

VICINITY MAP

THE CITY OF IRVINE

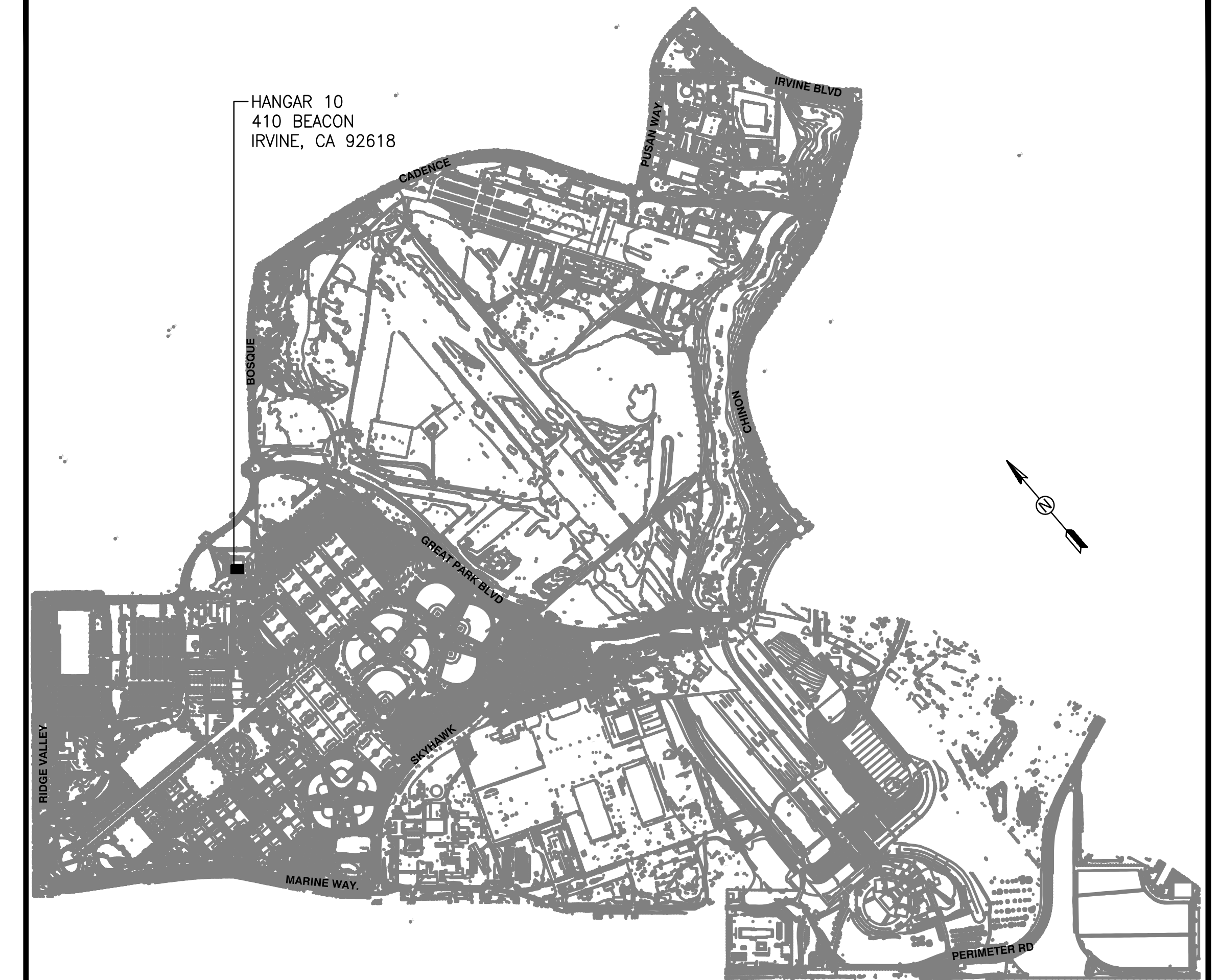


GREAT PARK FRAMEWORK PLAN

HANGAR 10 RECONSTRUCTION BUILDING PLAN

CITY CIP NO. 372604

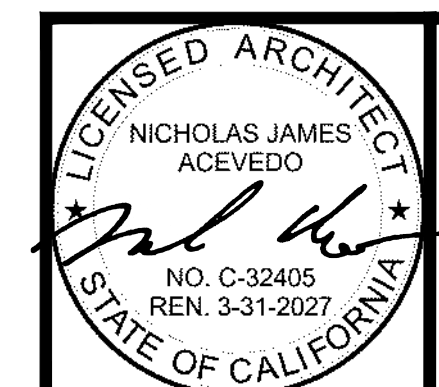
CITY PC NO. 00970420-CNEW



LOCATION MAP

7					
6					
5	05.07.2026	BID SET			
4	01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS			
3	11.03.2025	ISSUE FOR PLAN CHECK			
2	10.14.2025	CD CLIENT REVIEW/PRICING			
1	09.03.2025	DESIGN DEVELOPMENT			
NO.	DATE	DESIGN DEVELOPMENT	ENGR.	APPROV.	DATE

REVISIONS



Gensler

4675 MacArthur Court
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Newport Beach, CA 92660
United States
Tel 949.863.9434
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APPROVED BY: CITY ENGINEER	R.C.E. NO.	DATE	APPROVED BY: RWD SANITARY SEWER FACILITIES	R.C.E. NO.	DATE
APPROVED BY: ORANGE COUNTY FIRE MARSHALL	DATE		APPROVED BY: IRVINE RANCH WATER FACILITIES	DATE	

TITLESHEET

60.000

PROJECT INFORMATION REQUIREMENTS

PROJECT LOCATION: HANGAR 10, 410 BEACON; IRVINE, CA 92618; BEACON & HORNET EXTENSION
LEGAL DESCRIPTION FOR NEW TRACTS:
BEING A PORTION OF THAT CERTAIN PARCEL OF LAND LYING WITHIN LOT 279,
BLOCK 140 AS SHOWN ON THE MAP OF IRVINE'S SUBDIVISION RECORDED IN BOOK
1, PAGE 88 OF MISCELLANEOUS RECORD MAPS IN THE OFFICE OF THE COUNTY
RECORDER OF ORANGE COUNTY

PROJECT DESCRIPTION

MULTI-TENANT COMMERCIAL SHELL BUILDING WITH SWITCHGEAR, PUBLIC RESTROOMS, HVAC
UNITS, GREASE INTERCEPTOR AND STANDARD SHELL LIGHTING. BUILDING HAS ALSO BEEN
DESIGNED AS RISK CATEGORY III.

NOTE: THIS BUILDING IS DESIGNED AS A CORE AND SHELL BUILDING; SEPARATE BUILDING,
MECHANICAL ELECTRICAL AND PLUMBING PERMITS ARE REQUIRED FOR ALL FUTURE
COMMERCIAL TENANT SPACE BUILD-OUTS NOT DETAILED ON THIS PLAN. A CERTIFICATE OF
OCCUPANCY (C OF O) WILL NOT BE ISSUED UNTIL COMPLETE TENANT BUILD-OUT HAS BEEN
ACHIEVED.

SPECIAL CONDITIONS OF LAND USE APPROVAL

IN ACCORDANCE WITH PLANNING COMMISSION RESOLUTION 11-3109, THE PROPOSED HANGAR 10
BUILDING SUBMITTAL, THAT IS PART OF THE CANOPY PHASE 2 PROJECT SITE, HAS
DEMONSTRATED COMPLETE COMPLIANCE WITH ALL ASSOCIATED CONDITIONS OF APPROVAL. THE
COMPLIANCE INFORMATION HAS BEEN FULLY REVIEWED AND APPROVED BY THE CITY OF IRVINE
COMMUNITY DEVELOPMENT DEPARTMENT. A COMPLETE AND DETAILED COMPLIANCE SUMMARY CAN
BE FOUND WITHIN THE DOCUMENT TITLED "HANGAR 10 CONDITIONS OF APPROVAL LETTER".

USE(S), OCCUPANCY (IES), AND FLOOR AREAS(S)

ASSUMED DINING A #101 (A-2 OCCUPANCY):	4,715 SF
ASSUMED KITCHEN A #101A (A-2 OCCUPANCY):	1,805 SF
ASSUMED DINING B #102 (B OCCUPANCY):	533 SF
ASSUMED KITCHEN B #102A (B OCCUPANCY):	289 SF
ASSUMED DINING C #103 (B OCCUPANCY):	508 SF
ASSUMED KITCHEN C #103A (B OCCUPANCY):	275 SF
ASSUMED DINING D #104(B OCCUPANCY):	531 SF
ASSUMED KITCHEN D #104A (B OCCUPANCY):	288 SF

PUBLIC WOMEN'S RESTROOM #108 (A-2 OCCUPANCY):	264 SF
PUBLIC MEN'S RESTROOM #109 (A-2 OCCUPANCY):	191 SF
VESTIBULE #106 (A-2 OCCUPANCY):	84 SF
JEANITOR #107(A-2 OCCUPANCY):	70 SF
ROOF ACCESS #105 (A-2 OCCUPANCY):	18 SF
TOTAL FLOOR AREA:	9,571 SF

TOTAL CONDITIONED FLOOR AREA OF HABITABLE TENANT SPACES:	8,944 SF
TOTAL CONDITIONED FLOOR AREA OF SITE SUPPORTING RESTROOM AND UTILITY SPACES:	543 SF
TOTAL PROPOSED ROOF CANOPIES (A-2 OCCUPANCY):	147 SF
TOTAL PROPOSED ROO FCANOPIES (B OCCUPANCY):	270 SF

REFER TO SHEET G2.002 FOR ADDITIONAL INFORMATION INCLUDING THE LAND USES.

NUMBER OF STORIES 1

TYPE OF CONSTRUCTION V-B SPRINKLERED

SPRINKLERS YES

AN NFPA 13 AUTOMATIC SPRINKLER SYSTEM
SHALL BE PROVIDED UNDER SEPARATE APPROVAL THROUGH THE ORANGE COUNTY
FIRE AUTHORITY. SPRINKLERS ARE PROVIDED TO COMPLY WITH THE CITY OF IRVINE
MUNICIPAL CODE SECTION 5-9-401 FOR BUILDING HAVING A GROSS AREA EXCEEDING
5,000 SQUARE FEET.

ALLOW HEIGHT AND AREA ANALYSIS PER CBC SECTION 503:

(HANGAR 10 AND BUILDING 10 PER CBC 503.1.2 BUILDING ON THE SAME LOT WITH THE NONSEPARATED
OCCUPANCIES APPROACH IN ACCORDANCE WITH CBC 508.3. GOVERNING OCCUPANCY IS A OCCUPANCY)

BUILDING HEIGHT:	32'-0"	(< ALLOWABLE BUILDING HEIGHT: 40'-0")
STORIES:	1	(< ALLOWABLE NUMBER OF STORIES ABOVE GRADE PLANE: 1)
FLOOR AREA:		

HANGAR 10:	9,571 SF
BUILDING 10:	10,867 SF REFER TO PLAN CHECK 00971615-CNEW
TOTAL:	20,438 SF (< ALLOWABLE AREA OF BUILDING: 24,000 SF)

PARKING SUMMARY

REFER TO SITE PLAN G2.001 FOR PARKING INFORMATION.

APPLICABLE STATE CODES (WITH CITY OF IRVINE AMENDMENTS)

CALIFORNIA BUILDING CODE	2022
CALIFORNIA RESIDENTIAL CODE	2022
CALIFORNIA GREEN BUILDING STANDARDS CODE	2022
CALIFORNIA MECHANICAL CODE	2022
CALIFORNIA ELECTRICAL CODE	2022
CALIFORNIA PLUMBING CODE	2022
CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS	2022
CALIFORNIA FIRE CODE	2022

CALIFORNIA GREEN BUILDING STANDARDS CODE

PROVISIONS OF THE CALIFORNIA GREEN BUILDING STANDARDS CODE APPLY TO ALL NEW
RESIDENTIAL BUILDINGS (INCLUDING HOTELS AND MOTELS), RESIDENTIAL PARKING FACILITIES,
AND ALL NEW NON-RESIDENTIAL BUILDINGS.

SEE SHEET G2.100 FOR COMPLETED CITY OF IRVINE GREEN BUILDING STANDARDS NOTES.

CALIFORNIA ENERGY CODE

PROVISIONS OF THE CALIFORNIA ENERGY CODE (CEnc) APPLY TO THIS PROJECT. SEE LIST
BELOW FOR COMPLETE COMPLIANCE DOCUMENTATION.

NRCC-CXR-E: E: 0.006
NRCC-RF-E: M: 0.003-M: 0.004
NRCC-ELC-E: E: 0.005
NRCC-LTI-E: E: 0.002
NRCC-LTO-E: E: 0.003
NRCC-SAB-E: E: 0.004

SOLAR READY MANDATORY SOLAR READY REQUIREMENTS OF SECTION 110.10:

COMPLIANCE IS ACHIEVED AS FOLLOWS:

SOLAR ZONE

NON-RESIDENTIAL BUILDING:

PURSUANT TO SECTION 110.10(b)1.B, AN OBSTRUCTION FREE SOLAR ZONE IS
LOCATED ON **THE BUILDING ROOF** WITH A TOTAL AREA OF **702 SF., NOT LESS THAN 15
PERCENT OF THE TOTAL ROOF AREA OF THE BUILDING EXCLUDING ANY SKYLIGHT AREA,**
AS SHOWN ON PLAN SHEET(S) **A1.102 AND E2.102.**

SOLAR ZONE ORIENTATION:

REFER TO ROOF PLAN A1.102

STRUCTURAL DESIGN LIVE AND DEAD LOADS FOR THE SOLAR ZONE ARE **50PSF AND
20PSF (REFER TO LOW ROOF IN SHEET NOTE #2 ON E1.102)** RESPECTIVELY

INTERCONNECTION PATHWAYS

LOCATION FOR INVERTERS AND METERING EQUIPMENT AND A PATHWAY FOR
ROUTING OF CONDUIT FROM THE SOLAR ZONE TO THE POINT OF INTERCONNECTION
WITH THE MAIN ELECTRICAL SERVICE PANEL ARE SHOWN ON **E2.102**

SPECIAL INSPECTION AND STRUCTURAL OBSERVATION

THIS PROJECT IS SUBJECT TO BOTH SPECIAL INSPECTIONS AND STRUCTURAL OBSERVATION
PER CALIFORNIA BUILDING CODE (CBC) CHAPTER 17 AND SHALL FOLLOW THE
REQUIREMENTS AS DEFINED IN CITY OF IRVINE INFORMATION BULLETINS NO. 278 AND 251.

SEE SHEET S1.004

FOR COMPLETED PROJECT SPECIFIC CITY OF IRVINE

SPECIAL INSPECTION PROGRAM FORM.

SEE SHEET S1.001

FOR COMPLETED PROJECT SPECIFIC CITY OF IRVINE

SPECIAL OBSERVATION PROGRAM FORM.

CITY OF IRVINE MUNICIPAL CODE

[NOTE: COMPLETE IMC TEXT IS AVAILABLE ON THE INTERNET AT WWW.MUNICODE.COM]
THE DESIGN AND CONSTRUCTION OF THIS PROJECT SHALL COMPLY WITH ALL APPLICABLE
IRVINE MUNICIPAL CODE PROVISIONS INCLUDING BUT NOT LIMITED TO:

CONSTRUCTION WORK HOURS [IMC SECT. 6-8-205]

MON-FRI 7 AM TO 7 PM

SAT 9 AM TO 6 PM

NO WORK ON SUNDAYS OR FEDERAL HOLIDAYS

SECURITY DESIGN STANDARDS [IMC SECT. 5-9-501 THROUGH 5-9-520]

SEE SHEET G2.102 FOR APPLICABLE COMPLETED SECURITY CODE
PROVISIONS.

ROOFING [IMC 5-9-401 H. & 5-9-402 O.]

ROOF COVERING CLASSIFICATION SHALL MEET MINIMUM CLASS A.

OFF-SITE FABRICATION

ALL OFF-SITE FABRICATION OF STRUCTURAL STEEL COMPONENTS INCLUDING STEEL STAIRS
AND PRE-CAST CONCRETE SHALL BE DONE IN AN APPROVED FABRICATOR SHOP AS
REQUIRED BY CITY OF IRVINE INFORMATION BULLETIN NO. 311 ON G2.102. SEE BULLETIN FOR
DETAILS AND REQUIRED DOCUMENTATION REQUIRED AT THE RECEIPT OF ANY SHIPMENT OF
OFF-SITE FABRICATED ITEMS.

PRE-CONSTRUCTION MEETING REQUIREMENT [IMC
5-9-209A.]

ALL CONSTRUCTION PROJECTS INVOLVING NEW STRUCTURES AND THOSE
INVOLVING ADDITIONS TO NON-RESIDENTIAL STRUCTURES OR TENANT
IMPROVEMENTS EXCEEDING 5,000 SQUARE FEET OR INVOLVING A NEW
RESTAURANT ESTABLISHMENT SHALL NOT COMMENCE UNTIL A
PRE-CONSTRUCTION MEETING HAS BEEN HELD. TO SCHEDULE A
PRE-CONSTRUCTION MEETING CONTACT EITHER JOEL LYLES, NON-RESIDENTIAL
INSPECTIONS SUPERVISOR AT (949)724-6139 OR RESIDENTIAL INSPECTION
SUPERVISOR GINA MAURO AT (949)724-6546

CONSTRUCTION SITE SECURITY REQUIREMENTS [IMC
SECT 5-9-521]

GENERAL REQUIREMENTS MUNICIPAL CODE SECTIONS 5-9-521.B

FOR THE GENERAL REQUIREMENTS CHECKLIST FOR CONSTRUCTION SITE
SECURITY PER THE CITY OF IRVINE CONSTRUCTION SITE SECURITY ORDINANCE,
SEE **DEFERRED COMPLIANCE**

SEE SHEET "DEFERRED COMPLIANCE" FOR SITE SPECIFIC CONSTRUCTION SITE SECURITY PLAN.

ACOUSTICAL REPORT:

REPORT NO.: 16924-02

PREPARED BY: URBAN CROSSROADS

DATE: FEBRUARY 27, 2026

BUILDING FEATURES RECOMMENDATIONS: THERE ARE NO SPECIAL SOUND MITIGATIONS
REQUIRED FOR THIS BUILDING. REFER TO
PLAN SHEETS G2.104-G2.106 FOR PERINENT
ACOUSTICAL REPORT INFORMATION.

DEFERRED SUBMITTALS

THIS PROJECT HAS BEEN PERMITTED WITHOUT REVIEW AND/OR APPROVAL OF
THE FOLLOWING DEFERRED SUBMITTALS. PLANS APPROVED BY THE CITY SHALL
BE OBTAINED FOR EACH DEFERRED ITEM LISTED BELOW PRIOR TO COMMENCING
ANY WORK WITHIN THE SCOPE OF SUCH DEFERRAL. DEFERRALS MUST BE
REVIEWED AND ACCEPTED BY THE ARCHITECT OR ENGINEER OF RECORD PRIOR
TO SUBMITTING FOR REVIEW WITH THE CITY.

- FIRE SPRINKLERS AND SPRINKLER UNDERGROUND
- FIRE ALARM NOTIFICATION SYSTEM IN ACCORDANCE WITH CBC 907.2.1 & 907.5
- STOREFRONT SYSTEMS
- UTILITY AVAILABLE FAULT REPORT
- OCFA APPROVED FIRE MASTER PLAN (MUST BE PROVIDED PRIOR TO PERMIT ISSUANCE) (CITY RESPONSIBILITY)
- IRWD RECYCLED WATER USE WAIVER (MUST BE PROVIDED PRIOR TO PERMIT ISSUANCE) (CITY RESPONSIBILITY)
- CONSTRUCTION SITE SECURITY (MUST BE SUBMITTED AND APPROVED PRIOR TO PRE-CONSTRUCTION MEETING.)
- APPROVED WAYFINDING (MUST BE PROVIDED PRIOR TO PERMIT ISSUANCE) (CITY RESPONSIBILITY)
- METALWERKS WALL CLADDING SYSTEM

SHEET INDEX:

SEE SHEET G0.002

FOR SHEET INDEX.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT:

BE ADVISED, SOUTH COAST AIR QUALITY MANAGEMENT (SCAQMD) RULE 1403
GOVERNS WORK PRACTICE REQUIREMENTS FOR ASBESTOS IN ALL RENOVATION
AND DEMOLITION ACTIVITIES. PLEASE REFER TO RULE 1403
(http://www.aqmd.gov/docs/default-source/rule-book/reg-xiv/rule-1403.pdf)
FOR ALL CURRENT REQUIREMENTS.

CALIFORNIA HEALTH AND SAFETY CODE 19827.5 REQUIRES THAT EVIDENCE OF
DEMOLITION NOTIFICATION SUBMITTED TO THE SOUTH COAST AQMD BE
PROVIDED TO CITY OF IRVINE BUILDING AND SAFETY PRIOR TO THE ISSUANCE
OF ANY BUILDING PERMIT INCLUDING DEMOLITION WORK.

SPECIAL VERY HIGH FIRE HAZARD SEVERITY ZONE (CBC CHAPTER
7A AND CRC SECTION R337)

THE FOLLOWING REQUIREMENTS ARE NOT APPLICABLE AS THE PROJECT IS NOT WITHIN A VERY HIGH
FIRE HAZARD SEVERITY ZONE.

EROSION AND SEDIMENT CONTROL

AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROL MEASURES SHALL BE
IMPLEMENTED AND MAINTAINED AT ALL TIMES. REFER TO PROJECT GRADING PLANS UNDER
SEPARATE PERMIT FOR COMPLETE DETAILS.

STORM WATER POLLUTION PREVENTION NOTES

STORMWATER POLLUTION PREVENTION DEVICES AND PRACTICES SHALL BE INSTALLED AND/OR
INSTITUTED AS NECESSARY TO ENSURE COMPLIANCE TO THE CITY OF IRVINE WATER QUALITY
STANDARDS CONTAINED IN CHAPTER 3. WATER, OF DIVISION 8 OF TITLE 6 OF THE IRVINE MUNICIPAL
CODE AND ANY EROSION CONTROL PLAN ASSOCIATED WITH THIS PROJECT. ALL SUCH DEVICES AND
PRACTICES SHALL BE MAINTAINED, INSPECTED AND/OR MONITORED TO ENSURE ADEQUACY AND
PROPER FUNCTION THROUGHOUT THE DURATION OF THE CONSTRUCTION PROJECT.

COMPLIANCE TO THE WATER QUALITY STANDARDS AND ANY EROSION AND SEDIMENT CONTROL PLAN
ASSOCIATED WITH THIS PROJECT INCLUDES, BUT IS NOT LIMITED TO THE FOLLOWING REQUIREMENTS:

- AN EFFECTIVE COMBINATION OF EROSION AND SEDIMENT CONTROL MEASURES (BMPs) SHALL
BE IMPLEMENTED TO PROTECT THE EXPOSED PORTIONS OF THE SITE FROM EROSION AND TO
PREVENT SEDIMENT DISCHARGES.
- SEDIMENTS AND OTHER POLLUTANTS SHALL BE RETAINED ON SITE UNTIL PROPERLY DISPOSED
OF, AND MAY NOT BE TRANSPORTED FROM THE SITE VIA SHEET FLOW, SWALES, AREA DRAINS,
NATURAL DRAINAGE COURSES OR WIND.
- STOCKPILES OF EARTH AND OTHER CONSTRUCTION-RELATED MATERIALS SHALL BE
PROTECTED FROM BEING TRANSPORTED FROM THE SITE BY THE FORCES OF WIND AND WATER
FLOW.
- FUELS, OILS, SOLVENTS, AND OTHER TOXIC MATERIALS SHALL BE STORED IN ACCORDANCE
WITH THEIR LISTING AND ARE NOT TO CONTAMINATE THE SOIL AND SURFACE WATERS. ALL
APPROVED STORAGE CONTAINERS ARE TO BE PROTECTED FROM THE WEATHER. SPILLS
MUST BE CLEANED UP IMMEDIATELY AND DISPOSED OF IN A PROPER MANNER. SPILLS MAY NOT
BE WASHED INTO THE DRAINAGE SYSTEM, NOR BE ALLOWED TO SETTLE OR INFILTRATE INTO
SOIL.
- EXCESS OR WASTE CONCRETE MAY NOT BE WASHED INTO THE PUBLIC WAY OR ANY OTHER
DRAINAGE SYSTEM. PROVISIONS SHALL BE MADE TO RETAIN CONCRETE WASTES ON SITE UNTIL
THEY CAN BE DISPOSED OF AS SOLID WASTES.
- TRASH AND CONSTRUCTION SOLID WASTES SHALL BE DEPOSITED INTO A COVERED
RECEPTACLE TO PREVENT CONTAMINATION OF RAINWATER AND DISPERSAL BY WIND.
- SEDIMENTS AND OTHER MATERIALS MAY NOT BE TRACKED FROM THE SITE BY VEHICULAR
TRAFFIC. THE CONSTRUCTION ENTRANCE ROADWAYS MUST BE STABILIZED SO AS TO INHIBIT
SEDIMENTS FROM BEING DEPOSITED INTO THE PUBLIC WAY. ACCIDENTAL DEPOSITS SHALL BE
SWEEP UP IMMEDIATELY AND MAY NOT BE WASHED DOWN BY RAIN OR OTHER MEANS.
- STORMWATER POLLUTION PREVENTION DEVICES AND/OR PRACTICES SHALL BE MODIFIED AS
NEEDED AS THE PROJECT PROGRESSES TO ENSURE EFFECTIVENESS.

FIRE DEPARTMENT NOTES

- FOR ASSISTANCE WITH FIRE-RELATED PLAN REVIEW ISSUES OR TECHNICAL QUESTIONS, PLEASE
CALL (714) 573-6108. FOR FIRE-RELATED INSPECTION QUESTIONS OR ISSUES, PLEASE CONTACT
YOUR OCFA INSPECTOR DIRECTLY OR OCFA INSPECTION SCHEDULING AT (714) 573-6150 FOR
ASSISTANCE.
- THE PROJECT SHALL COMPLY WITH THE CURRENTLY ADOPTED CALIFORNIA BUILDING CODE,
CALIFORNIA FIRE CODE, AND OTHER CODES, STANDARDS, REGULATIONS AND REQUIREMENTS
AS ENFORCED BY THE ORANGE COUNTY FIRE AUTHORITY. APPROVAL OF THESE PLANS SHALL
NOT PERMIT THE VIOLATION OF ANY CODE OR LAW.
- FOR PROJECTS INVOLVING NEW STRUCTURES, ADDITIONS TO EXISTING STRUCTURES,
INSTALLATION OF GATES/WALLS/FENCES, OR ALTERATION OF VEHICULAR ACCESS, A FIRE
MASTER PLAN SHALL BE SUBMITTED TO AND APPROVED BY THE OCFA PRIOR TO SUBMITTAL OF
ARCHITECTURAL PLANS. AN APPROVED FIRE MASTER PLAN SHALL BE SUBMITTED WITH THE
ARCHITECTURAL PLANS.
- ALL WEATHER FIRE ACCESS ROADS SHALL BE APPROVED BY THE OCFA AND BE IN PLACE
BEFORE ANY COMBUSTIBLE MATERIALS ARE PLACED ON THE SITE. ACCESS ROADS SHALL BE
MAINTAINED CLEAR OF OBSTRUCTIONS DURING AND AFTER CONSTRUCTION.
- ADDRESS NUMBERS SHALL BE PROVIDED FOR ALL NEW AND EXISTING BUILDINGS, BE A MINIMUM
SIX INCHES HIGH, CONTRAST WITH THEIR BACKGROUND, AND BE PLAINLY VISIBLE FROM THE
ROADWAY THE BUILDING IS ADDRESSED ON OR AS OTHERWISE ALLOWED BY OCFA GUIDELINE
B-09.
- BUILDINGS UNDER CONSTRUCTION OR DEMOLITION SHALL CONFORM TO CFC CHAPTER 33. NO
SMOKING OR COOKING IS ALLOWED IN STRUCTURES WHERE COMBUSTIBLE MATERIALS ARE
EXPOSED OR WITHIN 25' OF COMBUSTIBLE MATERIALS STORAGE AREAS. CUTTING, WELDING,
OR OTHER HOT WORK SHALL BE IN CONFORMANCE WITH CFC CHAPTER 35.

7. LOCATIONS AND CLASSIFICATIONS OF EXTINGUISHERS SHALL BE IN ACCORDANCE WITH THE
CFC AND CCR TITLE 19. AT LEAST ONE EXTINGUISHER SHALL BE PROVIDED DURING
CONSTRUCTION ON EACH FLOOR AT EACH STAIRWAY, IN EACH STORAGE AND CONSTRUCTION
SHED, IN LOCATIONS WHERE FLAMMABLE OR COMBUSTIBLE LIQUIDS ARE STORED OR USED, OR
WHERE SIMILAR HAZARDS ARE PRESENT. BEFORE FINAL OCCUPANCY, AT LEAST ONE 2A:10B:C
EXTINGUISHER SHALL BE PROVIDED SO THAT NO POINT IS MORE THAN 75' TRAVEL DISTANCE
FROM THE EXTINGUISHER. EXTINGUISHERS SHALL BE LOCATED ALONG THE PATH OF EGRESS
TRAVEL AND IN A READILY VISIBLE AND ACCESSIBLE LOCATION, WITH THE BOTTOM OF THE
EXTINGUISHER AT LEAST 4' ABOVE THE FLOOR. ADDITIONAL EXTINGUISHERS MAY BE REQUIRED
BY THE INSPECTOR AND FINAL PLACEMENT IS SUBJECT TO APPROVAL.

8. WALL, FLOOR AND CEILING FINISHES AND DECORATIVE MATERIALS SHALL NOT EXCEED THE
FLAME SPREAD CLASSIFICATIONS IN CBC/CFC CHAPTER 8. DECORATIVE MATERIALS SHALL BE
PROPERLY TREATED BY A PRODUCT OR PROCESS APPROVED BY THE STATE FIRE MARSHAL.
SUCH ITEMS SHALL BE APPROVED AND INSPECTED PRIOR TO INSTALLATION.

9. KNOX BOXES/KEY CABINETS SHALL BE PROVIDED FOR ALL POOL ENCLOSURES, GATES IN THE
PATH OF FIREFIGHTER TRAVEL TO STRUCTURES, SECURED PARKING LEVELS, DOORS GIVING
ACCESS TO ALARM PANELS AND/OR ANNUNCIATORS, AND ANY OTHER STRUCTURES OR AREAS
WHERE IMMEDIATE ACCESS IS REQUIRED OR IS UNDULY DIFFICULT.

10. DUMPSTERS AND TRASH CONTAINERS EXCEEDING 1.5 CUBIC YARDS SHALL NOT BE STORED IN
BUILDINGS OR PLACED WITHIN 5 FEET OF COMBUSTIBLE WALLS, OPENINGS OR COMBUSTIBLE
ROOF EAVE LINES UNLESS PROTECTED BY AN APPROVED SPRINKLER SYSTEM OR LOCATED IN A
TYPE I OR IIA STRUCTURE SEPARATED BY 10 FEET FROM OTHER STRUCTURES. CONTAINERS
LARGER THAN 1 CUBIC YARD SHALL BE OF NON- OR LIMITED-COMBUSTIBLE MATERIALS OR
SIMILARLY PROTECTED OR SEPARATED. CFC 304.3

11. EXITS, EXIT SIGNS, FIRE ALARM PANELS, HOSE CABINETS, FIRE EXTINGUISHER LOCATIONS, AND
STANDPIPE CONNECTIONS SHALL NOT BE CONCEALED BY CURTAINS, MIRRORS, OR OTHER
DECORATIVE MATERIAL. THE EGRESS PATH SHALL REMAIN FREE AND CLEAR OF ALL
OBSTRUCTIONS AT ALL TIMES. NO STORAGE IS PERMITTED IN AISLES.

12. EXIT DOORS SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY
SPECIAL KNOWLEDGE OR EFFORT. DOORS SHALL NOT BE PROVIDED WITH THUMB-TURN LOCKS
OR DEADBOLTS THAT DO NOT UNLATCH IN TANDEM WITH THE NORMAL OPERATING LEVER.
RATED DOORS SHALL BE SELF-CLOSING AND LATCHING; SUCH DOORS SHALL NOT BE EQUIPPED
WITH DOOR STOPS OR OTHERWISE PROPPED OPEN.

13. SPRINKLER AND ALARM SYSTEMS SHALL BE PROVIDED WHEN REQUIRED BY CBC/CFC CHAPTER
9 AND LOCAL ORDINANCE. IN STRUCTURES OF UNDETERMINED USE, THE MINIMUM FIRE
SPRINKLER DESIGN DENSITY REQUIRED SHALL BE ORDINARY HAZARD (GROUP 2) WITH A DESIGN
AREA OF 3000 SQUARE FEET.

14. EXISTING SPRINKLER AND ALARM SYSTEMS IN SPACES UNDERGOING REMODELING SHALL BE
EVALUATED BY A LICENSED CONTRACTOR KNOWLEDGEABLE IN SUCH SYSTEMS TO DETERMINE
WHETHER CHANGES WILL BE NECESSARY TO MAINTAIN THESE SYSTEMS IN CONFORMANCE
WITH APPLICABLE STANDARDS. IF MODIFICATIONS ARE NECESSARY, PLANS SHALL BE
SUBMITTED TO THE OCFA FOR REVIEW AND APPROVAL PRIOR TO MODIFICATION OF THE
SYSTEM. SPRINKLER AND ALARM SYSTEMS SHALL BE SUPERVISED BY A UL-LISTED CENTRAL
ALARM STATION.

15. WHERE COMMERCIAL-TYPE FOOD HEATING OR COOKING EQUIPMENT THAT PRODUCES
GREASE-LADEN VAPORS IS PRESENT, AN AUTOMATIC EXTINGUISHING SYSTEM SHALL BE
PROVIDED AND SHALL COMPLY WITH CFC, CMC, AND NFPA 17A. REVIEW AND APPROVAL OF A
HOOD AND DUCT EXTINGUISHING SYSTEM PLAN BY THE OCFA IS REQUIRED PRIOR TO
INSTALLATION, MODIFICATION, REARRANGEMENT, OR USE OF COOKING EQUIPMENT.

16. HAZARDOUS MATERIALS EQUIPMENT, PROCESSES, STORAGE, DISPENSING, OR USE SHALL
COMPLY WITH CBC AND CFC REGULATIONS AND SHALL BE REVIEWED AND APPROVED BY THE
OCFA PRIOR TO SUCH MATERIALS OR EQUIPMENT BEING BROUGHT ON SITE.

17. STORAGE AREAS GREATER THAN 500 SQ.FT. WITH HIGH HAZARD MATERIALS STORED HIGHER
THAN SIX FEET AND OTHER MATERIALS STORED HIGHER THAN TWELVE FEET ARE NOT
PERMITTED WITHOUT FIRST SUBMITTING PLANS TO AND OBTAINING APPROVAL FROM THE OCFA.

18. A NEW HVAC UNIT EXCEEDING A 2,000 CFM CAPACITY SHALL BE PROVIDED WITH A DUCT SMOKE
DETECTOR. THIS DETECTOR SHALL SHUT DOWN ONLY THE AFFECTED INDIVIDUAL HVAC UNIT
UPON SMOKE DETECTION. THIS DETECTOR MUST ALSO BE INTERFACED TO AN EXISTING FIRE
ALARM SYSTEM. THE DETECTOR SHALL ONLY PROVIDE A SUPERVISORY SIGNAL AT THE FIRE
ALARM PANEL UPON SMOKE DETECTION.

EMERGENCY RESPONDER RADIO SYSTEM

EXEMPT: THIS BUILDING IS EXEMPT FROM EMERGENCY RESPONDER RADIO SYSTEM COVERAGE
REQUIREMENTS PER CFC 510.1.

STRUCTURE THREE STORIES OR LESS AND DO NOT HAVE A SUBTERRANEAN STORAGE OR PARKING
AND DO NOT EXCEED 50,000 SQUARE FEET ON ANY SINGLE STORY.

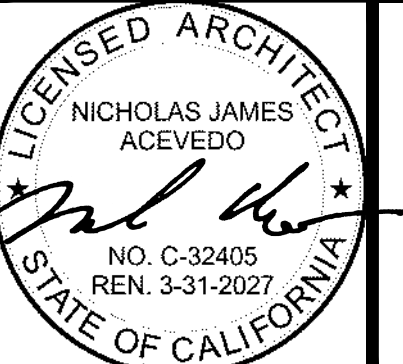

RELATED CASES

- PLANNING CASES / RESOLUTION NUMBERS: 11-3109
- IRWD APPROVAL: TBD
- FOG APPROVAL: FOG-2147
- OCFA FIRE UNDERGROUND: SR26000381
- OCFA FIRE MASTER PLAN: SR26000952
- PRECISE GRADING: 00974484-PARK
- ROUGH GRADING: 00968277-GPLM
- EV CHARGING ELECTRICAL: 00974484-PARK
- SITE LIGHTING: 00974484-PARK
- LANDSCAPE & IRRIGATION: 00974484-PARK
- WAYFINDING PPA NUMBER: TBD
- EMERGENCY ACCESS PPA NUMBER: TBD
- BUILDING 10 PC NUMBER: 00917615-CNEW
- BUILDING 11 PC NUMBER: 00971633-CNEW
- BUILDING 12 PC NUMBER: 00971641-CNEW
- WHOLE BUILDING DEMO: 00963930-CDRD

Printed by: G. 002 - 0026 on 04/01/2025

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	Under Ground Service Alert of Southern California Call: TOLL FREE 1-800- 227-2600
TWO WORKING DAYS BEFORE YOU DIG	

		4675 MacArthur Court Suite 100 Newport Beach, CA 92660 United States Tel 949.863.9434 Fax 949.553.1676	DRAWN BY: GENSLER DESIGNED BY: GENSLER CHECKED BY: GENSLER RECOMMENDED BY:	DATE DATE DATE DATE	CITY NOTES HANGAR 10 GREAT PARK, IRVINE, CALIFORNIA	G0.001	DATE DATE
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GENERAL NOTES

- 1 REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR.
THE CONTRACTOR SHALL CAREFULLY STUDY AND COMPARE THE CONTRACT DOCUMENTS WITH EACH OTHER AND WITH AS-BUILT DRAWINGS PROVIDED BY THE OWNER AND SHALL AT ONCE REPORT TO THE ARCHITECT ANY ERRORS, INCONSISTENCIES OR OMISSIONS. THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS AND VERIFY FIELD CONDITIONS. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR AND HAS CONTROL OVER CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES, AND FOR COORDINATING ALL PORTIONS OF THE WORK.
- 2 INTENT OF CONTRACT DOCUMENTS.
THE INTENT OF THE CONTRACT DOCUMENTS IS TO ALLOW FOR THE PERFORMANCE OF THE WORK. EVERY ITEM NECESSARILY REQUIRED MAY NOT BE SPECIFICALLY MENTIONED OR SHOWN. UNLESS EXPRESSLY STATED, ALL SYSTEMS AND EQUIPMENT SHALL BE COMPLETED AND APPROPRIATELY OPERABLE, FURNISH AND INSTALL ALL SPECIFIED AND APPROPRIATE ITEMS, AND ALL INCIDENTAL, ACCESSORY, AND OTHER ITEMS NOT SPECIFIED BUT REQUIRED FOR A COMPLETE AND FINISHED ASSEMBLY.
- 3 DEFECTIVE WORK.
NO WORK DEFECTIVE IN WORKMANSHIP OR QUALITY OR DEFICIENT IN ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS WILL BE ACCEPTABLE. THE ARCHITECT'S FAILURE TO DISCOVER OR REPORT OR POINT OUT DEFECTS OR DEFICIENCIES DURING CONSTRUCTION. DEFECTIVE WORK REVEALED WITHIN THE TIME REQUIRED BY GUARANTEES SHALL BE REPLACED BY WORK CONFORMING TO THE INTENT OF THE CONTRACT. NO PAYMENT, EITHER PARTIAL OR FINAL, SHALL BE CONSTRUED AS AN ACCEPTANCE OF DEFECTIVE WORK OR IMPROPER MATERIALS.
- 4 FIREPROOFING.
PATCH AND REPAIR ALL FIREPROOFING DAMAGE INCURRED DURING DEMOLITION AND/OR CONSTRUCTION. FIREPROOF AS REQUIRED BY CODE ALL NEW PENETRATIONS GENERATED BY THE WORK DESCRIBED IN THESE DOCUMENTS.
- 5 AS-BUILT DRAWINGS.
DURING THE COURSE OF CONSTRUCTION, ACTUAL LOCATIONS OF CONSTRUCTION ITEMS DENOTED IN THE CONSTRUCTION DOCUMENTS SHALL BE INDICATED TO SCALE IN CONTRASTING INK ON THE DRAWINGS FOR ALL RUNS OF MECHANICAL, SPRINKLER, PLUMBING, AND ELECTRICAL WORK INCLUDING SITE UTILITIES AND CONCEALED DEVIATIONS FROM THE DRAWINGS. UPON COMPLETION OF THE PROJECT, THE ARCHITECT WILL PROVIDE THE CONTRACTOR WITH A REPRODUCIBLE SET OF ORIGINAL DOCUMENTS FOR "AS-BUILT" DOCUMENTATION. THIS SET SHALL BE CONSPICUOUSLY MARKED "AS-BUILTS" AND DELIVERED TO THE ARCHITECT.
- 6 CONTRACTOR RESPONSIBILITY.
IT IS INTENDED THAT THE CONTRACTOR PROVIDE A COMPLETE JOB AND ANY OMISSIONS IN THESE NOTES OR IN THE OUTLINE OF WORK SHALL NOT BE CONSTRUED AS RELIEVING THE CONTRACTOR OF SUCH RESPONSIBILITIES IMPLIED BY SCOPE OF WORK EXCEPT FOR ITEMS SPECIFICALLY NOTED.
- 7 UNENFORCEABLE WORK.
SHOULD ANY PORTION OF THE CONTRACT DOCUMENTS PROVE TO BE, FOR WHATEVER REASONS, UNENFORCEABLE, SUCH UNENFORCEABILITY SHALL NOT EXTEND TO THE REMAINDER OF THE CONTRACT NOR SHALL IT VOID ANY OTHER PROVISIONS OF THE CONTRACT.
- 8 LIENS.
THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL REFRAIN FROM ACTIONS THAT COULD LEAD TO THE FILING OF CLAIMS OR LIENS BY SUBCONTRACTORS, SUPPLIERS OF MATERIALS, LABOR, SERVICE, EQUIPMENT, OR ANY OTHER INDIVIDUAL OR COMPANY SO ENTITLED UNDER GOVERNING LAWS AND REGULATIONS, UNLESS REASONABLE AND JUSTIFIABLE CAUSE CAN BE SHOWN. APPROVAL FOR PAYMENT SHALL BE CONTINGENT UPON THE CONTRACTOR'S OBTAINING AND FURNISHING TO THE ARCHITECT SIGNED RELEASES FROM SUCH INDIVIDUALS OR COMPANIES.
- 9 COORDINATION OF THE WORK.
THE CONTRACTOR IS RESPONSIBLE FOR REVIEW AND VERIFICATION OF CONTRACT DOCUMENTS, FIELD CONDITIONS, AND DIMENSIONS FOR ACCURACY AND CONFIRMING THAT WORK IS BUILDABLE AS SHOWN BEFORE PROCEEDING WITH CONSTRUCTION. IF THERE ARE ANY QUESTIONS REGARDING THESE OR OTHER COORDINATION ISSUES, THE CONTRACTOR SHALL SUBMIT THEM IN WRITING TO THE ARCHITECT AND IS RESPONSIBLE FOR OBTAINING A WRITTEN CLARIFICATION FROM THE ARCHITECT BEFORE PROCEEDING WITH WORK IN QUESTION, OR RELATED WORK.
- 10 WORK SHOULD COMPLY WITH APPLICABLE CODES.
EXECUTE WORK IN ACCORDANCE WITH ANY AND ALL APPLICABLE LOCAL, STATE, AND FEDERAL, CODES, MANUFACTURERS' RECOMMENDATIONS, AND TRADE AND REFERENCE STANDARDS, INCLUDING BUT NOT LIMITED TO: FEDERAL, STATE, LOCAL/MUNICIPAL CODES, IBC, UBC, SEISMIC CODES, NEC, NFPA, ASMC, AND UMC (LATEST ENFORCED EDITIONS).
- 11 DIMENSIONS.
DO NOT SCALE DRAWINGS; DIMENSIONS SHALL GOVERN. DETAILS SHALL GOVERN OVER PLANS AND ELEVATIONS. LARGE SCALE DETAILS SHALL GOVERN OVER SMALL SCALE DETAILS. WRITTEN SPECIFICATIONS SHALL GOVERN OVER ALL.
- 12 CLARIFICATIONS.
CLARIFY ALL DISCREPANCIES RELATIVE TO CONSTRUCTION DOCUMENTS, SPECIFICATIONS, AND FIELD CONDITIONS PRIOR TO SUBMITTING BIDS AND COMMENCING WORK.
- 13 SUBSTITUTIONS.
THERE SHALL BE NO SUBSTITUTION OF MATERIALS WHERE A MANUFACTURER IS SPECIFIED. WHERE THE TERM "OR EQUAL" IS USED, THE ARCHITECT ALONE SHALL DETERMINE EQUALITY BASED UPON INFORMATION SUBMITTED BY THE CONTRACTOR, CLEARLY IDENTIFIED AS A "REQUEST FOR SUBSTITUTION". CONTRACTOR SHALL ALSO LIST CREDIT TO THE CLIENT FOR USE OF SUBSTITUTION. CONSENT OF THE ARCHITECT/OWNER.
- 14 DRAWING DISTRIBUTION.
THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISTRIBUTION OF DRAWINGS TO ALL TRADES UNDER THEIR JURISDICTION.
- 15 CHANGES IN THE WORK.
DO NOT PROCEED WITH ANY WORK REQUIRING ADDITIONAL COMPENSATION BEYOND THE CONTRACT AMOUNT WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER. FAILURE TO OBTAIN AUTHORIZATION SHALL INVALIDATE ANY CLAIM FOR EXTRA COMPENSATION.
- 16 EXISTING WORK.
ALL INSTALLED PLUMBING, MECHANICAL, AND ELECTRICAL EQUIPMENT SHALL OPERATE QUIETLY AND FREE OF VIBRATION.
- 17 PUNCH LIST.
UPON COMPLETION OF THE WORK BY THE CONTRACTOR, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING OF SUCH COMPLETION. THE ARCHITECT SHALL ATTEND THE PUNCH LIST WALK THROUGH CONDUCTED BY THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL PREPARE AND DISTRIBUTE A LIST OF ITEMS TO BE FINISHED OR COMPLETED PRIOR TO THIS WALK THROUGH. THE GENERAL CONTRACTOR SHALL TAKE NOTES AND PREPARE A LIST OF FINAL PUNCH ITEMS TO BE COMPLETED OR CORRECTED AS A RESULT OF THIS WALK THROUGH. THIS PUNCH LIST IS TO BE PROMPTLY DISTRIBUTED BY THE GENERAL CONTRACTOR TO THE TENANT, OWNER AND ARCHITECT.
- 18 MATERIALS.
ALL MATERIALS SHALL BE NEW, UNUSED, AND OF THE HIGHEST QUALITY IN EVERY RESPECT, UNLESS NOTED OTHERWISE. MANUFACTURED MATERIALS AND EQUIPMENT SHALL BE INSTALLED AS PER MANUFACTURERS' RECOMMENDATIONS AND INSTRUCTIONS, UNLESS NOTED OTHERWISE.
- 19 INSURANCE.
THE CONTRACTOR AND SUBCONTRACTORS SHALL PURCHASE AND MAINTAIN CERTIFICATIONS OF INSURANCE WITH RESPECT TO WORKERS COMPENSATION, PUBLIC LIABILITY, AND PROPERTY DAMAGE FOR THE LIMITS AS REQUIRED BY LAW, IN ADDITION TO THE TERMS OF THE OWNER'S CONTRACT, WHICHEVER IS GREATER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PRECAUTIONS IN CONNECTION WITH THE WORK.
- 20 EXISTING TENANTS.
COORDINATE ALL WORK WITH BUILDING OWNER SO AS NOT TO DISTURB OR CAUSE DAMAGE TO ANY TENANT.
- 21 COORDINATION.
VERIFY IN THE FIELD THAT NO CONFLICTS EXIST WHICH WOULD PROHIBIT THE LOCATION OF ANY AND ALL MECHANICAL, TELEPHONE, ELECTRICAL, LIGHTING, PLUMBING, AND SPRINKLER EQUIPMENT (TO INCLUDE ALL REQUIRED PIPING, DUCTWORK, AND CONDUIT), AND THAT ALL REQUIRED CLEARANCES FOR INSTALLATION AND MAINTENANCE OF ABOVE EQUIPMENT ARE PROVIDED.
- 22 PROTECTION OF EXISTING WORK.
PROVIDE PROTECTION TO ALL EXISTING FINISHES IN ALL SPACES WITHIN OR ADJACENT TO THE SCOPE OF WORK AND THE TENANT'S SPACE. THE CONTRACTOR SHALL PATCH, REFINISH, AND REPAIR ANY DAMAGE CAUSED BY HIM OR HIS SUBCONTRACTORS. MATCH EXISTING ADJACENT FINISH, OR AS NOTED HEREIN.
- 23 EXISTING DEFECTS.
CORRECT ANY DEFECTS FOUND IN EXISTING BUILDING CONSTRUCTION WHICH AFFECTS THE SCOPE OF WORK. THIS INCLUDES BUT IS NOT LIMITED TO UNEVEN SURFACES AND FINISHES AT GYPSUM BOARD OR DAMAGED FIREPROOFING. PATCH AND REPAIR SURFACES TO MATCH ADJACENT, ADJOINING SURFACES.
- 24 TERMINOLOGY.
TYPICAL OR TYP MEANS IDENTICAL FOR ALL SIMILAR CONDITIONS, UNLESS NOTED OTHERWISE. SIMILAR OR SIM MEANS COMPARABLE CHARACTERISTICS TO THE CONDITION NOTED. VERIFY DIMENSIONS AND ORIENTATION ON PLAN. VERIFY OR VER MEANS TO ASCERTAIN AND CONFIRM APPLICATION WITH ARCHITECT.
- 25 FURNITURE.
FURNITURE SHOWN IS FOR REFERENCE ONLY AND INSTALLED BY OTHERS, UNLESS NOTED OTHERWISE.
- 26 FILE CABINETS.
FILE CABINETS, AS SHOWN ON DRAWINGS, ARE SUPPLIED BY OTHERS. COORDINATE FILE SIZE(S) WITH FURNITURE INSTALLER FOR REQUIRED CLEARANCES.
- 27 CLEANING.
PROVIDE STRICT CONTROL OF JOB CLEANING AND PREVENT DUST AND DEBRIS FROM MIGRATING FROM CONSTRUCTION AREA.
- 28 ADJACENT SPACES.
CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING OF ACCESS INTO ADJACENT TENANT SPACES WITH THE BUILDING MANAGEMENT AS REQUIRED FOR PRICING AND EXECUTION OF THE WORK.
- 29 EXISTING CONDITIONS.
CONTRACTOR SHALL THOROUGHLY EXAMINE THE PREMISES AND SHALL BASE HIS BID ON THE EXISTING CONDITIONS, NOTWITHSTANDING ANY INFORMATION SHOWN OR NOT INDICATED ON THE CONTRACT DOCUMENTS.
- 30 CONTRACT DOCUMENTS.
ALL CONTRACT DOCUMENTS ARE COMPLEMENTARY AND WHAT IS CALLED FOR BY ANY WILL BE AS BINDING AS IF CALLED FOR BY ALL. ALL WORK SHOWN OR REFERRED TO ON ANY CONTRACT DOCUMENT SHALL BE PROVIDED AS THOUGH THEY ARE ON ALL RELATED DOCUMENTS.
- 31 CONTRACTOR RESPONSIBILITY TO NOTIFY ARCHITECT.
IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY THE ARCHITECT OF ANY CONFLICTS HEREIN - EITHER APPARENT OR OBVIOUS - PRIOR TO THE START OF NEW WORK ON THAT ITEM, OR BEAR THE RESPONSIBILITY OF CORRECTING SUCH WORK AS DIRECTED BY THE ARCHITECT.
- 32 DUPLICATION OF DOCUMENTS.
ALL DRAWINGS AND WRITTEN MATERIAL HEREIN CONSTITUTE THE ORIGINAL AND UNPUBLISHED WORK OF THE ARCHITECT/OWNER AND THE SAME MAY NOT BE DUPLICATED, USED, OR DISCLOSED WITHOUT THE WRITTEN CONSENT OF THE ARCHITECT/OWNER.
- 33 DETAIL REFERENCE.
REFER TO A12 SHEETS SERIES FOR DETAILS NOT CROSS REFERENCED FOR ALL THE CONDITIONS OF PENETRATION THROUGH FIRE RATED ASSEMBLIES AND ACOUSTICAL PARTITIONS.

- 34 EXISTING PENETRATIONS.
ALL PENETRATIONS TO THE FLOOR/CEILING ASSEMBLY SHALL BE GROUTED SOLID WITH A QUICK-SET CONCRETE FILLER. THE SLAB BETWEEN THE MECHANICAL EQUIPMENT ROOM AND THE TENANT SPACE SHALL BE ACOUSTICALLY SEALED AIRTIGHT.
- 35 SHOP DRAWINGS AND SUBMITTALS.
IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO REVIEW ALL SUBMITTALS AND SHOP DRAWINGS FOR APPROPRIATENESS AND COMPLIANCE WITH THE CONTRACT DOCUMENTS PRIOR TO SENDING SHOP DRAWINGS TO THE ARCHITECT OR ENGINEER FOR REVIEW. A STAMP OR STATEMENT TESTIFYING THE CONTRACTOR HAS REVIEWED THE SHOP DRAWINGS, INCLUDING THE DATE REVIEWED, MUST BE AFFIXED TO THE FIRST PAGE OF EACH SUBMITTAL.
- 36 IF ANY WORK IS PERFORMED PRIOR TO PROPER CLARIFICATION, CONTRACTOR SHALL CORRECT CONFLICTING WORK AT CONTRACTORS EXPENSE AT NO ADDITIONAL COST TO THE OWNER, TENANT OR ARCHITECT.

HAZARDOUS MATERIALS NOTES

- 1 OWNER ACKNOWLEDGES THAT GENSLER SHALL HAVE NO RESPONSIBILITY FOR THE DISCOVERY, PRESENCE HANDLING, REMOVAL, DISPOSAL, OR EXPOSURE OF PERSONS TO HAZARDOUS SUBSTANCES, MATERIALS, AND WASTES IN ANY FORM AT THE PROJECT SITE, INCLUDING BUT NOT LIMITED TO: ASBESTOS, ASBESTOS PRODUCTS, PCB MOLD, OR OTHER TOXIC SUBSTANCES.
- 2 THE OWNER ACKNOWLEDGES THAT IT ACCEPTS RESPONSIBILITY FOR NOTIFYING THE APPROPRIATE FEDERAL, STATE, AND AUTHORITIES HAVING JURISDICTION FOR ANY DEMOLITION, CONSTRUCTION, OR REPAIR WORK.
- 3 ANY QUESTIONS THAT ARISE RELATED TO ASBESTOS SHALL BE REFERRED TO THE OWNER FOR RESOLUTION. GENSLER SHALL NOT BE REQUIRED TO DO ANY WORK NO RENDER ANY OPINIONS RELATED TO ASBESTOS.
- 4 THE OWNER SHALL RETAIN AN INDEPENDENT CONSULTANT WHO IS TRAINED AND EXPERIENCED IN IDENTIFICATION AND SURVEY OR EXISTING SITES PRIOR TO START OF DEMOLITION CONSTRUCTION.
- 5 ALL CONTRACTORS AND SUBCONTRACTORS SHALL REPORT THE PRESENCE OF ANY MATERIAL OR ASSEMBLY SUSPECTED TO CONTAIN ASBESTOS UPON DISCOVERY. THE WORK SHALL BE CARRIED OUT PER THE CONSULTANTS RECOMMENDATIONS.

FIRE DEPT SUBMITTALS & PERMITS

- 1 IT IS UNDERSTOOD THAT PLANS FOR THE PROJECT HAVE, AT THIS TIME, BEEN REVIEWED FOR COMPLIANCE WITH ALL APPLICABLE STATE AND CITY REGULATIONS, AND THAT THE PROJECT AS A WHOLE HAS BEEN APPROVED BY THE CITY, WITH THE EXCEPTION OF THE DEFERRED ITEMS LISTED.
- 2 I/WE UNDERSTAND THAT I/WE WILL NOT BE AUTHORIZED ANY INSPECTION OF THE DEFERRED ITEMS PROPOSED PRIOR TO THE SUBMITTAL AND APPROVAL OF PLANS AND/OR CALCULATIONS FOR THESE DEFERRED ITEMS.
- 3 COMPLETE PLANS AND SPECIFICATIONS FOR ALL FIRE EXTINGUISHING SYSTEMS, INCLUDING AUTOMATIC SPRINKLER AND STANDPIPE SYSTEMS AND OTHER SPECIAL FIRE EXTINGUISHING SYSTEMS AND RELATED APPURTENANCES SHALL BE SUBMITTED TO THE CITY OF IRVINE FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
- 4 COMPLETE PLANS AND SPECIFICATIONS FOR ALL FIRE ALARM SYSTEMS SHALL BE SUBMITTED TO THE CITY OF IRVINE DEVELOPMENT SERVICES FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

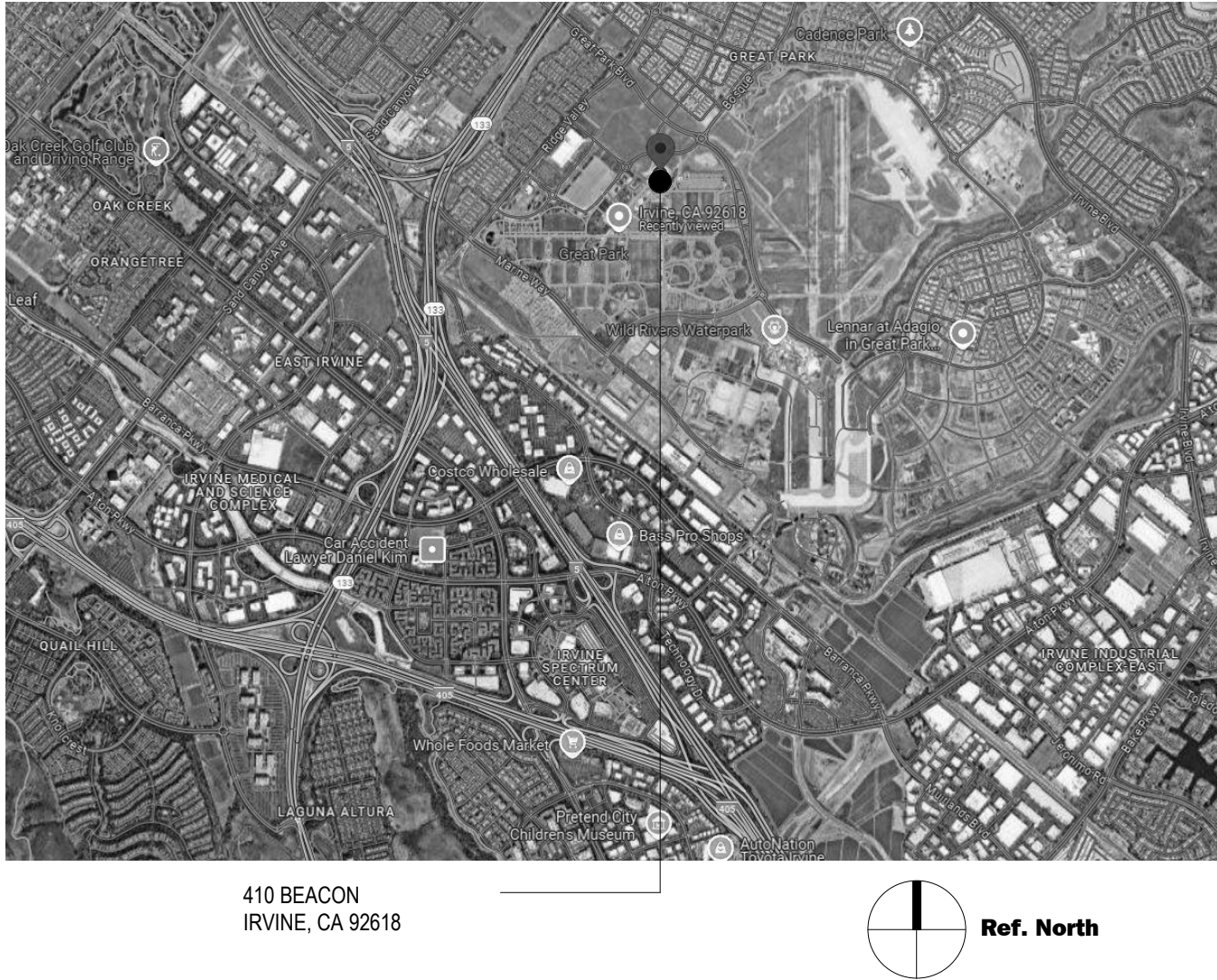
PROJECT TEAM

BUILDING OWNER	CITY OF IRVINE COMMUNITY DEVELOPMENT ONE CIVIC CENTER PLAZA, P.O. BOX 19575, IRVINE, CA 92623 949.724.3463 BRIAN POLIVKA / DENICE BAILEY BPOLIVKA@CITYOFIRVINE.ORG / DBAILEY@CITYOFIRVINE.ORG
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PROJECT MANAGER	CITY OF IRVINE COMMUNITY DEVELOPMENT ONE CIVIC CENTER PLAZA, P.O. BOX 19575, IRVINE, CA 92623 949.724.3463 DENICE BAILEY DBAILEY@CITYOFIRVINE.ORG
CONSTRUCTION MANAGER	PSOMAS 5 HUTTON CENTER DR. #300; SANTA ANA, CA 92707 571.722.2277 DI KELLY DAVID.KELLY@PSOMAS.COM
ARCHITECT	G E N S L E R 4675 MacArthur Court, Suite 100 Newport Beach, CA. 92660 949.260.8542 / 949.553.1676 (Fax) CINDY TAYLOR CINDY_TAYLOR@GENSLER.COM
STRUCTURAL	STRUCTURAL FOCUS 19210 S. VERMONT AVE., BLDG. B, SUITE 210; GARDENA, CA 90248 310.323.9924 BRENDAN RAMOS BRAMOS@STRUCTURALFOCUS.COM
MEP	MA ENGINEERS 5160 CARROLL CANYON RD, SUITE 200; SAN DIEGO, CA 92121 658.200.0030 BRIAN HAHNLEN BHAHNLEN@MA-ENGR.COM

SHEET INDEX - ARCHITECTURAL

SHEET NUMBER	SHEET NAME	SCHEMATIC DESIGN	DESIGN DEVELOPMENT	CD CLIENT REVIEW/PRICING	ISSUE FOR PLAN CHECK	ADDENDUM A - PC COMMENTS	BID SET	2026.05.28 BID ADDENDUM 02
01 - Architectural								
G0.000	TITLE SHEET							
G0.001	NOTES							
G0.002	GENERAL PROJECT INFORMATION & SHEET INDEX							
G0.003	SYMBOLS & ABBREVIATIONS							
G1.020	ACCESSIBILITY REQUIREMENTS & DETAILS							
G1.021	ACCESSIBILITY REQUIREMENTS							
G2.001	SITE LIFE SAFETY PLANS							
G2.002	ENLARGED LIFE SAFETY / EGRESS PLAN							
G2.100	STANDARD NOTES NON-RESIDENTIAL CONSTRUCTION 2022							
	CALGREEN							
G2.101	STANDARD NON-RESIDENTIAL SECURITY CODE PROVISIONS							
G2.102	SECURITY CODE DEFINITIONS, CONSTRUCTION SITE SECURITY & FABRICATION, ROOF AND ROOF DRAIN							
G2.104	CANOPY PHASE 2 NOISE ANALYSIS							
G2.105	CANOPY PHASE 2 NOISE ANALYSIS							
G2.106	CANOPY PHASE 2 NOISE ANALYSIS							
G5.000	PARTITION DETAILS							
G5.001	PARTITION DETAILS							
G6.000	DOOR SCHEDULE & DETAILS							
G8.000	SCHEDULES							
A1.100	CONSTRUCTION AND FINISH PLAN							
A1.101	SLAB EDGE PLAN							
A1.102	ROOF PLAN							
A1.200	REFLECTED CEILING PLAN							
A2.000	EXTERIOR ELEVATIONS							
A3.000	BUILDING SECTIONS							
A3.001	BUILDING SECTIONS							
A4.000	WALL SECTIONS							
A4.001	WALL SECTIONS							
A4.002	WALL SECTIONS							
A5.000	RESTROOM PLANS							
A5.001	RESTROOM PLAN							
A5.010	RESTROOM ELEVATIONS							
A5.011	RESTROOM AND JANITOR ELEVATIONS							
A6.000	EXTERIOR WALL DETAILS							
A6.001	ENLARGED STOREFRONT ELEVATIONS & DETAILS							
A6.002	STOREFRONT DETAILS							
A6.100	ROOF DETAILS							
A6.101	ROOF DETAILS							
A6.301	BASE, TRANSITIONS AND CEILING DETAILS							
02 - Structural								
S1.001	GENERAL STRUCTURAL NOTES AND DRAWING INDEX							
S1.002	GENERAL STRUCTURAL NOTES CONTINUED							
S1.003	GENERAL STRUCTURAL NOTES CONTINUED							
S1.004	SPECIAL INSPECTIONS							
S1.005	SYMBOLS AND ABBREVIATIONS							
S1.010	TYPICAL CONCRETE DETAILS							
S1.011	TYPICAL CONCRETE DETAILS							
S1.020	TYPICAL STEEL DETAILS							
S1.030	TYPICAL WOOD DETAILS							
S1.031	TYPICAL WOOD DETAILS							
S1.100	CONSTRUCTION PLAN							
S1.102	ROOF PLAN							
S4.001	ELEVATIONS							
S5.001	CONCRETE DETAILS							
S7.001	STEEL DETAILS							
S8.001	WOOD DETAILS							
YL-1	YIELD-LINK CONNECTION							
YLMC1	YIELD-LINK MOMENT CONNECTION							
YLMC2	YIELD-LINK MOMENT CONNECTION							
YLMC3	YIELD-LINK MOMENT CONNECTION							
03 - Mechanical								
M0.001	MECHANICAL LEGENDS AND GENERAL NOTES							
M0.002	MECHANICAL SCHEDULES							
M0.003	MECHANICAL TITLE 24							
M0.004	MECHANICAL TITLE 24							
M0.005	MECHANICAL TITLE 24							
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M1.201	MECHANICAL CONSTRUCTION PLAN - LEVEL 01							
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M1.203	MECHANICAL PIPING PLAN							
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M6.101	MECHANICAL CONTROLS							
M6.102	MECHANICAL CONTROLS							
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E0.001	LIGHTING FIXTURE SCHEDULE & LCD							
E0.002	TITLE 24							
E0.003	TITLE 24							
E0.004	TITLE 24							
E0.005	TITLE 24							
E0.006	TITLE 24							
E1.101	ELECTRICAL SITE PLAN							
E2.101	LEVEL 01 - POWER PLAN							
E2.102	LEVEL 01 - ROOF PLAN							
E3.101	LEVEL 01 - LIGHTING PLAN							
E3.102	LEVEL 01 - EGRESS PHOTO METRIC PLAN							
E5.101	SINGLE-LINE DIAGRAM							
E7.101	ELECTRICAL DETAILS							
05 - Plumbing								
P0.001	PLUMBING LEGENDS AND GENERAL NOTES							
P0.002	PLUMBING SCHEDULES							
P1.003	PLUMBING CONSTRUCTION PLAN - PARTIAL SITE PLAN							
P1.200	PLUMBING CONSTRUCTION PLAN - UNDERGROUND PLAN							
P1.201	PLUMBING CONSTRUCTION PLAN - LEVEL 01							
P1.202	PLUMBING ROOF PLAN							
P1.301	ENLARGED PLANS							
P1.302	ENLARGED PLANS							
P1.303	ENLARGED PLANS							

VICINITY MAP



LOCATION MAP



CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States
Tel 949.863.9434
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△ Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET
2 05.28.2026	BID ADDENDUM 02

Seal / Signature

Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

GENERAL PROJECT INFORMATION & SHEET INDEX

Scale

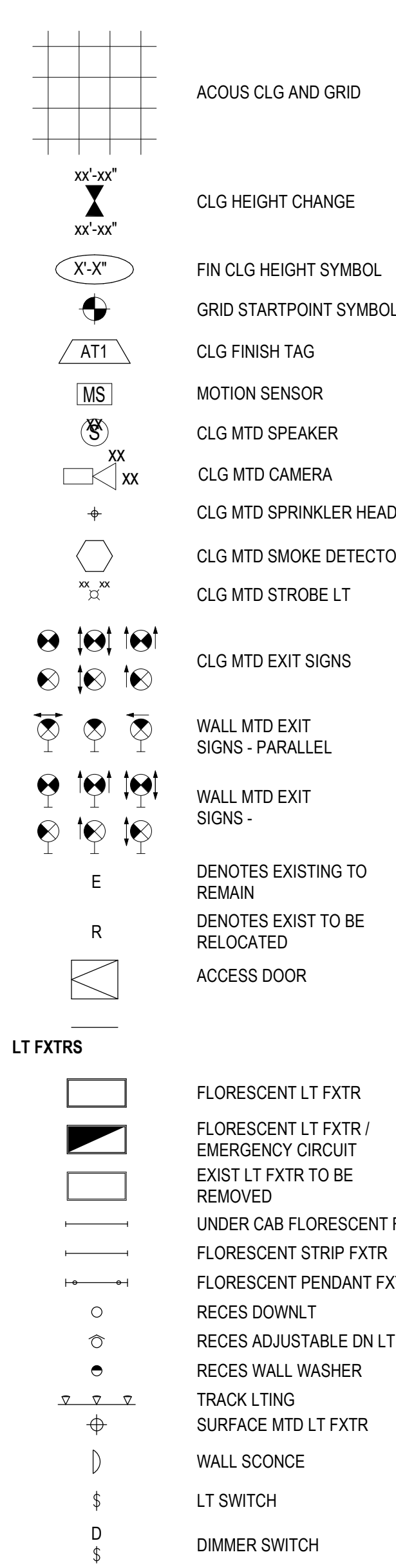


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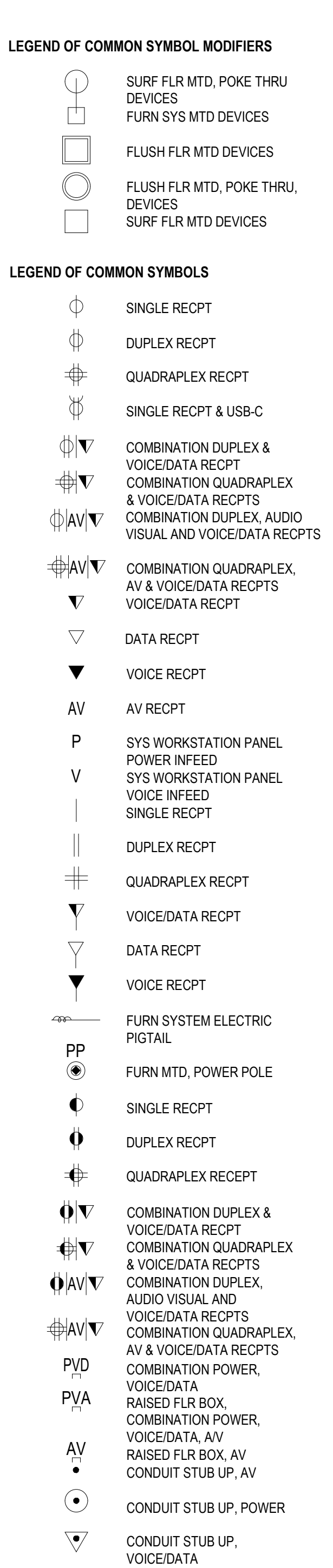
SYMBOLS

ABBREVIATIONS

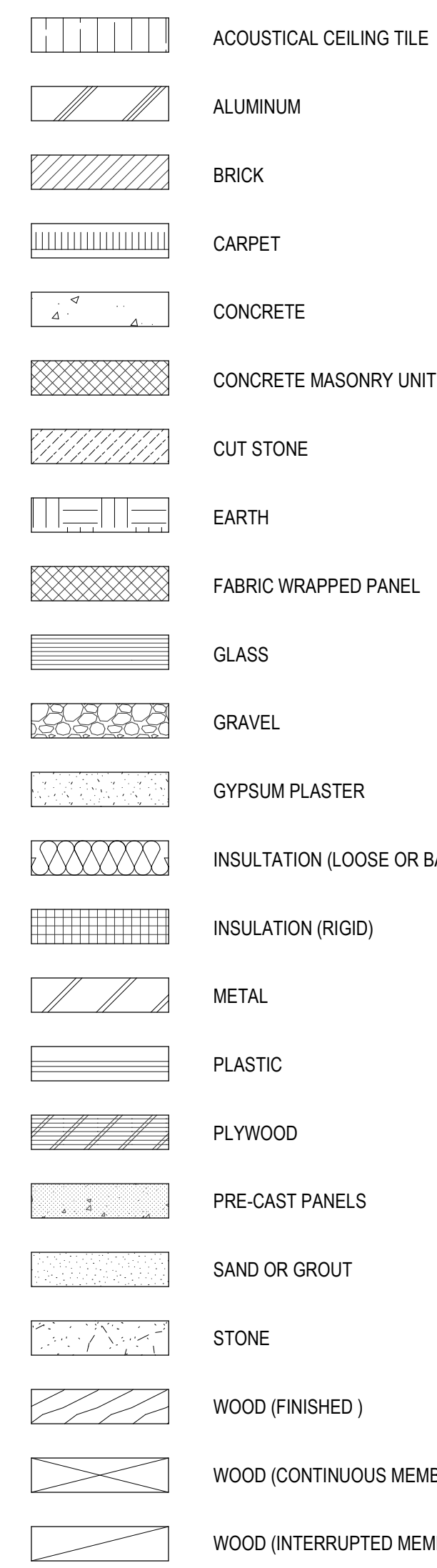
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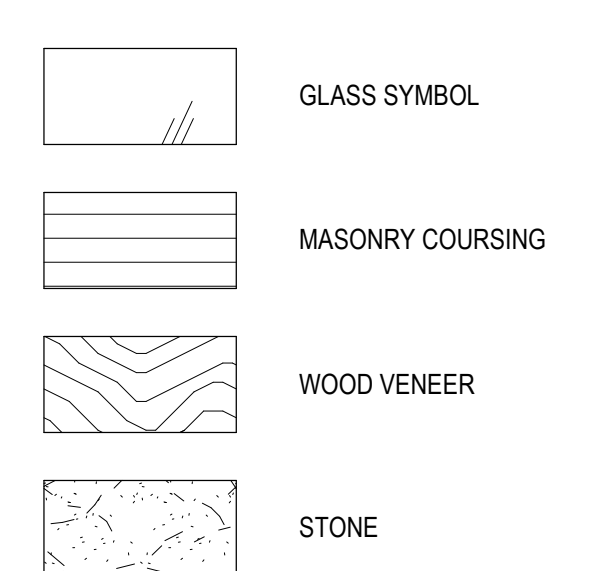
POWER & COMM.



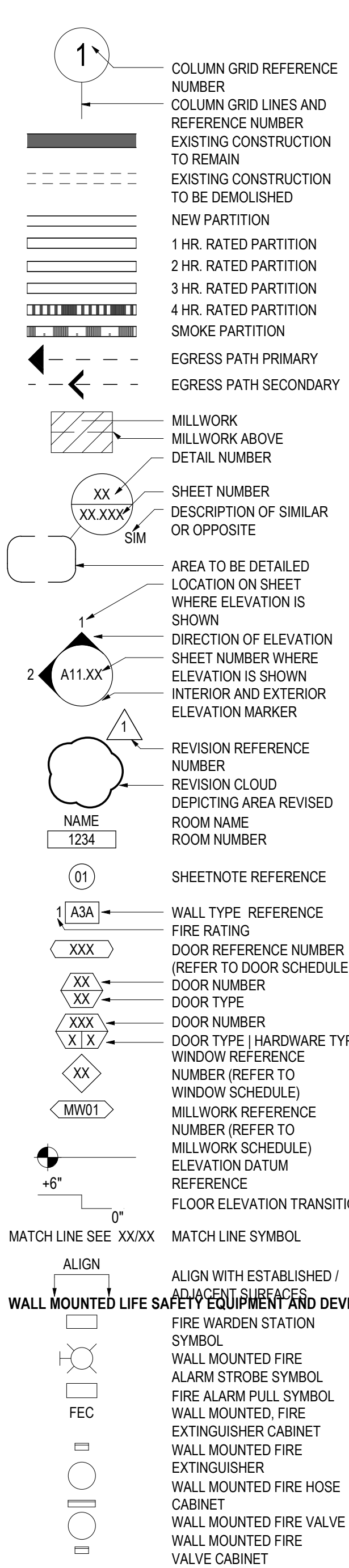
SECTION INDICATIONS



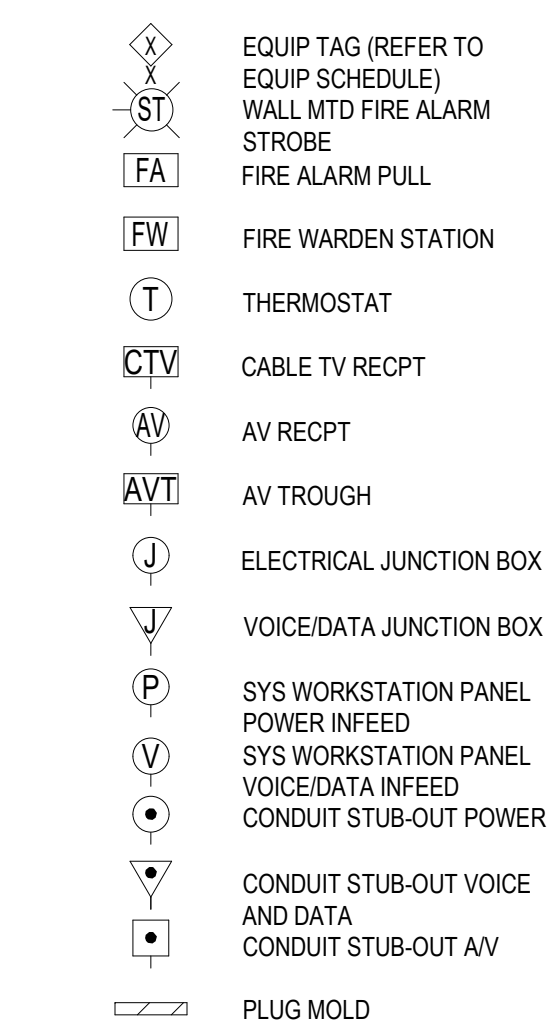
ELEVATION INDICATION



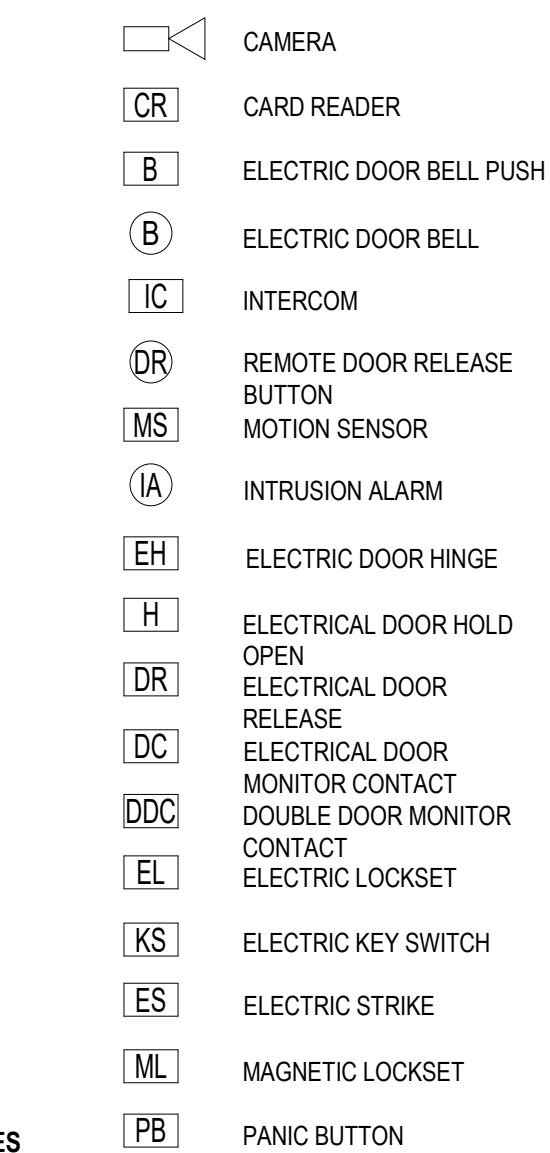
CONSTRUCTION



WALL MTD DEVICES



SECURITY DEVICES



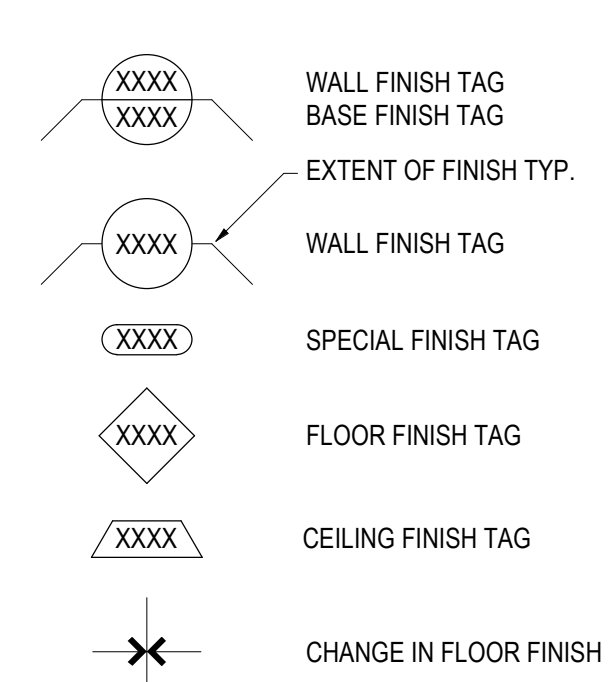
AND
 (D) DEMOLISHED
 (E) EXISTING
 (N) NEW
 (R) RELOCATED
 A
 ABV ABOVE
 ACC ACCESSORY
 ACI AMERICAN CONCRETE INSTITUTE
 ADDL ADDITIONAL
 ADJ ADJACENT
 AFD ABOVE FINISH FLOOR
 ALT ALTERNATE, ALTERATION, ALTITUDE
 ALUM ALUMINUM
 AMT AMOUNT
 ANCH ANCHOR, ANCHORAGE
 ANOD ANODIZED
 APPL APPLIANCE
 APPROX APPROXIMATE
 ARCH ARCHITECT, ARCHITECTURAL
 ASPH ASPHALT
 ASSOC ASSOCIATE, ASSOCIATED, ASSOCIATION
 ASSY ASSEMBLY
 AUTH AUTHORITY, AUTHORIZED, AUTHORIZATION
 AUTO AUTOMATIC
 AVG AVERAGE
 B
 B BOTTOM (OF)
 BD BOARD
 BET BETWEEN
 BEV BEVEL, BEVELED
 BLDG BUILDING
 BLK BLOCK
 BM BEAM, BENCH MARK
 BOL BOLLARD
 BRDG BRIDGE, BRIDGING
 BROOM BROOM, BROOM
 BRKT BRACKET
 BRZ BRONZE
 BTB BACK TO BACK
 BU BUILT-UP
 C
 C CENTER (OF)
 CAB CABINET
 CAP CAPACITY
 CCTV CLOSED CIRCUIT TV
 CEM CEMENT, CEMENTITIOUS
 CER CERAMIC
 CF CUBIC FEET
 CFL COUNTERFLASHING
 CHAM CHAMFER
 CHR CHILLED WATER RETURN
 CHS CHILLED WATER SUPPLY
 CIR CIRCLE
 CJ CONTROL JOINT
 CL CENTERLINE
 CLG CEILING
 CLR CLEAR
 CMU CONCRETE MASONRY UNIT
 CON CONDITION
 COEF COEFFICIENT
 CND COLUMN
 COMB COMBINATION
 COMM COMMUNICATION(S)
 COMP COMPRESSED
 CONC CONCRETE
 COND CONDITION, CONDENSER, CONDUIT
 CONFIG CONFIGURE, CONFIGURATION
 CONN CONNECTION
 CONST CONSTRUCTION
 CONT CONTINUOUS, CONTINUATION
 CONTD CONTINUED
 CONTR CONTRACTOR
 CONV CONVECTOR
 COR CORNER, CORRIDOR, CORRUGATE, CORNER
 CPR COPPER
 CRT CARPET
 CR CARD READER
 CRS COURSE, COLD ROLLED STEEL
 CT CERAMIC TILE, CORK TILE
 CTC CENTER TO CENTER
 CU FT CUBIC FEET
 CU YD CUBIC YARD
 CURR CURRENT
 CW COLD WATER
 CWP CIRCULATING WATER PUMP
 CWS CONDENSATE WASTE RETURN
 CWS CONDENSATE WASTE SUPPLY
 CYL CYLINDER
 D
 DB DECIBEL
 DBL DOUBLE
 DC DIRECT CURRENT
 DEG DEGREE
 DEMO DEMOLITION
 DEPT DEPARTMENT
 DET DETAIL
 DF DRINKING FOUNTAIN
 DIA DIAMETER
 DIAG DIAGONAL
 DIFF DIFFUSER
 DIM DIMENSION
 DISP DISPENSER
 DIV DIVISION
 DMT DEMOUNTABLE
 DN DOWN
 DPR DAMPER
 DR DOOR
 DISCON DISCONNECT
 DSP DRY STANDPIPE
 DWG DRAWING, DRAWINGS
 DWR DRAWER
 E
 EA EACH
 ECC ECCENTRIC
 EJ EXPANSION JOINT
 ELAST ELASTIC
 ELEC ELECTRICAL
 ELEV ELEVATOR, ELEVATION
 ENCL ENCLOSURE
 ENGR ENGINEER, ENGINEERED, ENGINEERING
 ENTR ENTRANCE
 EOS EDGE OF SLAB
 EPDM ETHYLENE PROPYLENE DIENE MONOMER
 EQ EQUIVALENT
 EQUIP EQUIPMENT
 EST ESTIMATE
 EVAP EVAPORATOR
 EWH ELECTRIC WATER HEATER
 EX EXISTING
 EXH EXHAUST
 EXIST EXISTING
 EXP EXPANSION, EXPOSED
 EXT EXTERIOR
 F
 F FACE (OF)
 FI FIRE ALARM, FRESH AIR

FAB FABRICATE, FABRICATION
FAR FLOOR AREA RATIO
FC FOOT CANDLE
FD FIRE DEPARTMENT
FDC FIRE DEPARTMENT CONNECTION
FDN FOUNDATION
FE FIRE EXTINGUISHER
FEC FIRE EXTINGUISHER CABINET, FIRE EXTINGUISHER
FFE FIXTURES, FURNISHINGS AND EQUIPMENT
FGR FIRE GLASS REINFORCED
FH FIRE HYDRANT
FHC FIRE HOSE CABINET
FIN FINISH, FINISHED
FL FLOOR, FLOOR LINE
FLEX FLEXIBLE
FLS FLOORING
FLG FIRE LIVING
FLUOR FLUORESCENT
FM FACTORY MUTUAL, FACTORY MUTUAL COMPANY, FM GLOBAL
FP FIREPROOF, FIREPROOFING, FIRE PROTECTION
FPM FEET PER MINUTE
FR FIRE RATED, FIRE RATING
FSCW FLUSH SOLID CORE WOOD
FT FOOT
FTG FITTING
FURN FURNITURE
FURR FURRING
FUT FUTURE
FVC FIRE VALVE CABINET
FWC FABRIC WALL COVERING
FXD FIXED
FXTR FIXTURE
G G
GA GAUGE
GAL GALLON
GALV GALVANIZED
GC GENERAL CONTRACTOR
GEN GENERATOR
GFRG GLASS FIBER REINFORCED CONCRETE
GLGSS GLASS GLASS
GFRP GLASS FIBER REINFORCED PLASTER
GL GLASS, GLAZE, GLAZED, GLAZING
GND GROUND
GOVT GOVERNMENT
GPH GALLONS PER HOUR
GPM GALLONS PER MINUTE
GPS GALLONS PER SECOND
GR GRADE
GRAN GRANITE
GT GROUT
GYP GYPSUM
GYP BD GYPSUM BOARD
H H
HB HOSE BIB
HC HOLLOW CORE
HD HEAVY DUTY, HEAVY DUTY
HDWD HARDWOOD
HWR HARDWARE
HEX HEXAGONAL
HGR HANGER
HH MAGNETIC HOLD OPEN
HD HIGH INTENSITY DISCHARGE
HM HOLLOW METAL
HORIZ HORIZONTAL
HP HIGH POINT
HR HOUR
HS HEAT STRENGTHENED
HT HEIGHT
HTG HEATING
HTR HEATER
HTW HIGH TEMPERATURE WATER
HVAC HEATING, VENTILATING AND AIR CONDITIONING
HW HOT WATER, HEAVY WALL
HWC HOT WATER CIRCULATING, HEAVY WALL CONDUIT
HWH HOT WATER HEATER
HWR HOT WATER RECIRCULATING RETURN
HWS HOT WATER SUPPLY
HWY HIGHWAY
HYD HYDRAULIC
HYDRO HYDROSTATIC
I I
ID INSIDE DIAMETER
IM INTERMEDIATE
IN INCH, INCHES
INCAND INCANDESCENT
INCL INCLUDE, INCLUDING
INCR INCREASE, INCREMENT
INFIL INFILTRATION
INFO INFORMATION
INSP INSPECT, INSPECTION
INSUL INSULATION
INT INTERIOR
INTLK INTERLOCK, INTERLOCKING
IW INDIRECT WASTE
J J
J-BOX JUNCTION BOX
JAN JANITOR
JCT JUNCTION
JST JOIST
JT JOINT
K K
KG KILOGRAM
KIP KILOPOUND (1000 POUNDS)
KIT KITCHEN
KM KILOMETER
KO KNOCKOUT
KPL KICKPLATE
KVA KILOVOLT-AMPERE
KW KILOWATT
KWH KILOWATT HOUR
L L
LA LANDSCAPE ARCHITECT
LAB LABORATORY, LABOR
LAD LADDER
LAM LAMINATE, LAMINATED
LAT LATERAL
LAV LAVATORY
LB POUND (WEIGHT)
LCD LIQUID CRYSTAL DIODE
LED LIGHT EMITTING DIODE
LF LINEAR FEET, LINEAR FOOT
LL LEFT HAND
LH LIVE LOAD
LOC LOCATE, LOCATION
LT LIGHT
LT WT LIGHTWEIGHT
LTI LIGHTING
LV LOW VOLTAGE
LVLG LEVELING
LYR LOUVER
LVT LUXURY VINYL TILE
LWC LIGHT WEIGHT CONCRETE
M M
M. METER

MACH	MACHINE
MAINT	MAINTENANCE
MAN	MANUAL
MARB	MARBLE
MAS	MASONRY
MAT	MATERIAL
MATL	MATERIAL
MAX	MAXIMUM
MD	MEDIUM
MECH	MECHANICAL
MEMB	MEMBRANE
MEZZ	MEZZANINE
MFR	MANUFACTURED
MIN	MINIMUM
MISC	MISCELLANEOUS
MK	MARK
MM	MILLIMETER
MO	MASONRY OPENING
MOD	MODULE
MOT	MOTOR(IZED)
MOV	MOVABLE
MP	METAL PANEL
MT	METAL
MU	MOUNTED
MTL	METAL
MTR	MOTOR
MUL	MULLION
N	
NIC	NOT IN CONTRACT
NMT	NON-METALLIC
NO	NUMBER
NOM	NOMINAL
NR	NOISE REDUCTION
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE
O	
O.C.	ON CENTER
O.A.	OUTSIDE FACE
OF	OVER
OA	OVERALL
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OHF	OVERHEAD DOOR
OPH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
OPR	OPERABLE
ORN	ORNAMENTAL
OSD	OPEN SIGHT DRAIN
OTO	OUT TO FLOW
OVFL	OVERFLOW
OVHD	OVERHEAD
OZ	OUNCE
P	
P SL	PIPE SLEEVE
PA	PUBLIC ADDRESS
PAV	PAVEMENT, PAVING, PAVERS
PB	PULL BOX
PBD	PARTICLE BOARD
PCF	POUNDS PER CUBIC FOOT
PD	PEZALA DRAIN
PED	PEDESTAL, PEDESTRIAN
PERF	PERFORATE, PERFORATED
PERIM	PERIMETER
PKM	PARKING
PKWY	PARKWAY
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLBG	PLUMBING
PLF	POUNDS PER LINEAL FOOT
PNL	PANEL
PLP	POLISH, POLISHED
PORT	PORTABLE
PREFAB	PREFABRICATED
PREFIN	PREFINISHED
PRTN	PARTITION
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PAINT, PAINTED
PTC	POST-TENSIONED CONCRETE
PTD	PAINTED
PTD	PARTITION
PVC	POLYVINYL CHLORIDE
PVF	POLYVINYLIDENE FLUORIDE
PVT	PRIVATE
PWR	POWER
Q	
QT	QUARRY TILE
QTL	QUANTITY
QTY	QUANTITY
QUAL	QUALITY
R	
RA	RETURN AIR
RAD	RADIUS
RB	RUBBER BASE
RBT	RABBIT
RCF	REFLECTED CEILING PLANN
RD	ROOF DRAIN
REBAR	REINFORCING BAR
REC	RECEIVER
RECEP	RECEPTACLE
RECES	RECESSED
RED	REDUCER
REF	REFER (TO), REFERENCE
REFR	REFRIGERATOR
REG	REGULAR, REGULATION, REGULATING
REG	REGULATORY
REINF	REINFORCEMENT
REIN	REMOVE
REQ	REQUIRE, REQUIRED, REQUIREMENTS
RESIL	RESILIENT
RESIS	RESIST, RESISTANT, RESISTIVE
RET	RETURN, RETAINING
REV	REVERSE, REVISE, REVISION
RFG	ROOFING
RGH	ROUGH
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RPT	REPEAT (LIKE "DITTO")
RR	RAILROAD
RSF	RENTABLE SQUARE FEET
S	
SAS	SURFACED ALL FOUR SIDES
SAN	SANITARY
SC	SOLID CORE
SCHED	SCHEDULE
SCUP	SCUPPER
SCWD	SOLID CORE WOOD
SECT	SECTION
SEJ	SEWAGE EJECTOR DISCHARGE
SEL	SELECT
SERV	SERVICE
SEV	SEWAGE EJECTOR VENT
SF	SQUARE FOOT, SQUARE FEET

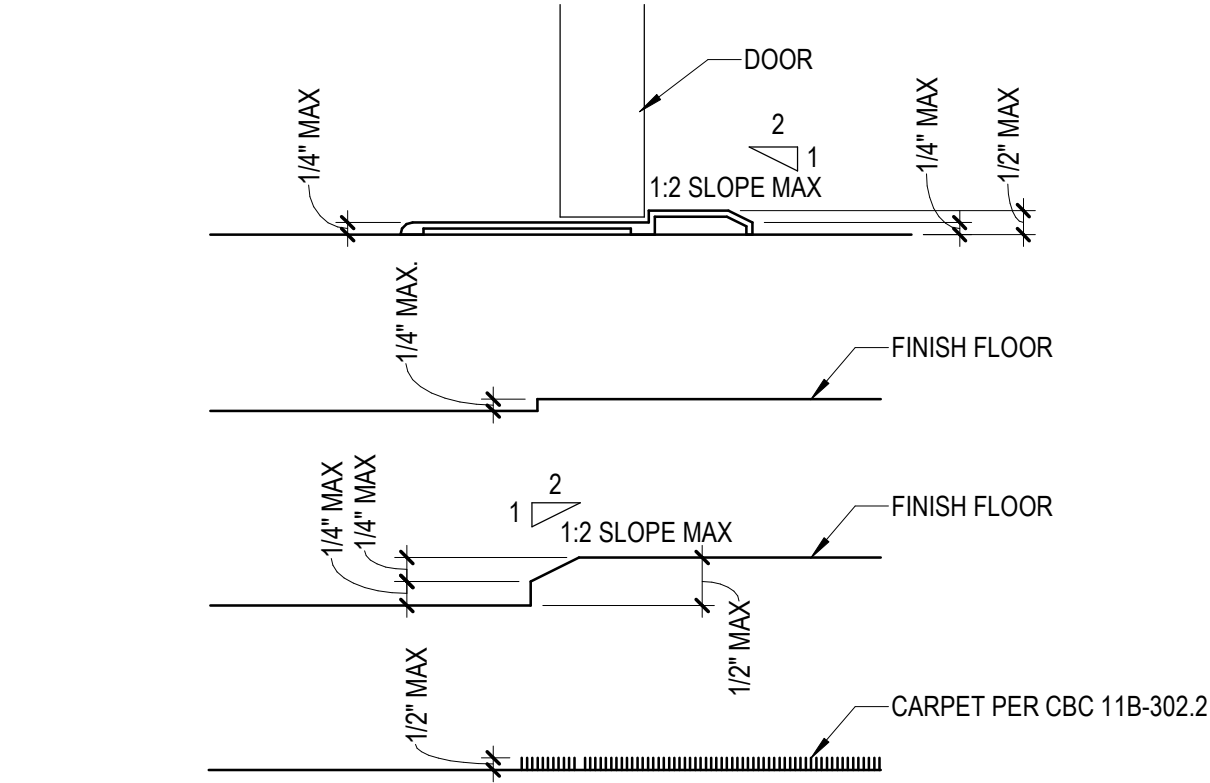
SGG	SAFETY GLASS
SGG	STRUCTURAL GLAZING GASKET
SGL	SINGLE
SGS	SILICONE GLAZING SEALANT
SHT	SHEET
SIM	SIMILAR
SP	SOIL PIPE
SPEC	SPECIFICATION, SPECIFICATIONS
SPK	SPEAKER
SPL	SPECIAL
SPLR	SPRINKLER
SQ	SQUARE
SS	SQUARE YARD
SS	SOLID SURFACE
SSD	SUB-SOIL DRAIN
SSG	SILICONE STRUCTURAL GLAZING SEALANT
ST	STAINLESS STEEL
ST	STAIN, STAINED
STD	SOUND TRANSMISSION CLASS
STD	STANDARD
STG	SEATING
STGG	STRUCTURAL GLAZING GASKET
STL	STEEL
STRUCT	STRUCTURAL
SUPP	SUPPLEMENTARY, SUPPLEMENT
SURF	SURFACE
SUSP	SUSPENDED, SUSPENDED
SYM	SYMMETRICAL
SYN	SYNTHETIC
SYS	SYSTEM
T	
T&G	TONGUE & GROOVE
T/	TOP (OF)
TICCON	TOP OF CONCRETE
TICURB	TOP OF CURB
TIPIV	TOP OF PAVEMENT
TISLAB	TOP OF SLAB
TISTL	TOP OF STEEL
TIWALL	TOP OF WALL
TAN	TANGENT
TBD	TO BE DETERMINED
TD	TRENCH DRAIN
TEL	TELEPHONE
TEMP	TEMPERED, TEMPERATURE, TEMPORARY
TER	TEMPERATURE, TEMPORARY
THR	THICK
TH	THROUGH
TL	TILE
TOL	TOLERANCE
TRANS	TRANSPARENT
TRAV	TRAVERLINE
TRD	TREAD
TRD	TREATED
TSTAT	THERMOSTAT
T	TELEVISION
Y	TYPICAL
UL	UL FORMERLY UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
USF	USABLE SQUARE FEET
US	UNITED STATES STANDARD
UTIL	UTILITY
V	
VAC	VACUUM
VAR	VARIABLE, VARIABLE
VB	VAPOR BARRIER
VBC	VINYL BASE (COVERED)
VBS	VINYL BASE (STRAIGHT)
VCT	VINYL COMPOSITION TILE
VEN	VEHICLE
VENT	VENT, VENTILATE, VENTING
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
VIT	VITREOUS
VLT	VAULT
VOL	VOLUME
VP	VENT PIPE
VR	VAPOR RETARDER
VS	VENT STACK
VWC	VINYL WALL COVERING
W	
W	WITH
WO	WITHOUT
WB	WOOD BASE
WC	WATER CLOSET
WO	WOOD
WDW	WINDOW
WF	WIDE FLANGE (STRUCTURAL STEEL)
WH	WATER HEATER
WLD	WELD
WM	WIRE MESH
WP	WATERPROOFING
WPT	WORKING POINT
WR	WATER RESISTANT, WATER REPELLANT
WT	WEIGHT
WTRPFR	WATERPROOFING
W	WOOD VENEER
WWF	WELDED WIRE FABRIC
X	
XHY	EXTRA HEAVY
XSTR	EXTRA STRONG
Y	
YD	YARD
YR	YEAR

FINISH

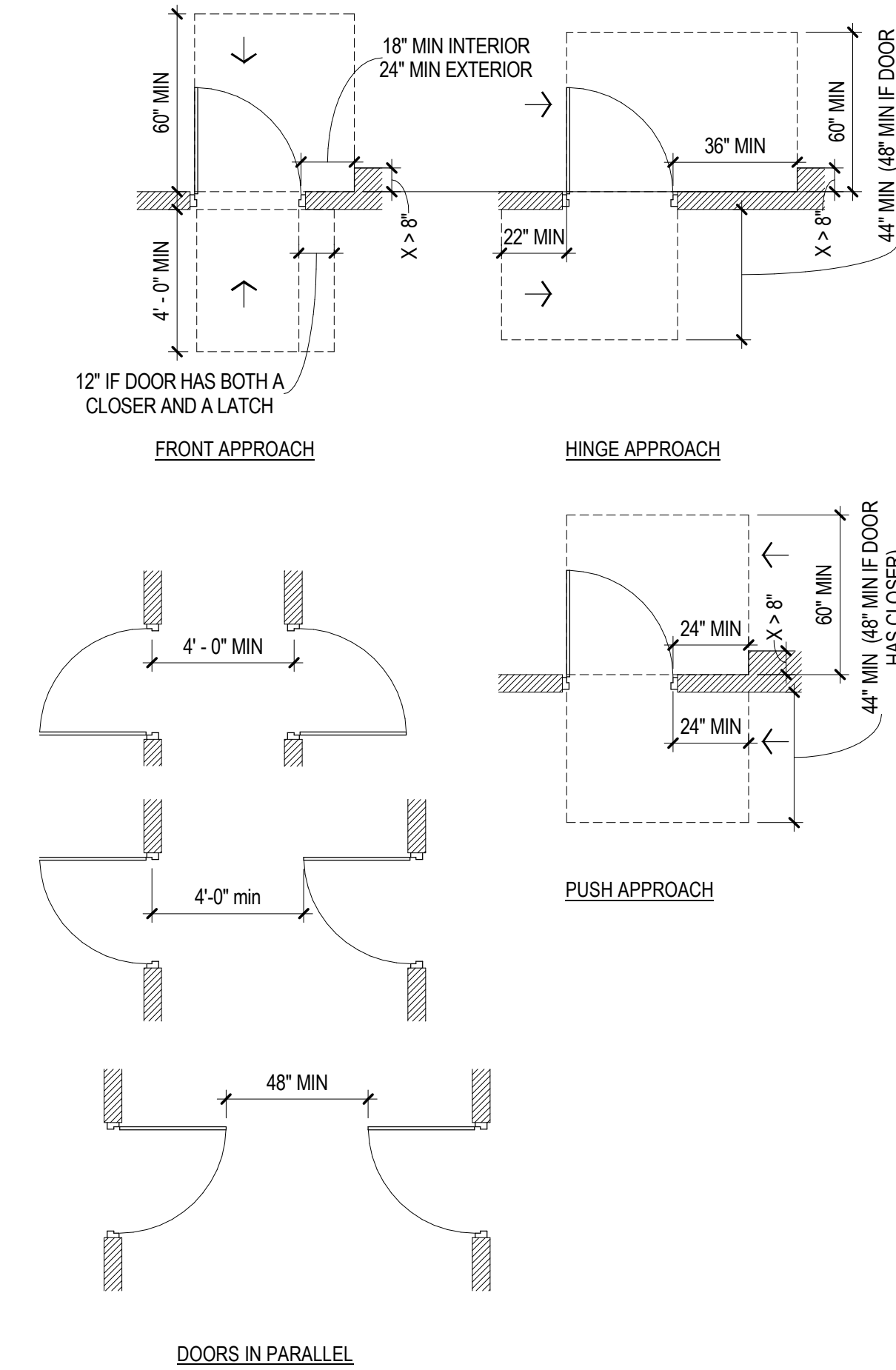


ACCESSIBILITY NOTES (CBC CH. 11B)

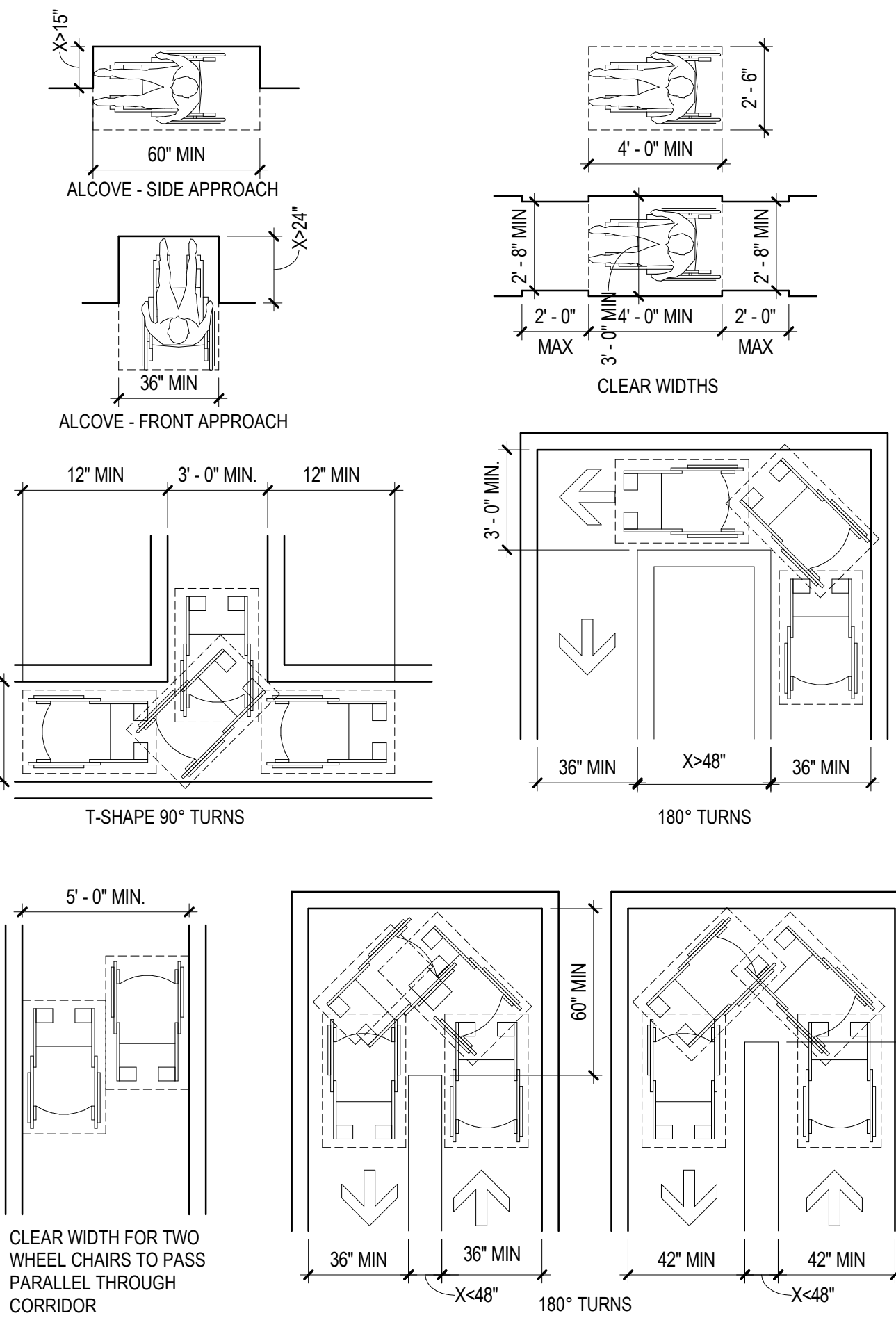
1. THE AMERICAN WITH DISABILITIES ACT (A.D.A.) PROVIDES THAT ALL ALTERATIONS TO A FACILITY MUST BE MADE IN SUCH A MANNER THAT, TO THE MAXIMUM EXTENT FEASIBLE, THE ALTERED PORTIONS OF THE FACILITY ARE READILY ACCESSIBLE TO INDIVIDUALS WITH DISABILITIES. BANK OF AMERICA AND THE GENERAL CONTRACTOR ACKNOWLEDGE THAT THE REQUIREMENTS OF A.D.A. WILL BE SUBJECT TO VARIOUS AND POSSIBLY CONTRADICTORY INTERPRETATIONS. THE ARCHITECT THEREFORE, WILL USE HIS HER BEST PROFESSIONAL EFFORTS TO INTERPRET A.D.A. REQUIREMENTS AND OTHER FEDERAL, STATE AND LOCAL LAWS, RULES, CODE ORDINANCES AND REGULATIONS AS THEY APPLY TO THE PROJECT. THE ARCHITECT, HOWEVER, CANNOT AND DOES NOT WARRANT OR GUARANTEE THAT BANK OF AMERICA WILL COMPLY WITH ALL INTERPRETATIONS OF THE A.D.A. REQUIREMENTS AND/OR THE REQUIREMENTS OF OTHER FEDERAL, STATE AND LOCAL LAWS, RULES, CODES, ORDINANCES AND REGULATIONS AS THEY APPLY TO THE PROJECT.
2. THE SCOPE OF WORK INDICATED IN THESE DRAWINGS IS FOR SPECIFIC ITEMS SELECTED BY BANK OF AMERICA FOR CUSTOMER ACCESS TO GOODS AND SERVICES. NOTE THAT SOME AREAS OF ACCESS HAVE NOT BEEN MODIFIED TO MEET A.D.A. REQUIREMENTS. ALL OTHER AREAS OF A.D.A. UPGRADE THAT MAY BE REQUIRED AT THIS TIME ARE NOT IN THIS CONTRACT AND ARE NOT INDICATED ON THESE DOCUMENTS. SEE BANK OF AMERICA FOR ADDITIONAL INFORMATION CONCERNING OTHER AREAS OF A.D.A. SCOPE OF WORK.
3. FLOOR SURFACES SHALL BE STABLE, FIRM, AND SLIP-RESISTANT.
4. IN BUILDINGS AND FACILITIES, FLOORS OF A GIVEN STORY SHALL BE A COMMON LEVEL THROUGHOUT, OR SHALL BE CONNECTED BY PEDESTRIAN RAMPS, PASSENGER ELEVATORS OR SPECIAL ACCESS LIFTS.
5. OPENINGS IN FLOOR OR GROUND SURFACES SHALL NOT ALLOW PASSAGE OF A SPHERE MORE THAN 1/2 INCH DIAMETER. ELONGATED OPENINGS SHALL BE PLACED SO THAT THE LONG DIMENSION IS PERPENDICULAR TO THE DOMINANT DIRECTION OF TRAVEL.
6. ABRUPT CHANGES IN LEVEL ALONG ANY ACCESSIBLE ROUTE SHALL NOT EXCEED 1/2 INCH IN HEIGHT. CHANGES IN LEVEL OF 1/4 INCH HIGH MAXIMUM SHALL BE PERMITTED TO BE VERTICAL AND WITHOUT EDGE TREATMENT. CHANGES IN LEVEL BETWEEN 1/4 INCH AND 1/2 INCH HIGH MAXIMUM SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 1:2.
7. CHANGES IN LEVEL GREATER THAN 1/2 INCH HIGH SHALL BE RAMPED.
8. ABRUPT CHANGES IN LEVEL EXCEEDING 4 INCHES IN A VERTICAL DIMENSION BETWEEN WALKS, SIDEWALKS OR OTHER PEDESTRIAN WAYS AND ADJACENT SURFACES OR FEATURES SHALL BE IDENTIFIED BY WARNING CURBS AT LEAST 6 INCHES IN HEIGHT ABOVE THE WALK OR SIDEWALK SURFACE. A WARNING CURB IS NOT REQUIRED WHEN A GUARD OR HANDRAIL IS PROVIDED WITH A GUIDE RAIL CENTERED 2 INCHES MINIMUM AND 4 INCHES MAXIMUM ABOVE THE SURFACE OF THE WALK OR SIDEWALK.
9. CHANGES IN LEVEL, SLOPES EXCEEDING 1:48, AND DETECTABLE WARNINGS SHALL NOT BE PERMITTED IN FLOOR OR GROUND SURFACES OF A TURNING SPACE. TURNING SPACE INCLUDES CIRCULAR SPACE AND T-SHAPED SPACE. THE SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE.
10. CLEAR FLOOR OR GROUND SPACE SHALL BE 30 INCHES MINIMUM BY 48 INCHES MINIMUM. CHANGES IN LEVEL, SLOPES EXCEEDING 1:48, AND DETECTABLE WARNINGS SHALL NOT BE PERMITTED. CLEAR FLOOR OR GROUND SPACE SHALL BE PERMITTED TO INCLUDE KNEE AND TOE CLEARANCE.
11. PROTRUSION LIMITS: OBJECTS WITH LEADING EDGES MORE THAN 27 INCHES AND NOT MORE THAN 80 INCHES ABOVE THE FINISH FLOOR OR GROUND SHALL PROTRUDE 4 INCHES MAXIMUM HORIZONTALLY INTO THE CIRCULATION PATH. HANDRAILS SHALL BE PERMITTED TO PROTRUDE 4 1/2 INCHES MAXIMUM.
12. POST-MOUNTED OBJECTS: FREE-STANDING OBJECTS MOUNTED ON POSTS OR PYLONS SHALL OVERHANG CIRCULATION PATHS 12 INCHES MAXIMUM WHEN LOCATED 27 INCHES MINIMUM AND 80 INCHES MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. WHERE A SIGN OR OTHER OBSTRUCTION IS MOUNTED BETWEEN POSTS OR PYLONS AND THE CLEAR DISTANCE BETWEEN THE POSTS OR PYLONS IS GREATER THAN 12 INCHES, THE LOWEST EDGE OF SUCH SIGN OR OBSTRUCTION SHALL BE 27 INCHES MAXIMUM OR 80 INCHES MINIMUM ABOVE THE FINISH FLOOR OR GROUND. THE SLOPING PORTIONS OF HANDRAILS SERVING STAIRS AND RAMPS SHALL NOT BE REQUIRED TO COMPLY.
13. POST-MOUNTED OBJECTS EDGES AND CORNERS: WHERE SIGNS OR OTHER OBJECTS ARE MOUNTED ON POSTS OR PYLONS, AND THEIR EDGES ARE LESS THAN 80 INCHES ABOVE THE FLOOR OR GROUND SURFACE, THE EDGE OF SUCH SIGNS AND OBJECTS SHALL BE ROUNDED OR EASED AND THE CORNERS SHALL HAVE A MINIMUM RADIUS OF 1/8 INCH.
14. VERTICAL CLEARANCE: VERTICAL CLEARANCE SHALL BE 80 INCHES HIGH MINIMUM. GUARDRAILS OR OTHER BARRIERS SHALL BE PROVIDED WHERE THE VERTICAL CLEARANCE IS LESS THAN 80 INCHES HIGH. THE LEADING EDGE OF SUCH GUARDRAIL OR BARRIER SHALL BE LOCATED 27 INCHES MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. DOOR CLOSERS AND DOOR STOPS SHALL BE PERMITTED TO BE 78 INCHES MINIMUM ABOVE THE FINISH FLOOR OR GROUND.
15. PROTRUDING OBJECTS SHALL NOT REDUCE THE CLEAR WIDTH REQUIRED FOR ACCESSIBLE ROUTES.
16. OPERABLE PARTS SHALL BE PLACED WITHIN ONE OR MORE OF THE REACH RANGES. COMPLIANT WITH CBC 11B-308. OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS MAXIMUM.
17. THE RUNNING SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:20. THE CROSS SLOPE OF WALKING SURFACES SHALL NOT BE STEEPER THAN 1:48. THE RUNNING SLOPE OF SIDEWALKS SHALL NOT EXCEED THE GENERAL GRADE ESTABLISHED FOR THE ADJACENT STREET OR HIGHWAY.
18. ALL WALKS WITH CONTINUOUS GRADIENTS SHALL HAVE RESTING AREAS, 60 INCHES IN LENGTH, AT INTERVALS OF 400 FEET MAXIMUM. THE RESTING AREA SHALL BE AT LEAST AS WIDE AS THE WALK. THE SLOPE OF THE RESTING AREA IN ALL DIRECTIONS SHALL BE 1:48 MAXIMUM.
19. MANEUVERING CLEARANCES AT DOORS SHALL COMPLY WITH CBC TABLE 11B-404.2.4.1. CHANGES IN LEVEL, SLOPES EXCEEDING 1:48, AND DETECTABLE WARNINGS SHALL NOT BE PERMITTED.
20. WHERE A PAIR OF DOORS IS UTILIZED, AT LEAST ONE OF THE DOORS SHALL PROVIDE A CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32" WITH THE LEAF POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.
21. IDENTIFY ACCESSIBLE ENTRANCES WITH INTERNATIONAL SYMBOL OF ACCESSIBILITY AND WITH ADDITIONAL DIRECTIONAL SIGNS, AS REQUIRED, VISIBLE FROM APPROACHING PEDESTRIAN WAYS.
22. THE FLOOR OR LANDING ON EACH SIDE OF AN ENTRANCE OR PASSAGE DOOR SHALL BE LEVEL AND CLEAR. THE LEVEL AND CLEAR AREA SHALL BE AT LEAST 60" LONG IN THE DIRECTION OF THE DOOR SWING AND 48" CLEAR IN THE DIRECTION OPPOSITE THE DOOR SWING MEASURED IN RIGHT ANGLES TO THE PLANE OF THE DOOR IN ITS CLOSED POSITION.



01 THRESHOLDS
SCALE: 3" = 1'-0"



02 DOOR CLEARANCES
SCALE: 1/4" = 1'-0"



04 ACCESSIBILITY PLAN CLEARANCES
SCALE: 1/4" = 1'-0"

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States
Tel 949 863 9434
Fax 949 553 1676

△ Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

ACCESSIBILITY REQUIREMENTS &
DETAILS

Scale

As indicated

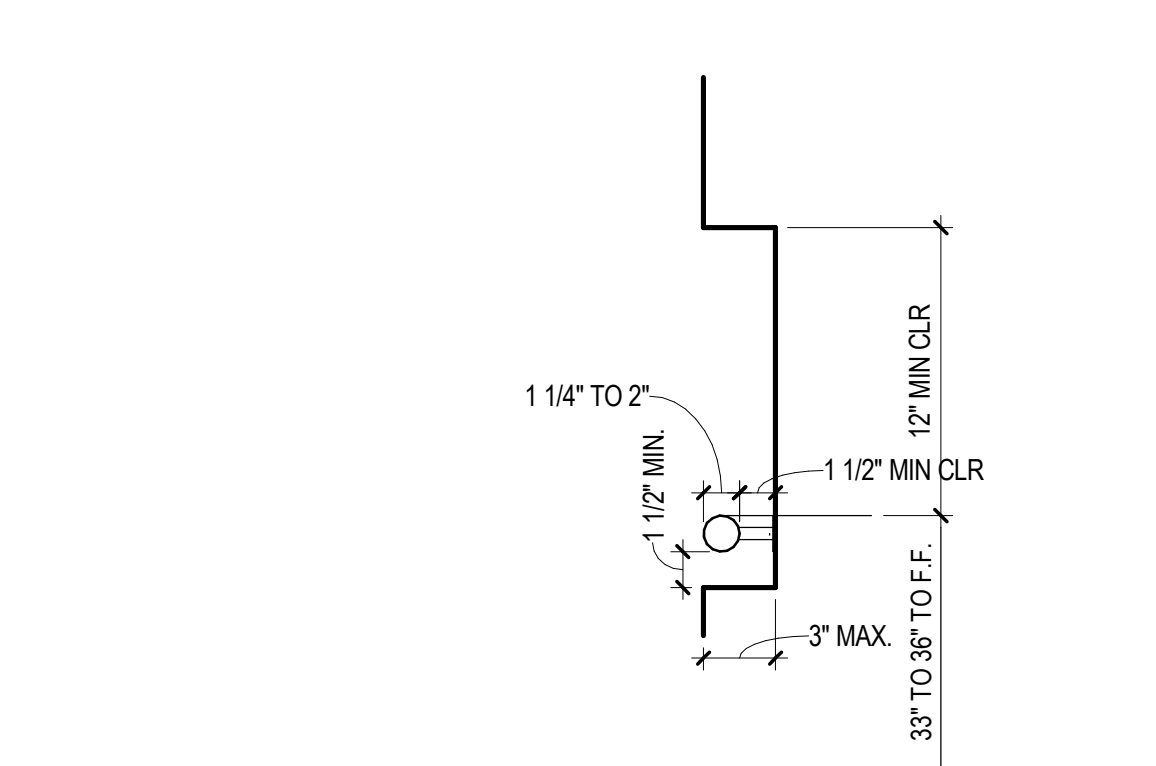
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CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

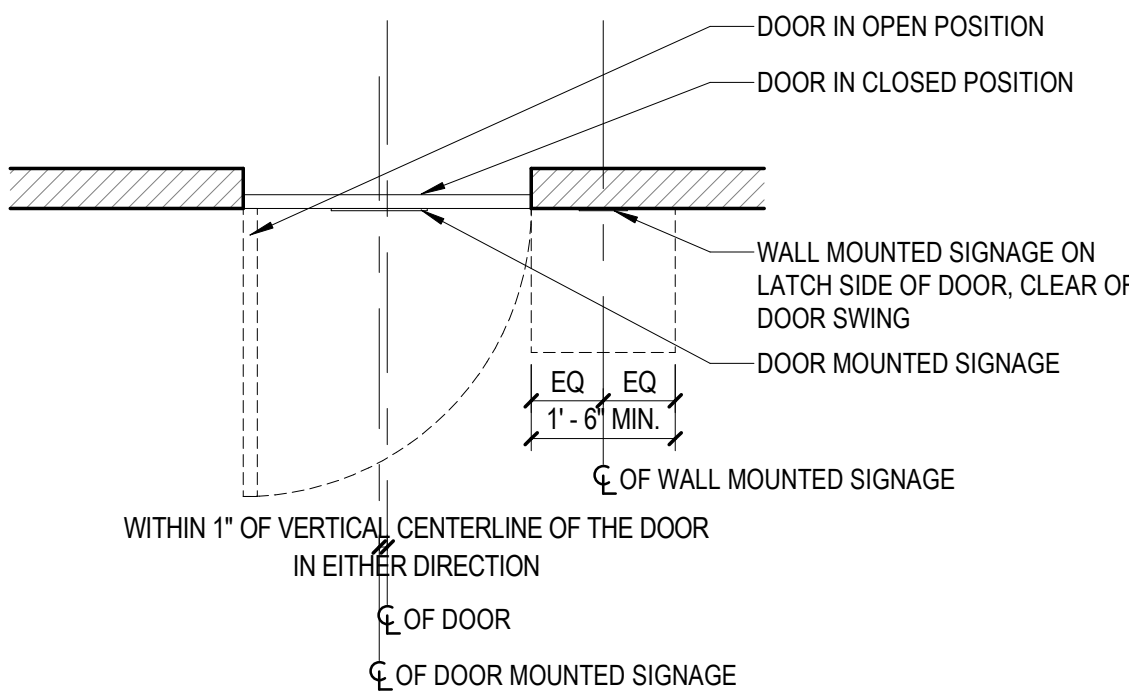
4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States
Tel 949.863.9434
Fax 949.553.1676



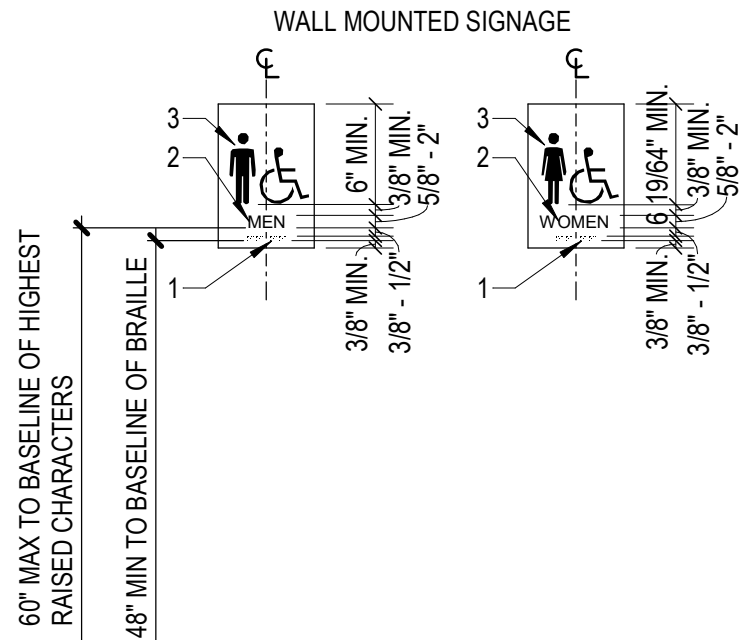
NOTE (REFER TO CBC 11B-609):
1. MOUNTING HEIGHT IS 33\"/>

13 GRAB BAR

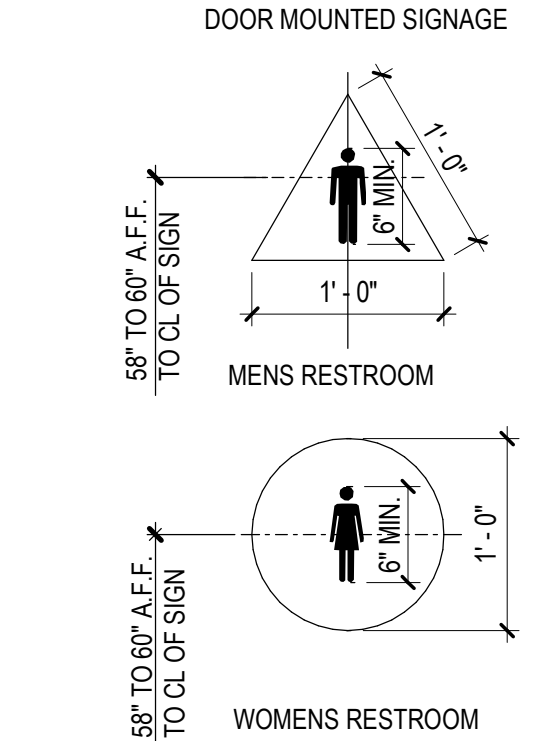
SCALE: 1 1/2\"/>



SIGNAGE (SCALE: 1/2\"/>



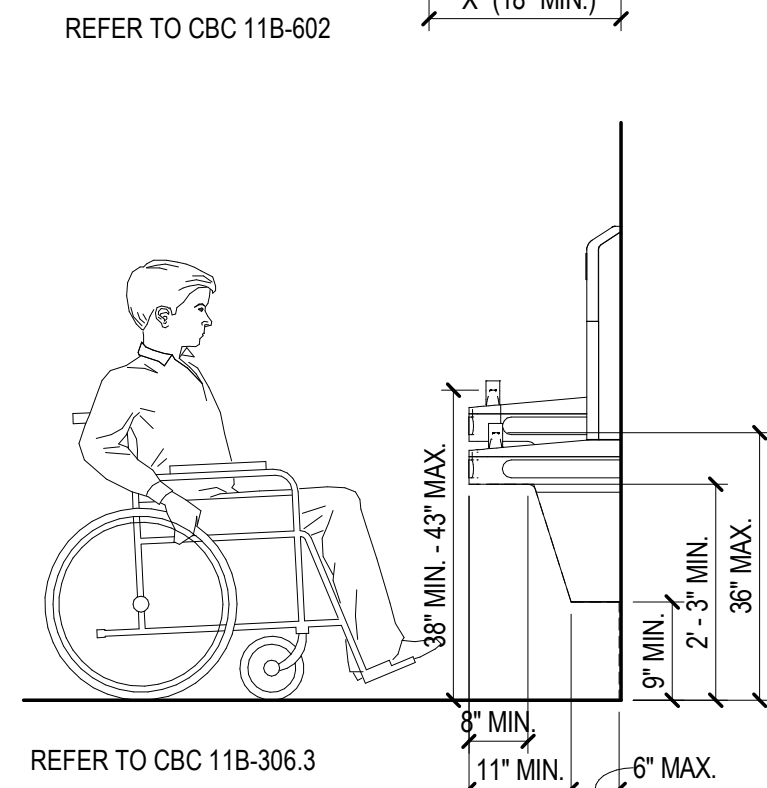
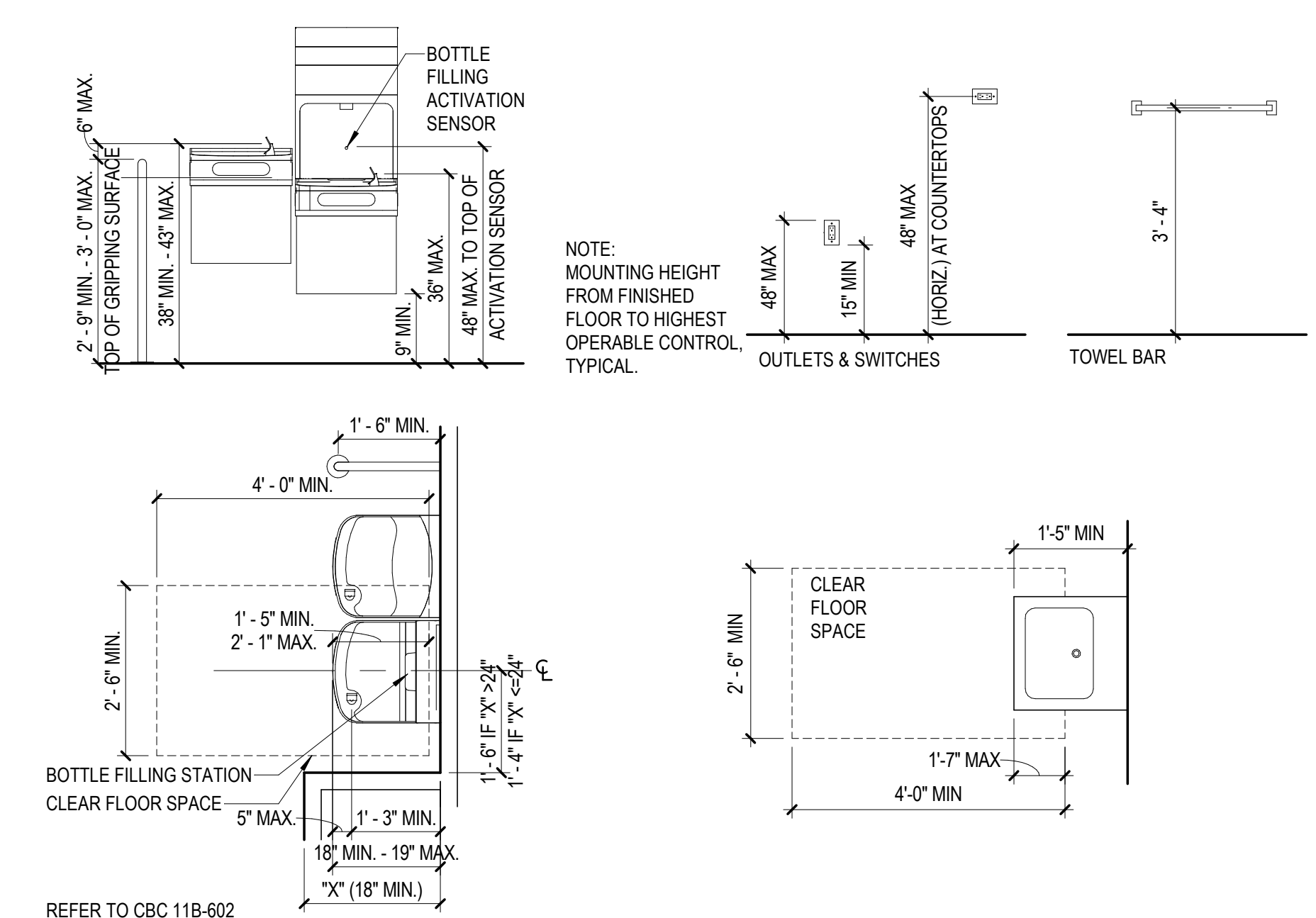
NOTE:
1. BRAILLE SHALL BE CONTRACTED (GRADE 2) TYP AND SHALL COMPLY WITH SECTION 11B-703.3 AND 11B-703.4. BRAILLE SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT IN A HORIZONTAL FORMAT. FLUSH LEFT OR CENTERED. IF TEXT IS MULTILINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8\"/>



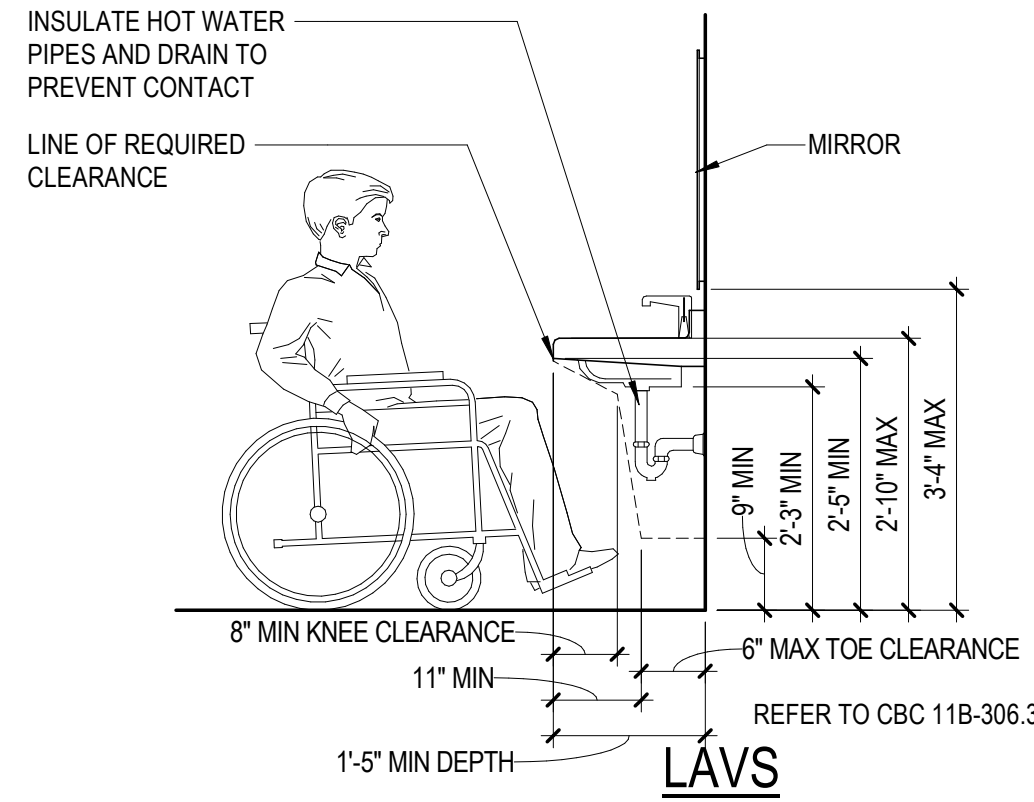
NOTE:
1. 1/4\"/>

15 RESTROOM SIGNAGE

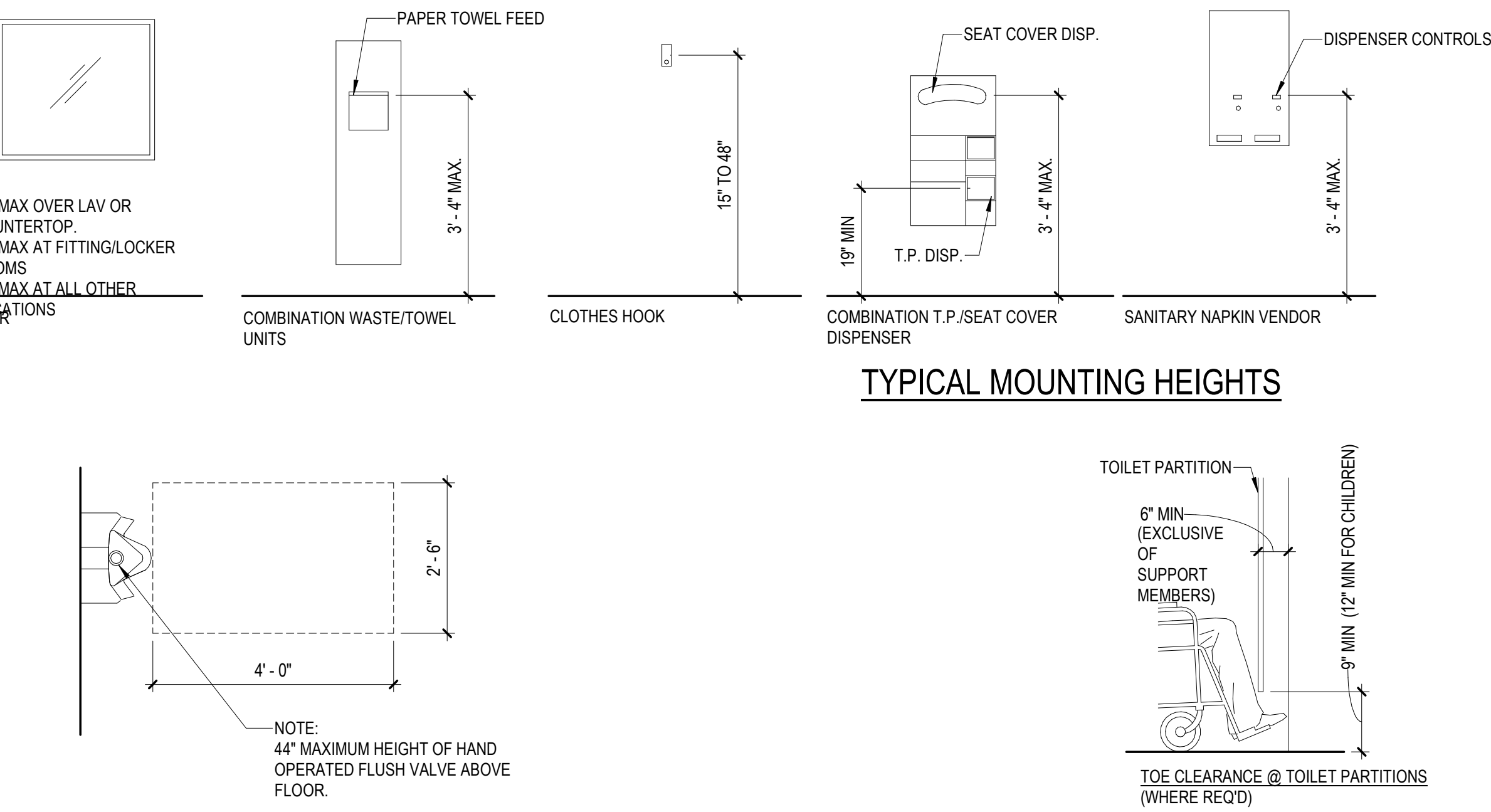
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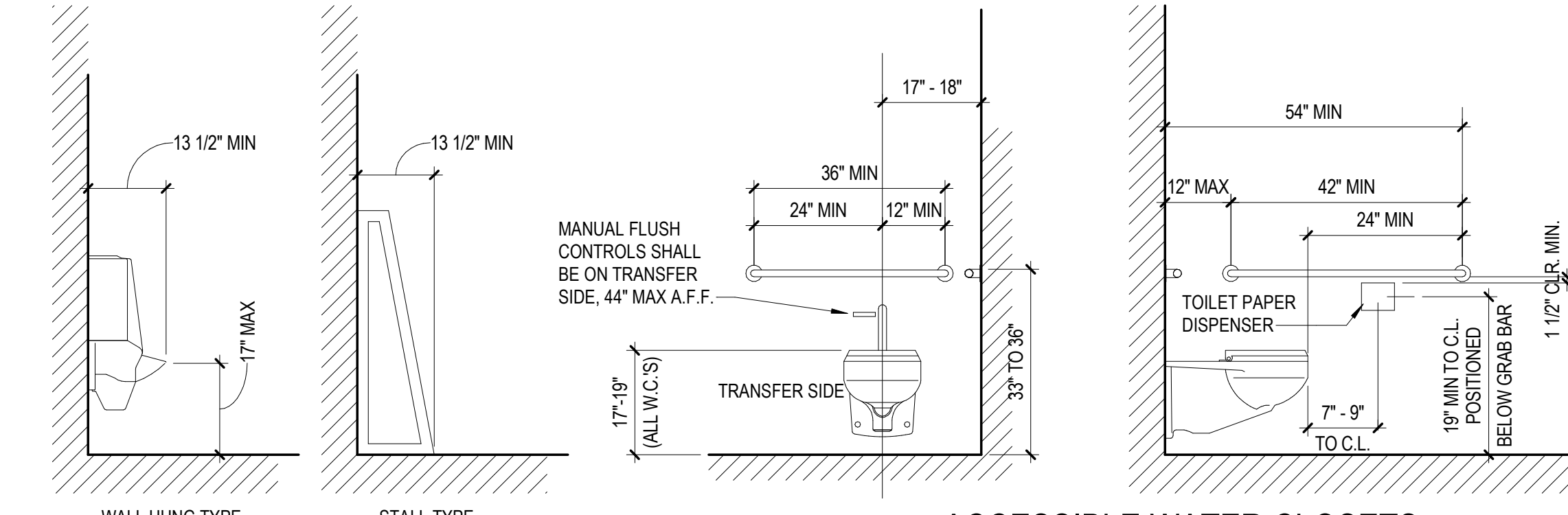
DRINKING FOUNTAIN



LAVS

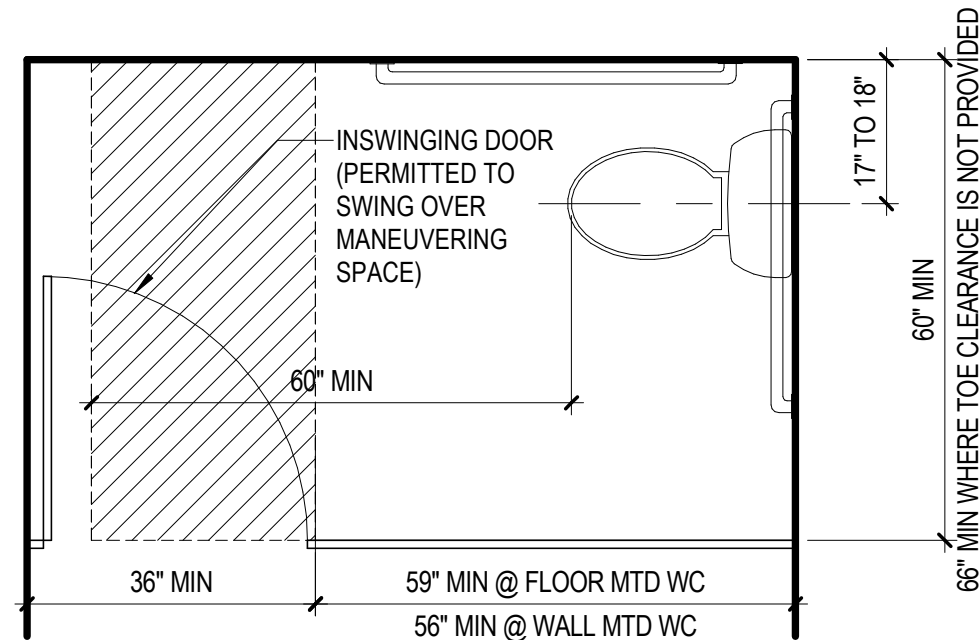


TYPICAL MOUNTING HEIGHTS



ACCESSIBLE URINALS

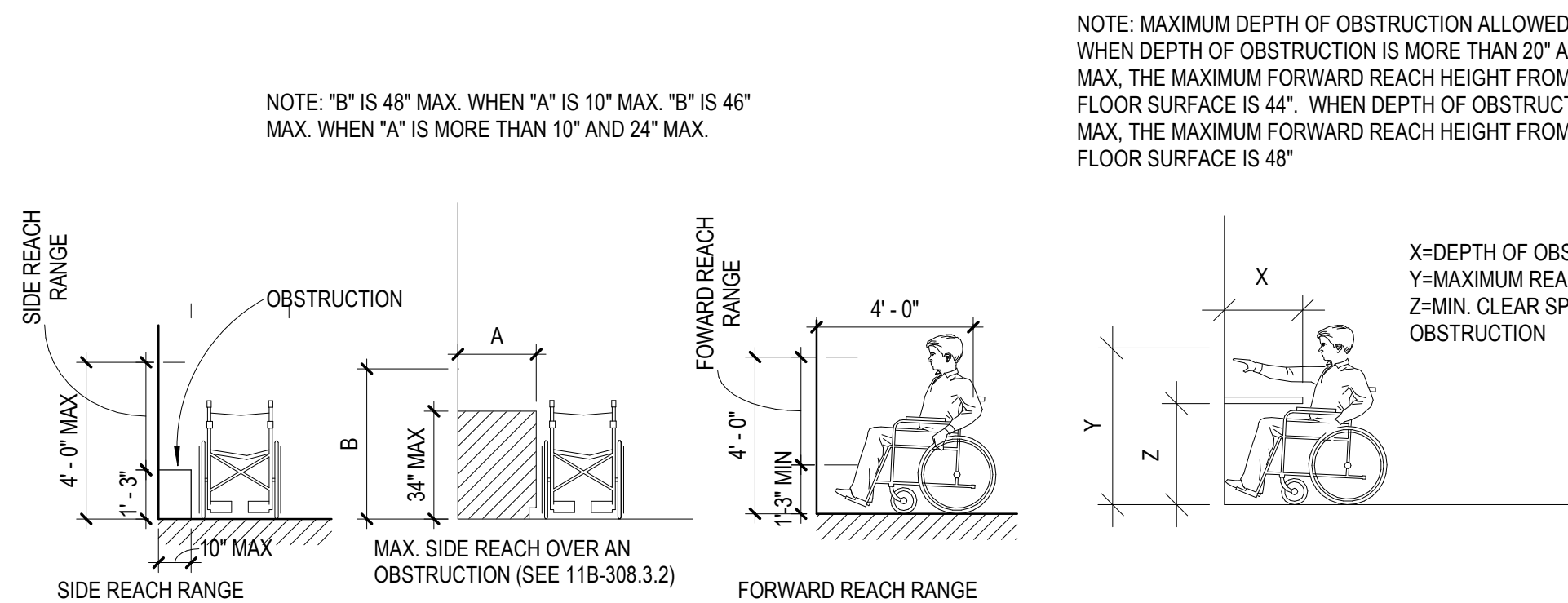
ACCESSIBLE WATER CLOSETS



SIDE-OPENING STALLS

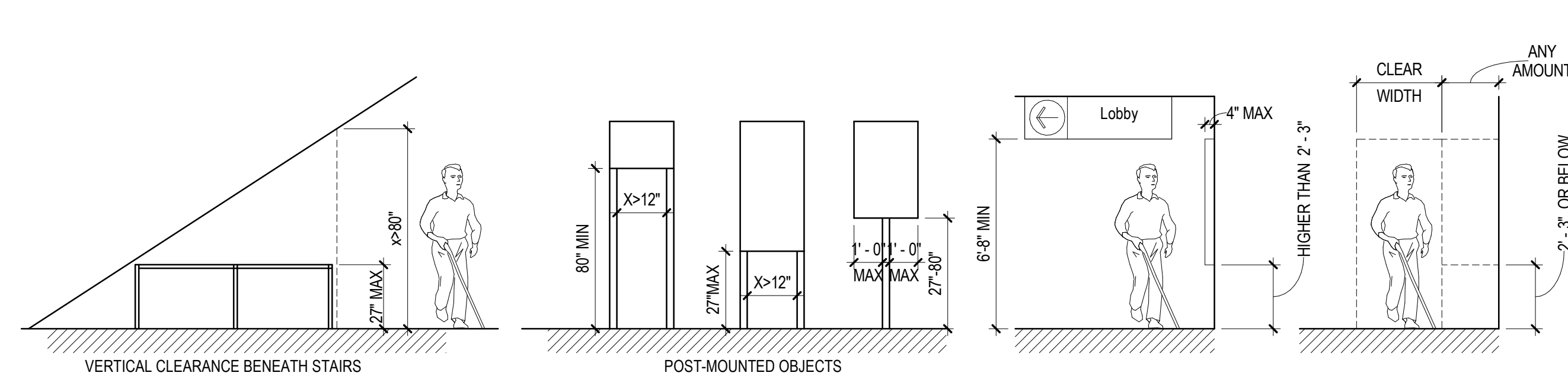
01 TYPICAL ACCESSIBILITY REQUIREMENTS FOR RESTROOMS

SCALE: 1/2\"/>



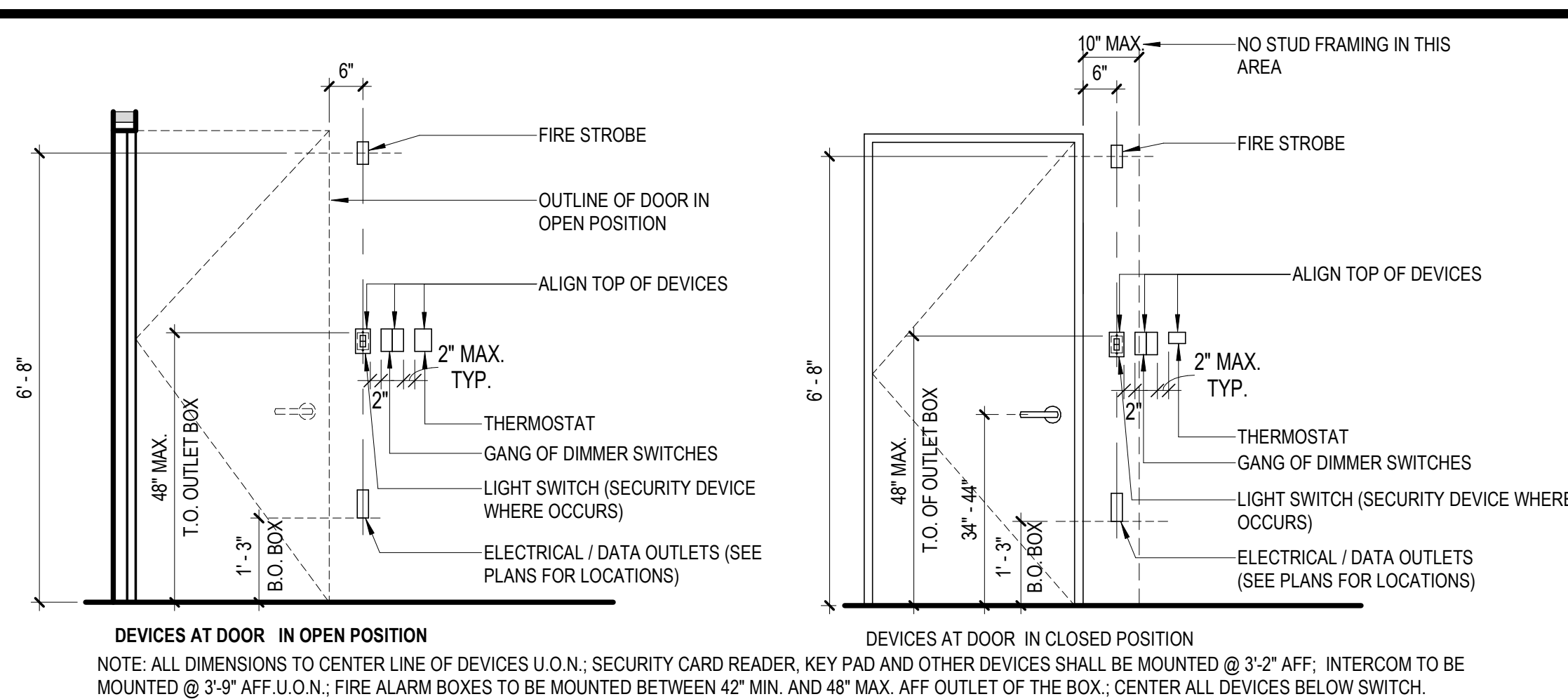
11 REACH RANGES

SCALE: 1/4\"/>



03 PROTRUDING OBJECTS

SCALE: 1/4\"/>

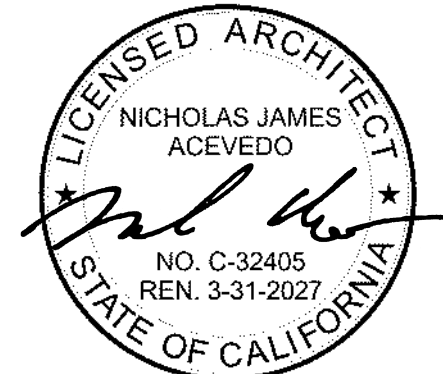


04 TYPICAL ACCESSIBLE MOUNTING DIAGRAM @ DOOR

SCALE: 1/2\"/>

Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

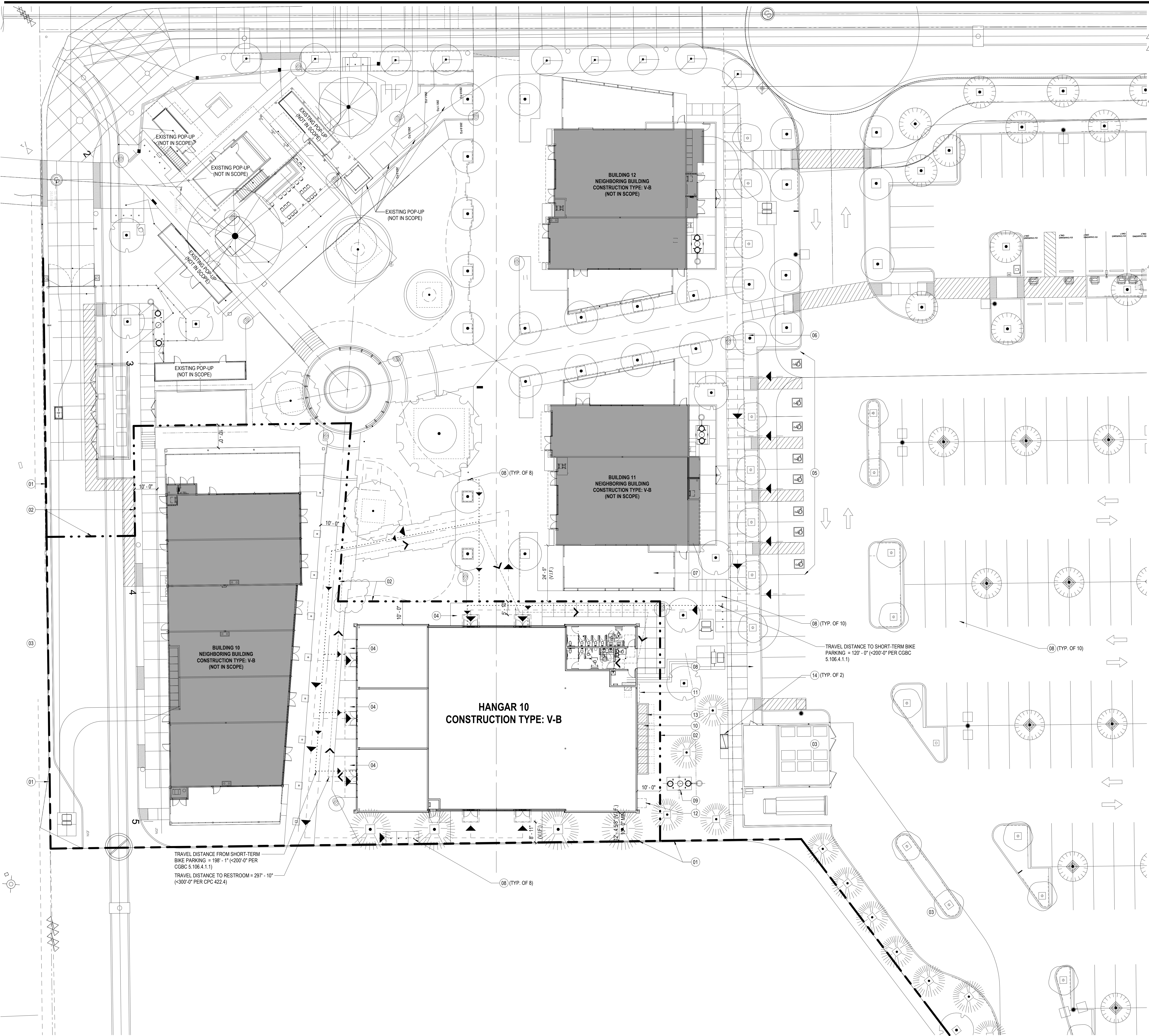
Seal / Signature



Project Name
HANGAR 10
RECONSTRUCTION
Project Number
007.3945.000
Description
ACCESSIBILITY REQUIREMENTS

Scale
As indicated

G1.021



SHEET NOTES

- 01 PROPERTY LINE. FINAL CONNECTIONS TO BE COORDINATED IN FIELD.
- 02 TRASH ENCLOSURE. BY OTHERS.
- 03 EXISTING CONCRETE PAVING. BY OTHERS.
- 04 ACCESSIBLE STALLS TO ACCESSIBLE ENTRANCES. INTERNATIONAL SYMBOL OF ACCESSIBILITY. NO PARKING LETTERING. ACCESSIBLE PARKING SIGN.
- 05 ACCESSIBLE PATH OF TRAVEL FROM ACCESSIBLE PARKING STALLS TO ACCESSIBLE ENTRANCES.
- 06 OPEN TRELLIS. BY OTHERS.
- 07 SHORT-TERM BICYCLE PARKING (BICYCLE RACKS). BY OTHERS.
- 08 GREASE INTERCEPTOR. REFER TO PLUMBING DRAWINGS.
- 09 SWITCHGEAR IN NEMA 3R ENCLOSURE (1-800AMP, 3-400AMP, 1-200AMP, TELEBOARD) ON 6" CONCRETE PAD. REFER TO STRUCTURAL AND ELECTRICAL DRAWINGS.
- 10 LOCATION FOR GAS MANIFOLD AND FUTURE GAS METER. GAS MANIFOLD AND GAS MAIN FEEDING GAS MANIFOLD ARE BY OTHERS UNDER SEPARATE PERMIT. FUTURE GAS METERS BY FUTURE TENANTS. REFER TO PLUMBING DRAWINGS.
- 11 4" X 4" X 4" ESTIMATED FIRE RISER LOCATION AT EXTERIOR OF THE BUILDING. FIRE RISER BY APPROVED FIRE UNDERGROUND PLANS UNDER SEPARATE SUBMITTAL. PROVIDE HUB DRAIN, ELECTRONIC TRAP PRIMER AND ITS COLD WATER LINE. TRAP AND CONNECT TO VENT FOR FIRE RISER. REFER TO PLUMBING DRAWINGS. LOCATE HUB DRAIN CLOSE TO FIRE RISER LOCATION AND LOCATE ELECTRONIC TRAP PRIMER WITHIN WALL.
- 12 NEMA ENCLOSURE. REFER TO ELECTRICAL DRAWINGS.
- 13 LONG-TERM STACKED BICYCLE LOCKERS. BY OTHERS.

