. IF SITE-SPECIFICDESIGN CRITERIA ARE OUTSIDE THE LIMITS OF THESE PC DRAWINGS, CONTACT POLIGON ENGINEERING TO SEE IF AN ENGINEERING LETTER, SUPPLEMENTAL DRAWINGS, AND/OR CALCULATIONS COULD BE SUBMITTED FOR A SITE-SPECIFIC SOLUTION. ANY SITE-SPECIFIC DEVIATION FROM THIS PC MAY NOT BE SUBMITTED TO DSA AS AN

WITHIN STATE OR LOCAL GEOLOGICAL HAZARD ZONE. VERIFY SUBMITTAL AND APPROVAL OF A GEOHAZARD REPORT BY

2. STRUCTURE NOT DESIGNED TO SUPPORT SOLAR PANELS. STRUCTURE IS NOT DESIGNED TO SUPPORT SPRINKLER SYSTEMS IN LOAD SCENARIO 2 REGIONS 3. GEOHAZARD REPORTS ARE REQUIRED IF THE AREA COVERED UNDER THE ROOF EXCEEDS 4000 SQ FT. OR IS LOCATED

4. STRUCTURAL SEPARATION BETWEEN ADJACENT STRUCTURES: MSL15= 2.75" MSL25= 2.75" MSL35= 2.5"

STRUCTURAL SEPARATION BETWEEN EXISTING STRUCTURES: MSL15= 3.75" MSL25= 3.75" MSL35= 3.5" 5. WHEN PLACING MULTIPLE CANOPIES WITH PIER FOOTINGS ADJACENT TO ONE ANOTHER, THE DESIGN MAY REQUIRE AN ANALYSIS OF GROUP EFFECTS ON THE FOUNDATIONS. THE MINIMUM CLEARANCE BETWEEN CENTER OF

PIERS IS EIGHT TIMES PIER DIAMETER WITHOUT AN ACCOMPANYING ENIGNEERING LETTER. 6. SITE APPLICATION DESIGN PROFESSIONAL AND DSA REVIEWER SHALL VERIFY THE STRUCTURE TO BE LOCATED AT LEAST 20 FEET FROM ANY HIGHER ADJACENT STRUCTURE IF GROUND SNOW LOAD IS GREATER THAN ZERO.

. DESIGN COMPLIES WITH THE CONDITIONS OF EXCEPTION 1 OF ASCE 7-16 SECTION 11.4.8, ITEM 2.

B. APPROVED FIRE APPARATUS ACCESS ROADS SHALL EXTEND TO WITHIN 150 FEET OF ALL PORTIONS OF THE PERIMETER OF THE STRUCTURE PER CFC 503.1.1.

ARCHITECTURAL REQUIREMENTS:

CGS PRIOR TO DSA SITE APPLICATION.

DESCRIPTION	DESIGN VALUES
TYPE OF CONSTRUCTION	II B
NUMBER OF STORIES	1
FIRE SPRINKLER SYSTEM	NOT BY POLIGON

RELATED BUILDING CODES AND STANDARDS:

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC)... 2022 CALIFORNIA BUILDING CODE (CBC), VOLUMES 1 AND 2 (PART 2, TITLE 24, CCR) (2021 INTERNATIONAL BUILDING CODE WITH 2022 CALIFORNIA AMENDMENTS) 2022 CALIFORNIA ELECTRICAL CODE. (2020 NATIONAL ELECTRICAL CODE WITH 2022 CALIFORNIA AMENDMENTS) 2022 CALIFORNIA MECHANICAL CODE (CMC) ..(PART 4, TITLE 24, CCR) (2021 UNIFORM MECHANICAL CODE WITH 2022 CALIFORNIA AMENDMENTS) ..(PART 5, TITLE 24, CCR) 2022 CALIFORNIA PLUMBING CODE (CPC). (2021 UNIFORM PLUMBING CODE WITH 2022 CALIFORNIA AMENDMENTS) 2022 CALIFORNIA ENERGY CODE

..(PART 6. TITLE 24. CCR 2022 CALIFORNIA FIRE CODE (CFC) (PART 9, TITLE 24, CCR) (2021 INTERNATIONAL FIRE CODE WITH 2022 CALIFORNIA AMENDMENTS) 2022 CALIFORNIA EXISTING BUILDING CODE (CEBC). .. (PART 10, TITLE 24, CCR

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE. ..(PART 11, TITLE 24, CCR) 2022 CALIFORNIA REFERENCED STANDARDS CODE. . (PART 12, TITLE 24, CCR) TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

NFPA 72 - 2022

REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS:

2022 CBC, CHAPTER 35 **2022 CFC**, CHAPTER **80**

<u>SCOPE OF WORK NARRATIVE:</u>

HESE DRAWINGS ILLUSTRATE THE FABRICATION AND INSTALLATION REQUIREMENTS FOR A FREE-STANDING PREFABRICATED STEEL SHADE STRUCTURE. THE ENTIRE STRUCTURAL SYSTEM IS COMPRISED OF TUBULAR STEEL MEMBERS SUPPORTED ON CONCRETE FOUNDATIONS. THE FLEXIBILITY INCLUDED HEREIN ALLOWS THIS STRUCTURE TO COMPLY WITH A WIDE VARIETY OF PROJECT SITES AND LOADING REQUIREMENTS.

INSTRUCTIONS FOR ARCHITECTS PLANNING TO SUBMIT THESE PRE-CHECKED DRAWINGS TO DSA:

BEFORE SUBMITTING THESE PRE-CHECKED DRAWINGS FOR YOUR PROJECT, FOLLOW THE STEPS BELOW TO PROPERLY DEFINE THE APPROVED OPTIONS: THE POLIGON ENGINEERING DEPARTMENT IS AVAILABLE TO HELP YOU COMPLETE THESE STEPS (616) 888-3500

	STEP 1 PROJECT INFORMATION
PROJECT NAME	
SCHOOL DISTRICT	
USE AND OCCUPANCY CLASSIFICATION	(PROPOSED OCCUPANCY: A1,A2, A3, A4, A5, B,E
OCCUPANT LOAD FACTOR	(15 SQFT/PERSON MAX; 5 SQFT/PERSON MIN FOR ANY A OCCUPANC 20 SQFT/PERSON MAX FOR B OR E OCCUPANC
TOTAL ROOF AREA	
NUMBER OF OCCUPANTS	

	STEP 2 DESIGN OPTIONS	
ROOF DECK	[] MULTI-RIB (MR)	DEFAULT , WEIGHT 1.2 PSF
ROOF DECK	[] STANDING SEAM (SS)	WEIGHT 1.8 PSF
CHITEDS	[] NO	DEFAULT
GUTTERS	[] YES	SEE MSL7.0 FOR DETAILS
	[] NO	DEFAULT
ELECTRICAL ACCESS	[] YES	SEE MSL7.1 FOR DETAILS
CLEAR HEICHT	[] 8'	DEFAULT
CLEAR HEIGHT	[] OTHER	10' MAX
	<u> </u>	

		Ss .	(g)	
		\$1	(g)	
		STEP 4 SEISMIC REGION	<u>IS</u>	
0.000 <ss <="1.406</td"><td>\$1 <= 0.844</td><td>[] WHITE</td><td></td><td>3.5 PSF MAX DEAD LOAI</td></ss>	\$1 <= 0.844	[] WHITE		3.5 PSF MAX DEAD LOAI
1.406 < Ss <= 2.063	S1 <= 1.070	[] GREEN		2.0 PSF MAX DEAD LOAI

STEP 5 TOTAL ROOF DEAD LOAD

STEP 3 SEISMIC ACCELERATION

ROOF DECK	PSF	SEE SIEP 2 ROOF DECK! FOR WEIGHIS
COLLATERAL	PSF	LIGHTING, FIRE SUPPRESSION, ETC.
TOTAL	PSF	ADD 'ROOF DECK' AND 'COLLATERAL'
	STEP 6 LOAD SCENARIO	<u>)</u>
WHITE	TOTAL ROOF DEAD LOAD <= 3.5 PSF	[] LOAD SCENARIO 1
GREEN	TOTAL ROOF DEAD LOAD < 2.0 PSF	[] LOAD SCENARIO 2

STEP 7 PC STRUCT	<u>URE</u>
ROOF WIDTH <= 15	[] MSL 15
15 < ROOF WIDTH <= 25	[] MSL 25
25 < ROOF WIDTH <= 35	[] MSL 35

		<u>STEP</u>	8 STRI	UCTURE SIZE			
		MSL 15		MSL 25		MS	SL 35
POOE WIDTH	[] 15'	DEFAULT	[] 25'	DEFAULT	[] 35'		DEFAULT
ROOF WIDTH	[]	OTHER 6' MIN; 15' MAX	[]	OTHER 15'-6" MIN; 25' MAX	[]	_OTHER	25'-6" MIN; 35' MAX
	[]44'	2 BAYS	[]44'	2 BAYS	[]44'		2 BAYS
DOOF LENGTH	[]64'	3 BAYS	[]64'	3 BAYS	[]64'		3 BAYS
ROOF LENGTH	[]84'	4 BAYS	[]84'	4 BAYS	[]84'		4 BAYS
	[]	OTHER	[]	OTHER	[]	_OTHER	

		STEP 9 FOU	NDATION TYPE	
MSI	L 15	MS	L 25	MSL 35
[] SPREAD PAD	[] DRILLED PIER	[] SPREAD PAD	[] DRILLED PIER	[] SPREAD PAD

	STEP 10 FOUNDA	ATION SUMMARY	
MSL 15	MSI	. 25	MSL 35
[] LOAD SCENARIO 1 [] LOAD SCENARIO SPREAD PAD DRILLED PIER	[] LOAD SCENARIO 1 SPREAD PAD	[] LOAD SCENARIO 1 DRILLED PIER	[] LOAD SCENARIO 1 SPREAD PAD
[] LOAD SCENARIO 2 [] LOAD SCENARIO 2 SPREAD PAD DRILLED PIER	P [] LOAD SCENARIO 2 SPREAD PAD	[] LOAD SCENARIO 2 DRILLED PIER	[] LOAD SCENARIO 2 SPREAD PAD

	STEP 11 SHEET INDEX									
BASE FRAME		MS	L 15			MSI	L 25		MS	L 35
ROOF DECK	N	1R	S	S	N	IR	S	S	MR	SS
FOUNDATION TYPE	SPREAD PAD	DRILLED PIER	SPREAD PAD	DRILLED PIER	SPREAD PAD	DRILLED PIER	SPREAD PAD	DRILLED PIER	SPREAD PAD	SPREAD PAD
SELECT ONE	[]	[]	[]	[]	[]	[]	[]	[]	[]	[]
ORDER FORM	MSL1.0	MSL1.0	MSL1.0	MSL1.0	MSL1.0	MSL1.0	MSL1.0	MSL1.0	MSL1.0	MSL1.0
NOTES AND SPECIAL INSPECTIONS	MSL1.1	MSL1.1	MSL1.1	MSL1.1	MSL1.1	MSL1.1	MSL1.1	MSL1.1	MSL1.1	MSL1.1
FOUNDATION PLAN	MSL2.0	MSL2.1	MSL2.0	MSL2.1	MSL2.2	MSL2.3	MSL2.2	MSL2.3	MSL2.4	MSL2.4
FRAMING PLAN	MSL3.0	MSL3.0	MSL3.0	MSL3.0	MSL3.1	MSL3.1	MSL3.1	MSL3.1	MSL3.2	MSL3.2
FRAME CONNECTION DETAILS	MSL4.0	MSL4.0	MSL4.0	MSL4.0	MSL4.1	MSL4.1	MSL4.1	MSL4.1	MSL4.2	MSL4.2
ARCHITECTURAL VIEWS	MSL5.0	MSL5.0	MSL5.0	MSL5.0	MSL5.1	MSL5.1	MSL5.1	MSL5.1	MSL5.2	MSL5.2
ROOF CONNECTION DETAILS	MSL6.0	MSL6.0	MSL6.1	MSL6.1	MSL6.0	MSL6.0	MSL6.1	MSL6.1	MSL6.0	MSL6.1
MISC DESIGN OPTIONS	MSL7.0	MSL7.0	MSL7.0	MSL7.0	MSL7.0	MSL7.0	MSL7.0	MSL7.0	MSL7.0	MSL7.0
ELECTRICAL CUTOUTS	MSL7.1	MSL7.1	MSL7.1	MSL7.1	MSL7.1	MSL7.1	MSL7.1	MSL7.1	MSL7.1	MSL7.1

STEP 12 MULTIPLE STRUCTURES				
	ROOF WIDTH X LENGTH	QTY		
MULTIPLE STRUCTURES				

STEP 1: GENERAL PROJECT INFORMATION

- IDENTIFY PROJECT NAME AND SCHOOL DISTRICT IDENTIFY USE AND OCCUPANCY CLASSIFICATION

- THE USE AND OCCUPANCY DETERMINE THE MAXIMUM SQUARE FOOTAGE OF THE STRUCTURE - THE MAXIMUM SQUARE FOOTAGE IS ALSO LIMITED BY THE NUMBER OF OCCUPANTS IDENTIFY THE OCCUPANT LOAD PER TABLE 1004.5 IN THE CBC IDENTIFY TOTAL ROOF AREA WHICH SHALL NOT EXCEED ALLOWABLE AREA PER TABLE 506.2 IN THE CBC. IDENTIFY EXPECTED NUMBER OF OCCUPANTS BASED ON THE ESTIMATED OCCUPANT LOAD
- TOTAL ROOF AREA DIVIDED BY OCCUPANT LOAD CAN DETERMINE NUMBER OF OCCUPANTS

STEP 2: DESIGN OPTIONS

SELECT ROOF DECK FOR YOUR PROJECT - "MR" REPRESENTS MCELROY METAL "MULTI-RIB" ROOF DECK

- "SS" REPRESENTS MCELROY METAL "MEDALLION-LOK" 16" STANDING SEAM ROOF DECK SELECT WHETHER GUTTERS AND DOWNSPOUTS FROM POLIGON IS NEEDED FOR YOUR PROJECT.

- IF "YES", THEN INCLUDE SHEET MSL7.0 IN THE DRAWING SET ELECT WHETHER ELECTRICAL CUTOUTS ARE NEEDED FOR YOUR PROJECT SHEET MSL7.0 SHOWS ELECTRICAL CUTOUT SIZE AND LOCATION CUTOUTS IN COLUMNS

- SHEET MSL7.1 HAS INSTRUCTIONS AND SHEET TO IDENTIFY WHICH COLUMNS - SHEET MSL7.1 MUST BE FILLED OUT IN THE SUBMITTAL SET APPROVED BY DSA

IF NOTHING IS FILLED IN ON MSL7.1, POLIGON WILL ASSUME CUTOTUS ARE ONLY IN COLUMN A1 (SEE 'FRAMING PLAN' FOR REFERENCE) SELECT CLEAR HEIGHT (SEE 'ARCHITECTURAL VIEWS' SHEET FOR REFERENCE)

- IF NOTHING IS SELECTED, POLIGON WILL ASSUME THE DEFAULT FOR EACH DESIGN OPTION

STEP 3: IDENTIFY THE Ss & S1 ACCELERATION (g) FOR YOUR PROJECT AND GEOTECHNICAL INFORMATION

- Ss & S1 VALUE DETERMINES THE REQUIRED SEISMIC DESIGN FORCES - Ss & S1 VALUE DEPENDS ON PROJECT'S GEOGRAPHICAL LOCATION

- FIND Ss & S1 VALUES FOR YOUR PROJECT IN THE SITE SPECIFIC GEOTECHNICAL REPORT - FIND Ss & S1 VALUES FOR YOUR PROJECT USING https://asce7hazardtool.online/ - THIS PC IS NOT APPROVED FOR Ss VALUES GREATER THAN 2.063 (CONTACT POLIGON FOR ADDITIONAL OPTIONS)

STEP 4: IDENTIFY THE SEISMIC REGION FOR YOUR PROJECT

The regions are dependant on the Ss & S1 Values determined in Step 3 $\,$ THE SEISMIC REGION DICTATES THE MAXIMUM DEAD LOAD PERMITTED (SEE TABLE TO THE LEFT)

STEP 5: IDENTIFY THE ROOF DEAD LOAD FOR YOUR PROJECT

THE ROOF DECK DEAD LOAD WILL ALWAYS BE INCLUDED THE COLLATERAL LOAD REPRESENTS ADDITIONAL LOAD THAT CAN BE SUPPORTED BY THE FRAMI TOTAL ROOF DEAD LOAD MUST BE LESS THAN OR EQUAL TO THE MAX DEAD LOAD SHOWN IN STEP 4 · CUT SHEETS OF ANY BOARDS, BOXES AND EQUIPMENT TO BE MOUNTED ON THE STRUCTURE, INCLUDING WEIGHTS AND DIMENSIONS ARE REQUIRED

STEP 6: IDENTIFY THE LOAD SCENARIO

- REFERENCE THE STEP 4 COLOR AND SELECT THE APPLICABLE LOAD SCENARIO · LOAD SCENARIOS HAVE NO IMPACT ON FRAME DESIGN OR COST, BUT DO AFFECT FOUNDATION SIZE

STEP 7: IDENTIFY PC STRUCTURE

- ROOF WIDTHS UP TO 15' WIDE USE THE "MSL 15" ROOF WIDTHS UP TO 25' WIDE USE THE "MSL 25'

ROOF WIDTHS UP TO 35' WIDE USE THE "MSL 35' the 15', 25', and 35' widths are suggested because they are the most economical MAXIMUM WIDTH IS 35'; (SEE 'ARCHITECTURAL VIEWS' SHEET FOR REFERENCE)

STEP 8: IDENTIFY SITE SPECIFIC ROOF WIDTH AND LENGTH

- DO NOT EXCEED THE TOTAL ROOF AREA FROM STEP 1 (ROOF WIDTH MULTIPLIED BY ROOF LENGTH)

STEP 9: FOUNDATION TYPE

SELECT A FOUNDATION BASED THE DESIRED FOUNDATION TYPE

SELECT EITHER SPREAD PAD OR DRILLED PIER FOUNDATION PRIOR TO APPROVAL FOUNDATION TYPE IMPACTS CONSTRUCTION (TIMING, SEQUENCE, COST, ETC.)

FOUNDATION TYPE IMPACTS ANCHOR BOLT LENGTH (NOT PROVIDED BY POLIGON - REVIEW OF SITE-SPECIFIC SOILS REPORT TO EVALUATE APPLICABILITY OF FOUNDATION OPTIONS AVAILABLE

STEP 10: FOUNDATION SUMMARY

- use the selections from step 6 and step 9 to select the appropriate foundation

STEP 11: SELECT APPLICABLE SHEET INDEX FOR YOUR PROJECT

IDENTIFY THE APPLICABLE SHEET INDEX INCLUDE APPLICABLE SHEETS WITH YOUR DSA SUBMITTAL - EXCLUDE 'MISC DESIGN OPTIONS' SHEET FOR PROJECTS WITHOUT ELECTRICAL CUTOUTS OR GUTTERS EXCLUDE 'ELECTRICAL CUTOUTS' SHEET FOR PROJECTS WITHOUT ELECTRICAL CUTOUTS

STEP 12: MULTIPLE STRUCTURES WITH THE SAME PC#

FILL IN ROOF LENGTH AND WIDTH OF STRUCTURES AS WELL AS QUANTITY - UNO ON THE POLIGON DRAWINGS, POLIGON WILL ASSUME ALL DESIGN CRITERIA FOR EACH STRUCTURE IS THE SAME - CONTACT POLIGON FOR FURTHER INFORMATION

AMERICAN CONCRETE INSTITUTE

STEP 13: COULMN BASE PROTECTION

- SELECT THE METHOD OF COLUMN INSTALLATION ON APPLICABLE FOUNDATION PLAN SHEET, DETAIL 2, NOTE 3.

