DOCKETED	
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Project Title:	Palomar Energy Project Compliance
TN #:	265488
Document Title:	HRSG Isolation Valves
Description:	N/A
Filer:	Jason Dobbs
Organization:	San Diego Gas and Electric
Submitter Role:	Applicant
Submission Date:	8/8/2025 3:46:16 PM
Docketed Date:	8/8/2025

PETITION FOR NEW PROJECT APPROVAL TO INSTALL HRSG ISOLATION VALVES AT THE PALOMAR ENERGY CENTER (01-AFC-24C)

By:

SAN DIEGO GAS & ELECTRIC (SDG&E) SAN DIEGO, CALIFORNIA

Submitted to:

CALIFORNIA ENERGY COMMISSION (CEC)

August 8, 2025 PETITION FOR NEW PROJECT APPROVAL TO INSTALL HRSG ISOLATION VALVES AT THE PALOMAR ENERGY CENTER (01-AFC-24C)

1.0 INTRODUCTION

San Diego Gas & Electric (SDG&E or "the applicant") is filing this petition for a proposed project design as described in the Final Decision for the Palomar Energy Center (PEC), Docket 01-AFC-24 pursuant to 20 Cal. Code Regs. Section 1769(a)(1). PEC is a combined cycle power plant with 2 Heat Recovery Steam Generator (HRSG) units that provide high pressure steam to the Steam Turbine Generator (STG) for operation. The HRSG's are designed with a connected Hot Reheat (HRH) and Cold Reheat (CRH) steam system. SDG&E is proposing to install isolation valves for both HRSGs and erect working platforms to access the valves at PEC. The valves and working platforms will ensure system reliability and minimize operational down time. No changes in Conditions of Certification are necessary.

2.0 DESCRIPTION OF PROPOSED MODIFICATION (Sec. 1769(a)(1)(A))

Further details of the proposed facilities are as follows:

HRSG Isolation Valve Installation. SDG&E is filing this petition for a proposed project design to install 2 isolation valves for the HRH system, install 2 isolation valves for the CRH system, and install working platforms for each of the new valves to support inspection, maintenance and repair of the valves. This will allow operations and maintenance crews to isolate an individual HRSG in the event of HRH steam system equipment failure and perform repairs while maintaining operational availability of the non-impacted HRSG. SDG&E is proposing to install the mentioned valve and working platforms to support system reliability. No changes in Conditions of Certification are necessary. Project information (drawings) of the new systems are attached in Appendix 1.

Petition for Change (HRSG Isolation Valves) August 8, 2025

3.0 NECESSITY (Sec. 1769(a)(1)(B))

The installation of the HRSG Isolation Valves will improve facility reliability.

4.0 TIMING (Sec. 1769(a)(1)(C) and (D))

SDG&E assumed ownership of the PEC about three years after issuance of the Final Decision and certification to Palomar Energy, LLC. Since taking ownership of the plant in 2006, SDG&E has continued to review the engineering and design of the plant in order to better serve the needs of SDG&E ratepayers. SDG&E has also benefited from experience gained operating the plant since assuming ownership. This "fine tuning" could not have taken place during the licensing proceeding because SDG&E was not the applicant, the plant was not yet operating, and Palomar Energy brought its own objectives to the development of the project for the merchant market. The addition of this expansion does not change or undermine the assumptions, rationale, findings, or other bases of the Final Decision. The change complies with all laws, ordinances, regulations and standards and does not have a significant environmental impact, as further described below.

5.0 ANALYSIS OF THE EFFECT OF THE MODIFICATIONS ON THE ENVIRONMENT (Sec. 1769(a)(1)(E))

The requested equipment change will have no significant effects on any of the technical areas analyzed in the August 2003 Final Commission Decision. Please see Table 1 below.

Table 1 Review of Effects of Installation and Operation of Nitrogen Concentrator System

TECHNICAL AREA	SIGNIFICANT		NOTES	
	ENVIRONMENTAL			
	IMPACT (Y/N)?			
AIR QUALITY		N	no change	
CULTURAL		N	Area for construction is prior filled	
RESOURCES			area	
EFFICIENCY		N	No impact	
GEOLOGICAL		N	No change	
HAZARDS				
HAZARDOUS		N	No change	
MATERIALS				
HANDLING				
LAND USE		N	No change	
NOISE		N	No Change	
PALEONTOLOGICAL		N	Area for construction is prior filled	
RESOURCES			area	
BIOLOGICAL		N	Area previously disturbed.	
RESOURCES				

TECHNICAL AREA	SIGNIFICANT ENVIRONMENTAL IMPACT (Y/N)?	NOTES		
PUBLIC HEALTH	N	no change		
RELIABILITY	N	Improve		
SOCIOECONOMICS	N	No change		
SOILS	N	No change		
TRAFFIC AND TRANSPORTATION	N	Construction traffic minimal		
T-LINE SAFETY AND NUISANCE	N	No change		
TRANSMISSION SYSTEM ENGINEERING	N	No change		
VISUAL RESOURCES	N	No Change		
WASTE MANAGEMENT	N	No change		
WATER RESOURCES	N	No change		
WORKER SAFETY	N	No change		

6.0 COMPLIANCE WITH LAWS, ORDINANCES, REGULATIONS AND

STANDARDS (LORS) (Sec. 1769(a)(1)(F))

The proposed improvements will not affect compliance with any other LORS requirement.

Therefore, the proposed modification is not anticipated to impact SDG&E's ability to comply

with the applicable LORS, as listed in Appendix A of the Commission Final Decision.

7.0 POTENTIAL EFFECTS ON PUBLIC AND NEARBY PROPERTY OWNERS (Sec.

1769(a)(1)(G and I))

The requested expansion will not have any environmental impacts and will comply with all

applicable LORS. Thus, the proposed equipment change is not anticipated to affect nearby

property owners or parties in the application proceedings or the public

8.0 LIST OF PROPERTY OWNERS (Sec. 1769(a)(1)(H))

A list of property owners 1,000 feet of the plant site has previously been provided to the

Commission CPM.

9.0 **SUMMARY OF REQUEST**

As demonstrated above, the HRSG Isolation Valves and work platforms will not have an adverse

effect on the public or the environment. The change will not affect compliance with the

applicable LORS. Accordingly, SDG&E requests that the Energy Commission Staff expedite

review of this petition, and request Commission approval of the proposed modified conditions

in accordance with Title 20 CCR Section 1769.

