Transmittal

837 N SPRING ST STE 300, LOS ANGELES, CA 90012-2377

PROJECT:	RSD Janson ES New Relos and Playgrounds 161-23078	DATE:	3/9/2024
SUBJECT:	RSD- Janson Relos- Drawings	TRANSMITTAL ID:	00004
PURPOSE:	For Your Comment or Use	VIA:	Info Exchange

FROM

NAME	COMPANY	EMAIL	PHONE
Mayra Ovalle Duranleau 837 N SPRING ST STE 300 LOS ANGELES CA 90012-2377 United States	NAC Architecture	MOvalle@nacarchitecture.com	(323) 475-8054

TO

NAME	COMPANY	EMAIL	PHONE
Melinda Pure		melinda@ehanda.com	

REMARKS:

Good morning Melinda-

Please see attached the latest set of drawings for the Janson Relos.

Regards,

Mayra Ovalle Duranleau
P 323 475 8075
D 323 475 8054
NAC ARCHITECTURE
nacarchitecture.com

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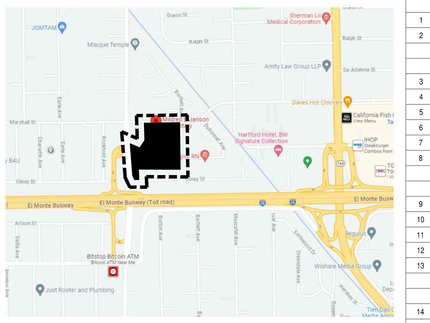
1	3/9/2024	DWG_V2.pdf	

COPIES:

Gary Christofi (NAC Architecture)



ROSEMEAD SCHOOL DISTRICT

NEW RELOCATABLES AT:

MILDRED B. JANSON ELEMENTARY SCHOOL

8628 MARSHALL ST. ROSEMEAD CA 91770

GENERAL NOTES

1. DO NOT SCALE THE CONSTRUCTION DOCUMENTS. DIMENSIONS SHALL TAKE PRECEDENCE OVER GRAPHIC SCALES SHOWN ON THE DRAWINGS. TYPICAL DETAILS & GENERAL NOTES ARE MINIMUM REQUIREMENTS TO BE USED WHEN CONDITIONS ARE NOT SHOWN OTHERWISE. IF ADDITIONAL DIMENSIONS ARE REQUIRED, CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING. WORK WITHIN THE AREA OF DISCREPANCY OR CONFLICT SHALL NOT PROCEED UNTIL GIVEN SUCH NOTICE BY THE ARCHITECT TO RESUME CONSTRUCTION.

2. SPECIFIC NOTES & DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES & TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.

3. THIS SHEET IS ONE OF A SET OF DOCUMENTS WHICH INCLUDES, BUT IS NOT LIMITED TO, DRAWINGS, SPECIFICATIONS & ADDENDA ADDRESSING ALL TRADES. FULLY COORDINATE ARCHITECTURAL, STRUCTURAL, ELECTRICAL, AND/OR MECHANICAL DRAWINGS, DETAILS & SPECIFICATIONS TO ASCERTAIN THE FULL SCOPE OF THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO FURNISH COMPLETE SET OF CONSTRUCTION DOCUMENTS TO ALL BIDDERS. ALL BIDDERS SHALL REVIEW THE FULL SET OF CONSTRUCTION DOCUMENTS PRIOR TO SUBMITTING BIDS FOR THE WORK. ANY INCONSISTENCIES OR CONFLICTING INFORMATION INCORPORATED INTO THE CONTRACT DOCUMENTS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATIONS AND/OR ADJUSTMENTS BEFORE COMMENCING WORK.

4. WHERE APPLICABLE, REFER TO THE PROJECT SPECIFICATION MANUAL FOR INFORMATION NOT COVERED BY THESE GENERAL NOTES OR THE DRAWINGS. INFORMATION GIVEN IN ONE PORTION OF THE CONTRACT DOCUMENTS SHALL BE CONSIDERED TO BE GIVEN IN ALL CONTRACT DOCUMENTS.

5. THE DRAWINGS & SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE(S) OR MODIFICATION TO AN EXISTING STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION.

   GENERAL:
   CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR

   ADDENDA:
   CHANGES OR ALTERATIONS OF THE APPROVED PLANS OR SPECIFICATIONS PRIOR TO LETTING A CONSTRUCTION CONTRACT FOR THE WORK INVOLVED SHALL BE MADE BY MEANS OF ADDENDA WHICH SHALL BE SUBMITTED TO & APPROVED BY DSA PRIOR TO DISTRIBUTION TO CONTRACTORS. ORIGINAL COPIES OF ADDENDA SHALL BE STAMPED & SIGNED BY THE ARCHITECT OR ENGINEER IN GENERAL RESPONSIBLE CHARGE OF PREPARATION OF THE PLANS & SPECIFICATIONS & BY THE ARCHITECT OR REGISTERED ENGINEER DELEGATED RESPONSIBILITY FOR THE PORTION AFFECTED BY THE ADDENDA. [SEE SECTION 4-317(h).] ONE COPY OF EACH ADDENDUM IS REQUIRED FOR THE FILES OF DSA.

   CONTRACT CHANGE DOCUMENT (CCD):
   CHANGES OR ALTERATIONS OF THE APPROVED PLANS OR SPECIFICATIONS AFTER A CONTRACT FOR THE WORK HAS BEEN LET SHALL BE MADE ONLY BY MEANS OF CCD SUBMITTED TO & APPROVED BY DSA PRIOR TO COMMENCEMENT OF THE WORK SHOWN THEREON. CCDS SHALL STATE THE REASON OF THE CHANGE & THE SCOPE OF WORK TO BE ACCOMPLISHED, &, WHERE NECESSARY, SHALL BE ACCOMPANIED BY SUPPLEMENTARY DRAWINGS REFERENCED IN THE TEXT OF THE CCD. ALL CCDS & SUPPLEMENTARY DRAWINGS SHALL BE STAMPED & SIGNED BY THE ARCHITECT OR ENGINEER IN GENERAL RESPONSIBLE CHARGE OF OBSERVATION OF THE WORK OF CONSTRUCTION OF THE PROJECT & BY THE ARCHITECT OR REGISTERED ENGINEER DELEGATED RESPONSIBILITY FOR OBSERVATION OF THE PORTION OF THE WORK OF CONSTRUCTION AFFECTED BY THE CCD, SHALL BEAR THE APPROVAL OF THE DISTRICT & SHALL INDICATE THE ASSOCIATED CHANGE IN THE PROJECT COST, IF ANY. ONE COPY OF EACH CCD IS REQUIRED FOR THE FILES OF DSA.

   VOIDANCE OF APPLICATION:
   ANY CHANGE, ERASURE, ALTERATION, OR MODIFICATION OF ANY PLANS OR SPECIFICATIONS BEARING THE STAMP OF DSA MAY RESULT IN VOIDANCE OF THE APPROVAL OF THE APPLICATION. HOWEVER, THE WRITTEN APPROVAL OF PLANS MAY BE EXTENDED BY DSA TO INLCUDE REVISED PLANS & SPECIFICATIONS AFTER DOCUMENTS ARE SUBMITTED FOR REVIEW & APPROVED. (SEE SECTION 4-323 FOR REVISED PLANS & SECTION 4-338 FOR ADDENDA & CHANGE ORDERS.)

   PERFORMANCE OF THE WORK:
   THE CONTRACTOR SHALL CAREFULLY STUDY THE APPROVED PLANS & SPECIFICATIONS & SHALL PLAN A SCHEDULE OF OPERATIONS WELL AHEAD OF TIME. IF AT ANY TIME IT IS DISCOVERED THAT WORK IS BEING DONE WHICH IS NOT IN ACCORDANCE WITH THE APPROVED PLANS & SPECIFICATIONS, THE CONTRACTOR SHALL CORRECT THE WORK IMMEDIATELY. ALL INCONSISTENCIES OR ITEMS WHICH APPEAR IN ERROR IN THE PLANS & SPECIFICATIONS SHALL BE PROMPTLY CALLED TO THE ATTENTION OF THE ARCHITECT OR REGISTERED ENGINEER, THROUGH THE INSPECTOR, FOR INTERPRETATION OR CORRECTION. IN NO CASE, HOWEVER, SHALL THE INSTRUCTION OF THE ARCHITECT OR REGISTERED ENGINEER BE CONSTRUED TO CAUSE WORK TO BE DONE WHICH IS NOT IN CONFORMITY WITH THE APPROVED PLANS, SPECIFICATIONS, AND CHANGE ORDERS. THE CONTRACTOR MUST NOTIFY THE PROJECT INSPECTOR, IN ADVANCE, OF THE COMMENCEMENT OF CONSTRUCTION OF EACH AND EVERY ASPECT OF THE WORK. SUBSTITUTIONS SHALL BE CONSIDERED AS A CHANGE ORDER.

6. THE GENERAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS & SITE CONDITIONS BEFORE STARTING WORK. DIMENSIONS ARE NOT ADJUSTABLE WITHOUT THE REVIEW & CLARIFICATION OF THE ARCHITECT UNLESS NOTED AS (+/-) PLUS/MINUS OR (FIELD) VERIFY. THE ARCHITECT SHALL BE NOTIFIED OF ANY DISCREPANCY BEFORE PROCEEDING WITH WORK.

7. ALL INFORMATION SHOWN ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS REPRESENTING THE BEST INFORMATION CURRENTLY AVAILABLE, BUT WITHOUT GUARANTEE OF ACCURACY. THE CONTRACTOR & SUBCONTRACTOR SHALL CAREFULLY EXAMINE THE SITE, COMPARE THE CONSTRUCTION DOCUMENTS WITH THE EXISTING CONDITIONS, BE RESPONSIBLE FOR ACCURACY OF ALL DIMENSIONS & THOROUGHLY FAMILIARIZE HIMSELF/HERSELF WITH THE SCOPE OF WORK. BY THE ACT OF SUBMITTING A BID THE CONTRACTOR SHALL BE DEEMED TO HAVE MADE SUCH AN EXAMINATION, HAVE ACCEPTED THE CONDITIONS & HAVE INCLUDED ALL RELATED SITE/BUILDING(S) CONDITION COST IN HIS/HER BID.

8. NO PART OF THESE CONTRACT DOCUMENTS SHALL BE CONSIDERED AS REQUIRING OR PERMITTING ANY WORK CONTRARY TO THE REQUIREMENTS OF ANY CODE REGULATION OR ORDINANCE WHICH HAS JURISDICTION OVER THE WORK.

9. ALL SYMBOLS & ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED TO BE CONSTRUCTION STANDARDS ABBREVIATION OR SYMBOLS. IF THE CONTRACTOR HAS A QUESTION REGARDING THE SAME OR THEIR EXACT MEANING, THE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION.

10. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE(S) DURING CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE TEMPORARY BRACES, SHORES & GUYS REQUIRED TO SUPPORT ALL LOADS TO WHICH THE BUILDING STRUCTURE & COMPONENTS, ADJACENT SOILS OR STRUCTURES, UTILITIES & RIGHT-OF-WAYS MAY BE SUBJECTED DURING CONSTRUCTION.

11. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICE, THE CONTRACTOR SHALL ASSUME SOLE & COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS & PROPERTY ACCORDING TO THE REQUIREMENTS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) & CALIFORNIA OCCUPATIONAL REGULATIONS [add other agencies]. THIS STIPULATION SHALL BE CONSIDERED TO BE CONTINUOUS & NOT LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL INDEMNIFY & HOLD DESIGN PROFESSIONALS, INSPECTORS, ET AL., HARMLESS FROM ANY & ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THE PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN. FIRE SAFETY DURING DEMOLITION AND CONSTRUCTION SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF THIS CODE AND THE APPLICABLE PROVISIONS OF CHAPTER 33 OF CFC.

12. THE DESIGN TEAM SHALL NOT HAVE CONTROL OR CHARGE OF & SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS & PROGRAMS IN CONNECTION WITH THE WORK, THE ACTS OR OMISSIONS OF THE WORK, OR FOR THE FAILURE OF ANY OF THEM TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, APPLICABLE CODES AND STANDARDS.

13. CONTRACTOR SHALL PROVIDE CONSTRUCTION BARRICADES OR PROTECTIVE DEVICES OF SUFFICIENT HEIGHT & MAGNITUDE AS TO PREVENT ANY PERSONS OF ANY AGE FROM ACCIDENTALLY ENTERING THE WORK AREA. PROVIDE TEMPORARY PASSAGEWAYS AS REQUIRED. YELLOW TAPE BARRICADES SHALL NOT BE ALLOWED AT THESE SITES.

14. DELIVERY OF MATERIALS TO THE CONSTRUCTION ZONE & REMOVAL OF WASTE FROM THE SITE SHALL BE COORDINATED WITH THE DISTRICT FOR AN ACCEPTABLE ACCESS ROUTE & SCHEDULE. USE OF THE AREA OUTSIDE THE CONSTRUCTION ZONE SHALL NOT BE ALLOWED UNDER ANY CIRCUMSTANCES WITHOUT CLEARANCE FROM THE SCHOOL DISTRICT OR THE OWNER'S AUTHORIZED REPRESENTATIVE.

15. CONTRACTOR SHALL INVESTIGATE THE SITE DURING CLEARING & EARTHWORK OPERATIONS, AS MAY BE REQUIRED BY THE SCOPE OF THE WORK, FOR FILLED EXCAVATIONS OR BURIED STRUCTURES, SYSTEMS, UTILITIES OR FOUNDATIONS, ETC. IF ANY SUCH STRUCTURES ARE FOUND, THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY.

16. IN DEMOLITION OF EXISTING BUILDINGS, WORK SHALL NOT BE PERFORMED IN AREA CONTAMINATED BY MATERIALS MADE OF ASBESTOS &/OR LEAD UNTIL THE ASBESTOS AND/OR LEAD MATERIALS HAVE BEEN REMOVED OR ENCAPSULATED BY THE CONTRACTOR. IF ASBESTOS OR LEAD IS ENCOUNTERED, NOTIFICATION SHALL BE GIVEN PER SPECIFICATIONS.

17. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO ENSURE SHOP DRAWINGS, PRODUCT LITERATURE, PRODUCT SAMPLES, ETC. ARE SUBMITTED TO THE ARCHITECT IN A TIMELY MANNER SO AS NOT TO IMPACT THE CONSTRUCTION SCHEDULE.

18. ALL DISSIMILAR METALS SHALL BE EFFECTIVELY ISOLATED FROM EACH OTHER TO PREVENT MOLECULAR BREAKDOWN.

19. CONTRACTOR SHALL REVIEW THE CONSTRUCTION DOCUMENTS BEFORE PERFORMING THE WORK SHOWN ON THE CONSULTING ENGINEER'S DRAWINGS. DISCREPANCIES BETWEEN THE ARCHITECTURAL & CONSULTING ENGINEER'S DRAWINGS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION FOR CLARIFICATION & DIRECTION. CONSTRUCTION INSTALLED IN CONFLICT WITH THE CONSTRUCTION DOCUMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT NO EXPENSE TO THE DISTRICT.

20. INSTALL ALL EQUIPMENT COMPLETELY AS REQUIRED AND/OR AS RECOMMENDED BY THE MANUFACTURER, INCLUDING ALL NECESSARY UTILITY CONNECTIONS, TO MAKE THE EQUIPMENT FULLY OPERATIONAL.

21. TRADE NAMES & MANUFACTURERS REFERRED TO ARE FOR QUALITY STANDARDS ONLY. SUBSTITUTION WILL BE PERMITTED AS APPROVED BY THE SCHOOL DISTRICT OR ARCHITECT OF RECORD. CONTRACTOR SHALL STIPULATE THAT ALL PROPOSED SUBSTITUTIONS ARE EQUAL IN PERFORMANCE & COMPLY WITH THE APPLICABLE CODES & REGULATIONS. SUBSTITUTIONS OF ALTERNATE MATERIALS OR SYSTEMS SHALL BE AT NO ADDITIONAL COST TO THE DISTRICT.

22. ALL INSPECTION & TESTING SHALL CONFORM TO THE REQUIREMENTS OF PART 1 & 2, TITLE 24, C.C.R..

23. GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE COORDINATION OF THE VARIOUS TRADES PERFORMING THE WORK. CONTRACTOR SHALL SUBMIT FOR REVIEW A COMPLETE COORDINATION SCHEDULE ILLUSTRATING THE EXTENT & THE POSITION OF EACH SCOPE OF WORK TO AVOID CONFLICT & TO MAINTAIN REQUIRED SERVICE ACCESS & CODE REQUIRED CLEARANCES.

24. THE DISTRICT MUST PROVIDE FOR & REQUIRE COMPETENT, ADEQUATE. & CONTINUOUS INSPECTION BY AN INSPECTOR SATISFACTORY TO THE ARCHITECT OR REGISTERED ENGINEER IN GENERAL RESPONSIBLE CHARGE OF OBSERVATION OF THE WORK OF CONSTRUCTION, TO ANY ARCHITECT OR REGISTERED ENGINEER DELEGATED RESPONSIBILITY FOR A PORTION OF THE WORK, & TO DSA. THE COST OF THE PROJECT INSPECTION SHALL BE PAID FOR BY THE DISTRICT. AN INSPECTOR SHALL NOT HAVE ANY CURRENT EMPLOYMENT WITH ANY ENTITY THAT IS A CONTRACTING PARTY FOR THE CONSTRUCTION. AN APPROVED PROJECT INSPECTOR MAY BE REMOVED & REPLACED IF THE WORK PERFORMED IS NOT IN CONFORMANCE WITH ACCEPTED INSPECTION STANDARDS AS DETERMINED BY THE DISTRICT THE PROJECT ARCHITECT & ENGINEER WITH CONCURRENCE OF DSA. THE INSPECTOR SHALL HAVE PERSONAL KNOWLEDGE AS DEFINED IN SECTIONS 17309 & 81141 OF THE EDUCATION CODE OF ALL WORK DONE ON THE PROJECT OR ITS PARTS AS DEFINED IN SECTION 4-316 OF TITLE 24. NO WORK SHALL BE CARRIED ON EXCEPT UNDER THE INSPECTION OF A PROJECT INSPECTOR APPROVED BY DSA.THE EMPLOYMENT OF SPECIAL OR ASSISTANT INSPECTORS SHALL NOT BE CONSTRUED AS RELIEVING THE PROJECT INSPECTOR OF HIS/HER DUTIES & RESPONSIBILITIES UNDER SECTION 17309 & 81141 OF THE EDUCATION CODE AND SECTIONS 4-336 & 4342 OF TITLE24. A PROJECT INSPECTOR SHALL, UNDER THE DIRECTION OF THE ARCHITECTAND/OR ENGINEER, BE RESPONSIBLE FOR MONITORING THE WORK OF THE SPECIAL INSPECTORS AND TESTING LABORATORIES TO ENSURE THAT THE TESTING PROGRAM IS SATISFACTORILY COMPLETED. THE PROJECT INSPECTOR AND ANY ASSISTANT INSPECTOR MUST BE APPROVED BY DSA.

25. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CCD, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.

26. CUTTING, BORING SAWCUTTING OR DRILLING THROUGH THE EXISTING OR NEW STRUCTURAL ELEMENTS IS NOT TO BE STARTED UNTIL THE DETAILS HAVE BEEN REVIEWED & APPROVED BY THE ARCHITECT, STRUCTURAL ENGINEER & THE DSA FIELD ENGINEER IF DETAILS DO NOT SHOW OR CONFORM TO THE APPROVED DRAWINGS.

27. A "DSA CERTIFIED" PROJECT INSPECTOR EMPLOYED BY THE DISTRICT(OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 424, CCR).

28. A "DSA CERTIFIED" INSPECTOR WITH CLASS 4 & RBIP CERTIFICATION IS REQUIRED FOR THIS PROJECT.

29. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISH WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CONSTRUCTION CHANGE DOCUMENT (CCD) OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT BEFORE PROCEEDING WITH THE WORK. REFERENCE SECTION 4-317 (c), CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR)

30. IN-PLANT INSPECTOR INSPECTION CARD/VERIFIED REPORT DSA 152/IPI SHALL BE PROVIDED PRIOR TO INSTALLATION OF THE RELOCATABLES.

VICINITY MAP JANSON E.S. SITE

N

PROJECT SITE:
MILDRED B. JANSON ELEMENTARY SCHOOL

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2013

2022 BUILDING STANDARDS ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 C.C.R.
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.
(2021 INTERNATIONAL BUILDING CODE OF THE INTERNATIONAL CODE COUNCIL, WITH CALIFORNIA AMENDMENTS)
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
(2020 NATIONAL ELECTRICAL CODE OF THE NATIONAL FIRE PROTECTION ASSOCIATION, NFPA)
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.
(2021 UNIFORM MECHANICAL CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING & MECHANICAL OFFICIALS, IAPMO)
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
(2021 UNIFORM PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING & MECHANICAL OFFICIALS, IAPMO)
2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.
PART 7 CURRENTLY VACANT
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 C.C.R.
(2009 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL)
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 C.C.R.
(2021 INTERNATIONAL EXISTING BUILDING, WITH 2022 CALIFORNIA AMENDMENTS)
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.
2022 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

PARTIAL LIST OF APPLICABLE STANDARDS:

2022 CALIFORNIA BUILDING CODE (for SFM) REFERENCE STANDARDS CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.

NFPA 13	**STANDARD FOR THE INSTALLATION OF AUTOMATIC SPRINKLER SYSTEMS (CA AMENDED)**	**2022 EDITION**
NFPA 14	**STANDARD FOR THE INSTALLATION OF STANDPIPES SYSTEMS (CA AMENDED)**	**2019 EDITION**
NFPA 17	**STANDARD FOR DRY CHEMICAL EXTINGUISHING SYSTEMS**	**2021 EDITION**
NFPA 17A	**STANDARD FOR WET CHEMICAL SYSTEMS**	**2021 EDITION**
NFPA 72	**NATIONAL FIRE ALARM CODE (CALIFORNIA AMENDED)**	**2022 EDITION**
NFPA 80	**STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES**	**2022 EDITION**
NFPA 2001	**STANDARD ON CLEAN AGENT FIRE EXTINGUISHER SYSTEMS (CA AMENDED)**	**2022 EDITION**
UL 464	**AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES**	**2003 EDITION**
UL 521	**STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS**	**2005 EDITION**
UL 1971	**STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED**	**2018 EDITION**

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~~70~~	~~A-3.42~~	~~ROOF PLAN - 36' x 40' - TPO - MONO OR DUAL SLOPE~~
71	A-3.43	ROOF PLAN - 48' TO 120' x 40' - TPO - MONO SLOPE
~~72~~	~~A-3.44~~	~~ROOF PLAN - 48' TO 120' x 40' - TPO - DUAL SLOPE~~
73	A-3.50	ROOF DETAILS - STANDING SEAM ROOF DECK
74	A-3.80	ROOF DETAILS - PARAPET
75	A-3.90	ROOFING DETAILS - TPO ROOF
~~76~~	~~A-4.01~~	~~EXTERIOR ELEVATIONS - 24' x 40' - MONO OR DUAL SLOPE~~
~~77~~	~~A-4.02~~	~~EXTERIOR ELEVATIONS - 36' x 40' - MONO SLOPE~~
~~78~~	~~A-4.03~~	~~EXTERIOR ELEVATIONS - 36' x 40' - DUAL SLOPE~~
79	A-4.04	EXTERIOR ELEVATIONS - 48' TO 120' x 40' - MONO SLOPE
~~80~~	~~A-4.05~~	~~EXTERIOR ELEVATIONS - 48' TO 120' x 40' - DUAL SLOPE~~
~~81~~	~~A-4.21~~	~~EXTERIOR ELEVATIONS - 24' x 40' PARAPET - MONO OR DUAL SLOPE~~
~~82~~	~~A-4.22~~	~~EXTERIOR ELEVATIONS - 36' x 40' PARAPET - MONO OR DUAL SLOPE~~
83	A-4.23	EXTERIOR ELEVATIONS - 48' TO 120' x 40' PARAPET - MONO OR DUAL SLOPE
84	A-5.01	CROSS SECT. - MONO SLOPE
~~85~~	~~A-5.02~~	~~CROSS SECT. - DUAL SLOPE~~
86	A-5.05	CROSS SECTION
87	A-5.50	ARCHITECTURAL DETAILS - WOOD STUD - SHTG
88	A-5.51	ARCHITECTURAL DETAILS - WOOD STUD - PLASTER
~~89~~	~~A-5.52~~	~~ARCHITECTURAL DETAILS - WOOD STUD - WOOD SIDING - 1 HOUR RATED~~
~~90~~	~~A-5.53~~	~~ARCHITECTURAL DETAILS - WOOD STUD - PLASTER - 1 HOUR RATED~~
~~91~~	~~A-5.60~~	~~ARCHITECTURAL DETAILS - STEEL STUD - SHTG~~
~~92~~	~~A-5.61~~	~~ARCHITECTURAL DETAILS - STEEL STUD - PLASTER~~
~~93~~	~~A-5.62~~	~~ARCHITECTURAL DETAILS - STEEL STUD - 1 HOUR RATED~~
~~94~~	~~A-5.63~~	~~ARCHITECTURAL DETAILS - STEEL STUD - PLASTER - 1 HOUR RATED~~
95	A-5.64	ARCHITECTURAL DETAILS - 1 HOUR RATED OPTIONS
96	A-5.70	ARCHITECTURAL DETAILS - FLOOR
~~97~~	~~A-5.71~~	~~DETERIORATION PROTECTION - NON-WD SIDING - CONC FLR - WD STUDS~~
98	A-5.72	DETERIORATION PROTECTION - STUCCO FINISH - CONC FLR - WD STUDS

NO.	SHT. NO.	SHEET TITLE
~~99~~	~~A-5.73~~	~~DETERIORATION PROTECTION - NON-WD SIDING - WD FLR - WD STUDS~~
100	A-5.74	DETERIORATION PROTECTION - STUCCO FINISH - WD FLR - WD STUDS
~~101~~	~~A-5.75~~	~~DETERIORATION PROTECTION - NON-WD SIDING - CONC FLR - STL STUDS~~
~~102~~	~~A-5.76~~	~~DETERIORATION PROTECTION - STUCCO FINISH - CONC FLR - STL STUDS~~
~~103~~	~~A-5.77~~	~~DETERIORATION PROTECTION - NON-WD SIDING - WD FLR - STL STUDS~~
104	A-5.78	DETERIORATION PROTECTION - STUCCO FINISH - WD FLR - STL STUDS
105	A-5.80	ARCHITECTURAL DETAILS - MISCELLANEOUS/OPTIONS
106	A-5.81	ARCHITECTURAL DETAILS - MISCELLANEOUS/OPTIONS
~~107~~	~~A-6.01~~	~~INTERIOR ELEVATIONS - 24' x 40'~~
~~108~~	~~A-6.02~~	~~INTERIOR ELEVATIONS - 36' x 40'~~
109	A-6.03	INTERIOR ELEVATIONS - 48' TO 120' x 40'
		FOUNDATION
~~110~~	~~F-0.01~~	~~WOOD FOUNDATION PLAN - 24' x 40' (50 PSF)~~
~~111~~	~~F-0.02~~	~~WOOD FOUNDATION PLAN - 24' x 40' (50+15 PSF)~~
~~112~~	~~F-0.03~~	~~WOOD FOUNDATION PLAN - 24' x 40' (100 PSF)~~
~~113~~	~~F-0.04~~	~~WOOD FOUNDATION PLAN - 24' x 40' (150 PSF)~~
~~114~~	~~F-0.11~~	~~WOOD FOUNDATION PLAN - 36' x 40' (50 PSF)~~
~~115~~	~~F-0.12~~	~~WOOD FOUNDATION PLAN - 36' x 40' (50+15 PSF)~~
~~116~~	~~F-0.13~~	~~WOOD FOUNDATION PLAN - 36' x 40' (100 PSF)~~
~~117~~	~~F-0.14~~	~~WOOD FOUNDATION PLAN - 36' x 40' (150 PSF)~~
~~118~~	~~F-0.21~~	~~WOOD FOUNDATION PLAN - 48' x 40' (50 PSF)~~
~~119~~	~~F-0.22~~	~~WOOD FOUNDATION PLAN - 48' x 40' (50+15 PSF)~~
~~120~~	~~F-0.23~~	~~WOOD FOUNDATION PLAN - 48' x 40' (100 PSF)~~
~~121~~	~~F-0.24~~	~~WOOD FOUNDATION PLAN - 48' x 40' (150 PSF)~~
~~122~~	~~F-0.50~~	~~FOUNDATION DETAILS - WOOD~~
~~123~~	~~F-1.01~~	~~CONCRETE FOUNDATION PLAN - ABOVE GRADE - WOOD FLOOR~~
~~124~~	~~F-1.11~~	~~CONCRETE FOUNDATION PLAN - ABOVE GRADE - CONCRETE FLOOR~~
~~125~~	~~F-1.50~~	~~CONCRETE FOUNDATION DETAILS - ABOVE GRADE~~
~~126~~	~~F-2.01~~	~~CONCRETE FOUNDATION PLAN - BELOW GRADE - WOOD FLOOR~~
127	F-2.11	CONCRETE FOUNDATION PLAN - BELOW GRADE - CONCRETE FLOOR
128	F-2.50	CONCRETE FOUNDATION PLAN - BELOW GRADE
129	F-2.51	FOUNDATION DETAILS - CONCRETE
		STRUCTURAL
130	S-0.1	STRUCTURAL SPECIFICATIONS
~~131~~	~~S-1.01~~	~~FLOOR FRAMING PLAN - WOOD FLOOR~~
132	S-1.11	FLOOR FRAMING PLAN - CONCRETE FLOOR
~~133~~	~~S-1.50~~	~~FLOOR FRAMING DETAILS - WOOD FLOOR~~
134	S-1.60	FLOOR FRAMING DETAILS - CONCRETE FLOOR
135	S-2.01	ROOF FRAMING PLAN - MONO SLOPE
136	S-2.03	ROOF FRAMING PLAN - PARAPET - MONO SLOPE
~~137~~	~~S-2.11~~	~~ROOF FRAMING PLAN - DUAL SLOPE~~
~~138~~	~~S-2.13~~	~~ROOF FRAMING PLAN - PARAPET - DUAL SLOPE~~
139	S-2.50	ROOF FRAMING DETAILS - MONO SLOPE
~~140~~	~~S-2.51~~	~~ROOF FRAMING DETAILS - DUAL SLOPE~~
141	S-2.60	ROOF FRAMING DETAILS
142	S-2.70	ROOF FRAMING DETAILS - PARAPET
143	S-2.90	ROOF FRAMING DETAILS - TRUSS
144	S-3.01	BUILDING SECTION - MONO SLOPE
~~145~~	~~S-3.02~~	~~BUILDING SECTION - DUAL SLOPE~~
146	S-5.00	WALL FRAMING ELEVATIONS - WOOD STUDS
147	S-5.10	WALL FRAMING DETAILS - WOOD STUDS
148	S-5.11	WALL FRAMING DETAILS - WOOD STUDS
~~149~~	~~S-5.20~~	~~WALL FRAMING ELEVATIONS - STEEL STUDS~~
~~150~~	~~S-5.30~~	~~WALL FRAMING DETAILS - STEEL STUDS~~
~~151~~	~~S-5.31~~	~~WALL FRAMING DETAILS - STEEL STUDS~~
		PLUMBING
152	P-1.01	PLUMBING DETAILS AND SCHEDULE
		MECHANICAL
153	M-0.1	MECHANICAL NOTES, SCHEDULES, AND DETAILS
~~154~~	~~M-1.01~~	~~MECHANICAL PLAN - WALL MOUNT - 24' x 40'~~
~~155~~	~~M-1.02~~	~~MECHANICAL PLAN - WALL MOUNT - 36' x 40'~~
156	M-1.03	MECHANICAL PLAN - WALL MOUNT - 48' TO 120' x 40'
~~157~~	~~M-2.01~~	~~MECHANICAL PLAN - ROOF MOUNT - 24' x 40'~~
~~158~~	~~M-2.02~~	~~MECHANICAL ROOF PLAN - ROOF MOUNT - 24' x 40'~~
~~159~~	~~M-3.01~~	~~MECHANICAL PLAN - ROOF MOUNT - 36' x 40'~~
~~160~~	~~M-3.02~~	~~MECHANICAL ROOF PLAN - ROOF MOUNT - 36x 40'~~
161	M-4.01	MECHANICAL PLAN - ROOF MOUNT - 48' TO 120' x 40'
162	M-4.02	MECHANICAL ROOF PLAN - ROOF MOUNT - 48' TO 120' x 40'
		ELECTRICAL
~~163~~	~~E-1.01~~	~~ELECTRICAL PLAN AND SCHEDULE - 24' x 40'~~
~~164~~	~~E-1.02~~	~~ELECTRICAL PLAN AND SCHEDULE - 36' x 40'~~
165	E-1.03	ELECTRICAL PLAN AND SCHEDULE - 48' TO 120' x 40'
		RAMP
~~166~~	~~R-1.01~~	~~RAMP LANDING~~
~~167~~	~~R-1.02~~	~~OFFSET RAMP PLAN~~
~~168~~	~~R-1.03~~	~~RAMP LANDING~~
~~169~~	~~R-1.04~~	~~STANDARD LANDING WITH STEPS~~
~~170~~	~~R-1.05~~	~~SWITCHBACK RAMP PLAN~~
~~171~~	~~R-2.01~~	~~RAMP DETAILS~~
~~172~~	~~R-3.01~~	~~STANDARD CONCRETE RAMP AND DETAILS~~
		RELOCATABLE SHEETS
173	REL-102	BUILDING RELOCATION DETAILS
174	REL-102	BUILDING RELOCATION DETAILS
		OVERALL TOTAL SHEETS: 174

FILE No.: 19-91 | A#: 03-123590

Revisions

HELENA L. JUBANY
22214
5-31-25

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STATEMENT OF GENERAL CONFORMANCE

FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS (APPLICATION NO. A# 03-122194 FILE NO. 19-H16)

(APPLICATION NO. **A# 03- 123590** **FILE NO.** **19-91**

☒ THE DRAWINGS OR SHEETS LISTED ON THE COVER OR ASSOCIATED WITH 03-122194
☐ THIS DRAWING, PAGE OF SPECIFICATIONS/CALCULATIONS

HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND/OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THIS STATE. IT HAS BEEN EXAMINED BY ME FOR:

1. DESIGN INTENT AND APPEARS TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS AND THE PROJECT SPECIFICATIONS PREPARED BY ME, AND
2. COORDINATION WITH MY PLANS AND SPECIFICATIONS AND IS ACCEPTABLE FOR INCORPORATION INTO THE CONSTRUCTION OF THIS PROJECT.

THE STATEMENT OF GENERAL CONFORMANCE "SHALL NOT BE CONSTRUED AS RELIEVING ME OF MY RIGHTS, DUTIES, AND RESPONSIBILITIES UNDER SECTIONS 17302 AND 81138 OF THE EDUCATION CODE AND SECTIONS 4-336, 4-341, AND 4-344" OF TITLE 24, PART 1 (TITLE 24, PART 1, SECTION 4-317 [b])

I FIND THAT:
☒ ELEVATOR GUIDERAILS, GLAZED ALUMINUM CURTAINWALLS.
☐ THIS DRAWING OR PAGE

☒ IS/ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN INTENT, AND
☒ HAS/HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS.

SIGNATURE:
DATE: 09/18/2023
ARCHITECT OR ENGINEER DESIGNATED TO BE IN GENERAL RESPONSIBLE CHARGE
PRINT NAME: HELENA JUBANY
LICENSE NUMBER: C-22214
EXPIRATION DATE: 05/31/2025

☐ IS/ARE IN GENERAL CONFORMANCE WITH THE PROJECT DESIGN INTENT, AND
☐ HAS/HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS.

SIGNATURE:
DATE:
ARCHITECT OR ENGINEER DELEGATED RESPONSIBILITY FOR THIS PORTION OF THE WORK
PRINT NAME:
LICENSE NUMBER:
EXPIRATION DATE:

GENERAL SYMBOLS

CODE ANALYSIS

TYPE OF CONSTRUCTION: TYPE V-B NON SPRINKLERED
ALLOWABLE AREA = 9,500 S.F.
PROPOSED AREA = 2,880 S.F.
OCCUPANCY - E

SCOPE OF WORK

MILDRED B. JANSON ELEMENTARY SCHOOL:
AREA OF SCOPE OF WORK: 2,880 SQ.FT.

- CONSTRUCTION OF (3) 24' X 40' RELOCATABLES (PC#04-121999) ADA PATH OF TRAVEL SCOPE. NEW ADA RESTROOM SIGNAGE AT EXISTING BUILDING 'D' DSA A# 03-107659 03-118778

NATIONAL FLOOD HAZARD MAP

MILDRED B. JANSON ELEMENTARY SCHOOL
NEW RELOCATABLES
8628 MARSHALL ST, ROSEMEAD, CA 91770

ROSEMEAD SCHOOL DISTRICT
3907 ROSEMEAD BLVD.,
ROSEMEAD, CA 91770

NAC ARCHITECTURE
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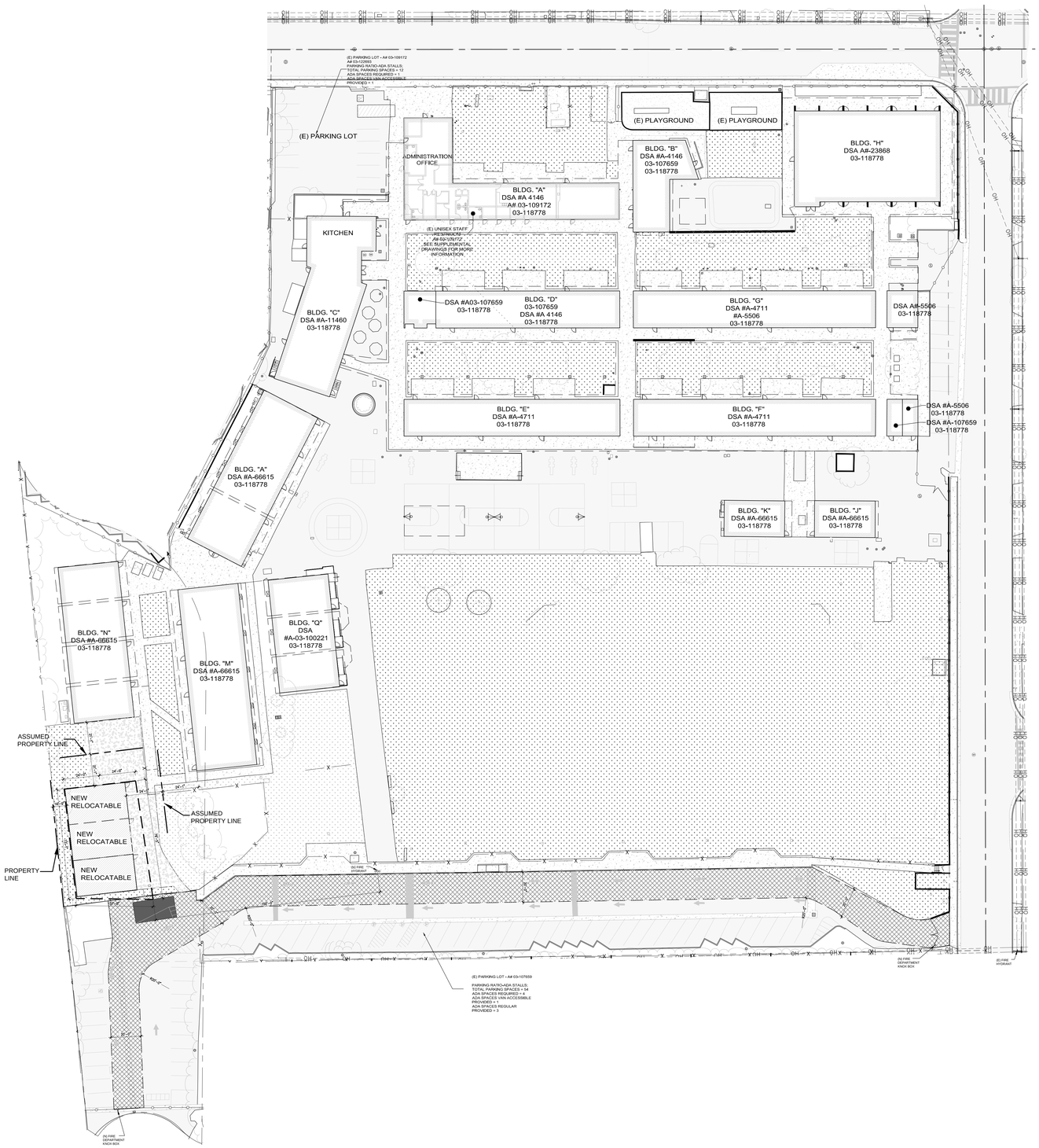
NAC NO	161-23078
DRAWN	AF
CHECKED	MO,GC
DATE	08/30/2023

TITLE SHEET,
INDEX TO DRAWINGS
AND NOTES

G0.1



1 FIRE ACCESS PLAN
SCALE: 1/32" = 1'-0"

N
PLAN NORTH

DSA

810

FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

Division of the State Architect's (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requires the design professional to provide the following information at time of project submittal for projects consisting of construction of a new campus, construction of new building(s), additions to existing buildings, and for site alternate design means for fire department emergency vehicle access, and fire suppression water supply.

Information associated with compliance items 1 through 3 below is to be provided for all project types indicated above. Information associated with items 4 through 7 is to be completed when an alternate means is utilized. Acknowledgement by the school district and signature from the Local Fire Authority (LFA) is only required when an alternate design means is being requested.

The Project Information and Fire & Life Safety Information sections are to be completed for all projects and imaged onto the fire access site plan. When an alternate design/means is proposed, all sections on pages 1 and 2 are to be completed and imaged on the fire access site plan.

For additional information refer to the instructions at the end of this form and DSA Policy *PL 09-01: Fire Flow for Buildings*.

PROJECT INFORMATION	
School District/Owner:	Rosemead School District
Project Name/School:	Mildred B. Janson Elementary School
Project Address:	8628 Marshall St, Rosemead, CA 91770

FIRE & LIFE SAFETY INFORMATION				
1.	Has a fire hydrant flow test been performed within the past 12 months? *(If yes, provide a copy of the test data.)*	Yes ☑		No ☐
2.	Was the fire hydrant water flow test performed as part of this LFA review?	Yes ☐		No ☑
3.	Is the project located within a designated fire hazard severity zone (FHSZ) as established by Cal-Fire? *(If yes, indicate FHSZ classification below.)*	Yes ☐		No ☑
	Refer to the following website for FHSZ locations: http://egis.fire.ca.gov/FHSZ/	Moderate ☐	High ☐	Very High ☐
	Wildland Interface Area (WIFA) *(If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)*			WIFA ☐

CONDITION MEANS AND METHODS RESOLUTION		ALTERNATE ACCEPTED			
		Yes	No	N/A	N/R
4.	Emergency vehicle access roadways do not meet CFC requirements.			✓	
4a.	**Acceptable Alternate:** Emergency vehicle and personnel access as proposed by the project architect is acceptable for providing fire suppression and protection of life and property.		✓		
5.	**Fire Hydrants:** Number and spacing does not meet CFC requirements.			✓	
5a.	**Acceptable Alternate:** Number of fire hydrants and spacing as proposed by the project architect is acceptable for fire suppression and protection of life and property.		✓		
6.	**Fire Hydrants:** Water flow and pressure are less than CFC minimum.			✓	
6a.	**Acceptable Alternate:** The available flow and pressure is acceptable for providing fire suppression and protection of life and property.		✓		
7.	Location of fire department connection(s) serving fire sprinkler systems or standpipe systems does not meet CFC requirements.			✓	
7a.	**Acceptable Alternate:** The location of fire department connection serving the fire sprinkler system and/or standpipe system is acceptable for providing fire suppression and protection of life and property.		✓		

School District Acceptance of Acceptable Design Alternates

By signing this form, the school district acknowledges and accepts the proposed design as an alternative to California Building Code (CBC) and California Fire Code (CFC) minimum requirements, as indicated by one or more of the conditions indicated at items 4a, 5a, 6a or 7a, for providing fire and life safety protection of life and property.

Accepted by: _____ Title: _____

Signature: _____ Date: _____

LOCAL FIRE AUTHORITY (LFA) INFORMATION			
LFA Agency Name:			
LFA Review Official:			
Title:		Work Phone:	
Work Email:			

LFA Reviewer's Signature: _____ Date: _____

FIRE ACCESS PLAN - GENERAL NOTES

CFC 3310.1 REQUIRED ACCESS:
APPROVED VEHICLE ACCESS FOR FIRE FIGHTING SHALL BE PROVIDED TO ALL CONSTRUCTION OR DEMOLITION SITES. VEHICLE ACCESS SHALL BE PROVIDED WITHIN 150 FEET OF TEMPORARY OR PERMANENT FIRE DEPARTMENT CONNECTIONS. VEHICLE ACCESS SHALL BE PROVIDED BY EITHER TEMPORARY OR PERMANENT ROADS, CAPABLE OF SUPPORTING VEHICLE LOADING UNDER ALL WEATHER CONDITIONS. VEHICLE ACCESS SHALL BE MAINTAINED UNTIL PERMANENT FIRE APPARATUS ACCESS ROADS ARE AVAILABLE.

CFC 3310.2 KNOX BOXES:
KNOX BOXES SHALL BE PROVIDED AS REQUIRED BY CHAPTER 5.

FIRE DEPARTMENT ACCESS DURING CONSTRUCTION

CFC 3310.1 REQUIRED ACCESS:
THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ACCESS FOR FIRE TRUCKS TO WITHIN 150' OF THE PERIMETER OF THE NEW TENT STRUCTURE, DURING CONSTRUCTION. ACCESS SHALL BE PROVIDED STARTING NO LATER THAN THE COMPLETION OF EXCAVATION AND FOUNDATIONS, BUT PRIOR TO STOCKPILING COMBUSTIBLE MATERIAL ON SITE, AND SHALL BE MAINTAINED CONTINUOUSLY THROUGHOUT THE REMAINING DURATION OF CONSTRUCTION. FIRE TRUCK ACCESS SHALL BE VIA COMPACTED EARTH DRIVEWAYS MINIMUM TWENTY FEET WIDE WITHIN MINIMUM INSIDE TURING RADII OF TWENTY FEET. THESE DRIVEWAYS SHALL BE MAINTAINED IN GOOD CONDITION BY THE CONTRACTOR DURING CONSTRUCTION AND SHALL REMAIN CLEAR AND UNOBSTRUCTED AT ALL TIME.

BUILDING CODE ANALYSIS

CONSTRUCTION OF 3 NEW 24X40 RELOCATABLES
CODE ANALYSIS:

TYPE OF CONSTRUCTION: TYPE V-B, NON-SPRINKLERED
ALLOWABLE AREA = 9,500 S.F.
PROPOSED AREA = 2,880 S.F. OK

HYDRANT FLOW REQUIREMENT FOR THE NEW RELOS PER CFC, APPENDIX BB, TABLE BB 105.1 = 1,500 GPM AT 20 PSI FOR A DURATION OF 2 HOURS.
HYDRANT FLOW PROVIDED AT NEW FH: 1,500 GPM AT 20 PSI FOR 2 HOURS

FIRE DEPARTMENT NOTES

CFC 3310.1 REQUIRED ACCESS:

1. PROVIDE A MINIMUM UNOBSTRUCTED WIDTH OF 26 FEET AND A MINIMUM UNOBSTRUCTED VERTICAL CLEARANCE OF 13 FEET 6 INCHES. VEHICULAR ACCESS TO WITHIN MINIMUM 150 FEET OF ALL PORTION OF EXTERIOR WALLS.
   FIRE CODE 902.2.1.
2. THE REQUIRED FIRE FLOW FOR PUBLIC FIRE HYDRANTS AT THIS LOCATION IS 1,500 GALLONS PER MINUTE AT 20 PSI FOR THE DURATION OF 2 HOURS, OVER AN ABOVE MAXIMUM DAILY DOMESTIC DEMAND.
3. THE REQUIRED FIRE FLOW ON-SITE HYDRANTS IS 1,500 GALLONS PER MINUTE AT 20 PSI. EACH ON-SITE HYDRANTS MUST BE CAPABLE OF FLOWING 1,500 GALLONS PER MINUTE AT 20 PSI WITH ANY TWO HYDRANTS FLOWING SIMULTANEOUSLY.
4. VEHICULAR ACCESS MUST BE PROVIDED AND MAINTAINED SERVICEABLE THROUGHOUT CONSTRUCTION. SEE NOTE ON THIS SHEET REGARDING FIRE DEPT. ACCESS DURING CONSTRUCTION.
5. COMMERCIAL DUMPSTERS OR CONTAINERS WITH AN INDIVIDUAL CAPACITY OF 1.5 CUBIC YARDS OR GREATER SHALL NOT BE STORED OR PLACED WITHIN FIVE FEET OF COMBUSTIBLE WALLS, OPENINGS OR COMBUSTERS ARE PROTECTED BY AN APPROVED SPRINKLER SYSTEM. FIRE CODE 1103.2.2.

LEGEND

NEW FIRE HYDRANT
FLOW = 1,500 GPM @ 20 PSI FOR 2 HOURS.
HYDRANT SHALL BE WETBARREL TYPE
CONFORMING TO AWWA C503 OR UL246

(E) FIRE APPARATUS ACCESS ROAD - UNOBSTRUCTED WIDTH OF 20 FT. MIN. AND UNOBSTRUCTED VERTICAL CLEARANCE " CLEAR TO SKY".

FIRE APPARATUS

FILE No.: 19-91 A#: 03-123590

Revisions

LICENSED ARCHITECT
HELENA LJUBANOVIC
22214
EXPIRES: 6-30-25
STATE OF CALIFORNIA

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NEW RELOCATABLES
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ROSEMEAD SCHOOL DISTRICT
3907 ROSEMEAD BLVD.,
ROSEMEAD, CA 91770

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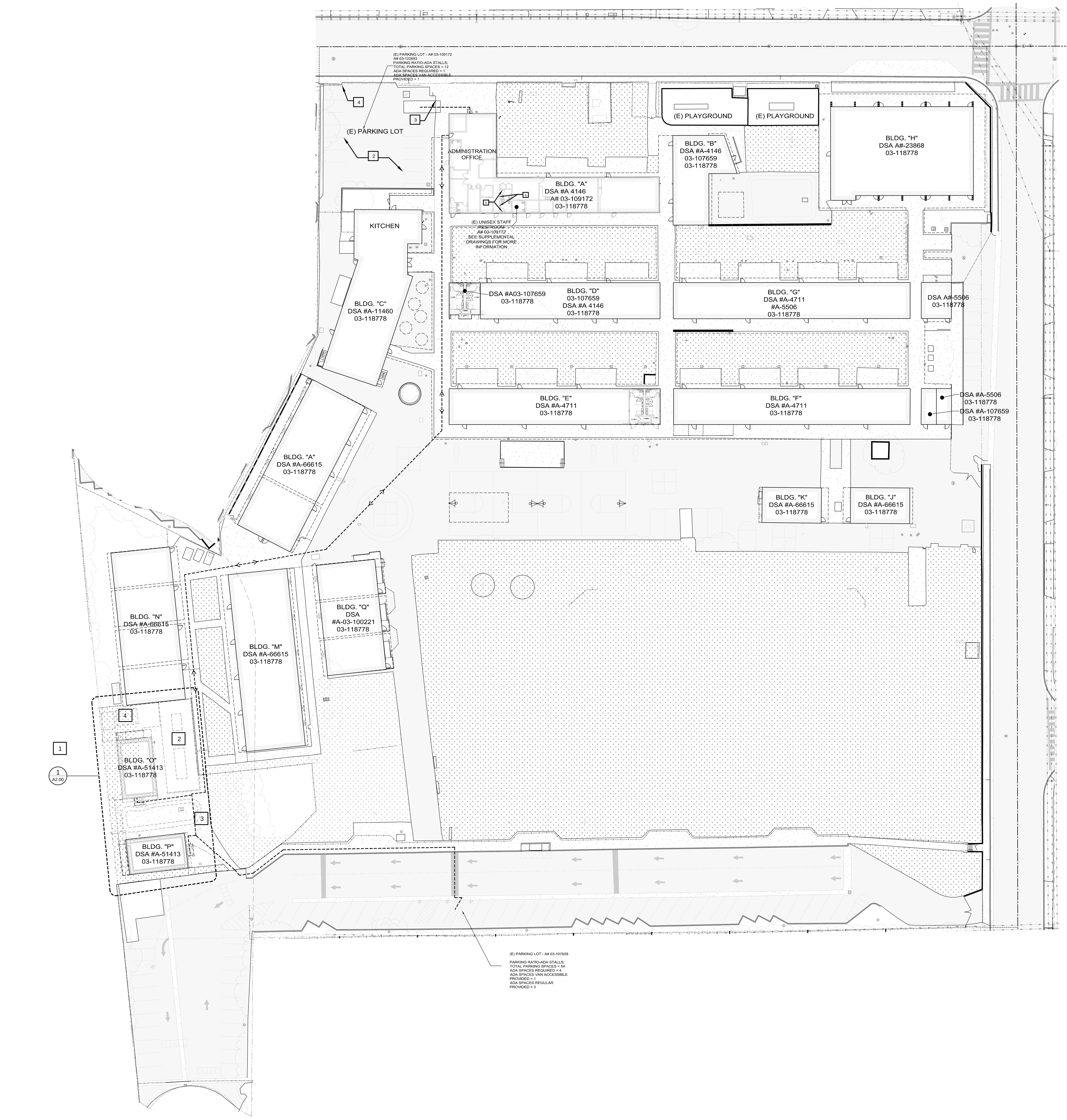
P:323.475.8075

NAC NO	161-23078
DRAWN	AF
CHECKED	MO,GC
DATE	08/30/2023

FIRE ACCESS PLAN

G0.2

Revisions



1 SITE PLAN - DEMOLITION
SCALE: 1/32" = 1'-0"

N
PLAN NORTH

JANSON RELOCATABLES

BLDGS IN SCOPE	DSA A#	CERTIFICATION STATUS
BLDG A	03-4146 03-109172 03-118778	CERTIFIED CERTIFIED CERTIFIED

ACCESSIBILITY NOTES

1. SITE WALKWAYS SHALL PROVIDE A BARRIER FREE PATH OF TRAVEL FOR A PERSON IN A WHEELCHAIR.THE PATH OF TRAVEL SHALL BE A HARD, DURABLE AND SLIP RESISTANT ROUTE A MINIMUM OF 48 INCHES IN WIDTH (11B-403.5.1 EXCEPTION 3) AND WITH A MAXIMUM GRADIENT SLOPE OF 5% AND MAXIMUM CROSS-SLOPE OF 2% (11B-403.3) ABRUPT CHANGES IN LEVEL SHALL NOT EXCEED A BEVELED SLOPE OF 1:2 WITH A 1/2" IN VERTICAL HEIGHT AND 1/4" MAXIMUM IN VERTICAL DIFFERENTIAL LEVELS. CONCRETE FINISH SHALL BE STABLE, FIRM AND SLIP-RESISTANT (11B-302).

2. PATH OF TRAVEL (P.O.T.) AS INDICATED, IS A COMMON BARRIER FREE EGRESS/ACCESS ROUTE WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAXIMUM SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL AND IS AT LEAST 48" WIDE. THE PATH SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH. PASSING SPACES (11B-403.5.3) AT LEAST 60"X 60" ARE LOCATED NOT MORE THAN 200' APART. PARTS OF P.O.T. WITH CONTINUOUS GRADIENTS HAVE 60" LEVEL AREAS (11B-403.7) NOT MORE THAN 400' APART. THE CROSS-SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5%. (P.O.T.) SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM (11B-307.4) AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80" (11B-307.2). THAT THERE ARE NO BARRIERS IN THE P.O.T. ARCHITECT HAS VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.

3. GATES IN THE PATH OF TRAVEL SHALL HAVE ACCESSIBLE HARDWARE AND KICK PLATES.

4. FOR ALL SITE GRADIENTS SEE CIVIL PLANS

PATH OF TRAVEL STATEMENT

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT: THE P.O.T. IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE REQUIREMENTS OF THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS, OR PORTIONS OF THE P.O.T.THAT WERE DETERMINED TO BE NONCOMPLIANT WITH THE CBC HAVE BENN IDENTIFIED AND THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION TRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF P.O.T. ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CBC COMPLIANT ARE FOUND TO BE CONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THE ITEMS SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

LEGEND

- LANDSCAPE
- NEW RELOCATABLE SCOPE OF WORK
- ACCESSIBLE PATH OF TRAVEL (POT)
- EXISTING, TO BE DEMOLISHED

KEYNOTES

- 1.0 REMOVE EXISTING RELOCATABLES BUILDING COMPLETELY (INCLUDING FOUNDATIONS AND RAMPS)
- 2.0 REMOVE EXISTING PLAYGROUND EQUIPMENT AND DEMOLISH EXISTING CONCRETE CURBS.
- 3.0 REMOVE EXISTING CONCRETE WALKWAY.
- 4.0 REMOVE EXISTING STORAGE SHEDS.

MILDRED B. JANSON ELEMENTARY SCHOOL
NEW RELOCATABLES
8628 MARSHALL ST, ROSEMEAD, CA 91770

ROSEMEAD SCHOOL DISTRICT
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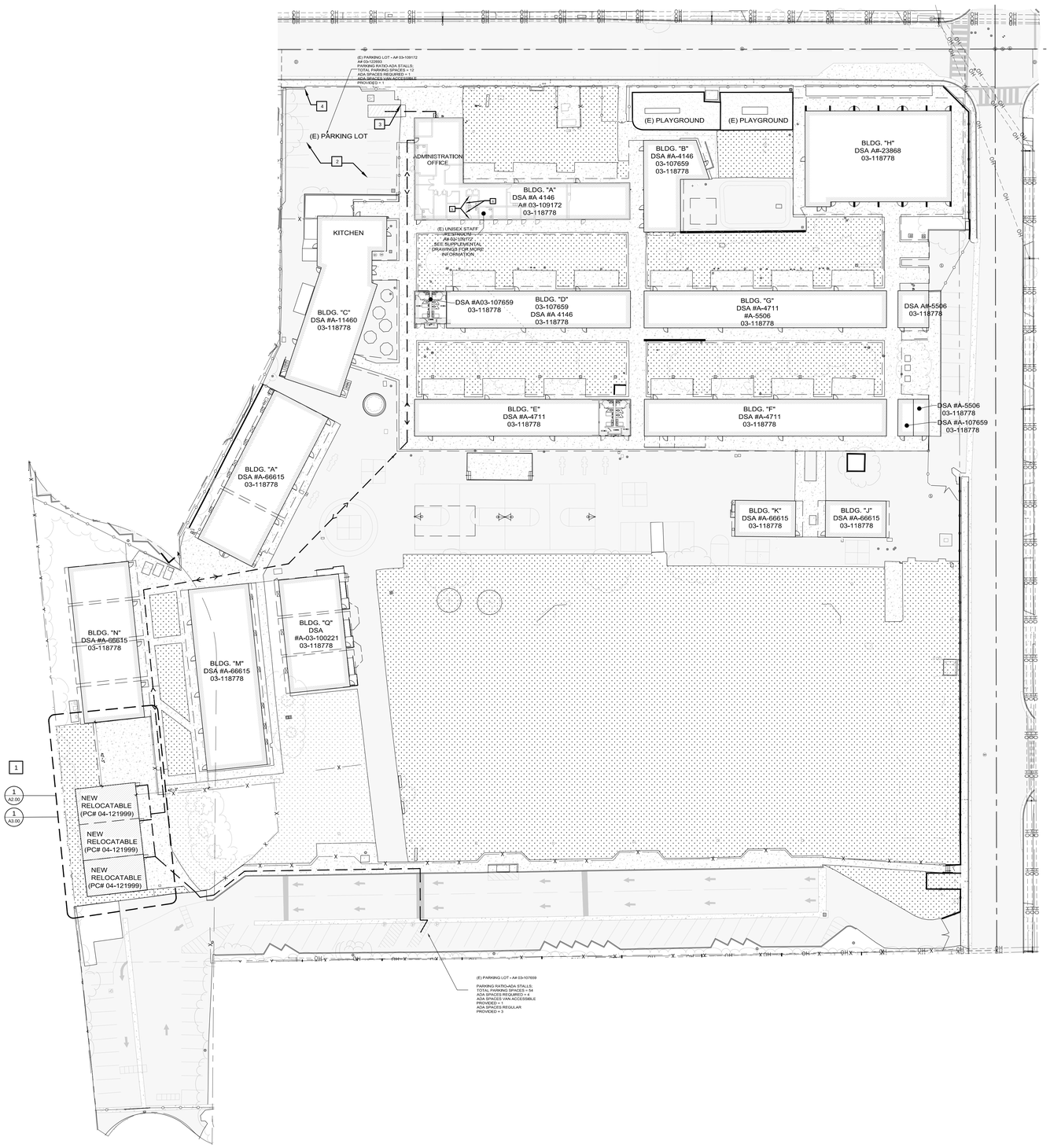
SITE PLAN - DEMOLITION

A0.01



1 SITE PLAN
SCALE: 1/32" = 1'-0"

N
PLAN NORTH

JANSON RELOCATABLES

BLDGS IN SCOPE	DSA A#	CERTIFICATION STATUS
BLDG A	03-4146 03-109172 03-118778	CERTIFIED CERTIFIED CERTIFIED

ACCESSIBILITY NOTES

1. SITE WALKWAYS SHALL PROVIDE A BARRIER FREE PATH OF TRAVEL FOR A PERSON IN A WHEELCHAIR.THE PATH OF TRAVEL SHALL BE A HARD, DURABLE AND SLIP RESISTANT ROUTE A MINIMUM OF 48 INCHES IN WIDTH (11B-403.5.1 EXCEPTION 3) AND WITH A MAXIMUM GRADIENT SLOPE OF 5% AND MAXIMUM CROSS-SLOPE OF 2% (11B-403.3) ABRUPT CHANGES IN LEVEL SHALL NOT EXCEED A BEVELED SLOPE OF 1:2 WITH A 1/2" IN VERTICAL HEIGHT AND 1/4" MAXIMUM IN VERTICAL DIFFERENTIAL LEVELS. CONCRETE FINISH SHALL BE STABLE, FIRM AND SLIP-RESISTANT (11B-302).

2. PATH OF TRAVEL (P.O.T.) AS INDICATED, IS A COMMON BARRIER FREE EGRESS/ACCESS ROUTE WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAXIMUM SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL AND IS AT LEAST 48" WIDE. THE PATH SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH PASSING SPACES (11B-403.5.3) AT LEAST 60"X 60" ARE LOCATED NOT MORE THAN 200' APART. PARTS OF P.O.T. WITH CONTINUOUS GRADIENTS HAVE 60" LEVEL AREAS (11B-403.7) NOT MORE THAN 400' APART. THE CROSS-SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5%. (P.O.T.) SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM (11B-307.4) AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80" (11B-307.2). THAT THERE ARE NO BARRIERS IN THE P.O.T. ARCHITECT HAS VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.

3. GATES IN THE PATH OF TRAVEL SHALL HAVE ACCESSIBLE HARDWARE AND KICK PLATES.

4. FOR ALL SITE GRADIENTS SEE CIVIL PLANS

PATH OF TRAVEL STATEMENT

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT: THE P.O.T. IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE REQUIREMENTS OF THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS, OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NONCOMPLIANT WITH THE CBC HAVE BENN IDENTIFIED AND THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION TRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE INDICATED IN THESE CONSTRUCTION DOCUMENTS.

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LEGEND

- LANDSCAPE
- NEW RELOCATABLE SCOPE OF WORK
- ACCESSIBLE PATH OF TRAVEL (POT)

KEYNOTES

1. NEW (3) 24' X 40' RELOCATABLES
2. PROVIDE NEW STRIPING AT ENTIRE PARKING LOT AS PER DETAIL #9/A8.02
3. PROVIDE NEW ADA PARKING SIGNS PER 10/A8.02
4. PROVIDE NEW TOW AWAY SIGN ON (E) POLE PER DETAIL 7/A8.02
5. REMOVE EXISTING SIGNAGE AND REPLACE WITH NEW ACCESSIBLE RESTROOM DOOR SIGN. SEE, 4/8.04
6. REMOVE EXISTING WALL SIGNAGE AND REPLACE WITH NEW ACCESSIBLE RESTROOM WALL SIGN. SEE, 2 & 3/A8.04

FILE No.: 19-91 A#: 03-123590

Revisions

LICENSED ARCHITECT
HELENA LJUBANOVIC
22214
RENEW 8-31-25
STATE OF CALIFORNIA

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SITE PLAN

A1.00

1 DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

N
PLAN NORTH

GENERAL NOTES

1. THE DEMOLITION PLANS INCLUDE THE SCOPE OF DEMOLITION WORK REQUIRED, BUT ARE NOT INTENDED TO INCLUDE ALL OF THE DETAILED REQUIREMENTS. ALL DEMOLITION WORK NOT SHOWN ON DRAWINGS OR SPECIFIED WHICH IS REQUIRED FOR COMPLETION OF WORK INCLUDED IN THE CONTRACT DOCUMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
2. COORDINATE ALL DEMOLITION WORK WITH ALL TRADES AND REVIEW DRAWINGS FOR EXACT LOCATIONS OF ALL OPENINGS, ETC., PRIOR TO STARTING WORK.
3. ALL EXISTING WALLS, STRUCTURE, DOORS AND OTHER ITEMS TO REMAIN ARE SHOWN AS SOLID LINES OR INDICATED AS SUCH BY NOTE. ALL STRUCTURAL MEMBERS, SLABS AND ROOF STRUCTURE/DECKS ARE TO REMAIN UNLESS SPECIFICALLY NOTED OTHERWISE.

GRAPHIC LEGEND

EXISTING, TO REMAIN

EXISTING, TO BE DEMOLISHED

KEYNOTES

1.0 REMOVE EXISTING RELOCATABLES BUILDING COMPLETELY (INCLUDING FOUNDATIONS AND RAMPS)

2.0 REMOVE EXISTING PLAYGROUND EQUIPMENT AND DEMOLISH EXISTING CONCRETE CURBS.

3.0 REMOVE EXISTING CONCRETE WALKWAY.

4.0 REMOVE EXISTING STORAGE SHEDS.

FILE No.: 19-91 | A#: 03-123590

Revisions

LICENSED ARCHITECT HELENA L. JUBANY 22214 REN. 8-31-25 STATE OF CALIFORNIA

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DEMOLITION PLAN

A2.00

1 CONSTRUCTION PLAN
SCALE: 1/8" = 1'-0"

N
PLAN NORTH

GRAPHIC LEGEND

EXISTING, TO REMAIN

NEW RELOCATABLE

KEYNOTES

1.0 (3) NEW 24'X40' RELOCATABLE

2.0 NEW CONCRETE WALKWAY

FILE No.: 19-91 A#: 03-123590

Revisions

LICENSED ARCHITECT
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MILDRED B. JANSON ELEMENTARY SCHOOL

NEW RELOCATABLES

8628 MARSHALL ST. ROSEMEAD, CA 91770

ROSEMEAD SCHOOL DISTRICT

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SCHOOL DISTRICT
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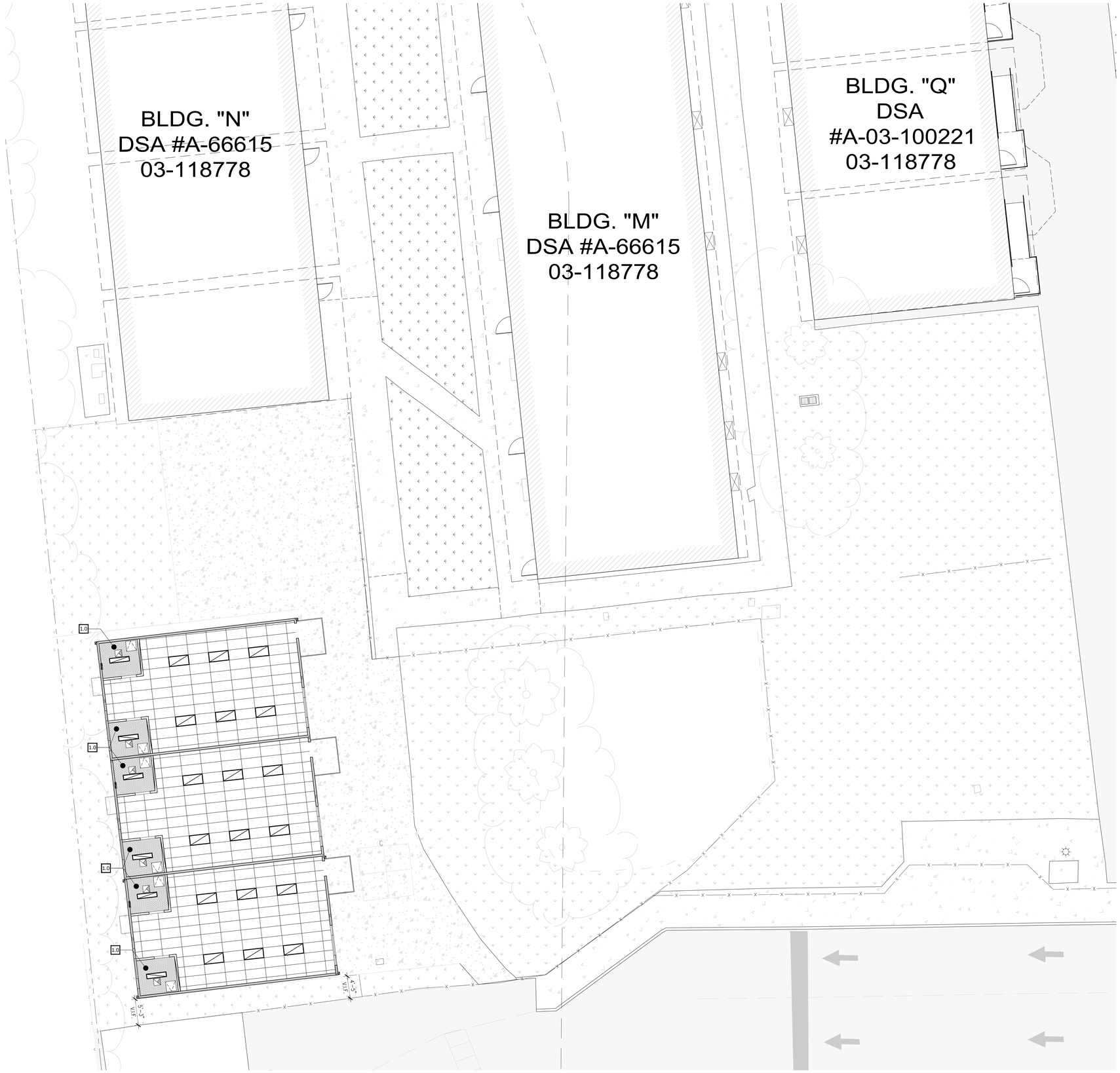
CONSTRUCTION PLAN

A3.00



GRAPHIC LEGEND

- EXISTING, TO REMAIN
- NEW WALL
- T-BAR CEILING
- 2'X4' RECESSED LIGHT FIXTURE
- 1'X4' RECESSED LIGHT FIXTURE
- ACCESS PANEL
- EXHAUST FAN

KEYNOTES

1.0 GYPSUM BOARD CEILING

1 REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"

N
PLAN NORTH

FILE No.: 19-91 | A#: 03-123590

Revisions

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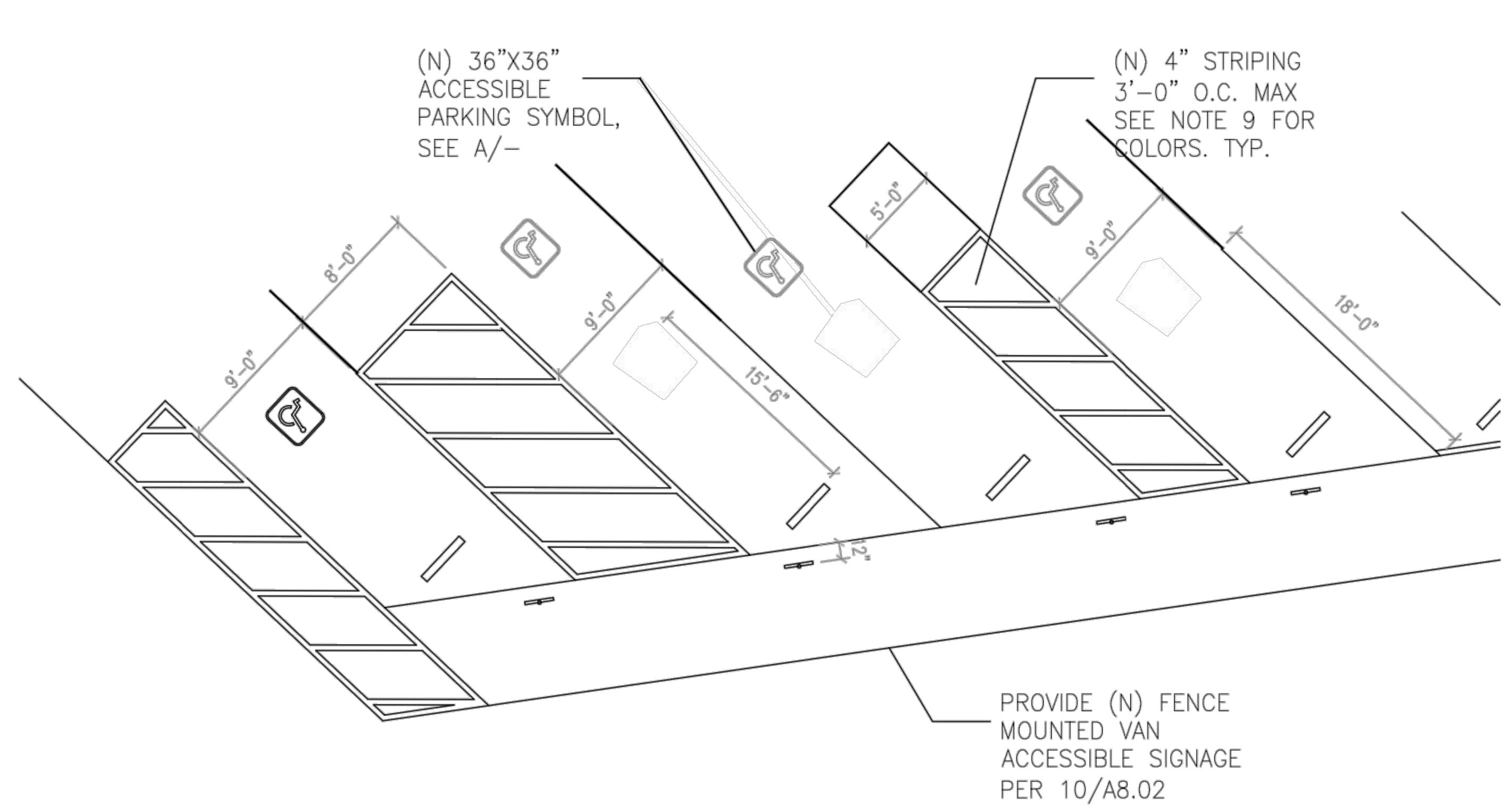
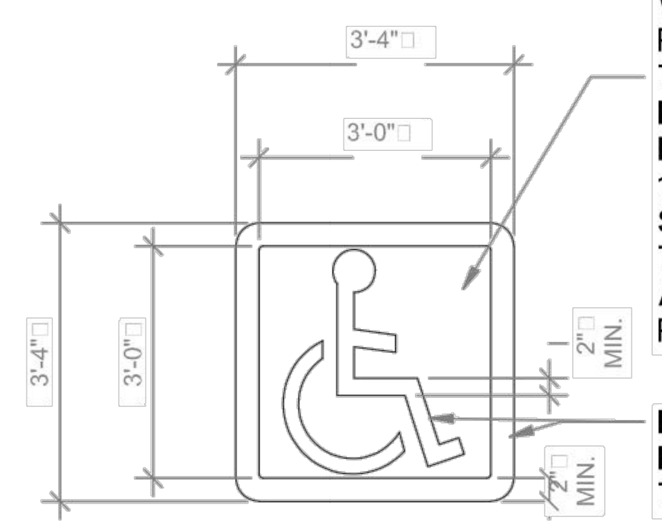
DATE	08/30/2023

REFLECTED CEILING PLAN

A4.00



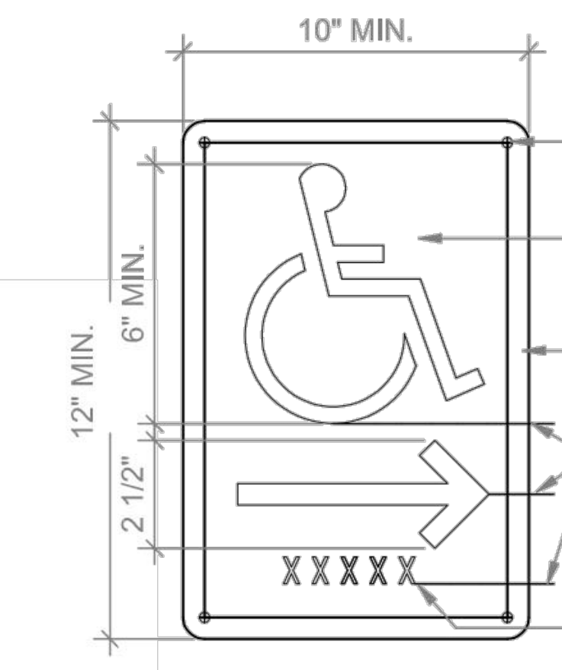
9 PARKING STRIPING
Scale: 1/8" = 1'-0"



A ACCESSIBLE PARKING SYMBOL

NOTES

1. A CONCRETE CUTTING SAW SHALL BE USED TO SAWCUT ALL EXISTING PAVEMENT ALONG LINES OF REMOVAL, WHERE NEW PAVEMENT IS TO ADJOIN EXISTING.
2. OVERLAP SEALER COAT A MINIMUM OF 12" BEYOND JOINT LINES, WHERE NEW PAVEMENT ABUTTS EXISTING.
3. ALL SURFACES SHALL PROVIDE POSITIVE DRAINAGE FREE FROM DEPRESSIONS AND SHALL BE FLOODED AS NECESSARY TO VERIFY DRAINAGE CHARACTERISTICS.
4. DUST SHALL BE CONTROLLED BY WATERING.
5. PATCH, REPAIR AND/OR RECONSTRUCT ALL DAMAGED AREAS OF EXISTING PAVING TO MATCH ADJACENT SURFACES.
6. REFER TO ELECTRICAL AND PLUMBING DRAWINGS PRIOR TO EXCAVATING, TRENCHING OR GRADING OPERATIONS. VERIFY LOCATIONS AND DEPTHS OF UTILITIES AND PROTECT THROUGH-OUT THE WORK.
7. SCORE CONCRETE WALKS AND RAMPS AS INDICATED. EQUAL SPACES BETWEEN EXPANSIONS JOINTS.
8. DOUBLE LINES ACROSS CONCRETE WALKS INDICATE EXPANSION JOINTS AT 20'-0" O.C. MAXIMUM.
9. STRIPING & LETTERING SHALL BE 2 COATS OF WHITE TRAFFIC PAINT APPLIED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. ALL LETTERING TO BE 12" HIGH WITH 1-1/2" WIDE STROKE. ALL STRIPING 4" WIDE. ALL STRIPING TO BE APPLIED WITH CUTOUTS & TEMPLATES WITHOUT FUZZINESS OR WAVINESS.
10. SEE SITE PLAN FOR OVERALL LAYOUT.
11. THESE DETAILS ARE FOR REFERENCE AND DIMENSION CONTROL ONLY.
12. 8' ACCESS AISLE SHALL BE PLACED ON THE PASSENGER SIDE OF A VAN ACCESSIBLE SPACE.
13. ALL DIMENSIONS ARE TO CENTERLINE OF STRIPE INLESS OTHERWISE INDICATED.
14. PARKING SPACE AND ACCESS AISLE SHALL HAVE A MAXIMUM SLOPE OF 1.5% IN ANY DIRECTION.
15. POLE SIGNAGE SHALL NOT BE PLACED IN A PATH OF TRAVEL.
16. IF POLE INSTALLED NECT TO ACESSIBEL WALK PROVIDE 1'-0: MIN. CLEAR.
17. PER CH 11B-502.2 EXCEPTION: VAN PARKING SPACES SHALL BE PERMITED TO BE 108 INCHES WIDE MINIMUM WHERE THE ACCESS AISLE IS 96 INCHES WIDE MINIMUM.



NOTE:
VISUAL CHARACTERS ON SIGNS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I". STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 10 PERCENT MINIMUM AND 20 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER

CHARACTER HEIGHT TO BE 5/8" MIN. AND 2" MAX BASED ON THE HEIGHT OF THE UPPERCASE "I" CBC 11B-703.2.5

ISA (INTERNATIONAL SYMBOL OF ACCESSIBILITY) SHALL COMPLY WITH CBC 11B-703.7 & CBC FIGURE 11B-703.7.2.1 (PROPORTIONS), TYP.

ACCESSIBLE DIRECTIONAL SIGN; COMPLY WITH *VISUAL* SIGN REQUIREMENTS (11B-703.5)

REFER TO SPEC 10 1400 - 2.3 - B AND CBC 2016 11B-703.5 FOR REQUIREMENTS FOR VISUAL CHARACTER SIGNS

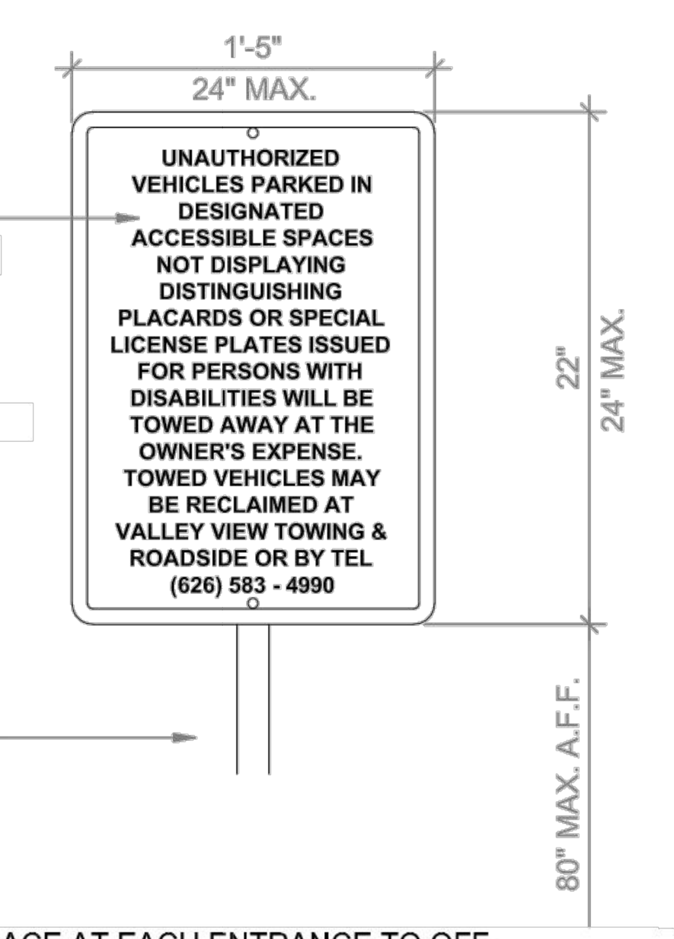
3 ACCESSIBLE DIRECTIONAL SIGNAGE
Scale: 3" = 1'-0"

NOTES:
1. FOR POST MOUNTING SEE DETAIL 4/-

11 NO PARKING FIRE LANE
Scale: 1 1/2" = 1'-0"

1. METAL REFLECTORIZED SIGN
2. SIZE: MINIMUM 12"x18"
3. MINIMUM 3" LETTERING
4. WHITE BACKGROUND WITH RED LETTERING
5. BOTTOM OF THE SIGN SHALL BE 7'-0" ABOVE GROUND LEVEL.
6. FOR SIGN POST MOUNTING REFER TO 2/-

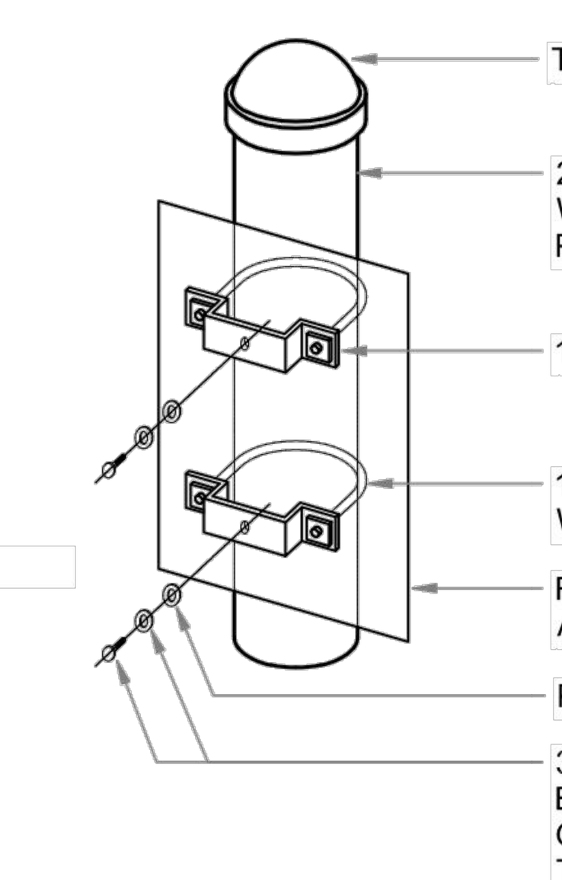
8 FIRE LANE SIGNAGE
Scale: 3/16" = 1'-0"



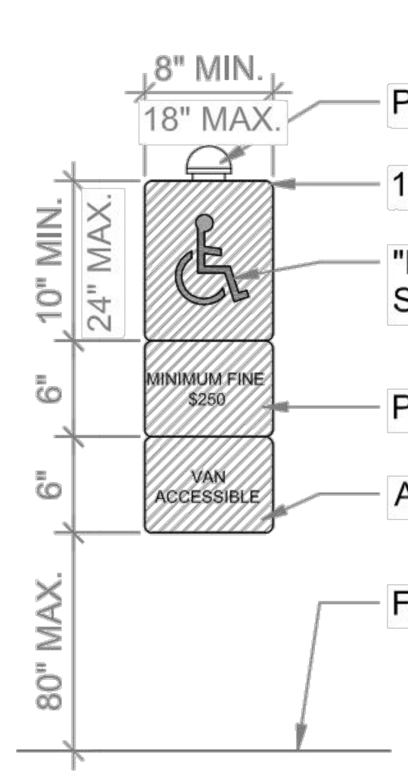
NOTE:
POST IN CONSPICUOUS PLACE AT EACH ENTRANCE TO OFF-STREET PARKING LOT, OR IMMEDIATELY ADJACENT TO AND VISIBLE FROM EACH DESIGNATED STALL. SIGN SHALL NOT OBSTRUCT PASSAGE FROM PARKING STALL OR ANY WALKWAY. ALL LETTERS MUST BE PERMANENT PART OF SIGN. DECALS/STICKERS ARE NOT ACCEPTABLE.

7 TOW AWAY PARKING LOT SIGN
Scale: 1 1/2" = 1'-0"

5 WALL & FENCE MOUNTING SIGN
Scale: 1" = 1'-0"



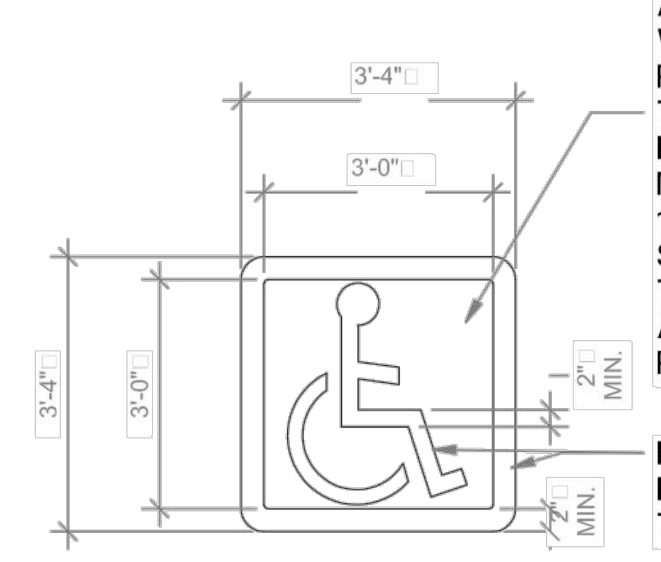
2 SIGN ATTACHMENT DETAIL - POST
Scale: 1" = 1'-0"



NOTE: FOR FENCE ATTACHMENT SEE 5/-

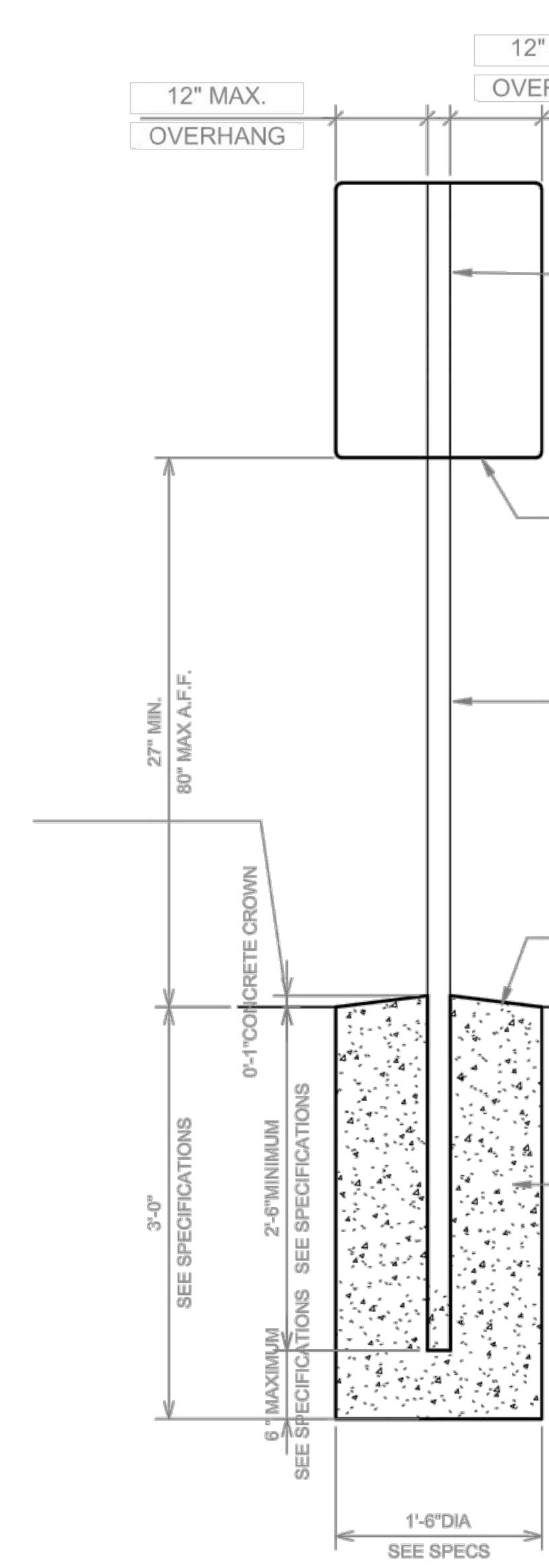
NOTE:
TEXT AND SYMBOLS TO BE COLOR WHITE ON BLUE BACKGROUND-TYPICAL

10 ACCESSIBLE PARKING SIGNAGE
Scale: 1" = 1'-0"



A ACCESSIBLE PARKING SYMBOL

6 ACCESSIBLE PARKING SYMBOL
Scale: 1" = 1'-0"

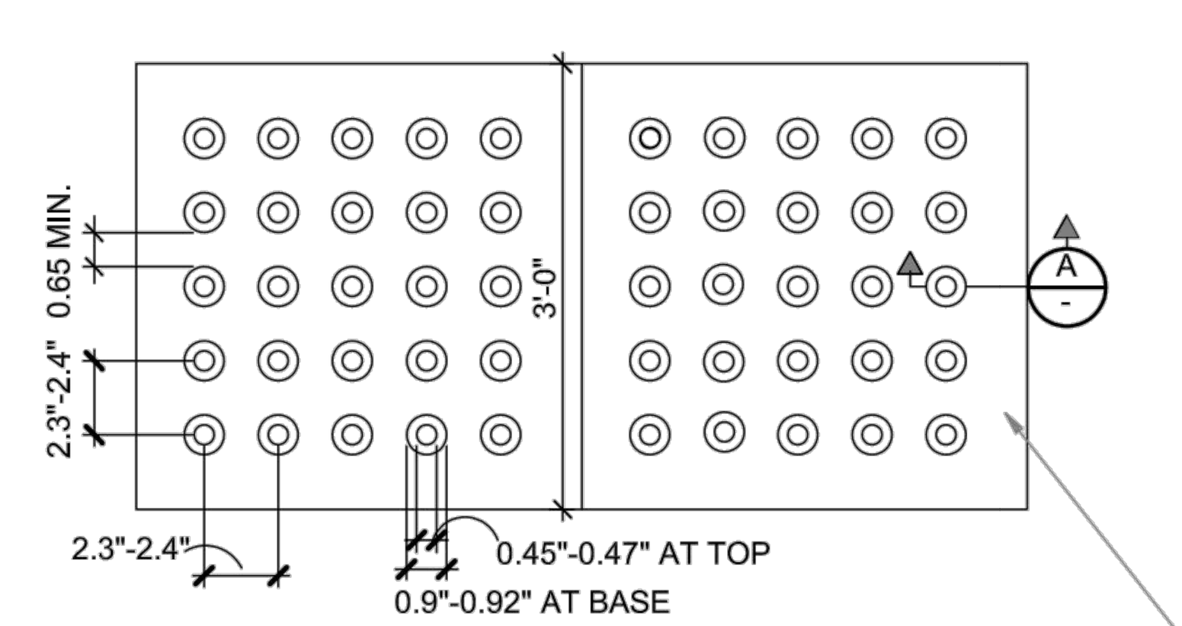


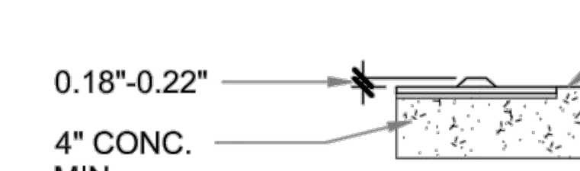
NOTE:
SEE SIGN ATTACHMENT DETAILS. SIGN MAY BE MOUNTED ON FENCE OR WALL, WHERE APPLICABLE - SEE 5-A8.02

4 POST MOUNTED SIGN - FOOTING
Scale: 1" = 1'-0"

NOTES:
1. DETECTABLE WARNING TILE SHALL FORM CONTINUOUS SURFACE OF CROSSWALK.
2. COLOR YELLOW TO MATCH FEDERAL COLOR NO. 33538, PER STANDARD NO. 595C.
3. PROVIDE 5 YEAR PRODUCT WARRANTY PER DSA BULLETIN ISSUED 10/31/2002, REVISED 04/09/2008

WHERE THE DETECTABLE WARNING SURFACE DOES NOT PROVIDE A 70 PERCENTAGE MINIMUM CONTRAST WITH ADJACENT WALKING SURFACES, A 1-INCH (25 MM) WIDE MINIMUM VISUALLY CONTRASTING SURFACE SHALL SEPARATE THE DETECTABLE WARNING FROM ADJACENT WALKING SURFACES. YELLOW COLOR APPROX. FS 33538 OF FEDERAL STANDARD 595C.

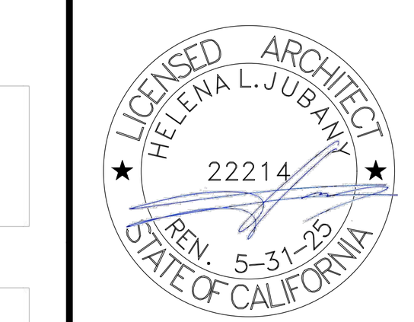




SECTION A

1 DETECTABLE WARNING DOMES
Scale: 3" = 1'-0"

FILE No.: 19-91 A#: 03-123590
Revisions



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SITE DETAILS

SITE DETAILS

A8.02

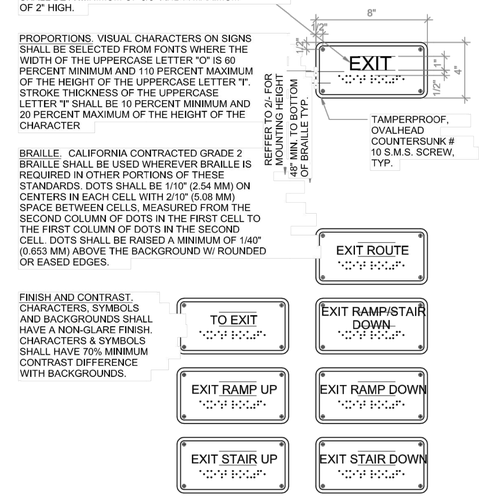
CHARACTER TYPE. INTEGRAL LETTERS, SYMBOL & BRAILLE RAISED 1/32" BY ETCHING OR SAND BLASTING AND SHALL BE SANS SERIF UPPERCASE CHARACTERS ACCOMPANIED BY GRADE 2 BRAILLE COMPLYING WITH 11B 703.2. TYP. FOR ALL SIGNS

CHARACTER SIZE. RAISED CHARACTERS SHALL BE A MINIMUM OF 5/8" AND A MAXIMUM OF 2" HIGH.

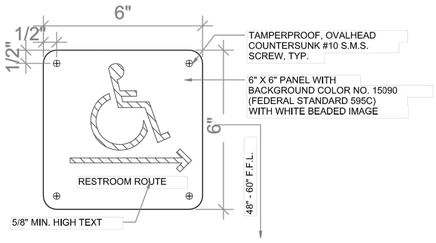
PROPORTIONS. VISUAL CHARACTERS ON SIGNS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I". STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 10 PERCENT MINIMUM AND 20 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER

BRAILLE. CALIFORNIA CONTRACTED GRADE 2 BRAILLE SHALL BE USED WHEREVER BRAILLE IS REQUIRED IN OTHER PORTIONS OF THESE STANDARDS. DOTS SHALL BE 1/10" (2.54 MM) ON CENTERS IN EACH CELL WITH 2/10" (5.08 MM) SPACE BETWEEN CELLS, MEASURED FROM THE SECOND COLUMN OF DOTS IN THE FIRST CELL TO THE FIRST COLUMN OF DOTS IN THE SECOND CELL. DOTS SHALL BE RAISED A MINIMUM OF 1/40" (0.653 MM) ABOVE THE BACKGROUND W/ ROUNDED OR EASED EDGES.

FINISH AND CONTRAST. CHARACTERS, SYMBOLS AND BACKGROUNDS SHALL HAVE A NON-GLARE FINISH. CHARACTERS & SYMBOLS SHALL HAVE 70% MINIMUM CONTRAST DIFFERENCE WITH BACKGROUNDS.



8 EXIT SIGNAGE
Scale: 3" = 1'-0"



NOTE:
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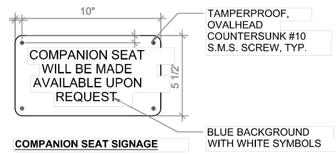
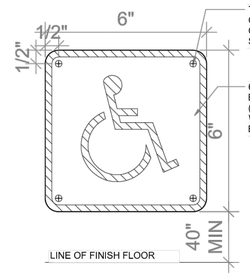
CHARACTER HEIGHT TO BE 5/8" MIN. AND 2" MAX BASED ON THE HEIGHT OF THE UPPERCASE "T" CBC 11B-703.2.5

ISA (INTERNATIONAL SYMBOL OF ACCESSIBILITY) SHALL COMPLY WITH CBC 11B-703.7 & CBC FIGURE 11B-703.7.2.1 (PROPORTIONS), TYP.

7 RESTROOM DIRECTIONAL SIGNAGE
Scale: 6" = 1'-0"



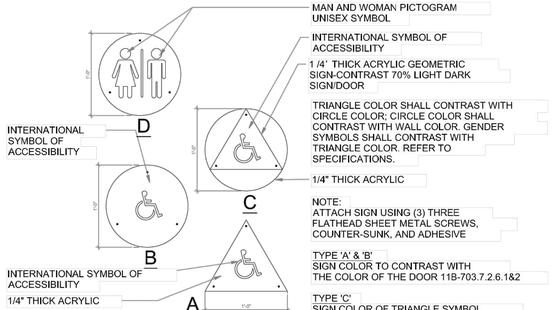
6 SEAT SIGNAGE - FRONT OF BLEACHER
Scale: 3" = 1'-0"



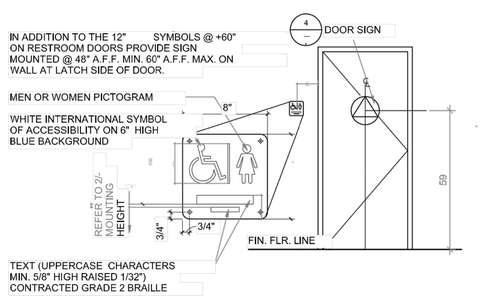
NOTE:
ALL BUILDING ENTRANCES THAT ARE ACCESSIBLE TO AND USABLE BY PERSONS WITH DISABILITIES SHALL BE IDENTIFIED WITH AT LEAST ONE STANDARD SIGN, TO BE VISIBLE TO PERSONS APPROACHING FROM PEDESTRIANS WAYS.

ISA (INTERNATIONAL SYMBOL OF ACCESSIBILITY) SHALL COMPLY WITH CBC 11B-703.7 & CBC FIGURE 11B-703.7.2.1 (PROPORTIONS), TYP.

5 INTERNATIONAL SYMBOL OF ACCESSIBILITY
Scale: 6" = 1'-0"



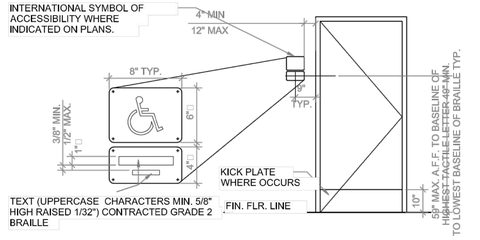
4 RESTROOM DOOR SIGNS
Scale: 1 1/2" = 1'-0"



RAISED CHARACTER (1) & BRAILLE (2) ON RESTROOM IDENTIFICATION SIGN; COMPLY WITH *TACTILE* SIGN REQUIREMENTS & *VISUAL* SIGN REQUIREMENTS (11B-703.5); BOTH RAISED CHARACTERS AND BRAILLE SHALL BE CENTERED ON THE SIGN TO ENSURE 18"x18" CLEAR APPROACH AREA IS MAINTAINED.

3 RESTROOM WALL SIGN MOUNTING HEIGHT
Scale: 1/2" = 1'-0"

PERMANENT ROOM IDENTIFICATION SIGNAGE TO BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR. MOUNTING LOCATION MUST ALLOW A PERSON TO APPROACH WITHIN 3" WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING PATH OF THE DOOR. (PLACE SIGN NEAREST ADJACENT WALL, PREFERABLY ON THE RIGHT, WHERE THERE IS NO SPACE ADJACENT TO THE LATCH SIDE OF THE DOOR). ROOM IDENTIFICATION SIGNAGE TO INDICATE ROOM NAME AND NUMBER.



2 ROOM NAME & NUMBER SIGN MOUNTING HEIGHT
Scale: NTS.

SIGNAGE NOTES

11B-703.2 RAISED CHARACTERS

RAISED CHARACTERS SHALL COMPLY WITH SECTION 11B-703.2 AND SHALL BE DUPLICATED IN BRAILLE COMPLYING WITH SECTION 11B-703.3. RAISED CHARACTERS SHALL BE INSTALLED IN ACCORDINACE WITH SECTION 11B-703.4.

11B-703.2.1 DEPTH: RAISED CHARACTERS SHALL BE 1/32 INCH MIN. ABOVE THEIR BACKGROUND.

11B-703.2.2 CASE: CHARACTERS SHALL BE UPPERCASE.

11B-703.2.3 STYLE: CHARACTERS SHALL BE SANS SERIF. CHARACTERS SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OF OTHER UNUSAL FORMS.

11B-703.2.4 CHARACTER PROPORTIONS: CHARACTERS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60% MINIMUM AND 110% MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I".

11B-703.2.5 CHARACTER HEIGHT: CHARACTER HEIGHT MEASURED VERTICALLY FROM THE BASELINE OF THE CHARACTER SHALL BE 5/8" MINIMUM AND 2" MAXIMUM BASED ON THE HEIGHT OF THE UPPERCASE LETTER "I".

11B-703.2.6 STROKE THICKNESS: STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 15% MAXIMUM OF THE HEIGHT OF THE CHARACTER.

11B-703.2.7 CHARACTER SPACING: CHARACTER SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSEST POINTS OF ADJACENT RAISED CHARACTERS WITHIN A MESSAGE, EXCLUDING WORD SPACES. WHERE CHARACTERS HAVE RECTANGULAR CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/8" MIN. AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM. WHERE CHARACTERS HAVE OTHER CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/16" MIN. AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM AT THE BASE OF THE CROSS SECTIONS, AND 1/8" MIN. AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH MAX. AT THE TOP OF THE CROSS SECTIONS. CHARACTERS SHALL BE SEPARATED FROM RAISED BORDERS AND DECORATIVE ELEMENTS 3/8" MINIMUM.

11B-703.2.8 LINE SPACING: SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF RAISED CHARACTERS WITHIN A MESSAGE SHALL BE 135% MIN. AND 170% MAX. OF THE RAISED CHARACTER HEIGHT.

11B-703.2.9 FORMAT: TEXT SHALL BE IN A HORIZONTAL FORMAT.

11B-703.3 BRAILLE

BRAILLE SHALL BE CONTRACTED (GRADE 2) AND SHALL COMPLY WITH SECTIONS 11B-703.3 & 11B-703.4.

11B-703.3.1 DIMENSIONS AND CAPITALIZATION: BRAILLE DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND SHALL COMPLY WITH TABLE 11B-703.3.1. THE INDICATION OF AN UPPERCASE LETTER OR LETTERS SHALL ONLY BE USED BEFORE THE FIRST WORD OF SENTENCES, PROPER NOUNS AND NAMES, INDIVIDUAL LETTERS OF THE ALPHABET, INITIALS, AND ACRONYMS.

11B-703.3.2 POSITION: BRAILLE SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT IN A HORIZONTAL FORMAT, FLUSH LEFT OR CENTERED. IF TEXT IS MULTI-LINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8" MIN. AND 1/2" MAX. FROM ANY OTHER TACTILE CHARACTERS AND 3/8" MIN. FROM RAISED BORDERS AND DECORATIVE ELEMENTS.
EXCEPTION: BRAILLE PROVIDED ON ELEVATOR CAR CONTROLS SHALL BE SEPARATED 3/16" MIN. AND SHALL BE LOCATED EITHER DIRECTLY BELOW THE CORRESPONDING RAISED CHARACTERS OR SYMBOLS

11B-703.4 INSTALLATION HEIGHT AND LOCATION

SIGNS WITH TACTILE CHARACTERS SHALL COMPLY WITH SECTION 11B-703.4.

11B-703.4.1 HEIGHT ABOVE FINISH FLOOR OR GROUND: TACTILE CHARACTERS ON SIGNS SHALL BE LOCATED 48" MIN. ABOVE THE FINISH FLOOR OR GROUND SURFACE MEASURED FROM THE BASELINE OF THE LOWEST BRAILLE CELLS CHARACTER, AND 60" MAX. ABOVE THE FINISH FLOOR OR GROUND SURFACE MEASURED FROM THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS.
EXCEPTION: TACTILE CHARACTERS FOR ELEVATOR CAR CONTROLS SHALL NOT BE REQUIRED TO COMPLY WITH SECTION 11B-703.4.1.

11B-703.4.2 LOCATION: WHERE A TACTILE SIGN IS PROVIDED AT A DOOR, THE SIGN SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18" MIN. BY 18" MIN., CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION. WHERE PROVIDED, SIGNS IDENTIFYING PERMANENT ROOMS AND SPACES SHALL BE LOCATED AT THE ENTRANCE TO, AND OUTSIDE OF THE ROOM OR SPACE. WHERE PROVIDED, SIGNS IDENTIFYING EXITS SHALL BE LOCATED AT THE EXIT DOOR WHEN APPROACHED IN THE DIRECTION OF EGRESS TRAVEL.
EXCEPTION: IN ALTERATIONS WHERE SIGN INSTALLATION LOCATIONS IDENTIFIED IN SECTION 11B-703.4.2 ARE OBSTRUCTED OR OTHERWISE UNAVAILABLE FOR SIGN INSTALLATION, SIGNS WITH TACTILE CHARACTERS SHALL BE PERMITTED ON THE PUSH SIDE OF DOORS WITH CLOSERS AND WITHOUT HOLD-OPEN DEVICES.

FILE No.: 19-91 A#: 03-123590
Revisions

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RENEW 8-31-25
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NAC NO	161-23078
DRAWN	AF
CHECKED	MO,GC
DATE	08/30/2023

SIGNAGE DETAILS

A8.04

GENERAL NOTES:

1. ALL WORK DETAILED ON THESE PLANS SHALL BE CONSTRUCTED IN ACCORDANCE WITH "STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION," STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION (LATEST EDITION AND SUPPLEMENTS), THE UNIFORM BUILDING CODE (FOR EXCAVATION AND GRADING), CALIFORNIA BUILDING CODE (CBC) AND ROSEMEAD SCHOOL DISTRICT STANDARD PLANS.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR, REPLACEMENT, AND MAINTENANCE OF EROSION CONTROL PLAN.
3. NO CONCRETE SHALL BE POURED UNTIL THE PROJECT INSPECTOR HAS INSPECTED AND APPROVED THE FOOTING EXCAVATIONS.
4. IF AT ANY TIME DURING THE GRADING AND EXCAVATION OPERATIONS, UNFAVORABLE SOILS CONDITIONS ARE ENCOUNTERED, THE WORK SHALL STOP UNTIL APPROVED CORRECTIVE MEASURES ARE OBTAINED.
5. ALL GRADES AND CONTOURS INDICATED ON THE PLANS ARE TO FINISHED SURFACE, AND NOT ROUGH GRADES. CONTRACTOR SHALL SUBTRACT THE STRUCTURAL THICKNESS OF PAVEMENTS AND TOP-SOIL THICKNESS IN LANDSCAPED AREAS, TO OBTAIN DESIRED ROUGH GRADES.
6. NO FILL TO BE PLACED, UNTIL THE PROJECT INSPECTOR HAS INSPECTED AND APPROVED THE BOTTOM EXCAVATION.
7. ALL CONCENTRATED DRAINAGE MUST BE CONDUCTED TO THE STREET IN APPROVED NON-EROSIVE DEVICES OR TO EXISTING STORM DRAIN SYSTEM.
8. EXCAVATIONS SHALL BE MADE IN ACCORDANCE WITH THE REGULATIONS OF THE STATE OF CALIFORNIA, DIVISION OF INDUSTRIAL SAFETY. ALL EXCAVATIONS SHALL BE STABILIZED WITHIN 30 DAYS OF INITIAL EXCAVATION. ALL TEMPORARY EXCAVATIONS SHALL BE DONE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL REPORT.
9. MAN MADE FILL SHALL BE COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 90% MAX. DRY DENSITY, UNLESS A LOWER RELATIVE COMPACTION (NO LESS THAN 90% OF MAX. DRY DENSITY) IS JUSTIFIED BY THE SOILS ENGINEER.
10. THIS PLAN IS FOR GRADING PURPOSES ONLY AND DOES NOT CONSTITUTE APPROVAL OF BUILDINGS.
11. ALL DEBRIS AND FOREIGN MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED OF AT APPROVED DISPOSAL SITES. THE CONTRACTOR SHALL OBTAIN NECESSARY PERMITS FOR THE TRANSPORTATION OF MATERIAL TO AND FROM THE SITE.
12. EXISTING TOPOGRAPHY SHOWN HEREON WAS TAKEN FROM A SURVEY DATED MARCH 11 2022 BY CAL VADA SURVEYING, INC.
13. CONSTRUCTION STAKING FOR IMPROVEMENTS SHOWN ON THESE PLANS SHALL BE PERFORMED BY A LICENSED LAND SURVEYOR.
14. STRAIGHT GRADE SHALL BE MAINTAINED BETWEEN CONTOUR LINES AND SPOT ELEVATIONS UNLESS OTHERWISE SHOWN ON THE PLANS.
15. DIMENSIONS TO PIPELINES ARE TO CENTERLINE UNLESS OTHERWISE NOTED.
16. ALL DIMENSIONS ARE IN FEET OR DECIMALS THEREOF.
17. ALL CURB DIMENSIONS AND RADII ARE TO BOTTOM OF CURB FACE.
18. CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) AT (800-422-4133) PRIOR TO ANY EXCAVATION.
19. CONTRACTOR TO BE AWARE OF ALL OVERHEAD LINES AT ALL TIMES, SO AS NOT TO DISTURB THEM.
20. CONTRACTOR SHALL COORDINATE REMOVAL OR RELOCATION OF ANY PUBLIC UTILITY LINES (IF ENCOUNTERED DURING CONSTRUCTION) WITH THEIR RESPECTIVE OWNERS. SEPARATE PERMITS MAY BE REQUIRED.
21. THE CONTRACTOR SHALL REPLACE ALL EXISTING IMPROVEMENTS DAMAGED DURING CONSTRUCTION AT HIS OWN EXPENSE AND TO THE SATISFACTION OF THE OWNER. MATCH EXISTING MATERIALS, SURFACE TREATMENT, AND COLORS. SAME SHALL APPLY TO PERMANENT UTILITY TRENCH RESURFACING.
22. STORM DRAINAGE SHOWN ON THESE PLANS HAVE BEEN DESIGNED FOR THE FINAL SITE CONDITION AT COMPLETION OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ADEQUATE DRAINAGE OF THE SITE, DURING INTERIM CONDITIONS OF CONSTRUCTION.
23. CUT AND FILL SLOPES SHALL BE NO STEEPER THAN TWO HORIZONTAL ONE VERTICAL.
24. ANY TEMPORARY STOCKPILING OF EXCESS MATERIAL ON SITE SHALL BE APPROVED BY THE PROJECT INSPECTOR AND THE OWNER'S AUTHORIZED REPRESENTATIVE, INCLUDING PROTECTION AND EROSION CONTROL, PRIOR TO EXCAVATION.
25. PROJECT INSPECTOR IS REQUIRED ON GRADING AND FOUNDATION EARTHWORK.
26. STAKE AND FLAG THE PROPERTY LINES IN ACCORDANCE WITH A LICENSED SURVEY MAP.
27. CONTINUOUS INSPECTION BY THE SOIL ENGINEER/GEOLOGIST IS REQUIRED AS DESCRIBED IN THE SOIL REPORT.

NOTICE TO CONTRACTORS:

1. PRIOR TO COMMENCING CONSTRUCTION, THE CONTRACTOR SHALL VERIFY ALL JOIN ELEVATION CONDITIONS FOR GRADING AND DRAINAGE WORK. IF CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND SHALL NOT BEGIN CONSTRUCTION UNTIL THE CHANGED CONDITIONS HAVE BEEN EVALUATED.
2. THE EXISTENCE, LOCATION AND CHARACTERISTICS OF UNDERGROUND UTILITY INFORMATION SHOWN ON THESE PLANS HAVE BEEN OBTAINED FROM A REVIEW OF AVAILABLE RECORD DATA. NO REPRESENTATION IS MADE AS TO THE ACCURACY OR COMPLETENESS OF SAID UTILITY INFORMATION. THE CONTRACTOR SHALL TAKE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.
3. THE CONTRACTOR FURTHER SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY, AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT
4. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE PLANS, THE SOILS AND/OR GEOLOGY REPORTS, AND THE SITE CONDITIONS PRIOR TO COMMENCING WORK.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT OR THE ENGINEER, PRIOR TO THE START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT THEIR OWN EXPENSE AND NOT TO THE EXPENSE OF THE OWNER OR ENGINEER.
6. ALL CHANGES TO THE CONSTRUCTION DOCUMENTS FOR THIS PROJECT SHALL BE DONE IN WRITING AND APPROVED BY THE ENGINEER OF RECORD. THE ENGINEER SHALL NOT BE RESPONSIBLE, OR LIABLE FOR UNAUTHORIZED CHANGES OR USES OF THE CONSTRUCTION DOCUMENTS.
7. SHOULD CONFLICTING INFORMATION BE FOUND ON THE PLANS, THE CONTRACTOR SHALL NOTIFY THE PROJECT ARCHITECT OR ENGINEER BEFORE PROCEEDING WITH THE WORK IN QUESTION.
8. THE CONTRACTOR SHALL OBTAIN AN OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.) PERMIT FROM THE CALIFORNIA DIVISION OF INDUSTRIAL SAFETY PRIOR TO THE CONSTRUCTION OF TRENCHES OR EXCAVATIONS WHICH ARE 5 FEET OR DEEPER.
9. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS.

ENVIRONMENTAL QUALITY NOTES:

A. ALL UNPAVED DEMOLITION AND CONSTRUCTION AREAS SHALL BE WETTED AT LEAST TWICE DAILY DURING EXCAVATION AND CONSTRUCTION, AND TEMPORARY DUST COVERS SHALL BE USED TO REDUCE DUST EMISSIONS AND MEET SCAQMD DISTRICT RULE 403.

B. THE CONTRACTOR SHALL KEEP THE CONSTRUCTION AREA SUFFICIENTLY DAMPENED TO CONTROL DUST CAUSED BY CONSTRUCTION AND HAULING, AND AT ALL TIMES PROVIDE REASONABLE CONTROL OF DUST CAUSED BY WIND.

C. EROSION CONTROL TO BE INSTALLED YEAR ROUND THROUGHOUT ENTIRE PROJECT. OBTAIN GRADING INSPECTOR'S APPROVAL OF PROPOSED PROCEDURES.

D. ALL LOADS SHALL BE SECURED BY TRIMMING, WATERING OR OTHER APPROPRIATE MEANS TO PREVENT SPILLAGE AND DUST.

E. ALL MATERIALS TRANSPORTED OFF-SITE SHALL BE EITHER SUFFICIENTLY WATERED OR SECURELY COVERED TO PREVENT EXCESSIVE AMOUNT OF DUST.

F. ALL CLEARING, EARTH MOVING, OR EXCAVATION ACTIVITIES SHALL BE DISCONTINUED DURING PERIODS OF HIGH WINDS (I.E., GREATER THAN 15 MPH), SO AS TO PREVENT EXCESSIVE AMOUNTS OF DUST.

G. GENERAL CONTRACTORS SHALL MAINTAIN AND OPERATE CONSTRUCTION EQUIPMENT SO AS TO MINIMIZE EXHAUST EMISSIONS.

H. THE PROJECT SHALL COMPLY WITH THE NOISE ORDINANCES WHICH PROHIBIT THE EMISSION OR CREATION OF NOISE BEYOND CERTAIN LEVELS AT ADJACENT USES UNLESS TECHNICALLY INFEASIBLE.

I. CONSTRUCTION AND DEMOLITION SHALL BE RESTRICTED TO THE HOURS OF 7:00 AM TO 6:00 PM MONDAY THROUGH FRIDAY, AND 8:00 AM TO 6:00 PM ON SATURDAY.

J. CONSTRUCTION AND DEMOLITION ACTIVITIES SHALL BE SCHEDULED SO AS TO AVOID OPERATING SEVERAL PIECES OF EQUIPMENT SIMULTANEOUSLY.

K. THE PROJECT CONTRACTOR SHALL USE POWER CONSTRUCTION EQUIPMENT WITH STATE-OF-THE-ART NOISE SHIELDING AND MUFFLING DEVICES.

L. THE CONTRACTOR SHALL COMPLY WITH THE NOISE INSULATION STANDARDS OF TITLE 24 OF THE CALIFORNIA CODE REGULATIONS, WHICH INSURE AN ACCEPTABLE INTERIOR NOISE ENVIRONMENT.

M. ALL WASTE SHALL BE DISPOSED OF PROPERLY. USE APPROPRIATELY LABELED RECYCLING BINS TO RECYCLE CONSTRUCTION MATERIALS INCLUDING: SOLVENTS, WATER-BASED PAINTS, VEHICLE FLUIDS, BROKEN ASPHALT AND CONCRETE, WOOD, AND VEGETARIAN. NON RECYCLABLE MATERIALS/WASTES SHALL BE TAKEN TO AN APPROPRIATE LANDFILL. TOXIC WASTES MUST BE DISCARDED AT A LICENSED REGULATED DISPOSAL SITE.

O. PAVEMENT SHALL NOT BE HOSED DOWN AT MATERIAL SPILLS. DRY CLEANUP METHODS SHALL BE USED WHENEVER POSSIBLE.

P. DUMPSTERS SHALL BE COVERED AND MAINTAINED. UNCOVERED DUMPSTERS SHALL BE PLACED UNDER A ROOF OR BE COVERED WITH TARPS OR PLASTIC SHEETING.

Q. GRAVEL APPROACHES SHALL BE USED WHERE TRUCK TRAFFIC IS FREQUENT TO REDUCE SOIL COMPACTION AND THE TRACKING OF SEDIMENT INTO STREETS SHALL BE LIMITED.

R. ALL VEHICLE/EQUIPMENT MAINTENANCE, REPAIR, AND WASHING SHALL BE CONDUCTED AWAY FROM STORM DRAINS. ALL MAJOR REPAIRS SHALL BE CONDUCTED OFF-SITE. DRIP PANS OR DROP CLOTHES SHALL BE USED TO CATCH DRIPS AND SPILLS.

ACCESSIBILITY NOTES:

CALIFORNIA ACCESS COMPLIANCE, TITLE 24 CCR

1. WALKS AND SIDEWALK SURFACE CROSS SLOPES SHALL NOT EXCEED 1/4" PER FOOT (2% GRADIENT) (SEC. 11B-403.3)
2. WHEN THE SLOPE IN THE DIRECTION OF TRAVEL OF ANY WALK EXCEEDS 1:20 (5% GRADIENT) IT SHALL COMPLY WITH THE PROVISIONS OF SECTION 11B-401 AS A PEDESTRIAN RAMP (SEC. 11B-403.3)
3. WALK AND SIDEWALK SURFACES WITH A SLOPE OF LESS THAN 6% GRADIENT SHALL BE AT LEAST AS SLIP-RESISTANT AS THAT DESCRIBED AS A MEDIUM SALTED FINISH. (SEC. 11B-403.2)
4. WALK & SIDEWALK SURFACES WITH A SLOPE OF 6% OR MORE GRADIENT SHALL BE SLIP-RESISTANT. (SEC. 11B-403.2)
5. ALL WALKS WITH CONTINUOUS GRADIENTS SHALL HAVE LEVEL AREAS AT LEAST 5' IN LENGTH AT INTERVALS OF' AT LEAST EVERY 400'. (SEC. 11B-403.7)
6. WALKS SHALL BE PROVIDED WITH A LEVEL AREA NOT LESS THAN 60" WIDE AND DOOR+36" DEEP AT A DOOR OR GATE THAT SWINGS TOWARD THE WALK, AND NOT LESS THAN 48" WIDE AND DOOR+12" DEEP AT A DOOR OR GATE THAT SWINGS AWAY FROM THE WALK. (SEC. 11B-404.2.4.1 (c) OR (d))
7. WALKS AND SIDEWALKS SHALL HAVE A CONTINUOUS COMMON SURFACE, NOT INTERRUPTED BY STEPS OR BY ABRUPT CHANGES IN LEVEL EXCEEDING 1/2", AND SHALL BE A MINIMUM OF 48" WIDE. (SEC. 11B-403.1, 11B-403.2, 11B-403.5.1, 11B-403.5.3, 11B-302.1)
8. WHEN ABRUPT CHANGES IN LEVEL NOT EXCEEDING 1/2" OCCUR, THEY SHALL BE BEVELED WITH A SLOPE NO GREATER THAN 1 UNIT VERTICAL TO 2 UNITS HORIZONTAL (50%), EXCEPT THAT LEVEL CHANGES NOT EXCEEDING ¼" MAY BE VERTICAL (SEC. 11B-403.4 AND FIGURES 11B-5E (c) AND (d))
9. ABRUPT CHANGES IN LEVEL ALONG ANY ACCESSIBLE ROUTE EXCEEDING 1/2" SHALL COMPLY WITH THE REQUIREMENTS FOR CURB RAMPS. (SEC. 11B-303.4)
10. WALKS SHALL EXTEND A MINIMUM OF 36" TO THE SIDE OF THE STRIKE EDGE OF A DOOR OR GATE THAT SWINGS TOWARD THE WALL (SEC. 11B-404.2.4.1 (d))
11. WALKS, SIDEWALKS, AND PEDESTRIAN WAYS SHALL BE FREE OF GRATINGS WHEREVER POSSIBLE. GRID OPENINGS IN GRATINGS SHALL BE 1/2" WIDE MAX IN THE DIRECTION OF TRAFFIC FLOW. ELONGATED OPENINGS, IF PROVIDED SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL (SEC. 11B-302.3)
12. ABRUPT CHANGES IN LEVEL, 4" OR MORE, EXCEPT BETWEEN A WALK OR A SIDEWALK AND ADJACENT STREETS OR DRIVEWAYS SHALL BE IDENTIFIED BY A 6" HIGH CURBS ABOVE WALK SURFACE (SEC. 11B-303.5)
13. PROVIDE SIGNS DISPLAYING THE INTERNATIONAL SYMBOL OF ACCESSIBILITY AT EVERY PRIMARY PUBLIC ENTRANCE AND AT EVERY MAJOR JUNCTION ALONG OR LEADING TO AN ACCESSIBLE ROUTE OF TRAVEL. SIGNS SHALL INDICATE THE DIRECTION TO ACCESSIBLE BUILDING ENTRANCES AND SHALL COMPLY WITH SECTION 11B-703 (SEC. 11B-216.6)

PAVING NOTES:

1. A PRE-PAVING MEETING WITH PROJECT INSPECTOR AND ENGINEER IS REQUIRED 48 HOURS PRIOR TO PAVING.
2. CRUSHED AGGREGATE BASE SHOULD CONFORM TO SECTION 200-2.2 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION AND SHOULD BE COMPACTED TO A DRY DENSITY OF AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AT NEAR OPTIMUM MOISTURE CONTENT AS DETERMINED BY ASTM D 1557-02.
3. THE PCC PAVEMENT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF APPROXIMATELY 2,500 PSI FOR PEDESTRIAN AREAS.
4. ADJACENT PAVEMENTS SLAB SECTIONS SHALL HAVE FLUSH TRAPEZOIDAL KEYED CONSTRUCTION JOINT. AS AN ALTERNATIVE TO THE KEYED JOINT, DOWELING BETWEEN CONSTRUCTION JOINTS CAN BE USED. DOWELS SHALL CONSIST OF SMOOTH, #4bar REINFORCING STEEL, 18 INCHES LONG, EMBEDDED A MINIMUM OF SIX INCHES INTO THE SLAB ON EITHER SIDE OF THE CONSTRUCTION JOINT.

CALIFORNIA CODE OF REGULATIONS:

LIST OF APPLICABLE CODES

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

APPLICABLE STANDARDS

FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

BENCH MARK

ELEVATIONS SHOWN HEREON ARE BASED UPON LOS ANGELES COUNTY BENCHMARK MG3252, ELEVATION 323.41 FEET (NAVD 88).

DESCRIPTION:
RDBM TAG IN W CB 1FT N/O BCR @ NW COR VALLEY BLVD & WALNUT GROVE AVE.

SITE INFORMATION

SITE NAME:
MILDRED B. JANSON ELEMENTARY SCHOOL

SITE ADDRESS:
8628 MARSHALL STREET,
ROSEMEAD, CA 91770
LOS ANGELES COUNTY

ASSESSOR'S PARCEL NO:
5390-004-901

BASIS OF BEARINGS

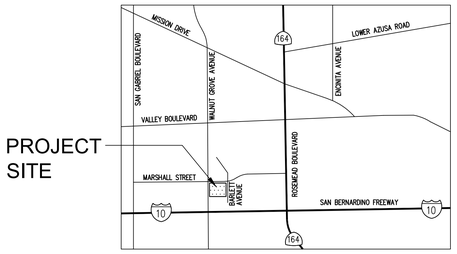
THE BEARINGS SHOWN HEREON ARE BASED UPON THE CALIFORNIA COORDINATE SYSTEM OF 1983, CCS83, ZONE 5, (2017.50) IN ACCORDANCE TO THE CALIFORNIA PUBLIC RESOURCES CODE SECTIONS 8801-8819; SAID BEARINGS ARE DETERMINED LOCALLY UPON FIELD-OBSERVED TIES TO THE FOLLOWNG CALIFORNIA SPATIAL REFERENCE CENTER (C.S.R.C.) CONTINUOUSLY OPERATING REFERENCE STATIONS (C.O.R.S.):

C.S.R.C. RHCL:
NORTHING = 1829315.58' EASTING = 6553739.69'

C.S.R.C. BKMS:
NORTHING = 1808660.13' EASTING = 6532953.81'

THE COMBINATION FACTOR FOR THIS PROJECT WAS APPLIED AT THE FOLLOWING POINT:
NORTHING = 1849306.58' EASTING = 6537401.68'

MAPPING ANGLE = -0°02'44" SCALE FACTOR = 1.00001741



PROJECT SITE

VICINITY MAP

SCALE: N.T.S.

LEGEND:

- NEW PORTABLE BUILDING
- EXISTING BUILDING
- PROPERTY LINE
- R — RIDGE LINE
- GRADE BREAK LINE
- SAWCUT LINE
- LIMITS OF BUILDING OVEREXCAVATION
- FENCE
- 320 — PROP. CONTOUR (1' INTERVAL)
- 320 — EXIST. CONTOUR (1' INTERVAL)
- XXX.XX FS — PROPOSED SPOT ELEVATION
- (XXX.XX) FS — EXISTING SPOT ELEVATION
- ADA PATH OF TRAVEL
- NEW ASPHALT CONCRETE PAVEMENT, TRAFFIC INDEX=4.5
- NEW ASPHALT CONCRETE PAVEMENT, TRAFFIC INDEX=7.0
- NEW CONCRETE PAVEMENT
- NEW LANDSCAPING

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LOS ANGELES, CA. 90017
TEL (213) 596-4500
FAX (213) 596-4599

REPRESENTATIVE:

ED MELO, PE
DIRECTOR OF CIVIL ENGINEERING

PREPARED FOR

ROSEMEAD SCHOOL DISTRICT
3907 ROSEMEAD BLVD.
ROSEMEAD, CA 91770

REPRESENTATIVE:

NAC ARCHITECTURE
323-475-8075

INDEX OF DRAWINGS

FILE No.: 19-91 A#: 03-123590

Revisions

REGISTERED PROFESSIONAL ENGINEER — EDWARD S. MELO — No.C80534 — STATE of CALIFORNIA
EXP. 03/31/25 FOR BRANDOW & JOHNSTON

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STRUCTURAL CIVIL ENGINEERS
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B&J NO	C23-0038
DRAWN	VT
CHECKED	EM
DATE	08/30/2023

TITLE SHEET AND GENERAL NOTES

C1.01

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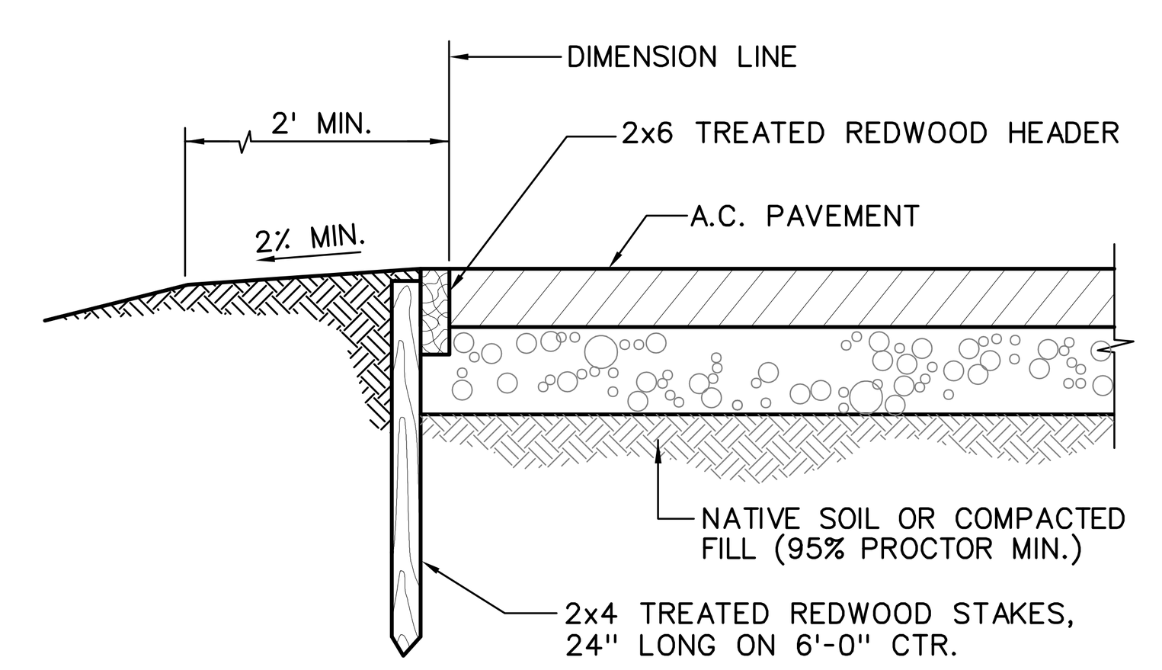
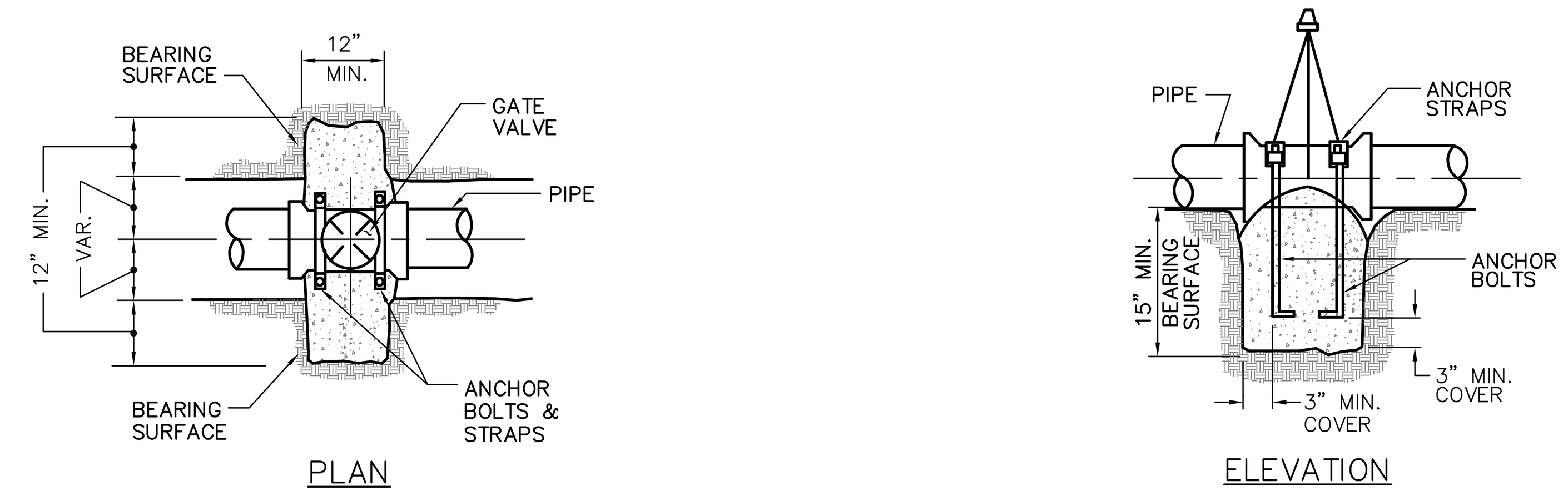
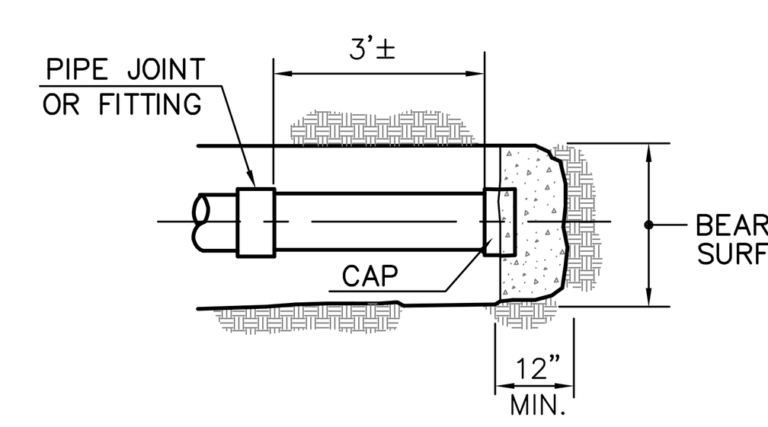


REDWOOD HEADER DETAIL

SCALE: NO SCALE | 11



VALVE ANCHORS



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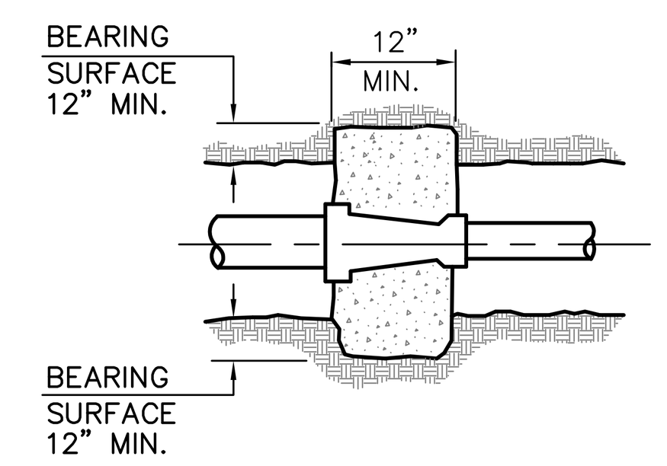

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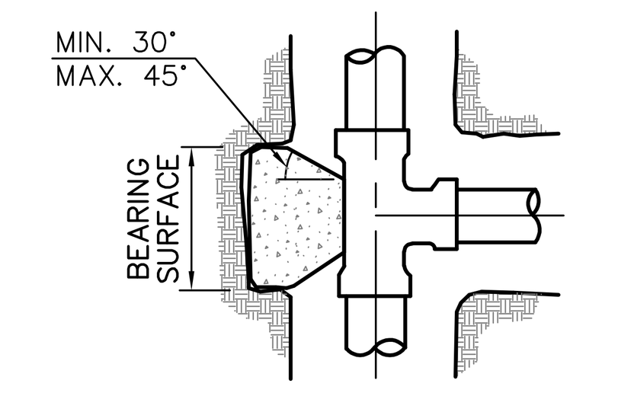
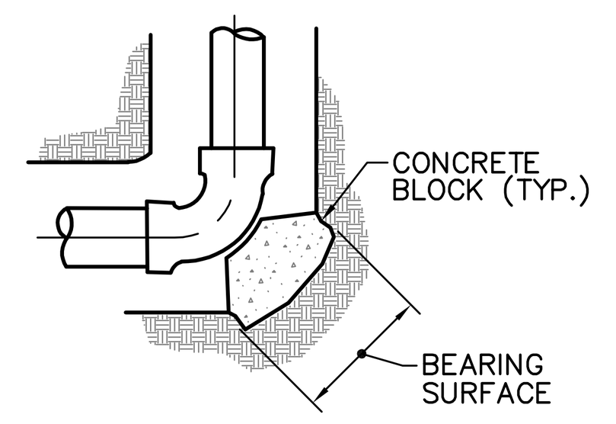
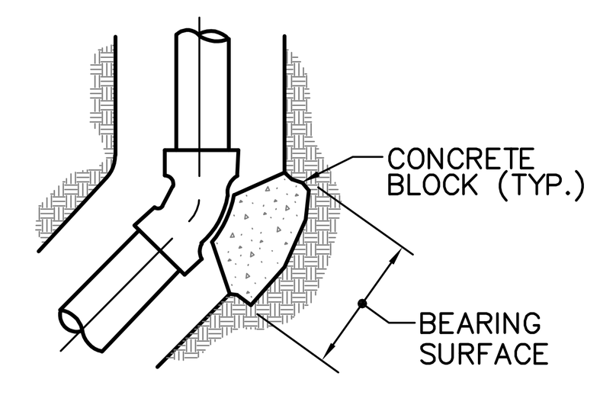


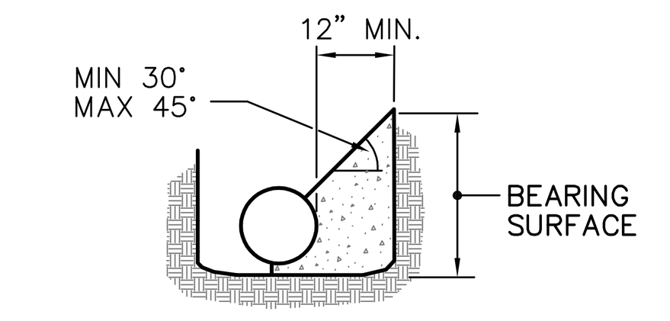
TEE



90° ELBOW



45° ELBOW



TYPICAL SECTION OF THRUST BLOCK

NOTES:

1. ALL THRUST/ANCHOR BLOCKS SHALL BEAR AGAINST UNDISTURBED SOIL.
2. CONCRETE SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 2000 P.S.I. AT 28 DAYS.
3. ALL ANCHOR RODS AND ANCHOR BOLTS SHALL BE MINIMUM 1/2" DIA. & ANCHOR STRAPS SHALL BE 1/4" X 2" BAR.
4. THRUST BLOCK DESIGN IS BASED ON A PIPE CLASS 150, AND A MAXIMUM ALLOWABLE SOIL BEARING VALUE OF 2000 P.S.F. FOR MAXIMUM SOIL BEARING VALUES OF 1000 P.S.F. INCREASE BEARING SURFACES BY A FACTOR OF 2.
5. THE RATIO OF WIDTH TO HEIGHT OF THRUST BLOCKS SHALL NOT EXCEED 1 TO 1.
6. ANCHOR BLOCKS FOR VERTICAL BENDS SHALL BE CONSTRUCTED PER SPECIAL DETAIL AS REQUIRED.
7. THRUST BLOCKS SHALL BE OF A CONCRETE MIX NOT LEANER THAN ONE PART CEMENT, TWO AND ONE HALF PARTS SAND, AND FIVE PARTS STONE (NFPA 24 10.8.2.2).

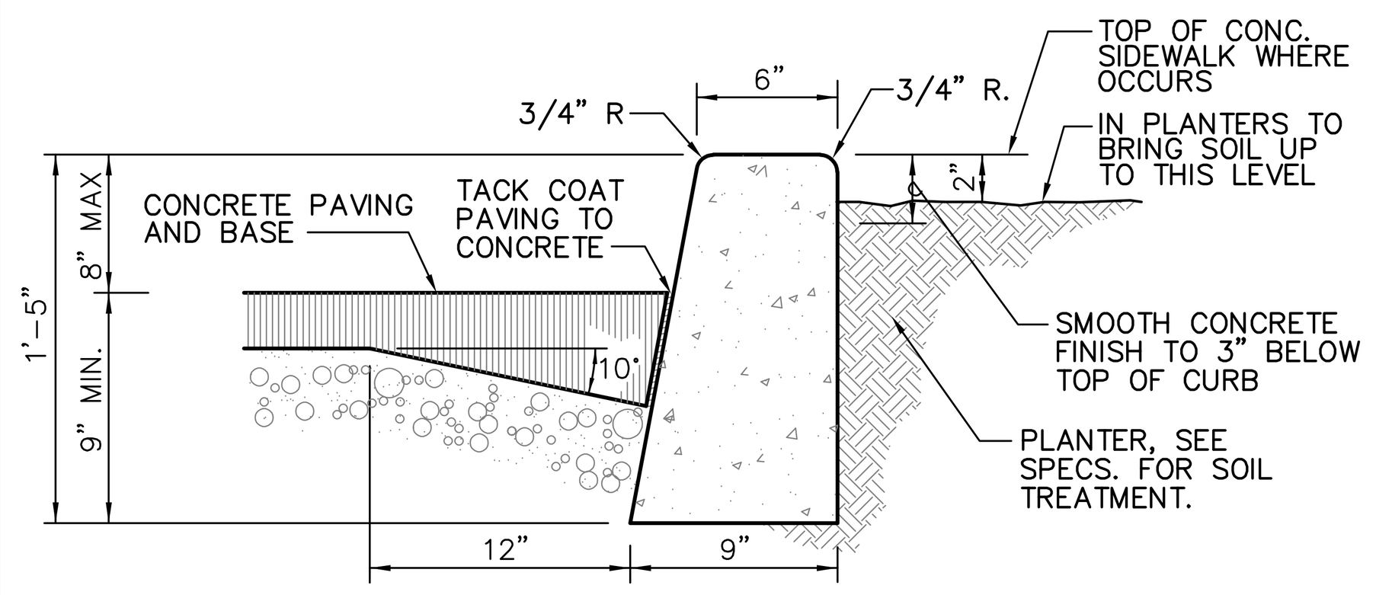
THRUST BLOCK BEARING AREAS – S.F.

MAIN SIZE	TEE*	BEND			
		90°	45°	22.5°	11.25°
4"	2	2	2	2	2
6"	3	3	2	2	2
8"	4	6	3	3	3
10"	6	9	5	3	3
12"	9	12	7	4	4

* INCLUDES TEES, PLUGS, CAPS, HYDRANTS & VALVES.

THRUST AND ANCHOR BLOCK DETAILS

SCALE: NO SCALE | 7

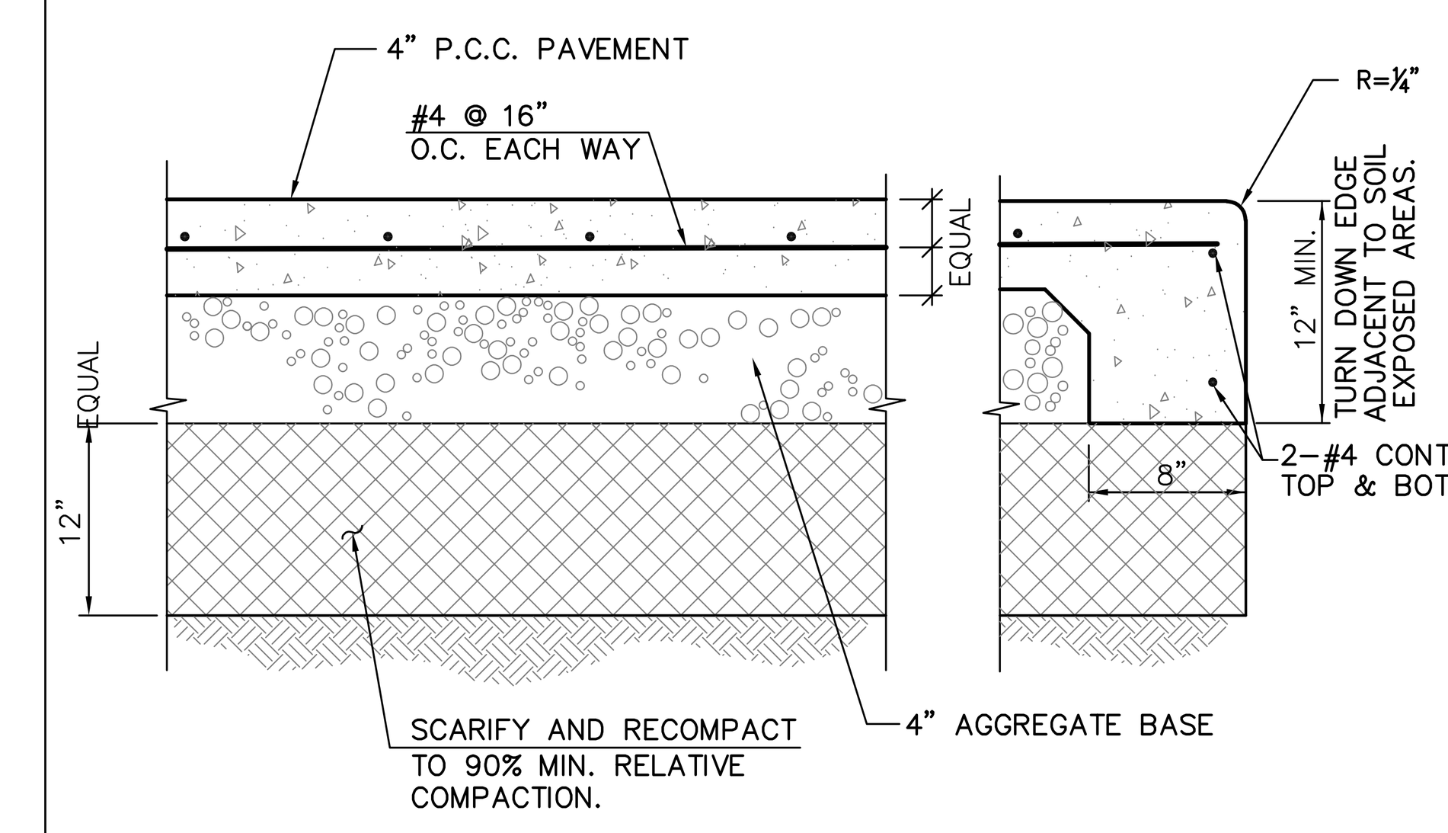


NOTES: (TYPICAL @ ALL SIMILAR CONDITIONS)

1. BOTTOM OF CURB TO BE SET ON COMPACTED SUB-BASE OR NATURAL UNDISTURBED SOIL (PER SOILS REPORT).
2. FINISH ALL EXPOSED CONCRETE SURFACES SMOOTH.
3. PROVIDE 1/2" EXPANSION JOINTS AT 25'-0" O.C. MAX. AND AT CURVES, TANGENTS AND CORNERS.
4. PORTLAND CEMENT CONCRETE, f'c=3200 psi

CONCRETE CURB DETAIL (APWA 120-I)

SCALE: NO SCALE | 4

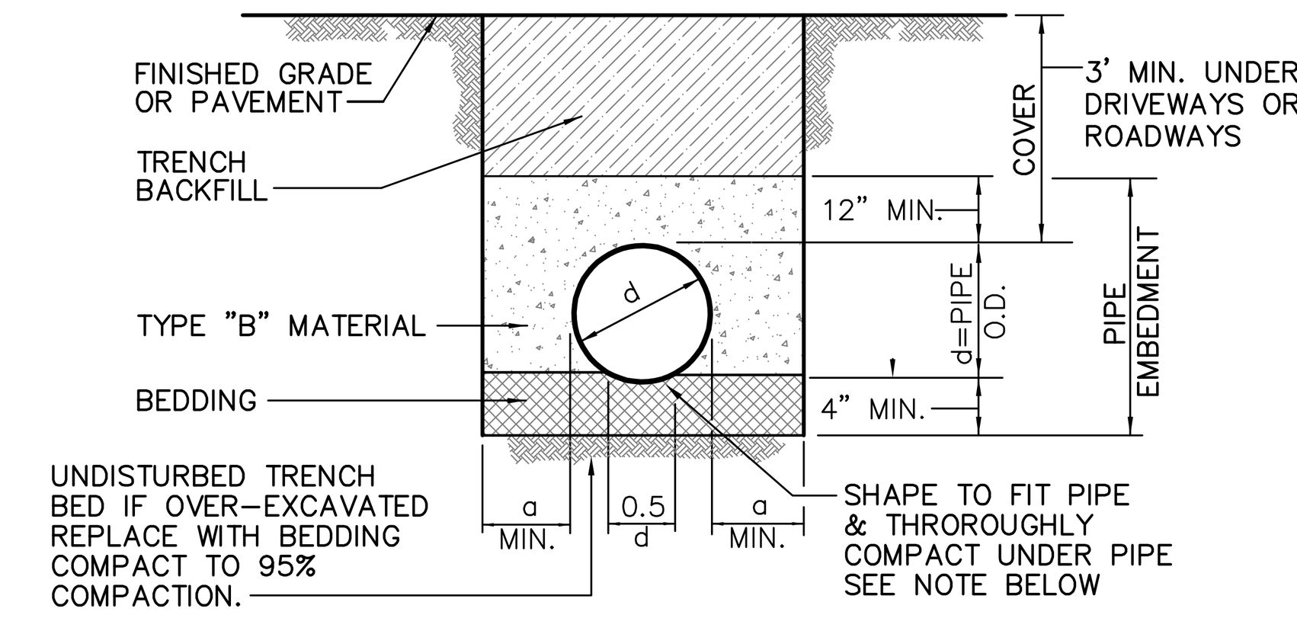


NOTES:

1 – PORTLAND CEMENT CONCRETE, fc=2500 psi, W/C RATIO 0.5 MAX.
2 – EXPANSION JOINTS-PER DETAIL 2 HEREON. SPACING – 32' O.C. OR LESS TO FIT WITH CONTROL JOINT SPACING PER DETAIL 2 HEREON.
3 – CONTROL JOINTS – PER DETAIL 2 HEREON.
4 – FINISH – MATCH EXISTING.

PEDESTRIAN CONCRETE PAVEMENT

SCALE: NO SCALE | 1



NOTE:
a = 8" FOR PIPES ≤ 15"
a = 6" FOR PIPES > 15"

PIPE:

FOR GRAVITY FLOW SAN. SEWERS AND DRAINAGE P.V.C CONFORMING TO A.S.T.M. D-3034 MAXIMUM SDR 35, GASKETED JOINT, 15" DIA. MAXIMUM PIPE SIZE.

COMPACTION:
PIPE EMBEDMENT AND TRENCH BACKFILL SHALL BE COMPACTED IN ACCORDANCE WITH SECTION 306-12 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION. WATER DENSIFIED BACKFILL SHALL NOT BE USED.

BEDDING:
CLEAN COARSE SAND

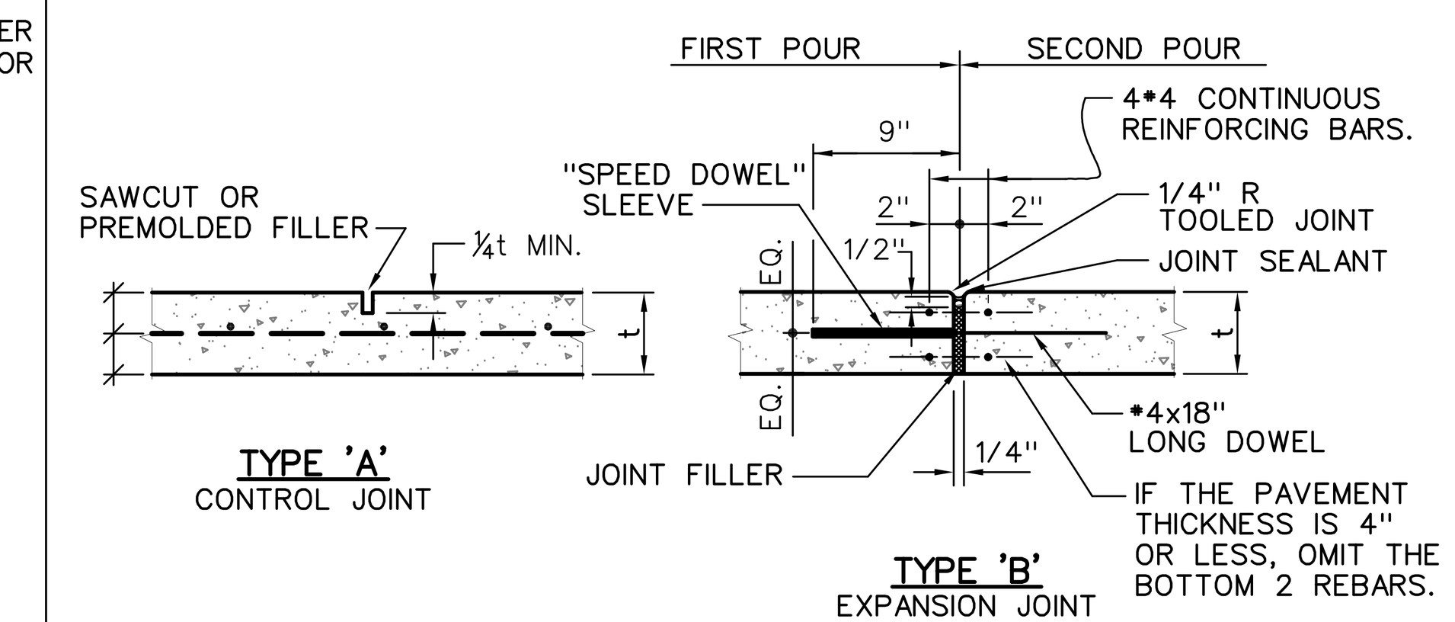
BEDDING TYPE B:
SAND OR OTHER GRANULAR MATERIAL WITH SAND EQUIVALENT VALUE NOT LESS THAN 30 AND SHALL BE COMPLETED PRIOR TO PLACING THE BALANCE OF THE BACKFILL. THE MAXIMUM ROCK SIZE FOR BEDDING TYPE B SHALL BE 3/4" IN THE GREATEST DIMENSION. NESTING OF ROCKS WILL NOT BE PERMITTED.

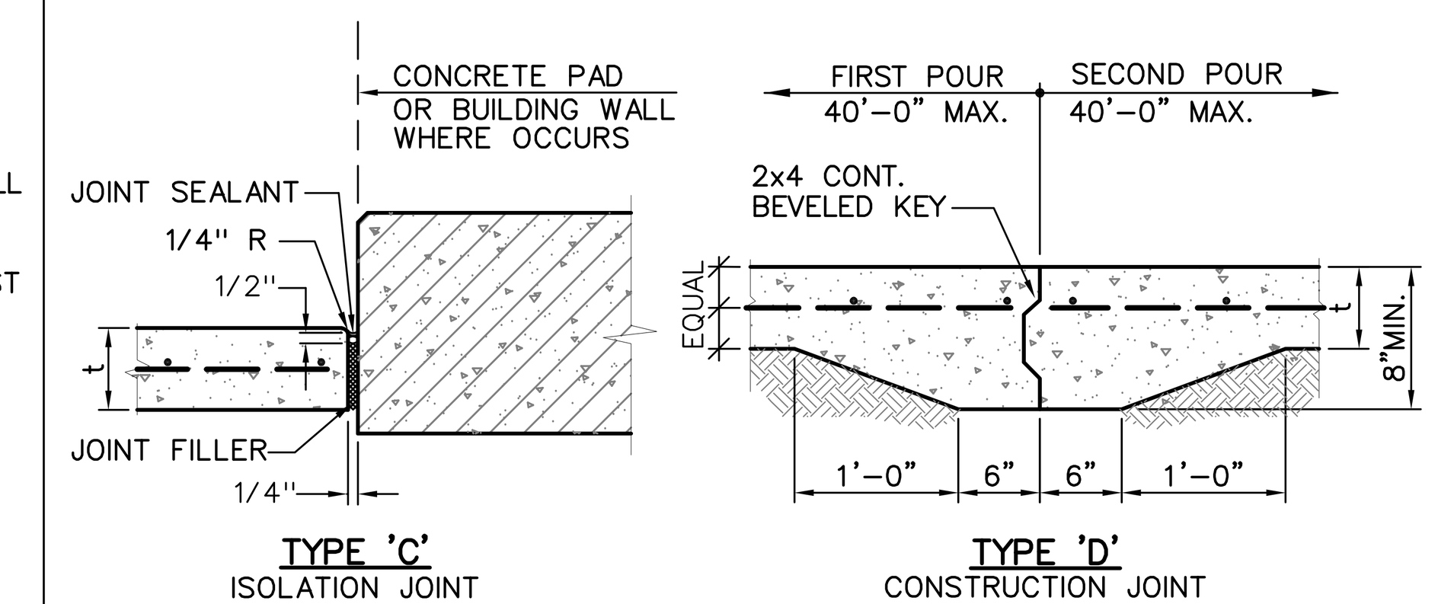
TRENCH BACKFILL:
BACKFILL WITH ONSITE OR IMPORT SOILS TO MINIMUM 95% RELATIVE COMPACTION

TRENCH RESURFACING AT EXISTING PAVEMENT:
PER SPPWC STD. PLANS 132-3 OR 133-3 (WHICHEVER IS APPLICABLE)

FLEXIBLE PIPE BEDDING AND TRENCH DETAIL

SCALE: NO SCALE | 5





SUGGESTED SPACING OF CONTROL JOINTS

PAVEMENT/SLAB THICKNESS (IN)	LESS THAN 3/4 INCH AGGREGATE: SPACING (FT)	LARGER THAN 3/4 INCH AGGREGATE: SPACING (FT)
3	4	6
4	8	10
5	10	13
6	12	15
7	14	18
8	16	20
9	18	23
10	20	25

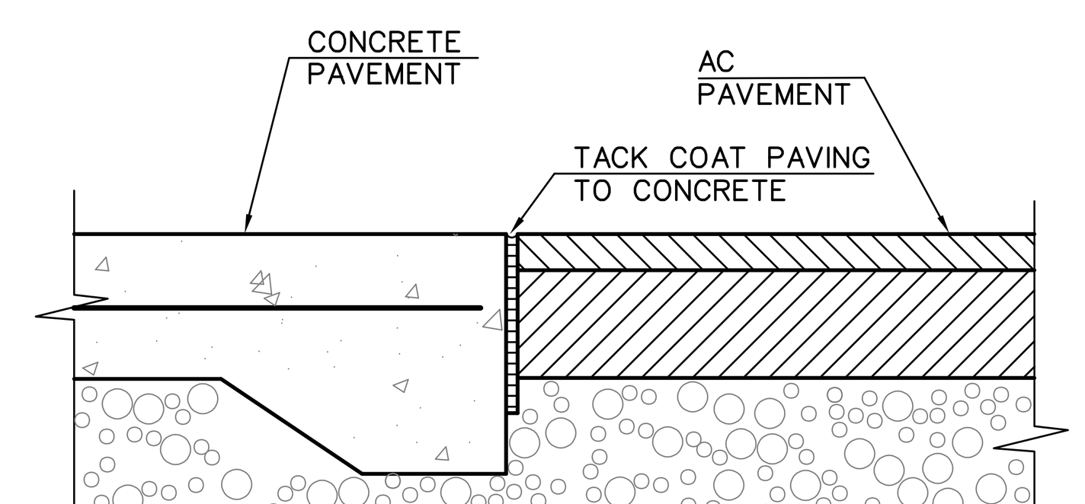
* GIVEN SPACING ALSO APPLY TO THE DISTANCE FROM CONTROL JOINTS TO PARALLEL ISOLATION JOINTS OR TO PARALLEL EXPANSION JOINTS.

NOTES:

1. SEE SPECIFICATIONS FOR TYPE OF JOINT SEALANT AND JOINT FILLER.
2. PLACE 18" LONG #4 DOWELS AT 24" O.C. (TYPE 'B' ONLY)
3. SPACING OF JOINTS PER TABLE HEREON.
4. STOP SLAB REINFORCING AT EXPANSION JOINT.

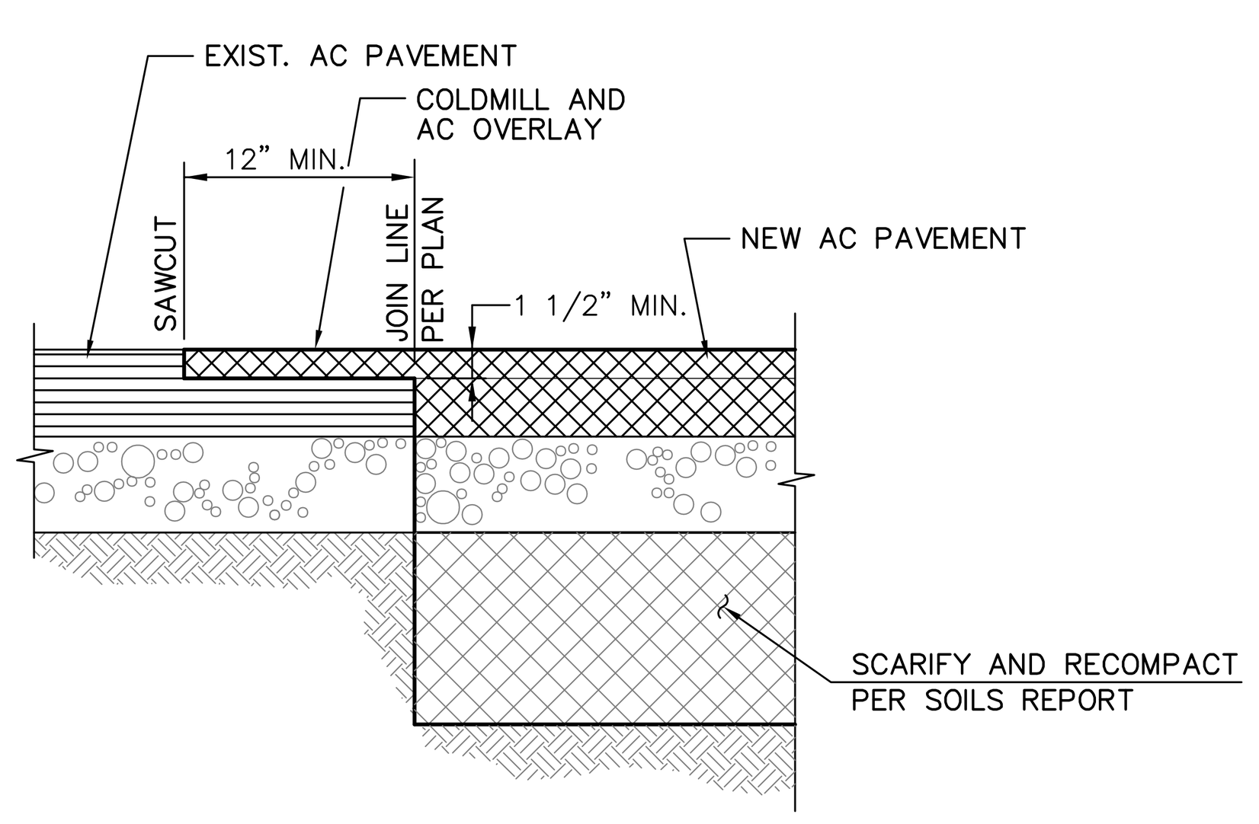
CONSTRUCTION JOINTS

SCALE: NO SCALE | 2



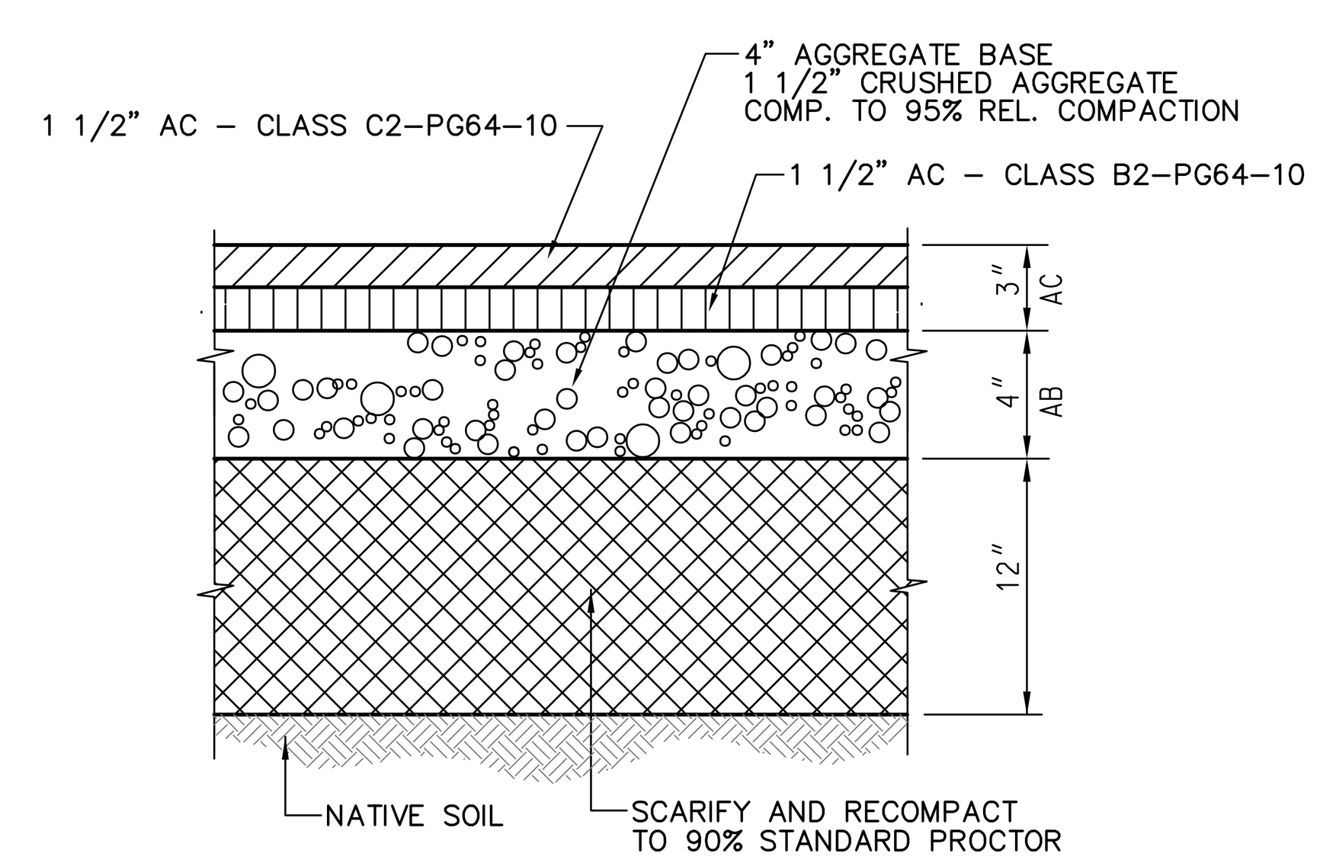
AC TO CONCRETE PAVEMENT TRANSITION

SCALE: NO SCALE | 9

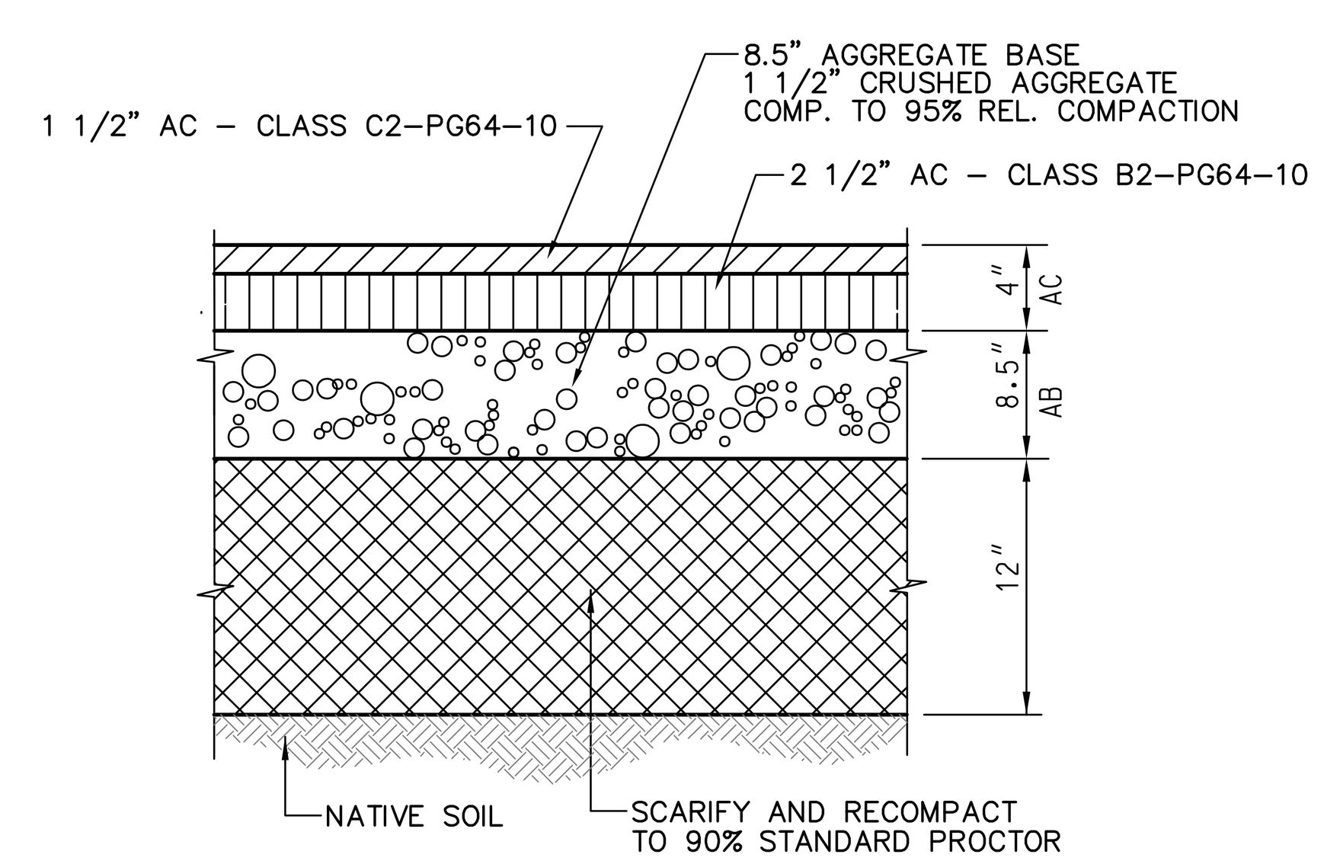


AC PAVEMENT JOINT DETAIL

SCALE: NO SCALE | 10



TRAFFIC INDEX TI=4.5

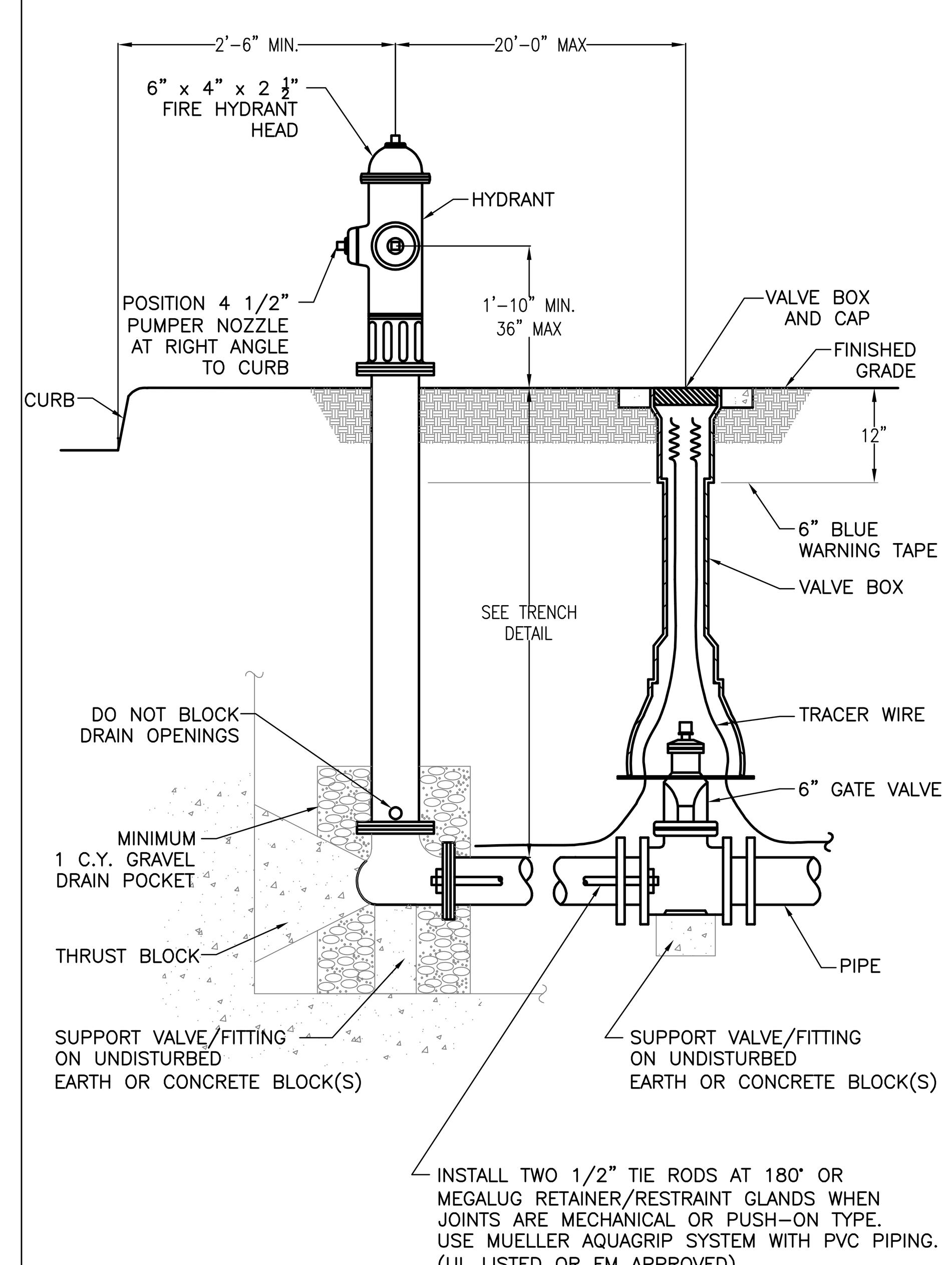


TRAFFIC INDEX TI=7.0

NOTES:
THE ACTUAL PAVEMENT THICKNESS WILL BE DETERMINED BY GEOTECHNICAL ENGINEER, BASED ON TRAFFIC INDEX AND AFTER SOIL TESTING.

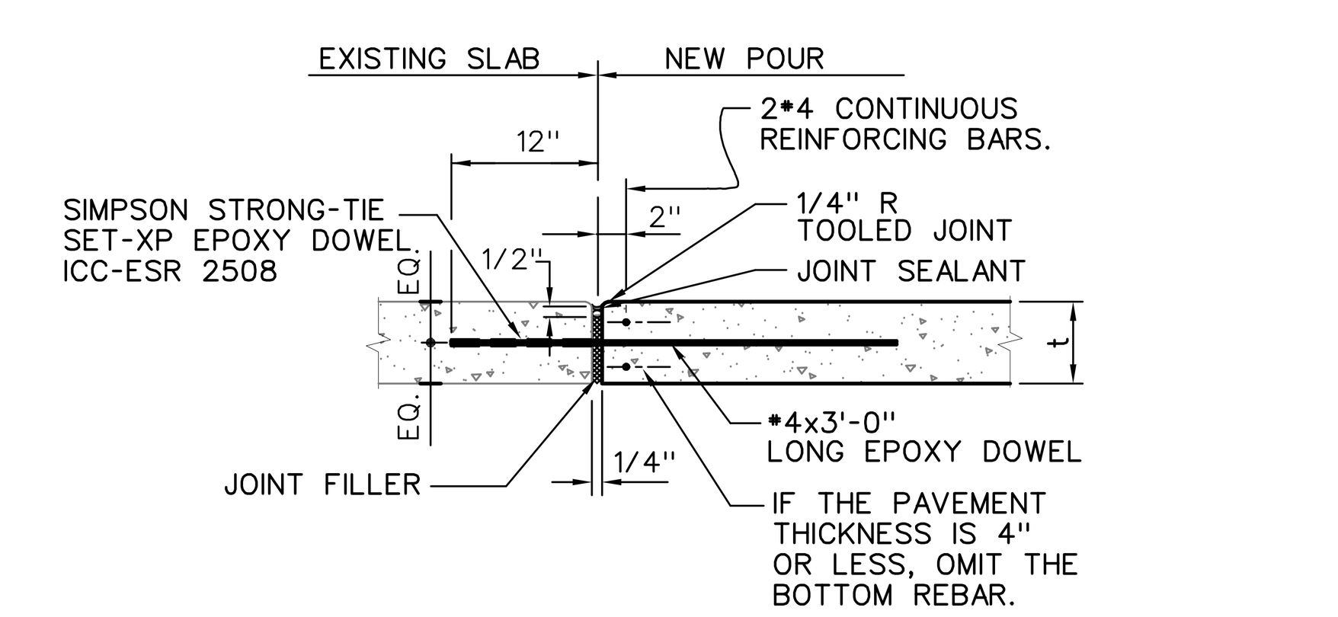
AC PAVEMENT DETAIL

SCALE: NO SCALE | 8



FIRE HYDRANT DETAIL

SCALE: NO SCALE | 6



NOTES:

1. SEE SPECIFICATIONS FOR TYPE OF JOINT SEALANT AND JOINT FILLER.
2. PLACE THE DOWELS AT 24" O.C. (2 DOWELS MIN.)
3. 12" MAX. BETWEEN THE CONCRETE EDGE AND THE FIRST DOWEL.

CONSTRUCTION JOINT AT (E) CONC.

SCALE: NO SCALE | 3

FILE No.: 19-91 A#: 03-123590

Revisions

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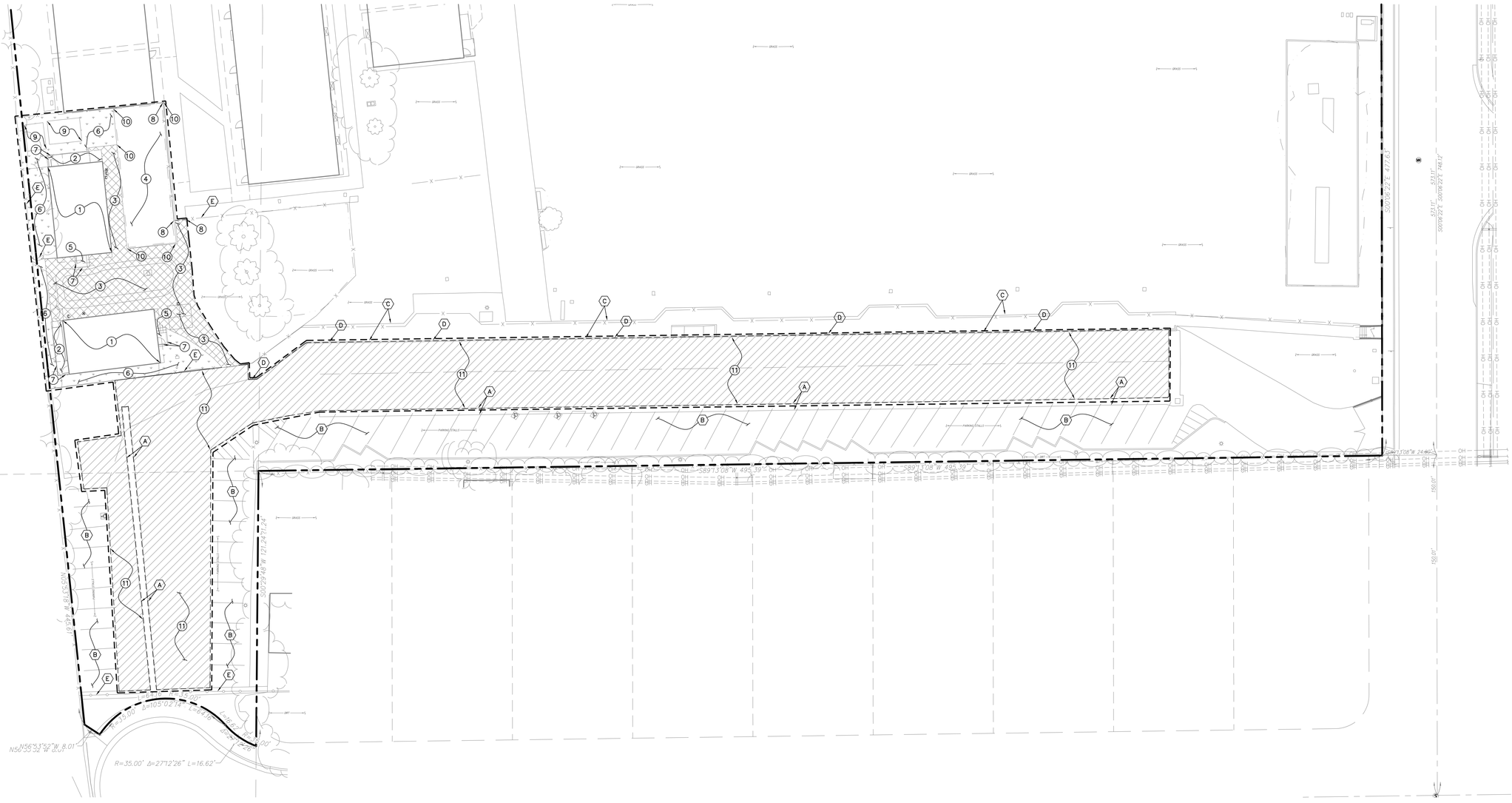
TYPICAL DETAILS

C2.01



LEGEND:

- LIMITS OF DEMOLITION
- EXISTING BUILDING
- PROPERTY LINE
- SAWCUT LINE
- REMOVE EXIST. AC PAVEMENT
- REMOVE EXIST. PCC PAVEMENT
- REMOVE EXIST. LANDSCAPE

NOTE:

1. NO DEMOLITION SHALL BEGIN UNTIL PLANS INCLUDING DEMOLITION WORK HAVE BEEN APPROVED BY DSA.

DEMOLITION NOTES:

1. REMOVE EXISTING PORTABLE BUILDING. REFER TO ARCHITECTURAL PLANS.
2. REMOVE EXISTING PORTABLE BUILDING RAMP. REFER TO ARCHITECTURAL PLANS.
3. REMOVE EXISTING CONCRETE PAVEMENT AND FULL BASE.
4. REMOVE EXISTING PLAYGROUND EQUIPMENT. REFER TO ARCHITECTURE PLANS.
5. REMOVE EXISTING CONCRETE STAIRS.
6. REMOVE EXISTING LANDSCAPE/DIRT.
7. REMOVE EXISTING HANDRAIL PER ARCHITECTURE PLANS.
8. REMOVE EXISTING FENCE, POST, FOOTING.
9. REMOVE EXISTING STORAGE SHED.
10. REMOVE CURB.
11. REMOVE EXISTING ASPHALT CONCRETE PAVEMENT AND FULL BASE.

SALVAGE NOTES:

- A PROTECT EXISTING CONCRETE GUTTER.
- B PROTECT EXISTING ASPHALT CONCRETE PAVEMENT.
- C PROTECT EXISTING CONCRETE PAVEMENT.
- D PROTECT EXISTING CONCRETE CURB.
- E PROTECT EXISTING FENCE/GATE.

NORTH

SITE DEMOLITION PLAN

0' 10' 20' 40'

GRAPHIC SCALE : 1"=20'

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SITE DEMOLITION PLAN

C3.01

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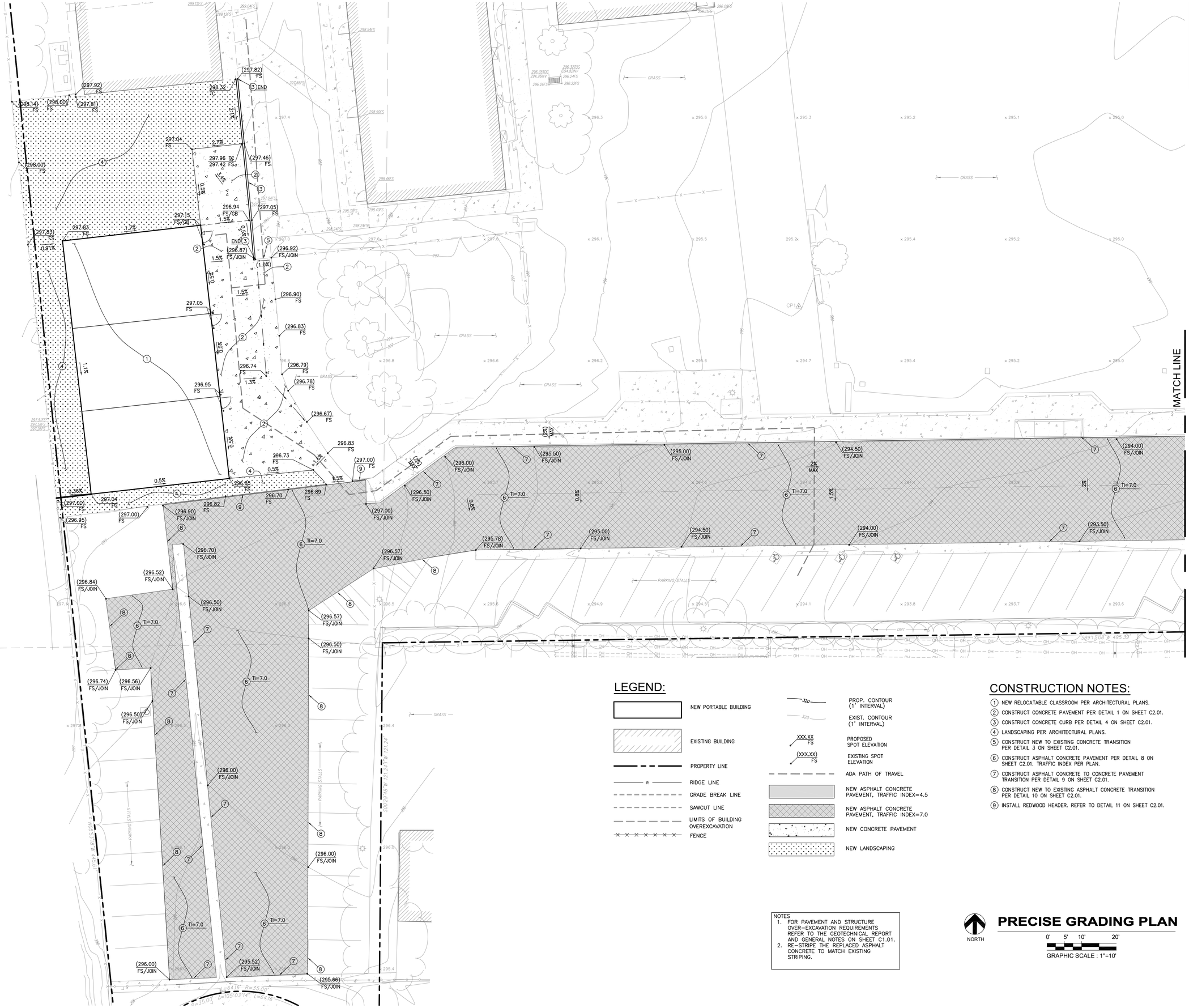

LEGEND:

- NEW PORTABLE BUILDING
- EXISTING BUILDING
- PROPERTY LINE
- RIDGE LINE
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- SAWCUT LINE
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- FENCE
- PROP. CONTOUR (1' INTERVAL)
- EXIST. CONTOUR (1' INTERVAL)
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- ADA PATH OF TRAVEL
- NEW ASPHALT CONCRETE PAVEMENT, TRAFFIC INDEX=4.5
- NEW ASPHALT CONCRETE PAVEMENT, TRAFFIC INDEX=7.0
- NEW CONCRETE PAVEMENT
- NEW LANDSCAPING

CONSTRUCTION NOTES:

1. NEW RELOCATABLE CLASSROOM PER ARCHITECTURAL PLANS.
2. CONSTRUCT CONCRETE PAVEMENT PER DETAIL 1 ON SHEET C2.01.
3. CONSTRUCT CONCRETE CURB PER DETAIL 4 ON SHEET C2.01.
4. LANDSCAPING PER ARCHITECTURAL PLANS.
5. CONSTRUCT NEW TO EXISTING CONCRETE TRANSITION PER DETAIL 3 ON SHEET C2.01.
6. CONSTRUCT ASPHALT CONCRETE PAVEMENT PER DETAIL 8 ON SHEET C2.01. TRAFFIC INDEX PER PLAN.
7. CONSTRUCT ASPHALT CONCRETE TO CONCRETE PAVEMENT TRANSITION PER DETAIL 9 ON SHEET C2.01.
8. CONSTRUCT NEW TO EXISTING ASPHALT CONCRETE TRANSITION PER DETAIL 10 ON SHEET C2.01.
9. INSTALL REDWOOD HEADER. REFER TO DETAIL 11 ON SHEET C2.01.

NOTES
1. FOR PAVEMENT AND STRUCTURE OVER-EXCAVATION REQUIREMENTS REFER TO THE GEOTECHNICAL REPORT AND GENERAL NOTES ON SHEET C1.01.
2. RE-STRIPE THE REPLACED ASPHALT CONCRETE TO MATCH EXISTING STRIPING.

NORTH

PRECISE GRADING PLAN

0' 5' 10' 20'
GRAPHIC SCALE : 1"=10'

FILE No.: 19-91 A#: 03-123590

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PRECISE GRADING PLAN

C4.01

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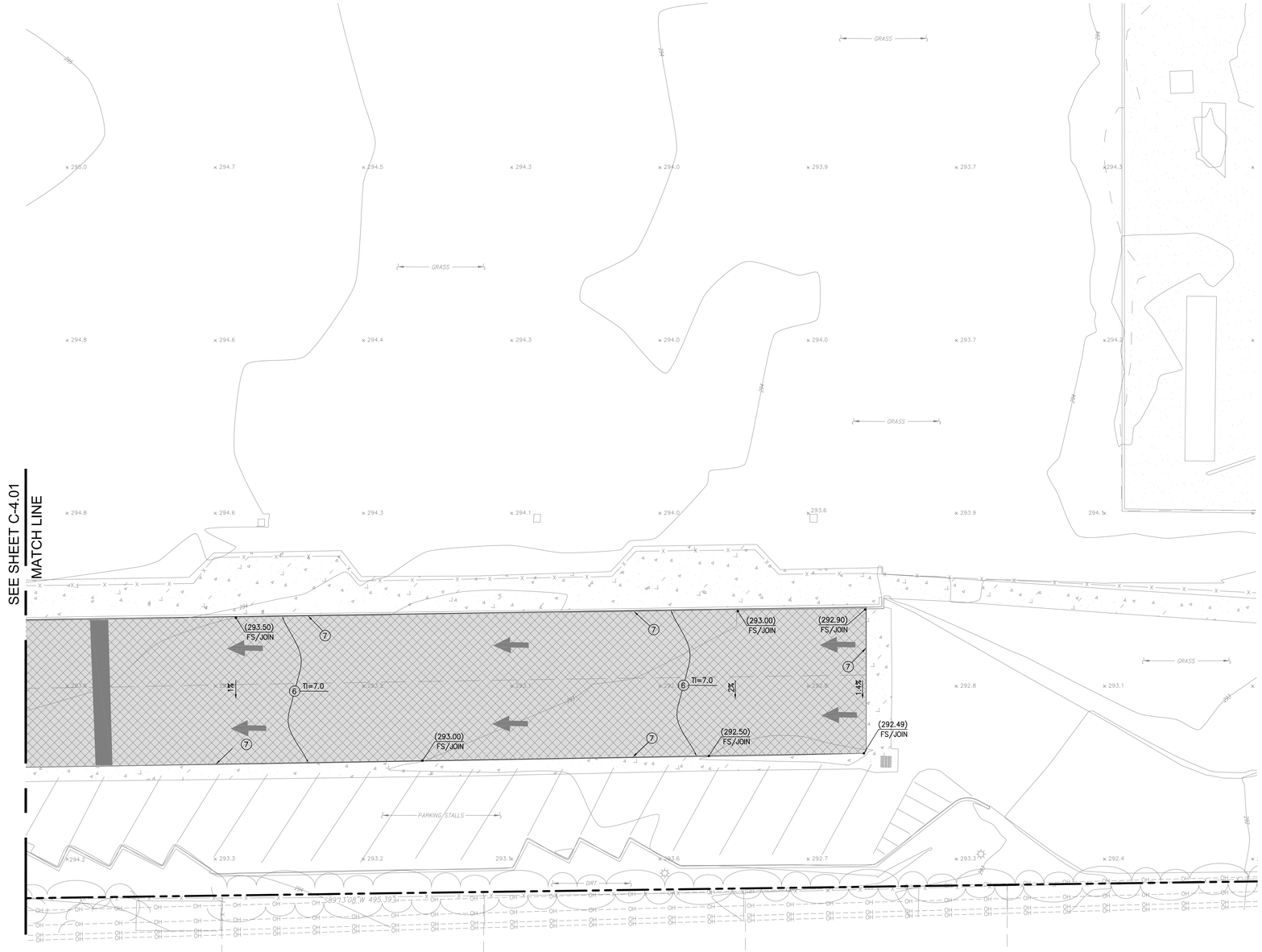

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- NEW CONCRETE PAVEMENT
- NEW LANDSCAPING

CONSTRUCTION NOTES:

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7. CONSTRUCT ASPHALT CONCRETE TO CONCRETE PAVEMENT TRANSITION PER DETAIL 9 ON SHEET C2.01.
8. CONSTRUCT NEW TO EXISTING ASPHALT CONCRETE TRANSITION PER DETAIL 10 ON SHEET C2.01.
9. INSTALL REDWOOD HEADER. REFER TO DETAIL 11 ON SHEET C2.01.

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2. RE-STRIPE THE REPLACED ASPHALT CONCRETE TO MATCH EXISTING STRIPING.

NORTH

PRECISE GRADING PLAN

0' 5' 10' 20'

GRAPHIC SCALE : 1"=10'

FILE No.: 19-91 A#: 03-123590

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NEW RELOCATABLES
8628 MARSHALL ST. ROSEMEAD, CA 91770

ROSEMEAD SCHOOL DISTRICT
3907 ROSEMEAD BLVD.,
ROSEMEAD, CA 91770

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B&J NO	C23-0038
DRAWN	VT
CHECKED	EM
DATE	08/30/2023

PRECISE GRADING PLAN

C4.02

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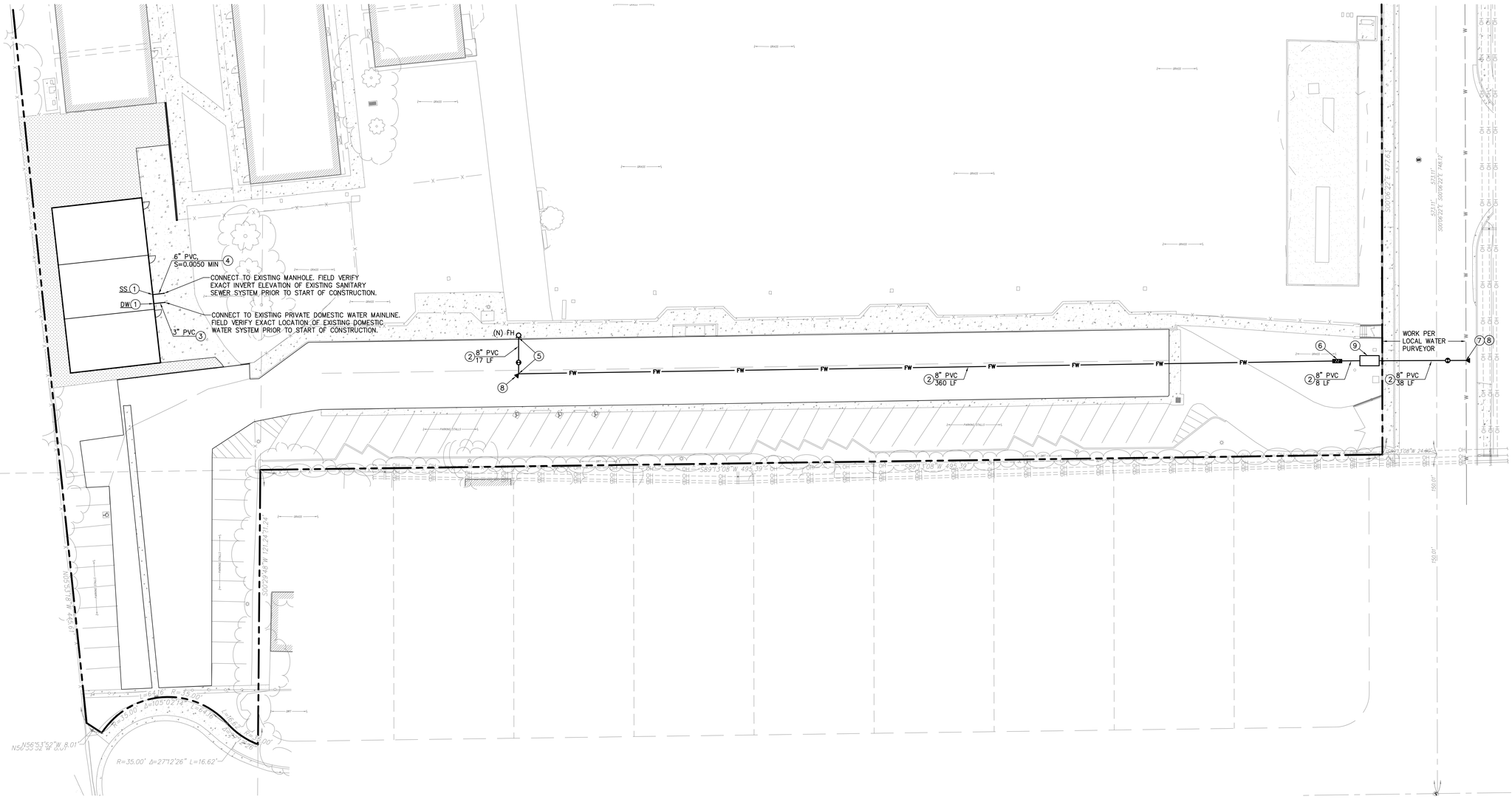

LEGEND:

- NEW PORTABLE BUILDING
- EXISTING BUILDING
- PROPERTY LINE
- FW — PROPOSED FIRE WATER LINE
- W — PROPOSED DOMESTIC WATER LINE
- SS — PROPOSED SANITARY SEWER LINE

UTILITY CONSTRUCTION NOTES:

1. ESTABLISH BUILDING POINT OF CONNECTION. UTILITY PER PLAN. SEE PLUMBING PLANS FOR INTERIOR CONTINUATION.
2. INSTALL PVC FIRE WATER LINE, PER AWWA C-900, CLASS 200 W/D.I. FITTINGS. SIZE & LENGTH PER PLAN. SEE DETAIL 5 ON SHEET C2.01 FOR TRENCH.
3. INSTALL PVC DOMESTIC WATER LINE, PER AWWA C-900, CLAS 200 W/D.I. FITTINGS. SIZE & LENGTH PER PLAN. SEE DETAIL 5 ON SHEET C2.01 FOR TRENCH.
4. INSTALL PVC SCHEDULE 40 SANITARY SEWER PIPE W/ PUSH-ON JOINTS. SIZE, LENGTH, & SLOPE PER PLAN. SEE DETAIL 5 ON SHEET C2.01 FOR TRENCH.
5. INSTALL FIRE HYDRANT AND VALVE ASSEMBLY PER DETAIL 6 ON SHEET C2.01.
6. INSTALL 8" DOUBLE DETECTOR CHECK ASSEMBLY, MODEL ZURN 350ADA OR APPROVED EQUAL.
7. CONNECT TO EXISTING PUBLIC WATER MAIN. COORDINATE DETAILS AND REQUIREMENTS WITH LOCAL WATER PURVEYOR.
8. INSTALL THRUST BLOCK PER DETAIL 7 ON SHEET C2.01.
9. UNDERGROUND WATER METER VAULT TO BE INSTALLED BY THE LOCAL WATER PURVEYOR.

NORTH

SITE UTILITY PLAN

0' 10' 20' 40'

GRAPHIC SCALE : 1"=20'

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FILE No.: 19-91 A#: 03-123590

Revisions

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SITE UTILITY PLAN

C5.01

ELECTRICAL SYMBOLS

(A)	PANEL DESIGNATION, LETTER IDENTIFIES THE PANEL.		
(E)	EXISTING.		
C.O.	CONDUIT ONLY WITH #12 PULL WIRE.	A.F.F	ABOVE FINISHED FLOOR.
(N)	NEW.	W.P.	WEATHERPROOF.
U.O.N.	UNLESS OTHERWISE NOTED.	IDF	INTERMEDIATE DISTRIBUTION FRAME.
	TELEPHONE OUTLET, +48" A.F.F.		
	DATA OUTLET (SINGLE).		
WAP	WIRELESS ACCESS POINT.		
S	PA SPEAKER. MATCH TO EXISTING.		
J	JUNCTION BOX: MOUNT +18" UNLESS NOTED OTHERWISE.		
J	JUNCTION BOX: MOUNTED IN ATTIC SPACE OR UNDER CANOPY.		
	DUPLEX RECEPTACLE: 125V., 20 AMP., NEMA 5-20R. +18" A.F.F. TO BOTTOM OF BOX UNLESS OTHERWISE NOTED.		
	CONDUIT: EXPOSED IN UNFINISHED AREAS; CONCEALED ABOVE CEILING OR IN WALL IN FINISHED AREAS.		
	CONDUIT: IN OR BELOW FLOOR OR BELOW GRADE.		
	CONDUIT: EXPOSE IN UNFINISHED AREAS: CONCEALED ABOVE CEILING OR IN WALL IN FINISH AREAS.		
	LIGHTING PANEL.		
A.I.C.	AMPERE INTERRUPTING CURRENT.		
	DISTRIBUTION BOARD.		

COMPUTER DATA/TELEPHONE CABLE CONDUIT SCHEDULE

1DW TO 3DW - 3/4" CONDUIT.

4DW TO 6DW - 1" CONDUIT.

7DW TO 10DW - 1-1/2" CONDUIT.

11DW TO 14DW - 1-1/2" CONDUIT.

PA SPEAKER CABLE CONDUIT SCHEDULE

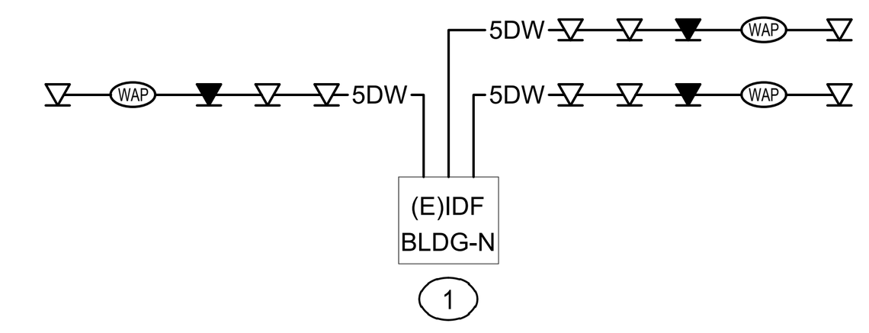
—1A— 3/4"C, WITH ONE "A" CABLE.

CABLE TYPE

"A" CABLE - PA INDOOR SPEAKER CABLE WEST PENN #356.

"AW" CABLE - PA INDOOR SPEAKER CABLE WEST PENN #356, WET LOCATION TYPE.

"DW" CABLE - #24 AWG 4-PAIR CAT-6 COMPUTER DATA/TELEPHONE (WET LOCATION).

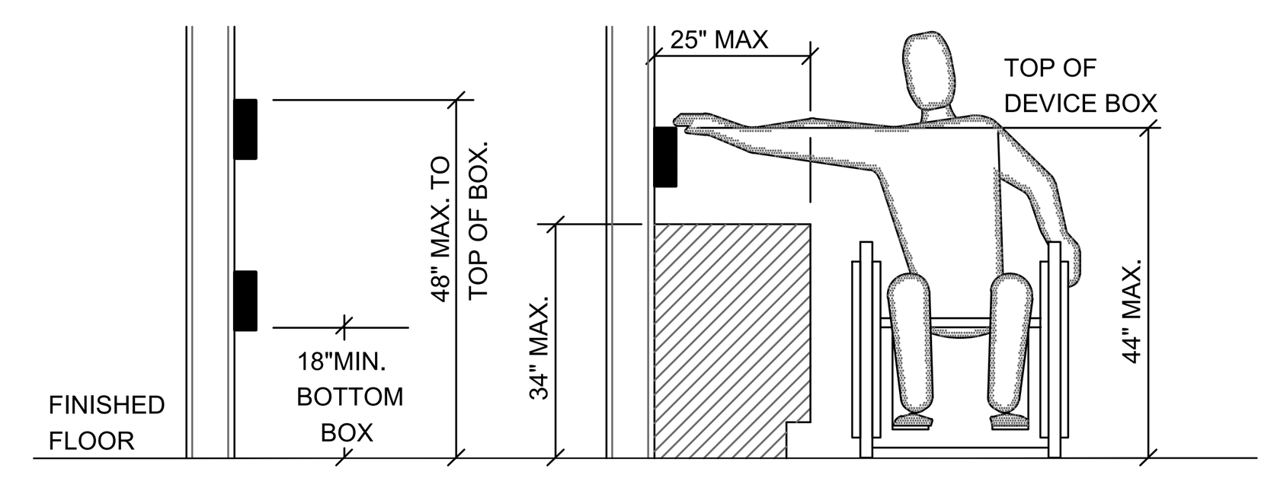


TEL/DATA RISER DIAGRAM

N.T.S.

KEYED NOTES

(1) ADD PATCH PANELS, WIRE MANAGEMENT, FIBER TERMINATION UNITS, ELECTRONIC SWITCHES FOR DATA AND TELEPHONE.



MOUNTING HEIGHTS   OVER OBSTRUCTION

MOUNTING HEIGHTS

N.T.S. OUTLETS, INTERCOM, CONTROLS, ETC.

TYPICAL MOUNTING HEIGHTS ABOVE FINISHED FLOOR (UNLESS OTHERWISE NOTED ON DRAWINGS)

+48": A.F.F. TO TOP OF BOX:	LIGHT SWITCHES, DIMMER SWITCHES, FIRE ALARM PULL STATION, DUCT DETECTOR TEST PANEL, INTERCOM CALL SWITCH, SPEAKER VOLUME CONTROL, T-STATS, BY-PASS TIMER WALL TELEPHONE.
+18" A.F.F. TO BOTTOM OF BOX:	ALL DUPLEX RECEPTACLES, WALL OUTLET FOR DESK TELEPHONE, COMPUTER OUTLET, UNLESS OTHERWISE NOTED.

GENERAL NOTES

1) THE FIRE ALARM SYSTEM SHALL CONFORM TO ARTICLE 760 OF THE CALIFORNIA ELECTRICAL CODE, CURRENT CALIFORNIA TITLE 24 REQUIREMENTS, CALIFORNIA FIRE CODE, NFPA 72 AND 101 STANDARDS, AMERICAN WITH DISABILITY ACT (ADA) REQUIREMENTS.

2) ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE(S), OR ANY RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF AUSD ARCHITECT/ENGINEER OF RECORD PRIOR TO COMMENCING ANY WORK.

3) CONSULT WITH THE DISTRICT'S ELECTRICAL INSPECTOR BEFORE STARTING WORK.

4) ALL EXPOSED CONDUITS AND BOXES SHALL BE PAINTED TO MATCH THE SURFACES WHERE INSTALLED.

5) WHERE EXISTING STRUCTURAL WALLS ARE CORED FOR NEW CONDUIT RUNS, SEPARATION BETWEEN CORED HOLES SHALL BE THREE INCHES FROM NEW OR EXISTING HOLES, UNLESS DIRECTED OTHERWISE BY THE ENGINEER.

6) THE REPRESENTATION OF PHYSICAL PLACEMENT OF EXISTING CONDUITS HAS BEEN DEVELOPED FROM THE BEST INFORMATION AVAILABLE TO THE DISTRICT AT THE TIME THE DRAWINGS WERE PREPARED. THE DISTRICT PROVIDES THIS ONLY AS A GENERAL GUIDELINE FOR THE CONVENIENCE OF BIDDERS/CONTRACTORS AND DOES NOT GUARANTEE OR WARRANT IN ANY WAY EXPRESSLY OR IMPLIEDLY, THE ACCURACY OF THESE REPRESENTATIONS. NOTHING IN THIS DISCLAIMER AFFECTS IN ANY WAY THE DUTY OF THE CONTRACTOR TO FURNISH ACCURATE "AS BUILT" DRAWINGS AFTER THE COMPLETION OF THE CONTRACT.

7) IN EXISTING BUILDINGS, CONTRACTORS SHALL NOT WORK IN AREAS CONTAMINATED BY MATERIALS MADE OF ASBESTOS UNTIL THE ASBESTOS MATERIALS HAVE BEEN REMOVED OR ENCAPSULATED.

8) REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT AND MATERIAL APPROVED FOR USE UNDER THIS CONTRACT.

9) EXISTING FIRE ALARM SYSTEM AND SECURITY SYSTEM MUST REMAIN IN OPERATION UNTIL NEW SYSTEM IS COMPLETE, APPROVED AND OPERATIONAL.

10) QUANTITY OF WIRES SHOWN IN ALL CONDUITS IS FOR GENERAL GUIDELINE. SUPPLIER OF AUXILIARY SYSTEM (FA, TEL, SECURITY) SHALL PREPARE CONSTRUCTION DRAWINGS SHOWING ALL NECESSARY WIRES AND CABLES AND VERIFY SIZES OF ALL CONDUITS SHOWN. PROVIDE ALL SPARE WIRES BETWEEN DRAWINGS DO NOT SHOW ALL THE NECESSARY J-BOXES AND PULL BOXES WHICH WILL BE REQUIRED THROUGHOUT.

11) IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL THESE BOXES AS NECESSARY TO TERMINATE CONDUITS AND RACEWAYS. PAINT BOXES TO MATCH COLOR OF THE FINISHED SURFACE THAT THE BOXES ARE ATTACHED BUILDINGS.

12) ALL JUNCTION BOXES AND DEVICES INDICATED ON BUILDING EXTERIORS SHALL BE WEATHERPROOF TYPE.

13) ALL SIGNAL WIRING IN UNDERGROUND CONDUITS SHALL BE WET LOCATION TYPE.

14) COORDINATION:
A. THE GENERAL CONTRACTOR SHALL COORDINATE LAYOUT DIMENSIONS INDICATED ON ELECTRICAL. ALL DISCREPANCIES SHALL BE REPORTED TO THE ENGINEER BEFORE BID TIME, OR BEFORE PROCEEDING WITH THE WORK.

B. IN THE EVENT THAT CERTAIN FEATURES OF THE CONSTRUCTION ARE NOT FULLY SHOWN ON THE CONSTRUCTION DOCUMENTS, THEN THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS SIMILAR CONDITIONS THAT ARE SHOWN.

C. THE CONTRACTOR SHALL VERIFY ALL ELECTRICAL, COMMUNICATION AND SECURITY REQUIREMENTS BEFORE CONSTRUCTION BEGINS.

15) ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED ON THE SITE BY GENERAL CONTRACTOR, AND EACH SUB-CONTRACTOR BEFORE THE WORK BEGINS. ERRORS, OMISSIONS AND DISCREPANCIES SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION BEFORE CONSTRUCTION BEGINS.

16) THE ENGINEER HAS PREPARED THESE DOCUMENTS ONLY FOR IMPROVEMENTS SPECIFIED, DETAILED OR SHOWN AS NEW WORK, AND ASSUMES NO RESPONSIBILITY FOR OTHER CONSTRUCTION, MATERIAL OR EQUIPMENT NOTED AS "EXISTING" OR AS "PROVIDED BY OTHERS".

17) JUNCTION BOXES SHALL NOT CONTAIN SPLICES. CONDUCTORS SHALL BE PULLED THROUGH. TERMINATIONS SHALL BE PERFORMED.

18) IF USE OF WIREMOLD IS DESIRED, CONTRACTOR SHALL OBTAIN A LETTER FROM AOR AUTHORIZING USE OF WIREMOLD PRIOR TO INSTALLATION.

19) DRAWINGS ARE BASED ON AVAILABLE AS-BUILT PLANS AND FIELD OBSERVATIONS. NOTIFY THE AUTHORIZED OWNER REPRESENTATIVE (AOR) IMMEDIATELY WHEREVER (E) CONDITIONS ENCOUNTERED DEVIATE FROM THESE DRAWINGS AND EXISTING EQUIPMENT MUST BE RELOCATED DUE TO NEW CONSTRUCTION EFFORTS.

20) PROVIDE GROUND BUSHING ON NEW AND EXISTING PULLBOXES.

21) IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MAINTAIN CONTINUITY OF THE EXISTING FIRE ALARM SYSTEM, CENTRAL STATION REPORTING SYSTEM, SMOKE MANAGEMENT SYSTEM, AND ANY OTHER LIFE SAFETY EQUIPMENT EXISTING AT THE SITE AND AFFECTED BY HIS WORK ON THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIRE WATCH OR OTHER MITIGATING MEASURES FOR SYSTEMS THAT ARE MADE INACTIVE OR OTHERWISE COMPROMISED AS A RESULT OF THE WORK PERFORMED BY THAT CONTRACTOR.

22) IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THE TYPE OF CEILING CONSTRUCTION AND TO PROVIDE THE PROPER TYPE OF BOX MOUNTING AND SUPPORT FOR FIRE ALARM INITIATION DEVICES.

23) ANY DAMAGE CAUSED BY DEMOLITION OPERATIONS TO ADJACENT FACILITIES SHALL BE PROMPTLY REPAIRED AT NO ADDITIONAL COST TO THE OWNER. ALL ITEMS MOVED OR TEMPORARILY DISASSEMBLED SHALL BE REPLACED OR REASSEMBLED TO AT LEAST THE CONDITION IN LIKE QUALITY PRIOR TO REMOVAL OR DISASSEMBLY.

24) THE COLOR CODE FOR WIRE INSULATION IN THE LOW VOLTAGE SPECIFICATIONS SHOULD BE FOLLOWED.

25) SEAL ALL SPACE AROUND CONDUIT PENETRATION THROUGH FIRE RATED WALL WITH A UL LISTED FIRE BARRIER COMPOUND "3M" CAULKING OR EQUAL.

CODES, STANDARDS & GUIDES

LIST OF APPLICABLE CODES
2022 California Administrative Code (CAC), Part 1, Title 24 CCR
2022 California Building Code (CBC), Part 2, Title 24 CCR
2022 California Electrical Code (CEC), Part 3, Title 24 CCR
2022 California Mechanical Code (CMC), Part 4, Title 24 CCR
2022 California Plumbing Code (CPC), Part 5, Title 24 CCR
2022 California Energy Code, Part 6, Title 24 CCR
2022 California Fire Code (CFC), Part 9, Title 24 CCR
2022 California Existing Building Code (CEBC), Part 10, Title 24 CCR
2022 California Green Building Standards Code (CALGreen), Part 11, Title 24 CCR
2022 California Referenced Standards Code, Part 12, Title 24 CCR
Title 19 CCR, Public Safety, State Fire Marshal Regulations
2010 ADA Standards for Accessible Design

APPLICABLE STANDARDS
For a list of applicable standards, including California amendments to the NFPA Standards, refer to CBC Chapter 35 and CFC Chapter 80.

Applicable Code: 2022 CBC

MEP Component Anchorage Note

All mechanical, plumbing, and electrical components shall be anchored and installed per the details on the DSA-approved construction documents. The following components shall be anchored or braced to meet the force and displacement requirements prescribed in the 2022 CBC Sections 1617A.1.18 through 1617A.1.26 and ASCE 7-16 Chapters 13, 26, and 30:

1. All permanent equipment and components.
2. Temporary, movable or mobile equipment that is permanently attached (e.g., hard wired) to the building utility services such as electricity, gas or water. “Permanently attached” shall include all electrical connections except plugs for 110/220 volt receptacles having a flexible cable.
3. Temporary, movable or mobile equipment which is heavier than 400 pounds or has a center of mass located 4 feet or more above the adjacent floor or roof level that directly support the component is required to be restrained in a manner approved by DSA.

The following mechanical and electrical components shall be positively attached to the structure but need not demonstrate design compliance with the references noted above. These components shall have flexible connections provided between the component and associated ductwork, piping, and conduit. Flexible connections must allow movement in both transverse and longitudinal directions:

A. Components weighing less than 400 pounds and having a center of mass located 4 feet or less above the adjacent floor or roof level that directly support the component.
B. Components weighing less than 20 pounds, or in the case of distributed systems, less than 5 pounds per foot, which are suspended from a roof or floor or hung from a wall.

The anchorage of all mechanical, electrical and plumbing components shall be subject to the approval of the design professional in general responsible charge or structural engineer delegated responsibility and acceptance by DSA. The project inspector will verify that all components and equipment have been anchored in accordance with the above requirements.

Applicable Code: 2022 CBC

Piping, Ductwork, and Electrical Distribution System Bracing Note

Piping, ductwork, and electrical distribution systems shall be braced to comply with the forces and displacements prescribed in ASCE 7-16 Section 13.3 as defined in ASCE 7-16 Sections 13.6.5, 13.6.6, 13.6.7, 13.6.8; and 2022 CBC, Sections 1617A.1.24, 1617A.1.25 and 1617A.1.26.

The method of showing bracing and attachments to the structure for the identified distribution system are as noted below. When bracing and attachments are based on a preapproved installation guide (e.g., HCAi OPM for 2013 CBC or later), copies of the bracing system installation guide or manual shall be available on the jobsite prior to the start of and during the hanging and bracing of the distribution systems. The Structural Engineer of Record shall verify the adequacy of the structure to support the hanger and brace loads.

Mechanical Piping (MP), Mechanical Ducts (MD), Plumbing Piping (PP), Electrical Distribution Systems (E):

MP☐ MD☐ PP ☐ E☑ Option 1: Detailed on the approved drawings with project specific notes and details.

MP☐ MD☐ PP☐ E☐ Option 2: Shall comply with HCAi Preapproval (OPM #) #_______________.

FILE No.: 19-91 A#: 03-123590

Revisions

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SYMBOL LIST AND NOTES

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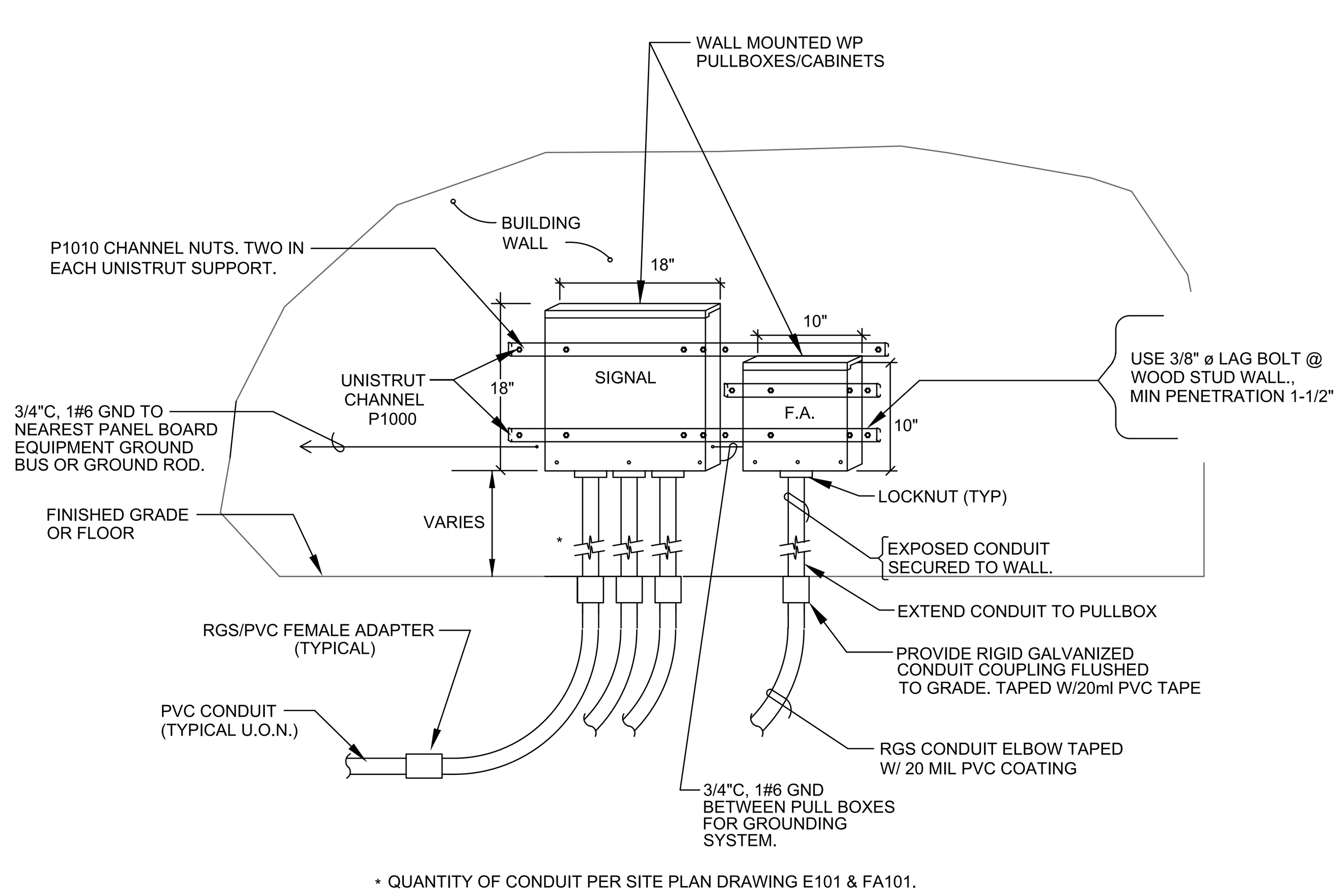
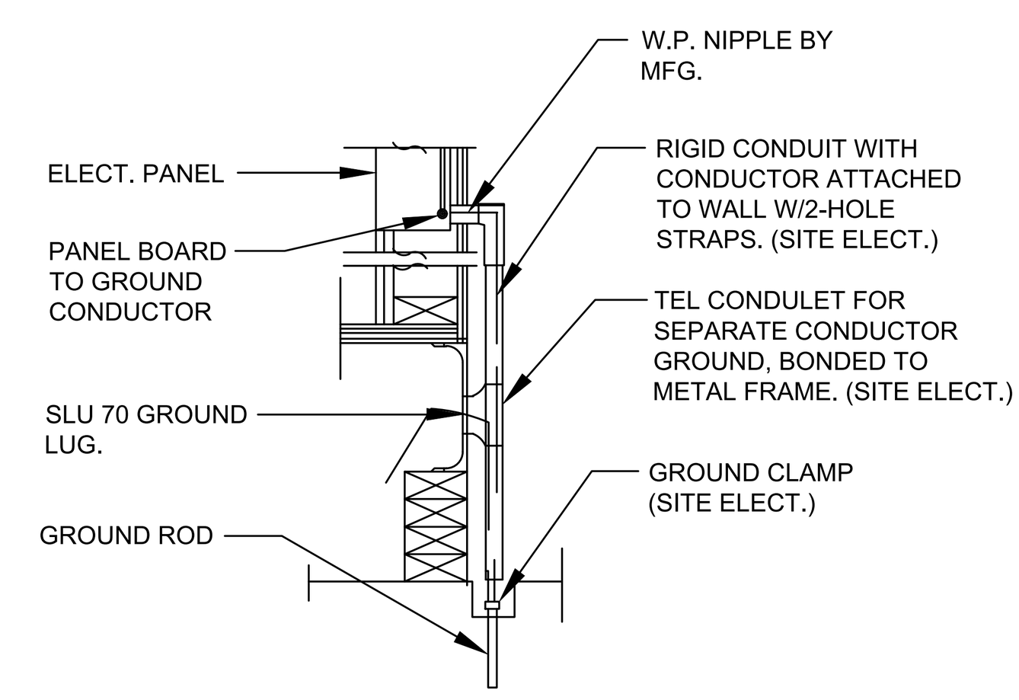
E-001



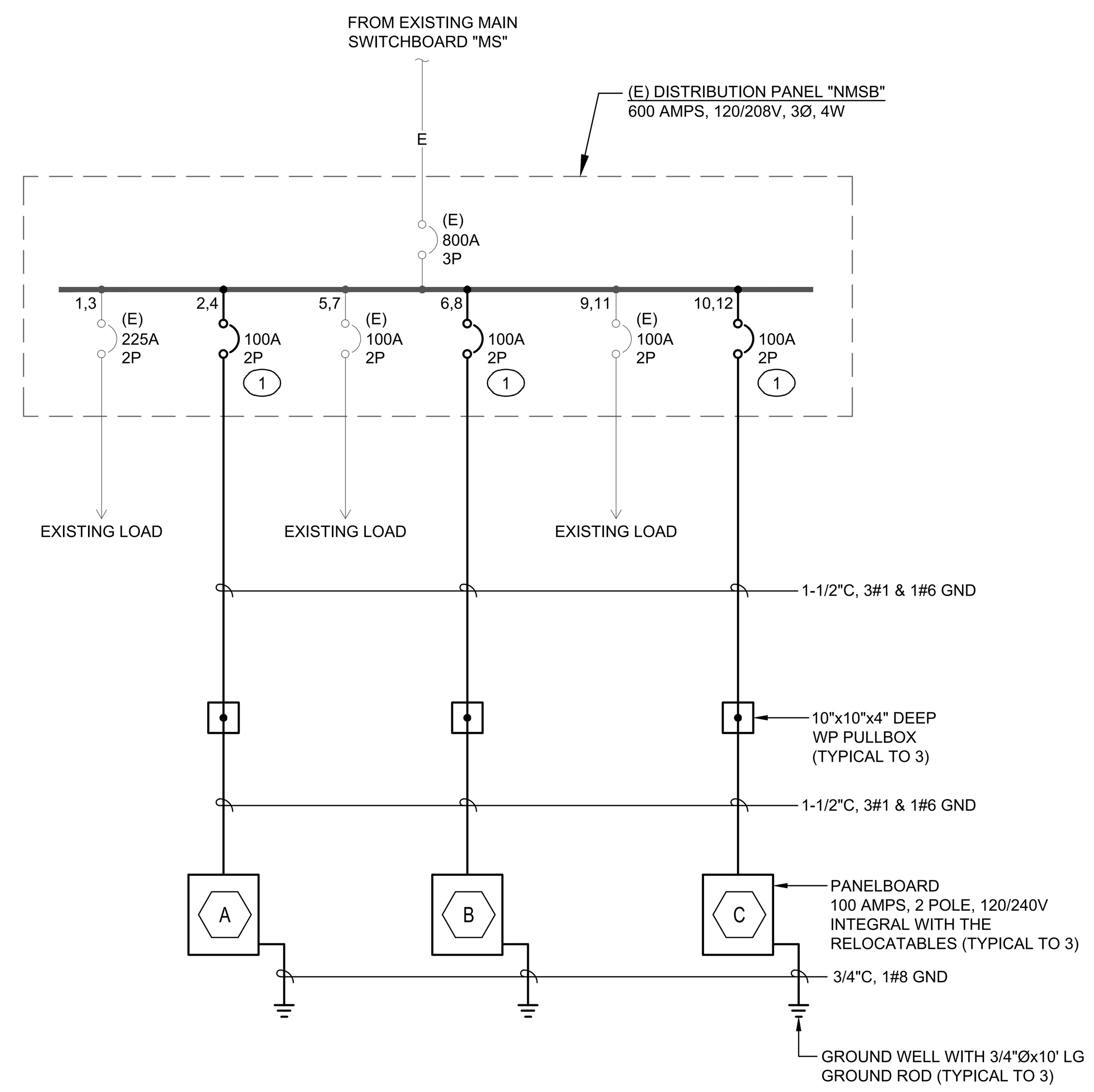
* QUANTITY OF CONDUIT PER SITE PLAN DRAWING E101 & FA101.

3 / E-002 COMMUNICATION JUNCTION BOXES DETAIL
N.T.S.



TYPICAL GROUNDING DET
N.T.S.

1. EACH BUILDING SHALL BE SEPARATELY GROUNDED WITH A 3/4" RD.X8' COPPERCLAD STEEL GROUND ROD. WHERE ROCK BOTTOM IS ENCOUNTERED, ROD SHALL BE DRIVEN AT AN ANGLE NOT TO EXCEED 45 DEGREE'S FROM THE VERTICAL OR SHALL BE BURIED IN A TRENCH THAT IS AT LEAST 30" DEEP. (BY SITE ELECTRICAL).
2. TESTING: TEST FOR RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS. (BY SITE ELECTRICAL).
3. PROVIDE EQUIPMENT ANCHORAGE PER TITLE 24, TABLE 2-23J, PART B.
4. APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF THIS FIRE ALARM FOR ALL SITES. THE FIRE ALARM SYSTEM AND/OR COMPONENTS MAYBE REQUIRED TO BE CHANGED DUE TO SITE LOCATION, EXISTING CONDITIONS OR INCOMPATIBLE COMPONENTS.
5. GROUND MG TEST SHALL BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR.

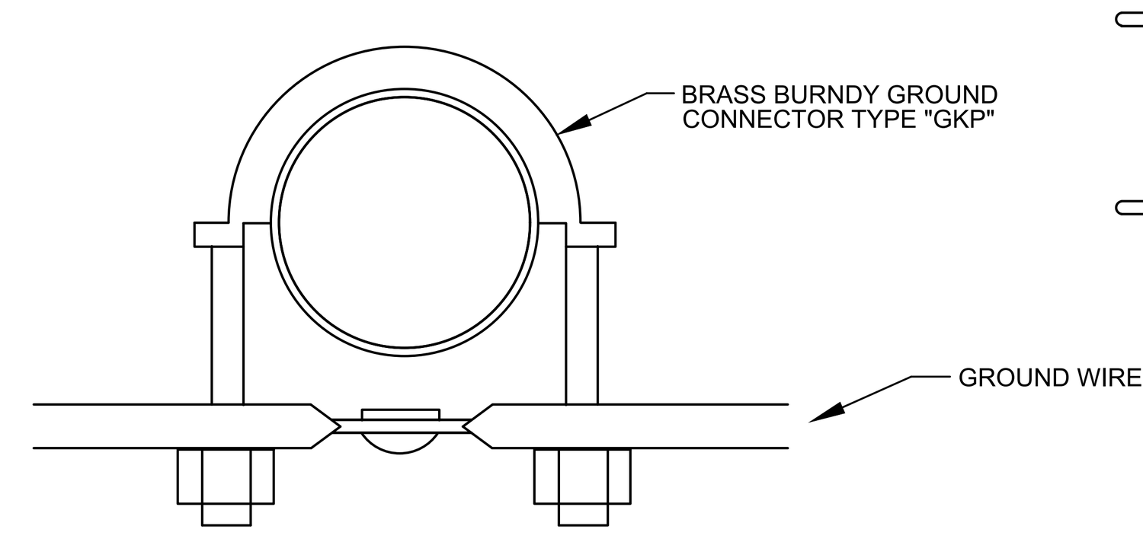


SINGLE LINE DIAGRAM
N.T.S.

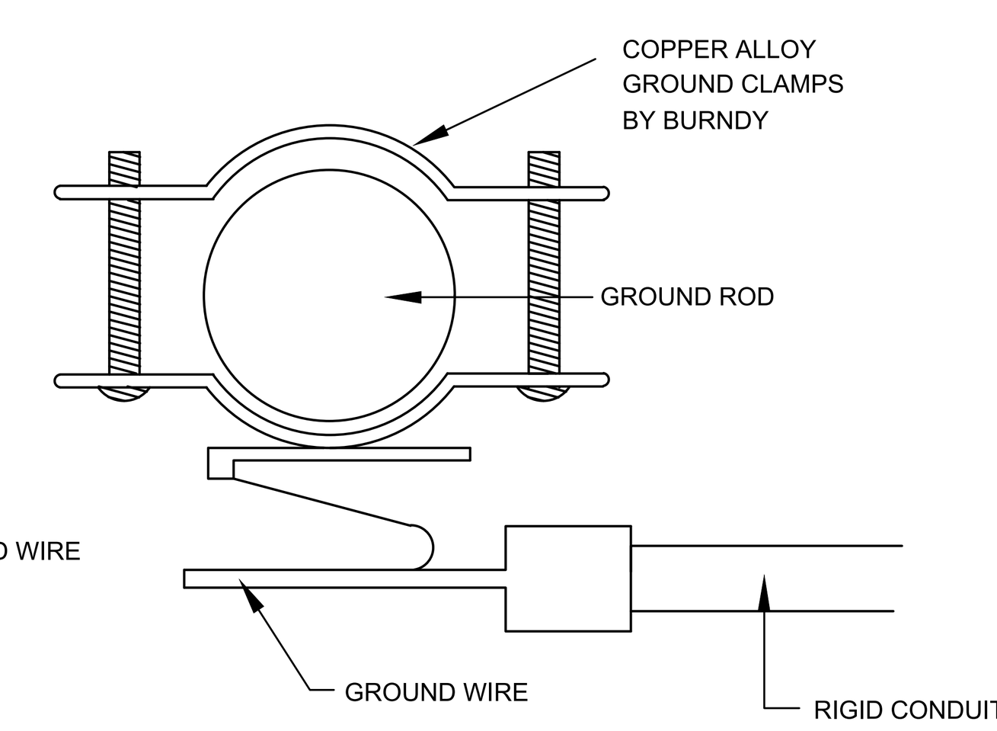
KEYED NOTES

(1) PROVIDE NEW CIRCUIT BREAKER 100 AMPS, 2 POLE, 250 VOLTS WITH MOUNTING ACCESSORY. MATCH EXISTING TYPE AND A.I.C. RATING.