		SHEET IN	IDEX		
1	MSL1.0	ORDER FORM	11	MSL4.0	FRAME CONNECTION DETAILS- MSL 15
2	MSL1.1	NOTES AND SPECIAL INSPECTIONS	12	MSL4.1	FRAME CONNECTION DETAILS- MSL 25
3	MSL2.0	FOUNDATION PLAN SPREAD PAD - MSL 15	13	MSL4.2	FRAME CONNECTION DETAILS- MSL 35
4	MSL2.1	FOUNDATION PLAN DRILLED PIER - MSL 15	14	MSL5.0	ARCHITECTURAL VIEWS - MSL 15
5	MSL2.2	FOUNDATION PLAN SPREAD PAD - MSL 25	15	MSL5.1	ARCHITECTURAL VIEWS - MSL 25
6	MSL2.3	FOUNDATION PLAN DRILLED PIER - MSL 25	16	MSL5.2	ARCHITECTURAL VIEWS - MSL 35
7	MSL2.4	FOUNDATION PLAN SPREAD PAD - MSL 35	17	MSL6.0	ROOF CONNECTION DETAILS
8	MSL3.0	FRAMING PLAN - MSL 15	18	MSL6.1	ROOF CONNECTION DETAILS
9	MSL3.1	FRAMING PLAN - MSL 25	19	MSL7.0	MISC DESIGN OPTIONS
10	MSL3.2	FRAMING PLAN - MSL 35	20	MSL7.1	ELECTRICAL CUTOUTS

ABBREVIATIONS:

AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	NTS	NOT TO SCALE	
ASM	ASSEMBLY (INTERNAL REFERENCE)	NO	NUMBER	P
ASTM	AMERICAN SOCIETY FOR TESTING AND MAT'LS	ОС	ON CENTER	3.
AWS	AMERICAN WELDING SOCIETY	OSHA	OCCUPATIONAL HEALTH AND SAFETY ADM.	
СВС	CALIFORNIA BUILDING CODE	PCF	POUNDS PER CUBIC FOOT	
CJP	COMPLETE JOINT PENETRATION	PD	POLIGON DRAWING	
CLR	CLEAR	PJ	PRETENSIONED JOINT	
DEG	DEGREE	PLCS	PLACES	3.
DIA	DIAMETER	PLT	PLATE	
DIM	DIMENSION	PSF	POUNDS PER SQUARE FOOT	
DSA	DIVISION OF THE STATE ARCHITECT	PSI	POUNDS PER SQUARE INCH	
EQ	EQUAL	QTY	QUANTITY	
FT	FEET	REF	REFERENCE	
GA	GAGE	SQ	SQUARE	
IN	INCHES	SS	STANDING SEAM ROOF PANEL (MCELROY)	
KSI	KIPS PER SQUARE INCH	TYP	TYPICAL	3.
MAX	MAXIMUM	UNO	UNLESS NOTED OTHERWISE] .
MIN	MINIMUM	USGS	U.S. GEOLOGICAL SURVEY	3.
MISC	MISCELLANEOUS	W/	WITH	
MPH	MILES PER HOUR			

MR

MULTI-RIB ROOF PANEL (MCELROY)

SPECIFICATIONS

PART 1 - GENERAL

1. MONOSLOPE (MSL)

A. STRUCTURE(S) BASED ON THE FOLLOWING PC DESIGN(S):

1.1 STRUCTURE DESCRIPTION

A. MEET THE DESIGN INTENT SHOWN ON THE PC DRAWINGS APPROVED FOR THIS PROJECT. 1. DESIGN CRITERIA

3. HIDDEN BOLTED CONNECTIONS BETWEEN STRUCTURAL MEMBERS 4. COLUMN ANCHORAGE SHALL INCLUDE FOUR (4) BOLTS IN COMPLIANCE WITH OSHA 1926.755(A)(1).

5. NO FIELD WELDING PERMITTED 6. NO FIELD PAINTING PERMITTED

7. ROOF DIMENSIONS AND SLOPES 8. exposed Steel roof fasteners (if applicable) powder coated by manufacturer 9. ROOF DECK SPANS FROM PEAK TO EAVE AND PÉRMITS PROPER DRAINAGE WITHOUT DEBRIS BUILD-

A. DRAWINGS AND CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE APPROPRIATE

B. ONLY MANUFACTURERS THAT SUBMIT DRAWINGS AND CALCULATIONS PRIOR TO BID SHALL BE CONSIDERED . MANUFACTURER MUST BE ABLE TO SUBMIT APPROPRIATE LABORATORY TESTS FOR THE FOLLOWING: FRAME FINISH REQUIREMENTS LISTED IN PART 2 OF THIS SPECIFICATION.

2. CERTIFIED MILL TEST REPORTS FOR STRUCTURAL STEEL (DESCRIBING THE CHEMICAL AND PHYSICAL 3. CERTIFIED MILL TEST REPORTS FOR STRUCTURAL BOLTS.

A. MANUFACTURER MUST HAVE IN-HOUSE ENGINEERING DEPARTMENT AND A PROFESSIONAL ENGINEER LICENSED IN THE APPROPRIATE STATE TO ANSWER TECHNICAL QUESTIONS.

1.5 QUALITY ASSURANCE

A. GENERAL 1. FABRICATION PROCEDURES SHALL COMPLY WITH APPLICABLE CODES AND LOCAL REGULATIONS. 2. REQUIRED STRUCTURAL TESTS AND SPECIAL INSPECTIONS INCLUDED ON THE PROJECT DSA-103 FORM

B. MANUFACTURER QUALIFICATIONS 1. MINIMUM (10) YEARS ENGINEERING AND FABRICATING PRE-ENGINEERED STRUCTURES

. MANUFACTURER OWNED AND OPERATED POWDER COAT PAINT FINISH SYSTEM

3. ALL AWS CERTIFIED WELDERS 4. FULL-TIME PROFESSIONAL ENGINEER ON STAFF LICENSED IN THE APPROPRIATE STATE

5. FULL-TIME AWS CERTIFIED ASSOCIATE WELDING INSPECTOR ON STAFF 6. FULL-TIME QUALITY ASSURANCE MANAGER ON STAFF

7. FULL-TIME LEED AP ON STAFF C. MANUFACTURER CERTIFICATIONS

1. PCI 4000 CERTIFICATION THROUGH POWDER COATING INSTITUTE (PCI) 2. AISC CERTIFIED FABRICATOR

.6 MANUFACTURER WARRANTY

A. STRUCTURE MUST HAVE (10) YEAR LIMITED WARRANTY ON STEEL FRAME MEMBERS. B. STRUCTURE MUST HAVE (10) YEAR LIMITED WARRANTY ON PAINT SYSTEM. . PASS THROUGH WARRANTY OF ROOFING MANUFACTURER SHALL BE PROVIDED UPON REQUEST.

PART 2 - PRODUCTS 2.1 MANUFACTURER

A. ACCEPTABLE MANUFACTURERS POLIGON, A DIVISION OF PORTERCORP.

A. 4240 N 136TH AVE., HOLLAND, MI 49424; (616) 399-1963; <u>WWW.POLIGON.COM</u>.

I. FOR POLIGON STRUCTURES IN *NORTHERN CALIFORNIA*, THE LOCAL REPRESENTATIVE IS ALL ABOUT PLAY (WWW.PLAYGROUNDPROS.COM). EMAIL AAP@PLAYGROUNDSALES

.<u>COM</u> OR CALL 916-923-2180
II. FOR POLIGON STRUCTURES IN *SOUTHERN CALIFORNIA*, THE LOCAL REPRESENTATIVE IS MIRACLE PLAYGROUND SALES (<u>WWW.MIRACLEPLAYGROUNDSALES.COM</u> EMAIL <u>SALES@MIRACLEPLAYGROUND.COM</u> OR CALL (951) 695-4515

1. THE ENGINEERING FOR THIS STRUCTURE IS ONLY APPLICABLE IF POLIGON SUPPLIES THE MATERIAL.

2. IF THE CONTRACTOR ELECTS TO SUBSTITUTE A DIFFERENT STRUCTURE, THEY ARE RESPONSIBLE TO OBTAIN THE NECESSARY DSA APPROVAL WITH: A. NO COST TO THE DISTRICT OR ARCHITECT

B. NO CHANGE TO THE CONSTRUCTION SCHEDULE 3. Substitutions must be approved a minimum of (10) days before bid. 4. ALL APPROVED MANUFACTURERS SHALL BE NOTIFIED IN WRITING BEFORE THE BID DATE.

5. SUBSTITUTE MANUFACTURERS SHALL NOT BE ALLOWED TO BID WITHOUT WRITTEN NOTIFICATION.

6. SUBSTITUTE MANUFACTURERS MUST MEET "MANUFACTURER QUALIFICATIONS" LISTED IN PART 1 OF THIS SPECIFICATION. 7. SUBSTITUTE MANUFACTURERS MUST PROVIDE PROOF OF

"MANUFACTURER CERTIFICATIONS" ABOVE 8. SUBSTITUTE MANUFACTURERS MUST PROVIDE PAINT FINISH DESCRIBED IN "FRAME FINISH"

2.2 FRAME A. MATERIALS

1. ANCHOR BOLTS: SEE DRAWINGS FOR REQUIREMENTS. ANCHOR BOLTS NOT PROVIDED BY 2. STRUCTURAL STEEL: SEE DRAWINGS FOR REQUIREMENTS 3. STRUCTURAL BOLTS: SEE DRAWINGS FOR REQUIREMENTS.

1. FRAME FINISH: POLI-5000 POWDER COAT. NO FIELD PAINTING PERMITTED.

A. COMPONENTS SHALL BE CLEANED, PRE-TREATED, AND FINISHED AT A FACILITY OWNED AND DIRECTLY SUPERVISED BY THE MANUFACTURER. B. COMPONENTS SHALL BE SHOT BLASTED TO SSPC-SP10 NEAR-WHITE BLAST CLEANING. SSPC-SP2 HAND TOOL CLEANING WILL NOT BE AN ACCEPTABLE ALTERNATIVE.

C. COMPONENTS SHALL BE PRETREATED IN A (3) STAGE IRON PHOSPHATE OR EQUAL WASHER. D. COMPONENTS SHALL RECEIVE EPOXY PRIMER COAT FOR SUPERIOR CORROSION PROTECTION. COMPONENTS SHALL RECEIVE TOP COAT OF SUPER DURABLE TGIC POWDER COAT. FINISH SHALL NOT HAVE ANY VOC EMISSIONS G. MANUFACTURER SHALL BE ABLE TO PRODUCE DOCUMENTATION STATING SAMPLE

PRODUCTION COMPONENTS HAVE BEEN TESTED TO MEET THE FOLLOWING: I. SALT SPRAY RESISTANCE PER ASTM B 117/ ASTM D 1654 TO 10,000 HOURS WITH NO CREEP FROM SCRIBE LINE AND RATING OF 10. II. HUMIDITY RESISTANCE PER ASTM D2247-02 TO 5,000 HOURS WITH NO LOSS OF ADHESION

OR BLISTERING. III. COLOR/UV RESISTANCE PER ASTM G154-04 TO 2,000 HOURS EXPOSURE, ALTERNATE CYCLES WITH RESULTS OF NO CHALKING, 75% COLOR RETENTION, COLOR VARIATION MAXIMUM 3.0 E VARIATION CIE FORMULA (BEFORE AND AFTER 2,000 HOURS EXPOSURE)

2. FRAME COLOR: DETERMINED BY DISTRICT. C. FABRICATION 1. FABRICATE COMPONENTS TO PERMIT BOLTED CONNECTIONS ON SITE. NO FIELD WELDING

PERMITTED 2. LABEL EACH MEMBER WITH UNIQUE PART NUMBER TO STREAMLINE ERECTION. 3. WELDING REQUIREMENTS: SEE DRAWINGS FOR REQUIREMENTS.

2.3 ROOF

 ROOF MATERIAL: SEE DRAWINGS FOR REQUIREMENTS. 2. ROOF HARDWARE: SEE DRAWINGS FOR REQUIREMENTS

1. ROOF FINISH: KYNAR 500 HIGH-PERFORMANCE RESIN-BASED PAINT. 2. ROOF COLOR: DETERMINED BY OWNER.

2.4 MISCELLANEOUS A. MATERIAIS

 CONCRETE MATERIAL: SEE DRAWINGS FOR REQUIREMENTS. CONCRETE NOT PROVIDED BY MANUFACTURER.

PART 3 - EXECUTION

3.1 STORAGE AND HANDLING

A. PROTECT MATERIAL AFTER DELIVERY FROM WEATHER, SUNLIGHT, AND DAMAGE B. ELEVATE MATERIAL TO ALLOW CIRCULATION AND REDUCE MOLD, FUNGI DECAY, AND INSECT INFESTATION. C. HANDLE MATERIAL WITH PROTECTIVE STRAPS OR PADDED FORKLIFT. HANDLING MATERIAL WITH CHAIN OR CABLE WILL NOT BE ACCEPTED AND MAY VOID MANUFACTURER'S WARRANTY.

A. INSTALL COMPONENTS ACCORDING TO MANUFACTURER'S INSTALLATION DRAWINGS AND THESE SPECIFICATIONS. B. ANCHOR BOLT AND COLUMN LAYOUT IS CRITICAL C. COMPLY WITH SPECIFIC BOLTING INSTALLATION REQUIREMENTS PROVIDED ON DRAWINGS REQUIRING THE

D. TO PREVENT MOISTURE DAMAGE TO ANY WOOD MATERIAL (IF APPLICABLE), KEEP WOOD PACKAGED

BEFORE INSTALLATION AND COVER IMMEDIATELY WITH ANY SECONDARY ROOF MATERIAL.

CONTRACTOR TO COORDINATE THIS PHASE OF CONSTRUCTION WITH THE SPECIAL BOLTING INSPECTOR AND THE INSPECTOR OF RECORD PRIOR TO THE ERECTION OF THE FRAME. D. NO FIELD SLOTTING OR OPENING OF HOLES WILL BE ALLOWED. TOLERANCES ON STEEL STRUCTURAL MEMBERS ARE SET ACCORDING TO AISC CONSTRUCTION PRACTICES, FOLLOWED DURING FABRICATION,

AND CANNOT BE INCREASED. E. AFTER INSTALLATION, RESTORE DAMAGED SURFACES TO THE ORIGINAL CONDITION USING TOUCH-UP PAINT PROVIDED BY MANUFACTURER. IF THE ARCHITECT DOES NOT ACCEPT THAT, REPLACE DAMAGED MATERIAL AT NO COST TO THE DISTRICT.

COORDINATE AS REQUIRED WITH OTHER DISCIPLINES (ELECTRICAL, PLUMBING, ETC.) . COMPLY WITH ALL APPLICABLE OHSA REQUIREMENTS

A. DO NOT ATTEMPT ANY FIELD CHANGES TO THE STRUCTURE WITHOUT FIRST CONTACTING THE MANUFACTURER

3.4 QUALITY CONTROL A. TESTS AND INSPECTIONS DURING ERECTION ARE NOT REQUIRED BY THE MANUFACTURER, BUT MAY BE B. THE PROJECT INSPECTOR, AND ENTIRE CONSTRUCTION OVERSIGHT PROCESS, SHALL COMPLY WITH

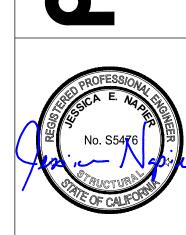
DSA PR 13-01. DO NOT PROCEED UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

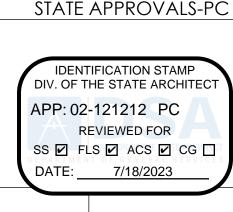


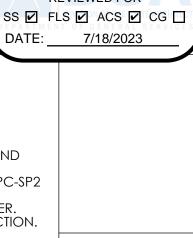
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GENERAL:

- 1. GENERAL NOTES AND TYPICAL DETAILS SHALL APPLY TO ALL PARTS OF THE JOB EXCEPT WHERE THEY MAY CONFLICT WITH DETAILS AND NOTES ON OTHER SHEETS. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF CONSTRUCTION SHALL BE USED SUBJECT TO REVIEW BY THE STRUCTURAL ENGINEER FOR THIS PROJECT.
- 2. WORK SHALL CONFORM TO THE REQUIREMENTS, AS AMENDED TO DATE, OF THE LATEST ADOPTED EDITION OF THE CBC, C.A.C. TITLE 24, AND ALL OTHER LOCAL, STATE AND FEDERAL REGULATIONS.
- 3. OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER FOR THIS PROJECT PRIOR TO PROCEEDING WITH ANY WORK INVOLVED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS. ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE STRUCTURAL ENGINEER FOR THIS PROJECT AND BE RESOLVED BEFORE PROCEEDING WITH THE WORK.
- THESE CONSTRUCTION DRAWINGS AND SPECIFICATIONS 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, INCLUDING, BUT NOT LIMITED TO, BRACING, TEMPORARY SUPPORTS, AND SHORING. OBSERVATION VISITS TO THE SITE BY FIELD REPRESENTATIVES OF THE ARCHITECT/ENGINEER SHALL NOT INCLUDE INSPECTIONS OF THE PROTECTIVE MEASURES OR THE CONSTRUCTION PROCEDURES. ANY SUPPORT SERVICES PERFORMED BY THE ARCHITECT/ENGINEER DURING THE CONSTRUCTION SHALL BE DISTINGUISHED FROM CONSTRUCTION AND DETAILED INSPECTION SERVICES WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ARCHITECT/ENGINEER, WHETHER OF MATERIAL OR WORK, ARE FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH CONTRACT DOCUMENTS, BUT DO NOT GUARANTEE CONSTRUCTION.
- 6. ASTM DESIGNATIONS AND ALL STANDARDS REFER TO THE LATEST AMENDMENTS.
- 7. CONFORM TO APPLICABLE CAL/OSHA CONSTRUCTION SAFETY REGULATIONS FOR ALL WORK PERFORMED DURING CONSTRUCTION. JOB SITE SAFETY IS STRICTLY THE RESPONSIBILITY OF THE CONTRACTOR AND NOT THE ARCHITECT/ENGINEER OR OWNER.
- 8. THE ENGINEER AND THEIR CONSULTANTS SHALL HAVE NO RESPONSIBILITY FOR THE DISCOVERY, HANDLING, REMOVAL OR DISPOSAL OF HAZARDOUS MATERIALS AT THE PROJECT SITE, INCLUDING BUT NOT LIMITED, TO ASBESTOS, ASBESTOS PRODUCTS, POLYCHLORINATED BIPHENYL (PCB) OR OTHER TOXIC SUBSTANCES.
- SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS, OR IF A CHANGE IN THE SCOPE OF WORK IS PROPOSED, A CONSTRUCTION CHANGE DOCUMENT DETAILING AND SPECIFYING THE REQUIRED CHANGE(S) SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.
- 10. THE SCHOOL DISTRICT'S INSPECTOR OF RECORD SHALL INSPECT AND APPROVE THE ERECTED FRAME PRIOR TO ROOF INSTALLATION.
- 11. SEE REQUIREMENTS FOR LOCATION IN ANY FIRE HAZARD SEVERITY ZONE FOR WILDLAND URBAN INTERFACE AREAS (WUI) AS SPECIFIED IN THE APPLICABLE VERSION OF THE CALIFORNIA BUILDING CODE. PROVIDE PROTECTION AND DETAILS OF ALL AREAS COMPLYING WITH THE WUI REQUIRMENTS.
- 12. LOCATING THIS STRUCTURE CLOSER THAN 20 FEET TO OTHER STRUCTURES MAY AFFECT THE ALLOWABLE AREA FOR THE EXISTING CONSTRUCTION PER THE APPLICABLE VERSION OF THE CALIFORNIA BUILDING CODE.
- 13. VIEWS AND DETAILS ARE NOT DRAWN TO SCALE (UNLESS NOTED OTHERWISE). DO NOT SCALE THESE DRAWINGS.
- 14. OTHER SITE SPECIFIC ITEMS MAY BE REQUIRED.
- 15. WHEN A SITE-SPECIFIC PROJECT IS LOCATED IN A FLOOD ZONE OTHER THAN ZONE X, A LETTER STAMPED AND SIGNED FROM A SOILS ENGINEEER IS NEEDED TO VALIDATE THE ALLOWABLE SOIL VALUES SPECIFIED IN THE PC ARE STILL APPLICABLE.

STRUCTURAL AND MISCELLANEOUS STEEL:

- ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) 360-16 AND 303-16 REFERENCED BY THE 2022 EDITION OF THE CALIFORNIA BUILDING CODE.
- 2. PIPE SECTIONS SHALL CONFORM TO ASTM A53, Fy = 35 ksi, GRADE B UNLESS NOTED OTHERWISE.
- 3. STRUCTURAL TUBING (HSS SHAPES) SHALL CONFORM TO ASTM A500, GRADE B (OR HIGHER), Fy = 46 KSI.
- 4. IF MATERIAL AVAILABILITY IS LIMITED, MEMBER THICKNESSES CAN BE INCREASED BEYOND WHAT IS SHOWN IN THESE DRAWINGS (MAXIMUM INCREASE OF 1/8").
- 5. ALL CHANNELS, ANGLES, PLATES AND MISC. STEEL SHALL CONFORM TO ASTM A36, Fy = 36 KSI.
- 6. ALL COLD FORM STEEL SHALL CONFORM TO ASTM A653, CS = TYPE B, Fy = 50 KSI.
- 7. STRUCTURAL STEEL AND DECK SHALL BE IDENTIFIED FOR CONFORMITY PER CBC 2202A.1
- 8. ROOF DECK SHALL HAVE KYNAR 5000 METAL COATING.
- 9. ROOF DECK SHALL CONFORM TO ATSM A792, Fy = 50 KSI.
- 10. MR ROOF SCREWS MEET ASTM A510 WITH A HEAD DIMENSION OF 0.31" (FLAT-TO-FLAT) AND INTEGRAL WASHER DIMENSION OF 0.58" (OUTSIDE DIAMETER).
- 11. SS ROOF SCREWS MEET ASTM A510 WITH A HEAD DIMENSION OF 0.437" (OUTSIDE DIAMETER).

WELDING:

- ALL WELDING SHALL COMPLY WITH AWS D1.1 SPECIFICATIONS AND SHALL BE DONE BY AWS QUALIFIED WELDERS CERTIFIED FOR THE TYPE OF WELDING TO BE PERFORMED.
- 2. ALL WELDING SHALL BE DONE BY GAS METAL ARC PROCESS WITH E70XX ELECTRODES. FLUX CORE ARC WELD SHALL CONFORM TO CHARPY NOTCH TOUGHNESS RATING OF 20 ft-lb @ (0° F).
- 3. ALL WELDING SHALL BE DONE IN THE SHOP WITH REQUIRED INSPECTION, PRE-APPROVED BY DSA, TO ENSURE PROPER MATERIAL ID AND WELDING.
- 4. WELD FILLER METAL MANUFACTURER SHALL PROVIDE WRITTEN CERTIFICATION OF COMPLIANCE WITH CODE AND SPECIFICATIONS.