Respectfully Submitted,

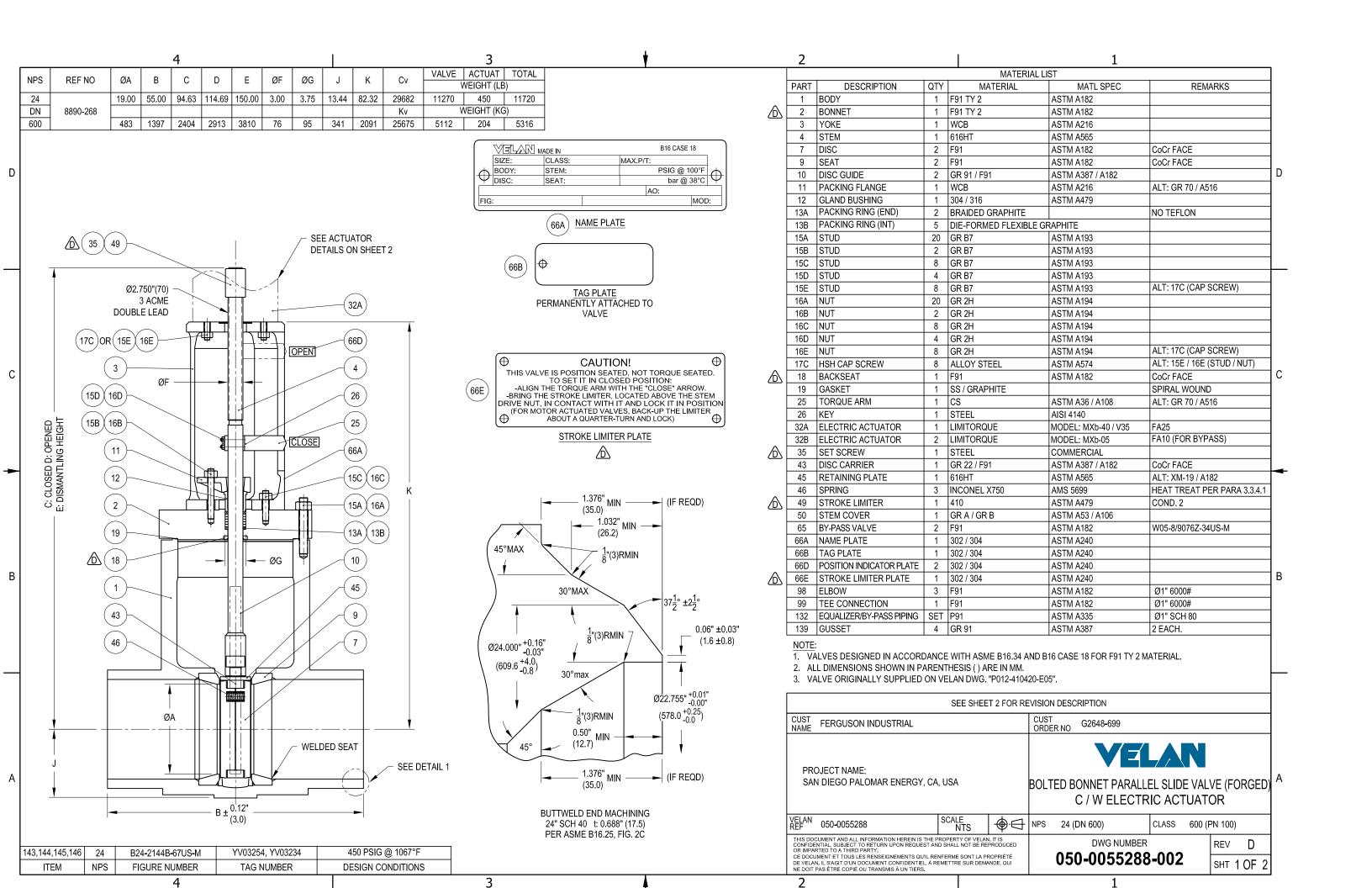
Jason T. Dobbs

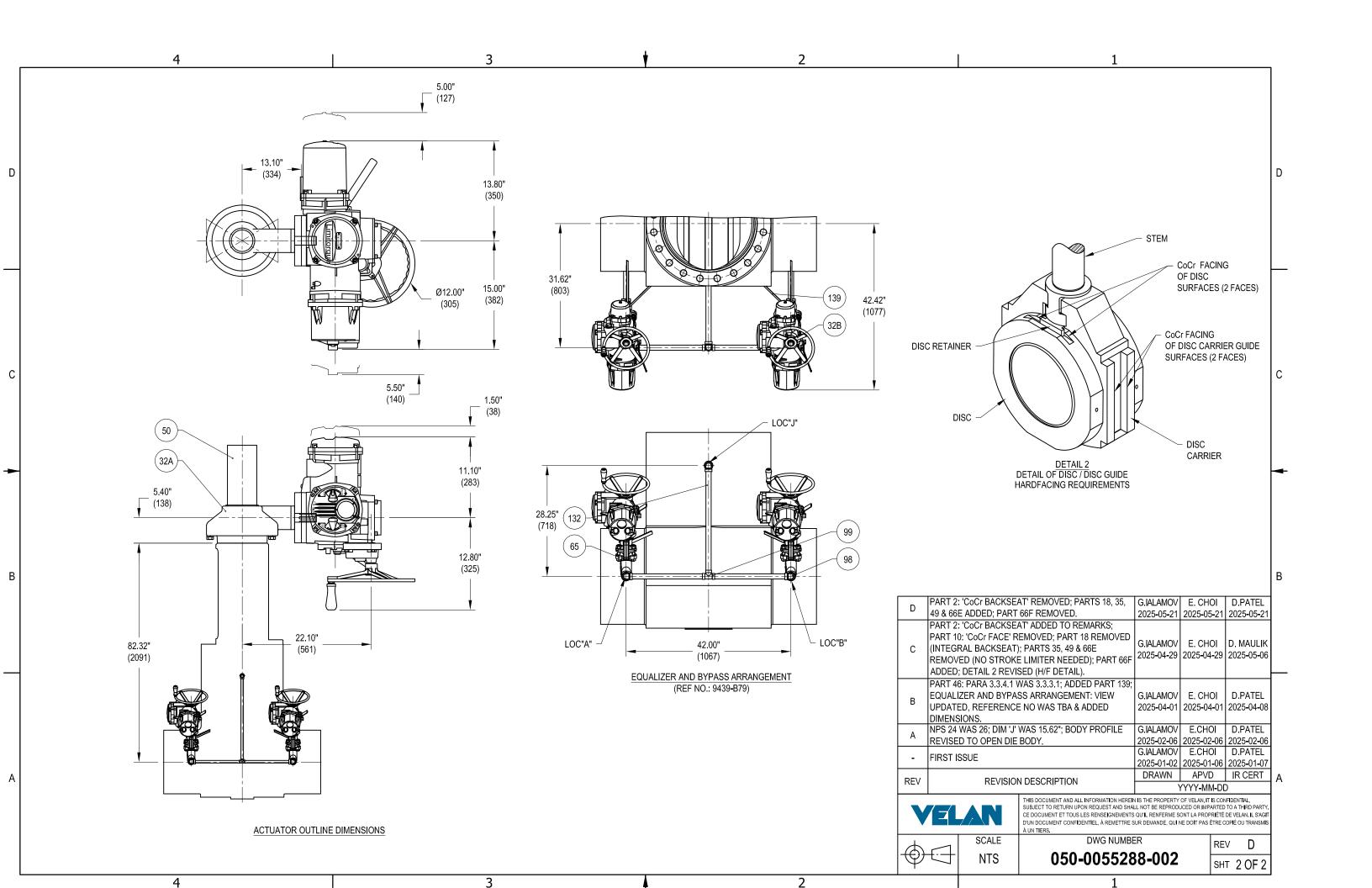
Generation Compliance Advisor

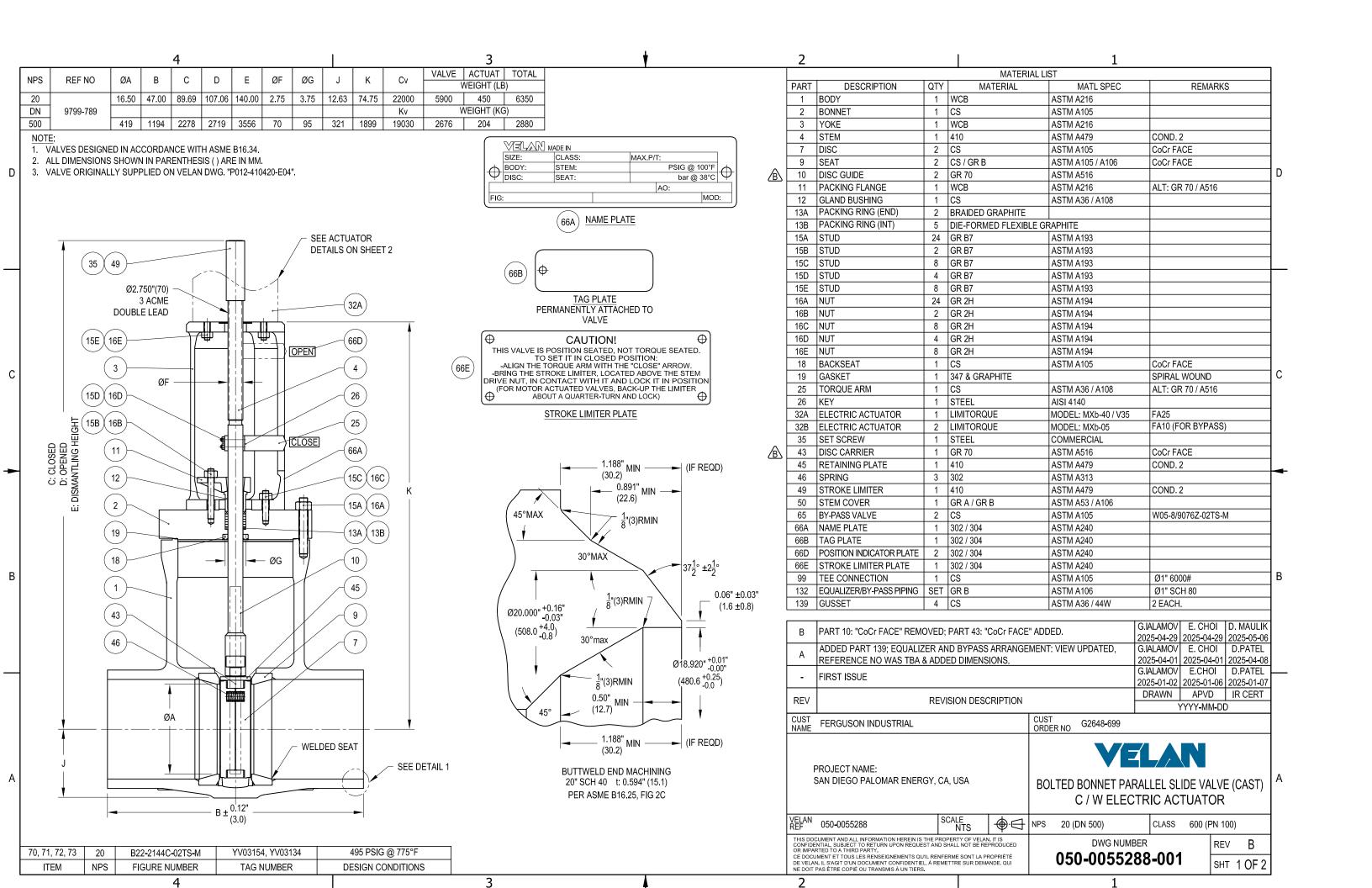
