construction process without written approval by the Engineer of Record.
- The contractor shall examine the Construction Documents and shall notify the Engineer of Record of any discrepancies they may find before proceeding with the work.
- 7. All information on existing conditions shown on drawings are based on best present knowledge available, but without guarantee of accuracy. The Contractor shall werfly and for responsible for all dimensions and conditions at the stea of shall notify the Epipeer of Record of any discrepancies between actual size conditions and information shown on or in the Contraction Documents before proceeding with one.

- 10. All work shall conform to the best practice prevailing in the various trades comprising work. The Contractor shall be responsible for coordinating the work of all trades.
- These Construction Documents represent the finished structure, and do not indicate the method of construction. The Contractor shall supervise and direct the work and shall be solely responsible for construction means, methods, techniques, sequences and procedures.
- 12. The Contractor shall take all steps necessary to ensure proper alignment of the structure after the installation of all structural and finish materials. This shall include any necessary preloading of the structure to determine final position of the completed work.
- 13. These notes, details, drawings and Specifications (Construction Documents) do not carry necessary provisions for construction safety. These documents and all phases of construction are to be governed, at all times, by applicable provisions of the current California Occupational Safety and Health Act.
- Where any conflict occurs between the requirements of federal, state and local laws, codes, ordinances, rules and regulations, the most stringent shall govern.
- Inspection and approval for shops used for fabrication of structural load bearing members, components, materials or assemblies shall conform to CRC Section 1704.2.5.
   Labeling (as required or specified) shall be provided in accordance with CRC Section 1703.5.
   Polivation and followarin inspection, services day required or specified; shall conform.
- 1703.5.
   Evaluation and follow-up inspection services (as required or specified), shall conform to CBC Section 1703.6.
- 16. The Contractor shall refer to the Specifications for information not covered by these drawings and General Notes.
- 17. Observation voits to the project site by fleid representatives of the Engineer of Record (support services) shall not estude inspections of safety or protective measures, our form of the properties of the properties of the properties of the project services and established from continuous and detailed inspection services (as required by any regulating government) whether of material or work, are preferred solely for the propose of assisting in quality control and in achieving conformance with contrast documents, but do not guarantee Contraction's performance and shall not be constituted as superiors of construction.
- 18. Provide openings and supports as required per typical details and notes for mecha plumbing, and electrical equipment, vents, ducts, piping, etc. All mechanical, plun and electrical equipment shall be properly braced against lateral forces.
- Refer to drawings by other disciplines to coordinate with Structural Drawings. Any discrepancy between these drawings shall be referred to the Architect or Engineer of Record for clarification prior to the start of construction.
- 20. Written dimensions shall have precedence over scaled dimensions.
- 21. Drawings (notes, schedules, details and plans) shall have precedence over Structural Calculations.
- 23. The Contractor shall have a copy of the Project Geotechincal Investigation on the job site.
- 24. ASTM designation and all standards refer to the latest amendments.
- These structural Construction Documents shall not be modified without prior written approval of the Engineer of Record.
- 26. Only structural working drawings approved by the Authority Having Jurisdiction are permitted to be used for construction on this project. All other drawings or documents are obsoleted and ser not permitted on the job site, nor shall lively be used for any construction purposes. Contractors using unapproved drawings or documents are solely responsible for all work not performed in accordance with the "approved" drawings.

#### SHOP DRAWING AND CONTRACTOR SUBMITTAL REVIEW

- Shop Drawings or Contractor Submittals should be provided for the fabrication (or proportioning) of the following but not limited to) components or elements.

  A. Structural Storeium
  B. Structural Aluminum
  C. Substitute or alternate materials
- The Contractor shall be responsible for the production of Shop Drawings or Contractor Submittals, the distribution of documents to the Engineer of Record for review incorporation of any noted revisions made by the Engineer of Record into the documents, and final approval.
- 3 Shop drawings shall not be a reproduction of structural drawing sheets
- When the Contractor submits shop drawings or other submittals to the Engineer of Record for review, submittal package shall contain sufficient copies that the Engineer of Record ma-retain a complete copy of submittal package.
- The Contractor shall allow sufficient time for the Engineer of Record to thoroughly review submittal package (10 working days, minimum).
- Review of Shop Drawings or Contractor Submittal by Engineer of Record does not in any way
  constitute approval of submittal package. Engineer of Record's review is for general
  conformance with the design concept and contract documents. Review shall not be
  construed as relieving the Contractor from compliance with the contract documents.