BOLTING:

ALL BOLTS SHOWN ON THESE DRAWINGS ARE ASTM F3125 (A325 TYPE 1) HIGH STRENGTH BOLTS (UNO) AND SHALL BE HOT DIPPED GALVANIZED PER ASTM F2329.

- HIGH STRENGTH BOLTS SHALL BE SAMPLED AND TESTED IN COMPLANCE WITH CBC 2213A.1.
- 3. BEFORE ERECTING THE FRAME, VERIFY ALL BOLTS AND NUTS ARE CLEAN OF DEBRIS AND BURRS INCLUDING THE HARDWARE ALREADY FASTENED INSIDE THE MEMBERS. CHASING SOME OF THE BOLTS AND NUTS MAY BE REQUIRED.
- 4. ANCHOR BOLTS (HEAVY HEX HEAD, ASTM F1554, GRADE 55) SHALL BE HOT DIPPED GALVANIZED PER ASTM F2329. ANCHOR BOLTS MAY BE HEADED OR THREADED WITH A NUT THAT IS PREVENTED FROM ROTATING.
- 5. HIGH STRENGTH NUTS SHALL CONFORM TO ASTM A563 AND SHALL BE GALVANIZED PER ASTM F2329.
- 6. HIGH STRENGTH WASHERS SHALL CONFORM TO ASTM F436 AND SHALL BE GALVANIZED PER ASTM F2329.
- THE BOLTING INSTALLATION REQUIREMENTS OUTLINED BELOW ARE CRITICAL TO THE STRUCTURE'S DESIGN AND PERFORMANCE. THE INSTALLER IS REQUIRED TO COORDINATE THIS PHASE OF CONSTRUCTION WITH THE SPECIAL BOLTING INSPECTOR AND THE INSPECTOR OF RECORD PRIOR TO THE ERECTION OF THE FRAME. ALL BOLTS SHALL BE INSTALLED AND INSPECTED PER THE APPLICABLE VERSION OF AISC'S "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS", CBC 1705A.2.1; AISC 341-16 J7; AISC 360-16 N5.6.
- A. PRETENSIONED JOINTS (IDENTIFIED ON THE FRAME CONNECTION DETAILS WITH A "PJ REQUIRED") MUST BE INSTALLED AND INSPECTED TO MEET ONE OF FOLLOWING REQUIREMENTS:
 - 1. TURN-OF-NUT PRETENSIONING
 - 2. CALIBRATED WRENCH PRENTENSIONING
 - DIRECT-TENSION-INDICATOR PRETENSIONING (CONTRACTOR RESPONSIBLE FOR PURCHASE OF REQUIRED WASHERS)
- B. ALL OTHER JOINTS MUST BE INSTALLED AND INSPECTED TO MEET THE REQUIREMENTS OF SNUG-TIGHTENED JOINTS. NOTE TO INSTALLER AND INSPECTOR(S): THE SNUG-TIGHT CONDITION EXISTS, IN PART, WHEN ALL THE BOLTS IN THE JOINT HAVE BEEN TIGHTENED SUFFICIENTLY TO PREVENT THE REMOVAL OF THE NUTS WITHOUT THE USE OF A WRENCH

THE CONTRACTOR, SPECIAL BOLTING INSPECTOR AND THE INSPECTOR OF RECORD MUST ALL AGREE ON WHICH APPROACH WILL BE USED TO PRETENSION THE BOLTS. THE CONTRACTOR IS RESPONSIBLE FOR DOCUMENTING THE APPROACH AGREED TO BY ALL PARTIES LISTED ABOVE.

FOUNDATIONS:

- 1. ALLOWABLE SOIL PRESSURES ASSUME CLASS 5 SOIL CLASSIFICATION PER 2022 CBC TABLE 1806A.2
- 2. FILL AND BACKFILL SHALL BE COMPACTED TO 95% OF MAX. DENSITY IN ACCORDANCE WITH ASTM TEST METHOD D1557. FLOODING NOT PERMITTED.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING, ETC. NECCESSARY TO SUPPORT CUT AND/OR FILL BANKS DURING EXCAVATION, AND FORMING AND PLACEMENT OF CONCRETE.
- 4. STRUCTURES SHALL BE SETBACK FROM ADAJCENT SLOPES TO PROVIDE FIRM MATERIAL FOR EMBEDMENT AND FOR PROTECTION FROM SLOPE DRAINAGE, EROSION, AND SHALLOW FAILURES.
 - A. BOTTOM OF ASCENDING SLOPE: THE SMALLER OF HALF THE HEIGHT OF THE SLOPE AND 15FT MEASURED FROM THE FACE
 - OF THE STRUCTURE TO THE TOE OF THE SLOPE B. TOP OF DECENDING SLOPE: THE SMALLER OF A THIRD OF THE HEIGHT OF THE SLOPE AND 40 FT MEASURED FROM THE FACE OF THE FOOTING TO THE TOP OF THE SLOPE

ALTERNATE SETBACKS ARE PERMITTED, SUBJECT FOR APPROVAL. A GEOTECHNICAL INVESTIGATION MAY BE

5. STRUCTURES PLACED ON LIQUIFIABLE SOILS OR SITE CLASS F MAY NOT BE SUBMITTED FOR AN OVER THE COUNTER

CONCRETE:

. MIX DESIGN REQUIREMENTS: (NORMAL WEIGHT CONCRETE)

MINIMUM STRENGTH f'c	EXPOSURE CATEGORY	MAXIMUM	SLUMP	UNIT WEIGHT
(28 DAYS)		W/C RATIO	(± 1'')	(NORMAL WEIGHT)
5000 PSI	F3, S3, W2, C2	0.4	4"	150 PCF

- 2. CHANGES TO THE MIX DESIGN MUST BE APPROVED BY THE ENGINEER OR ARCHITECT OF RECORD AND DSA
- 3. AGGREGATES SHALL CONFORM TO ASTM C33. MAX AGGREGATE SIZE = 1".
- 4. CEMENT SHALL CONFORM TO ASTM C150 (TYPE V) WITH A MAXIMUM EXPANSION OF 0.040%, FOR SULFATE
- 5. ADMIXTURES CONTAINING CALCIUM CHLORIDE ARE PROHIBITED.
- 6. CONCRETE EXPOSED TO FREEZING-AND-THAWING CYCLES SHALL BE AIR ENTRAINED PER ACI 318-19 SECTION
- 7. CONCRETE SHALL BE MAINTAINED IN A MOIST CONDITION FOR A MINIMUM OF FIVE DAYS AFTER PLACEMENT.
- ALTERNATE METHODS WILL BE APPROVED IF SATISFACTORY PERFORMANCE CAN BE ASSURED.
- 8. CONCRETE SHALL NOT FREE FALL MORE THAN FIVE FEET.
- 9. CONCRETE SHALL BE PROPORTIONED PER ACI 318-19 26.4.
- 10. CONCRETE SHALL BE TESTED PER CBC 1910A.1, 1705A.3, AND ACI 318-19 26.13. BATCH PLANT INSPECTION NOT REQUIRED. CONTRACTOR SHALL IMPLEMENT WEIGHTMASTER AND BATCH TICKET REQUIREMENTS OF CBC 1705A.3.3.1.

REINFORCING STEEL:

- REINFORCING STEEL SHALL BE DEFORMED STEEL CONFORMING TO THE REQUIREMENTS OF ASTM A615, (DEFORMATIONS SHALL BE IN ACCORDANCE WITH ASTM A305) AS FOLLOWS:

 GR 60: (#4 BARS AND LARGER)
- 2. DETAILING, FABRICATION, AND ERECTION OF REINFORCING BARS SHALL CONFORM TO THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCING CONCRETE STRUCTURES."
- . MIN. COVER FOR CAST-IN-PLACE CONCRETE SHALL BE AS FOLLOWS:

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Α.	CAST AGAINST EARTH		3"
	CAST AGAINST FORM BELOW		2"
C.	FORMED SLABS (#11 BAR & SA	MALLER)	3/4"
D.	SLABS ON GRADE (FROM TOF	° OF SLÁB)	1"
E.	COLUMNS AND BEÂMS (MAIN	I BARS)	2"
F. '	WALLS EXPOSED TO WEATHER	(#6-#18 BARS)	2''
		(#5 & SMALLER)	11/2"
G.	NOT EXPOSED TO WEATHER	(#11 & SMALLEŔ)	

- 4. BARS SHALL BE CLEAN OF RUST, GREASE OR OTHER MATERIAL LIKELY TO IMPAIR BOND. BENDS SHALL BE MADE
- 5. FOR #6 BARS AND SMALLER, REINFORCING SHALL BE LAP SPLICED 45 BAR DIA MINIMUM IN CONCRETE. FOR #7 BARS AND LARGER, REINFORCING SHALL BE LAP SPLICED 55 BAR DIAMETERS MINIMUM IN CONCRETE. ALL LAP SPLICES MUST COMPLY WITH ACI 318-19.
- 6. PRIOR TO PLACING OF CONCRETE, REINFORCING STEEL AND EMBEDDED ITEMS SHALL BE WELL SECURED IN
- 7. WELDING OF REINFORCING IS NOT ALLOWED
- 8. REINFORCING STEEL SHALL BE SAMPLED AND TESTED PER CBC 1910A.2.

POWDER COATED AND EPOXY PRIMED FINISH:

- 1. ENTIRE POWDER COATING PROCESS COMPLETED IN SAME FACILITY AS STEEL FABRICATION.
- 2. ALL CARBON STEEL MEMBERS (COLUMNS, BEAMS, PLATES, ETC.) PAINTED WITH PRIME COAT PER THE "AISC CODE OF STANDARD PRACTICE" AND THE "AISC SPECIFICATION SECTION M3" (UNLESS NOTED OTHERWISE).
- 3. PARTS PRETREATED IN A 3 STAGE IRON PHOSPHATE WASHER (OR EQUAL).
- 4. EPOXY PRIMER POWDER COAT APPLIED TO PARTS FOR SUPERIOR CORROSION PROTECTION.
- 5. TOP POWDER COAT OF SUPER DURABLE TGIC (COLOR SELECTED FROM MANUFACTURER'S STANDARD OPTIONS OR CUSTOM COLOR).
- SAMPLE PRODUCTION PARTS TESTED TO MEET THE FOLLOWING CRITERIA:
 - A. SALT SPRAY RESISTANCE PER ASTM B 117/ ASTM D 1654

 1. 10000 HOURS WITH NO CREEP FROM SCRIBE LINE AND RATING OF 10
 - B. HUMIDITY RESISTANCE PER ASTM D2247-02

 1. 5000 HOURS WITH NO LOSS OF ADHESION OR BLISTERING
 - C. COLOR/UV RESISTANCE PER ASTM G154-04
 - 1. 2000 HOURS EXPOSURE ALTERNATE CYCLES WITH NO CHALKING, 75% COLOR RETENTION, AND COLOR VARIATION MAXIMUM 3.0 E VARIATION CIE FORMULA (BEFORE AND AFTER 2000 HOURS EXPOSURE

CONSTRUCTION NOTES

- . A DSA-CERTIFIED CLASS 2 INSPECTOR IS REQUIRED FOR THIS PROJECT.
- 2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY DSA, AS REQURIED BY SECTION 4-338, PART 1, TITLE 24 CCR AND DSA IR A-6.
- 3. A "DSA-CERTIFIED" PROJECT INSPECTOR EMPLOYED BY THE OWNER (E.G. DISTRICT, ETC.) AND APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.
- A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE OWNER (E.G. DISTRICT, ETC.) SHALL CONDUCT ALL THE REQUIRED TEST AND INSPECTIONS FOR THE PROJECT.

NOTICE OF DISCLAIMER FOR STRUCTURAL ENGINEER RESPONIBILITY

- 1. FOR THE SITE-SPECIFIC PROJECT, NEITHER POLIGON OR GHD ARE THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE.
- 2. FOR THE SITE-SPECIFIC PROJECT, GHD AND POLIGON'S RESPONSIBILITY IS LIMITED TO THE PREPARATION OF THE PLANS AND SPECIFICATIONS FOR THE STRUCTURES OF THIS PC ONLY.
- 3. STRUCTURAL OBSERVATION OF CONSTRUCTION IS SPECIFICALLY EXCLUDED FROM GHD AND POLIGON'S RESPONSIBILITY FOR THE SITE-SPECIFIC PROJECT.
- 4. ALL CONSTRUCTION ACTIVITIES RELATED TO STRUCTURAL ENGINEERING MAY BE DELEGATED TO A QUALIFIED ENGINEER BY THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE. THESE ACTIVITIES INCLUDE, BUT ARE NOT LIMITED TO, APPROVAL OF INSPECTOR QUALIFICATIONS, STRUCTURAL OBSERVATIONS OF CONSTRUCTION, REVIEW OF INSPECTIONS REPORTS, AND SIGNING OFF ON THE VERIFIED REPORT FOR COMPLETED WORK.
- 5. POLIGON WILL BE RESPONSIBLE FOR RESPONDING TO QUESTIONS PERTAINING TO THE PLANS AND SPECIFICATIONS FOR THE STRUCTURES OF THIS PC WHICH ARISE DURING PLAN REVIEW AND CONSTRUCTION.

SPECIAL INSPECTION NOTES:

S2. SOIL COMPACTION AND FILL

S/A2. HIGH-STRENGTH BOLTS:

a. Verify identification markings and manufacturer's

certificates of compliance conform to ASTM standards

Test or Special Inspection

- 1. THE PROJECT INSPECTOR AND TESTING AGENCY SHALL BE SELECTED BY THE SCHOOL DISTRICT AND APPROVED BY DSA AND THE ARCHITECT OF RECORD.
- 2. COSTS OF THE PROJECT INSPECTOR AND THE TESTING AGENCY SHALL BE BORN BY THE SCHOOL DISTRICT.
- 3. THE PROJECT INSPECTOR, AND ENTIRE CONSTRUCTION OVERSIGHT PROCESS, SHALL COMPLY WITH DSA PR 13-01.
- 4. ON APPROVED PC DRAWINGS, THE STATEMENT OF STRUCTURAL TESTS AND SPECIAL INSPECTIONS (FORM DSA-103) BELOW <u>IS ONLY AN EXAMPLE</u>.

 ON APPROVED PC DRAWINGS, THE EXAMPLE FORM DSA-103 MUST BE CROSSED OUT BEFORE THE PC DRAWINGS CAN BE APPROVED

 AS PART OF A SITE SPECIAL CORP. THE PROJECT SO THEY WILL NOT CONFLICT WITH THE OFFICIAL FORM DSA-103 FOR THE PROJECT.

AS PART OF A SITE-SPECIFIC (OR STOCKPILE) PROJECT SO THEY WILL NOT CONFLICT WITH THE OFFICIAL FORM DSA-TUS FOR THE PROJECT.							
DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2022 CBC							
	,						
Application Number:	School Name:	School District:					
7 pproducti rambori	our rand	College District					
DSA File Number:	Increment Number:	Date Submitted:					

IMPORTANT: This form is only a summary list of structural tests and some of the special inspections required for the project.

Generally, the structural tests and special inspections noted on this form are those that will be performed by the Geotechnical Engineer of Record, Laboratory of Record, or Special Inspector. The actual complete test and inspection program must be performed as detailed on the DSA approved documents. The appendix at the bottom of this form identifies work NOT subject to DSA requirements for special inspection or structural testing. The project inspector is responsible for providing inspection of all facets of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high-load wood diaphragms, cold-formed steel framing, anchorage of non-structural components, etc., per Title 24, Part 2, Chapter 17A (2022 CBC).

**NOTE: Undefined section and table references found in this document are from the CBC, or California Building Code.

TYPE Continuous – Indicates that a continuous special inspection is required periodic – Indicates that a periodic special inspection is required periodic – Indicates that a periodic special inspection is required periodic – Indicates that a periodic special inspection is required Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335. PI – Indicates that the special inspection may be performed by a project inspector when specifically approved by

Test or Special Inspection a. Verify that: See Notes PI Refer to specific items identified in the Appendix listing exemptions for limitations. Placement of controlled fill and/or excavations are extended to proper depth and have reached proper material. Materials below footings are adequate to achieve the design bearing capacity. Type Performed By Code References and Notes Refer to specific items identified in the Appendix listing exemptions for limitations. Placement of controlled fill exceeding 12" depth under foundations is not permitted without a geotechnical report.		S1. GENERAL:			
 Site has been prepared properly prior to placement of controlled fill and/or excavations for foundations. Foundation excavations are extended to proper depth and have reached proper material. Materials below footings are adequate to achieve the 		Test or Special Inspection	Туре	Performed By	Code References and Notes
	Ø	Site has been prepared properly prior to placement of controlled fill and/or excavations for foundations. Foundation excavations are extended to proper depth and have reached proper material. Materials below footings are adequate to achieve the	See Notes	PI	exemptions for limitations. Placement of controlled fill exceeding 12" depth under foundations is not permitted without

SI – Indicates that the special inspection shall be performed by an appropriately qualified/approved special.

Performed By | Code References and Notes

Performed By | Code References and Notes

Performed By | Code References and Notes

Table 1705A.2.1 Items 1a & 1b, 2202A.1; AISC 360-16 Section

A3.3, J3.1, and N3.2; RCSC 2014 Section 1.5 & 2.1; DSA IR 17-

Sample and test anchor bolts and anchor rods not readily

dentifiable per procedures noted in DSAIR 17-11.

		ement and compaction during		* Under the supervision of a geotechnical engineer or LOR's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations.		
Ø	a. Verify use of proper materials, densities and inspect lift thicknesses, placement and compaction during placement of fill.					
2	b. Compaction testing. Test		LOR*	* Under the supervision of a geotechnical engineer or LOR's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations.		
	S4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):					
	Test or Special Inspection	Туре	Performed By	Code References and Notes		
V	a. Inspect drilling operations and maintain complete and accurate records for each pier.	Refer to specific items identified in the Appelexemptions for limitations. ters, plumbness, and Continuous PI Continuous inspection to be provided by		Continuous inspection to be provided by project inspector. Refer to specific items identified in the Appendix listing exemptions for limitations.		
V	b. Verify pier locations, diameters, plumbness, and lengths. Record concrete or grout volumes.			Continuous inspection to be provided by project inspector. Refer to specific items identified in the Appendix listing exemptions for limitations.		
	c. Concrete piers.			er CONCRETE section below.		

	Test or Special Inspection	Туре	Performed By	Code References and Notes
✓	a. Verify use of required design mix.	Periodic	SI	Table 1705A.3 Item 5, 1910A.1.
✓	b. Identifiy, sample, and test reinforcing steel.	Test	LOR	1910A.2; ACI 318-19 Ch. 20 and Section 26.6.1.2; DSA IR 17- 10. (See Appendix (end of this form) for exemptions.)
☑	c. During concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	Test	LOR	Table 1705A.3 Item 6; ACI 318-19 Sections 26.5 & 26.12.
V	d. Test concrete (fc).	Test	LOR	1905A.1.17; ACI 318-19 Section 26.12.
Ø	e. Batch plan inspection:	See Notes	SI	Default of 'Continuous' per 1705A.3.3. If approved by DSA, batch plant inspection may be reduced to 'Periodic' subject to requirements in Section 1705.A.3.3.1, or eliminated per 1705A.3.3.2. See IR 17-13. (See Appendix (end of this form) fexemptions.)

	Test or Special Inspection	Туре	Performed By	Code References and Notes
Ø	a. Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	Periodic	*	Table 1705A.2.1 Item 3a–3c. 2202A.1; AISI S100-20 Section A3.1 & A3.2, AISI S240-20 Section A3 & A5, AISI S220-20 Sections A4 & A6. * By special inspector or qualified technicial when performed off-site.
✓	b. Test unidentified materials	Test	LOR	2202A.1.
✓	c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.
V	Verify and document steel fabrication per DSA- approved construction documents.	Periodic	SI	Not applicable to cold-formed steel light-frame construction, except for trusses (1705A.2.4).

	specified in the DSA-approved documents.			8 & DSA IR 17-9.	
Ø	b. Test high-strength bolts, nuts and washers.	Test	LOR	Table 1705A.2.1 Item 1c, 2213A.1 ; RCSC 2014 Section 7.2; DSA IR 17-8.	
☑	c. Bearing-type ("snug tight") connections.	Periodic	SI	Table 1705A.2.1 Item 2a, 1705A.2.6, 2204A.2; AISC 360-16 J3.1, J3.2, M2.5 & N5.6; RCSC 2014 Section 9.1; DSA IR 17-9.	
7	d. Pretensioned and slip-critical connections.	*	SI	Table 1705A.2.1 Items 2b & 2c, 1705A.2.6, 2204A.2; AISC 360-16 J3.1, J3.2, M2.5 & N5.6; RCSC 2014 Sections 9.2 & 9.3; DSA IR 17-9. * "Continuous" or "Periodic" depends on the tightening	
	S/A3. WELDING:				
	Test or Special Inspection	Туре	Performed	Code References and Notes	
✓	A. Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents and the WPS.	Periodic	SI	1705A.2.5, Table 1705A.2.1 Items 4 & 5; AWS D1.1 and AWS D1.8 for structural steel; AWS D1.2 for Aluminum; AWS D1.3 for cold-formed steel; AWS D1.4 for reinforcing steel; DSA IR 17-3.	
Ø	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.	
✓	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.	
	S/A4. SHOP WELDING (IN ADDITION TO SECTION S/A3):				
	Test or Special Inspection	Туре	Performed By	Code References and Notes	
✓	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	Continuous	SI	Table 1705A.2.1 Items 5a.1-4; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.	
	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof	Periodic	SI	1705A.2.2. Table 1705A.2.1 Items 5a.5 & 5a.6; AISC 360-16	

Name of Architect or Engineer in general responsible charge:

Name of Structural Engineer (When structural design has been delegated):

S/A9. ANCHOR BOLTS AND ANCHOR RODS:

Test or Special Inspection

a. Anchor Bolts and Anchor Rods

Signature of Architect or Structural Engineer: Date:

Note: To facilitate DSA electronic mark-ups and identification stamp application, DSA recommends against using secured electronic or digital signatures.