Dated: August 8, 2025

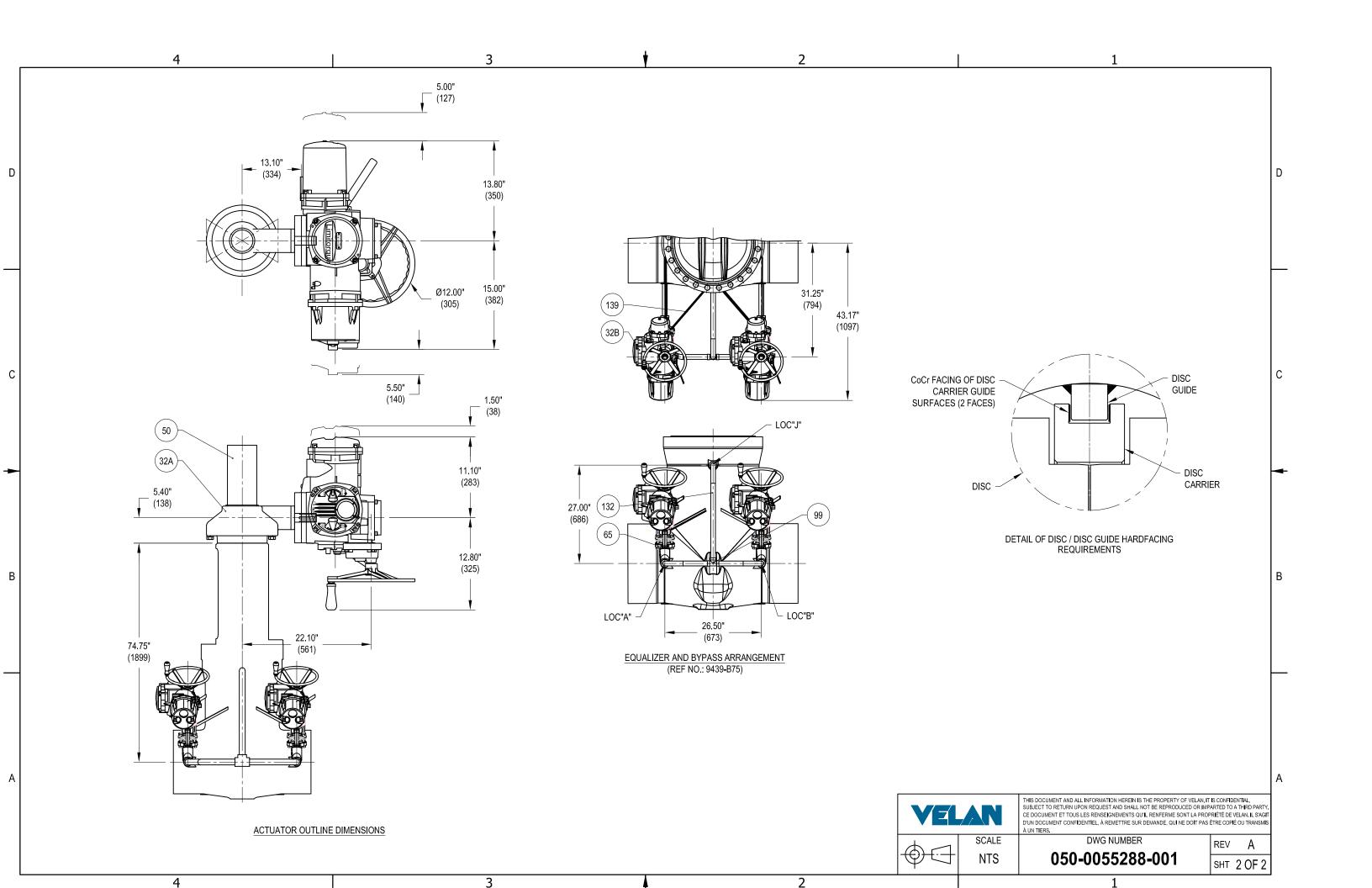
Petition for Change (HRSG Isolation Valves) August 8, 2025

APPENDIX 1 (PROJECT INFORMATION)