PARKING CALCS

(APPROVED UNDER 00974484 PARK)

VEHICULAR PARKING SUMMARY:

PARKING SUMMARY:

PER CITY OF IRVINE ZONING ORDINANCE DIVISION 4, CHAPTER 4-3, SECTION 4-3-4 (AUTOMOBILE PARKING MATRIX), BELOW IS A SUMMARY OF THE REQUIRED PARKING STALLS FOR THE PROJECT.

BUILDING	SQ. FT.	PARKING RATIO	REQ. STALLS
BLDG. #10	6,920	1/222 SF	32
PATIO	1,120+720	1/150 SF	13
BLDG. #11	3,747	1/222 SF	17
PATIO	751+929	1/150 SF	12
BLDG. #12	3,799	1/222 SF	19
PATIO	907+686	1/150 SF	11
HANGAR	9,571	1/222 SF	44
EX. POP-UPS			8
TOTAL REQUIRED STALLS			155 SPACES
TOTAL STALLS PROVIDED			158 SPACES

ACCESSIBLE PARKING SUMMARY:

(08C119-208.2 & 208.2.4)

TOTAL REQUIRED: 8 SPACES (8 STANDARD & 2 VANS)

TOTAL PROVIDED: 8 SPACES

ELECTRIC VEHICLE (EV) PARKING SUMMARY:

PER CALGREEN SECTION 6.106.5.3.6 POWER ALLOCATION METHOD: REQUIRED: 20% OF 345 X 6.6 = 461 KVA PROVIDED: 24 X 6.6 KW @ 0.75 = 1,056 KVA

ACCESSIBLE EV SPACES: 2 SPACES (1 VAN & 1 STANDARD)

(08C119-228.3.2.1)

EV CHARGING SYSTEM AND ASSOCIATED ELECTRICAL WORK TO BE PERMITTED SEPARATELY.

BICYCLE PARKING SUMMARY:

PER CALGREEN SECTION 6.106.4 STANDARDS, BELOW IS A SUMMARY OF THE PROPOSED SHORT-TERM AND LONG-TERM BICYCLE PARKING PROVIDED FOR THE PROJECT.

REQUIRED SHORT-TERM (5% OF THE TOTAL VEHICULAR PARKING) 348 (PROVIDED PARKING) X 9% = 18 (SHORT-TERM BIKE PARKING)

PROVIDED SHORT-TERM 48 SPACES

REQUIRED LONG-TERM (5% OF THE TENANT-OCCUPANT PARKING) 341 (TENANT-OCCUPANT) X 9% = 19 (LONG-TERM BIKE PARKING)

PROVIDED LONG-TERM 2 SPACES

LEGEND

- ACCESSIBLE PATH OF TRAVEL
- PATH OF TRAVEL TO RESTROOMS
- PATH OF TRAVEL FROM SHORT-TERM BICYCLE PARKING TO ENTRANCE
- PROPERTY LINE
- ASSUMED PROPERTY LINE

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

Tel 949 863 9434
Fax 949 553 1676

Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET
2 05.28.2026	BID ADDENDUM 02

Seal / Signature

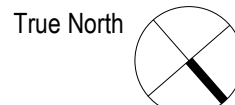


Project Name
HANGAR 10
RECONSTRUCTION

Project Number
007.3945.000

Description
SITE LIFE SAFETY PLANS

Scale
As indicated



G2.001

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States
Tel 949 863 9434
Fax 949 553 1676

OCCUPANCY & EXIT CALCULATIONS

Number	Name	Occupancy Classification	Use Classification	Area	Load Factor	Occupant Load	Exit Width Required (CBC 1005.3.2)
101	ASSUMED DINING A	A-2 (ASSEMBLY UNCONCENTRATED)	RESTAURANT	4,715 SF	15 SF	314.36	3' - 11 1/4"
101A	ASSUMED KITCHEN A	A-2 (ASSEMBLY UNCONCENTRATED)	RESTAURANT	1,805 SF	200 SF	9.03	0' - 1 1/4"
102	ASSUMED DINING B	B (BUSINESS)*	RESTAURANT	533 SF	15 SF	35.54	0' - 5 1/4"
102A	ASSUMED KITCHEN B	B (BUSINESS)	RESTAURANT	289 SF	200 SF	1.44	0' - 0 1/4"
103	ASSUMED DINING C	B (BUSINESS)*	RESTAURANT	508 SF	15 SF	33.86	0' - 5"
103A	ASSUMED KITCHEN C	B (BUSINESS)	RESTAURANT	275 SF	200 SF	1.38	0' - 0 1/4"
104	ASSUMED DINING D	B (BUSINESS)*	RESTAURANT	531 SF	15 SF	35.41	0' - 5 1/4"
104A	ASSUMED KITCHEN D	B (BUSINESS)	RESTAURANT	288 SF	200 SF	1.44	0' - 0 1/4"
105	ROOF ACCESS	A-2 ACCESSORY***	ACCESSORY USE	18 SF	0 SF	0.00	0' - 0"
106	VESTIBULE	A-2 ACCESSORY***	ACCESSORY USE	84 SF	0 SF	0.00	0' - 0"
107	JANITOR	A-2 ACCESSORY***	ACCESSORY USE	70 SF	0 SF	0.00	0' - 0"
108	WOMEN'S RESTROOM	A-2 ACCESSORY***	ACCESSORY USE	264 SF	0 SF	0.00	0' - 0"
109	MEN'S RESTROOM	A-2 ACCESSORY***	ACCESSORY USE	191 SF	0 SF	0.00	0' - 0"
				9,571 SF		432.46	5' - 4 3/4"

NOTES:
* SPACES CLASSIFIED AS B OCCUPANCY IN ACCORDANCE WITH CBC 303.1.1: A BUILDING OR TENANT SPACE USED FOR ASSEMBLY PURPOSES WITH AN OCCUPANT LOAD OF LESS THAN 50 PERSONS SHALL BE CLASSIFIED AS A GROUP B OCCUPANCY.
** ACCESSORY SPACE TO A-2 OCCUPANCY IN ACCORDANCE WITH CBC 311.1.1: A ROOM OR SPACE USED FOR STORAGE PURPOSES THAT IS ACCESSORY TO ANOTHER OCCUPANCY SHALL BE CLASSIFIED AS PART OF THAT OCCUPANCY.
*** UNCONDITIONED SPACE.

NUMBER OF EXITS @ #101 SUITE A / FUTURE TENANT				TOTAL EXITS REQUIRED:	2
				TOTAL EXITS PROVIDED:	4

EXIT DOOR WIDTH					
REQUIRED:	324	OCCUPANTS	X	0.2"	= 64.80"
PROVIDED:	4	DOORS	X	68.00" EACH	= 272.00"

NUMBER OF EXITS @ #102 SUITE B / FUTURE TENANT				TOTAL EXITS REQUIRED:	1
				TOTAL EXITS PROVIDED:	1

EXIT DOOR WIDTH					
REQUIRED:	37	OCCUPANTS	X	0.2"	= 7.40"
PROVIDED:	1	DOORS	X	68.00" EACH	= 68.00"

NUMBER OF EXITS @ #103 SUITE C / FUTURE TENANT				TOTAL EXITS REQUIRED:	1
				TOTAL EXITS PROVIDED:	1

EXIT DOOR WIDTH					
REQUIRED:	36	OCCUPANTS	X	0.2"	= 7.20"
PROVIDED:	1	DOORS	X	68.00" EACH	= 68.00"

NUMBER OF EXITS @ #104 SUITE D / FUTURE TENANT				TOTAL EXITS REQUIRED:	1
				TOTAL EXITS PROVIDED:	1

EXIT DOOR WIDTH					
REQUIRED:	37	OCCUPANTS	X	0.2"	= 7.40"
PROVIDED:	1	DOORS	X	68.00" EACH	= 68.00"

PLUMBING CALCULATIONS

LOCATION PER OCCUPANCY	AREA (SF)	LOAD FACTOR TABLE 1004.5	OCCUPANT LOAD		WATER CLOSET		LAVATORIES		DRINKING FOUNTAIN	SERVICE SINK
			MALE	FEMALE	MALE	FEMALE	URINALS	MALE		
PROPOSED LEVEL 01										
RESTAURANT DINING	6,288	30								
RESTAURANT KITCHEN	2,657	50	132	132	2.00	4.00	1.00	1.00	1.00	1.00
TOTAL AREAS AND REQUIRED FIXTURES	8,945				2.00	4.00	1.00	1.00	1.00	1.00
TOTAL PROVIDED					2	5	2	2	2 *	1

NOTE:
* PLUS BOTTLE FILLER

NOTE:
THE PROPOSED PUBLIC RESTROOM PLUMBING FIXTURE QUANTITIES ARE BASED ON FUTURE ASSUMED WORST CASE OCCUPANT LOADING FOR HANGAR 10 ONLY. EACH INDEPENDENT TI PERMIT SUBMITTAL WILL BE REQUIRED TO DEMONSTRATE THAT THE MINIMUM NUMBER OF PLUMBING FIXTURES HAVE BEEN PROVIDED BASED ON THE ACTUAL USE AND OCCUPANT LOADING. IF AT ANY POINT, THE PUBLIC RESTROOM FIXTURE COUNTS BECOME INSUFFICIENT TO SERVE A SPECIFIC SUITE, IT IS THE RESPONSIBILITY OF THE TENANT OR BUILDING OWNER TO PROVIDE SUPPLEMENTAL RESTROOM FACILITIES TO MEET THE DEMAND IN ACCORDANCE WITH CPC 422.

SHEET NOTES

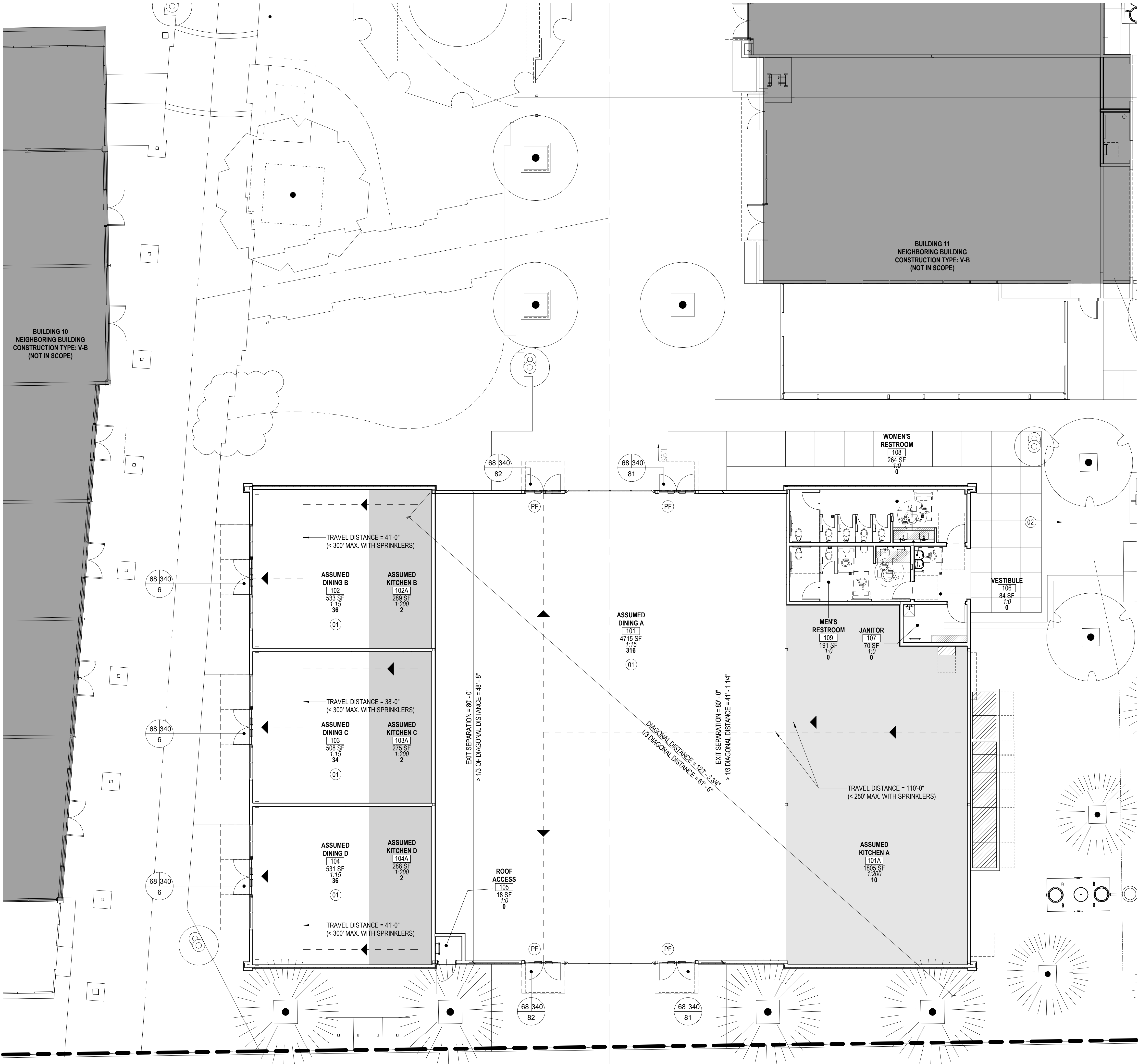
- 01 TACTILE EXIT SIGN, ILLUMINATED EXIT SIGNAGE, MAXIMUM OCCUPANT SIGNAGE, AND FIRE EXTINGUISHER ARE DEFERRED TO TI SCOPE.
02 GREASE INTERCEPTOR. REFER TO PLUMBING DRAWINGS.

LEGEND

- COMMON PATH OF EGRESS TRAVEL WITH SPRINKLER:
A-2: 75' MAX.
B: 100' MAX.
TRAVEL DISTANCE WITH SPRINKLER:
A-2: 250' MAX.
B: 300' MAX.
- PF PANIC & FIRE EXIT HARDWARE
- CLEAR EXIT WIDTH AT DOOR
- MAXIMUM EGRESS CAPACITY AT DOOR [1005.1]
- ACTUAL EGRESS COUNT AT THIS DOOR

OCCUPANCY SYMBOLOGY

- AREA
201 SF
1/100
2
- FUNCTION
AREA
OCCUPANT LOAD FACTOR
OCCUPANT LOAD
- INDICATES AREA NOT IN CONTRACT
- INDICATES BUILT-IN MILLWORK



△ Date	Description
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name
HANGAR 10
RECONSTRUCTION
Project Number
007.3945.000
Description
ENLARGED LIFE SAFETY / EGRESS
PLAN

Scale
1/8" = 1'-0"
True North



COMMUNITY DEVELOPMENT
Building and Safety

STANDARD NOTES NON-RESIDENTIAL CONSTRUCTION
2022 CALIFORNIA GREEN BUILDING STANDARDS (4.1)

[Effective July 1, 2024]

Applies to **Newly Constructed Non-residential Buildings and associated site development, initial tenant improvements regardless of valuation, and any subsequent addition of 1,000 square feet or more, or tenant improvement having a valuation of \$200,000 and associated site development.** The following standard notes shall be completed and incorporated into the approved plans and all effected design features and specifications shall be made to conform.

INSTRUCTIONS: Designer to place an "X" preceding each applicable section and complete the notes or indicate "N/A" if not applicable. Building plan check shall be responsible for verification except for those items preceded by a (P) which will be verified by Planning. All provisions generally apply to new construction and additions of 1,000 square feet or more, or tenant improvements having a valuation of \$200,000. An (N), however, indicates a provision applies only to new construction, an (E) indicates a provision that applies to new construction and provides additional qualifiers for when the provision applies to an addition or tenant improvement.

STANDARDS

BICYCLE PARKING CALIFORNIA GREEN BUILDING STANDARDS CODE (CGBSC) Section 5.106.4

(E) Short term bicycle parking applies to new or existing facilities if the project is expected to generate visitor traffic and adds 10 or more vehicular parking spaces.

Check the appropriate box and provide complete input for each selection as applicable:

X [P] Short-term bicycle parking (bicycle racks) are provided to accommodate anticipated visitor traffic. The total number provided is: SEE NOTE. These racks are located within 200 feet of the visitor's entrance as depicted on plan sheet: G2.001. SEE NOTES ON SHEET G2.001.

(E) Long term bicycle parking applies to new shell buildings, and to existing facilities if the project adds 10 or more vehicular parking spaces.

X This project will accommodate over 10 tenant-occupants, therefore long term bicycle parking is provided. The total number (minimum one) provided equal to 5% of vehicular parking spaces: 2. The method(s) selected to satisfy this requirement is (are):

Covered, lockable enclosures with permanently anchored racks for bicycles, the total number provided is: , see plan sheet: .

Lockable bicycle rooms with permanently anchored racks, the total number provided is: , see plan sheet: .

X Lockable, permanently anchored bicycle lockers, the total number provided is: SEE NOTE, see plan sheet: G2.001. SEE NOTES ON SHEET G2.001.

ELECTRIC VEHICLE (EV) CHARGING (CGBSC 5.106.5.3)

(E) The following applies to this project:

X New construction where the total number of parking spaces is 10 or more.

N/A Addition or alteration to existing parking facility being modified by one of the following:

Increase in power supply to an electric service panel as part of a parking facility addition or alteration.

New Photovoltaic system is installed covering existing parking spaces.

Scope of work is triggered per CGBSC section 301.3 and includes increase in power supply to an electric service panel.

EV Charging Space Calculation (CGBSC 5.106.5.3.3)

X Total parking spaces for the project or total parking spaces added/alterd is SEE NOTE, therefore pursuant to Table 5.106.5.3.1 a total of SEE NOTE EV charging space(s) and a total of SEE NOTE EV Capable space(s) are provided. See plan sheet: G2.001. THE CALCULATION IS UNDER SEPARATE PERMIT. REFER TO G0.000 FOR SEPARATE SITE SUBMITTALS.

N/A Project has parking spaces accessible by automated car parking system. This provision is not applicable.

N/A Project is an existing remote parking facility that do not have access to the building service panel. This provision is not applicable.

N/A Project is for an existing parking area lighting upgrades with no trenching. This provision is not applicable.

1. EV Capable Spaces:

- A parking stall width of 108 inches and a length as required by the City of Irvine Zoning Code.
- A listed raceway not less than 1 inch diameter to accommodate a future dedicated 208/240-volt branch circuit originating at the main service or subpanel, and terminating in a listed cabinet, box, or other enclosure in close proximity to the proposed EV capable space. A common raceway may be used to serve multiple EV capable spaces.
- Service panel or subpanel sized to accommodate original design load plus an added dedicated 40 amp minimum branch circuit for each EV capable space with delivery of 30 amp minimum to an installed EV supply equipment (EVSE).
- The electrical system and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each EV capable space.
- The service panel or subpanel circuit directory shall identify the reserved overcurrent protective device space(s) as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE".

2. Electric Vehicle Charging Stations (EVCS):

- EVCS can be any combination of Level 2 and Direct Current Fast Charging (DCFC), except that at least one Level 2 charger shall be provided.
- One EV charger with multiple connectors capable of charging multiple EVs simultaneously shall be permitted if the electrical load capacity required for each EV capable space is accumulatively supplied to the EV charger.
- The installation of each DCFC EVSE shall be permitted to reduce the minimum number of required EV capable spaces without EVSE by five and reduced proportionally the required electrical load capacity to its service panel or subpanel.
- When EV chargers are installed, accessible EVCS shall be provided.
- Accessible EVCS shall be located either on an accessible route or adjacent to an accessible parking space to allow use of the EV charger from the accessible parking.
- EV space serving an accessible EVCS shall be 18 feet minimum length.
- EV space serving an accessible EVCS shall be 9 feet wide for standard accessible and 12 ft. wide for van accessible. A 5-foot aisle shall be provided on the side of the vehicle space.
- Surface slope for EV space and the aisle shall not exceed 1/48 in any direction.
- Refer to California Building Code Chapter 11B for applicable requirements to EV space serving accessible EVCS.

Electric Vehicle (EV) Charging: Medium-Duty and Heavy-Duty (CGBSC 5.106.5.4)

(N) The following is applicable to construction of new warehouses, grocery stores, office buildings, manufacturing facilities, and retail stores with planned off-street loading spaces:

N/A EV supply and distribution equipment, spare raceway(s) or busway(s) and adequate capacity for transformer(s), service panel(s) or subpanel (s) for medium and heavy duty is provided. See plan sheet.

LIGHT POLLUTION REDUCTION (N)(CGBSC Section 5.106.8)

X [P] Outdoor lighting designed to comply with the City of Irvine Security Code, Section 3-16-1 of the City of Irvine Zoning Code, which requires all direct rays to be confined to the site and that adjacent properties are protected from glare, and allowable BUG rating limitations of CGBSC Table 5.106.8 are depicted on plan sheet: SEE NOTE, along with photometrics. THIS REQUIREMENT IS COVERED UNDER A SEPARATE PERMIT # 00974484-PARK, SHEET E

Refer to CGBSC Section 5.106.8.1 and 5.106.8.2 for facing requirements and more stringent backlight and glare ratings for luminaires located in proximity to property lines.

WATER EFFICIENCY AND CONSERVATION (CGBSC Section 5.303)

Separate Submeters or metering devices

Applicable to new buildings exceeding 50,000 square feet and (E) additions of 50,000 square feet or more made to existing buildings, and to any tenant of a new building or addition, regardless of size, which is projected to consume more than 1,000 gallons/day CGBSC Sections 5.303.1.1 and 5.303.1.2.

N/A A separate meter or metering device is provided for the following spaces: . See plan sheet: for details and specifications defining metering design.

N/A This project consists of a single tenant building with a dedicated meter.

X Separate meters or metering devices are not required as the new building or addition is less than 50,000 square feet, and no tenant usage is projected to exceed 1,000 gallons/day.

N/A Separate meters or metering devices are not required as no tenant usage is projected to consume more than 100 gallons/day.

NOTES: (1) Tenants of new multi-tenant buildings or additions exceeding 50,000 square feet and that are not provided with a separate metering device must be shown to use less than 100 gallons/day via worksheet W5-1 found in chapter 8 of the CGBSC and any necessary addendum worksheet to reflect process water or other uses not represented on the worksheet. (2) For new buildings or additions having a total floor area less than 50,000 square feet, all its spaces not having a separate metering device must be shown to have a projected consumption of less than 1,000 gallons/day via worksheet W5-1 found in chapter 8 of the CGBSC and any necessary addendum worksheet to reflect process water or other uses not represented on the worksheet.

INDOOR WATER USE (CGBSC 5.303.3)

(E) Applicable to any newly installed plumbing fixture within new construction, the area of remodel or addition.

X All new plumbing fixtures meet the requirements of CGBSC Section 5.303.3, see modified table below for flow rates.

TABLE FIXTURE FLOW RATES

FIXTURE TYPES	MAXIMUM FLOW RATE
SHOWERHEADS	1.8 gpm @ 80 psi
LAVATORY FAUCETS	0.5 gpm @ 60 psi
KITCHEN FAUCETS	1.8 gpm @ 60 psi*
WASH FOUNTAIN	1.8/(rim space (in.)/20 gpm @ 60 psi)
METERING FAUCET	0.2 gallons/cycle
METERING FAUCET FOR WASH FOUNTAINS	0.2/(rim space (in.)/20 gpm @ 60 psi)
WATER CLOSETS	1.28 gallons/flush*
FLOOR-MOUNTED URINAL	0.5 gallons/flush
WALL-MOUNTED URINAL	0.125 gallons/flush

*Includes single and dual flush water closets with an effective flush rate of 1.28 gallons or less: Dual flush toilets—The effective flush volume shall not exceed 1.28 gallons (4.8 liters). The effective flush volume is defined as the composite, average flush volume of two reduced flushes and one full flush.

When a pre-rinse spray valve is installed, it shall meet requirements in the California Code of Regulations, Title 20, Section 1605.1(h)(4) Table H-2, Section 1605.3(h)(4)(A), and Section 1607(d)(7), and shall be equipped with an integral automatic shutoff.

NOTE: The combined flow of multiple showerheads serving a single shower shall not exceed maximum allowable flow rate for a single fixture shower or the control valves shall be arranged to only allow one shower head to operate at a time.

OUTDOOR WATER USE- MWEL0 (CGBSC Section 5.304)

X This project is subject to MWEL0 requirements. See plan sheet: SEE NOTE for completed City of Irvine Model Water Efficiency Landscape Ordinance work sheet, Form 40-81. THIS REQUIREMENT IS COVERED UNDER A SEPARATE PERMIT # 00974484-PARK, SHEET

WATER RESISTANCE AND MOISTURE MANAGEMENT (CGBSC Section 5.407)

(E) Applicable to any new entry or opening which is part of an addition of 1,000 or more square feet or any tenant improvement having a valuation of \$200,000 or more.

ENTRIES

To prevent water intrusion into exterior entries and/or openings subject to foot traffic or wind-driven rain, the following features have been incorporated into the design for **primary exterior entries:**

X Door is protected by an awning or roof overhang 4 feet or more in depth, or is recessed 4 feet or more, see plan sheet: A1.102.

X Flashings integrated with a drainage plane, see plan sheet: A6.001.

X Non-absorbent floor and wall finishes within at least 2 feet around and perpendicular to such openings, see plan sheet: G2.001.

MATERIAL CONSERVATION AND RESOURCE EFFICIENCY - CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING (CGBSC Section 5.408)

Recycling of materials for new construction, additions, and remodels shall conform to the Construction and Demolition Materials Recycling Requirements of the City of Irvine Municipal Code, Sections 6-7-901 through 6-7-912.

LIFE CYCLE ASSESSMENT (CGBSC Section 5.409)

(E) Applicable to newly constructed building with floor area of 100,000 square feet or greater or additions/alterations of existing buildings where the combined added or added floor area is 100,000 square feet or greater. Shall comply with one of the following:

N/A Building reuse analysis for existing buildings (CGBSC 5.105.2). See sheet for compliance summary.

N/A Whole Building life cycle assessment (CGB 5409.2). See sheet for summary of the Global Warming Potential (GWP) analysis.

N/A Prescriptive path - Product GWP compliance (CGBSC 5.409.3). See sheet for compliance summary.

BUILDING MAINTENANCE AND OPERATION (CGBSC Section 5.410)

RECYCLING BY OCCUPANTS

(E) Applicable to an addition that adds 1,000 square feet or more or has a valuation of \$200,000, that **also increases** total floor area by at least 30% of existing floor area.

X [P] Designated recycling areas shall be provided as required by City of Irvine Zoning Ordinance (ZO) Sections 3-23-1 through 3-23-4 of the . See plan sheet: G2.001.

N/A **(N) COMMISSIONING** Building Commissioning is **only** required for new buildings or initial tenant improvements greater than 10,000 square feet. (Exceptions: Unconditioned warehouses of any size, conditioned areas less than 10,000 square feet and accessory to unconditioned warehouses, open parking garages, open parking garage areas associated with a larger structure.)

DESIGN

- Completed and signed Owner's Project Requirements (OPR) including all items as specified in CGBSC section 5.410.2.1, see sheet: .

FORM 66-113 REV 07/24
PAGE 3 of 6

FORM 66-113 REV 07/24
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- Completed and signed Basis of Design (BOD) including all items as specified in CGBSC section 5.410.2.2, see sheet: .
- Completed and signed Commissioning Plan, as specified in CGBSC section 5.410.2.3, see sheet: .

CONSTRUCTION - PRIOR TO FINAL INSPECTION APPROVAL

A completed Commissioning Report shall be provided to the City Inspector prior to final inspection approval. Contents, pursuant to CGBSC Section 5.410.2.6, shall include a description of the commissioning process activities undertaken through the design, construction, and reporting recommendations for post construction phases. In addition, all required functional performance testing reports shall be included.

A completed Systems Manual shall be made available for review by the City Inspector prior to final inspection approval. Contents shall include a completed and signed "Systems Manual" as specified in CGBSC section 5.410.2.5.1.

X **TESTING AND ADJUSTING** For buildings not exceeding 10,000 square feet, (E) and any new system serving an addition of 1,000 or more square feet or a tenant improvement having a valuation of \$200,000, testing and adjusting are required.

DESIGN

See sheet M0.001 for procedures for testing and adjusting systems, which includes:

- HVAC systems and controls
- HVAC balancing per the Testing Adjusting and Balancing Bureau National Standards; the National Environmental Balancing Bureau Procedural Standards; or Associated Air Balance Council National Standards or approved equal.
- Indoor and outdoor lighting and controls PLEASE REFER TO "TITLE 24 COMPLIANCE" ON E0.001 AND "TITLE 24" ON E0.003.
- Water heating systems
- Renewable energy systems
- Landscape irrigation systems THIS REQUIREMENT IS COVERED UNDER A SEPARATE PERMIT #00974484-PARK, SHEET
- Water reuse systems

CONSTRUCTION - PRIOR TO FINAL INSPECTION APPROVAL

Completed testing, adjusting, and balancing reports shall be provided to the City Inspector prior to final inspection approval. Contents shall match those specified in the procedures section above and be signed by the responsible parties.

ENVIRONMENTAL QUALITY

N/A **FIREPLACES** Wood burning devices including fireplaces are not permitted under SCAQMD Rule 445. Any installed gas fireplace shall be a direct-vent sealed-combustion type. (CGBSC Section 5.503)

MECHANICAL EQUIPMENT AND DUCT PROTECTION

To reduce the amount of dust, water, and debris collected in mechanical equipment and ducts, all duct openings and other related air distribution equipment component openings shall be covered from the time of delivery at the jobsite through the construction until final start up. (CGBSC Section 5.504.3)

FINISH MATERIAL POLLUTANT CONTROL

- Adhesives, sealants and caulks** shall meet the applicable standards of CGBSC Section 5.504.4.1 and Tables 5.504.4.1 and 5.504.4.2 for VOC limits and content prohibitions.
- Paints and coatings** shall meet the applicable standards of CGBSC Section 504.4.3 and Table 5.504.4.3 for VOC limits.

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- Aerosol paints and coatings** shall meet the applicable standards of CGBSC Section 5.504.4.3.1.
- Carpet systems** shall meet the applicable standards of CGBSC Section 5.504.4.4 including CGBSC Section 5.504.4.4.1 for **carpet cushions** and CGBSC Section 5.504.4.4.2 for **carpet adhesives**.
- Resilient flooring** shall meet the applicable standards of CGBSC Section 5.504.4.6.
- Composite wood products** shall meet the applicable standards of CGBSC Section 5.504.4.5 and Table 5.504.4.5.

ENVIRONMENTAL TOBACCO SMOKE CONTROL (CGBSC Section 5.504.7)

N/A See plan sheet for designated outdoor smoking area which shows a minimum of 25 feet from building entries, outdoor ventilation intakes, and operable windows. THE CITY IS SMOKE FREE IN PUBLIC PLACES. SMOKE FREE SIGNAGE SHALL BE PLACED THROUGHOUT THE SITE AS PART OF THE TENANT IMPROVEMENT SCOPE.

FILTERS (CGBSC Section 5.504.5.3)

X **Ventilation filtration** (CGBSC Section 5.504.5.3) - For new HVAC systems outside and return air shall pass through filtration media having a rating of:

X MERV 13 or better, see plan sheet M0.002 for specifications.

Equipment is existing and exempt from this requirement.

ENVIRONMENTAL COMFORT (CGBSC Section 5.507)

Exterior Noise Wall and roof assemblies making up the building envelope and exposed to the noise source as follows shall meet a composite STC rating of 50 or a composite OITC rating of 40, and exterior windows within said walls shall meet an STC of 40 or an OITC of 30.

Prescriptive Method (Using Sound Transmission Class (STC) Map - 2012 from the City's online form directory.)

N/A 1. A portion or the entire building is within the 65 CNEL contour for a freeway or expressway therefore exterior wall assemblies and roof or roof-ceiling assemblies shall meet the specified exterior wall assemblies and roof or roof-ceiling assemblies requirements stated above. For details and specifications see plan sheets .

N/A 2. A portion or the entire building is within the 65 CNEL contour for John Wayne Airport therefore exterior wall assemblies and roof or roof-ceiling assemblies shall meet the specified exterior wall assemblies and roof or roof-ceiling assemblies requirements stated above. For details and specifications see plan sheets .

N/A 3. The project site fronts a street identified as producing 65 CNEL contours extending beyond the right of way therefore that portion of the building that is the contour shall meet the specified exterior wall assemblies and roof or roof-ceiling assemblies requirements stated above. For details and specifications see plan sheets .

N/A This building is a factory, storage facility, utility building, enclosed parking structure, or stadium therefore no STC assemblies are required.

Performance Method

X Pursuant to CGBSC Section 5.507.4.2, site and building mitigations have been defined based on a noise study prepared by an acoustical engineer. For a summary of features see plan sheets G5.000. For construction details see sheets .

Prior to final inspection, an acoustical report shall be provided to the City Inspector which demonstrates complying interior noise sound levels. Said report shall be signed and stamped by an acoustical engineer.

Interior Sound

X Wall and floor-ceiling assemblies separating tenant spaces and tenant spaces and public places shall have an STC of at least 40. Note: Examples of assemblies and their various STC ratings may be found at the California Office of Noise Control at https://www.tslb.org/files/STC_ILC_Ratings.pdf. For details and specifications see plan sheets G5.000.

N/A No interior walls separate tenant spaces or occupant spaces and public areas.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	(Page 19 of 19)

Documentation Author's Declaration Statement

I, I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Hans Marsman LEED AP	Documentation Author Signature:
Company: Marsman Consulting	Signature Date:
Address: 440 N Barranca Ave #5726	CEA/HERS Certification Identification (if applicable)
City/State/Zip: Covina, CA 91723	Phone: (619) 573-6374

Responsible Person's Declaration statement

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

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 9 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
- 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.
- 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.
- 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.
- 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:	Responsible Designer Signature:
Company: Gensler	
Address: 4675 MacArthur Court Suite 100	Date Signed: 2/19/2026
City/State/Zip: Newport Beach, CA 92660	License #: C32405
Phone: 949.863.9434	Title: Architect
Responsible Designer Name: Bojan Lazarevic, PE	Responsible Designer Signature:
Company: MA Engineers	
Address: 5160 Carroll Canyon Rd, Suite 200	Date Signed: 02/19/2026
City/State/Zip: San Diego, CA 92121	License #: M41366
Phone: (858) 200-0030	Title: Engineer

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000
Schema Version: rev 20220601

Report Generated: 2026-02-19 13:36:10

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

Tel 949.863.9434
Fax 949.553.1676

Date	Description
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name
HANGAR 10 RECONSTRUCTION
Project Number
007.3945.000
Description
STANDARD NOTES NON-RESIDENTIAL CONSTRUCTION 2022 CALGREEN
Scale
NOT TO SCALE

G2.100



STANDARD NON-RESIDENTIAL SECURITY CODE PROVISIONS [VERSION 6.0]

[Applies to Applications Made on or After 01/01/2023]

This document shall be completed by the design professional of record. The completed document shall be incorporated, in its entirety, along with the **City of Irvine Standard Security Code Plan Requirements and Definitions** into the plans submitted for approval prior to permit issuance. This document is in 12 point font and may not be reduced in size prior to incorporation.

INSTRUCTIONS:

(1) Those provisions preceded by an asterisk (*) shall be completed if applicable and an "A" shall be inserted in the space preceding the provision; if not applicable, an "N/A" shall be inserted.

(2) Those provisions preceded by a [P] shall be depicted in the plans via notes, details, plan, and/or elevation views in a manner that clearly demonstrates compliance to the requirement. Such depictions shall be cross referenced within the brackets () provided or note shall be completed as otherwise instructed.

STANDARDS

KEYING REQUIREMENTS [Ref. Irvine Municipal Code (IMC) Section 5-9-511]

Upon occupancy by the owner or proprietor, each single unit shall have locks using combinations which are interchangeable free from locks used in all other proprietorships or similar distinct occupancies.

N/A (*) STANDARDS FOR LOUVERED WINDOWS [Ref. IMC Section 5-9-514]

[P] Louvered windows shall not be utilized if any portion of it is within 8 feet vertically or 6 feet horizontally from any exterior accessible surface or any adjoining roof, balcony, landing, stair tread, platform, or similar structure. *[Ref. elevation views, window schedule*

A (*) STANDARDS FOR GARAGE DOORS: ROLLING OVERHEAD, SOLID OVERHEAD [Ref. IMC Section 5-9-515]

A. [P] Wood doors shall have panels a minimum of 5/16 inch in thickness with the locking hardware being attached to the support framing. *[Ref. plans and/or door schedules or note: Not Applicable- NOT APPLICABLE*

B. [P] Aluminum doors shall be a minimum thickness of 0.0215 inches and riveted together a minimum of 18 inches on center along the outside seams. There shall be a full width horizontal beam attached to the main door structure which shall meet the pilot, or pedestrian access, door framing within 3 inches of the strike area of the pilot or pedestrian access door framing within 3 inches of the strike area of the pilot or pedestrian access door. *[Ref. plans and/or door schedules or note: Not Applicable- REFER TO DOOR SCHEDULE: G6.000; PLAN: A1.100; DETAILS: A6.002*

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STANDARDS FOR LIGHTING [Ref. IMC Section 5-9-517]

Note: Performance standards are contained herein for reference. Compliance shall be demonstrated in photometric study preceding plan check approval.

Buildings, open parking lots, walkways, and accesses thereto shall conform to the following light standards and be arranged in such a way so as to conform to California Green Building Standards Code Section 5.106.5.2 and Zoning Code Section 3-16-1 which require that direct rays be confined to the site and that adjoining properties are protected from glare such that at 15 feet beyond site boundaries illumination is less than 0.01 horizontal foot-candles.

A. [P] All types of exterior doors shall be illuminated with an exterior light fixture, during the hours of darkness, with a minimum maintained 1 foot-candle of light, measured within a 5 foot radius on each side of the door at ground level. The light source shall be controlled by a photocell device or a timeclock with an astronomical clock feature and capable of operating during a power outage. *[Ref. plans, elevations, and applicable notes and/or details- E3.102*

B. Recessed areas of buildings or fences, which have a minimum depth of 2 feet, a minimum height of 5 feet, and do not exceed 6 feet in width and are capable of human concealment, shall be illuminated with a minimum maintained 0.25 foot-candles of light at ground level during the hours of darkness. This requirement applies to defined recessed areas which are within 6 feet of the edge of a designated walking surface with an unobstructed pathway to it, not hindered by walls or hedge row landscaping a minimum of 2 feet in height.

C. Stairways shall be illuminated with a minimum maintained 1 foot-candle of light on all landings and stair treads, during the hours of operation, including 1 hour thereafter.

D. All interior or exterior corridors, passageways, and walkways in any hotel, motel, or inn shall be illuminated at all times with a minimum maintained 1 foot-candle of light on the walking surface.

E. All exterior pedestrian walkways, interior common corridors, and open parking lots shall be illuminated with a minimum maintained 1 foot-candle of light on the walking, parking, or driving surface during the hours of operation and 1 hour thereafter.

F. [P] For buildings required to have 2 or more exits, lighting for landings shall be on an emergency power system consisting of storage batteries or an onsite generator capable of providing power for 90 minutes, installed as required by California Building Code Section 1008.3 *[Ref. plans, elevations, and applicable notes and/or details or note: This provision is not applicable- E0.001 LUMINAIRE SPECIFICATIONS*

G. The light source utilized to comply with this section to meet parking and drive surface lighting shall have a rated average bulb life of not less than 12,000 hours.

H. Light fixtures for open parking lots may utilize motion sensing devices to raise and lower the light levels based upon the presence of vehicles or people. The light level shall not be less than minimum maintained .25 foot-candles of light at ground level when not occupied. The motion sensing device shall only be used after business hours and shall be adjusted to sense and activate light when a vehicle or person is within 24 feet of the fixture. Areas within a 50 foot radius of an elevator lobby/doors and stairways shall not fall below the required minimum maintained 1.0 foot-candles of light.

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The key switch is to be accessible in such a manner as to not require a person to exit their vehicle to reach it; nor to require any back-up movements in order to enter/exit the gate. The key switch may be installed within a visitor telephone/intercom call box if meeting the above criteria. The control housing shall consist of heavy gauge metal, and be vandal- and weather-resistant and be mounted on a substantial structure such as a steel post, concrete, or masonry pedestal.

B. Key switches shall be secured to the control housing, telephone/intercom call box, or parking ticket dispenser utilizing tamper resistant screws.

C. Except for any open surface parking lot with less than 100 spaces, a radio controlled entry system shall be installed per City specifications.

D. [P] Vehicle gates shall be designed to open in a power failure. *[Ref. plans, elevations, and applicable notes and/or details- REFER TO PLAN CHECK 00974484-PARK*

C. [P] Fiberglass doors shall have panels a minimum density of 6 ounces per square foot from the bottom of the door to a height of 7 feet. Panels above 7 feet shall have a density not less than 5 ounces per square foot. *[Ref. plans and/or door schedules or note: Not Applicable- NOT APPLICABLE*

D. Doors utilizing a cylinder lock shall have a minimum 5 pin tumbler operation with the locking bar or bolt extending into the receiving guide a minimum of 1 inch.

E. Doors that exceed 16 feet in width shall have 2 lock receiving points; or, if the door does not exceed 19 feet, a single bolt may be used if placed in the center of the door with the locking point located either at the floor or door frame header; or, torsion spring counterbalance-type hardware may be used.

F. [P] Doors secured by electrical operation shall have a keyed-switch to open the door when in a closed position, or by a signal locking device. *[Ref. plans and applicable notes and/or details or note: Not Applicable- REGULAR EGRESS DOORS ARE PROVIDED NEXT TO THE BI-FOLD DOOR, REFER TO A1.100.*

G. Doors with slide bolt assemblies shall have frames a minimum of 0.120 inches in thickness, with a minimum bolt diameter of 1/2 inch and protrude at least 1 1/2 inches into the receiving guide. A bolt diameter of 3/8 inch may be used in a residential building. The slide bolt shall be attached to the door with non-removable bolts from the outside. Rivets shall not be used to attach slide bolt assemblies.

STANDARDS FOR EXTERIOR DOORS & OPENINGS [Ref. IMC Section 5-9-517]

A. Swinging exterior glass doors, wood, or metal doors with glass panels, solid wood, or metal doors, and all entrance doors to individual office suites shall be constructed or protected as follows:

1. [P] Wood doors shall be of solid core construction with a minimum thickness of 1 3/4 inches. Wood panel doors with panels less than 1 inch thick shall be covered on the inside with a minimum 16 U.S. gauge sheet steel or its equivalent, which is to be attached with screws on minimum 6 inch centers. Hollow steel doors shall be of a minimum 16 U.S. gauge and have sufficient reinforcement to maintain the designated thickness of the door when any locking device is installed; such reinforcement being able to restrict collapsing of the door around any locking device. *[Ref. plans and/or door and window schedules- DOOR NOTES #14 ON G6.000.*

2. [P] Except when double cylinder deadbolts are utilized, any glazing utilized within 40 inches of any door locking mechanism shall be constructed or protected as follows:

- Fully tempered glass or rated burglary resistant glazing; or
- Iron or steel grills of at least 1/8 inch material with a minimum 2 inch mesh secured on the inside of the glazing may be utilized; or
- The glazing shall be covered with iron bars of at least 1/2 inch round or 1 inch by 1/4 inch flat steel material, spaced not more than 5 inches apart, secured on the inside of the glazing.
- Items b. and c., above, shall not interfere with the operation of opening windows if such windows are required to be operable by the Uniform Building Code.

[Ref. plans and/or door and window schedules- DOOR NOTES #6 ON G6.000.

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I. [P] Accessible luminaires utilized to meet the requirements of this section have fully enclosed vandal resistant light fixtures and be not less than 3 feet in height from ground level when used to illuminate walkways and a minimum of 8 feet in height from ground level when illuminating surfaces associated with vehicles. Light fixtures shall be deemed accessible if mounted within 15 feet vertically or 6 feet horizontally from any accessible surface or any adjoining roof, balcony, landing, stair tread, platform, or similar structure. *[Ref. plans, elevations, and applicable notes and/or details or note: This provision is not applicable- MOUNTING HEIGHT: A2.000; SCHEDULE: G8.000 & E0.001.*

J. [P] See plan sheet *[Ref. plans or note: This provision is not applicable- CANOPY AT GREAT PARK PHASE 2 LANDSCAPE AND ELECTRICAL DRAWINGS UNDER SEPARATE PERMIT, REFER TO PLAN CHECK 00974484-PARK.*

showing buildings, parking area, walkways, detailed landscaping with tree legend (if pole lights are used) and shrub legend (if bollards are used), fixture schedule, mounting height, lighting ratio, and a point-by-point photometric calculation of the required light levels. If parking lot is equipped with an occupancy sensor, then a point-by-point photometric calculation is required to show it meets the required minimum level of light. Foot-candles shall be measured at grade on a horizontal plane and conform to a uniformity ratio of 6:1 average/minimum. Landscaping shall not be planted so as to obscure required light levels and with light fixtures exceeding 8 feet in height installed at lease 2 feet from a tree's canopy at 70 percent maturity. Private street, alley, and Fire Department required roadways designed for use in emergency only situations shall be illuminated using the same standards as established for public thoroughfares.

K. Private streets, drive aisles, alleys, and Fire Department required roadways designed for use only in emergency situations shall be illuminated using the same standards as established for public thoroughfares.

STANDARDS FOR ADDRESSING [Ref. IMC Section 5-9-517]

[P] Buildings shall display a street address number conforming to the following specifications:

A. Numerals shall be mounted on the wall or window, not less than 8 feet or higher than 30 feet from ground level and face the street on which the building is addressed. Numerals are to be clearly visible from this same street and not obscured by building landscaping at full maturity. Addressing shall be of a color contrasting to the background to which they are affixed. Method of attachment shall not include the use of two-sided tape or any material not resistant to weather conditions. *[Ref. plans, elevations, and applicable notes and/or details- REFER TO ELEVATION: ELEVATIONS #01 AND #03 ON A2.000, AND APPROVED WAYFINDING SERIES IN CANOPY AT GREAT PARK PHASE 2 UNDER PLAN CHECK 00974484-PARK.*

B. Where distance or intervening obstructions impair visibility from the street, addressing shall be mounted on all buildings so as to be visible from the drive aisles and walkways internal to the site, and each such address, or an encompassing range of addresses, shall be displayed on monument signs visible from each site entrance from all approaching directions. In such cases, these signs shall be designed per Item E. below. *[Ref. plans, elevations, and applicable notes and/or details or note: This provision is not applicable- REFER TO WAYFINDING SERIES IN CANOPY AT GREAT PARK PHASE 2 UNDER PLAN CHECK 00974484-PARK.*

C. Numerals shall be no less than 6 inches in height if located less than 100 feet from the center line of the addressed street, or 12 inches in height if placed further than 100 feet from the center line of the

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3. Doors without mechanical locks may be secured with a magnetic locking device which shall have the minimum holding force of 1600 lbs. and a minimum 12 hour back up battery source.

B. All swinging exterior wood and steel doors shall be equipped as follows:

1. A single or double door shall be equipped with a double or single cylinder deadbolt. The bolt shall have a minimum projection of 1 inch and be constructed so as to repel a cutting tool attack. The deadbolt shall have an embedment of at least 3/4 inch into the strike receiving the projected bolt. The cylinder shall have a cylinder guard, a minimum of 5-pin tumblers, and shall be connected to the inner portion of the lock by connecting screws of at least 1/4 inch in diameter. The provisions of the preceding paragraph do not apply where: (1) panic hardware is required, or (2) an equivalent device is approved by the enforcing authority.

2. Double doors shall be equipped as follows:

- The inactive leaf of double door(s) shall be equipped with metal flush bolts having a minimum embedment of 5/8 inch into the head and threshold of the doorframe.
- Double doors shall have an astragal constructed of steel a minimum of 1/8 inch thick, which will cover the opening between the doors. The astragal shall be a minimum of 2 inches wide, and extend a minimum of 1 inch beyond the edge of the door to which it is attached. The astragal shall be attached to the outside of the active door by means of welding or with nonremovable bolts spaced apart on not more than 10 inches centers. (The door to which such an astragal is attached must be determined by the fire safety codes adopted by the enforcing authority.)

C. Aluminum frame swinging doors shall be equipped as follows:

1. The jamb on all aluminum frame swinging doors shall be so constructed or protected to withstand 1,600 pounds of pressure in both a vertical distance of 3 inches and a horizontal distance of 1 inch each side of the strike, so as to prevent violation of the strike.

2. A single or double door shall be equipped with a double cylinder deadbolt with a bolt projection exceeding 1 inch or a hook-shaped or expanding deadbolt that engages the strike sufficiently to prevent spreading. The deadbolt lock shall have a minimum of 5-pin tumblers and a cylinder guard.

D. Panic hardware, whenever required by the Building Code shall be installed as follows:

- Panic hardware shall contain a minimum of 2 locking points on each door; or
- On single doors, panic hardware may have 1 locking point, which is not to be located at either the top or bottom rails of the doorframe. The door shall have an astragal constructed of steel 1/8 inch thick, which shall be attached with nonremovable bolts to the outside of the door. The astragal shall extend a minimum of 6 inches vertically above and below the latch of the panic hardware. The astragal shall be a minimum of 2 inches wide and extend a minimum of 1 inch beyond the edge of the door to which it is attached.
- Double doors containing panic hardware shall have an astragal attached to the doors at their meeting point, which will close the opening between them, but not interfere with the operation of either door.

E. Horizontal sliding doors shall be equipped with a metal guide track at top and bottom, and a cylinder lock and/or padlock with a hardened steel shackle which locks at both heel and toe, and a minimum 5-pin tumbler operation with nonremovable key when in an unlocked position. The bottom track shall be so designed that the door cannot be lifted from the track when the door is in a locked position.

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F. In office buildings (multiple occupancy), all entrance doors to individual office suites shall meet the construction and locking requirements for exterior doors.

G. Glazing shall be deemed accessible, if any portion of it is within 40 inches of any door locking mechanism, and shall be constructed of either two part laminated glazing with a 0.60 .0060 inch inner layer or burglary resistant glazing.

Exception:

Glass doors at least 1/2 inch thick and greater than 2880 square inches.

A (*) STANDARDS FOR ROOF OPENINGS [Ref. IMC Section 5-9-517]

[P] Roof openings shall be protected as follows if the roof is accessible via an exterior ladder or the roof is less than 20 feet from ground level or if any portion of it is within 12 feet vertically or 6 feet horizontally from any exterior accessible surface or any adjoining roof, balcony, landing, stair tread, or similar structure:

A. All skylights on the roof of any building used for business purposes shall be provided with:

- Rated burglary-resistant glazing; or
- Iron bars of at least 1/2 inch round or 1 by 1/4 inch flat steel material, spaced not more than 5 inches apart, under the skylight and securely fastened; or
- A steel grill of at least 1/8 inch material with a maximum 2 inch mesh under the skylight and securely fastened.

B. All hatchway openings on the roof of any building or premises used for business purposes shall be secured as follows:

- If the hatchway is of wooden material, it shall be covered on the inside with at least 16 U.S. gauge sheet metal, or its equivalent, attached with screws.
- The hatchway shall be secured from the inside with a slide bar or slide bolts.
- Outside hinges on all hatchway openings shall be provided with nonremovable pins when using pin-type hinges. *[Ref. plans and details- PLAN: A1.102; DETAILS: A6.102*

N/A (*) STANDARDS FOR EXTERIOR LADDERS [Ref. IMC Section 5-9-517]

[P] Exterior mounted ladders are prohibited except:

A. Ladders with a minimum 1/8 inch thick steel plate, securely attached to the ladder edge on each side and extending to within 2 inches of the wall for a height of 10 feet above ground level. A door or cover shall be securely attached to the front of the ladder and be constructed of a minimum 1/8 inch steel, extending from ground level to at least 10 feet high. The ladder door shall have nonremovable hinge pins and be locked tight against the side wall by a locking mechanism with a minimum 5-pin tumbler operation, and attached with nonremovable bolts from the exterior; or

B. Ladders beginning a height of 10 feet above ground. *[Ref. plans, elevations, and applicable notes and/or details-*

EXTERIOR PHONE PANELS ARE PROHIBITED [Ref. IMC Section 5-9-517]

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2. Buildings providing addressing for a helipad as specified in the California Building Code.

[Ref. plans, elevations, and applicable notes and/or details or note: This provision is not applicable- NOT APPLICABLE

G. For sites having more than three separately addressed buildings with a common area sidewalk connecting each building, and the primary building entrances are not visible from the street or parking lot, pedestrian directional signage shall be provided. Signs shall be posted at all decision-making points, including walkway entrances and intersections. Bottom of the address numbers on the sign copy shall be no less than two feet from ground level and not obstructed by landscaping at full maturity. Numerals shall be at least three inches in height using a Sans Serif font with a stroke weight of medium to bold, or an approved equivalent font which is clearly legible.

H. A Wayfinding Plan shall be developed indicating the following:

- Location and wording of directional signage for vehicles and pedestrians;
- Location of building address numbers;
- Landscaping details for areas near any signage or address numbers, including elevation showing trees near exterior address numbers;
- Required lighting level on address numbers.

The plan shall include design drawings or exhibits that clearly illustrate the intent of the Wayfinding Plan. *[Ref. plans, elevations, and applicable notes and/or details or note: This provision is not applicable- REFER TO WAYFINDING SERIES IN CANOPY AT GREAT PARK PHASE 2 UNDER SEPARATE PERMIT, REFER TO PLAN CHECK 00974484-PARK.*

N/A (*) STANDARDS FOR ELEVATOR [Ref. IMC Section 5-9-517]

Elevators shall be designed as follows:

A. Elevator cabs, the interiors of which are not completely visible when the door is open from a point centered on and 36 inches away from the door, shall have shatter resistant mirrors or other equally reflective material so placed as to make visible the entire elevator cab from this point. The elevator cab shall be illuminated at all times with a minimum maintained 2 foot-candles of light at floor level. *[Ref. plans, elevations, and applicable notes and/or details or note: This provision is not applicable as interior is completely visible per specification above-*

B. Elevator emergency stop buttons shall be so installed and connected as to activate the elevator alarm when utilized.

A (*) EMERGENCY ACCESS [Ref. IMC Section 5-9-519]

Private roads and parking areas or parking facilities when controlled by unmanned automated parking gates shall provide for police emergency access, at all individual gates, both ingress and egress, utilizing an approved radio controlled entry system and approved key switch device to be installed and designed as follows:

A. [P] The key switch control shall be installed at a height of 42 inches from finished driveway grade and a minimum of 15 feet from the entry/exit gate, and be located on the driver's side of the road or driveway.

CITY OF IRVINE HANGAR 10 RECONSTRUCTION

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Fax 949.553.1676

Date	Description
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name
HANGAR 10 RECONSTRUCTION
Project Number
007.3945.000
Description
STANDARD NON-RESIDENTIAL SECURITY CODE PROVIDISONS
Scale

G2.101



STANDARD SECURITY CODE PLAN REQUIREMENTS AND DEFINITIONS

The design professional of record shall complete, as applicable to the project, each of the following:

- Standard Residential Security Code Provisions
- Standard Recreational Spaces Security Code Provisions
- Standard Non-Residential Security Code Provisions
- Standard Parking Facility Security Code Provisions

This document in its entirety, along with each applicable standard shall be incorporated into the plans submitted for approval prior to permit issuance.

DEFINITIONS [Ref. Irvine Municipal Code (IMC) Section 5-9-503]

Alley is any roadway not exceeding 25 feet in width which is primarily used for access to the rear or side entrances of abutting property.

Approved means certified as meeting the requirements of this code by the enforcing authority or its authorized agents, or by other officials designated by law to give approval on a particular matter dealt with by the provisions of this code with regard to a given material, mode of construction, piece of equipment or device.

Astragal is a device, either fixed or movable, which eliminates the vertical opening between a pair of doors when in the closed position.

Bolt is a metal bar which, when actuated, is projected (or thrown) either horizontally or vertically into a retaining member, such as a strike plate, to prevent a door or window from moving or opening.

Bolt projection or bolt thrown is the distance from the edge of the door, at the bolt center line, to the farthest point on the bolt in the projected position.

Burglary resistant glazing means those materials as defined in Underwriters' Laboratories Bulletin 972.

Common area is an area of space, a building or portion of a building, which is legally accessible to the owners or users of a multi-tenant property.

Cylinder means the subassembly of a lock containing the cylinder core, tumbler mechanism and the keyway. A double cylinder lock is one, which has a key-actuated cylinder on both the exterior and interior of the door.

Cylinder guard means a tapered or flush metal ring or plate surrounding the otherwise exposed portion of a cylinder lock to resist cutting, drilling, prying, pulling or wrenching with common tools.

Deadbolt is a lock bolt which does not have a spring action. The bolt must be actuated by a key and a knob or thumb-turn, and when projected becomes locked against return by end pressure.

Dead latch or deadlocking latch bolt means a spring-actuated latch bolt having a beveled end and incorporating a plunger which, when depressed, automatically locks the projected latch bolt against return by end pressure.

REV 12/19/2022 | Page 1 of 3

STANDARD SECURITY CODE PLAN REQUIREMENTS AND DEFINITIONS

Double cylinder deadbolt means a deadbolt lock which can be activated only by a key on both the interior and exterior.

Dwelling means a building or portion thereof designed exclusively for residential occupancy, including single-family and multiple-family dwellings.

Enforcing authority is the agency or person having the responsibility for enforcing the provisions of this code.

Flashbolt is a manual, key or turn-operated metal bolt normally used on inactive door(s), and is attached to the top and bottom of the door and engages in the head and threshold of the frame.

Fully tempered glass means those materials meeting or exceeding UCB Standard 24-2 for Safety Glazing.

Glazing is all glass, plastics, and fiberglass utilized as an exterior window, vision panel, light, or pane within any type of door.

Hours of operation shall mean the time period when any activity requires the presence of employees or workers within or about the affected business.

Hours of darkness shall mean any time from one-half hour before sunset and one-half hour after sunrise and any other time when the illumination level is less than the required lighting for uses as designated in this code.

Jamb means the vertical members of a door frame to which the door is secured.

Jamb/wall is that component of a door assembly to which a door is attached and secured; the wall and jamb used together are considered a unit.

Latch or latch bolt is a beveled, spring-actuated bolt, which may or may not have a deadlocking device.

Lock (or lockset) is a keyed device (complete with cylinder, latch or deadbolt mechanism, and trim such as knobs, levers, thumb turns, escutcheons, etc.) for securing a door in a closed position against forced entry. For the purposes of this code, a lock does not include the strike plate.

Locking device is a part of a window assembly, which is intended to prevent movement of the moveable sash, which may be the sash lock or sash operator.

Luminaire is a complete lighting device consisting of a light source together with its direct appurtenances, such as globe, reflector, refractor, housing and such support as is integral with the housing. The pole, post or bracket is not considered a part of the luminaire.

Minimum maintained foot-candles of light is the amount of light falling on that point of a surface with the least illumination, calculated through application of a maintenance factor, which is a multiplier applied to account for aging of the lamp and for dirt build-up on the luminaire during the period for which a lamp is in place.

Multiple-family dwelling means a building or portion thereof designed for occupancy by two or more families living independently of each other, including hotels, motels, apartments, duplexes and townhouses.

Nonresidential means any building, parking lot and associated areas used for any purpose other than a dwelling.

REV 12/19/2022 | Page 2 of 3

STANDARD SECURITY CODE PLAN REQUIREMENTS AND DEFINITIONS

Panic hardware means a latching device on a door assembly for use when emergency egress is required due to fire or other threat to life safety. Devices designed so that they will facilitate the safe egress of people in case of an emergency when a pressure not to exceed 15 pounds is applied to the releasing device in the direction of exit travel. Such releasing devices are bars or panels extending not less than one-half of the width of the door and placed at heights suitable for the service require, not less than 30 nor more than 44 inches above the floor.

Primary locking device means the single locking system on a door or window unit whose primary function is to prevent unauthorized intrusion.

Private or single-family dwelling means a building designed exclusively for occupancy by one family.

Roll means the horizontal member of a window or door. A meeting roll is one which meets with a rail of another sash or a framing member of the door or window frame when the sash is in the closed position.

Recreational space means any public or private park, community common open space or paseo, bike trail, community swimming pools and associated sidewalks and parking lots.

Sash is an assembly of stiles, rails, and sometimes, mullions assembled into a single frame, which supports the glazing material. A fixed sash is one which is not intended to be opened. A moveable sash is intended to be opened.

Stile is the lowest horizontal member of a window frame.

Single cylinder deadbolt means a deadbolt lock, which is activated from the outside by a key and from the inside by a knob, thumb-turn, lever, or similar mechanism.

Solid core door means a door composed of solid wood or composed of compressed wood equal in strength to solid wood construction.

Stile is a vertical framing member of a window or door.

Strike is a metal plate attached to or mortised into a door or door jamb to receive and to hold a projected latch bolt and deadbolt in order to secure the door to the jamb.

Swinging door means a door hinged at the stile or at the head and threshold.

Underwriters' Laboratories listed means tested and listed by Underwriters' Laboratory, Inc.

Vandal resistant light fixture has a lens constructed of materials meeting or exceeding U.L. Bulletin 972 (Burglary Resistant Glazing) and a housing meeting or exceeding U.L. Bulletin 1572 (Wet Locations).

Window assembly is a unit, which includes a window and the anchorage between the window and the wall.

Window frame is the part of a window, which surrounds and supports the sashes and is attached to the surrounding wall. The members include side jambs (vertical), head jamb (upper, horizontal), sill and mullions.

REV 12/19/2022 | Page 3 of 3



INFORMATIONAL BULLETIN

Bulletin No.: 311
Page 1 of 1
Effective: 3/21/2007
Revised: 9/14/2009
Eric M. Jolly
Chief Building Official

REQUIREMENTS FOR FABRICATION APPROVAL

Reference: California Building Code (CBC) Appendix Chapter 1 Section 104.1, Section 1704.2, as amended by City of Irvine Municipal Code 5-9-401, item L, and CBC Section 1708.4.

PURPOSE:

To establish a policy for use and acceptance of structural load bearing members and assemblies fabricated offsite and are intended for use in a structure being constructed or modified under a valid building permit. Such members and assemblies include but are not limited to structural steel (including steel stains) and pre-cast concrete building components.

POLICY:

Fabricator Approval Fabricators for projects within the City of Irvine are required to obtain approval from the Chief Building Official. Approval is generally granted upon verification of a current fabricator listing for the intended work from a recognized agency. Such agencies include the City of Los Angeles and the International Accreditation Services (IAS) for steel fabrication and the Precast/Prestressed Concrete Institute (PCI) is acceptable for pre-cast concrete.

Fabricators having a listing with an agency not referenced above may present their credentials to the Chief Building Official for consideration prior to fabrication.

Deliveries to the Jobsite No member or assembly fabricated offsite shall be delivered to the jobsite without required documentation. Required documentation shall be verified to be complete and accurate by the special inspector and documented in his daily report. Any exceptions shall be noted and brought to the City inspector's attention.

Documentation requirements are as follows:

- Fabricator's current Certification from a recognized agency.
- Fabricator's Certificate of Compliance. Such certificate shall state "...that the work has been performed in accordance with the approved plans and specifications."
- Any applicable destructive and/or non-destructive testing reports as required by CBC section 1708.4.
- Certified mill test report for all structural steel and reinforcing steel.



INFORMATIONAL BULLETIN

Bulletin No.: 250
Page 1 of 1
Effective: 5/1/95
Revision: 2/20/96
Revision: 6/3/10
Eric M. Jolly
Chief Building Official

ROOFS SLOPE AND CERTIFICATION REQUIREMENTS FOR WOOD FRAMED CONSTRUCTION

Reference: California Building Code Sections 1503.4, 1507 and 1611

Minimum Roof Slope:

California Building Code (CBC) Section 1507 requires various minimum slopes for roofs depending on the roofing material. Built-up roofs and thermoplastic roofs may be as little as ¼ inch per foot. This is the minimum allowed for wood framed construction within the City of Irvine unless otherwise approved by the Chief Building Official.

Drainage:

Roof drainage shall conform to CBC Section 1503.4 and the California Plumbing Code using a rainfall rate of 4 inches per hour per City of Irvine Information Bulletin 299-Roof Drainage System Sizing.

Accumulated Rainwater Design Load:

CBC Section 1611.1 requires that the roof structure design load include the weight from rainwater accumulation that would occur due to blockage of the primary drainage system including that volume above the inlet of the secondary drainage system at its design flow.

Structural Check for Ponding:

Where the design slope is allowed to be less than ¼ inch per foot, CBC Section 1611.2 requires the design calculations to include verification of adequate stiffness to preclude progressive deflection in accordance with Section 8.4 of ASCE 7.

Certification of Roof Slope:

New roof systems of wood framed construction having a design slope of ¼ inch per foot (2%) or flatter shall be certified upon completion and before building occupancy by a California Registered Engineer or Land Surveyor. Certification shall include a statement that the completed roof system has been verified to be in conformance with the approved plans. Said certification shall be stamped and signed by the registered professional and be retained at the jobsite for collection by the City building inspector.



INFORMATIONAL BULLETIN

Bulletin No.: 299
Page 1 of 1
Effective: 09/25/02
Revised: 01/28/2021
Kenneth
Chief Building Official

ROOF DRAINAGE SYSTEM SIZING

Purpose: To specify the rainfall rate for sizing roof drainage systems in the City of Irvine

References: California Plumbing Code Section 1101.12
California Building Code Section 1502

The rainfall rate of 4 inches per hour shall be used for sizing roof drainage systems for buildings in the City of Irvine.

CITY OF IRVINE HANGAR 10 RECONSTRUCTION

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Gensler

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△ Date	Description
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
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A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

SECURITY CODE DEFINITIONS,
CONSTRUCTION SITE SECURITY &
FABRICATION, ROOF AND ROOF
DRAIN

Scale

NOT TO SCALE

G2.102



CANOPY PHASE 2

NOISE ANALYSIS

Prepared By:

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Noah Johnson | njohnson@urbanxroads.com

Reference Number	Agency	Date
16924-02	City of Irvine	February 27, 2026



1 INTRODUCTION

This Noise Analysis has been completed to determine the noise impacts associated with the development of the Canopy Phase 2 ("Project"). This noise analysis briefly describes the Project, provides information regarding noise fundamentals, sets out the local regulatory setting, presents the study methods and procedures for noise analysis, and evaluates the future exterior and interior noise environment.

1.1 SITE LOCATION

The Project site is located at the northeast corner of the Bosque and Hornet Intersection, in the City of Irvine. The Project is bounded by park uses to the south and east, and undeveloped uses to the north and west, as shown in Exhibit 1-1. The nearest airport is the John Wayne Airport, 7.3 miles west of the Project site.

1.2 PROJECT DESCRIPTION

The Project will consist of commercial development and includes the construction of four commercial buildings totaling approximately 1,200 square feet. A preliminary site plan is shown in Exhibit 1-2.

16924-02	7	Canopy Phase 2
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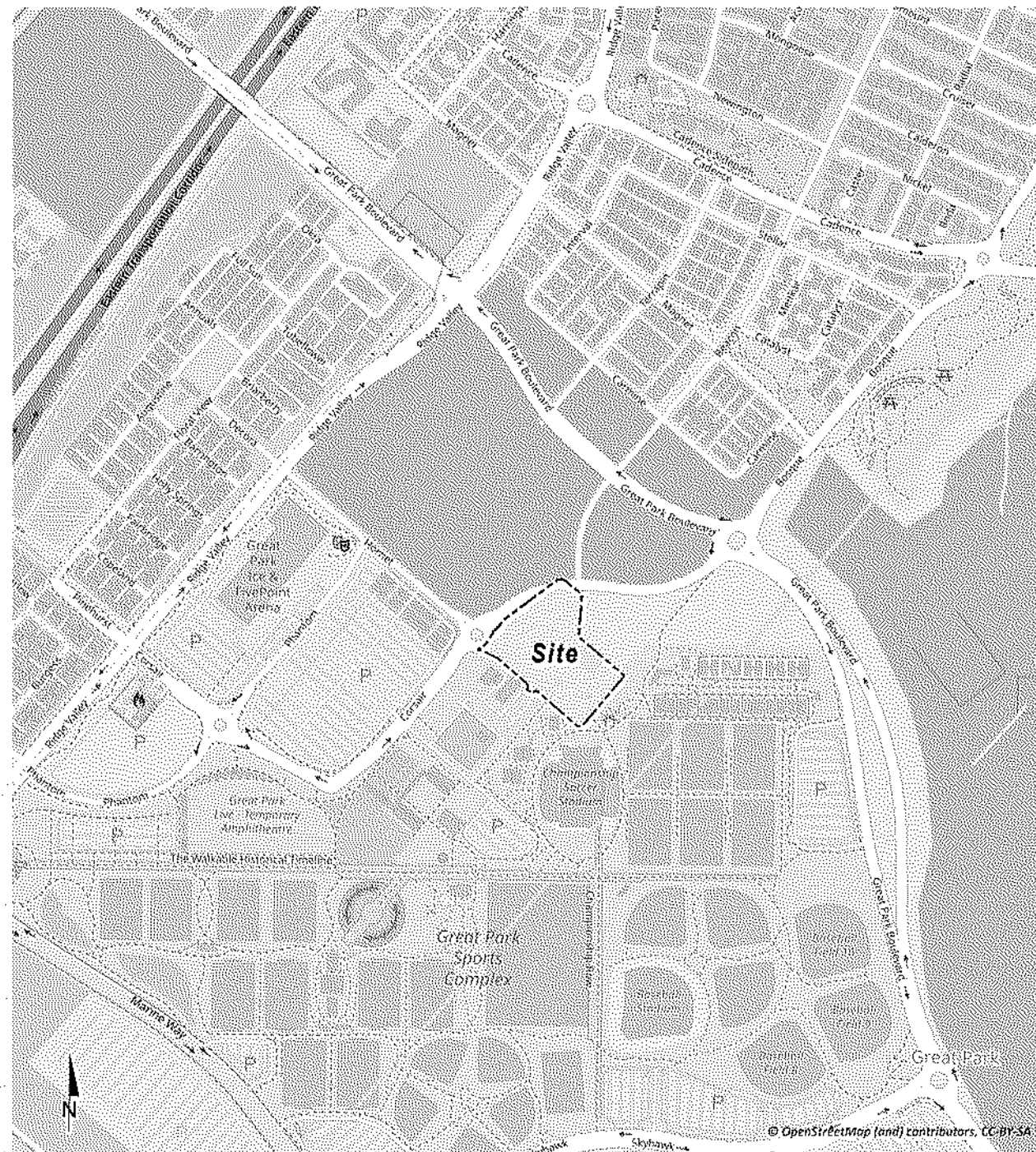
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APPENDIX 4.1: SITE PLAN
APPENDIX 5.1: ON-SITE ANALYSIS
APPENDIX 5.2: INSUL CALCULATIONS
APPENDIX 5.3: INTERIOR ANALYSIS

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EXHIBIT 1-1: PROJECT LOCATION



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LIST OF ABBREVIATED TERMS

(I)	Reference
ANSI	American National Standards Institute
Calveno	California Vehicle Noise
CEQA	California Environmental Quality Act
CNEL	Community Noise Equivalent Level
dBA	A-weighted decibels
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
INCE	Institute of Noise Control Engineering
Leq	Equivalent continuous (average) sound level
Lmax	Maximum level measured over the time interval
Miles per hour	Miles per hour
PPV	Peak Particle Velocity
Project	Canopy Phase 2
REMEL	Reference Energy Mean Emission Level
RMS	Root-mean-square
VdB	Vibration Decibels

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3 REGULATORY SETTING

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic activity generally produces an average sound level that remains constant with time. Air and rail traffic, and commercial and industrial activities, are also major sources of noise in some areas. Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

3.1 STATE OF CALIFORNIA NOISE REQUIREMENTS

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards, and provides guidance for local land use compatibility. State law requires that each county and city adopt a General Plan that includes a Noise Element, which is to be prepared per guidelines adopted by the Governor's Office of Land Use and Climate Innovation (LCI) (13). The purpose of the Noise Element is to *limit the exposure of the community to excessive noise levels*. In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

3.2 CITY OF IRVINE STANDARD CONDITION 3.5

As part of the City of Irvine Standard Condition 3.5 the Project is required to submit final acoustical report. As stated in the City of Irvine Standard Condition 3.5 this report is required to "demonstrate that the development will be sound attenuated against present and projected noise levels including stationary, roadway, aircraft, helicopter, and railroad noise to meet City interior and exterior noise standards. The final acoustical report shall include all information required by the City's Acoustical Report Information Sheet (Form 42-48). The report shall be accompanied by a list identifying the sheet(s) of the building plans that include required sound attenuation measures." The City's Acoustical Report information Sheet (Form 42-48) is included in Appendix 3.1.

3.3 CITY OF IRVINE GENERAL PLAN NOISE ELEMENT

The City of Irvine has adopted a Noise Element of the General Plan to control and abate environmental noise, and to protect the citizens of the City of Irvine from excessive exposure to noise. (14) The Noise Element specifies the maximum exterior and interior noise levels for new developments impacted by transportation noise sources such as arterial roads, freeways, airports, and railroads. In addition, the Noise Element identifies noise policies designed to protect, create, and maintain an environment free from noise that may jeopardize the health or welfare of sensitive receivers, or degrade the quality of life. To protect the City of Irvine residents from excessive noise, the Noise Element contains the following three objectives:

16924-02	19	Canopy Phase 2
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EXECUTIVE SUMMARY

Urban Crossroads, Inc. has prepared this noise study to determine the noise exposure and the necessary noise abatement measures for the Canopy Phase 2 neighborhood ("Project"). The Project site is located at the northeast corner of the Beacon and Hornet Intersection, in the City of Irvine. The Project is to consist of commercial development and includes the construction of four commercial buildings. This noise analysis was prepared to satisfy the City of Irvine Standard Condition 3.5:

Demonstrate that the development will be sound attenuated against present and projected noise levels including stationary, roadway, aircraft, helicopter, and railroad noise to meet City interior and exterior noise standards. The final acoustical report shall include all information required by the City's Acoustical Report Information Sheet (Form 42-48). The report shall be accompanied by a list identifying the sheet(s) of the building plans that include required sound attenuation measures. (1)

Exterior Noise Levels

The future long-range exterior traffic noise analysis calculations show that the unmitigated exterior noise level levels at the building facade will range from 42.5 to 58.4 dBA CNEL.

Interior Noise Abatement

The project interior noise levels are expected to range from 19.1 to 37.0 dBA CNEL with windows/storefronts with a minimum STC rating of 31. The interior noise level analysis shows that all units will satisfy the City of Irvine's 55 dBA CNEL interior noise standards for Commercial land uses.

16924-02	5	Canopy Phase 2
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- N-1 Maintain healthy and safe noise environments consistent with the standards in Table 1 through site design and location.
- N-2 Reduce noise from nontransportation sources such that City residents are not exposed to stationary noise levels that exceed City Noise Ordinance standards.
- N-3 Achieve maximum efficiency in noise abatement efforts through establishing minimum standards, intergovernmental coordination, and public information programs.

The noise policies specified in the City of Irvine Noise Element provide the guidelines necessary to satisfy these three objectives. To prevent exposure to mobile noise levels in excess of the CNEL standards for residents, the City of Irvine General Plan Noise Element identifies an exterior noise level limit of 45 dBA CNEL for residential uses, and identifies interior noise standards of 45 dBA CNEL, for a closed window condition with a means of mechanical ventilation, and 55 dBA CNEL for a windows open condition for residential uses (Table 3) that are impacted by transportation noise sources such as arterial roads, freeways, airports and railroads. The Noise Element also provides several policies to reduce noise impacts from stationary noise sources, including requirements for new developments to propose abatement measures for any potential noise sources known at the time of submittal. To efficiently reduce noise impacts in the City, the Noise Element requires review of the latest noise standards, including the City Noise Ordinance, to continue to be effective in restricting future noise impacts. (14)

3.3.1 Land Use Compatibility

The noise criteria identified in the City of Irvine Noise Element are guidelines to evaluate the land use compatibility of transportation-related noise. The compatibility criteria, shown in Exhibit 3-1, provide the City with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels.

The City's Land Use Noise Compatibility (Table 4 of the Noise Element), presented here as Exhibit 3-1, provides guidelines to evaluate the acceptability of the transportation-related noise level impacts. These guidelines are based on the Governor's Office of Planning and Research and are used to assess the long-term traffic noise impacts on land uses. Land uses such as the commercial units of the Project are considered clearly compatible with exterior noise levels below 65 dBA CNEL and normally compatible with noise levels below 75 dBA CNEL. "For normally compatible land use, new construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features are included in the design." The City uses 65 dBA CNEL as the critical criterion for assessing the compatibility of noise-sensitive land uses with noise sources. The City requires that, for new residential land uses, the noise levels in the exterior areas considered by the City to be noise sensitive not exceed 65 dBA CNEL. In addition, the City requires that commercial developments achieve an indoor noise standard of 55 dBA CNEL and that residential developments achieve an indoor noise standard of 45 dBA CNEL with windows closed, which is based on the California Building Code.

16924-02	20	Canopy Phase 2
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CITY OF IRVINE HANGAR 10 RECONSTRUCTION

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---	--------------------------------------

△ Date	Description
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name
HANGAR 10 RECONSTRUCTION
Project Number
007.3945.000
Description
CANOPY PHASE 2 NOISE ANALYSIS

Scale

G2.104

CITY OF IRVINE
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SHEET LEGEND

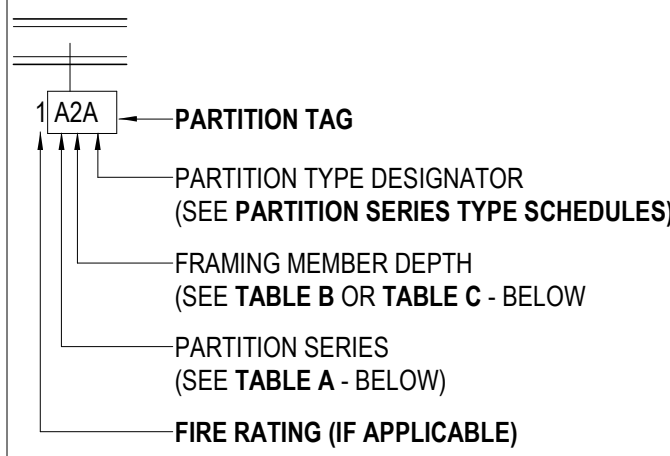


TABLE A- PARTITION SERIES CONSTRUCTION ASSEMBLY

SERIES	SHEATHING	FRAMING MEMBERS	SHEATHING
A	1-LAYER	STUD	1-LAYER
C	1-LAYER	STUD	2-LAYERS
D	1-LAYER	STUD	NONE
E	2-LAYERS	STUD	NONE

TABLE B- FRAMING DEPTH SCHEDULE

TAG NUMBER	WOOD STUD
DESIGNATION	DEPTH
4	3 1/2"
6	5 1/2"
8	7 1/4"
10	9 1/4"

PARTITION SERIES TYPE SCHEDULES

CONSTRUCTION TYPE
A
SLAB TO STRUCTURE

GN-01. PARTITION TYPES ARE NOT SEQUENTIAL.

GN-02. ALL PARTITION SHEATHING TO BE 5/8" GYPSUM BOARD UNLESS OTHERWISE NOTED.

GN-03. REFER TO G5.000. SERIES FOR TOP OF PARTITION AND G5.000. SERIES FOR BOTTOM OF PARTITION CONDITIONS LISTED IN PARTITION SCHEDULE. REFER TO STRUCTURAL DRAWINGS.

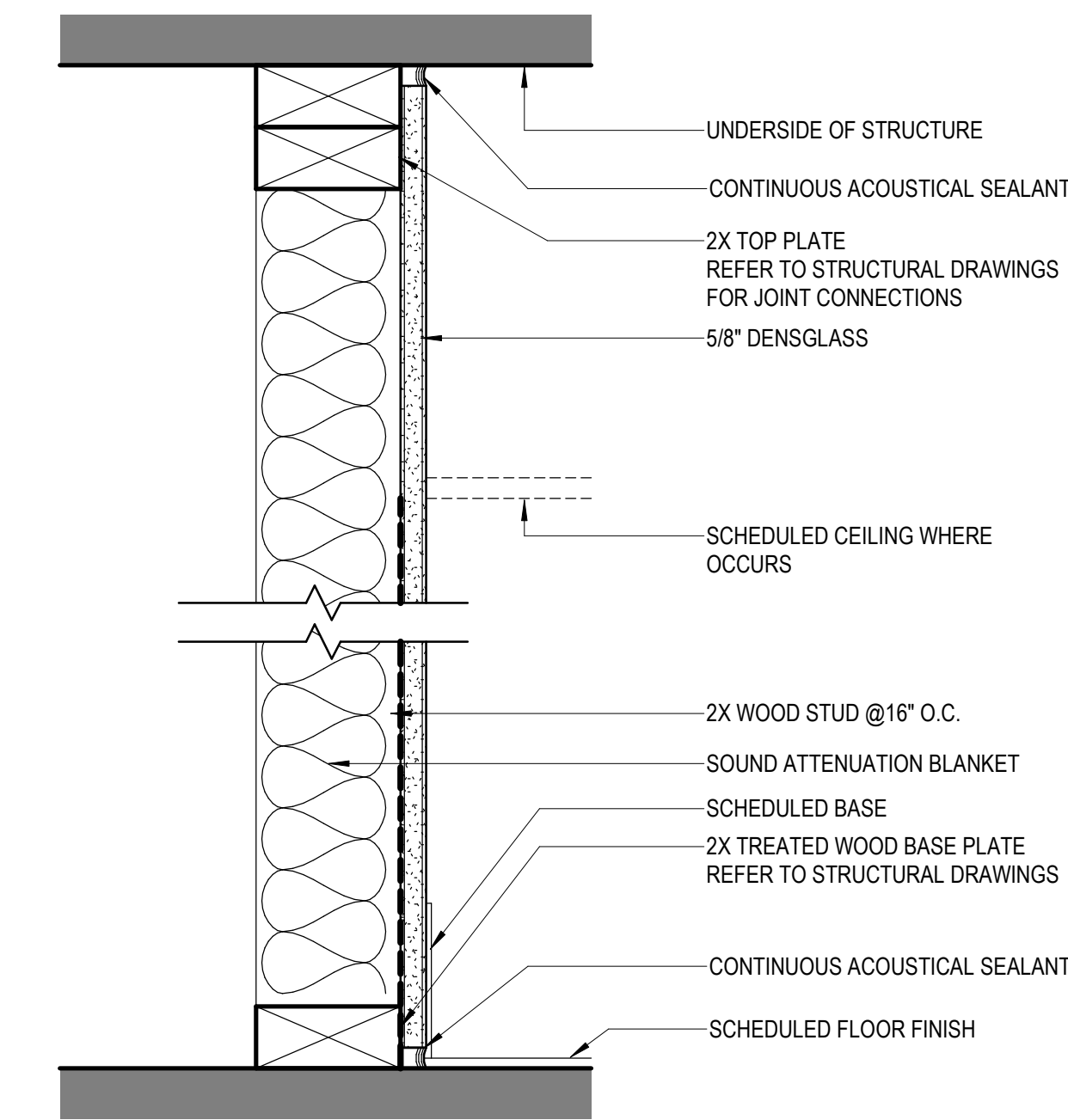
GN-04. ALL PARTITIONS SHALL BE COORDINATED WITH SCHEDULED FINISHES FOR PARTITION LAYOUT AND REQUIRED CLEARANCES.

GN-05. PROVIDE BACKING PER DETAIL IN PARTITIONS FOR ARTWORK HANGING AS INDICATED. SEE CONSTRUCTION PLANS AND/OR INTERIOR ELEVATIONS FOR LOCATIONS.

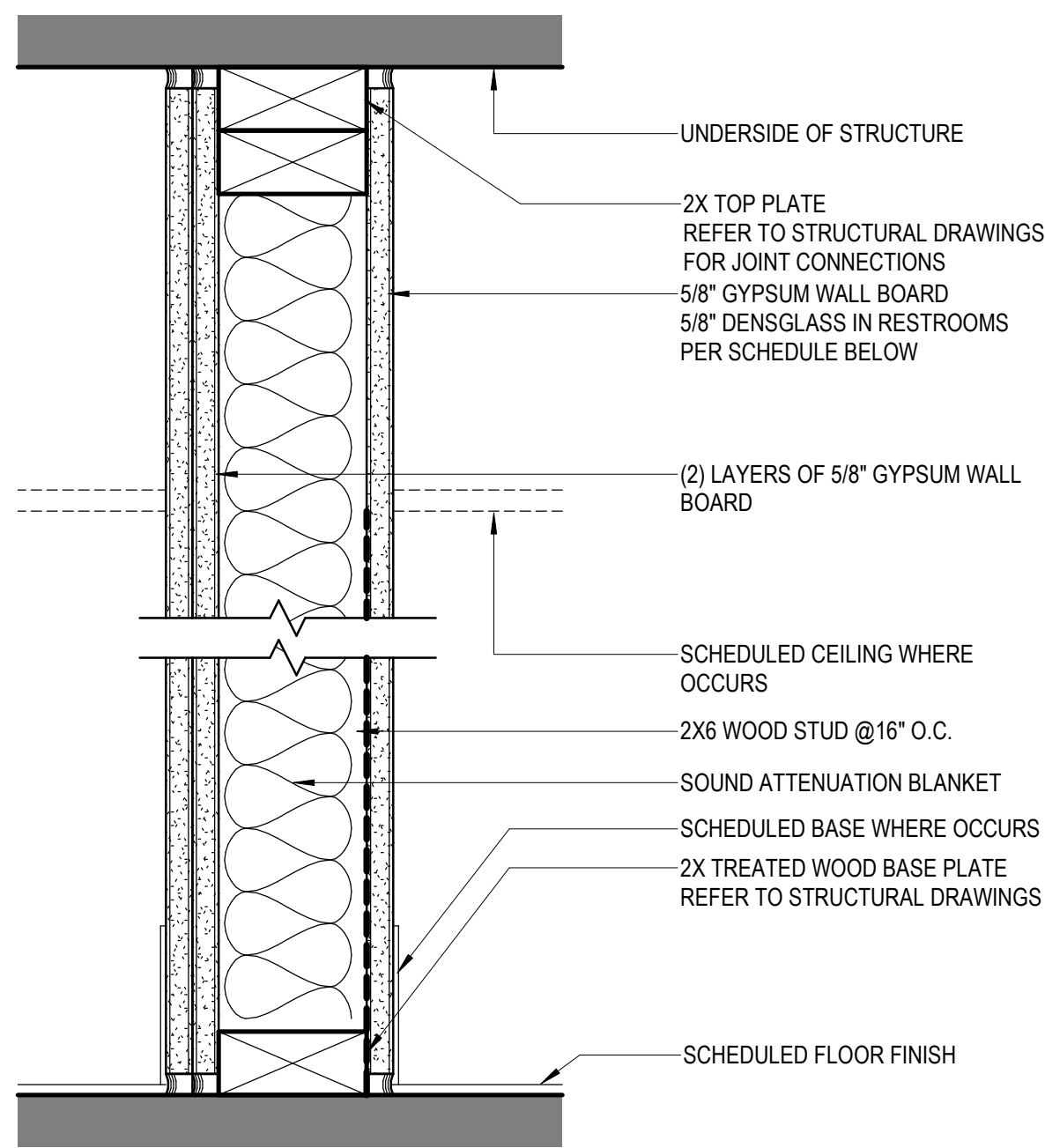
GN-06. CONTRACTOR TO RE-CONFIRM STUD SIZING AND SUBMIT SELECTION CRITERIA FOR REVIEW INCLUDING DELINEATION OF SLAB TO UNDERSIDE OF SLAB INFORMATION

FASTENER SPACING FOR DRYWALL AND SHEATHING
8" O.C. AT PANEL EDGES
12" O.C. AT PANEL FIELD
TYPE 'S' SCREWS

Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
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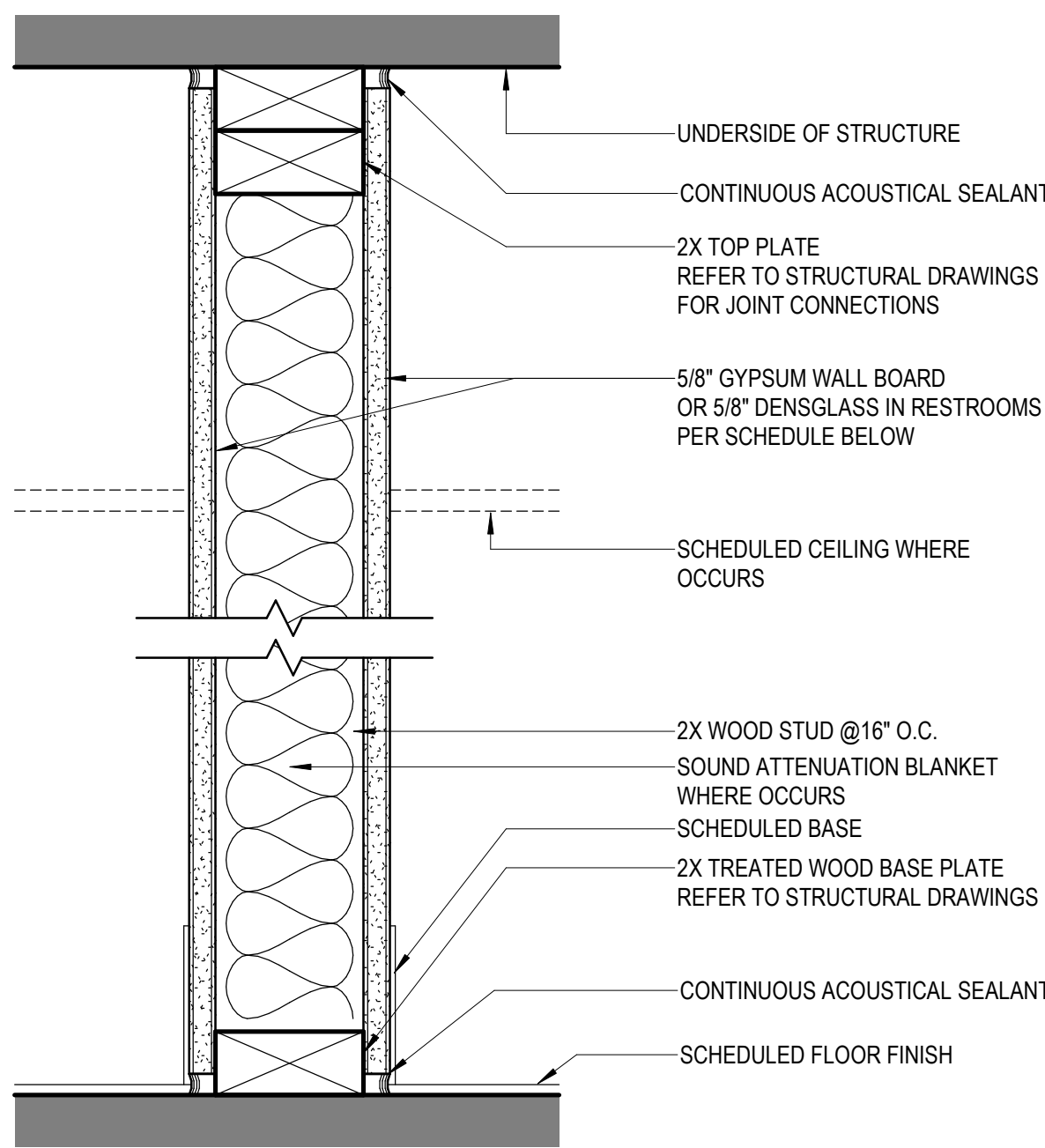


WALL TYPE	FRAMING DEPTH	SPACING	DETAILS TOP	DETAILS BOT	R VALUE	STC Rating	FIRE RTG	REMARKS
D4A	3 1/2"	16" O.C.	S1.030	S1.030	R19	-	-	



WALL TYPE	FRAMING DEPTH	SPACING	DETAILS TOP	DETAILS BOT	R VALUE	STC Rating	FIRE RTG	REMARKS
C6A	5 1/2"	16" O.C.	S1.030	S1.030	R19	40"	-	5/8" DENSGLOSS @RESTROOM SIDE

NOTE:
* ACOUSTICAL REPORT IS A DEFERRED COMPLIANCE ITEM. SEE G0.000.

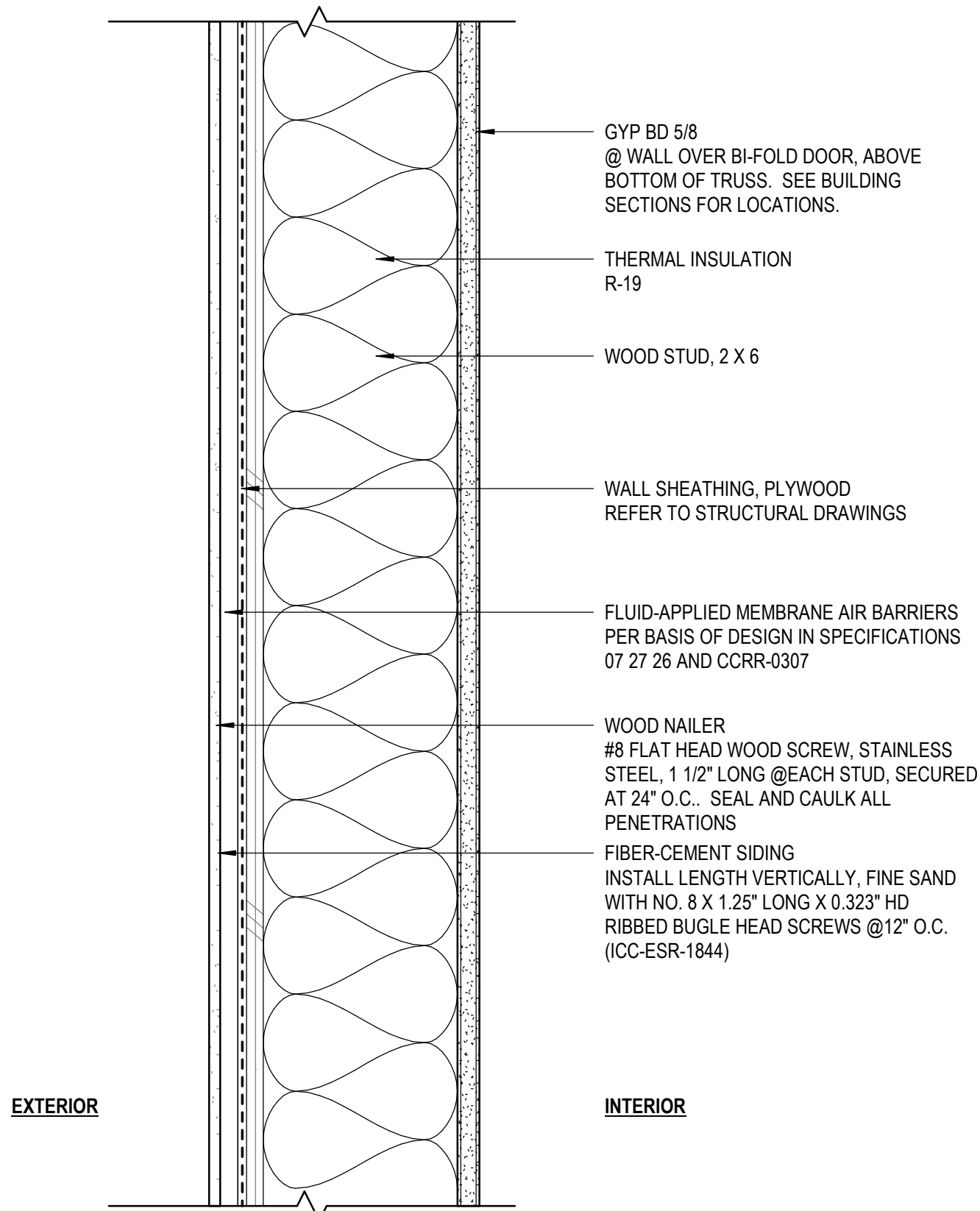


WALL TYPE	FRAMING DEPTH	SPACING	DETAILS TOP	DETAILS BOT	R VALUE	STC Rating	FIRE RTG	REMARKS
A4A	3 1/2"	16" O.C.	S1.030	S1.030	-	-	-	5/8" DENSGLOSS EACH SIDE OF WALL
A6A	5 1/2"	16" O.C.	S1.030	S1.030	R19	-	-	5/8" DENSGLOSS @RESTROOM SIDE

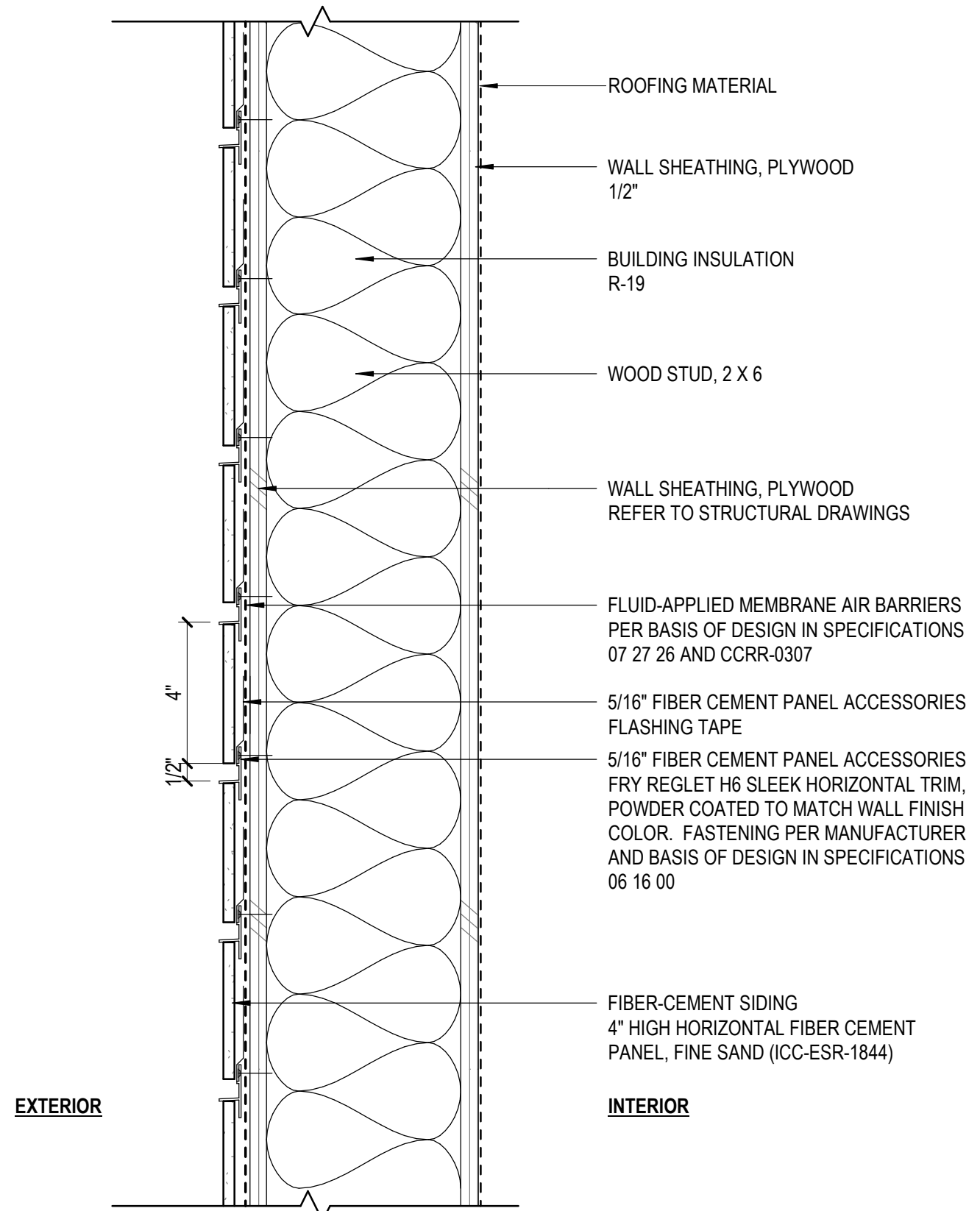
03 PARTITION TYPE 'D'
SCALE: 3" = 1'-0"

02 PARTITION TYPE 'C'
SCALE: 3" = 1'-0"

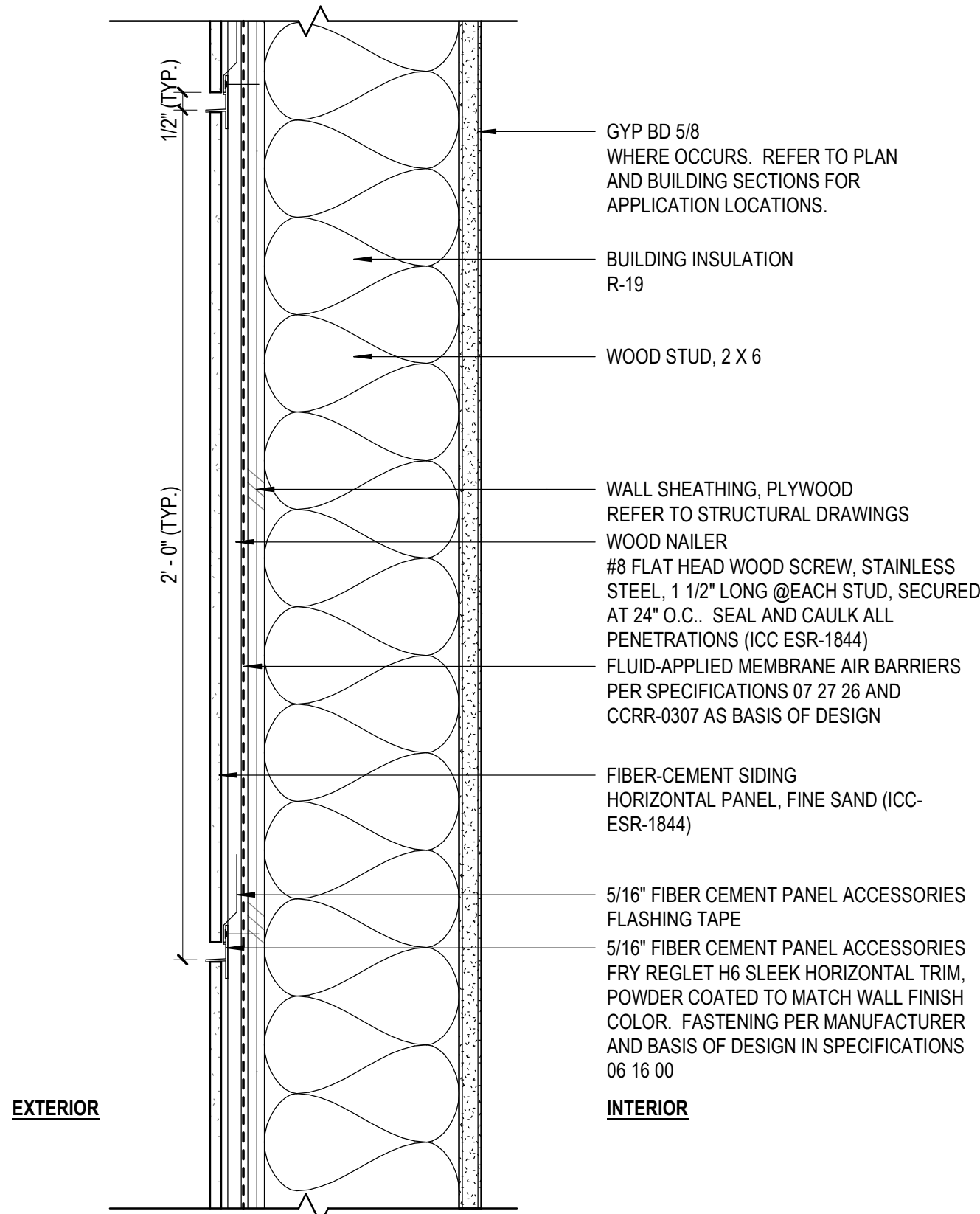
01 PARTITION TYPE 'A'
SCALE: 3" = 1'-0"



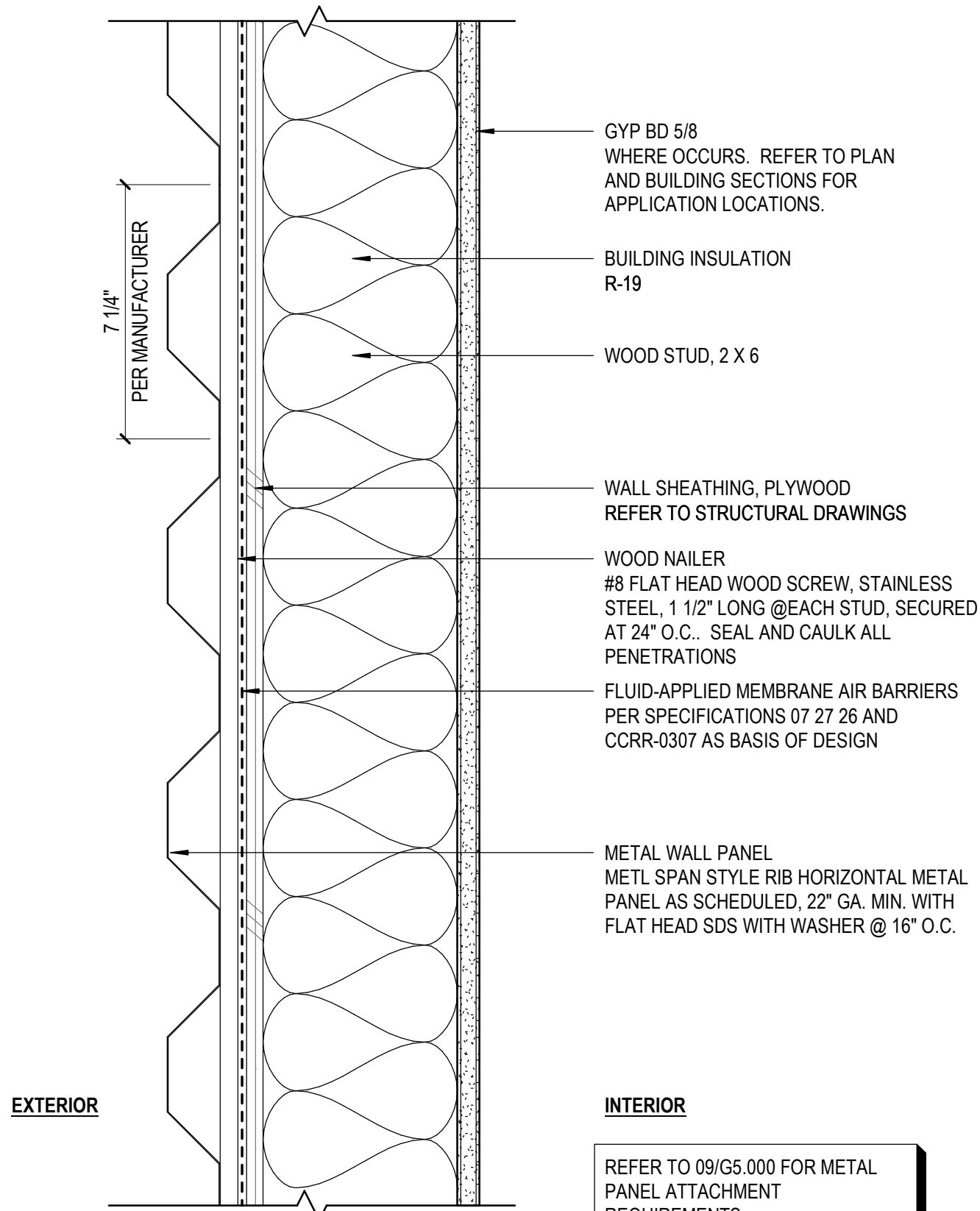
08 EW04 - EXTERIOR FIBER CEMENT BOARD
SCALE: 3" = 1'-0"



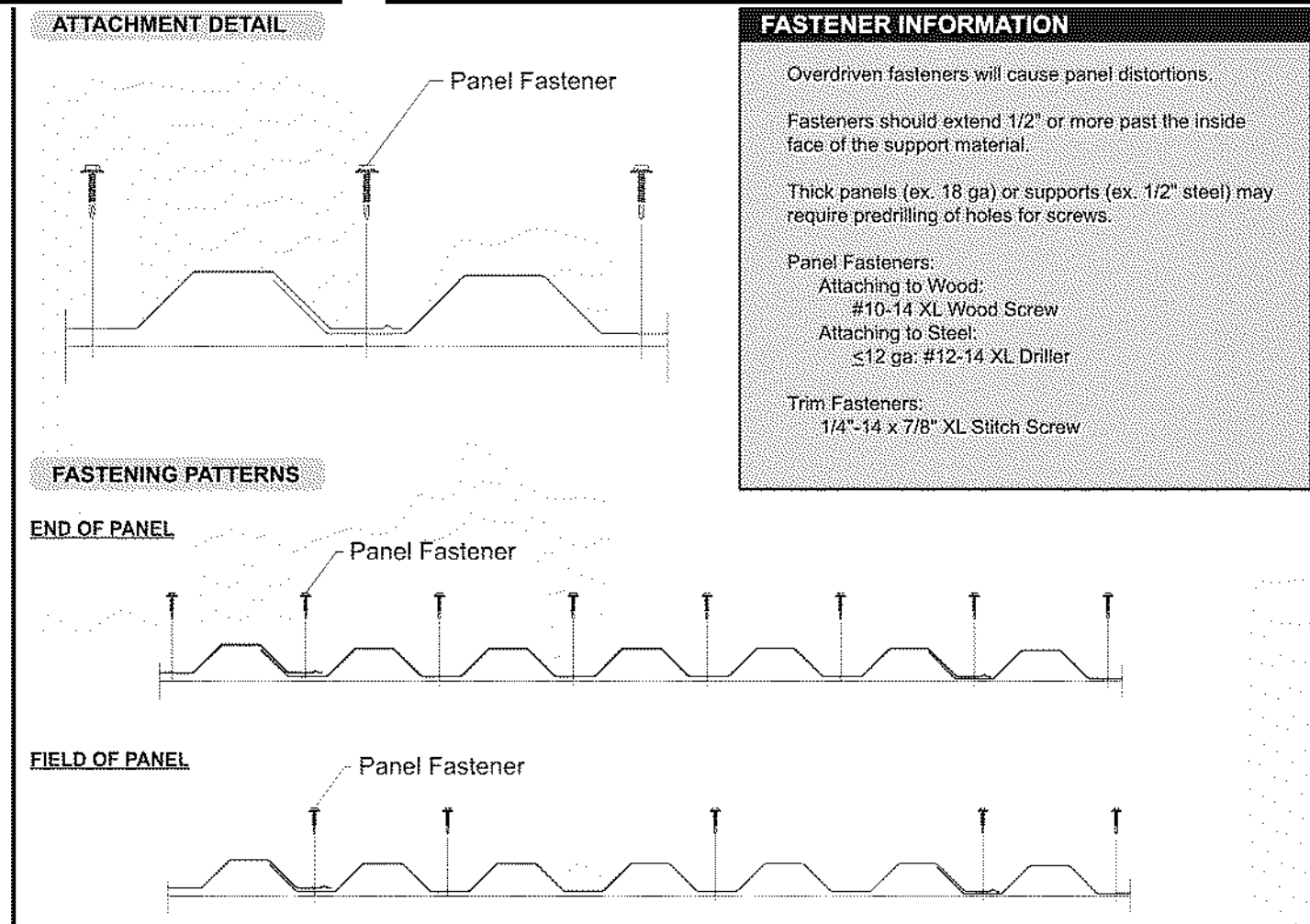
07 EW03 - EXTERIOR 4" FIBER CEMENT SIDING
SCALE: 3" = 1'-0"



06 EW02 - EXTERIOR 24" FIBER CEMENT BOARD
SCALE: 3" = 1'-0"



05 EW01 - EXTERIOR METAL PANEL DETAIL
SCALE: 3" = 1'-0"



BASIS OF DESIGN OR APPROVED EQUAL

09 METAL PANEL ATTACHMENT REQUIREMENTS
SCALE: 12" = 1'-0"

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

PARTITION DETAILS

Scale

NOT TO SCALE

G5.000

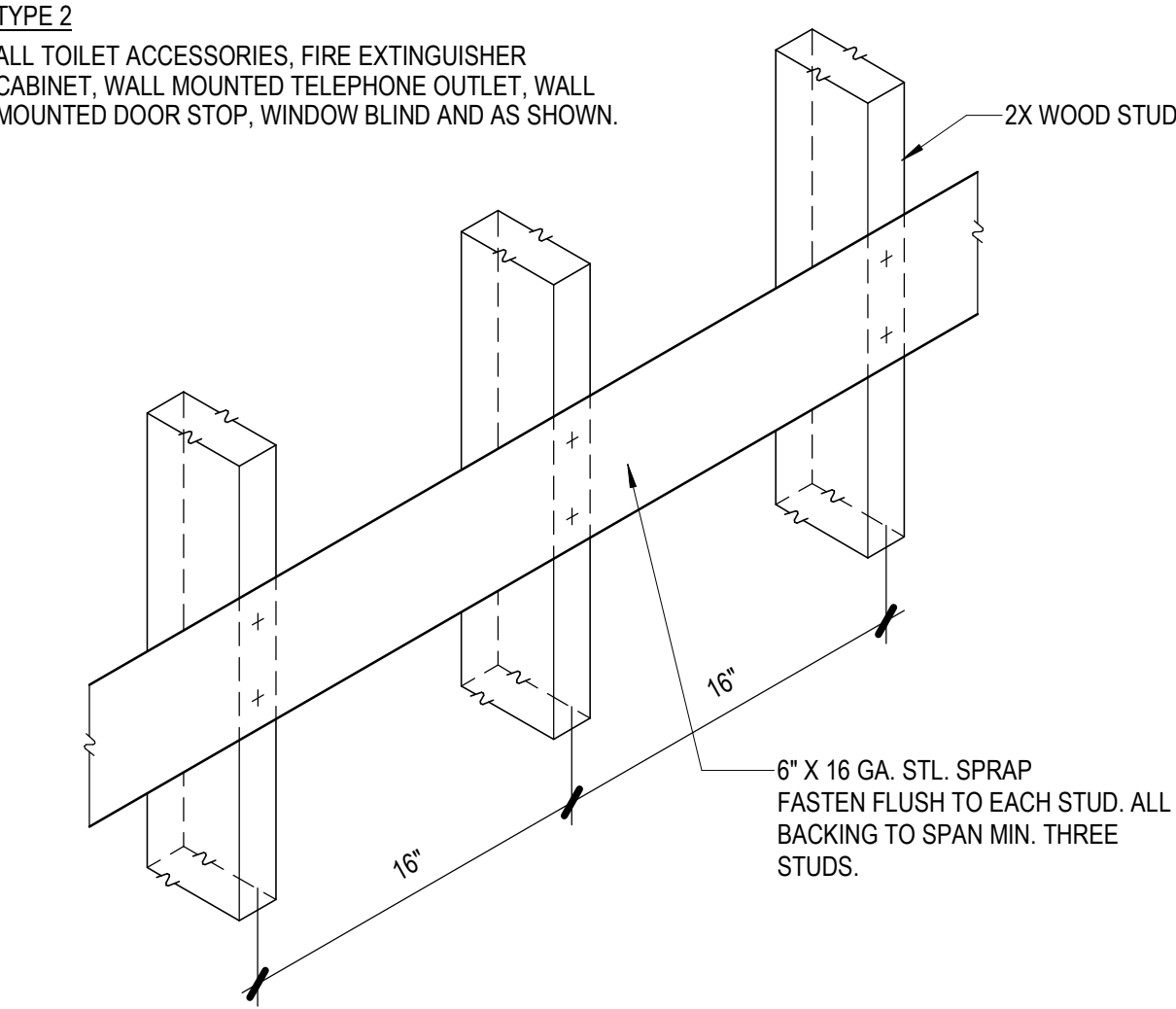
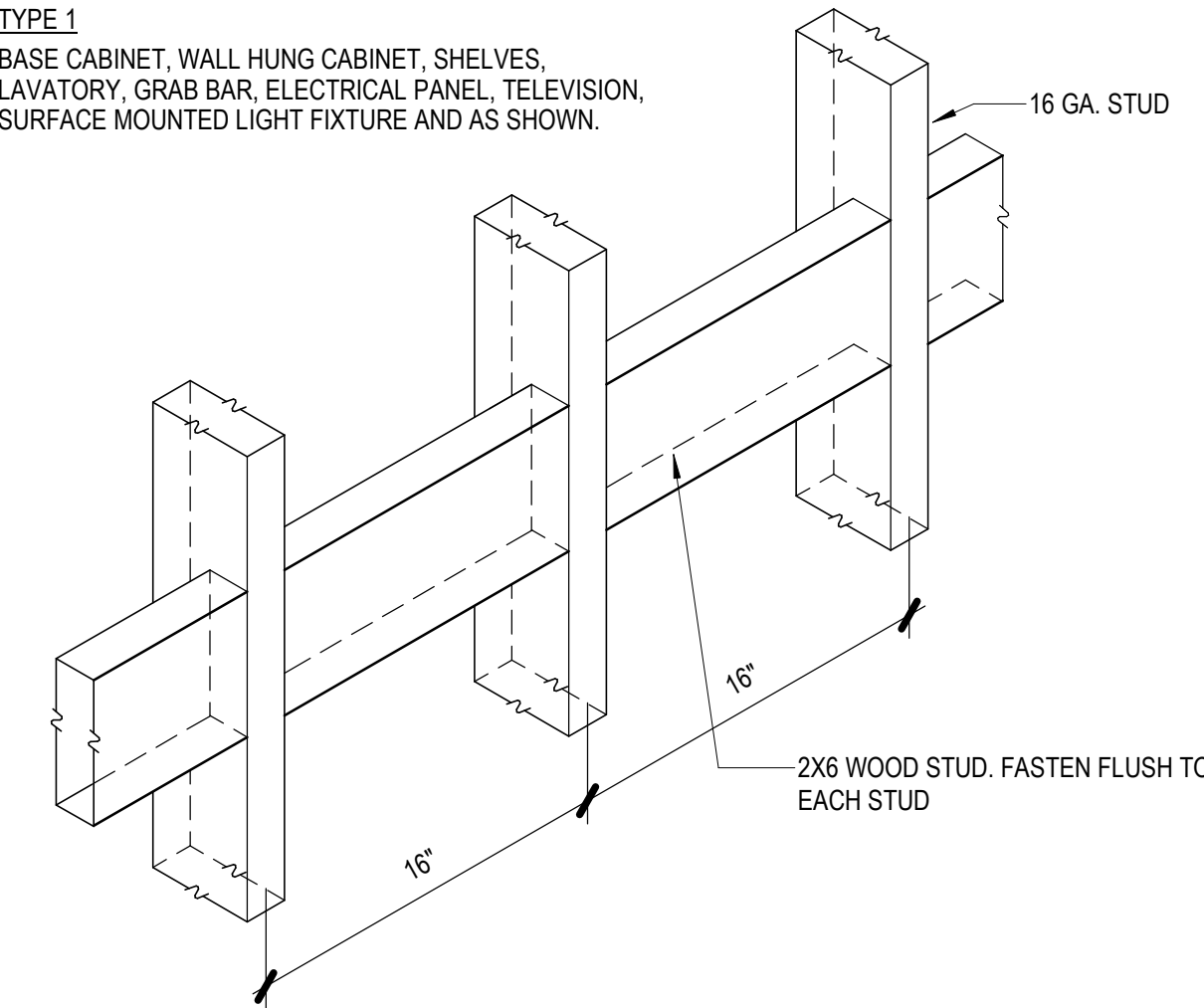
CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

Tel 949.863.9434
Fax 949.553.1676



- NOTES:
1. EXTEND BACKING PLATES TO LAST STUD BEYOND FACE OF FIXTURE OR ACCESSORY - 3 STUDS MIN.
 2. PROVIDE METAL SLEEVES THROUGH WALL FINISH AT FIXTURE FASTENING, TYP.
 3. ALL BACKING PLATES SHOWN OR NOT SHALL BE SCREWED TO STUDS, TYP.

02 BACKING PLATE

SCALE: 3" = 1'-0"

△ Date	Description
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

PARTITION DETAILS

Scale

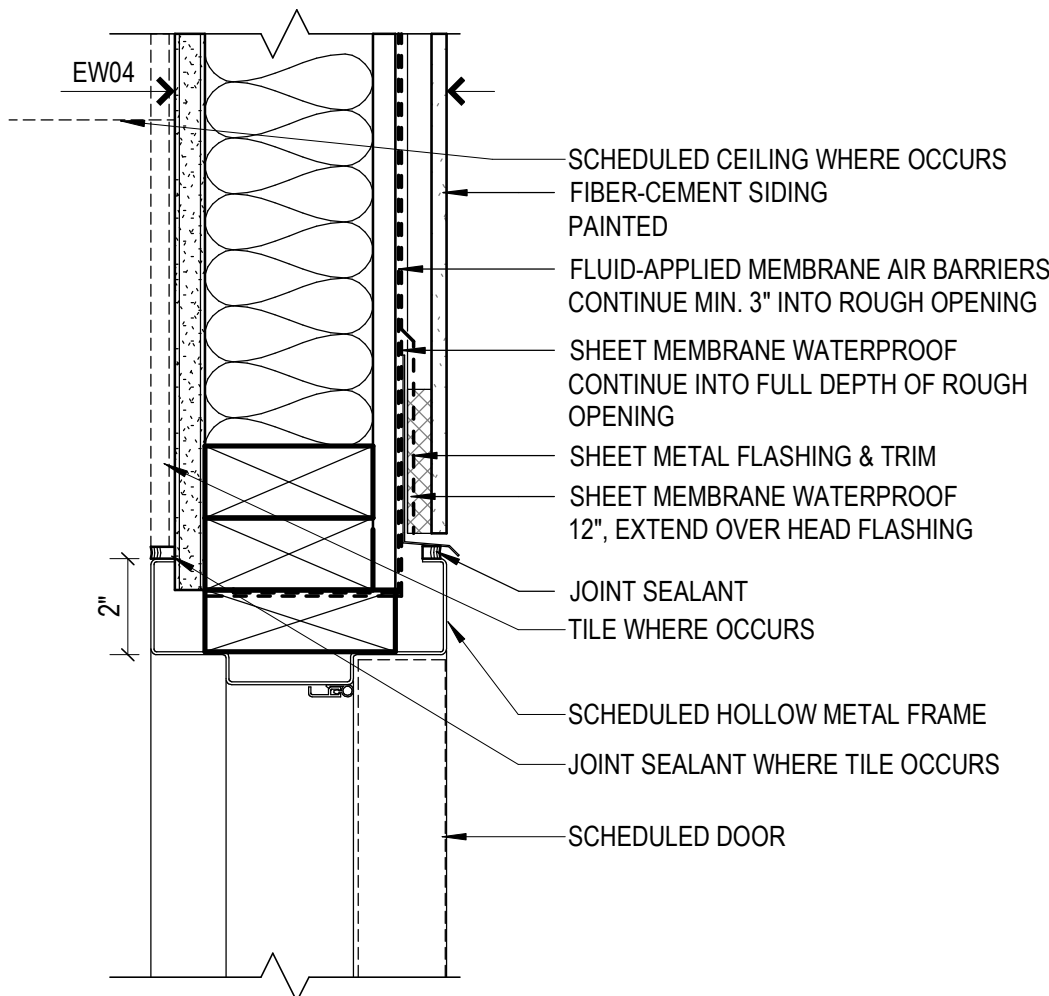
3" = 1'-0"

G5.001

DOOR AND FRAME SCHEDULE

NUMBER	DOOR ASSEMBLY		DOOR				FRAME		FIRE RATING	HARDWARE GROUP	REMARKS
	LOCATION	TYPE	DIMENSIONS			FINISH	MATERIAL	FINISH			
			WIDTH	HEIGHT	THICKNESS						
101.1	ASSUMED DINING A	B	6'-0"	7'-0"	1/2"	AL / GL	AL	EXPT-04	-	3	
101.2	ASSUMED DINING A	B	6'-0"	7'-0"	1/2"	AL / GL	AL	EXPT-04	-	3	
101.3	ASSUMED DINING A	B	6'-0"	7'-0"	1/2"	AL / GL	AL	EXPT-04	-	3	
101.4	ASSUMED DINING A	B	6'-0"	7'-0"	1/2"	AL / GL	AL	EXPT-04	-	3	
101.5	ASSUMED DINING A	C	15'-4"	10'-30"	2"	AL / GL	AL	EXPT-04	-		15'-4" WIDE X 10'-0" HIGH OPENING. HARDWARE GROUP PER MANUFACTURER AND PROVIDES LOCK FUNCTION. FINISH PER ELEVATION.
101.6	ASSUMED DINING A	C	15'-4"	10'-30"	2"	AL / GL	AL	EXPT-04	-		15'-4" WIDE X 10'-0" HIGH OPENING. HARDWARE GROUP PER MANUFACTURER AND PROVIDES LOCK FUNCTION. FINISH PER ELEVATION.
102.1	ASSUMED DINING B	B	6'-0"	7'-0"	1/2"	AL / GL	AL	EXPT-04	-	3	
103.1	ASSUMED DINING C	B	6'-0"	7'-0"	1/2"	AL / GL	AL	EXPT-04	-	3	
104.1	ASSUMED DINING D	B	6'-0"	7'-0"	1/2"	AL / GL	AL	EXPT-04	-	3	
105A	ROOF ACCESS	A	3'-0"	7'-0"	1 3/4"	INSUL HM / EXPT-03	INSUL HM	EXPT-03	-	1	NO LEVER AT EXTERIOR SIDE.
105B	ROOF ACCESS	D	3'-0"	4'-0"	1 3/4"	INSUL HM / EXPT-03	INSUL HM	EXPT-03	-	4	ROOF ACCESS WITH STOREROOM LOCK AND 4-SIDED FRAME. BOTTOM FRAME AT 15'-10" ABOVE FINISH FLOOR (FF=297.90).
107	JANITOR	A	3'-0"	7'-0"	1 3/4"	INSUL HM / EXPT-03	INSUL HM	EXPT-03	-	1	PROVIDE 3/4" UNDERCUT AT DOOR LEAF.
108	WOMEN'S RESTROOM	A	3'-0"	7'-0"	1 3/4"	INSUL HM / EXPT-03	INSUL HM	EXPT-03	-	2	
109	MEN'S RESTROOM	A	3'-0"	7'-0"	1 3/4"	INSUL HM / EXPT-03	INSUL HM	EXPT-03	-	2	

- NOTE:
1. REFER TO FINISH SCHEDULE ON G8.000 FOR EXTERIOR PAINT (EXPT-0X) FINISHES.
2. ALL GLASS TO BE VITRO INSULATING UNIT, SOLARBAN 60 ON STARCHIRE 6MM(2) | AIR 1/2" | STARCHIRE 6MM
OUTDOOR LITE: STARCHIRE WITH A SECOND SURFACE SOLARBAN 60,
1/2" AIR;
INDOOR LITE: STARCHIRE 6MM (2).
REFER TO GLASS DATA SHEET ON THIS SHEET.
3. OVERALL U-FACTOR FOR OPAQUE DOORS (DOOR 105A, 105B, 107, 108 AND 109): 0.5 (REFER TO MECHANICAL DRAWINGS).

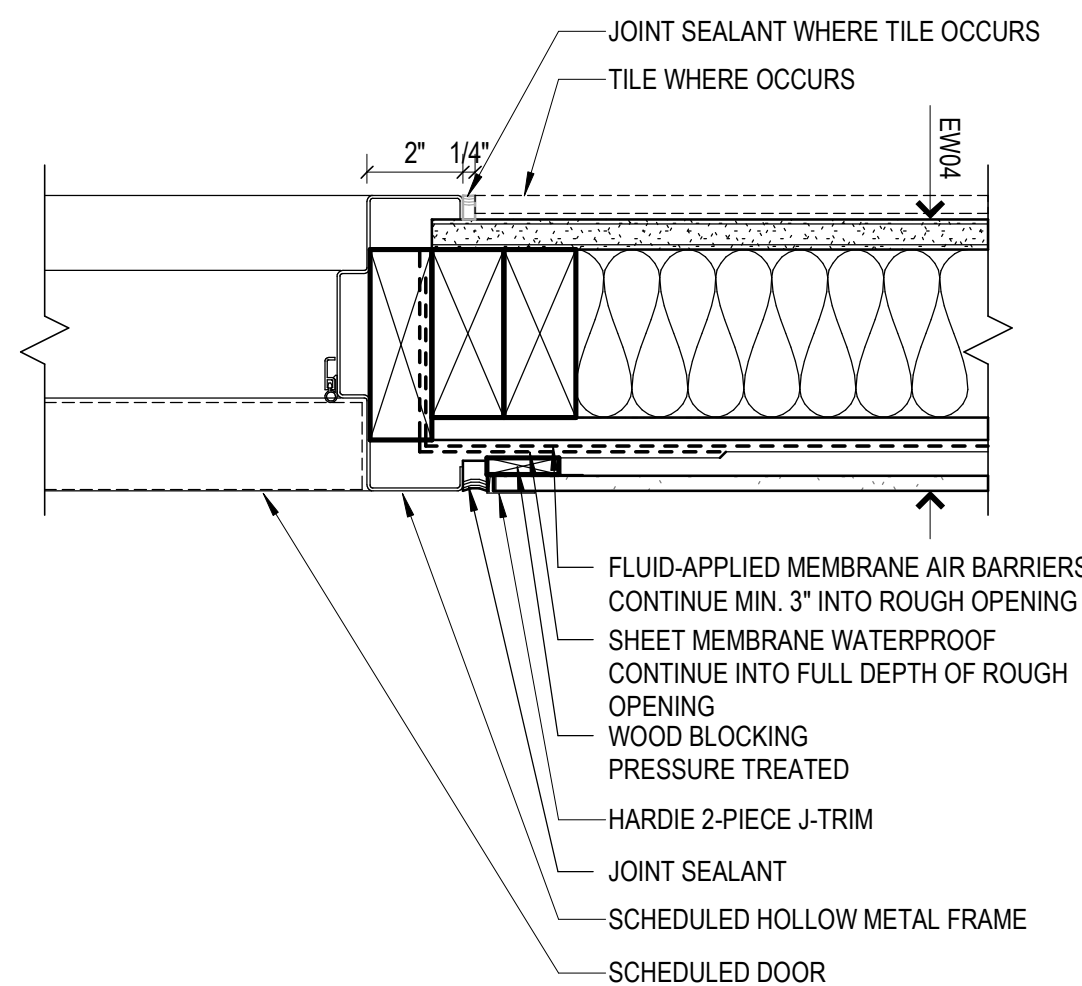
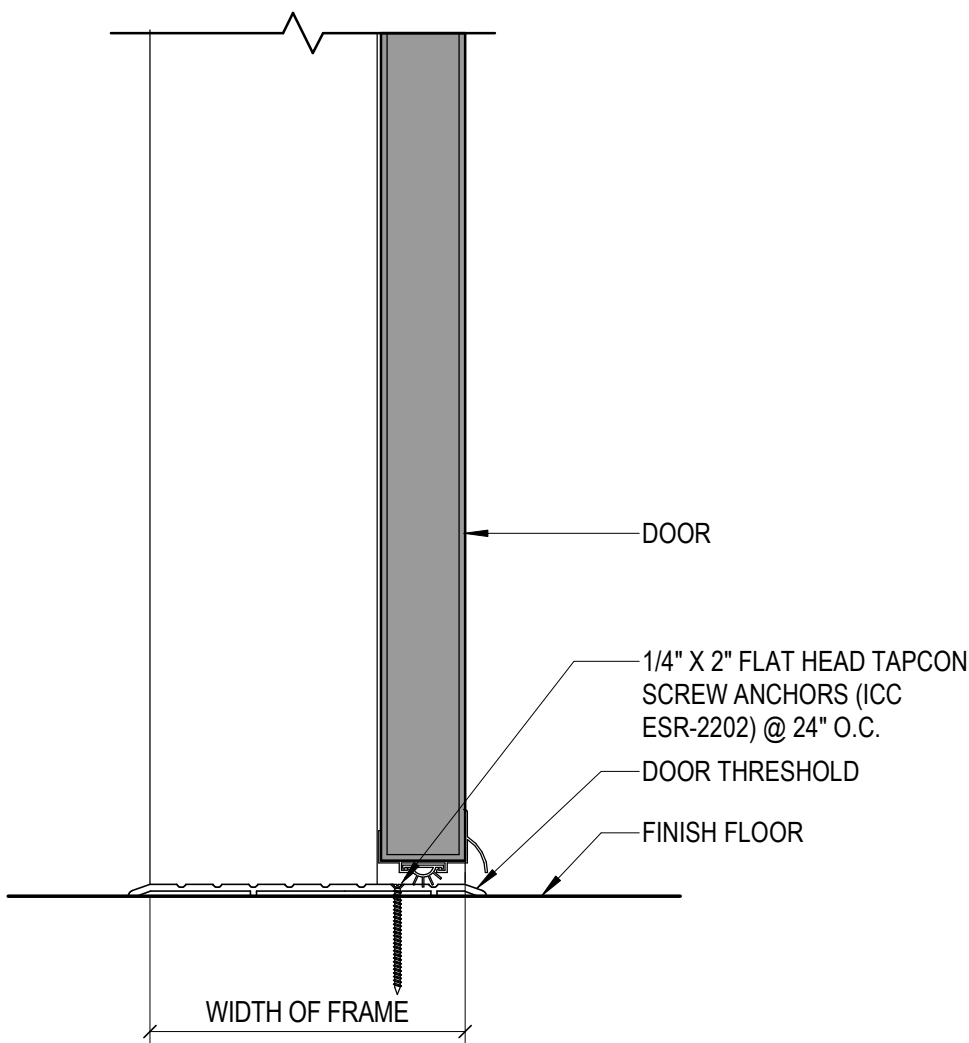


Mitro Architectural Glass											
Thickness (inches)	Transmittance (%)	Transmittance (1 inch)	Transmittance (Total Rate)	Reflectance (Total Rate)	U-Value (BTU/hr-ft²-F)	Sound Transmission Coefficient (STC)	Sound Transmission Class (STC)	Sound Transmission Class (STC)	Sound Transmission Class (STC)	Sound Transmission Class (STC)	Sound Transmission Class (STC)
Solarban® 60 on Starphire® 6mm (2) Air 1/2" (12.7mm) Starphire® 6mm	1*	24	74	39	41	11	12	0.29	0.27	0.48	0.41
								1.80	Low		

Specifications:
Insulating Unit Construction:
Solarban® 60 on Starphire® 6mm (2) | Air 1/2" (12.7mm) | Starphire® 6mm
Outdoor Lite: Starphire® with a second surface Solarban® 60
Indoor Lite: Starphire® 6mm
Vitro Approved Manufacturers/Where to Buy Vitro Products: Vitro Certified™ Network
Certification: Vitro (re)s are Cradle to Cradle certified by McDonough Brannan Design Chemistry, LLC (MBC) (www.mbc.com)

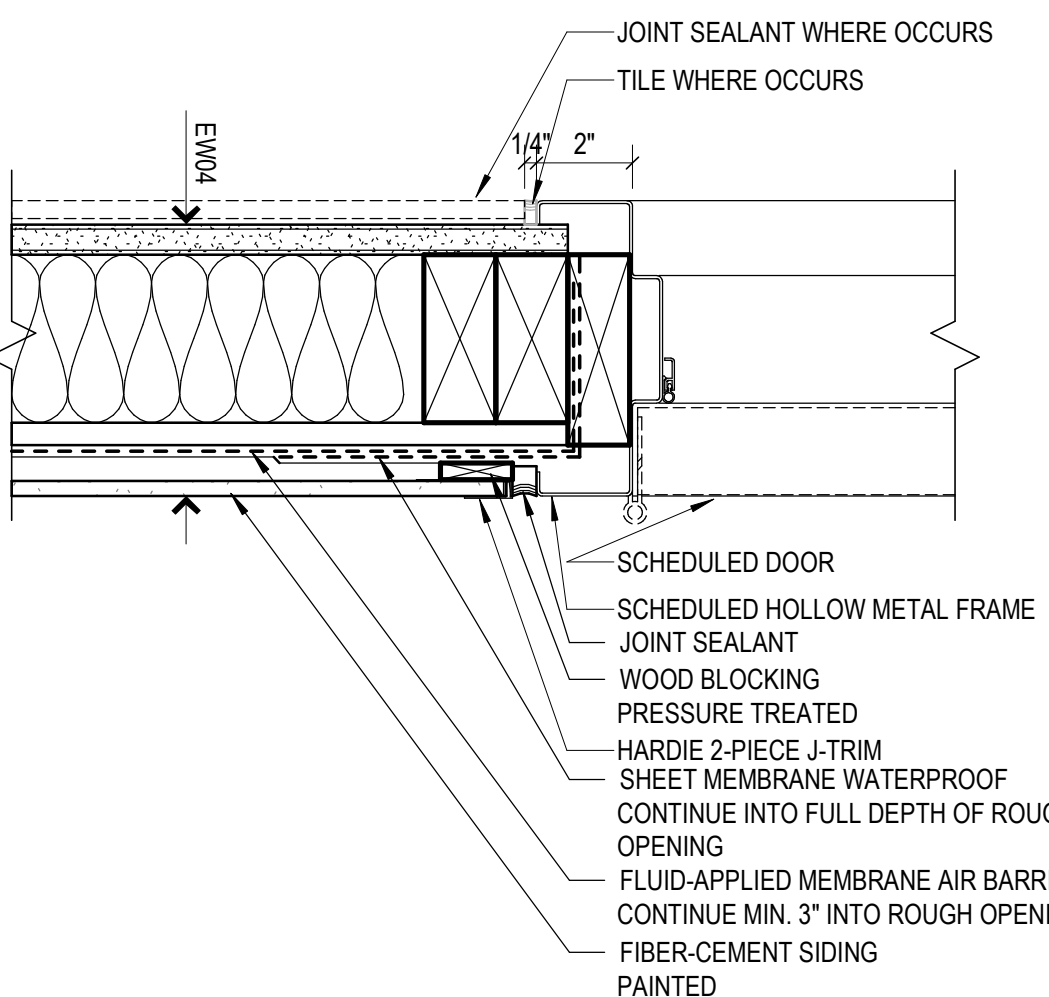
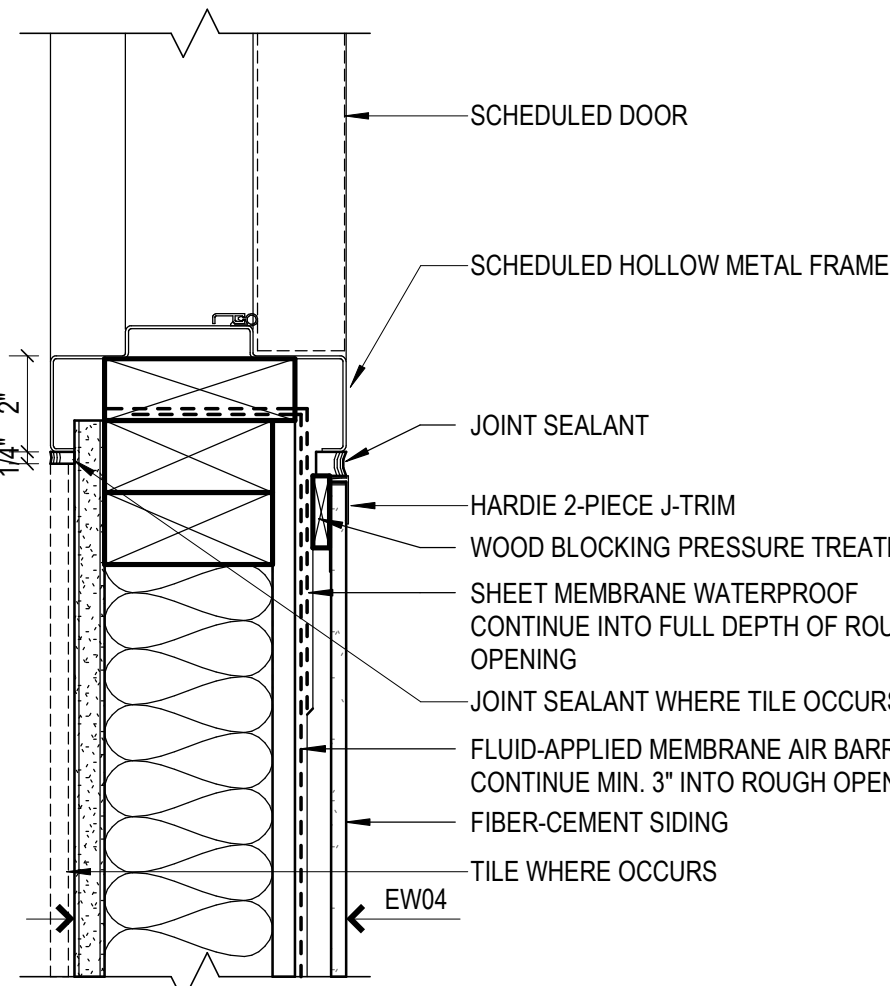
06 DOOR - HOLLOW METAL HEAD EXT.
SCALE: 3" = 1'-0"

GLASS DATA SHEET



11 DOOR - THRESHOLD
SCALE: 3" = 1'-0"

07 DOOR - HOLLOW METAL JAMB EXT.
SCALE: 3" = 1'-0"



12 DOOR - HOLLOW METAL SILL EXT.
SCALE: 3" = 1'-0"

08 DOOR - HOLLOW METAL HINGE JAMB EXT.
SCALE: 3" = 1'-0"

HARDWARE TYPES

HARDWARE SET 1: SINGLE EXTERIOR LOCKSET

- A. SCHLAGE, #L9080-03A-622, STOREROOM LOCKSET, 6 PIN, SAME FINISH BOTH SIDES, 622 MATTE BLACK, 38" A.F.F. TO CENTERLINE OF LEVER.
- B. 4 1/2" X 4 1/2" HAGER BB-1279 (STANLEY AND MCKINNEY ARE ACCEPTABLE ALTERNATES), BUTT HINGES TWO PAIR, FLAT BLACK L1.
- C. TRIMCO #1211, FLOOR STOP, FINISH TO MATCH LEVER.
- D. PEMCO 316AS, PERIMETER GASKET, BSP
- E. PEMCO 216AV, DOOR SWEEP, BSP
- F. NPG 325, THRESHOLD, MBL

HARDWARE SET 2: SINGLE EXTERIOR LATCHSET

- A. SCHLAGE, #L9010-03A-626, LATCHSET, 6 PIN, SAME FINISH BOTH SIDES, 622 MATTE BLACK, 38" A.F.F. TO CENTERLINE OF LEVER.
- B. 4 1/2" X 4 1/2" HAGER BB-1279 (STANLEY AND MCKINNEY ARE ACCEPTABLE ALTERNATES), BUTT HINGES TWO PAIR, FLAT BLACK L1.
- C. TRIMCO #1211, FLOOR STOP, FINISH TO MATCH LEVER.
- D. PEMCO 316AS, PERIMETER GASKET, BSP
- E. PEMCO 216AV, DOOR SWEEP, BSP
- F. NPG 325, THRESHOLD, MBL

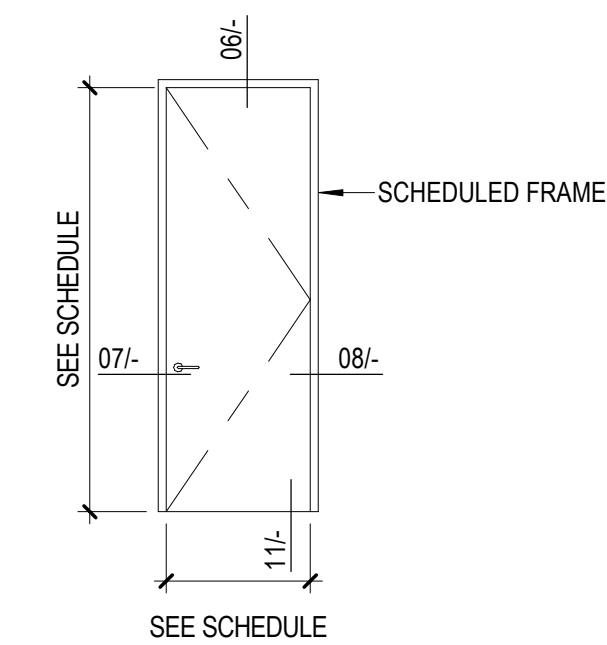
HARDWARE SET 3: DOUBLE GLASS EXTERIOR

- A. FLOOR CLOSER: DORMA, BTS-75V-BF, ADJUSTABLE DELAYED ACTION RECESSED 90 DEGREE ROTATION WITH TOP PIVOT, WITH HOLD OPEN FEATURE.
- B. (2) CRL PH20ABS BRUSHED STAINLESS TOP DOOR PATCH FITTING WITH 1NT303 INSERT, MATTE BLACK FINISH.
- C. (2) CRL PH10CBS BRUSHED STAINLESS BOTTOM DOOR PATCH WITH 1NT 301 INSERT, MATTE BLACK FINISH.
- D. (1) CRL PA100JGKBS BLUMCRAFT BRUSHED STAINLESS LEFT HAND REVERSE GLASS MOUNT KEYED ACCESS 1" EXTERIOR, TOP SECURING PANIC HANDLE, LOCKABLE FROM INTERIOR AND EXTERIOR, MATTE BLACK FINISH.
- E. (1) CRL PA100JGKBS BLUMCRAFT BRUSHED STAINLESS RIGHT HAND REVERSE GLASS MOUNT KEYED ACCESS 1" EXTERIOR, TOP SECURING PANIC HANDLE, LOCKABLE FROM INTERIOR AND EXTERIOR, MATTE BLACK FINISH.
- F. TRIMCO #1211 FLOOR STOP, FINISH TO MATCH PULLS @ INSIDE OF ROOM ONLY.

HARDWARE SET 4: SINGLE EXTERIOR ROOF ACCESS

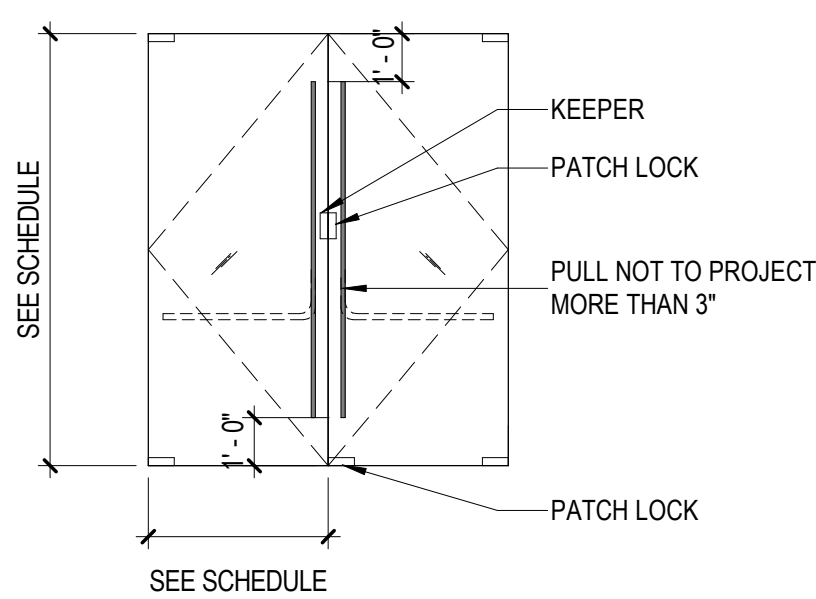
- A. SCHLAGE, #L9080-03A-626, STOREROOM LOCKSET, 6 PIN, SAME FINISH BOTH SIDES, 622 MATTE BLACK, 38" A.F.F. TO CENTERLINE OF LEVER.
- B. 4 1/2" X 4 1/2" HAGER BB-1279 (STANLEY AND MCKINNEY ARE ACCEPTABLE ALTERNATES), BUTT HINGES ONE PAIR, FLAT BLACK L1.
- C. 4-SIDED ACCESS DOOR AND FRAME, HMF EXPRESS, 3'-0" WIDE, PAINTED TO MATCH EXPT-03.
- D. PEMCO 316AS, PERIMETER GASKET, BSP

DPPR TYPE



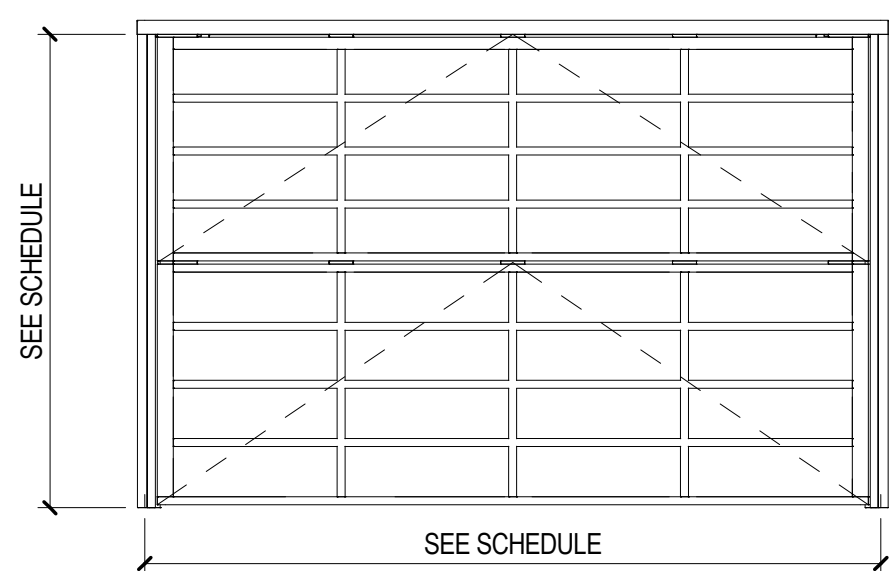
TYPE "A"

FRAMED INSULATED HOLLOW METAL DOOR SINGLE DOOR



TYPE 'B'

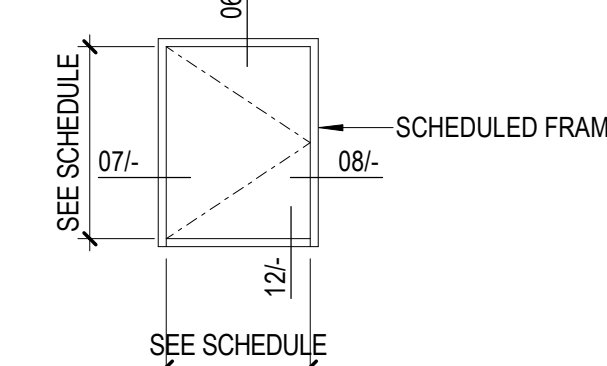
FRAMELESS GLASS DOUBLE DOOR



REFER TO A6.001 AND A6.002 FOR DETAILS

TYPE "C"

OVERHEAD MOTORIZD GARAGE DOOR



TYPE "D"

FRAMED INSULATED HOLLOW METAL ACCESS SINGLE DOOR

LEGEND

- AL ALUMINUM
- EXPT EXTERIOR PAINT (REFER TO FINISH SCHEDULE ON G8.000)
- GL GLASS
- INSUL HM INSULATED HOLLOW METAL

DOOR NOTES

- CONTRACTOR TO PROVIDE COMPLETE DOOR/HARDWARE PACKAGE TO FUNCTION AS INDICATED. ALL DOORS AND HARDWARE SHALL BE BUILDING STANDARD, U.O.N. SUBMIT COMPLETE SPECS TO ARCHITECT FOR REVIEW AND APPROVAL.
- ALL HARDWARE TO MEET TITLE 24 AND ACCESSIBILITY REQUIREMENTS. SEE REQUIRED CLEARANCES AND MOUNTING HEIGHTS ON SHEET G1.021 DETAIL #04. SEE REQUIRED ACCESSIBLE THRESHOLD ON SHEET G1.020 DETAIL #01. SEE REQUIRED DOOR MANEUVERING CLEARANCE ON SHEET G1.020 DETAIL #02.
- CONTRACTOR TO FIELD VERIFY CONDITION, HAND, THROAT SIZE AND WORKABILITY OF ALL DOORS AND HARDWARE, REPAIR OR REPLACE AS REQUIRED.
- HINGES AT RATED ASSEMBLIES SHALL BE BALL BEARING.
- DOOR AND GATE OPENING FORCE. THE FORCE FOR PUSHING OR PULLING OPEN A DOOR OR GATE OTHER THAN FIRE DOORS SHALL BE AS FOLLOWS (11B-404.2.9):
 - INTERIOR HINGED DOORS AND GATES: 5 LBS MAX
 - SLIDING OR FOLDER DOORS: 5 LBS MAX
 - REQUIRED FIRE DOORS: THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE ADMINISTRATIVE AUTHORITY, NOT TO EXCEED 15 LBS
 - EXTERIOR HINGED DOORS: 5 LBS MAX
- LOCK CYLINDERS AND KEYS SHALL BE COORDINATED WITH TENANT AND BUILDING OWNER.
- SWINGING DOOR AND GATE SURFACES WITHIN 10 INCHES OF THE FLOOR OR GROUND MEASURED VERTICALLY SHALL HAVE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING THE FULL WIDTH OF THE DOOR OR GATE (11B-404.2.10).
- ALL GLAZING SHALL BE TEMPERED. ALL EXPOSED EDGES SHALL BE POLISHED. GLAZING WITHIN A 24" ARC OF EITHER SIDE OF DOORS MUST BE OF SAFETY GLAZING MATERIAL (CBC SEC. 2406).
- OPERABLE PARTS OF DOOR HARDWARE SHALL BE 34 INCHES MINIMUM AND 44 INCHES MAXIMUM ABOVE THE FINISH FLOOR OR GROUND. OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 LBS (11B-309.4, 11B-404.2.7).
- TRIM THE BOTTOMS OF DOORS TO CLEAR THE TOP OF FINISHED FLOOR, AS APPLICABLE, BY 1/4" INCH MINIMUM UON. VERIFY SLAB CONDITIONS. TRIM EACH DOOR TO FIT CONDITION. WHERE VARIATIONS IN FLOOR ELEVATION EXIST, DOORS SHALL BE ORDERED WITH BOTTOM STILE SIZED TO ACCOMMODATE THESE UNDERCUT CONDITIONS.
- EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT. SPECIAL LOCKING DEVICES SHALL BE OF AN APPROVED TYPE. ALL NEW DOORS SHALL HAVE APPROVED LEVER HANDLES.
- DOOR CLOSERS AND GATE CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12 DEGREES FROM THE LATCH IS 5 SECONDS MAXIMUM.
- ALL ELECTRIFIED LOCKING HARDWARE WILL REQUIRE REQUEST TO EXIST SWITCHES INSIDE THE HARDWARE.
- HOLLOW METAL DOOR SHALL BE OF A MINIMUM OF 16 U.S. GAUGE AND HAVE SUFFICIENT REINFORCEMENT TO MAINTAIN THE DESIGNATED THICKNESS OF THE DOOR WHEN ANY LOCKING DEVICE IS INSTALLED, SUCH REINFORCEMENT BEING ABLE TO RESTRICT COLLAPSING OF THE DOOR AROUND ANY LOCKING DEVICE.

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

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IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States
Tel 949 863 9434
Fax 949 553 1676

△ Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature

Project Name
HANGAR 10
RECONSTRUCTION

Project Number
007.3945.000

Description
DOOR SCHEDULE & DETAILS

Scale
NOT TO SCALE

LICENSED ARCHITECT
NICHOLAS JAMES ACEVEDO
NO. C-32405
REN. 3-31-2027
STATE OF CALIFORNIA

G6.000

CITY OF IRVINE
HANGAR 10
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FINISH SCHEDULE

FINISH CODE	MANUFACTURER	MODEL	DESCRIPTION
ALUMINUM-FRAMED ENTRANCES AND STOREFRONTS			
GL-01	VITRO ARCHITECTEURAL GLASS	OUTDOOR LITE: SOLARBAN 60 ON STARPHIRE 6MM (2); AIR 1/2", INDOOR LITE: STARPHIRE 6MM	EXTERIOR GLAZING
EXTERIOR PAINT			
EXPT-01	SHERWIN WILLIAMS	BASE: SW 9104, FINISH: SW 7033 BRAINSTORM BRONZE	CUSTOM 3-CAT PAINT APPLICATION
EXPT-02	SHERWIN WILLIAMS	SW 9141 WATERLOO	
EXPT-03	SHERWIN WILLIAMS	SW 7075 WEB GRAY	WHERE STRUCTURAL STEEL OR METAL OCCURS, PROVIDE PRIMER FOR STRUCTURAL STEEL AND FINISH COAT TO RESIST EROSION.
EXPT-04	SHERWIN WILLIAMS	SW 7076 CYBERSPACE	WHERE STRUCTURAL STEEL OR METAL OCCURS, PROVIDE PRIMER FOR STRUCTURAL STEEL AND FINISH COAT TO RESIST EROSION.
INTERIOR PAINT			
PT-01	SHERWIN WILLIAMS	WHITE	JANITOR CLOSET WALL
MODIFIED BITUMINOUS MEMBRANE ROOFING			
EXRF-01	SIPLAST	PARADIENE 30, COLOR: STONEGRAY A-877	PLACE OVER RIGID INSULATION. ICC ESR #1713. AN NDL FULL SYSTEM WARRANTY/GUARANTEE, 20-YEAR MATERIAL AND INSTALLATION WARRANTY REQUIRES A MANUFACTURER APPROVED APPLICATOR FOR INSTALLATION. CUSTOMER SERVICE IN NORTH AMERICA: 800.922.8800
RESILIENT BASE AND ACCESSORIES			
WB-01	TARKETT / JOHNSONITE	BASEWORKS THERMOSET RUBBER WALL BASE, RUBBER, 4" X 1/8"	JANITOR CLOSET WALL BASE
SOLID SURFACE			
SS-01	CORIAN SOLID SURFACE, FINISH: TBD	CORIAN TROUGH SINK	RESTROOM COUNTERTOP
TILING			
TL-01	TILEBAR	CERAMIC SUBWAY TILE; BAYOU WHITE 3X12; MATTE	ON ALL RESTROOM WALLS FROM FLOOR UP TO 5'-0"
TL-02	SPECCERAMICS	2.875" X 9.75" PORCELAIN FIELD TILE, COLOR: DIAS; MATTE	ON RESTROOM FLOOR; REFER TO RESTROOM FINISH PLAN FOR TILE PATTERN.
WALL COVERINGS			
FRP-01	4' HIGH WHITE FRP PANEL	4' HIGH WHITE FRP PANEL	ABOVE JANITOR MOP SINK
WC-01	SPOONFLOWER	SWOOPING SWALLOW WALLPAPER; BLUE ON VANILLA/LARGE BIRDS	ON ALL RESTROOM WALLS FROM 5'-0" A.F.F. UP TO CEILING

TOILET ACCESSORY SCHEDULE

TYPE MARK	DESCRIPTION	MANUFACTURER	MODEL	FINISH	NOTES
TA-01	36" GRAB BAR	BOBRICK	NO. 150C MBLK, 36", MATTE BLACK FINISH		
TA-02	42" GRAB BAR	BOBRICK	NO. 150C MBLK, 42", MATTE BLACK FINISH		
TA-03	TOILET TISSUE DISPENSER	BOBRICK WASHROOM EQUIPMENT, INC.	B-3588		
TA-04	SEAT COVER DISPENSER	BOBRICK WASHROOM EQUIPMENT, INC.	B-221		
TA-05	PIPE PROTECTION				
TA-06	MIRROR	BOBRICK WASHROOM EQUIPMENT, INC.	B-165		
TA-07	RECESSED COMBINATION TOWEL AND WASTE UNIT	BOBRICK WASHROOM EQUIPMENT, INC.	B-38903		
TA-08	LAVATORY MOUNTED SOAP DISPENSER	BOBRICK WASHROOM EQUIPMENT, INC.	B-822		
TA-09	RESTROOM SIGNAGE		RESTROOM SIGNAGE		
TA-10	FINO COLLECTION SURFACE MOUNTED COAT HOOK	BOBRICK	B-9542		
TA-11	TOILET PARTITION	BOBRICK WASHROOM EQUIPMENT, INC.			
TA-12	BABY CHANGING STATION	KOALA KARE	KB310-SSWM		
TA-13	SANITARY NAPKIN DISPOSAL	BOBRICK WASHROOM EQUIPMENT, INC.	B-35139		

NOTE: REFER TO PLUMBING DRAWINGS FOR PLUMBING FIXTURE SCHEDULE.