Test

DSA STAMP

DSA 103-22: LIST OF REQUIRED VERIFIED REPORTS, CBC 2022

1. Soils Testing and Inspection: Geotechnical Verified Report Form DSA 293

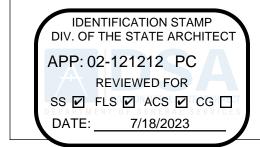
Structural Testing and Inspection: Laboratory Verified Report Form DSA 291
 Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292
 High-Strength Bolt Installation Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

STATE APPROVALS-SITE

4080 PLAZA GOLDORADO CIRCLE SUITE B, CAMERON PARK, CA 95682 530,677,5515



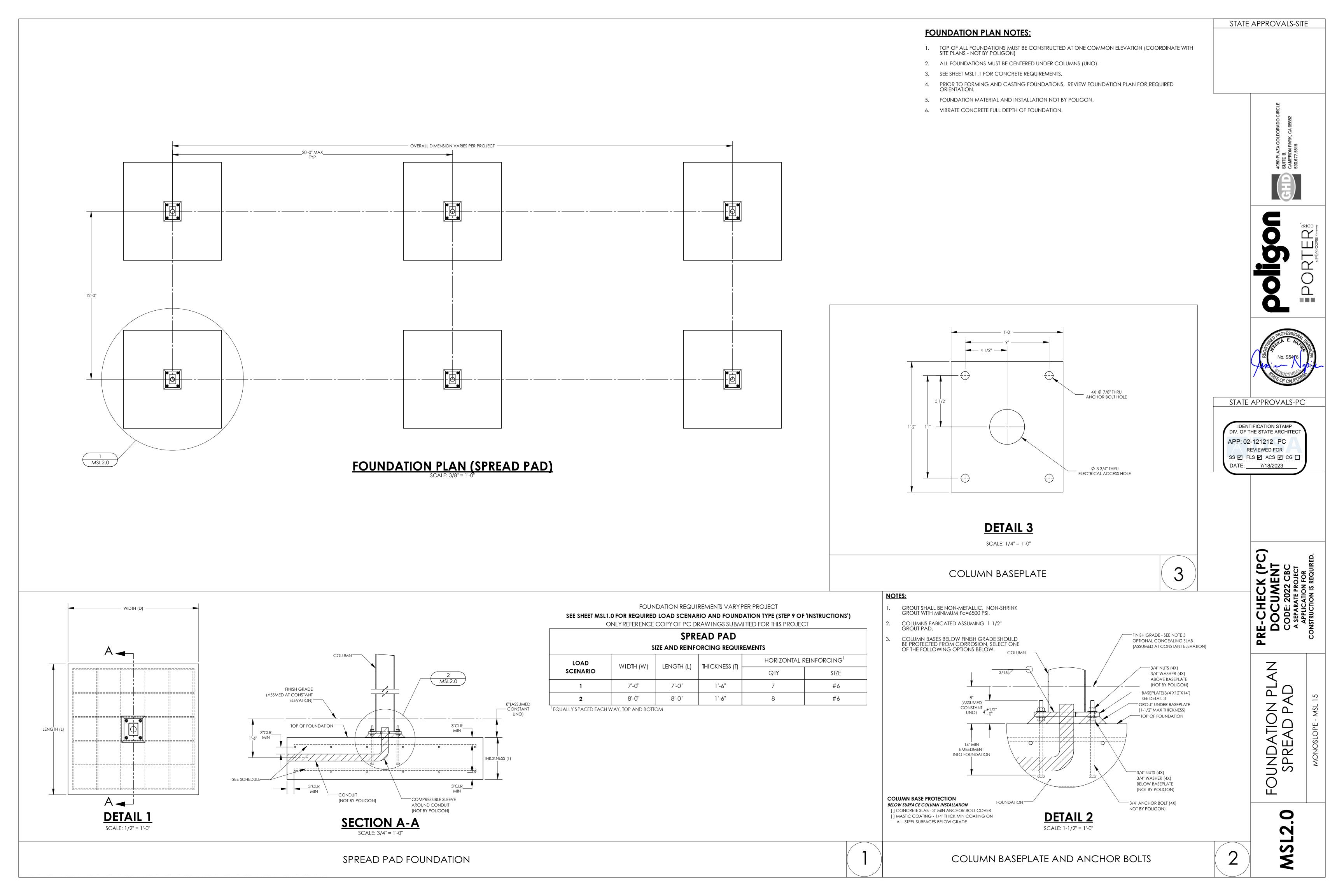


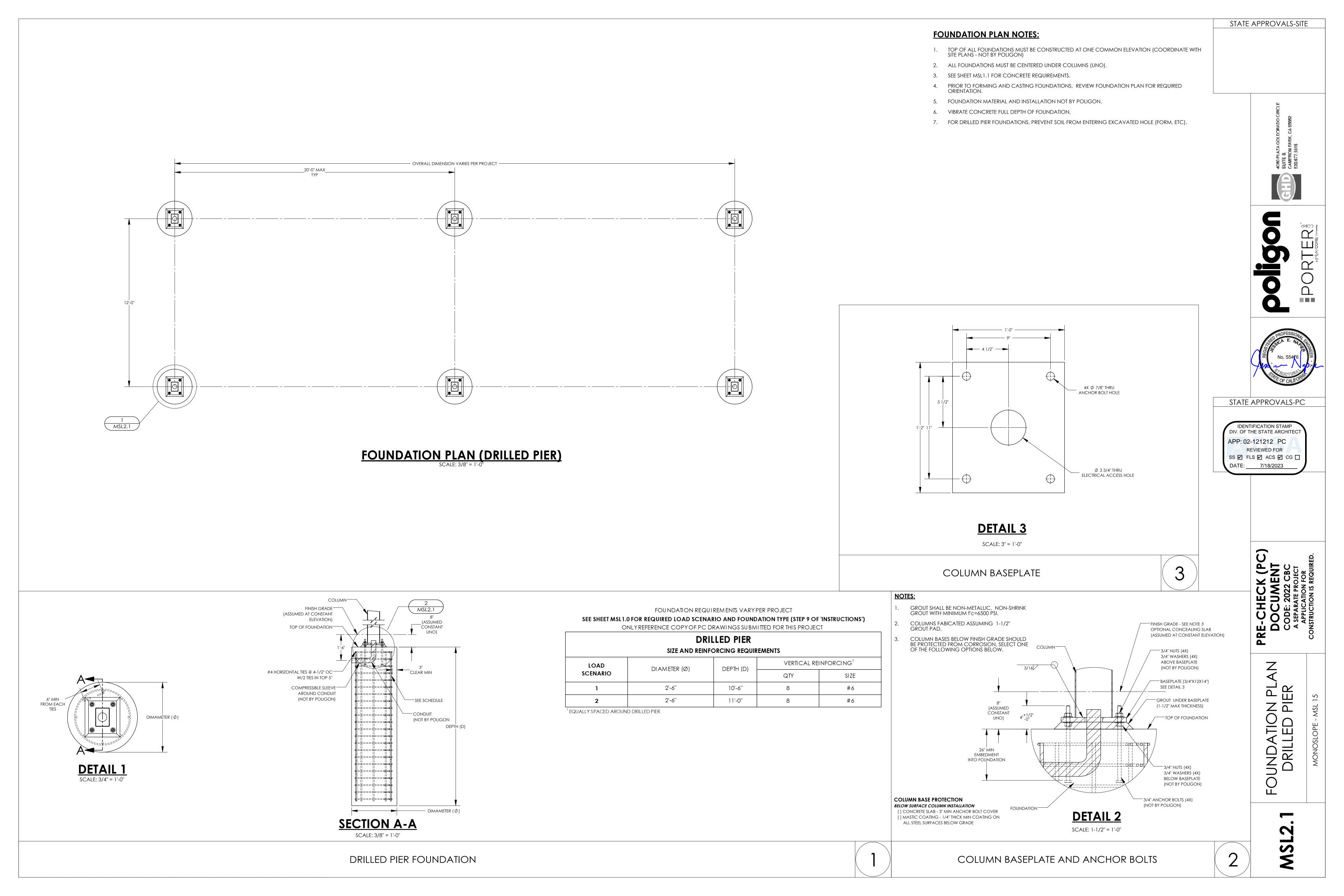


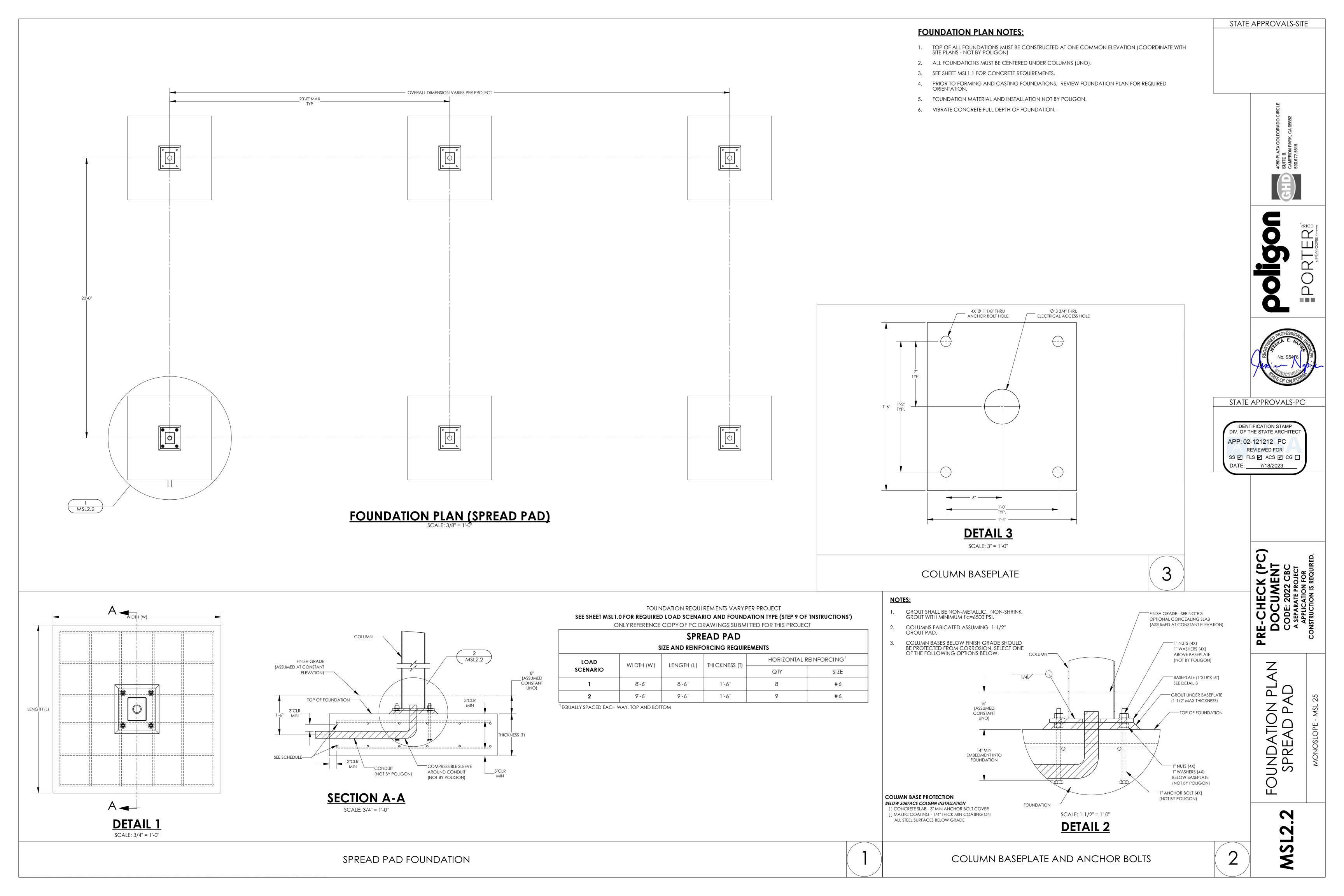
E-CHECK (PC)
DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT
APPLICATION FOR

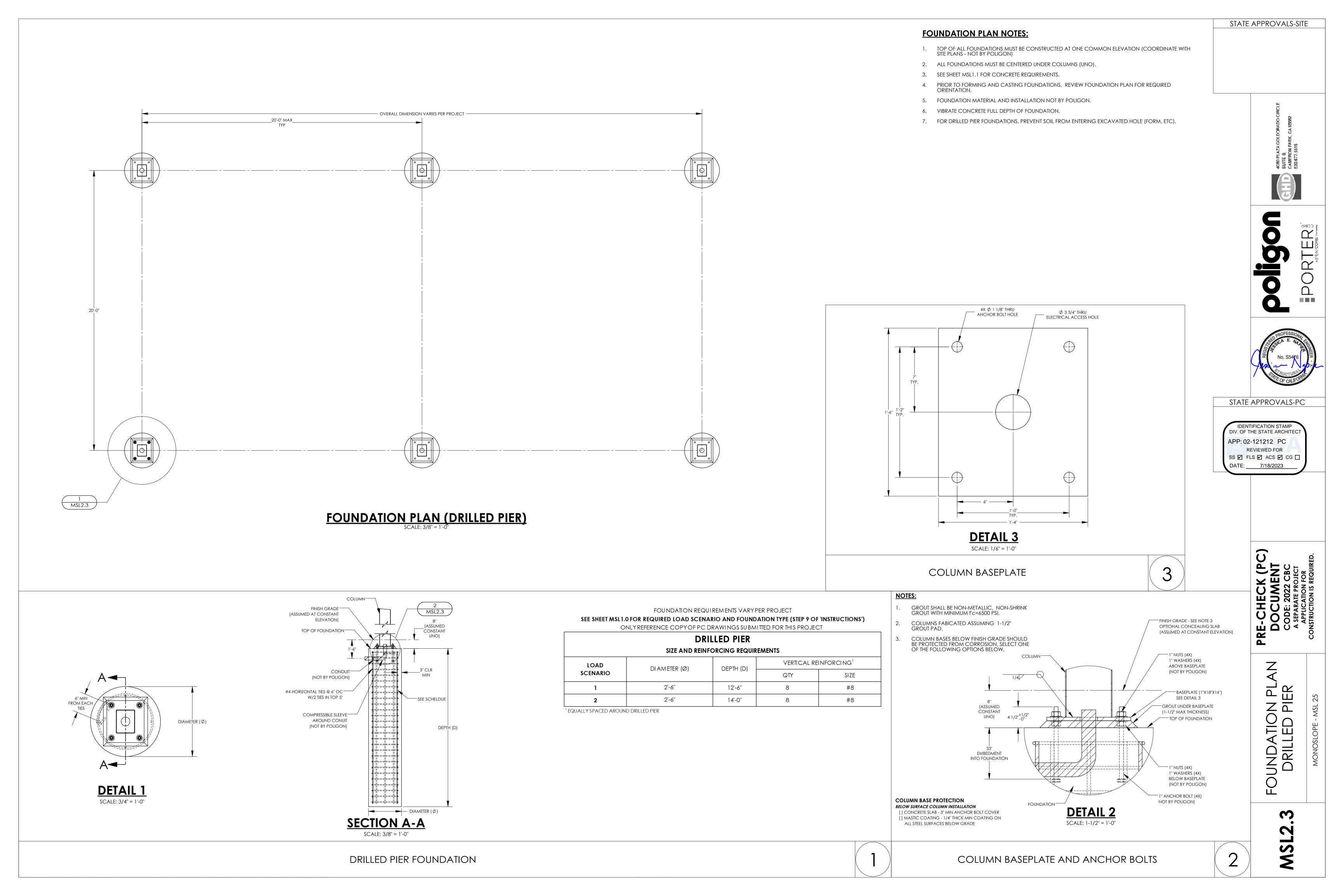
TES AND SPECIA INSPECTIONS

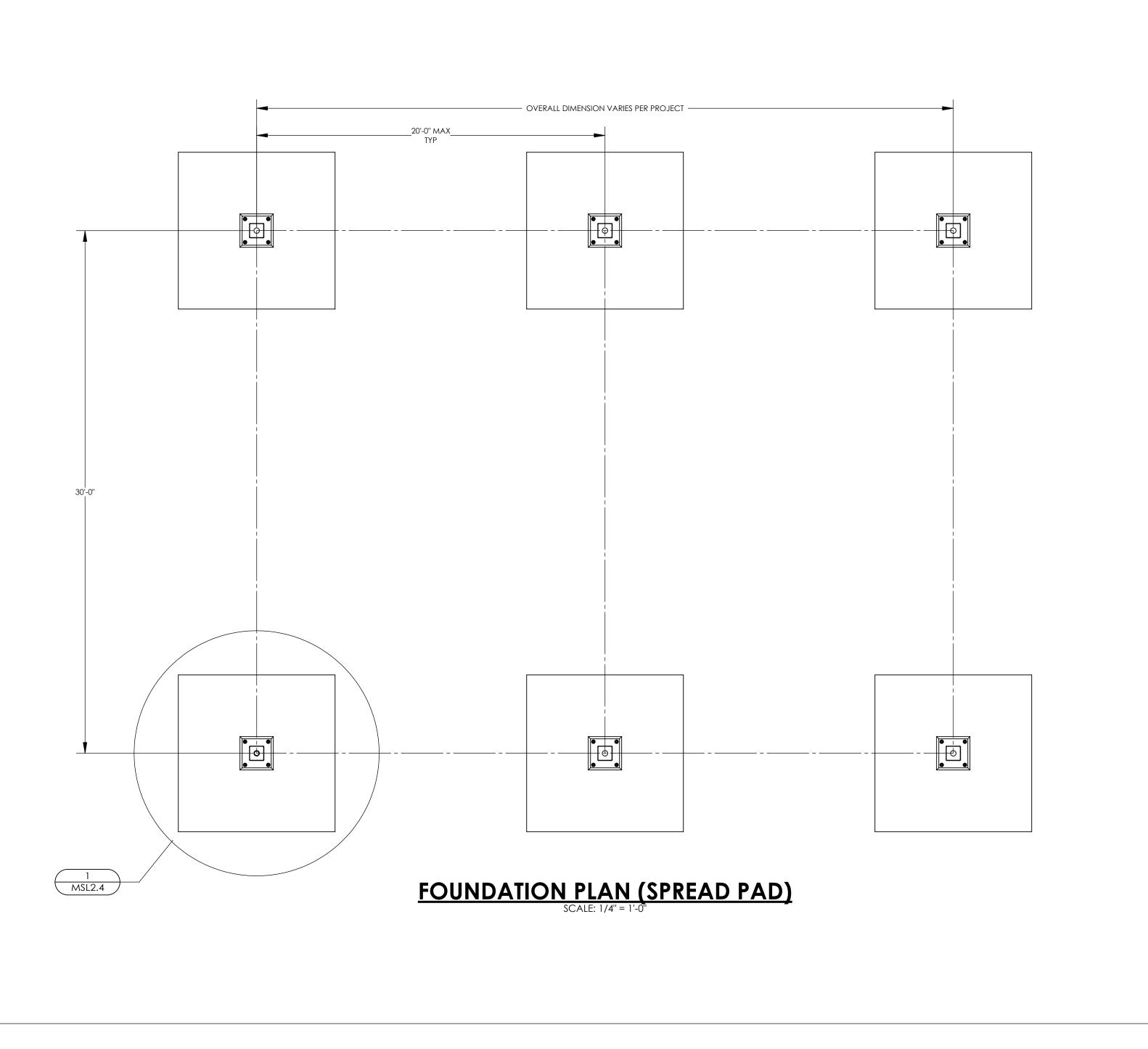
WSL1,1





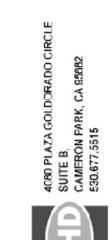




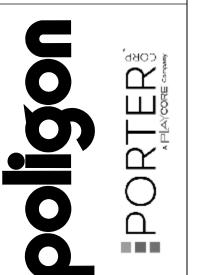


FOUNDATION PLAN NOTES:

- TOP OF ALL FOUNDATIONS MUST BE CONSTRUCTED AT ONE COMMON ELEVATION (COORDINATE WITH SITE PLANS NOT BY POLIGON)
- 2. ALL FOUNDATIONS MUST BE CENTERED UNDER COLUMNS (UNO).
- 3. SEE SHEET MSL1.1 FOR CONCRETE REQUIREMENTS.
- 4. PRIOR TO FORMING AND CASTING FOUNDATIONS, REVIEW FOUNDATION PLAN FOR REQUIRED
- 5. FOUNDATION MATERIAL AND INSTALLATION NOT BY POLIGON.
- 6. VIBRATE CONCRETE FULL DEPTH OF FOUNDATION.