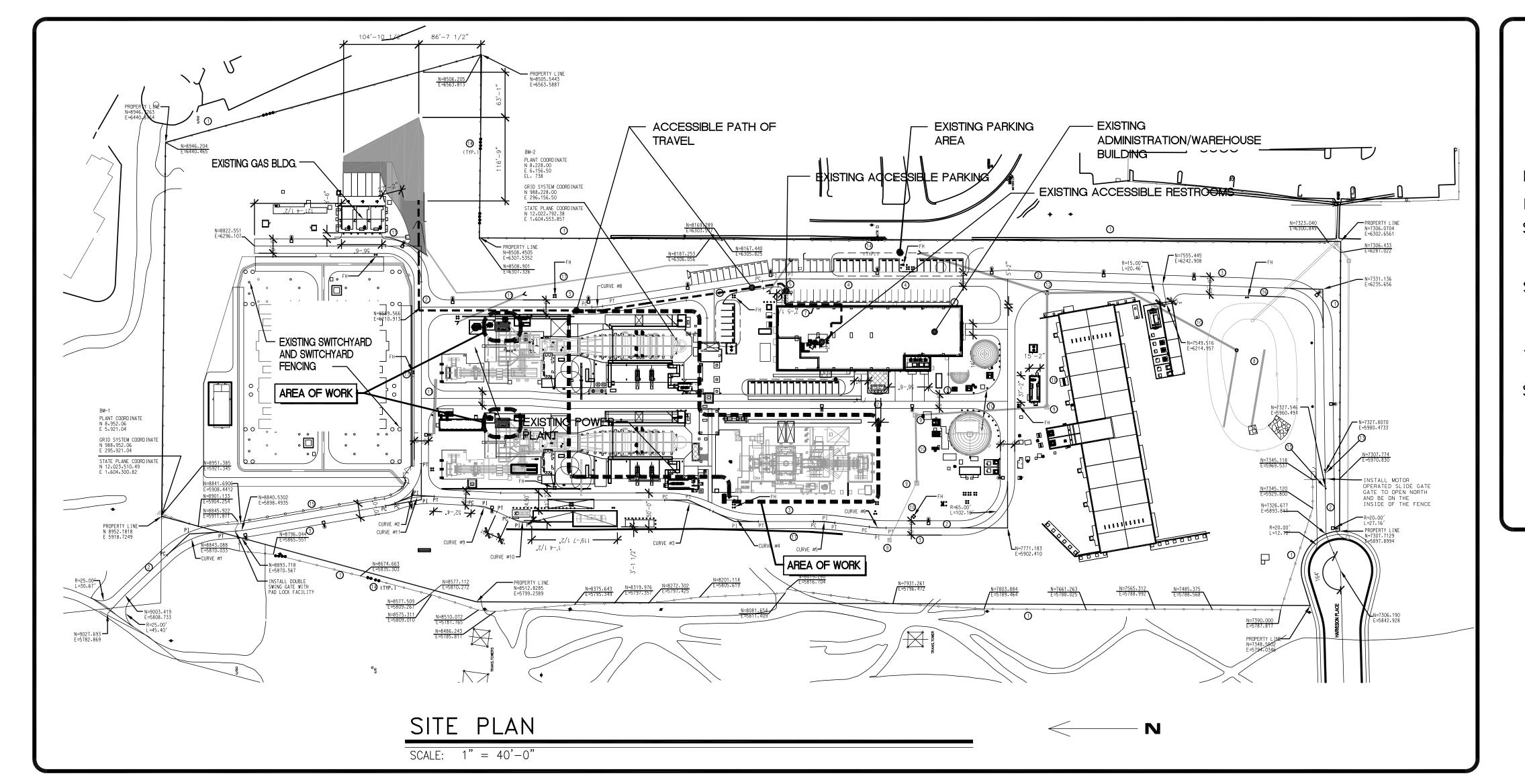






PROJECT INFORMATION

PROJECT DATA VICINITY MAP CONSULTANTS SHEET INDEX SHEET REV DATE DESCRIPTION PROJECT DESCRIPTION: NUMBER OWNER: ADD 2 NEW EXTERIOR MAINTENANCE PLATFORMS ON THE STEAM TURBINE SEMPRA UTILITIES - PALOMAR ENERGY CENTER ARCHITECTURAL SITE DRAWINGS PIPE RACK AND 1 NEW EXTERIOR MAINTENANCE PLATFORM TO EACH HRSG 2300 HARVESON PLACE, SD1473 PIPE RACK (4 PLATFORMS TOTAL). ESCONDIDO, CA 92029 TITLE SHEET (N) PLATFORM LOCATION PLAN STRUCTURAL ENGINEER: APPLICANT/OWNER: MARTIN AND LIBBY SEMPRA UTILÍTIES — PALOMAR ENERGY CENTER 4452 GLACIER AVE Valley Dr 2300 HARVESON PLACE, SD1473 SAN DIEGO, CA 92120 ESCONDIDO, CA 92029 TEL: (619) 280-9307 Milpas Dr FAX: (619) 284-3533 APPLICANT'S REPRESENTATIVE/ENGINEER: CONTACT: MARTIN AND LIBBY 4452 GLACIER AVE EMAIL: STRUCTURAL DRAWINGS SAN DIEGO, CA 92120 Surrey Ln TEL: (619) 280-9307 GENERAL NOTES FAX: (619) 284-3533 CONTACT: TYPICAL DETAILS S-2 EMAIL: PIPE RACK PLATFORM LOCATION PLAN ASSESSOR'S PARCEL NUMBER: **PLANS** S-4 232-591-01-00 **PLANS** S-5 **ELEVATIONS** APPLICABLE CODES WORK SHALL BE IN COMPLIANCE WITH THE FOLLOWING APPLICABLE CODES: 1. 2007 CALIFORNIA BUILDING CODE (CBC) BASED ON THE 2006 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC). 2. 2007 CALIFORNIA PLUMBING CODE (CPC) BASED ON THE 2006 UNIFORM PLUMBING CODE (UPC). 3. 2007 CALIFORNIA MECHANICAL CODE (CMC) BASED ON THE 2006 UNIFORM MECHANICAL CODE (UMC). 4. 2007 CALIFORNIA ELECTRICAL CODE (CEC) BASED ON THE 2005



NATIONAL ELECTRICAL CODE (NEC).

UFC.

5. 2007 CALIFORNIA FIRE CODE (CFC) 2007 EDITION BASED ON THE 2006

SITE SUMMARY

SITE GROSS AREA: 20.44 ACRES

ZONING: S-P SPECIAL DISTRICTS - VINEYARD/TIER 1

MAX. BUILDING HEIGHT ALLOWED: -

PROPOSED BUILDING HEIGHT:

SETBACKS

VICINITY MAP

SIDE:

SCOPE: CONSTRUCT PLATFORM TO PROVIDE ACCESS FOR MAINTENANCE VARIOUS

COMPONENTS AT HRSG AND STEAM TURBINE.

TYPE OF CONSTRUCTION: III-B

SPRINKLERS: NO

OCCUPANCY: F-1

OCCUPANCY LOAD: 2

IOT FOR CONSTRUCTION

HESE DRAWINGS HAVE BEEN
PRINTED PRIOR TO ISSUANCE

OF A BUILDING PERMIT AND

RE SUBJECT TO CHANGE.

DESCRIPTION
1/29/2025 ISSUED FOR CLIENT REVIEW
J



PLATFORMS

PLATFORMS

PLATFR

TEAM VALVE ACCESS PL.
PALOMAR ENERGY CENTER
FSCONDIDG CA

ALE AS NOTED

DRAWN
RBH
DESIGNED
JAS

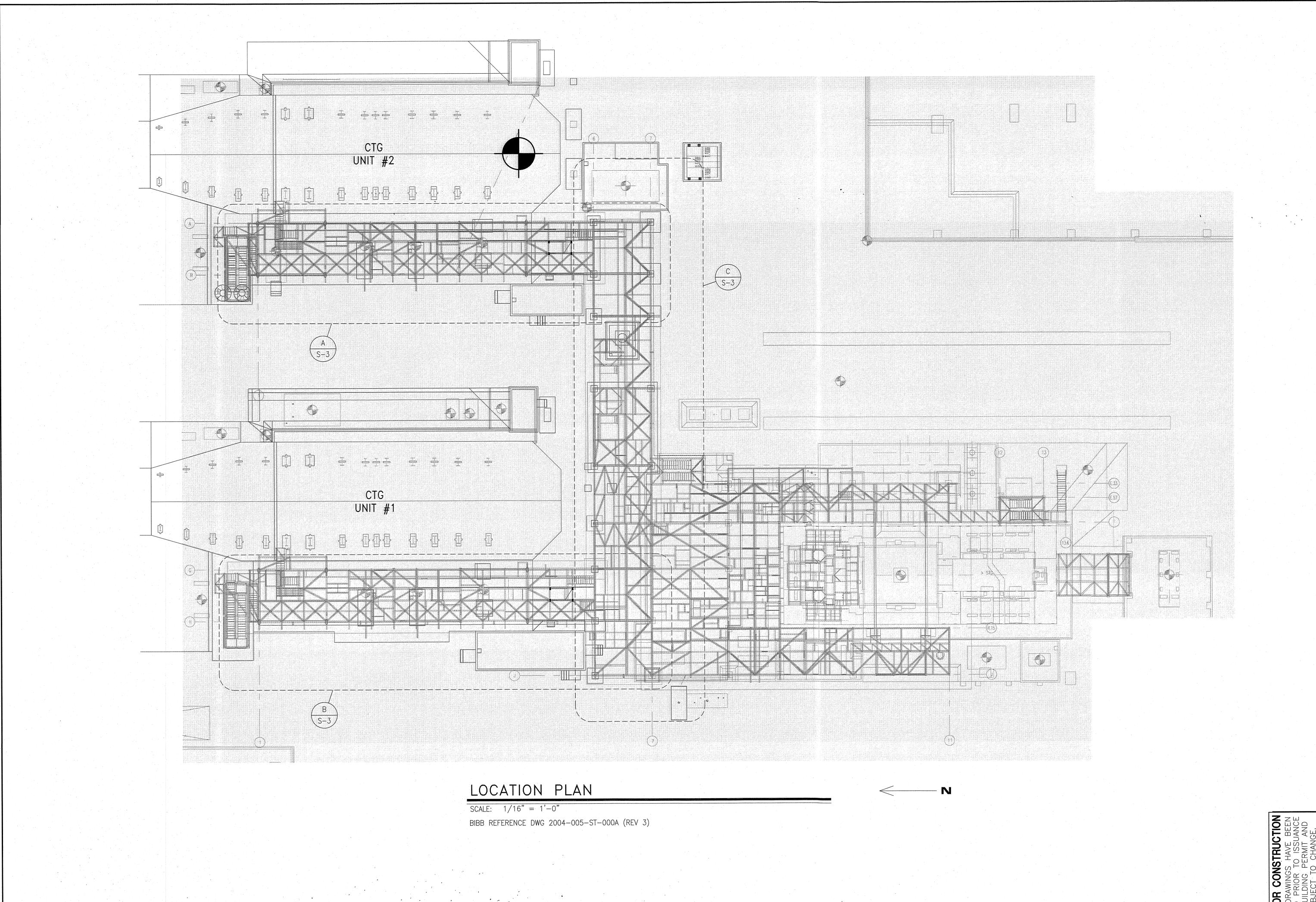
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CHECKED
DRL
JOB NO