LIGHT FIXTURE SCHEDULE

ITEM	MANUFACTURER	MODEL	DESCRIPTION
L01E			4' LONG STRIP LIGHT. REFER TO ELECTRICAL DRAWINGS.
L02			4' LONG STRIP LIGHT @JANITOR. REFER TO ELECTRICAL DRAWINGS.
L03			2' LONG STRIP LIGHT, WALL MOUNTED, IN ROOF ACCESS. REFER TO ELECTRICAL DRAWINGS.
L04	Acuity Brands Lighting		WALL MOUNTED EXTERIOR EGRESS LIGHT @SWITCHGEAR. REFER TO ELECTRICAL DRAWINGS.
LT-01	ALVA LIGHTING	TESS 30 3000K WHT	ARCHITECTURAL SCALE, WET-LISTED EXTERIOR WALL SCONCE AT EXTERIOR WALL
LT-02	KLIK USA	LED LEDPOD XL50 FLAT	RECESSED DOWNLIGHT AT EXTERIOR CANOPY
LT-03	LITHONIA LIGHTING	LDN4	RECESSED CAN LIGHT AT RESTROOM CEILING SOFFIT
LT-04	ALORA LIGHTING	KENSINGTON WV361230	WALL SCONCE AT RESTROOMS

△	Date	Description
	02.06.2025	SCHEMATIC DESIGN/PRICING
	05.02.2025	DESIGN DEVELOPMENT
	09.03.2025	DESIGN DEVELOPMENT
	10.14.2025	CD CLIENT REVIEW/PRICING
	11.03.2025	ISSUE FOR PLAN CHECK
A	01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
	05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

SCHEDULES

Scale

G8.000

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

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SHEET NOTES

- 01 NO GYPSUM WALL BOARD LARYER PROVIDED ON THE INTERIOR SIDE OF EXTERIOR WALL AT LOCATIONS INDICATED.
- 02 PROVIDE GYPSUM WALL BOARD AT INTERIOR SIDE OF EXTERIOR WALL FROM BOTTOM OF TRUSS UP TO ROOF. REFER TO WALL SECTIONS AND DETAILS.
- 03 EXPOSED CONCRETE SLAB. NO FLOOR FINISHES UNLESS OTHERWISE NOTED.
- 04 STRUCTURAL STEEL COLUMN. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 05 MOMENT FRAME. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 06 SWITCHGEAR IN NEMA 3R ENCLOSURE (1-800AMP, 3-400AMP, 1-200AMP, TELEBOARD) ON 6" CONCRETE PAD. REFER TO STRUCTURAL AND ELECTRICAL DRAWINGS.
- 07 ROOF DRAIN CONNECTION AND OVERFLOW.
- 08 GREASE INTERCEPTOR. REFER TO PLUMBING DRAWINGS AND CANOPY PHASE 2 CIVIL DRAWINGS (UNDER SEPARATE PERMIT) FOR ADDITIONAL INFORMATION.
- 09 METAL TABULAR FIXED LADDER WITH FALL PROTECTION TO ROOF HATCH. PRECISION LADDER LLC, FLH-04. REFER TO DETAIL 09/A6.100 FOR ADDITIONAL INFORMATION.
- 10 DOOR REQUIRED MANEUVERING CLEARANCE SHOWN IN DASH AT DOOR. REFER TO 02/G1.020, TYPICAL THROUGHOUT.
- 11 BROOM FINISHED CONCRETE FLOOR. PROVIDE GYPSUM WALL BOARD DOWN TO CONCRETE FLOOR. NO WALL BASE REQUIRED.
- 12 PROVIDE R-19 MIN. INSULATION IN WALL PER TITLE 24 ENVELOPE ANALYSIS. REFER TO PARTITION TYPES ON G5.000 AND MECHANICAL DRAWINGS.
- 13 LOCATION FOR GAS MANIFOLD AND FUTURE GAS METER. GAS MANIFOLD AND GAS MAIN FEEDING GAS MANIFOLD ARE BY OTHERS UNDER SEPARATE PERMIT. FUTURE GAS METERS BY FUTURE TENANTS. REFER TO PLUMBING DRAWINGS.
- 14 4'-0" X 4'-0" ESTIMATED FIRE RISER LOCATION AT EXTERIOR OF THE BUILDING. FIRE RISER BY APPROVED FIRE UNDERGROUND PLANS UNDER SEPARATE SUBMITTAL.
- 15 PROVIDE ELECTRONIC TRAP PRIMER AND ITS COLD WATER LINE, TRAP, AND CONNECT TO VENT. REFER TO PLUMBING DRAWINGS. LOCATE ELECTRONIC TRAP PRIMER WITHIN WALL. PROVIDE 12"X12" ACCESS PANEL ON FINISHED WALL BY FUTURE TENANT DURING TENANT IMPROVEMENT UNDER SEPARATE PERMIT FOR ELECTRONIC TRAP PRIMER.
- 16 NEMA ENCLOSURE. REFER TO ELECTRICAL DRAWINGS.
- 17 DISTRIBUTION BOARD. REFER TO ELECTRICAL DRAWINGS.
- 18 PROVIDE HUB DRAIN FOR FIRE RISER. LOCATE HUB DRAIN CLOSE TO FIRE RISER. REFER TO PLUMBING DRAWINGS.
- 19 PROVIDE POINT OF ENTRY FOR PLUMBING NETWORK SERVICE. FINAL CONNECTION AND LOCATION TO BE COORDINATED IN FIELD.

GENERAL NOTES

- A REFER TO G0.002 FOR GENERAL NOTES, G0.003 FOR GRAPHIC SYMBOLS AND ABBREVIATIONS, G1.020 AND G1.021 FOR ACCESSIBILITY REQUIREMENTS & DETAILS, CLEARANCES AND MOUNTING HEIGHTS.
- B REFER TO SHEET G6.000 FOR PARTITION DETAILS.
- C REFER TO G6.000 FOR DOOR SCHEDULE.
- D PROVIDE BLOCKING AS REQ AT ALL LOCATIONS INCLUDING, BUT NOT LIMITED TO: GRAB BARS, OVERHEAD CABINETRY, SHELVING, SIGNAGE, TOILET ROOM ACCESSORIES, WALL MOUNTED EQUIPMENT, ETC.
- E NOTIFY ARCHITECT IN WRITING OF ANY DISCREPANCIES OR CONFLICTS IN THE LOCATION(S) OF CONSTRUCTION ELEMENTS; ALSO ANY UNFORESSEEN JOB CONDITIONS WHICH MIGHT AFFECT PROJECT COSTS. ADDITIONAL WORK AND/OR COSTS MUST BE APPROVED IN WRITING PRIOR TO START OF CONSTRUCTION.
- F OBTAIN APPROVAL FROM ARCHITECT PRIOR TO MODIFYING OR ADJUSTING EXISTING BUILDING SYSTEMS, ARCHITECTURAL ELEMENTS, OR FIELD CONDITIONS NOT NOTED ON THE CONSTRUCTION DOCUMENTS REQUIRED TO FIT PLANS.
- G ALL PARTITIONS ARE DIMENSIONED FROM FINISHED FACE TO FINISHED FACE UNON.
- H DIMENSIONS NOTED "CLEAR" OR "CLR" MUST ALLOW FOR THICKNESS OF ALL WALL FINISHES. BE ACCURATELY MAINTAINED AND SHALL NOT VARY MORE THAN 1/8" WITHOUT WRITTEN APPROVAL FROM ARCHITECT.
- I DIMENSIONS MARKED +/- MEAN A TOLERANCE NOT GREATER NOR SMALLER THAN 2 INCHES FROM INDICATED DIMENSIONS. NOTIFY ARCHITECTS OF ANY DIMENSION EXCEEDING TOLERANCE & OBTAIN WRITTEN APPROVAL FROM ARCHITECT BEFORE PROCEEDING.
- J "ALIGN" MEANS TO ACCURATELY LOCATE FINISHED FACES IN THE SAME PLANE.
- K DETAILS NOT SHOWN ARE SIMILAR IN CHARACTER TO THOSE DETAILED. WHERE SPECIFIED DIMENSIONS, DETAILS OR DESIGN INTENT CANNOT BE DETERMINED, NOTIFY ARCHITECT BEFORE PROCEEDING WITH CONSTRUCTION.
- L INSTALL METAL CORNER BEADS AT ALL EXPOSED WALLBOARD EDGES. INSTALL CASING BEADS WHEREVER WALLBOARD, PLASTER, ETC. ABUTS A DISSIMILAR FINISH MATERIAL & PROVIDE SEALANT AS REQD. INSTALL METAL EDGE TRIM AT EXPOSED GYPSUM BOARD EDGE.
- M PREP SLAB AS REQUIRED FOR SPECIFIED FINISH REF. FINISH PLAN.
- N ALL SLAB PENETRATIONS FOR PIPING SHALL BE FULLY PACKED & SEALED WITH FIRE-RATED MATERIALS IN ACCORDANCE WITH APPLICABLE BLDG AND FIRE CODES.
- O DOOR JAMB LOCATIONS SHALL BE TYP. 4" FROM ADJ. WALL. REFER TO G1.021 FOR ALL REQUIRED ADA DOOR CLEARANCES.

DEDUCT ALTERNATE

THE LISTED DEDUCTIVE ALTERNATES ARE PROVIDED FOR REFERENCE ONLY FOR PROJECT BIDDING PURPOSE. IF CHOSEN, THE PLANS SHALL BE REVISED TO INCORPORATE ALL CHANGES AND SUBMITTED TO BUILDING & SAFETY FOR REVIEW AND APPROVAL PRIOR TO PERMIT ISSUANCE OR AS A REVISION POST PERMIT ISSUANCE.

- 1 EXCLUDING TWO DEMISING WALLS BETWEEN SMALL TENANTS. ONE BETWEEN ASSUMED DINING B AND ASSUMED DINING C, AND THE OTHER BETWEEN ASSUME DINING C AND ASSUMED DINING D.
AIR LEAKAGE: <0.3 CFM/FS
U FACTOR: NFRC 100 OR PER TABLE 116-B (I.E.S.)
SHGC: NFRC 200 OR PER TABLE 116-B (I.E.S.)
- 2 PROVIDE PLUMBING STUB-UPS ONLY. EXCLUDING PLUMBING FIXTURES, PLUMBING ACCESSORIES, RESTROOM FINISHES, CEILING, LIGHTING, AND MECHANICAL DUCTS IN RESTROOMS.
- 3 NO SLAB DEPRESSION AT SMALL TENANT AREA.

Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET
2 05.28.2026	BID ADDENDUM 02

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

CONSTRUCTION AND FINISH PLAN

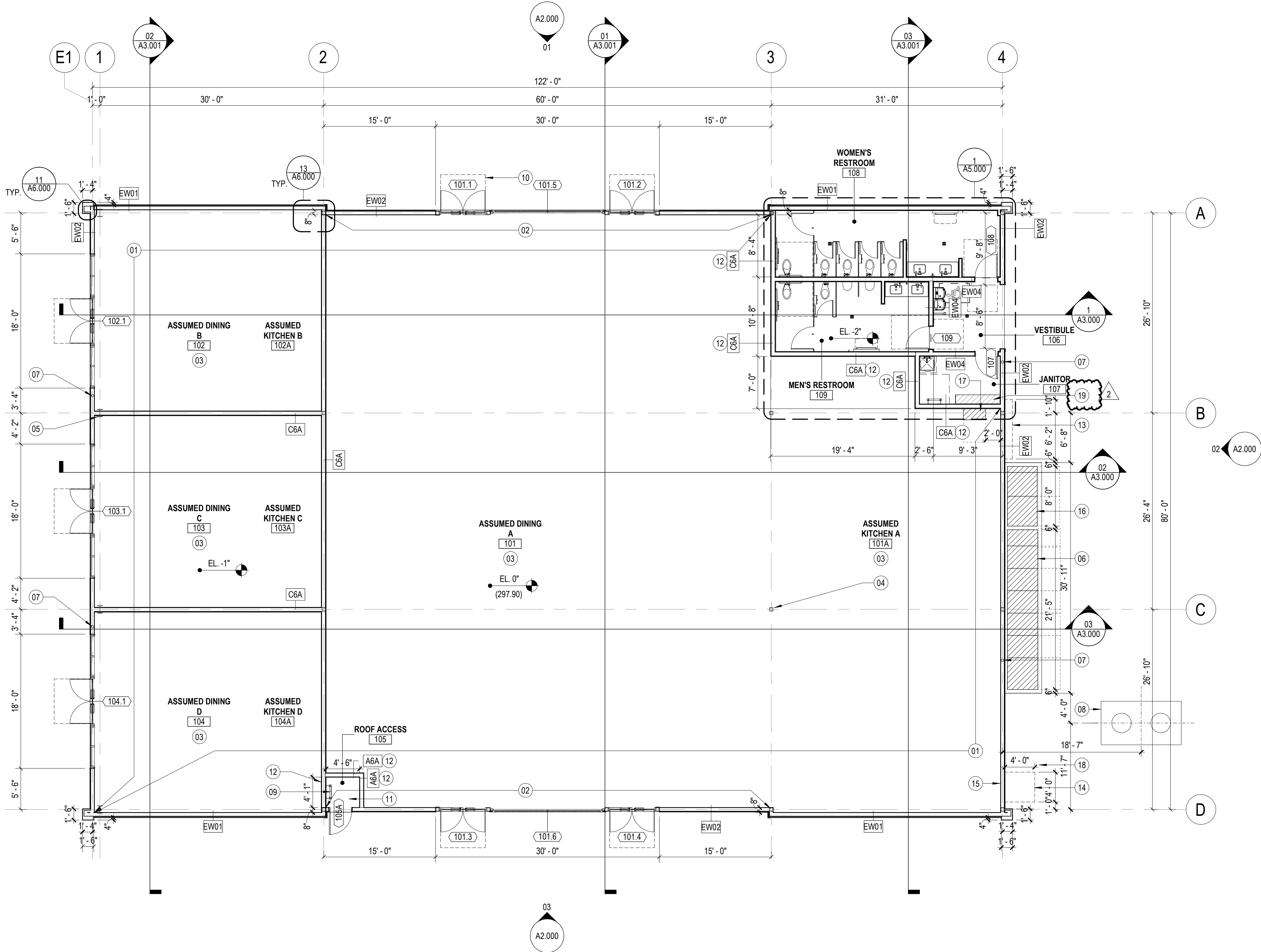
Scale

1/8" = 1'-0"

True North

A1.100

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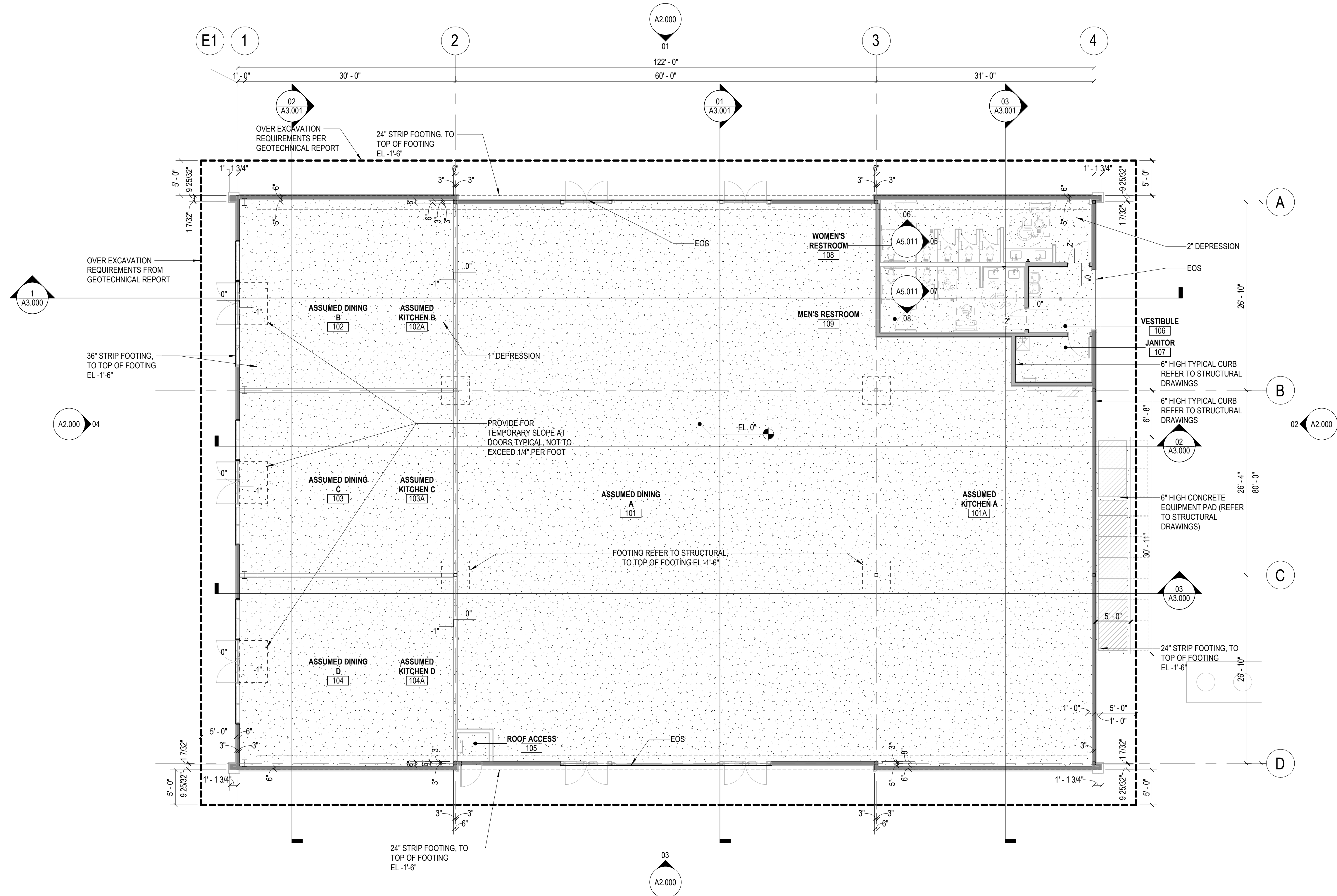
1 CONSTRUCTION PLAN

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

SHEET NOTES

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United StatesTel 949.863.9434
Fax 949.553.1676

GENERAL NOTES

- A REFER TO G0.002 FOR GENERAL NOTES, G0.003 FOR GRAPHIC SYMBOLS AND ABBREVIATIONS, G1.003 AND G1.021 FOR ACCESSIBILITY REQUIREMENTS & DETAILS, CLEARANCES AND MOUNTING HEIGHTS.
- B REFER TO SHEET G5.000 FOR PARTITION DETAILS.
- C REFER TO G6.000 FOR DOOR SCHEDULE.
- D PROVIDE BLOCKING AS REQ AT ALL LOCATIONS INCLUDING, BUT NOT LIMITED TO: GRAB BARS, OVERHEAD CABINETRY, SHELVING, SIGNAGE, TOILET ROOM ACCESSORIES, WALL MOUNTED EQUIPMENT, ETC.
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- G ALL PARTITIONS ARE DIMENSIONED FROM FINISHED FACE TO FINISHED FACE UNLESS NOTED OTHERWISE.
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- L INSTALL METAL CORNER BEADS AT ALL EXPOSED WALLBOARD EDGES. INSTALL CASING BEADS WHEREVER WALLBOARD, PLASTER, ETC. ABUTS A DISSIMILAR FINISH MATERIAL & PROVIDE SEALANT AS REQ'D. INSTALL METAL EDGE TRIM AT EXPOSED GYPSUM BOARD EDGE.
- M PREP SLAB AS REQUIRED FOR SPECIFIED FINISH REF. FINISH PLAN.
- N ALL SLAB PENETRATIONS FOR PIPING SHALL BE FULLY PACKED & SEALED WITH FIRE-RATED MATERIALS IN ACCORDANCE WITH APPLICABLE BLDG AND FIRE CODES.
- O DOOR JAMB LOCATIONS SHALL BE TYP. 4" FROM ADJ. WALL. REFER TO G1.021 FOR ALL REQUIRED ADA DOOR CLEARANCES.

Date	Description
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Seal / Signature



Project Name
**HANGAR 10
RECONSTRUCTION**

Project Number
007.3945.000

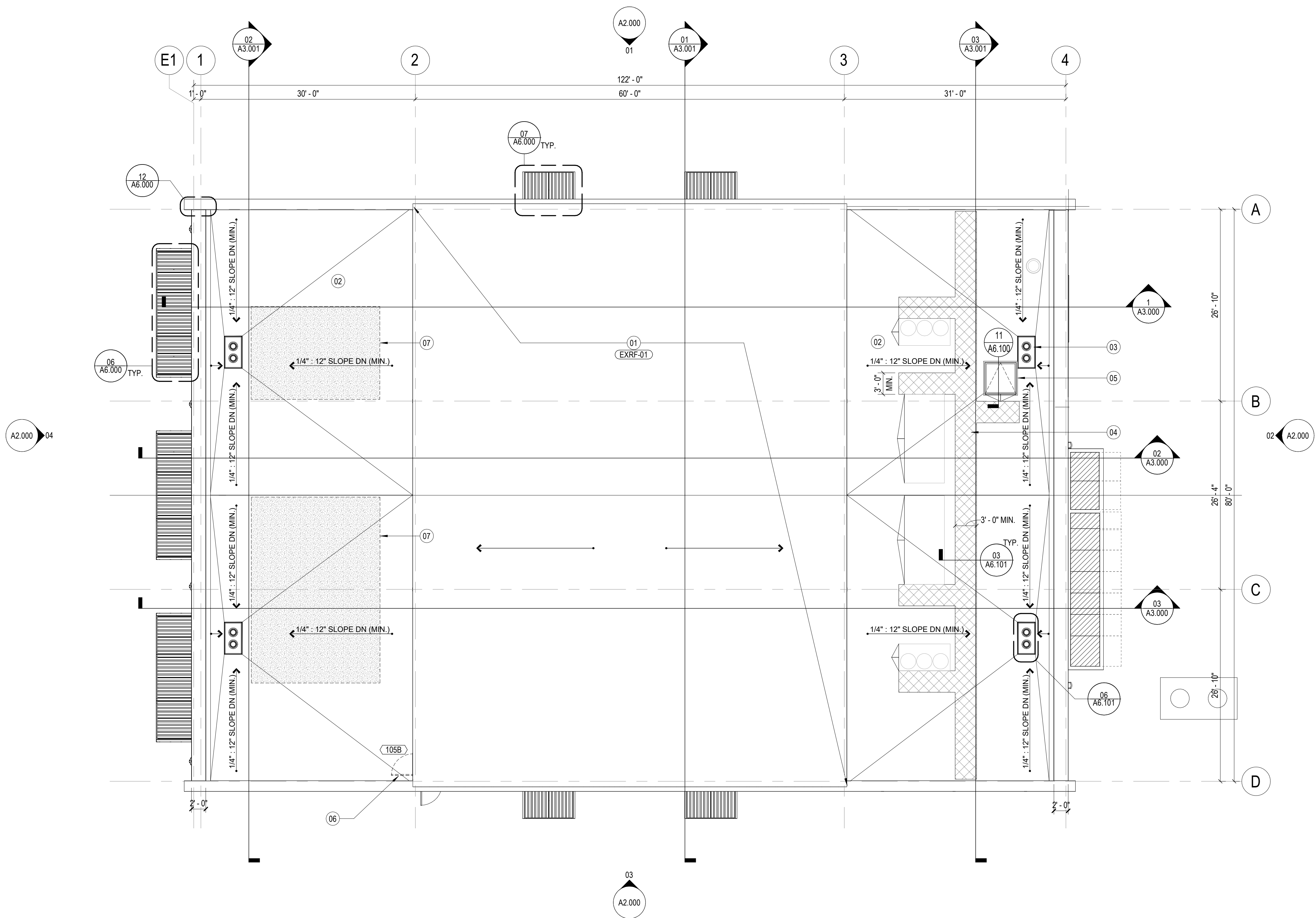
Description
SLAB EDGE PLAN

Scale
1/8" = 1'-0"

True North

A1.101

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SHEET NOTES

- 01 TORCH-APPLIED MODIFIED BITUMINOUS PROTECTED MEMBRANE ASPHALT ROOFING. REFER TO R-01 ON A6.100 FOR ROOF ASSEMBLY AND FINISH SCHEDULE ON ROOF MEMBRANE INFORMATION. ROOF TO BE INSTALLED BY AN APPROVED APPLICATOR TO QUALIFY 20-YEAR MATERIAL AND INSTALLATION WARRANTY.
- 02 SINGLE-PLY ROOF MEMBRANE, WHITE. REFER TO R-02 ON A6.100 FOR ROOF ASSEMBLY.
- 03 ROOF DRAIN WITH OVERFLOW.
- 04 PROVIDE 3'-0\"/>
- 05 BILOX4 SINGLE LEAF ROOF ACCESS HATCH WITH THERMAL BREAK TYPE F-50TB.
- 06 3'W X 4'H ROOF ACCESS DOOR, PAINTED WHITE.
- 07 SOLAR READY AREA. REFER TO ELECTRICAL DRAWINGS.

GENERAL NOTES

A ROOF PLAN HAS INCORPORATED CITY BULLETIN 250 ON ROOF MINIMUM SLOPE AND BULLETIN 299 ON ROOF DRAIN. REFER TO G2-102 FOR INFORMATION ON THESE TWO BULLETINS.

B RIGID INSULATION SHALL COMPLY WITH CBC 2603.6. PACKAGES AND CONTAINERS OF INSULATION COMPONENTS DELIVERED TO THE JOB SITE SHALL BEAR THE LABEL OF AN APPROVED AGENCY SHOWING THE MANUFACTURER'S NAME, PRODUCT LISTING, PRODUCT IDENTIFICATION AND INFORMATION SUFFICIENT TO DETERMINE THAT THE END USE WILL COMPLY WITH THE CODE REQUIREMENTS. (CBC 2603.2)

CITY OF IRVINE

HANGAR 10

RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

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Fax 949.653.1676

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Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

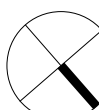
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ROOF PLAN

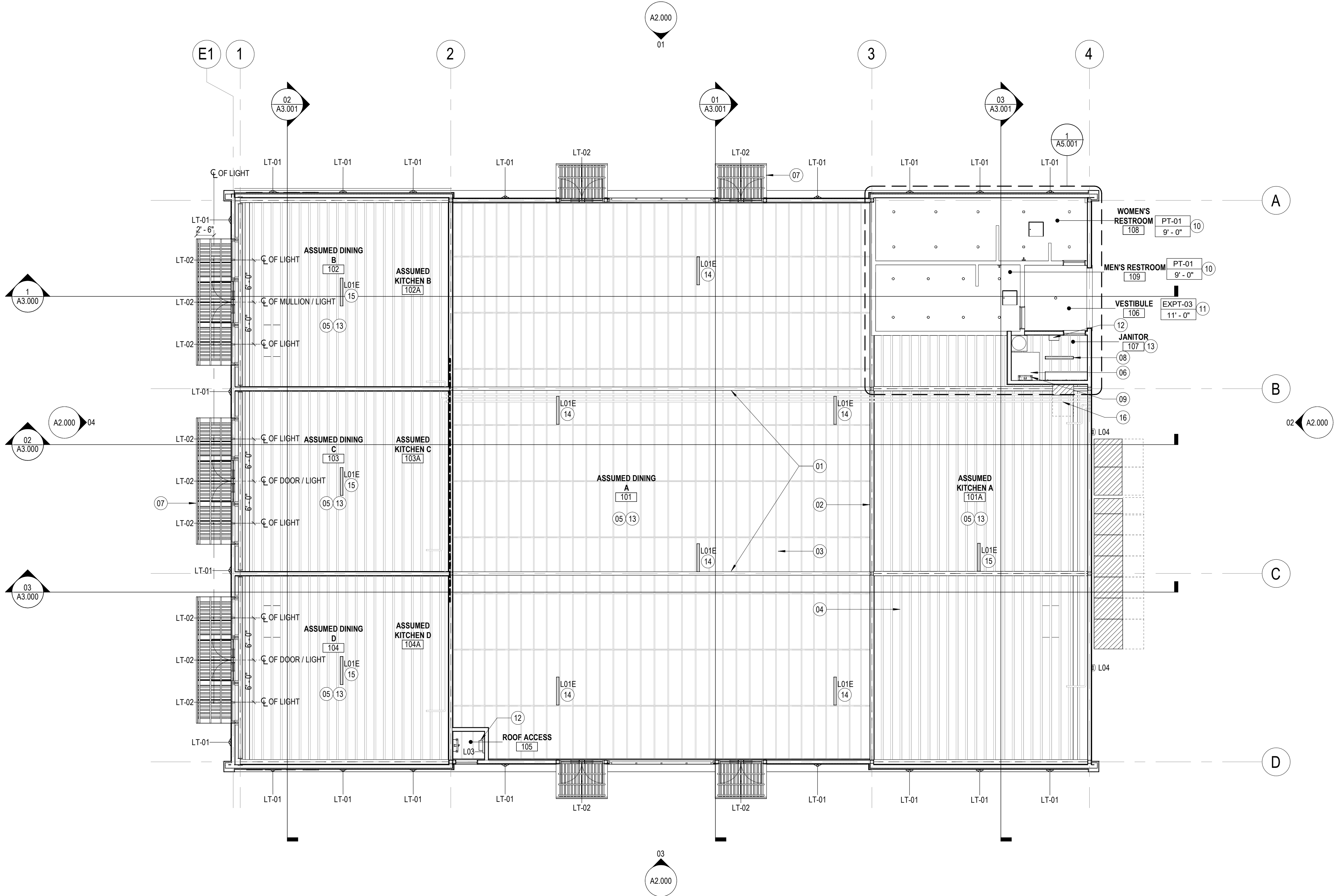
Scale

1/8" = 1'-0"

True North



A1.102



SHEET NOTES

- 01 STEEL TRUSS. REFER TO BUILDING SECTION FOR LOCATION. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL INFORMATION.
- 02 STRUCTURAL STEEL BEAMS, TYPICAL. REFER TO STRUCTURAL DRAWINGS.
- 03 LVL @24" O.C. AT TRUSS AREA, TYPICAL. REFER TO STRUCTURAL DRAWINGS.
- 04 TJI @16" O.C. AT TRUSS AREA, TYPICAL. REFER TO STRUCTURAL DRAWINGS.
- 05 EGRESS LIGHTING PER ELECTRICAL DRAWINGS UNLESS OTHERWISE NOTED, TYPICAL THROUGHOUT.
- 06 BILCO 4X4 SINGLE LEAF ROOF ACCESS HATCH WITH THERMAL BREAK TYPE F-50TB ABOVE.
- 07 METAL CANOPY ABOVE, TYPICAL.
- 08 4' LONG STRIP LIGHT PER ELECTRICAL DRAWINGS.
- 09 METAL TABULAR FIXED LADDER WITH FALL PROTECTION TO ROOF HATCH, PRECISION LADDER LLC, FLH-04. REFER TO DETAIL 09/A6.100 FOR ADDITIONAL INFORMATION.
- 10 PAINTED GYPSUM WALL, BOARD CEILING SOFFIT. REFER TO A6.301 FOR CEILING DETAILS. PAINT COLOR AS INDICATED.
- 11 PAINTED FIBER CEMENT BOARD. PAINT COLOR AS INDICATED.
- 12 BI-FOLD DOOR POWER UNIT ON WALL BY MANUFACTURER. PROVIDE 32" CLEAR IN HEIGHT FROM BOTTOM OF THE UNIT UP PER MANUFACTURER REQUIREMENTS.
- 13 OPEN FRAMING ABOVE.
- 14 BOTTOM OF EGRESS LIGHT ALIGNS WITH BOTTOM OF TRUSS.
- 15 BOTTOM OF EGRESS LIGHT ALIGNS WITH BOTTOM OF TJI.
- 16 GAS LINE FROM GAS MANIFOLD TO EACH TENANT. REFER TO PLUMBING DRAWINGS. PAINT GAS LINE PIPES BLACK, FLAT FINISH.

GENERAL NOTES

- A NOTIFY ARCHITECT OF ANY DISCREPANCIES BETWEEN ARCHITECTURAL AND ELECTRICAL OR MECHANICAL DRAWINGS AND OBTAIN CLARIFICATION BEFORE COMMENCING CONSTRUCTION.
- B LOCATIONS OF CEILING PENETRATIONS, SUCH AS AIR DIFFUSERS, GRILLES, LIGHT FIXTURES, ETC., SHALL BE AS SHOWN ON ARCHITECTURAL REFLECTED CEILING PLANS. WHERE DISCREPANCIES IN LOCATION OCCUR, THE ARCHITECTURAL PLAN SHALL GOVERN. NOTIFY ARCHITECT ANY DISCREPANCIES FOR CLARIFICATION.
- C ALL CEILING GRILLES TO BE FACTORY FINISHED TO MATCH THE COLOR OF ADJACENT CEILING TILE.
- D CONDUIT MUST BE A MINIMUM OF 8" CLEAR ABOVE THE CEILING GRID.
- E ALL NEW CIRCUITS SHALL BE LABELED ON THE PROPER BUILDING ELECTRICAL PANEL DIRECTORIES.
- F NOTIFY ARCHITECT WHEN A LIGHT FIXTURE CANNOT BE USED DUE TO EXISTING NON-REMOVABLE OBSTRUCTION AND ALTERNATE LOCATION HINDERS LAYOUT. LOW PROFILE LIGHT FIXTURE SHALL BE USED.
- G PROVIDE SPRINKLERS THROUGHOUT AS REQUIRED BY CODE. SUBMIT SHOP DRAWINGS PRIOR TO INSTALLATION FOR APPROVAL AS DEFERRED SUBMITTAL.
- H EXIT ILLUMINATION LEVEL SHALL NOT BE LESS THAN 1 FC AT THE WALKING SURFACE LEVEL (SEC 1006.2). POWER FOR THE MEANS OF EGRESS ILLUMINATION SHALL BE PROVIDED BY THE BUILDING ELECTRICAL SUPPLY. IN THE EVENT OF POWER SUPPLY FAILURE, EMERGENCY POWER SYSTEM SHALL PROVIDE POWER FOR A DURATION NOT LESS THAN 90 MINUTES AND SHALL CONSIST OF STORAGE BATTERIES, UNIT EQUIPMENT OR AN ON-SITE GENERATOR (SEC 1006.1, 1006.2, 1006.3, 1006.4).
- I EXCEPT WHERE RIGID BRACES ARE USED TO LIMIT LATERAL DEFLECTIONS, SPRINKLER HEADS AND OTHER PENETRATION SHALL HAVE A 2" OVERSIZED RING, SLEEVES, OR ADAPTER THROUGH THE CEILING TILE TO ALLOW FOR FREE MOVEMENT OF AT LEAST 1" IN ALL HORIZONTAL DIRECTIONS.
- J CHANGES IN CEILING PLAN ELEVATIONS SHALL BE PROVIDED WITH POSITIVE BRACING.
- K CABLE TRAY AND ELECTRICAL CONDUITS SHALL BE SUPPORTED INDEPENDENTLY OF THE CEILING.

CITY OF IRVINE HANGAR 10 RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

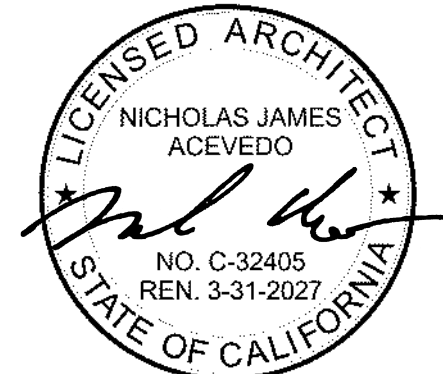
Gensler

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Tel 949.863.9434
Fax 949.553.1676

Date	Description
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Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

REFLECTED CEILING PLAN

Scale

1/8" = 1'-0"

True North

A1.200

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

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United States

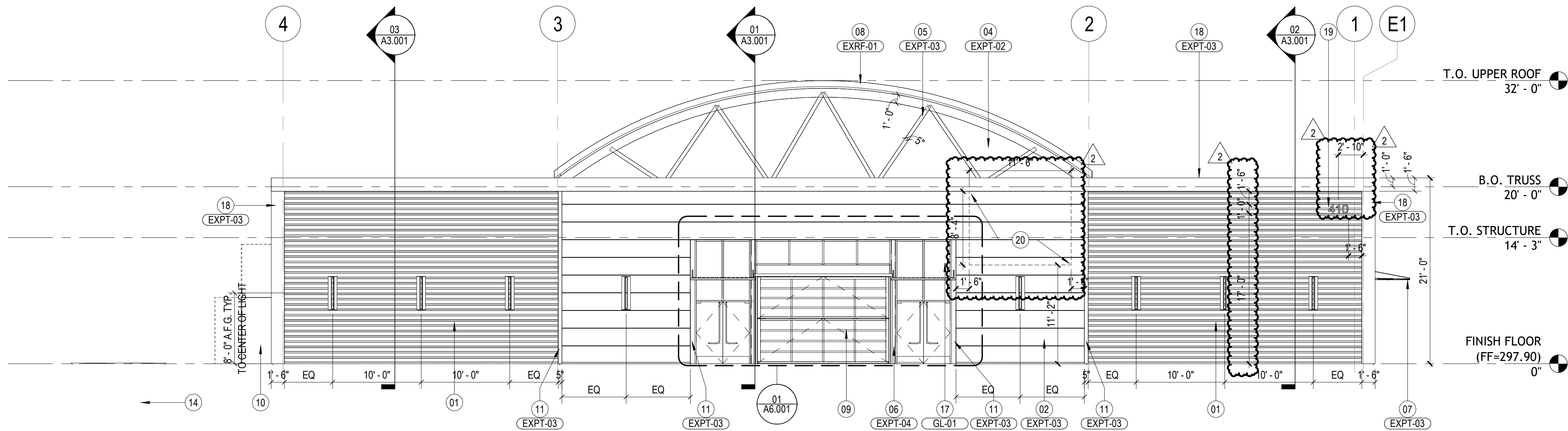
Tel 949 863 9434
Fax 949 553 1676

SHEET NOTES

- 01 SINGLE SKIN CORRUGATED METAL PANEL G90 GALVANIZED.
- 02 PAINTED 24" HIGH FIBER CEMENT BOARD WITH 1/2" REVEAL. PAINT COLOR AS INDICATED.
- 03 PAINTED 4" HIGH FIBER CEMENT BOARD WITH 1/2" REVEAL. PAINT COLOR AS INDICATED.
- 04 PAINTED FIBER CEMENT BOARD, INSTALL LENGTH VERTICALLY. PAINT COLOR AS INDICATED.
- 05 1 1/2" DEEP PAINTED WOOD TRIM ON BOTH SIDES OF EXTERIOR WALL. LAYOUT, WIDTH, AND LOCATION TO MATCH INTERIOR METAL TRUSS.
- 06 PAINTED METAL FASCIA OVER STEEL MEMBER, COLOR AS INDICATED. REFER TO STRUCTURAL DRAWINGS FOR ADDITIONAL STEEL MEMBER INFORMATION.
- 07 PAINTED METAL CUSTOM CANOPY. PAINT COLOR AS INDICATED.
- 08 TORCH-APPLIED MODIFIED BITUMINOUS PROTECTED MEMBRANE ASPHALT ROOFING. REFER TO RF01 ON A6-100 FOR ROOF ASSEMBLY AND FINISH SCHEDULE ON ROOF MEMBRANE INFORMATION.
- 09 BIFOLD DOOR BY CROWN DOORS, SST-II HYDRAULIC (TYP.). MULLION COLOR AS INDICATED.
- 10 ELECTRICAL SWITCHGEAR. REFER TO ELECTRICAL DRAWINGS.
- 11 PAINTED METAL TRIM. COLOR AS INDICATED.
- 12 DRINKING FOUNTAIN ELKAY PRO FILTRATION BOTTLE-FILLING STATION & 84-LEVEL ADA COOLER REGENERATED TOTAL FFAS + LEAD REDUCTION LZSTL8WSBPRO-FLP4.
- 13 STOREFRONT SYSTEM. MULLIONS COLOR AS INDICATED.
- 14 GREASE INTERCEPTOR. REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- 15 3W X 4H ROOF ACCESS DOOR. PAINTED WHITE.
- 16 HOLLOW METAL DOOR AND FRAME. PAINTED TO MATCH ADJACENT BACKGROUND WALL.
- 17 EXTERIOR GLAZING TYPICAL.
- 18 PAINTED FLAT METAL PANEL SIDE AND TOP FRAME.
- 19 BUILDING ADDRESS SIGNAGE. INTERNALLY ILLUMINATED ALUMINUM CHANNEL SIGNAGE. PAINTED BLACK. NUMBERS, SIZE AND LOCATION AS SHOWN. REFER TO STANDARDS FOR ADDRESSING ON FORM 41-318 ON G2 101 FOR ADDITIONAL INFORMATION. REFER TO APPROVED WAYFINDING PLANS FOR ADDITIONAL ADDRESSING AND WAYFINDING REQUIREMENTS.
- 20 ALUMINUM CHANNEL SIGNAGE. 1/2" THICK CONCEALED MOUNTED. PAINTED WHITE. GRAPHIC EMBLEM "10". FINAL FONT AND TYPE TO BE PROVIDED FOR FINAL FABRICATION.

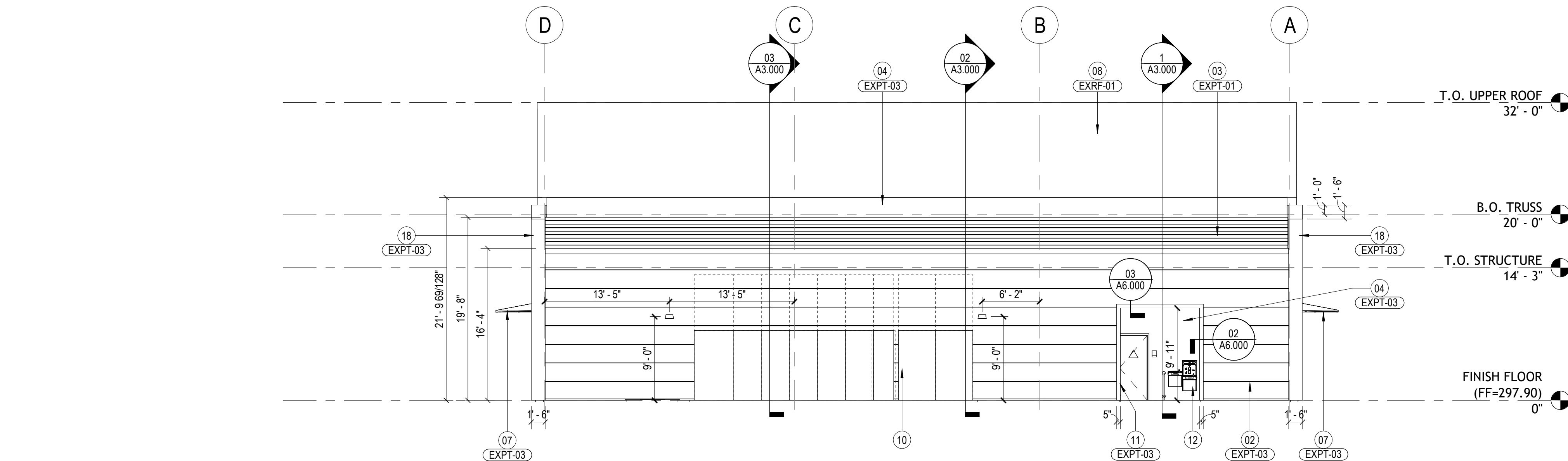
01 EXTERIOR ELEVATION - SOUTH-WEST

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



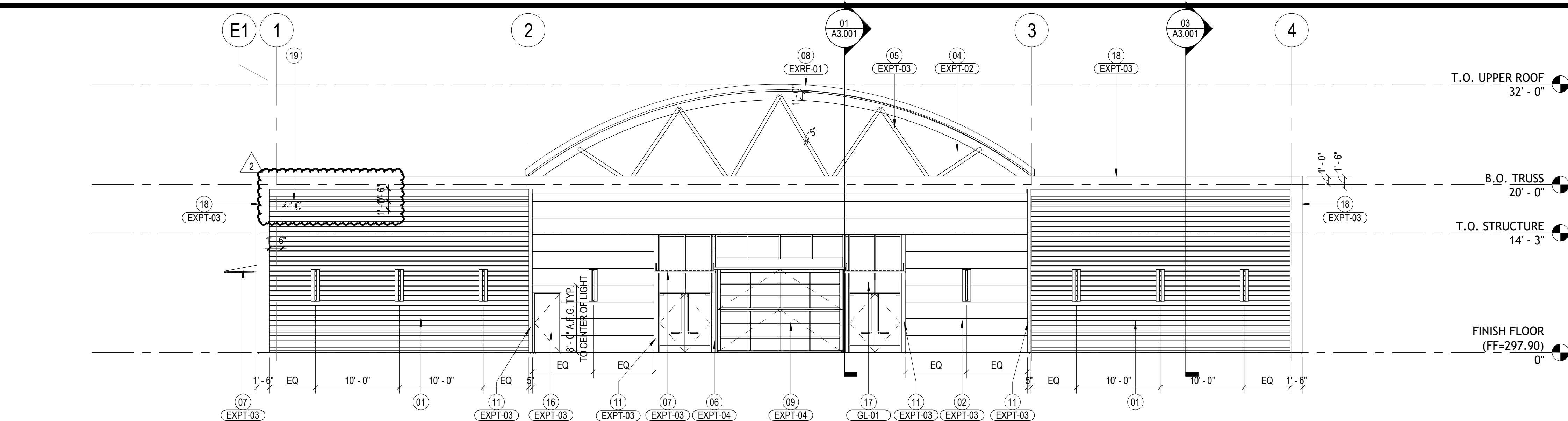
02 EXTERIOR ELEVATION - NORTH-WEST

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



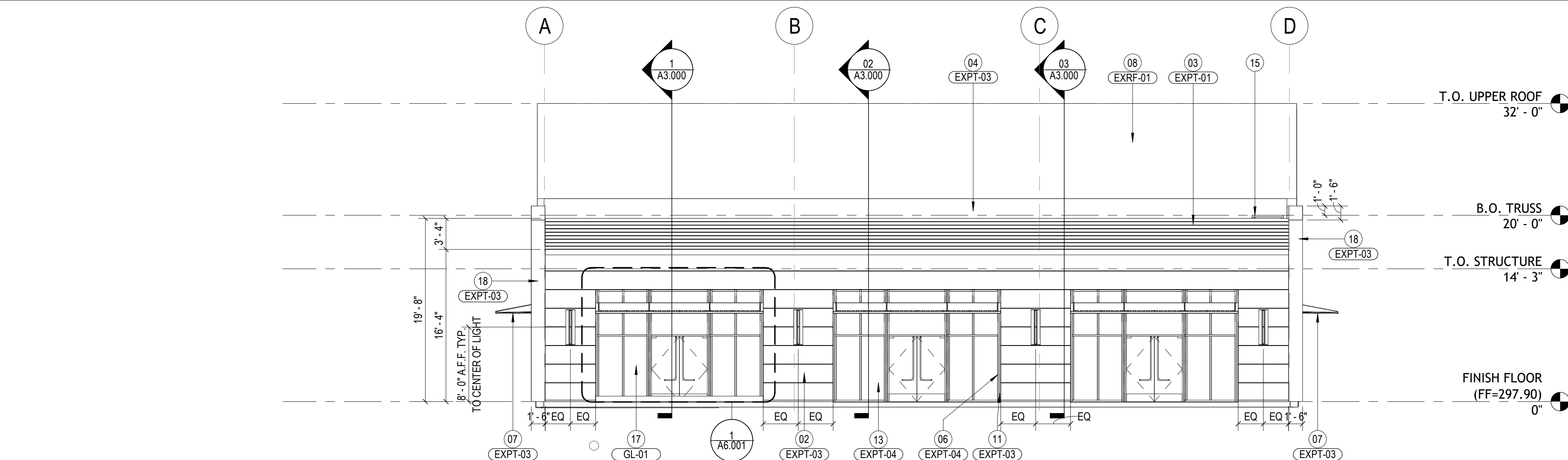
03 EXTERIOR ELEVATION - NORTH-EAST

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



04 EXTERIOR ELEVATION - SOUTH-EAST

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



Date	Description
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05.07.2026	BID SET
2 05.28.2026	BID ADDENDUM 02

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

EXTERIOR ELEVATIONS

Scale

1/8" = 1'-0"

A2.000

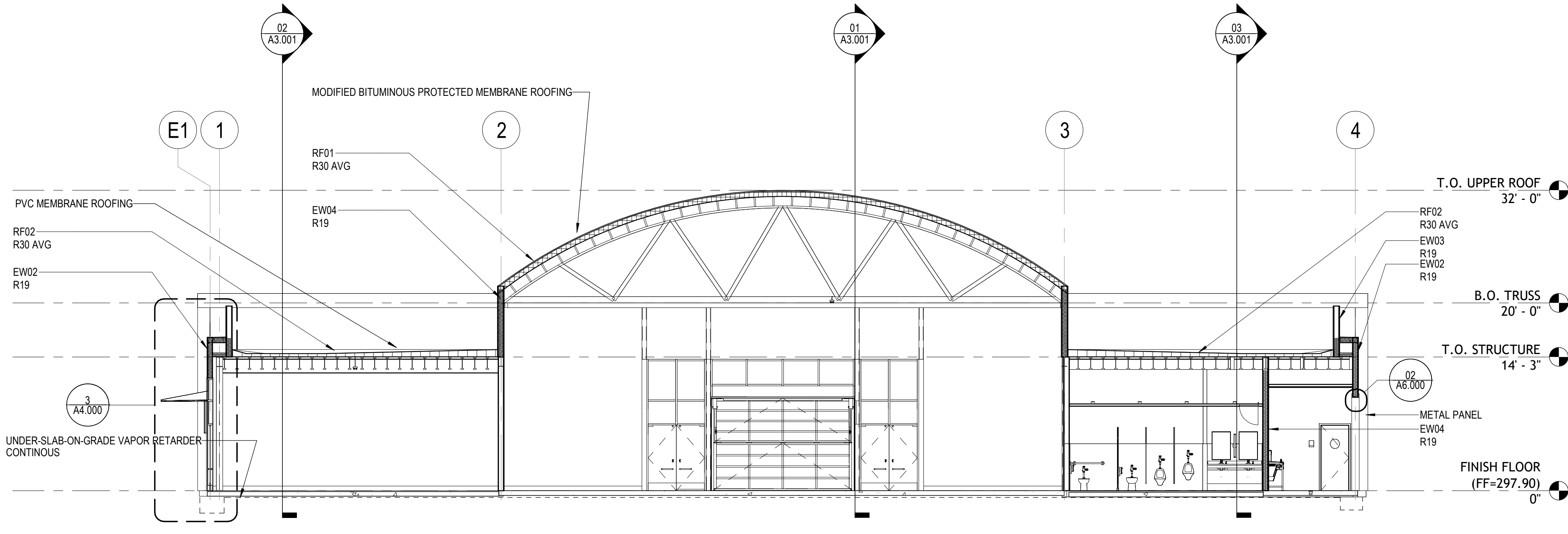
SHEET NOTES

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

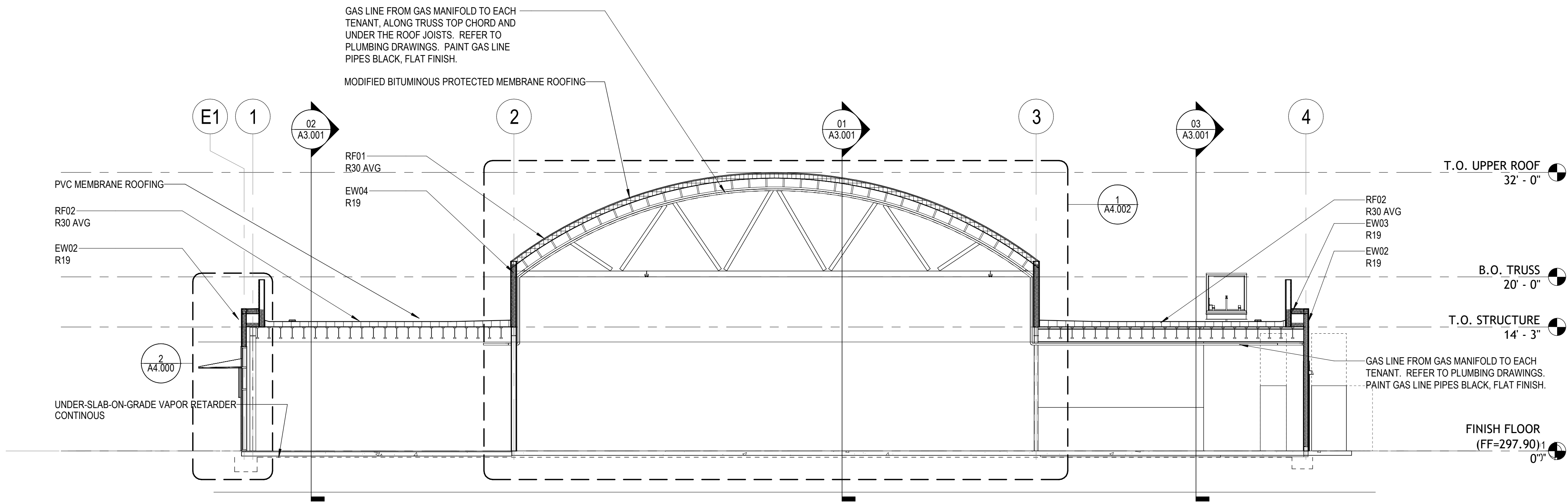
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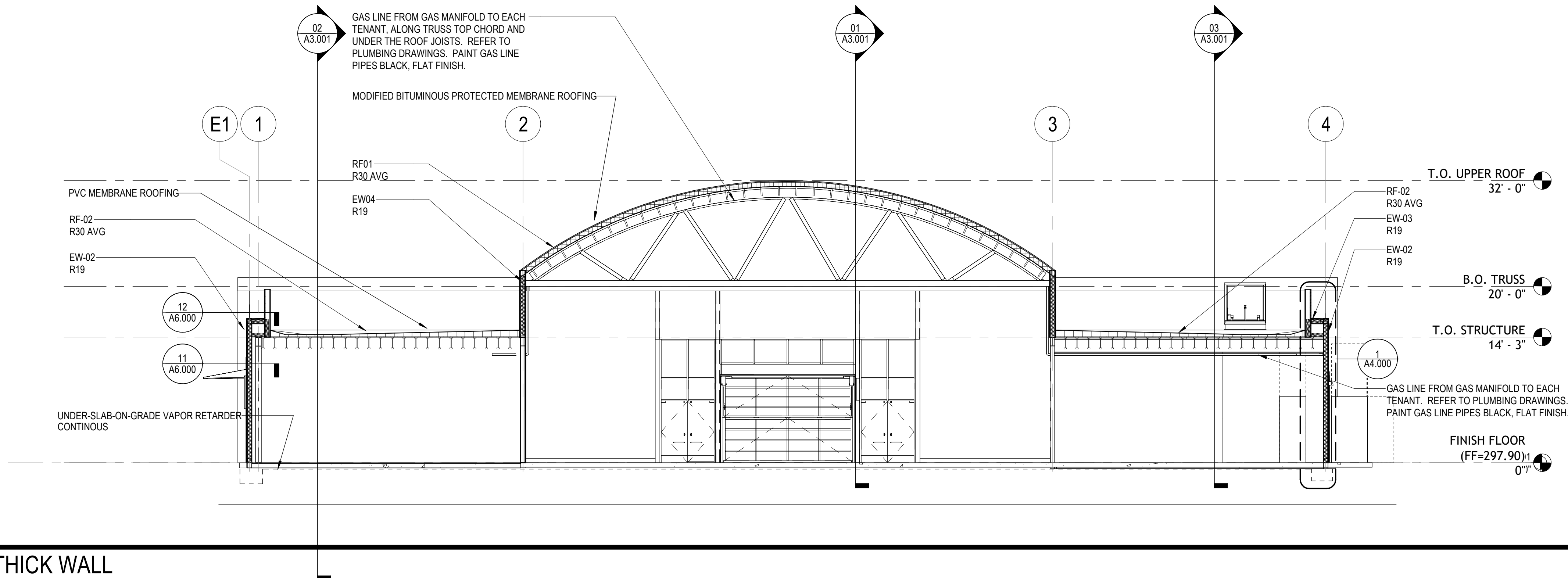
1 BUILDING SECTION - LONGITUDINAL @ RESTROOM

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



02 BUILDING SECTION - LONGITUDINAL @ SWITCHGEAR

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



03 BUILDING SECTION - LONGITUDINAL @ THICK WALL

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

GENERAL NOTES

- A REFER TO G5.000 FOR WALL AND PARTITION TYPE AND DETAILS
B REFER TO A6.100 FOR ROOF ASSEMBLY.

Date	Description
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Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

BUILDING SECTIONS

Scale

1/8" = 1'-0"

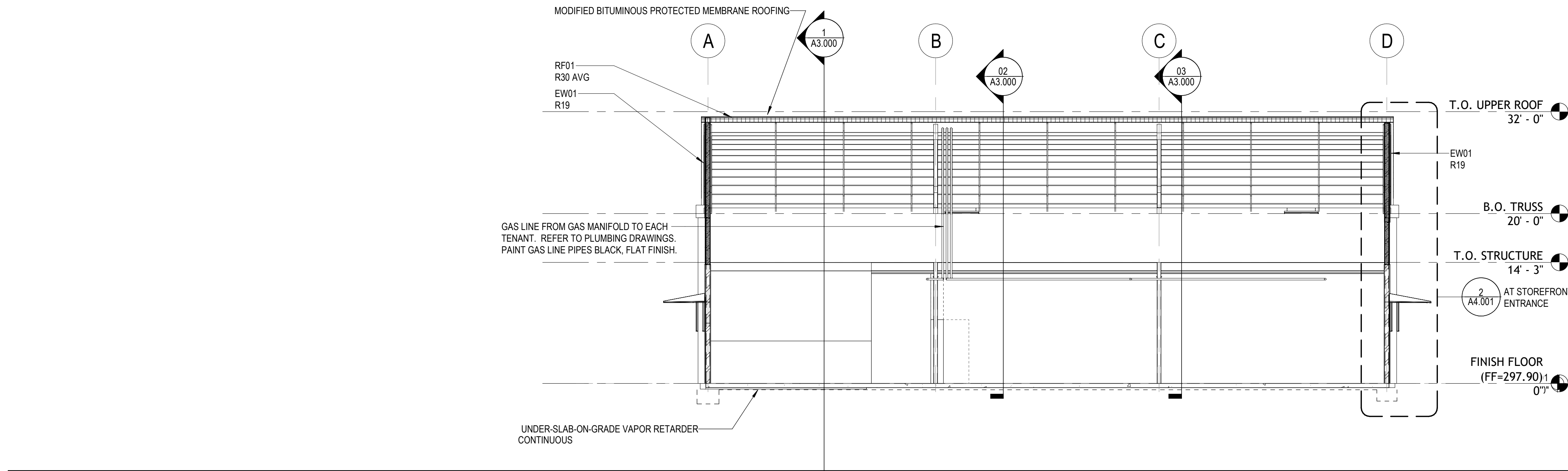
A3.000

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

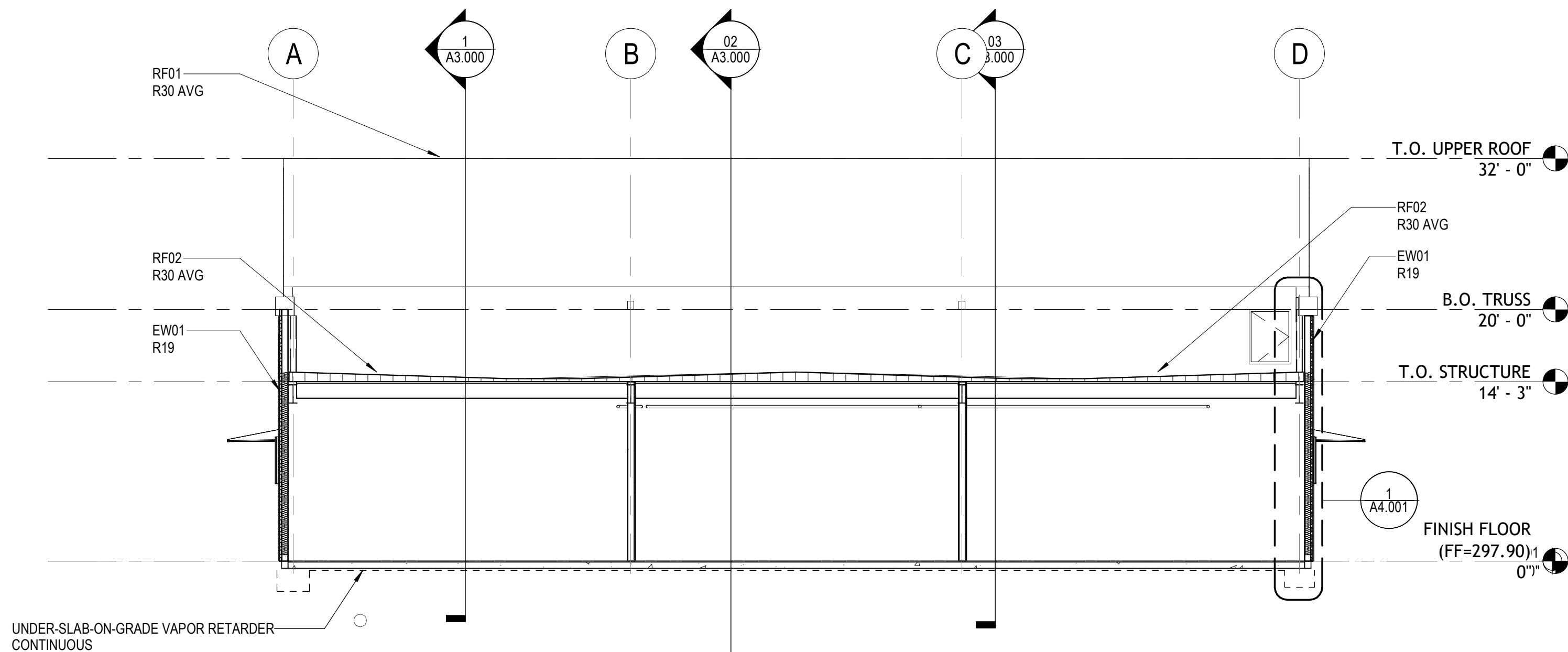
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United States
Tel 949.863.9434
Fax 949.553.1676



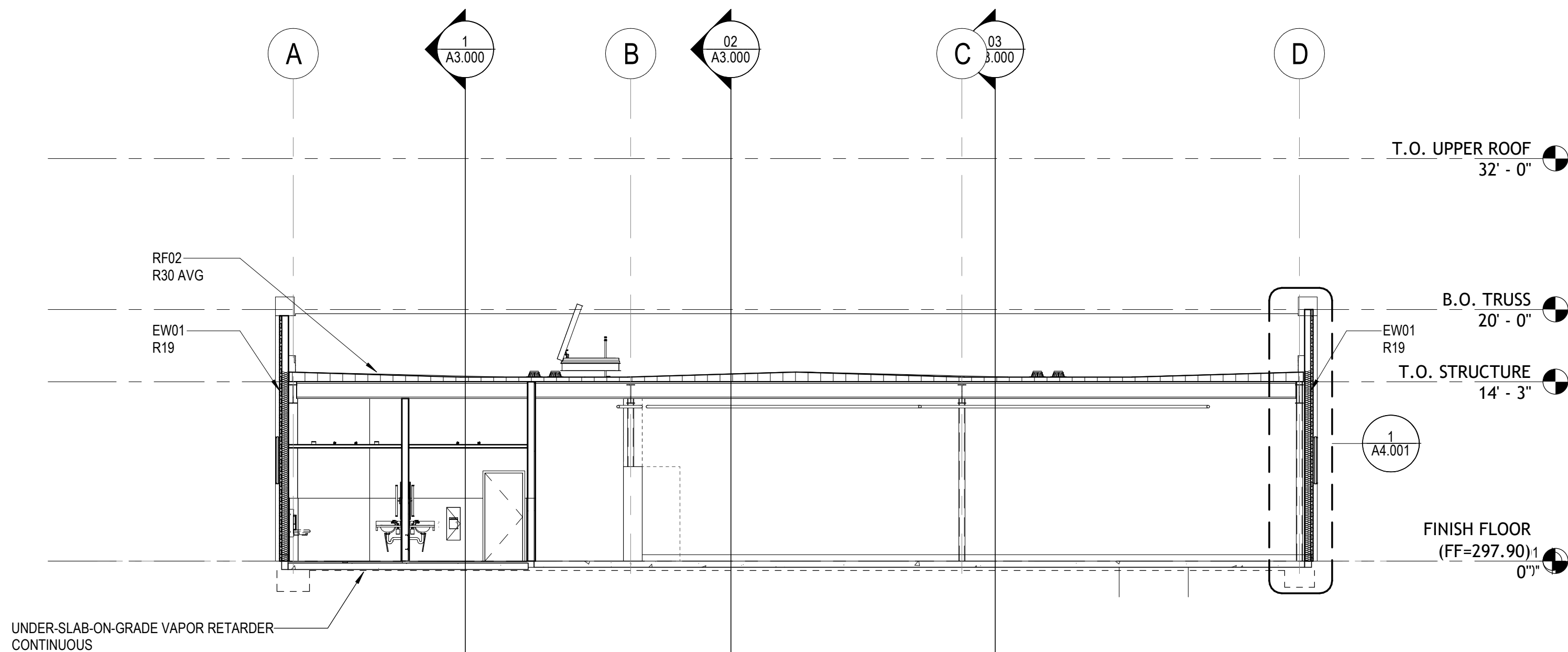
01 BUILDING SECTION - TRANSVERSE @MAIN ENTRANCES

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



02 BUILDING SECTION - TRANSVERSE @THICK WALL

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



03 BUILDING SECTION - TRANSVERSE @RESTROOM

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

GENERAL NOTES

- A REFER TO GS.000 FOR WALL AND PARTITION TYPE AND DETAILS
B REFER TO A6.100 FOR ROOF ASSEMBLY.

Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

BUILDING SECTIONS

Scale

1/8" = 1'-0"

A3.001

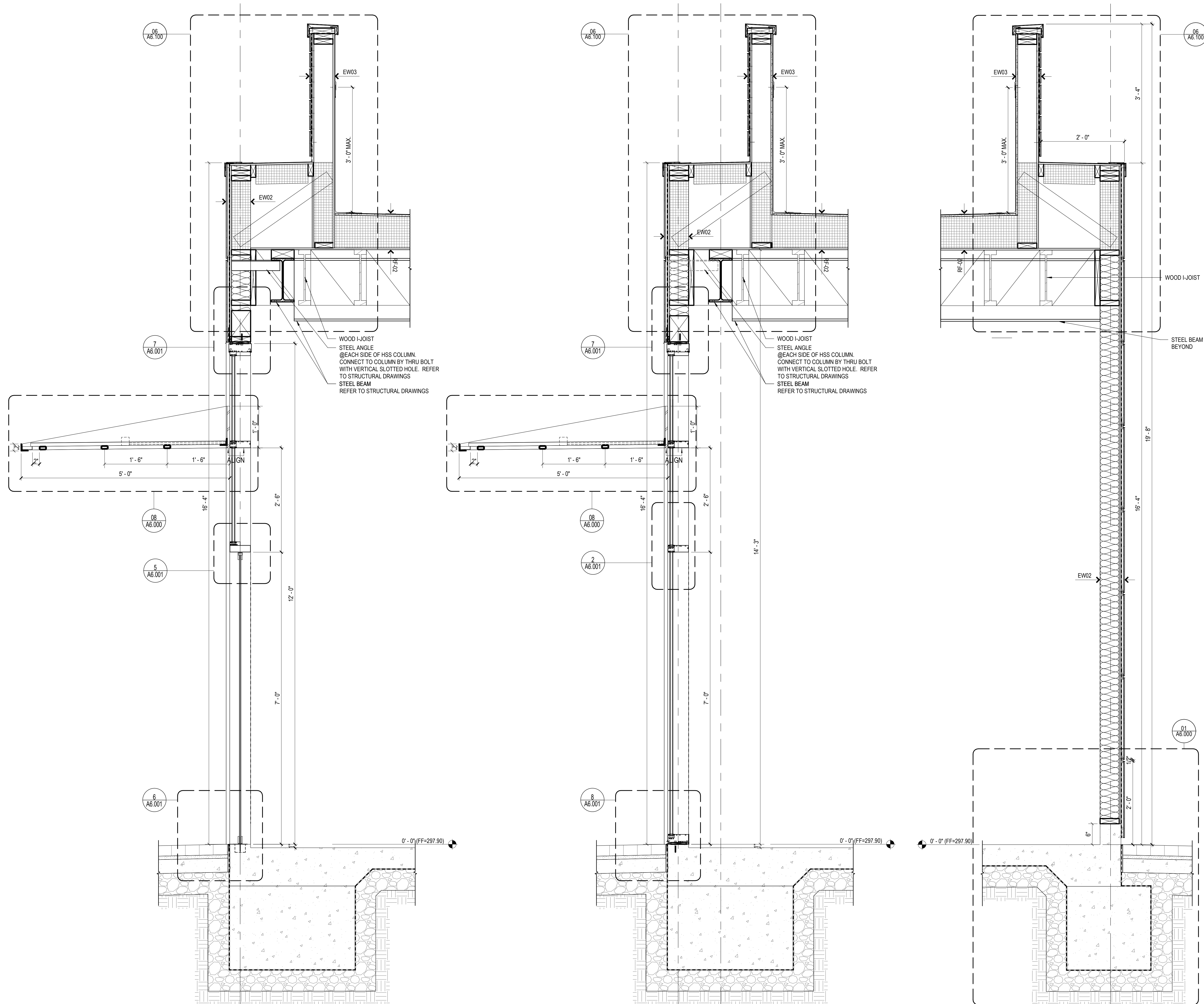
CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

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Suite 100
Newport Beach, CA 92660
United States

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3 WALL SECTION - SCREEN WALL STOREFRONT DOOR
SCALE: 1" = 1'-0"

2 WALL SECTION - SCREEN WALL STOREFRONT
SCALE: 1" = 1'-0"

1 WALL SECTION - SCREEN WALL
SCALE: 1" = 1'-0"

Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
05.02.2025	DESIGN DEVELOPMENT
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A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

WALL SECTIONS

Scale

1" = 1'-0"

A4.000

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

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△ Date	Description
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05.07.2026	BID SET

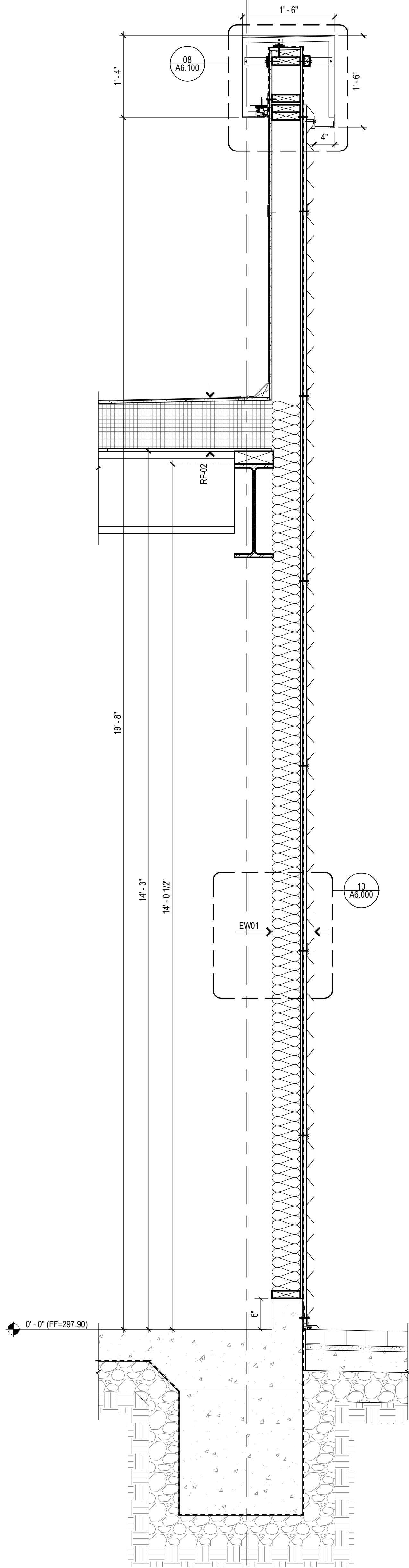
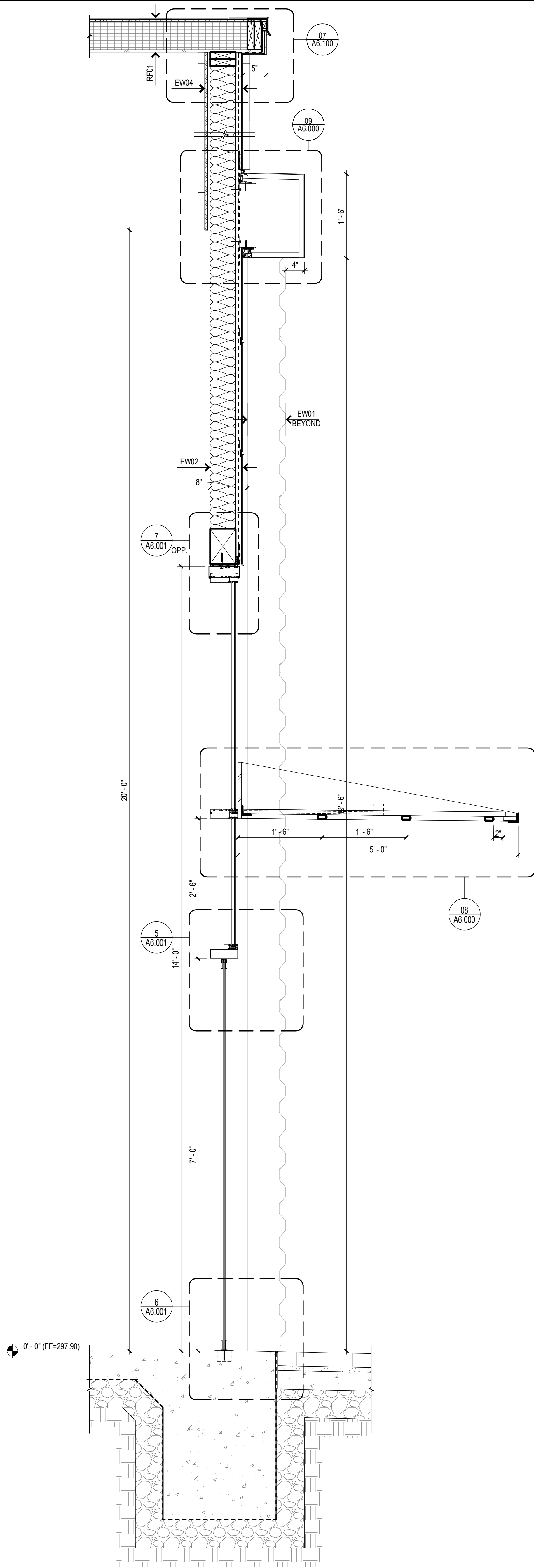
Seal / Signature



Project Name
HANGAR 10
RECONSTRUCTION
Project Number
007.3945.000
Description
WALL SECTIONS

Scale
1" = 1'-0"

A4.001



CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

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△ Date	Description
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature

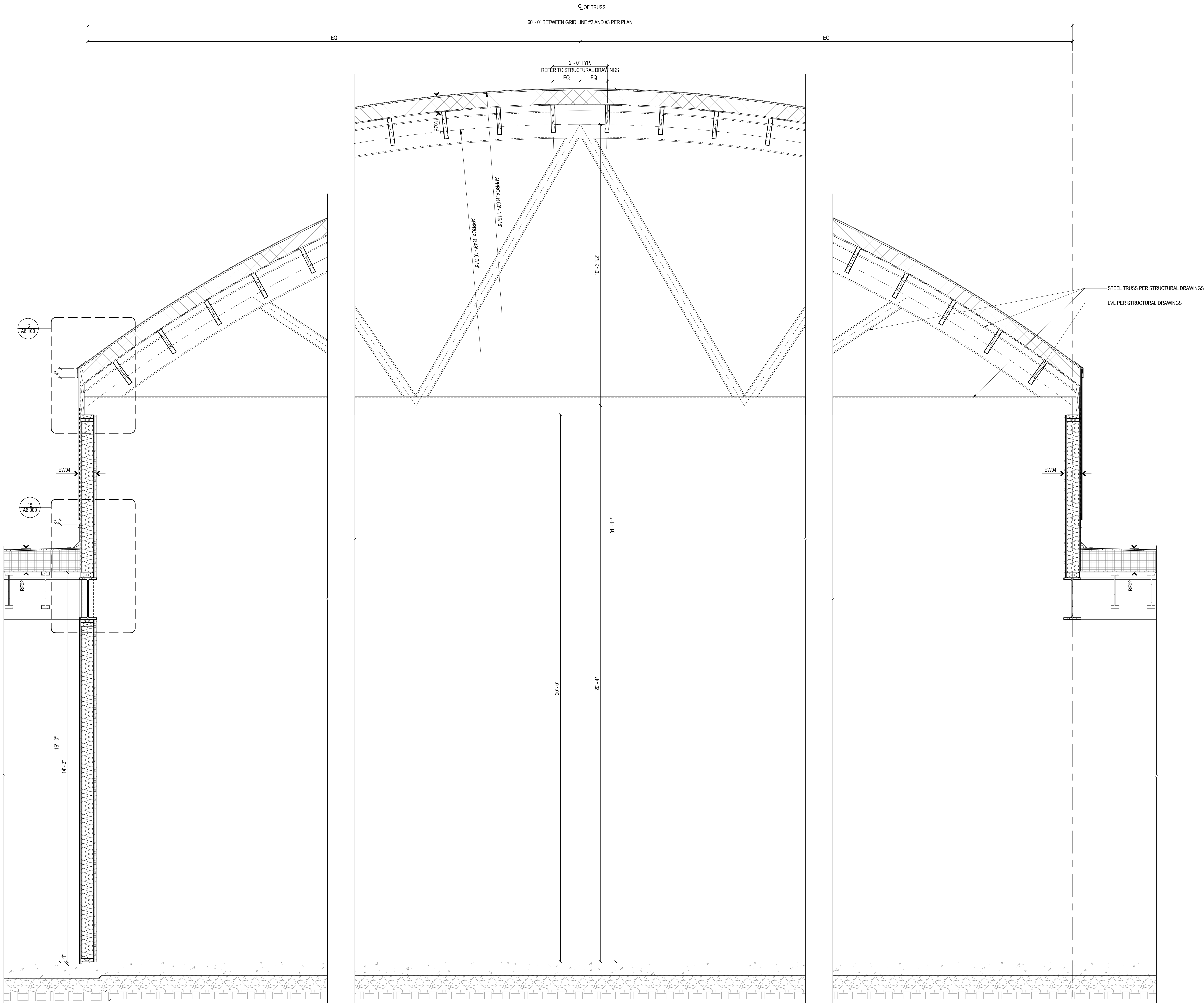


Project Name
HANGAR 10
RECONSTRUCTION
Project Number
007.3945.000
Description
WALL SECTIONS

Scale
3/4" = 1'-0"

A4.002

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1 WALL SECTION - TRUSS
SCALE: 3/4" = 1'-0"

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United States

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△ Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

2 FINISH PLAN - ENLARGED RESTROOMS
SCALE: 1/2" = 1'-0"

1 CONSTRUCTION PLAN - ENLARGED RESTROOMS
SCALE: 1/2" = 1'-0"

SHEET NOTES

- FLOOR DRAIN (TYPICAL OF 3). REFER TO PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
- CLEARANCE REQUIRED AT LADDER FROM FLOOR, PLATFORM, ROOF, OR OTHER OBSTRUCTION.
- METAL TABULAR FIXED LADDER WITH FALL PROTECTION TO ROOF HATCH, PRECISION LADDER LLC, FLH-04. REFER TO DETAIL 09/A6.100 FOR ADDITIONAL INFORMATION.
- 4'-0" X 4'-0" ROOF OPENING FOR ROOF HATCH ABOVE.
- 2'-0" X 2'-0" MOP SINK AND FAUCET. REFER TO PLUMBING DRAWINGS.
- WATER HEATER SHELF ABOVE MOP SINK. REFER TO STRUCTURAL AND PLUMBING DRAWINGS.
- TOILET PARTITION DOOR WITH 34" MIN. CLEAR WIDTH WHEN THE DOOR OPEN 90 DEGREES. PROVIDE DOOR WITH CLOSER, HANDLE AND PRIVACY LATCH. TYPICAL OF 2.
- BROOM FINISHED CONCRETE SLAB.
- BROOM FINISHED CONCRETE SLAB. STOP GYPSUM WALL BOARD ON WALL AT TOP OF CONCRETE CURB. NO WALL BASE IS REQUIRED.
- REFER TO 15/G1.021 FOR ADDITIONAL INFORMATION ON RESTROOM DOOR AND WALL MOUNTED SIGNAGES.

GENERAL NOTES

- REFER TO G0.002 FOR GENERAL NOTES, G0.003 FOR GRAPHIC SYMBOLS AND ABBREVIATIONS, G1.020 AND G1.021 FOR GENERAL ACCESSIBILITY REQUIREMENTS & DETAILS, CLEARANCES AND MOUNTING HEIGHTS.
- REFER TO 01/G1.021 FOR TYPICAL RESTROOM CLEARANCES AND FIXTURE MOUNTING HEIGHTS.
- REFER TO G8.000 FOR TOILET ACCESSORY AND FINISH SCHEDULES. REFER TO PLUMBING DRAWINGS FOR PLUMBING FIXTURE SCHEDULE.
- PROVIDE BLOCKING AS REQ AT ALL LOCATIONS INCLUDING, BUT NOT LIMITED TO: GRAB BARS, OVERHEAD CABINETRY, SHELVING, SIGNAGE, TOILET ROOM ACCESSORIES, WALL MOUNTED EQUIPMENT, ETC.
- USE WATER RESISTANT GYPSUM BOARD BEHIND TOILET AND LAVATORY.

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

RESTROOM PLANS

Scale

1/2" = 1'-0"

True North

A5.000

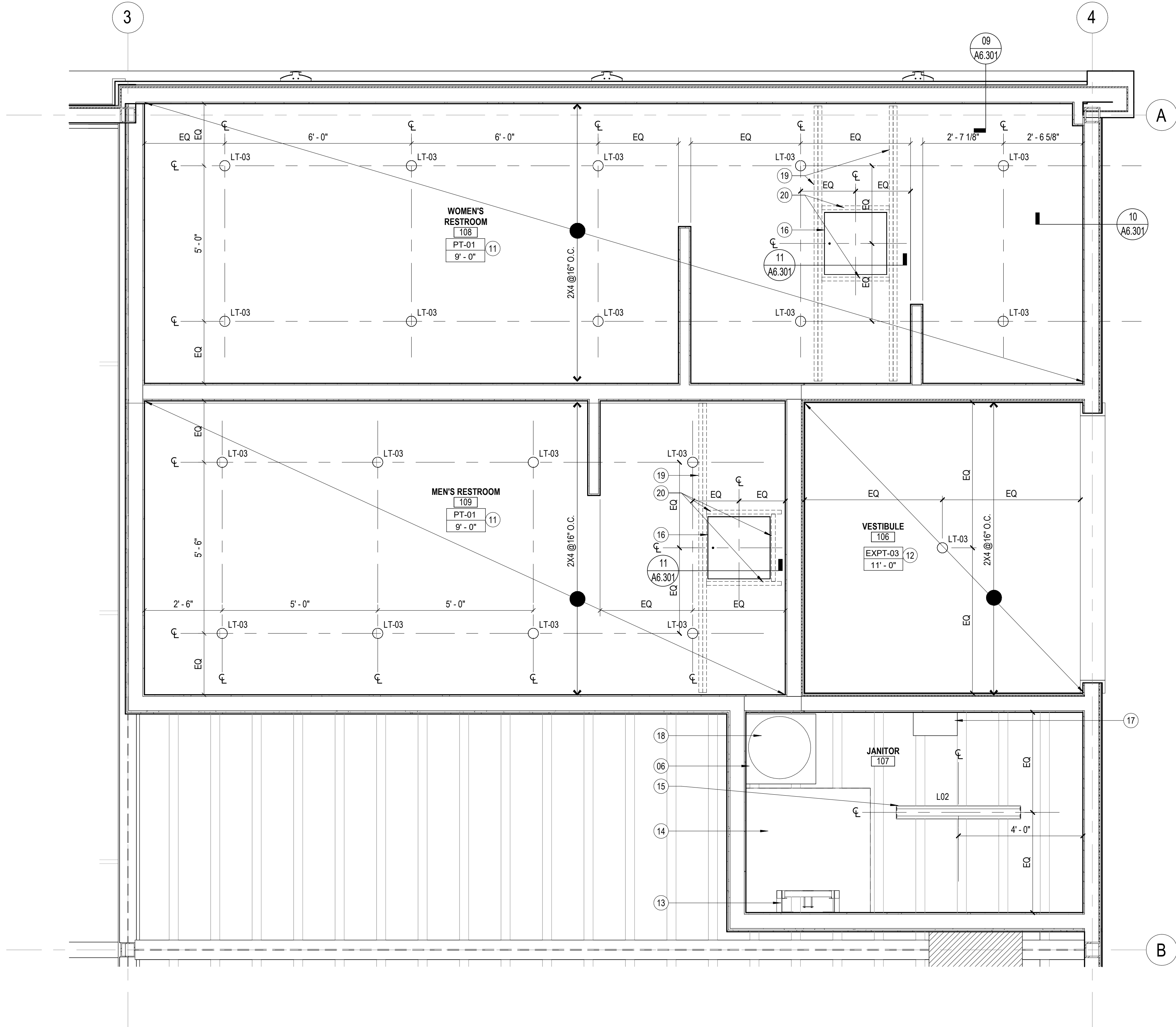
CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
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United States

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1 REFLECTED CEILING PLAN - ENLARGED RESTROOM
SCALE: 1/2" = 1'-0"

SHEET NOTES

- WATER HEATER SHELF ABOVE MOP SINK. REFER TO STRUCTURAL AND PLUMBING DRAWINGS.
- PAINTED GYPSUM WALL BOARD CEILING SOFFIT. REFER TO A6.301 FOR CEILING DETAILS. PAINT COLOR AS INDICATED.
- PAINTED FIBER CEMENT BOARD. PAINT COLOR AS INDICATED.
- METAL TABULAR FIXED LADDER WITH FALL PROTECTION TO ROOF HATCH, PRECISION LADDER LLC, FLH-04. REFER TO DETAIL 08/A6.100 FOR ADDITIONAL INFORMATION.
- BILCO 4X4 SINGLE LEAF ROOF ACCESS HATCH WITH THERMAL BREAK TYPE F-50TB ABOVE.
- 4" LONG STRIP LIGHT PER ELECTRICAL DRAWINGS.
- 24"X24" GYPSUM WALL BOARD CEILING ACCESS PANEL A6.301/FB-5015.
- BI-FOLD DOOR POWER UNIT ON WALL BY MANUFACTURER. PROVIDE 32" CLEAR IN HEIGHT FROM BOTTOM OF THE UNIT UP PER MANUFACTURER REQUIREMENTS.
- WATER HEATER TO TOP OF WATER HEATER SHELF. REFER TO STRUCTURAL AND PLUMBING DRAWINGS.
- DOUBLE 2X4 WOOD CEILING JOISTS AT OPENING.
- 2X4 WOOD FRAMING AT OPENING.

GENERAL NOTES

- NOTIFY ARCHITECT OF ANY DISCREPANCIES BETWEEN ARCHITECTURAL AND ELECTRICAL OR MECHANICAL DRAWINGS AND OBTAIN CLARIFICATION BEFORE COMMENCING CONSTRUCTION.
- LOCATIONS OF CEILING PENETRATIONS, SUCH AS AIR DIFFUSERS, GRILLES, LIGHT FIXTURES, ETC., SHALL BE AS SHOWN ON ARCHITECTURAL REFLECTED CEILING PLANS. WHERE DISCREPANCIES IN LOCATION OCCUR, THE ARCHITECTURAL PLAN SHALL GOVERN. NOTIFY ARCHITECT ANY DISCREPANCIES FOR CLARIFICATION.
- ALL CEILING GRILLES TO BE FACTORY FINISHED TO MATCH THE COLOR OF ADJACENT CEILING TILE.
- CONDUIT MUST BE A MINIMUM OF 8" CLEAR ABOVE THE CEILING GRID.
- ALL NEW CIRCUITS SHALL BE LABELED ON THE PROPER BUILDING ELECTRICAL PANEL DIRECTORIES.
- NOTIFY ARCHITECT WHEN A LIGHT FIXTURE CANNOT BE USED DUE TO EXISTING NON-REMOVABLE OBSTRUCTION AND ALTERNATE LOCATION HINDERS LAYOUT. LOW PROFILE LIGHT FIXTURE SHALL BE USED.
- PROVIDE SPRINKLERS THROUGHOUT AS REQUIRED BY CODE. SUBMIT SHOP DRAWINGS PRIOR TO INSTALLATION FOR APPROVAL AS DEFERRED SUBMITTAL.

- EXIT ILLUMINATION LEVEL SHALL NOT BE LESS THAN 1 FC AT THE WALKING SURFACE LEVEL (SEC 1006.2). POWER FOR THE MEANS OF EGRESS ILLUMINATION SHALL BE PROVIDED BY THE BUILDING ELECTRICAL SUPPLY. IN THE EVENT OF POWER SUPPLY FAILURE, EMERGENCY POWER SYSTEM SHALL PROVIDE POWER FOR A DURATION NOT LESS THAN 90 MINUTES AND SHALL CONSIST OF STORAGE BATTERIES, UNIT EQUIPMENT OR AN ON-SITE GENERATOR (SEC 1006.1, 1006.2, 1006.3, 1006.4).
- EXCEPT WHERE RIGID BRACES ARE USED TO LIMIT LATERAL DEFLECTIONS, SPRINKLER HEADS AND OTHER PENETRATION SHALL HAVE A 2" OVERSIZED RING, SLEEVES, OR ADAPTER THROUGH THE CEILING TILE TO ALLOW FOR FREE MOVEMENT OF AT LEAST 1" IN ALL HORIZONTAL DIRECTIONS.
- CHANGES IN CEILING PLAN ELEVATIONS SHALL BE PROVIDED WITH POSITIVE BRACING.
- CABLE TRAY AND ELECTRICAL CONDUITS SHALL BE SUPPORTED INDEPENDENTLY OF THE CEILING.

KEY PLAN

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

RESTROOM PLAN

Scale

1/2" = 1'-0"

True North



A5.001

SHEET NOTES

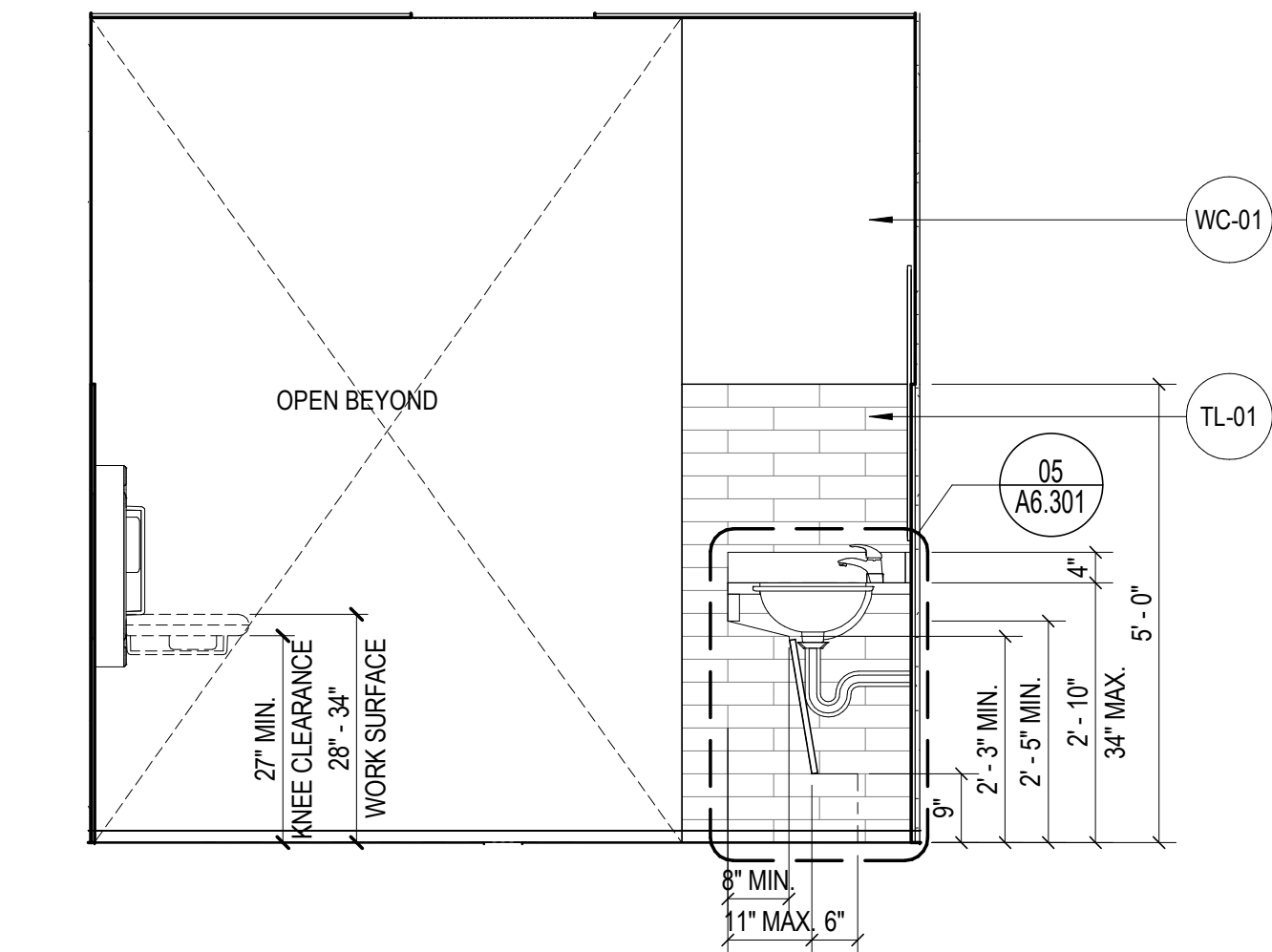
01 ACCESS PANEL ON TILE WALL: ACUDOR
FB-5060-TD WITH TILE IN STALLED ON ACCESS
PANEL. TILE GROUT LOCATION TO MATCH
ADJACENT EXISTING.

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

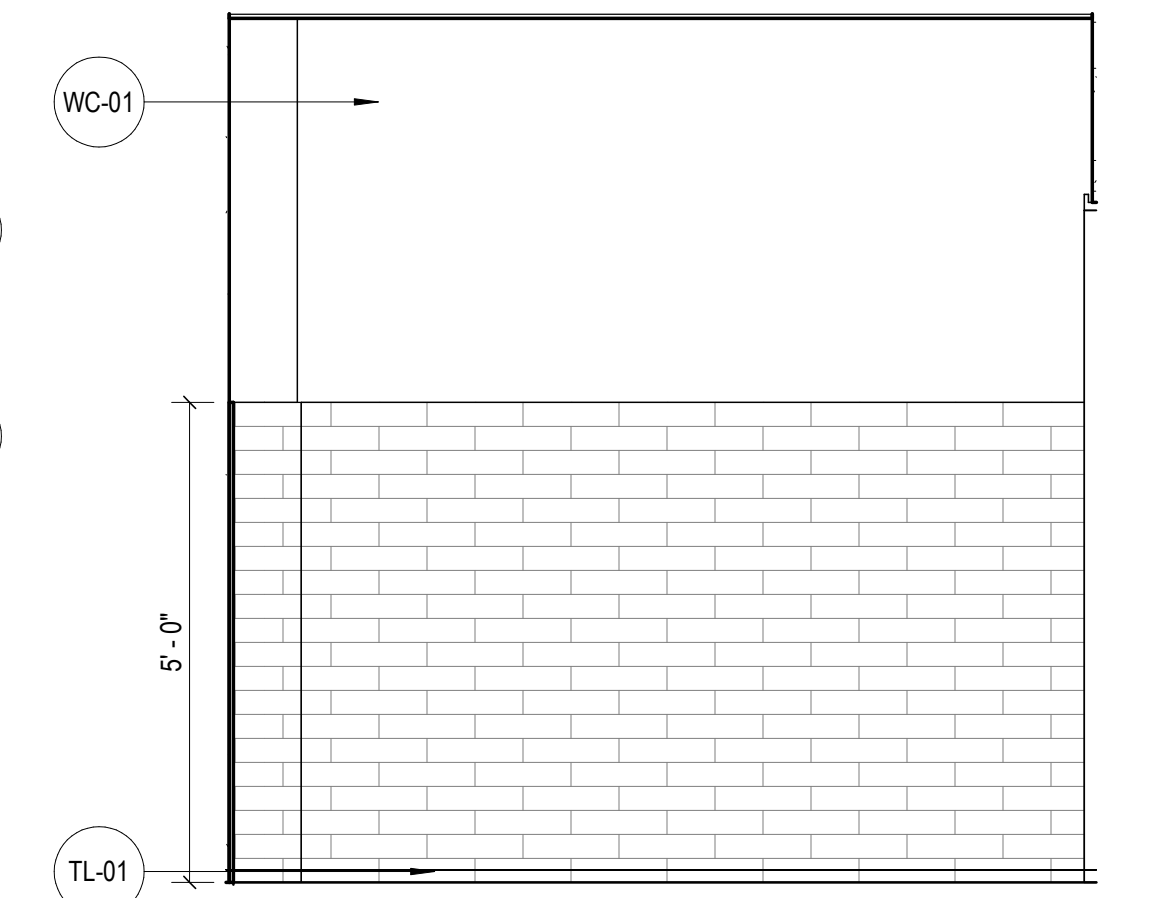
410 BEACON
IRVINE, CA 92618

Gensler

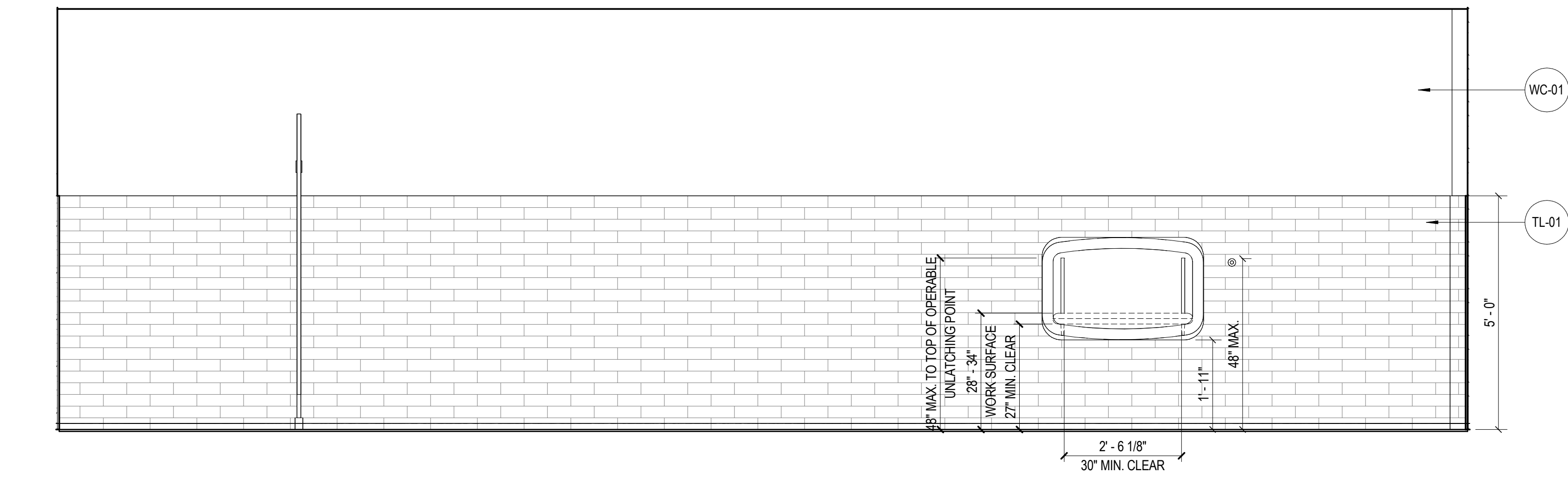
4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States
Tel 949.863.9434
Fax 949.553.1676



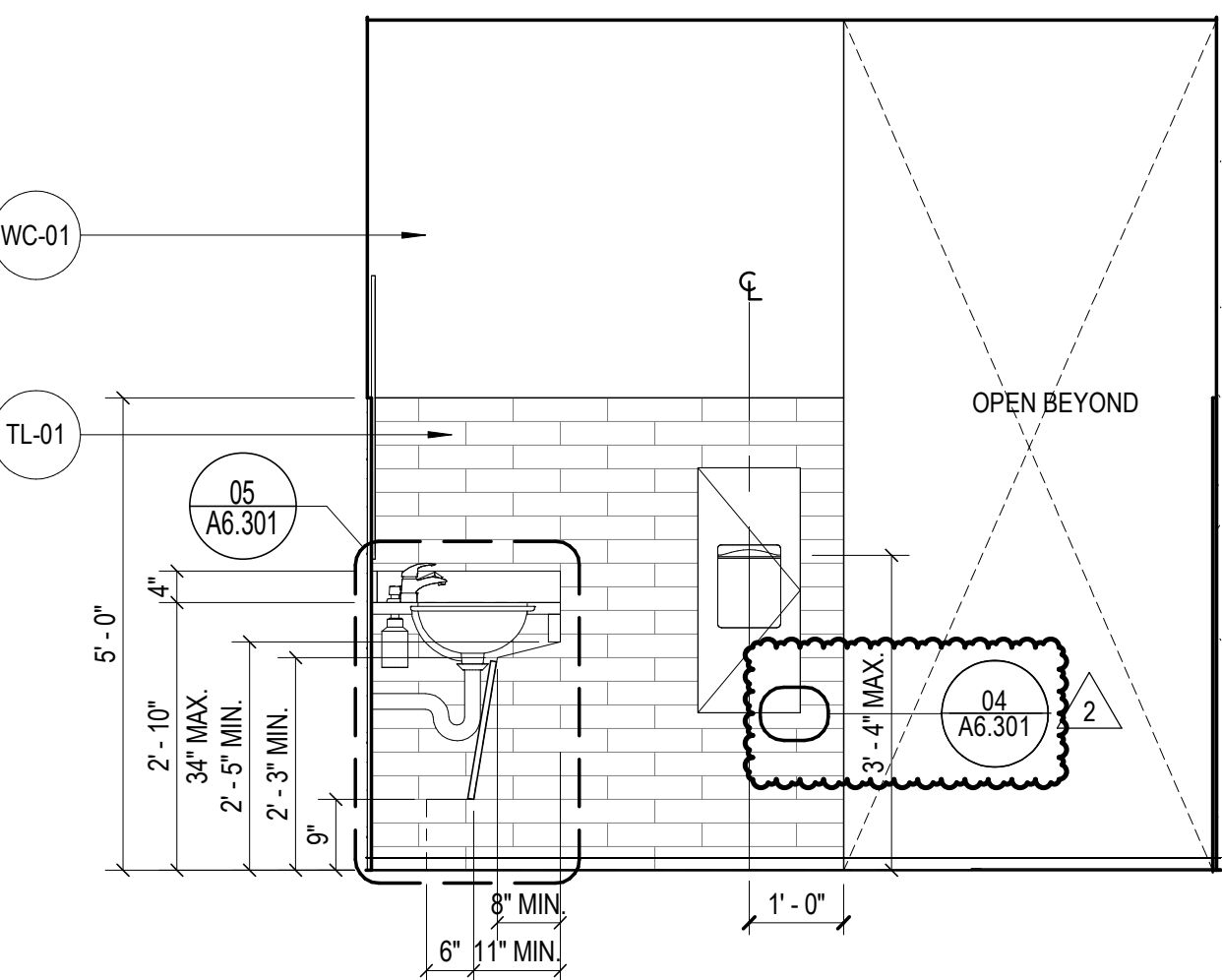
01 WOMEN'S RESTROOM - SINK PLAN EAST
SCALE: 1/2" = 1'-0"



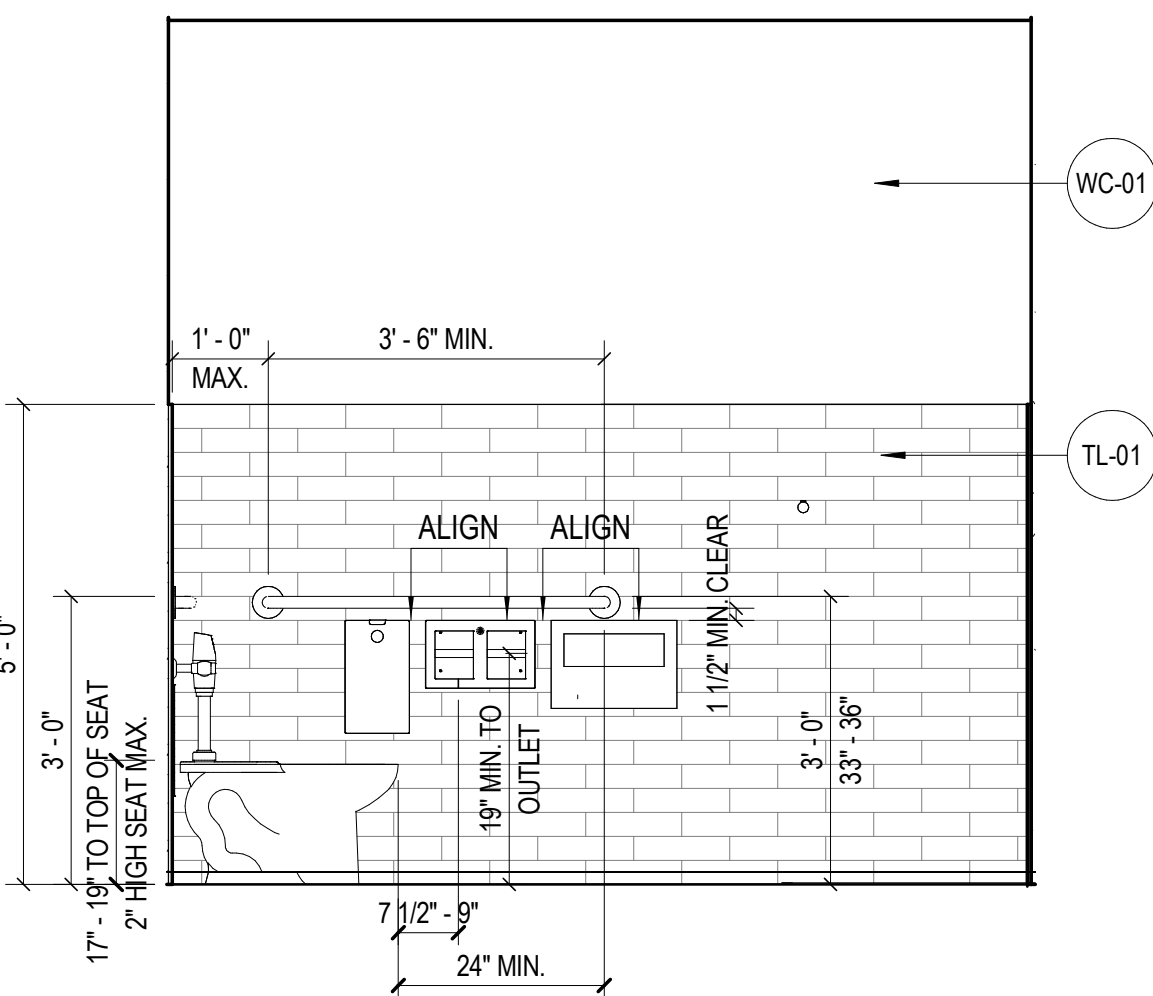
02 WOMEN'S RESTROOM - PLAN EAST
SCALE: 1/2" = 1'-0"



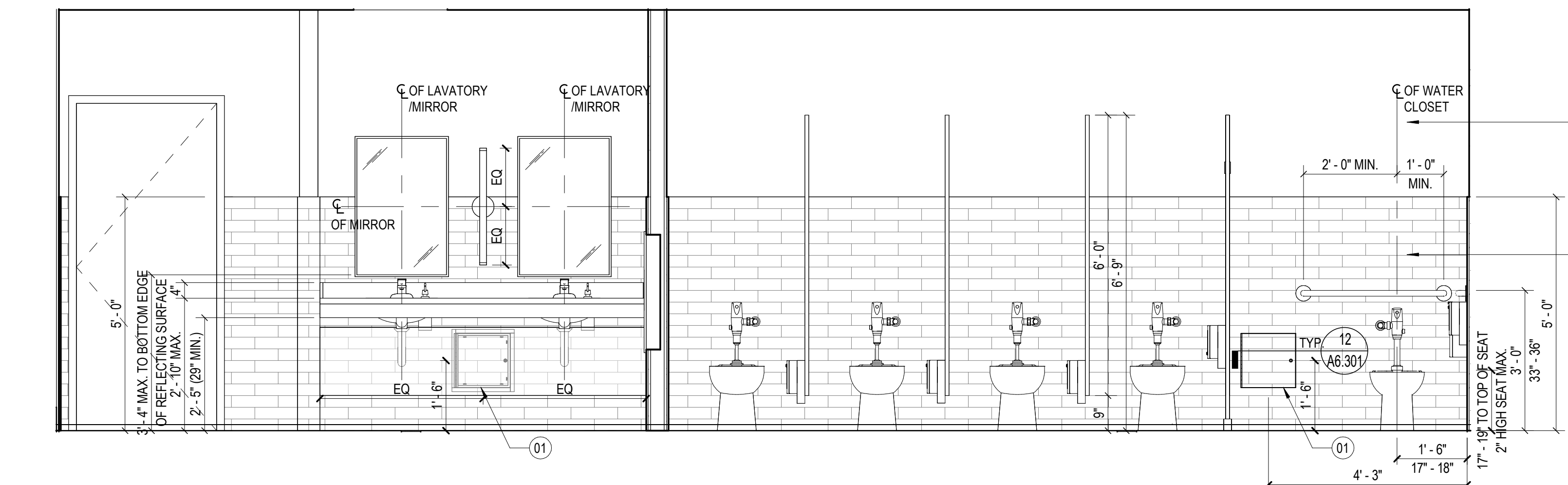
03 WOMEN'S RESTROOM - PLAN NORTH
SCALE: 1/2" = 1'-0"



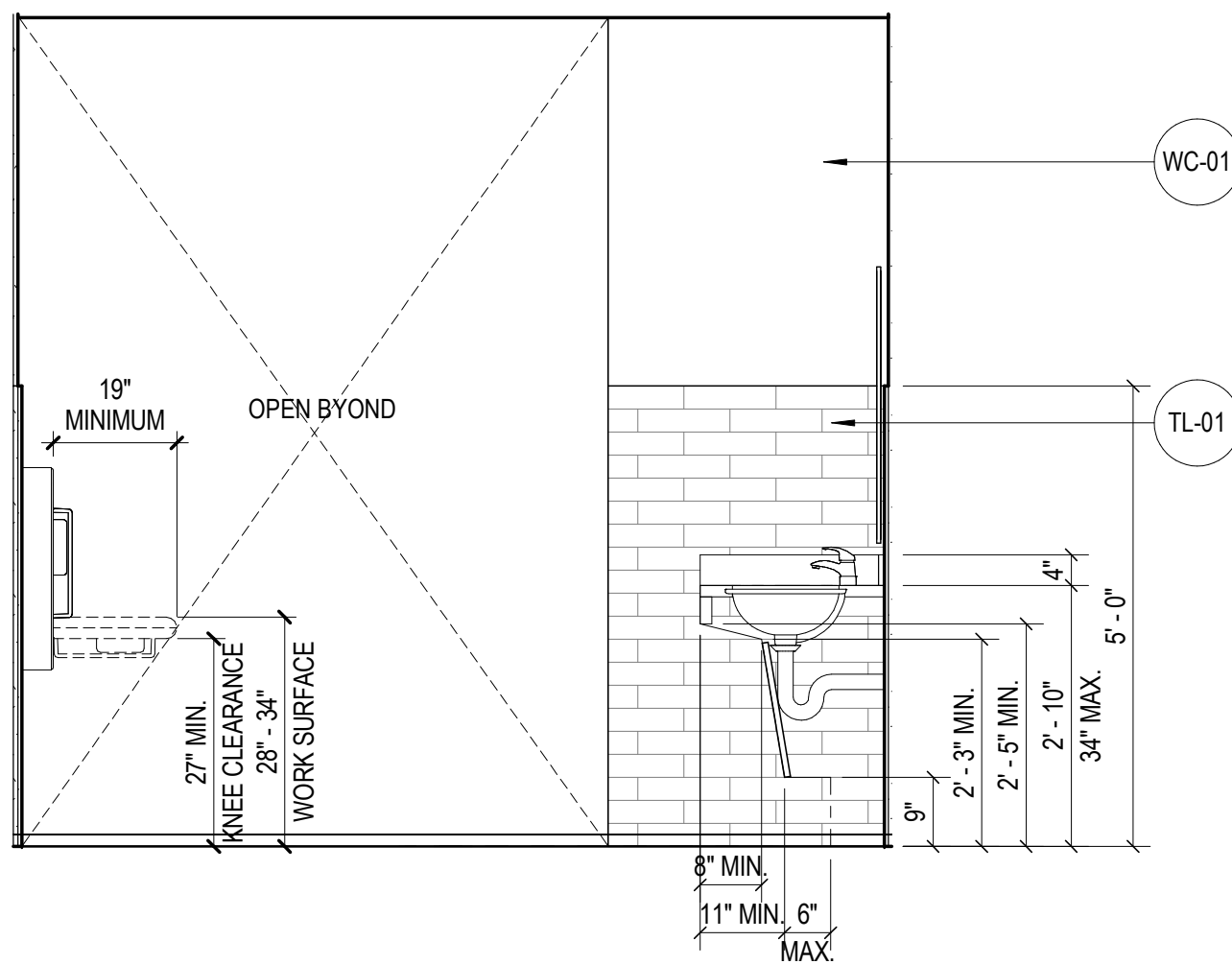
05 WOMEN'S RESTROOM - SINK PLAN WEST
SCALE: 1/2" = 1'-0"



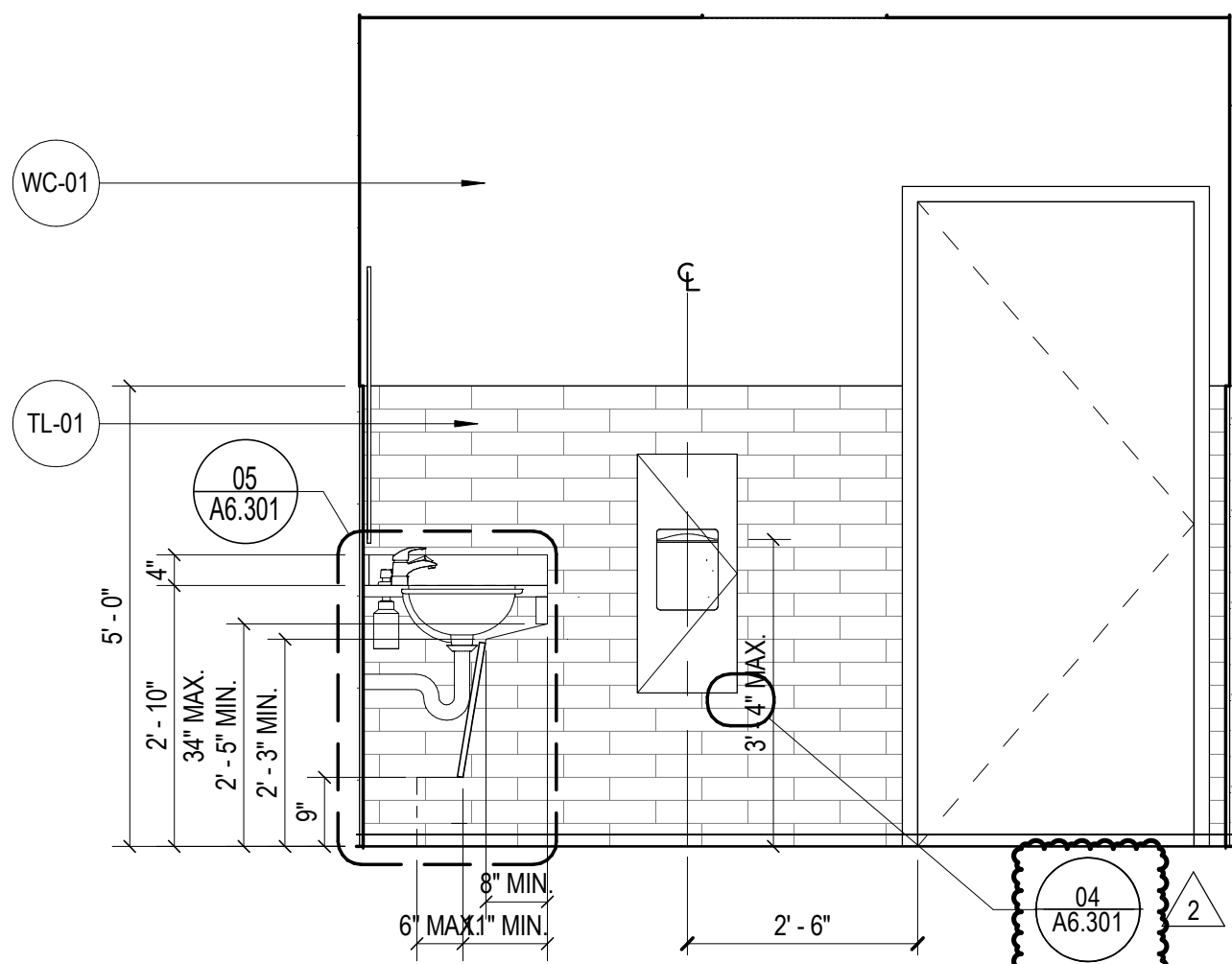
06 WOMEN'S RESTROOM - PLAN WEST
SCALE: 1/2" = 1'-0"



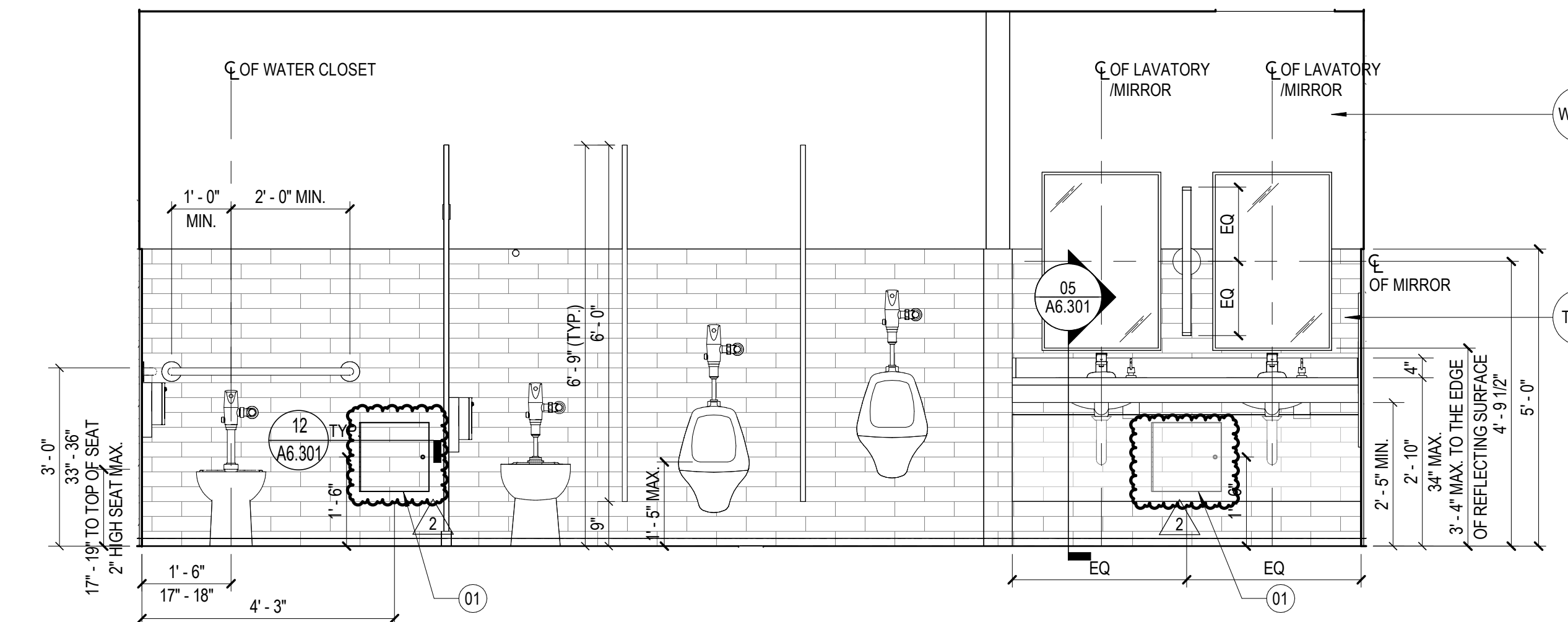
07 WOMEN'S RESTROOM - PLAN SOUTH
SCALE: 1/2" = 1'-0"



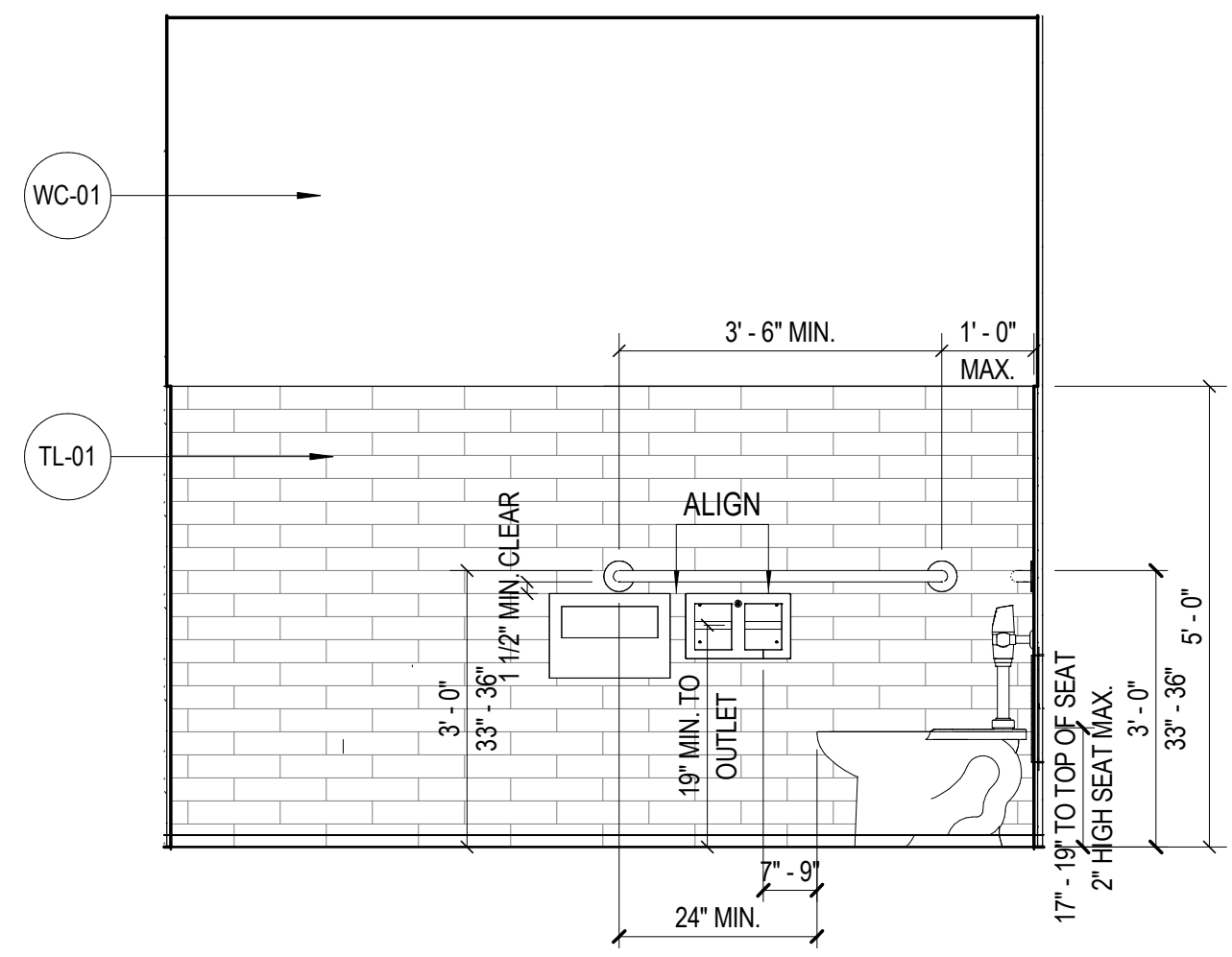
09 MEN'S RESTROOM - SINK PLAN WEST
SCALE: 1/2" = 1'-0"



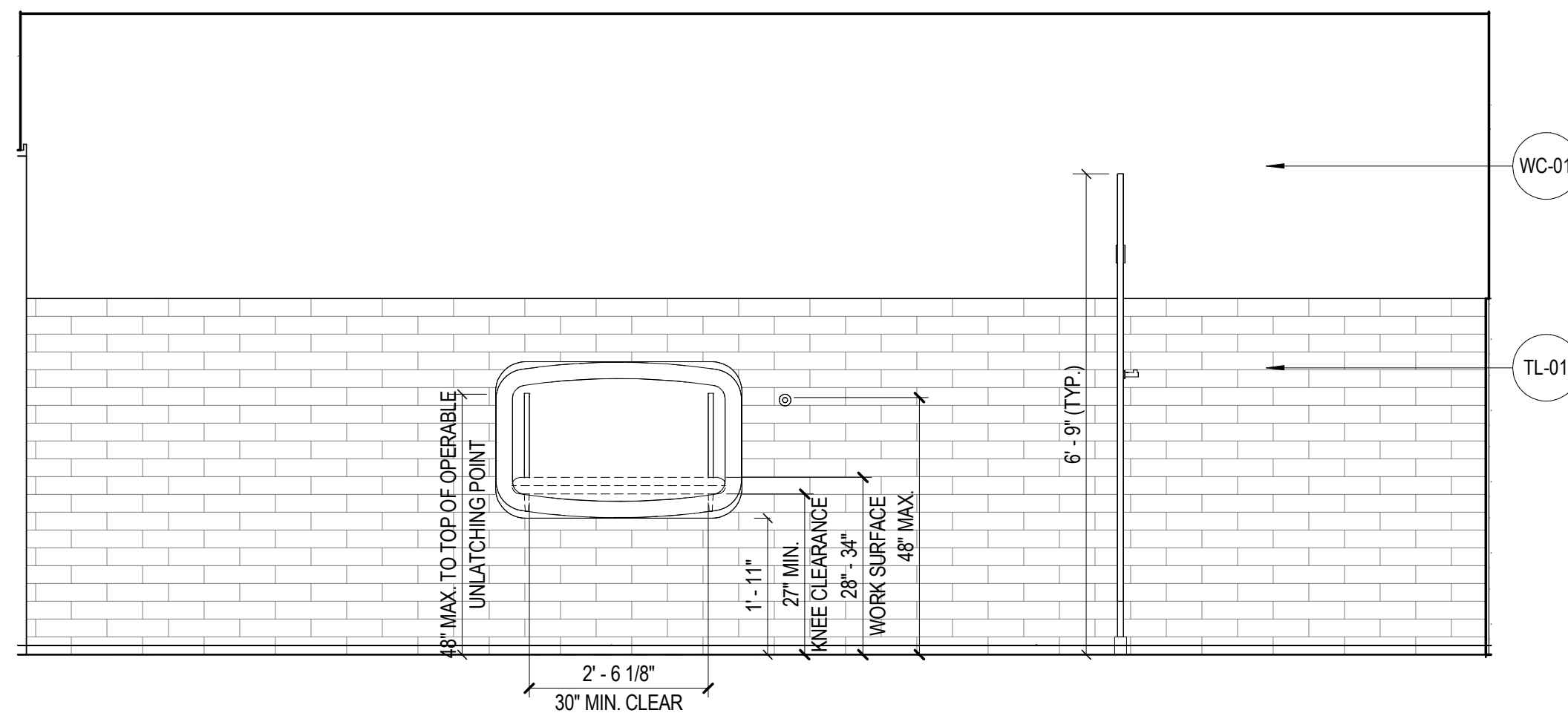
10 MEN'S RESTROOM - PLAN EAST
SCALE: 1/2" = 1'-0"



11 MEN'S RESTROOM - PLAN NORTH
SCALE: 1/2" = 1'-0"



14 MEN'S RESTROOM - PLAN WEST
SCALE: 1/2" = 1'-0"



15 MEN'S RESTROOM - PLAN SOUTH
SCALE: 1/2" = 1'-0"

GENERAL NOTES

Date	Description
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET
2 05.28.2026	BID ADDENDUM 02

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

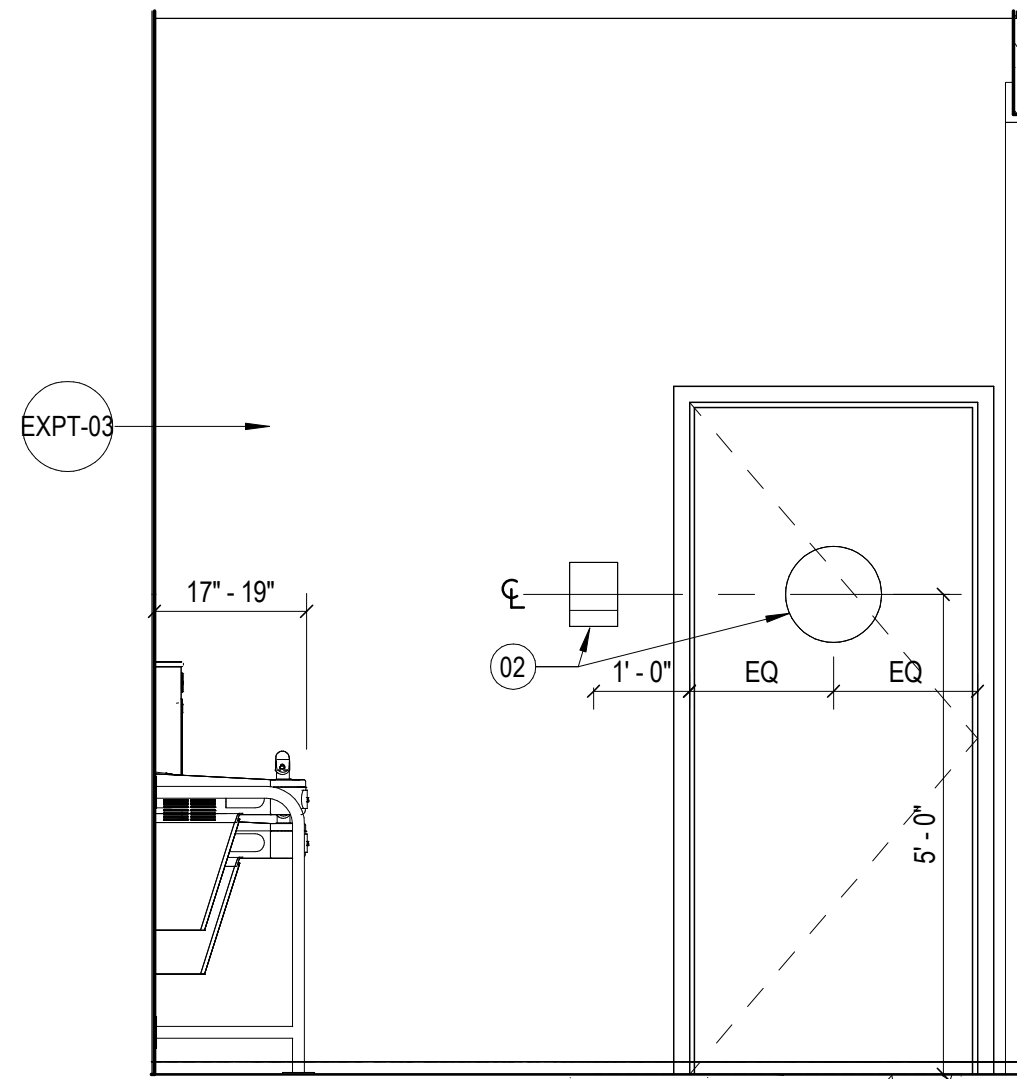
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RESTROOM ELEVATIONS

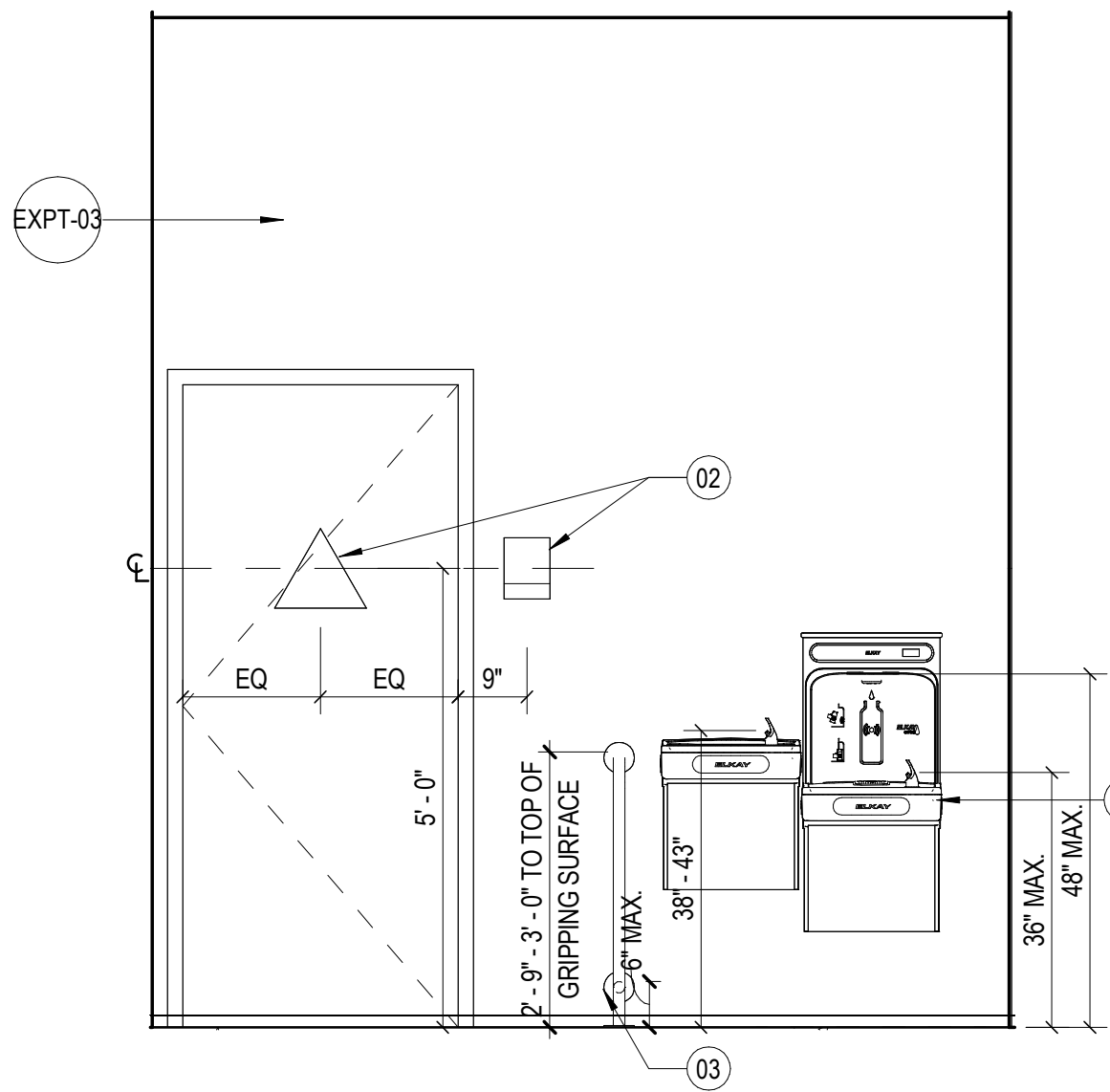
Scale

1/2" = 1'-0"

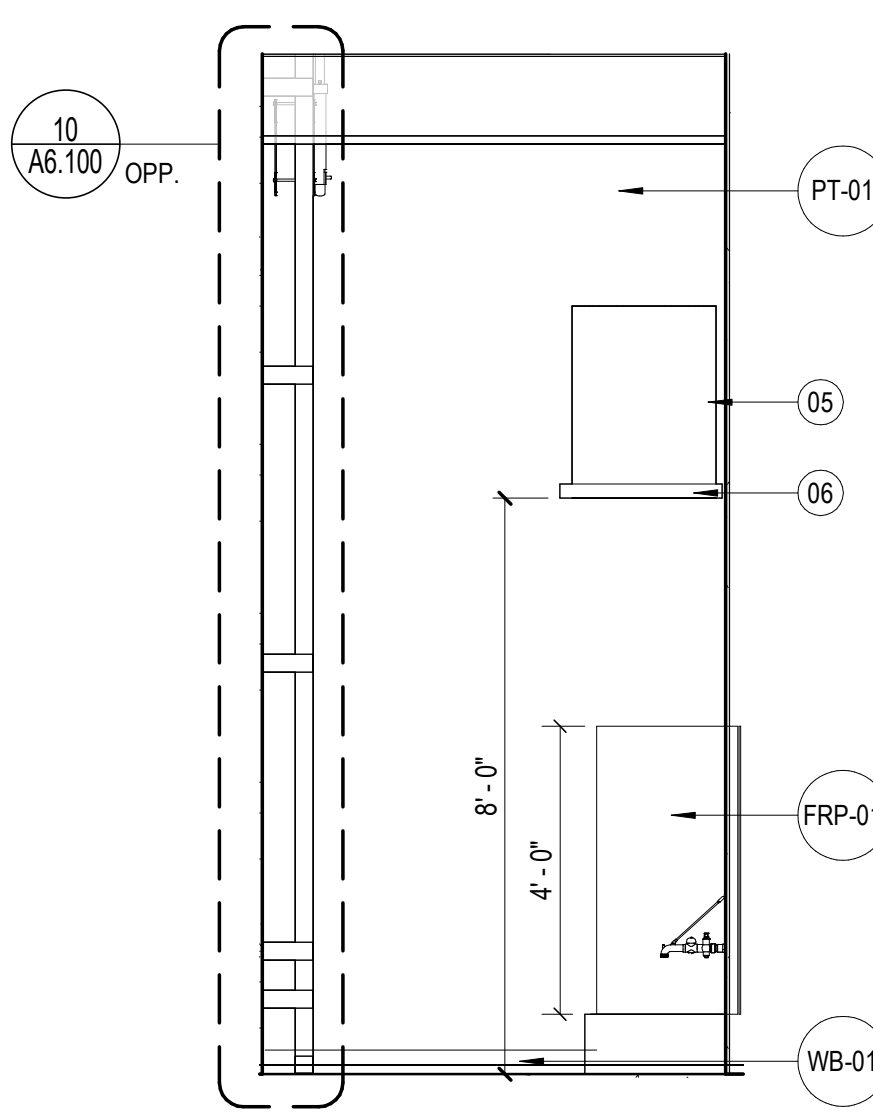
A5.010



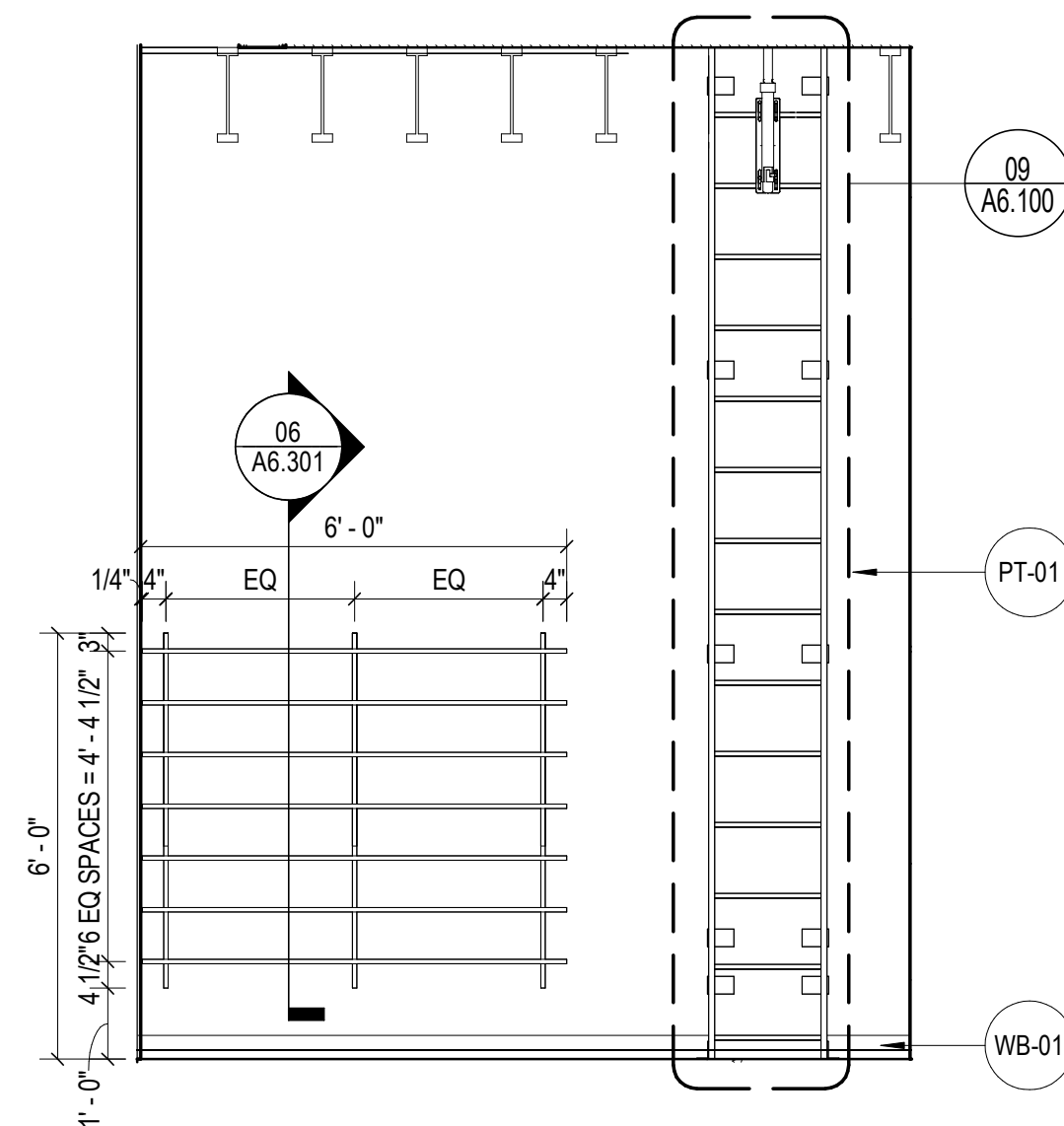
01 VESTIBULE - PLAN NORTH
SCALE: 1/2" = 1'-0"



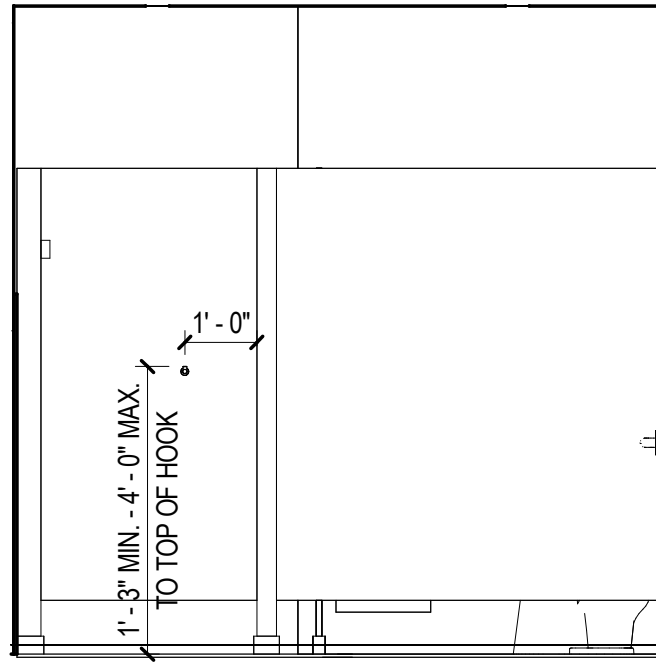
02 VESTIBULE - PLAN WEST
SCALE: 1/2" = 1'-0"



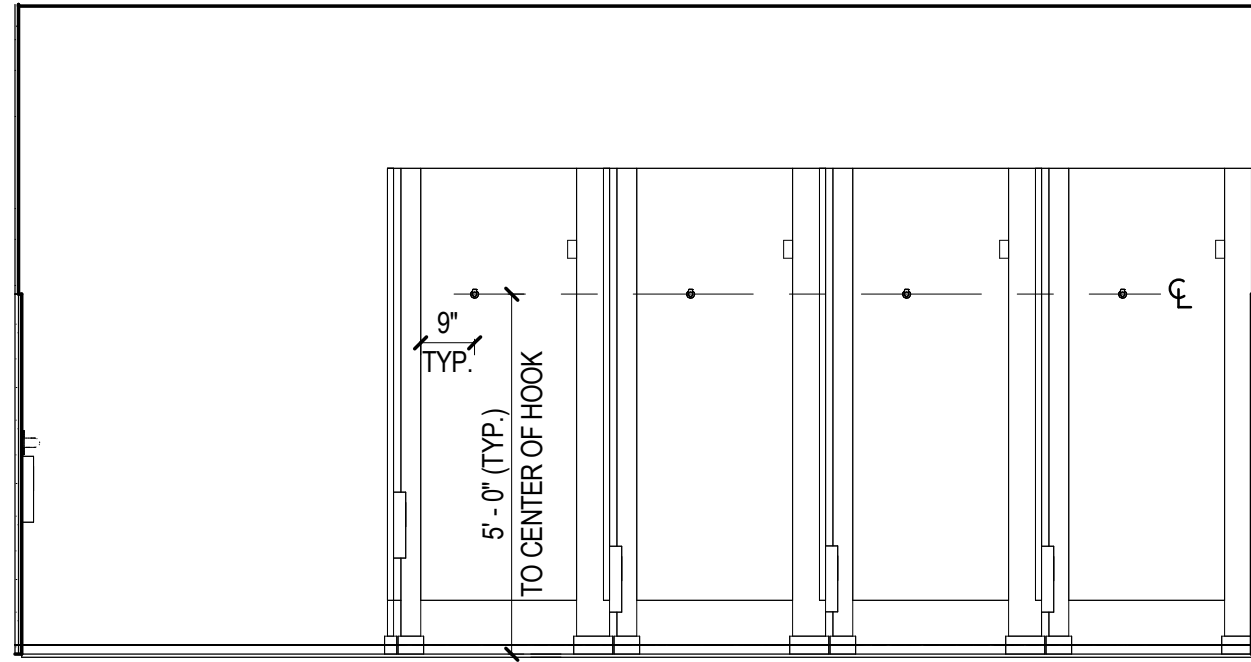
03 JANITOR - PLAN WEST
SCALE: 3/8" = 1'-0"



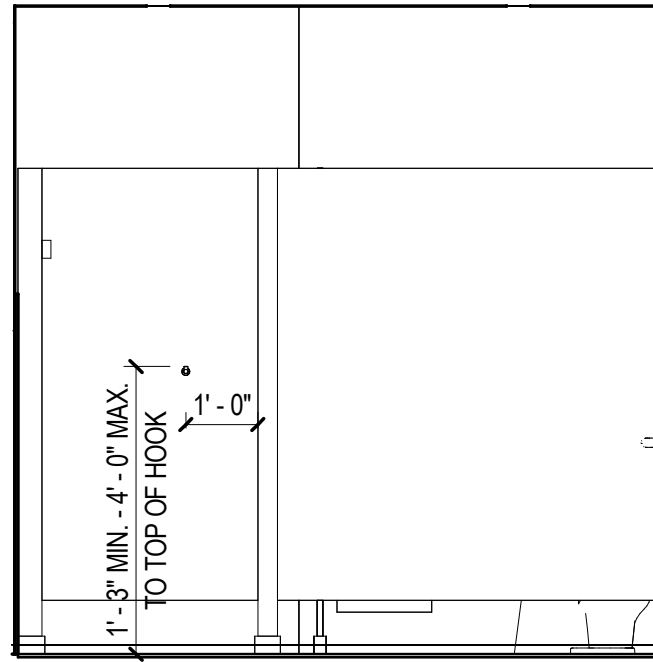
04 JANITOR - PLAN SOUTH
SCALE: 3/8" = 1'-0"



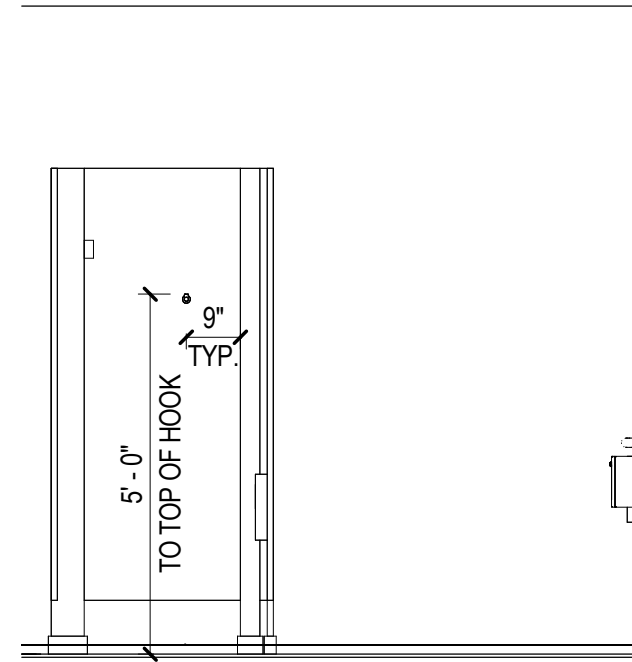
05 WOMEN'S ACCESSIBLE STALL - PLAN EAST
SCALE: 3/8" = 1'-0"



06 WOMEN'S STANDARD STALL - PLAN NORTH
SCALE: 3/8" = 1'-0"



07 MEN'S ACCESSIBLE STALL - PLAN EAST
SCALE: 3/8" = 1'-0"



08 MEN'S STANDARD STALL - PLAN SOUTH
SCALE: 3/8" = 1'-0"

SHEET NOTES

- 02 RESTROOM SIGNAGE. REFER TO TOILET ROOM ELEVATIONS AND DETAIL 15/G1.021 FOR TYPE, SIZE AND MOUNTING LOCATION REQUIREMENTS.
- 03 BOTTOM HORIZONTAL RAIL 5" MAX. ABOVE FINISH FLOOR.
- 04 REFER TO 01/G1.021 FOR ACCESSIBILITY COMPLIANCE DETAILING.
- 05 WATER HEATER. REFER TO PLUMBING DRAWINGS.
- 06 WATER HEATER SUPPORT PLATFORM. REFER TO STRUCTURAL AND PLUMBING DRAWINGS.