#### STRUCTURAL STEEL AND WELDING

- All structural steel construction shall conform to AISC 360-16 and AISC 341-16.
   A. All structural steel shall be be fabricated in an approved fabrication shop. Inspection and approval of fabricaiton shops shall conform to CBC Section 1704.2.5.
- Special Inspection shall be provided for all structural steel and welding, in accordance with CBC Chapter 17.
- All structural steel shall be fabricated, erected and welded in accordance with AISC Specifications for Structural Steel Buildings (AISC 360-16) and Code of Standard Practice for Steel Buildings and Brigges (AISC 303-16).
- 4. No field welding permitted, unless specifically noted otherwise.
- No holes other than those specifically detailed shall be allowed through structural steel members. Burning of holes is not permitted.
- 6. All welding shall conform to AWS D1.1 and D1.8 specifications for welding. (E-70XX Electroduc)

- All beams and/or posts and accessories shall be of the type, size, gauge and spacing shown on the drawings and shall be manufactured by coast aluminum or approved equal.
- 2. All aluminum construction shall conform to the following:

Aluminum Shape	ASTM Specification
All Shapes	6061-T6
Aluminum Filler Material	
All Thicknesses	5356, 5556
½" or Less	4043

- 4. All components shall be securely fastened together.
- A Factoring shall be with 18-8 stainless steel holts and welds
- B. Bolt and weld size, type, location and spacing shall be as detailed on these Construction
- 5. Welding shall comply with current 'AWS' practices.
- 6. Components shall be held firmly in position until properly fastened.

### STRUCTURAL DESIGN VALUES

Earthquake Design Data	Value
Risk Category	I
Importance Factor, I <sub>e</sub>	1.25
Mapped Spectral Response Accelerations	S= 1.069 g S= 0.394 g
Site Class	D - Default
Spectral Response Coefficients	Sm= 0.856 g Sm= 0.497 g
Seismic Design Category	D
Geotechnical Design Data	Value
Geotechnical Basis: 2019 California Building Code, Chapter 18	
Allowable Soil Bearing Pressure (DL + LL)	1,500 psf
Design Passive Pressure, P,	350 pcf
Design Coefficient of Friction, f <sub>f</sub>	N/A