7584 TE 1/24/25

1/24/25

SHEET NUMBER

T-1



REV DATE DESCRIPTION
0 1/29/2025 ISSUED FOR CLIENT REVIEW



STEAM VALVE ACCESS PLATFORMS
PALOMAR ENERGY CENTER
ESCONDIDO, CA

SCALE
AS NOTED
DRAWN
RBH

DRAWN
RBH
DESIGNED
JAS

CHECKED DRL
JOB NO 7584

1/24/25

SHEET NUMBER

GENERAL

- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS AND 1. LIVE LOADS: CONDITIONS AT THE JOB SITE BEFORE STARTING WORK, AND SHALL NOTIFY THE STRUCTURAL ENGINEER IMMEDIATELY OF ANY DISCREPANCIES.
- 2. NOTES AND DETAILS ON THE DRAWINGS SHALL TAKE PRECEDENCE OVER THESE STANDARD NOTES AND TYPICAL DETAILS IN CASE OF CONFLICT.
- DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DRAWINGS.
- ALL MATERIALS AND WORKMANSHIP SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL STANDARDS AND THE APPLICABLE PROVISIONS OF THE 2010 CALIFORNIA BUILDING CODE (CBC) AS AMMENDED BY THE CITY OF ESCONDIDO.
- 5. WHERE NO CONSTRUCTION DETAILS ARE SHOWN OR NOTED FOR ANY PART OF THE WORK, SUCH DETAILS SHALL BE THE SAME AS FOR SIMILAR WORK SHOWN ON THE DRAWINGS. MEMBER SIZES ARE GENERALLY FOUND ON PLANS. DETAILS AND SECTIONS GENERALLY REFER TO GENERIC ELEMENTS.
- THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE, UNLESS OTHERWISE INDICATED. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES LATITUDE: 33.1174207 NECESSARY TO PROTECT THE STRUCTURE, WORKMEN, AND OTHER PERSONS DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING FOR CONSTRUCTION EQUIPMENT, SHORING FOR THE BUILDING, SHORING FOR EARTH BANKS, FORMS, SCAFFOLDING, PLANKING, SAFETY NETS, SUPPORT AND BRACING FOR CRANES AND GIN POLES, ETC. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND HE OR SHE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE ENGINEER SHALL NOT CONSTITUTE INSPECTION OF THE ABOVE ITEMS.
- NOTIFY THE STRUCTURAL ENGINEER WHEN DRAWINGS BY OTHERS SHOW OPENINGS, POCKETS, ETC., NOT SHOWN ON THE STRUCTURAL DRAWINGS, BUT WHICH ARE LOCATED IN THE STRUCTURAL MEMBERS.
- ALL SPECIFICATION AND CODES NOTED SHALL BE THE LATEST APPROVED EDITIONS AND REVISIONS BY THE GOVERNMENTAL AGENCY HAVING JURISDICTION OVER THIS PROJECT.
- CONSTRUCTION MATERIALS SHALL BE SPREAD OUT WHEN PLACED ON FRAMED FLOORS OR ROOFS. THE CONSTRUCTION MATERIAL LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT. PROVIDE ADEQUATE SHORING AND/OR BRACING WHERE STRUCTURE HAS NOT ATTAINED DESIGN STRENGTH.

PAINTING

1. ANY EXISTING PAINTED SURFACES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED FOLLOWING 'SPECIFICATIONS FOR GENERAL PAINTING BIBB SPEC 980.'

COLOR: SHERWIN WILLIAMS SW1022, CUBIST GRAY (OR EQUAL).

DESIGN CRITERIA

PLATFORMS & STAIRS

ENDTHOUNKE DECICAL DATA

2. EARTHQUAKE DESIGN DATA:		
SEISMIC PARAMETER	RECOMMENDED VALUE	ASCE 7-05
SEISMIC IMPORTANCE FACTOR	1.25	SEC 11.5.1
Ss	1.060	SEC 11.4.1
Sı	0.396	SEC 11.4.1
SITE CLASS	D	TABLE 20.3-1
S _{DS}	0.76	SEC 11.4.4
S _{DI}	0.425	SEC 11.4.4
SEISMIC DESIGN CATEGORY	D	TABLE 11.6-1
COMPONENT RESPONSE MODIFICATION FACTOR Rp, O.M.F.	3.5	TABLE 15.4-1
COMPONENT RESPONSE MODIFICATION FACTOR Rp, B.F.	3.25	
SEISMIC DESIGN FORCE Fp, O.M.F.	0.271W	SEC 12.8
B.F.	0.292W	

100 PSF

LONGITUDE: -117.1194284

CHAMADY OF CDECIAL INCDECTION

1	CONCRETE	13.1	VERIFY SOIL CONDITIONS ARE SUBSTANTIALLY IN
2	BOLTS INSTALLED IN CONCRETE		CONFORMANCE WITH THE SOIL INVESTIGATION REPORT
3	CONCRETE MOMENT-RESISTING SPACE FRAME	13.2	VERIFY THAT FOUNDATION EXCAVATIONS EXTEND TO
4	REINFORCING STEEL AND PRESTRESSING STEEL		PROPER DEPTH AND BEARING STRATA.
5	ALL STRUCTURAL WELDING	13.3	PROVIDE SOIL COMPACTION TEST RESULTS, DEPTHS
5.1	WELDING REINFORCING STEEL		OF FILL, RELATIVE DENSITY, BEARING VALUES.
5.2	WELD TESTING DUCTILE MOMENT-RESISTING STEEL	13.4	PROVIDE SOIL EXPANSION TEST RESULTS, EXPANSION
	FRAME		INDEX, RECOMMENDATIONS FOR FOUNDATIONS,
5.3	WELDING REINFORCING STEEL		ON-GRADE FLOOR SLAB DESIGN FOR EACH BUILDING
6	HIGH-STRENGTH BOLTING		SITE.
7	STRUCTURAL MASONRY	14	SMOKE CONTROL SYSTEM.
8	REINFORCED GYPSUM CONCRETE	15	SPECIAL CASES (DESCRIBE).
9	INSULATING CONCRETE FILL	16	OFF-SITE FABRICATION OF BUILDING COMPONENTS.
10	SPRAY—APPLIED FIREPROOFING	17	OTHER SPECIAL INSPECTIONS AS REQUIRED BY
11	DEEP FOUNDATIONS (PILING, DRILLED & CAISSONS)		DESIGNER.
12	SHOTCRETE		