GENERAL NOTES

CITY OF IRVINE HANGAR 10 RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
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United States

Tel 949.863.9434
Fax 949.553.1676

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10.14.2025	CD CLIENT REVIEW/PRICING
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Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

RESTROOM AND JANITOR
ELEVATIONS

Scale

As indicated

A5.011

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United States

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13 WALL DETAIL - METAL PANEL @SHIFT

09 WALL DETAIL - EXTERIOR TRUSS
SCALE: 1 1/2" = 1'-0"

06 STOREFRONT - LARGE TENANT CANOPY PLAN Copy 1
SCALE: 3/4" = 1'-0"

01 FOOTING DETAIL

15 WALL DETAIL - TRUSS & FLAT ROOF

11 WALL DETAIL - METAL PANEL CORNER

07 STOREFRONT - LARGE TENANT CANOPY PLAN
SCALE: 3/4" = 1'-0"

02 WALL DETAIL - METAL PANEL @OPEN JAMB
SCALE: 1 1/2" = 1'-0"

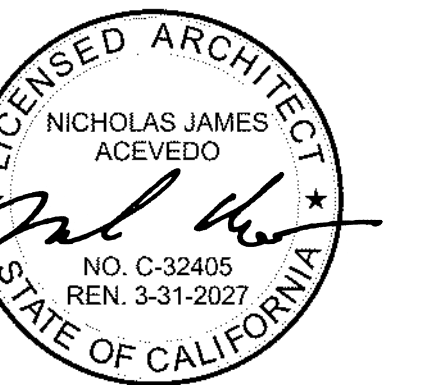
12 WALL DETAIL - MTL PANEL UPPER CORNER
SCALE: 1 1/2" = 1'-0"

08 STOREFRONT - CANOPY @SMALL TENANTS
SCALE: 1 1/2" = 1'-0"

03 WALL DETAIL - METAL PANEL @OPEN HEAD

Date	Description
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05.07.2026	BID SET

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Project Name

HANGAR 10 RECONSTRUCTION

Project Number	007.3945.000
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Description
EXTERIOR WALL DETAILS

Scale
As indicated

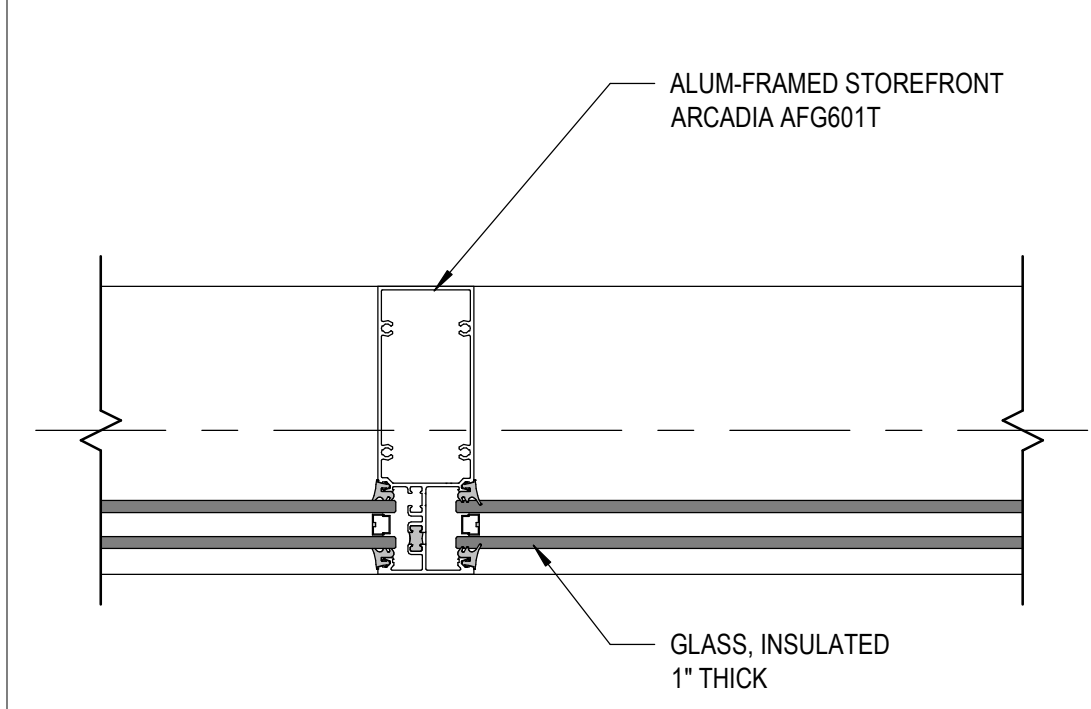
A6.000

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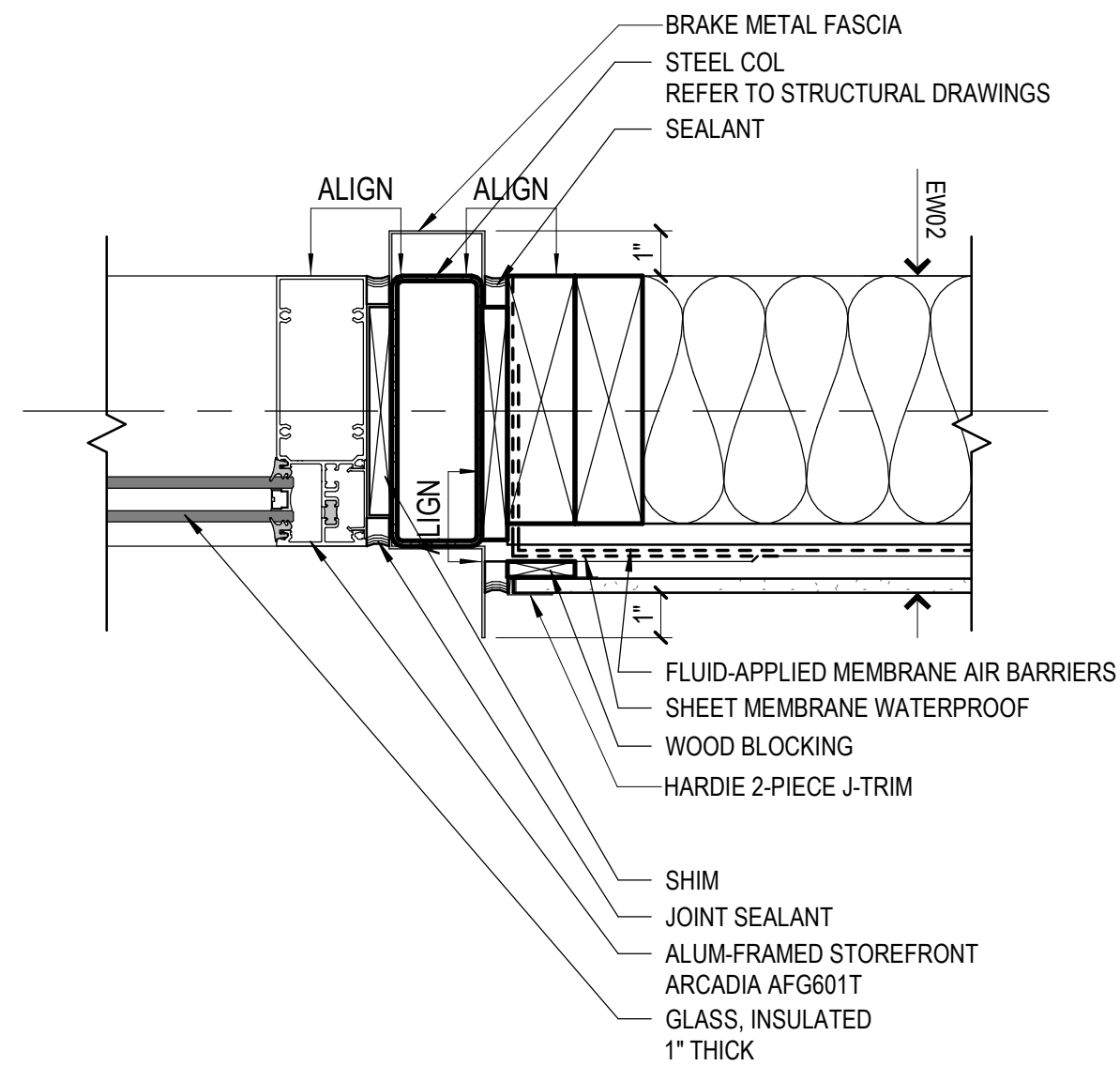
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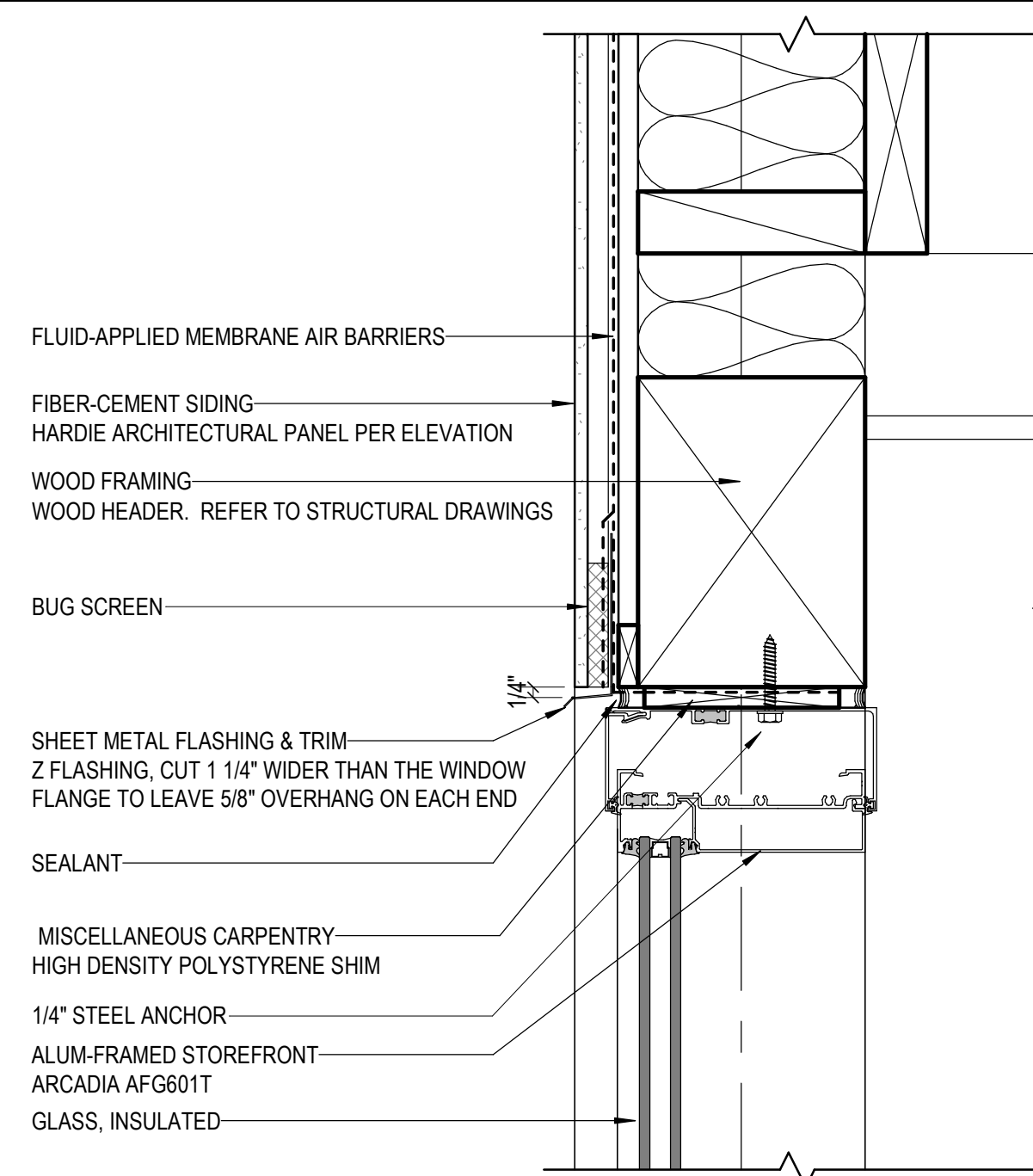
Tel 949.863.9434
Fax 949.553.1676



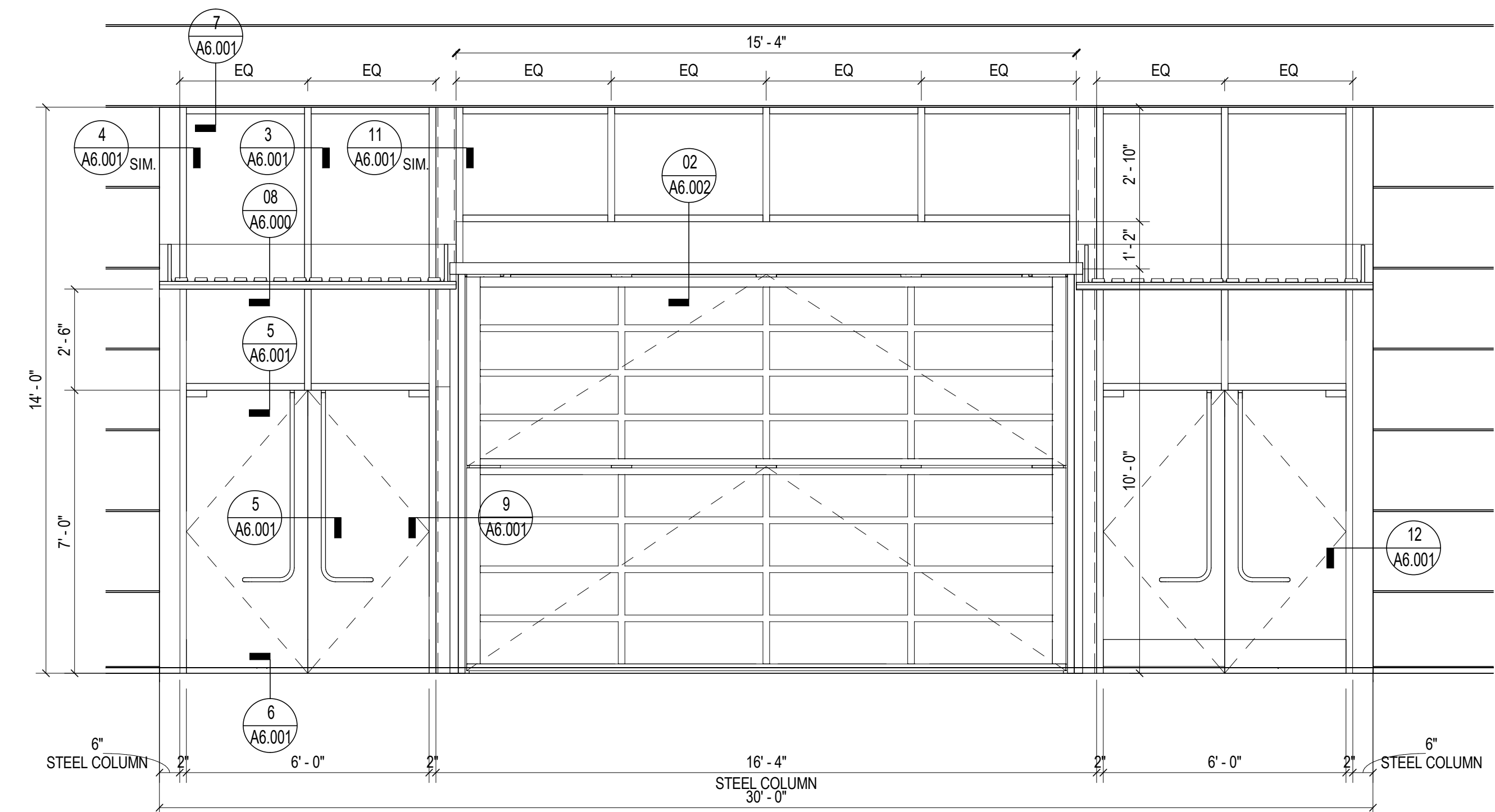
3 STOREFRONT VERTICAL WITH CAP



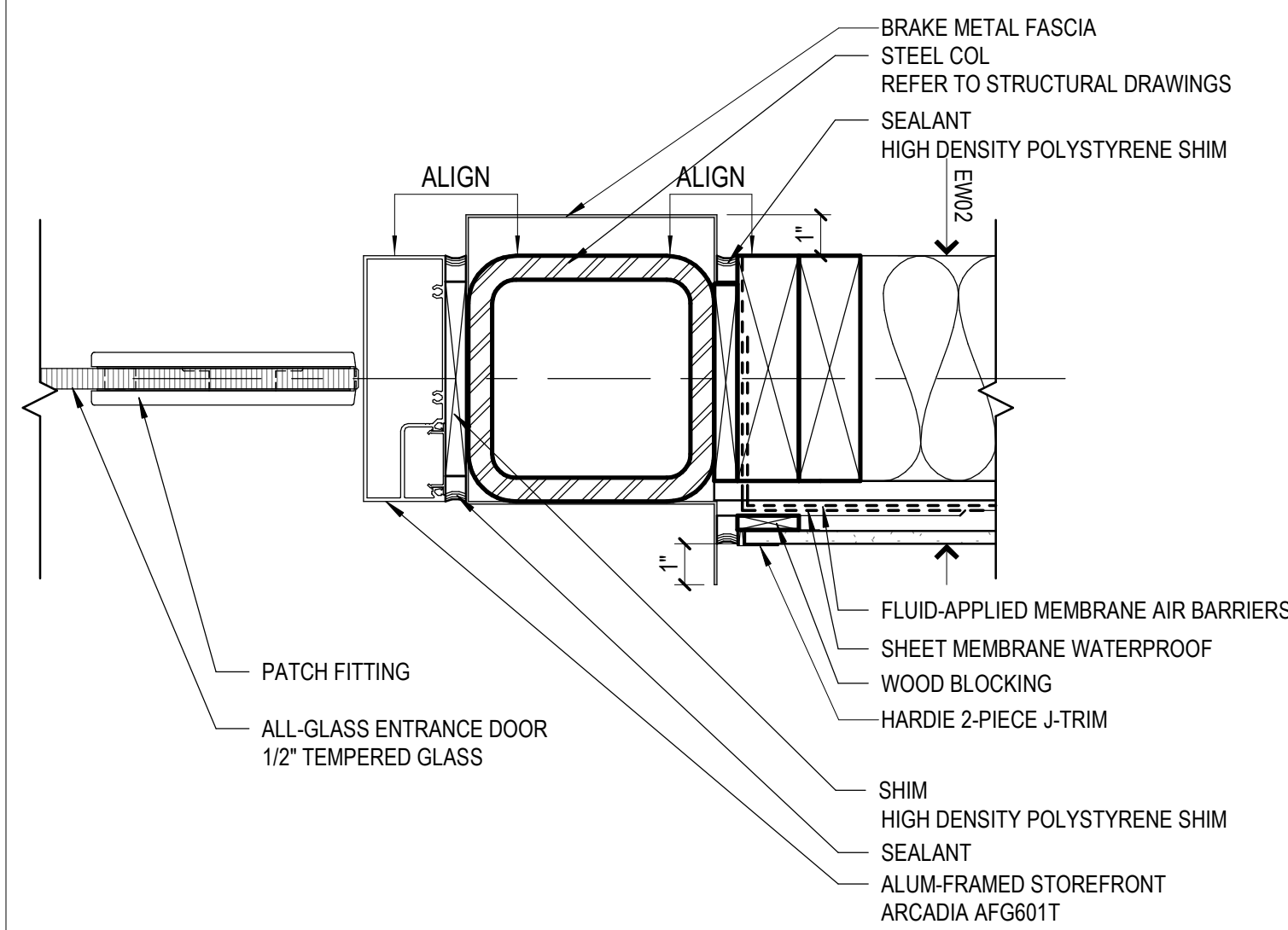
4 STOREFRONT JAMB



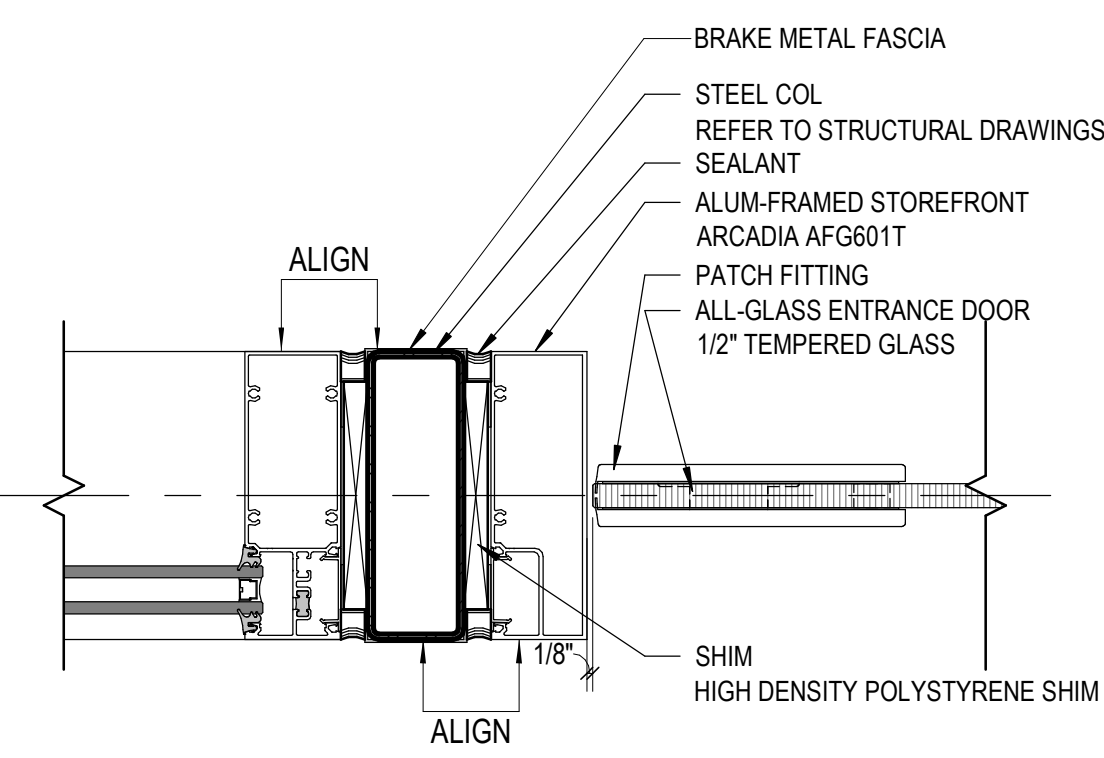
7 **STOREFRONT - TOP @SMALL TENANTS**
SCALE: 3" = 1'-0"



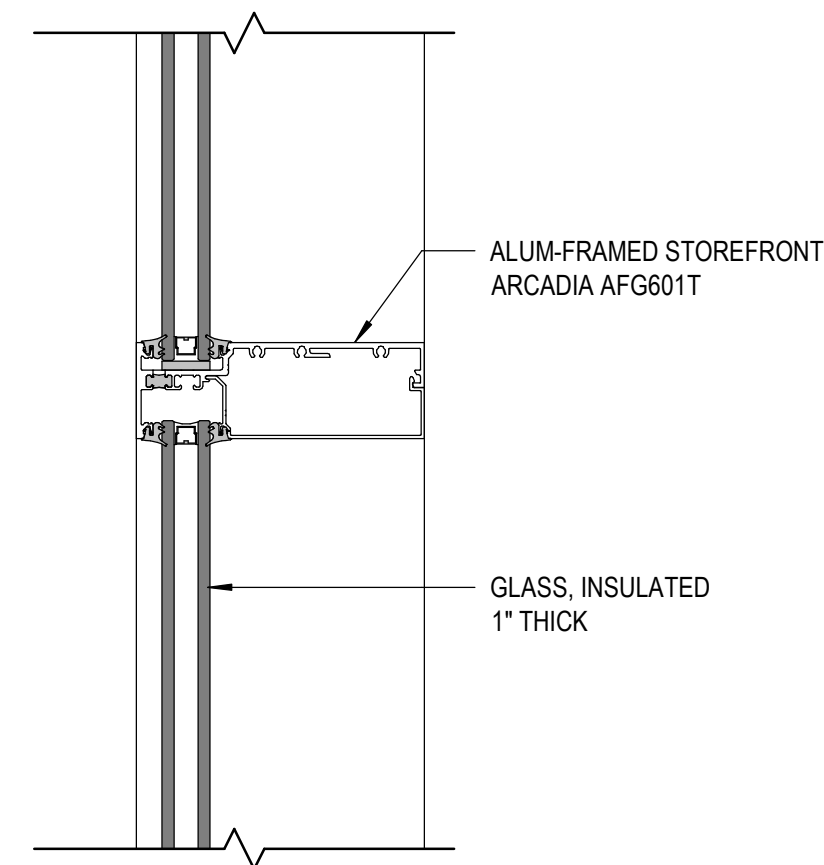
01 ENLARGED STOREFRONT WITH BI-FOLD DOOR
SCALE: 3/8" = 1'-0"



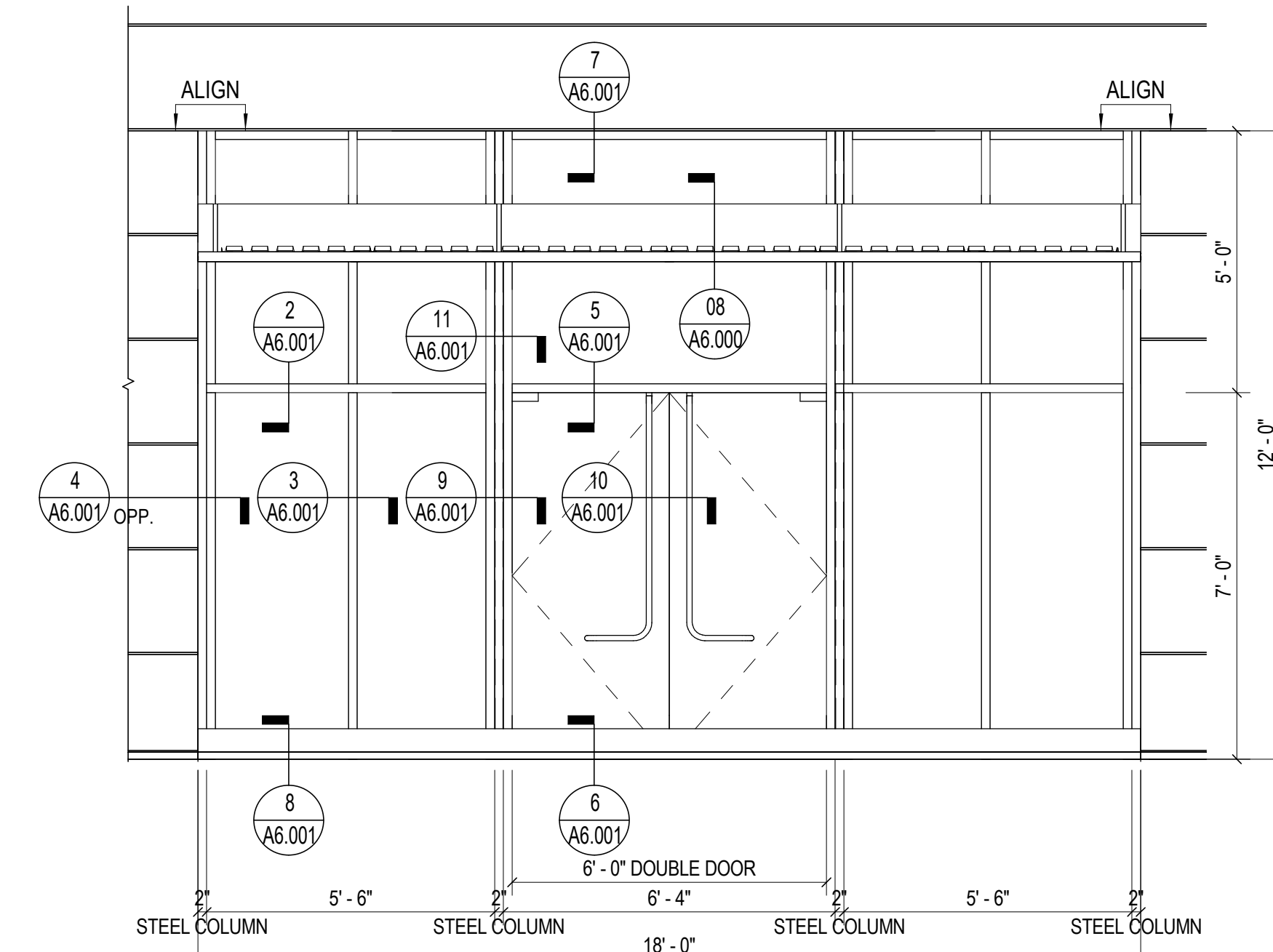
12 STOREFRONT JAMB @6" COLUMN
SCALE: 3" = 1'-0"



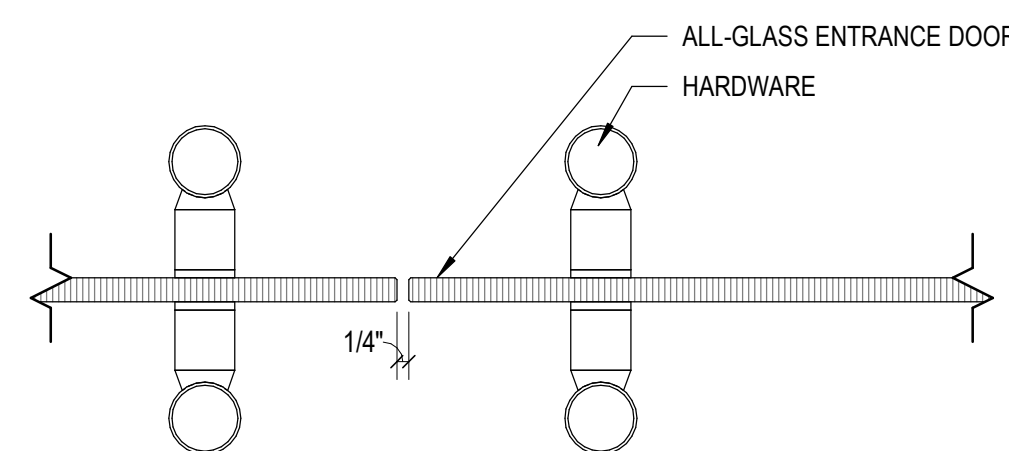
9 STOREFRONT DOOR JAMB
SCALE: 3" = 1'-0"



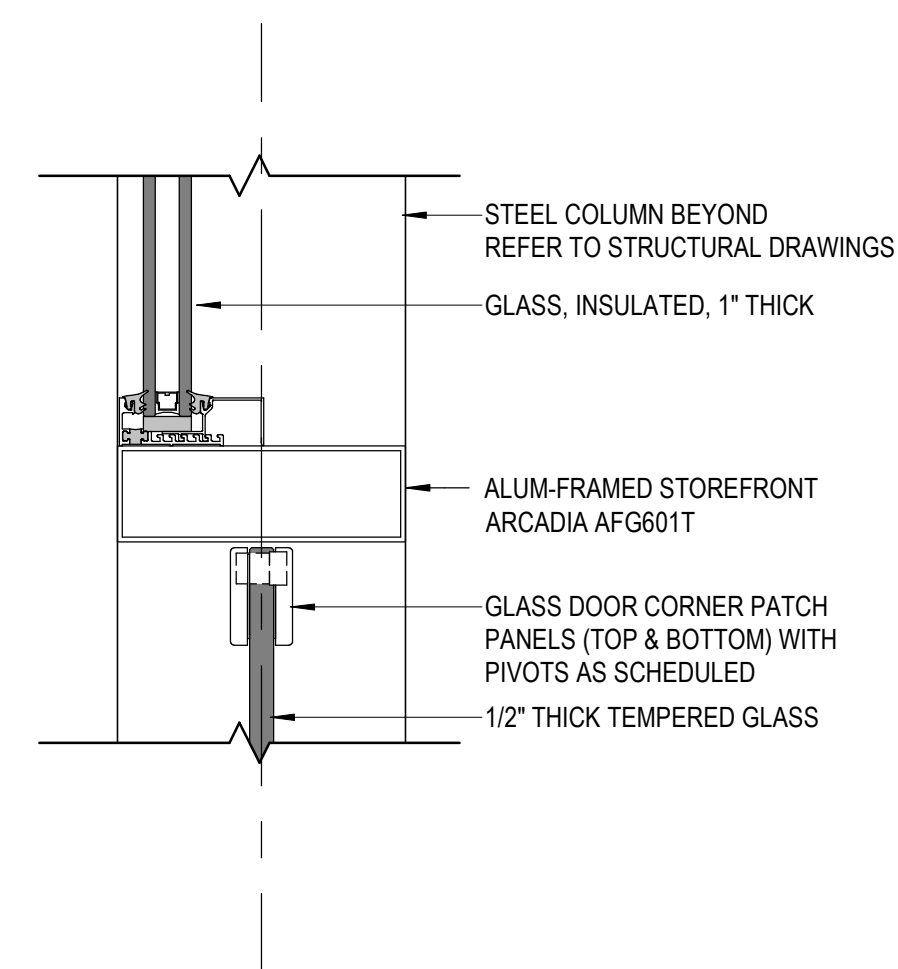
2 STOREFRONT - HORIZONTAL MULLION



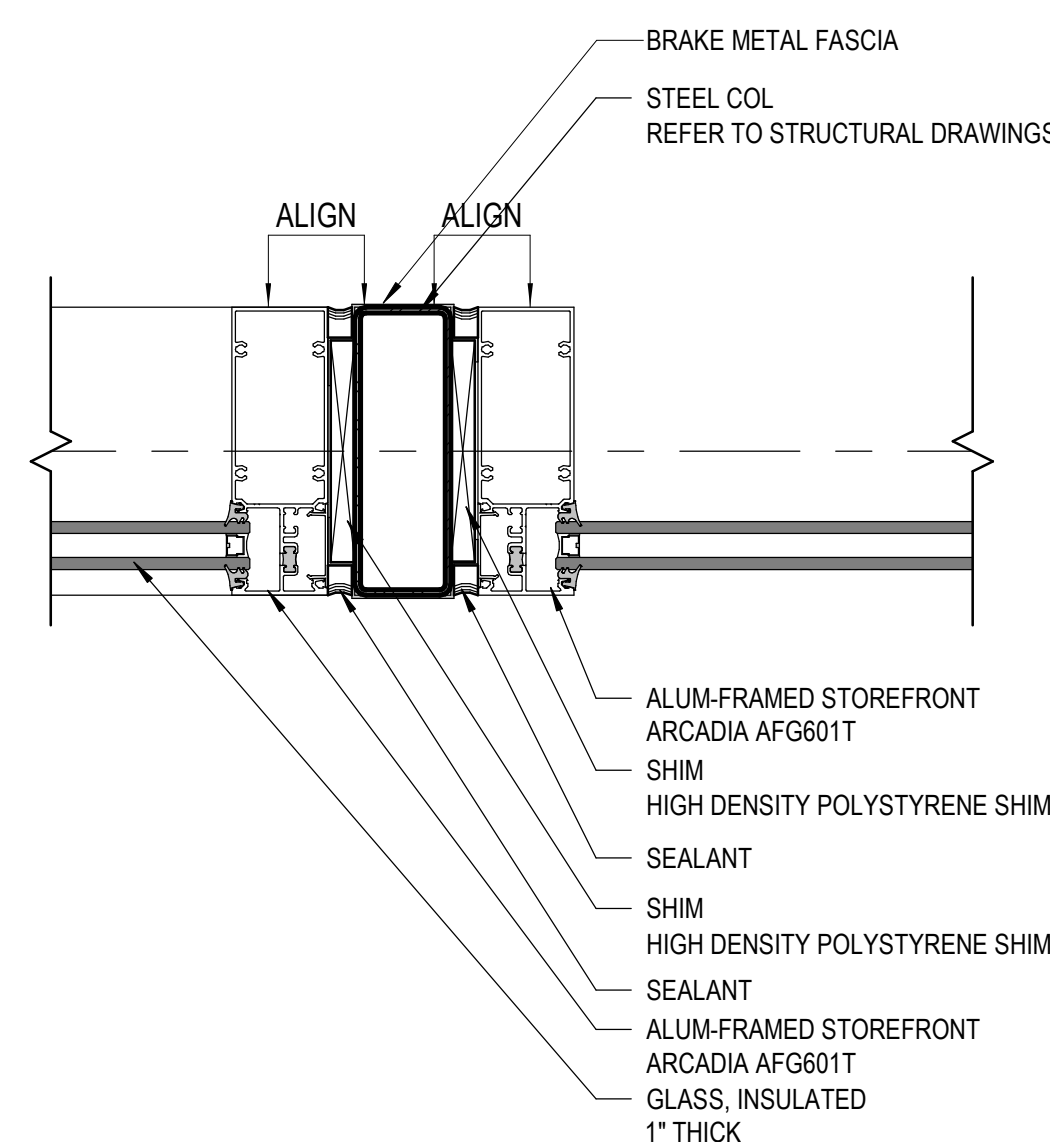
1 ENLARGED STOREFRONT ELEVATION



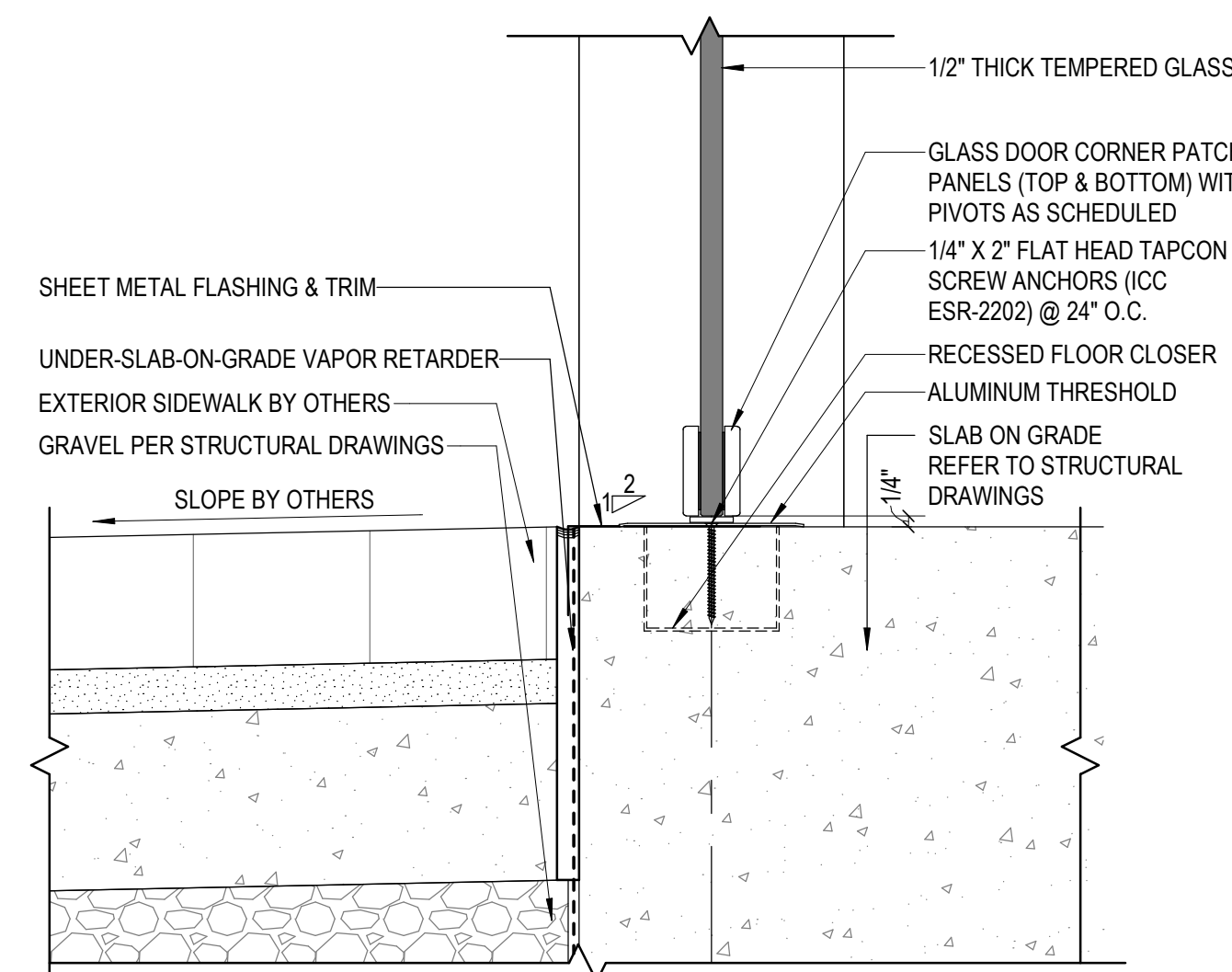
10 STOREFRONT DOOR



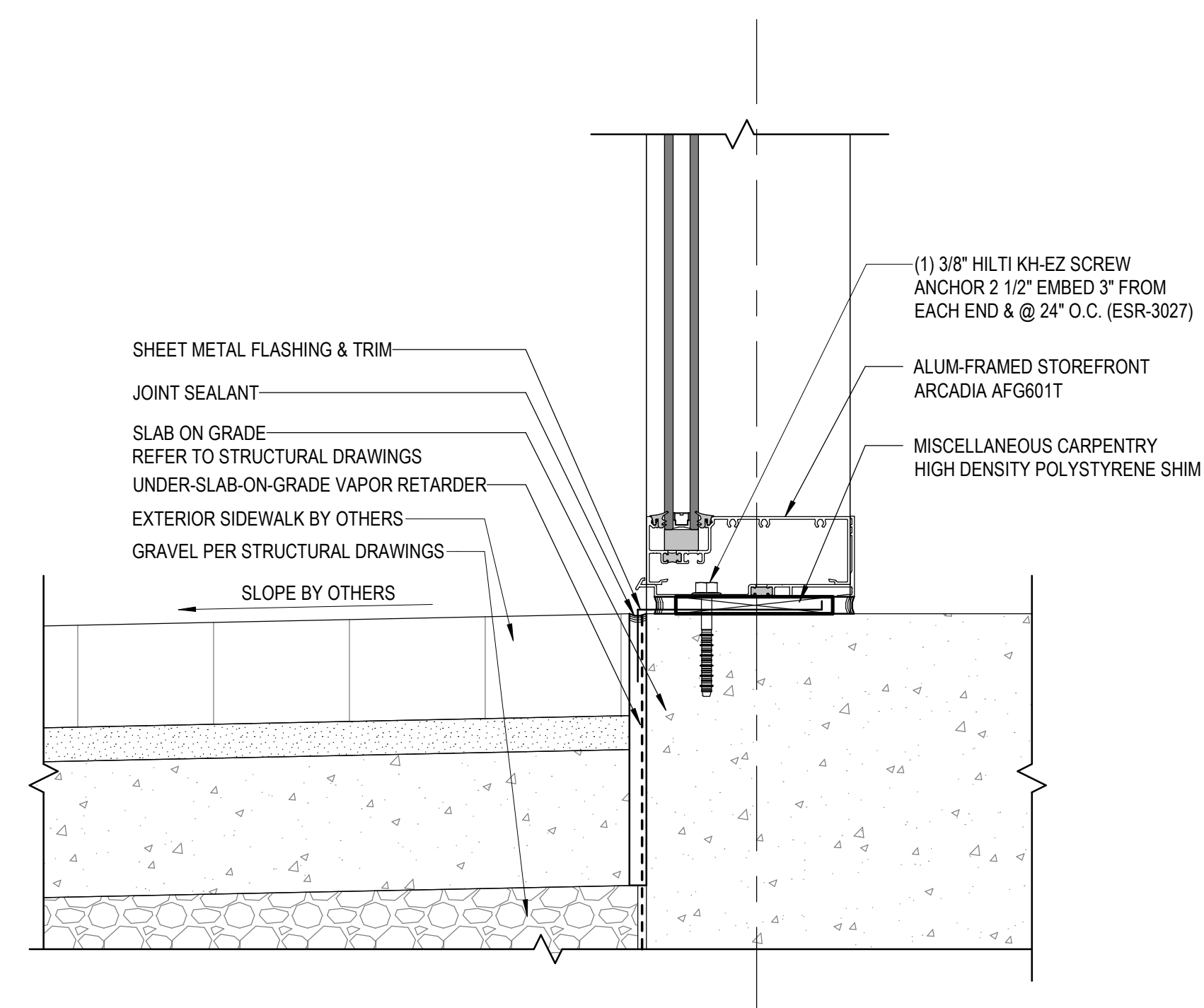
5 STOREFRONT DOOR HEAD



11 STOREFRONT MULLION @ COLUMN
SCALE: 3" = 1'-0"



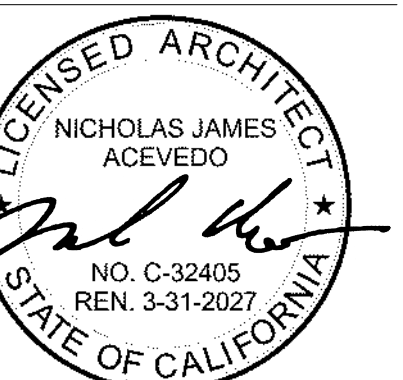
6 STOREFRONT DOOR THRESHOLD



8 STOREFRONT - BASE @SMALL TENANTS

△	Date	Description
	09.03.2025	DESIGN DEVELOPMENT
	10.14.2025	CD CLIENT REVIEW/PRICING
	11.03.2025	ISSUE FOR PLAN CHECK
A	01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
	05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10 RECONSTRUCTION

Project Number

007.3945.000

[illegible]

ENLARGED STOREFRONT ELEVATIONS & DETAILS

Scale
As indicated

A6.001

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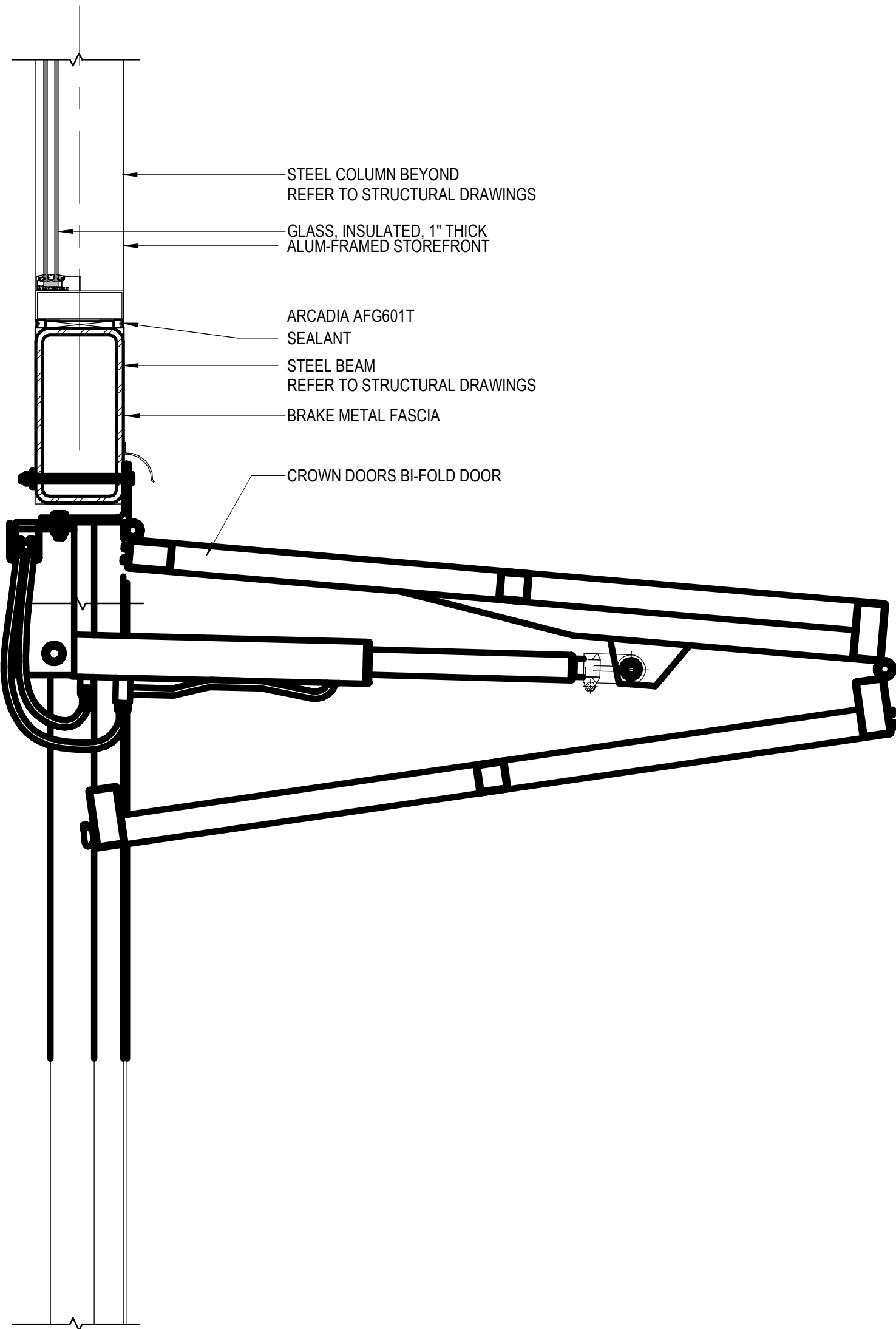
CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

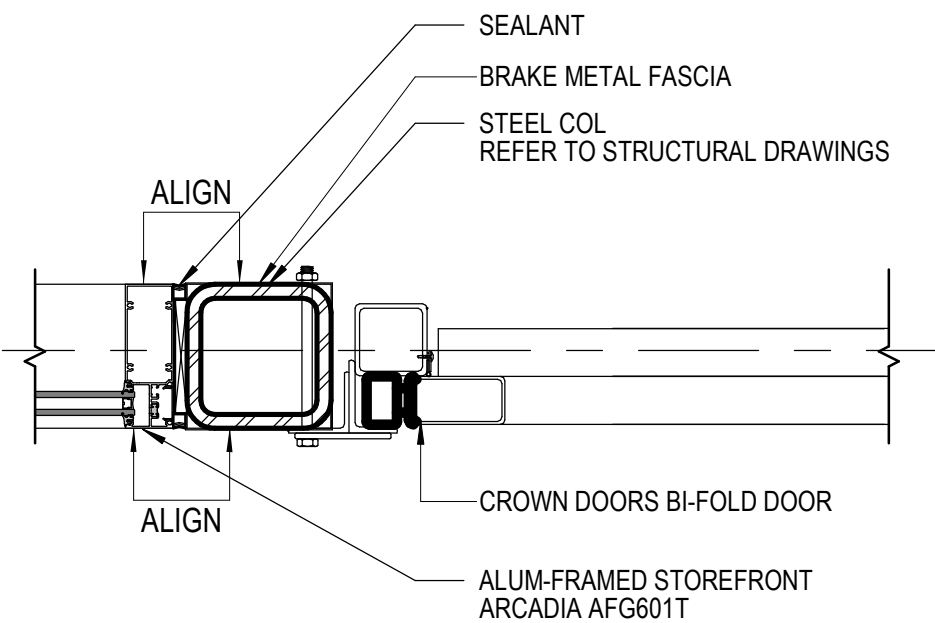
4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

Tel 949.863.9434
Fax 949.553.1676



02 STOREFRONT BI-FOLD DOOR HEAD

SCALE: 1 1/2" = 1'-0"



03 STOREFRONT BI-FOLD DOOR JAMB

SCALE: 1 1/2" = 1'-0"

△ Date	Description
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

STOREFRONT DETAILS

Scale

1 1/2" = 1'-0"

A6.002

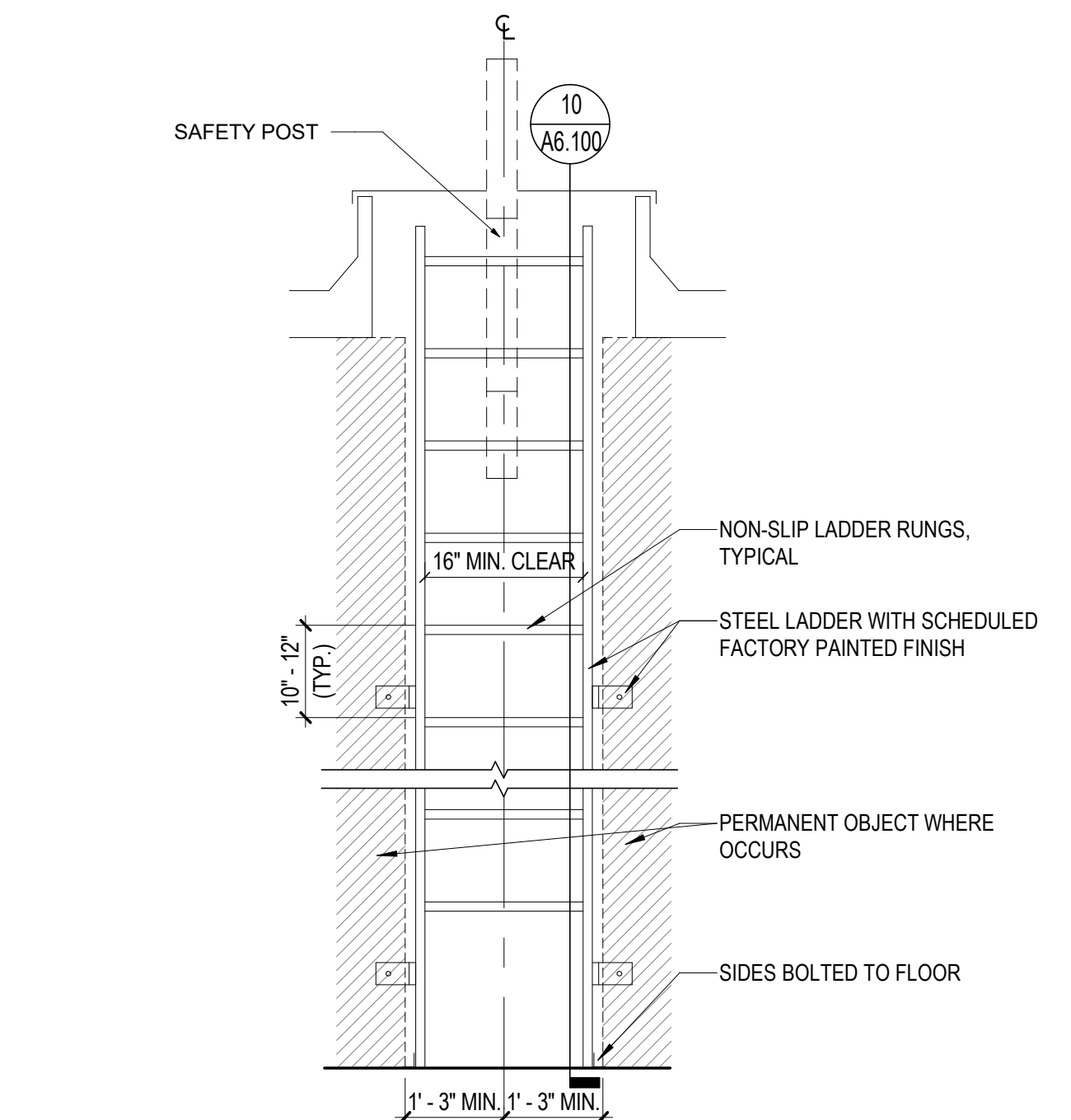
CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

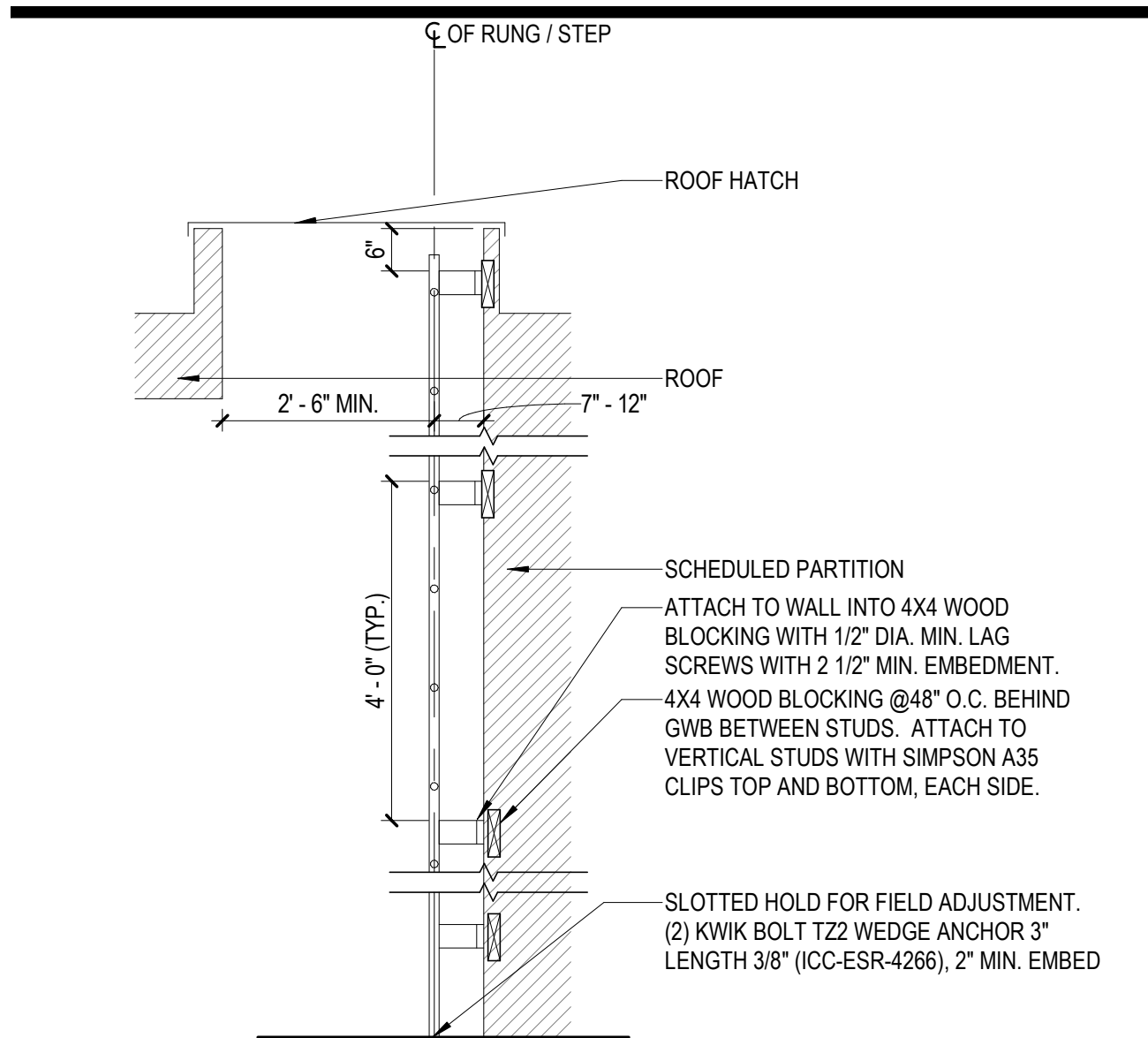
4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

Tel 949 863 9434
Fax 949 553 1676



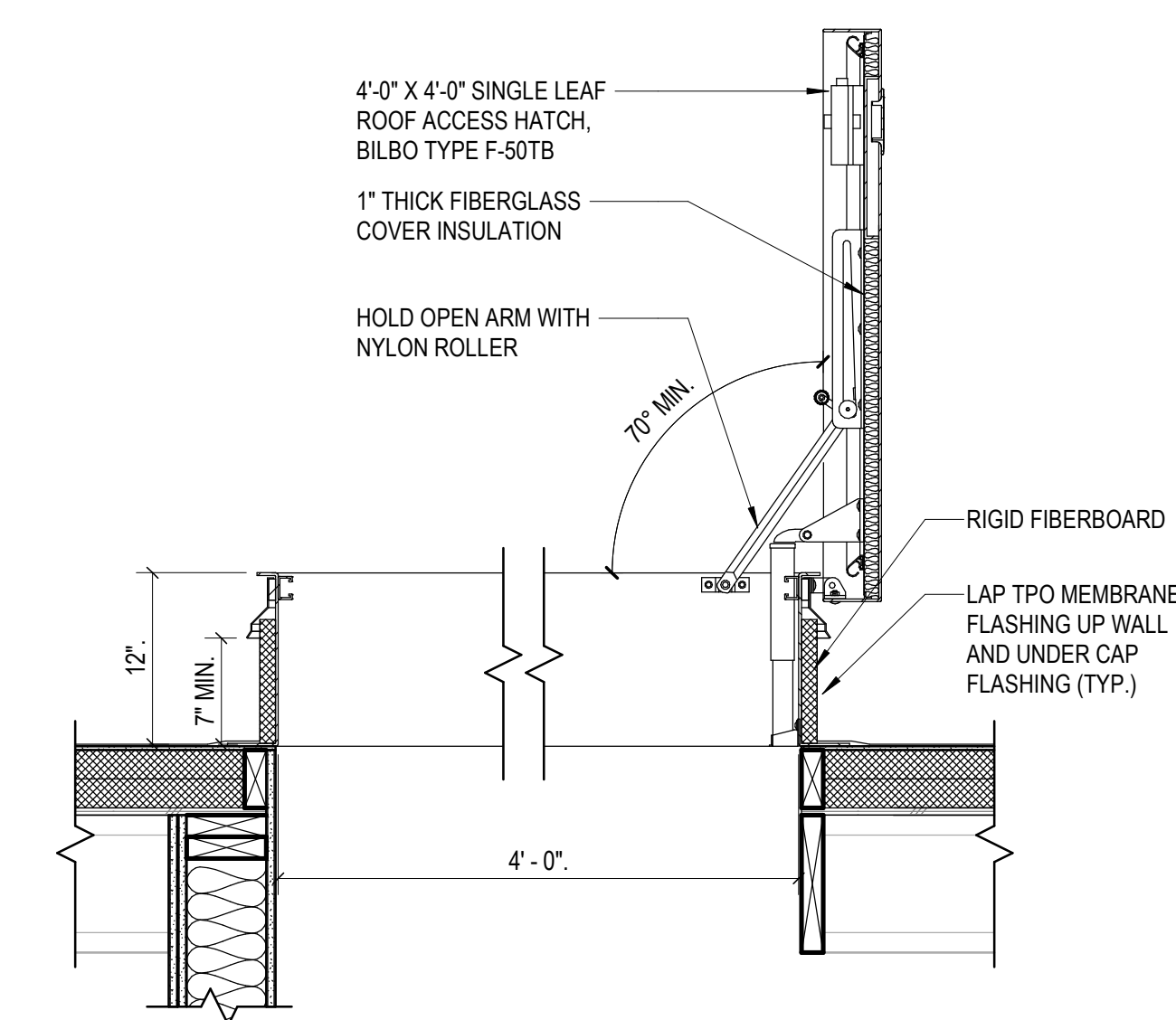
09 ROOF LADDER ELEVATION

SCALE: 1/2" = 1'-0"



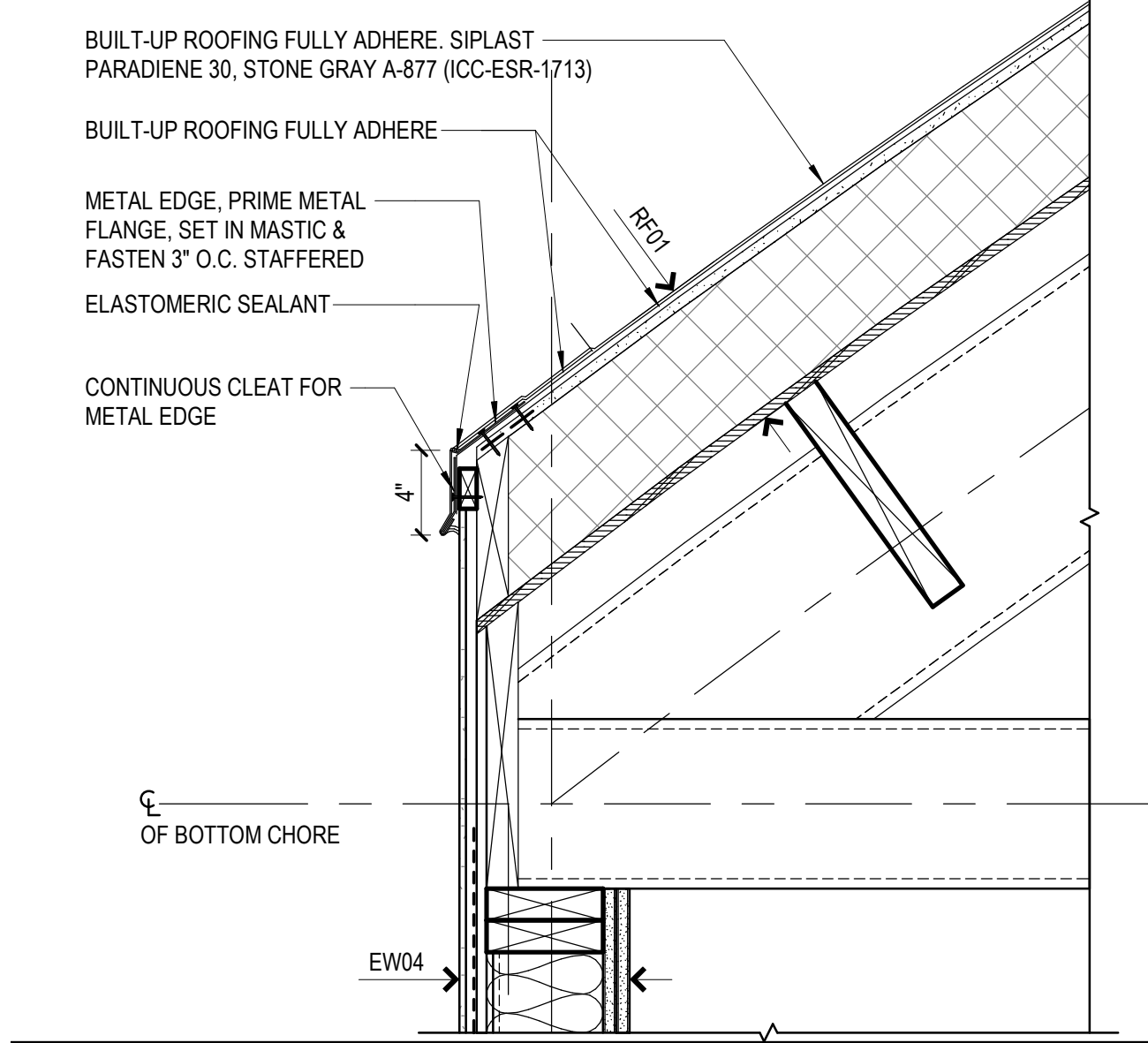
10 ROOF LADDER SECTION

SCALE: 1/2" = 1'-0"



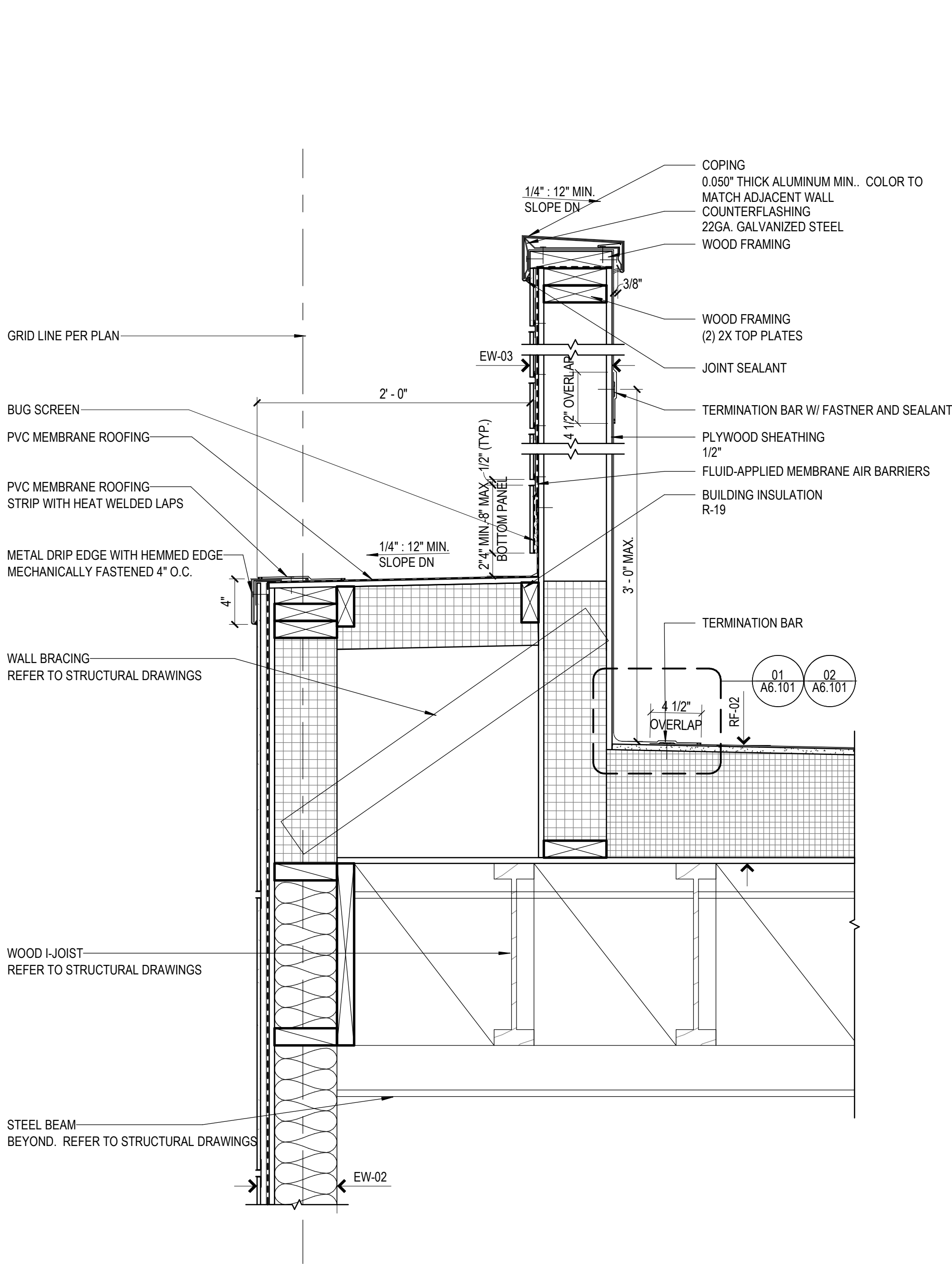
11 ROOF HATCH DETAIL

SCALE: 1" = 1'-0"



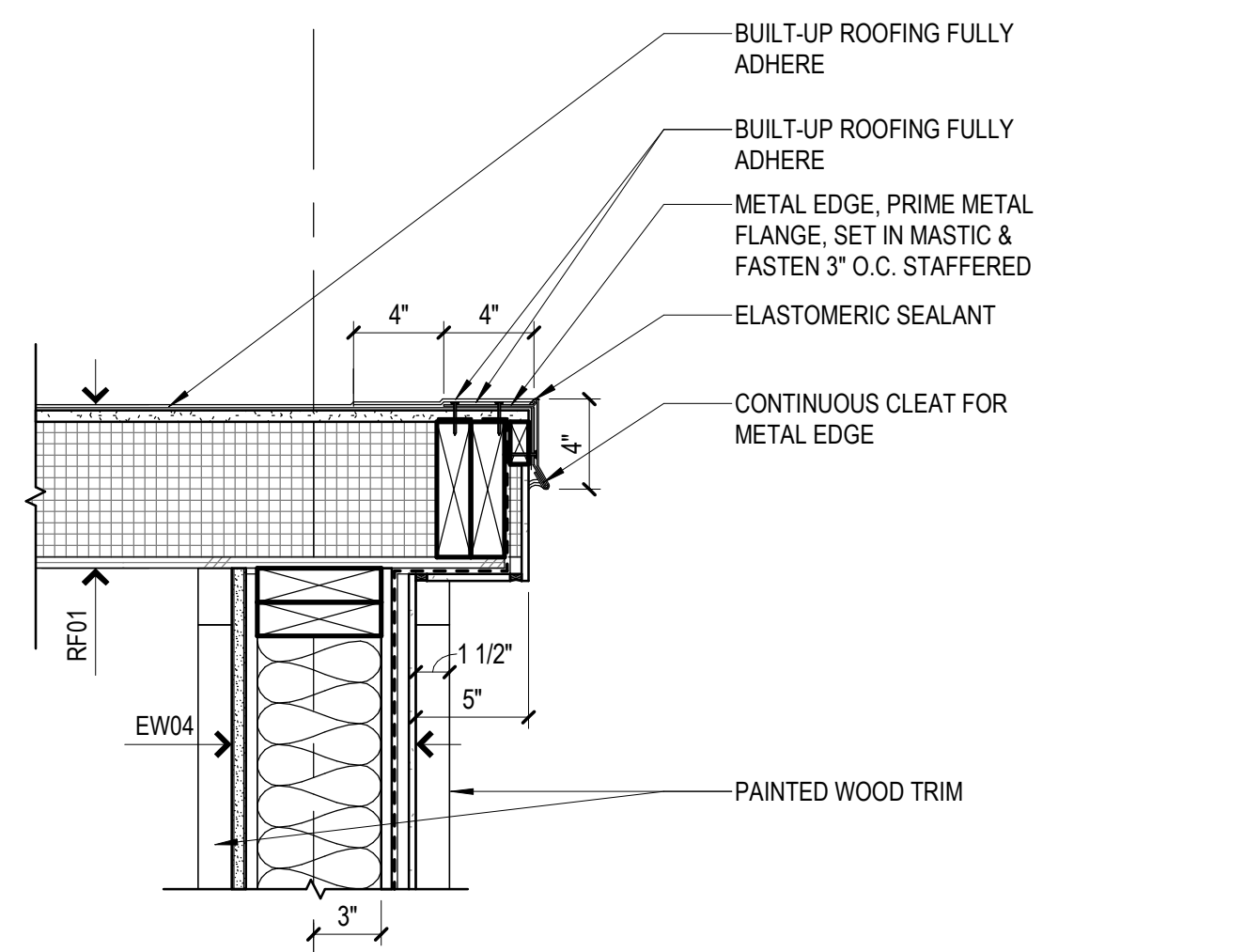
12 ROOF DETAIL - EDGE @ TRUSS

SCALE: 1 1/2" = 1'-0"



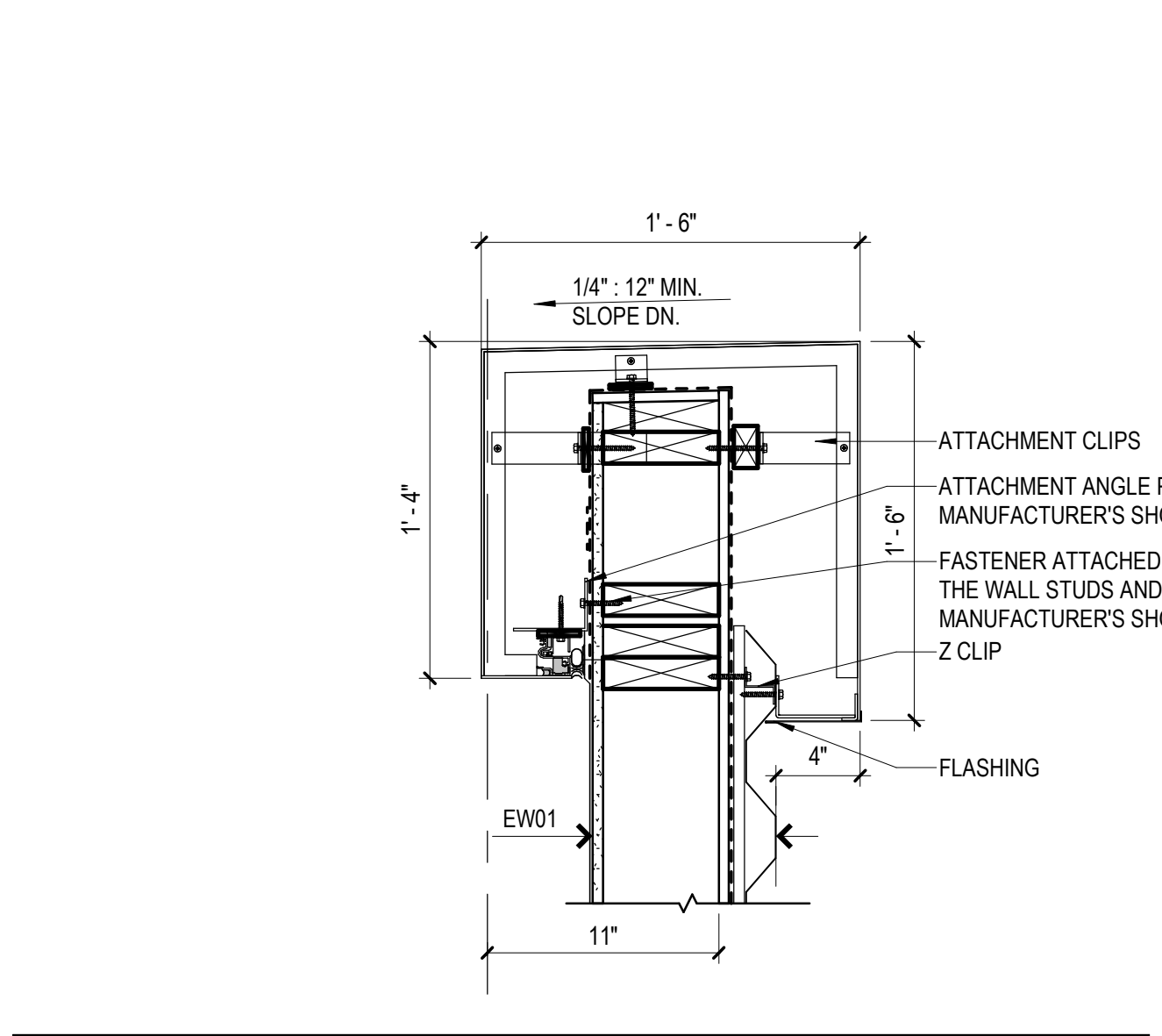
06 ROOF DETAIL - SCREEN WALL

SCALE: 1 1/2" = 1'-0"



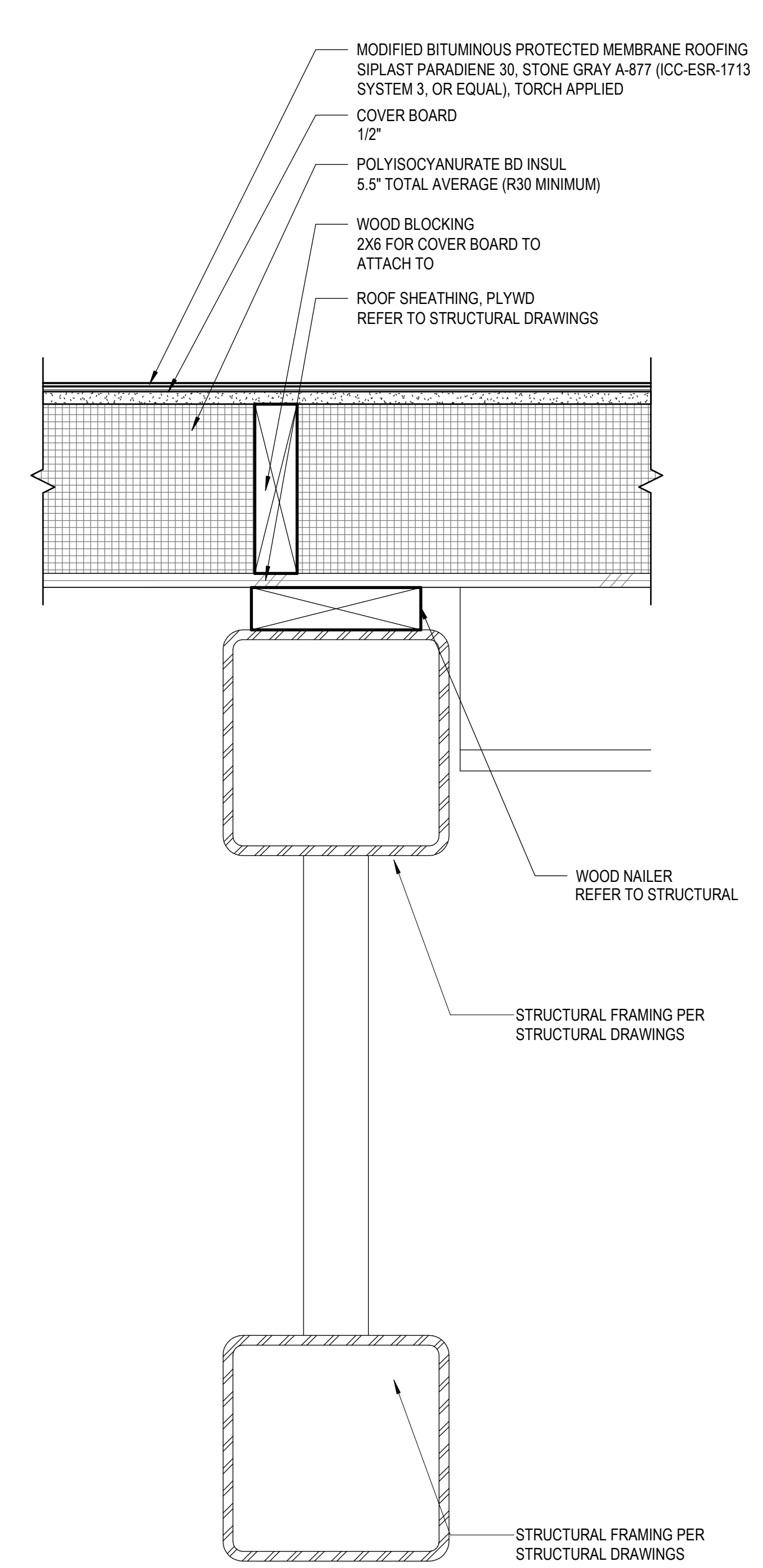
07 ROOF EDGE @ TRUSS

SCALE: 1 1/2" = 1'-0"



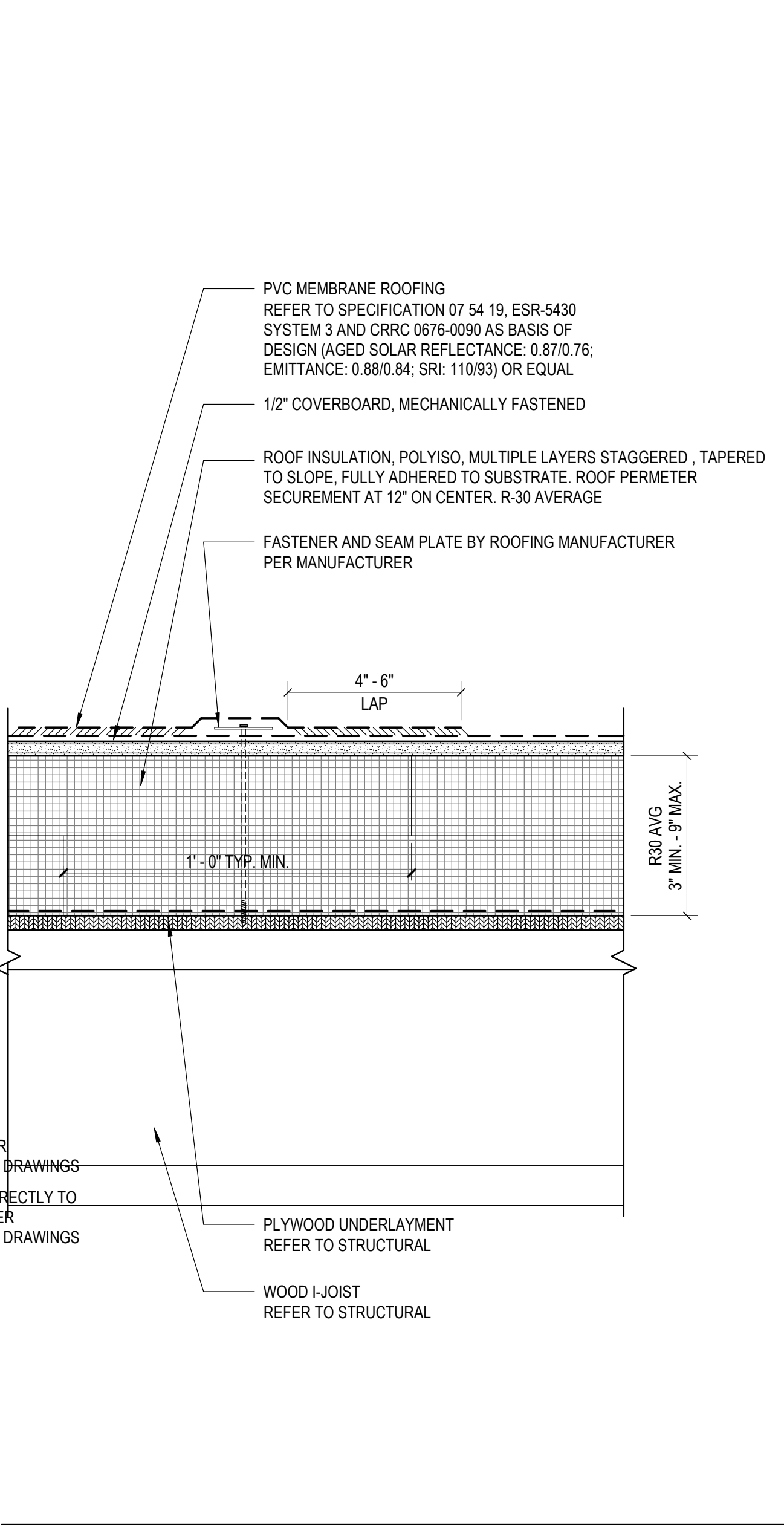
08 ROOF @ TOP OF METAL PANEL

SCALE: 1 1/2" = 1'-0"



02 RF01 - ROOF ASSEMBLY

SCALE: 3" = 1'-0"



04 RF02 - ROOF ASSEMBLY

SCALE: 3" = 1'-0"

Date	Description
09.03.2025	DESIGN DEVELOPMENT
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05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

ROOF DETAILS

Scale

As indicated

A6.100

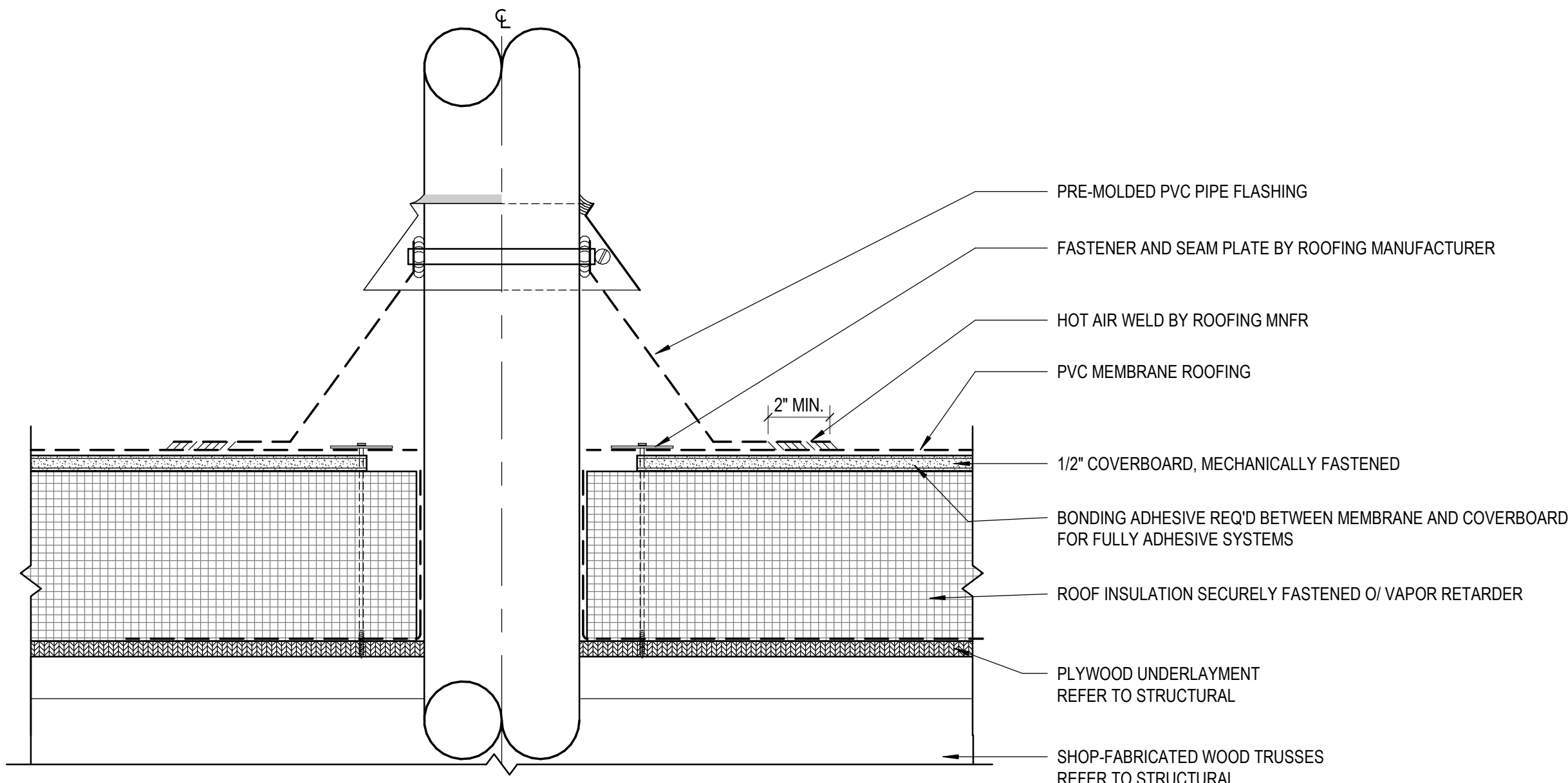
CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

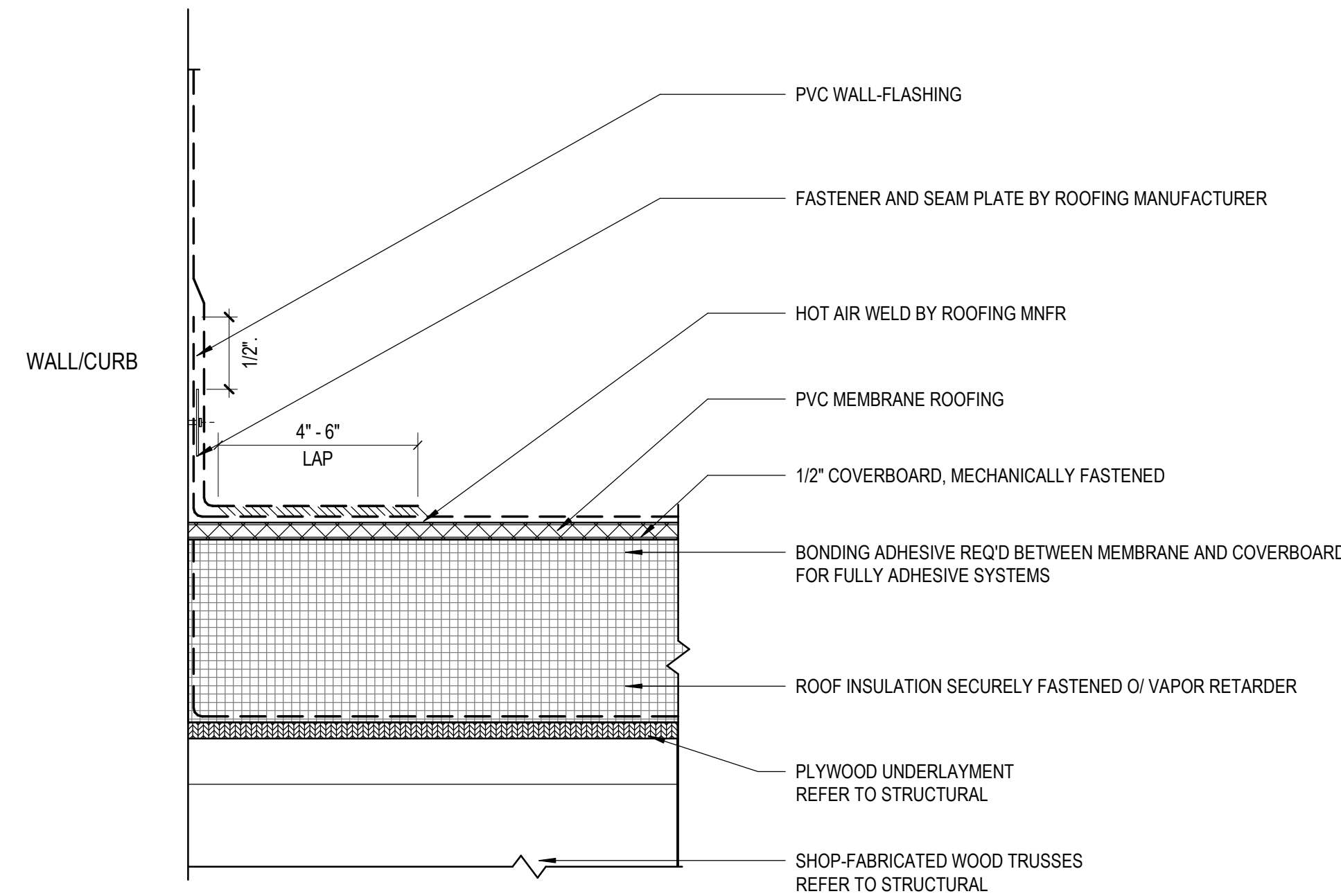
4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

Tel 949.863.9434
Fax 949.553.1676



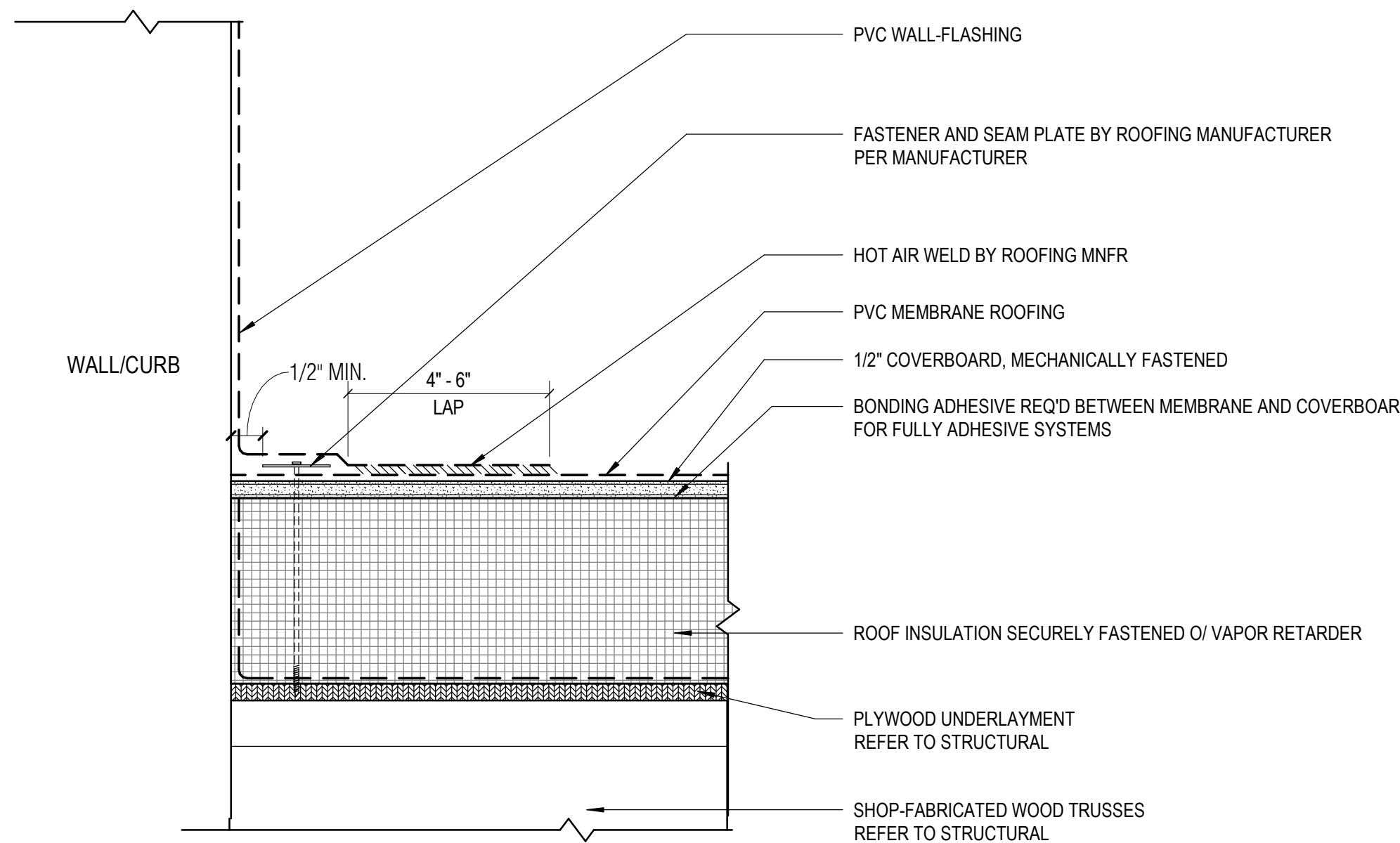
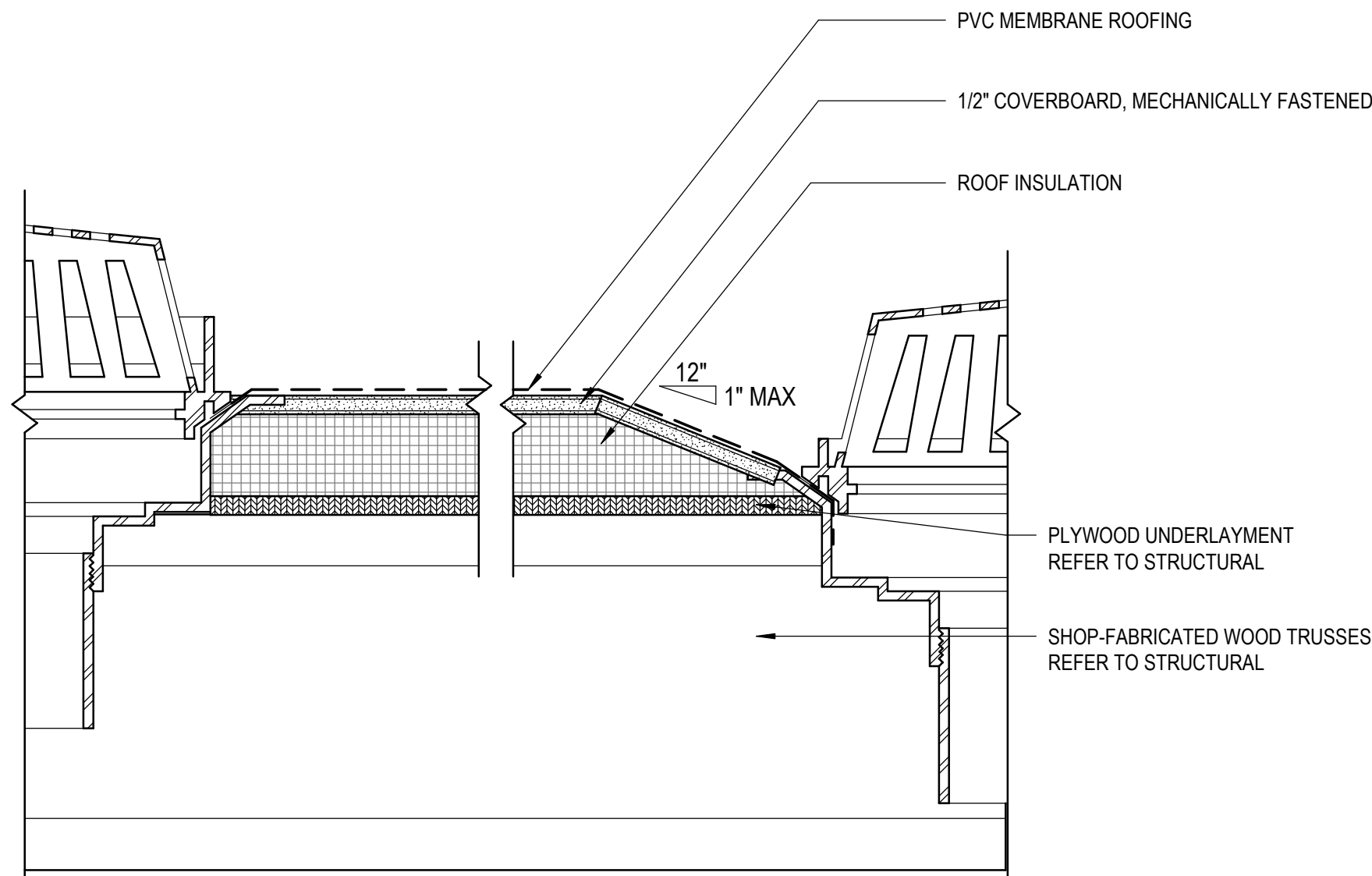
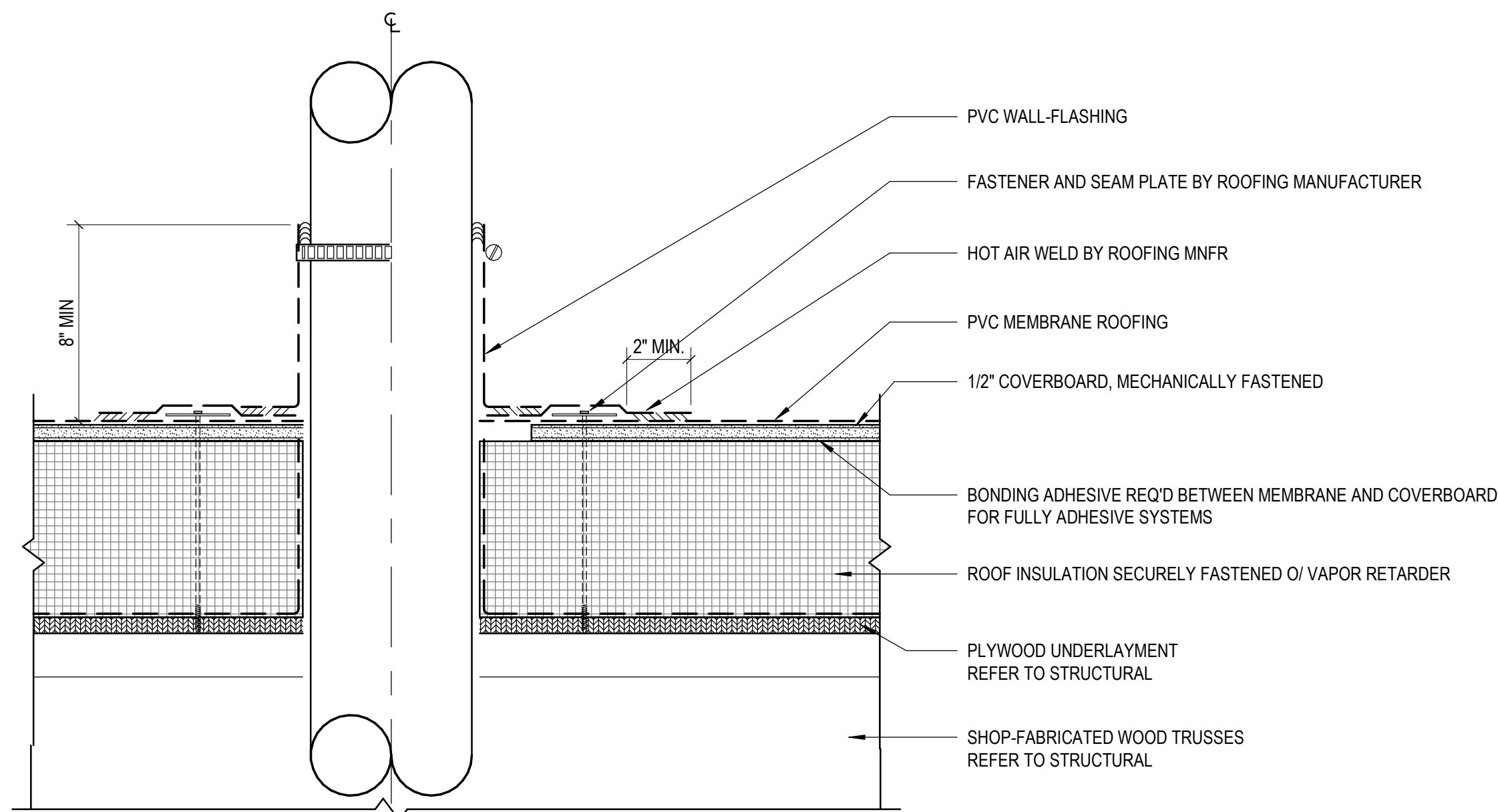
07 PVC LARGE PIPE PENETRATION @ RESTROOM

SCALE: 3" = 1'-0"



01 PVC PARAPET TO DECK 02

SCALE: 3" = 1'-0"



08 PVC PIPE PENETRATION @ RESTROOM

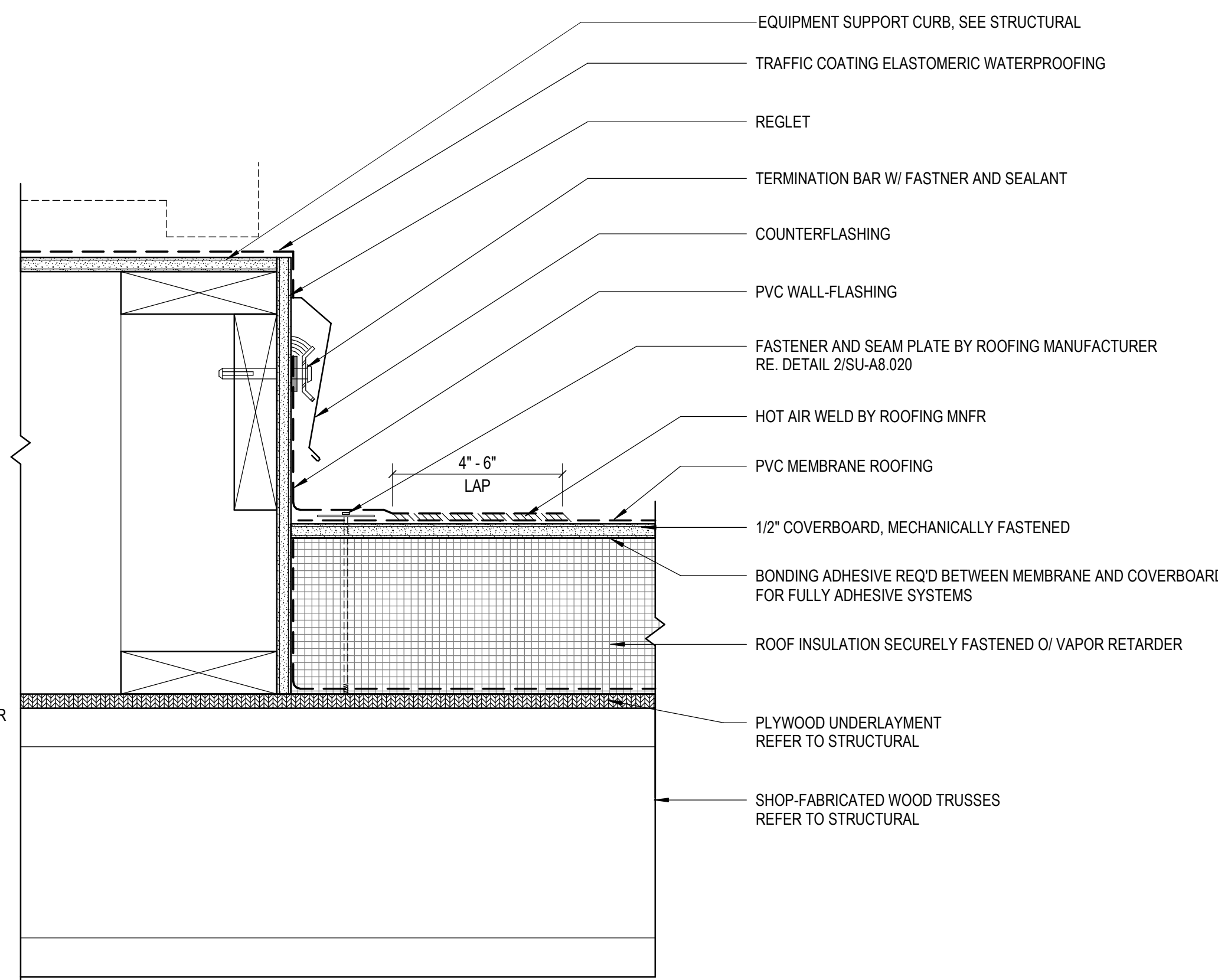
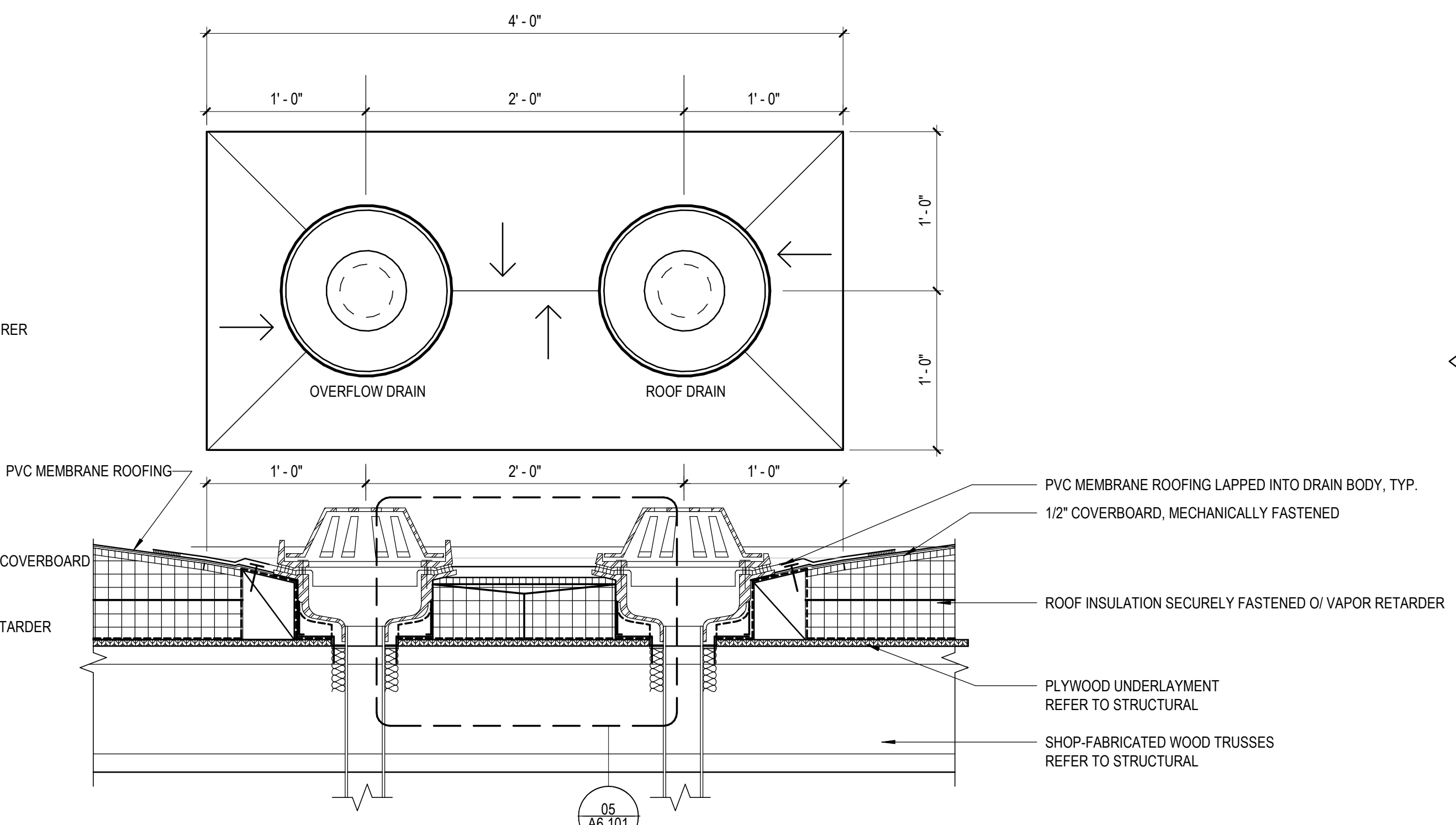
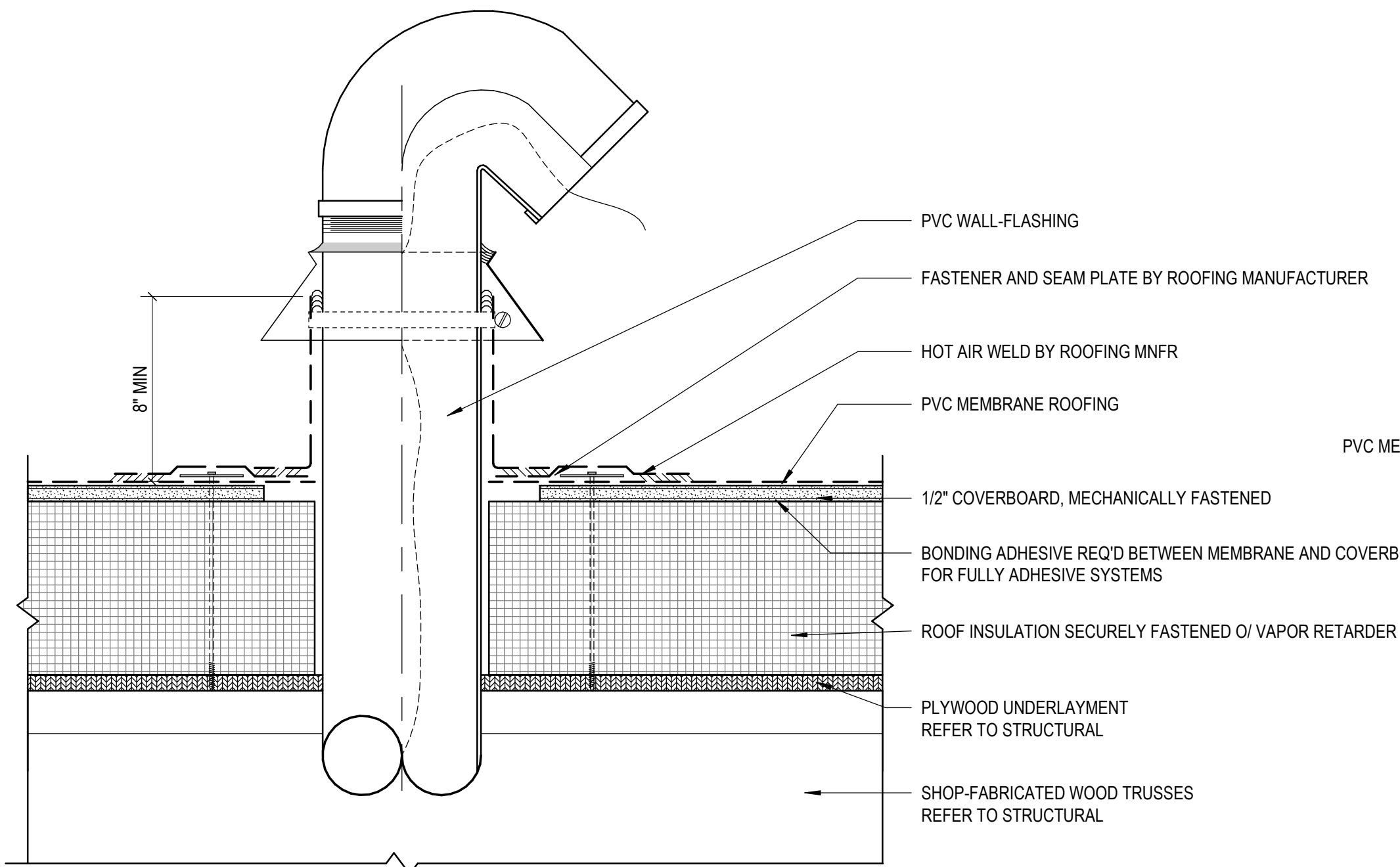
SCALE: 3" = 1'-0"

05 PVC ROOF DRAIN W/OVERFLOW

SCALE: 3" = 1'-0"

02 PVC PARAPET TO DECK 01

SCALE: 3" = 1'-0"



09 PVC CABLE/WEATHER HEAD ASSEMBLY

SCALE: 3" = 1'-0"

06 PVC ROOF DRAIN W/OVERFLOW

SCALE: 1 1/2" = 1'-0"

03 PVC ROOF EQUIPMENT PAD

SCALE: 3" = 1'-0"

Date	Description
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

ROOF DETAILS

Scale

As indicated

A6.101

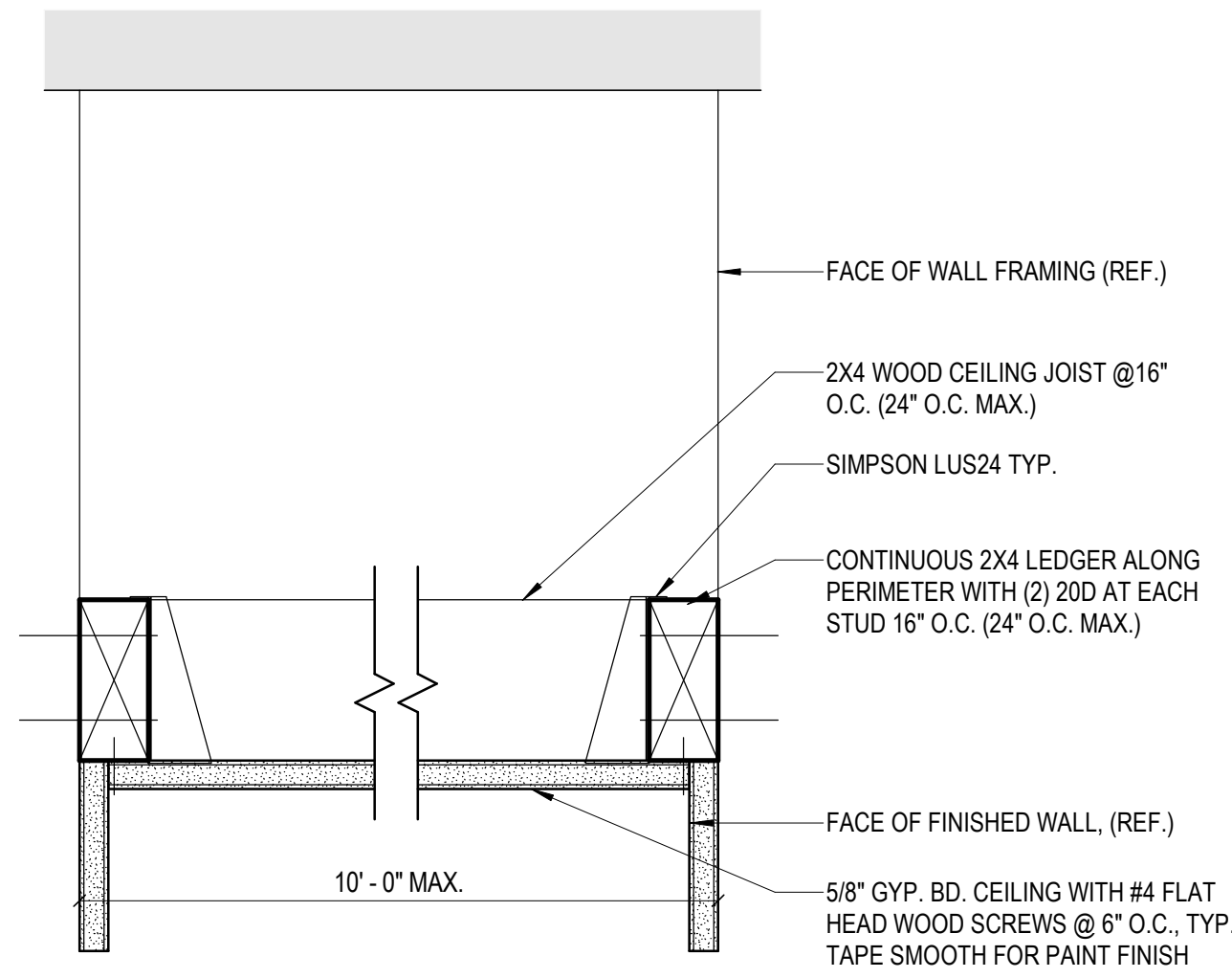
CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

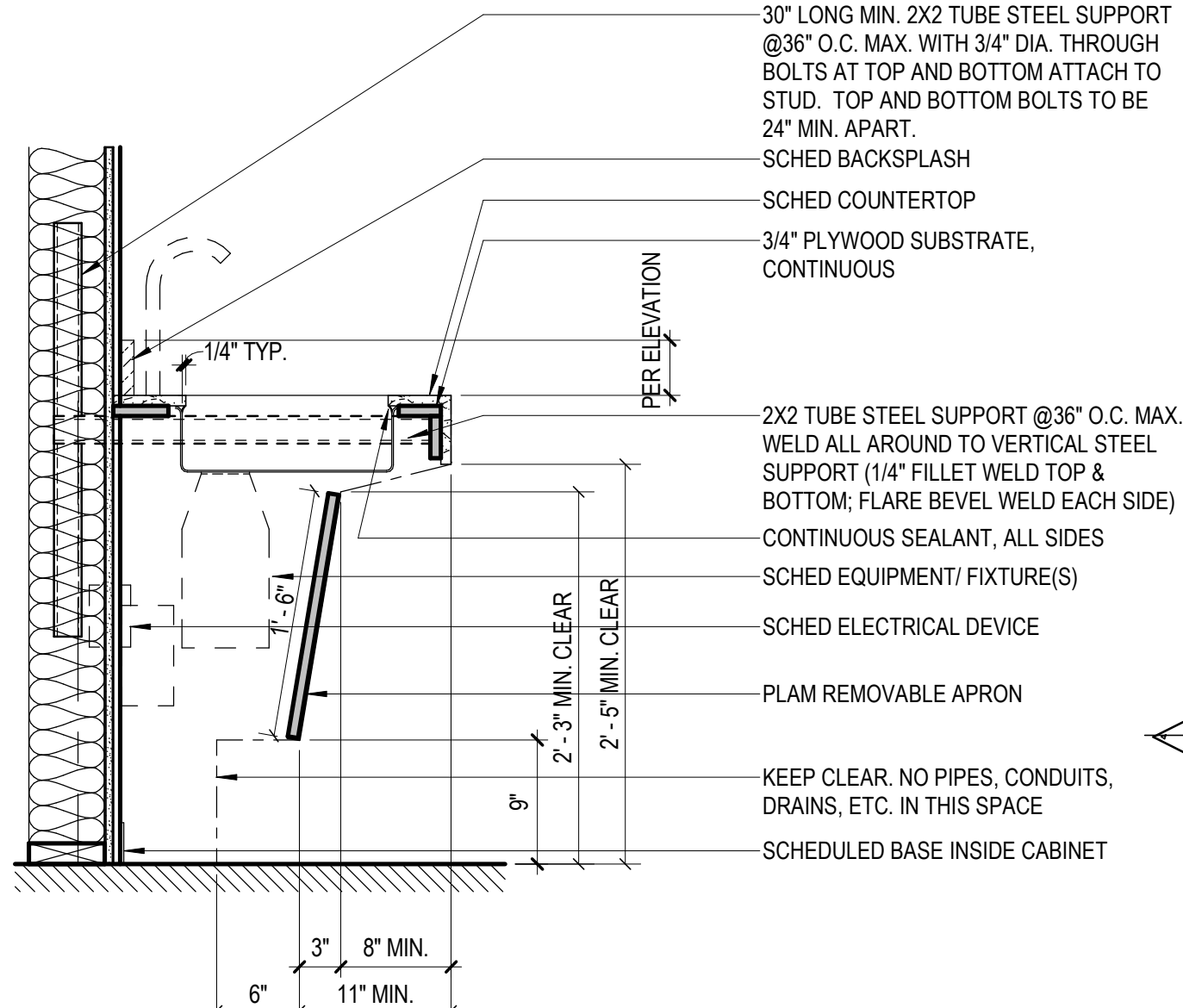
Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

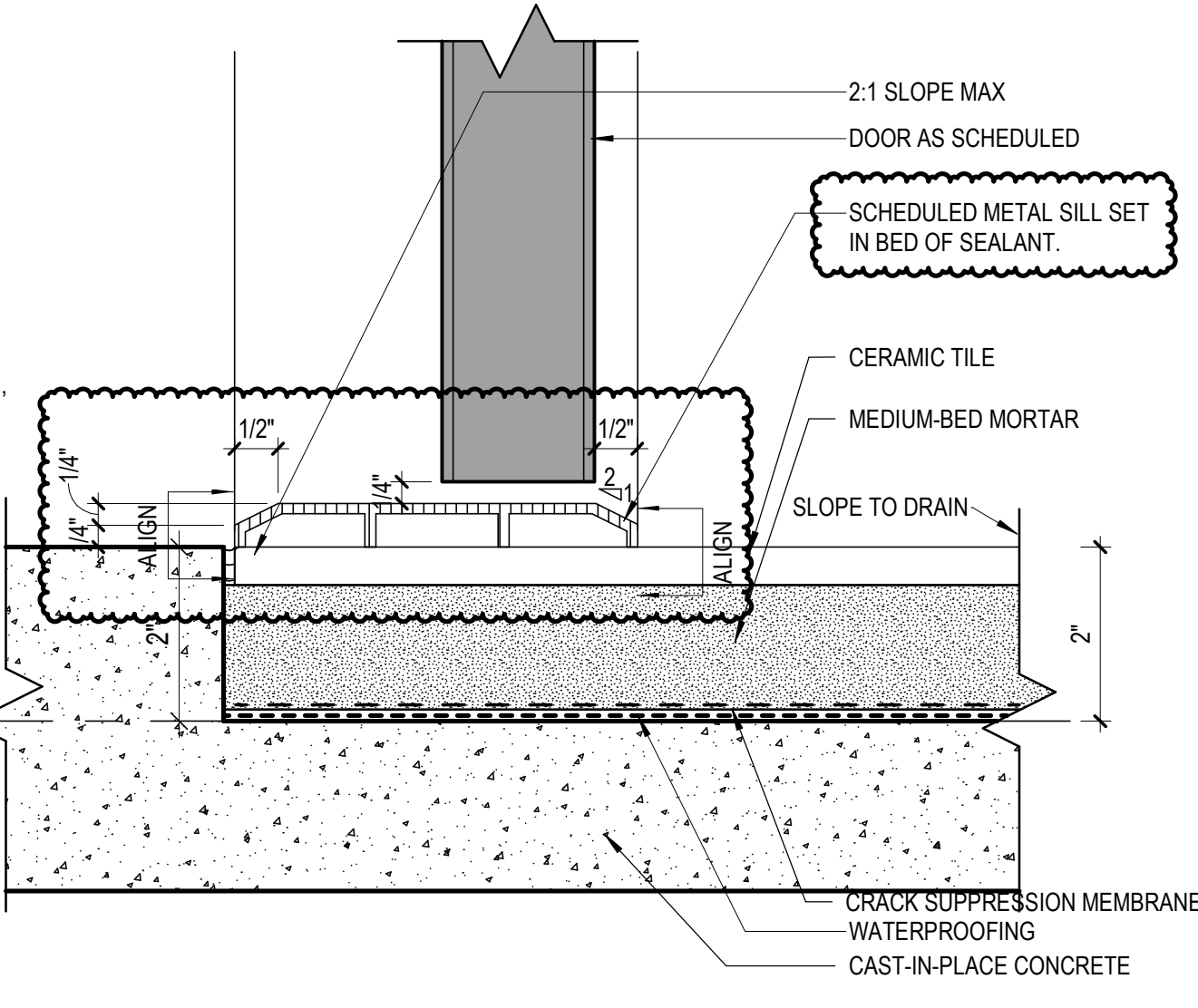
Tel 949.863.9434
Fax 949.553.1676



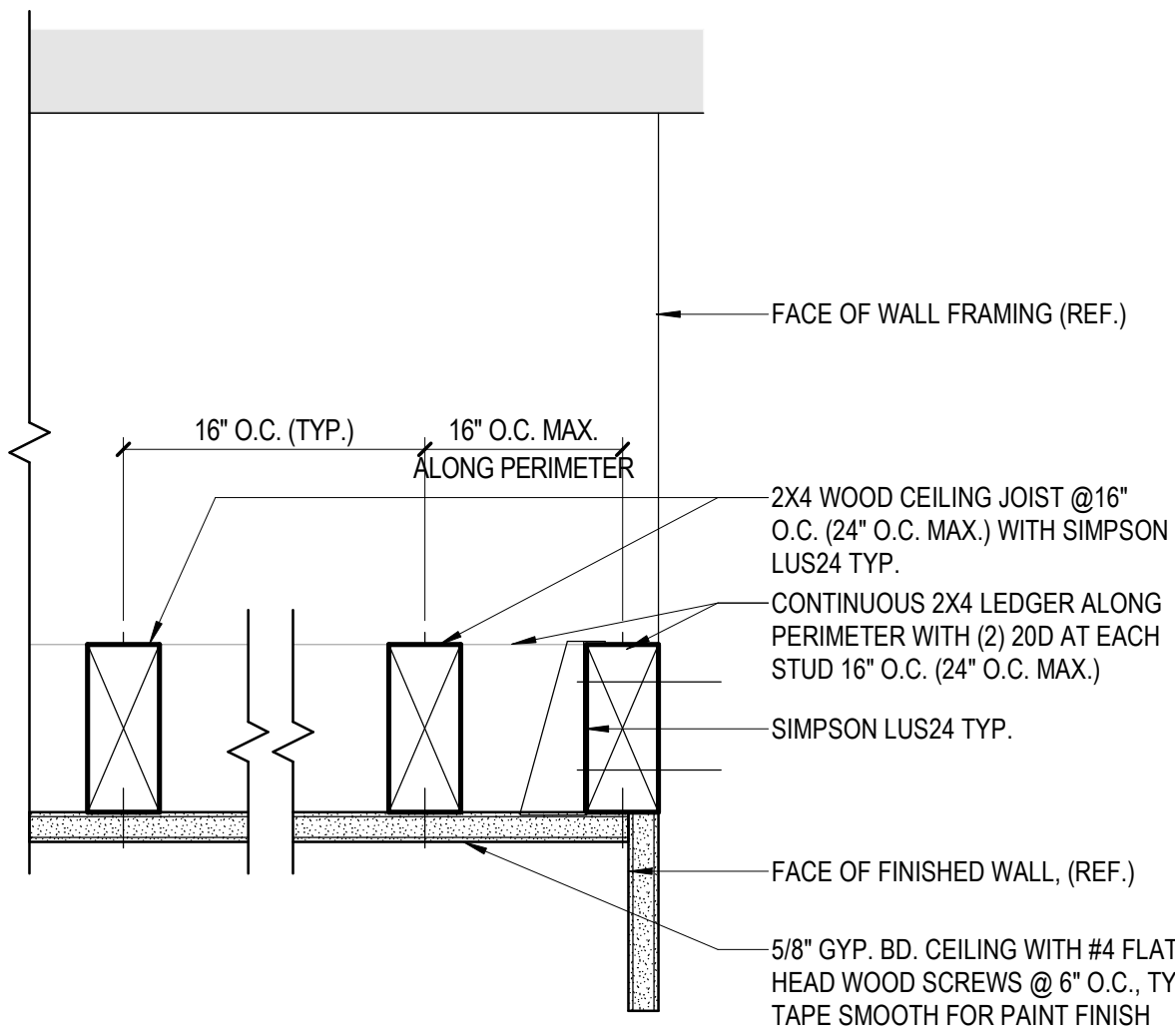
09 CEILING JOIST FRAMING - SHORT SIDE
SCALE: 3\"/>



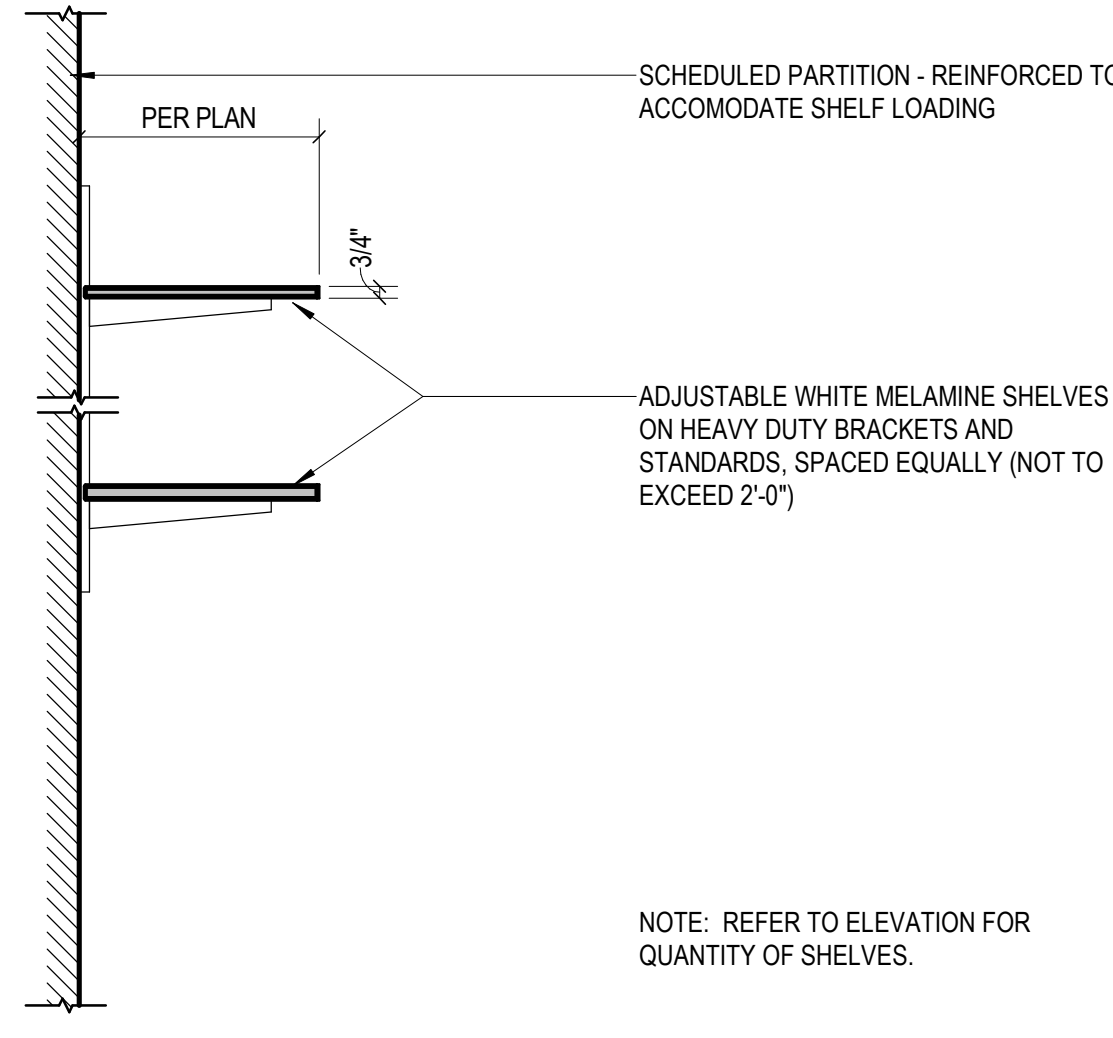
05 BASE/ SINK (ADA)
SCALE: 1\"/>



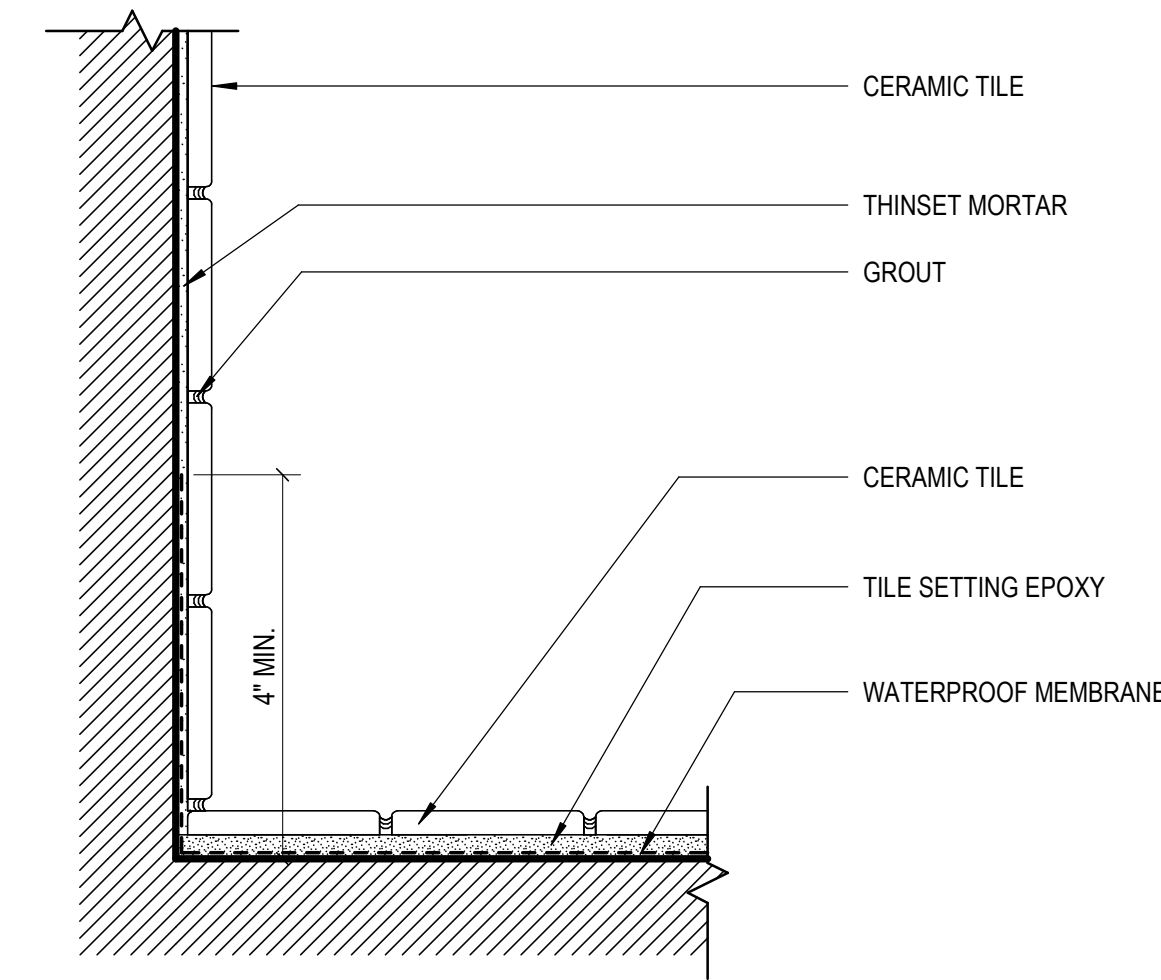
01 CONCRETE TO TILE
SCALE: 6\"/>



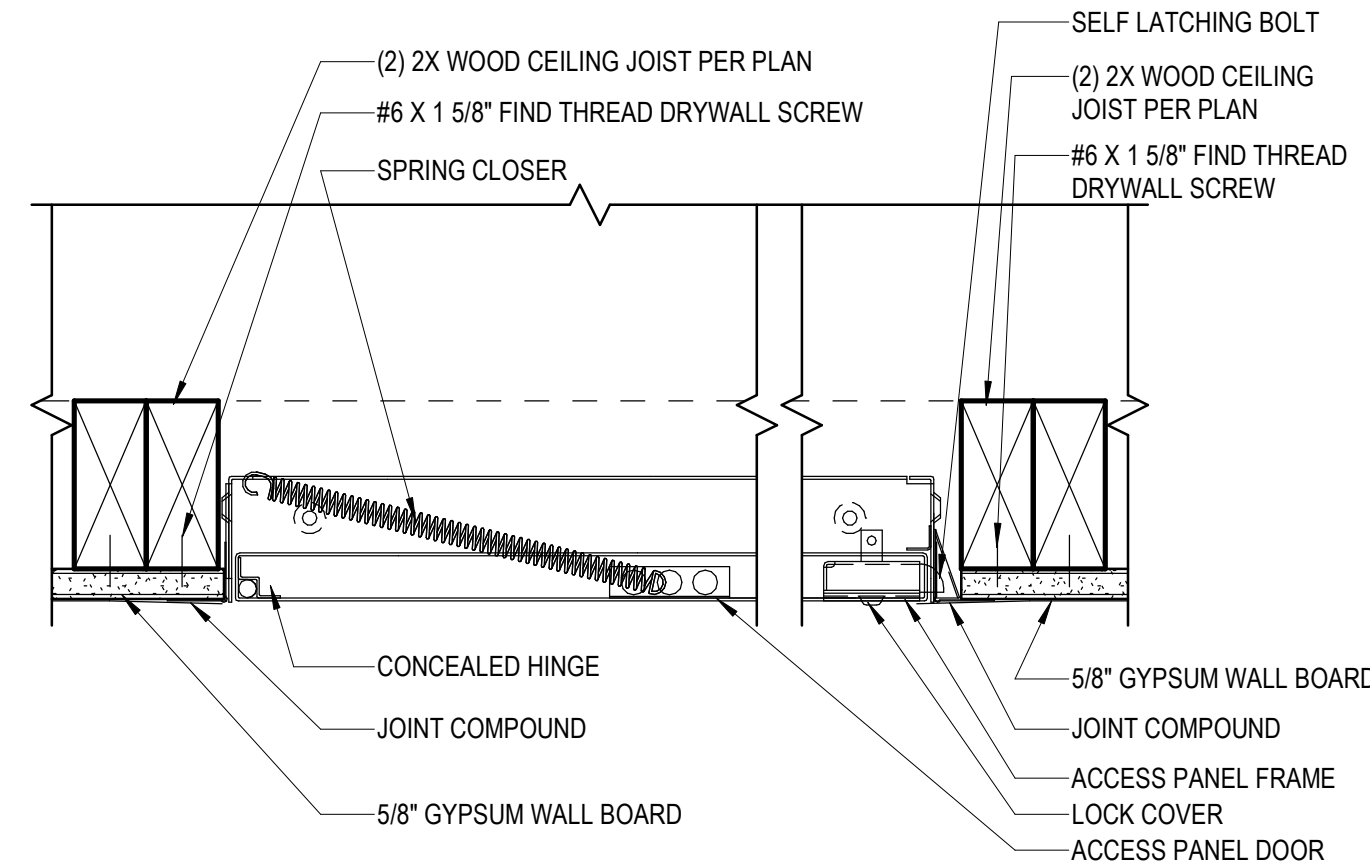
10 CEILING JOIST FRAMING - LONG SIDE
SCALE: 3\"/>



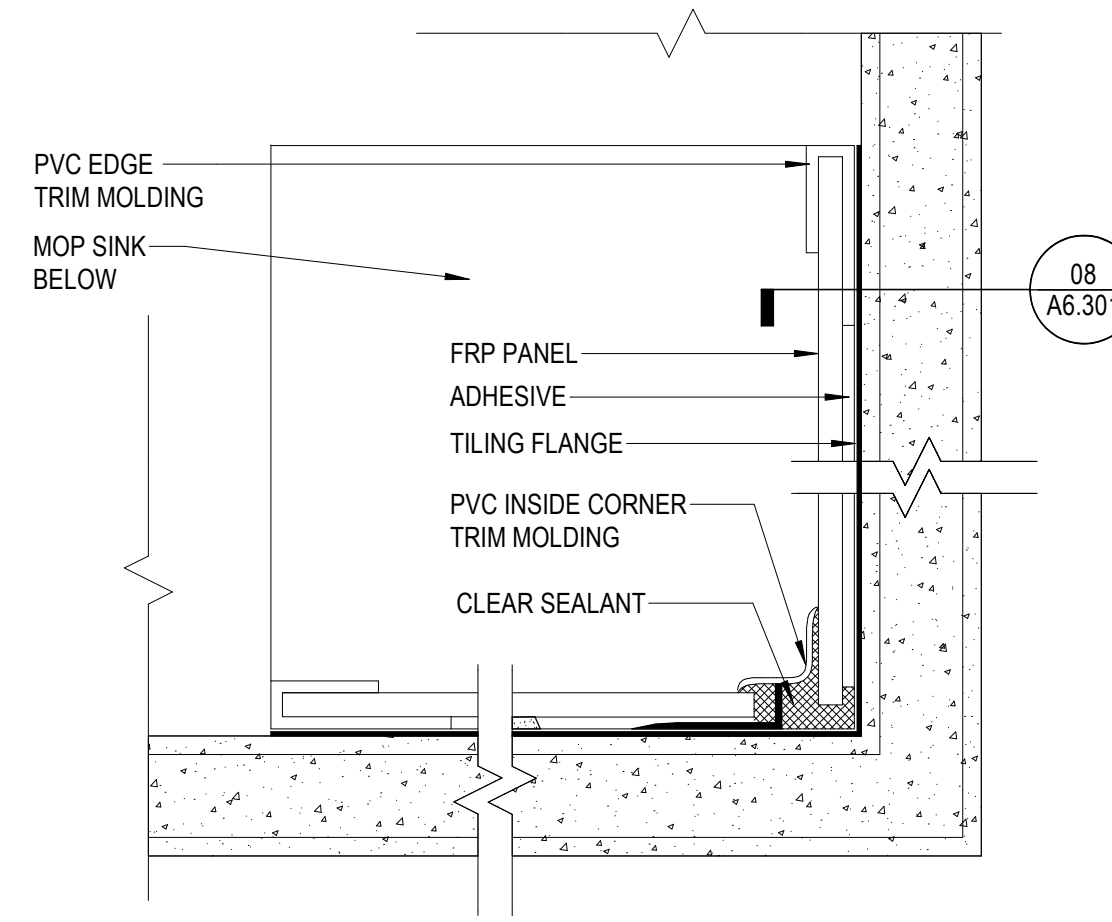
06 SHELF @JANITOR
SCALE: 1\"/>



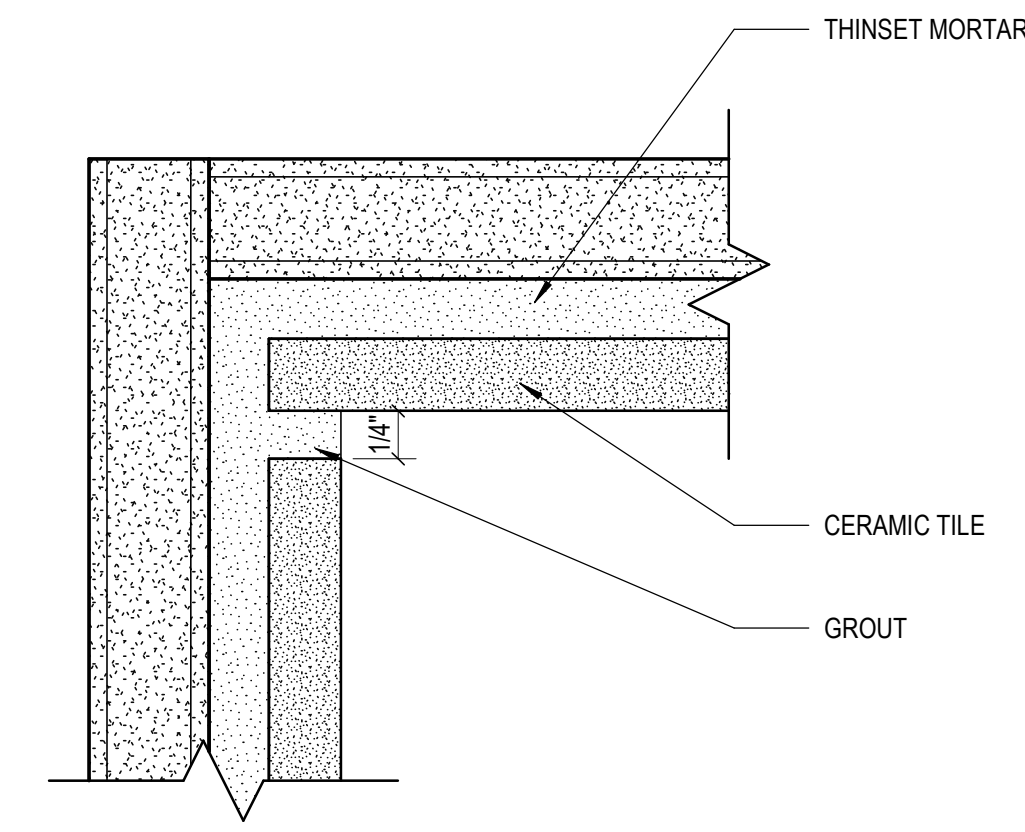
02 CERAMIC TILE - BASE
SCALE: 6\"/>



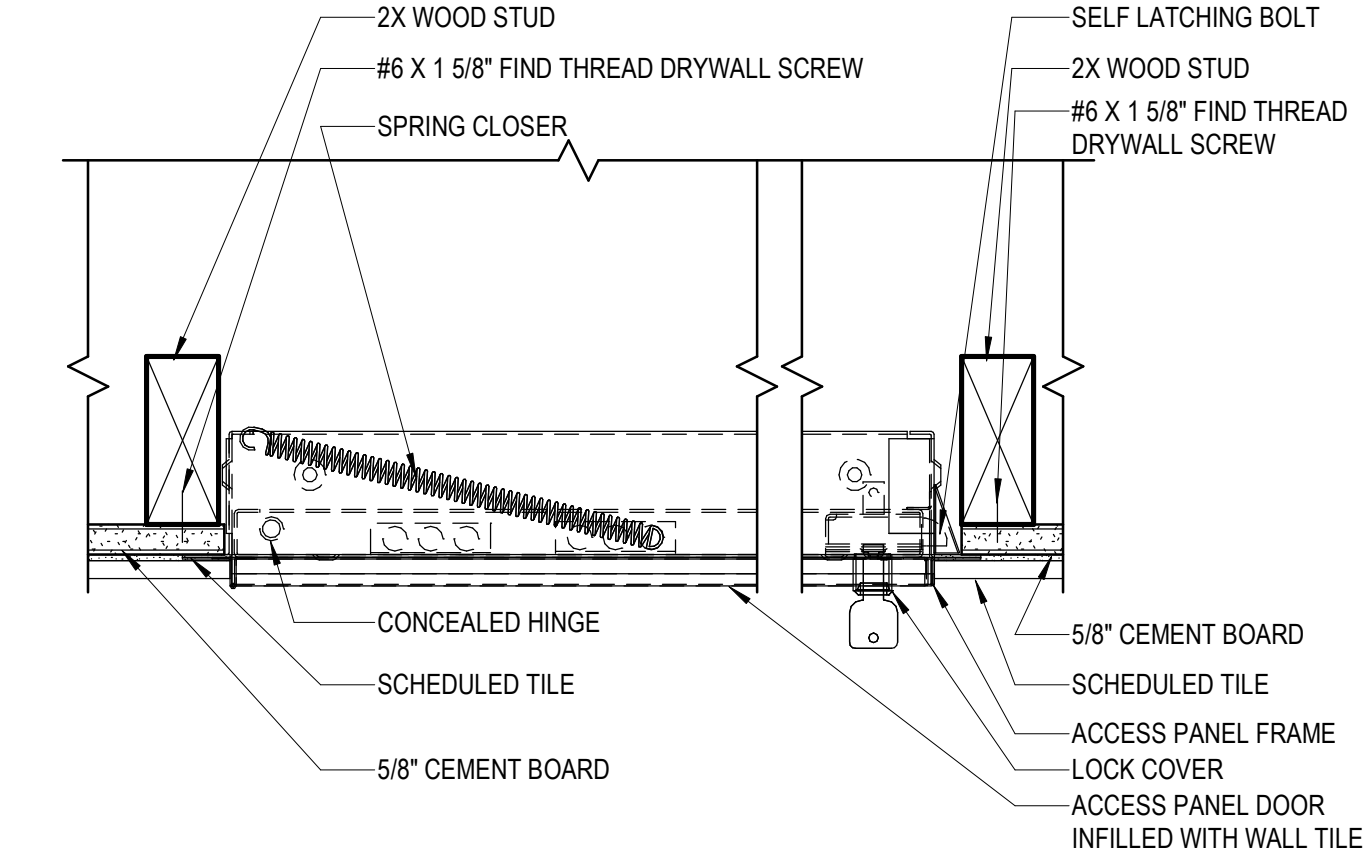
11 ACCESS PANEL DETAIL - CEILING
SCALE: 3\"/>



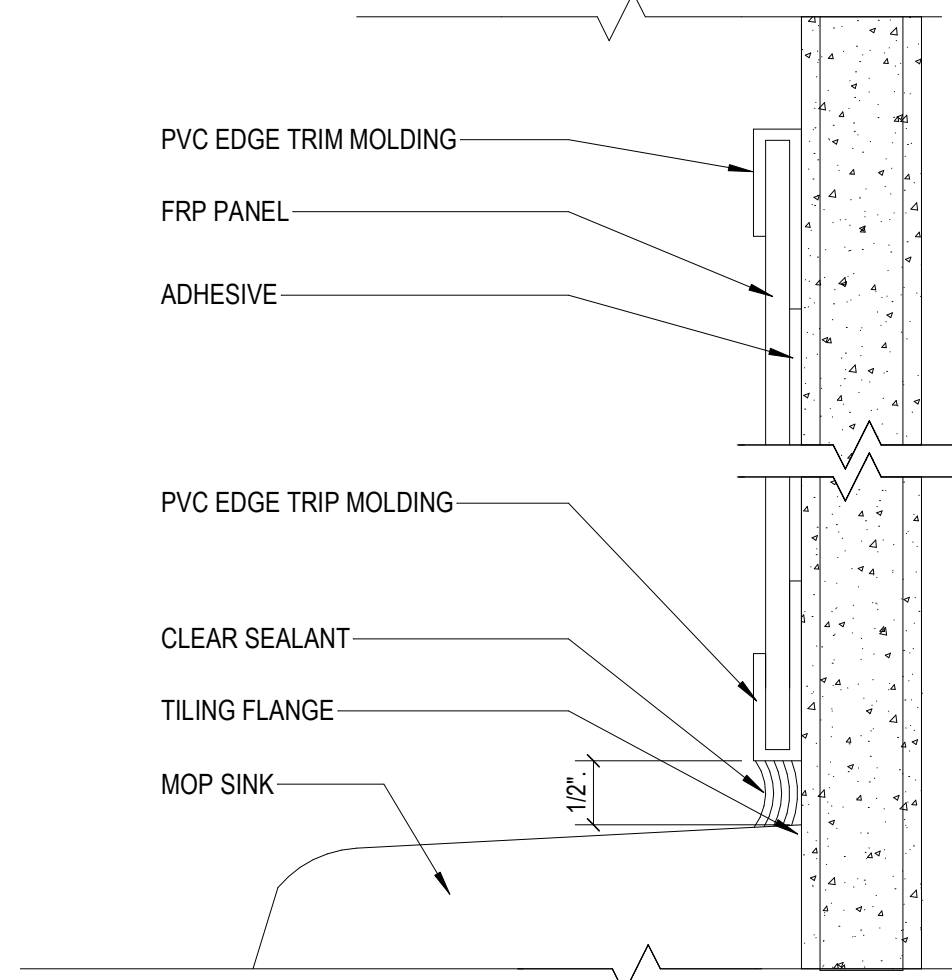
07 ENLARGED PLAN AT MOP SINK
SCALE: 12\"/>



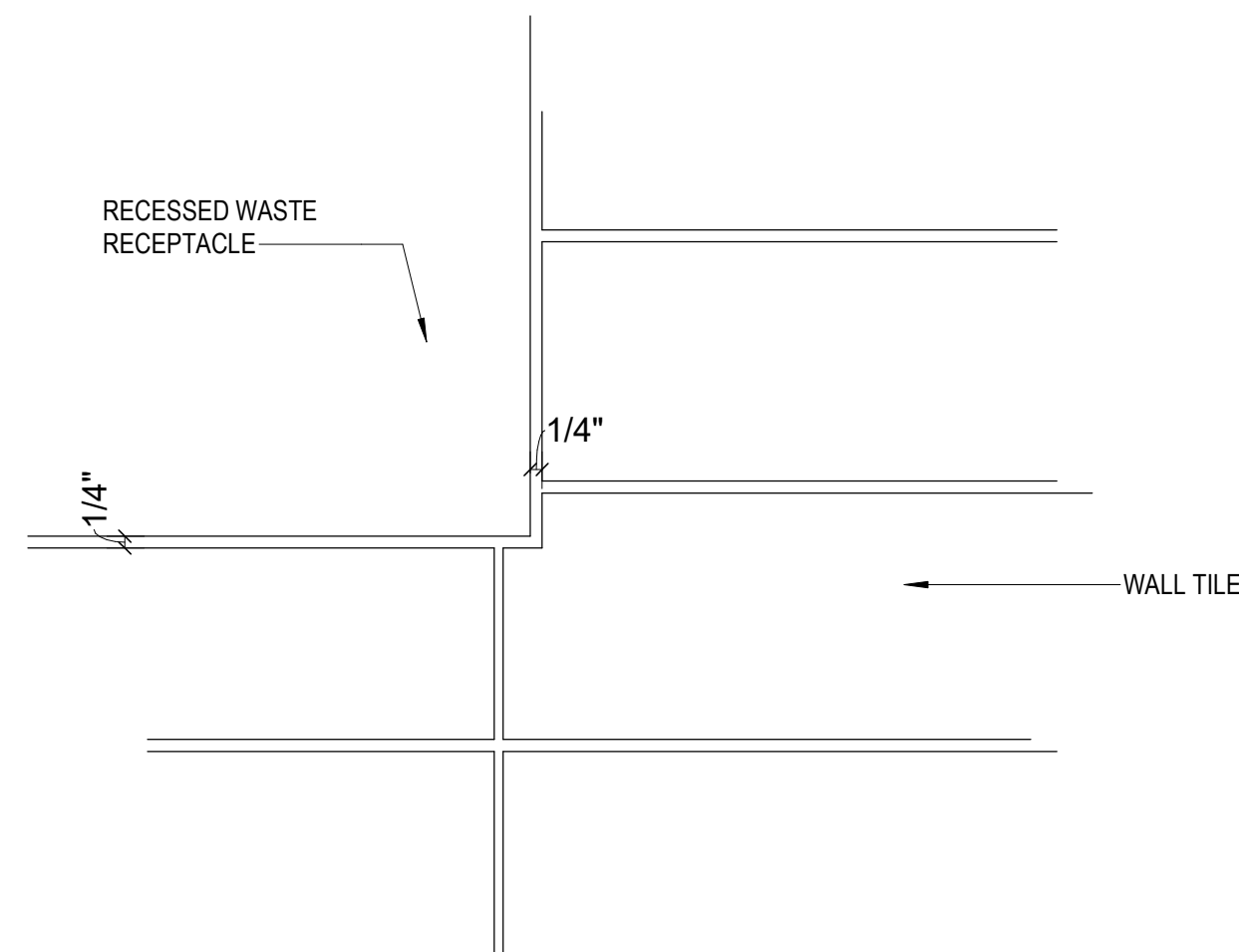
03 INSIDE CORNER TILE DETAIL
SCALE: 12\"/>



12 ACCESS PANEL DETAIL - TILE WALL
SCALE: 3\"/>



08 SECTION AT MOP SINK
SCALE: 12\"/>



04 TRASH RECEPTACLE DETAIL
SCALE: 3\"/>

Date	Description
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET
2 05.28.2026	BID ADDENDUM 02

Seal / Signature



Project Name
HANGAR 10
RECONSTRUCTION
Project Number
007.3945.000
Description
BASE, TRANSITIONS AND CEILING
DETAILS

Scale
As indicated

A6.301

GENERAL STRUCTURAL NOTES

I. GENERAL

1. MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE 2022 EDITION OF THE CALIFORNIA BUILDING CODE (CBC), WITH CITY OF IRVINE AMENDMENTS AND THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.
2. THESE GENERAL NOTES SUPPLEMENT THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS. IN CASE OF CONFLICT BETWEEN THE PLANS AND SPECIFICATIONS, FOLLOW THE MORE STRINGENT OF THE TWO, UNLESS OTHERWISE NOTED BY THE OWNER'S REPRESENTATIVE.
3. REFERENCE TO CODES, RULES, REGULATIONS, STANDARDS, MANUFACTURER'S INSTRUCTIONS OR REQUIREMENTS OF REGULATORY AGENCIES IS TO THE LATEST PRINTED EDITION OF EACH IN EFFECT AT THE DATE OF SUBMISSION OF BID UNLESS THE DOCUMENT DATE IS SHOWN.
4. DRAWINGS INDICATE GENERAL AND TYPICAL DETAILS OF CONSTRUCTION. WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED BUT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, USE SIMILAR DETAILS OF CONSTRUCTION, SUBJECT TO REVIEW BY THE OWNER'S REPRESENTATIVE.
5. DETAILS AND SHEETS TITLED "TYPICAL" APPLY TO SITUATIONS OCCURRING ON THE PROJECT THAT ARE THE SAME OR SIMILAR TO THOSE SPECIFICALLY REFERENCED. SUCH DETAILS ARE NOT NOTED AT EACH LOCATION THAT THEY OCCUR.
6. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND FOR CHECKING DIMENSIONS. NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES AND RESOLVE BEFORE PROCEEDING WITH THE WORK.
7. DO NOT SCALE THE DRAWINGS.
8. PROVIDE MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES INCLUDE, BUT MAY NOT BE LIMITED TO, BRACING AND SHORING FOR LOADS DURING CONSTRUCTION. RETAIN A REGISTERED CIVIL ENGINEER WHO IS PROPERLY QUALIFIED TO DESIGN BRACING, SHORING, ETC. VISITS TO THE SITE BY THE OWNER'S REPRESENTATIVE WILL NOT INCLUDE OBSERVATION OF THE ABOVE NOTED ITEMS.
9. SEQUENCING OF DEMOLITION AND CONSTRUCTION SHALL BE REVIEWED BY THE SHORING ENGINEER. THE SHORING ENGINEER SHALL BE RESPONSIBLE FOR THE DETERMINATION OF LOADING OR DESIGN CRITERIA. RETAIN A REGISTERED CIVIL ENGINEER FOR SHORING. DESIGN OF BRACING, SHORING, ETC. SHALL BE IN ACCORDANCE WITH THE ASCE STANDARD TITLED ASCE/SEI 37 - DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION PUBLISHED BY THE AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE).
10. INFORMATION SHOWN ON THE DRAWINGS RELATED TO EXISTING CONDITIONS REPRESENTS KNOWN INFORMATION, BUT WITHOUT GUARANTEE OF ACCURACY. REPORT CONDITIONS THAT CONFLICT WITH THE CONTRACT DOCUMENTS TO THE OWNER'S REPRESENTATIVE. DO NOT DEViate FROM THE CONTRACT DOCUMENTS WITHOUT WRITTEN DIRECTION FROM THE OWNER'S REPRESENTATIVE.
11. REFER TO ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATION OF FLOOR, ROOF AND WALL OPENINGS NOT SHOWN ON THE STRUCTURAL DRAWINGS. COORDINATE THE SIZE AND LOCATION OF OPENINGS ASSOCIATED WITH, BUT NOT LIMITED TO, ELECTRICAL, MECHANICAL AND PLUMBING TRADES. SUBMIT FINAL SIZING AND LOCATION REQUIREMENTS OF OPENINGS TO THE OWNER'S REPRESENTATIVE FOR REVIEW.
12. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING A SAFE PLACE TO WORK AND MEETING THE REQUIREMENTS OF ALL APPLICABLE JURISDICTIONS. EXECUTE WORK TO ENSURE THE SAFETY OF PERSONS AND ADJACENT PROPERTY AGAINST DAMAGE BY FALLING DEBRIS AND OTHER HAZARDS IN CONNECTION WITH THIS WORK.
13. COORDINATE THE MECHANICAL EQUIPMENT WITH ALL TRADES BEFORE INSTALLATION.
14. REFERENCE DATUM FOR THE ELEVATIONS IS FINISH FIRST FLOOR, ELEVATION = S.A.D.
15. A COPY OF THE ELEVATION REPORT AND/OR CONDITIONS OF LISTING SHALL BE MADE AVAILABLE ON THE JOB SITE.
16. STRUCTURAL ENGINEER REQUIRES 10 WORKING DAYS TO REVIEW AND RESPOND AFTER RECEIPT OF SHOP DRAWINGS AND CALCULATIONS. SHOP DRAWINGS SHALL NOT BE A REPRODUCTION OF THE STRUCTURAL DRAWINGS. ENVIRONMENTAL PRODUCT DECLARATIONS (EPDs) SHALL BE SUBMITTED WITH ALL SUBMITTALS, IF AVAILABLE. SUBMITTALS SHALL BE PROVIDED FOR THE FOLLOWING:

- A. CONCRETE
1. REINFORCING LAYOUT, INCLUDE PROPOSED SPLICE LENGTHS AND LOCATIONS
2. CONCRETE MIX DESIGN
- B. STEEL FRAMING AND CONNECTIONS
- C. TJI JOIST LAYOUT

17. STRUCTURAL ENGINEER REQUIRES 5 WORKING DAYS TO RESPOND AFTER RECEIPT OF REQUEST FOR INFORMATION (RFI).
18. ALL WORK IS NEW (N) UNLESS INDICATED AS EXISTING (E).
19. FIELD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO SHOP DRAWINGS PRODUCTION AND FABRICATION OF STRUCTURAL ELEMENTS.

II. FOUNDATION AND SITE WORK

1. THE DESIGN OF THE FOUNDATION SYSTEM IS BASED UPON THE CRITERIA AND RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL INVESTIGATION REPORT ENTITLED "THE CANOPY 2 SITE AT THE IRVINE GREAT PARK HORNET & BEACON INTERSECTION" BY GROUP DELTA CONSULTANTS, INC. PROJECT NUMBER IR855, DATED JUNE 5, 2025.
2. THE ABOVE TITLED REPORT IS CONSIDERED PART OF THE CONSTRUCTION DOCUMENTS, AND ALL REQUIREMENTS OF THIS REPORT SHALL BE MET.
3. GROUNDWATER ELEVATION IS ESTIMATED AT APPROXIMATELY ELEVATION 40 FEET. PROVIDE SITE DE-WATERING AS SPECIFIED.
4. LOCATE AND PROTECT EXISTING UTILITIES TO REMAIN DURING AND/OR AFTER CONSTRUCTION.
5. REMOVE ABANDONED FOOTINGS, UTILITIES, ETC. WHICH INTERFERE WITH NEW CONSTRUCTION, UNLESS OTHERWISE INDICATED.
6. NOTIFY THE OWNER'S REPRESENTATIVE IF ANY BURIED STRUCTURES NOT INDICATED, SUCH AS CESSPOOLS, CISTERNS, FOUNDATIONS, ETC., ARE FOUND.
7. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR EXCAVATION PROCEDURES INCLUDING LAGGING, SHORING, UNDERPINNING AND PROTECTION OF EXISTING CONSTRUCTION.
8. REMOVE LOOSE SOIL AND STANDING WATER FROM FOUNDATION EXCAVATIONS PRIOR TO PLACING CONCRETE.
9. EXCAVATIONS FOR FOUNDATIONS MUST BE ACCEPTED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING REINFORCING AND CONCRETE. NOTIFY THE GEOTECHNICAL ENGINEER WHEN EXCAVATIONS ARE READY FOR INSPECTION.
10. PLACE BACKFILL BEHIND RETAINING WALLS AFTER CONCRETE OR MASONRY HAS ATTAINED FULL DESIGN STRENGTH. BRACE BUILDING AND PIT WALLS BELOW GRADE FROM LATERAL LOADS UNTIL ATTACHED FLOORS AND SLABS ON GRADE ARE COMPLETE AND HAVE ATTAINED FULL DESIGN STRENGTH.