# **ABBREVIATIONS**

.В.			
	Anchor Bolt	18C	International Building Code
	Anchor Bolt	IRC	International Building Code
BV.	Above	ICC	International Code Council
CI	American Concrete Institute	ICF	Insulated Concrete Form
DD'L	Additional	ID	Inside Diameter
DJ.	Adjacent	IN.	Inch,Inches
DO.	мијасенс	IN.	Introduction
HJ	Authority Having Jurisdiction	INT.	Interior
ISC	American Institute of Steel		
	Construction	IST.	Inist
ITC	American Institute of Timber		
116	American insuruce or rimber	ksi	Manager Comments to the
	Construction	KSI	Kips per Square Inch
OR	Architect of Record		
PA	American Plywood Association	II.	Live Load
PPROX.	Approximate(ly)	LW	Lightweight
SCE	Approximate(iy)	LSL	Laminated Strand Lumber
SCE	American Society of Civil	LDL	Laminated Strand Lumber
	Engineers	LVL	Laminated Veneer Lumber
RCH.	Architect, Architecture American Society of Testing and Materials		
STM	American Facinty of Taction	MAX.	Maximum
31191	Willelican Society of Testing	MB	Machine Bolt
	and Materials	MID	Macrine boil
TR	All Thread Rod	MBM	Metal Building Manufacturer
WS	American Welding Society	MECH.	Mechanical
		MSE	Mechanically Stabilized Earth
0.0	0.15	MFR.	Manufactured, Manufacturer
.DG.	Building	MIFN.	Malidiactured, Maridiacturer
.K.	Block	MIN.	Minimum
KD	Blocked	MPH	Miles per Hour
.K. .KD. .K'G .M.	Blocking	MTI	Metal
. K O	BIOCKING	min.	TFTG CALL
M.	Beam		
O. OT. RG.	Bottom of	(N)	New
nt.	Bottom	NDS	National Design Specification
3/2	Bearing	N.T.S.	Not to Scale
VG.		14.1.5.	MOLTO STRIE
t .	Between		
		O.C.	On Center
AC.	California Administrative Code	0/	Over
ANT.		OD.	Outside Diameter
MINT.	Cantilever	OU	Outside Diameter
BC	California Building Code	OSB	Oriented Strand Board
IP.	Cast-in-place	OSHPD	Office of State Health Planning
	Control Joint		and Development
	CONCIONATION	OWSJ	Open Web Steel Joist
IP	Complete Joint Penetration	OWSI	Open web Steel Joist
	Centerline		
LG.	Ceiling	PEN.	Penetration
LR.	Clear	DI	Plate
LR.	Liear	PL. PLYWD.	riate
MU	Concrete Masonry Unit	PLYWD.	Plywood
21	Column	PJP	Partial Joint Penetration
ONC	Concrete	psi	Rounds par Square Inch
ONC.	Concrete	PSF	December Security Front
MU DL. DNC. DNN. DNST. DNT. TR.	Connection		Pounds per Square Inch Pounds per Square Foot Parallel Strand Lumber
ONST.	Construction	PSL	Parallel Strand Lumber
ONT.	Continue, Continuous		(Paralam)
TR	Center	PEMB	Pre-Engineered Metal Building
5K.	Countersink	PERF	Desferated
264.	COUNTERSTIK	PTDF	Perforated Pressure Treated Douglas Fir
		PIDE	Pressure Treated Douglas Hir
	Diameter	PW	Puddle Weld
	Penny		
BL.	Double	Q.A.	and the second
BL.		U.A.	Quality Assurance
CW	Demand Critical Weld	Q.C.	Quality Control
FT.			
ET.	Detail Demolition	200	Reduced Beam Section
ET. EMO	Demolition	RBS	Reduced Beam Section
EMO F	Demolition Douglas Fir	RDWD	Redwood
EMO F IAG.	Demolition Douglas Fir Diagonal	RDWD REBAR	Redwood Reinforcing Bar
EMO F IAG.	Demolition Douglas Fir Diagonal	RDWD REBAR	Redwood Reinforcing Bar
EMO F IAG. L	Demolition Douglas Fir Diagonal Dead Load	RDWD REBAR REINF.	Redwood Reinforcing Bar Reinforcement
EMO F IAG. L SA	Demolition Douglas Fir Diagonal Dead Load Division of State Architect	RDWD REBAR REINF. RET.	Redwood Reinforcing Bar Reinforcement Retaining
EMO F IAG. L	Demolition Douglas Fir Diagonal Dead Load	RDWD REBAR REINF.	Redwood Reinforcing Bar Reinforcement
EMO F IAG. L SA WGS.	Demolition Douglas Fir Diagonal Dead Load Division of State Architect	RDWD REBAR REINF. RET. REQ'D	Redwood Reinforcing Bar Reinforcement Retaining Required
EMO F IAG. L SA	Demolition Douglas Fir Diagonal Dead Load Division of State Architect Drawings	RDWD REBAR REINF. RET. REQ'D	Redwood Reinforcing Bar Reinforcement Retaining Required
EMO F IAG. L SA WGS.	Demolition Douglas Fir Diagonal Dead Load Division of State Architect Drawings Each	RDWD REBAR REINF. RET. REQ'D	Redwood Reinforcing Bar Reinforcement Retaining Required Square Feet
EMO F IAG. L SA WGS.	Demolition Douglas Fir Diagonal Dead Load Division of State Architect Drawings Each Each Face	RDWD REBAR REINF. RET. REQ'D	Redwood Reinforcing Bar Reinforcement Retaining Required Square Feet Sheet
EMO F IAG. L SA WGS. A. F.	Demolition Douglas Fir Diagonal Dead Load Division of State Architect Drawings Each Each Face Electric, Electrical	RDWD REBAR REINF. RET. REQ'D S.F. SHT. SHT'G	Redwood Reinforcing Bar Reinforcement Retaining Required Square Feet Sheet Sheet
EMO F IAG. L SA WGS. A. F.	Demolition Douglas Fir Diagonal Dead Load Distance of State Architect Drawings Each Each Face Electric, Electrical Elevation	RDWD REBAR REINF. RET. REQ'D S.F. SHT. SHT'G SIM.	Redwood Reinforcing Bar Reinforcement Retaining Required Square Feet Shoet Sheathing Similar
EMO F IAG. L SA WGS. A. F.	Demolition Douglas Fir Diagonal Dead Load Distance of State Architect Drawings Each Each Face Electric, Electrical Elevation	RDWD REBAR REINF. RET. REQ'D S.F. SHT. SHT'G SIM.	Rechood Reinforcing Bar Reinforcement Recaling Required Square Feet Sheat Sheat hing Similar Structural Insulated Panel