NO	DESCRIPTION OF TYPE OF INSPECTION REQUIRED, LOCATION, REMARKS, ETC	DESIGN STRENGTH
1	POST INSTALLED ANCHOR	SEE "EXPANSION ANCHORS" NOTES
5	ALL STRUCTURAL STEEL WELDING	E70XX
6	HIGH STRENGTH BOLTING	A325N
16	ALL STRUCTURAL STEEL SHOP WELDING (UNLESS DONE IN AN APPROVED FABRICATORS SHOP PER 1701.7, CBC)	E70XX

- A. SPECIAL INSPECTION SHALL BE IN ACCORDANCE WITH FOLLOWING:
 - STRUCTURAL STEEL AND HIGH STRENGTH BOLTING PER SECTION 1704.3 AND PER TABLE 1704.3.
 - POST-INSTALLED ANCHORS: SPECIAL INSPECTION IS REQUIRED IN ACCORDANCE WITH SECTION 1704.13 OF THE 2007 CBC. INSTALLATION SHALL FOLLOW PROCEDURE GIVE IN PRODUCT'S APPROVED EVALUATION/TEST REPORT.
- B. THE SPECIAL INSPECTIONS LISTED ARE IN ADDITION TO THE CALLED INSPECTIONS REQUIRED BY SECTION 109 OF THE CBC, A AMENDED.
- CONTINUOUS INSPECTION IS ALWAYS REQUIRED DURING THE PERFORMANCE OF THE WORK UNLESS OTHERWISE SPECIFIED. WHEN WORK IN MORE THAN ONE CATEGORY OF WORK REQUIRING SPECIAL INSPECTION IS TO BE PERFORMED SIMULTANEOUSLY, OR THE GEOGRAPHIC LOCATION OF THE WORK IS SUCH THAT IT CANNOT BE CONTINUOUSLY OBSERVED IN ACCORDANCE WITH THE PROVISIONS OF CBC SECTION 1704, IT IS THE OWNER OR OWNER'S AGENT'S RESPONSIBILITY TO EMPLOY A SUFFICIENT NUMBER OF INSPECTORS TO ASSURE THAT ALL THE WORK IS INSPECTED IN ACCORDANCE WITH THOSE PROVISIONS.
- THE SPECIAL INSPECTORS MUST BE CERTIFIED BY THE CITY OF ESCONDIDO TO PERFORM THE TYPE OF INSPECTION SPECIFIED.
- E. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE SPECIAL INSPECTOR OR INSPECTION AGENCY AT LEAST ONE WORKING DAY PRIOR TO PERFORMING ANY WORK THAT REQUIRES SPECIAL INSPECTION.
- SPECIALLY INSPECTED WORK THAT IS INSTALLED OR COVERED WITHOUT THE APPROVAL OF THE SPECIAL INSPECTOR IS SUBJECT TO REMOVAL OR EXPOSURE.
- THE SPECIAL INSPECTOR SHALL SUBMIT IN WRITING A REPORT OF OBSERVATIONS AND TESTING FOR EACH INSPECTION TO THE S.E.O.R.
- H. A CERTIFICATE OF SATISFACTORY COMPLETION OF WORK REQUIRING SPECIAL INSPECTION MUST BE COMPLETED AND SUBMITTED TO THE S.E.O.R.
 - AN APPLICATION FOR OFF-SITE FABRICATION MUST BE SUBMITTED TO THE S.E.O.R. FOR APPROVAL PRIOR TO FABRICATION.

SUMMARY OF SPECIAL INSPECTION (CONT.)

STRUCTURAL STEEL:

MATERIAL VERIFICATION OF

a. IDENTIFICATION MARKINGS

TO CONFORM TO ASTM

TABLE 1704.3

UOUS

REQUIRED VERIFICATION AND INSPECTION OF STEEL CONSTRUCTION

CONTIN- | PERI- | REFERENCED |

STANDARD* | REFERENCE

APPLICABLE

ASTM

MATERIAL SPECIFI-

CATIONS:

AISC 360

SECTION

A3.3

AISC 360,

SECTION

M2.5

1704.3.3

ODIC

	VERIFICATION AND INSPECTION
ASCE 7-05	1. MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS:
SEC 11.5.1 SEC 11.4.1 SEC 11.4.1 TABLE 20.3-1 SEC 11.4.4 SEC 11.4.4	a. IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.
TABLE 11.6-1 TABLE 15.4-1	b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.
SEC 12.8	2. INSPECTION OF HIGH—STRENGTH BOLTING: a. BEARING—TYPE CONNECTIONS.

т.	STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS.	-	-	ASTM A 6 OR ASTM A 568	1708.4
	b. MANUFACTURERS' CERTIFIED MILL TEST REPORTS.	-	-	ASTM A 6 OR ASTM A 568	
3	4. MATERIAL VERIFICATION OF WELD FILLER MATERIALS:				
	a. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATION IN THE APPROVED CONSTRUCTION DOCUMENTS.	I	I	AISC 360, SECTION A3.5	Ι
	b. MANUFACTURER'S CERTIFICATE OF COMPLIANCE REQUIRED.	ı	ı	_	-
	5. INSPECTION OF WELDING:				
	a. STRUCTURAL STEEL:				
	1) COMPLETE AND PARTIAL PENETRATION GROOVE WELDS.	X	1		
	2) MULTIPASS FILLET WELDS.	X	ı	AWS D1.1	1704.3.1
	3) SINGLE-PASS FILLET WELDS > 5/16".	X	I	7,110 51.1	1701.0.1
	4) SINGLE-PASS FILLET WELDS ≤ 5/16".	I	X		
G:	5) FLOOR AND ROOF DECK WELDS.	-	Х	AWS D1.3	_
<u>=</u>	6. INSPECTION OF STEEL FRAME JOINT DETAILS FOR COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS:		X		
ÆN	a. DETAILS SUCH AS BRACING AND STIFFENING.	_	_	_	1704.3.2
	b. MEMBER LOCATIONS.	_	_		
AS	c. APPLICATION OF JOINT DETAILS AT EACH CONNECTION.	_			

CONNECTION.

FOR SI: 1 INCH = 25.4 mm. a. WHERE APPLICABLE, SEE ALSO SECTION 1707.1, SPECIAL INSPECTION FOR SEISMIC RESISTANCE.

STRUCTURAL STEEL

- ALL STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING AND 9. SHALL BE FABRICATED ACCORDING TO AISC PRACTICE AND SPECIFICATIONS FOR BUILDINGS (UNLESS OTHERWISE SPECIFIED).
 - A. MATERIAL OF STRUCTURAL ELEMENTS
 - STEEL BEAMS ASTM A992, GRADE 50, Fy = 50 KSI • STRUCTURAL HOLLOW TUBES — ASTM A500, GRADE B, $F_V = 46 \text{ KSI}$
 - CHANNELS, PLATES, ANGLES ASTM A36, Fy = 36 KSI • STEEL PIPE - ASTM 53, GRADE B, Fy = 35 KSI
- BOLTS SHALL CONFORM TO ASTM A325 OR F1852, UNO. ALL BOLTS SHALL BE INSTALLED WITH CUT STEEL WASHERS. BOLT HOLES SHALL BE 1/16-INCH LARGER THAN THE NOMINAL SIZE $\sqrt{4}$ OF THE BOLT.
- ALL WELDING SHALL BE PERFORMED BY CERTIFIED OPERATORS UNDER THE SUPERVISION OF AN APPROVED FABRICATOR USING THE ELECTRIC SHIELDED ARC PROCESS AS FORMULATED BY THE AMERICAN WELDING SOCIETY.
- STEEL SHALL BE IDENTIFIED BY HEAT OR MELT NUMBERS AND SHALL BE ACCOMPANIED BY TEST REPORTS.