11. MECHANICALLY COMPACT EXCAVATION BACKFILLS IN LAYERS. PROVIDE THE FOLLOWING MINIMUM COMPACTION IN ACCORDANCE WITH THE ASTM D1557 TEST METHOD OR AS INDICATED IN GEOTECHNICAL INVESTIGATION REPORT, WHICHEVER IS MORE STRINGENT.:
- | % OF MAXIMUM DRY DENSITY | LOCATIONS |
|--------------------------|-------------------------------|
| 90% | TRENCH AND WALL BACKFILL |
| 90% | UPPER 6" OF SOIL BENEATH FILL |
| 90% | FILL BENEATH SLAB ON GRADE |
| 95% | FILL BENEATH FOOTINGS |
| 90% | OTHER |
- IF TEST INDICATE WORK DOES NOT MEET SPECIFIED REQUIREMENTS, REMOVE WORK, REPLACE AND RETEST.
12. SCARIFY SUBGRADE SURFACE TO A DEPTH AS INDICATED IN GEOTECHNICAL INVESTIGATION REPORT TO IDENTIFY SOFT SPOTS. CUT OUT SOFT AREAS OF SUBGRADE NOT CAPABLE OF COMPACTION IN PLACE. BACKFILL WITH GENERAL FILL. COMPACT SUBGRADE TO DENSITY EQUAL OR GREATER THAN REQUIREMENTS FOR SUBSEQUENT FILL MATERIAL. UNTIL READY TO FILL, MAINTAIN EXCAVATIONS AND PREVENT LOOSE SOIL FROM FALLING INTO EXCAVATION.

13. IF ADVERSE SOIL CONDITIONS ARE ENCOUNTERED, NOTIFY OWNER'S REPRESENTATIVE FOR FURTHER INVESTIGATION.

III. FORMWORK

1. THE DESIGN OF THE FORMWORK, SHORES, AND RE-SHORES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. DESIGN FORMWORK UNDER DIRECT SUPERVISION OF A PROFESSIONAL CIVIL OR STRUCTURAL ENGINEER EXPERIENCED IN DESIGN OF CONCRETE FORMWORK AND LICENSED IN THE STATE OF THE LOCAL JURISDICTION. COMPLY WITH APPLICABLE STATE AND LOCAL CODES WITH RESPECT TO DESIGN, FABRICATION, ERECTION, AND REMOVAL OF FORMWORK. FORMWORK SHALL BE DESIGNED TO ACHIEVE THE CAMBER SPECIFIED ON THE DRAWINGS.
2. TIMING FOR THE REMOVAL OF THE FORMWORK AND SHORES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH ACI 347 TABLE 5.7.2.3. LOOSEN FORMS CAREFULLY. DO NOT WEDGE PRY BARS, HAMMERS, OR TOOLS AGAINST FINISHED CONCRETE SURFACES SCHEDULED FOR EXPOSURE TO VIEW.
3. AT SUSPENDED SLABS, FORMWORK SHALL NOT BE REMOVED BEFORE THE CONCRETE REACHES 75% OF ITS SPECIFIED 28-DAY COMPRESSIVE STRENGTH AND 75% OF ITS CORRESPONDING 28-DAY MODULUS OF ELASTICITY. CONCRETE SHALL BE PLACED AS SOON AS POSSIBLE AFTER REMOVING FORMWORK AND NO LATER THAN THE END OF THE SAME DAY THE FORMWORK WAS REMOVED. THE RE-SHORES SHALL NOT BE REMOVED BEFORE CONCRETE REACHES ITS SPECIFIED STRENGTH AT 28 DAYS.
4. PROVIDE APPROVED CURING MEASURE WHERE FORMS ARE REMOVED IN LESS THAN 7 DAYS, INCLUDING BUT NOT LIMITED TO WALLS, COLUMNS, AND UNDERSIDE OF ELEVATED SLABS.
5. VERIFY LINES, LEVELS, AND CENTERS BEFORE PROCEEDING WITH FORMWORK. ENSURE THE DIMENSIONS AGREE WITH DRAWINGS.
6. PROVIDE POUR POCKETS IN FORMS AND UNDER EXISTING STRUCTURAL MEMBERS AS REQUIRED TO PREVENT AIR POCKETS AND/OR "HONEYCOMB" UNDER OR AROUND THE EXISTING MEMBERS. CONCRETE CAST WITH AIR POCKETS AND/OR "HONEYCOMB" UNDER OR AROUND THE MEMBERS IS NOT ACCEPTABLE.
7. ERECT FORMWORK, SHORING AND BRACING TO ACHIEVE DESIGN REQUIREMENTS, IN ACCORDANCE WITH REQUIREMENTS OF ACI 301. PROVIDE BRACING TO ENSURE STABILITY OF FORMWORK. SHORE OR STRENGTHEN FORMWORK SUBJECT TO OVERSTRESSING BY CONSTRUCTION LOADS.
8. PROVIDE FORMED OPENINGS WHERE REQUIRED FOR ITEMS TO BE EMBEDDED IN PASSING THROUGH CONCRETE WORK.
9. CLEAN FORMS AS ERECTION PROCEEDS. TO REMOVE FOREIGN MATTER WITHIN FORMS. CLEAN FORMED CAVITIES OF DEBRIS PRIOR TO PLACING CONCRETE.
10. CONSTRUCT FORMWORK TO MAINTAIN TOLERANCES REQUIRED BY ACI 117.

IV. REINFORCING STEEL

1. REINFORCING TO CONFORM TO THE FOLLOWING, UNLESS OTHERWISE NOTED:

LOCATION	TYPE
REINFORCING STEEL #7 AND SMALLER	ASTM A615, 60 KSI
REINFORCING STEEL #8 AND LARGER AND REINFORCING STEEL TO BE WELDED	ASTM A706, 60 KSI
1/2 INCH DIAMETER LOW RELAXATION SEVEN WIRE POST-TENSIONING STRAND	ASTM A416, 270 KSI
SMOOTH STEEL WIRE FOR SPIRALS	ASTM A82, 70 KSI
WELDED STEEL WIRE FABRIC	ASTM A185, 70 KSI
SMOOTH DOWELS IN SLAB ON GRADE	ASTM A36, 36 KSI
DEFORMED BAR ANCHORS: NELSON/TRW TYPE "D2L" PER ICC-ESR 2907 OR APPROVED EQUIVALENT	ASTM A496, 70 KSI

2. FABRICATE CONCRETE REINFORCING IN ACCORDANCE WITH CURRENT CRSI (DA4) - MANUAL OF STANDARD PRACTICE AND ACI 318.
3. ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT FROM DISPLACING DUE TO FORMWORK, CONSTRUCTION, OR CONCRETE PLACEMENT OPERATIONS. LOCATE AND SUPPORT REINFORCING BY METAL CHAIRS, RUNNERS, BOLSTERS, SPACERS, AND HANGERS AT A MAXIMUM 3-FOOT SPACING. PLACE REINFORCING BARS IN ACCORDANCE WITH CURRENT CRSI (P1).
4. MECHANICAL COUPLERS: LENTON THREADED OR INTERLOCK COUPLERS BY ERICO, IAPMO ER-0129, OR XTENDER BY HEADED REINFORCEMENT CORPORATION, ICC ESR-2764, OR BAR-LOCK BY DAYTON SUPERIOR CORPORATION, IAPMO ER-319. COUPLERS FOR BEAM AND SLAB BARS AT FORMED CONSTRUCTION JOINTS MAY BE LENTON FORM SAVERS BY ERICO, IAPMO ER-0129.
5. WELD REINFORCING STEEL IN ACCORDANCE WITH AWS D1.4 USING QUALIFIED WELDERS.
6. WELDABILITY TEST OF EXISTING REINFORCING STEEL SHALL BE PERFORMED PRIOR TO WELDING. PROPER WELDING PROCEDURE SHALL BE SELECTED BASED ON THE CHEMICAL COMPOSITION OF EXISTING REINFORCING STEEL AND RECOMMENDATION FROM AWS D1.4.
7. TERMINATE REINFORCING STEEL IN STANDARD HOOKS, UNLESS OTHERWISE SHOWN.
8. PROVIDE REINFORCING SHOWN OR NOTED CONTINUOUS IN LENGTHS AS LONG AS PRACTICAL.
9. TIE WIRE TO BE ANNEALED, MINIMUM 16 GAGE. CHAIRS, BOLSTERS, BAR SUPPORTS, SPACERS ARE TO BE SIZED AND SHAPED FOR ADEQUATE SUPPORT OF REINFORCEMENT DURING CONCRETE PLACEMENT.

V. CAST-IN-PLACE CONCRETE

1. CONCRETE IS REINFORCED AND CAST-IN-PLACE UNLESS OTHERWISE NOTED. WHERE REINFORCING IS NOT SPECIFICALLY SHOWN OR WHERE DETAILS ARE NOT GIVEN, PROVIDE REINFORCING SIMILAR TO THAT SHOWN FOR SIMILAR CONDITIONS. SUBJECT TO REVIEW BY THE OWNER'S REPRESENTATIVE.
2. ROUGHEN CONCRETE SURFACES OF CONSTRUCTION JOINTS TO ¼ INCH AMPLITUDE AND CLEAN OF LAITANCE, FOREIGN MATTER, AND LOOSE PARTICLES. LOCATE CONSTRUCTION JOINTS AS SHOWN ON THE DRAWINGS. SUBMIT ALTERNATE JOINT LOCATIONS OR JOINTS NOT SHOWN TO THE OWNER'S REPRESENTATIVE FOR REVIEW AND APPROVAL PRIOR TO PROCEEDING WITH THE WORK.
3. AT LOCATIONS WHERE CONCRETE IS CAST AGAINST EXISTING CONCRETE, ROUGHEN CONTACT SURFACES TO ¼ INCH AMPLITUDE AND CLEAN OF LAITANCE, FOREIGN MATTER, AND LOOSE PARTICLES.
4. AT LOCATIONS WHERE CONCRETE IS CAST AGAINST EXISTING MASONRY, THOROUGHLY ROUGHEN CONTACT SURFACES BY LIGHT SANDBLASTING OR OTHER SUITABLE MEANS AND CLEAN OF LAITANCE, FOREIGN MATTER, AND LOOSE PARTICLES.
5. REFER TO ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATIONS OF ADDITIONAL CONCRETE CURBS AND HOUSEKEEPING PADS NOT SHOWN.
6. CONCRETE CLEAR COVER TO REINFORCING BARS IS AS FOLLOWS, UNLESS OTHERWISE NOTED:

LOCATION	CLEAR COVER
CONCRETE PLACED AGAINST EARTH	3 INCHES
FORMED SURFACES EXPOSED TO WEATHER OR IN CONTACT WITH EARTH:	
#6 BARS AND LARGER	2 INCHES
#5 BARS AND SMALLER	1 1/2 INCHES
SLABS ON GRADE (TOP CLEARANCE)	1 1/2 INCHES
BEAMS, GIRDERS AND COLUMNS NOT EXPOSED TO WEATHER OR EARTH	1 1/2 INCHES
WALL OR SLAB SURFACES NOT EXPOSED TO WEATHER OR EARTH:	
#5 & SMALLER	3/4 INCH
#6 & #7	1 INCH
#8,#9, #10 & #11	1 1/2 INCHES
#14 & #18	2 1/2 INCHES

7. CONCRETE TYPES:

CLASS	28-DAY STRENGTH	TYPE	LOCATION
A	3000 PSI	NORMAL WEIGHT	FOUNDATIONS, MISC CURBS, HOUSE-KEEPING PADS, ETC
B	3000 PSI	NORMAL WEIGHT	SLABS ON GRADE

8. CEMENT SHALL CONFORM TO ASTM C150 TYPE II.
9. FINE AND COARSE AGGREGATES SHALL CONFORM TO ASTM C33. LIGHTWEIGHT AGGREGATE SHALL CONFORM TO ASTM C330.
10. MIXING WATER SHALL BE POTABLE AND CONFORM TO ASTM C1602.
11. FLY ASH USED IN CONCRETE MIX SHALL CONFORM TO ASTM C618 CLASS F, CALCINED POZZOLAN SHALL CONFORM TO ASTM C 618, CLASS N, SILICA FUME SHALL CONFORM TO ASTM C 1240, PROPORTIONED IN ACCORDANCE WITH ACI 211.1, AND AIR ENTRAINMENT ADMIXTURE SHALL CONFORM TO ASTM C 260.
12. FOR EACH CLASS OF CONCRETE, A CONCRETE MIX DESIGN SHALL BE PREPARED BASED ON FIELD EXPERIENCE OR TRIAL MIXTURES IN CONFORMANCE TO ACI 211 AND ACI 301.
13. CONCRETE MIX DESIGNS SHALL BE REVIEWED BY THE OWNER'S TESTING AGENCY. CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGN FOR EACH CLASS OF CONCRETE, INCLUDING LETTER OF CONFORMANCE FROM OWNER'S TESTING AGENCY, TO OWNER'S REPRESENTATIVE FOR REVIEW. AS AN ALTERNATE TO THE LETTER OF CONFORMANCE FROM THE OWNER'S TESTING AGENCY, THE CONCRETE MIX DESIGN MAY BE PREPARED BY A CIVIL ENGINEER LICENSED IN STATE OF CALIFORNIA. THE MIX DESIGN SHALL BEAR THE STAMP AND SIGNATURE OF THE CIVIL ENGINEER.
14. CONCRETE SHALL BE TESTED IN ACCORDANCE WITH ASTM C 39/C 39 M.
15. PERFORM WORK IN ACCORDANCE WITH ACI 301 AND ACI 318. FOLLOW RECOMMENDATIONS OF ACI 308R WHEN CONCRETING DURING HOT WEATHER AND ACI 308R WHEN CONCRETING DURING COLD WEATHER.
16. CONTINUOUSLY MOIST CURE CONCRETE SLABS-ON-GRADE FOR 7 DAYS MINIMUM. WATER FOG SPRAYS, PONDING, SATURATED ABSORPTIVE COVERS, MOISTURE RETAINING COVERS OR CURING COMPOUNDS MAY BE USED.
17. VAPOR BARRIER SHALL CONFORM TO ACI 302.
18. REPAIR UNDERSLAB VAPOR RETARDER DAMAGE DURING PLACEMENTS OF CONCRETE REINFORCING. REPAIR ACCORDING TO MANUFACTURER RECOMMENDATIONS.
19. CONCRETE FILL THICKNESS SHOWN ON THE FRAMING PLANS ARE MINIMUM THICKNESSES. NO ALLOWANCES HAVE BEEN SHOWN FOR ADDITIONAL CONCRETE FILL REQUIRED TO COMPENSATE FOR FRAME, DECK, OR FORMWORK DEFLECTIONS TO MAINTAIN SURFACE TOLERANCES SPECIFIED.
20. PLACE CONCRETE IN ACCORDANCE WITH ACI 304R, PLACE CONCRETE FOR FLOOR SLABS IN ACCORDANCE WITH ACI 302.1R. DO NOT INTERRUPT SUCCESSIVE PLACEMENT; DO NOT PERMIT COLD JOINTS TO OCCUR. SAW CUT JOINTS WITHIN 24 HOURS AFTER PLACING.
21. NON-SHRINK GROUT SHALL CONFORM TO ASTM C 1107/C 1107M, 7000 PSI MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS: EUCLID CHEMICAL COMPANY'S "EUCO-NS", L&M CRYSTEX, MASTER BUILDERS' "MASTERFLOW 713", OR FIVE STAR GROUT. WHERE HIGH FLUIDITY OR INCREASED PLACING TIME IS REQUIRED, USE EUCLID CHEMICAL COMPANY'S "EUCO HI-FLOW GROUT" OR MASTER BUILDERS' "MASTERFLOW 928".
22. SEPARATE SLABS ON GRADE FROM VERTICAL SURFACES WITH JOINT FILLER UNLESS OTHERWISE INDICATED IN THE DRAWINGS.
23. PLACE JOINT FILLER IN FLOOR SLAB PATTERN PLACEMENT SEQUENCE. SET TOP TO REQUIRED ELEVATIONS. SECURE TO RESIST MOVEMENT BY WET CONCRETE.
24. EXTEND JOINT FILLER FROM BOTTOM OF SLAB TO WITHIN ½ INCH OF FINISHED SLAB SURFACE.
25. INSTALL JOINT DEVICES IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.



COMMUNITY DEVELOPMENT
Building and Safety

Print Form

STRUCTURAL OBSERVATION PROGRAM

PROJECT ADDRESS		PERMIT APPLICATION NUMBER	
Hangar 10, Great Park Irvine, CA 92618		00970420-CNEW	
DESCRIPTION OF WORK			
A new shell building for future tenants to replace existing. New building includes (2) restrooms, janitor closet and roof access.			
OWNER	ARCHITECT	ENGINEER	
City of Irvine	Gensler	Structural Focus	
STRUCTURAL OBSERVATION (ONLY CHECKED ITEMS ARE REQUIRED)			
FIRM OR INDIVIDUAL TO BE RESPONSIBLE FOR THE STRUCTURAL OBSERVATION			
Structural Focus			
NAME	PHONE	CALIFORNIA REGISTRATION	
Brendan Ramos	310.323.9924	S6251	
FOUNDATION	WALL	FRAME	DIAPHRAGM
<input checked="" type="checkbox"/> FOOTING, STEM WALLS, PIERS	<input type="checkbox"/> CONCRETE	<input checked="" type="checkbox"/> STEEL MOMENT FRAME	<input type="checkbox"/> CONCRETE
<input type="checkbox"/> MAT FOUNDATION	<input type="checkbox"/> MASONRY	<input type="checkbox"/> STEEL BRACED FRAME	<input type="checkbox"/> STEEL DECK
<input type="checkbox"/> CAISSON, PILES, GRADE BEAM	<input checked="" type="checkbox"/> WOOD	<input type="checkbox"/> CONCRETE MOMENT FRAME	<input checked="" type="checkbox"/> WOOD
<input type="checkbox"/> STEPPING/RETAINING FOUNDATION	<input type="checkbox"/> OTHER:	<input type="checkbox"/> MASONRY WALL FRAME	<input type="checkbox"/> OTHER:
<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:	<input type="checkbox"/> OTHER:
THIS PROJECT IS STRUCTURALLY REPETITIVE IN THE FOLLOWING MANNER:			
DUE TO THE REPETITIVE NATURE DESCRIBED ABOVE AND SUBJECT TO THE CONDITIONS OF THE CITY OF IRVINE INFORMATIONAL BULLETIN NO. 251, STRUCTURAL OBSERVATION WILL BE PERFORMED AS FOLLOWS:			

DECLARATION BY OWNER: I, THE OWNER OF THE PROJECT, DECLARE THAT THE ABOVE LISTED FIRM OR INDIVIDUAL IS HIRED BY ME TO BE THE STRUCTURAL OBSERVER.

Denise Bailey
SIGNATURE

2025-10-15
DATE

ONLY COMPLETE IF DEFERRING SELECTION: IN CONSIDERATION OF DEFERRING THE SELECTION OF THE STRUCTURAL OBSERVER, THE OWNER ACKNOWLEDGES THAT THE PROJECT CAN NOT COMMENCE UNTIL SUCH SELECTION IS MADE AND DOCUMENTED ON A SUPPLEMENTAL CITY OF IRVINE STRUCTURAL OBSERVATION PROGRAM FORM PROVIDED TO THE CITY INSPECTOR AT OR BEFORE THE PRE-CONSTRUCTION MEETING, WHICH SHALL BE ATTENDED BY THE SELECTED STRUCTURAL OBSERVER.

SIGNATURE

DATE

FORM 40-83 REV 1/16

Date	Description
10/14/2025	CD CLIENT REVIEW/PRICING
11/03/2025	ISSUE FOR PLAN CHECK
01/09/2025	ADDENDUM A/PLAN CHECK COMMENTS
05/07/2026	BID SET

Seal / Signature

DRAWING INDEX	
S1.001	GENERAL STRUCTURAL NOTES AND DRAWING INDEX
S1.002	GENERAL STRUCTURAL NOTES CONTINUED
S1.003	GENERAL STRUCTURAL NOTES CONTINUED
S1.004	SPECIAL INSPECTIONS
S1.005	SYMBOLS AND ABBREVIATIONS
S1.010	TYPICAL CONCRETE DETAILS
S1.011	TYPICAL CONCRETE DETAILS
S1.020	TYPICAL STEEL DETAILS
S1.030	TYPICAL WOOD DETAILS
S1.031	TYPICAL WOOD DETAILS
S1.100	CONSTRUCTION PLAN
S1.102	ROOF PLAN
S4.001	ELEVATIONS
S5.001	CONCRETE DETAILS
S7.001	STEEL DETAILS
S8.001	WOOD DETAILS
YL-1	YIELD-LINK CONNECTION
YLMC1	YIELD-LINK MOMENT CONNECTION
YLMC2	YIELD-LINK MOMENT CONNECTION
YLMC3	YIELD-LINK MOMENT CONNECTION

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

Tel 949.863.9434
Fax 949.553.1676



19210 S. Vermont Ave.,
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Gardena, CA 90248
Tel 310.323.9924



Date	Description
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05/07/2026	BID SET

Seal / Signature

Project Name

HANGAR 10
RECONSTRUCTION

Project Number

25226

Description

GENERAL STRUCTURAL NOTES AND DRAWING INDEX

Scale

NOT TO SCALE

S1.001

GENERAL STRUCTURAL NOTES CONTINUED

VI. STRUCTURAL STEEL

1. STRUCTURAL STEEL TO CONFORM TO THE FOLLOWING UNLESS OTHERWISE NOTED:

SECTIONS	TYPE
ROLLED SHAPES	
WIDE FLANGES	ASTM A992 (50 KSI)
CHANNELS, ANGLES, & OTHER	ASTM A36
PLATES	
COLUMN BASE PLATES	ASTM A572, GR 50
BRACE GUSSET PLATES	ASTM A572, GR 50
BEAM SHEAR CONNECTION PLATES	ASTM A572, GR 50
COLUMN CONTINUITY PLATES	ASTM A572, GR 50
BEAM STIFFENER PLATES	ASTM A572, GR 50
DECK CLOSURE PLATES	ASTM A572, GR 50
OTHER	ASTM A572, GR 50
STEEL PIPE	ASTM A53 GRADE B
HOLLOW STRUCTURAL SECTION (HSS)	ASTM A500 GRADE C
STAINLESS STEEL SHAPES, PLATES AND BARS	ASTM A276
BOLTS	ASTM F3125 GR A325X
MACHINE BOLTS	ASTM A307
ANCHOR BOLTS AND RODS	ASTM F1554, GR 55
THREADED AND HANGER ROD	ASTM A572, GR 50
WELDED SHEAR CONNECTORS NELSON/TRW PER ICC ESR-2856 OR APPROVED EQUIVALENT	ASTM A108, GRADE 1015 THROUGH 1020 (50 KSI)
WELDED THREADED STUDS NELSON/TRW OR APPROVED EQUIVALENT	ASTM A108, GRADE 1015 THROUGH 1020
NUTS FOR BOLTS AND MACHINE BOLTS	ASTM A563
HARDENED WASHERS	ASTM F436
UNHARDENED	ASTM F844
PLAIN WASHERS	ANSI B18.22.1
BEVELED WASHERS	ANSI B18.23.1

2. HOT DIP GALVANIZING IN ACCORDANCE WITH ASTM A123 AND ASTM A153 STRUCTURAL STEEL AND FASTENERS THAT ARE PERMANENTLY EXPOSED TO THE WEATHER. REPAIR GALVANIZING AFTER WELDING IN ACCORDANCE WITH ASTM A780.

3. STRUCTURAL STEEL AND CONNECTIONS EXPOSED TO VIEW IN THE COMPLETED BUILDING ARE DESIGNATED ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS).

4. ARC-WELDING ELECTRODES/FILLER METALS TO BE LOW HYDROGEN TYPES E70XX, E70TXX OR E70XXX MINIMUM AS APPLICABLE. ELECTRODES WITH CHARPY V-NOTCH (CVN) TESTS VALUES OF A MINIMUM 20 FOOT-POUNDS AT -20 DEGREES FAHRENHEIT ARE TO BE USED AT THE FOLLOWING LOCATIONS:

- A. COMPLETE JOINT PENETRATION WELDS
- B. BEAM TO COLUMN MOMENT CONNECTIONS - INCLUDING FLANGE, WEB, AND CONTINUITY PLATE FILLET AND PARTIAL JOINT PENETRATION WELDS
- C. BRACE CONNECTIONS - INCLUDING BRACE, GUSSET, BASE PLATES, BEAM STIFFENER PLATES, AND CONTINUITY PLATE FILLET AND PARTIAL JOINT PENETRATION WELDS
- D. WELDS NOTED "CVN" ON THE DRAWINGS

5. WELDERS TO BE CERTIFIED BY AWS AND THE GOVERNING JURISDICTION.

6. WHERE FIELD WELDING IS NOTED, THE DESIGNATION IS GIVEN AS A SUGGESTED CONSTRUCTION PROCEDURE ONLY.

7. PROVIDE NATURAL CAMBER UP, UNLESS NOTED OTHERWISE, EXCEPT AT CANTILEVERS. AT CANTILEVERS PROVIDE CAMBER SUCH THAT TIP OF CANTILEVER IS ABOVE FINAL ELEVATION.

8. SPLICE MEMBERS ONLY WHERE INDICATED.

9. FIELD WELDING TO BE DONE BY WELDERS CERTIFIED BY THE BUILDING DEPARTMENT FOR STRUCTURAL STEEL AND REINFORCING STEEL. CONTINUOUS INSPECTION BY A DEPUTY INSPECTOR IS REQUIRED.

10. SHOP WELDS MUST BE PERFORMED IN A BUILDING DEPARTMENT LICENSED FABRICATOR'S SHOP.

11. BUILDING DEPARTMENT LICENSED FABRICATOR IS REQUIRED FOR TRUSSES AND STRUCTURAL STEEL.

12. PROVIDE LEAD HOLE 40%-70% OF THREADED SHANK DIAMETER AND FULL DIAMETER FOR SMOOTH SHANK PORTION.

VII. MECHANICAL ANCHORS

1. EXPANSION OR WEDGE ANCHORS INTO CONCRETE: HILTI KWIK BOLT TZ-2 (ICC-ESR 4266), SIMPSON STRONG-BOLT 2 (ICC-ESR-3037), OR APPROVED EQUAL. INSTALL ANCHORS IN ACCORDANCE WITH ICC REPORT. EMBEDMENT DEPTH, MINIMUM EDGE DISTANCE, AND MINIMUM SPACING FOR ANCHORS AND DOWELS ARE AS FOLLOW, UNLESS OTHERWISE NOTED IN DRAWINGS. PROVIDE SPECIAL INSPECTION AS REQUIRED BY THE ICC EVALUATION REPORT:

EXPANSION ANCHORS INTO CONCRETE:

ANCHOR DIAMETER	ANCHOR EMBEDMENT	ANCHOR EDGE DISTANCE	ANCHOR SPACING	BASE MATERIAL THICKNESS
1/2"	4"	8"	4"	6"
5/8"	4"	9"	5"	8"
3/4"	5"	9"	7"	9"

2. SCREW ANCHORS INTO CONCRETE: SIMPSON TITEN HD (ICC-ESR-2713), HILTI KWIK HUS-EZ (ICC-ESR 3027), OR APPROVED EQUAL. SCREW ANCHORS INTO GROUTED CONCRETE MASONRY UNIT: SIMPSON TITEN HD SCREWS (ICC-ESR 1056), HILTI KWIK HUS-EZ (ICC-ESR 3056) OR APPROVED EQUAL. INSTALL ANCHORS IN ACCORDANCE WITH ICC REPORT. EMBEDMENT DEPTH, MINIMUM EDGE DISTANCE, AND MINIMUM SPACING FOR ANCHORS AND DOWELS ARE AS FOLLOW, UNLESS OTHERWISE NOTED IN DRAWINGS. PROVIDE SPECIAL INSPECTION AS REQUIRED BY THE ICC EVALUATION REPORT:

SCREW ANCHORS INTO CONCRETE:

ANCHOR DIAMETER	ANCHOR EMBEDMENT	ANCHOR EDGE DISTANCE	ANCHOR SPACING	BASE MATERIAL THICKNESS
3/8"	3"	4"	3"	5"
1/2"	4"	6"	3"	7"
5/8"	5"	7"	4"	9"

SCREW ANCHORS INTO GROUTED MASONRY UNITS:

ANCHOR DIAMETER	ANCHOR EMBEDMENT	ANCHOR EDGE DISTANCE	ANCHOR SPACING	BASE MATERIAL THICKNESS
3/8"	3"	12"	6"	8" NOMINAL
1/2"	4"	12"	8"	8" NOMINAL
5/8"	5"	12"	10"	8" NOMINAL

UNLESS OTHERWISE NOTED, LOCATE EXPANSION ANCHORS 1-1/4" MINIMUM FROM THE VERTICAL MORTAR HEAD JOINT.

4. HEAVY DUTY SLEEVE ANCHORS INTO CONCRETE: HILTI HDA-P UNDERCUT ANCHOR (ICC-ESR 1546), HILTI HSL-4 ANCHORS (ICC-ESR 4386) OR APPROVED EQUAL. INSTALL ANCHORS IN ACCORDANCE WITH ICC REPORT. EMBEDMENT DEPTH, MINIMUM EDGE DISTANCE, AND MINIMUM SPACING FOR ANCHORS AND DOWELS ARE AS FOLLOW, UNLESS OTHERWISE NOTED IN DRAWINGS. PROVIDE SPECIAL INSPECTION AS REQUIRED BY THE ICC EVALUATION REPORT:

SLEEVE ANCHORS INTO CONCRETE:

ANCHOR SIZE	ANCHOR EMBEDMENT	ANCHOR EDGE DISTANCE	ANCHOR SPACING	BASE MATERIAL THICKNESS
M10	4"	5"	10"	8"
M12	5"	5"	11"	8"
M16	8"	6"	13"	11"
M20	10"	9"	14"	14"

5. POWDER-ACTUATED FASTENERS: SIMPSON PDPA .300" HEADED FASTENER WITH 0.157" SHANK DIAMETER (ICC-ESR 2138), HILTI X-U FASTENERS WITH 0.157" SHANK DIAMETER (ICC-ESR 2269), OR APPROVED EQUAL. EMBEDMENT DEPTH, MINIMUM EDGE DISTANCE, AND MINIMUM SPACING FOR ANCHORS AND DOWELS ARE AS FOLLOW, UNLESS OTHERWISE NOTED IN DRAWINGS. INSTALL FASTENERS IN ACCORDANCE WITH ICC REPORT.

FASTENERS INTO CONCRETE:

ANCHOR SIZE	ANCHOR EMBEDMENT	ANCHOR EDGE DISTANCE	ANCHOR SPACING	BASE MATERIAL THICKNESS
SEE ABOVE	2"	3"	4"	6"

6. PROVIDE STAINLESS STEEL FASTENERS FOR EXTERIOR USE OR WHEN EXPOSED TO WEATHER. PROVIDE GALVANIZED CARBON STEEL ANCHORS AT OTHER LOCATIONS, UNLESS OTHERWISE NOTED.

7. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT THE HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF 2 ANCHOR DIAMETERS OR 1 INCH, WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE DOWEL AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT. IF THE ANCHOR OR DOWEL MAY NOT BE SHIFTED AS NOTED ABOVE, NOTIFY THE OWNER'S REPRESENTATIVE FOR FURTHER DIRECTION.

8. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH MECHANICAL ANCHORS.

9. ANCHORS WILL BE PROOF TESTED BY OWNER'S TESTING AND INSPECTION AGENCY.

10. IF ANY ANCHOR FAILS TESTING, REPLACE ANCHOR AND TEST ADDITIONAL ANCHORS OF THE SAME CATEGORY NOT PREVIOUSLY TESTED UNTIL TWENTY (20) CONSECUTIVE PASS, THEN RESUME INITIAL TESTING FREQUENCY.

11. APPLY TEST LOAD BY ANY METHOD THAT WILL EFFECTIVELY MEASURE THE TENSION ON THE ANCHOR SUCH AS DIRECT PULL WITH A HYDRAULIC JACK, TORQUE WRENCH, OR CALIBRATED SPRING LOADING DEVICES, ETC.

12. TEST ANCHORS NO SOONER THAN 24 HOURS AFTER INSTALLATION.

13. REACTION LOADS FROM TEST FIXTURES MAY BE APPLIED CLOSE TO THE ANCHOR BEING TESTED, PROVIDED THE ANCHOR IS NOT RESTRAINED FROM WITHDRAWING BY A BASE PLATE OR OTHER FIXTURE. IF RESTRAINT IS FOUND, LOOSEN AND SHIM OR REMOVE THE FIXTURE PRIOR TO TESTING.

14. TEST 10% WEDGE OR SLEEVE ANCHORS PER ONE OF THE FOLLOWING METHODS:

A. HYDRAULIC RAM METHOD: APPLY PROOF TEST LOAD WITHOUT REMOVING THE NUT. IF IT IS NOT POSSIBLE TO TEST WITH THE NUT INSTALLED, REPLACE THE NUT WITH A THREADED COUPLER TO THE SAME TORQUE MEASURED WITH A TORQUE WRENCH, AND THEN APPLY THE LOAD. ANCHOR IS ACCEPTABLE IF NO MOVEMENT IS OBSERVED AT THE TEST LOAD. MOVEMENT MAY BE DETERMINED WHEN THE WASHER UNDER THE NUT BECOMES LOOSE.

B. TORQUE WRENCH METHOD: TEST ANCHORS TO THE TORQUE LOAD INDICATED IN THE TABLE BELOW WITHIN THE FOLLOWING LIMITS:

1. FOR 3/8" SLEEVE ANCHORS, ONE-QUARTER TURN OF THE NUT. FOR OTHER SLEEVE ANCHORS, ONE-HALF TURN OF THE NUT.
2. FOR WEDGE ANCHORS, ONE-HALF TURN OF THE NUT.

15. TEST SHELL TYPE ANCHORS PER ONE OF THE FOLLOWING METHODS:

A. VISUALLY INSPECT 25% OF ANCHORS FOR FULL EXPANSION AS EVIDENCED BY THE LOCATION OF THE EXPANSION PLUG IN THE ANCHOR BODY. ACCEPTABLE PLUG LOCATION OF A FULLY EXPANDED ANCHOR IS RECOMMENDED BY THE MANUFACTURER, OR IN THE ABSENCE OF SUCH RECOMMENDATION, WILL BE DETERMINED FOLLOWING THE MANUFACTURER'S INSTALLATION INSTRUCTIONS. ALSO, PROOF LOAD 5% OF THE ANCHORS TO THE TENSION LOAD VALUES INDICATED IN THE TABLE BELOW, BUT NOT LESS THAN THREE ANCHORS PER DAY FOR EACH DIFFERENT PERSON OR CREW INSTALLING ANCHORS.

B. TEST 10% OF ANCHORS USING THE HYDRAULIC RAM METHOD. ANCHOR IS ACCEPTABLE IF NO MOVEMENT IS OBSERVED AT THE TEST LOAD. MOVEMENT MAY BE DETERMINED WHEN THE WASHER UNDER THE NUT BECOMES LOOSE.

ANCHOR DIA (IN)	TEST VALUES: (HARD ROCK CONCRETE)					
	EXPANSION OR WEDGE	HEAVY DUTY SLEEVE	UNDERCUT			
	TENSION LOAD (LBS)	TORQUE LOAD (FT-LBS)	TENSION LOAD (LBS)	TORQUE LOAD (FT-LBS)	TENSION LOAD (LBS)	TORQUE LOAD (FT-LBS)
3/8"	1640	25	3980	50	6500	37
1/2"	1740	60	4850	80	8120	59
5/8"	3400	60	6790	120	16250	89
3/4"	4920	110	9470	200	24370	221
1"	5800	250	10350	250	-	-

16. TEST 10% OF HSL ANCHORS IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS.

VIII. ADHESIVE ANCHORS AND DOWELS

1. ANCHORS AND DOWELS INSTALLED INTO CONCRETE: HILTI HIT-RE 500-V3 (ICC-ESR 3814), HILTI HIT-HY 200 V3 (ICC-ESR 4868), SIMPSON SET-3G (ICC-ESR 4057), OR APPROVED EQUAL. EMBEDMENT DEPTH, MINIMUM EDGE DISTANCE, AND MINIMUM SPACING FOR ANCHORS AND DOWELS ARE AS FOLLOW, UNLESS OTHERWISE NOTED IN DRAWINGS. PROVIDE SPECIAL INSPECTION AS REQUIRED BY THE ICC EVALUATION REPORT:

ROD DIA OR BAR SIZE	EMBEDMENT	MINIMUM EDGE DISTANCE	MINIMUM SPACING	MINIMUM BASE MATERIAL THICKNESS
1/2"	5"	15"	3"	8" NOMINAL
5/8"	6"	18"	3 3/4"	12" NOMINAL
3/4"	7"	21"	4 1/2"	12"
7/8"	9"	27"	5 1/4"	14"
1"	11"	33"	6"	14"
#4	6 1/2"	19 1/2"	3"	14"
#5	8"	24"	3 3/4"	14"
#6	10"	30"	4 1/2"	14"

2. IF FIELD CONDITION DOES NOT MEET THE EMBEDMENT, MINIMUM EDGE DISTANCE, OR MINIMUM SPACING REQUIREMENT AS NOTED IN TABLES ABOVE, NOTIFY THE OWNER'S REPRESENTATIVE FOR FURTHER INSTRUCTIONS.

3. ANCHORS: ASTM A193 GRADE B7 THREADED RODS WITH ASTM A 563 GRADE DH HEAVY HEX NUTS AND ASTM F 436 WASHERS.

4. DOWELS: ASTM A615 GRADE 60 REINFORCING STEEL.

5. REMOVE GREASE, OIL, RUST, AND OTHER LAITANCE FROM RODS AND DOWELS PRIOR TO INSTALLATION.

6. THE DIAMETER OF THE HOLES IS PER THE MANUFACTURER'S INSTRUCTIONS. DRILL HOLES FOR CONCRETE AND FULLY GROUTED CONCRETE MASONRY ANCHORS AND DOWELS WITH CARBIDE-TIPPED DRILL BITS COMPLYING WITH ANSI B212.15-1994. DRILL HOLES FOR ANCHORS AND DOWELS IN UNREINFORCED BRICK MASONRY WITH A NON-IMPACT ROTARY DRILL. PRIOR TO INSTALLING ANCHORS OR DOWELS, WIRE BRUSH HOLES TO REMOVE RESIDUE, BLOW OUT WITH OIL-FREE COMPRESSED AIR, AND ALLOW HOLE TO DRY.

7. PLACE ADHESIVE WITH THE MANUFACTURER'S RECOMMENDED APPLICATION TOOL TO A DEPTH AS SPECIFIED BY THE MANUFACTURER AND TO MINIMIZE THE AMOUNT OF ADHESIVE THAT WILL OVERFLOW OUT OF THE HOLE WHEN THE BAR IS INSERTED. REMOVE EXCESS ADHESIVE ON THE ADJACENT SURFACES.

8. INSERT THE ANCHOR OR DOWEL IN THE HOLE WITH A TWISTING MOTION TO THE REQUIRED EMBEDMENT DEPTH. DO NOT PUMP THE ANCHOR OR DOWEL IN AND OUT OF THE HOLE.

9. WEDGE BARS TIGHT AND CENTERED IN THE HOLE WITH WOODEN WEDGES (GOLF TEES) TO HOLD IT IN PLACE UNTIL THE ADHESIVE SETS.

10. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT THE HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF 2 ANCHOR DIAMETERS OR 1 INCH, WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE DOWEL AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT. IF THE ANCHOR OR DOWEL MAY NOT BE SHIFTED AS NOTED ABOVE, THE ENGINEER WILL DETERMINE A NEW LOCATION.

11. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH ADHESIVE ANCHORS.

12. OWNER'S TESTING LABORATORY WILL PERFORM TENSION TESTS ON 25% OF ANCHOR AND DOWELS FOR THE FOLLOWING TEST LOADS. ANCHORS SHALL BE TESTED AFTER ANCHORS HAVE PROPERLY CURED. SEE ICC REPORTS FOR CURE TIME REQUIREMENTS.

ROD DIA OR BAR SIZE	EMBEDMENT	TEST LOAD	BASE MATERIAL
3/8"	4"	1800#	CONCRETE
1/2"	5"	3200#	CONCRETE
5/8"	6"	5000#	CONCRETE
3/4"	7"	7100#	CONCRETE
7/8"	9"	9700#	CONCRETE
1"	11"	12800#	CONCRETE
#3	5"	3000#	CONCRETE
#4	6 1/2"	5400#	CONCRETE
#5	8"	8400#	CONCRETE
#6	10"	11900#	CONCRETE
#7	12"	16200#	CONCRETE
#8	14"	21300#	CONCRETE
3/8"	3 1/2"	3100#	MASONRY
1/2"	4 1/2"	3600#	MASONRY
5/8"	5"	4500#	MASONRY
3/4"	6 5/8"	7500#	MASONRY
5/8"	12"	3000#	URM
3/4"	12"	3000#	URM

13. REPLACE ANCHORS AND DOWELS THAT FAIL DURING TESTING AND RETEST. IF MORE THAN 10% OF THE TESTED DOWELS AND ANCHORS FAIL TO ACHIEVE THE SPECIFIED TEST LOAD, NOTIFY OWNER'S REPRESENTATIVE AND TEST 100% OF THE DOWELS AND ANCHORS INSTALLED IN THE LAST 2 DAYS OF ANCHOR INSTALLATION.

IX. ROUGH CARPENTRY

1. FRAMING LUMBER: DOUGLAS FIR (COAST REGION) GRADED AND MARKED IN ACCORDANCE WITH THE STANDARD GRADING RULES NO. 17 OF THE WEST COAST LUMBER INSPECTION BUREAU (W.C.L.I.B.) OR WESTERN LUMBER GRADING RULES, OF THE WESTERN WOOD PRODUCTS ASSOCIATION (W.W.P.A.), COMPLY WITH PS 20. LUMBER FABRICATED FROM OLD GROWTH TIMBER IS NOT PERMITTED. USE LUMBER OF THE FOLLOWING GRADES:

MEMBER	MOISTURE CONTENT	WOOD/GRADE
SILLS & LUMBER IN CONTACT WITH ROOFING, FLASHING, WATERPROOFING, MASONRY, OR CONCRETE	19%	D.F. #1 PRESSURE OR PRESERVATIVE TREATED OR FOUNDATION GRADE REDWOOD
STUDS	19%	D.F. #2
JOISTS, PLANKS AND PLATES	15%	D.F. #1
BEAMS, 5" & WIDER	GREEN	D.F. SELECT STRUCTURAL
BEAMS, 4" & NARROWER	GREEN	D.F. #1 & BETTER
POSTS, 6X6 & LARGER	GREEN	D.F. SELECT STRUCTURAL
POSTS, 4X6 & SMALLER	19%	D.F. #1
FRAMING, BLOCKING & BRIDGING	15%	D.F. #2
PLYWOOD BLOCKING	19%	D.F. #1
BACKING, STRIPPING AND FURRING	19%	CONSTRUCTION

1/FOUNDATION SILLS SHALL BE NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD. FIELD-CUT ENDS, NOTCHES, AND DRILLED HOLES OF PRESERVATIVE-TREATED WOOD SHALL BE FIELD-TREATED PER AWPA M4.

2. PANEL SHEATHING: IDENTIFY WOOD STRUCTURAL PANELS WITH THE APPROPRIATE TRADEMARK OF APA-THE ENGINEERED WOOD ASSOCIATION AND MEET THE REQUIREMENTS OF THE VOLUNTARY PRODUCT STANDARD PS-1 OR PS-2 AND APA PRP-108 PERFORMANCE STANDARD.

A. PANEL SHEATHING TO BE EXPOSURE 1.

B. PLYWOOD PANELS TO BE 5-PLY MINIMUM, EXCEPT 3/8" PANELS TO BE 3-PLY MINIMUM.

C. PLYWOOD TO BE CC GRADE AT LOCATIONS EXPOSED TO WEATHER; CD GRADE ELSEWHERE.

D. PROVIDE THE FOLLOWING GRADE AND SPAN RATINGS:

PANEL THICKNESS	MINIMUM GRADE	ROOF/FLOOR RATING
3/8"	STRUCTURAL 1	24/0
7/16"	STRUCTURAL 1	24/16
15/32"	STRUCTURAL 1	32/16
19/32" AND 5/8"	CD/CC	40/20
3/4"	CD/CC	48/24
7/8" AND 1"	CD/CC	54/32
1 1/8"	CD/CC	60/48

3. ROUGH HARDWARE:

A. NAILS: COMMON WIRE NAILS, FEDERAL SPECIFICATION FF-N-105B, STANDARD LENGTHS U.O.N. USE HOT-DIPPED ZINC-COATED GALVANIZED NAILS PER ASTM A 153/A 153 M FOR EXTERIOR INSTALLATIONS AND WHEN PENETRATING PRESSURE TREATED OR FIRE-RETARDANT LUMBER IS USED.

B. BOLTS AND THREADED RODS: ASTM A307, SQUARE OR HEXAGONAL HEAD MACHINE BOLTS WITH ASTM A563 NUTS. USE MALLEABLE IRON WASHERS UNDER HEAD AND NUT WHEN IN CONTACT WITH WOOD. AT SILL PLATES USE 3"x3"x1/2" MINIMUM PLATE WASHERS.

VERIFY PLATE WASHER SIZE PER LOCAL JURISDICTION.

C. LAG SCREWS: ASTM A307, ANSI/ASME STANDARD B18.2.1. USE ANSI B18.22.1 WASHERS UNDER HEAD WHEN IN CONTACT WITH WOOD.

D. SCREWS: ASTM A307, ANSI/ASME STANDARD B18.6.1. USE CADMIUM-PLATED PAN OR ROUND HEADED SCREWS AT STEEL TO WOOD AND WOOD TO WOOD CONNECTIONS.

E. MISCELLANEOUS STEEL: ASTM A36.

F. BOLTS, NUTS, WASHERS, STRAPS AND OTHER HARDWARE EXPOSED TO THE WEATHER OR IN CONTACT WITH PRESERVATIVE-TREATED WOOD TO BE HOT-DIPPED GALVANIZED PER ASTM A 653/A 653 M OR STAINLESS STEEL.

G. FRAMING CLIPS, SHEET METAL STRAPS, ETC.: SIMPSON, UNIVERSAL, OR SILVER, WITH ICC REPORTS. DESIGNATIONS ON DRAWINGS ARE BASED ON SIMPSON CATALOGUE NUMBERS.

4. NAILING:

A. DRIVE NAILS PERPENDICULAR TO THE GRAIN, U.O.N.

B. PREDRILL HOLES TO 3/4 OF NAIL DIAMETER WHERE SPECIFIED AND WHEN WOOD TENDS TO SPLIT.

C. AIR-DRIVEN NAILS TO BE FULL-HEADED NAILS. DO NOT OVERDRIVE NAILS.

D. PANEL SHEATHING:

1. AT FLOOR AND ROOF SHEATHING, USE RING SHANK NAILS. USE SMOOTH SHANK NAILS AT WALLS.

2. USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOB SITE DEMONSTRATION FOR EACH PROJECT AND APPROVAL BY THE OWNER'S REPRESENTATIVE. NAILHEADS THAT PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND HAMMER OR IF THE MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED THE INSTALLATION IS UNSATISFACTORY. MACHINE NAILING IS NOT APPROVED IN 5/16" OR LESS SHEATHING.

3. GLUE FLOOR SHEATHING AT ALL POINTS OF CONTACT.

E. MINIMUM NAILING TO BE AS FOLLOWS, UNLESS OTHERWISE NOTED:

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
JOIST TO JOIST, DOUBLE 2x	16d	16" O.C. FACE NAIL, (2) ROWS STAGGERED
BLOCKING BETWEEN CEILING JOISTS, RAFTERS, OR TRUSSES TO TOP PLATE OR OTHER FRAMING BELOW	(3) 8d	EACH END, TOENAIL
BLOCKING BETWEEN RAFTERS, OR TRUSS NOT AT THE WALL TOP PLATE, TO RAFTER OR TRUSS	(2) 8d	EACH END, TOENAIL
	(2) 16d	END NAIL
RAFTER OR ROOF TRUSS TO TOP PLATE	(3) 10d	TOENAIL
ROOF RAFTER TO RIDGE VALLEY OR HIP RAFTERS	(2) 16d	END NAIL
	(3) 10d	TOENAIL
STUD TO STUD AND ABUTTING STUDS AT INTERSECTING WALL CORNERS	16d	16" O.C. FACE NAIL
CONTINUOUS HEADER TO STUD	(4) 8d	TOENAIL
TOP PLATE TO TOP PLATE	16d	16" O.C. FACE NAIL
TOP PLATE TO TOP PLATE, AT END JOISTS	(8) 16d	EACH SIDE OF END JOINT, FACE NAIL, (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)
BOTTOM PLATE TO JOIST, RIM JOIST, OR BLOCKING	(2) 16d	16" O.C. FACE NAIL
STUD TO TOP OR BOTTOM PLATE	(4) 8d	TOENAIL
	(2) 16d	END NAIL
TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	(2) 16d	FACE NAIL
JOISTS TO SILL, TOP PLATE, OR GIRDER	(3) 8d	TOENAIL
RIM JOIST OR BLOCKING TO TOP PLATE, SILL, OR OTHERS FRAMING BELOW	8d	6" O.C. TOENAIL

FOR ADDITIONAL INFORMATION NOT INDICATED, SEE TABLE 2304.10.2 OF THE CALIFORNIA BUILDING CODE.

5. BOLT AND SCREW INSTALLATION:

A. DRILL BOLT HOLES A MINIMUM OF 1/32 INCH TO A MAXIMUM OF 1/16 INCH LARGER IN DIAMETER THAN THE BOLT NOMINAL DIAMETER.

B. DRILL PRE-BORED LEAD HOLES FOR WOOD SCREWS AS FOLLOWS.

1. DRILL LEAD HOLE FOR THE SHANK TO A DEPTH EQUAL TO THE LENGTH OF THE UNTHREADED PORTION IN THE MAIN MEMBER. USE A DRILL BIT 7/8 THE DIAMETER OF THE WOOD SCREW.

2. EXTEND THE LEAD HOLE FOR THE THREADED PORTION OF THE SCREW WITH A DRILL BIT WHOSE DIAMETER IS 7/8 THE DIAMETER OF THE SCREW AT THE ROOT OF THE THREAD.

3. INSERT THE SCREW INTO LEAD HOLE BY TURNING. DO NOT DRIVE WITH A HAMMER.

4. LUBRICATE WITH SOAP OR BEESWAX TO FACILITATE INSTALLATION.

C. DRILL PRE-BORED LEAD HOLES FOR LAG SCREWS AS FOLLOWS.

1. DRILL LEAD HOLE FOR THE SHANK TO A DEPTH EQUAL TO THE LENGTH OF THE UNTHREADED PORTION IN THE MAIN MEMBER. USE A DRILL

GENERAL STRUCTURAL NOTES CONTINUED

IX. ROUGH CARPENTRY CONTINUED

9. HOLD-DOWN CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE APPROVED PLATE WASHERS; AND HOLD-DOWNS SHALL BE FINGER TIGHT AND 1/2 WRENCH TURN JUST PRIOR TO COVERING THE WALL FRAMING. CONNECTOR BOLTS INTO WOOD FRAMING REQUIRE STEEL PLATE WASHERS ON THE POST ON THE OPPOSITE SIDE OF THE ANCHORAGE DEVICE. PLATE SIZE SHALL BE MINIMUM OF 0.299 INCH BY 3 INCHES BY 3 INCHES.
10. ROOF DIAPHRAGM NAILING TO BE INSPECTED BEFORE COVERING. FACE GRAIN OF PLYWOOD SHALL BE PERPENDICULAR TO SUPPORTS. FLOOR SHALL HAVE TONGUE AND GROOVE OR BLOCKED PANEL EDGES. PLYWOOD SPANS SHALL CONFORM WITH TABLE 2304.9(1).
11. ALL DIAPHRAGM AND SHEAR WALL NAILING SHALL UTILIZE COMMON NAILS OR GALVANIZED BOX.
12. HOLD-DOWN HARDWARE MUST BE SECURED IN PLACE PRIOR TO FOUNDATION INSPECTION.

X. PREFABRICATED WOOD PRODUCTS

1. ENGINEERED WOOD I-JOISTS & OPEN WEB JOISTS:
- A. PRODUCTS BY TRUS-JOIST CORPORATION OR STANDARD STRUCTURES INCORPORATED. MARK MEMBERS WITH APA PRI TRADEMARK INDICATING CONFORMANCE WITH MANUFACTURING AND QUALITY ASSURANCE OF APA EWS STANDARD PRI-400.
- B. MANUFACTURER TO DESIGN FRAMING AND SUBMIT DRAWINGS AND CALCULATIONS STAMPED BY A REGISTERED CIVIL OR STRUCTURAL ENGINEER IN THE STATE OF CALIFORNIA [OREGON] TO THE OWNER'S REPRESENTATIVE AND THE BUILDING DEPARTMENT FOR REVIEW AND APPROVAL.
- C. CONTRACTOR IS RESPONSIBLE FOR ERECTION BRACING TO KEEP JOISTS STRAIGHT AND PLUMB AND PROVIDE ADEQUATE LATERAL SUPPORT FOR THE INDIVIDUAL MEMBERS AND THE ENTIRE SYSTEM UNTIL CONSTRUCTION HAS BEEN COMPLETED.
- D. INSTALL BLOCKING, BRIDGING, STIFFENERS, FILLER BLOCKS AND BACKER BLOCKS IN CONFORMANCE WITH MANUFACTURER'S STANDARDS AND AS DETAILED.
- E. SPACE JOIST BRIDGING EQUALLY ALONG LENGTH OF MEMBERS, AT 16" O.C. MAXIMUM, TYPICAL ALL BAYS.
- F. HEAT RESISTANT ADHESIVE SHALL BE USED FOR ENGINEERED WOOD PRODUCTS IN FRAMING SUPPORTING THE FIRE RATED ASSEMBLY. SUCH MEMBERS SHALL BEAR A STAMP WITH HRA DESIGNATION.

XI. STRUCTURAL TESTS, INSPECTIONS, AND OBSERVATIONS

1. AN INDEPENDENT TESTING AGENCY AND SPECIAL INSPECTORS WILL BE RETAINED BY THE OWNER TO PERFORM THE FOLLOWING TESTS AND INSPECTION. PROVIDE ACCESS AND FURNISH SAMPLES TO THE AGENCY AS REQUIRED BY THE CONTRACT DOCUMENTS.
2. IF INITIAL TESTS OR INSPECTIONS MADE BY THE OWNER'S TESTING AGENCY REVEAL THAT ANY PORTION OF THE WORK DOES NOT COMPLY WITH THE CONTRACT DOCUMENTS, ADDITIONAL TESTS, INSPECTIONS, AND NECESSARY REPAIRS WILL BE MADE AT THE CONTRACTOR'S EXPENSE.
3. THE FOLLOWING ITEMS REQUIRE TESTS AND INSPECTIONS IN ACCORDANCE WITH THE REQUIREMENTS OF THE CHAPTER "STRUCTURAL TESTS AND INSPECTIONS" OF THE CODE OF THE GOVERNING JURISDICTION AS NOTED IN THE GENERAL SECTION OF THESE GENERAL NOTES. ADDITIONAL ITEMS AND REQUIREMENTS FOR TESTS AND INSPECTIONS ARE IDENTIFIED IN THE SPECIFICATIONS.

Continuous	Periodic	STRUCTURAL STEEL
	√	Review Mill Certificates & Test Reports
	√	Identification Markings
		Sample & Test Sections √ As Specified
	√	Field Erection Inspection
	√	Fabrication Inspection
	√	Review Welding Procedure Specification & Welder Certifications
	√	Welding Inspection - Complete & Partial Joint Penetration Groove
	√	Welding Inspection - Multi-Pass Fillet & > 5/16" Fillet
	√	Welding Inspection - Plug & Slot
	√	Welding Inspection - Single-Pass & ≤ 5/16" Fillet
	√	Non-Destructive Weld Test √ Shop √ Field
	√	Review Compliance Certificates for Weld Filler Material
	√	High-Strength Bolts, Nuts & Washer Identification Markings
	√	High-Strength Bolts, Nuts & Washer Manufacturer's Certificate of Compliance
	√	Bolting Inspection - Snug-Tight Joints
	√	Bolting Inspection - Pre-Tensioned & Slip-Critical With Indicator
	√	Bolting Inspection - Pre-Tensioned & Slip-Critical Without Indicator
	√	Steel Frame Joint Detail Inspection
Continuous	Periodic	REINFORCING STEEL
	√	Review Mill Certificates & Test Reports
		Sample & Test Reinforcing Bars
		Sample & Test Reinforcing Wire Fabric
	√	Placement Inspection
	√	Welding Inspection - Shear Reinforcement
	√	Welding Inspection - Other
	√	Test Existing Reinforcement for Weldability
Continuous	Periodic	STRUCTURAL LUMBER
	√	Review Certificates & Test Reports
		Sample & Test Timber Connectors
	√	Field Erection Inspection
	√	Diaphragm & Shear Wall Nailing
	√	Bolting of Drag Struts & Hold Downs
Continuous	Periodic	FOUNDATIONS/EARTHWORK
		Review of Import Material Test Reports per Geotechnical Report
		Acceptance Tests of Materials
	√	Compacted Fill Material Properties & Lift Thickness During Placement
	√	Placement and Excavation
	√	Compaction Test
	√	Bearing Capacity Test
Continuous	Periodic	CONCRETE & SHOTCRETE
	√	Mix Design Review
	√	Batch Plant Inspections
	√	Sample & Test (Cast, Pick-Up, & Compression)
	√	Slump, Entrained Air, & Temperature Test (At time of Sampling)
		Unit Weight Test Wet Dry
		Shrinkage Test
	√	Inspection of Framework for Shape, Locations & Dimensions
	√	Placement Inspection
	√	Inspection for Proper Application Technique
	√	Inspection for Curing Maintenance & Temperature
		Core & Test
	√	Cast-in-Place Anchors
	√	Post-Installed Anchors
Continuous	Periodic	GROUT & MORTAR
		Cement Test
		Mix Design Review
	√	In-situ Mix Proportion Review
		Shrinkage Test
		Core & Test

4. THE REQUIREMENTS FOR TESTING AND INSPECTION LISTED ABOVE MAY CHANGE DUE TO THE METHOD OF CONSTRUCTION SELECTED BY THE CONTRACTOR.
5. THE TESTING AGENCY AND SPECIAL INSPECTOR SHALL REVIEW CONSTRUCTION DOCUMENTS AND COORDINATE WITH CONTRACTOR TO DEVELOP A PLAN FOR TESTING AND INSPECTION. SUBMIT THE PLAN FOR TESTING AND INSPECTION TO OWNER'S REPRESENTATIVE FOR REVIEW.
6. THE CONTRACTOR SHALL NOTIFY STRUCTURAL FOCUS AT LEAST THREE BUSINESS DAYS IN ADVANCE OF THE SIGNIFICANT CONSTRUCTION STAGES NOTED BELOW AND PRIOR TO PLACING CONCRETE, APPLYING FIREPROOFING, DRYWALL, OR OTHERWISE COVERING THE STRUCTURAL ELEMENTS, AND SHALL THEN PROVIDE ACCESS FOR STRUCTURAL OBSERVATIONS. THIS NOTIFICATION REQUIREMENT SHALL APPLY TO ANY SITE VISIT OR ON SITE MEETING REQUESTED BY THE CONTRACTOR. AS REQUIRED BY THE APPLICABLE BUILDING CODE, STRUCTURAL FOCUS WILL PERFORM A VISUAL OBSERVATION OF THE STRUCTURAL SYSTEMS FOR GENERAL CONFORMANCE WITH THE APPROVED CONTRACT DOCUMENTS AT SIGNIFICANT STAGES OF CONSTRUCTION. STRUCTURAL FOCUS WILL, BASED ON OUR JUDGMENT AS ENGINEER-OF-RECORD, DETERMINE WHICH STAGES OF CONSTRUCTION ARE SIGNIFICANT, AND COORDINATE STRUCTURAL OBSERVATION OF THOSE STAGES WITH THE GENERAL CONTRACTOR.

THE LIST OF STAGES OF CONSTRUCTION IDENTIFIED BELOW IS NOT INTENDED TO IMPLY THAT STRUCTURAL FOCUS WILL PROVIDE A STRUCTURAL OBSERVATION AT EACH AND EVERY OCCURRENCE. STRUCTURAL OBSERVATION MAY BE LIMITED TO THE FIRST SIGNIFICANT OCCURRENCE OF A PARTICULAR STAGE OF CONSTRUCTION. SIGNIFICANT STAGES OF CONSTRUCTION MAY INCLUDE THE FOLLOWING:

- A. FOUNDATIONS
1. FOOTING REINFORCEMENT
 2. GRADE BEAM REINFORCEMENT
 3. ANCHOR BOLT PLACEMENT
 4. SLAB-ON-GRADE REINFORCEMENT
- B. CONCRETE
1. SLAB REINFORCEMENT
- C. STEEL FRAMING
1. GENERAL FRAMING
 2. COMPLETED MOMENT FRAME CONNECTIONS
- D. WOOD FRAMING
1. BEARING WALL FRAMING
 2. FLOOR JOIST FRAMING
 3. COMPLETED SHEAR WALL NAILING
 4. INSTALLED HOLD-DOWN ANCHORS
 5. COMPLETED DIAPHRAGM NAILING
 6. INSTALLED COLLECTOR AND CONTINUITY TIES

7. CONTINUOUS SPECIAL INSPECTION BY A REGISTERED DEPUTY INSPECTOR IS REQUIRED FOR FIELD WELDING, CONCRETE STRENGTH $f'_c > 2500$ PSI, HIGH STRENGTH BOLTING, SPRAYED-ON FIREPROOFING, ENGINEERED MASONRY, HIGH-LIFT GROUTING, PRE-STRESSED CONCRETE, HIGH LOAD DIAPHRAGMS AND SPECIAL MOMENT-RESISTING CONCRETE FRAMES.
8. PERIODIC SPECIAL INSPECTION IS REQUIRED FOR WOOD SHEAR WALLS, SHEAR PANELS, AND DIAPHRAGMS, INCLUDING NAILING, BOLTING, ANCHORING, AND OTHER FASTENING TO COMPONENTS OF THE SEISMIC FORCE RESISTING SYSTEM. SPECIAL INSPECTION BY A DEPUTY INSPECTOR IS REQUIRED WHERE THE FASTENER SPACING OF THE SHEATHING IS 4 INCHES ON CENTER OR LESS.
9. SPECIAL ACTIVITY INSPECTION IS REQUIRED FOR (BUILDINGS OVER 5 STORIES OR 60' IN HEIGHT) (BUILDINGS OVER 50,000 SQ. FT. OF GROUND FLOOR AREA) (BUILDINGS OVER 200,000 SQ. FT. OF TOTAL FLOOR AREA).

XII. DESIGN CRITERIA

1. APPLICABLE CODE: 2022 EDITION OF THE CALIFORNIA BUILDING CODE.
2. FOUNDATIONS HAVE BEEN DESIGNED WITH THE FOLLOWING CRITERIA:

INDIVIDUAL SPREAD FOOTINGS:
ALLOWABLE NET SOIL PRESSURE FOR DL + LL = 3000* PSF
ALLOWABLE NET SOIL PRESSURE FOR DL + LL + EQ = 3000* PSF
COEFFICIENT OF FRICTION = 0.57
PASSIVE RESISTANCE = 360 PCF

CONTINUOUS STRIP/ WALL FOOTINGS:
ALLOWABLE NET SOIL PRESSURE FOR DL + LL = 3000* PSF
ALLOWABLE NET SOIL PRESSURE FOR DL + LL + EQ = 3000* PSF
COEFFICIENT OF FRICTION = 0.57
PASSIVE RESISTANCE = 360 PCF

*ALLOWABLE SOIL BEARING PRESSURES ARE FOR FOOTINGS HAVING A WIDTH AND DEPTH EQUAL TO 24 INCHES. THE ALLOWABLE PRESSURES MAY BE INCREASED BY 1/3 FOR TRANSIENT LOADS UNLESS THOSE LOADS HAVE BEEN FACTORED TO ACCOUNT FOR TRANSIENT CONDITIONS.

3. GRAVITY LOADS:

- A. DEAD LOADS:
ROOF:

ROOFING + PLYWOOD SHEATHING	4.4 PSF
ENGINEERED WOOD JOISTS	SELF WEIGHT
STEEL TRUSS	SELF WEIGHT
MEP FROM ABOVE	SEE PLANS
MEP SUSPENDED FROM BELOW	3.0 PSF
SUPERIMPOSED DEAD LOAD	4.3 PSF
TOTAL	20 PSF

- B. LIVE LOADS:
ROOF: 20 PSF (REDUCIBLE)

4. SEISMIC DESIGN:

DESIGN OF NEW LATERAL FORCE RESISTING SYSTEM ELEMENTS BASED ON CURRENT CODE LEVEL FORCES PER ASCE 7-16

BASE SHEAR: $V = C_s W = 0.16 W$

WHERE:

$C_{smin} = 0.037$
 $C_{smax} = 0.673$
 $C_s = 0.16$
 $R = 6.50$ FOR LIGHT FRAME (WOOD) SHEATHED WALLS
 $I_e = 1.25$ FOR RISK CATEGORY III BUILDINGS
LATITUDE = 33.676442 DEGREES
LONGITUDE = -117.739263 DEGREES
SITE CLASS: D PER GEOTECHNICAL REPORT
SEISMIC DESIGN CATEGORY: D
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE (ELF)
REDUNDANCY FACTOR: 1
 $S_s = 1.248$
 $S_1 = 0.446$
 $S_{0.8} = 0.833$
 $S_{0.1} = 0.827$

5. WIND DESIGN:

MAIN WIND FORCE RESISTING SYSTEM (MWFRS):

WIND SPEED: $V = 102$ MPH FOR RISK CATEGORY III

VELOCITY PROCEDURE: $q_h = 0.00256K_zK_{zt}K_dK_eV^2 = 19.63$ PSF FOR EXPOSURE CATEGORY C

WHERE

$K_z = 0.98$ VELOCITY PRESSURE COEFFICIENT
 $K_{zt} = 1$ TOPOGRAPHY FACTOR
 $K_d = 0.85$ WIND DIRECTIONALITY FACTOR
 $K_e =$ GROUND ELEVATION FACTOR

ASCE 7-16: CHAPTER 27, WIND LOADS ON BUILDINGS - MWFRS (DIRECTIONAL PROCEDURE)

PRESSURE: $p = q(GC_p) - q_i(GC_{pi}) = 25.94$ PSF ON MWFRS AT [DEFINE MEAN ROOF HEIGHT OF BUILDING] FEET

WHERE:

$q = 20.72$ VELOCITY PRESSURE FOR 21.9 FT EVALUATED AT MEAN ROOF HEIGHT
 $q_i = 21.55$ FOR POSITIVE INTERNAL PRESSURE
 $G = 0.85$ GUST EFFECT FACTOR [ASCE 7-16 SECTION 26.11]
 $C_p = 0.8$ EXTERNAL PRESSURE COEFFICIENT [ASCE 7-16 FIGURES 27.3-1, 27.3-2, & 27.3-3]
 $GC_{pi} = +/-0.55$ INTERNAL PRESSURE COEFFICIENT [ASCE 7-16 FIGURES 26.13-1]

ASCE 7-16: CHAPTER 30, WIND LOADS - COMPONENTS AND CLADDING (C&C)

PRESSURE: $p = q_h[(GC_{pf}) - (GC_{pi})] = 29.1$ PSF ON C&C AT 26.5 FEET

WHERE:

$q_h =$ VELOCITY PRESSURE EVALUATED AT MEAN ROOF HEIGHT
 $(GC_{pf}) = 0.8$ EXTERNAL PRESSURE COEFFICIENT
 $(GC_{pi}) = +/-0.55$ INTERNAL PRESSURE COEFFICIENT

VELOCITY PROCEDURE: $q_h = 0.00256K_zK_{zt}K_dK_eV^2 = 21.5$ PSF FOR EXPOSURE CATEGORY C

WHERE

$K_z = 0.95$ VELOCITY PRESSURE COEFFICIENT
 $K_{zt} = 1$ TOPOGRAPHY FACTOR
 $K_d = 0.85$ WIND DIRECTIONALITY FACTOR
 $K_e = 1.0$ GROUND ELEVATION FACTOR
 $V = 102$ MPH BASIC WIND SPEED FOR RISK CATEGORY III

CITY OF IRVINE
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RECONSTRUCTION

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△ Date	Description
10/14/2025	CD CLIENT REVIEW/PRICING
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01/09/2025	ADDENDUM A/PLAN CHECK COMMENTS
05/07/2026	BID SET

Seal / Signature

Project Name

HANGAR 10
RECONSTRUCTION

Project Number

25226

Description

GENERAL STRUCTURAL NOTES
CONTINUED

Scale

NOT TO SCALE

S1.003

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Seal / Signature

Project Name
HANGAR 10 RECONSTRUCTION
Project Number
25226
Description
SPECIAL INSPECTIONS

Scale
NOT TO SCALE

S1.004

STATEMENT OF SPECIAL INSPECTION

30. ☒ **Designated Seismic Systems, Section 1705.14.3** The registered design professional shall specify on the approved construction documents the requirements for seismic qualification. Certificate of compliance for the seismic qualification shall be provided to the building official as specified in Section 1704.5.

SECTION 1705.12: SPECIAL INSPECTIONS FOR WIND RESISTANCE

Special inspections for wind resistance, Section 1705.12 Special inspections for wind resistance specified in Sections 1705.12.1 through 1705.12.3

31. ☒ **Structural Wood, Section 1705.12.1** Continuous special inspection is required during field gluing operations of elements of the main windforce-resisting system. Periodic special inspection is required for nailing, bolting, anchoring, and other fastening of elements of the main windforce-resisting system, including wood shear walls, wood diaphragms, drag struts, braces, and hold-downs.

Exception: Special inspections are not required for wood shear walls, shear panels, and diaphragms where the fastener spacing of the sheathing is more than 4 inches on center.

32. ☐ **Cold-Formed Steel Light-Frame Construction, Section 1705.12.2** Periodic special inspection is required for welding operations of elements of the main windforce-resisting system. Periodic special inspection is required for screw attachment, bolting, anchoring, and other fastening of elements of the main windforce-resisting system, including shear walls, braces, diaphragms, collectors (drag struts), and hold-downs. See Section 1705.12.2 for exceptions.

33. ☒ **Wind-Resisting Components, Section 1705.12.3** Periodic special inspection is required for fastening of the following systems and components:

- Roof covering, roof deck, and roof framing connections.
- Exterior wall covering and wall connections to roof and floor diaphragms and framing.

STATEMENT OF SPECIAL INSPECTION

19. ☒ **Structural Wood, Section 1705.13.2** For the seismic force-resisting systems:
1. Continuous special inspection shall be required during field gluing operations of elements of the seismic force-resisting system.

2. Periodic special inspection shall be required for nailing, bolting, anchoring, and other fastening of elements of the seismic force-resisting system, including wood shear walls, wood diaphragms, drag struts, braces, shear panels, and hold-downs.

Exception: Special inspections are not required for wood shear walls, shear panels, and diaphragms, including nailing, bolting, anchoring, and other fastening to other elements of the seismic force-resisting system, where the fastener spacing of the sheathing is more than 4 inches on center.

Provide plan sheet or detail reference where the special inspection is required.

20. ☐ **Cold-Formed Steel Light-Frame Construction, Section 1705.13.3** For the seismic force-resisting systems of structures, periodic special inspection shall be required:

- For welding operations of elements of the seismic force-resisting system; and
- For screw attachment, bolting, anchoring, and other fastening of elements of the seismic force-resisting system, including shear walls, braces, diaphragms, collectors (drag struts), and hold-downs.

Provide plan sheet or detail reference where the special inspection is required.

21. ☐ **Designated Seismic Systems, Section 1705.13.4** The special inspector shall examine designated seismic systems requiring seismic qualification in accordance with Section 13.2.2 of ASCE 7 and verify that the label, anchorage and mounting conform to the certificate of compliance.

22. ☐ **Architectural Components, Section 1705.13.5** Periodic special inspection is required during the erection and fastening of:

- ☐ Exterior cladding, and exterior or interior veneer, more than 30 feet in height above grade or walking surface, or weighing more than 5 psf as indicated on plan sheet(s):
- ☐ Non-bearing walls more than 30 feet in height or weighing more than 15 psf as indicated on plan sheet(s):

23. ☐ **Access Floors, Section 1705.13.5.1** Periodic special inspection is required for the anchorage of access floors.

24. ☒ **Plumbing, Mechanical and Electrical Components, Section 1705.13.6** Periodic special inspection is required during installation and anchorage of:

- ☐ Electrical equipment for emergency or standby power systems.
- ☐ The piping system(s) and associated mechanical units intended to hazardous materials as indicated on plan sheet(s):

STATEMENT OF SPECIAL INSPECTION

- ☐ The HVAC ducts intended to carry hazardous materials as indicated on plan sheet(s):
- ☒ The vibration isolation system as indicated on plan sheet(s) :

25. ☐ **Storage Racks and Access Floors, Section 1705.13.7** Periodic special inspection is required for materials used, fabricated storage rack elements, storage rack anchorage installation, and completed storage rack system of steel storage racks and steel cantilevered storage racks that are 8 feet in height or greater and assigned to Seismic Design Category D, E or F per Table 1705.13.7.

26. ☐ **Seismic Isolation System, Section 1705.13.8** Periodic special inspection is required during the fabrication and installation of ☐ isolator units and ☐ energy dissipation devices.

27. ☐ **Cold-Formed Steel Special Bolted Moment Frames, Section 1705.13.9** Periodic special inspection shall be provided for the installation of cold-formed steel special bolted moment frames.

SECTION 1705.14: TESTING FOR SEISMIC RESISTANCE

28. ☒ **Structural Steel, Section 1705.14.1** The following describes required testing of welds, base metal, weld tab removal sites, and thermally cut surfaces of beam copes or access holes per CBC Section 1708 and AISC 341. MT= Magnetic Particle Testing per Appendix W of Section W4.2 AISC 341, UT= Ultrasonic Testing per Appendix W, Section 4.1. Testing procedures and acceptance criteria shall conform to AISC 341 and AWS D1.1.

- ☐ K-area welding: web area shall be MT'd for cracks in the k-area base metal within 3 inches minimum of the weld.
- ☐ Complete joint penetration groove welds. All shall be UT'd for materials 5/16 inches or thicker.
- ☐ Complete joint penetration groove welds. 25% of all beam to column connections shall be MT'd.
- ☐ Base metal for lamellar tearing: UT testing for discontinuities behind and adjacent to weld fusion line for all complete joint penetration groove welded connections for tension loading in the through thickness direction of base metal greater than 1 1/2 inch thickness to connected piece greater than 3/4 inch.
- ☐ Flange and web thickness exceeding 1 1/2 inches: ___ welded splices and connections, ___ thermally cut surfaces of beam copes and access holes shall be MT or penetrant tested.
- ☐ End of welds from which a weld tab has been removed shall be MT'd. **(NOTE:** N/A for continuity plate weld tabs)
- ☐ UT percentage reduction protocol is as follows **(NOTE:** May not exceed that allowed by AISC 341):
- ☐ MT percentage reduction protocol is as follows **(NOTE:** May not exceed that allowed by AISC 341):

29. ☒ **Nonstructural Components, Section 1705.14.2** The registered design professional shall specify on the approved construction documents the requirements for seismic qualification. Certificate of compliance for the seismic qualification shall be provided to the building official as specified in Section 1704.5.

STATEMENT OF SPECIAL INSPECTION

8. ☐ **Metal-Plate-Connected Wood Trusses, Section 1705.5.2** Special inspection of wood trusses with a clear span greater than or equal to 60 feet is required in accordance with CBC 1705.5.2.

9. ☒ **Soils, Section 1705.6** Footing excavations are subject to verification that proper depth and bearing material have been reached prior to placement of concrete per CBC Table 1705.6 **(NOTE:** Work performed under a grading permit is subject to separate special inspection requirements.)

10. ☐ **Driven Deep Foundations, Section 1705.7** Driven deep foundations are subject to special inspection per CBC Table 1705.7.

11. ☐ **Cast-in-Place Deep Foundations, Section 1705.8** Cast-in-place deep foundations are subject to special inspection per CBC Table 1705.8.

12. ☐ **Helical Pile Foundation, Section 1705.9** Helical pile foundations are subject to special inspection per CBC Section 1705.9.

13. ☐ **Sprayed Fire-Resistant Materials, Section 1705.15** Special inspections and tests of sprayed fire-resistant materials applied to floor, roof, and wall assemblies and structural members shall be performed in accordance with Sections 1705.15.1 through 1705.15.6.

14. ☐ **Mastic and Intumescent Fire-Resistant Coatings, Section 1705.16** Mastic and intumescent fire-resistant coatings applied to structural elements and decks shall be performed in accordance with Association of the Wall and Ceiling Industry (AWCI) Technical Manual 12-8.

15. ☒ **Exterior Insulation and Finish Systems (EIFS), Section 1705.17** Exterior insulation and finish systems (EIFS) are subject to special inspection per CBC Section 1705.17.

16. ☐ **Fire-Resistant Penetrations and Joints, Section 1705.18** In high-rise buildings or in buildings assigned to Risk Category III or IV, or in fire areas containing Group R occupancies with an occupant load greater than 250, special inspections for through-penetrations, membrane penetration firestops, fire-resistant joint systems, and perimeter fire barrier systems that are tested and listed in accordance with Sections 714.4.1.2, 714.5.1.2, 715.3.1, and 715.4 shall be in accordance with Section 1705.18.1 or 1705.18.2.

17. ☐ **Smoke Control, Section 1705.19** Via Orange County Fire Authority (OCFA) procedures.

SECTION 1705.13: SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE

The following are applicable to specified seismic force-resisting systems, designated seismic systems, and architectural, mechanical, and electrical components. See CBC Sections 1705.13.1 through 1705.13.9 to determine applicability.

Seismic-Force Resisting Systems. The following describes the seismic-force resisting systems(s) subject to special inspection per applicable CBC Sections 1705.13.1 through 1705.13.9 as indicated below:

18. ☒ **Structural Steel, Section 1705.13.1** Special inspections of structural steel in the seismic force resisting systems of buildings shall be performed in accordance with the quality assurance requirements of American Institute of Steel Construction (AISC) 341.

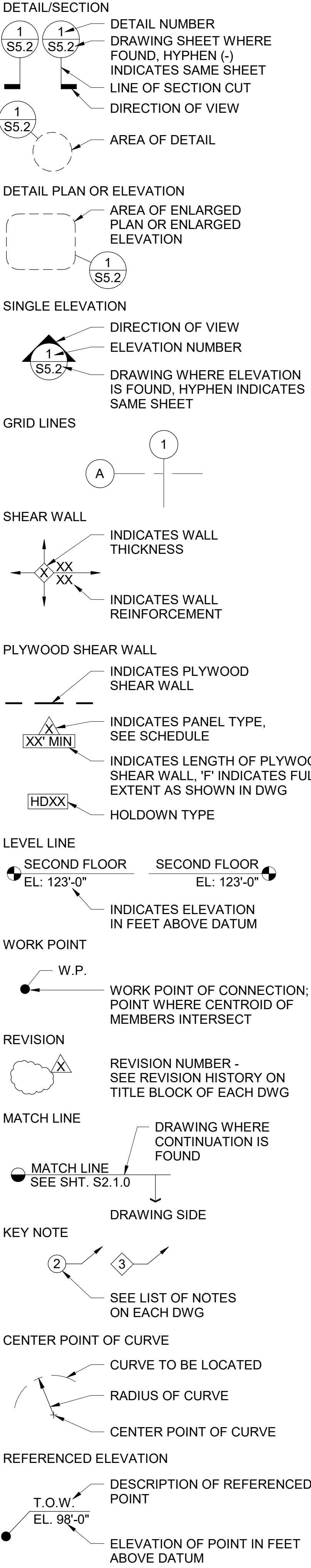
ABBREVIATIONS

(E)	EXISTING	K.O.
(N)	NEW	L
#	NUMBER	ℓ _d
&	AND	ℓ _{dh}
@	AT	LEV
A.A.	ADHESIVE ANCHOR	LLBB
A.B.	ANCHOR BOLT	LLH
ABV	ABOVE	LLV
A.C.	ASPHALT CONCRETE	LOC
ADD'L	ADDITIONAL	LONGIT
ADH	ADHESIVE	L.P.
ADJ	ADJACENT	ℓ _s
A.F.F.	ABOVE FINISH FLOOR	LSL
AGGR	AGGREGATE	
AL	ALUMINUM	LT
ALT	ALTERNATE	LVL
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	
		LWC
APPROX	APPROXIMATE	MAX
ARCH	ARCHITECTURAL	M.B.
ASTM	AMERICAN SOCIETY for TESTING and MATERIALS	MECH
		M.E.P.
		MEZZ
AWG	AMERICAN WIRE GAUGE	MFR
BLDG	BUILDING	MIN
BLKG	BLOCKING	MISC
BLW	BELOW	MTD
BM or BMS	BEAM or BEAMS	N
B.N.	BOUNDARY NAILING	N.A.
B.O.	BOTTOM OF	N.F.
BOT	BOTTOM	N.I.C.
BP	BASE PLATE	NO. or #
BRG	BEARING	NOM
B.S.	BOTH SIDES	N.S.
BSMT	BASEMENT	N.T.S.
BTWN	BETWEEN	NWC
C	CHANNEL	O.C.
C.I.P.	CAST IN PLACE	O.D.
C.J.	CONSTRUCTION JOINT	O.H.
C.J.P	COMPLETE JOINT PENETRATION	OPNG
CL or ☿	CENTERLINE	OPP
CLG	CELLING	O.W.S.G.
CLR	CLEAR	O.W.S.J.
CMU	CONCRETE MASONRY UNIT	PC or PCS
COL	COLUMN	PERP
CONC	CONCRETE	PL
CONN	CONNECTION	PLYWD
CONSTR	CONSTRUCTION	P.P.
CONT	CONTINUOUS	PR
C.P.	COMPLETE PENETRATION	PRCST
CSK	COUNTERSINK	PSL
CTR	CENTER	
d	PENNT (NAIL SIZE)	P.T.
DBL	DOUBLE	PTN
DCW	DEMAND CRITICAL WELD	R or RAD
DEMO	DEMOLITION	REBAR
DET or DETS	DETAIL or DETAILS	REF
DIA or Ø	DIAGONAL	REINF
DIM or DIMS	DIMENSION or DIMENSIONS	REQD
DIST	DISTANCE	REV
DK or DKG	DECK or DECKING	RFG
DN	DOWN	R.O.
DO	DITTO	RSJ
DWG or DWGS	DRAWING or DRAWINGS	S.A.D.
DWL or DWLS	DOWEL or DOWELS	SCHED
EA	EACH	SECT
E.F.	EACH FACE	SHT
E.J.	EXPANSION JOINT	SHTG
EL	ELEVATION	SIM
ELEC	ELECTRICAL	SL
ELEV	ELEVATOR	S.M.S.
EMBED	EMBEDMENT	S.O.G.
E.N.	EDGE NAILING	SPEC
E.O.S.	EDGE OF SLAB	SQ
EQ	EQUAL	S.S. or SST
EQUIP	EQUIPMENT	STAG
E.S.	EACH SIDE	STD
EV	EVERY	STIFF
E.W.	EACH WAY	STIR
E-W	EAST-WEST	STL
EXCAV	EXCAVATE or EXCAVATION	STRUC
EXP	EXPANSION	SUBST
EXT	EXTERIOR	SUSP
'F'	FULL	SYM
FDN	FOUNDATION	T&B
F.F.	FINISH FACE	T&G
FIN	FINISH	THK
FLR or FLRS	FLOOR or FLOORS	THRD
F.N.	FIELD NAILING	THRU
F.O.	FACE OF	T.O.
FPRF	FIREPROOFING	TOT
F.S.	FAR SIDE	TRANS
FT	FOOT AND FEET	TREAD
FTG or FTGS	FOOTING or FOOTINGS	TR
GA	GAUGE	TS
GALV	GALVANIZED	TYP
GL	GLASS or GLAZING	U.O.N.
GLB	GLULAM BEAM	URM
GRND	GROUND	VENT
GR	GRADE	VERT or (V)
GYP BD	GYPNUM BOARD	V.I.F.
HD	HOLDOWN	W/
H.D.G.	HOT DIPPED GALVANIZED	W/O
HDR	HEADER	W or WF
HK or HKS	HOOK or HOOKS	WD
HORIZ or (H)	HORIZONTAL	W.P.
H.P.	HIGH POINT	WT
H.S.B.	HIGH STRENGTH BOLTS	W.W.M.
HSS	HOLLOW STRUCTURAL SECTION	X HVY
HT	HEIGHT	XX HVY
HVY	HEAVY	XS
I.D.	INSIDE DIAMETER	XXS
INFO	INFORMATION	
JST or JSTS	JOIST or JOISTS	
JT	JOINT	

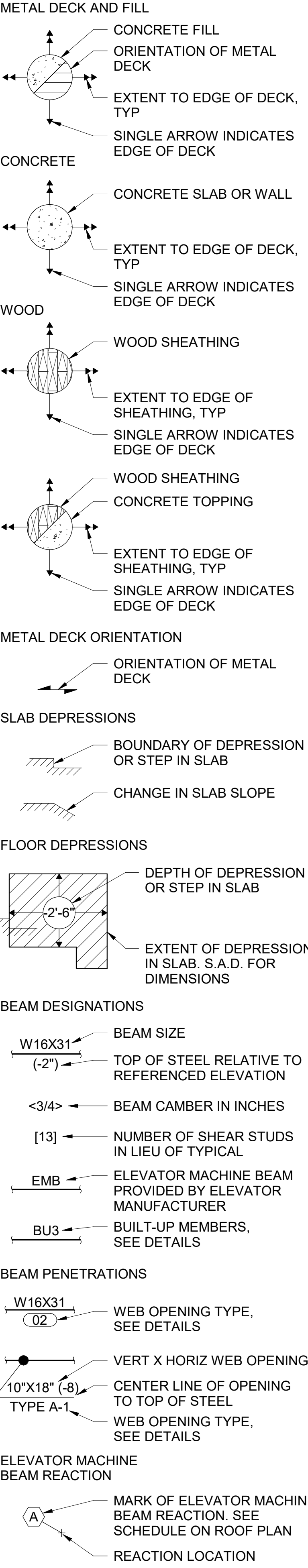
KNOCK-OUT	ANGLE
DEVELOPMENT LENGTH	DEVELOPMENT LENGTH
HOOK DEVELOPMENT LENGTH	HOOK DEVELOPMENT LENGTH
LEV	LEVEL
LLBB	LONG LEG BACK TO BACK
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LOC	LOCATION
LONGIT	LONGITUDINAL
L.P.	LOW POINT
ℓ _s	LAP SPICE LENGTH
LSL	TIMBERSTRAND, LAMINATED STRAND LUMBER
LT	LIGHT
LVL	MICROLLAM, LAMINATED VENEER LUMBER
LWC	LIGHT WEIGHT CONCRETE
MAX	MAXIMUM
M.B.	MACHINE BOLT
MECH	MECHANICAL
M.E.P.	MECHANICAL, ELECTRICAL, PLUMBING
MEZZ	MEZZANINE
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MTD	MOUNTED
N	NORTH
N.A.	NEUTRAL AXIS
N.F.	NEAR FACE
N.I.C.	NOT IN CONTRACT
NO. or #	NUMBER
NOM	NOMINAL DIAMETER
N.S.	NEAR SIDE
N.T.S.	NORTH-SOUTH
NWC	NOT TO SCALE
O.C.	NORMAL WEIGHT CONCRETE ON CENTER
O.D.	OUTSIDE DIAMETER (DIM)
O.H.	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
O.W.S.G.	OPEN WEB STEEL GIRDER
O.W.S.J.	OPEN WEB STEEL JOIST
PC or PCS	PIECE or PIECES
PERP	PERPENDICULAR
PL	PLATE
PLYWD	PLYWOOD
P.P.	PARTIAL PENETRATION
PR	PAIR
PRCST	PRE CAST
PSL	PARALLAM, PARALLEL STRAND LUMBER
P.T.	PRESERVATIVE-TREATED
PT	POINT
PTN	PARTITION
R or RAD	RADIUS
REBAR	REINFORCING BAR
REF	REFERENCE
REINF	REINFORCED or REINFORCING
REQD	REQUIRED
REV	REVISE OR REVISION
RFG	ROOFING
R.O.	ROUGH OPENING
RSJ	ROLLED STEEL JOIST
S.A.D.	SEE ARCHITECTURAL DOCUMENTS
SCHED	SCHEDULE
SECT	SECTION
SHT	SHEET
SHTG	SHEATHING
SIM	SIMILAR
SL	SLOPE
S.M.S.	SHEET METAL SCREW
S.O.G.	SLAB ON GRADE
SPEC	SPECIFICATION or SPECIFICATIONS
SQ	SQUARE
S.S. or SST	STAINLESS STEEL
STAG	STAGGER or STAGGERED
STD	STANDARD
STIFF	STIFFENER
STIR	STIRRUP or STIRRUPS
STL	STEEL
STRUC	STRUCTURAL
SUBST	SUBSTITUTE
SUSP	SUSPENDED
SYM	SYMMETRICAL
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
THK	THICK
THRD	THREADED
THRU	THROUGH
T.O.	TOP OF
TOT	TOTAL
TRANS	TRANSVERSE
TREAD	TREAD
TR	TUBE STEEL
TS	TYPICAL
TYP	UNLESS OTHERWISE NOTED
U.O.N.	UNREINFORCED MASONRY
URM	UNREINFORCED MASONRY
VENT	VENTILATE
VERT or (V)	VERTICAL
V.I.F.	VERIFY IN FIELD
W/	WITH
W/O	WITHOUT
W or WF	WIDE FLANGE
WD	WOOD
W.P.	WORK POINT
WT	WEIGHT
W.W.M.	WEIDED WIRE MESH
X HVY	EXTRA HEAVY
XX HVY	DOUBLE EXTRA HEAVY
XS	EXTRA STRONG
XXS	DOUBLE EXTRA STRONG

SYMBOLS

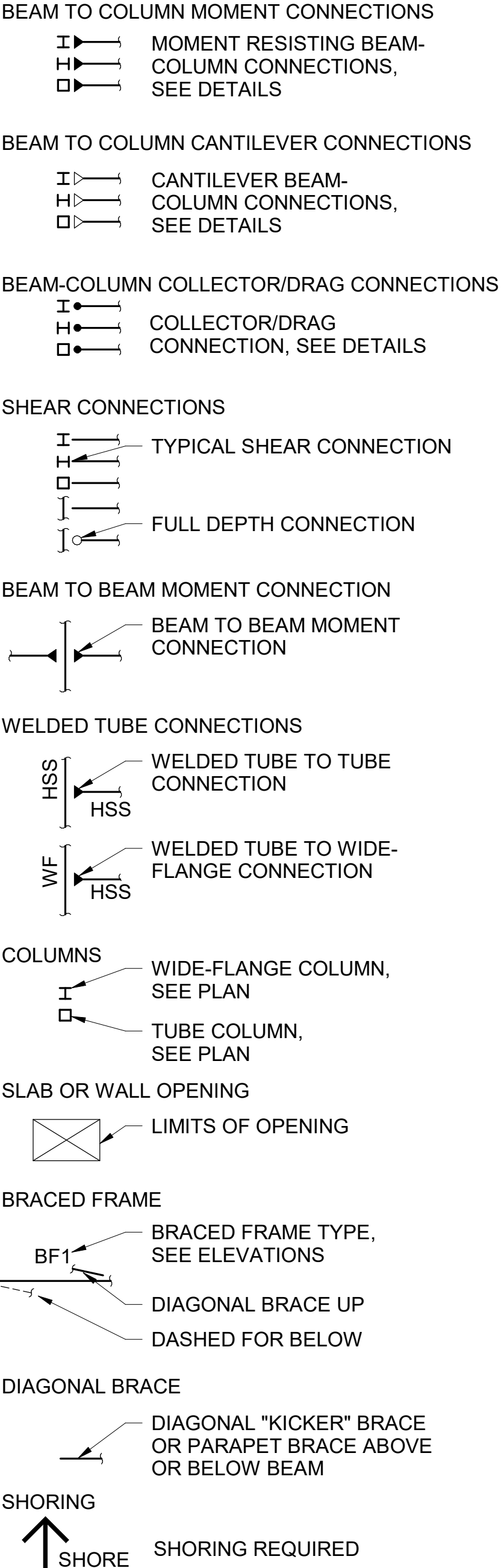
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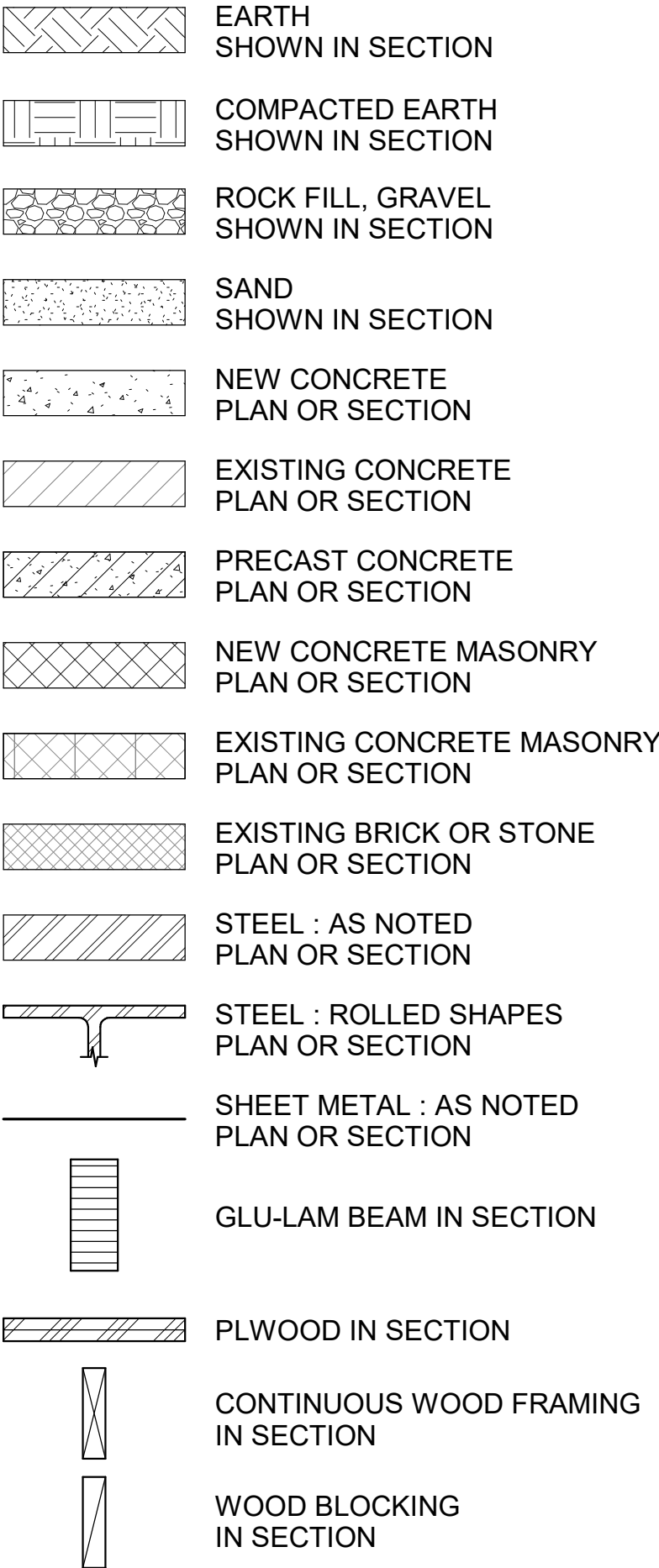
PLAN SYMBOLS



PLAN SYMBOLS (CONT'D)



MATERIAL SYMBOLS



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Project Number

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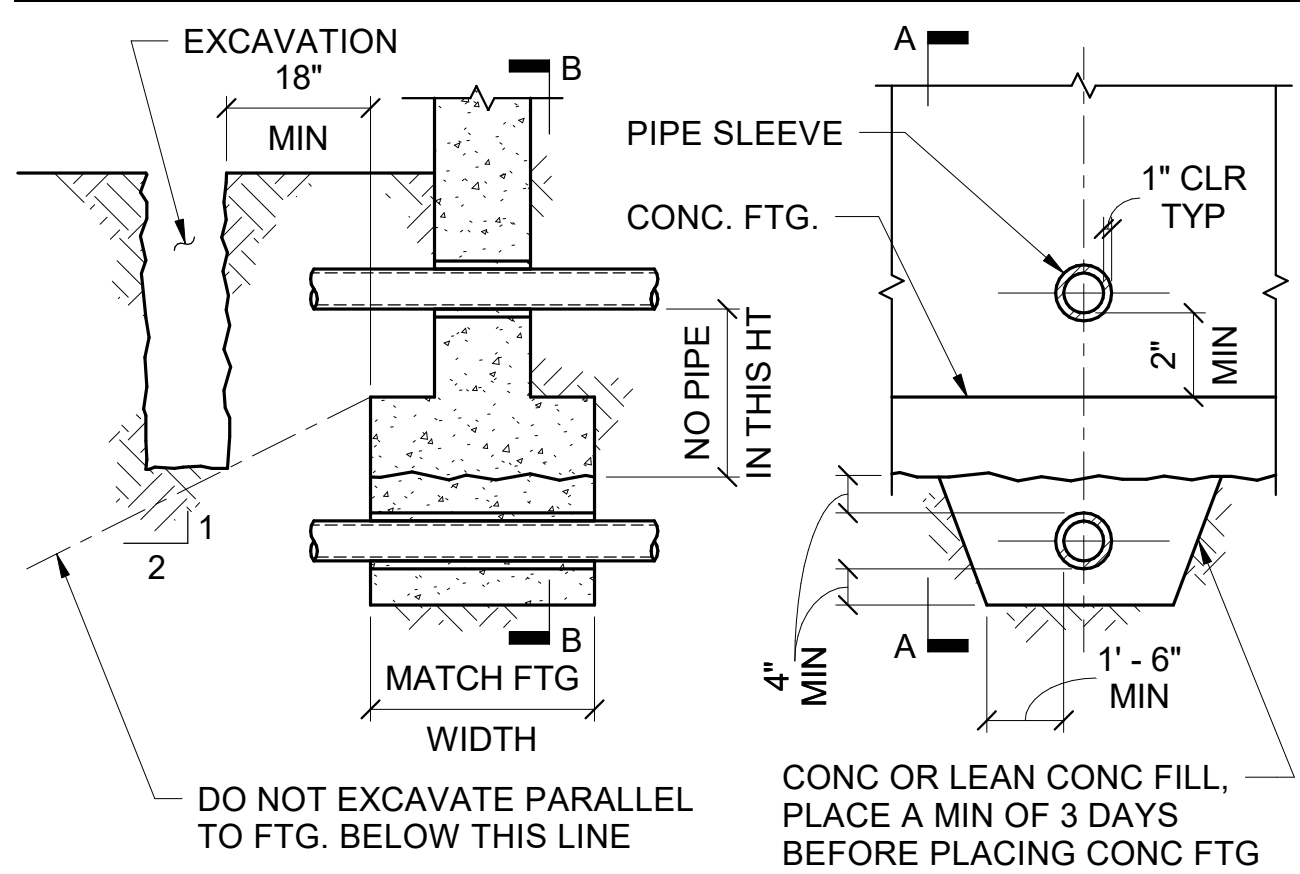
Description

SYMBOLS AND ABBREVIATIONS

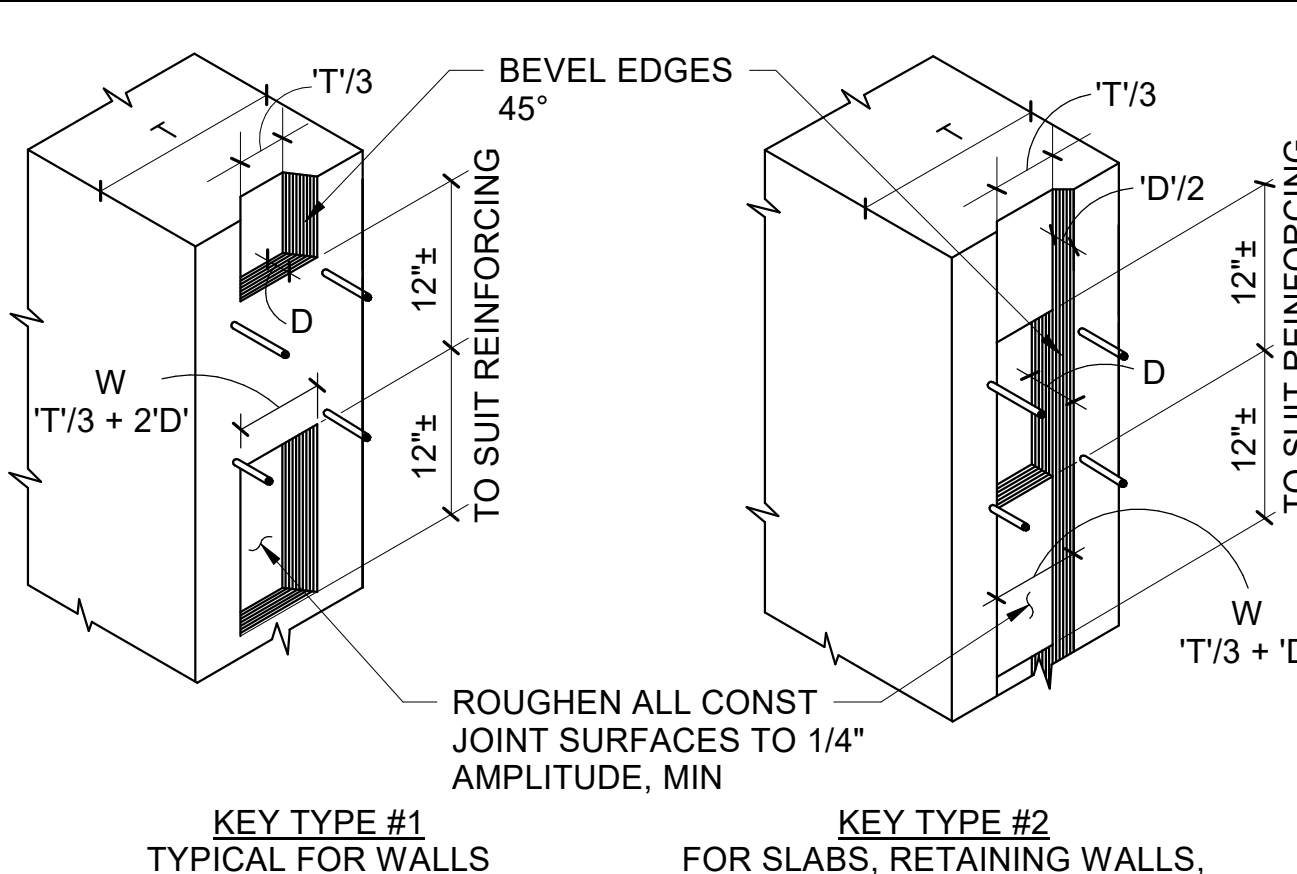
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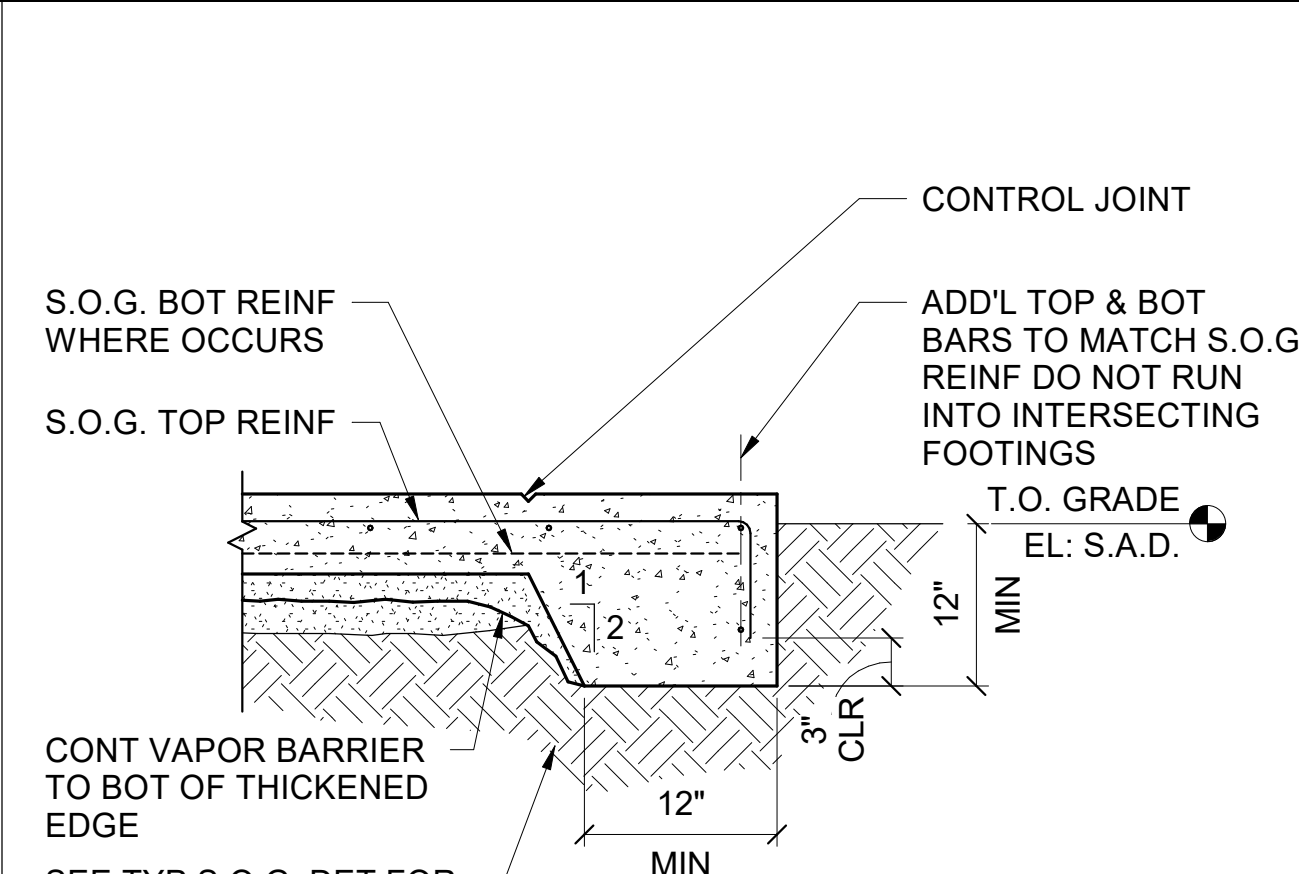
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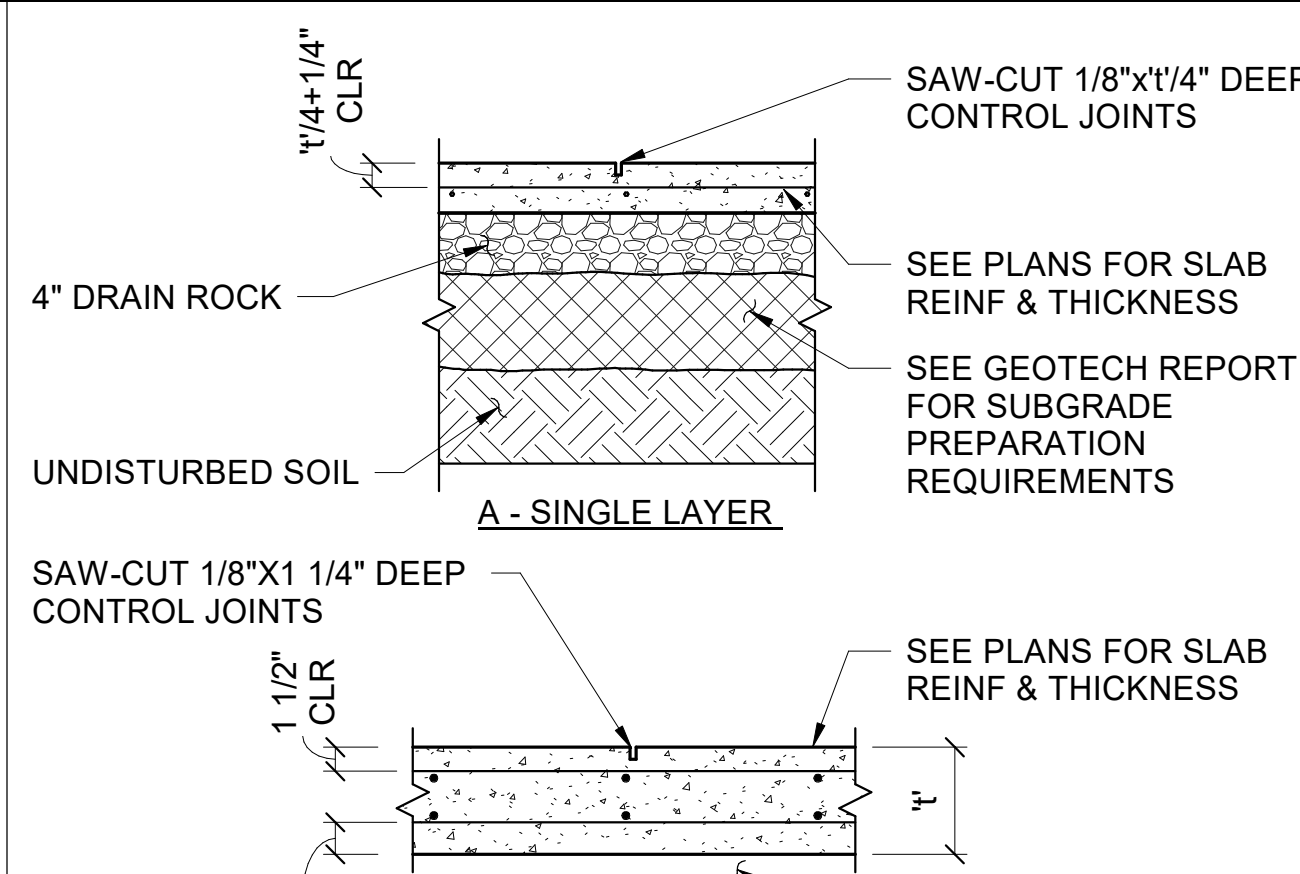
17 PIPE SLEEVES THROUGH STRIP FOOTINGS
1/2" = 1'-0"



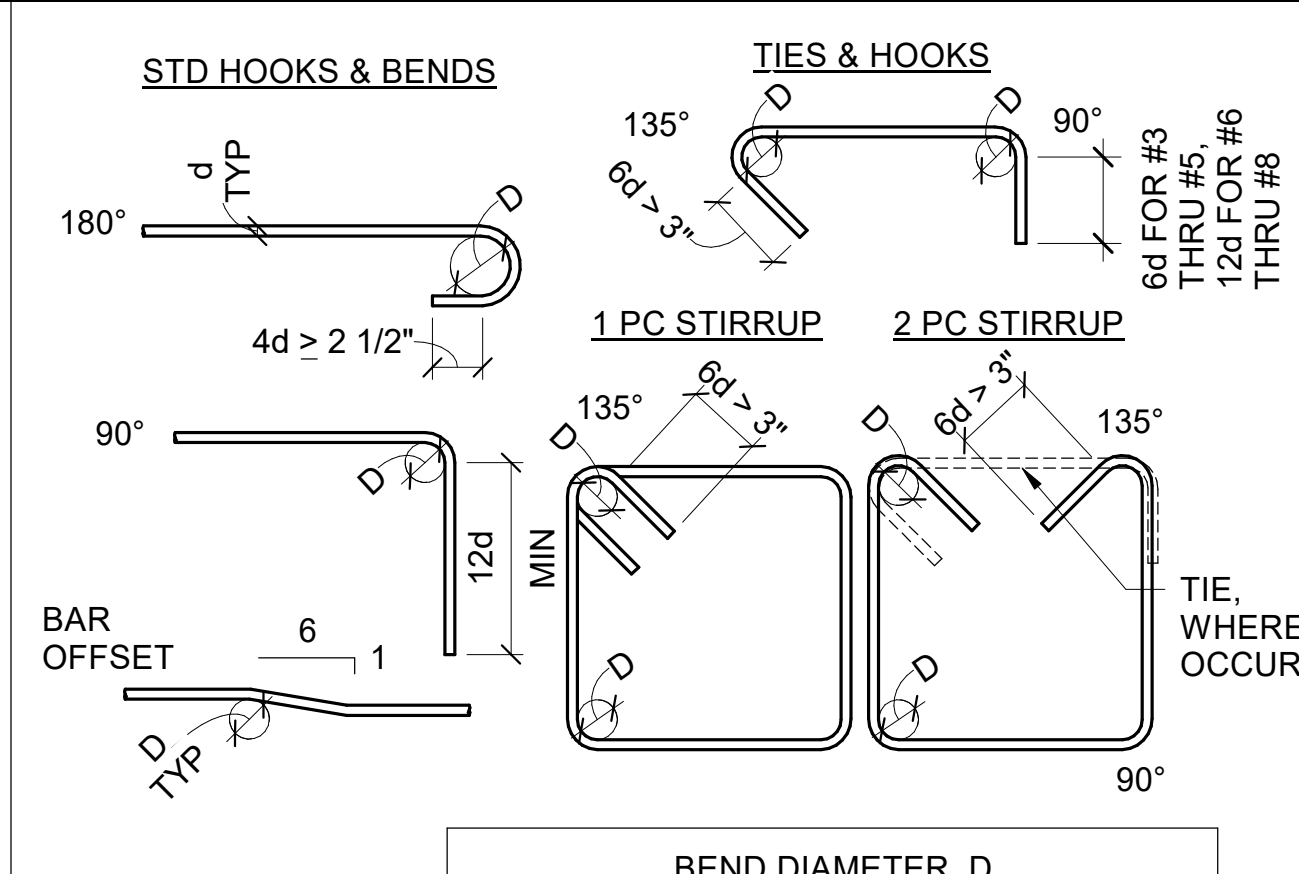
13 CONSTRUCTION JOINTS IN CONCRETE WALLS & SLABS
3/4" = 1'-0"



9 FREE EDGE AT SLAB ON GRADE
1" = 1'-0"



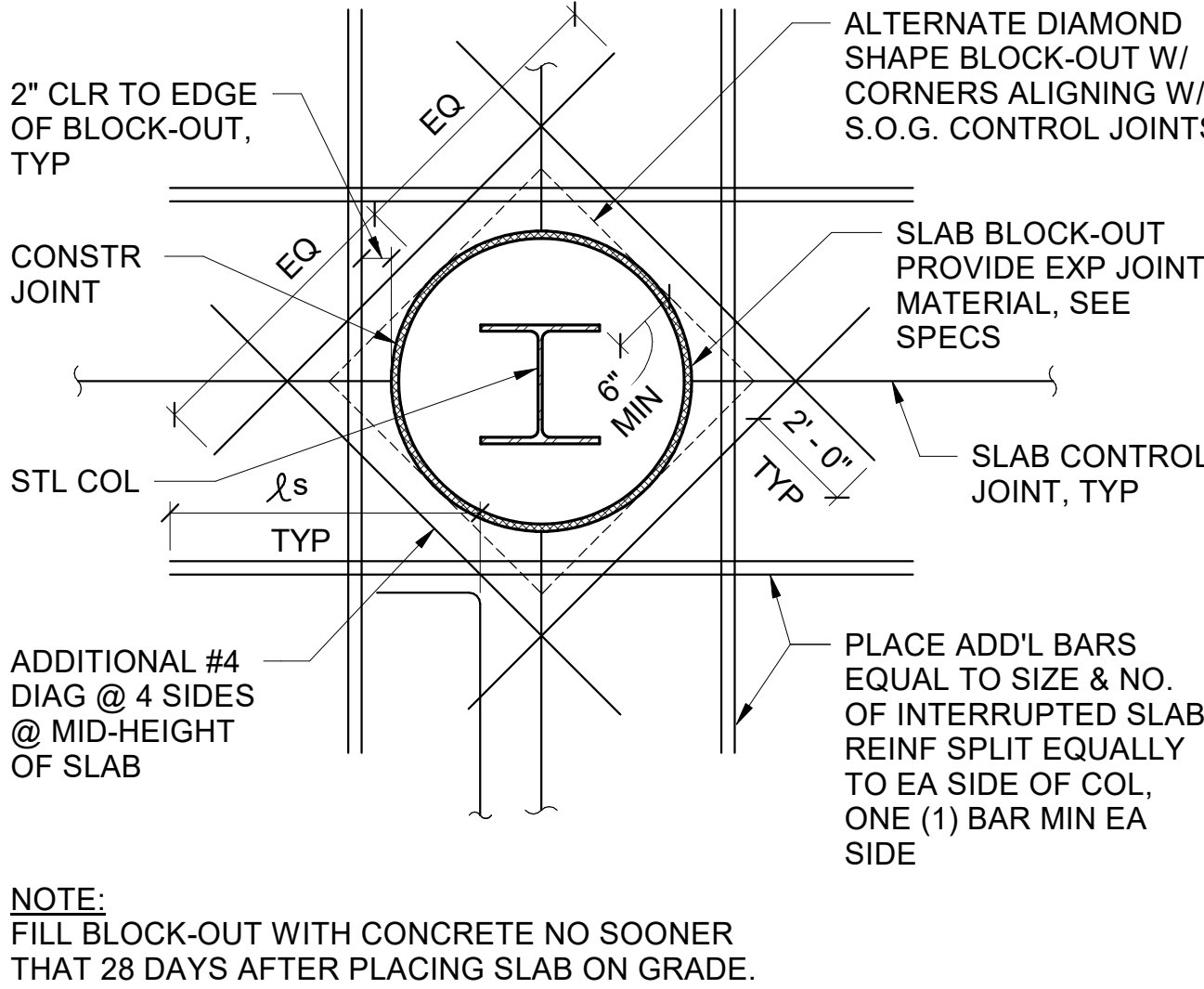
5 SLAB ON GRADE, CONTROL JT & SUBGRADE PREPARATION
1" = 1'-0"



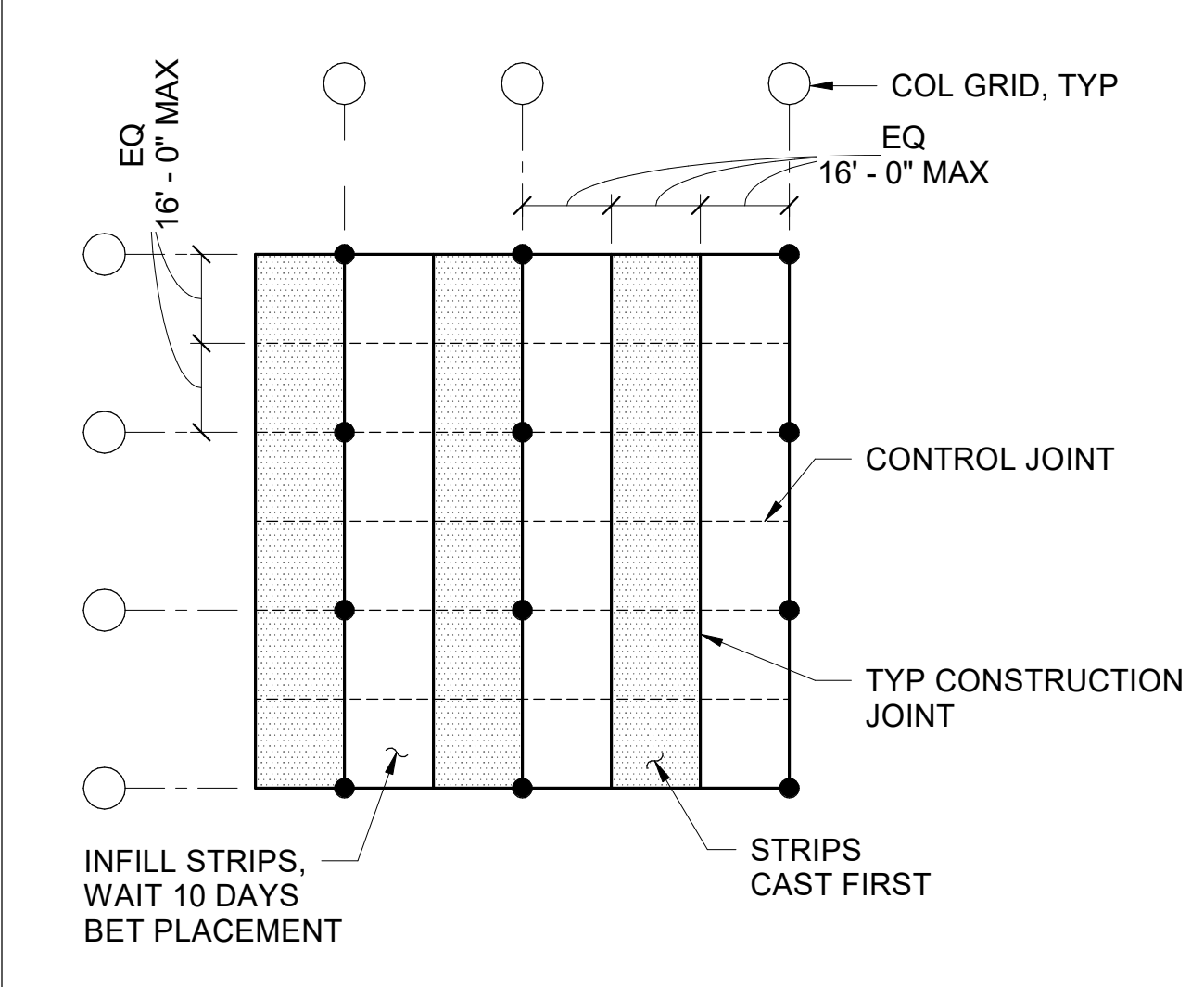
1 HOOKS & BENDS
1" = 1'-0"



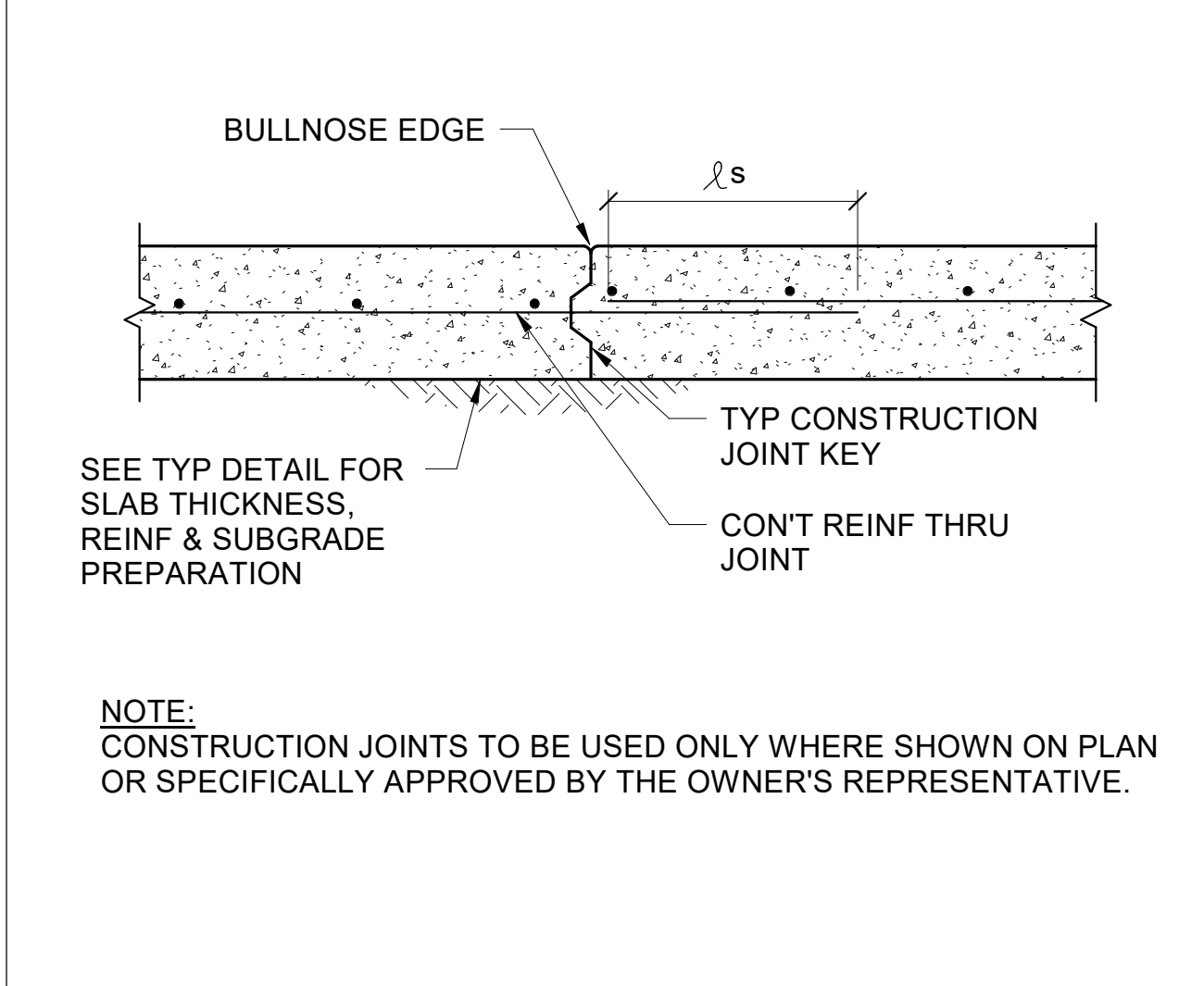
18 NOT USED
N.T.S.



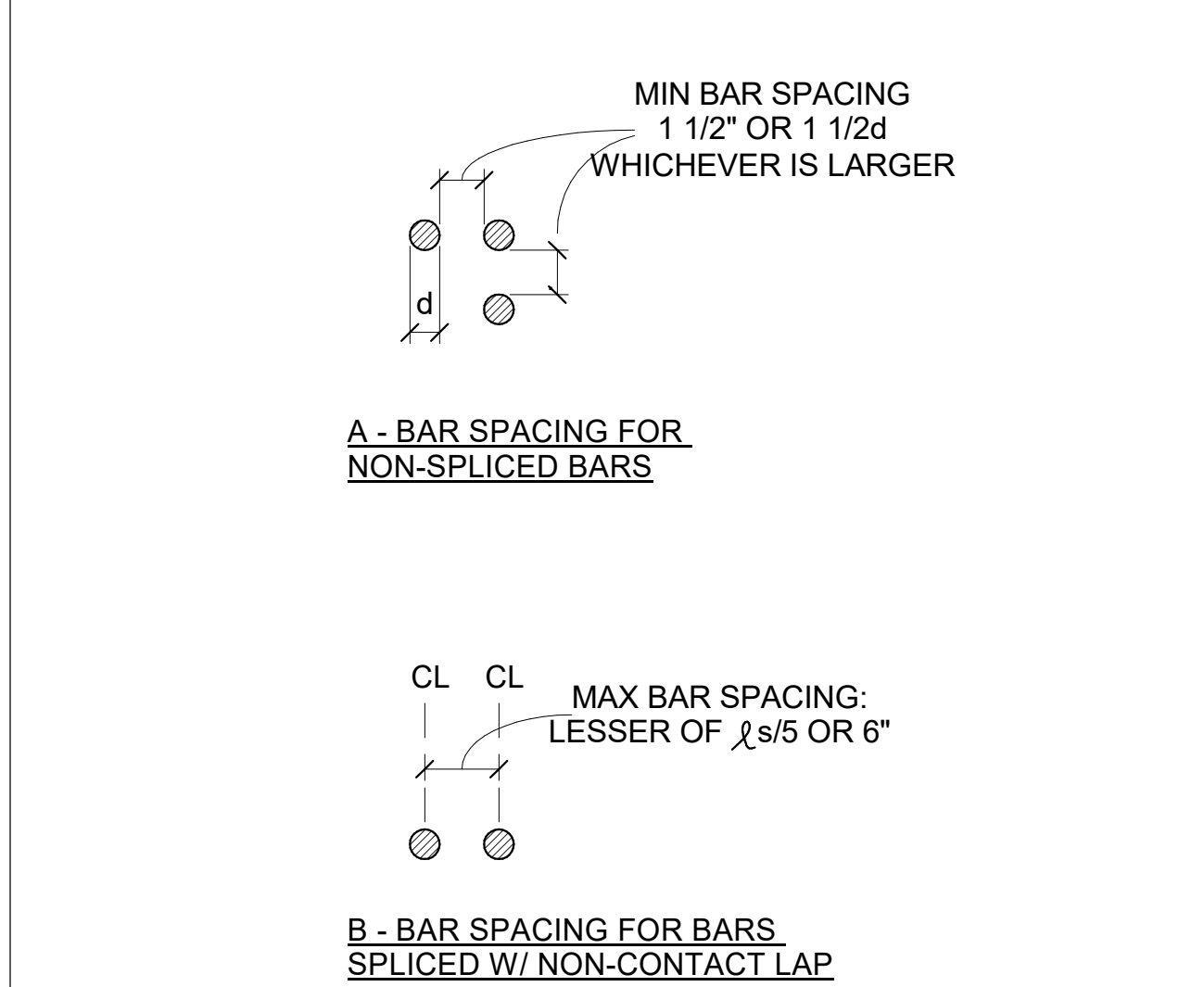
14 BLOCKOUT AT COLUMNS AT SLAB ON GRADE
1" = 1'-0"



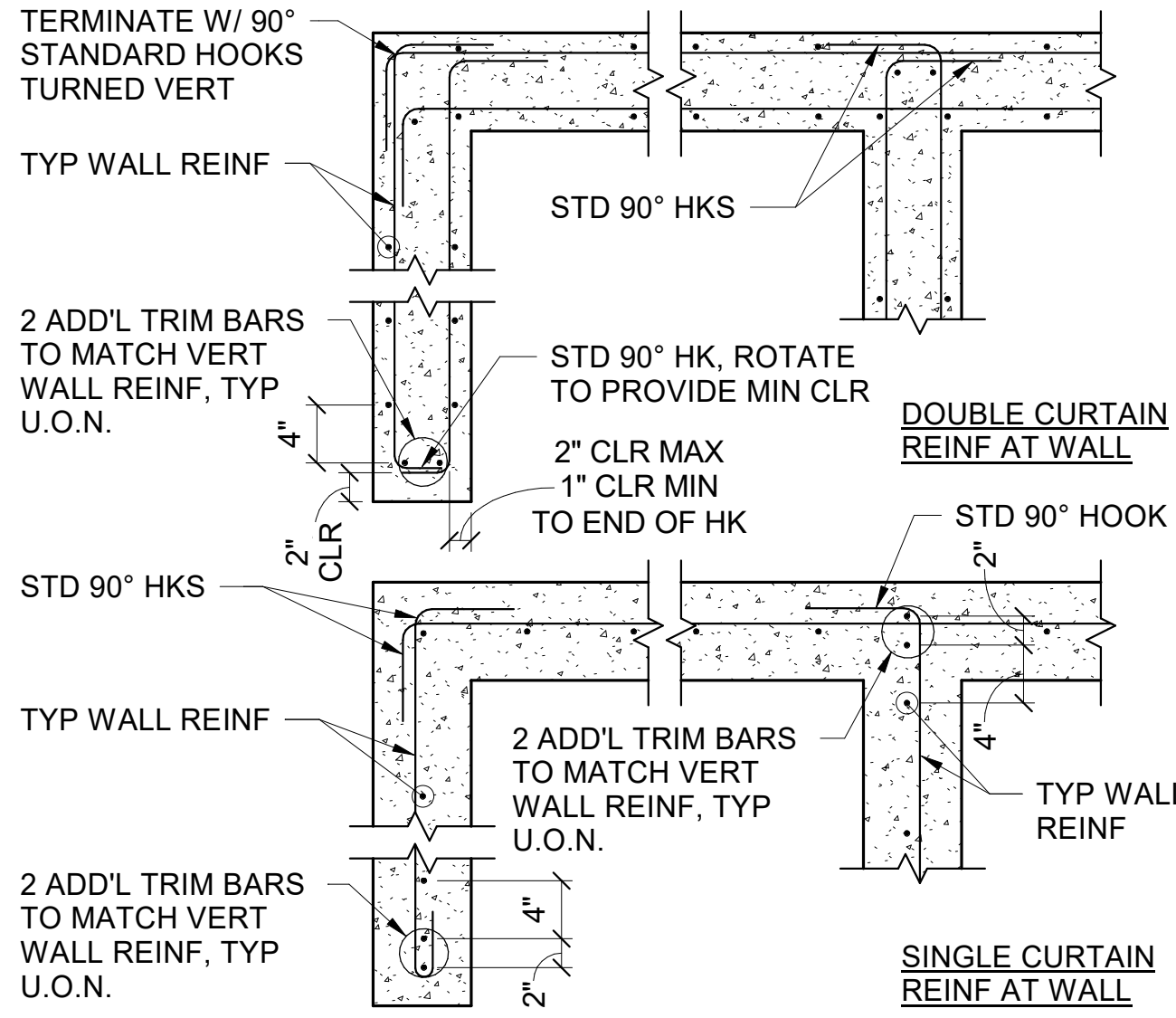
10 CONSTRUCTION JOINTS AT SLAB ON GRADE
1" = 1'-0"



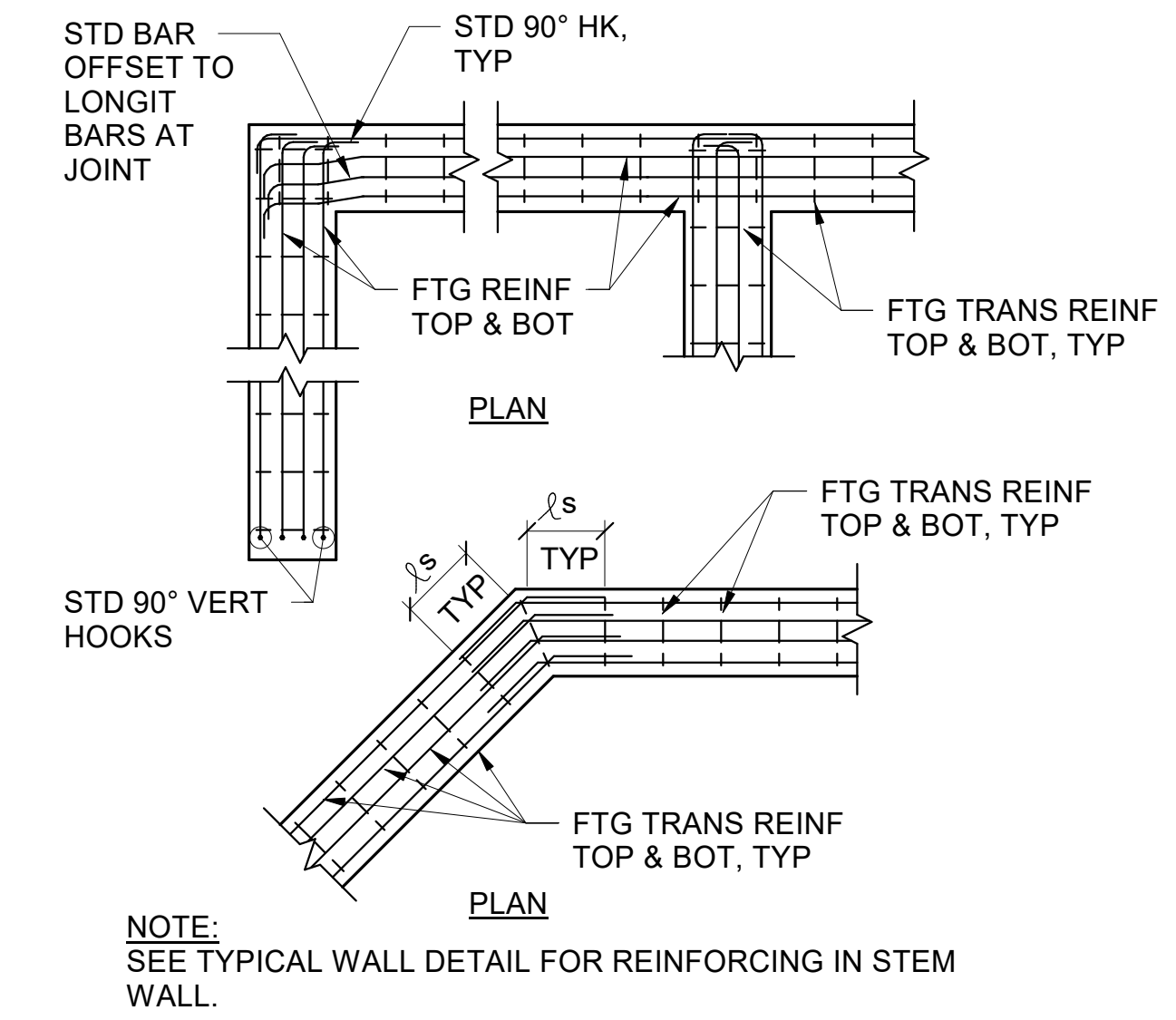
6 CONSTRUCTION JOINTS AT SLAB ON GRADE
1" = 1'-0"



2 BAR SPACING
1" = 1'-0"

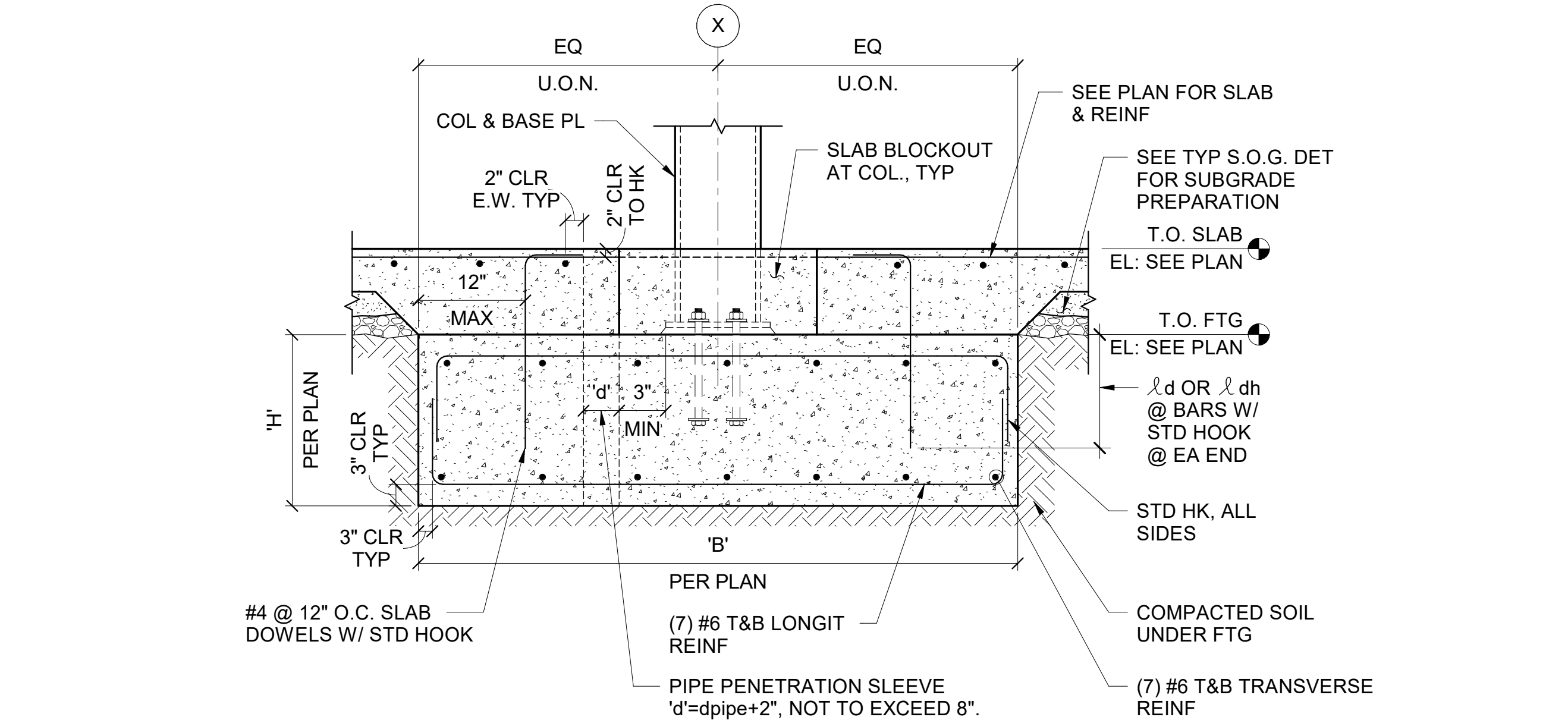
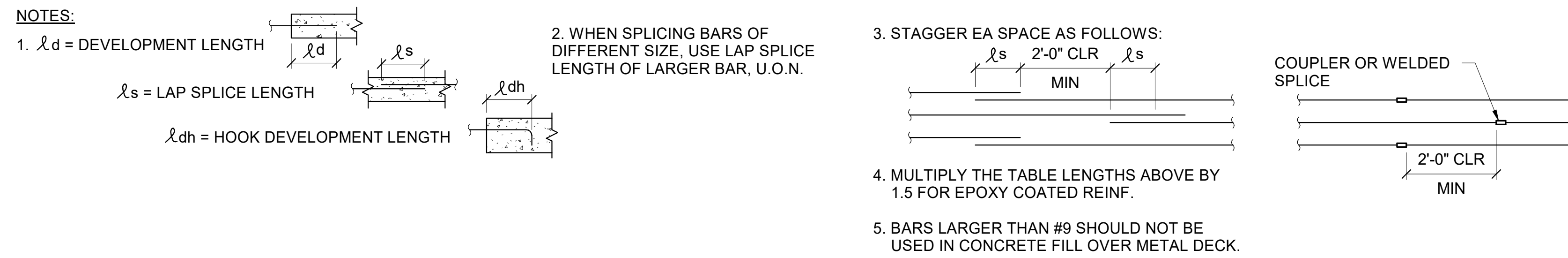


19 PLAN AT CURB AND WALL REINF AT CORNERS AND INTERSECTIONS
1" = 1'-0"

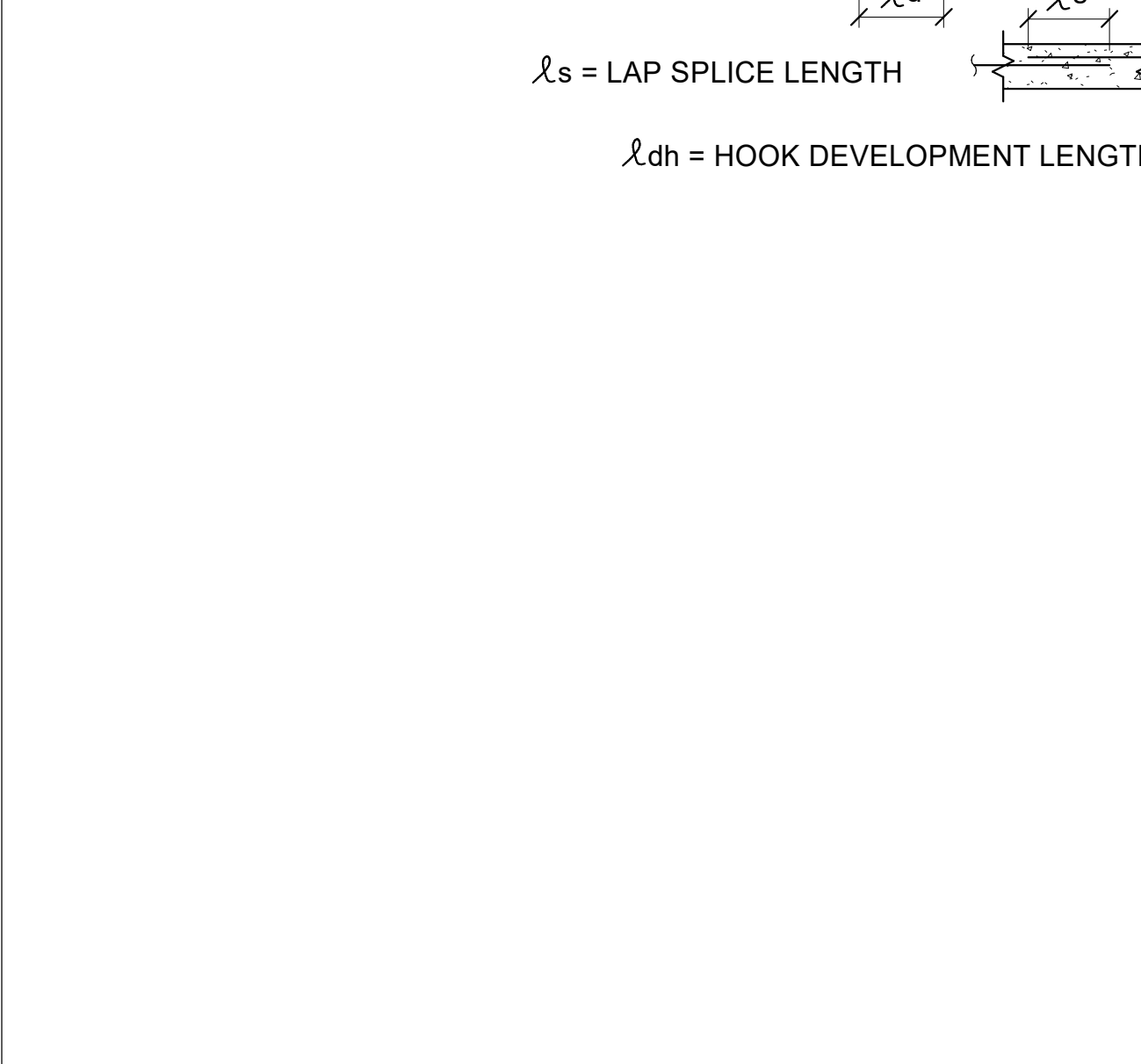


15 FOOTING REINFORCEMENT AT CORNERS AND INTERSECTIONS
1" = 1'-0"

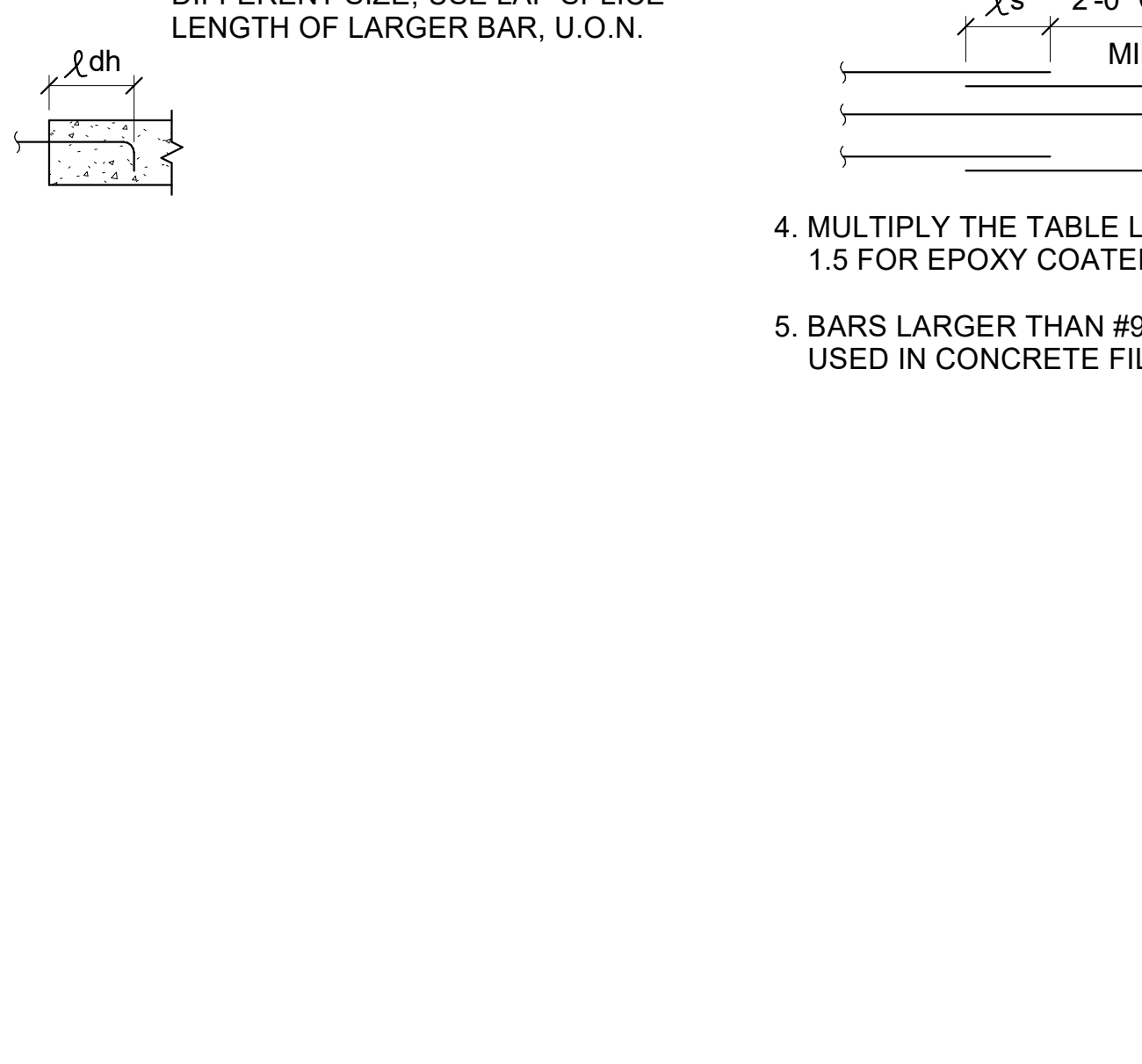
CONCRETE REINFORCING DEVELOPMENT & SPLICE LENGTHS (INCHES)																																				
BAR LOCATION	CONCRETE		REBAR SPACING, CLEAR	BAR SIZE																																
	TYPE	STRENGTH		#3		#4		#5		#6		#7		#8		#9		#10		#11		#14		#18												
				ℓ_d	ℓ_s	ℓ_d	ℓ_s	ℓ_d	ℓ_s	ℓ_d	ℓ_s	ℓ_d	ℓ_s	ℓ_d	ℓ_s	ℓ_d	ℓ_s	ℓ_d	ℓ_s	ℓ_d	ℓ_s	ℓ_d	ℓ_s	ℓ_d	ℓ_s	ℓ_d	ℓ_s									
CONC WALL VERT REINF, COLUMNS, BEAM BOT REINF, SLAB-ON-GRADE, FOOTING BOT REINF, FILL ON METAL DECK, SUSPENDED SLAB	NWC	$f'_c \geq 3\text{ksi}$ $f_y=60\text{ksi}$	< 6"	16	21	8	22	28	12	27	35	16	33	43	21	53	69	27	66	86	32	75	97	39	84	109	46	93	121	54	112	N/A	71	149	N/A	109
			$\geq 6"$	16	21	7	22	28	9	27	35	11	32	42	13	44	57	17	48	62	20	51	66	24	63	81	46	75	97	54	72	N/A	71	116	N/A	109
CONC WALL HORIZ REINF, CONC WALL BOUNDARY & TRIM REINF, FTG TOP & SIDE REINF, BEAM TOP & SIDE REINF	NWC	$f'_c \geq 3\text{ksi}$ $f_y=60\text{ksi}$	< 6"	21	27	8	28	36	12	35	45	16	43	56	21	69	90	27	86	112	32	97	126	39	109	142	46	121	157	54	145	N/A	71	193	N/A	109
			$\geq 6"$	21	27	7	28	36	9	35	45	11	42	54	13	57	74	17	62	80	20	66	86	24	81	105	46	97	126	54	93	N/A	71	150	N/A	109
FILL ON METAL DECK	LWC	$f'_c \geq 3\text{ksi}$ $f_y=60\text{ksi}$	< 6"	22	28	10	29	37	16	36	46	21	44	57	28	71	92	35	88	114	43	99	129	51	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			$\geq 6"$	22	28	9	29	37	12	36	46	15	43	55	18	59	76	22	63	82	27	68	88	32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A



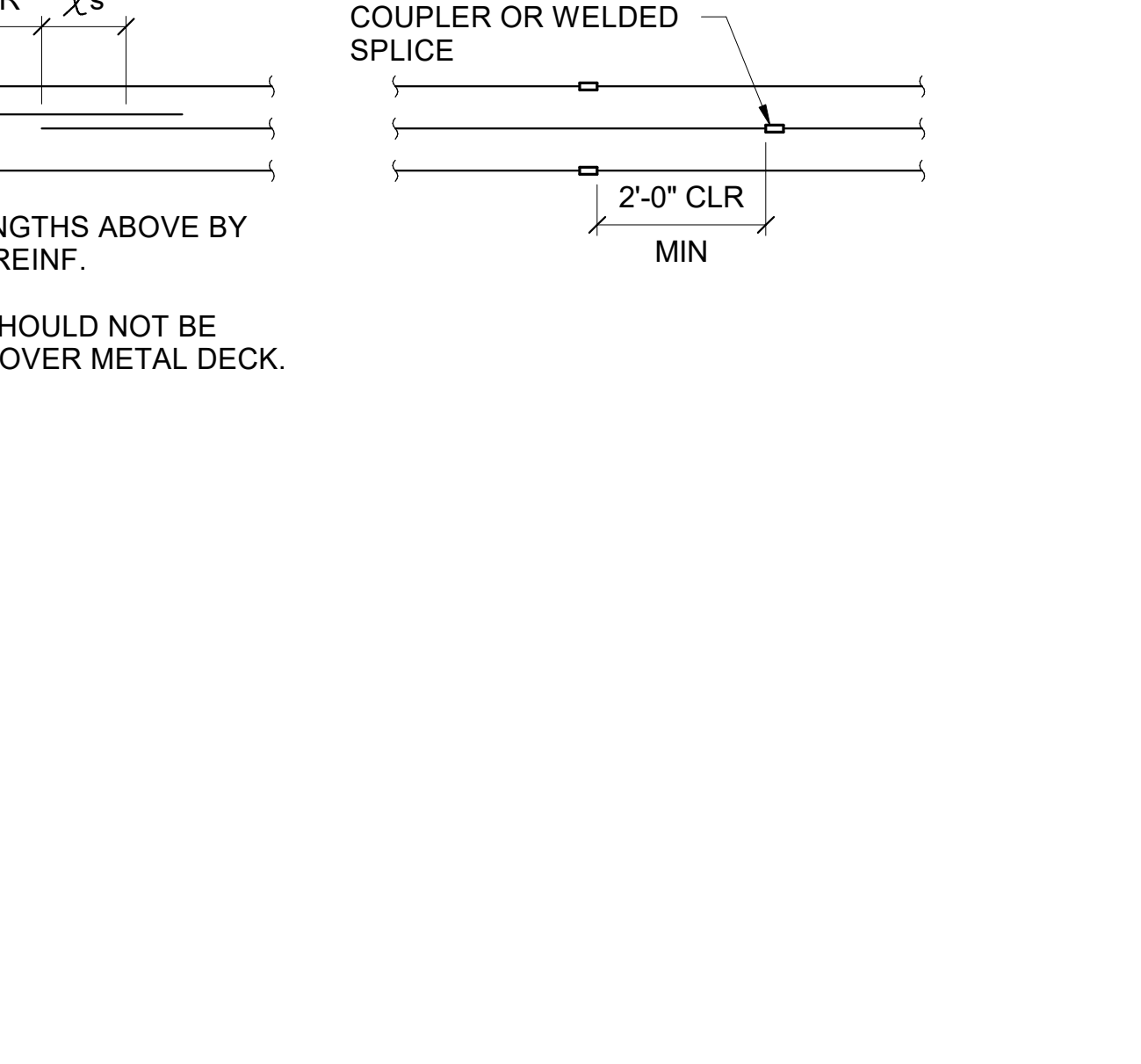
20 SPREAD FOOTING
3/4" = 1'-0"



12 REINFORCING DEVELOPMENT & SPLICE LENGTHS
1" = 1'-0"



6 CONSTRUCTION JOINTS AT SLAB ON GRADE
1" = 1'-0"



2 BAR SPACING
1" = 1'-0"

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PROFESSIONAL ENGINEER

NO. 51718

STRUCTURAL

STATE OF CALIFORNIA

△ Date

Description

10/14/2025 CD CLIENT REVIEW/PRICING

11/03/2025 ISSUE FOR PLAN CHECK

01/09/2025 ADDENDUM A/PLAN CHECK COMMENTS

05/07/2026 BID SET

2 05/28/2026 BID ADDENDUM 02

Seal / Signature

Project Name

HANGAR 10

RECONSTRUCTION

Project Number

25226

Description

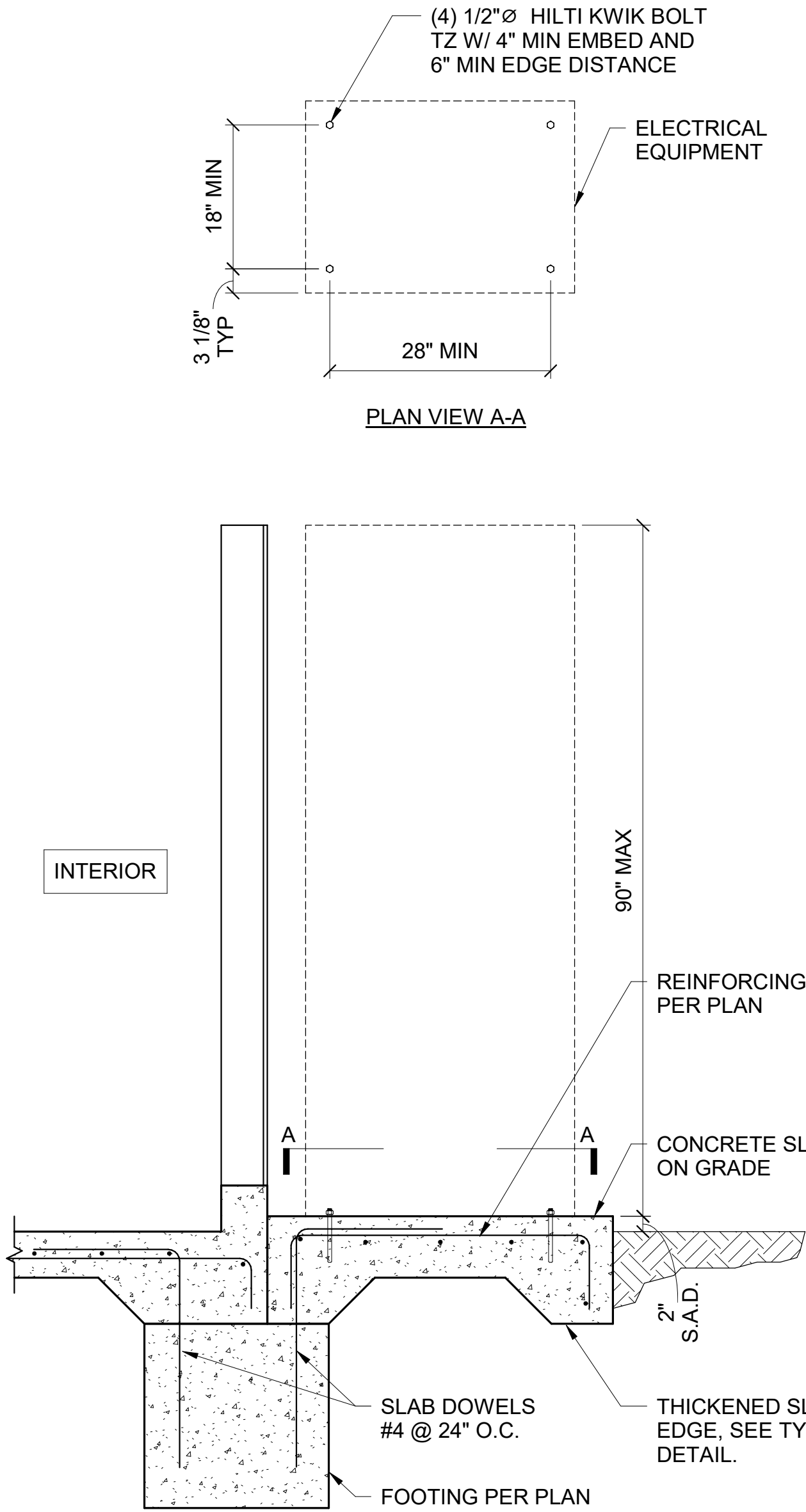
TYPICAL CONCRETE DETAILS

Scale

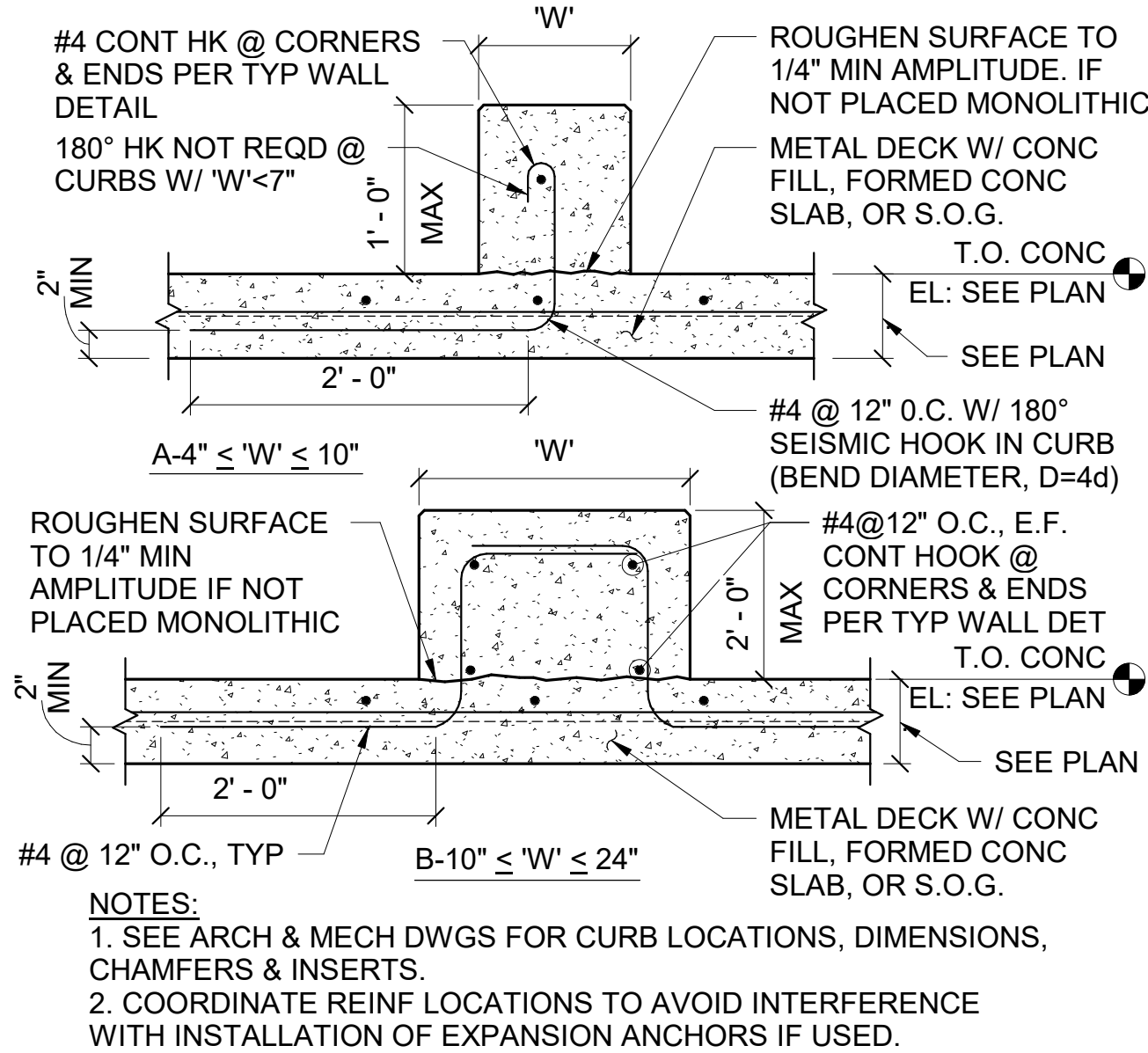
As indicated

S1.010

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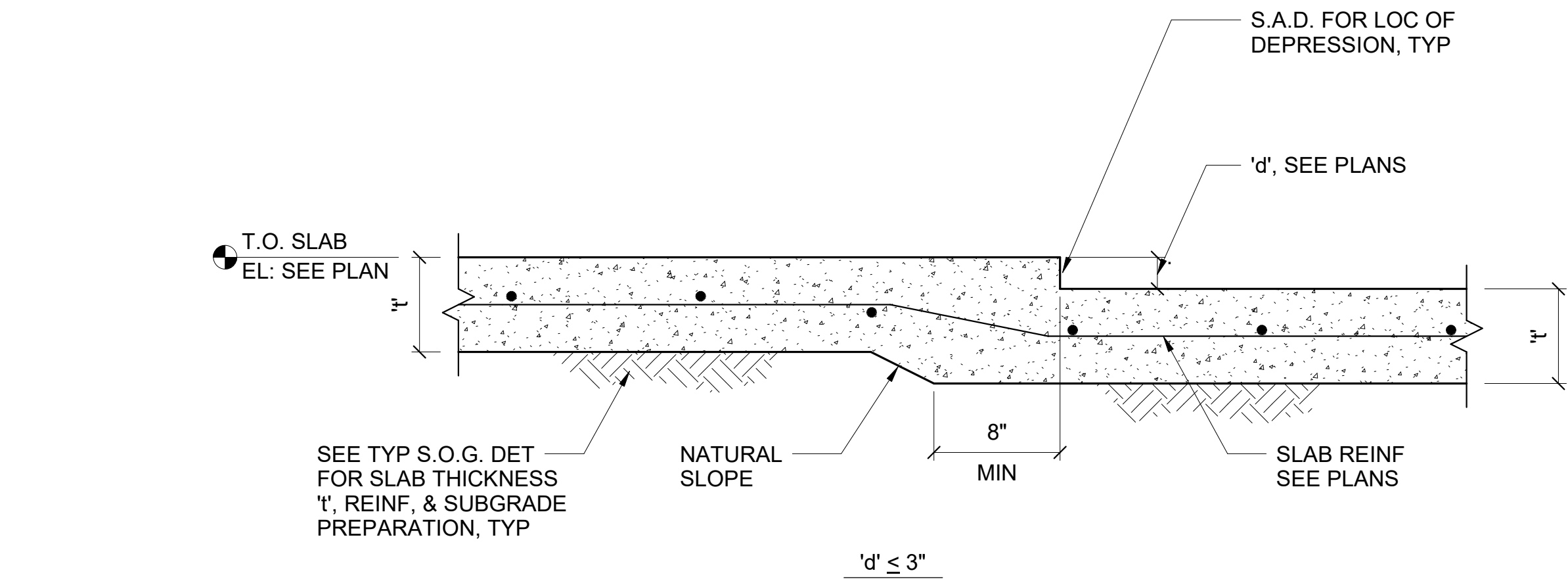


6 TYPICAL SWITCHBOARD ANCHORAGE
N.T.S.



1 CONCRETE CURBS
N.T.S.

2 HOUSEKEEPING PAD
N.T.S.



7 DEPRESSIONS IN SLAB ON GRADE
N.T.S.

CITY OF IRVINE HANGAR 10 RECONSTRUCTION

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05/07/2026	BID SET

Seal / Signature

Project Name
**HANGAR 10
RECONSTRUCTION**

Project Number
25226

Description
TYPICAL CONCRETE DETAILS

Scale
As indicated

S1.011

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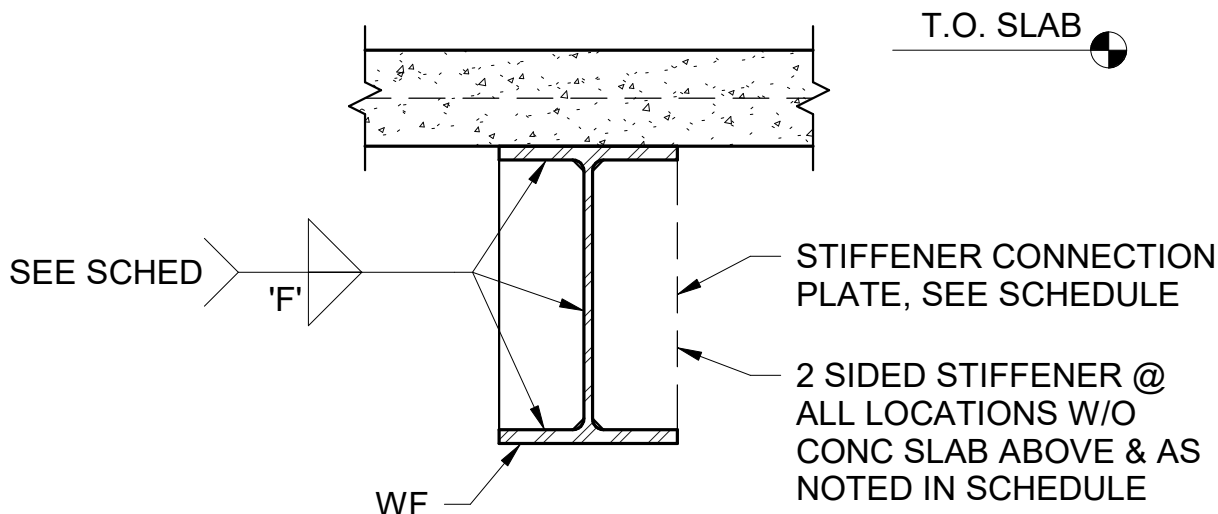
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	01/09/2025	ADDENDUM A/PLAN CHECK COMMENTS
	05/07/2026	BID SET

Seal / Signature

Project Name	HANGAR 10 RECONSTRUCTION
Project Number	25226
Description	TYPICAL STEEL DETAILS

Scale
N.T.S.