EMO F IAG. L SA WGS. A. F. EC.	Demolition Douglas Fir Diagonal Dead Load Division of State Architect Drawings Each Each Face Electric, Electrical Elevation	RDWD REBAR REINF. RET. REQ'D S.F. SHT. SHT'G SIM. SIP	Rechood Reinforcing Bar Reinforcement Recaling Required Square Feet Sheat Sheat hing Similar Structural Insulated Panel
EMO F IAG. L SA WGS. A. F. EC.	Demolition Douglas Fir Diagonal Dead Load Division of State Architect Drawings Each Each Face Electric, Electrical Elevation	RDWD REBAR REINF. REC'D S.F. SHT. SHT'G SIM. SIP SJI	Redwood Reinforcing Bar Reinforcement Retaining Required Square Feet Sheet Sheet Sheet Sheething Similar Structural Insulated Panel Street loist Institute
EMO F IAG. L SA WGS. A. F. EC.	Demolition Douglas Fir Diagonal Dead Load Division of State Architect Drawings Each Each Face Elektric, Electrical Elevation Embedded, Embedment Edge Nailing Engineer of Record	RDWD REBAR REINF. RET. REQ'D S.F. SHT. SHT'G SIM. SIP SJI SLRS	Redwood Reinforciement Recinfing Required Square Feet Sheet Sheet Sheet Structural Insulated Panel Steel Joist Institute Seismit Load Residing System
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EMO F IAG. L SA WGS. A. F. EC.	Demolition Douglas Fir Diagonal Dead Load Distain of State Architect Drawings Each Face Each Face Electric, Electrical Elevation Embedded, Embedment Edge Naling Engineer of Record Equal	RDWD REBAR REINF. RET. REQ'D S.F. SHT: SHT'G SIM. SIP SJI SLRS SMS	Redwood Reinforcing Bar Reinforcement Retaining Required Square Feet Sheet Sheet Sheet Strivial Insulated Panel Structural Insulated Panel Steel Jost Institute Selsmit, Load Resisting System Selsmit Load Resisting System
EMO F IAG. L SA WGS. A. F. EC.	Demolition Douglas Fir Diagonal Dead Load Distain of State Architect Drawings Each Face Each Face Electric, Electrical Elevation Embedded, Embedment Edge Naling Engineer of Record Equal	RDWD REBAR REINF. RET. REQ'D S.F. SHT: SHT'G SIM. SIP SJI SLRS SMS SQ.	Redwood Reinforcing Bar Reinforcement Retaining Required Square Feet Sheet Sheet Sheet Strivial Insulated Panel Structural Insulated Panel Steel Jost Institute Selsmit, Load Resisting System Selsmit Load Resisting System
EMO F IAG. L SA WGS. A. F. EC.	Demolition Douglas Fir Diagonal Dead Load Distion of State Architect Drawings Each Each Face Electric, Electrical Elevation Elevation Edge Nailing Engineer of Record Equipment Each Side Each Side Each Side Each Side Each Side	RDWD REBAR REINF. RET. REQ'D S.F. SHT: SHT'G SIM. SIP SJI SLRS SMS SQ. SS	Redwood Reinforcing Bar Reinforcement Retaining Required Square Feet Sheet Sheet Sheet Structural Insulated Panel Stred Lost Institute Sestimic Load Residing System Sestimic Load Residing System Square Square Seet Structural
EMO F IAG. L SA WGS. A. F. EC. EV. VIBED. N. DR Q. QUIP. S. W	Demotition Douglas Fir Diagonal Douglas Fir Diagonal Dead Load Division of State Architect Drawings Each Each Face Electrica, Electrical Elevation Elevation Elevation Embedded, Embedment Ediago National Engineer of Record Equipment Equi	RDWD REBAR REINF. RET. REQ'D S.F. SHT. SHT'G SIM. SIP SJI SLRS SMS SQ. SS SS STAGG'D	Redwood Reinforcing Bar Reinforcing Bar Reinforcing Bar Reinforcing Bar Reinforcement Retailing Required Square Feet Sheet She
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EMO F IAG. L SA WGS. A. F. EC. EV. VIBED. N. DR Q. QUIP. S. W	Demolsion Douglas Fir Diagonal Diagonal Diagonal Diagonal Diagonal Diagonal Bach Face Each Sace Electric, Electrical Electric, Electrical Electric, Electrical Edge Nalling Engineer of Record Equal Equipment Each Sace Estimpton	RDWD REBAR REINF. RET. REQ'D S.F. SHT. SHT'G SIM. SIP SIJ SLRS SQ. SS SCASS STAGG'D STD. STL. SW	Redwood Reinforcing Bar Reinforcing Bar Reinforcing Bar Reinforcing Bar Required Square Feet Sheet Straitura Structural Structural Structural Security Coad Resisting System Square Sheet Structural Staggered Sanahard Sheet Wall
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EMO F L SA WGS.    L EC. EV. UBED. N. DR    UIP. SS. W.  UIP. SS. W.  MB.	Demolsion Douglas fir Douglas	RDWD REBAR REINF. RET. REQ'D S.F. SHT. SHT'G SIM. SIP SIJ SLRS SQ. SS SCASS STAGG'D STD. STL. SW	Redwood Rendrong Bar Rendrong Bar Rendrong Bar Rendrong ent Required Square Feet Sheet Sheet Sheet Sheet Sheet Sheet Sheet Structural Insulated Panel Steel Jost Institute Street Jost Institute Science Load Renaing System Square Square Spagered Steel Structural Engineer of Record Sheet Structural Steel Sheet Structural Engineer of Record Structural Engineer of Record Science Science Structural Engineer of Record Science Science Structural Engineer of Record Science Structural Engineer of Record Science Structural Engineer of Record Science
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**PROJECT** CITY OF SAN LUIS OBISPO CONTAINMENT IMPROVEMENT OZONE