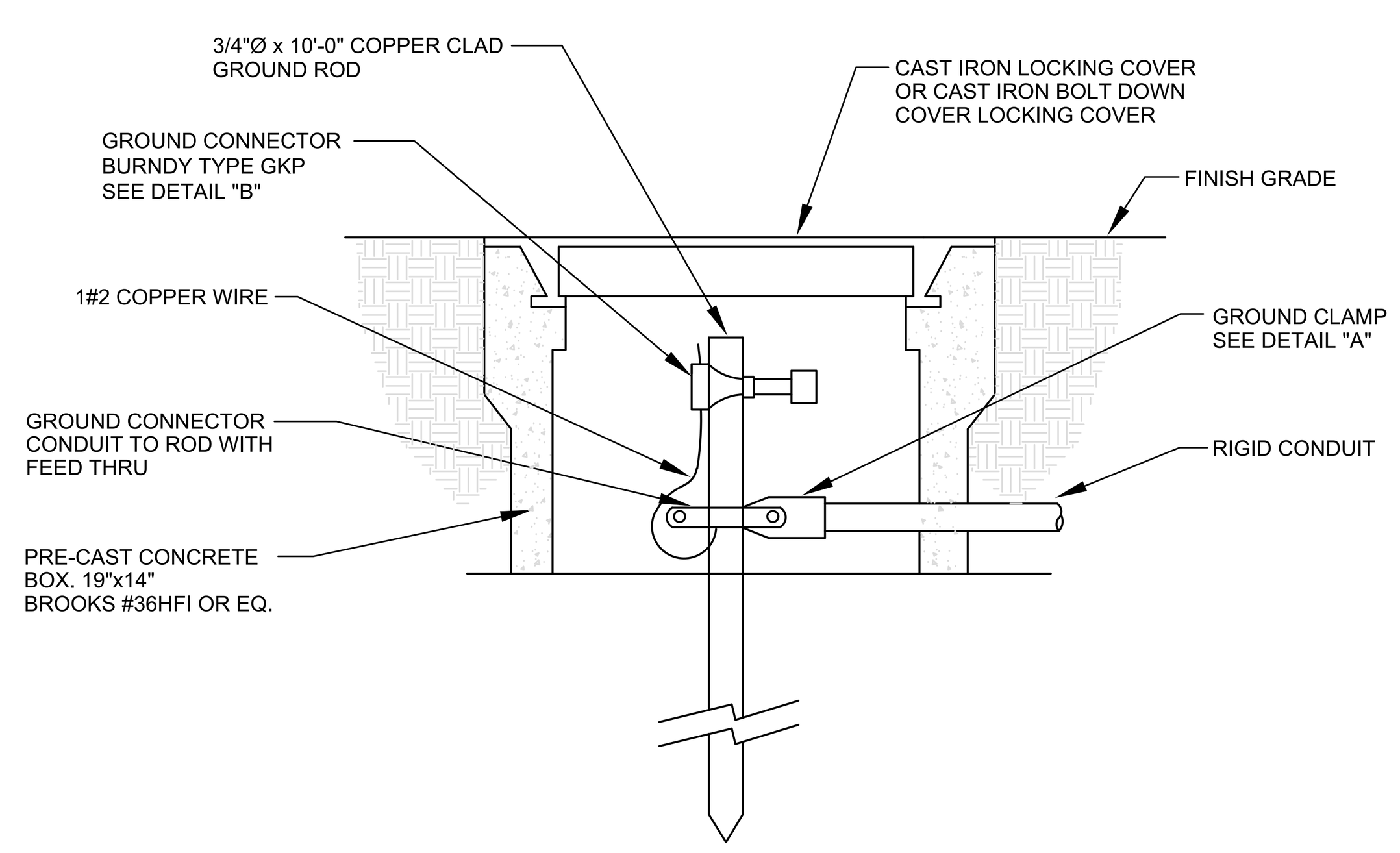
THE ELECTRICAL ENGINEER WHOSE SIGNATURE IS ON THIS SET OF DRAWINGS HAS REVIEWED THE EXISTING ELECTRICAL POWER SYSTEM AND HAS DETERMINED THAT THERE IS ENOUGH CAPACITY TO HANDLE THE NEW BUILDINGS WITH CONNECTION METHOD AS SHOWN.



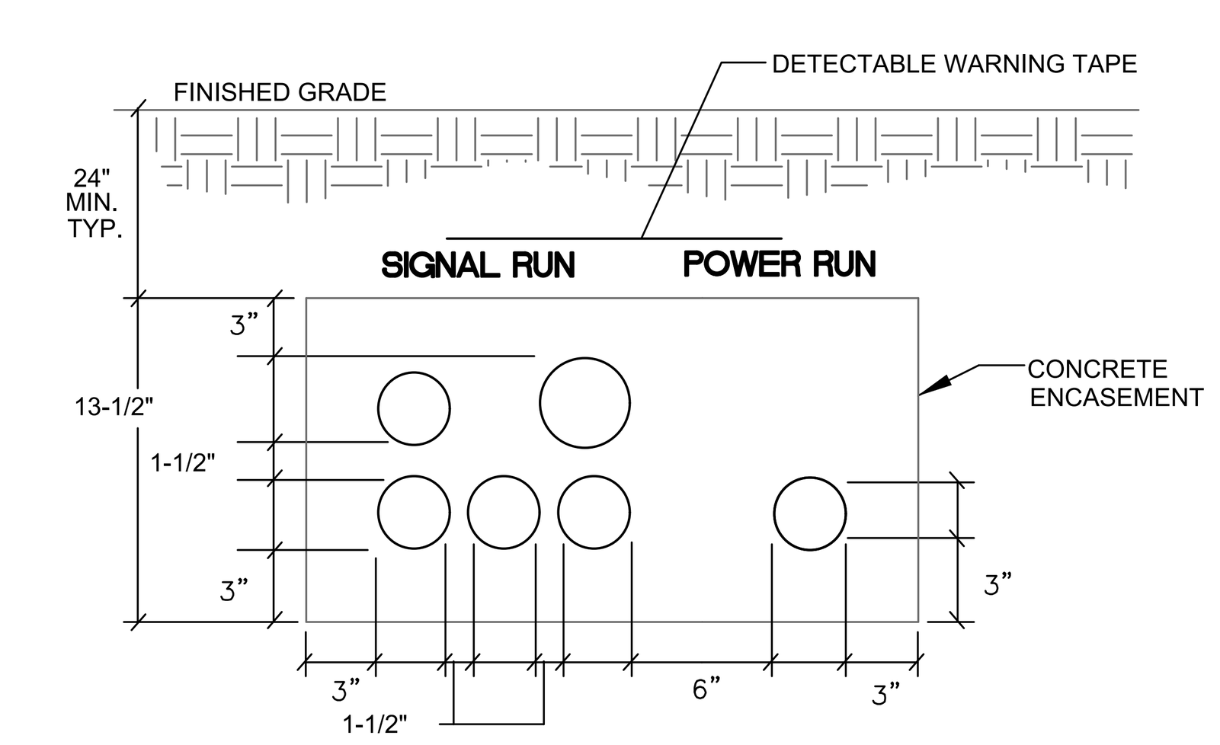
TOP VIEW , DETAIL "B"



PLAN VIEW OF GROUND CLAMP TO RIGID CONDUIT DETAIL "A"



2 / E-002 GROUND ROD & PRECAST CONCRETE BOX DETAIL
N.T.S.



1 / E-002 CONDUIT DUCT BANK SECTION
N.T.S.

NOTE: 1. DETAILS SHOWS TYPICAL CONDUIT SPACING AND DEPTH ONLY. REFER TO DRAWINGS FOR EXACT QUANTITY AND SIZES OF CONDUITS.
2. SAW CUT AND PATCH EXISTING SURFACE WHEN TRENCHING UNDER EXISTING ASPHALT OR CONCRETE. PATCH TO MATCH EXISTING CONDITION.
3. ELECTRICAL UNDERGROUND CONDUITS SHALL HAVE A 12" MINIMUM SEPARATION FROM ANY OTHER UNDERGROUND UTILITIES.

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Revisions

DRAWINGS, SPECIFICATIONS AND OTHER VISUAL AIDS, AS INSTRUMENTS OF SERVICE ARE THE PROPERTY OF THE ARCHITECT WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT, AND THEY ARE NOT TO BE USED FOR ANY OTHER SITE THAN THE ONE FOR WHICH THEY ARE PREPARED, EXCEPT BY AGREEMENT IN WRITING.

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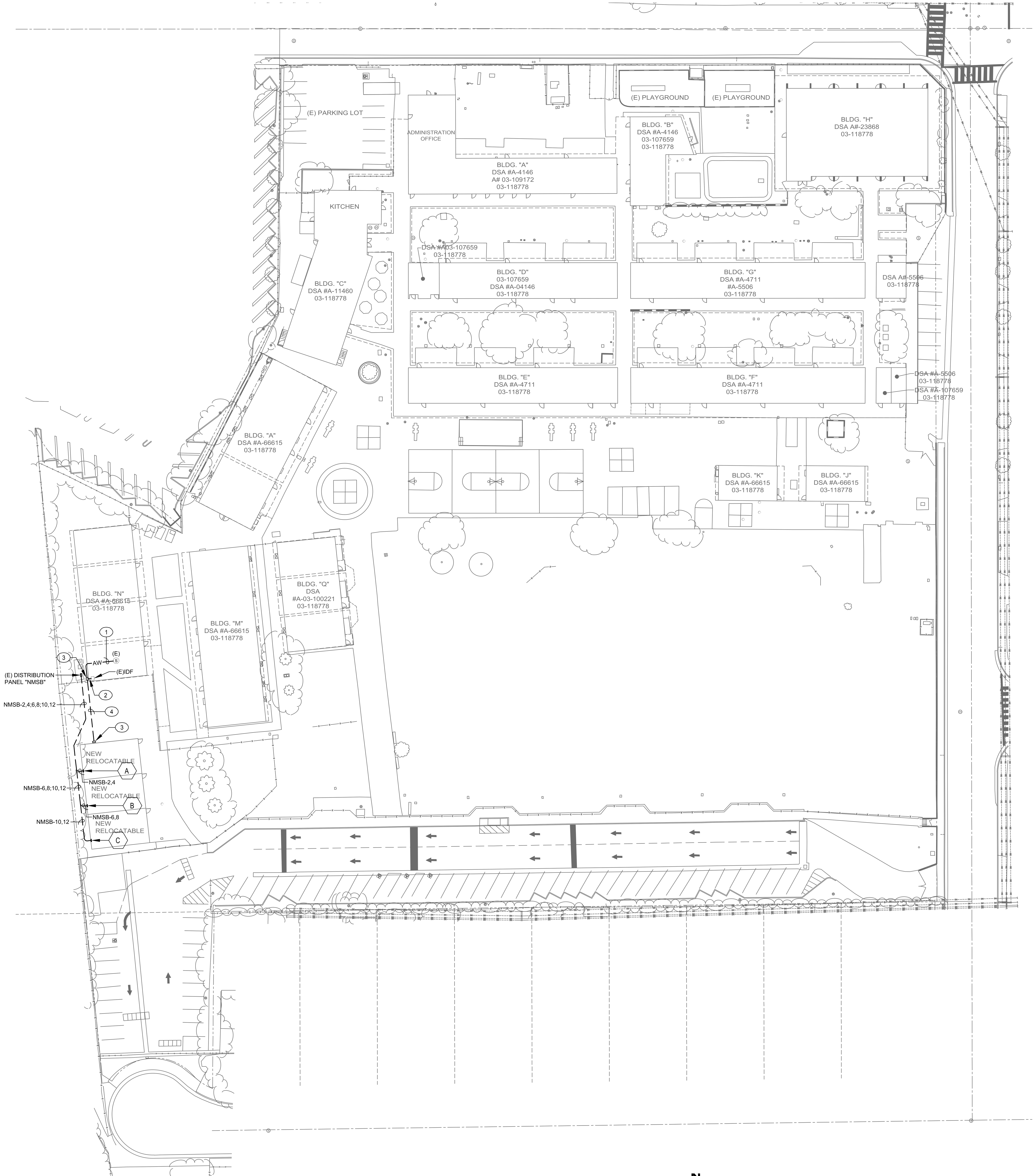
SINGLE LINE DIAGRAM & DETAILS

E-002



ELECTRICAL SITE PLAN

SCALE: 1"=30'-0"

N

PLAN NORTH

KEYED NOTES

1. 3/4"C, (1)AW, CONNECT TO EXISTING PA SPEAKER.
2. 1-1/2"C, (15)DW (DATA/TEL).
3. WEATHERPROOF SIGNAL PULLBOX 18"x18"x6" DEEP, MOUNT HIGH ON WALL.
4. 2"C, (1)AW, (15)DW (PA/DATA/TEL).

EXCAVATION NOTES

CONTRACTOR SHALL FIELD VERIFY UNDERGROUND UTILITIES PRIOR TO WORK (ELECTRICAL CONDUITS, SEWER LINES, WATER LINES, PLUMBING, ETC.). CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND ROUTING OF NEW TRENCHING IN AREAS OF EXISTING UNDERGROUND LINES. CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL EXISTING LINES WHERE NEW TRENCHING OCCURS BY USING ELECTRONIC LOCATING DEVICES, DIG ALERT SERVICES, ETC. CONTRACTOR SHALL INCLUDE THE COST OF LOCATING THE EXISTING UNDERGROUND LINES IN THE BID. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO EXISTING LINES.

TRENCHING FOR NEW UNDERGROUND CONDUITS IN AREAS WHERE EXISTING UNDERGROUND LINES ARE PRESENT SHALL BE EXCAVATED BY HAND AND WITH EXTREME CAUTION. UNDERGROUND POWER AND SIGNAL PULLBOXES WHERE SHOWN ON THE SITE PLAN DETERMINED TO BE IN CONFLICT WITH EXISTING UNDERGROUND LINES AFTER EXCAVATION BY HAND SHALL BE RELOCATED TO A POSITION AS CLOSE AS POSSIBLE TO THE LOCATION SHOWN ON THE DRAWINGS.

FILE No.: 19-91 A#: 03-123590

Revisions

LICENSED ARCHITECT HELENA L. JUBANY 22214 REN. 5-31-25 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER MEL ANTHONY BOBADILLA FAJARDO E21979 Exp. 09/30/25 ELECTRICAL STATE OF CALIFORNIA

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ELECTRICAL SITE PLAN

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E-101

FILE No.: 19-91 A#: 03-123590

Revisions

KEYED NOTES

1. RUN SIGNAL CABLES EXPOSED IN CEILING SPACE WITH J-HOOK CABLE SUPPORT AT 4 FEET ON CENTER.
2. WEATHERPROOF PULLBOX 18"x18"x6"DEEP, MOUNT HIGH ON WALL.

RELOCATABLE SIGNAL PLAN

SCALE: 1/8"=1'-0"

N
PLAN NORTH

LICENSED ARCHITECT HELENA L. JUBANY 22214 REN. 5-31-25 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER MEL ANTHONY BOBADILLA FAJARDO E21979 Exp. 09/30/25 ELECTRICAL STATE OF CALIFORNIA

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DATE	08/30/2023

RELOCATABLE SIGNAL PLAN

FIRE ALARM SYMBOL LIST

Symbol	Description
CANDELA RATING (95) A1-1 V2-1 [1]	CEILING MOUNTED SPEAKER/STROBE, CANDELA RATING AS INDICATED WITH 1 WATT SPEAKER TAPPED.
V2-1 S 15cd	FIRE ALARM STROBE. MOUNT AT +96" TO TOP OF STROBE. CANDELA RATING AS INDICATED. "V2-1" DENOTES FIRE ALARM SIGNAL CIRCUIT NUMBER. "15cd" DENOTES 15cd CANDELA RATING.
S1-1 SD	ADDRESSABLE SMOKE DETECTOR, PHOTOELECTRIC TYPE. "S1-1" DENOTES LOOP DETECTOR IDENTIFICATION NUMBER.
HD	HEAT DETECTOR IN CEILING SPACE ABOVE T-BAR CEILING.
FATC	FIRE ALARM TERMINAL CABINET WITH TERMINAL STRIPS. 12"x12"x5" DEEP.
MFACP	MAIN FIRE ALARM CONTROL PANEL.
FA	FIRE ALARM
FAPS	FIRE ALARM POWER SUPPLY.
VOICE EVAC	VOICE EVACUATION PANEL
MFATC	MAIN FIRE ALARM TERMINAL CABINET WITH TERMINAL STRIPS 24"x24"x6"DEEP.
(E)	EXISTING TO REMAIN.
W.P.	WEATHERPROOF.
FA ANNUN	FIRE ALARM ANNUNCIATOR PANEL.
RA	REMOTE AMPLIFIER.
(XR)	DISCONNECT AND REMOVE EXISTING DEVICES. DEMOLISH EXISTING ASSOCIATED WIRES/CABLES.
EOL	END OF LINE RESISTOR.
PB	PULLBOX, WEATHERPROOF.
SLC	SIGNALLING LINE CIRCUIT.

FIRE ALARM CABLE AND WIRING

Symbol	Description
"F" CABLE -	"WEST PENN" NO. D980, 1 PAIR #18 NON-SHIELDED - FIRE ALARM ADDRESSABLE LOOP.
"FW" CABLE -	"WEST PENN" NO. AQC225, 1 PAIR #16 NON-SHIELDED - FIRE ALARM ADDRESSABLE LOOP (UNDERGROUND).
"A" CABLE -	2#14 TWISTED PAIR, AUDIO CABLE (SPEAKER).
"AW" CABLE -	2#14 TWISTED PAIR, AUDIO CABLE WET LOCATION (AUDIO).
"V" CABLE -	2#12 AWG-FIRE ALARM VISUAL CIRCUIT CABLE.
F,A,V / F,A,V	3/4"C, WITH ONE "F" CABLE, ONE "A" CABLE AND ONE "V" CABLE.
F	3/4" CONDUIT WITH ONE "F" CABLE.
2F	3/4" CONDUIT WITH TWO "F" CABLES.
V	3/4" CONDUIT WITH ONE "V" CABLE.
2V	3/4" CONDUIT WITH TWO "V" CABLES.
A	3/4" CONDUIT WITH ONE "A" CABLE.
2A	3/4" CONDUIT WITH TWO "A" CABLES.
AW	3/4" CONDUIT WITH ONE "AW" CABLE.
2AW	3/4" CONDUIT WITH TWO "AW" CABLES.
2F,2A,2V	1-1/2" CONDUIT WITH TWO "F", TWO "A", TWO "V" CABLES.
2A,2V	1" CONDUIT WITH TWO "A", TWO "V" CABLES.
F,A,2V	1" CONDUIT WITH ONE "F", ONE "A", TWO "V" CABLES.

GENERAL FIRE ALARM NOTES

1. THE SYSTEM SHALL CONFORM TO CALIFORNIA CODE OF REGULATIONS (CCR) TITLES 19 & 24 AS APPLICABLE TO THIS PROJECT.
2. UPON COMPLETION OF SYSTEM INSTALLATION, THE SYSTEM SHALL BE TESTED IN THE PRESENCE OF AND IN A MANNER ACCEPTABLE TO DSA/IOR. CONTRACTOR TO SUPPLY NECESSARY TESTING EQUIPMENT INCLUDING A "DECIMETER" TO CHECK ACCEPTABLE NOISE LEVELS OF AUDIBLE DEVICES, PROVIDE TEST RESULTS PER NFPA 72 TO ARCHITECT, DSA, INSPECTOR OF RECORD, OWNER AND TO THE LOCAL FIRE AUTHORITY.
3. PENETRATIONS OF ALL FIRE-RATED WALLS SHALL BE PROTECTED IN ACCORDANCE WITH THE CALIFORNIA BUILDING CODE, PART 2. PROVIDE DETAILS AND DESIGN NUMBERS.
4. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDA OR A CONSTRUCTION CHANGE DOCUMENTS (CCD) APPROVED BY THE OFFICE OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.
5. A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE OFFICE OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1. TITLE 24, CCR.
6. AUTOMATIC VOICE EVACUATION FIRE ALARM SYSTEMS SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72 AS AMENDED BY THE ARTICLE 91. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUFX OR UUJS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011.
7. LOCATION AND PLACEMENT OF FIRE ALARM DEVICES ARE NOT TO BE CONSIDERED DIAGRAMMATIC IN NATURE. ANY CHANGE IN THE LOCATION OR PLACEMENT OF BOTH DETECTION AND NOTIFICATION DEVICES MUST BE REVIEWED AND APPROVED BY DSA FLS. FINAL APPROVAL OF DEVICE PLACEMENT IS SUBJECT TO FIELD VERIFICATION OF CODE COMPLIANCE.
8. ALL WIRING, INITIATING DEVICES AND ANNUNCIATOR PANEL SHALL BE SUPERVISED TO THE PRINCIPAL POINT OF ANNUNCIATION.
9. ALL TERMINATIONS IN TERMINAL CABINETS SHALL BE ON TERMINAL BLOCKS.
10. "THE FIRE ALARM SYSTEM SHALL CONFORM TO ARTICLE 760 OF THE CALIFORNIA ELECTRICAL CODE, CURRENT CALIFORNIA TITLE 24 REQUIREMENTS, CALIFORNIA FIRE CODE, NFPA 72 AND 101 STANDARDS, AMERICAN WITH DISABILITY ACT (ADA) REQUIREMENTS."
11. AT LEAST ONE TERMINATION CABINET IN EACH BUILDING FOR TERMINATION OF ALL FIRE ALARM WIRING. PROVIDE A MAIN TERMINAL CABINET IN MAIN BUILDING FOR ROUTING ALL FIRE ALARM SYSTEM WIRING FOR ENTIRE SCHOOL.
12. "CONTRACTOR SHALL INSTALL AND FURNISH A COMPLETE ADDRESSABLE FIRE ALARM VOICE EVACUATION SYSTEM, INCLUDING BUT NOT LIMITED TO WIRING, CONDUITS AND DEVICES REQUIRED FOR SATISFACTORY OPERATION OF SYSTEM."
13. ALL EXPOSED CONDUITS AND BOXES WITH THE EXCEPTION OF THOSE IN UNOCCUPIED AREAS LIKE JANITOR OR UTILITY ROOMS, SHALL BE PAINTED TO MATCH THE SURFACES WHERE INSTALLED.
14. THE REPRESENTATION OF PHYSICAL PLACEMENT OF EXISTING CONDUITS HAS BEEN DEVELOPED FROM THE BEST INFORMATION AVAILABLE TO THE DISTRICT AT THE TIME THE DRAWINGS WERE PREPARED. THE DISTRICT PROVIDES THIS ONLY AS A GENERAL GUIDELINE FOR THE CONVENIENCE OF BIDDERS/CONTRACTORS AND DOES NOT GUARANTEE OR WARRANT IN ANY WAY EXPRESSLY OR IMPLIEDLY, THE ACCURACY OF THESE REPRESENTATIONS. NOTHING IN THIS DISCLAIMER AFFECTS IN ANY WAY THE DUTY OF THE CONTRACTOR TO FURNISH ACCURATE "AS BUILT" DRAWINGS AFTER THE COMPLETION OF THE CONTRACT.
15. IN EXISTING BUILDINGS, CONTRACTORS SHALL NOT WORK IN AREAS CONTAMINATED BY MATERIALS MADE OF ASBESTOS UNTIL THE ASBESTOS MATERIALS HAVE BEEN REMOVED OR ENCAPSULATED.
16. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND EQUIPMENT AND MATERIAL APPROVED FOR USE UNDER THIS CONTRACT.
17. QUANTITY OF WIRES SHOWN IN ALL CONDUITS IS FOR GENERAL GUIDELINE. SUPPLIER OF FA SYSTEM SHALL PREPARE CONSTRUCTION DRAWINGS SHOWING SHOWING ALL NECESSARY WIRES AND CABLES AND VERIFY SIZES OF ALL CONDUITS SHOWN.
18. DRAWINGS DO NOT SHOW ALL THE NECESSARY J-BOXES AND PULL BOXES WHICH WILL BE REQUIRED THROUGHOUT. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL THESE BOXES AS NECESSARY TO TERMINATE CONDUITS AND RACEWAYS. PAINT BOXES TO MATCH COLOR OF THE FINISHED SURFACE THAT THE BOXES ARE ATTACHED BUILDINGS.
19. ALL JUNCTION BOXES AND DEVICES INDICATED ON BUILDING EXTERIORS SHALL BE WEATHERPROOF TYPE.
20. FIRE ALARM WIRES SHALL BE COPPER TYPE THWN/THHN.
21. WHEN ALL FIRE ALARM DEVICES ARE INSTALLED AND PROGRAMMING IS COMPLETE, THE FIRE ALARM DEVICE MAP IN THE SCHOOL MAIN OFFICE SHOULD BE UPDATED TO INDICATE TO SCHOOL PERSONNEL THE LOCATIONS OF THE NEW DEVICES.
22. SPLICING OF FA SYSTEM WIRING IS NOT ALLOWED. JUNCTION BOXES SHALL NOT CONTAIN SPLICES. CONDUCTORS SHALL BE PULLED THROUGH. TERMINATIONS SHALL BE PERFORMED, ON DEVICE TERMINALS, TERMINAL BLOCKS IN CABINETS AND EQUIPMENT TERMINALS.
23. LABEL DESCRIPTIONS" INDICATING DEVICE TYPE AND LOCATION THAT ARE DISPLAYED ON THE FIRE ALARM LCD DISPLAY SHOULD BE CLEAR AND EASILY UNDERSTOOD BY THE OFFICE STAFF. DESCRIPTIONS SHOULD BE BASED ON THE STAFFS UNDERSTANDING OF THE SITE AND NOT ON INFORMATION TAKEN FROM PRINTS.
24. PROVIDE 24 HOURS FIRE WATCH DURING CONSTRUCTION. SHOULD EXISTING SYSTEM NEED TO BE INTERRUPTED. INCLUDE ALL COST IN ORIGINAL BID.
25. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY THE TYPE OF CEILING CONSTRUCTION AND TO PROVIDE THE PROPER TYPE OF BOX MOUNTING AND SUPPORT FOR FIRE ALARM INITIATION DEVICES.

CONSTRUCTION NOTES

1. VERIFY CONDUIT STUB UP AREAS OUTSIDE ALL BUILDINGS AND STUB UP AT BEST AREAS TO AVOID EXISTING WINDOWS, VENTS, ETC.
2. PERFORM THE NECESSARY DEMOLITION WORK WITH GREAT CARE AND WITH SMALL TOOLS IN ORDER NOT TO JEOPARDIZE EXISTING STRUCTURE AND EQUIPMENT TO REMAIN.
3. HEAT DETECTORS INSTALLED ABOVE SUSPENDED CEILING MUST HAVE THEIR LOCATIONS CLEARLY MARKED BELOW THE CEILING AND BE EASILY ACCESSIBLE. LABEL LETTERING SHOULD BE 1/2" HIGH, RED ON WHITE BACKGROUND AND BOLD ENOUGH TO BE EASILY SEEN BY PERSONNEL FROM THE FLOOR.
4. REPLACE DAMAGED CEILING TILES AND CEILING TILES WITH HOLES DUE TO REMOVAL OF EXISTING DEVICES, J-BOX, CONDUITS, WIREMOLD RACEWAYS & ETC.
5. UNLESS SPECIFICALLY APPROVED ON THE DRAWINGS, NO STRUCTURAL MEMBER SHALL BE ALTERED BY CUTTING, BORING, BRAZING, DRILLING, NOTCHING, WELDING AND ETC. WITHOUT THE SEOR AND DSA REVIEW AND APPROVAL.
6. SEAL AND CAULK AS REQUIRED AT ALL PENETRATIONS.
7. WHEREVER POSSIBLE, CONCEAL NEW CONDUITS AND BOXES IN CEILING, ATTIC SPACE OR WALLS. FISH CONDUITS INSIDE OF STUD WALLS WHERE POSSIBLE. WHERE EXPOSED RACEWAYS AND BOXES HAVE TO BE USED IN FINISHED AREAS, USE "WIREMOLD" TYPE SURFACE RACEWAYS. FOR ONE SD PER CLASSROOM, RUN THE WIREMOLD FROM WALL J-BOX UP TO THE SD ONLY. FOR TWO SD PER CLASSROOM, LOCATE THE TWO SD CLOSER TO WALLS WITH A CENTER-TO-CENTER SPACE BETWEEN SD IN COMPLIANCE WITH NFPA-72 AND USE A SHORT PIECE OF WIREMOLD FROM EACH WALL J-BOX TO EACH SD. DO NOT RUN WIREMOLD ACROSS THE CEILING BUT RUN ALONG WALLS.
8. WHEN RUNNING WIREMOLD RACEWAYS, RUN RACEWAYS HIGH ON WALL AT CEILING LINE OR LOW NEAR FLOOR AND SWEEP DOWN OR UP TO DEVICES. TAKE CARE TO MAKE INSTALLATION NEAT AND UNOBJECTIONABLE. DRAWINGS DO NOT SHOW NECESSARY INTERMEDIATE BOXES. INCLUDE ALL NECESSARY FITTINGS, PULL AND J-BOXES IN BID.
9. IF STRUCTURAL MEMBERS NOT INDICATED TO BE REMOVED ARE INTERFERING WITH NEW CONSTRUCTION, OBTAIN WRITTEN AUTHORIZATION FROM ENGINEER BEFORE REMOVING SUCH MEMBERS. DSA APPROVAL REQUIRED.
10. COORDINATE THE DEMOLITION WORK AND NEW CONSTRUCTION TO PERMIT CONTINUED OPERATION OF ALL FACILITIES NECESSARY TO BE KEPT IN OPERATION.

CODES, STANDARDS & GUIDES

LIST OF APPLICABLE CODES
2022 California Administrative Code (CAC), Part 1, Title 24 CCR
2022 California Building Code (CBC), Part 2, Title 24 CCR
2022 California Electrical Code (CEC), Part 3, Title 24 CCR
2022 California Mechanical Code (CMC), Part 4, Title 24 CCR
2022 California Plumbing Code (CPC), Part 5, Title 24 CCR
2022 California Energy Code, Part 6, Title 24 CCR
2022 California Fire Code (CFC), Part 9, Title 24 CCR
2022 California Existing Building Code (CEBC), Part 10, Title 24 CCR
2022 California Green Building Standards Code (CALGreen), Part 11, Title 24 CCR
2022 California Referenced Standards Code, Part 12, Title 24 CCR
Title 19 CCR, Public Safety, State Fire Marshal Regulations
2010 ADA Standards for Accessible Design

APPLICABLE STANDARDS
For a list of applicable standards, including California amendments to the NFPA Standards, refer to CBC Chapter 35 and CFC Chapter 80.

Applicable Code: 2022 CBC

MEP Component Anchorage Note

All mechanical, plumbing, and electrical components shall be anchored and installed per the details on the DSA-approved construction documents. The following components shall be anchored or braced to meet the force and displacement requirements prescribed in the 2022 CBC Sections 1617A.1.18 through 1617A.1.26 and ASCE 7-16 Chapters 13, 26, and 30:

1. All permanent equipment and components.
2. Temporary, movable or mobile equipment that is permanently attached (e.g., hard wired) to the building utility services such as electricity, gas or water. "Permanently attached" shall include all electrical connections except plugs for 110/220 volt receptacles having a flexible cable.
3. Temporary, movable or mobile equipment which is heavier than 400 pounds or has a center of mass located 4 feet or more above the adjacent floor or roof level that directly support the component is required to be restrained in a manner approved by DSA.

The following mechanical and electrical components shall be positively attached to the structure but need not demonstrate design compliance with the references noted above. These components shall have flexible connections provided between the component and associated ductwork, piping, and conduit. Flexible connections must allow movement in both transverse and longitudinal directions:

A. Components weighing less than 400 pounds and having a center of mass located 4 feet or less above the adjacent floor or roof level that directly support the component.
B. Components weighing less than 20 pounds, or in the case of distributed systems, less than 5 pounds per foot, which are suspended from a roof or floor or hung from a wall.

The anchorage of all mechanical, electrical and plumbing components shall be subject to the approval of the design professional in general responsible charge or structural engineer delegated responsibility and acceptance by DSA. The project inspector will verify that all components and equipment have been anchored in accordance with the above requirements.

Applicable Code: 2022 CBC

Piping, Ductwork, and Electrical Distribution System Bracing Note

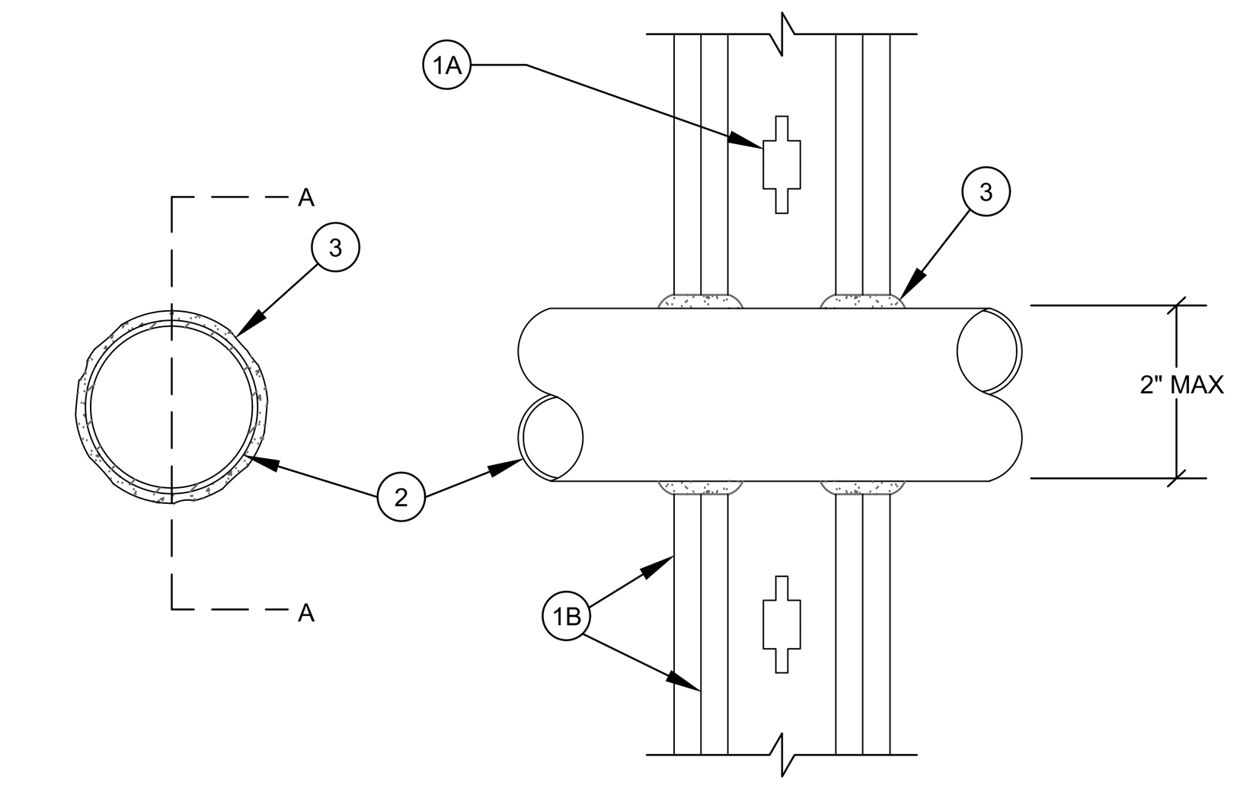
Piping, ductwork, and electrical distribution systems shall be braced to comply with the forces and displacements prescribed in ASCE 7-16 Section 13.3 as defined in ASCE 7-16 Sections 13.6.5, 13.6.6, 13.6.7, 13.6.8; and 2022 CBC, Sections 1617A.1.24, 1617A.1.25 and 1617A.1.26.

The method of showing bracing and attachments to the structure for the identified distribution system are as noted below. When bracing and attachments are based on a preapproved installation guide (e.g., HCAi OPM for 2013 CBC or later), copies of the bracing system installation guide or manual shall be available on the jobsite prior to the start of and during the hanging and bracing of the distribution systems. The Structural Engineer of Record shall verify the adequacy of the structure to support the hanger and brace loads.

Mechanical Piping (MP), Mechanical Ducts (MD), Plumbing Piping (PP), Electrical Distribution Systems (E):

MP☐ MD☐ PP ☐ E☑ Option 1: Detailed on the approved drawings with project specific notes and details.

MP☐ MD☐ PP☐ E☐ Option 2: Shall comply with HCAi Preapproval (OPM #) #______________.



SECTION A-A

THROUGH - PENETRATION FIRESTOP SYSTEM

System No. W-L-1001
June 15, 2005
F Ratings - 1, 2, 3 and 4 Hr (See Items 2 and 3)
T Ratings - 0, 1, 2, 3 and 4 Hr (See Item 3)
L Ratings At Ambinet - less than 1 CFM/sq ft
L Rating At 400 F - less than 1 CFM/sq ft

1. Wall Assembly - The 1, 2, 3 or 4 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
   A. Studs - Wall framing may consist of either wood studs (max 2 hr fire rated assemblies) or steel channel studs. Wood studs consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406mm) OC with nom 2 by 4 in. (51 by 102 mm) lumber end plates and cross braces. Steel studs to be min 3-5/8 in. (92 mm) wide by 1-3/8 in. (35 mm) deep channels spaced max 24 in. (610 mm) OC.
   B. Gypsum Board* - Nom 1/2 or 5/8 in. (13 or 16 mm) thick, 4 ft. (122 cm) wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 26 in. (660 mm).
2. Through Penetrant - One Metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in. (0 mm) (point contact) to max 2 in. (51 mm). Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:
   A. Steel Pipe - Nom 24 in. (610 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.
   B. Iron Pipe - Nom 24 in. (610 mm) diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in. (305 mm) diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.
   C. Conduit - Nom 6 in. (152 mm) diam (or smaller) steel conduit or nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing.
   D. Copper Tubing - Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing.
   E. Copper Pipe - Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.
   F. Through Penetrating Product* - Flexible Metal Piping - The following types of steel flexible metal gas piping may be used:
      1. Nom 2 in. (51 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.
         OMEGA FLEX INC
      2. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.
         TITEFLEX CORP
         A BUNDY CO
      3. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.
         WARD MFG INC
3. Fill, Void or Cavity Material* - Caulk or Sealant - Min 5/8. 1-1/4,1-7/8 and 2-1/2in. (16, 32, 48, and 64 mm) thickness of caulk for 1, 2, 3 and 4 hr rated assemblies, respectively, applied within annulus, flush with both surfaces of wall. Min 1/4 in. (6mm) diam bead of caulk applied to gypsum board/penetrant interface at point contact location on both sides of wall. The hourly F Rating of the fire stop system is dependent upon the hourly fire rating of the wall assembly in which it is installed, as shown in the following tables. The hourly T Rating of the firestop system is dependent upon the type or size of the pipe or conduit and the hourly fire rating of the wall assembly in which it is installed, as tabulated below:

Max Pipe or Conduit Diam In. (mm)	F Rating Hr	T Rating Hr
1 (25)	1 or 2	0+, 1 or 2
1 (25)	3 or 4	3 or 4
4 (102)	1 or 2	0
6 (152)	3 or 4	0
12 (305)	1 or 2	0

+ When copper pipe is used, T Rating is 0 hr.
3M COMPANY - CP 25WB+ caulk or FB-3000 WT sealant,
* Bearing the UL Classification Marking

FIRE ALARM SYSTEM DESCRIPTION
FIRE ALARM SUBMITTAL CONSISTS OF COMPLETE FULLY AUTOMATIC VOICE EVACUATION FIRE ALARM SYSTEM PER DSA POLICY CFC907.2.3.

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Revisions

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FIRE ALARM SYMBOL LIST AND NOTES

FIRE ALARM SIGNAL CIRCUIT SCHEDULE (EXISTING)

BLDG.	CKT. NO.	WALL QUAN. STROBE 15 cd 0.043	WALL QUAN. STROBE 30 cd 0.063	WALL QUAN. STROBE 75 cd 0.107	WALL QUAN. STROBE 110cd 0.148	CEIL. QUAN. STROBE 15cd 0.041	CEIL. QUAN. STROBE 30cd 0.063	CEIL. QUAN. STROBE 75cd 0.111	CEIL. QUAN. STROBE 110cd 0.158	TOTAL AMPS	WIRE SIZE	DISTANCE (IN FEET)	TO MFACP	TO POWER EXTENDER	PERCENT VOLTAGE DROP
A	V1	3				3	1	2		0.54	#12	180		FCPS-A	1.33
A	V2	3				2		1		0.32	#12	100		FCPS-A	0.44
D	V3	1	2				2	2		0.52	#12	300		FCPS-A	2.14
E	V4		2					3		0.46	#12	390		FCPS-A	2.47
F	V5		2					4		0.57	#12	460		FCPS-B	3.61
G	V6		2					4		0.57	#12	368		FCPS-B	2.89
B	V7	3	2					1		0.37	#12	180		FCPS-B	0.91
J/K	V8							2		0.22	#12	510		FCPS-B	1.56
H	V9	3	1					4	1	0.79	#12	260		FCPS-H	2.85
C	V10	3		1	1				2	0.70	#12	290		FCPS-C	2.80
L	V11	4						4		0.62	#12	320		FCPS-C	2.72
M	V12							5		0.56	#12	225		FCPS-M	1.72
M	V13							3		0.33	#12	200		FCPS-M	0.92
N	V14							4		0.44	#12	375		FCPS-M	2.29
(N)RELO	V15							(E)2-2+(N)3=5		0.56	#12	660		FCPS-M	5.05

I = TOTAL CURRENT FLOW IN ALARM CONDITION
L = LENGTH OF CIRCUIT FROM SUPPLY TO LAST DEVICE (IN FEET)
21.6 = RESISTIVITY OF COPPER CONDUCTOR PER CIRCULAR MILL

C.M. = CROSS SECTIONAL AREA OF CONDUCTOR IN CIRCULAR MILLS

$$\text{VOLTAGE DROP} = \frac{(I) \times (L) \times 21.6}{(CM)}$$

BATTERY CALCULATIONS PANEL FACP "SILENT KNIGHT" - 6820EVS (EXISTING)

QTY.	DESCRIPTION	STANDBY DEVICE	STANDBY AMPS	ALARM DEVICE	ALARM AMPS
1	6820EVS	0.19000	0.19000	0.25000	0.25000
2	ADDR. INPUT MOD	0.00055	0.00110	0.00055	0.00110
9	ADDR. MANUAL PULL STATION	0.00055	0.00495	0.00055	0.00495
23	ADDR. RELAY MODULE	0.00055	0.01265	0.00055	0.01265
125	ADDR. HEAT DETECTOR (E)117-4+(N)12=125	0.00055	0.06875	0.00055	0.06875
133	ADDR. PHOTO SMOKE DET (E)125-4+(N)12=133	0.00055	0.07315	0.00055	0.07315
42	ADDR. PHOTO-CARBON MONOXIDE SMOKE DET.	0.00055	0.02310	0.00055	0.02310
1	SLC EXPANDER	0.05500	0.05500	0.05500	0.05500
1	EVS-ITN50W	0.02000	0.02000	0.02500	0.02500
1	EVS-VCM	0.04500	0.04500	0.04500	0.04500
1	DACT	0.03500	0.03500	0.20000	0.20000
1	LED ANNUNCIATOR	0.03500	0.03500	0.14500	0.14500
27	SPEAKER 1/2 WATT TAP	0.00000	0.00000	0.02000	0.54000
13	SPEAKER 2 WATT TAP	0.00000	0.00000	0.08000	1.04000
12	SPEAKER 1/4 WATT TAP	0.00000	0.00000	0.01000	0.12000
0	SPEAKER 1 WATT TAP	0.00000	0.00000	0.04000	0.00000
TOTAL			0.5637		2.6037
		STANDBY		ALARM	
		24 HOURS	13.5288	15 MIN.	0.6509
		TOTAL	14.18	A.H.	
	BATTERY WITH 25% DERATING INCLUDED:		17.72	A.H.	
	BATTERY:		25	A.H.	
	SPARE:		7.28	A.H.	

VOICE EVACUATION CONTROL PANEL SPEAKER CIRCUIT LOAD CALCULATION (EXISTING)

MFG. REC. MAXIMUM LOSS IS: -0.5dB

AMPLIFIER# A	AMPLIFIER LOCATION	CIRCUIT LOCATION	PANEL CIRCUIT NUMBER	WIRE GAUGE (18, 16, 14 12)	CIRCUIT VOLTAGE (25 OR 70 VRMS)	SPEAKER TAPPED AT 0.25 Watts	SPEAKER TAPPED AT 0.5 Watts	SPEAKER TAPPED AT 1 Watt	SPEAKER TAPPED AT 2 Watts	TOTAL CIRCUIT LOAD (WATTS)	ESTIMATED CIRCUIT LENGTH (FEET)	ACTUAL WIRE/LOSS (dB)	MAXIMUM ALLOWABLE CKT. LENGTH (FEET)	TOTAL CIRCUIT RESISTANCE (OHMS)
AMP-C	PLATFORM BUILDING C	BUILDING C	A5	14 AWG	25 Vrms	0	0	4	2	8.00 Watts	340 ft.	-0.19 dB	6,226 ft.	1.8 Ohms
AMP-C	PLATFORM BUILDING C	BUILDING L	A6	14 AWG	25 Vrms	2	4	0	2	6.50 Watts	390 ft.	-0.18 dB	7,663 ft.	2.0 Ohms
AMP-C	PLATFORM BUILDING C	BUILDING M	A7	14 AWG	25 Vrms	0	8	0	3	10.00 Watts	440 ft.	-0.31 dB	4,981 ft.	2.3 Ohms
AMP-C	PLATFORM BUILDING C	BUILDING N, O, P	A8	14 AWG	25 Vrms	0	(E)6-2+(N)3=7	0	(E)1-1+(N)1=1	5.50 Watts	850 ft.	-0.33 dB	9,057 ft.	4.4 Ohms

BUILDING "M"

BATTERY CALCULATIONS - POWER EXTENDER FAPS-33M (EXISTING)

EQUIPMENT MODEL	QUANTITY	SUPERVISORY CURRENT, A UNIT	SUPERVISORY CURRENT, A TOTAL	ALARM CURRENT, A UNIT	ALARM CURRENT, A TOTAL
POWER SUPPLY 5496	1	0.04	0.04	0.16	0.16
STROBE (15cd) (WALL) (E)4+(N)6=10	10	0	0	0.043	0.43
STROBE (30cd)	0	0	0	0.063	0
STROBE (75cd) (CEILING) (E)14-2+(N)3=15	15	0	0	0.111	1.665
STROBE (110cd)	0	0	0	0.148	0

STANDBY AH	0.96	SUB TOTAL	0.04	SUB TOTAL	2.255
ALARM AH	0.56	HOURS	24.00	HOURS	0.25
TOTAL	1.52	AH STANDBY	0.96	AH ALARM	0.56375

PROVIDE NEW 7 AH BATTERY PACK (0.25 HRS. = 15 MIN.)

VOICE EVACUATION FIRE ALARM SEQUENCE OF OPERATION (EXISTING)

DEVICE / ACTION	MANUAL PULL STATION	AREA SMOKE DETECTORS	SMOKE DETECTOR CARBON MONOXIDE	AREA HEAT DETECTORS	POWER FAILURE	KITCHEN FIRE SUPPRESSION	NOTES
ANNUNICIATE ALARM AT FACP AND REMOTE ANNUNCIATOR	X	X	X	X			
ANNUNICIATE SUPERVISORY CONDITION AT FACP AND REMOTE ANNUNCIATOR	X	X	X	X	X	X	
ANNUNICIATE TROUBLE AT FACP AND REMOTE ANNUNCIATOR	X	X	X	X	X	X	[1]
ACTIVATE AUDIBLE/VISUAL SIGNAL THROUGHTOUT SCHOOL (ALARM)	X	X	X	X		X	
CONTACT CENTRAL STATION (UDACT)	X	X	X	X	X	X	
SHUT DOWN AIR HANDLING EQUIPMENT		X	X	X			[2]
SHUT-OFF AUTONOMOUS PA	X	X	X	X		X	[3]

[1] INDICATE TROUBLE ON WIRING FAULT OR DEVICE AS REQUIRED.

[2] SHUT DOWN ONLY AIR HANDLER EQUIPMENT IN THE BUILDING OR AREA WHERE ALARM CONDITION OCCURS.

[3] NO EXISTING AUTONOMOUS PA.

BATTERY SIZING CALCULATION

REMOTE AMPLIFIER - AMP-C (EXISTING)

EVS-50W

Quantity	Device Type	Model Number	Standby Current	Total Standby Current	Alarm Current	Total Alarm Current
1	EVS-50W	.	0.06500	0.06500	2.00000	2.00000
(E)18-2+(N)3=19	Speaker 25V	Speaker - 1/2 Watt Tap	0.00000	0.00000	0.02000	0.38000
(E)8-1+(N)1=8	Speaker 25V	Speaker - 2 Watt Tap	0.00000	0.00000	0.08000	0.64000
2	Speaker 25V	Speaker - 1/4 Watt Tap	0.00000	0.00000	0.01000	0.02000
4	Speaker 25V	Speaker - 1 Watt Tap	0.00000	0.00000	0.04000	0.16000
				Standby Load 0.065		Alarm Load 3.360

Standby Load:	0.065	Amps	Alarm Load:	3.360	Amps
Standby Time:	24	Hours	Alarm Time:	15	Minutes
Total Standby Load:	1.56	Amp*Hours	Total Alarm Load:	0.84	Amp*Hours
Batteries Provided:	(2) BAT-12180		Available Battery:	14.40	A.H.
Battery Size:	18.00	A.H.	Load (ALM + STBY)	2.40	A.H.
De-Rated Size(80%):	14.40	A.H.	Spare Capacity	12.00	A.H.

SYMBOLS	COMPONENT	SILENT KNIGHT CAT. NO.	CSFM NO.
▭	FIRE ALARM CONTROL PANEL "MFACP" (VOICE EVAC)	6820EVS (EXISTING)	7165-0559:0500
▭	FIRE ALARM ANNUNCIATOR WITH MIC.	EVS-LOC (EXISTING)	7165-0559:0500
▭	FIRE ALARM POWER SUPPLY	5496 (EXISTING)	7165-0559:0500
▭	REMOTE AMPLIFIER	EVS-50W (EXISTING)	7165-0559:0172
(cd) SS	CEILING MOUNTED SPEAKER/STROBE	SYSTEM SENSOR SPSCRL	7320-1653:0505
(cd) S	WALL STROBE (15cd)	SYSTEM SENSOR SRL	7125-1653:0504
SD	SMOKE DETECTOR, PHOTOELECTRIC	SK-PHOTO-W	7272-0559:0512
HD	HEAT DETECTOR	SK-HEAT-HT-W	7270-0559:0511

FIRE ALARM SYSTEM DESCRIPTION
FIRE ALARM SUBMITTAL CONSISTS OF COMPLETE FULLY AUTOMATIC VOICE EVACUATION FIRE ALARM SYSTEM PER DSA POLICY CFC907.2.3.

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FILE No.: 19-91 A#: 03-123590

Revisions

LICENSED ARCHITECT HELENA L. JUBANY 22214 REN. 5-31-25 STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER MEL ANTHONY BOBADILLA FIAJARDO E21979 Exp. 09/30/25 ELECTRICAL STATE OF CALIFORNIA

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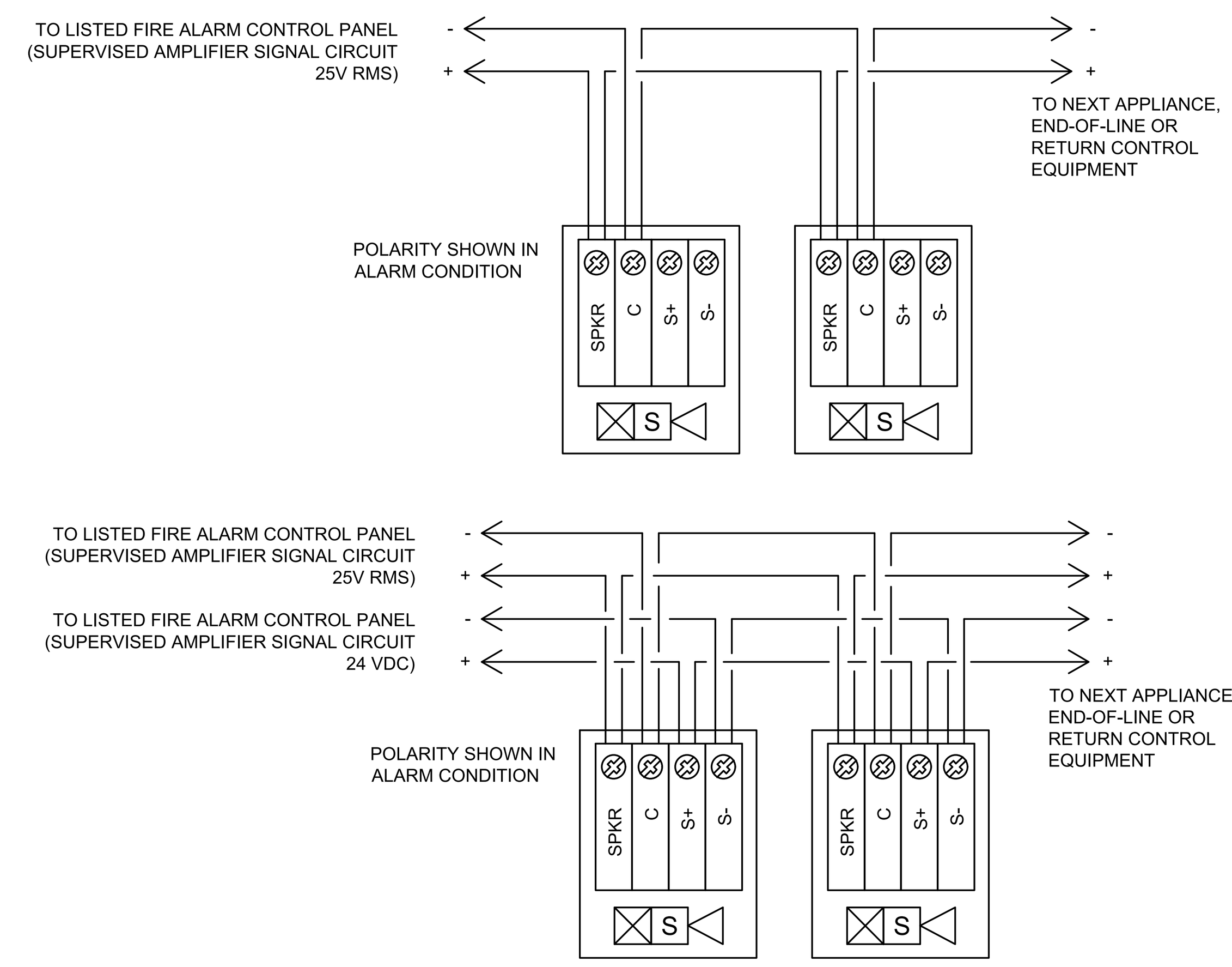
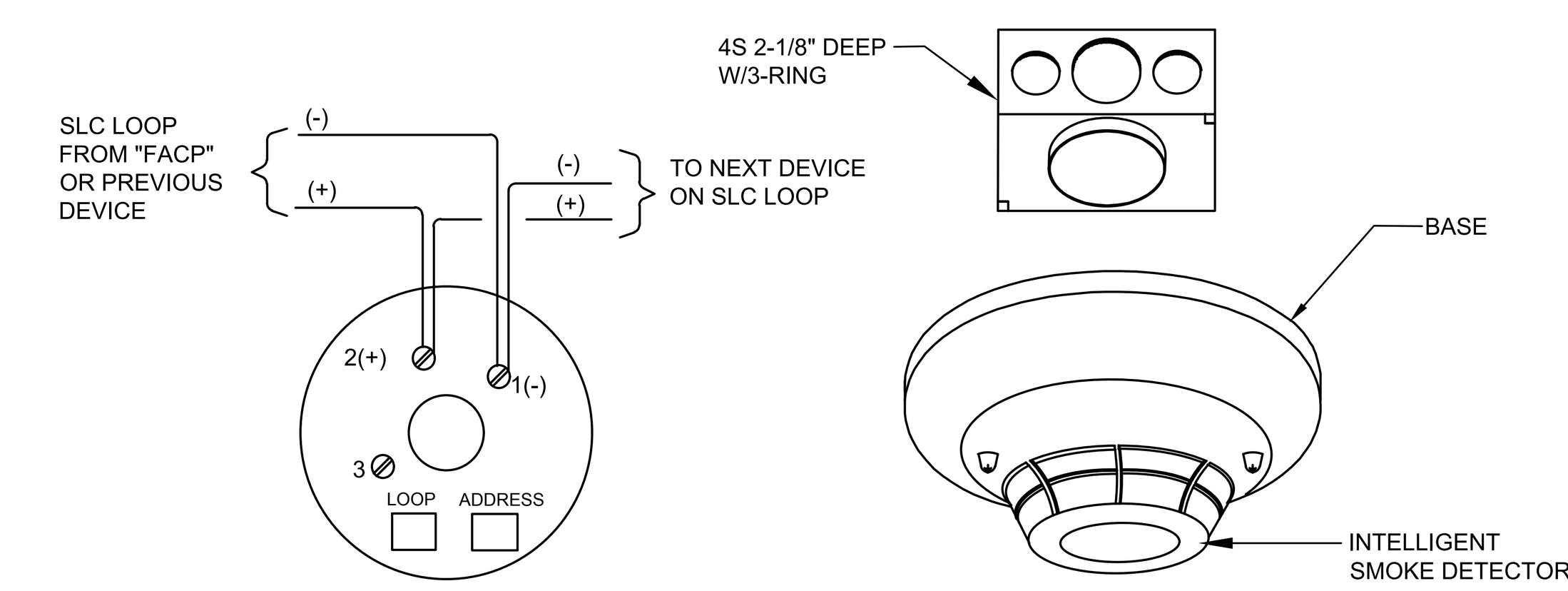
FIRE ALARM SCHEDULES AND CALCULATIONS

FA-002



6
FA-003
TYPICAL SPEAKER, SPEAKER/STROBE WIRING DIAGRAM
N.T.S.



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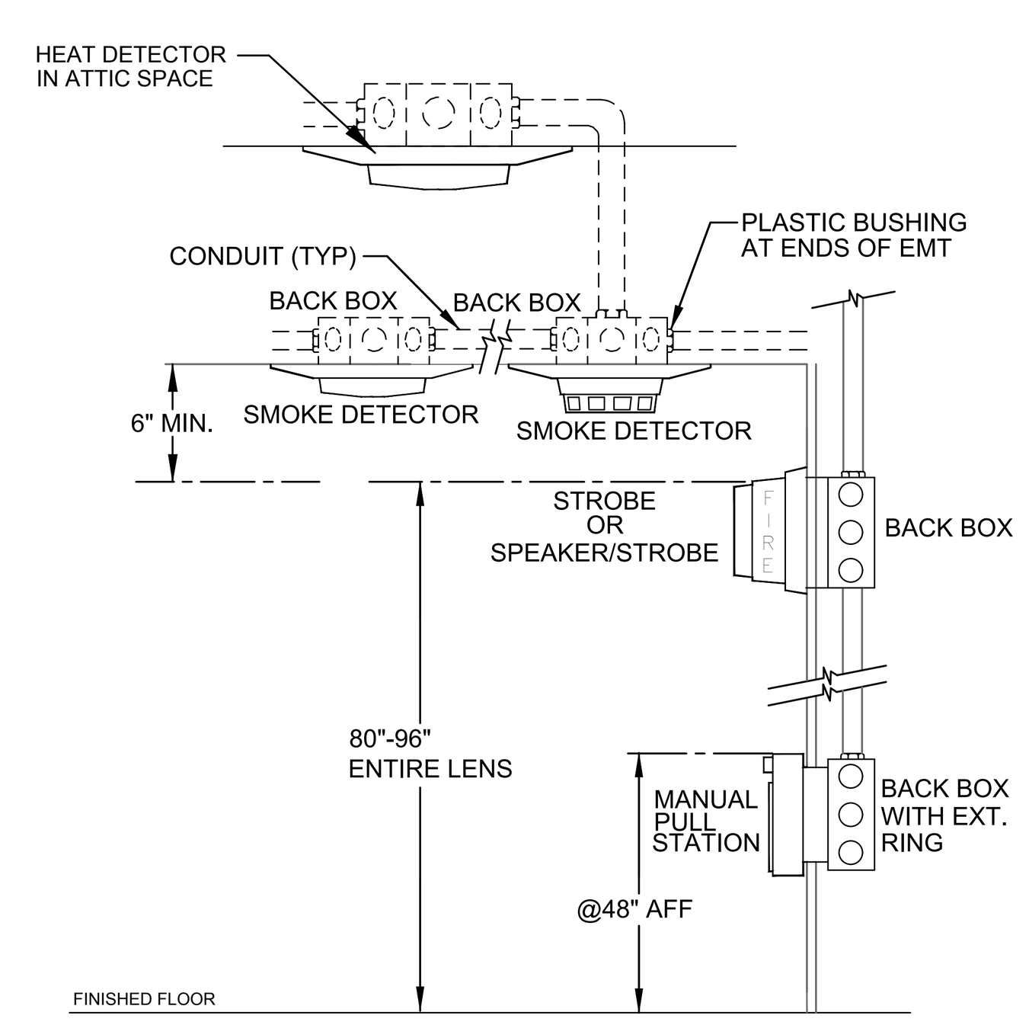
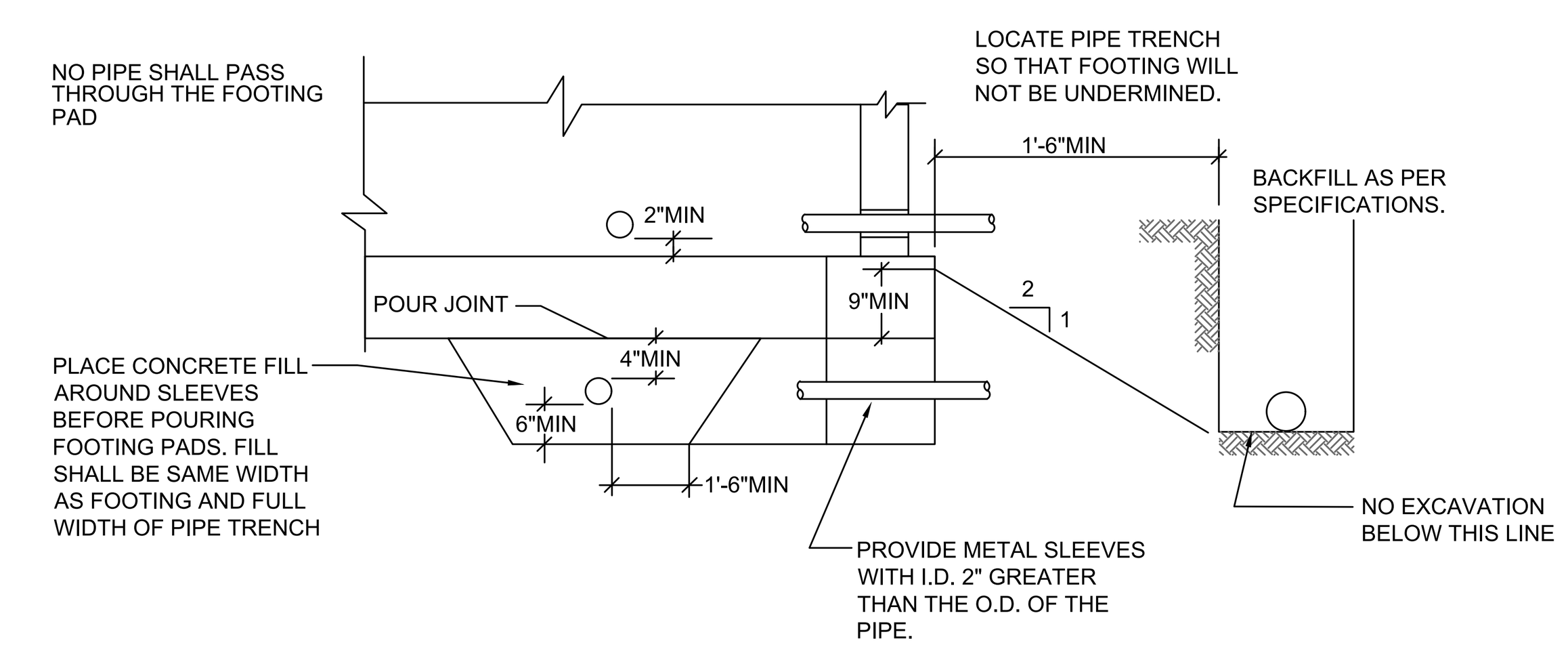
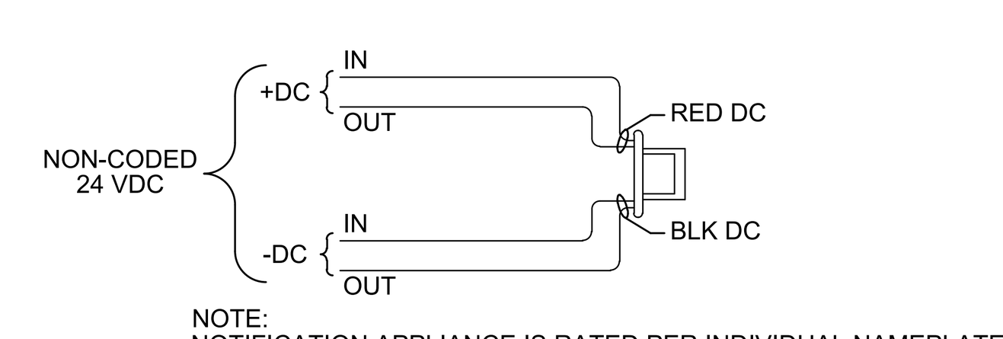
FA-003
SMOKE AND HEAT DETECTOR
N.T.S.



5
FA-003
PULL STATION, SPEAKER & STROBE HEIGHT REQUIREMENTS
N.T.S.



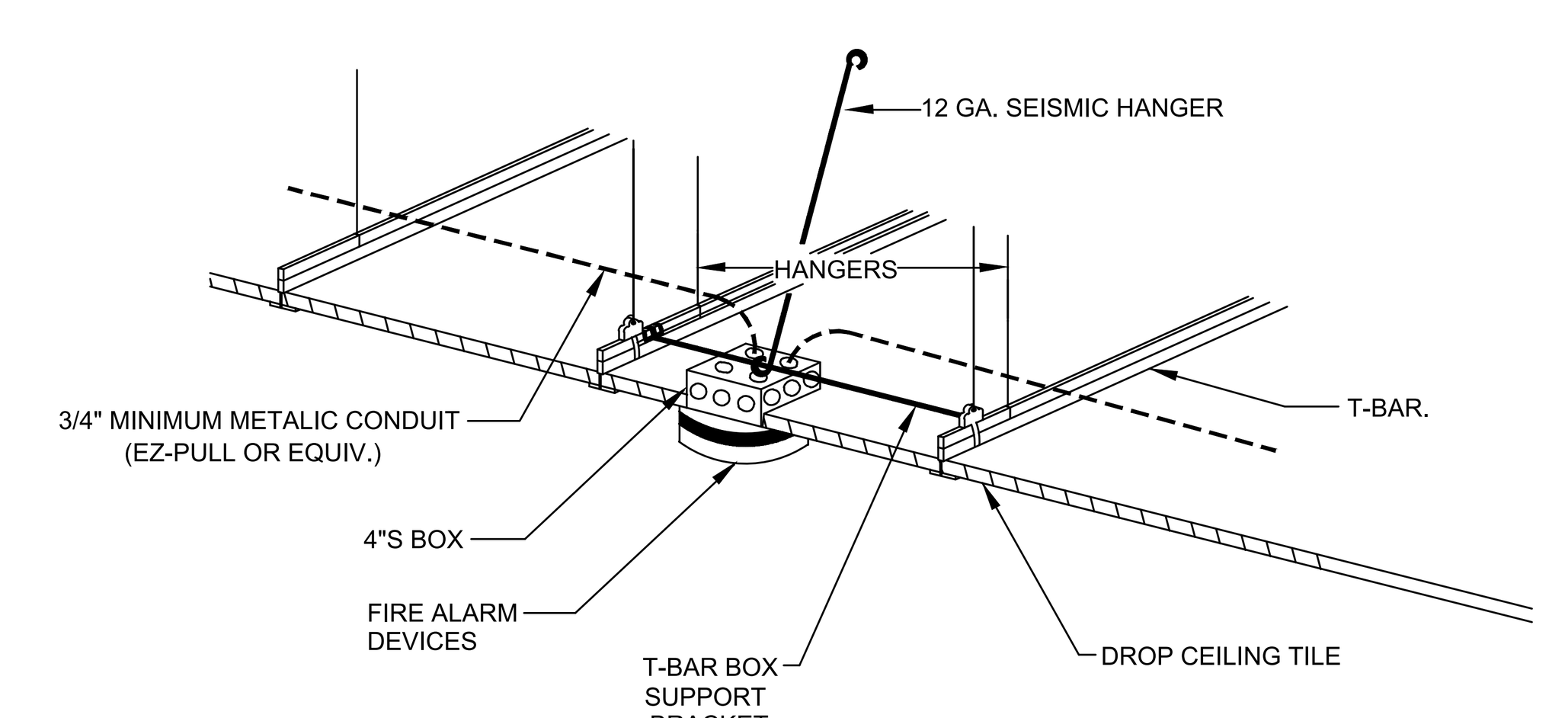
2
FA-003
TYPICAL PIPE TRENCH OR DUCT BANK AND FOOTING DETAIL
N.T.S.



NOTE:
NOTIFICATION APPLIANCE IS RATED PER INDIVIDUAL NAMEPLATE.

VISUAL WIRING DIAGRAM

4
FA-003
STROBE LIGHT
N.T.S.



1
FA-003
TYPICAL (SMOKE DETECTOR,/ SPEAKER-STROBE CEILING MOUNT INSTALLATION DETAIL
N.T.S.

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Revisions

DRAWINGS, SPECIFICATIONS AND OTHER VISUAL AIDS, AS INSTRUMENTS OF SERVICE ARE THE PROPERTY OF THE ARCHITECT WHETHER THE PROJECT FOR WHICH THEY ARE MADE IS EXECUTED OR NOT, AND THEY ARE NOT TO BE USED FOR ANY OTHER SITE THAN THE ONE FOR WHICH THEY ARE PREPARED, EXCEPT BY AGREEMENT IN WRITING.

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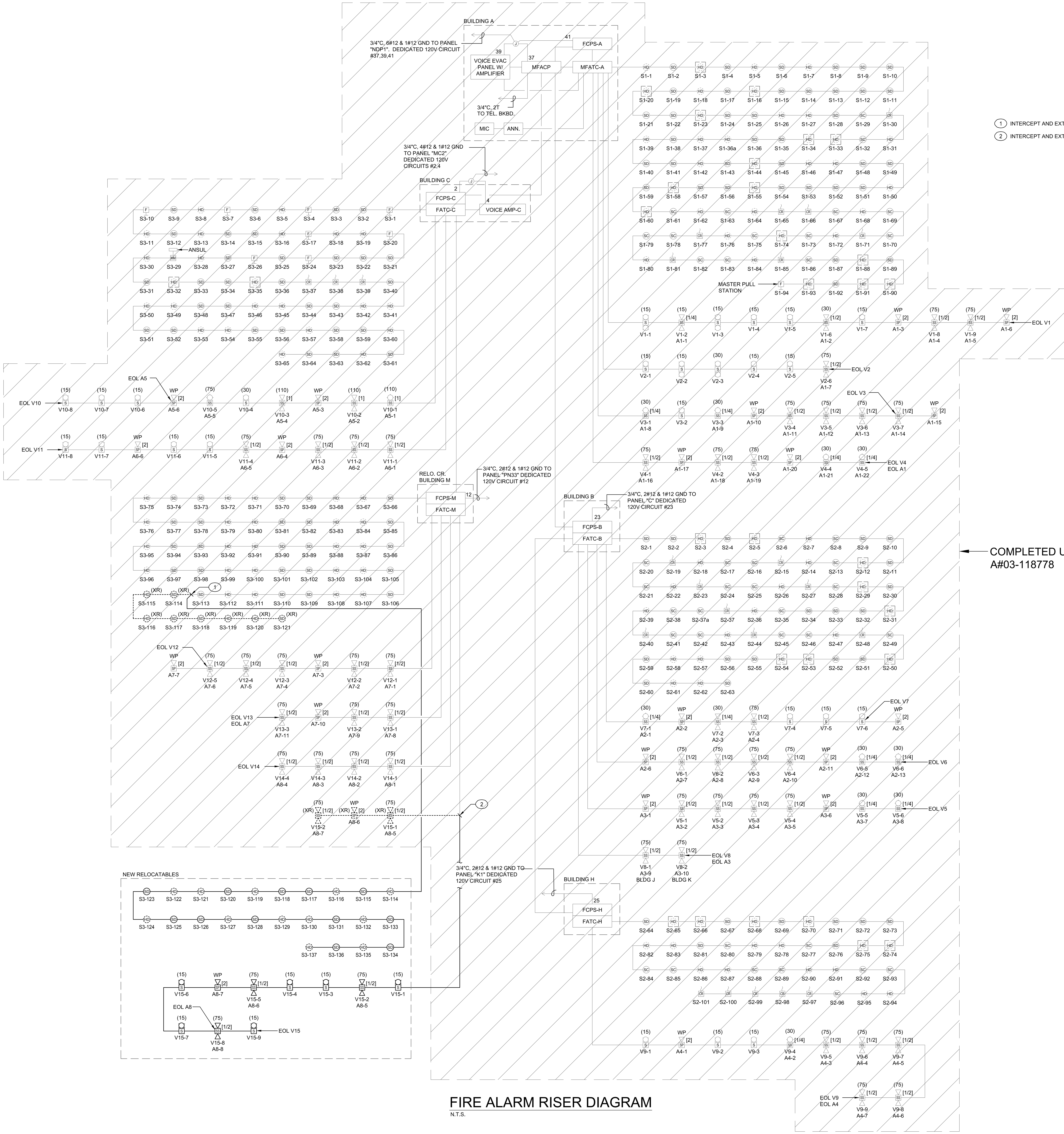
FIRE ALARM DETAILS

FA-003



FIRE ALARM RISER DIAGRAM

N.T.S.

KEYED NOTES

1. INTERCEPT AND EXTEND SLC CABLE TO NEW RELOCATABLE.
2. INTERCEPT AND EXTEND AUDIO AND VISUAL CABLE TO NEW RELOCATABLE.

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Revisions

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FA RISER DIAGRAM

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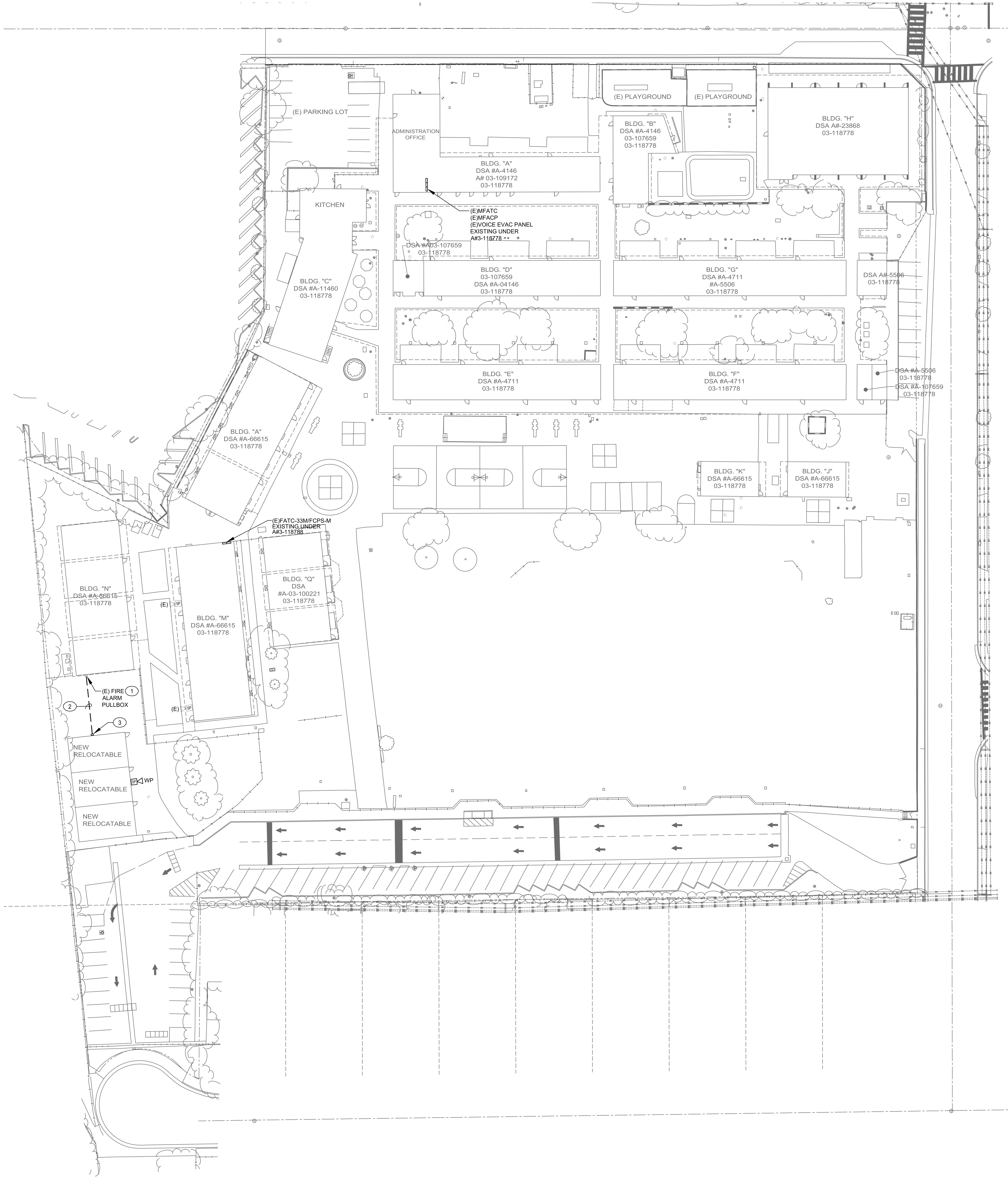
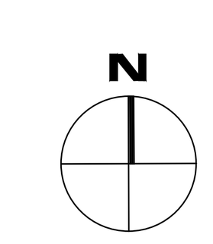
FA-004



FIRE ALARM SITE PLAN

SCALE: 1"=30'-0"



PLAN NORTH

KEYED NOTES

1. INTERCEPT AND EXTEND FIRE ALARM CABLES (SLC, AUDIO, VISUAL) FROM REMOVED CLASSROOMS.
2. 1"C, (1)FW, (1)V, (1)AW (FIRE ALARM).
3. WEATHERPROOF FIRE ALARM PULLBOX 10"x10"x6" DEEP, MOUNT HIGH ON WALL.

EXCAVATION NOTES

CONTRACTOR SHALL FIELD VERIFY UNDERGROUND UTILITIES PRIOR TO WORK (ELECTRICAL CONDUITS, SEWER LINES, WATER LINES, PLUMBING, ETC.). CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION AND ROUTING OF NEW TRENCHING IN AREAS OF EXISTING UNDERGROUND LINES. CONTRACTOR SHALL VERIFY EXACT LOCATIONS OF ALL EXISTING LINES WHERE NEW TRENCHING OCCURS BY USING ELECTRONIC LOCATING DEVICES, DIG ALERT SERVICES, ETC. CONTRACTOR SHALL INCLUDE THE COST OF LOCATING THE EXISTING UNDERGROUND LINES IN THE BID. CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY AND ALL DAMAGE TO EXISTING LINES.

TRENCHING FOR NEW UNDERGROUND CONDUITS IN AREAS WHERE EXISTING UNDERGROUND LINES ARE PRESENT SHALL BE EXCAVATED BY HAND AND WITH EXTREME CAUTION. UNDERGROUND POWER AND SIGNAL PULLBOXES WHERE SHOWN ON THE SITE PLAN DETERMINED TO BE IN CONFLICT WITH EXISTING UNDERGROUND LINES AFTER EXCAVATION BY HAND SHALL BE RELOCATED TO A POSITION AS CLOSE AS POSSIBLE TO THE LOCATION SHOWN ON THE DRAWINGS.

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FIRE ALARM SITE PLAN

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FA-101

RELOCATABLE FIRE ALARM PLAN

SCALE: 1/8"=1'-0"

N

PLAN NORTH

FILE No.: 19-91 A#: 03-123590

Revisions

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RELOCATABLE FIRE ALARM PLAN

FA-201

MODULAR CLASSROOM BUILDINGS
(WITH OPTIONAL RESTROOM MODULES)
BUILDING SIZE: 24' X 40'
EXPANDABLE TO 120' X 40'
PC 04-121999

BY

SILVER CREEK MODULAR, INC.
2830 BARRETT AVE, PERRIS, CALIFORNIA 92571
PHONE : (951) 943-5393 FAX : (951) 943-2211

GENERAL NOTES

1. FIRE ALARM IS NOT PART OF THIS APPROVAL.
2. ALLOWABLE AREA IS BASED ON 10' SET BACK FROM IMAGINARY ASSUMED LINE PER 2022 CBC 705.3.
3. THIS PC IS DESIGNED STRUCTURALLY TO SUPPORT THE WEIGHT OF A FIRE SPRINKLER SYSTEM.
4. PC IS DESIGNED AS A SINGLE STORY MODULAR BUILDING.
5. FOR SOILS TYPES / DESIGN BEARING STRENGTH, SEE STRUCTURAL SPECIFICATIONS.
6. ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
7. THIS PC IS NOT APPROVED FOR "A" OCCUPANCY USES.
8. EXTERIOR WALL OPENINGS TO COMPLY W/ 705.8, 2022 CBC. THE USE OF UNPROTECTED OPENINGS SHALL BE VERIFIED IN THE PROJECT SPECIFIC APPLICATIONS.
9. EXTERIOR PROJECTIONS ARE TO BE FIRE PROTECTED WHERE REQUIRED BY SECTIONS 705.2 & 1405.
10. SEE SHEETS A-0.7 FOR REQUIRED BUILDING ENVELOPE ASSEMBLIES AND HVAC SYSTEM.
11. PURSUANT TO D.S.A. APPROVAL ALL PRODUCTS CAN BE SUBSTITUTED BY AN "EQUAL".
12. BUILDING(S) TO BE LOCATED IN ANY FIRE HAZARD SEVERITY ZONE OR ANY WILDLAND - URBAN INTERFACE FIRE AREA SHALL COMPLY WITH CBC CHAPTER 7A.
13. WHEN THE PRE-CHECKED BUILDING IS SITE ADAPTED, THE BUILDING AND SITE FEATURES NEED TO COMPLY WITH CALGREEN CODE, SECTION 5.507.4 FOR THE SITE SPECIFIC LOCATION.
14. IN THE EVENT THAT A PC CLASSROOM IS DESIGNED TO CONNECT TO THE SAME PC CLASSROOM, INTERIOR SOUND TRANSMISSION IN THE INTERIOR ADJOINING WALL AND FLOOR-CEILING SHALL MEET THE MINIMUM REQUIREMENTS OF THE STC RATING OF 40 PER CALGREEN CODE, SECTION 5.507.4.3.
15. FOR THE CONCRETE BELOW GRADE (AMM*) FOUNDATION OPTION THIS PC USES A DSA APPROVED ALTERNATE MEANS OF COMPLIANCE WITH THE FOUNDATION DURABILITY REQUIREMENTS OF CBC 1402.2 + 1403.2 (WEATHER-RESISTANT EXTERIOR WALL ENVELOPE AND CONTINUOUS WATER-RESTISTIVE BARRIER ON WALLS TO FOUNDATION) + 2304.12.1.2 (PROTECTION AGAINST DECAY AND TERMITES). DETAILS ARE PROVIDED ON SHEETS A-5.71 - A-5.78 AS APPLICABLE.
16. THE BUILDING PAD ELEVATION SHALL ABOVE THE DESIGN FLOOD ELEVATION.
17. WHEN THE SITE-SPECIFIC PROJECT IS LOCATED IN A FLOOD ZONE OTHER THAN ZONE X, A SEALED LETTER FROM A GEOTECHNICAL ENGINEER SHALL BE PROVIDED TO VALIDATE THE APPLICABILITY OF THE ALLOWABLE SOIL BEARING PRESSURES INDICATED ON THE PC DRAWINGS.
EXCEPTION: THIS LETTER IS NOT REQUIRED FOR PROJECTS LOCATED IN FLOOD ZONE D WHEN A GEOTECHNICAL REPORT IS AVAILABLE FOR IMPROVEMENTS ON THE SAME PROJECT SITE, AND IN ACCORDANCE WITH THE CURRENT CBC, WHICH CONFIRMS THAT THE SITE IS NOT IN A FLOOD HAZARD ZONE OR CONFIRMS THAT THE FLOOD HAZARD DOES NOT RESULT IN A REDUCTION OF SOIL CAPACITY VALUES.

APPLICABLE STANDARDS

NFPA 13	AUTOMATIC SPRINKLER SYSTEMS (CA. AMENDED)	2022 EDITION
NFPA 72	NATIONAL FIRE ALARM CODE (CALIFORNIA AMENDED) (NOTE: SEE UL STANDARD 1971 FOR "VISUAL DEVICES")	2022 EDITION
ACI 318	BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE	2019 EDITION
ASME A17.1 (W/A17.1A CSA B44A-2019 ADDENDA) SAFETY CODE FOR ELEVATORS & ESCALATORS.		2007 EDITION

APPLICABLE CODES

LIST OF 2022 CALIFORNIA CODE OF REGULATIONS

2022 BUILDING ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 C.C.R.
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 C.C.R.
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 C.C.R.
TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

BUILDING DATA

NUMBER OF STORIES:	1 - STORY		
OCCUPANCY:	E or B		
TYPE OF CONSTRUCTION:	V-B		
FLOOR LIVE LOAD:	☐ 50 PSF	☐ 50+15 PSF PARTITION LOAD	
	☐ 100 PSF	☐ 150 PSF	
ROOF LIVE LOAD:	20 PSF		
FLOOR DEAD LOAD:	☐ WOOD FLOOR - 11 PSF	☐ CONCRETE FLOOR - 35 PSF	
ROOF DEAD LOAD:	18 PSF (INCLUDING SPRINKLER LOAD AND SOLAR ALLOWANCE)		
SOLAR ALLOWANCE:	0.6 PSF OVER ENTIRE ROOF AREA		
RAMP LIVE LOAD:	100 PSF		
BUILDING AREA:	☐ 24'x40' BLDG - 960 S.F.	☐ 84'x40' BLDG - 3,360 S.F.	
	☐ 36'x40' BLDG - 1,440 S.F.	☐ 96'x40' BLDG - 3,840 S.F.	
	☐ 48'x40' BLDG - 1,920 S.F.	☐ 108'x40' BLDG - 4,320 S.F. ★	
ALLOWABLE AREA: 9,000 S.F.	☐ 60'x40' BLDG - 2,400 S.F.	☐ 120'x40' BLDG - 4,800 S.F. ★	
	☐ 72'x40' BLDG - 2,880 S.F.	★ SEE S-0.1 FOR GEOTECHNICAL REPORT REQUIREMENT	
(ALL w/o OVERHANGS)			
FOUNDATION:	☐ WOOD (CONDITIONAL) ☐ CONCRETE ABOVE GRADE ☐ CONCRETE BELOW GRADE (<2,160 SF. CONDITIONAL) ☐ CONCRETE BELOW GRADE (AMM. SEE NOTE 15)		
CEC CLIMATE ZONE:	☐ ALL ZONES (1-16) ☐ SINGLE ZONE (SEE PROJECT SPECIFIC DRAWINGS)		

ALLOWABLE SOIL PRESSURE

WOOD FOOTING (DL & DL+LL & DL+LL+SEISMIC)	1,000 psf
CONCRETE FOOTING (DL & DL+LL & DL+LL+SEISMIC)	1,500 psf

ROOF SNOW LOAD

GROUND SNOW LOAD, P_g FROM COUNTY: 0

ROOF SNOW LOAD: ☐ FLAT P_f OR ☐ LOW-SLOW, P_{flt} OR ☐ SLOPED, P_s

SNOW EXPOSURE FACTOR C_s	-
SNOW IMPORTANCE FACTOR I_s	1.0
THERMAL FACTOR C_t	-

FLOOD DESIGN (SEE GENERAL NOTE #16 + 17)

FLOOD HAZARD AREA YES ☐ NO ☐

WIND DESIGN

BASIC WIND SPEED (3 SECOND GUST) V_{ult}	120
RISK CATEGORY	II
WIND EXPOSURE CATEGORY	C
TOPOGRAPHIC FACTOR K_{zt}	1

SEISMIC DESIGN

LATERAL FORCE-RESISTING SYSTEM	OMF
ANALYSIS PROCEDURE	EQIV. LATERAL FORCE
SEISMIC DESIGN CATAGORY (SDC)	E
SEISMIC IMPORTANCE FACTOR I_e	1.0
SEISMIC RESPONSE COEFFICIENT C_s	0.45
RESPONSE MODIFICATION COEFFICIENT R	3.5
SITE CLASS	D
MAPPED SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD S_s	2.8
SHORT PERIOD SITE COEFFICIENT F_a	1.2
DESIGN SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD S_{DS}	2.23 +++
MAPPED SPECTRAL RESPONSE ACCELERATION AT 1-SECOND PERIOD S_1	1.064 ++
LONG PERIOD SITE COEFFICIENT, F_v	1.7
DESIGN SPECTRAL RESPONSE ACCELERATION AT 1-SECOND PERIOD S_{D1}	1.2
HORIZONTAL OR VERTICAL IRREGULARITY TYPES	NONE
REDUNDANCY FACTOR Rho	1.0
FUNDAMENTAL PERIOD T	< 0.5s

++ PER SUPPLEMENT 3 OF ASCE 7-16, STRUCTURES SITUATED IN SITE CLASS D WITH S1 VALUES THAT ARE EQUAL TO OR GREATER THAN 0.2 ARE EXEMPTED FROM THE GROUND MOTION HAZARD ANALYSIS. THIS EXEMPTION APPLIES WHEN THE PARAMETER SM1, DETERMINED THROUGH THE USE OF EQ. 11.4-2, IS ELEVATED BY 50% FOR ALL APPLICATIONS OF SM1

+++ FOR THE PURPOSES OF CALCULATING C_S (PER ASCE 7-16 12.8.1.3)
S_{DS} = 1.56

FOR SITE SPECIFIC PROJECT

☐ SOLAR PV IS REQUIRED AND REFERENCE SHEET A-0.7
☐ GEOTECH REPORT IS REQUIRED

SEISMIC DESIGN FOR SITE SPECIFIC PROJECTS

SELECT ONE

☐ DESIGN BASED ON SITE CLASS $D_{default}$

NO GEOTECHNICAL INVESTIGATION REQUIRED

Ss = _____ Fa = 1.2

☐ DESIGN BASED ON SITE CLASS DETERMINED PER CHAPTER 20 OF ASCE 7-16

GEOTECHNICAL INVESTIGATION PROVIDED

SITE CLASS: ☐ C ☐ D

Ss = _____ Fa = _____ PER ASCE 7-16 SUPPL 3, TABLE 11.4-1

☐ DESIGN BASED ON SITE SPECIFIC GROUND MOTION HAZARD ANALYSIS PER CHAPTER 21 OF ASCE 7-16

SHORT-PERIOD DESIGN SPECTRAL RESPONSE PARAMETER, S_{DS}, SHALL BE AS SPECIFIED IN GEOTECHNICAL INVESTIGATION

CGS APPROVAL REQUIRED

NOT ELIGIBLE FOR OTC REVIEW

SITE CLASS: ☐ C ☐ D

S_{DS} = ⅔ Fa Ss = _____

☐ SITE CLASS C or D: 0.7 x S_{DS}* = 0.7 x _____ = _____ ≤ 2.23

C_S = 0.45 USED IN DESIGN

SEISMIC DESIGN CATEGORY: ☐ D ☐ E

* SITE SPECIFIC S_{DS} VALUE BEFORE APPLYING REDUCTION ALLOWED BY ASCE 7 SECTION 12.8.1.3

NOTE:
CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.

SHEET INDEX

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

COVER SHEET

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
A-0

2022 CBC

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.

KEY TO COLUMNS

1. TYPE	2. PERFORMED BY
Continuous – Indicates that a continuous special inspection is required **Periodic** – Indicates that a periodic special inspection is required **Test** – Indicates that a test is required	**GE (Geotechnical Engineer)** – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative. **LOR (Laboratory of Record)** – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335. **PI (Project Inspector)** – Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA. **SI (Special Inspection)** – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

	S/A1. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**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 technician 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.
☑	**d.** 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**).
☐	**e.** Buckling restrained braces.	Test	LOR	Testing and special inspections in accordance with IR 22-4.

	S/A2. HIGH-STRENGTH BOLTS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Verify identification markings and manufacturer's certificates of compliance conform to ASTM standards specified in the DSA-approved documents.	Periodic	SI	**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 17-8 & DSA IR 17-9.
☐	**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.
☐	**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 method used.
	S/A3. WELDING:			
	Test or Special Inspection	**Type**	**Performed By**	**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.
☑	**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	**Type**	**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 deck welds.	Periodic	SI	**1705A.2.2, Table 1705A.2.1 Items 5a.5 & 5a.6;** AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	**c.** Inspect welding of stairs and railing systems.	Periodic	SI	**1705A.2.1**; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3.
☐	**d.** Verification of reinforcing steel weldability other than ASTM A706.	Periodic	SI	**1705A.3.1**; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
☐	**e.** Inspect welding of reinforcing steel.	Continuous	SI	**Table 1705A.2.1 Item 5b, 1705A.3.1, Table 1705A.3 Item 2, 1903A.8;** AWS D1.4; DSA IR 17-3.
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
	S/A5. FIELD WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	**Type**	**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 (AISC 341-16 as applicable); DSA IR 17-3.
☐	**b.** Inspect single-pass fillet welds ≤ 5/16".	Periodic	SI	**Table 1705A.2.1 Item 5a.5;** AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.
☐	**c.** Inspect end-welded studs (ASTM A-108) installation (including bend test).	Periodic	SI	**2213A.2**; AISC 360-16 (AISC 341-16 as applicable); AWS D1.1; DSA IR 17-3.
☐	**d.** Inspect floor and roof deck welds.	Periodic	SI	**1705A.2.2, Table 1705A.2.1 Item 5a.6;** AISC 360-16 (AISC 341-16 as applicable); AWS D1.3; DSA IR 17-3.
☐	**e.** Inspect welding of structural cold-formed steel.	Periodic	SI*	**1705A.2.5; AWS D1.3; DSA IR 17-3.** The quality control provisions of AISI S240-20 Chapter D shall also apply. * May be performed by the project inspector when specifically approved by DSA.
☐	**f.** Inspect welding of stairs and railing systems.	Periodic	SI*	**1705A.2.1**; AISC 360-16 (AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3. * May be performed by the project inspector when specifically approved by DSA.
☐	**g.** Verification of reinforcing steel weldability.	Periodic	SI	**1705A.3.1**; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
☐	**h.** Inspect welding of reinforcing steel.	Continuous	SI	**Table 1705A.2.1 Item 5b, 1705A.3.1, Table 1705A.3 Item 2, 1903A.8;** AWS D1.4; DSA IR 17-3.
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
	S/A6. NONDESTRUCTIVE TESTING:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Ultrasonic	Test	LOR	**1705A.2.1, 1705A.2.5;** AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.
☑	**b.** Magnetic Particle	Test	LOR	**1705A.2.1, 1705A.2.5;** AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.
☐	c.	Test	LOR	

	S/A7. STEEL JOISTS AND TRUSSES:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Verify size, type and grade for all chord and web members as well as connectors and weld filler material; verify joist profile, dimensions and camber (if applicable); verify all weld locations, lengths and profiles; mark or tag each joist.	Continuous	SI	**1705A.2.3, Table 1705A.2.3;** AWS D1.1; DSA IR 22-3 for steel joists only. **1705A.2.4;** AWS D1.3 for cold-formed steel trusses.
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
	S/A8. SPRAYED FIRE-RESISTANT MATERIALS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Examine structural steel surface conditions, inspect application, take samples, measure thickness and verify compliance of all aspects of application with DSA-approved documents.	Periodic	SI	1705A.15, 1705A.1, 1705A.2, 1705A.3, 1705A.4.
☐	**b.** Test density.	Test	LOR	1705A.15.1, 1705A.15.5, ASTM E736
☐	**c.** Bond strength adhesion/cohesion.	Test	LOR	1705A.15.1, 1705A.15.4, ASTM E605

	S/A9. ANCHOR BOLTS AND ANCHOR RODS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Anchor Bolts and Anchor Rods	Test	LOR	Sample and test anchor bolts and anchor rods not readily identifiable per procedures noted in DSA IR 17-11.
☑	**b.** Threaded rod not used for foundation anchorage.	Test	LOR	Sample and test threaded rods not readily identifiable per procedures noted in DSA IR 17-11.

	S/A10. STORAGE RACK SYSTEMS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Materials used, to verify compliance with one or more of the material test reports in accordance with the approved construction documents.	Periodic	SI	Table 1705A.13.7
☐	**b.** Fabricated storage rack elements.	Periodic	SI	1704A.2.5; Table 1705A.13.7
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**c.** Storage rack anchorage installation.	Periodic	SI	ANSI/MH16.1 Section 7.3.2; Table 1705A.13.7
☐	**d.** Completed storage rack system to indicate compliance with the approved construction documents.	Periodic	SI*	Table 1705A.13.7; * May be preformed by the project inspector when specifically approved by DSA.

	S/A11. Other Steel			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	a.			

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Application Number: 04-122203	**School Name:** Silver Creek Modular	**School District:** Silver Creek Modular
DSA File Number: 33 silver	**Increment Number:**	**Date Created:** 2023-08-25 09:27:21

Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests / special inspections noted. **Items marked as exempt shall be identified on the approved construction documents**. The project inspector shall verify all construction complies with the approved construction documents.

	SOILS:
☐	1. Deep foundations acting as a cantilever footing with a design based on minimum allowable pressures per CBC Table 1806A.2 and without a geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 35'-0" tall (e.g., lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.
☐	2. Shallow foundations, etc. are exempt from special inspections and testing by a Geotechnical Engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12" depth per CBC Section 1804A.6), B) soil scarification/recompaction not exceeding 12" depth, C) native or fill soil supporting exterior non-structural flatwork (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.

	CONCRETE/MASONRY:
☐	1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding" in the Appendix below) given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding" in the Appendix below
☐	2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.
☐	3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1. Refer to construction documents for specific exemptions accordingly for each applicable wall condition.
☐	4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.
	CONCRETE/MASONRY:
☐	5. Testing of reinforcing bars is not required for items given in CBC Section 1910A.2 subject to the requirements and limitations in that section.

	WELDING:
☐	1. Solid-clad and open-mesh fences, gates with maximum leaf span of 10', and gates with a maximum rolling section of 10' all having an apex height less than 8'-0" above lowest adjacent grade. When located above circulation or occupied space below, these gates/fences are not located within 1.5x gate/fence height (max 8'-0") to the edge of floor or roof.
☐	2. Handrails, guardrails, and modular or relocatable ramps associated with walking surfaces less than 30" above adjacent grade (excluding post base connections per the 'Exception' language in Section 1705A.2.1); fillet welds shall not be ground flush.
☐	3. Non-structural interior cold-formed steel framing spanning less than 15'-0", such as in interior partitions, interior soffits, etc. supporting only self weight and light-weight finishes or adhered tile, masonry, stone, or terra cotta veneer no more than 5/8" thickness and apex less than 20'-0" in height and not over an exit way. Maximum tributary load to a member shall not exceed the equivalent of that occurring from a 10'x10' opening in a 15' tall wall for a header or king stud.
☐	4. Manufactured support frames and curbs using hot rolled or cold-formed steel (i.e., light gauge) for mechanical, electrical, or plumbing equipment weighing less than 2000# (equipment only) (connections of such frames to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
☐	5. Manufactured components (e.g., Tolco, B-Line, Afcon, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
☐	6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) (connections of such elements to superstructure elements using welding will require special inspection as noted in selected item(s) for sections S/A3, S/A4 and/or S/A5 located in the Steel/Aluminum category of listing above).
☐	7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400# and resulting composite center of mass (including component's center of mass) ≤4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20# for discrete units or <5 plf for distributed systems.

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

Application Number: 04-122203	**School Name:** Silver Creek Modular	**School District:** Silver Creek Modular
DSA File Number: 33 silver	**Increment Number:**	**Date Created:** 2023-08-25 09:27:21

1. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291
2. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

PERMANENT WOOD FOUNDATION 5

Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests / special inspections noted. **Items marked as exempt shall be identified on the approved construction documents**. The project inspector shall verify all construction complies with the approved construction documents.

	SOILS:
☐	1. Deep foundations acting as a cantilever footing with a design based on minimum allowable pressures per CBC Table 1806A.2 and without a geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 35'-0" tall (e.g., lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.
☐	2. Shallow foundations, etc. are exempt from special inspections and testing by a Geotechnical Engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12" depth per CBC Section 1804A.6), B) soil scarification/recompaction not exceeding 12" depth, C) native or fill soil supporting exterior non-structural flatwork (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.

	CONCRETE/MASONRY:
☐	1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding" in the Appendix below) given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding" in the Appendix below
☐	2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.
☐	3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1. Refer to construction documents for specific exemptions accordingly for each applicable wall condition.
☐	4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.

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

Application Number: 04-122203	**School Name:** Silver Creek	**School District:** Silver Creek
DSA File Number: 33 Silver Creek	**Increment Number:**	**Date Created:** 2023-08-13 22:14:55

1. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291
2. Concrete Batch Plant Inspection: Laboratory Verified Report Form DSA 291
3. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

STOCKPILE CONCRETE FLOOR, CONT. 3

The example form DSA 103 sections shown on this sheet are for illustration purposes only. A form DSA 103 is to be completed for each application that this PC is being incorporated into and the example sections shown on this drawing are to be crossed out.

- UT TESTING SHALL BE PERFORMED ON 100% OF CJP GROOVE WELDS COLUMN SPLICES OR BEAM SPLICES WHERE THE MATERIAL THICKNESS BEING WELDED IS 5/16" OR GREATER.
- UT TEST SHALL NOT BE REQUIRED TO BE PERFORMED ON CJP GROOVE WELDS WHERE THE MATERIAL THICKNESS BEING WELDED IS 1/4" OR LESS.
- MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON 25% OF ALL BEAM TO COLUMN OR TRUSS CHORD TO COLUMN CJP GROOVE WELDS.

GENERAL 103-22 NOTES 4

2022 CBC

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.

KEY TO COLUMNS

1. TYPE	2. PERFORMED BY
Continuous – Indicates that a continuous special inspection is required **Periodic** – Indicates that a periodic special inspection is required **Test** – Indicates that a test is required	**GE (Geotechnical Engineer)** – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative. **LOR (Laboratory of Record)** – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335. **PI (Project Inspector)** – Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA. **SI (Special Inspection)** – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

	C1. CAST-IN-PLACE CONCRETE			
	Test or Special Inspection	**Type**	**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.
☑	**d.** Test concrete (f'c).	Test	LOR	**1905A.1.17;** ACI 318-19 Section 26.12.
☑	**e.** Batch plant inspection: **Periodic**	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 **1705A.3.3.1**, or eliminated per **1705A.3.3.2.** See IR 17-13. (See Appendix (end of this form) for exemptions.)
☐	**f.** Welding of reinforcing steel.	Provide special inspection per STEEL, Category S/A4(d) & (e) and/or S/A5(g) & (h) below.		

	C2. PRESTRESSED / POST-TENSIONED CONCRETE (IN ADDITION TO SECTION C1):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Sample and test prestressing tendons and anchorages.	Test	LOR	**1705A.3.4, 1910A.3**
☐	**b.** Inspect placement of prestressing tendons.	Periodic	SI	**1705A.3.4, Table 1705A.3 Items 1 & 9.**
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**c.** Verify in-situ concrete strength prior to stressing of post-tensioning tendons.	Periodic	SI	**Table 1705A.3 Item 13.** Special inspector to verify specified concrete strength test prior to stressing.
☐	**d.** Inspect application of post-tensioning or prestressing forces and grouting of bonded prestressing tendons.	Continuous	SI	**1705A.3.4, Table 1705A.3 Item 9;** ACI 318-14 Section 26.13

	C3. PRECAST CONCRETE (IN ADDITION TO SECTION C1):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Inspect fabrication of precast concrete members.	Continuous	SI	ACI 318-19 Section 26.13.
☐	**b.** Inspect erection of precast concrete members.	Periodic	SI*	**Table 1705A.3 Item 10.** * May be performed by PI when specifically approved by DSA.
☐	**c.** For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to Seismic Design Category D, E or F, inspect such connections and reinforcement in the field for: 1. Installation of the embedded parts 2. Completion of the continuity of reinforcement across joints. 3. Completion of connections in the field.	Continuous	SI	Table 1705A.3; ACI 318-19 Section 26.13.1.3; ACI 550.5
☐	**d.** Inspect installation tolerances of precast concrete diaphragm connections for compliance with ACI 550.5.	Periodic	SI	Table 1705A.3; ACI 318-19 Section 26.13.1.3; ACI 550.5
	C4. SHOTCRETE (IN ADDITION TO SECTION C1):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Inspect shotcrete placement for proper application techniques.	Continuous	SI	**1705A.3.9, Table 1705A.3 Item 7, 1908A.1, 1908A.2, 1908A.3.** See ACI 506.2-13 Section 3.4, ACI 506R-16.
☐	**b.** Sample and test shotcrete (f'c).	Test	LOR	**1908A.2, 1705A.3.9**

	C5. POST-INSTALLED ANCHORS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Inspect installation of post-installed anchors	See Notes	SI*	**1617A.1.19, Table 1705A.3 Item 4a (Continuous) & 4b (Periodic), 1705A.3.8** (See Appendix (end of this form) for exemptions). ACI 318-14 Sections 17.8 & 26.13. * May be performed by the project inspector when specifically approved by DSA.
☐	**b.** Test post-installed anchors.	Test	LOR	**1910A.5.** (See Appendix (end of this form) for exemptions.)

	C6. OTHER CONCRETE:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	a.			
	S/A1. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**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 technician 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.
☑	**d.** 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**).

STOCKPILE CONCRETE FLOOR 3

STOCKPILE WOOD FLOOR 2

2022 CBC

KEY TO COLUMNS

1. TYPE	2. PERFORMED BY
Continuous – Indicates that a continuous special inspection is required **Periodic** – Indicates that a periodic special inspection is required **Test** – Indicates that a test is required	**GE (Geotechnical Engineer)** – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative. **LOR (Laboratory of Record)** – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335. **PI (Project Inspector)** – Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA. **SI (Special Inspection)** – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

Geotechnical Reports: Project has a geotechnical report, or CDs indicate soils special inspection is required by GE

	S1. GENERAL:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify that: • 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 design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix (end of this form) form for exemptions.)

	S2. SOIL COMPACTION AND FILL:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Perform classification and testing of fill materials.	Test	LOR*	* Under the supervision of the geotechnical engineer.
☑	**b.** Verify use of proper materials, densities and inspect lift thicknesses, placement and compaction during placement of fill.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (Refer to specific items identified in the Appendix (end of this form) form for exemptions where soils SI and testing may be conducted under the supervision of a geotechnical engineer or LOR's engineering manager. In such cases, the LOR's form DSA 291 shall satisfy the soil SI and test reporting requirements for the exempt items.)
☑	**c.** Compaction testing.	Test	LOR*	* Under the supervision of the geotechnical engineer. (Refer to specific items identified in the Appendix (end of this form) for exemptions where soils testing may be conducted under the supervision of a geotechnical engineer or LOR's engineering manager. In such cases, the LOR's form DSA 291 shall satisfy the soil test reporting requirements for the exempt items.)
	S3. DRIVEN DEEP FOUNDATIONS (PILES):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Verify pile materials, sizes and lengths comply with the requirements.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
☐	**b.** Determine capacities of test piles and conduct additional load tests as required.	Test	LOR*	* Under the supervision of the geotechnical engineer.
☐	**c.** Inspect driving operations and maintain complete and accurate records for each pile.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
☐	**d.** Verify locations of piles and their plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and record any pile damage.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
☐	**e.** Steel piles.	Provide tests and inspections per STEEL section below.		
☐	**f.** Concrete piles and concrete filled piles.	Provide tests and inspections per CONCRETE section below.		
☐	**g.** For specialty piles, perform additional inspections as determined by the registered design professional in responsible charge.	*	*	* As defined on drawings or specifications.

	S4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Note**
☐	**a.** Inspect drilling operations and maintain complete and accurate records for each pier.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix (end of this form) for exemptions.)
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Note**
☐	**b.** Verify pier locations, diameters, plumbness, bell diameters (if applicable), lengths and embedment into bedrock (if applicable); record concrete or grout volumes.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix (end of this form) for exemptions.)
☐	**c.** Confirm adequate end strata bearing capacity.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix (end of this form) for exemptions.)
☐	**d.** Concrete piers.	Provide tests and inspections per CONCRETE section below.		

	S5. RETAINING WALLS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Placement, compaction and inspection of backfill.	Continuous	GE*	**1705A.6.1.** * By geotechnical engineer or his or her qualified representative. (See section S2 above).
☐	**b.** Placement of soil reinforcement and/or drainage devices.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
☐	**c.** Segmental retaining walls; inspect placement of units, dowels, connectors, etc.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. See DSA IR 18-2.
☐	**d.** Concrete retaining walls.	Provide tests and inspections per CONCRETE section below.		
☐	**e.** Masonry retaining walls.	Provide tests and inspections per MASONRY section below.		
	S6. OTHER SOILS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Soil Improvements	Test	GE*	Submit a comprehensive report documenting final soil improvements constructed, construction observation and the results of the confirmation testing and analysis to CGS (California Geological Survey) for final acceptance. * By geotechnical engineer or his or her qualified representative.
☐	**b.** Inspection of Soil Improvements	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
☐	c.			

Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests / special inspections noted. **Items marked as exempt shall be identified on the approved construction documents**. The project inspector shall verify all construction complies with the approved construction documents.

	SOILS:
☐	1. Deep foundations acting as a cantilever footing with a design based on minimum allowable pressures per CBC Table 1806A.2 and without a geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 35'-0" tall (e.g., lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.

SOILS REPORT REQUIRED 1

PROJECT SPECIFIC STATE AGENCY APPROVAL

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ALL PATENTABLE MATERIAL CONTAINED HEREIN AND ORIGINATING WITH SCM Inc SHALL BE THE PROPERTY OF SCM Inc

PROJECT NAME:

SHEET TITLE:

T & I FORMS

REVISIONS

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2
3
4
5

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

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

JOHN W STARLING
2475

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0A

DSA 1-AMM

REQUEST FOR ALTERNATE DESIGN, MATERIALS & METHODS OF CONSTRUCTION

Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

This form is used in conjunction with *DSA Procedure PR 18-01: Request for Alternate Design, Materials and Methods of Construction*. Please print or type all information or you may complete online and print for signatures. All fields must be completed. Attach additional sheets as necessary. For requests applicable to CCDs, attach the completed form to form *DSA 140: Application for Approval of Construction Change Document – CCD A/B*.

1. PROJECT INFORMATION

Name of Facility: Silver Creek PCs	DSA File #: 33 - silvercreek
Project Scope: PC Relocatable Designs	DSA App.#: 04 -
School District: Silver Creek Modular Inc	Increment # *(if applicable)*:
School District Mailing Address: 2830 Barrett Ave	
City: Perris	State: CA Zip Code: 92571

2. CONTACT INFORMATION

A. Facilities Director: Jack Shively	
Work Email: jshively@silvercreekmodular.com	Work Phone: (951) 943-5393
B. Firm Architect/Engineer: Jack Starlin	
Work Email: jstarlin@silvercreekmodular.com	Work Phone: (951) 943-5393
C. Architect/Engineer Of Record: Jack Starlin	
Work Email: jstarlin@silvercreekmodular.com	Work Phone: (951) 943-5393

3. TYPE OF REVIEW REQUESTED

☑ Structural ☐ Fire & Life Safety

4. PURPOSE OF REVIEW REQUEST

☐ Use of Alternate Materials ☑ Propose Alternate Design ☑ Alternate Method of Construction

Applicable Code(s) and Edition: 2022 CBC

Applicable Code Section(s): 2304.12.1.2

5. DESCRIPTION OF CONDITION *(Add additional pages if necessary)*

2304.12.1.2 requires the use of naturally durable or preservative treated wood where the wall is in close proximity to ground level. The proposed alternate design/method utilizes an adhered moisture flashing and termite barrier to provide protection in lieu of preservative treated wood in the area adjacent to ground level.

The system consists of a single layer of adhered flashing roll (Polyguard TERM Flashing Moisture/Termite Barrier) which is installed in the factory and which extends up the wall not less than 8" while covering the joint between the bottom plate of the wall and the floor structure. When the building modules are installed on site a 2nd layer of adhered flashing roll is continued down into the foundation in order to cover the joint between the floor structure and the foundation wall. Galvanized flashing is then installed over the adhered flashing roll. The galvanized flashing continues up the wall 6" from the ground level and below grade to protect the adhered flashing roll.

DGS DSA 1-AMM (iss 01/31/18) Page 1 of 2
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA

DSA 1-AMM

REQUEST FOR ALTERNATE DESIGN, MATERIALS & METHODS OF CONSTRUCTION

6. DESCRIPTION OF REQUESTED ALTERNATE *(Describe the equivalency for each of the following criteria: suitability, strength, effectiveness, fire resistance, durability, safety and sanitation. Indicate N/A when not applicable.)*

A. Suitability:	The proposed product/flashing system is specifically intended to be used at base of wall conditions in order to water proof the joint and to provide a termite barrier.
B. Strength:	N/A
C. Effectiveness:	The protection membrane is directly adhered to the wall sheathing, floor structure and foundation to create a continuous barrier which restricts moisture transfer and pest intrusion. The membrane is a class 1 barrier with a perm rating of 0.035.
D. Fire Resistance:	N/A
E. Durability:	The adhered flashing is intended to be a permanent installation not requiring regular maintenance. In addition to the adhered flashing membrane we are providing a galvanized metal flashing at ground level to provide protection from abuse.
F. Safety:	The system has no impact on occupant safety after installation. The safety requirements during installation are similar to other adhesive products.
G. Sanitation:	The system does not require any specific cleaning or maintenance after installation. The installed system provides a more sanitary interior environment due to the continuous barrier to pest intrusion that is provided by the membrane.

IDENTIFICATION OF SUPPORTING DOCUMENTATION (*List all; attach copies of data.)*

1. Proposed base of wall flashing details.

FOR DSA USE ONLY

Discipline	Reviewer	Return Date	Accepted Date	Rejected Date
SS				
FLS				
ACS				

DSA Special Conditions or Restrictions:

Notes: (*Add comments or rationale relating to above)*

DGS DSA 1-AMM (iss 01/31/18) Page 2 of 2
DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA

BELOW GRADE FOUNDATION (AMM) 5

2022 CBC

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.

KEY TO COLUMNS

1. TYPE	2. PERFORMED BY
Continuous – Indicates that a continuous special inspection is required **Periodic** – Indicates that a periodic special inspection is required **Test** – Indicates that a test is required	**GE (Geotechnical Engineer)** – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative. **LOR (Laboratory of Record)** – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335. **PI (Project Inspector) –** Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA. **SI (Special Inspection)** – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

C1. CAST-IN-PLACE CONCRETE

	Test or Special Inspection	Type	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.
☑	**d.** Test concrete (f'c).	Test	LOR	**1905A.1.17;** ACI 318-19 Section 26.12.

RELO CONCRETE FOUNDATION 4

RELO WOOD FOUNDATION 3

5. Manufactured components (e.g., Tolco, B-Line, Afcon, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).

6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) (connections of such elements to superstructure elements using welding will require special inspection as noted in selected item(s) for sections S/A3, S/A4 and/or S/A5 located in the Steel/Aluminum category of listing above).

7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400# and resulting composite center of mass (including component's center of mass) ≤4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20# for discrete units or <5 plf for distributed systems.

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

Application Number: 04-122203	**School Name:** Silver Creek Modular	**School District:** Silver Creek Modular
DSA File Number: 33 silver	**Increment Number:**	**Date Created:** 2023-08-25 09:35:51

1. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291
2. Concrete Batch Plant Inspection: Laboratory Verified Report Form DSA 291
3. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA
DGS DSA 103-22 (Revised 12/01/2022) Page 14 of 14

PERMANENT WOOD / CONCRETE FLOORS
CONCRETE FOUNDATION - CONT. 1

The example form DSA 103 sections shown on this sheet are for illustration purposes only. A form DSA 103 is to be completed for each application that this PC is being incorporated into and the example sections shown on this drawing are to be crossed out.

- UT TESTING SHALL BE PERFORMED ON 100% OF CJP GROOVE WELDS COLUMN SPLICES OR BEAM SPLICES WHERE THE MATERIAL THICKNESS BEING WELDED IS 5/16" OR GREATER.
- UT TEST SHALL NOT BE REQUIRED TO BE PERFORMED ON CJP GROOVE WELDS WHERE THE MATERIAL THICKNESS BEING WELDED IS 1/4" OR LESS.
- MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON 25% OF ALL BEAM TO COLUMN OR TRUSS CHORD TO COLUMN CJP GROOVE WELDS.

GENERAL 103-22 NOTES 2

PERMANENT WOOD / CONC. FLRS - CONC. FOUNDATION 1

PROJECT SPECIFIC STATE AGENCY APPROVAL

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PROJECT NAME:

SHEET TITLE:

T & I FORMS

REVISIONS

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

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

JOHN W STARLIN
2475

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

A-0B

REFLECTED CEILING NOTES

1. CEILING SYSTEM GENERAL NOTES

1.01 Ceiling system components shall comply with ASTM C635 and Section 5.1 of ASTM E580.
1.02 The ceiling grid system must be rated heavy duty as defined by ASTM C635.
1.03 Ceiling systems. The following ceiling system(s) is/are part of the scope of this project:

Manufacturer:	Armstrong
Evaluation Report Type and Number:	ICC ESR-1308
Main Runner Part, Model, or Catalog Number:	7301
Cross Runner Part, Model, Catalog Number:	XL7328

1.04 Seismic Wall Clip:

Manufacturer's Model: BERC-2

1.05 Ceiling panels shall not support any luminaires, air terminals or devices.
1.06 For ceiling installations utilizing acoustical tile panels of mineral or glass fiber, it is not mandatory to provide ¾" clearance between the acoustical tile panels and the wall on the sides of the ceiling which are free to slip. For all other ceiling panel types, provide ¾" clearance between the ceiling panel and the wall on the sides of the ceiling free to slip. Clearance between ceiling grid runners/members and walls shall comply with the details on these drawings regardless of ceiling tile material.

2. MATERIALS

2.01 Ceiling wire shall be Class 1 zinc coated (galvanized) carbon steel conforming to ASTM A641. Wire shall be #12 gauge (0.106" diameter) with soft temper and minimum ultimate tensile strength = 70 ksi.
2.02 Galvanized sheet steel (including that used for metal stud and track compression struts/post) shall conform to ASTM A653, or other equivalent sheet steel listed in Section A3.1 of the North American Specification for the Design of Cold-Formed Steel Structural Members, (AISI S100). Material 43 mil (18 gauge) and lighter shall have minimum yield strength of 33 ksi. Material 54 mil (16 gauge) and heavier shall have a minimum yield strength of 50ksi.
2.03 Electrical metallic tube (EMT) shall be ANSI C80.3/UL 797 carbon steel with G90 galvanizing. EMT shall have minimum yield strength (FY) of 30 ksi and minimum ultimate strength (FU) of 48 ksi.

3. ATTACHMENT OF HANGER AND BRACING WIRES

3.01 Separate all ceiling hanger and bracing wires at least 6 inches from all unbraced ducts, pipes, conduit, etc.
3.02 Hanger and bracing wires shall not attach to or bend around obstructions including but not limited to piping, ductwork, conduit and equipment.
3.03 Hanger wires that are more than one (horizontal) in six (vertical) out of plumb shall have counter-sloping wires.
3.04 Slack safety wires shall be considered hanger wires for installation and testing requirements.
3.05 Hanger and bracing wire anchorage to the structure shall be installed in such a manner that the direction of the anchorage aligns closely with the direction of the wire (e.g., bracing wire ceiling clips must be bent as shown in the details and rotated as required to align closely with the direction of the wire, screw eyes in wood must be installed so they align closely with the direction of the wire, etc.).

4. FASTENERS AND WELDING

4.01 Sheet metal screws shall comply with ASTM C1513 and ASME B18.6.3. Penetration of screws through joined material shall not be less than three exposed threads.
4.02 Expansion anchors shall be: [RDP to indicate manufacturer, product, evaluation report number and test load for each size specified per CBC 1910A.5.4.]
4.03 Power-Actuated Fasteners shall be: [RDP to indicate manufacturer, product, evaluation report number.]
4.04 If not otherwise specified in the evaluation report, power-actuated fasteners installed in steel shall be installed so the entire pointed end of the fastener is driven through the steel member
4.05 Power-actuated fasteners in concrete or masonry are not permitted for bracing wires.
4.06 Concrete reinforcement and prestressing tendons shall be located by non-destructive means prior to installing post-installed anchors.
4.07 Welding shall be in accordance with AWS D1.3 using E60XX series electrodes.

5. TESTING

5.01 All field testing must be performed in the presence of the project inspector.
5.02 Post-installed anchors in concrete used to support hanger wires shall be tested at a frequency of 10 percent. Power-actuated fasteners in concrete shall be field tested for 200 pounds in tension. All other post-installed anchors in concrete shall be tested in accordance with CBC Section 1910A.5.
5.03 Post-installed anchors in concrete used to attach bracing wires shall be tested at a frequency of 50 percent in accordance with CBC Section 1910A.5.

6. LUMINAIRES

6.01 All luminaires shall be positively attached to the ceiling suspension systems by mechanical means to resist a horizontal force equal to the weight of the luminaire. A minimum of two screws or approved fasteners are required at each luminaire, per ASTM E580 Section 5.3.1.
6.02 Surface-mounted luminaires shall be attached to the main runner with at least two positive clamping devices. The clamping device shall completely surround the supporting ceiling runner and be made of steel with a minimum thickness of #14 gauge. Rotational spring catches do not comply. A #12 gauge slack safety wire shall be connected from each clamping device to the structure above. Provide additional supports when a luminaire is 8 feet or longer or exceeds 56 pounds. Maximum spacing between supports shall not exceed 8 feet.
6.03 Luminaires weighing less than or equal to 10 pounds may be supported directly on the ceiling runners, shall have a minimum of one #12 gauge slack safety wire connected from the fixture housing to the structure above.
6.04 Luminaires weighing greater than 10 pounds but less than or equal to 56 pounds may be supported directly on the ceiling runners, but they shall have a minimum of two #12 gauge slack safety wires connected from the fixture housing at diagonal corners to the structure above.
Exception: All luminaires greater than two by four feet weighing less than 56 pounds shall have a #12 gauge slack safety wire at each corner.
6.05 All luminaires weighing greater than 56 pounds shall be independently supported by not less than four taut #12 gauge hanger wires (one at each corner) attached from the fixture housing to the structure above or other approved hangers. The four taut #12 gauge wires or other approved hangers, including their attachment to the structure above, shall be capable of supporting four times the weight of the fixture.

7. SERVICES WITHIN THE CEILING

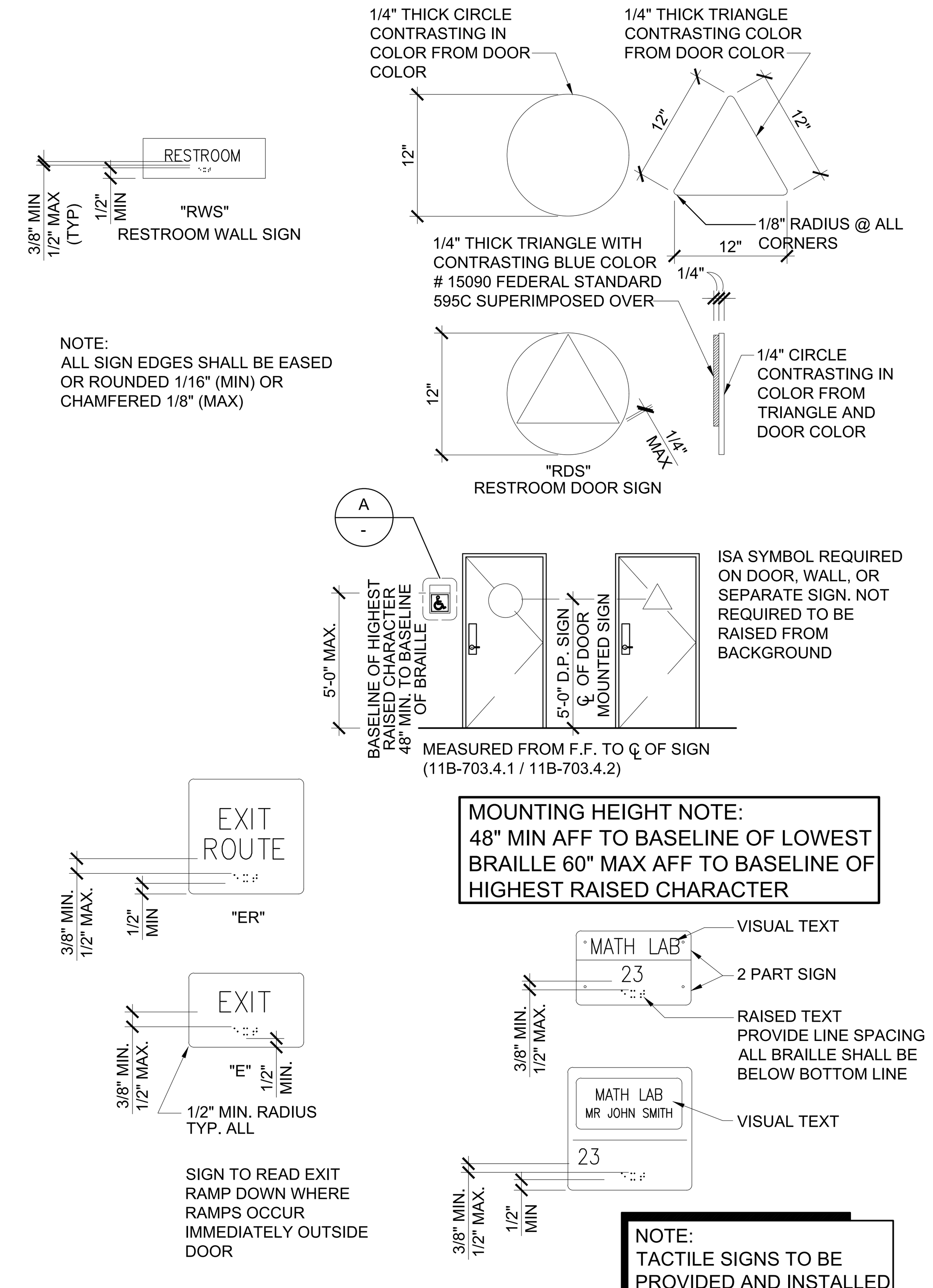
7.01 All flexible sprinkler hose fitting mounting brackets, ceiling-mounted air terminals or other services shall be positively attached to the ceiling suspension systems by mechanical means. Screws or approved fasteners are required. A minimum of two attachments are required at each component.
7.02 Ceiling-mounted air terminals or other services weighing less than or equal to 20 pounds shall have one #12 gauge slack safety wire attached from the terminal or service to the structure above.
7.03 Flexible sprinkler hose fittings, ceiling-mounted air terminals or other services weighing more than 20 pounds but less than or equal to 56 pounds shall have two #12 gauge slack safety wires (at diagonal corners) connected from the terminal or service to the structure above.
7.04 Flexible sprinkler hose fittings, ceiling-mounted air terminals or other services weighing more than 56 pounds shall be supported directly from the structure above by not less than four taut #12 gauge hanger wires attached from the terminal or service to the structure above or other approved hangers.

8. OTHER DEVICES WITHIN THE CEILING

8.01 All lightweight miscellaneous devices, such as strobe lights, occupancy sensors, speakers, exit signs, etc., shall be attached to the ceiling grid. In addition, devices weighing more than 10 pounds shall have a #12 gauge slack safety wire anchored to the structure above. Devices weighing more than 20 pounds shall be supported independently from the structure above.

NOTE:
ACOUSTICAL PANELS SHALL BE 5/8" MINIMUM THICK, MINERAL FIBERBOARD OR VINYL FACED FIBERGLASS LAY-IN PANELS SQUARE EDGE AND CBC CLASS C FLAME-SPREAD 76-200; SMOKE-DEVELOPED 0-450.

NOTE:
PER CBC SECTION 718.2.1. FIRE BLOCKS MAY BE OF GYPSUM BOARD, CEMENT FIBER BOARD, BATTS OR MINERAL OR GLASS FIBER, OR OTHER APPROVED MATERIALS INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE. LOOSE-FILL INSULATION MATERIAL SHALL NOT BE USED AS A FIRE BLOCK UNLESS SPECIFICALLY TESTED IN THE FORM AND MANNER INTENDED FOR USE TO DEMONSTRATE ITS ABILITY TO REMAIN IN PLACE AND TO RETARD THE SPREAD OF FIRE AND HOT GASES. (SECTION 718.2.1). FLAME SPREAD - 25 SMOKE DEVELOPMENT - 50 MAX FIRE BLOCKING IS NOT REQUIRED WITHIN CONCEALED SPACES CONSTRUCTED OF NON-COMBUSTIBLE MATERIALS



NOTE:
TACTILE SIGNS TO BE PROVIDED AND INSTALLED ON SITE BY OTHERS, NOT SCM. AND SHALL COMPLY W/ CBC 1013.4

SIGNAGE TEMPLATES

COORDINATE WITH SIGNAGE NOTES (BELOW)

SIGNAGE NOTES

1. **CHARACTER TYPE:** CHARACTERS ON TACTILE SIGNS SHALL BE RAISED 1/32" (0.794 mm) MINIMUM ABOVE THEIR BACKGROUND AND SHALL BE SANS SERIF UPPERCASE CHARACTERS ACCOMPANIED BY GRADE 2 BRAILLE. (SEE NOTE 5 BELOW) 11B-703.2.1 & 11B-703.2.2 &11B-703.23.

2. **RAISED CHARACTER HEIGHT:** CHARACTER HEIGHT MEASURED VERTICALLY FROM THE BASELINE OF THE CHARACTER SHALL BE 5/8" (15.9 mm) MINIMUM AND 2 INCH (51 mm) MAXIMUM BASED ON THE HEIGHT OF THE UPPERCASE LETTER "I". 11B-703.2.5

3. **FINISH AND CONTRAST:** SYMBOLS OF ACCESSIBILITY AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH SYMBOLS. SYMBOLS OF ACCESSIBILITY SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER A LIGHT SYMBOL ON A DARK BACKGROUND OR A DARK SYMBOL ON A LIGHT BACKGROUND. 11B-703.7.1.

4. **PROPORTIONS:** RAISED CHARACTERS ON SIGNS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60% MIN AND 110% MAX OF THE HEIGHT OF THE UPPERCASE LETTER "I". STROKE THICKNESS OF THE UPPERCASE "I" SHALL BE 15% MAX OF THE HEIGHT OF THE CHARACTER. 11B-703.2.4 + 11B-703.2.6

VISUAL CHARACTERS ON SIGNS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60% MIN AND 110% MAX OF THE HEIGHT OF THE UPPERCASE LETTER ' I '. STROKE THICKNESS OF THE UPPER CASE ' I ' SHALL BE 10% MIN. AND 20% MAX OF THE HEIGHT OF THE CHARACTER.

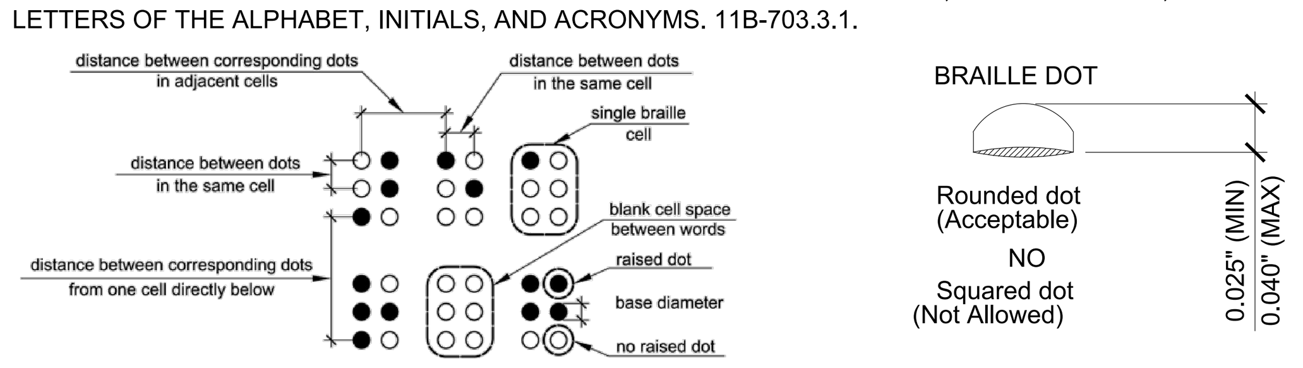
TEMPLATE FOR CHECKING CHARACTER AND STROKE WIDTH TO HEIGHT PROPORTIONS:

1.1:1	3:5	3:20	1:5	1:10
110%	60%	15%	20%	10%
TACTILE + VISUAL CHARACTER WIDTH		TACTILE STROKE WIDTH	VISUAL STROKE WIDTH	

5. **CHARACTER SPACING:** CHARACTER SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSEST POINTS OF ADJACENT RAISED CHARACTERS WITHIN A MESSAGE, EXCLUDING WORD SPACES. WHERE CHARACTERS HAVE RECTANGULAR CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/8" (MIN) AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH (MAX). WHERE CHARACTERS HAVE OTHER CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/16" (MIN) AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH (MAX) AT THE BASE OF THE CROSS SECTIONS, AND 1/8" (MIN) AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH (MAX) AT THE TOP OF THE CROSS SECTIONS. CHARACTERS SHALL BE SEPARATED FROM RAISED BORDERS AND DECORATIVE ELEMENTS 3/8" (MIN). 11B-703.2.7

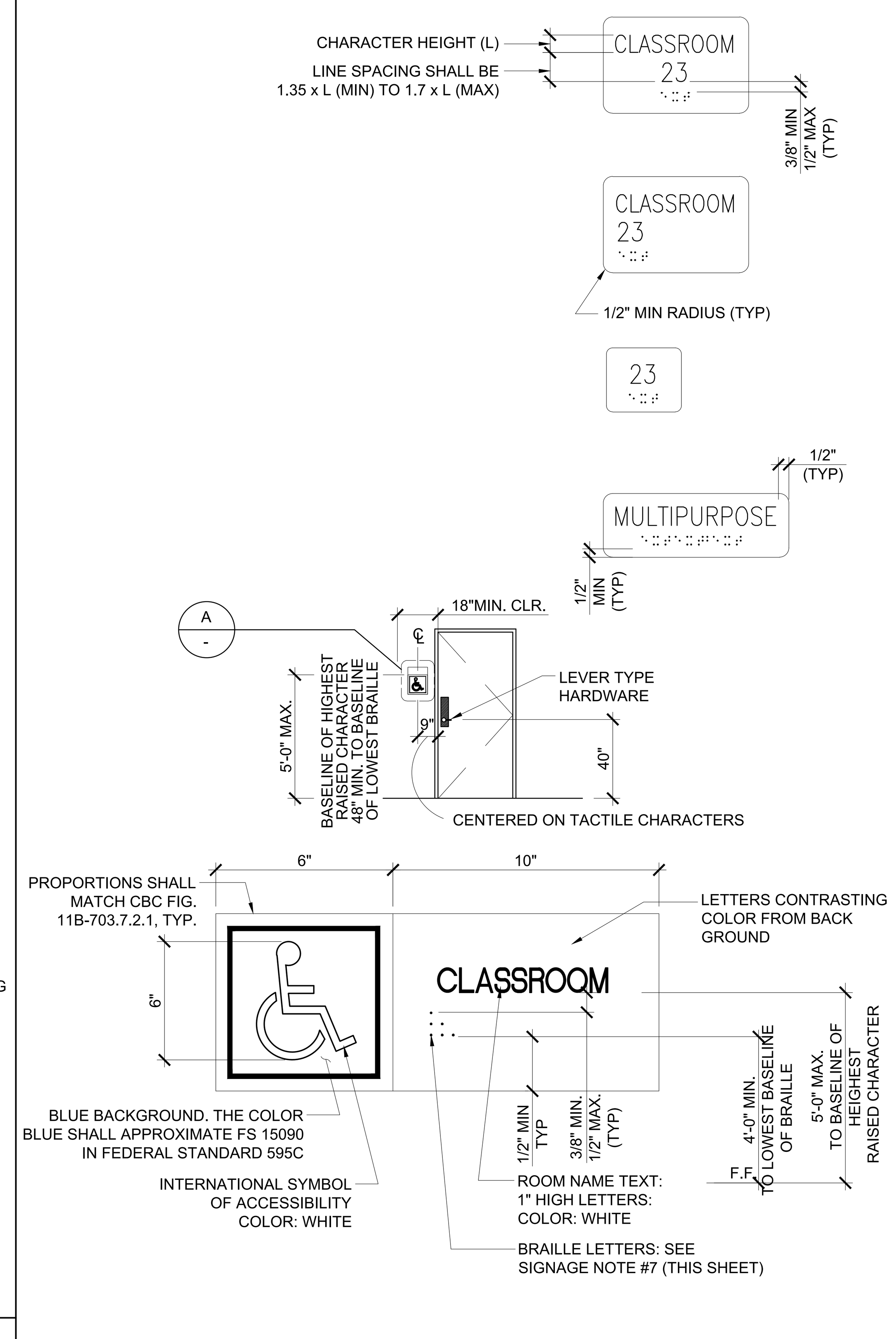
6. **LINE SPACING:** SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF RAISED CHARACTERS WITHIN A MESSAGE SHALL BE 135% (MIN) AND 170% (MAX) OF THE RAISED CHARACTER HEIGHT. 11B-703.2.8

7. **BRAILLE:** BRAILLE SHALL BE CONTRACTED (GRADE 2) AND SHALL COMPLY WITH SECTIONS 11B-703.3 AND 11B-703.4. DIMENSIONS AND CAPITALIZATION: BRAILLE DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND SHALL COMPLY WITH TABLE 11B-703.3.1. THE INDICATION OF AN UPPERCASE LETTER OR LETTERS SHALL ONLY BE USED BEFORE THE FIRST WORD OF SENTENCES, PROPER NOUNS, INDIVIDUAL LETTERS OF THE ALPHABET, INITIALS, AND ACRONYMS. 11B-703.3.1.



MEASUREMENT RANGE	MINIMUM IN INCHES MAXIMUM IN INCHES
Dot base diameter	0.059 (1.5 mm) to 0.063 (1.6mm)
Distance between two dots in the same cell[1] (#footnote-1)	*0.100 (2.5 mm)*
Distance between corresponding dots in adjacent cells[1] (#footnote-1)	*0.300 (7.6 mm)*
Dot height	0.025 (0.6 mm) to 0.037 (0.9 mm)
Distance between corresponding dots from one cell directly below[1] (#footnote-1)	0.395 (10 mm) to 0.400 (10.2 mm)

1. Measured center to center.



NOTE:
SIGN MATERIAL TO BE 1/8" THK. E.S. PLASTIC W/1/32" RAISED GRAPHICS AND LETTERS. PROVIDE MECHANICAL MOUNTING W/ VANDAL RESISTANT FASTENERS. CBC SECTION 11B-703. WHERE RAISED BOARDERS OCCUR, PROVIDE 1/2" MIN. CLEARANCE BETWEEN TOP OF BOARDER AND LOWEST LEVEL OF BRAILLE TEXT.

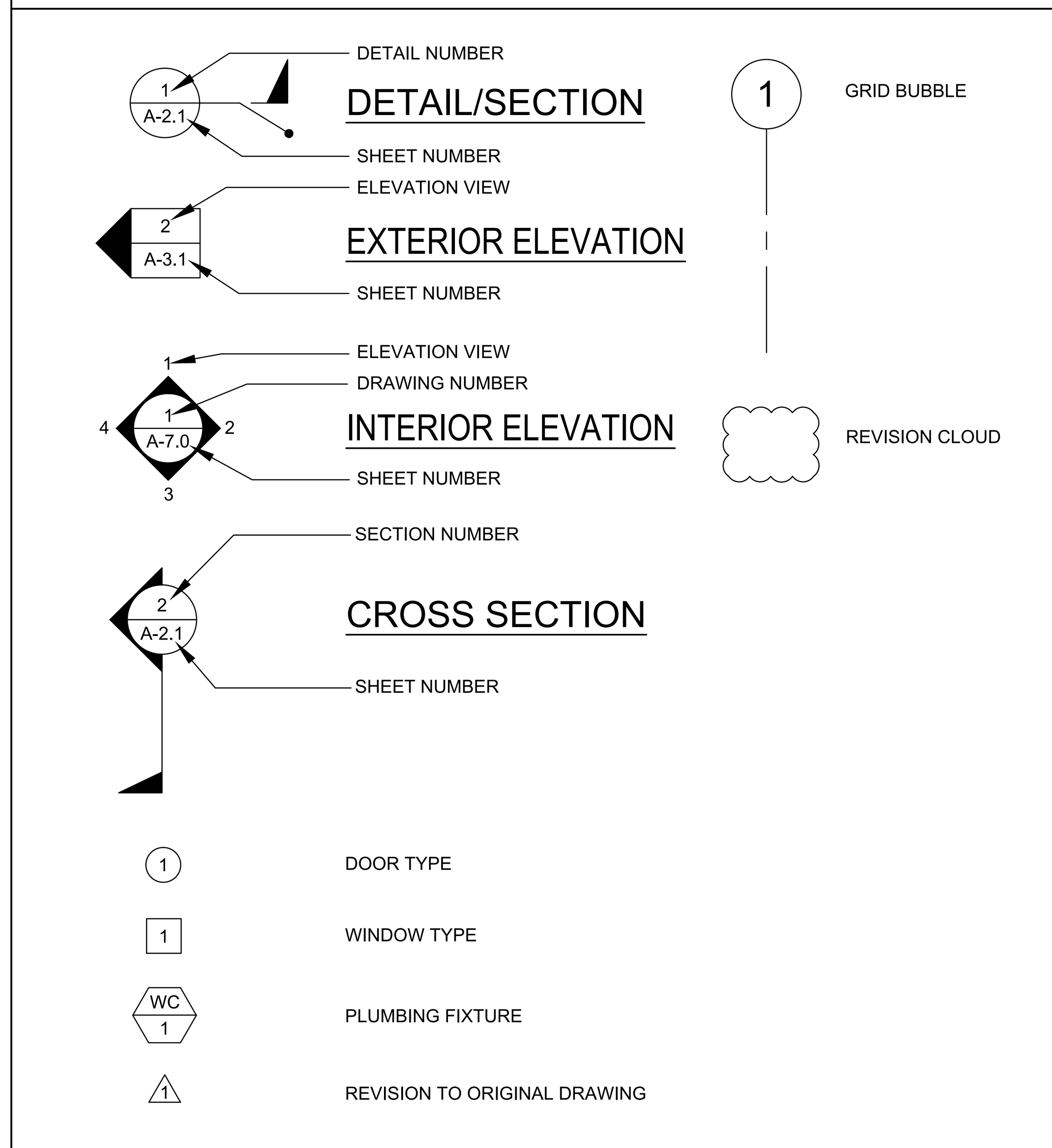
A ROOM IDENTIFCATION ROOM SIGNAGE (BY DISTRICT)

FOR SITE SPECIFIC LOCATIONS ARCHITECT TO PROVIDE BUILDING / ROOM IDENTIFICATION SIGNS. DETAILS AND LOCATIONS OF SIGNAGE TO BE INDICATED.

COORDINATE WITH SIGNAGE NOTES 1 THROUGH 7 ON THIS SHEET.

THIS DETAIL FOR REFERENCE ONLY

SYMBOLS LEGEND



ABBREVIATIONS

AB	ANCHOR BOLT
ABS	ABSOLUTE
ABV	ABOVE
ACC	ACCESS
ADDL	ADDITIONAL
ADJ	ADJACENT
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
AGC	ABOVE GRADE CONCRETE
ALT	ALTERNATE
AOR	ARCHITECT OF RECORD
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL / ARCHITECT
BD	BOARD
BGC	BELOW GRADE CONCRETE
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BOT	BOTTOM (OR BTM)
BTWN	BETWEEN
BU	BUILT UP
CAB	CABINET
CBC	CALIFORNIA BUILDING CODE
CI	CAST IRON
CJ	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
℄	CENTER LINE
CLG	CEILING
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONST	CONSTRUCTION
CONT	CONTINUOUS
CPT	CARPET
CSK	COUNTERSINK
CTR	CENTER
DBL	DOUBLE
DET	DETAIL
DF	DOUGLAS FIR
DIA OR Ø	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DSA	DIVISION OF THE STATE ARCHITECT
DWG	DRAWING
(E)	EXISTING
EA	EACH
EJ	EXPANSION JOINT
ELEV	ELEVATION
EN	END NAIL
EQ	EQUAL
EQUIP	EQUIPMENT
EW	EACH WAY
EXT	EXTERIOR
FA	FIRE ALARM
FCO	FLOOR CLEAN OUT
FF	FINISH FLOOR
FG	FINISH GRADE

FIN	FINISH
FLR	FLOOR
FN	FIELD NAILING
FND	FOUNDATION
FOC	FACE OF CONCRETE
FOS	FACE OF STUD
FTG	FOOTING
FOF	FACE OF FINISH
GA	GAUGE
GALV	GALVANIZE
GC	GENERAL CONTRACTOR
GR	GRADE
GYP	GYPSUM
GYP BD	GYPSUM BOARD
HB	HOSE BIBB
HD	HEAVY DUTY
HDR	HEADER
HDW	HARDWARE
HF	HEM FIR
HORIZ	HORIZONTAL
HT	HEIGHT
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING
INCL	INCLUDED
INFO	INFORMATION
INT	INTERIOR
J-BOX	JUNCTION BOX
JST	JOIST
JT	JOINT
KO	KNOCK OUT
LAB	LABORATORY
LAM	LAMINATED
LAV	LAVATORY
LB	POUNDS
LT	LIGHT
LT WT	LIGHT WEIGHT
LVR	LOUVER
MAX	MAXIMUM
MB	MACHINE BOLT
MED	MEDIUM
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MOD	MODULE
MTL	METAL
(N)	NEW
N	NORTH
NIC	NOT IN CONTRACT (NOT IN SILVER CREEK'S SCOPE OF WORK
NO	NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE

℘ OR PL	PLATE
PC	PRE-CHECKED
PLAS	PLASTER
PLYWD	PLYWOOD
PNL	PANEL
POC	POINT OF CONNECTION
POT	PATH OF TRAVEL
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
RAG	RETURN AIR GRILLE
RD	ROOF DRAIN
REF	REFERENCE
REINF	REINFORCE
REQ'D	REQUIRED
REV	REVISION
RF	ROOF
RM	ROOM
RO	ROUGH OPENING
ROH	ROOF OVERHANG
SCHED	SCHEDULE
SEC	SECTION
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SPEC	SPECIFICATION
SQ	SQUARE
SST	STAINLESS STEEL
STD	STANDARD
STIFF	STIFFENER
STL	STEEL
STS	SELF-TAPPING SCREW
STSMS	SELF-TAPPING SHEET METAL SCREW
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TEL	TELEPHONE
THK	THICK
TOC	TOP OF COLUMN
TOS	TOP OF STEEL
TS	TUBE STEEL
TV	TELEVISION
TYP	TYPICAL
UBC	UNIFORM BUILDING CODE
UON	UNLESS OTHERWISE NOTED
UR	URINAL
VERT	VERTICAL
VCT	VINYL COMPOSITION TILE
W/	WITH
WC	WATER CLOSET
WCO	WALL CLEAN OUT
WD	WOOD
WH	WATER HEATER
WIC	WOODWORK INSTITUTE OF CALIFORNIA
WND	WINDOW (OR WDW)
W/O	WITHOUT
WP	WATER PROOF

SPECIFICATIONS

DIVISION 5 - METALS

- ALL WELDED JOINTS AND SURFACES SHALL BE GROUNDED SMOOTH, NO SHARP OR ABRASIVES CORNERS, EDGES OR SURFACES. WALL SURFACES ADJACENT TO HANDRAILS SHALL BE SMOOTH,
- ALL HANDRAILS SHALL BE ROUND OR SHALL HAVE RADIUSED EDGES (r = 1/8" MIN)

DIVISION 6 - WOOD AND PLASTICS

- ALL CABINET AND DRAWERS WILL HAVE U-SHAPED WIRE PULLS

DIVISION 9 - FINISHES

- CEILING INSTALLATION SHALL BE PER THE NOTES PROVIDED ON THIS SHEET.

DIVISION 10 - SPECIALITIES

- ALL TOILET ACCESSORIES SHALL BE INSTALLED AT THE HEIGHT AND CLEARANCES SHOWN ON SHEET P-1.01

DIVISION 22 - PLUMBING

- FAUCETS SHALL BE LEVER OPERATED (4" MIN BLADE) OR SHALL BE PUSH TYPE OR AUTOMATIC ELECTRONICALLY CONTROLLED. CONTROLS TO BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST TO OPERATE.
- FORCE TO ACTIVATE CONTROLS SHALL NOT BE GREATER THAN 5 LBS
- FORCE TO REMAIN OPEN FOR A MINIMUM OF 10 SECONDS WHEN SELF CLOSING VALVES ARE USED
- PIPE COVERS SHALL BE PROVIDED FOR WATER LINES AND DRAIN PIPES UNDER ACCESSIBLE SINKS AND LAVATORIES
- ACCESSIBLE SINKS SHALL NOT BE DEEPER THAN 6 1/2"

ASSISTIVE LISTENING SYSTEM

ASSISTIVE LISTENING SYSTEM SIGN
(SYMBOL PROPORTIONS SHALL MATCH CBC FIGURE 11B-703.7.2.4)

NOTES;
1. ASSISTIVE-LISTENING SYSTEM SHALL BE PROVIDED IN ACCORDANCE WITH CBC SECTIONS 11B-216.10 AND 11B-219 AND SHALL COMPLY WITH CBC SECTION 11B-706.
2. THE MINIMUM NUMBER OF RECEIVERS TO BE PROVIDED SHALL BE EQUAL TO 4% OF THE TOTAL NUMBER OF SEATS, BUT IN NO CASE LESS THAN TWO. 25% (MIN) OF RECEIVERS PROVIDED, BUT NO FEWER THAN TWO, SHALL BE HEARING AID COMPATIBLE IN ACCORDANCE WITH CBC SECTION 11B-706.3
3. SIGNAGE SHALL BE POSTED IN A PROMINENT PLACE INDICATING THE AVAILABILITY OF ASSISTIVE LISTENING DEVICES.
4. OWNER/SCHOOL DISTRICT SHALL PROVIDE A PERMANENT OR PORTABLE ASSISTIVE LISTENING SYSTEM.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

SYMBOLS LEGEND, ABBREVIATIONS & ADA SIGNAGE

REVISIONS

1	
2	
3	
4	
5	

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

A-0.1

WILDLAND URBAN INTERFACE REQUIREMENTS ☐

WHEN THIS BUILDING IS TO BE INSTALLED WHERE THE REQUIREMENTS OF CHAPTER 7A OF THE 2022 CBC ARE APPLICABLE COMPLIANCE WITH THE APPLICABLE REQUIREMENTS SHALL BE AS OUTLINED BELOW:

CHAPTER 7A REQUIREMENTS:

705A ROOFING

705A.1 - ROOF SHALL BE CLASS 'A'.
705A.2 - NOT APPLICABLE. NO VOIDS OCCUR, ROOF IS APPLIED DIRECTLY.
705A.3 - NOT APPLICABLE. NO VALLEYS OCCUR.
705A.4 - LEAF GUARDS/COVERS SHALL BE PROVIDED AT ALL GUTTERS.

706A VENTS

706A.2 - THE UNDER-FLOOR ACCESS AND VENT OPENINGS SHALL BE COVERED WITH CORROSION RESISTANT WIRE MESH WITH A CLEAR OPENING NOT EXCEEDING 1/8".
706A.3 - THE SOFFIT VENTS SHALL BE VULCAN TECHNOLOGIES MODEL #VE OR VSC SOFFIT VENT COVERS (PER CASFM LISTING 8165-2192:0100).

707A EXTERIOR COVERINGS

707A.3 - EXTERIOR WALL FINISH SHALL BE PLASTER (NON-COMBUSTIBLE) OVER 1/2" OSB OVER STUDS OR 19/32" DURATEMP SIDING OVER STUDS (PER SFM LISTING# 8140-2031:0004).
707A.4 - NOT APPLICABLE. NO OPEN ROOF EAVES OCCUR.
707A.5 - SOFFIT FINISH SHALL BE PLASTER (NON-COMBUSTIBLE) OVER FRAMING OR ALLURA FIBER-CEMENT PANELS (NON-COMBUSTIBLE) (PER ESR-1668).
707A.6 - NOT APPLICABLE. DOES NOT OCCUR
707A.7 - NOT APPLICABLE. DOES NOT OCCUR
707A.8 - NOT APPLICABLE. DOES NOT OCCUR
707A.9 - NOT APPLICABLE. DOES NOT OCCUR

708A EXTERIOR DOORS AND WINDOWS

708A.2 - NOT APPLICABLE. DOES NOT OCCUR
708A.3 - EXTERIOR DOORS AND FRAMES ARE NON-COMBUSTIBLE (HOLLOW METAL).
708A.4 - NOT APPLICABLE.

709A - DECKING - THE EXTERIOR DECKING (WHERE APPLICABLE) IS A NON-COMBUSTIBLE STEEL FRAME AND DECK. SKIRTING MATERIAL (WHERE APPLICABLE) SHALL BE 19/32" DURATEMP SIDING (PER SFM LISTING# 8140-2031:0004).

710A - NOT APPLICABLE.

WINDOW SCHEDULE

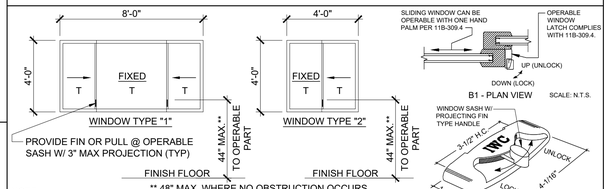
WINDOW NO.	TYPE	SIZE WIDTH	SIZE HEIGHT	FRAME MAT.	OPERABLE	MAX U-FACTOR	REQUIRED SHGC	MIN VT	NFRC RATED	GLASS SPECS	NOTES
A	1	8'-0"	4'-0"	ANOD	YES	0.520	0.350	0.610	YES	DP	
B	2	4'-0"	4'-0"	ANOD	YES	0.520	0.350	0.610	YES	DP	

WINDOW FINISH

ANOD: CLEAR ANODIZED ALUMINUM FRAME
DP: 3/16" MINIMUM DUAL PANE TEMPERED GLASS OF SOLAR GRAY - 3/16" ENERGYSHIELD
T: TEMPERED GLASS

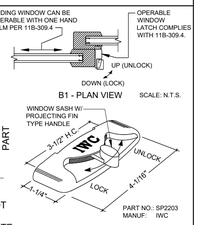
NOTES:
1. ALL OPERABLE SASH SHALL HAVE SCREENS.
2. TEMPORARY NFRC LABELS SHALL STAY ON WINDOWS UNTIL PROJECT INSPECTOR HAS VERIFIED INSTALLED FENESTRATION MATCHES WINDOW SCHEDULE ON PLAN.

WINDOW TYPE



** 48" MAX. WHERE NO OBSTRUCTION OCCURS

NOTE:
1. OPERABLE WINDOW CONTROLS SHALL COMPLY WITH CBC 11B.309.4 AND SHALL NOT REQUIRE TIGHT GRASPING,PINCHING OR TWISTING OF THE WRIST.
2. WINDOW CONTROLS SHALL NOT REQUIRE MORE THAN 5LBS OF FORCE TO OPEREATE
3. THE REQUIRED FORCE TO PUSH/PULL THE WINDOW PANEL SHALL NOT EXCEED 5LBS
4. ALL SAFETY GLAZING SHALL BE IDENTIFIED PER CBC CHAPTER 24.



B2 - PERSPECTIVE VIEW of OPERABLE WINDOW LATCH

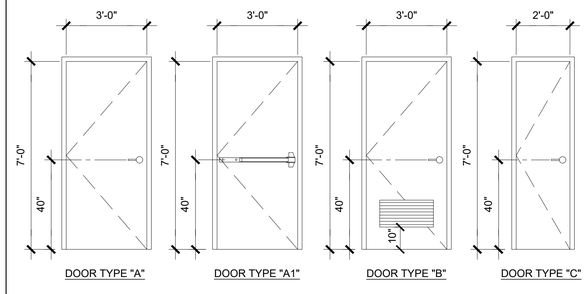
DOOR SCHEDULE

DOOR NO	WIDTH	HEIGHT	DOOR TYPE	QTY	DOOR MAT/FIN	FRAME MAT/FIN	HARDWARE SET	LOCKABLE FROM INT.	NOTES*
1	3'-0"	7'-0"	A		HM	KD	HW - 1	YES	
1P	3'-0"	7'-0"	A1		HM	KD	HW - 2	YES	
2	3'-0"	7'-0"	A		SCL	KD	HW - 3	NO	
3	3'-0"	7'-0"	B		HM	KD	HW - 4	NO	
4	3'-0"	7'-0"	B		HM	KD	HW - 5	NO	NO CLOSER REQ'D.
5	2'-0"	7'-0"	C		HM	KD	HW - 6	NO	

DOOR MATERIAL AND FINISH ABBREVIATIONS

HM: 18GA HOLLOW METAL
WF: 16GA WELDED FRAME
AL: ALUMINUM
SST: STAINLESS STEEL
KD: KNOCK DOWN FRAME
SCL: SOLID CORE WOOD LEGACY
HC: HOLLOW CORE WOOD
PT: PAINTED
* EXTERIOR DOORS TO BE UNINSULATED SINGLE LAYER DOORS W/ U-FACTOR OF 1.450 MAX

DOOR TYPES & NOTES



1. DOOR HANDLE FOR LOCKSETS AND PANIC HARDWARE TO BE CENTED AT 40" AFF HARDWARE TO BE OPENED FROM THE INSIDE WITHOUT ANY SPECIAL KNOWLEDGE OR EFFORT. LEVERS TO RETURN TO WITHIN 1/2" OF DOOR.
2. ALL DOORS SHALL BE 1 3/4" THICK U.N.O.
3. CLOSER SHALL BE SET FOR MAXIMUM OPENING PRESSURE OF 5 LBS AT EXTERIOR AND INTERIOR DOORS.
4. PANIC HARDWARE IS REQUIRED TO BE INSTALLED WHEN THE CONFIGURATION OF ANY ROOM PROVIDES AN OCCUPANT LOAD OF 50 OR GREATER.
5. ALL HARDWARE SHALL COMPLY WITH SILVER CREEK'S SPECS ON THIS SHEET AND CBC SECTIONS 11B-206.5,11B-404.1 & 1010.
6. DOOR CLOSER SHALL BE ADJUSTED TO SO THAT FROM AN OPEN POSITION OF 90°, THE DOOR WILL TAKE AT LEAST 5 SECONDS TO MOVE TO A POINT 12° FROM THE LATCH, MEASURED TO THE LANDING SIDE OF THE DOOR.
7. PANIC AND FIRE EXIT HARDWARE. WHERE THIS TYPE HARDWARE IS INSTALLED, IT SHALL COMPLY WITH THE FOLLOWING;
   - THE ACTUATING PORTION OF THE RELEASING DEVICE SHALL EXTEND AT LEASE ONE-HALF OF THE DOOR LEAF WIDTH.
   - THE MAXIMUM FORCE TO ACTIVATE ANY OPERABLE PART SHALL NOT EXCEED 5 LBS PER THE 2022 CBC, PANIC HARDWARE SHALL COMPLY WITH CBC SECTION 1010.1.10
8. ALL HAND ACTIVATED HARDWARE SHALL BE LEVER TYPE, PANIC BARS, PUSH/PULL TYPE OR 'U' SHAPED HANDLES.
9. ALL HAND ACTIVATED HARDWARE SHALL BE EASY TO OPERATE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF WRIST TO OPERATE.
10. FLOOR STOP SHALL BE LOCATED 4" MAX FROM FACE OF WALL.

FINISH SCHEDULE

ROOM NAME	FLOORING FLOOR	FLOORING BASE	WALL FINISH FRONT	WALL FINISH LEFT	WALL FINISH REAR	WALL FINISH RIGHT	CEILING	CEILING HT	NOTES
CLASSROOM 101	CARP	4" TS	TACK	TACK	TACK	TACK	CP	8'-6"	
CLASSROOM 102	CARP	4" TS	TACK	TACK	TACK	TACK	CP	8'-6"	
TOILET 103	SV	6" TS	FRP	FRP	FRP	FRP	CP	8'-0"	SEE 10/A-5.70
GIRLS 104	SV	SC	FRP	FRP	FRP	FRP	GBP	8'-0"	SEE 10/A-5.70
BOYS 105	SV	SC	FRP	FRP	FRP	FRP	GBP	8'-0"	SEE 10/A-5.70
STAFF 106	SV	SC	FRP	FRP	FRP	FRP	GBP	8'-0"	SEE 10/A-5.70
STAFF 107	SV	SC	FRP	FRP	FRP	FRP	GBP	8'-0"	SEE 10/A-5.70
PLUMBING CHASE	---	---	---	---	---	---	---	---	

FLOOR, WALL, CEILING MATERIALS

FLOORING
CARP: CARPET PER STATE OF CALIFORNIA SPECIFICATIONS COMPLYING WITH GROUP 1; TYPE "A" OR TYPE "B"; CLASS 2; DENSITY 4600; DIRECT GLUE DOWN
SV: SHEET VINYL FLOORING W/ FULLY SEALED JOINTS
VCT: VINYL COMPOSITION TILE

BASE
4" TS: 4" TOP SET BASE
6" TS: 6" TOP SET BASE
SC: 6" SELF-COVE BASE, CONTINUE FLOOR MATERIAL UP THE WALL PER 10/A-5.70

WALLS
TACK: 1/2" VINYL TACKBOARD CLASS 1 OVER ½" GYPSUM BOARD BACKING
FRP: 1/8" FIBER REINFORCED PANEL OVER ½" WATER RESISTANT GYPSUM BOARD
GYP: 1/2" GYPSUM BOARD; TAPE; TEXTURE; PAINTED FINISH
PLY: 1/2" PLYWOOD FINISH
NF: NO FINISH

CEILING
CP: ACOUSTICAL LAY IN GRID CEILING PANELS (SEE SPECIFICATION NOTES ON REFLECTED CEILING PLAN)
HC: 5/8" GYPSUM BOARD; TAPE; TEXTURE; PAINTED FINISH (HARD LID CEILING)
GBP: 1/2" GYPSUM BOARD WASHABLE PANELS (PAINTED)

FINISH NOTES

1. ALL FINISHES SHALL COMPLY WITH CBC, CFC AND TITLE 19 CCR.
2. PREPARATION FOR SUB-FLOOR TO ACCEPT FINISH FLOORING IS BY FLOORING CONTRACTOR. PLYWOOD SUB-FLOOR IS 2.4.1. PLYWOOD. OUTER PLYWOOD IS PLUGGED AND TOUCH SANDED. ANY DEFORMITIES DUE TO STANDARD CONSTRUCTION PRACTICES SHALL BE FILLED AND SANDED BY FLOORING CONTRACTOR. THE JOINT AT THE MODLINE SHALL NOT BE LARGER THAN 1/8" AND SHALL BE FILLED AND SANDED BY FLOORING CONTRACTOR.
3. RESILIENT FLOORING DEMONSTRATING A COEFFICIENT OF FRICTION OF AT LEAST 0.6 PER ASTM D2047, WILL BE ACCEPTED AS MEETING THE INTENT OF SLIP RESISTANCE.
4. CARPET SHALL HAVE A LEVEL LOOP, TEXTURED LOOP, LEVEL CUT, OR LEVEL CUT / UNCUT PILE TEXTURE AND MAXIMUM PILE HEIGHT OF 1/2" PER THE 2022 CBC. CARPET EDGED SHALL COMPLY WITH THE 2022 CBC

DOOR HARDWARE

CLASSROOM - EXTERIOR DOOR HW-1

LOCKSET	TAH LHV75-LFIC SAT	Finish 626	or equal
I/C CORE	SCHLAGE 23-030 C123	Finish 626	or equal
BUTTS	TAH BB179 4 ½" x 4 ½" NRP	Finish 626	or equal
CLOSER	TAH DC851 DA	Finish 689	or equal
WEATHER STRIP	COLUMBIA 3340S 3684	Finish Alum	or equal
THRESHOLD	COLUMBIA 4920 36"	Finish Alum	or equal
DOOR BOTTOM	COLUMBIA 2590 36"	Finish Alum	or equal

DOOR W/ PANIC HARDWARE - EXTERIOR DOOR HW-2

EXIT DEVICE	VON DUPRIN AX-99L-PA-2	Finish 626	or equal
I/C CORE	SCHLAGE 23-030 C123 W/ 20-079	Finish 626	or equal
BUTTS	TAH BB179 4 ½" x 4 ½" NRP	Finish 626	or equal
CLOSER	TAH DC851 DA	Finish 689	or equal
WEATHER STRIP	COLUMBIA 3340S 3684	Finish Alum	or equal
THRESHOLD	COLUMBIA 4920 36"	Finish Alum	or equal
DOOR BOTTOM	COLUMBIA 2590 36"	Finish Alum	or equal

EMERGENCY EXIT AND PANIC HARDWARE IS TO COMPLY WITH SFM STANDARD 12-10-3, SECTION 12-10-302:
a) THE CROSS BAR SHALL EXTEND ACROSS NOT LESS THAN ONE-HALF THE WIDTH OF THE DOOR/GATE.
d) THE ENDS OF THE CROSS-BAR SHALL BE CURVED, GUARDED OR OTHERWISE DESIGNED TO PREVENT CATCHING ON THE CLOTHING OF PERSONS DURING EGRESS.

STAFF RESTROOM / SINGLE-OCCUPANCY - INTERIOR DOOR HW-3

LOCKSET	TAL LVH40 SAT	Finish 626	or equal
BUTTS	TAH BB179 4 ½" x 4 ½" NRP	Finish 626	or equal

BOYS & GIRLS RESTROOM - EXTERIOR DOOR HW-4

LOCKSET	TAH LHV70-LFIC SAT	Finish 626	or equal
I/C CORE	SCHLAGE 23-030 C123	Finish 626	or equal
BUTTS	TAH BB179 4 ½" x 4 ½" NRP	Finish 626	or equal
CLOSER	TAH DC851 DA	Finish 689	or equal
WEATHER STRIP	COLUMBIA 3340S 3684	Finish Alum	or equal
THRESHOLD	COLUMBIA 4920 36"	Finish Alum	or equal
DOOR BOTTOM	COLUMBIA 2590 36"	Finish Alum	or equal
LOUVER	ANEMO 24 x 12	Finish Bronze	or equal

STAFF RESTROOM - EXTERIOR DOOR HW-5

LOCKSET	SCHLAGE L9496J-06A X 09-509 X L583-363	Finish 626	or equal
I/C CORE	SCHLAGE 23-030 C123	Finish 626	or equal
BUTTS	TAH BB179 4 ½" x 4 ½" NRP	Finish 626	or equal
WEATHER STRIP	COLUMBIA 3340S 3684	Finish Alum	or equal
THRESHOLD	COLUMBIA 4920 36"	Finish Alum	or equal
DOOR BOTTOM	COLUMBIA 2590 36"	Finish Alum	or equal
LOUVER	ANEMO 24 x 12	Finish Bronze	or equal

CHASE EXTERIOR DOOR - INTERIOR DOOR HW-6

LOCKSET	TAH LVH70 LFIC SAT	Finish 626	or equal
I/C CORE	SCHLAGE 23-030 C123	Finish 626	or equal
BUTTS	TAH BB179 4 ½" x 4 ½" NRP	Finish 626	or equal

INSULATION SPECIFICATIONS

MOISTURE PROTECTION INSULATION:

DESCRIPTION OF WORK: THE FURNISHING AND INSTALLING OF ALL INSULATION FOR ALL CEILING, FLOOR AREAS, PIPES AND EXTERIOR WALLS. (CLASS A = 0-25 FLAME SPREAD:) SMOKE DEVELOPMENT DENSITY LESS THAN 450.

MATERIAL:
INSULATING MATERIAL FOR WALLS SHALL BE FIBERGLASS BATTS (UNFACED) AND SHALL COMPLY WITH CBC 720.1, 720.2, 720.3, 720.5 AND 720.7. INSULATION SHALL BE AS MANUFACTURED BY OWENS-CORNING, JOHNS-MANVILLE, OR EQUAL.

INSULATING MATERIAL FOR ROOFS SHALL BE CLOSED CELL SPRAY FOAM AND SHALL COMPLY WITH CBC 720.1, 720.2, 720.3, 720.5 AND 720.7. INSULATION SHALL HAVE A MINIMUM R-VALUE OF R-6 PER EACH INCH OF THICKNESS, AN AIR PERMEANCE RATE OF NOT MORE THAN 0.02 L/s AT 75 Pa, AND A WATER VAPOR TRANSMISSION RATE OF NOT MORE THAN 0.9 PERMS. THE FOAM SHALL BE APPLIED TO FILL ALL VOIDS IN THE ROOF FRAMING MEMBERS.

MIN INSULATION VALUES:

WOOD STUD EXTERIOR WALL INSULATION (MIN.)
☐ R-13 (4" WALL @ UNCONDITIONED RESTROOM MODULE ONLY)
☐ R-19 (6" WALL)
☐ R-30 (8" WALL)

STEEL STUD EXTERIOR WALL INSULATION (MIN.)
☐ R-13 (4" WALL @ UNCONDITIONED RESTROOM MODULE ONLY)
☐ R-19 BATT + R-8.8 (MIN) CONTINUOUS RIGID FOAM INSULATION ON THE INTERIOR SIDE OF THE WALL ((6" WALL)
☐ R-30 BATT + R-8.8 (MIN) CONTINUOUS RIGID FOAM INSULATION ON THE INTERIOR SIDE OF THE WALL (8" WALL)

INTERIOR WALL INSULATION (MIN.)
R-13

FLOOR INSULATION
☐ NONE (CONCRETE MASS)
☐ R-11 (MIN) + CONCRETE MASS
☐ R-19 (MIN)

ROOF INSULATION (MIN.)
R-30 (5" MIN. DEPTH) CLOSED CELL SPRAY FOAM

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

SCHEDULES

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

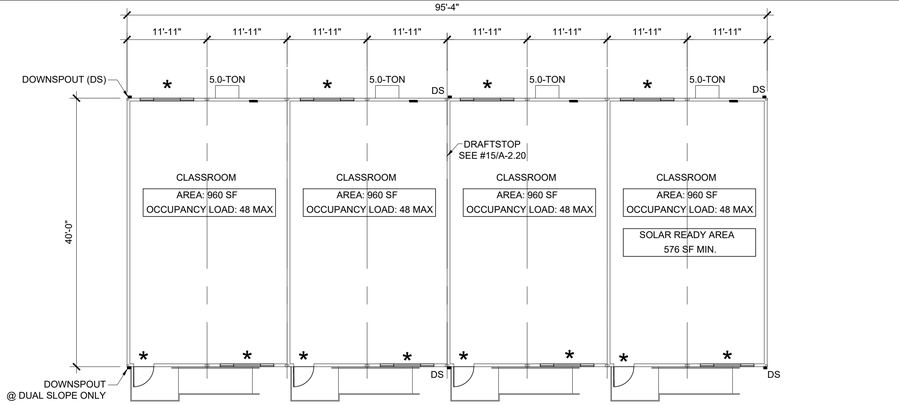
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24175 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
A-0.2

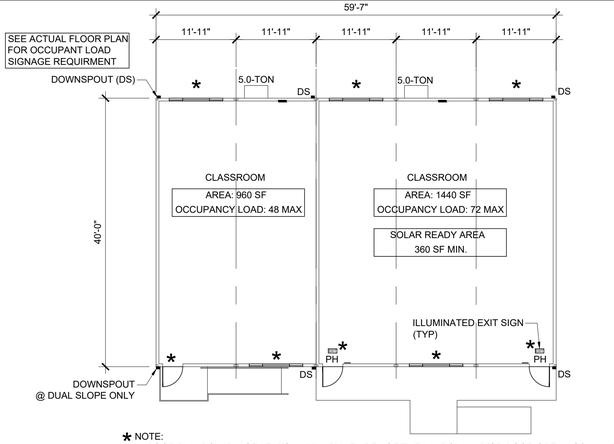


SEE ACTUAL FLOOR PLAN FOR OCCUPANT LOAD SIGNAGE REQUIRMENT

★ NOTE:
1. DOOR / WINDOW PLACEMENTS MAY VARY. IF AREA OF THE WINDOW AND/OR DOOR OPENINGS IN ANY WALL EXCEEDS WHAT IS SHOWN ON THIS PLAN A NEW PROJECT SPECIFIC ENERGY CALCULATION SHALL BE PROVIDED.
2. OPT. INTERIOR PARTITIONS MAY BE ADDED FOR BLDGS. WITH FLOOR LIVE LOADS OF 50+15, 100, OR 150 PSF AND SHALL BE SUBMITTED TO DSA FOR REVIEW. REFER TO STRUCTURAL DWGS. FOR WALL ATTACHMENT.

DRAFT STOP NOT REQUIRED W/ FIRE SPRINKLERS

96' x 40' KEY PLAN (TOTAL AREA - 3840 SF) SCALE: 3/32" = 1' - 0" | 7



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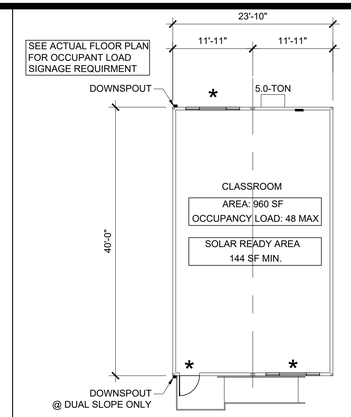
3. PROVIDE PANIC HARDWARE FOR ROOMS WITH TWO OR MORE EXIT DOORS.
4. PROVIDE TACTILE EXIT SIGN, PER DETAIL ON SHEET A-0.1, (TYP), SEE FLOOR PLAN SHT. FOR LOCATIONS

60' x 40' KEY PLAN (TOTAL AREA - 2400 SF) SCALE: 3/32" = 1' - 0" | 4



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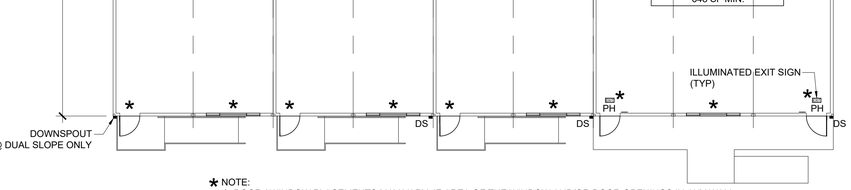
24' x 40' KEY PLAN (TOTAL AREA - 960 SF) SCALE: 3/32" = 1' - 0" | 1



SEE ACTUAL FLOOR PLAN FOR OCCUPANT LOAD SIGNAGE REQUIRMENT

★ NOTE:
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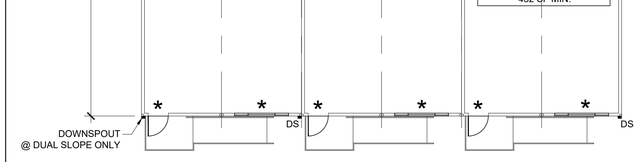
3. PROVIDE PANIC HARDWARE FOR ROOMS WITH TWO OR MORE EXIT DOORS.
4. PROVIDE TACTILE EXIT SIGN, PER DETAIL ON SHEET A-0.1, (TYP), SEE FLOOR PLAN SHT. FOR LOCATIONS

DRAFT STOP NOT REQUIRED W/ FIRE SPRINKLERS

108' x 40' KEY PLAN (TOTAL AREA - 4320 SF) SCALE: 3/32" = 1' - 0" | 8



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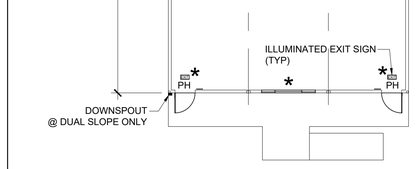
72' x 40' KEY PLAN (TOTAL AREA - 2880 SF) SCALE: 3/32" = 1' - 0" | 5



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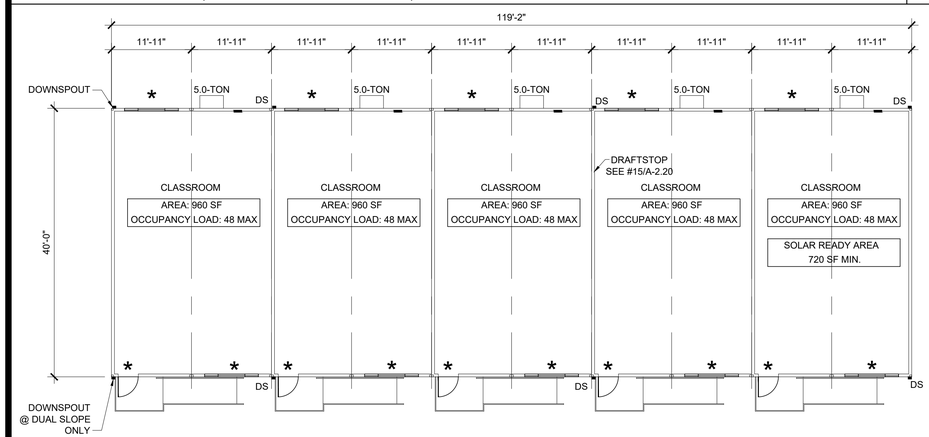
4. PROVIDE TACTILE EXIT SIGN, PER DETAIL ON SHEET A-0.1, (TYP), SEE FLOOR PLAN SHT. FOR LOCATIONS

36' x 40' KEY PLAN (TOTAL AREA - 1440 SF) SCALE: 3/32" = 1' - 0" | 2



SEE ACTUAL FLOOR PLAN FOR OCCUPANT LOAD SIGNAGE REQUIRMENT

★ NOTE:
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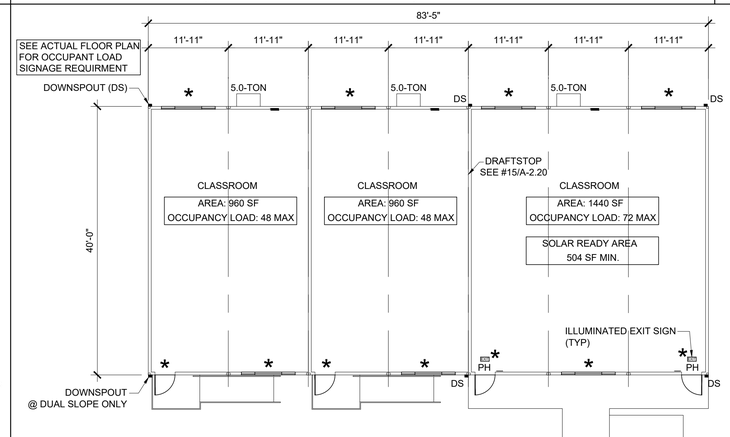
2. OPT. INTERIOR PARTITIONS MAY BE ADDED FOR BLDGS. WITH FLOOR LIVE LOADS OF 50+15, 100, OR 150 PSF AND SHALL BE SUBMITTED TO DSA FOR REVIEW. REFER TO STRUCTURAL DWGS. FOR WALL ATTACHMENT.

DRAFT STOP NOT REQUIRED W/ FIRE SPRINKLERS

120' x 40' KEY PLAN (TOTAL AREA - 4800 SF) SCALE: 3/32" = 1' - 0" | 9



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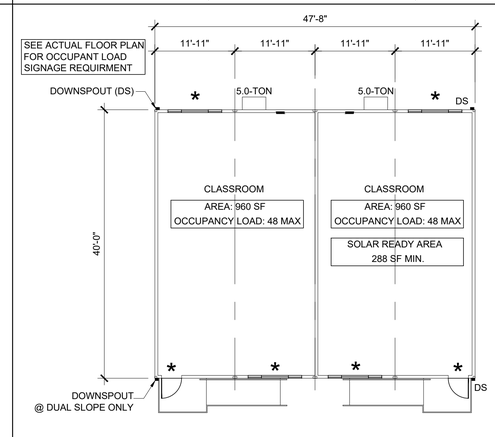
3. PROVIDE PANIC HARDWARE FOR ROOMS WITH TWO OR MORE EXIT DOORS.
4. PROVIDE TACTILE EXIT SIGN, PER DETAIL ON SHEET A-0.1, (TYP), SEE FLOOR PLAN SHT. FOR LOCATIONS

84' x 40' KEY PLAN (TOTAL AREA - 3360 SF) SCALE: 3/32" = 1' - 0" | 6



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2. OPT. INTERIOR PARTITIONS MAY BE ADDED FOR BLDGS. WITH FLOOR LIVE LOADS OF 50+15, 100, OR 150 PSF AND SHALL BE SUBMITTED TO DSA FOR REVIEW. REFER TO STRUCTURAL DWGS. FOR WALL ATTACHMENT.

48' x 40' KEY PLAN (TOTAL AREA - 1920 SF) SCALE: 3/32" = 1' - 0" | 3

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

TYPICAL KEY PLANS
24' - 120' x 40'

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
A-0.3

Zone Zip Code (Weather Station)	Rotation	☐ 24x40 (1) 5-ton unit						
		TDV Eff.	%	TDV Total	%	Source EN.	%	Result
Zone 14 92301 (PALMDALE)	30	66.91	15.9%	66.91	15.9%	6.71	18.5%	PASS
	75	69.23	16.2%	69.23	16.2%	6.92	18.9%	PASS
	120	69.11	16.2%	69.11	16.2%	6.89	18.8%	PASS
	165	59.59	14.5%	59.59	14.5%	6.06	17.0%	PASS
	210	62.55	15.0%	62.55	15.0%	6.30	17.5%	PASS
	255	64.42	15.3%	64.42	15.3%	6.47	17.9%	PASS
	300	65.57	15.6%	65.57	15.6%	6.55	18.1%	PASS
	345	59.02	14.4%	59.02	14.4%	6.03	17.0%	PASS
Zone 15 92225 (PALM SPRINGS)	30	53.29	12.4%	53.29	12.4%	4.86	15.0%	PASS
	75	57.27	13.1%	57.27	13.1%	5.22	15.8%	PASS
	120	58.33	13.3%	58.33	13.3%	5.30	16.0%	PASS
	165	48.62	11.5%	48.62	11.5%	4.44	13.9%	PASS
	210	48.37	11.4%	48.37	11.4%	4.56	14.2%	PASS
	255	51.01	11.9%	51.01	11.9%	4.76	14.6%	PASS
	300	48.43	11.4%	48.43	11.4%	4.54	14.1%	PASS
	345	46.89	11.1%	46.89	11.1%	4.32	13.6%	PASS
Zone 16 96006 (BLUE CANYON)	30	37.03	10.4%	37.03	10.4%	18.90	31.4%	PASS
	75	39.67	11.0%	39.67	11.0%	18.95	31.3%	PASS
	120	38.43	10.7%	38.43	10.7%	18.88	31.2%	PASS
	165	27.64	8.0%	27.64	8.0%	18.53	30.9%	PASS
	210	40.17	11.1%	40.17	11.1%	19.06	31.5%	PASS
	255	43.43	11.9%	43.43	11.9%	19.04	31.5%	PASS
	300	40.04	11.1%	40.04	11.1%	18.80	31.2%	PASS
	345	30.40	8.7%	30.40	8.7%	18.49	31.0%	PASS

☐ 36x40 (1) 5-ton unit						
TDV Eff.	%	TDV Total	%	Source EN.	%	Result
104.26	28.6%	104.26	28.6%	9.93	32.0%	PASS
106.81	28.8%	106.81	28.8%	10.16	32.3%	PASS
106.32	28.8%	106.32	28.8%	10.11	32.2%	PASS
97.89	27.6%	97.89	27.6%	9.37	31.0%	PASS
104.72	28.8%	104.72	28.8%	9.95	32.1%	PASS
107.43	29.0%	107.43	29.0%	10.18	32.4%	PASS
106.32	28.8%	106.32	28.8%	10.06	32.2%	PASS
96.56	27.3%	96.56	27.3%	9.24	30.7%	PASS
11.89	4.1%	11.89	4.1%	0.54	2.7%	PASS
10.69	3.6%	10.69	3.6%	0.46	2.3%	PASS
11.90	4.1%	11.90	4.1%	0.46	2.3%	PASS
21.22	7.1%	21.22	7.1%	0.59	3.0%	PASS
19.59	6.6%	19.59	6.6%	0.48	2.4%	PASS
12.82	4.4%	12.82	4.4%	0.62	3.1%	PASS
12.05	4.1%	12.05	4.1%	0.48	2.4%	PASS
12.65	4.4%	12.65	4.4%	0.46	2.3%	PASS
73.71	23.7%	73.71	23.7%	20.31	40.2%	PASS
77.03	24.4%	77.03	24.4%	20.30	40.1%	PASS
73.54	23.6%	73.54	23.6%	20.11	39.8%	PASS
66.95	22.1%	66.95	22.1%	19.93	39.8%	PASS
74.59	24.0%	74.59	24.0%	20.33	40.3%	PASS
77.01	24.4%	77.01	24.4%	20.29	40.1%	PASS
73.00	23.4%	73.00	23.4%	20.11	39.8%	PASS
66.95	22.1%	66.95	22.1%	19.95	39.8%	PASS

☐ **48x40**
(2) 5-ton units

(2) 24x40 CLASSROOMS

☐ **60x40**
(2) 5-ton units

(1) 24x40 CLASSROOM +
(1) 36x40 CLASSROOM

☐ **72x40**
(3) 5-ton units

(3) 24x40 CLASSROOMS

☐ **84x40**
(3) 5-ton units

(2) 24x40 CLASSROOMS +
(1) 36x40 CLASSROOM

☐ **96x40**
(4) 5-ton units

(4) 24x40 CLASSROOMS

☐ **108x40**
(4) 5-ton units

(3) 24x40 CLASSROOMS +
(1) 36x40 CLASSROOM

☐ **120x40**
(5) 5-ton units

(5) 24x40 CLASSROOMS

☐

Envelope Min Design - Zone: 1-16		
Building: 24x40		
Assembly	U-Value	Insulation R-Value
Walls:	0.062	R-19 batt
Floor:	0.115	None
Roof:	0.055	R-30 Foam

☐

Envelope Min Design - Zone: 1-16		
Building: 36x40		
Assembly	U-Value	Insulation R-Value
Walls:	0.062	R-19 batt
Floor:	0.066	R-11 batt
Roof:	0.055	R-30 Foam

HVAC Min Design - Zone: 1-16		
Buildings: All		
Tonnage	5	
Min. EER / HSPF	12.0/8.5	
Outside Air	See Ventilation Calcs on Mechanical Plans	
Occupancy Sensor	Yes	
DCV/ Economizer	Yes	
Cooling Stages (Min.)	1	
Allowable Mechanical Unit (See Equipment Schedule)	HP 1 STANDARD	HP 2 OPTIONAL

LEGEND
Occupancy Sensor: Ceiling mounted occupancy sensor with dimming controls. Automatic on for low level lighting only, full by manual activation.
DCV: Demand Control Ventilation

NOTES:
- Interior lights shall be dimmable LED fixtures, 51 Watts Max per fixtures, 4 fixtures per module per floor
- Windows shall be NFRC #INT-A-73-00213-00011 or equal, U-Factor = 0.520 (Max), SHGC = 0.350 (Max), Visual Transmittance = 0.610 (Min)
- Doors shall be hollow metal, uninsulated single layer doors (Min), U-Factor = 1.450 (Max)
- Refer to sheet A-0.2 For windows specifications
- Refer to sheet A-0.2 For insulation specifications
- Refer to sheets A-0.3 for mechanical layout per classroom
- Refer to Mechanical plans for more info
- Where Steel stud walls are used the exterior wall assembly shall be as follows:
  U-Value 0.062 (max) - provide 6" (Nominal) studs @ 24" oc with R-19 batt cavity insulation and continious 1.5" rigid foam insulation (R=8.8 min) on the interior side of the wall.

DESIGN ENERGY VALUES BY BUILDING SIZE - CONC FLOOR - ROOF HVAC

ENERGY SPECS

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

DESIGN ENERGY VALUES
CONC FLOOR - ROOF HVAC

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0.50

Zone Zip Code (Weather Station)	Rotation	☐ 24x40 (1) 5-ton unit						
		TDV Eff.	%	TDV Total	%	Source EN.	%	Result
Zone 14 92301 (PALMDALE)	30	82.80	19.7%	82.80	19.7%	7.99	22.1%	0.0%
	75	85.05	19.9%	85.05	19.9%	8.19	22.4%	0.0%
	120	85.02	19.9%	85.02	19.9%	8.17	22.3%	0.0%
	165	75.40	18.3%	75.40	18.3%	7.33	20.6%	0.0%
	210	78.40	18.8%	78.40	18.8%	7.57	21.1%	0.0%
	255	80.35	19.1%	80.35	19.1%	7.74	21.4%	0.0%
	300	81.33	19.3%	81.33	19.3%	7.82	21.6%	0.0%
	345	74.96	18.3%	74.96	18.3%	7.31	20.7%	0.0%
Zone 15 92225 (PALM SPRINGS)	30	66.40	15.4%	66.40	15.4%	6.35	19.6%	0.0%
	75	70.63	16.1%	70.63	16.1%	6.72	20.3%	0.0%
	120	71.45	16.3%	71.45	16.3%	6.80	20.6%	0.0%
	165	61.72	14.6%	61.72	14.6%	5.93	18.6%	0.0%
	210	61.83	14.6%	61.83	14.6%	6.06	18.8%	0.0%
	255	64.40	15.0%	64.40	15.0%	6.26	19.3%	0.0%
	300	61.53	14.4%	61.53	14.4%	6.05	18.7%	0.0%
	345	59.93	14.2%	59.93	14.2%	5.80	18.3%	0.0%
Zone 16 96006 (BLUE CANYON)	30	48.32	13.5%	48.32	13.5%	19.97	33.1%	0.0%
	75	51.04	14.1%	51.04	14.1%	20.02	33.1%	0.0%
	120	49.49	13.7%	49.49	13.7%	19.94	33.0%	0.0%
	165	38.74	11.2%	38.74	11.2%	19.58	32.7%	0.0%
	210	51.37	14.2%	51.37	14.2%	20.12	33.3%	0.0%
	255	54.75	15.0%	54.75	15.0%	20.11	33.2%	0.0%
	300	51.32	14.2%	51.32	14.2%	19.87	33.0%	0.0%
	345	41.72	12.0%	41.72	12.0%	19.55	32.7%	0.0%

☐ 36x40 (1) 5-ton unit						
TDV Eff.	%	TDV Total	%	Source EN.	%	Result
104.54	28.7%	104.54	28.7%	9.92	32.0%	PASS
107.04	28.9%	107.04	28.9%	10.14	32.3%	PASS
106.57	28.9%	106.57	28.9%	10.09	32.2%	PASS
98.30	27.7%	98.30	27.7%	9.37	31.0%	PASS
105.02	28.9%	105.02	28.9%	9.94	32.1%	PASS
107.69	29.1%	107.69	29.1%	10.17	32.4%	PASS
106.61	28.9%	106.61	28.9%	10.06	32.1%	PASS
96.98	27.4%	96.98	27.4%	9.25	30.7%	PASS
7.57	2.6%	7.57	2.6%	0.46	2.3%	PASS
6.18	2.1%	6.18	2.1%	0.37	1.9%	PASS
7.43	2.5%	7.43	2.5%	0.37	1.8%	PASS
17.00	5.7%	17.00	5.7%	0.52	2.6%	PASS
15.34	5.2%	15.34	5.2%	0.41	2.0%	PASS
8.33	2.8%	8.33	2.8%	0.52	2.6%	PASS
7.51	2.6%	7.51	2.6%	0.40	2.0%	PASS
8.38	2.9%	8.38	2.9%	0.38	1.9%	PASS
72.69	23.4%	72.69	23.4%	20.21	40.0%	PASS
76.04	24.1%	76.04	24.1%	20.22	39.9%	PASS
72.61	23.3%	72.61	23.3%	20.03	39.7%	PASS
66.12	21.8%	66.12	21.8%	19.85	39.6%	PASS
73.71	23.7%	73.71	23.7%	20.25	40.1%	PASS
76.14	24.2%	76.14	24.2%	20.20	39.9%	PASS
72.08	23.1%	72.08	23.1%	20.02	39.7%	PASS
66.10	21.8%	66.10	21.8%	19.86	39.6%	PASS

☐ **48x40**
(2) 5-ton units

(2) 24x40 CLASSROOMS

☐ **60x40**
(2) 5-ton units

(1) 24x40 CLASSROOM +
(1) 36x40 CLASSROOM

☐ **72x40**
(3) 5-ton units

(3) 24x40 CLASSROOMS

☐ **84x40**
(3) 5-ton units

(2) 24x40 CLASSROOMS +
(1) 36x40 CLASSROOM

☐ **96x40**
(4) 5-ton units

(4) 24x40 CLASSROOMS

☐ **108x40**
(4) 5-ton units

(3) 24x40 CLASSROOMS +
(1) 36x40 CLASSROOM

☐ **120x40**
(5) 5-ton units

(5) 24x40 CLASSROOMS

Envelope Min Design - Zone: 1-16		
Building: 24x40		
Assembly	U-Value	Insulation R-Value
Walls:	0.062	R-19 batt
Floor:	0.115	None
Roof:	0.055	R-30 Foam

Envelope Min Design - Zone: 1-16		
Building: 36x40		
Assembly	U-Value	Insulation R-Value
Walls:	0.062	R-19 batt
Floor:	0.066	R-11 batt
Roof:	0.055	R-30 Foam

HVAC Min Design - Zone: 1-16		
Buildings: All		
Tonnage	5	
Min. EER / COP	11.0/3.3	
Outside Air	See Ventilation Calcs on Mechanical Plans	
Occupancy Sensor	Yes	
DCV/ Economizer	Yes	
Cooling Stages (Min.)	1	
Allowable Mechanical Unit (See Equipment Schedule)	SPVU 1	SPVU 2
	STANDARD	OPTIONAL

LEGEND
Occupancy Sensor: Ceiling mounted occupancy sensor with dimming controls. Automatic on for low level lighting only, full by manual activation.
DCV: Demand Control Ventilation

NOTES:
- Interior lights shall be dimmable LED fixtures, 51 Watts Max per fixtures, 4 fixtures per module per floor
- Windows shall be NFRC #INT-A-73-00213-00011 or equal, U-Factor = 0.520 (Max), SHGC = 0.350 (Max), Visual Transmittance = 0.610 (Min)
- Doors shall be hollow metal, uninsulated single layer doors (Min), U-Factor = 1.450 (Max)
- Refer to sheet A-0.2 For windows specifications
- Refer to sheet A-0.2 For insulation specifications
- Refer to sheets A-0.3 for mechanical layout per classroom
- Refer to Mechanical plans for more info
- Where Steel stud walls are used the exterior wall assembly shall be as follows:
  U-Value 0.062 (max) - provide 6" (Nominal) studs @ 24" oc with R-19 batt cavity insulation and continious 1.5" rigid foam insulation (R=8.8 min) on the interior side of the wall.

DESIGN ENERGY VALUES BY BUILDING SIZE - CONC FLOOR - WALL HVAC

ENERGY SPECS

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

DESIGN ENERGY VALUES
CONC FLOOR - WALL HVAC

REVISIONS
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MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0.51

Zone (Zip Code / Weather Station)	Rotation	☐ 24x40 (1) 5-ton unit							☐ 36x40 (1) 5-ton unit						
		TDV Eff.	%	TDV Total	%	Source EN.	%	Result	TDV Eff.	%	TDV Total	%	Source EN.	%	Result
Zone 14 92301 (PALMDALE)	30	73.52	17.5%	73.52	17.5%	6.86	18.9%	0.0%	108.49	29.8%	108.49	29.8%	10.33	33.3%	PASS
	75	76.12	17.8%	76.12	17.8%	7.13	19.5%	0.0%	111.28	30.0%	111.28	30.0%	10.61	33.8%	PASS
	120	76.70	18.0%	76.70	18.0%	7.15	19.5%	0.0%	111.15	30.1%	111.15	30.1%	10.57	33.7%	PASS
	165	66.80	16.2%	66.80	16.2%	6.25	17.6%	0.0%	103.09	29.0%	103.09	29.0%	9.77	32.3%	PASS
	210	70.21	16.9%	70.21	16.9%	6.52	18.2%	0.0%	108.68	29.9%	108.68	29.9%	10.31	33.3%	PASS
	255	72.13	17.2%	72.13	17.2%	6.74	18.7%	0.0%	112.56	30.4%	112.56	30.4%	10.69	34.1%	PASS
	300	72.99	17.3%	72.99	17.3%	6.80	18.8%	0.0%	111.92	30.4%	111.92	30.4%	10.60	33.9%	PASS
	345	65.76	16.0%	65.76	16.0%	6.17	17.5%	0.0%	101.71	28.7%	101.71	28.7%	9.66	32.0%	PASS
Zone 15 92225 (PALM SPRINGS)	30	74.37	17.3%	74.37	17.3%	6.65	20.5%	0.0%	24.08	8.3%	24.08	8.3%	2.04	10.2%	PASS
	75	79.02	18.1%	79.02	18.1%	7.09	21.5%	0.0%	22.73	7.8%	22.73	7.8%	2.03	10.1%	PASS
	120	80.35	18.4%	80.35	18.4%	7.22	21.8%	0.0%	24.75	8.4%	24.75	8.4%	2.08	10.4%	PASS
	165	70.15	16.6%	70.15	16.6%	6.28	19.7%	0.0%	33.76	11.4%	33.76	11.4%	2.10	10.6%	PASS
	210	70.45	16.6%	70.45	16.6%	6.41	19.9%	0.0%	32.23	10.8%	32.23	10.8%	2.01	10.1%	PASS
	255	73.20	17.1%	73.20	17.1%	6.68	20.5%	0.0%	25.30	8.6%	25.30	8.6%	2.22	11.0%	PASS
	300	70.07	16.4%	70.07	16.4%	6.46	20.0%	0.0%	25.43	8.7%	25.43	8.7%	2.16	10.8%	PASS
	345	68.02	16.1%	68.02	16.1%	6.13	19.3%	0.0%	25.08	8.7%	25.08	8.7%	1.97	10.0%	PASS
Zone 16 96006 (BLUE CANYON)	30	53.21	14.9%	53.21	14.9%	19.94	33.1%	0.0%	87.28	28.1%	87.28	28.1%	21.14	41.8%	PASS
	75	56.14	15.5%	56.14	15.5%	20.03	33.1%	0.0%	91.12	28.9%	91.12	28.9%	21.21	41.8%	PASS
	120	54.27	15.1%	54.27	15.1%	19.94	33.0%	0.0%	87.55	28.1%	87.55	28.1%	21.00	41.6%	PASS
	165	43.50	12.5%	43.50	12.5%	19.57	32.7%	0.0%	80.13	26.5%	80.13	26.5%	20.70	41.3%	PASS
	210	56.63	15.7%	56.63	15.7%	20.15	33.3%	0.0%	88.08	28.3%	88.08	28.3%	21.14	41.9%	PASS
	255	59.76	16.4%	59.76	16.4%	20.14	33.3%	0.0%	91.33	29.0%	91.33	29.0%	21.20	41.9%	PASS
	300	56.00	15.5%	56.00	15.5%	19.86	33.0%	0.0%	87.11	28.0%	87.11	28.0%	21.01	41.6%	PASS
	345	46.08	13.2%	46.08	13.2%	19.50	32.7%	0.0%	80.21	26.5%	80.21	26.5%	20.73	41.4%	PASS

☐ 48x40
(2) 5-ton units

(2) 24x40 CLASSROOMS

☐ 60x40
(2) 5-ton units

(1) 24x40 CLASSROOM +
(1) 36x40 CLASSROOM

☐ 72x40
(3) 5-ton units

(3) 24x40 CLASSROOMS

☐ 84x40
(3) 5-ton units

(2) 24x40 CLASSROOMS +
(1) 36x40 CLASSROOM

☐ 96x40
(4) 5-ton units

(4) 24x40 CLASSROOMS

☐ 108x40
(4) 5-ton units

(3) 24x40 CLASSROOMS +
(1) 36x40 CLASSROOM

☐ 120x40
(5) 5-ton units

(5) 24x40 CLASSROOMS

Envelope Min Design - Zone: 1-16		
Buildings: All		
Assembly	U-Value	Insulation R-Value
Walls:	0.062	R-19 batt
Floor:	0.054	R-19 batt
Roof:	0.055	R-30 Foam

HVAC Min Design - Zone: 1-16	
Building: 24 x 40	
Tonnage	5
Min. EER / HSPF	12.0/8.5
Outside Air	See Ventilation Calcs on Mechanical Plans
Occupancy Sensor	Yes
DCV/ Economizer	Yes
Cooling Stages (Min.)	1
Allowable Mechanical Unit (See Equipment Schedule)	HP 1 STANDARD / HP 2 OPTIONAL

HVAC Min Design - Zone: 1-16	
Buildings: 36 x 40	
Tonnage	5
Min. EER / HSPF	12.0/8.5
Outside Air	See Ventilation Calcs on Mechanical Plans
Occupancy Sensor	Yes
DCV/ Economizer	Yes
Cooling Stages (Min.)	2
Allowable Mechanical Unit (See Equipment Schedule)	HP 2 STANDARD

LEGEND
Occupancy Sensor: Ceiling mounted occupancy sensor with dimming controls. Automatic on for low level lighting only, full by manual activation.
DCV: Demand Control Ventilation

NOTES:
- Interior lights shall be dimmable LED fixtures, 51 Watts Max per fixtures, 4 fixtures per module per floor
- Windows shall be NFRC #INT-A-73-00213-00011 or equal, U-Factor = 0.520 (Max), SHGC = 0.350 (Max), Visual Transmittance = 0.610 (Min)
- Doors shall be hollow metal, uninsulated single layer doors (Min), U-Factor = 1.450 (Max)
- Refer to sheet A-0.2 For windows specifications
- Refer to sheet A-0.2 For insulation specifications
- Refer to sheets A-0.3 for mechanical layout per classroom
- Refer to Mechanical plans for more info
- Where Steel stud walls are used the exterior wall assembly shall be as follows:
  U-Value 0.062 (max) - provide 6" (Nominal) studs @ 24" oc with R-19 batt cavity insulation and continious 1.5" rigid foam insulation (R=8.8 min) on the interior side of the wall.

DESIGN ENERGY VALUES BY BUILDING SIZE - WOOD FLOOR - ROOF HVAC

ENERGY SPECS

PROJECT NAME:

SHEET TITLE:

DESIGN ENERGY VALUES
WOOD FLOOR - ROOF HVAC

REVISIONS
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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
A-0.52

Zone Zip Code (Weather Station)	Rotation	☐ 24x40 (1) 5-ton unit							☐ 36x40 (1) 5-ton unit						
		TDV Eff.	%	TDV Total	%	Source EN.	%	Result	TDV Eff.	%	TDV Total	%	Source EN.	%	Result
Zone 14 92301 (PALMDALE)	30	**75.68**	18.0%	**75.68**	18.0%	**6.98**	19.3%	**0.0%**	**95.31**	26.2%	**95.31**	26.2%	**8.77**	28.3%	**PASS**
	75	**78.22**	18.3%	**78.22**	18.3%	**7.26**	19.8%	**0.0%**	**98.31**	26.5%	**98.31**	26.5%	**9.05**	28.8%	**PASS**
	120	**78.82**	18.5%	**78.82**	18.5%	**7.27**	19.8%	**0.0%**	**97.91**	26.5%	**97.91**	26.5%	**8.99**	28.7%	**PASS**
	165	**69.06**	16.8%	**69.06**	16.8%	**6.39**	17.9%	**0.0%**	**88.70**	25.0%	**88.70**	25.0%	**8.13**	26.9%	**PASS**
	210	**72.38**	17.4%	**72.38**	17.4%	**6.65**	18.5%	**0.0%**	**95.51**	26.3%	**95.51**	26.3%	**8.75**	28.3%	**PASS**
	255	**74.24**	17.7%	**74.24**	17.7%	**6.87**	19.0%	**0.0%**	**98.80**	26.7%	**98.80**	26.7%	**9.07**	28.9%	**PASS**
	300	**75.17**	17.9%	**75.17**	17.9%	**6.93**	19.2%	**0.0%**	**98.08**	26.6%	**98.08**	26.6%	**8.98**	28.7%	**PASS**
	345	**68.01**	16.6%	**68.01**	**16.6%**	**6.32**	17.9%	**0.0%**	**87.68**	24.8%	**87.68**	**24.8%**	**8.04**	26.7%	**PASS**
Zone 15 92225 (PALM SPRINGS)	30	**72.14**	16.8%	**72.14**	16.8%	**6.79**	20.9%	**0.0%**	**7.51**	2.6%	**7.51**	2.6%	**0.51**	2.5%	**PASS**
	75	**76.94**	17.6%	**76.94**	17.6%	**7.22**	21.9%	**0.0%**	**6.59**	2.2%	**6.59**	**2.2%**	**0.52**	2.6%	**PASS**
	120	**78.02**	17.8%	**78.02**	17.8%	**7.34**	22.2%	**0.0%**	**7.89**	2.7%	**7.89**	2.7%	**0.55**	2.7%	**PASS**
	165	**67.89**	16.1%	**67.89**	16.1%	**6.41**	20.1%	**0.0%**	**16.78**	5.6%	**16.78**	5.6%	**0.56**	2.8%	**PASS**
	210	**68.26**	16.1%	**68.26**	16.1%	**6.53**	20.3%	**0.0%**	**15.35**	5.2%	**15.35**	5.2%	**0.46**	2.3%	**PASS**
	255	**70.52**	16.4%	**70.52**	16.4%	**6.80**	20.9%	**0.0%**	**8.56**	2.9%	**8.56**	2.9%	**0.66**	3.3%	**PASS**
	300	**67.87**	15.9%	**67.87**	15.9%	**6.61**	20.5%	**0.0%**	**8.02**	2.7%	**8.02**	2.7%	**0.56**	2.8%	**PASS**
	345	**65.76**	15.6%	**65.76**	**15.6%**	**6.27**	19.7%	**0.0%**	**8.18**	2.8%	**8.18**	2.8%	**0.43**	2.2%	**PASS**
Zone 16 96006 (BLUE CANYON)	30	**53.58**	15.0%	**53.58**	15.0%	**19.96**	33.1%	**0.0%**	**70.82**	22.8%	**70.82**	22.8%	**19.50**	38.6%	**PASS**
	75	**56.56**	15.7%	**56.56**	15.7%	**20.06**	33.2%	**0.0%**	**74.47**	23.6%	**74.47**	23.6%	**19.55**	38.6%	**PASS**
	120	**54.70**	15.2%	**54.70**	15.2%	**19.96**	33.0%	**0.0%**	**70.44**	22.6%	**70.44**	22.6%	**19.31**	38.2%	**PASS**
	165	**43.85**	12.6%	**43.85**	**12.6%**	**19.58**	32.7%	**0.0%**	**63.49**	21.0%	**63.49**	**21.0%**	**19.05**	38.0%	**PASS**
	210	**57.00**	15.8%	**57.00**	15.8%	**20.16**	33.3%	**0.0%**	**71.64**	23.0%	**71.64**	23.0%	**19.51**	38.6%	**PASS**
	255	**60.18**	16.5%	**60.18**	16.5%	**20.16**	33.3%	**0.0%**	**74.64**	23.7%	**74.64**	23.7%	**19.54**	38.6%	**PASS**
	300	**56.39**	15.6%	**56.39**	15.6%	**19.88**	33.0%	**0.0%**	**70.14**	22.5%	**70.14**	22.5%	**19.32**	38.3%	**PASS**
	345	**46.54**	13.3%	**46.54**	13.3%	**19.52**	32.7%	**0.0%**	**63.68**	21.0%	**63.68**	21.0%	**19.10**	38.1%	**PASS**

☐ **48x40**
(2) 5-ton units

(2) 24x40 CLASSROOMS

☐ **60x40**
(2) 5-ton units

(1) 24x40 CLASSROOM +
(1) 36x40 CLASSROOM

☐ **72x40**
(3) 5-ton units

(3) 24x40 CLASSROOMS

☐ **84x40**
(3) 5-ton units

(2) 24x40 CLASSROOMS +
(1) 36x40 CLASSROOM

☐ **96x40**
(4) 5-ton units

(4) 24x40 CLASSROOMS

☐ **108x40**
(4) 5-ton units

(3) 24x40 CLASSROOMS +
(1) 36x40 CLASSROOM

☐ **120x40**
(5) 5-ton units

(5) 24x40 CLASSROOMS

Envelope Min Design - Zone: 1-16		
Buildings: All		
Assembly	U-Value	Insulation R-Value
Walls:	0.062	R-19 batt
Floor:	0.054	R-19 batt
Roof:	0.055	R-30 Foam

☐

HVAC Min Design - Zone: 1-16		
Building: 24 x 40		
Tonnage	5	
Min. EER / COP	11.0/3.3	
Outside Air	See Ventilation Calcs on Mechanical Plans	
Occupancy Sensor	Yes	
DCV/ Economizer	Yes	
Cooling Stages (Min.)	1	
Allowable Mechanical Unit (See Equipment Schedule)	SPVU 1 STANDARD	SPVU 2 OPTIONAL

☐

HVAC Min Design - Zone: 1-16		
Buildings: 36 x 40		
Tonnage	5	
Min. EER / COP	11.0/3.3	
Outside Air	See Ventilation Calcs on Mechanical Plans	
Occupancy Sensor	Yes	
DCV/ Economizer	Yes	
Cooling Stages (Min.)	2	
Allowable Mechanical Unit (See Equipment Schedule)		SPVU 2 STANDARD

LEGEND
Occupancy Sensor: Ceiling mounted occupancy sensor with dimming controls. Automatic on for low level lighting only, full by manual activation.
DCV: Demand Control Ventilation

NOTES:
- Interior lights shall be dimmable LED fixtures, 51 Watts Max per fixtures, 4 fixtures per module per floor
- Windows shall be NFRC #INT-A-73-00213-00011 or equal, U-Factor = 0.520 (Max), SHGC = 0.350 (Max), Visual Transmittance = 0.610 (Min)
- Doors shall be hollow metal, uninsulated single layer doors (Min), U-Factor = 1.450 (Max)
- Refer to sheet A-0.2 For windows specifications
- Refer to sheet A-0.2 For insulation specifications
- Refer to sheets A-0.3 for mechanical layout per classroom
- Refer to Mechanical plans for more info
- Where Steel stud walls are used the exterior wall assembly shall be as follows:
  U-Value 0.062 (max) - provide 6" (Nominal) studs @ 24" oc with R-19 batt cavity insulation and continious 1.5" rigid foam insulation (R=8.8 min) on the interior side of the wall.

DESIGN ENERGY VALUES BY BUILDING SIZE - WOOD FLOOR - WALL HVAC

ENERGY SPECS

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

DESIGN ENERGY VALUES
WOOD FLOOR - WALL HVAC

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0.53

Project Name:	**04-121999 - 24x40 - CONC FLR - RF HVAC**	**Date Prepared:**	**2023-07-17**

A. General Information

1	Project Name	04-121999 - 24x40 - CONC FLR - RF HVAC			
2	Run Title				
3	Project Location	- specify -			
4	City	- specify -	5	Standards Version	Compliance 2022
6	Zip code	92301	7	Compliance Software (version)	CBECC 2022.2.1 SP1 (1298)
8	Climate Zone	14	9	Building Orientation (deg)	345
10	Building Type(s)	• Relocable Public School Building for use in all climate zones Occupancy: E	11	Weather File	PALMDALE_STYP20.epw
12	Project Scope	• New complete scope	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft^2)	960	15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft^2)	0	17	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	960	19	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance						Building Components Complying Prescriptively	
Envelope (See Table G)	Nonres	Performance	Solar Thermal Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒	Not Included		
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☐	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

---

C1. COMPLIANCE SUMMARY

COMPLIES[3]

	Time Dependent Valuaton (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft^2 - yr)	Total[2] (kBtu/ft^2 - yr)	Total[2] (kBtu/ft^2 - yr)
Standard Design	410.64	410.64	35.39
Proposed Design	351.62	351.62	29.35
Compliance Margins	**59.02**	**59.02**	**6.04**
	Pass	**Pass**	**Pass**

[1] *Efficiency measures include improvements like a better building envelope and more efficient equipment*
[2] *Compliance Totals include efficiency, photovoltaics and batteries*
[3] *Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft^2 - yr)

COMPLIES[2]

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	31.03	28.78	2.25
Space Cooling	107.73	107.28	0.45
Indoor Fans	178.08	131.18	46.9
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	61.19	61.28	-0.09
Indoor Lighting	32.61	23.1	9.51
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**410.64**	**351.62**	**59.02 (14.4%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**410.64**	**351.62**	**59.02 (14.4%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	67.93	67.93	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**478.57**	**419.55**	**59.02 (12.3%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft^2 /yr)

COMPLIES[2]

Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Space Heating	4.6	4.17	0.43
Space Cooling	4.04	4.1	-0.06
Indoor Fans	17.7	12.77	4.93
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	6.48	6.49	-0.01
Indoor Lighting	2.57	1.82	0.75
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**35.39**	**29.35**	**6.04 (17.1%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**35.39**	**29.35**	**6.04 (17.1%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Receptacle	4.92	4.92	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**40.31**	**34.27**	**6.04 (15%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	1	0.9	0.1	---	---	---
Space Cooling	2.7	2.6	0.1	---	---	---
Indoor Fans	6	4.4	1.6	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	2.3	2.3	0	---	---	---
Indoor Lighting	1.2	0.8	0.4	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**13.2**	**11**	**2.2**	**0**	**0**	**0**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**13.2**	**11**	**2.2**	**0**	**0**	**0**
Receptacle	2.5	2.5	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**15.7**	**13.5**	**2.2**	**0**	**0**	**0**

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft^2 / yr)	Proposed Design (kBtu/ft^2 / yr)	Margin (kBtu/ft^2 / yr)	Margin Percentage
GROSS EUI[1]	55.8	47.98	7.82	14.01
NET EUI[1]	55.8	47.98	7.82	14.01

[1] *Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

D1. EXCEPTIONAL CONDITIONS

- The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
- The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
- Project is claiming Exception 2 to Section 140.10(a): No PV system is required where the required PV system size is less than 4 kWdc.
- Project is claiming Exception 2 to Section 140.10(b): No battery storage system is required in buildings with battery storage system requirements with less than 10 kWh rated capacity.
- Project is claiming Exception 3 to Section 140.10(b): No battery storage system required for tenant spaces less than or equal to 5,000 ft2.

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft^2)**	**Total Fenestration Area (ft^2)**	**Window to Wall Ratio (%)**
North-Facing[1]	276	32	11.59
East-Facing[2]	440	0	0
South-Facing[3]	252	32	12.7

Notes
[1] *North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),*
[2] *East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),*
[3] *South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),*
[4] *West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),*

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft^2)**	**Total Fenestration Area (ft^2)**	**Window to Wall Ratio (%)**
West-Facing[4]	440	0	0
Total	**1408**	**64**	**4.55**
Roof	960	0	0

Notes
[1] *North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),*
[2] *East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),*
[3] *South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),*
[4] *West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),*

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	**Air Barrier**
BuildingStory 1	Air barrier - not verified

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	**Construction Type**	**Area (ft^2)**	**Framing Type**	**Cavity R-Value**	**Continuous R-Value**		**Units**	**Value**	**Description of Assembly Layers**	**Status[1]**
					Interior	**Exterior**				
2x6 T111 WALL	Exterior Wall	1,408	Wood	19	N/A	N/A	U-factor	0.0619	Wood siding - 1/2 in. Vapor seal - plastic film - 1/16 in. SCI - 2x6 WD STUD WALL R-19 16 OC Gypsum Board - 1/2 in. Acoustic Tile - 1/2 in.	N
SCI MTL ROOF	Roof	960	Metal	30	N/A	N/A	U-factor	0.0554	Metal Standing Seam - 1/16 in. Building Paper - 1/16 in. Plywood - 3/4 in. SCI - STL JOIST ROOF R-30 Air - Cavity - Wall Roof Ceiling - 4 in. or more Acoustic Tile - 1/2 in.	N
SCI CONC FLOOR	Exterior Floor	960	N/A	0	N/A	N/A	U-factor	0.1153	Vented Crawl Space Concrete - 80 lb/ft3 - 4 in. Linoleum/cork tile - 1/4 in.	N

[1] *Status: N - New, A - Altered, E - Existing*

G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)

01	02	03	04
Assembly Name	**Area (ft^2)**	**Overall U-factor**	**Status[1]**
SCI - STD HM DOOR	21	1.45	N

[1] *Status: N - New, A - Altered, E - Existing*

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	**Fenestration Type/ Product Type / Frame Type**	**Certification Method[1]**	**Assembly Method**	**Area (ft^2)**	**Overall U-factor**	**Overall SHGC**	**Overall VT**	**Status[2]**
NFRC #INT-A-73-00213-00011	Vertical fenestration Operable window N/A	NFRC	Site built	64	0.52	0.35	0.61	N

[1] *Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.*
[2] *Status: N - New, A - Altered, E - Existing*

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
Equipment Name	**Equipment Type**	**Qty**	**Heating**				**Cooling**			**Economizer Type (if present)**	**Status[1]**
			Total Heating Output (kBtu/h)	**Supp Heat Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**	**Total Cooling Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**		
AirSystem 101	Single Zone Heat Pump (SZHP) Air System	1	57	0	N/A	NA	57	EER SEER	12 15	Fixed DB	N

[1] *Status: N - New, A - Altered, E - Existing*

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	**Qty**	**Design OA CFM**	**Supply Fan**				**Return / Relief Fan**					**Status[1]**
			CFM	**Power**	**Power Units**	**Control**	**Fan Type**	**CFM**	**Power**	**Power Units**	**Control**	
AirSystem 101	1	468	1,750	0.9	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

[1] *Status: N - New, A - Altered, E - Existing*

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	**Equipment Type**	**Interlocks per 140.4(n)[1]**	**Other Special Features and Controls**
AirSystem 101	Single Zone Heat Pump (SZHP) Air System	No	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	**Mechanical Ventilation**				**Conditioned Area (sf)**	**DCV or Occupant Sensor Controls, or Both**
	Ventilation Function	**# of People**	**Supply OA CFM**	**Exhaust CFM**		
ThermalZone 101	Education - Classrooms (ages 9-18)	31.2	468	0	960	DCV

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	**System Type**	**Qty**	**Rated Capacity (kBtuh)**		**Airflow (cfm)**			**Fan**			**VSD**
			Heating	**Cooling**	**Design**	**MIn.**	**Min. Ratio**	**Power**	**Power Units**	**Cycles**	
TerminalUnit 101	Uncontrolled	1	N/A	N/A	1,750	N/A	0	N/A	N/A	N/A	☐

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
Occupancy Type[1]	**Conditioned Floor Area[2] (ft^2)**	**Installed Lighting Power (Watts)**	**Lighting Control Credits (Watts)**	**Additional (Custom) Allowance**	
				Area Category Footnotes (Watts)	**Area Category Footnotes (Watts)**
Classroom, Lecture, or Training Vocational	960	408	0	0	0
Building Totals:	**960**	**408**	**0**	**0**	**0**

[1] *See Table 140.6-C*
[2] *See NRCC-LTI--E for unconditioned spaces*
[3] *Lighting information for existing spaces modeled is not included in this table*

K2. INDOOR CONDITIONED LIGHTING SCHEDULE

Luminaire Schedule (includes all permanent installed lighting in conditioned space, and portable lighting over 0.3 w/ft^2 in offices)

01	02	03	04	05	06
Name or Item Tag	**Complete Luminaire Description (i.e. 3-lamp fluorescent troffer, F32T8, one dimmable electronic ballast)**	**Installed Watts (Conditioned)**			
		Watts per luminaire	**How is Wattage determined**	**Total Number of Luminaires**	**Installed Watts**
SCI - 2x4 LED	---	51	According to	8	408

[1] *If lighting power densities were used in the compliance model Building Departments will need to check prescriptive forms for Luminaire Schedule details.*

K3. INDOOR CONDITIONED LIGHTING CONTROL CREDITS

Lighting Control Credits Schedule (includes all lighting controls installed in conditioned space for compliance credit per 140.6(a)2 and Table 140.6-A)

01	02	03	04	05	06	07	08	09
Area Description	**Primary Function Area (must meet requirements of Table 140.6-A and 170.2-L)**	**Type of Lighting Control**	**Power Adjustment Factor (PAF)**	**Luminaire Item Tag**	**Watts per Luminaire**	**# of Luminaires**	**Lighting Controlled (Watts)**	**Control Credit (Watts)**
Classroom 101	Classroom, Lecture, or Training Vocational	N/A	N/A	SCI - 2x4 LED	51	2	102	0
Classroom 101	Classroom, Lecture, or Training Vocational	N/A	N/A	SCI - 2x4 LED	51	6	306	0
							Lighting Control Credits (Conditioned) Total (Watts)	**0**

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Plumbing	NRCI-PLB-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Indoor Lighting	NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls.
Indoor Lighting	NRCA-LTI-03-A - Automatic Daylight Controls.
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-03-A - Constant Volume Single Zone HVAC
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
Mechanical	NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.
Mechanical	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units
Mechanical	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance
Mechanical	NRCA-MCH-19-A Occupancy Sensor Controls

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Mechanical	NRCV-MCH-27 Indoor Air Quality & Mechanical Ventilation

---

Documentation Author's Declaration Statement

1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: SILVER CREEK	Documentation Author Signature:
Company: SILVER CREEK	Signature Date:
Address:	CEA/HERS Certification Identification (if applicable):
City/State/Zip: ,	Phone: 951-943-5393

Responsible Person's Declaration statement

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:	
Company: SILVER CREEK		
Address: 2830 BARRETT AVE	Date Signed:	
City/State/Zip: PERRIS , CA 92571	License #: 2475	
Phone: 951-943-5393	Title: Engineer	Scope: Envelope
Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:	
Company: SILVER CREEK		
Address: 2830 BARRETT AVE	Date Signed:	
City/State/Zip: PERRIS , CA 92571	License #: 2475	
Phone: 951-943-5393	Title: Engineer	Scope: Lighting

Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:	
Company: SILVER CREEK		
Address: 2830 BARRETT AVE	Date Signed:	
City/State/Zip: PERRIS , CA 92571	License #: 2475	
Phone: 951-943-5393	Title: Engineer	Scope: Mechanical

PROJECT SPECIFIC STATE AGENCY APPROVAL

THESE DRAWINGS AND ALL MATERIAL CONTAINED HEREIN ARE THE PROPERTY OF SILVER CREEK MODULAR, INC (SCM Inc) AND SHALL NOT BE REPRODUCED, COPIED OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY AND SHALL NOT BE USED IN WHOLE OR IN PART TO ASSIST IN THE MAKING OF OR FOR THE PURPOSE OF FURNISHING ANY INFORMATION FOR THE MAKING OF DRAWINGS, PRINTS, APPARATUS OR PARTS THEREOF WITHOUT THE FULL KNOWLEDGE AND WRITTEN CONSENT OF SCM Inc.
ALL PATENTABLE MATERIAL CONTAINED HEREIN AND ORIGINATING WITH SCM Inc SHALL BE THE PROPERTY OF SCM Inc

PROJECT NAME:

SHEET TITLE:

PRF FORMS
24x40 - ZONE 14
WORST CASE

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

JOHN W STARLIN
2475

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0.54

Project Name:	**04-121999 - 24x40 - CONC FLR - RF HVAC**	**Date Prepared:**	**2023-07-17**

A. General Information

1	Project Name	04-121999 - 24x40 - CONC FLR - RF HVAC			
2	Run Title				
3	Project Location	- specify -			
4	City	- specify -	5	Standards Version	Compliance 2022
6	Zip code	92225	7	Compliance Software (version)	CBECC 2022.2.1 SP1 (1298)
8	Climate Zone	15	9	Building Orientation (deg)	345
10	Building Type(s)	• Relocable Public School Building for use in all climate zones Occupancy: E	11	Weather File	PALM-SPRINGS_STYP20.epw
12	Project Scope	• New complete scope	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft^2)	960	15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft^2)	0	17	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	960	19	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance						Building Components Complying Prescriptively	
Envelope (See Table G)	Nonres	Performance	Solar Thermal Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒	Not Included		
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☐	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

---

C1. COMPLIANCE SUMMARY

COMPLIES[3]

	Time Dependent Valuaton (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft^2 - yr)	Total[2] (kBtu/ft^2 - yr)	Total[2] (kBtu/ft^2 - yr)
Standard Design	421.74	421.74	31.74
Proposed Design	374.85	374.85	27.42
Compliance Margins	**46.89**	**46.89**	**4.32**
	Pass	**Pass**	**Pass**

[1] *Efficiency measures include improvements like a better building envelope and more efficient equipment*
[2] *Compliance Totals include efficiency, photovoltaics and batteries*
[3] *Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft^2 - yr)

COMPLIES[2]

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	6.05	6.2	-0.15
Space Cooling	176.5	176.12	0.38
Indoor Fans	163.21	126.15	37.06
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	43.76	43.56	0.2
Indoor Lighting	32.22	22.82	9.4
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**421.74**	**374.85**	**46.89 (11.1%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**421.74**	**374.85**	**46.89 (11.1%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	66.69	66.69	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**488.43**	**441.54**	**46.89 (9.6%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft^2 /yr)

COMPLIES[2]

Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Space Heating	0.83	0.84	-0.01
Space Cooling	8.73	8.65	0.08
Indoor Fans	15.02	11.51	3.51
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	4.59	4.6	-0.01
Indoor Lighting	2.57	1.82	0.75
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**31.74**	**27.42**	**4.32 (13.6%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**31.74**	**27.42**	**4.32 (13.6%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Receptacle	4.92	4.92	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**36.66**	**32.34**	**4.32 (11.8%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	0.2	0.2	0	---	---	---
Space Cooling	5.2	5.1	0.1	---	---	---
Indoor Fans	5.5	4.3	1.2	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	1.6	1.6	0	---	---	---
Indoor Lighting	1.2	0.8	0.4	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**13.7**	**12**	**1.7**	**0**	**0**	**0**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**13.7**	**12**	**1.7**	**0**	**0**	**0**
Receptacle	2.5	2.5	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**16.2**	**14.5**	**1.7**	**0**	**0**	**0**

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft^2 / yr)	Proposed Design (kBtu/ft^2 / yr)	Margin (kBtu/ft^2 / yr)	Margin Percentage
GROSS EUI[1]	57.58	51.54	6.04	10.49
NET EUI[1]	57.58	51.54	6.04	10.49

[1] *Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

D1. EXCEPTIONAL CONDITIONS

- The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
- The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
- Project is claiming Exception 2 to Section 140.10(a): No PV system is required where the required PV system size is less than 4 kWdc.
- Project is claiming Exception 2 to Section 140.10(b): No battery storage system is required in buildings with battery storage system requirements with less than 10 kWh rated capacity.
- Project is claiming Exception 3 to Section 140.10(b): No battery storage system required for tenant spaces less than or equal to 5,000 ft2.

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	Total Gross Surface Area (ft^2)	Total Fenestration Area (ft^2)	Window to Wall Ratio (%)
North-Facing[1]	276	32	11.59
East-Facing[2]	440	0	0
South-Facing[3]	252	32	12.7

Notes
[1] *North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),*
[2] *East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),*
[3] *South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),*
[4] *West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),*

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	Total Gross Surface Area (ft^2)	Total Fenestration Area (ft^2)	Window to Wall Ratio (%)
West-Facing[4]	440	0	0
Total	**1408**	**64**	**4.55**
Roof	960	0	0

Notes
[1] *North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),*
[2] *East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),*
[3] *South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),*
[4] *West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),*

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	Air Barrier
BuildingStory 1	Air barrier - not verified

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	Construction Type	Area (ft^2)	Framing Type	Cavity R-Value	Continuous R-Value		Units	Value	Description of Assembly Layers	Status[1]
					Interior	Exterior				
2x6 T111 WALL	Exterior Wall	1,408	Wood	19	N/A	N/A	U-factor	0.0619	Wood siding - 1/2 in. Vapor seal - plastic film - 1/16 in. SCI - 2x6 WD STUD WALL R-19 16 OC Gypsum Board - 1/2 in. Acoustic Tile - 1/2 in.	N
SCI MTL ROOF	Roof	960	Metal	30	N/A	N/A	U-factor	0.0554	Metal Standing Seam - 1/16 in. Building Paper - 1/16 in. Plywood - 3/4 in. SCI - STL JOIST ROOF R-30 Air - Cavity - Wall Roof Ceiling - 4 in. or more Acoustic Tile - 1/2 in.	N
SCI CONC FLOOR	Exterior Floor	960	N/A	0	N/A	N/A	U-factor	0.1153	Vented Crawl Space Concrete - 80 lb/ft3 - 4 in. Linoleum/cork tile - 1/4 in.	N

[1] *Status: N - New, A - Altered, E - Existing*

G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)

01	02	03	04
Assembly Name	Area (ft^2)	Overall U-factor	Status[1]
SCI - STD HM DOOR	21	1.45	N

[1] *Status: N - New, A - Altered, E - Existing*

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	Fenestration Type/ Product Type / Frame Type	Certification Method[1]	Assembly Method	Area (ft^2)	Overall U-factor	Overall SHGC	Overall VT	Status[2]
NFRC #INT-A-73-00213-00011	Vertical fenestration Operable window N/A	NFRC	Site built	64	0.52	0.35	0.61	N

[1] *Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.*
[2] *Status: N - New, A - Altered, E - Existing*

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
			Heating				Cooling				
Equipment Name	Equipment Type	Qty	Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency	Economizer Type (if present)	Status[1]
AirSystem 101	Single Zone Heat Pump (SZHP) Air System	1	57	0	N/A	NA	57	EER SEER	12 15	Fixed DB	N

[1] *Status: N - New, A - Altered, E - Existing*

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
			Supply Fan				Return / Relief Fan					
Name or Item Tag	Qty	Design OA CFM	CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	Status[1]
AirSystem 101	1	468	1,750	0.9	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

[1] *Status: N - New, A - Altered, E - Existing*

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	Equipment Type	Interlocks per 140.4(n)[1]	Other Special Features and Controls
AirSystem 101	Single Zone Heat Pump (SZHP) Air System	No	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.
[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
	Mechanical Ventilation					
Zone Name	Ventilation Function	# of People	Supply OA CFM	Exhaust CFM	Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
ThermalZone 101	Education - Classrooms (ages 9-18)	31.2	468	0	960	DCV

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
			Rated Capacity (kBtuh)		Airflow (cfm)			Fan			
System ID	System Type	Qty	Heating	Cooling	Design	MIn.	Min. Ratio	Power	Power Units	Cycles	VSD
TerminalUnit 101	Uncontrolled	1	N/A	N/A	1,750	N/A	0	N/A	N/A	N/A	☐

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
				Additional (Custom) Allowance	
Occupancy Type[1]	Conditioned Floor Area[2] (ft^2)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Area Category Footnotes (Watts)	Area Category Footnotes (Watts)
Classroom, Lecture, or Training Vocational	960	408	0	0	0
Building Totals:	**960**	**408**	**0**	**0**	**0**

[1] *See Table 140.6-C*
[2] *See NRCC-LTI--E for unconditioned spaces*
[3] *Lighting information for existing spaces modeled is not included in this table*

K2. INDOOR CONDITIONED LIGHTING SCHEDULE

Luminaire Schedule (includes all permanent installed lighting in conditioned space, and portable lighting over 0.3 w/ft^2 in offices)

01	02	03	04	05	06
		Installed Watts (Conditioned)			
Name or Item Tag	Complete Luminaire Description (i.e. 3-lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Watts per luminaire	How is Wattage determined	Total Number of Luminaires	Installed Watts
SCI - 2x4 LED	---	51	According to	8	408

[1] *If lighting power densities were used in the compliance model Building Departments will need to check prescriptive forms for Luminaire Schedule details.*

K3. INDOOR CONDITIONED LIGHTING CONTROL CREDITS

Lighting Control Credits Schedule (includes all lighting controls installed in conditioned space for compliance credit per 140.6(a)2 and Table 140.6-A)

01	02	03	04	05	06	07	08	09
Area Description	Primary Function Area (must meet requirements of Table 140.6-A and 170.2-L)	Type of Lighting Control	Power Adjustment Factor (PAF)	Luminaire Item Tag	Watts per Luminaire	# of Luminaires	Lighting Controlled (Watts)	Control Credit (Watts)
Classroom 101	Classroom, Lecture, or Training Vocational	N/A	N/A	SCI - 2x4 LED	51	2	102	0
Classroom 101	Classroom, Lecture, or Training Vocational	N/A	N/A	SCI - 2x4 LED	51	6	306	0
						Lighting Control Credits (Conditioned) Total (Watts)		**0**

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

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Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Plumbing	NRCI-PLB-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

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Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Indoor Lighting	NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls.
Indoor Lighting	NRCA-LTI-03-A - Automatic Daylight Controls.
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-03-A - Constant Volume Single Zone HVAC
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
Mechanical	NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.
Mechanical	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units
Mechanical	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance
Mechanical	NRCA-MCH-19-A Occupancy Sensor Controls

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Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:	
Company: SILVER CREEK		
Address: 2830 BARRETT AVE	Date Signed:	
City/State/Zip: PERRIS , CA 92571	License #: 2475	
Phone: 951-943-5393	Title: Engineer	Scope: Envelope

Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:	
Company: SILVER CREEK		
Address: 2830 BARRETT AVE	Date Signed:	
City/State/Zip: PERRIS , CA 92571	License #: 2475	
Phone: 951-943-5393	Title: Engineer	Scope: Lighting

Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:	
Company: SILVER CREEK		
Address: 2830 BARRETT AVE	Date Signed:	
City/State/Zip: PERRIS , CA 92571	License #: 2475	
Phone: 951-943-5393	Title: Engineer	Scope: Mechanical

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

PRF FORMS
24x40 - ZONE 15
WORST CASE

REVISIONS
1
2
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4
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PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

JOHN W STARLIN
2475

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
A-0.55

Project Name:	**04-121999 - 24x40 - CONC FLR - RF HVAC**	**Date Prepared:**	**2023-07-17**

A. General Information					
1	Project Name	04-121999 - 24x40 - CONC FLR - RF HVAC			
2	Run Title				
3	Project Location	- specify -			
4	City	- specify -	5	Standards Version	Compliance 2022
6	Zip code	96006	7	Compliance Software (version)	CBECC 2022.2.1 SP1 (1298)
8	Climate Zone	16	9	Building Orientation (deg)	165
10	Building Type(s)	• Relocable Public School Building for use in all climate zones Occupancy: E	11	Weather File	BLUE-CANYON_STYP20.epw
12	Project Scope	• New complete scope	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft²)	960	15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft²)	0	17	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	960	19	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance						Building Components Complying Prescriptively	
Envelope (See Table G)	Nonres	Performance	Solar Thermal Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒	Not Included		
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☐	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

C1. COMPLIANCE SUMMARY

COMPLIES³

	Time Dependent Valuaton (TDV)		Source Energy Use
	Efficiency¹ (kBtu/ft² - yr)	Total² (kBtu/ft² - yr)	Total² (kBtu/ft² - yr)
Standard Design	347.46	347.46	59.92
Proposed Design	319.82	319.82	41.38
Compliance Margins	**27.64**	**27.64**	**18.54**
	Pass	**Pass**	**Pass**

[1] *Efficiency measures include improvements like a better building envelope and more efficient equipment*
[2] *Compliance Totals include efficiency, photovoltaics and batteries*
[3] *Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)

COMPLIES²

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)¹
Space Heating	71.12	101.19	-30.07
Space Cooling	20.15	18.52	1.63
Indoor Fans	183.24	136.22	47.02
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	41.89	41.89	0
Indoor Lighting	31.06	22	9.06
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**347.46**	**319.82**	**27.64 (8%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**347.46**	**319.82**	**27.64 (8%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS¹

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)¹
Receptacle	63.66	63.66	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**411.12**	**383.48**	**27.64 (6.7%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft² /yr)

COMPLIES²

Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)¹
Space Heating	22.6	9.71	12.89
Space Cooling	1.36	1.31	0.05
Indoor Fans	18.3	13.45	4.85
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	15.09	15.09	0
Indoor Lighting	2.57	1.82	0.75
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**59.92**	**41.38**	**18.54 (30.9%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**59.92**	**41.38**	**18.54 (30.9%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS¹

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)¹
Receptacle	4.92	4.92	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**64.84**	**46.3**	**18.54 (28.6%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	0.1	2.6	-2.5	23	---	---
Space Cooling	0.8	0.7	0.1	---	---	---
Indoor Fans	6.1	4.5	1.6	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	---	---	---	15.8	15.8	0
Indoor Lighting	1.2	0.8	0.4	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**8.2**	**8.6**	**-0.4**	**38.8**	**15.8**	**23**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**8.2**	**8.6**	**-0.4**	**38.8**	**15.8**	**23**
Receptacle	2.5	2.5	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**10.7**	**11.1**	**-0.4**	**38.8**	**15.8**	**23**

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI¹	78.45	55.91	22.54	28.73
NET EUI¹	78.45	55.91	22.54	28.73

[1] *Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

D1. EXCEPTIONAL CONDITIONS

- The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
- The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
- Project is claiming Exception 2 to Section 140.10(a): No PV system is required where the required PV system size is less than 4 kWdc.
- Project is claiming Exception 2 to Section 140.10(b): No battery storage system is required in buildings with battery storage system requirements with less than 10 kWh rated capacity.
- Project is claiming Exception 3 to Section 140.10(b): No battery storage system required for tenant spaces less than or equal to 5,000 ft2.