STATE APPROVALS-SITE





STATE APPROVALS-PC

4X Ø 1 1/8" THRU

Ø 3 3/4" THRU

- FINISH GRADE - SEE NOTE 3

OPTIONAL CONCEALING SLAB

(ASSUMED AT CONSTANT ELEVATION)

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 02-121212 PC REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 CG 🗌 DATE: 7/18/2023

DETAIL 3 SCALE: 3" = 1'-0"

COLUMN BASEPLATE

GROUT SHALL BE NON-METALLIC, NON-SHRINK GROUT WITH MINIMUM I'C=6500 PSI.

COLUMNS FABICATED ASSUMING 1-1/2" GROUT PAD.

NOTES:

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APPLICA
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UNDA-SPREA

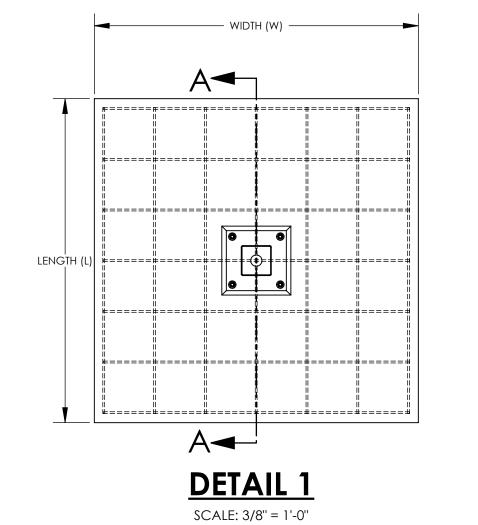
MSL2

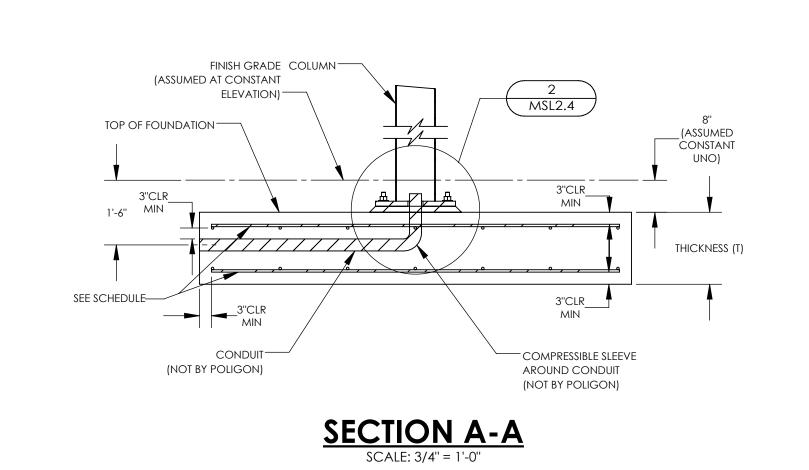
FOUNDATION REQUIREMENTS VARYPER PROJECT

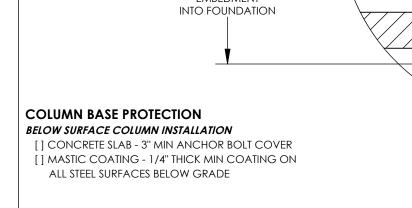
SEE SHEET MSL1.0 FOR REQUIRED LOAD SCENARIO AND FOUNDATION TYPE (STEP 9 OF 'INSTRUCTIONS') ONLY REFERENCE COPY OF PC DRAWINGS SUBMITTED FOR THIS PROJECT

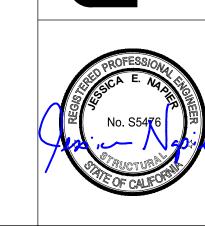
SPREAD PAD SIZE AND REINFORCING REQUIREMENTS HORIZONTAL REINFORCING¹ LOAD WIDTH (W) LENGTH (L) THICKNESS (T) SCENARIO QTY SIZE 10'-0'' 10'-0'' 1'-6'' #6 11'-6'' 1'-6'' 11 #6

¹ EQUALLY SPACED EACH WAY, TOP AND BOTTOM









IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APP: 02-121212 PC

REVIEWED FOR
SS FLS ACS CG CG

DATE: 7/18/2023

IECK (PC)
UMENT

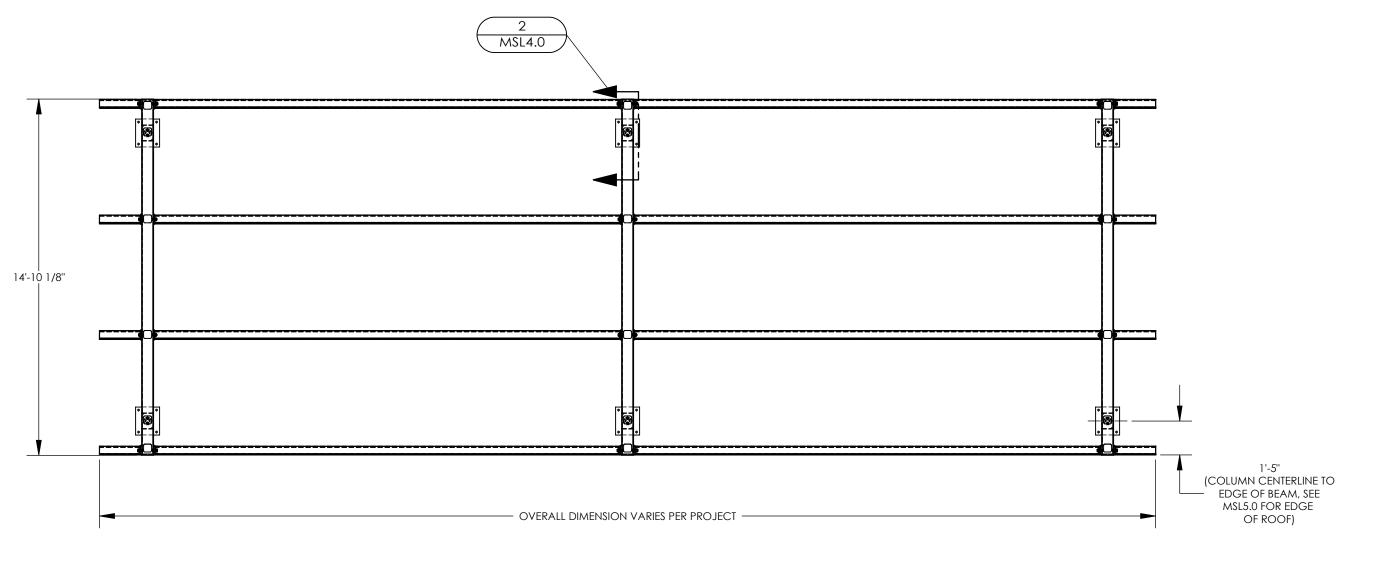
PRE-CHECK (PDOCUMENT DOCUMENT CODE: 2022 CBC A SEPARATE PROJECT APPLICATION FOR

FRAMING PLAN

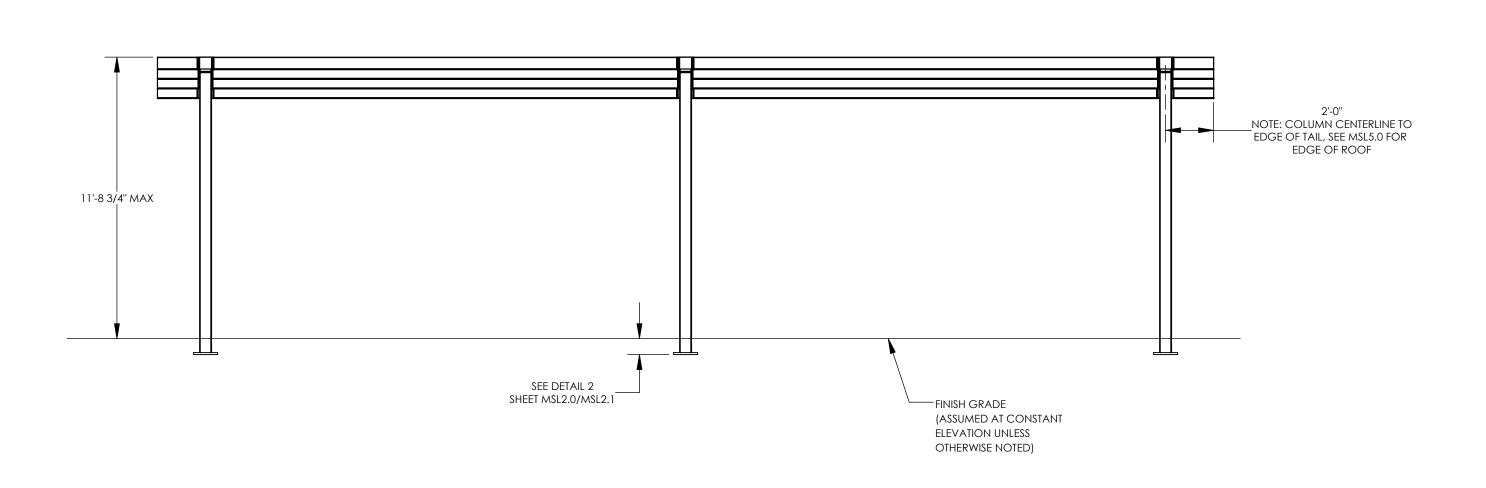
MSL3.0

ISOMETRIC VIEW

SCAIR- 1/4-1-10

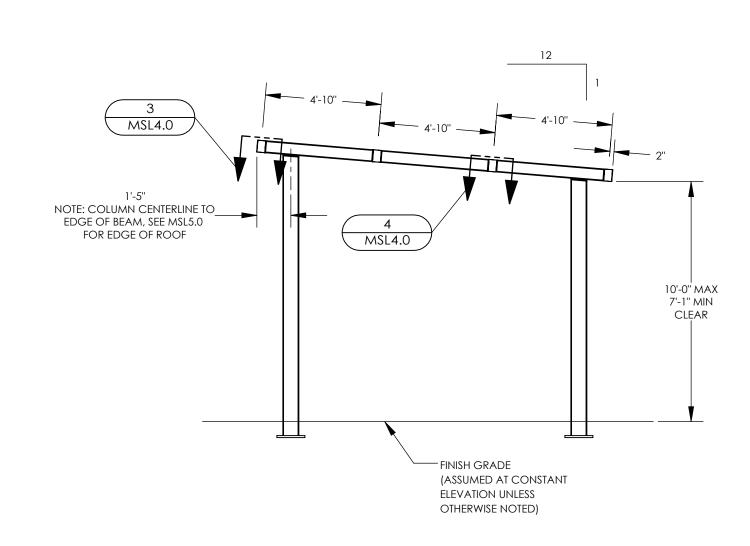


PLAN VIEW SCALE: 1/4" = 1'-0"



FRONT ELEVATION

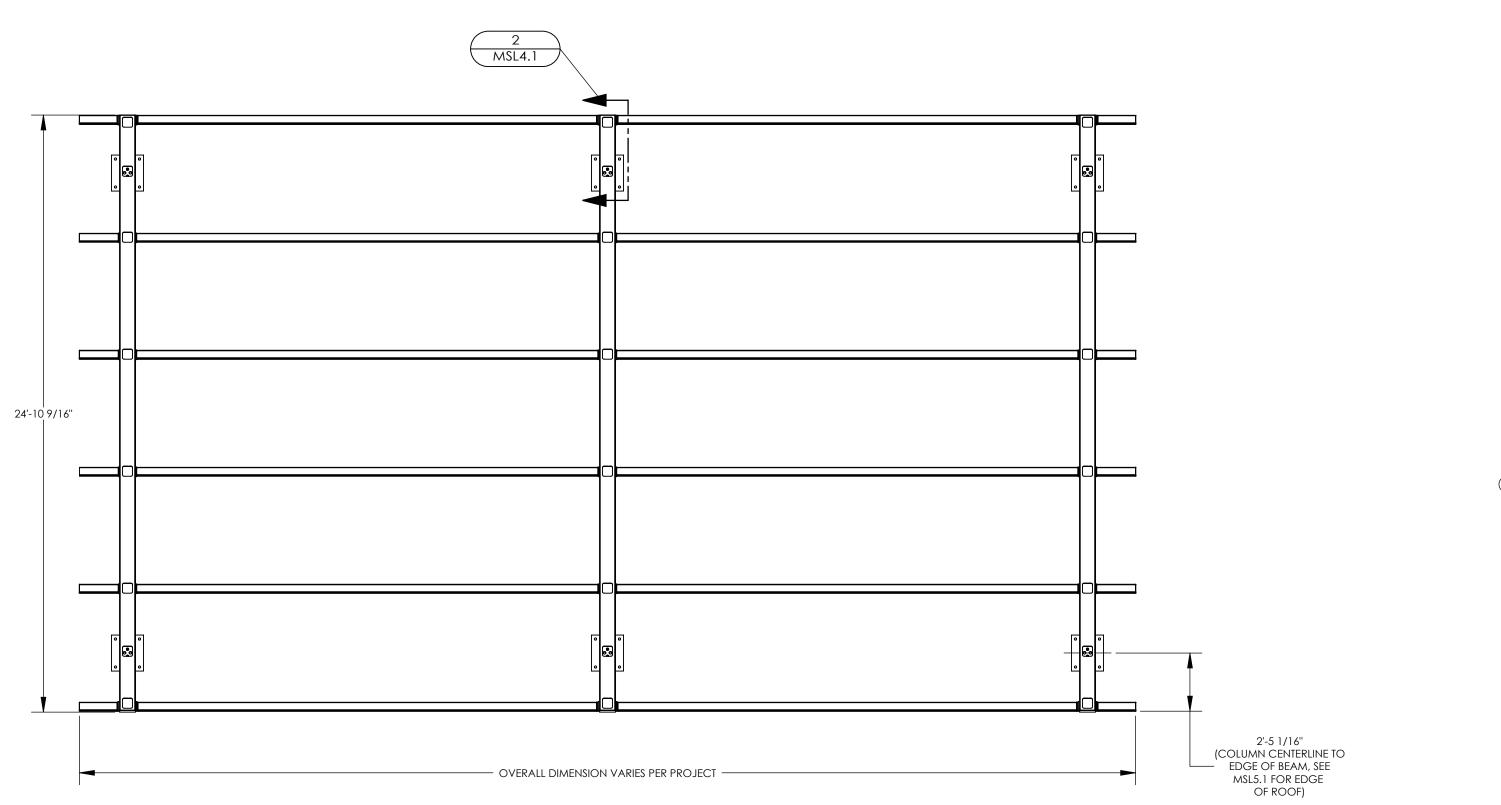
SCALE: 1/4" = 1'-0"

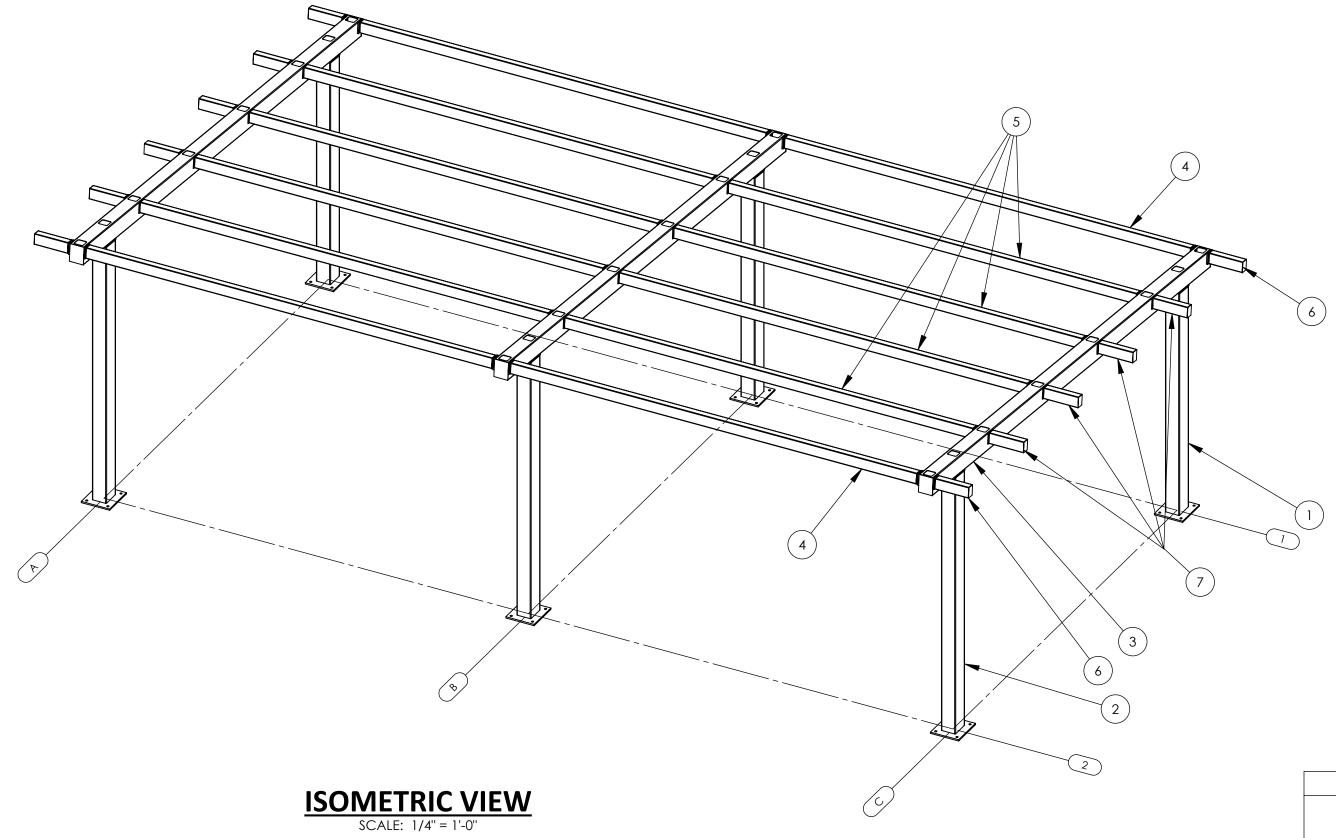


SCALE: 1/4" = 1'-0"

7	4	-	PURLIN TAIL ASM	HSS6x4x1/8	16.92
6	4	-	EBEAM TAIL ASM	HSS6x4x1/8	18.13
5	4	-	PURLIN ASM	HSS6x4x1/8	161.76
4	4	-	EAVE BEAM ASM	HSS6x4x1/8	164.19
3	3	-	GABLE BEAM_1 ASM	HSS6X6X3/16	249.59
2	3	-	COL_2 ASM	HSS8X6X3/16	245.60
1	3	-	COL_1 ASM	HSS8X6X3/16	228.63
ITEM	QTY.	PART NO.	DESCRIPTION	MATERIAL	WEIGHT







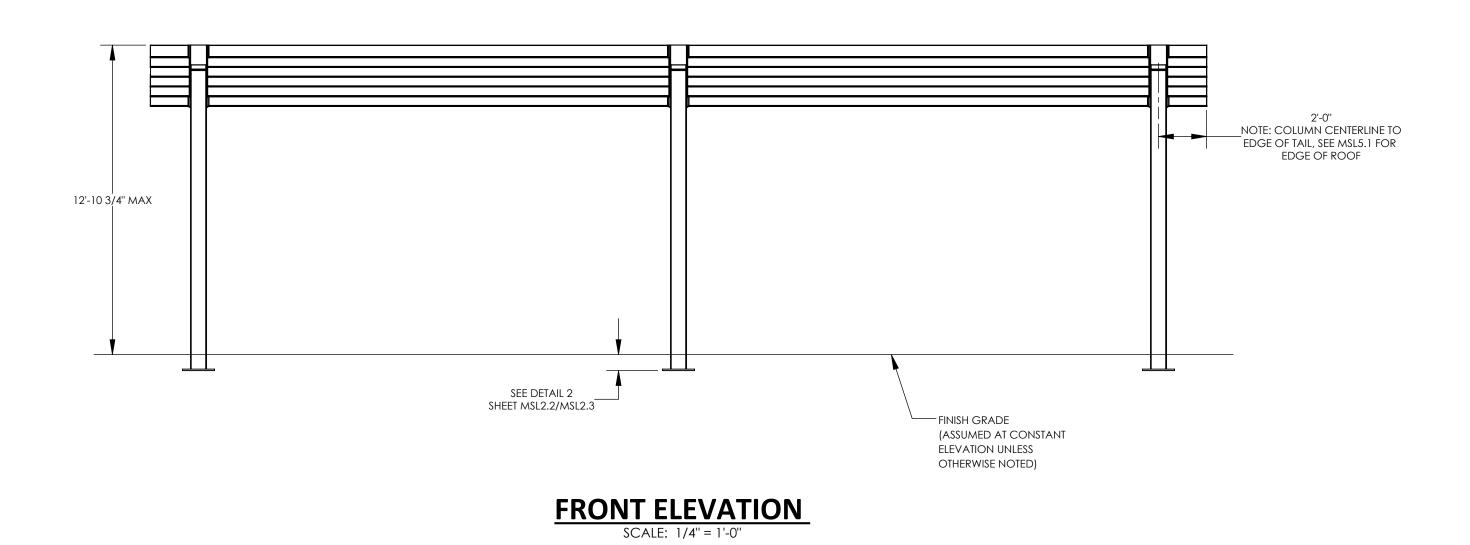
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APP: 02-121212 PC