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# SPECIAL INSPECTION

#### GENERAL NOTES

- All Special Inspection shall be provided in accordance with CBC Section 1704 and 1705.
- Where Special Inspection is required, all inspection or testing shall be provided by an "approved agency" in accordance with CBC Section 1702.1, 1703.1 and 1704.1.
- an approved agency in accordance with Les Section 1742.1, 176.1 and 1764.1 Special Impactors abull formith inspection. The Special Impactors abull formith inspection reports to the Authority Issiving Jurisdiction, and to the Architect Conformance to approved construction Occurrents. Discrepancies shall be brought to other conformance to approved construction Occurrents. Discrepancies shall be brought to the attention of the contractor for correction. If the discrepancies are not corrected, the discrepancies also be brought to the attention of the conformance of the accordance of th
- Special Inspectors shall be approved by local Authority Having Jurisdiction in accordance with GBC Section 1704.2.1.
- Local Authority Having Jurisdictions may require Special Inspection for "Special Cases" in accordance with CBC Section 1705.1.1
- Cases' in accordance with CBC Section 1705.1.1

  Contexturn's responsibility Each contractor responsible for the construction of a Main Lateral-Force-Resisting System, listed in the Statement of Special inspection shall submit a wintern statement of responsibility to the Authority Hawing Jurisdiction and the covere port to the commercement of work on the system or A. Acknowledgement of waveness of the special requirements contained in the statement of special inspections. The special requirements contained in the statement of special inspections. The special requirements contained in the statement of special inspections. The special requirements contained in the statement of special inspections. The special requirements contained in the statement of special inspections. The special requirements of the special requirements contained in the statement of the special requirements of the special requirements of the special requirements of the special requirements of the processing such control and their goodorous and public positions and public positions are specially special representations and special received and their goodorous like the organization.

- Refer to Special Inspection requirements by other disciplines not included herein.

OILS <sup>a</sup>		
rification and Inspection	Continuous	Periodic
Verify materials below shallow foundations are adequate to achieve the design bearing capacity.		4
Verify excavations are extended to proper depth and have reached proper material.		4
Perform classification and testing of compacted fill materials.		4
Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	4	b
Prior to placement of compacted fill, observe subgrade and verify that site has been prepared properly.		4
	riffication and Inspection  Verify materials below shallow foundations are adequate to achieve the design bearing capacity.  Verify executions are extended to proper depth and have reached proper material.  Perform classification and testing of compacted fill materials.  Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.  Prior to placement of compacted fill, observe subgrade and verify that side has been appeared to the property of the proper	riffication and Inspection  Continuous  Verify materials below shallow foundations are adequate to achieve the design bearing capacity.  Verify executions are extended to proper depth and have reached proper material.  Perform classification and testing of compacted fill materials.  Verify used of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.  Prior to placement of compacted fill, observes subgrade and verify that side has been

Notes: Soils

a. GBC Section 1705.6 and Table 1705.6

b. With the approval of the Authority Having Jurisdiction and the recommendation of the Geotechnical Engineer of Record, Special Inspection of grading operations may periodic per CBC Section 1704.2, Exception 1.