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft²)**	**Total Fenestration Area (ft²)**	**Window to Wall Ratio (%)**
North-Facing¹	252	32	12.7
East-Facing²	440	0	0
South-Facing³	276	32	11.59

Notes
[1] *North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),*
[2] *East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),*
[3] *South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),*
[4] *West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),*

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft²)**	**Total Fenestration Area (ft²)**	**Window to Wall Ratio (%)**
West-Facing⁴	440	0	0
Total	**1408**	**64**	**4.55**
Roof	960	0	0

Notes
[1] *North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),*
[2] *East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),*
[3] *South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),*
[4] *West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),*

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	**Air Barrier**
BuildingStory 1	Air barrier - not verified

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	**Construction Type**	**Area (ft²)**	**Framing Type**	**Cavity R-Value**	**Continuous R-Value**		**Units**	**Value**	**Description of Assembly Layers**	**Status¹**
					Interior	**Exterior**				
2x6 T111 WALL	Exterior Wall	1,408	Wood	19	N/A	N/A	U-factor	0.0619	Wood siding - 1/2 in. Vapor seal - plastic film - 1/16 in. SCI - 2x6 WD STUD WALL R-19 16 OC Gypsum Board - 1/2 in. Acoustic Tile - 1/2 in.	N
SCI MTL ROOF	Roof	960	Metal	30	N/A	N/A	U-factor	0.0554	Metal Standing Seam - 1/16 in. Building Paper - 1/16 in. Plywood - 3/4 in. SCI - STL JOIST ROOF R-30 Air - Cavity - Wall Roof Ceiling - 4 in. or more Acoustic Tile - 1/2 in.	N
SCI CONC FLOOR	Exterior Floor	960	N/A	0	N/A	N/A	U-factor	0.1153	Vented Crawl Space Concrete - 80 lb/ft3 - 4 in. Linoleum/cork tile - 1/4 in.	N

[1] *Status: N - New, A - Altered, E - Existing*

G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)

01	02	03	04
Assembly Name	**Area (ft²)**	**Overall U-factor**	**Status¹**
SCI - STD HM DOOR	21	1.45	N

[1] *Status: N - New, A - Altered, E - Existing*

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	**Fenestration Type/ Product Type / Frame Type**	**Certification Method¹**	**Assembly Method**	**Area (ft²)**	**Overall U-factor**	**Overall SHGC**	**Overall VT**	**Status²**
NFRC #INT-A-73-00213-00011	Vertical fenestration Operable window N/A	NFRC	Site built	64	0.52	0.35	0.61	N

[1] *Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.*
[2] *Status: N - New, A - Altered, E - Existing*

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
			Heating				**Cooling**				
Equipment Name	**Equipment Type**	**Qty**	**Total Heating Output (kBtu/h)**	**Supp Heat Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**	**Total Cooling Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**	**Economizer Type (if present)**	**Status¹**
AirSystem 101	Single Zone Heat Pump (SZHP) Air System	1	57	0	N/A	NA	57	EER SEER	12 15	Fixed DB	N

[1] *Status: N - New, A - Altered, E - Existing*

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	**Qty**	**Design OA CFM**	**Supply Fan**				**Return / Relief Fan**					**Status¹**
			CFM	**Power**	**Power Units**	**Control**	**Fan Type**	**CFM**	**Power**	**Power Units**	**Control**	
AirSystem 101	1	468	1,750	0.9	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

[1] *Status: N - New, A - Altered, E - Existing*

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	**Equipment Type**	**Interlocks per 140.4(n)¹**	**Other Special Features and Controls**
AirSystem 101	Single Zone Heat Pump (SZHP) Air System	No	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	**Mechanical Ventilation**				**Conditioned Area (sf)**	**DCV or Occupant Sensor Controls, or Both**
	Ventilation Function	**# of People**	**Supply OA CFM**	**Exhaust CFM**		
ThermalZone 101	Education - Classrooms (ages 9-18)	31.2	468	0	960	DCV

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	**System Type**	**Qty**	**Rated Capacity (kBtuh)**		**Airflow (cfm)**			**Fan**			**VSD**
			Heating	**Cooling**	**Design**	**MIn.**	**Min. Ratio**	**Power**	**Power Units**	**Cycles**	
TerminalUnit 101	Uncontrolled	1	N/A	N/A	1,750	N/A	0	N/A	N/A	N/A	☐

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
Occupancy Type¹	**Conditioned Floor Area² (ft²)**	**Installed Lighting Power (Watts)**	**Lighting Control Credits (Watts)**	**Additional (Custom) Allowance**	
				Area Category Footnotes (Watts)	**Area Category Footnotes (Watts)**
Classroom, Lecture, or Training Vocational	960	408	0	0	0
Building Totals:	**960**	**408**	**0**	**0**	**0**

[1] *See Table 140.6-C*
[2] *See NRCC-LTI--E for unconditioned spaces*
[3] *Lighting information for existing spaces modeled is not included in this table*

K2. INDOOR CONDITIONED LIGHTING SCHEDULE

Luminaire Schedule (includes all permanent installed lighting in conditioned space, and portable lighting over 0.3 w/ft² in offices)

01	02	03	04	05	06
Name or Item Tag	**Complete Luminaire Description (i.e. 3-lamp fluorescent troffer, F32T8, one dimmable electronic ballast)**	**Installed Watts (Conditioned)**			
		Watts per luminaire	**How is Wattage determined**	**Total Number of Luminaires**	**Installed Watts**
SCI - 2x4 LED	---	51	According to	8	408

[1] *If lighting power densities were used in the compliance model Building Departments will need to check prescriptive forms for Luminaire Schedule details.*

K3. INDOOR CONDITIONED LIGHTING CONTROL CREDITS

Lighting Control Credits Schedule (includes all lighting controls installed in conditioned space for compliance credit per 140.6(a)2 and Table 140.6-A)

01	02	03	04	05	06	07	08	09
Area Description	**Primary Function Area (must meet requirements of Table 140.6-A and 170.2-L)**	**Type of Lighting Control**	**Power Adjustment Factor (PAF)**	**Luminaire Item Tag**	**Watts per Luminaire**	**# of Luminaires**	**Lighting Controlled (Watts)**	**Control Credit (Watts)**
Classroom 101	Classroom, Lecture, or Training Vocational	N/A	N/A	SCI - 2x4 LED	51	2	102	0
Classroom 101	Classroom, Lecture, or Training Vocational	N/A	N/A	SCI - 2x4 LED	51	6	306	0
Lighting Control Credits (Conditioned) Total (Watts)								**0**

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Plumbing	NRCI-PLB-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Indoor Lighting	NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls.
Indoor Lighting	NRCA-LTI-03-A - Automatic Daylight Controls.
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-03-A - Constant Volume Single Zone HVAC
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
Mechanical	NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.
Mechanical	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units
Mechanical	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance
Mechanical	NRCA-MCH-19-A Occupancy Sensor Controls

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Mechanical	NRCV-MCH-27 Indoor Air Quality & Mechanical Ventilation

Documentation Author's Declaration Statement

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: SILVER CREEK	Documentation Author Signature:
Company: SILVER CREEK	Signature Date:
Address:	CEA/HERS Certification Identification (if applicable):
City/State/Zip: ,	Phone: 951-943-5393

Responsible Person's Declaration statement

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:	
Company: SILVER CREEK		
Address: 2830 BARRETT AVE	Date Signed:	
City/State/Zip: PERRIS , CA 92571	License #: 2475	
Phone: 951-943-5393	Title: Engineer	Scope: Envelope
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Phone: 951-943-5393	Title: Engineer	Scope: Mechanical

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

PRF FORMS
24x40 - ZONE 16
WORST CASE

REVISIONS

1
2
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4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

JOHN W STARLIN
2475

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0.56

Project Name:	**04-121999 - 36x40 - WD FLR - WALL HVAC**	**Date Prepared:**	**2023-07-18**

A. General Information

1	Project Name	04-121999 - 36x40 - WD FLR - WALL HVAC			
2	Run Title				
3	Project Location	- specify -			
4	City	- specify -	5	Standards Version	Compliance 2022
6	Zip code	92301	7	Compliance Software (version)	CBECC 2022.2.1 SP1 (1298)
8	Climate Zone	14	9	Building Orientation (deg)	345
10	Building Type(s)	• Relocable Public School Building for use in all climate zones Occupancy: E	11	Weather File	PALMDALE_STYP20.epw
12	Project Scope	• New complete scope	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft²)	1440	15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft²)	0	17	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	1440	19	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance						Building Components Complying Prescriptively	
Envelope (See Table G)	Nonres	Performance	Solar Thermal Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒	Not Included		
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☐	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

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C1. COMPLIANCE SUMMARY

COMPLIES[3]

	Time Dependent Valuaton (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft² - yr)	Total[2] (kBtu/ft² - yr)	Total[2] (kBtu/ft² - yr)
Standard Design	354.06	354.06	30.15
Proposed Design	266.39	266.39	22.1
Compliance Margins	**87.67**	**87.67**	**8.05**
	Pass	**Pass**	**Pass**

[1] *Efficiency measures include improvements like a better building envelope and more efficient equipment*
[2] *Compliance Totals include efficiency, photovoltaics and batteries*
[3] *Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)

COMPLIES[2]

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	28.01	36.84	-8.83
Space Cooling	94.92	93.54	1.38
Indoor Fans	154.98	69.39	85.59
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	43.54	43.52	0.02
Indoor Lighting	32.61	23.1	9.51
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**354.06**	**266.39**	**87.67 (24.8%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**354.06**	**266.39**	**87.67 (24.8%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	67.93	67.93	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**421.99**	**334.32**	**87.67 (20.8%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft² /yr)

COMPLIES[2]

Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Space Heating	4.15	5.45	-1.3
Space Cooling	3.55	3.4	0.15
Indoor Fans	15.33	6.88	8.45
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	4.55	4.55	0
Indoor Lighting	2.57	1.82	0.75
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**30.15**	**22.1**	**8.05 (26.7%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**30.15**	**22.1**	**8.05 (26.7%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Receptacle	4.92	4.92	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**35.07**	**27.02**	**8.05 (23%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1
☐ This project is pursuing CalGreen Tier 2

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	1.3	1.7	-0.4	---	---	---
Space Cooling	3.5	3.4	0.1	---	---	---
Indoor Fans	7.9	3.5	4.4	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	2.5	2.5	0	---	---	---
Indoor Lighting	1.8	1.3	0.5	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**17**	**12.4**	**4.6**	**0**	**0**	**0**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**17**	**12.4**	**4.6**	**0**	**0**	**0**
Receptacle	3.8	3.8	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**20.8**	**16.2**	**4.6**	**0**	**0**	**0**

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	49.28	38.38	10.9	22.12
NET EUI[1]	49.28	38.38	10.9	22.12

[1] *Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

D1. EXCEPTIONAL CONDITIONS

- The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
- The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
- Project is claiming Exception 2 to Section 140.10(a): No PV system is required where the required PV system size is less than 4 kWdc.
- Project is claiming Exception 2 to Section 140.10(b): No battery storage system is required in buildings with battery storage system requirements with less than 10 kWh rated capacity.
- Project is claiming Exception 3 to Section 140.10(b): No battery storage system required for tenant spaces less than or equal to 5,000 ft2.

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft²)**	**Total Fenestration Area (ft²)**	**Window to Wall Ratio (%)**
North-Facing[1]	414	64	15.46
East-Facing[2]	440	0	0
South-Facing[3]	378	32	8.47

Notes
[1] *North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),*
[2] *East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),*
[3] *South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),*
[4] *West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),*

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft²)**	**Total Fenestration Area (ft²)**	**Window to Wall Ratio (%)**
West-Facing[4]	440	0	0
Total	**1672**	**96**	**5.74**
Roof	1440	0	0

Notes
[1] *North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),*
[2] *East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),*
[3] *South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),*
[4] *West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),*

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	**Air Barrier**
BuildingStory 1	Air barrier - not verified

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	Construction Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value		Units	Value	Description of Assembly Layers	Status[1]
					Interior	Exterior				
SCI PLYWD FLOOR	Exterior Floor	1,440	Metal	19	N/A	N/A	U-factor	0.0544	Vented Crawl Space SCI - STL JOIST FLOOR R-19 >16 OC Plywood - 1 in. Linoleum/cork tile - 1/4 in.	N
2x6 T111 WALL	Exterior Wall	1,672	Wood	19	N/A	N/A	U-factor	0.0619	Wood siding - 1/2 in. Vapor seal - plastic film - 1/16 in. SCI - 2x6 WD STUD WALL R-19 16 OC Gypsum Board - 1/2 in. Acoustic Tile - 1/2 in.	N
SCI MTL ROOF	Roof	1,440	Metal	30	N/A	N/A	U-factor	0.0554	Metal Standing Seam - 1/16 in. Building Paper - 1/16 in. Plywood - 3/4 in. SCI - STL JOIST ROOF R-30 Air - Cavity - Wall Roof Ceiling - 4 in. or more Acoustic Tile - 1/2 in.	N

[1] *Status: N - New, A - Altered, E - Existing*

G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)

01	02	03	04
Assembly Name	**Area (ft²)**	**Overall U-factor**	**Status[1]**
SCI - STD HM DOOR	42	1.45	N

[1] *Status: N - New, A - Altered, E - Existing*

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	**Fenestration Type/ Product Type / Frame Type**	**Certification Method[1]**	**Assembly Method**	**Area (ft²)**	**Overall U-factor**	**Overall SHGC**	**Overall VT**	**Status[2]**
NFRC #INT-A-73-00213-00011	Vertical fenestration Operable window N/A	NFRC	Site built	96	0.52	0.35	0.61	N

[1] *Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.*
[2] *Status: N - New, A - Altered, E - Existing*

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
Equipment Name	**Equipment Type**	**Qty**	**Heating**				**Cooling**			**Economizer Type (if present)**	**Status[1]**
			Total Heating Output (kBtu/h)	**Supp Heat Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**	**Total Cooling Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**		
AirSystem 101	Single Package VHP Air System	1	52	0	COP	3.3	56	EER	11	Fixed DB	N

[1] *Status: N - New, A - Altered, E - Existing*

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	**Qty**	**Design OA CFM**	**Supply Fan**				**Return / Relief Fan**					**Status[1]**
			CFM	**Power**	**Power Units**	**Control**	**Fan Type**	**CFM**	**Power**	**Power Units**	**Control**	
AirSystem 101	1	540	1,650	0.67	BHP	VSD	N/A	N/A	N/A	N/A	N/A	N

[1] *Status: N - New, A - Altered, E - Existing*

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	**Equipment Type**	**Interlocks per 140.4(n)[1]**	**Other Special Features and Controls**
AirSystem 101	Single Package VHP Air System	No	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	**Mechanical Ventilation**				**Conditioned Area (sf)**	**DCV or Occupant Sensor Controls, or Both**
	Ventilation Function	**# of People**	**Supply OA CFM**	**Exhaust CFM**		
ThermalZone 101	Education - Classrooms (ages 9-18)	36	540	0	1440	DCV

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	**System Type**	**Qty**	**Rated Capacity (kBtuh)**		**Airflow (cfm)**			**Fan**			**VSD**
			Heating	**Cooling**	**Design**	**MIn.**	**Min. Ratio**	**Power**	**Power Units**	**Cycles**	
TerminalUnit 101	Uncontrolled	1	N/A	N/A	1,650	N/A	0	N/A	N/A	N/A	☐

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
Occupancy Type[1]	**Conditioned Floor Area[2] (ft²)**	**Installed Lighting Power (Watts)**	**Lighting Control Credits (Watts)**	**Additional (Custom) Allowance**	
				Area Category Footnotes (Watts)	**Area Category Footnotes (Watts)**
Classroom, Lecture, or Training Vocational	1440	612	0	0	0
Building Totals:	**1440**	**612**	**0**	**0**	**0**

[1] *See Table 140.6-C*
[2] *See NRCC-LTI--E for unconditioned spaces*
[3] *Lighting information for existing spaces modeled is not included in this table*

K2. INDOOR CONDITIONED LIGHTING SCHEDULE

Luminaire Schedule (includes all permanent installed lighting in conditioned space, and portable lighting over 0.3 w/ft² in offices)

01	02	03	04	05	06
Name or Item Tag	**Complete Luminaire Description (i.e. 3-lamp fluorescent troffer, F32T8, one dimmable electronic ballast)**	**Installed Watts (Conditioned)**			
		Watts per luminaire	**How is Wattage determined**	**Total Number of Luminaires**	**Installed Watts**
SCI - 2x4 LED	---	51	According to	12	612

[1] *If lighting power densities were used in the compliance model Building Departments will need to check prescriptive forms for Luminaire Schedule details.*

K3. INDOOR CONDITIONED LIGHTING CONTROL CREDITS

Lighting Control Credits Schedule (includes all lighting controls installed in conditioned space for compliance credit per 140.6(a)2 and Table 140.6-A)

01	02	03	04	05	06	07	08	09
Area Description	**Primary Function Area (must meet requirements of Table 140.6-A and 170.2-L)**	**Type of Lighting Control**	**Power Adjustment Factor (PAF)**	**Luminaire Item Tag**	**Watts per Luminaire**	**# of Luminaires**	**Lighting Controlled (Watts)**	**Control Credit (Watts)**
Classroom 101	Classroom, Lecture, or Training Vocational	N/A	N/A	SCI - 2x4 LED	51	3	153	0
Classroom 101	Classroom, Lecture, or Training Vocational	N/A	N/A	SCI - 2x4 LED	51	9	459	0
							Lighting Control Credits (Conditioned) Total (Watts)	**0**

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Plumbing	NRCI-PLB-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Indoor Lighting	NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls.
Indoor Lighting	NRCA-LTI-03-A - Automatic Daylight Controls.
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-03-A - Constant Volume Single Zone HVAC
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
Mechanical	NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.
Mechanical	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units
Mechanical	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance
Mechanical	NRCA-MCH-19-A Occupancy Sensor Controls

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Mechanical	NRCV-MCH-27 Indoor Air Quality & Mechanical Ventilation

---

Documentation Author's Declaration Statement

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: SILVER CREEK	Documentation Author Signature:
Company: SILVER CREEK	Signature Date:
Address:	CEA/HERS Certification Identification (if applicable):
City/State/Zip: ,	Phone: 951-943-5393

Responsible Person's Declaration statement

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:	
Company: SILVER CREEK		
Address: 2830 BARRETT AVE	Date Signed:	
City/State/Zip: PERRIS , CA 92571	License #: 2475	
Phone: 951-943-5393	Title: Engineer	Scope: Envelope

Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:	
Company: SILVER CREEK		
Address: 2830 BARRETT AVE	Date Signed:	
City/State/Zip: PERRIS , CA 92571	License #: 2475	
Phone: 951-943-5393	Title: Engineer	Scope: Lighting

Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:	
Company: SILVER CREEK		
Address: 2830 BARRETT AVE	Date Signed:	
City/State/Zip: PERRIS , CA 92571	License #: 2475	
Phone: 951-943-5393	Title: Engineer	Scope: Mechanical

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

PRF FORMS
36x40 - ZONE 14
WORST CASE

REVISIONS

1
2
3
4
5

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

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-121999 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 08/31/2023~~

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

JOHN W STARLIN
2475

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0.57

Project Name:	**04-121999 - 36x40 - CONC FLR - WALL HVAC**	**Date Prepared:**	**2023-07-17**

A. General Information

1	Project Name	04-121999 - 36x40 - CONC FLR - WALL HVAC			
2	Run Title				
3	Project Location	- specify -			
4	City	- specify -	5	Standards Version	Compliance 2022
6	Zip code	92225	7	Compliance Software (version)	CBECC 2022.2.1 SP1 (1298)
8	Climate Zone	15	9	Building Orientation (deg)	75
10	Building Type(s)	• Relocable Public School Building for use in all climate zones Occupancy: E	11	Weather File	PALM-SPRINGS_STYP20.epw
12	Project Scope	• New complete scope	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft^2)	1440	15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft^2)	0	17	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	1440	19	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

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Envelope (See Table G)	Nonres	Performance	Solar Thermal Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒	Not Included		
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☐	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

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C1. COMPLIANCE SUMMARY

COMPLIES[3]

	Time Dependent Valuaton (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft^2 - yr)	Total[2] (kBtu/ft^2 - yr)	Total[2] (kBtu/ft^2 - yr)
Standard Design	292.9	292.9	20.07
Proposed Design	286.71	286.71	19.69
Compliance Margins	**6.19**	**6.19**	**0.38**
	Pass	**Pass**	**Pass**

[1] Efficiency measures include improvements like a better building envelope and more efficient equipment
[2] Compliance Totals include efficiency, photovoltaics and batteries
[3] Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded

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C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft^2 - yr)

COMPLIES[2]

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	10.6	6.81	3.79
Space Cooling	150.25	156.03	-5.78
Indoor Fans	68.71	69.74	-1.03
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	31.12	31.31	-0.19
Indoor Lighting	32.22	22.82	9.4
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**292.9**	**286.71**	**6.19 (2.1%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**292.9**	**286.71**	**6.19 (2.1%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	66.69	66.69	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**359.59**	**353.4**	**6.19 (1.7%)**

[1] Notes: This table is not used for Energy Code Compliance.

C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft^2 /yr)

COMPLIES[2]

Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Space Heating	1.51	0.93	0.58
Space Cooling	7.29	7.43	-0.14
Indoor Fans	5.48	6.29	-0.81
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	3.22	3.22	0
Indoor Lighting	2.57	1.82	0.75
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**20.07**	**19.69**	**0.38 (1.9%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**20.07**	**19.69**	**0.38 (1.9%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Receptacle	4.92	4.92	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**24.99**	**24.61**	**0.38 (1.5%)**

[1] Notes: This table is not used for Energy Code Compliance.

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	0.4	0.3	0.1	---	---	---
Space Cooling	6.6	6.8	-0.2	---	---	---
Indoor Fans	3.4	3.6	-0.2	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	1.8	1.8	0	---	---	---
Indoor Lighting	1.8	1.3	0.5	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**14**	**13.8**	**0.2**	**0**	**0**	**0**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**14**	**13.8**	**0.2**	**0**	**0**	**0**
Receptacle	3.8	3.8	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**17.8**	**17.6**	**0.2**	**0**	**0**	**0**

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft^2 / yr)	Proposed Design (kBtu/ft^2 / yr)	Margin (kBtu/ft^2 / yr)	Margin Percentage
GROSS EUI[1]	42.18	41.7	0.48	1.14
NET EUI[1]	42.18	41.7	0.48	1.14

[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.

D1. EXCEPTIONAL CONDITIONS

- The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
- The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
- Project is claiming Exception 2 to Section 140.10(a): No PV system is required where the required PV system size is less than 4 kWdc.
- Project is claiming Exception 2 to Section 140.10(b): No battery storage system is required in buildings with battery storage system requirements with less than 10 kWh rated capacity.
- Project is claiming Exception 3 to Section 140.10(b): No battery storage system required for tenant spaces less than or equal to 5,000 ft2.

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft^2)**	**Total Fenestration Area (ft^2)**	**Window to Wall Ratio (%)**
North-Facing[1]	440	0	0
East-Facing[2]	414	64	15.46
South-Facing[3]	440	0	0

Notes
[1] North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),
[2] East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),
[3] South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),
[4] West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),

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G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft^2)**	**Total Fenestration Area (ft^2)**	**Window to Wall Ratio (%)**
West-Facing[4]	378	32	8.47
Total	**1672**	**96**	**5.74**
Roof	1440	0	0

Notes
[1] North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),
[2] East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),
[3] South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),
[4] West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	**Air Barrier**
BuildingStory 1	Air barrier - not verified

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	**Construction Type**	**Area (ft^2)**	**Framing Type**	**Cavity R-Value**	**Continuous R-Value**		**Units**	**Value**	**Description of Assembly Layers**	**Status[1]**
					Interior	**Exterior**				
2x6 T111 WALL	Exterior Wall	1,672	Wood	19	N/A	N/A	U-factor	0.0619	Wood siding - 1/2 in. Vapor seal - plastic film - 1/16 in. SCI - 2x6 WD STUD WALL R-19 16 OC Gypsum Board - 1/2 in. Acoustic Tile - 1/2 in.	N
SCI MTL ROOF	Roof	1,440	Metal	30	N/A	N/A	U-factor	0.0554	Metal Standing Seam - 1/16 in. Building Paper - 1/16 in. Plywood - 3/4 in. SCI - STL JOIST ROOF R-30 Air - Cavity - Wall Roof Ceiling - 4 in. or more Acoustic Tile - 1/2 in.	N
SCI CONC FLOOR - R11	Exterior Floor	1,440	Metal	11	N/A	N/A	U-factor	0.0656	Vented Crawl Space SCI - CONC FLOOR JOISTS R-11 Concrete - 80 lb/ft3 - 4 in. Linoleum/cork tile - 1/4 in.	N

[1] Status: N - New, A - Altered, E - Existing

G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)

01	02	03	04
Assembly Name	**Area (ft^2)**	**Overall U-factor**	**Status[1]**
SCI - STD HM DOOR	42	1.45	N

[1] Status: N - New, A - Altered, E - Existing

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	**Fenestration Type/ Product Type / Frame Type**	**Certification Method[1]**	**Assembly Method**	**Area (ft^2)**	**Overall U-factor**	**Overall SHGC**	**Overall VT**	**Status[2]**
NFRC #INT-A-73-00213-00011	Vertical fenestration Operable window N/A	NFRC	Site built	96	0.52	0.35	0.61	N

[1] Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.
[2] Status: N - New, A - Altered, E - Existing

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
			Heating				**Cooling**				
Equipment Name	**Equipment Type**	**Qty**	**Total Heating Output (kBtu/h)**	**Supp Heat Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**	**Total Cooling Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**	**Economizer Type (if present)**	**Status[1]**
AirSystem 101	Single Package VHP Air System	1	52.5	0	COP	3.3	54.5	EER	11	Fixed DB	N

[1] Status: N - New, A - Altered, E - Existing

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
			Supply Fan				**Return / Relief Fan**					
Name or Item Tag	**Qty**	**Design OA CFM**	**CFM**	**Power**	**Power Units**	**Control**	**Fan Type**	**CFM**	**Power**	**Power Units**	**Control**	**Status[1]**
AirSystem 101	1	540	1,750	0.75	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

[1] Status: N - New, A - Altered, E - Existing

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	**Equipment Type**	**Interlocks per 140.4(n)[1]**	**Other Special Features and Controls**
AirSystem 101	Single Package VHP Air System	No	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

[1] Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
	Mechanical Ventilation					
Zone Name	**Ventilation Function**	**# of People**	**Supply OA CFM**	**Exhaust CFM**	**Conditioned Area (sf)**	**DCV or Occupant Sensor Controls, or Both**
ThermalZone 101	Education - Classrooms (ages 9-18)	36	540	0	1440	DCV

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
			Rated Capacity (kBtuh)		**Airflow (cfm)**			**Fan**			
System ID	**System Type**	**Qty**	**Heating**	**Cooling**	**Design**	**MIn.**	**Min. Ratio**	**Power**	**Power Units**	**Cycles**	**VSD**
TerminalUnit 101	Uncontrolled	1	N/A	N/A	1,750	N/A	0	N/A	N/A	N/A	☐

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
				Additional (Custom) Allowance	
Occupancy Type[1]	**Conditioned Floor Area[2] (ft^2)**	**Installed Lighting Power (Watts)**	**Lighting Control Credits (Watts)**	**Area Category Footnotes (Watts)**	**Area Category Footnotes (Watts)**
Classroom, Lecture, or Training Vocational	1440	612	0	0	0
Building Totals:	**1440**	**612**	**0**	**0**	**0**

[1] See Table 140.6-C
[2] See NRCC-LTI--E for unconditioned spaces
[3] Lighting information for existing spaces modeled is not included in this table

K2. INDOOR CONDITIONED LIGHTING SCHEDULE

Luminaire Schedule (includes all permanent installed lighting in conditioned space, and portable lighting over 0.3 w/ft^2 in offices)

01	02	03	04	05	06
		Installed Watts (Conditioned)			
Name or Item Tag	**Complete Luminaire Description (i.e. 3-lamp fluorescent troffer, F32T8, one dimmable electronic ballast)**	**Watts per luminaire**	**How is Wattage determined**	**Total Number of Luminaires**	**Installed Watts**
SCI - 2x4 LED	---	51	According to	12	612

[1] If lighting power densities were used in the compliance model Building Departments will need to check prescriptive forms for Luminaire Schedule details.

K3. INDOOR CONDITIONED LIGHTING CONTROL CREDITS

Lighting Control Credits Schedule (includes all lighting controls installed in conditioned space for compliance credit per 140.6(a)2 and Table 140.6-A)

01	02	03	04	05	06	07	08	09
Area Description	**Primary Function Area (must meet requirements of Table 140.6-A and 170.2-L)**	**Type of Lighting Control**	**Power Adjustment Factor (PAF)**	**Luminaire Item Tag**	**Watts per Luminaire**	**# of Luminaires**	**Lighting Controlled (Watts)**	**Control Credit (Watts)**
Classroom 101	Classroom, Lecture, or Training Vocational	N/A	N/A	SCI - 2x4 LED	51	3	153	0
Classroom 101	Classroom, Lecture, or Training Vocational	N/A	N/A	SCI - 2x4 LED	51	9	459	0
							Lighting Control Credits (Conditioned) Total (Watts)	**0**

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Plumbing	NRCI-PLB-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Indoor Lighting	NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls.
Indoor Lighting	NRCA-LTI-03-A - Automatic Daylight Controls.
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-03-A - Constant Volume Single Zone HVAC
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
Mechanical	NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.
Mechanical	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units
Mechanical	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance
Mechanical	NRCA-MCH-19-A Occupancy Sensor Controls

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Mechanical	NRCV-MCH-27 Indoor Air Quality & Mechanical Ventilation

---

Documentation Author's Declaration Statement

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: SILVER CREEK	Documentation Author Signature:
Company: SILVER CREEK	Signature Date:
Address:	CEA/HERS Certification Identification (if applicable):
City/State/Zip: ,	Phone: 951-943-5393

Responsible Person's Declaration statement

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:	
Company: SILVER CREEK		
Address: 2830 BARRETT AVE	Date Signed:	
City/State/Zip: PERRIS , CA 92571	License #: 2475	
Phone: 951-943-5393	Title: Engineer	Scope: Envelope

Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:	
Company: SILVER CREEK		
Address: 2830 BARRETT AVE	Date Signed:	
City/State/Zip: PERRIS , CA 92571	License #: 2475	
Phone: 951-943-5393	Title: Engineer	Scope: Lighting

Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:	
Company: SILVER CREEK		
Address: 2830 BARRETT AVE	Date Signed:	
City/State/Zip: PERRIS , CA 92571	License #: 2475	
Phone: 951-943-5393	Title: Engineer	Scope: Mechanical

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

PRF FORMS
36x40 - ZONE 15
WORST CASE

REVISIONS

1
2
3
4
5

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

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-121999 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 08/31/2023~~

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

JOHN W STARLIN
2475

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0.58

Project Name:	**04-121999 - 36x40 - WD FLR - WALL HVAC**	**Date Prepared:**	**2023-07-18**

A. General Information

1	Project Name	04-121999 - 36x40 - WD FLR - WALL HVAC			
2	Run Title				
3	Project Location	- specify -			
4	City	- specify -	5	Standards Version	Compliance 2022
6	Zip code	96006	7	Compliance Software (version)	CBECC 2022.2.1 SP1 (1298)
8	Climate Zone	16	9	Building Orientation (deg)	165
10	Building Type(s)	• Relocable Public School Building for use in all climate zones Occupancy: E	11	Weather File	BLUE-CANYON_STYP20.epw
12	Project Scope	• New complete scope	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft^2)	1440	15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft^2)	0	17	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	1440	19	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance						Building Components Complying Prescriptively	
Envelope (See Table G)	Nonres	Performance	Solar Thermal Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒	Not Included		
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☐	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

C1. COMPLIANCE SUMMARY

COMPLIES[3]

	Time Dependent Valuaton (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft^2 - yr)	Total[2] (kBtu/ft^2 - yr)	Total[2] (kBtu/ft^2 - yr)
Standard Design	302.73	302.73	50.07
Proposed Design	239.24	239.24	31.01
Compliance Margins	**63.49**	**63.49**	**19.06**
	Pass	**Pass**	**Pass**

[1] *Efficiency measures include improvements like a better building envelope and more efficient equipment*
[2] *Compliance Totals include efficiency, photovoltaics and batteries*
[3] *Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft^2 - yr)

COMPLIES[2]

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	60.15	98.26	-38.11
Space Cooling	17.95	17.18	0.77
Indoor Fans	163.12	71.34	91.78
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	30.46	30.46	0
Indoor Lighting	31.05	22	9.05
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**302.73**	**239.24**	**63.49 (21%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**302.73**	**239.24**	**63.49 (21%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	63.66	63.66	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**366.39**	**302.9**	**63.49 (17.3%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft^2 /yr)

COMPLIES[2]

Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Space Heating	19.06	9.93	9.13
Space Cooling	1.21	1.14	0.07
Indoor Fans	16.26	7.15	9.11
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	10.97	10.97	0
Indoor Lighting	2.57	1.82	0.75
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**50.07**	**31.01**	**19.06 (38.1%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**50.07**	**31.01**	**19.06 (38.1%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Receptacle	4.92	4.92	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**54.99**	**35.93**	**19.06 (34.7%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	0.2	3.8	-3.6	29	---	---
Space Cooling	1.1	1.1	0	---	---	---
Indoor Fans	8.2	3.6	4.6	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	---	---	---	17.2	17.2	0
Indoor Lighting	1.8	1.3	0.5	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**11.3**	**9.8**	**1.5**	**46.2**	**17.2**	**29**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**11.3**	**9.8**	**1.5**	**46.2**	**17.2**	**29**
Receptacle	3.8	3.8	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**15.1**	**13.6**	**1.5**	**46.2**	**17.2**	**29**

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft^2 / yr)	Proposed Design (kBtu/ft^2 / yr)	Margin (kBtu/ft^2 / yr)	Margin Percentage
GROSS EUI[1]	67.86	44.17	23.69	34.91
NET EUI[1]	67.86	44.17	23.69	34.91

[1] *Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

D1. EXCEPTIONAL CONDITIONS

- The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
- The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
- Project is claiming Exception 2 to Section 140.10(a): No PV system is required where the required PV system size is less than 4 kWdc.
- Project is claiming Exception 2 to Section 140.10(b): No battery storage system is required in buildings with battery storage system requirements with less than 10 kWh rated capacity.
- Project is claiming Exception 3 to Section 140.10(b): No battery storage system required for tenant spaces less than or equal to 5,000 ft2.

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft^2)**	**Total Fenestration Area (ft^2)**	**Window to Wall Ratio (%)**
North-Facing[1]	378	32	8.47
East-Facing[2]	440	0	0
South-Facing[3]	414	64	15.46

Notes
[1] *North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),*
[2] *East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),*
[3] *South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),*
[4] *West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),*

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft^2)**	**Total Fenestration Area (ft^2)**	**Window to Wall Ratio (%)**
West-Facing[4]	440	0	0
Total	**1672**	**96**	**5.74**
Roof	1440	0	0

Notes
[1] *North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),*
[2] *East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),*
[3] *South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),*
[4] *West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),*

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	**Air Barrier**
BuildingStory 1	Air barrier - not verified

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	**Construction Type**	**Area (ft^2)**	**Framing Type**	**Cavity R-Value**	**Continuous R-Value**		**Units**	**Value**	**Description of Assembly Layers**	**Status[1]**
					Interior	**Exterior**				
SCI PLYWD FLOOR	Exterior Floor	1,440	Metal	19	N/A	N/A	U-factor	0.0544	Vented Crawl Space SCI - STL JOIST FLOOR R-19 >16 OC Plywood - 1 in. Linoleum/cork tile - 1/4 in.	N
2x6 T111 WALL	Exterior Wall	1,672	Wood	19	N/A	N/A	U-factor	0.0619	Wood siding - 1/2 in. Vapor seal - plastic film - 1/16 in. SCI - 2x6 WD STUD WALL R-19 16 OC Gypsum Board - 1/2 in. Acoustic Tile - 1/2 in.	N
SCI MTL ROOF	Roof	1,440	Metal	30	N/A	N/A	U-factor	0.0554	Metal Standing Seam - 1/16 in. Building Paper - 1/16 in. Plywood - 3/4 in. SCI - STL JOIST ROOF R-30 Air - Cavity - Wall Roof Ceiling - 4 in. or more Acoustic Tile - 1/2 in.	N

[1] *Status: N - New, A - Altered, E - Existing*

G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)

01	02	03	04
Assembly Name	**Area (ft^2)**	**Overall U-factor**	**Status[1]**
SCI - STD HM DOOR	42	1.45	N

[1] *Status: N - New, A - Altered, E - Existing*

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	**Fenestration Type/ Product Type / Frame Type**	**Certification Method[1]**	**Assembly Method**	**Area (ft^2)**	**Overall U-factor**	**Overall SHGC**	**Overall VT**	**Status[2]**
NFRC #INT-A-73-00213-00011	Vertical fenestration Operable window N/A	NFRC	Site built	96	0.52	0.35	0.61	N

[1] *Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.*
[2] *Status: N - New, A - Altered, E - Existing*

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
Equipment Name	**Equipment Type**	**Qty**	**Heating**				**Cooling**			**Economizer Type (if present)**	**Status[1]**
			Total Heating Output (kBtu/h)	**Supp Heat Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**	**Total Cooling Output (kBtu/h)**	**Efficiency Unit**	**Efficiency**		
AirSystem 101	Single Package VHP Air System	1	52	0	COP	3.3	56	EER	11	Fixed DB	N

[1] *Status: N - New, A - Altered, E - Existing*

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	**Qty**	**Design OA CFM**	**Supply Fan**				**Return / Relief Fan**					**Status[1]**
			CFM	**Power**	**Power Units**	**Control**	**Fan Type**	**CFM**	**Power**	**Power Units**	**Control**	
AirSystem 101	1	540	1,650	0.67	BHP	VSD	N/A	N/A	N/A	N/A	N/A	N

[1] *Status: N - New, A - Altered, E - Existing*

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	**Equipment Type**	**Interlocks per 140.4(n)[1]**	**Other Special Features and Controls**
AirSystem 101	Single Package VHP Air System	No	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	**Mechanical Ventilation**				**Conditioned Area (sf)**	**DCV or Occupant Sensor Controls, or Both**
	Ventilation Function	**# of People**	**Supply OA CFM**	**Exhaust CFM**		
ThermalZone 101	Education - Classrooms (ages 9-18)	36	540	0	1440	DCV

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	**System Type**	**Qty**	**Rated Capacity (kBtuh)**		**Airflow (cfm)**			**Fan**			**VSD**
			Heating	**Cooling**	**Design**	**MIn.**	**Min. Ratio**	**Power**	**Power Units**	**Cycles**	
TerminalUnit 101	Uncontrolled	1	N/A	N/A	1,650	N/A	0	N/A	N/A	N/A	☐

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
Occupancy Type[1]	**Conditioned Floor Area[2] (ft^2)**	**Installed Lighting Power (Watts)**	**Lighting Control Credits (Watts)**	**Additional (Custom) Allowance**	
				Area Category Footnotes (Watts)	**Area Category Footnotes (Watts)**
Classroom, Lecture, or Training Vocational	1440	612	0	0	0
Building Totals:	**1440**	**612**	**0**	**0**	**0**

[1] *See Table 140.6-C*
[2] *See NRCC-LTI--E for unconditioned spaces*
[3] *Lighting information for existing spaces modeled is not included in this table*

K2. INDOOR CONDITIONED LIGHTING SCHEDULE

Luminaire Schedule (includes all permanent installed lighting in conditioned space, and portable lighting over 0.3 w/ft^2 in offices)

01	02	03	04	05	06
Name or Item Tag	**Complete Luminaire Description (i.e. 3-lamp fluorescent troffer, F32T8, one dimmable electronic ballast)**	**Installed Watts (Conditioned)**			
		Watts per luminaire	**How is Wattage determined**	**Total Number of Luminaires**	**Installed Watts**
SCI - 2x4 LED	---	51	According to	12	612

[1] *If lighting power densities were used in the compliance model Building Departments will need to check prescriptive forms for Luminaire Schedule details.*

K3. INDOOR CONDITIONED LIGHTING CONTROL CREDITS

Lighting Control Credits Schedule (includes all lighting controls installed in conditioned space for compliance credit per 140.6(a)2 and Table 140.6-A)

01	02	03	04	05	06	07	08	09
Area Description	**Primary Function Area (must meet requirements of Table 140.6-A and 170.2-L)**	**Type of Lighting Control**	**Power Adjustment Factor (PAF)**	**Luminaire Item Tag**	**Watts per Luminaire**	**# of Luminaires**	**Lighting Controlled (Watts)**	**Control Credit (Watts)**
Classroom 101	Classroom, Lecture, or Training Vocational	N/A	N/A	SCI - 2x4 LED	51	3	153	0
Classroom 101	Classroom, Lecture, or Training Vocational	N/A	N/A	SCI - 2x4 LED	51	9	459	0
						Lighting Control Credits (Conditioned) Total (Watts)		**0**

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Plumbing	NRCI-PLB-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Indoor Lighting	NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls.
Indoor Lighting	NRCA-LTI-03-A - Automatic Daylight Controls.
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-03-A - Constant Volume Single Zone HVAC
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
Mechanical	NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.
Mechanical	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units
Mechanical	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance
Mechanical	NRCA-MCH-19-A Occupancy Sensor Controls

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Mechanical	NRCV-MCH-27 Indoor Air Quality & Mechanical Ventilation

Documentation Author's Declaration Statement

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: SILVER CREEK	Documentation Author Signature:
Company: SILVER CREEK	Signature Date:
Address:	CEA/HERS Certification Identification (if applicable):
City/State/Zip: ,	Phone: 951-943-5393

Responsible Person's Declaration statement

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:	
Company: SILVER CREEK		
Address: 2830 BARRETT AVE	Date Signed:	
City/State/Zip: PERRIS , CA 92571	License #: 2475	
Phone: 951-943-5393	Title: Engineer	Scope: Envelope
Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:	
Company: SILVER CREEK		
Address: 2830 BARRETT AVE	Date Signed:	
City/State/Zip: PERRIS , CA 92571	License #: 2475	
Phone: 951-943-5393	Title: Engineer	Scope: Lighting

Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:	
Company: SILVER CREEK		
Address: 2830 BARRETT AVE	Date Signed:	
City/State/Zip: PERRIS , CA 92571	License #: 2475	
Phone: 951-943-5393	Title: Engineer	Scope: Mechanical

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

PRF FORMS
36x40 - ZONE 16
WORST CASE

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

JOHN W STARLIN
2475

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0.59

STATE OF CALIFORNIA
Nonresidential Building Commissioning
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-CXR-E
This document is used to demonstrate compliance with mandatory commissioning requirements in 120.8 for nonresidential buildings and hotel/motel or mixed-use buildings with nonresidential spaces. This document does not demonstrate compliance with commissioning requirements within Title 24, Part 11, which need to be documented separately if they apply.	
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM	**Report Page:** (Page 1 of 6)
Project Address:	**Date Prepared:** 2023-01-31T18:53:26-05:00

A. GENERAL INFORMATION

01	Project Location (city)	Perris	04	Building Size (ft²)	960
02	Occupancy Type	Nonresidential	05	Nonresidential Conditioned Floor Area (ft²)	< 10,000 ft²
03	Project Type	Newly constructed	06	HVAC System Type	Unitary or packaged equipment each serving one zone
			07	Climate Zone	10

B. PROJECT SCOPE

Based on project information provided in Table A, Table B indicates which commissioning related requirements apply per 120.8. Table B is not editable by the user.

Commissioning Requirements per 120.8

01	Table F: Design Review Kickoff	120.8(d)1 and 120.8(d)2	The design review kickoff meeting establishes who will play the role of the design reviewer, the project schedule and identify owner's requirements. This meeting should be conducted during schematic design.
02	Table G: Owner's Project Requirements (OPR)	120.8(b)	This requirement does not apply.
03	Table H: Basis of Design (BOD)	120.8(c)	This requirement does not apply.
04	Table I: Design Review	120.8(d) and 120.8(e)	The design reviewer(s) reviews the construction documents for clarity, completeness, and adherence to the owner's goals. Commissioning measures must be included in the construction documents to facilitate the design review and commissioning process. For projects with >= 10,000 ft² of nonresidential conditioned floor area, the design review is for adherence with the Owner's Project Requirements (OPR) and Basis of Design (BOD). This should be conducted during design.
05	Table J: Commissioning Plan	120.8(f)	This requirement does not apply.
06	Table K: Functional Performance Testing	120.8(g)	This requirement does not apply.
07	Table L: Documentation and Training	120.8(h)	This requirement does not apply.
08	Table M: Commissioning Report	120.8(i)	This requirement does not apply.

Registration Number:
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Generated Date/Time:
Report Version: 2022.0.000
Schema Version: rev 20220101

Documentation Software: Energy Code Ace
Compliance ID: 86563-0123-0005
Report Generated: 2023-01-31 15:53:28

STATE OF CALIFORNIA
Nonresidential Building Commissioning
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-CXR-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM	**Report Page:** (Page 2 of 6)
Project Address:	**Date Prepared:** 2023-01-31T18:53:26-05:00

C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with commissioning requirements per 120.8. This table is not editable by the user. If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

01	02	03	04	05	06	07	08	09
Design Kickoff Review	Owner's Project Requirements	Basis of Design	Design Review	Commissioning Plan	Functional Performance Testing	Documentation and Training	Commissioning Report	Compliance Results
Table F	Table G	Table H	Table I	*Table J*	Table K	Table L	Table M	
Yes			Yes					COMPLIES
10	Design Reviewer(s) for the project include:			John Starlin				COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

Registration Number:
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Generated Date/Time:
Report Version: 2022.0.000
Schema Version: rev 20220101

Documentation Software: Energy Code Ace
Compliance ID: 86563-0123-0005
Report Generated: 2023-01-31 15:53:28

STATE OF CALIFORNIA
Nonresidential Building Commissioning
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-CXR-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM	**Report Page:** (Page 3 of 6)
Project Address:	**Date Prepared:** 2023-01-31T18:53:26-05:00

F. DESIGN REVIEW KICKOFF MEETING

This table indicates that the design reviewer meets the qualification requirements per Title 24, Part 1 Section 10-103(a)1 and demonstrates compliance with design review kickoff requirements per 120.8(d)2. This meeting should occur during the Schematic Design phase of the project.

Design Review Kickoff Meeting Details

01	Date of Design Review Kickoff Meeting			2022-12-05
02	Meeting Attendees: (one person may play multiple roles)			
☒	Owner/Facility Manager:	Ryan McIntosh	☐ Design Reviewer(s)	
☐	Project Manager:		☒ Design Architect/ Engineer(s):	John Starlin
☐	Contractor:		☐ Certified Acceptance Test Tech(s):	
☐	Commissioning Provider:		☒ Energy/ T24 Part 6 Consultant:	John Starlin

Design Reviewer Qualifications per Title 24 Part 1 Section 10-103(a)1

		Do the Design Reviewer(s) meet these qualifications?	
		Yes	No
03	The design reviewer(s) must be licensed professional engineers or licensed architects, or licensed contractors representing services performed by or under the direct supervision of a licensed engineer or architect, as specified in the provisions of Division 3 of the Business and Professions Code. In addition, for buildings with < 10,000 ft², the design reviewer(s) may also be a qualified in-house engineer or architect with no other project involvement or a third party engineer, architect or contractor.	●	○
04	The design reviewer(s) for this project will be:	John Starlin	

Preliminary Construction Schedule

		Start Date	Completion Date
05	Schematic Design	2022-12-05	2022-12-05
06	Design Development	2022-12-05	2022-12-05
07	Construction Documents	2022-12-05	2023-02-24
08	Construction	2024-01-01	2024-01-01
09	Building Turnover	2024-01-01	2024-01-01

Project Goals Related to Energy Efficiency

10	Operational Costs	Code Minimum performance
11	Desired Building Lifespan	30 - 50 years.
12	Equipment Lifecycle	Industry standard.
13	Project Energy Efficiency Goals	Code Minimum performance

Registration Number:
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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STATE OF CALIFORNIA
Nonresidential Building Commissioning
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-CXR-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM	**Report Page:** (Page 4 of 6)
Project Address:	**Date Prepared:** 2023-01-31T18:53:26-05:00

F. DESIGN REVIEW KICKOFF MEETING

14	Envelope Goals	Code minimum performance.
15	HVAC System Goals	Code minimum performance.
16	Indoor Lighting System Goals	Code minimum performance.
17	Outdoor Lighting System Goals	Code minimum performance.
18	Water Heating System Goals	Code minimum performance.
19	Equipment and System Specifications	Industry standard equipment.
20	Operations and Maintenance	No specific requirements.

G. OWNER'S PROJECT REQUIREMENTS (OPR)

This section does not apply to this project.

H. BASIS OF DESIGN (BOD)

This section does not apply to this project.

I. CONSTRUCTION DOCUMENT DESIGN REVIEW CHECKLIST

This table is only completed if a design review document is not attached to permit application to demonstrate compliance with 120.8(b) and 120.8(e). For buildings with >= 10,000 ft² conditioned floor area, the design review will ensure the construction documents meet the Owner's Project Requirements (Table G.) and the Basis of Design Documents (Table H.). For buildings with < 10,000 ft² conditioned floor area, the design review will ensure the construction documents meet the goals documented in Table I. during the Design Review Kickoff.

		YES	NO
01	Attaching Completed Design Review Documentation?	○	●

Design Review Checklist

02	Envelope Design	The design represents the typical PC building design with updates (as applicable) for the 2022 code cycle.
03	HVAC System Design	The design represents the typical PC building design with updates (as applicable) for the 2022 code cycle.
04	HVAC Controls Design	The design represents the typical PC building design with updates (as applicable) for the 2022 code cycle.
05	Indoor Lighting System Design	The design represents the typical PC building design with updates (as applicable) for the 2022 code cycle.
06	Indoor Lighting Controls Design	The design represents the typical PC building design with updates (as applicable) for the 2022 code cycle.

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CERTIFICATE OF COMPLIANCE, NONRESIDENTIAL BUILDING COMMISSIONING

STATE OF CALIFORNIA
Nonresidential Building Commissioning
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-CXR-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM	**Report Page:** (Page 5 of 6)
Project Address:	**Date Prepared:** 2023-01-31T18:53:26-05:00

I. CONSTRUCTION DOCUMENT DESIGN REVIEW CHECKLIST

07	Outdoor Lighting System and Controls Design	The design represents the typical PC building design with updates (as applicable) for the 2022 code cycle.
08	Water Heating System Design	The design represents the typical PC building design with updates (as applicable) for the 2022 code cycle.
09	Other Systems and Features	The design represents the typical PC building design with updates (as applicable) for the 2022 code cycle.

J. COMMISSIONING PLAN

This section does not apply to this project.

K. FUNCTIONAL PERFORMANCE TESTING

This section does not apply to this project.

L. DOCUMENTATION AND TRAINING

This section does not apply to this project.

M. COMMISSIONING REPORT

This section does not apply to this project.

N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

There are no forms required for this project.

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

Registration Number:
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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STATE OF CALIFORNIA
Nonresidential Building Commissioning
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-CXR-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM	**Report Page:** (Page 6 of 6)
Project Address:	**Date Prepared:** 2023-01-31T18:53:26-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ryan McIntosh	Documentation Author Signature:
Company: Silver Creek Industries, LLC	Signature Date: 02-20-2023
Address: 2830 Barrett Ave	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: John Starlin	Responsible Designer Signature:
Company: Silver Creek Industries, LLC	Date Signed: 02-20-2023
Address: 2830 Barrett Ave	License: 2475
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

Registration Number:
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-E
This document is used to demonstrate compliance with mandatory requirements in 130.5, for electrical systems in newly constructed nonresidential and hotel/motel occupancies and 160.6 and 160.9 for electrical systems in newly constructed multifamily occupancies. Additions and alterations to electrical service systems in nonresidential and hotel/motel occupancies will also use this document to demonstrate compliance per 141.0(a) or 141.0(b)2P for alterations. For multifamily addition or alterations compliance will be documented per 180.1(a) or 180.2 (b)4Bvii	
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM	**Report Page:** (Page 1 of 4)
Project Address:	**Date Prepared:** 2023-01-31T18:53:58-05:00

A. GENERAL INFORMATION

01	Project Location (city)	Perris	02	Climate Zone	10
			03	Occupancy Types Within Project:	Classroom

B. PROJECT SCOPE

This table includes electrical systems that are within the scope of the permit application.

01	02	03	04	05	06	07
Electrical Service Designation/ Description	Scope of Work[1]	Rating[2] (kVA)	Utility Provided Metering System Exception to 130.5(a)/ 160.6(a)[3]	System subject to CA Elec Code Article 517 Exception to 130.5(a)and (b)	Demand Response Controls	Provides power to dwelling units/common living areas only in multifamily occupancy
Site feeder	Add/Alt to feeders and branch circuits only	---	☐	☐	Where required, demand response controls must be specified which are capable of receiving and automatically responding to at least one standards based messaging protocol which enables demand response after receiving a demand response signal. Sections 120.2/ 160.3, 130.1/ 160.5, and 130.5/ 160.5, and mechanical, Indoor lighting, and sign lighting Certificate of Compliance documents will indicate when demand response controls are required.	☐

[1] *FOOTNOTES: Adding only new feeders and branch circuits triggers Voltage Drop 130.5(c)/160.6(c), no other requirements from 130.5/160.6 are required.*
[2] *If common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.*
[3] *Applicable if the utility company is providing a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.*

Registration Number:
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM	**Report Page:** (Page 2 of 4)
Project Address:	**Date Prepared:** 2023-01-31T18:53:58-05:00

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through J. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.

01		02		03		04	05	06
Service Electrical Metering 130.5(a)/ 160.6(a) (See Table F)	AND	Separation for Monitoring 130.5(b)/ 160.6(b) (See Table G)	AND	Voltage Drop 130.5(c)/ 160.6(c) (See Table H)	AND	Controlled Receptacles 130.5(d)/ 160.6(d) (See Table I)	Electric Ready 160.9 (See Table J)	**Compliance Results**
	AND		AND	Yes	AND			COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

H. VOLTAGE DROP

This table includes entirely new or complete replacement electrical power distribution systems, or alterations that add, modify or replace both feeders and branch circuits to demonstrate compliance with 130.5(c)/ 160.6(c). For alterations, only the altered circuits must demonstrate compliance per 141.0(b)2Piii/ 180.2(b)4Bviic.

01	02			03	04	05	
Electrical Service Designation/Description	Combined Voltage Drop on Installed Feeder/Branch Circuit Conductors Compliance Method			Location of Voltage Drop Calculations[1]	Sheet Number for Voltage Drop Calculations in Construction Documents	Field Inspector	
						Pass	Fail
Site feeder	☒ Voltage drop less than 5%	☐	Permitted by CA Elec Code (Exception to 130.5(c))*	Contractor Responsible		☐	☐

** NOTES: If "Permitted by CA Elec Code *" is selected under Compliance Method above, please indicate where the exception applies in the space provided below.*

[1] *FOOTNOTES: Voltage drop calculations may be attached to the permit application outside the construction documents if allowed by the Authority Having Jurisdiction. Select "attached" if applicable. If calculations will be the responsibility of the installing contractor, select "Contractor Responsible".*

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CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM	**Report Page:** (Page 3 of 4)
Project Address:	**Date Prepared:** 2023-01-31T18:53:58-05:00

K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-ELC-E - Must be submitted for all buildings

L. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

Registration Number:
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Generated Date/Time:
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STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-ELC-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM	**Report Page:** (Page 4 of 4)
Project Address:	**Date Prepared:** 2023-01-31T18:53:58-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ryan McIntosh	Documentation Author Signature:
Company: Silver Creek Industries, LLC	Signature Date: 02-20-2023
Address: 2830 Barrett Ave	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: John Starlin	Responsible Designer Signature:
Company: Silver Creek Industries, LLC	Date Signed: 02-20-2023
Address: 2830 Barrett Ave	License: 2475
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

Registration Number:
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CERTIFICATE OF COMPLIANCE, ELECTRICAL POWER DISTRIBUTION

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

CERTIFICATE OF COMPLIANCE FORMS

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLIN 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
A-0.6A

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 1 of 8)
Project Address:		Date Prepared: 2023-01-31T18:54:22-05:00

This document is used to demonstrate compliance with requirements in 110.9, 130.0, 130.2, 140.7, and 141.0(b)2I, for outdoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e)6, 180.1(a) and 180.2(b)4Bv for outdoor lighting scopes using the prescriptive path for multifamily and mixed-use occupancies. Multifamily includes dormitory and senior living facilities.

A. GENERAL INFORMATION

01	Project Location (city)	Perris	04	Total Illuminated Hardscape Area (ft²)	60
02	Climate Zone	10			
03	Outdoor Lighting Zone per Title 24 Part 1 10.114 or as designated by Authority Having Jurisdiction (AHJ):				
☐	LZ-0: Very Low - Undeveloped Parkland	☐	LZ-2: Moderate - Urban Clusters	☐	LZ-4: High - Must be reviewed by CA Energy Commission for Approval
☐	LZ-1: Low - Rural Areas	☒	LZ-3: Moderately High - Urban Areas		
05	Occupancy Types within Project				
• Classroom					

B. PROJECT SCOPE

This table includes outdoor lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.7 / 170.2(e)6i or 141.0(b)2I. / 180.2(b)4Bv for alterations.

My Project Consists of:

01	02
☒ New Lighting System	Must Comply with Allowances from 140.7 / 170.2(e)6
☐ Altered Lighting System	Is your alteration increasing the connected lighting load (Watts)? ○ Yes ○ No

03	04	05
% of Existing Luminaires Being Altered[1]	Sum Total of Luminaires Being Added or Altered	Calculation Method
☐ < 10% ☐ >= 10% and < 50% ☐ >= 50%		

Please proceed to Table C. Outdoor Lighting Fixture Schedule to define the project's luminaires.

[1] *FOOTNOTES: % of Existing Luminaires Being Altered = (Sum Total of Luminaires Being Added or Altered / Existing Luminaires within the Scope of the Permit Application) x 100.*

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-LTO-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM Report Page: (Page 2 of 8)
Project Address: Date Prepared: 2023-01-31T18:54:22-05:00

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through N. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.

Calculations of Total Allowed Lighting Power (Watts) 140.7 / 170.2(e)6i or 141.0(b)2I. / 180.2(b)4Bv											Compliance Results		
01		02		03		04		05		06	07	08	09
General Hardscape Allowance 140.7(d1) / 170.2(e)6 (See Table I)	+	Per Application 140.7(d2) / 170.2(e)6 (See Table J)	+	Sales Frontage 140.7(d2) (See Table K)	+	Ornamental 140.7(d2) / 170.2(e)6 (See Table L)	+	Per Specific Area 140.7(d2) / 170.2(e)6 (See Table M)	OR	Existing Power Allowance 141.0(b)2I. / 180.2(b)4Bv (See Table N)	= **Total Allowed** (Watts)	≥ **Total Actual** (Watts)	**07 must be >= 08**
258.06	+	19	+	---	+	---	+	---	OR	---	= 277.06	≥ 30	COMPLIES
Shielding Compliance (See Table G for Details)													N/A
Controls Compliance (See Table H for Details)													COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

Selections made in Certificates of Installation Table have been changed by the permit applicant. See Table E. Additional Remarks for permit applicant's explanation.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

(NRCI-LTO-01-E Explanation) 1

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STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-LTO-D
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM Report Page: (Page 3 of 8)
Project Address: Date Prepared: 2023-01-31T18:54:22-05:00

F. OUTDOOR LIGHTING FIXTURE SCHEDULE

For new or altered lighting systems demonstrating compliance with 140.7 / 170.2(e)6 all new luminaires being installed and any existing luminaires remaining or being moved within the spaces covered by the permit application are included in the Table below. For altered lighting systems using the Existing Power method per 141.0(b)2I, only new luminaires being installed and replacement luminaires being installed as part of the project scope are included (ie, existing luminaires remaining or existing luminaires being moved are not included). Outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here.

Designed Wattage:

01	02		03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description		Watts per luminaire* [2]	How is Wattage determined	Total Number Luminaires [2]	Luminaire Status[3]	Excluded per 140.7(a) / 170.2(e)6A	Design Watts	Cutoff Req. > 6,200 initial lumen output 130.2(b) / 160.5(c)1[4]	Field Inspector	
										Pass	Fail
F-1	0 Watt LED Wallpack	☐ Linear	30	Mfr. Spec	1	New	☐	30	NA: < 6200 lumens	☐	☐
							Total Design Watts:	30			

* NOTES: Selections with a * require a note in the space below explaining how compliance is achieved.
EX: Luminaire is lighting a statue; EXCEPTION 2 to 130.2(b)

[1] *FOOTNOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b)*
[2] *For linear luminaires, wattage should be indicated as W/ft instead of Watts/luminaire. Total linear feet should be indicated in column 05 instead of number of luminaires.*
[3] *Select "New" for new luminaires in a new outdoor lighting project, or for added luminaires in an alteration. Select "Altered" for replacement luminaires in an alteration. Select "Existing to Remain" for existing luminaires within the project scope that are not being altered and are remaining. Select "Existing Reinstalled" for existing luminaires which are being removed and reinstalled as part of the project scope.*
[4] *Compliance with mandatory shielding requirements is required for luminaires with initial lumen output >= 6,200 unless exempted by 130.2(b)/ 160.5(c)*

G. SHIELDING REQUIREMENTS (BUG)

This section does not apply to this project.

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STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-LTO-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM Report Page: (Page 4 of 8)
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H. OUTDOOR LIGHTING CONTROLS

This table demonstrates compliance with controls requirements for all new or altered luminaires installed as part of the permit application. For alteration projects, luminaires which are existing to remain (ie untouched) and luminaires which are removed and reinstalled (wiring only) do not need to be included in this table even if they are within the spaces covered by the permit application.
Outdoor lighting for nonresidential buildings, parking garages and common service areas in multifamily buildings must be documented separately from outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit

Mandatory Controls for Nonresidential Occupancies, Parking Garages & Common Areas in Multifamily Buildings

01	02	03	04	05	
Area Description	Shut-Off 130.2(c)1 / 160.5(c)	Auto-Schedule 130.2(c)2 / 160.5(c)	Motion Sensor 130.2(c)3 / 160.5(c)	Field Inspector	
				Pass	Fail
Entry: "F-1"	Photocontrol	Provided	NA: Facade, etc. >=24 ft	☐	☐

[1] *FOOTNOTE: Text has been abbreviated, please refer to Table 160.5-A to confirm compliance with the specific light source technologies listed.*
[2] *Authority having jurisdiction may ask for cutsheets or other documentation to confirm compliance of light source.*
[3] *Recessed luminaires marked for use in fire-rated installations, and recessed luminaires installed in non-insulated ceilings are excepted from I and iii.*

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CERTIFICATE OF COMPLIANCE, OUTDOOR LIGHTING

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-LTO-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM Report Page: (Page 1 of 8)
Project Address: Date Prepared: 2023-01-31T18:54:22-05:00

I. LIGHTING POWER ALLOWANCE (per 140.7 / 170.2(e))

This table includes areas using allowance calculations per 140.7 / 170.2(e). General Hardscape Allowance is per Table 140.7-A/Table 170.2-B while "Use it or lose it" Allowances are per Table 140.7-B /Table 170.2-S. Indicate which allowances are being used to expand sections for user input. Luminaires that qualify for one of the "Use it or lose it" allowances shall not qualify for another "Use it or lose it" allowance.
Outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here.

	01				
		"Use it or lose it" Allowance (select all that apply) (select all that apply)			
☒ General Hardscape Allowance Table I (below)	☒ Per Application Table J	☐ Sales Frontage Table K	☐ Ornamental Table L	☐ Per Specific Area Table M	

Calculated General Hardscape Lighting Power Allowance per Table 140.7-A for Nonresidential & Hotel/Motel

02	03	04	05	06	07	08	09
Area Description	Area Wattage Allowance (AWA)			Linear Wattage Allowance (LWA)			Total General AWA + LWA (Watts)
	Illuminated Area (ft²)	Allowed Density (W/ft²)	Area Allowance (Watts)	Perimeter Length (lf)	Allowed Density (W/lf)	Linear Allowance (Watts)	
Entry	60	0.021	1.26	34	0.2	6.8	8.06
				Initial Wattage Allowance for Entire Site (Watts):			250
				Instances of Initial Wattage Allowance (LZ 0 only)[1]			
				Total General Hardscape Allowance (Watts):			258.06

J. LIGHTING ALLOWANCE: PER APPLICATION

This table includes areas using the wattage allowance per application from Table 140.7-B / Table 170.2-S.

01	02	03	04	05	06	07	08	09	10
Area Description	Application per Table 140.7-B[1]	CALCULATED ALLOWANCE (Watts)			DESIGN WATTS				Additional Allowance (Watts)
		# of Locations	Allowance per Location[2]	Extra Allowance (Watts)	Luminaire Name or Item Tag	Watts per Luminaire	# of Luminaires	Design Watts	
Entry Door	Building Entrance/Exit	1	19	19	F-1	30	1	30	19
							Total Design Watts for this Area:	30	
							Total Allowance (Watts) All Areas:		19

[1] *FOOTNOTES: Primary entrance applications are only available for senior care facilities, healthcare facilities, police stations, hospitals, fire stations, and emergency vehicle facilities.*
[2] *The Allowance per Location for ATMs is 100W for the first ATM and 35W for each additional per Table 140.7-B /Table 170.2-S.*
[3] *For luminaires indicated in Table F as linear, wattage in column 07 is W/lf instead of Watts/luminaire. Total linear feet should be indicated in column 08 instead of number of luminaires.*

K. LIGHTING ALLOWANCE: SALES FRONTAGE

This section does not apply to this project.

L. LIGHTING ALLOWANCE: ORNAMENTAL

This section does not apply to this project.

M. LIGHTING ALLOWANCE: PER SPECIFIC AREA

This section does not apply to this project.

N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)

This section does not apply to this project.

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 86563-0123-0007 Report Generated: 2023-01-31 15:54:24

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-LTO-I
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM Report Page: (Page 7 of 8)
Project Address: Date Prepared: 2023-01-31T18:54:22-05:00

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-LTO-E - Must be submitted for all buildings

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls are added to <= 20 luminaires.	Entry: "F-1"

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 86563-0123-0007 Report Generated: 2023-01-31 15:54:24

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-LTO-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM Report Page: (Page 8 of 8)
Project Address: Date Prepared: 2023-01-31T18:54:22-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature:
Ryan McIntosh	
Company:	Signature Date:
Silver Creek Industries, LLC	02-16-2023
Address: 2830 Barrett Ave	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: John Starbin	Responsible Designer Signature:
Company: Silver Creek Industries, LLC	Date Signed: 02-16-2023
Address: 2830 Barrett Ave	License: 2475
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 86563-0123-0007 Report Generated: 2023-01-31 15:54:24

CERTIFICATE OF COMPLIANCE, OUTDOOR LIGHTING

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 1 of 6)
Project Address:		Date Prepared: 2023-02-02T16:17:35-05:00

This document is used to demonstrate compliance for nonresidential occupancies with requirements in 110.1, 110.3, 120.3, and 140.5, and with requirements in 141.0 for additions and alterations, for domestic water heating scopes using the prescriptive path. For high-rise residential and hotel/motel occupancies compliance is demonstrated with requirements in 110.1, 110.3, 160.4 and 170.2(d), and with requirements 180.1 for additions and 180.2 for alterations.

A. GENERAL INFORMATION

01	Project Location (city)	Perris	02	Climate Zone	10
03	Occupancy Types Within Project (select all that apply):				
• Classroom sinks and restroom lavatories					

B. PROJECT SCOPE

This table includes domestic water heating systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive paths outlined in 140.7 / 170.2(d) and 141.0(a)/ 180.1, or 141.0(b)2N / 180.2 for additions or alterations. Solar water heating systems are documented on the NRCC-SAB compliance document. Combined hydronic water heating systems are documented on the NRCC-MCH compliance document.

01	02	03	
My project consists of (check all that apply):	System Type[1,2]	System Components	
☒ New system (DHW system being installed for the first time in newly constructed building)	Individual System (serving nonresidential spaces)	☒ Equipment	☒ Distribution ☒ Controls
☐ System Alteration (equipment, distribution or controls)		☐ Equipment	☐ Distribution ☐ Controls

[1] *FOOTNOTES: Point of use water heaters, or other non-central systems used to serve nonresidential spaces, are considered individual systems.*
[2] *Dwelling units refers to hotel/motel guest rooms and units in a multifamily residential occupancy.*
[3] *DHW systems serving 2 or more dwelling units are considered "Central Systems" for multifamily occupancies*

C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with water heating requirements. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. or the table indicated as not compliant for guidance.

01	02	03	04
Domestic Hot Water Equipment	Distribution Systems	Controls	**Compliance Results**
Table F	Table G	Table H	
Yes	Yes	Yes	COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 86563-0223-0009 Report Generated: 2023-02-02 13:17:38

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-PLB-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM Report Page: (Page 2 of 6)
Project Address: Date Prepared: 2023-02-02T16:17:35-05:00

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. DOMESTIC HOT WATER EQUIPMENT

This table is used to demonstrate compliance with mandatory equipment requirements in 110.1 and 110.3. Compliance with prescriptive requirements in 140.5(c) / 170.2(d) must also be demonstrated and with 141.0 / 180.1 / 180.2 for addition and alteration scopes.

Equipment Schedule: Water Heating Efficiency and Standby Loss

03	04		05		06		
System Name	WH-1	Exception to 140.5(c)/ 170.2(d)3	Exceptions Do Not Apply	☐	Gas Service Water Heating System >= 1MMBtu/h[1]	Capacity-weighted Average Efficiency %	

07	08	09	10		11	12	13	14	15
Name or Item Tag	Equipment Type	Volume (gal)	Rated Input Capacity (Btu/h)	Max GPM/ First Hour Rating (FHR)	Rated Efficiency	Minimum Efficiency Required	Efficiency Unit	Designed Standby Loss	Maximum Standby Loss
WH-1	Consumer Rated Electric Instantaneous (<=12kW)	<=2	10,264	0 <= GPM <1.7	0.91	0.91	UEF		

[1] *FOOTNOTE: In systems >= 1MMBtu/h with multiple units, gas water heaters with input capacity > 100,000 Btu/h may meet 90% Et requirements via an input capacity-weighted average.*

Water Heating Equipment All Occupancies

	Yes	No	Not Applicable	Requirement
18	☐	☐	☒	Unfired storage tank insulation shall have Internal + External >=R-16 OR External >=R-3.5. Label required per 110.3(c)3
19	☐	☐	☒	New state buildings 60% of energy for service water heating from site solar energy or recovered energy per 110.3(c)5
20	☐	☐	☒	Isolation valves for instantaneous water heater with input rating >6.8 kBTUH or 2 kW has been specified per 110.3(c)6
21	☐	☐	☒	School buildings < 25,000 ft² and < 4 stories must install a heat pump water heating system per 140.5(a)1. Water heating systems serving an individual bathroom space may be an instantaneous electric water heater.

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 86563-0223-0009 Report Generated: 2023-02-02 13:17:38

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-PLB-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM Report Page: (Page 3 of 6)
Project Address: Date Prepared: 2023-02-02T16:17:35-05:00

G. DOMESTIC HOT WATER DISTRIBUTION SYSTEM

This table is used to demonstrate compliance for nonresidential occupancies with distribution requirements in 120.3 and 140.5. For multifamily and hotel/motel occupancies, compliance is demonstrated with requirements 110.3(c), 160.4, 170.2(d).

Mandatory Pipe Insulation All Occupancies

13	☐	For systems serving dwelling units, pipe insulation must meet the minimum insulation requirements in Table 160.4-A (see below) except: • Piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. Piping that penetrates metal framing shall use grommets, plugs, wrapping or other insulating material to assure that no contact is made with the metal framing. Insulation shall abut securely against all framing members • Piping installed in interior or exterior walls shall not be required to have pipe insulation if all of the requirements are met for compliance with Quality Insulation Installation (QII) as specified in the Reference Residential Appendix RA3.5. • Piping surrounded with a minimum of 1 inch of wall insulation, 2 inches of crawlspace insulation, or 4 inches of attic insulation, shall not be required to have pipe insulation.
14	☒	For systems serving nonresidential spaces, pipe insulation for the following applications is specified to comply with Table 120.3-A (see below) per 120.3: • Recirculating system piping, including supply and return piping of the water heater • The first 8 ft of hot and cold outlet piping, including between storage tank and heat trap, for a nonrecirculating storage system • Pipes that are externally heated
15	☒	Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service per 120.3(b) / 160.4(f). Pipe insulation buried below grade must be installed in a water proof and non-crushable casing or sleeve.

TABLE 120.3-A / 160.4-A PIPE INSULATION THICKNESS

Fluid Temperature Range (°F)	Conductivity Range (Btu-in per hour per ft² per °F)	Insulation Mean Rating Temp (°F)	Nominal Pipe Diameter (in)			
			< 1	1 to < 1.5	1.5 to < 4	1.5 to < 4 Multifamily & Hotel/Motel
			Minimum Insulation Required			
105-140	0.22 - 0.28	100	1.0 in or R-7.7	1.5 in or R-12.5	1.5 in or R-11	2.0 in or R-16

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 86563-0223-0009 Report Generated: 2023-02-02 13:17:38

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-PLB-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM Report Page: (Page 4 of 6)
Project Address: Date Prepared: 2023-02-02T16:17:35-05:00

H. DOMESTIC HOT WATER CONTROLS

This table is used to demonstrate compliance with control requirements in 110.3 for all occupancies. For multifamily residential and hotel/motel occupancies, compliance is also demonstrated with requirements in 160.4(e) / 170.2(d).

	Yes	No	Not Applicable	Requirement
01	☒	☐	☐	Construction documents require manufacturer certification that service water-heating systems are equipped with automatic temperature controls capable of adjusting temperature settings per 110.3(a).
02	☐	☐	☒	Systems with capacity > 167,000 BTUH equipped with outlet temperature controls per 110.3(c)1 unless covered by California Plumbing Code 613.0.
03	☐	☐	☒	Controls for circulating pumps or electrical heat trace systems are capable of automatically turning off the system per §110.3(c)2 unless systems serves healthcare facility.
04	☐	☐	☒	For recirculation systems serving multiple dwelling units, design includes automatic pump controls per 170.2(d) or 180.1(b)3 for additions.
05	☐	☐	☒	For recirculation systems serving individual dwelling units, design includes manual on/off controls as specified in Reference Appendix RA4.4.9 per 170.2(d).
06	☐	☐	☒	Combustion air positive shut-off shall be provided per 160.4(3).on all newly installed commercial boilers as follows: • Boilers with input capacity >= 2.5 MMBtu/h, in which the boiler is designed to operate with a nonpositive vent static pressure • Boilers where one stack serves two or more boilers with a total combined input capacity per stack of 2.5 MMBtu/h.
07	☐	☐	☒	Boiler combustion air fans with motor >= 10 hp shall meet one of the following • The fan motor shall be driven by a variable speed drive OR • The fan motor shall include controls that limit the fan motor demand to <=30% of the total design wattage at 50% of the design air volume.
08	☐	☐	☒	Newly installed boilers with an input capacity (dgtgt/) 5MMBtu/h and a steady state full-load combustion efficiency < 90% shall maintain excess (stack gas) oxygen concentrations <= 5% by volume on a dry basis over firing rates of 20-100%. Combustion air volume shall be controlled with respect to firing rate or flue gas oxygen concentration. Use of a common gas and combustion air control linkage or jack shaft is prohibited.

I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-PLB-E - Must be submitted for all buildings

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 86563-0223-0009 Report Generated: 2023-02-02 13:17:38

CERTIFICATE OF COMPLIANCE, WATER HEATER SYSTEM

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 5 of 6)
Project Address:		Date Prepared: 2023-02-02T16:17:35-05:00

J. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

K. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no forms required for this project.

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 86563-0223-0009 Report Generated: 2023-02-02 13:17:38

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE NRCC-PLB-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM Report Page: (Page 6 of 6)
Project Address: Date Prepared: 2023-02-02T16:17:35-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature:
Ryan McIntosh	
Company:	Signature Date:
Silver Creek Industries, LLC	02-16-2023
Address: 2830 Barrett Ave	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: John Starbin	Responsible Designer Signature:
Company: Silver Creek Industries, LLC	Date Signed: 02-16-2023
Address: 2830 Barrett Ave	License: 2475
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 86563-0223-0009 Report Generated: 2023-02-02 13:17:38

CERTIFICATE OF COMPLIANCE, WATER HEATER SYSTEM

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

CERTIFICATE OF COMPLIANCE FORMS

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARBIN 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0.6B

STATE OF CALIFORNIA
Solar And Battery
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-SAB-E
Project Name:	40- PC-PV	Report Page:	(Page 1 of 5)
Project Address:		Date Prepared:	2023-02-17T18:05:07-05:00

This document is used to demonstrate compliance with prescriptive PV and battery requirements in 140.10/ 170.2 for nonresidential, multifamily and mixed-use buildings and prescriptive solar thermal requirements in 170.2(d)3C for multifamily and hotel/ motel occupancies. When PV/battery/solar thermal requirements don't apply or are traded using the performance approach, this document demonstrates compliance with mandatory solar readiness requirements in 110.10/ 160.8 for newly constructed buildings which are either multifamily ten stories or fewer, hotel/motel ten stories or fewer or all other nonresidential buildings three stories or fewer. It is also used to demonstrate compliance with solar readiness in 110.10/ 160.8 for additions to nonresidential, multifamily or hotel/motel building types which add more than 2,000 ft² of roof area. Alterations, or additions of less than 2,000 ft² of roof area, are not required to comply with solar readiness, solar PV and battery requirements and do not need to complete this document.

A. GENERAL INFORMATION

01	Project Location (city)	N/A	04	Building Occupancies	School or Classroom
02	Climate Zone	15	05	Construction Type	New construction
03	Conditioned Floor Area (ft²)	4800	06	Number of Stories	Bldg <= 3 stories

B. PROJECT SCOPE

The compliance path the project is using to comply per 110.10(b)1B/ 140.10/ 170.2(g and h) is indicated below.

Compliance with Solar Photovoltaic (PV) and Battery Requirements in 140.10/ 170.2(g and h)

	01
☐	Provided PV system and battery storage sized per 140.10/ 170.2 (g and h)
☐	Exception to PV and Battery: Not enough Solar Access Roof Area
☐	Exception to PV and Battery: Required PV < 4kW
☐	Exception to PV and Battery: No contiguous Solar Access Roof Area
☐	Exception to PV and Battery: Can't meet snow load
☐	Exception to PV and Battery: Multi-tenant without VNEM or Community Solar
☐	The prescriptive PV/battery requirement has been traded off using the performance compliance approach as documented on the PRF Certificate of Compliance form.

The project has included an installed PV system and battery storage system per requirements in 140.10/ 170.2(g and h) as documented in Table *1*.

The total of all available Solar Access Roof Area(s) of the project site is less than three percent of the conditioned floor area as documented in Table *1*.

The required PV system size is less than 4 kW dc as documented in Table *1*..

The Solar Access Roof Area(s) of the project site contains less than 80 contiguous square feet as documented in Table *1*.

The project has a roof design where the enforcement authority has verified it is not possible for the PV system, including panels, modules, components, supports, and attachments to the roof structure, to meet ASCE 7-16 Chapter 7, Snow Loads.

The project is a multi-tenant building in an area where a load serving entity does not provide either a Virtual Net Metering (VNEM) or community solar program.

The project is a multi-tenant building in an area where a load serving entity does not provide either a Virtual Net Metering (VNEM) or community solar program.

Registration Number:	Generated Date/Time:	Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: 90125-0223-0002 Report Generated: 2023-02-17 15:05:11

STATE OF CALIFORNIA
Solar And Battery
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-SAB-E
Project Name:	40- PC-PV	Report Page:	(Page 2 of 5)
Project Address:		Date Prepared:	2023-02-17T18:05:07-05:00

Compliance with Solar Thermal Water Heating Requirements in 170.2(d)3C (Multifamily and hotel/ motel occupancies only)

	01
☐	The project includes a hotel/motel or multifamily occupancy with a gas or propane central water-heating system (serves 2+ dwelling units) and includes a permanently installed domestic solar water-heating system to comply with 170.2(d)3C and Reference Residential Appendix RA4, as documented in Table H. Compliance meets Exception 2 to solar ready requirements in 110.10(b).

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through I. Note: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance or see the applicable Table referenced below.

Allocated Solar Zone				Installed PV System					Installed SWH System				Smart Tstat and Alternative EE Measure		Compliance Results
01		02		03		04			05		06		07	08	
Required Minimum Area (ft²)	<=	Designated Area (ft²)	OR	Required Minimum DC Power Rating (Watts)	<=	Designed DC Power Rating (Watts)	OR		Required Minimum Solar Savings Fraction	<=	Designed/Rated Solar Savings Fraction	OR	JA5 Compliant Thermostat Specified?	Alternative Energy Efficiency Measure	COMPLIES
(See Table F)				(See Tables G or J)					(See Table H)				(See Table I)		
	<=		OR	11,810	<=	11,810	OR			<=		OR			
Location in construction documents showing the location for inverters and metering equipment and a pathway for the routing of conduit/ plumbing to the electrical service/ water heating system per §110.10(c).															
Battery storage system design meets the minimum requirements in Joint Appendix JA12 and the minimum energy (kWh)/ power (kW) capacity per Table *1*.															Not Applicable

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table is includes remarks made by the permit applicant to the Authority Having Jurisdiction.

Registration Number:	Generated Date/Time:	Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: 90125-0223-0002 Report Generated: 2023-02-17 15:05:11

STATE OF CALIFORNIA
Solar And Battery
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-SAB-E
Project Name:	40- PC-PV	Report Page:	(Page 3 of 5)
Project Address:		Date Prepared:	2023-02-17T18:05:07-05:00

F. ALLOCATED SOLAR ZONE

This section does not apply to this project.

G. PERMANENTLY INSTALLED SOLAR PV FOR SOLAR READY EXCEPTION

This section does not apply to this project.

H. PERMANENTLY INSTALLED SOLAR HOT WATER SYSTEMS

This section does not apply to this project.

I. SMART THERMOSTATS AND ALTERNATIVE EFFICIENCY MEASURE FOR SOLAR READY EXCEPTION

This section does not apply to this project.

Registration Number:	Generated Date/Time:	Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: 90125-0223-0002 Report Generated: 2023-02-17 15:05:11

STATE OF CALIFORNIA
Solar And Battery
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-SAB-E
Project Name:	40- PC-PV	Report Page:	(Page 4 of 5)
Project Address:		Date Prepared:	2023-02-17T18:05:07-05:00

J. PHOTOVOLTAIC (PV) AND BATTERY SYSTEMS

This table documents compliance with prescriptive photovoltaic and battery system requirements in 140.10/ 170.2(g and h). Unless the project meets one of the listed exceptions, or trades-off PV in an energy model using performance path, 140.10/ 170.2(g and h) requires installed photovoltaic and battery systems for newly constructed buildings. The installed PV systems must meet the minimum requirements in Joint Appendix 11.

Photovoltaic (PV) System

01	02	03	04	05	06	07	08
Occupancy	Conditioned Floor Area (ft²)	Area of New Roof[1] (ft²)	Roof Area < 70% Solar Access[2] (ft²)	Plansheet or Document showing Solar Access Calculations	Occupied Roof Area[3] (ft²)	Solar Access Roof Area (SARA) (ft²)	Min Size of PV System Required (kWdc)
School or Classroom	4,800	5,700	0	Sheet A-0.7	0	5,700	11.8
						Total Min Size PV System Required for all Spaces (kWdc):	11.81
						Total Size PV System in Design (kWdc):	11.81

[1]*FOOTNOTES: Includes the area of the building's roof space capable of structurally supporting a PV system and the area of all roof space on covered parking areas, carports, and all other newly constructed structures on the site that are compatible with supporting a PV system per Title 24, Part 2 Section 1511.2.*
[2]*Solar access must be determined using CEC approved solar access calculation tools found at https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/solar-assessment-tools.*
[3]*As specified by CBC Section 503.1.4.*

K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-SAB-01-E - Must be submitted for all buildings that must comply with solar readiness or PV/Battery requirements.

L. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

Registration Number:	Generated Date/Time:	Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: 90125-0223-0002 Report Generated: 2023-02-17 15:05:11

CERTIFICATE OF COMPLIANCE, SOLAR & BATTERY - PV

STATE OF CALIFORNIA
Solar And Battery
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-SAB-E
Project Name:	40- PC-PV	Report Page:	(Page 5 of 5)
Project Address:		Date Prepared:	2023-02-17T18:05:07-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ryan McIntosh	Documentation Author Signature:
Company: Silver Creek Industries, LLC	Signature Date: 02-20-2023
Address: 2830 Barrett Ave	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the building provides to the building owner at occupancy.

Responsible Designer Name: John Starlin	Responsible Designer Signature:
Company: Silver Creek Industries, LLC	Date Signed: 02-20-2023
Address: 2830 Barrett Ave	License: 2475
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

Registration Number:	Generated Date/Time:	Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: 90123-0223-0003 Report Generated: 2023-02-17 15:06:58

STATE OF CALIFORNIA
Solar And Battery
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-SAB-E
Project Name:	40- PC-Solar Ready	Report Page:	(Page 1 of 7)
Project Address:		Date Prepared:	2023-02-17T18:06:54-05:00

This document is used to demonstrate compliance with prescriptive PV and battery requirements in 140.10/ 170.2 for nonresidential, multifamily and mixed-use buildings and prescriptive solar thermal requirements in 170.2(d)3C for multifamily and hotel/ motel occupancies. When PV/battery/solar thermal requirements don't apply or are traded using the performance approach, this document demonstrates compliance with mandatory solar readiness requirements in 110.10/ 160.8 for newly constructed buildings which are either multifamily ten stories or fewer, hotel/motel ten stories or fewer or all other nonresidential buildings three stories or fewer. It is also used to demonstrate compliance with solar readiness in 110.10/ 160.8 for additions to nonresidential, multifamily or hotel/motel building types which add more than 2,000 ft² of roof area. Alterations, or additions of less than 2,000 ft² of roof area, are not required to comply with solar readiness, solar PV and battery requirements and do not need to complete this document.

A. GENERAL INFORMATION

01	Project Location (city)	N/A	04	Building Occupancies	School or Classroom
02	Climate Zone	15	05	Construction Type	New construction
03	Conditioned Floor Area (ft²)	960	06	Number of Stories	Bldg <= 3 stories

B. PROJECT SCOPE

The compliance path the project is using to comply per 110.10(b)1B/ 140.10/ 170.2(g and h) is indicated below.

Compliance with Solar Readiness Requirements in 110.10(b)1B

	01
☒	Provide Solar Ready Area no exceptions
☐	Exception to Solar Ready Area: Installed Solar Photovoltaic System
☐	Exception to Solar Ready Area: Installed Solar Water Heating System
☐	Exception to Solar Ready Area: Smart Thermostat and Alternative Energy Efficiency Measure
☐	Exception to Solar Ready Area: Roof is designed for vehicular traffic, parking or for heliport
☐	Exception to Solar Ready Area: Roof too small
☐	Exception to Solar Ready Area: Number of building stories

The project has allocated a solar zone on the roof plan per requirements in §110.10(b), as documented in Table F.

The project includes a permanently installed solar electric system having a nameplate DC power rating, measured under Standard Test Conditions, of no less than one watt per square foot of roof area as documented in Table G.

The project is a hotel/motel or high-rise multifamily occupancy and includes a permanently installed domestic solar water-heating system complying with 170.2(d)3C and Reference Residential Appendix RA4, as documented in Table H.

The project is a multifamily occupancy where all thermostats in each dwelling unit comply with §110.12(a) AND at least one additional measure listed in Exception 4 to §110.10(b)1B is installed, as documented in Table I.

Plan sheet showing roof designed for vehicular traffic, parking or heliport

The project is new construction and has a total roof area <= 533 square feet[1]

The project is nonresidential > 3 stories or multifamily/ hotel/motel > 10 stories.

[1]*FOOTNOTE: Buildings with roof area <=533 ft² would have a required solar zone < 80 ft² and are therefore exempt per 110.10(b)1.*

Registration Number:	Generated Date/Time:	Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: 90123-0223-0003 Report Generated: 2023-02-17 15:06:58

STATE OF CALIFORNIA
Solar And Battery
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-SAB-E
Project Name:	40- PC-Solar Ready	Report Page:	(Page 2 of 7)
Project Address:		Date Prepared:	2023-02-17T18:06:54-05:00

Compliance with Solar Photovoltaic (PV) and Battery Requirements in 140.10/ 170.2(g and h)

	01
☐	Provided PV system and battery storage sized per 140.10/ 170.2 (g and h)
☐	Exception to PV and Battery: Not enough Solar Access Roof Area
☒	Exception to PV and Battery: Required PV < 4kW
☐	Exception to PV and Battery: No contiguous Solar Access Roof Area
☐	Exception to PV and Battery: Can't meet snow load
☐	Exception to PV and Battery: Multi-tenant without VNEM or Community Solar
☐	The prescriptive PV/battery requirement has been traded off using the performance compliance approach as documented on the PRF Certificate of Compliance form.

The project has included an installed PV system and battery storage system per requirements in 140.10/ 170.2(g and h) as documented in Table *1*.

The total of all available Solar Access Roof Area(s) of the project site is less than three percent of the conditioned floor area as documented in Table *1*.

The required PV system size is less than 4 kW dc as documented in Table *1*..

The Solar Access Roof Area(s) of the project site contains less than 80 contiguous square feet as documented in Table *1*.

The project has a roof design where the enforcement authority has verified it is not possible for the PV system, including panels, modules, components, supports, and attachments to the roof structure, to meet ASCE 7-16 Chapter 7, Snow Loads.

The project is a multi-tenant building in an area where a load serving entity does not provide either a Virtual Net Metering (VNEM) or community solar program.

The project is a multi-tenant building in an area where a load serving entity does not provide either a Virtual Net Metering (VNEM) or community solar program.

Compliance with Solar Thermal Water Heating Requirements in 170.2(d)3C (Multifamily and hotel/ motel occupancies only)

	01
☐	The project includes a hotel/motel or multifamily occupancy with a gas or propane central water-heating system (serves 2+ dwelling units) and includes a permanently installed domestic solar water-heating system to comply with 170.2(d)3C and Reference Residential Appendix RA4, as documented in Table H. Compliance meets Exception 2 to solar ready requirements in 110.10(b).

Registration Number:	Generated Date/Time:	Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: 90123-0223-0003 Report Generated: 2023-02-17 15:06:58

STATE OF CALIFORNIA
Solar And Battery
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-SAB-E
Project Name:	40- PC-Solar Ready	Report Page:	(Page 3 of 7)
Project Address:		Date Prepared:	2023-02-17T18:06:54-05:00

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through I. Note: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance or see the applicable Table referenced below.

Allocated Solar Zone				Installed PV System					Installed SWH System				Smart Tstat and Alternative EE Measure		Compliance Results
01		02		03		04			05		06		07	08	
Required Minimum Area (ft²)	<=	Designated Area (ft²)	OR	Required Minimum DC Power Rating (Watts)	<=	Designed DC Power Rating (Watts)	OR		Required Minimum Solar Savings Fraction	<=	Designed/Rated Solar Savings Fraction	OR	JA5 Compliant Thermostat Specified?	Alternative Energy Efficiency Measure	COMPLIES
(See Table F)				(See Tables G or J)					(See Table H)				(See Table I)		
171	<=	172	OR	0	<=	0	OR			<=		OR			
N/A				Location in construction documents showing the location for inverters and metering equipment and a pathway for the routing of conduit/ plumbing to the electrical service/ water heating system per §110.10(c).											COMPLIES
Battery storage system design meets the minimum requirements in Joint Appendix JA12 and the minimum energy (kWh)/ power (kW) capacity per Table *1*.															Not Applicable

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table is includes remarks made by the permit applicant to the Authority Having Jurisdiction.

Registration Number:	Generated Date/Time:	Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: 90123-0223-0003 Report Generated: 2023-02-17 15:06:58

STATE OF CALIFORNIA
Solar And Battery
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-SAB-E
Project Name:	40- PC-Solar Ready	Report Page:	(Page 4 of 7)
Project Address:		Date Prepared:	2023-02-17T18:06:54-05:00

F. ALLOCATED SOLAR ZONE

This table is completed if the project is designating a solar zone to comply with §110.10(b)1B. New construction consider the total roof area; Additions consider newly added roof area. This table demonstrates that the project has designated the minimum area required for the Allocated Solar Zone, and also that the requirements for Solar Zone Subareas have been met. Each subarea must be shown on a roof plan or documented in construction documents. The solar zones must also comply with fire code requirements, including, but not limited to, setback and pathway requirements. Requirements for interconnection pathways must also be included in construction documents, and the location is specified in this table.

Required Minimum Solar Zone

01	02	03	04	05	06		07	08
Minimum Solar Zone Area Calculation Method	Total New or Added Roof Area (ft²)	Total New or Added Roof Area Covered with Skylights (ft²)	Minimum Solar Zone Based on Total or Added Roof Area (0.15 x (Roof-Sky)) (ft²)	Method/ Tools Used to Determine Annual Solar Access for Potential Zones[1]	Potential Solar Zone Areas: Roof areas with >= 70% Solar Access		Minimum Solar Zone Based on Potential Zone (0.5 x (Total Potential Zone)) (ft²)	Required Minimum Solar Zone Area (ft²)
					Low-Sloped Area (<= 2:12 pitch) (ft²)	Steep-Sloped Area (> 2:12 pitch) Oriented 90 < - 300 ° (ft²)		
Total New or Added Roof Area	1140	0	171					171

Designated Solar Zone Subareas

09	10	11	12	13	14	15	16	17	18	19
Subarea Name or Tag	Building Plan Reference	Roof or Overhang Slope (Low <= 2:12 pitch) (Steep > 2:12 pitch)	Is Steep-Sloped Roof or Overhang between 90 and 300 degrees?	Subarea Complies with Title 24, Part 9	Solar Zone Subarea Free of Obstructions per §110.10(b)1A	Subarea is Required Distance from Potential Obstructions per §110.10(b)1B	Is the Smallest Dimension 5 feet or greater?	Min. Area Required per Subarea (ft²)	Designated Area (ft²)	Subarea Complies?
Solar Zone	Roof plans sheets A-3.xx	Low slope		Yes	Yes	Yes	Yes	80	172	COMPLIES

Registration Number:	Generated Date/Time:	Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: 90123-0223-0003 Report Generated: 2023-02-17 15:06:58

STATE OF CALIFORNIA
Solar And Battery
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-SAB-E
Project Name:	40- PC-Solar Ready	Report Page:	(Page 5 of 7)
Project Address:		Date Prepared:	2023-02-17T18:06:54-05:00

Interconnection Pathways	
location in construction documents showing the location for inverters and metering equipment and a pathway for the routing of conduit/ plumbing to the electrical service/ water heating system per §110.10(c).	N/A

[2]*FOOTNOTE: This field is used to document how the percentage of annual solar access was determined per §110.10(b)1B. Solar access is the ratio of solar insolation including shade to the solar insolation without shade. Shading from obstructions located on the roof or any other part of the building shall not be included in the determination of annual solar access.*

G. PERMANENTLY INSTALLED SOLAR PV FOR SOLAR READY EXCEPTION

This section does not apply to this project.

H. PERMANENTLY INSTALLED SOLAR HOT WATER SYSTEMS

This section does not apply to this project.

I. SMART THERMOSTATS AND ALTERNATIVE EFFICIENCY MEASURE FOR SOLAR READY EXCEPTION

This section does not apply to this project.

Registration Number:	Generated Date/Time:	Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: 90123-0223-0003 Report Generated: 2023-02-17 15:06:58

STATE OF CALIFORNIA
Solar And Battery
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-SAB-E
Project Name:	40- PC-Solar Ready	Report Page:	(Page 6 of 7)
Project Address:		Date Prepared:	2023-02-17T18:06:54-05:00

J. PHOTOVOLTAIC (PV) AND BATTERY SYSTEMS

This table documents compliance with prescriptive photovoltaic and battery system requirements in 140.10/ 170.2(g and h). Unless the project meets one of the listed exceptions, or trades-off PV in an energy model using performance path, 140.10/ 170.2(g and h) requires installed photovoltaic and battery systems for newly constructed buildings. The installed PV systems must meet the minimum requirements in Joint Appendix 11.

Photovoltaic (PV) System

01	02	03	04	05	06	07	08
Occupancy	Conditioned Floor Area (ft²)	Area of New Roof[1] (ft²)	Roof Area < 70% Solar Access[2] (ft²)	Plansheet or Document showing Solar Access Calculations	Occupied Roof Area[3] (ft²)	Solar Access Roof Area (SARA) (ft²)	Min Size of PV System Required (kWdc)
School or Classroom	960	1,140	0	Roof plans A-3.xx	0	1,140	1.36
						Total Min Size PV System Required for all Spaces (kWdc):	0
						Total Size PV System in Design (kWdc):	0

[1]*FOOTNOTES: Includes the area of the building's roof space capable of structurally supporting a PV system and the area of all roof space on covered parking areas, carports, and all other newly constructed structures on the site that are compatible with supporting a PV system per Title 24, Part 2 Section 1511.2.*
[2]*Solar access must be determined using CEC approved solar access calculation tools found at https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/solar-assessment-tools.*
[3]*As specified by CBC Section 503.1.4.*

K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-SAB-01-E - Must be submitted for all buildings that must comply with solar readiness or PV/Battery requirements.

L. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

Registration Number:	Generated Date/Time:	Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: 90123-0223-0003 Report Generated: 2023-02-17 15:06:58

STATE OF CALIFORNIA
Solar And Battery
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-SAB-E
Project Name:	40- PC-Solar Ready	Report Page:	(Page 7 of 7)
Project Address:		Date Prepared:	2023-02-17T18:06:54-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ryan McIntosh	Documentation Author Signature:
Company: Silver Creek Industries, LLC	Signature Date: 02-20-2023
Address: 2830 Barrett Ave	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the building provides to the building owner at occupancy.

Responsible Designer Name: John Starlin	Responsible Designer Signature:
Company: Silver Creek Industries, LLC	Date Signed: 02-20-2023
Address: 2830 Barrett Ave	License: 2475
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

Registration Number:	Generated Date/Time:	Documentation Software: Energy Code Ace
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance	Report Version: 2022.0.000 Schema Version: rev 20220101	Compliance ID: 90123-0223-0003 Report Generated: 2023-02-17 15:06:58

CERTIFICATE OF COMPLIANCE, SOLAR & BATTERY - SOLAR READY AREAS

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

CERTIFICATE OF COMPLIANCE FORMS

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLIN 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0.6C

STATE OF CALIFORNIA
Domestic Water Heating System CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 1 of 6)
Project Address:		Date Prepared: 2023-02-02T16:17:35-05:00

This document is used to demonstrate compliance for nonresidential occupancies with requirements in 110.1, 110.3, 120.3, and 140.5, and with requirements in 141.0 for additions and alterations, for domestic water heating scopes using the prescriptive path. For high-rise residential and hotel/motel occupancies compliance is demonstrated with requirements in 110.1, 110.3, 160.4 and 170.2(d), and with requirements 180.1 for additions and 180.2 for alterations.

A. GENERAL INFORMATION

01	Project Location (city)	Perris	02	Climate Zone	10
03	Occupancy Types Within Project (select all that apply):				

● Classroom sinks and restroom lavatories

B. PROJECT SCOPE

This table includes domestic water heating systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive paths outlined in 140.1/ 170.2(d) and 141.0(a)/ 180.1, or 141.0(b)2N / 180.2 for additions or alterations. Solar water heating systems are documented on the NRCC-SAB compliance document. Combined hydronic water heating systems are documented on the NRCC-MCH compliance document.

01	02	03	
My project consists of (check all that apply):	System Type[1,2]	System Components	
☒ New system (DHW system being installed for the first time in newly constructed building)	Individual System (serving nonresidential spaces)	☒ Equipment	☒ Distribution ☒ Controls
☐ System Alteration (equipment, distribution or controls)		☐ Equipment	☐ Distribution ☐ Controls

[1]FOOTNOTES: Point of use water heaters, or other non-central systems used to serve nonresidential spaces, are considered individual systems.
[2] Dwelling units refers to hotel/motel guest rooms and units in a multifamily residential occupancy.
[3] DHW systems serving 2 or more dwelling units are considered "Central Systems" for multifamily occupancies

C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with water heating requirements. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. or the table indicated as not compliant for guidance.

01	02	03	04
Domestic Hot Water Equipment	Distribution Systems	Controls	Compliance Results
Table F	Table G	Table H	
Yes	Yes	Yes	COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

STATE OF CALIFORNIA
Domestic Water Heating System CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 2 of 6)
Project Address:		Date Prepared: 2023-02-02T16:17:35-05:00

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. DOMESTIC HOT WATER EQUIPMENT

This table is used to demonstrate compliance with mandatory equipment requirements in 110.1 and 110.3. Compliance with prescriptive requirements in 140.5[c] / 170.2(d) must also be demonstrated and with 141.0 / 180.1 for addition and alteration scopes.

Equipment Schedule: Water Heating Efficiency and Standby Loss

03	04			05		06		
System Name	WH-1	Exception to 140.5(c)/ 170.2(d)3	Exceptions Do Not Apply	☐	Gas Service Water Heating System >= 1MMBtu/h[1]	Capacity-weighted Average Efficiency %		
07	08	09	10	11	12	13	14	15
Name or Item Tag	Equipment Type	Volume (gal)	Rated Input Capacity (Btu/h)	Rated Efficiency	Minimum Efficiency Required	Efficiency Unit	Designed Standby Loss	Maximum Standby Loss
WH-1	Consumer Rated Electric Instantaneous (<=12kW)	<=2	10,264	0 <= GPM <1.7	0.91	UEF		

[1]FOOTNOTE: In systems >= 1MMBtu/h with multiple units, gas water heaters with input capacity > 100,000 Btu/h may meet 90% Et requirements via an input capacity-weighted average.

Water Heating Equipment All Occupancies

	Yes	No	Not Applicable	Requirement
18	☐	☐	☒	Unfired storage tank insulation shall have Internal + External >=R-16 OR External >=R-3.5. Label required per 110.3(c)3
19	☐	☐	☒	New state buildings 60% of energy for service water heating from site solar energy or recovered energy per 110.3(c)5
20	☐	☐	☒	Isolation valves for instantaneous water heater with input rating >6.8 kBTUH or 2 kW has been specified per 110.3(c)6
21	☐	☐	☒	School buildings < 25,000 ft² and < 4 stories must install a heat pump water heating system per 140.5(a)1. Water heating systems serving an individual bathroom space may be an instantaneous electric water heater.

STATE OF CALIFORNIA
Domestic Water Heating System CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 3 of 6)
Project Address:		Date Prepared: 2023-02-02T16:17:35-05:00

G. DOMESTIC HOT WATER DISTRIBUTION SYSTEM

This table is used to demonstrate compliance for nonresidential occupancies with distribution requirements in 120.3 and 140.5. For multifamily and hotel/motel occupancies, compliance is demonstrated with requirements 110.3(c), 160.4, 170.2(d).

Mandatory Pipe Insulation All Occupancies

13	☐	For systems serving dwelling units, pipe insulation must meet the minimum insulation requirements in Table 160.4-A (see below) except: • Piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. Piping that penetrates metal framing shall use grommets, plugs, wrapping or other insulating material to assure that no contact is made with the metal framing. Insulation shall abut securely against all framing members • Piping installed in interior or exterior walls shall not be required to have pipe insulation if all of the requirements are met for compliance with Quality Insulation Installation (QII) as specified in the Reference Residential Appendix RA3.5. • Piping surrounded with a minimum of 1 inch of wall insulation, 2 inches of crawlspace insulation, or 4 inches of attic insulation, shall not be required to have pipe insulation.
14	☒	For systems serving nonresidential spaces, pipe insulation for the following applications is specified to comply with Table 120.3-A (see below) per 120.3: • Recirculating system piping, including supply and return piping of the water heater • The first 8 ft of hot and cold outlet piping, including between storage tank and heat trap, for a nonrecirculating storage system • Pipes that are externally heated
15	☒	Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service per 120.3(b) / 160.4(f). Pipe insulation buried below grade must be installed in a water proof and non-crushable casing or sleeve.

TABLE 120.3-A / 160.4-A PIPE INSULATION THICKNESS

Fluid Temperature Range (°F)	Conductivity Range (Btu-in per hour per ft² per °F)	Insulation Mean Rating Temp (°F)	Nominal Pipe Diameter (in)			
			< 1	1 to < 1.5	1.5 to < 4	1.5 to < 4 Multifamily & Hotel/Motel
			Minimum Insulation Required			
105-140	0.22 - 0.28	100	1.0 in or R-7.7	1.5 in or R-12.5	1.5 in or R-11	2.0 in or R-16

STATE OF CALIFORNIA
Domestic Water Heating System CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 4 of 6)
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H. DOMESTIC HOT WATER CONTROLS

This table is used to demonstrate compliance with control requirements in 110.3 for all occupancies. For multifamily residential and hotel/motel occupancies, compliance is also demonstrated with requirements in 160.4(e) / 170.2(d).

	Yes	No	Not Applicable	Requirement
01	☒	☐	☐	Construction documents require manufacturer certification that service water-heating systems are equipped with automatic temperature controls capable of adjusting temperature settings per 110.3(a).
02	☐	☐	☒	Systems with capacity > 167,000 BTUH equipped with outlet temperature controls per 110.3(c)1 unless covered by California Plumbing Code §13.0.
03	☐	☐	☒	Controls for circulating pumps or electrical heat trace systems are capable of automatically turning off the system per §110.3(c)2 unless systems serves healthcare facility.
04	☐	☐	☒	For recirculation systems serving multiple dwelling units, design includes automatic pump controls per 170.2(d) or 180.1(b)3 for additions.
05	☐	☐	☒	For recirculation systems serving individual dwelling units, design includes manual on/off controls as specified in Reference Appendix RA4.4.9 per 170.2(d).
06	☐	☐	☒	Combustion air positive shut-off shall be provided per 160.4(3).on all newly installed commercial boilers as follows: • Boilers with input capacity >= 2.5 MMBtu/h, in which the boiler is designed to operate with a nonpositive vent static pressure • Boilers where one stack serves two or more boilers with a total combined input capacity per stack of 2.5 MMBtu/h.
07	☐	☐	☒	Boiler combustion air fans with motor >= 10 hp shall meet one of the following • The fan motor shall be driven by a variable speed drive OR • The fan motor shall include controls that limit the fan motor demand to <=30% of the total design wattage at 50% of the design air volume.
08	☐	☐	☒	Newly installed boilers with an input capacity (d.gte)7 5MMBtu/h and a steady state full-load combustion efficiency < 90% shall maintain excess (stack-gas) oxygen concentrations <= 5% by volume on a dry basis over firing rates of 20-100%. Combustion air volume shall be controlled with respect to firing rate or flue gas oxygen concentration. Use of a common gas and combustion air control linkage or jack shaft is prohibited.

I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-PLB-E - Must be submitted for all buildings

STATE OF CALIFORNIA
Domestic Water Heating System CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 5 of 6)
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J. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

K. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no forms required for this project.

STATE OF CALIFORNIA
Domestic Water Heating System CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 6 of 6)
Project Address:		Date Prepared: 2023-02-02T16:17:35-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ryan McIntosh	Documentation Author Signature:
Company: Silver Creek Industries, LLC	Signature Date: 02-16-2023
Address: 2830 Barrett Ave	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: John Starlin	Responsible Designer Signature:
Company: Silver Creek Industries, LLC	Date Signed: 02-16-2023
Address: 2830 Barrett Ave	License: 2475
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

STATE OF CALIFORNIA
Indoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name:	40- PC-12x40 -1-mod Restroom	Report Page: (Page 1 of 7)
Project Address:		Date Prepared: 2023-02-20T11:47:24-05:00

This document is used to demonstrate compliance with requirements in 110.9, 110.12(c), 130.0, 130.1, 140.6 and 141.0(b)2 for indoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e) and 180.2(b)4 for indoor lighting scopes using the prescriptive path for multifamily occupancies. Multifamily includes dormitory and senior living facilities.

A. GENERAL INFORMATION

01	Project Location (city)	NA	04	Total Conditioned Floor Area (ft²)	0
02	Climate Zone	10	05	Total Unconditioned Floor Area (ft²)	480
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	1

● School or Classroom

B. PROJECT SCOPE

This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.6 / 170.2(e) or 141.0(b)2 / 180.2(b)4 for alterations.

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft²)	Calculation Method	Area (ft²)
☒ New Lighting System	N/A	0	Complete Building Method	480
☐ New Lighting System - Parking Garage	N/A	0	N/A	0
Total Area of Work (ft²)			480	

STATE OF CALIFORNIA
Indoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name:	40- PC-12x40 -1-mod Restroom	Report Page: (Page 2 of 7)
Project Address:		Date Prepared: 2023-02-20T11:47:24-05:00

C. COMPLIANCE RESULTS

If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per 140.6(b)1 / 170.2(e)	Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts)						Adjusted Lighting Power per 140.6(a) / 170.2(e) (Watts)					Compliance Results
	01	02	03	04	05		06	07		08		09
	Complete Building 140.6(c)1	Area Category 140.6(c)2 / 170.2(e)4	Area Category Additional 140.6(c)2N / 170.2(e)4Av (+)	Tailored 140.6(c)3 / 170.2(e)4B (+)		Total Allowed (Watts)	Total Designed (Watts)	Adjustments PAF Lighting Control Credits 140.6(a)2 / 170.2(e)1B (-)	=	Total Adjusted (Watts) *Includes Adjustments		05 must be >= 08 140.6 / 170.2(e)
	[See Table I]	[See Table I]	[See Table J]	[See Table K]	=	288	[See Table F]	[See Table P]	=	255		COMPLIES
Conditioned					=				=			
Unconditioned	288				=	288	255		=	255		COMPLIES
Controls Compliance (See Table H for Details)												COMPLIES
Rated Power Reduction Compliance (See Table Q for Details)												

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

STATE OF CALIFORNIA
Indoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name:	40- PC-12x40 -1-mod Restroom	Report Page: (Page 3 of 7)
Project Address:		Date Prepared: 2023-02-20T11:47:24-05:00

F. INDOOR LIGHTING FIXTURE SCHEDULE

This table includes all planned permanent and portable lighting other than dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is documented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are not included here.

Designed Wattage: Unconditioned Spaces

01	02	03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change[1]	Watts per luminaire[2]	How is Wattage determined	Total Number of Luminaires	Excluded per 140.6(a)3 / 170.2(e)2C	Design Watts	Field Inspector	
									Pass	Fail
F-1	Lay-in LED Fixture	No	NA	51	MfL Spec	5	No	255	☐	☐
					Total Designed Watts: UNCONDITIONED SPACES			255		

[1]FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75% /80% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.
[2]Authority having jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b). Wattage used must be the maximum rated for the luminaire, not the lamp.

G. MODULAR LIGHTING SYSTEMS

This section does not apply to this project.

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

This table includes lighting controls for conditioned and unconditioned spaces.

Building Level Controls

01	02	03	
		Field Inspector	
		Pass	Fail
Mandatory Demand Response 110.12(c)	Shut-off controls 130.1(c) / 160.5(b)4C	☐	☐
NA < 4,000W subject to multilevel	See Area/Space Level Controls	☐	☐

STATE OF CALIFORNIA
Indoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
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H. INDOOR LIGHTING CONTROLS (Not including PAFs)

Area Level Controls

04	05	06	07	08	09	10	11	12	
Area Description	Complete Building or Area Category Primary Function Area	Manual Area Controls 130.1(a) / 160.5(b)4A	Multi-Level Controls 130.1(b) / 160.5(b)4B	Shut-Off Controls 130.1(c) // 160.5(b)4C	Primary/Sky lit Daylighting 130.1(d) / 160.5(b)4D	Secondary Daylighting 130.1(d) / 160.5(b)4D	Interlocked Systems 140.6(a)1/ 170.2(e)2A	Field Inspector	
								Pass	Fail
Restroom	School or Classroom	Auth. Personnel	Dimmer	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
					13				
					Plan Sheet Showing Daylit Zones:				

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Each area complying using the Complete Building or Area Category Methods per 140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per 140.6(c) or adjustments per 140.6(a) are being used.

Unconditioned Spaces

01	02	03	04	05	06	
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft²)	Area (ft²)	Allowed Wattage (Watts)	Additional Allowance / Adjustment	
					Area Category	PAF
Restroom	School or Classroom	0.6	480	288	No	No
	TOTALS:		480	288	See Tables J, or P for detail	

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

STATE OF CALIFORNIA
Indoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
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K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

This section does not apply to this project.

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

This section does not apply to this project.

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

This section does not apply to this project.

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS

This section does not apply to this project.

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This section does not apply to this project.

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

This section does not apply to this project.

Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTERATIONS

This section does not apply to this project.

R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS

This section does not apply to this project.

STATE OF CALIFORNIA
Indoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name:	40- PC-12x40 -1-mod Restroom	Report Page: (Page 6 of 7)
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S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

This section does not apply to this project.

T. DWELLING UNIT LIGHTING

This section does not apply to this project.

U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-LTI-E - Must be submitted for all buildings

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	Restroom

STATE OF CALIFORNIA
Indoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name:	40- PC-12x40 -1-mod Restroom	Report Page: (Page 7 of 7)
Project Address:		Date Prepared: 2023-02-20T11:47:24-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ryan McIntosh	Documentation Author Signature:
Company: Silver Creek Industries, LLC	Signature Date: 02-20-2023
Address: 2830 Barrett Ave	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: John Starlin	Responsible Designer Signature:
Company: Silver Creek Industries, LLC	Date Signed: 02-20-2023
Address: 2830 Barrett Ave	License: 2475
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

SINGLE MODULE TOILET BUILDING COMPLIANCE FORMS

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLIN 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0.6D

STATE OF CALIFORNIA
Domestic Water Heating System CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 1 of 6)
Project Address:		Date Prepared: 2023-02-02T16:17:35-05:00

This document is used to demonstrate compliance for nonresidential occupancies with requirements in 110.1, 110.3, 120.3, and 140.5, and with requirements in 141.0 for additions and alterations, for domestic water heating scopes using the prescriptive path. For high-rise residential and hotel/motel occupancies compliance is demonstrated with requirements in 110.1, 110.3, 160.4 and 170.2(d), and with requirements 180.1 for additions and 180.2 for alterations.

A. GENERAL INFORMATION

01	Project Location (city)	Perris	02	Climate Zone	10
03	Occupancy Types Within Project (select all that apply):				

● Classroom sinks and restroom lavatories

B. PROJECT SCOPE

This table includes domestic water heating systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive paths outlined in 140.1/ 170.2(d) and 141.0(a)/ 180.1, or 141.0(b)2N / 180.2 for additions or alterations. Solar water heating systems are documented on the NRCC-SAB compliance document. Combined hydronic water heating systems are documented on the NRCC-MCH compliance document.

01	02	03	
My project consists of (check all that apply):	System Type[1,2]	System Components	
☒ New system (DHW system being installed for the first time in newly constructed building)	Individual System (serving nonresidential spaces)	☒ Equipment	☒ Distribution ☒ Controls
☐ System Alteration (equipment, distribution or controls)		☐ Equipment	☐ Distribution ☐ Controls

[1]FOOTNOTES: Point of use water heaters, or other non-central systems used to serve nonresidential spaces, are considered individual systems.
[2] Dwelling units refers to hotel/motel guest rooms and units in a multifamily residential occupancy.
[3] DHW systems serving 2 or more dwelling units are considered "Central Systems" for multifamily occupancies

C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with water heating requirements. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. or the table indicated as not compliant for guidance.

01	02	03	04
Domestic Hot Water Equipment	Distribution Systems	Controls	Compliance Results
Table F	Table G	Table H	
Yes	Yes	Yes	COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

STATE OF CALIFORNIA
Domestic Water Heating System CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 2 of 6)
Project Address:		Date Prepared: 2023-02-02T16:17:35-05:00

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. DOMESTIC HOT WATER EQUIPMENT

This table is used to demonstrate compliance with mandatory equipment requirements in 110.1 and 110.3. Compliance with prescriptive requirements in 140.5[c] / 170.2(d) must also be demonstrated and with 141.0 / 180.1 for addition and alteration scopes.

Equipment Schedule: Water Heating Efficiency and Standby Loss

03	04			05		06		
System Name	WH-1	Exception to 140.5(c)/ 170.2(d)3	Exceptions Do Not Apply	☐	Gas Service Water Heating System >= 1MMBtu/h[1]	Capacity-weighted Average Efficiency %		
07	08	09	10	11	12	13	14	15
Name or Item Tag	Equipment Type	Volume (gal)	Rated Input Capacity (Btu/h)	Max GPM/ First Hour Rating (FHR)	Rated Efficiency	Minimum Efficiency Required	Efficiency Unit	Designed Standby Loss	Maximum Standby Loss
WH-1	Consumer Rated Electric Instantaneous (<=12kW)	<=2	10,264	0 <= GPM <1.7	0.91	0.91	UEF		

[1]FOOTNOTE: In systems >= 1MMBtu/h with multiple units, gas water heaters with input capacity > 100,000 Btu/h may meet 90% Et requirements via an input capacity-weighted average.

Water Heating Equipment All Occupancies

	Yes	No	Not Applicable	Requirement
18	☐	☐	☒	Unfired storage tank insulation shall have Internal + External >=R-16 OR External >=R-3.5. Label required per 110.3(c)3
19	☐	☐	☒	New state buildings 60% of energy for service water heating from site solar energy or recovered energy per 110.3(c)5
20	☐	☐	☒	Isolation valves for instantaneous water heater with input rating >6.8 kBTUH or 2 kW has been specified per 110.3(c)6
21	☐	☐	☒	School buildings < 25,000 ft[2] and < 4 stories must install a heat pump water heating system per 140.5(a)1. Water heating systems serving an individual bathroom space may be an instantaneous electric water heater.

STATE OF CALIFORNIA
Domestic Water Heating System CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
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G. DOMESTIC HOT WATER DISTRIBUTION SYSTEM

This table is used to demonstrate compliance for nonresidential occupancies with distribution requirements in 120.3 and 140.5. For multifamily and hotel/motel occupancies, compliance is demonstrated with requirements 110.3(c), 160.4, 170.2(d).

Mandatory Pipe Insulation All Occupancies

13	☐	For systems serving dwelling units, pipe insulation must meet the minimum insulation requirements in Table 160.4-A (see blow) except: • Piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. Piping that penetrates metal framing shall use grommets, plugs, wrapping or other insulating material to assure that no contact is made with the metal framing. Insulation shall abut securely against all framing members • Piping installed in interior or exterior walls shall not be required to have pipe insulation if all of the requirements are met for compliance with Quality Insulation Installation (QII) as specified in the Reference Residential Appendix RA3.5. • Piping surrounded with a minimum of 1 inch of wall insulation, 2 inches of crawlspace insulation, or 4 inches of attic insulation, shall not be required to have pipe insulation.
14	☒	For systems serving nonresidential spaces, pipe insulation for the following applications is specified to comply with Table 120.3-A (see below) per 120.3: • Recirculating system piping, including supply and return piping of the water heater • The first 8 ft of hot and cold outlet piping, including between storage tank and heat trap, for a nonrecirculating storage system • Pipes that are externally heated
15	☒	Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service per 120.3(b) / 160.4(f). Pipe insulation buried below grade must be installed in a water proof and non-crushable casing or sleeve.

TABLE 120.3-A / 160.4-A PIPE INSULATION THICKNESS

Fluid Temperature Range (°F)	Conductivity Range (Btu-in per hour per ft[2] per °F)	Insulation Mean Rating Temp (°F)	Nominal Pipe Diameter (in)			
			< 1	1 to < 1.5	1.5 to < 4	1.5 to < 4 Multifamily & Hotel/Motel
			Minimum Insulation Required			
105-140	0.22 - 0.28	100	1.0 in or R-7.7	1.5 in or R-12.5	1.5 in or R-11	2.0 in or R-16

STATE OF CALIFORNIA
Domestic Water Heating System CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 4 of 6)
Project Address:		Date Prepared: 2023-02-02T16:17:35-05:00

H. DOMESTIC HOT WATER CONTROLS

This table is used to demonstrate compliance with control requirements in 110.3 for all occupancies. For multifamily residential and hotel/motel occupancies, compliance is also demonstrated with requirements in 160.4(e) / 170.2(d).

	Yes	No	Not Applicable	Requirement
01	☒	☐	☐	Construction documents require manufacturer certification that service water-heating systems are equipped with automatic temperature controls capable of adjusting temperature settings per 110.3(a).
02	☐	☐	☒	Systems with capacity > 167,000 BTUH equipped with outlet temperature controls per 110.3(c)1 unless covered by California Plumbing Code §13.0.
03	☐	☐	☒	Controls for circulating pumps or electrical heat trace systems are capable of automatically turning off the system per §110.3(c)2 unless systems serves healthcare facility.
04	☐	☐	☒	For recirculation systems serving multiple dwelling units, design includes automatic pump controls per 170.2(d) or 180.1(b)3 for additions.
05	☐	☐	☒	For recirculation systems serving individual dwelling units, design includes manual on/off controls as specified in Reference Appendix RA4.4.9 per 170.2(d).
06	☐	☐	☒	Combustion air positive shut-off shall be provided per 160.4(3).on all newly installed commercial boilers as follows: • Boilers with input capacity >= 2.5 MMBtu/h, in which the boiler is designed to operate with a nonpositive vent static pressure • Boilers where one stack serves two or more boilers with a total combined input capacity per stack of 2.5 MMBtu/h.
07	☐	☐	☒	Boiler combustion air fans with motor >= 10 hp shall meet one of the following • The fan motor shall be driven by a variable speed drive OR • The fan motor shall include controls that limit the fan motor demand to <=30% of the total design wattage at 50% of the design air volume.
08	☐	☐	☒	Newly installed boilers with an input capacity (d gte)7 5MMBtu/h and a steady state full-load combustion efficiency < 90% shall maintain excess (stack-gas) oxygen concentrations <= 5% by volume on a dry basis over firing rates of 20-100%. Combustion air volume shall be controlled with respect to firing rate or flue gas oxygen concentration. Use of a common gas and combustion air control linkage or jack shaft is prohibited.

I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-PLB-E - Must be submitted for all buildings

STATE OF CALIFORNIA
Domestic Water Heating System CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 5 of 6)
Project Address:		Date Prepared: 2023-02-02T16:17:35-05:00

J. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

K. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no forms required for this project.

STATE OF CALIFORNIA
Domestic Water Heating System CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 6 of 6)
Project Address:		Date Prepared: 2023-02-02T16:17:35-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ryan McIntosh	Documentation Author Signature:
Company: Silver Creek Industries, LLC	Signature Date: 02-16-2023
Address: 2830 Barrett Ave	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: John Starlin	Responsible Designer Signature:
Company: Silver Creek Industries, LLC	Date Signed: 02-16-2023
Address: 2830 Barrett Ave	License: 2475
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

STATE OF CALIFORNIA
Indoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name:	40- PC-24x40 -2-mod Restroom	Report Page: (Page 1 of 7)
Project Address:		Date Prepared: 2023-02-20T11:51:41-05:00

This document is used to demonstrate compliance with requirements in 110.9, 110.12(c), 130.0, 130.1, 140.6 and 141.0(b)2 for indoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e) and 180.2(b)4 for indoor lighting scopes using the prescriptive path for multifamily occupancies. Multifamily includes dormitory and senior living facilities.

A. GENERAL INFORMATION

01	Project Location (city)	NA	04	Total Conditioned Floor Area (ft[2])	0
02	Climate Zone	10	05	Total Unconditioned Floor Area (ft[2])	960
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	1

● School or Classroom

B. PROJECT SCOPE

This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.6 / 170.2(e) or 141.0(b)2 / 180.2(b)4 for alterations.

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft[2])	Calculation Method	Area (ft[2])
☒ New Lighting System	N/A	0	Complete Building Method	960
☐ New Lighting System - Parking Garage	N/A	0	N/A	0
Total Area of Work (ft[2])			960	

STATE OF CALIFORNIA
Indoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name:	40- PC-24x40 -2-mod Restroom	Report Page: (Page 2 of 7)
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C. COMPLIANCE RESULTS

If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per 140.6(b)1 / 170.2(e)	Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts)						Adjusted Lighting Power per 140.6(a) / 170.2(e) (Watts)					Compliance Results
	01	02	03	04		05	06	07		08		09
	Complete Building 140.6(c)1	Area Category 140.6(c)2 / 170.2(e)4	Area Category Additional 140.6(c)2N / 170.2(e)4Av (+)	Tailored 140.6(c)3 / 170.2(e)4B (+)	=	Total Allowed (Watts)	Total Designed (Watts)	Adjustments PAF Lighting Control Credits 140.6(a)2 / 170.2(e)1B (-)	=	Total Adjusted (Watts) *Includes Adjustments		05 must be >= 08 140.6 / 170.2(e)
	[See Table I]	[See Table I]	[See Table J]	[See Table K]			[See Table F]	[See Table P]				
Conditioned					=				=			
Unconditioned	576				=	576	510		=	510		COMPLIES
Controls Compliance (See Table H for Details)												COMPLIES
Rated Power Reduction Compliance (See Table Q for Details)												COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

STATE OF CALIFORNIA
Indoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name:	40- PC-24x40 -2-mod Restroom	Report Page: (Page 3 of 7)
Project Address:		Date Prepared: 2023-02-20T11:51:41-05:00

F. INDOOR LIGHTING FIXTURE SCHEDULE

This table includes all planned permanent and portable lighting other than dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is documented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are not included here.

Designed Wattage: Unconditioned Spaces

01	02	03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change[1]	Watts per luminaire[2]	How is Wattage determined	Total Number of Luminaires	Excluded per 140.6(a)3 / 170.2(e)2C	Design Watts	Field Inspector	
									Pass	Fail
F-1	Lay-in LED Fixture	No	NA	51	MfL Spec	10	No	510	☐	☐
					Total Designed Watts: UNCONDITIONED SPACES			510		

[1]FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75% /80% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.
[2]Authority having jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b). Wattage used must be the maximum rated for the luminaire, not the lamp.

G. MODULAR LIGHTING SYSTEMS

This section does not apply to this project.

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

This table includes lighting controls for conditioned and unconditioned spaces.

Building Level Controls

01	02	03	
		Field Inspector	
		Pass	Fail
Mandatory Demand Response 110.12(c)	Shut-off controls 130.1(c) / 160.5(b)4C		
NA < 4,000W subject to multilevel	See Area/Space Level Controls	☐	☐

STATE OF CALIFORNIA
Indoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name:	40- PC-24x40 -2-mod Restroom	Report Page: (Page 4 of 7)
Project Address:		Date Prepared: 2023-02-20T11:51:41-05:00

I. INDOOR LIGHTING CONTROLS (Not including PAFs)

Area Level Controls

04	05	06	07	08	09	10	11	12	
Area Description	Complete Building or Area Category Primary Function Area	Manual Area Controls 130.1(a) / 160.5(b)4A	Multi-Level Controls 130.1(b) / 160.5(b)4B	Shut-Off Controls 130.1(c) // 160.5(b)4C	Primary/Sky lit Daylighting 130.1(d) / 160.5(b)4D	Secondary Daylighting 130.1(d) / 160.5(b)4D	Interlocked Systems 140.6(a)1/ 170.2(e)2A	Field Inspector	
								Pass	Fail
Restroom	School or Classroom	Auth. Personnel	Dimmer	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
					13				
					Plan Sheet Showing Daylit Zones:				

J. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Each area complying using the Complete Building or Area Category Methods per 140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per 140.6(c) or adjustments per 140.6(a) are being used.

Unconditioned Spaces

01	02	03	04	05	06	
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft[2])	Area (ft[2])	Allowed Wattage (Watts)	Additional Allowance / Adjustment	
					Area Category	PAF
Restroom	School or Classroom	0.6	960	576	No	No
		TOTALS:	960	576	See Tables J, or P for detail	

K. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

STATE OF CALIFORNIA
Indoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name:	40- PC-24x40 -2-mod Restroom	Report Page: (Page 5 of 7)
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K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

This section does not apply to this project.

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

This section does not apply to this project.

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

This section does not apply to this project.

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS

This section does not apply to this project.

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This section does not apply to this project.

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

This section does not apply to this project.

Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTERATIONS

This section does not apply to this project.

R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS

This section does not apply to this project.

STATE OF CALIFORNIA
Indoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name:	40- PC-24x40 -2-mod Restroom	Report Page: (Page 6 of 7)
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S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

This section does not apply to this project.

T. DWELLING UNIT LIGHTING

This section does not apply to this project.

U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-LTI-E - Must be submitted for all buildings

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	Restroom

STATE OF CALIFORNIA
Indoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTI-E
Project Name:	40- PC-24x40 -2-mod Restroom	Report Page: (Page 7 of 7)
Project Address:		Date Prepared: 2023-02-20T11:51:41-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ryan McIntosh	Documentation Author Signature:
Company: Silver Creek Industries, LLC	Signature Date: 02-20-2023
Address: 2830 Barrett Ave	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: John Starlin	Responsible Designer Signature:
Company: Silver Creek Industries, LLC	Date Signed: 02-20-2023
Address: 2830 Barrett Ave	License: 2475
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

TWO MODULE TOILET BUILDING COMPLIANCE FORMS

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLIN 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

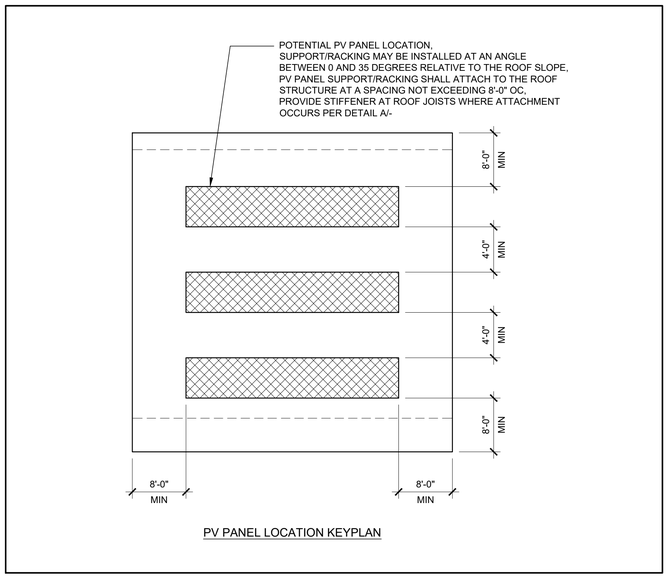
A-0.6E

CERTIFICATE OF COMPLIANCE, WATER HEATER SYSTEM

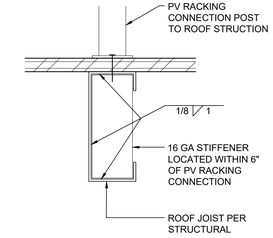
TWO MODULE TOILET BUILDING OPTION - INTERIOR LIGHTING COMPLIANCE FORMS

NOTE:
THE PC ROOF STRUCTURE HAS BEEN DESIGNED TO SUPPORT THE MASS OF A PV SYSTEM (TOTAL ALLOWANCE IS EQUAL TO 0.6 POUNDS x THE TOTAL ROOF AREA) TO BE DESIGNED AND INSTALLED UNDER THE PROJECT SPECIFIC APPLICATION.

THE PC ROOF STRUCTURE HAS BEEN DESIGNED TO ACCOMMODATE THE POTENTIAL UPLIFT ON THE ROOF FRAMING MEMBERS WHEN THE PV SYSTEM IS INSTALLED PER THE EDGE CLEARANCE AND SPACING AS INDICATED BELOW.



PV PANEL LOCATION KEYPLAN



STIFFENER AT PV RACKING CONNECTION SCALE : 3" = 1'-0" | A

REQUIRED PV SYSTEM SIZE (kW)

CLIMATE ZONE	BUILDING SIZE								
	24'x40'	36'x40'	48'x40'	60'x40'	72'x40'	84'x40'	96'x40'	108'x40'	120'x40'
	APPROXIMATE CONDITIONED FLOOR AREA								
	960	1440	1920	2400	2880	3360	3840	4320	4800
1	NONE	NONE	NONE	NONE	NONE	4.3	4.9	5.5	6.1
2	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
3	NONE	NONE	NONE	NONE	NONE	4.3	4.9	5.5	6.1
4	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
5	NONE	NONE	NONE	NONE	NONE	4.3	4.9	5.5	6.1
6	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
7	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
8	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
9	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
10	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
11	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
12	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
13	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
14	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
15	NONE	NONE	4.7	5.9	7.1	8.3	9.4	10.6	11.8
16	NONE	NONE	NONE	NONE	NONE	4.3	4.9	5.5	6.1
ALL ZONES	NONE	NONE	4.7	5.9	7.1	8.3	9.4	10.6	11.8

THE PRESCRIPTIVE MINIMUM REQUIRED PV SYSTEM SIZE IS INDICATED IN THE CHART ABOVE. THE ACTUAL PV SYSTEM SHALL BE INCLUDED IN THE PROJECT SPECIFIC DRAWING PACKAGE. ALL PV SYSTEM COMPONENT, CONNECTIONS AND DETAILING SHALL BE INCLUDED IN THE PROJECT SPECIFIC DRAWING PACKAGE.

WHERE THE PROJECT SPECIFIC DRAWING PACKAGE INDICATES THAT THE BUILDING IS BEING APPROVED FOR A SPECIFIC CLIMATE ZONE THE (MINIMUM) PV SYSTEM SIZE SHALL BE AS INDICATED FOR THAT CLIMATE ZONE IN THE CHART ABOVE. WHERE THE BUILDING IS INTENDED TO BE ELIGIBLE FOR RELOCATION TO ANY CLIMATE ZONE THE (MINIMUM) PV SYSTEM SIZE SHALL BE AS INDICATED IN THE "ALL ZONES" ROW.

PV SYSTEM SIZING AND INSTALLATION REQUIREMENTS | 3

CALIFORNIA ENERGY CODE - MANDATORY MEASURES

INTERIOR LIGHTING MANDATORY MEASURES:

- ALL LIGHTING CONTROL DEVICES AND SYSTEMS, BALLASTS, AND LUMINAIRES SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 110.9.
- ALL LUMINAIRES SHALL BE FACTORY-LABELED PER SECTION 130.0(c).
- EACH ROOM AND AREA WITH FLOOR-TO-CEILING WALLS IN THIS BUILDING SHALL BE EQUIPPED WITH MANUAL ON AND OFF LIGHTING CONTROLS PER SECTION 130.1(a).
- ALL ROOMS AND AREAS 100 SF OR GREATER AND WITH MORE THAN 0.5 WATT PER SF OF LIGHTING LOAD WITH 2 OR MORE LUMINAIRES SHALL BE CONTROLLED WITH MULTI-LEVEL SWITCHING FOR UNIFORM REDUCTION OF LIGHTING WITHIN THE ROOM. CONTROL STEPS SHALL MEET REQUIREMENTS IN TABLE 130.1-A.
- PROVIDE VACANCY SENSOR OR PARTIAL-ON OCCUPANCY SENSOR IN ALL ROOMS.
- ALL GENERAL LIGHTING IN PRIMARY SIDELIT DAYLIT ZONES AND SKYLIT DAYLIT ZONES IN ENCLOSED SPACES WITH 120 WATTS, OR MORE IN COMBINED PRIMARY/SKYLIT ZONES AND 24 SF, OR MORE OF FENESTRATION, SHALL BE CONTROLLED WITH AUTOMATIC DAYLIGHTING CONTROLS PER SECTION 130.1(d).

OUTDOOR LIGHTING MANDATORY MEASURES:

- ALL LIGHTING CONTROL DEVICES AND SYSTEMS, BALLASTS, AND LUMINAIRES SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 110.9.
- ALL LUMINAIRES SHALL BE FACTORY-LABELED PER SECTION 130.0(c).
- ALL OUTDOOR LIGHTING SHALL BE OPERATED WITH CONTROLS WHICH AUTOMATICALLY TURNS OFF OUTDOOR LIGHTING WHEN DAYLIGHT IS AVAILABLE PER SECTION 130.2(c).
- ALL OUTDOOR LIGHTING SHALL BE INDEPENDENTLY CONTROLLED FROM OTHER ELECTRICAL LOADS WHICH ARE CONTROLLED BY AN AUTOMATIC SCHEDULING CONTROL PER SECTION 130.2(c).

SPACE CONDITIONING EQUIPMENT MANDATORY MEASURES:

- ALL SPACE CONDITIONING EQUIPMENT SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 110.2.
- MECHANICAL VENTILATION SHALL BE PROVIDED PER SECTION 120.1.
- ALL SPACE CONDITIONING CONTROLS SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 120.2.
- ALL AIR DISTRIBUTION SYSTEM DUCTS AND PLENUMS SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 120.4.

BUILDING ENVELOPE MANDATORY MEASURES:

- ALL FENESTRATION PRODUCTS AND EXTERIOR DOORS SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 110.6.
- ALL JOINTS, PENETRATIONS AND OTHER OPENINGS IN THE BUILDING ENVELOPE SHALL BE SEALED TO LIMIT INFILTRATION AND EXFILTRATION PER SECTION 110.7.
- ALL INSULATION, ROOFING PRODUCTS AND RADIANT BARRIERS SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 110.8.
- THE WEIGHTED AVERAGE U-FACTOR OF THE ROOF ASSEMLY SHALL NOT EXCEED 0.075 PER SECTION 120.7(a).
- THE WEIGHTED AVERAGE U-FACTOR OF THE EXTERIOR WALL ASSEMBLY SHALL NOT EXCEED 0.110 PER SECTION 120.7(b).
- THE WEIGHTED AVERAGE U-FACTOR OF THE FLOOR ASSEMBLY SHALL NOT EXCEED 0.071 PER SECTION 120.7(c).

SOLAR READY AND ELECTRICAL DISTRIBUTION MANDATORY MEASURES:

- A SOLAR ZONE SHALL BE PROVIDED ON THE ROOF OF THE BUILDING PER SECTION 110.10(b).
- A PATHWAY SHALL BE PROVIDED FROM THE SOLAR ZONE TO AN INDICATED LOCATION SUITABLE FOR THE FUTURE INSTALLATION OF INVERTERS AND METERING EQUIPMENT PER SECTION 110.10(c).
- ELECTRICAL SERVICE METERING SHALL UTILIZE A PERMANENTLY INSTALLED METERING SYSTEM PER SECTION 130.5(a).
- SEPERATION OF ELECTRICAL CIRCUITS SHALL NOT BE REQUIRED WHERE ELECTRICAL SERVICE OR FEEDER IS RATED AT 50 KVA OR LESS PER SECTION 130.5(b).
- THE VOLTAGE DROP TO THE FARTHEST CONNECTED LOAD OR OUTLET SHALL NOT EXCEED 5% PER SECTION 130.5(c).

THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.

LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).

MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.

A LISTING OF CERTIFIED ATT CAN BE FOUND AT
HTTPS://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICS/PROGRAMS/ACCEPTANCE
-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE

THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION/INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA.

PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

THIS LIST OF REQUIRED ACCEPTANCE TESTS FOR THE PROJECT IS FOUND IN THE LAST PAGES OF THE ENERGY COMPLIANCE REPORTS (T24) UNDER DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE.

CALIFORNIA ENERGY CODE - MANDATORY MEASURES | 1

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

PV SYSTEM REQUIREMENTS, ENERGY MANDATORY MEASURES & CALGREEN SPEC'S

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

CONSTRUCTION WASTE MANAGEMENT PLAN

A. DEFINITIONS
1. CONSTRUCTION AND DEMOLITION (C&D) WASTE: INCLUDES ALL NON-HAZARDOUS SOLID WASTES RESULTING FROM CONSTRUCTION, REMODELING, ALTERATIONS, REPAIR, AND DEMOLITION. INCLUDES MATERIAL THAT IS RECYCLED, REUSED, SALVAGED OR DISPOSED AS GARBAGE.
2. RECYCLING: THE PROCESS OF SORTING, CLEANING, TREATING, AND RECONSTITUTING MATERIALS FOR THE PURPOSE OF USING THE MATERIAL IN THE MANUFACTURE OF A NEW PRODUCT.
3. CO-MINGLED C&D RECYCLING: THE PROCESS OF COLLECTING MIXED RECYCLABLE MATERIALS IN ONE CONTAINER ON-SITE. THE CONTAINER IS TAKEN TO A MATERIAL RECOVERY FACILITY WHERE MATERIALS ARE SEPARATED FOR RECYCLING.

B. PERFORMANCE REQUIREMENTS
1. GENERAL: WASTE MATERIAL GENERATED DURING PROJECTS SHALL BE RECYCLED OR REUSED WHENEVER PRACTICABLE. DIVERT A MINIMUM OF 90% C&D WASTE, BY WEIGHT, FROM THE LANDFILL BY A CO-MINGLED C&D RECYCLING FACILITY.
I. C&D WASTE MATERIALS THAT SHALL BE SALVAGED, REUSED OR RECYCLED INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
CONCRETE, METALS, WINDOW GLASS, WOOD, GYPSUM BOARD, CARPETING AND PAD, CEILING TILES

C. QUALITY ASSURANCE
1. PRECONSTRUCTION CONFERENCE: REVIEW METHODS AND PROCEDURES RELATED TO WASTE MANAGEMENT INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
I. REVIEW AND DISCUSS WASTE MANAGEMENT PLAN INCLUDING RESPONSIBILITIES OF WASTE MANAGEMENT COORDINATOR.
II. REVIEW REQUIREMENTS FOR DOCUMENTING QUANTITIES OF EACH TYPE OF MATERIALS THAT WILL BE SALVAGED, RECYCLED OR DISPOSED OF AS WASTE.
III. REVIEW PROCEDURES FOR PERIODIC WASTE COLLECTION AND TRANSPORTATION TO RECYCLING AND DISPOSAL FACILITIES.
IV. REVIEW WASTE MANAGEMENT REQUIREMENTS FOR EACH TRADE.

D. WASTE MANAGEMENT PLAN
1. INDENTIFY AND CONTRACT WITH A WASTE MANAGEMENT SERVICES PROVIDER OR ASSIGN RESPONSIBILITY TO INHOUSE WASTE MANAGEMENT PROJECT ADMINISTRATOR
2. RESPONSIBLE PARTY SHALL DEVELOP AND PROVIDE A PLAN WHICH INCLUDES THE FOLLOWING INFORMATION:
I. TYPES OF C&D WASTE EXPECTED TO BE GENERATED DURING DEMOLITION AND CONSTRUCTION.
II. PROPOSED METHODS FOR C&D WASTE SALVAGE, REUSE, RECYCLING AND DISPOSAL.
III. PROPOSED METHODS FOR SALVAGE, REUSE, RECYCLING AND DISPOSAL DURING CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, ONE OR MORE OF THE FOLLOWING:
A. REQUIRING SUBCONTRACTORS TO TAKE THEIR C&D WASTE TO A RECYCLING FACILITY,
B. CONTRACTING WITH A RECYCLING HAULER TO HAUL RECYCLABLE C&D WASTE TO AN APPROVED RECYCLING OR MATERIAL RECOVERY FACILITY,
C. PROCESSING AND REUSING MATERIALS ON-SITE

E. WASTE MANAGEMENT REPORT
1. WASTE MANAGEMENT SERVICES PROVIDER OR ADMINISTRATOR SHALL SUBMIT A CUMULATIVE WASTE MANAGEMENT REPORT ON A REGULAR BASIS WHICH INCLUDES:
I. A RECORD OF THE TYPE AND QUANTITY, BY WEIGHT, OF EACH MATERIAL SALVAGED, REUSED, RECYCLED OR DISPOSED.
II. TOTAL QUANTITY OF WASTE RECYCLED AS A PERCENTAGE OF TOTAL WASTE.
III. DISPOSAL RECEIPTS: COPY OF RECEIPTS ISSUED BY A DISPOSAL FACILITY FOR C&D WASTE THAT IS DISPOSED IN A LANDFILL.
IV. RECYCLING RECEIPTS: COPY OF RECEIPTS ISSUED BY APPROVED RECYCLING FACILITIES FOR COMINGLED MATERIALS. INCLUDE WEIGHT TICKETS FROM THE RECYCLING HAULER OR MATERIAL RECOVERY FACILITY AND VERIFICATION OF THE RECYCLING RATE FOR CO-MINGLED LOADS AT THE FACILITY.
V. SALVAGED MATERIALS DOCUMENTATION: TYPES AND QUANTITIES, BY WEIGHT, FOR MATERIALS SALVAGED FOR REUSE ON SITE, SOLD OR DONATED TO A THIRD PARTY.

F. CONSTRUCTION WASTE MANAGEMENT, GENERAL REQUIREMENTS
1. USE DETAILED MATERIAL ESTIMATES TO REDUCE RISK OF UNPLARMED AND POTENTIALLY WASTEFUL CUTS.
2. TO THE GREATEST EXTENT POSSIBLE, INCLUDE IN MATERIAL PURCHASING AGREEMENTS A WASTE REDUCTION PROVISION REQUESTING THAT MATERIALS AND EQUIPMENT BE DELIVERED IN PACKAGING MADE OF RECYCLABLE MATERIAL; THAT THEY REDUCE THE AMOUNT OF PACKAGING, THAT PACKAGING BE TAKEN BACK FOR REUSE OR RECYCLING, AND TO TAKE BACK ALL UNUSED PRODUCT. INSURE THAT SUBCONTRACTORS REQUIRE THE SAME PROVISIONS IN THEIR PURCHASE AGREEMENTS.
3. CONDUCT REGULAR VISUAL INSPECTIONS OF DUMPSTERS AND RECYCLING BINS TO REMOVE CONTAMINANTS.
4. A MINIMUM OF 65% (BY WEIGHT) OF THE NON-HAZARDOUS CONSTRUCTION WASTE SHALL BE RECYCLED AND/OR SALVAGED FOR REUSE.
5. CONSTRUCTION WASTE MATERIALS SHALL BE COLLECTED IN CO-MINGLED CONTAINERS EXCEPT STEEL AND WOOD SHALL BE COLLECTED SEPARATELY.
6. CONSTRUCTION WASTE SHALL BE HAULED, SEPARATED, AND MEASURED BY CR+R (OR AN EQUAL WASTE MANAGEMENT COMPANY). A REPORT SHALL BE PROVIDED INDICATING THE DIVERSION RATE (BY VOLUME).

G. REMOVAL OF CONSTRUCTION WASTE MATERIALS, GENERAL REQUIREMENTS
1. REMOVE C&D WASTE MATERIALS FROM PROJECT SITE ON A REGULAR BASIS. DO NOT ALLOW C&D WASTE TO ACCUMULATE ON-SITE.
2. TRANSPORT C&D WASTE MATERIALS OFF PROPERTY AND LEGALLY DISPOSE OF THEM.
3. BURNING OF C&D WASTE IS NOT PERMITTED.

IEQ PLAN

A. CONSTRUCTION PHASE:
1. FILTERS
I. ALL MECHANICAL EQUIPMENT WHICH REQUIRES A FILTER SHALL NOT BE OPERATED WITHOUT A FILTER IN PLACE.
II. ALL FILTERS SHALL HAVE A MERV RATING OF 13 OR GREATER (2" THICK).
III. A PRESSURE GAUGE SHALL BE INSTALLED AT ALL MECHANICAL EQUIPMENT REQUIRING FILTERS WHICH MEASURES THE PRESSURE DROP ACROSS THE FILTER AND WHICH IS MARKED TO INDICATE WHEN THE FILTER REQUIRES CLEANING OR REPLACEMENT
2. PROTECTION OF MATERIALS
I. ALL BUILDING MATERIALS SHALL BE PROTECTED FROM WEATHER AND OTHER MOISTURE SOURCES WHEN RECOMMEND BY THE MANUFACTURER.
II. ANY OBVIOUS MATERIAL WITH VISIBLE MICROBIAL GROWTH SHALL NOT BE INSTALLED.
III. ANY OTHER MATERIAL WITH VISIBLE MICROBIAL GROWTH SHALL BE THOROUGHLY CLEAN AND DECONTAMINATED PRIOR TO INSTALLATION.
3. PROTECTION OF INTERIOR ENVIRONMENT
I. WHENEVER POSSIBLE ALL SANDING, CUTTING GRINDING OR OTHER ACTIVITIES WHICH WILL GENERATE AIRBORNE PARTICLES SHALL BE PERFORMED AWAY FROM THE BUILDING.
II. WHERE AIRBORNE PARTICLE GENERATING ACTIVITIES CANNOT BE PERFORMED AWAY FROM THE BUILDING PROTECTIVE MEASURES SHALL BE TAKE TO SEAL INTERIOR AREAS TO REDUCE OR ELIMINATE PARTICLE TRANSFER.
III. ANY TEMPORARILY UNFILLED EXTERIOR OPENINGS SHALL BE PROTECTED WITH PLASTIC SHEETING, OR OTHER BARRIER, TO PREVENT THE MOISTURE AND OTHER CONTAMINANTS FROM ENTERING THE BUILDING.
IV. ALL WELDING SHALL BE PERFORMED PRIOR TO THE INSTALLATION OF EXTERIOR WALLS WHEREVER POSSIBLE.
4. DUCT SYSTEM CONSTRUCTION
I. THE DUCT SYSTEMS SHALL BE CONSTRUCTED AND INSTALLED PER THE SMACNA HV AC DUCT CONSTRUCTION STANDARDS FOR METAL AND FLEXIBLE DUCTWORK.
II. THE DUCT SYSTEMS SHALL BE CONSTRUCTED AND INSTALLED PER THE SMACNA FIBROUS GLASS DUCT CONSTRUCTION STANDARDS.
III. THE DUCT SYSTEMS SHALL BE CONSTRUCTED AND INSTALLED NFPA 90A & NFPA 90B.
IV. ONCE INSTALLED ALL OPEN DUCTS AND REGISTERS SHALL BE PROTECTED WITH PLASTIC SHEETING, OR OTHER BARRIER, UNTIL THE BUILDING HAS BEEN COMPLETELY INSTALLED AND ENCLOSED AND THE MECHANICAL SYSTEM IS READY TO BE STARTED.
V. ALL OIL FILM SHALL BE REMOVED FROM DUCTS PRIOR TO INSTALLATION.
VI. ALL DUST AND DIRT SHALL BE REMOVED FROM BOTH THE INTERIOR AND EXTERIOR OF ALL DUCTS PRIOR TO INSTALLATION.
5. MATERIALS INSTALLATION
I. NATURAL OR TEMPORARY MECHANICAL VENTILATION SHALL BE PROVIDED WHEN MATERIALS WHICH EMIT VOLATILE ORGANIC COMPOUNDS (VOC) ARE INSTALLED.
II. NATURAL OR TEMPORARY MECHANICAL VENTILATION SHALL BE CONTINUED UNTIL SUCH A TIME THAT THE VOC EMISSIONS HAVE DISSIPATED.
III. ANY TEMPORARY VENTILATION SHALL BE EXHAUSTED TO THE EXTERIOR OF THE BUILDING.
IV. WHEN TEMPORARY MECHANICAL VENTILATION IS USED A CONSTRUCTION FILTER SHALL BE INSTALLED WITH MERV RATING OF NOT LESS THAN 13 (2" THICK). THE CONSTRUCTION FILTER SHALL BE REPLACED PRIOR TO OCCUPANCY.
V. MATERIALS INSTALLATION SHALL BE SEQUENCED WHENEVER POSSIBLE TO ALLOW FOR THE INSTALLATION OF VOC EMITTING MATERIALS PRIOR TO THE INSTALLATION OF POROUS AND FIBROUS MATERIALS.
VI. MATERIALS WHICH EMIT A SIGNIFICANT AMOUNT OF VOCS OR ODORS SHALL BE STORED IN A MANNER WHICH ALLOWS FOR OFF-GASSING, IN A DRY AND WELL VENTILATION AREA, PRIOR TO INSTALLATION.
VII. CARPETED SURFACES SHALL BE VACUUMED PER THE CRI/GREEN LABEL VACUUM CLEANER PROGRAM REQUIREMENTS AT COMPLETION OF CONSTRUCTION AND PRIOR TO OCCUPANCY.

LOW EMITTING MATERIALS + MOISTURE MANAGEMENT

SEALANTS AND CAULKS
ALL ADHESIVES, SEALANTS AND CAULKS APPLIED IN THE PROJECT'S INTERIOR SHALL MEET THE REQUIREMENTS OF THE 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.504.4.1. PRODUCTS IN THIS CATEGORY INCLUDE BUT ARE NOT LIMITED TO CARPET, RESILIENT AND WOOD FLOORING ADHESIVES; BASE COVE ADHESIVES; CERAMIC TILE ADHESIVES; DRYWALL AND PANEL ADHESIVES; AEROSOL ADHESIVES; ADHESIVE PRIMERS; ACOUSTICAL SEALANTS; FIRE STOP SEALANTS; HVAC DUCT SEALANTS, SEALANT PRIMERS; AND CAULKS.

PAINTS & COATINGS
ALL PAINTS AND ARCHITECTURAL COATINGS APPLIED IN THE PROJECT'S INTERIOR SHALL MEET THE REQUIREMENTS OF THE 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.504.4.3. PRODUCTS IN THIS CATEGORY INCLUDE BUT ARE NOT LIMITED TO FLAT COATINGS, STAINS, CLEAR WOOD FINISHES, FLOOR SEALERS AND COATINGS, WATERPROOFING SEALERS, PRIMERS, FLAT PAINTS AND COATINGS, NON-FLAT PAINTS AND COATINGS, AND RUST PREVENTATIVE COATINGS.

RESILIENT FLOORING SYSTEMS
ALL FLOORING SYSTEMS SHALL MEET THE REQUIREMENTS OF THE 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.504.4.6.

COMPOSITE WOOD
ALL OF THE COMPOSITE WOOD PRODUCTS INSTALLED IN THE PROJECT SHALL MEET THE REQUIREMENTS OF THE 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.504.4.5. COMPOSITE WOOD PRODUCTS IN THIS CATEGORY ARE DEFINED IN THE CALIFORNIA AIR RESOURCES BOARD (CARE) AIRBORNE TOXIC CONTROL MEASURE (ATCM) TO REDUCE FORMALDEHYDE EMISSIONS FROM COMPOSITE WOOD PRODUCTS (SECTIONS 93120-93120.12, TITLE 17, CALIFORNIA CODE OF REGULATIONS. THE AFFECTED PRODUCTS INCLUDE HARDWOOD PLYWOOD, PLYWOOD WITH DECORATIVE SOFTWOOD VENEER, LAMINATED PRODUCTS WITH A COMPOSITE WOOD CORE OR PLATFORM, PARTICLEBOARD, MEDIUM DENSITY FIBERBOARD (MDF), AND FINISHED GOODS FABRICATED FROM THESE PRODUCTS.

CEILING & WALL SYSTEMS
ALL CEILING AND WALL SYSTEMS INSTALLED IN THE PROJECT'S INTERIOR TOTALING 90% OR MORE OF THE TOTAL AREAS OF SUCH PRODUCTS SHALL MEET THESE REQUIREMENTS. CEILING AND WALL SYSTEMS INCLUDE BUT ARE NOT LIMITED TO CEILING INSULATION INSTALLED WITHIN THE STRUCTURAL ENVELOP, WALL INSULATION, ACOUSTICAL CEILING PANELS, GYPSUM BOARD WALL PANELS, TACKABLE WALL PANELS, AND WALL COVERINGS. CERAMIC TILE AND OTHER ORGANIC-FREE METAL- OR MINERAL-BASED WALL COVERINGS ARE AVAILABLE FOR CREDIT WITHOUT ANY TESTING REQUIREMENTS. SITE APPLIED ADHESIVES AND SEALANTS AND SITE APPLIED PAINTS AND COATINGS ASSOCIATED WITH CEILING AND WALL SYSTEMS ARE TREATED UNDER OPTIONS 1 AND 2, RESPECTIVELY. CEILING AND WALL SYSTEMS SHALL BE TESTED AND EVALUATED FOR EMISSIONS OF VOCS OF CONCERN WITH RESPECT TO CHRONIC INHALATION EXPOSURES FOLLOWING THE SPECIFICATIONS OF THE CDPH STANDARD METHOD V1.1. THE SEPARATE COMPONENTS OR DISTINCT LAYERS OF THESE SYSTEMS SHALL BE MODELED TO THE STANDARD PRACTICE SCHOOL CLASSROOM USING THE CLASSROOM CEILING AREA AND/OR WALL AREA AS APPROPRIATE. FOR SYSTEMS CONSISTING OF MORE THAN ONE DISTINCT LAYER (E.G., WALLS COMPRISED OF INSULATION, WALL PANEL AND WALL COVERING), ALL LAYERS SHALL INDIVIDUALLY MEET THE REQUIREMENTS OF THE STANDARD PRACTICE.

CARPET SYSTEMS
ALL CARPET SYSTEMS SHALL MEET THE REQUIREMENTS OF THE 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.504.4.4. ALL CARPET SHALL BE PER THE CARPET AND RUG INSTITUTE'S GREEN LABEL PLUS PROGRAM OR SHALL BE LISTED IN THE CHPS HIGH PERFORMANCE PRODUCT DATABASE. ALL CARPET PAD SHALL BE PER THE CARPET AND RUG INSTITUTE GREEN LABEL PROGRAM.

PRIMARY EXTERIOR DOORS
ALL WALL AND FLOOR SURFACES WITHIN 24" OF A PRIMARY EXTERIOR DOOR SHALL BE NON-ABSORBANT. SEE DETAIL A/- FOR TYPICAL FLOOR AND WALL FINISH DIAGRAM.

ALL PRIMARY EXTERIOR DOORS SHALL BE PROTECTED BY AN OVERHANG, AWNING OR SIMILAR ELEMENT NOT LESS THAN 48" IN DEPTH.

OUTDOOR AIR QUALITY

HVAC, REFRIGERATION AND FIRE SUPPRESSION SYSTEMS SHALL NOT CONTAIN CFCs OR HALONS.

ACOUSTICAL CONTROL

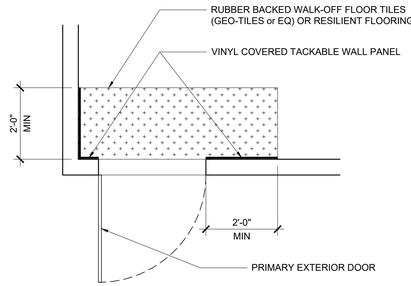
INTERIOR WALLS BETWEEN CLASSROOMS AND ADJACENT SPACES (WHERE OCCURS) SHALL BE FULL HEIGHT TO THE UNDERSIDE OF THE STRUCTURE ABOVE AND SHALL HAVE A STC RATING OF NOT LESS THAN 40. ONE OF THE FOLLOWING ASSEMBLY SHALL BE USED:

☐ 2x4 (MIN) STUDS @ 24" O.C. WITH 1 LAYER OF 1/2" GYP BD. EA. SIDE OF WALL & 3 1/2" BATT INSULATION, ADDITIONAL LAYERS OF FINISH MATERIAL MAY BE INSTALLED OVER THE GYP BD., GYP BD SHALL BE FASTENED TO THE STUDS w/ 1-1/4" TYPE W SCREWS AT 12" OC, JOINTS SHALL BE STAGGERED (DESIGN #NGC 2012065)(STC-42)

☐ 2x4 (MIN) STUDS @ 16" O.C. WITH 2 LAYER OF 5/8" TYPE "X" GYP BD. EA SIDE OF WALL & 3 1/2" BATT INSULATION, ADDITIONAL LAYERS OF FINISH MATERIAL MAY BE INSTALLED OVER THE GYP BD., BASE LAYER OF GYP BD SHALL BE FASTENED TO THE STUDS w/1-7/8" 6d COATED NAILS AT 6" OC, FACE LAYER OF GYP BD SHALL BE FASTENED TO THE STUDS w/2-3/8" 8d COATED NAILS AT 8" OC, VERTICAL JOINTS SHALL OCCUR OVER A STUD, STAGGER JOINTS EACH LAYER AND EACH SIDE (DESIGN #NGC 2364) (STC-41)

WHEN THE PRE-CHECKED BUILDING IS SITE ADAPTED, THE BUILDINGS CONSTRUCTED PER THIS PC SHALL MEET THE REQUIREMENTS OF THE 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.507.4. THE ARCHITECT OF RECORD FOR THE PROJECT SITE THE PC BUILDING IS TO BE INSTALLED UPON SHALL IDENTIFY ANY ADDITIONAL NOISE TRANSMISSION MEASURES WHICH ARE REQUIRED BASED UPON THE NOISE LEVEL PRESENT AT THE PROJECT SITE. IF NECESSARY EXTERIOR WALL, ROOF AND WINDOW ASSEMBLIES MEETING THE STC AND OR OITC RATINGS SPECIFIED IN SECTIONS 5.507.4.1 + 5.507.4.1.1 SHALL BE UTILIZED.

WHEN THE PC BUILDING IS PLACED ADJACENT TO ANOTHER BUILDING, A SEPARATION (AIR GAP) OF NOT LESS THAN 6" SHALL BE PROVIDED.



A PRIMARY EXTERIOR WALL FINISH DIAGRAM

CALGREEN SPECIFICATIONS | 2

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24975
STRUCTURAL
STATE OF CALIFORNIA

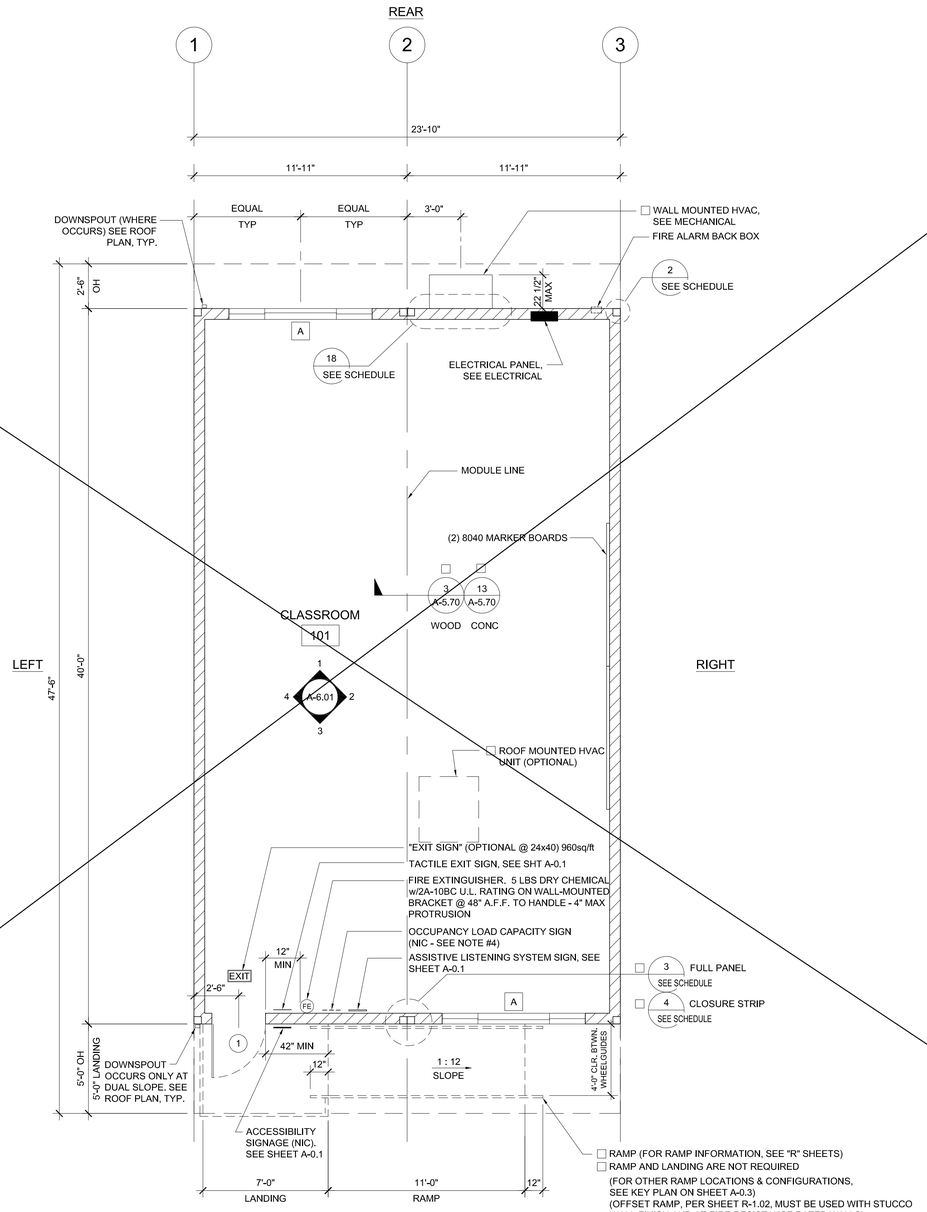
Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0.7



FRONT

NOTES

1. PLACE (2) PERMANENT METAL IDENTIFICATION LABELS ON EACH MODULE. PER IR 16-1 (4.1)
   (1) LABEL AT REAR EXTERIOR AND (1) LABEL ABOVE CEILING LINE AT INTERIOR FRAME. LABELS WILL BE MECHANICALLY FASTENED AND SHOW THE DSA APPLICATION NUMBER, MANUFACTURER'S NAME AND SERIAL NUMBER, DESIGN LIVE LOAD FOR ROOF AND FLOOR FRAMING, REQUIRED PV SYSTEM CAPACITY (kW), WIND SPEED, EXPOSURE CATEGORY, AND Kzt = 1.0 2022 CBC, DESIGN CLIMATE ZONE, SEISMIC PARAMETER = S_S
2. VINYL TACKBOARD INTERIOR FINISH SHALL COMPLY WITH CBC SECTION 803.7
3. LOCATIONS OF DOORS AND WINDOWS MAY VARY PER JOB. (IF THE NUMBER OF WINDOWS INCREASE, A NEW TITLE 24 SHALL BE SUBMITTED TO DSA)
4. POSTING OF OCCUPANCY LOAD SIGNS SHALL COMPLY WITH CALIFORNIA CODE OF REGULATIONS (CCR) TITLES 19 ART. 3.30 (NOT IN MODULAR MANUFACTURER'S SCOPE OF WORK
5. IF BUILDING IS TO BE RELOCATED, SEE RELOCATION SHEETS
6. FOR BUILDINGS THAT ARE MANUFACTURED IN-PLANT, THE IN-PLANT INSPECTOR IS TO ATTACH A VERIFIED REPORT INSIDE EACH BUILDING, WHICH SHALL INDICATE THE MANUFACTURER'S NAME AND THE SERIAL NUMBER FOR EACH BUILDING MODULE AS WELL AS THE DSA FILE AND APPLICATION NUMBES, PER IR 16-1.13 (2.1)
7. ALL FIXTURE HEIGHTS TO BE VERIFIED PRIOR TO CONSTRUCTION
8. INTERIOR WALLS MAY BE ADDED TO FLOOR PLAN. SEE STRUCTURAL
9. FOR CASEWORK, TEACHER WALL, OR TV BLOCKING OPTIONS, SEE SHEET A-5.80
10. INTERIOR WALLS BETWEEN CLASSROOMS AND ADJACENT SPACES (WHERE OCCURS) SHALL BE FULL HEIGHT TO THE UNDERSIDE OF THE STRUCTURE ABOVE AND SHALL HAVE A STC RATING OF NOT LESS THAN 40. SEE SHEET A-0.7 FOR WALL ASSEMBLY
11. TOILET ROOM FLOORING AND BASE SHALL BE INSTALLED PER 10/A-5.70 IN LIEU OF PROVIDING A CURB (IR 23-2)
12. DOORS SHALL PROVIDED WITH MINIMUM 4' CANOPY OR ROOF OVERHANG

DETAIL SCHEDULE

FINISH:	SHEET #:
☐ SIDING OVER WOOD STUDS	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

WALL LEGEND

NOMINAL 4" WALL STUD ☐

NOMINAL 6" WALL STUD ☐

NOMINAL 8" WALL STUD ☐

A WINDOW PER SCHEDULE SHEET A-0.2

(#) DOOR PER SCHEDULE SHEET A-0.2

NOTES:
ALL EXTERIOR WALL FRAMING SHALL BE 2x6 (OR 6" NOMINAL STEEL STUD) (MIN). EXCEPTION: AT UNCONDITIONED RESTROOM MODULES.

2x4 (OR 4" NOMINAL STEEL STUD) WALL FRAMING NOT ALLOWED WITH PLASTER WALL FINISH AT UNCONDITIONED RESTROOM MODULES WITH WALLS OVER 9'-0" IN HEIGHT.

THIS PLAN MAY INCLUDE THE VARIOUS EXERCISABLE OPTIONS APPLICABLE TO THE PC SUCH AS PARTITION WALLS, PLUMBING, ETC. FOR REFERENCE PURPOSES. OPTIONS CAN BE APPLIED AS REQUIRED TO THE PC'S BUILDING SIZES.

SYMBOLS LEGEND

60" CIRCLE CLEAR SPACE

30"x48" CLEAR SPACE

MARKING & IDENTIFICATION OF FIRE RATED CONSTRUCTION. (CBC 703.5)
FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITIONS OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE EFFECTIVELY AND PERMANENTLY IDENTIFIED WITH SIGNS OR STENCILING. SUCH IDENTIFICATION SHALL:

1. BE LOCATED IN ACCESSIBLE CONCEALED FLOOR, FLOOR-CEILING OR ATTIC SPACES;
2. BE LOCATED WITHIN 15 FEET OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION; AND
3. INCLUDE LETTERING NOT LESS THAN 3" IN HEIGHT AND A MIN. 3/8" STROKE IN A CONTRASTING COLOR INCORPORATING THE SUGGESTED WORDING. "FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS" OR OTHER SIMILAR WORDING.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

FLOOR PLAN
24' x 40'

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

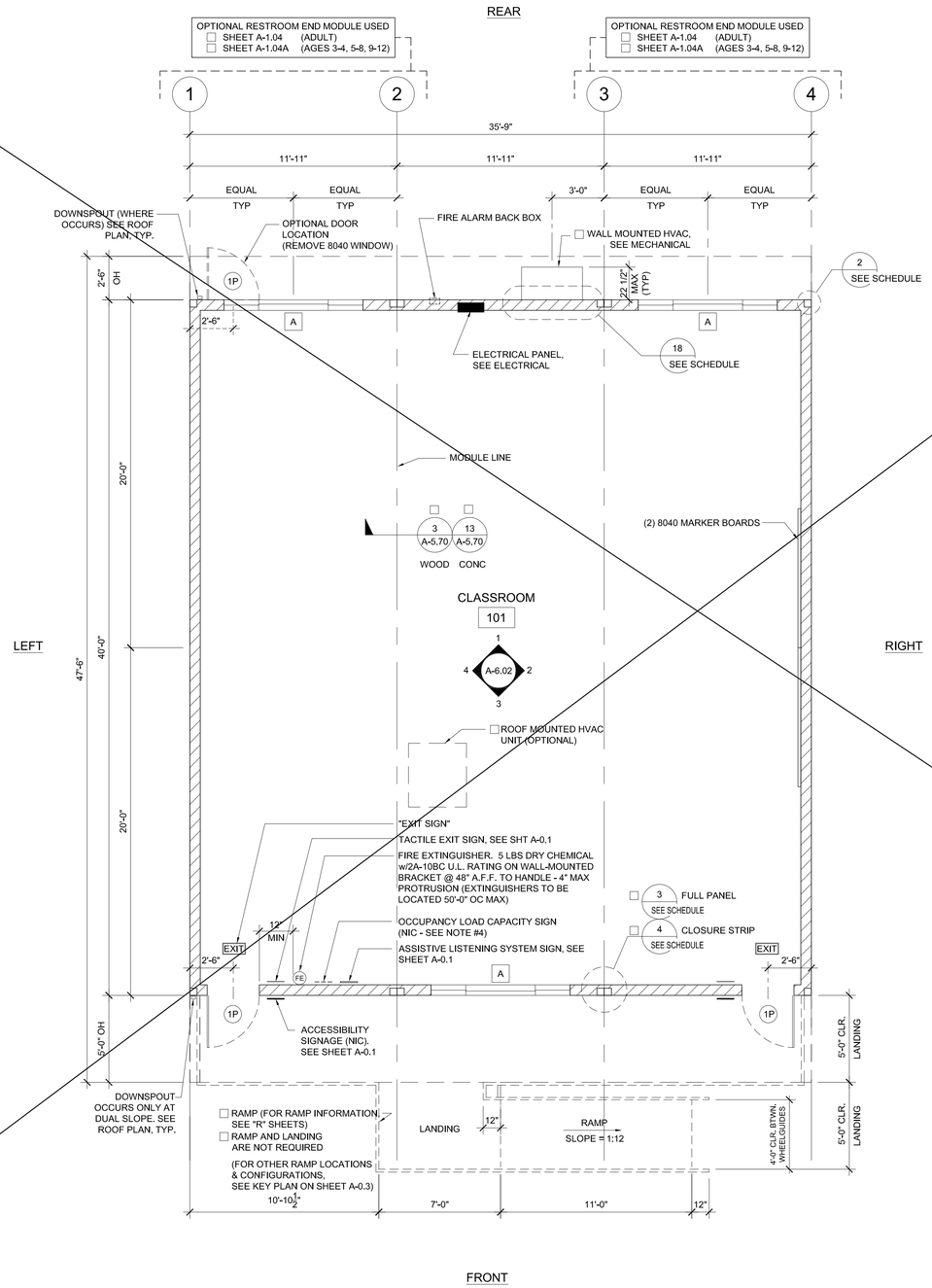
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
2475
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

A-1.01



FRONT

NOTES

1. PLACE (2) PERMANENT METAL IDENTIFICATION LABELS ON EACH MODULE. PER IR 16-1 (4.1)
   (1) LABEL AT REAR EXTERIOR AND (1) LABEL ABOVE CEILING LINE AT INTERIOR FRAME. LABELS WILL BE MECHANICALLY FASTENED AND SHOW THE DSA APPLICATION NUMBER, MANUFACTURER'S NAME AND SERIAL NUMBER, DESIGN LIVE LOAD FOR ROOF AND FLOOR FRAMING, REQUIRED PV SYSTEM CAPACITY (kW), WIND SPEED, EXPOSURE CATEGORY, AND Kzt = 1.0 2022 CBC, DESIGN CLIMATE ZONE, SEISMIC PARAMETER = S_S
2. VINYL TACKBOARD INTERIOR FINISH SHALL COMPLY WITH CBC SECTION 803.7
3. LOCATIONS OF DOORS AND WINDOWS MAY VARY PER JOB. (IF THE NUMBER OF WINDOWS INCREASE, A NEW TITLE 24 SHALL BE SUBMITTED TO DSA)
4. POSTING OF OCCUPANCY LOAD SIGNS SHALL COMPLY WITH CALIFORNIA CODE OF REGULATIONS (CCR) TITLES 19 ART. 3.30 (NOT IN MODULAR MANUFACTURER'S SCOPE OF WORK
5. IF BUILDING IS TO BE RELOCATED, SEE RELOCATION SHEETS
6. FOR BUILDINGS THAT ARE MANUFACTURED IN-PLANT, THE IN-PLANT INSPECTOR IS TO ATTACH A VERIFIED REPORT INSIDE EACH BUILDING, WHICH SHALL INDICATE THE MANUFACTURER'S NAME AND THE SERIAL NUMBER FOR EACH BUILDING MODULE AS WELL AS THE DSA FILE AND APPLICATION NUMBES, PER IR 16-1.13 (2.1)
7. ALL FIXTURE HEIGHTS TO BE VERIFIED PRIOR TO CONSTRUCTION
8. INTERIOR WALLS MAY BE ADDED TO FLOOR PLAN. SEE STRUCTURAL
9. FOR CASEWORK, TEACHER WALL, OR TV BLOCKING OPTIONS, SEE SHEET A-5.80
10. INTERIOR WALLS BETWEEN CLASSROOMS AND ADJACENT SPACES (WHERE OCCURS) SHALL BE FULL HEIGHT TO THE UNDERSIDE OF THE STRUCTURE ABOVE AND SHALL HAVE A STC RATING OF NOT LESS THAN 40. SEE SHEET A-0.7 FOR WALL ASSEMBLY
11. TOILET ROOM FLOORING AND BASE SHALL BE INSTALLED PER 10/A-5.70 IN LIEU OF PROVIDING A CURB (IR 23-2)
12. DOORS SHALL PROVIDED WITH MINIMUM 4' CANOPY OR ROOF OVERHANG

DETAIL SCHEDULE

FINISH:	SHEET #:
☐ SIDING OVER WOOD STUDS	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

WALL LEGEND

NOMINAL 4" WALL STUD ☐

NOMINAL 6" WALL STUD ☐

NOMINAL 8" WALL STUD ☐

A WINDOW PER SCHEDULE SHEET A-0.2

(#) DOOR PER SCHEDULE SHEET A-0.2

NOTES:
ALL EXTERIOR WALL FRAMING SHALL BE 2x6 (OR 6" NOMINAL STEEL STUD) (MIN). EXCEPTION: AT UNCONDITIONED RESTROOM MODULES.

2x4 (OR 4" NOMINAL STEEL STUD) WALL FRAMING NOT ALLOWED WITH PLASTER WALL FINISH AT UNCONDITIONED RESTROOM MODULES WITH WALLS OVER 9'-0" IN HEIGHT.

THIS PLAN MAY INCLUDE THE VARIOUS EXERCISABLE OPTIONS APPLICABLE TO THE PC SUCH AS PARTITION WALLS, PLUMBING, ETC. FOR REFERENCE PURPOSES. OPTIONS CAN BE APPLIED AS REQUIRED TO THE PC'S BUILDING SIZES.

SYMBOLS LEGEND

60" CIRCLE CLEAR SPACE

30"x48" CLEAR SPACE

MARKING & IDENTIFICATION OF FIRE RATED CONSTRUCTION. (CBC 703.5)
FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITIONS OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE EFFECTIVELY AND PERMANENTLY IDENTIFIED WITH SIGNS OR STENCILING. SUCH IDENTIFICATION SHALL:

1. BE LOCATED IN ACCESSIBLE CONCEALED FLOOR, FLOOR-CEILING OR ATTIC SPACES;
2. BE LOCATED WITHIN 15 FEET OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION; AND
3. INCLUDE LETTERING NOT LESS THAN 3" IN HEIGHT AND A MIN. 3/8" STROKE IN A CONTRASTING COLOR INCORPORATING THE SUGGESTED WORDING. "FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS" OR OTHER SIMILAR WORDING.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

FLOOR PLAN
36' x 40'

REVISIONS
1
2
3
4
5

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JOHN W STARLAND
2475
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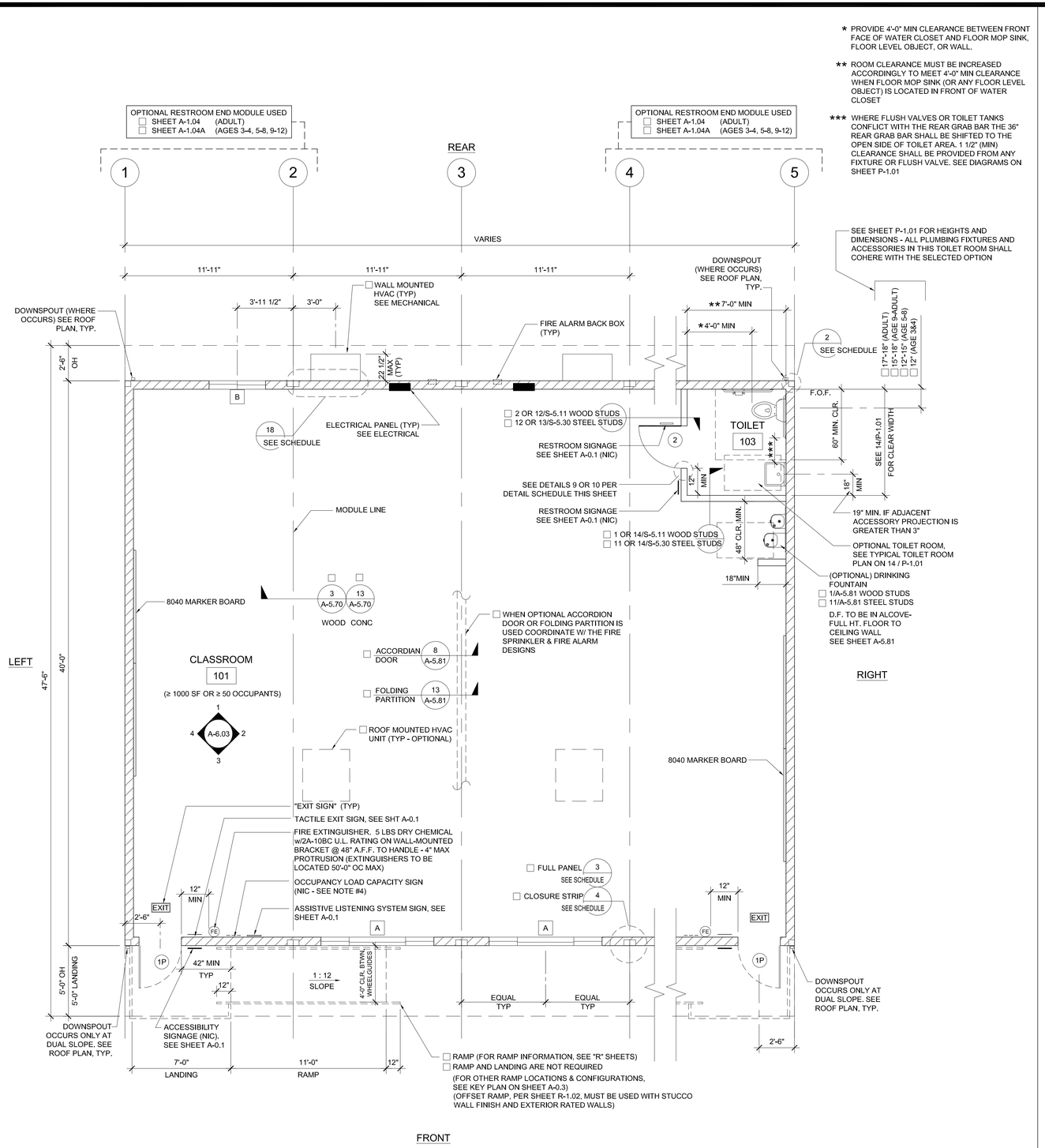
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

A-1.02



FRONT

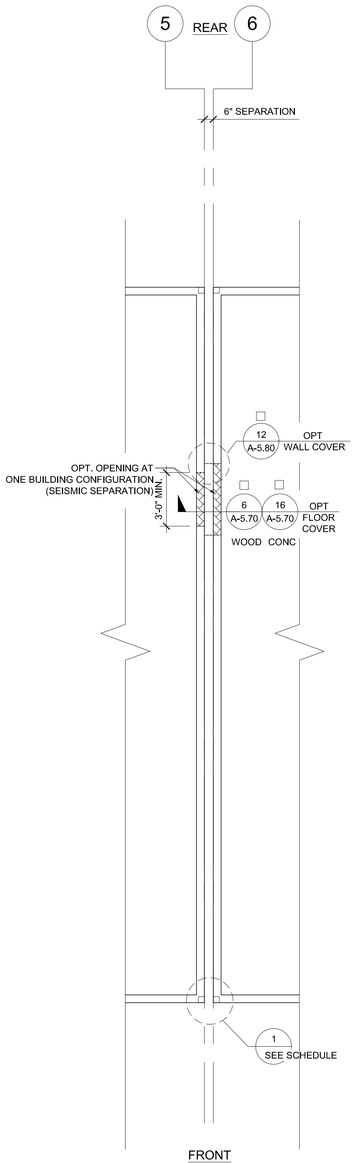
* PROVIDE 4'-0" MIN CLEARANCE BETWEEN FRONT FACE OF WATER CLOSET AND FLOOR MOP SINK, FLOOR LEVEL OBJECT, OR WALL.

** ROOM CLEARANCE MUST BE INCREASED ACCORDINGLY TO MEET 4'-0" MIN CLEARANCE WHEN FLOOR MOP SINK (OR ANY FLOOR LEVEL OBJECT) IS LOCATED IN FRONT OF WATER CLOSET

*** WHERE FLUSH VALVES OR TOILET TANKS CONFLICT WITH THE REAR GRAB BAR THE 36" REAR GRAB BAR SHALL BE SHIFTED TO THE OPEN SIDE OF TOILET AREA. 1 1/2" (MIN) CLEARANCE SHALL BE PROVIDED FROM ANY FIXTURE OR FLUSH VALVE. SEE DIAGRAMS ON SHEET P-1.01

NOTE:
- HOT WATER LINE INSULATION TO BE INSTALLED AT FIRST 8' FROM THE WATER HEATER ON NON-RECIRCULATING SYSTEMS
- ALL HOT WATER LINES TO BE INSULATED WHEN RE-CIRCULATING SYSTEMS ARE USED.

FLOOR PLAN — SCALE: 1/4" = 1'-0" — 2



FRONT

FLOOR SEPARATION PLAN OPTION — SCALE: 1/4" = 1'-0" — 1

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DETAIL SCHEDULE

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☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
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WALL LEGEND

NOMINAL 4" WALL STUD ☐
NOMINAL 6" WALL STUD ☐
NOMINAL 8" WALL STUD ☐

A WINDOW PER SCHEDULE SHEET A-0.2
DOOR PER SCHEDULE SHEET A-0.2

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30"x48" CLEAR SPACE

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PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

FLOOR PLAN
48' TO 120' x 40'

REVISIONS
1
2
3
4
5

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MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARUN 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

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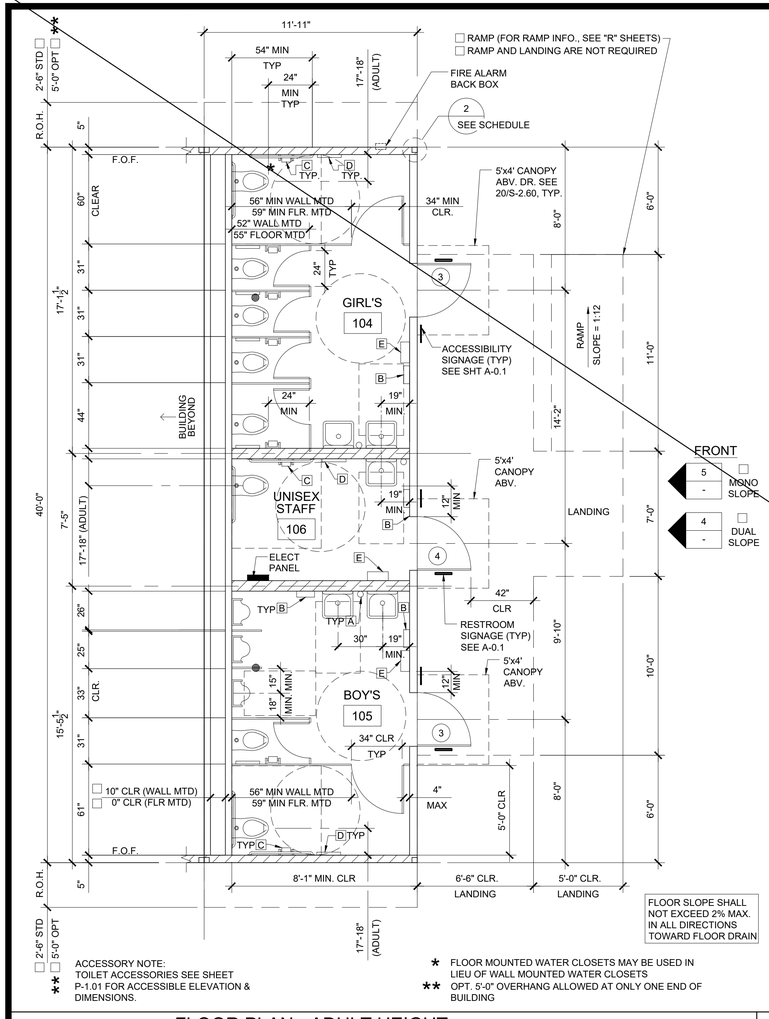
A-1.03



FLOOR PLAN - ADULT HEIGHT

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

NOTES

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2. NOT USED
3. ALL FIXTURE HEIGHTS TO BE VERIFIED PRIOR TO CONSTRUCTION.
4. ACCESSORIES SHALL NOT ENCROACH REQUIRED CLEAR SPACE. LOCATION OF LAVATORY TO BE 19" MIN. FROM FACE OF FINISH OF WALL WHEN ACCESSORIES (PAPER TOWEL DISPENSERS, ELECTRIC HAND DRYERS, ETC.) HAVING A 4" PROJECTION ARE TO BE INSTALLED, SO AS NOT TO ENCROACH INTO THE 30" x 48" CLEAR SPACE.
5. TOILET ROOM FLOORING AND BASE SHALL BE INSTALLED PER 10/A-5.70 IN LIEU OF PROVIDING A CURB (IR 23-2)

DETAIL SCHEDULE

FINISH:	SHEET #:
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FIRE RATED DETAIL SCHEDULE

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WALL LEGEND

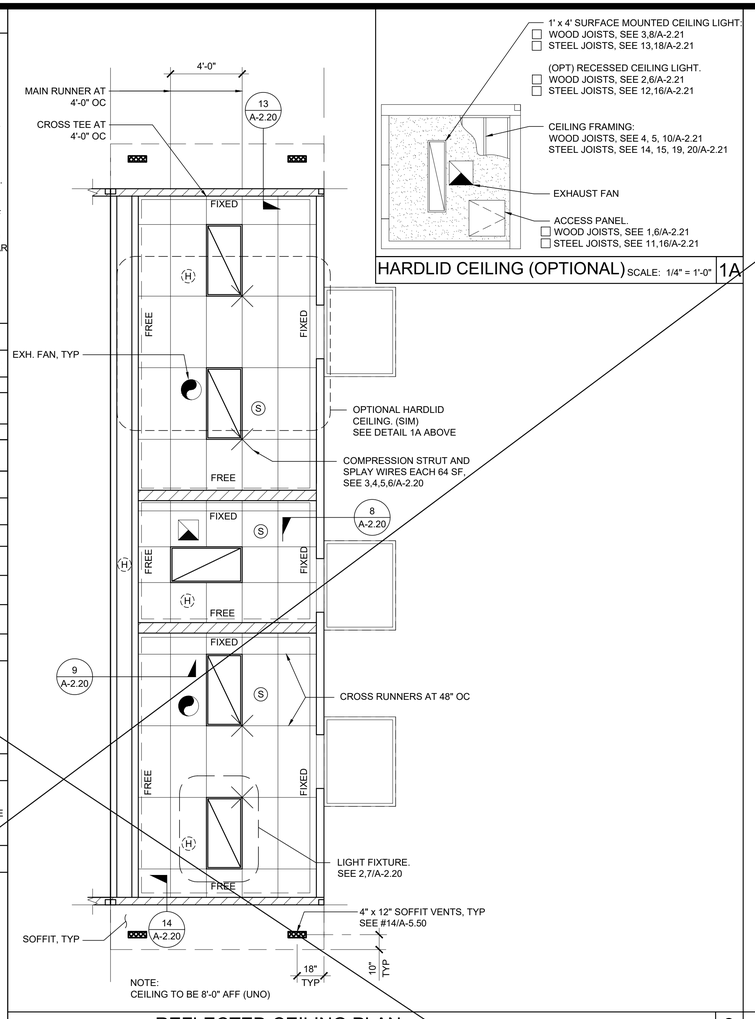
- NOMINAL 4" WALL STUD ☐
- NOMINAL 6" WALL STUD ☐
- NOMINAL 8" WALL STUD ☐

SYMBOLS LEGEND

60" CIRCLE CLEAR SPACE — 30"x48" CLEAR SPACE

TOILET ACCESSORIES

- A SOAP DISPENSER: LIQUID SOAP DISPENSER 4" MAX PROJECTION
- B PAPER TOWEL DISPENSER: SURFACE MOUNTED 4" MAX. PROJECTION-CANNOT ENCROACH INTO 30"x48" CLEAR SPACE OF FIXTURE
- C TOILET PAPER HOLDER: SINGLE ROLL SEMI-RECESSED OR 3" MAX PROJECTION
- D TOILET SEAT COVER DISPENSER: SURFACE MOUNTED
- E WALL MOUNTED WASTE RECEPTACLE, 6" MAX PROJECTION, 12" MAX ABV. FIN FLR TO BTM.

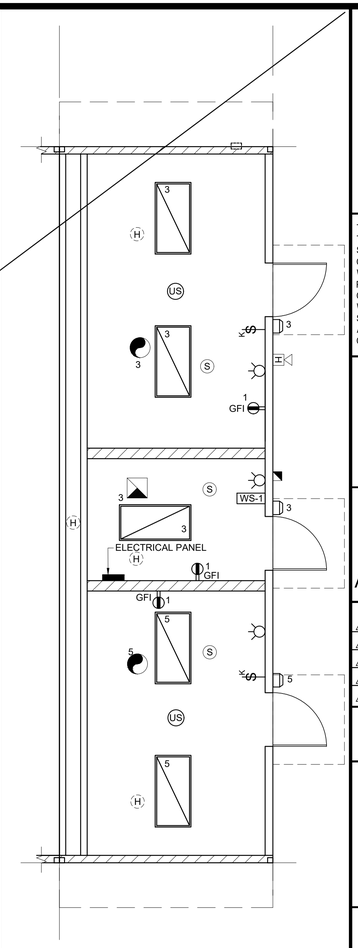


REFLECTED CEILING PLAN

SCALE: 1/4" = 1' - 0" | 2

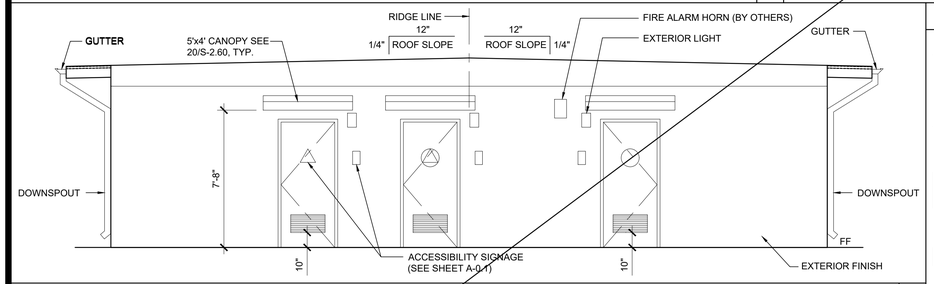
HARDLID CEILING (OPTIONAL)

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



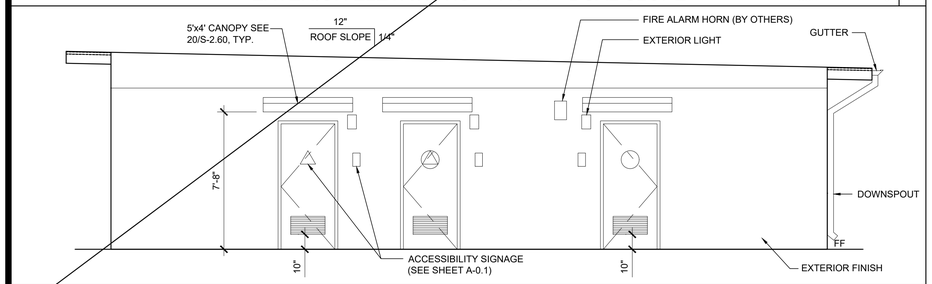
ELECTRICAL PLAN

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



EXTERIOR ELEVATIONS - FRONT - DUAL SLOPE

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



EXTERIOR ELEVATIONS - FRONT - MONO SLOPE

SCALE: 1/4" = 1' - 0" | 5

R.C.P. LEGEND

- T-BAR CEILING
- FIELD INSTALLED PANEL AT MODULE LINE
- 2x4 CEILING RECESSED LIGHT, LED LIGHT FIXTURE WITH DIMMING, 51 WATTS (MAX), 5000L (MIN)
- OPTIONAL 1' x 4' RECESSED LIGHT FIXTURE 51 WATTS (MAX), 5000L (MIN)
- SPLAY WIRE
- (S) CEILING MOUNTED SMOKE DETECTOR
- (H) ATTIC MOUNTED HEAT DETECTOR
- CEILING EXHAUST FAN
- EXTERIOR LIGHT
- (US) CEILING MOUNTED OCCUPANCY SENSOR

NOTE:
SEE 'E' SHEETS FOR ADDITIONAL DESCRIPTION OF ITEMS SHOWN IN THE R.C.P. LEGEND

NOTES:
1. SEE SHEET A-0.2 FOR DOOR TYPE AND SCHEDULES
2. SEE SHEET A-1.04A FOR ALTERNATE AGE GROUP HEIGHTS

VOLTS: 120/208 V | PANEL: "B" | FEED: BOTTOM
MAIN: 100A | LOCATION: INTERIOR ACCESS | MOUNTING: FLUSH

LOAD	QTY	WATTS AØ	WATTS BØ	BREAKER Amps	BREAKER P	Circuit	A	B	Circuit	BREAKER Amps	BREAKER P	WATTS AØ	WATTS BØ	QTY	LOAD
RECEPTACLES / GFI	3	540		20	1	1			2						
INTERIOR/EXTERIOR LIGHTING/EXHAUST FAN	7		560	20	1	3			4						
INTERIOR/EXTERIOR LIGHTING/EXHAUST FAN	4	365		20	1	5			6						
					1	7			8						
DED. - SOLAR READY						9			10						
DED. - SOLAR READY						11			12	20	1		40		FIRE ALARM
A = 905 WATTS / PHASE		905	560										40		B = 600 WATTS / PHASE
TOTAL = 1805 WATTS		7.2 AMPS		120/208 VOLTS						1 Ø			3 WIRE		

ELECTRICAL PANEL

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

OPTIONAL RESTROOM END MODULE

ADULT HEIGHT PLAN & ELEV'S

REVISIONS

1
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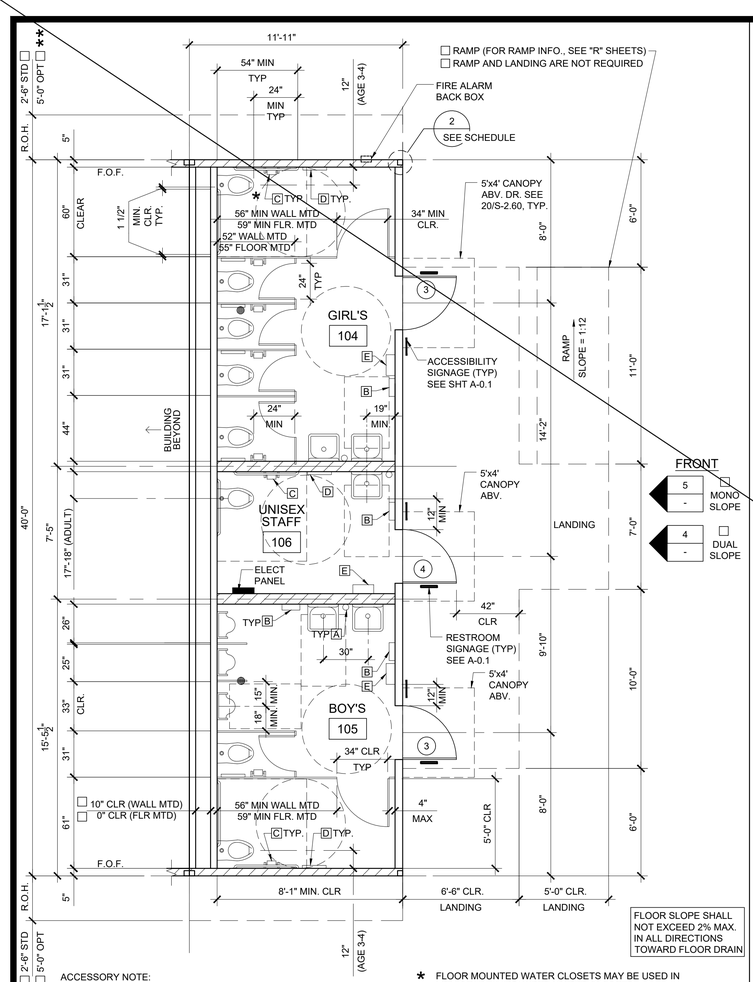


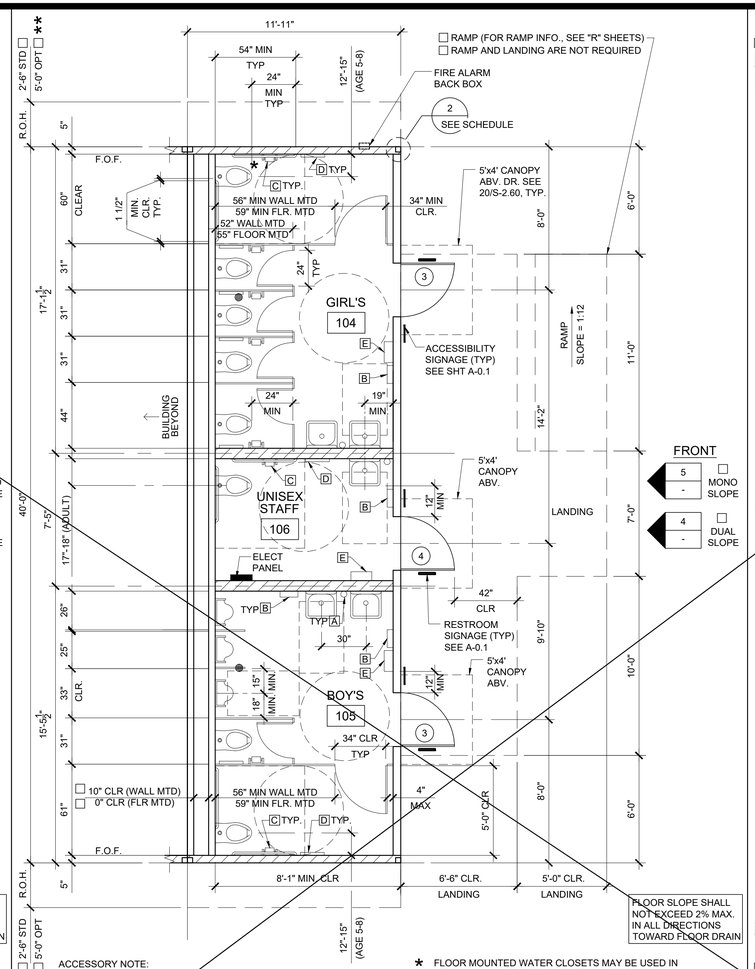
ACCESSORY NOTE:
TOILET ACCESSORIES SEE SHEET P-1.01 FOR ACCESSIBLE ELEVATION & DIMENSIONS.

* FLOOR MOUNTED WATER CLOSETS MAY BE USED IN LIEU OF WALL MOUNTED WATER CLOSETS

** OPT. 5'-0" OVERHANG ALLOWED AT ONLY ONE END OF BUILDING

FLOOR PLAN - AGE 3-4

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



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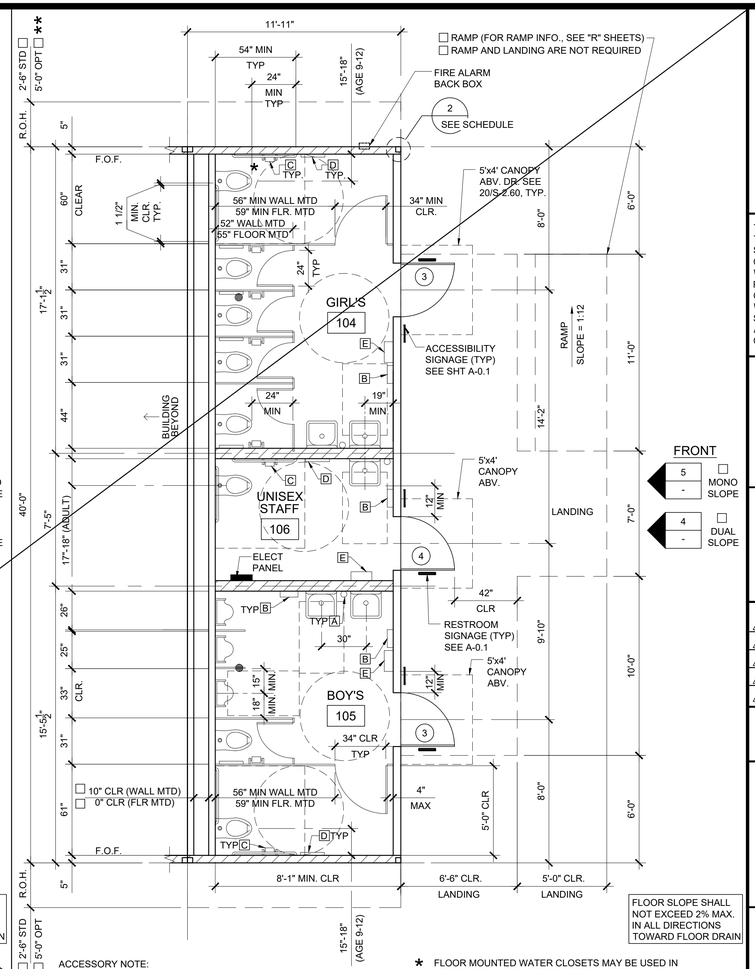
FLOOR PLAN - AGE 5-8

SCALE: 1/4" = 1' - 0" | 2



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** OPT. 5'-0" OVERHANG ALLOWED AT ONLY ONE END OF BUILDING

FLOOR PLAN - AGE 9-12

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

OPTIONAL RESTROOM END MODULE

ALTERNATE HEIGHT PLANS

REVISIONS

1
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APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN 'N STARLING
24575
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

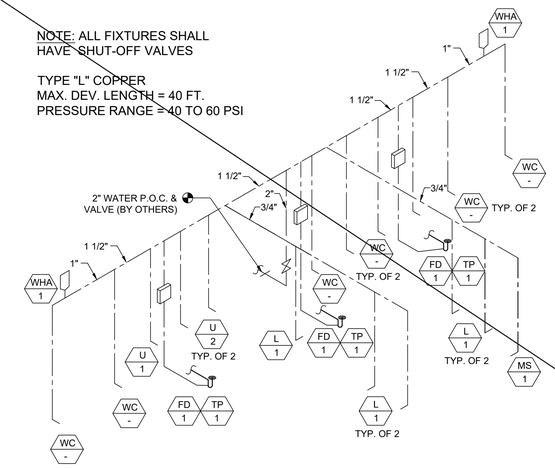
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-1.04A

NOTE: ALL FIXTURES SHALL HAVE SHUT-OFF VALVES

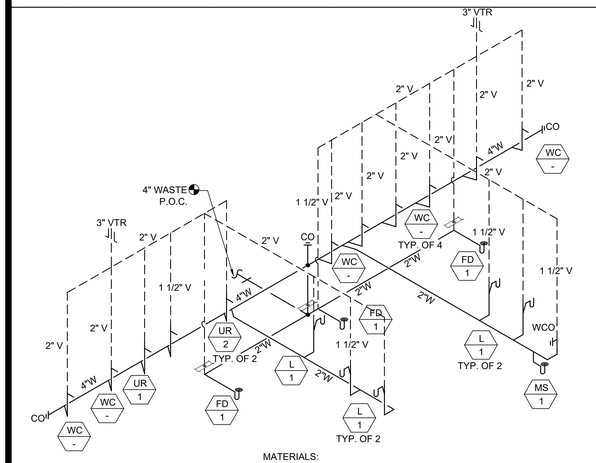
TYPE "L" COPPER
MAX. DEV. LENGTH = 40 FT.
PRESSURE RANGE = 40 TO 60 PSI



WATER LINE

SEE NOTES THIS SHEET

SUPPLY ISOMETRIC - FLOOR AND WALL MOUNT — SCALE: N.T.S. — 9



MATERIALS:

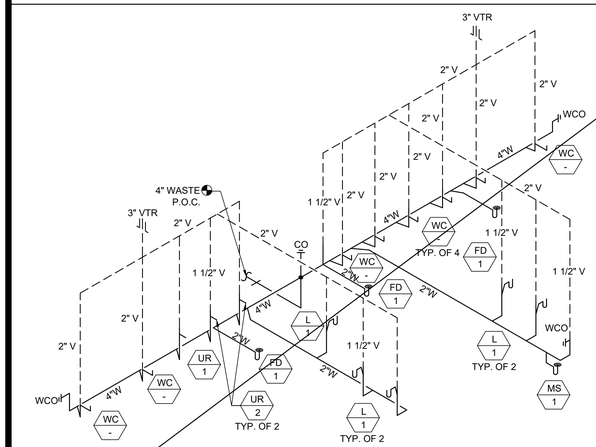
- ABS SCHEDULE 40 IS STANDARD
- CAST IRON W/ NO HUB CONNECTOR IS OPTION FOR BLDG. OVER 2160 SF.
- BASED ON 1/4" PER FOOT SLOPE

VENT LINE

WASTE LINE

SEE NOTES THIS SHEET

WASTE AND VENTING ISOMETRIC - WALL MOUNT — SCALE: N.T.S. — 10



MATERIALS:

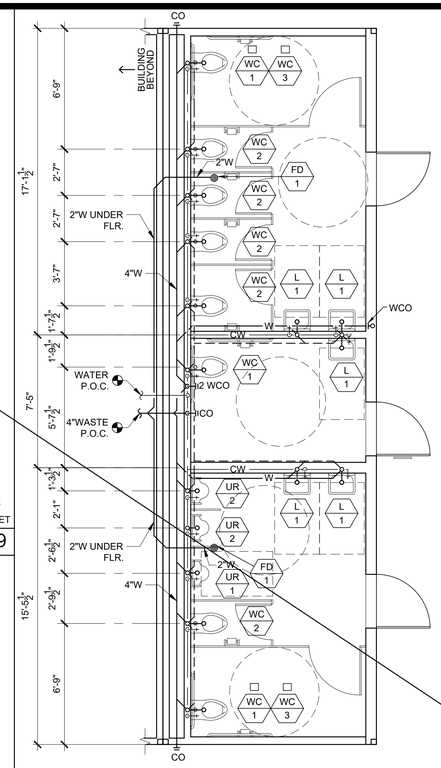
- ABS SCHEDULE 40 IS STANDARD
- CAST IRON W/ NO HUB CONNECTOR IS OPTION FOR BLDG. OVER 2160 SF.
- BASED ON 1/4" PER FOOT SLOPE

VENT LINE

WASTE LINE

SEE NOTES THIS SHEET

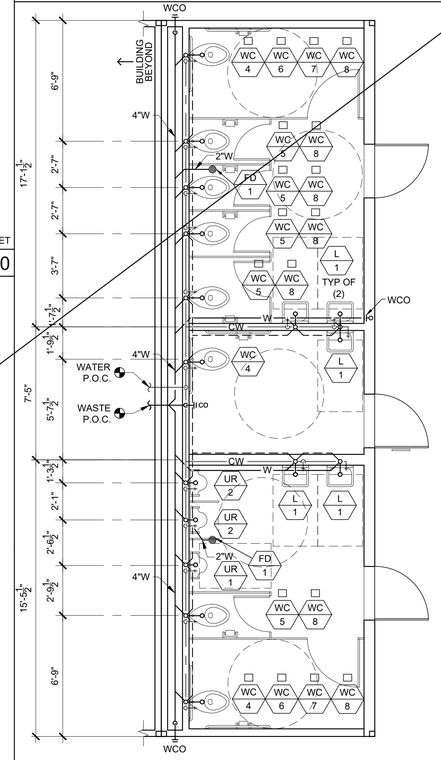
WASTE AND VENTING ISOMETRIC - FLOOR MOUNT — SCALE: N.T.S. — 11



WALL MOUNT

SEE NOTES THIS SHEET
SCALE: 1/4" = 1-0"

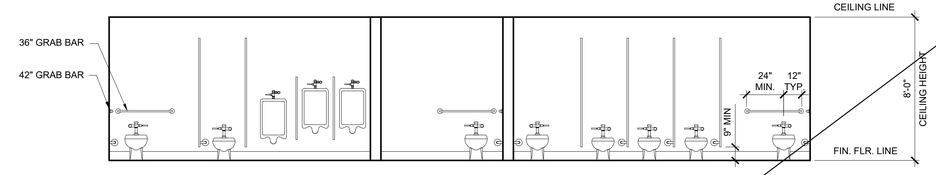
PLUMBING PLAN (AGE 5-8, 9-12 & ADULT) — 7



FLOOR MOUNT

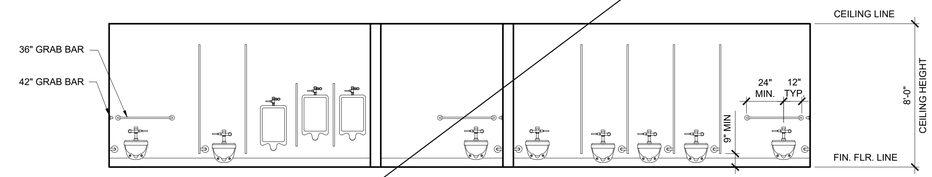
SEE NOTES THIS SHEET
SCALE: 1/4" = 1-0"

PLUMBING PLAN (AGE 3-4, 5-8, 9-12 & ADULT) — 8



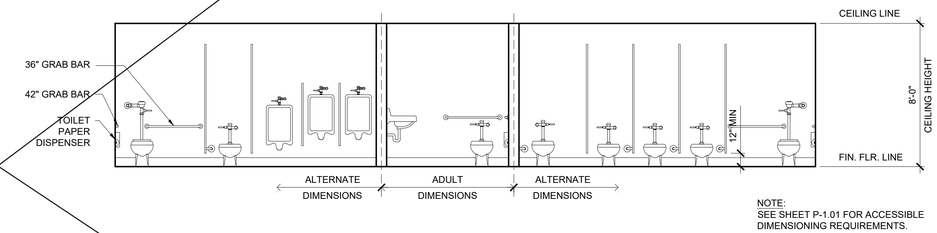
NOTE:
SEE SHEET P-1.01 FOR ACCESSIBLE DIMENSIONING REQUIREMENTS.

PLUMBING FIXTURE ELEVATION - FLOOR MOUNTED (ADULT) — SCALE: 1/4" = 1-0" — 1



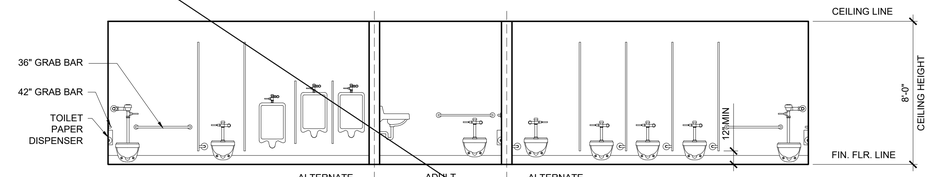
NOTE:
SEE SHEET P-1.01 FOR ACCESSIBLE DIMENSIONING REQUIREMENTS.

PLUMBING FIXTURE ELEVATION - WALL MOUNTED (ADULT) — SCALE: 1/4" = 1-0" — 2



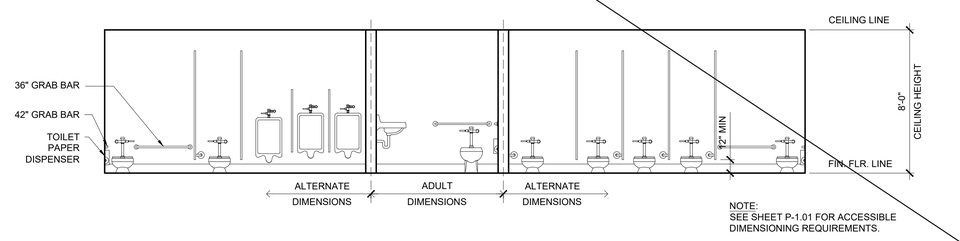
NOTE:
SEE SHEET P-1.01 FOR ACCESSIBLE DIMENSIONING REQUIREMENTS.

PLUMBING FIXTURE ELEVATION - FLOOR WALL MOUNTED (AGE 5-8 OR 9-12) — SCALE: 1/4" = 1-0" — 3



NOTE:
SEE SHEET P-1.01 FOR ACCESSIBLE DIMENSIONING REQUIREMENTS.

PLUMBING FIXTURE ELEVATION - WALL MOUNTED (AGE 5-8 OR 9-12) — SCALE: 1/4" = 1-0" — 4



NOTE:
SEE SHEET P-1.01 FOR ACCESSIBLE DIMENSIONING REQUIREMENTS.

PLUMBING FIXTURE ELEVATION - FLOOR MOUNTED (AGE 3 - 4) — SCALE: 1/4" = 1-0" — 5

NOTE:

- HOT WATER LINE INSULATION TO BE INSTALLED AT FIRST 8' FROM THE WATER HEATER ON NON-RECIRCULATING SYSTEMS.
- ALL HOT WATER LINES TO BE INSULATED WHEN RE-CIRCULATING SYSTEMS ARE USED.
- INSULATION SHALL HAVE A FLAME SPREAD INDEX 0-25; SMOKE DEVELOPED INDEX 0-450.

NOTE:
FOR PLUMBING FIXTURE SCHEDULE SEE SHEET A-1.07

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

OPTIONAL RESTROOM END MODULE
PLUMBING SHEET

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
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MODULAR BUILDING DESIGN PROFESSIONAL

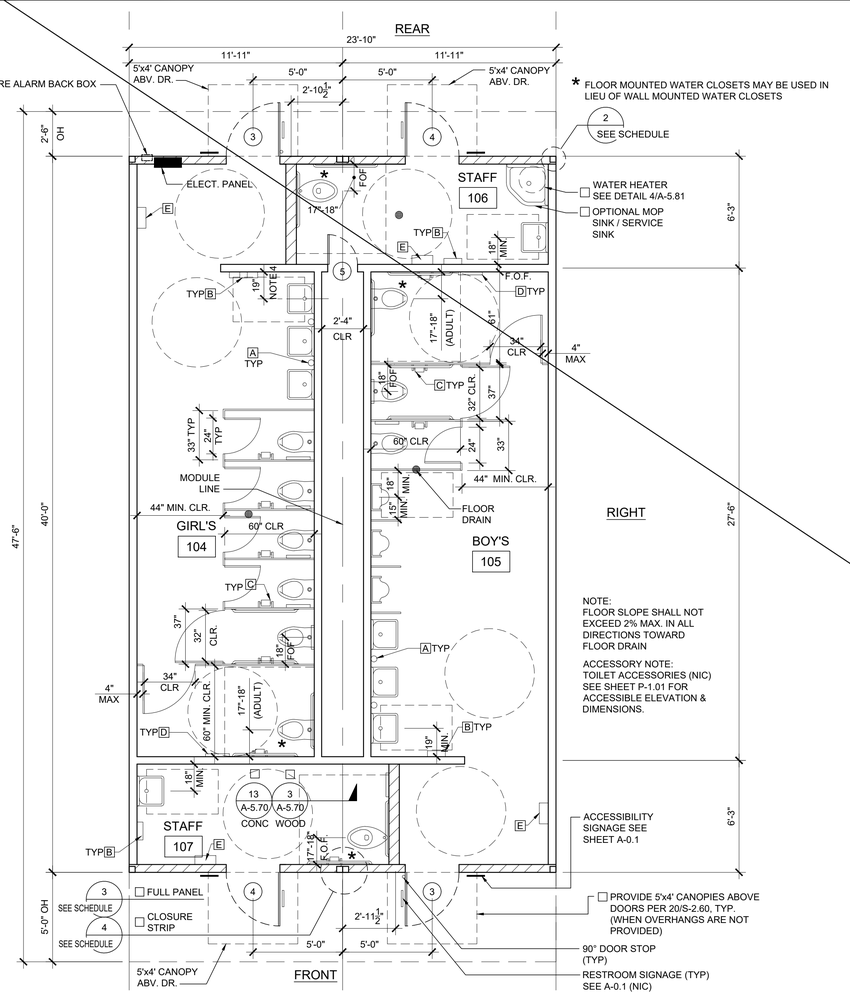
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24175 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

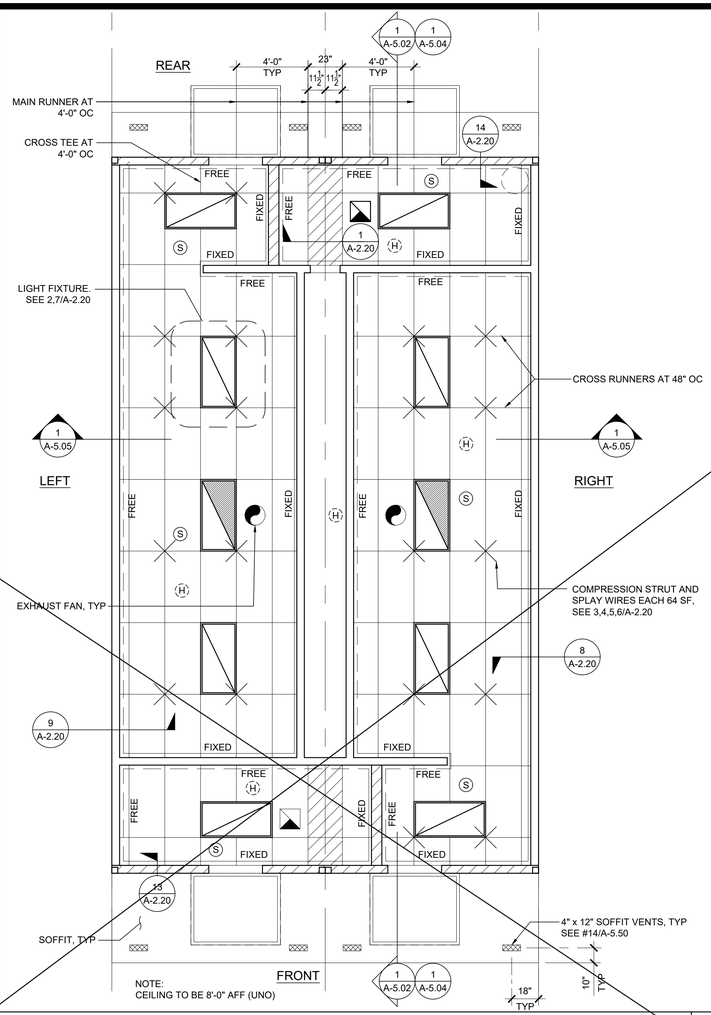
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

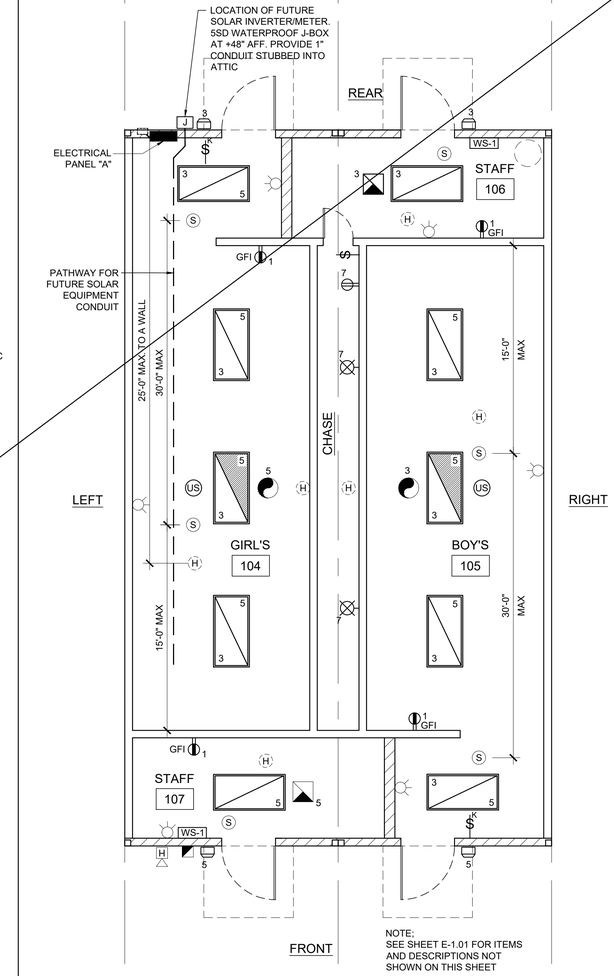
A-1.05



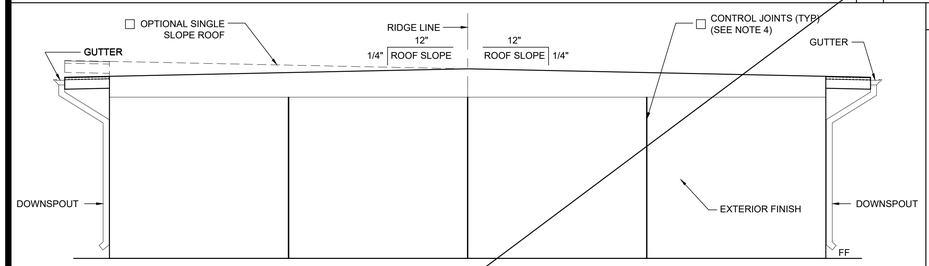
FLOOR PLAN (ADULT HEIGHT) SCALE: 1/4" = 1' - 0" 1



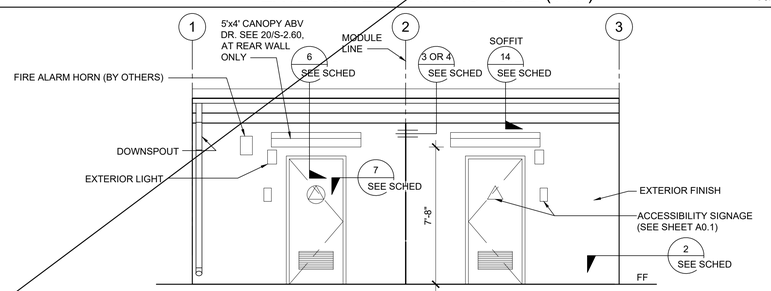
REFLECTED CEILING PLAN SCALE: 1/4" = 1' - 0" 2



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



EXTERIOR ELEVATIONS - SIDE (TYP) SCALE: 1/4" = 1' - 0" 4



EXTERIOR ELEVATIONS - FRONT / REAR SCALE: 1/4" = 1' - 0" 5

R.C.P. LEGEND

- T-BAR CEILING
- FIELD INSTALLED PANEL AT MODULE LINE
- 2x4 CEILING RECESSED LIGHT, LED LIGHT FIXTURE WITH DIMMING, 51 WATTS (MAX), 5000L (MIN)
- OPTIONAL 1' x 4' RECESSED LIGHT FIXTURE 51 WATTS (MAX), 5000L (MIN)
- SPLAY WIRE
- (S) CEILING MOUNTED SMOKE DETECTOR
- (H) ATTIC MOUNTED HEAT DETECTOR
- CEILING EXHAUST FAN
- EXTERIOR LIGHT
- FIRE ALARM STROBE

NOTE: SEE 'E' SHEETS FOR ADDITIONAL DESCRIPTION OF ITEMS SHOWN IN THE R.C.P. LEGEND

- 30"x48" CLEAR SPACE
- 60" CIRCLE CLEAR SPACE

ELECTRICAL PANEL

VOLTS: 120/208 V | PANEL: "A" | FEED: BOTTOM
MAIN: 100A | LOCATION: INTERIOR ACCESS | MOUNTING: FLUSH

LOAD	QTY	WATTS AØ	WATTS BØ	BREAKER Amps	BREAKER P	A Circuit	B Circuit	BREAKER Amps	BREAKER P	WATTS AØ	WATTS BØ	QTY	LOAD
RECEPTACLES / GFI	3	720		20	1	1	2						
INTERIOR/EXTERIOR LIGHTING/EXHAUST FAN	8		955	20	1	3	4						
INTERIOR/EXTERIOR LIGHTING/EXHAUST FAN	5	955		20	1	5	6						
CHASE LIGHT / RECEPTACLE (OPT B-1)	3		300	20	1	7	8						
						9	10						
						11	12	20	1		40		FIRE ALARM
A = 1675 WATTS / PHASE		1675	1255								40		B = 2510 WATTS / PHASE
TOTAL = 4185 WATTS		17.4	AMPS	120/208	VOLTS				1 Ø		3	WIRE	

NOTES

1. PLACE (2) PERMANENT METAL IDENTIFICATION LABELS ON EACH MODULE. PER IR 16-1.13 (2.1) (1) LABEL AT REAR EXTERIOR AND (1) LABEL ABOVE CEILING LINE AT INTERIOR FRAME. LABELS WILL BE MECHANICALLY FASTENED AND SHOW THE DSA APPLICATION NUMBER, MANUFACTURER'S NAME AND SERIAL NUMBER, DESIGN LIVE LOAD FOR ROOF AND FLOOR FRAMING, WIND SPEED, EXPOSURE CATEGORY, AND Kzt = 1.0 2022 CBC, DESIGN CLIMATE ZONE, SEISMIC PARAMETER = S_S.
2. NOT USED
3. ALL FIXTURE HEIGHTS TO BE VERIFIED PRIOR TO CONSTRUCTION.
4. ACCESSORIES SHALL NOT ENCROACH REQUIRED CLEAR SPACE. LOCATION OF LAVATORY TO BE 19" MIN. FROM FACE OF FINISH OF WALL WHEN ACCESSORIES (PAPER TOWEL DISPENSERS, ELECTRIC HAND DRYERS, ETC.) HAVING A 4" PROJECTION ARE TO BE INSTALLED, SO AS NOT TO ENCROACH INTO THE 30" x 48" CLEAR SPACE.
5. TOILET ROOM FLOORING AND BASE SHALL BE INSTALLED PER 10/A-5.70 IN LIEU OF PROVIDING A CURB (IR 23-2)

DETAIL SCHEDULE

FINISH:	SHEET #:
☐ SIDING OVER WOOD STUDS	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

TOILET ACCESSORIES

(REF. ONLY - MODELS FURNISHED AND INSTALLED BY DISTRICT U.N.O.)

- A SOAP DISPENSER: LIQUID SOAP DISPENSER 4" MAX PROJECTION
- B PAPER TOWEL DISPENSER: SURFACE MOUNTED 4" MAX. PROJECTION-CANNOT ENCROACH INTO 30"x48" CLEAR SPACE OF FIXTURE
- C TOILET PAPER HOLDER: SINGLE ROLL SEMI-RECESSED OR 3" MAX PROJECTION
- D TOILET SEAT DISPENSER: SURFACE MOUNTED
- E WALL MOUNTED WASTE RECEPTACLE, 6" MAX PROJECTION, 12" MAX ABV. FIN FLR TO BTM.

WALL LEGEND

- NOMINAL 4" WALL STUD ☐
- NOMINAL 6" WALL STUD ☐
- NOMINAL 8" WALL STUD ☐

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

TOILET BUILDING 24'x40'
ADULT HEIGHT PLAN & ELEV'S

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
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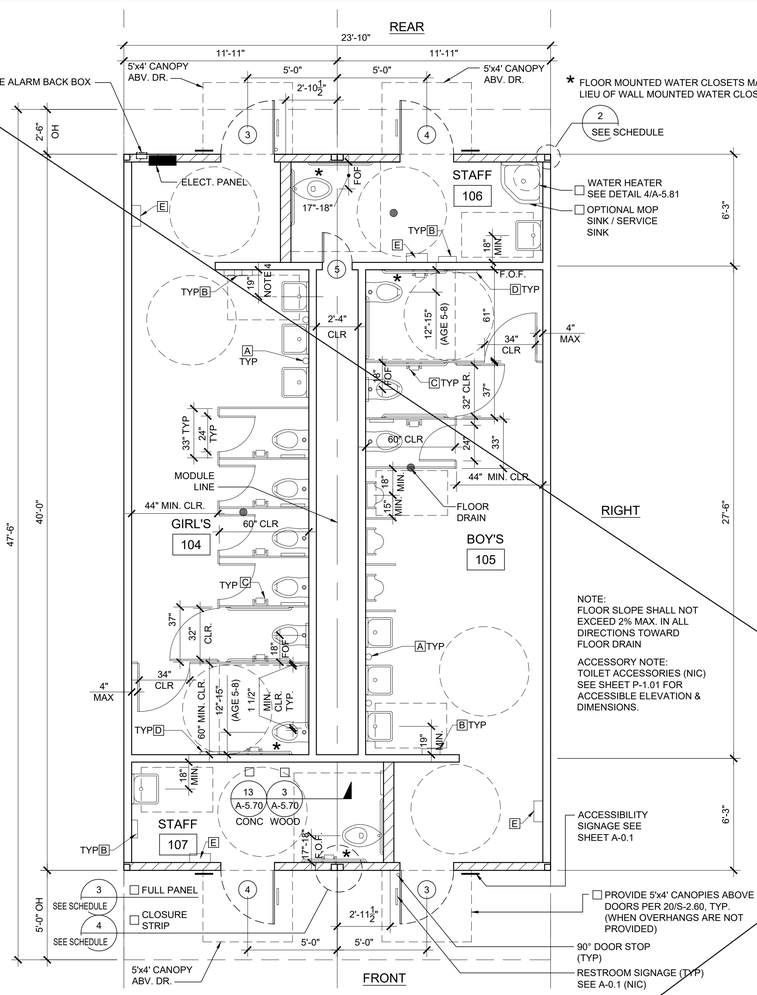
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 2475 STRUCTURAL STATE OF CALIFORNIA

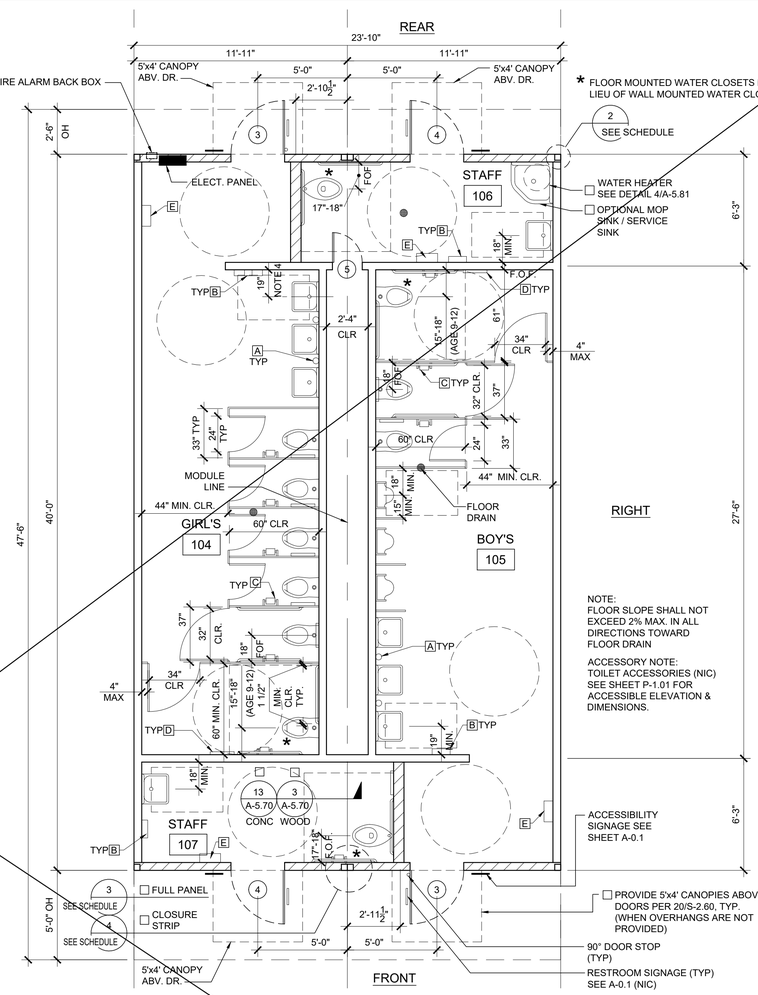
SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
A-1.06



FLOOR PLAN - AGE 5-8 SCALE: 1/4" = 1' - 0" 2



FLOOR PLAN - AGE 9-12 SCALE: 1/4" = 1' - 0" 1

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

TOILET BUILDING 24'x40'
ALTERNATE HEIGHT PLANS

REVISIONS

1	
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3	
4	
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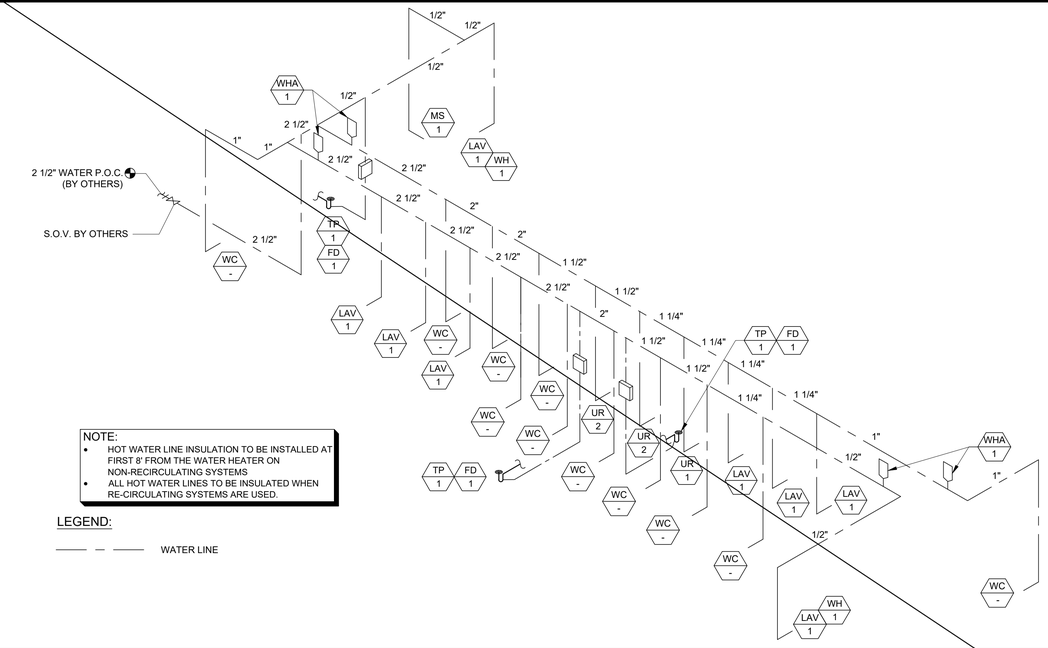

NOTE:
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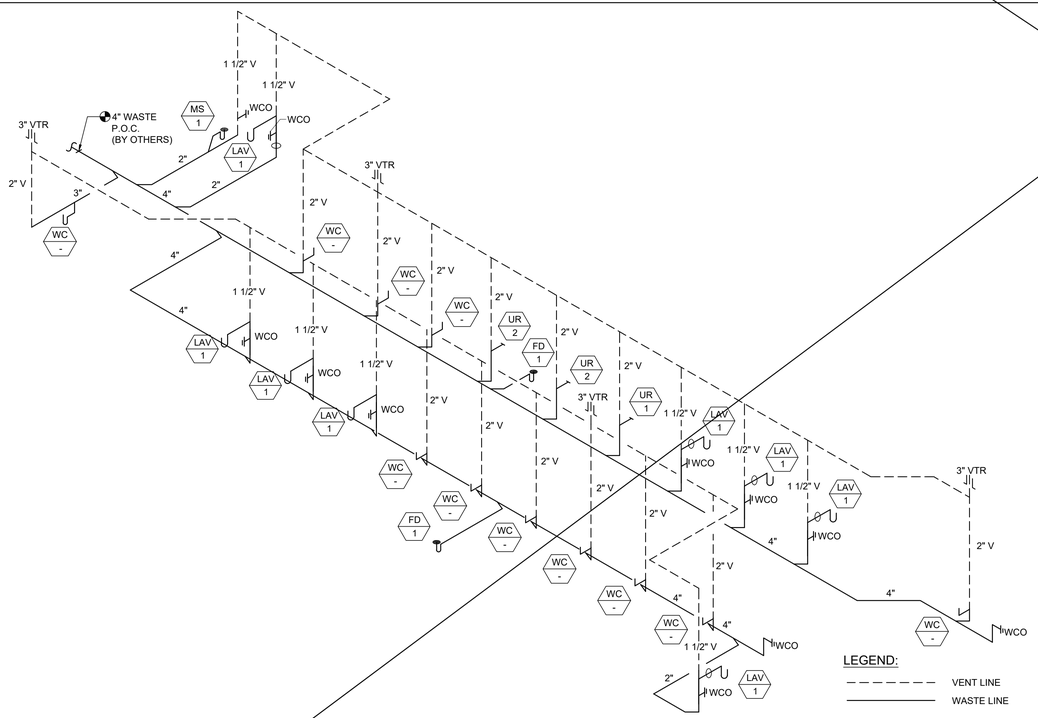
- ALL HOT WATER LINES TO BE INSULATED WHEN RE-CIRCULATING SYSTEMS ARE USED.