REVIEWED FOR
SS FLS ACS CG

DATE: 7/18/2023

PLAN VIEW
SCALE: 1/4" = 1'-0"



4-10 11/16"

4-10 11/16"

4-10 11/16"

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4-10 11/16"

4-10

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

7	8	-	PURLIN TAIL ASM	HSS6X4X1/8	16.39
6	4	-	EBEAM TAIL ASM	HSS6X4X1/8	17.51
5	8	-	PURLIN ASM	HSS6X4X1/8	160.58
4	4	-	EAVE BEAM ASM	HSS6X4X1/8	162.84
3	3	-	GABLE_1 ASM	HSS10X8X3/16	594.19
2	3	-	COL_2 ASM	HSS10X8X3/16	339.19
1	3	-	COL_1 ASM	HSS10X8X3/16	302.45
ITEM	QTY.	PART NO.	DESCRIPTION	MATERIAL	WEIGH1
			-		

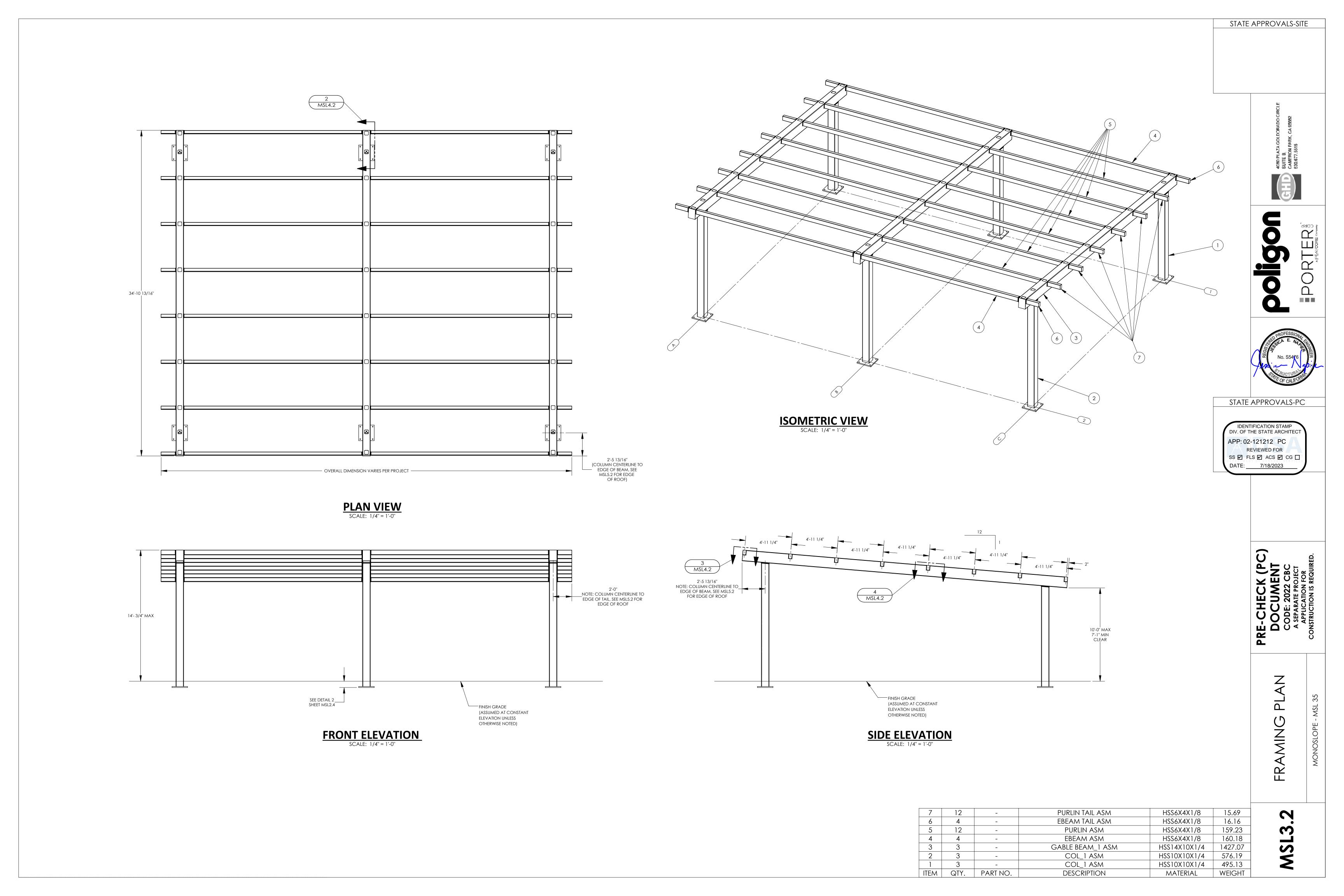
PRE-CHECK (PC)

DOCUMENT

CODE: 2022 CBC

-RAMING PLAN

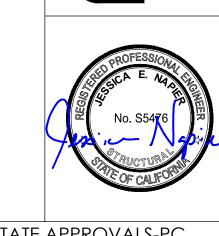
MSL3.1

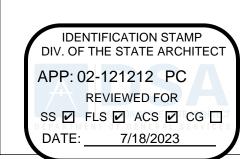








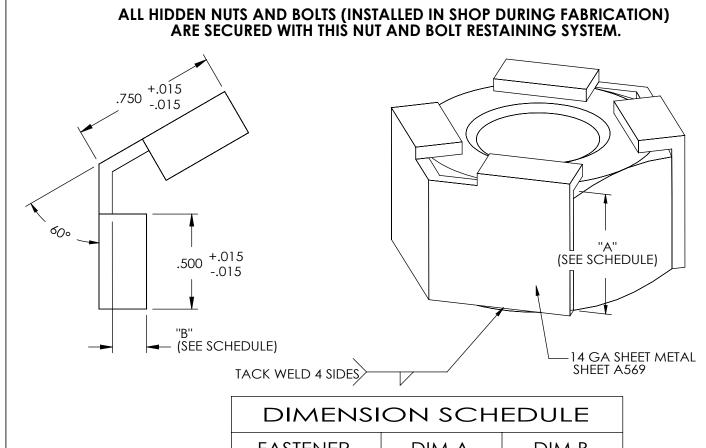




FRAME ONNECTION DETAILS

MSL4.0





DIMENSION SCHEDULE								
FASTENER	DIV	ΛА	DIN	ИΒ				
5/8" NUT	.631	+.000 015	.180	+.015 015				
5/8" BOLT	.403	+.000 015	.250	+.015 015				
3/4" NUT	.758	+.000 015	.180	+.015 015				
3/4" BOLT	.483	+.000 015	.375	+.015 015				
1" NUT	1.012	+.000 015	.180	+.015 015				
1" BOLT	.643	+.000 015	.375	+.015 015				



/ 4"x4" HAND ACCESS

GABLE BEAM

(3/16)

(HSS6X6X3/16) _____

2

NUT, HEX, 5/8-11

(2-1/2 SPACING)

-3/8"x6"x8" PLATE

3/16(3/16)

(HSS8X6X3/16)

w/ 3/8"x6"x8-3/4" FLG. PLT.

(2) PLCS EACH CONNECTION

EAVE BEAM AND EAVE TAIL CONNECTIONS

EAVE BEAM (HSS6X4X1/8)

(3/16)

____5/8"x6"x4" PLT

5/8"x6"x4-3/8" PLT

3/8"x6"x4" PLT

5/8"x6"x4-3/8" PLT

-4"x4" HAND ACCESS

_GABLE BEAM

(HSS6X6X3/16)

1/8(1/8)

1/8" SHIM (IF REQUIRED) —

BOLT, HEX, 5/8-11x2-1/2 (2) PLCS EACH CONNECTION_

BOLT, HEX, 5/8-11x2-1/4

10GA (.1345") COVER PLATE

(3-1/2" SPACING)

1/8(1/8)

PJ REQUIRED

3/16(3/16)

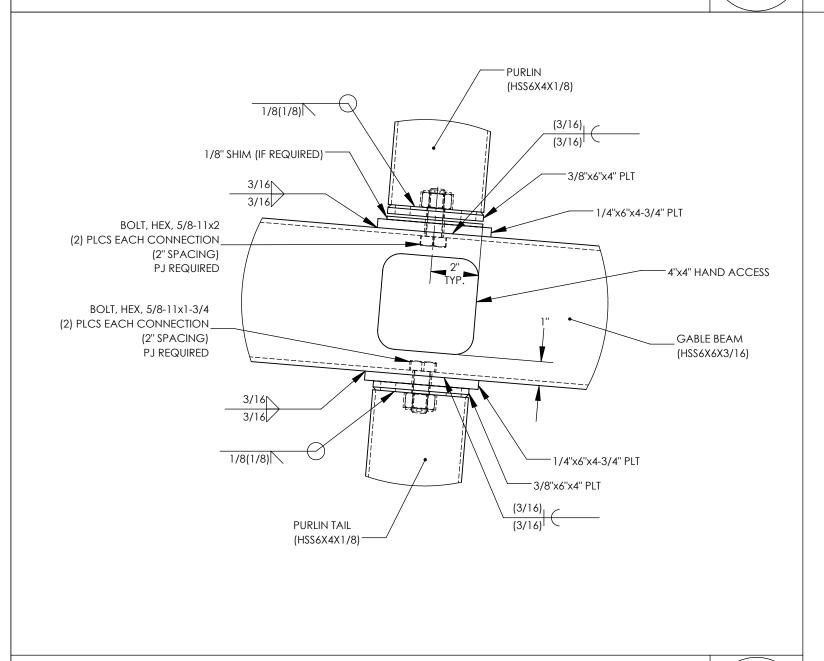
EAVE TAIL (HSS6X4X1/8)

(2) PLCS EACH CONNECTION_

3/16(3/16)

(3-1/2" SPACING)
PJ REQUIRED

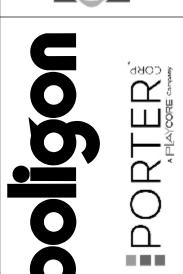
NUT & BOLT RESTRAINING SYSTEM

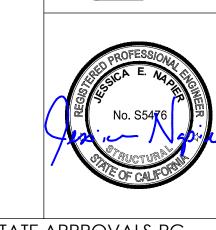


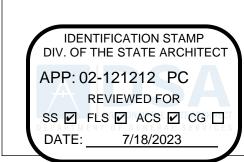
PURLIN AND PURLIN TAIL CONNECTIONS





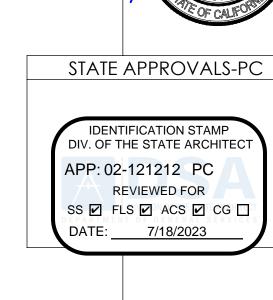






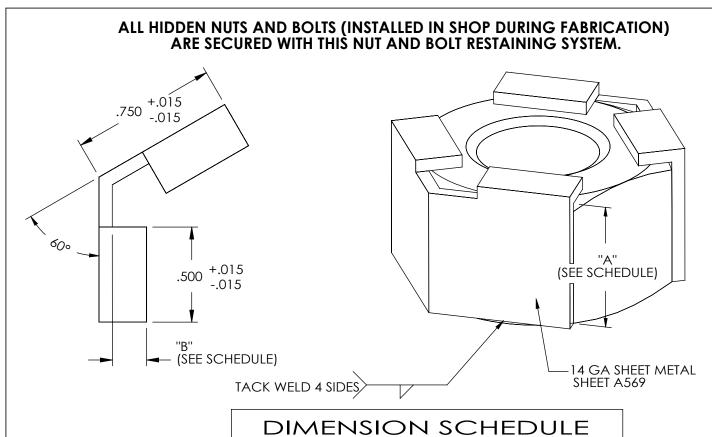
MSL4.



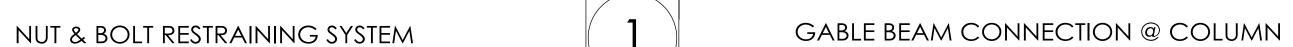




FRAME ONNECTION DETAILS



DIMENSION SCHEDULE		
FASTENER	DIM A	DIM B
5/8" NUT	.631 +.000 015	.180 +.015 015
5/8" BOLT	.403 +.000 015	.250 +.015 015
3/4" NUT	.758 +.000 015	.180 +.015 015
3/4" BOLT	.483 +.000 015	.375 +.015 015
1" NUT	1.012 +.000 015	.180 +.015 015
1" BOLT	.643 +.000 015	.375 +.015 015



-5"x5" HAND ACCESS

NUT, HEX, 5/8-11

3/8"x8"x10-1/16" PLATE

3/16(3/16)

(HSS10X8X3/16)

w/ 3/8"x8"x10-13/16" FLG. PLT.

(3-9/16" SPACING)

(2) PLCS EACH CONNECTION

2

GABLE BEAM

(HSS10X8X3/16) —

3/16

EAVE BEAM

R3/4" —___

EAVE BEAM AND EAVE TAIL CONNECTIONS

1/8(1/8)

1/8" SHIM (IF REQUIRED) -

3/16(3/16)

(3-1/2" SPACING) PJ REQUIRED

BOLT, HEX, 5/8-11x2-1/2

(2) PLCS EACH CONNECTION_

BOLT, HEX, 5/8-11x2-1/2

(3-1/2" SPACING)
PJ REQUIRED

3/16(3/16)

1/8(1/8)

EAVE TAIL

(HSS6X4X1/8)-

(2) PLCS EACH CONNECTION_

(HSS6X4X1/8)

(3/16)

_____5/8"x6"x4" PLT

1 1/2" TYP.

(3/16)

3/8"x6"x4" PLT

5/8"x6-3/8""x4-3/8" PLT

5/8"x6-3/8""x4-3/8" FLG PLT

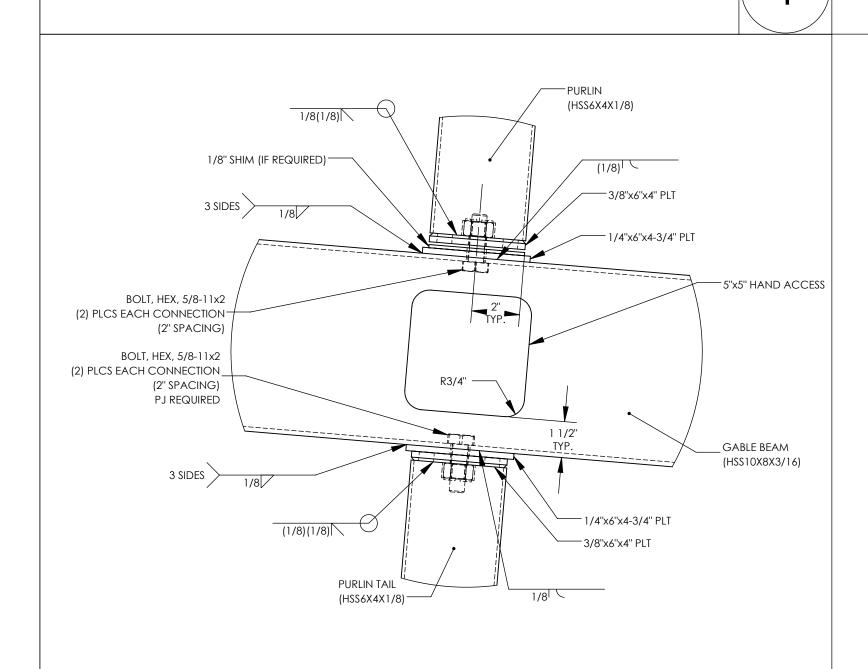
GABLE BEAM

(HSS10X8X3/16)

5"x5" HAND ACCESS

GABLE BEAM

(HSS10X8X3/16)

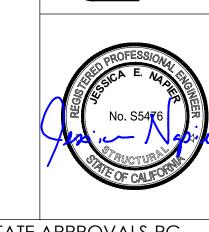


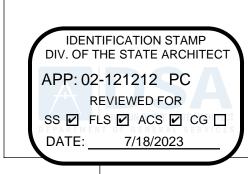
PURLIN AND PURLIN TAIL CONNECTIONS









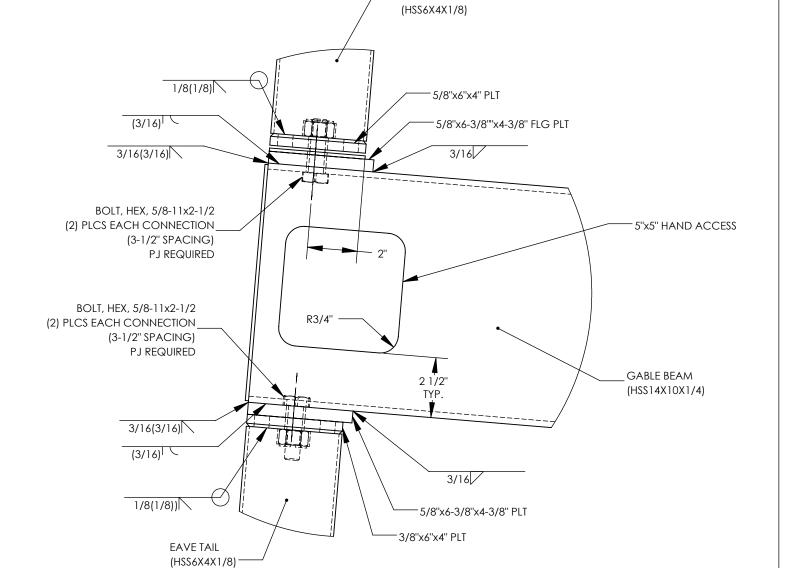


FRAME ONNECTION DETAILS

GABLE BEAM (HSS14X10X1/4)

5"x5" HAND ACCESS NUT, HEX, 5/8-11 (2) PLCS EACH CONNECTION (3-3/16" SPACING) -3/8"x10"x10-1/16" PLT w/ 3/8"x10"x10-13/16" FLG PLT (3/16) 1/4(1/4)

(HSS10X10X1/4)



EAVE BEAM

NUT & BOLT RESTRAINING SYSTEM

TACK WELD 4 SIDES

FASTENER

5/8" NUT

5/8" BOLT

3/4" NUT

3/4" BOLT

1" NUT

1" BOLT

.500 +.015

— (SEE SCHEDULE)

ALL HIDDEN NUTS AND BOLTS (INSTALLED IN SHOP DURING FABRICATION)
ARE SECURED WITH THIS NUT AND BOLT RESTAINING SYSTEM.