STRUCTURAL STEEL (CONT)

- AISC STANDARD BEAM CONNECTIONS SHALL BE USED FOR CONNECTIONS NOT SHOWN (AISC 9TH EDITION OR EQUAL) USING 5/8-INCH BOLTS.
- ALL STEEL SHALL BE FABRICATED TO FIT TOGETHER PLUMB AND TRUE IN THE FIELD WITHOUT ALTERATION.
- WELDING ELECTRODES FOR MANUAL SHIELDED METAL-ARC WELDING SHALL CONFORM TO SPECIFICATIONS FOR MILD STEEL COVERED ARC WELDING ELECTRODES, AWS A5.1. OR SPECIFICATION FOR LOW-ALLOY STEEL COVERED ARC- WELDING ELECTRODES AWS A5.5. ELECTRODES SHALL BE E70 SERIES.
- ELECTRODES USED IN THE GAS METAL ARC PROCESS SHALL CONFORM TO SPECIFICATION FOR MILD STEEL ELECTRODES FOR GAS METAL-ARC WELDING AWS A5.18.
- REFER TO SPECIAL INSPECTION NOTES FOR WELDING REQUIREMENTS.
- ALL WELDS USED IN PRIMARY MEMBERS AND CONNECTIONS IN THE SEISMIC FORCE RESISTING SYSTEM SHALL BE MADE WITH A FILLER METAL THAT HAS A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-LBS AT MINUS 20° F, AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION.
- AN ERECTION PLAN PREPARED BY A REGISTERED CIVIL OR STRUCTURAL ENGINEER SHALL BE SUBMITTED TO THE S.E.O.R. WHICH SHALL INCORPORATE ALL LOCAL. STATE AND FEDERAL SAFETY REQUIREMENTS. THIS PLAN IS SUBMITTED TO VERIFY ITS EXISTENCE NOT FOR A SAFETY REVIEW, ALL RESPONSIBILITY FOR SAFETY REMAINS WITH THE CONTRACTOR
- 12. EXCEPT AS SUBSEQUENTLY NOTED, ALL HIGH STRENGTH BOLTS SHALL BE PRETENSIONED, AS DEFINED IN SECTION 4.2 OF THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSC) SPECIFICATION.

EXPANSION ANCHORS

- 1. ALL ANCHORS SHALL BE ICC APPROVED.
- ALL ANCHORS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH 10. RAILINGS: MANUFACTURER'S APPROVED RESEARCH REPORT(ICC-ESR).
- ANCHORS SHALL BE: HILTI KB-TZ . . . ESR-1917
- CONCRETE IN WHICH ANCHORS ARE INSTALLED SHALL BE NORMAL WEIGHT WITH A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3.000 P.S.I.
- ANCHOR DIAMETER REFERS TO THE THREAD SIZE FOR THE WEDGE CATEGORIES.
- TEST EQUIPMENT (INCLUDING TORQUE WRENCHES) IS TO BE CALIBRATED BY AN APPROVED TESTING LABORATORY IN ACCORDANCE WITH STANDARD RECOGNIZED PROCEDURES
- TEST 50 PERCENT OR ALTERNATE BOLTS IN A GROUP FOR EACH PIECE OF EQUIPMENT.
- 8. THE FOLLOWING CRITERIA APPLY FOR THE ACCEPTANCE OF INSTALLED ANCHORS:

TORQUE WRENCH METHOD: THE APPLICABLE TEST TORQUE MUST BE REACHED WITHIN THE FOLLOWING LIMITS: WEDGE TYPE: ONE-HALF (1/2) TURN OF THE NUT.

> <u>TEST_VALUES</u> NORMAL WEIGHT CONCRETE

<u>ANCHOR</u>	<u>WEDGE</u>
<u>DIA</u>	<u>TORQUE</u>
(IN)	(FT-LBS)
1/2	40
3/4	110

- TESTING SHOULD OCCUR A MINIMUM OF 24 HOURS AFTER INSTALLATION OF THE SUBJECT ANCHORS.
- 10. IF THE MANUFACTURER'S RECOMMENDED INSTALLATION TORQUE IS LESS THAN THE TEST TORQUE NOTED IN THE TABLE, THE MANUFACTURER'S RECOMMENDED INSTALLATION TORQUE SHOULD BE USED IN LIEU OF THE TABULATED VALUES.
- 11. ALL TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE SPECIAL INSPECTOR.
- 12. WHEN INSTALLING DRILLED-IN ANCHORS IN EXISTING NON-PRESTRESSED REINFORCED CONCRETE USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS.
- 13. UNLESS OTHERWISE SHOWN, PROVIDE A MINIMUM OF 6x DIAMETER EDGE DISTANCES AND 12xDIAMETER SPACING OF ANCHORS.

EXPANSION ANCHORS (CONT)

14. FOR EXTERIOR USE DRILLED IN ANCHORS SHALL BE STAINLESS STEEL.

MISCELLANEOUS METALS

- 1. MISCELLANEOUS METALS SHALL INCLUDE ITEMS MANUFACTURED AND SHOP FORMED OR FABRICATED ITEMS NOT SPECIFIED ELSEWHERE.
- 2. WELDING SHALL COMPLY WITH AWS PROCEDURES, AND WELDERS MUST BE CERTIFIED.
- 3. STEEL SHAPES, PLATES AND BARS ASTM A36.
- 4. FURNISH ALL NECESSARY ANCHORAGE DEVICES, AND FASTENERS FOR COMPLETE INSTALLATION.
- 5. VERIFY FIELD CONDITIONS SO THAT ITEMS CAN BE INSTALLED WITHOUT CUTTING AND FITTING IN THE FIELD.
- FIT EXPOSED CONNECTIONS ACCURATELY TO FORM TIGHT JOINTS.
- 7. TOUCH UP GALVANIZED SURFACES DAMAGED OR FIELD FITTED.
- 8. PLATFORM DECKING AND STAIRS:
 - A. MANUFACTURED WELDED STEEL GRATING FASTENING TO SUPPORT STEEL 1 1/4"x3/16" OR 2 1/4"x3/16" @ 1 3/16" O.C.
 - (SERRATED GALVANIZED GRATING MATCH EXISTING) CLIPS TO SECURE GRATING SHALL BE SIMILAR TO 'GRATING FASTENER INC' MODEL GG GALVANIZED W/SADDLE CLIP
 - TOPS TO MATCH EXISTING CONDITIONS.

ALL FIXED LADDERS SHALL CONFORM TO OSHA REGULATIONS (STANDARDS -29 CFR) SECTION 1910.27.

A. SHOP FABRICATED OF SHAPES, AS INDICATED.

LADDER:

- GALVANIZED 1 1/2" STD. PIPE CONSTRUCTION.
- WELD ALL INTERSECTIONS ALL AROUND. CLOSE ALL ENDS.
- GRIND SMOOTH SO THAT THERE ARE NO ROUGH EDGES.

GALVANIZATION

1. ALL STRUCTURAL STEEL & MISCELLANEOUS METALS INCLUDING PLATES SHALL BE HOT DIPPED GALVANIZED. ALL BOLTS, NUTS AND WASHER SHALL BE GALVANIZED. ALL STEEL GRATING, UNLESS OTHERWISE NOTED, SHALL BE GALVANIZED. GALVANIZING SHALL BE DONE IN CONFORMANCE WITH ASTM A123 GRADE 60 OR ASTM A153 CLASS C AS APPROPRIATE. ALL DAMAGED GALVANIZED SURFACES SHALL BE REPAIRED WITH GALVA-GUARD ZINC TOUCH-UP SOLDER BY COMINCO LTD OR SCE APPROVED EQUAL.