LEGEND:

——— – ——— WATER LINE

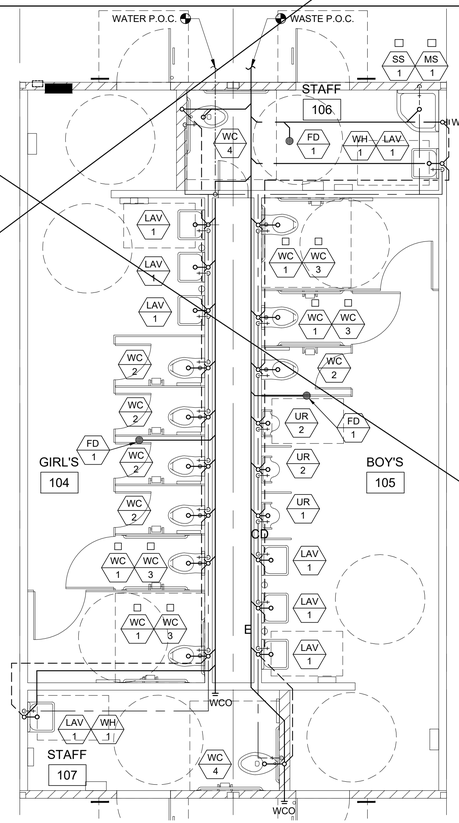
SUPPLY ISOMETRIC

SCALE: N.T.S. | 3



WASTE AND VENTING ISOMETRIC

SCALE: N.T.S. | 4



PLUMBING PLAN (AGE 5-8, 9-12 & ADULT)

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

PLUMBING FIXTURE SCHEDULE CONT.

SYMBOL	FIXTURE	COLD WATER	HOT WATER	WASTE	VENT	FIXTURE DESCRIPTION (AS CALLED OUT OR APPROVED EQUAL)
WC 20	[ADULT] WATER CLOSET TANK TYPE (ACCESSIBLE)	1/2"	-	3"	2"	STD: PROFLO PF9403 (1.28 GPF) ALT: AMERICAN STANDARD ADA 2758.128, 17 HIGH, VITREOUS CHINA ELONGATED RIM, TANK TYPE; 12" ROUGH-IN; OLSONITE 10CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT
WC 21	[AGE 9-12] WATER CLOSET TANK TYPE (ACCESSIBLE)	1/2"	-	3"	2"	STD: PROFLO STANDARD PF9401 (1.28 GPF) ALT: AMERICAN STANDARD 2832.128, 16" HIGH, VITREOUS CHINA ELONGATED RIM, TANK TYPE; 12" ROUGH-IN; OLSONITE 10CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT
WC 22	[AGE 5 TO ADULT] WATER CLOSET TANK TYPE (NON-ACCESSIBLE)	1/2"	-	3"	2"	STD: PROFLO STANDARD PF9401 (1.28 GPF) ALT: AMERICAN STANDARD 2832.128, 16" HIGH, VITREOUS CHINA ELONGATED RIM, TANK TYPE; 12" ROUGH-IN; OLSONITE 10CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT
WC 23	[AGE 3-4] WATER CLOSET TANK TYPE (ACCESSIBLE & NON-ACCESSIBLE)	1/2"	-	3"	2"	STD: PROFLO PF1704BB (1.28 GPF) ALT: AMERICAN STANDARD 2315.016 BABY DEVORO 10" HIGH, 10" ROUGH-IN, VITREOUS CHINA ELONGATED RIM, TANK TYPE; OLSONITE 10CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT
WC 24	[AGE 5-8] WATER CLOSET TANK TYPE (ACCESSIBLE)	1/2"	-	3"	2"	STD: PROFLO PF1704BB (1.28 GPF) ALT: AMERICAN STANDARD 2315.016 BABY DEVORO 10" HIGH, 10" ROUGH-IN, VITREOUS CHINA ELONGATED RIM, TANK TYPE; CHURCH 2L2155T (2" LIFT) SOLID OPEN WHITE ELONG. PLASTIC SEAT

SYMBOL	FIXTURE	COLD WATER	HOT WATER	WASTE	VENT	FIXTURE DESCRIPTION (AS CALLED OUT OR APPROVED EQUAL)
WC 1	[ADULT] WATER CLOSET WALL MTD/FLUSH (ACCESSIBLE)	1"	-	3"	2"	STD: PROFLO STANDARD PF1731 WALL (1.28 GPF) ALT: AMERICAN STD 2856.128 VITREOUS CHINA ELONGATED RIM, FLUSH VALVE TYPE, SIPHON JET; OLSONITE 10SSCTFR SOLID OPEN WHITE ELONGATED PLASTIC SEAT; SLOAN ROYAL #111-1.28 LOW CONSUMPTION FLUSHOMETER VALVE; JAY R SMITH #210-LY OR RY NO-HUB ADJUSTABLE FIXTURE SUPPORT CARRIER
WC 2	[AGE 5 TO ADULT] WATER CLOSET WALL MTD/ FLUSH (NON-ACCESSIBLE)	1"	-	3"	2"	STD: PROFLO STANDARD PF1731 WALL (1.28 GPF) ALT: AMERICAN STD 2856.128 VITREOUS CHINA ELONGATED RIM, FLUSH VALVE TYPE, SIPHON JET; OLSONITE 10SSCTFR SOLID OPEN WHITE ELONGATED PLASTIC SEAT; SLOAN ROYAL #111-1.28 LOW CONSUMPTION FLUSHOMETER VALVE; JAY R SMITH #210-LY OR RY NO-HUB ADJUSTABLE FIXTURE SUPPORT CARRIER
WC 3	[AGE 5 TO 12] WATER CLOSET WALL MTD/FLUSH (ACCESSIBLE)	1"	-	3"	2"	STD: PROFLO STANDARD PF1731 WALL (1.28 GPF) ALT: AMERICAN STD 2856.128 VITREOUS CHINA ELONGATED RIM, FLUSH VALVE TYPE, SIPHON JET; OLSONITE 10SSCTFR SOLID OPEN WHITE ELONGATED PLASTIC SEAT; SLOAN ROYAL #115-1.28 LOW CONSUMPTION FLUSHOMETER VALVE; JAY R SMITH #210-LY OR RY NO-HUB ADJUSTABLE FIXTURE SUPPORT CARRIER
WC 4	[ADULT] WATER CLOSET FLOOR MTD/FLUSH (ACCESSIBLE)	1"	-	3"	2"	STD: PROFLO PF1723 (1.28 GPF) ALT: AMERICAN STD 3043.001 "MADERA" 16 3/4" HIGH, VITREOUS CHINA ELONGATED RIM, SIPHON JET, 10" ROUGH-IN; OLSONITE 10SSCTFR SOLID OPEN WHITE ELONGATED PLASTIC SEAT; SLOAN ROYAL #111-1.28 LOW CONSUMPTION FLUSHOMETER VALVE
WC 5	[AGE 5 TO ADULT] WATER CLOSET FLOOR MTD/FLUSH (NON-ACCESSIBLE)	1"	-	3"	2"	STD: PROFLO STANDARD PF1721 (1.28 GPF) ALT: AMERICAN STANDARD 2234.001 MADERA 15" HIGH, VITREOUS CHINA ELONGATED RIM, SIPHON JET, 12" ROUGH-IN; OLSONITE 10SSCTFR SOLID OPEN WHITE ELONGATED PLASTIC SEAT; SLOAN ROYAL #111-1.28 LOW CONSUMPTION FLUSHOMETER VALVE
WC 6	[AGE 9-12] WATER CLOSET FLOOR MTD/FLUSH (ACCESSIBLE)	1"	-	3"	2"	STD: PROFLO STANDARD PF1721 (1.28 GPF) ALT: AMERICAN STANDARD 2234.001 MADERA 15" HIGH, VITREOUS CHINA ELONGATED RIM, SIPHON JET, 12" ROUGH-IN; OLSONITE 10SSCTFR SOLID OPEN WHITE ELONGATED PLASTIC SEAT; SLOAN ROYAL #115-1.28 LOW CONSUMPTION FLUSHOMETER VALVE
WC 7	[AGE 5-8] WATER CLOSET FLOOR MTD/FLUSH (ACCESSIBLE)	1"	-	3"	2"	AMERICAN STANDARD 2599.001 MADERA YOUTH (1.28 GPF) 14" HIGH, VITREOUS CHINA ELONG. RIM, SIPHON JET, 10" ROUGH-IN; OLSONITE 10SSCTFR ELONGATED WHITE PLASTIC SEAT; SLOAN ROYAL #115-1.28 LOW CONSUMPTION FLUSHOMETER VALVE
WC 8	[AGE 3-4] WATER CLOSET FLOOR MTD/FLUSH (ACCESSIBLE & NON-ACCESSIBLE)	1"	-	3"	2"	STD: PROFLO PF1700BB (1.28 GPF) ALT: AMERICAN STANDARD BABY DEVORO 2282.010 VITREOUS CHINA ELONGATED RIM, 10" ROUGH-IN LOW CONSUMPTION CLOSET BOWL; OLSONITE 126CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT; SLOAN ROYAL #111-1.28 LOW CONSUMPTION FLUSH VALVE
LAV 1	LAVATORY (ACCESSIBLE)	1/2"	-	2"	1 1/2"	STD: AMERICAN STANDARD 0355.012 LUCERNE ALT: CRANE 1-412V "HARWICH" 20X18" VITREOUS CHINA; JAY R SMITH #722 CONCEALED HANGER; OLYMPIA #6161 SINGLE HANDLE FAUCET (0.5 GPM)
UR 1	URINAL (ACCESSIBLE)	3/4"	-	2"	1 1/2"	STD: PROFLO PF 1815 (0.125 GPF) ALT: AMERICAN STANDARD 6550.501 VITREOUS CHINA, WALL HUNG, SIPHON JET URINAL WITH INTEGRAL TRAP; SLOAN REGAL 186-0.125 LOW CONSUMPTION FLUSHOMETER VALVE
UR 2	URINAL (NON-ACCESSIBLE)	3/4"	-	2"	1 1/2"	STD: PROFLO PF 1815 (0.125 GPF) ALT: AMERICAN STANDARD 6550.501 WASHOUT VITREOUS CHINA, WALL HUNG URINAL WITH INTEGRAL TRAP; SLOAN REGAL 186-0.125 LOW CONSUMPTION FLUSHOMETER VALVE
FD 1	FLOOR DRAIN	-	-	2"	1 1/2"	JAY R SMITH #2005YA-02-P050-NB. FLOOR DRAIN TAPPED FOR PRIMER. 5" NICKEL BRONZE STRAINER W/ 1/4" MAX. GRATE OPENINGS
TP 1	TRAP PRIMER	1/2"	-	-	-	PR-500 WITH 8"x12" LOCKABLE BOX, 1/2" BALL SHUT-OFF VALVE, AND PPP DU-U FRESH WATER DISTRIBUTION SYSTEM
WHA 1	WATER HAMMER ARRESTOR	1"	-	-	-	PPP SC-1000
GB 1	GRAB BAR	-	-	-	-	BOBRICK B-6806-1-1/2 OC STAINLESS STEEL GRAB BAR - SATIN FINISH; 36" LONG ON BACK AND 42" ON SIDE
MR 1	MIRROR	-	-	-	-	SERIES 530 RETURNED MIRRORS STAINLESS STEEL - 18GA 18"x24" - "J" SHEET METAL MANUFACTURED OR APPROVED EQUAL
PAR 1	TOILET PARTITION	-	-	-	-	METAL POWDER COATED
SS 1	SERVICE SINK	1/2"	1/2"	2"	1 1/2"	KOHLER K-6714 "BANNON" 22"x18" CAST IRON, ACID RESISTANT SINK; K-8905-RP "KNOXFORD" FAUCET; K-6672 2" I.P.S. TRAP
MS 1	MOP SINK	1/2"	1/2"	2"	1 1/2"	AMERICAN STANDARD #7741.000 28"x28" CAST IRON W/ CHIGAGO FAUCET 956-R, 853 WALL HOOK, AND 2" K-9142 STRAINER
CS 1	CLASSROOM SINK (OPTION)	1/2"	1/2"	2"	1 1/2"	JUST CRA-1725-A-GR 17"x25" w/ 4 1/2" BOWL DEPTH, WITH CHICAGO FAUCET #350 AND BUBBLER JSB-10
WH 1	INSTANT WATER HEATER	1/2"	1/2"	-	-	EEMAX #SP3012, 120V, 3.0 KW, 25A
DF 1	DRINKING FOUNTAIN	1/2"	-	2"	1 1/2"	HALSEY-TAYLOR / BI-LEVEL HAC8FSBL-Q / COOLING TYPE

** NOTE;
WHERE FLUSH VALVES OR TOILET TANKS CONFLICT WITH THE REAR GRAB BAR, THE 36" REAR GRAB BAR SHALL BE SHIFTED TO THE OPEN SIDE OF THE TOILET AREA WITH 1 1/2" MIN. CLEARANCE FROM FIXTURE OR CONTROL VALVE.

PLUMBING FIXTURE SCHEDULE

A

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

TOILET BUILDING 24'x40'
PLUMBING SHEET

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR:
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

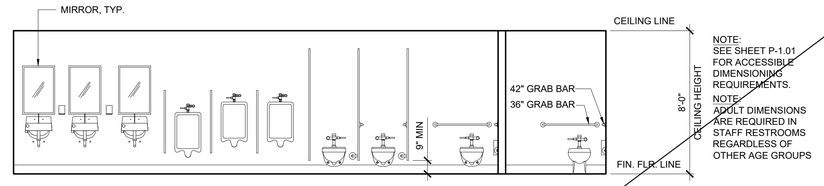
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

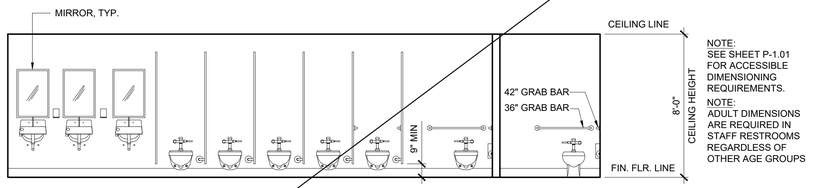
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-1.07



PLUMBING FIXTURE ELEVATION - BOYS (ADULT HEIGHT) SCALE: 1/4" = 1-0" | 1



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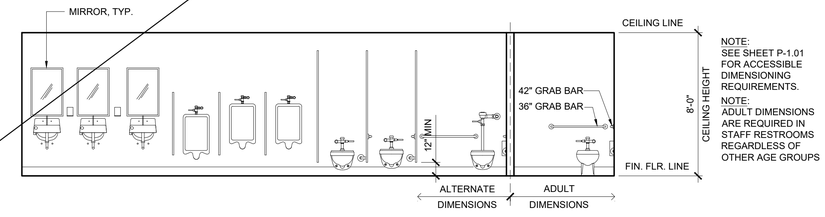
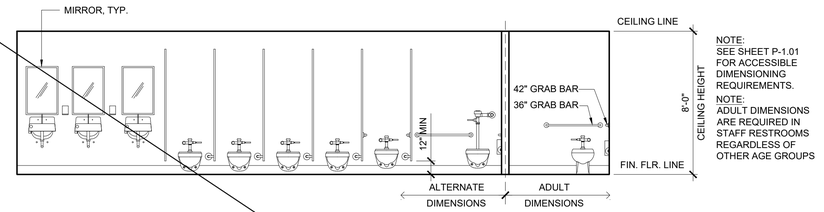
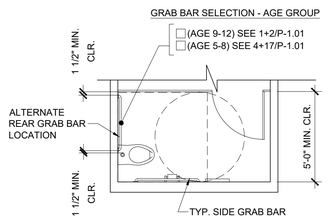


PLUMBING FIXTURE ELEVATION - BOYS (AGE 5-8 OR 9-12) SCALE: 1/4" = 1-0" | 3



PLUMBING FIXTURE ELEVATION - GIRLS (AGE 5-8 OR 9-12) SCALE: 1/4" = 1-0" | 4



ALTERNATE ACCESSIBLE TOILET STALL (DETAIL - 'A')

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

TOILET BUILDING 24'x40'
INTERIOR ELEVATIONS

REVISIONS

1
2
3
4
5

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

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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

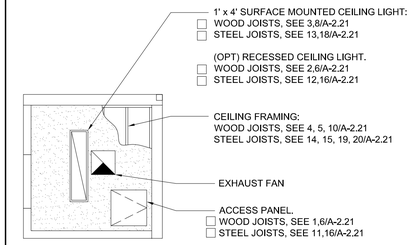
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

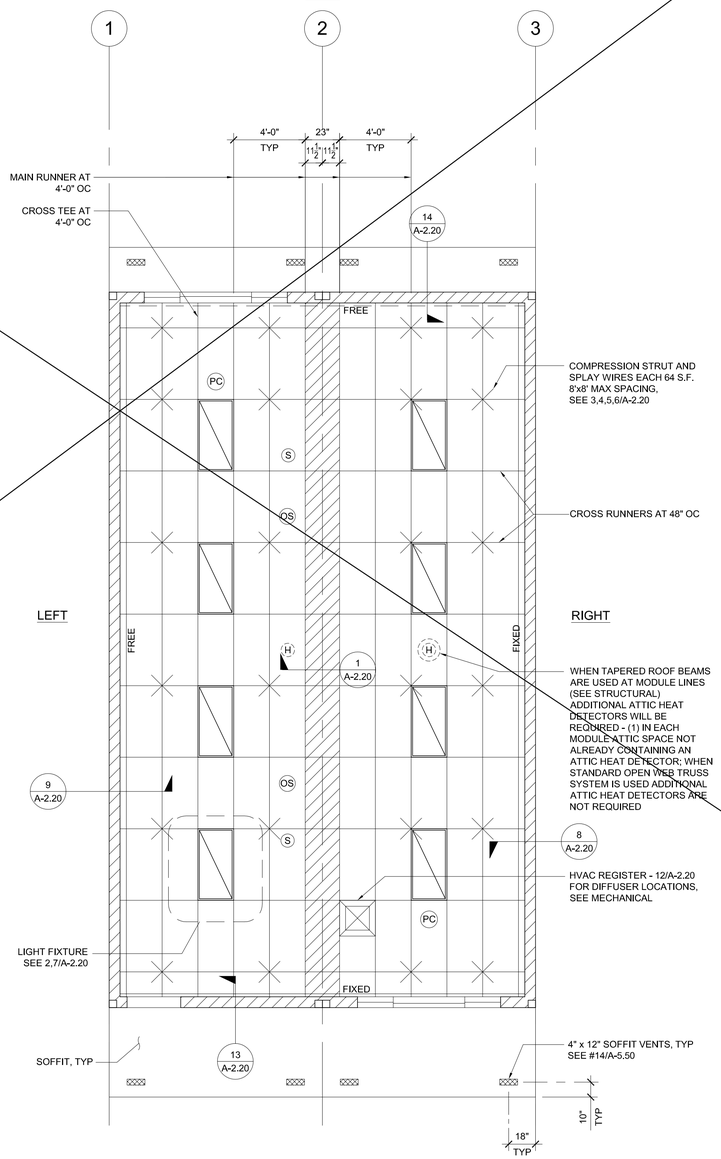
P.C. SHEET NUMBER

A-1.08



HARDLID CEILING (OPTIONAL) SCALE: 1/4" = 1'-0" | 1A

REAR

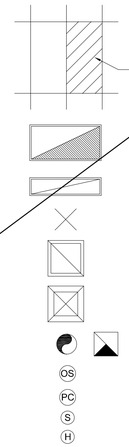


NOTE:
CEILING TO BE 8'-6" AFF (UNO)

FRONT

REFLECTED CEILING PLAN SCALE: 1/4" = 1'-0" | 1

LEGEND



NOTE:
FOR ALL REFLECTED CEILING NOTES SEE SHEET A-0.1

T-BAR SCHEDULE

ARMSTRONG PART NUMBERS ICC-ES ESR-1308

MAIN RUNNER: 7301
4' CROSS TEE: XL7341
2' CROSS TEE: XL7328

STANDARD 7/8" WALL ANGLE WITH BERC-2 CLIP (ICC #ESR-1308) 2"
WALL ANGLE: 7810 (OPTIONAL)

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

REFLECTED CEILING PLAN
24' x 40'

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
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APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

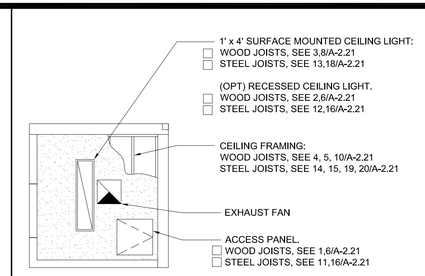
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
2475
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

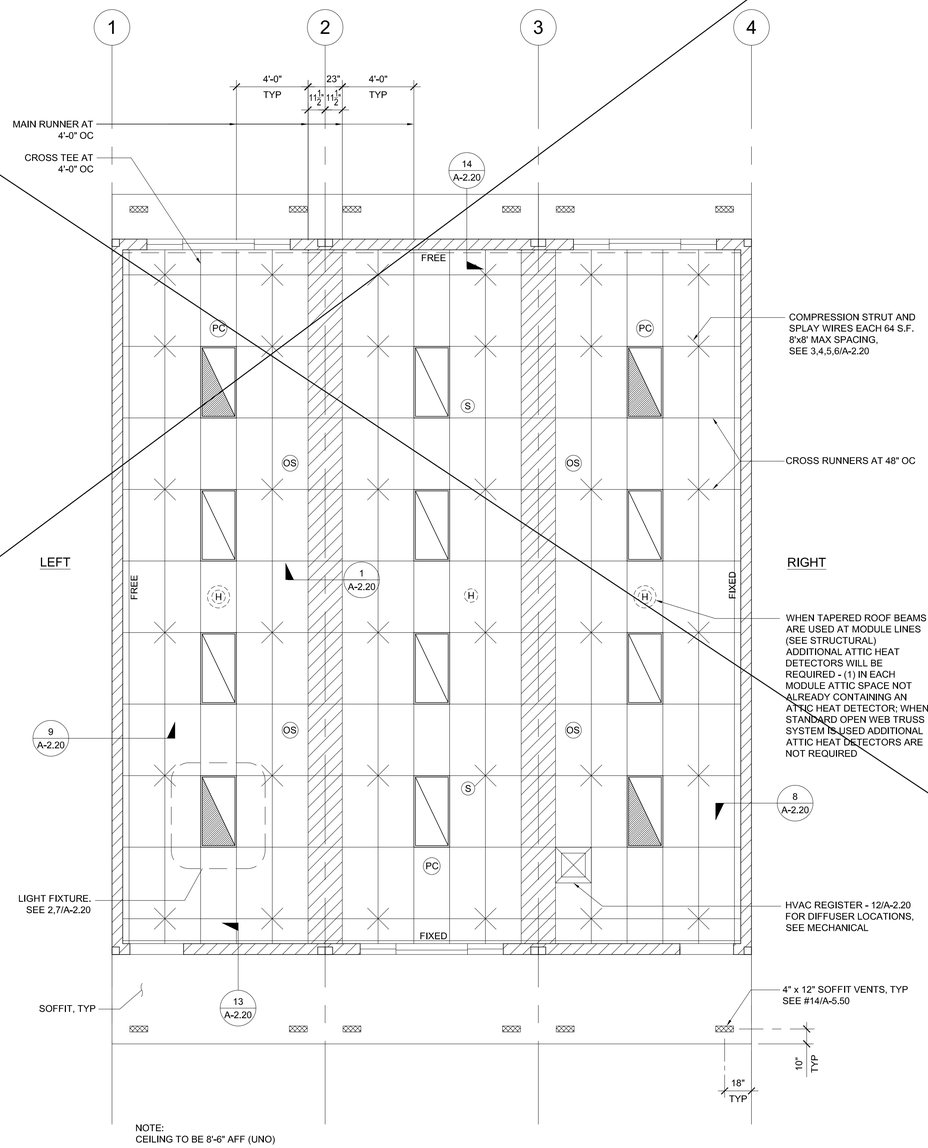
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
A-2.01



HARDLID CEILING (OPTIONAL) SCALE: 1/4" = 1'-0" | 1A

REAR



LEFT

RIGHT

FRONT

NOTE:
CEILING TO BE 8'-6" AFF (UNO)

REFLECTED CEILING PLAN SCALE: 1/4" = 1'-0" | 1

LEGEND

- T-BAR CEILING
- FIELD INSTALLED PANEL AT MODULE LINE
- 2' x 4' RECESSED LIGHT FIXTURE, HATCHING DENOTES EMERGENCY LIGHT FIXTURE (SEE ELECTRICAL PLAN)
- "OPTIONAL" 1' x 4' RECESSED LIGHT FIXTURE
- SPLAY WIRE
- RETURN AIR REGISTER
- SUPPLY AIR REGISTER
- CEILING EXHAUST FAN
- (OS) CEILING MOUNTED OCCUPANCY SENSOR
- (PC) CEILING MOUNTED PHOTOCELL
- (S) CEILING MOUNTED SMOKE DETECTOR
- (H) ATTIC MOUNTED HEAT DETECTOR

NOTE:
FOR ALL REFLECTED CEILING NOTES
SEE SHEET A-0.1

T-BAR SCHEDULE

ARMSTRONG PART NUMBERS ICC-ES ESR-1308

MAIN RUNNER: 7301
4' CROSS TEE: XL7341
2' CROSS TEE: XL7328

STANDARD 7/8" WALL ANGLE WITH BERC-2 CLIP (ICC #ESR-1308) 2" WALL ANGLE: 7810 (OPTIONAL)

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

REFLECTED CEILING PLAN
36' x 40'

REVISIONS
1.
2.
3.
4.
5.

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

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DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

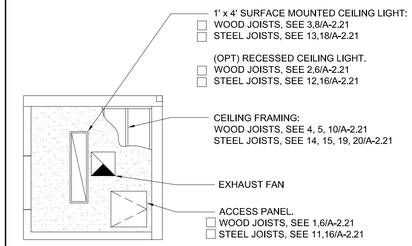
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STANLEY 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

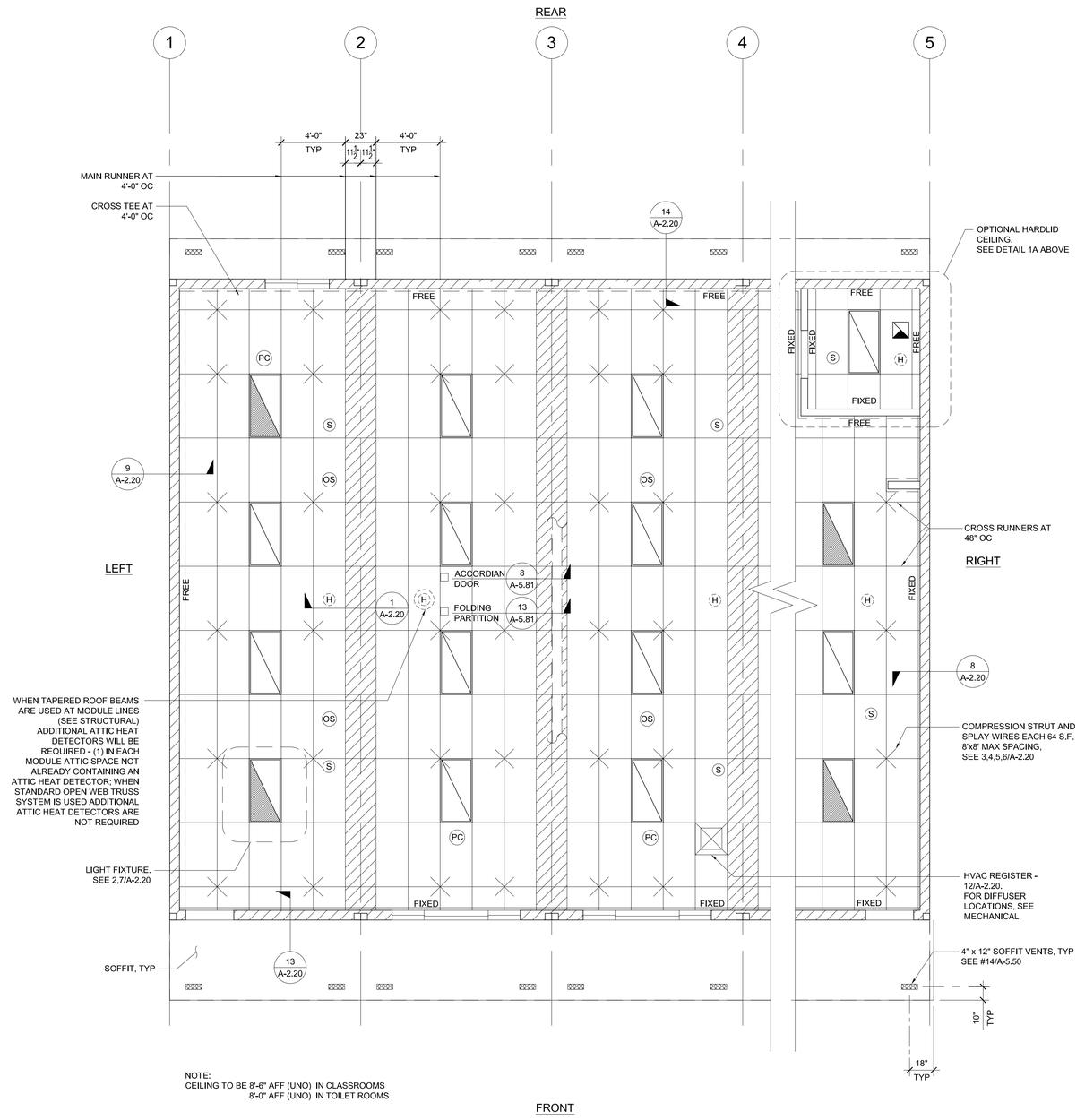
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
A-2.02



HARDLID CEILING (OPTIONAL) SCALE: 1/4" = 1'-0" | 1A

REAR



NOTE:
CEILING TO BE 8'-6" AFF (UNO) IN CLASSROOMS
8'-0" AFF (UNO) IN TOILET ROOMS

FRONT

REFLECTED CEILING PLAN SCALE: 1/4" = 1'-0" | 1

LEGEND

- T-BAR CEILING
- FIELD INSTALLED PANEL AT MODULE LINE
- 2' x 4' RECESSED LIGHT FIXTURE, HATCHING DENOTES EMERGENCY LIGHT FIXTURE (SEE ELECTRICAL PLAN)
- "OPTIONAL" 1' x 4' RECESSED LIGHT FIXTURE
- SPLAY WIRE
- RETURN AIR REGISTER
- SUPPLY AIR REGISTER
- CEILING EXHAUST FAN
- (OS) CEILING MOUNTED OCCUPANCY SENSOR
- (PC) CEILING MOUNTED PHOTOCELL
- (S) CEILING MOUNTED SMOKE DETECTOR
- (H) ATTIC MOUNTED HEAT DETECTOR

NOTE:
FOR ALL REFLECTED CEILING NOTES SEE SHEET A-0.1

NOTE:
WHERE OPERABLE PARTITION OCCURS, OCCUPANCY SENSOR SHALL BE DESIGNED AND LOCATED TO PROVIDE FOR EACH AREA CREATED BY THE PARTITION IN A CLOSED POSITION.

T-BAR SCHEDULE

ARMSTRONG PART NUMBERS ICC-ES ESR-1308

MAIN RUNNER: 7301
4' CROSS TEE: XL7341
2' CROSS TEE: XL7328

STANDARD 7/8" WALL ANGLE WITH BERC-2 CLIP (ICC #ESR-1308) 2" WALL ANGLE: 7810 (OPTIONAL)

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

REFLECTED CEILING PLAN
48' TO 120' x 40'

REVISIONS
1
2
3
4
5

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

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DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

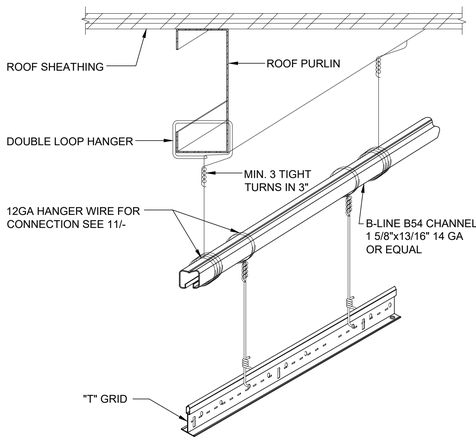
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24175 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

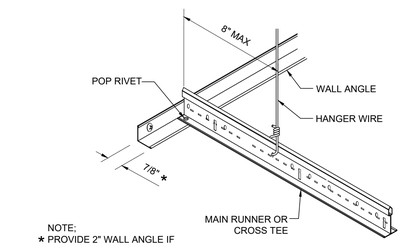
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
A-2.03



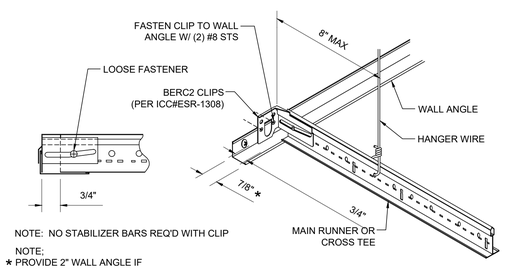
NOTE:
LOCATION MAY VARY (SEE NOTE "C" ON SHEET A-0.1)

TRAPEZE DETAIL — SCALE : NTS — 17



NOTE:
* PROVIDE 2" WALL ANGLE IF BERC2 CLIP IS NOT USED ON FREE SIDES

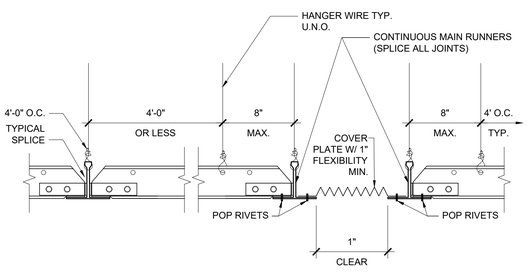
FIXED SIDE — SCALE : NTS — 18



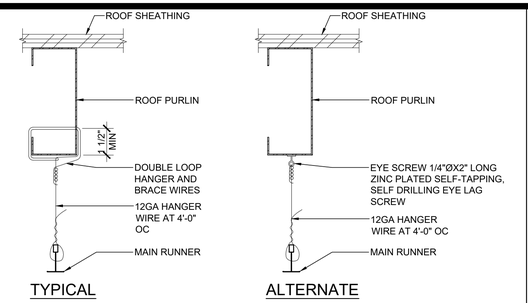
NOTE: NO STABILIZER BARS REQ'D WITH CLIP

NOTE;
* PROVIDE 2" WALL ANGLE IF BERC2 CLIP IS NOT USED

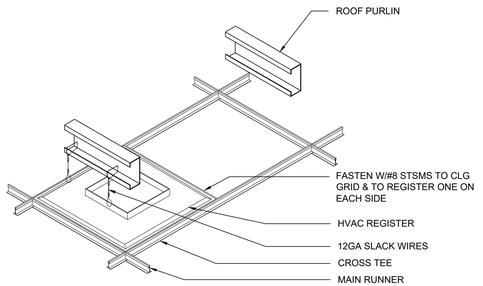
FREE SIDE — SCALE : NTS — 19



GRID SEISMIC SEPARATION JOINT — SCALE : NTS — 20

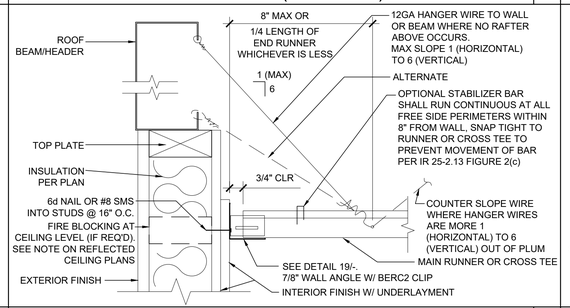


HANGER WIRE DETAIL — SCALE : 3"=1'-0" — 11



HVAC REGISTER MOUNTING — SCALE : NTS — 12

HANGER WIRE - FIXED SIDE (ENDWALL) — SCALE : 3"=1'-0" — 13



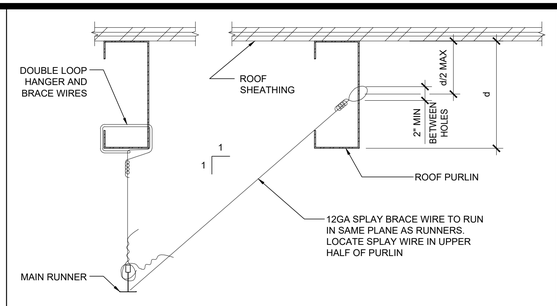
HANGER WIRE - FREE SIDE (ENDWALL) — SCALE : 3"=1'-0" — 14

NOTE:
PROVIDE ATTIC DRAFT STOP WHEN OPEN ATTIC SPACE EXCEEDS 3,000 S.F. DRAFT STOPPING IS NOT REQUIRED WHEN FIRE SPRINKLERS ARE PROVIDED PER CBC 718.4.3.

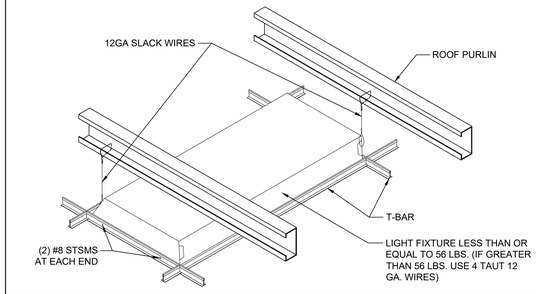
A FULL HEIGHT WALL W/ WALL FINISH & SOLID ROOF BEAM ABOVE SHALL BE CONSIDERED AS A DRAFT STOP.

TIGHT FITTING FIBERGLASS BATTS OR MINERAL WOOL SHALL BE PROVIDED BETWEEN BTM. OF TRUSS OR ROOF BEAM AND T-GRID CEILING WHEN FULL HEIGHT WALL FRAMING IS NOT PROVIDED CBC 718.3.1.

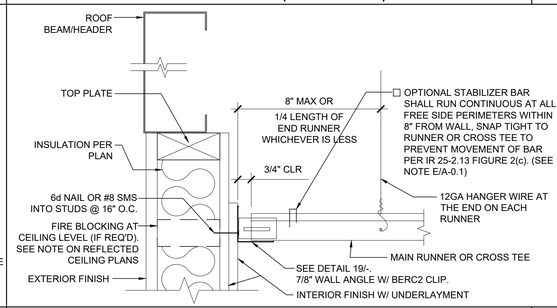
ATTIC DRAFT STOP — SCALE : 3"=1'-0" — 15



SPLAY BRACING WIRE — SCALE : 3"=1'-0" — 6

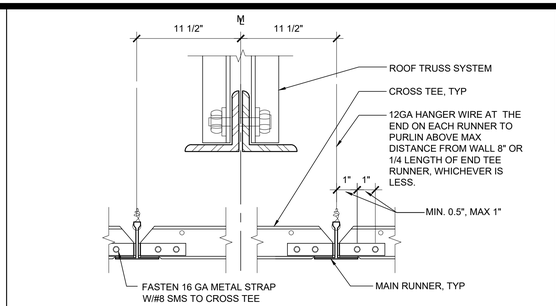


LIGHT FIXTURE MOUNTING — SCALE : NTS — 7

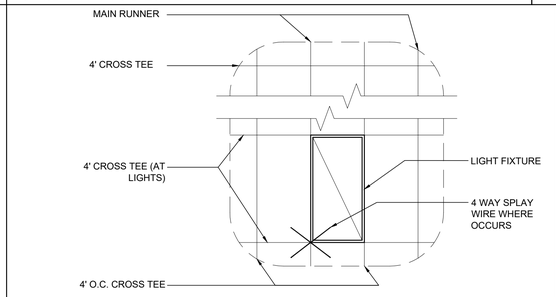


HANGER WIRE - FREE SIDE (SIDEWALL) — SCALE : 3"=1'-0" — 9

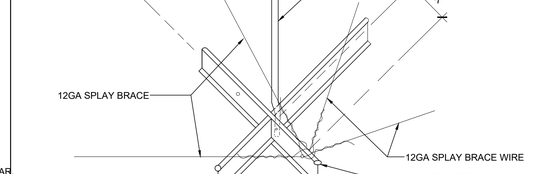
HVAC DUCTWORK MOUNTING — SCALE: NTS — 10



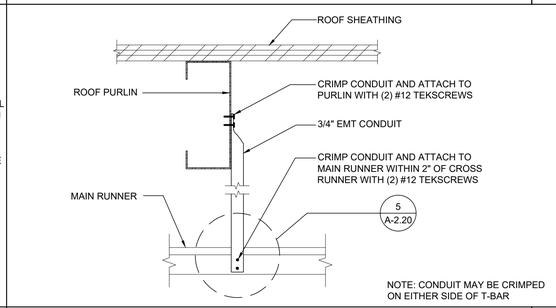
GRID AT MODLINE — SCALE : 3"=1'-0" — 1



4' CROSS TEE AT LIGHTS — SCALE : 3/8"=1'-0" — 2

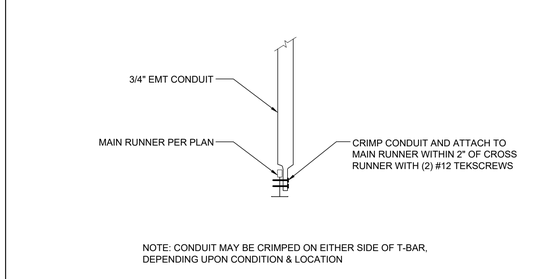


SEISMIC SPLAY - 4 WAY — SCALE : NTS — 3



NOTE: CONDUIT MAY BE CRIMPED ON EITHER SIDE OF T-BAR

COMPRESSION STRUT — SCALE : 3"=1'-0" — 4



NOTE: CONDUIT MAY BE CRIMPED ON EITHER SIDE OF T-BAR, DEPENDING UPON CONDITION & LOCATION

COMPRESSION STRUT — SCALE : 3"=1'-0" — 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

CEILING DETAILS
T-GRID

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

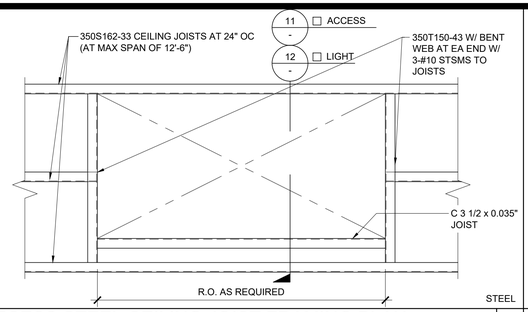
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

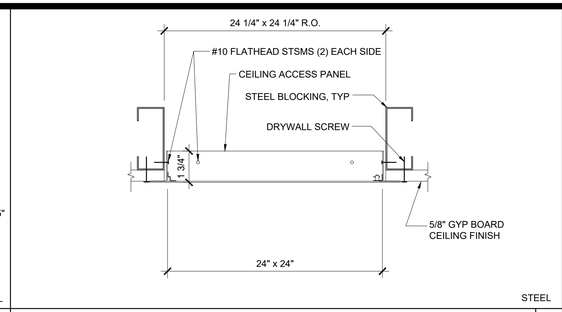
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

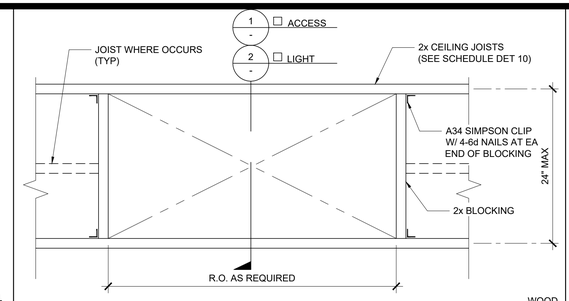
A-2.20



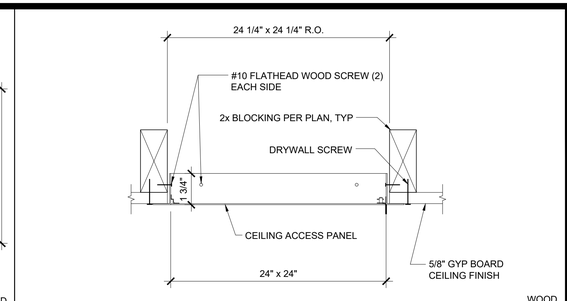
RECESS STEEL CEILING JOIST FRAMING PLAN SCALE : 1" = 1'-0" | 16



CEILING ACCESS PANEL - STEEL SCALE : 3" = 1'-0" | 11

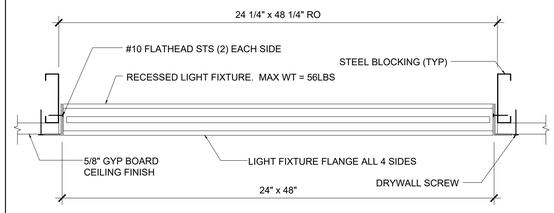


RECESS WOOD CEILING JOIST FRAMING PLAN SCALE : 1" = 1'-0" | 6



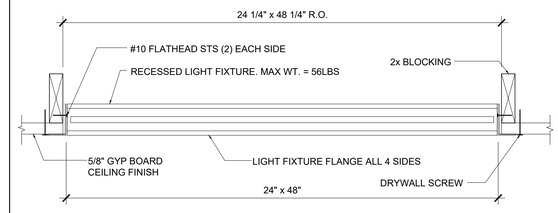
CEILING ACCESS PANEL SCALE : 3" = 1'-0" | 1

NOT USED | 17

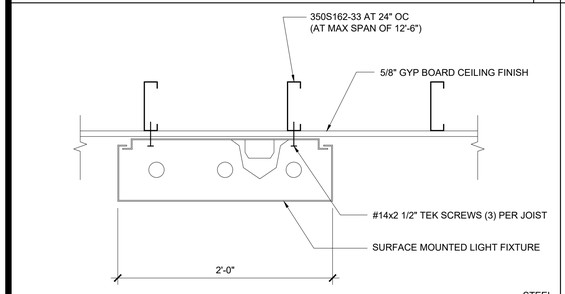


RECESSED LIGHT FIXTURE AT HARD LID SCALE : 1 1/2" = 1'-0" | 12

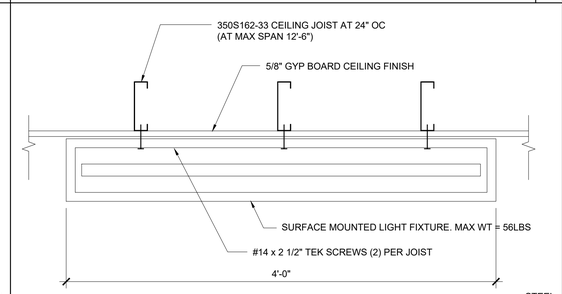
NOT USED | 7



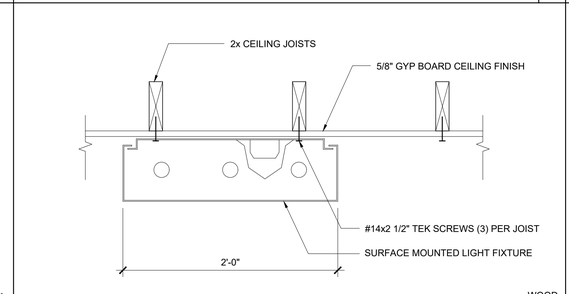
RECESSED LIGHT FIXTURE AT HARD LID SCALE : 1 1/2" = 1'-0" | 2



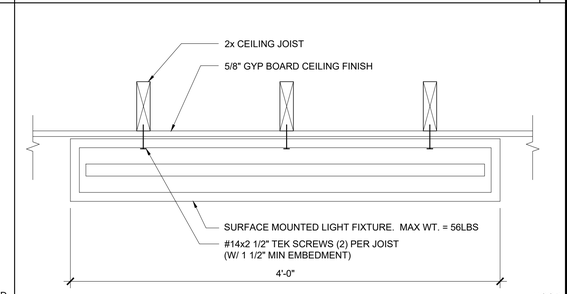
SURFACE MOUNTED LIGHT - PARALLEL JOISTS SCALE : 1 1/2" = 1'-0" | 18



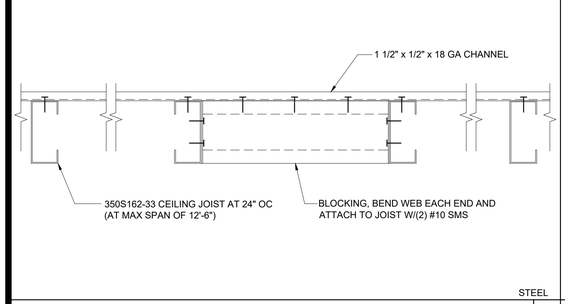
SURFACE MOUNTED LIGHT-PERPENDICULAR JOISTS SCALE : 1 1/2" = 1'-0" | 13



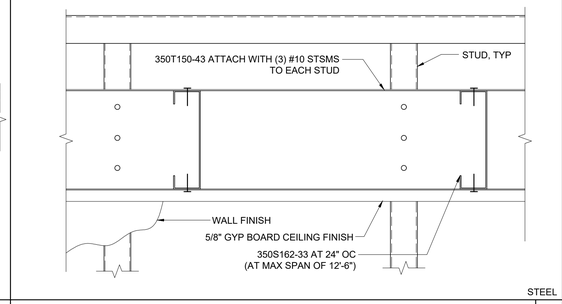
SURFACE MOUNTED LIGHT - PARALLEL JOISTS SCALE : 1 1/2" = 1'-0" | 8



SURFACE MOUNTED LIGHT-PERPENDICULAR JOISTS SCALE : 1 1/2" = 1'-0" | 3

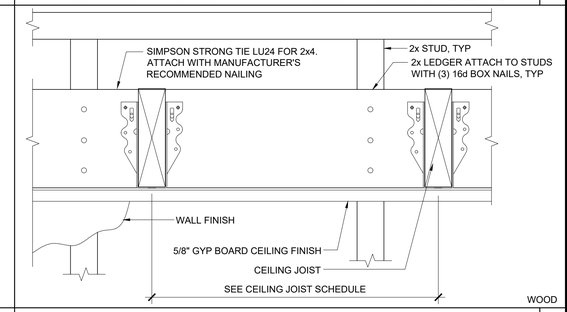


CEILING JOIST BLOCKING - STEEL SCALE : 3" = 1'-0" | 19

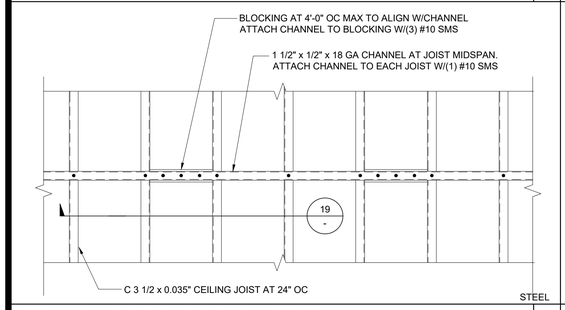


HARD LID CEILING CONNECTION - STEEL SCALE : 3" = 1'-0" | 14

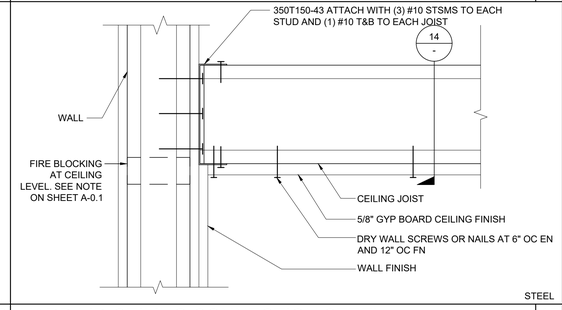
NOT USED | 9



HARD LID CEILING CONNECTION SCALE : 3" = 1'-0" | 4



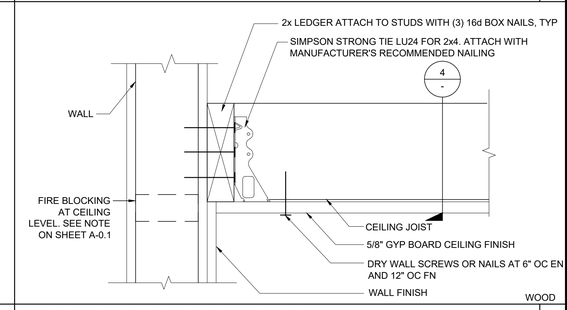
CEILING JOIST BLOCKING - STEEL SCALE : 1" = 1'-0" | 20



HARD LID CEILING CONNECTION STEEL SCALE : 3" = 1'-0" | 15

2X4 JOIST TABLE - MAX SPAN					
SPACING	HEMFIR STUD	HEMFIR NO 2	HEMFIR NO 1	DFL STUD	DFL NO. 2
12" OC	11' - 3"	11' - 7"	12' - 2"	11' - 10"	12' - 5"
16" OC	10' - 3"	10' - 6"	11' - 0"	10' - 9"	11' - 3"
24" OC	8' - 11"	9' - 2"	9' - 8"	9' - 5"	9' - 10"

WOOD CEILING JOIST SCHEDULE SCALE : NTS | 10



HARD LID CEILING CONNECTION SCALE : 3" = 1'-0" | 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

CEILING DETAILS
HARD LID

REVISIONS

1
2
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Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

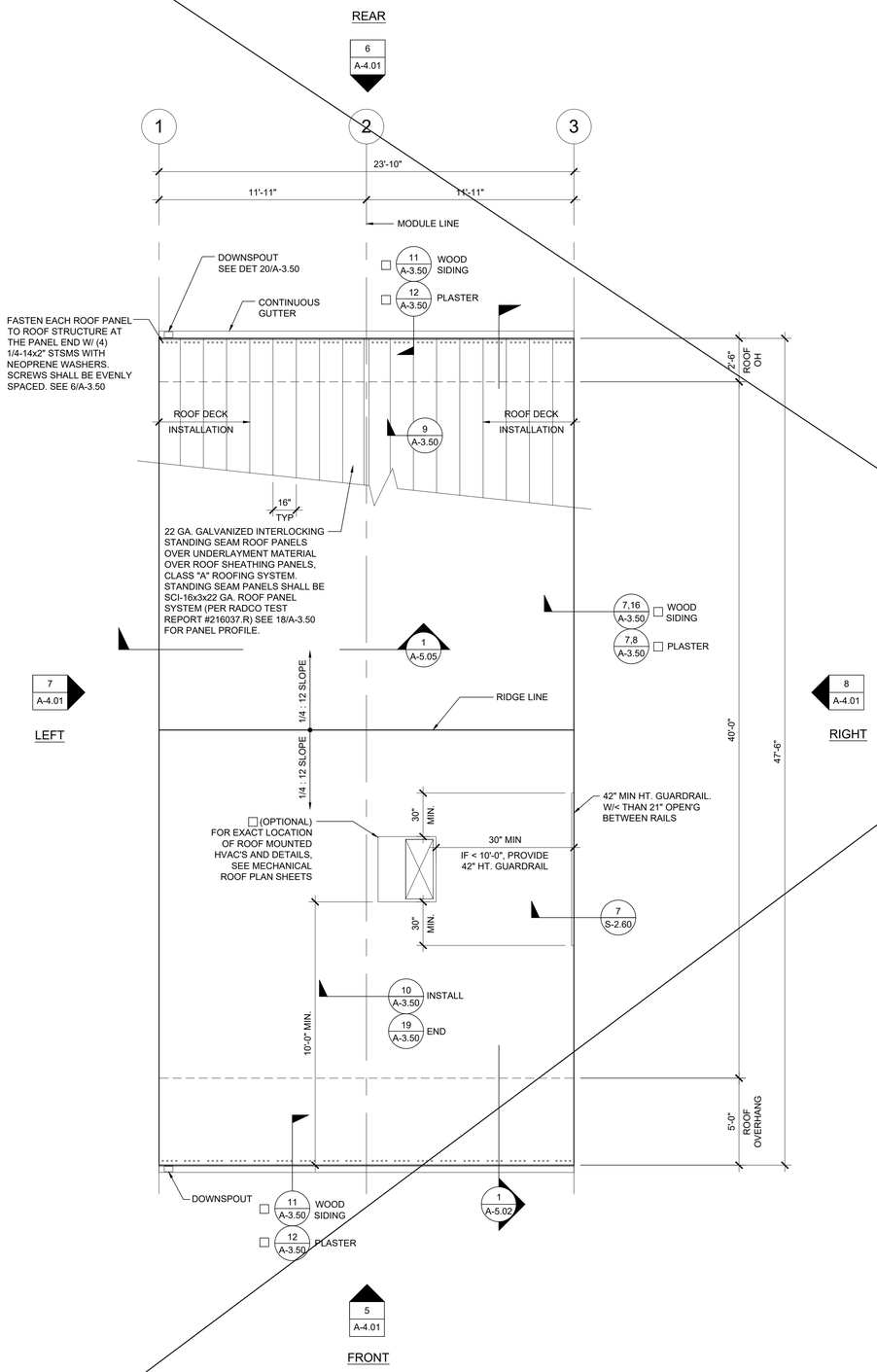
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
2475
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

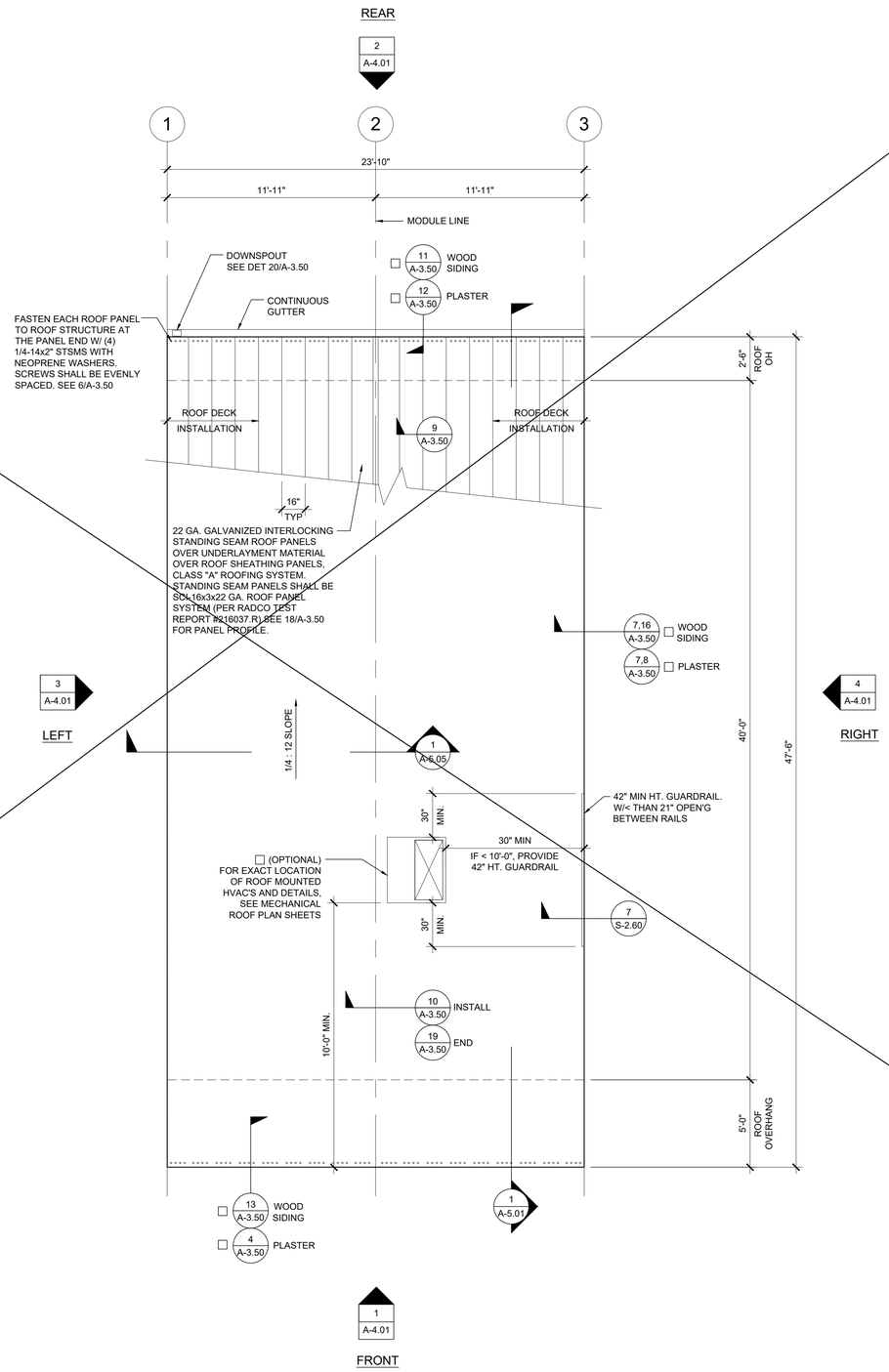
P.C. SHEET NUMBER

A-2.21



ROOF PLAN - METAL DECK - DUAL SLOPE

SCALE: 1/4" = 1' - 0" | 2



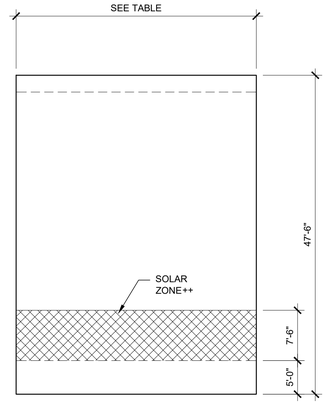
ROOF PLAN - METAL DECK - MONO SLOPE

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

NOTES

1. BUILDINGS SHALL HAVE ROOF COVERINGS AS SPECIFIED IN CBC TABLE 1505.1 - CLASS A.
2. LOCATIONS OF DRAFTSTOP AND/OR FULL HEIGHT PARTITIONS AS REQUIRED PER CBC-718.4.3 SHALL BE SHOWN ON PROJECT SPECIFIC PLANS LOCATED AT MODULE LINES.
3. ALL ROOFTOP EQUIPMENT THAT REQUIRES SERVICE & ROOF ACCESS HATCHES MUST BE A MIN. OF 10'-0" AWAY FROM ALL ROOF EDGES TO OPENING EDGES. OR A GUARDRAIL SHALL BE PROVIDED PER 7/S-2.60
4. SEE DETAIL "A" (THIS SHEET) FOR ROOF SYSTEM UPLIFT CAPACITY

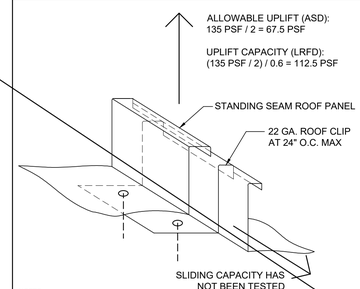
SOLAR ZONE



KEYPLAN

SOLAR ZONE CALCULATION TABLE		
BUILDING SIZE	REQUIRED SOLAR ZONE	PROVIDED SOLAR ZONE
24'-0" x 40'-0"	172 SF	178 SF
36'-0" x 40'-0"	258 SF	267 SF
48'-0" x 40'-0"	344 SF	356 SF
60'-0" x 40'-0"	430 SF	445 SF
72'-0" x 40'-0"	516 SF	534 SF
84'-0" x 40'-0"	602 SF	623 SF
96'-0" x 40'-0"	688 SF	712 SF
108'-0" x 40'-0"	774 SF	801 SF
120'-0" x 40'-0"	860 SF	890 SF
ROOF AREA PER MODULE	=	567 SF
REQUIRED SOLAR ZONE	=	86 SF
PROVIDED SOLAR ZONE	=	89 SF

++ NOTE: ACTUAL SOLAR ZONE LOCATION AND SIZE MAY VARY. MINIMUM ZONE AREA SHALL BE PER THE TABLE ABOVE.



NOTES:

1. THE ALLOWABLE UPLIFT VALUES PROVIDED ABOVE ARE BASED ON TESTING PERFORMED IN ACCORDANCE WITH UL STANDARD 1897 (UPLIFT TEST FOR ROOF COVERING SYSTEM).

   TEST REPORT:
   TI RADCO (RADCO, A TWINING COMPANY)
   REPORT # 216037.R
   DATE: 6.22.2021

2. THE ULTIMATE LOAD DETERMINED BY TESTING = 135 PSF.
   A SAFETY FACTOR OF 2.0 HAS BEEN USED IN CALCULATING THE ALLOWABLE VALUES.
3. PV PANEL ATTACHMENT OPTION IS NOT INCLUDED WITHIN THIS PC.
4. THE CLIP SLIDING CAPACITY HAS NOT BEEN TESTED. IF PV PANELS ARE INSTALLED THE SLIDING CAPACITY OF THE ROOF PANEL SYSTEM MUST BE DETERMINED BY FIELD TESTING FOR ROOF SLOPES OF NOT LESS THAN 7 DEGREES.
   EXCEPTION: WHERE THE SLIDING LOAD FOR SEISMIC AND WIND FORCES ON THE PV PANEL SYSTEM IS LESS THAN THE DISPLACED DESIGN LIVE LOAD SLIDING COMPONENT PER DSA IR 16-8 (SECTION 5.1.1.2).
5. CONVERSION FROM ALLOWABLE UPLIFT (ASD) TO UPLIFT CAPACITY (LRFD) IS BASED ON ASD WIND PRESSURE = 0.6 x (LFRD WIND PRESSURE).

ROOF SYSTEM CAPACITY

SCALE: NTS | A

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF PLAN
24'x40' - METAL DECK MONO OR DUAL SLOPE

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

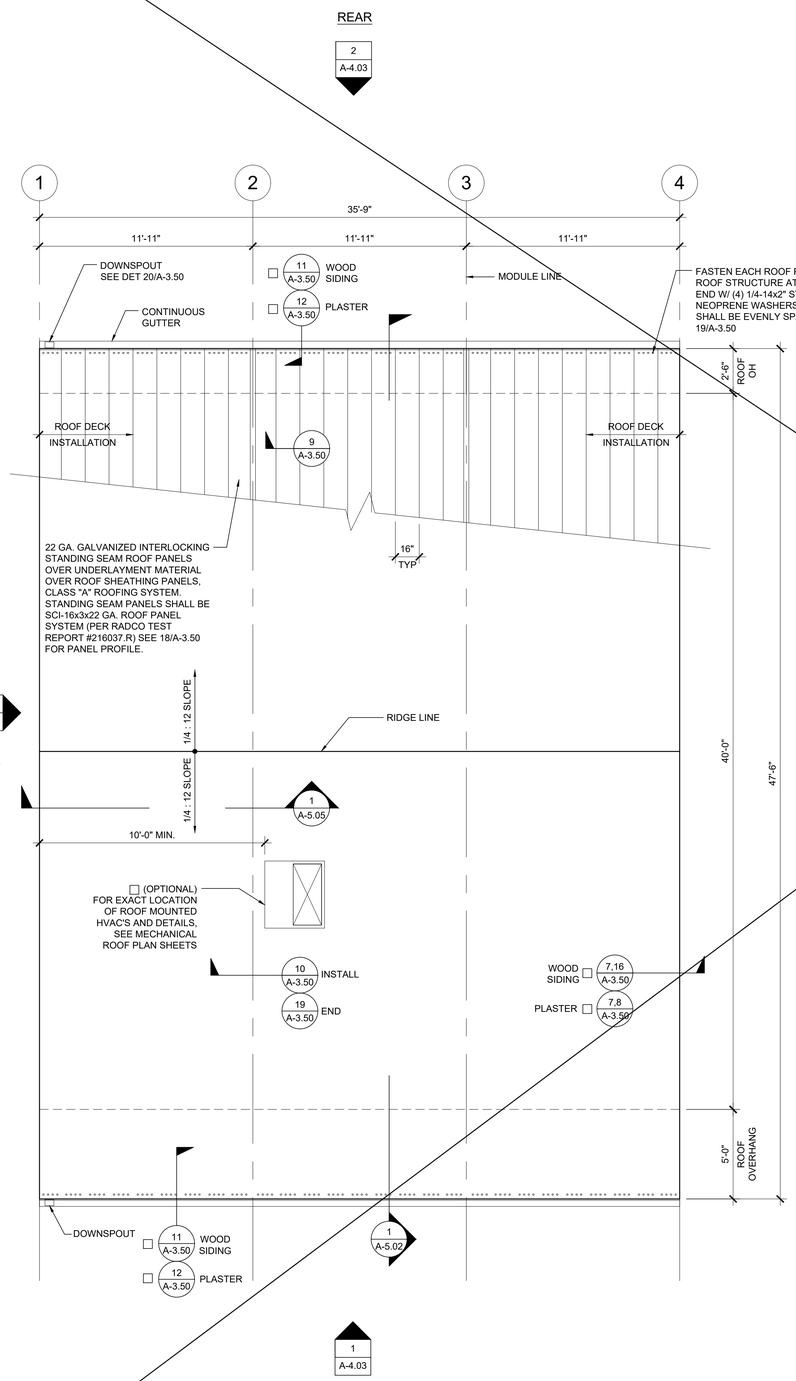
REGISTERED PROFESSIONAL ENGINEER JOHN W STARUCH 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

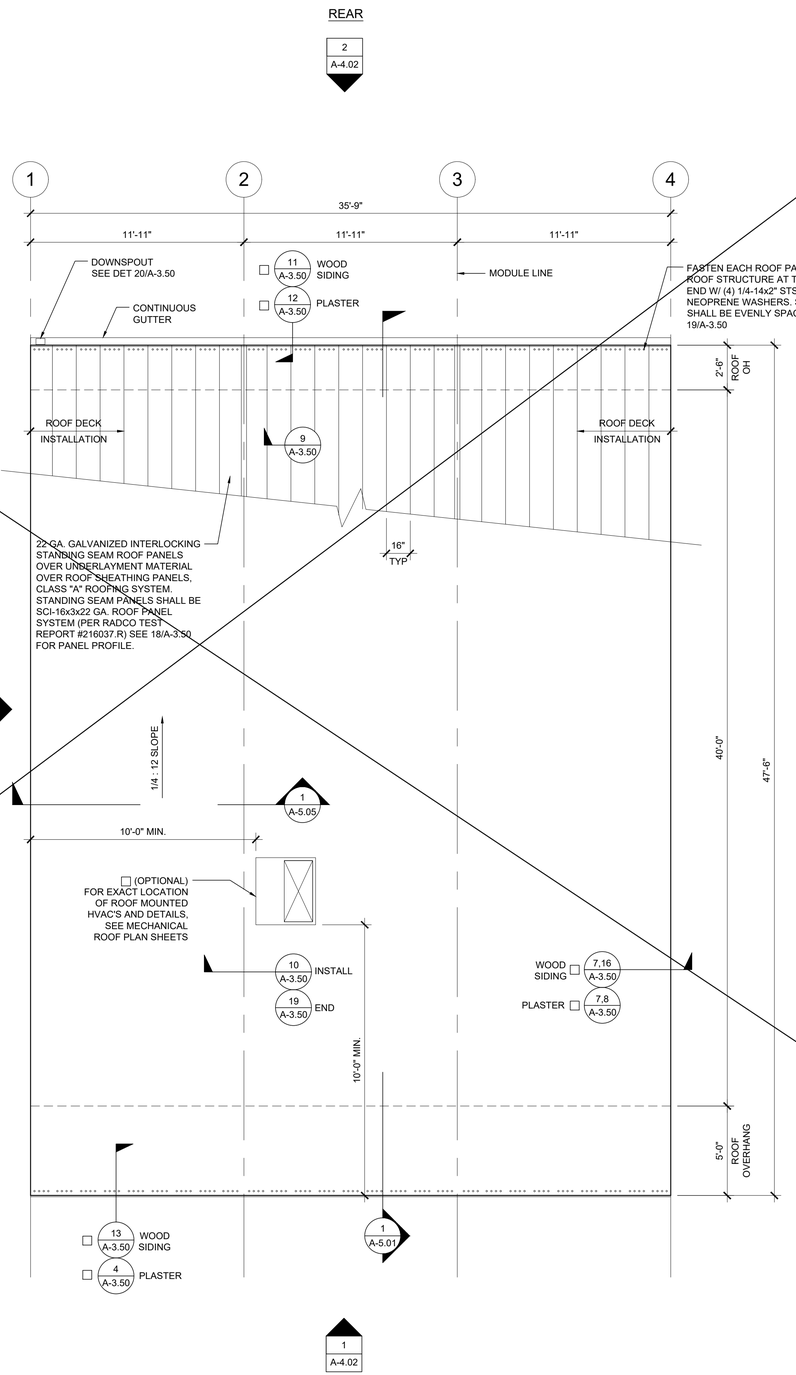
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-3.01



ROOF PLAN - METAL DECK - DUAL SLOPE SCALE: 1/4" = 1' - 0" 2

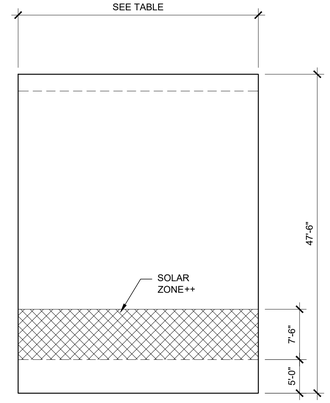


ROOF PLAN - METAL DECK - MONO SLOPE SCALE: 1/4" = 1' - 0" 1

NOTES

1. BUILDINGS SHALL HAVE ROOF COVERINGS AS SPECIFIED IN CBC TABLE 1505.1 - CLASS A.
2. LOCATIONS OF DRAFTSTOP AND/OR FULL HEIGHT PARTITIONS AS REQUIRED PER CBC-718.4.3 SHALL BE SHOWN ON PROJECT SPECIFIC PLANS LOCATED AT MODULE LINES.
3. ALL ROOFTOP EQUIPMENT THAT REQUIRES SERVICE & ROOF ACCESS HATCHES MUST BE A MIN. OF 10'-0" AWAY FROM ALL ROOF EDGES TO OPENING EDGES. OR A GUARDRAIL SHALL BE PROVIDED PER 7/S-2.60
4. SEE DETAIL "A" (THIS SHEET) FOR ROOF SYSTEM UPLIFT CAPACITY

SOLAR ZONE



KEYPLAN

SOLAR ZONE CALCULATION TABLE		
BUILDING SIZE	REQUIRED SOLAR ZONE	PROVIDED SOLAR ZONE
24'-0" x 40'-0"	172 SF	178 SF
36'-0" x 40'-0"	258 SF	267 SF
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60'-0" x 40'-0"	430 SF	445 SF
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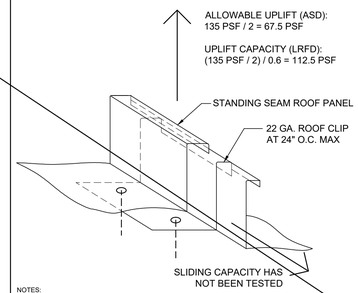
ROOF AREA PER MODULE	=	567 SF
REQUIRED SOLAR ZONE	=	86 SF
PROVIDED SOLAR ZONE	=	89 SF

++ NOTE: ACTUAL SOLAR ZONE LOCATION AND SIZE MAY VARY. MINIMUM ZONE AREA SHALL BE PER THE TABLE ABOVE.

ROOF SYSTEM CAPACITY SCALE: NTS A



NOTES:

1. THE ALLOWABLE UPLIFT VALUES PROVIDED ABOVE ARE BASED ON TESTING PERFORMED IN ACCORDANCE WITH UL STANDARD 1897 (UPLIFT TEST FOR ROOF COVERING SYSTEM).

   TEST REPORT:
   TI RADCO (RADCO, A TWINING COMPANY)
   REPORT # 216037.R
   DATE: 6.22.2021

2. THE ULTIMATE LOAD DETERMINED BY TESTING = 135 PSF.
   A SAFETY FACTOR OF 2.0 HAS BEEN USED IN CALCULATING THE ALLOWABLE VALUES.
3. PV PANEL ATTACHMENT OPTION IS NOT INCLUDED WITHIN THIS PC.
4. THE CLIP SLIDING CAPACITY HAS NOT BEEN TESTED. IF PV PANELS ARE INSTALLED THE SLIDING CAPACITY OF THE ROOF PANEL SYSTEM MUST BE DETERMINED BY FIELD TESTING FOR ROOF SLOPES OF NOT LESS THAN 7 DEGREES.
   EXCEPTION: WHERE THE SLIDING LOAD FOR SEISMIC AND WIND FORCES ON THE PV PANEL SYSTEM IS LESS THAN THE DISPLACED DESIGN LIVE LOAD SLIDING COMPONENT PER DSA IR 16-8 (SECTION 5.1.1.2).
5. CONVERSION FROM ALLOWABLE UPLIFT (ASD) TO UPLIFT CAPACITY (LRFD) IS BASED ON ASD WIND PRESSURE = 0.6 x (LFRD WIND PRESSURE).

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF PLAN
36' x 40' - METAL DECK
MONO OR DUAL SLOPE

REVISIONS

1	
2	
3	
4	
5	

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

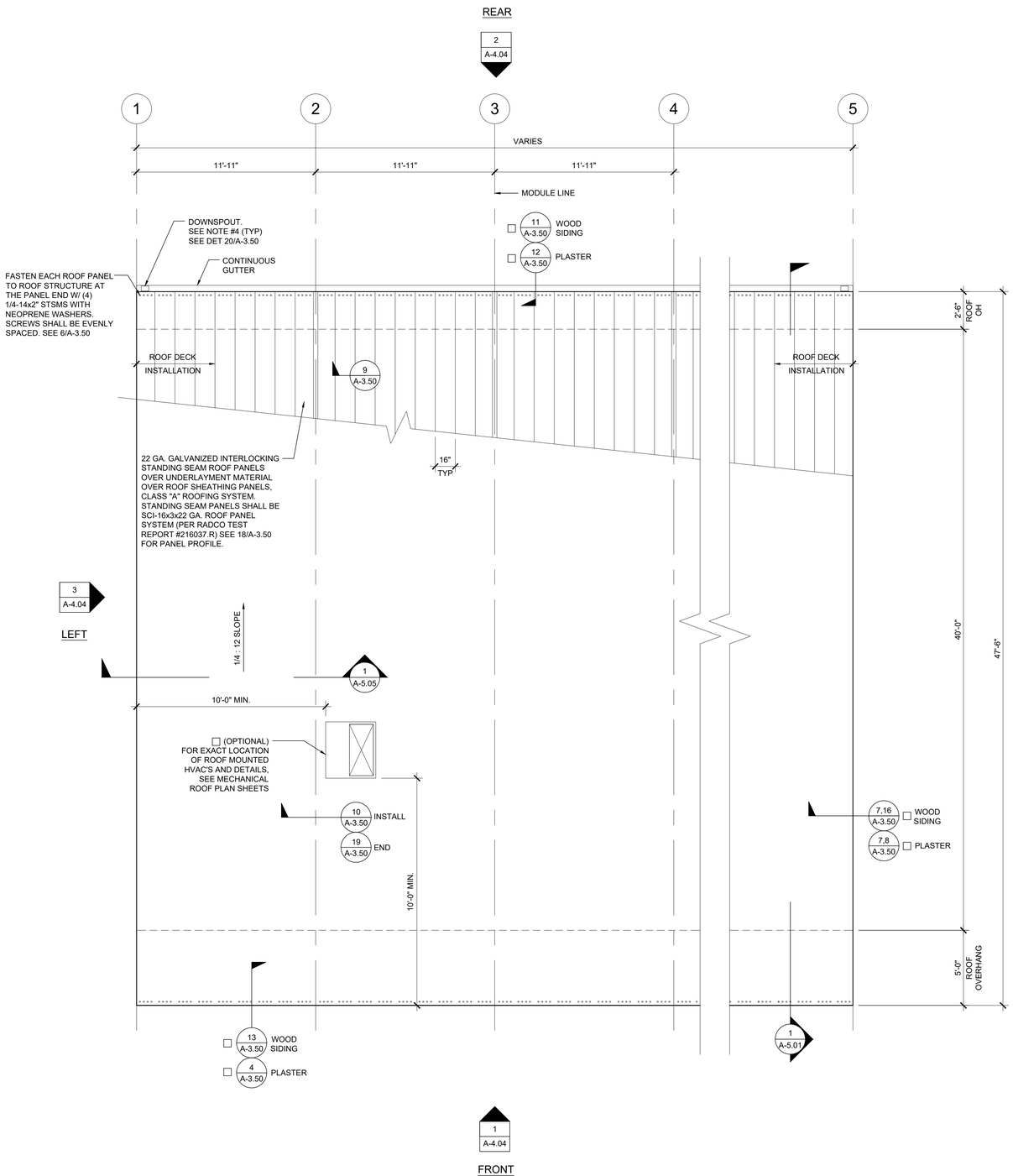
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24078
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

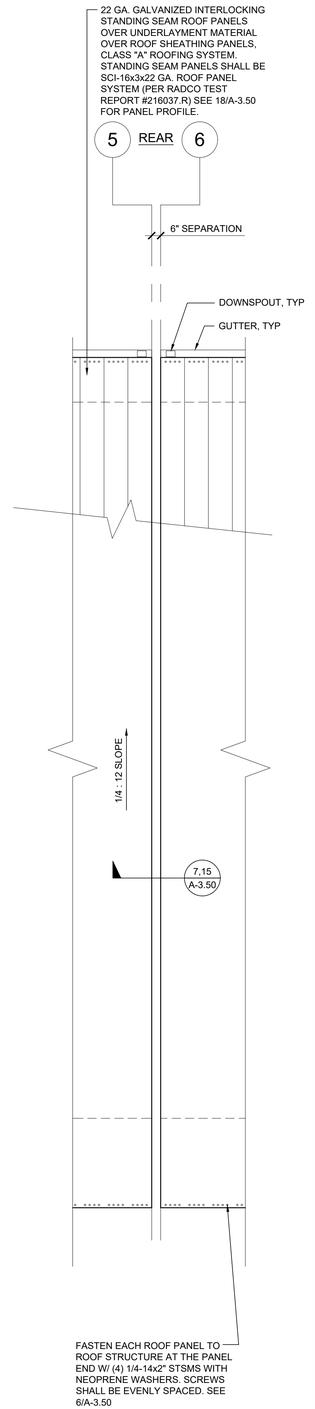
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

A-3.02



ROOF PLAN - METAL DECK - MONO SLOPE SCALE: 1/4" = 1' - 0" 2



ROOF SEP. PLAN OPTION SCALE: 1/4" = 1' - 0" 1

NOTES

1. BUILDINGS SHALL HAVE ROOF COVERINGS AS SPECIFIED IN CBC TABLE 1505.1 - CLASS A.
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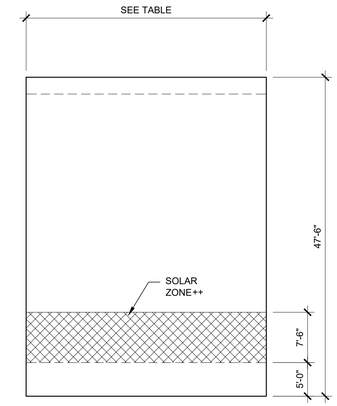
4. SEE DETAIL "A" (THIS SHEET) FOR ROOF SYSTEM UPLIFT CAPACITY

SOLAR ZONE



KEYPLAN

SOLAR ZONE CALCULATION TABLE		
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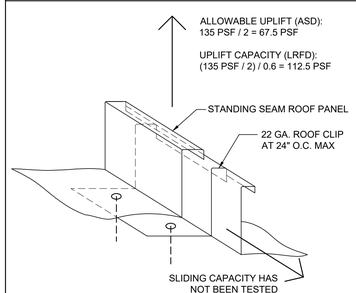
36'-0" x 40'-0"	258 SF	267 SF
48'-0" x 40'-0"	344 SF	356 SF
60'-0" x 40'-0"	430 SF	445 SF
72'-0" x 40'-0"	516 SF	534 SF
84'-0" x 40'-0"	602 SF	623 SF
96'-0" x 40'-0"	688 SF	712 SF
108'-0" x 40'-0"	774 SF	801 SF
120'-0" x 40'-0"	860 SF	890 SF
ROOF AREA PER MODULE	=	567 SF
REQUIRED SOLAR ZONE	=	86 SF
PROVIDED SOLAR ZONE	=	89 SF

++ NOTE: ACTUAL SOLAR ZONE LOCATION AND SIZE MAY VARY. MINIMUM ZONE AREA SHALL BE PER THE TABLE ABOVE.



NOTES:

1. THE ALLOWABLE UPLIFT VALUES PROVIDED ABOVE ARE BASED ON TESTING PERFORMED IN ACCORDANCE WITH UL STANDARD 1897 (UPLIFT TEST FOR ROOF COVERING SYSTEM).

   TEST REPORT:
   TI RADCO (RADCO, A TWINING COMPANY)
   REPORT # 216037.R
   DATE: 6.22.2021

2. THE ULTIMATE LOAD DETERMINED BY TESTING = 135 PSF.
   A SAFETY FACTOR OF 2.0 HAS BEEN USED IN CALCULATING THE ALLOWABLE VALUES.
3. PV PANEL ATTACHMENT OPTION IS NOT INCLUDED WITHIN THIS PC.
4. THE CLIP SLIDING CAPACITY HAS NOT BEEN TESTED. IF PV PANELS ARE INSTALLED THE SLIDING CAPACITY OF THE ROOF PANEL SYSTEM MUST BE DETERMINED BY FIELD TESTING FOR ROOF SLOPES OF NOT LESS THAN 7 DEGREES.
   EXCEPTION: WHERE THE SLIDING LOAD FOR SEISMIC AND WIND FORCES ON THE PV PANEL SYSTEM IS LESS THAN THE DISPLACED DESIGN LIVE LOAD SLIDING COMPONENT PER DSA IR 16-8 (SECTION 5.1.1.2).
5. CONVERSION FROM ALLOWABLE UPLIFT (ASD) TO UPLIFT CAPACITY (LRFD) IS BASED ON ASD WIND PRESSURE = 0.6 x (LFRD WIND PRESSURE).

ROOF SYSTEM CAPACITY SCALE: NTS A

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF PLAN
48' TO 120' x 40'
METAL DECK - MONO SLOPE

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

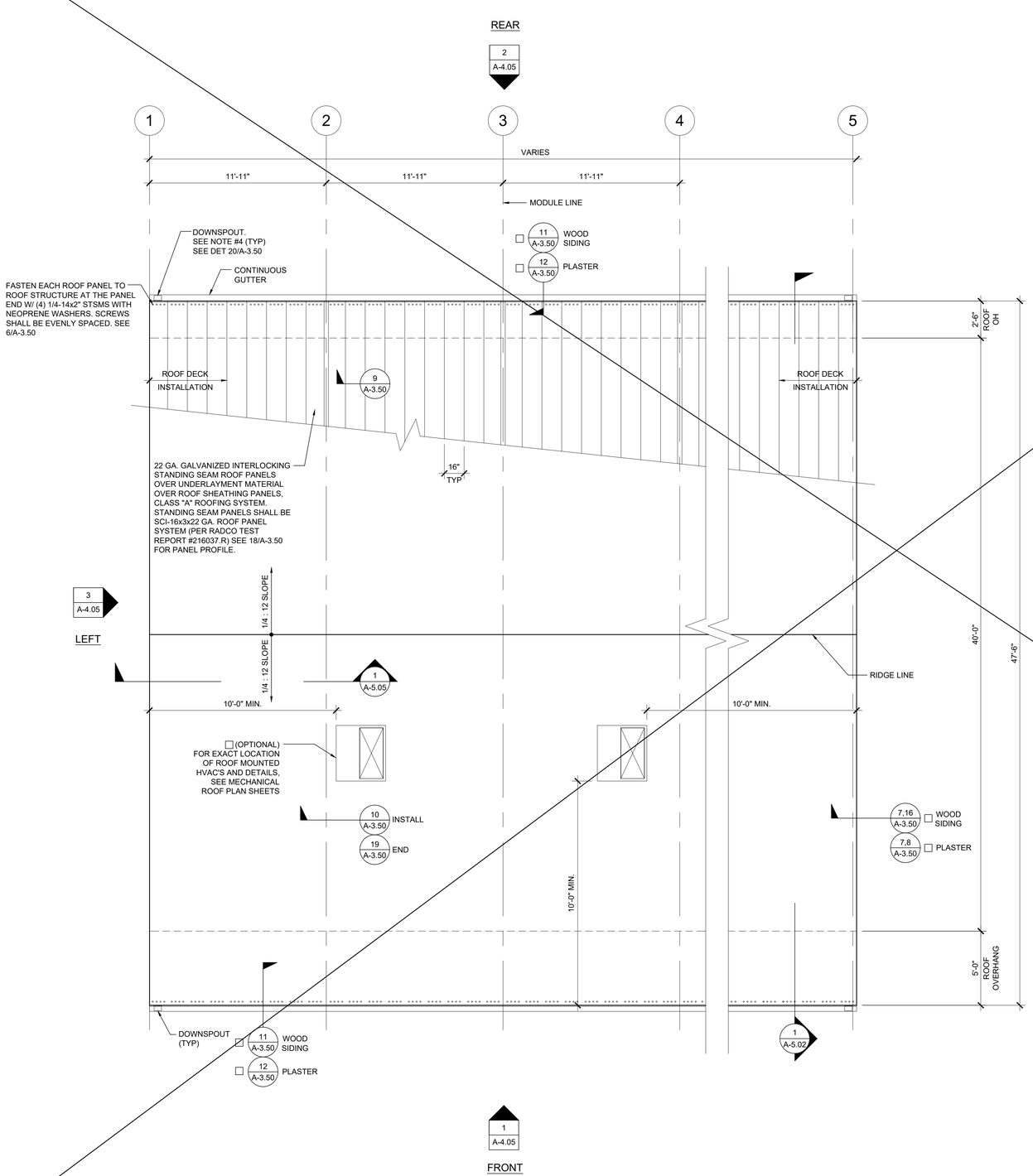
MODULAR BUILDING DESIGN PROFESSIONAL

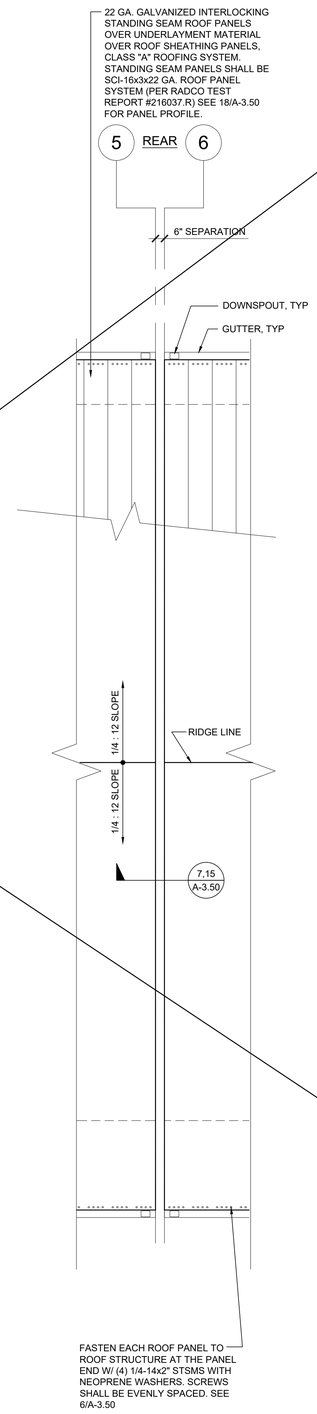
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24975 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
A-3.03

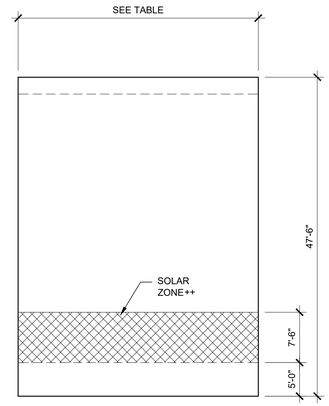




NOTES

1. BUILDINGS SHALL HAVE ROOF COVERINGS AS SPECIFIED IN CBC TABLE 1505.1 - CLASS A.
2. LOCATIONS OF DRAFTSTOP AND/OR FULL HEIGHT PARTITIONS AS REQUIRED PER CBC-718.4.3 SHALL BE SHOWN ON PROJECT SPECIFIC PLANS LOCATED AT MODULE LINES.
3. ALL ROOFTOP EQUIPMENT THAT REQUIRES SERVICE & ROOF ACCESS HATCHES MUST BE A MIN. OF 10'-0" AWAY FROM ALL ROOF EDGES TO OPENING EDGES. OR A GUARDRAIL SHALL BE PROVIDED PER 7/S-2.60
4. SEE DETAIL "A" (THIS SHEET) FOR ROOF SYSTEM UPLIFT CAPACITY

SOLAR ZONE



KEYPLAN

SOLAR ZONE CALCULATION TABLE		
BUILDING SIZE	REQUIRED SOLAR ZONE	PROVIDED SOLAR ZONE
24'-0" x 40'-0"	172 SF	178 SF
36'-0" x 40'-0"	258 SF	267 SF
48'-0" x 40'-0"	344 SF	356 SF
60'-0" x 40'-0"	430 SF	445 SF
72'-0" x 40'-0"	516 SF	534 SF
84'-0" x 40'-0"	602 SF	623 SF
96'-0" x 40'-0"	688 SF	712 SF
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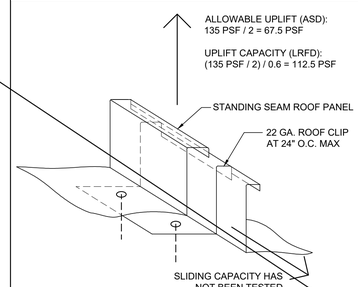
120'-0" x 40'-0"	860 SF	890 SF
ROOF AREA PER MODULE	=	567 SF
REQUIRED SOLAR ZONE	=	86 SF
PROVIDED SOLAR ZONE	=	89 SF

++ NOTE: ACTUAL SOLAR ZONE LOCATION AND SIZE MAY VARY. MINIMUM ZONE AREA SHALL BE PER THE TABLE ABOVE.



NOTES:

1. THE ALLOWABLE UPLIFT VALUES PROVIDED ABOVE ARE BASED ON TESTING PERFORMED IN ACCORDANCE WITH UL STANDARD 1897 (UPLIFT TEST FOR ROOF COVERING SYSTEM).

   TEST REPORT:
   TI RADCO (RADCO, A TWINING COMPANY)
   REPORT # 216037.R
   DATE: 6.22.2021

2. THE ULTIMATE LOAD DETERMINED BY TESTING = 135 PSF.
   A SAFETY FACTOR OF 2.0 HAS BEEN USED IN CALCULATING THE ALLOWABLE VALUES.
3. PV PANEL ATTACHMENT OPTION IS NOT INCLUDED WITHIN THIS PC.
4. THE CLIP SLIDING CAPACITY HAS NOT BEEN TESTED. IF PV PANELS ARE INSTALLED THE SLIDING CAPACITY OF THE ROOF PANEL SYSTEM MUST BE DETERMINED BY FIELD TESTING FOR ROOF SLOPES OF NOT LESS THAN 7 DEGREES.
   EXCEPTION: WHERE THE SLIDING LOAD FOR SEISMIC AND WIND FORCES ON THE PV PANEL SYSTEM IS LESS THAN THE DISPLACED DESIGN LIVE LOAD SLIDING COMPONENT PER DSA IR 16-8 (SECTION 5.1.1.2).
5. CONVERSION FROM ALLOWABLE UPLIFT (ASD) TO UPLIFT CAPACITY (LRFD) IS BASED ON ASD WIND PRESSURE = 0.6 x (LFRD WIND PRESSURE).

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF PLAN
48' TO 120' x 40'
METAL DECK - DUAL SLOPE

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
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DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24075 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

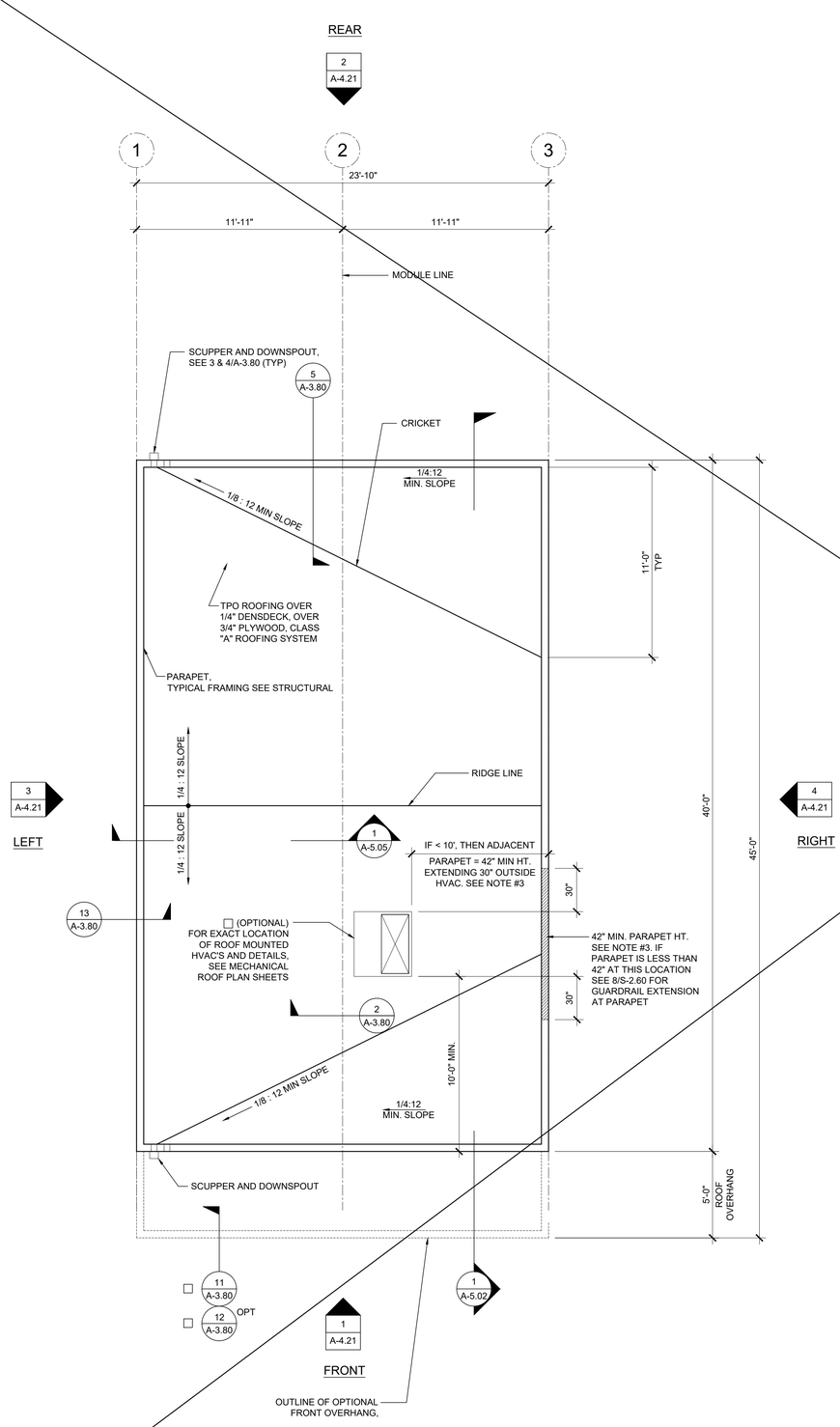
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
A-3.04

ROOF PLAN - METAL DECK - DUAL SLOPE SCALE: 1/4" = 1' - 0" 2

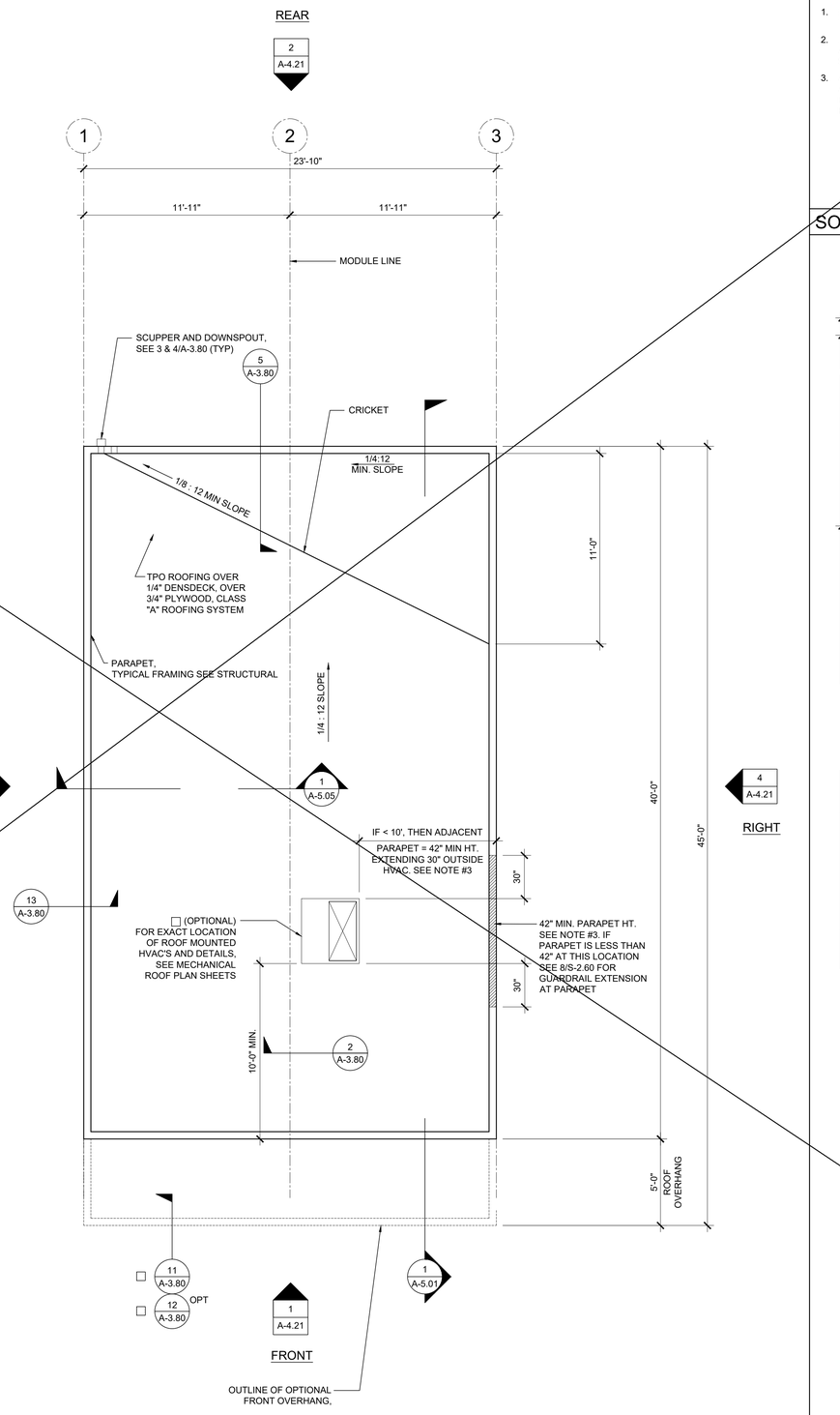
ROOF SEP. PLAN OPTION SCALE: 1/4" = 1' - 0" 1

ROOF SYSTEM CAPACITY SCALE: NTS A



NOTE:
IF PARAPET IS USED & HIGHER THAN 18", END WALLS MUST BE 2x6 @ 24" O.C. UP TO A MAX PARAPET OF 48"

ROOF PLAN - PARAPET - DUAL SLOPE — SCALE: 1/4" = 1' - 0" — 2



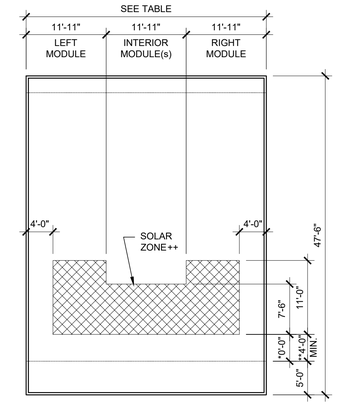
NOTE:
IF PARAPET IS USED & HIGHER THAN 18", END WALLS MUST BE 2x6 @ 24" O.C. UP TO A MAX PARAPET OF 48"

ROOF PLAN - PARAPET - MONO SLOPE — SCALE: 1/4" = 1' - 0" — 1

NOTES

1. BUILDINGS SHALL HAVE ROOF COVERINGS AS SPECIFIED IN CBC TABLE 1505.1 - CLASS A.
2. LOCATIONS OF DRAFTSTOP AND/OR FULL HEIGHT PARTITIONS AS REQUIRED PER CBC-718.4.3 SHALL BE SHOWN ON PROJECT SPECIFIC PLANS LOCATED AT MODULE LINES.
3. ALL ROOFTOP EQUIPMENT THAT REQUIRES SERVICE & ROOF ACCESS HATCHES MUST BE A MIN. OF 10'-0" AWAY FROM ALL ROOF EDGES TO OPENING EDGES. OR A GUARDRAIL SHALL BE PROVIDED PER 7/S-2.60

SOLAR ZONE



KEYPLAN
(w/ PARAPET)

* w/ OVERHANG
** w/o OVERHANG

SOLAR ZONE CALCULATION TABLE		
BUILDING SIZE	REQUIRED SOLAR ZONE	PROVIDED SOLAR ZONE
24'-0" x 40'-0"	172 SF	178 SF
36'-0" x 40'-0"	258 SF	267 SF
48'-0" x 40'-0"	344 SF	356 SF
60'-0" x 40'-0"	430 SF	445 SF
72'-0" x 40'-0"	516 SF	534 SF
84'-0" x 40'-0"	602 SF	623 SF
96'-0" x 40'-0"	688 SF	712 SF
108'-0" x 40'-0"	774 SF	801 SF
120'-0" x 40'-0"	860 SF	890 SF
ROOF AREA PER MODULE	=	567 SF
REQUIRED SOLAR ZONE	=	86 SF
PROVIDED SOLAR ZONE	=	89 SF

++ NOTE: ACTUAL SOLAR ZONE LOCATION AND SIZE MAY VARY. MINIMUM ZONE AREA SHALL BE PER THE TABLE ABOVE.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF PLAN
24'x40' - PARAPET ROOF MONO OR DUAL SLOPE

REVISIONS

1
2
3
4
5

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

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APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

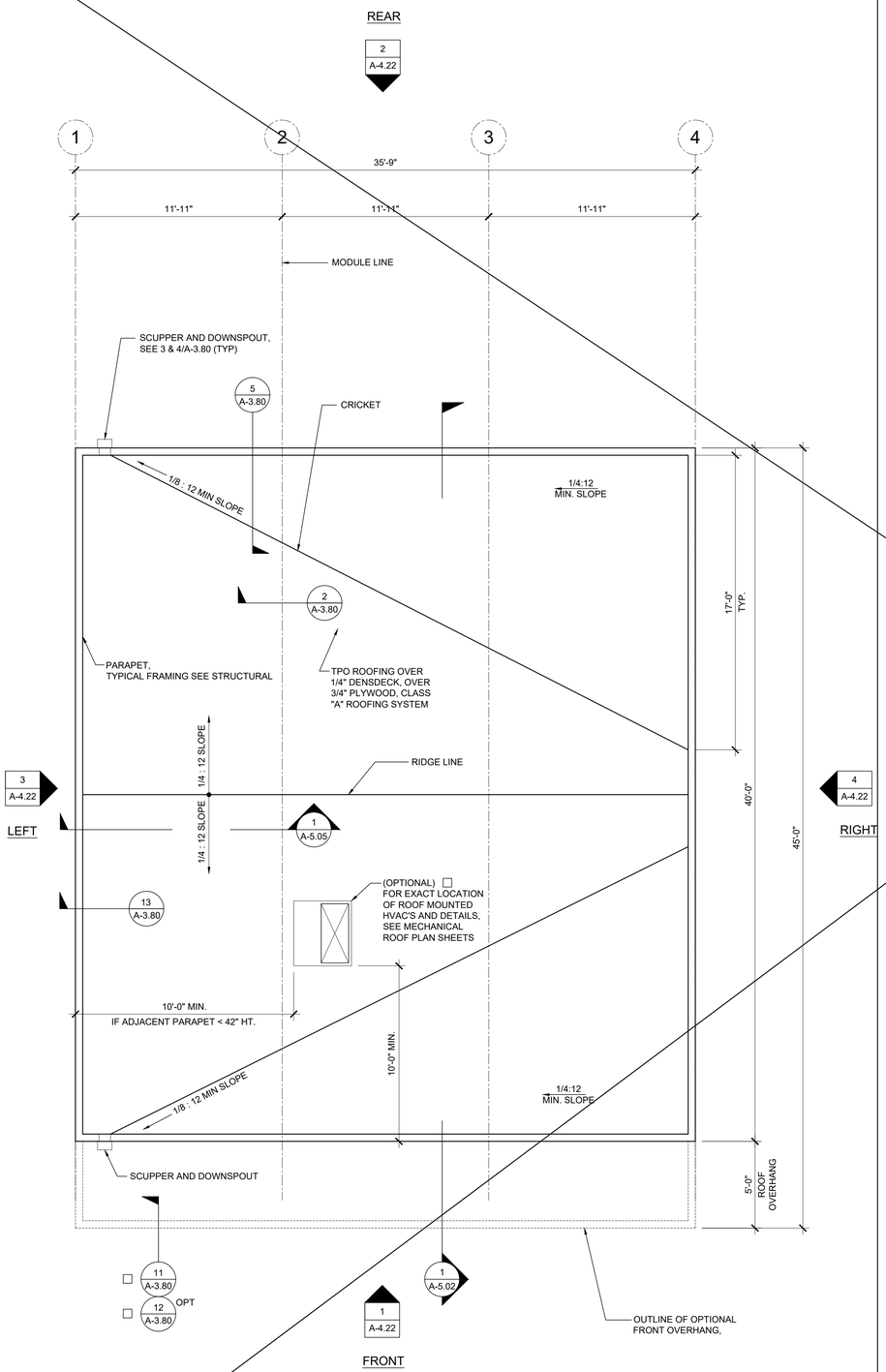
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24775 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

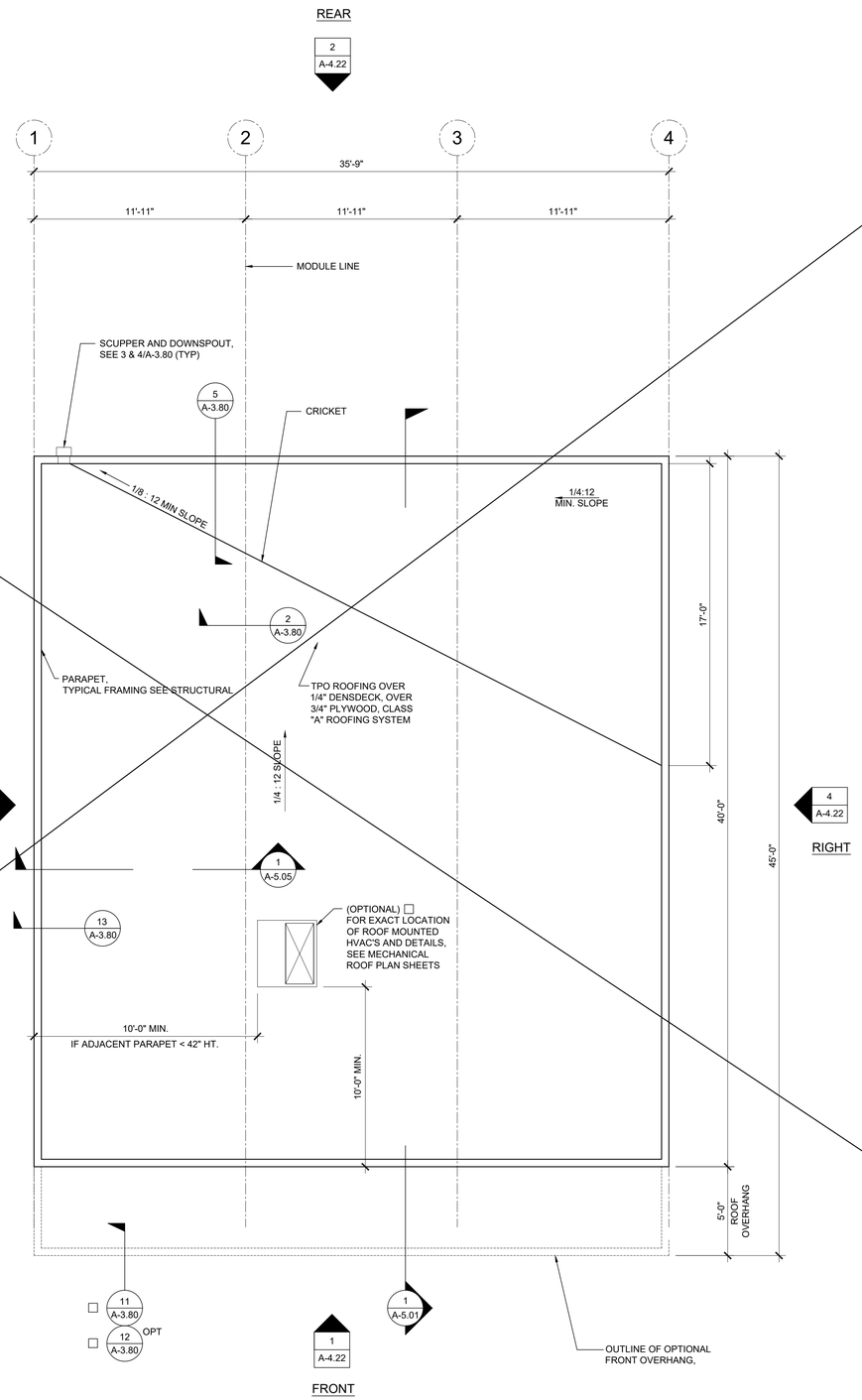
P.C. SHEET NUMBER

A-3.31



NOTE:
IF PARAPET IS USED & HIGHER THAN 18",
END WALLS MUST BE 2x6 @ 24" O.C. UP
TO A MAX PARAPET OF 48"

ROOF PLAN - PARAPET - DUAL SLOPE SCALE: 1/4" = 1' - 0" 2



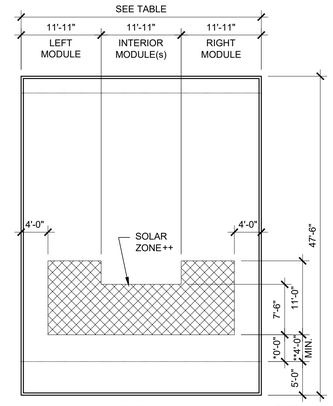
NOTE:
IF PARAPET IS USED & HIGHER THAN 18",
END WALLS MUST BE 2x6 @ 24" O.C. UP
TO A MAX PARAPET OF 48"

ROOF PLAN - PARAPET - MONO SLOPE SCALE: 1/4" = 1' - 0" 1

NOTES

1. BUILDINGS SHALL HAVE ROOF COVERINGS AS SPECIFIED IN CBC TABLE 1505.1 - CLASS A.
2. LOCATIONS OF DRAFTSTOP AND/OR FULL HEIGHT PARTITIONS AS REQUIRED PER CBC-718.4.3 SHALL BE SHOWN ON PROJECT SPECIFIC PLANS LOCATED AT MODULE LINES.
3. ALL ROOFTOP EQUIPMENT THAT REQUIRES SERVICE & ROOF ACCESS HATCHES MUST BE A MIN. OF 10'-0" AWAY FROM ALL ROOF EDGES TO OPENING EDGES. OR A GUARDRAIL SHALL BE PROVIDED PER 7/S-2.60

SOLAR ZONE



KEYPLAN
(w/ PARAPET)

* w/ OVERHANG
** w/o OVERHANG

SOLAR ZONE CALCULATION TABLE		
BUILDING SIZE	REQUIRED SOLAR ZONE	PROVIDED SOLAR ZONE
24'-0" x 40'-0"	172 SF	178 SF
36'-0" x 40'-0"	258 SF	267 SF
48'-0" x 40'-0"	344 SF	356 SF
60'-0" x 40'-0"	430 SF	445 SF
72'-0" x 40'-0"	516 SF	534 SF
84'-0" x 40'-0"	602 SF	623 SF
96'-0" x 40'-0"	688 SF	712 SF
108'-0" x 40'-0"	774 SF	801 SF
120'-0" x 40'-0"	860 SF	890 SF
ROOF AREA PER MODULE	=	567 SF
REQUIRED SOLAR ZONE	=	86 SF
PROVIDED SOLAR ZONE	=	89 SF

++ NOTE: ACTUAL SOLAR ZONE LOCATION AND SIZE MAY VARY. MINIMUM ZONE AREA SHALL BE PER THE TABLE ABOVE.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF PLAN
36' x 40' - PARAPET
MONO OR DUAL SLOPE

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
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FOR CONSTRUCTION IS REQUIRED

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SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

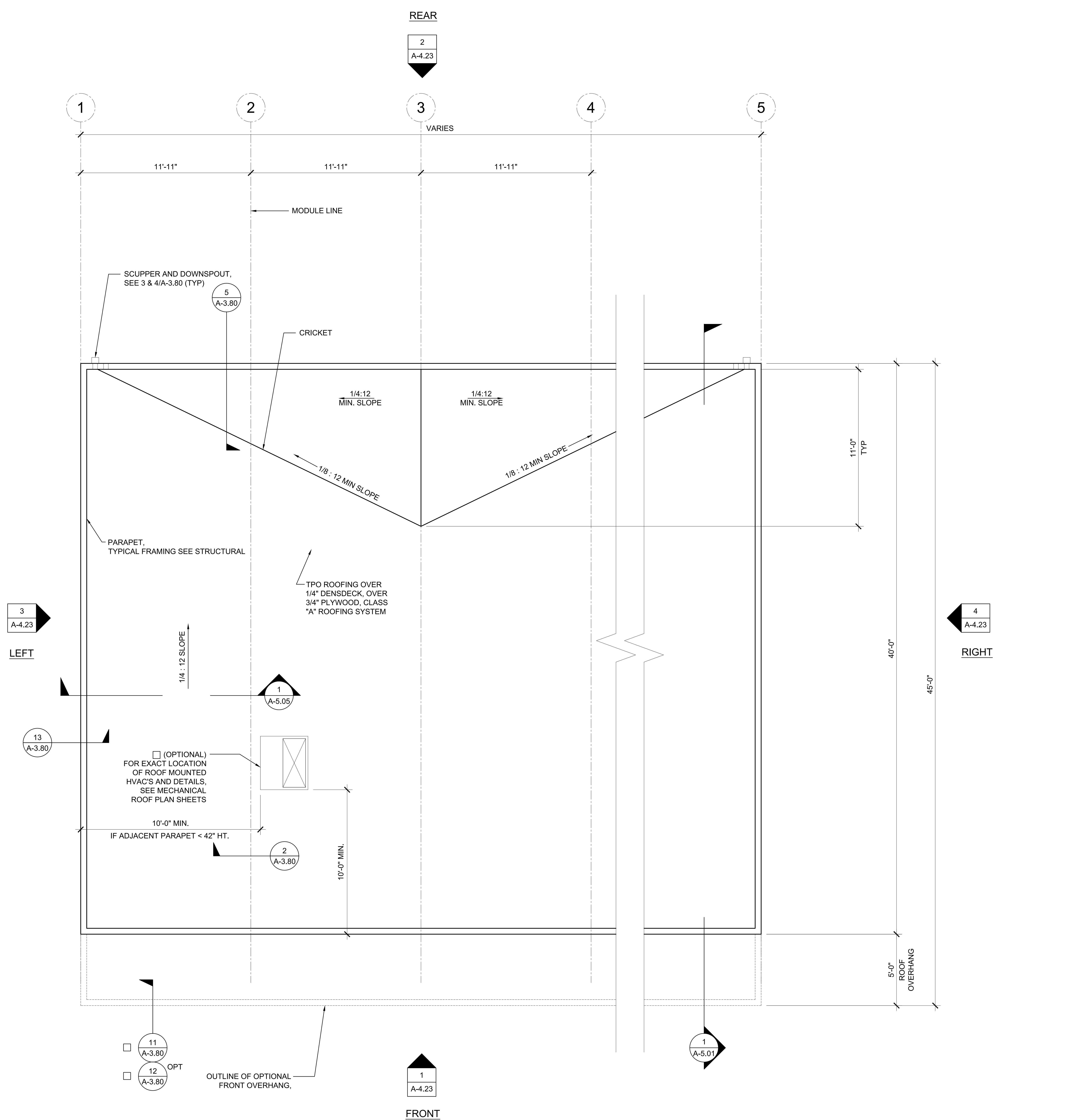
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
2975
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

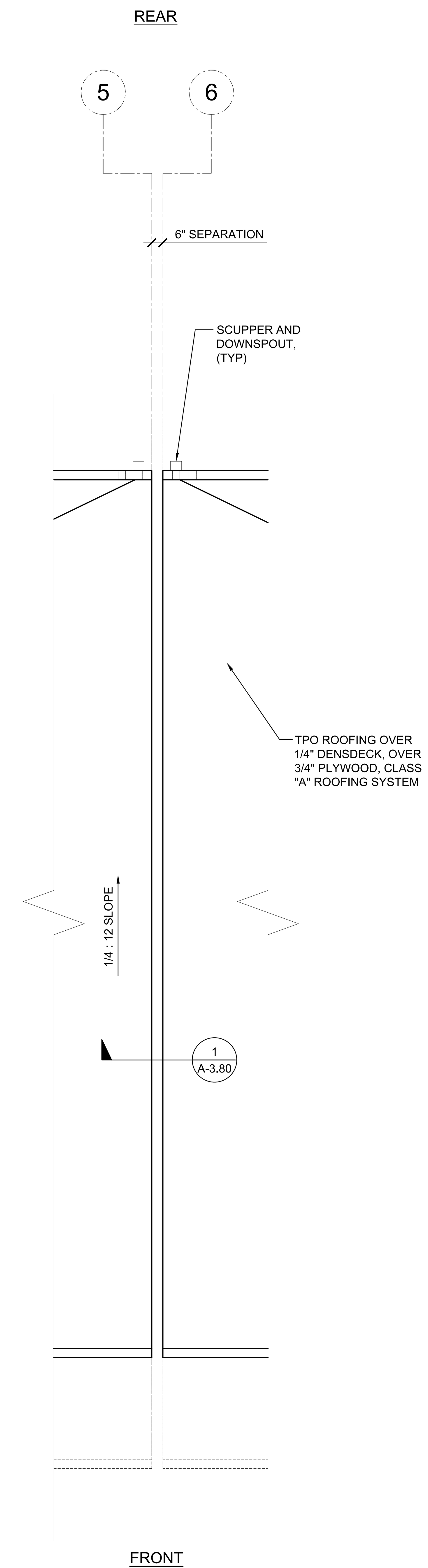
P.C. SHEET NUMBER

A-3.32



NOTE:
IF PARAPET IS USED & HIGHER THAN 18", END WALLS MUST BE 2x6 @ 24" O.C. UP TO A MAX PARAPET OF 48"

ROOF PLAN - PARAPET - MONO SLOPE SCALE: 1/4" = 1' - 0" 2

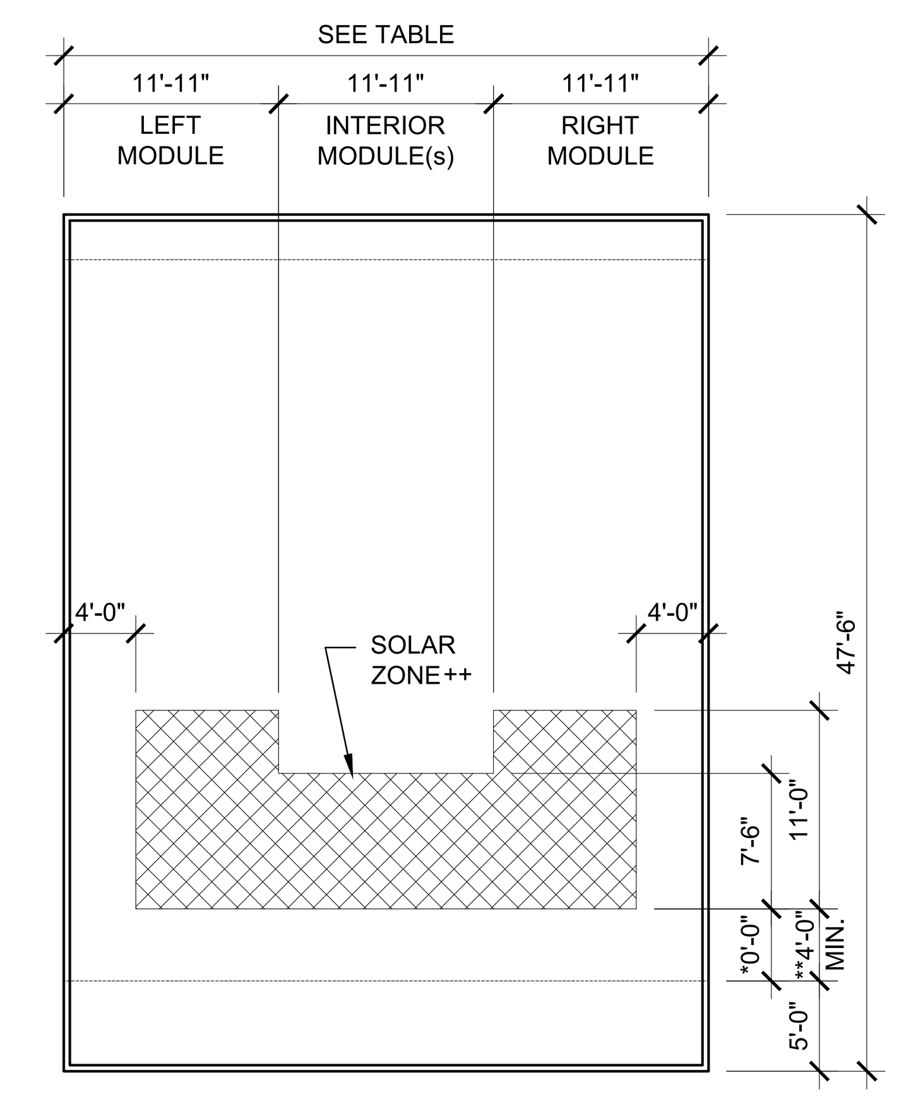


ROOF SEP PLAN OPTION SCALE: 1/4" = 1' - 0" 1

NOTES

1. BUILDINGS SHALL HAVE ROOF COVERINGS AS SPECIFIED IN CBC TABLE 1505.1 - CLASS A.
2. LOCATIONS OF DRAFTSTOP AND/OR FULL HEIGHT PARTITIONS AS REQUIRED PER CBC-718.4.3 SHALL BE SHOWN ON PROJECT SPECIFIC PLANS LOCATED AT MODULE LINES.
3. ALL ROOFTOP EQUIPMENT THAT REQUIRES SERVICE & ROOF ACCESS HATCHES MUST BE A MIN. OF 10'-0" AWAY FROM ALL ROOF EDGES TO OPENING EDGES. OR A GUARDRAIL SHALL BE PROVIDED PER 7/S-2.60

SOLAR ZONE



KEYPLAN
(w/ PARAPET)

* w/ OVERHANG
** w/o OVERHANG

SOLAR ZONE CALCULATION TABLE		
BUILDING SIZE	REQUIRED SOLAR ZONE	PROVIDED SOLAR ZONE
24'-0" x 40'-0"	172 SF	178 SF
36'-0" x 40'-0"	258 SF	267 SF
48'-0" x 40'-0"	344 SF	356 SF
60'-0" x 40'-0"	430 SF	445 SF
72'-0" x 40'-0"	516 SF	534 SF
84'-0" x 40'-0"	602 SF	623 SF
96'-0" x 40'-0"	688 SF	712 SF
108'-0" x 40'-0"	774 SF	801 SF
120'-0" x 40'-0"	860 SF	890 SF

ROOF AREA PER MODULE = 567 SF
REQUIRED SOLAR ZONE = 86 SF
PROVIDED SOLAR ZONE = 89 SF

++ NOTE: ACTUAL SOLAR ZONE LOCATION AND SIZE MAY VARY. MINIMUM ZONE AREA SHALL BE PER THE TABLE ABOVE.

PROJECT SPECIFIC STATE AGENCY APPROVAL

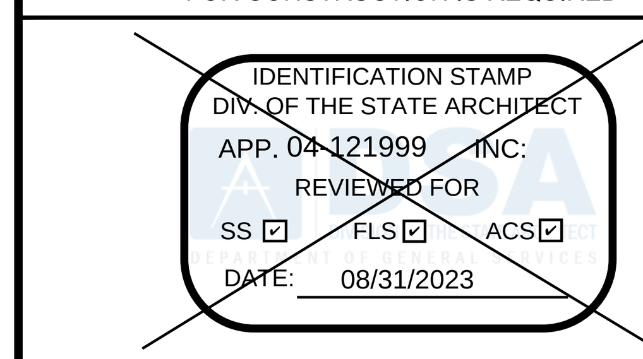
PROJECT NAME:

SHEET TITLE:

ROOF PLAN
48' to 120' x 40' - PARAPET MONO SLOPE

REVISIONS
1
2
3
4
5

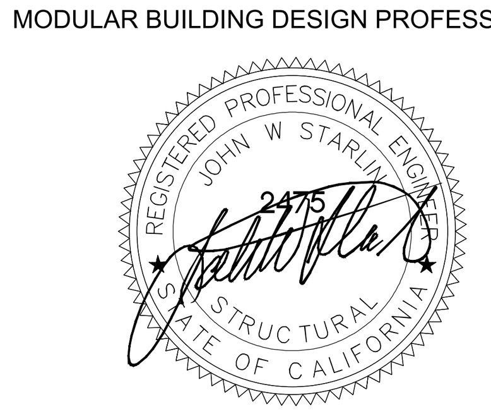
PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED



PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

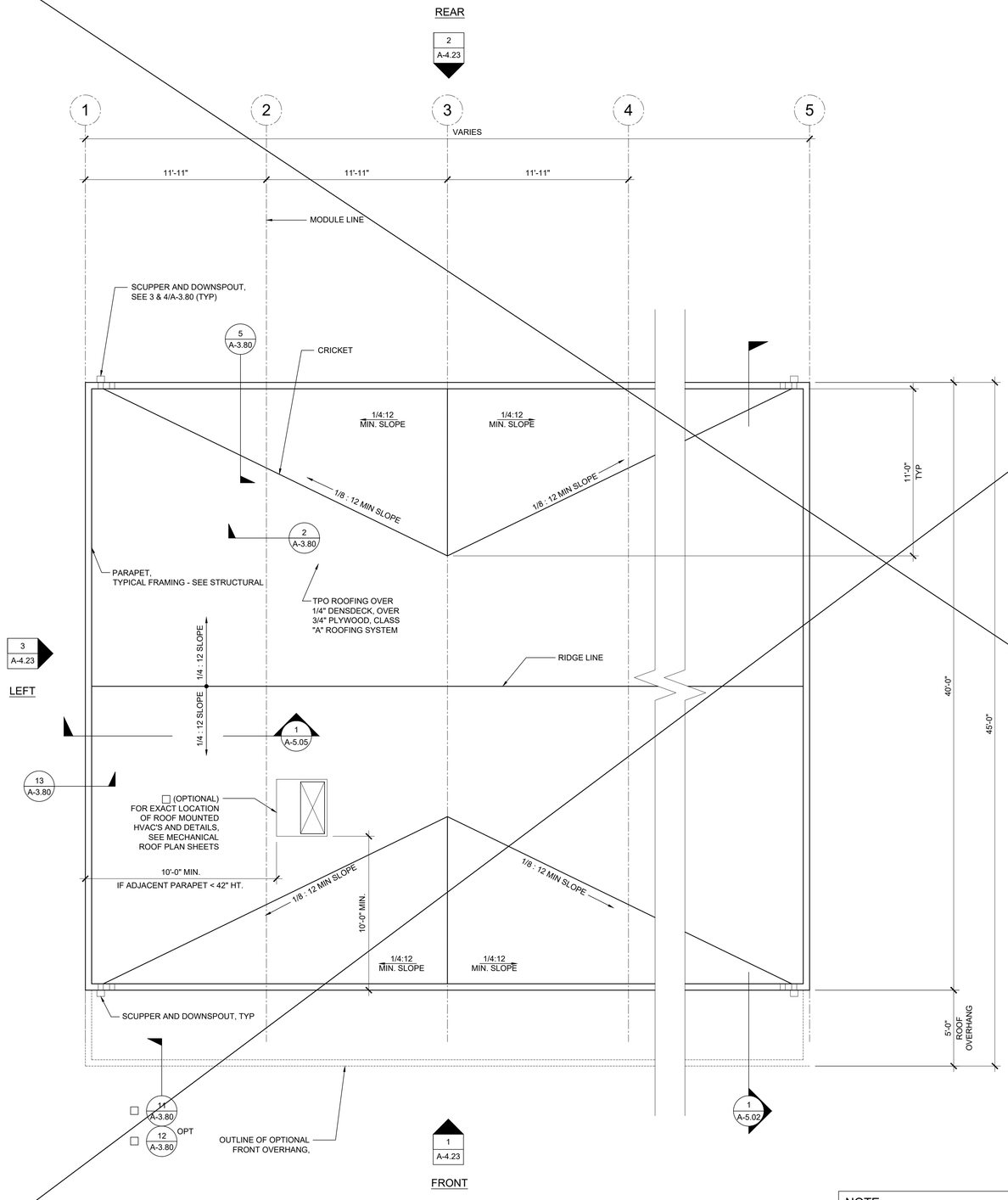
MODULAR BUILDING DESIGN PROFESSIONAL



SILVER CREEK INDUSTRIES
24' x 40' PC

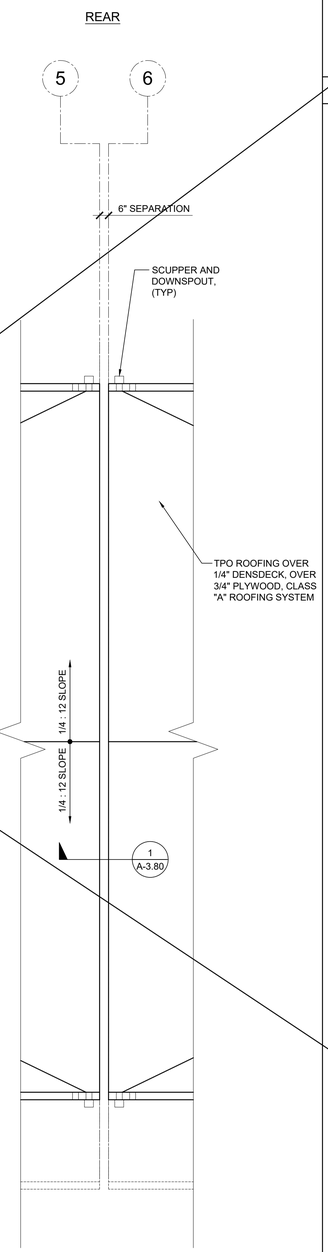
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
A-3.33



NOTE:
IF PARAPET IS USED & HIGHER THAN 18", END WALLS MUST BE 2x6 @ 24" O.C. UP TO A MAX PARAPET OF 48"

ROOF PLAN - PARAPET - DUAL SLOPE SCALE: 1/4" = 1'-0" 2

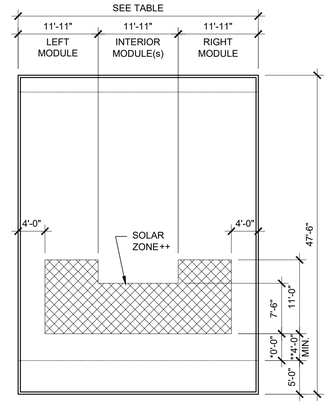


ROOF SEP PLAN OPTION SCALE: 1/4" = 1'-0" 1

NOTES

1. BUILDINGS SHALL HAVE ROOF COVERINGS AS SPECIFIED IN CBC TABLE 1505.1 - CLASS A.
2. LOCATIONS OF DRAFTSTOP AND/OR FULL HEIGHT PARTITIONS AS REQUIRED PER CBC-718.4.3 SHALL BE SHOWN ON PROJECT SPECIFIC PLANS LOCATED AT MODULE LINES.
3. ALL ROOFTOP EQUIPMENT THAT REQUIRES SERVICE & ROOF ACCESS HATCHES MUST BE A MIN. OF 10'-0" AWAY FROM ALL ROOF EDGES TO OPENING EDGES. OR A GUARDRAIL SHALL BE PROVIDED PER 7/S-2.60

SOLAR ZONE



KEYPLAN
(w/ PARAPET)

* w/ OVERHANG
** w/o OVERHANG

SOLAR ZONE CALCULATION TABLE

BUILDING SIZE	REQUIRED SOLAR ZONE	PROVIDED SOLAR ZONE
24'-0" x 40'-0"	172 SF	178 SF
36'-0" x 40'-0"	258 SF	267 SF
48'-0" x 40'-0"	344 SF	356 SF
60'-0" x 40'-0"	430 SF	445 SF
72'-0" x 40'-0"	516 SF	534 SF
84'-0" x 40'-0"	602 SF	623 SF
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108'-0" x 40'-0"	774 SF	801 SF
120'-0" x 40'-0"	860 SF	890 SF
ROOF AREA PER MODULE	=	567 SF
REQUIRED SOLAR ZONE	=	86 SF
PROVIDED SOLAR ZONE	=	89 SF

++ NOTE: ACTUAL SOLAR ZONE LOCATION AND SIZE MAY VARY. MINIMUM ZONE AREA SHALL BE PER THE TABLE ABOVE.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF PLAN
48' to 120' x 40' - PARAPET DUAL SLOPE

REVISIONS

1
2
3
4
5

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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

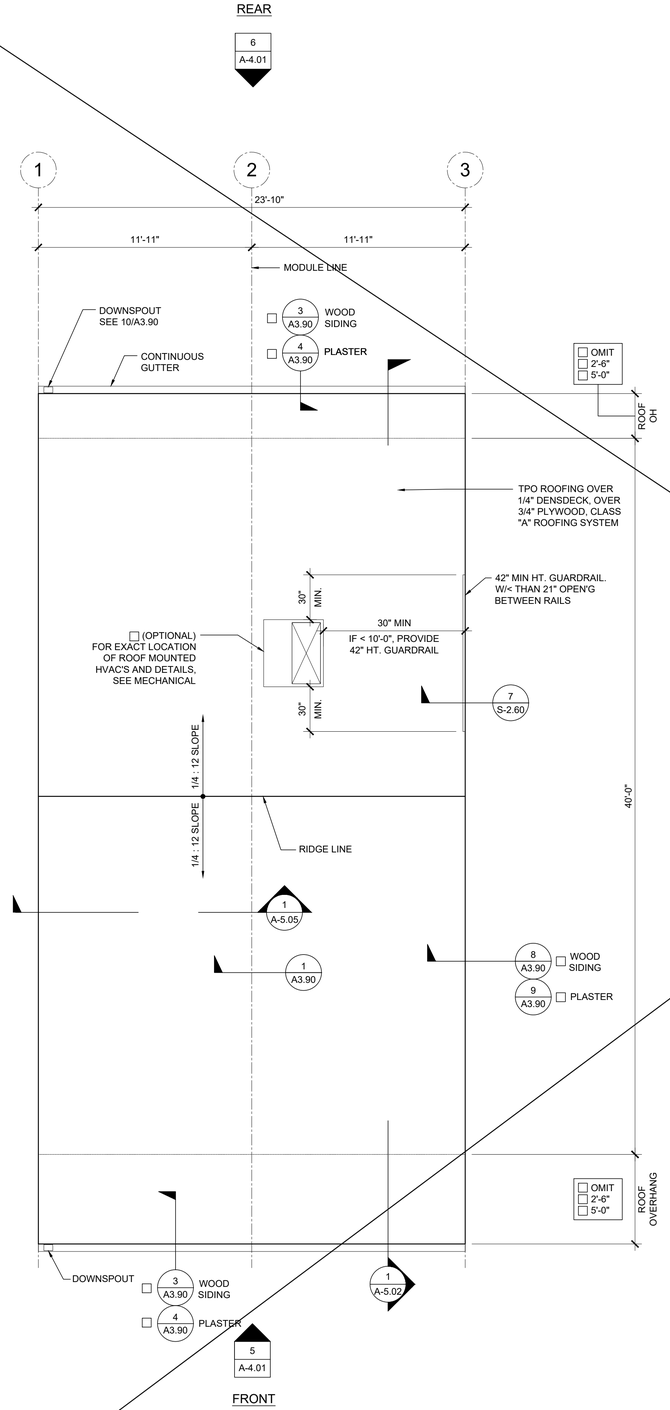
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24775 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

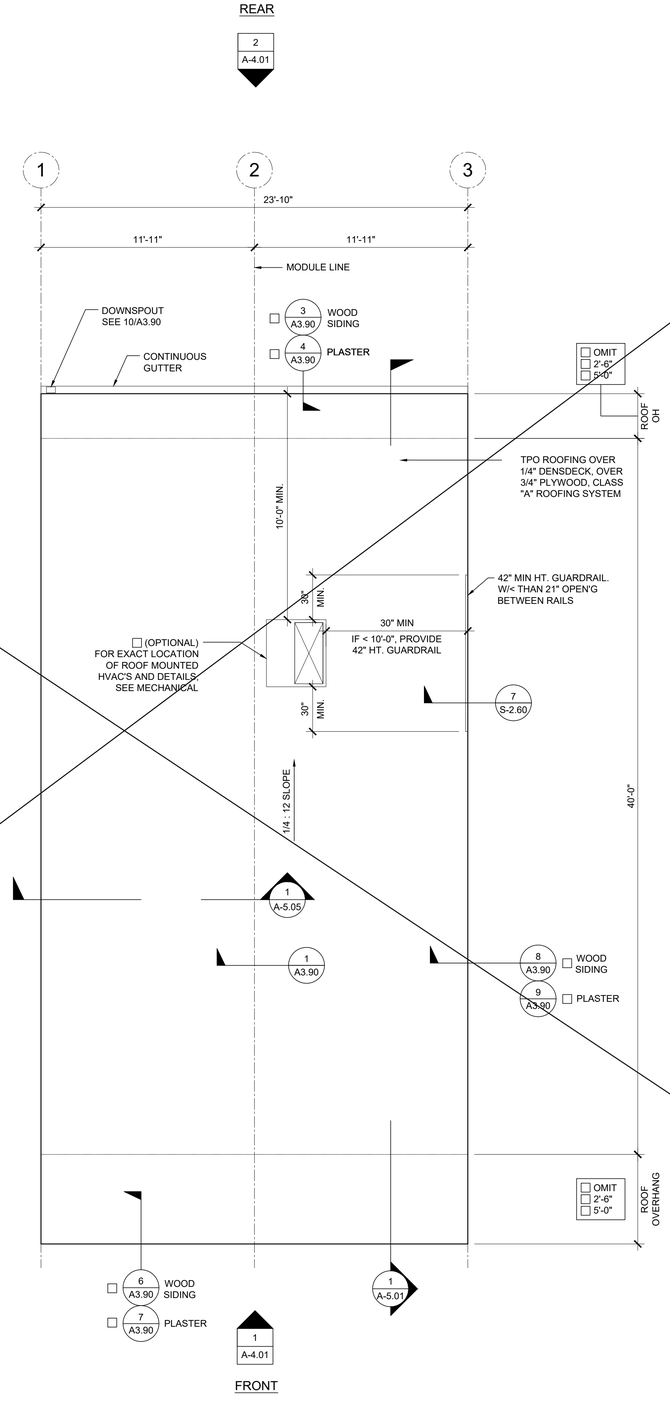
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-3.34



ROOF PLAN - TPO - DUAL SLOPE SCALE: 1/4" = 1' - 0" 2

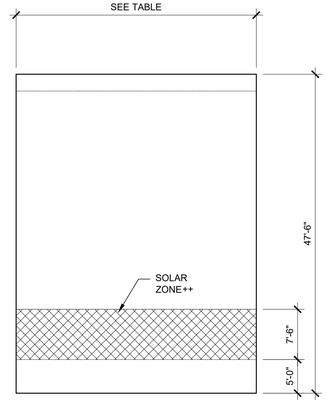


ROOF PLAN - TPO - MONO SLOPE SCALE: 1/4" = 1' - 0" 1

NOTES

1. BUILDINGS SHALL HAVE ROOF COVERINGS AS SPECIFIED IN CBC TABLE 1505.1 - CLASS A.
2. LOCATIONS OF DRAFTSTOP AND/OR FULL HEIGHT PARTITIONS AS REQUIRED PER CBC-718.4.3 SHALL BE SHOWN ON PROJECT SPECIFIC PLANS LOCATED AT MODULE LINES.
3. ALL ROOFTOP EQUIPMENT THAT REQUIRES SERVICE & ROOF ACCESS HATCHES MUST BE A MIN. OF 10'-0" AWAY FROM ALL ROOF EDGES TO OPENING EDGES. OR A GUARDRAIL SHALL BE PROVIDED PER 7/S-2.60

SOLAR ZONE



KEYPLAN

SOLAR ZONE CALCULATION TABLE		
BUILDING SIZE	REQUIRED SOLAR ZONE	PROVIDED SOLAR ZONE
24'-0" x 40'-0"	172 SF	178 SF
36'-0" x 40'-0"	258 SF	267 SF
48'-0" x 40'-0"	344 SF	356 SF
60'-0" x 40'-0"	430 SF	445 SF
72'-0" x 40'-0"	516 SF	534 SF
84'-0" x 40'-0"	602 SF	623 SF
96'-0" x 40'-0"	688 SF	712 SF
108'-0" x 40'-0"	774 SF	801 SF
120'-0" x 40'-0"	860 SF	890 SF
ROOF AREA PER MODULE	=	567 SF
REQUIRED SOLAR ZONE	=	86 SF
PROVIDED SOLAR ZONE	=	89 SF

++ NOTE: ACTUAL SOLAR ZONE LOCATION AND SIZE MAY VARY. MINIMUM ZONE AREA SHALL BE PER THE TABLE ABOVE.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF PLAN
24'x40' - TPO ROOF
MONO OR DUAL SLOPE

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARUCH 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

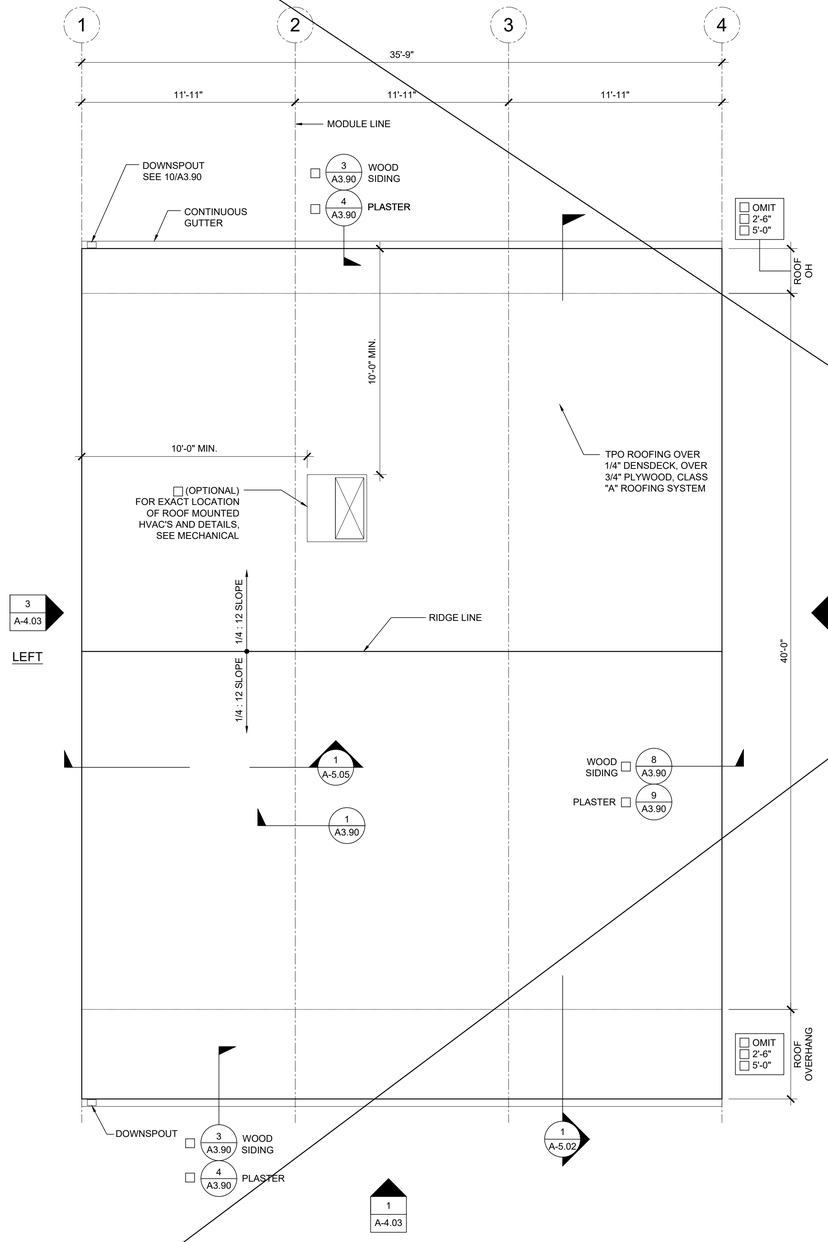
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-3.41

REAR

2
A-4.03



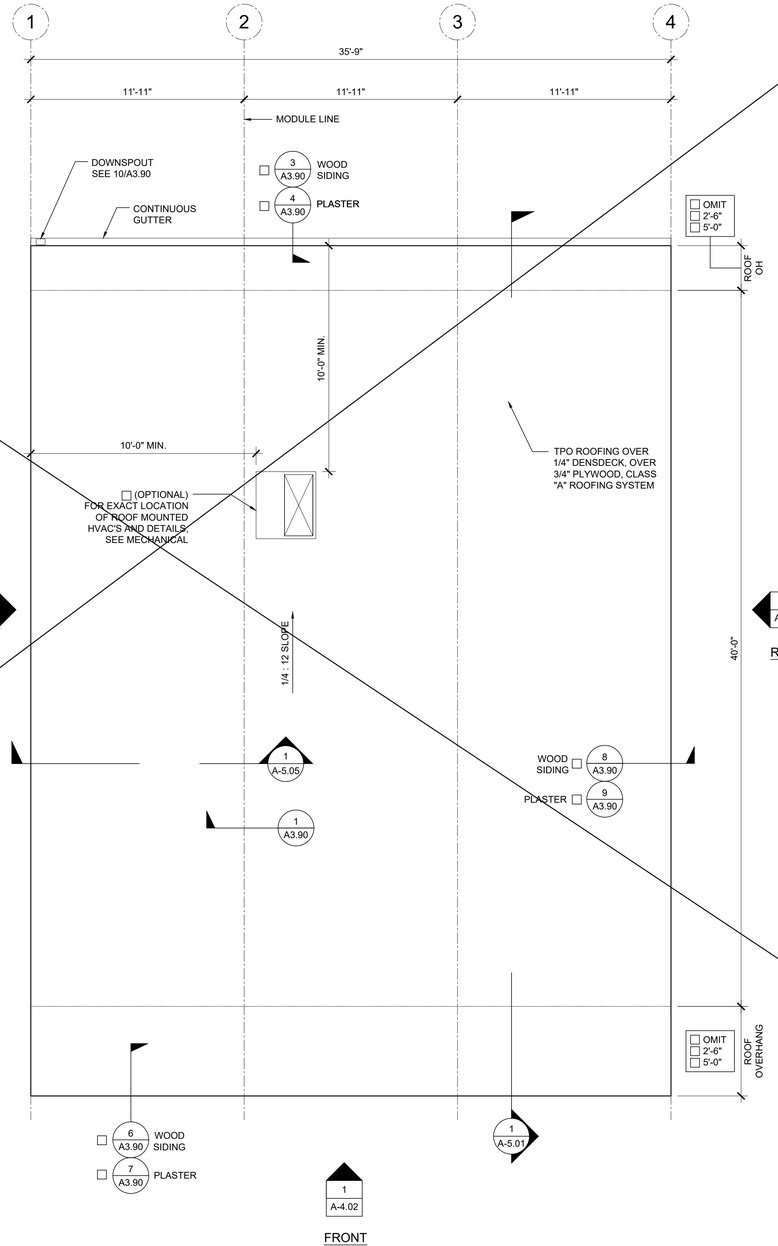
FRONT

ROOF PLAN - TPO - DUAL SLOPE

SCALE: 1/4" = 1'-0" | 2

REAR

2
A-4.02



FRONT

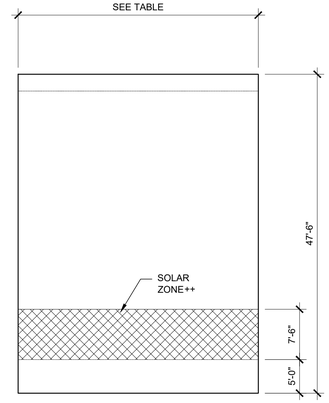
ROOF PLAN - TPO - MONO SLOPE

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

NOTES

1. BUILDINGS SHALL HAVE ROOF COVERINGS AS SPECIFIED IN CBC TABLE 1505.1 - CLASS A.
2. LOCATIONS OF DRAFTSTOP AND/OR FULL HEIGHT PARTITIONS AS REQUIRED PER CBC-718.4.3 SHALL BE SHOWN ON PROJECT SPECIFIC PLANS LOCATED AT MODULE LINES.
3. ALL ROOFTOP EQUIPMENT THAT REQUIRES SERVICE & ROOF ACCESS HATCHES MUST BE A MIN. OF 10'-0" AWAY FROM ALL ROOF EDGES TO OPENING EDGES. OR A GUARDRAIL SHALL BE PROVIDED PER 7/S-2.60

SOLAR ZONE



KEYPLAN

SOLAR ZONE CALCULATION TABLE		
BUILDING SIZE	REQUIRED SOLAR ZONE	PROVIDED SOLAR ZONE
24'-0" x 40'-0"	172 SF	178 SF
36'-0" x 40'-0"	258 SF	267 SF
48'-0" x 40'-0"	344 SF	356 SF
60'-0" x 40'-0"	430 SF	445 SF
72'-0" x 40'-0"	516 SF	534 SF
84'-0" x 40'-0"	602 SF	623 SF
96'-0" x 40'-0"	688 SF	712 SF
108'-0" x 40'-0"	774 SF	801 SF
120'-0" x 40'-0"	860 SF	890 SF
ROOF AREA PER MODULE	=	567 SF
REQUIRED SOLAR ZONE	=	86 SF
PROVIDED SOLAR ZONE	=	89 SF

++ NOTE: ACTUAL SOLAR ZONE LOCATION AND SIZE MAY VARY. MINIMUM ZONE AREA SHALL BE PER THE TABLE ABOVE.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF PLAN
36' x 40' - TPO ROOF
MONO OR DUAL SLOPE

REVISIONS

1
2
3
4
5

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2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

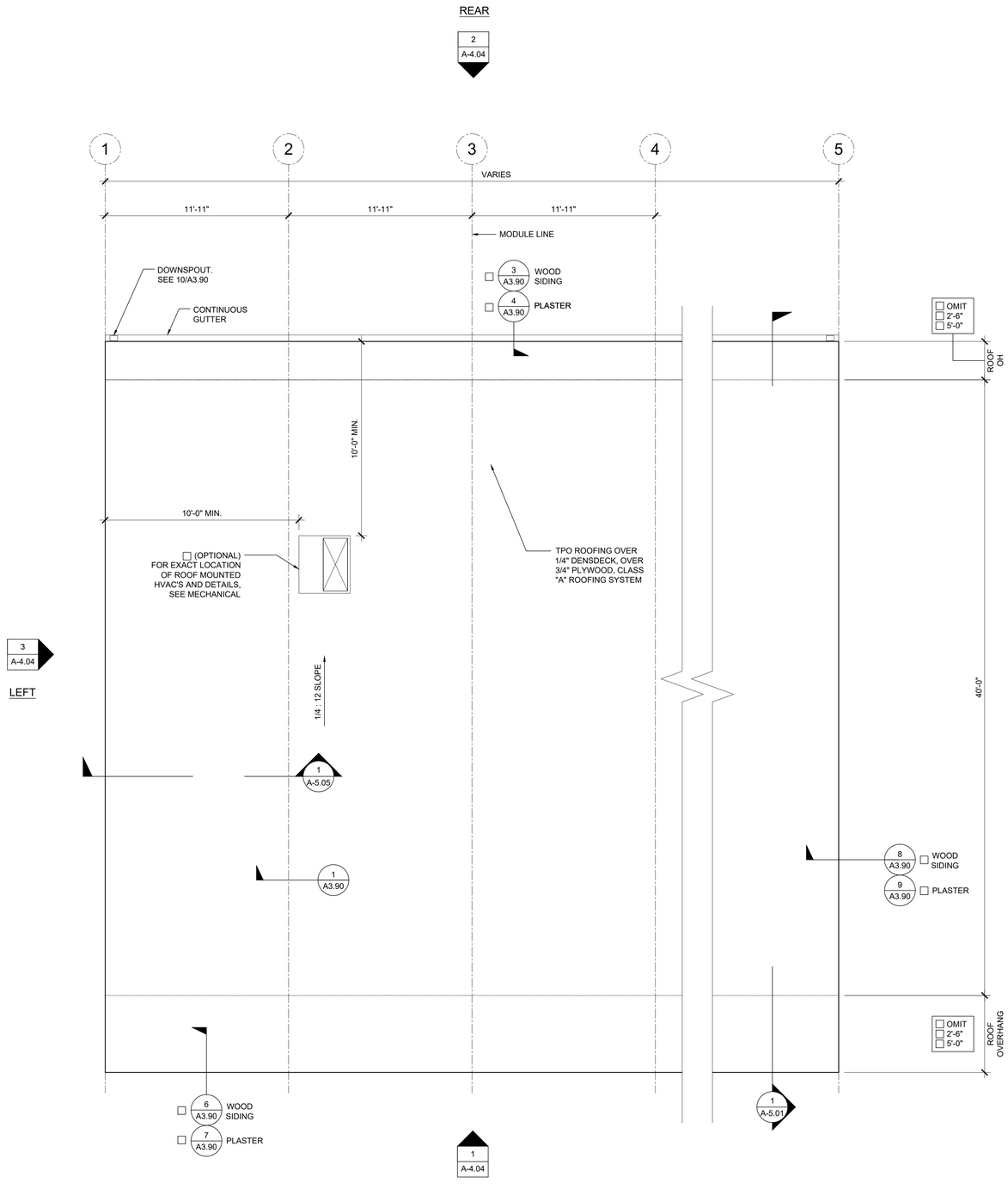
MODULAR BUILDING DESIGN PROFESSIONAL

SILVER CREEK INDUSTRIES
24' x 40' PC

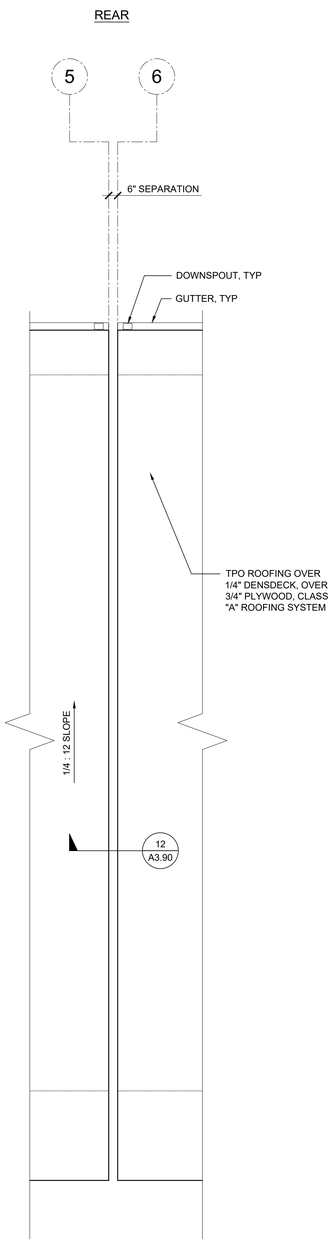
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-3.42



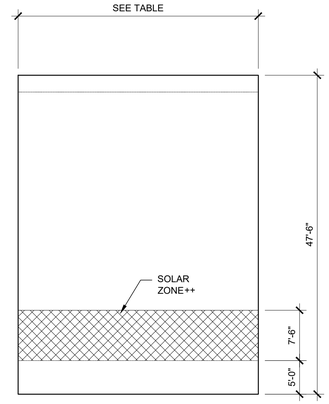
ROOF PLAN - TPO - MONO SLOPE SCALE: 1/4" = 1' - 0" 2



ROOF SEP. PLAN OPTION SCALE: 1/4" = 1' - 0" 1

NOTES

1. FOR WALL MOUNTED HVAC UNIT, PROVIDE OPENING THROUGH REAR ROOF HEADER WHERE IT OCCURS. SEE FLOOR PLAN FOR HVAC LOCATION.
   SEE 5,15 / S-2.50 OR 5,15/S-2.51 FOR DETAILS
2. PROVIDE ADDITIONAL JOIST FOR FIRE SPRINKLER LINE AS NEEDED. LOCATION OF FIRE SPRINKLER PURLIN TO BE DETERMINED BY SITE STIFFENER PLATE OR ANGLE BRACE REQUIRED AT THIS LOCATION. FOR FIRE SPRINKLER LINE SIDE BEAM PENETRATION, SEE 14 / S-2.50 OR 14 / S-2.51 DETAILS.
3. FOR OPTIONAL SIDE BEAM OPENING SEE 10, 15/S-2.50 OR 10, 15/S-2.51 FOR DETAILS



KEYPLAN

SOLAR ZONE CALCULATION TABLE		
BUILDING SIZE	REQUIRED SOLAR ZONE	PROVIDED SOLAR ZONE
24'-0" x 40'-0"	172 SF	178 SF
36'-0" x 40'-0"	258 SF	267 SF
48'-0" x 40'-0"	344 SF	356 SF
60'-0" x 40'-0"	430 SF	445 SF
72'-0" x 40'-0"	516 SF	534 SF
84'-0" x 40'-0"	602 SF	623 SF
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108'-0" x 40'-0"	774 SF	801 SF
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ROOF AREA PER MODULE	=	567 SF
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PROVIDED SOLAR ZONE	=	89 SF

++ NOTE: ACTUAL SOLAR ZONE LOCATION AND SIZE MAY VARY. MINIMUM ZONE AREA SHALL BE PER THE TABLE ABOVE.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF PLAN
48' TO 120' x 40'
TPO ROOF
MONO SLOPE

REVISIONS

1
2
3
4
5

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MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24575 STRUCTURAL STATE OF CALIFORNIA

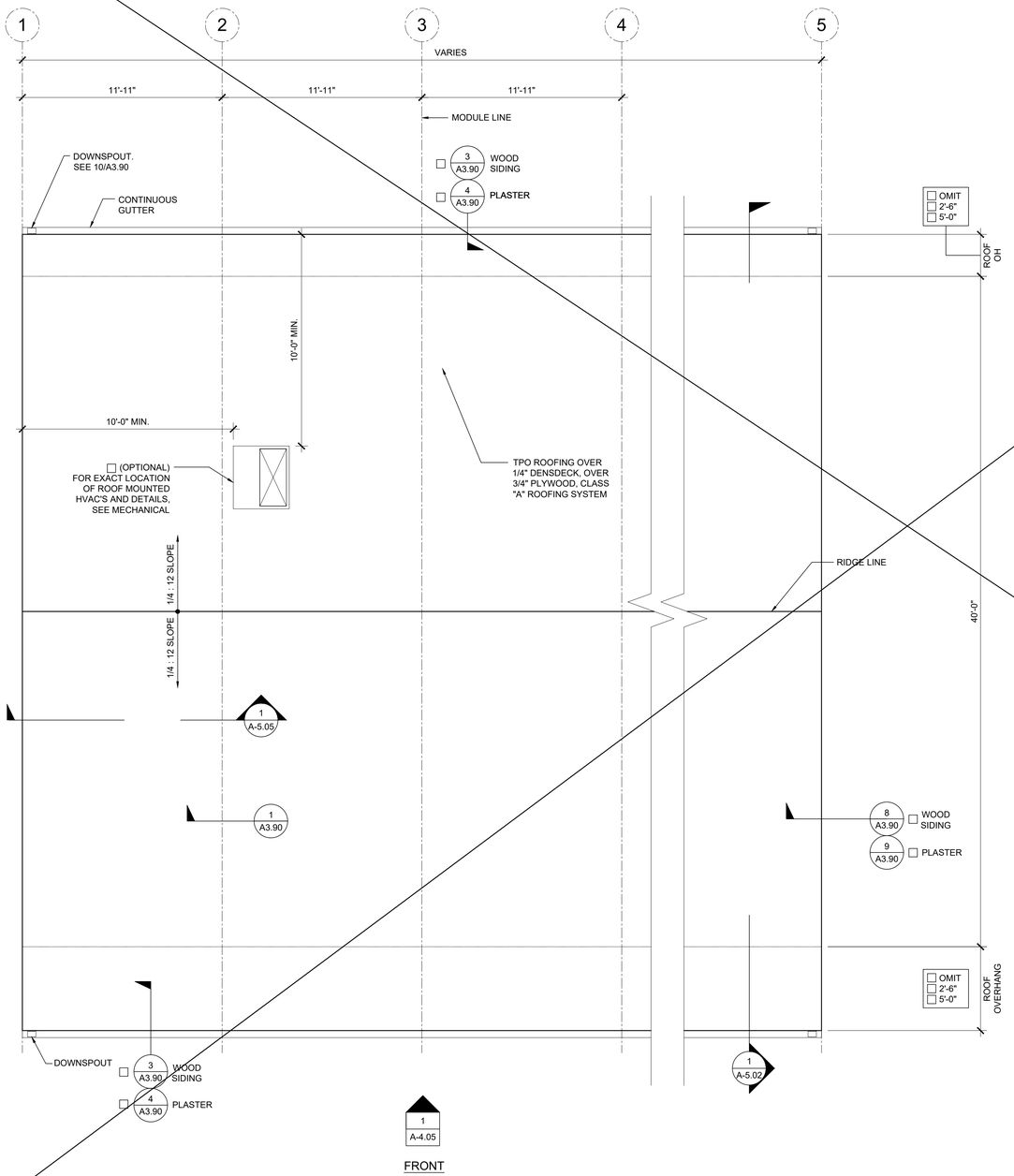
SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

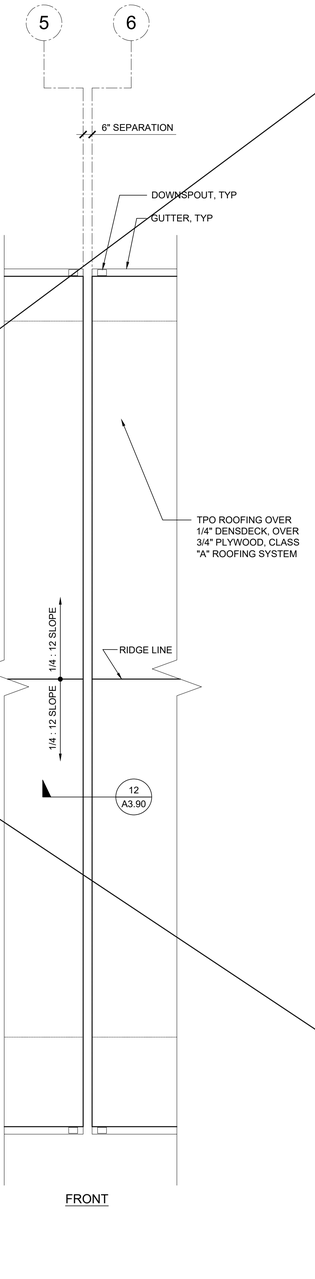
A-3.43

REAR



ROOF PLAN - TPO - DUAL SLOPE SCALE: 1/4" = 1' - 0" 2

REAR



FRONT

ROOF SEP. PLAN OPTION SCALE: 1/4" = 1' - 0" 1

NOTES

1. BUILDINGS SHALL HAVE ROOF COVERINGS AS SPECIFIED IN CBC TABLE 1505.1 - CLASS A.
2. LOCATIONS OF DRAFTSTOP AND/OR FULL HEIGHT PARTITIONS AS REQUIRED PER CBC-718.4.3 SHALL BE SHOWN ON PROJECT SPECIFIC PLANS LOCATED AT MODULE LINES.
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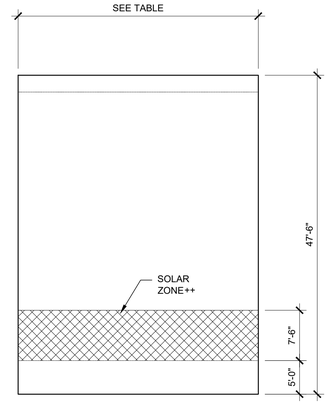
SOLAR ZONE



KEYPLAN

SOLAR ZONE CALCULATION TABLE

BUILDING SIZE	REQUIRED SOLAR ZONE	PROVIDED SOLAR ZONE
24'-0" x 40'-0"	172 SF	178 SF
36'-0" x 40'-0"	258 SF	267 SF
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60'-0" x 40'-0"	430 SF	445 SF
72'-0" x 40'-0"	516 SF	534 SF
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ROOF AREA PER MODULE	=	567 SF
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++ NOTE: ACTUAL SOLAR ZONE LOCATION AND SIZE MAY VARY. MINIMUM ZONE AREA SHALL BE PER THE TABLE ABOVE.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF PLAN
48' TO 120' x 40'
TPO ROOF
DUAL SLOPE

REVISIONS

1
2
3
4
5

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MODULAR BUILDING DESIGN PROFESSIONAL

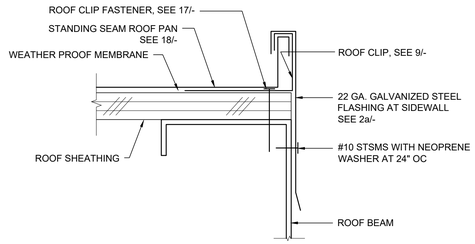
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

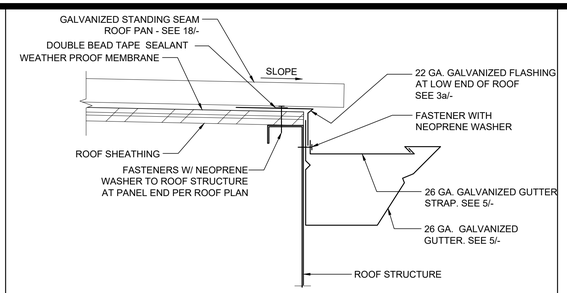
P.C. SHEET NUMBER

A-3.44



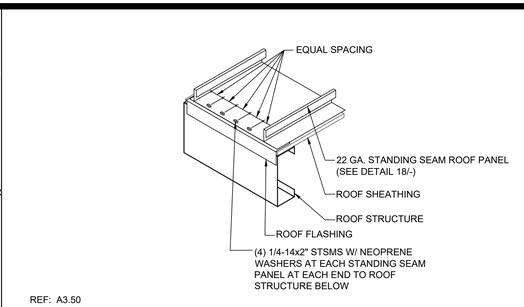
REF: A3.01, A3.02, A3.03, A3.04

ROOF FLASHING AT SIDEWALL — SCALE : 6"=1'-0" — 16



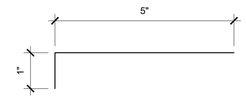
REF: A3.01, A3.02, A3.03, A3.04

GUTTER AT ROOF FASCIA BEAM — SCALE : 3"=1'-0" — 11



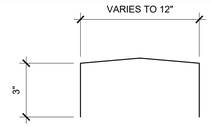
REF: A3.50

STANDING SEAM PANEL AT ENDS — SCALE : NTS — 6



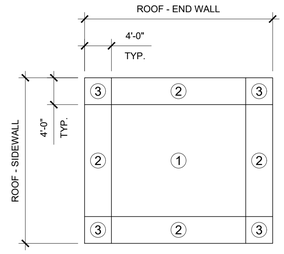
REF: A3.50

FLASHING AT MODULE LINE WALL — SCALE : 6"=1'-0" — 1a



REF: A3.50

0.018" ROOF CAP AT MODULE LINE — SCALE : 6"=1'-0" — 1b



1 = ZONE 1, CLIP LENGTH = 3"

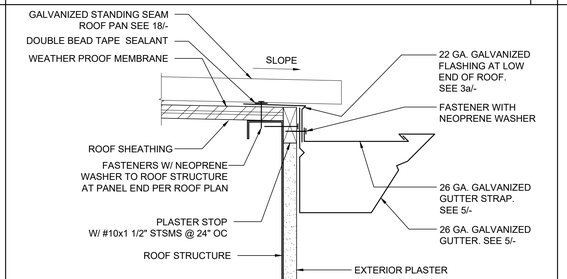
2 = ZONE 2, CLIP LENGTH = 3"

3 = ZONE 3, CLIP LENGTH = 3"

NOTE:
SEE 9/- FOR ATTACHMENT,
SEE 14/- FOR CLIP PROFILE,
FASTEN CLIP WITH:
(2)1/4-14 x 1 7/8" PHILLIPS WAFER HEAD STSMS TO PURLIN / BEAM / TRUSS

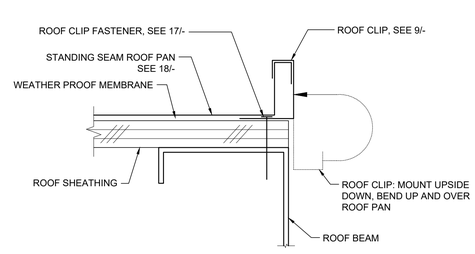
REF: A3.50

ROOF CLIP ZONES — NTS — 17



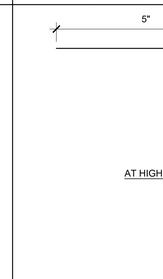
REF: A3.01, A3.02, A3.03, A3.04

GUTTER AT ROOF FASCIA BEAM — SCALE : 3"=1'-0" — 12



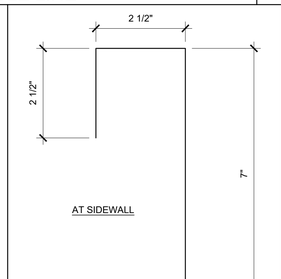
REF: A3.01, A3.02, A3.03, A3.04

STARTER ROOF PAN CONNECTION — SCALE : 6"=1'-0" — 7



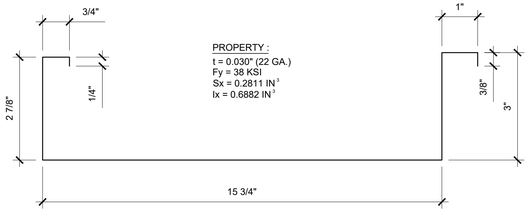
REF: A3.50

ROOF FLASHING — SCALE : 6"=1'-0" — 2b



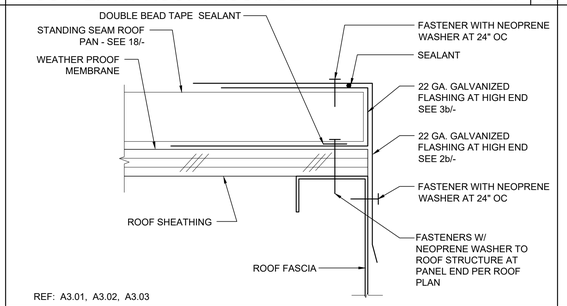
REF: A3.50

ROOF FLASHING — SCALE : 6"=1'-0" — 2a



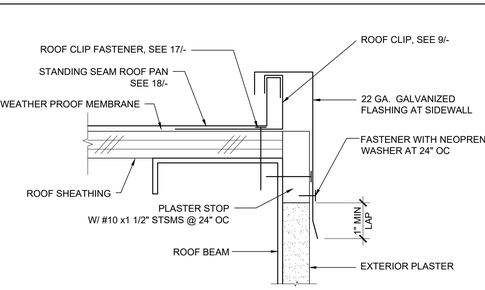
REF: A3.50

ROOF DECK PROFILE — SCALE : NTS — 18



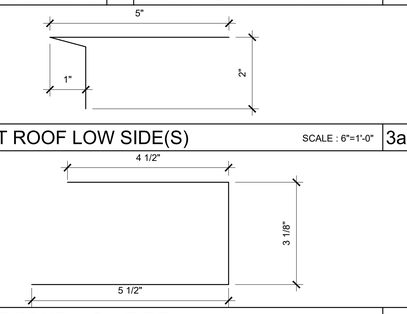
REF: A3.01, A3.02, A3.03

ROOF FLASHING AT HIGH SIDE — SCALE : 6"=1'-0" — 13



REF: A3.01, A3.02, A3.03, A3.04

ROOF FLASHING AT SIDEWALL — SCALE : 6"=1'-0" — 8

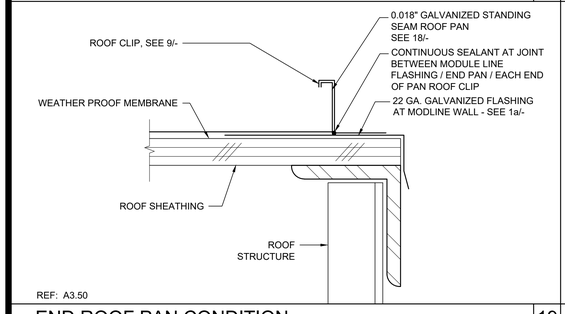


REF: A3.50

FLASHING AT ROOF LOW SIDE(S) — SCALE : 6"=1'-0" — 3a

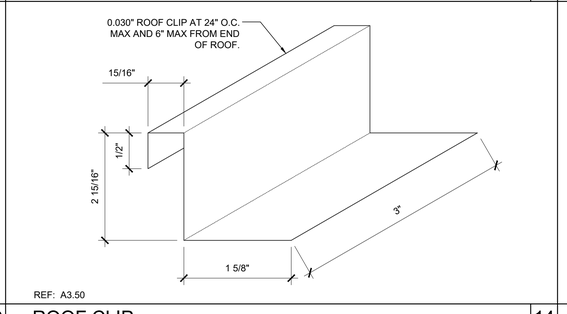
REF: A3.50

FLASHING AT ROOF HIGH SIDE — SCALE : 6"=1'-0" — 3b



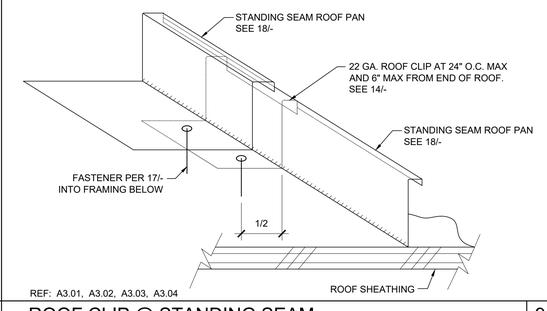
REF: A3.50

END ROOF PAN CONDITION — SCALE : 6"=1'-0" — 19



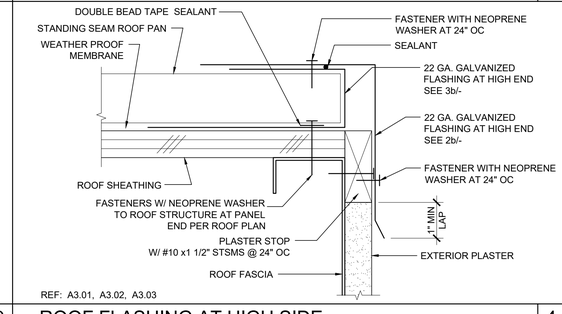
REF: A3.50

ROOF CLIP — SCALE : 1'-0"=1'-0" — 14



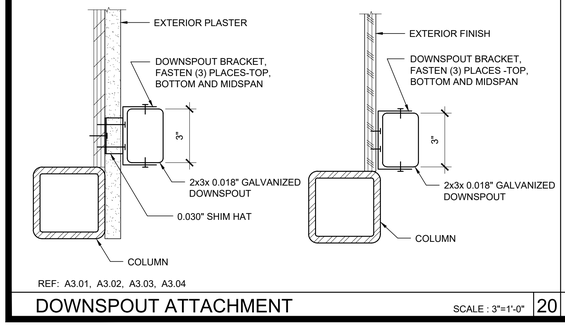
REF: A3.01, A3.02, A3.03, A3.04

ROOF CLIP @ STANDING SEAM — SCALE : NTS — 9



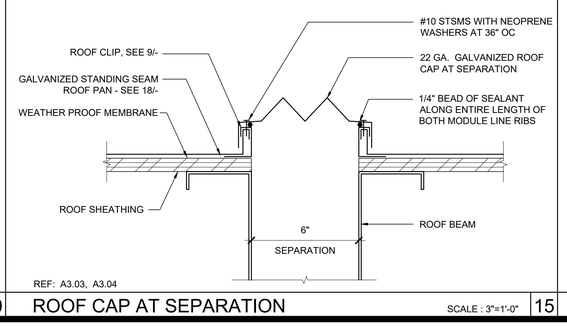
REF: A3.01, A3.02, A3.03

ROOF FLASHING AT HIGH SIDE — SCALE : 6"=1'-0" — 4



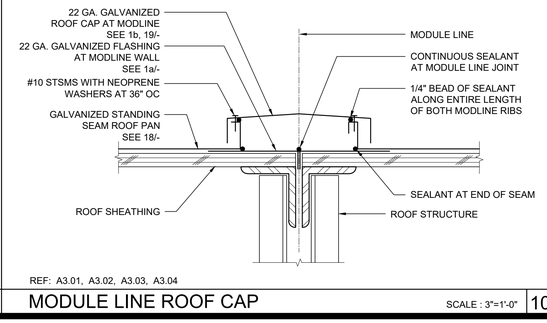
REF: A3.01, A3.02, A3.03, A3.04

DOWNSPOUT ATTACHMENT — SCALE : 3"=1'-0" — 20



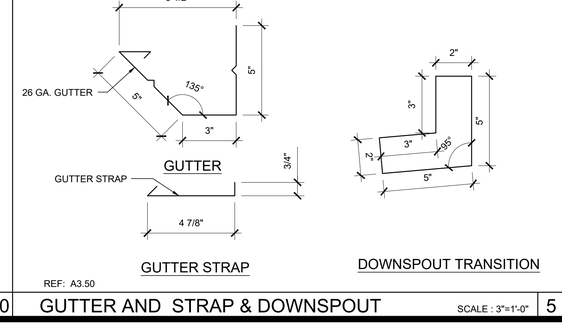
REF: A3.03, A3.04

ROOF CAP AT SEPARATION — SCALE : 3"=1'-0" — 15



REF: A3.01, A3.02, A3.03, A3.04

MODULE LINE ROOF CAP — SCALE : 3"=1'-0" — 10



GUTTER STRAP

DOWNSPOUT TRANSITION

REF: A3.50

GUTTER AND STRAP & DOWNSPOUT — SCALE : 3"=1'-0" — 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF DETAILS
STANDING SEAM ROOF DECK

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

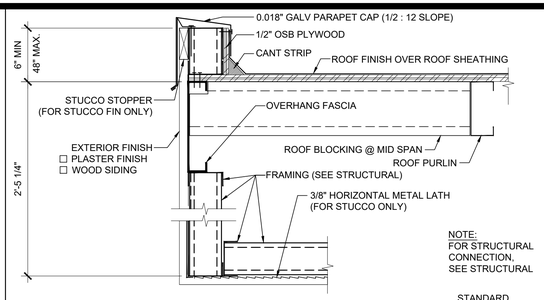
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24975 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

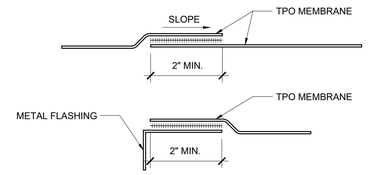
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

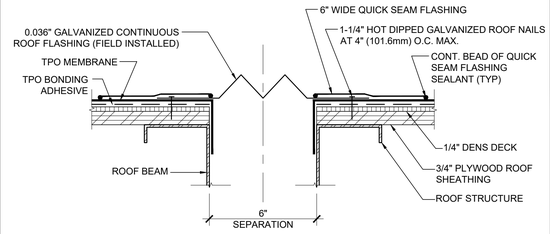
A-3.50



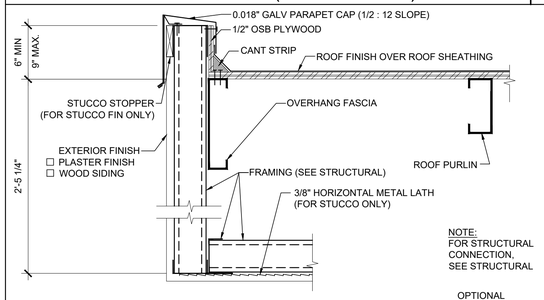
FRONT PARAPET SECTION (STEEL FRAME) SCALE : 1 1/2" = 1'-0" | 11



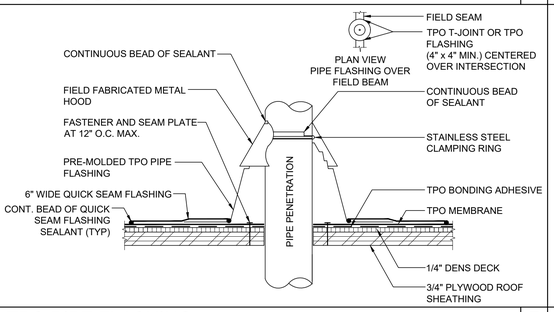
TPO LAP SPLICE SCALE : 6" = 1'-0" | 6



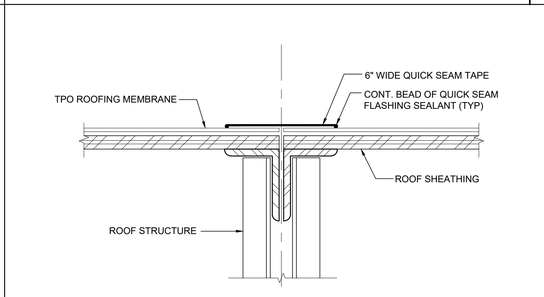
TPO ROOF AT SEPARATION SCALE : 3"=1'-0" | 1



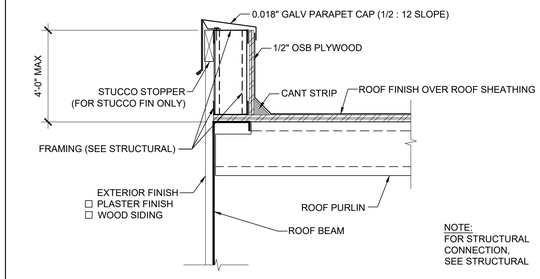
FRONT PARAPET SECTION (STEEL FRAME) SCALE : 1 1/2" = 1'-0" | 12



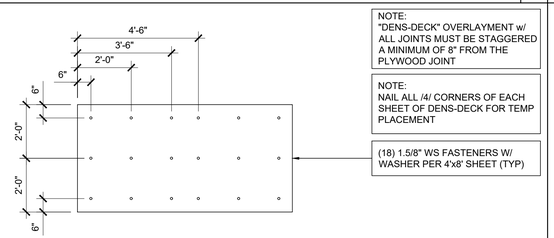
TPO PIPE FLASHING SCALE : 3" = 1'-0" | 7



TPO ROOF AT MODLINE SCALE : 3"=1'-0" | 2



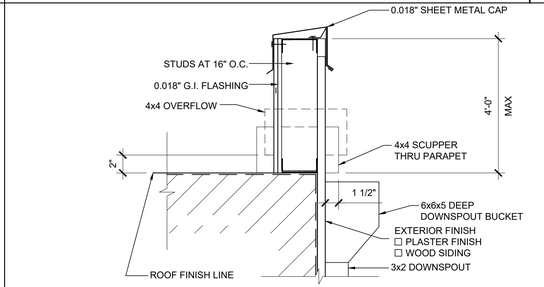
SIDEWALL PARAPET SECTION (STEEL FRAME) SCALE : 1 1/2" = 1'-0" | 13



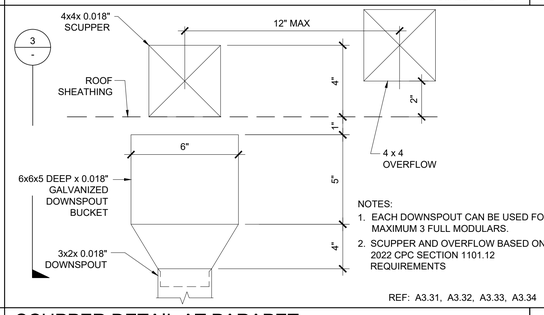
18 FASTENERS PER BOARD

FMRC 1-90 WIND UPLIFT / (18) FASTENERS PER 4' x 8' BOARD

DENS-DECK FASTENING DIAGRAM SCALE : NTS | 8

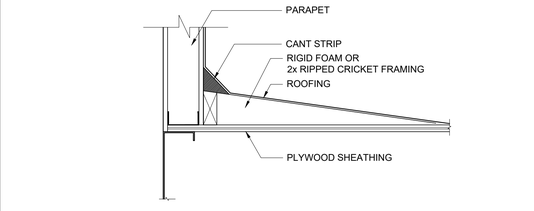


PARAPET DETAIL SCALE: 1 1/2"=1'-0" | 3



REF: A3.31, A3.32, A3.33, A3.34

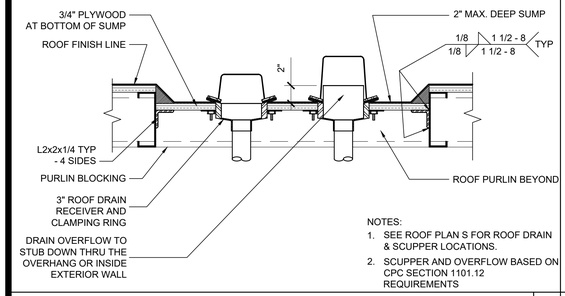
SCUPPER DETAIL AT PARAPET SCALE : 3"=1'-0" | 4



REF: A3.31, A3.32, A3.33, A3.34

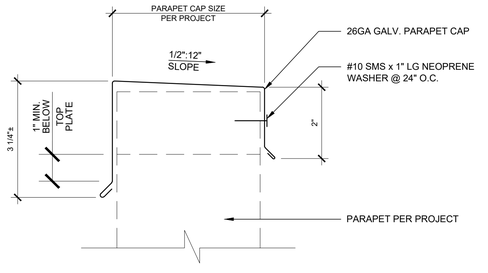
SECTION AT CRICKET SCALE : 1 1/2" = 1'-0" | 5

19

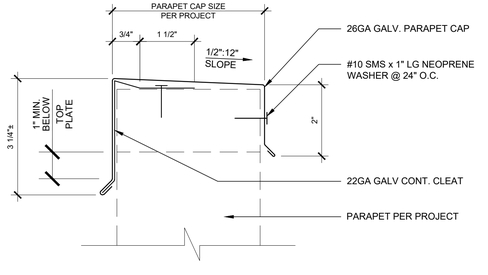


NOTES:
1. SEE ROOF PLAN S FOR ROOF DRAIN & SCUPPER LOCATIONS.
2. SCUPPER AND OVERFLOW BASED ON CPC SECTION 1101.12 REQUIREMENTS

ROOF DRAIN DETAIL SCALE : 1 1/2" = 1'-0" | 20



PARAPET CAP DETAIL SCALE : 1 1/2" = 1'-0" | 15



9

10

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF DETAILS
PARAPET

REVISIONS

1
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PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

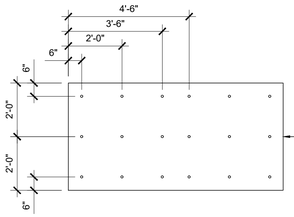
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-3.80



NOTE:
"DENS-DECK" OVERLAYMENT w/ ALL JOINTS MUST BE STAGGERED A MINIMUM OF 8" FROM THE PLYWOOD JOINT

NOTE:
NAIL ALL /4/ CORNERS OF EACH SHEET OF DENS-DECK FOR TEMP PLACEMENT

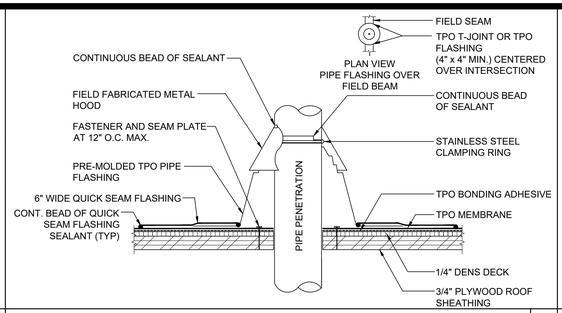
(18) #12 x 1 5/8" WS FASTENERS W/ WASHER PER 4'x8' SHEET (TYP)

18 FASTENERS PER BOARD

FMRC 1-90 WIND UPLIFT / (18) FASTENERS PER 4' x 8' BOARD

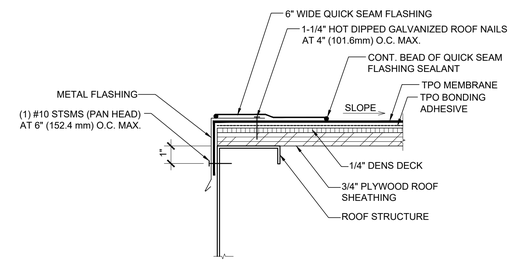
TYP 4x8 SHEET FASTENER LAYOUT

SCALE: NTS | 16



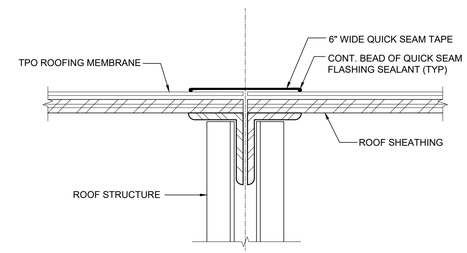
DETAIL AT PIPE FLASHING

SCALE: 3"=1'-0" | 11



ROOF AT HIGH END

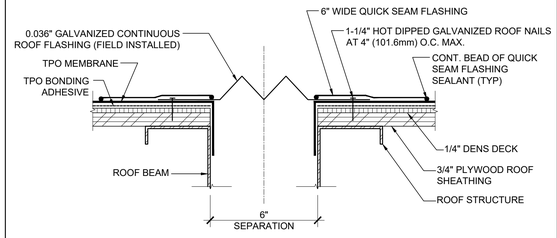
SCALE: 3"=1'-0" | 6



TPO ROOF AT MODLINE

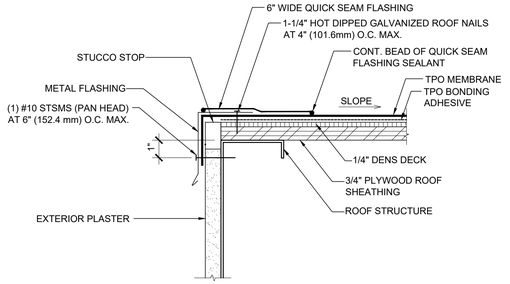
SCALE : 3"=1'-0" | 1

17



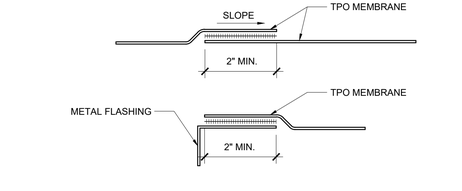
SEPARATION AT ROOF

SCALE: 3"=1'-0" | 12



ROOF AT HIGH END

SCALE: 3"=1'-0" | 7

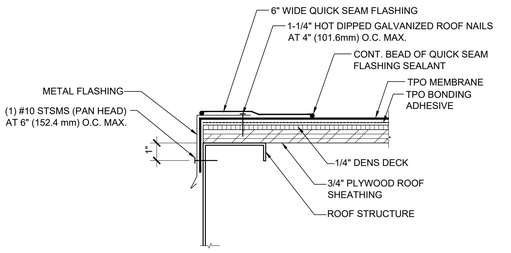


TPO LAP SPLICE

SCALE: 6" = 1'-0" | 2

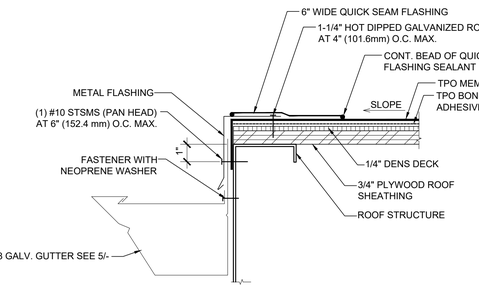
18

13



ROOF AT SIDEWALL

SCALE: 3" = 1'-0" | 8

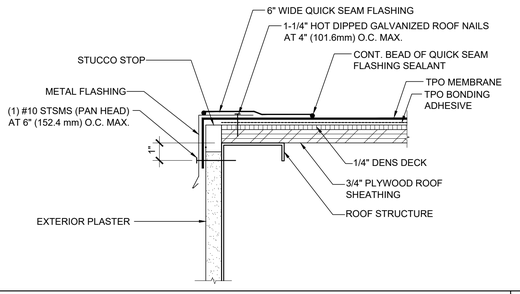


ROOF AT LOW END

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

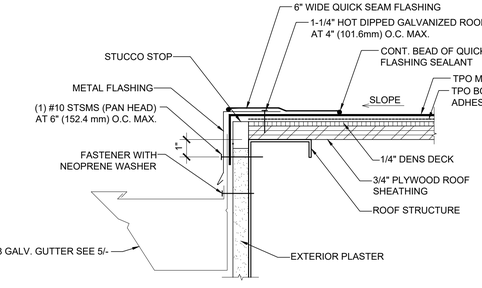
19

14



ROOF AT SIDEWALL

SCALE: 3" = 1'-0" | 9

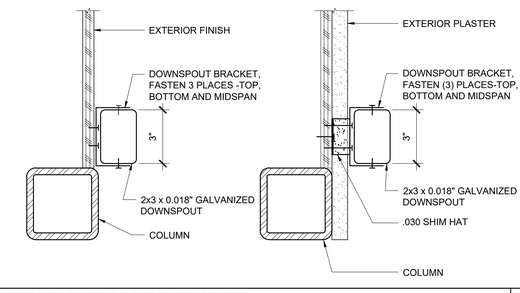


ROOF AT LOW END

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

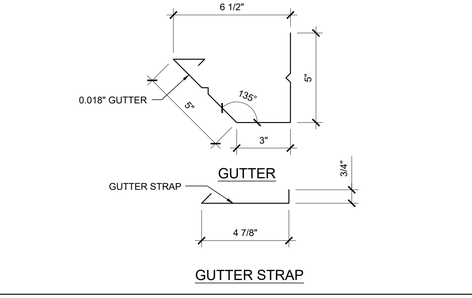
20

15



DOWNSPOUT ATTACHMENT

SCALE : 3" = 1'-0" | 10



0.018" GUTTER AND GUTTER STRAP

SCALE : 3" = 1'-0" | 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOFING DETAILS TPO ROOF

REVISIONS

1
2
3
4
5

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REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24975 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
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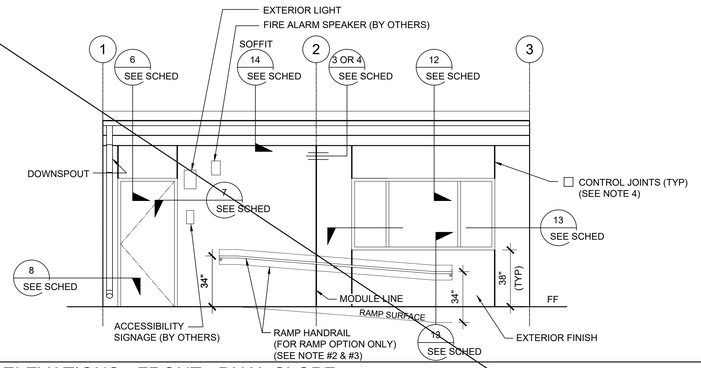
DATE: 02-27-2023

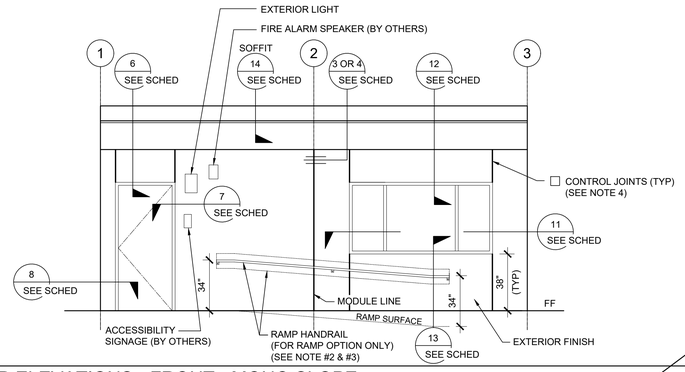
P.C. SHEET NUMBER

A-3.90



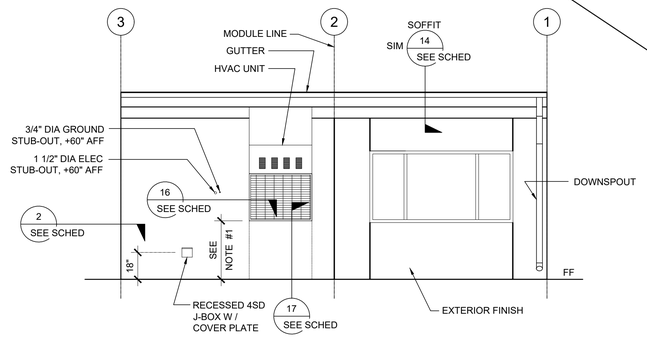
EXTERIOR ELEVATIONS - FRONT - DUAL SLOPE

SCALE: 1/4" = 1' - 0" | 5



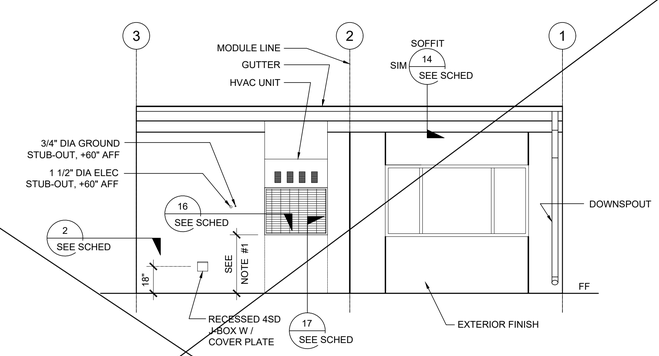
EXTERIOR ELEVATIONS - FRONT - MONO SLOPE

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



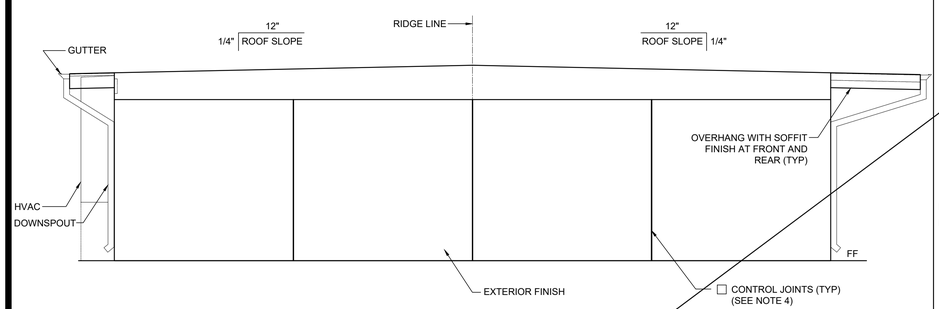
EXTERIOR ELEVATIONS - REAR - DUAL SLOPE

SCALE: 1/4" = 1' - 0" | 6



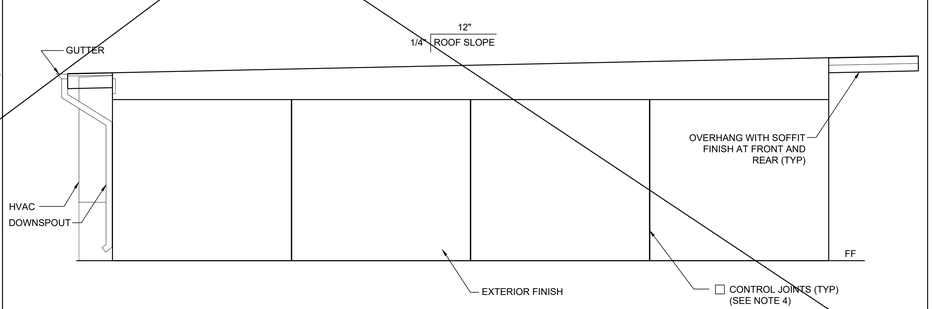
EXTERIOR ELEVATIONS - REAR - MONO SLOPE

SCALE: 1/4" = 1' - 0" | 2



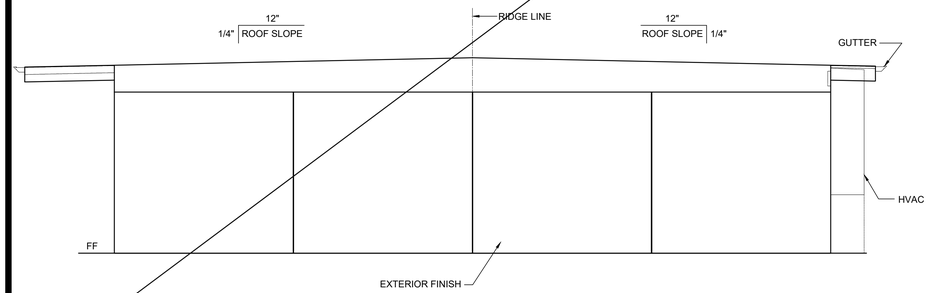
EXTERIOR ELEVATIONS - LEFT - DUAL SLOPE

SCALE: 1/4" = 1' - 0" | 7



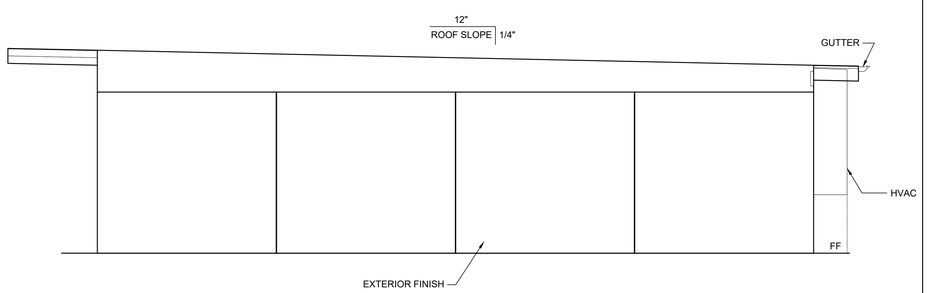
EXTERIOR ELEVATIONS - LEFT - MONO SLOPE

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



EXTERIOR ELEVATIONS - RIGHT - DUAL SLOPE

SCALE: 1/4" = 1' - 0" | 8



EXTERIOR ELEVATIONS - RIGHT - MONO SLOPE

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

NOTES (EXTERIOR ELEVATION)

1. PROVIDE PROTECTION RAIL AROUND HVAC UNIT(S) IF LOCATED IN A PEDESTRIAN WAY IF THE HEIGHT FROM GRADE TO BOTTOM OF UNIT EXCEEDS 27" (NIC). REFERENCE TO DET. # 2/A5.81 FOR WOOD STUDS, # 17/A5.81 FOR STEEL STUDS
2. RAMP (WHERE OCCURS), NOT SHOWN FOR CLARITY.
3. WALL BEYOND HANDRAIL SHALL NOT HAVE ANY SHARP OR ABRASIVE SURFACE ADJACENT TO HANDRAILS. (GRIND SMOOTH ALL METAL RAILING CONNECTIONS - SMOOTH SURFACE TO EXTEND 18" ABOVE HANDRAIL)
4. FOR PLASTER ONLY, PROVIDE CONTROL JOINT AT EACH MODLINE, ON END WALLS, 10'-0" OC AT SIDE WALLS, AND / OR ABOVE AND BELOW OPENINGS. WHERE FIRE RATED WALLS ARE REQUIRED, MATERIALS AND METHODS OF CONSTRUCTION USED TO PROTECT JOINTS WILL COMPLY WITH CBC SECTION 703.2 AND 705.
5. EXTERIOR PROJECTIONS SHALL COMPLY W/ SECTION 705 AND 1406, 2022 CBC
6. PROVIDE AN OFFSET RAMP (PER SHEET R-1.02) WHEN A RAMP IS REQUIRED ADJACENT TO A STUCCO WALL AND/OR FIRE RESISTANCE RATED EXTERIOR WALL.

DETAIL SCHEDULE

FINISH:	SHEET #:
☐ SIDING OVER WOOD STUDS	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

EXTERIOR ELEVATION
24' X 40'
MONO / DUAL SLOPE

REVISIONS

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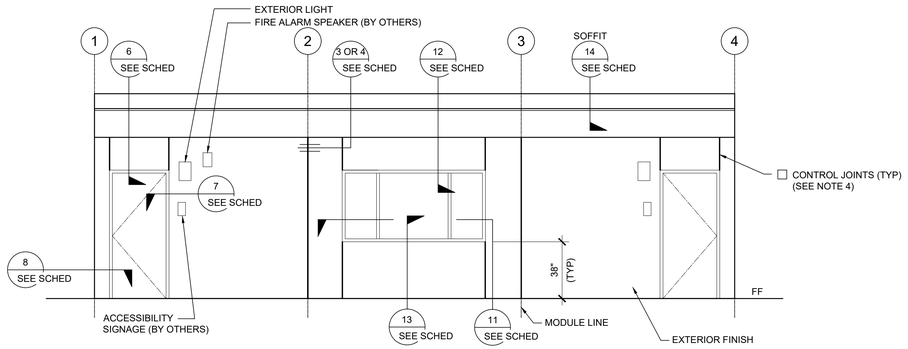
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

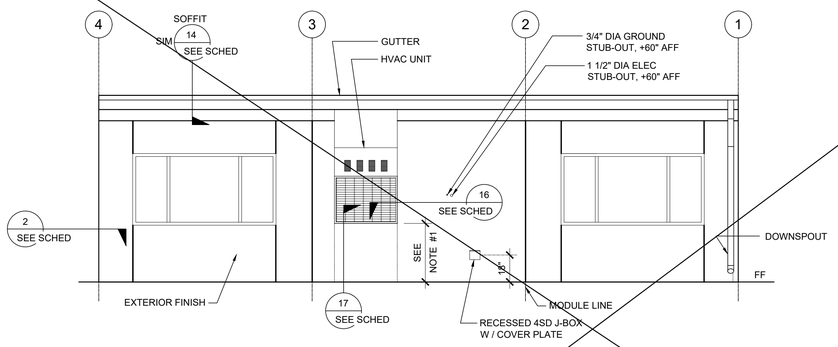
P.C. SHEET NUMBER

A-4.01



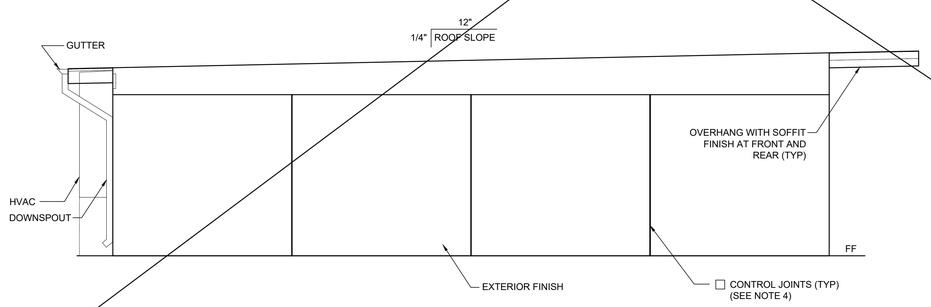
EXTERIOR ELEVATIONS - FRONT - MONO SLOPE

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



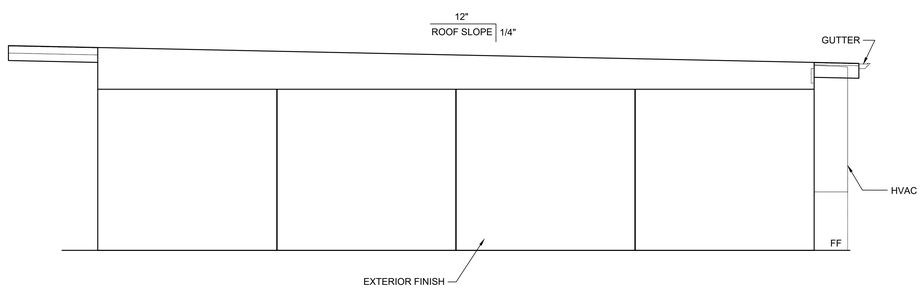
EXTERIOR ELEVATIONS - REAR - MONO SLOPE

SCALE: 1/4" = 1' - 0" | 2



EXTERIOR ELEVATIONS - LEFT - MONO SLOPE

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



EXTERIOR ELEVATIONS - RIGHT - MONO SLOPE

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

NOTES (EXTERIOR ELEVATION)

1. PROVIDE PROTECTION RAIL AROUND HVAC UNIT(S) IF LOCATED IN A PEDESTRIAN WAY IF THE HEIGHT FROM GRADE TO BOTTOM OF UNIT EXCEEDS 27" (NIC). REFERENCE TO DET. # 2/A5.81 FOR WOOD STUDS, # 17/A5.81 FOR STEEL STUDS
2. RAMP (WHERE OCCURS), NOT SHOWN FOR CLARITY.
3. WALL BEYOND HANDRAIL SHALL NOT HAVE ANY SHARP OR ABRASIVE SURFACE ADJACENT TO HANDRAILS. (GRIND SMOOTH ALL METAL RAILING CONNECTIONS - SMOOTH SURFACE TO EXTEND 18" ABOVE HANDRAIL)
4. FOR PLASTER ONLY, PROVIDE CONTROL JOINT AT EACH MODLINE, ON END WALLS, 10'-0" OC AT SIDE WALLS, AND / OR ABOVE AND BELOW OPENINGS. WHERE FIRE RATED WALLS ARE REQUIRED, MATERIALS AND METHODS OF CONSTRUCTION USED TO PROTECT JOINTS WILL COMPLY WITH CBC SECTION 703.2 AND 705.
5. EXTERIOR PROJECTIONS SHALL COMPLY W/ SECTION 705 AND 1406, 2022 CBC
6. PROVIDE AN OFFSET RAMP (PER SHEET R-1.02) WHEN A RAMP IS REQUIRED ADJACENT TO A STUCCO WALL AND/OR FIRE RESISTANCE RATED EXTERIOR WALL.

DETAIL SCHEDULE

FINISH:	SHEET #:
☐ SIDING OVER WOOD STUDS	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

EXTERIOR ELEVATION
36' X 40'
MONO SLOPE

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

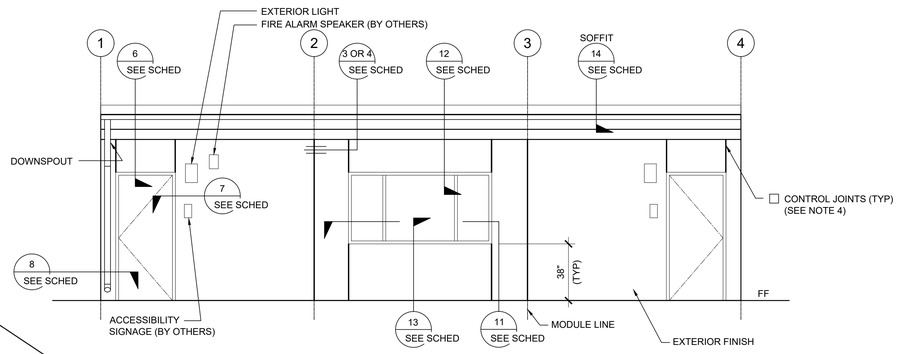
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
2475
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

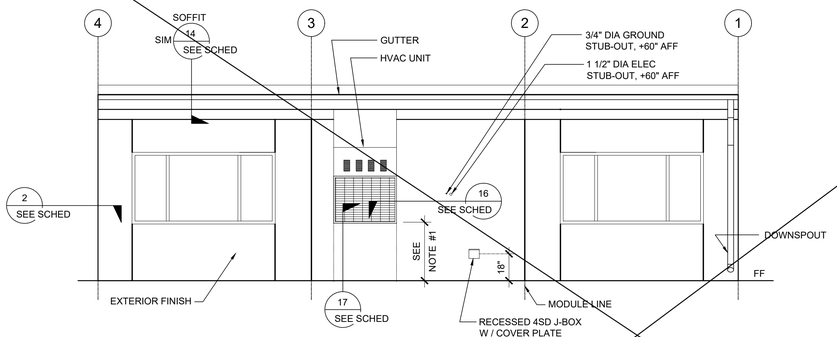
P.C. SHEET NUMBER

A-4.02



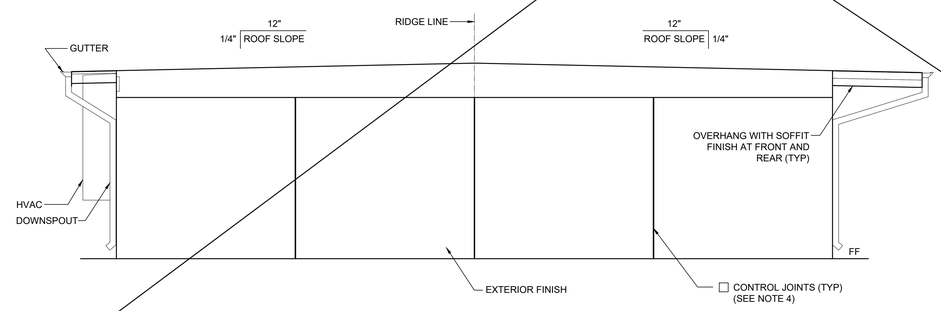
EXTERIOR ELEVATIONS - FRONT - DUAL SLOPE

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



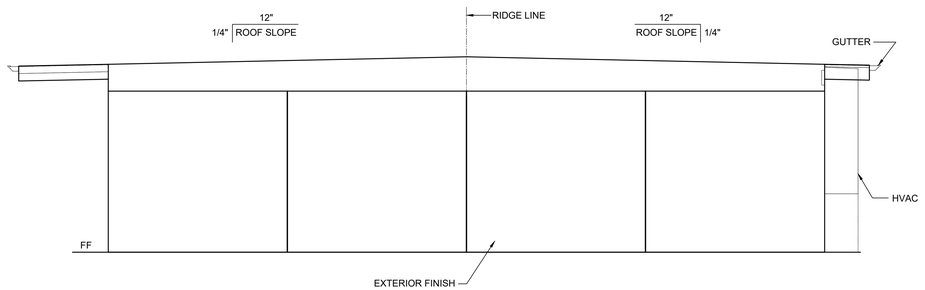
EXTERIOR ELEVATIONS - REAR - DUAL SLOPE

SCALE: 1/4" = 1' - 0" | 2



EXTERIOR ELEVATIONS - LEFT - DUAL SLOPE

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



EXTERIOR ELEVATIONS - RIGHT - DUAL SLOPE

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

NOTES (EXTERIOR ELEVATION)

1. PROVIDE PROTECTION RAIL AROUND HVAC UNIT(S) IF LOCATED IN A PEDESTRIAN WAY IF THE HEIGHT FROM GRADE TO BOTTOM OF UNIT EXCEEDS 27" (NIC). REFERENCE TO DET. # 2/A5.81 FOR WOOD STUDS, # 17/A5.81 FOR STEEL STUDS
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3. WALL BEYOND HANDRAIL SHALL NOT HAVE ANY SHARP OR ABRASIVE SURFACE ADJACENT TO HANDRAILS. (GRIND SMOOTH ALL METAL RAILING CONNECTIONS - SMOOTH SURFACE TO EXTEND 18" ABOVE HANDRAIL)
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6. PROVIDE AN OFFSET RAMP (PER SHEET R-1.02) WHEN A RAMP IS REQUIRED ADJACENT TO A STUCCO WALL AND/OR FIRE RESISTANCE RATED EXTERIOR WALL.

DETAIL SCHEDULE

FINISH:	SHEET #:
☐ SIDING OVER WOOD STUDS	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

EXTERIOR ELEVATION
36' X 40'
DUAL SLOPE

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
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DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

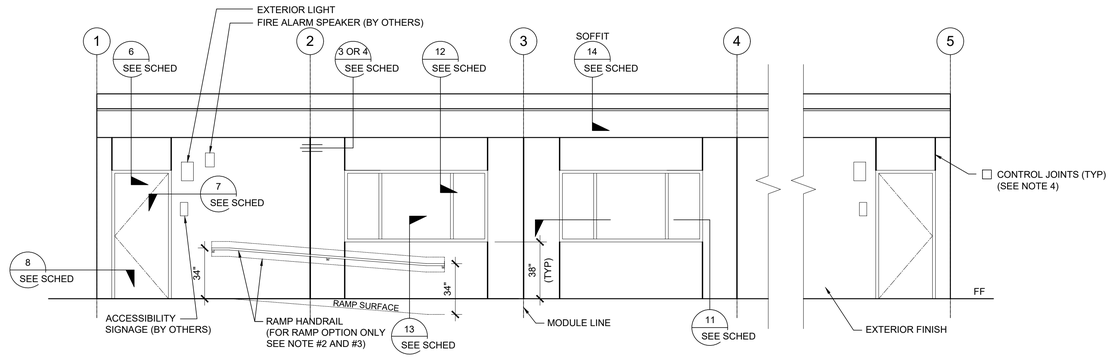
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

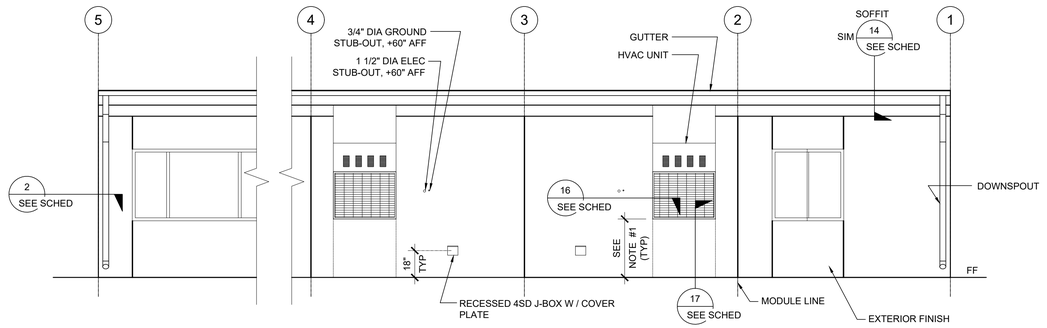
P.C. SHEET NUMBER

A-4.03



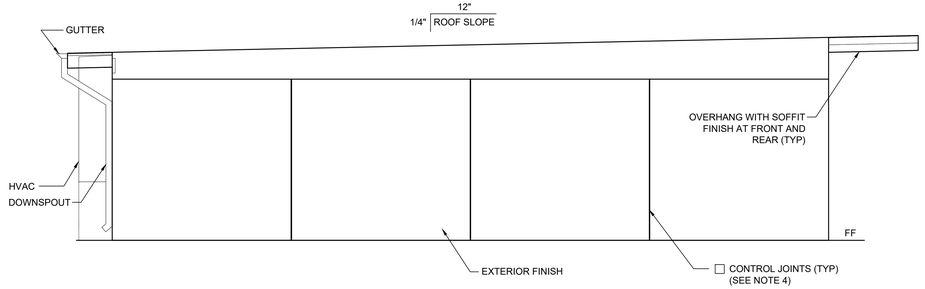
EXTERIOR ELEVATIONS - FRONT - MONO SLOPE

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



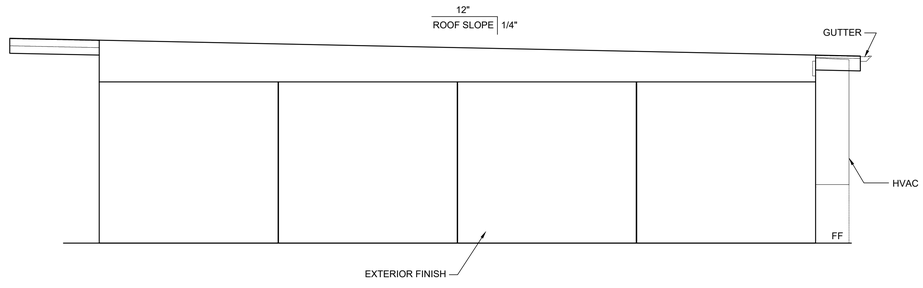
EXTERIOR ELEVATIONS - REAR - MONO SLOPE

SCALE: 1/4" = 1' - 0" | 2



EXTERIOR ELEVATIONS - LEFT - MONO SLOPE

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



EXTERIOR ELEVATIONS - RIGHT - MONO SLOPE

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

NOTES (EXTERIOR ELEVATION)

1. PROVIDE PROTECTION RAIL AROUND HVAC UNIT(S) IF LOCATED IN A PEDESTRIAN WAY IF THE HEIGHT FROM GRADE TO BOTTOM OF UNIT EXCEEDS 27" (NIC). REFERENCE TO DET. # 2/A5.81 FOR WOOD STUDS, # 17/A5.81 FOR STEEL STUDS
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3. WALL BEYOND HANDRAIL SHALL NOT HAVE ANY SHARP OR ABRASIVE SURFACE ADJACENT TO HANDRAILS. (GRIND SMOOTH ALL METAL RAILING CONNECTIONS - SMOOTH SURFACE TO EXTEND 18" ABOVE HANDRAIL)
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DETAIL SCHEDULE

FINISH:	SHEET #:
☐ SIDING OVER WOOD STUDS	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

EXTERIOR ELEVATION
48' TO 120' X 40'
MONO SLOPE

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

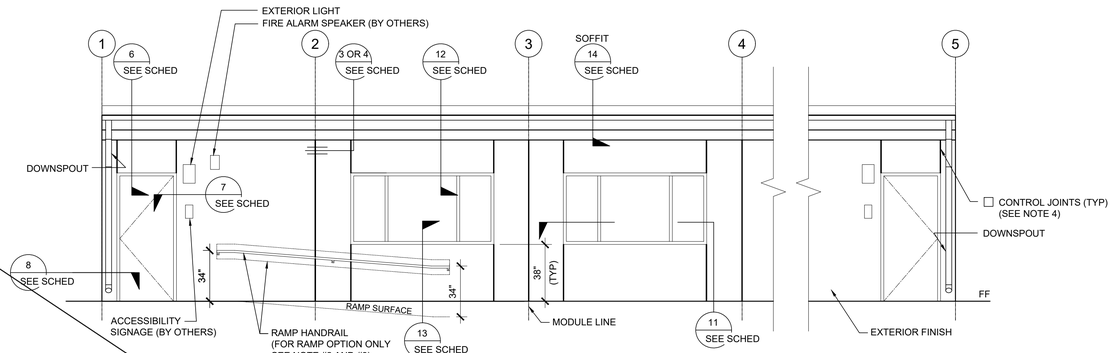
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24975
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

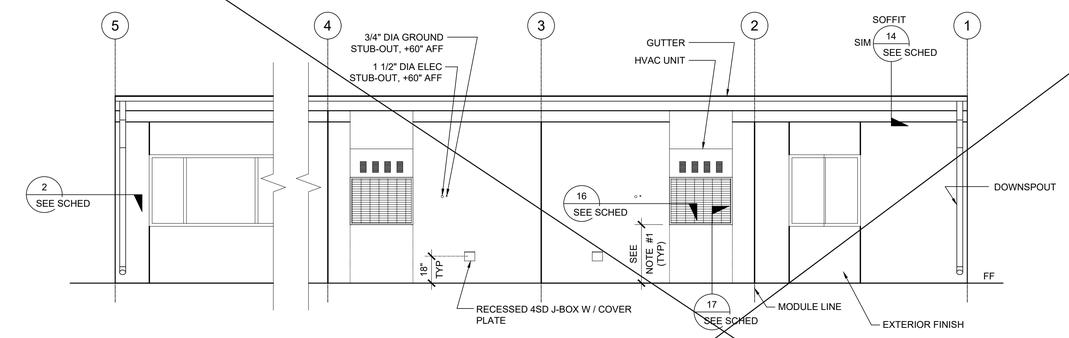
P.C. SHEET NUMBER

A-4.04



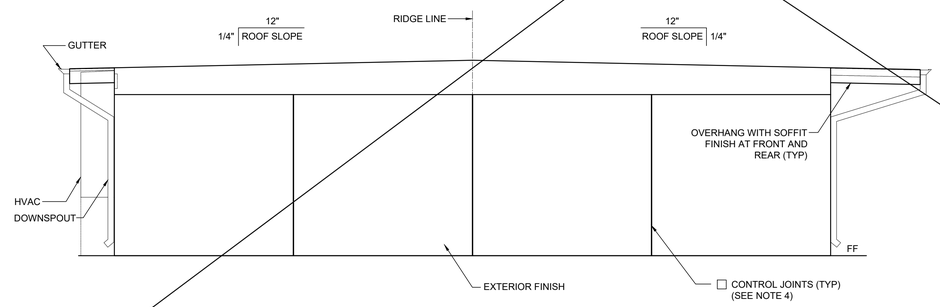
EXTERIOR ELEVATIONS - FRONT - DUAL SLOPE

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



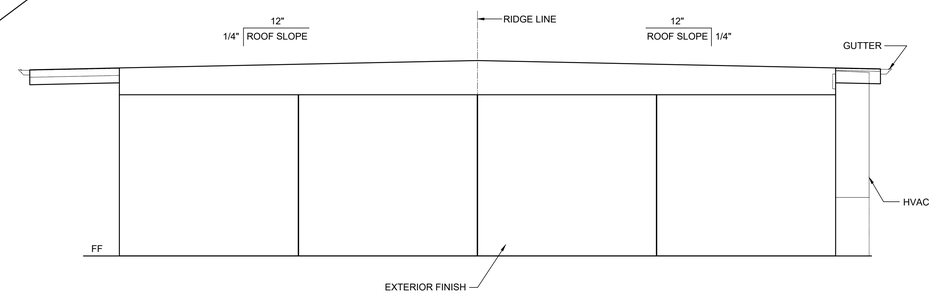
EXTERIOR ELEVATIONS - REAR - DUAL SLOPE

SCALE: 1/4" = 1' - 0" | 2



EXTERIOR ELEVATIONS - LEFT - DUAL SLOPE

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



EXTERIOR ELEVATIONS - RIGHT - DUAL SLOPE

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

NOTES (EXTERIOR ELEVATION)

1. PROVIDE PROTECTION RAIL AROUND HVAC UNIT(S) IF LOCATED IN A PEDESTRIAN WAY IF THE HEIGHT FROM GRADE TO BOTTOM OF UNIT EXCEEDS 27" (NIC). REFERENCE TO DET. # 2/A5.81 FOR WOOD STUDS, # 17/A5.81 FOR STEEL STUDS
2. RAMP (WHERE OCCURS), NOT SHOWN FOR CLARITY.
3. WALL BEYOND HANDRAIL SHALL NOT HAVE ANY SHARP OR ABRASIVE SURFACE ADJACENT TO HANDRAILS. (GRIND SMOOTH ALL METAL RAILING CONNECTIONS - SMOOTH SURFACE TO EXTEND 18" ABOVE HANDRAIL)
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5. EXTERIOR PROJECTIONS SHALL COMPLY W/ SECTION 705 AND 1406, 2022 CBC
6. PROVIDE AN OFFSET RAMP (PER SHEET R-1.02) WHEN A RAMP IS REQUIRED ADJACENT TO A STUCCO WALL AND/OR FIRE RESISTANCE RATED EXTERIOR WALL.

DETAIL SCHEDULE

FINISH:	SHEET #:
☐ SIDING OVER WOOD STUDS	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

EXTERIOR ELEVATION
48' TO 120' X 40'
DUAL SLOPE

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

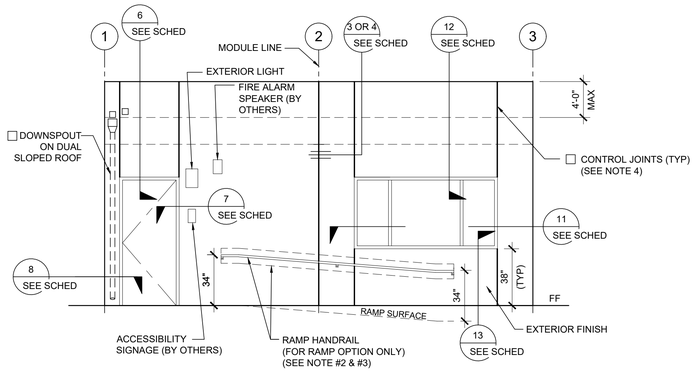
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

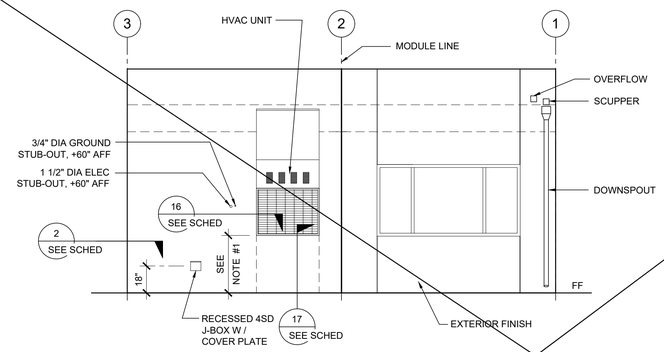
P.C. SHEET NUMBER

A-4.05



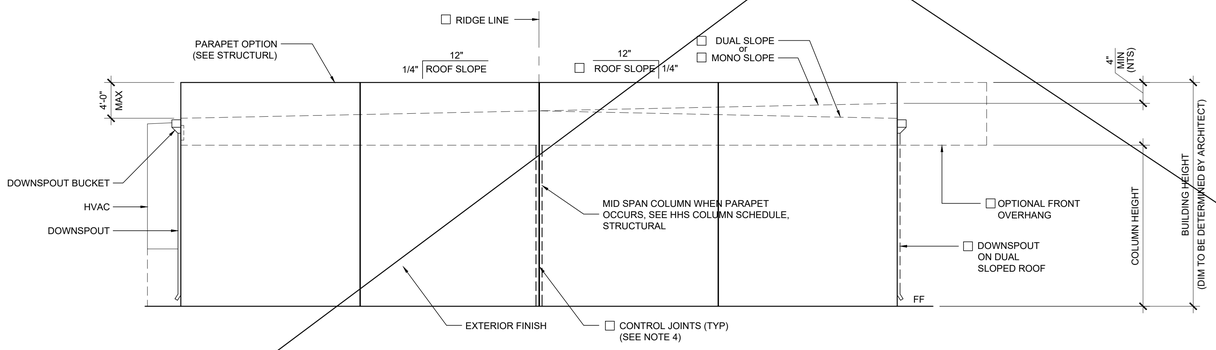
EXTERIOR ELEVATIONS - FRONT - MONO OR DUAL SLOPE

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



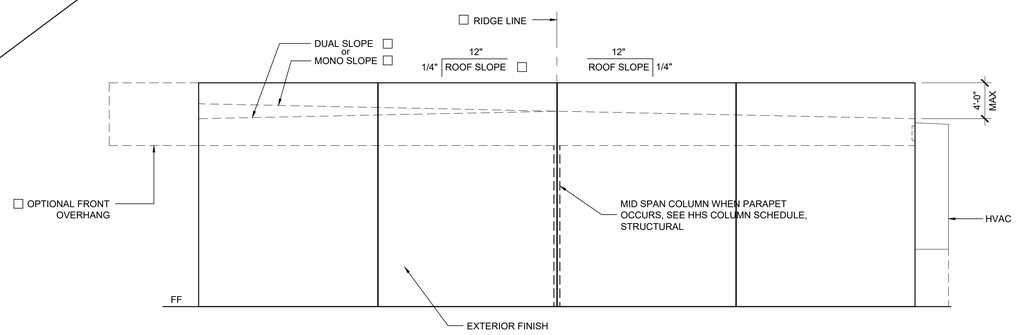
EXTERIOR ELEVATIONS - REAR - MONO OR DUAL SLOPE

SCALE: 1/4" = 1'-0" | 2



EXTERIOR ELEVATIONS - LEFT - MONO OR DUAL SLOPE

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



EXTERIOR ELEVATIONS - RIGHT - MONO OR DUAL SLOPE

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

NOTES (EXTERIOR ELEVATION)

1. PROVIDE PROTECTION RAIL AROUND HVAC UNIT(S) IF LOCATED IN A PEDESTRIAN WAY IF THE HEIGHT FROM GRADE TO BOTTOM OF UNIT EXCEEDS 27" (NIC). REFERENCE TO DET. # 2/A5.81 FOR WOOD STUDS, # 17/A5.81 FOR STEEL STUDS
2. RAMP (WHERE OCCURS), NOT SHOWN FOR CLARITY.
3. WALL BEYOND HANDRAIL SHALL NOT HAVE ANY SHARP OR ABRASIVE SURFACE ADJACENT TO HANDRAILS. (GRIND SMOOTH ALL METAL RAILING CONNECTIONS - SMOOTH SURFACE TO EXTEND 18" ABOVE HANDRAIL)
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5. EXTERIOR PROJECTIONS SHALL COMPLY W/ SECTION 705 AND 1406, 2022 CBC
6. PROVIDE AN OFFSET RAMP (PER SHEET R-1.02) WHEN A RAMP IS REQUIRED ADJACENT TO A STUCCO WALL AND/OR FIRE RESISTANCE RATED EXTERIOR WALL.