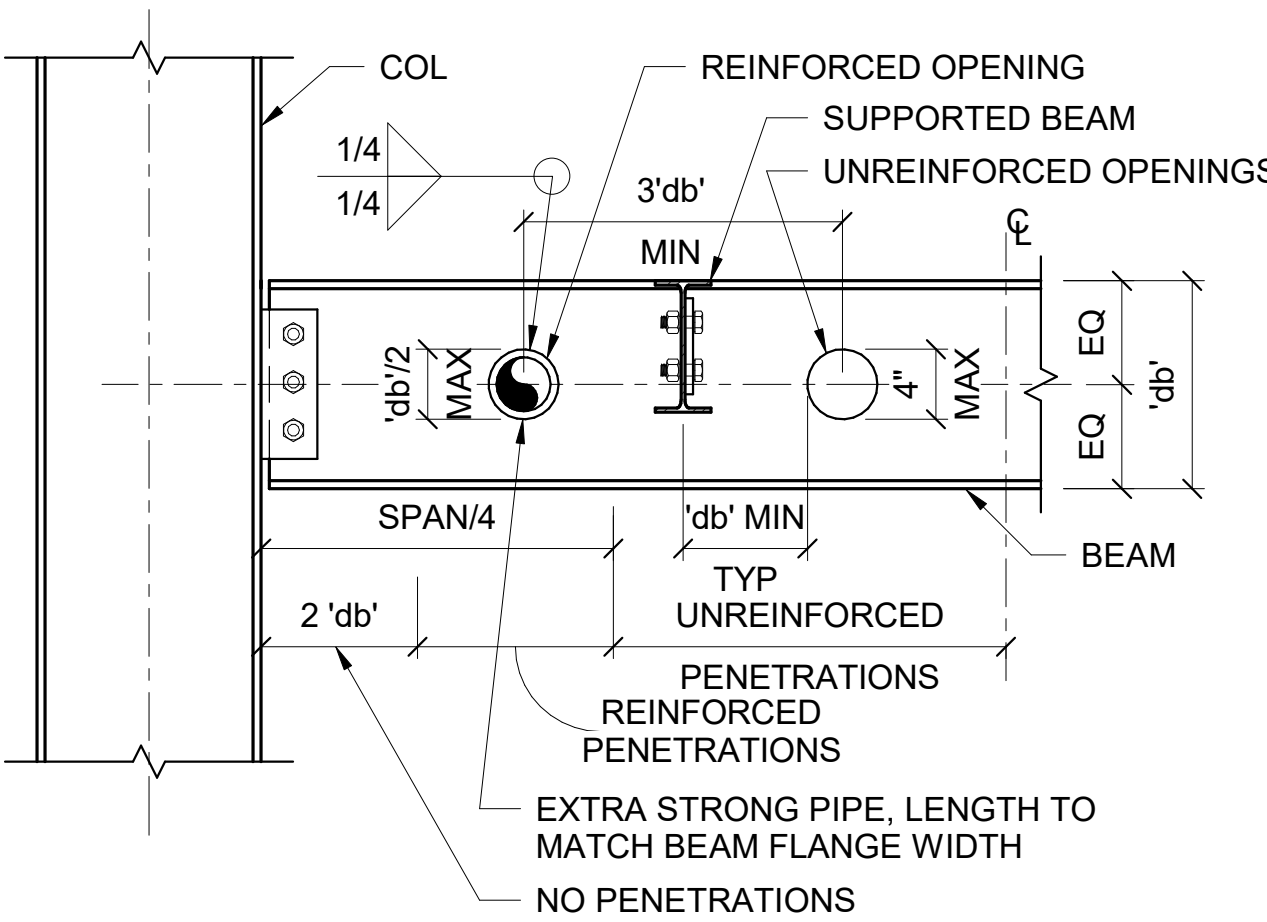
S1.020



LOCATION	PL SIZE	WELD SIZE 'F'	# OF PL'S
W12x & SMALLER	1/4"	1/8"	1-SIDED
W18x & SMALLER	3/8"	3/16"	2-SIDED
W36x & SMALLER	1/2"	1/4"	2-SIDED
STAIR STRINGER CONNECTIONS	3/8"	3/16"	2-SIDED

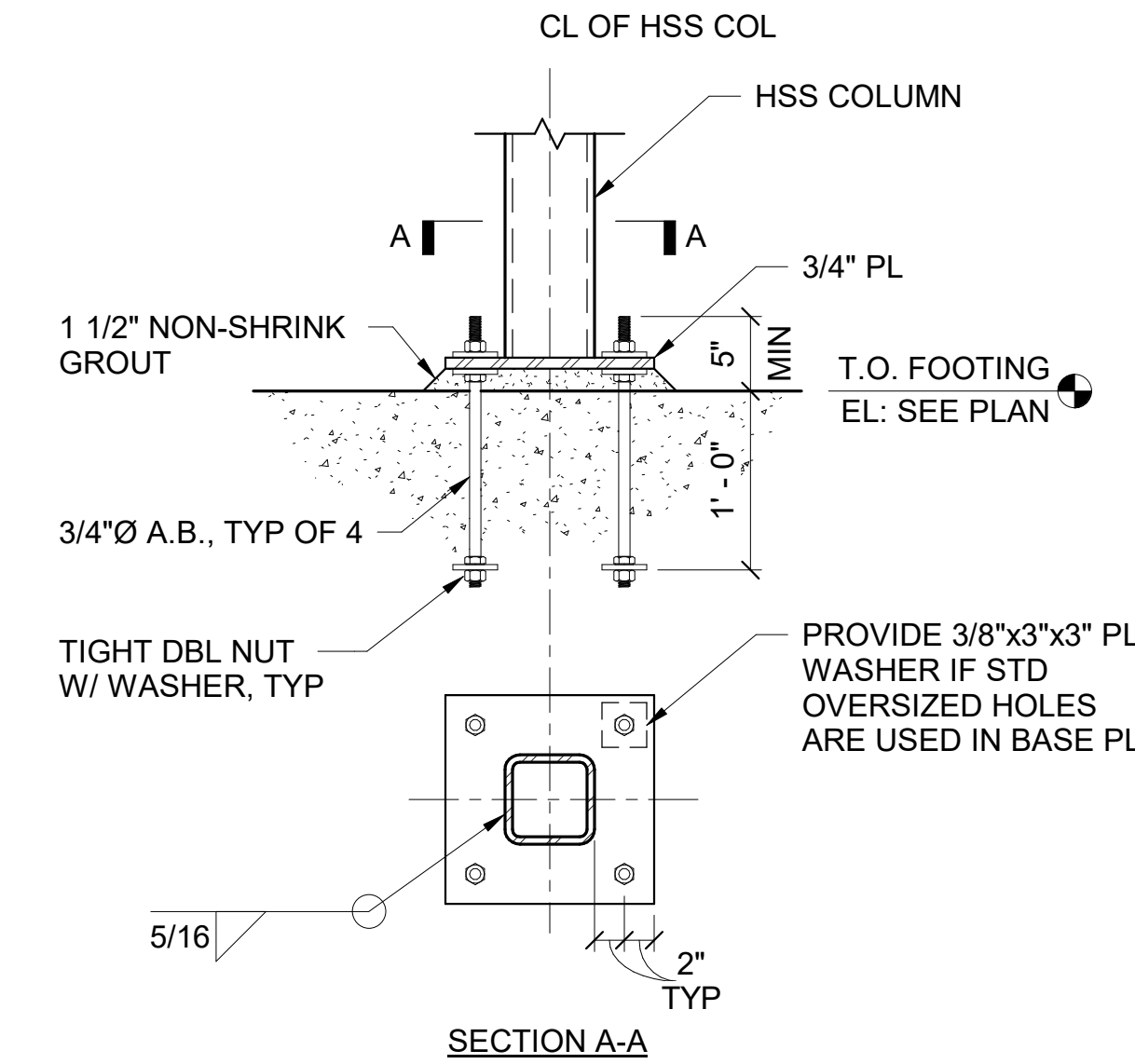
- NOTES:
- USE THIS DETAIL WHERE PL'S OR STIFFENERS ARE SHOWN BUT NOT DETAILED.
 - WELD TO MAXIMUM OF A.W.S. MINIMUM AND SCHEDULE SIZE.
 - COORDINATE LOCATIONS OF PL'S WITH ARCH DRAWINGS.

5 STIFFENER CONNECTION PLATE
N.T.S.

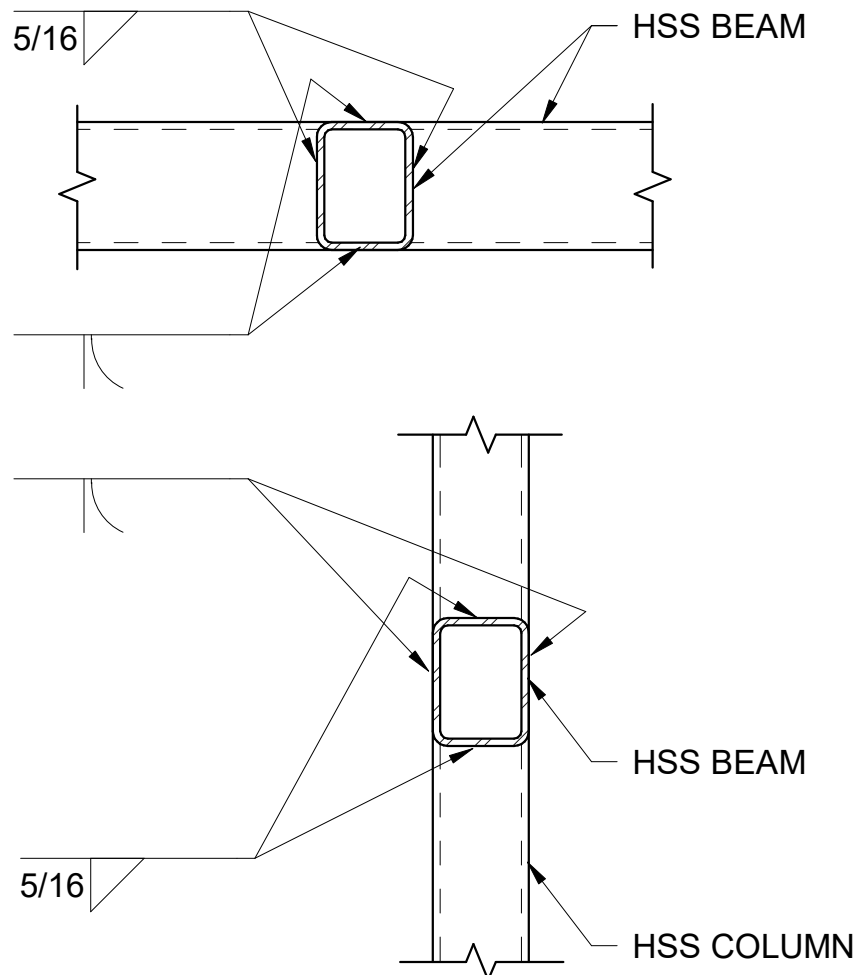


- NOTES:
- COORDINATE BEAM PENETRATION LOCATIONS WITH OTHER DISCIPLINES.
 - SUBMIT BEAM PENETRATIONS NOT SPECIFICALLY LOCATED ON THE STRUCTURAL DRAWINGS FOR APPROVAL.

6 TYPICAL ROUND HOLE
PENETRATION IN BEAM WEB
N.T.S.



7 HSS COLUMN BASE
N.T.S.

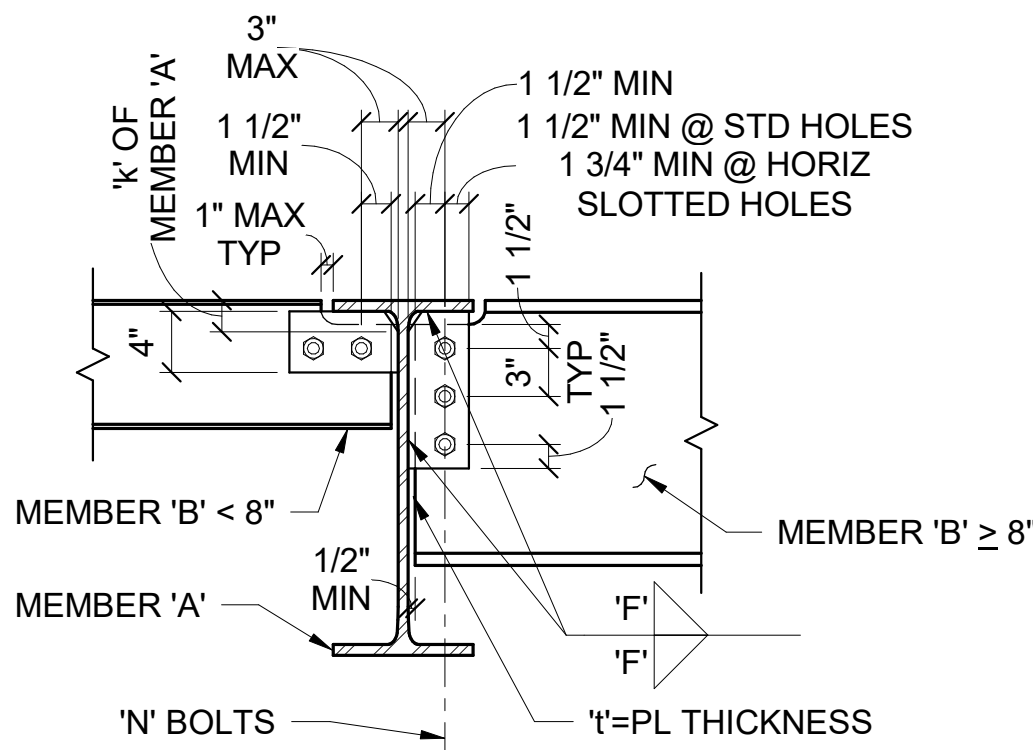


8 TYPICAL HSS TO HSS
CONNECTION
N.T.S.

BEAM CONNECTION SCHEDULE					
NOMINAL MEMBER DEPTH	SHEAR PL THICKNESS ('t')	FASTENERS A325-X U.O.N. ('N')	WELD SIZE ('F')	ØVh (K)	REMARKS
HSS LESS THAN 8"	1/2"	2-7/8" Ø	5/16"	54.1	
8", 10"	1/2"	2-7/8" Ø	5/16"	54.1	
12", 14"	1/2"	3-7/8" Ø	5/16"	81.2	
16", 18"	1/2"	4-7/8" Ø	5/16"	108	
21"	1/2"	5-7/8" Ø	5/16"	135	
24"	1/2"	6-7/8" Ø	5/16"	162	
27"	1/2"	7-7/8" Ø	5/16"	189	
30"	1/2"	8-7/8" Ø	5/16"	216	
33"	1/2"	9-7/8" Ø	5/16"	244	
36"	1/2"	10-7/8" Ø	5/16"	263	
40"	1/2"	11-7/8" Ø	5/16"	283	
44"	1/2"	12-7/8" Ø	5/16"	302	

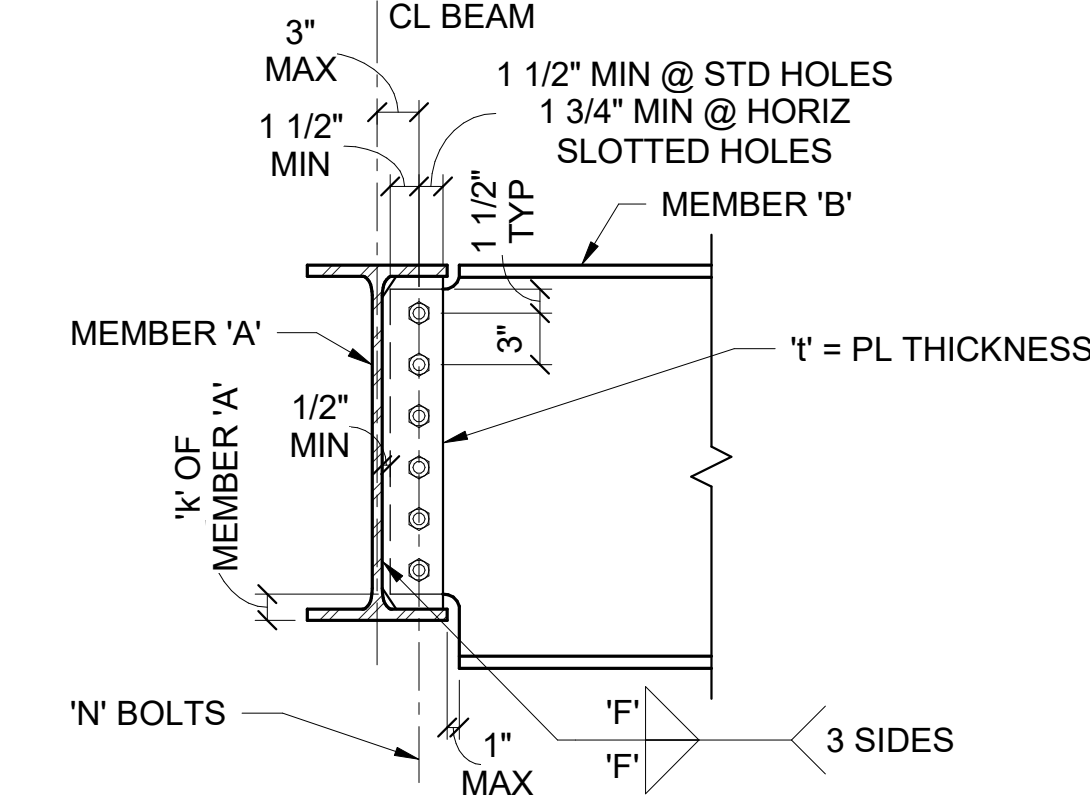
- NOTES:
- BOLT HOLES TO BE STANDARD HOLES 1/16" GREATER THAN BOLT DIAMETER. SHORT SLOTTED HOLES IN SHEAR PL MAY BE USED ONLY WHERE NOTED.
 - BOLTS TO BE FULLY PRETENSIONED A325-X WITH HARDENED WASHERS, U.O.N.
 - SCHEDULE BASED ON NOMINAL DEPTH OF WIDE FLANGE BEAMS, CHANNELS, TUBES & OTHER MISCELLANEOUS SHAPES.

1 BOLTED BEAM CONN SCHEDULE
N.T.S.



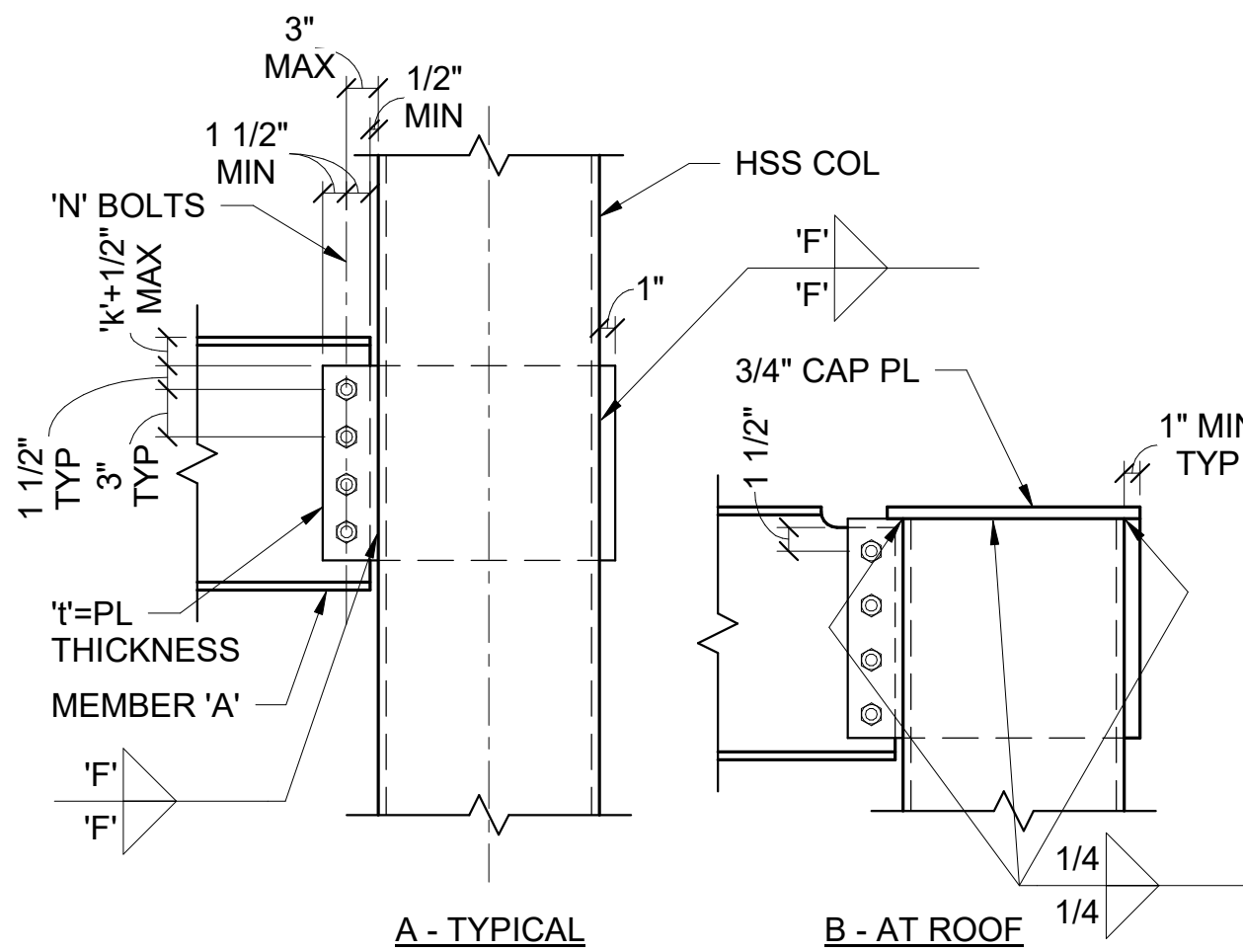
- NOTES:
- FOR WELD 'F', NUMBER OF BOLTS 'N' & PL THICKNESS 't', SEE BOLTED BEAM CONNECTION SCHEDULE.
 - SHORT SLOTTED HOLES IN SHEAR PL MAY BE USED.
 - DETAIL APPLIES TO WIDE FLANGE BEAMS AND CHANNEL.

2 BEAM TO BEAM CONNECTION
MEMBER 'A' > MEMBER 'B'
N.T.S.



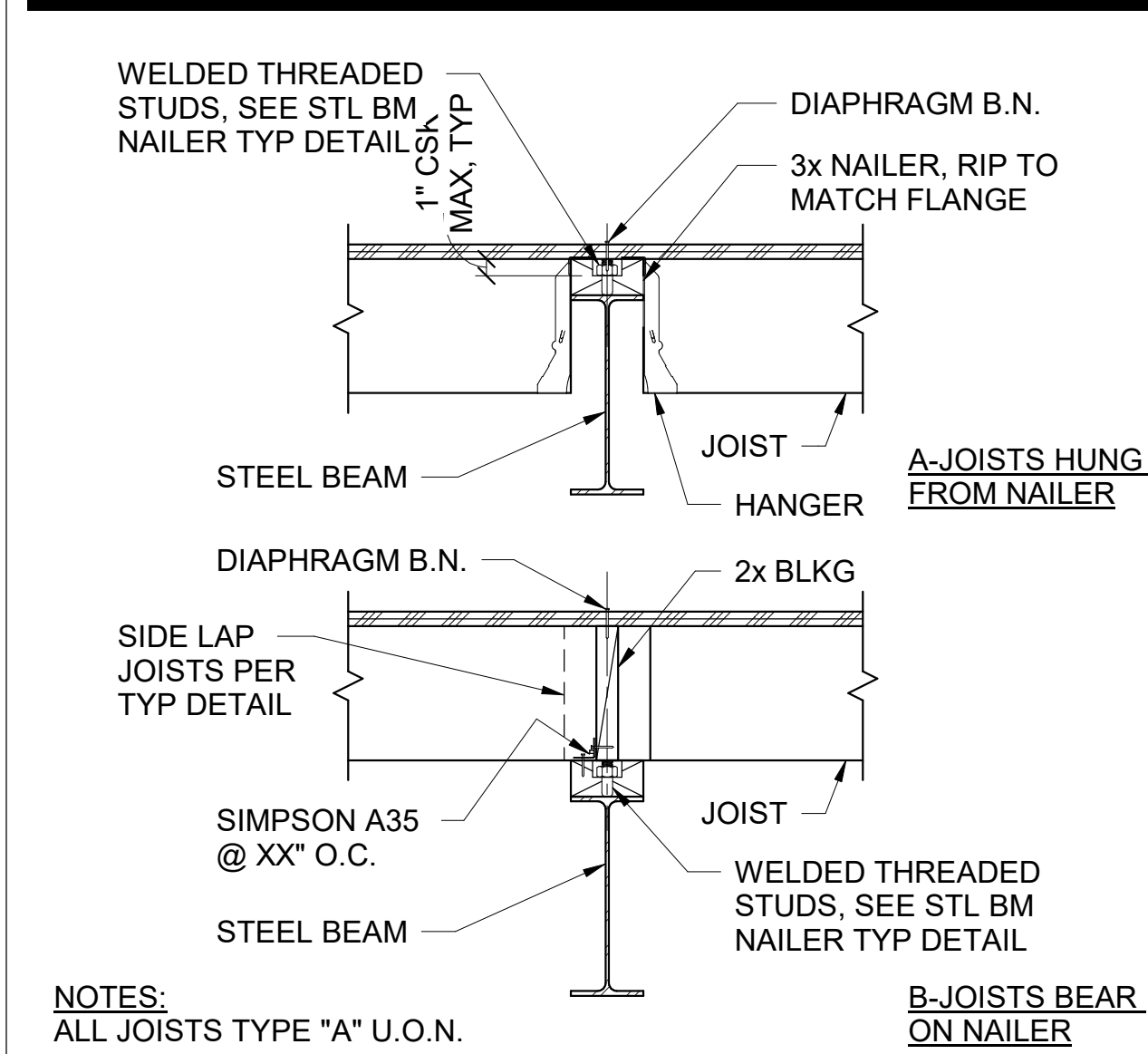
- NOTES:
- SIMILAR CONDITIONS APPLY FOR BEAMS ON BOTH SIDES OF MEMBER 'A'.
 - FOR WELD SIZE 'F' NUMBER OF BOLTS 'N' & PL THICKNESS 't', SEE BOLTED BEAM TO BEAM CONNECTION SCHEDULE.
 - SHORT SLOTTED HOLES IN SHEAR PL MAY BE USED.
 - IF MEMBER 'B' < 8", SEE BEAM TO BEAM CONNECTION - MEMBER 'A' > MEMBER 'B'.
 - SIMILAR CONDITIONS APPLY FOR CHANNELS.

3 BEAM TO BEAM CONNECTION
MEMBER 'A' < MEMBER 'B'
N.T.S.

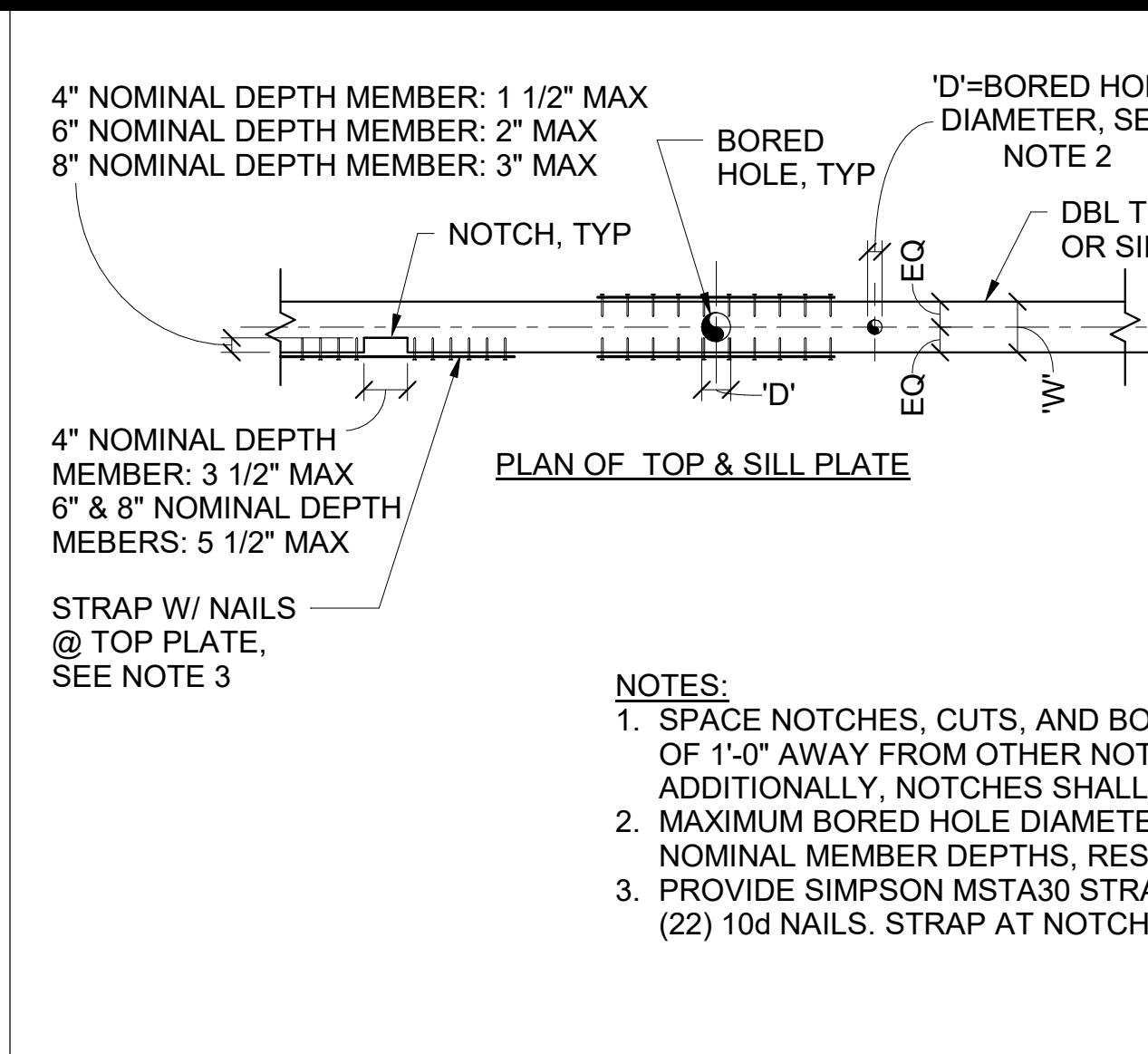


- NOTES:
- SIMILAR CONDITIONS APPLY FOR BEAMS ON BOTH SIDES OF COLUMN.
 - FOR WELD 'F', NUMBER OF BOLTS 'N' & PL THICKNESS 't', SEE BOLTED BEAM CONNECTION SCHEDULE.
 - SIMILAR CONDITIONS APPLY WHEN MEMBER 'A' IS A CHANNEL.

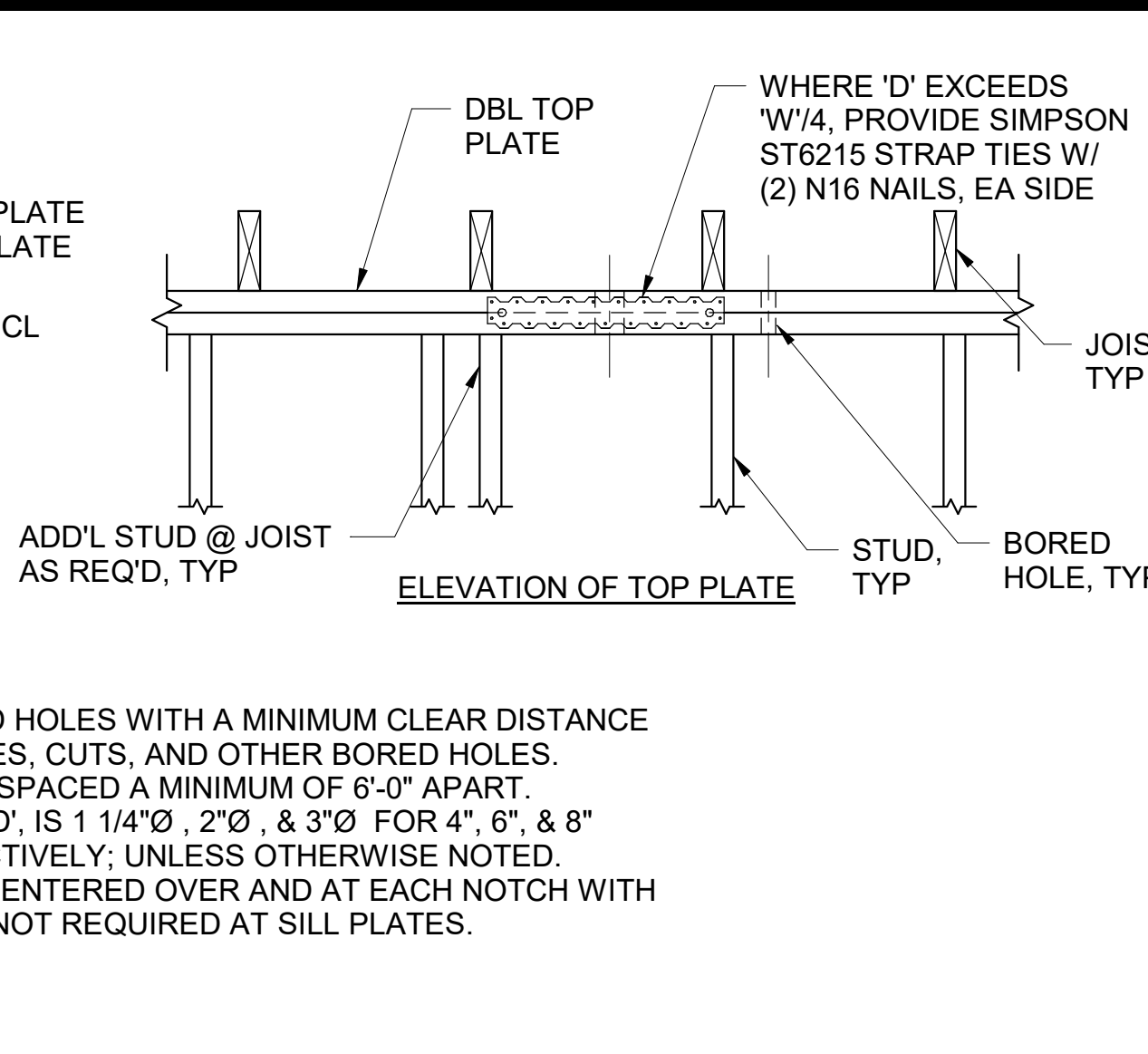
4 WF TO HSS COLUMN OR PIPE
COLUMN
N.T.S.



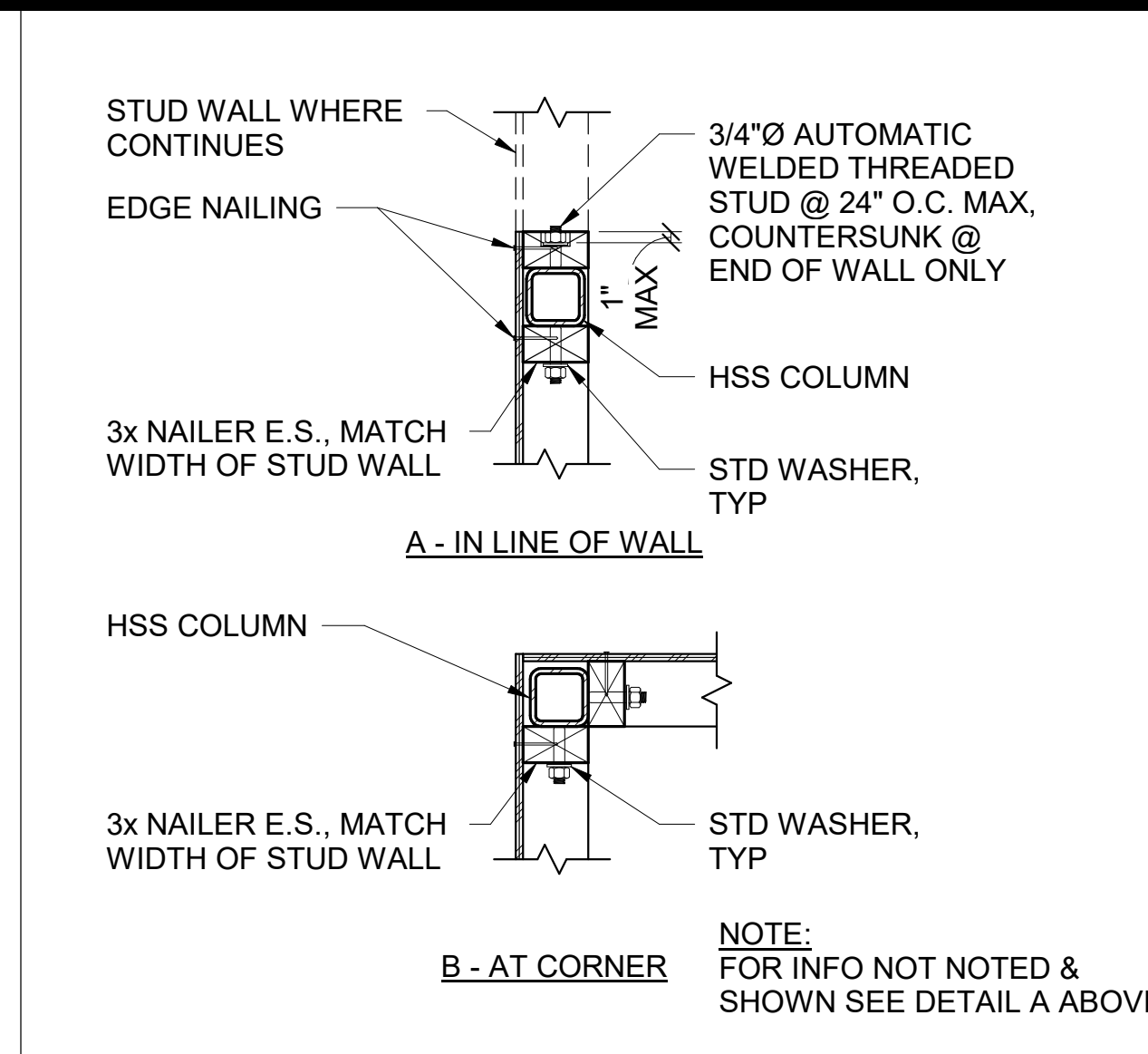
17 JOISTS PERPENDICULAR TO STEEL BEAM
N.T.S.



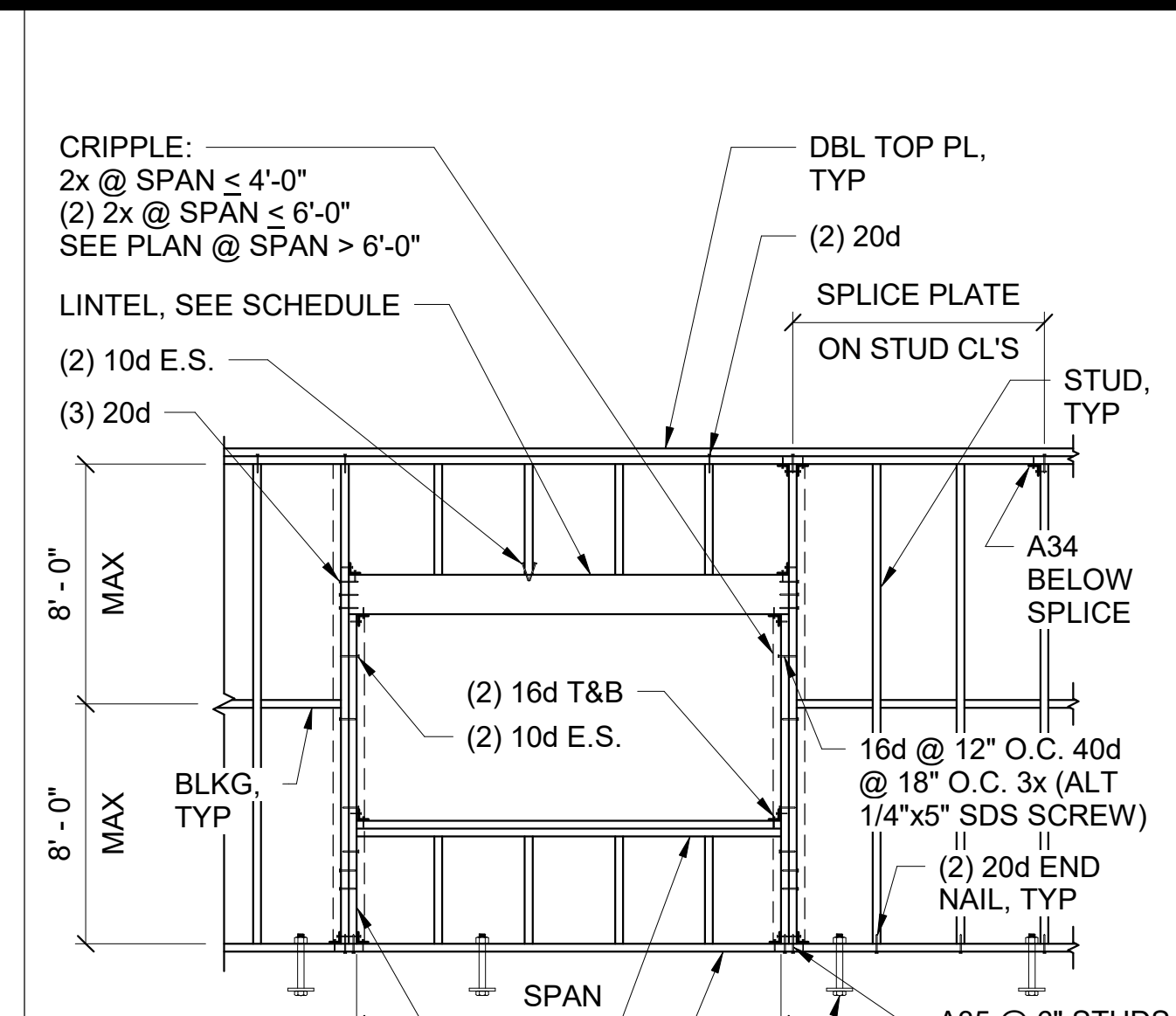
13 HOLES IN TOP PLATES
N.T.S.



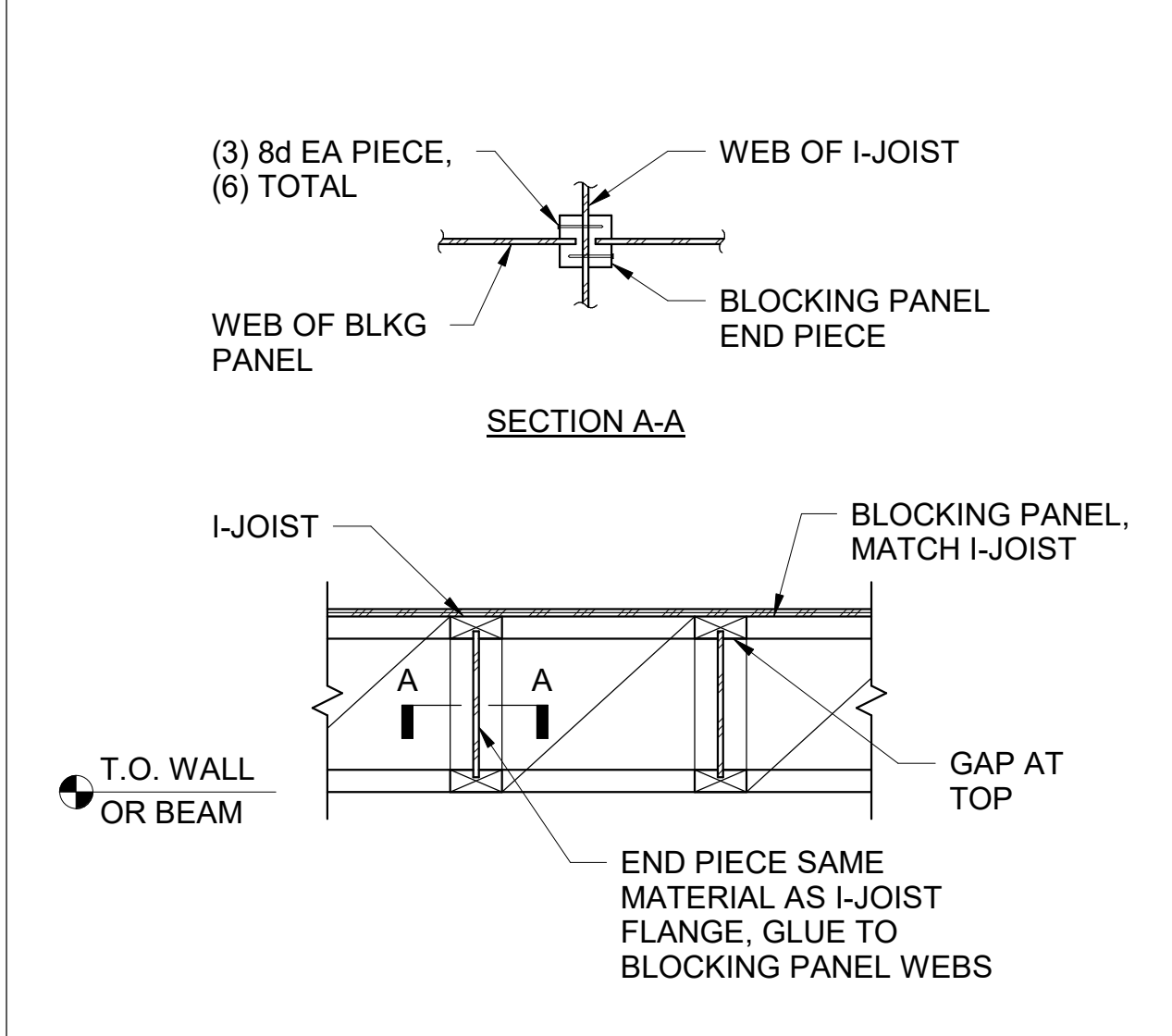
5 HSS COLUMN NAILER
N.T.S.



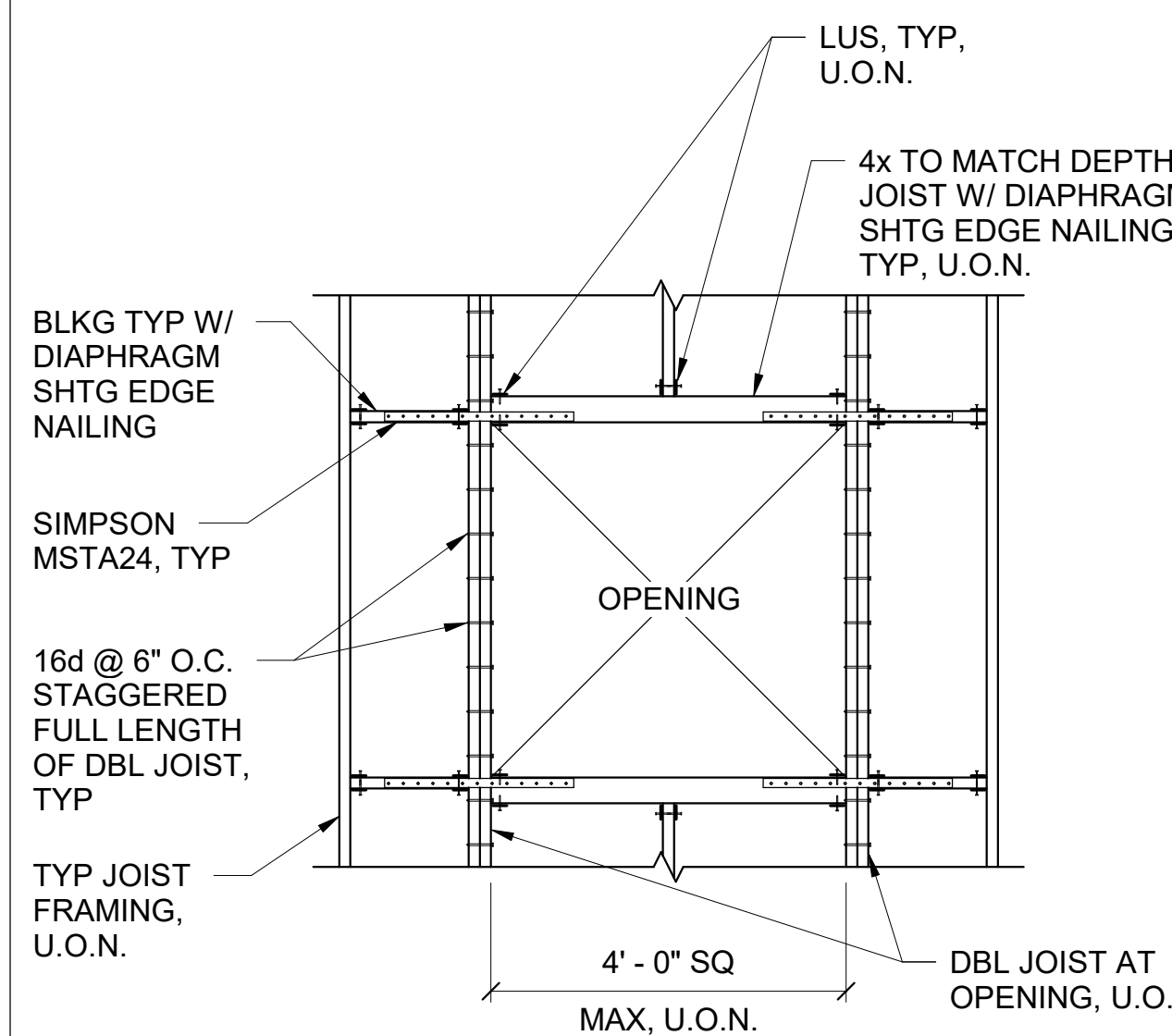
2 STUD WALL FRAMING
N.T.S.



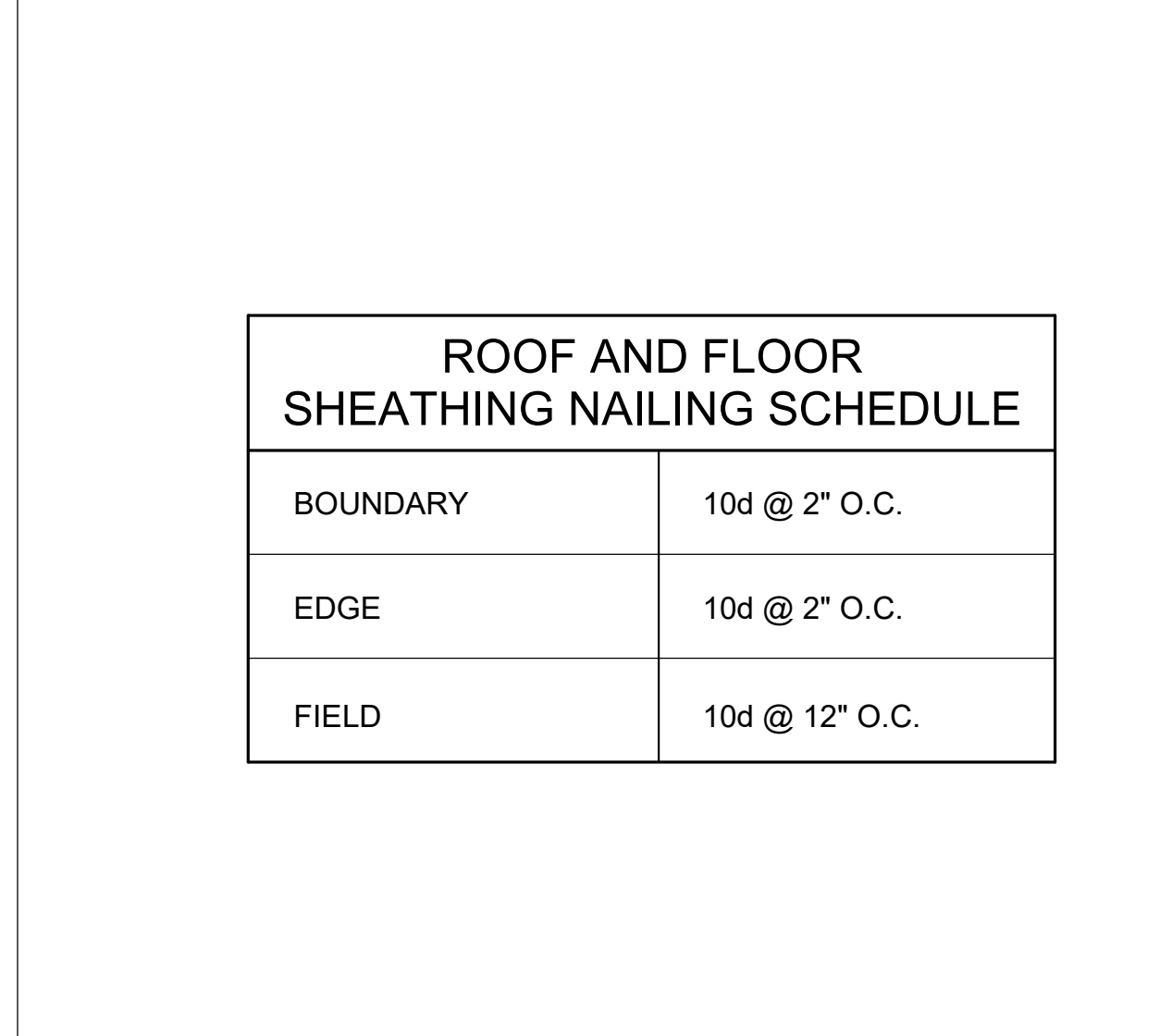
18 BLOCKING PANEL AT TJI JOIST
N.T.S.



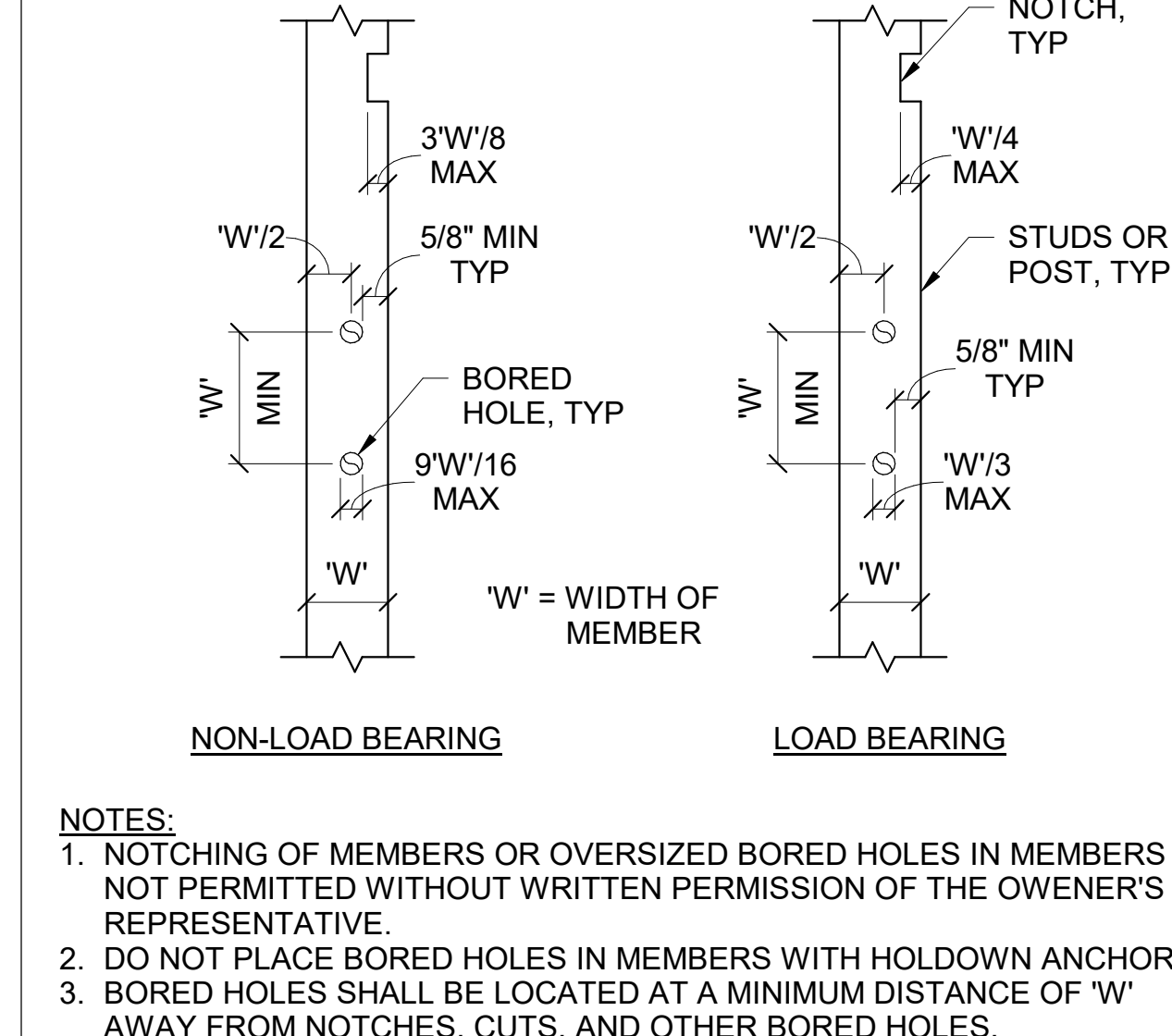
14 OPENING IN ROOF/FLOOR
N.T.S.



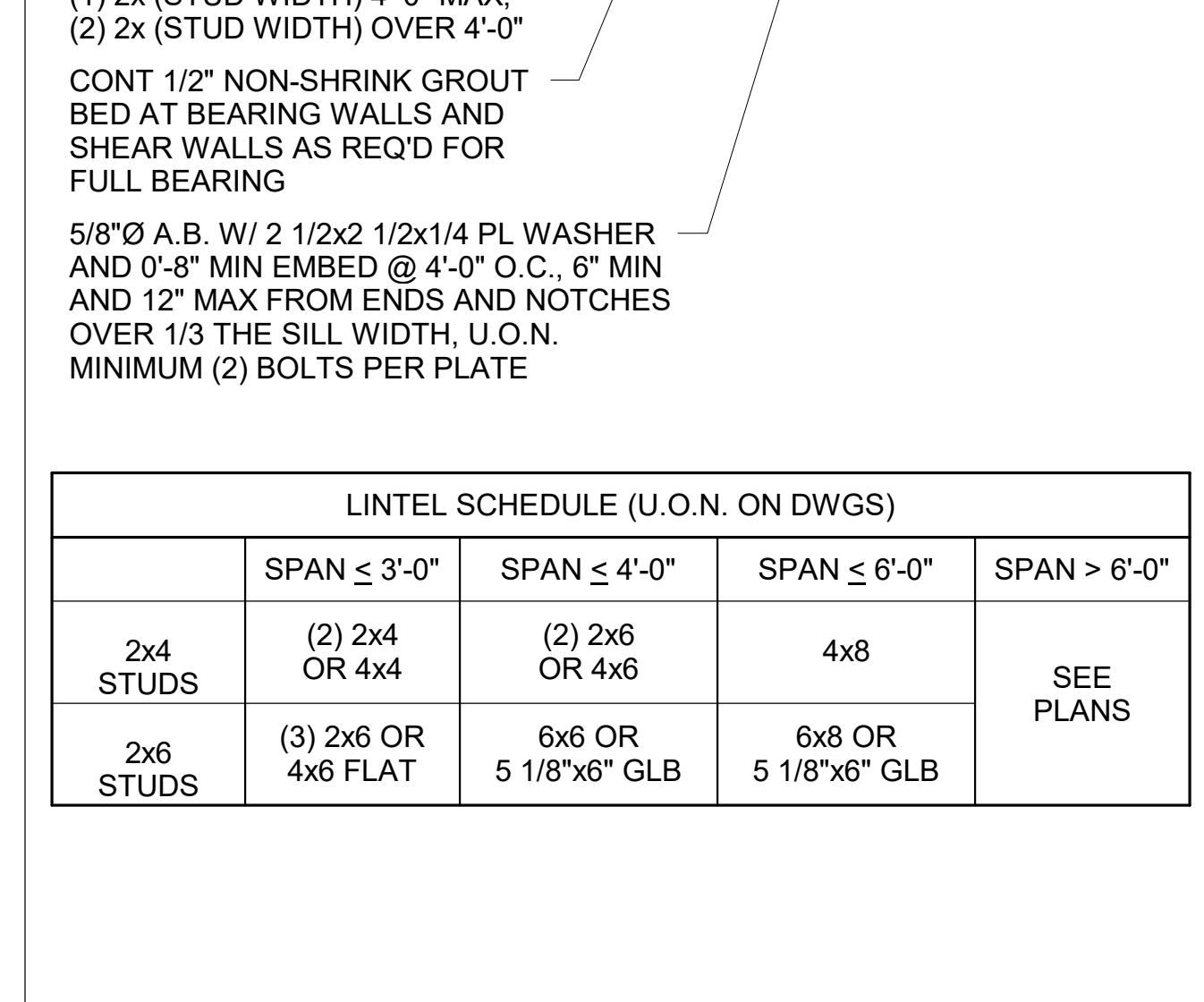
10 NAILING SCHEDULE
N.T.S.



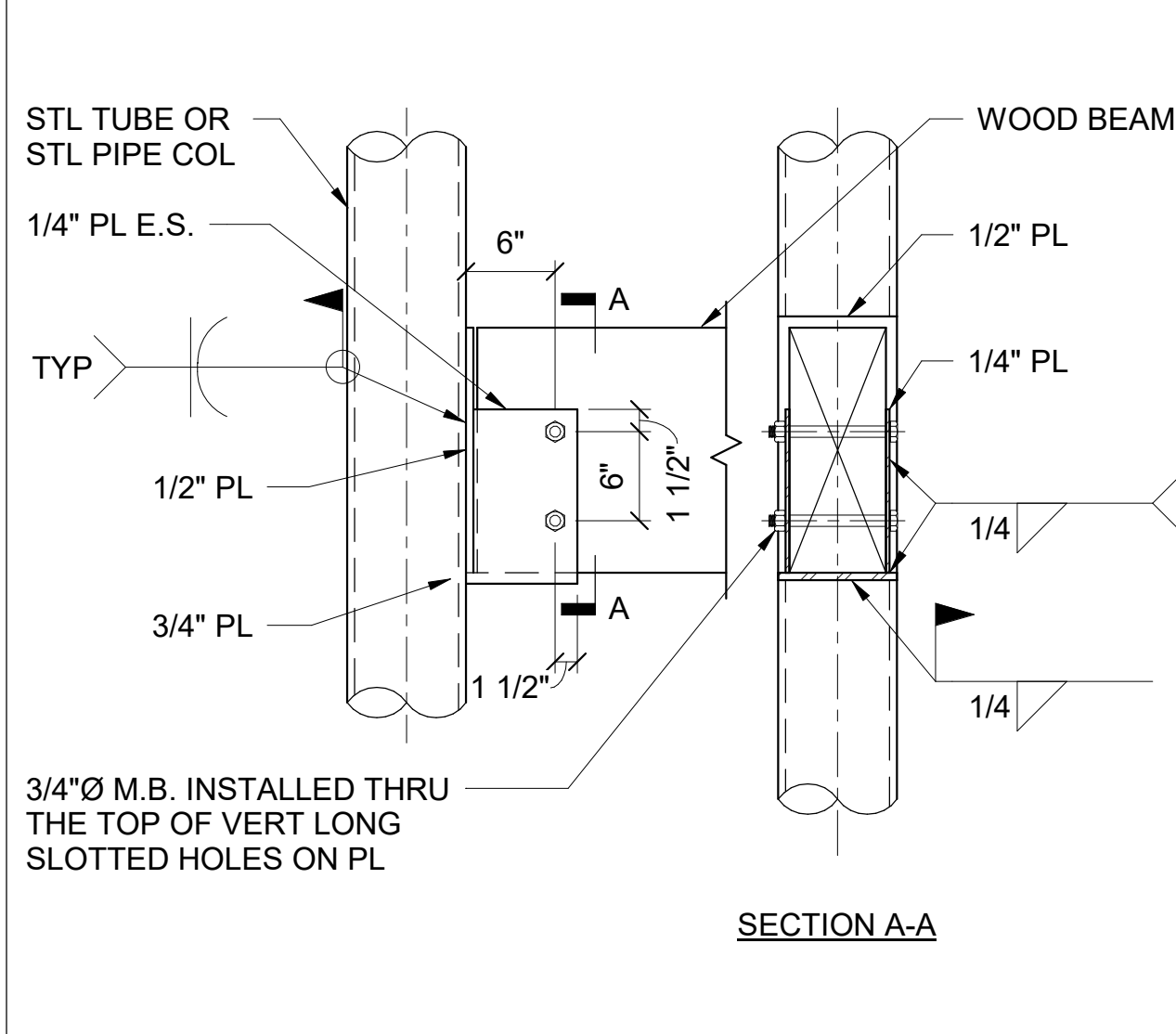
6 HOLES & NOTCHES IN STUDS OR POSTS
N.T.S.



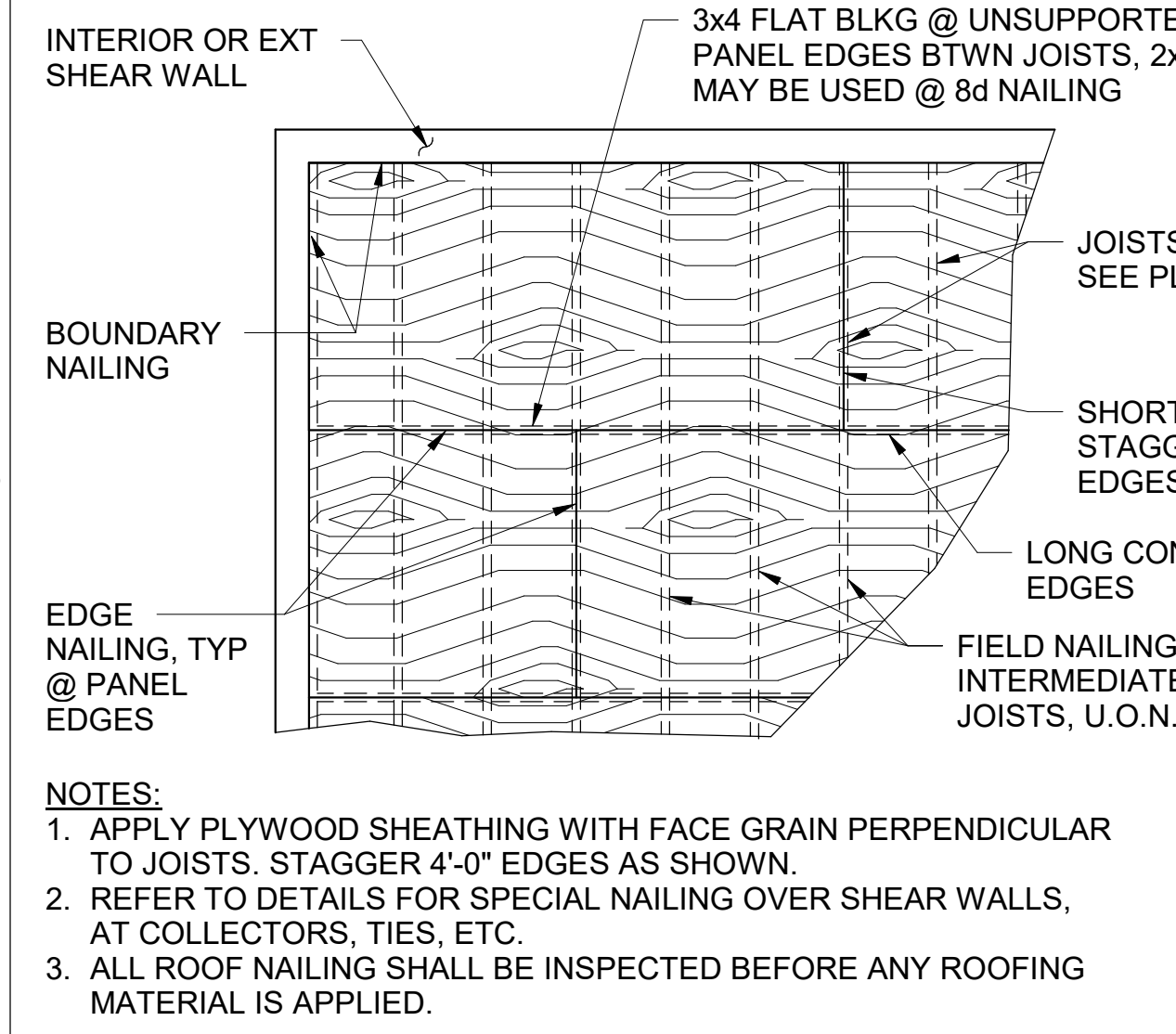
7 HOLES & NOTCHES IN BEAMS OR JOISTS
N.T.S.



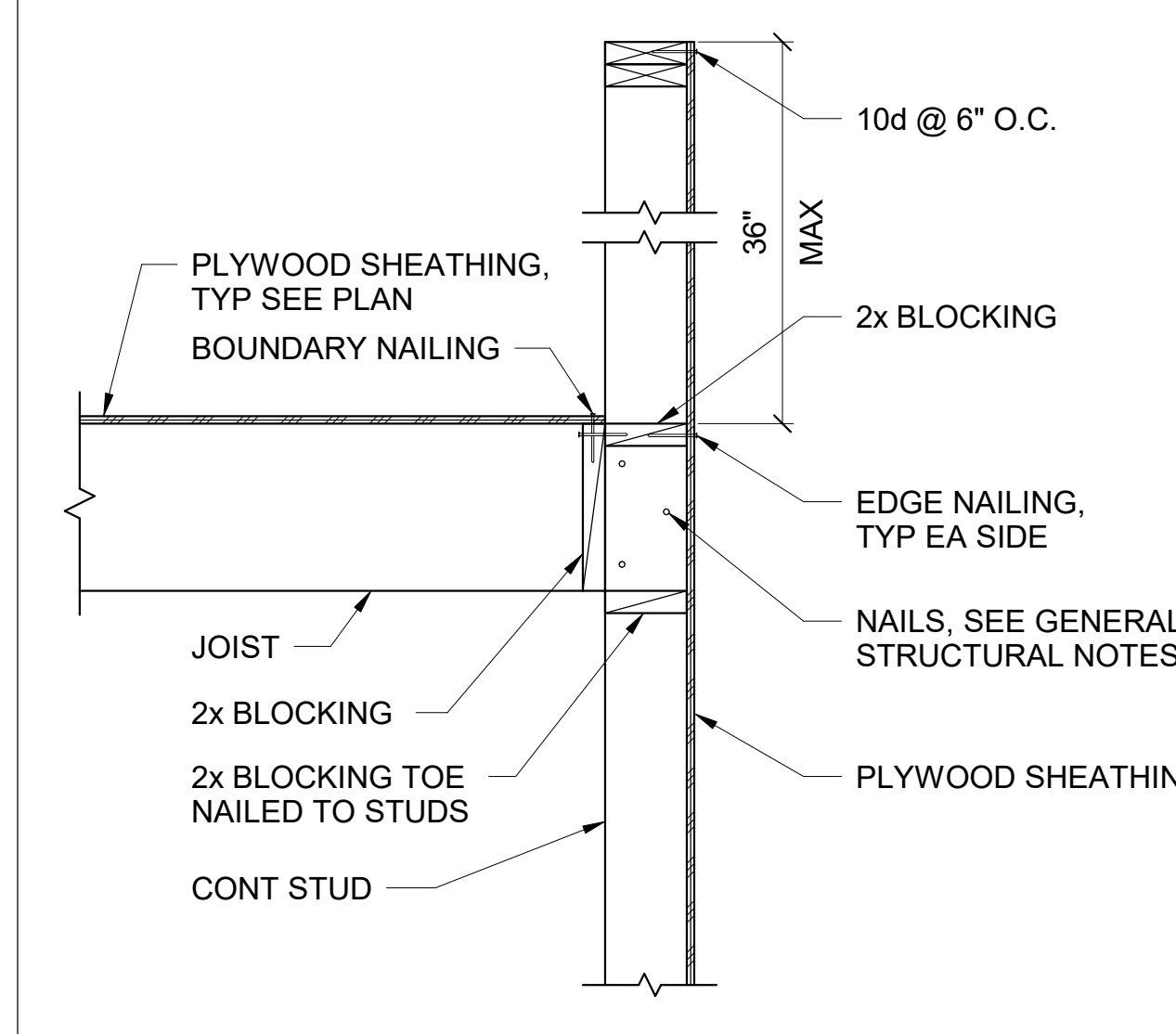
3 TOP PLATE SPLICE
N.T.S.



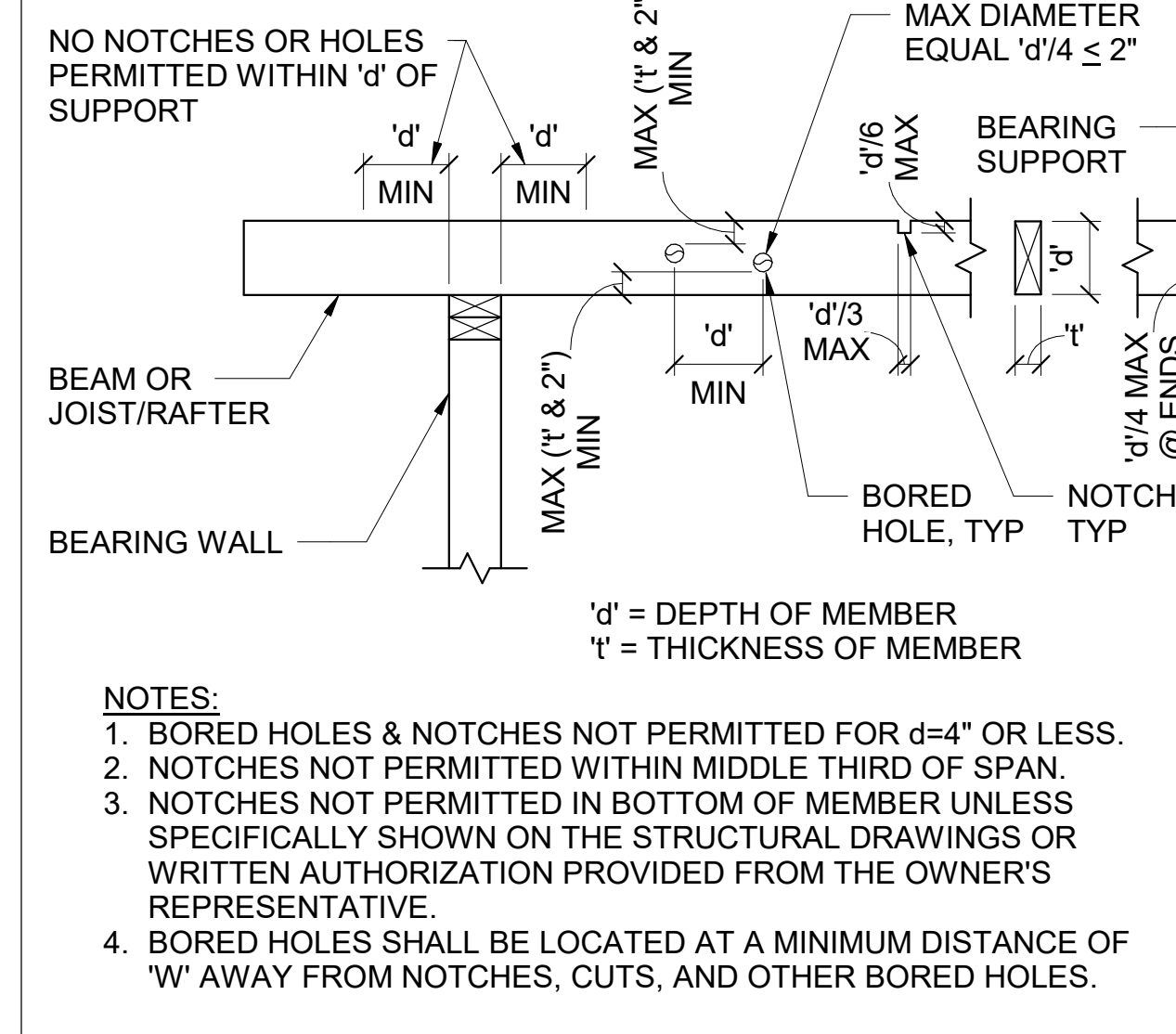
19 WOOD BEAM TO STEEL COLUMN
N.T.S.



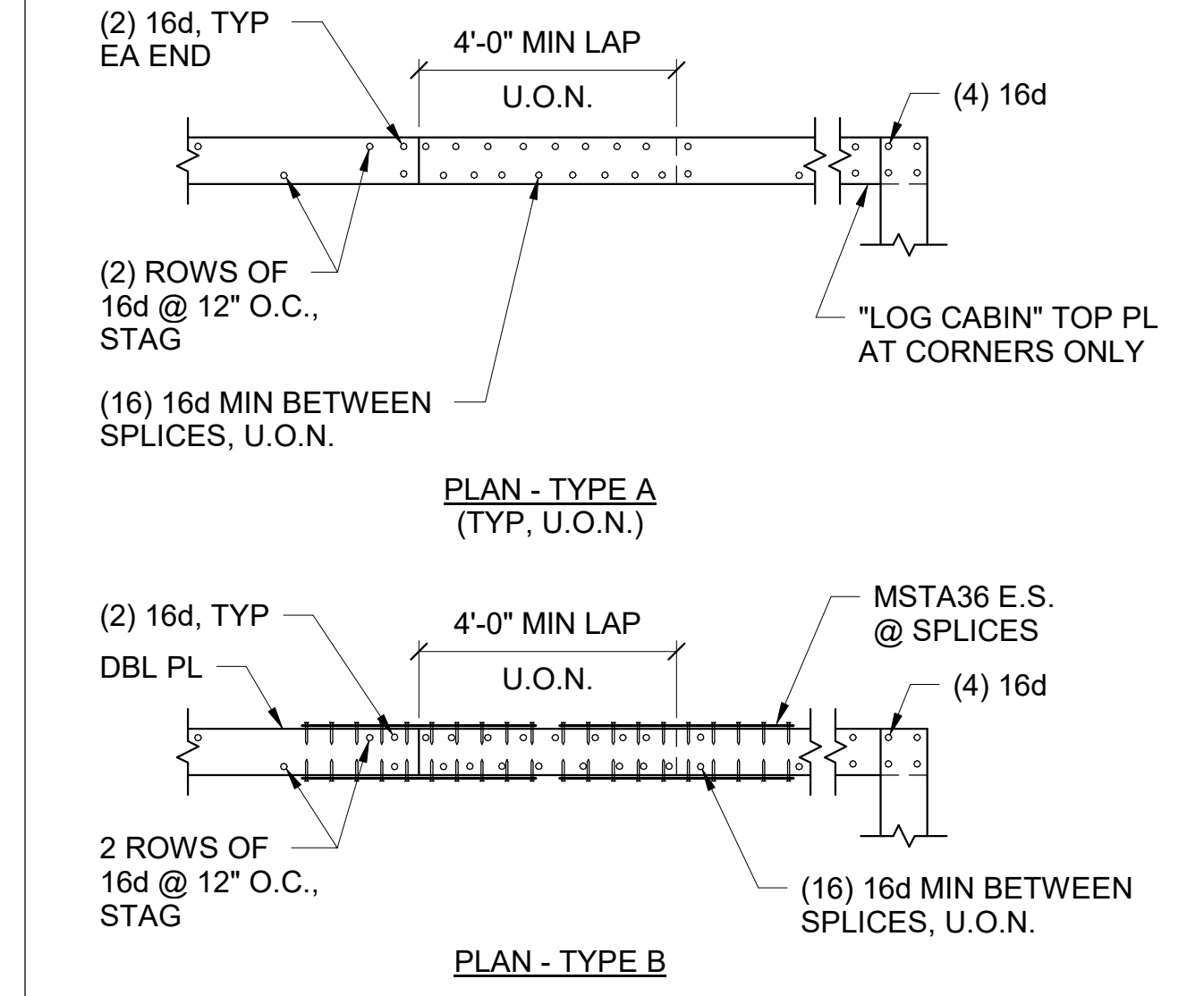
15 PLAN-ROOF & FLOOR SHEATHING
N.T.S.



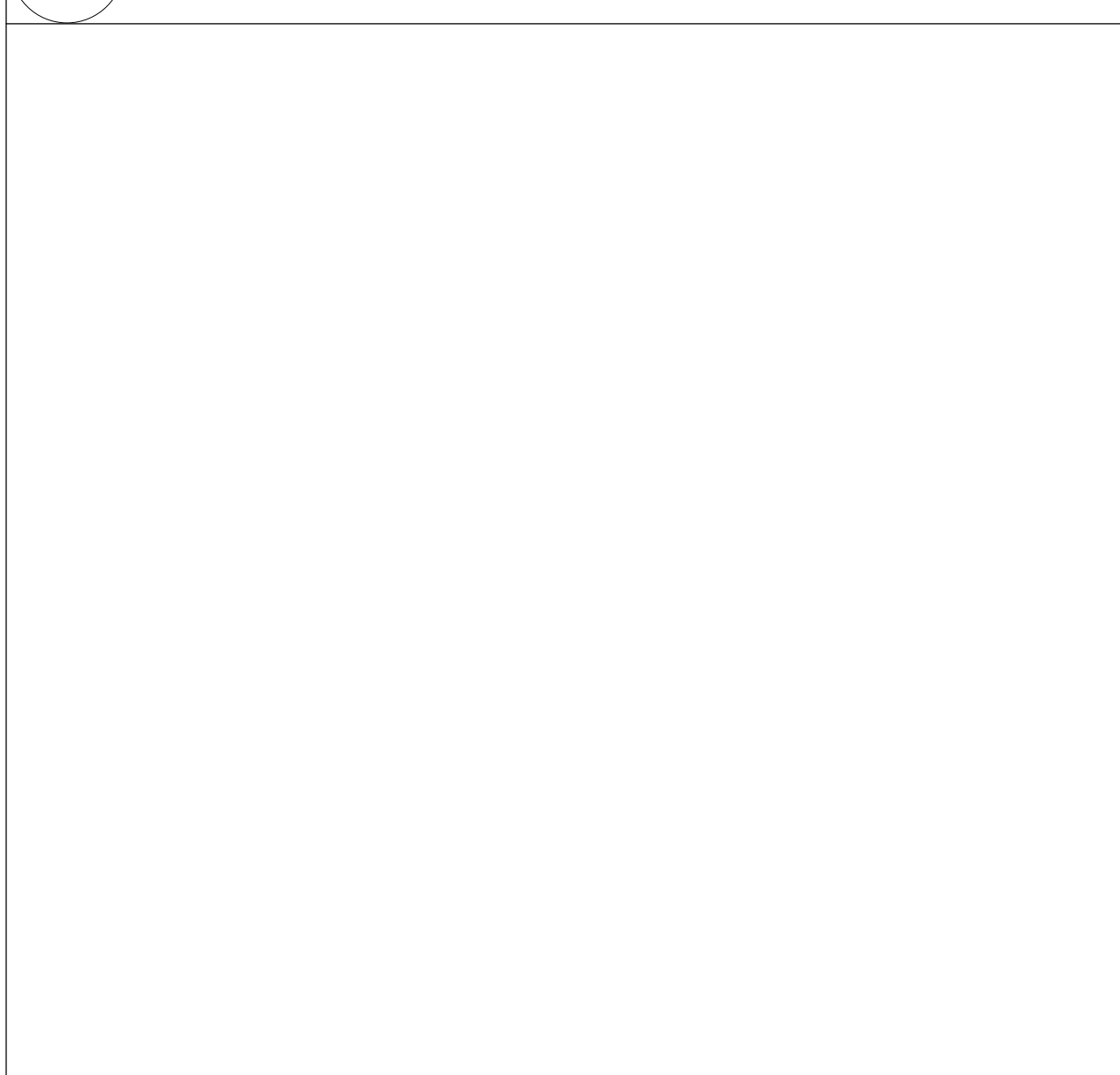
11 EXTERIOR WALL SECTION AT ROOF
N.T.S.



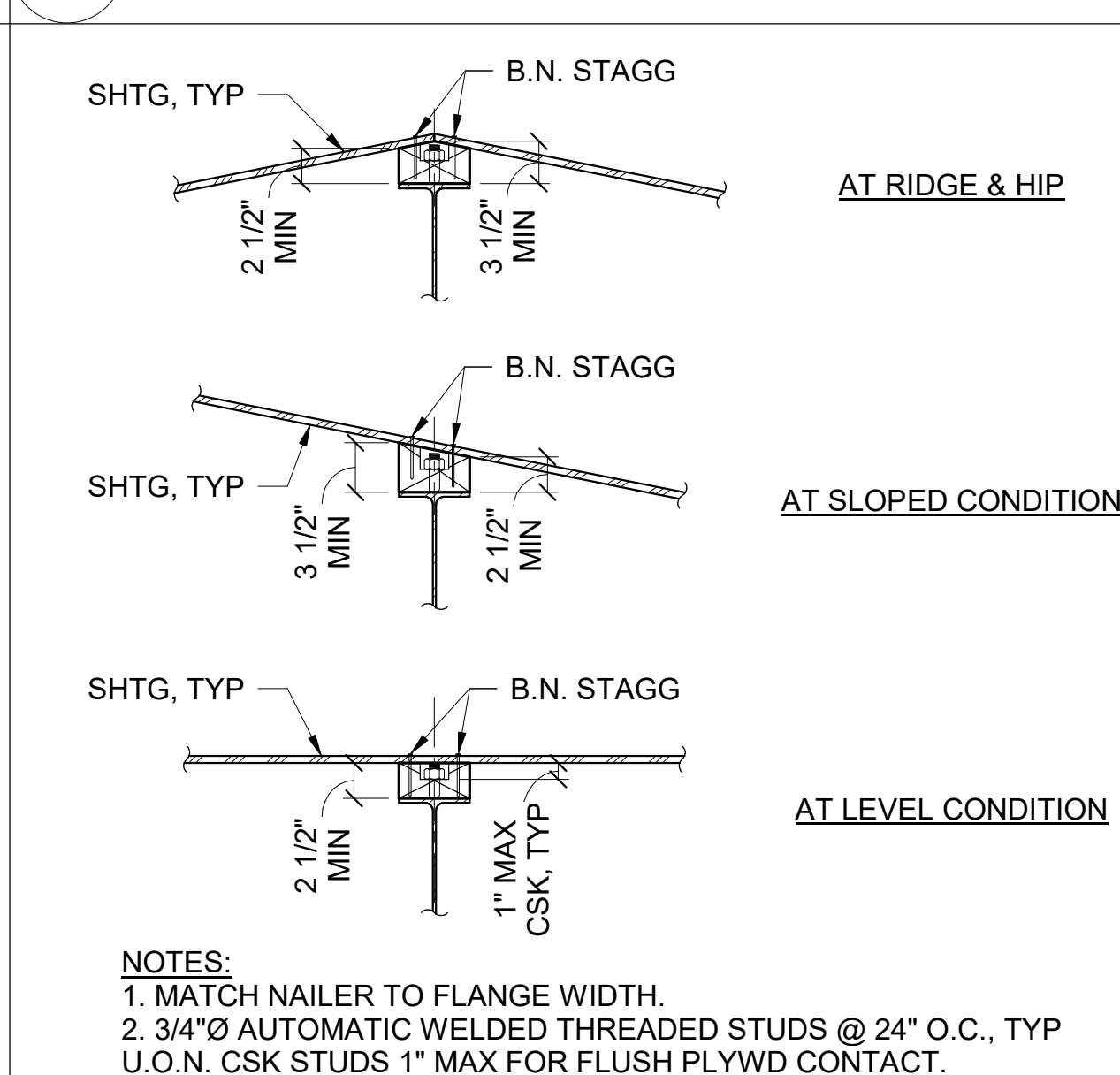
4 CORNER FRAMING AT SHEAR WALL & SHEATHED STUD WALL
N.T.S.



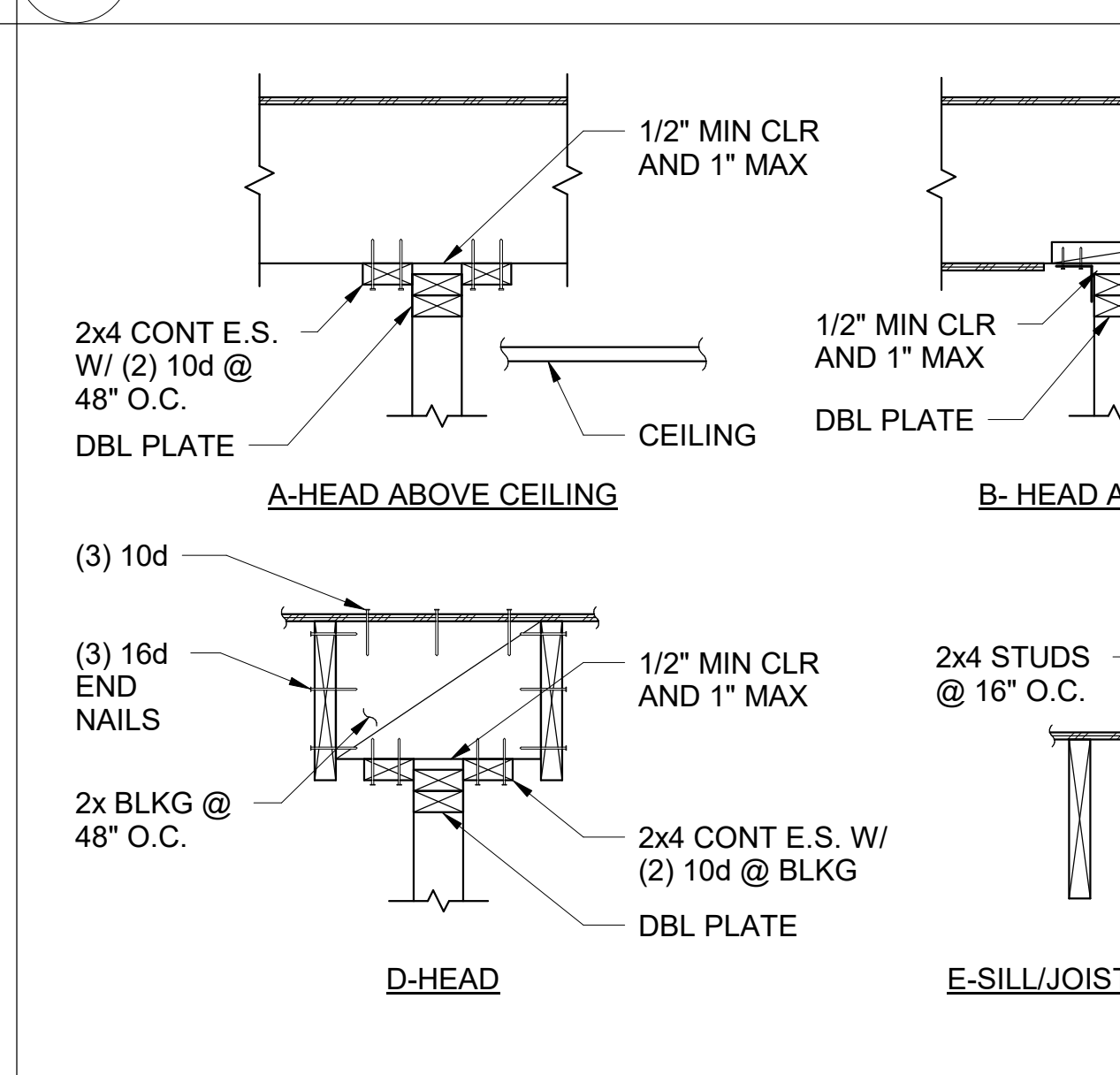
12 JOISTS AT NON-BEARING PARTITION
N.T.S.



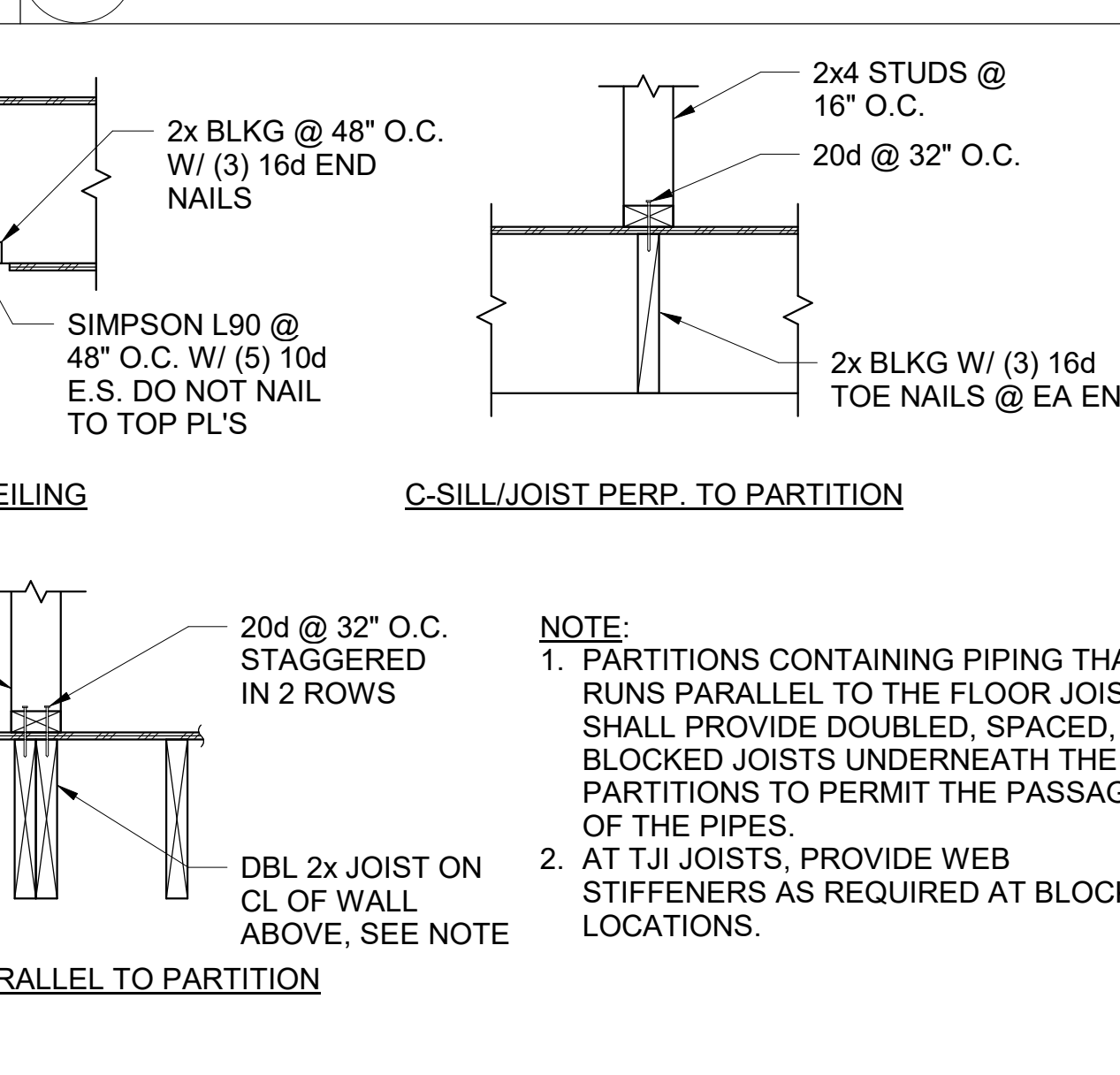
16 STEEL BEAM NAILERS
N.T.S.



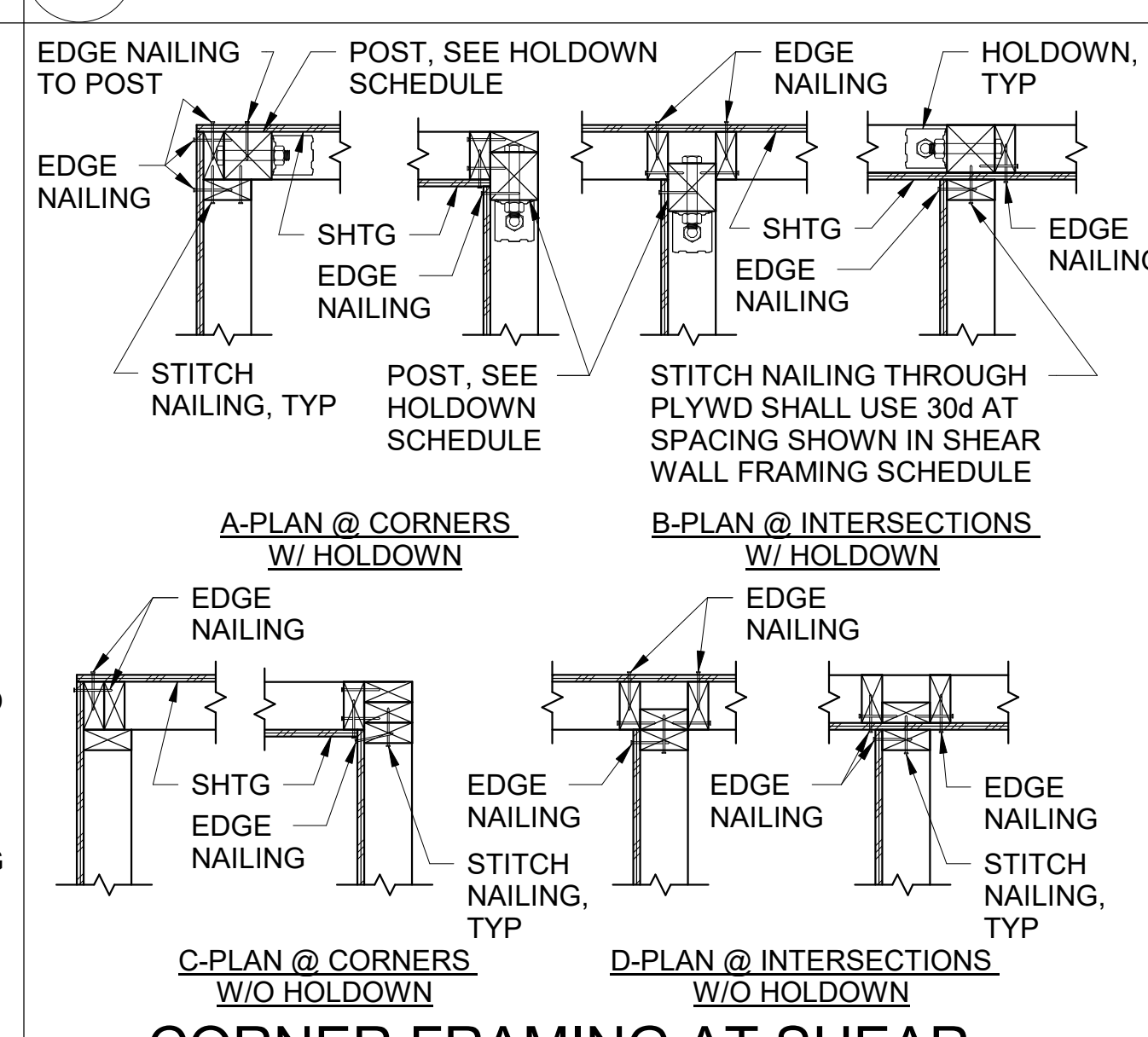
17 JOISTS PERPENDICULAR TO STEEL BEAM
N.T.S.



18 BLOCKING PANEL AT TJI JOIST
N.T.S.



19 WOOD BEAM TO STEEL COLUMN
N.T.S.



20 STEEL BEAM NAILERS
N.T.S.

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Seal / Signature

Project Name
HANGAR 10 RECONSTRUCTION

Project Number
25226

Description
TYPICAL WOOD DETAILS

Scale
As indicated

S1.030

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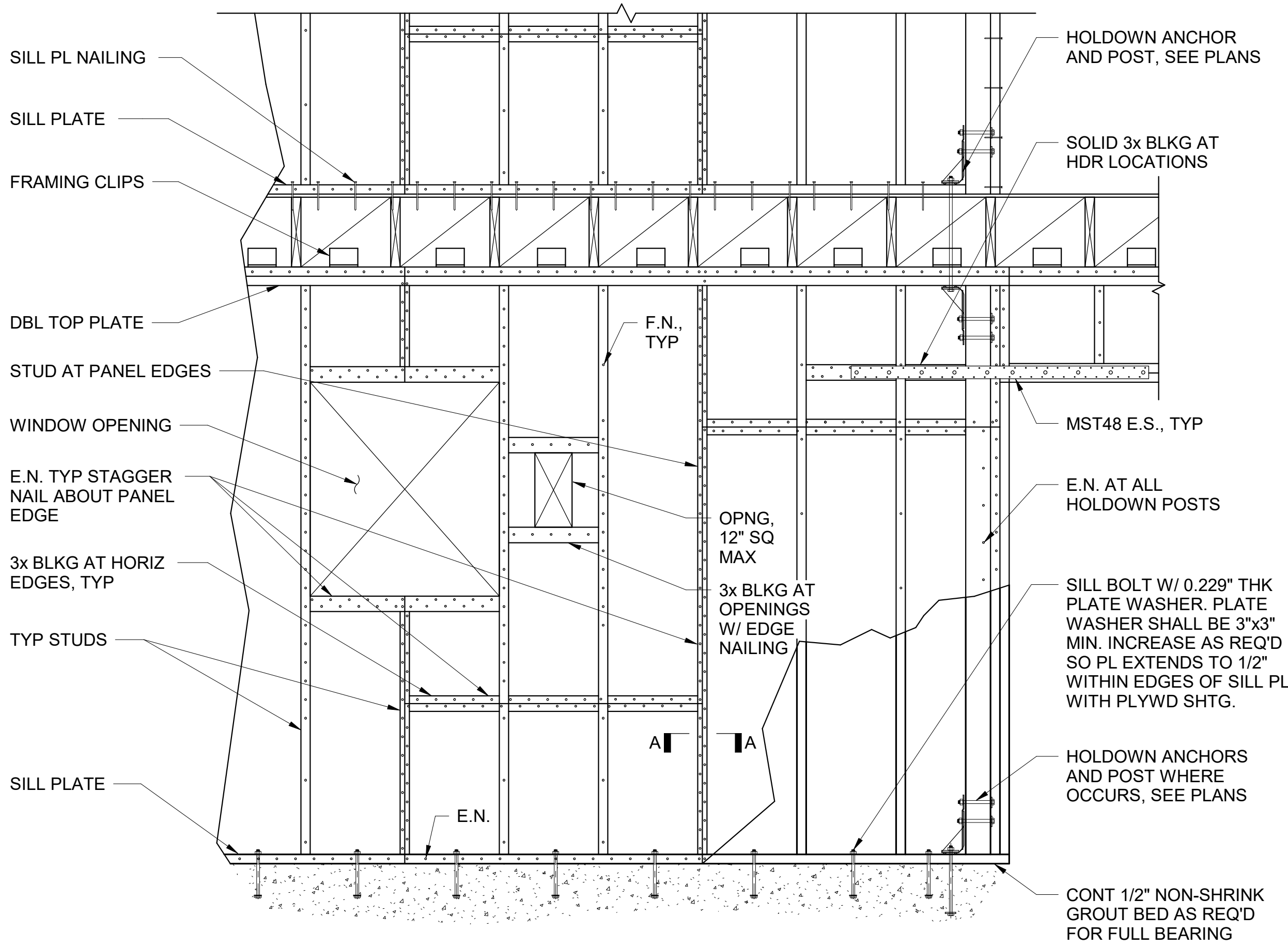
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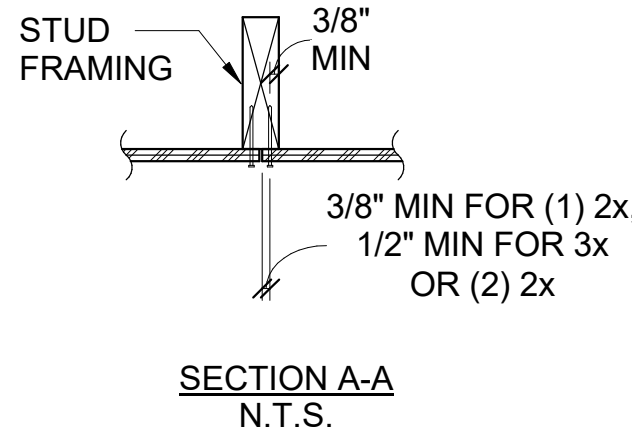
Project Name
HANGAR 10 RECONSTRUCTION
Project Number
25226
Description
TYPICAL WOOD DETAILS

Scale
As indicated

S1.031

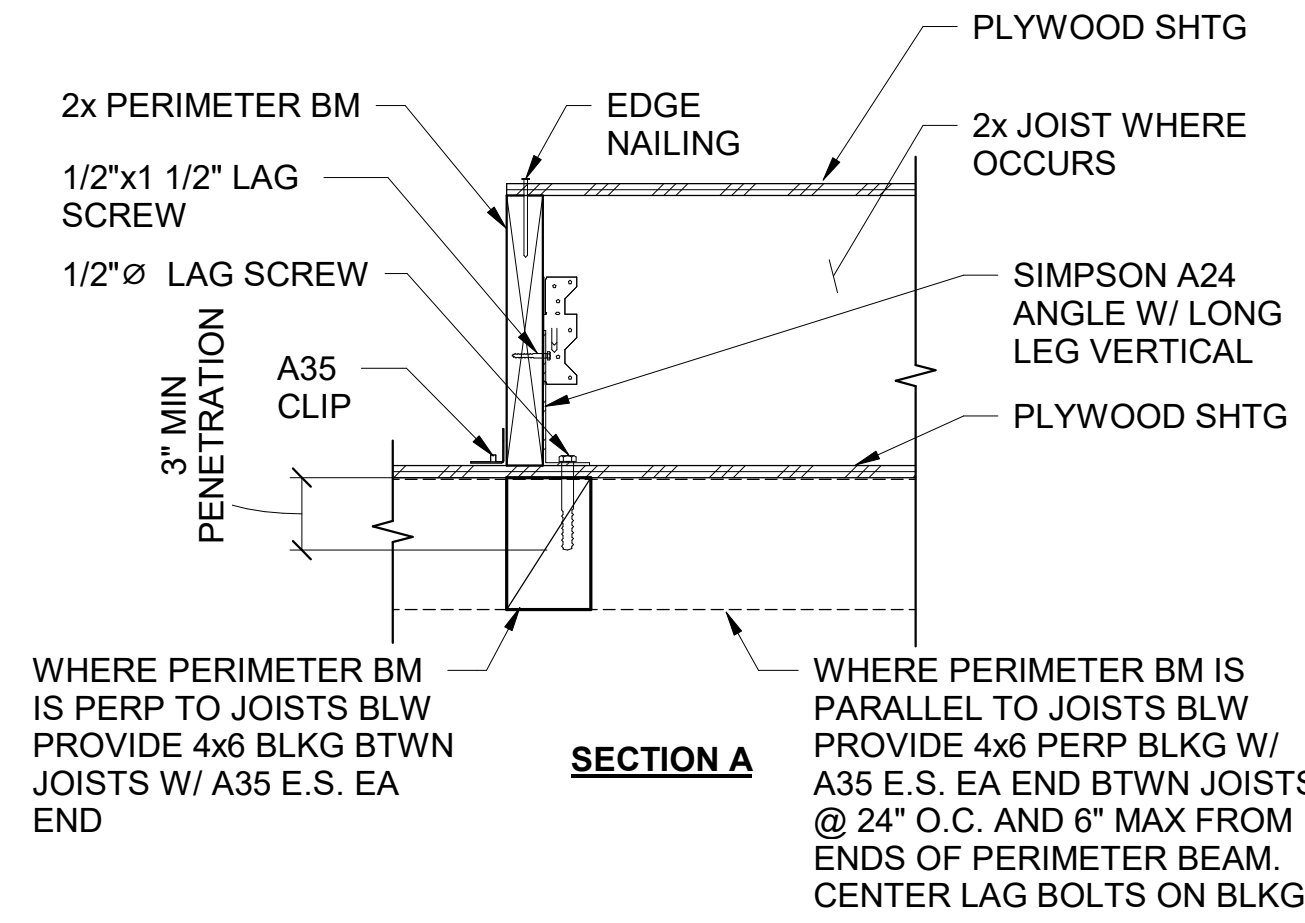
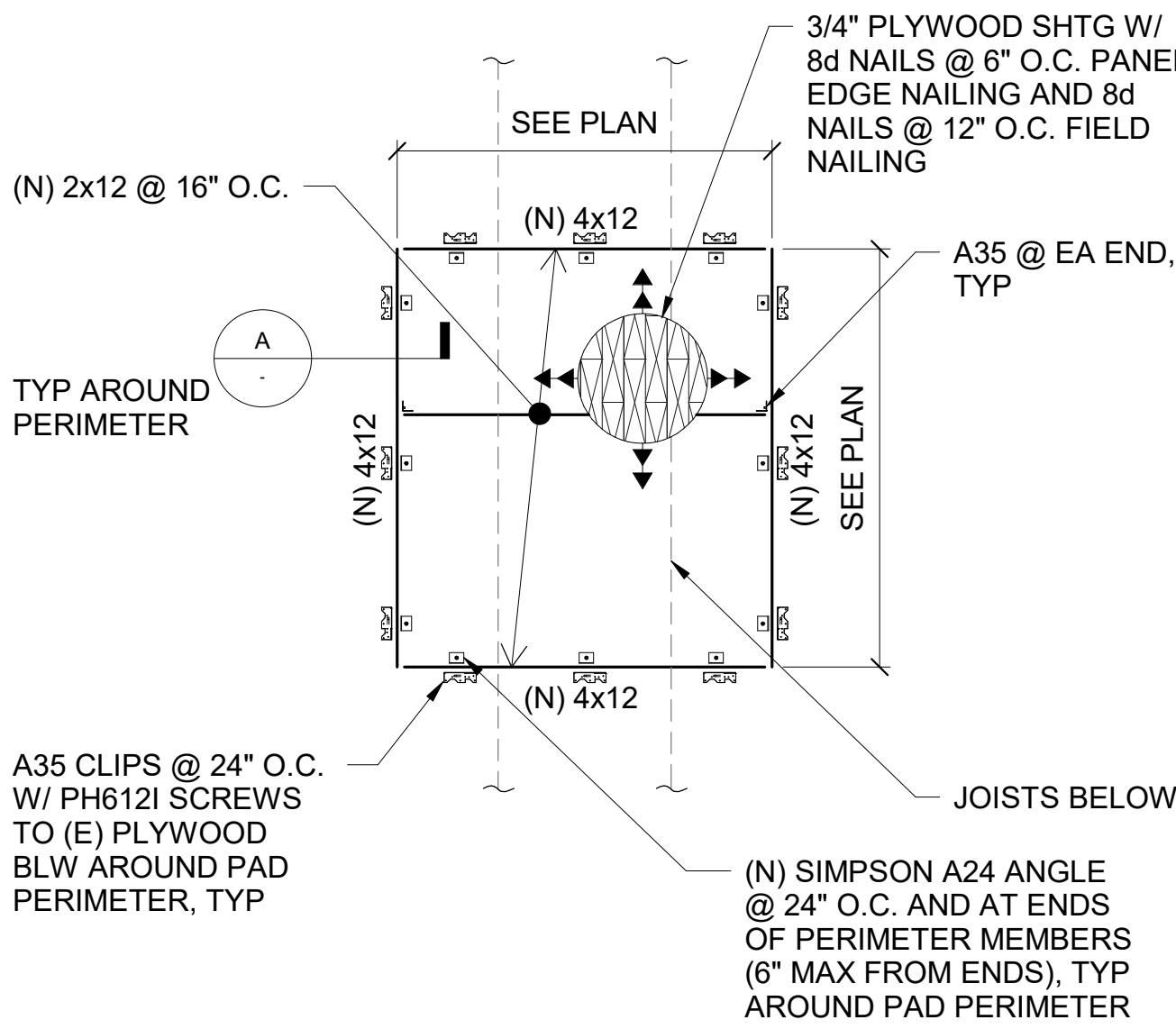


- NOTES:
- INDIVIDUAL PANEL PIECES SHALL NOT BE LESS THAN 2'-0" IN LEAST DIMENSION NOR LESS THAN 8 SQ FEET, U.O.N.
 - 2-SILL BOLTS MIN PER PIECE W/ 6" MIN AND 12" MAX FROM EA END. DO NOT CONSIDER HOLDOWN ANCHOR BOLTS AS SILL BOLTS.
 - PLACE PANELS ON SAME SIDE OF WALL AS SYMBOL SHOWN ON PLAN.
 - FOR WALLS WITH PANELS APPLIED ON BOTH FACES, OFFSET PANEL JOINTS TO FALL ON DIFFERENT FRAMING MEMBERS.
 - MAXIMUM ACCUMULATED LENGTH OF OPENINGS IN A SHEAR WALL SHALL NOT EXCEED MINIMUM OF 12" OR 10% OF SHEAR WALL LENGTH. HEIGHT OF OPENINGS SHALL NOT EXCEED 12"
 - NO CUTS OR HOLES IN SHEATHING WITHIN 16" OF CORNERS.
 - FOR WALLS WITH PANELS APPLIED ON BOTH FACES, SILL BOLT AND SILL PLATE NAILING SPACING SHALL BE HALVED AND FRAMING CLIPS SPACING SHALL BE HALVED OR CLIPS SHALL BE PROVIDED AT SPACING SHOWN IN SCHEDULE ON EACH SIDE OF WALL.



SHEAR PANEL SCHEDULE										
PANEL TYPE	SHEATHING	STITCH NAILING	EDGE NAILING	FIELD NAILING	SILL BOLT	SILL PLATE NAILING	SILL PLATE	STUDS AND HORIZ BLKG AT PANEL EDGES	TYP STUDS	FRAMING CLIPS
1	15/32" STRUCT I	16d @ 6" O.C.	10d @ 6" O.C.	10d @ 12" O.C.	1/2"Øx1'-0" @ 32" O.C.	20d @ 4" O.C.	3x6	3x6	2x6 @ 16" O.C.	A35 @ 16" O.C.
2	15/32" STRUCT I	16d @ 6" O.C.	10d @ 4" O.C.	10d @ 12" O.C.	1/2"Øx1'-0" @ 32" O.C.	20d @ 3" O.C.	3x6	3x6	2x6 @ 16" O.C.	A35 @ 12" O.C.

10 SHEAR WALL FRAMING
3/4" = 1'-0"



- NOTES:
- WOOD PAD SHALL BE SUPPORTED ON A MINIMUM (2) EXISTING ROOF JOISTS.
 - RIP (N) WOOD FRAMING TO MATCH ROOF SLOPE. MINIMUM DEPTH OF FRAMING = 8".
 - COORDINATE WITH MECHANICAL UNIT; UNIT SHALL ATTACH TO 4x FRAMING MEMBERS.
 - SLOPE AS REQUIRED, S.A.D. AND PROVIDE ROOFING/WATERPROOFING AS REQUIRED
 - EQUIPMENT ANCHORAGE TO CONTINUE DOWN INTO THE ROOF FRAMING.

4 TYPICAL WOOD PAD
N.T.S.

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

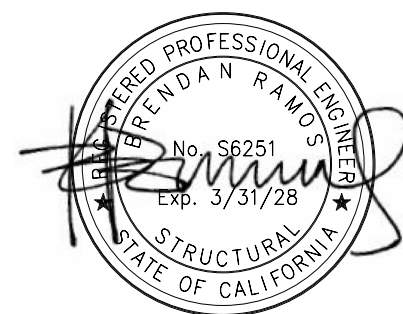
Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

Tel 949.863.9434
Fax 949.553.1676



19210 S. Vermont Ave.,
Bldg. B, Suite 210
Gardena, Ca 90248
Tel 310.323.9924



SHEET NOTES

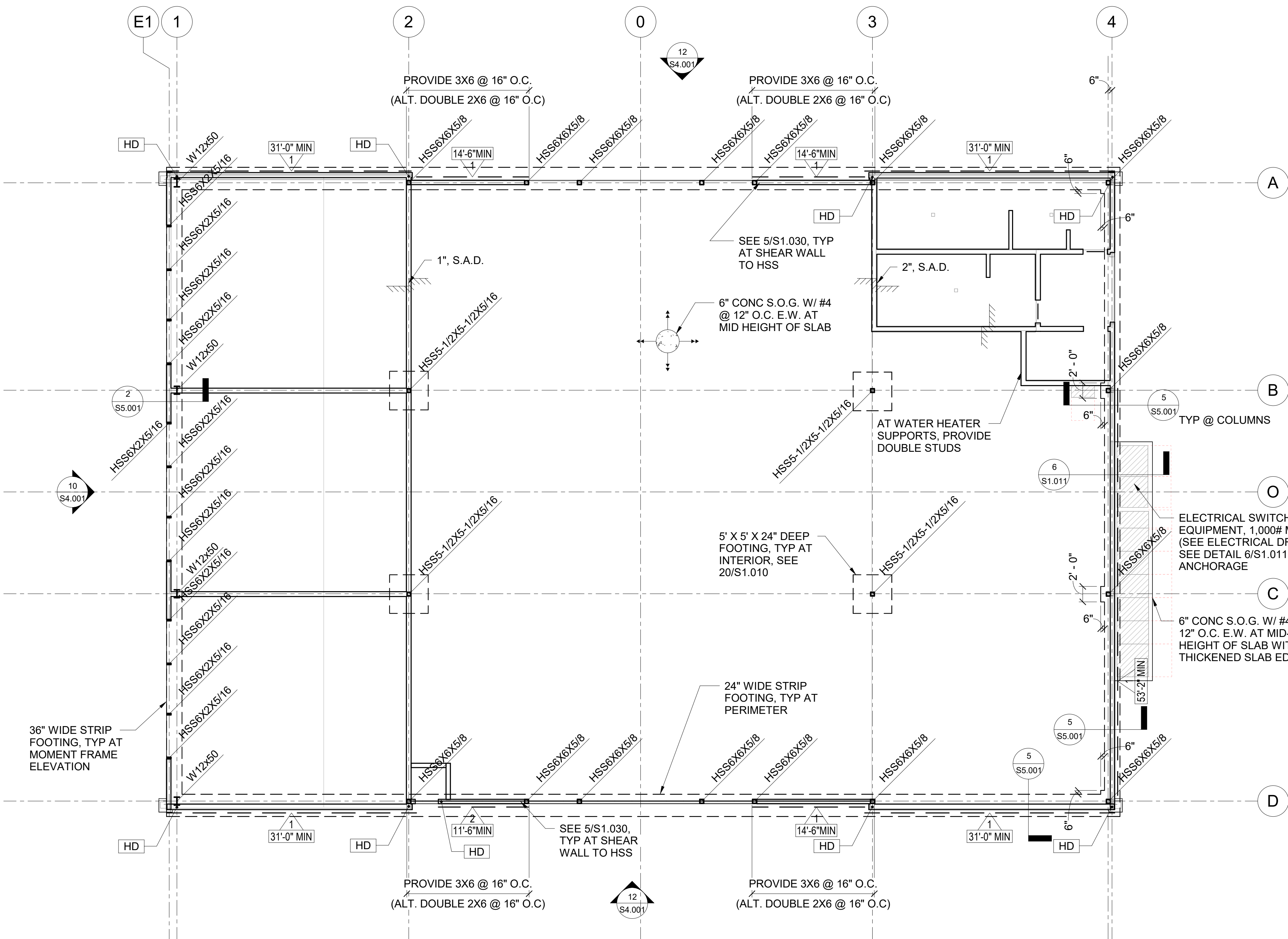
1. TOP OF SLAB-ON-GRADE = 0'-0" U.O.N.
2. TOP OF FOOTING SHALL BE A MINIMUM OF 1'-0" BELOW LOWEST ADJACENT TOP OF SLAB-ON-GRADE OR LOWEST ADJACENT GRADE U.O.N.
3. FOR DETAILS NOT SPECIFICALLY REFERENCED, SEE TYPICAL DETAILS SHEETS.
4. ALL FOUNDATION EXCAVATIONS SHALL BE OBSERVED AND APPROVED BY THE PROJECT ENGINEER GEOLOGIST AND/OR PROJECT GEOTECHNICAL ENGINEER PRIOR TO PLACEMENT OF REINFORCING STEEL.
5. COORDINATE THE LOCATION OF SLAB DEPRESSIONS AND OPENINGS WITH ARCHITECTURAL AND MEP DRAWINGS.
6. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS NOT SHOWN.
7. COLD FORMED STEEL FRAMING FOR INTERIOR PARTITION WALLS & EXTERIOR FAÇADE WALLS ARE A DESIGN-BUILD ITEM BY OTHERS.
8. SEE ARCHITECTURAL DRAWINGS FOR CURB LOCATIONS, DIMENSIONS, AND HEIGHTS. SEE TYPICAL DETAIL ON 1/S1.011.
9. POST-INSTALLED ANCHORS SHALL NOT BE USED AS ALTERNATES UNLESS THEY ARE SPECIFIED ON THE PLANS OR PRE-APPROVED BY THE SEOR AND SUBMITTED TO THE CITY FOR REVIEW AND APPROVAL.

PLAN SYMBOLS

FOR ADDITIONAL SYMBOLS NOT SHOWN, SEE SHEET S1.005

- INDICATES PLYWOOD SHEAR WALL
- INDICATES PANEL TYPE, SEE SCHEDULE
- INDICATES LENGTH OF PLYWOOD SHEAR WALL, 'F' INDICATES FULL EXTENT AS SHOWN IN DWG.
- INDICATES (N) 2X6 WALL STUDS @ 16" O.C. U.O.N. ALL INTERIOR WALLS ARE NON-BEARING PARTITIONS, SEE TYPICAL DETAILS
- INDICATES SIMPSON HDU11 HOLDOWN WITH 6x6 END POST AND 1"Ø. CAST IN PLACE ANCHOR BOLT WITH 14" EMBED INTO STRIP FOOTING

KEY PLAN



1 CONSTRUCTION PLAN

1/8" = 1'-0"

Date	Description
10/14/2025	CD CLIENT REVIEW/PRICING
11/03/2025	ISSUE FOR PLAN CHECK
01/09/2025	ADDENDUM A/PLAN CHECK COMMENTS
05/07/2026	BID SET

Seal / Signature

Project Name
HANGAR 10
RECONSTRUCTION
Project Number
25226
Description
CONSTRUCTION PLAN

Scale
As indicated
Ref North

S1.100

410 BEACON
IRVINE, CA 92618

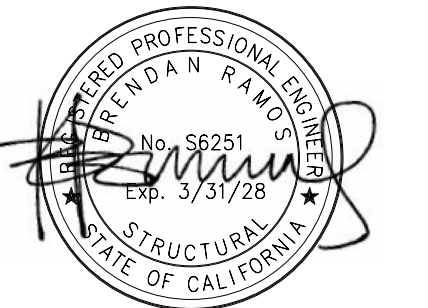
Gensler

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Tel 310.323.9924




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SHEET NOTES

1. FOR DETAILS NOT SPECIFICALLY REFERENCED, SEE
TYPICAL DETAILS SHEETS.
2. HIGH ROOF :
DESIGN DEAD LOAD: 20 PSF
DESIGN ROOF LIVE LOAD: 20 PSF
LOW ROOF:
DESIGN DEAD LOAD: 20 PSF
DESIGN ROOF LIVE LOAD: 50 PSF
3. COORDINATE THE LOCATION OF OPENINGS WITH
ARCHITECTURAL AND MEP DRAWINGS.
4. PROVIDE SIMPSON BA1.81 TOP FLANGE HANGERS AT LVL
JOISTS. PROVIDE SIMPSON HWHP3.56 TOP FLANGE
HANGERS AT TJ1 JOISTS.
5. PROVIDE FULL DEPTH BLOCKING AT 1/3 POINTS FOR
HIGH ROOF JOISTS.

PLAN SYMBOLS

FOR ADDITIONAL SYMBOLS NOT SHOWN, SEE SHEET S1.005

- H**  SIMPSON STRONG-TIE YIELD LINK MOMENT
RESISTING BEAM-COLUMN CONNECTIONS, SEE
DETAILS

KEY PLAN

Seal / Signature

Project Name

HANGAR 10 RECONSTRUCTION

Project Number

Category	Description
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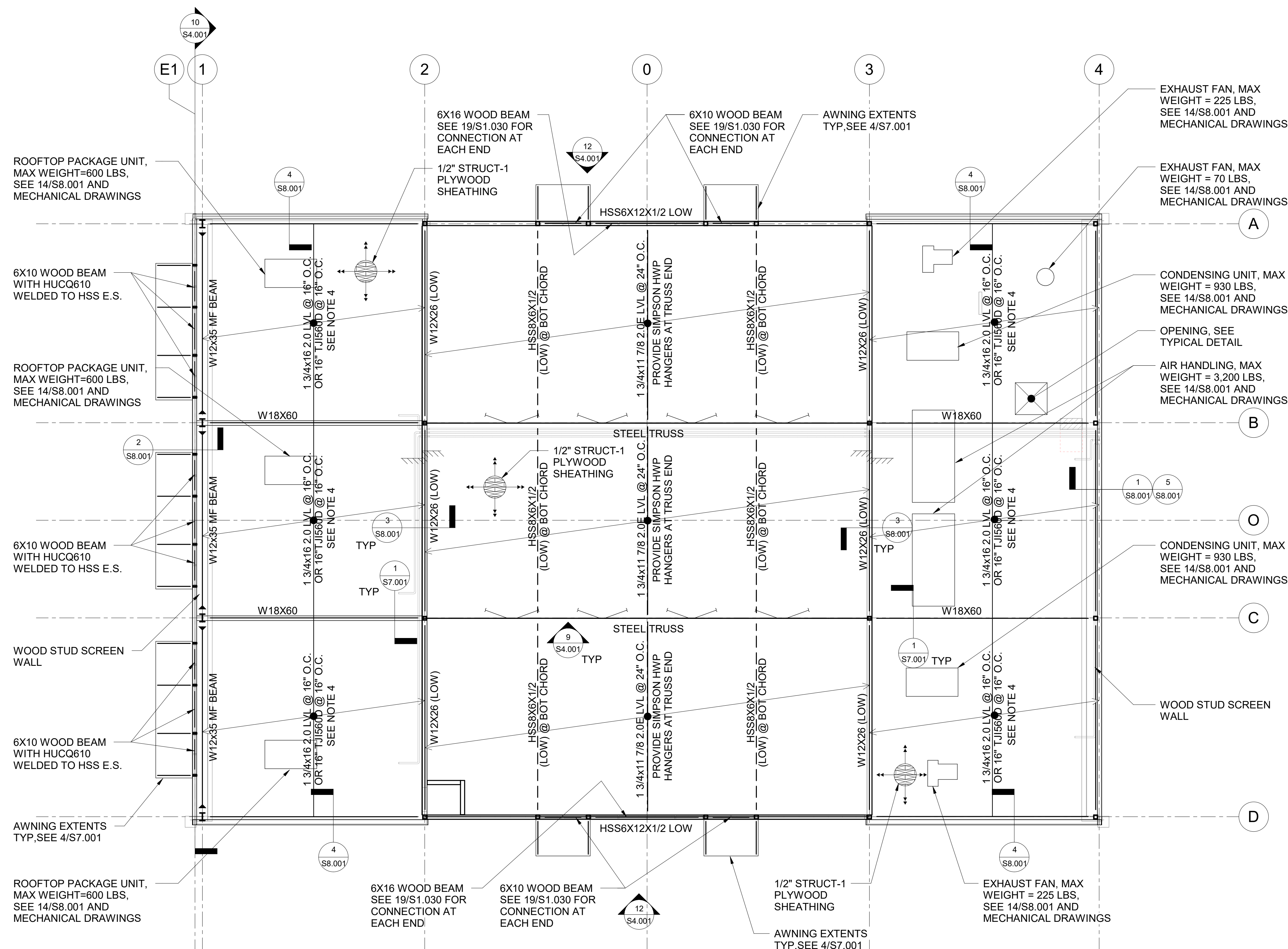
ROOF PLAN

Scale

As indicated

S1.102

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1 ROOF PLAN
1/8" = 1'-0"

$$1/8'' = 1'-0''$$

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

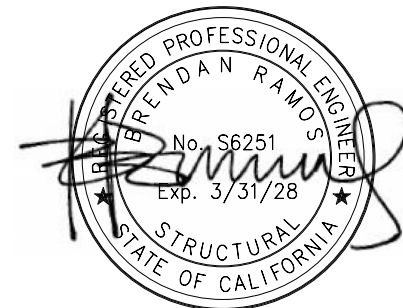
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IRVINE, CA 92618

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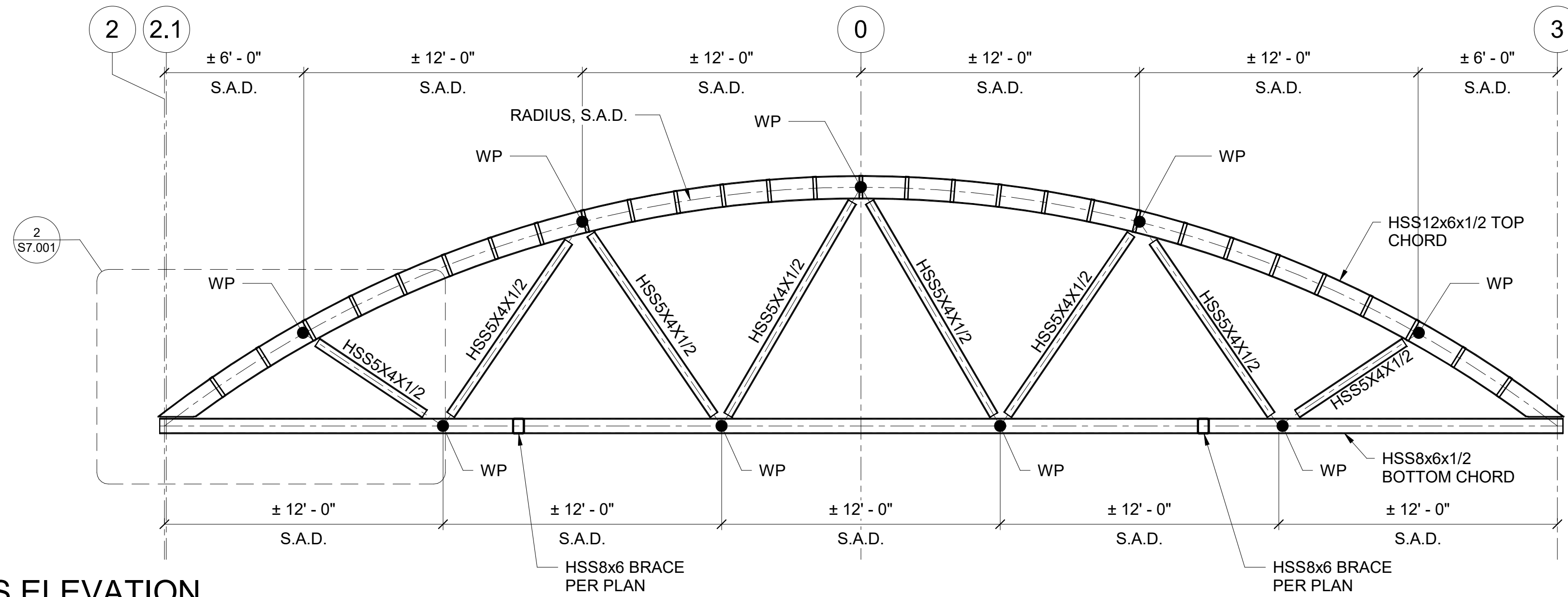
Seal / Signature

Project Name
HANGAR 10
RECONSTRUCTION
Project Number
25226
Description
ELEVATIONS

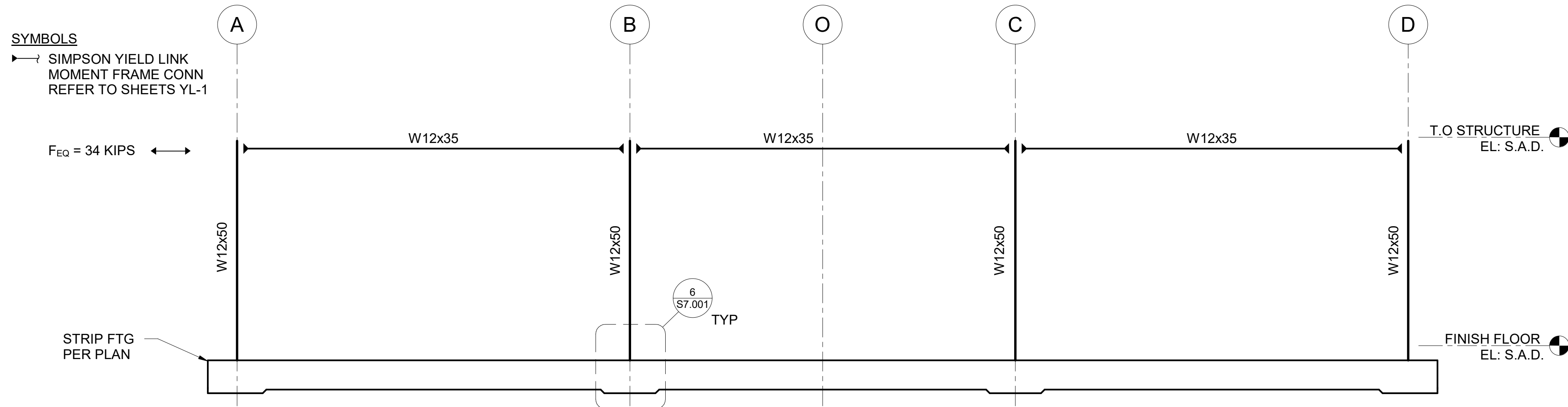
Scale
As indicated

S4.001

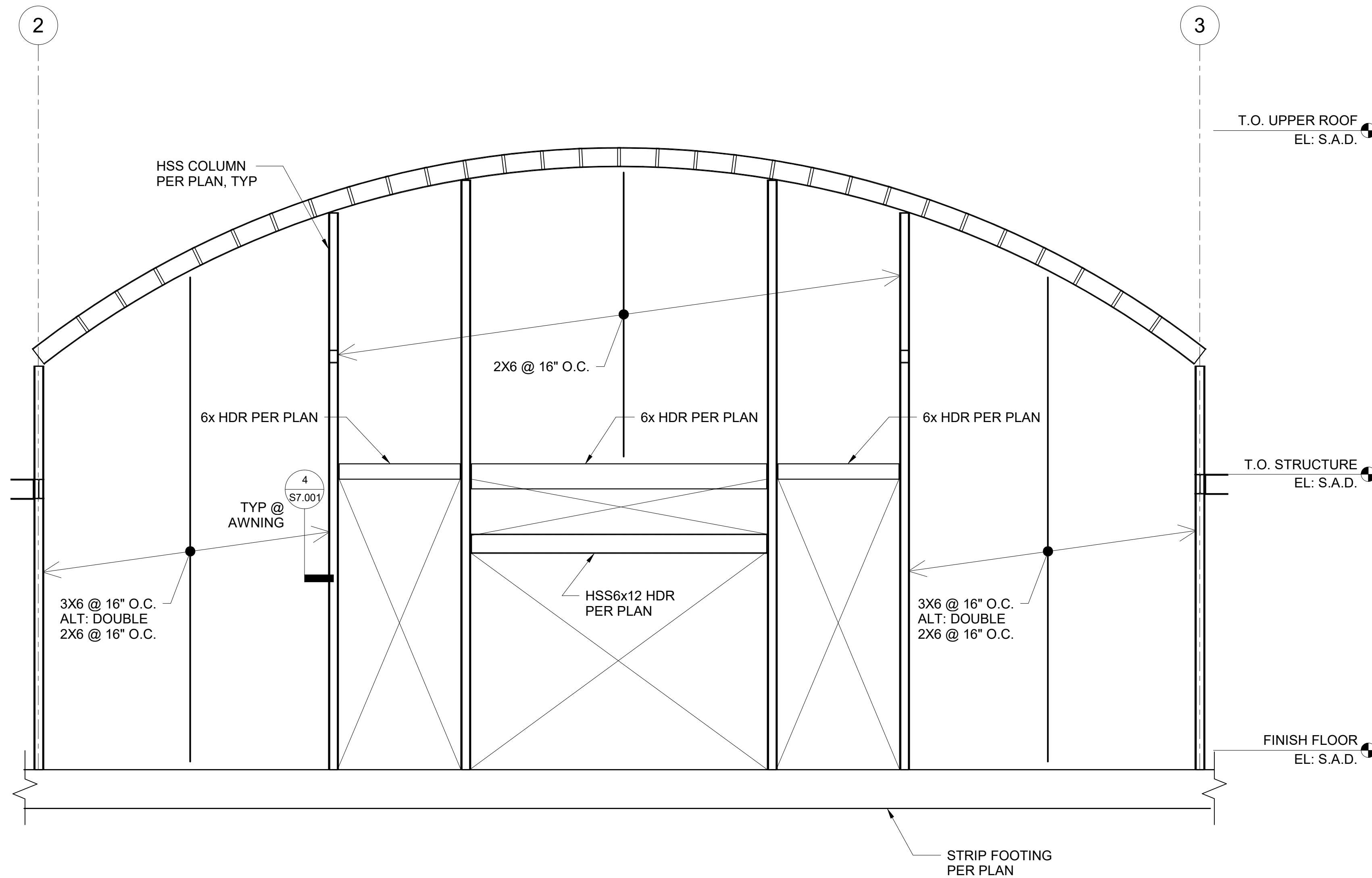
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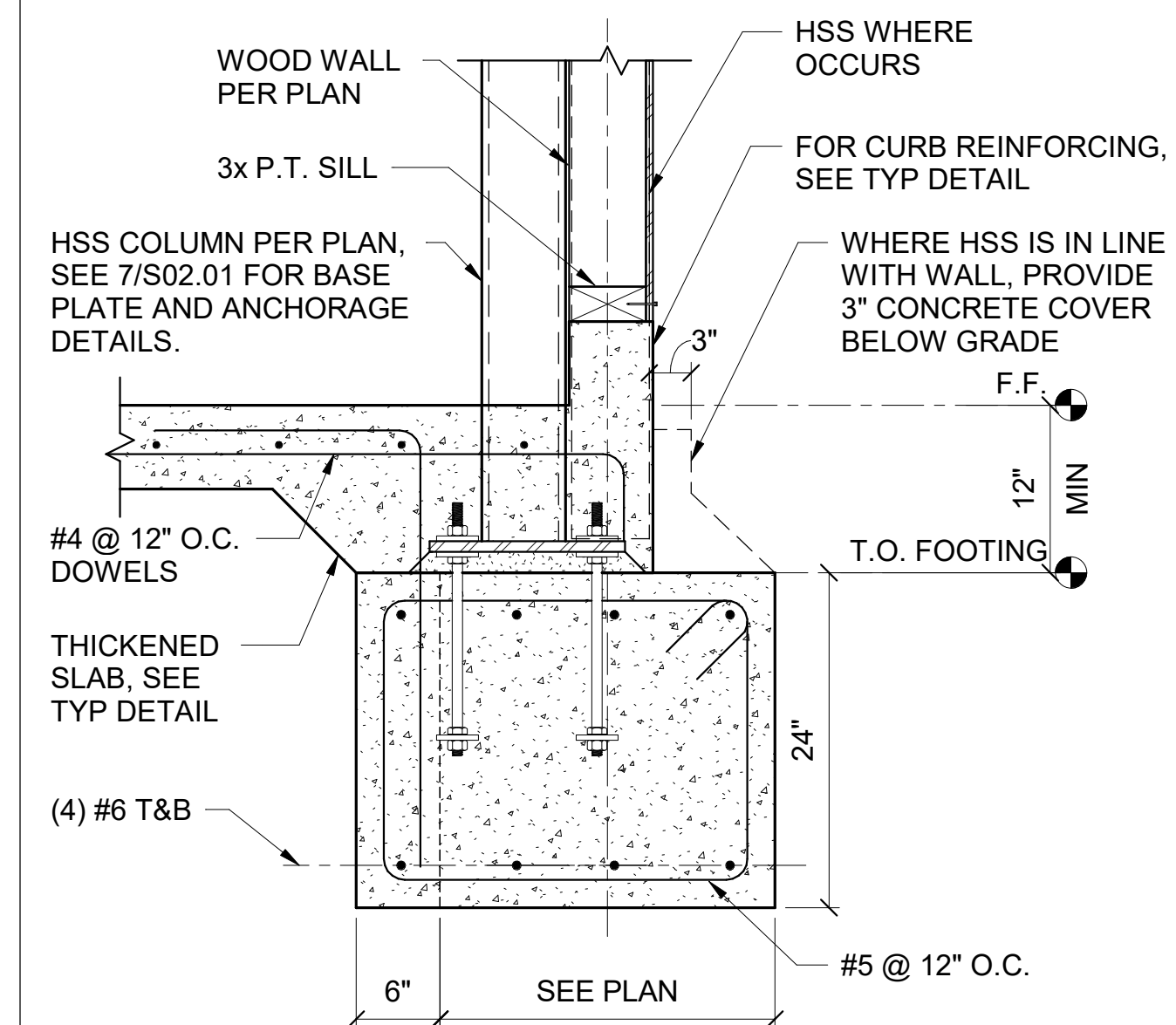
9 TRUSS ELEVATION
1/4" = 1'-0"



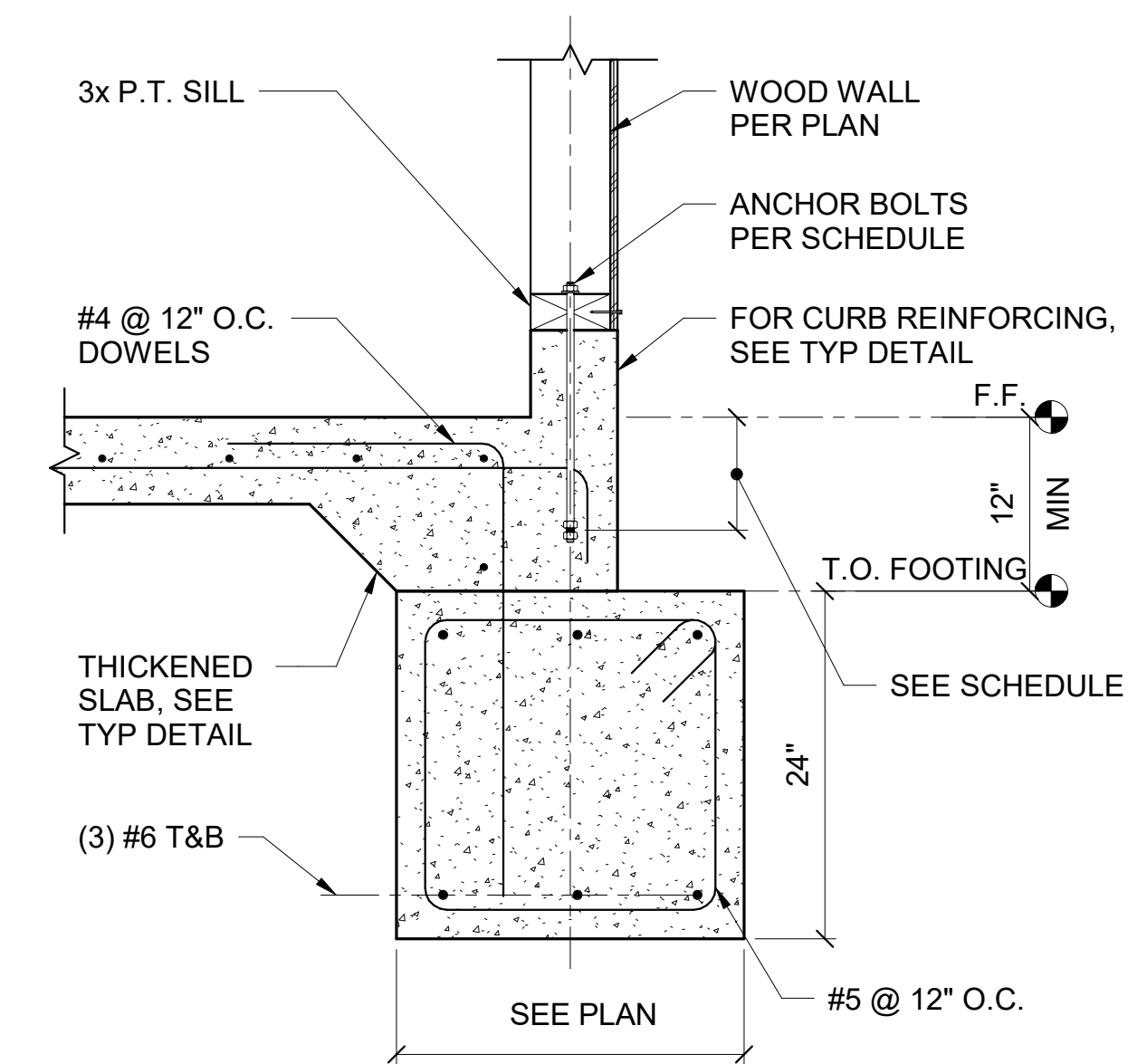
10 MOMENT FRAME ELEVATION
3/16" = 1'-0"



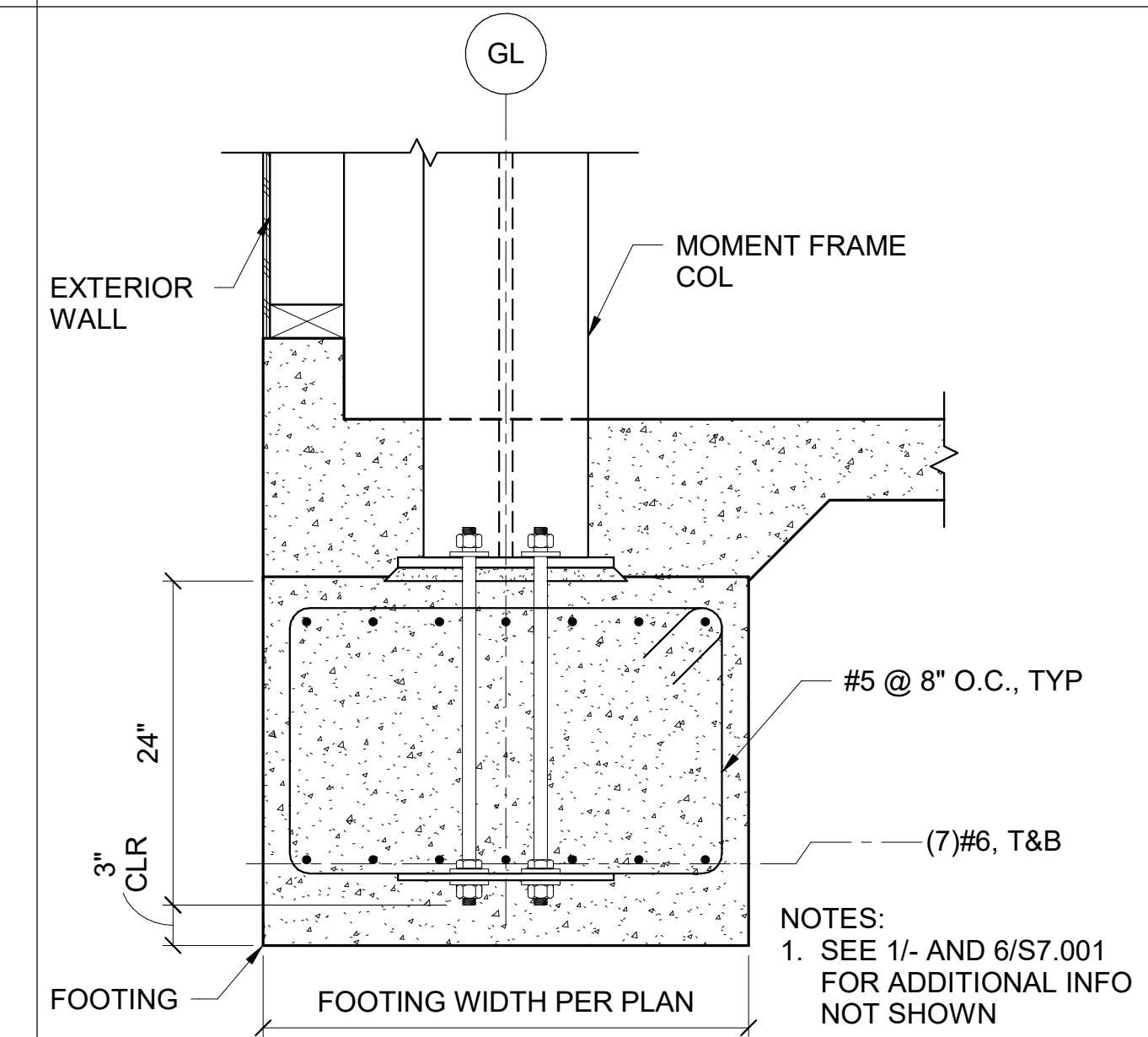
12 STOREFRONT STEEL FRAMING AT GL D
1/4" = 1'-0"



5 STEEL COLUMN AT EXTERIOR WALL
1" = 1'-0"



1 EXTERIOR WALL FOOTING



2 MOMENT FRAME FOOTING

CITY OF IRVINE HANGAR 10 RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

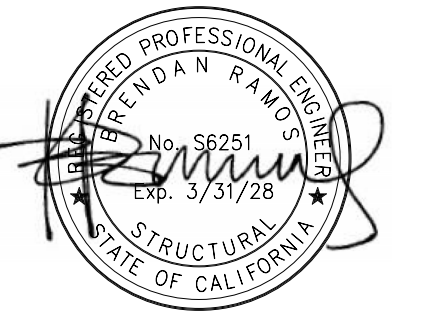
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Fax 949.553.1676



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Seal / Signature

Project Name

HANGAR 10 RECONSTRUCTION

Project Number

25226

Description

CONCRETE DETAILS

Scale

$$1'' = 1' - 0''$$

S5.001

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

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Seal / Signature

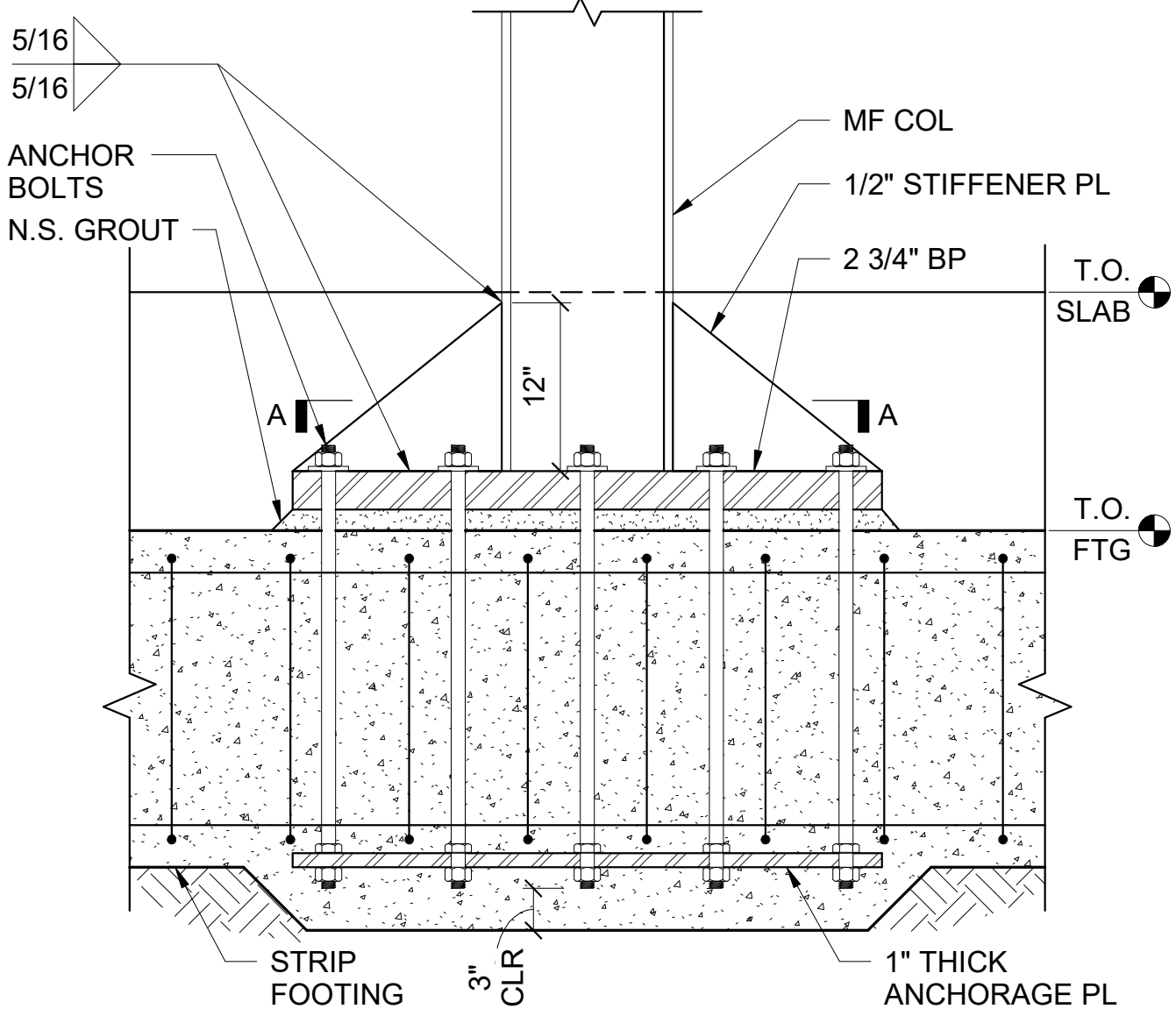
Project Name
HANGAR 10
RECONSTRUCTION

Project Number
25226

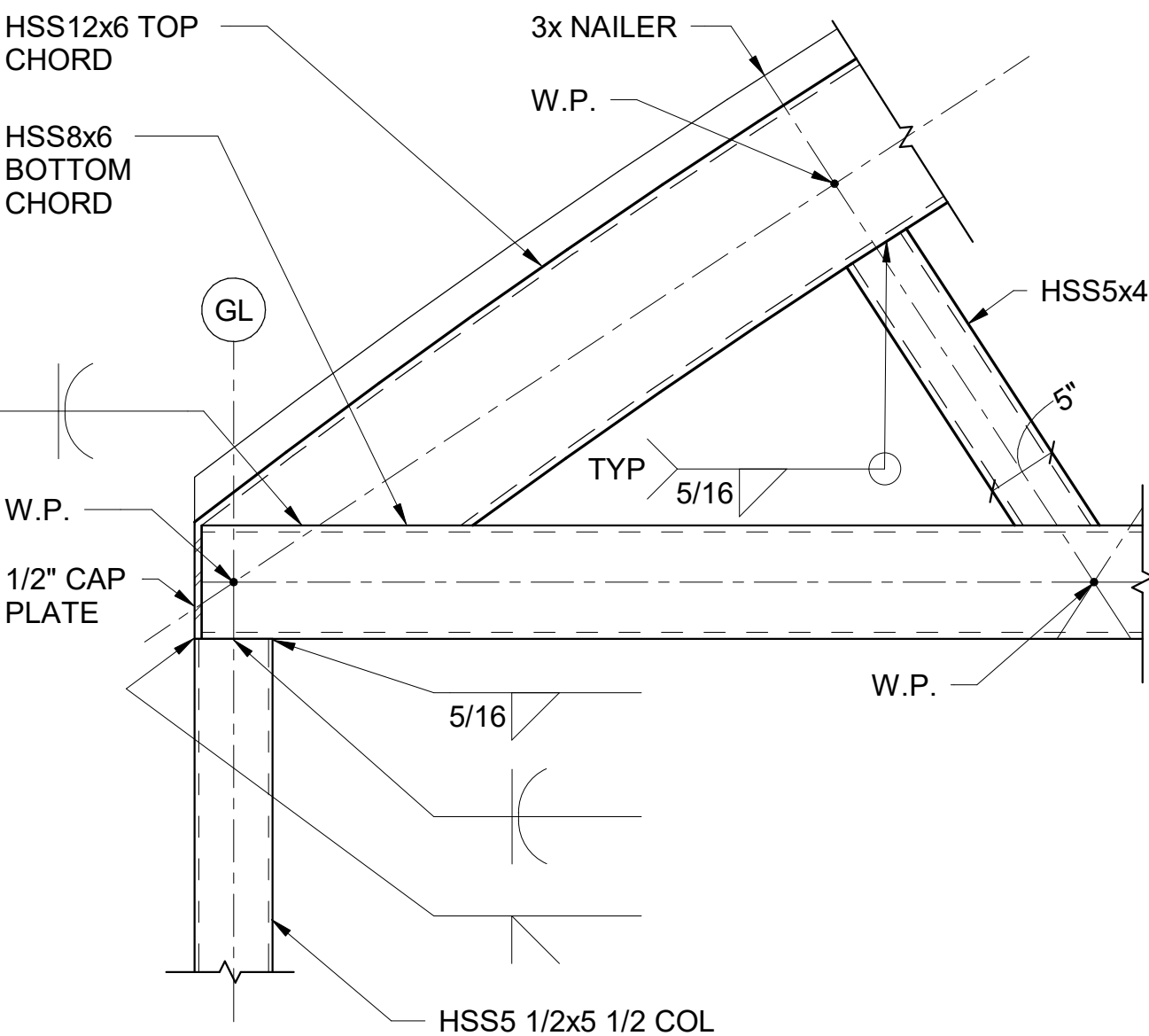
Description
STEEL DETAILS

Scale
As indicated

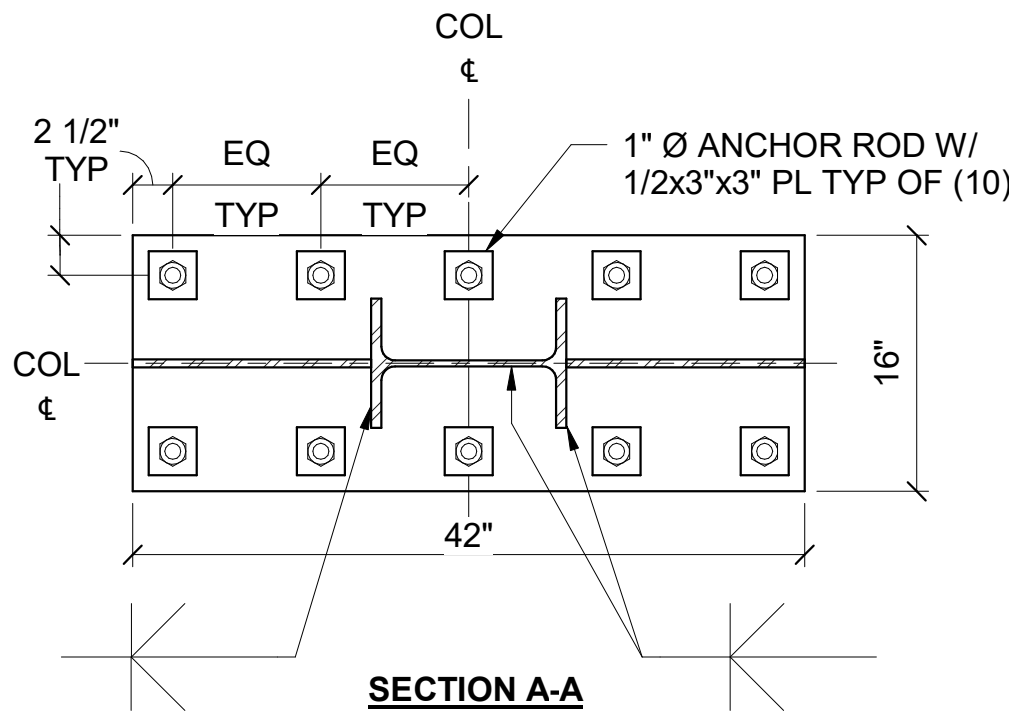
S7.001



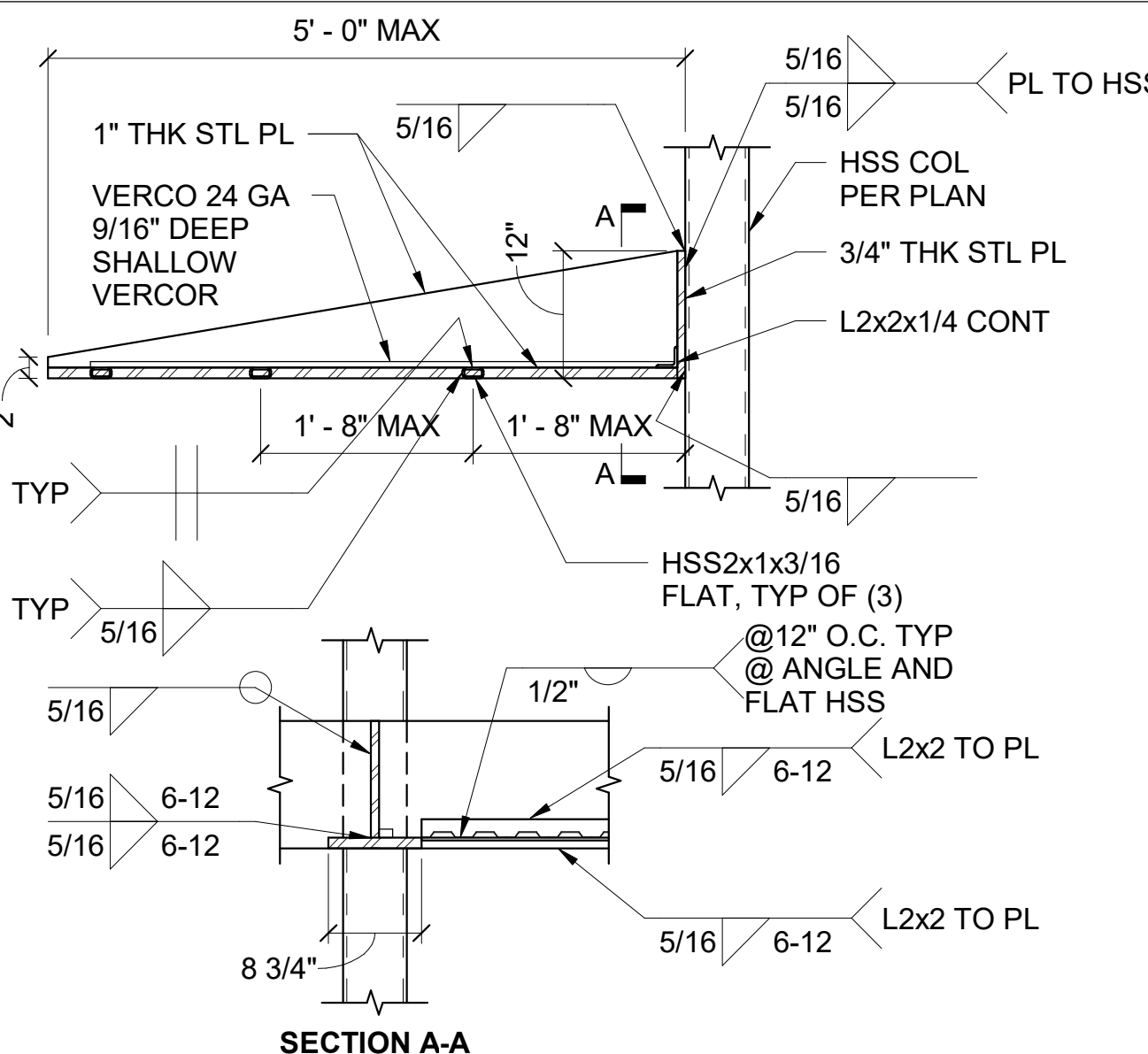
1 TRUSS @ END
N.T.S.