SP	SPECIAL CASES				
Ve	rification and Inspection	Continuous	Periodic		
Adh	nesive anchors (Epoxy)				
1.	Inspection of anchors installed in hardened concrete. Installed in horizontally or upwardly inclined orientations to resist sustained tension loads. (Concrete shall be cured for a minimum of 21 days)	4			
2.	All other installations of adhesive anchors.		₹		
Me	chanical anchors				
1.	Inspection of anchors installed in hardened concrete.		✓		

ΑL	UMINUM CONSTRUCTION		
Ve	rification and Inspection	Continuous	Periodic
Req	uired verification and inspection of steel construct	tion	
1.	Material verification of structural steel, cold-formed steel deck, high-strength bolts, nuts and washers:		
	For structural steel, identification markings to conform to AISC 360, or ASTM Standards Specified in approved Construction Documents. Manufacturer's certificate of compliance required.		4
2.	Material verification of structural steel or cold-form steel deck:		
	Identification markings to conform to ASTM standards specified in the approved construction documents.		<
	b. Manufacturer's certified test reports.		₹
3.	Inspection of high-strength bolting:		
	a. Snug-tight joints		· /
	Pretensioned and slip-critical joints     using turn-of-nut with matchmarking, twist     off bolt or direct tension indicator     methods of installation		4
	<ul> <li>Pretensioned and slip-critical joints using turn-of-nut without matchmarking or callibrated wrench methods of installation</li> </ul>	4	
4.	Material verification of weld filler materials:		
	Identification markings to conform to AWS specification in the approved Construction Documents		<
	<ul> <li>Manufacturer's certificate of compliance required</li> </ul>		₹
5.	Inspection of welding:		
	Structural steel and cold formed steel deck:		
	Complete and partial joint penetration groove welds	₹	
	2) Multi-pass fillet welds	< <	
	<li>3) Single-pass fillet welds &gt; ¥<sub>16</sub>*</li>	1	
	4) Plug and slot welds	4	
	5) Single-pass fillet welds $< N_6$ ".		1
	6) Floor and roof deck welds <sup>c</sup>		1
6.	Inspection of steel frame joint details for compliance:		,
	a. Details such as bracing and stiffening		7
	b. Member locations		1
	c. Application of joint details at each connection		,

Ve	rification and Inspection	Continuous	Periodic
Insp	ection tasks prior to welding		
1.	Welding procedure specifications (WSPs) available	4	
2.	Manufacturer certifications for welding consumables available	4	
3.	Material identification (type/grade)		1
4.	Welder identification system <sup>e</sup>		- 1
5.	Fit-up of groove welds (including joint geometry). Joint preparation, dimensions, cleanliness, tacking, backing type and fit		<b>4</b>
6.	Configuration and finish of access holes		₹
7.	Fit-up of fillet welds Dimensions, cleanliness, tacking		4
8.	Check welding equipment		
Insp	ection tasks during welding		
1.	Use of qualified welders		₹
2.	Control and handling of welding consumables Packaging, exposure control		✓
3.	No welding over cracked tack welds		~
4.	Environmental conditions, Wind speed within limits, precipitation and temperature		4
5.	WPS followed Settings on welding equipment, travel speed, selected welding materials, shielding gas type/flow rate, preheat applied, interprass temperature maintained min./max.),proper position (F, V, H, OH)		4
6.	Welding techniques Interpass and final cleaning, each pass within profile limitations		1
Insp	pection tasks after welding		
1.	Welds cleaned		4
2.	Size, length and location of welds	4	
3.	Welds meet visual acceptance criteria Crack prohibition, weld/base-metal fusion, crater cross section, weld profiles, weld size, undercut, porosity	4	
4.	Arc strikes	- 1	
5.	k-Area <sup>f</sup>	· /	
6.	Backing removed and weld tabs removed (if required)	4	
7.	Repair activies	₹	
8	Document acceptance or rejection of welded joint or member	J	