DETAIL SCHEDULE

FINISH:	SHEET #:
☐ SIDING OVER WOOD STUDS	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

EXTERIOR ELEVATION
24' X 40' PARAPET
MONO / DUAL SLOPE

REVISIONS

1 2 3 4 5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

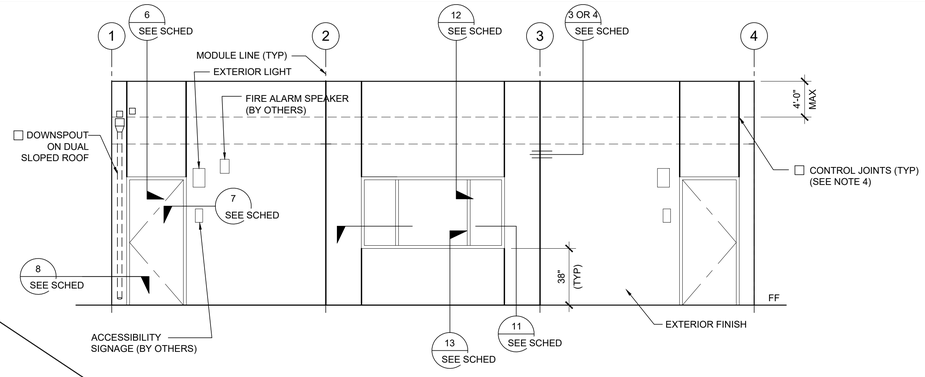
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

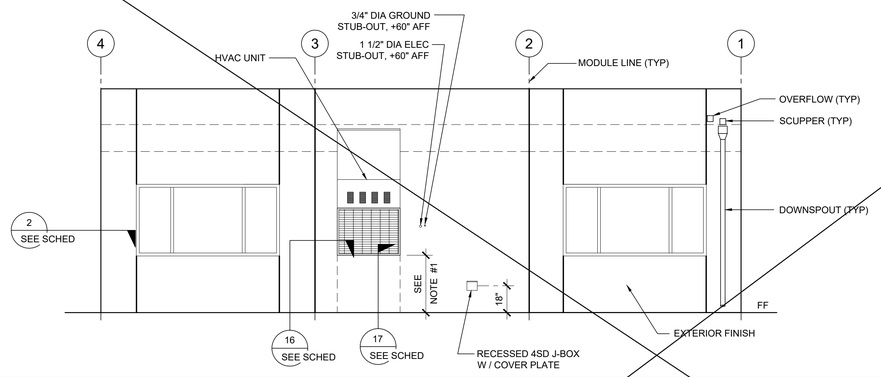
P.C. SHEET NUMBER

A-4.21



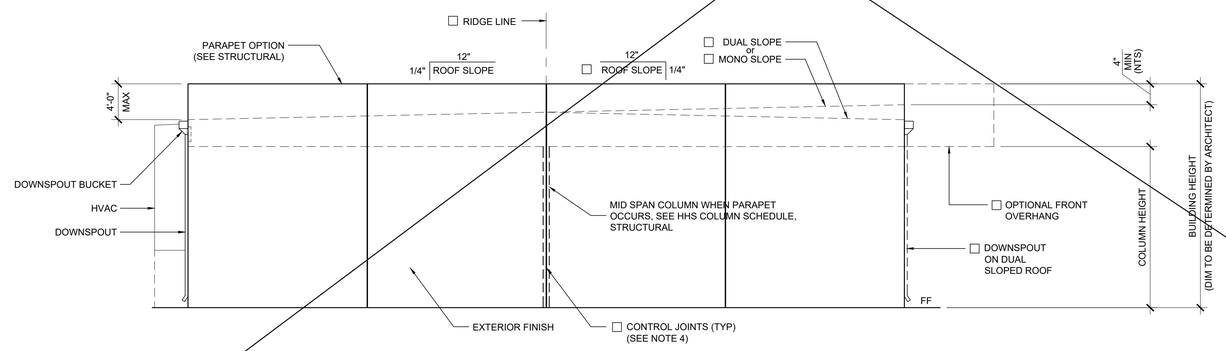
EXTERIOR ELEVATIONS - FRONT - MONO OR DUAL SLOPE

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



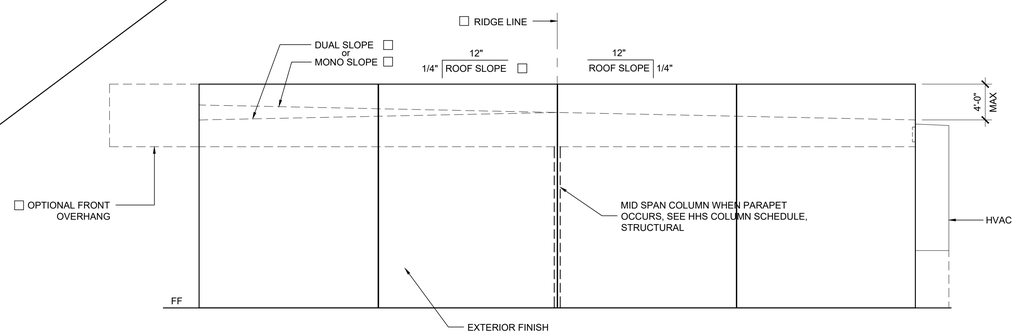
EXTERIOR ELEVATIONS - REAR - MONO OR DUAL SLOPE

SCALE: 1/4" = 1'-0" | 2



EXTERIOR ELEVATIONS - LEFT - MONO OR DUAL SLOPE

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



EXTERIOR ELEVATIONS - RIGHT - MONO OR DUAL SLOPE

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

NOTES (EXTERIOR ELEVATION)

1. PROVIDE PROTECTION RAIL AROUND HVAC UNIT(S) IF LOCATED IN A PEDESTRIAN WAY IF THE HEIGHT FROM GRADE TO BOTTOM OF UNIT EXCEEDS 27" (NIC). REFERENCE TO DET. # 2/A5.81 FOR WOOD STUDS, # 17/A5.81 FOR STEEL STUDS
2. RAMP (WHERE OCCURS), NOT SHOWN FOR CLARITY.
3. WALL BEYOND HANDRAIL SHALL NOT HAVE ANY SHARP OR ABRASIVE SURFACE ADJACENT TO HANDRAILS. (GRIND SMOOTH ALL METAL RAILING CONNECTIONS - SMOOTH SURFACE TO EXTEND 18" ABOVE HANDRAIL)
4. FOR PLASTER ONLY, PROVIDE CONTROL JOINT AT EACH MODLINE, ON END WALLS, 10'-0" OC AT SIDE WALLS, AND / OR ABOVE AND BELOW OPENINGS. WHERE FIRE RATED WALLS ARE REQUIRED, MATERIALS AND METHODS OF CONSTRUCTION USED TO PROTECT JOINTS WILL COMPLY WITH CBC SECTION 703.2 AND 705.
5. EXTERIOR PROJECTIONS SHALL COMPLY W/ SECTION 705 AND 1406, 2022 CBC
6. PROVIDE AN OFFSET RAMP (PER SHEET R-1.02) WHEN A RAMP IS REQUIRED ADJACENT TO A STUCCO WALL AND/OR FIRE RESISTANCE RATED EXTERIOR WALL.

DETAIL SCHEDULE

FINISH:	SHEET #:
☐ SIDING OVER WOOD STUDS	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

EXTERIOR ELEVATION
36' X 40' PARAPET
MONO OR DUAL SLOPE

REVISIONS

1	
2	
3	
4	
5	

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

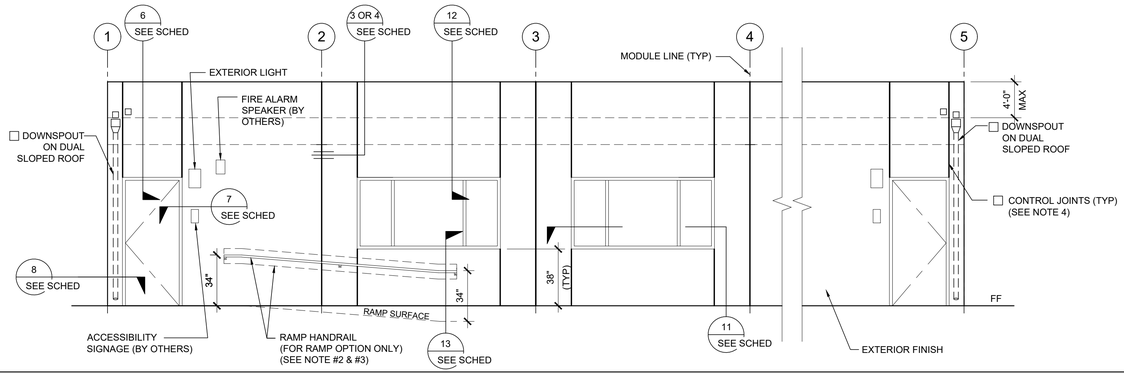
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
2475
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

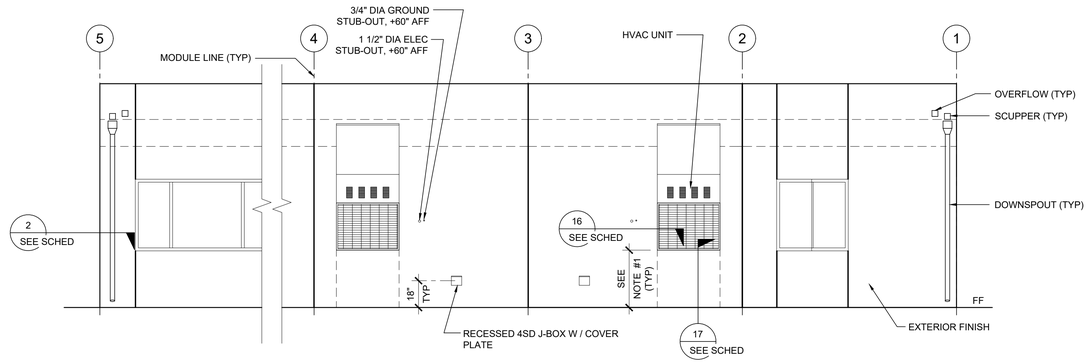
P.C. SHEET NUMBER

A-4.22



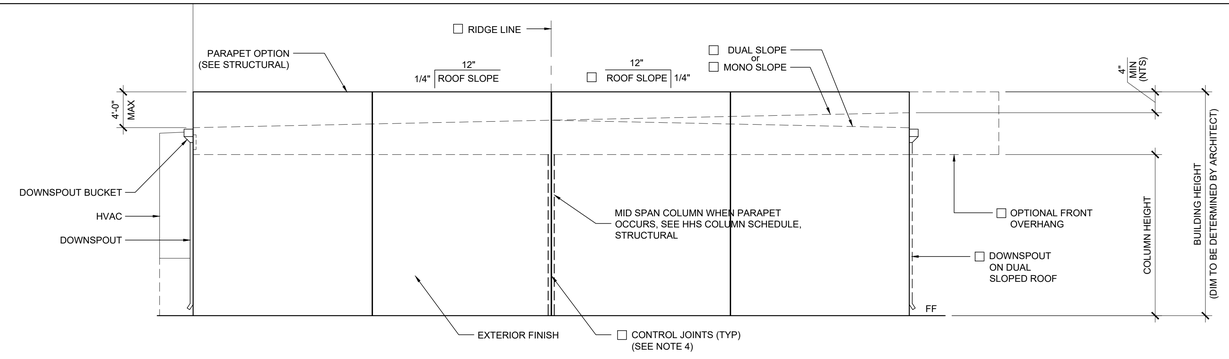
EXTERIOR ELEVATIONS - FRONT - MONO OR DUAL SLOPE

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



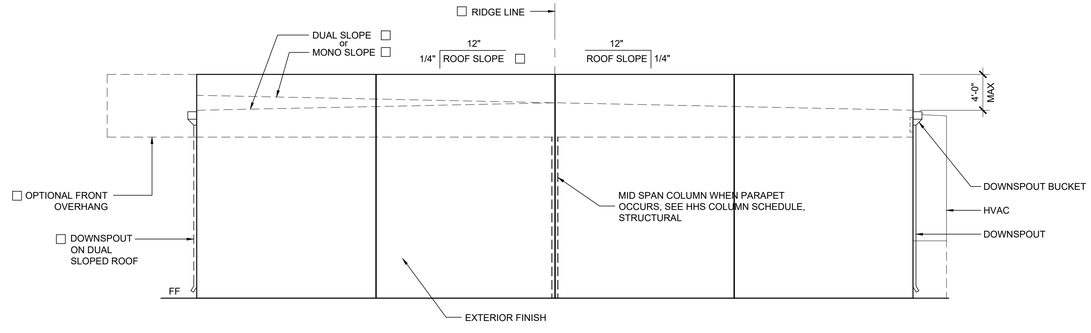
EXTERIOR ELEVATIONS - REAR - MONO OR DUAL SLOPE

SCALE: 1/4" = 1'-0" | 2



EXTERIOR ELEVATIONS - LEFT - MONO OR DUAL SLOPE

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



EXTERIOR ELEVATIONS - RIGHT - MONO OR DUAL SLOPE

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

NOTES (EXTERIOR ELEVATION)

1. PROVIDE PROTECTION RAIL AROUND HVAC UNIT(S) IF LOCATED IN A PEDESTRIAN WAY IF THE HEIGHT FROM GRADE TO BOTTOM OF UNIT EXCEEDS 27" (NIC). REFERENCE TO DET. # 2/A5.81 FOR WOOD STUDS, # 17/A5.81 FOR STEEL STUDS
2. RAMP (WHERE OCCURS), NOT SHOWN FOR CLARITY.
3. WALL BEYOND HANDRAIL SHALL NOT HAVE ANY SHARP OR ABRASIVE SURFACE ADJACENT TO HANDRAILS. (GRIND SMOOTH ALL METAL RAILING CONNECTIONS - SMOOTH SURFACE TO EXTEND 18" ABOVE HANDRAIL)
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DETAIL SCHEDULE

FINISH:	SHEET #:
☐ SIDING OVER WOOD STUDS	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

EXTERIOR ELEVATION
48' TO 120' X 40' PARAPET MONO OR DUAL SLOPE

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24775 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

A-4.23

DETAIL SCHEDULE

FINISH:	SHEET #:
☐ SIDING OVER WOOD STUDS	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

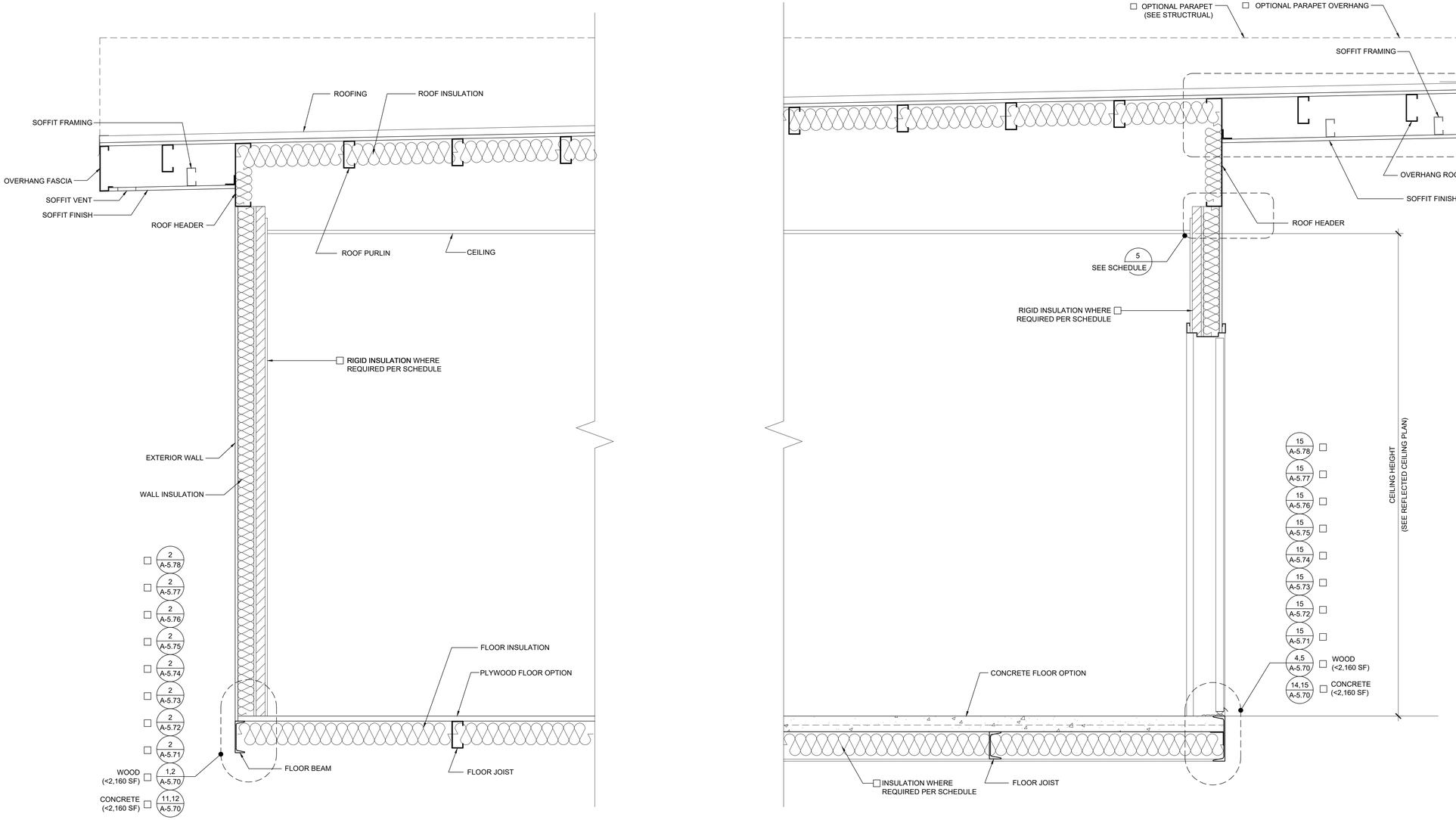
FINISH:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

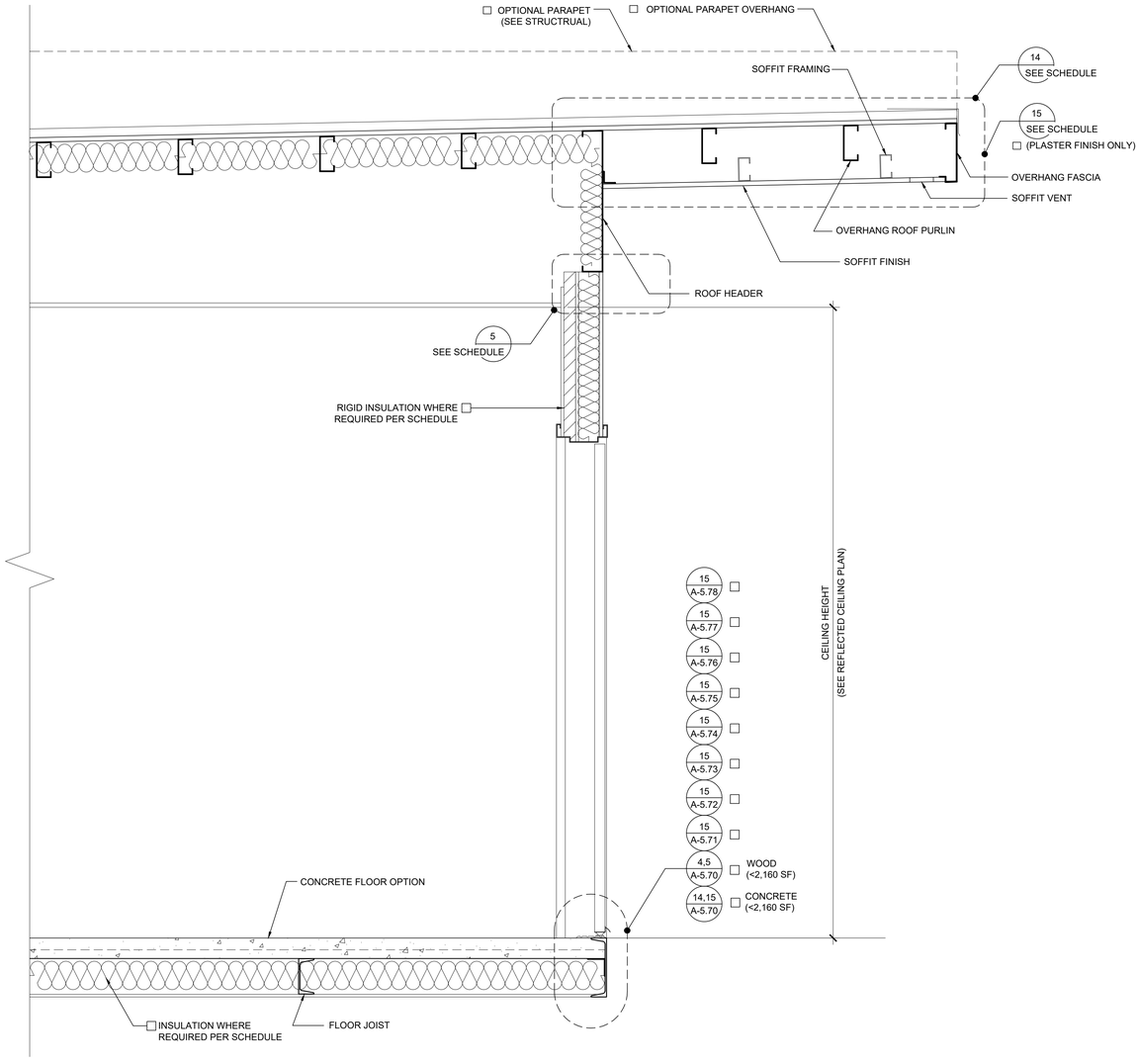
FLOOR OPTION

- ☐ WOOD FLOOR
- ☐ CONCRETE FLOOR

NOTES

SEALANTS AND CAULKING:
GENERAL: FURNISH AND INSTALL ALL SEALANTS AND CAULKING AS REQUIRED TO PROVIDE A WEATHERTIGHT BUILDING AND TO LIMIT AIR LEAKAGE.
MATERIALS: SEALANT SHALL BE AN ACRYLIC LATEX OR SILICONE CAULKING.
APPLICATIONS: AT JOINTS WHERE SHOWN, APPLY SEALANT AS FOLLOWS - JOINTS SHALL BE CLEAN, DRY, AND FREE FROM DUST, WAX, AND FOREIGN MATERIALS. SEALANT SHALL BE APPLIED WITH A GUN IN A STRICT COMPLIANCE WITH MANUFACTURER'S DIRECTIONS. COMPLETELY FILL THE JOINT AND FIRMLY TOOL AGAINST THE BACKING, MAKING A SMOOTH CONVEX BEAD.
COLOR: COLOR OF MATERIAL SHALL MATCH THAT OF ADJACENT FINISHED SURFACES.
ALL EXTERIOR JOINTS, PENETRATIONS AND OTHER OPENINGS SHALL BE CAULKED, GASKETED, WEATHER-STRIPPED OR OTHERWISE SEALED.





BUILDING SECTION

SCALE: 1" = 1' - 0" | 1

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

CROSS SECTION MONO SLOPE

REVISIONS

1
2
3
4
5

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Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-5.01

DETAIL SCHEDULE

FINISH:	SHEET #:
☐ SIDING OVER WOOD STUDS	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FINISH:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

FLOOR OPTION

- ☐ WOOD FLOOR
- ☐ CONCRETE FLOOR

NOTES

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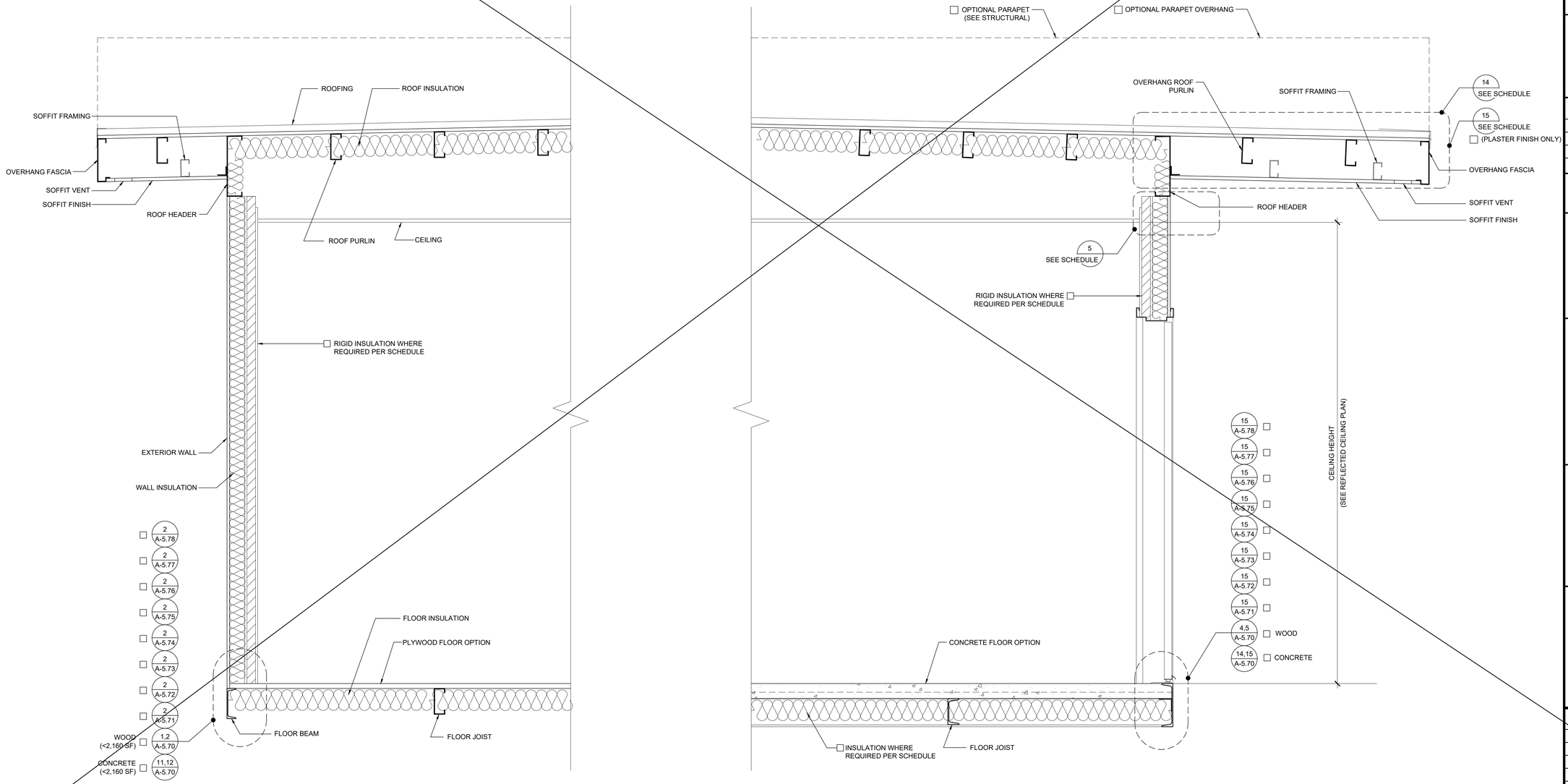

BUILDING SECTION

SCALE: 1" = 1' - 0" | 1

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

CROSS SECTION
DUAL SLOPE

REVISIONS

1	
2	
3	
4	
5	

PRE-CHECK (PC) DOCUMENT
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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARUCH 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

A-5.02

DETAIL SCHEDULE

FINISH:	SHEET #:
☐ SIDING OVER WOOD STUDS	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FINISH:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

FLOOR OPTION

- ☐ WOOD FLOOR
- ☐ CONCRETE FLOOR

NOTES

SEALANTS AND CAULKING:
GENERAL: FURNISH AND INSTALL ALL SEALANTS AND CAULKING AS REQUIRED TO PROVIDE A WEATHERTIGHT BUILDING AND TO LIMIT AIR LEAKAGE.
MATERIALS: SEALANT SHALL BE AN ACRYLIC LATEX OR SILICONE CAULKING.
APPLICATIONS: AT JOINTS WHERE SHOWN, APPLY SEALANT AS FOLLOWS - JOINTS SHALL BE CLEAN, DRY, AND FREE FROM DUST, WAX, AND FOREIGN MATERIALS. SEALANT SHALL BE APPLIED WITH A GUN IN A STRICT COMPLIANCE WITH MANUFACTURER'S DIRECTIONS. COMPLETELY FILL THE JOINT AND FIRMLY TOOL AGAINST THE BACKING, MAKING A SMOOTH CONVEX BEAD.
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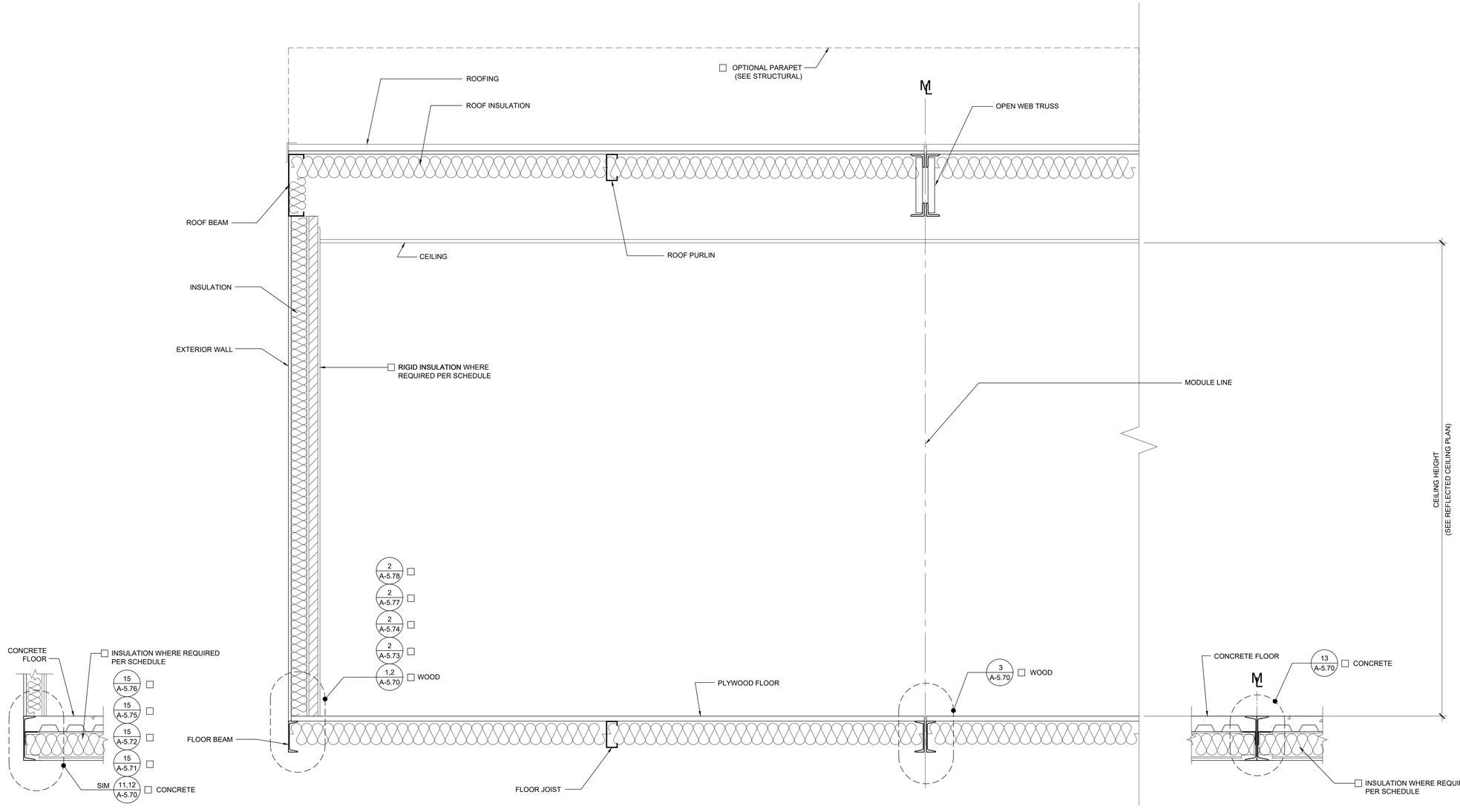


CONCRETE FLOOR OPTION

WOOD FLOOR OPTION

CONCRETE FLOOR OPTION

BUILDING SECTION

SCALE: 1" = 1'-0"

1

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

CROSS SECTION

REVISIONS

1 2 3 4 5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

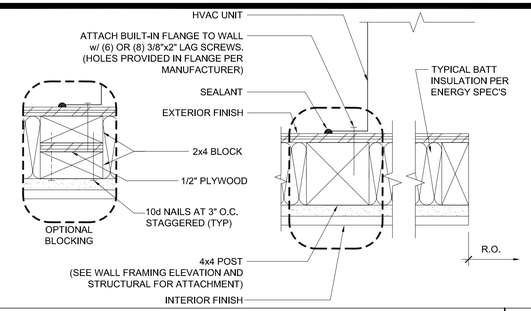
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24975 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

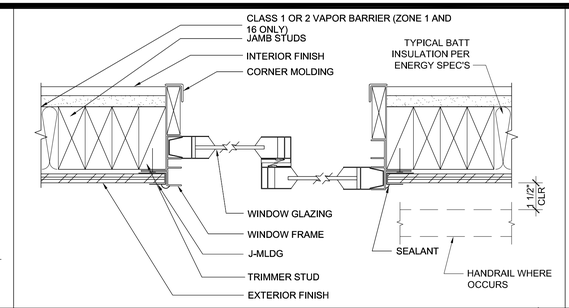
P.C. SHEET NUMBER

A-5.05



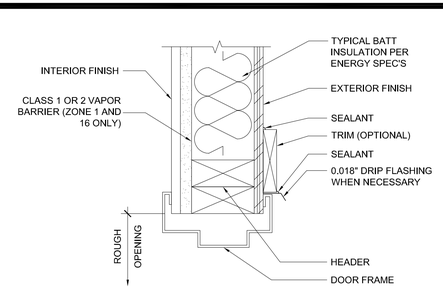
HVAC MOUNT AT JAMBS

SCALE : 3"=1'-0" | 16



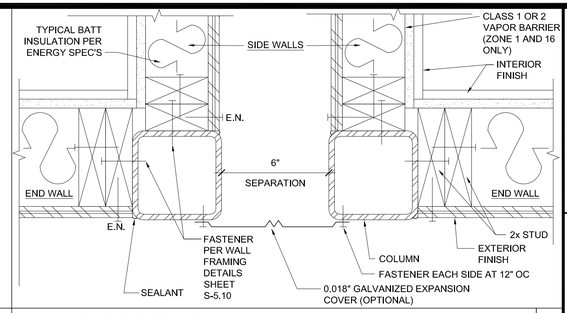
WINDOW SECTION AT JAMBS

SCALE : 3"=1'-0" | 11



EXTERIOR DOOR HEADER

SCALE : 3"=1'-0" | 6

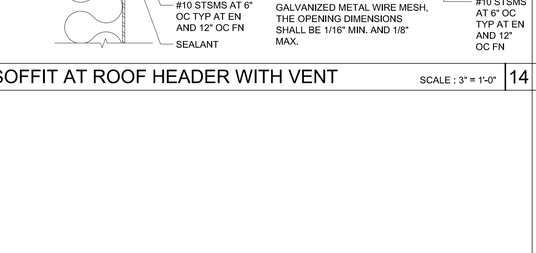


CLOSURE BETWEEN BUILDINGS

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

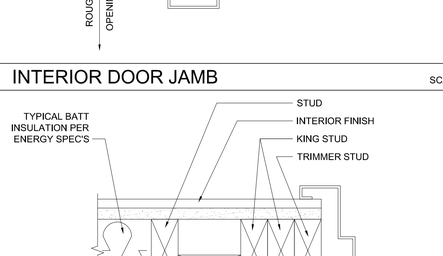
HVAC UNIT AT BOTTOM

SCALE : 3"=1'-0" | 17



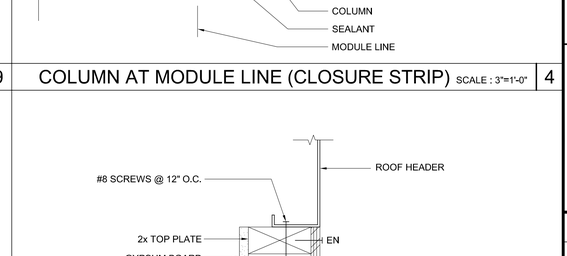
WINDOW HEADER

SCALE : 3"=1'-0" | 12



EXTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 7



COLUMN AT CORNER

SCALE : 3"=1'-0" | 2

HVAC UNIT (PLAN)

SCALE : 1"=1'-0" | 18

WINDOW SILL

SCALE : 3"=1'-0" | 13

COLUMN AT CORNER

SCALE : 3"=1'-0" | 8

COLUMN AT MODULE LINE (FULL PANEL CLOSE-UP)

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

NOT USED

19

SOFFIT AT ROOF HEADER WITH VENT

SCALE : 3" = 1'-0" | 14

INTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 9

COLUMN AT MODULE LINE (CLOSURE STRIP)

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

NOT USED

20

NOT USED

15

INTERIOR DOOR JAMBS

SCALE : 3"=1'-0" | 10

TOP PLATE AT ROOF HEADER

SCALE : 3" = 1'-0" | 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ARCHITECTURAL DETAILS
WOOD STUD - SHTG

REVISIONS

1
2
3
4
5

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

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PC STATE AGENCY APPROVAL

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2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

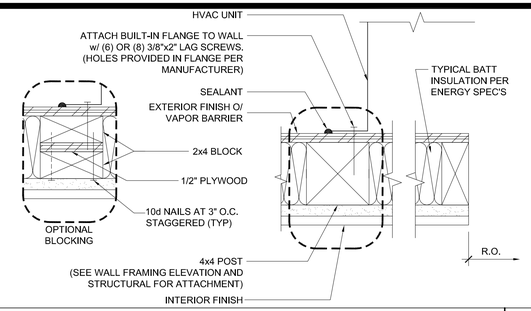
REGISTERED PROFESSIONAL ENGINEER JOHN W STARUN 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

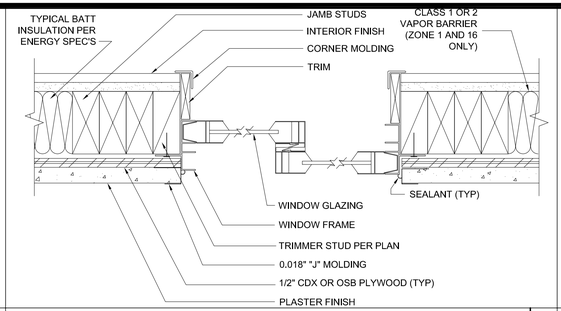
P.C. SHEET NUMBER

A-5.50



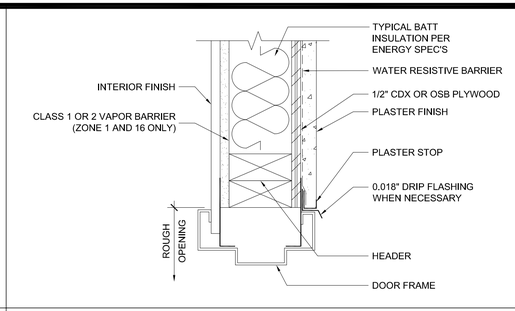
HVAC MOUNT AT JAMBS

SCALE : 3"=1'-0" | 16



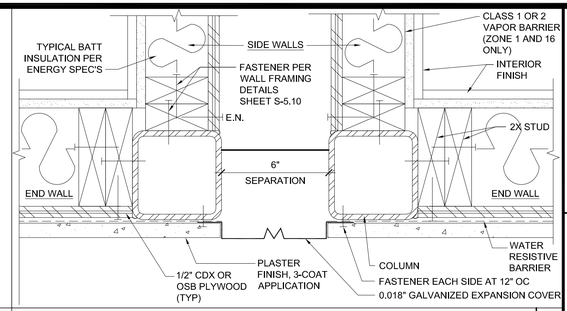
WINDOW SECTION AT JAMBS

SCALE : 3"=1'-0" | 11



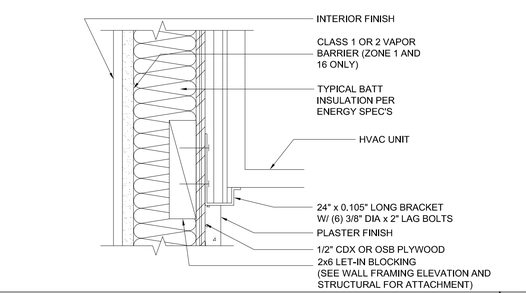
EXTERIOR DOOR HEADER

SCALE : 3"=1'-0" | 6



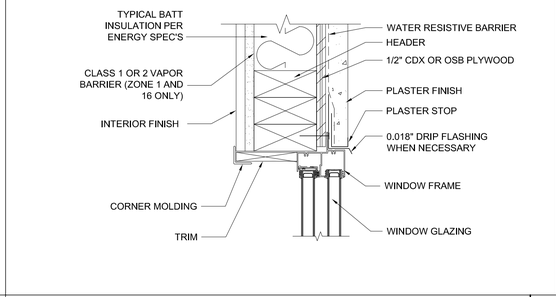
CLOSURE BETWEEN BUILDINGS

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



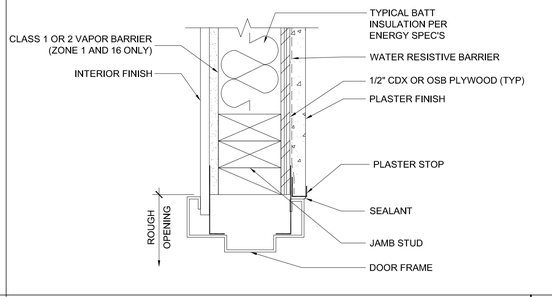
HVAC UNIT AT BOTTOM

SCALE : 3"=1'-0" | 17



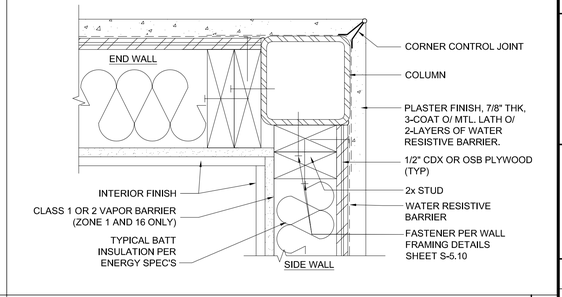
WINDOW HEADER

SCALE : 3"=1'-0" | 12



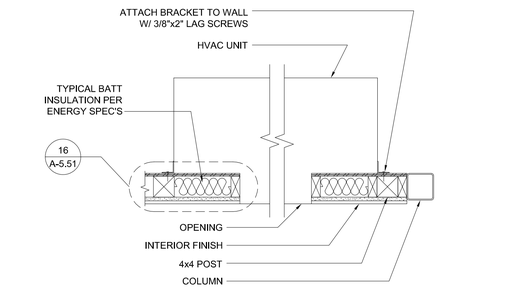
EXTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 7



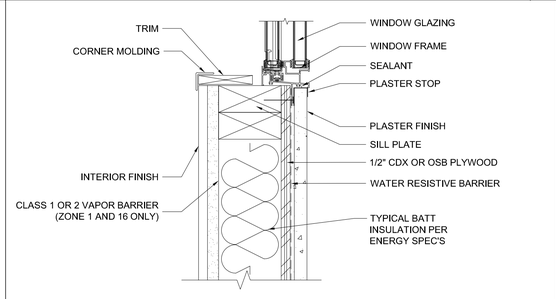
COLUMN AT CORNER

SCALE : 3"=1'-0" | 2



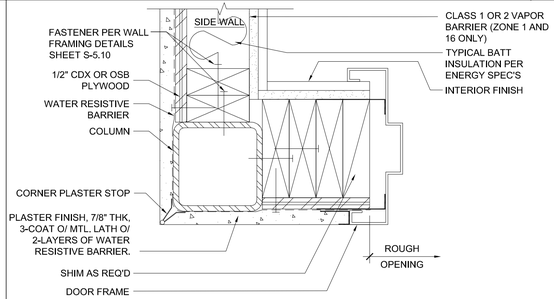
HVAC UNIT (PLAN)

SCALE : 1"=1'-0" | 18



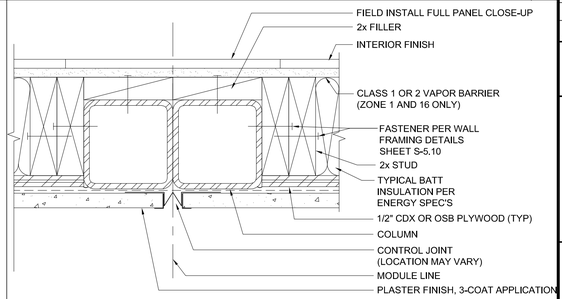
WINDOW SILL

SCALE : 3"=1'-0" | 13



EXTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 8

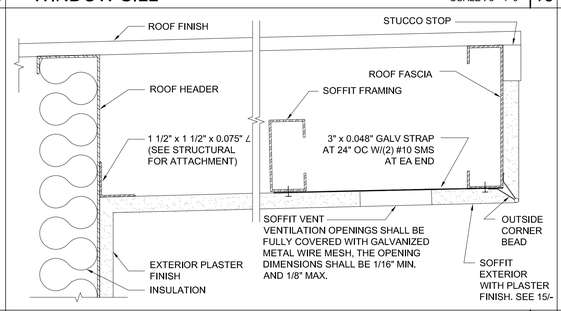


COLUMN AT MODULE LINE (FULL PANEL CLOSE-UP)

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

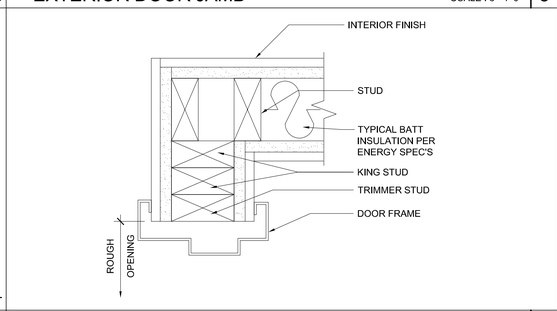
NOT USED

19



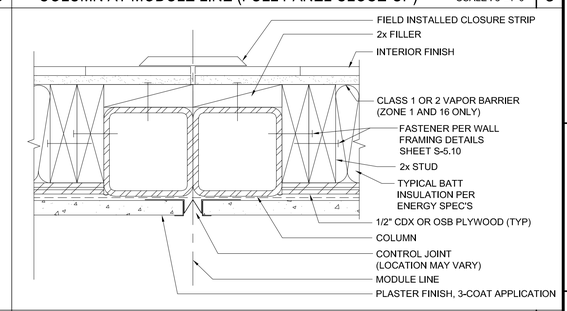
SOFFIT AT ROOF HEADER WITH VENT

SCALE : 3" = 1'-0" | 14



INTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 9



COLUMN AT MODULE LINE (FULL PANEL CLOSE-UP)

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

NOT USED

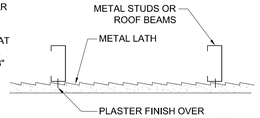
20

1. METAL LATH SHALL BE ATTACHED TO METAL SUPPORTS WITH NOT LESS #10 U.S. GAUGE THE WIRE SPACED NOT MORE THAN 6" APART OR WITH APPROVED EQUIVALENT ATTACHMENTS.

2. METAL LATH OR WIRE FABRIC SHALL BE APPLIED WITH THE LONG DIMENSION OF THE SHEETS PERPENDICULAR TO SUPPORTS.

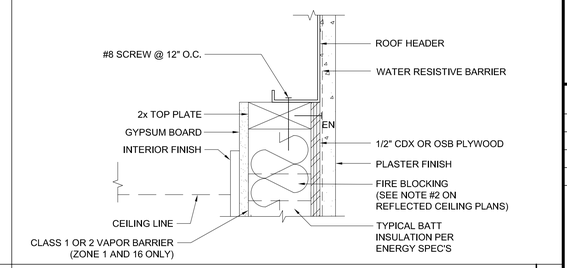
3. METAL LATH SHALL BE LAPPED NOT LESS THAN 1/2" AT SIDES AND 1" AT ENDS. WIRE FABRIC AT SIDES & ENDS. BUT NOT LESS THAN 1", AND METAL GREATER THAN 1/8" SHALL BE LAPPED AT THE SIDES BY NESTING OUTSIDE HOLE. WHERE EDGE LAPS OF SHEETS DO NOT OCCUR OVER SUPPORTS. THEY SHALL BE SECURELY TIED TOGETHER WITH NOT LESS THAN 18 GA. WIRE

4. CORNERITE SHALL BE INSTALLED IN ALL INTERNAL CORNERS TO RETAIN POSITION DURING PLASTERING CORNERITE MAY BE OMITTED WHEN LATH IS CONTINUOUS OR WHEN PLASTER IN NOT CONTINUOUS FROM ONE PLANE TO AN ADJACENT PLAN.



METAL LATH ATTACHMENT TO METAL JOIST

SCALE : NTS | 15



TOP PLATE AT ROOF HEADER

SCALE : 3" = 1'-0" | 5

INTERIOR DOOR JAMBS

SCALE : 3"=1'-0" | 10

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ARCHITECTURAL DETAILS
WOOD STUD - PLASTER

REVISIONS

1.
2.
3.
4.
5.

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

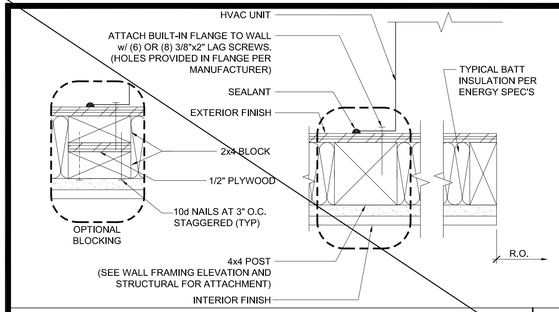
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLAND 24775 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

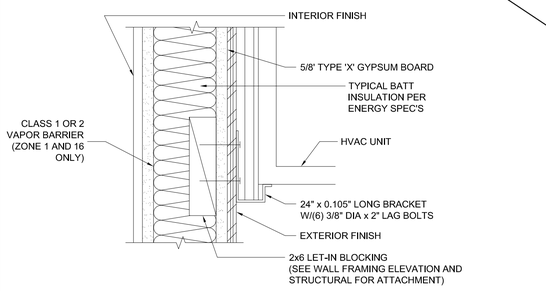
P.C. SHEET NUMBER

A-5.51



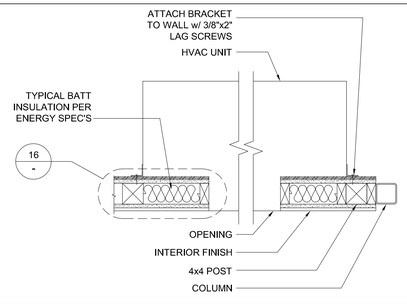
HVAC MOUNT AT JAMBS

SCALE : 3"=1'-0" | 16



HVAC UNIT AT BOTTOM

SCALE : 3"=1'-0" | 17



HVAC UNIT (PLAN)

SCALE : 1"=1'-0" | 18

GA FILE No. WP 3510

GYPSUM WALLBOARD, WOOD STUDS

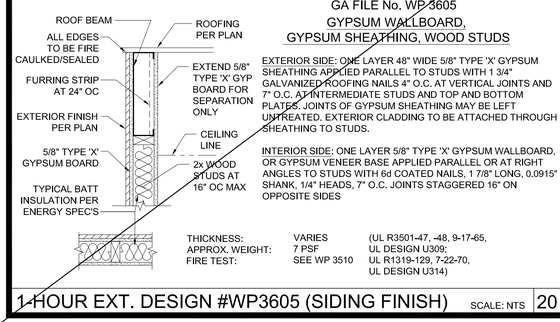
ONE LAYER 5/8" TYPE 'X' GYPSUM WALL BOARD APPLIED PARALLEL OR AT RIGHT ANGLES TO EACH SIDE OF STUDS WITH 6d COATED NAILS, 1 7/8" LONG, 0.0915 SHANK, 1/4" HEADS, 7" OC.

JOINTS STAGGERED 24" ON OPPOSITE SIDES.

THICKNESS:	4-7/8"
APPROXIMATE WEIGHT:	7 PSF
FIRE TEST:	UL R3501-47,-48,9-17-65, DESIGN U309; UL R1319-129, 7-22-70, DESIGN U314
SOUND TEST:	NGC 2404, 10-14-70

1-HOUR INTERIOR ASSEMBLY #WP3510

SCALE: NTS | 19



GA FILE No. WP 3605

GYPSUM WALLBOARD, GYPSUM SHEATHING, WOOD STUDS

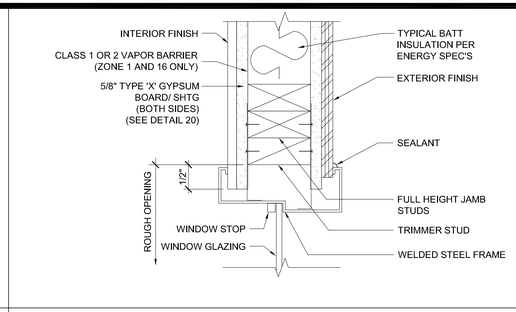
EXTERIOR SIDE: ONE LAYER 48" WIDE 5/8" TYPE 'X' GYPSUM SHEATHING APPLIED PARALLEL TO STUDS WITH 1 3/4" GALVANIZED ROOFING NAILS 4" O.C. AT VERTICAL JOINTS AND 7" O.C. AT INTERMEDIATE STUDS AND TOP AND BOTTOM PLATES. JOINTS OF GYPSUM SHEATHING MAY BE LEFT UNTREATED. EXTERIOR CLADDING TO BE ATTACHED THROUGH SHEATHING TO STUDS.

INTERIOR SIDE: ONE LAYER 5/8" TYPE 'X' GYPSUM WALLBOARD, OR GYPSUM VENEER BASE APPLIED PARALLEL OR AT RIGHT ANGLES TO STUDS WITH 6d COATED NAILS, 1 7/8" LONG, 0.0915" SHANK, 1/4" HEADS, 7" O.C. JOINTS STAGGERED 16" ON OPPOSITE SIDES

THICKNESS:	VARIES	(UL R3501-47, -48, 9-17-65,
APPROX. WEIGHT:	7 PSF	UL DESIGN U309;
FIRE TEST:	SEE WP 3510	UL R1319-129, 7-22-70, UL DESIGN U314)

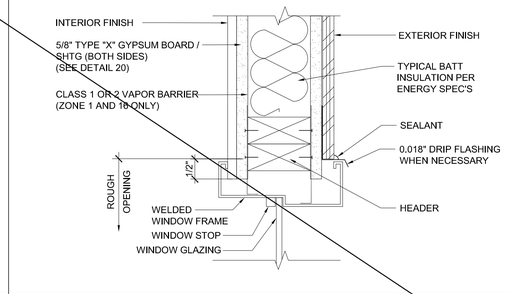
1-HOUR EXT. DESIGN #WP3605 (SIDING FINISH)

SCALE: NTS | 20



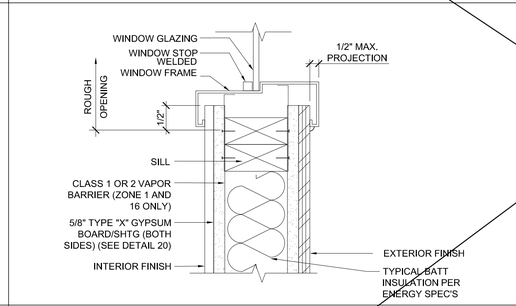
1-HR WINDOW SECTION AT JAMBS

SCALE : 3"=1'-0" | 11



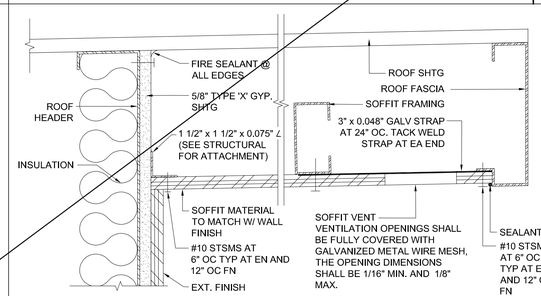
1-HR WINDOW SECTION AT HEADER

SCALE : 3"=1'-0" | 12



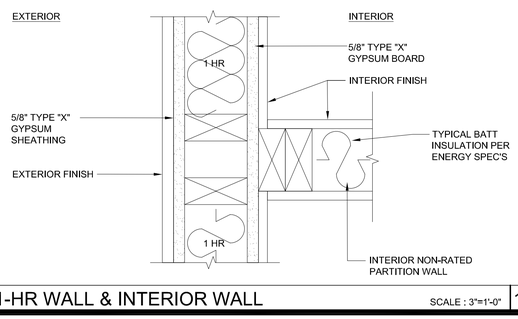
1-HR WINDOW SECTION AT SILL

SCALE : 3"=1'-0" | 13



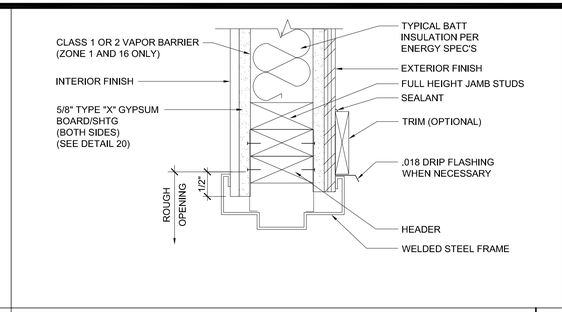
SOFFIT AT ROOF HEADER WITH VENT

SCALE : 3" = 1'-0" | 14



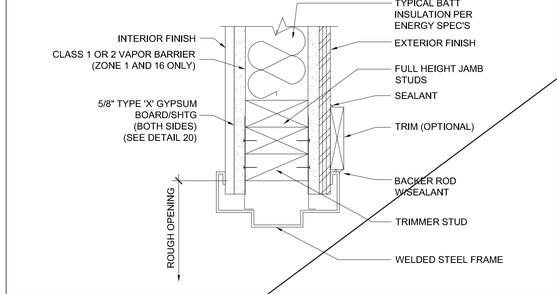
1-HR WALL & INTERIOR WALL

SCALE : 3"=1'-0" | 15



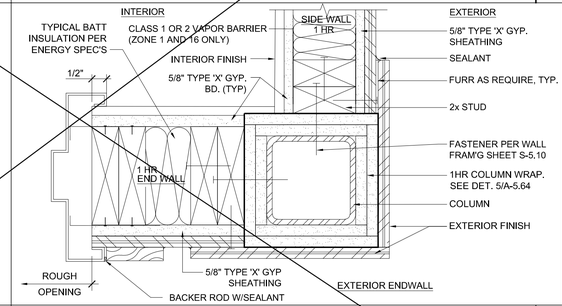
1-HR EXTERIOR DOOR HEADER

SCALE : 3"=1'-0" | 6



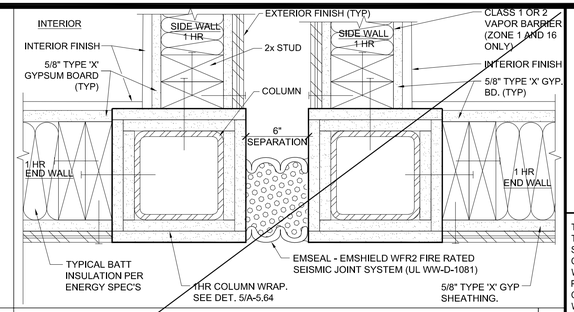
1-HOUR EXTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 7



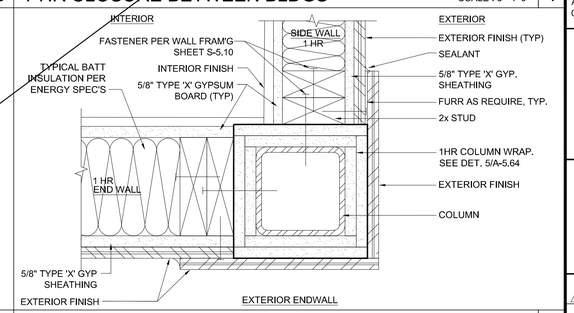
1-HR CORNER DETAIL - WOOD STUDS

SCALE : 3"=1'-0" | 8



1-HR CLOSURE BETWEEN BLDGS

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



INTERIOR WALL CONNECTION AT ROOF

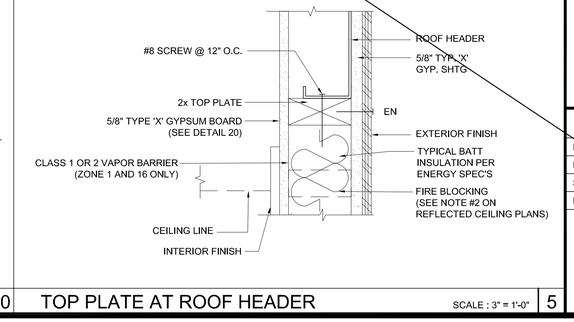
SCALE : 3"=1'-0" | 9

INTERIOR WALL CONNECTION AT ROOF

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

INTERIOR WALL CONNECTION AT ROOF

SCALE : 3"=1'-0" | 10



TOP PLATE AT ROOF HEADER

SCALE : 3" = 1'-0" | 5

1-HR AT MODLINE CLOSURE - WOOD STUDS

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ARCHITECTURAL DETAILS

WOOD STUD - WOOD SIDING

1 HOUR RATED

REVISIONS

1.
2.
3.
4.
5.

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

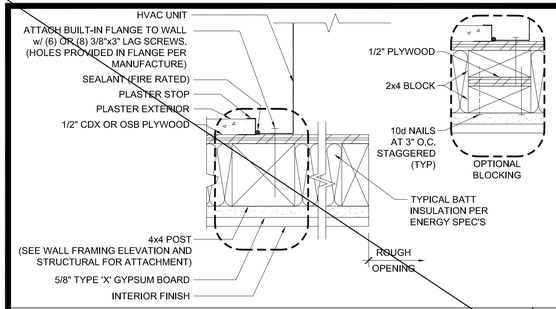
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

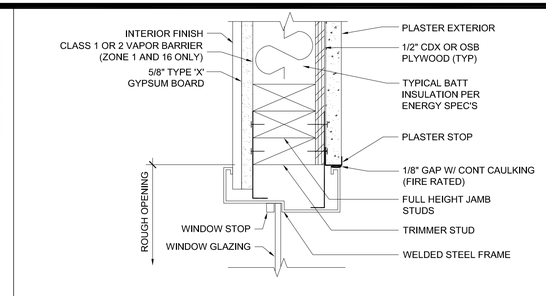
P.C. SHEET NUMBER

A-5.52



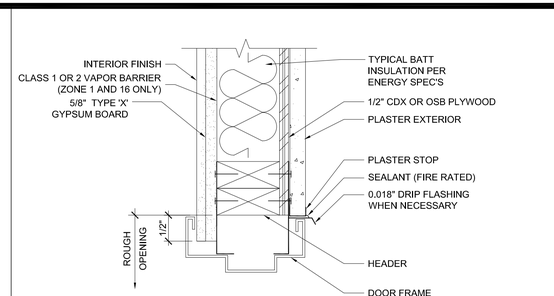
HVAC MOUNT AT JAMBS

SCALE : 3"=1'-0" | 16



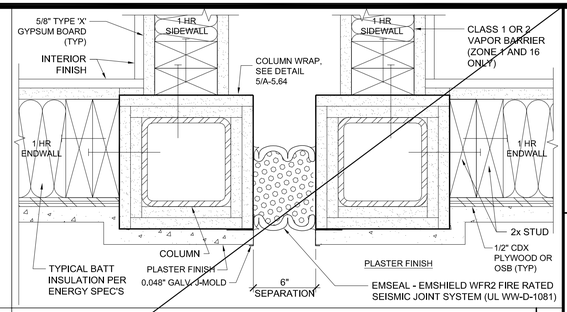
1-HR WINDOW SECTION AT JAMBS

SCALE : 3"=1'-0" | 11



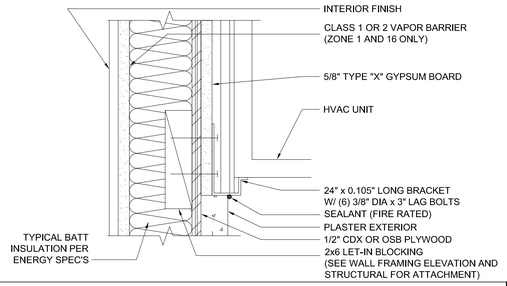
1-HR EXTERIOR DOOR HEADER

SCALE : 3"=1'-0" | 6



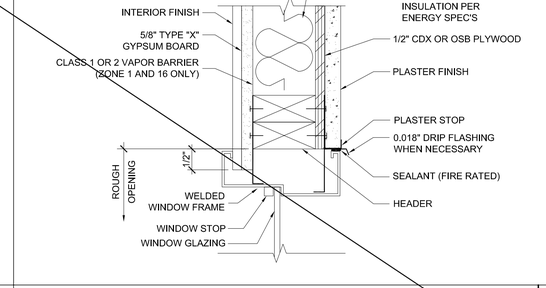
1-HR CLOSURE BETWEEN BLDGS

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



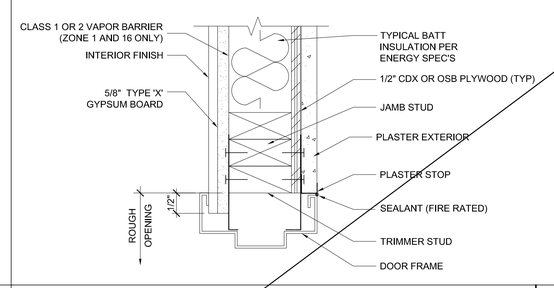
HVAC UNIT AT BOTTOM

SCALE : 3"=1'-0" | 17



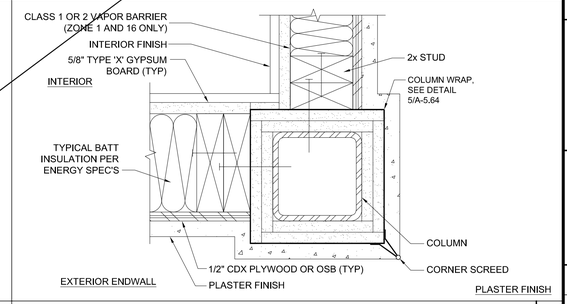
1-HR WINDOW SECTION AT HEADER

SCALE : 3"=1'-0" | 12



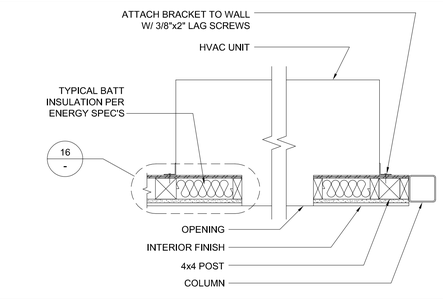
1-HR EXTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 7



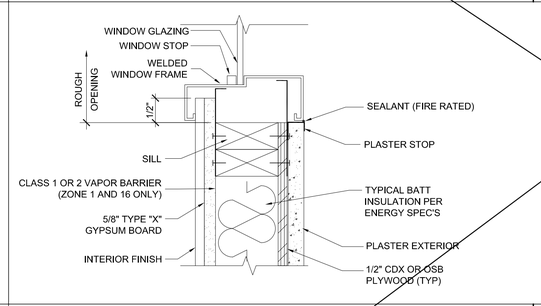
1-HOUR CORNER DETAIL

SCALE : 3"=1'-0" | 2



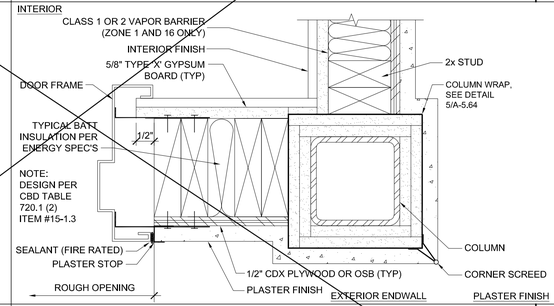
HVAC UNIT (PLAN)

SCALE : 1"=1'-0" | 18



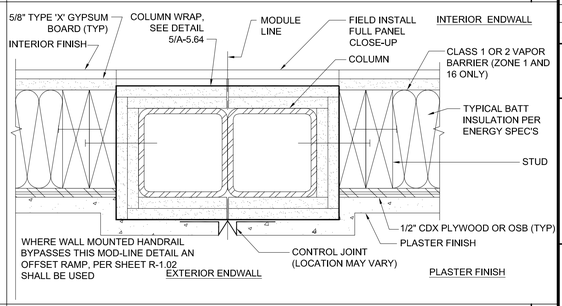
1-HR WINDOW SECTION AT SILL

SCALE : 3"=1'-0" | 13



1-HR EXTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 8



1-HR AT MODLINE CLOSURE

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

GA FILE No. WP 3510

GYPSUM WALLBOARD, WOOD STUDS

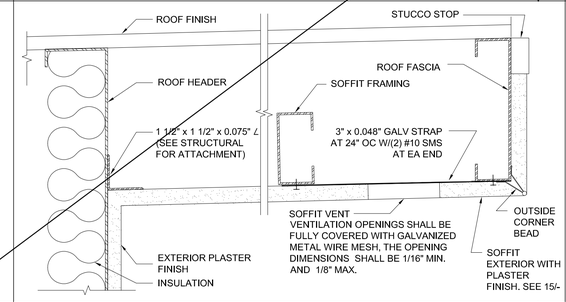
ONE LAYER 5/8" TYPE 'X' GYPSUM WALL BOARD APPLIED PARALLEL OR AT RIGHT ANGLES TO EACH SIDE OF STUDS WITH 6d COATED NAILS, 1 7/8" LONG, 0.0915 SHANK, 1/4" HEADS, 7" OC.

JOINTS STAGGERED 24" ON OPPOSITE SIDES.

THICKNESS:	4-7/8"
APPROXIMATE WEIGHT:	7 PSF
FIRE TEST:	UL R3501-47,-48,9-17-65, DESIGN U309; UL R1319-129, 7-22-70, DESIGN U314
SOUND TEST:	NGC 2404, 10-14-70

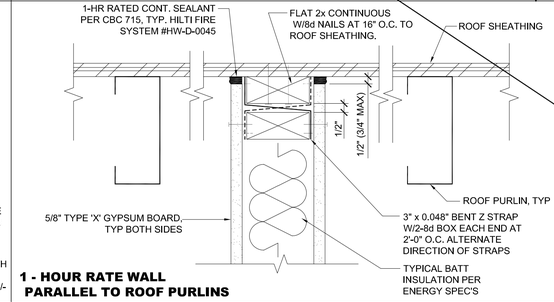
1-HOUR INTERIOR ASSEMBLY #WP3510

SCALE: NTS | 19



SOFFIT AT ROOF HEADER WITH VENT

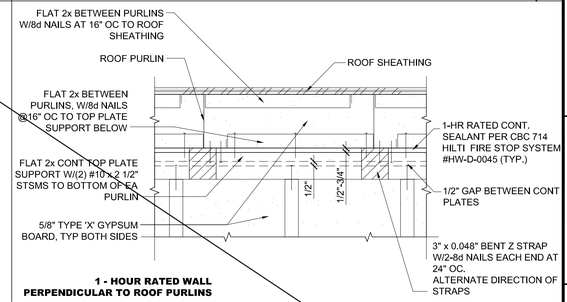
SCALE : 3" = 1'-0" | 14



1 - HOUR RATE WALL PARALLEL TO ROOF PURLINS

INTERIOR WALL CONNECTION AT ROOF

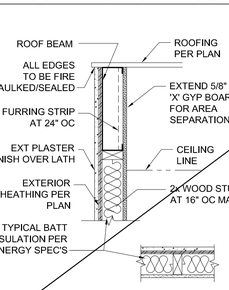
SCALE : 3"=1'-0" | 9



1 - HOUR RATED WALL PERPENDICULAR TO ROOF PURLINS

INTERIOR WALL CONNECTION AT ROOF

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



WOOD STUDS,
CEMENT PLASTER, GYPSUM WALLBOARD

EXTERIOR SIDE 15-1.3: 2x WOOD STUDS 16" OC WITH 7/8" CEMENT PLASTER OVER LATH OVER EXTERIOR SHEATHING SURFACE.

INTERIOR SIDE 14-1.3: ONE LAYER 5/8" TYPE 'X' GYPSUM WALLBOARD, OR GYPSUM VENEER BASE APPLIED PARALLEL OR AT RIGHT ANGLES TO STUDS WITH 6d COATED NAILS, 1 7/8" LONG, 0.0915" SHANK, 1/4" HEADS, 7" O.C. W/ END JOINTS ON NAILING MEMBERS.

JOINTS STAGGERED 24" ON EACH SIDE.

DESIGN PER
CBC - TABLE 721.1 (2)

1-HOUR EXTERIOR ASSEMBLY (STUCCO FINISH)

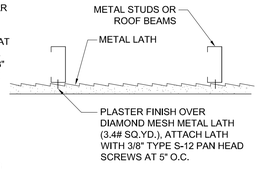
SCALE: NTS | 20

1. METAL LATH SHALL BE ATTACHED TO METAL SUPPORTS WITH NOT LESS #10 U.S. GAUGE THE WIRE SPACED NOT MORE THAN 6" APART OR WITH APPROVED EQUIVALENT ATTACHMENTS.

2. METAL LATH OR WIRE FABRIC SHALL BE APPLIED WITH THE LONG DIMENSION OF THE SHEETS PERPENDICULAR TO SUPPORTS.

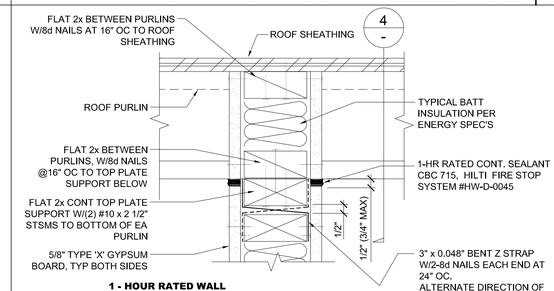
3. METAL LATH SHALL BE LAPPED NOT LESS THAN 1/2" AT SIDES AND 1" AT ENDS. WIRE FABRIC AT SIDES & ENDS, BUT NOT LESS THAN 1", AND METAL GREATER THAN 1/8" SHALL BE LAPPED AT THE SIDES BY NESTING OUTSIDE HOLE. WHERE EDGE LAPS OF SHEETS DO NOT OCCUR OVER SUPPORTS, THEY SHALL BE SECURELY TIED TOGETHER WITH NOT LESS THAN 18 GA. WIRE

4. CORNERITE SHALL BE INSTALLED IN ALL INTERNAL CORNERS TO RETAIN POSITION DURING PLASTERING CORNERITE MAY BE OMITTED WHEN LATH IS CONTINUOUS OR WHEN PLASTER IN NOT CONTINUOUS FROM ONE PLANE TO AN ADJACENT PLAN.



METAL LATH ATTACHMENT TO METAL JOIST

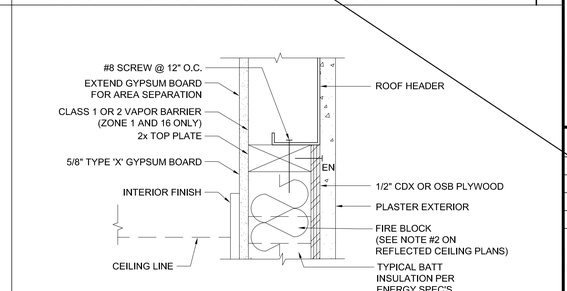
SCALE : NTS | 15



1 - HOUR RATED WALL PERPENDICULAR TO ROOF PURLINS

INTERIOR WALL CONNECTION AT ROOF

SCALE : 3"=1'-0" | 10



TOP PLATE AT ROOF HEADER

SCALE : 3" = 1'-0" | 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ARCHITECTURAL DETAILS

WOOD STUD - PLASTER 1 HOUR RATED

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

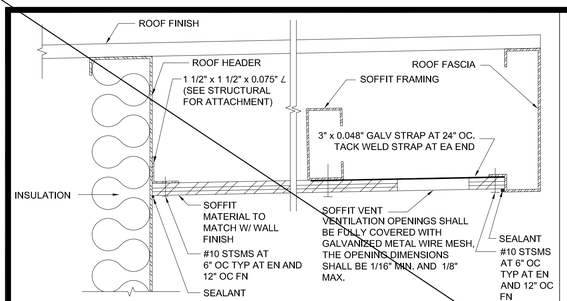
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

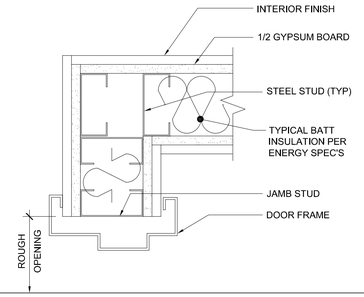
P.C. SHEET NUMBER

A-5.53



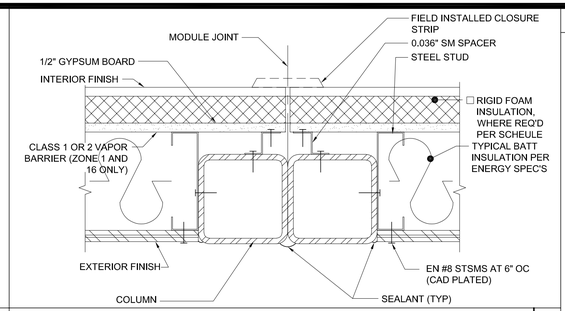
SOFFIT AT ROOF HEADER WITH VENT

SCALE : 3" = 1'-0" | 14



INTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 9



COLUMN AT MODULE LINE

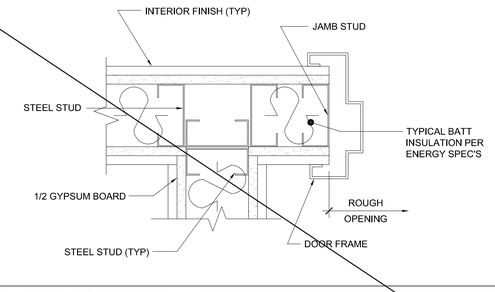
SCALE : 3"=1'-0" | 4

NOTES

1. ATTACH 1/2" GYPSUM BOARD BACKING WITH TYPE 'S' DRYWALL SCREWS AT 12" OC MAX E.N AND F.N.

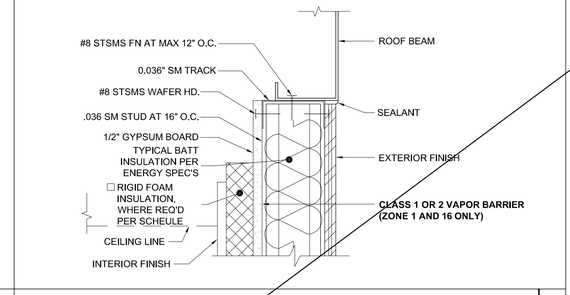
NOT USED

15



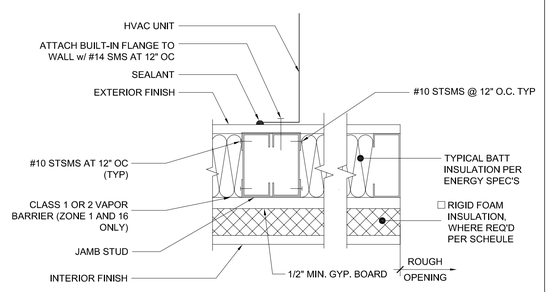
INTERIOR DOOR JAMBS

SCALE : 3"=1'-0" | 10



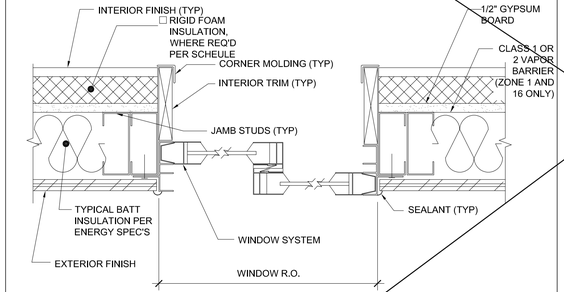
TOP PLATE AT ROOF HEADER

SCALE : 3" = 1'-0" | 5



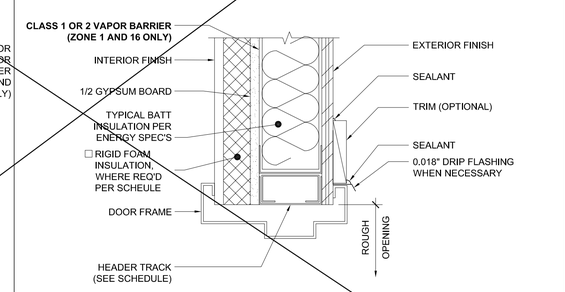
HVAC MOUNT AT JAMBS

SCALE : 3"=1'-0" | 16



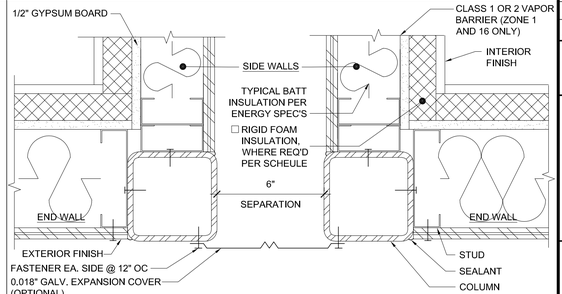
WINDOW SECTION AT JAMBS

SCALE : 3"=1'-0" | 11



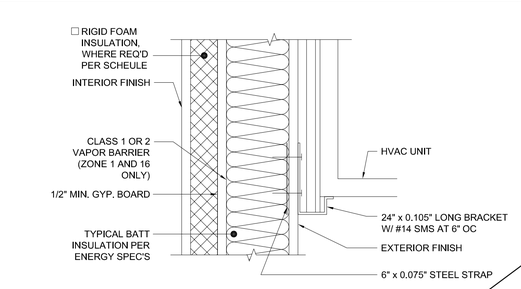
EXTERIOR DOOR HEADER

SCALE : 3"=1'-0" | 6



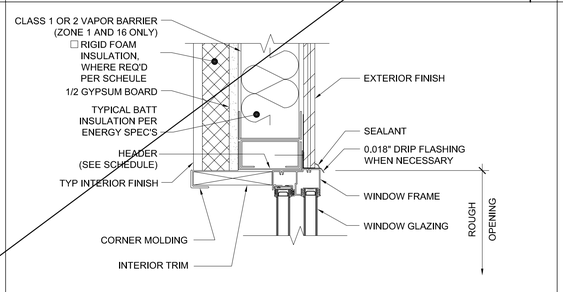
CLOSURE BETWEEN BUILDINGS

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



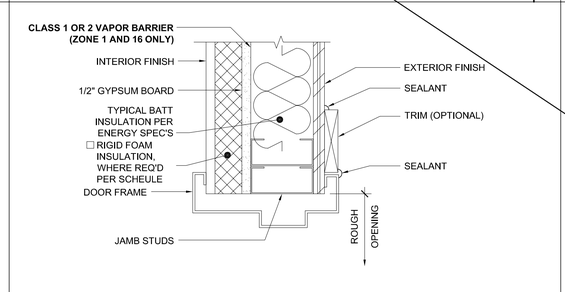
HVAC UNIT AT BOTTOM

SCALE : 3"=1'-0" | 17



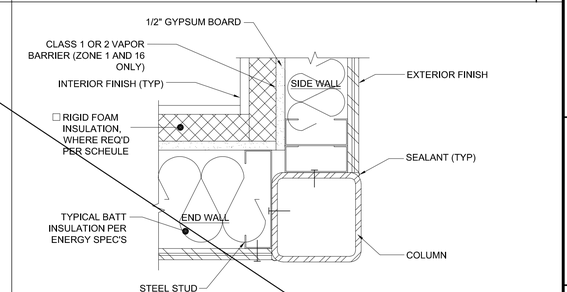
WINDOW HEADER

SCALE : 3"=1'-0" | 12



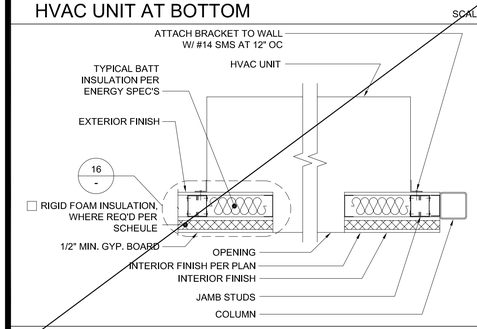
EXTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 7



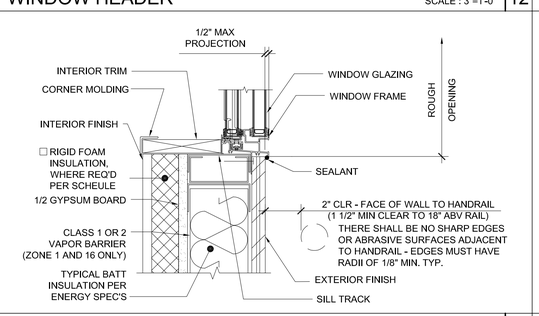
COLUMN AT CORNER

SCALE : 3"=1'-0" | 2



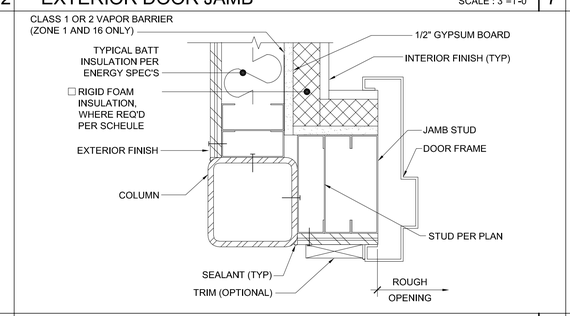
HVAC UNIT (PLAN)

SCALE : 1"=1'-0" | 18



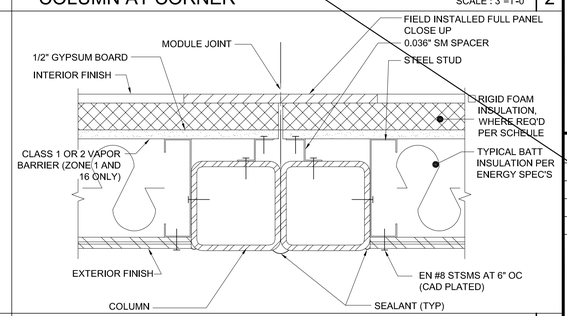
WINDOW SILL

SCALE : 3"=1'-0" | 13



EXTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 8



COLUMN AT MODULE LINE

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ARCHITECTURAL DETAILS
STEEL STUD - SHTG

REVISIONS

1.
2.
3.
4.
5.

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

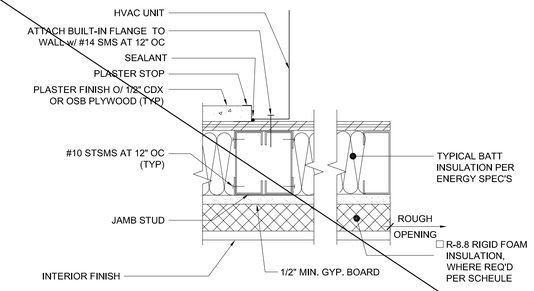
REGISTERED PROFESSIONAL ENGINEER JOHAN W STARKMAN 24775 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

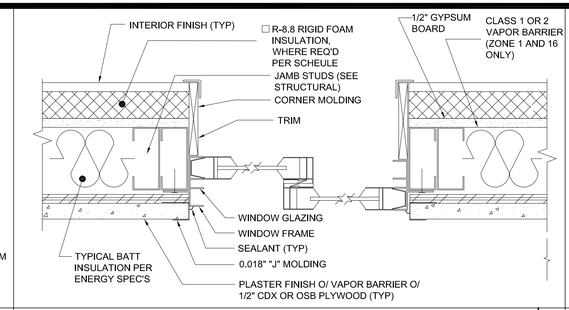
P.C. SHEET NUMBER

A-5.60



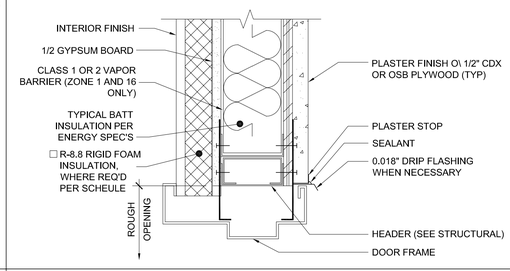
HVAC MOUNT AT JAMBS

SCALE : 3"=1'-0" | 16



WINDOW SECTION AT JAMBS

SCALE : 3"=1'-0" | 11

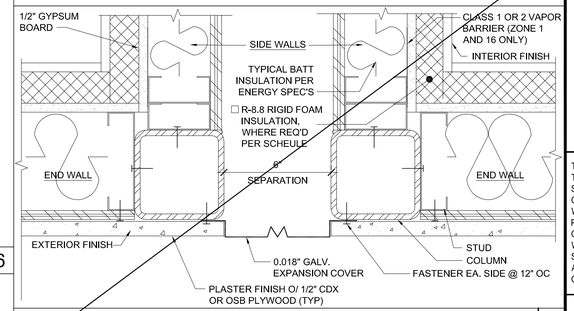


EXTERIOR DOOR HEADER

SCALE : 3"=1'-0" | 6

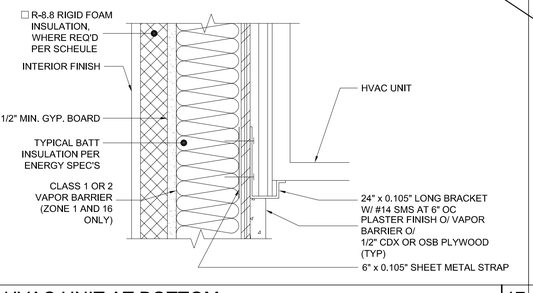
NOTES

1. ATTACH 1/2" GYPSUM BOARD BACKING WITH TYPE 'S' DRYWALL SCREWS AT 12" OC MAX E.N AND F.N.



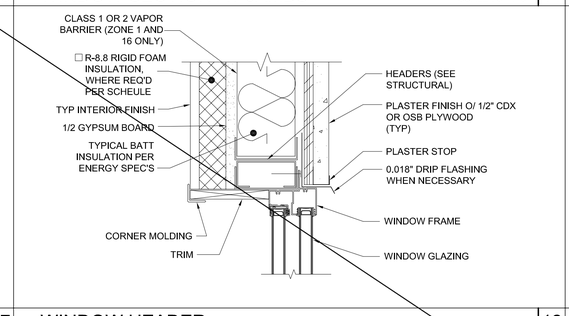
CLOSURE BETWEEN BUILDINGS

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



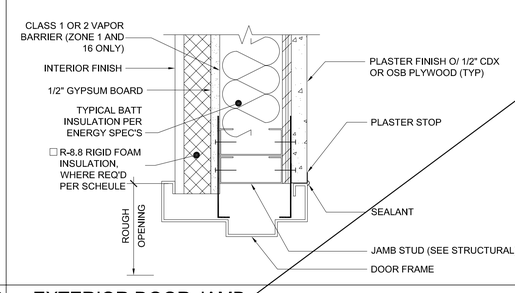
HVAC UNIT AT BOTTOM

SCALE : 3"=1'-0" | 17



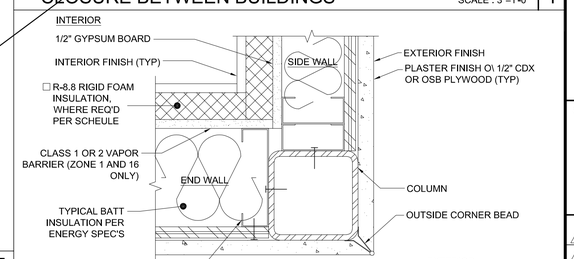
WINDOW HEADER

SCALE : 3"=1'-0" | 12



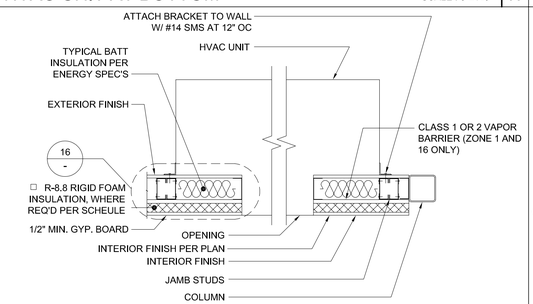
EXTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 7



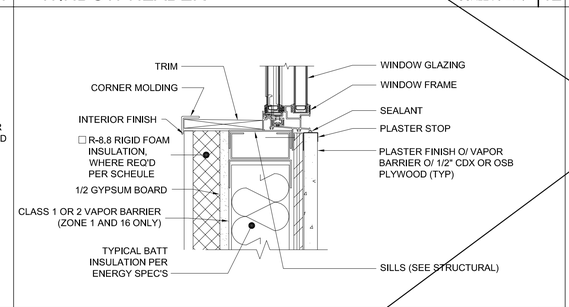
COLUMN AT CORNER

SCALE : 3"=1'-0" | 2



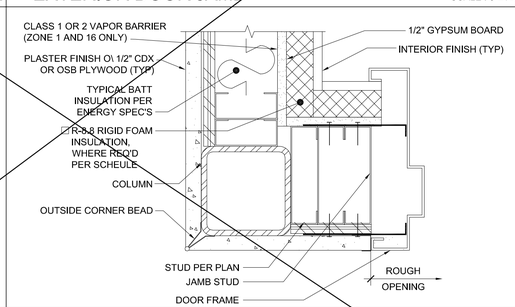
HVAC UNIT (PLAN)

SCALE : 1"=1'-0" | 18



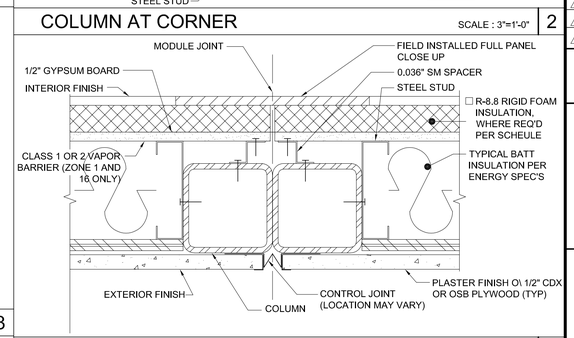
WINDOW SILL

SCALE : 3"=1'-0" | 13



EXTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 8



COLUMN AT MODULE LINE (FULL PANEL CLOSE-UP)

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

NOT USED

19

SOFFIT AT ROOF HEADER WITH VENT

SCALE : 3" = 1'-0" | 14

INTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 9

COLUMN AT MODULE LINE (CLOSURE STRIP)

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

NOT USED

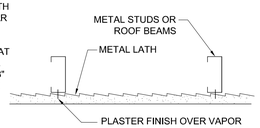
20

1. METAL LATH SHALL BE ATTACHED TO METAL SUPPORTS WITH NOT LESS #10 U.S. GAUGE THE WIRE SPACED NOT MORE THAN 6" APART OR WITH APPROVED EQUIVALENT ATTACHMENTS.

2. METAL LATH OR WIRE FABRIC SHALL BE APPLIED WITH THE LONG DIMENSION OF THE SHEETS PERPENDICULAR TO SUPPORTS.

3. METAL LATH SHALL BE LAPPED NOT LESS THAN 1/2" AT SIDES AND 1" AT ENDS. WIRE FABRIC AT SIDES & ENDS. BUT NOT LESS THAN 1", AND METAL GREATER THAN 1/8" SHALL BE LAPPED AT THE SIDES BY NESTING OUTSIDE HOLE. WHERE EDGE LAPS OF SHEETS DO NOT OCCUR OVER SUPPORTS. THEY SHALL BE SECURELY TIED TOGETHER WITH NOT LESS THAN 18 GA. WIRE

4. CORNERITE SHALL BE INSTALLED IN ALL INTERNAL CORNERS TO RETAIN POSITION DURING PLASTERING CORNERITE MAY BE OMITTED WHEN LATH IS CONTINUOUS OR WHEN PLASTER IN NOT CONTINUOUS FROM ONE PLANE TO AN ADJACENT PLAN.



METAL LATH ATTACHMENT TO METAL JOIST

SCALE : NTS | 15

INTERIOR DOOR JAMBS

SCALE : 3"=1'-0" | 10

TOP PLATE AT ROOF HEADER

SCALE : 3" = 1'-0" | 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ARCHITECTURAL DETAILS
STEEL STUD - PLASTER

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

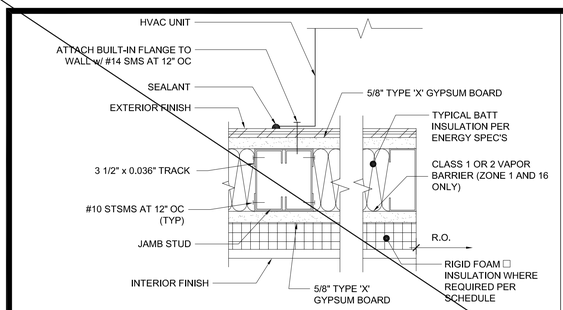
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLAND
2475
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

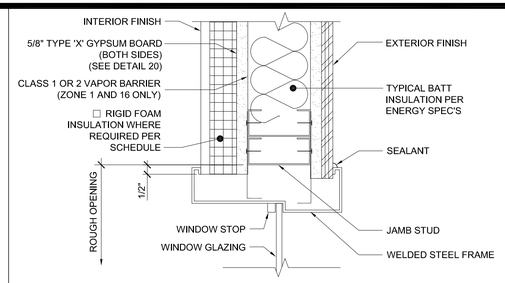
P.C. SHEET NUMBER

A-5.61



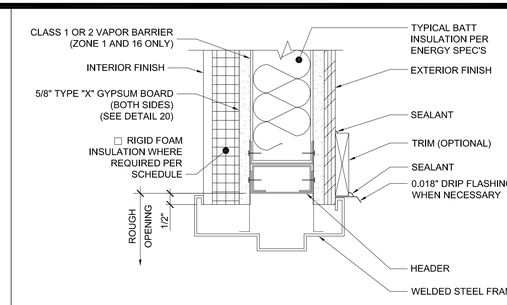
HVAC MOUNT AT JAMBS

SCALE : 3"=1'-0" | 16



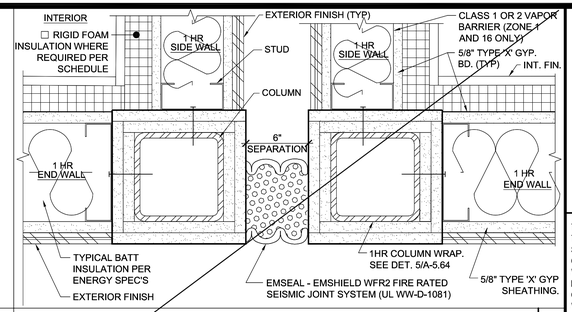
1-HR WINDOW SECTION AT JAMBS

SCALE : 3"=1'-0" | 11



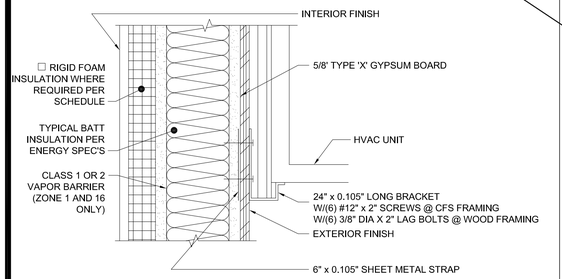
1-HR EXTERIOR DOOR HEADER

SCALE : 3"=1'-0" | 6



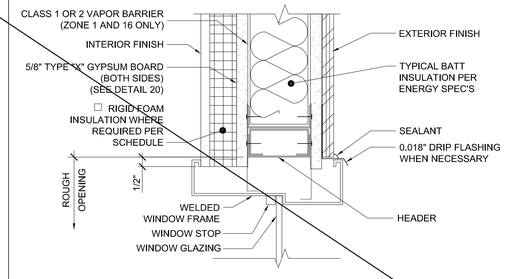
1-HR CLOSURE BETWEEN BLDGS

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



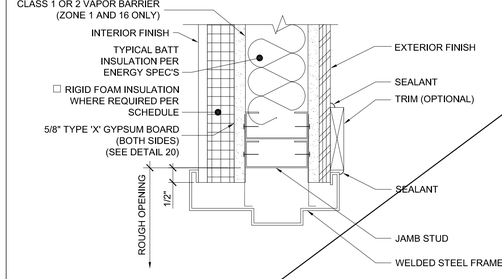
HVAC UNIT AT BOTTOM

SCALE : 3"=1'-0" | 17



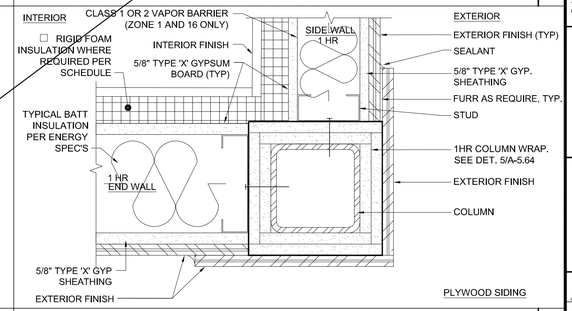
1-HR WINDOW SECTION AT HEADER

SCALE : 3"=1'-0" | 12



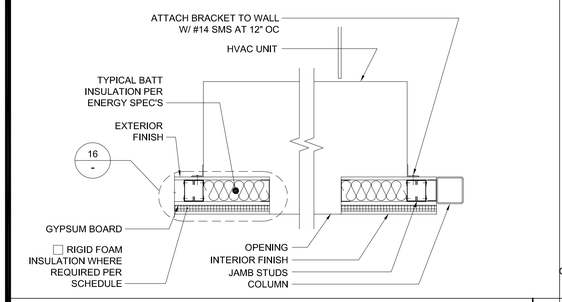
1-HOUR EXTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 7



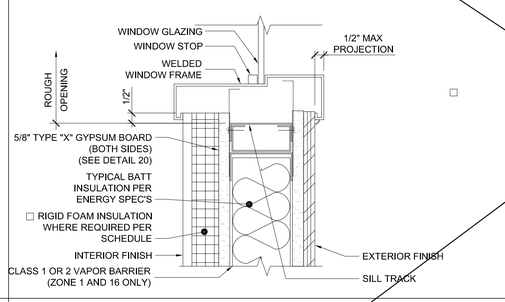
1-HR CORNER DETAIL - STEEL STUDS

SCALE: 3" = 1'-0" | 2



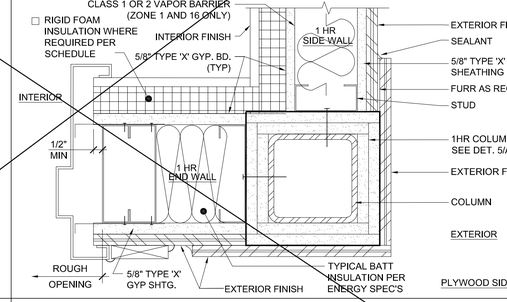
HVAC UNIT (PLAN)

SCALE : 1"=1'-0" | 18



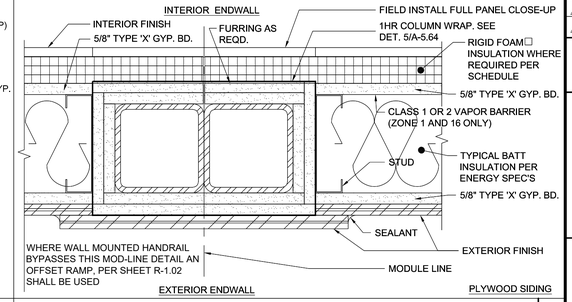
1-HR WINDOW SECTION AT SILL

SCALE : 3"=1'-0" | 13



1-HR EXTERIOR CORNER DOOR JAMB

SCALE: 3" = 1'-0" | 8



1-HR AT MODLINE CLOSURE - STEEL STUDS

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

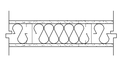
GA FILE NO. WP 1206

GYPSUM WALLBOARD, STEEL STUDS

GENERIC
1 HOUR FIRE
40 TO 44 STC
SOUND

ONE LAYER 5/8" TYPE 'X' GYPSUM WALLBOARD OR GYPSUM VENEER BASE APPLIED PARALLEL TO EACH SIDE OF 3 1/2" 20 GAGE STEEL STUDS 24" OC WITH 1" TYPE S-12 DRYWALL SCREWS 12" OC STUDS ATTACHED TO EACH SIDE OF FLOOR AND CEILING RUNNERS BY WELDING OR WITH 1/2" TYPE S-12 PAN HEAD SCREWS
JOINTS STAGGERED 24" ON OPPOSITE SIDES.

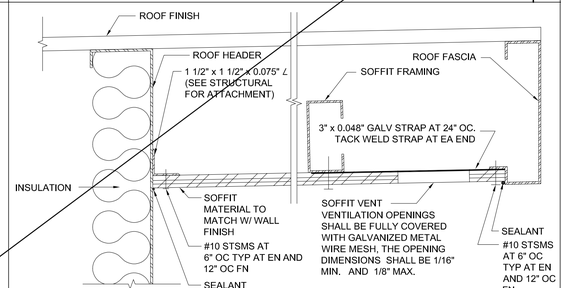
BRACING: LATERAL BRACING SPACED NOT OVER 40" OC SHALL BE 1" BY 18 GAGE STEEL STRAPS ATTACHED TO EACH SIDE OR CHANNEL BRACING ATTACHED TO EACH STUD WITH A CLIP ANGLE. FOR STUDS WITH HOLES OR PUNCH-OUTS IN THE WEB THE "Q" FACTOR SHALL BE DETERMINED BY MEANS OF STUB COLUMN TESTS. TESTED AT 100 PERCENT OF DESIGN LOAD. (LOAD BEARING)



THICKNESS:	4 3/4"
APPROX. WT.	6 psf
FIRE TEST:	UL NC 505-2, 7-29-82
	UL DESIGN U425
SOUND TEST:	SEE WP 1350
	(NGC 2385, 7-28-70)

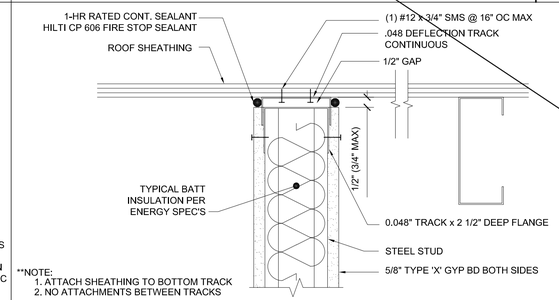
1-HOUR INTERIOR ASSEMBLY #WP1206

SCALE: NTS | 19



SOFFIT AT ROOF HEADER WITH VENT

SCALE : 3" = 1'-0" | 14



**NOTE:
1. ATTACH SHEATHING TO BOTTOM TRACK
2. NO ATTACHMENTS BETWEEN TRACKS

INTERIOR RATED PARTITION

SCALE : 3"=1'-0" | 9

NOT USED

4

GA FILE NO. WP 8006

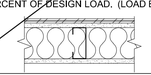
1 HOUR FIRE

GYPSUM WALLBOARD, GLASS MAT GYPSUM SUBSTRATE, STEEL STUDS, MINERAL OR GLASS FIBER INSULATION

EXTERIOR SIDE: ONE LAYER 5/8" TYPE 'X' GLASS MAT GYPSUM SHEATHING APPLIED PARALLEL TO 3½" x 20 GAGE STEEL STUDS 24" OC WITH 1" TYPE S-12, SELF-DRILLING, CORROSION RESISTANT, BUGLE HEAD, DRYWALL SCREWS 12" OC. STUDS ATTACHED TO BOTH VERTICAL LEGS OF FLOOR AND CEILING RUNNERS EITHER BY WELDING OR WITH 1/2" TYPE S-12 PAN HEAD SCREWS. MINERAL OR GLASS FIBER INSULATION FRICTION FIT INTO THE STUD SPACE. EXTERIOR CLADDING TO BE ATTACHED THROUGH GYPSUM PANEL TO STUDS.

INTERIOR SIDE: ONE LAYER ⅝" TYPE 'X' GYPSUM BOARD APPLIED PARALLEL TO STUDS WITH 1" SYPE S-12 DRYWALL SCREWS 12" OC

BRACING: LATERAL BRACING SPACED NOT OVER 40" OC SHALL BE 1" BY 18 GAGE STEEL STRAPS ATTACHED TO EACH SIDE OR CHANNEL BRACING ATTACHED TO EACH STUD WITH A CLIP ANGLE. FOR STUDS WITH HOLES OR PUNCH-OUTS IN THE WEB THE "Q" FACTOR SHALL BE DETERMINED BY MEANS OF STUB COLUMN TESTS. TESTED AT 100 PERCENT OF DESIGN LOAD. (LOAD BEARING)



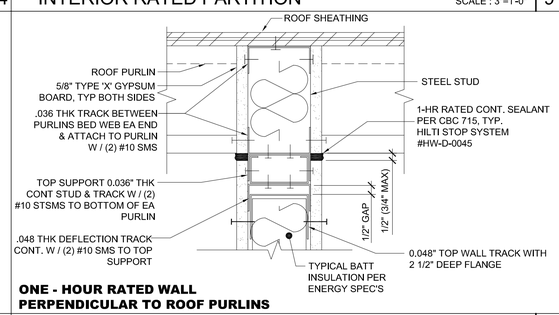
THICKNESS:	4 3/4"
APPROX. WT.	6 PSF
FIRE TEST:	UL R3660/R15187, 01NK21103, 2-4-02
	UL DESIGN U425

1-HOUR EXT. #WP8006 (SIDING FINISH)

SCALE: NTS | 20

NOT USED

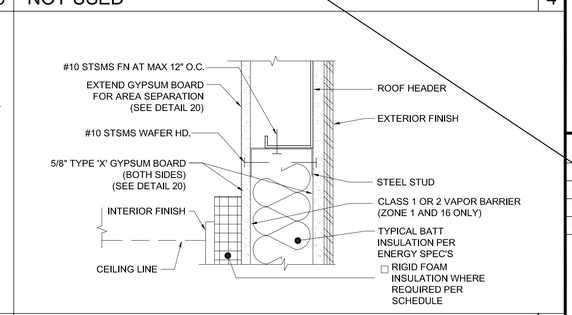
15



ONE - HOUR RATED WALL PERPENDICULAR TO ROOF PURLINS

INTERIOR WALL CONNECTION AT ROOF

SCALE : 3"=1'-0" | 10



TOP PLATE AT ROOF HEADER

SCALE : 3" = 1'-0" | 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ARCHITECTURAL DETAILS
STEEL STUD - 1 HOUR RATED

REVISIONS

1.
2.
3.
4.
5.

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

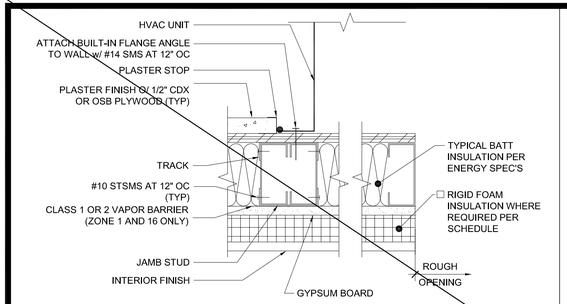
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

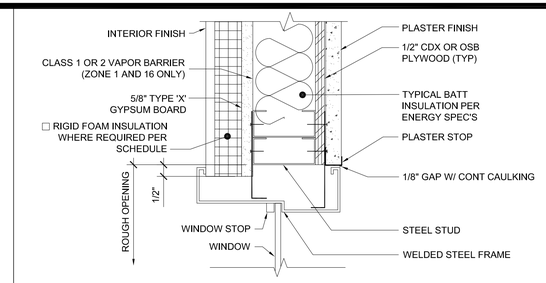
P.C. SHEET NUMBER

A-5.62



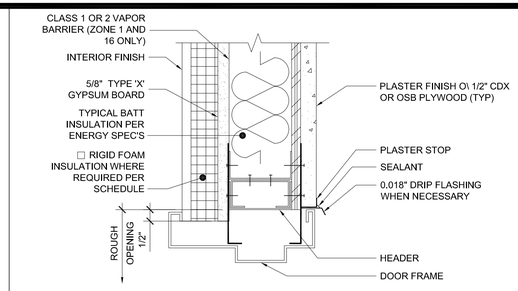
HVAC MOUNT AT JAMBS

SCALE : 3"=1'-0" | 16



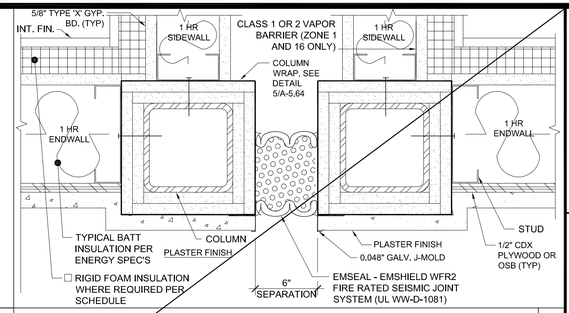
1-HR WINDOW SECTION AT JAMBS

SCALE : 3"=1'-0" | 11



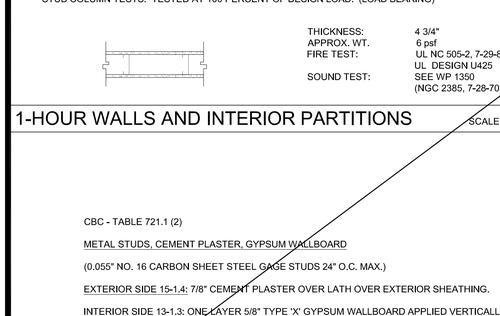
1-HR EXTERIOR DOOR HEADER

SCALE : 3"=1'-0" | 6



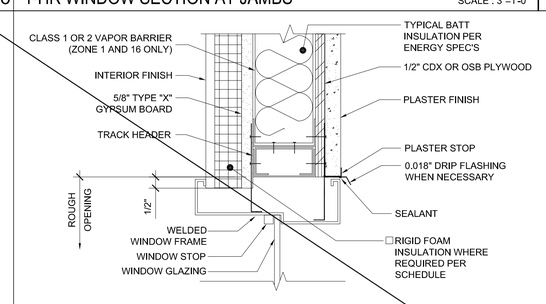
1-HR CLOSURE BETWEEN BLDGS

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



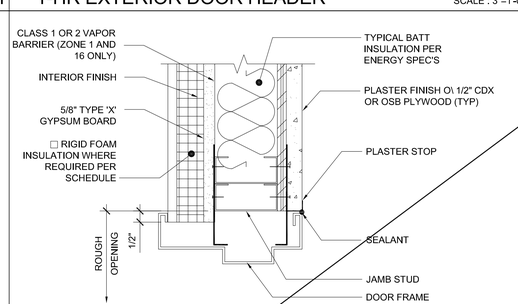
HVAC UNIT AT BOTTOM

SCALE : 3"=1'-0" | 17



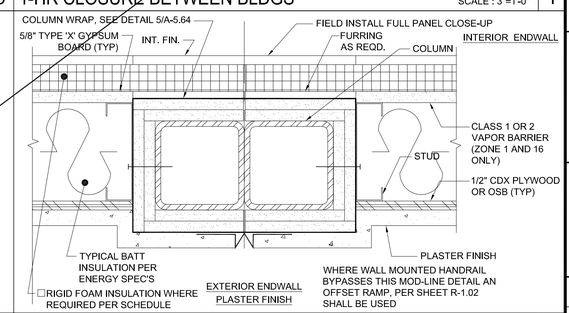
1-HR WINDOW SECTION AT HEADER

SCALE : 3"=1'-0" | 12



1-HR EXTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 7



1-HR AT MODLINE CLOSURE - STL STUDS

SCALE : 3"=1'-0" | 2

HVAC UNIT (PLAN)

SCALE : 1"=1'-0" | 18

1-HR WINDOW SECTION AT SILL

SCALE : 3"=1'-0" | 13

1-HR EXTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 8

1-HR CORNER DETAIL - STL STUDS

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

GA FILE NO. WP 1206

GYPSUM WALLBOARD, STEEL STUDS

GENERIC
1 HOUR FIRE
40 TO 44 STC
SOUND

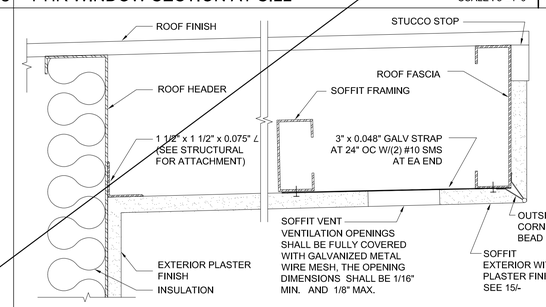
ONE LAYER 5/8" TYPE 'X' GYPSUM WALLBOARD OR GYPSUM VENEER BASE APPLIED PARALLEL TO EACH SIDE OF 3 1/2" 20 GAGE STEEL STUDS 24" OC WITH 1" TYPE S-12 DRYWALL SCREWS 12" OC STUDS ATTACHED TO EACH SIDE OF FLOOR AND CEILING RUNNERS BY WELDING OR WITH 1/2" TYPE S-12 PAN HEAD SCREWS
JOINTS STAGGERED 24" ON OPPOSITE SIDES.

BRACING: LATERAL BRACING SPACED NOT OVER 40" OC SHALL BE 1" BY 18 GAGE STEEL STRAPS ATTACHED TO EACH SIDE OR CHANNEL BRACING ATTACHED TO EACH STUD WITH A CLIP ANGLE. FOR STUDS WITH HOLES OR PUNCH-OUTS IN THE WEB THE "Q" FACTOR SHALL BE DETERMINED BY MEANS OF STUB COLUMN TESTS. TESTED AT 100 PERCENT OF DESIGN LOAD. (LOAD BEARING)

THICKNESS:	4 3/4"
APPROX. WT.	6 psf
FIRE TEST:	UL NC 505-2, 7-29-82 UL DESIGN U425
SOUND TEST:	SEE WP 1350 (NGC 2385, 7-28-70)

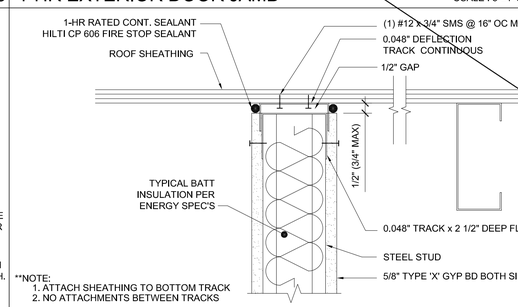
1-HOUR WALLS AND INTERIOR PARTITIONS

SCALE: NTS | 19



SOFFIT AT ROOF HEADER WITH VENT

SCALE : 3" = 1'-0" | 14



INTERIOR RATED PARTITION

SCALE : 3"=1'-0" | 9

	4

CBC - TABLE 721.1 (2)

METAL STUDS, CEMENT PLASTER, GYPSUM WALLBOARD

(0.055" NO. 16 CARBON SHEET STEEL GAGE STUDS 24" O.C. MAX.)

EXTERIOR SIDE 15-1.4: 7/8" CEMENT PLASTER OVER LATH OVER EXTERIOR SHEATHING.

INTERIOR SIDE 13-1.3: ONE LAYER 5/8" TYPE 'X' GYPSUM WALLBOARD APPLIED VERTICALLY AND NAILED 7" OC WITH 6d CEMENT - COATED COMMON NAILS. APPROVED METAL FASTENER GRIPS USED WITH NAILS AT VERTICAL BUTT JOINTS ALONG STUDS.

1-HOUR EXTERIOR ASSEMBLY (STUCCO FINISH)

SCALE: NTS | 20

1. METAL LATH SHALL BE ATTACHED TO METAL SUPPORTS WITH NOT LESS #10 U.S. GAUGE THE WIRE SPACED NOT MORE THAN 6" APART OR WITH APPROVED EQUIVALENT ATTACHMENTS.

2. METAL LATH OR WIRE FABRIC SHALL BE APPLIED WITH THE LONG DIMENSION OF THE SHEETS PERPENDICULAR TO SUPPORTS.

3. METAL LATH SHALL BE LAPPED NOT LESS THAN 1/2" AT SIDES AND 1" AT ENDS. WIRE FABRIC AT SIDES & ENDS, BUT NOT LESS THAN 1", AND METAL GREATER THAN 1/8" SHALL BE LAPPED AT THE SIDES BY NESTING OUTSIDE HOLE. WHERE EDGE LAPS OF SHEETS DO NOT OCCUR OVER SUPPORTS, THEY SHALL BE SECURELY TIED TOGETHER WITH NOT LESS THAN 18 GA. WIRE

4. CORNERITE SHALL BE INSTALLED IN ALL INTERNAL CORNERS TO RETAIN POSITION DURING PLASTERING CORNERITE MAY BE OMITTED WHEN LATH IS CONTINUOUS OR WHEN PLASTER IN NOT CONTINUOUS FROM ONE PLANE TO AN ADJACENT PLAN.

METAL LATH ATTACHMENT TO METAL JOIST

SCALE : NTS | 15

INTERIOR WALL CONNECTION AT ROOF

SCALE : 3"=1'-0" | 10

1-HR TOP PLATE AT ROOF HEADER

SCALE : 3" = 1'-0" | 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ARCHITECTURAL DETAILS
STEEL STUD - PLASTER
1 HOUR RATED

REVISIONS

1.
2.
3.
4.
5.

PRE-CHECK (PC) DOCUMENT
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Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

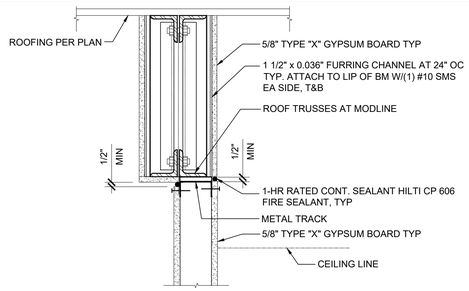
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

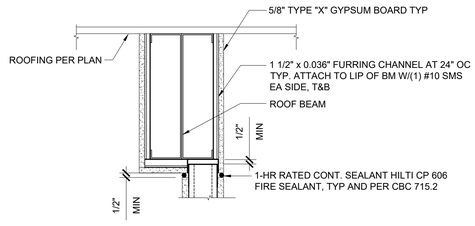
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023
P.C. SHEET NUMBER	A-5.63

NOT USED 15



1-HOUR INTERIOR WALL AT MODLINE SCALE : 1 1/2" = 1'-0" 11

NOT USED 16



INTERIOR WALL AT MODLINE - 1 HOUR (OPT) SCALE : 1 1/2" = 1'-0" 12

NOT USED 17

NOT USED 18

NOT USED 19

FIRE RESISTANCE RATING OF A HSS COLUMN

COLUMN SIZE: 4 x 4 x 1/4 (a / b)

COLUMN WIDTH	a=	4.00
COLUMN WIDTH	b=	4.00
	D=	16.00
COLUMN #/LINEAR FT	W=	12.21
THICKNESS OF GYP BD	h=	1.250
	W=	19.15

RATING (MINUTES)	R= 92.99
SHTG REQUIRED FOR 1HR FIRE RESISTANCE RATING	2 LAYERS OF 5/8" TYPE X SHTG

FIRE RESISTANCE RATING OF A HSS COLUMN

COLUMN SIZE: 5 x 5 x 1/4 (a / b)

COLUMN WIDTH	a=	5.00
COLUMN WIDTH	b=	5.00
	D=	20.00
COLUMN #/LINEAR FT	W=	15.62
THICKNESS OF GYP BD	h=	1.250
	W=	24.30

RATING (MINUTES)	R= 94.03
SHTG REQUIRED FOR 1HR FIRE RESISTANCE RATING	2 LAYERS OF 5/8" TYPE X SHTG

FIRE RESISTANCE RATING OF A HSS COLUMN

COLUMN SIZE: 6 x 6 x 1/4 (a / b)

COLUMN WIDTH	a=	6.00
COLUMN WIDTH	b=	6.00
	D=	24.00
COLUMN #/LINEAR FT	W=	19.02
THICKNESS OF GYP BD	h=	1.250
	W=	29.44

RATING (MINUTES)	R= 94.70
SHTG REQUIRED FOR 1HR FIRE RESISTANCE RATING	2 LAYERS OF 5/8" TYPE X SHTG

1-HOUR COLUMN PROTECTION 13

NOT USED 8

NOT USED 9

1 LAYER GYPSUM WALLBOARD, STEEL COLUMN COVER PER 2022 CBC SECTION 722.5.1.2

BASE LAYER MIN. 5/8" TYPE X GYPSUM WALLBOARD APPLIED VERTICALLY AROUND TUBE STEEL COLUMN WITH NO HORIZONTAL JOINTS AND HELD IN PLACE WITH PAPER MASKING TAPE. FACE LAYER EITHER NO. 24 MSG GALVANIZED STEEL COLUMN COVER CONSISTING OF TWO L-SHAPED SECTIONS WITH SNAP-LOCK SHEET STEEL JOINTS OR NO. 22 MSG GALVANIZED STEEL COLUMN COVERS CONSISTING OF TWO L-SHAPED SECTIONS WITH LAP JOINTS FASTENED WITH NO. 8x1/2" SHEET METAL SCREWS 12" O.C.

2 LAYER GYPSUM WALLBOARD, STEEL COLUMN COVER PER 2022 CBC SECTION 722.5.1.2

BASE LAYER MIN. 5/8" TYPE X GYPSUM WALLBOARD APPLIED AROUND TUBE STEEL COLUMN AND HELD IN PLACE WITH PAPER MASKING TAPE. SECOND LAYER 5/8" TYPE X GYPSUM WALLBOARD APPLIED AROUND COLUMN AND HELD IN PLACE WITH PAPER MASKING TAPE. HORIZONTAL JOINTS MUST BE SPACED AT 8' MIN. AND STAGGERED 12" AT SUCCESSIVE LAYERS. FACE LAYER EITHER NO. 24 MSG GALVANIZED STEEL COLUMN COVER CONSISTING OF TWO L-SHAPED SECTIONS WITH SNAP-LOCK SHEET STEEL JOINTS OR NO. 22 MSG GALVANIZED STEEL COLUMN COVERS CONSISTING OF TWO L-SHAPED SECTIONS WITH LAP JOINTS FASTENED WITH NO. 8x1/2" SHEET METAL SCREWS 12" O.C.

1-HOUR COLUMN PROTECTION - SCALE: NTS 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ARCHITECTURAL DETAILS
1 HOUR RATED OPTIONS

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

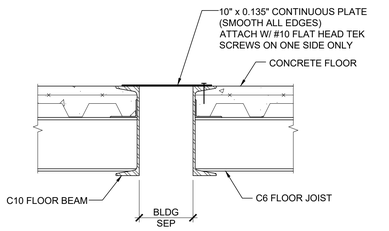
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24175 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

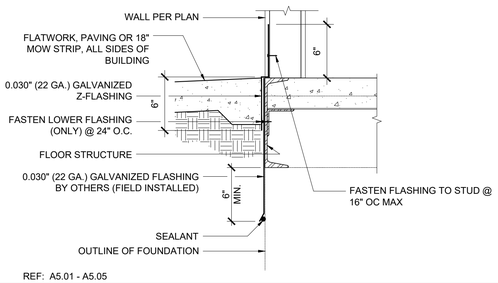
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
A-5.64



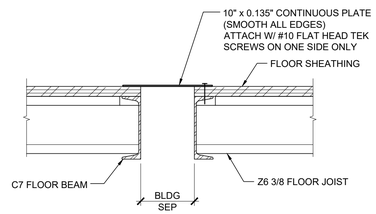
REF: A1.03

FLOOR AT SEPARATION (CONCRETE FLR) SCALE : 1 1/2"=1'-0" | 16



REF: A5.01 - A5.05

SKIRT FLASHING (CONCRETE FLOOR) SCALE : 1 1/2"=1'-0" | 11



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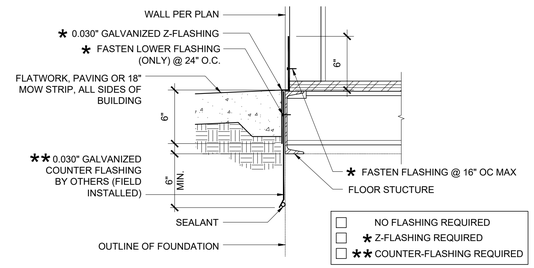

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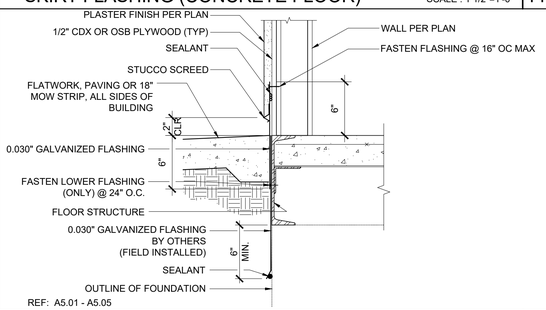
17



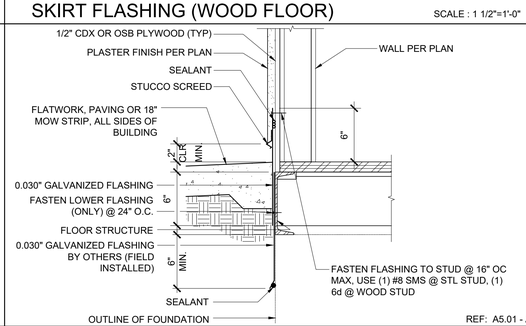
REF: A5.01 - A5.05

SKIRT FLASHING (CONCRETE FLOOR) SCALE : 1 1/2"=1'-0" | 12

NOTE:

1. WHEN THE BUILDING IS INSTALLED AT GROUND LEVEL (BELOW GRADE FOUNDATION OPTION) DETAILS 1,2,5,11,12+15 CAN ONLY BE USED WHERE THE BUILDING SIZE DOES NOT EXCEED 2,160 SF. SEE SHEETS A-5.71 THRU A-5.78 FOR ALTERNATE FLASHING DETAILS FOR BUILDINGS LARGER THAN 2,160 SF.
2. THE DETAILS ON SHEETS A-5.71 THRU A-5.78 MAY BE USED FOR BUILDINGS LESS THAN 2,160 SF.
3. FOR BUILDINGS INSTALLED ON ABOVE GRADE FOUNDATION SYSTEMS (WOOD FOUNDATION OR CONCRETE FOUNDATION WITH ABOVE GRADE STEMWALL) THE DETAILS SHOWN ON THIS SHEET MAY BE USED FOR ANY SIZE BUILDING.
4. FOR BUILDINGS INSTALLED ON ABOVE GRADE FOUNDATION SYSTEMS (WOOD FOUNDATION OR CONCRETE FOUNDATION WITH ABOVE GRADE STEMWALL) THE FLATWORK/PAVING/MOW STRIP WHICH IS INDICATED IN THE DETAILS ON THIS SHEET SHALL BE OMITTED.

7



REF: A5.01 - A5.05

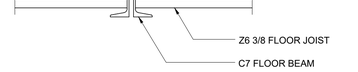
SKIRT FLASHING (WOOD FLOOR) SCALE : 1 1/2"=1'-0" | 2

18

REF: A1.01 - A1.03

FLOOR AT MODLINE (CONCRETE FLOOR) SCALE : 1 1/2"=1'-0" | 13

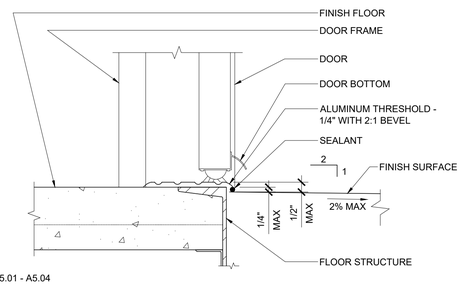
8



REF: A1.01 - A1.03

FLOOR AT MODLINE (WOOD FLOOR) SCALE : 1 1/2"=1'-0" | 3

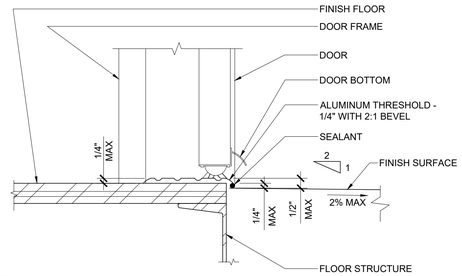
19



REF: A5.01 - A5.04

THRESHOLD SCALE : 3"=1'-0" | 14

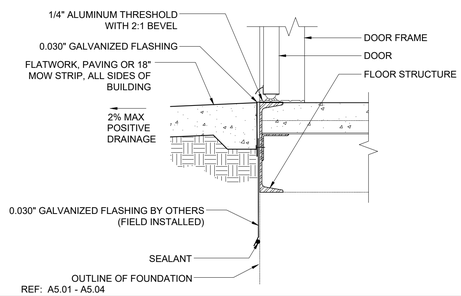
9



REF: A5.01 - A5.04

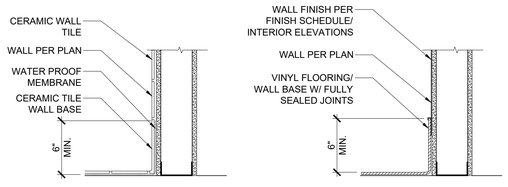
THRESHOLD SCALE : 3"=1'-0" | 4

20

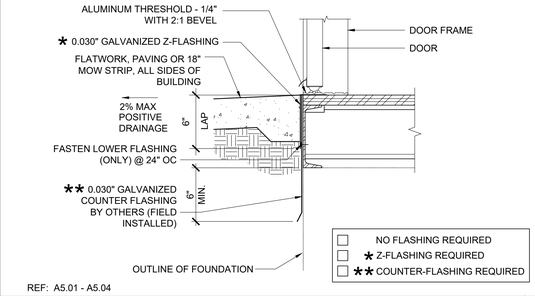


REF: A5.01 - A5.04

TYPICAL SILL AT FLOOR (CONCRETE FLOOR) SCALE : 1 1/2"=1'-0" | 15



WALL BASE AT TOILET ROOMS SCALE : 1 1/2"=1'-0" | 10



REF: A5.01 - A5.04

TYPICAL SILL AT FLOOR (WOOD FLOOR) SCALE : 1 1/2"=1'-0" | 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ARCHITECTURAL DETAILS

FLOOR

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
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Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

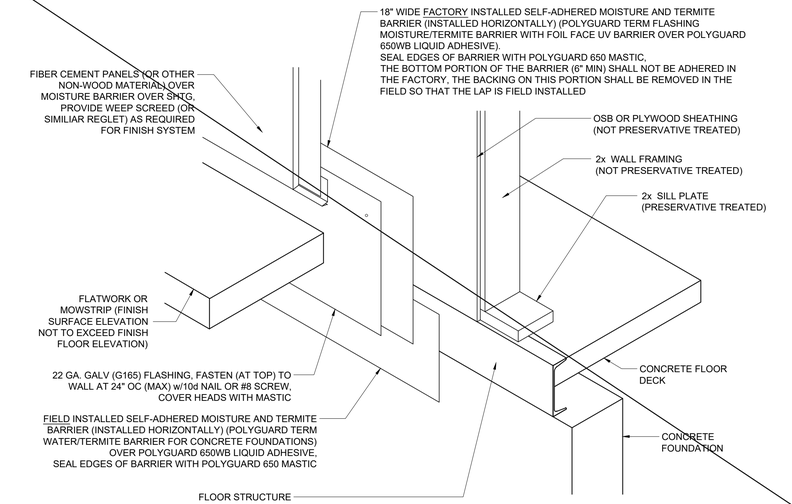
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

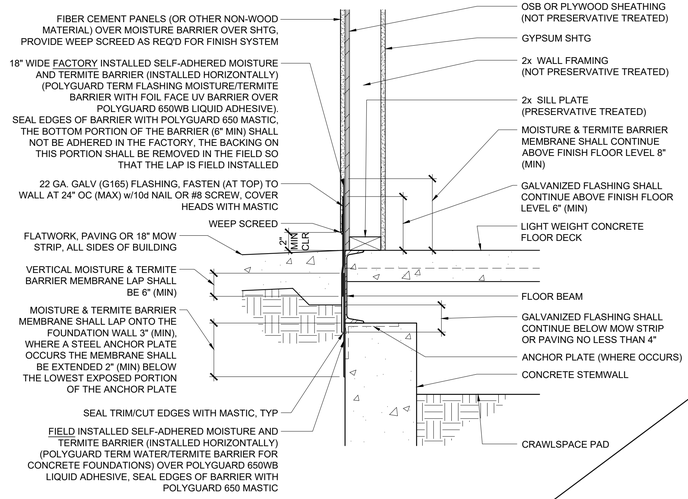
P.C. SHEET NUMBER

A-5.70



NOTE:
SEE DETAIL 10/- FOR DETERIORATION PROTECTION REQUIREMENTS

ISOMETRIC VIEW

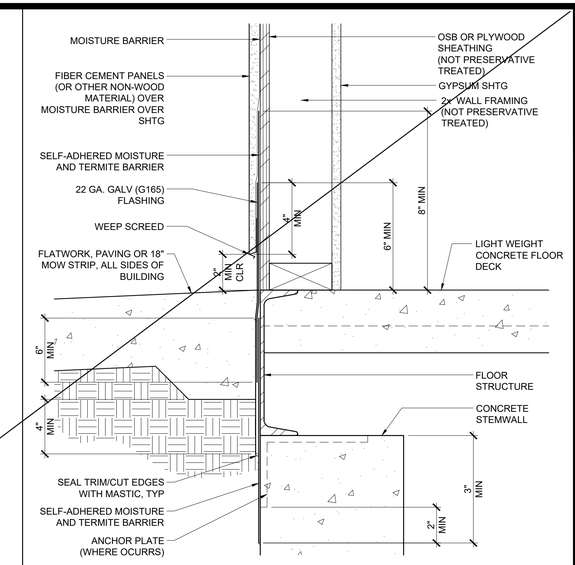


NOTE:
WHERE THE EXTERIOR GRADE IS BELOW THE TOP OF THE FOUNDATION WALL AND THE BOTTOM OF THE FOUNDATION ANCHOR PLATE(S) (WHERE OCCURS) THE FLASHING AND MEMBRANE OCCURRING BELOW GRADE MAY BE OMITTED.

SECTION VIEW

DETERIORATION PROTECTION

SCALE : NTS | 7



NOTE:
SEE DETAIL 7/- FOR MORE INFO ON FLASHING & DETERIORATION PROTECTION

TYPICAL EXTERIOR WALL SILL

SCALE : NTS | 2

OUTSIDE CORNER

INSIDE CORNER

DETERIORATION PROTECTION - CORNER CONDITIONS

SCALE : NTS | 14

MOISUTRE AND TERMITE BARRIER MEMBRANE FLASHING INSTALLATION REQUIREMENTS

- ALL SURFACES SHALL BE CLEAN (FREE OF DIRT, DUST, OIL AND OTHER DEBRIS) PRIOR TO APPLICATION OF THE ADHESIVE AND MEMBRANE.
- ALL SURFACE VOIDS GREATER THAN 1/8" IN WIDTH SHALL BE FILLED WITH SEALANT PRIOR TO INSTALLATION.
- APPLY LIQUID ADHESIVE TO ALL SURFACES WHICH WILL RECEIVE THE FLASHING BARRIER.
- CUT PIECES OF MEMBRANE TO LENGTH AS NEEDED AND APPLY TO SUBSTRATE ONCE THE LIQUID ADHESIVE HAS BECOME TACKY. IMMEDIATELY PRIOR TO MEMBRANE APPLICATION, THE INSTALLER SHALL VERIFY THAT THE ADHESIVE IS STILL TACKY TO THE TOUCH, IF NECESSARY A SECOND LAYER OF ADHESIVE SHALL BE PROVIDED.
- INSTALL MEMBRANE IN A HORIZONTAL ORIENTATION.
- WHERE A HORIZONTAL LAP OCCURS, THE JOINTS SHALL BE LAPPED 2 1/2 INCHES MINIMUM.
- AT BUILDING CORNERS THE MEMBRANE SHALL BE WRAPPED AROUND THE CORNER AND SHALL EXTEND NO LESS THAN 6" BEYOND THE CORNER PRIOR TO LAPPING ANOTHER SHEET. SEE DETAIL 14/-
- WHERE ARE MODULE JOINT (MODLINE) OCCURS THE FACTORY INSTALLED MEMBRANE SHALL BE TERMINATED WITHIN 1" OF THE EDGE OF THE MODULE. A FIELD INSTALLED MEMBRANE PIECE SHALL BE APPLIED FOLLOWING THE INSTALLATION OF THE MODULES ON THE FOUNDATION. THE FIELD INSTALLED MEMBRANE PIECE SHALL LAP THE FACTORY INSTALLED MEMBRANE 3" MINIMUM AT EACH END.
- WHERE A VERTICAL LAP OCCURS THE UPPER MEMBRANE LAYER SHALL BE LAPPED OVER THE LOWER MEMBRANE LAYER 6" MINIMUM.
- THE MEMBRANE SHALL BE ROLLED FIRMLY INTO PLACE USING HAND ROLLER.
- APPLY MASTIC OR SEALANT TO TERMINATING EDGES AND AROUND PIPES OR OTHER PENETRATIONS.
- WHERE THE SURFACES ARE OFFSET MORE THAN 1/8" OUT-OF-PLANE PROVIDE SEALANT OR ANOTHER STABLE MATERIAL TO TRANSITION BETWEEN THE SURFACES.
- WHERE A HORIZONTAL LAP OCCURS IN THE GALVANIZED FLASHING THE JOINTS SHALL BE LAPPED 2 1/2" MINIMUM
- REFER TO DETAIL 20/- FOR MODLINE DETERIORATION PROTECTION

REPAIR REQUIREMENTS

WHERE DAMAGE OCCURS, THE REPAIRS SHALL BE AS FOLLOWS:

1. WHERE THE DAMAGE MEASURES LESS THAN ½" IN ANY DIRECTION THE PUNCTURE SHALL BE SEALED WITH MASTIC.
2. WHERE THE DAMAGE MEASURES MORE THAN ½", BUT LESS THAN 2", IN ANY DIRECTION A PATCH SHALL BE INSTALLED OVER THE DAMAGE USING THE SAME MEMBRANE MATERIAL. THE PATCH SHALL OVERLAP 4" MINIMUM IN ALL DIRECTION.
3. WHERE THE DAMAGE MEASURES MORE THAN 2" IN ANY DIRECTION THE DAMAGED PORTION SHALL BE REMOVE AND A PIECE OF MEMBRANE SHALL BE INSTALLED. THE PATCH SHALL OVERLAP 4" MINIMUM IN ALL DIRECTIONS.

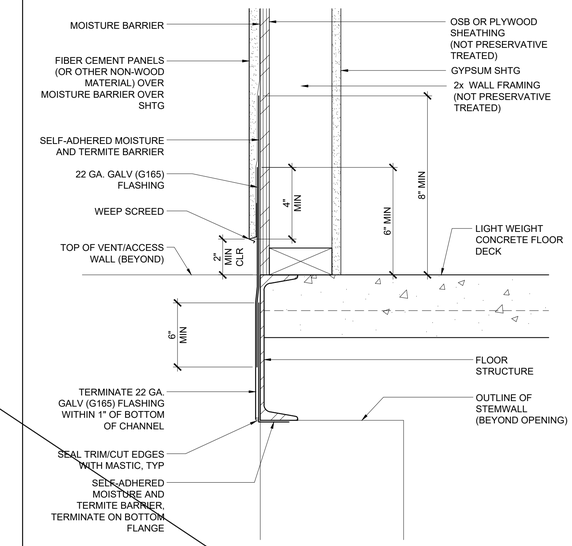
INSPECTION REQUIREMENTS

THE IN-PLANT INSPECTOR SHALL OBSERVE THE INSTALLATION OF FACTORY INSTALLED PORTION OF THE MEMBRANE FLASHING. THE ADHESIVE AND MEMBRANE SHALL BE INSTALLED IN ACCORDANCE WITH THESE INSTALLATION INSTRUCTIONS. ALL OVERLAPS SHALL BE AS INDICATED WITHIN THIS DRAWING PACKAGE. THE MEMBRANE SHALL BE CONTINUOUS UP THE WALL TO A MINIMUM HEIGHT ABOVE FINISH FLOOR AS INDICATED WITHIN THIS DRAWING PACKAGE.

THE ON-SITE INSPECTOR SHALL OBSERVE THE INSTALLATION OF THE SITE INSTALLED PORTION OF THE MEMBRANE FLASHING. THE FACTORY INSTALLED MEMBRANE SHOULD BE INVESTIGATED TO DETERMINE IF ANY DAMAGE OCCURRED DURING MODULE SHIPMENT/INSTALLATION PRIOR TO PROCEEDING WITH THE SITE INSTALLED MEMBRANE PLACEMENT. THE ADHESIVE AND MEMBRANE SHALL BE INSTALLED IN ACCORDANCE WITH THESE INSTALLATION INSTRUCTIONS. ALL OVERLAPS SHALL BE AS INDICATED WITHIN THIS DRAWING PACKAGE. THE MEMBRANE SHALL BE LAPPED ONTO THE FOUNDATION WALL AS INDICATED WITHIN THIS DRAWING PACKAGE. THE GALVANIZED FLASHING SHALL BE INSTALLED OVER THE MEMBRANE. THE GALVANIZED FLASHING SHALL BE CONTINUOUS UP THE WALL TO A MINIMUM HEIGHT ABOVE FINISH FLOOR AS INDICATED WITHIN THIS DRAWING PACKAGE AND SHALL CONTINUE BELOW THE BOTTOM OF THE FLATWORK OR MOW STRIP AS INDICATED WITHIN THIS DRAWING PACKAGE.

DETERIORATION PROTECTION REQUIREMENTS

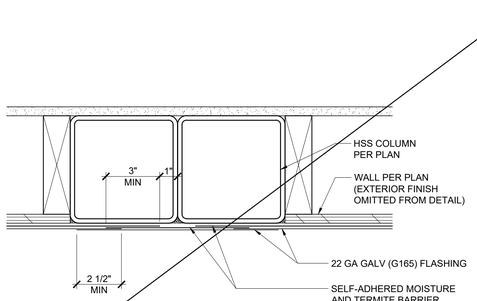
10



NOTE:
SEE DETAIL 7/- FOR MORE INFO ON FLASHING & DETERIORATION PROTECTION

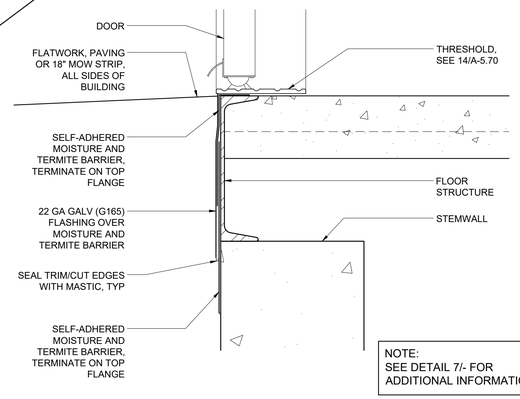
EXTERIOR WALL SILL @VENT / ACCESS

SCALE : NTS | 4



DETERIORATION PROTECTION - MODLINE

SCALE : NTS | 20



NOTE:
SEE DETAIL 7/- FOR ADDITIONAL INFORMATION

DETERIORATION PROTECTION @ THRESHOLD

15

5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

DETERIORATION PROTECTION
NON-WOOD FINISH SIDING
CONC FLOOR - WD STUDS

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
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2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

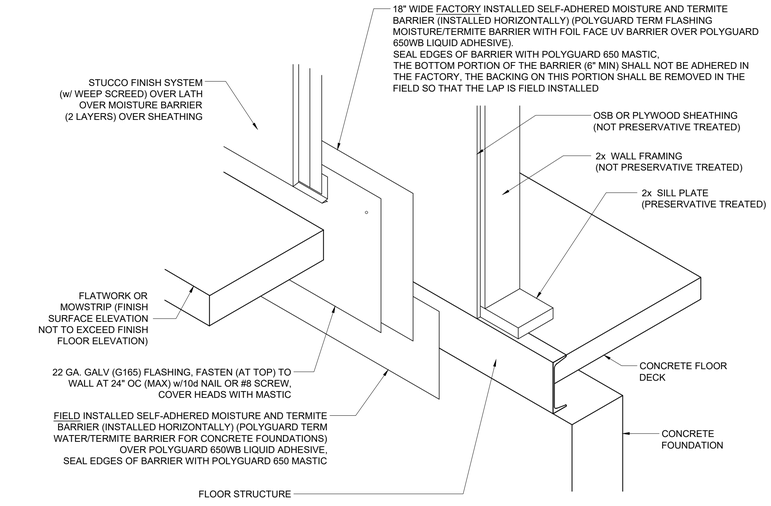
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24075 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

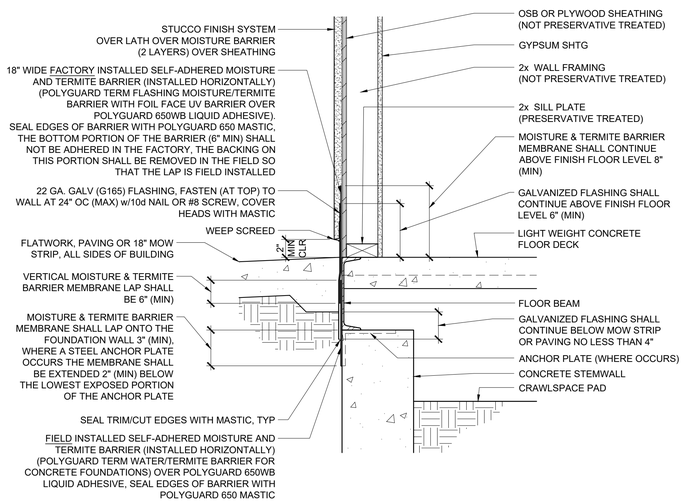
P.C. SHEET NUMBER

A-5.71



NOTE:
SEE DETAIL 10/- FOR DETERIORATION PROTECTION REQUIREMENTS

ISOMETRIC VIEW



NOTE:
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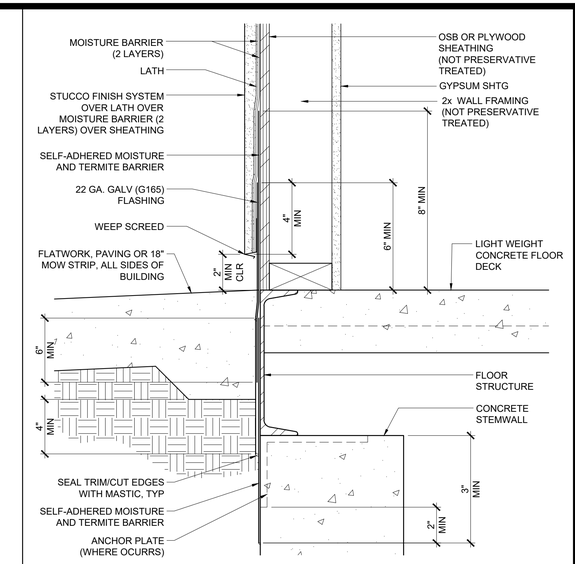
SECTION VIEW

DETERIORATION PROTECTION

SCALE : NTS | 7



NOTE:
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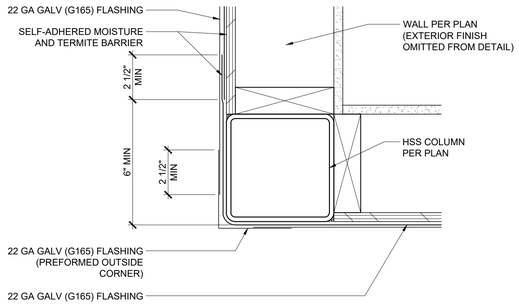
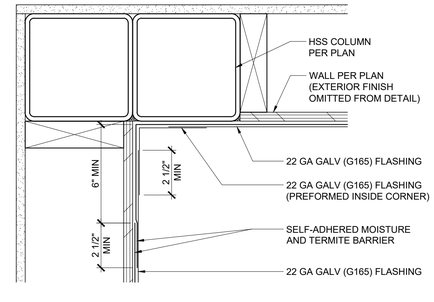
TYPICAL EXTERIOR WALL SILL

SCALE : NTS | 2



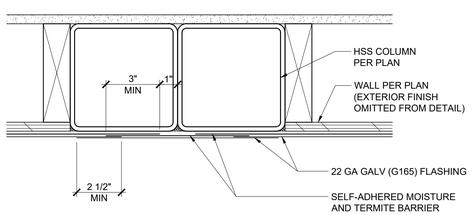
OUTSIDE CORNER



INSIDE CORNER

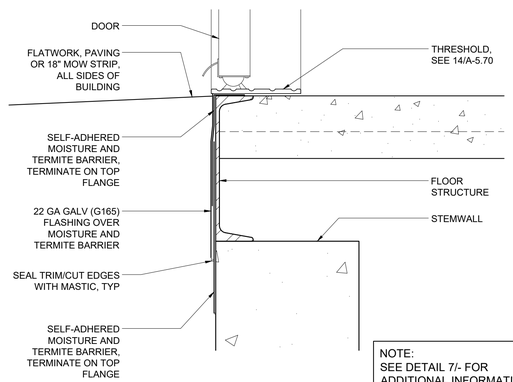
DETERIORATION PROTECTION - CORNER CONDITIONS

SCALE : NTS | 14



DETERIORATION PROTECTION - MODLINE

SCALE : NTS | 20



NOTE:
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DETERIORATION PROTECTION @ THRESHOLD

SCALE : NTS | 15

MOISUTRE AND TERMITE BARRIER MEMBRANE FLASHING INSTALLATION REQUIREMENTS

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- APPLY LIQUID ADHESIVE TO ALL SURFACES WHICH WILL RECEIVE THE FLASHING BARRIER.
- CUT PIECES OF MEMBRANE TO LENGTH AS NEEDED AND APPLY TO SUBSTRATE ONCE THE LIQUID ADHESIVE HAS BECOME TACKY. IMMEDIATELY PRIOR TO MEMBRANE APPLICATION, THE INSTALLER SHALL VERIFY THAT THE ADHESIVE IS STILL TACKY TO THE TOUCH, IF NECESSARY A SECOND LAYER OF ADHESIVE SHALL BE PROVIDED.
- INSTALL MEMBRANE IN A HORIZONTAL ORIENTATION.
- WHERE A HORIZONTAL LAP OCCURS, THE JOINTS SHALL BE LAPPED 2 1/2 INCHES MINIMUM.
- AT BUILDING CORNERS THE MEMBRANE SHALL BE WRAPPED AROUND THE CORNER AND SHALL EXTEND NO LESS THAN 6" BEYOND THE CORNER PRIOR TO LAPPING ANOTHER SHEET. SEE DETAIL 14/-
- WHERE ARE MODULE JOINT (MODLINE) OCCURS THE FACTORY INSTALLED MEMBRANE SHALL BE TERMINATED WITHIN 1" OF THE EDGE OF THE MODULE. A FIELD INSTALLED MEMBRANE PIECE SHALL BE APPLIED FOLLOWING THE INSTALLATION OF THE MODULES ON THE FOUNDATION. THE FIELD INSTALLED MEMBRANE PIECE SHALL LAP THE FACTORY INSTALLED MEMBRANE 3" MINIMUM AT EACH END.
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2. WHERE THE DAMAGE MEASURES MORE THAN ½", BUT LESS THAN 2", IN ANY DIRECTION A PATCH SHALL BE INSTALLED OVER THE DAMAGE USING THE SAME MEMBRANE MATERIAL. THE PATCH SHALL OVERLAP 4" MINIMUM IN ALL DIRECTION.
3. WHERE THE DAMAGE MEASURES MORE THAN 2" IN ANY DIRECTION THE DAMAGED PORTION SHALL BE REMOVE AND A PIECE OF MEMBRANE SHALL BE INSTALLED. THE PATCH SHALL OVERLAP 4" MINIMUM IN ALL DIRECTIONS.

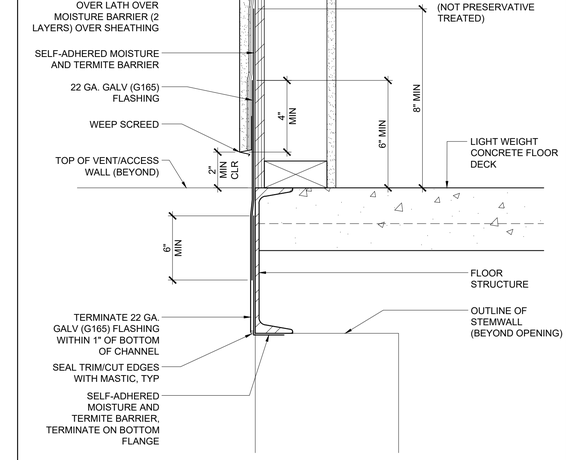
INSPECTION REQUIREMENTS

THE IN-PLANT INSPECTOR SHALL OBSERVE THE INSTALLATION OF FACTORY INSTALLED PORTION OF THE MEMBRANE FLASHING. THE ADHESIVE AND MEMBRANE SHALL BE INSTALLED IN ACCORDANCE WITH THESE INSTALLATION INSTRUCTIONS. ALL OVERLAPS SHALL BE AS INDICATED WITHIN THIS DRAWING PACKAGE. THE MEMBRANE SHALL BE CONTINUOUS UP THE WALL TO A MINIMUM HEIGHT ABOVE FINISH FLOOR AS INDICATED WITHIN THIS DRAWING PACKAGE.

THE ON-SITE INSPECTOR SHALL OBSERVE THE INSTALLATION OF THE SITE INSTALLED PORTION OF THE MEMBRANE FLASHING. THE FACTORY INSTALLED MEMBRANE SHOULD BE INVESTIGATED TO DETERMINE IF ANY DAMAGE OCCURRED DURING MODULE SHIPMENT/INSTALLATION PRIOR TO PROCEEDING WITH THE SITE INSTALLED MEMBRANE PLACEMENT. THE ADHESIVE AND MEMBRANE SHALL BE INSTALLED IN ACCORDANCE WITH THESE INSTALLATION INSTRUCTIONS. ALL OVERLAPS SHALL BE AS INDICATED WITHIN THIS DRAWING PACKAGE. THE MEMBRANE SHALL BE LAPPED ONTO THE FOUNDATION WALL AS INDICATED WITHIN THIS DRAWING PACKAGE. THE GALVANIZED FLASHING SHALL BE INSTALLED OVER THE MEMBRANE. THE GALVANIZED FLASHING SHALL BE CONTINUOUS UP THE WALL TO A MINIMUM HEIGHT ABOVE FINISH FLOOR AS INDICATED WITHIN THIS DRAWING PACKAGE AND SHALL CONTINUE BELOW THE BOTTOM OF THE FLATWORK OR MOW STRIP AS INDICATED WITHIN THIS DRAWING PACKAGE.

DETERIORATION PROTECTION REQUIREMENTS

10



NOTE:
SEE DETAIL 7/- FOR MORE INFO ON FLASHING & DETERIORATION PROTECTION

EXTERIOR WALL SILL @VENT / ACCESS

SCALE : NTS | 4

5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

DETERIORATION PROTECTION
STUCCO EXTERIOR FINISH
CONC FLOOR - WD STUDS

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

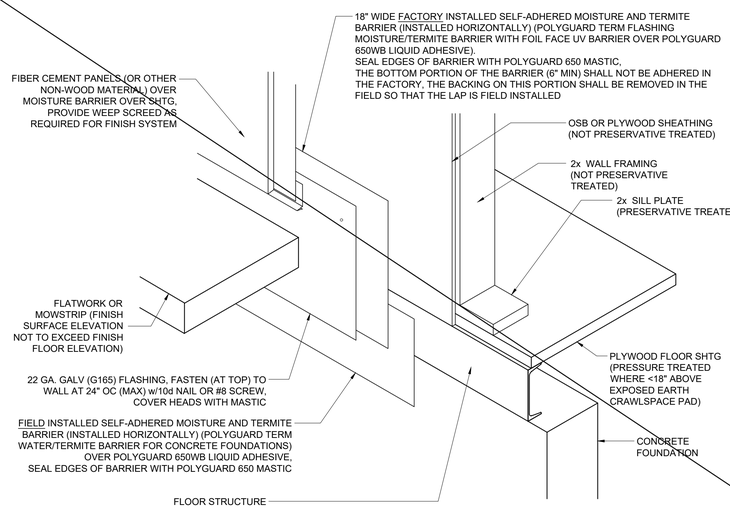
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

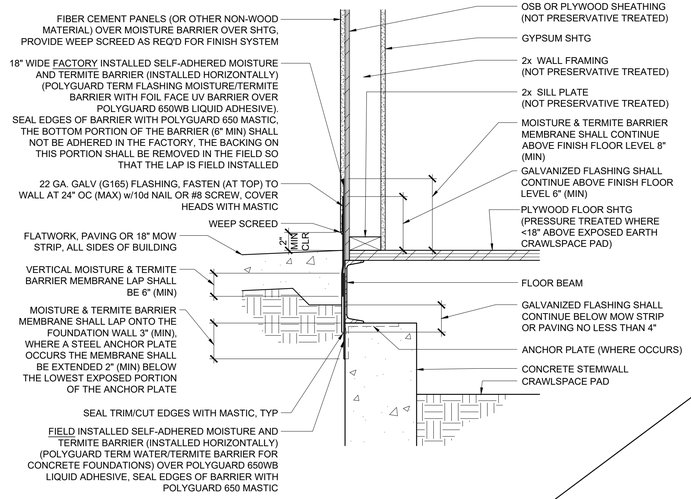
P.C. SHEET NUMBER

A-5.72



NOTE:
SEE DETAIL 10/- FOR DETERIORATION PROTECTION REQUIREMENTS

ISOMETRIC VIEW

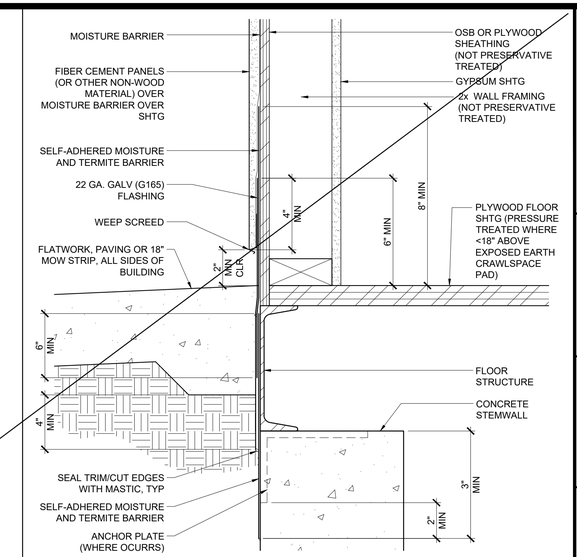


NOTE:
WHERE THE EXTERIOR GRADE IS BELOW THE TOP OF THE FOUNDATION WALL AND THE BOTTOM OF THE FOUNDATION ANCHOR PLATE(S) (WHERE OCCURS) THE FLASHING AND MEMBRANE OCCURRING BELOW GRADE MAY BE OMITTED.

SECTION VIEW

DETERIORATION PROTECTION

SCALE : NTS | 7



NOTE:
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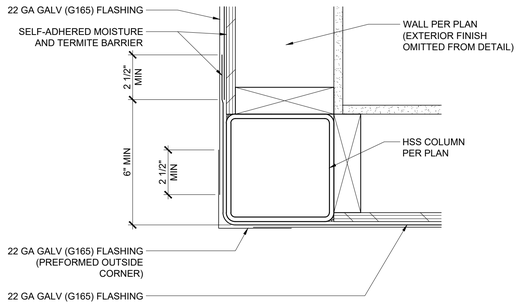
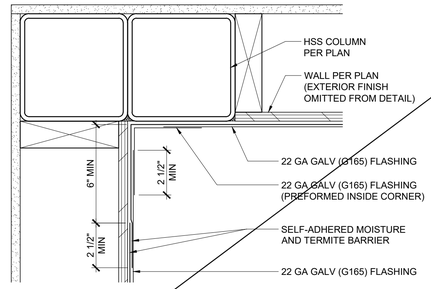
TYPICAL EXTERIOR WALL SILL

SCALE : NTS | 2



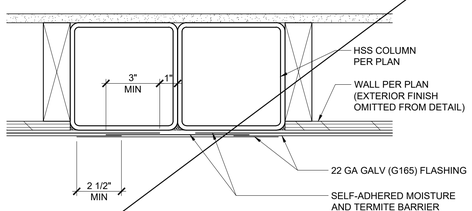
OUTSIDE CORNER



INSIDE CORNER

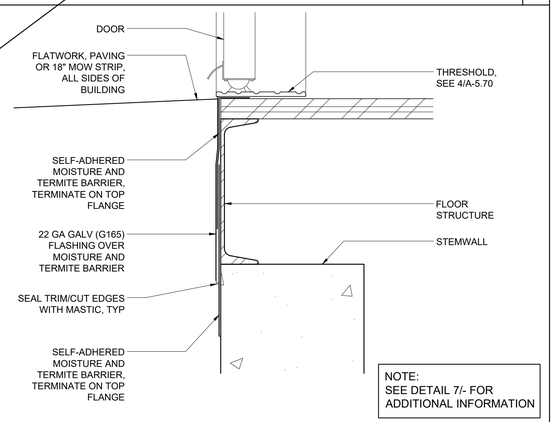
DETERIORATION PROTECTION - CORNER CONDITIONS

SCALE : NTS | 14



DETERIORATION PROTECTION - MODLINE

SCALE : NTS | 20



NOTE:
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DETERIORATION PROTECTION @ THRESHOLD

15

MOISUTRE AND TERMITE BARRIER MEMBRANE FLASHING INSTALLATION REQUIREMENTS

- ALL SURFACES SHALL BE CLEAN (FREE OF DIRT, DUST, OIL AND OTHER DEBRIS) PRIOR TO APPLICATION OF THE ADHESIVE AND MEMBRANE.
- ALL SURFACE VOIDS GREATER THAN 1/8" IN WIDTH SHALL BE FILLED WITH SEALANT PRIOR TO INSTALLATION.
- APPLY LIQUID ADHESIVE TO ALL SURFACES WHICH WILL RECEIVE THE FLASHING BARRIER.
- CUT PIECES OF MEMBRANE TO LENGTH AS NEEDED AND APPLY TO SUBSTRATE ONCE THE LIQUID ADHESIVE HAS BECOME TACKY. IMMEDIATELY PRIOR TO MEMBRANE APPLICATION, THE INSTALLER SHALL VERIFY THAT THE ADHESIVE IS STILL TACKY TO THE TOUCH, IF NECESSARY A SECOND LAYER OF ADHESIVE SHALL BE PROVIDED.
- INSTALL MEMBRANE IN A HORIZONTAL ORIENTATION.
- WHERE A HORIZONTAL LAP OCCURS, THE JOINTS SHALL BE LAPPED 2 1/2 INCHES MINIMUM.
- AT BUILDING CORNERS THE MEMBRANE SHALL BE WRAPPED AROUND THE CORNER AND SHALL EXTEND NO LESS THAN 6" BEYOND THE CORNER PRIOR TO LAPPING ANOTHER SHEET. SEE DETAIL 14/-
- WHERE ARE MODULE JOINT (MODLINE) OCCURS THE FACTORY INSTALLED MEMBRANE SHALL BE TERMINATED WITHIN 1" OF THE EDGE OF THE MODULE. A FIELD INSTALLED MEMBRANE PIECE SHALL BE APPLIED FOLLOWING THE INSTALLATION OF THE MODULE ON THE FOUNDATION. THE FIELD INSTALLED MEMBRANE PIECE SHALL LAP THE FACTORY INSTALLED MEMBRANE 3" MINIMUM AT EACH END.
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- THE MEMBRANE SHALL BE ROLLED FIRMLY INTO PLACE USING HAND ROLLER.
- APPLY MASTIC OR SEALANT TO TERMINATING EDGES AND AROUND PIPES OR OTHER PENETRATIONS.
- WHERE THE SURFACES ARE OFFSET MORE THAN 1/8" OUT-OF-PLANE PROVIDE SEALANT OR ANOTHER STABLE MATERIAL TO TRANSITION BETWEEN THE SURFACES.
- WHERE A HORIZONTAL LAP OCCURS IN THE GALVANIZED FLASHING THE JOINTS SHALL BE LAPPED 2 1/2" MINIMUM
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REPAIR REQUIREMENTS

WHERE DAMAGE OCCURS, THE REPAIRS SHALL BE AS FOLLOWS:

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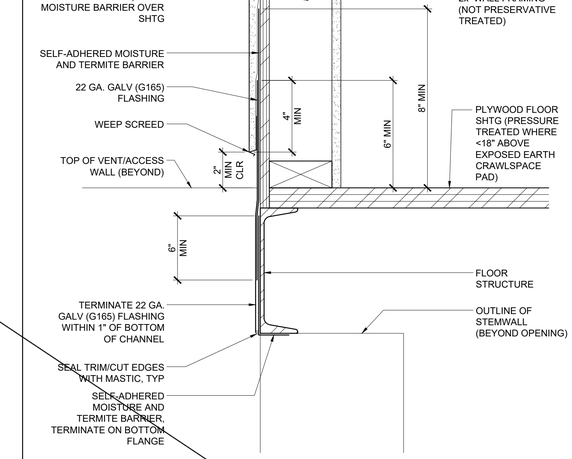
DETERIORATION PROTECTION REQUIREMENTS

10



NOTE:
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EXTERIOR WALL SILL @VENT / ACCESS

SCALE : NTS | 4

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

DETERIORATION PROTECTION NON-WOOD FINISH SIDING WOOD FLOOR - WD STUDS

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
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DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

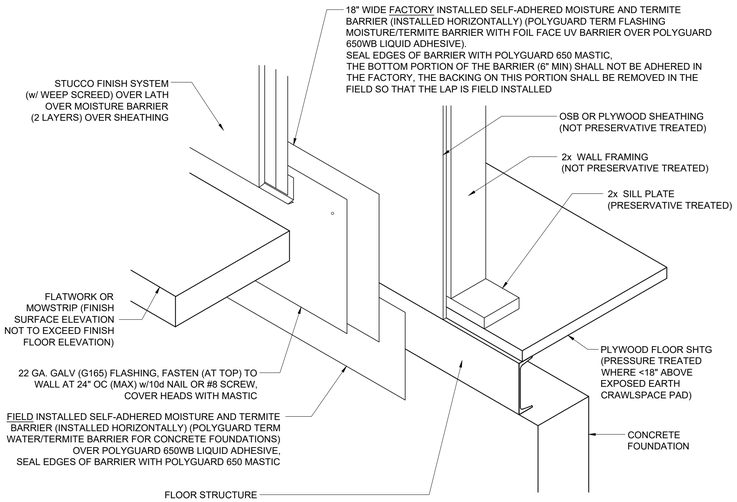
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24075 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-5.73



NOTE:
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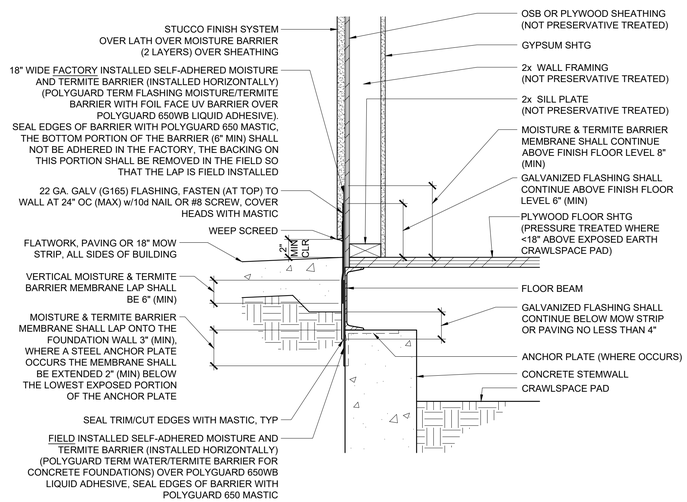
ISOMETRIC VIEW



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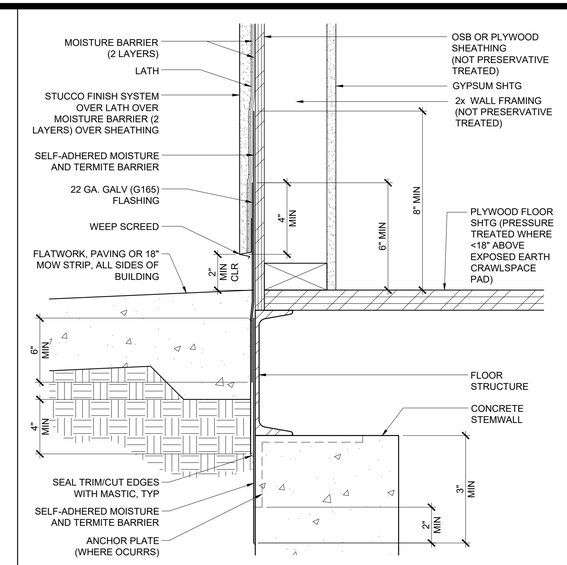
SECTION VIEW

DETERIORATION PROTECTION

SCALE : NTS | 7



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TYPICAL EXTERIOR WALL SILL

SCALE : NTS | 2

OUTSIDE CORNER

INSIDE CORNER

DETERIORATION PROTECTION - CORNER CONDITIONS

SCALE : NTS | 14

MOISUTRE AND TERMITE BARRIER MEMBRANE FLASHING INSTALLATION REQUIREMENTS

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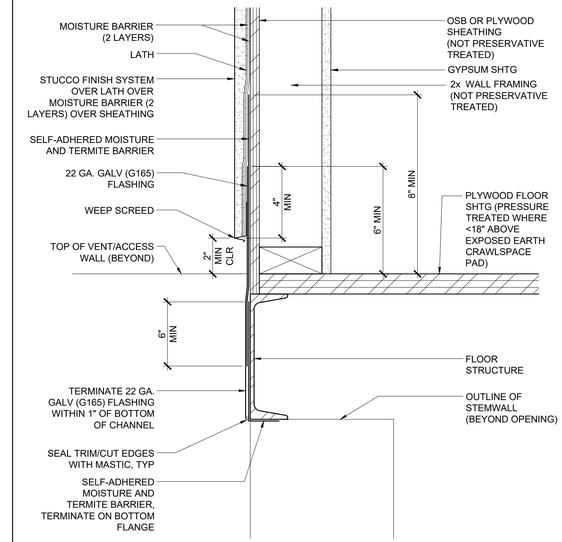
DETERIORATION PROTECTION REQUIREMENTS

10



NOTE:
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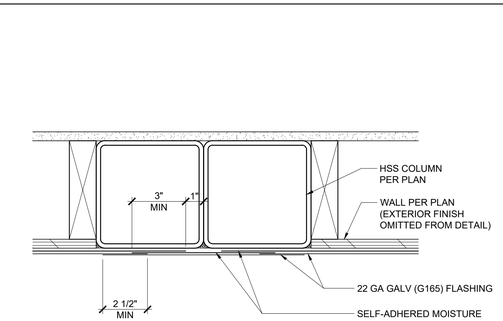
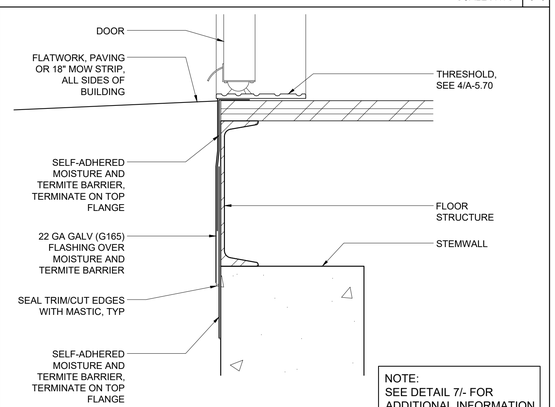
EXTERIOR WALL SILL @VENT / ACCESS

SCALE : NTS | 4



DETERIORATION PROTECTION - MODLINE

SCALE : NTS | 20



NOTE:
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DETERIORATION PROTECTION @ THRESHOLD

15

DETERIORATION PROTECTION

5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

DETERIORATION PROTECTION
STUCCO EXTERIOR FINISH
WOOD FLOOR - WD STUDS

REVISIONS

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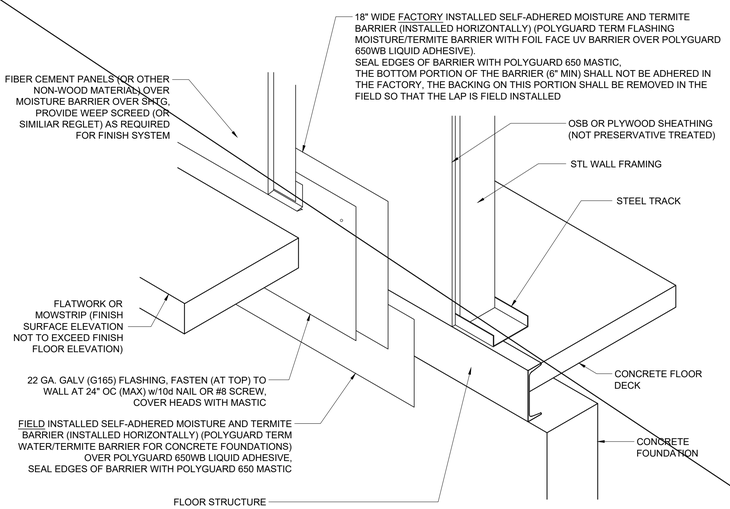
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24075 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-5.74



NOTE:
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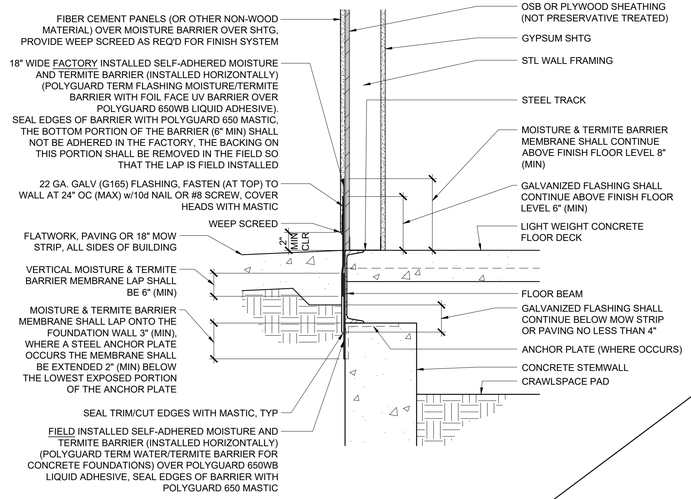
ISOMETRIC VIEW



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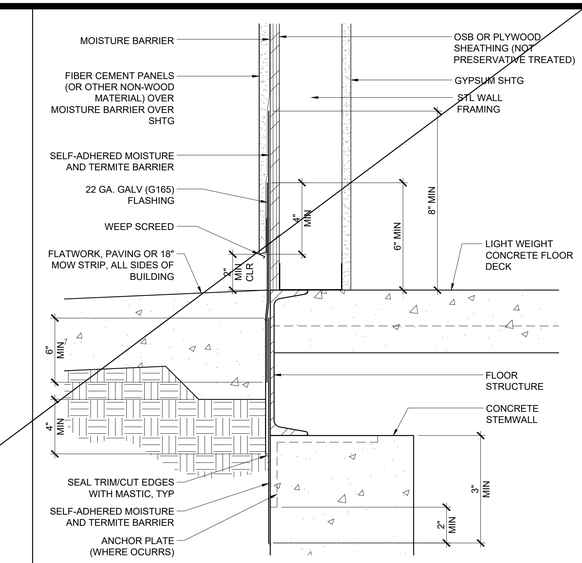
SECTION VIEW

DETERIORATION PROTECTION

SCALE : NTS | 7



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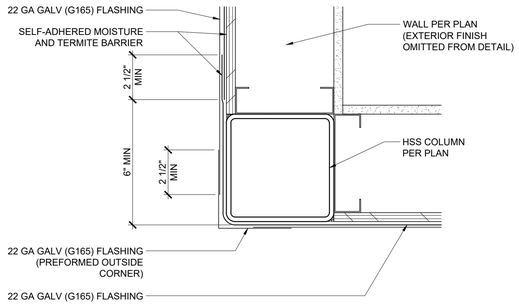
TYPICAL EXTERIOR WALL SILL

SCALE : NTS | 2



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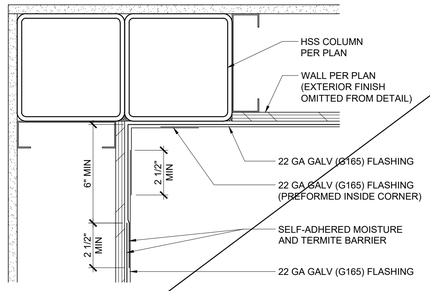

INSIDE CORNER

DETERIORATION PROTECTION - CORNER CONDITIONS

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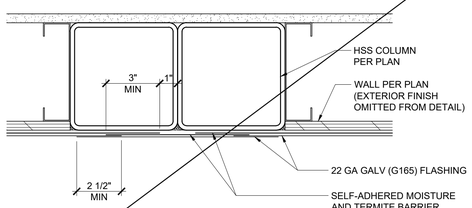
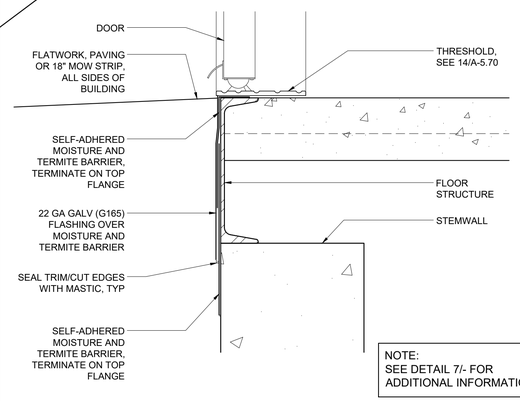


DETERIORATION PROTECTION - MODLINE

SCALE : NTS | 20



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DETERIORATION PROTECTION @ THRESHOLD

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- CUT PIECES OF MEMBRANE TO LENGTH AS NEEDED AND APPLY TO SUBSTRATE ONCE THE LIQUID ADHESIVE HAS BECOME TACKY. IMMEDIATELY PRIOR TO MEMBRANE APPLICATION, THE INSTALLER SHALL VERIFY THAT THE ADHESIVE IS STILL TACKY TO THE TOUCH, IF NECESSARY A SECOND LAYER OF ADHESIVE SHALL BE PROVIDED.
- INSTALL MEMBRANE IN A HORIZONTAL ORIENTATION.
- WHERE A HORIZONTAL LAP OCCURS, THE JOINTS SHALL BE LAPPED 2 1/2 INCHES MINIMUM.
- AT BUILDING CORNERS THE MEMBRANE SHALL BE WRAPPED AROUND THE CORNER AND SHALL EXTEND NO LESS THAN 6" BEYOND THE CORNER PRIOR TO LAPPING ANOTHER SHEET. SEE DETAIL 14/-
- WHERE ARE MODULE JOINT (MODLINE) OCCURS THE FACTORY INSTALLED MEMBRANE SHALL BE TERMINATED WITHIN 1" OF THE EDGE OF THE MODULE. A FIELD INSTALLED MEMBRANE PIECE SHALL BE APPLIED FOLLOWING THE INSTALLATION OF THE MODULES ON THE FOUNDATION. THE FIELD INSTALLED MEMBRANE PIECE SHALL LAP THE FACTORY INSTALLED MEMBRANE 3" MINIMUM AT EACH END.
- WHERE A VERTICAL LAP OCCURS THE UPPER MEMBRANE LAYER SHALL BE LAPPED OVER THE LOWER MEMBRANE LAYER 6" MINIMUM.
- THE MEMBRANE SHALL BE ROLLED FIRMLY INTO PLACE USING HAND ROLLER.
- APPLY MASTIC OR SEALANT TO TERMINATING EDGES AND AROUND PIPES OR OTHER PENETRATIONS.
- WHERE THE SURFACES ARE OFFSET MORE THAN 1/8" OUT-OF-PLANE PROVIDE SEALANT OR ANOTHER STABLE MATERIAL TO TRANSITION BETWEEN THE SURFACES.
- WHERE A HORIZONTAL LAP OCCURS IN THE GALVANIZED FLASHING THE JOINTS SHALL BE LAPPED 2 1/2" MINIMUM
- REFER TO DETAIL 20/- FOR MODLINE DETERIORATION PROTECTION

REPAIR REQUIREMENTS

WHERE DAMAGE OCCURS, THE REPAIRS SHALL BE AS FOLLOWS:

1. WHERE THE DAMAGE MEASURES LESS THAN ½" IN ANY DIRECTION THE PUNCTURE SHALL BE SEALED WITH MASTIC.
2. WHERE THE DAMAGE MEASURES MORE THAN ½", BUT LESS THAN 2", IN ANY DIRECTION A PATCH SHALL BE INSTALLED OVER THE DAMAGE USING THE SAME MEMBRANE MATERIAL. THE PATCH SHALL OVERLAP 4" MINIMUM IN ALL DIRECTION.
3. WHERE THE DAMAGE MEASURES MORE THAN 2" IN ANY DIRECTION THE DAMAGED PORTION SHALL BE REMOVE AND A PIECE OF MEMBRANE SHALL BE INSTALLED. THE PATCH SHALL OVERLAP 4" MINIMUM IN ALL DIRECTIONS.

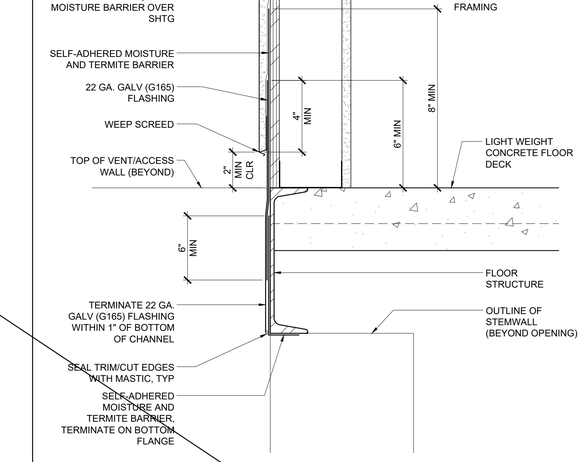
INSPECTION REQUIREMENTS

THE IN-PLANT INSPECTOR SHALL OBSERVE THE INSTALLATION OF FACTORY INSTALLED PORTION OF THE MEMBRANE FLASHING. THE ADHESIVE AND MEMBRANE SHALL BE INSTALLED IN ACCORDANCE WITH THESE INSTALLATION INSTRUCTIONS. ALL OVERLAPS SHALL BE AS INDICATED WITHIN THIS DRAWING PACKAGE. THE MEMBRANE SHALL BE CONTINUOUS UP THE WALL TO A MINIMUM HEIGHT ABOVE FINISH FLOOR AS INDICATED WITHIN THIS DRAWING PACKAGE.

THE ON-SITE INSPECTOR SHALL OBSERVE THE INSTALLATION OF THE SITE INSTALLED PORTION OF THE MEMBRANE FLASHING. THE FACTORY INSTALLED MEMBRANE SHOULD BE INVESTIGATED TO DETERMINE IF ANY DAMAGE OCCURRED DURING MODULE SHIPMENT/INSTALLATION PRIOR TO PROCEEDING WITH THE SITE INSTALLED MEMBRANE PLACEMENT. THE ADHESIVE AND MEMBRANE SHALL BE INSTALLED IN ACCORDANCE WITH THESE INSTALLATION INSTRUCTIONS. ALL OVERLAPS SHALL BE AS INDICATED WITHIN THIS DRAWING PACKAGE. THE MEMBRANE SHALL BE LAPPED ONTO THE FOUNDATION WALL AS INDICATED WITHIN THIS DRAWING PACKAGE. THE GALVANIZED FLASHING SHALL BE INSTALLED OVER THE MEMBRANE. THE GALVANIZED FLASHING SHALL BE CONTINUOUS UP THE WALL TO A MINIMUM HEIGHT ABOVE FINISH FLOOR AS INDICATED WITHIN THIS DRAWING PACKAGE AND SHALL CONTINUE BELOW THE BOTTOM OF THE FLATWORK OR MOW STRIP AS INDICATED WITHIN THIS DRAWING PACKAGE.

DETERIORATION PROTECTION REQUIREMENTS

10



NOTE:
SEE DETAIL 7/- FOR MORE INFO ON FLASHING & DETERIORATION PROTECTION

EXTERIOR WALL SILL @VENT / ACCESS

SCALE : NTS | 4

5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

DETERIORATION PROTECTION
NON-WOOD FINISH SIDING
CONC FLOOR - STL STUDS

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

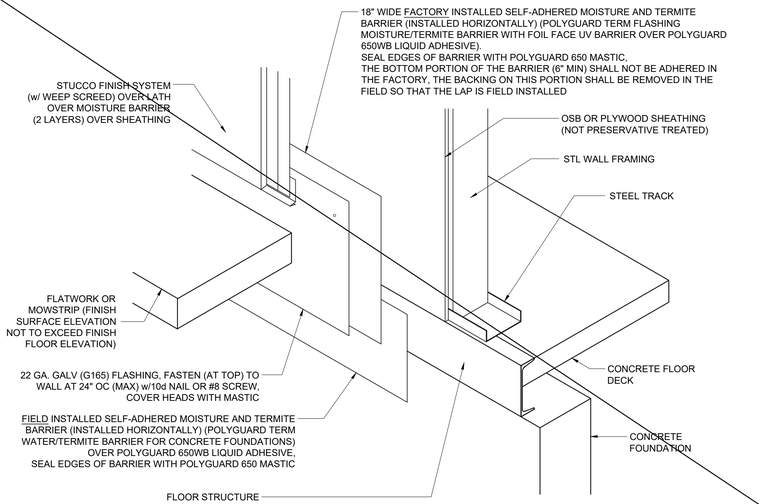
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24075 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

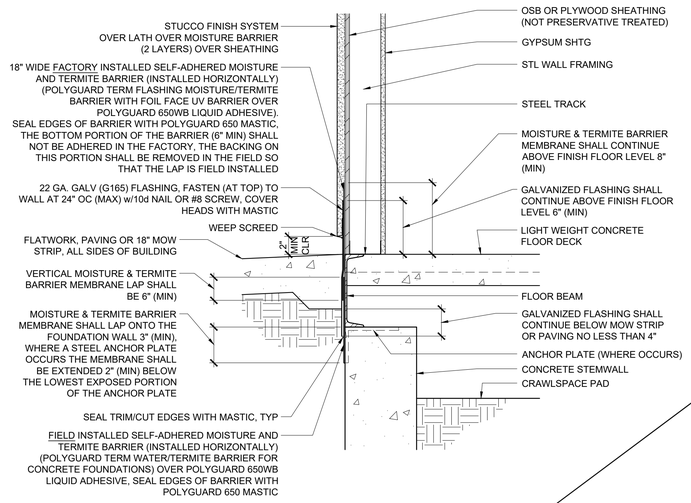
P.C. SHEET NUMBER

A-5.75



NOTE:
SEE DETAIL 10/- FOR DETERIORATION PROTECTION REQUIREMENTS

ISOMETRIC VIEW



NOTE:
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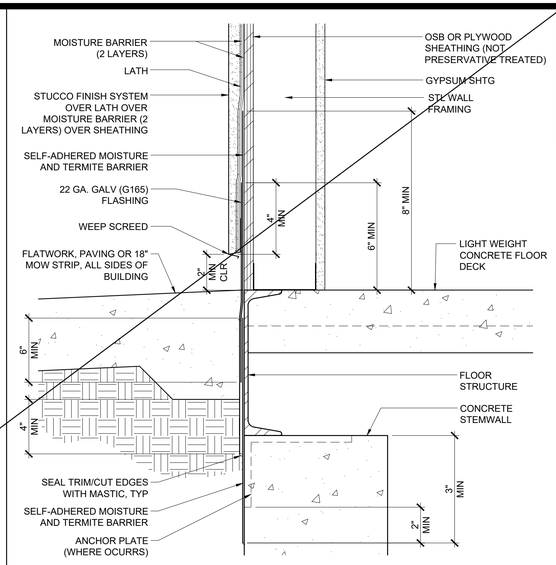
SECTION VIEW



NOTE:
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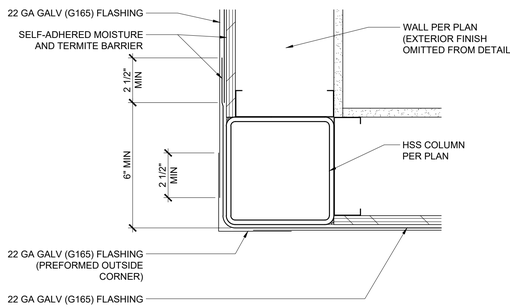
DETERIORATION PROTECTION

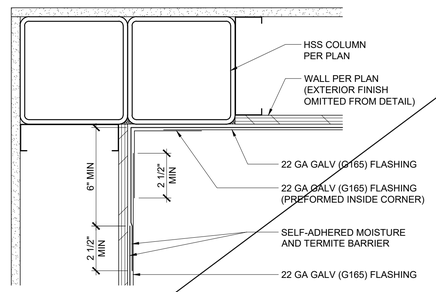
SCALE : NTS | 7

TYPICAL EXTERIOR WALL SILL

SCALE : NTS | 2



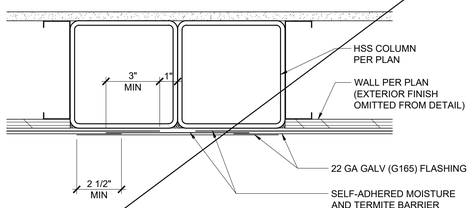
OUTSIDE CORNER



INSIDE CORNER

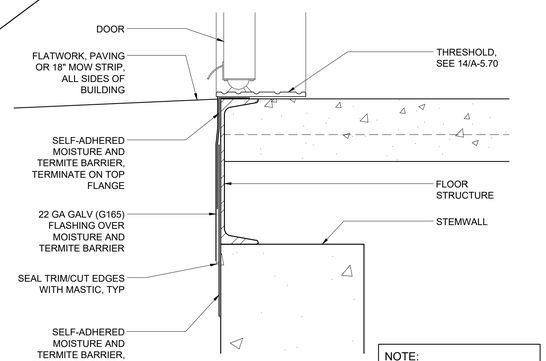
DETERIORATION PROTECTION - CORNER CONDITIONS

SCALE : NTS | 14



DETERIORATION PROTECTION - MODLINE

SCALE : NTS | 20



NOTE:
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DETERIORATION PROTECTION @ THRESHOLD

15

MOISUTRE AND TERMITE BARRIER MEMBRANE FLASHING INSTALLATION REQUIREMENTS

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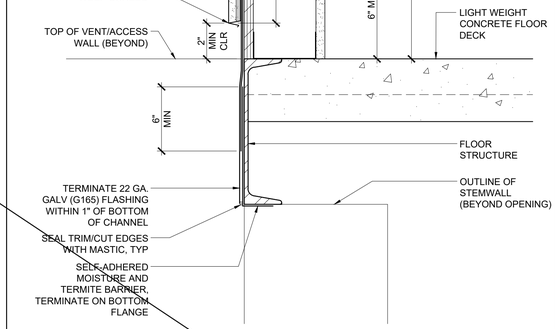
DETERIORATION PROTECTION REQUIREMENTS

10



NOTE:
SEE DETAIL 7/- FOR MORE INFO ON FLASHING & DETERIORATION PROTECTION

EXTERIOR WALL SILL @VENT / ACCESS

SCALE : NTS | 4

5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

DETERIORATION PROTECTION
STUCCO EXTERIOR FINISH
CONC FLOOR - STL STUDS

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

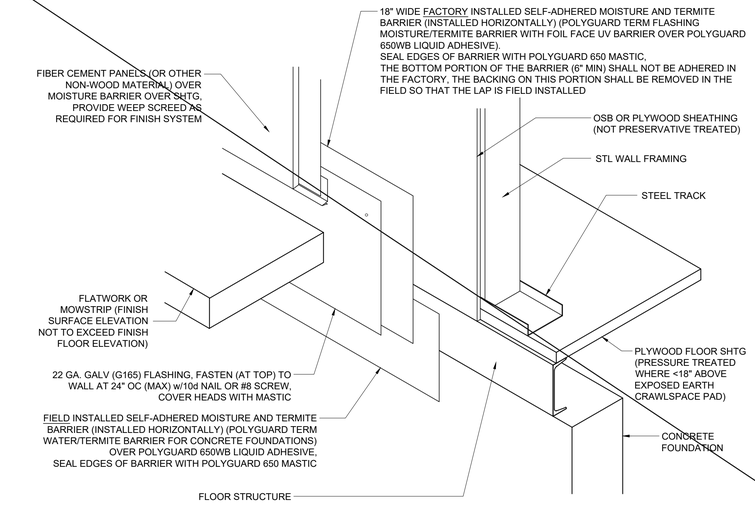
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24075 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

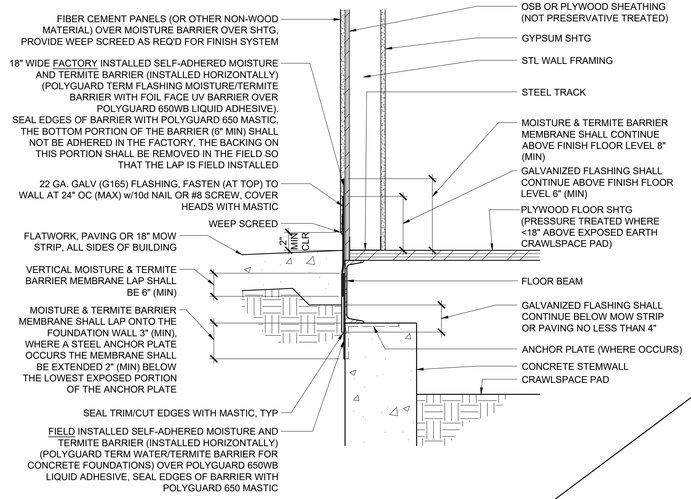
P.C. SHEET NUMBER

A-5.76



NOTE:
SEE DETAIL 10/- FOR DETERIORATION PROTECTION REQUIREMENTS

ISOMETRIC VIEW



NOTE:
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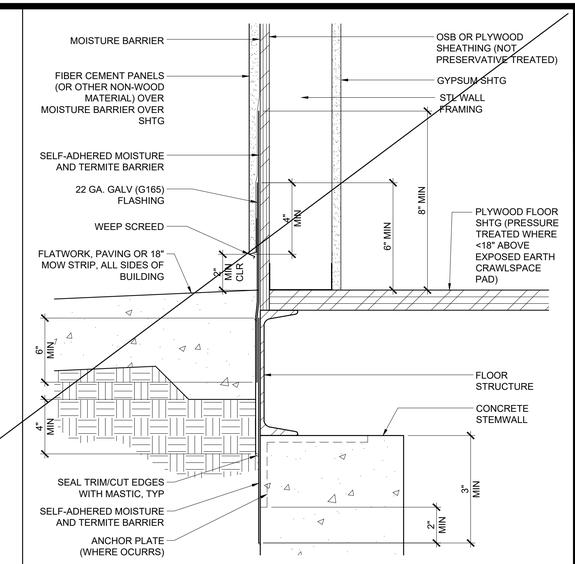
SECTION VIEW

DETERIORATION PROTECTION

SCALE : NTS | 7



NOTE:
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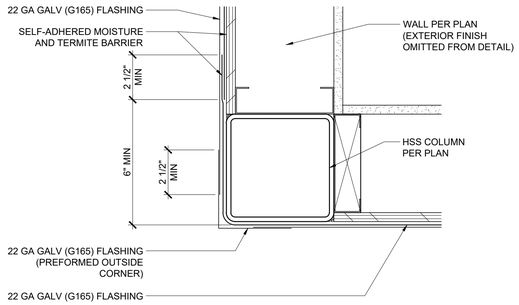
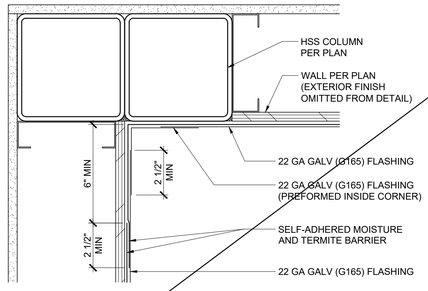
TYPICAL EXTERIOR WALL SILL

SCALE : NTS | 2



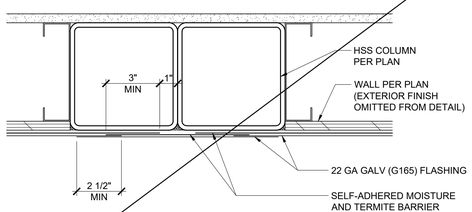
OUTSIDE CORNER



INSIDE CORNER

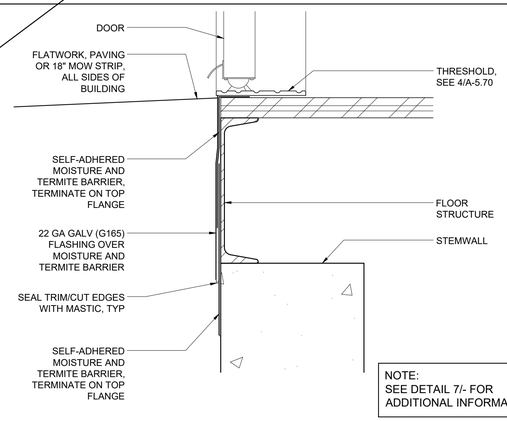
DETERIORATION PROTECTION - CORNER CONDITIONS

SCALE : NTS | 14



DETERIORATION PROTECTION - MODLINE

SCALE : NTS | 20



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DETERIORATION PROTECTION @ THRESHOLD

15

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DETERIORATION PROTECTION REQUIREMENTS

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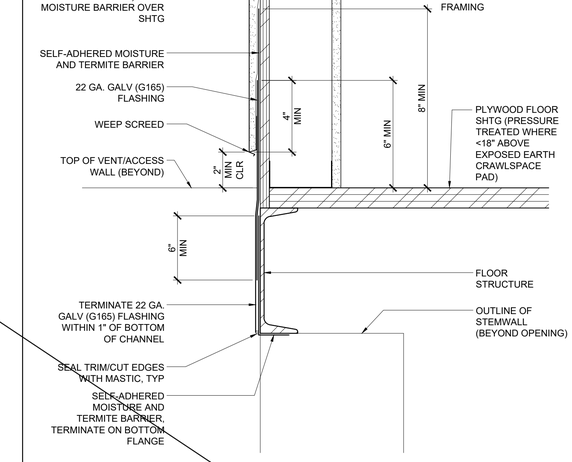

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EXTERIOR WALL SILL @VENT / ACCESS

SCALE : NTS | 4

5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

DETERIORATION PROTECTION NON-WOOD FINISH SIDING WOOD FLOOR - STL STUDS

REVISIONS

1
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MODULAR BUILDING DESIGN PROFESSIONAL

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SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
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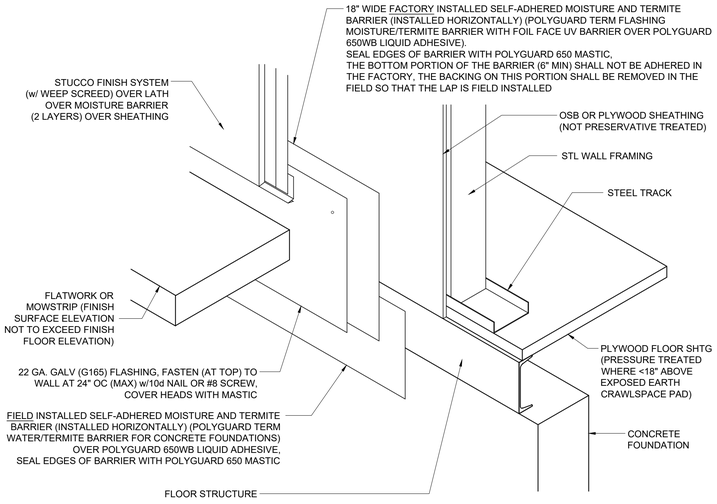
P.C. SHEET NUMBER

A-5.77



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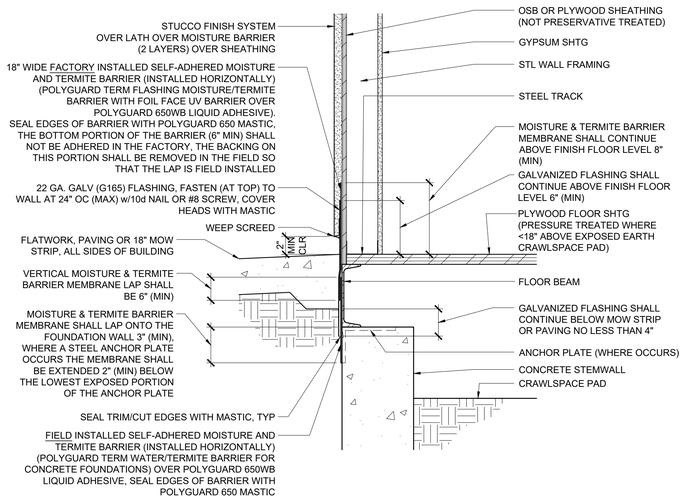
ISOMETRIC VIEW



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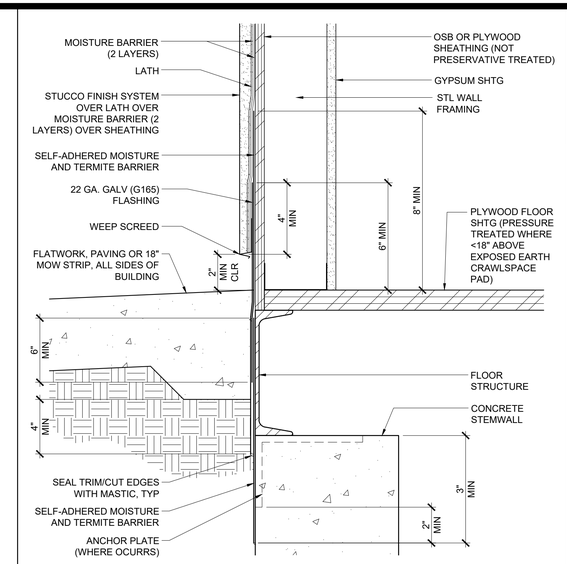
SECTION VIEW

DETERIORATION PROTECTION

SCALE : NTS | 7



NOTE:
SEE DETAIL 7/- FOR MORE INFO ON FLASHING & DETERIORATION PROTECTION

TYPICAL EXTERIOR WALL SILL

SCALE : NTS | 2

OUTSIDE CORNER

INSIDE CORNER

DETERIORATION PROTECTION - CORNER CONDITIONS

SCALE : NTS | 14

DETERIORATION PROTECTION - MODLINE

SCALE : NTS | 20

NOTE:
SEE DETAIL 7/- FOR ADDITIONAL INFORMATION

DETERIORATION PROTECTION @ THRESHOLD

15

MOISUTRE AND TERMITE BARRIER MEMBRANE FLASHING INSTALLATION REQUIREMENTS

- ALL SURFACES SHALL BE CLEAN (FREE OF DIRT, DUST, OIL AND OTHER DEBRIS) PRIOR TO APPLICATION OF THE ADHESIVE AND MEMBRANE.
- ALL SURFACE VOIDS GREATER THAN 1/8" IN WIDTH SHALL BE FILLED WITH SEALANT PRIOR TO INSTALLATION.
- APPLY LIQUID ADHESIVE TO ALL SURFACES WHICH WILL RECEIVE THE FLASHING BARRIER.
- CUT PIECES OF MEMBRANE TO LENGTH AS NEEDED AND APPLY TO SUBSTRATE ONCE THE LIQUID ADHESIVE HAS BECOME TACKY. IMMEDIATELY PRIOR TO MEMBRANE APPLICATION, THE INSTALLER SHALL VERIFY THAT THE ADHESIVE IS STILL TACKY TO THE TOUCH, IF NECESSARY A SECOND LAYER OF ADHESIVE SHALL BE PROVIDED.
- INSTALL MEMBRANE IN A HORIZONTAL ORIENTATION.
- WHERE A HORIZONTAL LAP OCCURS, THE JOINTS SHALL BE LAPPED 2 1/2 INCHES MINIMUM.
- AT BUILDING CORNERS THE MEMBRANE SHALL BE WRAPPED AROUND THE CORNER AND SHALL EXTEND NO LESS THAN 6" BEYOND THE CORNER PRIOR TO LAPPING ANOTHER SHEET. SEE DETAIL 14/-
- WHERE ARE MODULE JOINT (MODLINE) OCCURS THE FACTORY INSTALLED MEMBRANE SHALL BE TERMINATED WITHIN 1" OF THE EDGE OF THE MODULE. A FIELD INSTALLED MEMBRANE PIECE SHALL BE APPLIED FOLLOWING THE INSTALLATION OF THE MODULES ON THE FOUNDATION. THE FIELD INSTALLED MEMBRANE PIECE SHALL LAP THE FACTORY INSTALLED MEMBRANE 3" MINIMUM AT EACH END.
- WHERE A VERTICAL LAP OCCURS THE UPPER MEMBRANE LAYER SHALL BE LAPPED OVER THE LOWER MEMBRANE LAYER 6" MINIMUM.
- THE MEMBRANE SHALL BE ROLLED FIRMLY INTO PLACE USING HAND ROLLER.
- APPLY MASTIC OR SEALANT TO TERMINATING EDGES AND AROUND PIPES OR OTHER PENETRATIONS.
- WHERE THE SURFACES ARE OFFSET MORE THAN 1/8" OUT-OF-PLANE PROVIDE SEALANT OR ANOTHER STABLE MATERIAL TO TRANSITION BETWEEN THE SURFACES.
- WHERE A HORIZONTAL LAP OCCURS IN THE GALVANIZED FLASHING THE JOINTS SHALL BE LAPPED 2 1/2" MINIMUM
- REFER TO DETAIL 20/- FOR MODLINE DETERIORATION PROTECTION

REPAIR REQUIREMENTS

WHERE DAMAGE OCCURS, THE REPAIRS SHALL BE AS FOLLOWS:

1. WHERE THE DAMAGE MEASURES LESS THAN ½" IN ANY DIRECTION THE PUNCTURE SHALL BE SEALED WITH MASTIC.
2. WHERE THE DAMAGE MEASURES MORE THAN ½", BUT LESS THAN 2", IN ANY DIRECTION A PATCH SHALL BE INSTALLED OVER THE DAMAGE USING THE SAME MEMBRANE MATERIAL. THE PATCH SHALL OVERLAP 4" MINIMUM IN ALL DIRECTION.
3. WHERE THE DAMAGE MEASURES MORE THAN 2" IN ANY DIRECTION THE DAMAGED PORTION SHALL BE REMOVE AND A PIECE OF MEMBRANE SHALL BE INSTALLED. THE PATCH SHALL OVERLAP 4" MINIMUM IN ALL DIRECTIONS.

INSPECTION REQUIREMENTS

THE IN-PLANT INSPECTOR SHALL OBSERVE THE INSTALLATION OF FACTORY INSTALLED PORTION OF THE MEMBRANE FLASHING. THE ADHESIVE AND MEMBRANE SHALL BE INSTALLED IN ACCORDANCE WITH THESE INSTALLATION INSTRUCTIONS. ALL OVERLAPS SHALL BE AS INDICATED WITHIN THIS DRAWING PACKAGE. THE MEMBRANE SHALL BE CONTINUOUS UP THE WALL TO A MINIMUM HEIGHT ABOVE FINISH FLOOR AS INDICATED WITHIN THIS DRAWING PACKAGE.

THE ON-SITE INSPECTOR SHALL OBSERVE THE INSTALLATION OF THE SITE INSTALLED PORTION OF THE MEMBRANE FLASHING. THE FACTORY INSTALLED MEMBRANE SHOULD BE INVESTIGATED TO DETERMINE IF ANY DAMAGE OCCURRED DURING MODULE SHIPMENT/INSTALLATION PRIOR TO PROCEEDING WITH THE SITE INSTALLED MEMBRANE PLACEMENT. THE ADHESIVE AND MEMBRANE SHALL BE INSTALLED IN ACCORDANCE WITH THESE INSTALLATION INSTRUCTIONS. ALL OVERLAPS SHALL BE AS INDICATED WITHIN THIS DRAWING PACKAGE. THE MEMBRANE SHALL BE LAPPED ONTO THE FOUNDATION WALL AS INDICATED WITHIN THIS DRAWING PACKAGE. THE GALVANIZED FLASHING SHALL BE INSTALLED OVER THE MEMBRANE. THE GALVANIZED FLASHING SHALL BE CONTINUOUS UP THE WALL TO A MINIMUM HEIGHT ABOVE FINISH FLOOR AS INDICATED WITHIN THIS DRAWING PACKAGE AND SHALL CONTINUE BELOW THE BOTTOM OF THE FLATWORK OR MOW STRIP AS INDICATED WITHIN THIS DRAWING PACKAGE.

DETERIORATION PROTECTION REQUIREMENTS

10

NOTE:
SEE DETAIL 7/- FOR MORE INFO ON FLASHING & DETERIORATION PROTECTION

EXTERIOR WALL SILL @VENT / ACCESS

SCALE : NTS | 4

5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

DETERIORATION PROTECTION
STUCCO EXTERIOR FINISH
WOOD FLOOR - STL STUDS

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

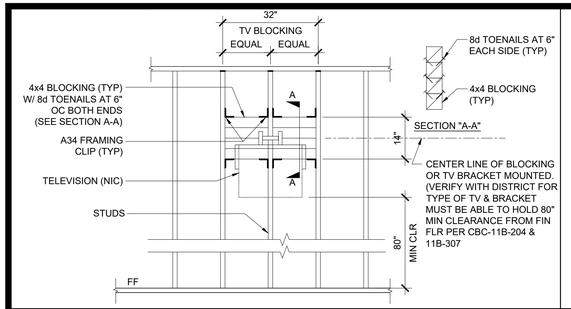
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

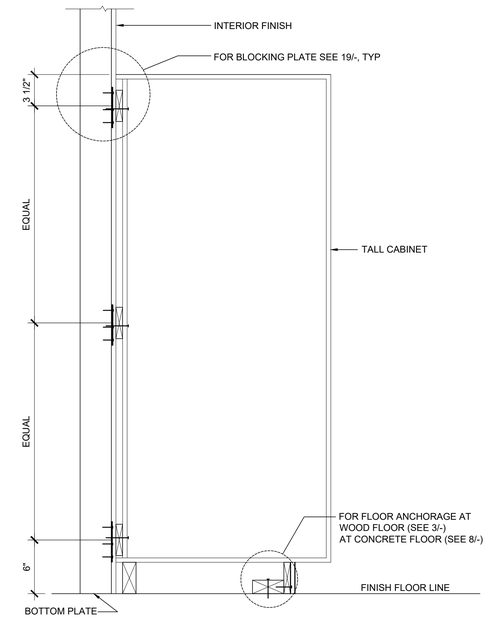
A-5.78

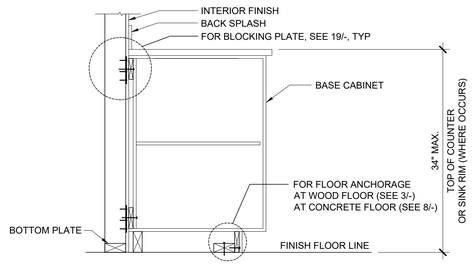


T.V. BLOCKING ATTACHMENT AT WOOD STUD

SCALE : 1/2" = 1'-0" | 16

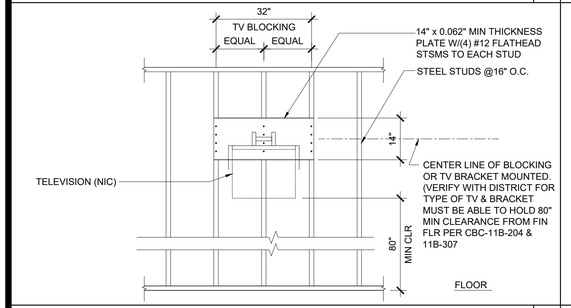
NOT USED | 11





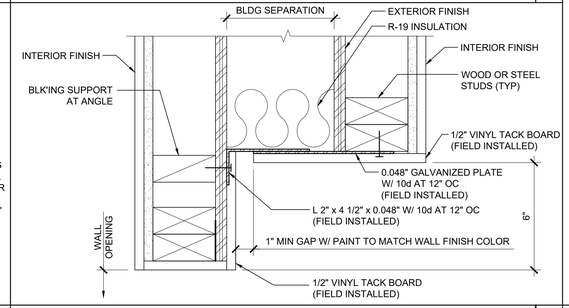
BASE CABINET WALL ANCHORAGE

SCALE : 1" = 1'-0" | 1



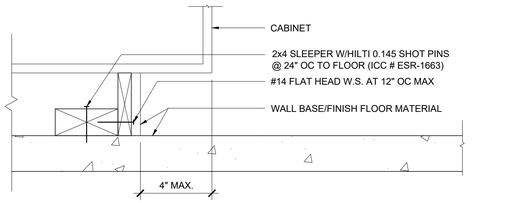
T.V. BLOCKING ATTACHMENT AT STEEL STUD

SCALE : 1/2" = 1'-0" | 17



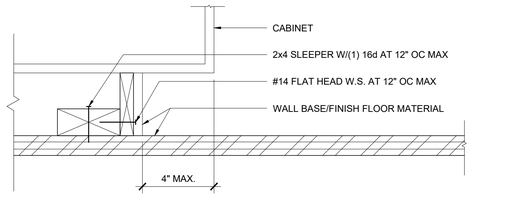
WALL OPENING AT HEADER AND JAMB

SCALE : 3"=1'-0" | 12



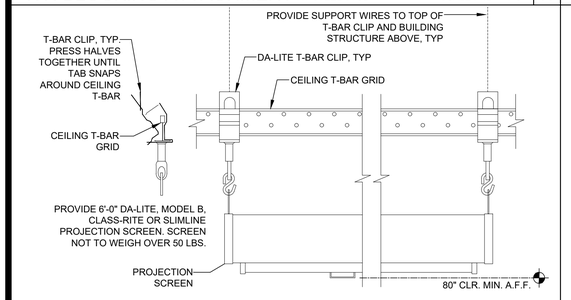
TALL CABINET WALL ANCHORAGE

SCALE : 1 1/2" = 1'-0" | 7



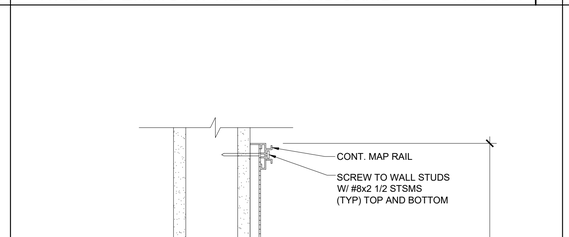
WALL HUNG ANCHORAGE CABINET

SCALE : 1 1/2" = 1'-0" | 2



PROJECTION SCREEN MOUNTING

SCALE : NTS | 18

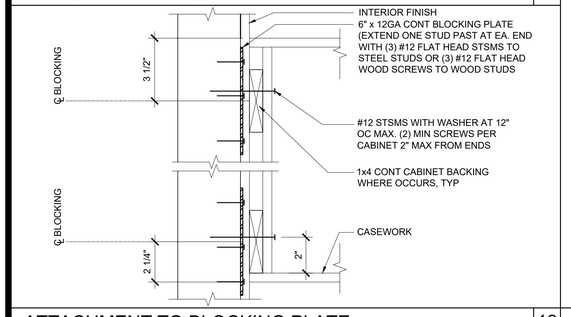


MARKER BOARD ATTACHMENT

SCALE : 3" = 1'-0" | 14

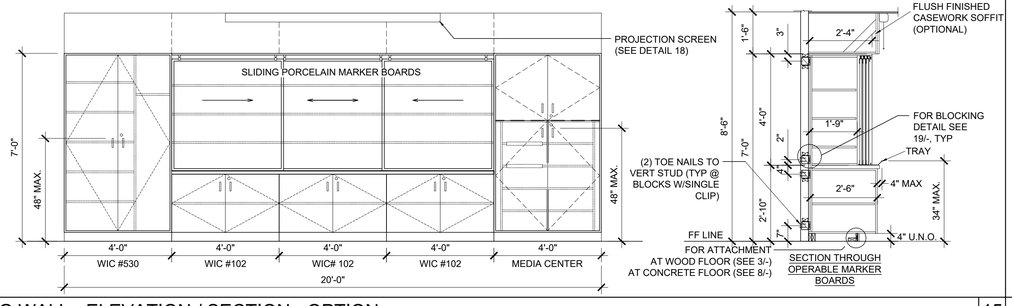
ACCESSIBLE COUNTER

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



ATTACHMENT TO BLOCKING PLATE

SCALE : 3" = 1'-0" | 19



TEACHING WALL - ELEVATION / SECTION - OPTION

SCALE : 3/8" = 1'-0" | 15

NOT USED | 10

NOT USED | 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ARCHITECTURAL DETAILS

MISCELLANEOUS/OPTIONS

REVISIONS

1
2
3
4
5

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MODULAR BUILDING DESIGN PROFESSIONAL

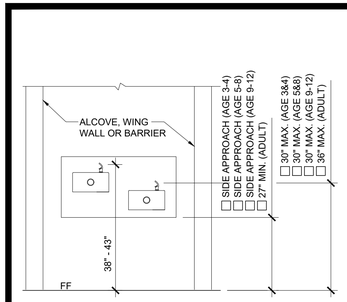
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24775 STRUCTURAL STATE OF CALIFORNIA

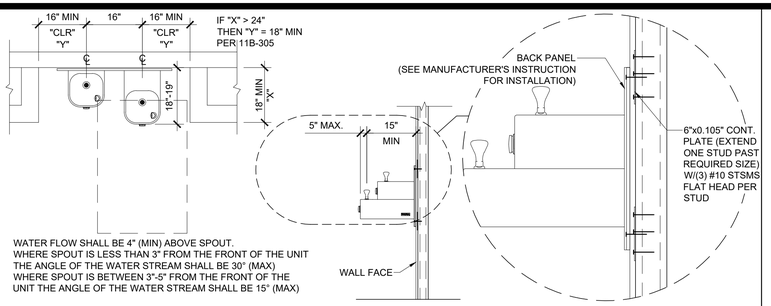
SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

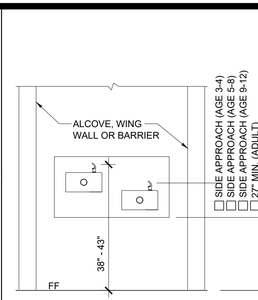
A-5.80

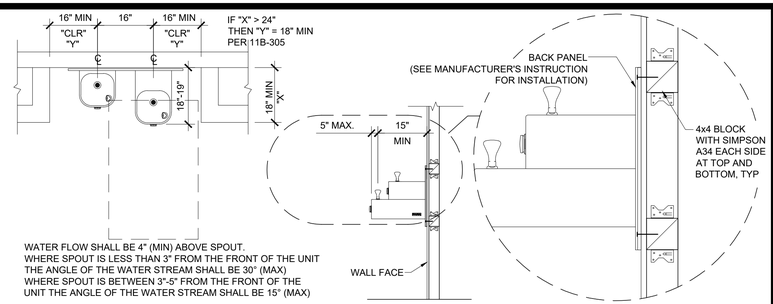




DRINKING FOUNTAIN BLOCKING DETAIL AT STEEL STUD

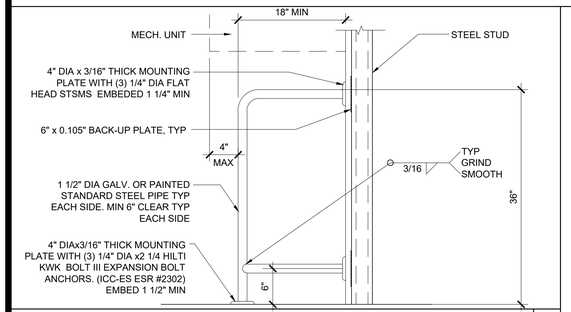
SCALE : 1/2" = 1'-0" | 11





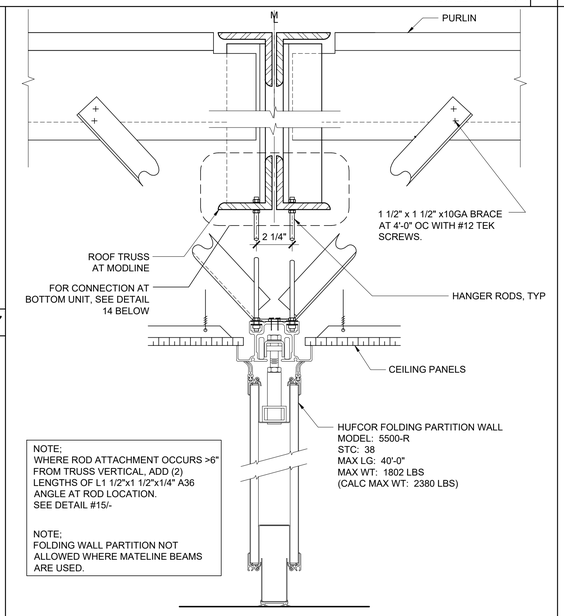
DRINKING FOUNTAIN BLOCKING DETAIL AT WOOD STUD

SCALE : 1/2" = 1'-0" | 1



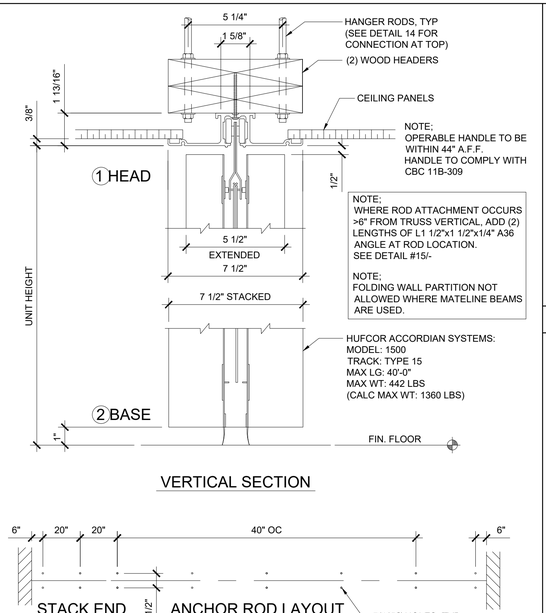
HVAC BARRIER - OPT. D.F. BARRIER AT STEEL STUD

SCALE : 1" = 1'-0" | 17



FOLDING WALL PARTITION ATTACH @ TOP UNIT

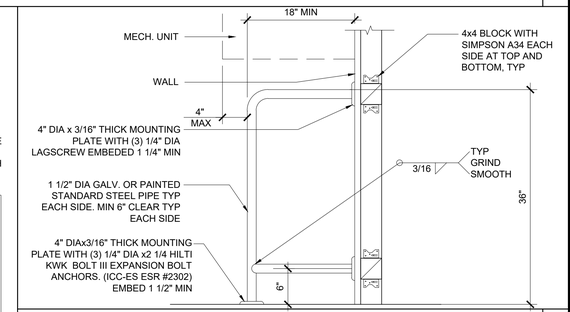
SCALE : 3" = 1'-0" | 13



VERTICAL SECTION

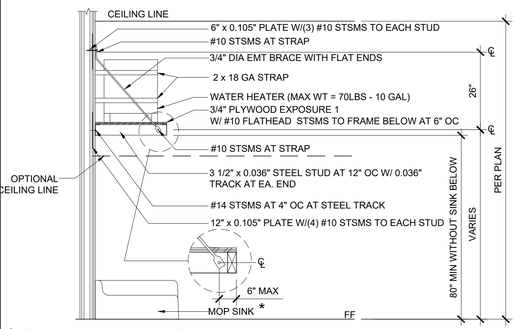
ACCORDION PARTITION ATTACHMENT

SCALE: 3" = 1'-0" | 8



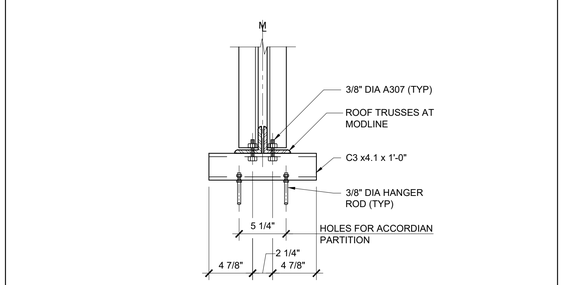
HVAC BARRIER - OPT. D.F. BARRIER AT WOOD STUD

SCALE : 1" = 1'-0" | 2



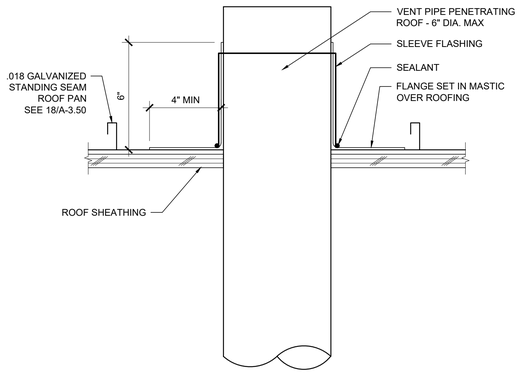
WATER HEATER SHELF AT STEEL STUD

SCALE : 1/2" = 1'-0" | 19



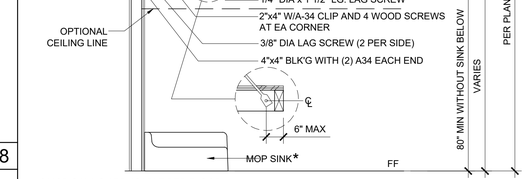
ACCORDIAN DOOR - TOP CONN AT TRUSS

SCALE : 1 1/2" = 1'-0" | 14



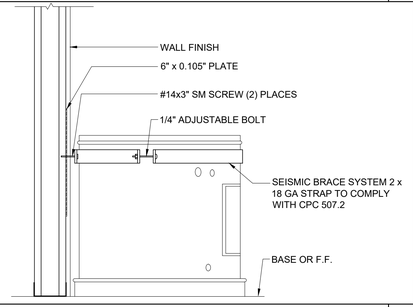
PIPE PENETRATION THROUGH ROOF

SCALE : 3"=1'-0" | 10



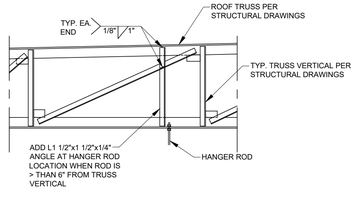
WATER HEATER SHELF AT WOOD STUD

SCALE : 1/2" = 1'-0" | 4



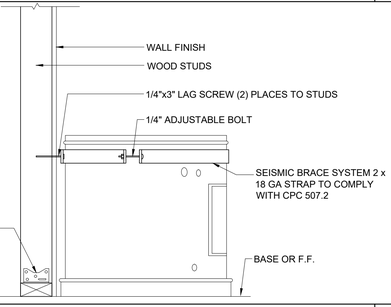
WATER HEATER BRACING AT STEEL STUD

SCALE : 1 1/2" = 1'-0" | 20



TRUSS SUPPORT @ HANGER ROD

15



WATER HEATER BRACING AT WOOD STUD

SCALE : 1 1/2" = 1'-0" | 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ARCHITECTURAL DETAILS

MISCELLANEOUS/OPTIONS

REVISIONS

1
2
3
4
5

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2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

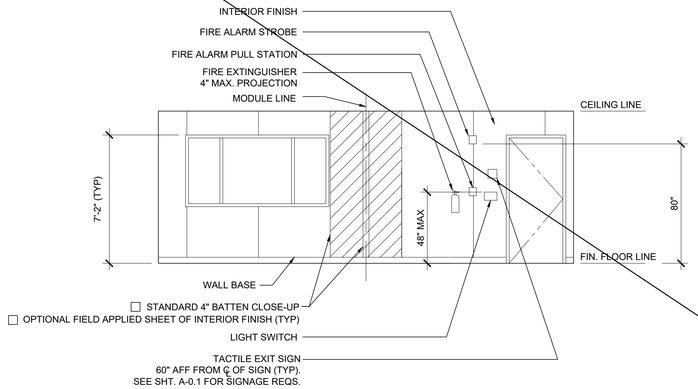
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

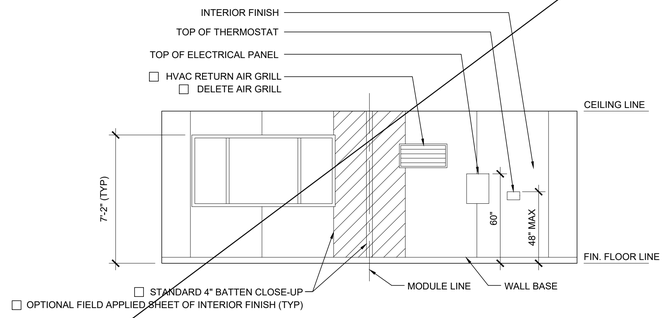
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

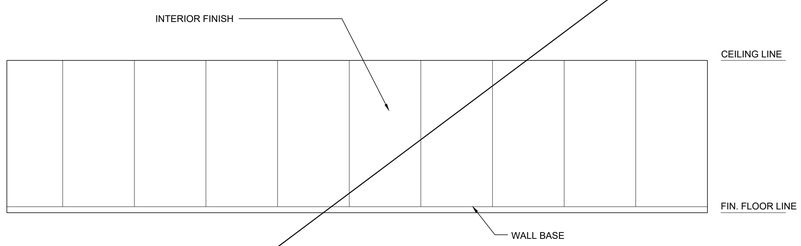
A-5.81



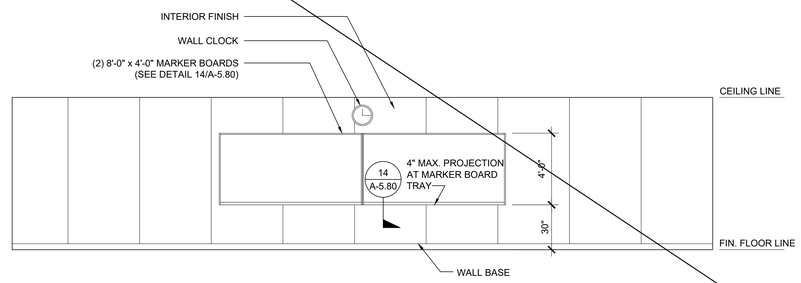
FRONT ELEVATION — SCALE: 1/4" = 1' - 0" — 3



REAR ELEVATION — SCALE: 1/4" = 1' - 0" — 1



SIDE ELEVATION — SCALE: 1/4" = 1' - 0" — 4



SIDE ELEVATION — SCALE: 1/4" = 1' - 0" — 2

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

INTERIOR ELEVATION
24' x 40'

REVISIONS

1	
2	
3	
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5	

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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

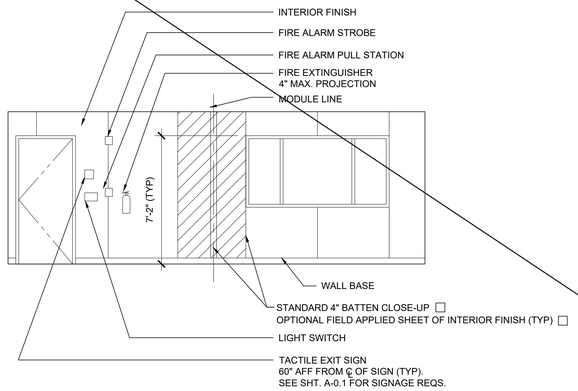
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24075
STRUCTURAL
STATE OF CALIFORNIA

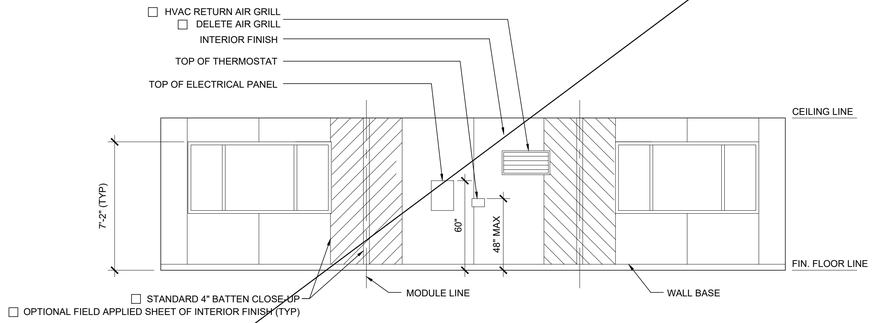
SILVER CREEK INDUSTRIES	24' x 40' PC
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

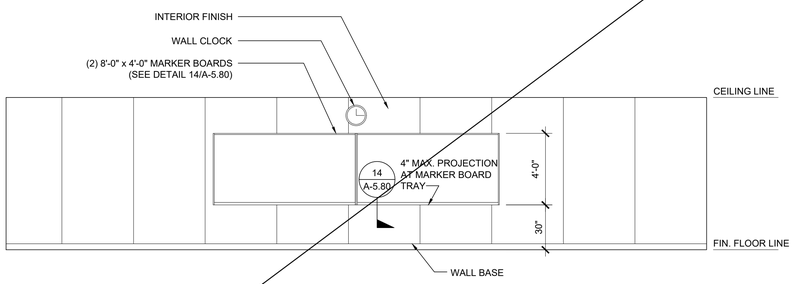
A-6.01



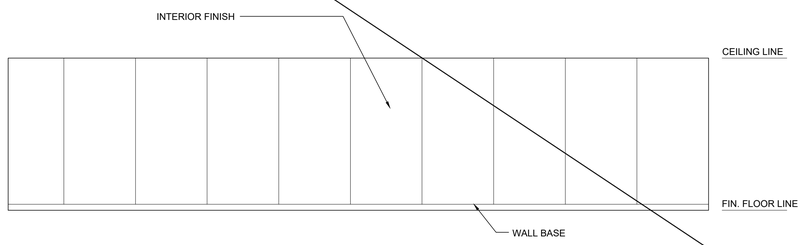
FRONT ELEVATION — SCALE: 1/4" = 1' - 0" — 3



REAR ELEVATION — SCALE: 1/4" = 1' - 0" — 1



SIDE ELEVATION — SCALE: 1/4" = 1' - 0" — 4



SIDE ELEVATION — SCALE: 1/4" = 1' - 0" — 2

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

INTERIOR ELEVATION
36' x 40'

REVISIONS

1	
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PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

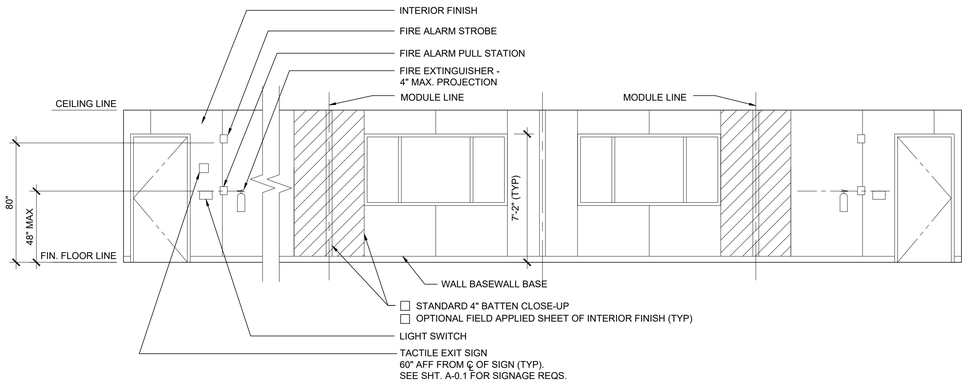
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

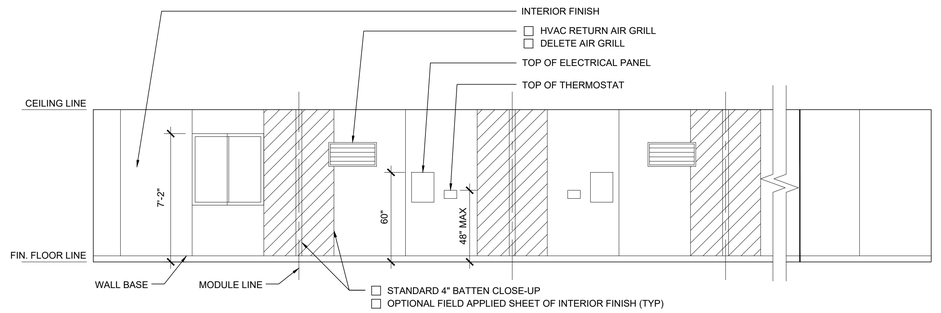
P.C. SHEET NUMBER

A-6.02



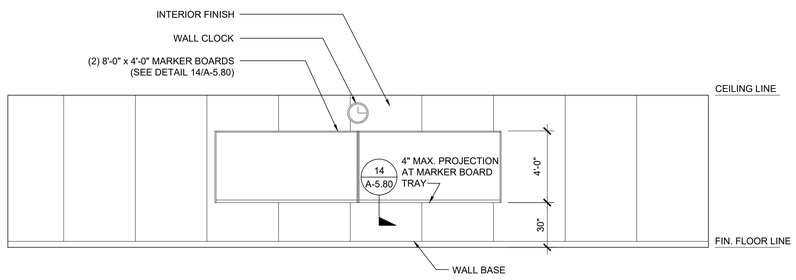
FRONT ELEVATION

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



REAR ELEVATION

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



SIDE ELEVATION

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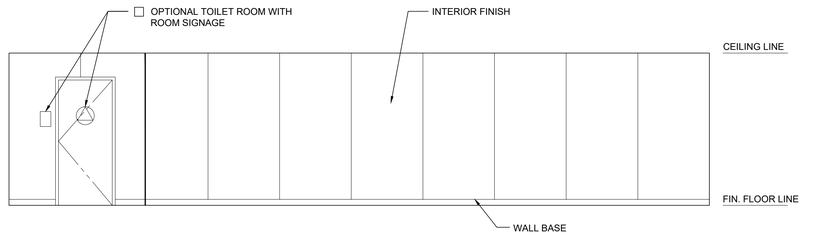
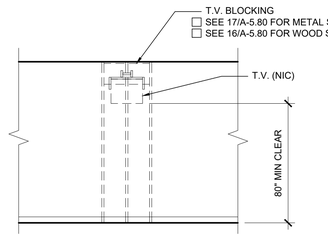


SIDE ELEVATION

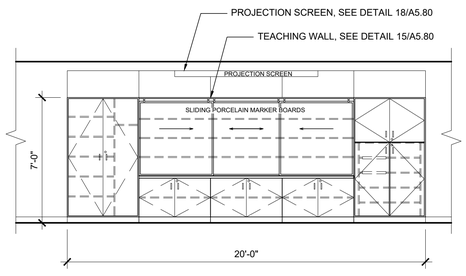
SCALE: 1/4" = 1' - 0" | 2



REF: A1.03

TELEVISION BLOCKING OPTION

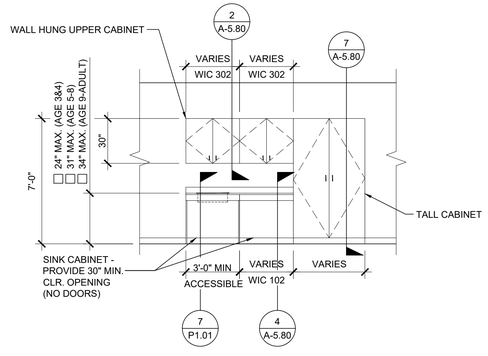
SCALE: 1/4" = 1' - 0" | C



REF: A1.03

TEACHING WALL OPTION

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



REF: A1.03

CASEWORK OPTION

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

INTERIOR ELEVATION
48' TO 120' x 40'

REVISIONS

1
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4
5

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MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
2475
STRUCTURAL
STATE OF CALIFORNIA

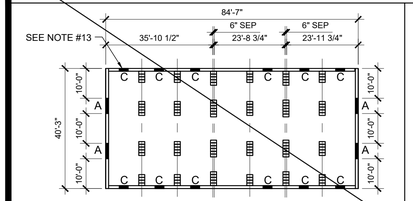
SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

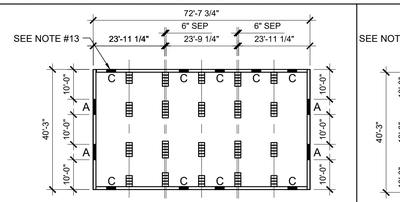
P.C. SHEET NUMBER

A-6.03

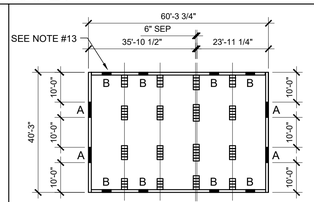
KEY PLAN VENTING CALCULATIONS w/o PARAPET



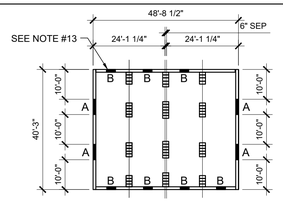
☐ 85' x 40' BUILDING: 3400 SF / 150 = 22.66 SF VENT REQ'D
(4) - "A" VENT = 10.24 SF
(12) - "C" VENT = 13.50 SF
23.74 SF TOTAL VENTILATION (> 22.66 SF)



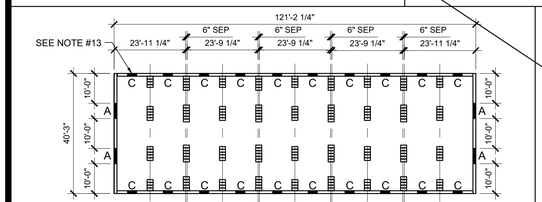
☐ 73'-0" x 40' BUILDING: 2920 SF / 150 = 19.46 SF VENT REQ'D
(4) - "A" VENT = 10.24 SF
(9) - "C" VENT = 10.12 SF
20.36 SF TOTAL VENTILATION (> 19.46 SF)



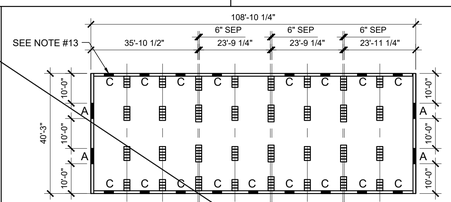
☐ 60'-6" x 40' BUILDING: 2420 SF / 150 = 16.14 SF VENT REQ'D
(4) - "A" VENT = 10.24 SF
(8) - "B" VENT = 6.00 SF
16.24 SF TOTAL VENTILATION (> 16.14 SF)



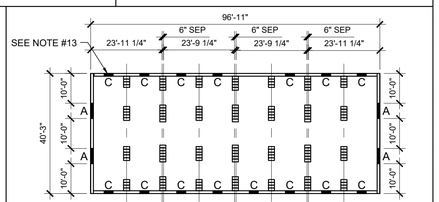
☐ 48'-6" x 40' BUILDING: 1940 SF / 150 = 12.93 SF VENT REQ'D
(4) - "A" VENT = 10.24 SF
(7) - "B" VENT = 5.25 SF
15.49 SF TOTAL VENTILATION (> 12.93 SF)



☐ 122'-0" x 40' BUILDING: 4880 SF / 150 = 32.53 SF VENT REQ'D
(4) - "A" VENT = 10.24 SF
(20) - "C" VENT = 22.50 SF
32.74 SF TOTAL VENTILATION (> 32.53 SF)
(VAPOR BARRIER REQUIRED)



☐ 109'-6" x 40' BUILDING: 4380 SF / 150 = 29.2 SF VENT REQ'D
(4) - "A" VENT = 10.24 SF
(17) - "C" VENT = 19.12 SF
29.36 SF TOTAL VENTILATION (> 29.2 SF)



☐ 97'-6" x 40' BUILDING: 3900 SF / 150 = 26 SF VENT REQ'D
(4) - "A" VENT = 10.24 SF
(15) - "C" VENT = 16.87 SF
27.11 SF TOTAL VENTILATION (> 26 SF)

WOOD FOUNDATION PLATE SCHEDULE

50 PSF

PLATES	END WALL	SIDE WALL	MODLINE PAD AT END WALL	MODLINE PAD AT INTERIOR	SEPARATION PAD AT ENDWALL ☐ SEPARATE	SEPARATION PAD AT ENDWALL ☐ CONTINUOUS	SEPARATION PAD AT INTERIOR ☐ SEPARATE	SEPARATION PAD AT INTERIOR ☐ CONTINUOUS
ADDITIONAL (AS NEEDED)	2x4	2x4	2x6	2x6	(2) ROWS OF 2x4	2x12	(2) ROWS OF 2x4	2x12
TOP	2x6	2x6	2x8	2x8	(2) ROWS OF 2x6	2x12	(2) ROWS OF 2x6	2x12
BLOCK	2x8	2x8	2x10	2x10	(2) ROWS OF 2x8	2x12	(2) ROWS OF 2x8	2x12
SILL	2x12 (2x14)[15]	2x12 (2x14)[15]	(5) 2x12 x 2'-0"	(5) 2x12 x 2'-0"	(2) ROWS OF 2x14	(3) 2x12 x 2'-0"	(2) ROWS OF 2x14	(7) 2x12 x 2'-0"

KEY PLAN VENTING SCHEDULE

VENT "A" (SIDEWALL): 5'-1 1/2" x 6" = 2.56 S.F. VENTILATION

"VENT OPENING BELOW CONT UPPER PLATE"

VENT "B" (ENDWALL): 3'-0" x 3" = 0.75 S.F. VENTILATION

(OPTIONAL AT MULTIPLE BLDG SETS)

"VENT OPENING ABOVE CONT. SILL AND BLOCK PLATE"

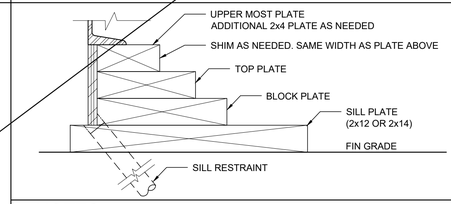
VENT "C" (ENDWALL): 3'-0" x 4.5" = 1.125 S.F. VENTILATION

(OPTIONAL AT MULTIPLE BLDG SETS)

"VENT OPENING ABOVE CONT. SILL AND BLOCK PLATE"

NOTE:
@ BUILDINGS WITH PARAPETS UP TO 48" HIGH, SIDE WALL VENTS CHANGE FROM 5'-1 1/2" TO 4'-0", SEE VENTING SCHEDULE

FOUNDATION PLATE DESCRIPTION



NOTES

1. BUILDINGS OVER 2,160 SF, MUST BE INSTALLED ON A PERMANENT CONCRETE FOUNDATION PER IR 16-1 ITEM 1.4.
2. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULAR FLOORS.
3. FOUNDATION VENTS THAT OCCUR UNDER RAMP LANDINGS, PROVIDE AN EQUAL AREA OF SCREENED VENT IN LANDING SKIRT.
4. WOOD SILL (FOOTING) PLATES SHALL BE PRESSURE TREATED HEM-FIR AND MAY BEAR DIRECTLY ON SOIL OR PAVED SURFACE. GRASS OR TURF SHALL BE CLEARED TO BARE SOIL UNDER THE ENTIRE AREA OF THE BUILDING BY OTHERS. THE WOOD SILL FOOTING PLATE MAY SUPPORT CONTINUOUS BLOCKING AND SHEATHING SKIRT WHICH NEED NOT BE TREATED.
5. SILL RESTRAINT:
   THE FOUNDATION SHALL BE DESIGNED TO PREVENT SLIDING ON THE SUPPORTING SURFACE BY ATTACHING THE WOOD FOUNDATION PLATES FOR THE BUILDING, RAMPS AND STAIRS TO THE GROUND WITH RESTRAINING DEVICES. AN ACCEPTABLE DESIGN WOULD INCORPORATE ONE-INCH DIAMETER STANDARD WEIGHT (1.315" ACTUAL O.D.) HOT DIPPED GALVANIZED PIPES OR ONE-INCH DIAMETER SOLID STEEL RODS SPACED AT NOT MORE THAN 10'-0" O.C. ONE PIPE / ROD SHALL BE LOCATED A MAXIMUM OF TWO FEET FROM EACH CORNER IN BOTH DIRECTIONS AND A MINIMUM OF TWO PIPES / RODS PER DISCONTINUOUS FOUNDATIONS STRIP. PIPES SHOULD PENETRATE INTO SOIL, CONCRETE, AND/OR PAVING A MINIMUM OF 12" MEASURED VERTICALLY. ALTERNATE OR EQUIVALENT DESIGNS, WHEN PROVIDED WITH STRUCTURAL CALCULATIONS AND DETAILS, WILL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL.
6. STACKED WOOD MEMBERS FOR FOUNDATIONS AND PRESSURE TREATED LUMBER SHALL BE NAILED WITH HOT DIPPED GALVANIZED PER ASTM A-153.
7. VENTILATION OPENINGS SHALL BE COVERED FOR EITHER HEIGHT AND WIDTH WITH CORROSION - RESISTANT WIRE MESH, WITH A CLEAR "THROUGH" DIMENSION NOT EXCEEDING 1/8" ACTING AS A VERMIN BARRIER.
8. VENTING CALCULATION REQUIREMENTS FOR MULTIPLE BUILDING SETS MUST BE CALCULATED WITH OVERALL SQUARE FOOTAGE INCLUDING SEPARATION.
9. FOR FOUNDATION ANCHORAGE ON CONCRETE PAD, SEE DETAIL 15/F0.50.
10. IF OPTIONAL ENDWALL VENTS ARE APPLIED, SILL PLATE AND BLOCK PLATE MUST BE CONTINUOUS. VENT OPENINGS SHALL BE BROKEN ABOVE THE BLOCK PLATE.
11. FOR FOUNDATION SPLICE - SEE 5/F-0.50.
12. CRAWLSPACE VAPOR RETARDERS (WHERE INDICATED):
    THE OPTIONAL TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
    MATERIALS:
    GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
    INSTALLATION RECOMMENDATIONS:
    OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; ATTACH VAPOR RETARDER OVER SILL PLATE PER 10/F0.50; SEAL TO ALL PIERS AND OTHER PENETRATIONS.
13. ENDWALL VENTS (IF REQ'D) SHALL BE LOCATED A MIN OF 24" FROM BUILDING CORNERS. MAXIMUM ONE ENDWALL VENT PER 12'-0" MODULE.
14. CONCRETE FLOOR LOAD IS INCLUDED IN THE CONCRETE FOUNDATION OPTION FOR FOUNDATION & ANCHORAGE DESIGN, I.E. THERE IS NO CONCRETE FLOOR FOR WOOD FOUNDATION OPTION. THERE IS CONCRETE FLOOR FOR CONCRETE FOUNDATION OPTION.
15. IF PARAPET IS HIGHER THAN 18", COMBINATION REQUIRES A 2 X 14" OR 2 X 16" SILL PLATE @ EXTERIOR OF BUILDING.
16. 150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OR PARAPET OPTION.
17. VENTS AT MODLINE FOUNDATIONS. THE MINIMUM CRITERIA REQUIREMENT AS FOLLOWS:
    A. VENTS HAVE A MINIMUM OF 2 SILL /BLOCKING PLATES BENEATH.
    B. VENTS ARE A MAXIMUM OF 6'-0" LONG x 3" MIN. HIGH.
    C. VENTS ARE SPACED A MINIMUM OF 8'-0" APART (EDGE TO EDGE) AND 24" MIN. FROM CORNERS.
18. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.