2 STEEL TRUSS
N.T.S.

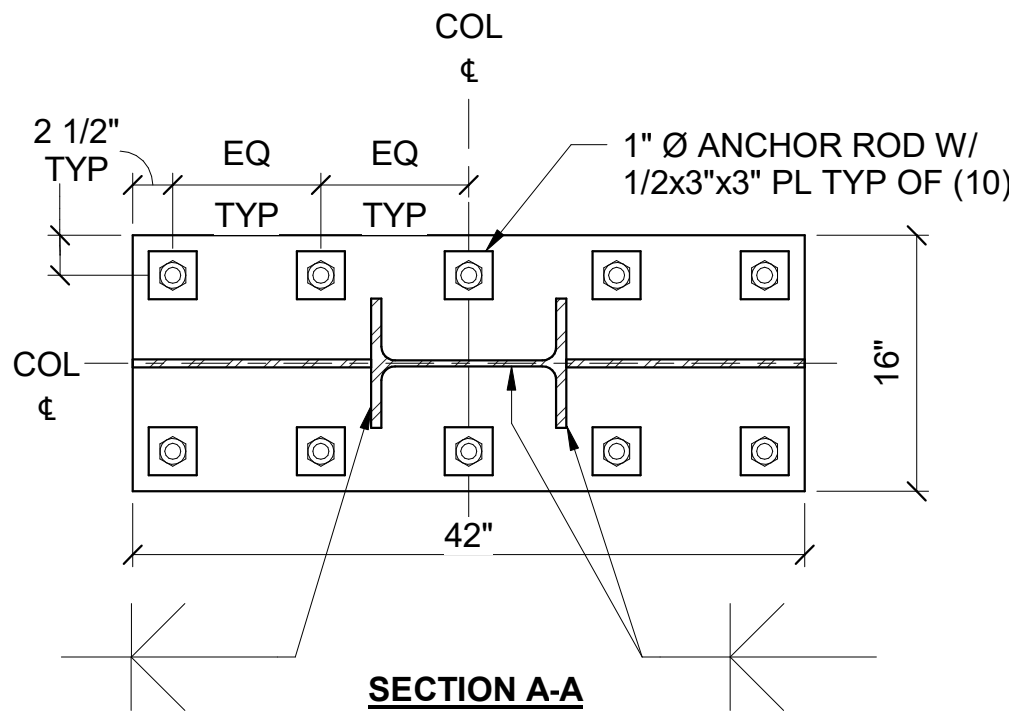


3 STOREFRONT STEEL AT MOMENT
FRAME
N.T.S.



4 AWNING CONN DETAIL
N.T.S.

6 MF BASE
N.T.S.



CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

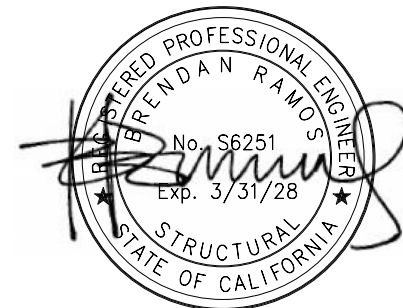
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Gensler

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Seal / Signature

Project Name

HANGAR 10
RECONSTRUCTION

Project Number

25226

Description

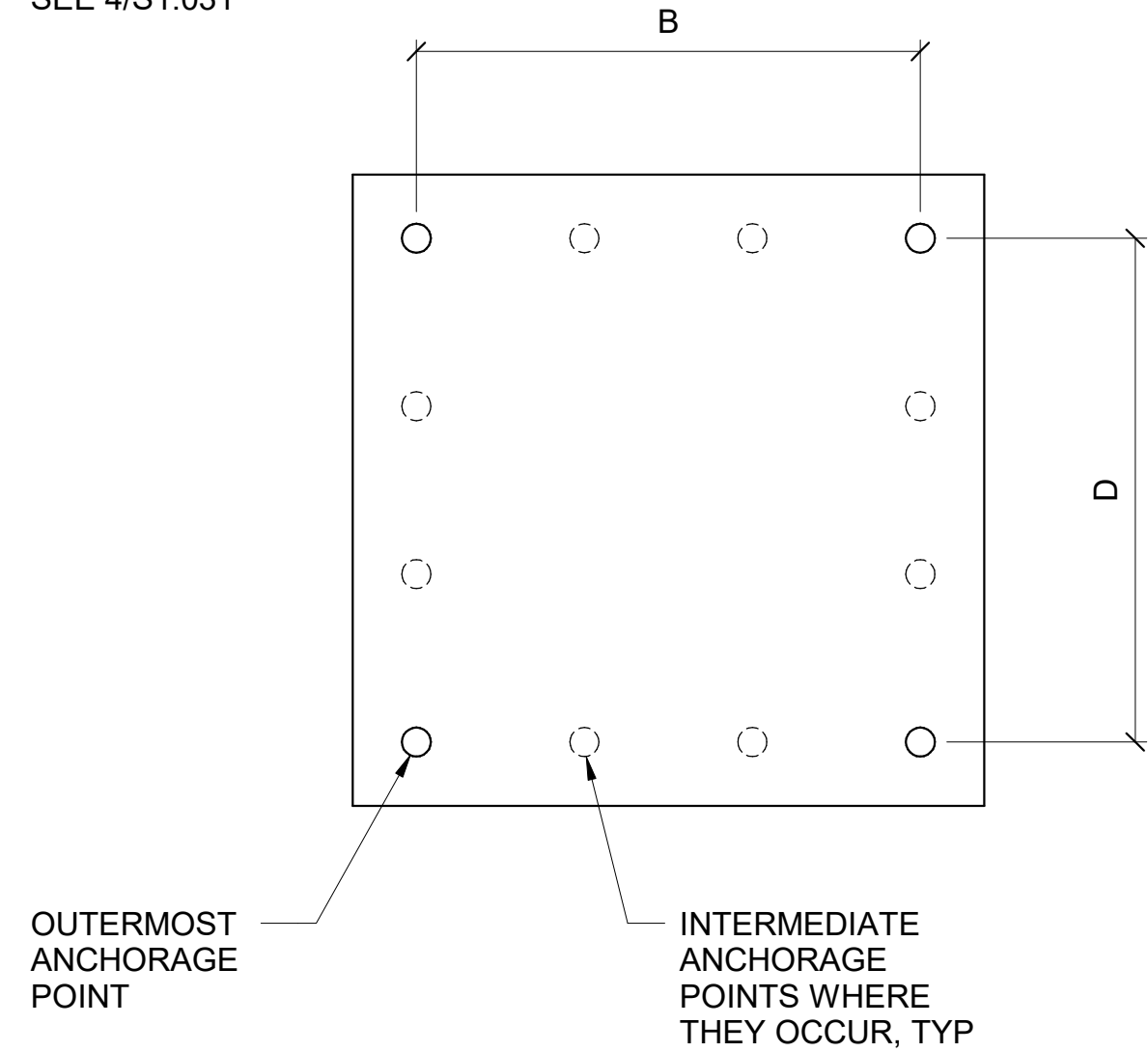
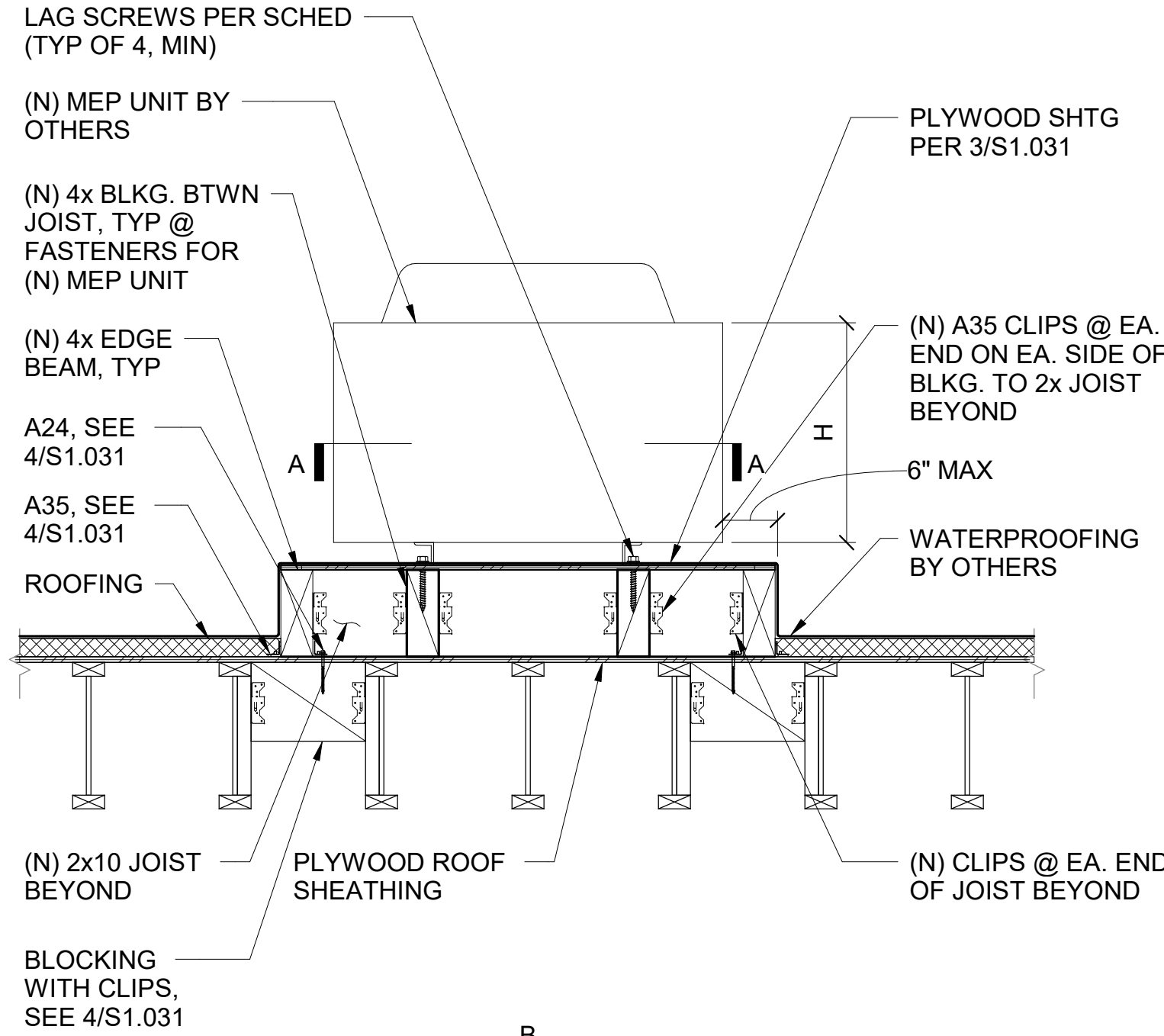
WOOD DETAILS

Scale

As indicated

S8.001

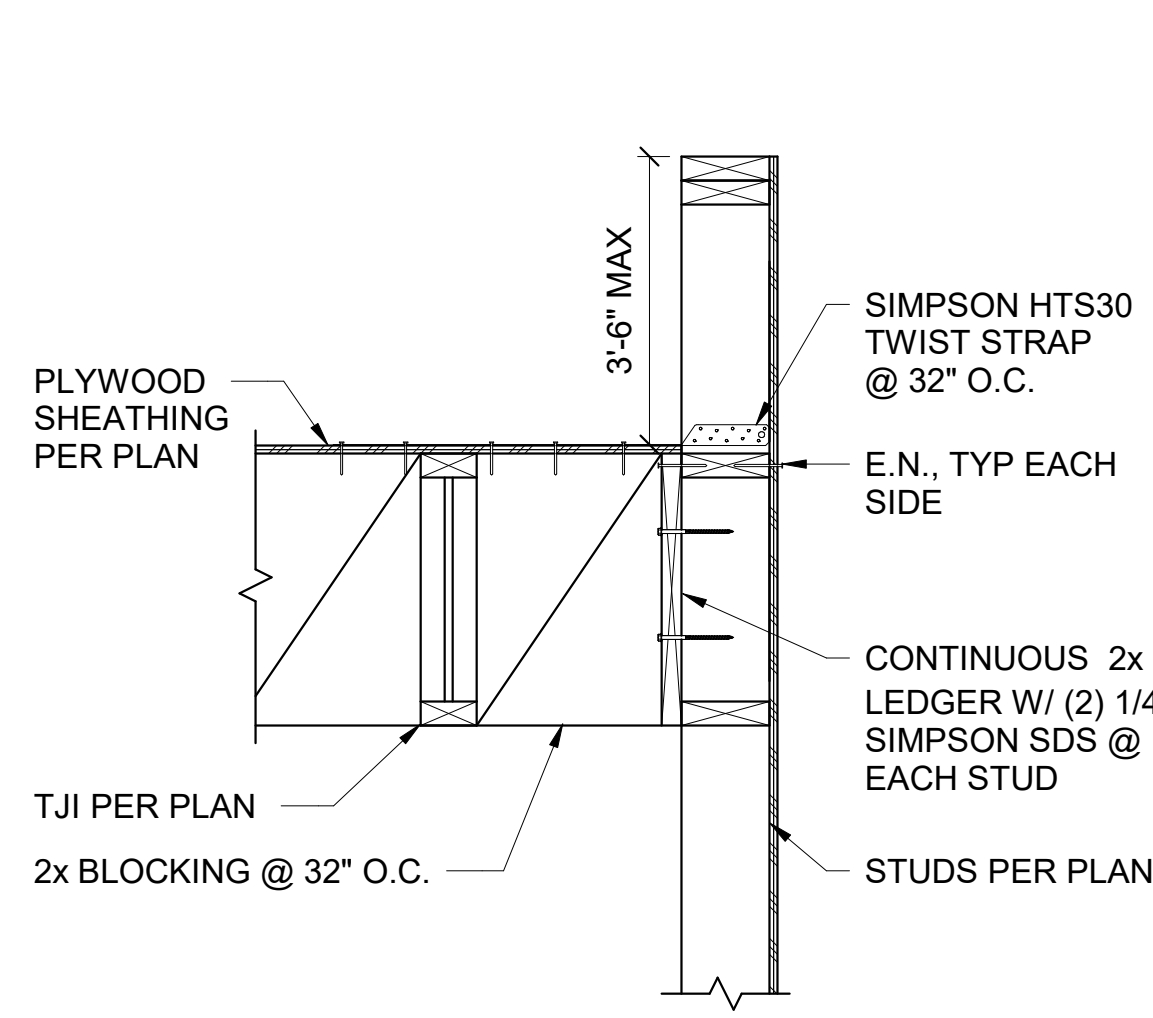
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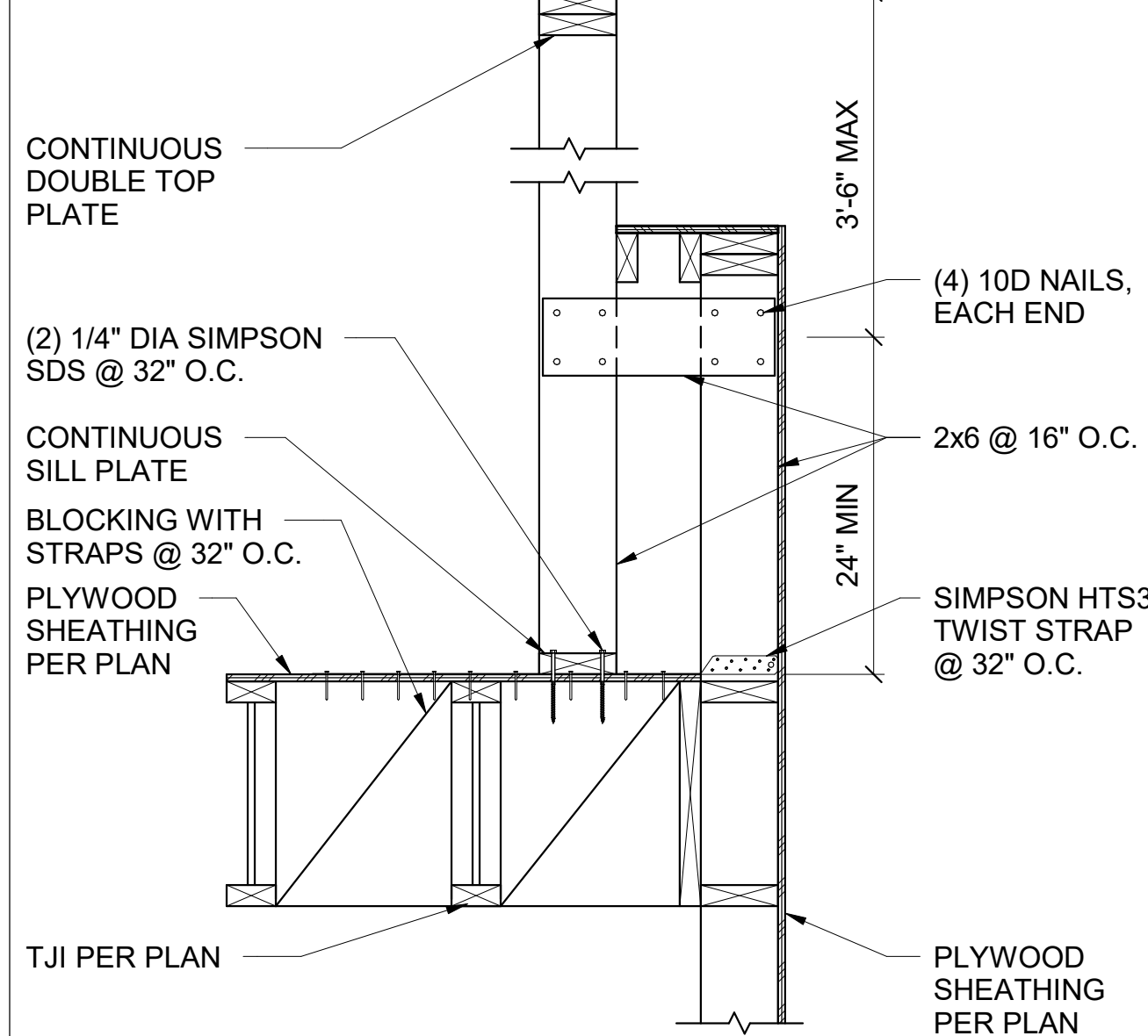
UNIT ID	UNIT MAX WEIGHT (LBS)	B	D	H	ANCHOR REQUIRED
CU-1	930	7'-3"	3'-10"	4'-2"	5/8"Φx 5"
CU-2	900	7'-3"	3'-10"	4'-2"	5/8"Φx 5"
AHU-1	3200	5'-7"	12'-5"	3'-1"	5/8"Φx 5"
AHU-2	3200	5'-7"	12'-5"	3'-1"	5/8"Φx 5"
EF-DX	530	3'-11"	3'-6"	-	5/8"Φx 5"
RTU-B1	600	7'-0"	3'-11"	3'-5"	5/8"Φx 5"
RTU-C1	600	7'-0"	3'-11"	3'-5"	5/8"Φx 5"
RTU-D1	600	7'-0"	3'-11"	3'-5"	5/8"Φx 5"

NOTE:
PROVIDE ANCHORS PER SCHEDULE @ ALL UNIT
ANCHOR LOCATIONS, MIN (4) CORNERS.

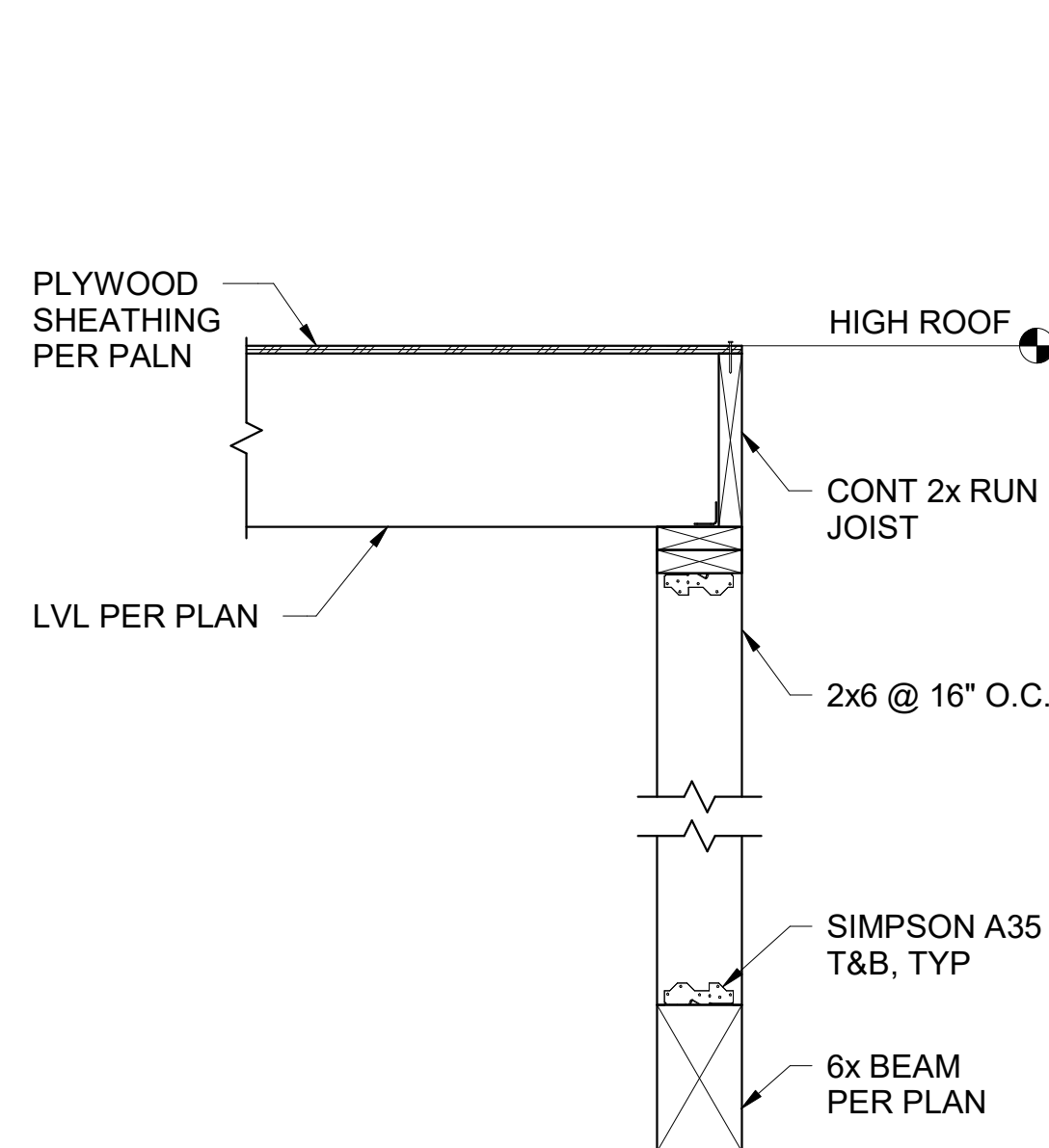
14 WOOD PAD MEP UNIT ANCHORAGE
N.T.S.



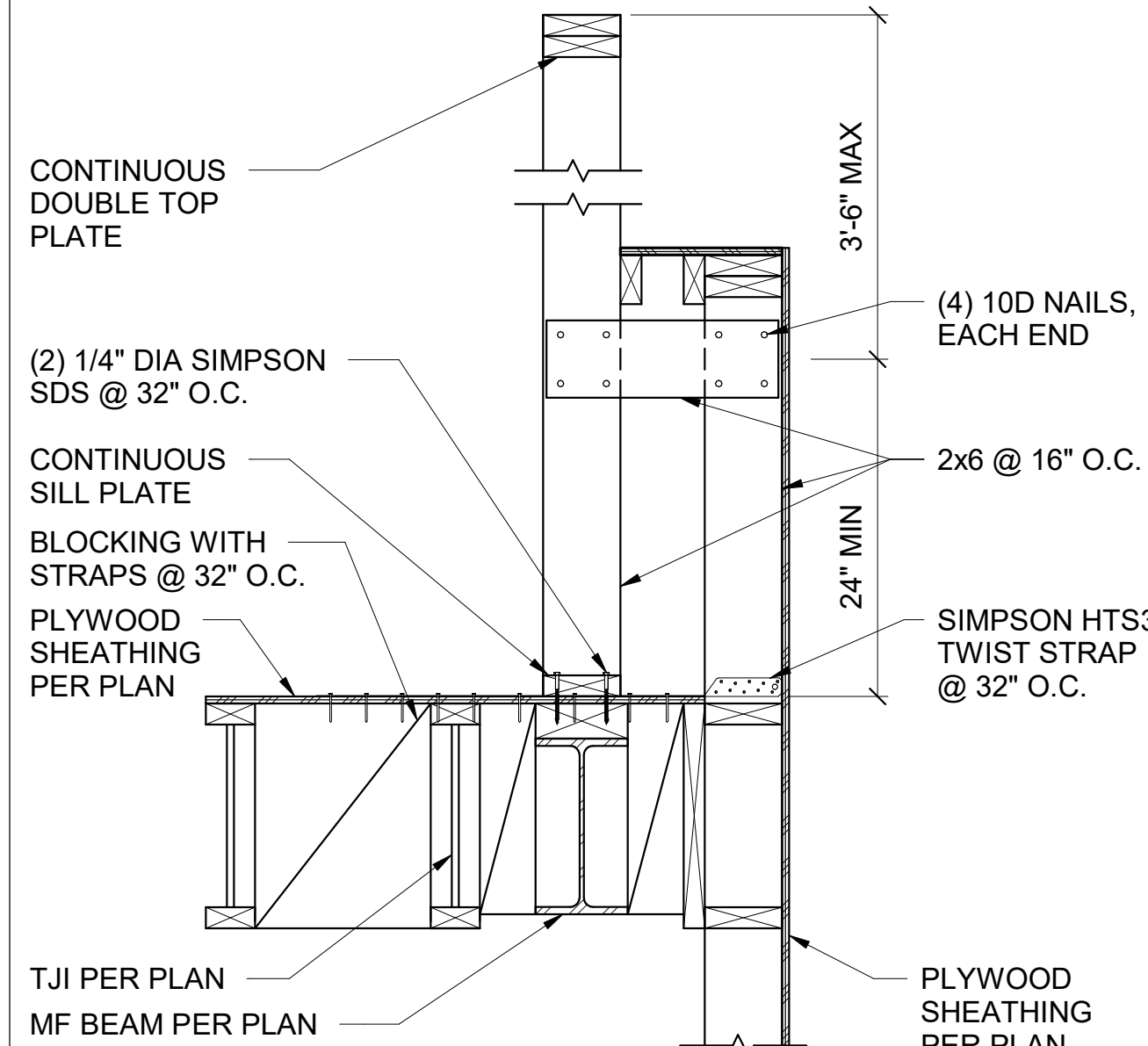
5 JOISTS AT EAST WALL
N.T.S.



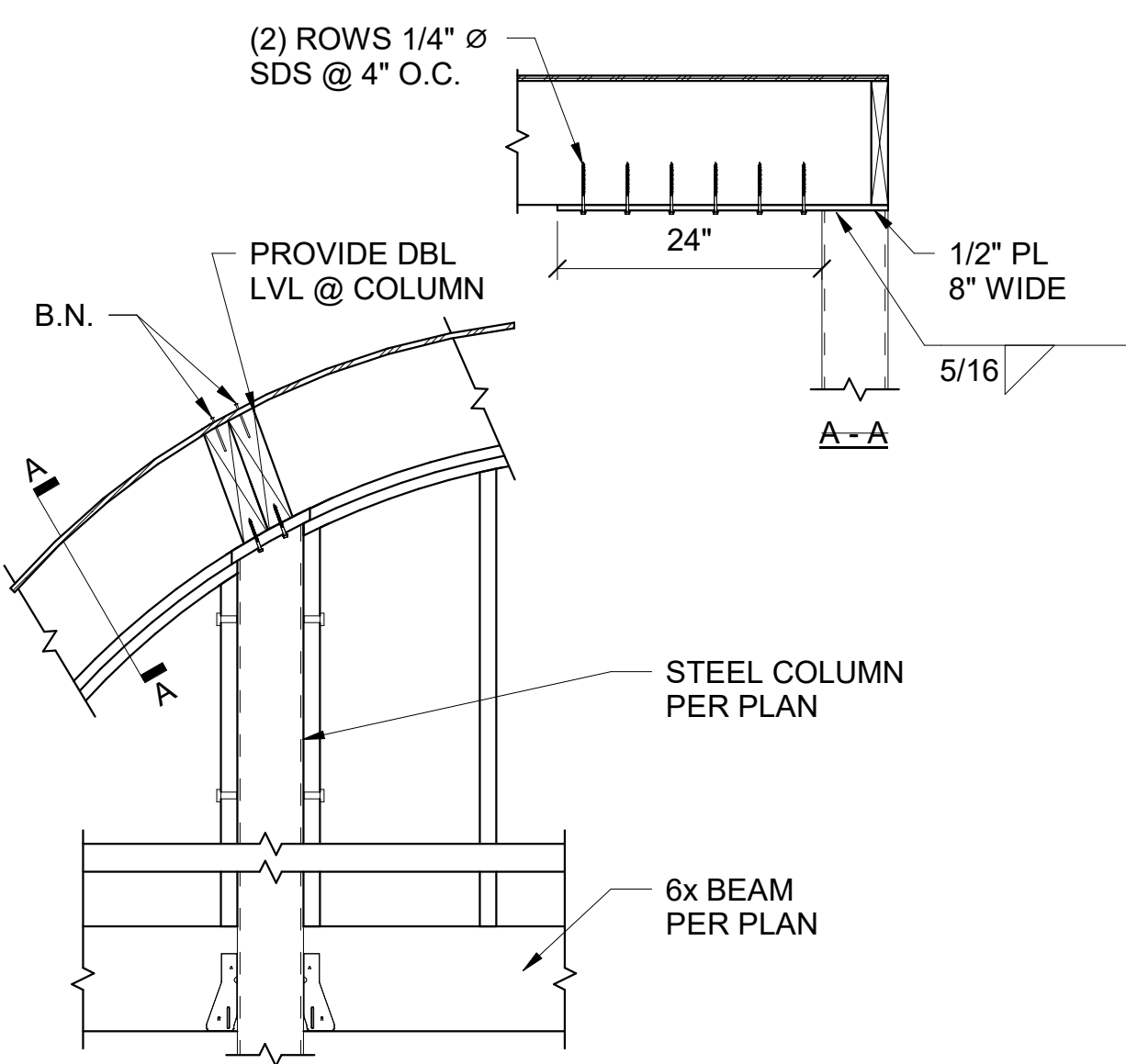
1 PARAPET AT EAST WALL
N.T.S.



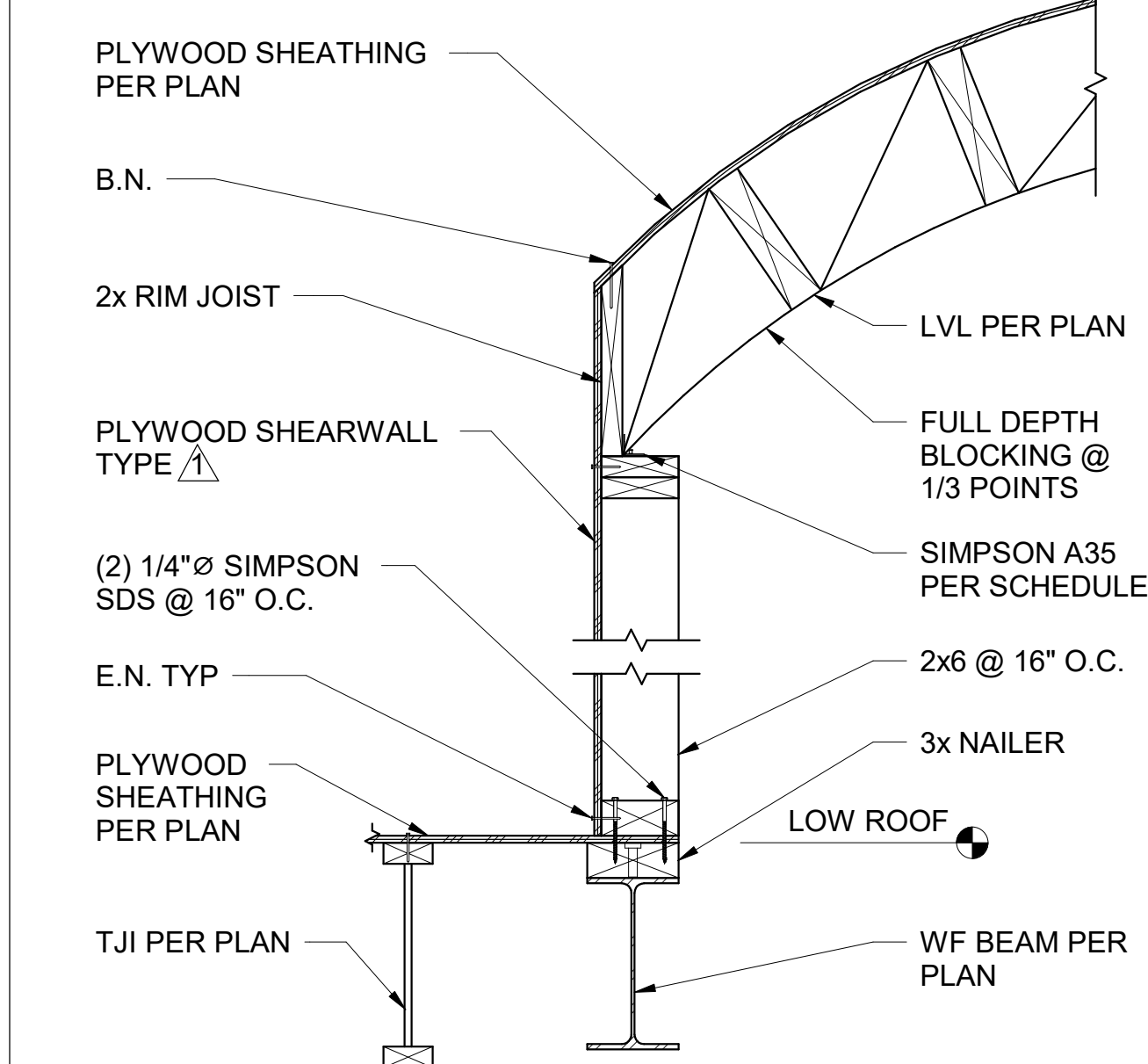
6 HIGH JOISTS AT NORTH/SOUTH
N.T.S.



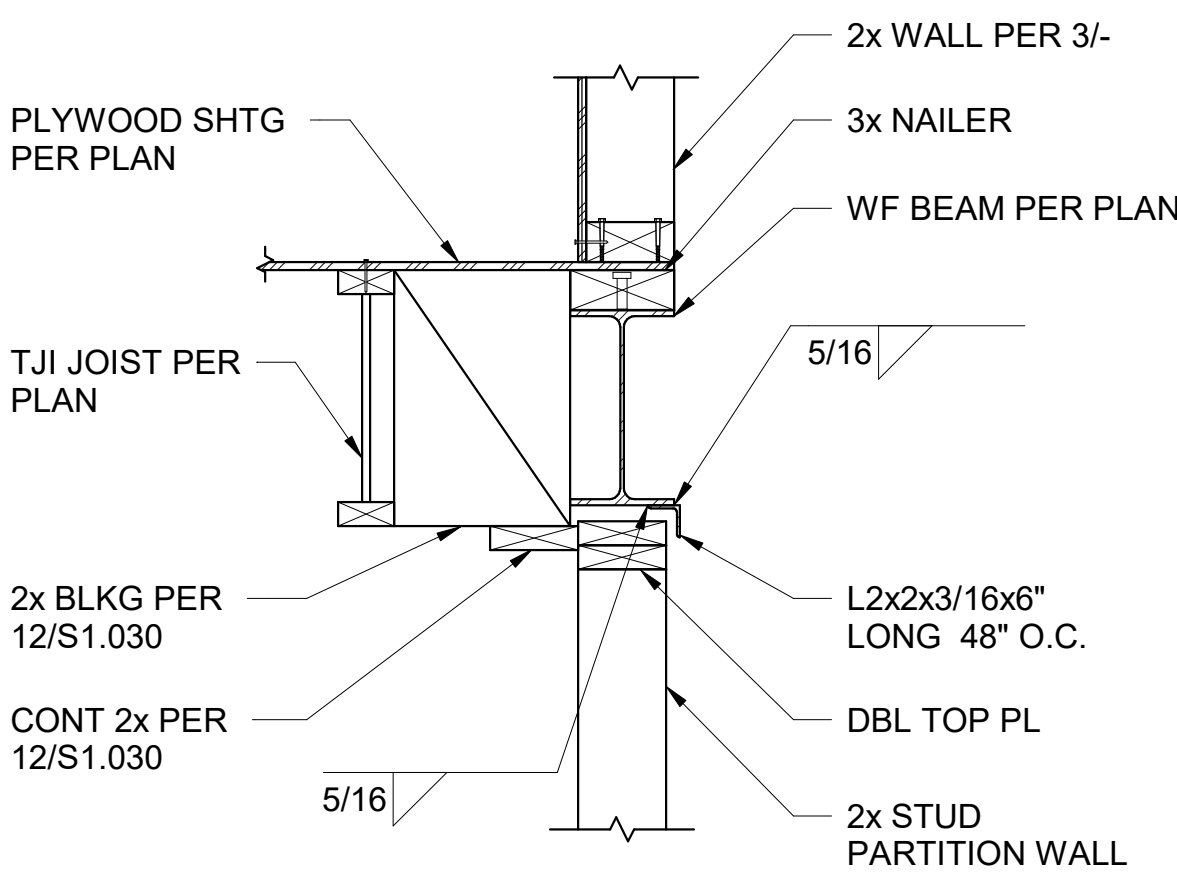
2 PARAPET AT MOMENT FRAMES
N.T.S.



7 NORTH/SOUTH COLUMNS
N.T.S.

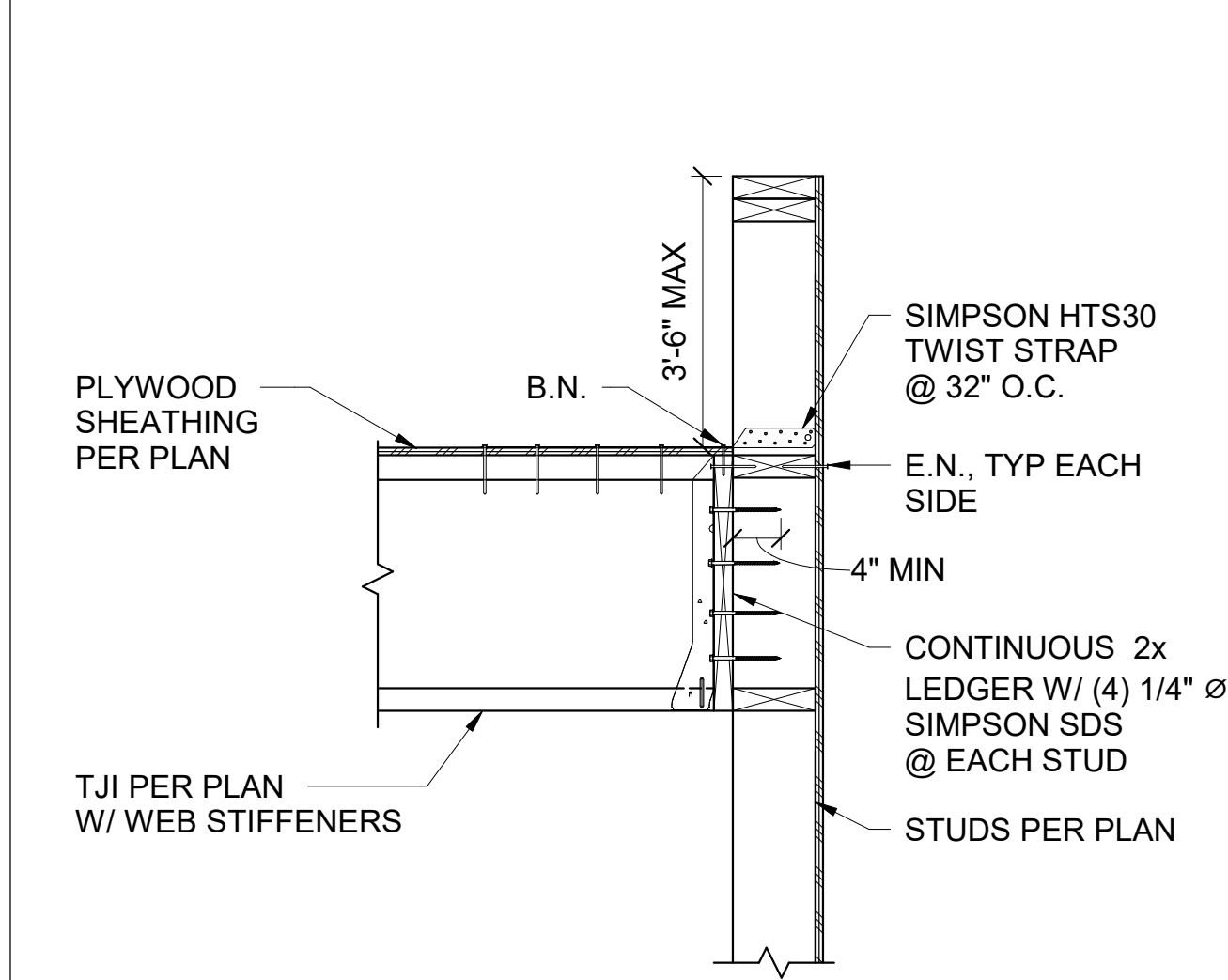


3 SHEAR TRANSFER
N.T.S.



NOTES:
SEE 12 / S1.030 FOR ADDITIONAL
INFORMATION NOT SHOWN.

8 NON-BEARING PARTITION WALL AT
WF BM
N.T.S.



4 JOISTS AT NORTH/SOUTH WALL
N.T.S.

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

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Gardena, Ca 90248
Tel 310.323.9924



REVISIONS	
NO.	DATE



SIMPSON STRONG-TIE, CO. INC.

• 3956 W. Los Positas Blvd.
Pleasanton, CA 94588
• Tel: (800) 999-5099
• Fax: (925) 847-1597
• Web site: www.strongtie.com

≠ THERE IS NO EQUAL

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THE MOMENT FRAME(S) IS
DESIGNED FOLLOWING
INFORMATION PROVIDED BY:
DATE OF PLANS (D.O.P.):
PROVIDED TO SIMPSON
STRONG-TIE BY:

YIELD-LINK® CONNECTION

FRAME ELEVATION DRAWING

ENGINEERED DESIGN

FRAME YL-1

NAME: G.S.

DATE: 09-11-2025

SCALE: N.T.S.

SHEET:

YL-1

JOB NO.
ES-25090431

Project Name

HANGAR 10
RECONSTRUCTION

Project Number

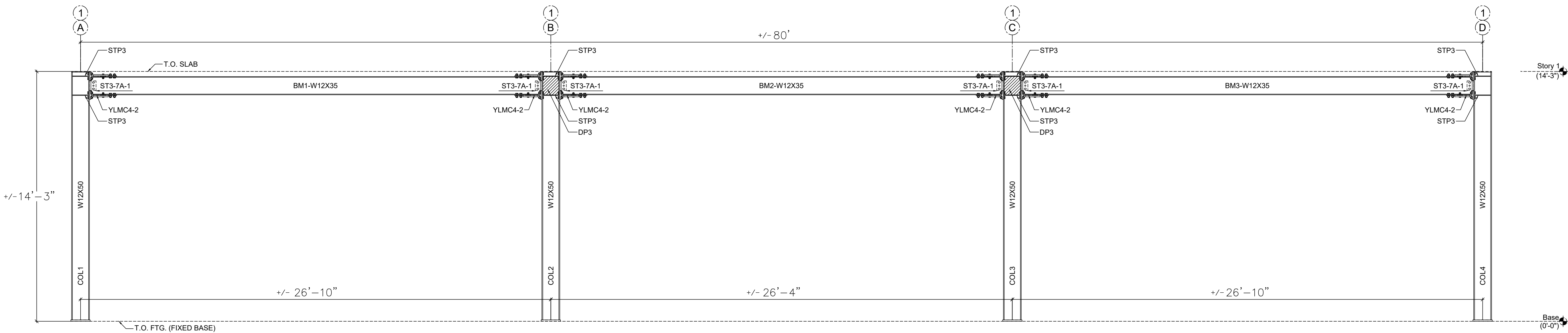
25226

Description

YIELD-LINK CONNECTION

Scale

YL-1



No.	Link Size	Qty (lbs)
1	YLMC4-2	6

Elev. ID	Grid ID	Story	Column Size	Left no. ST	Left ST Thk (in)	Right no. ST	Right ST Thk (in)	Cont. PL Thk (in)	Dist. PL Thk (in)	W1A (in)	N_side of W1A	W1A_PUP (in)	N_side of W1A_PUP	W1B (in)	N_side of W1B	W1B_PUP (in)	N_side of W1B_PUP	W2 (in)	N_side of W2	W3 (in)	N_side of W3	W4 (in)	N_side of W4	W4A Diameter (in)	W4A Depth (in)	W5 (in)	N_Side of W5
1	A	Story1	W12X50	-	-	1	3/8	3/8	-	-	-	-	-	1/4	2	-	-	3/16	2	3/16	2	-	-	-	-	-	-
1	B	Story1	W12X50	1	3/8	1	3/8	3/8	3/8	1/4	2	-	-	1/4	2	-	-	3/16	2	3/16	2	3/8	1	-	-	CJP Weld	1
1	C	Story1	W12X50	1	3/8	1	3/8	3/8	3/8	1/4	2	-	-	1/4	2	-	-	3/16	2	3/16	2	3/8	1	-	-	CJP Weld	1
1	D	Story1	W12X50	1	3/8	-	-	3/8	-	1/4	2	-	-	-	-	-	-	3/16	2	3/16	2	-	-	-	-	-	-

- SEE 18YLMC1 FOR ADDITIONAL WELDING INFORMATION.
- SEE 20YLMC1 FOR ADDITIONAL SHEAR TAB INFORMATION.
- DIMENSIONS SHOWN ARE FOR DESIGN PURPOSES ONLY AND SHALL BE REVIEWED / ADJUSTED BY OTHERS.
- SEE YLMC1 FOR GENERAL NOTES AND CONNECTION DETAILING.
- SEE YLMC2 FOR CONNECTION BOLTING AND PLATE DETAILING REQUIREMENTS FOR FABRICATION.
- SEE YLMC3 FOR CRUFORM COLUMN AND SLOPED BEAM DETAILING.

FRAME ELEVATION
SCALE: 3/8" = 1'-0"

Simpson Strong-Tie® Strong Frame® and the Yield-Link™ structural fuse are protected under one or more of the following US patents and applications: US patent No. 8,001,734 B2, US patent No. 8,375,652 B2, and US patent publication No. 2015/0159362, and must be supplied or licensed through Simpson Strong-tie.

United States

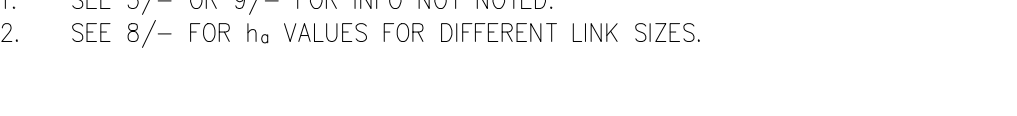
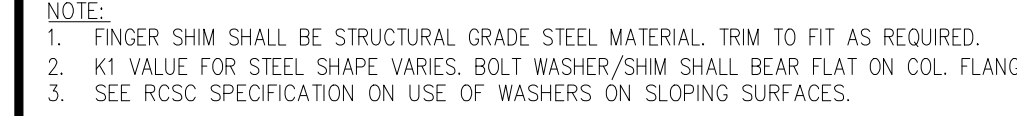
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Gardena, Ca 90248
Tel 310.323.9924

YIELD

SCALE: N.T.S.

JOB NO.

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DESIGN NOTES:

1. DESIGN FOR THE YIELD-LINK SPECIAL MOMENT CONNECTION SHALL BE IN ACCORDANCE WITH THE FOLLOWING:

- AISC 358, 2018, 2021 AND 2024 INTERNATIONAL BUILDING CODE (IBC)
- AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (ANSI/AISC 360-16, ANSI/AISC 360-22)
- AISC SEISMIC PROVISIONS (ANSI/AISC 341-16, ANSI/AISC 341-22)
- PREQUALIFIED CONNECTIONS FOR SPECIAL AND INTERMEDIATE STEEL MOMENT FRAMES FOR SEISMIC APPLICATIONS (ANSI/AISC 358-16, ANSI/AISC 358-22)
- ICC-ES ESR-2802
- 2020 AISC SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS
- STRUCTURAL WELDING CODE-STEEL (AWS D1-1:2020)
- STRUCTURAL WELDING CODE-SEISMIC SUPPLEMENT (AWS D1.8-2021)

2. AISC CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES (ANSI/AISC 303-22)

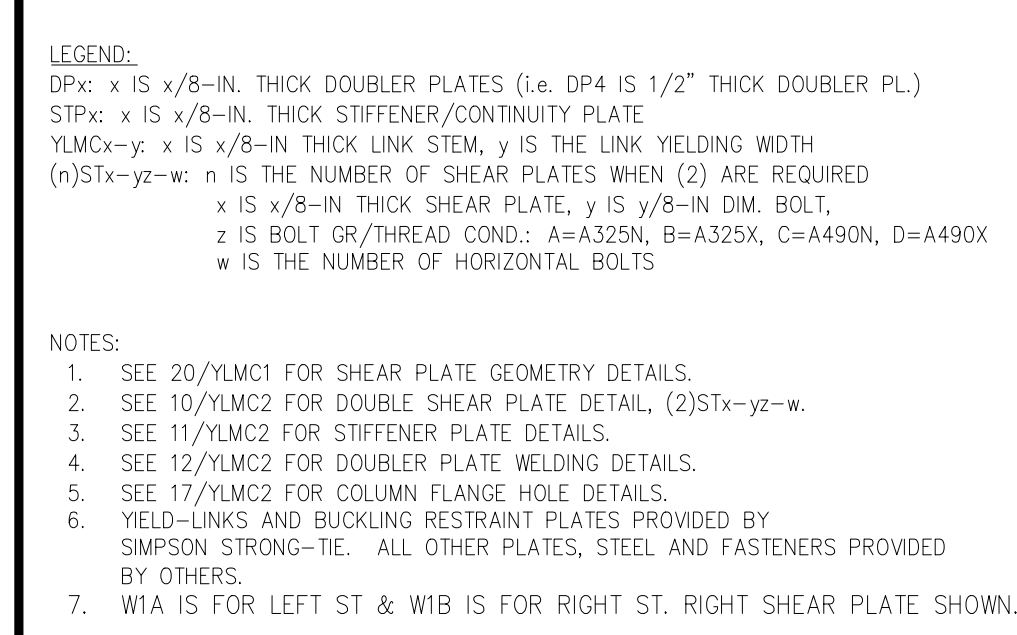
3. USE OF THIS PRODUCT IS SUBJECT TO THE APPROVAL OF THE LOCAL BUILDING DEPARTMENT

4. THIS PRODUCT IS PART OF THE OVERALL LATERAL FORCE RESISTING SYSTEM OF THE STRUCTURE. DESIGN OF THE BUILDING'S LATERAL FORCE RESISTING SYSTEM, INCLUDING THE LOAD PATH TO TRANSFER LATERAL FORCES FROM THE STRUCTURE TO THE GROUND, IS THE RESPONSIBILITY OF THE ENGINEER OF RECORD (EOR).

5. ALL CONNECTIONS AND RELATED COMPONENTS ARE PART OF THE LOAD PATH INCLUDING BUT NOT LIMITED TO DIAPHRAGMS, SHEAR TRANSFER, CHORDS AND COLLECTORS AND FOUNDATIONS.

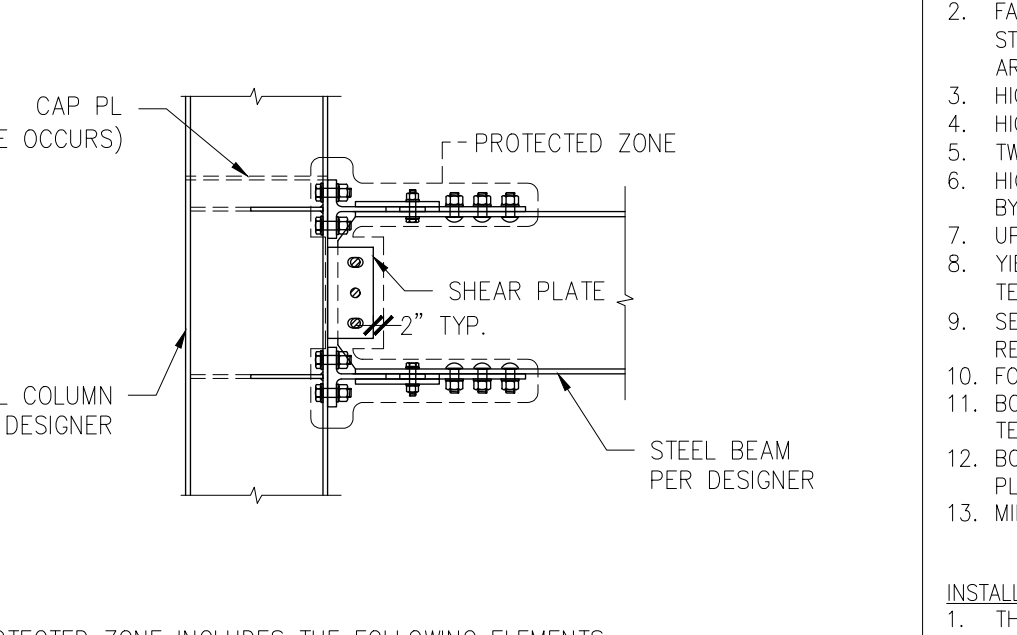
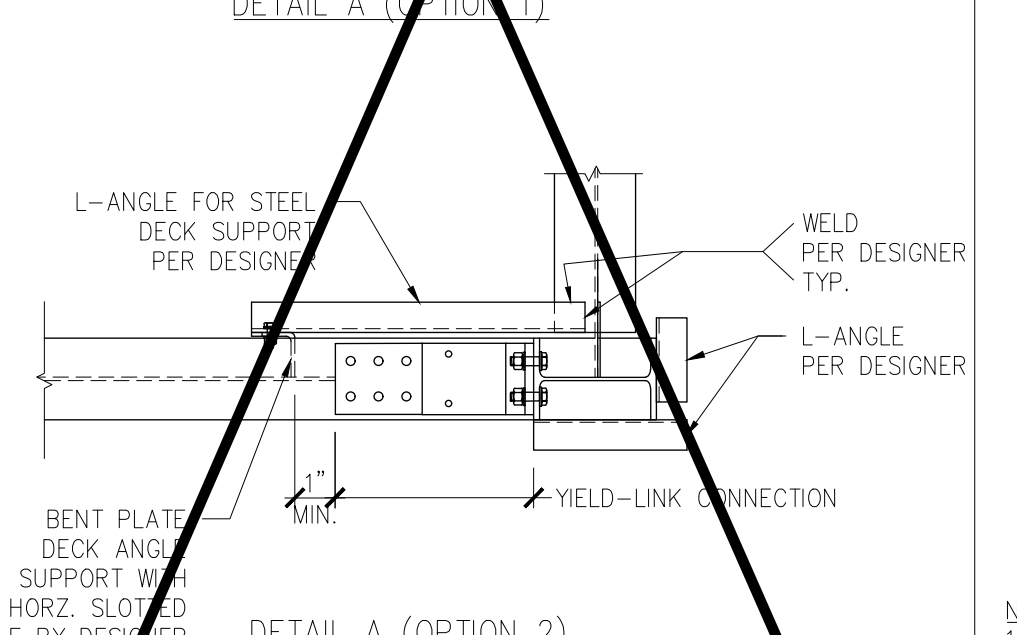
6. ALL CONNECTIONS AND RELATED COMPONENTS SHALL BE DESIGNED BY THE EOR.

7. THIS PRODUCT IS NOT INTENDED TO BE A LICENSED/CERTIFIED BUILDING DESIGN PROFESSIONAL OR A LICENSED PROFESSIONAL ENGINEER.



NOTES:

1. THICKNESS 54 MIL (16GA), ASTM A653 GRADE 33 STEEL.
2. FINISH: GALVANIZED/ZMAX COATING.
3. ALTERNATE CONCRETE COVER BY OTHERS, SEE DETAIL 20/YLMC2.



1. YIELD-LINES: ASTM A992 (PROVIDED BY SPMSON STRONG-ITE).

2. WELD METAL: ASTM A572 OR 50 (PROVIDED BY SPMSON STRONG-ITE).

3. BEAMS AND COLUMNS SHALL BE HOT-ROLLED W SECTIONS (ASTM A992) OR WELDED BUILT-UP I-SHAPES MEMBERS THAT MEET ALSO AISC 360 SECTION 5 AND AISC 358 SECTION 2.3.2.

4. SHEAR PLATE, STIFFENER PLATE AND DOUBLER PLATE: ASTM A572 OR 50 (A10.0).

5. LINER ITEM-TO-BEAM FLANGE BOLTS SHALL BE ASTM F1315 GRADE 480 OR F2280 (X OR N) (PRETENSIONED).

6. LINER FLANGE-TO-COLUMN FLANGE BOLTS SHALL BE ASTM F1315 GRADE 480 (X-N) (SNUG-TIGHT) OR F1852-N (PRETENSIONED).

7. SHEAR PLATE-TO-BEAM WEB BOLTS SHALL BE ASTM F1315 GRADE 480 (X-N) OR F2280 (X OR N) (PRETENSIONED).

8. BOLT-TIGHTENING: ALL BOLTS SHALL BE TIGHTENED TO THE FOLLOWING TORQUE VALUES (IN FT-LBS) PER DESIGN:

9. BOLT-TO-BEAM FLANGE BOLTS SHALL BE ASTM F1315 GRADE A325-N (A325-N FOR YLMC-8-B, YLMC-7-B, YLMC-8-B AND YLMC-8-B, YLMC-8-B AND YLMC-8-B).

10. BOLT-TIGHTENING: ALL BOLTS SHALL BE TIGHTENED TO THE FOLLOWING TORQUE VALUES (IN FT-LBS) PER DESIGN:

11. SPECIFIED COMPRESSIVE STRENGTH MUST BE NO MORE THAN 100 PSI. RECOMMENDED MATERIALS AT NON-FIRE-RATED ASSEMBLIES ARE RIGID FOM TYPE EXPANDED POLYSTYRENE (EPS) OR TYPE EXTRUDED POLYSTYRENE (XPS). RECOMMENDED MATERIALS AT FIRE-RATED ASSEMBLIES ARE SPRAYED FIRE-RESISTIVE MATERIALS (SPRAY-APPLIED FIREPROOFING) OR CAST-IN-PLACE CONCRETE.

12. UNLESS NOTED OTHERWISE BY THE ENGINEER OF RECORD, ALL WELD FILLER METAL SHALL HAVE CLASSIFICATION STRONG-ITE (F60) OF 70 KSI.

13. FOR NON-SEISMIC CRITICAL WELDS BEAM TO COLUMN SHEAR PLATE AND COLUMN STIFFENER/CONTINUITY PLATE, WELD FILLER METAL SHALL MEET THE AWS D1.1 AND D1.5.

14. FOR SEISMIC CRITICAL WELDS BEAM TO COLUMN SHEAR PLATE AND COLUMN STIFFENER/CONTINUITY PLATE, WELD FILLER METAL SHALL MEET THE AWS D1.1 AND D1.5.

15. FOR DRAMA-CRITICAL WELDS, COLUMN SPLICES, DOUBLER PLATES (C/P WELDS) AND BASE PLATES, WELD FILLER METAL SHALL MEET THE AWS D1.1 AND D1.8 MINIMUM QUALITY.

16. IN ADDITION TO THE MINIMUM CHARGE Y-NOTCH REQUIREMENT, ALL FILLER METAL SHALL MEET THE DIFFUSIBLE HYDROGEN LEVEL AS NOTED IN SECTION 6.1.3 OF AWS D1.1.

1. WELD QUALITY CONTROL REQUIREMENTS FOR SHEAR PLATE, STIFFENER PLATE, DOUBLER PLATE (IF REQUIRED) OF THE YIELD-LINE CONNECTION SHALL BE DONE BY PERSONNEL QUALIFIED PER AWS D1.1 SECTION 4 PART C, AWS D1.1 ANNEX D (AS REQUIRED), AND AS APPROVED BY AUTHORITIES HAVING JURISDICTION (AHJ).

2. WELD QUALITY CONTROL REQUIREMENTS FOR THE WELDING PROCEDURE QUALIFICATION TESTING SHALL BE DONE BY PERSONNEL QUALIFIED PER AWS D1.1 SECTION 4 PART C, AWS D1.1 ANNEX D (AS REQUIRED), AND AS APPROVED BY AUTHORITIES HAVING JURISDICTION (AHJ).

3. SPECIFIC WRITTEN WELDING PROCEDURE SPECIFICATIONS (WPS) FOR EACH WELDING APPLICATION USED FOR THE YIELD-LINE CONNECTIONS IN THE PROJECT SHALL BE SUBMITTED TO THE EOR/AHJ FOR REVIEW AND APPROVAL PRIOR TO START OF WORK. EACH WPS SHALL REFERENCE THE FREQULATED WELD JOINT DETAIL FROM SECTION 3 OF AWS D1.1. THE WPS SHALL BE APPROVED BY THE EOR/AHJ. THE WELDING PROCEDURE QUALIFICATION RECORD (PQR) FOR THE CONNECTIONS WELD USED FOR THE PROJECT SHALL CONFORM TO THE REQUIREMENTS OF AWS D1.1 SECTION 4.

4. WPS (OR PQR) SHALL CONTAIN ALL THE ESSENTIAL VARIABLES USED IN THE WELDING PROCEDURE AND SHALL BE STAMPED/APPROVED BY AN AMERICAN WELDING SOCIETY (OR ANOTHER QUALIFIED ORGANIZATION) AS APPROVED BY THE EOR/AHJ.

5. SUBMIT WELDER QUALIFICATION, WPS (OR PQR), AND FILLER METAL CERTIFICATION OF CONFORMANCE PROVIDED BY THE WIRE/MANUFACTURER TO THE EOR AND AHJ FOR REVIEW AND APPROVAL PRIOR TO START OF WORK.

6. STEEL BEAM ON WHICH WELD METAL IS TO BE DEPOSITED SHALL BE FREE OF DUST, MOISTURE, GREASE, SLAG, MILL SCALE AND OTHER FOREIGN MATERIAL THAT WOULD PREVENT PROPER WELD DEPOSIT.

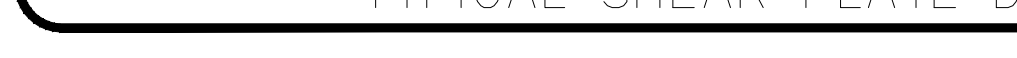
7. WELD METAL WELD TERMINATION MAY EXTEND TO THE ENDS OF THE SHEAR PLATE OR MAYBE STOPPED SHORT AT EACH END OF THE SHEAR PLATE FOR A LENGTH THE SAME DIMENSION AS THE WELD SIZE. FILLER METAL SHALL NOT BE WRAPPED AROUND THE TOP AND BOTTOM EDGES OF THE SHEAR PLATE.

8. WELD METAL WELD TERMINATION SHALL BE STOPPED SHORT OF THE END OF ONE FOLET WELD SIZE OF THE A DISTANCE $+1/2$ " FROM THE EXTENSION COLUMN FLANGE, AND $K1$ DISTANCE $+1/2$ " FROM THE CENTERLINE OF THE COLUMN WEB.

9. ALL COMPLETE JOINT PENETRATION GROOVE WELDS (CJP) SHALL BE ULTRA-SOUND TESTED PER D1.1 AND D1.2 REQUIREMENTS AS APPLICABLE.

10. ALL WELDS ARE TO BE ACCESSIBLY PLACED FOR VISUAL INSPECTION. VISUAL INSPECTION SHALL BE TESTED FOR CRACKS USING MAGNETIC PARTICLE TESTING. THE MAGNETIC PARTICLE TEST AREA SHALL INCLUDE THE K-AREA BEAM METAL WITHIN $3/4$ " OF THE WELD.

11. CJP GROOVE WELDS ON BASE METAL THICKER THAN $1/2$ " SHALL BE ULTRASONICALLY TESTED FOR DISCONTINUITIES (LAMELLAR Tearing). ANY TESTED BASE METAL DISCONTINUITIES



FILED LINK DOCUMENTS



9. DO NOT CUT OR ENLARGE EXISTING HOLES IN THE YIELD-LINK, BRP OR SPACER PLATES.

FIELDWORKING:

1. WHEN THE STEEL STRUCTURE IS REQUIRED TO MEET CERTAIN TYPE OF CONSTRUCTION RATING, THE YIELD-LINK MOMENT CONNECTION SHALL HAVE A FIRE RATING SIMILAR TO THAT OF THE PRIMARY STRUCTURAL FRAME.
2. WHERE SPRAY FIRE-RESISTANT MATERIAL (SPRM) IS USED, MINIMUM THICKNESS OF SPRM FOR THE YIELD-LINK FLANGE AND STEM SHALL BE SIMILAR TO THAT OF THE BEAM AND COLUMN CONNECTIONS.
3. FOR CASES WHEN THE CONCRETE THICKNESS ABOVE THE YIELD-LINK COVER PLATE IS SHALLOWER THAN THE CONCRETE THICKNESS ABOVE THE METAL DECK RIB, YIELD-LINK COVER PLATE AT THE BEAM TOP FLANGE CAN BE COVERED WITH FIRE BARRIER PAINT WITH A COATING THICKNESS THAT PROVIDES THE SAME FIRE RATING PROTECTION AS THE PRIMARY STRUCTURAL FRAME. FIRE BARRIER PAINT SHALL BE TESTED AND CERTIFIED TO ASTM E119.

1. INSPECTION REQUIREMENTS SHALL BE IN CONFORMANCE WITH THE LOCAL CODE, BASED ON BUILDING OCCUPANCY, REQUIREMENTS OF THE LOCAL BUILDING OFFICE, AND OTHER CONSIDERATIONS, AND SHALL BE SPECIFIED BY THE EIR.
2. THE SUBMITTER AND DESIGNER SHALL BE RESPONSIBLE FOR QUALITY CONTROL (QC) BY ENSURING WORKMANSHIP MEETS THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE OWNER'S REPRESENTATIVE SHALL BE RESPONSIBLE FOR QUALITY ASSURANCE (QA) INSPECTIONS. Q/C AND Q/A REQUIREMENTS SHALL BE IN ACCORDANCE WITH AISC 360 CHAPTER 10 AND AISC 341 CHAPTER 10.
3. CONTRACTORS SIMPSON STRONG-TIE® AT 800-999-9090 TO REQUEST YIELD-LINK MILL CERTIFICATES.
4. STEEL MOMENT FRAME CONNECTIONS UTILIZING THE SIMPSON STRONG-TIE® YIELD-LINK CONNECTION SHALL HAVE AN IDENTIFICATION STICKER (PROVIDED BY SIMPSON STRONG-TIE®) PLACED NEXT TO THE SHEAR PLATE BETWEEN THE LINKS FOR EACH CONNECTION.

@	=	AT	COND = CONDITION	INFO = INFORMATION	SMP	=	SPECIAL MODEL FRAME
&	=	&	CONN = CONNECTION	MAX = MAXIMUM	SMT	=	SMPON STRONG-TIE
#	=	NUMBER	DC = DEMAND CRITICAL	MIN = MINIMUM	ST	=	STEEL TIE
ABV.	=	ABOVE	DA = DISTANCE	NS = NEAR SIDE	STD	=	STANDARD
ALT.	=	ALTERNATE	DR = DIRECTION	OC = ON CENTER	STP	=	STIFFENER PLATE
BL	=	BL	DIS = DISTANCE	OPP = OPPOSITE	STRT	=	STIFFENER
BPS	=	BUCKLING RESTRAINT PLATE	DTL = DETAIL	PJP = PARTIAL JOINT PENETRATION	THK	=	THICKNESS
CR	=	COLD FORMED STEEL	E = EACH	PL = PLATE	TOP	=	TOP
CSP	=	COMPLETE JOINT PENETRATION	E2 = EACH SIDE	REQD = REQUIRED	TOT	=	TOP AND BOTTOM
CL	=	CENTER LINE	EQ = EQUAL	S.A.D. = SEE ARCHITECTURAL DRAWINGS	TY	=	TYPICAL
COR	=	CORNER	ENG = ENGINEER OF RECORD	SUR = SURFACE	UNL	=	UNLESS NOTED OTHERWISE
COL	=	COLUMN	FLG = FLANGE	SM = SIMILAR	VERT	=	VERTICAL
CONC.	=	CONCRETE	FS = FAR SIDE		W	=	WITH
			GR = GRADE		WF	=	WIDE FLANGE
			HORZ = HORIZONTAL		YL	=	YIELD-LINK

GENERAL NOTES

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

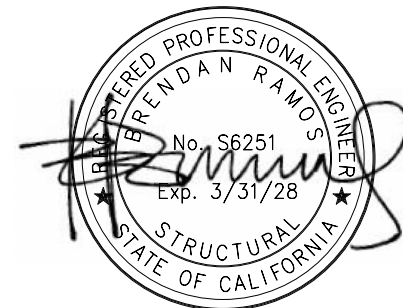
Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

Tel 949.863.9434
Fax 949.653.1676



19210 S. Vermont Ave.,
Bldg. B, Suite 210
Gardena, CA 90248
Tel 310.323.9924



NO.	DATE	REVISIONS

SIMPSON
Strong-Tie
THERE IS NO EQUAL

SIMPSON STRONG-TIE, CO. INC.
• 5956 W. Las Positas Blvd.
Pleasanton, CA 94588
• Tel: (800) 999-5099
• Fax: (925) 847-1997
• Web Site: www.strongtie.com

△	Date	Description
	10/14/2025	CD CLIENT REVIEW/PRICING
	11/03/2025	ISSUE FOR PLAN CHECK
	01/09/2025	ADDENDUM A/PLAN CHECK COMMENTS
	05/07/2026	BID SET

YIELD-LINK® MOMENT CONNECTION
STEEL SPECIAL MOMENT FRAME
CONNECTION DETAILING INFORMATION

NAME: G.S.
DATE: 09-11-2025
SCALE: N.T.S.
SHEET:
YLMC3
JOB NO.
ES-25090431

Project Name
**HANGAR 10
RECONSTRUCTION**
Project Number
25226
Description
YIELD-LINK MOMENT CONNECTION

Scale

YLMC3

ORTHOGONAL CONN. TO COL.

17

CRUCIFORM COL. STP CLIP DETAILS

18

SLOPED BEAM CONN (OPTION 3)

20

3-SIDED MOMENT CONNECTION

YIELD-LINK TO BEAM CONNECTION. NUMBER OF CONNECTION VARIES. SEE STRUCTURAL DOCUMENTS.

STIFFENER PER DESIGNER

WEAK AXIS (PINNED) CONNECTION TO COL. PER DESIGNER

WELD PER DESIGNER

A-A: CONN. TO COL. WEB

B-B: CONN. TO COL. FLANGE

DO NOT CONNECT SHEAR PL. TO COL. FLANGE WITH YL AT PROTECTED ZONE

STIFFENER PLATE PER DESIGNER MINIMUM THICKNESS PER TABLE 1 ON 2/YLMC3, 4 SIDES TYPICAL

NOTES:
1. SEE 2/- FOR INFO NOT NOTED.

4-SIDED MOMENT CONNECTION

YIELD-LINK TO BEAM CONNECTION. NUMBER OF CONNECTION VARIES. SEE STRUCTURAL DOCUMENTS.

STIFFENER PER DESIGNER MINIMUM THICKNESS PER TABLE 1 ON 2/YLMC3, 4 SIDES TYPICAL

NOTES:
1. SEE 2/- FOR INFO NOT NOTED.

MULTI-DIRECTION MOMENT CONNECTION DETAIL

10

SLOPED BEAM YIELD-LINK CONNECTION (OPTION 2)

12

CORNER CONDITION WITH FLANGE CRUCIFORM COLUMN

2

SLOPED BEAM YIELD-LINK CONNECTION (OPTION 1)

14

TABLE 1

YIELD-LINK	MIN. STIFF THK (IN)
YLMC4	3/8
YLMC6	1/2
YLMC8	5/8

SECTION A-A

SEE NOTE 5

W1

H1

WT (LEFT END)

WT (RIGHT END)

W-COL (LEFT END)

W-COL (RIGHT END)

W-SECTION OF COLUMN

STIFFENER TO COL. WEB FILLET WELD, PER DESIGNER, TYP.

W7

CONTINUOUS FULL HEIGHT FILLET WELD AWAY FROM CONN. TYPICAL

W6

STIFFENER TO COL. FLANGE FILLET OR CJP WELD PER DESIGNER, TYP.

W8

SECTION B-B

2-SIDED MOMENT CONNECTION

YIELD-LINK TO BEAM CONNECTION. NUMBER OF CONNECTION VARIES. SEE STRUCTURAL DOCUMENTS.

STIFFENER PER DESIGNER 4 SIDES TYPICAL (MIN. THICKNESS PER TABLE 1)

SEE DETAIL 18 FOR STIFF. CLIP DETAILS

WT TO-W COL. CONT. FILLET WELD AT THE CONNECTION (EXTENDS DEPTH OF WT ABOVE AND BELOW, PER DESIGNER) SEE NOTE 1

W6A

WT PORTION OF COLUMN

W-COL

W-SECTION OF COLUMN

STIFFENER PLATES NOT SHOWN FOR CLARITY

SECTION B-B

2-SIDED MOMENT CONNECTION

BUCKLING RESTRAINT PLATE

SPACER PLATE

YIELD-LINK

SHEAR PLATE PER DESIGNER SEE 20/YLMC1

TOP STIFFENER PLATES PER DESIGNER

INTERMEDIATE STIFFENER PLATES PER DESIGNER SEE NOTE 2

6" (MAX)

BOT. STIFFENER PLATES PER DESIGNER

STEEL BEAM PER DESIGNER

STEEL COLUMN PER DESIGNER

NOTES:
1. DOUBLE SIDED FILLET WELD SHALL DEVELOP SHEAR AT COLUMN FLANGE-TO-WEB CONNECTION STRENGTH. SMALLER OF: (A) NOMINAL SHEAR STRENGTH OF WT COLUMN WEB, (B) MAXIMUM SHEAR FORCE AT PR_LINK OF CONNECTION.
2. INTERMEDIATE STIFFENER REQUIRED IF DIFFERENCE BETWEEN DEPTH OF BEAMS CONNECTING W-COL AND WT SECTION IS GREATER THAN 6".
3. SEE 6/YLMC1 FOR BOLTING REQUIREMENTS.
4. SEE 7/YLMC1 FOR PROTECTED ZONE AT YIELD-LINK CONNECTION.
5. W1 AND H1 ARE DIMENSIONS FOR WELDING CLEARANCE. DESIGNER TO COORDINATE WITH FABRICATOR FOR MINIMUM DIMENSIONS REQUIRED.

NOT USED

NOTES:
1. WEB COPE AT WT AND W SECTIONS (LcIpFlg_Wt, LcIpWeb_W) = k+1.5"-t_w
2. FLANGE COPE AT WT AND W SECTIONS (LcIpFlg_Wt, LcIpFlg_W) = k+0.5"-t_w/2.
3. SEE AWS D1.8 CHAPTER C-4 FOR MORE INFORMATION.
4. SEE AISC STEEL MANUAL FOR k, k_s, t_w AND t_w VALUES FOR THE COLUMNS.

NOTES:
1. SEE 4/- FOR INFO NOT NOTED.
2. THICKNESS OF SHIMS (t₁, t₂, t₃ AND t₄) TO BE DETERMINED BY DESIGNER/DETAILER ASSUMING TOP OF LINK FLANGE IN CONTACT WITH COLUMN FLANGE (POINT A), WITH MINIMUM SHIM THICKNESS OF 1/16" AT (t₁ AND t₃ LOCATIONS).
3. t₁ SHALL BE A MAXIMUM OF 1/8".

NOTES:
1. MAXIMUM RISE = 1" PER FOOT, CONTACT SIMPSON STRONG-TIE FOR STEEPER SLOPES.
2. LINK FLANGE-TO-COLUMN FLANGE BOLTS SHALL BE PRE-TENSIONED FOR SLOPED BEAM-TO-COLUMN YIELD-LINK CONNECTIONS.
3. SHIM PLATE SIZE TO MATCH LINK FLANGE LENGTH AND WIDTH DIMENSIONS.
4. THICKNESS OF SHIM TO BE DETERMINED BY DESIGNER/DETAILER ASSUMING TOP OF LINK FLANGE IN CONTACT WITH COLUMN FLANGE (POINT A).
5. SHIM PLATE MATERIAL: A36 OR A572 GR. 50.
6. FINGER SHIM MATERIAL: STRUCTURAL-GRADE STEEL MATERIAL, BUT NEED NOT BE HARDENED.
7. ANGLED BOLT WASHER MATERIAL: F436.
8. BEAM SLOPED DOWN CONDITION SIMILAR.
9. SEE YLMC1 SHEET FOR FURTHER INFORMATION.

PLAN CHECK NOTES	
1.	ALL HVAC EQUIPMENT AND APPLIANCES SHALL MEET THE REQUIREMENTS PER SECTION 110.1-110.3, 110.5, 120.1-120.4 TITLE 24 ENERGY STANDARDS 2022.
2.	PROVIDE SMOKE DETECTORS IN MAIN SUPPLY AIR DUCTS OF AIR MOVING SYSTEMS EXCEEDING 2000 CFM PER SECTION 608.0 CMC 2022.
3.	EXHAUST DUCTS SHALL BE EQUIPPED WITH BACK-DRAFT DAMPERS PER SEC. 504.0 CMC 2022.
4.	A WATERTIGHT PAN OF CORROSION RESISTANT MATERIAL SHALL BE PROVIDED BENEATH HVAC UNITS PER SECTION 310.2 CMC 2022.
5.	ROOF ACCESS LADDER SHALL COMPLY WITH SECTION 304 CMC 2022.
6.	HVAC DUCT INSULATION SHALL BE R-4 AT EXTERIOR INSTALLED DUCTWORK.
7.	FACTORY MADE FLEXIBLE AIR DUCTS AND CONNECTORS SHALL NOT BE MORE THAN 5 FEET IN LENGTH PER SECTION 603.4.1 CMC 2022.

TITLE 24 NOTES	
1.	HVAC SYSTEMS SHALL MEET THE LATEST CONTROL REQUIREMENTS OF SECTIONS 110.2 & 120.2 TITLE 24 ENERGY STANDARDS 2022.
2.	DOORS AND WINDOWS SHALL MEET MINIMUM INFILTRATION REQUIREMENTS OF SECTION 110.6 AND 110.7 TITLE 24 ENERGY STANDARDS 2022.
3.	INSULATION AND FLEXIBLE DUCT SHALL COMPLY WITH STATE FIRE MARSHAL CRITERIA AND SHALL NOT EXCEED FLAME SPREAD OF 25 AND SMOKE DEVELOPED OF 450 PER ASTM-64, NFPA-225, AND U.L. 723.
4.	ALL WORK SHALL BE IN ACCORDANCE WITH CITY CODES, CALIFORNIA ENERGY CONSERVATION STANDARDS, TITLE - 24, AND ALL OTHER APPLICABLE CODES.
5.	ALL ENVELOPE AND MECHANICAL CERTIFICATE OF ACCEPTANCE FORMS AND ALL RELATED ACCEPTANCE DOCUMENTS SHALL BE SUBMITTED TO THE FIELD INSPECTOR DURING CONSTRUCTION. CERTIFICATE OF OCCUPANCY WILL NOT BE ISSUED UNTIL THESE FORMS ARE REVIEWED AND APPROVED.
6.	ALL PIPING AND DUCT WORK SHALL BE INSULATED CONSISTENT WITH THE REQUIREMENTS OF SECTIONS 120.3, 120.4 AND 120.7 TITLE 24 ENERGY STANDARDS 2022 AND CHAPTER 6 OF CMC 2022.

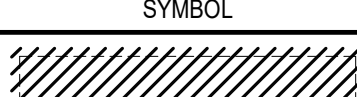
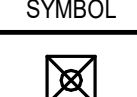
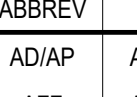


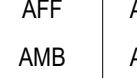


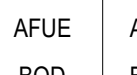

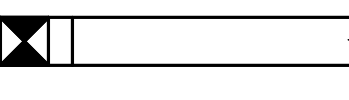
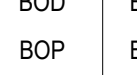

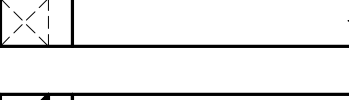
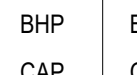

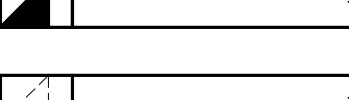
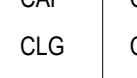

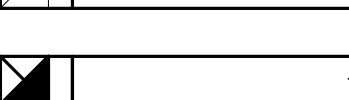
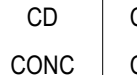

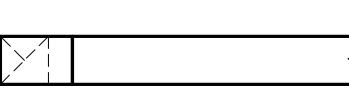
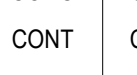

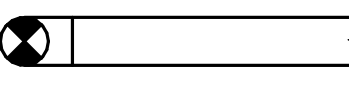
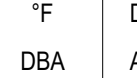

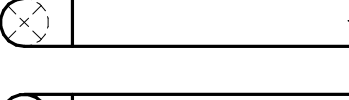
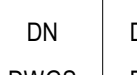

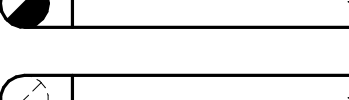
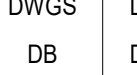

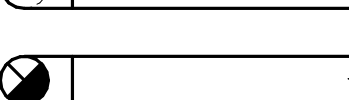
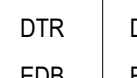
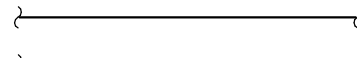
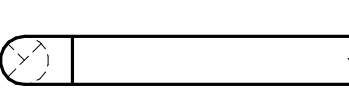
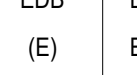
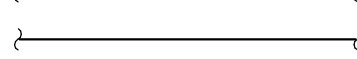
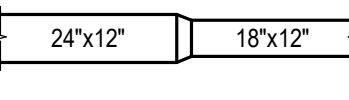
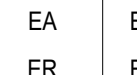
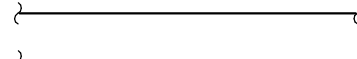
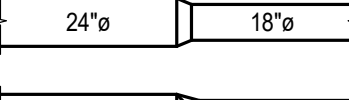
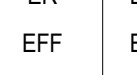
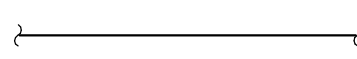
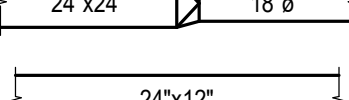
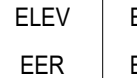
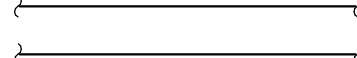
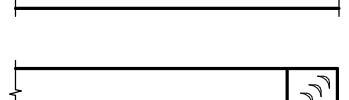
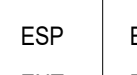
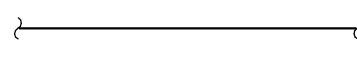

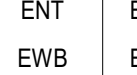
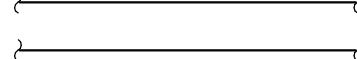
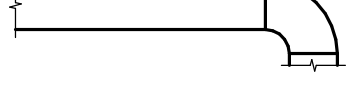
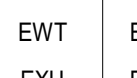
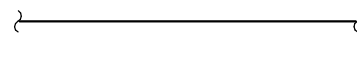
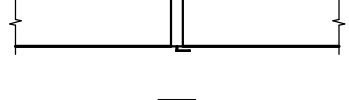
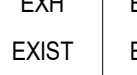
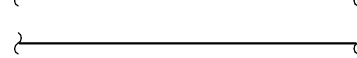
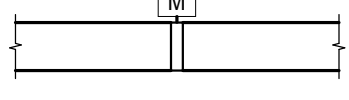
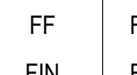
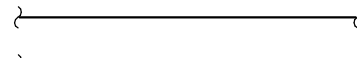
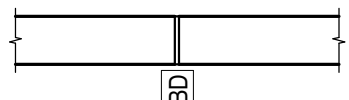
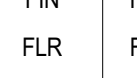
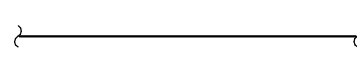
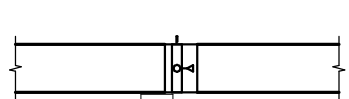
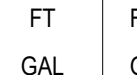
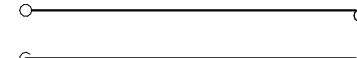
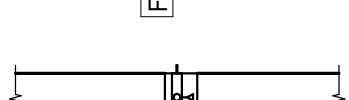
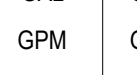

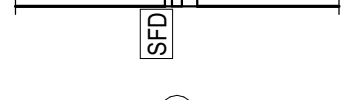
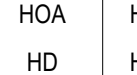
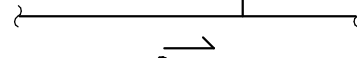
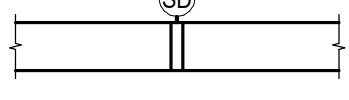
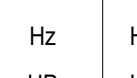
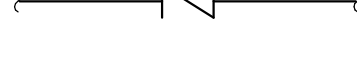
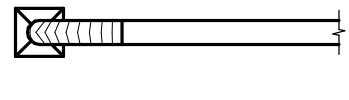
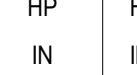
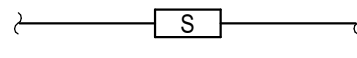
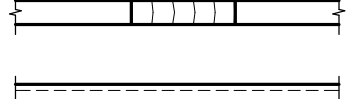
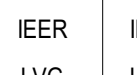

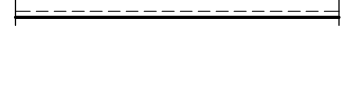
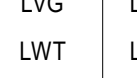

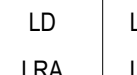

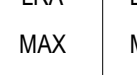
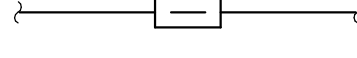
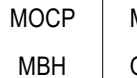
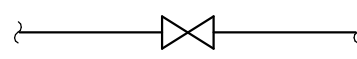
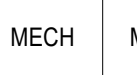
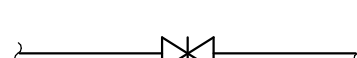
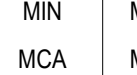

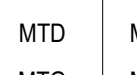
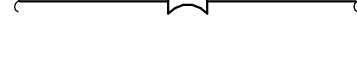
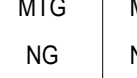
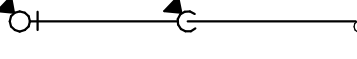
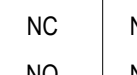

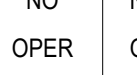

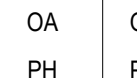

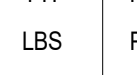
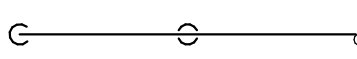
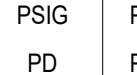

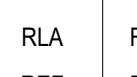

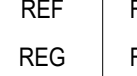

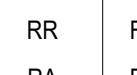
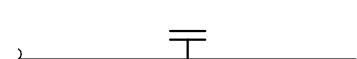
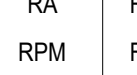

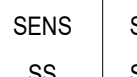
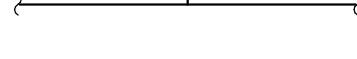
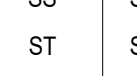
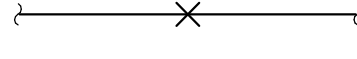

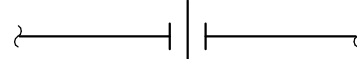
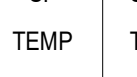

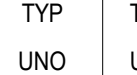

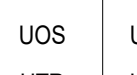

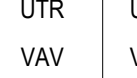
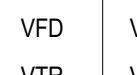
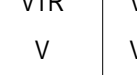
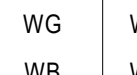
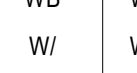
CA GREEN BUILDING NOTES	
1.	IN MECHANICALLY VENTILATED BUILDINGS, PROVIDE OCCUPIED AREAS OF BUILDING WITH AIR FILTRATION MEDIA FOR OUTSIDE AND RETURN AIR PRIOR TO OCCUPANCY THAT PROVIDES AT LEAST MERV OF 13, SECTION 5.504.5.3 CGBCS 2022.
2.	PERFORM TESTING AND ADJUSTING OF HVAC SYSTEMS AND CONTROLS PER 5.410.4.3.1 CGBCS 2022.
3.	COMMISSIONING IS REQUIRED FOR COMMERCIAL BUILDINGS 10,000 SF AND OVER PER SECTION 5.410.2 CGBCS 2022.
4.	THE PERMANENT HVAC SYSTEM SHALL ONLY BE USED DURING CONSTRUCTION IF NECESSARY TO CONDITION THE BUILDING OR AREAS OF ADDITION OR ALTERATION WITHIN THE REQUIRED TEMPERATURE RANGE FOR MATERIAL AND EQUIPMENT INSTALLATION. IF THE HVAC SYSTEM IS USED DURING CONSTRUCTION, RETURN AIR FILTERS WITH A MINIMUM EFFICIENCY REPORTING VALUE (MERV) OF 13, BASED ON ASHRAE 52.2-1989, OR AN AVERAGE EFFICIENCY OF 30%, BASED ON ASHRAE 52.1-1992 SHALL BE USED. ALL FILTERS SHALL BE REPLACED IMMEDIATELY PRIOR TO OCCUPANCY OR AT THE CONCLUSION OF CONSTRUCTION (5.504.1 CGBCS 2022).
5.	AT THE TIME OF ROUGH INSTALLATION AND DURING STORAGE ON THE CONSTRUCTION SITE UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH TAPE, PLASTIC, SHEET METAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF DUST, WATER AND DEBRIS WHICH MAY ENTER THE SYSTEM (5.504.3 CGBCS 2022).
6.	IN MECHANICALLY VENTILATED BUILDINGS, REGULARLY OCCUPIED AREAS OF THE BUILDING SHALL BE PROVIDED WITH AIR FILTRATION MEDIA FOR OUTSIDE AND RETURN AIR THAT PROVIDES AT LEAST A MINIMUM EFFICIENCY REPORTING VALUE (MERV) OF 13. MERV 13 FILTERS SHALL BE INSTALLED PRIOR TO OCCUPANCY, AND RECOMMENDATIONS FOR MAINTENANCE WITH FILTERS OF THE SAME VALUE SHALL BE INCLUDED IN THE OPERATION AND MAINTENANCE MANUAL (5.504.5.3 CGBCS 2022).
7.	WHERE OUTDOOR AREAS ARE PROVIDED FOR SMOKING, PROHIBIT SMOKING WITHIN THE BUILDING AS ALREADY PROHIBITED BY OTHER LAWS OR REGULATIONS, OR AS ENFORCED BY ORDINANCES, REGULATIONS, OR POLICES OF ANY CITY, COUNTY, CITY AND COUNTY, CALIFORNIA COMMUNITY COLLEGE, CAMPUS OF THE CALIFORNIA STATE UNIVERSITY, OR CAMPUS OF THE UNIVERSITY OF CALIFORNIA, WHICHEVER ARE MORE STRINGENT. WHEN ORDINANCES, REGULATIONS, OR POLICES ARE NOT IN PLACE, SIGNAGE SHALL BE POSTED TO INFORM BUILDING OCCUPANTS OF THE PROHIBITIONS.
8.	MECHANICALLY OR NATURALLY VENTILATED SPACES IN BUILDINGS SHALL MEET THE MINIMUM REQUIREMENTS OF SECTION 121 (REQUIREMENTS FOR VENTILATION) OF THE 2022 CALIFORNIA ENERGY CODE, OR THE APPLICABLE LOCAL CODE, WHICHEVER IS MORE STRINGENT, AND DIVISION 1, CHAPTER 4 OF CCR, TITLE 8, (CAL GREEN SECTION 5.506.1)
9.	FOR BUILDINGS OR ADDITIONS EQUIPPED WITH DEMAND CONTROL VENTILATION, CO2 SENSORS AND VENTILATION CONTROLS SHALL BE SPECIFIED AND INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS OF 2022 CALIFORNIA ENERGY CODE, SECTION 120.1(C)(4), (5.506.2 CGBCS 2022).
10.	BUILDING ASSEMBLIES AND COMPONENTS WITH STC VALUES DETERMINED IN ACCORDANCE WITH ASTM E90 AND ASTM E413 SHALL BE EMPLOYED.
11.	WALL AND ROOF-CEILING ASSEMBLIES EXPOSED TO THE NOISE SOURCE MAKING UP THE BUILDING OR ADDITION ENVELOPE OR ALTERED ENVELOPE SHALL MEET A COMPOSITE STC RATING OF AT LEAST 50 OR A COMPOSITE OITC RATING OF NO LESS THAN 40, WITH EXTERIOR WINDOWS OF A MINIMUM STC OF 40 OR OITC OF 30 IF LOCATED WITHIN THE 65 ONEL NOISE INDUSTRIAL SOURCE OR FIXED-GUIDEWAY SOURCE AS DETERMINED BY THE NOISE ELEMENT OF THE GENERAL PLAN, (5.507.4.1 CGBCS) SEE EXCEPTIONS 1&2 ON SEC. 5.507.4.1.
12.	INSTALLATIONS OF HVAC, REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT SHALL COMPLY WITH SECTIONS 5.508.1.1 AND 5.508.1.2 CGBCS 2022. HVAC, REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT SHALL NOT CONTAIN CHLOROFLUOROCARBONS (CFCs) AND SHALL NOT CONTAIN HALONS (5.508.1 CGBCS 2022).
13.	IN ADDITION TO TESTING AND ADJUSTING, BEFORE A NEW SPACE-CONDITIONING SYSTEM SERVING A BUILDING OR SPACE IS OPERATED FOR NORMAL USE, BALANCE THE SYSTEM IN ACCORDANCE WITH THE PROCEDURES DEFINED BY THE TESTING ADJUSTING AND BALANCING BUREAU NATIONAL STANDARDS, THE NEBB PROCEDURAL STANDARDS, OR AABC NATIONAL STANDARDS.
14.	PROVIDE THE BUILDING OWNER OR REPRESENTATIVE WITH DETAILED OPERATING AND MAINTENANCE INSTRUCTIONS AND COPIES OF GUARANTEES/WARRANTIES FOR EACH SYSTEM. O&M INSTRUCTIONS SHALL BE CONSISTENT WITH OSHA REQUIREMENTS IN CCR, TITLE 8, 5.410.4.5 CGBCS 2022, AND OTHER RELATED REGULATIONS.

MECHANICAL SCOPE OF WORK	
1.	THE MECHANICAL SCOPE OF WORK IS AS FOLLOWS: A. DESIGN THE MECHANICAL SYSTEMS FOR CORE AND SHELL BASE BUILDING SYSTEM.

GENERAL NOTES	
1.	THESE DRAWINGS ARE A GENERAL GRAPHIC PRESENTATION OF THE WORK. DUCTWORK, PIPING, AND EQUIPMENT, AS SHOWN, ARE SCHEMATIC. FABRICATE AND INSTALL BASED ON ACTUAL FIELD MEASUREMENT. COORDINATE WITH OTHER TRADES. PROVIDE A COMPLETE SET OF SHOP DRAWINGS REFLECTING ACTUAL INSTALL, ACCESS REQUIREMENTS, AND DETAILS BASED UPON THE ACTUAL EQUIPMENT PROCURED. MAINTAIN AN UP TO DATE SET OF AS-BUILT DRAWINGS AT THE JOB SITE.
2.	THESE DRAWINGS ARE TO BE CONSIDERED NOT FOR CONSTRUCTION UNTIL THEY ARE STAMPED, SIGNED, AND PERMITTED. UNTIL THEN THEY ARE SUBJECT TO CHANGE WITHOUT NOTICE.
3.	REVIEW ALL DRAWINGS AND SPECIFICATIONS INCLUDING ARCHITECTURAL, STRUCTURAL, CIVIL, MECHANICAL, PLUMBING, AND ELECTRICAL. ANY QUESTIONS SHALL BE BROUGHT UP, IN WRITING, TO THE ATTENTION OF THE ENGINEER BEFORE THE START OF CONSTRUCTION.
4.	PROVIDE ACCESS AND CLEARANCE FOR MAINTENANCE FOR MECHANICAL EQUIPMENT AND COMPONENTS AS RECOMMENDED BY EQUIPMENT MANUFACTURER AND APPLICABLE CODES.
5.	HANDLE, STORE AND INSTALL EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS.
6.	INSTALL VALVES WITH UNIONS OR FLANGES AT EACH PIECE OF EQUIPMENT ARRANGED TO ALLOW SERVICE MAINTENANCE, AND EQUIPMENT REMOVAL WITHOUT SYSTEM SHUT-DOWN.
7.	BRACE AND SUPPORT PIPES, CONDUIT, AND DUCTWORK IN ACCORDANCE WITH SMACNA GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL AND PLUMBING PIPING SYSTEM.
8.	REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT LOCATION OF DIFFUSERS, REGISTERS, GRILLES, AND ACCESS PANELS.
9.	ALL DUCT DIMENSIONS, AS SHOWN ON MECHANICAL DRAWINGS ARE CLEAR INSIDE DIMENSIONS.
10.	COMMISSION AND START-UP THE MECHANICAL SYSTEMS TO ASSURE A COMPLETE AND OPERATIONAL HVAC SYSTEM IN ACCORDANCE WITH ASHRAE AND NEBB.
11.	ALL SQUARE ELBOWS IN DUCTWORK SHALL HAVE DOUBLE THICKNESS TURNING VANES. ALL RADIUS ELBOWS IN DUCTWORK SHALL BE MINIMUM 1.5W (1.5W WIDTH) AND HAVE 3 SPLITTER VANES. PROVIDE MANUAL VOLUME DAMPER AT EACH BRANCH DUCT TAKE-OFF SERVING EACH AIR TERMINAL DEVICE. PROVIDE BALANCING DAMPERS FOR EACH MAIN DUCT TAKE-OFF IN ACCORDANCE WITH SMACNA IN ORDER TO ASSURE A COMPLETELY BALANCED SYSTEM.
12.	FIRE DAMPER ASSEMBLIES, INCLUDING LOCATION, SLEEVES, AND INSTALLATION PROCEDURES SHALL BE APPROVED BY THE BUILDING INSPECTOR PRIOR TO PROCUREMENT AND INSTALLATION. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF FIRE RATED WALLS AND SMOKE SEPARATIONS.
13.	COORDINATE WITH ELECTRICAL AND CONTROL CONTRACTORS FOR ALL POWER REQUIREMENTS PRIOR TO BID.
14.	UPON INSTALLATION OF ALL EQUIPMENT, DEVICES, VIBRATION ISOLATION, ETC., PROVIDE WRITTEN CONFIRMATION BY EQUIPMENT MANUFACTURER'S REPRESENTATIVES TO ENSURE COMPLIANCE WITH MANUFACTURER'S REQUIREMENTS.
15.	PROVIDE DETAILS AND SEISMIC CALCULATIONS FOR ALL EQUIPMENT ON VIBRATION ISOLATION. ALL DETAILS SHALL BE STAMPED BY A STRUCTURE ENGINEER FROM VIBRATION ISOLATION MANUFACTURER.
16.	THE CONTRACTOR SHALL SELECT ALL CIRCUIT SETTERS/BALANCING VALVES FOR ACTUAL FLOW THROUGH THE PIPE AND THE PROPER PRESSURE DROP TO ENSURE PROPER OPERATION AND NOT BASED ON PIPE SIZES.
17.	PROVIDE SALT SPRAY COATING ON CONDENSER COILS WHEN PROJECT IS WITHIN 5 MILES OF THE OCEAN.
18.	PROVIDE ALL MULTI-MOTOR EQUIPMENT WITH HIGH SCOR RATING.

PROJECT NOTES	
1.	CONTRACTOR SHALL COORDINATE ARCHITECTURAL REFLECTED CEILING PLANS WITH ALL DISCIPLINES TO VERIFY CLEARANCES BETWEEN HVAC DUCTS, HVAC PIPING, LIGHT FIXTURES, ELECTRICAL DATA CONDUITS, PLUMBING LINES, FIRE PROTECTION LINES, STRUCTURAL MEMBERS, ETC. SPECIAL ATTENTION IS REQUIRED ALONG THE LENGTH OF MAIN MECHANICAL SUPPLY AND RETURN AIR DUCTS WHERE THERE IS LIMITED CLEARANCE FOR PASSAGE OR ROUTING OF UTILITIES.
2.	THE SPACE FOR DUCT WORK & MECHANICAL EQUIPMENT FOR THIS PROJECT IS LIMITED. COORDINATION WITH OTHER TRADES IS CRITICAL. PROCEED WITH PREPARATION OF SHOP DRAWINGS. IMMEDIATELY UPON RECEIVING AN AUTHORIZATION TO PROCEED FOR THE PROJECT, COMPLETE SHOP DRAWINGS PRIOR TO MATERIAL FABRICATION AND INSTALLATION.
3.	PROVIDE ORIGINALLY PREPARED CONTRACTOR'S SHOP DRAWINGS IN ELECTRONIC FORMAT. THE SHOP DRAWINGS SHALL INCLUDE THE FOLLOWING: a. DUCT, PIPE AND PLUMBING ELEVATIONS. b. DOUBLE LINE DUCTWORK AND PIPING (6" AND LARGER). c. ACTUAL SIZE OF PURCHASED EQUIPMENT PER APPROVED CONTRACTOR'S SHOP DRAWINGS. d. ACCESS PANELS INCLUDING CEILING PANELS. e. ACCESS CLEARANCES FOR EQUIPMENT. f. ACTUAL LOCATIONS OF CEILING DIFFUSERS, REGISTERS, AND RETURN REGISTERS. g. LOCATIONS OF STRUCTURAL MEMBERS SUCH AS BEAMS. h. ACTUAL LOCATIONS OF CONTROL PANELS AND POWER CONNECTIONS TO EQUIPMENT. i. COLOR CODED DUCT AND PIPING BASED ON MATERIAL USED. j. MINIMUM 1/4"=10" SCALE DRAWINGS. k. LABEL AND TAG SCHEDULE FOR EQUIPMENT. l. DUCT TRANSITIONS TO CLEAR BEAMS OR TIGHT AREAS. m. ROOM TEMPERATURE SENSOR LOCATIONS. n. POINT OF CONNECTION TO UTILITIES OUTSIDE THE BUILDING. o. SECTIONS OR 3-D DRAWINGS OF CONGESTED AREAS. p. GRID LINES. q. UNDERGROUND PIPING.
4.	DO NOT COMMENCE WITH ANY INSTALLATION, ORDERING OF ANY EQUIPMENT OR MATERIAL FABRICATION WITHOUT AN APPROVED SHOP DRAWING SUBMITTAL.
5.	FOR EACH SUBMITTAL, THE CONTRACTOR SHALL PROVIDE A LETTER (ON COMPANY LETTERHEAD) AND SIGNED BY THE PROJECT MANAGER INDICATING THE SUBMITTAL HAS BEEN FULLY IN HOUSE REVIEWED TO ENSURE FULL COMPLIANCE WITH THE CONTRACT DOCUMENTS AND COORDINATION WITH OTHER TRADES. ANY EXCEPTIONS TO THE CONTRACT DOCUMENTS SHALL BE CLEARLY INDICATED ON THIS LETTER.

TESTING AND ADJUSTING	
TESTING AND ADJUSTING SHALL BE PERFORMED IN ACCORDANCE WITH THE 2022 CALIFORNIA ENERGY CODE (TITLE 24), SECTION 120.8.	
TESTING AND ADJUSTING SHALL INCLUDE MEASUREMENT AND ADJUSTMENT OF SUPPLY, RETURN, EXHAUST (IF PROVIDED), AND OUTDOOR AIRFLOWS TO DESIGN VALUES, VERIFICATION OF REQUIRED VENTILATION AIR QUANTITIES, AND FUNCTIONAL VERIFICATION OF ECONOMIZER OPERATION.	
REQUIRED ACCEPTANCE TESTING AND COMMISSIONING, IF APPLICABLE UNDER TITLE 24 SECTION 120.8, SHALL BE PERFORMED IN ACCORDANCE WITH CODE REQUIREMENTS. REQUIRED DOCUMENTATION SHALL BE COMPLETED AND SUBMITTED PRIOR TO FINAL INSPECTION.	

MECHANICAL LEGEND								
SYMBOL	ABBREV	DESCRIPTION	SYMBOL	ABBREV	DESCRIPTION	SYMBOL	ABBREV	DESCRIPTION
		REMOVE EXISTING WORK HATCHED AND SHOWN DASHED		CD	CEILING DIFFUSER		AD/AP	ACCESS DOOR / ACCESS PANEL
	POC	POINT OF CONNECTION		RR	RETURN REGISTER		AFF	ABOVE FINISHED FLOOR
	POD	POINT OF DISCONNECT		ER	EXHAUST REGISTER		AMB	AMBIENT
		COORDINATE WITH ELECTRICAL		SA	SA DUCT UP (RECTANGULAR)		AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY
	DS	DUCT SENSOR (NUMBER INDICATES EQUIPMENT ZONE SERVED)		SA	SA DUCT DOWN (RECTANGULAR)		BOD	BOTTOM OF DUCT
	TSTAT	THERMOSTAT OR TEMPERATURE SENSOR (NUMBER INDICATES EQUIPMENT ZONE SERVED)		RA/OA	RA/OA DUCT UP (RECTANGULAR)		BOP	BOTTOM OF PIPE (AFF)
	HSTAT	HUMIDISTAT		RA/OA	RA/OA DUCT DOWN (RECTANGULAR)		BHP	BRAKE HORSE POWER
	CMO	CARBON MONOXIDE SENSOR		EA	EA DUCT UP (RECTANGULAR)		CAP	CAPACITY
	CZ	CARBON DIOXIDE SENSOR		EA	EA DUCT DOWN (RECTANGULAR)		CLG	CEILING
	CFM	CUBIC FEET PER MINUTE		SA	SA DUCT UP (ROUND)		CD	CEILING DIFFUSER
	DIA	DIAMETER		SA	SA DUCT DOWN (ROUND)		CONC	CONCRETE
		SYMBOL, SEE EQUIPMENT SCHEDULE		RA/OA	RA/OA DUCT UP (ROUND)		CONT	CONTINUATION
	HHWS	HEATING HOT WATER SUPPLY		RA/OA	RA/OA DUCT DOWN (ROUND)		°F	DEGREES FAHRENHEIT
	HHWR	HEATING HOT WATER RETURN		EA	EA DUCT UP (ROUND)		DBA	A-WEIGHTED DECIBELS
	CHW	CHILLED WATER		EA	EA DUCT DOWN (ROUND)		DN	DOWN
	CHWR	CHILLED WATER RETURN			RECTANGULAR DUCT TRANSITION		DWGS	DRAWINGS
	CHWS	CHILLED WATER SUPPLY			ROUND DUCT TRANSITION		DBULB	DRY BULB
	CD	CONDENSATE DRAIN (A.C.)			RECTANGULAR TO ROUND DUCT TRANSITION		DTR	DUCT THROUGH ROOF
	CWR	CONDENSER WATER RETURN			DUCTWORK (1ST NUMBER INDICATES WIDTH SHOWN), NET INSIDE DIMENSION		EDB	ENTERING DRY BULB
	CWS	CONDENSER WATER SUPPLY		TV	SQUARE ELBOW WITH TURNING VANES		(E)	EXISTING
	D	DRAIN			RADIUS ELBOW		EA	EXHAUST AIR
	S	STEAM		MVD	MANUAL VOLUME DAMPER		ER	EXHAUST REGISTER
	LPS	LOW PRESSURE STEAM		MOD	MOTOR OPERATED DAMPER		EFF	EFFICIENCY
	MPS	MEDIUM PRESSURE STEAM		BDD	BACKDRAFT DAMPER		ELEV	ELEVATION
	HPW	HIGH PRESSURE STEAM		FD	FIRE DAMPER		EER	ENERGY EFFICIENCY RATIO
	CR	STEAM CONDENSATE RETURN		SFD	AUTOMATIC SMOKE AND FIRE DAMPER		ESP	EXTERNAL STATIC PRESSURE
	RD	REFRIGERANT DISCHARGE		FLEX	FLEXIBLE CONNECTION (DUCTWORK)		ENT	ENTERING
	RL	REFRIGERANT LIQUID		FLEX	FLEXIBLE CONNECTION OR SEISMIC JOINT		EWB	ENTERING WET BULB
	RS	REFRIGERANT SUCTION			LINED DUCTWORK (OR PLENUM)		EWAT	ENTERING WATER TEMPERATURE
		PIPE UP					EXH	EXHAUST
		PIPE DOWN					EXIST	EXISTING
	AV	AIR VENT (VALVE)					FF	FINISHED FLOOR
	CHV	CHECK VALVE					FIN	FINISH
	SD	SUCTION DIFFUSER					FLR	FLOOR
	CV (2W)	CONTROL VALVE (2-WAY)					FT	FEET
	CV (3W)	CONTROL VALVE (3-WAY)					GAL	GALLON
	FCD	AUTOMATIC FLOW CONTROL DEVICE					GPM	GALLONS PER MINUTE
	SOV	SHUT-OFF VALVE					HOA	HAND-OFF-AUTOMATIC
	BV	COMBINATION BALANCING & SHUT-OFF VALVE					HD	HEAD
	FEV	FLOW ELEMENT VENTURI					Hz	HERTZ
		VALVE ON RISE OR DROP					HP	HORSEPOWER
	STR	STRAINER					IN	INCH
	CL	CAPPED LINE					IEER	INTEGRATED ENERGY EFFICIENCY RATIO
	UP	RISE OR RISER					LVG	LEAVING
	DN	DOWN OR DROP					LWT	LEAVING WATER TEMPERATURE
	RV	PRESSURE RELIEF VALVE					LD	LINEAR DIFFUSER
	PG	PRESSURE GAUGE WITH BALL VALVE					LRA	LOCKED ROTOR AMPS
	FC	FLEXIBLE CONNECTION (PIPE)					MAX	MAXIMUM
	TW	TEST WELL (PETE'S PLUG) - PRESSURE AND/OR TEMPERATURE					MOCP	MAXIMUM OVERCURRENT PROTECTION
	TI	THERMOMETER					MBH	ONE THOUSAND B.T.U.'S PER HOUR
	PA	PIPE ANCHOR					MCH	MECHANICAL
	U	UNION					MIN	MINIMUM
							MCA	MINIMUM CIRCUIT AMPS
							MTD	MOUNTED
							MTG	MOUNTING
							NG	NATURAL GAS
							NC	NORMALLY CLOSED
							NO	NORMALLY OPEN
							OPER	OPERATING
							OA	OUTSIDE AIR
							PH	PHASE
							LBS	POUNDS
							PSIG	POUNDS PER SQUARE INCH GAUGE
							PD	PRESSURE DROP
							RLA	RATED LOAD AMPS
							REF	REFRIGERANT
							REG	REGISTER
							RR	RETURN REGISTER
							RA	RETURN AIR
							RPM	REVOLUTIONS PER MINUTE
							SENS	SENSIBLE
							SS	STAINLESS STEEL
							ST	STEAM
							SF	SQUARE FEET
							TEMP	TEMPERATURE
							TYP	TYPICAL
							UNO	UNLESS NOTED OTHERWISE
							UOS	UNLESS OTHERWISE SPECIFIED
							UTR	UP THROUGH ROOF
							VAV	VARIABLE AIR VOLUME
							VFD	VARIABLE FREQUENCY DRIVE
							VTR	VENT THROUGH ROOF
							V	VOLTS
							WG	WATER GAUGE
							WB	WET BULB
							W/	WITH

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ROOFTOP PACKAGE UNIT SCHEDULE																																			
SYMBOL	MAKE AND MODEL	AREA SERVED	LOCATION	SUPPLY FAN					MIN. OA (CFM)	REFRIGERANT				CAPACITY (MBH)				COOLING COIL				HEATING COIL				FILTERS				ELECTRICAL				OPER WEIGHT (LBS.)	REMARKS
				CFM	ESP (IN. W.G.)	TYPE	RPM	MAX HP		TYPE	CHARGE	TOTAL	SENS	D.B.	W.B.	AMB TEMP (°F)	SEER2	CAPACITY (MBH)	AMB (HEATING)	HSPF2	COP	PRE	FINAL	MCA	MOCP	V	PH								
RTU-B-1	CARRIER 50GEQM05A3A5-0A0A0	SUITE B	ROOF	1600	1.5	DIRECT	2660	1.11	450	R-454b	11.5	50.1	37.3	55	55	95	16	44.8	46	7.2	3.8	MERV-8	MERV-13	27.0	40	208	3	600	①②③⑤⑥⑦						
RTU-C-1	CARRIER 50GEQM05A3A5-0A0A0	SUITE C	ROOF	1600	1.5	DIRECT	2660	1.11	450	R-454b	11.5	50.1	37.3	55	55	95	16	44.8	46	7.2	3.8	MERV-8	MERV-13	27.0	40	208	3	600	①②③⑤⑥⑦						
RTU-D-1	CARRIER 50GEQM05A3A5-0A0A0	SUITE D	ROOF	1600	1.5	DIRECT	2660	1.11	450	R-454b	11.5	50.1	37.3	55	55	95	16	44.8	46	7.2	3.8	MERV-8	MERV-13	27.0	40	208	3	600	①②③⑤⑥⑦						
① PROVIDE WITH VIBRATION ISOLATION ② PROVIDE WITH BACNET INTERFACE ③ PROVIDE WITH VFD ④ EQUIPMENT TO BE INSTALLED BY FUTURE TENANT. ⑤ PROVIDE WITH VIBRATION ISOLATION CURB. CURB APPROXIMATE WEIGHT 425 LBS. ⑥ UNIT COIL AND CABINET SHALL BE OUTDOOR RATED WITH 3000 HOUR RATED SALT SPRAY FOR MARINE ENVIRONMENTS. ⑦ PROVIDE WITH DIFFERENTIAL ENTHALPY ECONOMIZER.																																			

AIR HANDLING UNIT SCHEDULE																											
SYMBOL	MAKE AND MODEL	AREA SERVED	LOCATION	SUPPLY FAN						MIN. OA (CFM)	REFRIGERANT	CAPACITY (MBH)		COOLING COIL			HEATING COIL		FILTERS		ELECTRICAL				OPER WEIGHT (LBS.)	REMARKS	
				CFM	ESP (IN. W.G.)	TYPE	RPM	BHP	SUPPLY FAN MAX HP			TOTAL	SENS	D.B.	W.B.	AMB. TEMP (F)	(MBH)	AMB (HEATING)	PRE	FINAL	MCA	MOCP	V	PH			
AHU-A-1	CARRIER 39MW	FUTURE TENANT 1	LOWER ROOF	6000	2.00	DIRECT	1555	4.1	7.5	2000	R-454B	174.3	126.9	60	57	88	181	40	MERV-8	MERV-13	24.2	40	208	3	3,120	①②③④⑤⑥	
AHU-A-2	CARRIER 39MW	FUTURE TENANT 1	LOWER ROOF	6000	2.00	DIRECT	1555	4.1	7.5	2000	R-454B	174.3	126.9	60	57	88	181	40	MERV-8	MERV-13	24.2	40	208	3	3,120	①②③④⑤⑥	
① PROVIDE WITH VIBRATION ISOLATION ② PROVIDE WITH BACNET INTERFACE ③ PROVIDE WITH VFD. ④ UNIT COIL AND CABINET SHALL BE OUTDOOR RATED WITH 3000 HOUR RATED SALT SPRAY FOR MARINE ENVIRONMENTS. ⑤ PROVIDE WITH DIFFERENTIAL ENTHALPY ECONMIZER ⑥ PROVIDE WITH DUCT-MOUNTED SMOKE DETECTOR.																											

CONDENSING UNIT SCHEDULE																				
SYMBOL	MAKE AND MODEL	AREA SERVED	LOCATION	CAPACITY (MBH)				REFRIGERA NT	ELECTRICAL					EFFICIENCY			OPER WEIGHT (LBS.)	REMARKS		
				COOLING		HEATING			TYPE	V	PH	MCA	MOCP	RLA	EER	IEER			COP	
				TOTAL	SENS.	AMB. TEMP (°F)	TOTAL													AMB. TEMP
CU A-1	CARRIER 38AXQT16A0C	FUTURE TENANT 1	LOWER ROOF	197	148	88	181	40	R-454b	208	3	65.0	90.0	10.9/11.5	10.6	13.6	3.5	922	①②③	
CU A-2	CARRIER 38AXQT16A0C	FUTURE TENANT 2	LOWER ROOF	197	148	88	181	40	R-454b	208	3	65.0	90.0	10.9/11.5	10.6	13.6	3.5	922	①②③	
① PROVIDE WITH VIBRATION ISOLATION. ② PROVIDE WITH BACNET INTERFACE. ③ UNIT COIL AND CABINET SHALL BE OUTDOOR RATED WITH 3000 HOUR RATED SALT SPRAY FOR MARINE ENVIRONMENTS.																				

EXHAUST FAN SCHEDULE													
SYMBOL	MAKE AND MODEL	AREA SERVED	LOCATION	CFM	ESP (IN. W.G.)	DRIVE	RPM	MOTOR			OPER. WEIGHT (LBS.)	REMARKS	
								BHP	MAX HP	V			PH
EF-B	GREENHECK CUE-100HP-VG	BATHROOM EXHAUST	ROOF	600	1.00	DIRECT	2030	0.25	0.50	115	1	70	①②③
EF-GX-1	GREENHECK USF-15	GENERAL EXHAUST	ROOF	2000	1.00	DIRECT	1684	0.92	1.50	208	3	225	①②③
EF-GX-2	GREENHECK USF-15	GENERAL EXHAUST	ROOF	2000	1.00	DIRECT	1684	0.92	1.50	208	3	225	①②③
① PROVIDE WITH VIBRATION ISOLATION ② PROVIDE WITH BACNET INTERFACE ③ PROVIDE WITH VFD.													

Zone data				Calculations (Values based off ASHRAE Table 60.1)									
Equipment Type	Equipment Number	Use Type	Area (sq ft)	ASHRAE Type	Rp (CFM/sqft)	Ra (CFM/sqft)	Calc Den. (ft Occ.)	Occ Den (Occ/1000sf)	CFM	T24 (cfm/sqft)	CFM x 1.3	T24 Min	LARGEST CFM
AHU	A-1	VENT	3000	Cafeteria/fast food dining	7.5	0.18	125	100	1478	0.50	1925	1500	1925
AHU	A-2	VENT	3600	Cafeteria/fast food dining	7.5	0.18	100	100	1398	0.50	1820	1800	1825
RTU	B-1	VENT	825	Cafeteria/fast food dining	7.5	0.18	25	100	336	0.50	440	412.5	450
RTU	C-1	VENT	785	Cafeteria/fast food dining	7.5	0.18	25	100	329	0.50	430	392.5	450
RTU	D-1	VENT	825	Cafeteria/fast food dining	7.5	0.18	25	100	336	0.50	440	412.5	450

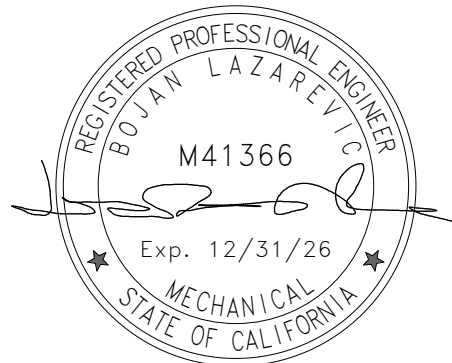
① OUTSIDE AIR CALCULATIONS

NO SCALE

AIR DISTRIBUTION SCHEDULE						
SYMBOL	TYPE	INLET SIZE	CFM RANGE	MODEL	ACCESSORIES	STYLE
A	SUPPLY AIR	8"	0-230	FOR INSTALLATION IN LAY-IN CEILING. PRICE PDMC PERFORATED FACE.		MODULAR CORE
		10"	231-350			
		12"	351-500			
		14"	501-680			
		16"	681-840			
		18"	841-960			
SYMBOL	TYPE	INLET SIZE	MAX CFM	MODEL	ACCESSORIES	STYLE
B	RETURN, EXHAUST, OR TRANSFER AIR GRILLE	8"	200	FOR INSTALLATION IN LAY-IN CEILING. PRICE PDMC PERFORATED FACE.		RETURN, EXHAUST, OR TRANSFER AIR GRILLE
		10"	300			
		12"	450			
		14"	600			
		16"	800			
		18"	1000			
		20"	1200			
		22"	1400			
C	SUPPLY AIR	SEE PLANS	SEE PLANS	FOR SIDEWALL-MOUNTED PRICE MODEL 520D S STANDARD FRAME STEEL CONSTRUCTION		SUPPLY REGISTER
D	RETURN AIR OR EXHAUST	SEE PLANS	SEE PLANS	FOR SIDEWALL-MOUNTED PRICE MODEL 535 45° DEFLECTION STEEL CONSTRUCTION		RETURN OR EXHAUST REGISTER
NOTE: FINAL COLOR, FINISH, AND BORDER TYPE TO BE COORDINATED WITH ARCHITECT.						

△	Date	Description
	02.06.2025	SCHEMATIC DESIGN/PRICING
	09.03.2025	DESIGN DEVELOPMENT
	10.14.2025	CD CLIENT REVIEW/PRICING
	11.03.2025	ISSUE FOR PLAN CHECK
A	01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
	05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

MECHANICAL SCHEDULES

Scale

12" = 1'-0"

M0.002

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD					NRCC-PRF-E	
Nonresidential Performance Compliance Method					(Page 1 of 19)	
Project Name:		City Of Irvine Hangar 10 Rehab		Date Prepared:		
				2026-02-19		
A. General Information						
1	Project Name	City Of Irvine Hangar 10 Rehab				
2	Run Title	90% CDs				
3	Project Location	Hangar 10, Great Park				
4	City	Irvine	5	Standards Version	Compliance 2022	
6	Zip code	92618	7	Compliance Software (version)	CBECC 2022.3.2-SP1 (1369)	
8	Climate Zone	8	9	Building Orientation (deg)	210	
10	Building Type(s)	• Nonresidential		11	Weather File	FULLERTON_STY20.epw
12	Project Scope	• New envelope and mechanical		13	Number of Dwelling Units	0
14	Total Conditioned Floor Area In Scope (ft²)	9587.0		15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft²)	0		17	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	9587.0		19	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0				

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CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD				NRCC-PRF-E
Nonresidential Performance Compliance Method				(Page 4 of 19)
C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kWh/ft ² - yr)				
COMPLIES ¹				
Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV) ¹	
Space Heating	46.32	41.97	4.35	
Space Cooling	101.68	139.45	-37.77	
Indoor Fans	105.03	60.68	44.35	
Heat Rejection	0	0	0	
Pumps & Misc.	0	0	0	
Domestic Hot Water	12.38	12.6	-0.22	
Indoor Lighting	63.81	60.26	3.55	
Flexibility	---	---	---	
EFFICIENCY COMPLIANCE TOTAL	329.22	314.96	14.26 (4.3%)	
Photovoltaics	---	---	---	
Batteries	---	---	---	
TOTAL COMPLIANCE	329.22	314.96	14.26 (4.3%)	

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

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CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD

NRCC-PRF-E

Nonresidential Performance Compliance Method

(Page 7 of 19)

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS¹

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE) ¹
Receptacle	18.77	18.77	---
Process	---	---	---
Other Utg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	57.07	44.96	12.11 (21.2%)

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

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CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD										NRCC-PRF-E
Nonresidential Performance Compliance Method										(Page 2 of 19)
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)	<input type="checkbox"/>	Performance	The following building components are NOT 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).	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTDE-E is required		
	Multifam	Not Included		<input type="checkbox"/>	Not Included					
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	<input type="checkbox"/>	Performance		Outdoor Lighting 140.7.8 & 170.2(e)	NRCC-LTDE-E is required		
	Multifam	Not Included	<input type="checkbox"/>	Not Included						
Domestic Hot Water (See Table I)	Nonres	Performance	Covered Process: Laboratory Exhaust (see Table J)	<input type="checkbox"/>	Performance		Sign Lighting 140.8 & 170.2(e)	NRCC-LTDE-E is required		
	Multifam	Not Included	<input type="checkbox"/>	Not Included						
Lighting (Indoor Conditioned, see Table K)	Nonres	Not Included	Photovoltaics (see Table F)	<input type="checkbox"/>	Performance		Building Components Complying with Mandatory Measures			
	Multifam	Not Included		<input type="checkbox"/>	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	Battery (see Table F)	<input type="checkbox"/>		Not Included	Electrical Power Distribution 110.11		
					<input type="checkbox"/>		Performance	Commissioning 120.8		
				<input type="checkbox"/>	Not Included	Solar and Battery 110.10				

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Schema Version: rev 20220601

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD			NRCC-PRF-E
Nonresidential Performance Compliance Method			(Page 5 of 19)
C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS ¹			
Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV) ¹
Receptacle	203.38	203.38	----
Process	----	----	----
Other Ltg	----	----	----
Process Motors	----	----	----
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	532.6	518.34	14.26 (2.7%)

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

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Report Generated: 2026-02-19 13:36:10
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CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD						NRCC-PRF-E
Nonresidential Performance Compliance Method						(Page 8 of 19)
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	---	13.5	---	156.3	---	---
Space Cooling	25.7	33.8	-8.1	---	---	---
Indoor Fans	35.3	20	15.3	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	4.2	4.2	0	---	---	---
Indoor Lighting	20.8	19.6	1.2	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	86	91.1	-5.1	156.3	0	156.3
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	86	91.1	-5.1	156.3	0	156.3
Receptacle	68.6	68.6	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	154.6	159.7	-5.1	156.3	0	156.3

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Report Generated: 2026-02-19 13:36:10
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CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD				NRCC-PRF-E
Nonresidential Performance Compliance Method				(Page 3 of 19)
CL COMPLIANCE SUMMARY				
COMPLIES ¹				
	Time Dependent Valuation (TDV)		Source Energy Use	
	Efficiency ¹ (kBtu/ft ² · yr)	Total ² (kBtu/ft ² · yr)	Total ² (kBtu/ft ² · yr)	
Standard Design	329.22	329.22	38.3	
Proposed Design	314.96	314.96	26.19	
Compliance Margins	14.26	14.26	12.11	
	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 New Construction, Complete Addition Scope: Building complies when all efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded

Existing, Addition and Alteration Scope: Building complies when efficiency compliance margin is greater than or equal to zero and unmet load hour limits are not exceeded

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CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD				NRCC-PRF-E
Nonresidential Performance Compliance Method				(Page 6 of 19)
CA. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kWh/ft ² /yr)				
COMPLIANCE ¹				
Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE) ¹	
Space Heating	14.97	6.25	8.72	
Space Cooling	4.81	6.19	-1.38	
Indoor Fans	10.61	6	4.61	
Heat Rejection	0	0	0	
Pumps & Misc.	0	0	0	
Domestic Hot Water	1.25	1.27	-0.02	
Indoor Lighting	6.66	6.48	0.18	
Flexibility	---	---	---	
EFFICIENCY COMPLIANCE TOTAL	38.3	26.19	12.11 (31.6%)	
Photovoltaics	---	---	---	
Batteries	---	---	---	
TOTAL COMPLIANCE	38.3	26.19	12.11 (31.6%)	

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

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance Report Version: 2022.0.000 Report Generated: 2026-02-19 13:36:10
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CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD

NRCC-PRF-E

Nonresidential Performance Compliance Method

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C3. 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	71.32	56.84	14.48	20.3
NET EUI ¹	71.32	56.84	14.48	20.3

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 aged solar reflectance and aged thermal emittance must be listed in the Cool Roof Rating Council database of certified products. For projects where initial reflectance is used, the initial reflectance must be listed, and the aged reflectance is calculated by the software program and used in the compliance model.
- Project is claiming Exception 5 to Section 140.10(a). Multitenant buildings in areas where a load-serving entity does not provide either a virtual net metering (VNM) or community solar program.
- 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.

E4. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

No PV required - SARA is below 4 kW DC

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	Total Gross Surface Area (ft ²)	Total Penetration Area (ft ²)	Window to Wall Ratio (%)
North-Facing ¹	2765.04	696	25.17

Notes

¹North-Facing is oriented to within 45 degrees of true north, including 4500°00" east of north (NE), but excluding 4500°00" west of north (NW).

²East-Facing is oriented to within 45 degrees of true east, including 4500°00" south of east (SE), but excluding 4500°00" north of east (NE).

³South-Facing is oriented to within 45 degrees of true south, including 4500°00" west of south (SW), but excluding 4500°00" east of south (SE).

⁴West-Facing is oriented to within 45 degrees of true west, including 4500°00" north of west (NW), but excluding 4500°00" south of west (SW).

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CITY OF IRVINE HANGAR 10 RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

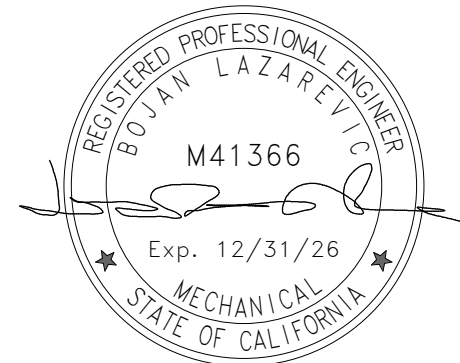
Tel 949.863.9434
Fax 949.553.1676



5160 Carroll Canyon Rd, Suite 200
San Diego, California 92121
Consulting Engineers
T. 858 200-0030 F. 858 200-0031
www.ma-engr.com

△	Date	Description
	02.06.2025	SCHEMATIC DESIGN/PRICING
	05.02.2025	DESIGN DEVELOPMENT
	09.03.2025	DESIGN DEVELOPMENT
	10.14.2025	CD CLIENT REVIEW/PRICING
	11.03.2025	ISSUE FOR PLAN CHECK
A	01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
	05.07.2026	BID SET

Seal / Signature



HANGAR 10 RECONSTRUCTION

007.3945.000

Description
MECHANICAL TITLE-24

Scale

M0.003

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

Tel 949.863.9434
Fax 949.553.1676



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Consulting Engineers
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www.ma-engr.com

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD										NRCC-PRF-E	
Nonresidential Performance Compliance Method										(Page 10 of 19)	
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 (%)					
East-Facing ^a		1507.17		537		35.63					
South-Facing ^a		2765.04		696		25.17					
West-Facing ^a		1507.17		166.14		11.02					
Total		8544.42		2095.14		24.52					
Roof		9732.56		0		0					
Notes											
^a North-Facing is oriented to within 45 degrees of true north, including 4500'00" east of north (NE), but excluding 4500'00" west of north (NW).											
^b East-Facing is oriented to within 45 degrees of true east, including 4500'00" south of east (SE), but excluding 4500'00" north of east (NE).											
^c South-Facing is oriented to within 45 degrees of true south, including 4500'00" west of south (SW), but excluding 4500'00" east of south (SE).											
^d West-Facing is oriented to within 45 degrees of true west, including 4500'00" north of west (NW), but excluding 4500'00" south of west (SW).											
G2A. ROOFING PRODUCT SUMMARY (NONRESIDENTIAL)											
01		02		03		04		05		06	
Assembly Name		Roof Pitch		Roof Rise (x in 12)		Aged Solar Reflectance		Thermal Emittance		SRI	
Flat Roof		LowAndSteepSlope		N/A		0.63		0.87		75	
G4. NONRESIDENTIAL AIR BARRIER											
01				02							
Building Story Name				Air Barrier							
L01				No air barrier							

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD										NRCC-PRF-E	
Nonresidential Performance Compliance Method										(Page 13 of 19)	
H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)											
01		02		03		04		05		06	
Equipment Name		Equipment Type		Qty		Heating		Cooling		Economizer Type (if present)	
						Total Heating Output (kBtu/h)		Total Cooling Output (kBtu/h)			
						Efficiency Unit		Efficiency Unit			
AHU-1		Package SZ VAV Heat Pump Air System		1		181		0		COP	
						3.5		197		EER	
						10.6				Differential Enthalpy	
										N	
AHU-2		Package SZ VAV Heat Pump Air System		1		181		0		COP	
						3.5		197		EER	
						10.6				Differential Enthalpy	
										N	
RTU B-1		Package SZ VAV Heat Pump Air System		1		44.8		0		COP HSPF2	
						3.8		7.2		50.1	
						EER2		SEER2		11.5 16	
										Differential Enthalpy	
										N	
RTU C-1		Package SZ VAV Heat Pump Air System		1		44.8		0		COP HSPF2	
						3.8		7.2		50.1	
						EER2		SEER2		11.5 16	
										Differential Enthalpy	
										N	
RTU D-1		Package SZ VAV Heat Pump Air System		1		44.8		0		COP HSPF2	
						3.8		7.2		50.1	
						EER2		SEER2		11.5 16	
										Differential Enthalpy	
										N	
¹ Status: N - New, A - Altered, E - Existing											

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance


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Schema Version: rev 20220601

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CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD										NRCC-PRF-E		
Nonresidential Performance Compliance Method										(Page 16 of 19)		
H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION												
01		02		03		04		05		06		
Zone Name		Mechanical Ventilation						Conditioned Area (sf)		DCV or Occupant Sensor Controls, or Both		
		Ventilation Function		# of People		Supply OA CFM						Exhaust CFM
Zn RTU D-1		Food Service - Cafeteria/fast-food dining		4.27		450		0		854.5		
										N/A		
H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY												
01		02		03		04		05		06		
System ID		System Type		Qty		Rated Capacity (kBtu/h)		Airflow (cfm)			Fan	
						Heating		Cooling		Design		Min. Min. Ratio
AHU-1_TU		Variable Air Volume No Reheat Box		1		N/A		N/A		6,000		
										2,000		
										0.33		
										N/A		
										N/A		
AHU-2_TU		Variable Air Volume No Reheat Box		1		N/A		N/A		6,000		
										2,000		
										0.33		
										N/A		
										N/A		
RTU B-1_TU		Variable Air Volume No Reheat Box		1		N/A		N/A		1,500		
										421.88		
										0.28		
										N/A		
										N/A		
RTU C-1_TU		Variable Air Volume No Reheat Box		1		N/A		N/A		1,500		
										421.88		
										0.28		
										N/A		
										N/A		
RTU D-1_TU		Variable Air Volume No Reheat Box		1		N/A		N/A		1,500		
										421.88		
										0.28		
										N/A		
										N/A		
II. WATER HEATER EQUIPMENT SUMMARY												
01		02		03		04		05		06		
Name		Heater Element Type		Tank Type		Qty		Tank Vol (gal)		Rated input		
								Rated input Unit		Efficiency		
EWH-1		Electricity		Storage		1		33		4.5		
										kW		
										0.92		
										UEF		
										N/A		
										N/A		
										1st Hc Rating or Flow Rate (gal)		
										60		
										N/A		
										N/A		

Documentation Author's Declaration Statement



1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Hans Marsman LEED AP	Documentation Author Signature:	 <div>Digitally signed by Hans Marsman, LEED AP, CEA Date: 2026.02.19 19:07:47 -0800</div>
Company: Marsman Consulting	Signature Date:	
Address: 440 N Barranca Ave #5726	CEA/HERS Certification Identification (if applicabl	
City/State/Zip: Covina, CA 91723	Phone: (619) 573-6374	

Responsible Person's Declaration statement

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

- The information provided on this Certificate of Compliance is true and correct.
- 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)
- 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.
- 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.
- 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.
- 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:	Responsible Designer Signature:	
Company: Gensler	Date Signed: 2/19/2026	
Address: 4675 MacArthur Court Suite 100	License #: C32405	
City/State/Zip: Newport Beach, CA 92660	Title: Architect	Scope: Envelope
Phone: 949.863.9434		
Responsible Designer Name: Bojan Lazarevic, PE	Responsible Designer Signature:	
Company: MA Engineers	Date Signed: 2/19/2026	
Address: 5160 Carroll Canyon Rd, Suite 200	License #: M41366	
City/State/Zip: San Diego, CA 92121	Title: Engineer	Scope: Mechanical
Phone: (858) 200-0030		

CITY OF IRVINE HANGAR 10 RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

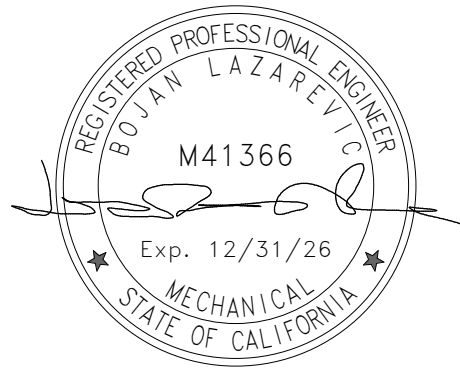
4675 MacArthur Court
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Tel 949.863.9434
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△ Date	Description
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Seal / Signature



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HANGAR 10
RECONSTRUCTION

Project Number

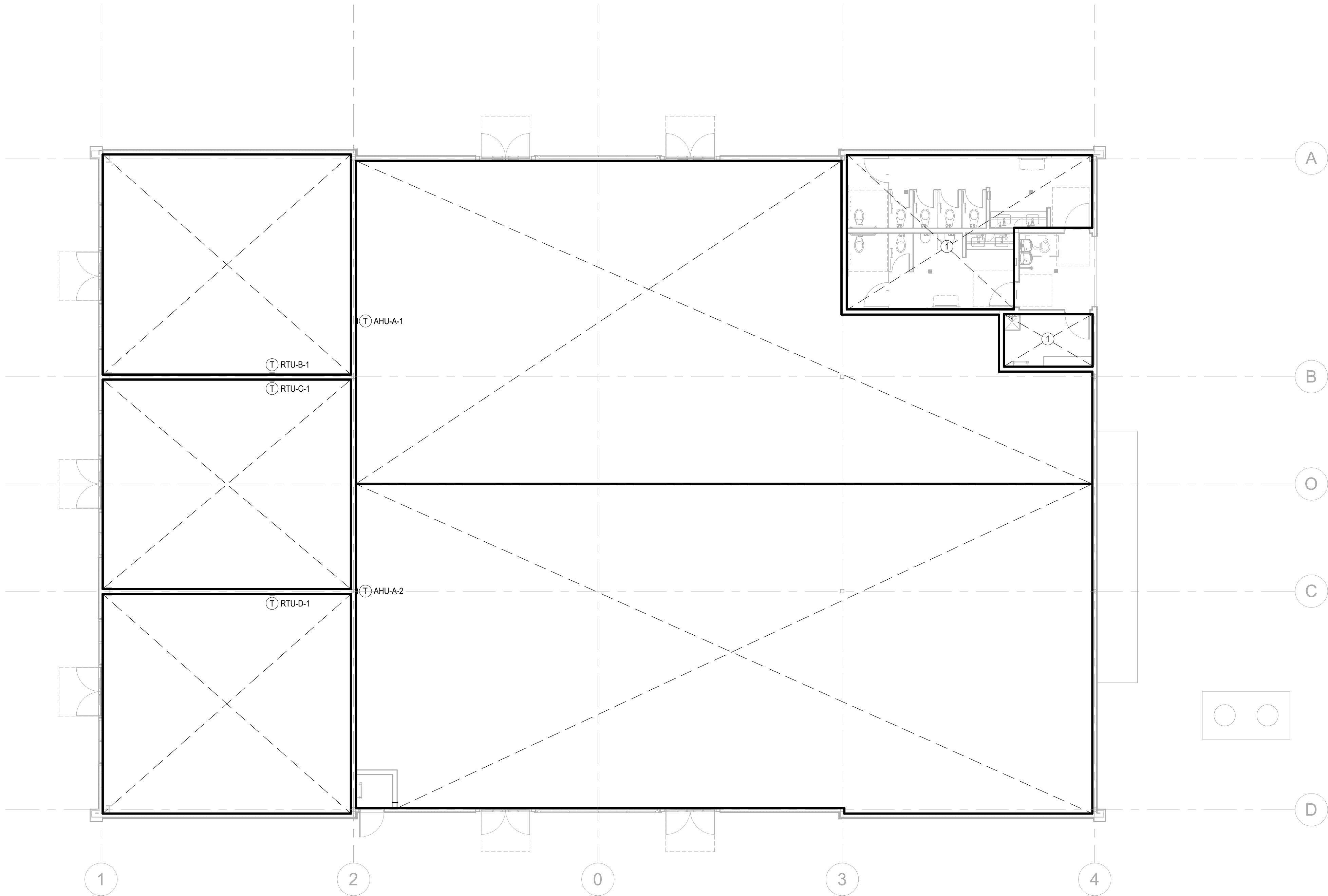
007.3945.000

Description

MECHANICAL TITLE-24

Scale

M0.005



SHEET NOTES

1 EXHAUST ONLY.

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RECONSTRUCTION410 BEACON
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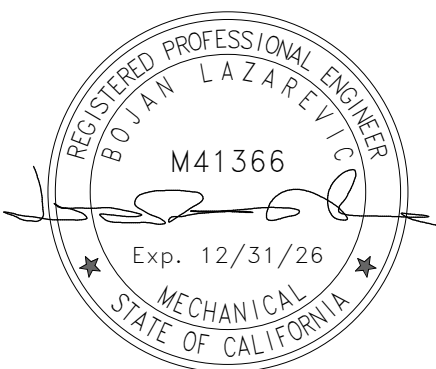
GENERAL NOTES

- A. ALL EXPOSED DUCTWORK TO BE INTERNALLY LINED.
- B. BALANCE RETURN GRILLES TO ENSURE +0.05 IN WG. BUILDING PRESSURE.
- C. ALL FLEXIBLE DUCTWORK SHALL BE ACOUSTICALLY RATED.
- D. ALL SUPPLY DUCTWORK TO BE EXTERNALLY WRAPPED UNLESS NOTED OTHERWISE.
- E. ENSURE ALL RETURN PATHS ARE MAINTAINED BACK TO THE RETURN MAIN.
- F. CONTRACTOR TO FIELD VERIFY ALL AS-BUILT CONDITIONS BEFORE COMMENCING WORK.
- G. CONTRACTOR TO PROVIDE PRE-TAB OF ALL SPACES BEFORE DEMOLITION.
- H. ALL EXISTING PIPE AND DUCT INSULATION TO BE MAINTAINED. NEW INSULATION TO ONLY BE PROVIDED ON NEW OR DAMAGED WORK.
- I. ALL EQUIPMENT AND DUCTWORK INDICATED TO REMAIN SHALL BE PROTECTED IN PLACE BY CONTRACTOR.
- J. MATERIALS EXPOSED WITHIN A DUCT OR PLENUM SHALL COMPLY WITH SECTION 602.2 CMC 2022.

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Description

MECHANICAL ZONING PLAN - LEVEL
01

Scale

1/8" = 1'-0"

Ref North



M1.200

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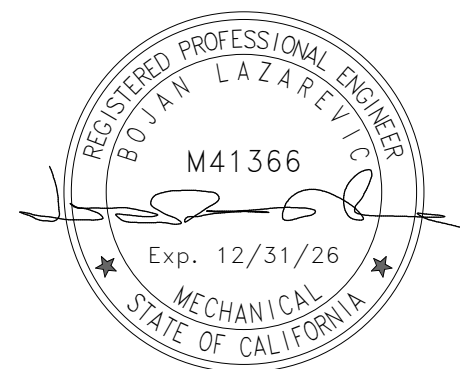
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- 1 BE CAPPED AND PROTECTED IN PLACE FOR
FUTURE TENANT IMPROVEMENT.
- 2 DUCT COMING DOWN FROM RTU-C-1 ON ROOF TO
BE CAPPED AND PROTECTED IN PLACE FOR
FUTURE TENANT IMPROVEMENT.
- 3 DUCT COMING DOWN FROM RTU-D-1 ON ROOF TO
BE CAPPED AND PROTECTED IN PLACE FOR
FUTURE TENANT IMPROVEMENT.
- 4 12"x12" EXHAUST AIR RISER FOR TOILET
EXHAUST GOING DOWN.
- 5 PROVIDE LOUVER WITH 0.5 SQUARE FEET OF
FREE AREA 18 FOOT ABOVE FINISHED FLOOR.
- 6 PROVIDE LOUVER WITH 0.5 SQUARE FEET OF
FREE AREA 1 FOOT ABOVE FINISHED FLOOR.