Ve	rification and Inspection	Continuous	Periodic
Req	uired verification and inspection of steel construc	tion	
1.	Material verification of structural steel, cold-formed steel deck, high-strength bolts, nuts and washers:		
	For structural steel, identification markings to conform to AISC 360, or ASTM Standards Specified in approved Construction Documents. Manufacturer's certificate of compliance required.		4
2.	Material verification of structural steel or cold-form steel deck:		
	<ul> <li>a. Identification markings to conform to ASTM standards specified in the approved construction documents.</li> </ul>		4
	b. Manufacturer's certified test reports.		<b>4</b>
3.	Inspection of high-strength bolting:		
	a. Snug-tight joints		· /
	Pretensioned and slip-critical joints using turn-of-nut with matchmarking, twist off bolt or direct tension indicator methods of installation		4
	<ul> <li>Pretensioned and slip-critical joints using turn-of-nut without matchmarking or calibrated wrench methods of installation</li> </ul>	✓	
4.	Material verification of weld filler materials:		
	Identification markings to conform to AWS specification in the approved Construction Documents		4
	b. Manufacturer's certificate of compliance required		✓
5.	Inspection of welding:		
	Structural steel and cold formed steel deck:		
	Complete and partial joint penetration groove welds	4	
	2) Multi-pass fillet welds	< <	
	<ol> <li>Single-pass fillet welds &gt; X<sub>6</sub>"</li> </ol>	₹	
	4) Plug and slot welds	1	
	<li>5) Single-pass fillet welds ≤ X<sub>6</sub>"</li>		7
	6) Floor and roof deck welds <sup>c</sup>		1
	b. Reinforcing steel: <sup>d</sup>		<u> </u>
	Verification of weldability of reinforcing steel other than ASTM A706.		4
	<ol> <li>Reinforcing steel resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special structural walls of concrete and shear reinforcement.</li> </ol>	4	
	3) Shear reinforcement	4	
	4) Other reinforcing steel		1
6.	Inspection of steel frame joint details for compliance:		
	a. Details such as bracing and stiffening		· /
	b. Member locations		<b>V</b>
	c. Application of joint details at each connection		< <
Insp	pection tasks prior to welding		
1.	Welding procedure specifications (WSPs) available	✓	
2.	Manufacturer certifications for welding consumables available	4	
_			

Material identification (type/grade)

Ve	rification and Inspection	Continuous	Periodio		
Rec	uired verification and inspection of steel construct	ion			
Insp	Inspection tasks prior to welding (continued)				
5.	Fit-up of groove welds (including joint geometry) Joint preparation, dimensions, cleanliness, tacking, backing type and fit		4		
6.	Configuration and finish of access holes		₹		
7.	Fit-up of fillet welds Dimensions, cleanliness, tacking		4		
8.	Check welding equipment				
Insp	nection tasks during welding		•		
1.	Use of qualified welders		₹		
2.	Control and handling of welding consumables Packaging, exposure control		4		
3.	No welding over cracked tack welds		1		
4.	Environmental conditions Wind speed within limits, precipitation and temperature		4		
5.	WPS followed Settlings on welding equipment, travel speed, selected welding materials, shielding gas type/flow rate, preheat applied, interpass temperature maintained min/max!, proper position (F, V, H, OH)		4		
6.	Welding techniques Interpass and final cleaning, each pass within profile limitations		4		



7





CITY OF SAN LUIS OBISPO WTP OZONE CONTAINMENT IMPROVEMENT PROJECT

SPECIAL INSPECTIONS

OF LIST

06.11.2024 CLK CLK MEP

MEP N/A

JUNE 2024 2001026

> S-002 9 of 13



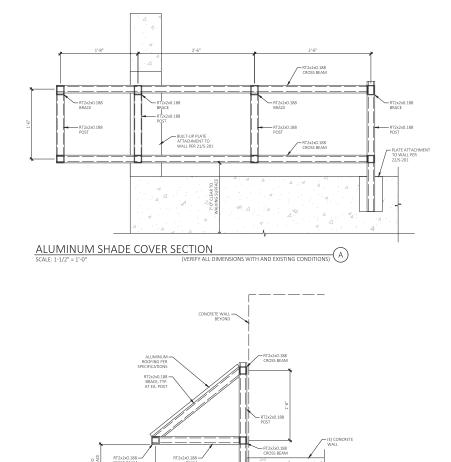
06.11.2024 CLK

CLK MEP

MEP

JUNE 2024 2001026 No./LOCATION

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ALUMINUM SHADE COVER SECTION





(VERIFY ALL DIMENSIONS WITH EXISTING CONDITIONS)





SEE 31/S-201

06.11.2024 CLK

NOTE: ALL STEEL SHALL BE HOT DIPPED GALVANIZED.