NAILING SCHEDULE

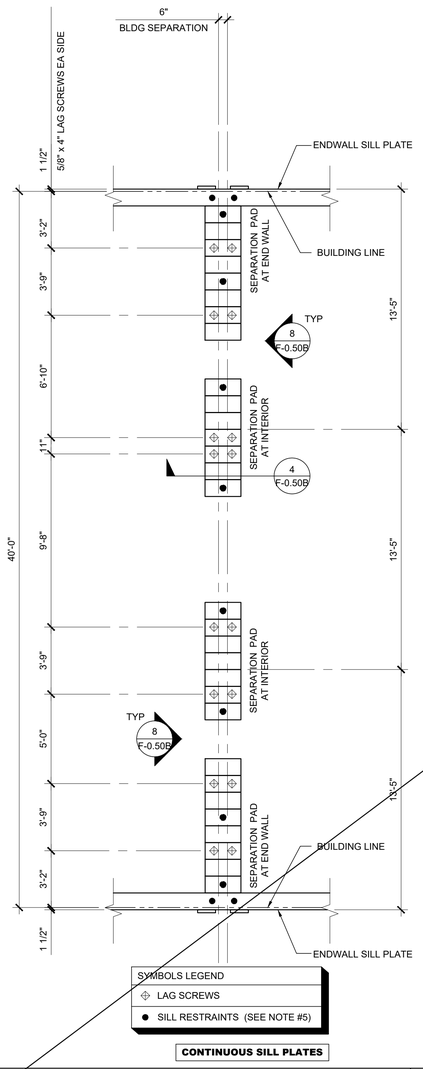
BUILDING SIZE	(2) 16d BOX NAILS PLATE TO PLATE ATTACHMENT BELOW UPPER MOST PLATE
24' x 40'	5" OC AT ENDWALL - 1 / F-0.50B 12" OC AT SIDEWALL - 2 / F-0.50B 10" OC AT SEPARATION - 4 / F-0.50B

VENTING SCHEDULE

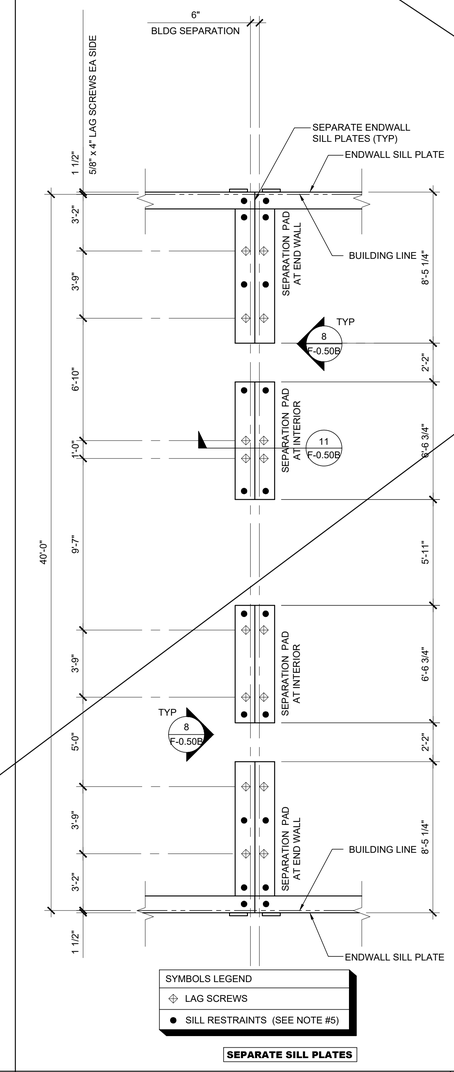
	BUILDING SIZE	BUILDING AREA	REQUIRED VENTING	SIDE VENTING	TOTAL VENTING SUPPLIED
W/O PARAPET	24' x 40'	960 SF	6.4 SF (1/150)	5.125' x 6" = (4) 2.56 SF/EA	10.25 SF SEE NOTE #8
W/ PARAPET	24' x 40'	960 SF	6.4 SF (1/150)	4'-0" x 6" = (4) 2 SF/EA	8 SF SEE NOTE #8

TIE PLATE SCHEDULE (14 / F-0.50B)

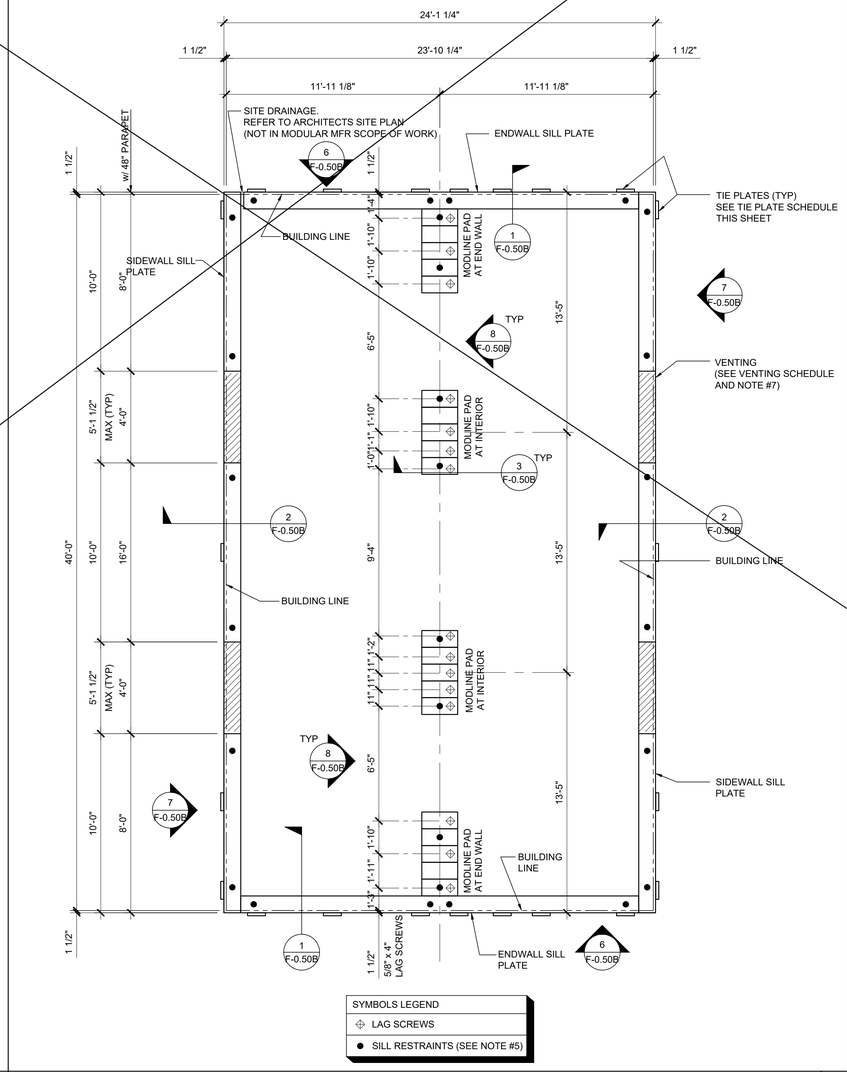
BUILDING SIZE	SIDE WALL TIE PLATES	END WALL TIE PLATES	TOTAL NUMBER OF TIE PLATES
24' x 40'	4	7	22



FOOTING AT SEPARATION SCALE: 1/4" = 1' - 0" 3



FOOTING AT SEPARATION SCALE: 1/4" = 1' - 0" 2



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

PROJECT NAME:

SHEET TITLE:

WOOD FOUNDATION PLAN
24x40
(50 PSF)

REVISIONS

1
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PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24175 STRUCTURAL STATE OF CALIFORNIA

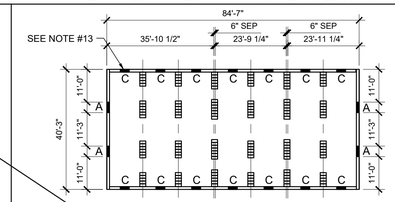
SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

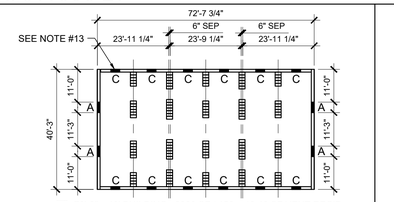
P.C. SHEET NUMBER

F-0.01

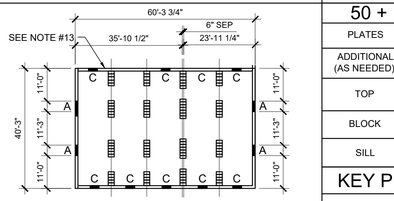
KEY PLAN VENTING CALCULATIONS w/o PARAPET



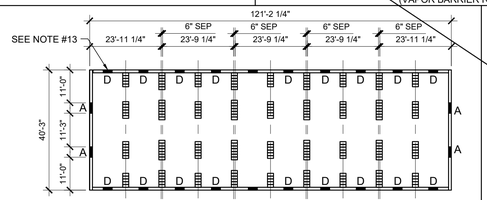
☐ 85' x 40' BUILDING: 3400 SF / 150 = 22.66 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(14) - "C" VENT = 15.75 SF
22.75 SF TOTAL VENTILATION (> 22.66 SF)
(VAPOR BARRIER REQUIRED)



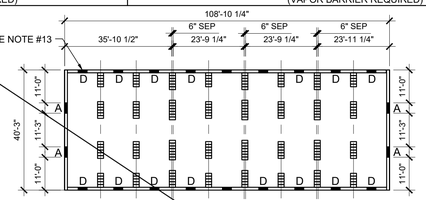
☐ 73'-0" x 40' BUILDING: 2920 SF / 150 = 19.46 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(12) - "C" VENT = 13.50 SF
20.50 SF TOTAL VENTILATION (> 19.46 SF)
(VAPOR BARRIER REQUIRED)



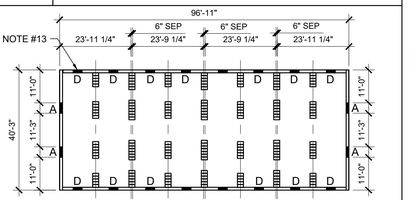
☐ 60'-6" x 40' BUILDING: 2420 SF / 150 = 16.13 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(8) - "C" VENT = 10.12 SF
17.12 SF TOTAL VENTILATION (> 16.13 SF)



☐ 122'-0" x 40' BUILDING: 4880 SF / 150 = 32.53 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(18) - "D" VENT = 27.00 SF
34.00 SF TOTAL VENTILATION (> 32.53 SF)
(VAPOR BARRIER REQUIRED)



☐ 109'-6" x 40' BUILDING: 4380 SF / 150 = 29.2 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(15) - "D" VENT = 22.5 SF
29.50 SF TOTAL VENTILATION (> 29.2 SF)
(VAPOR BARRIER REQUIRED)



☐ 97'-6" x 40' BUILDING: 3900 SF / 150 = 26 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(13) - "D" VENT = 19.50 SF
26.5 SF TOTAL VENTILATION (> 26 SF)
(VAPOR BARRIER REQUIRED)

WOOD FOUNDATION PLATE SCHEDULE

50 + 15 PSF

PLATES	END WALL	SIDE WALL	MODLINE PAD AT END WALL	MODLINE PAD AT INTERIOR	SEPARATION PAD AT ENDWALL ☐ SEPARATE	SEPARATION PAD AT ENDWALL ☐ CONTINUOUS	SEPARATION PAD AT INTERIOR ☐ SEPARATE	SEPARATION PAD AT INTERIOR ☑ CONTINUOUS
ADDITIONAL (AS NEEDED)	2x4	2x4	2x6	2x6	(2) ROWS OF 2x4	2x12	(2) ROWS OF 2x4	2x12
TOP	2x6	2x6	2x8	2x8	(2) ROWS OF 2x6	2x12	(2) ROWS OF 2x6	2x12
BLOCK	2x8	2x8	2x10	2x10	(2) ROWS OF 2x8	2x12	(2) ROWS OF 2x8	2x12
SILL	2x12 (2x14)[15]	2x12 (2x14)[15]	(6) 2x12 x 2'-0"	(6) 2x12 x 2'-0"	(2) ROWS OF 2x14	(9) 2x12 x 2'-0"	(2) ROWS OF 2x14	(8) 2x12 x 2'-0"

KEY PLAN VENTING SCHEDULE

VENT "A" (SIDEWALL): 3'-6" x 6" = 1.75 S.F. VENTILATION
"VENT OPENING BELOW CONT UPPER PLATE"

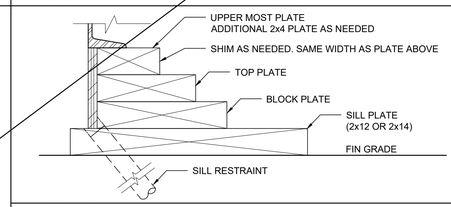
VENT "B" (ENDWALL): 3'-0" x 3" = 0.68 S.F. VENTILATION
(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATE"

VENT "C" (ENDWALL): 3'-0" x 4 1/2 " = 1.125 S.F. VENTILATION
(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "D" (ENDWALL): 3'-0" x 6" = 1.5 S.F. VENTILATION
(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

NOTE:
@ BUILDINGS WITH PARAPETS UP TO 48" HIGH, SIDE WALL VENTS CHANGE FROM 3'-6" TO 3'-0", SEE VENTING SCHEDULE

FOUNDATION PLATE DESCRIPTION



NOTES

1. BUILDINGS OVER 2,160 SF, MUST BE INSTALLED ON A PERMANENT CONCRETE FOUNDATION PER IR 16-1 ITEM 1.4.
2. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULAR FLOORS.
3. FOUNDATION VENTS THAT OCCUR UNDER RAMP LANDINGS, PROVIDE AN EQUAL AREA OF SCREENED VENT IN LANDING SKIRT.
4. WOOD SILL (FOOTING) PLATES SHALL BE PRESSURE TREATED HEM-FIR AND MAY BEAR DIRECTLY ON SOIL OR PAVED SURFACE. GRASS OR TURF SHALL BE CLEARED TO BARE SOIL UNDER THE ENTIRE AREA OF THE BUILDING BY OTHERS. THE WOOD SILL FOOTING PLATE MAY SUPPORT CONTINUOUS BLOCKING AND SHEATHING SKIRT WHICH NEED NOT BE TREATED.
5. SILL RESTRAINT:
   THE FOUNDATION SHALL BE DESIGNED TO PREVENT SLIDING ON THE SUPPORTING SURFACE BY ATTACHING THE WOOD FOUNDATION PLATES FOR THE BUILDING, RAMPS AND STAIRS TO THE GROUND WITH RESTRAINING DEVICES. AN ACCEPTABLE DESIGN WOULD INCORPORATE ONE-INCH DIAMETER STANDARD WEIGHT (1.315" ACTUAL O.D.) HOT DIPPED GALVANIZED PIPES OR ONE-INCH DIAMETER SOLID STEEL RODS SPACED AT NOT MORE THAN 10'-0" O.C. ONE PIPE / ROD SHALL BE LOCATED A MAXIMUM OF TWO FEET FROM EACH CORNER IN BOTH DIRECTIONS AND A MINIMUM OF TWO PIPES / RODS PER DISCONTINUOUS FOUNDATIONS STRIP. PIPES SHOULD PENETRATE INTO SOIL, CONCRETE, AND/OR PAVING A MINIMUM OF 12" MEASURED VERTICALLY. ALTERNATE OR EQUIVALENT DESIGNS, WHEN PROVIDED WITH STRUCTURAL CALCULATIONS AND DETAILS, WILL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL.
6. STACKED WOOD MEMBERS FOR FOUNDATIONS AND PRESSURE TREATED LUMBER SHALL BE NAILED WITH HOT DIPPED GALVANIZED PER ASTM A-153.
7. VENTILATION OPENINGS SHALL BE COVERED FOR EITHER HEIGHT AND WIDTH WITH CORROSION - RESISTANT WIRE MESH, WITH A CLEAR "THROUGH" DIMENSION NOT EXCEEDING 1/8" ACTING AS A VERMIN BARRIER.
8. VENTING CALCULATION REQUIREMENTS FOR MULTIPLE BUILDING SETS MUST BE CALCULATED WITH OVERALL SQUARE FOOTAGE INCLUDING SEPARATION.
9. FOR FOUNDATION ANCHORAGE ON CONCRETE PAD, SEE DETAIL 15/F0.50.
10. IF OPTIONAL ENDWALL VENTS ARE APPLIED, SILL PLATE AND BLOCK PLATE MUST BE CONTINUOUS. VENT OPENINGS SHALL BE BROKEN ABOVE THE BLOCK PLATE.
11. FOR FOUNDATION SPLICE - SEE 5/F-0.50.
12. CRAWLSPACE VAPOR RETARDERS (WHERE INDICATED):
    THE OPTIONAL TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
    MATERIALS:
    GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
    INSTALLATION RECOMMENDATIONS:
    OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; ATTACH VAPOR RETARDER OVER SILL PLATE PER 10/F0.50; SEAL TO ALL PIERS AND OTHER PENETRATIONS.
13. ENDWALL VENTS (IF REQ'D) SHALL BE LOCATED A MIN OF 24" FROM BUILDING CORNERS. MAXIMUM ONE ENDWALL VENT PER 12'-0" MODULE.
14. CONCRETE FLOOR LOAD IS INCLUDED IN THE CONCRETE FOUNDATION OPTION FOR FOUNDATION & ANCHORAGE DESIGN, I.E. THERE IS NO CONCRETE FLOOR FOR WOOD FOUNDATION OPTION. THERE IS CONCRETE FLOOR FOR CONCRETE FOUNDATION OPTION.
15. IF PARAPET IS HIGHER THAN 18", COMBINATION REQUIRES A 2 X 14" OR 2 X 16" SILL PLATE @ EXTERIOR OF BUILDING.
16. 150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OR PARAPET OPTION.
17. VENTS AT MODLINE FOUNDATIONS. THE MINIMUM CRITERIA REQUIREMENT AS FOLLOWS:
    A. VENTS HAVE A MINIMUM OF 2 SILL /BLOCKING PLATES BENEATH.
    B. VENTS ARE A MAXIMUM OF 6'-0" LONG x 3" MIN. HIGH.
    C. VENTS ARE SPACED A MINIMUM OF 8'-0" APART (EDGE TO EDGE) AND 24" MIN. FROM CORNERS.
18. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.

NAILING SCHEDULE

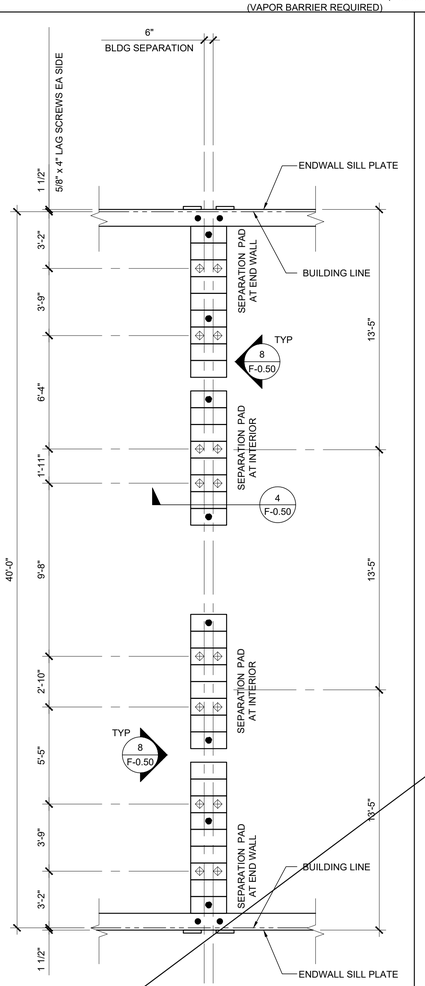
BUILDING SIZE	(2) 16d BOX NAILS PLATE TO PLATE ATTACHMENT BELOW UPPER MOST PLATE
24' x 40'	5" OC AT ENDWALL - 1 / F-0.50 12" OC AT SIDEWALL - 2 / F-0.50 10" OC AT SEPARATION - 4 / F-0.50

VENTING SCHEDULE

	BUILDING SIZE	BUILDING AREA	REQ. VENTING	SIDE VENTING	END VENTING	TOTAL VENTING SUPPLIED
W/O PARAPET	24' x 40'	960 SF	6.4 SF (1/150)	3'-6" x 6" = (4) 1.75 SF/EA	-	7.0 SF
W/ PARAPET	24' x 40'	960 SF	6.4 SF (1/150)	3'-0" x 6" = (4) 1.5 SF/EA (6 SF TOTAL)	3'-0" x 3" = (2) 1.5 SF/EA (.75 SF TOTAL)	7.5 SF SEE NOTE #8

TIE PLATE SCHEDULE

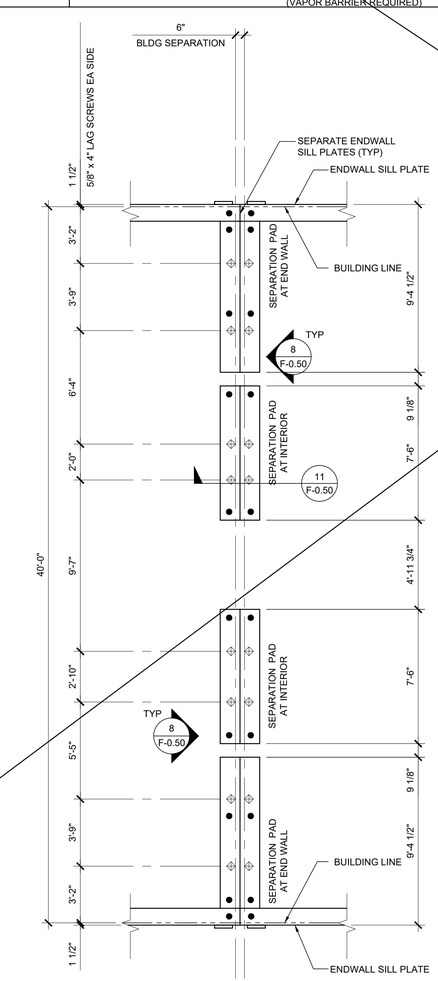
BUILDING SIZE	SIDE WALL TIE PLATES	END WALL TIE PLATES	TOTAL NUMBER OF TIE PLATES
24' x 40'	4	7	22



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

CONTINUOUS SILL PLATES

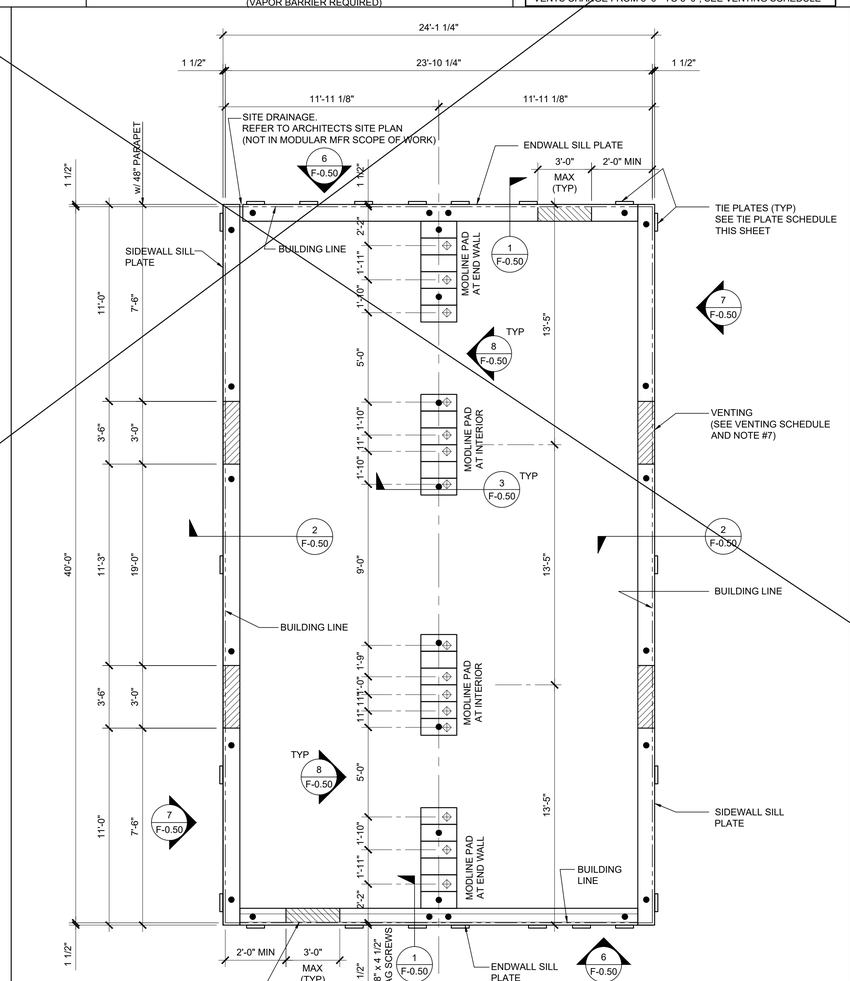
FOOTING AT SEPARATION SCALE: 1/4" = 1' - 0" 3



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

SEPARATE SILL PLATES

FOOTING AT SEPARATION SCALE: 1/4" = 1' - 0" 2



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

WOOD FOUNDATION PLAN
24x40
(50+15 PSF)

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

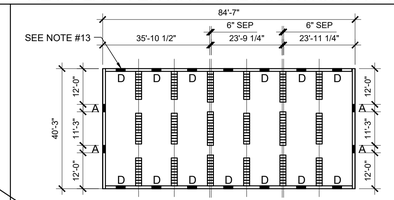
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24175 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

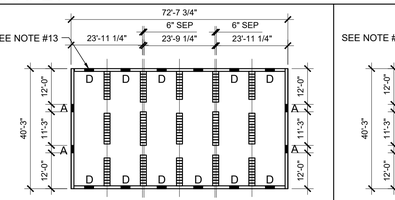
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
F-0.02

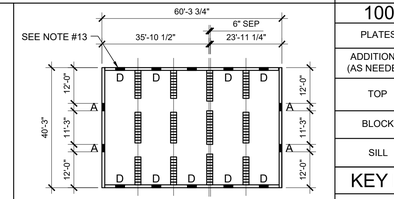
KEY PLAN VENTING CALCULATIONS W/O PARAPET



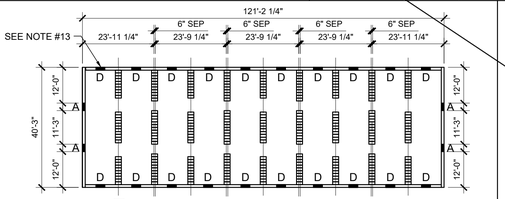
☐ 85' x 40' BUILDING: 3400 SF / 150 = 22.66 SF VENT REQ'D
(4) - "A" VENT = 5.00 SF
(13) - "D" VENT = 17.81 SF
22.81 SF TOTAL VENTILATION (> 22.66 SF)
(VAPOR BARRIER REQUIRED)



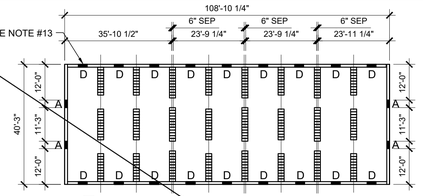
☐ 73'-0" x 40' BUILDING: 2920 SF / 150 = 19.46 SF VENT REQ'D
(4) - "A" VENT = 5.00 SF
(11) - "D" VENT = 15.07 SF
20.07 SF TOTAL VENTILATION (> 19.46 SF)
(VAPOR BARRIER REQUIRED)



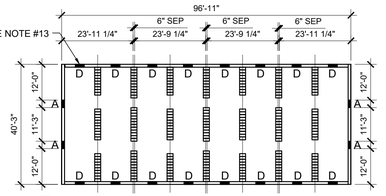
☐ 60'-6" x 40' BUILDING: 2420 SF / 150 = 16.13 SF VENT REQ'D
(4) - "A" VENT = 5.00 SF
(9) - "D" VENT = 12.33 SF
17.33 SF TOTAL VENTILATION (> 16.13 SF)
(VAPOR BARRIER REQUIRED)



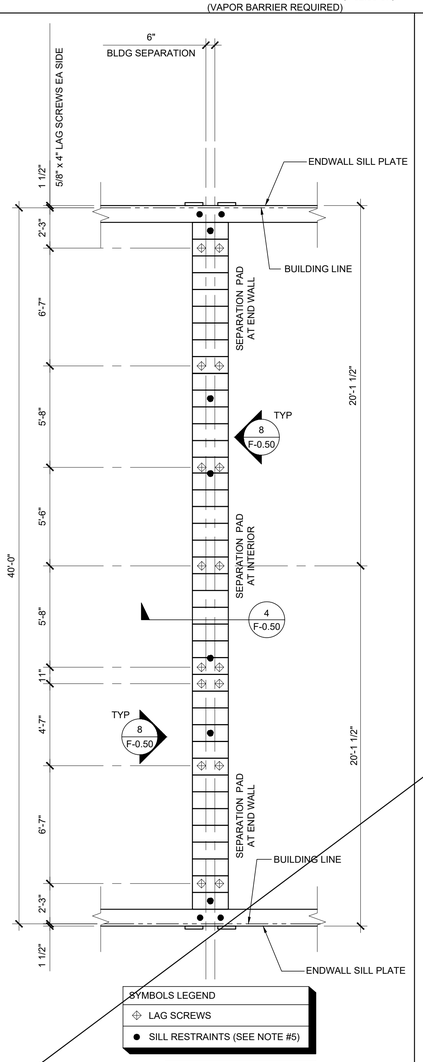
☐ 122'-0" x 40' BUILDING: 4880 SF / 150 = 32.53 SF VENT REQ'D
(4) - "A" VENT = 5.00 SF
(20) - "D" VENT = 27.5 SF
32.5 SF TOTAL VENTILATION (> 32.53 SF)
(VAPOR BARRIER REQUIRED)



☐ 109'-6" x 40' BUILDING: 4380 SF / 150 = 29.2 SF VENT REQ'D
(4) - "A" VENT = 5.00 SF
(18) - "D" VENT = 24.66 SF
29.66 SF TOTAL VENTILATION (> 29.2 SF)
(VAPOR BARRIER REQUIRED)



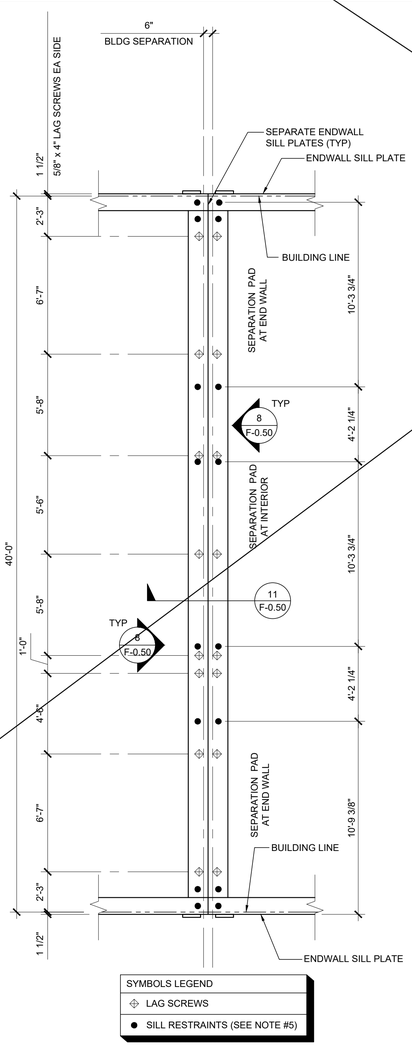
☐ 97'-6" x 40' BUILDING: 3900 SF / 150 = 26 SF VENT REQ'D
(4) - "A" VENT = 5.00 SF
(16) - "D" VENT = 21.92 SF
26.92 SF TOTAL VENTILATION (> 26 SF)
(VAPOR BARRIER REQUIRED)



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

CONTINUOUS SILL PLATES

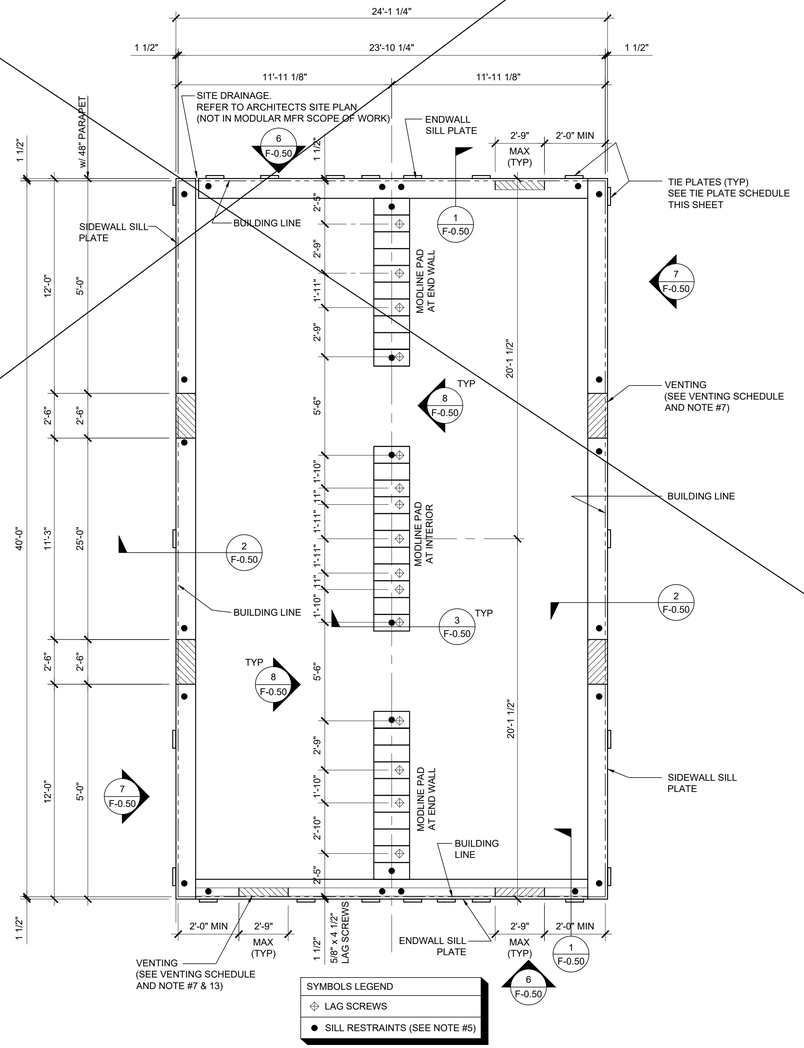
FOOTING AT SEPARATION SCALE: 1/4" = 1' - 0" 3



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

SEPARATE SILL PLATES

FOOTING AT SEPARATION SCALE: 1/4" = 1' - 0" 2



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

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

WOOD FOUNDATION PLATE SCHEDULE

100 PSF

PLATES	END WALL	SIDE WALL	MODLINE PAD AT END WALL	MODLINE PAD AT INTERIOR	SEPARATION PAD AT ENDWALL ☐ SEPARATE	SEPARATION PAD AT ENDWALL ☐ CONTINUOUS	SEPARATION PAD AT INTERIOR ☐ SEPARATE	SEPARATION PAD AT INTERIOR ☐ CONTINUOUS
ADDITIONAL (AS NEEDED)	2x4	2x4	2x6	2x6	(2) ROWS OF 2x4	2x12	(2) ROWS OF 2x4	2x12
TOP	2x6	2x6	2x8	2x8	(2) ROWS OF 2x6	2x12	(2) ROWS OF 2x6	2x12
BLOCK	2x8	2x8	2x10	2x10	(2) ROWS OF 2x8	2x12	(2) ROWS OF 2x8	2x12
SILL	2x14 (2x16)[15]	2x14 (2x16)[15]	(10) 2x12 x 2'-0"	(11) 2x12 x 2'-0"	(2) ROWS OF 2x14	2x12 x 2'-0"	(2) ROWS OF 2x14	2x12 x 2'-0"

KEY PLAN VENTING SCHEDULE

VENT "A" (SIDEWALL): 2'-6" x 6" = 1.25 S.F. VENTILATION
"VENT OPENING BELOW CONT UPPER PLATE"

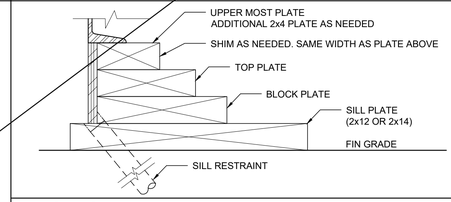
VENT "B" (ENDWALL): 2'-9" x 3" = 0.68 S.F. VENTILATION
(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATE"

VENT "C" (ENDWALL): 2'-9" x 4 1/2" = 1.03 S.F. VENTILATION
(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "D" (ENDWALL): 2'-9" x 6" = 1.37 S.F. VENTILATION
(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

NOTE:
@ BUILDINGS WITH PARAPETS UP TO 48" HIGH, SIDE WALL VENTS CHANGE FROM 3'-6" TO 3'-0", SEE VENTING SCHEDULE

FOUNDATION PLATE DESCRIPTION



NOTES

1. BUILDINGS OVER 2,160 SF, MUST BE INSTALLED ON A PERMANENT CONCRETE FOUNDATION PER IR 16-1 ITEM 1.4.
2. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULAR FLOORS.
3. FOUNDATION VENTS THAT OCCUR UNDER RAMP LANDINGS, PROVIDE AN EQUAL AREA OF SCREENED VENT IN LANDING SKIRT.
4. WOOD SILL (FOOTING) PLATES SHALL BE PRESSURE TREATED HEM-FIR AND MAY BEAR DIRECTLY ON SOIL OR PAVED SURFACE. GRASS OR TURF SHALL BE CLEARED TO BARE SOIL UNDER THE ENTIRE AREA OF THE BUILDING BY OTHERS. THE WOOD SILL FOOTING PLATE MAY SUPPORT CONTINUOUS BLOCKING AND SHEATHING SKIRT WHICH NEED NOT BE TREATED.
5. SILL RESTRAINT:
   THE FOUNDATION SHALL BE DESIGNED TO PREVENT SLIDING ON THE SUPPORTING SURFACE BY ATTACHING THE WOOD FOUNDATION PLATES FOR THE BUILDING, RAMPS AND STAIRS TO THE GROUND WITH RESTRAINING DEVICES. AN ACCEPTABLE DESIGN WOULD INCORPORATE ONE-INCH DIAMETER STANDARD WEIGHT (1.315" ACTUAL O.D.) HOT DIPPED GALVANIZED PIPES OR ONE-INCH DIAMETER SOLID STEEL RODS SPACED AT NOT MORE THAN 10'-0" O.C. ONE PIPE / ROD SHALL BE LOCATED A MAXIMUM OF TWO FEET FROM EACH CORNER IN BOTH DIRECTIONS AND A MINIMUM OF TWO PIPES / RODS PER DISCONTINUOUS FOUNDATIONS STRIP. PIPES SHOULD PENETRATE INTO SOIL, CONCRETE, AND/OR PAVING A MINIMUM OF 12" MEASURED VERTICALLY. ALTERNATE OR EQUIVALENT DESIGNS, WHEN PROVIDED WITH STRUCTURAL CALCULATIONS AND DETAILS, WILL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL.
6. STACKED WOOD MEMBERS FOR FOUNDATIONS AND PRESSURE TREATED LUMBER SHALL BE NAILED WITH HOT DIPPED GALVANIZED PER ASTM A-153.
7. VENTILATION OPENINGS SHALL BE COVERED FOR EITHER HEIGHT AND WIDTH WITH CORROSION - RESISTANT WIRE MESH, WITH A CLEAR "THROUGH" DIMENSION NOT EXCEEDING 1/8" ACTING AS A VERMIN BARRIER.
8. VENTING CALCULATION REQUIREMENTS FOR MULTIPLE BUILDING SETS MUST BE CALCULATED WITH OVERALL SQUARE FOOTAGE INCLUDING SEPARATION.
9. FOR FOUNDATION ANCHORAGE ON CONCRETE PAD, SEE DETAIL 15/F0.50.
10. IF OPTIONAL ENDWALL VENTS ARE APPLIED, SILL PLATE AND BLOCK PLATE MUST BE CONTINUOUS. VENT OPENINGS SHALL BE BROKEN ABOVE THE BLOCK PLATE.
11. FOR FOUNDATION SPLICE - SEE 5/F-0.50.
12. CRAWLSPACE VAPOR RETARDERS (WHERE INDICATED):
    THE OPTIONAL TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
    MATERIALS:
    GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
    INSTALLATION RECOMMENDATIONS:
    OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; ATTACH VAPOR RETARDER OVER SILL PLATE PER 10/F0.50; SEAL TO ALL PIERS AND OTHER PENETRATIONS.
13. ENDWALL VENTS (IF REQ'D) SHALL BE LOCATED A MIN OF 24" FROM BUILDING CORNERS. MAXIMUM ONE ENDWALL VENT PER 12'-0" MODULE.
14. CONCRETE FLOOR LOAD IS INCLUDED IN THE CONCRETE FOUNDATION OPTION FOR FOUNDATION & ANCHORAGE DESIGN, I.E. THERE IS NO CONCRETE FLOOR FOR WOOD FOUNDATION OPTION. THERE IS NO CONCRETE FLOOR FOR CONCRETE FOUNDATION OPTION.
15. IF PARAPET IS HIGHER THAN 18", COMBINATION REQUIRES A 2 X 14" OR 2 X 16" SILL PLATE @ EXTERIOR OF BUILDING.
16. 150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OR PARAPET OPTION.
17. VENTS AT MODLINE FOUNDATIONS. THE MINIMUM CRITERIA REQUIREMENT AS FOLLOWS:
    A. VENTS HAVE A MINIMUM OF 2 SILL /BLOCKING PLATES BENEATH.
    B. VENTS ARE A MAXIMUM OF 6'-0" LONG x 3" MIN. HIGH.
    C. VENTS ARE SPACED A MINIMUM OF 8'-0" APART (EDGE TO EDGE) AND 24" MIN. FROM CORNERS.
18. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.

NAILING SCHEDULE

BUILDING SIZE	(2) 16d BOX NAILS PLATE TO PLATE ATTACHMENT BELOW UPPER MOST PLATE
24' x 40'	5" OC AT ENDWALL - 1 / F-0.50 12" OC AT SIDEWALL - 2 / F-0.50 10" OC AT SEPARATION - 4 / F-0.50

VENTING SCHEDULE

BUILDING SIZE	BUILDING AREA	REQUIRED VENTING	SIDEWALL VENTING	ENDWALL VENTING	TOTAL VENTING SUPPLIED
24' x 40'	960 SF	6.4 SF (1/150)	2'-6" x 6" = (4) 1.25 SF/ EA (5 SF TOTAL)	2'-9" x 3" = (3) 0.68 SF/ EA (2.04 SF TOTAL)	7.04 SF SEE NOTE #8

TIE PLATE SCHEDULE

BUILDING SIZE	SIDE WALL TIE PLATES	END WALL TIE PLATES	TOTAL NUMBER OF TIE PLATES
24' x 40'	4	7	22

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

WOOD FOUNDATION PLAN
24x40
(100 PSF)

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

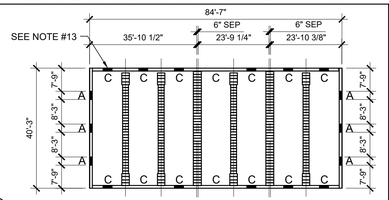
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24175
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

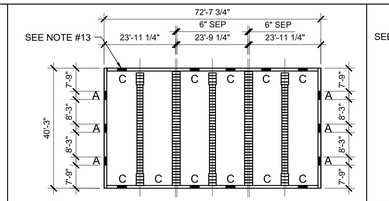
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
F-0.03

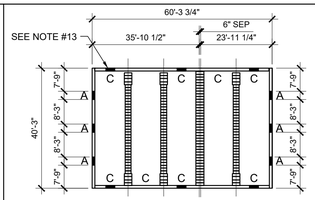
KEY PLAN VENTING CALCULATIONS



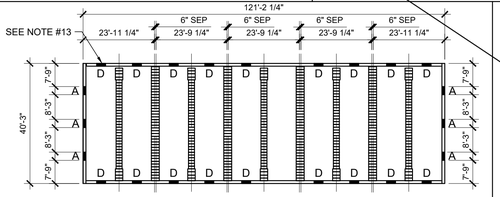
☐ 85' x 40' BUILDING: 3400 SF / 150 = 22.66 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(14) - "C" VENT = 14.42 SF
22.67 SF TOTAL VENTILATION (> 22.66 SF)



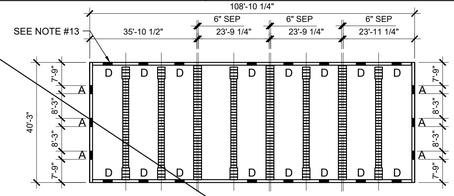
☐ 73'-0" x 40' BUILDING: 2920 SF / 150 = 19.46 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(11) - "C" VENT = 11.33 SF
19.58 SF TOTAL VENTILATION (> 19.46 SF)



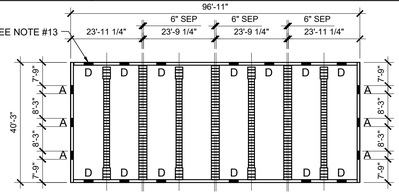
☐ 60'-6" x 40' BUILDING: 2420 SF / 150 = 16.13 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(8) - "C" VENT = 8.24 SF
16.49 SF TOTAL VENTILATION (> 16.13 SF)



☐ 122'-0" x 40' BUILDING: 4880 SF / 150 = 32.53 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(18) - "D" VENT = 24.66 SF
33.91 SF TOTAL VENTILATION (> 32.53 SF)



☐ 109'-6" x 40' BUILDING: 4380 SF / 150 = 29.2 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(16) - "D" VENT = 21.92 SF
30.17 SF TOTAL VENTILATION (> 29.2 SF)



☐ 97'-6" x 40' BUILDING: 3900 SF / 150 = 26 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(13) - "D" VENT = 17.81 SF
26.06 SF TOTAL VENTILATION (> 26 SF)

150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OR PARAPET OPTIONS

WOOD FOUNDATION PLATE SCHEDULE

150 PSF

PLATES	END WALL	SIDE WALL	MODLINE PAD AT END WALL	MODLINE PAD AT INTERIOR	PLATES AT SEPARATION ☐ SEPARATE	PLATES AT SEPARATION ☐ CONTINUOUS
ADDITIONAL (AS NEEDED)	2x4	2x4	2x6	2x6	(2) ROWS OF 2x4	2x12
TOP	2x6	2x6	2x8	2x8	(2) ROWS OF 2x6	2x12
BLOCK	2x8	2x8	2x12	2x12	(2) ROWS OF 2x8 (CONT)	2x12
SILL	2x14	2x14	(7) 2x12 x 30"	2x12 x 24"	(2) ROWS OF 2x14 (CONT)	2x12 x 30"

KEY PLAN VENTING SCHEDULE

VENT "A" (SIDEWALL): 2'-9" x 6" = 1.375 S.F. VENTILATION
"VENT OPENING ABOVE CONT. SILL AND BLOCK PLATE"

VENT "B" (ENDWALL): 2'-9" x 3" = 0.68 S.F. VENTILATION

(OPTIONAL AT MULTIPLE BLDG SET) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATE"

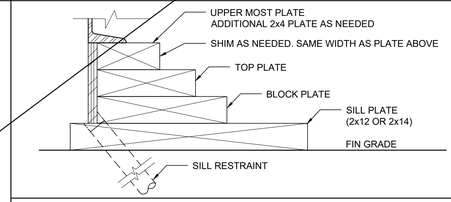
VENT "C" (ENDWALL): 2'-9" x 4 1/2" = 1.03 S.F. VENTILATION

(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "D" (ENDWALL): 2'-9" x 6" = 1.37 S.F. VENTILATION

(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

FOUNDATION PLATE DESCRIPTION



NOTES

1. BUILDINGS OVER 2,160 SF, MUST BE INSTALLED ON A PERMANENT CONCRETE FOUNDATION PER IR 16-1 ITEM 1.4.
2. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULAR FLOORS.
3. FOUNDATION VENTS THAT OCCUR UNDER RAMP LANDINGS, PROVIDE AN EQUAL AREA OF SCREENED VENT IN LANDING SKIRT.
4. WOOD SILL (FOOTING) PLATES SHALL BE PRESSURE TREATED HEM-FIR AND MAY BEAR DIRECTLY ON SOIL OR PAVED SURFACE. GRASS OR TURF SHALL BE CLEARED TO BARE SOIL UNDER THE ENTIRE AREA OF THE BUILDING BY OTHERS. THE WOOD SILL FOOTING PLATE MAY SUPPORT CONTINUOUS BLOCKING AND SHEATHING SKIRT WHICH NEED NOT BE TREATED.
5. SILL RESTRAINT:
   THE FOUNDATION SHALL BE DESIGNED TO PREVENT SLIDING ON THE SUPPORTING SURFACE BY ATTACHING THE WOOD FOUNDATION PLATES FOR THE BUILDING, RAMPS AND STAIRS TO THE GROUND WITH RESTRAINING DEVICES. AN ACCEPTABLE DESIGN WOULD INCORPORATE ONE-INCH DIAMETER STANDARD WEIGHT (1.315" ACTUAL O.D.) HOT DIPPED GALVANIZED PIPES OR ONE-INCH DIAMETER SOLID STEEL RODS SPACED AT NOT MORE THAN 10'-0" O.C. ONE PIPE / ROD SHALL BE LOCATED A MAXIMUM OF TWO FEET FROM EACH CORNER IN BOTH DIRECTIONS AND A MINIMUM OF TWO PIPES / RODS PER DISCONTINUOUS FOUNDATIONS STRIP. PIPES SHOULD PENETRATE INTO SOIL, CONCRETE, AND/OR PAVING A MINIMUM OF 12" MEASURED VERTICALLY. ALTERNATE OR EQUIVALENT DESIGNS, WHEN PROVIDED WITH STRUCTURAL CALCULATIONS AND DETAILS, WILL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL.
6. STACKED WOOD MEMBERS FOR FOUNDATIONS AND PRESSURE TREATED LUMBER SHALL BE NAILED WITH HOT DIPPED GALVANIZED PER ASTM A-153.
7. VENTILATION OPENINGS SHALL BE COVERED FOR EITHER HEIGHT AND WIDTH WITH CORROSION - RESISTANT WIRE MESH, WITH A CLEAR "THROUGH" DIMENSION NOT EXCEEDING 1/8" ACTING AS A VERMIN BARRIER.
8. VENTING CALCULATION REQUIREMENTS FOR MULTIPLE BUILDING SETS MUST BE CALCULATED WITH OVERALL SQUARE FOOTAGE INCLUDING SEPARATION.
9. FOR FOUNDATION ANCHORAGE ON CONCRETE PAD, SEE DETAIL 15/F0.50.
10. IF OPTIONAL ENDWALL VENTS ARE APPLIED, SILL PLATE AND BLOCK PLATE MUST BE CONTINUOUS. VENT OPENINGS SHALL BE BROKEN ABOVE THE BLOCK PLATE.
11. FOR FOUNDATION SPLICE - SEE 5/F-0.50.
12. CRAWLSPACE VAPOR RETARDERS (WHERE INDICATED):
    THE OPTIONAL TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
    MATERIALS:
    GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
    INSTALLATION RECOMMENDATIONS:
    OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; ATTACH VAPOR RETARDER OVER SILL PLATE PER 10/F0.50; SEAL TO ALL PIERS AND OTHER PENETRATIONS.
13. ENDWALL VENTS (IF REQ'D) SHALL BE LOCATED A MIN OF 24" FROM BUILDING CORNERS. MAXIMUM ONE ENDWALL VENT PER 12'-0" MODULE.
14. CONCRETE FLOOR LOAD IS INCLUDED IN THE CONCRETE FOUNDATION OPTION FOR FOUNDATION & ANCHORAGE DESIGN, I.E. THERE IS NO CONCRETE FLOOR FOR WOOD FOUNDATION OPTION. THERE IS CONCRETE FLOOR FOR CONCRETE FOUNDATION OPTION.
15. IF PARAPET IS HIGHER THAN 18", COMBINATION REQUIRES A 2 X 14" OR 2 X 16" SILL PLATE @ EXTERIOR OF BUILDING.
16. 150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OR PARAPET OPTION.
17. VENTS AT MODLINE FOUNDATIONS. THE MINIMUM CRITERIA REQUIREMENT AS FOLLOWS:
    A. VENTS HAVE A MINIMUM OF 2 SILL /BLOCKING PLATES BENEATH.
    B. VENTS ARE A MAXIMUM OF 6'-0" LONG x 3" MIN. HIGH.
    C. VENTS ARE SPACED A MINIMUM OF 8'-0" APART (EDGE TO EDGE) AND 24" MIN. FROM CORNERS.
18. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.

NAILING SCHEDULE

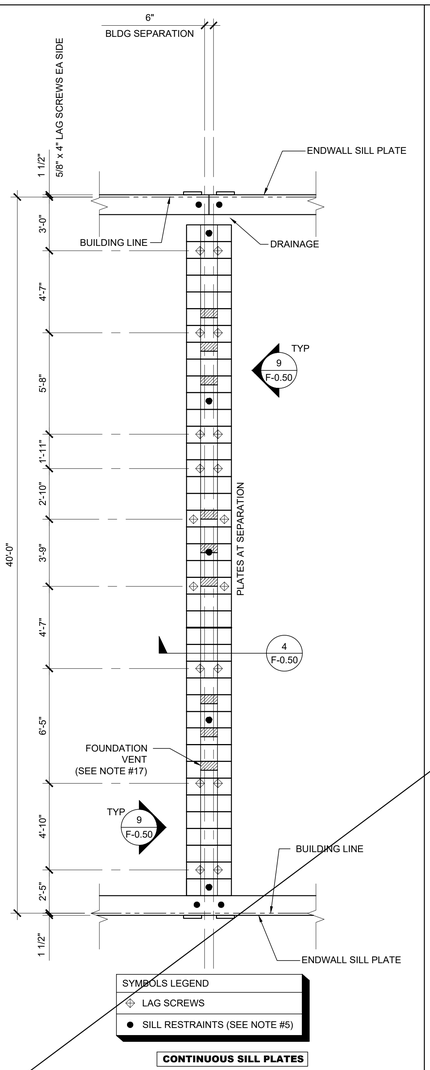
BUILDING SIZE	(2) 16d BOX NAILS PLATE TO PLATE ATTACHMENT BELOW UPPER MOST PLATE
24' x 40'	5" OC AT ENDWALL - 1 / F-0.50 12" OC AT SIDEWALL - 2 / F-0.50 9" OC AT SEPARATION - 4 / F-0.50

VENTING SCHEDULE

BUILDING SIZE	BUILDING AREA	REQUIRED VENTING	SIDEWALL VENTING	ENDWALL VENTING	TOTAL VENTING SUPPLIED
24' x 40'	960 SF	6.4 SF (1/150)	2.75' x 4.5" = (6) 1.03 SF/ EA (6.16 SF TOTAL)	2.75' x 3" = 0.68 SF/ EA 0.68 SF TOTAL)	6.84 SF SEE NOTE #8

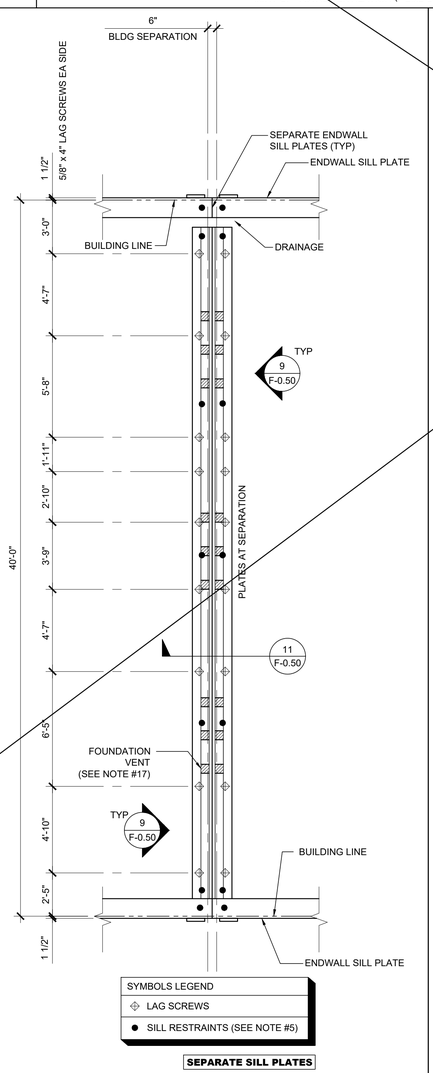
TIE PLATE SCHEDULE

BUILDING SIZE	SIDE WALL TIE PLATES	END WALL TIE PLATES	TOTAL NUMBER OF TIE PLATES
24' x 40'	4	8	24



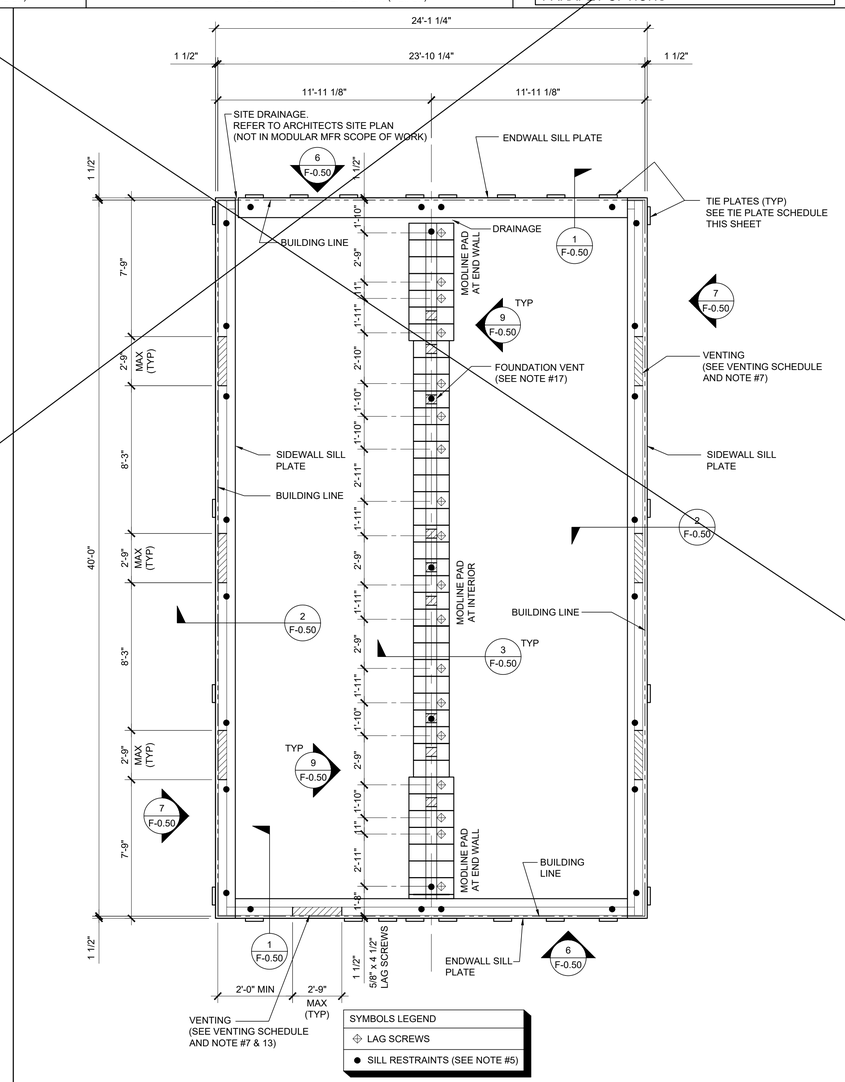
CONTINUOUS SILL PLATES

FOOTING AT SEPARATION SCALE: 1/4" = 1' - 0" 3



SEPARATE SILL PLATES

FOOTING AT SEPARATION SCALE: 1/4" = 1' - 0" 2



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

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

WOOD FOUNDATION PLAN
24x40
(150 PSF)

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

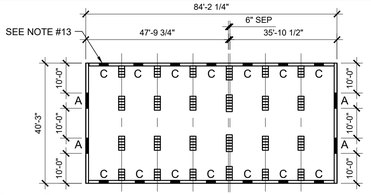
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLE 24775 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

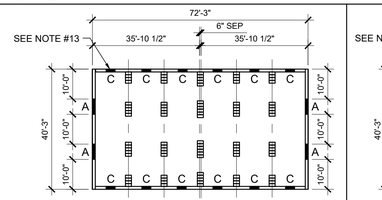
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
F-0.04

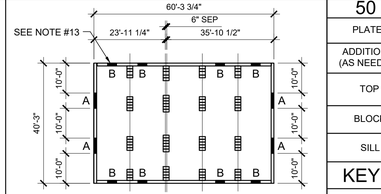
KEY PLAN VENTING CALCULATIONS w/o PARAPET



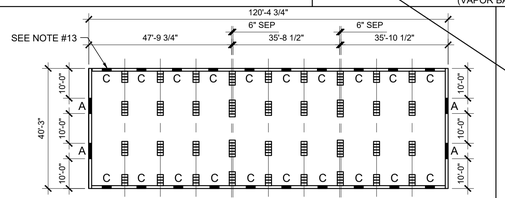
☐ 85' x 40' BUILDING: 3400 SF / 150 = 22.66 SF VENT REQ'D
(4) - "A" VENT = 10.24 SF
(12) - "C" VENT = 13.50 SF
23.74 SF TOTAL VENTILATION (> 22.66 SF)
(VAPOR BARRIER REQUIRED)



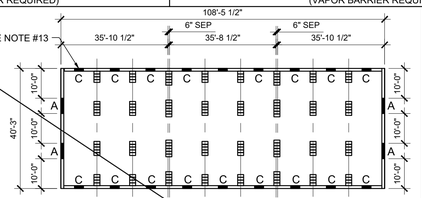
☐ 73'-0" x 40' BUILDING: 2920 SF / 150 = 19.46 SF VENT REQ'D
(4) - "A" VENT = 10.24 SF
(9) - "C" VENT = 10.125 SF
20.36 SF TOTAL VENTILATION (> 19.46 SF)
(VAPOR BARRIER REQUIRED)



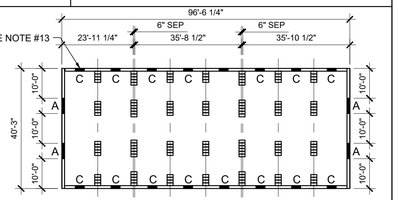
☐ 60'-6" x 40' BUILDING: 2420 SF / 150 = 16.13 SF VENT REQ'D
(4) - "A" VENT = 10.24 SF
(8) - "B" VENT = 6.00 SF
16.24 SF TOTAL VENTILATION (> 16.13 SF)



☐ 122'-0" x 40' BUILDING: 4880 SF / 150 = 32.53 SF VENT REQ'D
(4) - "A" VENT = 10.24 SF
(20) - "C" VENT = 22.50 SF
32.74 SF TOTAL VENTILATION (> 32.53 SF)
(VAPOR BARRIER REQUIRED)



☐ 109'-6" x 40' BUILDING: 4380 SF / 150 = 29.2 SF VENT REQ'D
(4) - "A" VENT = 10.24 SF
(17) - "B" VENT = 19.12 SF
29.36 SF TOTAL VENTILATION (> 29.2 SF)
(VAPOR BARRIER REQUIRED)



☐ 97'-6" x 40' BUILDING: 3900 SF / 150 = 26 SF VENT REQ'D
(4) - "A" VENT = 10.24 SF
(15) - "B" VENT = 16.87 SF
27.11 SF TOTAL VENTILATION (> 26 SF)
(VAPOR BARRIER REQUIRED)

WOOD FOUNDATION PLATE SCHEDULE

50 PSF

PLATES	END WALL	SIDE WALL	MODLINE PAD AT END WALL	MODLINE PAD AT INTERIOR	SEPARATION PAD AT ENDWALL ☐ SEPARATE	SEPARATION PAD AT ENDWALL ☐ CONTINUOUS	SEPARATION PAD AT INTERIOR ☐ SEPARATE	SEPARATION PAD AT INTERIOR ☐ CONTINUOUS
ADDITIONAL (AS NEEDED)	2x4	2x4	2x6	2x6	(2) ROWS OF 2x4	2x12	(2) ROWS OF 2x4	2x12
TOP	2x6	2x6	2x8	2x8	(2) ROWS OF 2x6	2x12	(2) ROWS OF 2x6	2x12
BLOCK	2x8	2x8	2x10	2x10	(2) ROWS OF 2x8	2x12	(2) ROWS OF 2x8	2x12
SILL	2x12 (2x14)[15]	2x12 (2x14)[15]	(5) 2x12 x 2'-0"	(5) 2x12 x 2'-0"	(2) ROWS OF 2x14	(8) 2x12 x 2'-0"	(2) ROWS OF 2x14	(7) 2x12 x 2'-0"

KEY PLAN VENTING SCHEDULE

VENT "A" (SIDEWALL): 5'-1 1/2" x 6" = 2.56 S.F. VENTILATION

"VENT OPENING AT SILL AND BLOCK PLATES"

VENT "B" (ENDWALL): 3'-0" x 3" = 0.75 S.F. VENTILATION

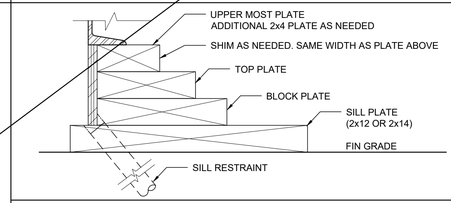
(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "C" (ENDWALL): 3'-0" x 4 1/2 " = 1.125 S.F. VENTILATION

(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

NOTE:
@ BUILDINGS WITH PARAPETS UP TO 48" HIGH, SIDE WALL VENTS CHANGE FROM 5'-1 1/2" TO 4'-0", SEE VENTING SCHEDULE

FOUNDATION PLATE DESCRIPTION



NOTES

1. BUILDINGS OVER 2,160 SF, MUST BE INSTALLED ON A PERMANENT CONCRETE FOUNDATION PER IR 16-1 ITEM 1.4.
2. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULAR FLOORS.
3. FOUNDATION VENTS THAT OCCUR UNDER RAMP LANDINGS, PROVIDE AN EQUAL AREA OF SCREENED VENT IN LANDING SKIRT.
4. WOOD SILL (FOOTING) PLATES SHALL BE PRESSURE TREATED HEM-FIR AND MAY BEAR DIRECTLY ON SOIL OR PAVED SURFACE. GRASS OR TURF SHALL BE CLEARED TO BARE SOIL UNDER THE ENTIRE AREA OF THE BUILDING BY OTHERS. THE WOOD SILL FOOTING PLATE MAY SUPPORT CONTINUOUS BLOCKING AND SHEATHING SKIRT WHICH NEED NOT BE TREATED.
5. SILL RESTRAINT:
   THE FOUNDATION SHALL BE DESIGNED TO PREVENT SLIDING ON THE SUPPORTING SURFACE BY ATTACHING THE WOOD FOUNDATION PLATES FOR THE BUILDING, RAMPS AND STAIRS TO THE GROUND WITH RESTRAINING DEVICES. AN ACCEPTABLE DESIGN WOULD INCORPORATE ONE-INCH DIAMETER STANDARD WEIGHT (1.315" ACTUAL O.D.) HOT DIPPED GALVANIZED PIPES OR ONE-INCH DIAMETER SOLID STEEL RODS SPACED AT NOT MORE THAN 10'-0" O.C. ONE PIPE / ROD SHALL BE LOCATED A MAXIMUM OF TWO FEET FROM EACH CORNER IN BOTH DIRECTIONS AND A MINIMUM OF TWO PIPES / RODS PER DISCONTINUOUS FOUNDATIONS STRIP. PIPES SHOULD PENETRATE INTO SOIL, CONCRETE, AND/OR PAVING A MINIMUM OF 12" MEASURED VERTICALLY. ALTERNATE OR EQUIVALENT DESIGNS, WHEN PROVIDED WITH STRUCTURAL CALCULATIONS AND DETAILS, WILL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL.
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7. VENTILATION OPENINGS SHALL BE COVERED FOR EITHER HEIGHT AND WIDTH WITH CORROSION - RESISTANT WIRE MESH, WITH A CLEAR "THROUGH" DIMENSION NOT EXCEEDING 1/8" ACTING AS A VERMIN BARRIER.
8. VENTING CALCULATION REQUIREMENTS FOR MULTIPLE BUILDING SETS MUST BE CALCULATED WITH OVERALL SQUARE FOOTAGE INCLUDING SEPARATION.
9. FOR FOUNDATION ANCHORAGE ON CONCRETE PAD, SEE DETAIL 15/F0.50.
10. IF OPTIONAL ENDWALL VENTS ARE APPLIED, SILL PLATE AND BLOCK PLATE MUST BE CONTINUOUS. VENT OPENINGS SHALL BE BROKEN ABOVE THE BLOCK PLATE.
11. FOR FOUNDATION SPLICE - SEE 5/F-0.50.
12. CRAWLSPACE VAPOR RETARDERS (WHERE INDICATED):
    THE OPTIONAL TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
    MATERIALS:
    GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
    INSTALLATION RECOMMENDATIONS:
    OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; ATTACH VAPOR RETARDER OVER SILL PLATE PER 10/F0.50; SEAL TO ALL PIERS AND OTHER PENETRATIONS.
13. ENDWALL VENTS (IF REQ'D) SHALL BE LOCATED A MIN OF 24" FROM BUILDING CORNERS. MAXIMUM ONE ENDWALL VENT PER 12'-0" MODULE.
14. CONCRETE FLOOR LOAD IS INCLUDED IN THE CONCRETE FOUNDATION OPTION FOR FOUNDATION & ANCHORAGE DESIGN, I.E. THERE IS NO CONCRETE FLOOR FOR WOOD FOUNDATION OPTION. THERE IS CONCRETE FLOOR FOR CONCRETE FOUNDATION OPTION
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16. 150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OR PARAPET OPTION.
17. VENTS AT MODLINE FOUNDATIONS. THE MINIMUM CRITERIA REQUIREMENT AS FOLLOWS:
    A. VENTS HAVE A MINIMUM OF 2 SILL /BLOCKING PLATES BENEATH.
    B. VENTS ARE A MAXIMUM OF 6'-0" LONG x 3" MIN. HIGH.
    C. VENTS ARE SPACED A MINIMUM OF 8'-0" APART (EDGE TO EDGE) AND 24" MIN. FROM CORNERS.
18. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.

NAILING SCHEDULE

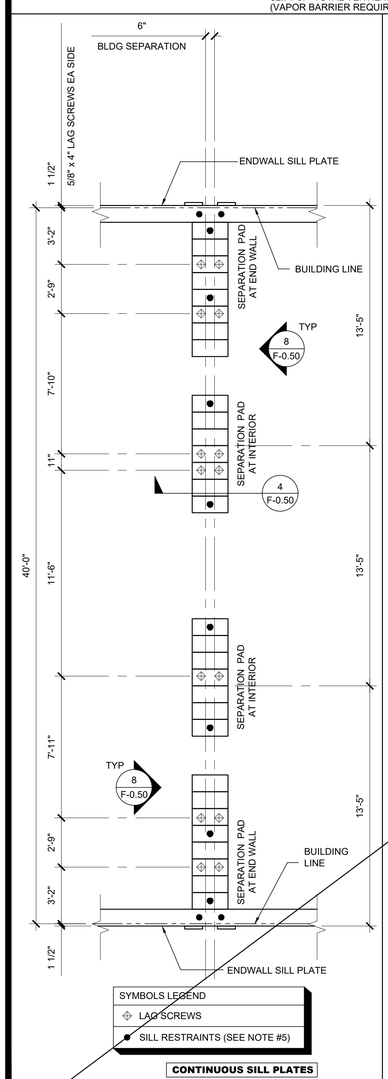
BUILDING SIZE	(2) 16d BOX NAILS PLATE TO SILL PLATE ATTACHMENT BELOW UPPER MOST PLATE
36' x 40'	5" OC AT ENDWALL - 1 / F-0.50B 12" OC AT SIDEWALL - 2 / F-0.50B 10" OC AT SEPARATION - 4 / F-0.50B

VENTING SCHEDULE

	BUILDING SIZE	BUILDING AREA	REQ. VENTING	SIDE VENTING	END VENTING	TOTAL VENTING SUPPLIED
W/O PARAPET	36' x 40'	1440 SF	9.6 SF (1/150)	5.125' x 6" = (4) 2.56 SF/EA	-	10.24 SF SEE NOTE #8
W/ PARAPET	36' x 40'	1440 SF	9.6 SF (1/150)	4'-0" x 6" = (4) 2 SF/EA (8 SF TOTAL)	3'-0" x 3" = (2) 1.5 SF/EA (.75 SF TOTAL)	9.5 SF SEE NOTE #8

TIE PLATE SCHEDULE (14 / F-0.50)

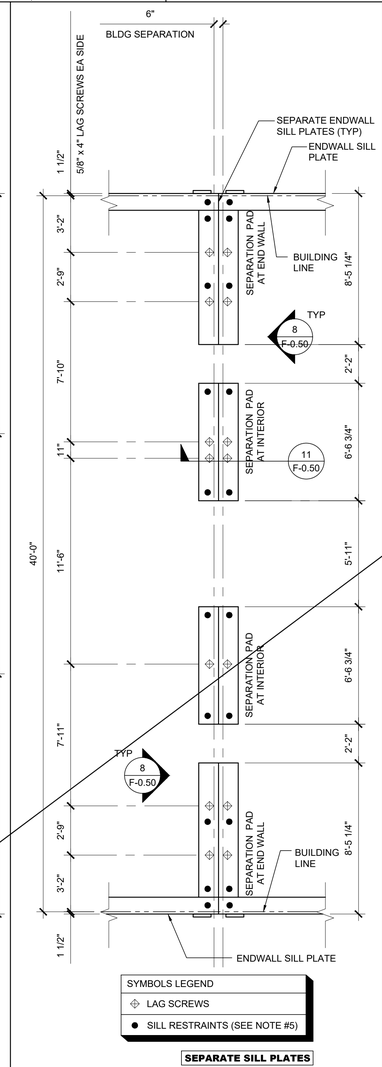
BUILDING SIZE	SIDE WALL TIE PLATES	END WALL TIE PLATES	TOTAL NUMBER OF TIE PLATES
36' x 40'	4	10	28



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

CONTINUOUS SILL PLATES

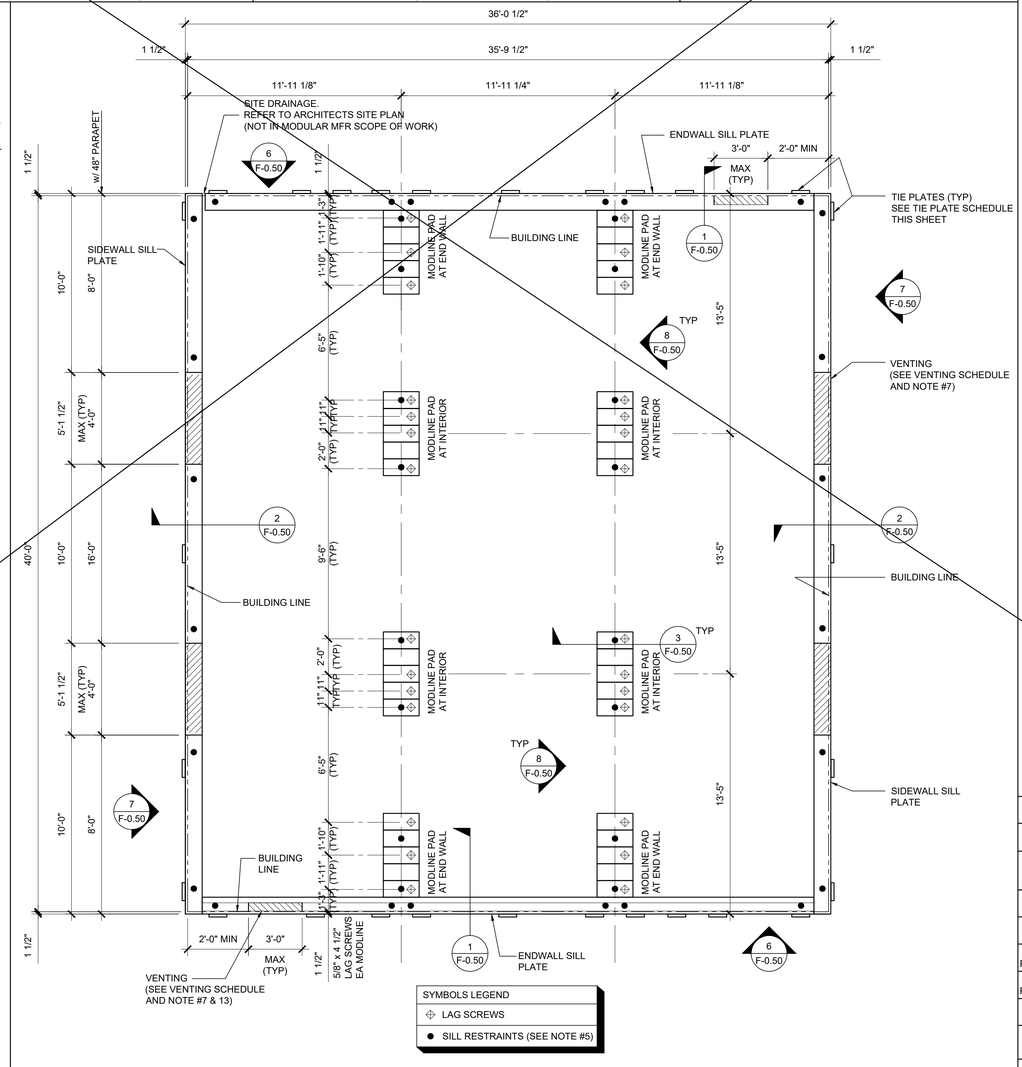
FOOTING AT SEP SCALE: 1/4" = 1' - 0" 3



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

SEPARATE SILL PLATES

FOOTING AT SEP SCALE: 1/4" = 1' - 0" 2



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

WOOD FOUNDATION PLAN
36' x 40' (50 PSF)

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

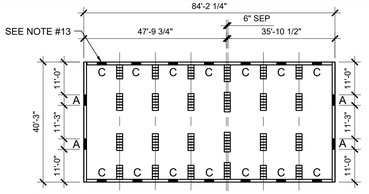
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24775 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

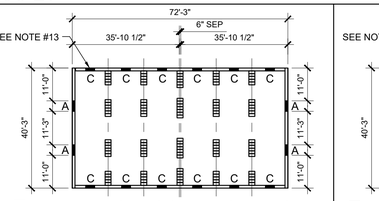
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
F-0.11

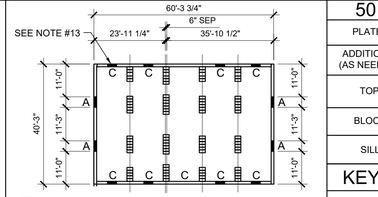
KEY PLAN VENTING CALCULATIONS w/o PARAPET



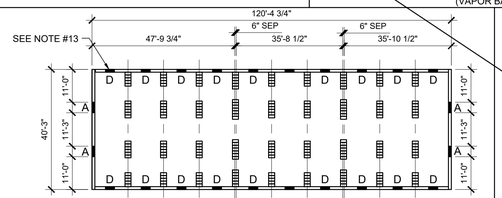
☐ 85' x 40' BUILDING: 3400 SF / 150 = 22.66 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(14) - "C" VENT = 15.75 SF
22.75 SF TOTAL VENTILATION (> 22.66 SF)
(VAPOR BARRIER REQUIRED)



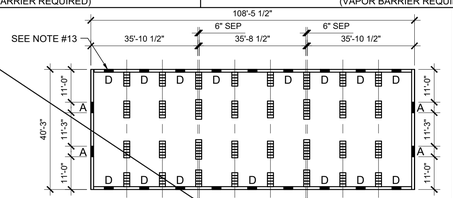
☐ 73'-0" x 40' BUILDING: 2920 SF / 150 = 19.46 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(12) - "C" VENT = 13.50 SF
20.50 SF TOTAL VENTILATION (> 19.46 SF)
(VAPOR BARRIER REQUIRED)



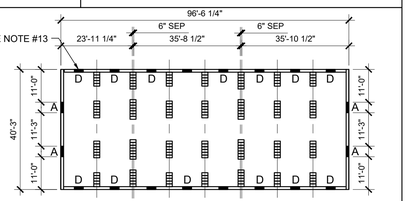
☐ 60'-6" x 40' BUILDING: 2420 SF / 150 = 16.13 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(9) - "C" VENT = 10.12 SF
17.12 SF TOTAL VENTILATION (> 16.13 SF)



☐ 122'-0" x 40' BUILDING: 4880 SF / 150 = 32.53 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(18) - "D" VENT = 27.00 SF
34.00 SF TOTAL VENTILATION (> 32.53 SF)
(VAPOR BARRIER REQUIRED)



☐ 109'-6" x 40' BUILDING: 4380 SF / 150 = 29.2 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(15) - "D" VENT = 22.50 SF
29.50 SF TOTAL VENTILATION (> 29.2 SF)
(VAPOR BARRIER REQUIRED)



☐ 97'-6" x 40' BUILDING: 3900 SF / 150 = 26 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(13) - "B" VENT = 19.50 SF
26.50 SF TOTAL VENTILATION (> 26 SF)
(VAPOR BARRIER REQUIRED)

WOOD FOUNDATION PLATE SCHEDULE

50 + 15 PSF

PLATES	END WALL	SIDE WALL	MODLINE PAD AT END WALL	MODLINE PAD AT INTERIOR	SEPARATION PAD AT ENDWALL ☐ SEPARATE	SEPARATION PAD AT ENDWALL ☐ CONTINUOUS	SEPARATION PAD AT INTERIOR ☐ SEPARATE	SEPARATION PAD AT INTERIOR ☐ CONTINUOUS
ADDITIONAL (AS NEEDED)	2x4	2x4	2x6	2x6	(2) ROWS OF 2x4	2x12	(2) ROWS OF 2x4	2x12
TOP	2x6	2x6	2x8	2x8	(2) ROWS OF 2x6	2x12	(2) ROWS OF 2x6	2x12
BLOCK	2x8	2x8	2x10	2x10	(2) ROWS OF 2x8	2x12	(2) ROWS OF 2x8	2x12
SILL	2x12 (2x14)[15]	2x12 (2x14)[15]	(6) 2x12 x 2'-0"	(6) 2x12 x 2'-0"	(2) ROWS OF 2x14	(2) 2x12 x 2'-0"	(2) ROWS OF 2x14	(8) 2x12 x 2'-0"

KEY PLAN VENTING SCHEDULE

VENT "A" (SIDEWALL): 3'-6" x 6" = 1.75 S.F. VENTILATION
"VENT OPENING AT SILL AND BLOCK PLATES"

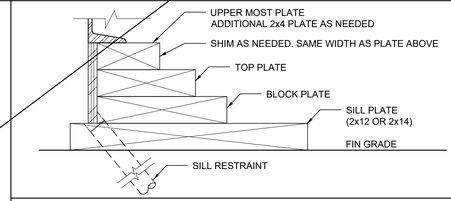
VENT "B" (ENDWALL): 3'-0" x 3" = 0.75 S.F. VENTILATION
(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "C" (ENDWALL): 3'-0" x 4 1/2 " = 1.125 S.F. VENTILATION
(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "D" (ENDWALL): 3'-0" x 6" = 1.5 S.F. VENTILATION
(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

NOTE:
@ BUILDINGS WITH PARAPETS UP TO 48" HIGH, SIDE WALL VENTS CHANGE FROM 3'-6" TO 3'-0", SEE VENTING SCHEDULE

FOUNDATION PLATE DESCRIPTION



NOTES

1. BUILDINGS OVER 2,160 SF, MUST BE INSTALLED ON A PERMANENT CONCRETE FOUNDATION PER IR 16-1 ITEM 1.4.
2. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULAR FLOORS.
3. FOUNDATION VENTS THAT OCCUR UNDER RAMP LANDINGS, PROVIDE AN EQUAL AREA OF SCREENED VENT IN LANDING SKIRT.
4. WOOD SILL (FOOTING) PLATES SHALL BE PRESSURE TREATED HEM-FIR AND MAY BEAR DIRECTLY ON SOIL OR PAVED SURFACE. GRASS OR TURF SHALL BE CLEARED TO BARE SOIL UNDER THE ENTIRE AREA OF THE BUILDING BY OTHERS. THE WOOD SILL FOOTING PLATE MAY SUPPORT CONTINUOUS BLOCKING AND SHEATHING SKIRT WHICH NEED NOT BE TREATED.
5. SILL RESTRAINT:
   THE FOUNDATION SHALL BE DESIGNED TO PREVENT SLIDING ON THE SUPPORTING SURFACE BY ATTACHING THE WOOD FOUNDATION PLATES FOR THE BUILDING, RAMPS AND STAIRS TO THE GROUND WITH RESTRAINING DEVICES. AN ACCEPTABLE DESIGN WOULD INCORPORATE ONE-INCH DIAMETER STANDARD WEIGHT (1.315" ACTUAL O.D.) HOT DIPPED GALVANIZED PIPES OR ONE-INCH DIAMETER SOLID STEEL RODS SPACED AT NOT MORE THAN 10'-0" O.C. ONE PIPE / ROD SHALL BE LOCATED A MAXIMUM OF TWO FEET FROM EACH CORNER IN BOTH DIRECTIONS AND A MINIMUM OF TWO PIPES / RODS PER DISCONTINUOUS FOUNDATIONS STRIP. PIPES SHOULD PENETRATE INTO SOIL, CONCRETE, AND/OR PAVING A MINIMUM OF 12" MEASURED VERTICALLY. ALTERNATE OR EQUIVALENT DESIGNS, WHEN PROVIDED WITH STRUCTURAL CALCULATIONS AND DETAILS, WILL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL.
6. STACKED WOOD MEMBERS FOR FOUNDATIONS AND PRESSURE TREATED LUMBER SHALL BE NAILED WITH HOT DIPPED GALVANIZED PER ASTM A-153.
7. VENTILATION OPENINGS SHALL BE COVERED FOR EITHER HEIGHT AND WIDTH WITH CORROSION - RESISTANT WIRE MESH, WITH A CLEAR "THROUGH" DIMENSION NOT EXCEEDING 1/8" ACTING AS A VERMIN BARRIER.
8. VENTING CALCULATION REQUIREMENTS FOR MULTIPLE BUILDING SETS MUST BE CALCULATED WITH OVERALL SQUARE FOOTAGE INCLUDING SEPARATION.
9. FOR FOUNDATION ANCHORAGE ON CONCRETE PAD, SEE DETAIL 15/F0.50.
10. IF OPTIONAL ENDWALL VENTS ARE APPLIED, SILL PLATE AND BLOCK PLATE MUST BE CONTINUOUS. VENT OPENINGS SHALL BE BROKEN ABOVE THE BLOCK PLATE.
11. FOR FOUNDATION SPLICE - SEE 5/F-0.50.
12. CRAWLSPACE VAPOR RETARDERS (WHERE INDICATED):
    THE OPTIONAL TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
    MATERIALS:
    GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
    INSTALLATION RECOMMENDATIONS:
    OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; ATTACH VAPOR RETARDER OVER SILL PLATE PER 10/F0.50; SEAL TO ALL PIERS AND OTHER PENETRATIONS.
13. ENDWALL VENTS (IF REQ'D) SHALL BE LOCATED A MIN OF 24" FROM BUILDING CORNERS. MAXIMUM ONE ENDWALL VENT PER 12'-0" MODULE.
14. CONCRETE FLOOR LOAD IS INCLUDED IN THE CONCRETE FOUNDATION OPTION FOR FOUNDATION & ANCHORAGE DESIGN, I.E. THERE IS NO CONCRETE FLOOR FOR WOOD FOUNDATION OPTION. THERE IS CONCRETE FLOOR FOR CONCRETE FOUNDATION OPTION
15. IF PARAPET IS HIGHER THAN 18", COMBINATION REQUIRES A 2 X 14" OR 2 X 16" SILL PLATE @ EXTERIOR OF BUILDING.
16. 150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OR PARAPET OPTION.
17. VENTS AT MODLINE FOUNDATIONS. THE MINIMUM CRITERIA REQUIREMENT AS FOLLOWS:
    A. VENTS HAVE A MINIMUM OF 2 SILL /BLOCKING PLATES BENEATH.
    B. VENTS ARE A MAXIMUM OF 6'-0" LONG x 3" MIN. HIGH.
    C. VENTS ARE SPACED A MINIMUM OF 8'-0" APART (EDGE TO EDGE) AND 24" MIN. FROM CORNERS.
18. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.

NAILING SCHEDULE

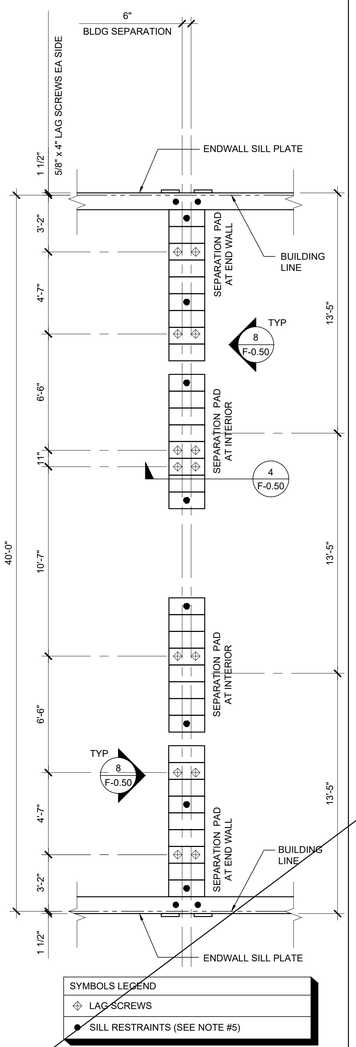
BUILDING SIZE	(2) 16d BOX NAILS PLATE TO PLATE ATTACHMENT BELOW UPPER MOST PLATE
36' x 40'	5" OC AT ENDWALL - 1 / F-0.50B 12" OC AT SIDEWALL - 2 / F-0.50B 10" OC AT SEPARATION - 4 / F-0.50B

VENTING SCHEDULE

	BUILDING SIZE	BUILDING AREA	REQ. VENTING	SIDE VENTING	END VENTING	TOTAL VENTING SUPPLIED
W/O PARAPET	36' x 40'	1440 SF	9.6 SF (1/150)	3'-6" x 6" = (4) 1.75 SF/EA (7 SF TOTAL)	3'-0" x 3" = (3) 0.75 SF/EA (3 SF TOTAL)	10 SF SEE NOTE #8
W/ PARAPET	36' x 40'	1440 SF	9.6 SF (1/150)	3'-0" x 6" = (4) 1.5 SF/EA (6 SF TOTAL)	3'-0" x 3" = (6) 0.75 SF/EA (4.5 SF TOTAL)	10.5 SF SEE NOTE #8

TIE PLATE SCHEDULE

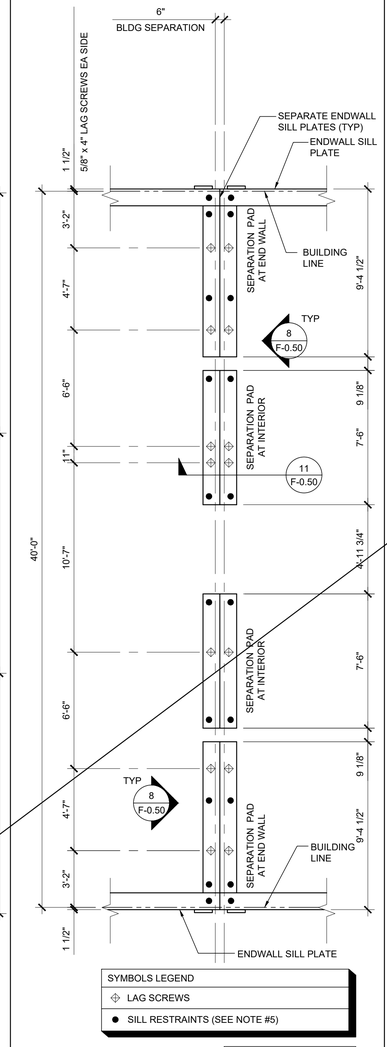
BUILDING SIZE	SIDE WALL TIE PLATES	END WALL TIE PLATES	TOTAL NUMBER OF TIE PLATES
36' x 40'	4	10	28



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

CONTINUOUS SILL PLATES

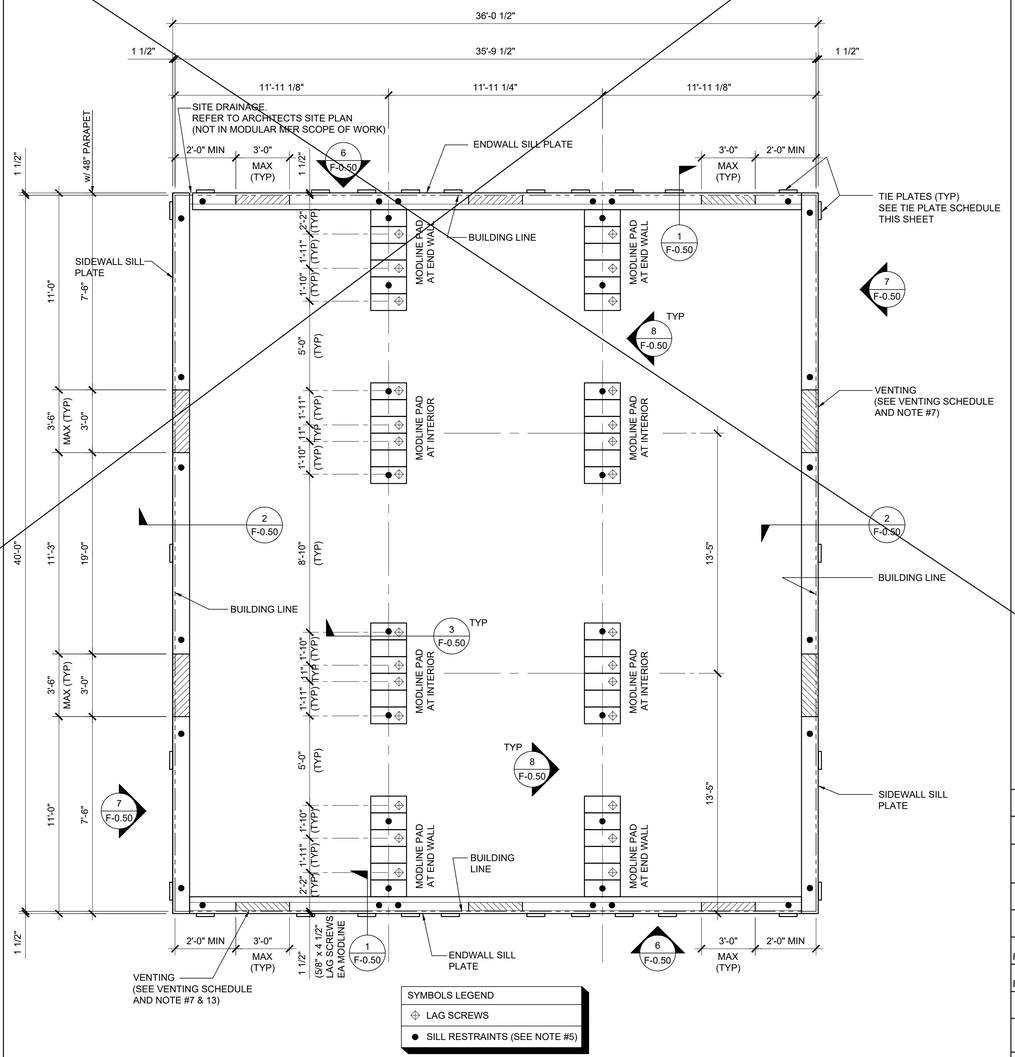
FOOTING AT SEP SCALE: 1/4" = 1' - 0" 3



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

SEPARATE SILL PLATES

FOOTING AT SEP SCALE: 1/4" = 1' - 0" 2



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

WOOD FOUNDATION PLAN
36x40
(50+15 PSF)

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 29075 STRUCTURAL STATE OF CALIFORNIA

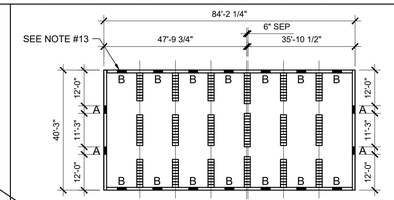
SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

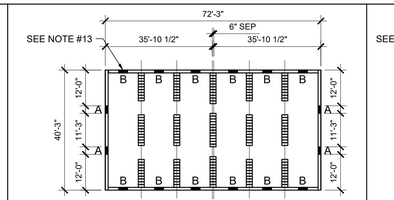
P.C. SHEET NUMBER

F-0.12

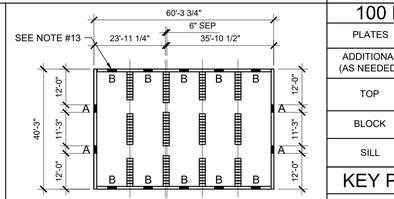
KEY PLAN VENTING CALCULATIONS w/o PARAPET



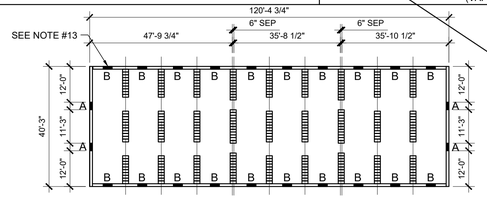
☐ 85' x 40' BUILDING: 3400 SF / 150 = 22.66 SF VENT REQ'D
(4) - "A" VENT = 8.24 SF
(11) - "B" VENT = 9.52 SF
17.76 SF TOTAL VENTILATION (> 22.66 SF)
(VAPOR BARRIER REQUIRED)



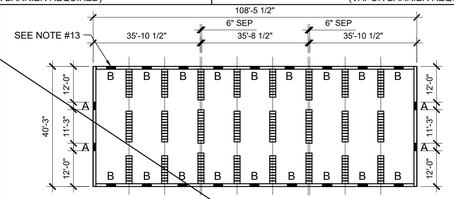
☐ 73'-0" x 40' BUILDING: 2920 SF / 150 = 19.46 SF VENT REQ'D
(4) - "A" VENT = 8.24 SF
(12) - "B" VENT = 8.16 SF
16.4 SF TOTAL VENTILATION (> 19.46 SF)
(VAPOR BARRIER REQUIRED)



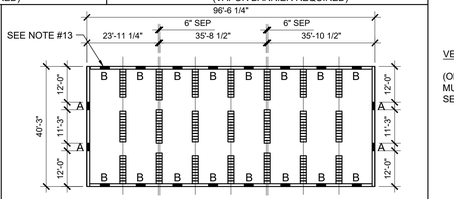
☐ 60'-6" x 40' BUILDING: 2420 SF / 150 = 16.13 SF VENT REQ'D
(4) - "A" VENT = 8.24 SF
(10) - "B" VENT = 6.8 SF
15.04 SF TOTAL VENTILATION (> 16.13 SF)
(VAPOR BARRIER REQUIRED)



☐ 122'-0" x 40' BUILDING: 4880 SF / 150 = 32.53 SF VENT REQ'D
(4) - "A" VENT = 8.24 SF
(20) - "B" VENT = 13.6 SF
21.84 SF TOTAL VENTILATION (> 32.53 SF)
(VAPOR BARRIER REQUIRED)



☐ 109'-6" x 40' BUILDING: 4380 SF / 150 = 29.2 SF VENT REQ'D
(4) - "A" VENT = 8.24 SF
(18) - "B" VENT = 12.24 SF
20.48 SF TOTAL VENTILATION (> 29.2 SF)
(VAPOR BARRIER REQUIRED)



☐ 97'-6" x 40' BUILDING: 3900 SF / 150 = 26 SF VENT REQ'D
(4) - "A" VENT = 8.24 SF
(16) - "B" VENT = 10.88 SF
19.12 SF TOTAL VENTILATION (> 26 SF)
(VAPOR BARRIER REQUIRED)

KEY PLAN VENTING SCHEDULE

VENT "A" (SIDEWALL) : 2'-6" x 6" = 1.25 S.F. VENTILATION

"VENT OPENING AT SILL AND BLOCK PLATES"

VENT "B" (ENDWALL): 2'-9" x 3" = 0.68 S.F. VENTILATION

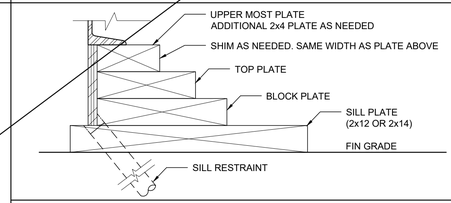
(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

WOOD FOUNDATION PLATE SCHEDULE

100 PSF

PLATES	END WALL	SIDE WALL	MODLINE PAD AT END WALL	MODLINE PAD AT INTERIOR	SEPARATION PAD AT ENDWALL ☐ SEPARATE	SEPARATION PAD AT ENDWALL ☐ CONTINUOUS	SEPARATION PAD AT INTERIOR ☐ SEPARATE	SEPARATION PAD AT INTERIOR ☑ CONTINUOUS
ADDITIONAL (AS NEEDED)	2x4	2x4	2x6	2x6	(2) ROWS OF 2x4	2x12	(2) ROWS OF 2x4	2x12
TOP	2x6	2x6	2x8	2x8	(2) ROWS OF 2x6	2x12	(2) ROWS OF 2x6	2x12
BLOCK	2x8	2x8	2x10	2x10	(2) ROWS OF 2x8	2x12	(2) ROWS OF 2x8	2x12
SILL	2x14 (2x16)[15]	2x14 (2x16)[15]	(10) 2x12 x 2'-0"	(11) 2x12 x 2'-0"	(2) ROWS OF 2x14	2x12 x 2'-0"	(2) ROWS OF 2x14	2x12 x 2'-0"

FOUNDATION PLATE DESCRIPTION



NOTES

1. BUILDINGS OVER 2,160 SF, MUST BE INSTALLED ON A PERMANENT CONCRETE FOUNDATION PER IR 16-1 ITEM 1.4.
2. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULAR FLOORS.
3. FOUNDATION VENTS THAT OCCUR UNDER RAMP LANDINGS, PROVIDE AN EQUAL AREA OF SCREENED VENT IN LANDING SKIRT.
4. WOOD SILL (FOOTING) PLATES SHALL BE PRESSURE TREATED HEM-FIR AND MAY BEAR DIRECTLY ON SOIL OR PAVED SURFACE. GRASS OR TURF SHALL BE CLEARED TO BARE SOIL UNDER THE ENTIRE AREA OF THE BUILDING BY OTHERS. THE WOOD SILL FOOTING PLATE MAY SUPPORT CONTINUOUS BLOCKING AND SHEATHING SKIRT WHICH NEED NOT BE TREATED.
5. SILL RESTRAINT:
   THE FOUNDATION SHALL BE DESIGNED TO PREVENT SLIDING ON THE SUPPORTING SURFACE BY ATTACHING THE WOOD FOUNDATION PLATES FOR THE BUILDING, RAMPS AND STAIRS TO THE GROUND WITH RESTRAINING DEVICES. AN ACCEPTABLE DESIGN WOULD INCORPORATE ONE-INCH DIAMETER STANDARD WEIGHT (1.315" ACTUAL O.D.) HOT DIPPED GALVANIZED PIPES OR ONE-INCH DIAMETER SOLID STEEL RODS SPACED AT NOT MORE THAN 10'-0" O.C. ONE PIPE / ROD SHALL BE LOCATED A MAXIMUM OF TWO FEET FROM EACH CORNER IN BOTH DIRECTIONS AND A MINIMUM OF TWO PIPES / RODS PER DISCONTINUOUS FOUNDATIONS STRIP. PIPES SHOULD PENETRATE INTO SOIL, CONCRETE, AND/OR PAVING A MINIMUM OF 12" MEASURED VERTICALLY. ALTERNATE OR EQUIVALENT DESIGNS, WHEN PROVIDED WITH STRUCTURAL CALCULATIONS AND DETAILS, WILL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL.
6. STACKED WOOD MEMBERS FOR FOUNDATIONS AND PRESSURE TREATED LUMBER SHALL BE NAILED WITH HOT DIPPED GALVANIZED PER ASTM A-153.
7. VENTILATION OPENINGS SHALL BE COVERED FOR EITHER HEIGHT AND WIDTH WITH CORROSION - RESISTANT WIRE MESH, WITH A CLEAR "THROUGH" DIMENSION NOT EXCEEDING 1/8" ACTING AS A VERMIN BARRIER.
8. VENTING CALCULATION REQUIREMENTS FOR MULTIPLE BUILDING SETS MUST BE CALCULATED WITH OVERALL SQUARE FOOTAGE INCLUDING SEPARATION.
9. FOR FOUNDATION ANCHORAGE ON CONCRETE PAD, SEE DETAIL 15/F0.50.
10. IF OPTIONAL ENDWALL VENTS ARE APPLIED, SILL PLATE AND BLOCK PLATE MUST BE CONTINUOUS. VENT OPENINGS SHALL BE BROKEN ABOVE THE BLOCK PLATE.
11. FOR FOUNDATION SPLICE - SEE 5/F-0.50.
12. CRAWLSPACE VAPOR RETARDERS (WHERE INDICATED):
    THE OPTIONAL TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
    MATERIALS:
    GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
    INSTALLATION RECOMMENDATIONS:
    OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; ATTACH VAPOR RETARDER OVER SILL PLATE PER 10/F0.50; SEAL TO ALL PIERS AND OTHER PENETRATIONS.
13. ENDWALL VENTS (IF REQ'D) SHALL BE LOCATED A MIN OF 24" FROM BUILDING CORNERS. MAXIMUM ONE ENDWALL VENT PER 12'-0" MODULE.
14. CONCRETE FLOOR LOAD IS INCLUDED IN THE CONCRETE FOUNDATION OPTION FOR FOUNDATION & ANCHORAGE DESIGN, I.E. THERE IS NO CONCRETE FLOOR FOR WOOD FOUNDATION OPTION. THERE IS CONCRETE FLOOR FOR CONCRETE FOUNDATION OPTION
15. IF PARAPET IS HIGHER THAN 18". COMBINATION REQUIRES A 2 X 14" OR 2 X 16" SILL PLATE @ EXTERIOR OF BUILDING.
16. 150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OR PARAPET OPTION.
17. VENTS AT MODLINE FOUNDATIONS. THE MINIMUM CRITERIA REQUIREMENT AS FOLLOWS:
    A. VENTS HAVE A MINIMUM OF 2 SILL /BLOCKING PLATES BENEATH.
    B. VENTS ARE A MAXIMUM OF 6'-0" LONG x 3" MIN. HIGH.
    C. VENTS ARE SPACED A MINIMUM OF 8'-0" APART (EDGE TO EDGE) AND 24" MIN. FROM CORNERS.
18. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.

NAILING SCHEDULE

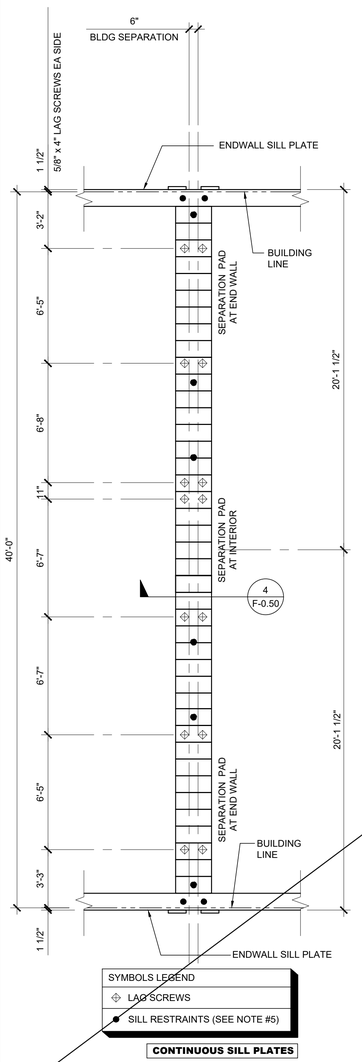
BUILDING SIZE	(2) 16d BOX NAILS PLATE TO PLATE ATTACHMENT BELOW UPPER MOST PLATE
36' x 40'	5" OC AT ENDWALL - 1 / F-0.50B 12" OC AT SIDEWALL - 2 / F-0.50B 10" OC AT SEPARATION - 4 / F-0.50B

VENTING SCHEDULE

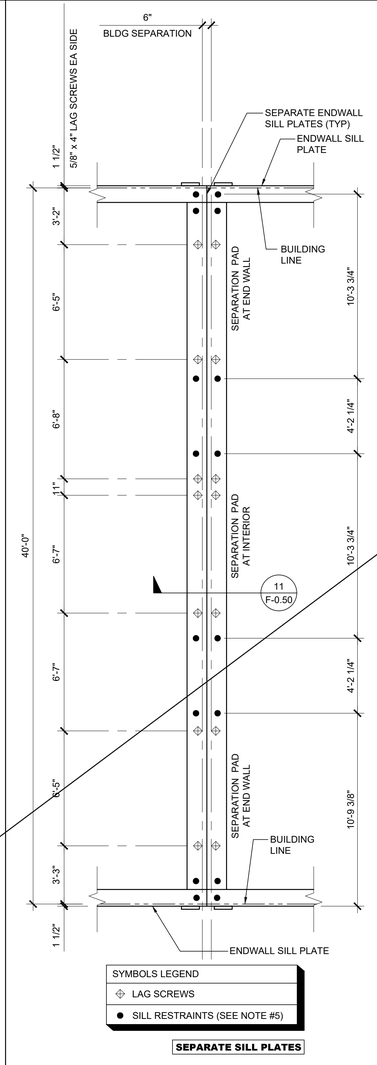
BUILDING SIZE	BUILDING AREA	REQUIRED VENTING	SIDEWALL VENTING	ENDWALL VENTING	TOTAL VENTING SUPPLIED
36' x 40'	1440 SF	9.6 SF (1/150)	2'-6" x 6" = (4) 1.25 SF/ EA (5 SF TOTAL) (VAPOR BARRIER REQUIRED)	2.75' x 3" = (6) .68 SF/ EA (4.08 SF TOTAL)	9.08 SF SEE NOTE #8

TIE PLATE SCHEDULE

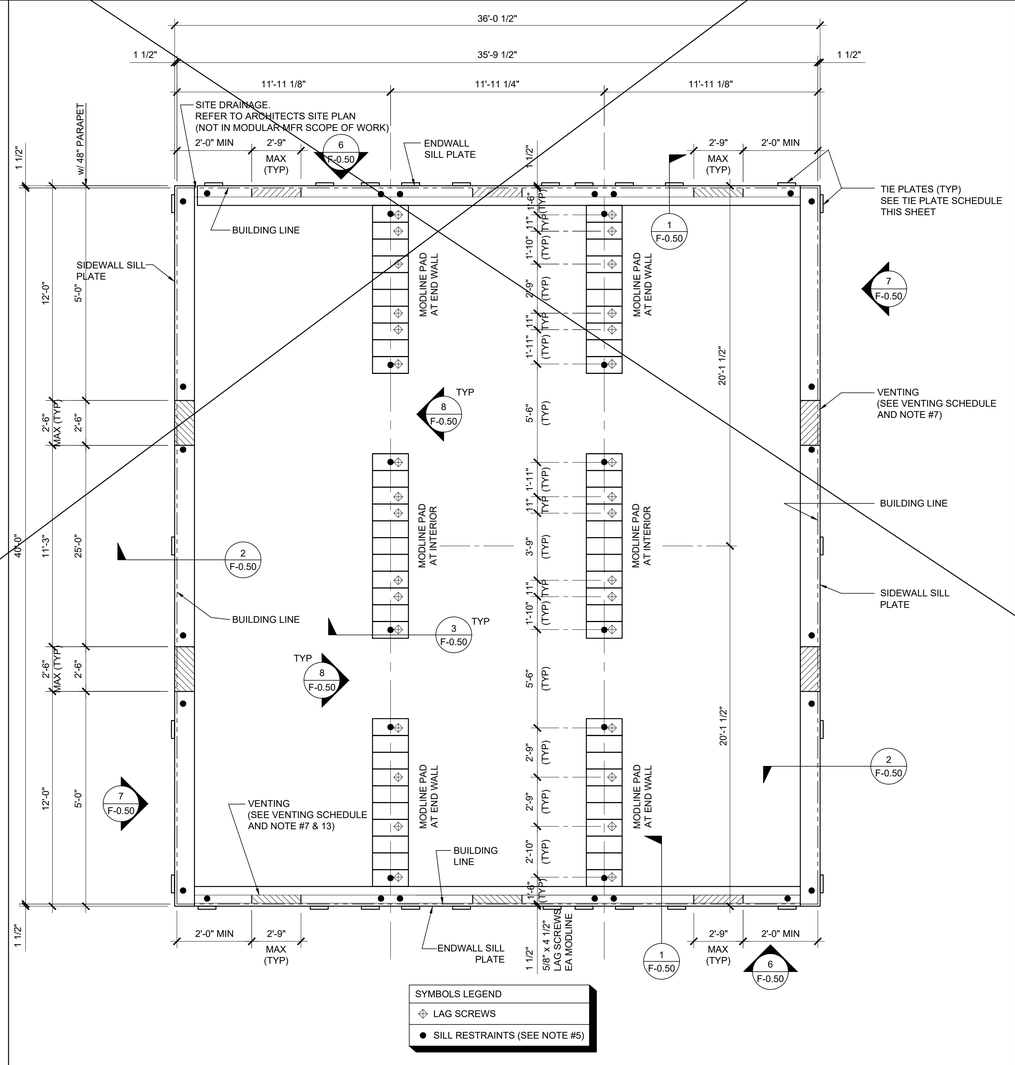
BUILDING SIZE	SIDE WALL TIE PLATE	END WALL TIE PLATE	TOTAL NUMBER OF TIE PLATES
36' x 40'	4	10	28



FOOTING AT SEP SCALE: 1/4" = 1' - 0" 3



FOOTING AT SEP SCALE: 1/4" = 1' - 0" 2



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

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

WOOD FOUNDATION PLAN
36x40
(100 PSF)

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

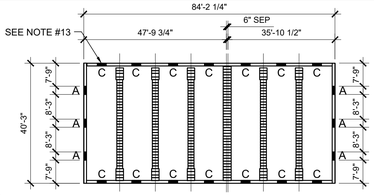
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24775 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

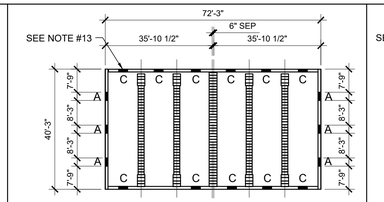
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
F-0.13

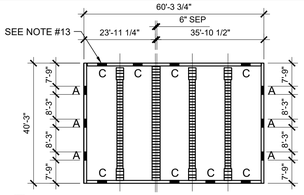
KEY PLAN VENTING CALCULATIONS



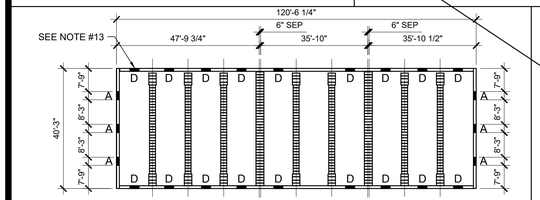
☐ 85' x 40' BUILDING: 3400 SF / 150 = 22.66 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(14) - "C" VENT = 14.43 SF
22.68 SF TOTAL VENTILATION (> 22.66 SF)



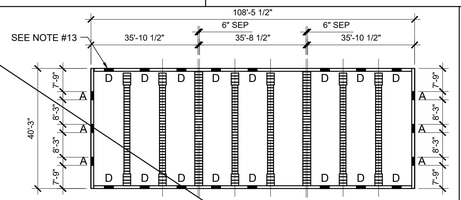
☐ 73'-0" x 40' BUILDING: 2920 SF / 150 = 19.46 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(11) - "C" VENT = 11.34 SF
19.59 SF TOTAL VENTILATION (> 19.46 SF)



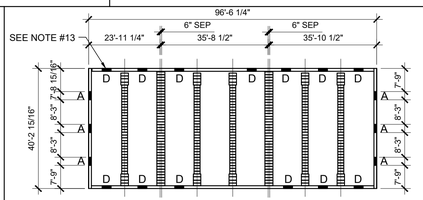
☐ 60'-6" x 40' BUILDING: 2420 SF / 150 = 16.13 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(8) - "C" VENT = 8.25 SF
16.50 SF TOTAL VENTILATION (> 16.13 SF)



☐ 122'-0" x 40' BUILDING: 4880 SF / 150 = 32.53 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(18) - "D" VENT = 24.75 SF
33.00 SF TOTAL VENTILATION (> 32.53 SF)



☐ 109'-6" x 40' BUILDING: 4380 SF / 150 = 29.2 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(16) - "D" VENT = 22.00 SF
30.25 SF TOTAL VENTILATION (> 29.2 SF)



☐ 97'-6" x 40' BUILDING: 3900 SF / 150 = 26 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(13) - "D" VENT = 17.87 SF
26.12 SF TOTAL VENTILATION (> 26 SF)

WOOD FOUNDATION PLATE SCHEDULE

150 PSF

PLATES	END WALL	SIDE WALL	MODLINE PAD AT END WALL	MODLINE PAD AT INTERIOR	PLATES AT SEPARATION ☐ SEPARATE BLDGS	PLATES AT SEPARATION ☐ ONE BLDG
ADDITIONAL (AS NEEDED)	2x4	2x4	2x6	2x6	(2) ROWS OF 2x4	2x12
TOP	2x6	2x6	2x8	2x8	(2) ROWS OF 2x6	2x12
BLOCK	2x8	2x8	2x12	2x12	(2) ROWS OF 2x8 (CONT)	2x12
SILL	2x14	2x14	(7) 2x12 x 30"	2x12 x 24"	(2) ROWS OF 2x14 (CONT)	2x12 x 30"

KEY PLAN VENTING SCHEDULE

VENT "A" (SIDEWALL): 2'-9" x 6" = 1.375 S.F. VENTILATION
"VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

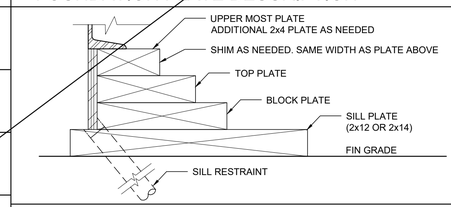
VENT "B" (ENDWALL): (OPTIONAL AT MULTIPLE BLDG SETS) 2'-9" x 3" = 0.68 S.F. VENTILATION
"VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "C" (ENDWALL): (OPTIONAL AT MULTIPLE BLDG SETS) 2'-9" x 4 1/2" = 1.031 S.F. VENTILATION
"VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "D" (ENDWALL): (OPTIONAL AT MULTIPLE BLDG SETS) 2'-9" x 6" = 1.375 S.F. VENTILATION
"VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OR PARAPET OPTIONS

FOUNDATION PLATE DESCRIPTION



NOTES

1. BUILDINGS OVER 2,160 SF, MUST BE INSTALLED ON A PERMANENT CONCRETE FOUNDATION PER IR 16-1 ITEM 1.4.
2. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULAR FLOORS.
3. FOUNDATION VENTS THAT OCCUR UNDER RAMP LANDINGS, PROVIDE AN EQUAL AREA OF SCREENED VENT IN LANDING SKIRT.
4. WOOD SILL (FOOTING) PLATES SHALL BE PRESSURE TREATED HEM-FIR AND MAY BEAR DIRECTLY ON SOIL OR PAVED SURFACE. GRASS OR TURF SHALL BE CLEARED TO BARE SOIL UNDER THE ENTIRE AREA OF THE BUILDING BY OTHERS. THE WOOD SILL FOOTING PLATE MAY SUPPORT CONTINUOUS BLOCKING AND SHEATHING SKIRT WHICH NEED NOT BE TREATED.
5. SILL RESTRAINT:
   THE FOUNDATION SHALL BE DESIGNED TO PREVENT SLIDING ON THE SUPPORTING SURFACE BY ATTACHING THE WOOD FOUNDATION PLATES FOR THE BUILDING, RAMPS AND STAIRS TO THE GROUND WITH RESTRAINING DEVICES. AN ACCEPTABLE DESIGN WOULD INCORPORATE ONE-INCH DIAMETER STANDARD WEIGHT (1.315" ACTUAL O.D.) HOT DIPPED GALVANIZED PIPES OR ONE-INCH DIAMETER SOLID STEEL RODS SPACED AT NOT MORE THAN 10'-0" O.C. ONE PIPE / ROD SHALL BE LOCATED A MAXIMUM OF TWO FEET FROM EACH CORNER IN BOTH DIRECTIONS AND A MINIMUM OF TWO PIPES / RODS PER DISCONTINUOUS FOUNDATIONS STRIP. PIPES SHOULD PENETRATE INTO SOIL, CONCRETE, AND/OR PAVING A MINIMUM OF 12" MEASURED VERTICALLY. ALTERNATE OR EQUIVALENT DESIGNS, WHEN PROVIDED WITH STRUCTURAL CALCULATIONS AND DETAILS, WILL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL.
6. STACKED WOOD MEMBERS FOR FOUNDATIONS AND PRESSURE TREATED LUMBER SHALL BE NAILED WITH HOT DIPPED GALVANIZED PER ASTM A-153.
7. VENTILATION OPENINGS SHALL BE COVERED FOR EITHER HEIGHT AND WIDTH WITH CORROSION - RESISTANT WIRE MESH, WITH A CLEAR "THROUGH" DIMENSION NOT EXCEEDING 1/8" ACTING AS A VERMIN BARRIER.
8. VENTING CALCULATION REQUIREMENTS FOR MULTIPLE BUILDING SETS MUST BE CALCULATED WITH OVERALL SQUARE FOOTAGE INCLUDING SEPARATION.
9. FOR FOUNDATION ANCHORAGE ON CONCRETE PAD, SEE DETAIL 15/F0.50.
10. IF OPTIONAL ENDWALL VENTS ARE APPLIED, SILL PLATE AND BLOCK PLATE MUST BE CONTINUOUS. VENT OPENINGS SHALL BE BROKEN ABOVE THE BLOCK PLATE.
11. FOR FOUNDATION SPLICE - SEE 5/F-0.50.
12. CRAWLSPACE VAPOR RETARDERS (WHERE INDICATED):
    THE OPTIONAL TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
    MATERIALS:
    GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
    INSTALLATION RECOMMENDATIONS:
    OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; ATTACH VAPOR RETARDER OVER SILL PLATE PER 10/F0.50; SEAL TO ALL PIERS AND OTHER PENETRATIONS.
13. ENDWALL VENTS (IF REQ'D) SHALL BE LOCATED A MIN OF 24" FROM BUILDING CORNERS. MAXIMUM ONE ENDWALL VENT PER 12'-0" MODULE.
14. CONCRETE FLOOR LOAD IS INCLUDED IN THE CONCRETE FOUNDATION OPTION FOR FOUNDATION & ANCHORAGE DESIGN, I.E. THERE IS NO CONCRETE FLOOR FOR WOOD FOUNDATION OPTION. THERE IS CONCRETE FLOOR FOR CONCRETE FOUNDATION OPTION.
15. IF PARAPET IS HIGHER THAN 18", COMBINATION REQUIRES A 2 X 14" OR 2 X 16" SILL PLATE @ EXTERIOR OF BUILDING.
16. 150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OR PARAPET OPTION.
17. VENTS AT MODLINE FOUNDATIONS. THE MINIMUM CRITERIA REQUIREMENT AS FOLLOWS:
    A. VENTS HAVE A MINIMUM OF 2 SILL /BLOCKING PLATES BENEATH.
    B. VENTS ARE A MAXIMUM OF 6'-0" LONG x 3" MIN. HIGH.
    C. VENTS ARE SPACED A MINIMUM OF 8'-0" APART (EDGE TO EDGE) AND 24" MIN. FROM CORNERS.
18. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.

NAILING SCHEDULE

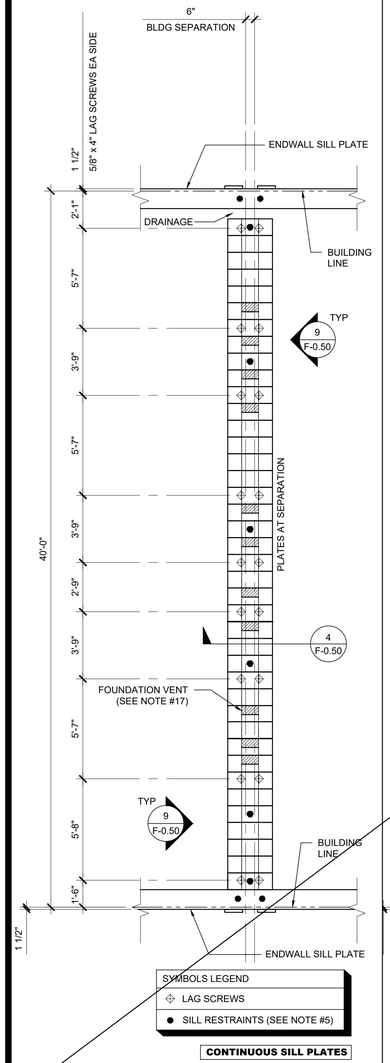
BUILDING SIZE	(2) 16d BOX NAILS PLATE TO PLATE ATTACHMENT BELOW UPPER MOST PLATE
36' x 40'	5" OC AT ENDWALL - 1 / F-0.50 12" OC AT SIDEWALL - 2 / F-0.50 9" OC AT SEPARATION - 4 / F-0.50

VENTING SCHEDULE

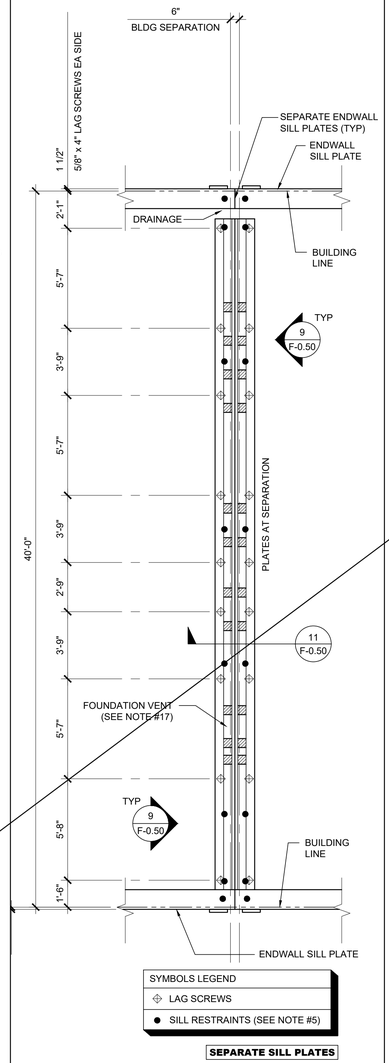
BUILDING SIZE	BUILDING AREA	REQUIRED VENTING	SIDEWALL VENTING	ENDWALL VENTING	TOTAL VENTING SUPPLIED
36' x 40'	1440 SF	9.6 SF (1/150)	2.75' x 6" = (6) 1.375 SF/ EA (8.25 SF TOTAL)	2.75' x 3" = (2) 0.68 SF/ EA (1.36 SF TOTAL)	9.61 SF SEE NOTE #8

TIE PLATE SCHEDULE

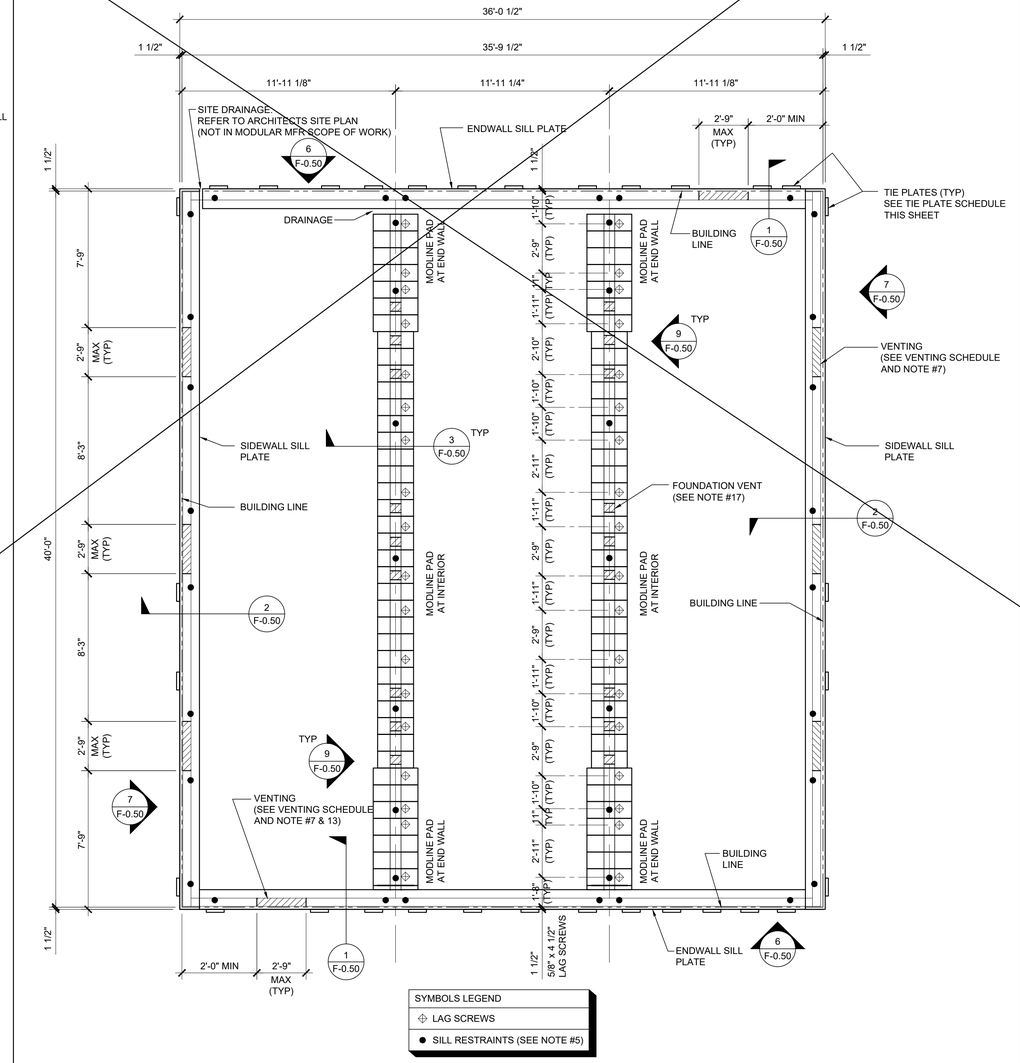
BUILDING SIZE	SIDE WALL TIE PLATES	END WALL TIE PLATES	TOTAL NUMBER OF TIE PLATES
36' x 40'	4	12	32



FOOTING AT SEP SCALE: 1/4" = 1' - 0" 3



FOOTING AT SEP SCALE: 1/4" = 1' - 0" 2



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

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

WOOD FOUNDATION PLAN
36x40
(150 PSF)

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

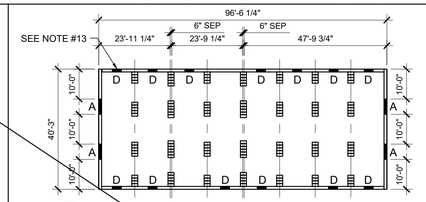
REGISTERED PROFESSIONAL ENGINEER JOHN 'N STARLING 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

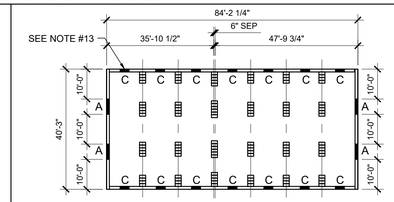
P.C. SHEET NUMBER
F-0.14

KEY PLAN VENTING CALCULATIONS w/o PARAPET



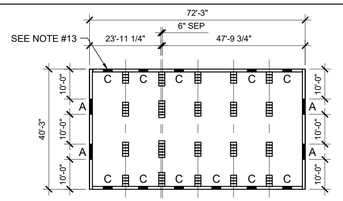
☐ 97'-6" x 40' BUILDING: 3900 SF / 150 = 26 SF VENT REQ'D

(4) - "A" VENT = 8 SF
(13) - "D" VENT = 19.5 SF
27.5 SF TOTAL VENTILATION (> 26 SF)
(VAPOR BARRIER REQUIRED)



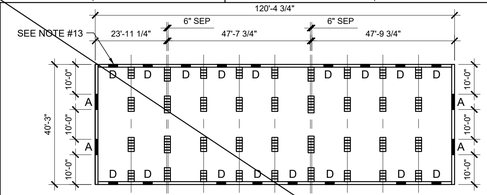
☐ 85' x 40' BUILDING: 3400 SF / 150 = 22.66 SF VENT REQ'D

(4) - "A" VENT = 8 SF
(14) - "C" VENT = 15.75 SF
23.75 SF TOTAL VENTILATION (> 22.66 SF)
(VAPOR BARRIER REQUIRED)



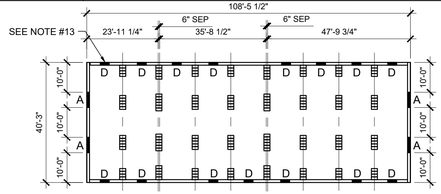
☐ 73'-0" x 40' BUILDING: 2920 SF / 150 = 19.46 SF VENT REQ'D

(4) - "A" VENT = 8 SF
(11) - "C" VENT = 12.37 SF
20.37 SF TOTAL VENTILATION (> 19.46 SF)
(VAPOR BARRIER REQUIRED)



☐ 122'-0" x 40' BUILDING: 4880 SF / 150 = 32.53 SF VENT REQ'D

(4) - "A" VENT = 8 SF
(17) - "D" VENT = 25.5 SF
33.5 SF TOTAL VENTILATION (> 32.53 SF)
(VAPOR BARRIER REQUIRED)



☐ 109'-6" x 40' BUILDING: 4380 SF / 150 = 29.2 SF VENT REQ'D

(4) - "A" VENT = 8 SF
(15) - "D" VENT = 22.5 SF
30.5 SF TOTAL VENTILATION (> 29.2 SF)
(VAPOR BARRIER REQUIRED)

WOOD FOUNDATION PLATE SCHEDULE

50 PSF

PLATES	END WALL	SIDE WALL	MODLINE PAD AT END WALL	MODLINE PAD AT INTERIOR	SEPARATION PAD AT ENDWALL ☐ SEPARATE BLDGS	SEPARATION PAD AT ENDWALL ☐ ONE BLDG	SEPARATION PAD AT INTERIOR ☐ SEPARATE BLDGS	SEPARATION PAD AT INTERIOR ☐ ONE BLDG
ADDITIONAL (AS NEEDED)	2x4	2x4	2x6	2x6	(2) ROWS OF 2x4	2x12	(2) ROWS OF 2x4	2x12
TOP	2x6	2x6	2x8	2x8	(2) ROWS OF 2x6	2x12	(2) ROWS OF 2x6	2x12
BLOCK	2x8	2x8	2x10	2x10	(2) ROWS OF 2x8	2x12	(2) ROWS OF 2x8	2x12
SILL	2x12 (2x14)[15]	2x12 (2x14)[15]	(5) 2x12 x 2'-0"	(5) 2x12 x 2'-0"	(2) ROWS OF 2x14	(8) 2x12 x 2'-0"	(2) ROWS OF 2x14	(7) 2x12 x 2'-0"

KEY PLAN VENTING SCHEDULE

VENT "A" (SIDEWALL): 4' x 6" = 2 S.F. VENTILATION
"VENT OPENING AT SILL AND BLOCK PLATES"

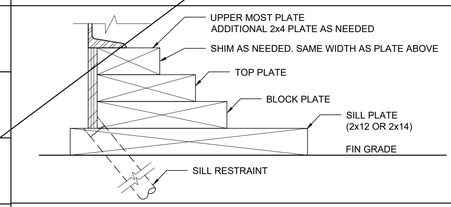
VENT "B" (ENDWALL): (OPTIONAL AT MULTIPLE BLDG SETS) 3'-0" x 3" = 0.75 S.F. VENTILATION
"VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "C" (ENDWALL): (OPTIONAL AT MULTIPLE BLDG SETS) 3'-0" x 4 1/2" = 1.125 S.F. VENTILATION
"VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "D" (ENDWALL): (OPTIONAL AT MULTIPLE BLDG SETS) 3'-0" x 6" = 1.5 S.F. VENTILATION
"VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

NOTE:
@ BUILDINGS WITH PARAPETS UP TO 48" HIGH, SIDE WALL VENTS CHANGE FROM 5'-1 1/2" TO 4'-0", SEE VENTING SCHEDULE

FOUNDATION PLATE DESCRIPTION



NOTES

1. BUILDINGS OVER 2,160 SF, MUST BE INSTALLED ON A PERMANENT CONCRETE FOUNDATION PER IR 16-1 ITEM 1.4.
2. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULAR FLOORS.
3. FOUNDATION VENTS THAT OCCUR UNDER RAMP LANDINGS, PROVIDE AN EQUAL AREA OF SCREENED VENT IN LANDING SKIRT.
4. WOOD SILL (FOOTING) PLATES SHALL BE PRESSURE TREATED HEM-FIR AND MAY BEAR DIRECTLY ON SOIL OR PAVED SURFACE. GRASS OR TURF SHALL BE CLEARED TO BARE SOIL UNDER THE ENTIRE AREA OF THE BUILDING BY OTHERS. THE WOOD SILL FOOTING PLATE MAY SUPPORT CONTINUOUS BLOCKING AND SHEATHING SKIRT WHICH NEED NOT BE TREATED.
5. SILL RESTRAINT:
   THE FOUNDATION SHALL BE DESIGNED TO PREVENT SLIDING ON THE SUPPORTING SURFACE BY ATTACHING THE WOOD FOUNDATION PLATES FOR THE BUILDING, RAMPS AND STAIRS TO THE GROUND WITH RESTRAINING DEVICES. AN ACCEPTABLE DESIGN WOULD INCORPORATE ONE-INCH DIAMETER STANDARD WEIGHT (1.315" ACTUAL O.D.) HOT DIPPED GALVANIZED PIPES OR ONE-INCH DIAMETER SOLID STEEL RODS SPACED AT NOT MORE THAN 10'-0" O.C. ONE PIPE / ROD SHALL BE LOCATED A MAXIMUM OF TWO FEET FROM EACH CORNER IN BOTH DIRECTIONS AND A MINIMUM OF TWO PIPES / RODS PER DISCONTINUOUS FOUNDATIONS STRIP. PIPES SHOULD PENETRATE INTO SOIL, CONCRETE, AND/OR PAVING A MINIMUM OF 12" MEASURED VERTICALLY. ALTERNATE OR EQUIVALENT DESIGNS, WHEN PROVIDED WITH STRUCTURAL CALCULATIONS AND DETAILS, WILL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL.
6. STACKED WOOD MEMBERS FOR FOUNDATIONS AND PRESSURE TREATED LUMBER SHALL BE NAILED WITH HOT DIPPED GALVANIZED PER ASTM A-153.
7. VENTILATION OPENINGS SHALL BE COVERED FOR EITHER HEIGHT AND WIDTH WITH CORROSION - RESISTANT WIRE MESH, WITH A CLEAR "THROUGH" DIMENSION NOT EXCEEDING 1/8" ACTING AS A VERMIN BARRIER.
8. VENTING CALCULATION REQUIREMENTS FOR MULTIPLE BUILDING SETS MUST BE CALCULATED WITH OVERALL SQUARE FOOTAGE INCLUDING SEPARATION.
9. FOR FOUNDATION ANCHORAGE ON CONCRETE PAD, SEE DETAIL 15/F0.50.
10. IF OPTIONAL ENDWALL VENTS ARE APPLIED, SILL PLATE AND BLOCK PLATE MUST BE CONTINUOUS. VENT OPENINGS SHALL BE BROKEN ABOVE THE BLOCK PLATE.
11. FOR FOUNDATION SPLICE - SEE 5/F-0.50.
12. CRAWLSPACE VAPOR RETARDERS (WHERE INDICATED):
    THE OPTIONAL TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
    MATERIALS:
    GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
    INSTALLATION RECOMMENDATIONS:
    OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; ATTACH VAPOR RETARDER OVER SILL PLATE PER 10/F0.50; SEAL TO ALL PIERS AND OTHER PENETRATIONS.
13. ENDWALL VENTS (IF REQ'D) SHALL BE LOCATED A MIN OF 24" FROM BUILDING CORNERS. MAXIMUM ONE ENDWALL VENT PER 12'-0" MODULE.
14. CONCRETE FLOOR LOAD IS INCLUDED IN THE CONCRETE FOUNDATION OPTION FOR FOUNDATION & ANCHORAGE DESIGN, I.E. THERE IS NO CONCRETE FLOOR FOR WOOD FOUNDATION OPTION. THERE IS CONCRETE FLOOR FOR CONCRETE FOUNDATION OPTION.
15. IF PARAPET IS HIGHER THAN 18", COMBINATION REQUIRES A 2 X 14" OR 2 X 16" SILL PLATE @ EXTERIOR OF BUILDING.
16. 150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OR PARAPET OPTION.
17. VENTS AT MODLINE FOUNDATIONS. THE MINIMUM CRITERIA REQUIREMENT AS FOLLOWS:
    A. VENTS HAVE A MINIMUM OF 2 SILL /BLOCKING PLATES BENEATH.
    B. VENTS ARE A MAXIMUM OF 6'-0" LONG x 3" MIN. HIGH.
    C. VENTS ARE SPACED A MINIMUM OF 8'-0" APART (EDGE TO EDGE) AND 24" MIN. FROM CORNERS.
18. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.

NAILING SCHEDULE

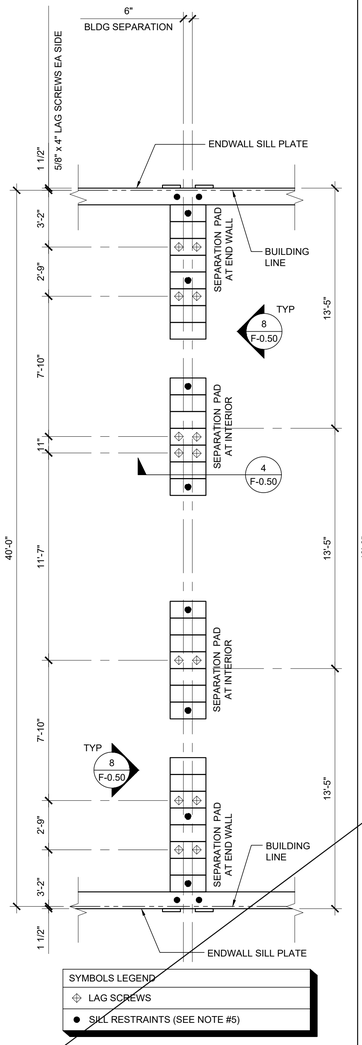
BUILDING SIZE	(2) 16d BOX NAILS PLATE TO SILL PLATE ATTACHMENT BELOW UPPER MOST PLATE
48' x 40'	5" OC AT ENDWALL - 1 / F-0.50B 12" OC AT SIDEWALL - 2 / F-0.50B 10" OC AT SEPARATION - 4 / F-0.50B

VENTING SCHEDULE

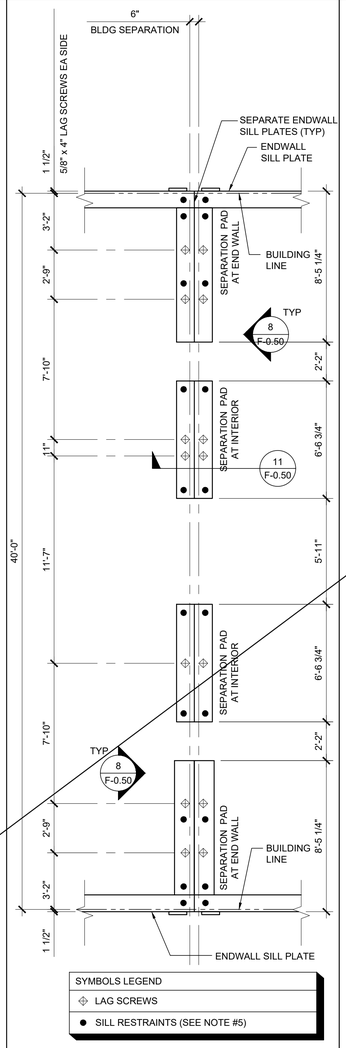
	BLDG. SIZE	BLDG. AREA	REQ. VENT	SIDEWALL VENT.	ENDWALL VENT.	TOTAL SUPPLIED
W/O PARAPET	48' x 40'	1920 SF	12.8 SF (1/150)	5.125" x 6" = (4) 2.56 SF/ EA (10.25 SF TOTAL)	3'-0" x 3" = (4) .75 SF/ EA (3.00 SF TOTAL)	13.25 SF SEE NOTE #8
W/ PARAPET	48' x 40'	1920 SF	12.8 SF (1/150)	4'-0" x 6" = (4) 2 SF/ EA (8 SF TOTAL)	3'-0" x 3" = (8) .75 SF/ EA (6.00 SF TOTAL)	14 SF SEE NOTE #8

TIE PLATE SCHEDULE (14 / F-0.50)

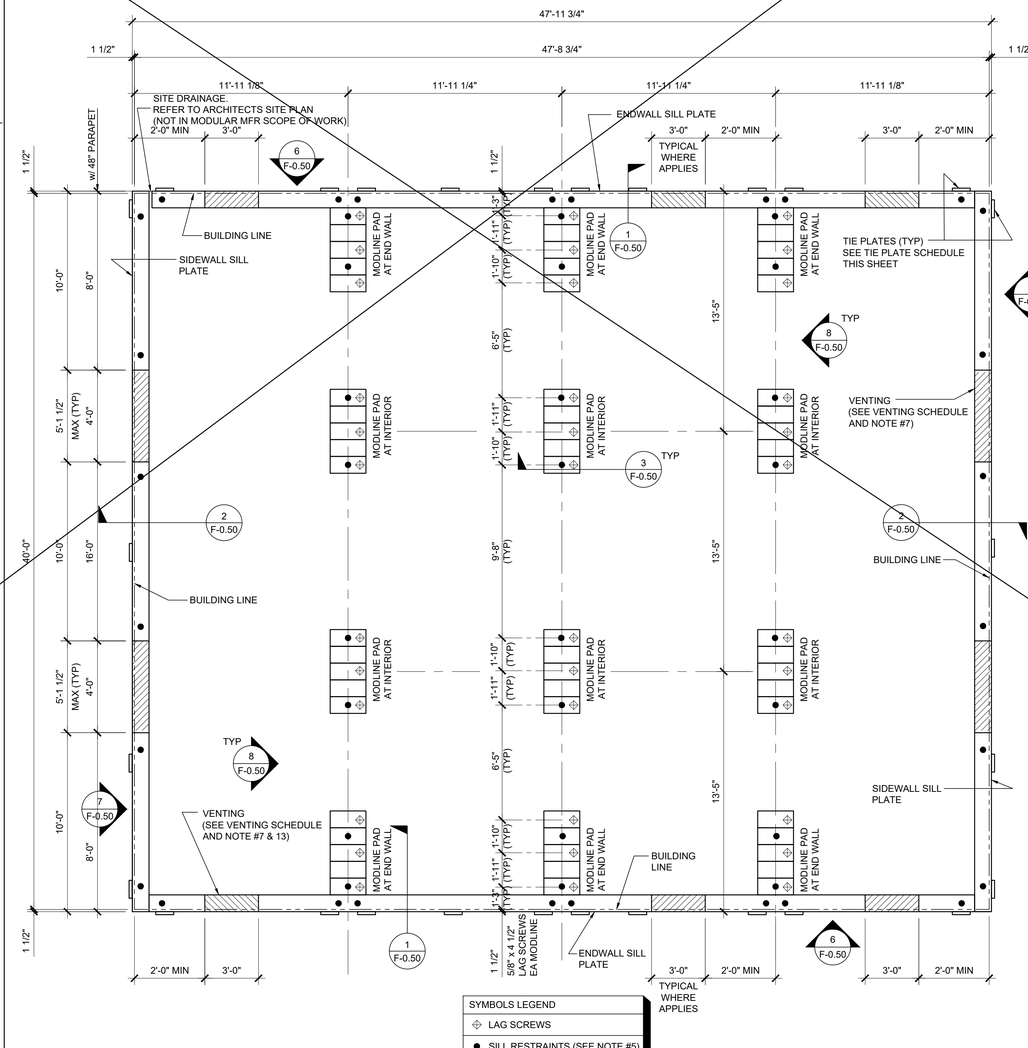
BUILDING SIZE	SIDE WALL TIE PLATES	END WALL TIE PLATES	TOTAL NUMBER OF TIE PLATES
48' x 40'	4	10	28



FOOTING AT SEP SCALE: 1/4" = 1'-0" 3



FOOTING AT SEP SCALE: 1/4" = 1'-0" 2



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

PROJECT NAME:

SHEET TITLE:

WOOD FOUNDATION PLAN
48' x 40'
(50 PSF)

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

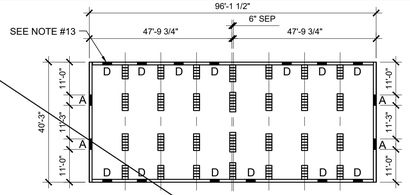
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24775 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

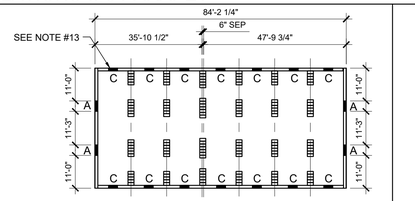
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
F-0.21

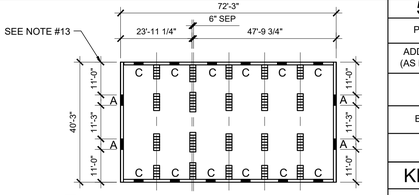
KEY PLAN VENTING CALCULATIONS w/o PARAPET



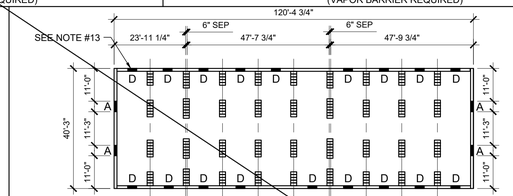
☐ 97'-6" x 40' BUILDING: 3900 SF / 150 = 26 SF VENT REQ'D
(4) - "A" VENT = 7 SF
(13) - "D" VENT = 19.5 SF
26.5 SF TOTAL VENTILATION (> 26 SF)
(VAPOR BARRIER REQUIRED)



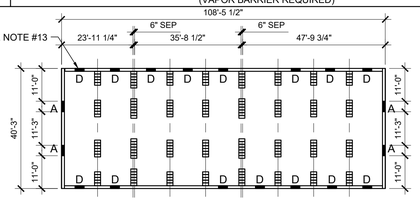
☐ 85' x 40' BUILDING: 3400 SF / 150 = 22.66 SF VENT REQ'D
(4) - "A" VENT = 7 SF
(14) - "C" VENT = 15.75 SF
22.75 SF TOTAL VENTILATION (> 22.66 SF)
(VAPOR BARRIER REQUIRED)



☐ 73'-0" x 40' BUILDING: 2920 SF / 150 = 19.46 SF VENT REQ'D
(4) - "A" VENT = 7 SF
(12) - "C" VENT = 13.5 SF
20.5 SF TOTAL VENTILATION (> 19.46 SF)
(VAPOR BARRIER REQUIRED)



☐ 122'-0" x 40' BUILDING: 4880 SF / 150 = 32.53 SF VENT REQ'D
(4) - "A" VENT = 7 SF
(18) - "D" VENT = 27 SF
34 SF TOTAL VENTILATION (> 32.53 SF)
(VAPOR BARRIER REQUIRED)



☐ 109'-6" x 40' BUILDING: 4380 SF / 150 = 29.2 SF VENT REQ'D
(4) - "A" VENT = 7 SF
(15) - "D" VENT = 22.5 SF
29.5 SF TOTAL VENTILATION (> 29.2 SF)
(VAPOR BARRIER REQUIRED)

WOOD FOUNDATION PLATE SCHEDULE

50 + 15 PSF

PLATES	END WALL	SIDE WALL	MODLINE PAD AT END WALL	MODLINE PAD AT INTERIOR	SEPARATION PAD AT ENDWALL ☐ SEPARATE BLDGS	SEPARATION PAD AT ENDWALL ☐ ONE BLDG	SEPARATION PAD AT INTERIOR ☐ SEPARATE BLDGS	SEPARATION PAD AT INTERIOR ☐ ONE BLDG
ADDITIONAL (AS NEEDED)	2x4	2x4	2x6	2x6	(2) ROWS OF 2x4	2x12	(2) ROWS OF 2x4	2x12
TOP	2x6	2x6	2x8	2x8	(2) ROWS OF 2x6	2x12	(2) ROWS OF 2x6	2x12
BLOCK	2x8	2x8	2x10	2x10	(2) ROWS OF 2x8	2x12	(2) ROWS OF 2x8	2x12
SILL	2x12 (2x14)[15]	2x12 (2x14)[15]	(6) 2x12 x 2'-0"	(6) 2x12 x 2'-0"	(2) ROWS OF 2x14	(9) 2x12 x 2'-0"	(2) ROWS OF 2x14	(8) 2x12 x 2'-0"

KEY PLAN VENTING SCHEDULE

VENT "A" (SIDEWALL): 3'-6" x 6" = 1.75 S.F. VENTILATION
"VENT OPENING AT SILL AND BLOCK PLATES"

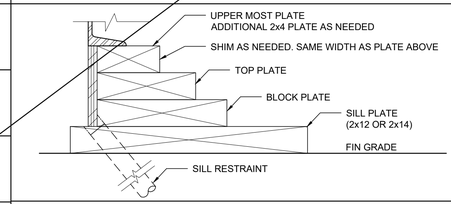
VENT "B" (ENDWALL): (OPTIONAL AT MULTIPLE BLDG SETS) 3'-0" x 3" = 0.75 S.F. VENTILATION
"VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "C" (ENDWALL): (OPTIONAL AT MULTIPLE BLDG SETS) 3'-0" x 4 1/2" = 1.125 S.F. VENTILATION
"VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "D" (ENDWALL): (OPTIONAL AT MULTIPLE BLDG SETS) 3'-0" x 6" = 1.5 S.F. VENTILATION
"VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

NOTE:
@ BUILDINGS WITH PARAPETS UP TO 48" HIGH, SIDE WALL VENTS CHANGE FROM 3'-6" TO 3'-0", SEE VENTING SCHED.

FOUNDATION PLATE DESCRIPTION



NOTES

1. BUILDINGS OVER 2,160 SF, MUST BE INSTALLED ON A PERMANENT CONCRETE FOUNDATION PER IR 16-1 ITEM 1.4.
2. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULAR FLOORS.
3. FOUNDATION VENTS THAT OCCUR UNDER RAMP LANDINGS, PROVIDE AN EQUAL AREA OF SCREENED VENT IN LANDING SKIRT.
4. WOOD SILL (FOOTING) PLATES SHALL BE PRESSURE TREATED HEM-FIR AND MAY BEAR DIRECTLY ON SOIL OR PAVED SURFACE. GRASS OR TURF SHALL BE CLEARED TO BARE SOIL UNDER THE ENTIRE AREA OF THE BUILDING BY OTHERS. THE WOOD SILL FOOTING PLATE MAY SUPPORT CONTINUOUS BLOCKING AND SHEATHING SKIRT WHICH NEED NOT BE TREATED.
5. SILL RESTRAINT:
THE FOUNDATION SHALL BE DESIGNED TO PREVENT SLIDING ON THE SUPPORTING SURFACE BY ATTACHING THE WOOD FOUNDATION PLATES FOR THE BUILDING, RAMPS AND STAIRS TO THE GROUND WITH RESTRAINING DEVICES. AN ACCEPTABLE DESIGN WOULD INCORPORATE ONE-INCH DIAMETER STANDARD WEIGHT (1.315" ACTUAL O.D.) HOT DIPPED GALVANIZED PIPES OR ONE-INCH DIAMETER SOLID STEEL RODS SPACED AT NOT MORE THAN 10'-0" O.C. ONE PIPE / ROD SHALL BE LOCATED A MAXIMUM OF TWO FEET FROM EACH CORNER IN BOTH DIRECTIONS AND A MINIMUM OF TWO PIPES / RODS PER DISCONTINUOUS FOUNDATIONS STRIP. PIPES SHOULD PENETRATE INTO SOIL, CONCRETE, AND/OR PAVING A MINIMUM OF 12" MEASURED VERTICALLY. ALTERNATE OR EQUIVALENT DESIGNS, WHEN PROVIDED WITH STRUCTURAL CALCULATIONS AND DETAILS, WILL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL.
6. STACKED WOOD MEMBERS FOR FOUNDATIONS AND PRESSURE TREATED LUMBER SHALL BE NAILED WITH HOT DIPPED GALVANIZED PER ASTM A-153.
7. VENTILATION OPENINGS SHALL BE COVERED FOR EITHER HEIGHT AND WIDTH WITH CORROSION - RESISTANT WIRE MESH, WITH A CLEAR "THROUGH" DIMENSION NOT EXCEEDING 1/8" ACTING AS A VERMIN BARRIER.
8. VENTING CALCULATION REQUIREMENTS FOR MULTIPLE BUILDING SETS MUST BE CALCULATED WITH OVERALL SQUARE FOOTAGE INCLUDING SEPARATION.
9. FOR FOUNDATION ANCHORAGE ON CONCRETE PAD, SEE DETAIL 15/F0.50.
10. IF OPTIONAL ENDWALL VENTS ARE APPLIED, SILL PLATE AND BLOCK PLATE MUST BE CONTINUOUS. VENT OPENINGS SHALL BE BROKEN ABOVE THE BLOCK PLATE.
11. FOR FOUNDATION SPLICE - SEE 5/F-0.50.
12. CRAWLSPACE VAPOR RETARDERS (WHERE INDICATED):
THE OPTIONAL TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
MATERIALS:
GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
INSTALLATION RECOMMENDATIONS:
OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; ATTACH VAPOR RETARDER OVER SILL PLATE PER 10/F0.50; SEAL TO ALL PIERS AND OTHER PENETRATIONS.
13. ENDWALL VENTS (IF REQ'D) SHALL BE LOCATED A MIN OF 24" FROM BUILDING CORNERS. MAXIMUM ONE ENDWALL VENT PER 12'-0" MODULE.
14. CONCRETE FLOOR LOAD IS INCLUDED IN THE CONCRETE FOUNDATION OPTION FOR FOUNDATION & ANCHORAGE DESIGN, I.E. THERE IS NO CONCRETE FLOOR FOR WOOD FOUNDATION OPTION. THERE IS CONCRETE FLOOR FOR CONCRETE FOUNDATION OPTION
15. IF PARAPET IS HIGHER THAN 18". COMBINATION REQUIRES A 2 X 14" OR 2 X 16" SILL PLATE @ EXTERIOR OF BUILDING.
16. 150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OR PARAPET OPTION.
17. VENTS AT MODLINE FOUNDATIONS. THE MINIMUM CRITERIA REQUIREMENT AS FOLLOWS:
A. VENTS HAVE A MINIMUM OF 2 SILL /BLOCKING PLATES BENEATH.
B. VENTS ARE A MAXIMUM OF 6'-0" LONG x 3" MIN. HIGH.
C. VENTS ARE SPACED A MINIMUM OF 8'-0" APART (EDGE TO EDGE) AND 24" MIN. FROM CORNERS.
18. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.

NAILING SCHEDULE

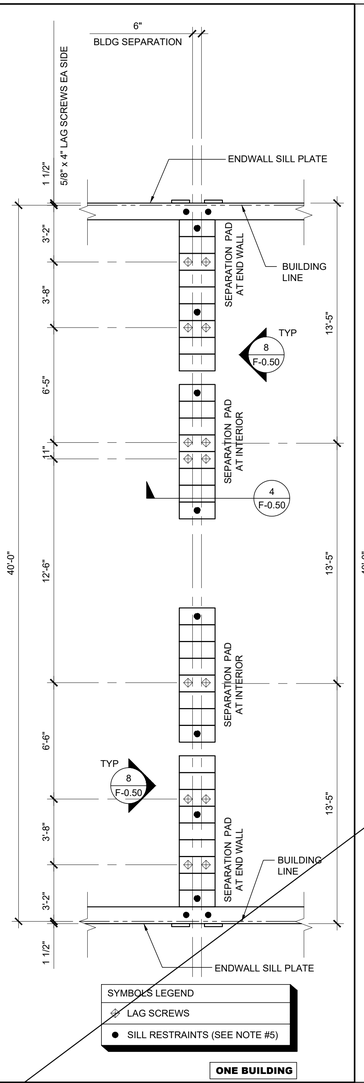
BUILDING SIZE	(2) 16d BOX NAILS PLATE TO PLATE ATTACHMENT BELOW UPPER MOST PLATE
48' x 40'	5" OC AT ENDWALL - 1 / F-0.50B 12" OC AT SIDEWALL - 2 / F-0.50B 10" OC AT SEPARATION - 4 / F-0.50B

VENTING SCHEDULE

	BUILDING SIZE	BUILDING AREA	REQUIRED VENTING	SIDEWALL VENTING	ENDWALL VENTING	TOTAL VENTING SUPPLIED
W/O PARAPET	48' x 40'	1920 SF	12.8 SF (1/150)	3'-6" x 6" = (4) 1.75 SF/EA(7SF TOTAL)	3'-0" x 3" = (8).75 SF/EA(6SF TOTAL)	13.0 SF SEE NOTE #8
W/ PARAPET	48' x 40'	1920 SF	12.8 SF (1/150)	3'-0" x 6" = (4) 1.5 SF/EA(6SF TOTAL)	36" x 4 1/2" = (7)1.125 SF/EA(7.87SF TOTAL)	13.87 SF SEE NOTE #8

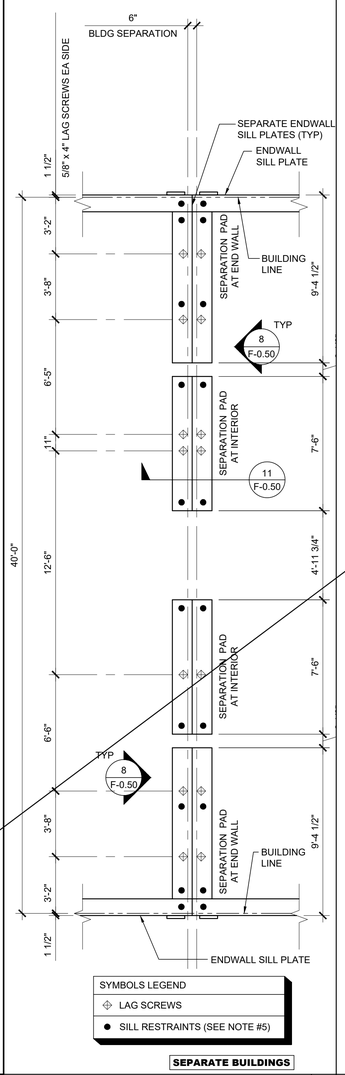
TIE PLATE SCHEDULE

BUILDING SIZE	SIDE WALL TIE PLATES	END WALL TIE PLATES	TOTAL NUMBER OF TIE PLATES
48' x 40'	4	10	28



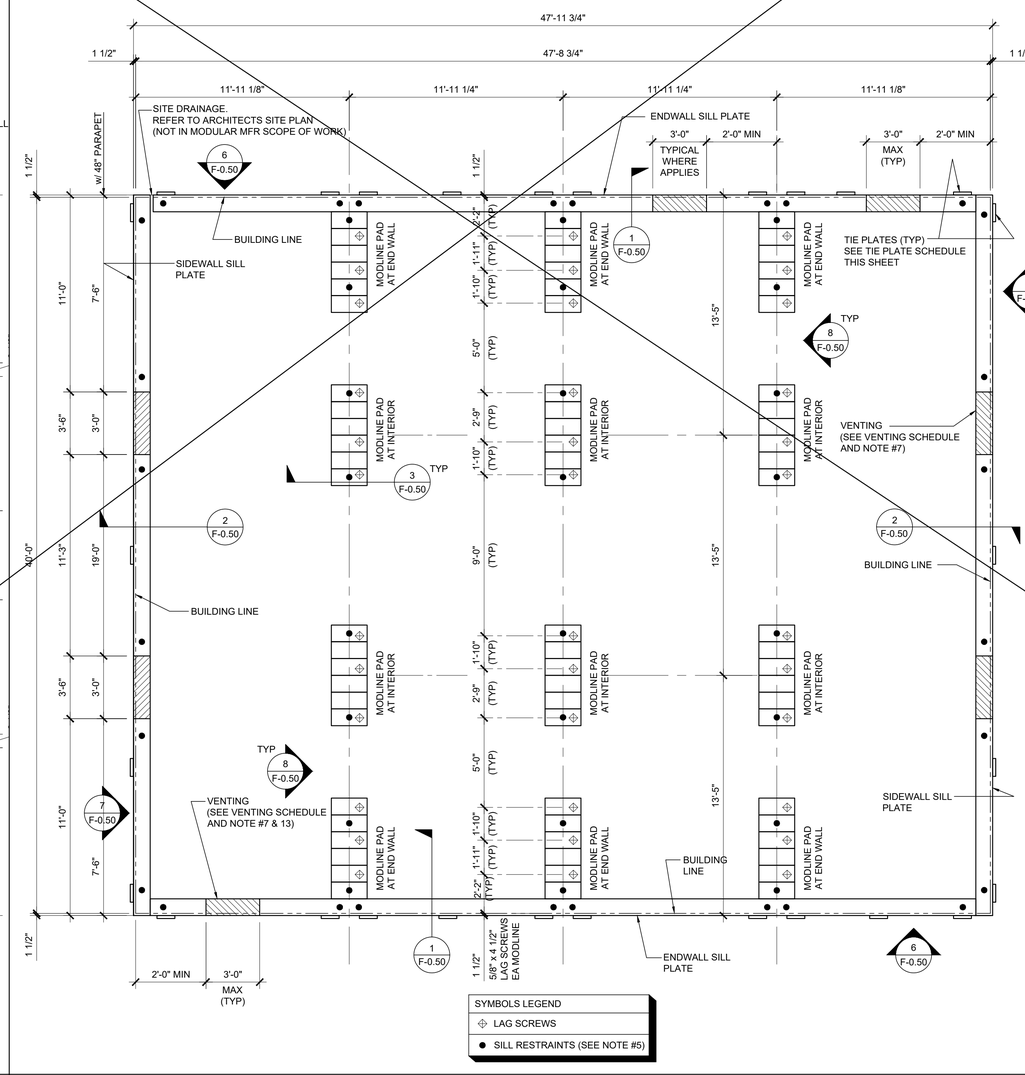
ONE BUILDING

FOOTING AT SEP SCALE: 1/4" = 1' - 0" 3



SEPARATE BUILDINGS

FOOTING AT SEP SCALE: 1/4" = 1' - 0" 2



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

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

WOOD FOUNDATION PLAN
48x40
(50+15 PSF)

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

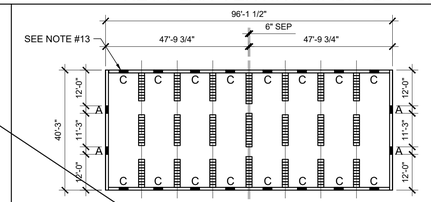
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24775 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

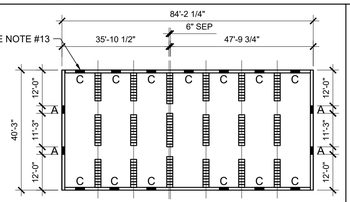
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
F-0.22

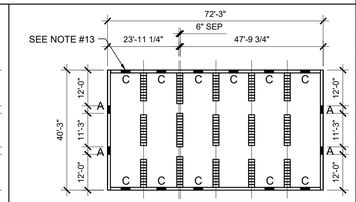
KEY PLAN VENTING CALCULATIONS w/o PARAPET



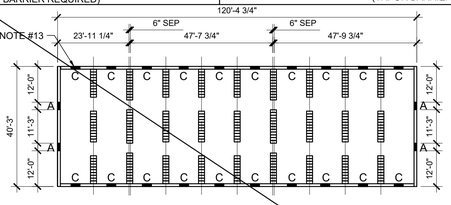
☐ 97'-6" x 40' BUILDING: 3900 SF / 150 = 26 SF VENT REQ'D
(4) - "A" VENT = 5 SF
(16) - "C" VENT = 22 SF
27 SF TOTAL VENTILATION (> 26 SF)
(VAPOR BARRIER REQUIRED)



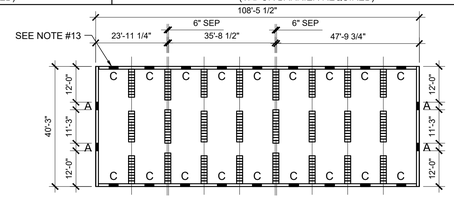
☐ 85' x 40' BUILDING: 3400 SF / 150 = 22.66 SF VENT REQ'D
(4) - "A" VENT = 5 SF
(13) - "C" VENT = 17.875 SF
22.875 SF TOTAL VENTILATION (> 22.66 SF)
(VAPOR BARRIER REQUIRED)



☐ 73'-0" x 40' BUILDING: 2920 SF / 150 = 19.46 SF VENT REQ'D
(4) - "A" VENT = 5 SF
(11) - "C" VENT = 15.125 SF
20.125 SF TOTAL VENTILATION (> 19.46 SF)
(VAPOR BARRIER REQUIRED)



☐ 122'-0" x 40' BUILDING: 4880 SF / 150 = 32.5 SF VENT REQ'D
(4) - "A" VENT = 5 SF
(20) - "C" VENT = 27.5 SF
32.5 SF TOTAL VENTILATION (> 32.5 SF)
(VAPOR BARRIER REQUIRED)



☐ 109'-6" x 40' BUILDING: 4380 SF / 150 = 29.2 SF VENT REQ'D
(4) - "A" VENT = 5 SF
(18) - "C" VENT = 24.75 SF
29.75 SF TOTAL VENTILATION (> 29.2 SF)
(VAPOR BARRIER REQUIRED)

WOOD FOUNDATION PLATE SCHEDULE

100 PSF

PLATES	END WALL	SIDE WALL	MODLINE PAD AT END WALL	MODLINE PAD AT INTERIOR	SEPARATION PAD AT ENDWALL ☐ SEPARATE BLDGS	SEPARATION PAD AT ENDWALL ☐ ONE BLDG	SEPARATION PAD AT INTERIOR ☐ SEPARATE BLDGS	SEPARATION PAD AT INTERIOR ☐ ONE BLDG
ADDITIONAL (AS NEEDED)	2x4	2x4	2x6	2x6	(2) ROWS OF 2x4	2x12	(2) ROWS OF 2x4	2x12
TOP	2x6	2x6	2x8	2x8	(2) ROWS OF 2x6	2x12	(2) ROWS OF 2x6	2x12
BLOCK	2x8	2x8	2x10	2x10	(2) ROWS OF 2x8	2x12	(2) ROWS OF 2x8	2x12
SILL	2x14 (2x16)[15]	2x14 (2x16)[15]	(10) 2x12 x 2'-0"	(11) 2x12 x 2'-0"	(2) ROWS OF 2x14	2x12 x 2'-0"	(2) ROWS OF 2x14	2x12 x 2'-0"

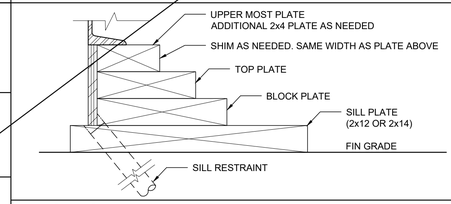
KEY PLAN VENTING SCHEDULE

VENT "A" (SIDEWALL) : 2'-6" x 6" = 1.25 S.F. VENTILATION
"VENT OPENING AT SILL AND BLOCK PLATES"

VENT "B" (ENDWALL): 2'-9" x 3" = 0.68 S.F. VENTILATION
(OPTIONAL AT MULTPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "C" (ENDWALL): 2'-9" x 6" = 1.375 S.F. VENTILATION
(OPTIONAL AT MULTPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

FOUNDATION PLATE DESCRIPTION



NOTES

1. BUILDINGS OVER 2,160 SF, MUST BE INSTALLED ON A PERMANENT CONCRETE FOUNDATION PER IR 16-1 ITEM 1.4.
2. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULAR FLOORS.
3. FOUNDATION VENTS THAT OCCUR UNDER RAMP LANDINGS, PROVIDE AN EQUAL AREA OF SCREENED VENT IN LANDING SKIRT.
4. WOOD SILL (FOOTING) PLATES SHALL BE PRESSURE TREATED HEM-FIR AND MAY BEAR DIRECTLY ON SOIL OR PAVED SURFACE. GRASS OR TURF SHALL BE CLEARED TO BARE SOIL UNDER THE ENTIRE AREA OF THE BUILDING BY OTHERS. THE WOOD SILL FOOTING PLATE MAY SUPPORT CONTINUOUS BLOCKING AND SHEATHING SKIRT WHICH NEED NOT BE TREATED.
5. SILL RESTRAINT:
THE FOUNDATION SHALL BE DESIGNED TO PREVENT SLIDING ON THE SUPPORTING SURFACE BY ATTACHING THE WOOD FOUNDATION PLATES FOR THE BUILDING, RAMPS AND STAIRS TO THE GROUND WITH RESTRAINING DEVICES. AN ACCEPTABLE DESIGN WOULD INCORPORATE ONE-INCH DIAMETER STANDARD WEIGHT (1.315" ACTUAL O.D.) HOT DIPPED GALVANIZED PIPES OR ONE-INCH DIAMETER SOLID STEEL RODS SPACED AT NOT MORE THAN 10'-0" O.C. ONE PIPE / ROD SHALL BE LOCATED A MAXIMUM OF TWO FEET FROM EACH CORNER IN BOTH DIRECTIONS AND A MINIMUM OF TWO PIPES / RODS PER DISCONTINUOUS FOUNDATIONS STRIP. PIPES SHOULD PENETRATE INTO SOIL, CONCRETE, AND/OR PAVING A MINIMUM OF 12" MEASURED VERTICALLY. ALTERNATE OR EQUIVALENT DESIGNS, WHEN PROVIDED WITH STRUCTURAL CALCULATIONS AND DETAILS, WILL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL.
6. STACKED WOOD MEMBERS FOR FOUNDATIONS AND PRESSURE TREATED LUMBER SHALL BE NAILED WITH HOT DIPPED GALVANIZED PER ASTM A-153.
7. VENTILATION OPENINGS SHALL BE COVERED FOR EITHER HEIGHT AND WIDTH WITH CORROSION - RESISTANT WIRE MESH, WITH A CLEAR "THROUGH" DIMENSION NOT EXCEEDING 1/8" ACTING AS A VERMIN BARRIER.
8. VENTING CALCULATION REQUIREMENTS FOR MULTIPLE BUILDING SETS MUST BE CALCULATED WITH OVERALL SQUARE FOOTAGE INCLUDING SEPARATION.
9. FOR FOUNDATION ANCHORAGE ON CONCRETE PAD, SEE DETAIL 15/F0.50.
10. IF OPTIONAL ENDWALL VENTS ARE APPLIED, SILL PLATE AND BLOCK PLATE MUST BE CONTINUOUS. VENT OPENINGS SHALL BE BROKEN ABOVE THE BLOCK PLATE.
11. FOR FOUNDATION SPLICE - SEE 5/F-0.50.
12. CRAWLSPACE VAPOR RETARDERS (WHERE INDICATED):
THE OPTIONAL TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
MATERIALS:
GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
INSTALLATION RECOMMENDATIONS:
OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; ATTACH VAPOR RETARDER OVER SILL PLATE PER 10/F0.50; SEAL TO ALL PIERS AND OTHER PENETRATIONS.
13. ENDWALL VENTS (IF REQ'D) SHALL BE LOCATED A MIN OF 24" FROM BUILDING CORNERS. MAXIMUM ONE ENDWALL VENT PER 12'-0" MODULE.
14. CONCRETE FLOOR LOAD IS INCLUDED IN THE CONCRETE FOUNDATION OPTION FOR FOUNDATION & ANCHORAGE DESIGN, I.E. THERE IS NO CONCRETE FLOOR FOR WOOD FOUNDATION OPTION. THERE IS CONCRETE FLOOR FOR CONCRETE FOUNDATION OPTION.
15. IF PARAPET IS HIGHER THAN 18", COMBINATION REQUIRES A 2 X 14" OR 2 X 16" SILL PLATE @ EXTERIOR OF BUILDING.
16. 150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OR PARAPET OPTION.
17. VENTS AT MODLINE FOUNDATIONS. THE MINIMUM CRITERIA REQUIREMENT AS FOLLOWS:
A. VENTS HAVE A MINIMUM OF 2 SILL /BLOCKING PLATES BENEATH.
B. VENTS ARE A MAXIMUM OF 6'-0" LONG x 3" MIN. HIGH.
C. VENTS ARE SPACED A MINIMUM OF 8'-0" APART (EDGE TO EDGE) AND 24" MIN. FROM CORNERS.
18. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.

NAILING SCHEDULE

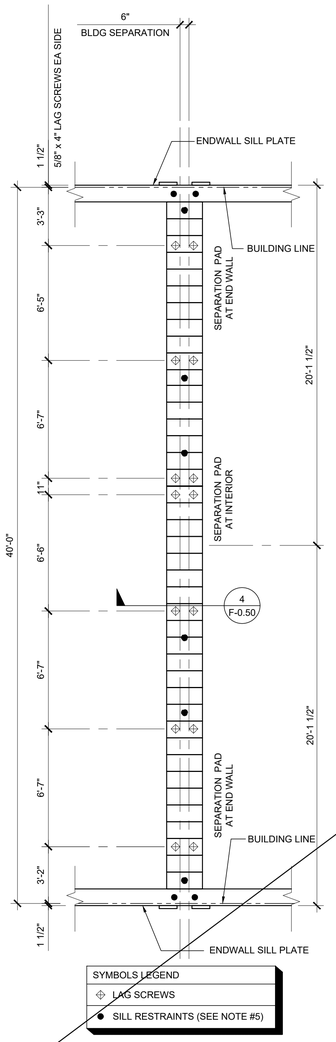
BUILDING SIZE	(2) 16d BOX NAILS PLATE TO PLATE ATTACHMENT BELOW UPPER MOST PLATE
48' x 40'	5" OC AT ENDWALL - 1 / F-0.50B 12" OC AT SIDEWALL - 2 / F-0.50B 10" OC AT SEPARATION - 4 / F-0.50B

VENTING SCHEDULE

BUILDING SIZE	BUILDING AREA	REQUIRED VENTING	SIDEWALL VENTING	ENDWALL VENTING	TOTAL VENTING SUPPLIED
48' x 40'	1920 SF	12.8 SF (1/150)	2'-6" x 6" = (4) 1.25 SF/ EA (5 SF TOTAL)	2'-9" x 4 1/2" = (8) 1.031 SF/ EA (8.24 SF TOTAL)	13.24 SF SEE NOTE #8

TIE PLATE SCHEDULE

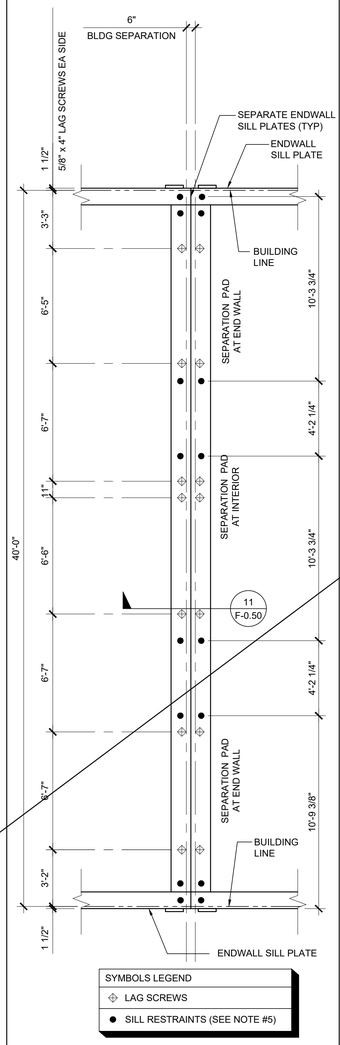
BUILDING SIZE	SIDE WALL TIE PLATES	END WALL TIE PLATES	TOTAL NUMBER OF TIE PLATES
48' x 40'	4	10	28



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

ONE BUILDING

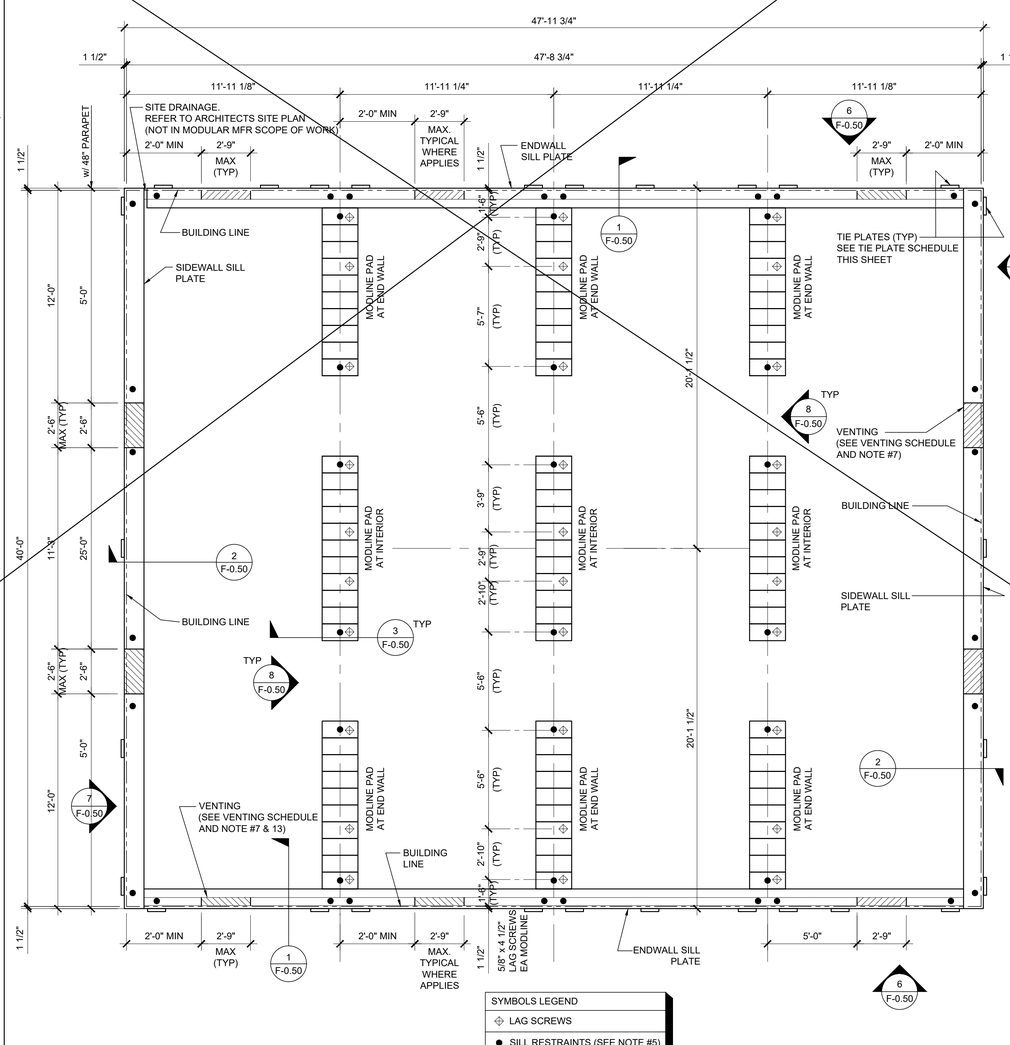
FOOTING AT SEP SCALE: 1/4" = 1' - 0" 3



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

SEPARATE BUILDINGS

FOOTING AT SEP SCALE: 1/4" = 1' - 0" 2



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

WOOD FOUNDATION PLAN
48x40
(100 PSF)

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

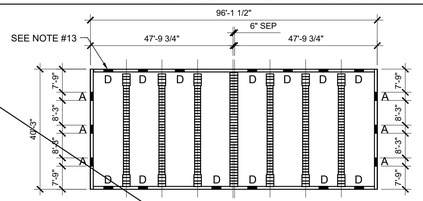
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24175 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

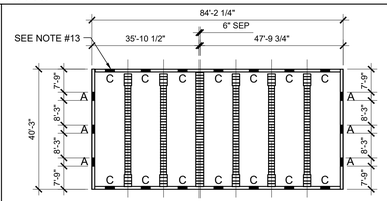
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
F-0.23

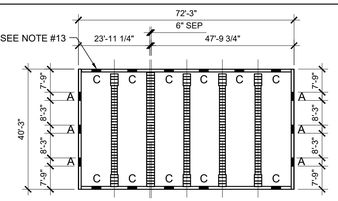
KEY PLAN VENTING CALCULATIONS



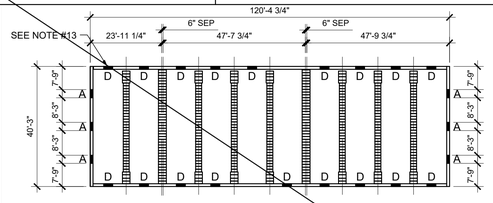
☐ 97'-6" x 40' BUILDING: 3900 SF / 150 = 26 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(13) - "D" VENT = 17.67 SF
26.12 SF TOTAL VENTILATION (> 26 SF)



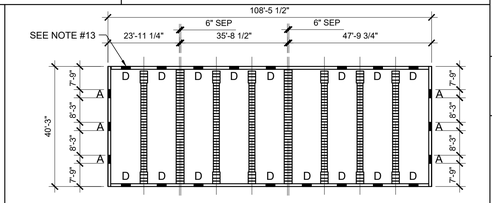
☐ 85' x 40' BUILDING: 3400 SF / 150 = 22.66 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(14) - "C" VENT = 14.43 SF
22.68 SF TOTAL VENTILATION (> 22.66 SF)



☐ 73'-0" x 40' BUILDING: 2920 SF / 150 = 19.46 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(11) - "C" VENT = 11.34 SF
19.59 SF TOTAL VENTILATION (> 19.46 SF)



☐ 122'-0" x 40' BUILDING: 4880 SF / 150 = 32.53 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(18) - "D" VENT = 24.75 SF
33.00 SF TOTAL VENTILATION (> 32.53 SF)



☐ 109'-6" x 40' BUILDING: 4380 SF / 150 = 29.2 SF VENT REQ'D
(6) - "A" VENT = 8.25 SF
(16) - "D" VENT = 22.00 SF
30.25 SF TOTAL VENTILATION (> 29.2 SF)

WOOD FOUNDATION PLATE SCHEDULE

150 PSF

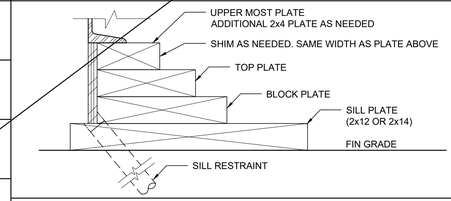
PLATES	END WALL	SIDE WALL	MODLINE PAD AT END WALL	MODLINE PAD AT INTERIOR	PLATES AT SEPARATION ☐ SEPARATE BLDGS	PLATES AT SEPARATION ☐ ONE BLDG
ADDITIONAL (AS NEEDED)	2x4	2x4	2x6	2x6	(2) ROWS OF 2x4	2x12
TOP	2x6	2x6	2x8	2x8	(2) ROWS OF 2x6	2x12
BLOCK	2x8	2x8	2x12	2x12	(2) ROWS OF 2x8 (CONT)	2x12
SILL	2x14	2x14	(7) 2x12 x 30"	2x12 x 24"	(2) ROWS OF 2x14 (CONT)	2x12 x 30"

KEY PLAN VENTING SCHEDULE

VENT "A" (SIDEWALL):	2'-9" x 6" = 1.375 S.F. VENTILATION "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"
VENT "B" (ENDWALL): (OPTIONAL AT MULTIPLE BLDG SETS)	2'-9" x 3" = 0.68 S.F. VENTILATION "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"
VENT "C" (ENDWALL): (OPTIONAL AT MULTIPLE BLDG SETS)	2'-9" x 4 1/2" = 1.031 S.F. VENTILATION "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"
VENT "D" (ENDWALL): (OPTIONAL AT MULTIPLE BLDG SETS)	2'-9" x 6" = 1.375 S.F. VENTILATION "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OR PARAPET OPTIONS

FOUNDATION PLATE DESCRIPTION



NOTES

1. BUILDINGS OVER 2,160 SF, MUST BE INSTALLED ON A PERMANENT CONCRETE FOUNDATION PER IR 16-1 ITEM 1.4.
2. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULAR FLOORS.
3. FOUNDATION VENTS THAT OCCUR UNDER RAMP LANDINGS, PROVIDE AN EQUAL AREA OF SCREENED VENT IN LANDING SKIRT.
4. WOOD SILL (FOOTING) PLATES SHALL BE PRESSURE TREATED HEM-FIR AND MAY BEAR DIRECTLY ON SOIL OR PAVED SURFACE. GRASS OR TURF SHALL BE CLEARED TO BARE SOIL UNDER THE ENTIRE AREA OF THE BUILDING BY OTHERS. THE WOOD SILL FOOTING PLATE MAY SUPPORT CONTINUOUS BLOCKING AND SHEATHING SKIRT WHICH NEED NOT BE TREATED.
5. SILL RESTRAINT:
   THE FOUNDATION SHALL BE DESIGNED TO PREVENT SLIDING ON THE SUPPORTING SURFACE BY ATTACHING THE WOOD FOUNDATION PLATES FOR THE BUILDING, RAMPS AND STAIRS TO THE GROUND WITH RESTRAINING DEVICES. AN ACCEPTABLE DESIGN WOULD INCORPORATE ONE-INCH DIAMETER STANDARD WEIGHT (1.315" ACTUAL O.D.) HOT DIPPED GALVANIZED PIPES OR ONE-INCH DIAMETER SOLID STEEL RODS SPACED AT NOT MORE THAN 10'-0" O.C. ONE PIPE / ROD SHALL BE LOCATED A MAXIMUM OF TWO FEET FROM EACH CORNER IN BOTH DIRECTIONS AND A MINIMUM OF TWO PIPES / RODS PER DISCONTINUOUS FOUNDATIONS STRIP. PIPES SHOULD PENETRATE INTO SOIL, CONCRETE, AND/OR PAVING A MINIMUM OF 12" MEASURED VERTICALLY. ALTERNATE OR EQUIVALENT DESIGNS, WHEN PROVIDED WITH STRUCTURAL CALCULATIONS AND DETAILS, WILL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL.
6. STACKED WOOD MEMBERS FOR FOUNDATIONS AND PRESSURE TREATED LUMBER SHALL BE NAILED WITH HOT DIPPED GALVANIZED PER ASTM A-153.
7. VENTILATION OPENINGS SHALL BE COVERED FOR EITHER HEIGHT AND WIDTH WITH CORROSION - RESISTANT WIRE MESH, WITH A CLEAR "THROUGH" DIMENSION NOT EXCEEDING 1/8" ACTING AS A VERMIN BARRIER.
8. VENTING CALCULATION REQUIREMENTS FOR MULTIPLE BUILDING SETS MUST BE CALCULATED WITH OVERALL SQUARE FOOTAGE INCLUDING SEPARATION.
9. FOR FOUNDATION ANCHORAGE ON CONCRETE PAD, SEE DETAIL 15/F0.50.
10. IF OPTIONAL ENDWALL VENTS ARE APPLIED, SILL PLATE AND BLOCK PLATE MUST BE CONTINUOUS. VENT OPENINGS SHALL BE BROKEN ABOVE THE BLOCK PLATE.
11. FOR FOUNDATION SPLICE - SEE 5/F-0.50.
12. CRAWLSPACE VAPOR RETARDERS (WHERE INDICATED):
    THE OPTIONAL TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
    MATERIALS:
    GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
    INSTALLATION RECOMMENDATIONS:
    OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; ATTACH VAPOR RETARDER OVER SILL PLATE PER 10/F-0.50; SEAL TO ALL PIERS AND OTHER PENETRATIONS.
13. ENDWALL VENTS (IF REQ'D) SHALL BE LOCATED A MIN OF 24" FROM BUILDING CORNERS. MAXIMUM ONE ENDWALL VENT PER 12'-0" MODULE.
14. CONCRETE FLOOR LOAD IS INCLUDED IN THE CONCRETE FOUNDATION OPTION FOR FOUNDATION & ANCHORAGE DESIGN, I.E. THERE IS NO CONCRETE FLOOR FOR WOOD FOUNDATION OPTION. THERE IS CONCRETE FLOOR FOR CONCRETE FOUNDATION OPTION.
15. IF PARAPET IS HIGHER THAN 18", COMBINATION REQUIRES A 2 X 14" OR 2 X 16" SILL PLATE @ EXTERIOR OF BUILDING.
16. 150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OR PARAPET OPTION.
17. VENTS AT MODLINE FOUNDATIONS. THE MINIMUM CRITERIA REQUIREMENT AS FOLLOWS:
    A. VENTS HAVE A MINIMUM OF 2 SILL /BLOCKING PLATES BENEATH.
    B. VENTS ARE A MAXIMUM OF 6'-0" LONG x 3" MIN. HIGH.
    C. VENTS ARE SPACED A MINIMUM OF 8'-0" APART (EDGE TO EDGE) AND 24" MIN. FROM CORNERS.
18. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.

NAILING SCHEDULE

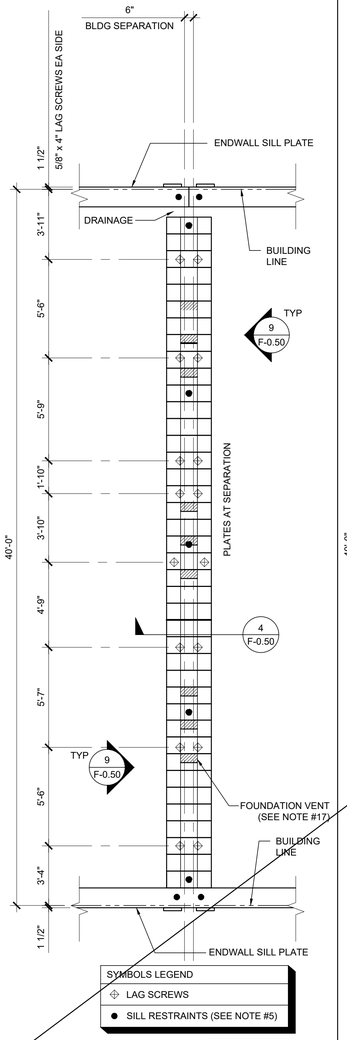
BUILDING SIZE	(2) 16d BOX NAILS PLATE TO PLATE ATTACHMENT BELOW UPPER MOST PLATE
48' x 40'	5" OC AT ENDWALL - 1 / F-0.50 12" OC AT SIDEWALL - 2 / F-0.50 9" OC AT SEPARATION - 4 / F-0.50

VENTING SCHEDULE

BUILDING SIZE	BUILDING AREA	REQUIRED VENTING	SIDEWALL VENTING	ENDWALL VENTING	TOTAL VENTING SUPPLIED
48' x 40'	1920 SF	12.8 SF (1/150)	2.75' x 6" = (6) 1.375 SF/ EA (8.25 SF TOTAL)	2.75' x 6" = (4) 1.375 SF/ EA (5.5 SF TOTAL)	13.75 SF SEE NOTE #8

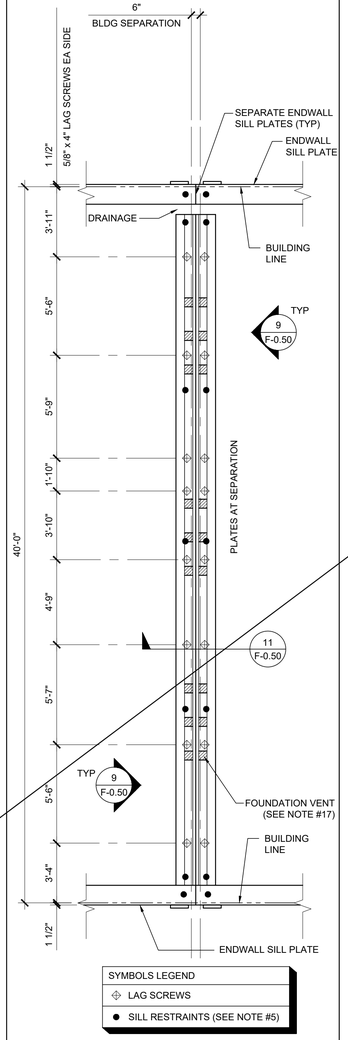
TIE PLATE SCHEDULE

BUILDING SIZE	SIDE WALL TIE PLATES	END WALL TIE PLATES	TOTAL NUMBER OF TIE PLATES
48' x 40'	4	16	40



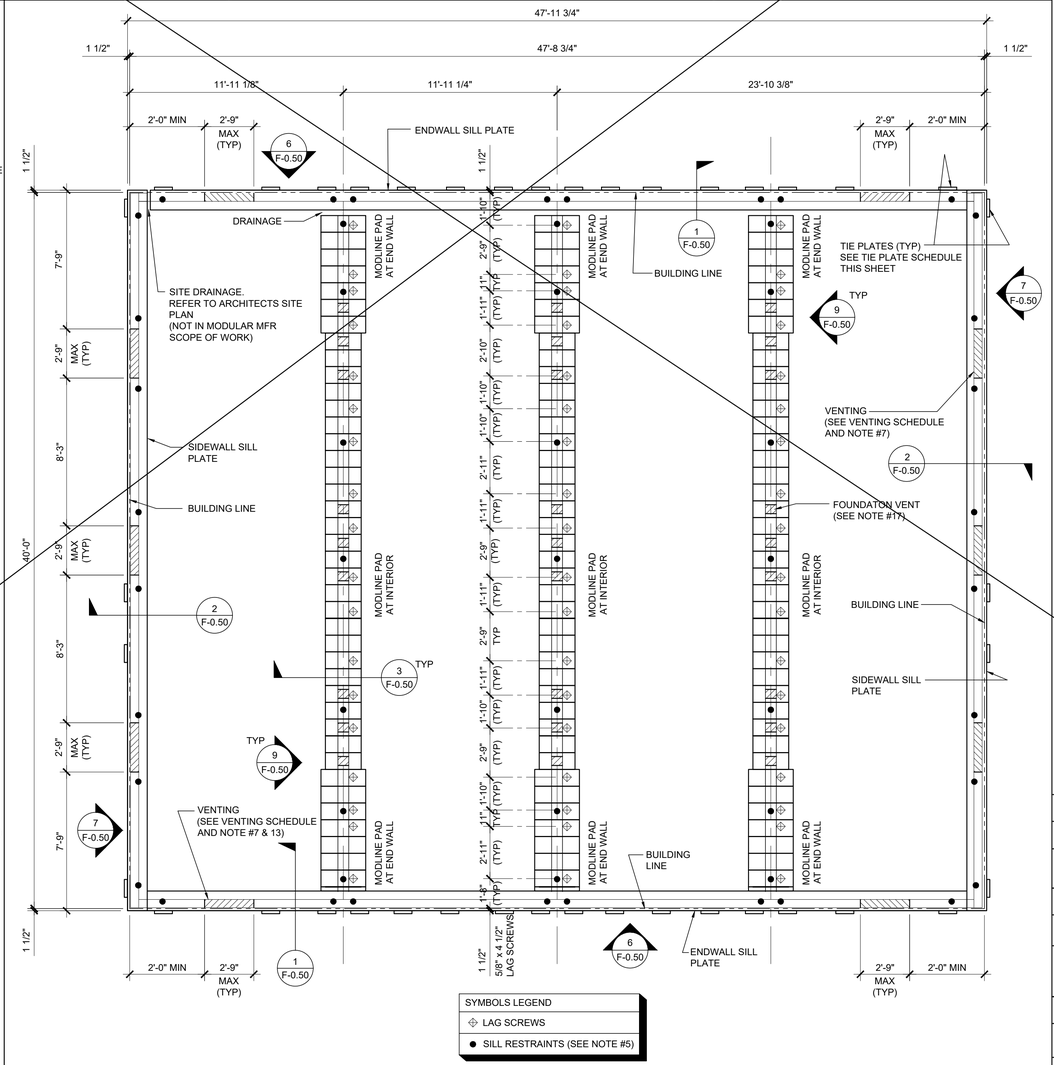
ONE BUILDING

FOOTING AT SEP SCALE: 1/4" = 1' - 0" 3



SEPARATE BUILDINGS

FOOTING AT SEP SCALE: 1/4" = 1' - 0" 2



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

WOOD FOUNDATION PLAN
48x40
(150 PSF)

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

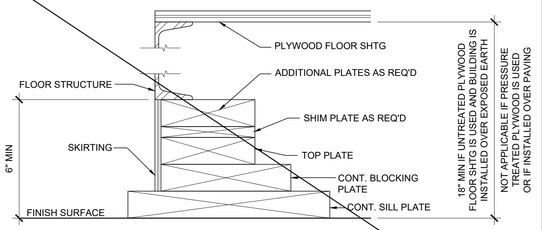
Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

SILVER CREEK INDUSTRIES
24' x 40' PC

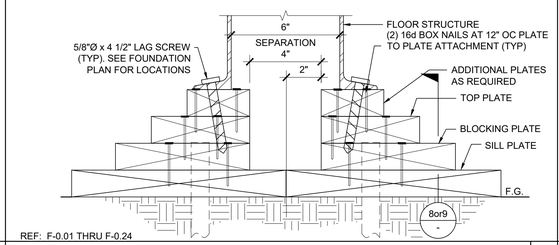
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
F-0.24



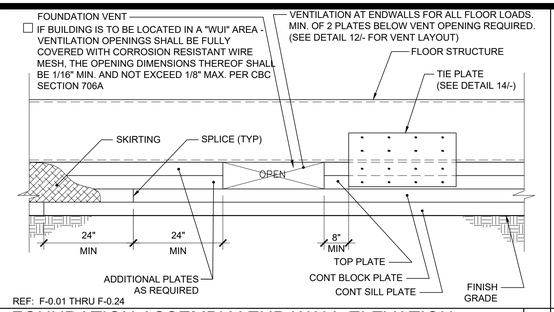
NOTE:
SEE SCHEDULE ON SHEET S-1.01 TO DETERMINE IF PRESSURE TREATED PLYWOOD FLOOR SHTG IS BEING PROVIDED

CLEARANCE TO PLYWOOD SHTG
SCALE : 3" = 1'-0" | 16



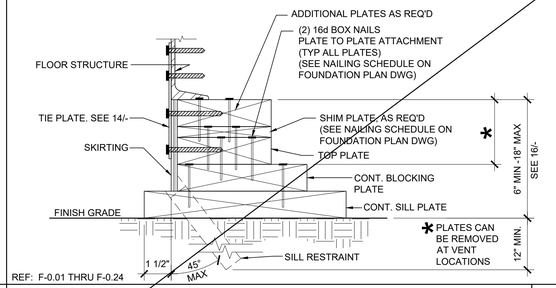
REF: F-0.01 THRU F-0.24

FOUNDATION AT ADJACENT BUILDING
SCALE : 3"=1'-0" | 11



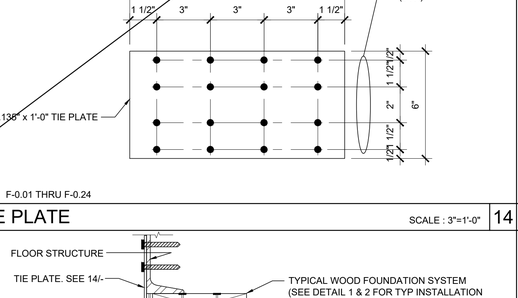
REF: F-0.01 THRU F-0.24

FOUNDATION ASSEMBLY END WALL ELEVATION
SCALE : 1 1/2"=1'-0" | 6

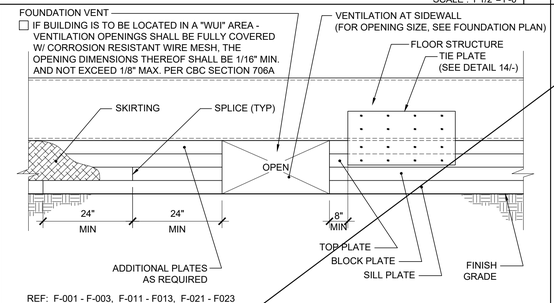


REF: F-0.01 THRU F-0.24

FOUNDATION AT END WALL
SCALE : 3"=1'-0" | 1

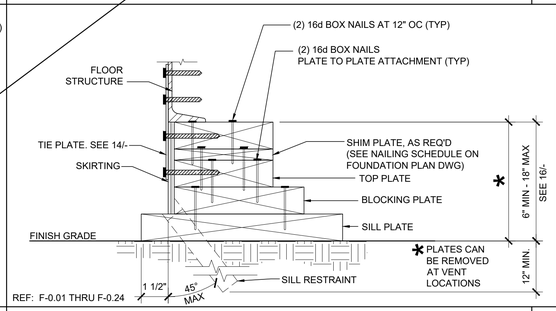


END WALL VENT
SCALE : 1 1/2"=1'-0" | 12



REF: F-001 - F-003, F-011 - F013, F-021 - F023

FOUNDATION ASSEMBLY SIDEWALL ELEVATION
SCALE : 1 1/2"=1'-0" | 7

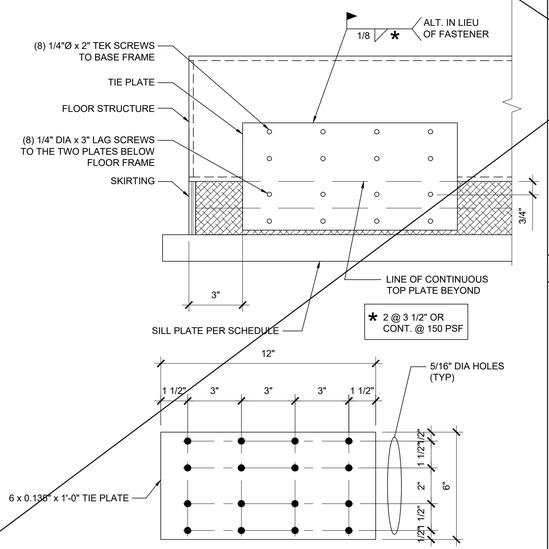


REF: F-0.01 THRU F-0.24

FOUNDATION AT SIDE WALL
SCALE : 3"=1'-0" | 2

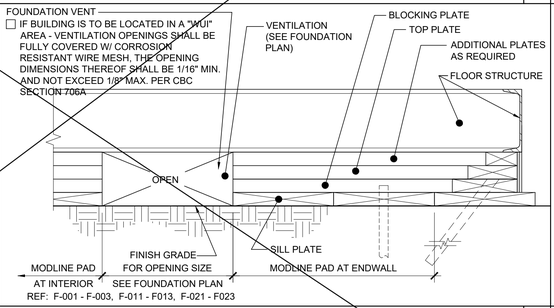
17

18



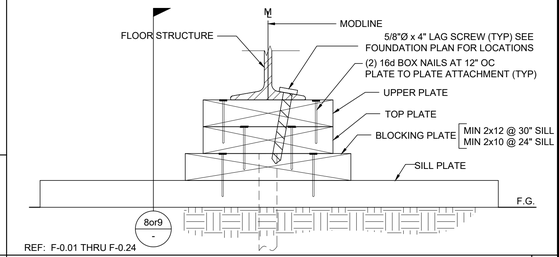
REF: F-0.01 THRU F-0.24

TIE PLATE
SCALE : 3"=1'-0" | 14



REF: F-001 - F-003, F-011 - F013, F-021 - F023

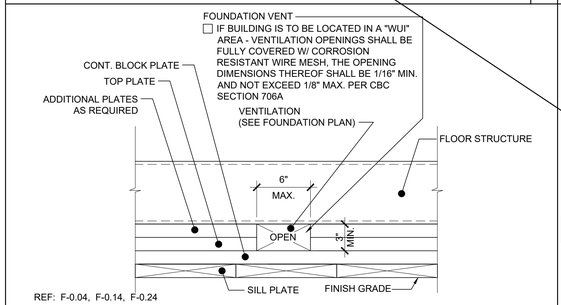
FOUNDATION AT MODLINE & SEPARATION
SCALE : 1 1/2"=1'-0" | 8



REF: F-0.01 THRU F-0.24

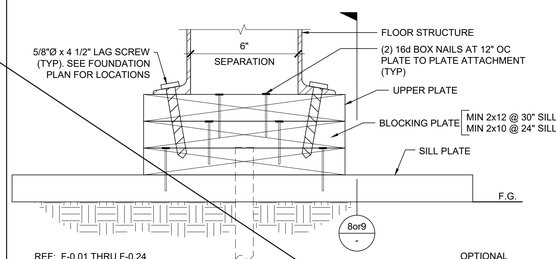
FOUNDATION AT MODLINE
SCALE : 3"=1'-0" | 3

19



REF: F-0.04, F-0.14, F-0.24

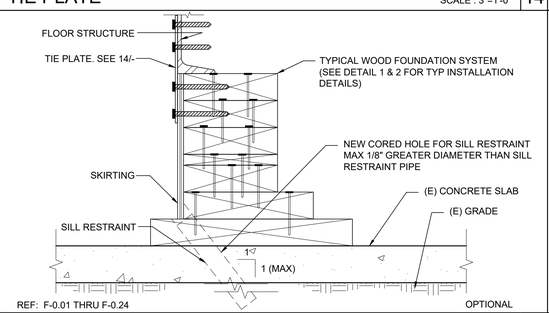
VENT ELEV. AT MODLINE & SEP FOR 150 PSF
SCALE : 3"=1'-0" | 9



REF: F-0.01 THRU F-0.24 OPTIONAL

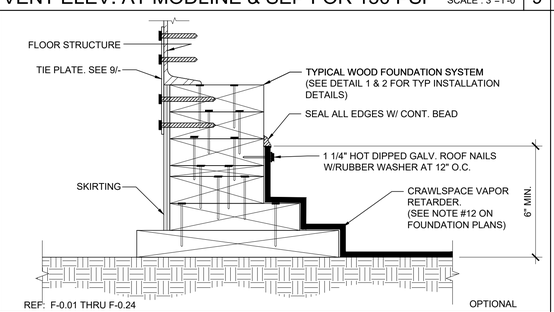
FOUNDATION AT ADJACENT BUILDING
SCALE : 3"=1'-0" | 4

20



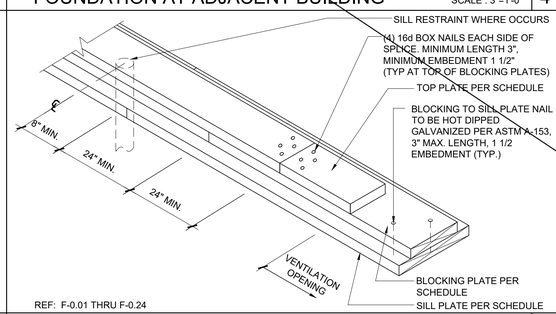
REF: F-0.01 THRU F-0.24 OPTIONAL

FOUNDATION ANCHORAGE AT CONCRETE PAD
SCALE : 3"=1'-0" | 15



REF: F-0.01 THRU F-0.24 OPTIONAL

CRAWLSPACE VAPOR RETARDER
SCALE : 3"=1'-0" | 10



REF: F-0.01 THRU F-0.24

FOUNDATION SPLICE
SCALE : NTS | 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

FOUNDATION DETAILS
WOOD

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24975 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

F-0.50

ANCHORAGE NOTES:
1. ANCHOR PLATES SHALL BE PLACED SUCH THAT THE FOLLOWING MINIMUM CRITERIA ARE MET:
   - ONE (1) LARGE ANCHOR PLATE AT EA. END OF EVERY MATE LINE.
   - ONE (1) ANCHOR PLATE WITHIN 35" OF OVERALL BUILDING CORNERS IN EA DIRECTION. (TWO PER MODULE ALONG EACH END WALL)
   - THREE (3) ANCHOR PLATES ALONG EACH SIDE WALL
2. SIDE WALL PLATES SHALL BE PLACED IN THE CORNER (AS NOTED ABOVE) WITH A 3RD PLATE AS CLOSE THE MIDSPAN AS IS POSSIBLE (PLATE LOCATION MAY BE ADJUSTED TO AVOID VENT/ACCESS OPENINGS.
3. ANCHOR PLATES WITHIN 21" OF AN OPENING SHALL BE REINFORCED WITH HAIRPINS PER 18/F-2.51.

NOTES

1. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULE BUILDINGS.
2. 8'-0" MAXIMUM VENT SIZE AT SIDE WALLS
   4'-0" MAXIMUM VENT SIZE AT END WALLS
   3'-0" MINIMUM DISTANCE FROM EDGE OF VENT TO STEMWALL CORNER
   2-'0" MINIMUM DISTANCE BETWEEN VENT EDGES
3. CRAWLSPACE VAPOR RETARDERS (WHERE INDICATED):

   THE TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
   MATERIALS:
   GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
   INSTALLATION RECOMMENDATIONS:
   OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; EXTEND VAPOR RETARDER A MINIMUM OF 6 INCHES UP THE STEM WALL (MORE IS BETTER); SEAL TO ALL PIERS AND OTHER PENETRATIONS, SEE DETAIL 11/F-2.51.
4. VENTILATION OPENINGS SHALL BE COVERED FOR THEIR HEIGHT AND WIDTH WITH A CORROSION-RESISTANT WIRE MESH, WITH THE LEAST DIMENSION NOT EXCEEDING 1/8".
5. SOIL BEARING PRESSURE OF 1500 PSF USED FOR DESIGN.
6. PROFESSIONAL SOILS REPORT: IF A SOILS REPORT IS REQUIRED BY DSA ON THIS BUILDING(S) AND THE RECOMMENDATIONS CAUSE AN INCREASE IN THE COST OF THE ORIGINAL FOUNDATION, THEN THE DISTRICT AGREES TO ACCEPT AND APPROVE A CHANGE ORDER IN THE AMOUNT OF THE COST INCREASE.
7. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE-SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.
8. A COLD JOINT MAY BE PROVIDED BETWEEN THE FOOTING AND THE VERTICAL FOUNDATION WALL. THE JOINT SHALL BE KEYED (2 1/2" WIDE (MIN) x 1 1/2" DEEP) AND ALL VERTICAL REINFORCING THAT CROSSES THE JOINT SHALL BE PLACED PRIOR TO THE PLACEMENT OF CONCRETE.

VENTING SCHEDULE

VENT "A" : (8'-0" x 8" METAL SCREEN COVER)
7'-10" x 5" = 3.26 S.F. VENTILATION

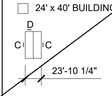
VENT "B" : (6'-0" x 8" METAL SCREEN COVER)
5'-10" x 5" = 2.43 S.F. VENTILATION

VENT "C" : (4'-0" x 8" METAL SCREEN COVER)
3'-10" x 5" = 1.59 S.F. VENTILATION

ACCESS/VENT "D" : (3'-0" x 2'-0" METAL SCREEN COVER)
2'-10" x 18" = 4.25 S.F. VENTILATION

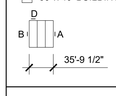
VENTING CALCULATION:

☐ 24' x 40' BUILDING: 24' x 40' = 960 SF / 150 = 6.4 SF VENT. REQ'D



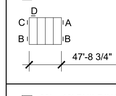
2 - "C" VENT = 3.18 SF
1 - "D" ACCESS VENT = 4.25 SF
7.43 SF TOTAL VENTILATION (> 6.4 SF)

☐ 36' x 40' BUILDING: 36' x 40' = 1440 SF / 150 = 9.6 SF VENT. REQ'D



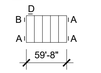
1 - "A" VENT = 3.26 SF
1 - "B" VENT = 2.43 SF
1 - "D" ACCESS VENT = 4.25 SF
9.94 SF TOTAL VENTILATION (> 9.6 SF)

☐ 48' x 40' BUILDING: 48' x 40' = 1920 SF / 150 = 12.8 SF VENT. REQ'D



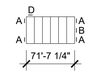
1 - "A" VENT = 3.26 SF
2 - "B" VENT = 4.86 SF
1 - "C" VENT = 1.59 SF
1 - "D" ACCESS VENT = 4.25 SF
13.96 SF TOTAL VENTILATION (> 12.8 SF)

☐ 60' x 40' BUILDING: 60' x 40' = 2400 SF / 150 = 16 SF VENT. REQ'D



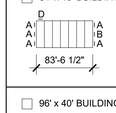
3 - "A" VENT = 9.78 SF
1 - "B" VENT = 2.43 SF
1 - "D" ACCESS VENT = 4.25 SF
16.46 SF TOTAL VENTILATION (> 16 SF)

☐ 72' x 40' BUILDING: 72' x 40' = 2880 SF / 150 = 19.2 SF VENT. REQ'D



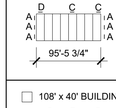
4 - "A" VENT = 13.04 SF
1 - "B" VENT = 2.43 SF
1 - "D" ACCESS VENT = 4.25 SF
19.72 SF TOTAL VENTILATION (> 19.2 SF)

☐ 84' x 40' BUILDING: 84' x 40' = 3360 SF / 150 = 22.4 SF VENT. REQ'D



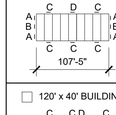
5 - "A" VENT = 16.30 SF
1 - "B" VENT = 2.43 SF
1 - "D" ACCESS VENT = 4.25 SF
22.98 SF TOTAL VENTILATION (> 22.4 SF)

☐ 96' x 40' BUILDING: 96' x 40' = 3840 SF / 150 = 25.6 SF VENT. REQ'D



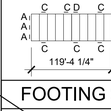
6 - "A" VENT = 19.56 SF
2 - "C" VENT = 3.18 SF
1 - "D" ACCESS VENT = 4.25 SF
26.99 SF TOTAL VENTILATION (> 25.6 SF)

☐ 108' x 40' BUILDING: 108' x 40' = 4320 SF / 150 = 28.8 SF VENT. REQ'D



4 - "A" VENT = 13.04 SF
2 - "B" VENT = 4.86 SF
5 - "C" VENT = 7.95 SF
1 - "D" ACCESS VENT = 4.25 SF
30.10 SF TOTAL VENTILATION (> 28.8 SF)

☐ 120' x 40' BUILDING: 120' x 40' = 4800 SF / 150 = 32 SF VENT. REQ'D

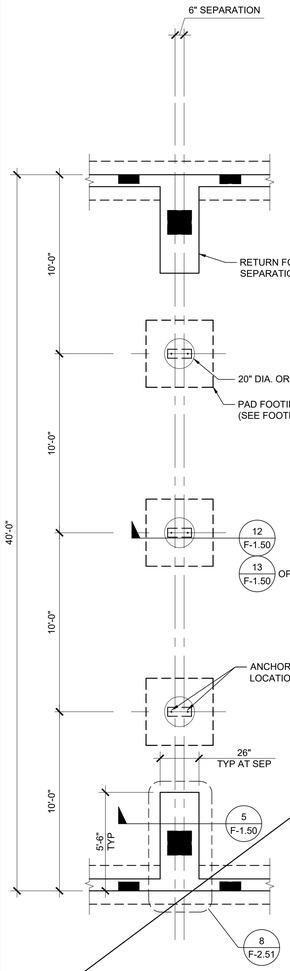


6 - "A" VENT = 19.56 SF
6 - "C" VENT = 9.54 SF
1 - "D" ACCESS VENT = 4.25 SF
33.35 SF TOTAL VENTILATION (> 32 SF)

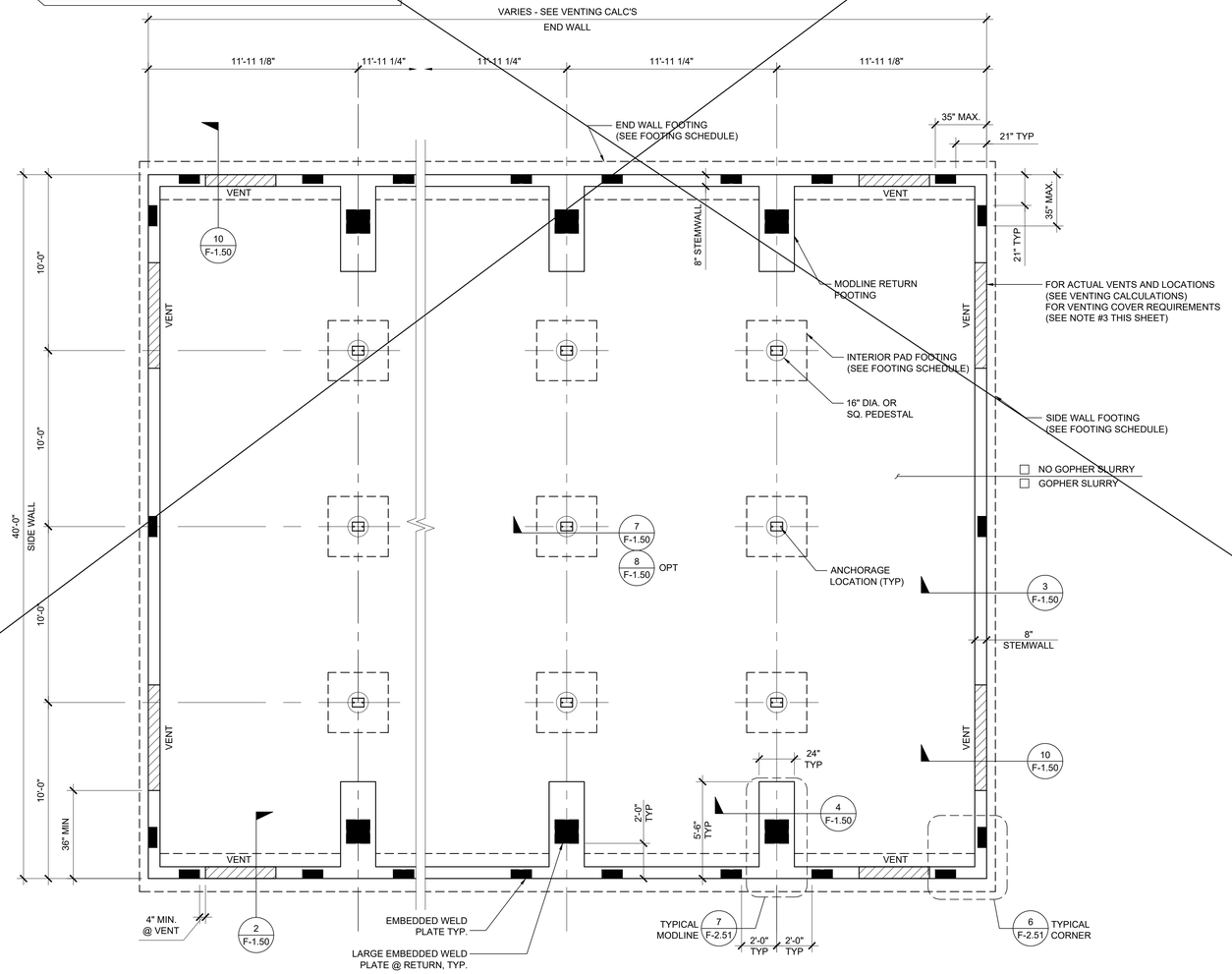
FOOTING SCHEDULE

DESIGN FLOOR LIVE LOAD	SIDEWALL FOOTING	ENDWALL FOOTING	INTERIOR PAD FOOTING	PAD FOOTING AT SEPARATION
☐ 50 PSF	12" WIDE (2) #5 CONT T&B	18" WIDE (3) #5 CONT T&B	3'-0" SQ (3) #5 EW	3'-10" SQ (4) #5 EW
☐ 50 + 15 PSF	12" WIDE (2) #5 CONT T&B	18" WIDE (3) #5 CONT T&B	3'-0" SQ (3) #5 EW	3'-10" SQ (4) #5 EW
☐ 100 PSF	12" WIDE (2) #5 CONT T&B	18" WIDE (3) #5 CONT T&B	3'-4" SQ (3) #5 EW	4'-2" SQ (4) #5 EW
☐ 150 PSF	14" WIDE (2) #5 CONT T&B	20" WIDE (3) #5 CONT T&B	4'-0" SQ (4) #5 EW	4'-8" SQ (4) #5 EW

SYMBOLS LEGEND
- L-6x4x3/8x14 EMBED PLATE PER 9/F-2.51
- 6x8x3/8 EMBED PLATE PER 7/F-1.50
- 16x16x3/8 EMBED PLATE PER 14/F-2.51



FOOTING AT SEPARATION SCALE: 1/4" = 1' - 0" | 2



FOUNDATION PLAN SCALE: 1/4" = 1' - 0" | 1

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

CONCRETE FOUNDATION PLAN
ABOVE GRADE WOOD FLOOR

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
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DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
F-1.01

ANCHORAGE NOTES:
1. ANCHOR PLATES SHALL BE PLACED SUCH THAT THE FOLLOWING MINIMUM CRITERIA ARE MET:
   - ONE (1) LARGE ANCHOR PLATE AT EA. END OF EVERY MATE LINE.
   - ONE (1) ANCHOR PLATE WITHIN 35" OF OVERALL BUILDING CORNERS IN EA DIRECTION. (TWO PER MODULE ALONG EACH END WALL)
   - THREE (3) ANCHOR PLATES ALONG EACH SIDE WALL
2. SIDE WALL PLATES SHALL BE PLACED IN THE CORNER (AS NOTED ABOVE) WITH A 3RD PLATE AS CLOSE THE MIDSPAN AS IS POSSIBLE (PLATE LOCATION MAY BE ADJUSTED TO AVOID VENT/ACCESS OPENINGS.
3. ANCHOR PLATES WITHIN 21" OF AN OPENING SHALL BE REINFORCED WITH HAIRPINS PER 18/F-2.51.