ABBREVIATIONS

INFO INFORMATION

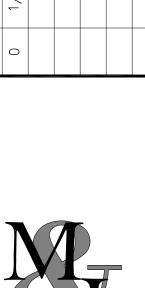
MAXIMUM

MINIMUM

l				
	& @	AND AT	(N)	NEW
	ADDL	ADDITIONAL	OPP	OPPOSITE
	BM B.O.	BEAM BOTTOM OF	PL	PLATE
		ВОТТОМ		SCHEDULE STRUCTURAL ENGINEER OF
		CENTERLINE CONNECTION		RECORD
	COMM	CONNECTION	SIM S.O.G.	SIMILAR SLAB ON GRADE
	DIA (ø)	DIAMETER		STANDARD STIFFEN(ER)
	ÈĽ	EXISTING ELEVATION EMBED(ED)	T.O.C. T.O.G.	TOP OF CONCRETE TOP OF GRATE TOP OF PLATE
)	FLNG F.V.	FLANGE FIELD VERIFY		TOP OF STEEL
	GALV	GALVANIZED	U.O.N.	UNLESS OTHERWISE NOTED
	HRSG	HET RECOVERY STEAM GENERATOR	W/ W.F. W.P.	WITH WIDE FLANGE WORK POINT

CONSTRUCTION
AWINGS HAVE BEEN
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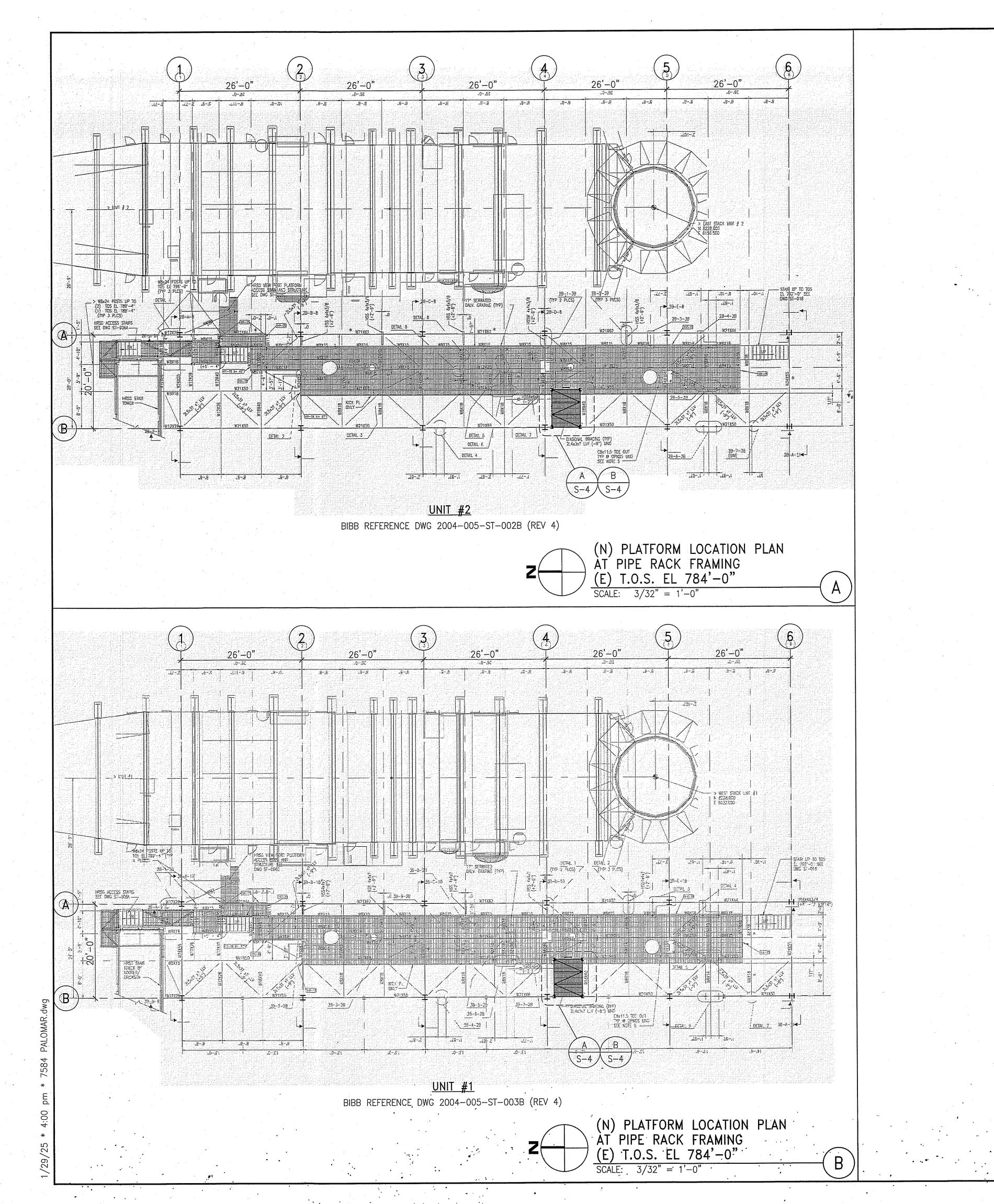
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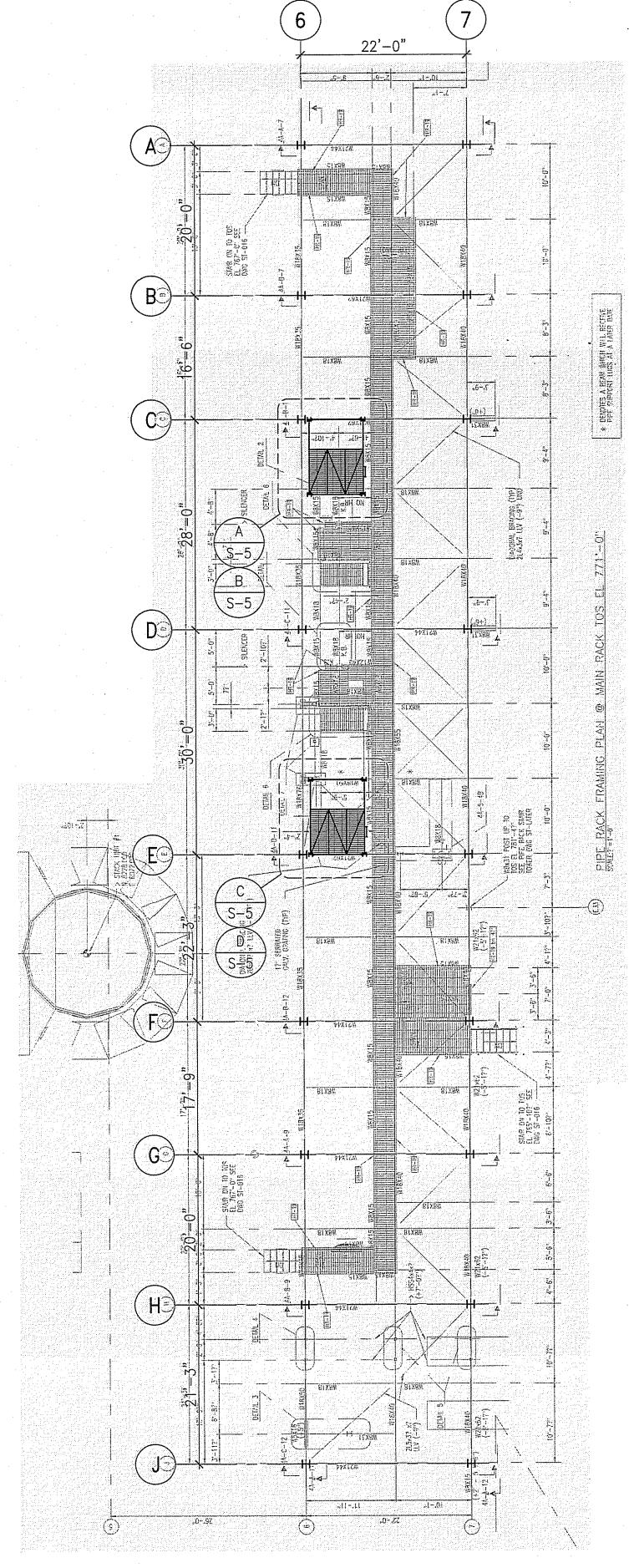
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1/24/25 SHEET NUMBER





MAIN RACK
BIBB REFERENCE DWG 2004-004A (REV 5)



(N) PLATFORM LOCATION PLAN AT PIPE RACK FRAMING (E) T.O.S. EL. 784'-0" SCALE: 3/32" = 1'-0"

* 1

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K PLATFORM LOCATON PLAN	LVE ACCESS PLATFORMS	ALOMAR ENERGY CENTER
ATF	AC	AR EN
X P	LVE	ALOM,

MARTIN & LIBBY STRUCTURAL ENGINEERS 4452 Glacier Avenue San Diego, CA 92120 Ph (619) 280-9307 F (619) 284-3533 Job No 7584

PIPE RACK
STEAM VAL

SCALE
AS NOTED

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