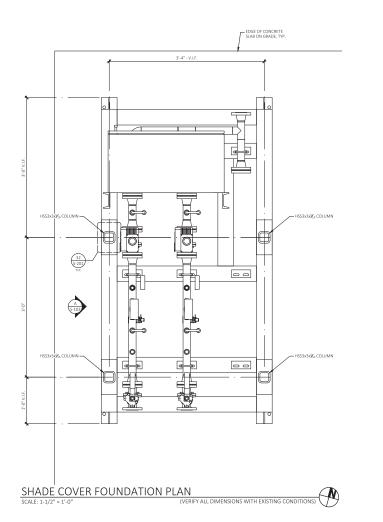
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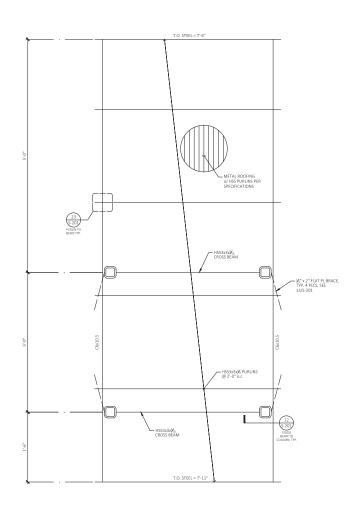
MEP

JUNE 2024

2001026 No./LOCATION

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# SHADE COVER FRAMING PLAN SCALE: 1-1/2" = 1'-0"

(VERIFY ALL DIMENSIONS WITH EXISTING CONDITIONS)







CITY OF SAN LUIS OBISPO WTP OZONE CONTAINMENT IMPROVEMENT PROJECT

EQUIPMENT SHADE COVER SECTION VIEW

06.11.2024

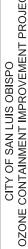
CLK CLK

MEP

MEP

JUNE 2024 CIFICATION NO. 2001026 E NO. / LOCATION

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CITY OF SAN LUIS OBISPO WTP OZONE CONTAINMENT IMPROVEMENT PROJECT

EQUIPMENT AWNING FRAMING PLAN AND SECTIONS

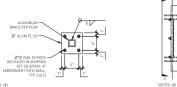
06.11.2024

CLK CLK

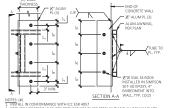
MEP

JUNE 2024 2001026 No./Location

S-201 **13** of **13** 



ALUM BRACE TO WALL

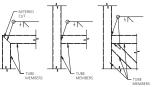


CORIGE.

SOURCE OR STEAM CLEAN CONCRETE UNDER ALUMINUM PLATES PER SSPC SP-1, APPLY
THERE OR MORE COATS OF PROPE BAR RUST 238H, OR ECUAL; 30 MIS TOTAL AMORMUM
HICKORS OF A MEMORIPOLIC COXING SPC. LIKE OF EXCELL PROPERTY
RECOMMENDATION.

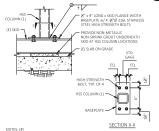
BUILT-UP PLATE ATTACHMENT

N.T.S.

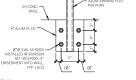


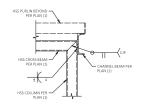
# NOTES (8) 1. THE FRANKIE FLAN AND NOTES 2. GRIND ALL WILDS SMOOTH TYPICAL WELDS AT ALUM FRAME



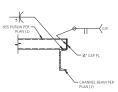


HSS COLUMN TO (E) SKID





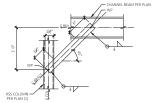
# STEEL FRAMING CONNECTION



NOTES: (#)

1. SEE FRAMING PLAN AND NOTES

STEEL FRAMING CONNECTION



NOTES: (#)
1. SEE FRAMING PLAN AND NOTES

STEEL BRACE CONNECTION







ALUM AWNING POST TO WALL