NOTES

1. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULE BUILDINGS.
2. 8'-0" MAXIMUM VENT SIZE AT SIDE WALLS
   4'-0" MAXIMUM VENT SIZE AT END WALLS
   3'-0" MINIMUM DISTANCE FROM EDGE OF VENT TO STEMWALL CORNER
   2-'0" MINIMUM DISTANCE BETWEEN VENT EDGES
3. CRAWLSPACE VAPOR RETARDERS (WHERE INDICATED):

   THE TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
   MATERIALS:
   GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
   INSTALLATION RECOMMENDATIONS:
   OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; EXTEND VAPOR RETARDER A MINIMUM OF 6 INCHES UP THE STEM WALL (MORE IS BETTER); SEAL TO ALL PIERS AND OTHER PENETRATIONS, SEE DETAIL 11/F-2.51.
4. VENTILATION OPENINGS SHALL BE COVERED FOR THEIR HEIGHT AND WIDTH WITH A CORROSION-RESISTANT WIRE MESH, WITH THE LEAST DIMENSION NOT EXCEEDING 1/8".
5. SOIL BEARING PRESSURE OF 1500 PSF USED FOR DESIGN.
6. PROFESSIONAL SOILS REPORT: IF A SOILS REPORT IS REQUIRED BY DSA ON THIS BUILDING(S) AND THE RECOMMENDATIONS CAUSE AN INCREASE IN THE COST OF THE ORIGINAL FOUNDATION, THEN THE DISTRICT AGREES TO ACCEPT AND APPROVE A CHANGE ORDER IN THE AMOUNT OF THE COST INCREASE.
7. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE-SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.
8. A COLD JOINT MAY BE PROVIDED BETWEEN THE FOOTING AND THE VERTICAL FOUNDATION WALL. THE JOINT SHALL BE KEYED (2 1/2" WIDE (MIN) x 1 1/2" DEEP) AND ALL VERTICAL REINFORCING THAT CROSSES THE JOINT SHALL BE PLACED PRIOR TO THE PLACEMENT OF CONCRETE.

VENTING SCHEDULE

VENT "A" : (8'-0" x 8" METAL SCREEN COVER)
7'-10" x 5" = 3.26 S.F. VENTILATION

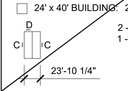
VENT "B" : (6'-0" x 8" METAL SCREEN COVER)
5'-10" x 5" = 2.43 S.F. VENTILATION

VENT "C" : (4'-0" x 8" METAL SCREEN COVER)
3'-10" x 5" = 1.59 S.F. VENTILATION

ACCESS/VENT "D" : (3'-0" x 2'-0" METAL SCREEN COVER)
2'-10" x 18" = 4.25 S.F. VENTILATION

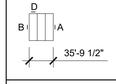
VENTING CALCULATION:

☐ 24' x 40' BUILDING: 24' x 40' = 960 SF / 150 = 6.4 SF VENT. REQ'D



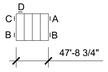
2 - "C" VENT = 3.18 SF
1 - "D" ACCESS VENT = 4.25 SF
7.43 SF TOTAL VENTILATION (> 6.4 SF)

☐ 36' x 40' BUILDING: 36' x 40' = 1440 SF / 150 = 9.6 SF VENT. REQ'D



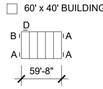
1 - "A" VENT = 3.26 SF
1 - "B" VENT = 2.43 SF
1 - "D" ACCESS VENT = 4.25 SF
9.94 SF TOTAL VENTILATION (> 9.6 SF)

☐ 48' x 40' BUILDING: 48' x 40' = 1920 SF / 150 = 12.8 SF VENT. REQ'D



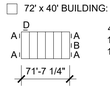
1 - "A" VENT = 3.26 SF
2 - "B" VENT = 4.86 SF
1 - "C" VENT = 1.59 SF
1 - "D" ACCESS VENT = 4.25 SF
13.96 SF TOTAL VENTILATION (> 12.8 SF)

☐ 60' x 40' BUILDING: 60' x 40' = 2400 SF / 150 = 16 SF VENT. REQ'D



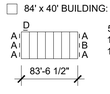
3 - "A" VENT = 9.78 SF
1 - "B" VENT = 2.43 SF
1 - "D" ACCESS VENT = 4.25 SF
16.46 SF TOTAL VENTILATION (> 16 SF)

☐ 72' x 40' BUILDING: 72' x 40' = 2880 SF / 150 = 19.2 SF VENT. REQ'D



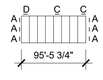
4 - "A" VENT = 13.04 SF
1 - "B" VENT = 2.43 SF
1 - "D" ACCESS VENT = 4.25 SF
19.72 SF TOTAL VENTILATION (> 19.2 SF)

☐ 84' x 40' BUILDING: 84' x 40' = 3360 SF / 150 = 22.4 SF VENT. REQ'D



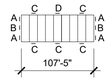
5 - "A" VENT = 16.30 SF
1 - "B" VENT = 2.43 SF
1 - "D" ACCESS VENT = 4.25 SF
22.98 SF TOTAL VENTILATION (> 22.4 SF)

☐ 96' x 40' BUILDING: 96' x 40' = 3840 SF / 150 = 25.6 SF VENT. REQ'D



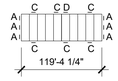
6 - "A" VENT = 19.56 SF
2 - "C" VENT = 3.18 SF
1 - "D" ACCESS VENT = 4.25 SF
26.99 SF TOTAL VENTILATION (> 25.6 SF)

☐ 108' x 40' BUILDING: 108' x 40' = 4320 SF / 150 = 28.8 SF VENT. REQ'D



4 - "A" VENT = 13.04 SF
2 - "B" VENT = 4.86 SF
5 - "C" VENT = 7.95 SF
1 - "D" ACCESS VENT = 4.25 SF
30.10 SF TOTAL VENTILATION (> 28.8 SF)

☐ 120' x 40' BUILDING: 120' x 40' = 4800 SF / 150 = 32 SF VENT. REQ'D



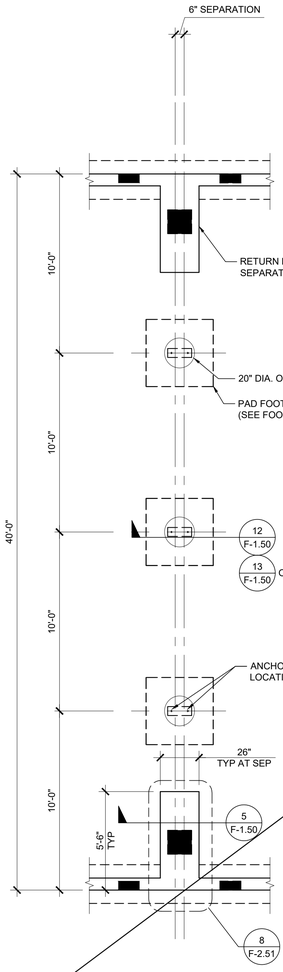
6 - "A" VENT = 19.56 SF
6 - "C" VENT = 9.54 SF
1 - "D" ACCESS VENT = 4.25 SF
33.35 SF TOTAL VENTILATION (> 32 SF)

FOOTING SCHEDULE

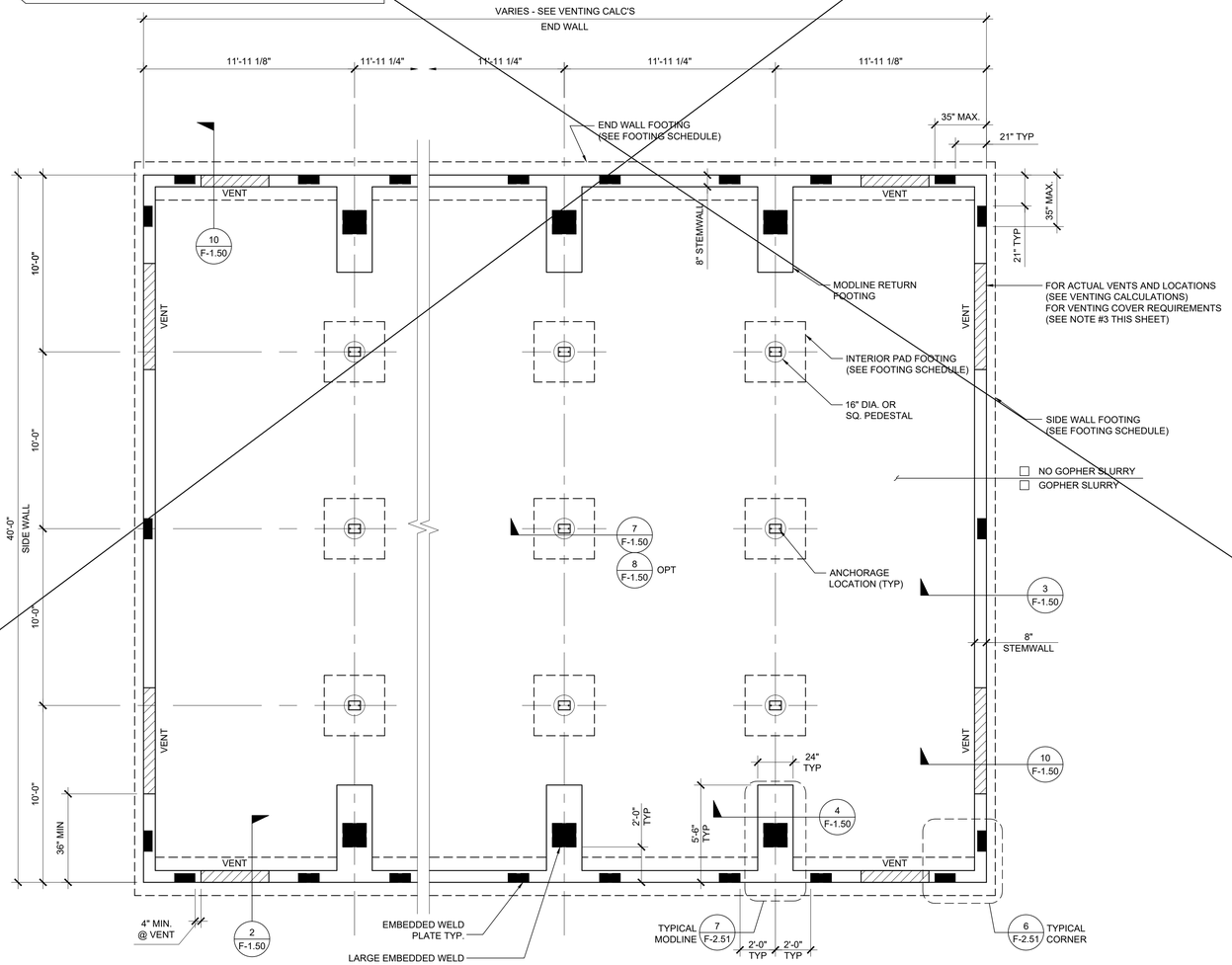
DESIGN FLOOR LIVE LOAD	SIDEWALL FOOTING	ENDWALL FOOTING	INTERIOR PAD FOOTING	PAD FOOTING AT SEPARATION
☐ 50 PSF	12" WIDE (2) #5 CONT T&B	18" WIDE (3) #5 CONT T&B	3'-2" SQ (3) #5 EW	4'-0" SQ (4) #5 EW
☐ 50 + 15 PSF	12" WIDE (2) #5 CONT T&B	18" WIDE (3) #5 CONT T&B	3'-2" SQ (3) #5 EW	4'-0" SQ (4) #5 EW
☐ 100 PSF	12" WIDE (2) #5 CONT T&B	18" WIDE (3) #5 CONT T&B	3'-6" SQ (3) #5 EW	4'-5" SQ (4) #5 EW
☐ 150 PSF	16" WIDE (2) #5 CONT T&B	20" WIDE (3) #5 CONT T&B	4'-2" SQ (4) #5 EW	5'-0" SQ (5) #5 EW

SYMBOLS LEGEND

▬	L-6x4x3/8x14 EMBED PLATE PER 9/F-2.51
▭	6x8x3/8 EMBED PLATE PER 7/F-1.50
■	16x16x3/8 EMBED PLATE PER 14/F-2.51



FOOTING AT SEPARATION SCALE: 1/4" = 1' - 0" | 2



FOUNDATION PLAN SCALE: 1/4" = 1' - 0" | 1

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

CONCRETE FOUNDATION PLAN
ABOVE GRADE CONCRETE FLOOR

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR:
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24175 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

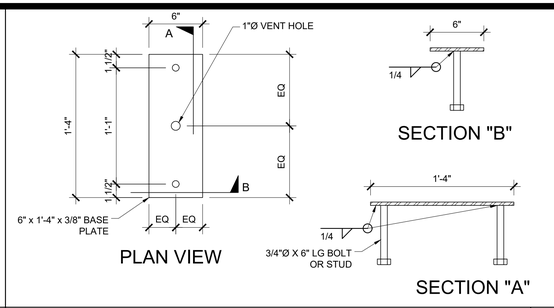
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

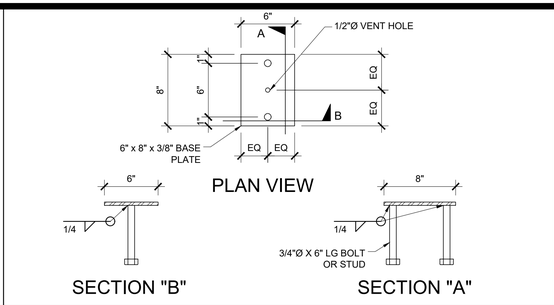
F-1.11

NOT USED 16

PIER PLATE (AT SEPARATION) SCALE : 1 1/2" = 1'-0" 11

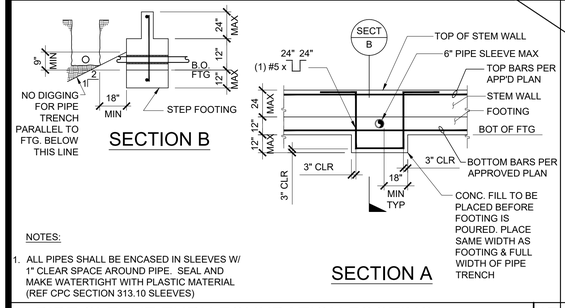


PIER PLATE SCALE : 1 1/2" = 1'-0" 6



NOT USED 1

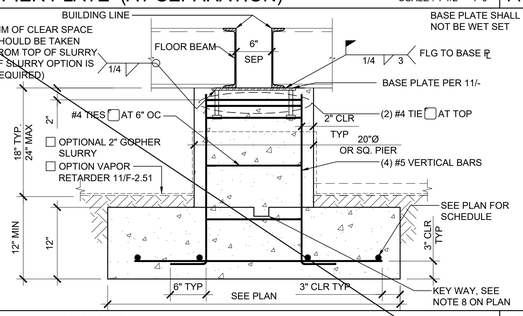
NOT USED 16



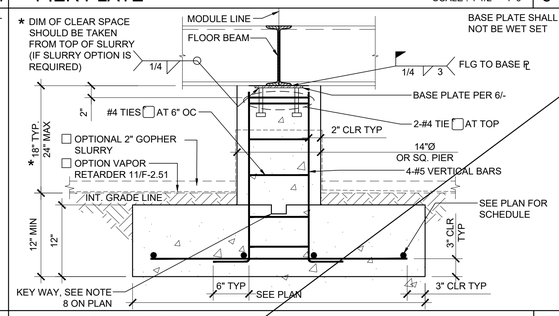
NOTES:

1. ALL PIPES SHALL BE ENCASED IN SLEEVES W/ 1" CLEAR SPACE AROUND PIPE. SEAL AND MAKE WATERTIGHT WITH PLASTIC MATERIAL (REF CPC SECTION 313.10 SLEEVES)

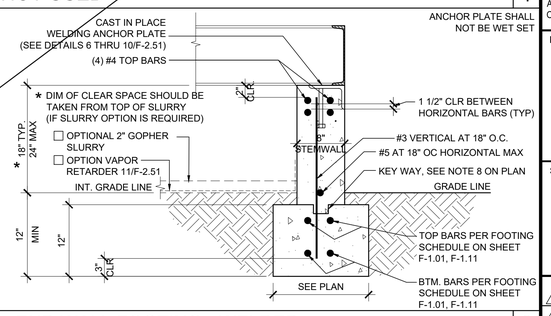
INTERIOR PAD FOOTING (AT SEPARATION) SCALE : 1" =1'-0" 12



INTERIOR PAD FOOTING (ATTACHMENT AT PLATE) SCALE : 1" =1'-0" 7



END WALL FOOTING - WELDED SCALE : 1" = 1'-0" 2



PIPE SLEEVE THRU FOUNDATION FOOTING SCALE : 1/4"=1'-0" 17

INTERIOR PAD FOOTING (AT SEPARATION) SCALE : 1" =1'-0" 12

INTERIOR PAD FOOTING (ATTACHMENT AT PLATE) SCALE : 1" =1'-0" 7

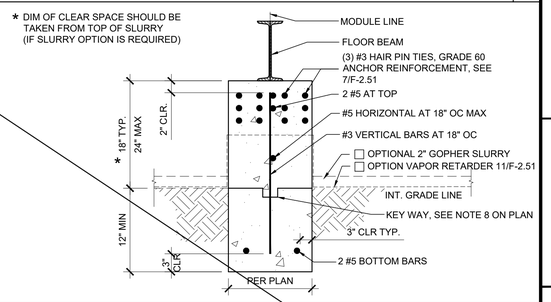
END WALL FOOTING - WELDED SCALE : 1" = 1'-0" 2

TYPICAL STEPPED FOOTING SCALE : 1/2"=1'-0" 18

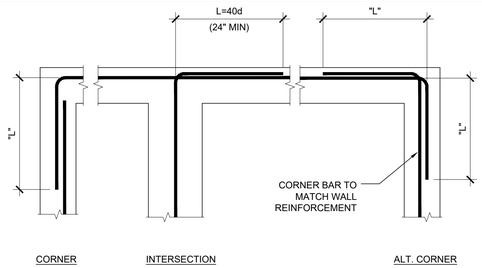
VENT OPENING SCALE : 1" = 1'-0" 15

VENT/ACCESS SECTION SCALE : 1" = 1'-0" 10

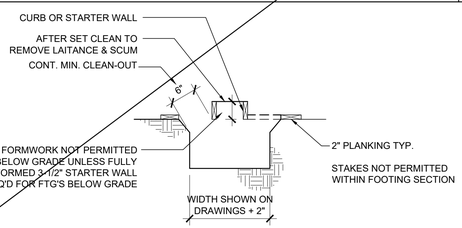
SIDE WALL FOOTING SCALE : 1" = 1'-0" 3



TYPICAL REINFORCING AT CORNER AND INTERSECTIONS SCALE : 3/4"=1'-0" 19



MANDATORY MINIMUM FORMWORK (UNLESS FULLY FORMED) SCALE : 1 1/2"=1'-0" 14



"FOUNDATION CONCRETE MAY BE PLACED DIRECTLY INTO NEAT EXCAVATIONS PROVIDED THE FOUNDATION TRENCH WALLS ARE STABLE AS DETERMINED BY THE ARCHITECT (STRUCTURAL ENGINEER). SUBJECT TO THE APPROVAL OF THE DIVISION OF THE STATE ARCHITECT. IN SCHOOL CASE THE MINIMUM FORMWORK SHOWN ON THE DRAWINGS IS MANDATORY TO INSURE CLEAN EXCAVATIONS IMMEDIATELY PRIOR TO AND DURING THE PLACING OF CONCRETE."

NOT USED 9

INTERIOR RETURN FOOTING SCALE : 1" = 1'-0" 4

STANDARD HOOKS FOR PRIMARY REINFORCEMENT	
BAR SIZE, No.	MINIMUM FINISHED BEND DIAMETER[a]
3 THROUGH 8	$6d_b$
9 THROUGH 11	$8d_b$
14 AND 18	$10d_b$

(a) MEASURED ON INSIDE OF BAR

STANDARD HOOKS FOR STIRRUPS AND TIE REINFORCEMENT	
BAR SIZE, No.	MINIMUM FINISHED BEND DIAMETER[b]
3 THROUGH 5	$4d_b$
6 THROUGH 8	$6d_b$

(b) MEASURED ON INSIDE OF BAR

TYPICAL REINFORCING BENDING DETAILS SCALE : 1 1/2" = 1'-0" 20

VENT OPENING SCALE : 1" = 1'-0" 15

VENT/ACCESS SECTION SCALE : 1" = 1'-0" 10

INTERIOR RETURN FOOTING AT SEPARATION SCALE : 1" = 1'-0" 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

CONCRETE FOUNDATION DETAILS ABOVE GRADE

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24075 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

F-1.50

ANCHORAGE NOTES:
1. ANCHOR PLATES SHALL BE PLACED SUCH THAT THE FOLLOWING MINIMUM CRITERIA ARE MET:
   - ONE (1) LARGE ANCHOR PLATE AT EA. END OF EVERY MATE LINE.
   - ONE (1) ANCHOR PLATE WITHIN 35" OF OVERALL BUILDING CORNERS IN EA DIRECTION. (TWO PER MODULE ALONG EACH END WALL)
   - THREE (3) ANCHOR PLATES ALONG EACH SIDE WALL
2. SIDE WALL PLATES SHALL BE PLACED IN THE CORNER (AS NOTED ABOVE) WITH A 3RD PLATE AS CLOSE THE MIDSPAN AS IS POSSIBLE (PLATE LOCATION MAY BE ADJUSTED TO AVOID VENT/ACCESS OPENINGS.
3. ANCHOR PLATES WITHIN 21" OF AN OPENING SHALL BE REINFORCED WITH HAIRPINS PER 18/F-2.51.

NOTES

1. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULE BUILDINGS.
2. 8'-0" MAXIMUM VENT SIZE AT SIDE WALLS
   4'-0" MAXIMUM VENT SIZE AT END WALLS
   3'-0" MINIMUM DISTANCE FROM EDGE OF VENT TO STEMWALL CORNER
   2-'0" MINIMUM DISTANCE BETWEEN VENT EDGES
3. CRAWLSPACE VAPOR RETARDERS (WHERE OCCURS):

   THE TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
   MATERIALS:
   GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
   INSTALLATION RECOMMENDATIONS:
   OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; EXTEND VAPOR RETARDER A MINIMUM OF 6 INCHES UP THE STEM WALL (MORE IS BETTER); SEAL TO ALL PIERS AND OTHER PENETRATIONS, SEE DETAIL 11/F-2.51.
4. SOIL BEARING PRESSURE OF 1500 PSF USED FOR DESIGN.
5. PROFESSIONAL SOILS REPORT: IF A SOILS REPORT IS REQUIRED BY DSA ON THIS BUILDING(S) AND THE RECOMMENDATIONS CAUSE AN INCREASE IN THE COST OF THE ORIGINAL FOUNDATION. THEN THE DISTRICT AGREES TO ACCEPT AND APPROVE A CHANGE ORDER IN THE AMOUNT OF THE COST INCREASE.
6. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.
7. A COLD JOINT MAY BE PROVIDED BETWEEN THE FOOTING AND THE VERTICAL FOUNDATION WALL. THE JOINT SHALL BE KEYED (2 1/2" WIDE (MIN) x 1 1/2" DEEP) AND ALL VERTICAL REINFORCING THAT CROSSES THE JOINT SHALL BE PLACED PRIOR TO THE PLACEMENT OF CONCRETE.

VENTING SCHEDULE

VENT "A": (8'-0" x 8" METAL SCREEN COVER)
7'-10" x 5" = 3.26 S.F. VENTILATION

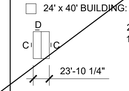
VENT "B": (6'-0" x 8" METAL SCREEN COVER)
5'-10" x 5" = 2.43 S.F. VENTILATION

VENT "C": (4'-0" x 8" METAL SCREEN COVER)
3'-10" x 5" = 1.59 S.F. VENTILATION

ACCESS/VENT "D": (3'-0" x 2'-0" METAL SCREEN COVER)
2'-10" x 18" = 4.25 S.F. VENTILATION

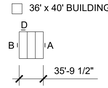
VENTING CALCULATION:

☐ 24' x 40' BUILDING: 24' x 40' = 960 SF / 150 = 6.4 SF VENT. REQ'D



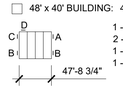
2 - "C" VENT = 3.18 SF
1 - "D" ACCESS VENT = 4.25 SF
7.43 SF TOTAL VENTILATION (> 6.4 SF)

☐ 36' x 40' BUILDING: 36' x 40' = 1440 SF / 150 = 9.6 SF VENT. REQ'D



1 - "A" VENT = 3.26 SF
1 - "B" VENT = 2.43 SF
1 - "D" ACCESS VENT = 4.25 SF
9.94 SF TOTAL VENTILATION (> 9.6 SF)

☐ 48' x 40' BUILDING: 48' x 40' = 1920 SF / 150 = 12.8 SF VENT. REQ'D



1 - "A" VENT = 3.26 SF
2 - "B" VENT = 4.86 SF
1 - "C" VENT = 1.59 SF
1 - "D" ACCESS VENT = 4.25 SF
13.96 SF TOTAL VENTILATION (> 12.8 SF)

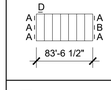
☐ 60' x 40' BUILDING: 60' x 40' = 2400 SF / 150 = 16 SF VENT. REQ'D

3 - "A" VENT = 9.78 SF
1 - "B" VENT = 2.43 SF
1 - "D" ACCESS VENT = 4.25 SF
16.46 SF TOTAL VENTILATION (> 16 SF)

☐ 72' x 40' BUILDING: 72' x 40' = 2880 SF / 150 = 19.2 SF VENT. REQ'D

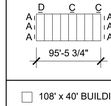
4 - "A" VENT = 13.04 SF
1 - "B" VENT = 2.43 SF
1 - "D" ACCESS VENT = 4.25 SF
19.72 SF TOTAL VENTILATION (> 19.2 SF)

☐ 84' x 40' BUILDING: 84' x 40' = 3360 SF / 150 = 22.4 SF VENT. REQ'D



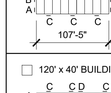
5 - "A" VENT = 16.30 SF
1 - "B" VENT = 2.43 SF
1 - "D" ACCESS VENT = 4.25 SF
22.98 SF TOTAL VENTILATION (> 22.4 SF)

☐ 96' x 40' BUILDING: 96' x 40' = 3840 SF / 150 = 25.6 SF VENT. REQ'D



6 - "A" VENT = 19.56 SF
2 - "C" VENT = 3.18 SF
1 - "D" ACCESS VENT = 4.25 SF
26.99 SF TOTAL VENTILATION (> 25.6 SF)

☐ 108' x 40' BUILDING: 108' x 40' = 4320 SF / 150 = 28.8 SF VENT. REQ'D



4 - "A" VENT = 13.04 SF
2 - "B" VENT = 4.86 SF
5 - "C" VENT = 7.95 SF
1 - "D" ACCESS VENT = 4.25 SF
30.10 SF TOTAL VENTILATION (> 28.8 SF)

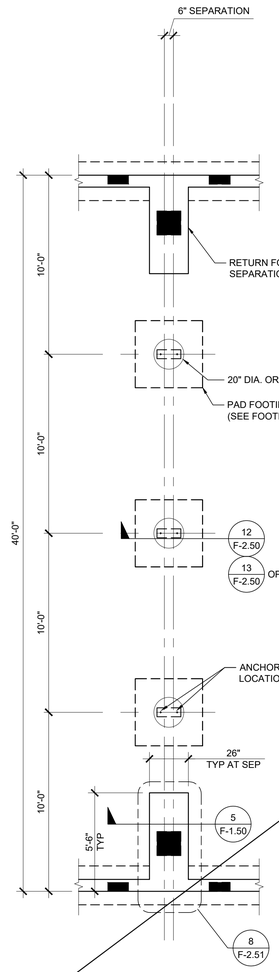
☐ 120' x 40' BUILDING: 120' x 40' = 4800 SF / 150 = 32 SF VENT. REQ'D

6 - "A" VENT = 19.56 SF
6 - "C" VENT = 9.54 SF
1 - "D" ACCESS VENT = 4.25 SF
33.35 SF TOTAL VENTILATION (> 32 SF)

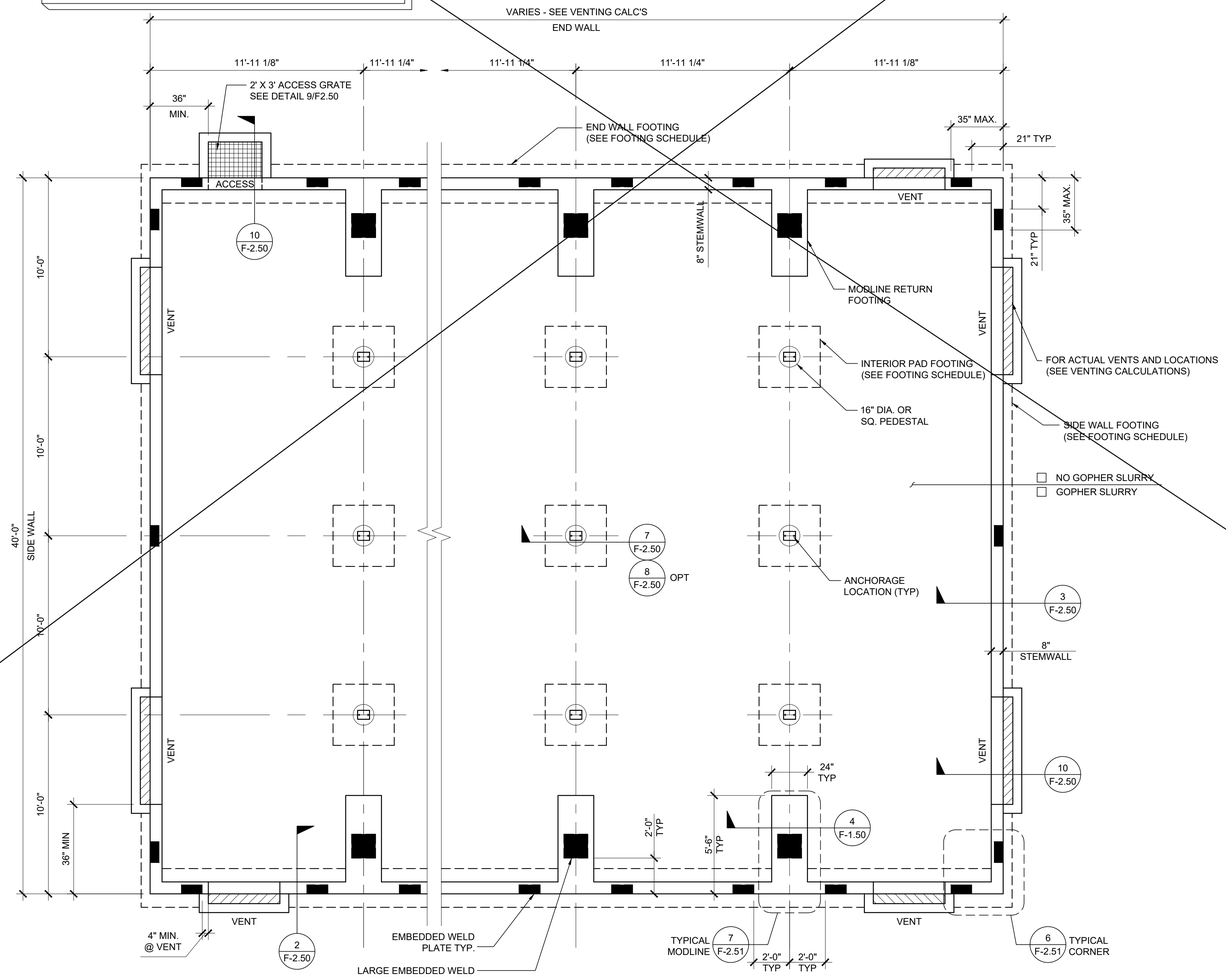
FOOTING SCHEDULE

DESIGN FLOOR LIVE LOAD	SIDEWALL FOOTING	ENDWALL FOOTING	INTERIOR PAD FOOTING	PAD FOOTING AT SEPARATION
☐ 50 PSF	12" WIDE (2) #5 CONT T&B	18" WIDE (3) #5 CONT T&B	3'-0" SQ (3) #5 EW	3'-10" SQ (4) #5 EW
☐ 50 + 15 PSF	12" WIDE (2) #5 CONT T&B	18" WIDE (3) #5 CONT T&B	3'-0" SQ (2) #5 EW	3'-10" SQ (4) #5 EW
☐ 100 PSF	12" WIDE (2) #5 CONT T&B	18" WIDE (3) #5 CONT T&B	3'-4" SQ (3) #5 EW	4'-2" SQ (4) #5 EW
☐ 150 PSF	14" WIDE (2) #5 CONT T&B	20" WIDE (3) #5 CONT T&B	4'-0" SQ (4) #5 EW	4'-8" SQ (4) #5 EW

SYMBOLS LEGEND
- L-6x4x3/8x14 EMBED PLATE PER 9/F-2.51
- 6x8x3/8 EMBED PLATE PER 7/F-2.50
- 16x16x3/8 EMBED PLATE PER 14/F-2.51



FOOTING AT SEPARATION SCALE: 1/4" = 1' - 0" | 2



FOUNDATION PLAN SCALE: 1/4" = 1' - 0" | 1

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

CONCRETE FOUNDATION PLAN
BELOW GRADE WOOD FLOOR

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 29075 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

F-2.01

ANCHORAGE NOTES:
1. ANCHOR PLATES SHALL BE PLACED SUCH THAT THE FOLLOWING MINIMUM CRITERIA ARE MET:
   - ONE (1) LARGE ANCHOR PLATE AT EA. END OF EVERY MATE LINE.
   - ONE (1) ANCHOR PLATE WITHIN 35" OF OVERALL BUILDING CORNERS IN EA DIRECTION. (TWO PER MODULE ALONG EACH END WALL)
   - THREE (3) ANCHOR PLATES ALONG EACH SIDE WALL
2. SIDE WALL PLATES SHALL BE PLACED IN THE CORNER (AS NOTED ABOVE) WITH A 3RD PLATE AS CLOSE THE MIDSPAN AS IS POSSIBLE (PLATE LOCATION MAY BE ADJUSTED TO AVOID VENT/ACCESS OPENINGS.
3. ANCHOR PLATES WITHIN 21" OF AN OPENING SHALL BE REINFORCED WITH HAIRPINS PER 18/F-2.51.

NOTES

1. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULE BUILDINGS.
2. 8'-0" MAXIMUM VENT SIZE AT SIDE WALLS
   4'-0" MAXIMUM VENT SIZE AT END WALLS
   3'-0" MINIMUM DISTANCE FROM EDGE OF VENT TO STEMWALL CORNER
   2'-0" MINIMUM DISTANCE BETWEEN VENT EDGES
3. CRAWLSPACE VAPOR RETARDERS (WHERE OCCURS):

   THE TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
   MATERIALS:
   GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
   INSTALLATION RECOMMENDATIONS:
   OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; EXTEND VAPOR RETARDER A MINIMUM OF 6 INCHES UP THE STEM WALL (MORE IS BETTER); SEAL TO ALL PIERS AND OTHER PENETRATIONS, SEE DETAIL 11/F-2.51.
4. SOIL BEARING PRESSURE OF 1500 PSF USED FOR DESIGN.
5. PROFESSIONAL SOILS REPORT: IF A SOILS REPORT IS REQUIRED BY DSA ON THIS BUILDING(S) AND THE RECOMMENDATIONS CAUSE AN INCREASE IN THE COST OF THE ORIGINAL FOUNDATION. THEN THE DISTRICT AGREES TO ACCEPT AND APPROVE A CHANGE ORDER IN THE AMOUNT OF THE COST INCREASE.
6. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.
7. A COLD JOINT MAY BE PROVIDED BETWEEN THE FOOTING AND THE VERTICAL FOUNDATION WALL. THE JOINT SHALL BE KEYED (2 1/2" WIDE (MIN) x 1 1/2" DEEP) AND ALL VERTICAL REINFORCING THAT CROSSES THE JOINT SHALL BE PLACED PRIOR TO THE PLACEMENT OF CONCRETE.

VENTING SCHEDULE

VENT "A" : (8'-0" x 8" METAL SCREEN COVER)
7'-10" x 5" = 3.26 S.F. VENTILATION

VENT "B" : (6'-0" x 8" METAL SCREEN COVER)
5'-10" x 5" = 2.43 S.F. VENTILATION

VENT "C" : (4'-0" x 8" METAL SCREEN COVER)
3'-10" x 5" = 1.59 S.F. VENTILATION

ACCESS/VENT "D" : (3'-0" x 2'-0" METAL SCREEN COVER)
2'-10" x 18" = 4.25 S.F. VENTILATION

VENTING CALCULATION:

☐ 24' x 40' BUILDING: 24' x 40' = 960 SF / 150 = 6.4 SF VENT. REQ'D

D / C C / 23'-10 1/4"

2 - "C" VENT = 3.18 SF
1 - "D" ACCESS VENT = 4.25 SF
7.43 SF TOTAL VENTILATION (> 6.4 SF)

☐ 36' x 40' BUILDING: 36' x 40' = 1440 SF / 150 = 9.6 SF VENT. REQ'D

D / B A / 35'-9 1/2"

1 - "A" VENT = 3.26 SF
1 - "B" VENT = 2.43 SF
1 - "D" ACCESS VENT = 4.25 SF
9.94 SF TOTAL VENTILATION (> 9.6 SF)

☐ 48' x 40' BUILDING: 48' x 40' = 1920 SF / 150 = 12.8 SF VENT. REQ'D

D / C A / B B / 47'-8 3/4"

1 - "A" VENT = 3.26 SF
2 - "B" VENT = 4.86 SF
1 - "C" VENT = 1.59 SF
1 - "D" ACCESS VENT = 4.25 SF
13.96 SF TOTAL VENTILATION (> 12.8 SF)

☐ 60' x 40' BUILDING: 60' x 40' = 2400 SF / 150 = 16 SF VENT. REQ'D

D / B A / A A / 59'-8"

3 - "A" VENT = 9.78 SF
1 - "B" VENT = 2.43 SF
1 - "D" ACCESS VENT = 4.25 SF
16.46 SF TOTAL VENTILATION (> 16 SF)

☐ 72' x 40' BUILDING: 72' x 40' = 2880 SF / 150 = 19.2 SF VENT. REQ'D

D / A A / A B / A A / 71'-7 1/4"

4 - "A" VENT = 13.04 SF
1 - "B" VENT = 2.43 SF
1 - "D" ACCESS VENT = 4.25 SF
19.72 SF TOTAL VENTILATION (> 19.2 SF)

☐ 84' x 40' BUILDING: 84' x 40' = 3360 SF / 150 = 22.4 SF VENT. REQ'D

D / A A / A B / A A / 83'-6 1/2"

5 - "A" VENT = 16.30 SF
1 - "B" VENT = 2.43 SF
1 - "D" ACCESS VENT = 4.25 SF
22.98 SF TOTAL VENTILATION (> 22.4 SF)

☐ 96' x 40' BUILDING: 96' x 40' = 3840 SF / 150 = 25.6 SF VENT. REQ'D

D C C / A A / A A / A A / 95'-5 3/4"

6 - "A" VENT = 19.56 SF
2 - "C" VENT = 3.18 SF
1 - "D" ACCESS VENT = 4.25 SF
26.99 SF TOTAL VENTILATION (> 25.6 SF)

☐ 108' x 40' BUILDING: 108' x 40' = 4320 SF / 150 = 28.8 SF VENT. REQ'D

C D C / A A / B B / A A / C C C / 107'-5"

4 - "A" VENT = 13.04 SF
2 - "B" VENT = 4.86 SF
5 - "C" VENT = 7.95 SF
1 - "D" ACCESS VENT = 4.25 SF
30.10 SF TOTAL VENTILATION (> 28.8 SF)

☐ 120' x 40' BUILDING: 120' x 40' = 4800 SF / 150 = 32 SF VENT. REQ'D

C C D C / A A / A A / A A / C C C / 119'-4 1/4"

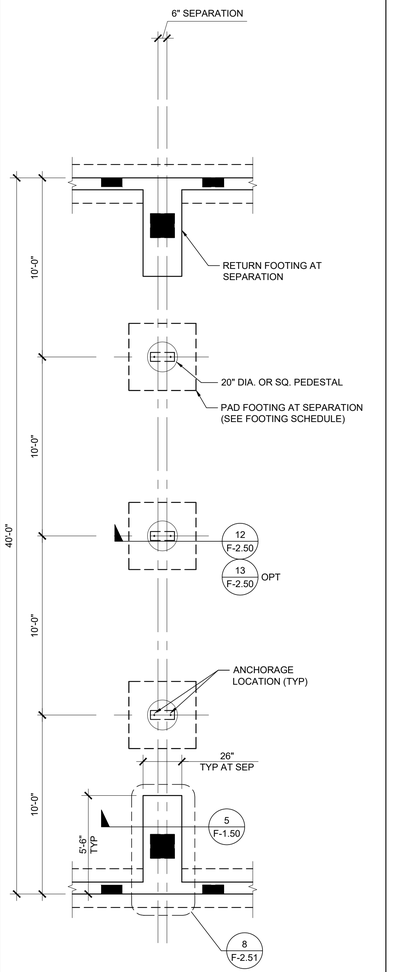
6 - "A" VENT = 19.56 SF
6 - "C" VENT = 9.54 SF
1 - "D" ACCESS VENT = 4.25 SF
33.35 SF TOTAL VENTILATION (> 32 SF)

FOOTING SCHEDULE

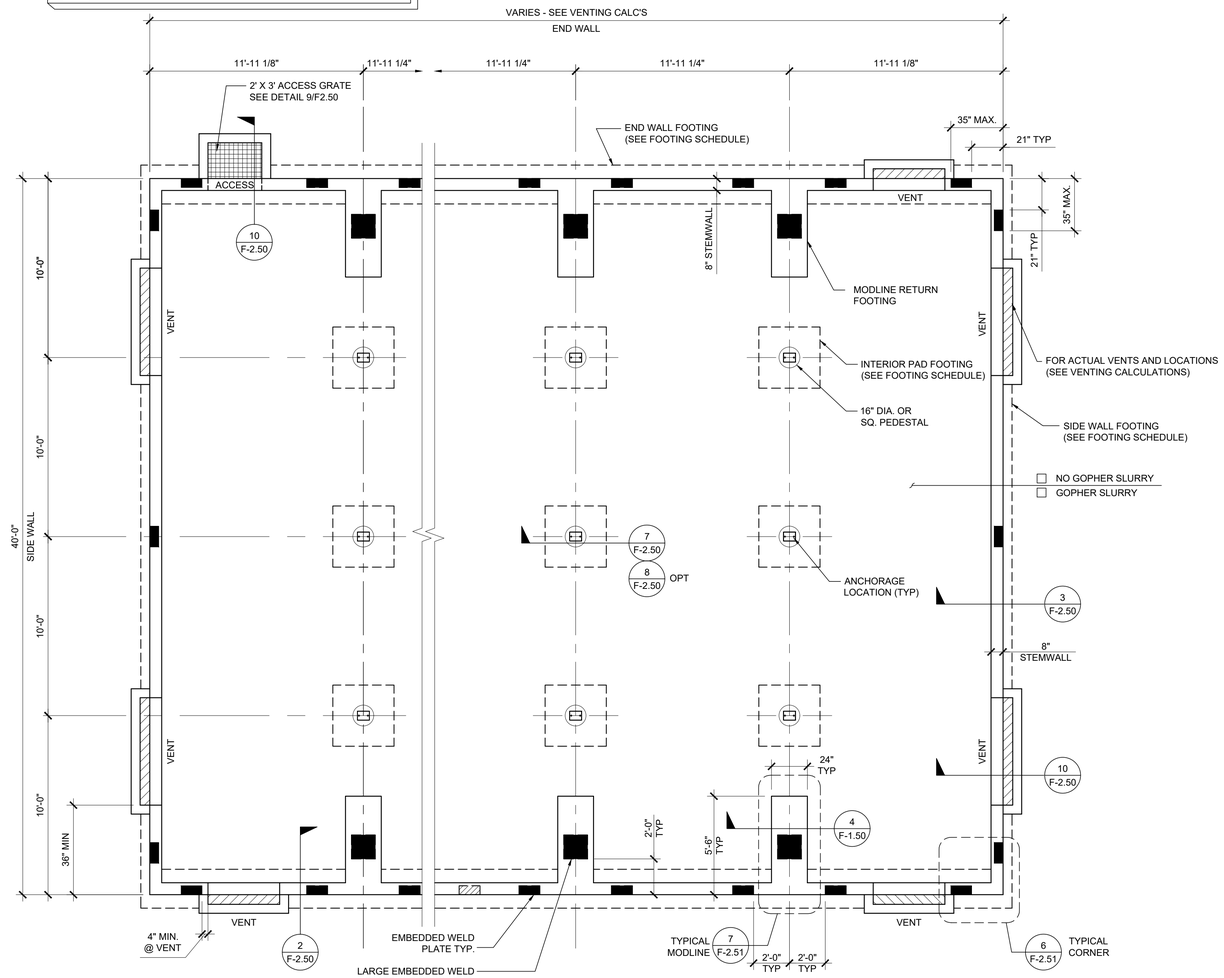
	DESIGN FLOOR LIVE LOAD	SIDEWALL FOOTING	ENDWALL FOOTING	INTERIOR PAD FOOTING	PAD FOOTING AT SEPARATION
☐	50 PSF	12" WIDE (2) #5 CONT T&B	18" WIDE (3) #5 CONT T&B	3'-2" SQ (3) #5 EW	4'-0" SQ (4) #5 EW
☐	50 + 15 PSF	12" WIDE (2) #5 CONT T&B	18" WIDE (3) #5 CONT T&B	3'-2" SQ (3) #5 EW	4'-0" SQ (4) #5 EW
☐	100 PSF	12" WIDE (2) #5 CONT T&B	18" WIDE (3) #5 CONT T&B	3'-6" SQ (3) #5 EW	4'-5" SQ (4) #5 EW
☐	150 PSF	16" WIDE (2) #5 CONT T&B	20" WIDE (3) #5 CONT T&B	4'-2" SQ (4) #5 EW	5'-0" SQ (5) #5 EW

SYMBOLS LEGEND

- L-6x4x3/8x14 EMBED PLATE PER 9/F-2.51
- 6x8x3/8 EMBED PLATE PER 7/F-2.50
- 16x16x3/8 EMBED PLATE PER 14/F-2.51



FOOTING AT SEPARATION SCALE: 1/4" = 1' - 0" | 2



FOUNDATION PLAN SCALE: 1/4" = 1' - 0" | 1

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

CONCRETE FOUNDATION PLAN
BELOW GRADE CONCRETE FLOOR

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24975 STRUCTURAL STATE OF CALIFORNIA

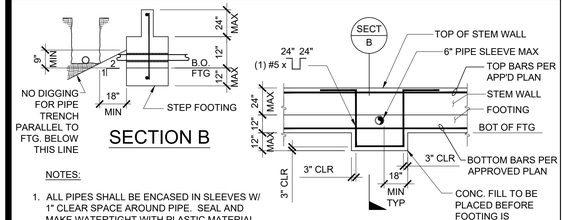
SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
F-2.11

NOT USED

16



SECTION B

SECTION A

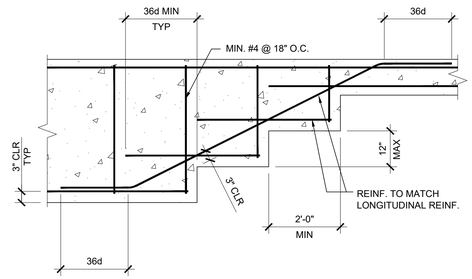
NOTES:

1. ALL PIPES SHALL BE ENCASED IN SLEEVES W/ 1" CLEAR SPACE AROUND PIPE. SEAL AND MAKE WATERTIGHT WITH PLASTIC MATERIAL (REF CPC SECTION 313.10 SLEEVES)

PIPE SLEEVE THRU FOUNDATION FOOTING

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

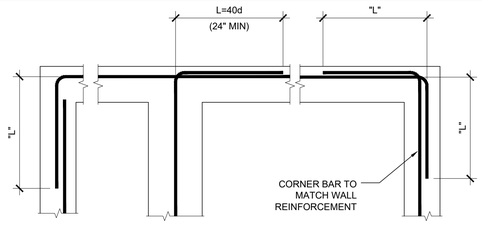
17



TYPICAL STEPPED FOOTING

SCALE : 1/2"=1'-0"

18



TYPICAL REINFORCING AT CORNER AND INTERSECTIONS

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

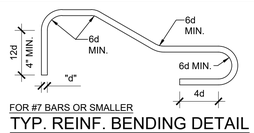
19

STANDARD HOOKS FOR PRIMARY REINFORCEMENT	
BAR SIZE, No.	MINIMUM FINISHED BEND DIAMETER[a]
3 THROUGH 8	$6d_b$
9 THROUGH 11	$8d_b$
14 AND 18	$10d_b$

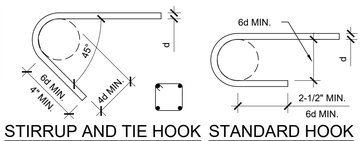
(a) MEASURED ON INSIDE OF BAR

STANDARD HOOKS FOR STIRRUPS AND TIE REINFORCEMENT	
BAR SIZE, No.	MINIMUM FINISHED BEND DIAMETER[b]
3 THROUGH 5	$4d_b$
6 THROUGH 8	$6d_b$

(b) MEASURED ON INSIDE OF BAR



TYP. REINF. BENDING DETAIL



STIRRUP AND TIE HOOK STANDARD HOOK

TYPICAL REINFORCING BENDING DETAILS

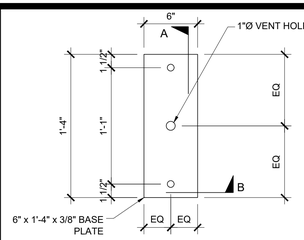
SCALE : 1 1/2" = 1'-0"

20

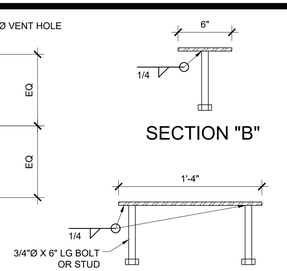
PIER PLATE (AT SEPARATION)

SCALE : 1 1/2" = 1'-0"

11

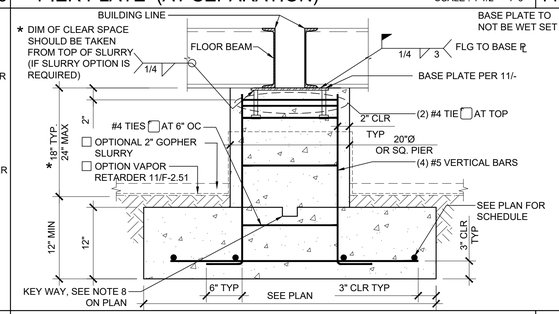


PLAN VIEW



SECTION "B"

SECTION "A"



INTERIOR PAD FOOTING (AT SEPARATION)

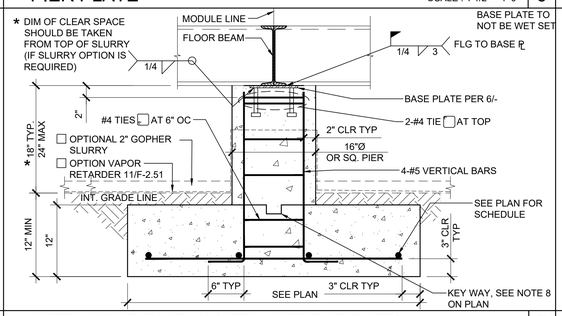
SCALE : 1" =1'-0"

12

PIER PLATE

SCALE : 1 1/2" = 1'-0"

6



INTERIOR PAD FOOTING (ATTACHMENT AT PLATE)

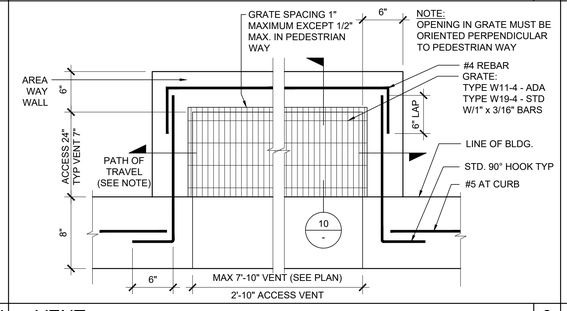
SCALE : 1" =1'-0"

7

VENT OPENING

SCALE : 1" = 1'-0"

15



VENT/ACCESS SECTION

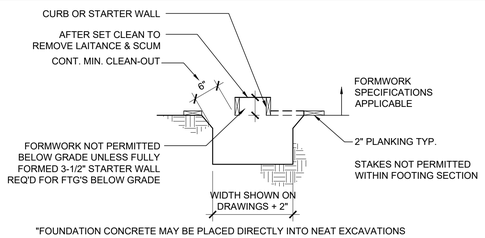
SCALE : 1" = 1'-0"

10

VENT

SCALE : 1 1/2" = 1'-0"

9



"FOUNDATION CONCRETE MAY BE PLACED DIRECTLY INTO NEAT EXCAVATIONS PROVIDED THE FOUNDATION TRENCH WALLS ARE STABLE AS DETERMINED BY THE ARCHITECT (STRUCTURAL ENGINEER). SUBJECT TO THE APPROVAL OF THE DIVISION OF THE STATE ARCHITECT. IN SUCH CASE THE MINIMUM FORMWORK SHOWN ON THE DRAWINGS IS MANDATORY TO INSURE CLEAN EXCAVATIONS IMMEDIATELY PRIOR TO AND DURING THE PLACING OF CONCRETE."

MANDATORY MINIMUM FORMWORK (UNLESS FULLY FORMED)

SCALE : 1 1/2"=1'-0"

14

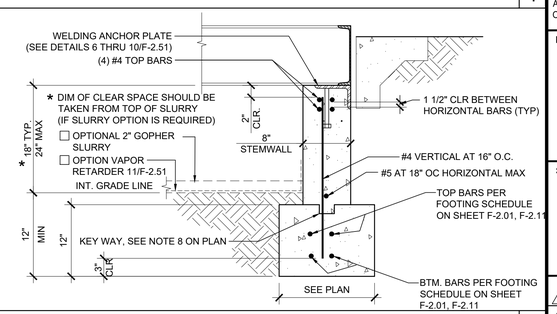
PLAN VIEW

SECTION "B"

SECTION "A"

PLAN VIEW

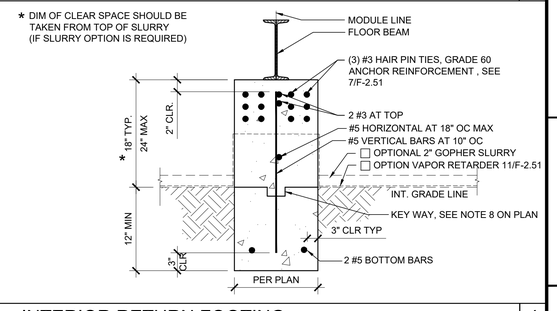
1



END WALL FOOTING - WELDED

SCALE : 1" = 1'-0"

2



SIDE WALL FOOTING

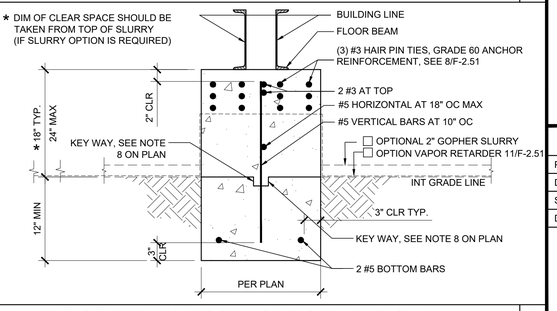
SCALE : 1" = 1'-0"

3

INTERIOR RETURN FOOTING

SCALE : 1" = 1'-0"

4



INTERIOR RETURN FOOTING AT SEPARATION

SCALE : 1" = 1'-0"

5

PROJECT NAME:

SHEET TITLE:

CONCRETE FOUNDATION DETAILS BELOW GRADE

REVISIONS

1
2
3
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REGISTERED PROFESSIONAL ENGINEER JOHN W STARLIN 29575 STRUCTURAL STATE OF CALIFORNIA

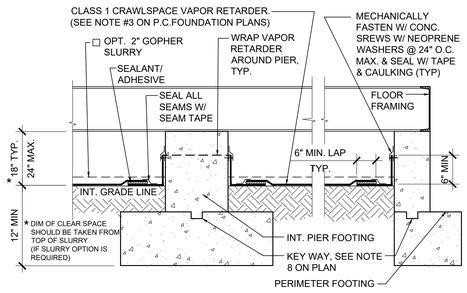
SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

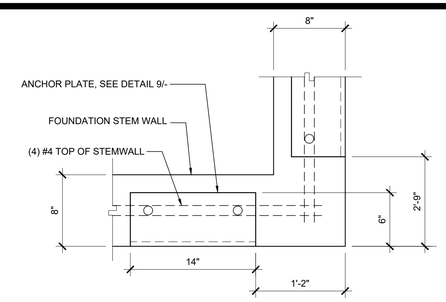
P.C. SHEET NUMBER

F-2.50

NOT USED | 16



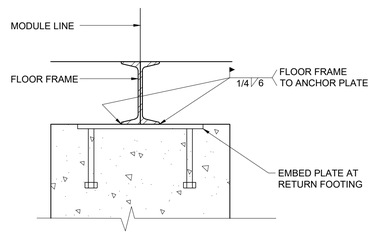
CRAWL SPACE VAPOR RETARDER SCALE: 3/4" = 1' - 0" | 11



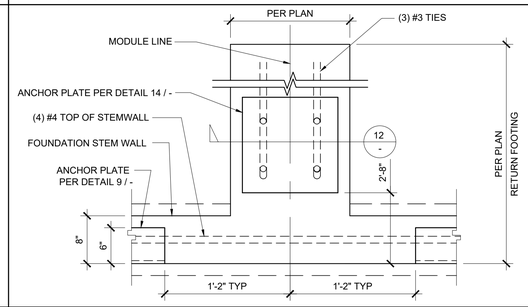
ANCHOR PLATE AT CORNER SCALE : 1 1/2" = 1'-0" | 6

NOT USED | 1

NOT USED | 17

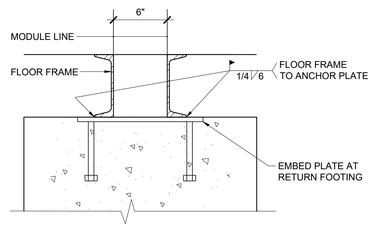


EMBED WELDING AT RETURN FOOTING SCALE : 1 1/2 = 1'-0" | 12

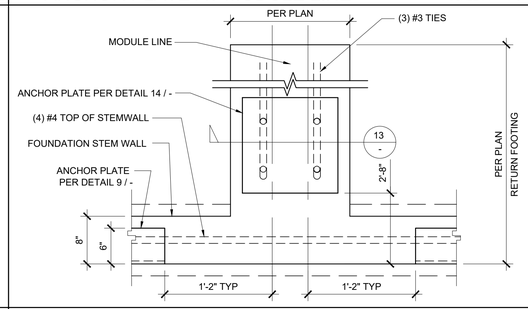


ANCHOR PLATE AT MODULE LINE SCALE : 1" = 1'-0" | 7

NOT USED | 2

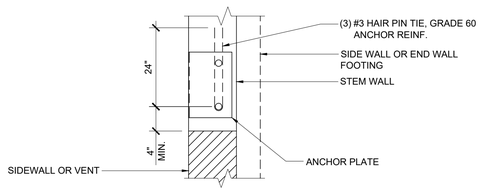


EMBED WELDING AT SEPERATION SCALE : 1 1/2 = 1'-0" | 13

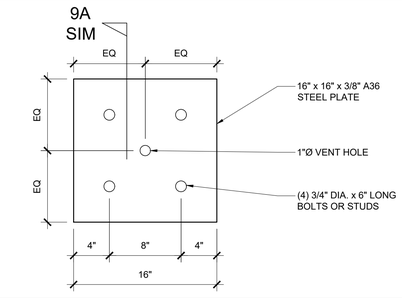


ANCHOR PLATE AT SEPARATION SCALE : 1" = 1'-0" | 8

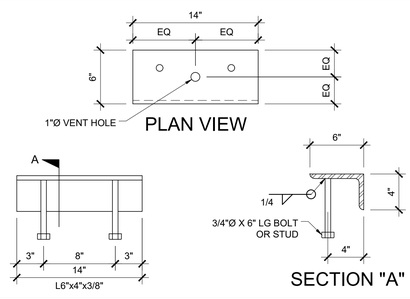
NOT USED | 3



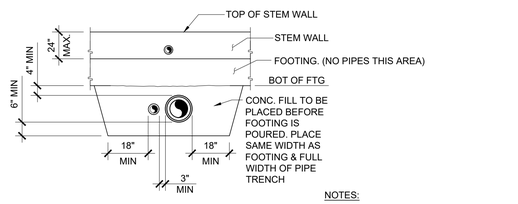
ANCHOR PLATE AT SIDEWALL OR ENDWALL @ VENT | 19



LARGE EMBEDDED PLATE DETAIL SCALE : N.T.S. | 14

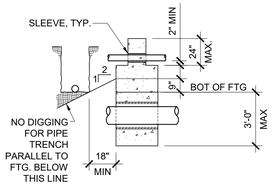


WELD ANGLE DETAIL SCALE : 1 1/2" = 1'-0" | 9



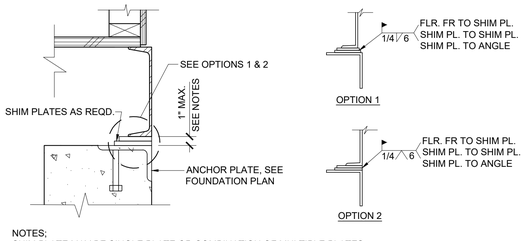
NOTES:

1. ALL PIPES SHALL BE ENCASED IN SLEEVES W/ 1" CLEAR SPACE AROUND PIPE. SEAL AND MAKE WATERTIGHT WITH PLASTIC MATERIAL (REF CPC SECTION 313.10 SLEEVES)
2. IF PIPE IS IN PLACE PRIOR TO POURING CONCRETE, WRAP PIPE WITH 1" GLASS WOOL OR POLYSTYRENE TAPE BEFORE POURING CONCRETE IN LIEU OF SLEEVES



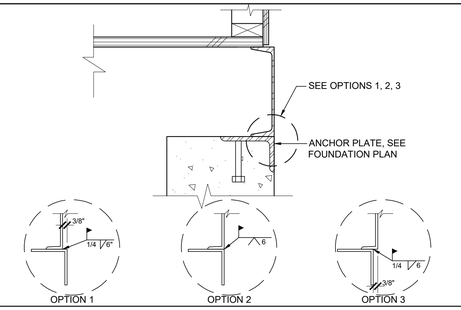
PIPE SLEEVE DETAIL SCALE : 1/4 = 1'-0" | 5

NOT USED | 20



NOTES:
SHIM PLATE MAY BE SINGLE PLATE OR COMBINATION OF MULTIPLE PLATES.
MIN.SHIM THICKNESS IS 1/4".
MAX. SHIM HEIGHT IS 1".
GAPS UP TO 1/4" DO NOT REQ. SHIM PLATE.

FOUNDATION WELDING W/ SHIM PLATES | 15



FOUNDATION - WELDED SCALE : 1 1/2" = 1'-0" | 10

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

FOUNDATION DETAILS
CONCRETE

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24175 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

F-2.51

STRUCTURAL SPECIFICATIONS

FOUNDATIONS:

GEOTECHNICAL INVESTIGATIONS SHALL BE CONDUCTED IN ACCORDANCE WITH SECTIONS 1803A.3 THROUGH 1803A.8. EXCEPTIONS, 1) GEOTECHNICAL REPORTS ARE NOT REQUIRED FOR ONE-STORY, WOOD-FRAME AND LIGHT-STEEL-FRAME BUILDINGS OF TYPE II OR TYPE V CONSTRUCTION AND 4,000 SQUARE FEET OR LESS IN FLOOR AREA, NOT LOCATED WITHIN EARTHQUAKE FAULT ZONES OR SEISMIC HAZARD ZONES AS SHOWN IN THE MOST RECENTLY PUBLISHED MAPS FROM THE CALIFORNIA GEOLOGICAL SURVEY (CGS) OR IN SEISMIC HAZARD ZONES AS DEFINED IN THE SAFETY ELEMENT OF THE LOCAL GENERAL PLAN, 2) A PREVIOUS REPORT FOR A SPECIFIC SITE MAY BE RESUBMITTED, PROVIDED THAT A REEVALUATION IS MADE AND THE REPORT IS FOUND TO BE CURRENTLY APPROPRIATE. ALLOWABLE FOUNDATION AND LATERAL SOIL PRESSURE VALUES MAY BE DETERMINED FROM TABLE 1806A.2 PER CBC SECTION 1803A.2

CONCRETE

PROVIDE NECESSARY SHIMS ON FOOTINGS NOT LEVEL WITHIN THE 1/2" ALLOWABLE TOLERANCE. THE DISTRICT SHALL PROVIDE CLEAR AND UNOBSTRUCTED ACCESS TO THE SITE. THE DISTRICT IS RESPONSIBLE FOR ALL SURVEYING, STAKING THE BUILDING CORNERS, SETTING THE FINISH FLOOR ELEVATION, RIGGING, CRANING, EXCAVATION, SPOIL REMOVAL, AND BACKFILL.

THE FOUNDATION AND THE METHOD OF FASTENING THE UNITS SHALL BE AS SHOWN ON DRAWINGS WHERE APPLICABLE. HIGH STRENGTH GROUT SHALL BE EMBECO 885 NON-SHRINK, METALLIC AGGREGATE GROUT OR A DSA APPROVED EQUAL.

THE DESIGN OF CONRETE FOUNDATIONS WILL BE AS FOLLOWS:

1. FURNISH AND INSTALL ALL CONCRETE WORK AS SHOWN ON THE DRAWINGS AND AS SPECIFIED.
2. EXCEPT AS MODIFIED BY THE REQUIREMENTS SPECIFIED HEREIN AND / OR THE DETAILS ON THE DRAWINGS, ALL WORK INCLUDED IN THIS SECTION SHALL CONFORM TO THE APPLICABLE PROVISIONS OF CODES AND STANDARDS.
    a) ALL WORK AND MATERIALS SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS, AND CHAPTER 19A.
    b) AMERICAN CONCRETE INSTITUTE (ACI): BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318-19
    c) SOCIETY FOR TESTING AND MATERIALS (ASTM): THE SPECIFICATIONS AND STANDARDS HEREINAFTER REFERENCED TO SHALL BE OF THE LATEST EDITION.
3. CONCRETE FOUNDATION TESTS AND INSPECTIONS SHALL BE THE RESPONSIBILITY OF THE ARCHITECT AND OR INSPECTOR.
4. DESIGN MIXES SHALL BE AS FOLLOWS:

☐ WHERE A GEOTECHNICAL REPORT IS NOT PROVIDED:
MINIMUM COMPRESSIVE STRENGTH = 5,000 PSI
MAXIMUM WATER/CEMENT RATIO = 0.40
CEMENT TYPE = V COMPLYING WITH ACI 319-19, TABLE 19.3.2.1, FOOTNOTE 8
NORMAL WEIGHT
NO ADMIXTURES CONTAINING CALCIUM CHLORIDE

☐ WHERE A GEOTECHNICAL REPORT IS PROVIDED WHICH INDICATES ONE OF THE FOLLOWING EXPOSURE CLASSIFICATIONS (F0, F1, S0, S1, W0, W1, C0, C1)
MINIMUM COMPRESSIVE STRENGTH = 4,000 PSI
MAXIMUM WATER/CEMENT RATIO = 0.50
CEMENT TYPE = II/V
NORMAL WEIGHT

NOTE: WHERE CONCRETE IS EXPOSED TO THAW AND FREEZE CYCLES IT SHALL BE AIR ENTRAINED PER ACI 318 SECTION 19.3.3.1.

5. FORMS SHALL BE SUBSTANTIAL, PLUMB, LEVEL, SQUARE, TRUE TO LINE, WATER TIGHT AND ACCURATE TO THE DIMENSIONS REQUIRED.
6. THE ARCHITECT SHALL APPROVE LOCATION OF:
    a) OPENINGS FOR MECHANICAL AND ELECTRICAL: PROVIDE FOR OPENINGS IN THE CONCRETE WITH THE TRADE(S) INVOLVED AND INSTALL SLEEVES AS MAY BE REQUIRED.
    b) OPENINGS FOR VENT WELLS FOR UNDER FLOOR VENTILATION: PROVIDE FOR ALL OPENINGS IN THE CONCRETE WITH THE TRADE(S) INVOLVED. INSTALL ALL SLEEVES AS MAY BE REQUIRED.
7. VARIANCE IN TOP OF STEMWALL AND/OR ANCHOR PLATE SURFACE SHALL BE NO MORE THAN 1/16" IN 10 FEET
8. ANCHOR BOLTS, DOWELS, REINFORCING STEEL, AND EMBEDDED ITEMS ARE TO BE SECURELY TIED IN PLACE BEFORE CONCRETE IS POURED "WET SETTING" IS NOT ALLOWED.
9. REFER TO ARCHITECTURAL, ELECTRICAL, AND MECHANICAL PLANS FOR SLEEVES, INSERTS CURBS, DEPRESSED AREAS, AND ETC.
10. CONCRETE MIX REQUIRED: CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGN FOR FOOTINGS TO PROFESSIONAL OF RECORD FOR APPROVAL PRIOR TO POURING CONCRETE.

1705A.3.3. WAIVER OF BATCH PLAN INSPECTION.

A. WHEN BATCH PLANT INSPECTION IS WAIVED, THE FOLLOWING REQUIREMENTS SHALL APPLY:

1. QUALIFIED TECHNICIAN OF THE TESTING LABORATORY SHALL CHECK THE FIRST BATCHING AT THE START OF DAY.
2. LICENSED WEIGHMASTER TO POSITIVELY IDENTIFY MATERIALS AS TO QUANTITY AND CERTIFY TO EACH LOAD BY A TICKET.
3. BATCH TICKETS, INCLUDING ACTUAL MATERIAL QUANTITIES AND WEIGHTS SHALL ACCOMPANY THE LOAD AND SHALL BE TRANSMITTED TO THE INSPECTOR OF RECORD BY A TRUCK DRIVER WITH LOAD IDENTIFIED THEREON. THE LOAD SHALL NOT BE PLACED WITHOUT A BATCH TICKET IDENTIFYING THE MIX. THE INSPECTOR WILL KEEP A DAILY RECORD OF PLACEMENTS, IDENTIFYING EACH TRUCK , IT'S LOAD, TIME OF RECEIPT AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND WILL TRANSMIT A COPY OF THE DAILY RECORD TO THE ENFORCEMENT AGENCY.

REINFORCING STEEL:

1. MATERIAL: ALL REINFORCING STEEL SHALL BE BILLET STEEL PER ASTM A-615 MIN. GRADE 60. EXCEPT #3 ANCHOR REINFORCEMENT SHALL BE GRADE 40.
2. SPLICES: ALL SPLICES SHALL BE LAPPED A MINIMUM 48" #5 BARS AND 30" #4 BARS UNLESS OTHERWISE DETAILED. SPLICES SHALL BE STAGGERED A MINIMUM OF 24" FROM ADJACENT HORIZONTAL BARS.
3. REINFORCING FABRICATION AND PLACEMENT: FABRICATION AND PLACING OF REINFORCING SHALL CONFORM TO THE "CODE OF STANDARD PRACTICE AND SPECIFICATIONS FOR PLACING REINFORCEMENT OF THE CONCRETE REINFORCING STEEL INSTITUTE".
4. MINIMUM COVERAGE: ALL REINFORCING SHALL HAVE THE FOLLOWING MINIMUM COVERAGE WITH CONCRETE:

LOCATION	AMOUNT
FORMED EARTH	2"
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
WALL-EXPOSED FACE	
#5 OR SMALLER	2"
#6 OR LARGER	2"
WALL-UNEXPOSED FACE	3/4"

5. HOOKS SHALL BE STAGGERED IN ALTERNATING DIRECTIONS.

STRUCTURAL STEEL:

1. ALL STRUCTURAL STEEL OTHER THAN TUBE AND PIPE COLUMNS SHALL CONFORM TO ASTM A-36.
2. TUBE COLUMNS SHALL CONFORM TO ASTM A500 GRADE B, OR A1085
3. PIPE COLUMNS SHALL CONFORM TO ASTM A501 OR ASTM A53, TYPE E OR S, GRADE B. OR A1085
4. TUBE STEEL USED FOR RAMPS & STAIRS SHALL CONFORM TO ASTM A513 GRADE MT1020 OR BETTER

STEEL FRAME BUILDING/STEEL FRAME CONSTRUCTION SHALL MEET THE MINIMUM DESIGN REQUIREMENTS OF STUD SPACING, ETC. PER LATEST EDITION OF 2022 CALIFORNIA BUILDING CODE. ALL WORK AND MATERIALS SHALL CONFORM TO THE "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" AND "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES," AMERICAN INSTITUTE OF STEEL CONSTRUCTION: TITLE 24, CCR, AND UNIFORM BUILDING CODE. STRUCTURAL STEEL SHALL BE MADE EITHER THE OPEN-HEARTH OR ELECTRIC FURNACE PROCESS ONLY AND SHALL CONFORM TO THE "SPECIFICATION FOR STRUCTURAL STEEL" ASTM DESIGNATION A36, CURRENT EDITION.

ROOF FRAMING, FLOOR FRAMING, AND WALL FRAMING SHALL BE PER MANUFACTURER'S PC PLANS AND PER APPLICABLE CODES.

ALL STRUCTURAL MEMBERS BELOW THE SUB-FLOOR, IE, GIRDERS, JOISTS, HEADERS, BLOCKING, SHALL BE STEEL. MINIMUM JOIST SPACING SHALL BE PER PLAN.

ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE AISC STANDARD SPECIFICATIONS, THE APPLICABLE REGULATORY AGENCY AND THE AMERICAN IRON AND STEEL INSTITUTE SPECIFICATIONS FOR DESIGN OR LIGHT GAUGE STEEL STRUCTURAL MEMBERS. WELDING: SHALL COMPLY WITH THE PERTINENT PROVISIONS OF THE APPLICABLE REGULATORY AGENCY. ALL WELDING SHALL BE DONE BY OPERATORS WHO ARE QUALIFIED AS PRESCRIBED IN THE "QUALIFICATION PROCEDURE" OF THE AMERICAN WELDING SOCIETY TO PERFORM THE TYPE OF WORK REQUIRED.

STEEL SHALL BE COATED WITH ONE SHOP COAT OF MANUFACTURER'S STANDARD CHASSIS PAINT OR EQUAL.

BOLTS:

ALL COMMON BOLTS AND ANCHOR BOLTS SHALL CONFORM TO ASTM A-307.

STRUCTURAL WELDING: SPECIAL INSPECTOR REQUIRED

GENERAL: DURING THE WELDING OF ANY MEMBER OR CONNECTION THAT IS DESIGNED TO RESIST LOADS AND FORCES REQUIRED BY THIS CODE.

ALL WELDS USED IN PRIMARY MEMBERS AND CONNECTIONS IN THE LATERAL FORCE-RESISTING SYSTEMS SHALL BE MADE WITH A FILLER METAL THAT HAS A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT/LBS AT MINUS 20 DEGREES F AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION.

ALL STRUCTURAL WELDING SHALL BE BY "ELECTRIC ARC PROCESS" PER AWS STANDARD CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION. ALL LIGHT GAUGE STEEL (SHEET STEEL) SHALL BE WELDED PER AWS D1.3. ALL REINFORCING STEEL SHALL BE WELDED WITH LOW HYDROGEN RODS PER AWS D1.4, OR REINFORCING STEEL SHALL CONFORM TO ASTM A-706. ALL SHOP WELDED MUST BE PERFORMED BY "APPROVED" WELDERS IN A SHOP OF A LICENSED FABRICATOR. ALL FIELD WELDING SHALL BE PERFORMED BY "APPROVED" WELDERS. ELECTRODES SHALL BE E70XX FOR STRUCTURAL STEEL AND REBAR AND SHALL BE E60XX FOR LIGHT GAUGE STEEL. * (SEE OPTIONAL PROCESS)

THE SPECIAL INSPECTOR NEED NOT BE CONTINUOUSLY PRESENT DURING WELDING OF THE FOLLOWING ITEMS, PROVIDED THE MATERIALS, WELDING PROCEDURES AND QUALIFICATION OF WELDERS ARE VERIFIED PRIOR TO THE START OF WORK: PERIODIC INSPECTIONS ARE MADE OF WORK IN PROGRESS, AND A VISUAL INSPECTION OF ALL WELDS IS MADE PRIOR TO SHIPMENT OF SHOP WELDING.

a) FLOOR AND ROOF DECK WELDING.
b) WELDED STUDS WHEN USED FOR STRUCTURAL DIAPHRAGM OR COMPOSITE SYSTEMS.
c) WELDED SHEET STEEL FOR COLD-FRAMED STEEL FRAMING MEMBERS SUCH AS STUDS AND JOISTS WHICH ARE NOT PART OF AN ORDINARY MOMENT FRAME.
d) SINGLE PASS FILLET WELDS NOT EXCEEDING 5/16".

MATERIAL SHALL BE IDENTIFIED BY MARKING OR STAMPING THE I.D. NUMBER ON STRUCTURAL STEEL COMPONENTS BY LICENSED FABRICATION SHOP.

ALL BUTT, BEVEL, GROOVE, VEE, U AND J WELDS SHALL BE PREQUALIFIED COMPLETE PENETRATION WELDS.

FILLER MATERIAL FOR WELDING: SHIELDED METAL-ARC: AWS A5.1 OR 15.5 E70XX ELECTRODES.

HOLES IN STRUCTURAL STEEL SHALL NOT BE PERMITTED UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS.

STRUCTURAL STEEL SHALL BE THOROUGHLY CLEANED BY SCRAPING OR WIRE BRUSHING AND SHOP PRIMED.

ALL STEEL WORK, INCLUDING WELD AND CONNECTIONS EXCEPT WHERE ENTIRELY ENCASED IN CONCRETE SHALL BE GIVEN ONE COAT OF ACCEPTABLE METAL PROTECTION WELL WORKED INTO JOINTS AND OPEN SPACES.

* OPTIONAL USE OF: FCAW PROCESS: E71T-8 FOR STRUCTURAL/REBAR (MEETS ALL CHARPY REQUIREMENTS)
E71T-11 FOR METAL DECKING

COLD-FORMED STEEL FRAMING:

STRUCTURAL LIGHT GAUGE STEEL FRAMING AND ACCESSORIES SHALL BE FABRICATED IN ACCORDANCE WITH ASTM A-1011/A GRADE AS LISTED BELOW, SEE PLAN FOR MINIMUM YIELD.

MATERIAL THICKNESS 0.060" OR LESS: ASTM A-1011/A GRADE 33 (UNO)
MATERIAL THICKNESS 0.060" OR GREATER: ASTM A-1011/A GRADE 50

SHEET STEEL DESIGNATION (GAUGE)	MINIMUM DELIVERED THICKNESS (INCHES)
26	0.017
22	0.029
20	0.034
18	0.046
16	0.057
14	0.071
12	0.100
11	0.114
10	0.128

LIGHT GAUGE STEEL STUDS AND TRACKS SHALL COMPLY WITH ASTM A-1003 STRUCTURAL GRADE 33 TYPE H

ALL WELDING SHALL BE IN CONFORMANCE WITH AWS D1.3, "STRUCTURAL WELDING CODE - SHEET STEEL". QUALIFICATION OF WELDERS SHALL BE IN ACCORDANCE WITH AWS D1.1, CHAPTER 5, PART C, "WELDER QUALIFICATIONS".

BOLTS, SCREWS, ETC. EXPOSED TO THE EXTERIOR SHALL BE GALVANIZED

MACHINE BOLTS USED SHALL CONFORM TO SPECIFICATIONS OF ASTM STANDARD A-307.

NTD:

(b) CJP GROOVE WELD NDT

ULTRASONIC TESTING SHALL BE PERFORMED ON 100 PERCENT OF CJP GROOVE WELDS IN MATERIALS 5/16 in. (8mm) THICK OR GREATER. ULTRASONIC TESTING IN MATERIALS LESS THAN 5/16 in. (8 mm) THICK IS NOT REQUIRED. MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON 25 PERCENT OF ALL BEAM-TO-COLUMN CJP GROOVE WELDS.

WOOD:

FRAMING: ALL FRAMING LUMBER SHALL BE GRADE MARKED BY AN APPROVED GRADING AGENCY AND SHALL BE OF THE FOLLOWING MINIMUM GRADES OR BETTER, PER WCLB RULES #16. MOISTURE CONTENT = 19% MAX.
PLATES AND BLOCKING - STANDARD GRADE OR BETTER
STUDS AND HEADER = HF #2, OR DF #2, OR BETTER

SHEATHING:

AMERICAN PLYWOOD ASSOCIATION PS 1-07. EACH SHEET SHALL BE GRADE MARKED BY THE AMERICAN PLYWOOD ASSOCIATION, AND SHALL CONFORM TO THE REQUIREMENTS OF STANDARD GRADE GROUP 1 OR BETTER GRADE STAMPED AND IDENTIFIED UNDER THE PROCEDURES AND QUALIFICATIONS SET FORTH BY PS 1-07.

1. PLYWOOD SUB FLOOR: 1 1/8" T&G UNBLOCKED PLYWOOD. PROVIDE SEAMLESS WOVEN POLYFLEX BOTTOM BOARD FOR MOISTURE PROTECTION
2. PLYWOOD ROOF DECK: APA RATED 3/4" T&G OSB OR EQUIVALENT RATED SHEATHING WITH APPROVAL FROM DSA
3. EXTERIOR WALL SIDING:
    i. STANDARD: 5/8" DURATEMP OR 5/8" SMART PANEL
    ii. OPTIONAL: 5/8" MDO
    iii. OPTIONAL: 1/2" OSB OR CDX PLYWOOD FOR PLASTER/STUCCO FINISH
4. EXTERIOR WALL SIDING ATTACHMENT:
FASTENERS USED FOR THE ATTACHMENT OF EXTERIOR WALL COVERINGS SHALL BE HOT-DIPPED GALVANIZED, MECHANICALLY DEPOSITED ZINC-COATED, STAINLESS STEEL, SILICON BRONZE OR COPPER PER CBC SECTION 2304.10.1.1

TREATED WOOD:

ALL WOOD INCLUDING WOOD SHEATHING IN CONTACT WITH CONCRETE OR MASONRY AND LOCATED LESS THAN 18" FROM EXPOSED EARTH SHALL BE "PRESERVATIVE TREATED" OR SHALL BE "NATURALLY DURABLE" MATERIAL PER (CBC SECTION 2304.12.1.2).

1. ALL ROUGH LUMBER SHALL BE DF #2 OR BETTER.
2. WOOD FASTENERS OTHER THAN SCREWS.
ALL POWER DRIVEN FASTENERS SHALL BE HILTI FASTENERS ICC# ESR-1663, AND RAMSET POWER DRIVEN FASTENERS (ICC# ESR-1799), OR SIMPSON POWER DRIVEN FASTENERS ICC #ESR-2138, OR OTHER EQUIVALENT PRODUCTS WITH ICC REPORTS AND APPROVED BY DSA.
3. FASTENERS, INCLUDING NUTS AND WASHERS, IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER PER CBC 2304.10.5.1

CONTINUOUS INSPECTION:

PROJECT INSPECTOR TO PROVIDE CONTINUOUS FIELD INSPECTION.

IN-PLANT INSPECTOR SHALL PROVIDE CONTINUOUS INSPECTION IN-PLANT

METALS, STRUCTURAL, AND MISC. STEEL:

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, AND SERVICES REQUIRED FOR STRUCTURES AND MISCELLANEOUS STEEL AS SPECIFIED AND INDICATED IN THE DRAWINGS.

STEEL SHEETS: STEEL SHEETS FOR LIGHT GAUGE STEEL SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-1011/A, GRADE 40 U.O.N. SHEET METAL GRAVEL STOPS AND FLASHINGS SHALL BE MINIMUM 0.030 THICKNESS AND SHALL BE GALVANIZED.

ERECTION:
ALL STRUCTURAL STEEL SHALL BE ERECTED TRUE, STRAIGHT, PLUMB AND TO ITS DESIGNED LOCATION. TEMPORARY BRACING OR SHORING SHALL BE INSTALLED WHEREVER NECESSARY TO TAKE CARE OF LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED, INCLUDING ERECTION EQUIPMENT AND THE OPERATION OF SAME. CONNECTIONS SHALL BE ADEQUATE TO WITHSTAND STRESSES TO WHICH THEY ARE NORMALLY SUBJECTED. CONNECTIONS SHALL BE STEEL, EXCEPT AS OTHERWISE NOTED. FIELD CONNECTIONS SHALL BE BOLTED OR WELDED AS SHOWN ON THE DRAWINGS.

SHOP PAINT:

* EXPOSED STEEL COATED WITH ONE SHOP COAT OF PRIMER.
* NON-EXPOSED STEEL COATED WITH ON SHOP COAT OF PRIMER.
* ALL SURFACES THOROUGHLY CLEANED BY EFFECTIVE MEANS PRIOR TO APPLICATION OF SHOP COATS.

POWER DRIVEN FASTENERS FOR SILL PLATE, WOOD NAILERS TO STEEL COLUMNS, AND SHEET METAL TO STRUCTURAL STEEL:

ALL POWER DRIVEN FASTENERS SHALL BE HILTI FASTENERS ICC# ESR-1663, OR RAMSET POWER DRIVEN FASTENERS (ICC# ESR-1799), OR SIMPSON POWER DRIVEN FASTENERS ICC #ESR-2138, OR OTHER EQUIVALENT PRODUCTS WITH ICC REPORTS AND APPROVED BY DSA.

WOOD ROUGH CARPENTRY:

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS AND STEPS NECESSARY TO PROTECT ALL COMPLETED, SEMI-COMPLETED, AND TEMPORARY WORK FROM COMMENCEMENT OF PROJECT TO COMPLETE, SEMI-COMPLETION OF SAME ANY PORTION OF THE WORK DAMAGED OR DISFIGURED SHALL BE SATISFACTORILY REPAIRED OR REPLACED AND THE WORK AS A WHOLE LEFT WITHOUT BLEMISH AT FINAL ACCEPTANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING ALL NECESSARY MEASUREMENTS AT THE BUILDING, THE ACCURATE FITTING OF ALL WORK AND PROPER ACCOMMODATION OF OTHER TRADES.

DESCRIPTION OF WORK:

THIS SECTION INCLUDES FURNISHING OF ALL LABOR, MATERIAL, TOOLS, EQUIPMENT, TRANSPORTATION, AND FACILITIES TO COMPLETE ROUGH CARPENTRY AS INDICATED IN THE DRAWINGS AND AS SPECIFIED HEREIN.

WORKMANSHIP:

ALL WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE BEST PRACTICE, SHALL BE ACCURATE AS TO MEASUREMENT AND SHALL BE CAREFULLY DONE. PLYWOOD SHEATHING SUBFLOOR SHALL PROVIDE A SMOOTH UNIFORM SURFACE CAPABLE PROPERLY ACCEPTING A CARPET FINISH.

ROOF DIAPHRAGM:

3/4" T&G APA RATED SHEATHING - STRUCTURE 1 EXPOSURE 1
SPAN RATING 48/24 MIN.
FASTEN TO ROOF JOISTS AND BEAMS W/ #10 X 1 1/4" LG. SELF DRILLING SELF-TAPPING PHILLIPS FLAT-HEAD ZINC COATED TEKS SCREWS AT 4" OC AT BOUNDARIES, 6" OC AT EDGES, AND 12" OC FIELD SCREWS. MIN. 3/8" EDGE DISTANCE FOR FASTENERS TO PLYWOOD EDGE PER CBC SECTION 2306.2.

FLOOR DIAPHRAGM:

1 1/8" PLYWOOD - STURD-I-FLOOR
EXTERIOR - TONGUE AND GROOVE EDGES
SPAN RATING: 48"
FASTEN TO FLOOR JOISTS AND BEAMS W/ #10 - 24 X 1 3/4 LG. SELF-DRILLING, SELF-TAPPING PHILLIPS FLAT-HEAD ZINC COATED TEKS SCREWS MIN. 3/8" EDGE DISTANCE FOR FASTENERS TO PLYWOOD EDGE PER CBC SECTION 2306.2.

@ 150-PSF ((FULLY BLOCKED))

FASTEN TO SHEET METAL SUPPORTS w/ #10 - 24 x 1 3/4 LG. SELF-DRILLING, SELF-TAPPING PHILLIPS FLAT-HEAD ZINC COATED TEKS SCREWS AT 4" O.C. BOUNDARIES + CONT. PANEL EDGES, 6" O.C. @ ALL OTHER PANEL EDGES 12" O.C. INTERMEDIATE.
ALL EDGES OF ALL PANELS SHALL BE ATTACHED TO FRAMING MEMBERS OR BLOCKING. WHERE USED AS BLOCKING, FLAT STRAPPING SHALL BE A MINIMUM THICKNESS OF 33 MILS WITH A MINIMUM WIDTH OF 1.5 INCHES. SCREWS SHALL BE INSTALLED THROUGH THE SHEATHING TO THE BLOCKING.

CONCRETE FLOOR DATA: LIGHTWEIGHT CONCRETE FLOOR
STRENGTH: 3000 PSI MIN
TYPE: I OR II
DENSITY: 110 PCF - MAX

DIMENSION LUMBER ATTACHMENT TO STEEL FRAMING:

2 X STUDS AT CORNER STEEL COLUMNS (NAILING STUD)
USE: #10 - 24 X 2 1/2" LG. SELF-DRILLING SELF-TAPPING PHILLIPS FLAT-HEAD WITH WASHER ZINC COATED TEK SCREWS AT 24" O.C.

REFERENCE STANDARDS NOTES:

INTENT OF DRAWINGS AND SPECIFICATIONS IS TO CONSTRUCT THE BUILDING IN ACCORDANCE WITH THE STATE OF CALIFORNIA, CALIFORNIA CODE OF REGULATIONS, PART 1, 2, 3, 4, 5, 6, 9, AND 12, SUB-CHAPTER 1. CALIFORNIA BUILDING CODE, 2022 EDITION, MANUAL OF STEEL CONSTRUCTION, (AISC) 15TH EDITION, AMERICAN WELDING SOCIETY, STRUCTURAL WELDING CODE, AWS D1.1, AMERICAN INSTITUTE OF TIMBER CONSTRUCTION STANDARD, (AITC) 109 ARCHITECTURAL SHEET METAL MANUAL, AIA FILE NO. 12-L (SMACNA) LATEST ADOPTED EDITION UNLESS OTHERWISE NOTED.

WORKMANSHIP:

WORKMANSHIP AND MATERIALS SHALL BE SUCH THAT BUILDING WILL BE WEATHERTIGHT AND WATERTIGHT.

INSPECTIONS:

A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.

CHANGES:

CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDA OR A CONSTRUCTION CHANGE DOCUMENT APPROVED BY THE DIVISION OF THE STATE ARCHITECT AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.

NAILING NOTES:

1. ALL NAILS SHALL BE COMMON UNLESS OTHERWISE NOTED
2. MACHINE APPLIED 16d FASTENERS SHALL HAVE AN EMBEDMENT OF NOT LESS THAN 1 1/2" INTO THE SECOND MEMBER, AND SHALL BE NOT LESS THAN 3" IN OVERALL LENGTH. THE ABOVE NAILS SHALL ALSO BE ACCEPTABLE FOR HAND NAILING, PROVIDED THE REQUIRED EMBEDMENT IS MAINTAINED.

CONNECTION AND FASTENERS:

ALL CONNECTIONS AND FASTENERS AS STATED ON THESE DRAWINGS CAN BE SUBSTITUTED BY AN EQUIVALENT PRODUCT WITH ICC REPORTS AND APPROVAL BY DSA.

CONNECTION OF LAG SCREWS:

AS REQUIRED PER ANSI / AF&FA NDS-2012, LAG SCREWS MUST BE INSTALLED INTO A PRE-DRILLED PILOT HOLE WITH A STANDARD WASHER AND TURNED WITH A WRENCH. DO NOT DRIVE IN WITH A HAMMER. OVER-TORQUING CAN SIGNIFICANTLY REDUCE THE LATERAL RESISTANCE OF THE LAG SCREW AND SHOULD BE AVOIDED.

FASTENING SCHEDULE (2022 CBC TABLE 2304.10.1)

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
Roof		
1. Blocking between ceiling joists, rafters or trusses to top plate or other framing below	3-8d common (2 1/2" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Each end, toenail
Blocking between rafters or truss not at the wall top plate, to rafter or truss	2-8d common (2 1/2" × 0.131") 2-3" × 0.131" nails 2-3" 14 gage staples	Each end, toenail
	2-16 d common (3 1/2" × 0.162") 3-3" × 0.131" nails 3-3" 14 gage staples	End nail
Flat blocking to truss and web filler	16d common (3 1/2" × 0.162") @ 6" o.c. 3" × 0.131" nails @ 6" o.c. 3" × 14 gage staples @ 6" o.c	Face nail
2. Ceiling joists to top plate	3-8d common (2 1/2" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Each joist, toenail
3. Ceiling joist not attached to parallel rafter, laps over partitions (no thrust) (see Section 2308.7.3.1, Table 2308.7.3.1)	3-16d common (3 1/2" × 0.162"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown	Face nail
4. Ceiling joist attached to parallel rafter (heel joint) (see Section 2308.7.3.1, Table 2308.7.3.1)	Per Table 2308.7.3.1	Face nail
5. Collar tie to rafter	3-10d common (3" × 0.148"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown	Face nail
6. Rafter or roof truss to top plate (See Section 2308.7.5, Table 2308.7.5)	3-10 common (3" × 0.148"); or 3-16d box (3 1/2" × 0.135"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131 nails; or 4-3" 14 gage staples, 7/16" crown	Toenail[c]
7. Roof rafters to ridge valley or hip rafters; or roof rafter to 2-inch ridge beam	2-16d common (3 1/2" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown; or	End nail
	3-10d common (3" × 0.148"); or 4-16d box (31/2" × 0.135"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown	Toenail
Wall		
8. Stud to stud (not at braced wall panels)	16d common (3 1/2" × 0.162");	24" o.c. face nail
	10d box (3" × 0.128"); or 3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	16" o.c. face nail
9. Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	16d common (3 1/2" × 0.162"); or	16" o.c. face nail
	16d box (3 1/2" × 0.135"); or	12" o.c. face nail
	3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	12" o.c. face nail
10. Built-up header (2" to 2" header)	16d common (3 1/2" × 0.162"); or	16" o.c. each edge, face nail
	16d box (3 1/2" × 0.135")	12" o.c. each edge, face nail
11. Continuous header to stud	4-8d common (2 1/2" × 0.131"); or 4-10d box (3" × 0.128")	Toenail
12. Top plate to top plate	16d common (3 1/2" × 0.162"); or	16" o.c. face nail
	10d box (3" × 0.128"); or 3" × 0.131" nails; or 3" 14 gage staples, 7/16" crown	12" o.c. face nail
13. Top plate to top plate, at end joints	8-16d common (3 1/2" × 0.162"); or 12-10d box (3" × 0.128"); or 12-3" × 0.131" nails; or 12-3" 14 gage staples, 7/16" crown	Each side of end joint, face nail (minimum 24" lap splice length each side of end joint)
14. Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d common (3 1/2" × 0.162"); or	16" o.c. face nail
	16d box (3 1/2" × 0.135"); or 3" × 0.131" nails; or 3" 14 gage staples, 7/16" crown	12" o.c. face nail
15. Bottom plate to joist, rim joist, band joist or blocking at braced wall panels	2-16d common (3 1/2" × 0.162"); or 3-16d box (3 1/2" × 0.135"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown	16" o.c. face nail
16. Stud to top or bottom plate	4-8d common(2 1/2" × 0.131"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown; or	Toenail
	2-16d common (3 1/2" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	End nail
17. Top plates, laps at corners and intersections	2-16d common (3 1/2" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Face nail
18. 1" brace to each stud and plate	2-8d common (2 1/2" × 0.131"); or 2-10d box (3" × 0.128"); or 2-3" × 0.131" nails; or 2-3" 14 gage staples, 7/16" crown	Face nail
19. 1" × 6" sheathing to each bearing	2-8d common (2 1/2" × 0.131"); or 2-10d box (3" × 0.128")	Face nail
20. 1" × 8" and wider sheathing to each bearing	3-8d common (2 1/2" × 0.131"); or 3-10d box (3" × 0.128")	Face nail
Floor		
21. Joist to sill, top plate, or girder	3-8d common (2 1/2" × 0.131"); or floor 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Toenail
22. Rim joist, band joist, or blocking to top plate, sill or other framing below	8d common (2 1/2" × 0.131"); or 10d box (3" × 0.128"); or 3" × 0.131" nails; or 3" 14 gage staples, 7/16" crown	6" o.c., toenail
23. 1" × 6" subfloor or less to each joist	2-8d common (2 1/2" × 0.131"); or 2-10d box (3" × 0.128")	Face nail
24. 2" subfloor to joist or girder	2-16d common (3 1/2" × 0.162")	Face nail
25. 2" planks (plank & beam — floor & roof)	2-16d common (3 1/2" × 0.162")	Each bearing, face nail
26. Built-up girders and beams, 2" lumber layers	20d common (4" × 0.192")	32" o.c., face nail at top and bottom staggered on opposite sides
	10d box (3" × 0.128"); or 3" × 0.131" nails; or 3" 14 gage staples, 7/16" crown	24" o.c. face nail at top and bottom staggered on opposite sides
	And: 2-20d common (4" × 0.192"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Ends and at each splice, face nail
27. Ledger strip supporting joists or rafters	3-16d common (3 1/2" × 0.162"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown	Each joist or rafter, face nail
28. Joist to band joist or rim joist	3-16d common (3 1/2" × 0.162"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown	End nail
29. Bridging or blocking to joist, rafter or truss	2-8d common (2 1/2" × 0.131"); or 2-10d box (3" × 0.128"); or 2-3" × 0.131" nails; or 2-3" 14 gage staples, 7/16" crown	Each end, toenail

Wood structural panels (WSP), subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing[a]		Edges (inches)	Intermediate supports (inches)
30. 3/8" — 1/2"	6d common or deformed (2" × 0.113") (subfloor and wall)	6	12
	8d common or deformed (2 1/2" × 0.131") (roof) or RSRS-01 (2 3/8" × 0.113") nail (roof)[d]	6	12
	2 3/8" × 0.113" nail (subfloor and wall)	6	12
	2 3/8" × 0.113" nail (roof)	4	8
31. 19/32" — 3/4"	8d common (2 1/2" × 0.131"); or 6d deformed (2" × 0.113") (subfloor and wall)	6	12
	8d common or deformed (2 1/2" × 0.131") (roof) or RSRS-01 (2 3/8" × 0.113") nail (roof)[d]	6	12
	2 3/8" x 0.113" nail	4	8
32. 7/8" — 11/4"	10d common (3" × 0.148"); or 8d deformed 2 1/2" 0.131")	6	12
Other exterior wall sheathing			
33. 1/2" fiberboard sheathing[b]	1 1/2" galvanized roofing nail (7/16" head diameter); or 1 1/4" 16 gage staple with 7/16" or 1" crown	3	6
34. 25/32" fiberboard sheathing[b]	1 3/4" galvanized roofing nail (7/16" diameter head); or 1 1/2" 16 gage staple with 7/16" or 1" crown	3	6
Wood structural panels, combination subfloor underlayment to framing			
35. 3/4" and less	8d common (2 1/2" × 0.131"); or 6d deformed (2" × 0.113")	6	12
36. 7/8" — 1"	8d common (2 1/2" × 0.131"); or 8d deformed (2 1/2" × 0.131")	6	12
37. 11/8" — 11/4"	10d common (3" × 0.148"); or 8d deformed (2 1/2" × 0.131")	6	12
Panel siding to framing			
38. 1/2" or less	6d corrosion-resistant siding (1 7/8" × 0.106"); or 6d corrosion-resistant casing (2" × 0.099")	6	12
39. 5/8"	8d corrosion-resistant siding (2 3/8" × 0.128"); or 8d corrosion-resistant casing (2 1/2" × 0.113")	6	12
Interior paneling			
40. 1/4"	4d casing (1 1/2" × 0.080"); or 4d finish (1 1/2" × 0.072")	6	12
41. 3/8"	6d casing (2" × 0.099"); or 6d finish (Panel supports at 24 inches)	6	12

Footnotes:

a. Nails spaced at 6 inches at intermediate supports where spans are 48 inches or more. For nailing of wood structural panel and particleboard diaphragms and shear walls, refer to Section 2305. Nails for wall sheathing are permitted to be common, box or casing.

b. Spacing shall be 6 inches on center on the edges and 12 inches on center at intermediate supports for nonstructural applications. Panel supports at 16 inches (20 inches if strength axis in the long direction of the panel, unless otherwise marked).

c. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule and the ceiling joist is fastened to the top plate in accordance with this schedule, the number of toenails in the rafter shall be permitted to be reduced by one nail.

d. RSRS-01 is a Roof Sheathing Ring Shank nail meeting the specifications in ASTM F1667.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

STRUCTURAL SPECIFICATIONS

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

JOHN W STARLING
2475

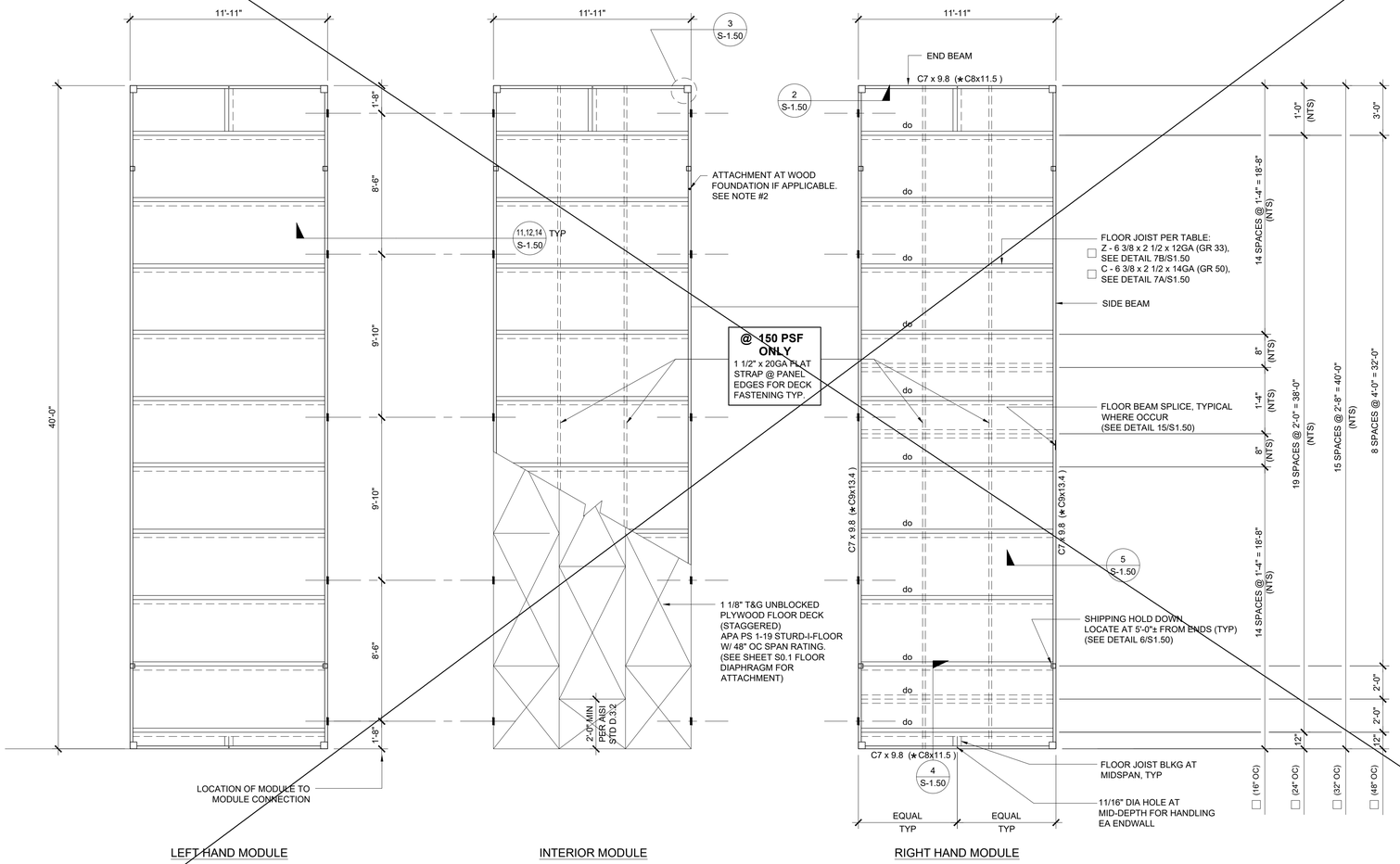
SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
S-0.1

NOTE:
* SEE BEAM AND COLUMN SCHEDULE ON SHEETS S-3.01 THRU S-3.02 FOR APPLICABLE FLOOR BEAM SIZE

REAR



LEFT HAND MODULE

INTERIOR MODULE

RIGHT HAND MODULE

FRONT

NOTES:

1. FOR FLOOR BLOCKING SEE DETAILS 4,7B / S-1.50 (STD), 4,7A / S-1.50 (ALT)
2. FOR BUILDINGS ON WOOD FOUNDATION SYSTEMS, PROVIDE 11/16" DIA. HOLE AT BOTTOM FLANGE OF FLOOR BEAM FOR LAG SCREW ATTACHMENT TO FOUNDATION PLATES BELOW. FOR EXACT HOLE LOCATIONS, SEE FOUNDATION PLAN.
3. FLOOR SHEATHING SHALL BE PRESSURE TREATED WOOD OR NATURALLY DURABLE IF BOTTOM OF PLYWOOD IS LESS THAN 18" CLEAR FROM EXPOSED EARTH.
4. HSS COLUMN SCHEDULES ON SHEETS S-3.01 THRU S-3.02

FLOOR JOIST TABLE

	LIVE LOAD PSF	JOIST SPACING	
		CLASSROOM ☐	OFFICE ☐
☐	50	48"	48" DBL JOIST
☐	50	32"	32" DBL JOIST
☐	50	24"	24" DBL JOIST
☐	50	16"	16" DBL JOIST
☐	50 + 15	32"	
☐	50 + 15	24"	
☐	50 + 15	16"	
☐	100	24"	
☐	100	16"	
☐	150	16"	

FLOOR SHEATHING

☐ PRESSURE TREATED

☐ NON-PRESSURE TREATED

NOTE:
PRESSURE TREATED SHEATHING SHALL ONLY BE PROVIDED WHEN WOOD FOUNDATIONS ARE USED AND EXPOSED EARTH OCCURS WITHIN THE FOUNDATION AT A DISTANCE OF LESS THAN 18" BELOW THE UNDERSIDE OF THE FLOOR SHEATHING. SEE 16/F-0.50 FOR ADDITIONAL INFORMATION.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

FLOOR FRAMING PLAN WOOD FLOOR

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARK 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
S-1.01

FLOOR FRAMING PLAN

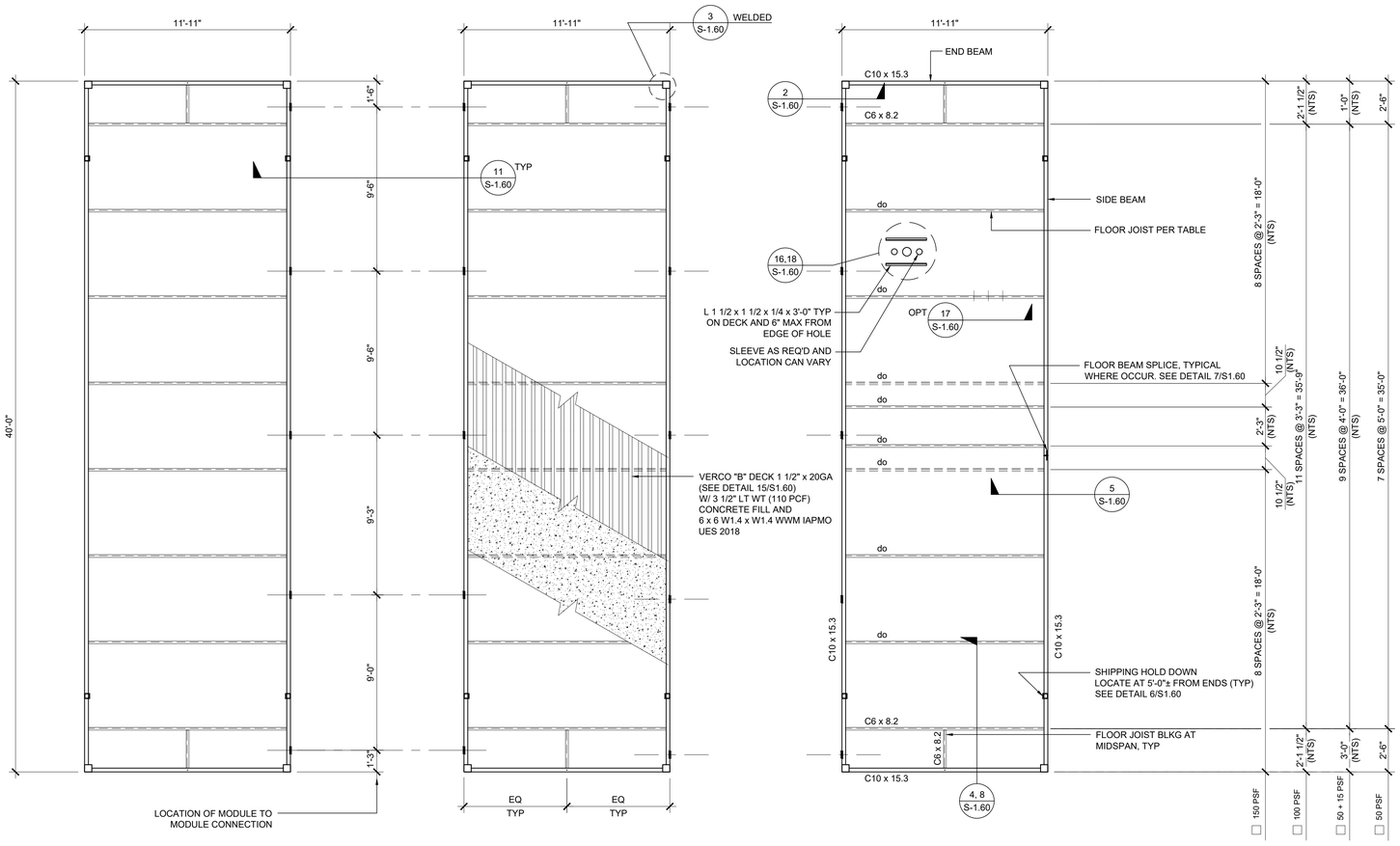
SCALE: 1/4" = 1'-0" | 1

FLOOR JOIST TABLE

	LIVE LOAD PSF	JOIST SPACING
☐	50	60"
☐	50 + 15	48"
☐	100	39"
☐	150	27"

1. HSS COLUMN SCHEDULES ON SHEETS S-3.01 THRU S-3.02

REAR



LEFT HAND MODULE

INTERIOR MODULE

RIGHT HAND MODULE

FRONT

FLOOR FRAMING PLAN

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

FLOOR FRAMING PLAN
CONCRETE FLOOR

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

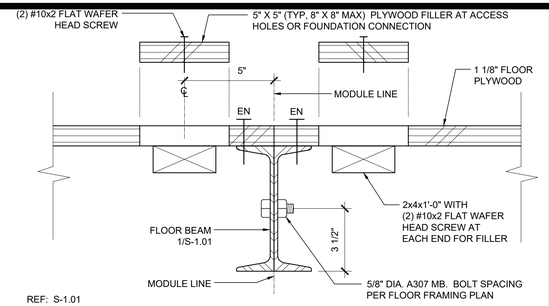
REGISTERED PROFESSIONAL ENGINEER JOHN W STARUP 29705 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

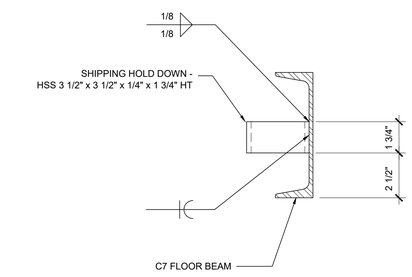
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

S-1.11



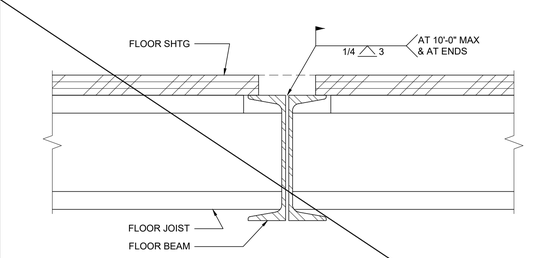
16 MODULE LINE - BOLTED CONNECTION SCALE : 3" = 1'-0"



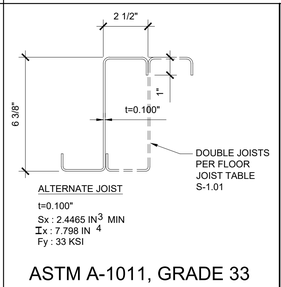
11 SHIPPING HOLD DOWN DETAIL SCALE : 3"=1'-0"

6

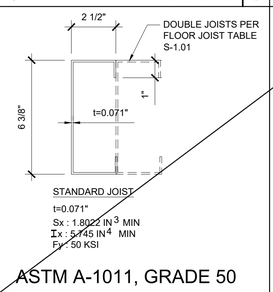
1



17 MODULE LINE CONNECTION (OPTION 1) SCALE : 3"=1'-0"

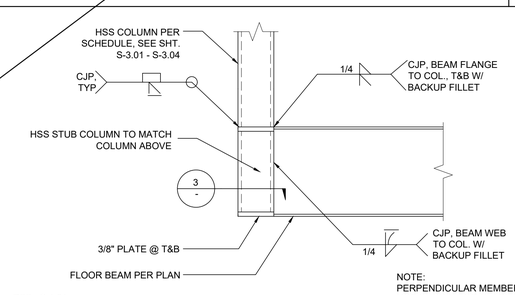


12 FLOOR JOIST SCALE : 3" = 1'-0"



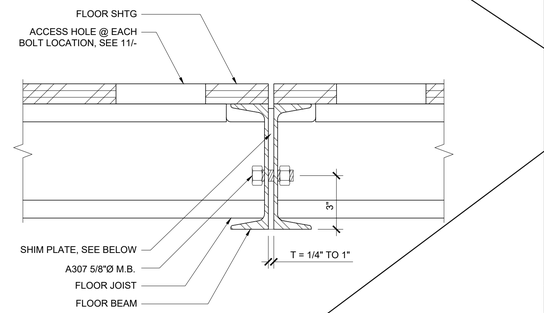
7B FLOOR JOIST SCALE : 3" = 1'-0"

7A

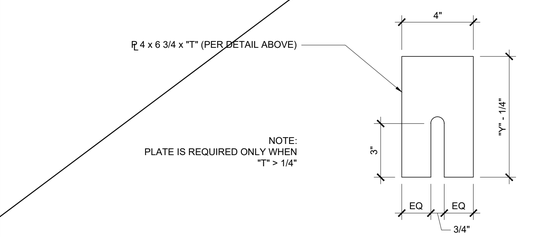


FLOOR BEAM TO COLUMN CONNECTION SCALE : 1 1/2" = 1'-0"

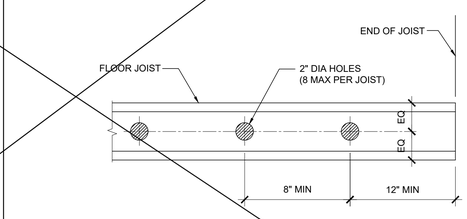
2



18

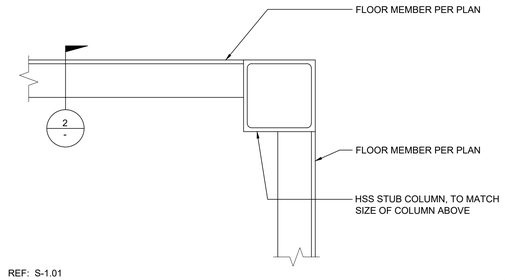


19 MODULE LINE CONNECTION (OPTION 2) SCALE : 3"=1'-0"



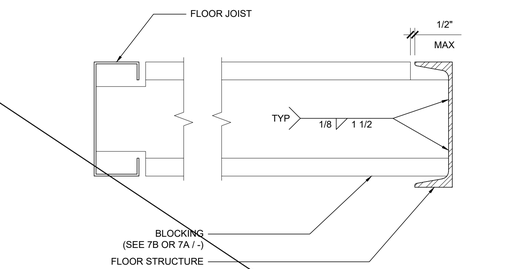
FLOOR JOIST HOLES (OPTIONAL) SCALE : 1/8" = 1'-0"

8



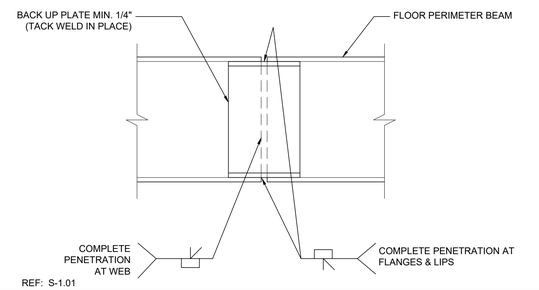
CORNER CONNECTION SCALE : 3" = 1'-0"

3



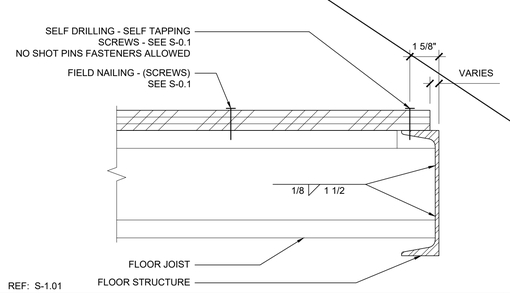
BLOCKING TO END BEAM SCALE : 3" = 1'-0"

4



20 FLOOR BEAM SPLICE SCALE : 3" = 1'-0"

15 NOT USED 10



JOIST TO SIDE BEAM SCALE : 3" = 1'-0"

5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

FLOOR FRMING DETILS

WOOD FLOOR

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

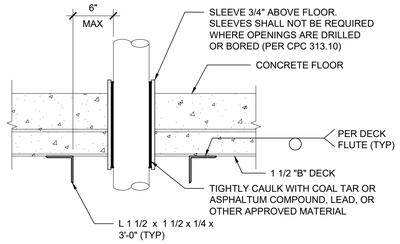
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24570 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

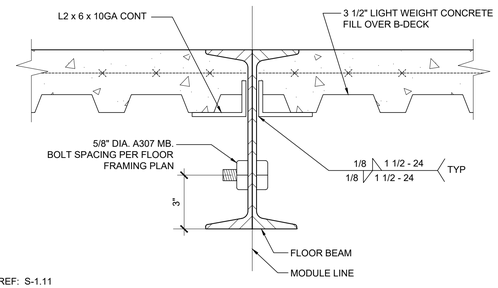
S-1.50



REF: S-1.11

FLOOR PENETRATION

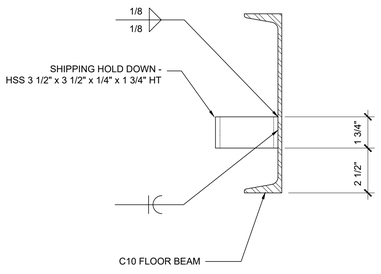
SCALE : 3" = 1'-0" | 16



REF: S-1.11

MODULE LINE - BOLTED CONNECTION

SCALE : 3" = 1'-0" | 11

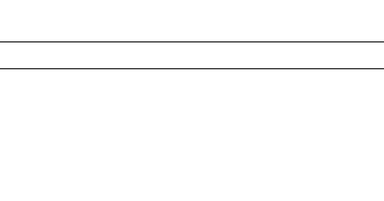


REF: S-1.11

SHIPPING HOLD DOWN DETAIL

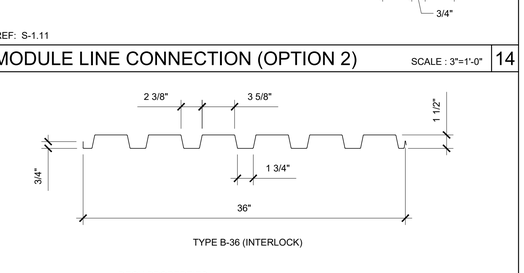
SCALE : 3"=1'-0" | 6

| 1



FLOOR JOIST HOLES (OPTIONAL)

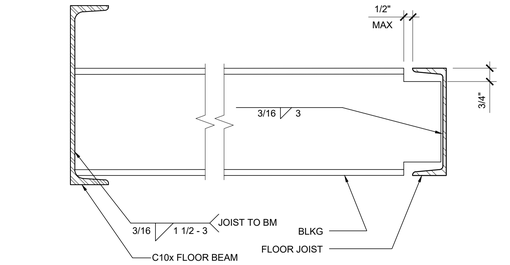
SCALE : 1/8" = 1'-0" | 17



REF: S-1.11

MODULE LINE CONNECTION (OPTION 1)

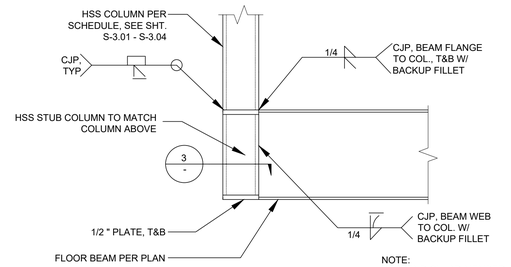
SCALE : 3" = 1'-0" | 12



REF: S-1.11

FLOOR BEAM SPLICE

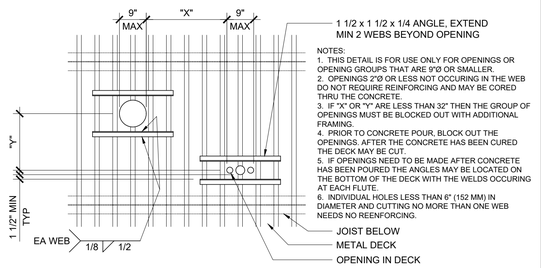
SCALE : 3" = 1'-0" | 7



REF: S-1.11

FLOOR BEAM TO COLUMN CONNECTION

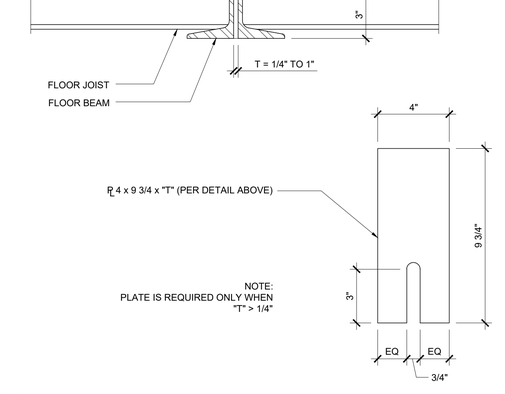
SCALE : 1 1/2" = 1'-0" | 2



NOTES:
1. THIS DETAIL IS FOR USE ONLY FOR OPENINGS OR OPENING GROUPS THAT ARE 9"Ø OR SMALLER.
2. OPENINGS 2"Ø OR LESS NOT OCCURING IN THE WEB DO NOT REQUIRE REINFORCING AND MAY BE CORED THRU THE CONCRETE.
3. IF "X" OR "Y" ARE LESS THAN 32" THEN THE GROUP OF OPENINGS MUST BE BLOCKED OUT WITH ADDITIONAL FRAMING.
4. PRIOR TO CONCRETE POUR, BLOCK OUT THE OPENINGS. AFTER THE CONCRETE HAS BEEN CURED THE DECK MAY BE CUT.
5. IF OPENINGS NEED TO BE MADE AFTER CONCRETE HAS BEEN POURED THE ANGLES MAY BE LOCATED ON THE BOTTOM OF THE DECK WITH THE WELDS OCCURING AT EACH FLUTE.
6. INDIVIDUAL HOLES LESS THAN 6" (152 MM) IN DIAMETER AND CUTTING NO MORE THAN ONE WEB NEEDS NO REENFORCING.

PENETRATIONS IN DECK (OPTION)

SCALE : 1/2"=1'-0" | 18



REF: S-1.11

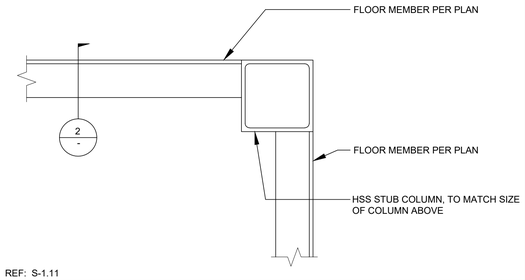
MODULE LINE CONNECTION (OPTION 2)

SCALE : 3"=1'-0" | 14

REF: S-1.11

BLOCKING TO JOIST

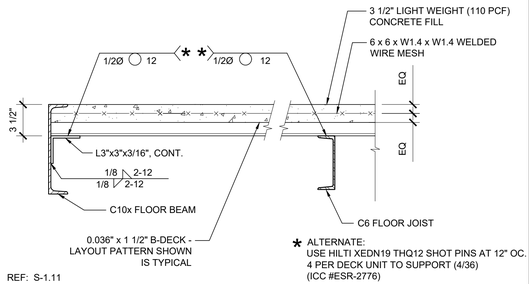
SCALE : 3"=1'-0" | 8



REF: S-1.11

CORNER CONNECTION

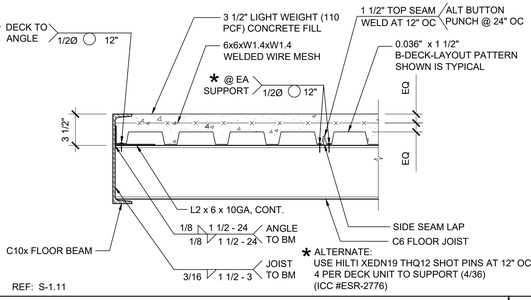
SCALE : 3" = 1'-0" | 3



REF: S-1.11

DECK AT END BEAM

SCALE : 1 1/2" = 1'-0" | 4



REF: S-1.11

JOIST TO SIDE BEAM

SCALE : 1 1/2" = 1'-0" | 5

TYPE B-36 (INTERLOCK)

DECK PROPERTIES:
TYPE: B
THICKNESS (IN): 0.036"
I (IN^4): 0.22
POSITIVE (IN^3): 0.235
NEGATIVE (IN^3): 0.246

REF: S-1.11

FLOOR DECK PROPERTY

SCALE : 1 1/2" = 1'-0" | 15

NOT USED

| 19

NOT USED

| 20

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

FLOOR FRAMING DETAIL
CONCRETE FLOOR

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

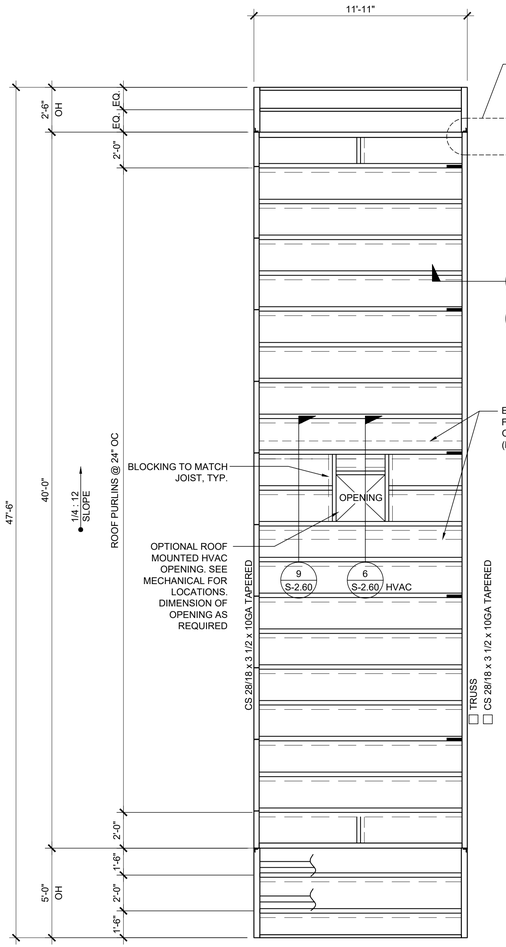
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 29575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

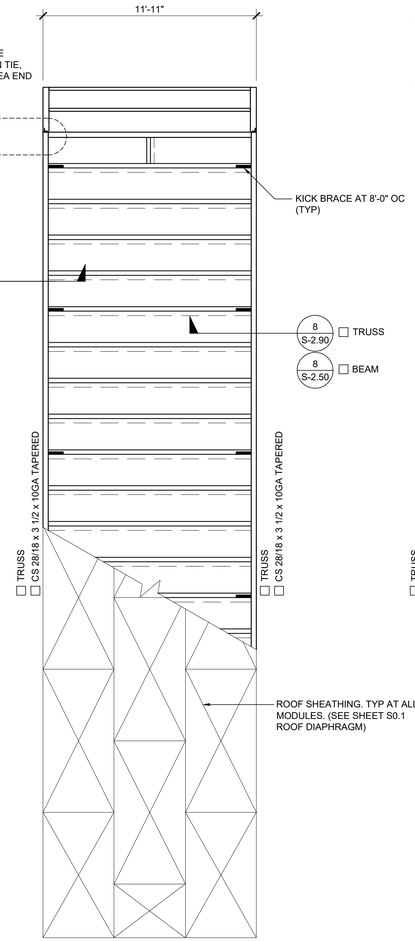
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

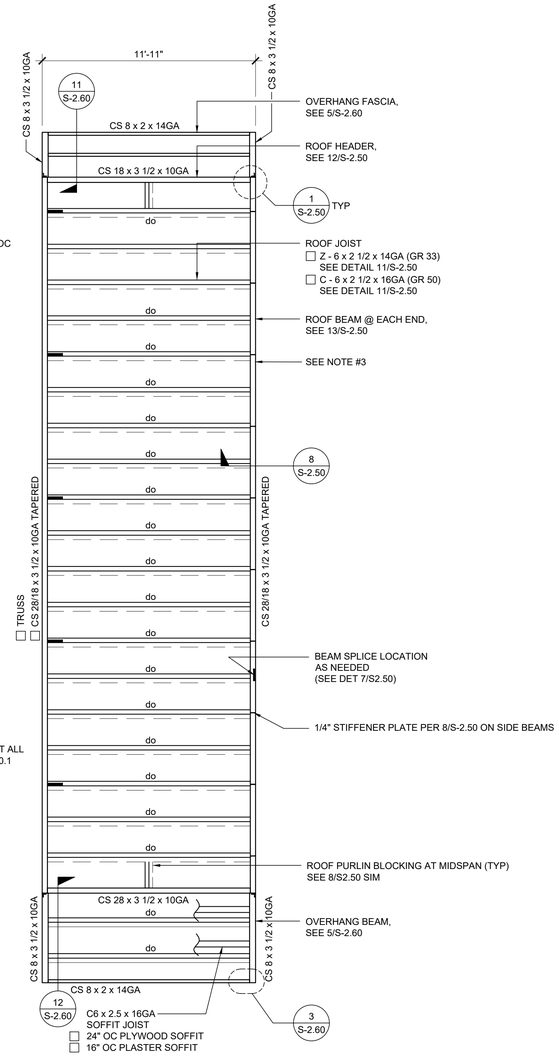
S-1.60



LEFT HAND MODULE



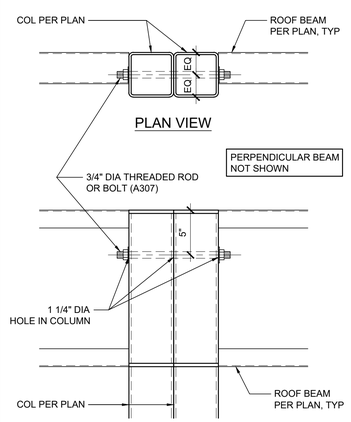
INTERIOR MODULE



RIGHT HAND MODULE

NOTES

1. FOR WALL MOUNTED HVAC UNIT, PROVIDE OPENING THROUGH REAR ROOF HEADER WHERE IT OCCURS. SEE FLOOR PLAN FOR HVAC LOCATION.
   SEE 5,15 / S-2.50 OR 5,15/S-2.51 FOR DETAILS
2. PROVIDE ADDITIONAL JOIST FOR FIRE SPRINKLER LINE AS NEEDED. LOCATION OF FIRE SPRINKLER PURLIN TO BE DETERMINED BY SITE STIFFENER PLATE OR ANGLE BRACE REQUIRED AT THIS LOCATION. FOR FIRE SPRINKLER LINE SIDE BEAM PENETRATION, SEE 14 / S-2.50 OR 14 / S-2.51 DETAILS.
3. FOR OPTIONAL SIDE BEAM OPENING SEE 10, 15/S-2.50 OR 10, 15/S-2.51 FOR DETAILS



SECTION VIEW

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF FRAMING PLAN
MONO SLOPE

REVISIONS

1	
2	
3	
4	
5	

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

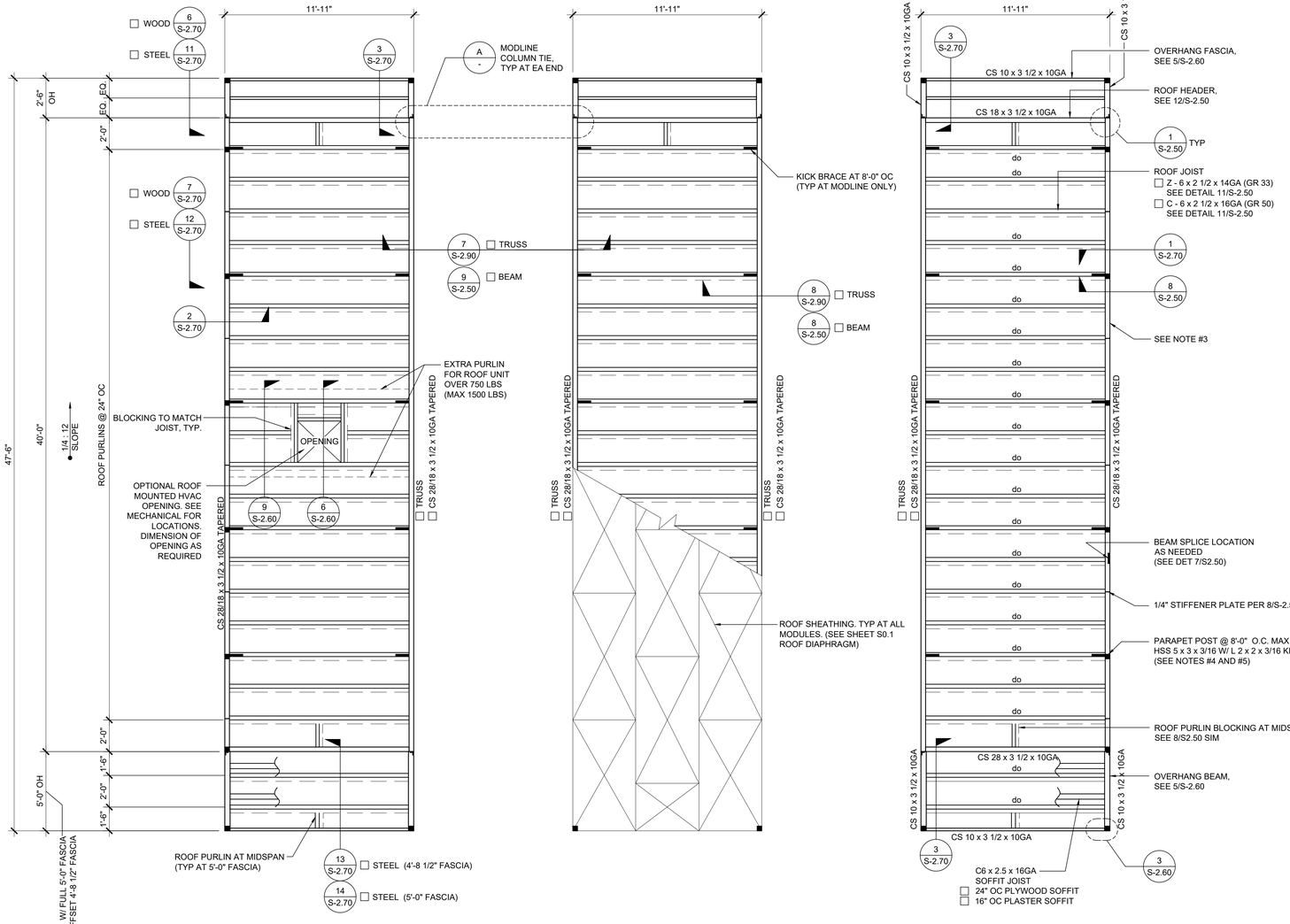
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN 'N STARLING
24575
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES	24' x 40' PC
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

S-2.01



LEFT HAND MODULE

INTERIOR MODULE

RIGHT HAND MODULE

NOTES

1. FOR WALL MOUNTED HVAC UNIT, PROVIDE OPENING THROUGH REAR ROOF HEADER WHERE IT OCCURS. SEE FLOOR PLAN FOR HVAC LOCATION. SEE 5,15 / S-2.50 OR 5,15/S-2.51 FOR DETAILS
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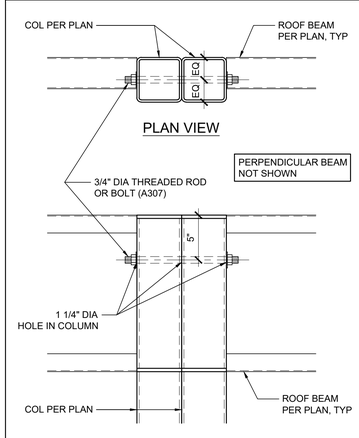
3. FOR OPTIONAL SIDE BEAM OPENING SEE 10, 15/S-2.50 OR 10, 15/S-2.51 FOR DETAILS
4. PARAPET HSS POST AND KICK BRACING REQUIRED WHERE PARAPET HEIGHT IS OVER 9" - SEE 1,2/S-2.70
5. PARAPET HEIGHT TO BE DETERMINED BY ARCHITECT BEFORE FABRICATION. (4'-0" MAX.) (SEE ARCHITECTURAL ELEVATION SHEET)



SECTION VIEW

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF FRAMING PLAN
PARAPET
MONO SLOPE

REVISIONS

1
2
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4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

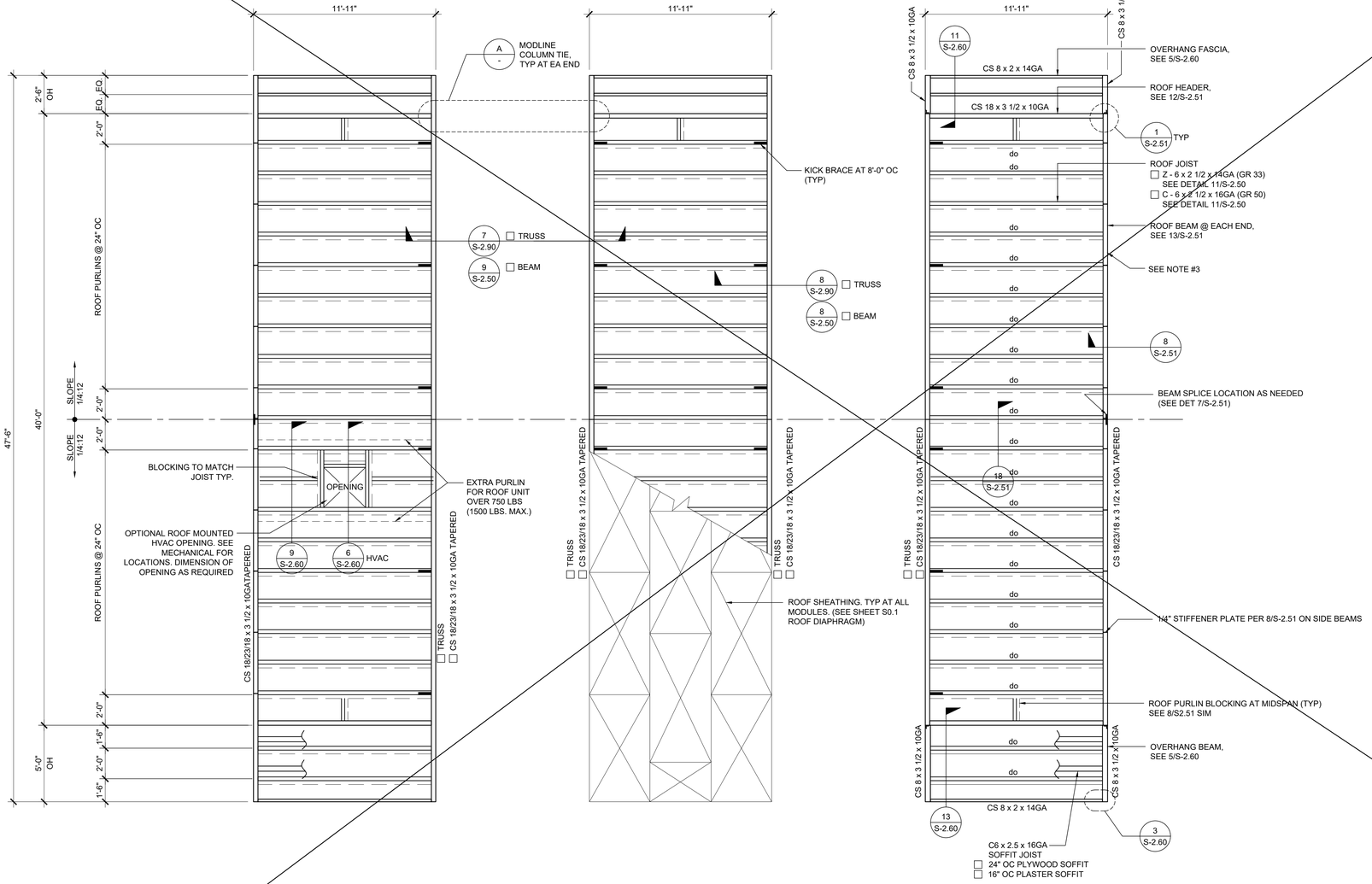
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24975
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

S-2.03



LEFT HAND MODULE

INTERIOR MODULE

RIGHT HAND MODULE

NOTES

1. FOR WALL MOUNTED HVAC UNIT, PROVIDE OPENING THROUGH REAR ROOF HEADER WHERE IT OCCURS. SEE FLOOR PLAN FOR HVAC LOCATION.
   SEE 5,15 / S-2.50 OR 5,15/S-2.51 FOR DETAILS
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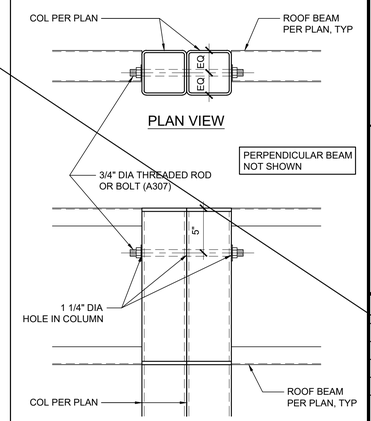
3. FOR OPTIONAL SIDE BEAM OPENING SEE 10, 15/S-2.50 OR 10, 15/S-2.51 FOR DETAILS



SECTION VIEW

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF FRAMING PLAN
DUAL SLOPE

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
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DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24075 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

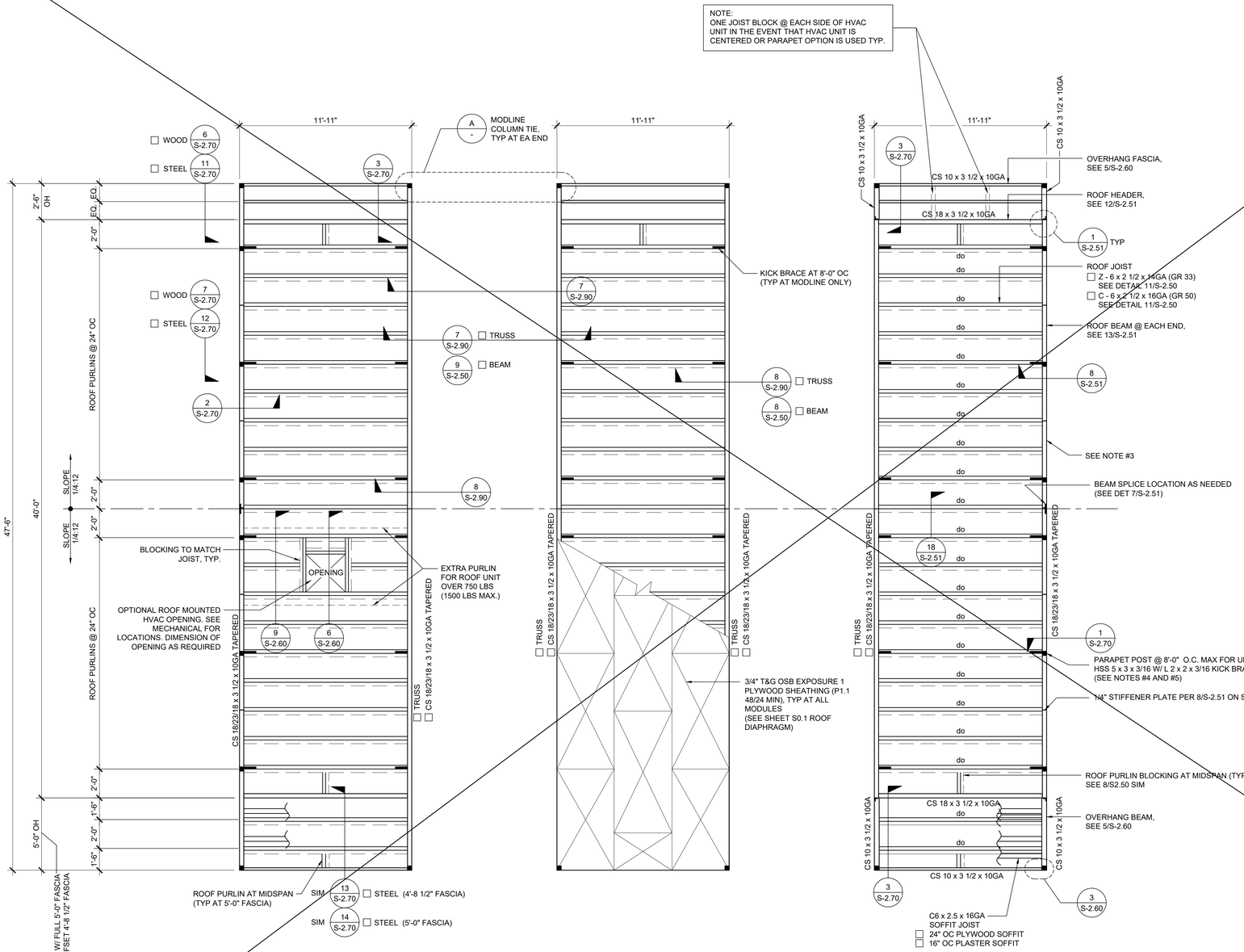
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

S-2.11

ROOF FRAMING PLAN

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



LEFT HAND MODULE

INTERIOR MODULE

RIGHT HAND MODULE

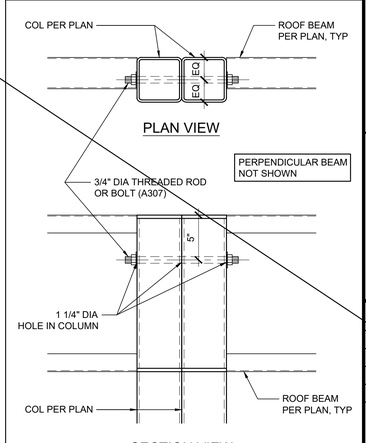
ROOF FRAMING PLAN

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

1

NOTES

1. FOR WALL MOUNTED HVAC UNIT, PROVIDE OPENING THROUGH REAR ROOF HEADER WHERE IT OCCURS. SEE FLOOR PLAN FOR HVAC LOCATION. SEE 5,15 / S-2.50 OR 5,15/S-2.51 FOR DETAILS
2. PROVIDE ADDITIONAL JOIST FOR FIRE SPRINKLER LINE AS NEEDED. LOCATION OF FIRE SPRINKLER PURLIN TO BE DETERMINED BY SITE STIFFENER PLATE OR ANGLE BRACE REQUIRED AT THIS LOCATION. FOR FIRE SPRINKLER LINE SIDE BEAM PENETRATION, SEE 14 / S-2.50 OR 14 / S-2.51 DETAILS.
3. FOR OPTIONAL SIDE BEAM OPENING SEE 10, 15/S-2.50 OR 10, 15/S-2.51 FOR DETAILS
4. PARAPET HSS POST AND KICK BRACING REQUIRED WHERE PARAPET HEIGHT IS OVER 9" - SEE 1,2/S-2.70
5. PARAPET HEIGHT TO BE DETERMINED BY ARCHITECT BEFORE FABRICATION. (4'-0" MAX.) (SEE ARCHITECTURAL ELEVATION SHEET.



SECTION VIEW

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF FRAMING PLAN PARAPET DUAL SLOPE

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
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SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARK 2975 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

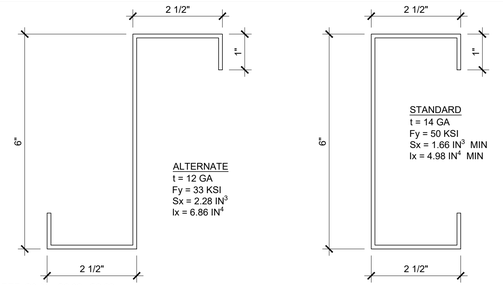
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

S-2.13

NOT USED | 16

ROOF PURLIN — SCALE : 6"=1'-0" | 11



REF: S2.01, S2.02, S2.03

NOT USED | 17

ROOF HEADER — SCALE : NTS | 12

18" (LOW END)
t = 10 GA
Fy = 40 KSI
Sx = 17.56 IN3 MIN.
Ix = 158.10 IN4 MIN.

28" (HIGH END)
t = 10 GA
Fy = 40 KSI
Sx = 33.80 IN3 MIN.
Ix = 474.00 IN4 MIN.

REF: S2.01, S2.02, S2.03

NOT USED | 18

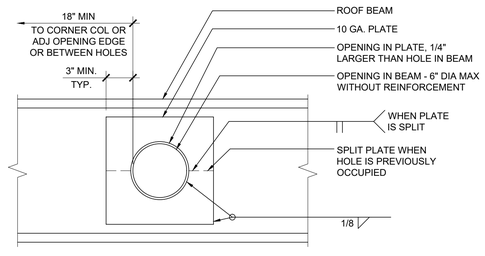
SIDE BEAM — SCALE : NTS | 13

18"	28"
t = 10 GA	t = 10 GA
Fy = 40 KSI	Fy = 40 KSI
Sx = 17.56 IN3	Sx = 33.80 IN3
Ix = 158.10 IN4	Ix = 474.00 IN4

REF: S2.01, S2.02, S2.03, S2.50

NOT USED | 19

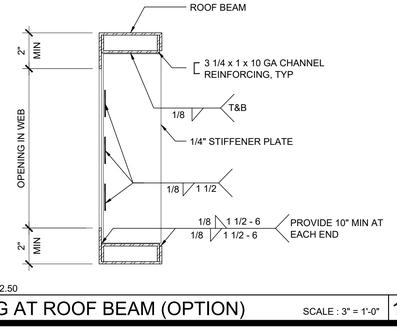
SIDEWALL BEAM PENETRATION — SCALE : 1 1/2"=1'-0" | 14



REF: S2.01, S2.02, S2.03

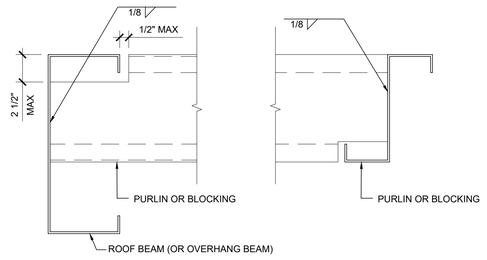
NOT USED | 20

WEB OPENING AT ROOF BEAM (OPTION) — SCALE : 3" = 1'-0" | 15



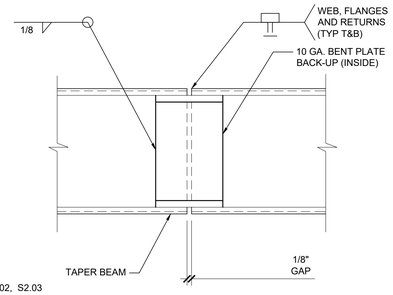
REF: S2.01, S2.02, S2.03, S2.50

TYPICAL PURLIN CONNECTION DETAIL — SCALE : 3" = 1'-0" | 6



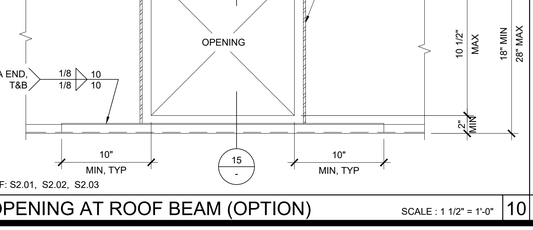
REF: S2.02

BEAM SPLICE — SCALE: 3" = 1'-0" | 7



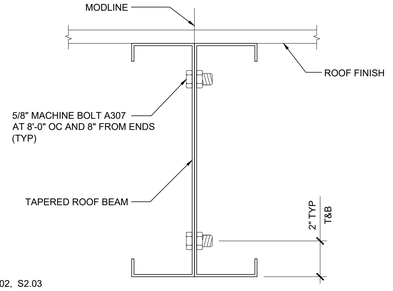
REF: S2.01, S2.02, S2.03

PURLIN TO ROOF BEAM @ STIFFENER — SCALE : 3"=1'-0" | 8



REF: S2.01, S2.02, S2.03

MODULE CONNECTION AT ROOF (OPTION) — SCALE : 3"=1'-0" | 9

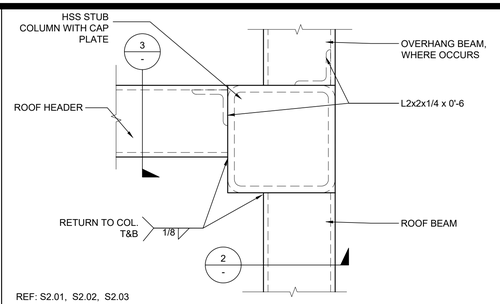


REF: S2.01, S2.02, S2.03

OPENING AT ROOF BEAM (OPTION) — SCALE : 1 1/2" = 1'-0" | 10

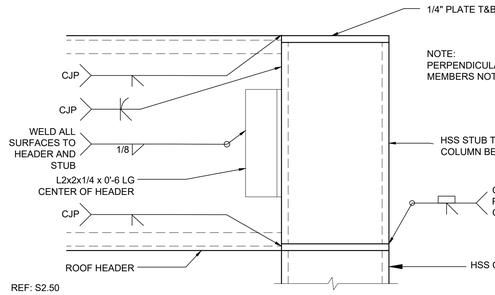
REF: S2.01, S2.02, S2.03

COLUMN AT ROOF - PLAN — SCALE : 3" = 1'-0" | 1



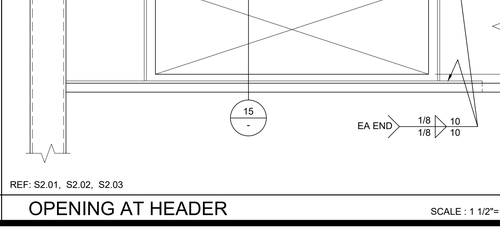
REF: S2.01, S2.02, S2.03

COLUMN AT ROOF - SECTION — SCALE : 3" = 1'-0" | 2



REF: S2.50

COLUMN AT ROOF OVERHANG — SCALE : 3" = 1'-0" | 3



NOTE: PERPENDICULAR
MEMBER NOT SHOWN

REF: S2.50

NOT USED | 4

COLUMN AT ROOF - OPENING — SCALE : 1 1/2"=1'-0" | 5

REF: S2.01, S2.02, S2.03

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF FRAMING DETAILS
MONO SLOPE

REVISIONS

1 2 3 4 5

PRE-CHECK (PC) DOCUMENT
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SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24775 STRUCTURAL STATE OF CALIFORNIA

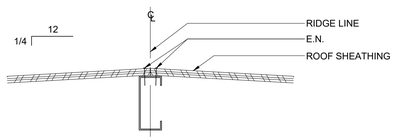
SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

S-2.50

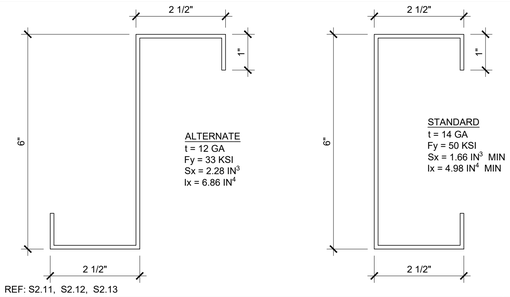
NOT USED 16



REF: S2.11, S2.12, S2.13

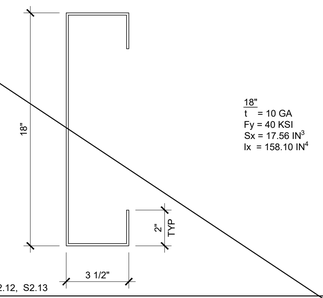
PURLINS AT RIDGE SCALE : 1 1/2"=1'-0" 18

ROOF PURLIN SCALE : 6"=1'-0" 11



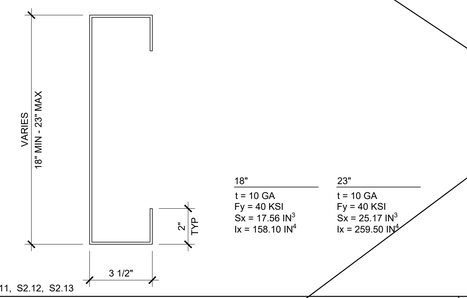
REF: S2.11, S2.12, S2.13

NOT USED 17



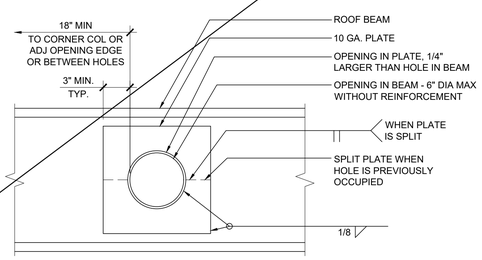
REF: S2.11, S2.12, S2.13

ROOF HEADER SCALE : NTS 12



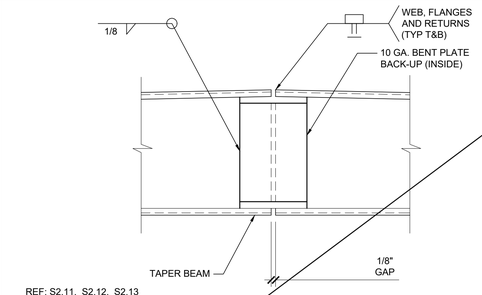
REF: S2.11, S2.12, S2.13

NOT USED 19



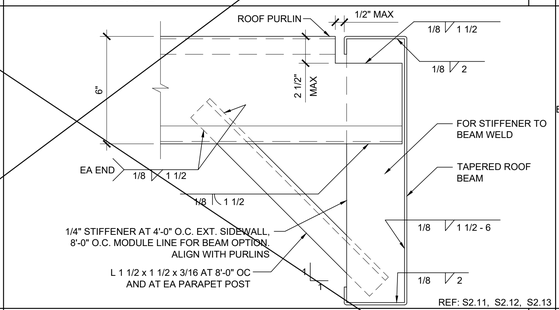
REF: S2.11, S2.12, S2.13

SIDEWALL BEAM PENETRATION SCALE : 1 1/2"=1'-0" 14



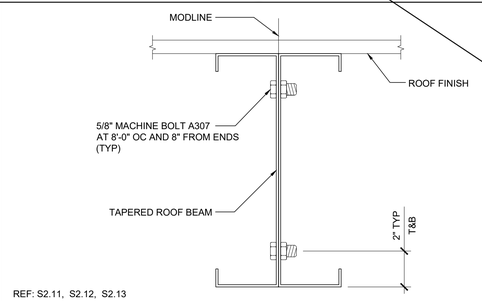
REF: S2.11, S2.12, S2.13

BEAM SPLICE SCALE: 3" = 1'-0" 7



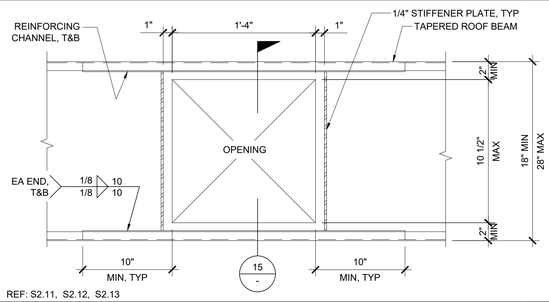
REF: S2.11, S2.12, S2.13

PURLIN TO ROOF BEAM @ STIFFENER SCALE : 3"=1'-0" 8



REF: S2.11, S2.12, S2.13

MODULE CONNECTION AT ROOF (OPTION) SCALE : 3"=1'-0" 9



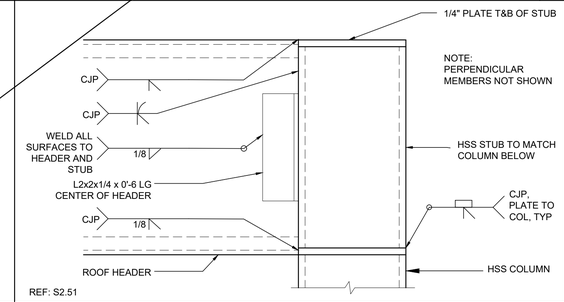
REF: S2.11, S2.12, S2.13

OPENING AT ROOF BEAM (OPTION) SCALE : 1 1/2" = 1'-0" 10

HSS STUB
COLUMN WITH CAP
PLATE
3
OVERHANG BEAM,
WHERE OCCURS
ROOF HEADER
L2x2x1/4 x 0'-6
RETURN TO COL.
T&B
1/8
ROOF BEAM
2

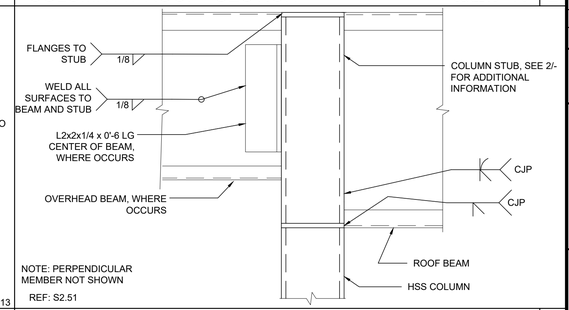
REF: S2.11, S2.12, S2.13

COLUMN AT ROOF - PLAN SCALE : 3" = 1'-0" 1



REF: S2.51

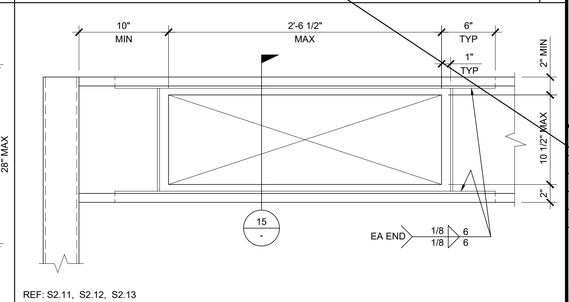
COLUMN AT ROOF - SECTION SCALE : 3" = 1'-0" 2



NOTE: PERPENDICULAR
MEMBER NOT SHOWN

REF: S2.51

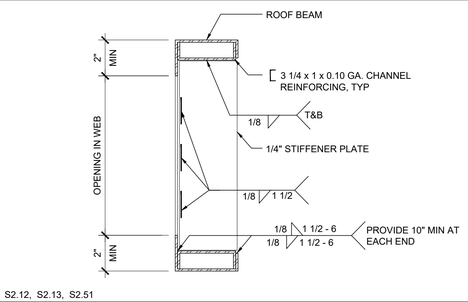
COLUMN AT ROOF OVERHANG SCALE : 3" = 1'-0" 3



REF: S2.11, S2.12, S2.13

OPENING AT HEADER SCALE : 1 1/2"=1'-0" 5

NOT USED 20



REF: S2.11, S2.12, S2.13, S2.51

WEB OPENING AT ROOF HEADER SCALE : 3" = 1'-0" 15

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF FRAMING DETAILS
DUAL SLOPE

REVISIONS

1
2
3
4
5

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DATE: 08/31/2023

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Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLIN
24775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

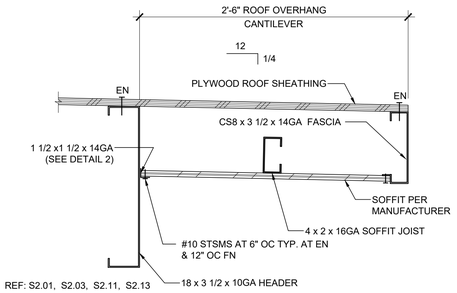
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

S-2.51

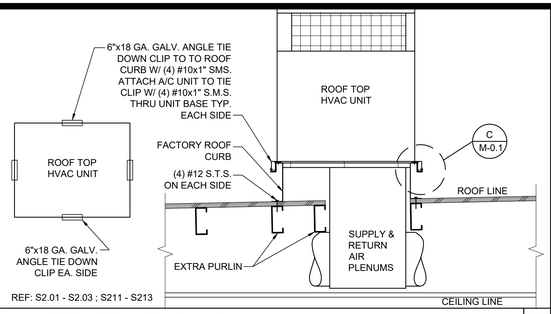
NOT USED 16

REAR OVERHANG SECTION SCALE : 1 1/2" = 1'-0" 11



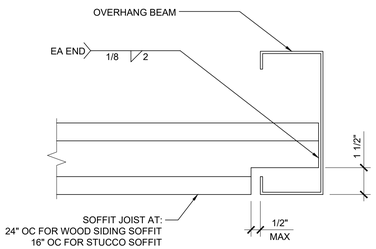
REF: S2.01, S2.03, S2.11, S2.13

HVAC CURB ATTACHMENT SCALE : 3/4" = 1'-0" 6



REF: S2.01 - S2.03 ; S211 - S213

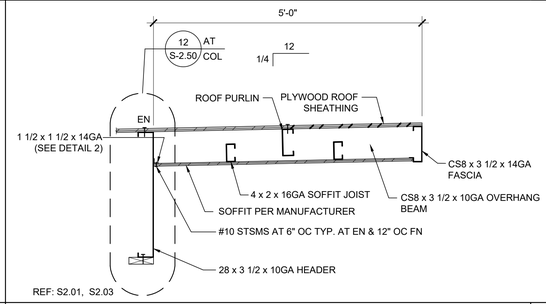
SOFFIT JOIST TO OVERHANG BEAM SCALE : 3"=1'-0" 1



REF: S3.01

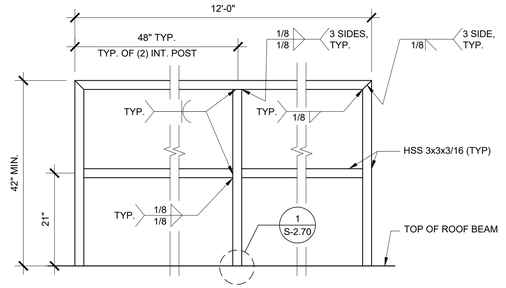
NOT USED 17

FRONT OVERHANG SECTION - MONO SLOPE SCALE: 3/4" = 1'-0" 12

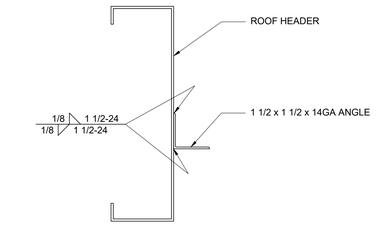


REF: S2.01, S2.03

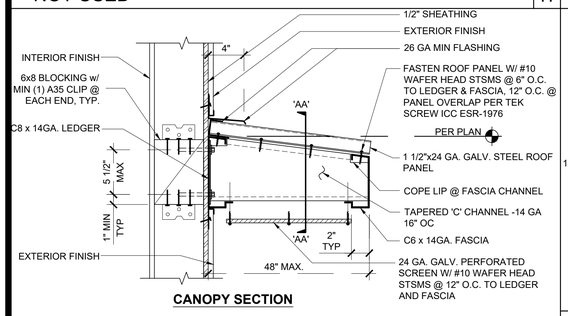
GUARDRAIL AT SIDEWALL SCALE : 3/4"=1'-0" 7



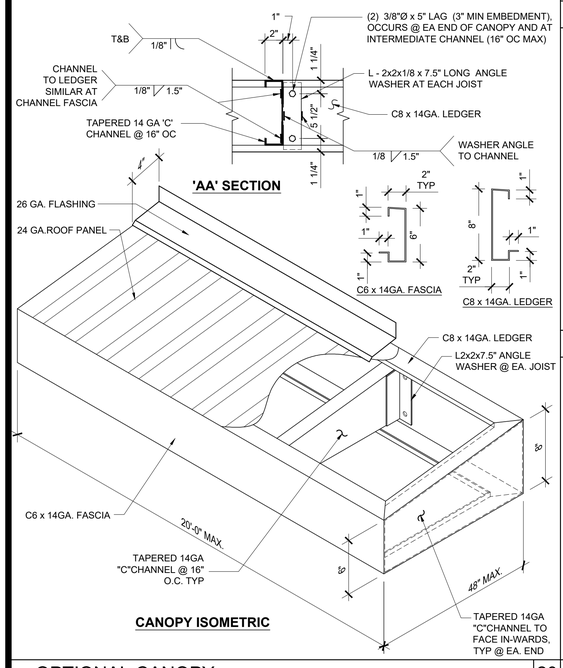
SOFFIT ANGLE TO HEADER CONNECTION SCALE : 3"=1'-0" 2



REF: S3.01



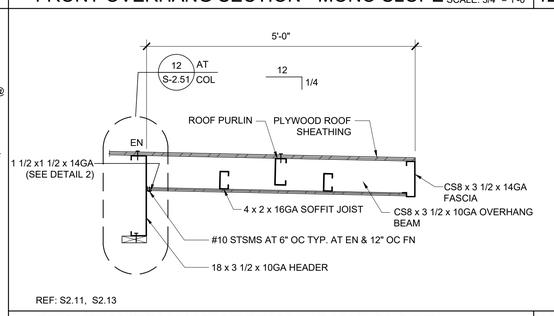
CANOPY SECTION



'AA' SECTION

CANOPY ISOMETRIC

OPTIONAL CANOPY SCALE : 1 1/2" = 1'-0" 20



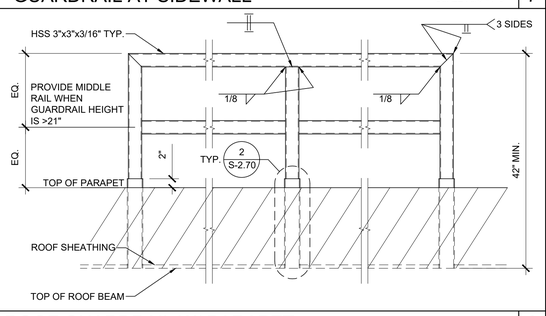
REF: S2.11, S2.13

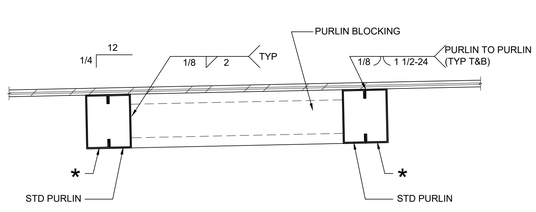
FRONT OVERHANG SECTION - DUAL SLOPE SCALE: 3/4" = 1'-0" 13

NOT USED 14

NOT USED 15

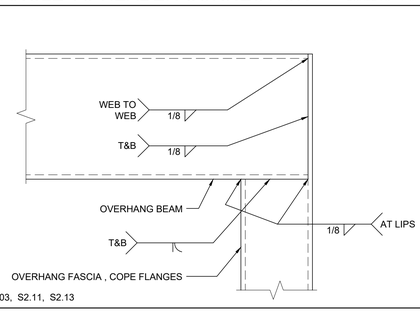
ROOF GUARDRAIL W/ PARAPET SCALE : 3/4" = 1'-0" 8





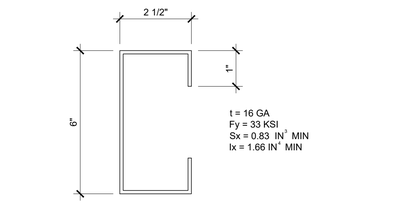
REF: S2.01 - S2.03 ; S211 - S213

DOUBLE PURLINS AT HVAC SCALE: 1 1/2" = 1'-0" 9



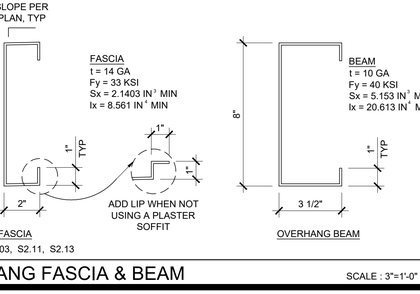
REF: S2.01, S2.03, S2.11, S2.13

OVERHANG FASCIA TO BEAM CONNECTION SCALE : 6"=1'-0" 3



REF: S2.01, S2.03, S2.11, S2.13, S3.01

SOFFIT JOIST SCALE : 6"=1'-0" 4



REF: S2.01, S2.03, S2.11, S2.13

OVERHANG FASCIA & BEAM SCALE : 3"=1'-0" 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF FRAMING DETAILS

REVISIONS

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PHONE: 951-943-5393 FAX: 951-943-2211

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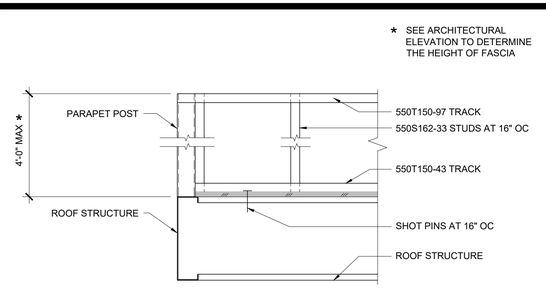
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24975
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

S-2.60

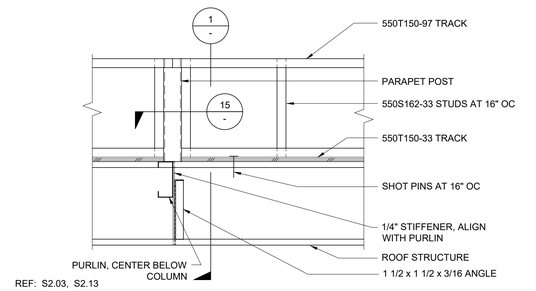


REF: S2.03, S2.13

16 PARAPET STEEL METAL FRAMING AT CORNER SCALE : 1" = 1'-0"

11 NOT USED

6 TUBE STEEL TO BEAM AT SIDEWALL SCALE : 3"=1'-0" 1

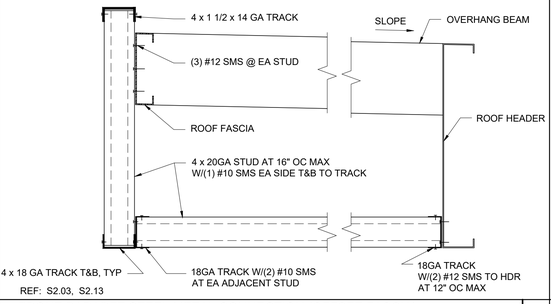


REF: S2.03, S2.13

17 PARAPET STEEL METAL FRAMING AT SIDEWALL SCALE : 1"=1'-0"

12 NOT USED

7 PARAPET POST WITH SLEEVE OPTION SCALE : 1 1/2"=1'-0" 2

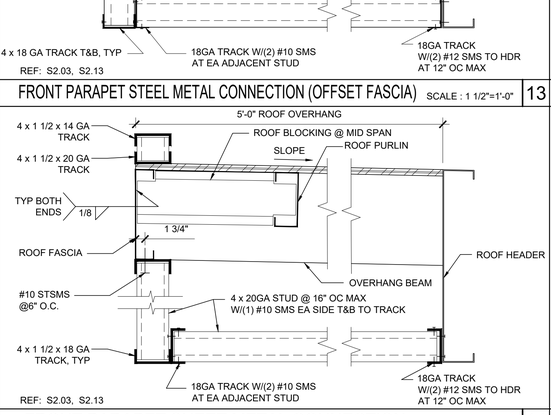


REF: S2.03, S2.13

18 FRONT PARAPET STEEL METAL CONNECTION (OFFSET FASCIA) SCALE : 1 1/2"=1'-0"

13 NOT USED

8 PARAPET POST CONNECTION AT MODLINE SCALE : 1 1/2"=1'-0" 3

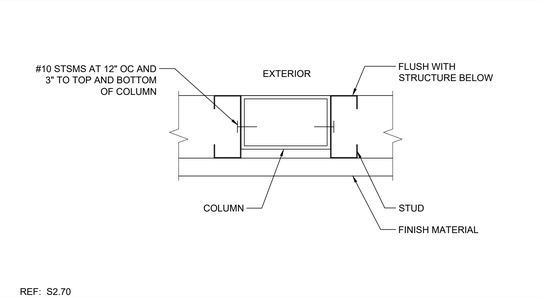


REF: S2.03, S2.13

19 FRONT PARAPET SHEET METAL CONNECTION SCALE : 1 1/2"=1'-0"

14 NOT USED

9 PARAPET POST CONNECTION AT INTERIOR SCALE : 1 1/2"=1'-0" 4



REF: S2.70

20 PARAPET SHEET METAL FRAMING TO TUBE STEEL SCALE : 3"=1'-0"

15 NOT USED

10 OVERHANG FASCIA/BEAM @ PARAPET SCALE : 6"=1'-0" 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF FRAMING DETAILS
PARAPET

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

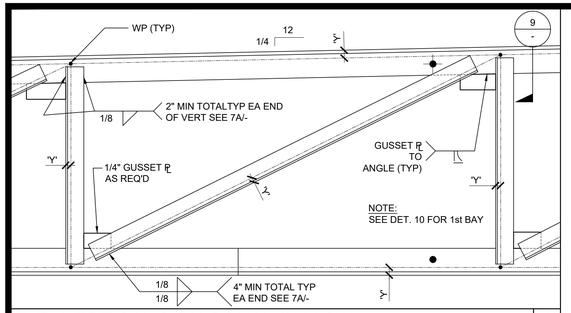
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 29075 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

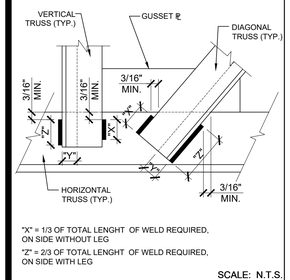
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
S-2.70



TYP. VERTICAL & DIAGONAL (U.N.O.)

SCALE: 1 1/2" = 1' - 0" | 6

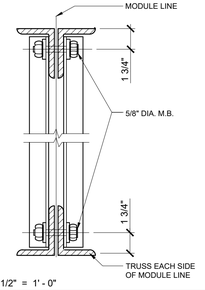


"X" = 1/3 OF TOTAL LENGHT OF WELD REQUIRED, ON SIDE WITHOUT LEG

"Z" = 2/3 OF TOTAL LENGHT OF WELD REQUIRED, ON SIDE WITH LEG

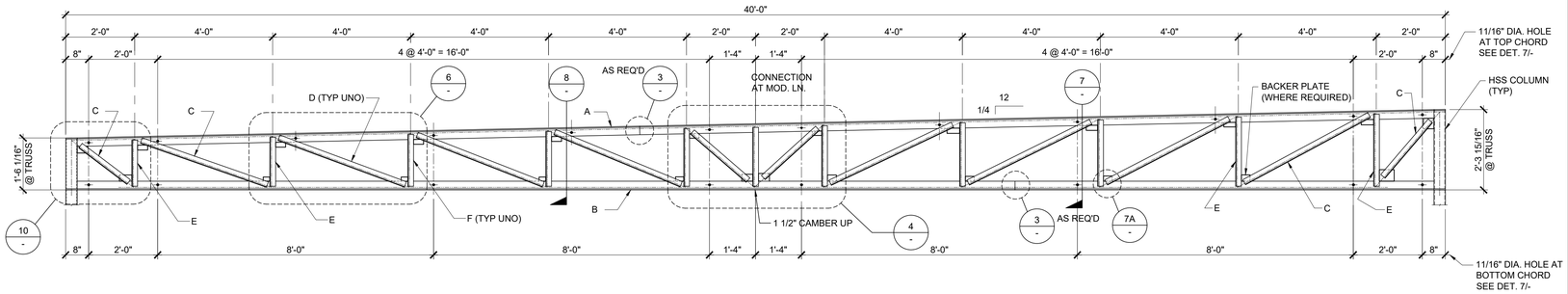
SCALE: N.T.S.

FILLET WELD TERMINATION | 7A



SCALE: 1 1/2" = 1' - 0"

CONNECTION @ MODULE LINE | 7



NOTES:

1. SEE SHEET S-0.1 FOR STEEL GRADES.
2. REQUIRED ELECTRODES FOR ALL WELDS TO BE E-70
3. VOLTAGE & AMPERAGE SHALL BE PER ELECTRODE MANUFACTURERS SPECIFICATIONS
4. BOLTS AND NUTS GRADES TO BE A307

REF: ROOF FRAMING PLAN

TRUSS MARK:			Y=
A	TOP CHORD	4" x 4" x 3/8" (LLV)	1 1/4
B	BOTTOM CHORD	4" x 4" x 3/8" (LLV)	1 1/4
C	END DIAGONALS (2 EACH END)	2" x 2" x 10 GA.	9/16
D	TYPICAL DIAGONALS	1 1/2" x 1 1/2" x 10 GA.	7/16
E	END VERTICAL (2 EACH END)	1 1/2" x 1 1/2" x 10 GA.	7/16
F	TYPICAL VERTICALS	1 1/2" x 1 1/2" x 10 GA.	7/16

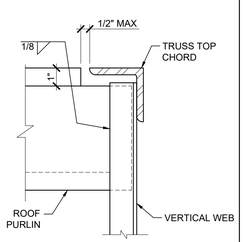
NOTE; "Y" MAY BE 1/4" MAX. OUT OF ALIGNMENT

MONO SLOPE TRUSS

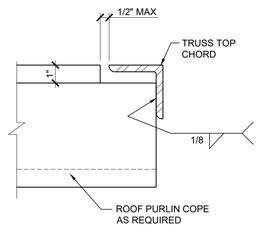
SCALE: 1/2" = 1' - 0" | 1

BRACE @ TRUSS & MATING LINE

SCALE: 1 1/2" = 1' - 0" | 8

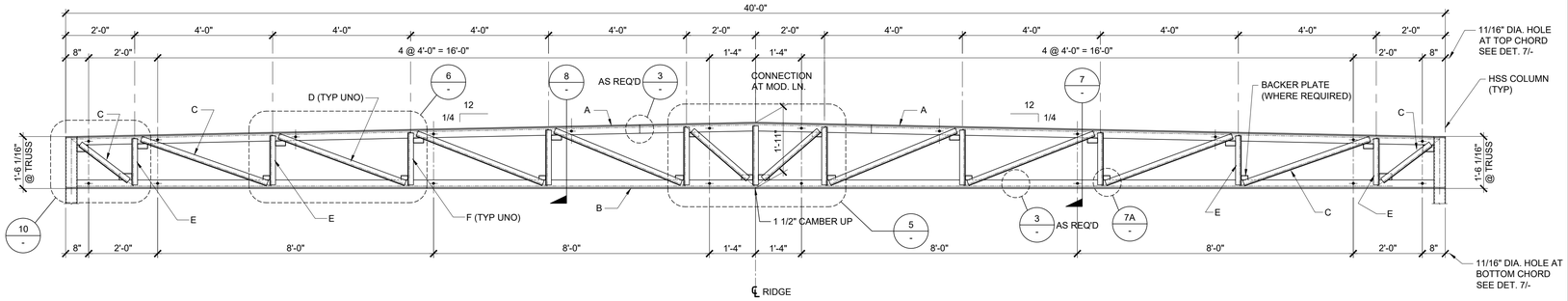


SCALE: 3" = 1' - 0"



PURLIN TO VERT. ANGLE CONN. | 9B

PURLIN TO TRUSS CONN. SCALE: 3"=1'- 0" | 9A



NOTES:

1. SEE SHEET S-0.1 FOR STEEL GRADES.
2. REQUIRED ELECTRODES FOR ALL WELDS TO BE E-70
3. VOLTAGE & AMPERAGE SHALL BE PER ELECTRODE MANUFACTURERS SPECIFICATIONS
4. BOLTS AND NUTS GRADES TO BE A307

REF: ROOF FRAMING PLAN

TRUSS MARK:			Y=
A	TOP CHORD	4" x 4" x 3/8" (LLV)	1 1/4
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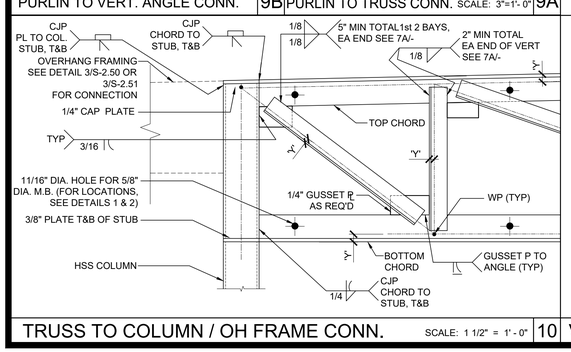
E	END VERTICAL (2 EACH END)	1 1/2" x 1 1/2" x 10 GA.	7/16
F	TYPICAL VERTICALS	1 1/2" x 1 1/2" x 10 GA.	7/16

NOTE; "Y" MAY BE 1/4" MAX. OUT OF ALIGNMENT

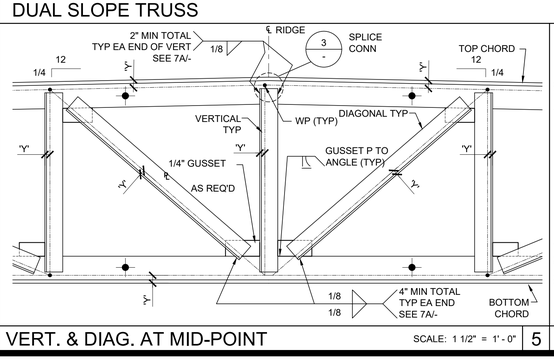
DUAL SLOPE TRUSS

SCALE: 1/2" = 1' - 0" | 2



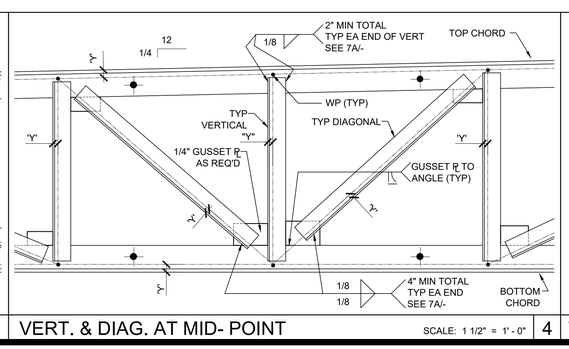
TRUSS TO COLUMN / OH FRAME CONN.

SCALE: 1 1/2" = 1' - 0" | 10



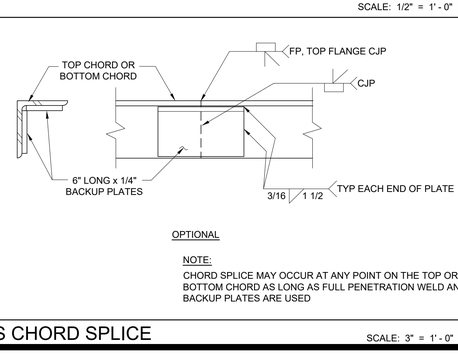
VERT. & DIAG. AT MID-POINT

SCALE: 1 1/2" = 1' - 0" | 5



VERT. & DIAG. AT MID- POINT

SCALE: 1 1/2" = 1' - 0" | 4



OPTIONAL

NOTE:

CHORD SPLICE MAY OCCUR AT ANY POINT ON THE TOP OR BOTTOM CHORD AS LONG AS FULL PENETRATION WELD AND BACKUP PLATES ARE USED

TRUSS CHORD SPLICE

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ROOF FRAMING DETAILS
TRUSS

REVISIONS

1
2
3
4
5

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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

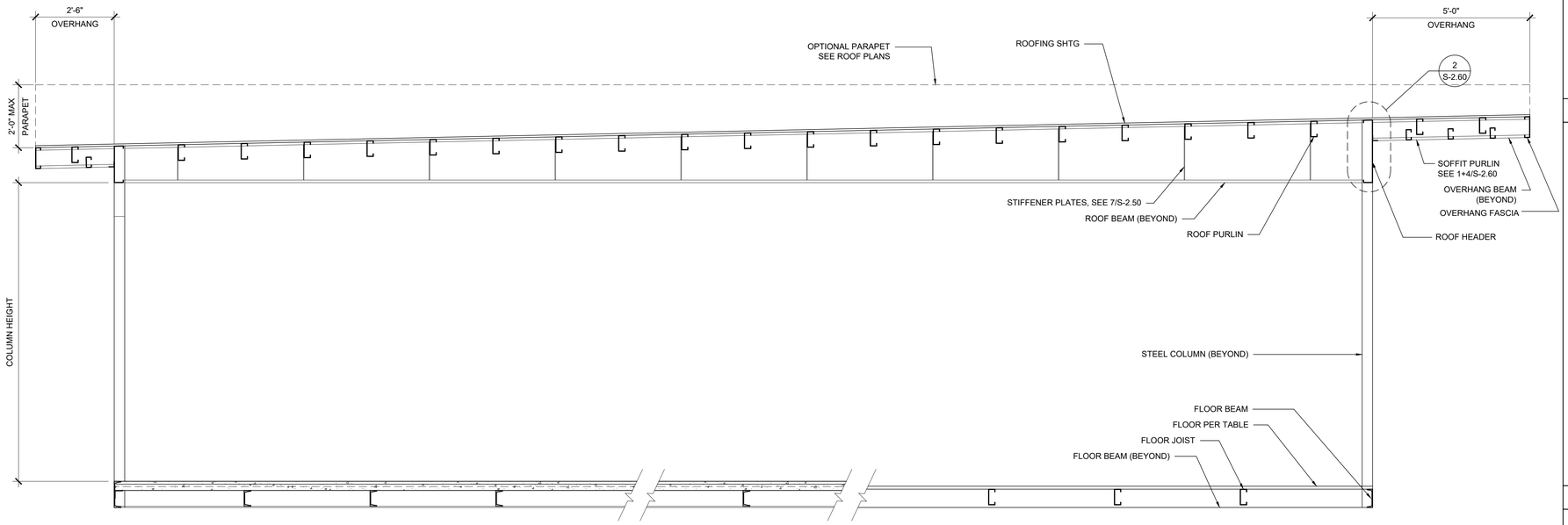
REGISTERED PROFESSIONAL ENGINEER JOHN 'N STARLING 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

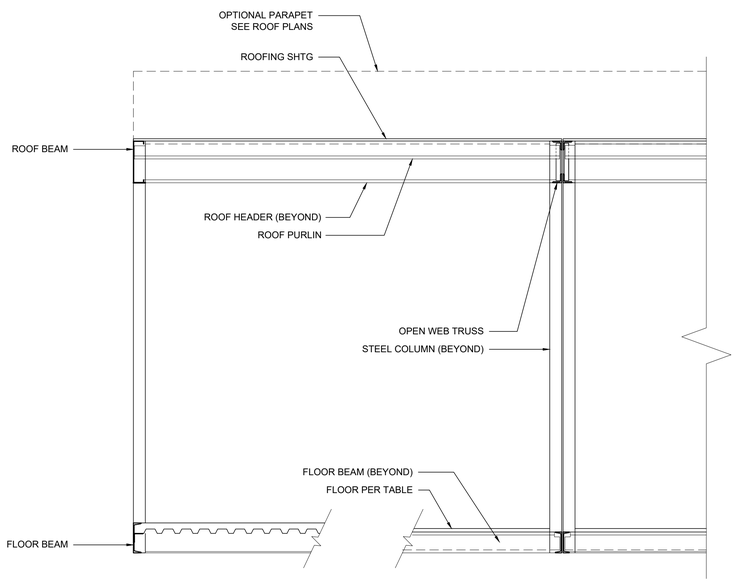
P.C. SHEET NUMBER

S-2.90



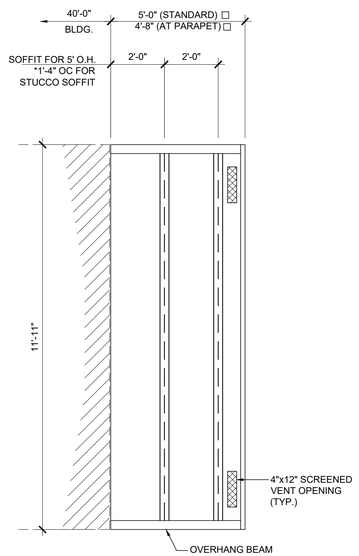
BUILDING SECTION

SCALE: 1/2" = 1'-0" | 1



BUILDING SECTION

SCALE: 1/2" = 1'-0" | 3



ENCL. SOFFIT PLAN-OPT.

SCALE: 3/8" = 1'-0" | 2

NOTES

1. ALL INFORMATION SUCH AS DETAILS, SECTIONS, CONNECTIONS, AND MATERIAL ATTACHMENT SHALL BE REFERENCED FROM OTHER SHEETS WITHIN THIS SET WHERE IT APPLIES.

FLOOR CONSTRUCTION

- ☐ WOOD FLOOR
- ☐ CONCRETE FLOOR

HSS COLUMN SCHEDULE

COLUMN HEIGHT	NO PARAPET	ROOF W/ PARAPET
☐ 9'-0"	☐ 6 x 6 x 1/4	☐ 6 x 6 x 1/4 ✶
☐ 9'-6"	☐ 6 x 6 x 1/4	☐ 6 x 6 x 1/4 ✶
☐ 10'-0"	☐ 6 x 6 x 1/4	☐ 6 x 6 x 1/4 ✶
☐ 10'-6"	☐ 6 x 6 x 1/4	☐ 6 x 6 x 1/4 ✶

FLOOR BEAM

C7x9.8 (TYP) PERIMETER BEAM FOR WOOD FLOOR
✶ C9x13.4 PERIMETER BEAM FOR WOOD FLOOR
C10x15.3 TYP. PERIMETER BEAM FOR CONCRETE FLOOR

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

BUILDING SECTIONS
MONO SLOPE

REVISIONS

1 2 3 4 5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
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FOR CONSTRUCTION IS REQUIRED

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APP. 04-121999 INC:
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DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

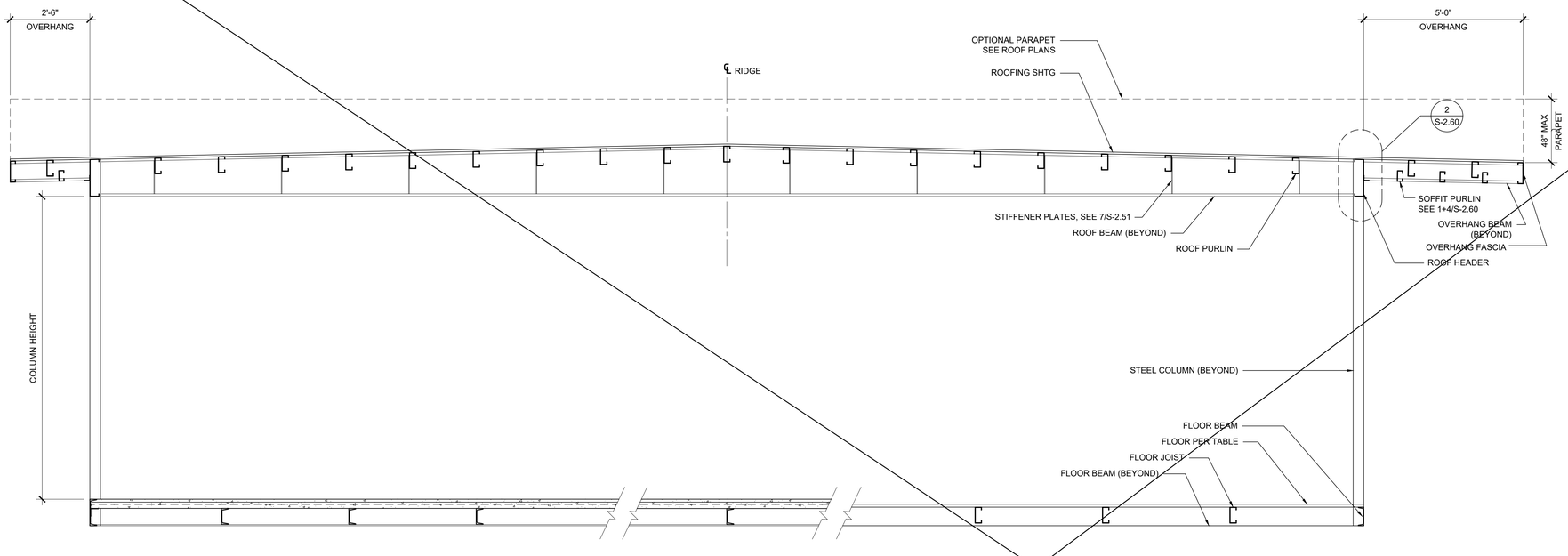
REGISTERED PROFESSIONAL ENGINEER JOHN W STARUCH 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

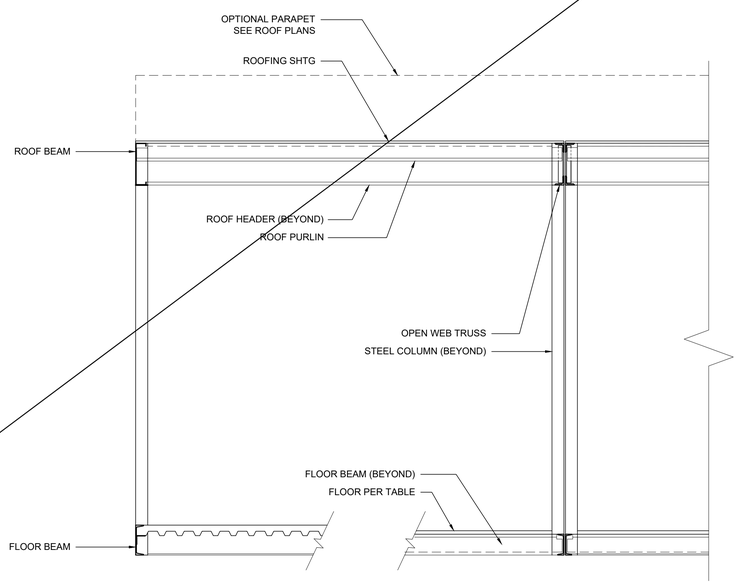
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

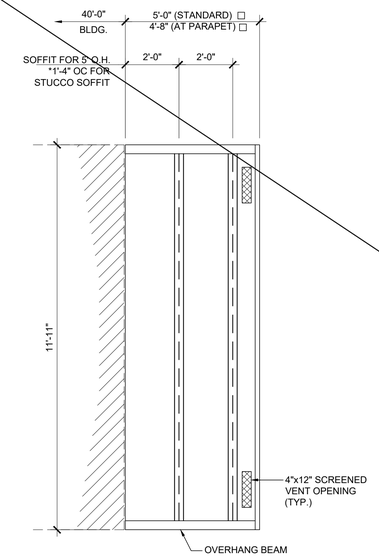
S-3.01



BUILDING SECTION — SCALE: 1/2" = 1'-0" — 1



BUILDING SECTION — SCALE: 1/2" = 1'-0" — 3



ENCL. SOFFIT PLAN-OPT. — SCALE: 3/8" = 1'-0" — 2

NOTES

1. ALL INFORMATION SUCH AS DETAILS, SECTIONS, CONNECTIONS, AND MATERIAL ATTACHMENT SHALL BE REFERENCED FROM OTHER SHEETS WITHIN THIS SET WHERE IT APPLIES.

FLOOR CONSTRUCTION

- ☐ WOOD FLOOR
- ☐ CONCRETE FLOOR

HSS COLUMN SCHEDULE

COLUMN HEIGHT	NO PARAPET	ROOF W/ PARAPET
☐ 9'-0"	☐ 6 x 6 x 1/4	☐ 6 x 6 x 1/4 ✶
☐ 9'-6"	☐ 6 x 6 x 1/4	☐ 6 x 6 x 1/4 ✶
☐ 10'-0"	☐ 6 x 6 x 1/4	☐ 6 x 6 x 1/4 ✶
☐ 10'-6"	☐ 6 x 6 x 1/4	☐ 6 x 6 x 1/4 ✶

FLOOR BEAM

C7x9.8 (TYP) PERIMETER BEAM FOR WOOD FLOOR
✶ C9x13.4 PERIMETER BEAM FOR WOOD FLOOR
C10x15.3 TYP. PERIMETER BEAM FOR CONCRETE FLOOR

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

BUILDING SECTIONS
DUAL SLOPE

REVISIONS

1 2 3 4 5

PRE-CHECK (PC) DOCUMENT
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SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

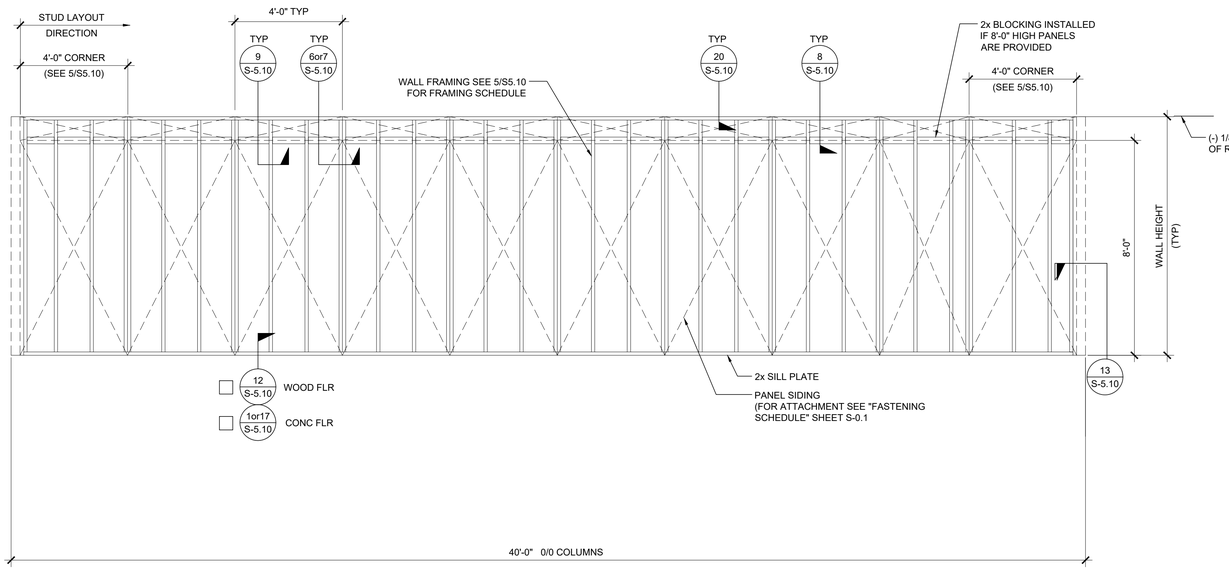
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

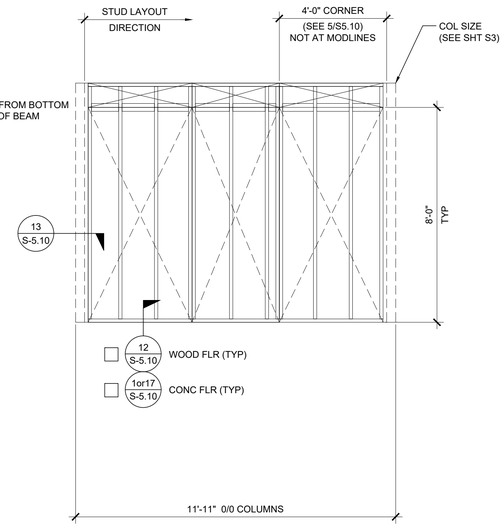
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

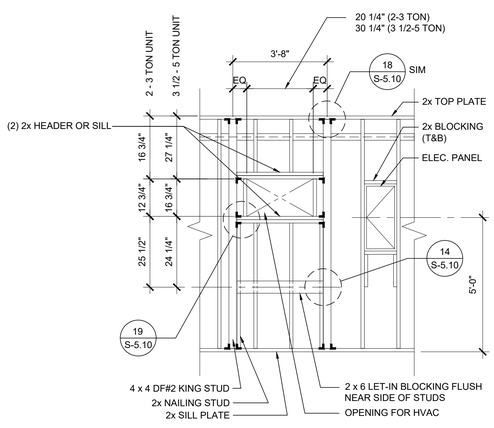
S-3.02



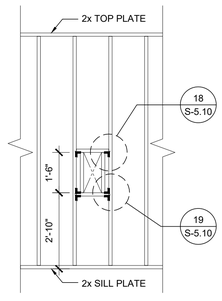
TYPICAL SIDE WALL



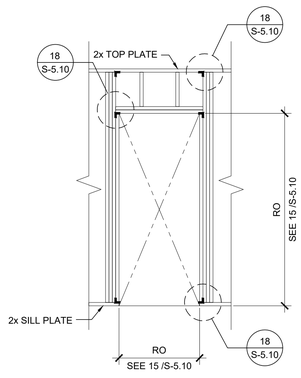
TYPICAL END WALL



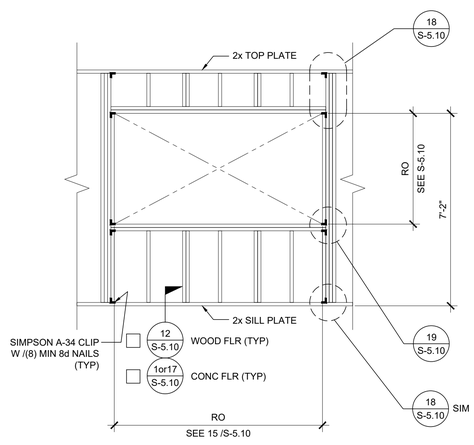
TYPICAL HVAC



FIRE EXTINGUISHER CABINET BLOCKOUT



TYPICAL DOOR



TYPICAL WINDOW

FRAMING ELEVATIONS

SCALE: 3/8" = 1' - 0" | 1

NOTES

WALL HEIGHT SCHEDULE

COLUMN HEIGHT	9'-0"	9'-6"	10'-0"	10'-6"
☐ CONCRETE FLOOR	8'-11 7/8"	9'-5 7/8"	9'-11 7/8"	10'-5 7/8"
☐ WOOD FLOOR	8'-10 3/4"	9'-4 3/4"	9'-10 3/4"	10'-4 3/4"

NOTE:
ALL EXTERIOR WALL FRAMING SHALL BE 2x6 (MIN).
EXCEPTION: UNCONDITIONED RESTROOM MODULES MAY UTILIZE 2x4 FRAMING.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

WALL FRAMING ELEVATIONS
WOOD STUDS

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
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SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

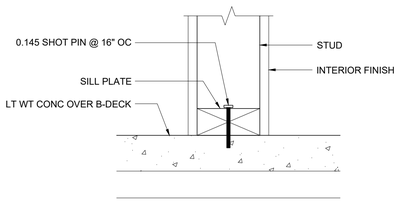
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24175 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

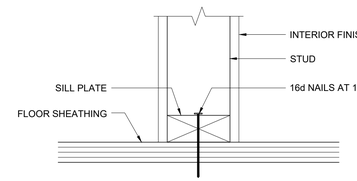
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

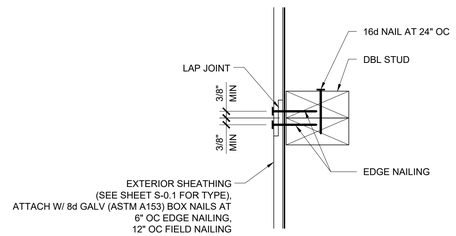
S-5.00



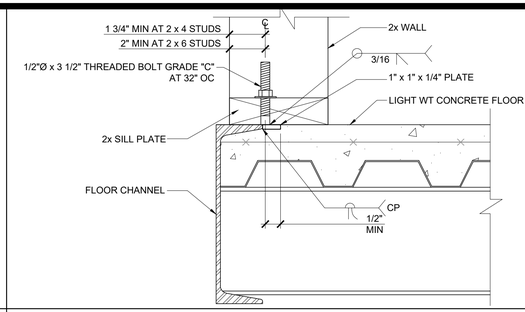
PARTITION CONNECTION AT CONC FLOOR SCALE : 3"=1'-0" 16



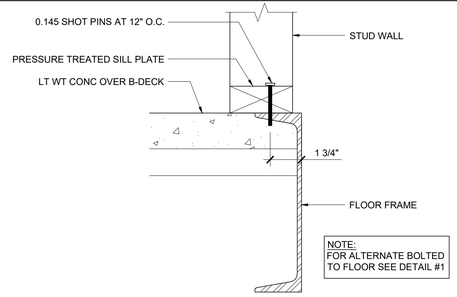
PARTITION CONNECTION AT WOOD FLOOR SCALE : 3"=1'-0" 11



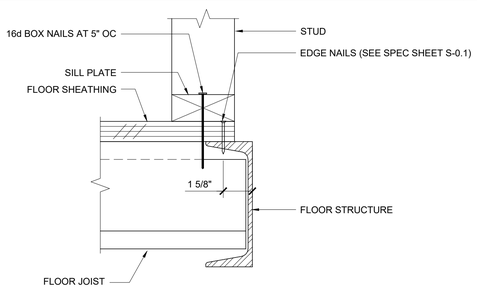
VERTICAL SHEATHING LAP JOINT SCALE : 3"=1'-0" 6



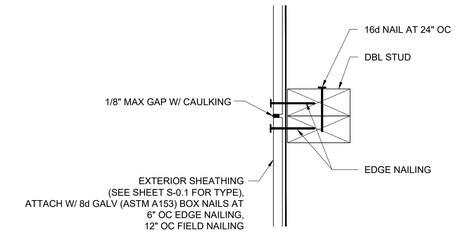
OPTIONAL BOLTED WALL TO FLOOR SCALE : NTS 1



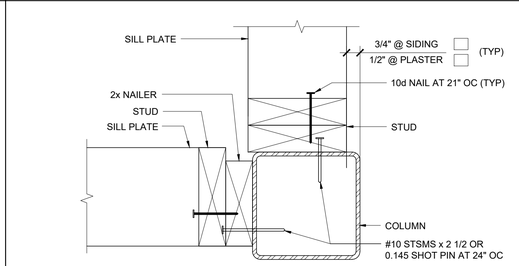
WALL SILL AT CONCRETE FLOOR SCALE : 3"=1'-0" 17



WALL SILL AT WOOD FLOOR SCALE : 3"=1'-0" 12



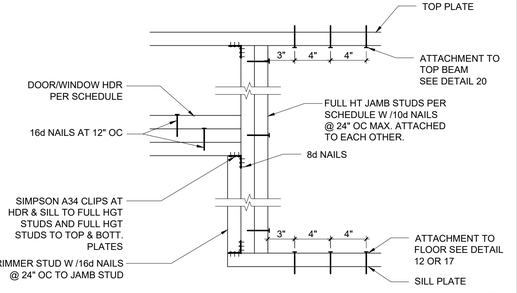
VERTICAL SHEATHING BUTT JOINT SCALE : 3"=1'-0" 7



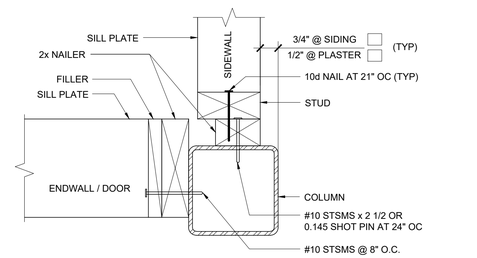
COLUMN AT ENDWALL (2x6) SCALE : 3"=1'-0" 2

COLUMN HEIGHT	OPENING SIZE	EXT FINISH	HEADER				SILL				FULL HEIGHT KING STUD			
			NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE
LESS THAN 9'-6"	3070	NO PLASTER	(1)	2X4	HF	#2		N/A			(2)	2X4	HF	#2
		NO PLASTER (OPT)	(1)	2X4	DF	#2		N/A			(2)	2X4	DF	#2
		PLASTER	(2	2X4	DF	#2		N/A			(3)	2X4	DF	#2
COLUMN HEIGHT	OPENING SIZE	EXT FINISH	HEADER				SILL				FULL HEIGHT KING STUD			
			NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE
9'-6" TO 10'-6"	3070	NO PLASTER	(1)	2X4	HF	#2		N/A			(2)	2X4	HF	#2
		NO PLASTER (OPT)	(1)	2X4	DF	#2		N/A			(2)	2X4	DF	#2

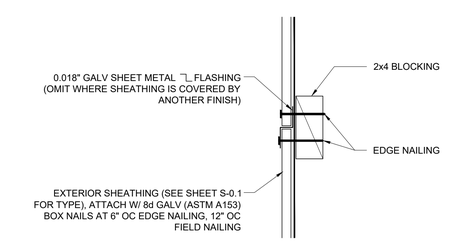
NOTE:
OPENINGS LARGER THAN 3'x7' ARE NOT PERMITTED IN 2x4 WALLS WITH PLASTER FINISH.



DOOR/WINDOW HEADER AND JAMB SCALE : 1 1/2"=1'-0" 18



COLUMN AT ENDWALL (2x4) SCALE : 3"=1'-0" 13



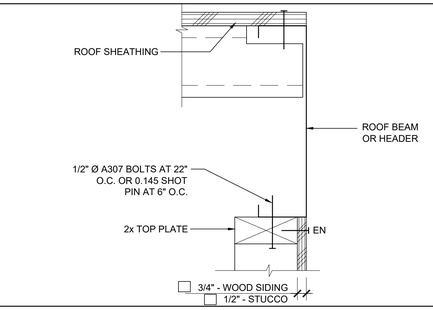
HORIZONTAL SHEATHING JOINT SCALE : 3"=1'-0" 8

COLUMN HEIGHT	EXT FINISH	WOOD WALL FRAMING					4" CORNER OF WOOD WALL FRAMING (ZONE 5)				
		NUMBER	SIZE	LUMBER	TYPE	OC	NUMBER	SIZE	LUMBER	TYPE	OC
LESS THAN 9'-6"	NO PLASTER	(1)	2X4	HF	#2	16" OC	(1)	2X4	HF	#2	16" OC
	NO PLASTER (OPT)	(1)	2X4	DF	#2	16" OC	(1)	2X4	DF	#2	16" OC
	PLASTER	(1)	2X4	DF	#2	16" OC	(1)	2X4	DF	#2	10" OC
9'-6" TO 10'-6"	NO PLASTER	(1)	2X4	HF	#2	16" OC	(1)	2X4	HF	#2	12" OC
	NO PLASTER (OPT)	(1)	2X4	DF	#2	16" OC	(1)	2X4	DF	#2	16" OC

2x4 OPENING STUDS SCHEDULE 4

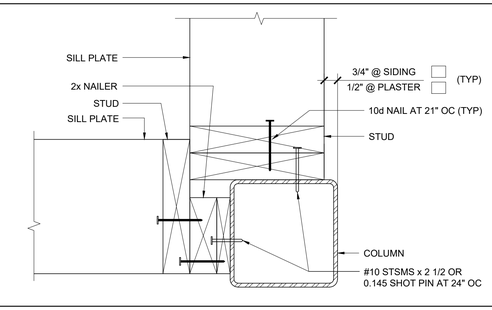
NOTES:
1. 2X4 WALL FRAMING NOT PERMITTED FOR STUCCO FINISH WALLS OVER 9'-0" TALL
2. 2X4 EXTERIOR WALL FRAMING IS ONLY PERMITTED AT UNCONDITIONED RESTROOM MODULES
3. 2X4 INTERIOR WALLS SHALL BE HF #2 (OR BETTER) AND SHALL BE SPACED NOT MORE THAN 24" OC MAX

2x4 WALL FRAMING SCHEDULE 5

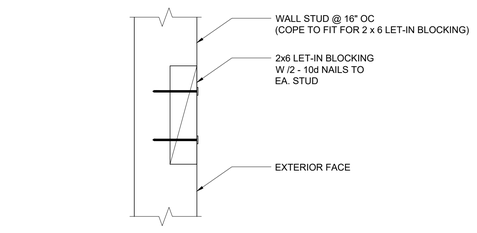


TOP PLATE AT ROOF BEAM SCALE : 3" = 1'-0" 20

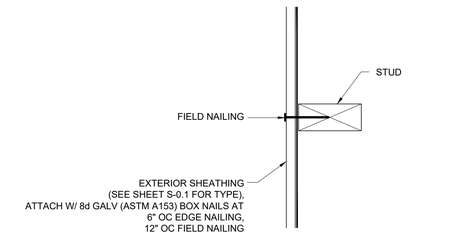
NOT USED 15



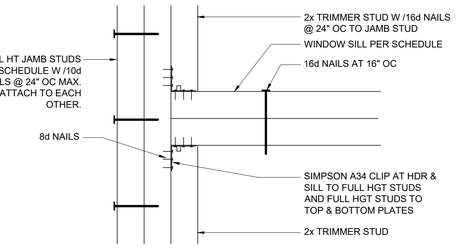
COLUMN AT ENDWALL (2x8) SCALE : 3"=1'-0" 10



LET-IN BLOCK ATTACHMENT SCALE : 3"=1'-0" 14



SECTION AT SHEATHING TO STUD ATTACHMENT SCALE : 3"=1'-0" 9



WINDOW SILL AND JAMB SCALE : 3"=1'-0" 19

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

WALL FRAMING DETAILS
WOOD STUDS

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
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FOR CONSTRUCTION IS REQUIRED

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SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

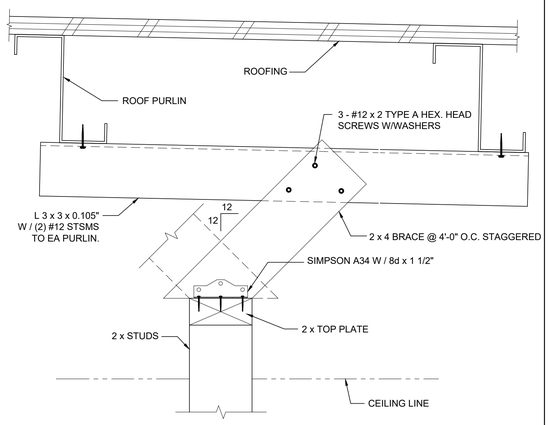
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARK
2023
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

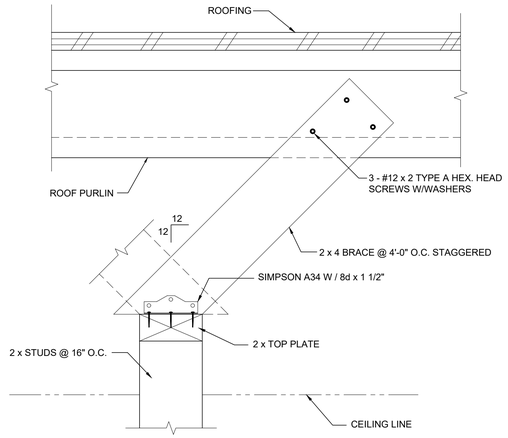
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
S-5.10



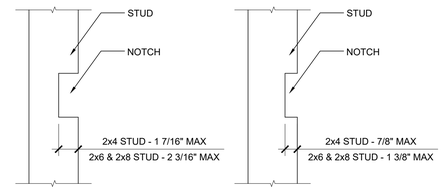
INTERIOR PARTITION

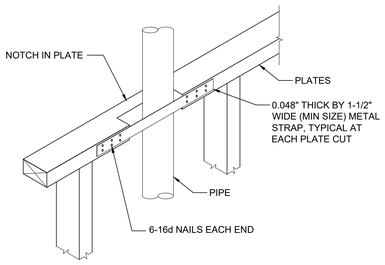
SCALE : 3" = 1'-0" | 14



INTERIOR PARTITION

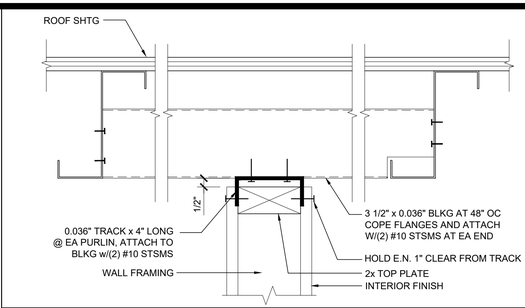
SCALE : 3" = 1'-0" | 12





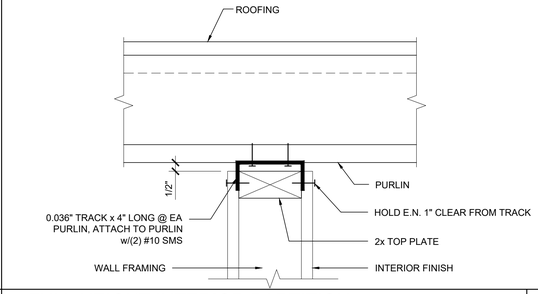
CUTTING AND NOTCHING

SCALE : 1 1/2" = 1'-0" | 7



FULL HEIGHT INTERIOR PARTITION

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



FULL HEIGHT INTERIOR PARTITION

SCALE : 3" = 1'-0" | 2

COLUMN HEIGHT	OPENING SIZE	EXT FINISH	HEADER				SILL				FULL HEIGHT KING STUD			
			NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE
UP TO 10'-6"	3070	ANY	(1)	2X6	HF	#2		N/A			(1)	2X6	HF	#2
		ANY (OPT)	(1)	2X6	DF	#2		N/A			(1)	2X6	DF	#2
	4070	ANY	(1)	2X6	HF	#2		N/A			(1)	2X6	HF	#2
		ANY (OPT)	(1)	2X6	DF	#2		N/A			(1)	2X6	DF	#2
	6040	ANY	(1)	2X6	HF	#2	(1)	2X6	HF	#2	(2)	2X6	HF	#2
		ANY (OPT)	(1)	2X6	DF	#2	(1)	2X6	DF	#2	(2)	2X6	DF	#2
	8040	ANY	(1)	2X6	HF	#2	(1)	2X6	HF	#2	(2)	2X6	HF	#2
		ANY (OPT)	(1)	2X6	DF	#2	(1)	2X6	DF	#2	(2)	2X6	DF	#2

2x6 OPENING STUDS SCHEDULE

19

COLUMN HEIGHT	OPENING SIZE	EXT FINISH	HEADER				SILL				FULL HEIGHT KING STUD			
			NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE
UP TO 10'-6"	3070	NO PLASTER	(1)	2X8	HF	#2		N/A			(1)	2X8	HF	#2
		NO PLASTER (OPT)	(1)	2X8	DF	#2		N/A			(1)	2X8	DF	#2
	4070	NO PLASTER	(1)	2X8	HF	#2		N/A			(1)	2X8	HF	#2
		NO PLASTER (OPT)	(1)	2X8	DF	#2		N/A			(1)	2X8	DF	#2
	6040	NO PLASTER	(1)	2X8	HF	#2	(1)	2X8	HF	#2	(1)	2X8	HF	#2
		NO PLASTER (OPT)	(1)	2X8	DF	#2	(1)	2X8	DF	#2	(1)	2X8	DF	#2
	8040	NO PLASTER	(1)	2X8	HF	#2	(1)	2X8	HF	#2	(1)	2X8	HF	#2
		NO PLASTER (OPT)	(1)	2X8	DF	#2	(1)	2X8	DF	#2	(1)	2X8	DF	#2

2x8 OPENING STUDS SCHEDULE

14

COLUMN HEIGHT	EXT FINISH	WOOD WALL FRAMING					4" CORNER OF WOOD WALL FRAMING (ZONE 5)				
		NUMBER	SIZE	LUMBER	TYPE	OC	NUMBER	SIZE	LUMBER	TYPE	OC
UP TO 10'-6"	NO PLASTER	(1)	2X6	HF	#2	16" OC	(1)	2X6	HF	#2	16" OC
	NO PLASTER (OPT)	(1)	2X6	DF	#2	16" OC	(1)	2X6	DF	#2	16" OC
	W/ PLASTER	(1)	2X6	HF	#2	16" OC	(1)	2X6	HF	#2	16" OC
	W/ PLASTER (OPT)	(1)	2X6	DF	#2	16" OC	(1)	2X6	DF	#2	16" OC

NOTE:
1. INTERIOR WALLS MAY BE 2x6 HF #2 (OR BETTER) SPACED AT NOT MORE THAN 24" OC.

2x6 WALL FRAMING SCHEDULE

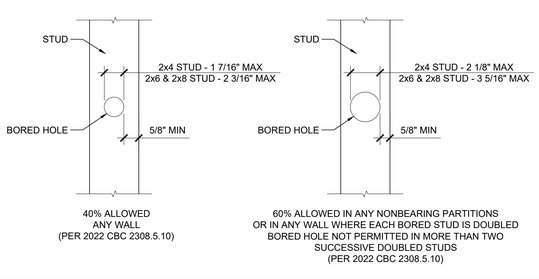
20

COLUMN HEIGHT	EXT FINISH	WOOD WALL FRAMING					4" CORNER OF WOOD WALL FRAMING (ZONE 5)				
		NUMBER	SIZE	LUMBER	TYPE	OC	NUMBER	SIZE	LUMBER	TYPE	OC
UP TO 10'-6"	NO PLASTER	(1)	2X8	HF	#2	16" OC	(1)	2X8	HF	#2	16" OC
	NO PLASTER (OPT)	(1)	2X8	DF	#2	16" OC	(1)	2X8	DF	#2	16" OC
	W/ PLASTER	(1)	2X8	HF	#2	16" OC	(1)	2X8	HF	#2	16" OC
	W/ PLASTER (OPT)	(1)	2X8	DF	#2	16" OC	(1)	2X8	DF	#2	16" OC

NOTES:
1. EXTERIOR STUD SPACING SHOWN IN THE TABLE ABOVE IS TYPICAL, HOWEVER, 2x8 STUDS (HF #2 OR BETTER) MAY BE SPACED AT NOT MORE THAN 24" OC.
2. INTERIOR WALLS MAY BE 2x6 HF #2 (OR BETTER) SPACED AT NOT MORE THAN 24" OC.