DIMENSION SCHEDULE

DIM A

.631 +.000 -.015

.403 +.000

.758 +.000

1.012 +.000

.643 +.000

.483

(SEE SCHEDULE)

DIM B

.180

.250

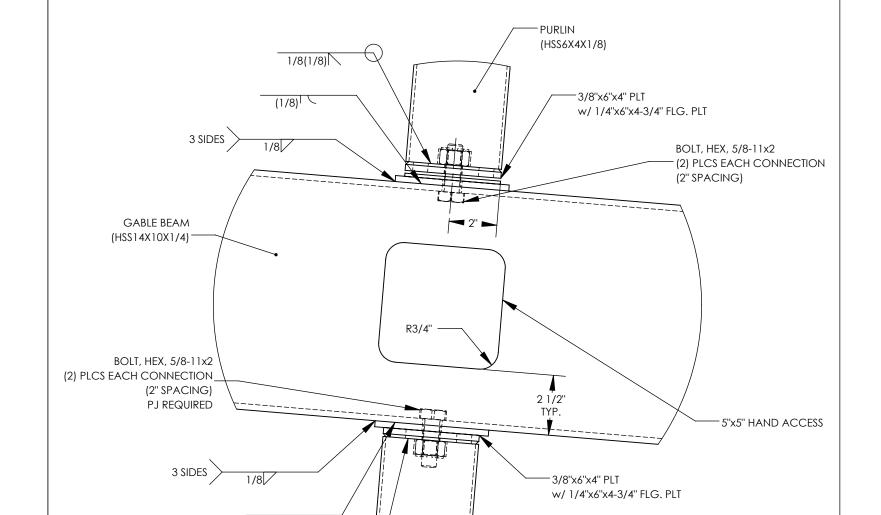
.180

.375

.180

.375 +.015

—14 GA SHEET METAL SHEET A569



PURLIN AND PURLIN TAIL CONNECTIONS

1/8(1/8)

(HSS6X4X1/8)

GABLE BEAM CONNECTION @ COLUMN

EAVE BEAM AND EAVE TAIL CONNECTIONS

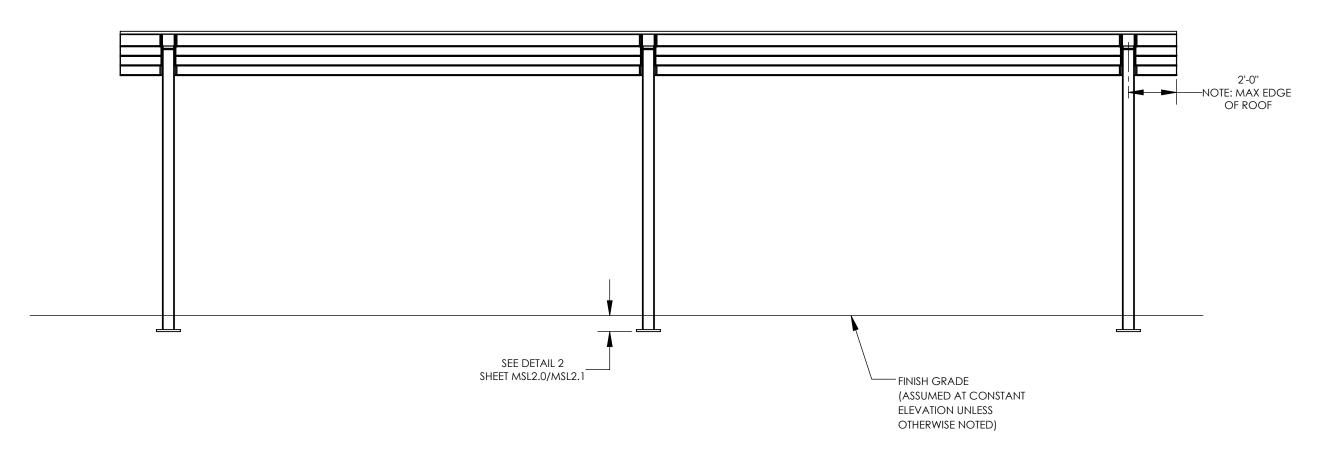
2

3 MSL4



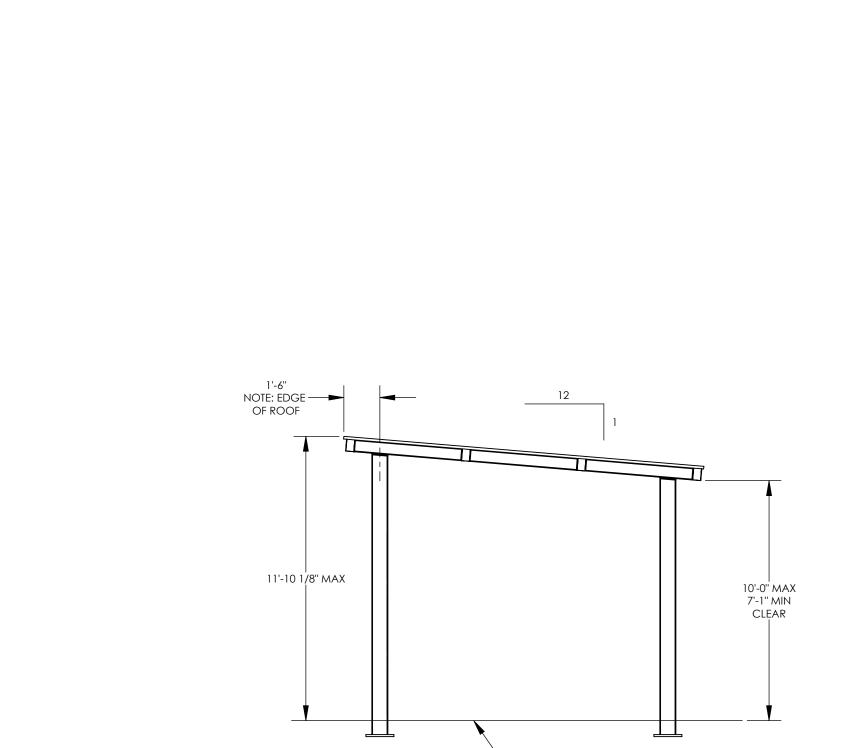
— OVERALL DIMENSION VARIES PER PROJECT ——





FRONT ELEVATION

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



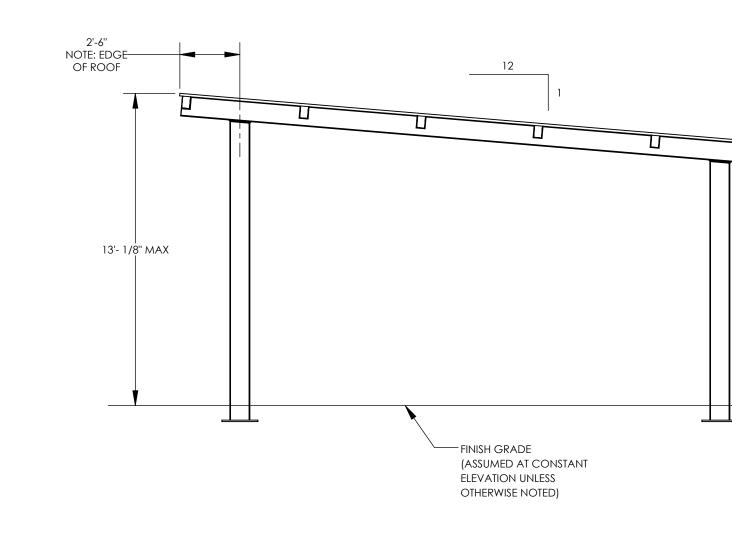
ISOMETRIC VIEW
SCALE: 1/4" = 1'-0"

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

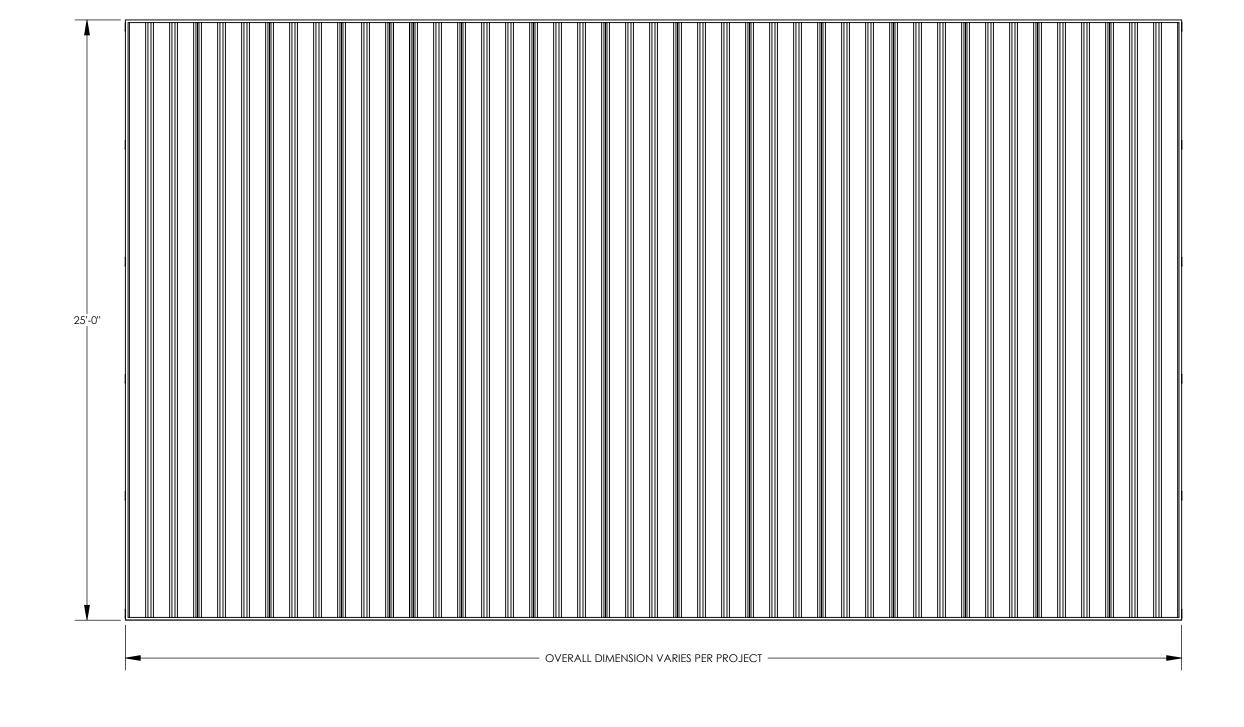
FINISH GRADE
(ASSUMED AT CONSTANT
ELEVATION UNLESS
OTHERWISE NOTED)

ARCHITECTURAL VIEWS

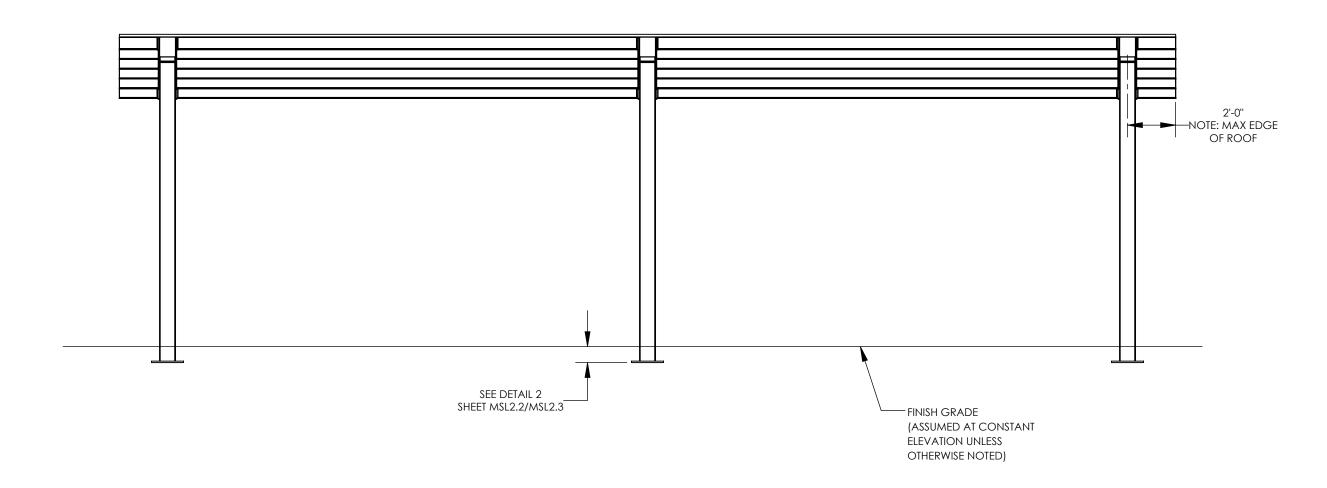
MSL5.



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

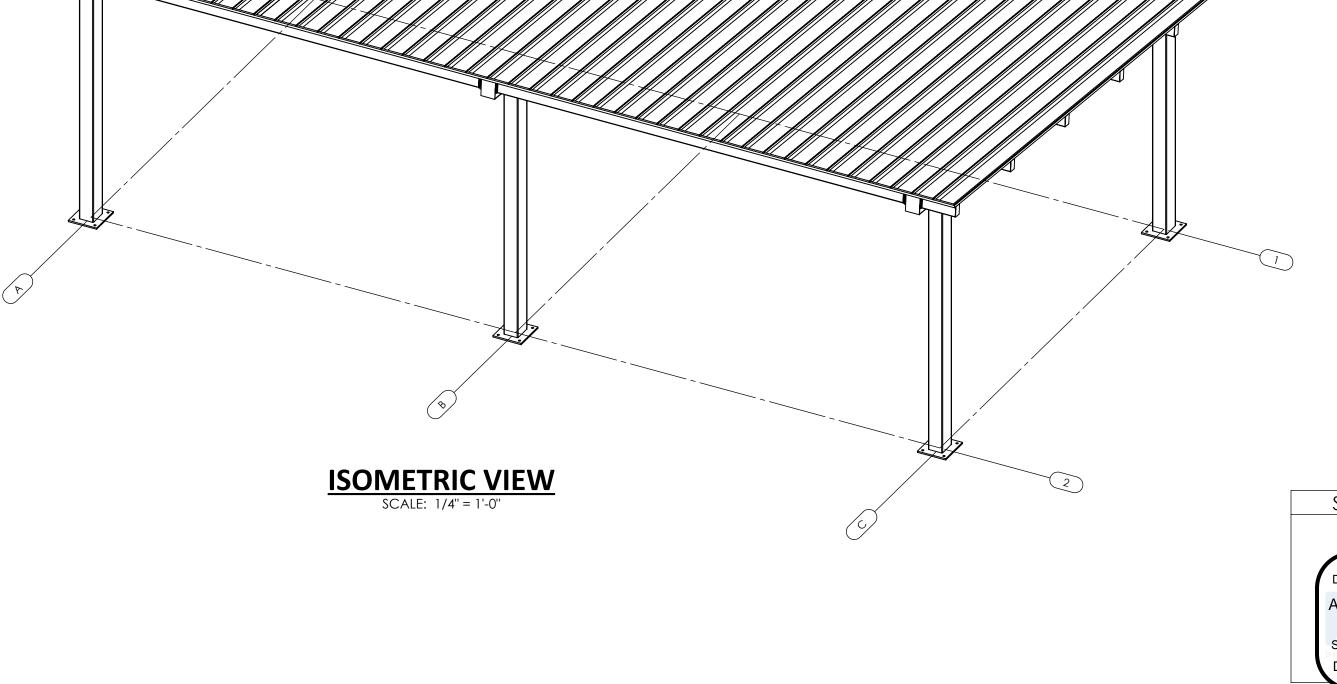




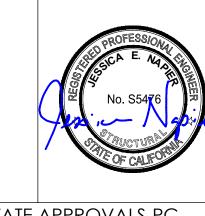


FRONT ELEVATION

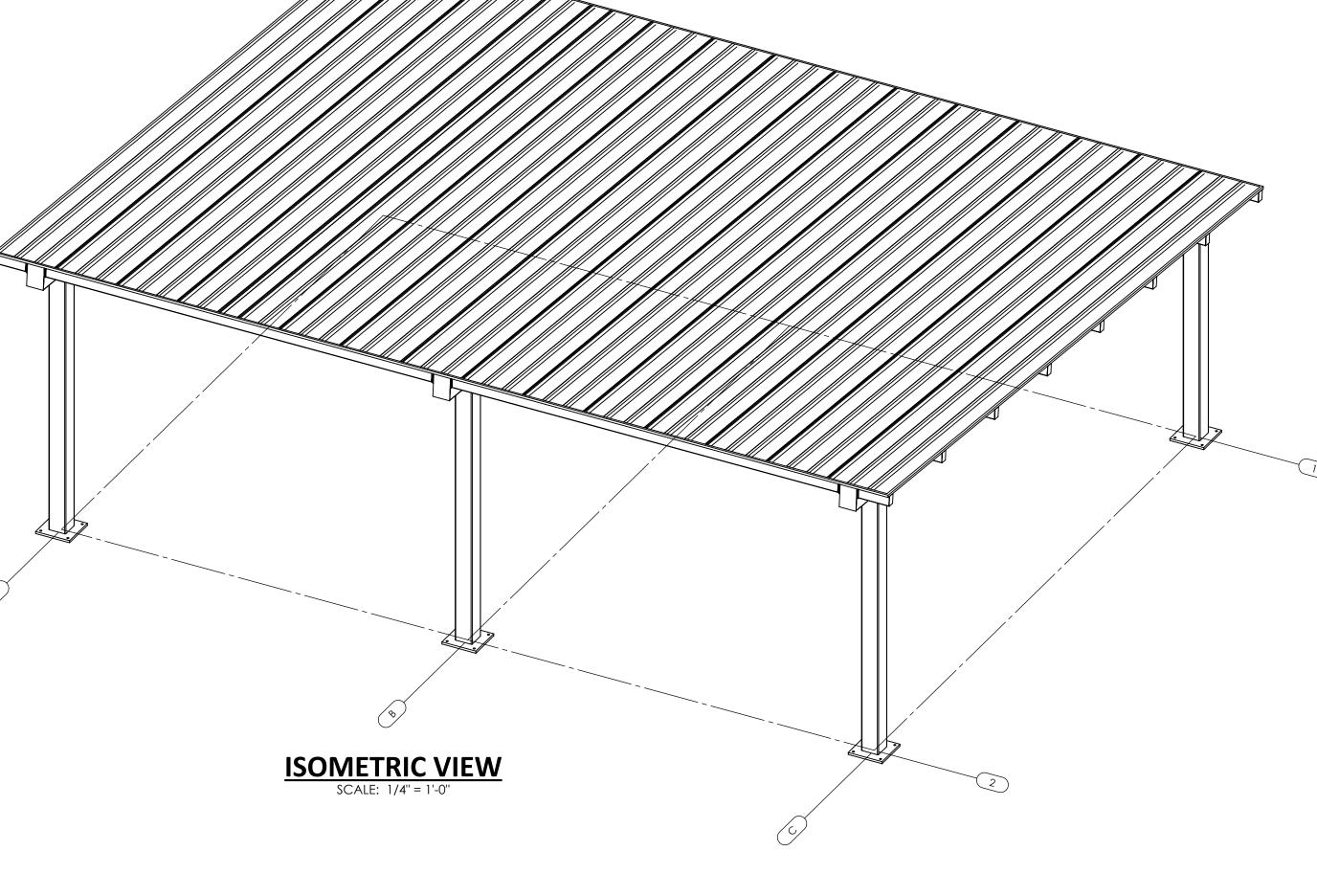
SCALE: 1/4" = 1'-0"



10'-0" MAX 7'-1" MIN CLEAR

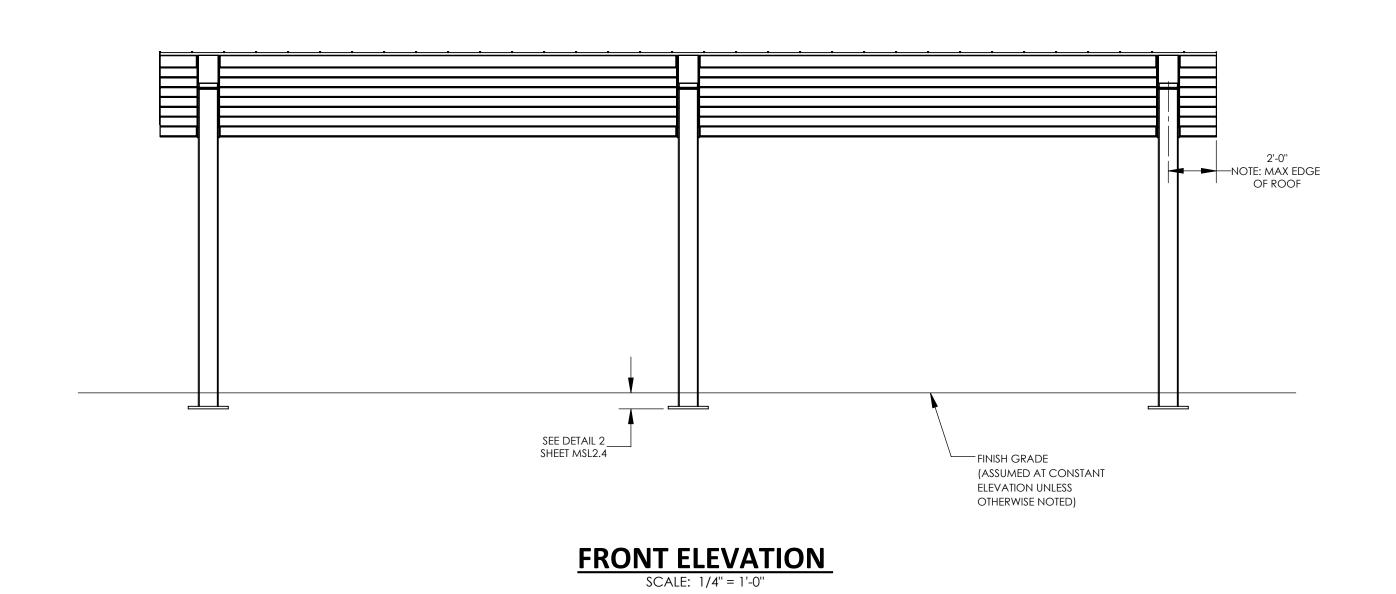


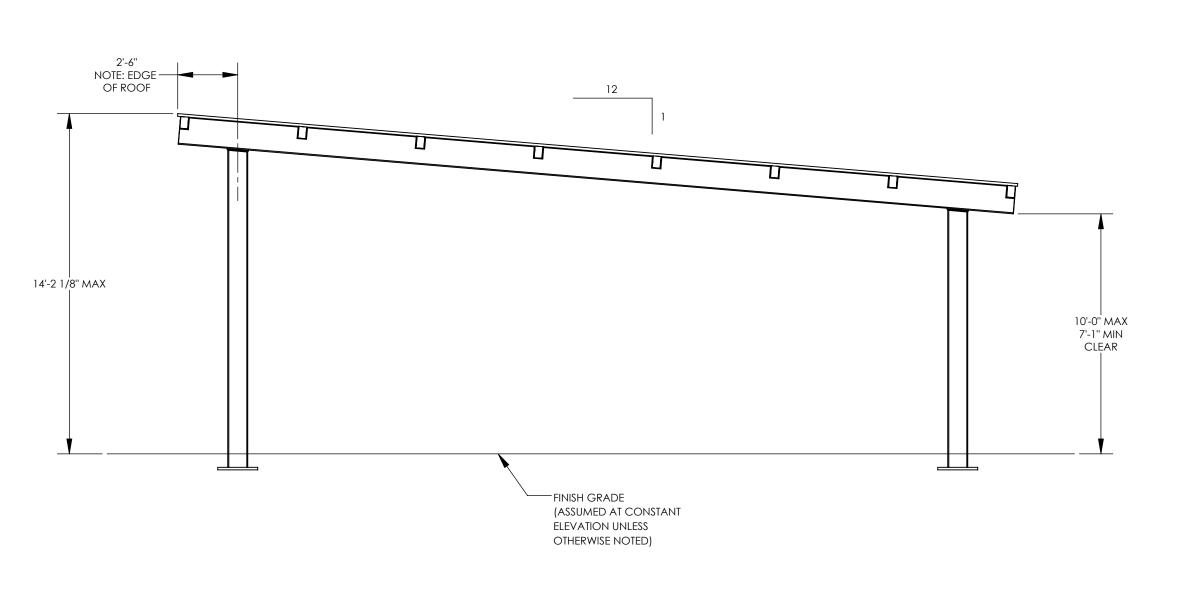
IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT APP: 02-121212 PC REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 CG 🗌