2x8 WALL FRAMING SCHEDULE

15



BORED HOLES

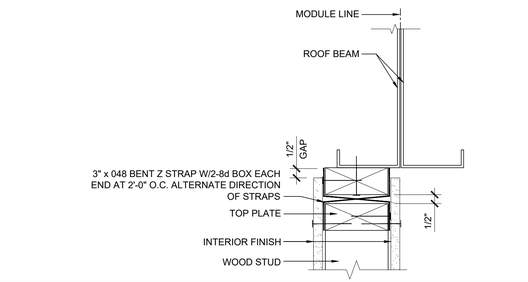
SCALE : 1 1/2" = 1'-0" | 8

NOT USED

9

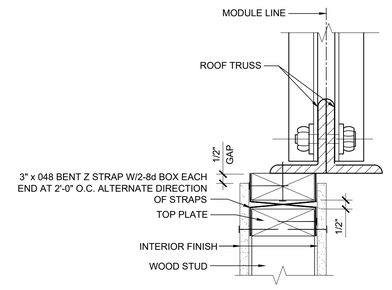
NOT USED

10



INTERIOR PARTITION WALL TO ROOF BEAM

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



INTERIOR PARTITION WALL TO ROOF TRUSS

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

NOT USED

5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

WALL FRAMING DETAILS
WOOD STUDS

REVISIONS

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Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

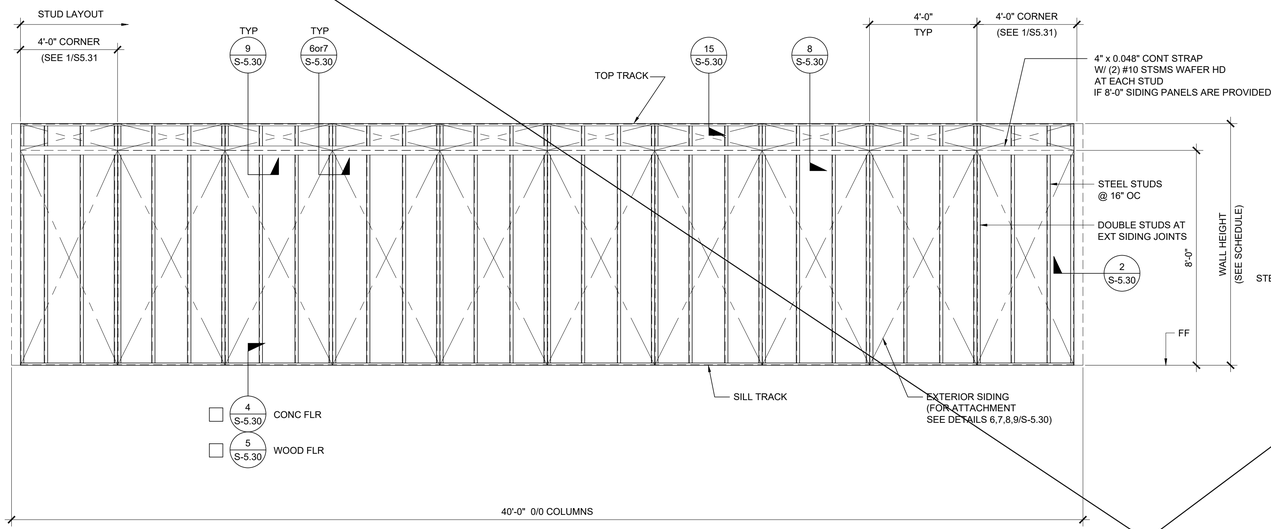
REGISTERED PROFESSIONAL ENGINEER JOHN W STARUCH 29705 STRUCTURAL STATE OF CALIFORNIA

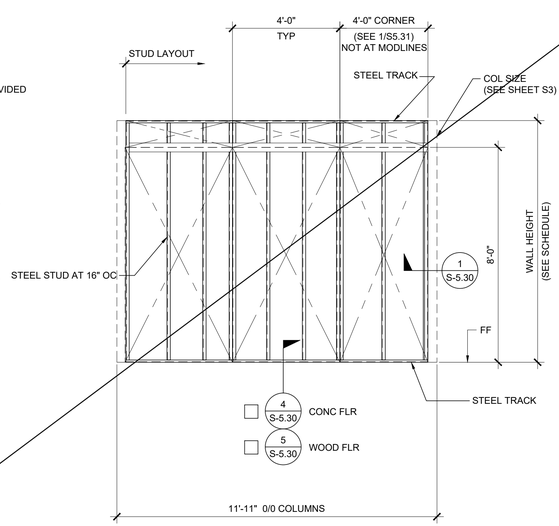
SILVER CREEK INDUSTRIES
24' x 40' PC

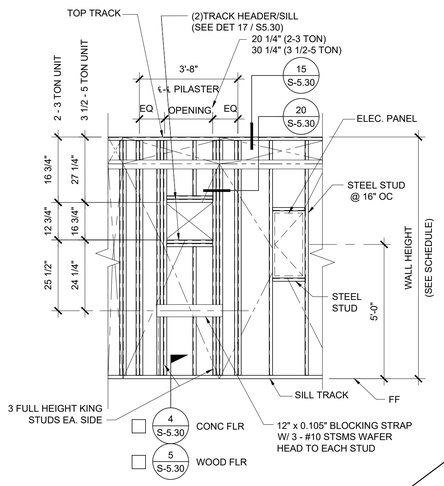
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

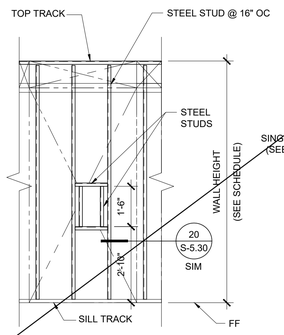
S-5.11



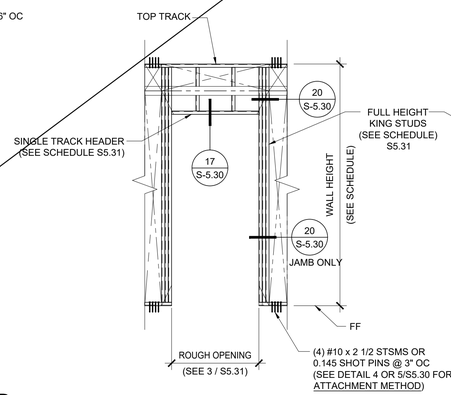




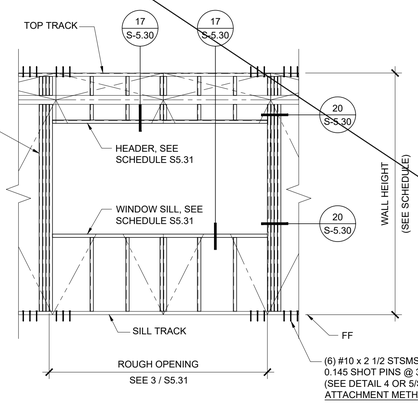
TYPICAL HVAC



FIRE EXTINGUISHER
CABINET BLOCKOUT



TYPICAL DOOR



TYPICAL WINDOW

NOTES

1. ALL STEEL SECTION STUDS CONFORM TO ASTM A446 GALVANIZED SHEETS HAVE BASE METAL THICKNESS AS INDICATED WITH COATING PER ASTM A525. (REFER TO DETAIL 18/S-5.30 FOR PROPERTIES)
2. FOR TRACK SPLICE DETAIL, SEE 19/S5.30

WALL HEIGHT SCHEDULE

COLUMN HEIGHT	☐ 9'-0"	☐ 9'-6"	☐ 10'-0"	☐ 10'-6"
☐ CONCRETE FLOOR	8'-11 7/8"	9'-5 7/8"	9'-11 7/8"	10'-5 7/8"
☐ WOOD FLOOR	8'-10 3/4"	9'-4 3/4"	9'-10 3/4"	10'-4 3/4"

NOTE:
ALL EXTERIOR WALL FRAMING SHALL BE 5.5" (MIN).
EXCEPTION: UNCONDITIONED RESTROOM MODULES MAY UTILIZE 3.5" FRAMING.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

WALL FRAMING ELEVATIONS
STEEL STUDS

REVISIONS
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MODULAR BUILDING DESIGN PROFESSIONAL

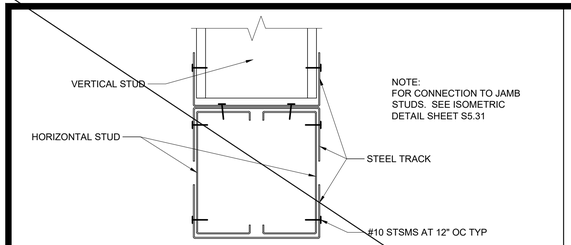
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARUCH
24575
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

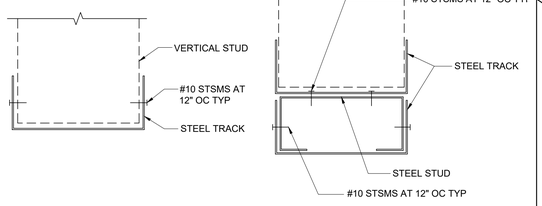
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

S-5.20



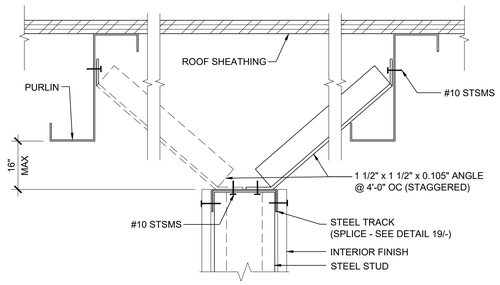
3 -TRACK HEADER



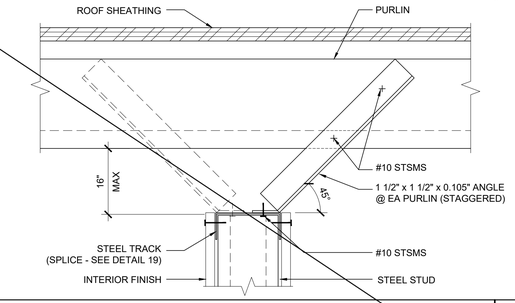
ONE TRACK HEADER

TWO TRACK HEADER

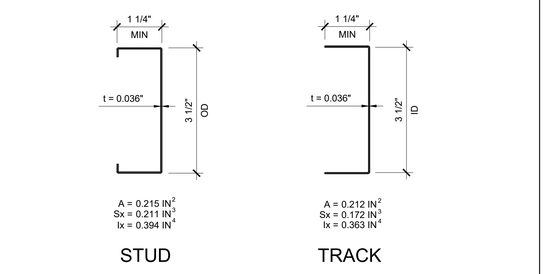
TYPICAL OPENING SILL AND HEADER SECTION SCALE : 6"=1'-0" | 17



INTERIOR PARTITION - BETW. PURLINS SCALE : 3"=1'-0" | 11

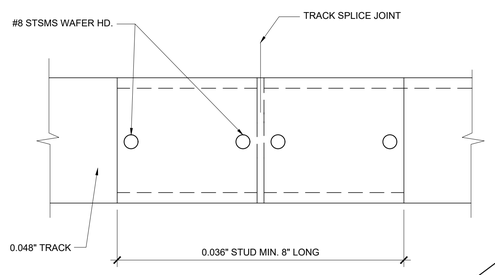


INTERIOR PARTITION SCALE : 3"=1'-0" | 12

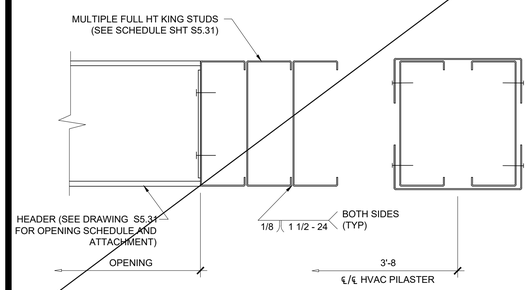


STUD TRACK

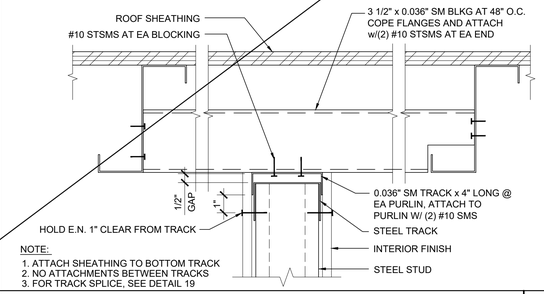
STUD AND TRACK SCALE : 6"=1'-0" | 18



TOP TRACK SPLICE DETAIL SCALE : 6" = 1'-0" | 19

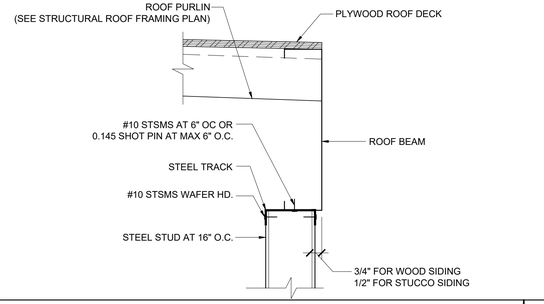


JAMB, SILL OR HEADER CONNECTIONS SCALE : 6"=1'-0" | 20

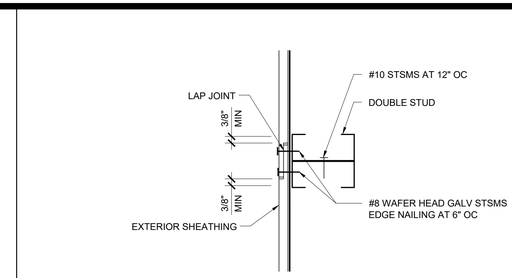


NOTE:
1. ATTACH SHEATHING TO BOTTOM TRACK
2. NO ATTACHMENTS BETWEEN TRACKS
3. FOR TRACK SPLICE, SEE DETAIL 19

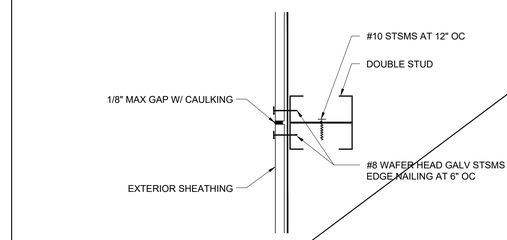
FULL INTERIOR PARTITION - BETW. PURLINS SCALE : 3"=1'-0" | 14



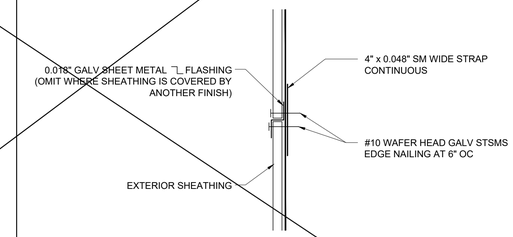
EXTERIOR WALL TO ROOF BEAM SCALE : 1 1/2" = 1'-0" | 15



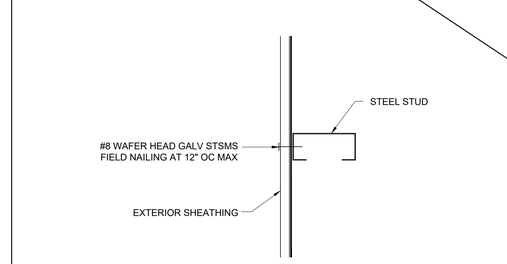
VERTICAL SHEATHING LAP JOINT SCALE : 3"=1'-0" | 6



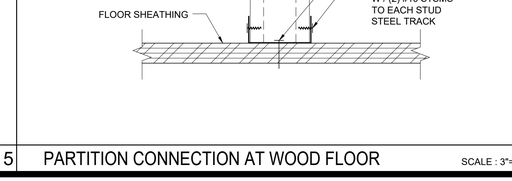
VERTICAL SHEATHING BUTT JOINT SCALE : 3"=1'-0" | 7



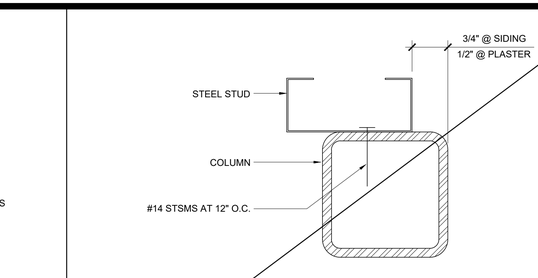
HORIZONTAL SHEATHING JOINT SCALE : 3"=1'-0" | 8



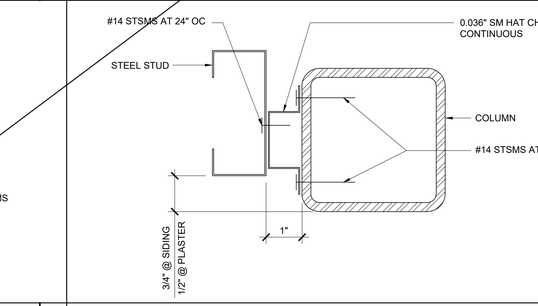
SECTION AT STUD SCALE : 3"=1'-0" | 9



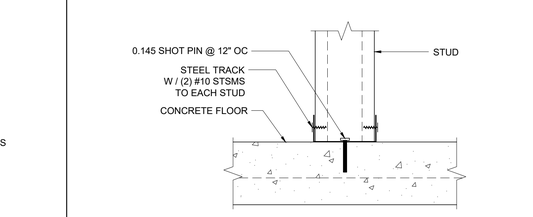
PARTITION CONNECTION AT WOOD FLOOR SCALE : 3"=1'-0" | 10



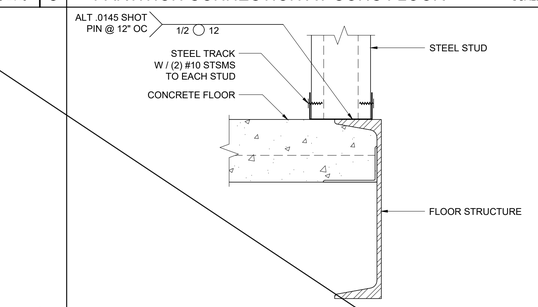
COLUMN AT ENDWALL SCALE : 6"=1'-0" | 1



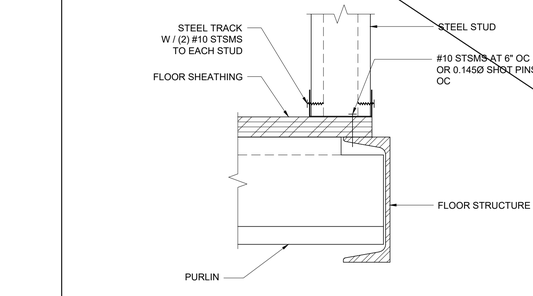
COLUMN AT SIDEWALL SCALE : 6"=1'-0" | 2



PARTITION CONNECTION AT CONC FLOOR SCALE : 3"=1'-0" | 3



WALL SILL AT CONCRETE FLOOR SCALE : 3"=1'-0" | 4



WALL SILL AT WOOD FLOOR SCALE : 3"=1'-0" | 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

WALL FRAMING DETAILS
STEEL STUDS

REVISIONS

1	
2	
3	
4	
5	

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARK
2975
STRUCTURAL
STATE OF CALIFORNIA

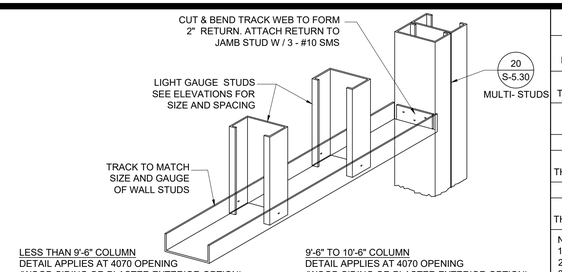
SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

S-5.30

16



LESS THAN 9'-6" COLUMN
DETAIL APPLIES AT 4070 OPENING
(WOOD SIDING OR PLASTER EXTERIOR OPTION)

DETAIL APPLIES AT 6040 OPENING
(WOOD SIDING EXTERIOR OPTION ONLY)

9'-6" TO 10'-6" COLUMN
DETAIL APPLIES AT 4070 OPENING
(WOOD SIDING OR PLASTER EXTERIOR OPTION)

DETAIL APPLIES AT 6040 OPENING
(WOOD SIDING EXTERIOR OPTION ONLY)

11 1 - TRACK HEADER (SIMILAR AT SILL)

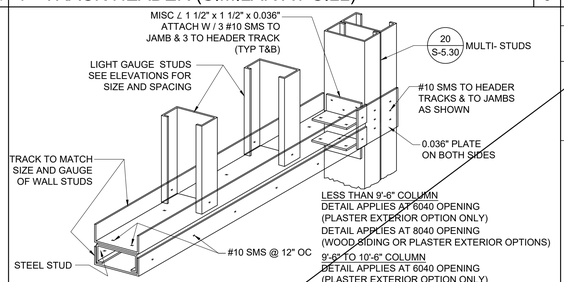
6 STEEL WALL FRAMING SCHEDULE

WALL HEIGHT	EXT FINISH	STEEL WALL FRAMING NO.	STEEL WALL FRAMING SIZE	STEEL WALL FRAMING OC	4' CORNER OF STEEL WALL FRAMING (ZONE 5) NO.	4' CORNER OF STEEL WALL FRAMING (ZONE 5) SIZE	4' CORNER OF STEEL WALL FRAMING (ZONE 5) OC
LESS THAN 9'-6"	NO PLASTER	(1)	350S162-33	16" OC	(1)	350S162-33	16" OC
	W/ PLASTER	(1)	350S162-33	16" OC	(1)	350S162-33	12" OC
9'-6" TO 10'-6"	NO PLASTER	(1)	350S162-33	16" OC	(1)	350S162-33	16" OC
	W/ PLASTER	(1)	350S162-33	12" OC	(2)	350S162-33	12" OC
LESS THAN 10'-6"	NO PLASTER	(1)	550S162-33	16" OC	(1)	550S162-33	16" OC
	W/ PLASTER	(1)	550S162-33	16" OC	(1)	550S162-33	16" OC
LESS THAN 10'-6"	NO PLASTER	(1)	750S162-33	16" OC	(1)	750S162-33	16" OC
	W/ PLASTER	(1)	750S162-33	16" OC	(1)	750S162-33	16" OC

NOTES:
1. INTERIOR FRAMING SHALL BE 350S162-33 SPACED AT NOT LESS THAN 24" O.C.
2. TOP AND BOTTOM TRACKS SHALL BE xxxT150-33 WHERE "xxx" MATCHES THE STUD WIDTH
3. 600S162-33 STUDS MAY BE USED IN LIEU OF 550S162-33 STUDS
4. 800S162-33 STUDS MAY BE USED IN LIEU OF 750S162-33 STUDS
5. 350S162-33 EXTERIOR FRAMING SHALL ONLY BE USED AT UNCONDITIONED RESTROOM MODULES

1

17



LESS THAN 9'-6" COLUMN
DETAIL APPLIES AT 6040 OPENING
(PLASTER EXTERIOR OPTION ONLY)
DETAIL APPLIES AT 8040 OPENING
(WOOD SIDING OR PLASTER EXTERIOR OPTIONS)

9'-6" TO 10'-6" COLUMN
DETAIL APPLIES AT 6040 OPENING
(PLASTER EXTERIOR OPTION ONLY)
DETAIL APPLIES AT 8040 OPENING
(WOOD SIDING OR PLASTER EXTERIOR OPTIONS)

12 2 - TRACK HEADER (SIMILAR AT SILL)

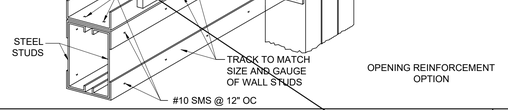
7 STEEL WALL OPENING SUPPORTS

COLUMN HEIGHT	OPENING SIZE	EXT FINISH	HEADER NO.	HEADER SIZE	SILL NO.	SILL SIZE	SILL TYPE	FULL HEIGHT KING STUD NO.	FULL HEIGHT KING STUD SIZE
10'-6" OR LESS	4070	NO PLASTER	(1)	350T150-33		N/A		(2)	350S162-33
		W/ PLASTER	(1)	350T150-33		N/A		(2)	350S162-33
	4070	ANY	(1)	550T150-33		N/A		(1)	550S162-33
	6040	ANY	(2)	550T150-33	(2)	3.5 x 1.25 x 036	TRACK	(2)	550S162-33
	8040	ANY	(2)	550T150-33	(2)	3.5 x 1.25 x 036	STUD	(2)	550S162-33

NOTES:
1. 550S162-33 STUDS MAY BE REPLACED WITH LARGER STUDS TO MATCH THE WALL FRAMING SIZE.
2. 550T150-33 TRACKS MAY BE REPLACED WITH LARGER TRACKS TO MATCH THE WALL FRAMING SIZE.

2

18



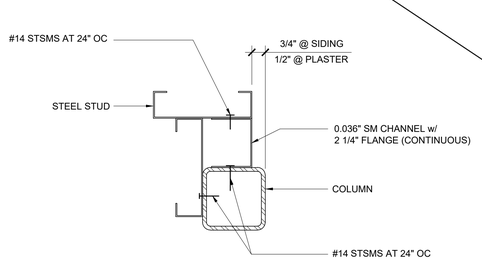
OPENING REINFORCEMENT OPTION

13 3 - TRACK HEADER (SIMILAR AT SILL)

8 NOT USED

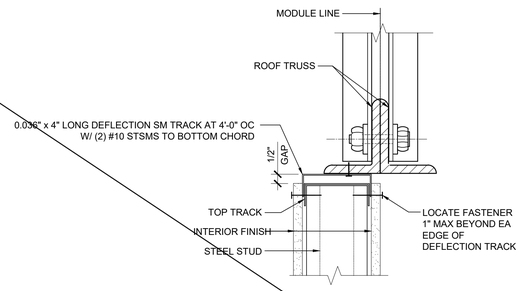
3

19



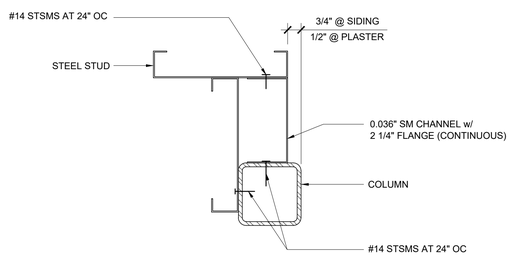
14 COLUMN AT CORNER @ 2x6 STUD WALL SCALE : 3"=1'-0"

9 INTERIOR PARTITION WALL TO ROOF TRUSS SCALE : 3"=1'-0"



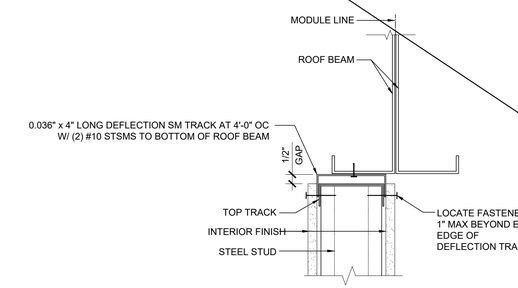
4

20



15 COLUMN AT CORNER @ 2x8 STUD WALL SCALE : 3"=1'-0"

10 INTERIOR PARTITION WALL TO ROOF BEAM SCALE : 3"=1'-0"



5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

WALL FRAMING DETAILS
STEEL STUDS

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JOHN W STARLIN
24775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

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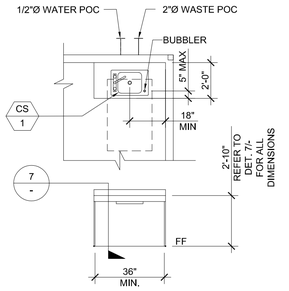
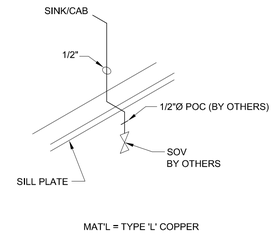
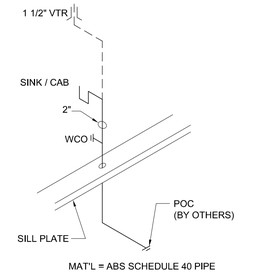


TYPICAL SINK CABINET 11



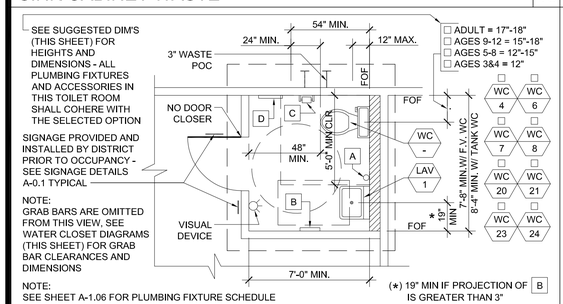
MAT'L = TYPE 'L' COPPER

SINK CABINET COLD WATER SUPPLY SCALE: N.T.S. 12

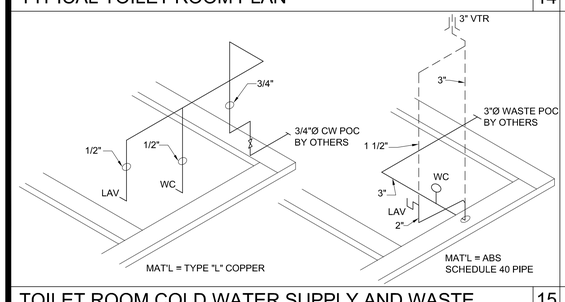


MAT'L = ABS SCHEDULE 40 PIPE

SINK CABINET WASTE 13



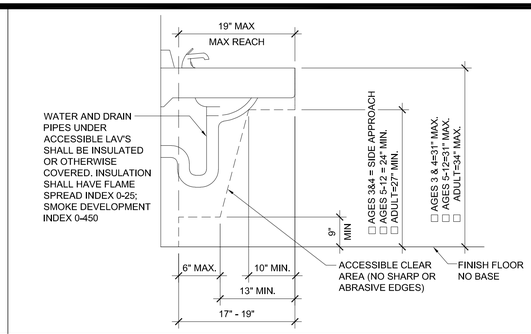
TYPICAL TOILET ROOM PLAN 14



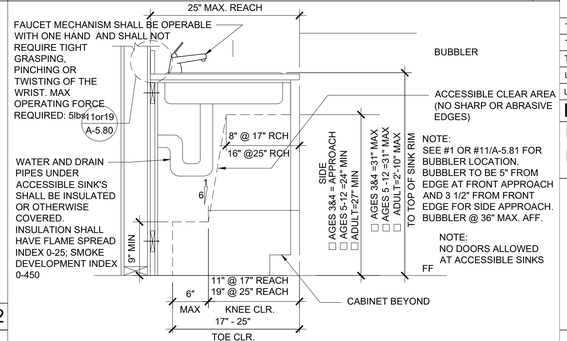
MAT'L = TYPE "L" COPPER

MAT'L = ABS
SCHEDULE 40 PIPE

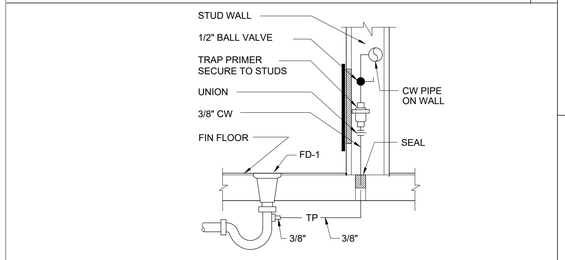
TOILET ROOM COLD WATER SUPPLY AND WASTE 15



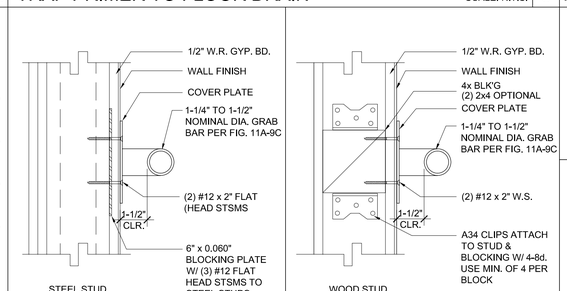
ACCESSIBLE LAV CLEARANCE SCALE: N.T.S. 6



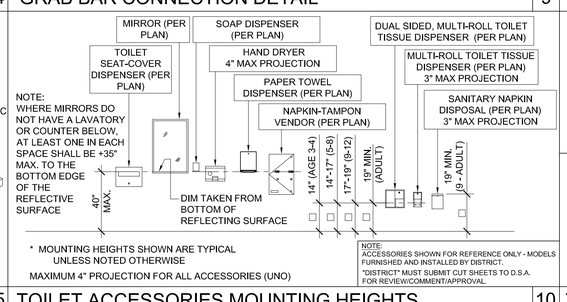
ACCESSIBLE SINK CABINET (OPTION) SCALE: N.T.S. 7



TRAP PRIMER TO FLOOR DRAIN SCALE: N.T.S. 8



GRAB BAR CONNECTION DETAIL 9



TOILET ACCESSORIES MOUNTING HEIGHTS 10

THE DIVISION OF THE STATE ARCHITECT, OFFICE OF REGULATION SERVICES ACCEPTS THE FOLLOWING DIMENSIONS AS ADEQUATELY SERVING THE NEEDS OF CHILDREN IN PROJECTS UNDER THEIR JURISDICTION. THESE DIMENSIONS ARE BASED ON CBC TABLE 11B-604.9 SUGGESTED DIMENSIONS FOR SERVING CHILDREN AGES 3 TO 12.

ACCESSIBILITY DIMENSIONS	11B-604.9 SUGGESTED DIMS			
	ADULT	AGES 9 THROUGH 12	AGES 5 THROUGH 8	AGES 3 AND 4
TOILET CENTERING FROM WALL	17" - 18"	15" - 18"	12" - 15"	12"
TOILET SEAT HEIGHT (DIM TO TOP OF SEAT)	17" - 19"	15" - 17"	12" - 15"	11" - 12"
GRAB BAR HEIGHT (TO TOP)	33" - 36"	25" - 27"	20" - 25"	18" - 20"
TOILET PAPER IN FRONT OF TOILET	7" - 9"	7" - 9"	7" - 9"	7" - 9"
NAPKIN DISPOSAL IN FRONT OF TOILET	12" MAX.	12" MAX.	N/A	N/A
MIRROR HEIGHT (TO BOTTOM OF GLASS)	40" MAX.	40" MAX.	36" MAX.	32" MAX.
DISPENSER HEIGHT	19" MIN.	17" - 19"	14" - 17"	14"
LAVATORY/SINK TOP HEIGHT	34" MAX.	31" MAX.	31" MAX.	31" MAX. 24" MAX. SIDE APPROACH
LAVATORY/SINK KNEE CLEARANCE	27" MIN.	24" MIN.	24" MIN.	SIDE APPROACH
URINAL LIP HEIGHT	17" MAX.	17" MAX.	15" MAX	13" MIN.
URINAL FLUSH HANDLE HEIGHT	44" MAX.	44" MAX.	37" MAX. *	32" MAX. *
DRINKING FOUNTAIN BUBBLER HT. (LOW)	36" MAX.	30" MAX.	30" MAX.	30" MAX.
DRINKING FOUNTAIN KNEE CLEARANCE	27" MIN.	SIDE APPROACH	SIDE APPROACH	SIDE APPROACH
HANDRAIL HEIGHT (TO TOP)	34" - 38"	34" - 38"	34" - 38"	34" - 38"

STANDARD DIMENSIONS	ALTERNATE HEIGHT (DIMS)			
	ADULT	AGES 9 THROUGH 12	AGES 5 THROUGH 8	AGES 3 AND 4
TOILET CENTERING FROM WALL/PARTITION	15" MIN	15" MIN	15" MIN	15" MIN
TOILET SEAT HEIGHT/DIM TO TOP OF SEAT	15"	15"	15"	15"
TOILET CLEARANCE/FRONT	24"	24"	24"	24"
URINAL LIP HEIGHT	24"	24"	18"	16"
URINAL CENTER FROM WALL/PARTITION	12"	12"	12"	12"

PLUMBING ACCESSORIES (REF. ONLY-MODELS FURNISHED AND INSTALLED BY DISTRICT U.N.O.)

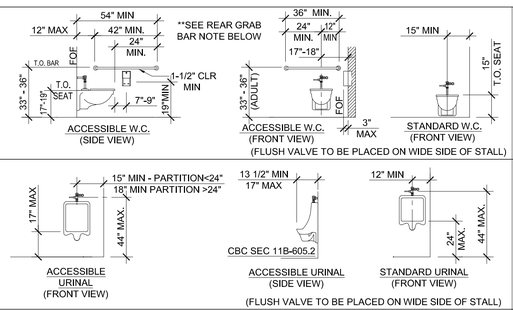
A SOAP DISPENSER; LIQUID SOAP DISPENSER 4" MAX. PROJECTION

B PAPER TOWEL DISPENSER/TRASH BIN COMBO; SURFACE MOUNTED 4" MAX. PROJECTION-CANNOT ENCROACH INTO 30x48 CLEAR SPACE OF FIXTURE

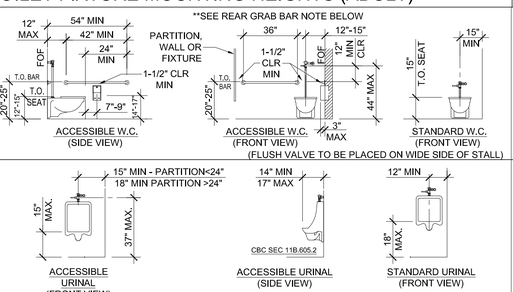
C TOILET PAPER HOLDER; SINGLE ROLL SEMI-RECESSED OR 3" MAX PROJECTION

D TOILET SEAT DISPENSER; SURFACE MOUNTED

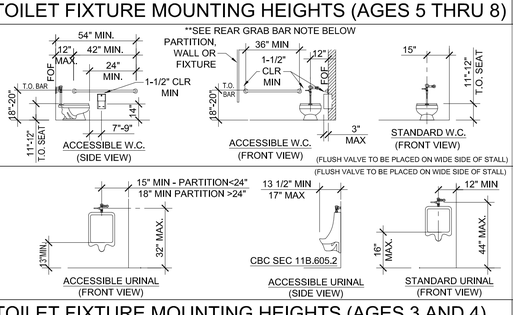
* 44" MAX. PER CODE



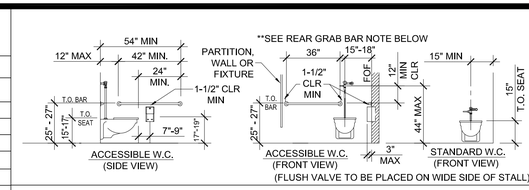
TOILET FIXTURE MOUNTING HEIGHTS (ADULT) 3



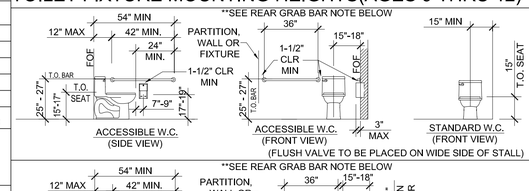
TOILET FIXTURE MOUNTING HEIGHTS (ADULT) 4



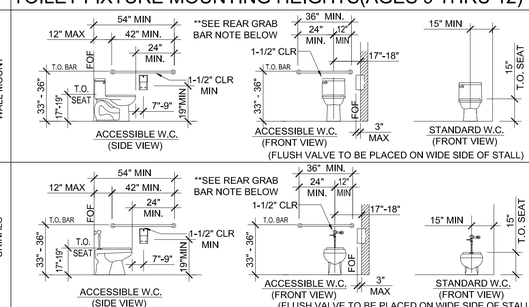
TOILET FIXTURE MOUNTING HEIGHTS (AGES 5 THRU 8) 5



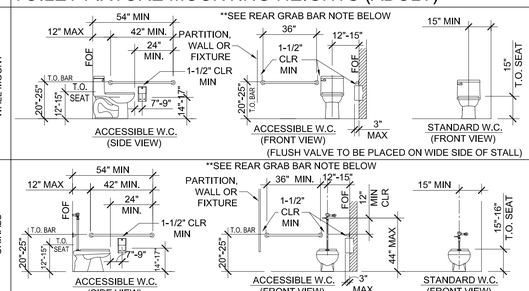
TOILET FIXTURE MOUNTING HEIGHTS(AGES 9 THRU 12) 1



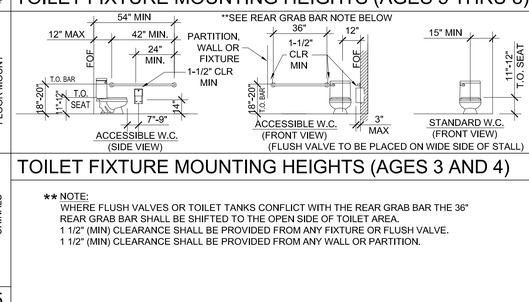
TOILET FIXTURE MOUNTING HEIGHTS(AGES 9 THRU 12) 2



TOILET FIXTURE MOUNTING HEIGHTS (AGES 3 AND 4) 18



TOILET FIXTURE MOUNTING HEIGHTS (AGES 5 THRU 8) 4



TOILET FIXTURE MOUNTING HEIGHTS (AGES 3 AND 4) 5

** NOTE:
WHERE FLUSH VALVES OR TOILET TANKS CONFLICT WITH THE REAR GRAB BAR THE 36" REAR GRAB BAR SHALL BE SHIFTED TO THE OPEN SIDE OF TOILET AREA.
1 1/2" (MIN) CLEARANCE SHALL BE PROVIDED FROM ANY FIXTURE OR FLUSH VALVE.
1 1/2" (MIN) CLEARANCE SHALL BE PROVIDED FROM ANY WALL OR PARTITION.

PROJECT NAME:

SHEET TITLE:

PLUMBING DETAILS AND SCHEDULE

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STANLAKE
2475
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

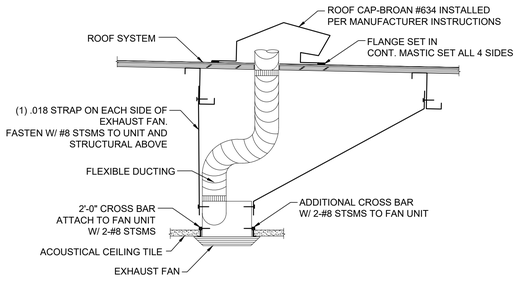
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

P-1.01

LEGEND

SYMBOL	ABB.	DESCRIPTION
	SAD	SUPPLY AIR DUCT
	RAD	RETURN AIR DUCT
	EAD	EXHAUST AIR DUCT
	(L)	LINED DUCTWORK
	CD	SUPPLY CEILING DIFFUSER
	CR	RETURN CEILING REGISTER
	ER	EXHAUST CEILING REGISTER
	VTR	VENT THRU ROOF
	FD	FIRE DAMPER
	MVD	MANUAL VOLUME DAMPER
UC	UC	UNDERCUT DOOR
T	STAT	THERMOSTAT
BT	BT	BYPASS TIMER
	P.O.C	POINT OF CONNECTION
CO		CO^2 SENSOR



EXHAUST FAN INSTALLATION

SCALE : 1"=1'-0"

CEILING MOUNTED EXHAUST FAN SCHEDULE

SYM.	LOCATION	SERVICE	MANUF.	MODEL	CFM	SONES	SP	ELECTRICAL VOLTS	Ø	POWER	WGT.	REMARKS
EF 1	CEILING	TOILET EXHAUST	BROAN *	L100	109	1.0	0.25	120	1	87 WATTS	22.80 LBS.	WITH BROAN ROOF CAP #634. PROVIDE 6" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.
EF 2	CEILING	TOILET EXHAUST	BROAN *	L200	210	2.0	0.25	120	1	127 WATTS	23.0 LBS.	WITH BROAN ROOF CAP #634. PROVIDE 8" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.
EF 3	CEILING	TOILET EXHAUST	BROAN *	L300	308	2.8	0.25	120	1	212 WATTS	23.10 LBS.	WITH BROAN ROOF CAP #634. PROVIDE 8" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.

* OR APPROVED EQUAL.

PERFORATED FACE GRILLE SCHEDULE (SUPPLY)

ITEM	NECK SIZE	RANGE CFM	MFG & MODEL #
T-BAR SUPPLY 16X16-4W	6"Ø	0 - 150	Fixed Curve Blade, 4-way throw
	8"Ø	150 - 230	For lay-in T-bar ceilings use Harth & Cooley SD-9419 . (Sizes as shown on Mech Plan)
	10"Ø	230 - 350	
	12"Ø	350 - 460	
	14"Ø	460 - 640	

PERFORATED FACE GRILLE SCHEDULE (RETURN)

ITEM	NECK SIZE	RANGE CFM	MFG & MODEL #
T-BAR RETURN	6"Ø	0 - 230	Perforated face
	10"Ø	230 - 460	For lay-in T-bar ceilings use Shoemaker 105P with 24 ga., 45 deg. angle. (Sizes as shown on Mech Plan.)
	14"Ø	460 - 710	

MEP COMPONENT ANCHORAGE NOTE:

ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPOORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.C

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRAVERSE AND LONGITUDINAL DIRECTIONS.

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION QUIDE (E.G., HCAI OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF THE DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP☐MD☒PP☐E☐OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP☐MD☐PP☐E☐OPTION 2: SHALL COMPLY WITH HCAI PREAPPROVAL (OPM #) #----------.

TABLE 140.4-E AIR ECONOMIZER HIGH LIMIT SHUT OFF CONTROL REQUIREMENTS

Device Type*	Climate Zones	Required High Limit (Economizer Off When): Equation[b]	Description
Fixed Dry Bulb	1, 3, 5, 11-16	$T_{OA} > 75°F$	Outdoor air temperature exceeds 75°F
	2, 4, 10	$T_{OA} > 73°F$	Outdoor air temperature exceeds 73°F
	6, 8, 9	$T_{OA} > 71°F$	Outdoor air temperature exceeds 71°F
	7	$T_{OA} > 69°F$	Outdoor air temperature exceeds 69°F
Differential Dry Bulb	1, 3, 5, 11-16	$T_{OA} > T_{RA}°F$	Outdoor air temperature exceeds return air temperature
	2, 4, 10	$T_{OA} > T_{RA}-2°F$	Outdoor air temperature exceeds return air temperature minus 2°F
	6, 8, 9	$T_{OA} > T_{RA}-4°F$	Outdoor air temperature exceeds return air temperature minus 4°F
	7	$T_{OA} > T_{RA}-6°F$	Outdoor air temperature exceeds return air temperature minus 6°F
Fixed Enthalpy[c] + Fixed Dry-bulb	All	$h_{OA} > 28$ Btu/lb or $T_{OA} > 75°F$	Outdoor air enthalpy exceeds 28 Btu/lb of dry air[c] or Outdoor air temperature exceeds 75°F

[a] Only the high limit control devices listed are allowed to be used and at the setpoints listed. Others such as Dew Point, Fixed Enthalpy, Electronic Enthalpy, and Differential Enthalpy Controls, may not be used in any Climate Zone for compliance with Section 140.4(e)1 unless approval for use is provided by the Energy Commission Executive Director.

[b] Devices with selectable (rather than adjustable) setpoints shall be capable of being set to within 2°F and 2 Btu/lb of the setpoint listed.

[c] At altitudes substantially different than sea level, the Fixed Enthalpy limit value shall be set to the enthalpy value at 75°F and 50% relative humidity. As an example, at approximately 6,000 foot elevation, the fixed enthalpy limit is approximately 30.7 Btu/lb.

Heat Pump Sequence of Operations

Description:
Constant Volume Unit, DX cooling and heating, and outside air economizer.

General:
Each unit shall be directly controlled and monitored by a programmable logic Thermostat Controller.

1. **Required Algorithms and Schedules:**
   Time Schedule
   Setpoint Schedule (temperature)
2. **Occupancy Status:**
   The occupancy status is determined by an occupancy sensor.
3. **Demand Control Ventilation:**
   The indoor CO2 concentration is monitored with a sensor in each room.

Sequence of Operation during Occupied Hours:

1. **Supply Fan Control Mode:**
   The supply fan will operate:
   A. During scheduled hours.
   B. When occupancy is detected.
2. **Economizer Control Mode:**
   The outside air damper will be wired through an interposing relay and interlocked to the supply fan. When the supply fan is operating the economizer damper will be set to the default position except when:
   A. The demand control ventilation system determines that the CO2 concentrations can reduce the outside air rate.
   B. During cooling mode when the outside air temperature sensor indicates that the damper position may be adjusted to increase the outside air rate.
3. **Operating Mode:**
   The thermostat shall be programmed to Auto Mode. When Auto Mode is active, the thermostat algorithm will automatically select either a heating or cooling mode based on the present space temperature value.
4. **Heating Mode:** The heating stages will be energized when the fan is running, the operating mode is auto, and the space temperature is below the occupied heating setpoint. The heating stages will be de-energized as the space temperature achieves the heating setpoint.
5. **Cooling Mode:** The cooling stages will be energized when the fan is running, the operating mode is auto, and the space temperature is above the occupied cooling setpoint. The cooling stages will be de-energized as the space temperature achieves the cooling setpoint.

Sequence of Operation during Unoccupied Hours:

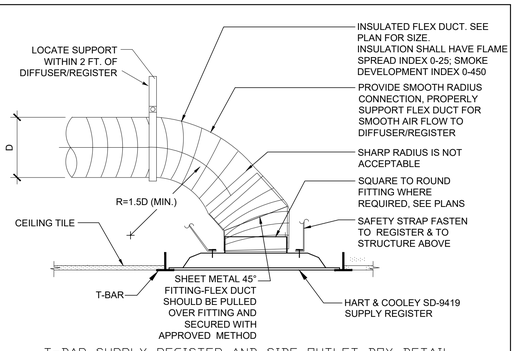
1. **Supply Fan:**
   The fan will be cycled on if the space temperature is outside the heating and cooling unoccupied set points.
2. **Economizer Control:**
   The outside air damper will be wired through an interposing relay and interlocked to the supply fan. When the supply fan is on, the dampers are forced to the minimum position. When the supply fan is off, the damper will close.
3. **Pre-Occupancy Purge**
   In the hour prior to scheduled normal occupancy the supply fan shall operate for a duration sufficient in length to provide not less than 3 complete air changes.

DUCT NOTES:

1. ALL DUCTING SHALL BE INSULATED WITH MIN OF R-4.2.
2. DUCT INSTALLATION AND PLENUMS SHALL MEET THE REQUIREMENTS OF ENERGY CODE SECTION 120.4 AND THE MANUFACTURERS INSTALLATION INSTRUCTIONS.
3. HORIZONTAL FLEX DUCT SHALL BE SUPPORTED AT A MAXIMUM 4 FT INTERVALS, WITH HANGING STRAPS A MINIMUM 1 1/2" WIDE.
4. DUCTS MUST BE PULLED TIGHT WITH A MAXIMUM SAG OF 1/2" PER FOOT OF HORIZONTAL RUN.
5. DUCT SHALL NOT BE KINKED OR CRUSHED.
6. BEND/RADIUS EQUAL TO THE DUCT DIAMETER OR GREATER.

GENERAL NOTES:

1. THERMOSTAT SHALL BE PROGRAMMED WITH EXPECTED OCCUPIED TIMES.
2. AIR HANDLER FAN WILL BE PROGRAMMED TO RUN DURING ALL OCCUPIED TIMES.
3. PRE-OCCUPANCY PURGE SHALL BE PROGRAMMED ONE HOUR PRIOR TO THE MODULAR BUILDING BEING NORMALLY OCCUPIED PER ENERGY CODE 120.1(D)1.
4. ECONOMIZERS SHALL BE PROGRAMMED FOR HIGH LIMIT SHUT OFF PER TABLE 140.4-E.
5. THE OUTDOOR AIR C02 CONCENTRATION SHALL BE ASSUMED TO BE 400 ppm.

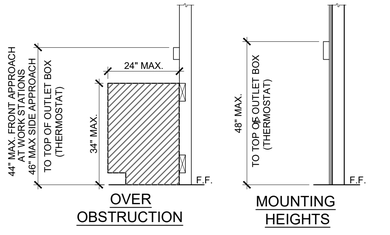


T-BAR SUPPLY REGISTER AND SIDE OUTLET BOX DETAIL

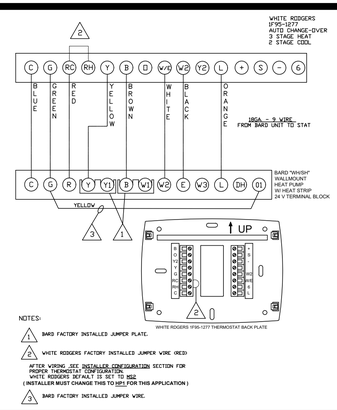
N.T.S.

SUPPLY CEILING DIFFUSER MOUNTING

SCALE: NONE — D



△ PROVIDE MIN 30"x48" CLR FLOOR SPACE FOR PERPENDICULAR APPROACH AT EACH LOCATION

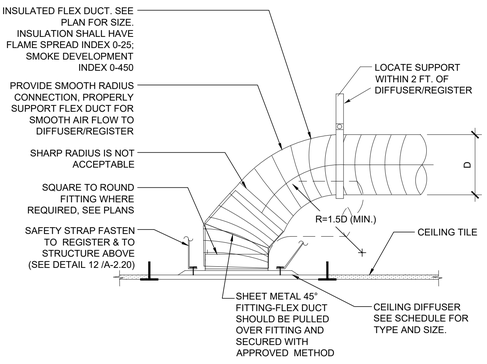


NOTES:

1. BARD FACTORY INSTALLED JUMPER PLATE.
2. WHITE RODGERS FACTORY INSTALLED JUMPER WIRE (RED)
   AFTER WIRING, SEE INSTALLER CONFIGURATION SECTION FOR PROPER THERMOSTAT SETTINGS.
   (THERMOSTAT MUST BE SET TO HEAT PUMP TO USE
   (INSTALLER MUST CHANGE THIS TO HP1 FOR THIS APPLICATION)
3. BARD FACTORY INSTALLED JUMPER WIRE.

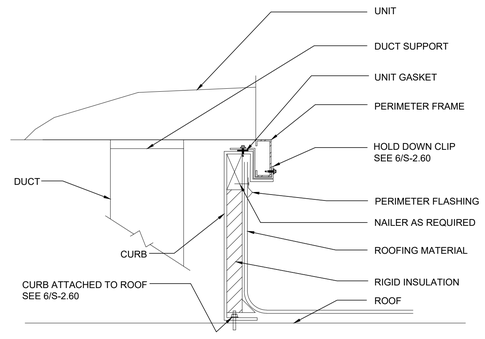
UNIT TO THERMOSTAT WIRING

SCALE: NONE — A



RETURN CEILING DIFFUSER MOUNTING

SCALE: NONE — B



A/C UNIT MOUNTING

SCALE: NONE — C

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

MECHANICAL NOTES, SCHEDULES, & DETAILS

REVISIONS

1.
2.
3.
4.
5.

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Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

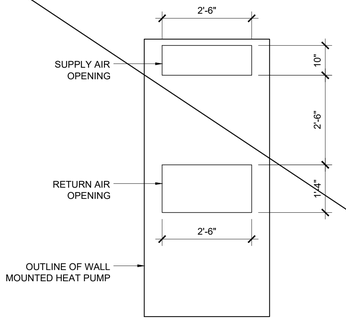
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLA 29575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

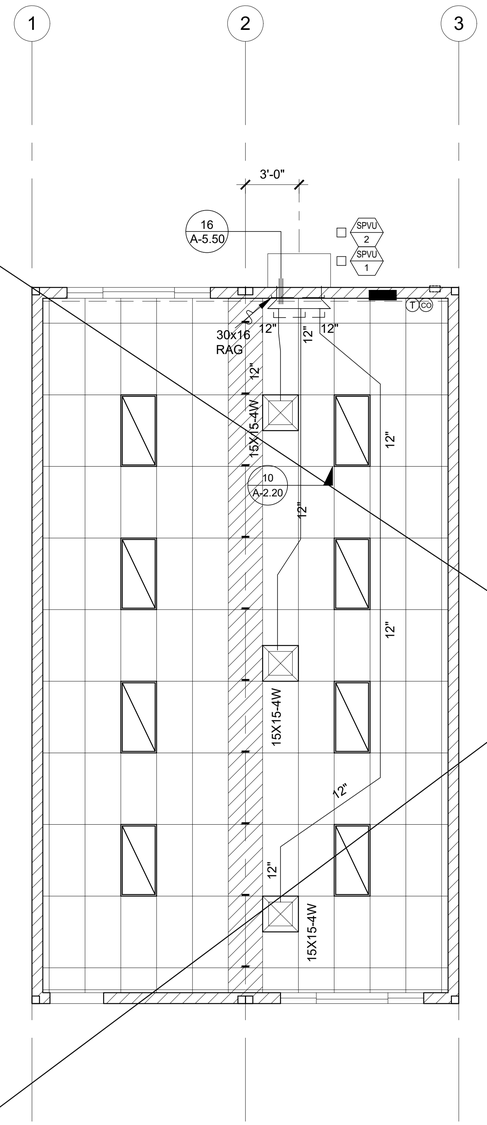
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

M-0.1



WALL MOUNTED HEAT PUMP DIAGRAM | SCALE: NONE | A



MECHANICAL PLAN - STANDARD 4 LIGHT CONFIGURATION | SCALE: 1/4" = 1'-0" | 1

WALL MOUNTED MECHANICAL EQUIPMENT SCHEDULE			
	SPVU-1	SPVU-2	
HVAC Equipment Make and Model	BARD #W60HC-A00VN	BARD #T60S1-A00VN	
Nominal Tonnage	5	5	
BTUH:			
Heating	52,500	56,000	
Cooling	54,500	52,000	
Indoor/Blower Fan:			
BHP/HP	0.75/0.75	0.75/0.75	
CFM	1,750	1,650	
Strip Heating	NA	NA	
SEER	NA	NA	
EER	11.0	11.0	
HSPF	NA	NA	
COP	3.3	3.3	
Voltage	230/208-1	230/208-1	
MCA	42	45	
MCOP	60	60	
Wire Size (Pwr/ Grnd)	8 / 10	8 / 10	
Thermostat:			
Make and Model	Venstar #T4900SCH	Venstar #T4900SCH	
Setback	Yes	Yes	
Heat Pumps	Yes	Yes	
Shut-off and Reset:	Occupancy Sensor	Occupancy Sensor	
Economizer:			
Make and Model	Integrated	Integrated	
Controls	Fixed Dry Bulb	Fixed Dry Bulb	
Fault Detection	Yes	Yes	
Outside Air Damper Position	Varies	Varies	
Demand Control Ventilation	Yes	Yes	
Minimum DCV Outside Air in CFM	0.15 CFM / SF	0.15 CFM / SF	
Minimum Designed Outside Air in CFM	See Below	See Below	
Demand Shed Thermostat	NA	NA	
Operating Weight	595 #	660 #	

NOTES:
PROVIDE SET-BACK THERMOSTAT.
DESIGNED MINIMUM OUTSIDE AIR SHALL BE NO LESS THAN 15 CFM PER EXPECTED OCCUPANT
PROVIDE AN OCCUPANCY SENSOR WITH AN AUTOMATIC SHUT DOWN CONTROLS
PROVIDE 2" MERV 13 FILTER
AIR HANDLERS WITH OTHER VOLTAGES SHALL BE ACCEPTABLE.
AIR HANDLERS OTHER THAN THE MAKE AND MODEL LISTED ABOVE SHALL BE ACCEPTABLE WHEN THE NOMINAL TONNAGE IS EQUAL TO THE INDICATED TONNAGE AND THE EER AND COP VALUES ARE NO LESS THAN THOSE SHOWN ABOVE.
PROVIDE A C02 SENSOR WITH LCD DISPLAY (CARROER #33ZCSPT02LCD-01 or EQUAL) ADJACENT TO THE THERMOSTAT MOUNTED AT + 48" AFF.
PROVIDE A HONEYWELL JADE CONTROL SYSTEM (or EQUAL) CAPABLE OF OUTPUTTING FDD ALARMS TO THE THEMOSTAT PER ENERGY CODE SECTION 120.2(j).
ECONOMIZERS SHALL HAVE AN INTEGRATED BARAMETRIC DAMPER OR OTHER MEANS OF EXHAUSTING THE BUILDING WHEN THE SYSTEM IS DELIVERING 100% OUTSIDE AIR.

MECHANICAL EQUIPMENT SCHEDULE

NOTE:
THIS MECHANICAL SYSTEM SHALL PROVIDE A MINIMUM OUTSIDE AIR RATE OF 0.38 CFM / SF OR 15 CFM PER OCCUPANT, WHICHEVER IS GREATER. THE BUILDING MANUFACTURER SHALL VERIFY THE EXPECTED OCCUPANT LOAD WITH THE SCHOOL DISTRICT PRIOR TO SELECTION OF THE MECHANICAL EQUIPMENT. THE SELECTED EQUIPMENT SHALL BE CAPABLE OF MEETING THE OUTSIDE AIR REQUIREMENTS UNDER PEAK DESIGN CONDITIONS FOR THE CLIMATE ZONE IN WHICH THE BUILDING WILL BE LOCATED. AT THE TIME OF OCCUPANCY, THE BUILDING MANUFACTURER SHALL PROVIDE TO THE BUILDING OWNER A CALCULATION INDICATING THE VOLUMES OF OUTSIDE AIR AND OF RECIRCULATED AIR THAT THE VENTILATION SYSTEM HAS BEEN DESIGNED TO PROVIDE.

VENTILATION CALCULATIONS:

24' X 40' CLASSROOM

MINIMUM REQUIRED VENTILATION
ROOM AREA = 960 SF
REQUIRED VENTILATION RATE = 0.38 CFM / SF
REQUIRED OUTSIDE AIR VOLUME = 960 X 0.38 = 365 CFM

VENTILATION AS DESIGNED
BUILDING AREA = 960 SF
OCCUPANCY FOR EGRESS PURPOSES = 960 / 20 = 48 OCCUPANTS
EXPECTED # OF OCCUPANTS = 48 OCCUPANTS X 0.65 = 31 OCCUPANTS
REQUIRED VENTILATION RATE = 15 CFM / OCCUPANT
REQUIRED OUTSIDE AIR VOLUME = 31 X 15 = 465 CFM

NOTE:
THE DEMAND CONTROL VENTILLATION SYSTEM SHALL NOT BE REQUIRED TO PROVIDE THE OUTSIDE AIR IN EXCESS OF THE DESIGNED VOLUME INDICATED ABOVE.. THE DEMAND CONTROL VENTILLATION SYSTEM SHALL NOT REDUCE THE OUTSIDE AIR TO LESS THAN 25% OF THE DESIGNED VOLUME INDICATED ABOVE.

NOTE:
BUILDING MANUFACTURER SHALL LEAVE FOR THE BUILDING OWNER, AT OCCUPANCY, OPERATING INFORMATION FOR ALL APPLICABLE MECHANICAL AND ELECTRICAL FEATURES, MATERIALS, COMPONENTS, AND DEVICES INSTALLED IN THE BUILDING RELATED TO EFFICIENT ENERGY USE. IN ADDITION, THE BUILDING MANUFACTURER SHALL LEAVE MAINTENANCE INFORMATION FOR ALL FEATURES, MATERIALS, COMPONENTS, AND MANUFACTURED DEVICES THAT REQUIRE ROUTINE MAINTENANCE FOR EFFICIENT OPERATION OF THE MECHANICAL AND LIGHTING SYSTEMS.

NOTE:
THE OCCUPANCY SENSOR USED TO CONTROL THE HVAC EQUIPMENT SHALL BE SEPARATE FROM THE OCCUPANCY SENSOR USED TO CONTROL THE LIGHTING SYSTEM. THIS SENSOR MAY BE INTEGRATED INTO THE THERMOSTAT OR MAY BE A SEPARATE DEVICE.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

MECHANICAL PLAN WALL MOUNT 24' x 40'

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
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MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 29175 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
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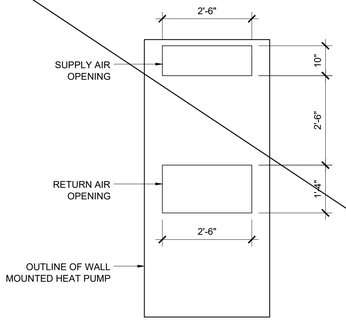
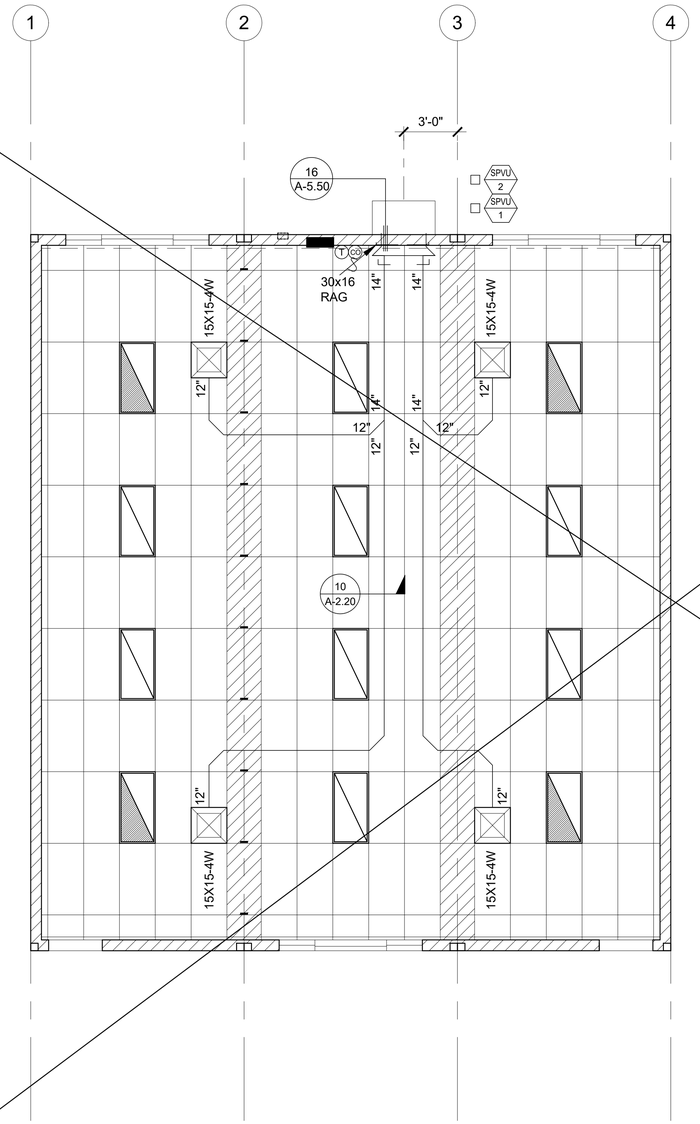


WALL MOUNTED HEAT PUMP DIAGRAM | SCALE: NONE | A



MECHANICAL PLAN - STANDARD 4 LIGHT CONFIGURATION | SCALE: 1/4" = 1'-0" | 1

WALL MOUNTED MECHANICAL EQUIPMENT SCHEDULE			
	SPVU-1	SPVU-2	
HVAC Equipment Make and Model	BARD #W60HC-A00VN	BARD #T6051-A00VN	
Nominal Tonnage	5	5	
BTUH:			
Heating	52,500	56,000	
Cooling	54,500	52,000	
Indoor/Blower Fan:			
BHP/HP	0.75/0.75	0.75/0.75	
CFM	1,750	1,650	
Strip Heating	NA	NA	
SEER	NA	NA	
EER	11.0	11.0	
HSPF	NA	NA	
COP	3.3	3.3	
Voltage	230/208-1	230/208-1	
MCA	42	45	
MCOP	60	60	
Wire Size (Pwr/ Grnd)	8 / 10	8 / 10	
Thermostat:			
Make and Model	Venstar #T4900SCH	Venstar #T4900SCH	
Setback	Yes	Yes	
Heat Pumps	Yes	Yes	
Shut-off and Reset:	Occupancy Sensor	Occupancy Sensor	
Economizer:			
Make and Model	Integrated	Integrated	
Controls	Fixed Dry Bulb	Fixed Dry Bulb	
Fault Detection	Yes	Yes	
Outside Air Damper Position	Varies	Varies	
Demand Control Ventilation	Yes	Yes	
Minimum DCV Outside Air in CFM	0.15 CFM / SF	0.15 CFM / SF	
Minimum Designed Outside Air in CFM	See Below	See Below	
Demand Shed Thermostat	NA	NA	
Operating Weight	595 #	660 #	

NOTES:
PROVIDE SET-BACK THERMOSTAT.
DESIGNED MINIMUM OUTSIDE AIR SHALL BE NO LESS THAN 15 CFM PER EXPECTED OCCUPANT
PROVIDE AN OCCUPANCY SENSOR WITH AN AUTOMATIC SHUT DOWN CONTROLS
PROVIDE 2" MERV 13 FILTER
AIR HANDLERS WITH OTHER VOLTAGES SHALL BE ACCEPTABLE.
AIR HANDLERS OTHER THAN THE MAKE AND MODEL LISTED ABOVE SHALL BE ACCEPTABLE WHEN THE NOMINAL TONNAGE IS EQUAL TO THE INDICATED TONNAGE AND THE EER AND COP VALUES ARE NO LESS THAN THOSE SHOWN ABOVE.
PROVIDE A C02 SENSOR WITH LCD DISPLAY (CARROER #33ZCSPT02LCD-01 or EQUAL) ADJACENT TO THE THERMOSTAT MOUNTED AT + 48" AFF.
PROVIDE A HONEYWELL JADE CONTROL SYSTEM (or EQUAL) CAPABLE OF OUTPUTTING FDD ALARMS TO THE THEMOSTAT PER ENERGY CODE SECTION 120.2(j).
ECONOMIZERS SHALL HAVE AN INTEGRATED BARAMETRIC DAMPER OR OTHER MEANS OF EXHAUSTING THE BUILDING WHEN THE SYSTEM IS DELIVERING 100% OUTSIDE AIR.

MECHANICAL EQUIPMENT SCHEDULE

NOTE:
THIS MECHANICAL SYSTEM SHALL PROVIDE A MINIMUM OUTSIDE AIR RATE OF 0.38 CFM / SF OR 15 CFM PER OCCUPANT, WHICHEVER IS GREATER. THE BUILDING MANUFACTURER SHALL VERIFY THE EXPECTED OCCUPANT LOAD WITH THE SCHOOL DISTRICT PRIOR TO SELECTION OF THE MECHANICAL EQUIPMENT. THE SELECTED EQUIPMENT SHALL BE CAPABLE OF MEETING THE OUTSIDE AIR REQUIREMENTS UNDER PEAK DESIGN CONDITIONS FOR THE CLIMATE ZONE IN WHICH THE BUILDING WILL BE LOCATED. AT THE TIME OF OCCUPANCY, THE BUILDING MANUFACTURER SHALL PROVIDE TO THE BUILDING OWNER A CALCULATION INDICATING THE VOLUMES OF OUTSIDE AIR AND OF RECIRCULATED AIR THAT THE VENTILATION SYSTEM HAS BEEN DESIGNED TO PROVIDE.

VENTILATION CALCULATIONS:

36' X 40' CLASSROOM

MINIMUM REQUIRED VENTILATION
ROOM AREA = 1,440 SF
REQUIRED VENTILATION RATE = 0.38 CFM / SF
REQUIRED OUTSIDE AIR VOLUME = 1,440 X 0.38 = 548 CFM

VENTILATION AS DESIGNED
BUILDING AREA = 1,440 SF
OCCUPANCY FOR EGRESS PURPOSES = 1,440 / 20 = 72 OCCUPANTS
EXPECTED # OF OCCUPANTS = 72 OCCUPANTS X 0.50 = 36 OCUPANTS
REQUIRED VENTILATION RATE = 15 CFM / OCCUPANT
REQUIRED OUTSIDE AIR VOLUME = 36 X 15 = 540 CFM

NOTE:
THE DEMAND CONTROL VENTILATION SYSTEM SHALL NOT BE REQUIRED TO PROVIDE OUTSIDE AIR IN EXCESS OF THE DESIGNED VOLUME INDICATED ABOVE. THE DEMAND CONTROL VENTILATION SYSTEM SHALL NOT REDUCE THE OUTSIDE AIR TO LESS THAN 25% OF THE DESIGNED VOLUME INDICATED ABOVE.

NOTE:
BUILDING MANUFACTURER SHALL LEAVE FOR THE BUILDING OWNER, AT OCCUPANCY, OPERATING INFORMATION FOR ALL APPLICABLE MECHANICAL AND ELECTRICAL FEATURES, MATERIALS, COMPONENTS, AND DEVICES INSTALLED IN THE BUILDING RELATED TO EFFICIENT ENERGY USE. IN ADDITION, THE BUILDING MANUFACTURER SHALL LEAVE MAINTENANCE INFORMATION FOR ALL FEATURES, MATERIALS, COMPONENTS, AND MANUFACTURED DEVICES THAT REQUIRE ROUTINE MAINTENANCE FOR EFFICIENT OPERATION OF THE MECHANICAL AND LIGHTING SYSTEMS.

NOTE:
THE OCCUPANCY SENSOR USED TO CONTROL THE HVAC EQUIPMENT SHALL BE SEPARATE FROM THE OCCUPANCY SENSOR USED TO CONTROL THE LIGHTING SYSTEM. THIS SENSOR MAY BE INTEGRATED INTO THE THERMOSTAT OR MAY BE A SEPARATE DEVICE.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

MECHANICAL PLAN WALL MOUNT 36' x 40'

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

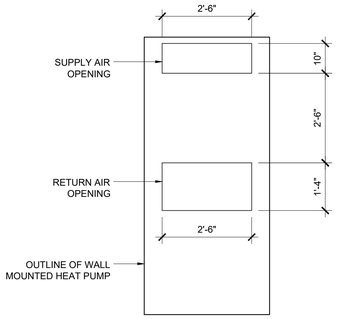
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

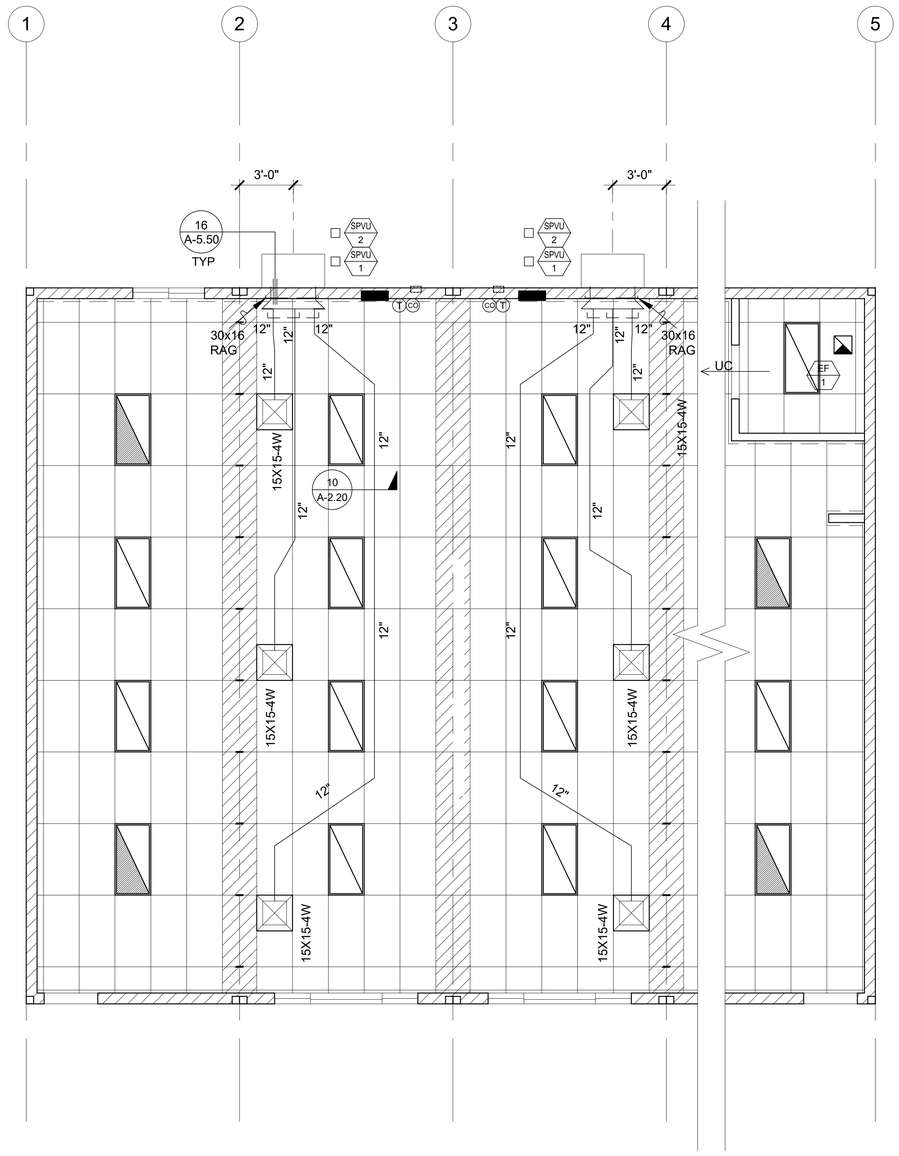
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

M-1.02



WALL MOUNTED HEAT PUMP DIAGRAM | SCALE: NONE | A



MECHANICAL PLAN - STANDARD 4 LIGHT CONFIGURATION

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

WALL MOUNTED MECHANICAL EQUIPMENT SCHEDULE			
	SPVU-1	SPVU-2	
HVAC Equipment Make and Model	BARD #W60HC-A00VN	BARD #T60S1-A00VN	
Nominal Tonnage	5	5	
BTUH:			
Heating	52,500	56,000	
Cooling	54,500	52,000	
Indoor/Blower Fan:			
BHP/HP	0.75/0.75	0.75/0.75	
CFM	1,750	1,650	
Strip Heating	NA	NA	
SEER	NA	NA	
EER	11.0	11.0	
HSPF	NA	NA	
COP	3.3	3.3	
Voltage	230/208-1	230/208-1	
MCA	42	45	
MCOP	60	60	
Wire Size (Pwr/ Grnd)	8 / 10	8 / 10	
Thermostat:			
Make and Model	Venstar #T4900SCH	Venstar #T4900SCH	
Setback	Yes	Yes	
Heat Pumps	Yes	Yes	
Shut-off and Reset:	Occupancy Sensor	Occupancy Sensor	
Economizer:			
Make and Model	Integrated	Integrated	
Controls	Fixed Dry Bulb	Fixed Dry Bulb	
Fault Detection	Yes	Yes	
Outside Air Damper Position	Varies	Varies	
Demand Control Ventilation	Yes	Yes	
Minimum DCV Outside Air in CFM	0.15 CFM / SF	0.15 CFM / SF	
Minimum Designed Outside Air in CFM	See Below	See Below	
Demand Shed Thermostat	NA	NA	
Operating Weight	595 #	660 #	

NOTES:
PROVIDE SET-BACK THERMOSTAT.
DESIGNED MINIMUM OUTSIDE AIR SHALL BE NO LESS THAN 15 CFM PER EXPECTED OCCUPANT
PROVIDE AN OCCUPANCY SENSOR WITH AN AUTOMATIC SHUT DOWN CONTROLS
PROVIDE 2" MERV 13 FILTER
AIR HANDLERS WITH OTHER VOLTAGES SHALL BE ACCEPTABLE.
AIR HANDLERS OTHER THAN THE MAKE AND MODEL LISTED ABOVE SHALL BE ACCEPTABLE WHEN THE NOMINAL TONNAGE IS EQUAL TO THE INDICATED TONNAGE AND THE EER AND COP VALUES ARE NO LESS THAN THOSE SHOWN ABOVE.
PROVIDE A C02 SENSOR WITH LCD DISPLAY (CARROER #33ZCSPT02LCD-01 or EQUAL) ADJACENT TO THE THERMOSTAT MOUNTED AT + 48" AFF.
PROVIDE A HONEYWELL JADE CONTROL SYSTEM (or EQUAL) CAPABLE OF OUTPUTTING FDD ALARMS TO THE THEMOSTAT PER ENERGY CODE SECTION 120.2(j).
ECONOMIZERS SHALL HAVE AN INTEGRATED BARAMETRIC DAMPER OR OTHER MEANS OF EXHAUSTING THE BUILDING WHEN THE SYSTEM IS DELIVERING 100% OUTSIDE AIR.

MECHANICAL EQUIPMENT SCHEDULE

NOTE:
THIS MECHANICAL SYSTEM SHALL PROVIDE A MINIMUM OUTSIDE AIR RATE OF 0.38 CFM / SF OR 15 CFM PER OCCUPANT, WHICHEVER IS GREATER. THE BUILDING MANUFACTURER SHALL VERIFY THE EXPECTED OCCUPANT LOAD WITH THE SCHOOL DISTRICT PRIOR TO SELECTION OF THE MECHANICAL EQUIPMENT. THE SELECTED EQUIPMENT SHALL BE CAPABLE OF MEETING THE OUTSIDE AIR REQUIREMENTS UNDER PEAK DESIGN CONDITIONS FOR THE CLIMATE ZONE IN WHICH THE BUILDING WILL BE LOCATED. AT THE TIME OF OCCUPANCY, THE BUILDING MANUFACTURER SHALL PROVIDE TO THE BUILDING OWNER A CALCULATION INDICATING THE VOLUMES OF OUTSIDE AIR AND OF RECIRCULATED AIR THAT THE VENTILATION SYSTEM HAS BEEN DESIGNED TO PROVIDE.

VENTILATION CALCULATIONS:

24' X 40' CLASSROOM

MINIMUM REQUIRED VENTILATION
ROOM AREA = 960 SF
REQUIRED VENTILATION RATE = 0.38 CFM / SF
REQUIRED OUTSIDE AIR VOLUME = 960 X 0.38 = 365 CFM

VENTILATION AS DESIGNED
BUILDING AREA = 960 SF
OCCUPANCY FOR EGRESS PURPOSES = 960 / 20 = 48 OCCUPANTS
EXPECTED # OF OCCUPANTS = 48 OCCUPANTS X 0.65 = 31 OCCUPANTS
REQUIRED VENTILATION RATE = 15 CFM / OCCUPANT
REQUIRED OUTSIDE AIR VOLUME = 31 X 15 = 465 CFM

36' X 40' CLASSROOM

MINIMUM REQUIRED VENTILATION
ROOM AREA = 1,440 SF
REQUIRED VENTILATION RATE = 0.38 CFM / SF
REQUIRED OUTSIDE AIR VOLUME = 1,440 X 0.38 = 548 CFM

VENTILATION AS DESIGNED
BUILDING AREA = 1,440 SF
OCCUPANCY FOR EGRESS PURPOSES = 1,440 / 20 = 72 OCCUPANTS
EXPECTED # OF OCCUPANTS = 72 OCCUPANTS X 0.50 = 36 OCCUPANTS
REQUIRED VENTILATION RATE = 15 CFM / OCCUPANT
REQUIRED OUTSIDE AIR VOLUME = 36 X 15 = 540 CFM

NOTE:
THE DEMAND CONTROL VENTILATION SYSTEM SHALL NOT BE REQUIRED TO PROVIDE OUTSIDE AIR IN EXCESS OF THE DESIGNED VOLUME INDICATED ABOVE. THE DEMAND CONTROL VENTILATION SYSTEM SHALL NOT REDUCE THE OUTSIDE AIR TO LESS THAN 25% OF THE DESIGNED VOLUME INDICATED ABOVE.

NOTE:
BUILDING MANUFACTURER SHALL LEAVE FOR THE BUILDING OWNER, AT OCCUPANCY, OPERATING INFORMATION FOR ALL APPLICABLE MECHANICAL AND ELECTRICAL FEATURES, MATERIALS, COMPONENTS, AND DEVICES INSTALLED IN THE BUILDING RELATED TO EFFICIENT ENERGY USE. IN ADDITION, THE BUILDING MANUFACTURER SHALL LEAVE MAINTENANCE INFORMATION FOR ALL FEATURES, MATERIALS, COMPONENTS, AND MANUFACTURED DEVICES THAT REQUIRE ROUTINE MAINTENANCE FOR EFFICIENT OPERATION OF THE MECHANICAL AND LIGHTING SYSTEMS.

NOTE:
THE OCCUPANCY SENSOR USED TO CONTROL THE HVAC EQUIPMENT SHALL BE SEPARATE FROM THE OCCUPANCY SENSOR USED TO CONTROL THE LIGHTING SYSTEM. THIS SENSOR MAY BE INTEGRATED INTO THE THERMOSTAT OR MAY BE A SEPARATE DEVICE.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

MECHANICAL PLAN
WALL MOUNT
48' TO 120' x 40'

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

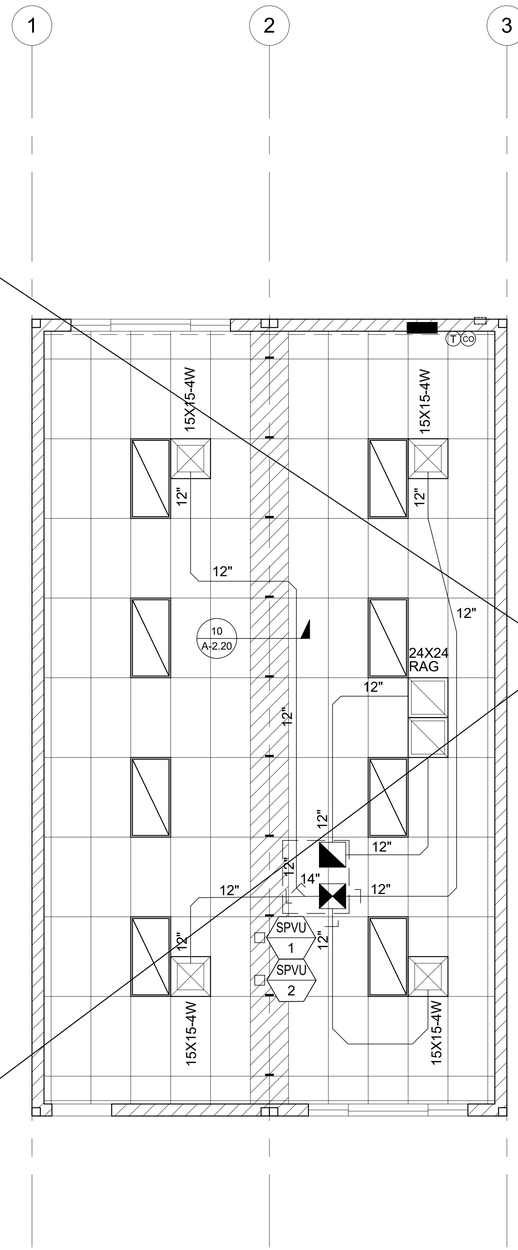
REGISTERED PROFESSIONAL ENGINEER JOHN W STARUCH 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

M-1.03



MECHANICAL PLAN - STANDARD 4 LIGHT CONFIGURATION

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

1

ROOF TOP MECHANICAL EQUIPMENT SCHEDULE			
	HP-1	HP-2	
HVAC Equipment Make and Model	DAY & NIGHT #PHD460000K	CARRIER #50VR-A60---30--	
Nominal Tonnage	5	5	
BTUH:			
Heating	57,500	57,000	
Cooling	57,500	57,000	
Indoor/Blower Fan:			
BHP/HP	1/1	0.80/1	
CFM	1,750	1,750	
Strip Heating	NA	NA	
SEER	14.0	15	
EER	11.5	12	
HSPF	8.0	8.5	
COP	3.7	3.5	
Voltage	230/208-1	230/208-1	
MCA	40	44.8	
MCOP	60	60	
Wire Size (Pwr/ Grnd)	8 / 10	8 / 10	
Thermostat:			
Make and Model	Venstar #T4900SCH	Venstar #T4900SCH	
Setback	Yes	Yes	
Heat Pumps	Yes	Yes	
Shut-off and Reset:	Occupancy Sensor	Occupancy Sensor	
Economizer:			
Make and Model	CPECOMZR007A00	ECO-SPPLBSA-D2DH	
Controls	Fixed Dry Bulb	Fixed Dry Bulb	
Fault Detection	Yes	Yes	
Outside Air Damper Position	Varies	Varies	
Demand Control Ventilation	Yes	Yes	
Minimum DCV Outside Air in CFM	0.15 CFM / SF	0.15 CFM / SF	
Minimum Designed Outside Air in CFM	See Below	See Below	
Demand Shed Thermostat	NA	NA	
Operating Weight	590 #	660 #	

NOTES:
PROVIDE SET-BACK THERMOSTAT.
DESIGNED MINIMUM OUTSIDE AIR SHALL BE NO LESS THAN 15 CFM PER EXPECTED OCCUPANT
PROVIDE AN OCCUPANCY SENSOR WITH AN AUTOMATIC SHUT DOWN CONTROLS
PROVIDE 2" MERV 13 FILTER
AIR HANDLERS WITH OTHER VOLTAGES SHALL BE ACCEPTABLE.
AIR HANDLERS OTHER THAN THE MAKE AND MODEL LISTED ABOVE SHALL BE ACCEPTABLE WHEN THE NOMINAL TONNAGE IS EQUAL TO THE INDICATED TONNAGE AND THE EER AND COP VALUES ARE NO LESS THAN THOSE SHOWN ABOVE.
PROVIDE A C02 SENSOR WITH LCD DISPLAY (CARROER #33ZCSPT02LCD-01 or EQUAL) ADJACENT TO THE THERMOSTAT MOUNTED AT + 48" AFF.
PROVIDE A HONEYWELL JADE CONTROL SYSTEM (or EQUAL) CAPABLE OF OUTPUTTING FDD ALARMS TO THE THEMOSTAT PER ENERGY CODE SECTION 120.2(j).
ECONOMIZERS SHALL HAVE AN INTEGRATED BARAMETRIC DAMPER OR OTHER MEANS OF EXHAUSTING THE BUILDING WHEN THE SYSTEM IS DELIVERING 100% OUTSIDE AIR.

MECHANICAL EQUIPMENT SCHEDULE

NOTE:
THIS MECHANICAL SYSTEM SHALL PROVIDE A MINIMUM OUTSIDE AIR RATE OF 0.38 CFM / SF OR 15 CFM PER OCCUPANT, WHICHEVER IS GREATER. THE BUILDING MANUFACTURER SHALL VERIFY THE EXPECTED OCCUPANT LOAD WITH THE SCHOOL DISTRICT PRIOR TO SELECTION OF THE MECHANICAL EQUIPMENT. THE SELECTED EQUIPMENT SHALL BE CAPABLE OF MEETING THE OUTSIDE AIR REQUIREMENTS UNDER PEAK DESIGN CONDITIONS FOR THE CLIMATE ZONE IN WHICH THE BUILDING WILL BE LOCATED. AT THE TIME OF OCCUPANCY, THE BUILDING MANUFACTURER SHALL PROVIDE TO THE BUILDING OWNER A CALCULATION INDICATING THE VOLUMES OF OUTSIDE AIR AND OF RECIRCULATED AIR THAT THE VENTILATION SYSTEM HAS BEEN DESIGNED TO PROVIDE.

VENTILATION CALCULATIONS:

24' X 40' CLASSROOM

MINIMUM REQUIRED VENTILATION
ROOM AREA = 960 SF
REQUIRED VENTILATION RATE = 0.38 CFM / SF
REQUIRED OUTSIDE AIR VOLUME = 960 X 0.38 = 365 CFM

VENTILATION AS DESIGNED
BUILDING AREA = 960 SF
OCCUPANSY FOR EGRESS PURPOSES = 960 / 20 = 48 OCCUPANTS
EXPECTED # OF OCCUPANTS = 48 OCCUPANTS X 0.65 = 31 OCUPANTS
REQUIRED VENTILATION RATE = 15 CFM / OCCUPANT
REQUIRED OUTSIDE AIR VOLUME = 31 X 15 = 465 CFM

NOTE:
THE DEMAND CONTROL VENTILATION SYSTEM SHALL NOT BE REQUIRED TO PROVIDE OUTSIDE AIR IN EXCESS OF THE DESIGNED VOLUME INDICATED ABOVE. THE DEMAND CONTROL VENTILATION SYSTEM SHALL NOT REDUCE THE OUTSIDE AIR TO LESS THAN 25% OF THE DESIGNED VOLUME INDICATED ABOVE.

NOTE:
BUILDING MANUFACTURER SHALL LEAVE FOR THE BUILDING OWNER, AT OCCUPANCY, OPERATING INFORMATION FOR ALL APPLICABLE MECHANICAL AND ELECTRICAL FEATURES, MATERIALS, COMPONENTS, AND DEVICES INSTALLED IN THE BUILDING RELATED TO EFFICIENT ENERGY USE. IN ADDITION, THE BUILDING MANUFACTURER SHALL LEAVE MAINTENANCE INFORMATION FOR ALL FEATURES, MATERIALS, COMPONENTS, AND MANUFACTURED DEVICES THAT REQUIRE ROUTINE MAINTENANCE FOR EFFICIENT OPERATION OF THE MECHANICAL AND LIGHTING SYSTEMS.

NOTE:
THE OCCUPANCY SENSOR USED TO CONTROL THE HVAC EQUIPMENT SHALL BE SEPARATE FROM THE OCCUPANCY SENSOR USED TO CONTROL THE LIGHTING SYSTEM. THIS SENSOR MAY BE INTEGRATED INTO THE THERMOSTAT OR MAY BE A SEPARATE DEVICE.

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

MECHANICAL PLAN ROOF MOUNT 24' x 40'

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

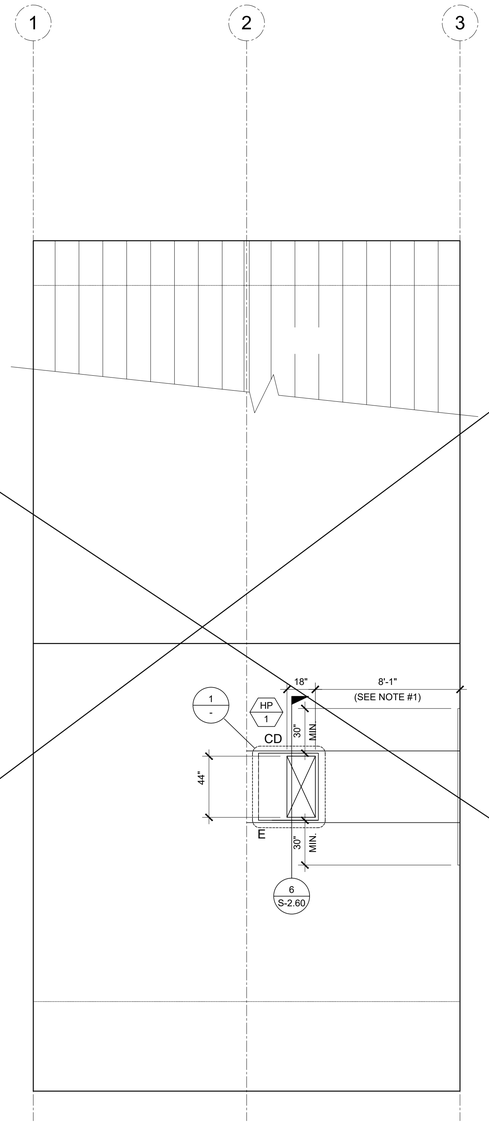
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24078 STRUCTURAL STATE OF CALIFORNIA

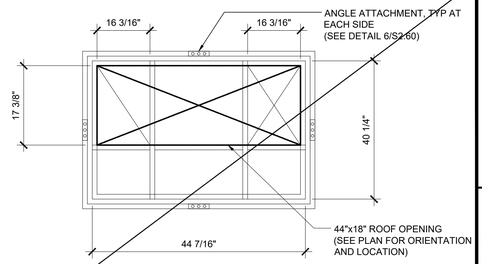
SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

M-2.01





HEAT PUMP CURB PLAN VIEW

SCALE: NTS | 1

NOTE:
1. ALL ROOFTOP EQUIPMENT THAT REQUIRES SERVICE & ROOF ACCESS HATCHES MUST BE A MIN. OF 10'-0" AWAY FROM ALL ROOF EDGES TO OPENING EDGES OR PROVIDE A GUARDRAIL PER CBC 2022 SECTIONS 1015.6 & 1015.7. SEE ARCH ROOF PLAN

MECHANICAL ROOF PLAN

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

3

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

MECHANICAL ROOF PLAN
ROOF MOUNT
24' x 40'

REVISIONS

1
2
3
4
5

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

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DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

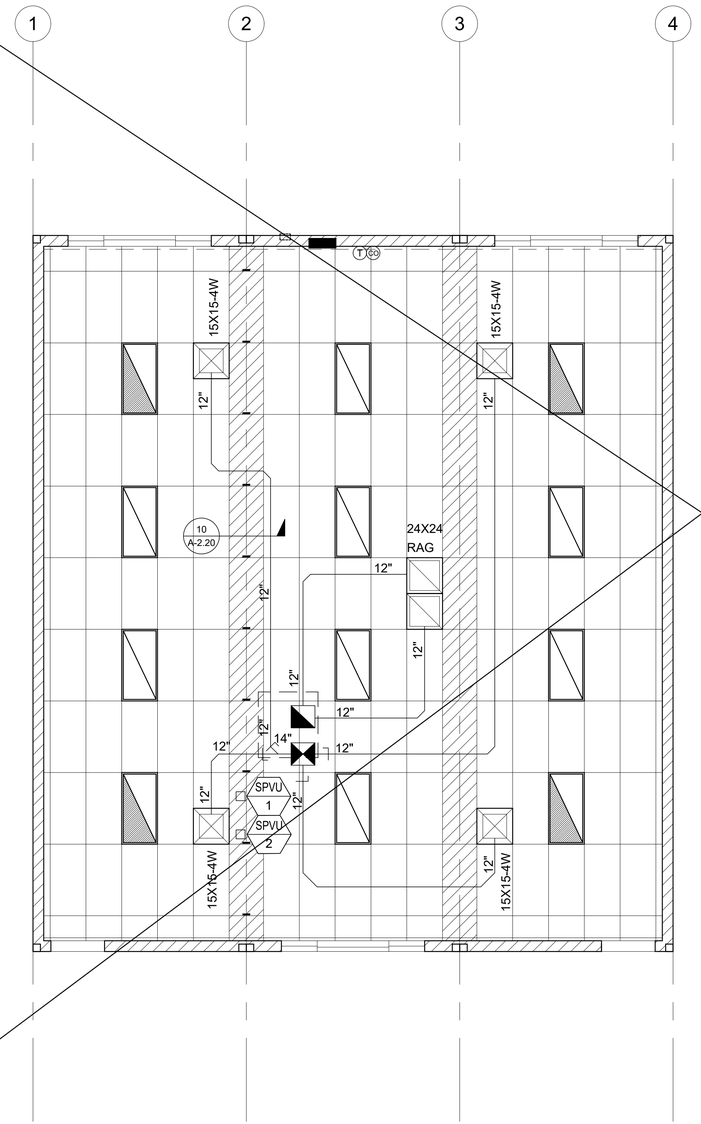
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
2975
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

M-2.02



ROOF TOP MECHANICAL EQUIPMENT SCHEDULE

	HP-1	HP-2	
HVAC Equipment Make and Model	DAY & NIGHT #PHD460000K	CARRIER #50VR-A60---30--	
Nominal Tonnage	5	5	
BTUH:			
Heating	57,500	57,000	
Cooling	57,500	57,000	
Indoor/Blower Fan:			
BHP/HP	1/1	0.60/1	
CFM	1,750	1,750	
Strip Heating	NA	NA	
SEER	14.0	15	
EER	11.5	12	
HSPF	8.0	8.5	
COP	3.7	3.5	
Voltage	230/208-1	230/208-1	
MCA	40	44.8	
MCOP	60	60	
Wire Size (Pwr/ Grnd)	8 / 10	8 / 10	
Thermostat:			
Make and Model	Venstar #T4900SCH	Venstar #T4900SCH	
Setback	Yes	Yes	
Heat Pumps	Yes	Yes	
Shut off and Reset:	Occupancy Sensor	Occupancy Sensor	
Economizer:			
Make and Model	CPECOMZR007A00	ECO-SPPLBSA-D2DH	
Controls	Fixed Dry Bulb	Fixed Dry Bulb	
Fault Detection	Yes	Yes	
Outside Air Damper Position	Varies	Varies	
Demand Control Ventilation	Yes	Yes	
Minimum DCV Outside Air in CFM	0.15 CFM / SF	0.15 CFM / SF	
Minimum Designed Outside Air in CFM	See Below	See Below	
Demand Shed Thermostat	NA	NA	
Operating Weight	590 #	660 #	

NOTES:
PROVIDE SET-BACK THERMOSTAT.
DESIGNED MINIMUM OUTSIDE AIR SHALL BE NO LESS THAN 15 CFM PER EXPECTED OCCUPANT
PROVIDE AN OCCUPANCY SENSOR WITH AN AUTOMATIC SHUT DOWN CONTROLS
PROVIDE 2" MERV 13 FILTER
AIR HANDLERS WITH OTHER VOLTAGES SHALL BE ACCEPTABLE.
AIR HANDLERS OTHER THAN THE MAKE AND MODEL LISTED ABOVE SHALL BE ACCEPTABLE WHEN THE NOMINAL TONNAGE IS EQUAL TO THE INDICATED TONNAGE AND THE EER AND COP VALUES ARE NO LESS THAN THOSE SHOWN ABOVE.
PROVIDE A C02 SENSOR WITH LCD DISPLAY (CARROER #332CSPT02LCD-01 or EQUAL) ADJACENT TO THE THERMOSTAT MOUNTED AT + 48" AFF.
PROVIDE A HONEYWELL JADE CONTROL SYSTEM (or EQUAL) CAPABLE OF OUTPUTTING FDD ALARMS TO THE THERMOSTAT PER ENERGY CODE SECTION 120.2(j).
ECONOMIZERS SHALL HAVE AN INTEGRATED BARAMETRIC DAMPER OR OTHER MEANS OF EXHAUSTING THE BUILDING WHEN THE SYSTEM IS DELIVERING 100% OUTSIDE AIR.

MECHANICAL EQUIPMENT SCHEDULE

NOTE:
THIS MECHANICAL SYSTEM SHALL PROVIDE A MINIMUM OUTSIDE AIR RATE OF 0.38 CFM / SF OR 15 CFM PER OCCUPANT, WHICHEVER IS GREATER. THE BUILDING MANUFACTURER SHALL VERIFY THE EXPECTED OCCUPANT LOAD WITH THE SCHOOL DISTRICT PRIOR TO SELECTION OF THE MECHANICAL EQUIPMENT. THE SELECTED EQUIPMENT SHALL BE CAPABLE OF MEETING THE OUTSIDE AIR REQUIREMENTS UNDER PEAK DESIGN CONDITIONS FOR THE CLIMATE ZONE IN WHICH THE BUILDING WILL BE LOCATED. AT THE TIME OF OCCUPANCY, THE BUILDING MANUFACTURER SHALL PROVIDE TO THE BUILDING OWNER A CALCULATION INDICATING THE VOLUMES OF OUTSIDE AIR AND OF RECIRCULATED AIR THAT THE VENTILATION SYSTEM HAS BEEN DESIGNED TO PROVIDE.

VENTILATION CALCULATIONS:

36' X 40' CLASSROOM

MINIMUM REQUIRED VENTILATION
ROOM AREA = 1,440 SF
REQUIRED VENTILATION RATE = 0.38 CFM / SF
REQUIRED OUTSIDE AIR VOLUME = 1,440 X 0.38 = 548 CFM

VENTILATION AS DESIGNED
BUILDING AREA = 1,440 SF
OCCUPANCY FOR EGRESS PURPOSES = 1,440 / 20 = 72 OCCUPANTS
EXPECTED # OF OCCUPANTS = 72 OCCUPANTS X 0.50 = 36 OCUPANTS
REQUIRED VENTILATION RATE = 15 CFM / OCCUPANT
REQUIRED OUTSIDE AIR VOLUME = 36 X 15 = 540 CFM

NOTE:
THE DEMAND CONTROL VENTILATION SYSTEM SHALL NOT BE REQUIRED TO PROVIDE OUTSIDE AIR IN EXCESS OF THE DESIGNED VOLUME INDICATED ABOVE. THE DEMAND CONTROL VENTILATION SYSTEM SHALL NOT REDUCE THE OUTSIDE AIR TO LESS THAN 25% OF THE DESIGNED VOLUME INDICATED ABOVE.

NOTE:
BUILDING MANUFACTURER SHALL LEAVE FOR THE BUILDING OWNER, AT OCCUPANCY, OPERATING INFORMATION FOR ALL APPLICABLE MECHANICAL AND ELECTRICAL FEATURES, MATERIALS, COMPONENTS, AND DEVICES INSTALLED IN THE BUILDING RELATED TO EFFICIENT ENERGY USE. IN ADDITION, THE BUILDING MANUFACTURER SHALL LEAVE MAINTENANCE INFORMATION FOR ALL FEATURES, MATERIALS, COMPONENTS, AND MANUFACTURED DEVICES THAT REQUIRE ROUTINE MAINTENANCE FOR EFFICIENT OPERATION OF THE MECHANICAL AND LIGHTING SYSTEMS.

NOTE:
THE OCCUPANCY SENSOR USED TO CONTROL THE HVAC EQUIPMENT SHALL BE SEPARATE FROM THE OCCUPANCY SENSOR USED TO CONTROL THE LIGHTING SYSTEM. THIS SENSOR MAY BE INTEGRATED INTO THE THERMOSTAT OR MAY BE A SEPARATE DEVICE.

MECHANICAL PLAN - STANDARD 4 LIGHT CONFIGURATION

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

2

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

MECHANICAL PLAN ROOF MOUNT 36' x 40'

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

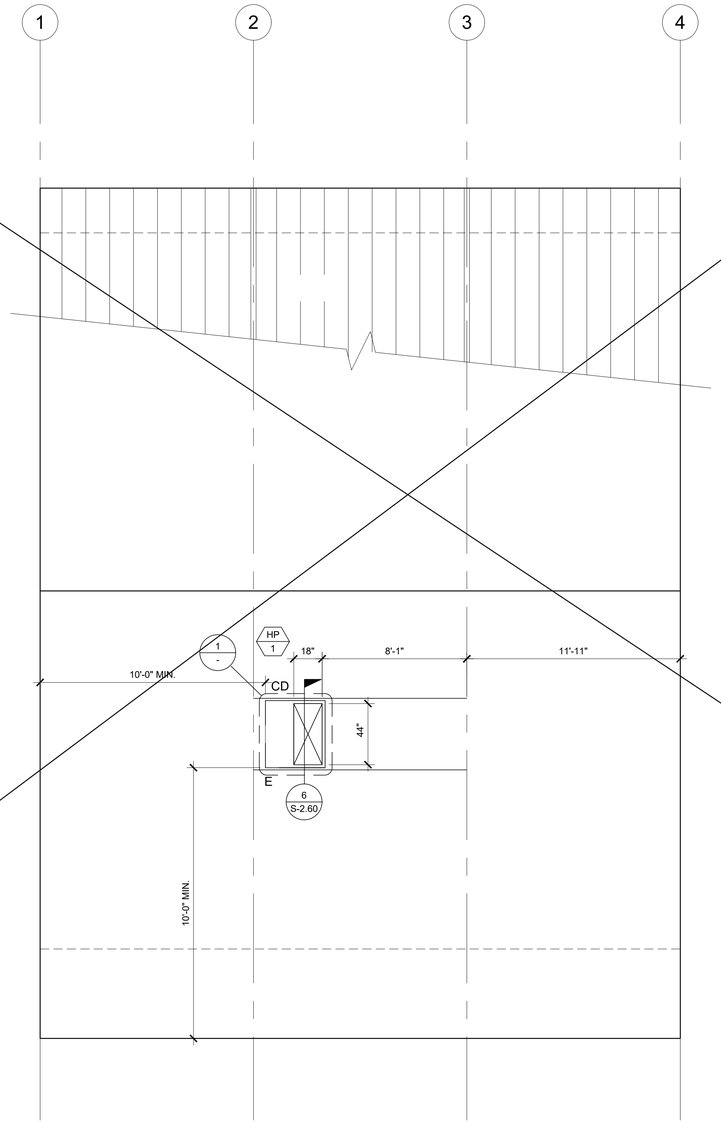
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
2475
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

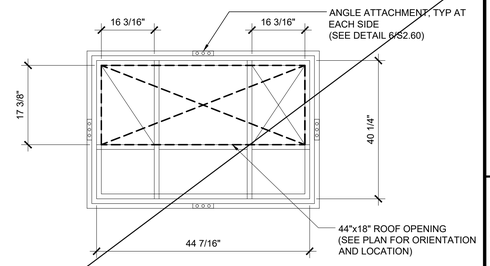
P.C. SHEET NUMBER

M-3.01



MECHANICAL ROOF PLAN

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



HEAT PUMP CURB PLAN VIEW

SCALE: NTS

NOTE:
1. ALL ROOFTOP EQUIPMENT THAT REQUIRES SERVICE & ROOF ACCESS HATCHES MUST BE A MIN. OF 10'-0" AWAY FROM ALL ROOF EDGES TO OPENING EDGES OR PROVIDE A GUARDRAIL PER CBC 2022 SECTIONS 1015.6 & 1015.7. SEE ARCH ROOF PLAN

PROJECT NAME:

SHEET TITLE:

MECHANICAL ROOF PLAN
ROOF MOUNT
36' x 40'

REVISIONS

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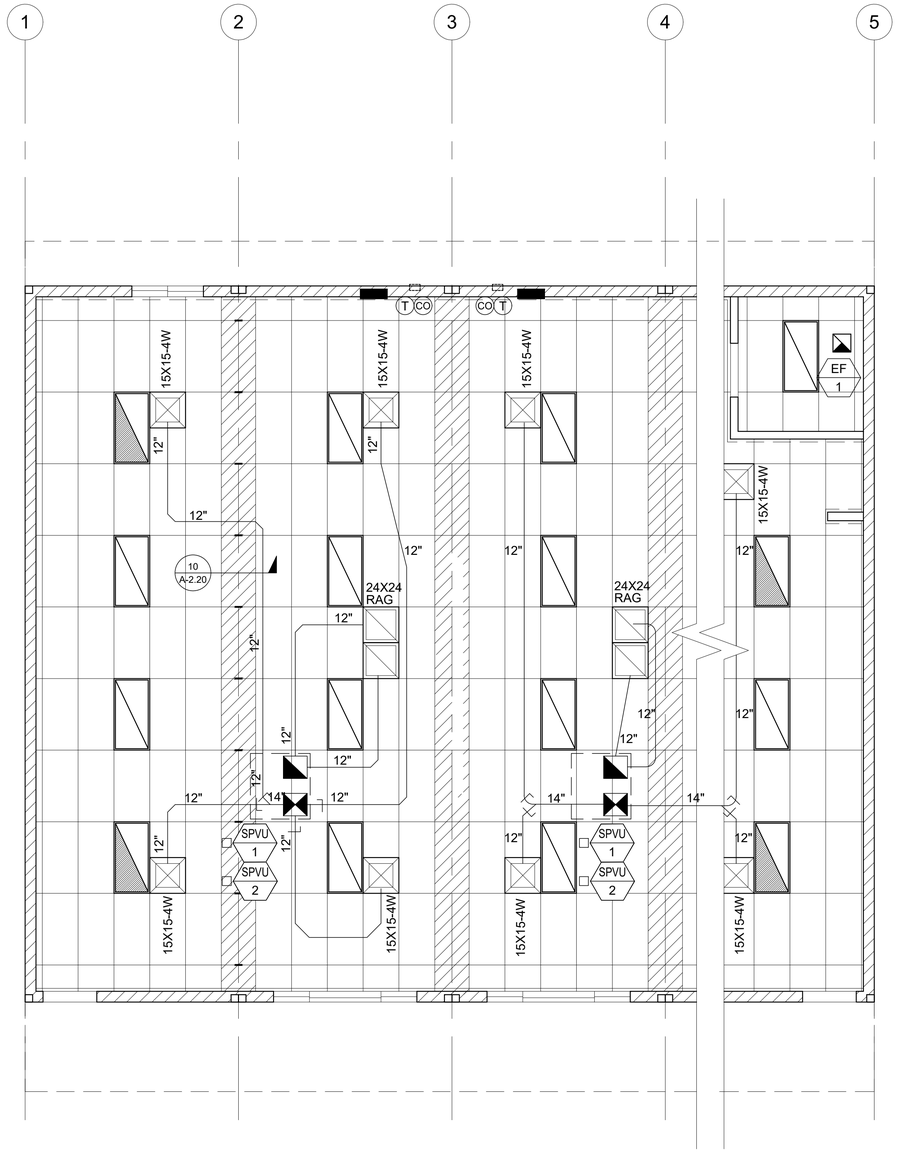

MECHANICAL PLAN - STANDARD 4 LIGHT CONFIGURATION

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

1

ROOF TOP MECHANICAL EQUIPMENT SCHEDULE			
	HP-1	HP-2	
HVAC Equipment Make and Model	DAY & NIGHT #PHD460000K	CARRIER #50VR-A60---30--	
Nominal Tonnage	5	5	
BTUH:			
Heating	57,500	57,000	
Cooling	57,500	57,000	
Indoor/Blower Fan:			
BHP/HP	1/1	0.80/1	
CFM	1,750	1,750	
Strip Heating	NA	NA	
SEER	14.0	15	
EER	11.5	12	
HSPF	8.0	8.5	
COP	3.7	3.5	
Voltage	230/208-1	230/208-1	
MCA	40	44.8	
MCOP	60	60	
Wire Size (Pwr/ Grnd)	8 / 10	8 / 10	
Thermostat:			
Make and Model	Venstar #T4900SCH	Venstar #T4900SCH	
Setback	Yes	Yes	
Heat Pumps	Yes	Yes	
Shut-off and Reset:	Occupancy Sensor	Occupancy Sensor	
Economizer:			
Make and Model	CPECOMZR007A00	ECO-SPPLBSA-D2DH	
Controls	Fixed Dry Bulb	Fixed Dry Bulb	
Fault Detection	Yes	Yes	
Outside Air Damper Position	Varies	Varies	
Demand Control Ventilation	Yes	Yes	
Minimum DCV Outside Air in CFM	0.15 CFM / SF	0.15 CFM / SF	
Minimum Designed Outside Air in CFM	See Below	See Below	
Demand Shed Thermostat	NA	NA	
Operating Weight	590 #	660 #	

NOTES:
PROVIDE SET-BACK THERMOSTAT.
DESIGNED MINIMUM OUTSIDE AIR SHALL BE NO LESS THAN 15 CFM PER EXPECTED OCCUPANT
PROVIDE AN OCCUPANCY SENSOR WITH AN AUTOMATIC SHUT DOWN CONTROLS
PROVIDE 2" MERV 13 FILTER
AIR HANDLERS WITH OTHER VOLTAGES SHALL BE ACCEPTABLE.
AIR HANDLERS OTHER THAN THE MAKE AND MODEL LISTED ABOVE SHALL BE ACCEPTABLE WHEN THE NOMINAL TONNAGE IS EQUAL TO THE INDICATED TONNAGE AND THE EER AND COP VALUES ARE NO LESS THAN THOSE SHOWN ABOVE.
PROVIDE A C02 SENSOR WITH LCD DISPLAY (CARROER #33ZCSPT02LCD-01 or EQUAL) ADJACENT TO THE THERMOSTAT MOUNTED AT + 48" AFF.
PROVIDE A HONEYWELL JADE CONTROL SYSTEM (or EQUAL) CAPABLE OF OUTPUTTING FDD ALARMS TO THE THEMOSTAT PER ENERGY CODE SECTION 120.2(j).
ECONOMIZERS SHALL HAVE AN INTEGRATED BAROMETRIC DAMPER OR OTHER MEANS OF EXHAUSTING THE BUILDING WHEN THE SYSTEM IS DELIVERING 100% OUTSIDE AIR.

MECHANICAL EQUIPMENT SCHEDULE

NOTE:
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VENTILATION CALCULATIONS:

24' X 40' CLASSROOM

MINIMUM REQUIRED VENTILATION
ROOM AREA = 960 SF
REQUIRED VENTILATION RATE = 0.38 CFM / SF
REQUIRED OUTSIDE AIR VOLUME = 960 X 0.38 = 365 CFM

VENTILATION AS DESIGNED
BUILDING AREA = 960 SF
OCCUPANCY FOR EGRESS PURPOSES = 960 / 20 = 48 OCCUPANTS
EXPECTED # OF OCCUPANTS = 48 OCCUPANTS X 0.65 = 31 OCCUPANTS
REQUIRED VENTILATION RATE = 15 CFM / OCCUPANT
REQUIRED OUTSIDE AIR VOLUME = 31 X 15 = 465 CFM

36' X 40' CLASSROOM

MINIMUM REQUIRED VENTILATION
ROOM AREA = 1,440 SF
REQUIRED VENTILATION RATE = 0.38 CFM / SF
REQUIRED OUTSIDE AIR VOLUME = 1,440 X 0.38 = 548 CFM

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PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

MECHANICAL PLAN
ROOF MOUNT
48' TO 120' x 40'

REVISIONS

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2475
STRUCTURAL
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SILVER CREEK INDUSTRIES
24' x 40' PC

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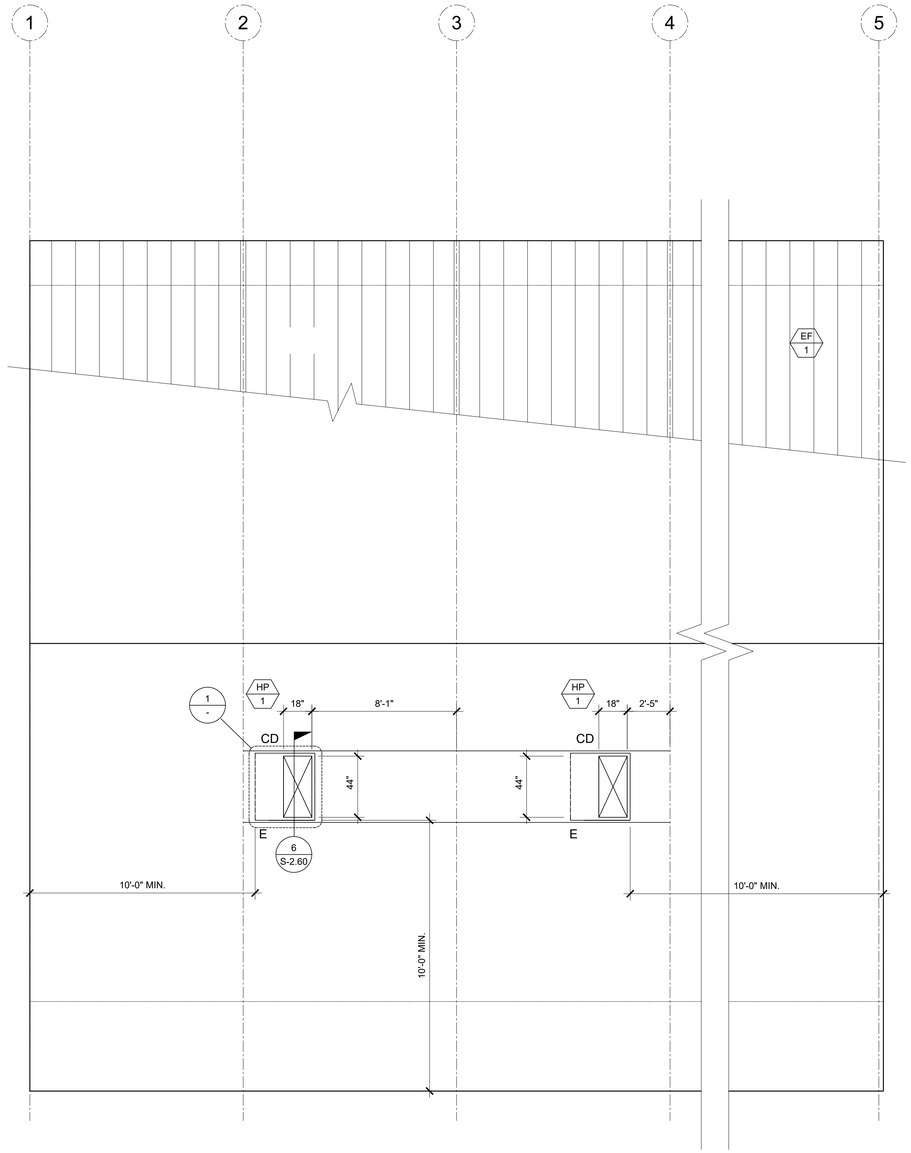

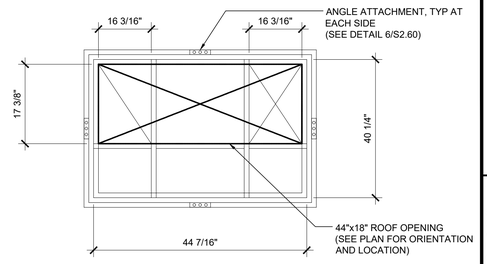

HEAT PUMP CURB PLAN VIEW

SCALE: NTS | 1

NOTE:
1. ALL ROOFTOP EQUIPMENT THAT REQUIRES SERVICE & ROOF ACCESS HATCHES MUST BE A MIN. OF 10'-0" AWAY FROM ALL ROOF EDGES TO OPENING EDGES OR PROVIDE A GUARDRAIL PER CBC 2022 SECTIONS 1015.6 & 1015.7. SEE ARCH ROOF PLAN

MECHANICAL ROOF PLAN

SCALE: 1/4" = 1'-0" | 2

PROJECT SPECIFIC STATE AGENCY APPROVAL

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MECHANICAL ROOF PLAN
ROOF MOUNT
48' TO 120" x 40'

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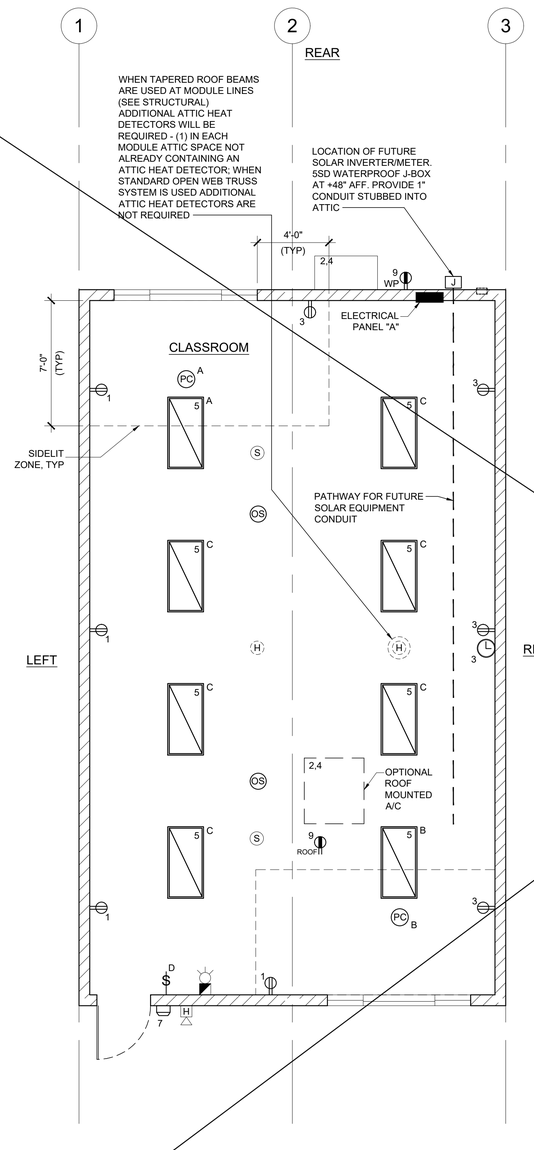
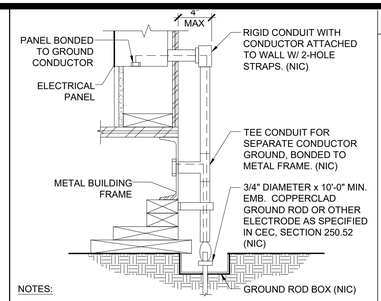


ELECTRICAL PLAN

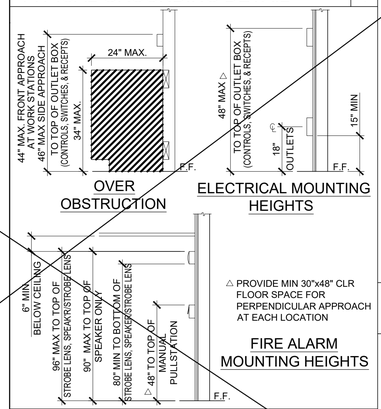
SCALE: 1/4" = 1'-0" | 4



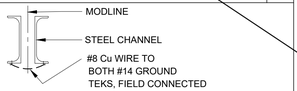
NOTES:

1. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250.66
2. ELEC. TRADE SHALL CHECK AREA FOR EXISTING CONDUITS, SEWER, GAS & WATER PIPING BEFORE DRIVING GROUND RODS.
3. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELEC'L. PANEL & TO METAL BUILDING FRAME (CEC 250.52) IN ADDITION TO THE DETAIL SHOWN ABOVE, BOND THE ELECTRICAL GROUND TO METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH THE EARTH FOR 10 FT. OR MORE, IF AVAILABLE (CEC 250.52)
4. ALL MODULES OF METAL FRAME BLDGS. SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING). BONDING SHALL INCLUDE METAL RAMP.
5. CHECK RESISTANT TO GROUND ROD, IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS WITH CONDUCTORS AS SHOWN SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (CEC 250.56).

TYPICAL GROUNDING DETAIL | 1



ACCESSIBLE HEIGHTS | 2



GROUND JUMPER AT MODLINE | 3

GROUND JUMPER AT MODLINE

EACH BUILDING SHALL BE SEPARATELY GROUNDED WITH A 3/4" RD. X 8' COPPERCLAD STEEL GROUND ROD, WHERE ROCK BOTTOM IS ENCOUNTERED, ROD SHALL BE DRIVEN AT AN ANGLE NOT TO EXCEED 45 DEGREE'S FROM THE VERTICAL OR SHALL BE BURIED IN A TRENCH THAT IS AT LEAST 30" DEEP (BY SITE ELECTRICAL).

TESTING: TEST FOR RESISTANCE TO GROUND, IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCES TO 25 OHMS OR LESS. (BY SITE ELECTRICAL).

APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF THIS FIRE ALARM FOR ALL SITES. THE FIRE ALARM SYSTEM AND/OR COMPONENTS MAYBE REQUIRED TO BE CHANGED DUE TO SITE LOCATION EXISTING CONDITIONS OR INCOMPATIBLE COMPONENTS.

GROUND MG TEST SHALL BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR, ALL GROUNDING SHALL BE IN ACCORDANCE WITH CEC ARTICLE 250.

FIRE ALARM NOTES

1. SMOKE AND HEAT DETECTOR CONDUIT AND DEVICES PROVIDED AND INTERCONNECTED BY OTHERS TO FIRE ALARM SYSTEM
2. PROVIDE DEDICATED FIRE ALARM 120 VOLT CIRCUIT CONNECTED TO LOCKED-ON BREAKER. THE CIRCUIT BREAKER SHALL BE LOCKED-ON WITH APPROVED LOCKING DEVICE, MARKED RED AND IDENTIFIED AS "FIRE ALARM CONTROL CIRCUIT". NFPA 72 SECTION 10.6.5.2

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2022 CBC SECTIONS 1617A.1.24, 1617A.1.25 & 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., OSHPD OPA FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEM (E):

MP☐ MD☐ PP☐ E☑ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

LIGHTING CONTROL SYSTEM SEQUENCE OF OPERATIONS

THE LIGHTING CONTROL SYSTEM BASIS OF DESIGN SHALL BE THE LUTRON VIVE WIRELESS LIGHTING CONTROL SYSTEM.
THE SYSTEM SHALL BE CAPABLE OF PROVIDING MANUAL CONTROL, OCCUPANCY SENSING CONTROL AND DAYLIGHT HARVESTING CONTROL.

SEQUENCE:

OCCUPANT ENTERS:
ALL LIGHTS AUTOMATICALLY TURN ON TO 50% LIGHT LEVEL. OCCUPANT MAY INCREASE LIGHTS TO MAXIMUM LEVEL MANUALLY WITH WALL CONTROL.
WHEN OCCUPIED:
LIGHTING IN DAYLIT ZONES AUTOMATICALLY DIM/BRIGHTEN BASED ON DAYLIGHT AVAILABILITY.
OCCUPANT MAY MANUALLY DIM/BRIGHTEN THE LIGHTS WITH WALL CONTROL.
OCCUPANT EXITS:
ALL LIGHTS AUTOMATICALLY TURN OFF 15 MINUTES AFTER VACANCY.

CONDUIT FILL AND CONDUCTOR CAPACITY TABLE

(ALL CONDUCTORS SHALL BE TYPE THHN/THWN 90°C. COPPER)

WIRE SIZE	CAPACITY	WIRE TYPE	NO. OF CONDUCTOR PERMITTED 1/2" C	3/4" C	1" C	1 1/4" C
#12	20A	THHN	9	16	25	45
#10	30A	THHN	5	10	16	28
#8	45A	THHN	2	5	8	14
#6	65A	THHN	1	3	5	10
#4	85A	THHN	1	2	4	7

JUNCTION BOX SIZE TABLE

BOX	SIZE	CU. IN.	MAX NO. OF CONDUCTORS #12	#10	#8	#6
4SS	1 1/4" x 4" SQ	18.0	8	7	6	0
4S	1 1/2" x 4" SQ	21.0	9	8	7	0
4SD	2 1/8" x 4" SQ	30.3	13	12	10	6
4SX	2 7/8" x 4" SQ	43.5	23	21	17	10
5SD	2 1/8" x 4-11/16" SQ	42.0	18	16	14	6
5SX	3 7/8" x 4-11/16" SQ	86.0	38	34	28	17
664	4" x 6" SQ	144.0	64	57	48	28

* DEDUCT ONE CONDUCTOR FOR (1) OR MORE GROUNDING CONDUCTORS ENTERING THE BOX

LEGEND

- 2x4 CEILING RECESSED LIGHT, LED LIGHT FIXTURE WITH DIMMING WATTAGE: 51 WATTS (MAX), 5000L (MIN)
- WALL MOUNTED HVAC UNIT. SEE MECHANICAL DWGS
- ROOF MOUNTED HVAC UNIT-SEE MECHANICAL DWGS
- ELECTRICAL PANEL AT +60" AFF TO TOP OF ELECTRICAL PANEL WITH 1 1/2" DIA POWER STUB OUT (U.N.O.)
- (OS) CEILING MOUNTED OCCUPANCY SENSOR
- (PC) CEILING MOUNTED PHOTOCELL
- (US) ULTRASONIC CEILING OCCUPANCY SENSOR. SENSOR TO BE CONNECTED TO KEYED LIGHT SWITCHES FOR MANUAL OVERRIDE AND USE FOR RESTROOM W/ PARTITIONS.
- WS-1 SINGLE SWITCH WALL OCCUPANCY SENSOR. WATTSTOPPER PW-100 OR EQUAL. SENSOR TO BE MOUNTED AT +44" AFF
- $D DIMMER SWITCH, AT +48" AFF. TO TOP OF OUTLET BOX
- $ LIGHT SWITCH. MOUNT AT +48" AFF TO TOP OF OUTLET BOX
- $3 3-WAY LIGHT SWITCH. MOUNT AT +48" AFF TO TOP OF OUTLET BOX
- $K KEYED SWITCH MOUNT AT +48" AFF TO TOP OF OUTLET BOX
- DUPLEX (WALL MOUNTED) RECEPTACLE 15A - 125V - 3 WIRE. MOUNT AT +18" AFF U.O.N. TO CENTERLINE OF DEVICE
- WP EXTERIOR WEATHER PROOF GFI RECEPTACLE AT +24 " AFF FOR A/C SERVICES (MAX 25'-0" FROM UNITS)
- GFI GROUND FAULT CIRCUIT INTERRUPT RECEPTACLE WITHIN 6'-0" OF ALL SINKS
- ROOF ROOF MOUNTED WEATHER PROOF GFI RECEPTACLE
- EM EXTERIOR LED LIGHT FIXTURE W/ 90 MIN. EMERGENCY BATTERY BACKUP WHEN 'EM' IS DESIGNATED NEXT TO FIXTURE W/ PHOTOCELL W/ 30w MAX. MOUNT AT +93" AFF
- (L) CLOCK OUTLET AT +90" AFF TO CENTERLINE OF DEVICE
- EXIT EXIT SIGN WITH 90 MIN. BATTERY BACK UP. EXIT SIGN REQUIRED FOR CLASSROOMS WITH TWO OR MORE EXTERIOR DOORS. CLASSROOMS WITH ONE EXTERIOR DOOR - OPTIONAL)
- 4SD J-BOX FOR FIRE ALARM PULL STATION (DEVICE BY OTHERS). MOUNT AT +48" AFF TO TOP OF OUTLET BOX WITH 3/4" CONDUIT TO FIRE ALARM STROBE WITH PULL STRING
- 4SD J-BOX FOR FIRE ALARM STROBE OR VOICE EVAC SPEAKER (DEVICE BY OTHERS). BOTTOM OF LENS SHALL BE BETWEEN 80" AND 96" AFF AND WITH 3/4" CONDUIT TO EXTERIOR FIRE ALARM HORN WITH PULL STRING
- (H) 4SD J-BOX FOR EXTERIOR FIRE ALARM SPEAKER (DEVICE BY OTHERS). MOUNT AT +90" AFF TO TOP OF DEVICE WITH 3/4" CONDUIT STUBBED TO ATTIC WITH PULL STRING
- RECESSED 4SD J-BOX W / COVER PLATE FOR FUTURE FIRE ALARM SYSTEM BY OTHERS. MOUNT AT +18" AFF U.O.N. TO CENTERLINE OF BOX AND PROVIDE 1" CO STUB TO ATTIC SPACE WITH PULL STRING
- (S) 4SD J-BOX IN ATTIC FOR CEILING MOUNTED SMOKE DETECTOR (DEVICE BY OTHERS). MAXIMUM 21'-0" FROM ANY POINT IN ROOM AND 30'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO SMOKE DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)
- (H) 4SD J-BOX IN ATTIC FOR ATTIC MOUNTED HEAT DETECTOR (DEVICE BY OTHERS). MAXIMUM 35'-0" FROM ANY POINT IN ATTIC AND 50'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO HEAT DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)
- WH 4SD J-BOX FOR WATER HEATER LOCATE ABOVE CEILING W/ COVER PLATE, HARD WIRE TO UNIT
- 100 CFM CEILING MOUNTED EXHAUST FAN. INTERLOCKED WITH LIGHT SWITCH
- 300 CFM CEILING MOUNTED EXHAUST FAN. INTERLOCKED WITH LIGHT SWITCH
- 2x4 CEILING RECESSED LIGHT, LED LIGHT FIXTURE WITH DIMMING WATTAGE: 51 WATTS (MAX), 5000L (MIN) EACH LIGHT FIXTURE WHICH IS INDICATED AS BEING AN EMERGENCY LIGHT SHALL HAVE A BALLAST BATTERY PACK INSTALLED ON THE FIXTURE. THE BATTERY PACK SHALL PROVIDE POWER TO A SINGLE LAMP WITHIN THE FIXTURE FOR NO LESS THAN 90 MINUTES. ANY LIGHT FIXTURE EQUIPPED WITH A BATTERY PACK SHALL BE WIRED IN SUCH A MANNER THAT THE BATTERY WILL BE ACTIVATED IMMEDIATELY UPON LOSS OF POWER TO THE FIXTURE. ADDITIONALLY THE BATTERY PACK SHALL BE OPERATED USING BATTERY POWER LIGHTING CONTROL SWITCHES AND SENSORS SHALL NOT BE ABLE TO SHUT THE FIXTURE OFF.
- WALL MOUNTED LIGHT FIXTURE, 30 WATTS
- 4SD J-BOX FOR FUTURE DATA W/ SINGLE GANG RING W/ 1" CO STUB INTO ATTIC AND PULL STRING
- FS DEDICATED CIRCUIT w/ LOCK ON DEVICE FOR FIRE SPRINKLER FLOW SWITCH.
- TS DEDICATED CIRCUIT w/ LOCK ON DEVICE FOR FIRE SPRINKLER TAMPER SWITCH.
- (B) DEDICATED CIRCUIT w/ LOCK ON DEVICE FOR FIRE SPRINKLER BELL.

NOTE: PROVIDE A MINIMUM OF 72 SF SOLAR READY AREA PER MODULE. AREA TO BE A MINIMUM OF 5' IN ANY DIRECTION WITH A MINIMUM SPACE OF 80 SF PER BUILDING.

ELECTRICAL PANEL

VOLTS: 120/208 V | PANEL: WALL MOUNTED HVAC | FEED: REAR
MAIN: 100 A | LOCATION: INTERIOR ACCESS | MOUNTING: FLUSH

LOAD	QTY	WATTS AØ	WATTS BØ	BREAKER Amps	BREAKER P	Circuit	A	B	Circuit	BREAKER Amps	BREAKER P	WATTS AØ	WATTS BØ	QTY	LOAD
RECEPTACLES	4	720		20	1	1			2	60	2	4830		1	HVAC - WALL MOUNT
RECEPTACLES/CLOCK	5		900	20	1	3			4	-	-		4830		-
INTERIOR LIGHTING	8	960		20	1	5			6						
EXTERIOR LIGHTING	1		40	20	1	7			8						
WALL RECEPTACLE (GFI)	1	180		20	1	9			10						
DED - SOLAR READY						11			12	20	1		40		FIRE ALARM CONTROL PANEL (FIRE ALARM NOTE #2)
DED - SOLAR READY						13			14						
A = 6690 WATTS / PHASE		1860	940									4830	4870		B = 5810 WATTS / PHASE

TOTAL = 12,500 WATTS | 61 AMPS | 120/208 VOLTS | 1 Ø | 3 WIRE

ELECTRICAL PANEL

VOLTS: 120/208 V | PANEL: "A" ROOF MOUNTED HVAC | FEED: REAR
MAIN: 100 A | LOCATION: INTERIOR ACCESS | MOUNTING: RECESSED

LOAD	QTY	WATTS AØ	WATTS BØ	BREAKER Amps	BREAKER P	Circuit	A	B	Circuit	BREAKER Amps	BREAKER P	WATTS AØ	WATTS BØ	QTY	LOAD
RECEPTACLES	4	720		20	1	1			2	60	2	4542		1	HVAC - ROOF MOUNT
RECEPTACLES/CLOCK	5		900	20	1	3			4	-	-		4542		-
INTERIOR LIGHTING	8	960		20	1	5			6						
EXTERIOR LIGHTING	1		40	20	1	7			8						
ROOF RECEPTACLE (GFI)	1	180		20	1	9			10						
DED - SOLAR READY						11			12	20	1		40		FIRE ALARM CONTROL PANEL (FIRE ALARM NOTE #2)
DED - SOLAR READY						13			14						
A = 6402 WATTS / PHASE		1860	940									4542	4582		B = 5522 WATTS / PHASE

TOTAL = 11,924 WATTS | 57 AMPS | 120/208 VOLTS | 1 Ø | 3 WIRE

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ELECTRICAL PLAN AND SCHEDULE 24' x 40'

REVISIONS
1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

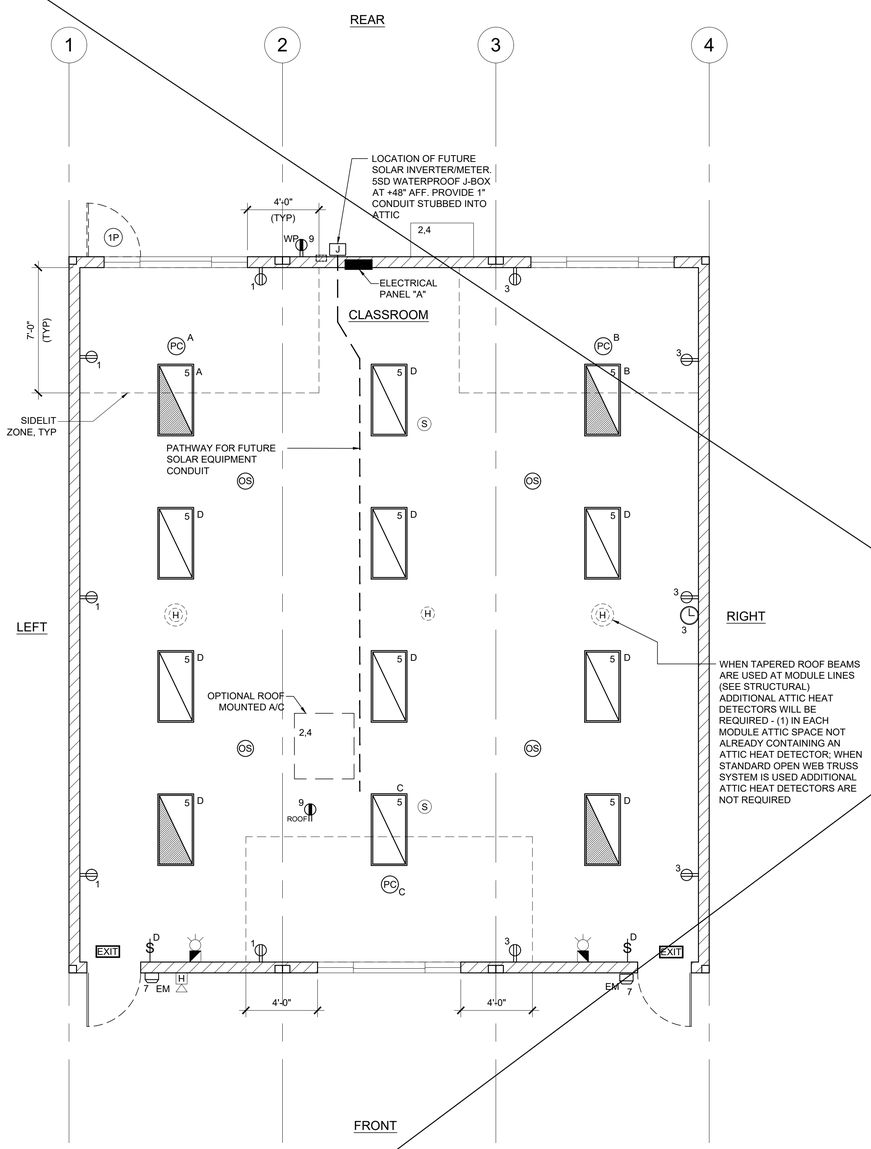
REGISTERED PROFESSIONAL ENGINEER JOHN W STARK 2015 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

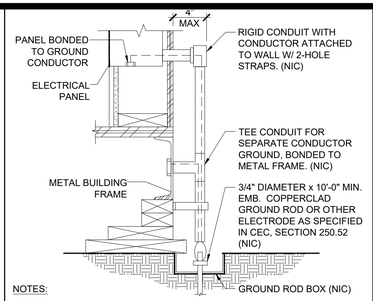
P.C. SHEET NUMBER

E-1.01



ELECTRICAL PLAN

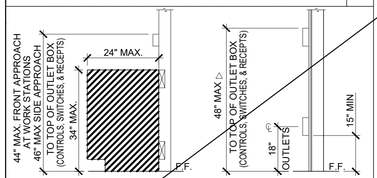
SCALE: 1/4" = 1'-0" | 4

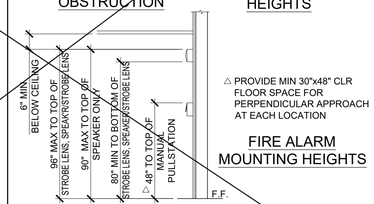


NOTES:

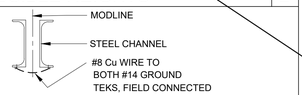
1. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250.66
2. ELEC. TRADE SHALL CHECK AREA FOR EXISTING CONDUITS, SEWER, GAS & WATER PIPING BEFORE DRIVING GROUND RODS.
3. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELEC'L. PANEL & TO METAL BUILDING FRAME (CEC 250.52) IN ADDITION TO THE DETAIL SHOWN ABOVE, BOND THE ELECTRICAL GROUND TO METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH THE EARTH FOR 10 FT. OR MORE, IF AVAILABLE (CEC 250.52)
4. ALL MODULES OF METAL FRAME BLDGS. SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING). BONDING SHALL INCLUDE METAL RAMP.
5. CHECK RESISTANT TO GROUND ROD, IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS WITH CONDUCTORS AS SHOWN SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (CEC 250.56).

TYPICAL GROUNDING DETAIL | 1





ACCESSIBLE HEIGHTS | 2



GROUND JUMPER AT MODLINE | 3

GROUND JUMPER AT MODLINE

EACH BUILDING SHALL BE SEPARATELY GROUNDED WITH A 3/4" RD. X 8' COPPERCLAD STEEL GROUND ROD, WHERE ROCK BOTTOM IS ENCOUNTERED, ROD SHALL BE DRIVEN AT AN ANGLE NOT TO EXCEED 45 DEGREE'S FROM THE VERTICAL OR SHALL BE BURIED IN A TRENCH THAT IS AT LEAST 30" DEEP (BY SITE ELECTRICAL).

TESTING: TEST FOR RESISTANCE TO GROUND, IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCES TO 25 OHMS OR LESS. (BY SITE ELECTRICAL).

APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF THIS FIRE ALARM FOR ALL SITES. THE FIRE ALARM SYSTEM AND/OR COMPONENTS MAYBE REQUIRED TO BE CHANGED DUE TO SITE LOCATION EXISTING CONDITIONS OR INCOMPATIBLE COMPONENTS.

GROUND MG TEST SHALL BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR. ALL GROUNDING SHALL BE IN ACCORDANCE WITH CEC ARTICLE 250.

FIRE ALARM NOTES

1. SMOKE AND HEAT DETECTOR CONDUIT AND DEVICES PROVIDED AND INTERCONNECTED BY OTHERS TO FIRE ALARM SYSTEM
2. PROVIDE DEDICATED FIRE ALARM 120 VOLT CIRCUIT CONNECTED TO LOCKED-ON BREAKER. THE CIRCUIT BREAKER SHALL BE LOCKED-ON WITH APPROVED LOCKING DEVICE, MARKED RED AND IDENTIFIED AS "FIRE ALARM CONTROL CIRCUIT". NFPA 72 SECTION 10.6.5.2

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2022 CBC SECTIONS 1617A.1.24, 1617A.1.25 & 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., OSHPD OPA FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEM (E):

MP☐ MD☐ PP☐ E☑ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

LIGHTING CONTROL SYSTEM SEQUENCE OF OPERATIONS

THE LIGHTING CONTROL SYSTEM BASIS OF DESIGN SHALL BE THE LUTRON VIVE WIRELESS LIGHTING CONTROL SYSTEM.
THE SYSTEM SHALL BE CAPABLE OF PROVIDING MANUAL CONTROL, OCCUPANCY SENSING CONTROL AND DAYLIGHT HARVESTING CONTROL.

SEQUENCE:

OCCUPANT ENTERS:
ALL LIGHTS AUTOMATICALLY TURN ON TO 50% LIGHT LEVEL. OCCUPANT MAY INCREASE LIGHTS TO MAXIMUM LEVEL MANUALLY WITH WALL CONTROL.
WHEN OCCUPIED:
LIGHTING IN DAYLIT ZONES AUTOMATICALLY DIM/BRIGHTEN BASED ON DAYLIGHT AVAILABILITY.
OCCUPANT MAY MANUALLY DIM/BRIGHTEN THE LIGHTS WITH WALL CONTROL.
OCCUPANT EXITS:
ALL LIGHTS AUTOMATICALLY TURN OFF 15 MINUTES AFTER VACANCY.

CONDUIT FILL AND CONDUCTOR CAPACITY TABLE

(ALL CONDUCTORS SHALL BE TYPE THHN/THWN 90°C. COPPER)

WIRE SIZE	CAPACITY	WIRE TYPE	NO. OF CONDUCTOR PERMITTED 1/2" C	3/4" C	1" C	1 1/4" C
#12	20A	THHN	9	16	25	45
#10	30A	THHN	5	10	16	28
#8	45A	THHN	2	5	8	14
#6	65A	THHN	1	3	5	10
#4	85A	THHN	1	2	4	7

JUNCTION BOX SIZE TABLE

BOX	SIZE	CU. IN.	MAX NO. OF CONDUCTORS #12	#10	#8	#6
4SS	1 1/4" x 4" SQ	18.0	8	7	6	0
4S	1 1/2" x 4" SQ	21.0	9	8	7	0
4SD	2 1/8" x 4" SQ	30.3	13	12	10	6
4SX	2 7/8" x 4" SQ	43.5	23	21	17	10
5SD	2 1/8" x 4-11/16" SQ	42.0	18	16	14	6
5SX	3 7/8" x 4-11/16" SQ	86.0	38	34	28	17
664	4" x 6" SQ	144.0	64	57	48	28

* DEDUCT ONE CONDUCTOR FOR (1) OR MORE GROUNDING CONDUCTORS ENTERING THE BOX

LEGEND

- 2x4 CEILING RECESSED LIGHT, LED LIGHT FIXTURE WITH DIMMING WATTAGE: 51 WATTS (MAX), 5000L (MIN)
- WALL MOUNTED HVAC UNIT. SEE MECHANICAL DWGS
- ROOF MOUNTED HVAC UNIT-SEE MECHANICAL DWGS
- ELECTRICAL PANEL AT +60" AFF TO TOP OF ELECTRICAL PANEL WITH 1 1/2" DIA POWER STUB OUT (U.N.O.)
- (OS) CEILING MOUNTED OCCUPANCY SENSOR
- (PC) CEILING MOUNTED PHOTOCELL
- (US) ULTRASONIC CEILING OCCUPANCY SENSOR. SENSOR TO BE CONNECTED TO KEYED LIGHT SWITCHES FOR MANUAL OVERRIDE AND USE FOR RESTROOM W/ PARTITIONS.
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- (H) 4SD J-BOX FOR EXTERIOR FIRE ALARM SPEAKER (DEVICE BY OTHERS). MOUNT AT +90" AFF TO TOP OF DEVICE WITH 3/4" CONDUIT STUBBED TO ATTIC WITH PULL STRING
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- (WH) 4SD J-BOX FOR WATER HEATER LOCATE ABOVE CEILING W/ COVER PLATE, HARD WIRE TO UNIT
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- WALL MOUNTED LIGHT FIXTURE, 30 WATTS
- 4SD J-BOX FOR FUTURE DATA W/ SINGLE GANG RING W/ 1" CO STUB INTO ATTIC AND PULL STRING
- FS DEDICATED CIRCUIT w/ LOCK ON DEVICE FOR FIRE SPRINKLER FLOW SWITCH.
- TS DEDICATED CIRCUIT w/ LOCK ON DEVICE FOR FIRE SPRINKLER TAMPER SWITCH.
- (B) DEDICATED CIRCUIT w/ LOCK ON DEVICE FOR FIRE SPRINKLER BELL.

NOTE: PROVIDE A MINIMUM OF 72 SF SOLAR READY AREA PER MODULE. AREA TO BE A MINIMUM OF 5' IN ANY DIRECTION WITH A MINIMUM SPACE OF 80 SF PER BUILDING.

ELECTRICAL PANEL

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MAIN: 100 A | LOCATION: INTERIOR ACCESS | MOUNTING: FLUSH

LOAD	QTY	WATTS AØ	WATTS BØ	BREAKER Amps	BREAKER P	Circuit	A	B	Circuit	BREAKER Amps	BREAKER P	WATTS AØ	WATTS BØ	QTY	LOAD
RECEPTACLES	4	720		20	1	1			2	60	2	4830		1	HVAC - WALL MOUNT
RECEPTACLES/CLOCK	5		900	20	1	3			4	-	-		4830		-
INTERIOR LIGHTING	8	960		20	1	5			6						
EXTERIOR LIGHTING	1		40	20	1	7			8						
WALL RECEPTACLE (GFI)	1	180		20	1	9			10						
DED - SOLAR READY						11			12	20	1		40		FIRE ALARM CONTROL PANEL (FIRE ALARM NOTE #2)
DED - SOLAR READY						13			14						
A = 6690 WATTS / PHASE		1860	940									4830	4870		B = 5810 WATTS / PHASE

TOTAL = 12,500 WATTS | 61 AMPS | 120/208 VOLTS | 1 Ø | 3 WIRE

ELECTRICAL PANEL

VOLTS: 120/208 V | PANEL: "A" ROOF MOUNTED HVAC | FEED: REAR
MAIN: 100 A | LOCATION: INTERIOR ACCESS | MOUNTING: RECESSED

LOAD	QTY	WATTS AØ	WATTS BØ	BREAKER Amps	BREAKER P	Circuit	A	B	Circuit	BREAKER Amps	BREAKER P	WATTS AØ	WATTS BØ	QTY	LOAD
RECEPTACLES	4	720		20	1	1			2	60	2	4542		1	HVAC - ROOF MOUNT
RECEPTACLES/CLOCK	5		900	20	1	3			4	-	-		4542		-
INTERIOR LIGHTING	8	960		20	1	5			6						
EXTERIOR LIGHTING	1		40	20	1	7			8						
ROOF RECEPTACLE (GFI)	1	180		20	1	9			10						
DED - SOLAR READY						11			12	20	1		40		FIRE ALARM CONTROL PANEL (FIRE ALARM NOTE #2)
DED - SOLAR READY						13			14						
A = 6402 WATTS / PHASE		1860	940									4542	4582		B = 5522 WATTS / PHASE

TOTAL = 11,924 WATTS | 57 AMPS | 120/208 VOLTS | 1 Ø | 3 WIRE

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ELECTRICAL PLAN AND SCHEDULE 36' x 40'

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

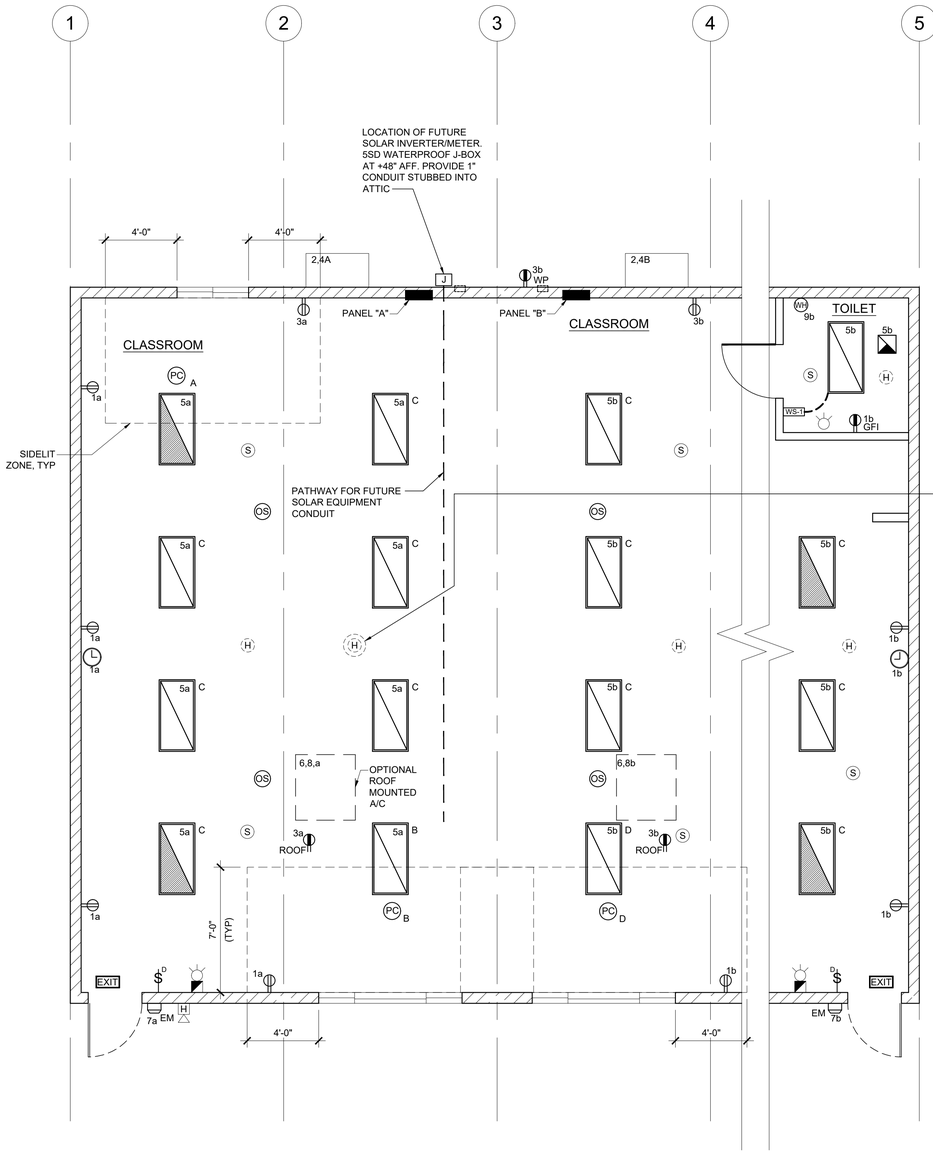
REGISTERED PROFESSIONAL ENGINEER JOHN W STARK 2015 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

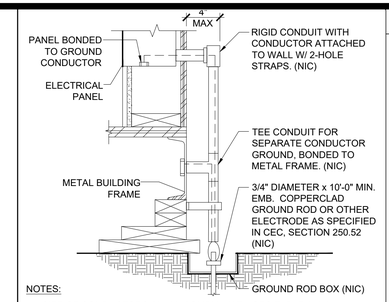
P.C. SHEET NUMBER

E-1.02



ELECTRICAL PLAN

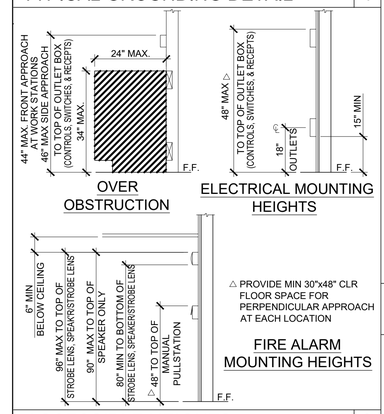
SCALE: 1/4" = 1'-0" | 4



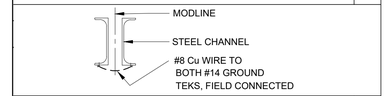
NOTES:

1. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250.66
2. ELEC. TRADE SHALL CHECK AREA FOR EXISTING CONDUITS, SEWER, GAS & WATER PIPING BEFORE DRIVING GROUND RODS.
3. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELEC'L. PANEL & TO METAL BUILDING FRAME (CEC 250.52) IN ADDITION TO THE DETAIL SHOWN ABOVE, BOND THE ELECTRICAL GROUND TO METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH THE EARTH FOR 10 FT. OR MORE, IF AVAILABLE (CEC 250.52)
4. ALL MODULES OF METAL FRAME BLDGS. SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING). BONDING SHALL INCLUDE METAL RAMP.
5. CHECK RESISTANT TO GROUND ROD, IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS WITH CONDUCTORS AS SHOWN SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (CEC 250.56).

TYPICAL GROUNDING DETAIL | 1



ACCESSIBLE HEIGHTS | 2



GROUND JUMPER AT MODLINE | 3

GROUND JUMPER AT MODLINE

EACH BUILDING SHALL BE SEPARATELY GROUNDED WITH A 3/4" RD. X 8' COPPERCLAD STEEL GROUND ROD. WHERE ROCK BOTTOM IS ENCOUNTERED, ROD SHALL BE DRIVEN AT AN ANGLE NOT TO EXCEED 45 DEGREE'S FROM THE VERTICAL OR SHALL BE BURIED IN A TRENCH THAT IS AT LEAST 30" DEEP (BY SITE ELECTRICAL).

TESTING: TEST FOR RESISTANCE TO GROUND, IF RESISTANCE EXCEEDS 25 OHMS. INSTALL ADDITIONAL GROUND RODS SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCES TO 25 OHMS OR LESS. (BY SITE ELECTRICAL).

APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF THIS FIRE ALARM FOR ALL SITES. THE FIRE ALARM SYSTEM AND/OR COMPONENTS MAYBE REQUIRED TO BE CHANGED DUE TO SITE LOCATION EXISTING CONDITIONS OR INCOMPATIBLE COMPONENTS.

GROUND MG TEST SHALL BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR. ALL GROUNDING SHALL BE IN ACCORDANCE WITH CEC ARTICLE 250.

FIRE ALARM NOTES

1. SMOKE AND HEAT DETECTOR CONDUIT AND DEVICES PROVIDED AND INTERCONNECTED BY OTHERS TO FIRE ALARM SYSTEM
2. PROVIDE DEDICATED FIRE ALARM 120 VOLT CIRCUIT CONNECTED TO LOCKED-ON BREAKER. THE CIRCUIT BREAKER SHALL BE LOCKED-ON WITH APPROVED LOCKING DEVICE, MARKED RED AND IDENTIFIED AS "FIRE ALARM CONTROL CIRCUIT". NFPA 72 SECTION 10.6.5.2

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2022 CBC SECTIONS 1617A.1.24, 1617A.1.25 & 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., OSHPD OPA FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEM (E):

MP☐ MD☐ PP☐ E☑ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

LIGHTING CONTROL SYSTEM SEQUENCE OF OPERATIONS

THE LIGHTING CONTROL SYSTEM BASIS OF DESIGN SHALL BE THE LUTRON VIVE WIRELESS LIGHTING CONTROL SYSTEM.
THE SYSTEM SHALL BE CAPABLE OF PROVIDING MANUAL CONTROL, OCCUPANCY SENSING CONTROL AND DAYLIGHT HARVESTING CONTROL.

SEQUENCE:

OCCUPANT ENTERS:
ALL LIGHTS AUTOMATICALLY TURN ON TO 50% LIGHT LEVEL. OCCUPANT MAY INCREASE LIGHTS TO MAXIMUM LEVEL MANUALLY WITH WALL CONTROL.
WHEN OCCUPIED:
LIGHTING IN DAYLIT ZONES AUTOMATICALLY DIM/BRIGHTEN BASED ON DAYLIGHT AVAILABILITY.
OCCUPANT MAY MANUALLY DIM/BRIGHTEN THE LIGHTS WITH WALL CONTROL.
OCCUPANT EXITS:
ALL LIGHTS AUTOMATICALLY TURN OFF 15 MINUTES AFTER VACANCY.

CONDUIT FILL AND CONDUCTOR CAPACITY TABLE

(ALL CONDUCTORS SHALL BE TYPE THHN/THWN 90°C. COPPER)

WIRE SIZE	CAPACITY	WIRE TYPE	NO. OF CONDUCTOR PERMITTED 1/2" C	3/4" C	1" C	1 1/4" C
#12	20A	THHN	9	16	25	45
#10	30A	THHN	5	10	16	28
#8	45A	THHN	2	5	8	14
#6	65A	THHN	1	3	5	10
#4	85A	THHN	1	2	4	7

JUNCTION BOX SIZE TABLE

BOX	SIZE	CU. IN.	MAX NO. OF CONDUCTORS #12	#10	#8	#6
4SS	1 1/4" x 4" SQ	18.0	8	7	6	0
4S	1 1/2" x 4" SQ	21.0	9	8	7	0
4SD	2 1/8" x 4" SQ	30.3	13	12	10	6
4SX	2 7/8" x 4" SQ	43.5	23	21	17	10
5SD	2 1/8" x 4-11/16" SQ	42.0	18	16	14	6
5SX	3 7/8" x 4-11/16" SQ	86.0	38	34	28	17
664	4" x 6" SQ	144.0	64	57	48	28

* DEDUCT ONE CONDUCTOR FOR (1) OR MORE GROUNDING CONDUCTORS ENTERING THE BOX

LEGEND

- 2x4 CEILING RECESSED LIGHT, LED LIGHT FIXTURE WITH DIMMING WATTAGE: 51 WATTS (MAX), 5000L (MIN)
- WALL MOUNTED HVAC UNIT. SEE MECHANICAL DWGS
- ROOF MOUNTED HVAC UNIT-SEE MECHANICAL DWGS
- ELECTRICAL PANEL AT +60" AFF TO TOP OF ELECTRICAL PANEL WITH 1 1/2" DIA POWER STUB OUT (U.N.O.)
- (OS) CEILING MOUNTED OCCUPANCY SENSOR
- (PC) CEILING MOUNTED PHOTOCELL
- (US) ULTRASONIC CEILING OCCUPANCY SENSOR. SENSOR TO BE CONNECTED TO KEYED LIGHT SWITCHES FOR MANUAL OVERRIDE AND USE FOR RESTROOM W/ PARTITIONS.
- WS-1 SINGLE SWITCH WALL OCCUPANCY SENSOR. WATTSTOPPER PW-100 OR EQUAL. SENSOR TO BE MOUNTED AT +44" AFF
- $D DIMMER SWITCH, AT +48" AFF. TO TOP OF OUTLET BOX
- $ LIGHT SWITCH. MOUNT AT +48" AFF TO TOP OF OUTLET BOX
- $3 3-WAY LIGHT SWITCH. MOUNT AT +48" AFF TO TOP OF OUTLET BOX
- $K KEYED SWITCH MOUNT AT +48" AFF TO TOP OF OUTLET BOX
- DUPLEX (WALL MOUNTED) RECEPTACLE 15A - 125V - 3 WIRE. MOUNT AT +18" AFF U.O.N. TO CENTERLINE OF DEVICE
- WP EXTERIOR WEATHER PROOF GFI RECEPTACLE AT +24 " AFF FOR A/C SERVICES (MAX 25'-0" FROM UNITS)
- GFI GROUND FAULT CIRCUIT INTERRUPT RECEPTACLE WITHIN 6'-0" OF ALL SINKS
- ROOF ROOF MOUNTED WEATHER PROOF GFI RECEPTACLE
- EM EXTERIOR LED LIGHT FIXTURE W/ 90 MIN. EMERGENCY BATTERY BACKUP WHEN 'EM' IS DESIGNATED NEXT TO FIXTURE W/ PHOTOCELL W/ 30w MAX. MOUNT AT +93" AFF
- (L) CLOCK OUTLET AT +90" AFF TO CENTERLINE OF DEVICE
- EXIT EXIT SIGN WITH 90 MIN. BATTERY BACK UP. EXIT SIGN REQUIRED FOR CLASSROOMS WITH TWO OR MORE EXTERIOR DOORS. CLASSROOMS WITH ONE EXTERIOR DOOR - OPTIONAL)
- 4SD J-BOX FOR FIRE ALARM PULL STATION (DEVICE BY OTHERS). MOUNT AT +48" AFF TO TOP OF OUTLET BOX WITH 3/4" CONDUIT TO FIRE ALARM STROBE WITH PULL STRING
- 4SD J-BOX FOR FIRE ALARM STROBE OR VOICE EVAC SPEAKER (DEVICE BY OTHERS). BOTTOM OF LENS SHALL BE BETWEEN 80" AND 96" AFF AND WITH 3/4" CONDUIT TO EXTERIOR FIRE ALARM HORN WITH PULL STRING
- (H) 4SD J-BOX FOR EXTERIOR FIRE ALARM SPEAKER (DEVICE BY OTHERS). MOUNT AT +90" AFF TO TOP OF DEVICE WITH 3/4" CONDUIT STUBBED TO ATTIC WITH PULL STRING
- RECESSED 4SD J-BOX W / COVER PLATE FOR FUTURE FIRE ALARM SYSTEM BY OTHERS. MOUNT AT +18" AFF U.O.N. TO CENTERLINE OF BOX AND PROVIDE 1" CO STUB TO ATTIC SPACE WITH PULL STRING
- (S) 4SD J-BOX IN ATTIC FOR CEILING MOUNTED SMOKE DETECTOR (DEVICE BY OTHERS). MAXIMUM 21'-0" FROM ANY POINT IN ROOM AND 30'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO SMOKE DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)
- (H) 4SD J-BOX IN ATTIC FOR ATTIC MOUNTED HEAT DETECTOR (DEVICE BY OTHERS). MAXIMUM 35'-0" FROM ANY POINT IN ATTIC AND 50'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO HEAT DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)
- (WH) 4SD J-BOX FOR WATER HEATER LOCATE ABOVE CEILING W/ COVER PLATE, HARD WIRE TO UNIT
- 100 CFM CEILING MOUNTED EXHAUST FAN. INTERLOCKED WITH LIGHT SWITCH
- 300 CFM CEILING MOUNTED EXHAUST FAN. INTERLOCKED WITH LIGHT SWITCH
- 2x4 CEILING RECESSED LIGHT, LED LIGHT FIXTURE WITH DIMMING WATTAGE: 51 WATTS (MAX), 5000L (MIN) EACH LIGHT FIXTURE WHICH IS INDICATED AS BEING AN EMERGENCY LIGHT SHALL HAVE A BALLAST BATTERY PACK INSTALLED ON THE FIXTURE. THE BATTERY PACK SHALL PROVIDE POWER TO A SINGLE LAMP WITHIN THE FIXTURE FOR NO LESS THAN 90 MINUTES. ANY LIGHT FIXTURE EQUIPPED WITH A BATTERY PACK SHALL BE WIRED IN SUCH A MANNER THAT THE BATTERY WILL BE ACTIVATED IMMEDIATELY UPON LOSS OF POWER TO THE FIXTURE. ADDITIONALLY THE BATTERY PACK SHALL BE OPERATED USING BATTERY POWER LIGHTING CONTROL SWITCHES AND SENSORS SHALL NOT BE ABLE TO SHUT THE FIXTURE OFF.
- WALL MOUNTED LIGHT FIXTURE, 30 WATTS
- 4SD J-BOX FOR FUTURE DATA W/ SINGLE GANG RING W/ 1" CO STUB INTO ATTIC AND PULL STRING
- FS DEDICATED CIRCUIT w/ LOCK ON DEVICE FOR FIRE SPRINKLER FLOW SWITCH.
- TS DEDICATED CIRCUIT w/ LOCK ON DEVICE FOR FIRE SPRINKLER TAMPER SWITCH.
- (B) DEDICATED CIRCUIT w/ LOCK ON DEVICE FOR FIRE SPRINKLER BELL.

NOTE: PROVIDE A MINIMUM OF 72 SF SOLAR READY AREA PER MODULE. AREA TO BE A MINIMUM OF 5' IN ANY DIRECTION WITH A MINIMUM SPACE OF 80 SF PER BUILDING.

ELECTRICAL PANEL

VOLTS: 120/208 V | PANEL: WALL MOUNTED HVAC | FEED: REAR
MAIN: 100 A | LOCATION: INTERIOR ACCESS | MOUNTING: FLUSH

LOAD	QTY	WATTS AØ	WATTS BØ	BREAKER Amps	BREAKER P	Circuit	A	B	Circuit	BREAKER Amps	BREAKER P	WATTS AØ	WATTS BØ	QTY	LOAD
RECEPTACLES	4	720		20	1	1			2	60	2	4830		1	HVAC - WALL MOUNT
RECEPTACLES/CLOCK	5		900	20	1	3			4	-	-		4830		-
INTERIOR LIGHTING	8	960		20	1	5			6						
EXTERIOR LIGHTING	1		40	20	1	7			8						
WALL RECEPTACLE (GFI)	1	180		20	1	9			10						
DED - SOLAR READY						11			12	20	1		40		FIRE ALARM CONTROL PANEL (FIRE ALARM NOTE #2)
DED - SOLAR READY						13			14						
A = 6690 WATTS / PHASE		1860	940									4830	4870		B = 5810 WATTS / PHASE

TOTAL = 12,500 WATTS | 61 AMPS | 120/208 VOLTS | 1 Ø | 3 WIRE

ELECTRICAL PANEL

VOLTS: 120/208 V | PANEL: "A" ROOF MOUNTED HVAC | FEED: REAR
MAIN: 100 A | LOCATION: INTERIOR ACCESS | MOUNTING: RECESSED

LOAD	QTY	WATTS AØ	WATTS BØ	BREAKER Amps	BREAKER P	Circuit	A	B	Circuit	BREAKER Amps	BREAKER P	WATTS AØ	WATTS BØ	QTY	LOAD
RECEPTACLES	4	720		20	1	1			2	60	2	4542		1	HVAC - ROOF MOUNT
RECEPTACLES/CLOCK	5		900	20	1	3			4	-	-		4542		-
INTERIOR LIGHTING	8	960		20	1	5			6						
EXTERIOR LIGHTING	1		40	20	1	7			8						
ROOF RECEPTACLE (GFI)	1	180		20	1	9			10						
DED - SOLAR READY						11			12	20	1		40		FIRE ALARM CONTROL PANEL (FIRE ALARM NOTE #2)
DED - SOLAR READY						13			14						
A = 6402 WATTS / PHASE		1860	940									4542	4582		B = 5522 WATTS / PHASE

TOTAL = 11,924 WATTS | 57 AMPS | 120/208 VOLTS | 1 Ø | 3 WIRE

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

ELECTRICAL PLAN AND SCHEDULE 48' TO 120' x 40'

REVISIONS
1
2
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PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

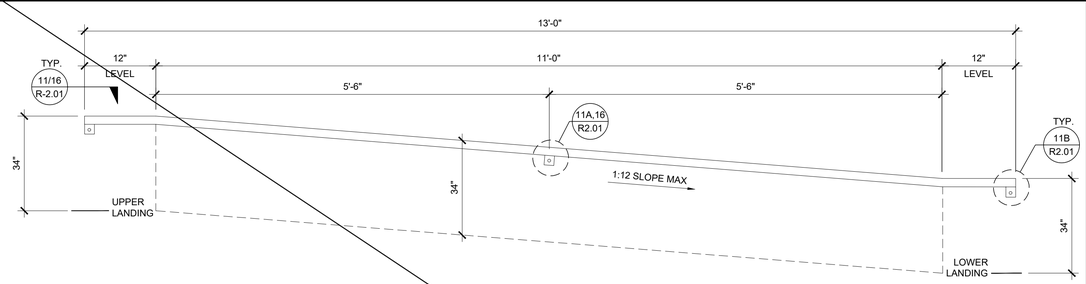
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLE 2575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

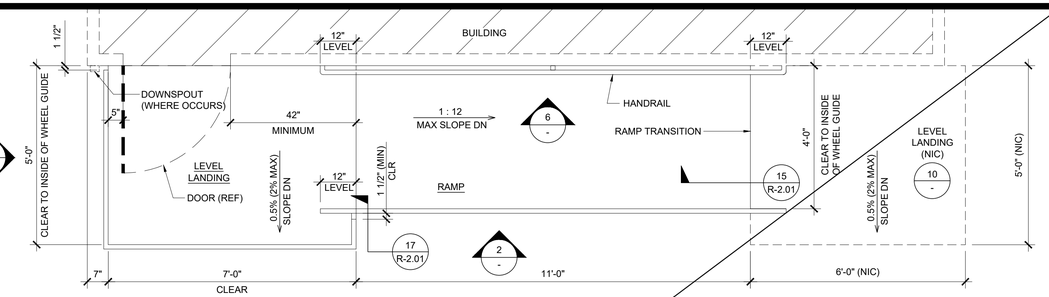
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
E-1.03



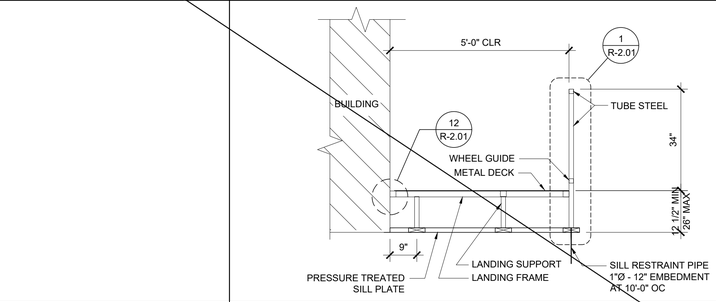
HANDRAIL ATTACHMENT TO BUILDING

SCALE : 1" = 1'-0" | 6



RAMP AND LANDING AT BUILDING

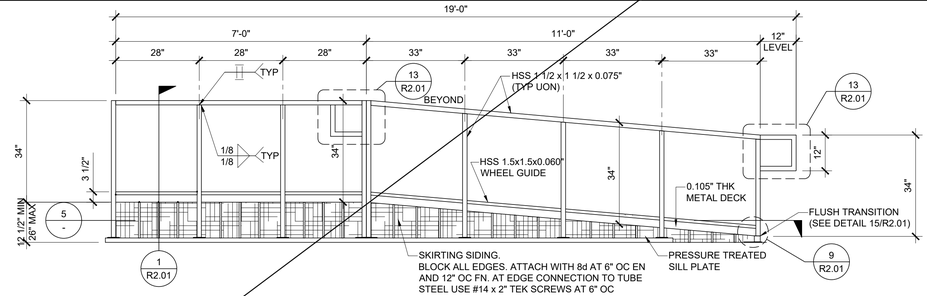
SCALE : 1/2" = 1'-0" | 1



11

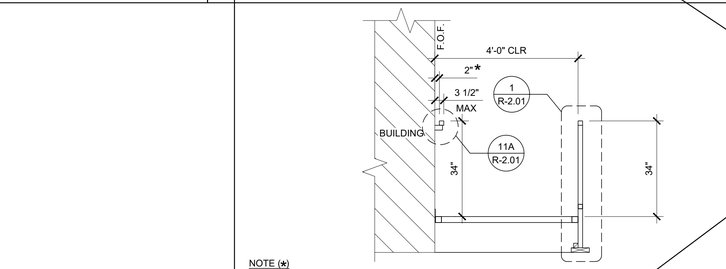
SECTION AT LANDING

SCALE : 1/2" = 1'-0" | 7



RAMP AND LANDING ELEVATION

SCALE : 1/2" = 1'-0" | 2



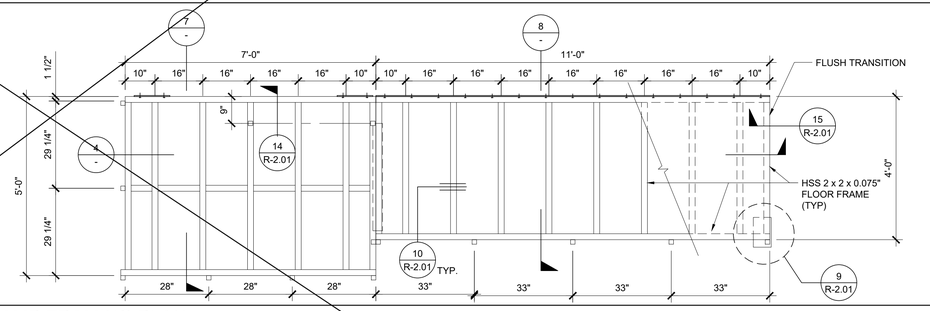
NOTE (*)

1. ALL SURFACES SHALL BE SMOOTH WITH NO SHARP CORNERS, PER CBC 11B-505.8 WALL TO BE SMOOTH AND TO EXTEND 18" ABOVE HANDRAIL

12

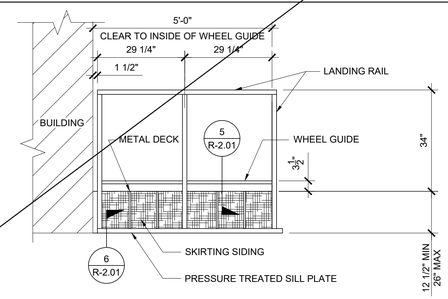
SECTION AT RAMP

SCALE : 1/2" = 1'-0" | 8



RAMP FRAMING PLAN

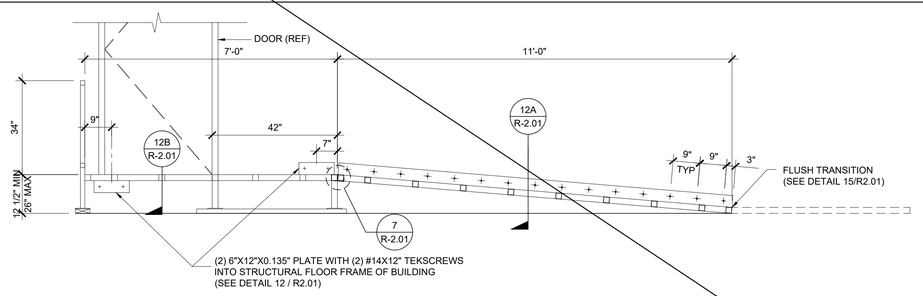
SCALE : 1/2" = 1'-0" | 3



13

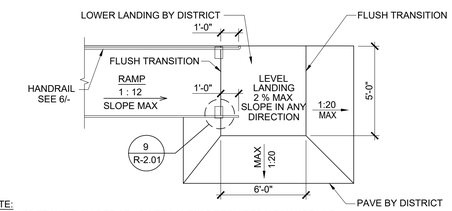
LANDING ELEVATION

SCALE : 1/2" = 1'-0" | 9



SECTION AT RAMP AND LANDING

SCALE : 1/2" = 1'-0" | 4



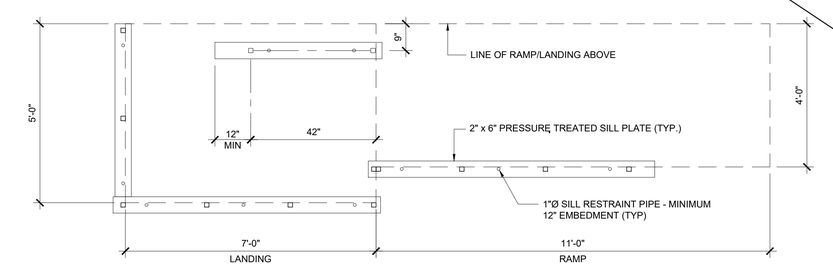
NOTE:

1. 1:20 TRANSITION OFF OF LOWER LANDING REQUIRES NO HANDRAILS.
2. TRANSITIONS EXCEEDING 1:20 BUT NOT TO EXCEED 1:12 REQUIRE REMOVAL OF 12" HANDRAIL EXTENSION AND ADDITIONAL HANDRAILING BY DISTRICT. (THIS CONDITION REQUIRES A SITE SPECIFIC DETAIL PROVIDED BY ARCHITECT TO DEMONSTRATE ACCESSIBLE RAMP.)

14

RAMP TRANSITION

SCALE: NTS | 10



SILL PLAN FOR RAMP AND LANDING

SCALE : 1/2" = 1'-0" | 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

RAMP LANDING

REVISIONS

1	
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3	
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REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

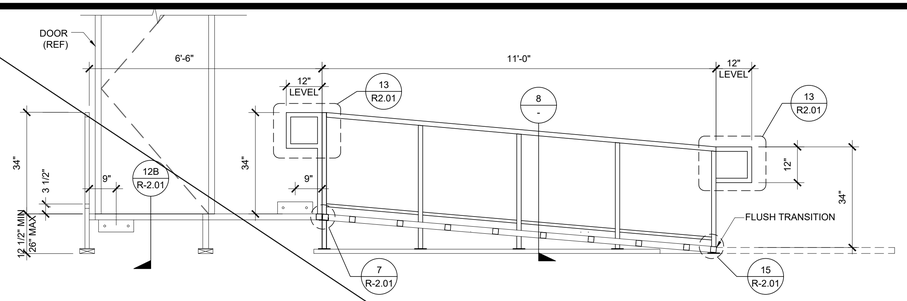
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24975 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES	24' x 40' PC
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

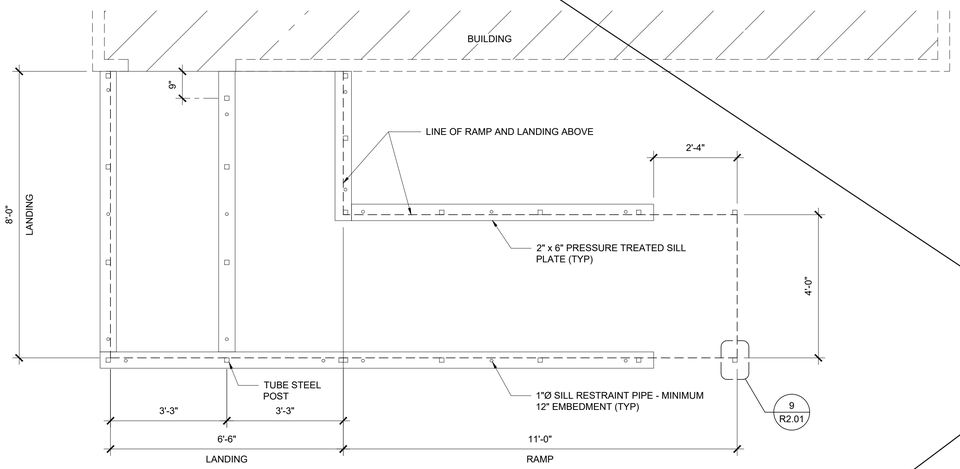
P.C. SHEET NUMBER

R-1.01



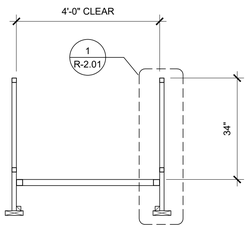
SECTION AT RAMP AND LANDING

SCALE : 1/2" = 1'-0" | 4



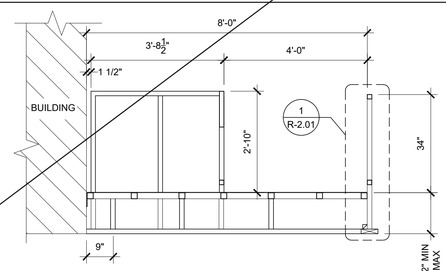
SILL PLAN FOR RAMP AND LANDING

SCALE : 1/2" = 1'-0" | 5



SECTION AT RAMP

SCALE : 1/2" = 1'-0" | 8



SECTION AT LANDING

SCALE : 1/2" = 1'-0" | 6

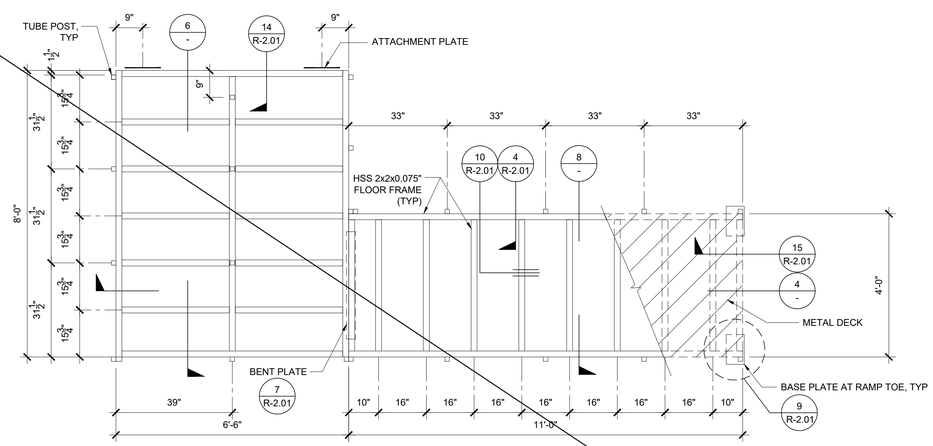
NOTE:
1. 1:20 TRANSITION OFF OF LOWER LANDING REQUIRES NO HANDRAILS.
2. TRANSITIONS EXCEEDING 1:20 BUT NOT TO EXCEED 1:12 REQUIRE REMOVAL OF 12" HANDRAIL EXTENSION AND ADDITIONAL HANDRAILING BY DISTRICT.
(THIS CONDITION REQUIRES A SITE SPECIFIC DETAIL PROVIDED BY ARCHITECT TO DEMONSTRATE ACCESSIBLE RAMP.)

RAMP TRANSITION

SCALE: NTS | 9

LANDING ELEVATION

SCALE : 1/2" = 1'-0" | 7

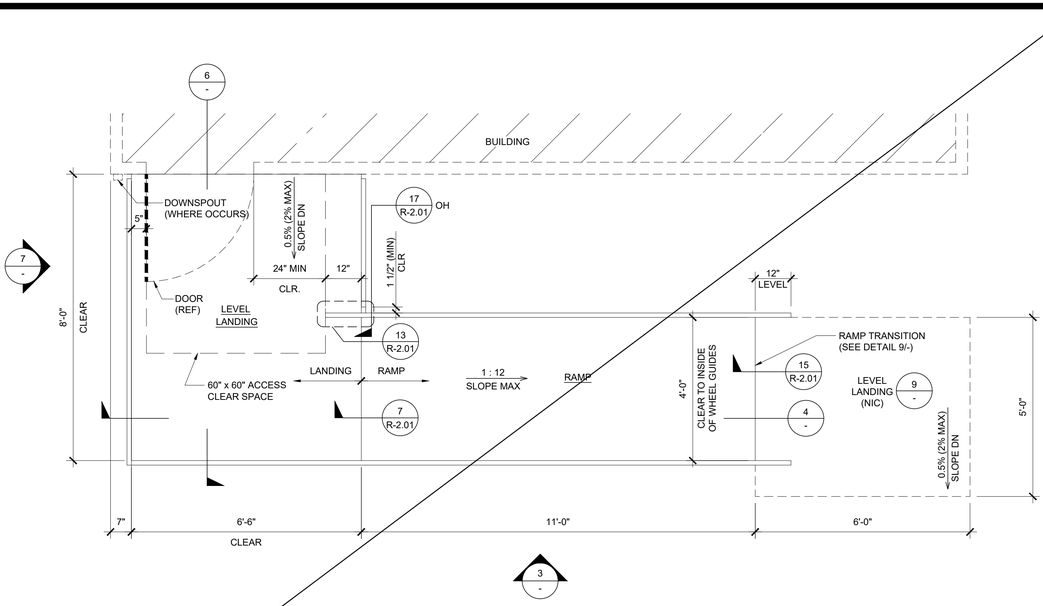


RAMP FRAMING PLAN

SCALE : 1/2" = 1'-0" | 2

RAMP AND LANDING ELEVATION

SCALE : 1/2" = 1'-0" | 3



PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

OFFSET RAMP PLAN

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

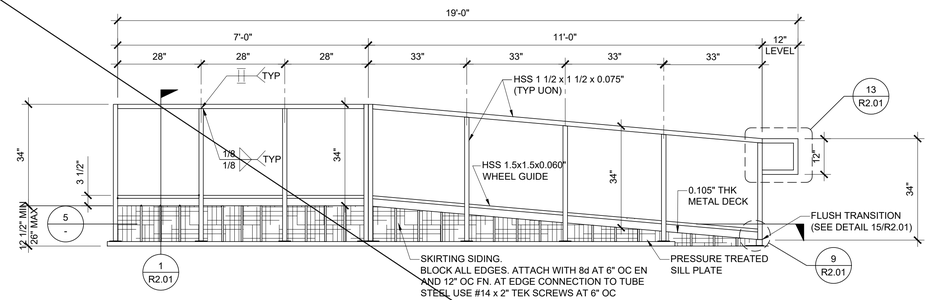
REGISTERED PROFESSIONAL ENGINEER
JOHN 'W STARLING
2475
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

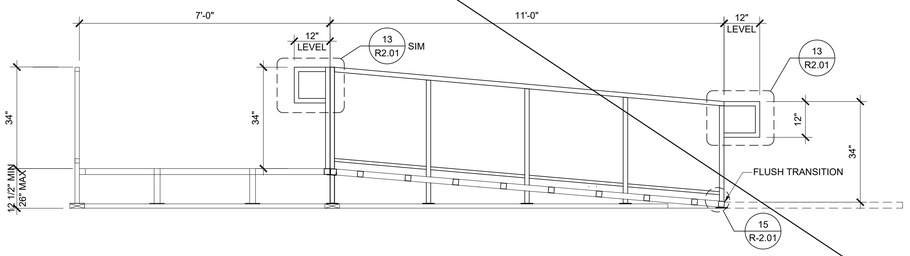
P.C. SHEET NUMBER

R-1.02



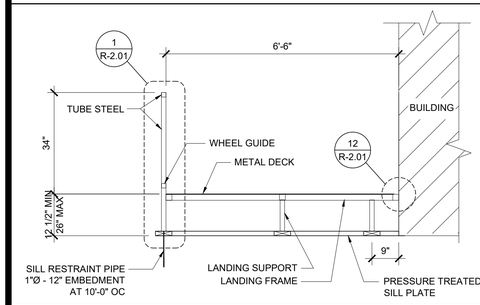
RAMP AND LANDING ELEVATION

SCALE : 1/2" = 1'-0" | 4



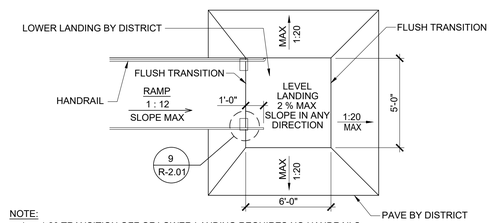
SECTION AT RAMP AND LANDING

SCALE : 1/2" = 1'-0" | 5



SECTION AT LANDING

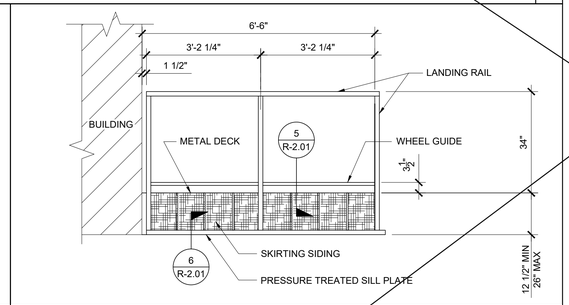
SCALE : 1/2" = 1'-0" | 9



NOTE:
1. 1:20 TRANSITION OFF OF LOWER LANDING REQUIRES NO HANDRAILS.
2. TRANSITIONS EXCEEDING 1:20 BUT NOT TO EXCEED 1:12 REQUIRE REMOVAL OF 12" HANDRAIL EXTENSION AND ADDITIONAL HANDRAILING BY DISTRICT.
(THIS CONDITION REQUIRES A SITE SPECIFIC DETAIL PROVIDED BY ARCHITECT TO DEMONSTRATE ACCESSIBLE RAMP.)

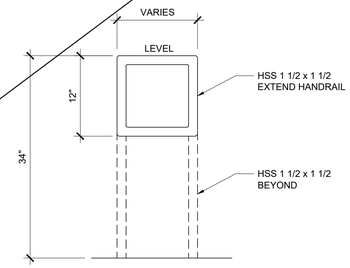
RAMP TRANSITION

SCALE: NTS | 10



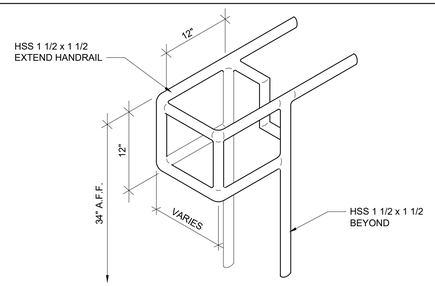
LANDING ELEVATION

SCALE : 1/2" = 1'-0" | 6



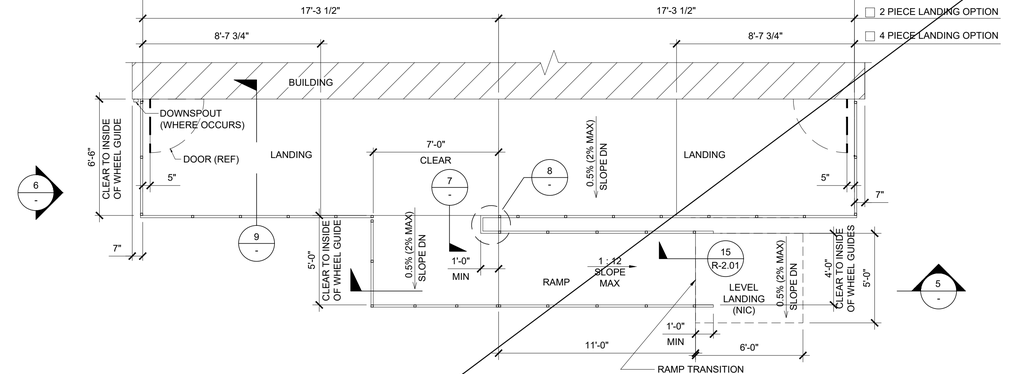
RETURN EXTEND HANDRAIL ELEVATION

SCALE : 1" = 1'-0" | 7



RETURN EXTEND HANDRAIL ISOMETRIC

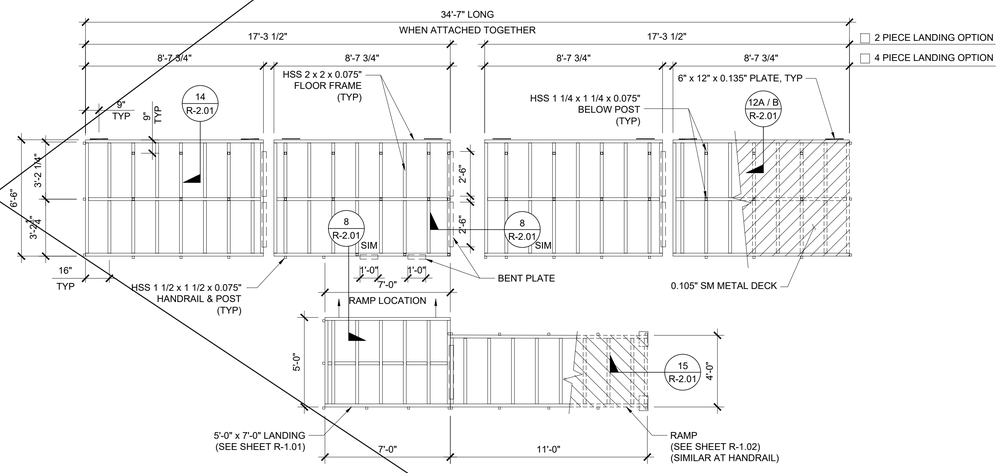
SCALE : NTS | 8



NOTE:
THIS LANDING DESIGN IS FOR USE AT THE 40'-0" MODULE SIDEWALL. IF THIS LANDING DESIGN IS USED AT THE 12'-0" MODULE ENDWALL THEN THE EDGE OF THE LANDING SHALL BE 7" CLEAR (MIN) FROM THE CORNER OF THE BUILDING.

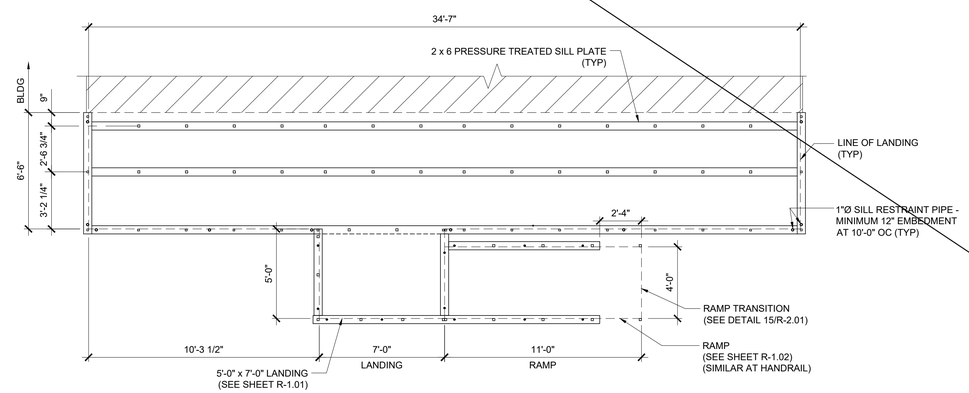
LANDING PLAN

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



LANDING FRAME

SCALE : 1/4" = 1'-0" | 2



SILL PLAN FOR RAMP AND LANDING

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

RAMP LANDING

REVISIONS

1	
2	
3	
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5	

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

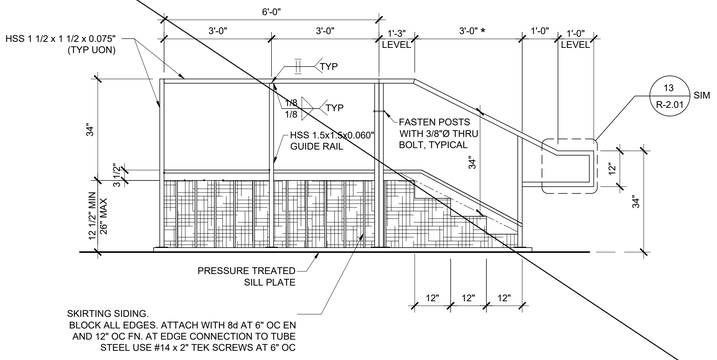
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24075 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

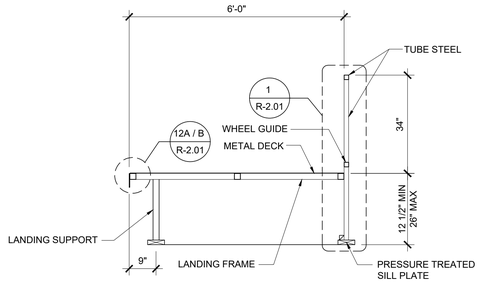
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

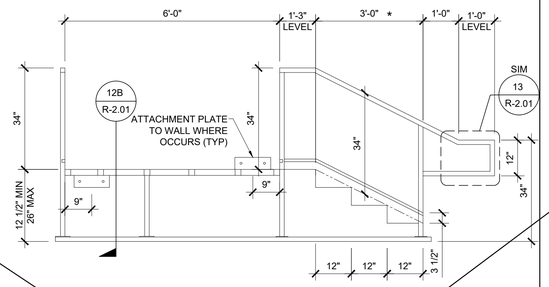
R-1.03



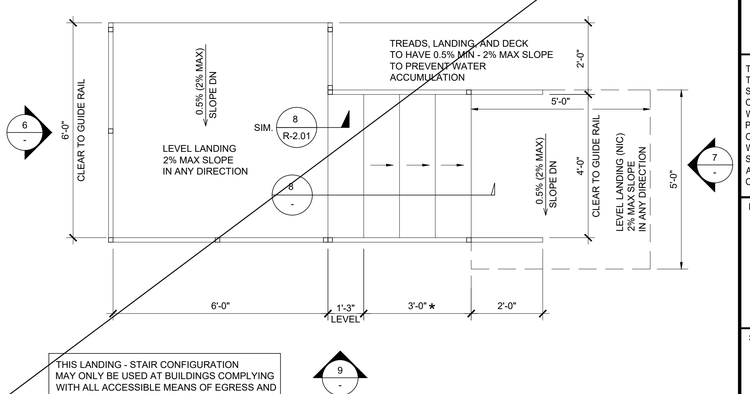
STEPS AND LANDING ELEVATION — SCALE : 1/2" = 1'-0" — 9



SECTION AT LANDING — SCALE : 1/2" = 1'-0" — 4

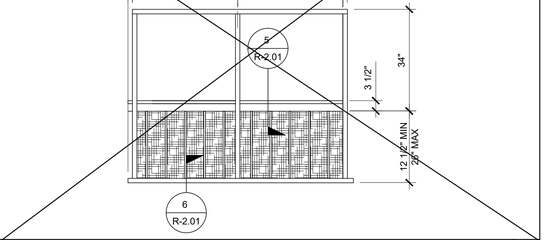


SECTION AT STEPS AND LANDING — SCALE : 1/2" = 1'-0" — 5

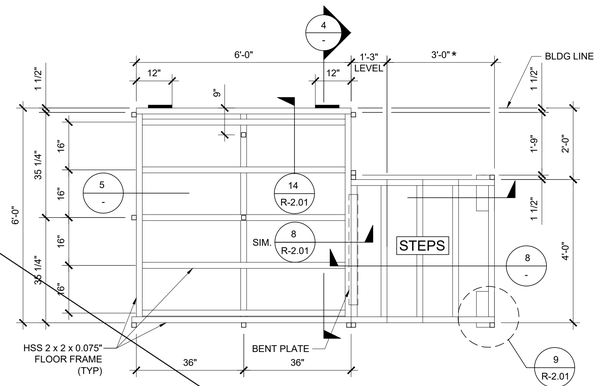


NOTE:
(*) NUMBER OF STEPS RISE DIMENSIONS WILL VARY. VERIFY WITH ARCHITECT BEFORE FABRICATION.

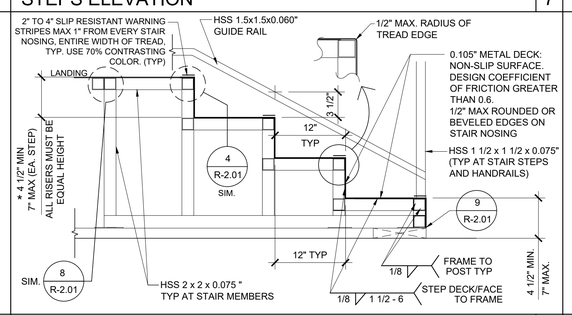
SCALE : 1/2" = 1'-0" — 1



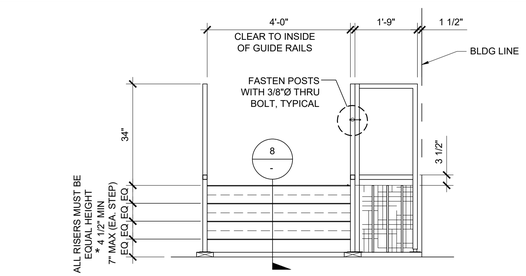
LANDING ELEVATION — SCALE : 1/2" = 1'-0" — 6



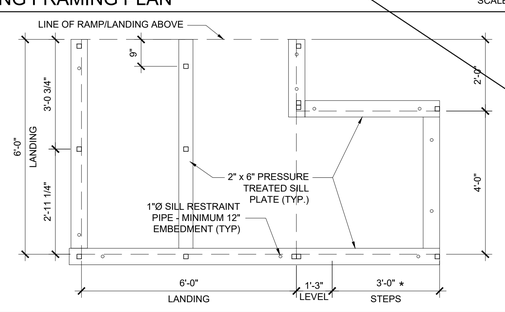
STEPS / LANDING FRAMING PLAN — SCALE : 1/2" = 1'-0" — 2



SECTION AT STEPS — 8



STEPS ELEVATION — 7



SILL PLAN FOR STEPS & LANDING — SCALE : 1/2" = 1'-0" — 3

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

STANDARD LANDING WITH STEPS

REVISIONS

1
2
3
4
5

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

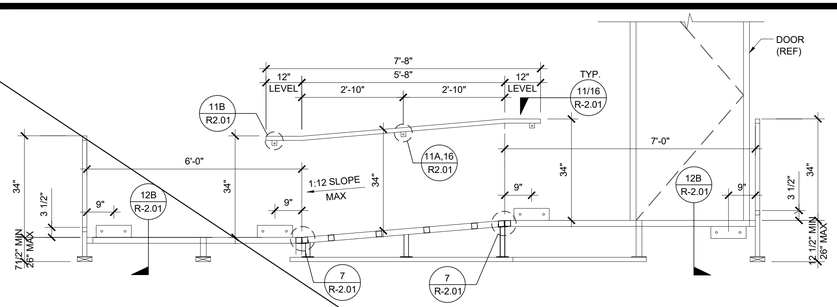
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24075 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

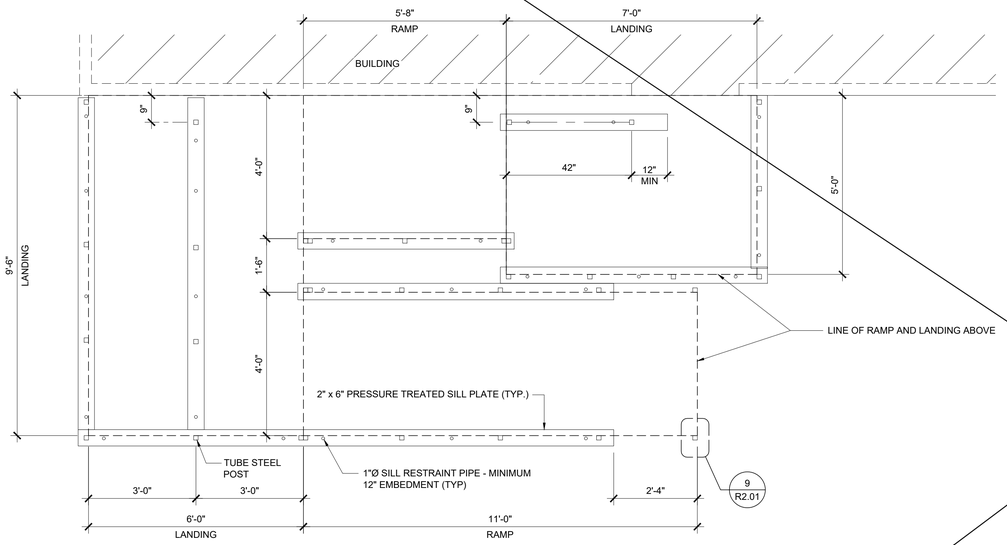
P.C. SHEET NUMBER

R-1.04



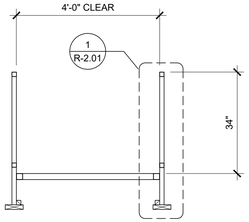
SECTION AT RAMP AND LANDING

SCALE : 1/2" = 1'-0" | 4



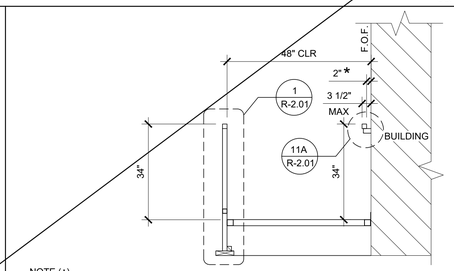
SILL PLAN FOR RAMP AND LANDING

SCALE : 1/2" = 1'-0" | 5



SECTION AT RAMP

SCALE : 1/2" = 1'-0" | 8

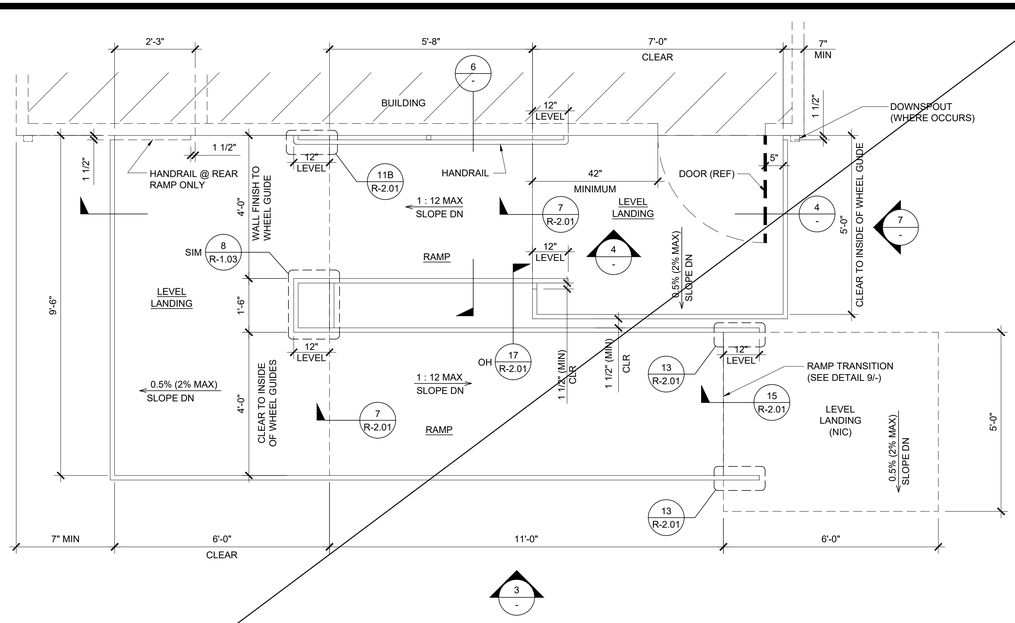


NOTE (*)

1. ALL SURFACES SHALL BE SMOOTH WITH NO SHARP CORNERS, PER CBC 11B-505.8 WALL TO BE SMOOTH AND TO EXTEND 8" ABOVE HANDRAIL

SECTION AT RAMP

SCALE : 1/2" = 1'-0" | 6



RAMP AND LANDING AT BUILDING

SCALE : 1/2" = 1'-0" | 1

RAMP FRAMING PLAN

SCALE : 1/2" = 1'-0" | 2

NOTE:

1. 1:20 TRANSITION OFF OF LOWER LANDING REQUIRES NO HANDRAILS.
2. TRANSITIONS EXCEEDING 1:20 BUT NOT TO EXCEED 1:12 REQUIRE REMOVAL OF 12" HANDRAIL EXTENSION AND ADDITIONAL HANDRAILING BY DISTRICT.
   (THIS CONDITION REQUIRES A SITE SPECIFIC DETAIL PROVIDED BY ARCHITECT TO DEMONSTRATE ACCESSIBLE RAMP.)

RAMP TRANSITION

SCALE: NTS | 9

LANDING ELEVATION

SCALE : 1/2" = 1'-0" | 7

RAMP AND LANDING ELEVATION

SCALE : 1/2" = 1'-0" | 3

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

SWITCHBACK RAMP PLAN

REVISIONS

1	
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PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
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IDENTIFICATION STAMP
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PC STATE AGENCY APPROVAL

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MODULAR BUILDING DESIGN PROFESSIONAL

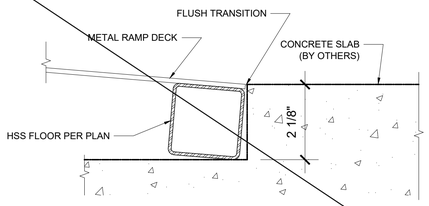
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

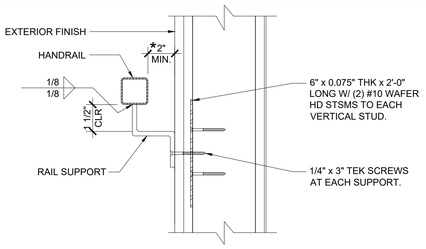
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

R-1.05

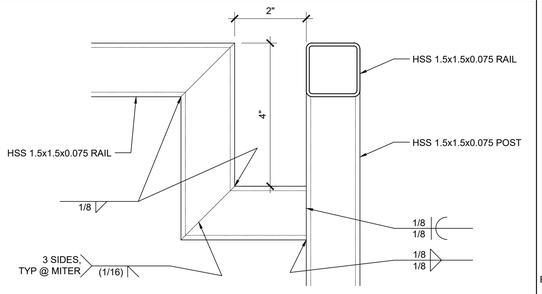


FLUSH TRANSITION AT BOTTOM OF RAMP SCALE : 6" = 1'-0" 15

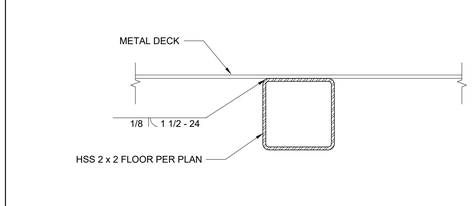


NOTE (★)
1. ALL SURFACES SHALL BE SMOOTH WITH NO SHARP CORNERS, PER CBC 11B-505.8 WALL TO BE SMOOTH AND TO EXTEND 18" ABOVE HANDRAIL

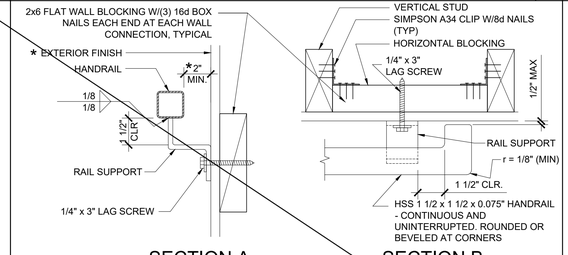
HANDRAIL CONNECTION AT SHEETMETAL BLKG SCALE : 3" = 1'-0" 16



RAIL NOTCH AT HANDRAIL SCALE : 6" = 1'-0" 17



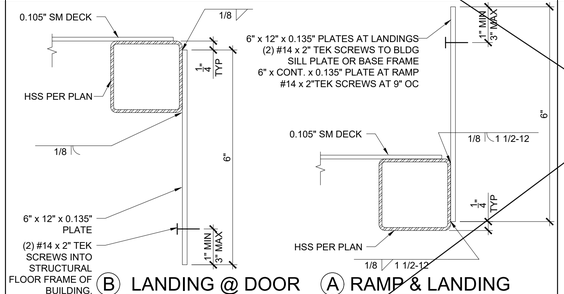
DECK TO FRAME SCALE : 6" = 1'-0" 10



SECTION A SECTION B

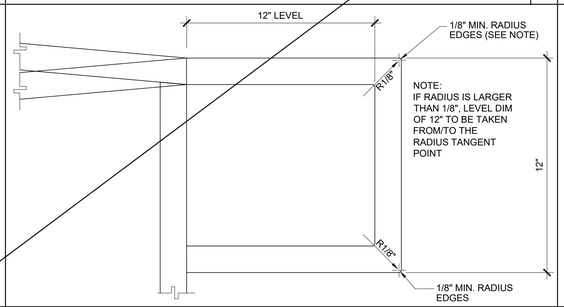
NOTE (★)
1. ALL SURFACES SHALL BE SMOOTH WITH NO SHARP CORNERS, PER CBC 11B-505.8 WALL TO BE SMOOTH AND TO EXTEND 18" ABOVE HANDRAIL

HANDRAIL CONNECTION AT WOOD BLOCKING SCALE : 3" = 1'-0" 11

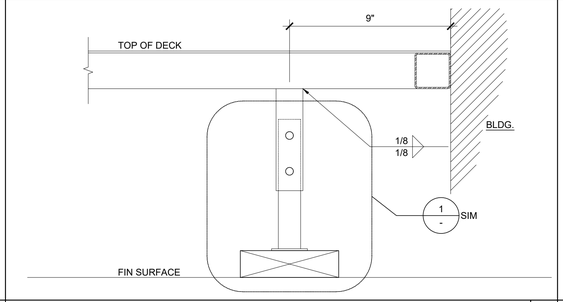


Ⓑ LANDING @ DOOR Ⓐ RAMP & LANDING

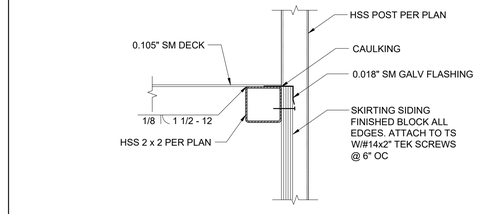
SECTION AT PLATE SCALE : 6" = 1'-0" 12



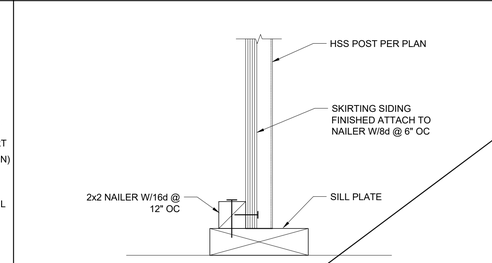
EXTEND HANDRAIL @ TOP OR BOTT. ENDS SCALE : 3" = 1'-0" 13



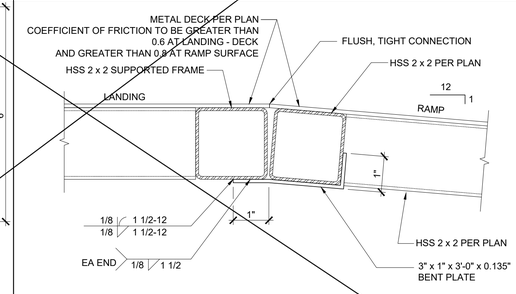
INTERIOR LANDING LEG SECTION SCALE : 3" = 1'-0" 14



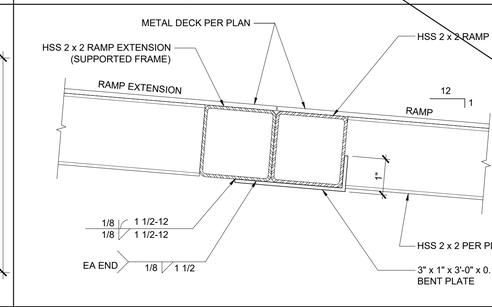
SKIRT FLASHING SCALE : 3" = 1'-0" 5



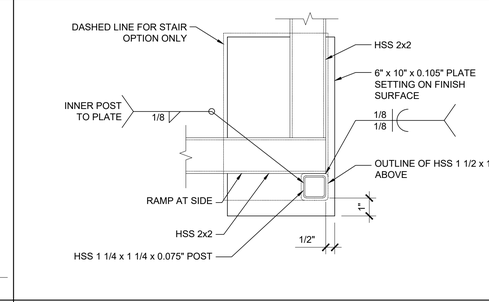
SKIRT FLASHING AT SILL PLATE SCALE : 3" = 1'-0" 6



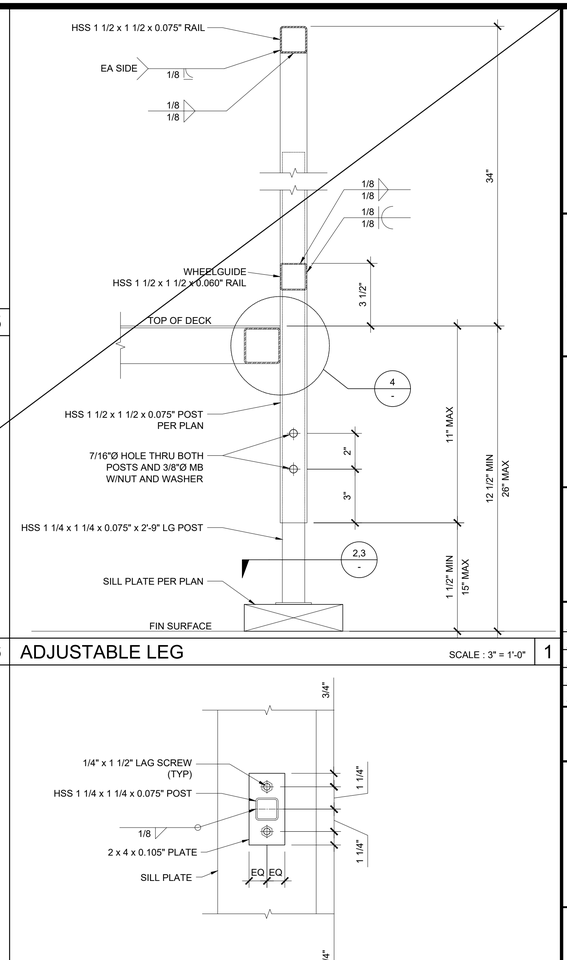
RAMP AT LANDING SCALE : 6" = 1'-0" 7



RAMP EXTENSION SCALE : 6" = 1'-0" 8

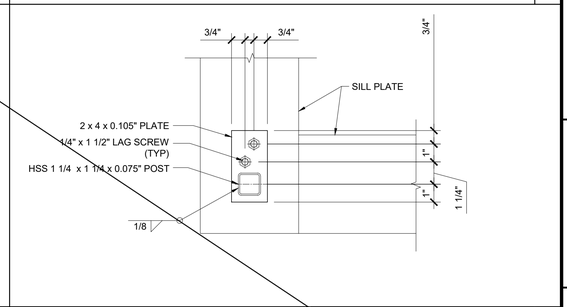


BASE PLATE AT RAMP TOE SCALE : 3" = 1'-0" 9

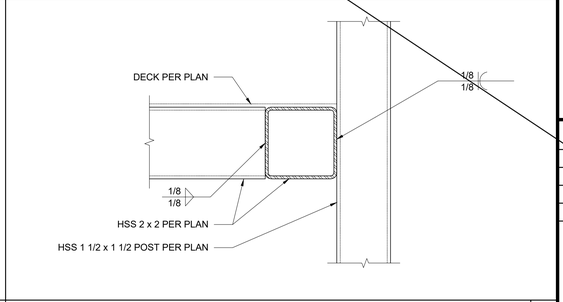


ADJUSTABLE LEG SCALE : 3" = 1'-0" 1

ADJUSTABLE LEG BASE PLATE SCALE : 3" = 1'-0" 2



ADJUSTABLE LEG BASE PLATE SCALE : 3" = 1'-0" 3



GUARDRAIL POST ATTACHMENT SCALE : 6" = 1'-0" 4

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

RAMP DETAILS

REVISIONS

1	
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PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

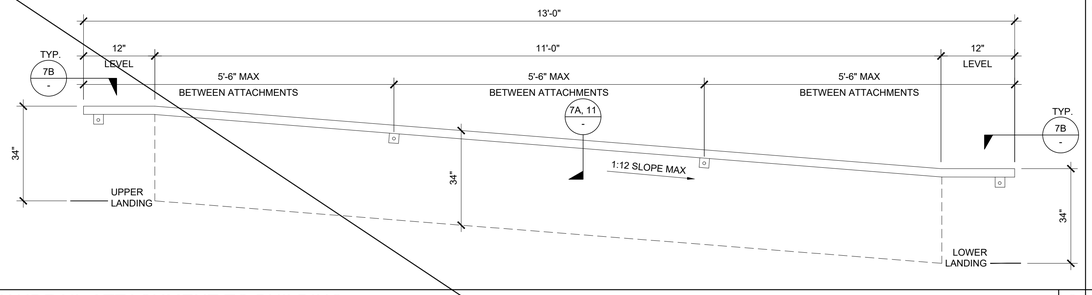
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLA 2975 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

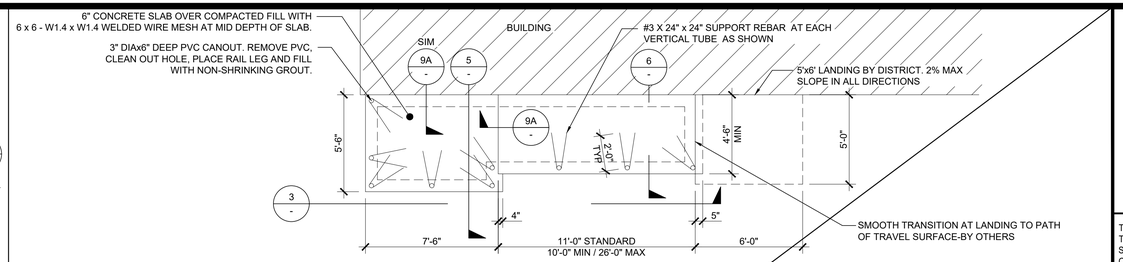
P.C. SHEET NUMBER

R-2.01



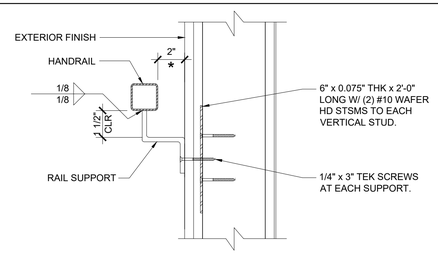
HANDRAIL ATTACHMENT TO BUILDING

SCALE : 1" = 1'-0" | 6



FOUNDATION PLAN

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

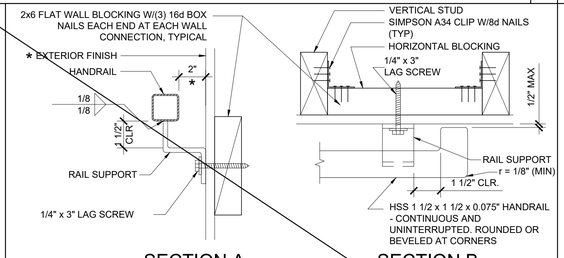


NOTE (*)

1. ALL SURFACES SHALL BE SMOOTH WITH NO SHARP CORNERS, PER CBC 11B-505.8 WALL TO BE SMOOTH AND TO EXTEND 8" ABOVE HANDRAIL

HANDRAIL CONNECTION AT SHEETMETAL BLKG

SCALE : 3" = 1'-0" | 11



SECTION A

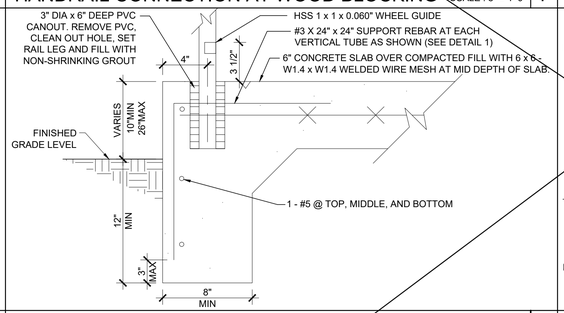
SECTION B

NOTE (*)

1. ALL SURFACES SHALL BE SMOOTH WITH NO SHARP CORNERS, PER CBC 11B-505.8 WALL TO BE SMOOTH AND TO EXTEND 8" ABOVE HANDRAIL

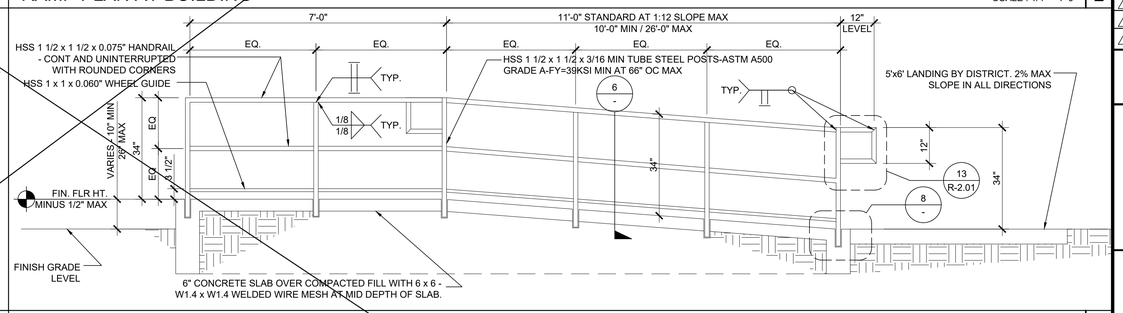
HANDRAIL CONNECTION AT WOOD BLOCKING

SCALE : 3" = 1'-0" | 7



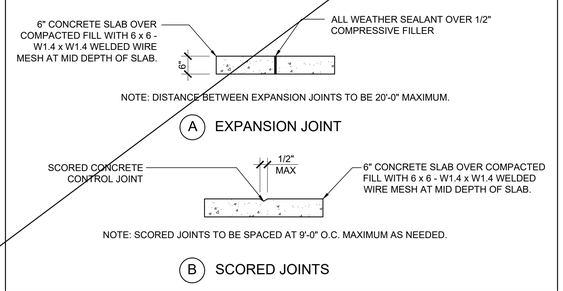
RAMP PLAN AT BUILDING

SCALE : 1/4" = 1'-0" | 2



TYPICAL CANOUT SECTION

SCALE : 1/2" = 1'-0" | 8



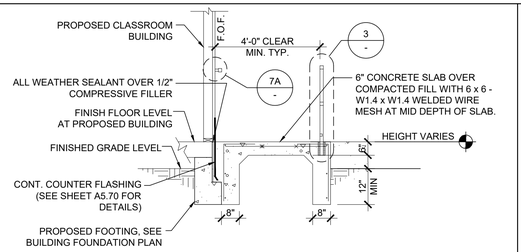
TYPICAL CONCRETE JOINTS

SCALE : 1/2" = 1'-0" | 9

RAMP / LANDING ELEVATION

SCALE : 1/2" = 1'-0" | 3

NOT USED | 4



SECTION AT RAMP

SCALE : 3/8" = 1'-0" | 6

NOT USED | 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

STANDARD CONCRETE RAMP AND DETAILS

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

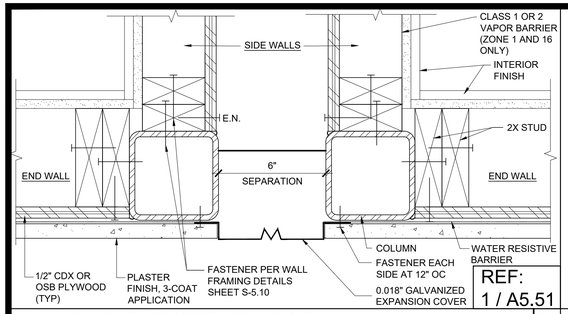
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24178 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

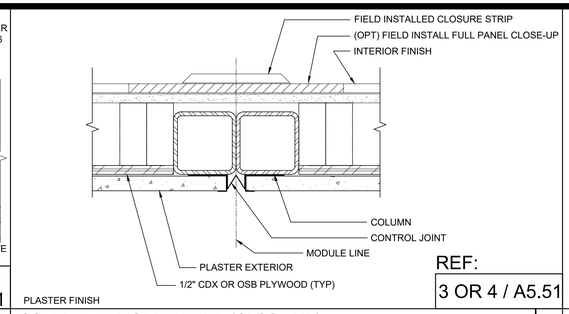
R-3.01



REF: 1 / A5.51

CLOSURE BETWEEN BUILDINGS

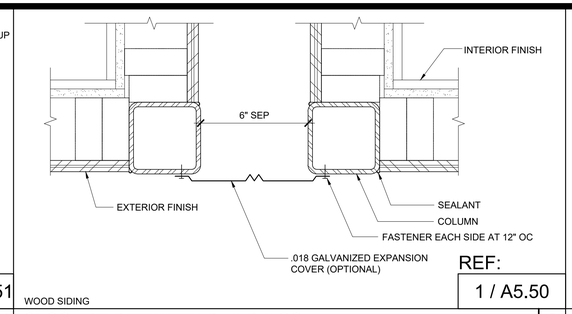
SCALE : 3"=1'-0" | 16



REF: 3 OR 4 / A5.51

COLUMN AT MODULE LINE (CLOSE UP)

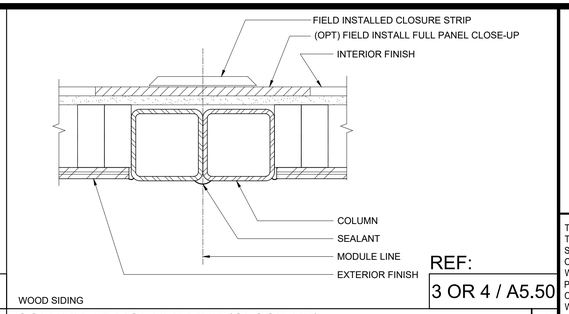
SCALE : 3"=1'-0" | 11



REF: 1 / A5.50

CLOSURE BETWEEN BUILDINGS

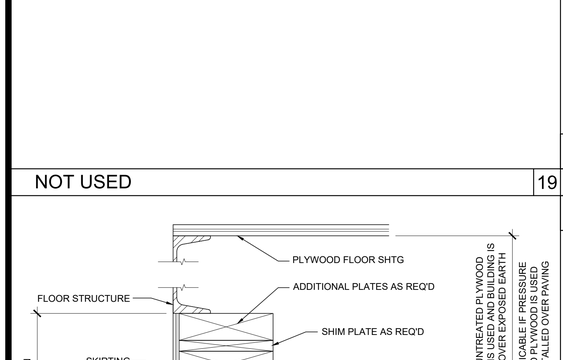
SCALE : 3"=1'-0" | 6



REF: 3 OR 4 / A5.50

COLUMN AT MODULE LINE (CLOSE-UP)

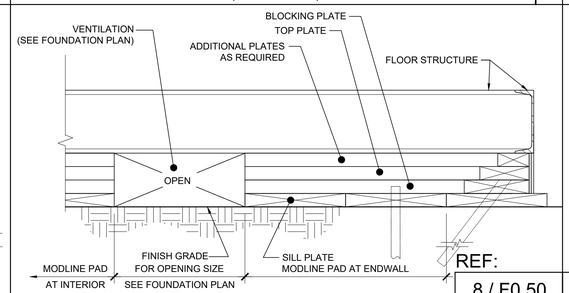
SCALE : 3"=1'-0" | 1



REF: 14 / F0.50

TIE PLATE

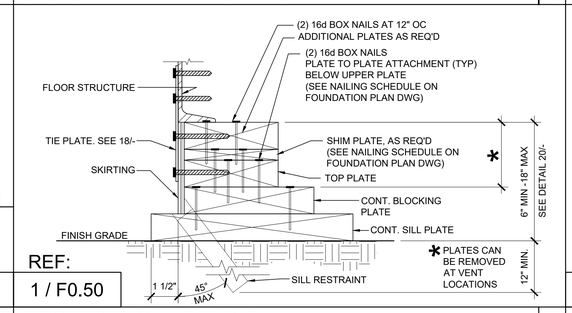
SCALE : 3"=1'-0" | 18



REF: 8 / F0.50

FOUNDATION AT MODLINE & SEPARATION

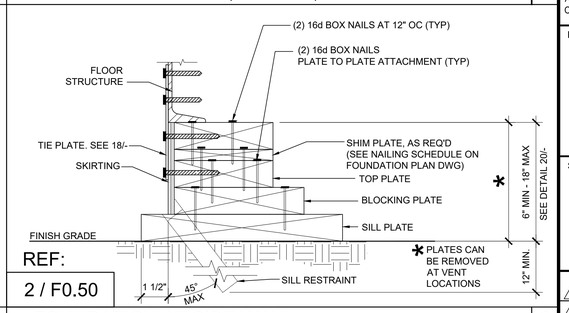
SCALE : 1 1/2"=1'-0" | 12



REF: 1 / F0.50

FOUNDATION AT END WALL

SCALE : 3"=1'-0" | 7



REF: 2 / F0.50

FOUNDATION AT SIDE WALL

SCALE : 3"=1'-0" | 2

REF: 9 / F0.50

VENT ELEV. AT MODLINE & SEP FOR 150 PSF

SCALE : 3"=1'-0" | 13

REF: 11 / F0.50

FOUNDATION AT ADJACENT BUILDING

SCALE : 3"=1'-0" | 8

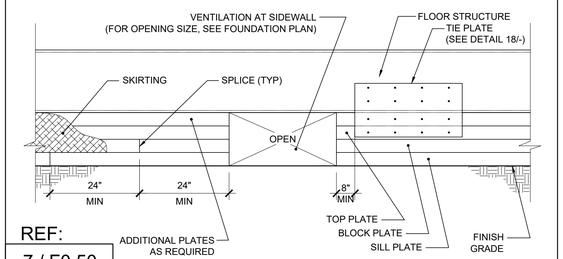
REF: 3 / F0.50

FOUNDATION AT MODLINE

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

NOT USED

19



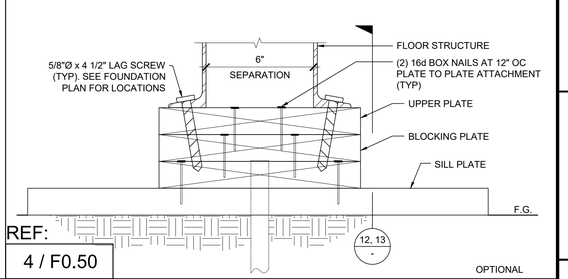
REF: 7 / F0.50

FOUNDATION ASSEMBLY SIDEWALL ELEVATION

SCALE : 1 1/2"=1'-0" | 14

NOT USED

9



REF: 4 / F0.50

FOUNDATION AT ADJACENT BUILDING

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

NOTE:
SEE SCHEDULE ON SHEET S-1.01 TO DETERMINE IF PRESSURE TREATED PLYWOOD FLOOR SHTG IS BEING PROVIDED

CLEARANCE TO PLYWOOD SHTG

SCALE : 3"=1'-0" | 20

6 / F0.50

REF:

FOUNDATION ASSEMBLY END WALL ELEVATION

SCALE : 1 1/2"=1'-0" | 15

NOT USED

10

REF: 5 / F0.50

FOUNDATION SPLICE

SCALE : NTS | 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

BUILDING RELOCATION DETAILS

REVISIONS

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04 121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

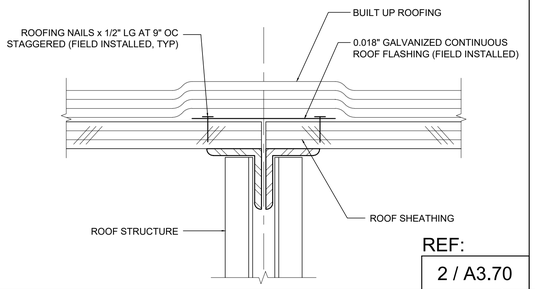
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN 'N STARLING 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES	24' x 40' PC
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

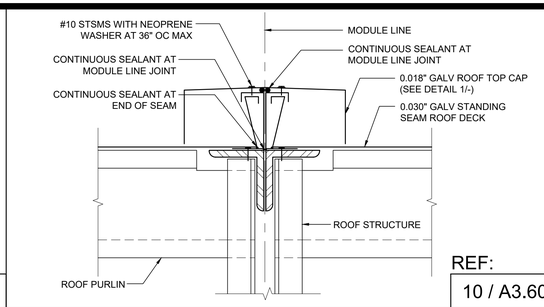
P.C. SHEET NUMBER

REL-101



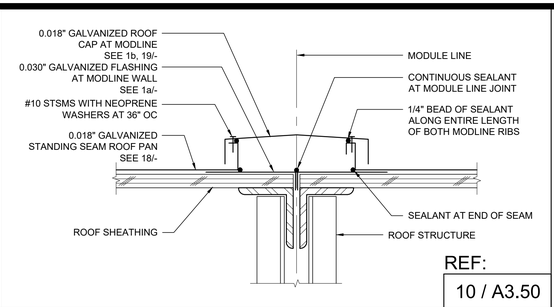
REF: 2 / A3.70

MODULE LINE CLOSURE SCALE : 6"=1'-0" 16



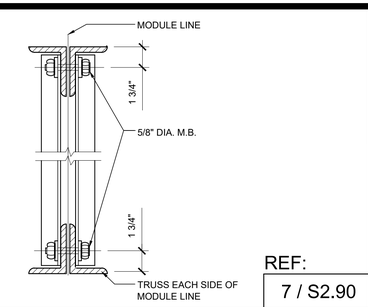
REF: 10 / A3.60

ROOF CAP AT MODULE LINE - 0.030" ROOF SCALE : 3" = 1'-0" 11



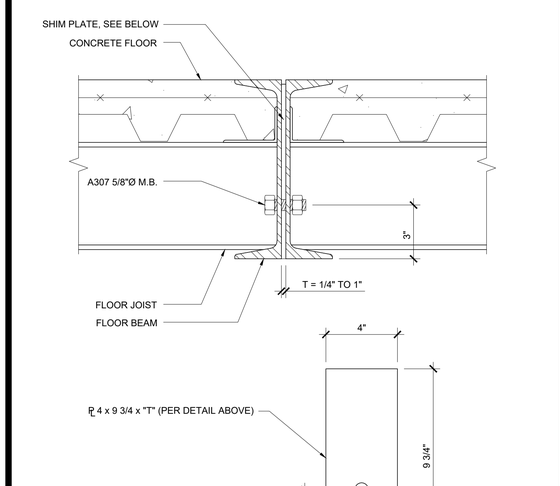
REF: 10 / A3.50

MODULE LINE ROOF CAP - 0.018" ROOF SCALE : 3"=1'-0" 6



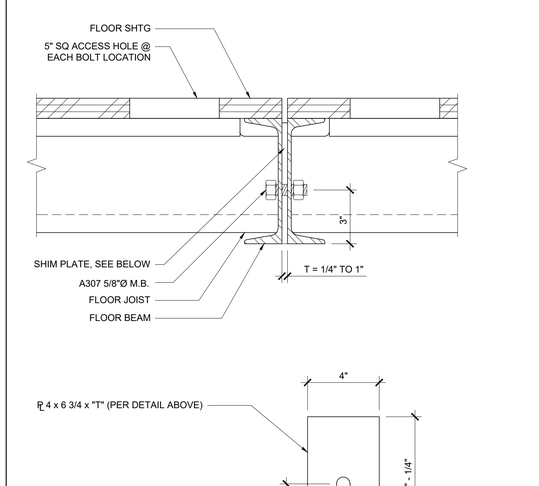
REF: 7 / S2.90

CONNECTION @ MODULE LINE SCALE : 3"=1'-0" 1



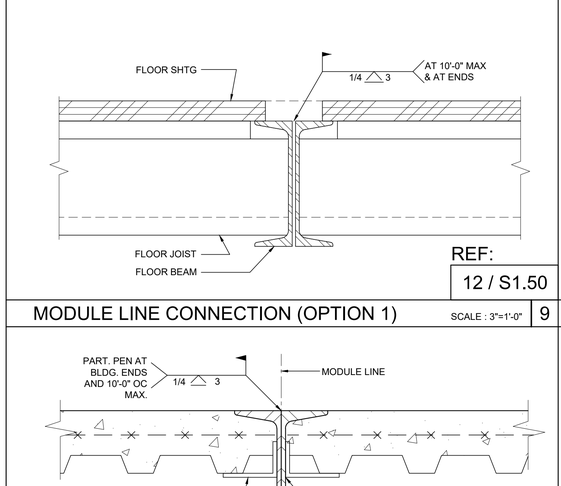
REF: 1 / A3.70

SEPARATION AT ROOF SCALE : 3"=1'-0" 17



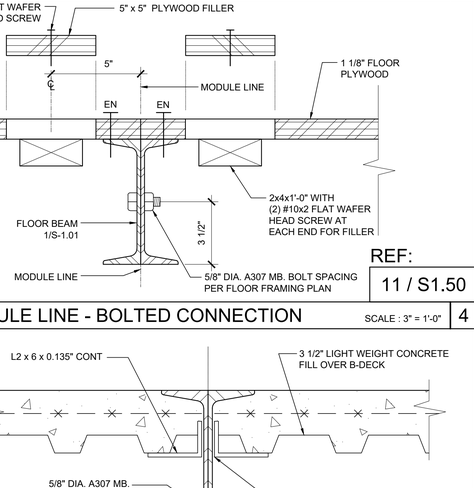
REF: 15 / A3.60

ROOF CAP AT SEPARATION - 0.030" ROOF SCALE : 3" = 1'-0" 12



REF: 15 / A3.50

ROOF CAP AT SEPARATION - 0.018" ROOF SCALE : 3"=1'-0" 7



REF: 9 / S2.50
9 / S2.51

MODULE CONNECTION AT ROOF (OPTION) SCALE : 3"=1'-0" 2

REF: 1b / A3.50

ROOF CAP AT MODULE LINE - 0.018" ROOF SCALE : 6"=1'-0"

REF: 1 / A3.60

ROOF CAP AT MODULE LINE - 0.030" ROOF SCALE : 6"=1'-0" 18

REF: 19 / A3.50
11 / A3.60

MODULE LINE ROOF CAP SCALE : NTS 13

8 NOT USED

REF: 11 / S1.50

3 MODULE LINE - BOLTED CONNECTION SCALE : 3" = 1'-0" 4

REF: 14 / S1.60

MODULE LINE CONNECTION (OPTION 2) SCALE : 3"=1'-0" 20

REF: 14 / S1.50

MODULE LINE CONNECTION (OPTION 2) SCALE : 3"=1'-0" 15

REF: 12 / S1.50

MODULE LINE CONNECTION (OPTION 1) SCALE : 3"=1'-0" 9

REF: 12 / S1.60

MODULE LINE CONNECTION (OPTION 1) SCALE : 3" = 1'-0" 10

REF: 11 / S1.60

MODULE LINE - BOLTED CONNECTION SCALE : 3" = 1'-0" 5

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SHEET TITLE:

BUILDING RELOCATION DETAILS

REVISIONS

1
2
3
4
5

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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLIN 24775 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

REL-102