PLAN VIEW SCALE: 1/4" = 1'-0""

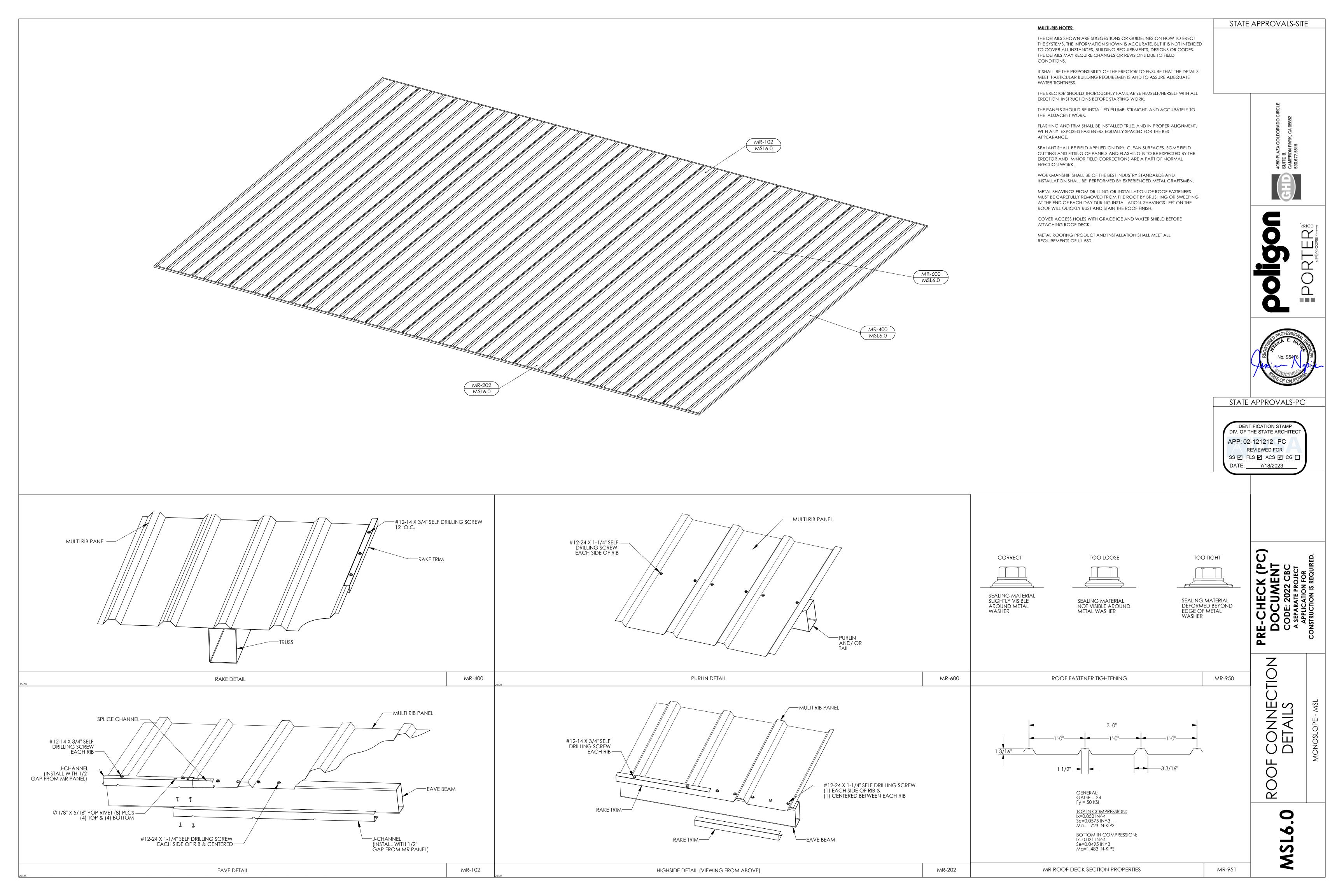
– Overall dimension varies per project —

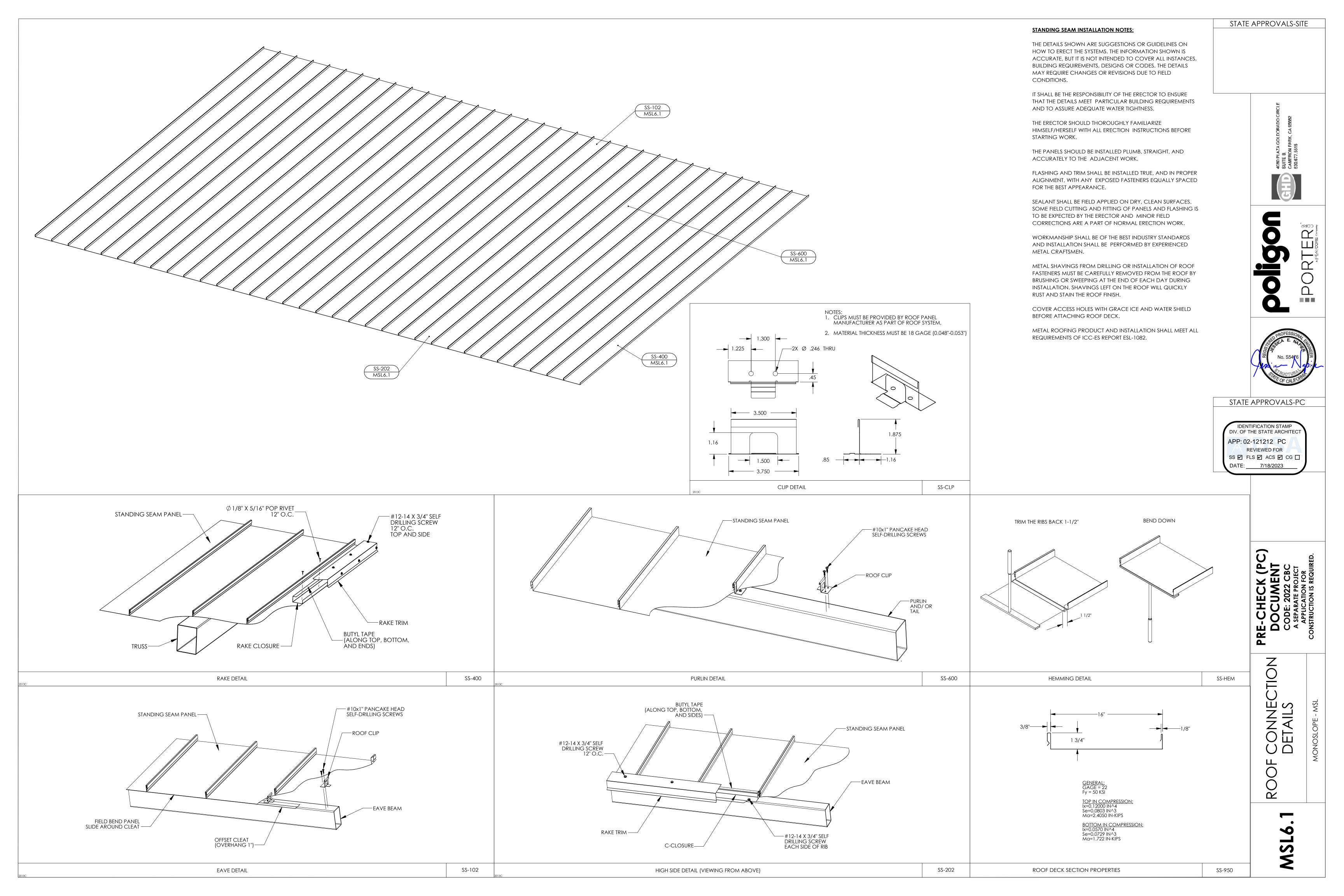


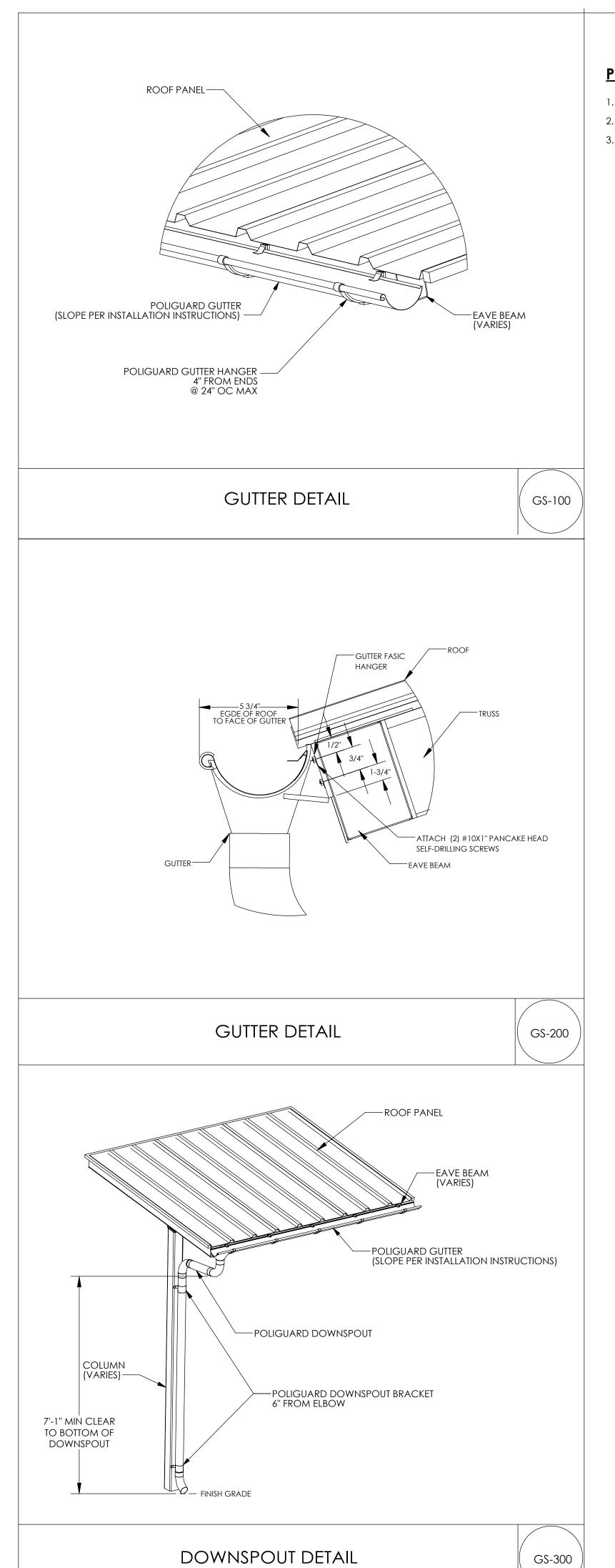


SCALE: 1/4" = 1'-0"

PRE-CHECK (PC)
DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT
APPLICATION FOR
CONSTRUCTION IS REQUIRED.

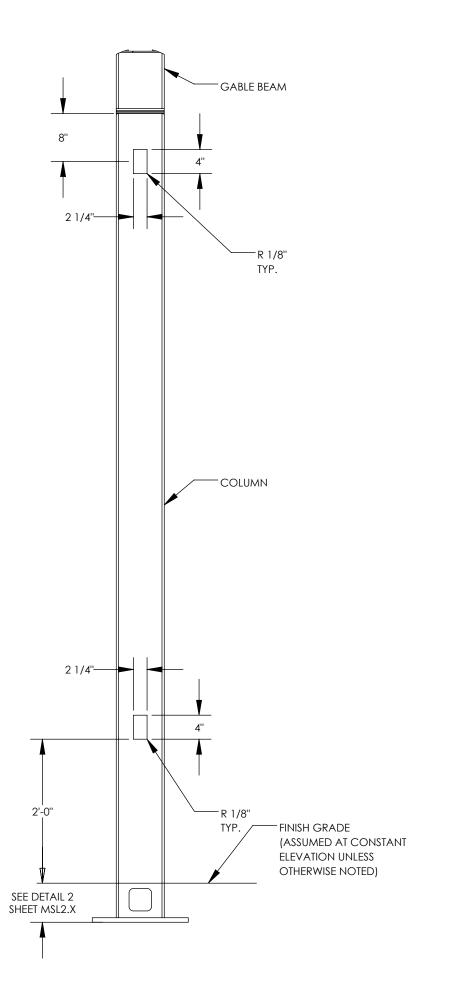






POLIGUARD GUTTER SYSTEM NOTES:

- 1. PREFABRICATED GUTTER SYSTEM IS ATTACHED TO THE STRUCTURE AFTER ROOF IS INSTALLED.
- 2. DETAILED INSTALLATION INSTRUCTIONS ARE SHIPPED WITH THE STRUCTURE.
- 3. DOWNSPOUTS REQUIRED AT EACH COLUMN.



ELECTRICAL CUTOUT IN COLUMNS

(EC-100

ELECTRICAL CUTOUT NOTES:

- 1. MAXIMUM ONE CUTOUT PERMITTED IN EACH MEMBER.
- 2. CUTOUTS CAN BE PLACED ON ANY SIDE OF A MEMBER.
- 3. CUTOUTS CAN BE PLACED ALONG MEMBERS AS INDICATED IN THE DETAILS.
- 4. ARCHITECTS REQUESTING CUTOUTS MUST MARKUP APPROVED PC DRAWINGS TO LOCATE CUTOUTS FOR APPROVAL AND FABRICATION.

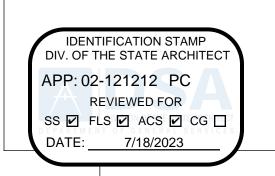
4080 PLAZA GOLDORADO CIRCLE SUITE B, CAMERON PARK, CA 95682

STATE APPROVALS-SITE





STATE APPROVALS-PC



PRE-CHECK (PC)

DOCUMENT

CODE: 2022 CBC

A SEPARATE PROJECT

APPLICATION FOR

MISC DESIGN OPTIONS

MSL7.0

- ONLY COLUMNS ARE PERMITTED TO HAVE ELECTRICAL ACCESS

- THE COLUMN CUTOUTS ARE STATIC AND SHOWN IN THE 'MISC DESIGN OPTIONS SHEET'

- IDENTIFY THE COLUMNS WITH ELECTRICAL CUTOUTS BELOW (REFERENCE GRID LINES IN

ISOMETRIC FRAME VIEW TO THE RIGHT)

- STRUCTURES MAY BE LONGER OR SHORTER THAN THE ISOMETRIC FRAME VIEW SHOWN

- IF SITE-SPECIFIC STRUCTURE HAS A DIFFERENT NUMBER OF COLUMNS THAN ISOMETRIC SHOWN,

REFERENCE COLUMN A1 IN THE ISOMETRIC VIEW AND CONTINUE PATTERN TO FIT SITE-SPECIFIC LAYOUT

- IF NO COLUMNS ARE IDENTIFIED, POLIGON WILL ASSUME CUTOUTS ONLY IN COLUMN A1

- CONTACT POLIGON ENGINEERING FOR SPECIAL PROJECT SPECIFIC REQUIREMENTS

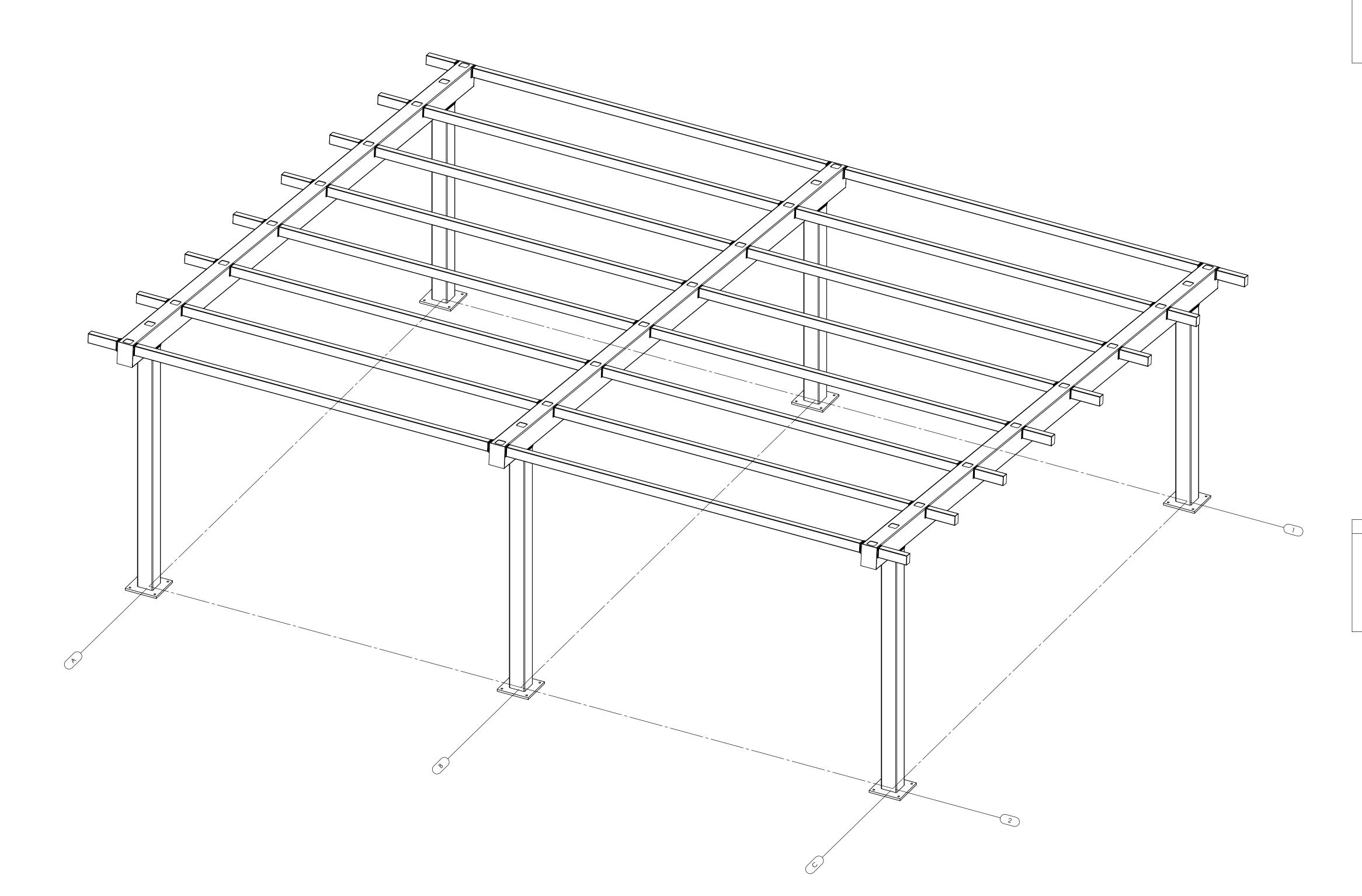
ELECTRICAL CUTOUT IDENTIFICATION IN COLUMNS

SPECIFIC MEMBERS

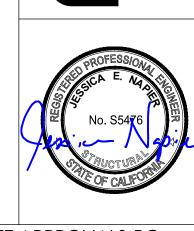
EXAMPLE:

ELECTRICAL CUTOUT IDENTIFICATION IN COLUMNS

SPECIFIC MEMBERS A1, B1, F1



STATE APPROVALS-SITE



STATE APPROVALS-PC

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT

APP: 02-121212 PC

REVIEWED FOR
SS FLS ACS CG D

DATE: 7/18/2023

PRE-CHECK (PC)

DOCUMENT

CODE: 2022 CBC

ELECTRICAL CUTOUTS

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MSL7.1