- A. ALL EXPOSED DUCTWORK TO BE INTERNALLY LINED.
- B. BALANCE RETURN PRESSURES TO ENSURE ± 0.05 IN WG. BUILDING PRESSURE.
- C. ALL FLEXIBLE DUCTWORK SHALL BE ACQUIRITALLY RATED.
- D. ALL SUPPLY DUCTWORK TO BE EXTERNALLY WRAPPED UNLESS NOTED OTHERWISE.
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Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

	Description
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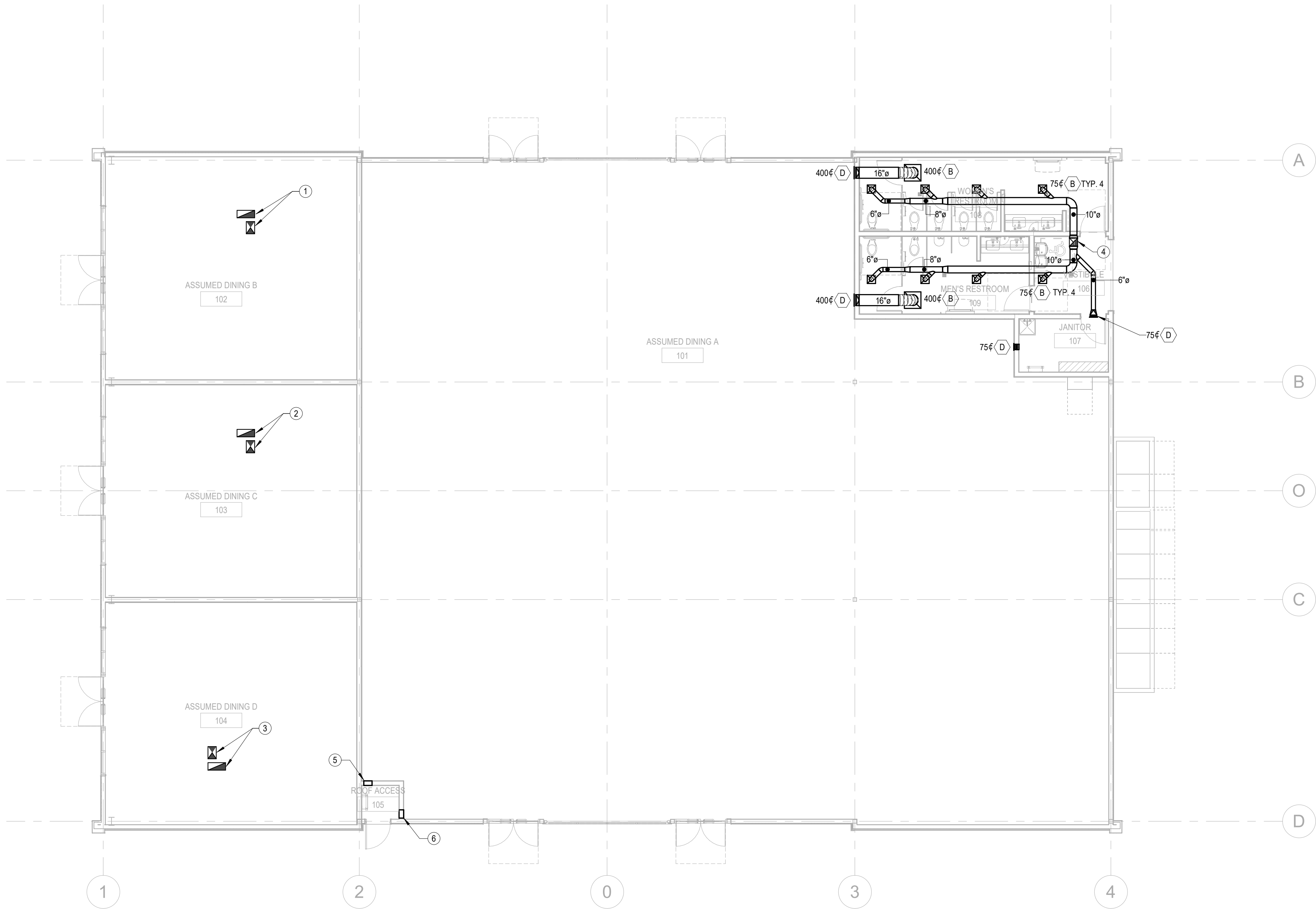
MECHANICAL CONSTRUCTION PLAN -
LEVEL 01

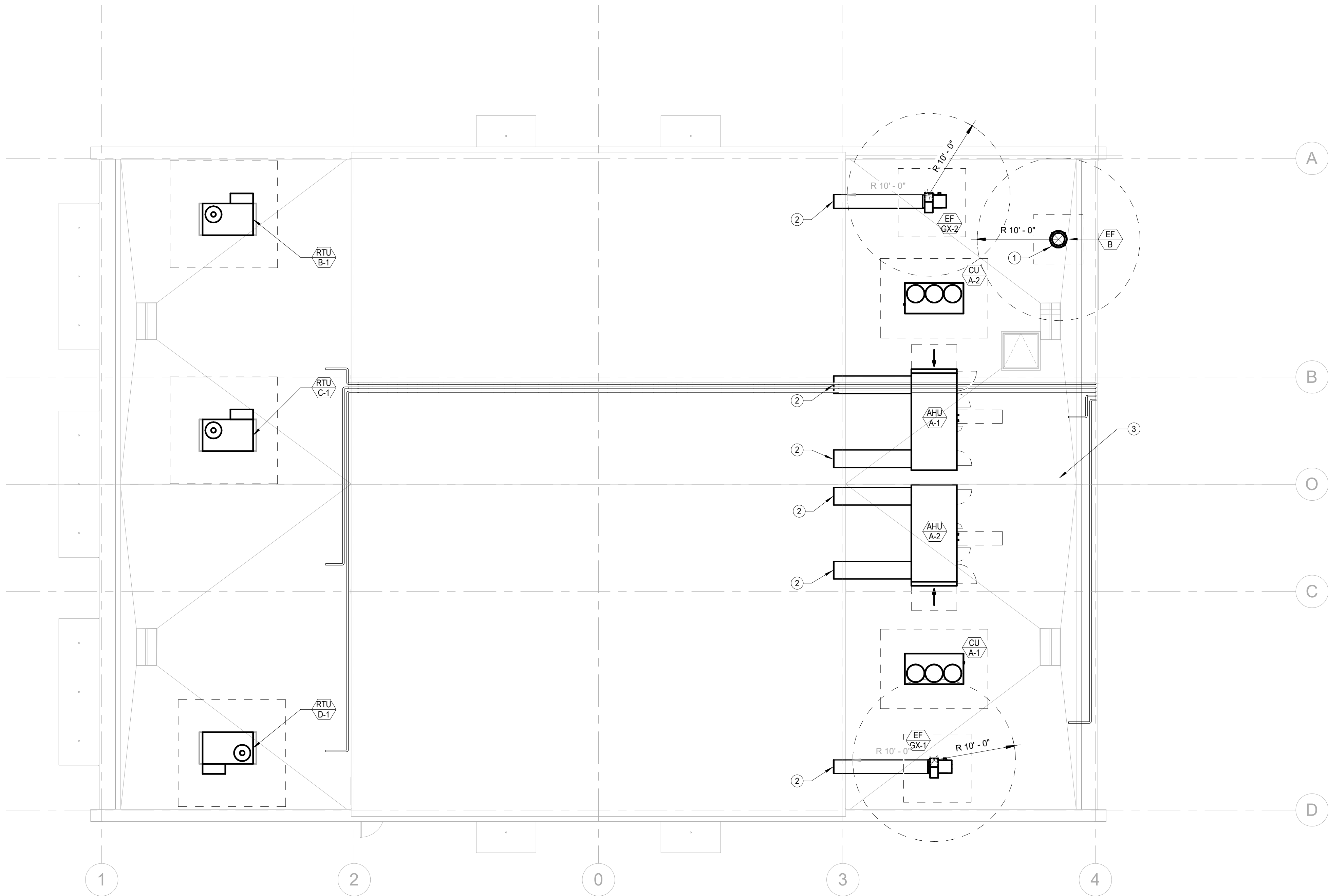
Scale

$$1/8'' = 1'-0''$$
Ref North

M1.201

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SHEET NOTES

- 12X12' EXHAUST AIR RISER FOR TOILET EXHAUST GOING DOWN.
- DUCT TO BE CAPPED AND PROTECTED IN PLACE FOR FUTURE TENANT IMPROVEMENT.
- PER SECTION 3-20-1.8 OF THE ZONING ORDINANCE, SCREENING SHALL BE PROVIDED SO THAT MATERIALS STORED IN ANY OUTDOOR STORAGE AREA AND/OR EQUIPMENT AT GRADE OR ON THE ROOF AREA SCREENED FROM ADJACENT STREETS, NO MATTER THE STREET GRADE, AND ALL PROPERTIES AT THE SAME GRADE.

GENERAL NOTES

- ALL EXPOSED DUCTWORK TO BE INTERNALLY LINED.
- BALANCE RETURN GRILLES TO ENSURE +0.05 IN WG. BUILDING PRESSURE.
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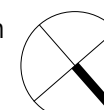
Description

MECHANICAL ROOF PLAN

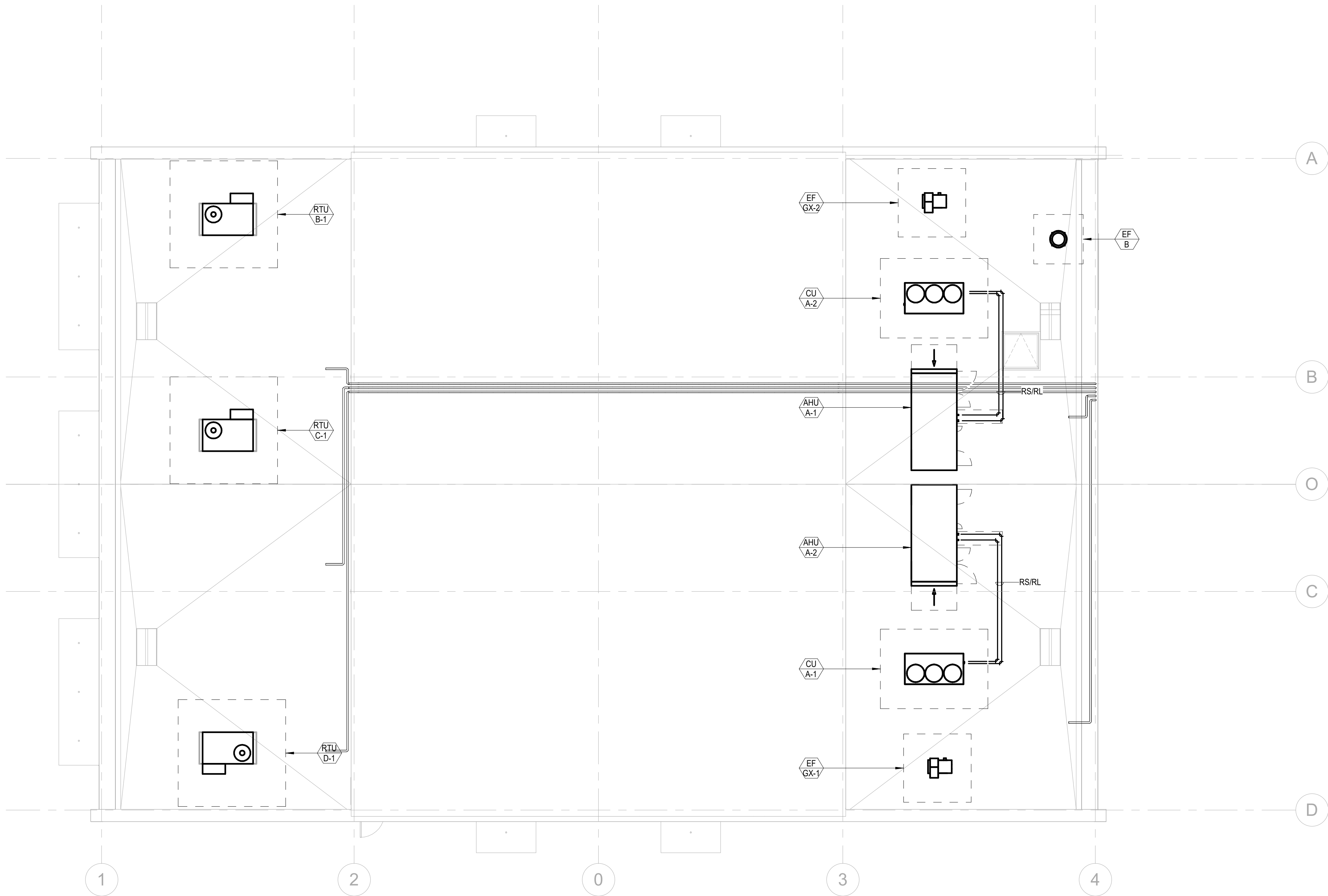
Scale

1/8" = 1'-0"

Ref North



M1.202



SHEET NOTES

GENERAL NOTES

- A. ALL EXPOSED DUCTWORK TO BE INTERNALLY LINED.
- B. BALANCE RETURN GRILLES TO ENSURE +0.05 IN WG. BUILDING PRESSURE.
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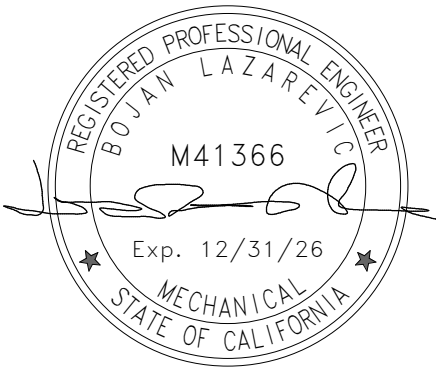
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Description

MECHANICAL PIPING PLAN

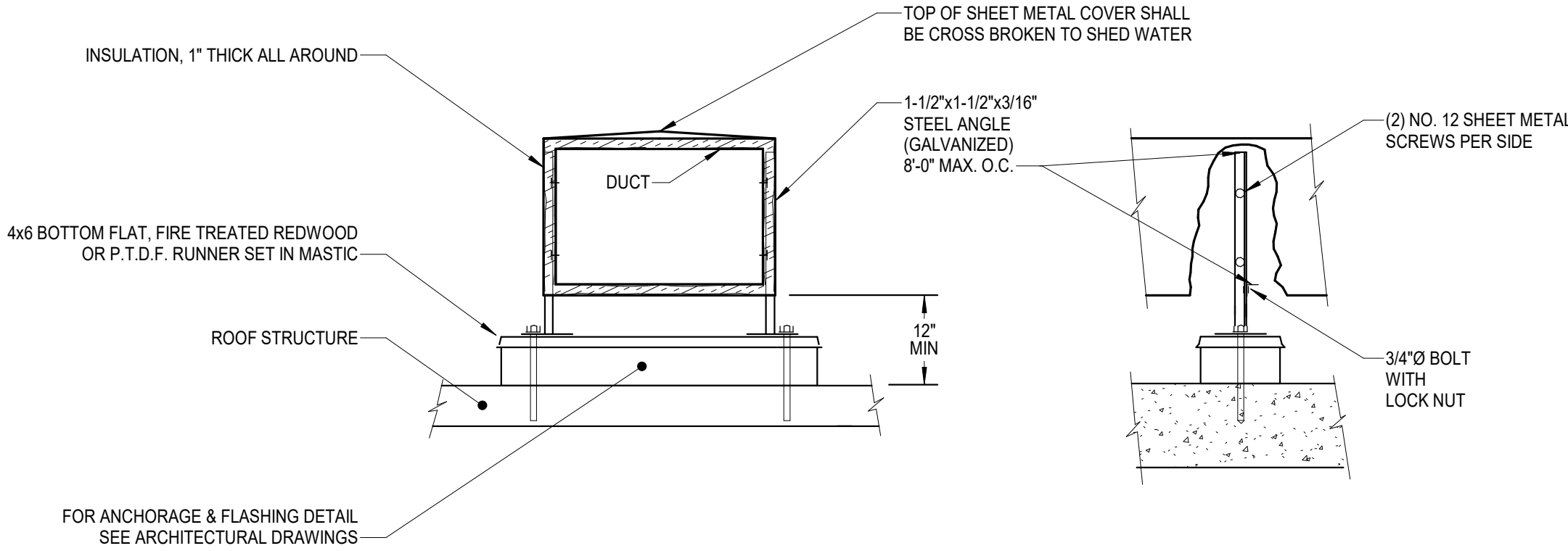
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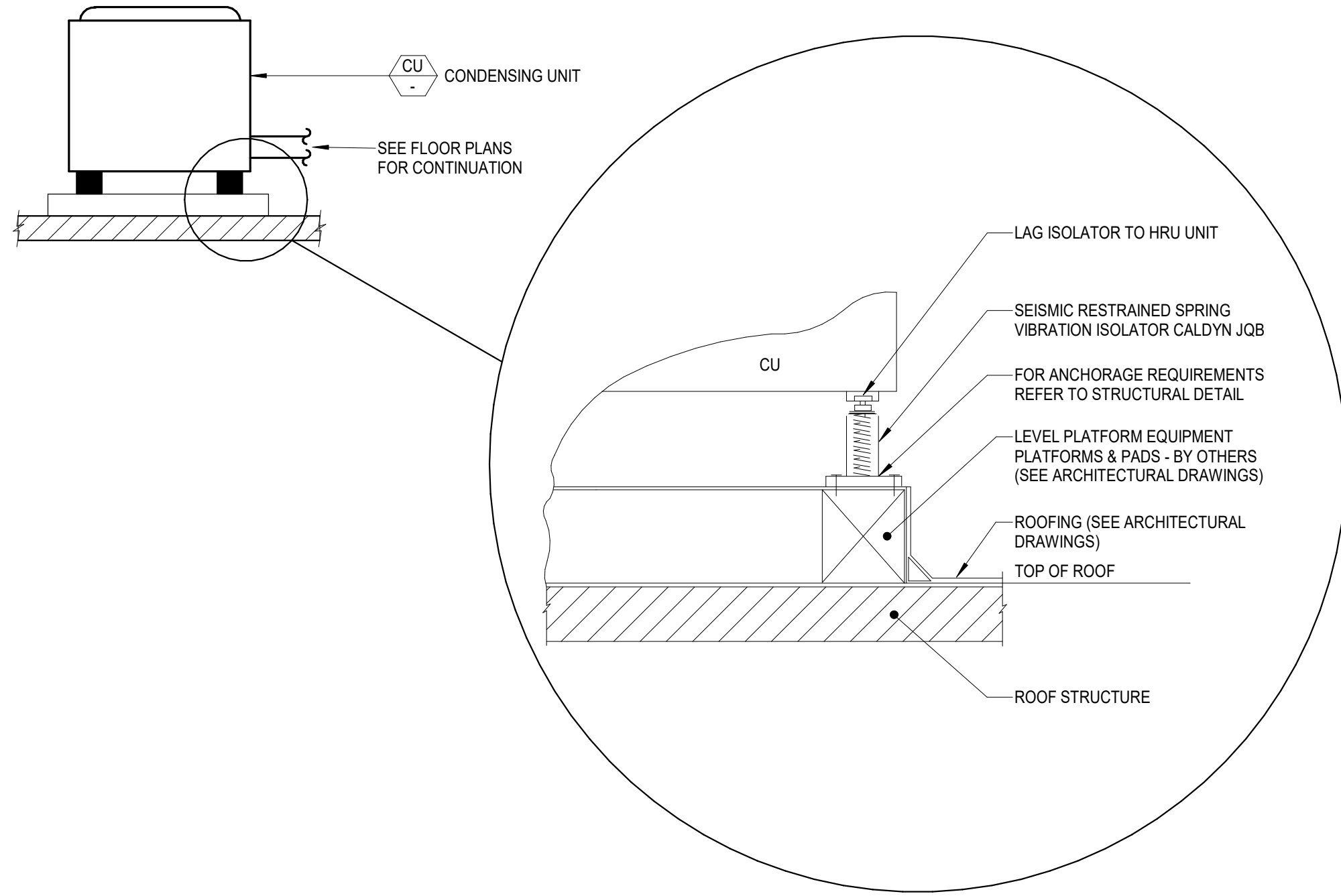
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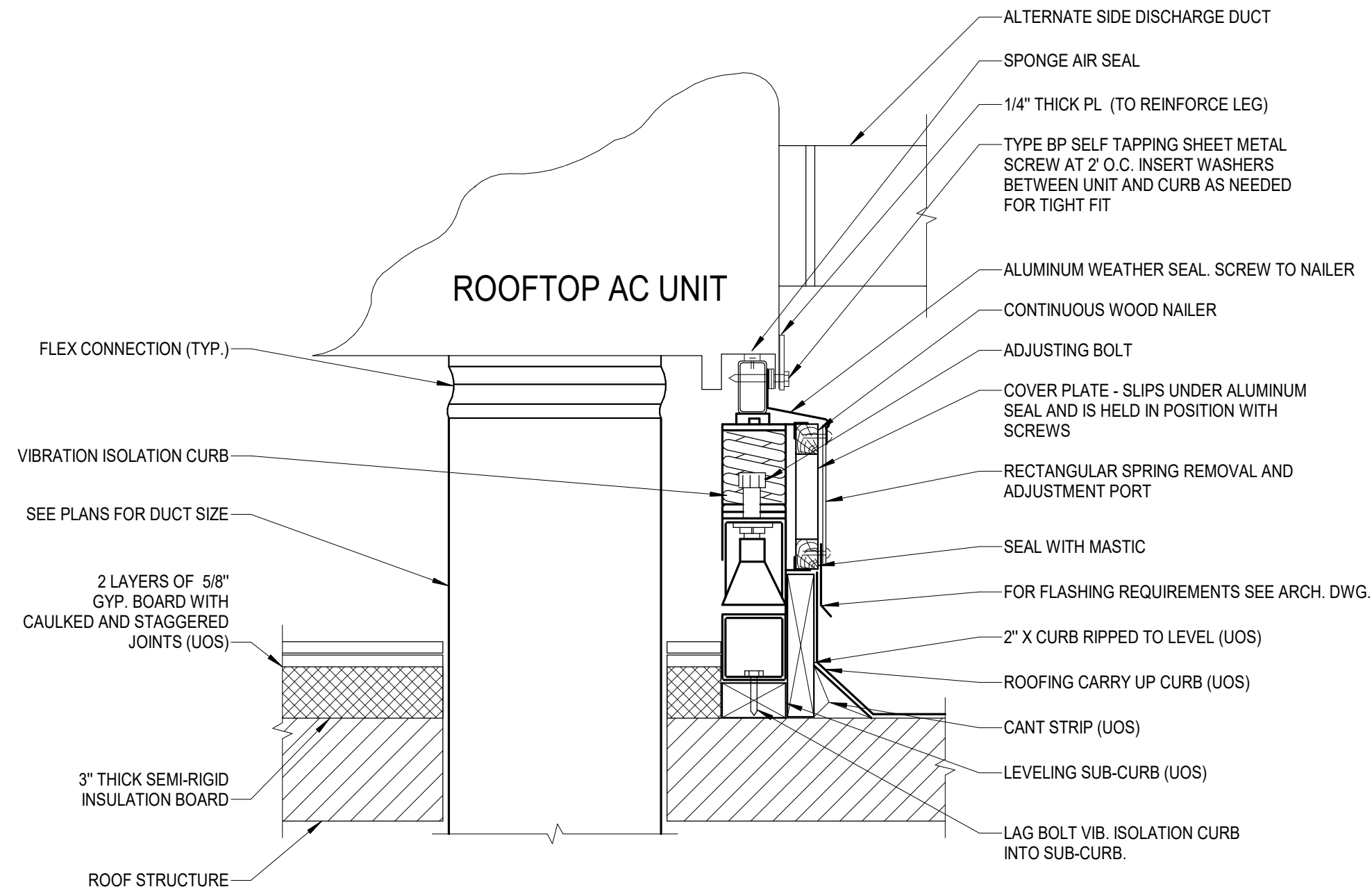
M1.203



7 RECTANGULAR DUCT ROOF MOUNTED DETAIL
NO SCALE

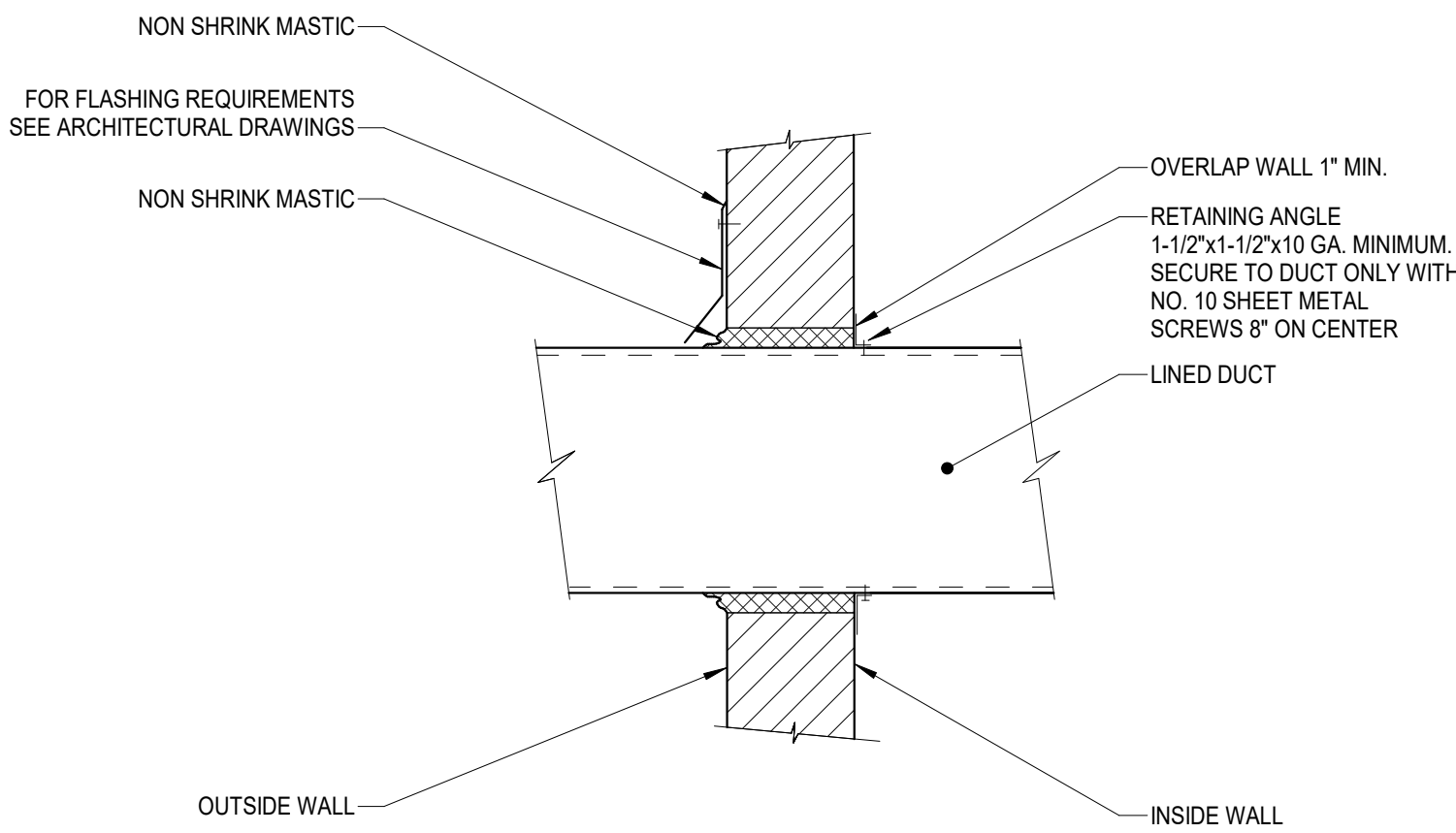


4 FUTURE CONDENSING UNIT MOUNTING DETAIL
NO SCALE

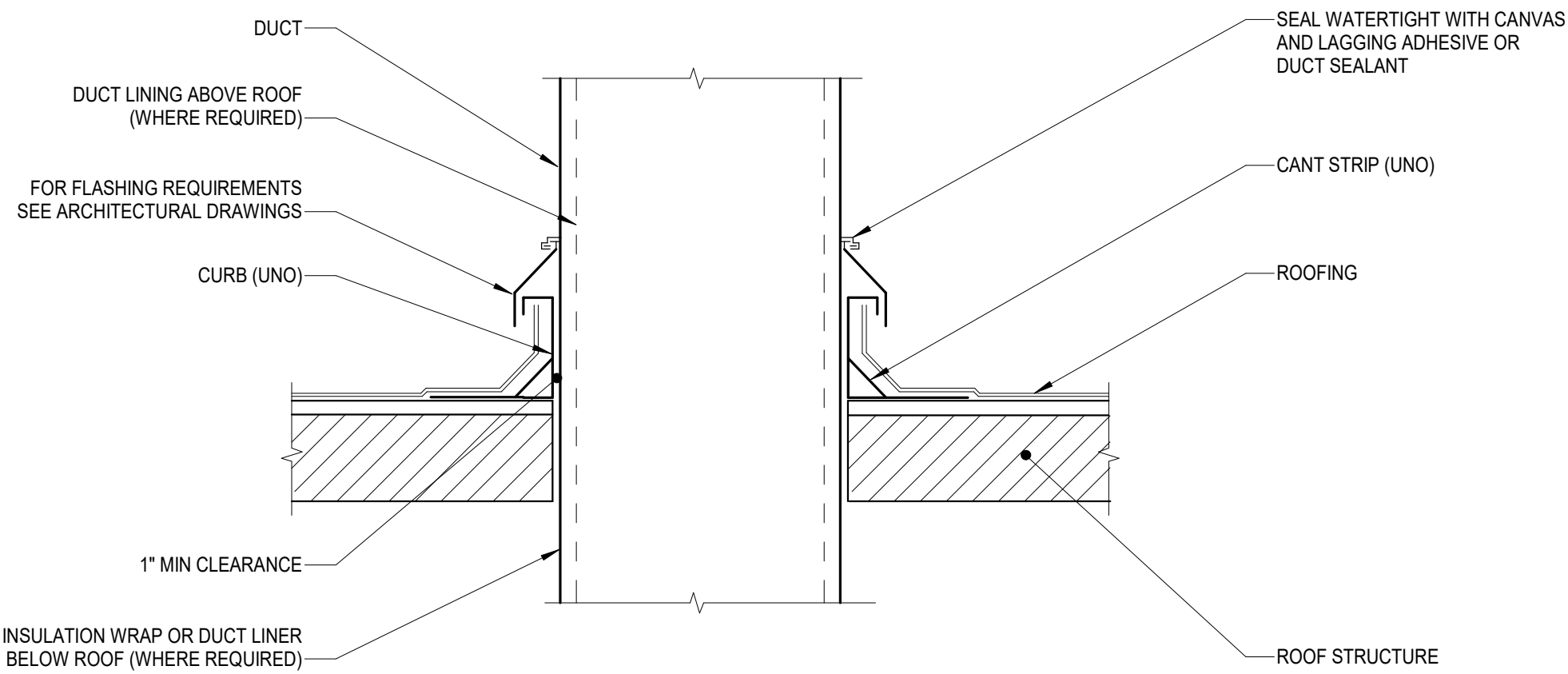


- NOTES:**
- COORDINATE EXACT LOCATION AND FRAMING OF ROOF OPENING WITH GENERAL CONTRACTOR.
 - PROVIDE ACOUSTICAL LINING IN THE SUPPLY AND RETURN AIR PLENUMS AND THE FIRST 10 FEET OF SUPPLY AND RETURN AIR DUCT.

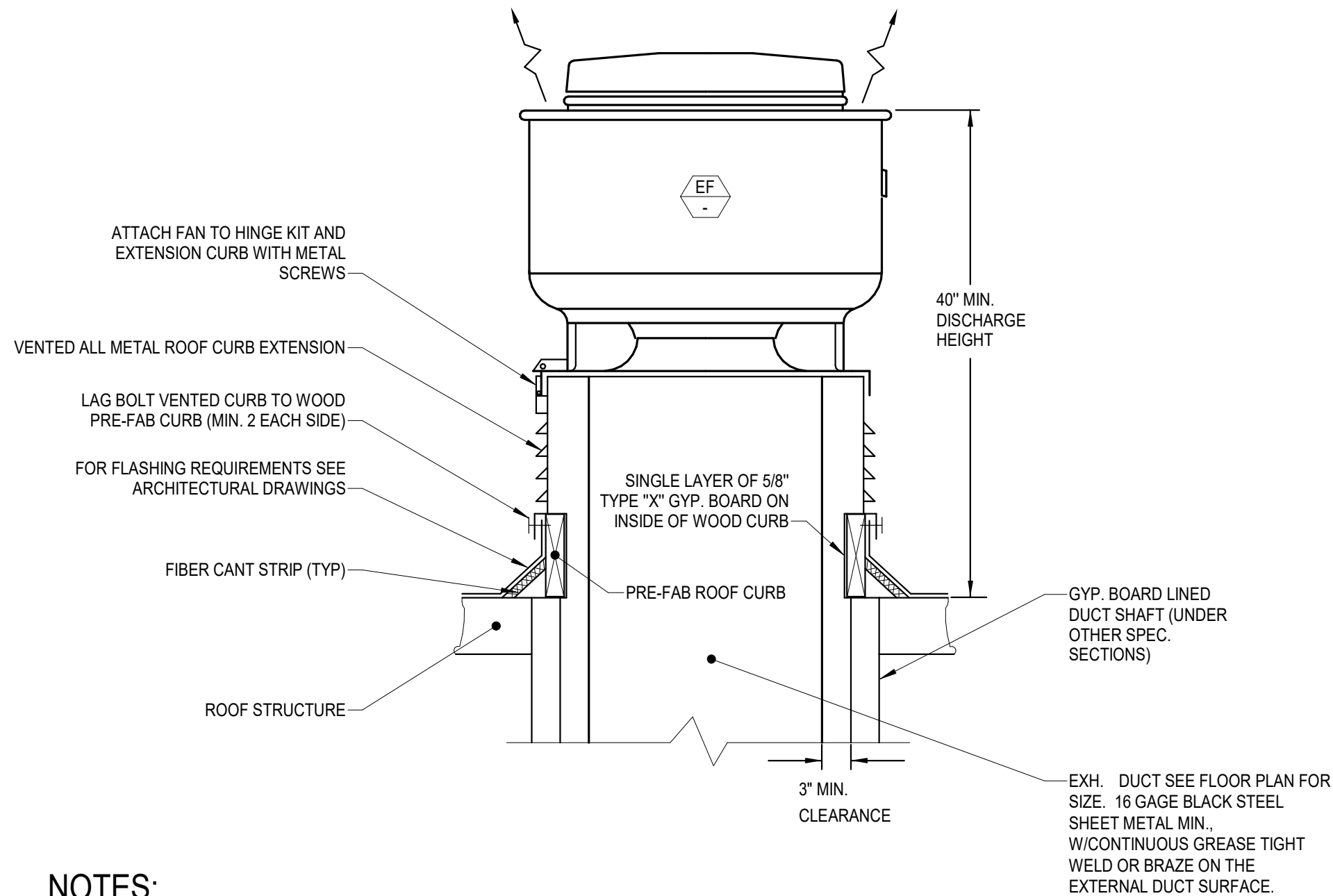
1 FUTURE AIR CONDITIONING UNIT MOUNTING DETAIL W/FACORY CURB
NO SCALE



8 DUCT THROUGH EXTERIOR WALL DETAIL
NO SCALE

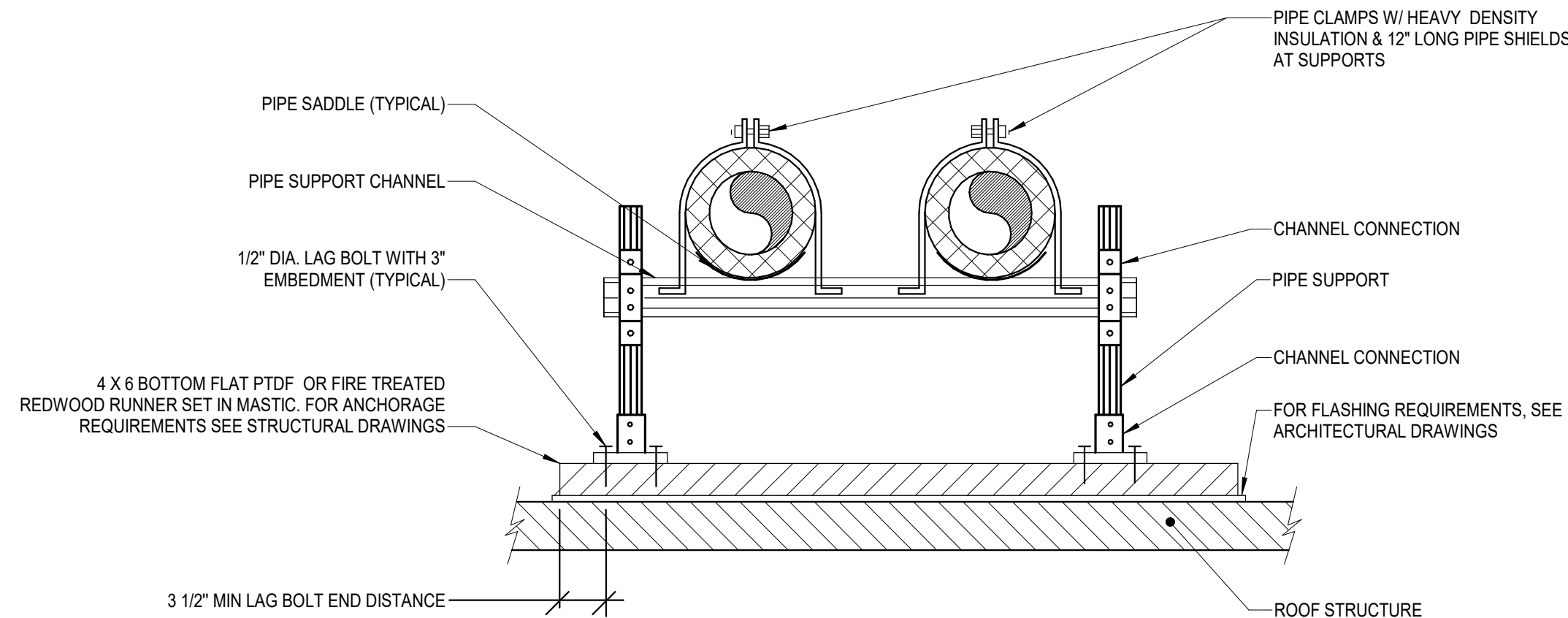


5 DUCT THROUGH ROOF DETAIL
NO SCALE



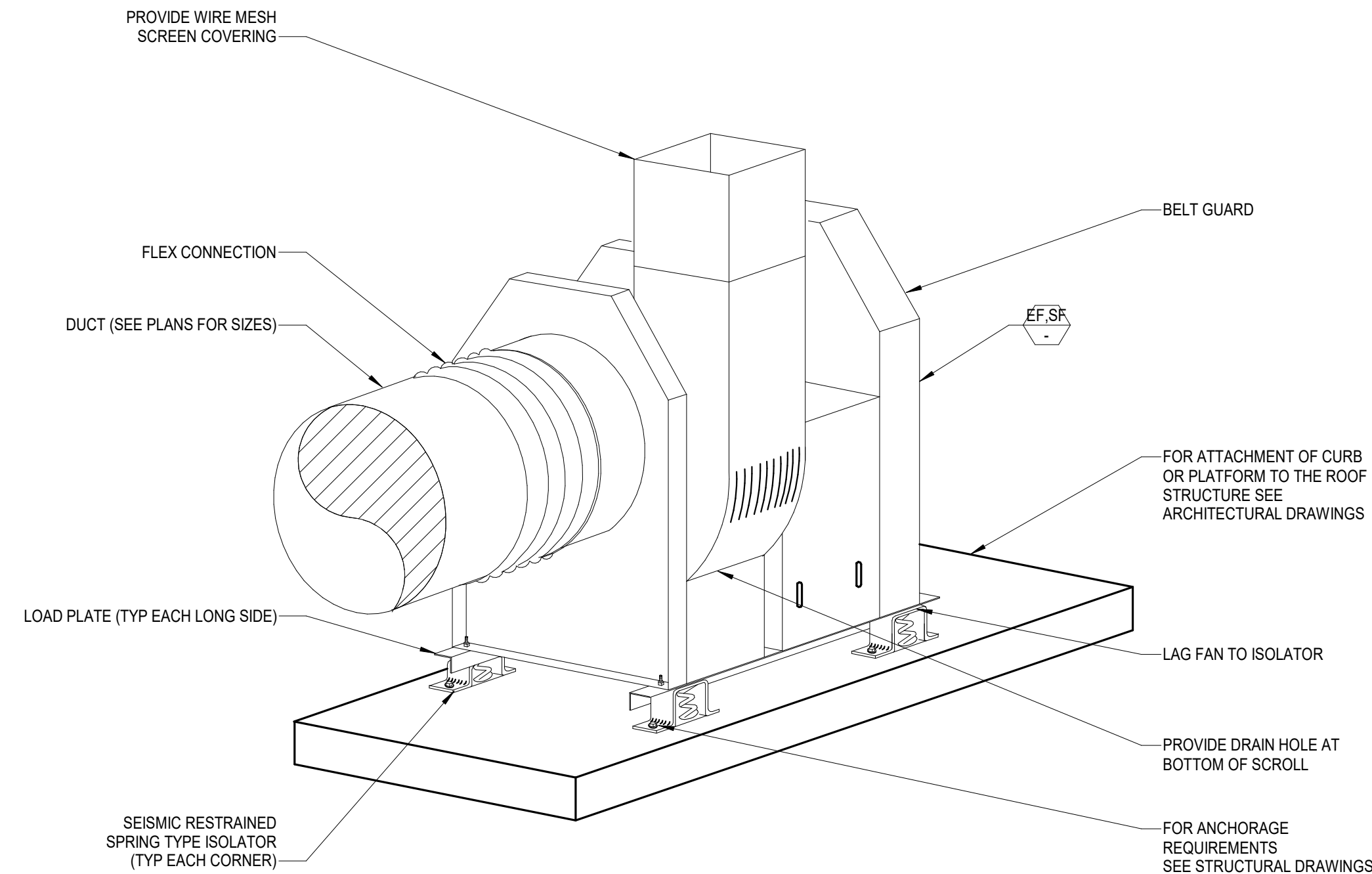
- NOTES:**
- FAN SHALL SIT LEVEL.

2 FUTURE KITCHEN EXHAUST FAN MOUNTING DETAIL
NO SCALE



- NOTES:**
- PLACE VERTICAL SUPPORTS WITHIN 24" OF ELBOWS & T-JOINTS
 - ALL PARTS SHALL BE STAINLESS STEEL OR GALVANIZED FOR EXTERIOR USE.
 - PIPE CLAMPS SECURED TIGHT AT ANCHOR SUPPORTS.
 - PIPE CLAMPS SECURED WITH 1/8" SPACING AT OTHER SUPPORTS.

6 ROOF MOUNTED PIPING SUPPORT DETAIL
NO SCALE



- NOTES:**
- INSTALL UNIT ON LEVEL CURB OR PLATFORM.

3 FUTURE UTILITY FAN MOUNTING DETAIL
NO SCALE

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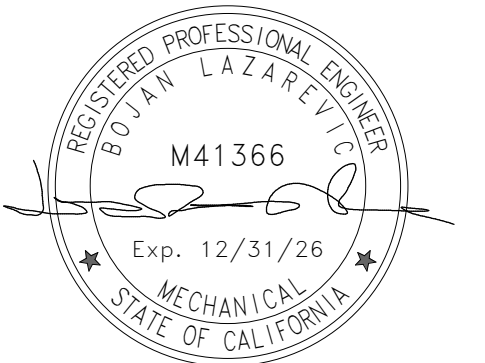
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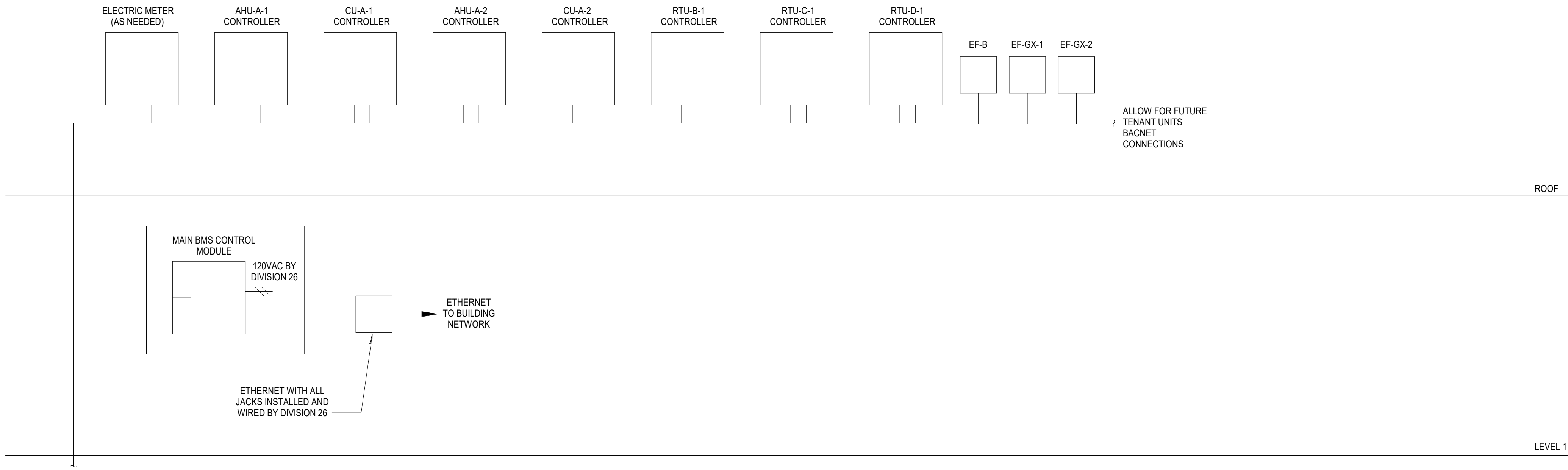
Description

MECHANICAL DETAILS

Scale

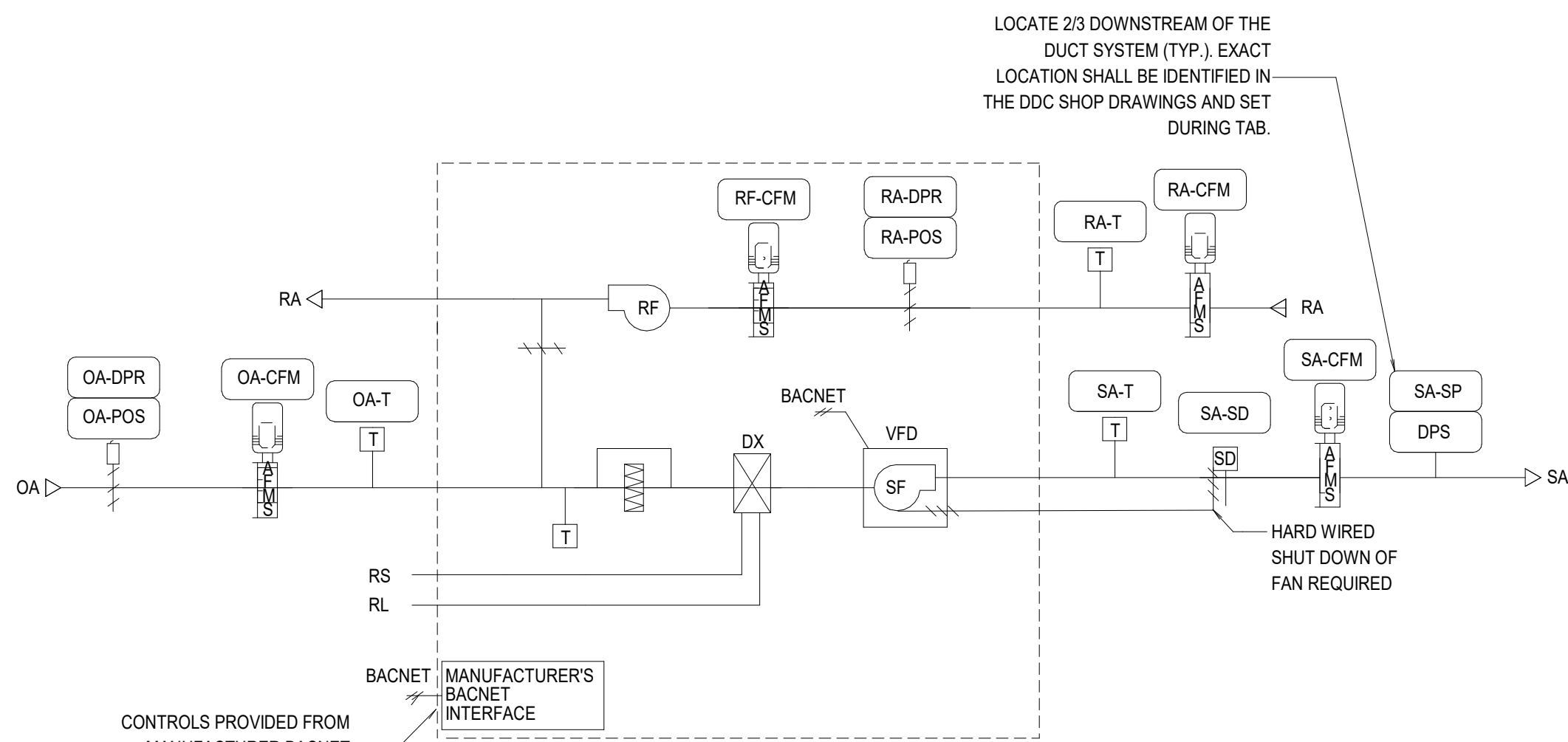
12" = 1'-0"

M5.101



2 BAS ARCHITECTURE

NO SCALE



CONTROLS PROVIDED FROM MANUFACTURER BACNET CONTROLLER. EXTRACT ALL AVAILABLE POINTS TO EMS

OBJECT DESCRIPTION	OBJECT NAME	OBJECT TYPE			
		AI	AO	DI	DO
SUPPLY AIR AIRFLOW	SA-CFM	X			
SUPPLY AIR SMOKE DETECTOR ALARM	SA-SD				X
OUTSIDE AIR AIRFLOW	OA-CFM	X			
OUTSIDE AIR TEMPERATURE	OA-T	X			
SUPPLY AIR TEMPERATURE	SA-T	X			
RETURN AIR AIRFLOW	RF-CFM	X			
RETURN AIR TEMPERATURE	RA-T	X			
SUPPLY AIR STATIC PRESSURE	SA-SP	X			
RETURN FAN AIRFLOW	RA-CFM	X			
CONDENSER WATER VALVE	CDG-VLV		X		
OUTSIDE AIR DAMPER	OA-DPR				X
OUTSIDE AIR DAMPER POSITION	OA-POS			X	
RETURN AIR DAMPER	RA-DPR				X
RETURN AIR DAMPER POSITION	RA-POS			X	

ROOFTOP SPLIT-DX (RTU)

(SPLIT-DX WILL OPERATE BASED ON THEIR INTERNAL CONTROL. SET UP - EMS WILL PROVIDE THE UNIT WITH SCHEDULE, SETPOINT, AND OVERRIDE MINIMUM OUTSIDE DAMPER IN HIGH LEVEL OF CO2)

A. OPERATION:

1. THE OCCUPIED PERIOD WILL BE SCHEDULED THROUGH THE ENERGY MANAGEMENT SYSTEM (EMS), PROVIDED ALL THE SAFETY ALARMS ARE FALSE, THE EMS WILL COMMAND THE WSHP TO START UNDER ITS OWN CONTROLS. WHEN THE EXHAUST AND MINIMUM OUTSIDE AIR DAMPERS, AND CONTROL VALVE ARE OPEN, THE SUPPLY FAN SHALL START.

B. SF VFD CONTROL:

1. THE SUPPLY FAN VFD WILL BE MODULATED TO MAINTAIN A MINIMUM DISCHARGE STATIC PRESSURE SETPOINT AS DETERMINED DURING AIR BALANCE.

C. RF VFD CONTROL:

1. THE EMS SHALL POLE THE SUPPLY AND RETURN AIR FLOW MONITORING STATION AND SET THE RETURN FAN SPEED ACCORDINGLY TO PROVIDE A MINIMUM SPACE PRESSURE OF 0.05 IN WG.

D. SUPPLY AIR DUCT STATIC PRESSURE CONTROL:

1. THE CONTROLLER WILL MEASURE DUCT STATIC PRESSURE AND MODULATE THE SUPPLY FAN VFD SPEED TO MAINTAIN A DUCT STATIC PRESSURE SETPOINT. THE SPEED WILL NOT DROP BELOW 30 HZ (ADJ.). THE STATIC PRESSURE SETPOINT WILL BE RESET BASED UPON THE POSITION OF THE ZONE DAMPERS, WITH A GOAL OF REDUCING THE STATIC PRESSURE UNTIL AT LEAST ONE ZONE DAMPER IS 90% OPEN.
 - a) THE INITIAL DUCT STATIC PRESSURE SETPOINT WILL BE 2.5 IN H2O (ADJ.).
 - b) IF NO ZONE DAMPER IS NEARLY WIDE OPEN, THE SETPOINT WILL INCREMENTALLY RESET DOWN TO A MINIMUM OF 1.3 IN H2O (ADJ.).
 - c) AS ONE OR MORE DAMPERS NEARS THE WIDE-OPEN POSITION, THE SETPOINT WILL INCREMENTALLY RESET UP TO A MAXIMUM OF 4.0 IN H2O (ADJ.).

E. COOLING CONTROL:

1. THE CONTROLLER WILL MEASURE THE SUPPLY AIR TEMPERATURE AND VARY THE COMPRESSOR SPEED TO MAINTAIN ITS COOLING SETPOINT. THIS SUPPLY AIR TEMPERATURE SETPOINT WILL RESET IN A STRAIGHT-LINE RELATIONSHIP THROUGH A RANGE OF 53°F TO 65°F.

F. HEATING CONTROL:

1. WHEN SPACE TEMPERATURE IS BELOW THE OCCUPIED HEATING SETPOINT (80°F), UNIT SHALL OPERATE IN THE HEATING MODE. UNIT SHALL STAGE AVAILABLE HEAT STAGES TO SATISFY DEMAND IN THE OCCUPIED SPACE.

G. PRE-OCCUPANCY PURGE/WARM-UP/COOL-DOWN:

1. THE EMS WILL START WSHP AS DETERMINED NECESSARY PRIOR TO SCHEDULED OCCUPANCY AS REQUIRED FOR PROVIDING PRE-OCCUPANCY PURGE, WARM-UP, AND COOL-DOWN.

H. ECONOMIZER:

1. THE ECONOMIZER CONTROL SHALL ACCOMMODATE FULL CONTROL. WHEN THE OUTDOOR AIR TEMPERATURE IS 65°F OR LESS, THE ECONOMIZER DAMPERS SHALL BE AT THEIR MINIMUM POSITION. SHOULD THE OUTDOOR ENTHALPY BE AT ACCEPTABLE LEVELS THE ECONOMIZER SHALL BE ENABLED. IF THE OA RH IS 35% AND BELOW, ECONOMIZER WILL BE DISABLED.
2. THE OUTSIDE AND EXHAUST AIR DAMPERS WILL CLOSE WHEN THE UNIT IS OFF.

I. MINIMUM OUTSIDE AIR VENTILATION:

1. WHEN IN THE OCCUPIED MODE, THE CONTROLLER WILL MEASURE THE OUTSIDE AIRFLOW AND MODULATE THE OUTSIDE AIR DAMPERS TO MAINTAIN THE PROPER MINIMUM OUTSIDE AIR VENTILATION, OVERRIDING NORMAL DAMPER CONTROL. ON DROPPING OUTSIDE AIRFLOW, THE CONTROLLER WILL MODULATE THE OUTSIDE AIR DAMPERS OPEN TO MAINTAIN THE OUTSIDE AIRFLOW SETPOINT (ADJ.).

J. TEMPORARY OCCUPANCY:

1. TEMPORARY OCCUPANCY WILL BE MADE AVAILABLE BY PRESSING THE OVERRIDE PUSH BUTTON. THE WSHP WILL BE ENABLED FOR AN EXTENDED PERIOD OF 2 HOUR (ADJ.).

K. UNOCCUPIED MODE:

1. DURING THE UNOCCUPIED MODE, THE FANS WILL REMAIN OFF, THE OUTSIDE AIR AND EXHAUST AIR DAMPERS WILL REMAIN CLOSED, AND CONTROL VALVE WILL CLOSE.

L. NIGHT SETBACK:

1. THE ROOFTOP UNIT WILL BE INDEXED TO THE OCCUPIED MODE IF ZONE TEMPERATURE IS GREATER THAN THE UNOCCUPIED COOLING SETPOINT OF 85°F, OR LOWER THAN THE UNOCCUPIED HEATING SETPOINT OF 55°F.

M. ALARM CONDITIONS:

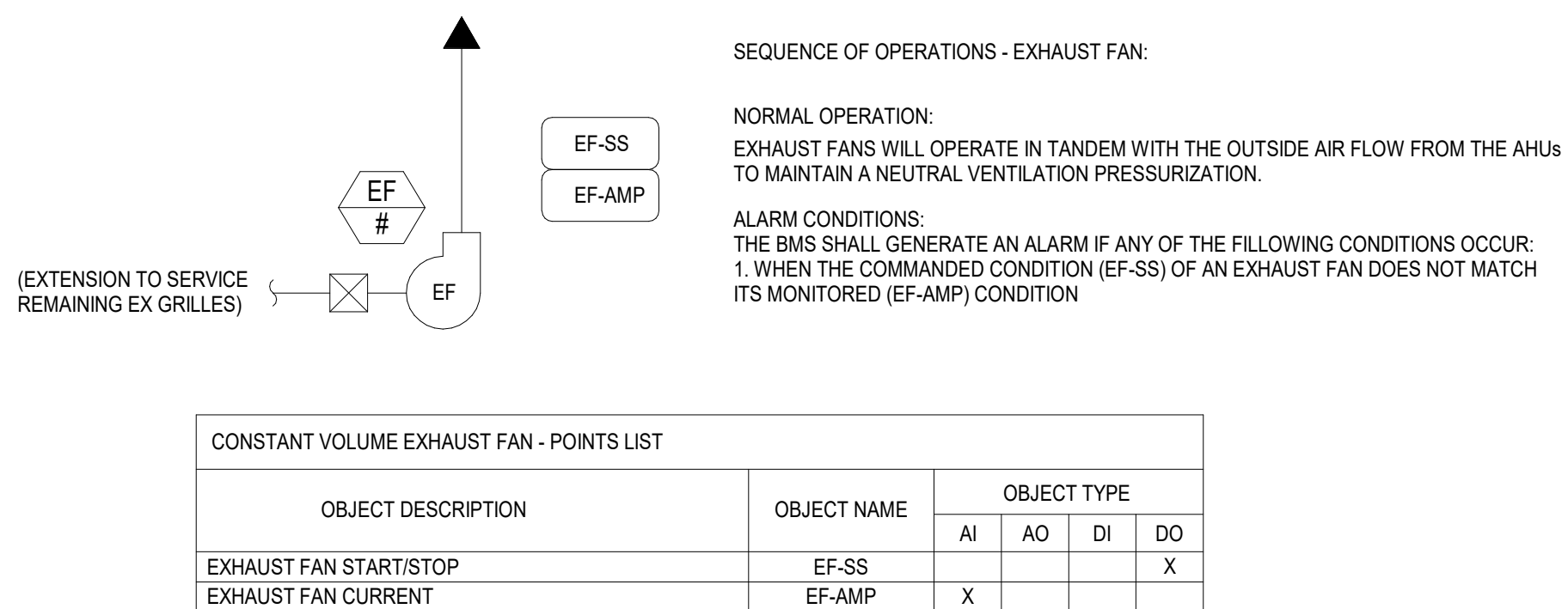
1. THE FOLLOWING ALARMS WILL BE DISPLAYED AT THE EMS:
 - a) SUPPLY AIR SMOKE DETECTION: THE SUPPLY AIR DUCT SMOKE DETECTOR WILL SHUTDOWN THE SUPPLY FAN AND RETURN FAN UPON DETECTION OF SMOKE.
 - b) SF RUN STATUS: THE SUPPLY FAN COMMANDED ON AND THE STATUS IS OFF AFTER 2 MINUTES (ADJUSTABLE).
 - c) RF RUN STATUS: THE RETURN FAN IS COMMANDED ON AND THE STATUS IS OFF AFTER 2 MINUTES (ADJUSTABLE).
 - d) HIGH PRESSURE SWITCH: THE HIGH-PRESSURE SWITCH WILL SHUTDOWN THE SUPPLY FAN VFD ONCE SETPOINT HAS BEEN REACHED THREE INCHES OF WATER.
 - e) LOW SUPPLY AIR STATIC PRESSURE FALLS BELOW 0.5 FOR FIVE (5) MINUTES.
 - f) OUTSIDE AIR DAMPER FAILURE

CONTROLS LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
AI	DDC ANALOG INPUT POINT W/ ADJUSTABLE PID GAIN CONTROL	P	ROOM PRESSURE SENSOR
AO	DDC ANALOG OUTPUT POINT W/ ADJUSTABLE PID GAIN CONTROL	LAN	LOCAL AREA NETWORK
DI	DDC DIGITAL INPUT POINT W/ INDICATING LIGHT ON DDC PANEL	DDC	DIRECT DIGITAL CONTROL
DO	DDC DIGITAL OUTPUT POINT W/ MANUAL OVERRIDE AND INDICATING LIGHT ON DDC PANEL	PID	PROPORTIONAL, INTEGRAL, DERIVATIVE
T	TEMPERATURE SENSOR	TSP	TWISTED SHIELDED PAIR
T	TEMPERATURE SENSOR W/ PIPING WELL	DP	DIFFERENTIAL PRESSURE
F	FLOW METER	E	COORDINATE WITH ELECTRICAL
FS	FLOW SWITCH - PROVIDE DIRECT HARDWARE CONNECTION TO BOILER, CHILLER OR ASSOCIATED EQUIPMENT	CFM	AIR FLOW SENSOR
P	PRESSURE SENSOR		
DPS	DIFFERENTIAL PRESSURE SENSOR		
CSR	CURRENT SENSING RELAY		
S.D.	DUCT SMOKE DETECTOR - COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER SUPPLY		
	DAMPER ACTUATOR		
HPS	HIGH LIMIT STATIC PRESSURE SWITCH WITH MANUAL RESET HARD WIRE DIRECTLY TO VFD SAFETY CIRCUIT AND PROVIDE DI POINT		
LPS	LOW LIMIT STATIC PRESSURE SWITCH WITH MANUAL RESET HARD WIRE DIRECTLY TO VFD SAFETY CIRCUIT AND PROVIDE DI POINT		
SP	STATIC PRESSURE SENSOR		
AF	AIR FLOW SENSOR - PARAGON MODEL NO. FE-1050 WITH FIT-1001M OR EQUAL		
	TWO-WAY CONTROL VALVE - VERIFY & PROVIDE A VALVE SCHEDULE		
	THREE-WAY CONTROL VALVE - VERIFY & PROVIDE A VALVE SCHEDULE		
VPS	VELOCITY PRESSURE SENSOR		

1 CONTROLS LEGEND

NO SCALE



3 CONSTANT VOLUME EXHAUST FAN CONTROLS

NO SCALE

CITY OF IRVINE HANGAR 10 RECONSTRUCTION

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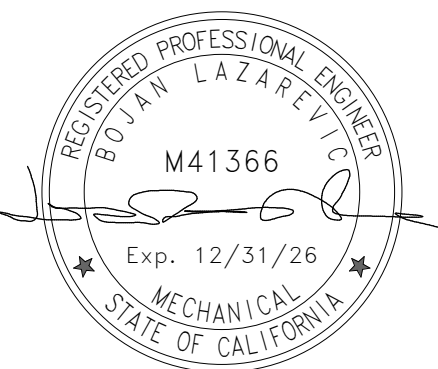
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Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

MECHANICAL CONTROLS

Scale

NO SCALE

M6.101

CITY OF IRVINE
HANGAR 10
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RECONSTRUCTION

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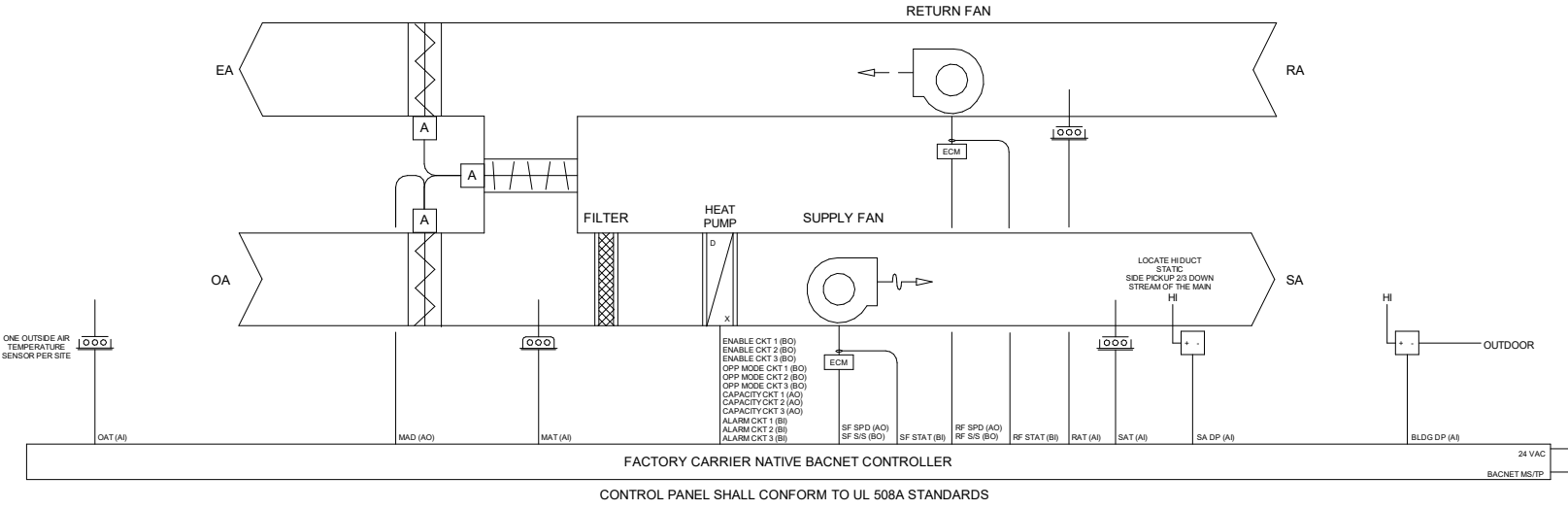
Description

MECHANICAL CONTROLS

Scale

NO SCALE

M6.102



Sequences of Operation

RUN CONDITIONS - REQUESTED:

THE UNIT SHALL RUN WHENEVER:

- ANY ZONE IS OCCUPIED.
- DEFINABLE NUMBER OF UNOCCUPIED ZONES NEED HEATING OR COOLING.
- OPTIMAL START FROM ZONES.

WARM-UP:

A ONE-TIME MORNING WARM UP WILL BE INITIATED ON STARTUP LOCKING OUT ECONOMIZER AND MECHANICAL COOLING UNTIL AVERAGE SPACE TEMPERATURE IS > (68°F) OR TIME EXCEEDS (120MIN).

SUPPLY FAN:

THE SUPPLY FAN SHALL RUN ANYTIME THE UNIT IS COMMANDED TO RUN, UNLESS SHUTDOWN ON SAFETIES. TO PREVENT SHORT CYCLING, THE SUPPLY FAN SHALL HAVE A USER DEFINABLE MINIMUM RUNTIME.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- SUPPLY FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
- SUPPLY FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
- SUPPLY FAN RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT.
- SUPPLY FAN VFD FAULT.

SUPPLY AIR DUCT STATIC PRESSURE CONTROL:

THE CONTROLLER WILL MEASURE DUCT STATIC PRESSURE AND MODULATE THE SUPPLY FAN VFD SPEED TO MAINTAIN A DUCT STATIC PRESSURE SETPOINT. THE SPEED WILL NOT DROP BELOW (20%).

THE STATIC PRESSURE SETPOINT WILL BE RESET BASED UPON THE POSITION OF THE ZONE DAMPERS > (95%), WITH A GOAL OF REDUCING THE STATIC PRESSURE UNTIL AT LEAST 90% OF ZONES DAMPERS IS NEARLY WIDE OPEN.

- THE INITIAL DUCT STATIC PRESSURE SETPOINT WILL BE (1.5IN H2O).
- THEN IF < (8) ZONES DAMPERS ARE > 95% OPEN, THE SETPOINT WILL INCREMENTALLY RESET (0.05 IN H2O) DOWN EVERY (2MIN) TO A MINIMUM OF (1.3IN H2O).
- THEN IF > (10) ZONES DAMPERS ARE > 95% OPEN, THE SETPOINT WILL INCREMENTALLY RESET (0.05 IN H2O) UP EVERY (2MIN) UP TO A MAXIMUM OF (1.8IN H2O).

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- HIGH SUPPLY AIR STATIC PRESSURE: IF THE SUPPLY AIR STATIC PRESSURE IS (25%) GREATER THAN SETPOINT.
- LOW SUPPLY AIR STATIC PRESSURE: IF THE SUPPLY AIR STATIC PRESSURE IS (25%) LESS THAN SETPOINT.
- SUPPLY FAN VFD FAULT.

SUPPLY AIR TEMPERATURE SETPOINT - RESET:

THE CONTROLLER WILL MONITOR THE SUPPLY AIR TEMPERATURE AND WILL MAINTAIN A SUPPLY AIR TEMPERATURE SETPOINT RESET BASED ON ZONE COOLING & HEATING REQUESTS.

THE SUPPLY AIR TEMPERATURE SETPOINT WILL BE RESET BASED ON ZONE COOLING REQUIREMENTS AS FOLLOWS:

- THE INITIAL SUPPLY AIR TEMPERATURE SETPOINT WILL BE (55°F).
- AS COOLING DEMAND INCREASES, THE SETPOINT WILL INCREMENTALLY RESET (0.3°F) TIMES COOLING REQUEST NOT TO EXCEED (1°F) DOWN EVERY (2MIN) DOWN TO A MINIMUM OF (52°F).
- AS COOLING DEMAND DECREASES, THE SETPOINT WILL INCREMENTALLY RESET (0.3°F) TIMES COOLING REQUEST NOT TO EXCEED (1°F) UP EVERY (2MIN) UP TO A MAXIMUM OF (55°F).

THE SUPPLY AIR TEMPERATURE SETPOINT WILL BE RESET BASED ON ZONE HEATING REQUIREMENTS AS FOLLOWS:

- THE INITIAL SUPPLY AIR TEMPERATURE SETPOINT WILL BE (55°F).
- AS COOLING DEMAND INCREASES, THE SETPOINT WILL INCREMENTALLY RESET (0.3°F) TIMES COOLING REQUEST NOT TO EXCEED (1°F) DOWN EVERY (2MIN) DOWN TO A MINIMUM OF (52°F).
- AS COOLING DEMAND DECREASES, THE SETPOINT WILL INCREMENTALLY RESET (0.3°F) TIMES COOLING REQUEST NOT TO EXCEED (1°F) UP EVERY (2MIN) UP TO A MAXIMUM OF (55°F).

OPERATION MODE (PMV KIT)

IF THE OPERATOR CONTACT IS CLOSED, SYSTEM WILL OPERATE IN HEAT MODE. IF THE CONTACT IS OPEN, SYSTEM WILL OPERATE IN COOL MODE.

HEATING MODE (PMV KIT)

WHEN THE UNIT IS IN HEATING MODE THE CONTROLLER SHALL ENABLE THE OUTDOOR UNIT AND PUT IT IN THE HEATING MODE. THE CONTROLLER SHALL MODULATE THE HEATING CAPACITY TO MAINTAIN THE HEATING SETPOINT (0-10V SIGNAL, 4V MINIMUM AT START OF HEATING CONTROL.)

COOLING MODE (PMV KIT)

WHEN THE UNIT IS IN COOLING MODE THE CONTROLLER SHALL ENABLE THE OUTDOOR UNIT AND PUT IT IN THE COOLING MODE. CONTROLLER SHALL MODULATE THE COOLING CAPACITY TO MAINTAIN THE COOLING SETPOINT (0-10V SIGNAL, 4V MINIMUM AT START OF COOLING CONTROL.)

BUILDING STATIC PRESSURE CONTROL:

THE CONTROLLER WILL MEASURE BUILDING STATIC PRESSURE AND MODULATE THE RETURN FAN VFD SPEED TO MAINTAIN A BUILDING STATIC PRESSURE SETPOINT OF (0.05IN H2O). THE RETURN FAN VFD SPEED WILL NOT DROP BELOW (20%). THE CONTROLLER WILL HAVE AN OPTION SWITCH TO ENABLE FAN TRACKING TO THE SUPPLY FAN TO (80%) OF SUPPLY FAN SPEED.

ALARMS WILL BE PROVIDED AS FOLLOWS:

- HIGH BUILDING STATIC PRESSURE: IF THE BUILDING AIR STATIC PRESSURE IS (0.02IN H2O) GREATER THAN SETPOINT.
- LOW BUILDING STATIC PRESSURE: IF THE BUILDING AIR STATIC PRESSURE IS (0.02IN H2O) LESS THAN SETPOINT.

RETURN FAN:

THE RETURN FAN WILL RUN WHENEVER THE SUPPLY FAN RUNS.

ALARMS WILL BE PROVIDED AS FOLLOWS:

- RETURN FAN FAILURE: COMMANDED ON, BUT THE STATUS IS OFF.
- RETURN FAN IN HAND: COMMANDED OFF, BUT THE STATUS IS ON.
- RETURN FAN RUNTIME EXCEEDED: STATUS RUNTIME EXCEEDS A USER DEFINABLE LIMIT.
- RETURN FAN VFD FAULT.

ECONOMIZER:

THE CONTROLLER WILL MEASURE THE MIXED AIR TEMPERATURE AND MODULATE THE ECONOMIZER DAMPERS IN SEQUENCE TO MAINTAIN A SETPOINT (2°F) LESS THAN THE SUPPLY AIR TEMPERATURE SETPOINT. THE OUTSIDE AIR DAMPERS WILL MAINTAIN A MINIMUM CFM FOR VENTILATION WHENEVER OCCUPIED.

THE ECONOMIZER WILL BE ENABLED WHENEVER:

- NOT IN MORNING WARM-UP.
- AND THE OUTSIDE AIR TEMPERATURE IS (2°F) LESS THAN THE RETURN AIR TEMPERATURE.
- AND THE SUPPLY FAN IS COMMANDED ON.
- AND AT LEAST (1) COOLING REQUEST.

THE OUTSIDE AND EXHAUST AIR DAMPERS WILL CLOSE AND THE RETURN AIR DAMPER WILL OPEN WHEN THE UNIT IS OFF.

MIXED AIR TEMPERATURE:

THE CONTROLLER SHALL MONITOR THE MIXED AIR TEMPERATURE AND USE AS REQUIRED FOR SETPOINT CONTROL OR ECONOMIZER CONTROL (IF PRESENT).

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- HIGH RETURN AIR TEMP: IF THE RETURN AIR TEMPERATURE IS GREATER THAN (80°F).
- LOW RETURN AIR TEMP: IF THE RETURN AIR TEMPERATURE IS LESS THAN (45°F).

RETURN AIR TEMPERATURE:

THE CONTROLLER SHALL MONITOR THE RETURN AIR TEMPERATURE AND USE AS REQUIRED FOR SETPOINT CONTROL OR ECONOMIZER CONTROL (IF PRESENT).

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- HIGH RETURN AIR TEMP: IF THE RETURN AIR TEMPERATURE IS GREATER THAN (80°F).
- LOW RETURN AIR TEMP: IF THE RETURN AIR TEMPERATURE IS LESS THAN (45°F).

SUPPLY AIR TEMPERATURE MONITOR:

THE CONTROLLER SHALL MONITOR THE SUPPLY AIR TEMPERATURE.

ALARMS SHALL BE PROVIDED AS FOLLOWS:

- HIGH SUPPLY AIR TEMP: IF THE SUPPLY AIR TEMPERATURE IS GREATER THAN (120°F) FOR MORE THAN (5 MIN).
- LOW SUPPLY AIR TEMP: IF REHEAT IS ENABLED AND THE SUPPLY AIR TEMPERATURE IS LESS THAN (60°F) FOR MORE THAN (5 MIN).

(NOTE: ALL NUMERICAL VALUES IN PARENTHESES ARE ADJUSTABLE UNLESS OTHERWISE NOTED)

1 SPLIT-DX HEAT PUMP UNIT (AHU)

NO SCALE

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

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Electrical Abbreviations			Electrical Symbol Legend		
IP A, Amp AC ADA ADO AF AFIAT AFF AFG AFI AHU AC AL ALT ANNUIN APPROX ARCH AS ASIAF AT ATS AUX AV AVG AWG BATT BD BLDG BMS CAB CATV CB CCITV CONN COMB CMPR CONN CMT DA DISC DIST DS DWG E EB EC EGC ELEC ELEV ELU EM EMS EPO EQUIP ER EV EVCS FA FACP FC FCU FLA FLR GA GALV GC GEO GEN GEC GFI GFP GND GRS GYP HOA HT HTR HV HVAC ID IMC INV J-BOX KCMIL KV KVA KW KWH LCL LTC LVL	1 Pole (2P, 3P, 4P, ETC.) Ampere Above Counter Americans with Disabilities Act Automatic Door Opener Amp Frame, Amp Fuse Amp Frame, Amp Trip Above Finished Floor Above Finished Grade Arc Fault Circuit Interrupter Air Handling Unit Authority Having Jurisdiction Amperes Interrupting Capacity Aluminum Alternate Annunciator Approximately Architect, Architectural Amp Switch Amp Switch, Amp Frame Amp Trip Automatic Transfer Switch Auxiliary Audio Visual Average American Wire Gauge Battery Board Building Building Management System Cabinet Cable Television Circuit Breaker Closed Circuit Television California Electrical Code Contractor Furnished, Contractor Installed Circuit Ceiling Combination Compressor Correction Continuation Or Continuous Conduit Only Control Power Transformer Copper Current Transformer Copper Department Detail Diameter Disconnect Distribution Safety Disconnect Switch Drawing Existing Emergency Battery Electrical Contractor Emergency Generator Equipment Grounding Conductor Emergency Inverter Existing To Be Relocated Electric, Electrical Elevator Emergency Lighting Unit Emergency Energy Management System Electrical Metallic Tubing New Location Of Relocated Emergency Power Off Equipment Existing To Be Removed Electric Vehicle Electric Vehicle Charging Station Fire Alarm Fire Alarm Booster Power Supply Panel Fire Alarm Control Panel Footcandle Fan Coil Unit Full Load Amps Floor Gauge Gallon Galvanized General Contractor Garbage Disposal Generator Grounding Electrode Conductor Ground Fault Circuit Interrupter Ground Fault Protector Ground Galvanized Rigid Steel (Conduit) Gypsum Board Hands-Off-Automatic Switch Horsepower Height Heater High Voltage Heating, Ventilating And Air Conditioning Intermediate Distribution Frame Isolated Ground Intermediate Metal Conduit Inverter Junction Box Thousand Circular Mils Kilovolt Kilovolt-Ampere Kilowatt Kilowatt Hour Long Continuous Load Lighting Low Voltage Level	MM M MAX MC MCB MCA MCC MFR MDF MIC MIN MISC MLO MOPCR MT MTD MTR MW N.C. NEC NEMA NIC NL N.O. NTS OC OFICI OH OL PS PSC PULL BOX Or Pushbutton PH PNC PIV PML PP PR PR PROJ PT PVC PWR REC REF RGS RM RSC RTU RSC SC SCOR SEC SFD SHT SIM SLD SPD STD SW SWB SYS TEL TYP TV UC UG UNO UNO UT V VA VD VFD W WI WH W/O WP XFMR	Meter / Main Maximum Momentary Contact Mechanical Contractor Main Circuit Breaker Main Distribution Frame Motor Control Center Manufacturer Microphone Minimum Minimum Circuit Amps Miscellaneous Main Legs Only Maximum Overcurrent Protection Mount Mounted Manual Transfer Switch Motor, Motorized Microwave Normally Closed National Electrical Code National Electrical Manufacturer's Association Not In Contact Night Light Normally Open Not To Scale On Center Owner Furnished, Contractor Installed Overhead Overloads Pull Section Public Address Pull Box Or Pushbutton Photoacoustic Power Factor Phase Post Indicating Valve Ceiling Power Pole Pair Primary Projection Potential Transformer Polyvinyl Chloride (Conduit) Power Receptacle Refrigerator Rigid Galvanized Steel (Conduit) Room Rigid Steel Conduit Roof Top Ceiling Roof Surface Conduit Short Circuit Current Rating Secondary Smoke Fire Damper Sheet Similar Single-Line Diagram Surge Protective Device Specification Stainless Steel Standard Switch Switchboard System Telephone Tampers Resistant Television Typical Under Counter Underground Underground Pull Section Unless Noted Otherwise (or UNO Unless Otherwise Noted) Uninterruptible Power Supply Underground Telephone Utility Volt Volt-Amperes Voltage Drop Variable Frequency Drive With Water Heater Without Weatherproof Transformer	Lighting Symbols Lighting Fixtures, Typical, Rectangular (Various Symbols) Filled circles indicate recessed. Open circles indicate surface-mounted. Diagonal line indicates lensed. Outer dots indicate suspended. Lighting Fixtures, Typical, Round (Various Symbols) Center dot indicates pendant. Diagonal line indicates lensed. Chevron indicates wall wash. Wall-mounted fixtures, Typical (Various Symbols) Strip Fixture Directional Light, Track Light, Flood Light Linear Light, Tape Light Emergency Lighting Unit, Ceiling-Mounted, Integral Battery Emergency Lighting Unit, Ceiling-Mounted, Remote Battery Emergency Lighting Unit, Wall-Mounted, Integral Battery Emergency Lighting Unit, Wall-Mounted, Remote Battery Exit Light, Ceiling-Mounted. Shading and arrows indicate faces and directional chevrons. Exit Light, Wall-Mounted. Shading and arrows indicate faces and directional chevrons. Exit/ELU Combo Pole/Area Lights Post-Top Area Light Bollard Light Diagonal hatch indicates light on a critical circuit. Solid hatch indicates light on an emergency or life safety circuit. Single-Pole Switch (for lighting) Switch Modifiers: 3-Way 4-Way K-Keypad D-Dimming T-Timer Occupancy Sensor Daylight Harvesting Sensor 1 Button Dimming Switch, With Occupancy Sensor 0-10V Dimming Controller With Integral Relay Emergency Lighting Control Unit Low Voltage Wall Switch With Dimming # = Zone Emergency Lighting Control Unit Low Voltage Level 2 Electric Vehicle Charger Station - Installed Complete With Wiring Single Or Dual Electric Vehicle Charging Station - Provide J-Box With 1" C.O. Low Power Level 2 Electric Vehicle Charger Station - Provide Level 2 Outlet By Orange Charger (or Equal) Power Device and Equipment Tags Electrical Device Tags: Uperscase letter(s) indicates Panel ID and circuit number. Lowercase letter indicates designation of controlling switch (where applicable). Equipment Tags: Equipment ID is indicated by an underlined tag adjacent to the equipment. See the equipment connection schedule for description, electrical requirements, and panel and circuit number. Symbols/graphic appearance of equipment varies. Wiring Wiring Turned Up Wiring Turned Down Concealed EMT conduit with wire 2#12AWG and #12AWG green ground, 3/4" minimum. Concealed EMT conduit with wire 3#12AWG and #12AWG green ground, 3/4" minimum. Concealed EMT conduit with wire 3#10AWG and #10AWG green ground, 3/4" minimum. Underground conduit and #10 wire, unless noted otherwise 3/4" PVC minimum. Home run to branch circuit panelboard. The equipment name and circuit number(s) are indicated, separated by a hyphen. Homeruns are only intended to indicate panel and circuit number. Actual homerun location shall be field-determined by the contractor. Power Distribution Equipment SB1 MDP HP1A LP1A Dry Type Transformer: See Single-Line Diagram for description and requirements.	Security Symbols Security Camera PTZ, Pan/Tilt/Zoom 360°, 360 Degree, Provide J-Box with 3/4"C and CAT-5E back to closest IDF Room. 180°, 180 Degree, Provide J-Box with 3/4"C and CAT-5E back to closest IDF Room. Card Reader Card Reader with Keypad Security Keypad Lockdown Button Closed Circuit TV Outlet Door Contact Electric Strike Intercom Magnetic Lock Request to Exit Button Request to Exit Sensor Motion Detector Security Control Unit SC2: Security Control Panel SPS: Security Power Supply Unit On-Line Lock. Locks shall be Salto. Provide complete system. Off-Line Lock. Locks shall be Salto. Provide complete system. Fire Alarm Symbols Door Holder Smoke Detector Combination Smoke and CO2 Sensor Fire Alarm Control Unit EVAC: Voice Evacuation Control Panel FAA: Fire Alarm Annunciator FACP: Fire Alarm Control Panel FATC: Fire Alarm Terminal Cabinet NACP: Notification Appliance Circuit Panel FANM: Fire Alarm Mass Notification Control Panel Existing to Be Demolished Area Not in Contact Keynote Underground Line Type Signaline Symbols and Descriptions Through Feed Lugs Panelboard Transformer Grounding Electrode and Conductor Circuit Breaker Utility Meter with C.T.S. Automatic Transfer Switch Circuit Breaker with Electronic Sensing, Timing and Tripping Control with Field Interchangeable with Discrete Field Adjustable Setting Independent of Other Adjustments A: Arch Flash Reduction L: Long Time Trip S: Short Time Overcurrent Trip I: Instantaneous Trip G: Ground Fault Tri. Ground Fault Sensing Integral with Circuit Breaker Surge Protective Device Digital Submeter Revenue Grade Shunt Trip

APPLICABLE CODES	
ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE CODES, GUIDELINES, STANDARDS, REGULATIONS AND ORDINANCES INCLUDING:	
CALIFORNIA BUILDING STANDARD CODE:	
2022 CALIFORNIA BUILDING CODE, CALIFORNIA CODE REGULATIONS TITLE-24 - PART 2	
2022 CALIFORNIA ELECTRICAL CODE, CALIFORNIA CODE REGULATIONS TITLE-24 - PART 3	
2022 CALIFORNIA ENERGY CODE, CALIFORNIA CODE REGULATIONS TITLE-24 - PART 6	
2022 CALIFORNIA FIRE CODE, CALIFORNIA CODE REGULATIONS TITLE-24 - PART 9	
2022 'CALGREEN' CALIFORNIA GREEN BUILDING CODE, CALIFORNIA CODE REGULATIONS TITLE-24 - PART 11	
NATIONAL AND LOCAL CODES:	
ASME A17.1/CSA 44-2019, SAFETY CODE FOR ELEVATORS AND ESCALATORS	

GENERAL PROJECT NOTES	
1. PROVIDE SUPPORTS FOR ALL CONDUCTORS IN VERTICAL RACEWAYS PER CEC 300.19.	
2. ALL ENCLOSURES AND EMERGENCY EQUIPMENT FOR EMERGENCY CIRCUITS SHALL BE PERMANENTLY MARKED SO THEY ARE READILY IDENTIFIED AS A COMPONENT OF AN EMERGENCY SYSTEM OR CIRCUIT PER CEC 700.10(A).	
3. TERMINALS/LUGS SHALL BE RATED FOR COPPER/ALUMINUM WITH 75°C MIN RATING.	
4. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES, CALIFORNIA ELECTRICAL CODE, STATE OF CALIFORNIA ENERGY CONSERVATION STANDARDS AND ALL REQUIREMENT OF THE AUTHORITY HAVING JURISDICTION (AHJ).	
5. CONTRACTORS SHALL COORDINATE ALL EQUIPMENT LOCATIONS WITH ARCHITECTURAL, MECHANICAL, STRUCTURAL, PLUMBING AND ALL APPROPRIATE DISCIPLINES.	
6. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM AND/OR ENGINEER PRIOR TO THE START OF CONSTRUCTION.	
7. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION AND REPAIR OF THE EXISTING SURFACES, AREAS AND PROPERTY THAT MAY BE DAMAGED AS A RESULT OF ANY ELECTRICAL DEMOLITION AND/OR NEW WORK.	
8. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS, APPROVALS, LICENSES, ETC. AS NEEDED FOR THE COMPLETE ELECTRICAL INSTALLATION. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR ALL FEES AND DATA NEEDED FOR THE ABOVE ITEMS.	
9. ALL CONDUITS SHALL BE EMT (INSTALLED IN INTERIOR CONCEALED SPACES) OR SCHEDULE-40 PVC (INSTALLED UNDERGROUND) UNLESS OTHERWISE NOTED.	
10. ALL AMPACITIES ARE BASED UPON TABLE 310.15(B)16 OF THE 2022 C.E.C.	
11. FEEDER SCHEDULES INDICATE DATA FOR COPPER CONDUCTORS RATED UP TO 600V AT 75°C.	
12. PROVIDE WEATHERPROOF (NEMA 3R) JUNCTION BOXES, CONDUIT, FITTINGS AND ALL ENCLOSURES AT ALL EXTERIOR LOCATIONS AND ALL WET OR DAMP INTERIOR LOCATIONS. ALL EXTERIOR LIGHTING FIXTURES SHALL BE UL LISTED FOR WET OR DAMP LOCATIONS AS APPROPRIATE FOR THE LOCATION.	
13. VERIFY EXISTING CONDITIONS PRIOR TO BID AND INCLUDE ALL COSTS AS REQUIRED FOR A COMPLETE AND FUNCTIONAL INSTALLATION.	
14. CONTRACTOR SHALL CONCEAL ALL CONDUIT, FITTINGS, AND DEVICES FROM VIEW WHERE REASONABLY POSSIBLE.	
15. CONTRACTOR SHALL ENSURE THAT ALL CONDUIT, FIXTURES, FITTINGS, AND DEVICES LOCATED IN PUBLIC AREAS ARE TAMPERPROOF AND PROTECTED FROM PHYSICAL DAMAGE.	

SCOPE OF WORK	
NEW HANGAR BUILDING WITH 9700 SF. BUILDING TO BE SERVICED BY NEW 2500A 208Y/120V 3PH 4W SWITCHBOARD.	
WORK CONSISTS OF: 1. LIGHTING 2. POWER	
SCE SERVICE REPORT INCLUDING AVAILABLE FAULT CURRENT, VOLTAGE, AMPERES, AND PHASE AT THE SERVICE TO BE A DEFERRED SUBMITTAL AND WILL BE PROVIDED WHEN OBTAINED FROM SCE.	

Electrical Sheet Schedule	
E0.000	ELECTRICAL TITLE SHEET
E0.001	LIGHTING FIXTURE SCHEDULE & LCD
E0.002	TITLE 24
E0.003	TITLE 24
E0.004	TITLE 24
E0.005	TITLE 24
E0.006	TITLE 24
E1.101	ELECTRICAL SITE PLAN
E2.101	LEVEL 01 - POWER PLAN
E2.102	LEVEL 01 - ROOF PLAN
E3.101	LEVEL 01 - LIGHTING PLAN
E3.102	LEVEL 01 - EGRESS PHOTOMETRIC PLAN
E5.101	SINGLE-LINE DIAGRAM
E7.101	ELECTRICAL DETAILS

600V 3PH CU FEEDER SCHEDULE (XXXX)				
Feeder Designation	Feeder Ampacity	Sets	Conduit Size	Conductor Quantity and size per conduit
203	20	1	3/4"	3 #12, 1 #12 G
204	20	1	3/4"	3 #12, 1 #12 N, 1 #12 G
303	30	1	3/4"	3 #10, 1 #10 G
304	30	1	3/4"	3 #10, 1 #10 N, 1 #10 G
403	40	1	1"	3 #8, 1 #10 G
404	40	1	1"	3 #8, 1 #8 N, 1 #10 G
503	50	1	1"	3 #6, 1 #10 G
504	50	1	1"	3 #6, 1 #6 N, 1 #10 G
603	60	1	1-1/4"	3 #4, 1 #10 G
604	60	1	1-1/4"	3 #4, 1 #4 N, 1 #10 G
703	70	1	1-1/4"	3 #4, 1 #8 G
704	70	1	1-1/4"	3 #4, 1 #4 N, 1 #8 G
803	80	1	1-1/4"	3 #2, 1 #8 G
804	80	1	1-1/4"	3 #2, 1 #2 N, 1 #8 G
903	90	1	1-1/4"	3 #2, 1 #8 G
904	90	1	1-1/4"	3 #2, 1 #2 N, 1 #8 G
1003	100	1	1-1/2"	3 #1, 1 #8 G
1004	100	1	1-1/2"	3 #1, 1 #1 N, 1 #8 G
1253	125	1	1-1/2"	3 #1, 1 #6 G
1254	125	1	1-1/2"	3 #1, 1 #1 N, 1 #6 G
1503	150	1	1-1/2"	3 #10, 1 #6 G
1504	150	1	1-1/2"	3 #10, 1 #10 N, 1 #6 G
1753	175	1	2"	3 #20, 1 #6 G
1754	175	1	2"	3 #20, 1 #20 N, 1 #6 G
2003	200	1	2"	3 #30, 1 #6 G
2004	200	1	2"	3 #30, 1 #30 N, 1 #6 G
2253	225	1	2-1/2"	3 #40, 1 #4 G
2254	225	1	2-1/2"	3 #40, 1 #40 N, 1 #4 G
2503	250	1	2-1/2"	3 #250KCMIL, 1 #4 G
2504	250	1	2-1/2"	3 #250KCMIL, 1 #250KCMIL N, 1 #4 G
3003	300	1	3"	3 #350KCMIL, 1 #4 G
3004	300	1	3"	3 #350KCMIL, 1 #350KCMIL N, 1 #4 G
3503	350	1	4"	3 #500KCMIL, 1 #2 G
3504	350	1	4"	3 #500KCMIL, 1 #500KCMIL N, 1 #2 G
4003	400	1	4"	3 #600KCMIL, 1 #2 G
4004	400	1	4"	3 #600KCMIL, 1 #600KCMIL N, 1 #2 G
4503	450	2	3"	3 #40, 1 #2 G
4504	450	2	3"	3 #40, 1 #40 N, 1 #2 G
5003	500	2	3"	3 #250KCMIL, 1 #2 G
5004	500	2	3"	3 #250KCMIL, 1 #250KCMIL N, 1 #2 G
6003	600	2	4"	3 #350KCMIL, 1 #1 G
6004	600	2	4"	3 #350KCMIL, 1 #350KCMIL N, 1 #1 G
7003	700	2	4"	3 #500KCMIL, 1 #10 G
7004	700	2	4"	3 #500KCMIL, 1 #500KCMIL N, 1 #10 G
8003	800	2	4"	3 #600KCMIL, 1 #10 G
8004	800	2	4"	3 #600KCMIL, 1 #600KCMIL N, 1 #10 G
10003	1000	3	4"	3 #500KCMIL, 1 #20 G
10004	1000	3	4"	3 #500KCMIL, 1 #500KCMIL N, 1 #20 G
12003	1200	3	4"	3 #600KCMIL, 1 #30 G
12004	1200	3	4"	3 #600KCMIL, 1 #600KCMIL N, 1 #30 G
16003	1600	4	4"	3 #600KCMIL, 1 #40 G
16004	1600	4	4"	3 #600KCMIL, 1 #600KCMIL N, 1 #40 G
20003	2000	5	4"	3 #600KCMIL, 1 #250KCMIL G
20004	2000	5	4"	3 #600KCMIL, 1 #600KCMIL N, 1 #250KCMIL G
25003	2500	6	4"	3 #600KCMIL, 1 #350KCMIL G
25004	2500	6	4"	3 #600KCMIL, 1 #600KCMIL N, 1 #350KCMIL G
30003	3000	8	4"	3 #500KCMIL, 1 #20 G
30004	3000	8	4"	3 #500KCMIL, 1 #500KCMIL N, 1 #20 G
40003	4000	10	4"	3 #600KCMIL, 1 #500KCMIL G
40004	4000	10	4"	3 #600KCMIL, 1 #600KCMIL N, 1 #500KCMIL G

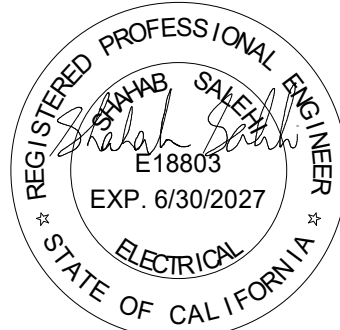
600V 1PH CU FEEDER SCHEDULE (XXXX)				
Feeder Designation	Feeder Ampacity	Sets	Conduit Size	Conductor Quantity and size per conduit
201	20	1	3/4"	2 #12, 1 #12 G
301	30	1	3/4"	2 #10, 1 #10 G
401	40	1	3/4"	2 #8, 1 #10 G
501	50	1	3/4"	2 #6, 1 #10 G
601	60	1	1"	2 #4, 1 #10 G
701	70	1	1"	2 #4, 1 #8 G
801	80	1	1-1/4"	2 #2, 1 #8 G
901	90	1	1-1/4"	2 #2, 1 #6 G
1001	100	1	1-1/4"	2 #1, 1 #6 G
1251	125	1	1-1/4"	2 #1, 1 #6 G
1501	150	1	1-1/4"	2 #10, 1 #6 G
1751	175	1	1-1/2"	2 #20, 1 #6 G
2001	200	1	2"	2 #30, 1 #6 G

600V CU TRANSFORMER SECONDARY FEEDER SCHEDULE (XXXX)				
Feeder Designation	Feeder Ampacity	Sets	Conduit Size	Conductor Quantity and size per conduit
50T	50	1	1"	3 #6, 1 #6 N, 1 #6 G
100T	100	1	1-1/2"	3 #1, 1 #1 N, 1 #6 G
150T	150	1	1-1/2"	3 #10, 1 #10 N, 1 #6 G
250T	250	1	1-1/2"	3 #250KCMIL, 1 #250KCMIL N, 1 #2 G
400T	400	1	4"	3 #600KCMIL, 1 #600KCMIL N, 1 #10 G
500T	500	2	3"	3 #250KCMIL, 1 #250KCMIL N, 1 #20 G
800T	800	2	4"	3 #600KCMIL, 1 #600KCMIL N, 1 #30 G
1000T	1000	3	4"	3 #500KCMIL, 1 #500KCMIL N, 1 #30 G
1600T	1600	4	4"	3 #600KCMIL, 1 #600KCMIL N, 1 #30 G
2500T	2500	6	4"	3 #600KCMIL, 1 #600KCMIL N, 1 #30 G

600V 1PH + N CU FEEDER SCHEDULE (XXXX)				
Feeder Designation	Feeder Ampacity	Sets	Conduit Size	Conductor Quantity and size per conduit
202	20	1	3/4"	2 #12, 1 #12 N, 1 #12 G
302	30	1	3/4"	2 #10, 1 #10 N, 1 #10 G
402	40	1	1"	2 #8, 1 #8 N, 1 #10 G
502	50	1	1"	2 #6, 1 #6 N, 1 #10 G
602	60	1	1-1/4"	2 #4, 1 #4 N, 1 #10 G
702	70	1	1-1/4"	2 #4, 1 #4 N, 1 #8 G
802	80	1	1-1/4"	2 #2, 1 #2 N, 1 #8 G
902	90	1	1-1/4"	2 #2, 1 #2 N, 1 #6 G
1002	100	1	1-1/2"	2 #1, 1 #1 N, 1 #8 G
1252	125	1	1-1/2"	2 #1, 1 #1 N, 1 #6 G
1502	150	1	1-1/2"	2 #10, 1 #10 N, 1 #6 G
1752	175	1	2"	2 #20, 1 #20 N, 1 #6 G
2002	200	1	2"	2 #30, 1 #30 N, 1 #6 G

Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A/ PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

ELECTRICAL TITLE SHEET

Scale

As indicated

E0.000

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

Tel 949 863 9434
Fax 949 553 1676

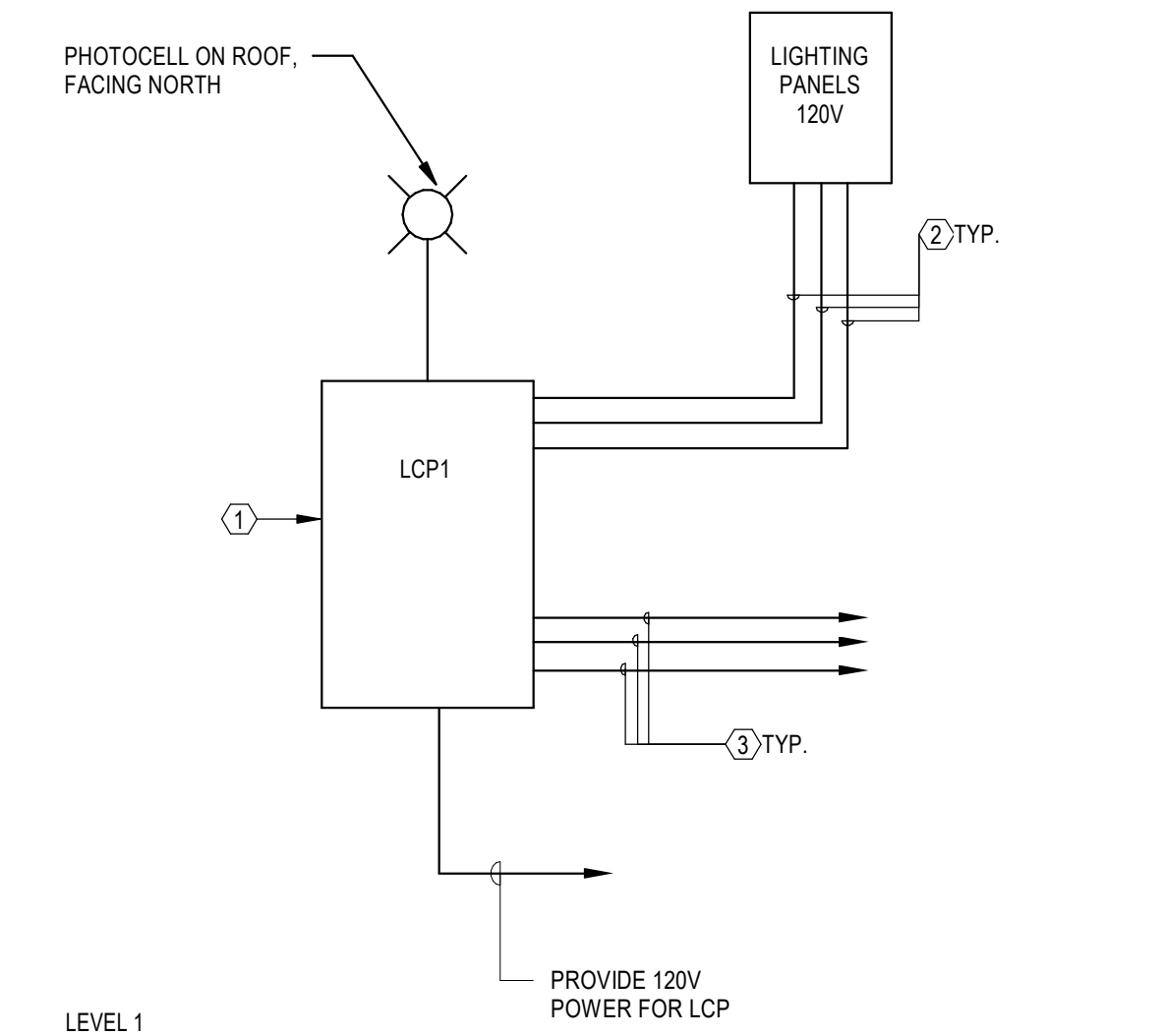


5160 Carroll Canyon Rd, Suite 200
San Diego, California 92121
Consulting Engineers
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www.ma-engr.com

LUMINAIRE SCHEDULE														
TYPE	DESCRIPTION	MANUFACTURER		LAMP				POWER			MOUNTING		NOTES	
		NAME	CATALOG NO.	TYPE	LUMENS	CCT	CRI (MIN)	VOLTAGE	INPUT WATTAGE	DRIVER		TYPE		DEPTH
										TYPE	DIM TYPE			
L01E	4' LED LOW BAY LUMINAIRE WITH PREPAINT WHITE ROLLED STEEL HOUSING AND FROST DIFFUSE LENS.PROVIDE WITH INTEGRAL 90-MINUTE BACKUP BATTERY.	METALUX LITHONIA LIGHTING DAYBRIGHT	4LBLED.LD4.8.SYMF.UNV.EL7W.L835.CD1.U APPROVED ALTERNATIVE APPROVED ALTERNATIVE	LED	8000	3500	80	120	56	INTEGRAL DRIVER / POWER SUPPLY	0-10V	PENDANT		REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT.
L02	4' INDUSTRIAL LUMINAIRE WITH PREPAINT WHITE ROLLED STEEL HOUSING AND ACRYLIC LENS.	METALUX LITHONIA LIGHTING DAYBRIGHT	4SNLED.LD5.23SL.SLN.UNV.L835.CD1.U APPROVED ALTERNATIVE APPROVED ALTERNATIVE	LED	2300	3500	80	120	16	INTEGRAL DRIVER / POWER SUPPLY	0-10V	UNIVERSAL		REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT.
L03	2' WALL MOUNTED INDUSTRIAL LUMINAIRE WITH PREPAINT WHITE ROLLED STEEL HOUSING AND ACRYLIC LENS.	METALUX LITHONIA LIGHTING DAYBRIGHT	2BCLED.LD4.8SL.F.UNV.L835.CD1.U APPROVED ALTERNATIVE APPROVED ALTERNATIVE	LED	900	3500	80	120	7	INTEGRAL DRIVER / POWER SUPPLY	0-10V	WALL		REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT.
L04	EXTERIOR WALL PACK.	LITHONIA LIGHTING OR APPROVED ALTERNATIVE	ARC1 LED.P1.30K.MVOLT (FINISH) APPROVED ALTERNATIVE	LED	1500	3500	80	120	11	INTEGRAL DRIVER / POWER SUPPLY	0-10V	WALL		REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT. CONFIRM FINISH WITH ARCHITECT.
LT-01	EXTERIOR WALL SCONCE.	ALVALIGHT OR APPROVED ALTERNATIVE	TESS 30.(TRIM).3000 APPROVED ALTERNATIVE APPROVED ALTERNATIVE	LED	750	3000	80	120	23	INTEGRAL DRIVER / POWER SUPPLY	0-10V	WALL		REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT. CONFIRM FINISH WITH ARCHITECT.
LT-02	EXTERIOR RECESSED DOWNLIGHT	KLIK USA OR APPROVED ALTERNATIVE	XL50F00.30K.500 S.FLD.CLR APPROVED ALTERNATIVE	LED	700	3000	80	120	6	REMOTE DRIVER / POWER SUPPLY	0-10V	RECESSED		CONFIRM FINISH WITH ARCHITECT.
-	EMERGENCY BATTERY PACK WITH MINIMUM 90-MINUTE RUNTIME.	ISOLITE BODINE MEYERS	E3U.36 APPROVED ALTERNATIVE APPROVED ALTERNATIVE	-	-	-	-	120	-	-	-	-		PROVIDE FOR FIXTURES INDICATED AS EMERGENCY ON PLANS.
LT-03	INTERIOR RECESSED DOWNLIGHT	LITHONIA LIGHTING PORTFOLIO CALCULITE	LDN4.30/.10.L04.(TRIM).LSS.[COLOR].MVOLT.GZ10 APPROVED ALTERNATIVE APPROVED ALTERNATIVE	LED	1000	3000	80	120	11	INTEGRAL DRIVER / POWER SUPPLY	0-10V	RECESSED		CONFIRM FINISH WITH ARCHITECT.
LT-03E	SIMILAR TO FIXTURE TYPE "L01" BUT WITH INTEGRAL 90-MINUTE BACKUP BATTERY.	LITHONIA LIGHTING PORTFOLIO CALCULITE	LDN4.30/.10.L04.(TRIM).LSS.[COLOR].MVOLT.GZ10.E10WCP APPROVED ALTERNATIVE APPROVED ALTERNATIVE	LED	1000	3000	80	120	11	INTEGRAL DRIVER / POWER SUPPLY	0-10V	RECESSED		CONFIRM FINISH WITH ARCHITECT.
LT-04	INTERIOR WALL SCONCE	ALORA LIGHTING OR APPROVED ALTERNATIVE	WV361230 APPROVED ALTERNATIVE	LED	3000	2700	90	120	36	REMOTE DRIVER / POWER SUPPLY	ELV	WALL		REFER TO ARCHITECTURAL ELEVATIONS FOR MOUNTING HEIGHT. CONFIRM FINISH WITH ARCHITECT.

ROOM TYPE	OCCUPANCY SENSOR					TIME CLOCK			WALL SWITCH		DAYLIGHT SENSOR	OTHER	NOTES		
	OCCUPANCY MODE (AUTO ON)	VACANCY MODE	DUAL TECHNOLOGY	OCCUPIED LEVEL (%)	PARTIAL OFF	SCHEDULE ON TIME	SCHEDULE OFF TIME	SCHEDULE OVERRIDE SWITCH	MANUAL (ON/OFF)	MANUAL DIMMING	KEY SWITCH	SCENE CONTROL		DIMMING (IF APPLICABLE)	PLUG LOAD CONTROL (IF APPLICABLE)
					TIME OF LAST DETECTED OCCUPANCY (MINUTES)										
					OCCUPANCY TIME DELAY (MINUTES)										
SHELL SPACE	X			100	7.5	45	10		X	X			X		
RESTROOMS	X	X	70	7.5	10	10			X	X	X		X		

1 SEQUENCE OF OPERATION - BASIS OF DESIGN TABLE
SCALE: NO SCALE



- GENERAL NOTES:
- PROVIDE BARRIER SEPARATION FROM NORMAL AND EMERGENCY CIRCUITS.
 - ALL EXTERIOR LIGHTING SHALL BE TOUTED THROUGH LIGHTING CONTROL PANEL. SEE DRAWINGS FOR LIGHTING CIRCUITS.

- KEY NOTES: (X)
- RELAY LIGHTING CONTROL PANEL.
 - 120V LIGHTING CIRCUITS, QUANTITIES PER PLAN.
 - 120V LIGHTING CIRCUITS TO LIGHT FIXTURES, QUANTITIES PER PLANS.

2 EXTERIOR LIGHTING CONTROL DIAGRAM
SCALE: NO SCALE

GENERAL NOTES:

- DETAILS AND DESIGN IS BASED ON AN LUTRON LIGHTING CONTROLS SYSTEM OR APPROVED ALTERNATIVE.
- DETAILS ARE DIAGRAMATIC AND FOR REFERENCE OF SYSTEM AND ROOM TYPE REQUIREMENTS TO MEET BASIS OF DESIGN. REFER TO MANUFACTURERS SHOP DRAWINGS FOR QUANTITIES AND DEVICES USED FOR EACH SPACE AND NETWORK.
- LIGHTING CONTROL SUBMITTALS FOR NETWORKED SYSTEM SHALL INCLUDE THE FOLLOWING DOCUMENTS(NOT LIMITED TO FOLLOWING):
 - SHOP DRAWINGS SHOWING QUANTITY AND LOCATION OF ALL DEVICES.
 - STANDALONE/NETWORK SINGLE LINE DIAGRAM.
 - BASIS OF DESIGN PROGRAMMING OPERATION FOR EACH ROOM TYPE.
 - DEVICE CUTSHEETS.
- MANUFACTURER OR FACTORY REPRESENTATIVE TO INCLUDE STARTUP AND COMMISSIONING OF THE LIGHTING CONTROL SYSTEM. MUST INCLUDE A SITE VISIT FOR THE FOLLOWING:
 - A PRE-CONSTRUCTION MEETING TO CONFIRM DESIGN AND FIELD INSTALLATION REQUIREMENTS.
 - PROGRAMMING AND COMMISSIONING OF THE LIGHTING CONTROL SYSTEM TO MEET THE BASIS OF DESIGN AND TITLE 24 REQUIREMENTS.
 - MAINTENANCE / OWNER WALK THROUGH FOR MAKING FINAL ADJUSTMENTS TO PROGRAMMING.
- CONTRACTOR SHALL FURNISH AND INSTALL ALL LIGHTING CONTROL DEVICES, CABLES, ACCESSORIES AS REQUIRED BY MANUFACTURER'S RECOMMENDATION TO PROVIDE A COMPLETE AND FULLY FUNCTIONAL COMPLIANT TITLE 24 SYSTEM.
- ALL DEVICES SHALL BE MOUNTED AND INSTALLED IN ACCESSIBLE CEILING LOCATIONS. CONTRACTOR WILL VERIFY BEST FIT LOCATIONS IN THE FIELD.
- CONTRACTOR TO VERIFY COMPATIBILITY BETWEEN DIMMING POWERPACKS AND INSTALLED FIXTURES.
- CONTACT SDLA FOR COMPLETE hLIGHT LIGHTING CONTROLS BOM. CONTROLS@SDLTG.COM - PHONE # 858-505-1055.

TITLE 24 COMPLIANCE:

- MANUAL AREA CONTROLS, SECTION 130.1(a)
- MULTI-LEVEL LIGHTING CONTROLS,SECTION 130.1(b)
- SHUT-OFF CONTROLS,SECTION 130.1(c)
- AUTOMATIC DAYLIGHTING CONTROLS, SECTION 130.1(d)
- DEMAND RESPONSE CONTROLS, SECTION 130.1(e) AND SEDCTION 110.2(c)
- CONTROLS INTERACTIONS,SECTION 130.1(f)
- CIRCUIT CONTROLS FOR 120V-VOLT CONTROLLED RECEPTACLES, SECTION 130.5(a)
- INDOOR LIGHTING CONTROLS BASIS OF DESIGN SECTION 120.8(c)
- CONTACT SDLA FOR COMPLETE ALIGHT LIGHTING CONTROLS BOM. CONTROLS@SDLTG.COM - PHONE # 858-505-1055.

SYSTEM OPERATIONS TRAINING OPTIONS.

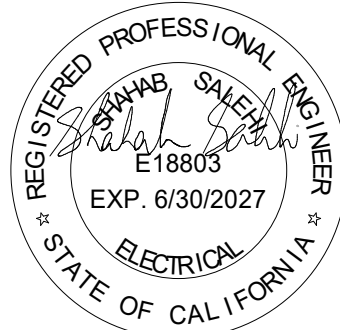
PER SECTION 120.8(d).

- 2-HOUR ONSITE OR REMOTE TRAINING.
- 2-DAY IN PERSON OR REMOTE TRAINING @ SDLA, AT CUSTOMER LOCATION, OR VIDEOCONFERENCING SOFTWARE.
- VIDEO TRAINING GIVEN TO EVERYONE WHO PARTICIPATES IN THE 2-DAY IN PERSON OR REMOTE TRAINING.
- CONTACT SDLA FOR TRAINING. CONTROLS@SDLTG.COM - PHONE # 858-505-1055.

EXTERIOR LIGHTING ZONING SCHEDULE - LCP1						
RELAY	ZONE	AREA CONTROLLED	PANEL	CKT#	CONTROLS	NOTES
1	A	CANOPY DOWN LIGHTS	H1	5	PHOTOCELL 'ON' TIME LOCK 'OFF'	
2	A	WALL SCONCE	H1	5	PHOTOCELL 'ON' TIME LOCK 'OFF'	
3	A	RESTROOM CANOPY	H1	5	PHOTOCELL 'ON' TIME LOCK 'OFF'	
4	A	EQUIPMENT YARD	H1	5	PHOTOCELL 'ON' TIME LOCK 'OFF'	
5	A	FUTURE ILLUMINATED SIGNAGE	H1	16	PHOTOCELL 'ON' TIME LOCK 'OFF'	

Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

LIGHTING FIXTURE SCHEDULE & LOD

Scale

12" = 1'-0"

E0.001

STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

Indoor Lighting

CERTIFICATE OF COMPLIANCE

NRCC-LTI-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 7 of 8)

Date Prepared: 2/12/2025

I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selections have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title

NRCC-LTI-E - Must be submitted for all buildings

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "A" in the form name must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

Form/Title

Systems/Spaces To Be Field Verified

NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.

Whole Building EMCS; JANITOR;

NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.

Whole Building Demand Response;

Generated Date/Time:

Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Schema Version: rev 20220101

Compliance ID: EnergyPro-6165-0226-6134

Report Generated: 2026-02-12 16:46:22

STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

Indoor Lighting

CERTIFICATE OF COMPLIANCE

NRCC-LTI-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 8 of 8)

Project Address: Hangar 10, Great Park

Date Prepared: 2/12/2025

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Shahab Salehi

Documentation Author Signature: Shahab Salehi

Company:

Signature Date: 2026-02-12

Address: 5160 Carroll Canyon Rd, Ste 200

City/State/Zip: San Diego CA 92121

CEA/HERS Certification Identification (if applicable): E18803

Phone: 858-200-0030

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: Shahab Salehi

Responsible Designer Signature: Shahab Salehi

Company: M.A. Engineers, Inc.

Date Signed: 2026-02-12

Address: 5160 Carroll Canyon Rd, Ste 200

City/State/Zip: San Diego CA 92121

Phone: 858-200-0030

Generated Date/Time:

Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Schema Version: rev 20220101

Compliance ID: EnergyPro-6165-0226-6134

Report Generated: 2026-02-12 16:46:22

STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

Indoor Lighting

CERTIFICATE OF COMPLIANCE

NRCC-LTI-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 4 of 8)

Date Prepared: 2/12/2025

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

This table includes lighting controls for conditioned and unconditioned spaces.

Building Level Controls

01

02

03

Mandatory Demand Response 110.12(c)

Shut-off controls 130.1(c) / 160.5(b)4C

Field Inspector

Required >= 4,000W subject to multilevel

Whole Building EMCS

Pass

Fail

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 Lighting 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

RESTROOM

Restroom

Readily Accessible

NA: Restrooms

See Building Level

NA: General Ltg < 120W

NA: General Ltg < 120W

No

Pass

Fail

JANITOR

Electrical Mechanical Telephone Room

Readily Accessible

NA: Enclosed area <100SF

Occupancy Sensor

NA: General Ltg < 120W

NA: General Ltg < 120W

No

Pass

Fail

FUTURE TENANT

All Other Space Types

Readily Accessible

Dimmer

See Building Level

NA: General Ltg < 120W

NA: General Ltg < 120W

No

Pass

Fail

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.

Conditioned Spaces

01

02

03

04

05

06

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Schema Version: rev 20220101

Compliance ID: EnergyPro-6165-0226-6134

Report Generated: 2026-02-12 16:46:22

STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

Indoor Lighting

CERTIFICATE OF COMPLIANCE

NRCC-LTI-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 5 of 8)

Date Prepared: 2/12/2025

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Area Description

Complete Building or Area Category Primary Function Area

Allowed Density (W/R²)

Area (ft²)

Allowed Wattage (Watts)

Additional Allowance / Adjustment

Area Category

PAF

RESTROOM

Restroom

0.65

455

295.8

No

No

SUPPORT

Electrical Mechanical Telephone Room

0.4

70

28

No

No

FUTURE TENANT

All Other Space Types

0.75

8,944

6,708

No

No

TOTALS:

9,469

7,031.8

See Tables J, or P for detail

Unconditioned Spaces

01

02

03

04

05

06

Area Description

Complete Building or Area Category Primary Function Area

Allowed Density (W/R²)

Area (ft²)

Allowed Wattage (Watts)

Additional Allowance / Adjustment

Area Category

PAF

SUPPORT

Electrical Mechanical Telephone Room

0.4

18

7.2

No

No

TOTALS:

18

7.2

See Tables J, or P for detail

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

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.

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CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

Indoor Lighting

CERTIFICATE OF COMPLIANCE

NRCC-LTI-E

Project Name: City of Irvine Hangar 10 Rehab

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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.

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.

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Indoor Lighting

CERTIFICATE OF COMPLIANCE

NRCC-LTI-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 1 of 8)

Project Address: Hangar 10, Great Park

Date Prepared: 2/12/2025

A. GENERAL INFORMATION

01 Project Location (city)

Irvine

04 Total Conditioned Floor Area (ft²)

9,469

02 Climate Zone

8

05 Total Unconditioned Floor Area (ft²)

18

03 Occupancy Types Within Project (select all that apply):

06 # of Stories (Habitable Above Grade)

1

• Support Areas • All Other Occupancies

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)

08 New Lighting System

Area Category Method

9469

Area Category Method

18

09 New Lighting System - Parking Garage

Area Category Method

9469

Area Category Method

18

Total Area of Work (ft²)

9469

18

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Project Name: City of Irvine Hangar 10 Rehab

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Date Prepared: 2/12/2025

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)

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)3 / 170.2(e)4B (+)

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)

Conditioned

7,031.8

0

=

7,032

≥

846

0

=

846

COMPLIES

Unconditioned

7.2

0

=

7

≥

7

0

=

7

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.

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STATE OF CALIFORNIA

CALIFORNIA ENERGY COMMISSION

Indoor Lighting

CERTIFICATE OF COMPLIANCE

NRCC-LTI-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 3 of 8)

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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: Conditioned Spaces

01

02

03

04

05

06

07

08

09

10

Name or Item Tag

Complete Luminaire Description

Modular (Track) Fixture

Small Aperture & Color Change¹

Watts per luminaire²

How is Wattage determined

Total Number of Luminaires

Excluded per 140.6(a)3 / 170.2(e)2C

Design Watts

Field Inspector

Pass

Fail

L01E

L01E

No

NA

56

Mfr. Spec

10

No

560

Pass

Fail

L02

L02

No

NA

16

Mfr. Spec

1

No

16

Pass

Fail

LT-03

LT-03

No

NA

11

Mfr. Spec

18

No

198

Pass

Fail

LT-04

LT-04

No

NA

36

Mfr. Spec

2

No

72

Pass

Fail

Total Designed Watts: CONDITIONED SPACES

846

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 Change¹

Watts per luminaire²

How is Wattage determined

Total Number of Luminaires

Excluded per 140.6(a)3 / 170.2(e)2C

Design Watts

Field Inspector

Pass

Fail

L03

L03

No

NA

7

Mfr. Spec

1

No

7

Pass

Fail

Total Designed Watts: UNCONDITIONED SPACES

7

¹FOOTNOTE: 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.

²Authority 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.

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CITY OF IRVINE

HANGAR 10

RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

Tel 949 863 9434
Fax 949 553 1676



5160 Carroll Canyon Rd, Suite 200
San Diego, California 92121
Consulting Engineers
O:858 200-0030 F:858 200-0037
www.ma-engr.com

△	Date	Description
	02.06.2025	SCHEMATIC DESIGN/PRICING
	05.02.2025	DESIGN DEVELOPMENT
	09.03.2025	DESIGN DEVELOPMENT
	10.14.2025	CD CLIENT REVIEW/PRICING
	11.03.2025	ISSUE FOR PLAN CHECK
	A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
	05.07.2026	BID SET

Seal / Signature

PROJECT INFORMATION

Project Name

HANGAR 10

RECONSTRUCTION

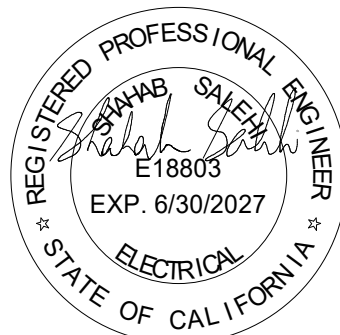
Project Number

007.3945.000

Description

TITLE 24

Scale



E0.002

STATE OF CALIFORNIA

Outdoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTO-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 7 of 7)

Project Address: Hangar 10, Great Park

Date Prepared: 2/12/2026

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Shahab Salehi

Documentation Author Signature: Shahab Salehi

Company: M.A. Engineers, Inc.

Address: 5160 Carroll Canyon Rd, Ste 200

City/State/Zip: San Diego CA 92121

Signature Date: 2026-02-12

Date Signed: 2026-02-12

License: E18803

Phone: 858-200-0030

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: Shahab Salehi

Responsible Designer Signature: Shahab Salehi

Company: M.A. Engineers, Inc.

Address: 5160 Carroll Canyon Rd, Ste 200

City/State/Zip: San Diego CA 92121

Date Signed: 2026-02-12

License: E18803

Phone: 858-200-0030

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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STATE OF CALIFORNIA

Outdoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTO-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 4 of 7)

Project Address: Hangar 10, Great Park

Date Prepared: 2/12/2026

G. SHIELDING REQUIREMENTS (BUG)

This section does not apply to this project.

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
EXTERIOR	Photocontrol	Provided - EMCS	NA: Each Luminaire <= 40 Watts	Pass Fail

FOOTNOTE: Text has been abbreviated, please refer to Table 160.5-A to confirm compliance with the specific light source technologies listed.

Authority having jurisdiction may ask for cutsheets or other documentation to confirm compliance of light source.

Recessed luminaires marked for use in fire-rated installations, and recessed luminaires installed in non-insulated ceilings are exempted from ii and iii.

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-R 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	02	03	04	05
Area Description	General Hardscape Allowance Table I (Below)	Per Application Table J	Sales Frontage Table K	Ornamental Table L
EXTERIOR				

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STATE OF CALIFORNIA

Outdoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTO-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 5 of 7)

Project Address: Hangar 10, Great Park

Date Prepared: 2/12/2026

J. LIGHTING ALLOWANCE: PER APPLICATION

This section does not apply to this project.

K. LIGHTING ALLOWANCE: SALES FRONTAGE

This table includes areas using wattage allowance for Outdoor Sales Frontage from Table 140.7-B. This allowance may be used for one or two frontage sides per site.

01	02	03	04	05	06	07	08	09
Area Description	CALCULATED ALLOWANCE(Watts)			DESIGN WATTS			Additional Allowance (Watts)	07 must be >= 08
	Linear ft. of Sales Frontage (lf)	Allowed Density (W/lf)	Extra Allowance (Watts)	Luminaire Name or Item Tag	Watts per Luminaire	# of Luminaires		
EXTERIOR	412	11	4,532	LT-01	23	20	460	571
				LT-02	6	13	78	
				LT-03	11	1	11	
				L04	11	2	22	
Total Design Watts for this Area:						571		
Total Allowance (Watts) All Areas:						571		

FOOTNOTES: For luminaires indicated in Table F as linear, wattage in column 06 is W/lf instead of Watts/luminaire. Total linear feet should be indicated in column 07 instead of number of luminaires.

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.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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STATE OF CALIFORNIA

Outdoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTO-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 3 of 7)

Project Address: Hangar 10, Great Park

Date Prepared: 2/12/2026

N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)

This section does not apply to this project.

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E.

Additional Remarks. These documents must be provided to the building inspector during construction and can be found online.

Form/Title

NRCC-LTO-E - Must be submitted for all buildings

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E.

Additional Remarks. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: <http://www.energy.ca.gov/title24/attcp/providers.html>

Form/Title

NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls are added to <= 20 luminaires.

EXTERIOR;

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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STATE OF CALIFORNIA

Outdoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTO-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 1 of 7)

Project Address: Hangar 10, Great Park

Date Prepared: 2/12/2026

A. GENERAL INFORMATION

01 Project Location (city)	Irvine	04 Total Illuminated Hardscape Area (ft²)	0
02 Climate Zone	8		
03 Outdoor Lighting Zone per Title 24 Part 1 10.134 or as designated by Authority Having Jurisdiction (AHJ):			
<input type="checkbox"/> LZ-0: Very Low - Undeveloped Parkland	<input checked="" type="checkbox"/> LZ-2: Moderate - Urban Clusters	<input type="checkbox"/> LZ-4: High - Must be reviewed by CA Energy Commission for Approval	
<input type="checkbox"/> LZ-1: Low - Rural Areas	<input type="checkbox"/> LZ-3: Moderately High - Urban Areas		
05 Occupancy Types within Project			
• Support Areas	• Warehouse		

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)6 or 141.0(b)(2) / 180.2(b)(4)Bv for alterations.

My Project Consists of:

01	02	03	04	05
General Hardscape Allowance	Per Application	Sales Frontage	Ornamental	Per Specific Area
140.7(d)(1) / 170.2(e)6 (See Table I)	140.7(d)(2) / 170.2(e)6 (See Table J)	140.7(d)(2) / 170.2(e)6 (See Table K)	141.0(b)(2) / 180.2(b)(4)Bv (See Table L)	140.7(d)(2) / 170.2(e)6 (See Table M)
<input type="checkbox"/> < 10%	<input type="checkbox"/> >= 10% and < 50%	<input type="checkbox"/> >= 50%		
Please proceed to Table F. Outdoor Lighting Fixture Schedule to define the project's luminaires.				
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.				

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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Outdoor Lighting

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NRCC-LTO-E

Project Name: City of Irvine Hangar 10 Rehab

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Project Address: Hangar 10, Great Park

Date Prepared: 2/12/2026

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)6 or 141.0(b)(2) / 180.2(b)(4)Bv

01	02	03	04	05	06	07	08	09
General Hardscape Allowance	Per Application	Sales Frontage	Ornamental	Per Specific Area	Existing Power Allowance	Total Allowed (Watts)	Total Actual (Watts)	07 must be >= 08
140.7(d)(1) / 170.2(e)6 (See Table I)	140.7(d)(2) / 170.2(e)6 (See Table J)	140.7(d)(2) / 170.2(e)6 (See Table K)	141.0(b)(2) / 180.2(b)(4)Bv (See Table L)	140.7(d)(2) / 170.2(e)6 (See Table M)	141.0(b)(2) / 180.2(b)(4)Bv (See Table N)	571	571	COMPLIES
0	+	---	+	---	OR	---	571	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.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

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STATE OF CALIFORNIA

Outdoor Lighting

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-LTO-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 3 of 7)

Project Address: Hangar 10, Great Park

Date Prepared: 2/12/2026

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)(2), 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 ^{1, 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)*	Field Inspector
L04	LT-01	<input type="checkbox"/> Linear	Mfr. Spec	2	New	<input type="checkbox"/>	22	NA: < 6200 lumens	Pass Fail
LT-01	LT-02	<input type="checkbox"/> Linear	Mfr. Spec	20	New	<input type="checkbox"/>	460	NA: < 6200 lumens	<input type="checkbox"/> <input type="checkbox"/>
LT-02	LT-03	<input type="checkbox"/> Linear	Mfr. Spec	13	New	<input type="checkbox"/>	78	NA: < 6200 lumens	<input type="checkbox"/> <input type="checkbox"/>
LT-03		<input type="checkbox"/> Linear	Mfr. Spec	1	New	<input type="checkbox"/>	11	NA: < 6200 lumens	<input type="checkbox"/> <input type="checkbox"/>
Total Design Watts:								571	

* NOTES: Selections with a * require a note in the space below explaining how compliance is achieved.

EX: Luminaire is lighting a statue; EXCEPT (N 2 to 120-20)

FOOTNOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b)

For linear luminaires, wattage should be indicated as W/lf instead of Watts/luminaire. Total linear feet should be indicated in column 05 instead of number of luminaires.

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.

Compliance with mandatory shielding requirements is required for luminaires with initial lumen output >= 6,200 unless exempted by 130.2(b) / 160.5(c)

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CITY OF IRVINE HANGAR 10 RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

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United States

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11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature

Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

TITLE 24

Seal

E0.003

STATE OF CALIFORNIA

Solar And Battery

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-SAB-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 7 of 7)


Project Address: 2026-02-12T19:32:44-05:00

Date Prepared:

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Gilberto Medina

Documentation Author Signature: 

Company: M.A. Engineers, Inc.

Signature Date: 2026-02-12

Address: 5160 Carroll Canyon Rd, Ste 200

CIA/ HERS Certification Identification (if applicable):

City/State/Zip: San Diego, CA 92121

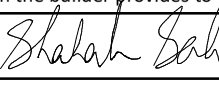
Phone: 858-200-0030

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

- The information provided on this Certificate of Compliance is true and correct.
- 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).
- 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.
- 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.
- 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: Shahab Salehi

Responsible Designer Signature: 

Company: M.A. Engineers, Inc.

Date Signed: 2026-02-12

Address: 5160 Carroll Canyon Rd, Ste 200

License: E18803

City/State/Zip: San Diego, CA 92121

Phone: 858-200-0030

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: 348982-0226-0011

Schema Version: rev 20220101

Report Generated: 2026-02-12 16:32:47

NOTE:

- THE UNCONDITIONED UTILITY SPACES HAVE BEEN EXCLUDED FROM THE CONDITIONED FLOOR AREA.
- THE CONDITIONED SITE SUPPORTING RESTROOM AND UTILITY SPACES HAVE BEEN EXCLUDED FROM THE CONDITIONED FLOOR AREA AS THERE SPACE TYPE IS NOT LISTED IN CENC TABLE 140.10-A.

STATE OF CALIFORNIA

Solar And Battery

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-SAB-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 4 of 7)

Project Address: 2026-02-12T19:32:44-05:00

Date Prepared:

F. ALLOCATED SOLAR ZONE

This table is completed if the project is designating a solar zone to comply with §110.10(b)(18). 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-Skylt) (ft²)	Method/ Tools Used to Determine Annual Solar Access for Potential Zones¹	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	4600	0	690						690	
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)(3) A	Subarea is Required Distance from Potential Obstructions per §110.10(b)(3) B	Is the Smallest Dimension 5 feet or greater?	Min. Area Required per Subarea (ft²)	Designated Area (ft²)	Subarea Complies?
A	E2.102	Low slope		Yes	Yes	Yes	Yes	80	234	COMPLIES
B	E2.102	Low slope		Yes	Yes	Yes	Yes	80	468	COMPLIES

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: 348982-0226-0011

Schema Version: rev 20220101

Report Generated: 2026-02-12 16:32:47

STATE OF CALIFORNIA

Solar And Battery

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-SAB-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 5 of 7)

Project Address: 2026-02-12T19:32:44-05:00

Date Prepared:

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).

FOOTNOTE: This field is used to document how the percentage of annual solar access was determined per §110.10(b)(18). 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.

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: 348982-0226-0011

Schema Version: rev 20220101

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STATE OF CALIFORNIA

Solar And Battery

CALIFORNIA ENERGY COMMISSION

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NRCC-SAB-E

Project Name: City of Irvine Hangar 10 Rehab

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Project Address: 2026-02-12T19:32:44-05:00

Date Prepared:

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 Roof¹ (ft²)	Roof Area < 70% Solar Access³ (ft²)	Plansheet or Document showing Solar Access Calculations	Occupied Roof Area³ (ft²)	Solar Access Roof Area (SARA) (ft²)	Min Size of PV System Required (kWdc)		
Restaurant	8,944	4,600	0	N/A	0	4,600	3.94		
Total Min Size PV System Required for all Spaces (kWdc):								64	
Total Site PV System in Design (kWdc):								0	

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 §11.2.
¹Solar 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>.
²As specified by CBC Section 503.1.4.

K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included Table E. Additional Remarks and ExceptionalConditionMessageCCSABE <= UserChangedSelectionC. These documents must be provided to the building inspector during construction and can be found online

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.

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: 348982-0226-0011

Schema Version: rev 20220101

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STATE OF CALIFORNIA

Solar And Battery

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-SAB-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 1 of 7)

Project Address: 2026-02-12T19:32:44-05:00

Date Prepared:

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 110.10/170.2(g and h) 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)	Irvine	04	Building Occupancies	Restaurant
02	Climate Zone	8	05	Construction Type	New construction
03	Conditioned Floor Area (ft ²)	9469	06	Number of Stories	Bldg <= 3 stories

B. PROJECT SCOPE

The compliance path the project is using to comply per 110.10(b)(18)/ 140.10/ 170.2(g and h) is indicated below.

Compliance with Solar Readiness Requirements in 110.10(b)(18)		01
<input checked="" type="checkbox"/> Provide Solar Ready Area no exceptions	The project has allocated a solar zone on the roof plan per requirements in §110.10(b), as documented in Table F.	
<input type="checkbox"/> Exception to Solar Ready Area: Installed Solar Photovoltaic System	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.	
<input type="checkbox"/> Exception to Solar Ready Area: Installed Solar Water Heating System	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 R44, as documented in Table H.	
<input type="checkbox"/> Exception to Solar Ready Area: Smart Thermostat and Alternative Energy Efficiency Measure	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)(18) is installed, as documented in Table I.	
<input type="checkbox"/> Exception to Solar Ready Area: Roof is designed for vehicular traffic, parking or for heliport	Plan sheet showing roof designed for vehicular traffic, parking or heliport	
<input type="checkbox"/> Exception to Solar Ready Area: Roof too small	The project is new construction and has a total roof area <= 533 square feet ¹	
<input type="checkbox"/> Exception to Solar Ready Area: Number of building stories	The project is nonresidential > 3 stories or multifamily/ hotel/motel > 10 stories.	

¹FOOTNOTE: Buildings with roof area <=533 ft² would have a required solar zone < 80 ft² and are therefore exempt per 110.10(b)(1).

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CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: 348982-0226-0011

Schema Version: rev 20220101

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STATE OF CALIFORNIA

Solar And Battery

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-SAB-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 2 of 7)

Project Address: 2026-02-12T19:32:44-05:00

Date Prepared:

Compliance with Solar Photovoltaic (PV) and Battery Requirements in 140.10/ 170.2(g and h)

Compliance with Solar Photovoltaic (PV) and Battery Requirements in 140.10/ 170.2(g and h)		01
<input type="checkbox"/> Provided PV system and battery storage sized per 140.10/ 170.2 (g and h)	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 I.	
<input type="checkbox"/> Exception to PV and Battery: Not enough Solar Access Roof Area	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 J.	
<input checked="" type="checkbox"/> Exception to PV and Battery: Required PV < 4kW	The required PV system size is less than 4 kW dc as documented in Table J.	
<input type="checkbox"/> Exception to PV and Battery: No contiguous Solar Access Roof Area	The Solar Access Roof Area(s) of the project site contains less than 80 contiguous square feet as documented in Table J.	
<input type="checkbox"/> Exception to PV and Battery: Can't meet snow load	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.	
<input type="checkbox"/> Exception to PV and Battery: Multi-tenant without VNEM or Community Solar	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.	
<input type="checkbox"/> The prescriptive PV/battery requirement has been traded off using the performance compliance approach as documented on the PRF Certificate of Compliance form.		

Compliance with Solar Thermal Water Heating Requirements in 170.2(d)(3C) (Multifamily and hotel/ motel occupancies only)

Compliance with Solar Thermal Water Heating Requirements in 170.2(d)(3C) (Multifamily and hotel/ motel occupancies only)		01
<input type="checkbox"/> 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 R44, as documented in Table H.	Compliance meets Exception 2 to solar ready requirements in 110.10(b).	

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: 348982-0226-0011

Schema Version: rev 20220101

Report Generated: 2026-02-12 16:32:47

STATE OF CALIFORNIA

Solar And Battery

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-SAB-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 3 of 7)

Project Address: 2026-02-12T19:32:44-05:00

Date Prepared:

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	COMPLIES	
(See Table F)			(See Tables G or J)			(See Table H)	(See Table I)		
690	<= 702	OR	0	<= 0	OR	0	<= 0	COMPLIES	
E2.102		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 I.									
								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.

Table F indicates a subarea that is not in compliance with the requirements. Please revisit Table F

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: 348982-0226-0011

Schema Version: rev 20220101

Report Generated: 2026-02-12 16:32:47

CITY OF IRVINE HANGAR 10 RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

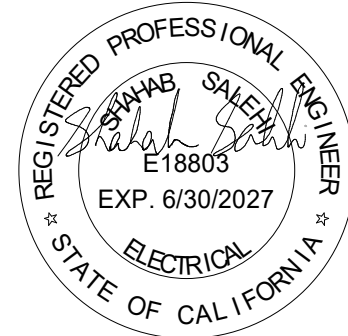
Tel 949 863 9434
Fax 949 553 1676



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San Diego, California 92121
Consulting Engineers
©188 200-0030 ©188 200-0037
www.ma-engr.com

△ Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

TITLE 24

Scale

E0.004

STATE OF CALIFORNIA

Electrical Power Distribution

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-ELC-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 4 of 6)

Date Prepared: 11/24/2025

G. SEPARATION OF ELECTRICAL CIRCUITS FOR ENERGY MONITORING

This table includes entirely new or complete replacement electrical power distribution systems to demonstrate compliance with 130.5(b)/ 160.6(b). Any load types that are not included in the service do not need to be shown. For multifamily occupancies, submetered systems that provide power to dwelling units do not need to meet these separation requirements and therefore load types on those submetered systems also do not need to be shown.

01	02	03	04	05	
Load Type per Table 130.5-B ¹	Minimum Required Separation of Load per Table 130.5-B	Compliance Method ²	Location of Requirements in Construction Documents	Field Inspector	
				Pass	Fail
¹ FOOTNOTES: For each separate load type, up to 10% of the connected load may be of any type. ² Method 1: Switchboards/ motor control centers/ panelboard loads disaggregated for each load type. Method 2: Switchboards/ motor control centers/ panelboard supply other distribution equipment with loads disaggregated for each load type. Method 3: Branch circuits serve load types individually and provisions for adding future branch circuit monitoring. Method 4: Complete metering system measures and reports loads by type. See Chapter 8 of the Nonresidential Compliance Manual for more detail on Compliance Methods.					

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)2P(a)/ 180.2(b)4Bivc.

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	
MSA	<input checked="" type="checkbox"/> Voltage drop less than 5%	<input type="checkbox"/> Permitted by CA Elec Code (Exception to 130.5(c))*	In construction documents	E5.101	<input type="checkbox"/>	<input type="checkbox"/>
¹ FOOTNOTES: If "Permitted by CA Elec Code *" is selected under Compliance Method above, please indicate where the exception applies in the space provided below. ² 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".						

I. CIRCUIT CONTROLS FOR 120-VOLT RECEPTACLES AND CONTROLLED RECEPTACLES

This table includes entirely new or complete replacement electrical power distribution systems to demonstrate compliance with 130.5(d)/ 160.6(d). Both controlled and uncontrolled receptacles must be provided in office areas, lobbies, conference rooms, kitchen areas in office spaces, copy rooms and hotel/motel guest rooms.

Generated Date/Time: Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: EnergyPro-6165-1125-5711

Schema Version: rev 20220101

Report Generated: 2025-11-24 14:28:32

STATE OF CALIFORNIA

Electrical Power Distribution

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-ELC-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 5 of 6)

Date Prepared: 11/24/2025

I. CIRCUIT CONTROLS FOR 120-VOLT RECEPTACLES AND CONTROLLED RECEPTACLES

01	02	03	04	05	06	07	
Room name or Description	Location/ Type of Controlled Receptacles ¹	Shut-Off Controls	Demand Responsive Controls	Permanent Durable Marking Will be Used	Location of Requirements in Construction Documents	Field Inspector	
						Pass	Fail
¹ FOOTNOTES: Receptacles dedicated to refrigerators and water dispensers in kitchens, located a minimum of 6ft above the floor specifically for clocks, network copiers, fax machines, A/V and data equipment other than personal computers in copy rooms, circuits rated more than 20 Amps, or connected to a UPS that are intended to be in continuous use and are marked to differentiate them from other receptacles or circuits are excepted from the requirements. .							

J. ELECTRIC READY BUILDINGS

This section does not apply to this project.

K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title

NRCC-ELC-E - Must be submitted for all buildings

Generated Date/Time: Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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Schema Version: rev 20220101

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STATE OF CALIFORNIA

Electrical Power Distribution

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-ELC-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 6 of 6)

Project Address: Hangar 10, Great Park

Date Prepared: 11/24/2025

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Shahab Salehi

Documentation Author Signature: Shahab Salehi

Company: Signature Date:

Address: 5160 Carroll Canyon Rd.

City/State/Zip: San Diego CA 92121

Phone: 858-200-0030

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

- The information provided on this Certificate of Compliance is true and correct.
- 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)
- 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.
- 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.
- 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: Shahab Salehi

Responsible Designer Signature: Shahab Salehi

Company: M.A. Engineers, Inc.

Date Signed: 2025-11-24

Address: 5160 Carroll Canyon Rd.

City/State/Zip: San Diego CA 92121

Phone: 858-200-0030

Generated Date/Time: Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

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Report Generated: 2025-11-24 14:28:32

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)4Bivc

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 1 of 6)

Project Address: Hangar 10, Great Park

Date Prepared: 11/24/2025

A. GENERAL INFORMATION

01	Project Location (city)	Irvine	02	Climate Zone	8
			03	Occupancy Types Within Project:	All Other OccupanciesSupport Areas

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
MSA	New electrical service equipment and meter	900	<input type="checkbox"/>	<input type="checkbox"/>	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 130.3/ 160.5, and mechanical, indoor lighting, and sign lighting Certificate of Compliance documents will indicate when demand response controls are required.	<input type="checkbox"/>
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.						

Generated Date/Time: Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: EnergyPro-6165-1125-5711

Schema Version: rev 20220101

Report Generated: 2025-11-24 14:28:32

STATE OF CALIFORNIA

Electrical Power Distribution

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-ELC-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 2 of 6)

Date Prepared: 11/24/2025

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)	AND	Electric Ready 160.9 (See Table J)	Compliance Results
Yes	AND	Yes	AND	Yes	AND	Yes	AND	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.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. SERVICE ELECTRICAL METERING

This table includes new or replacement electrical service systems OR equipment to demonstrate compliance with 130.5(a) / 160.6(a). For multifamily occupancies, submetered systems that provide power to common use areas must meet the following metering requirements. Submetered systems providing power to dwelling units do not.

01	02	03	04	05				
Electrical Service Designation/ Description	Rating ¹ (kVA)	Instantaneous Demand (kW)	Historical Peak Demand (kW)	Tracking kWh for user-defined period	kWh per rate period	Location of Requirements in Construction Documents	Field Inspector	
							Pass	Fail
MSA	900	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	E5.101	<input type="checkbox"/>	<input type="checkbox"/>

¹ FOOTNOTES: If common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.

Generated Date/Time: Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: EnergyPro-6165-1125-5711

Schema Version: rev 20220101

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STATE OF CALIFORNIA

Electrical Power Distribution

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-ELC-E

Project Name: City of Irvine Hangar 10 Rehab

Report Page: (Page 3 of 6)

Date Prepared: 11/24/2025

G. SEPARATION OF ELECTRICAL CIRCUITS FOR ENERGY MONITORING

This table includes entirely new or complete replacement electrical power distribution systems to demonstrate compliance with 130.5(b)/ 160.6(b). Any load types that are not included in the service do not need to be shown. For multifamily occupancies, submetered systems that provide power to dwelling units do not need to meet these separation requirements and therefore load types on those submetered systems also do not need to be shown.

01	02	03	04	05	
Load Type per Table 130.5-B ¹	Minimum Required Separation of Load per Table 130.5-B	compliance Method ²	Location of Requirements in Construction Documents	Field Inspector	
				Pass	Fail
MSA					
Lighting including exit, egress and exterior	All lighting disaggregated by floor, type or area	Method 3: Branch circuits serve load types individually & provisions for adding future branch circuit monitoring	E5.101	<input type="checkbox"/>	<input type="checkbox"/>
HVAC systems and components	All HVAC in aggregate and each HVAC load rated at least 50 kVA	Method 3: Branch circuits serve load types individually & provisions for adding future branch circuit monitoring	E5.101	<input type="checkbox"/>	<input type="checkbox"/>
Domestic and service water systems	All loads in aggregate	Method 3: Branch circuits serve load types individually & provisions for adding future branch circuit monitoring	E5.101	<input type="checkbox"/>	<input type="checkbox"/>
Plug Loads and appliances less than 25kVA	All plug loads separated by floor, type or area Groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf	Method 3: Branch circuits serve load types individually & provisions for adding future branch circuit monitoring	E5.101	<input type="checkbox"/>	<input type="checkbox"/>

Generated Date/Time: Documentation Software: EnergyPro

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000

Compliance ID: EnergyPro-6165-1125-5711

Schema Version: rev 20220101

Report Generated: 2025-11-24 14:28:32

CITY OF IRVINE

HANGAR 10

RECONSTRUCTION

410 BEACON
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Gensler

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Suite 100
Newport Beach, CA 92660
United States

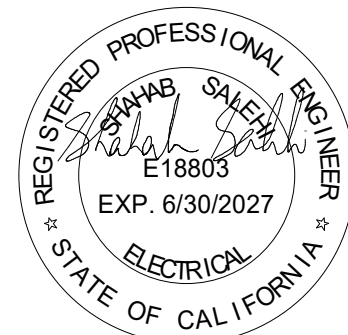
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Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10

RECONSTRUCTION

Project Number

007.3945.000

Description

TITLE 24

Scale

E0.005

STATE OF CALIFORNIA

Nonresidential Building Commissioning

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-CXR-E

Project Name: Hangar 10

Report Page: (Page 4 of 6)

Date Prepared: 2026-02-12T18:45:35-05:00

F. DESIGN REVIEW KICKOFF MEETING	
14 Envelope Goals	Goals are for energy and code compliance
15 HVAC System Goals	none other than code and energy compliance using typical schedules and setpoints
16 Indoor Lighting System Goals	Project is core shell, most indoor lighting provided during TI phase
17 Outdoor Lighting System Goals	Goal is to meet energy and code compliance
18 Water Heating System Goals	none other than code and energy compliance
19 Equipment and System Specifications	Systems that are efficient and maintainable with widely available, non-proprietary parts
20 Operations and Maintenance	Appropriate training from contractor and equipment specialists for effective operation and maintenance over equipment life.

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 F. during the Design Review Kickoff.

01	Attaching Completed Design Review Documentation?	YES	NO
		<input type="radio"/>	<input checked="" type="radio"/>

Design Review Checklist

02	Envelope Design	No issues identified
03	HVAC System Design	Project is core and shell, no issues were identified.
04	HVAC Controls Design	Project is core and shell, majority of controls will be provided during tenant improvement. No issues identified.
05	Indoor Lighting System Design	Project is core and shell. No issues identified.
06	Indoor Lighting Controls Design	Project is core and shell. Most lighting controls to be defined during TI phase.

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CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000 Compliance ID: 377495-0226-0009

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STATE OF CALIFORNIA

Nonresidential Building Commissioning

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-CXR-E

Project Name: Hangar 10

Report Page: (Page 5 of 6)

Date Prepared: 2026-02-12T18:45:35-05:00

I. CONSTRUCTION DOCUMENT DESIGN REVIEW CHECKLIST

07	Outdoor Lighting System and Controls Design	No issues identified.
08	Water Heating System Design	No issues identified.
09	Other Systems and Features	No issues were identified

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.

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CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

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Schema Version: rev 20220101 Report Generated: 2026-02-12 15:45:38

STATE OF CALIFORNIA

Nonresidential Building Commissioning

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-CXR-E

Project Name: Hangar 10

Report Page: (Page 6 of 6)

Project Address: Date Prepared: 2026-02-12T18:45:35-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Tom Lunnberg, P.E.

Documentation Author Signature:

Company: MA Engineers

Signature Date: 02/12/2026

Address: 5160 Carroll Canyon Road, Suite 200

CEA/HERS Certification Identification (if applicable):

City/State/Zip: San Diego, CA 92121

Phone: 858-200-0030

RESPONSIBLE PERSON'S DECLARATION STATEMENT

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

- The information provided on this Certificate of Compliance is true and correct.
- 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).
- 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.
- 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.
- 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: Shahab Salehi

Responsible Designer Signature:

Company: M.A. Engineers, Inc.

Date Signed: 2026-02-12

Address: 5160 Carroll Canyon Rd, Ste 200

License: E18803

City/State/Zip: San Diego, CA 92121

Phone: 858-200-0030

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000 Compliance ID: 377495-0226-0009

Schema Version: rev 20220101 Report Generated: 2026-02-12 15:45:38

STATE OF CALIFORNIA

Nonresidential Building Commissioning

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-CXR-E

Project Name: Hangar 10

Report Page: (Page 1 of 6)

Project Address: Date Prepared: 2026-02-12T18:45:35-05:00

A. GENERAL INFORMATION				
01	Project Location (city)	Irvine	04	Building Size (ft ²)
02	Occupancy Type	Nonresidential	05	< 10,000 ft ²
03	Project Type	Core & shell only	06	Unitary or packaged equipment each serving one zone
		07	Climate Zone	8

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 ft ² 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.

Generated Date/Time: Documentation Software: Energy Code Ace

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: Hangar 10

Report Page: (Page 2 of 6)

Date Prepared: 2026-02-12T18:45:35-05:00

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	
Table F	Table G	Table H	Table I	Table J	Table K	Table L	Table M	
Yes		Yes						COMPLIES
10					Brian Hahnen			COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

Either Core and Shell or Tenant fit out has been indicated in Table A. Please note commissioning may be completed for the entire building prior to tenant improvements, or for each individual tenant improvement. The local enforcement agency may have commissioning policies for multi-tenant buildings.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000 Compliance ID: 377495-0226-0009

Schema Version: rev 20220101 Report Generated: 2026-02-12 15:45:38

STATE OF CALIFORNIA

Nonresidential Building Commissioning

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE

NRCC-CXR-E

Project Name: Hangar 10

Report Page: (Page 3 of 6)

Date Prepared: 2026-02-12T18:45:35-05:00

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	2025-07-14			
02	Meeting Attendees: (one person may play multiple roles)				
<input type="checkbox"/>	Owner/Facility Manager:	<input type="checkbox"/>	Design Reviewer(s)		
<input checked="" type="checkbox"/>	Project Manager:	Cindy Taylor	<input checked="" type="checkbox"/>	Design Architect/ Engineer(s):	Brian Hahnen
<input type="checkbox"/>	Contractor:		<input type="checkbox"/>	Certified Acceptance Test Tech(s):	
<input type="checkbox"/>	Commissioning Provider:		<input type="checkbox"/>	Energy T24 Part 6 Consultant:	

Design Reviewer Qualifications per Title 24 Part 1 Section 10-103(a)1

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.

Do the Design Reviewer(s) meet these qualifications?

03	In addition, for buildings with < 10,000 ft ² , the design reviewer(s) may be the engineer or architect of record. 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.	Yes	No
		<input checked="" type="radio"/>	<input type="radio"/>

04 The design reviewer(s) for this project will be: Brian Hahnen

Preliminary Construction Schedule

	Start Date	Completion Date	
05	Schematic Design	2025-07-14	2025-08-08
06	Design Development	2025-08-11	2025-08-29
07	Construction Documents	2025-09-01	2026-02-20
08	Construction	2026-07-06	2026-12-31
09	Building Turnover	2027-01-01	2027-01-01

Project Goals Related to Energy Efficiency

10	Operational Costs	Minimize operational costs through effective, code-compliant design strategies.
11	Desired Building Lifespan	50-60 years
12	Equipment Lifecycle	Make appropriate decisions in design that will minimize total cost of ownership.
13	Project Energy Efficiency Goals	Meet a local jurisdiction's stretch goal for efficiency

Generated Date/Time: Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance

Report Version: 2022.0.000 Compliance ID: 377495-0226-0009

Schema Version: rev 20220101 Report Generated: 2026-02-12 15:45:38

CITY OF IRVINE

HANGAR 10

RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

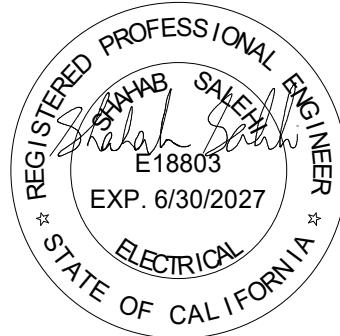
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△	Date	Description
	02.06.2025	SCHEMATIC DESIGN/PRICING
	05.02.2025	DESIGN DEVELOPMENT
	09.03.2025	DESIGN DEVELOPMENT
	10.14.2025	CD CLIENT REVIEW/PRICING
	11.03.2025	ISSUE FOR PLAN CHECK
A	01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
	05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10

RECONSTRUCTION

Project Number

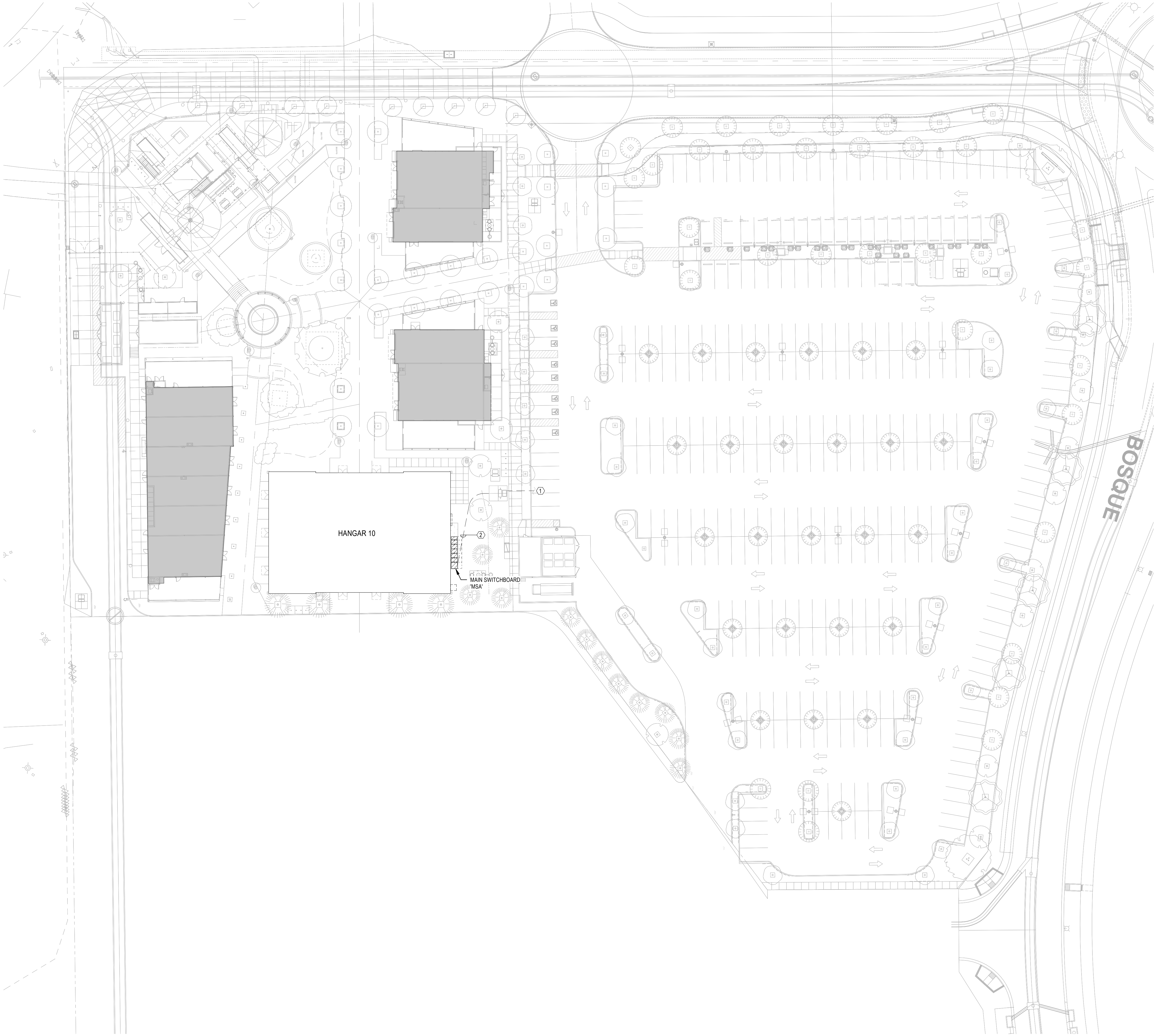
007.3945.000

Description

TITLE 24

Scale

E0.006



1 ELECTRICAL SITE PLAN

SCALE: 1" = 30'-0"

SHEET NOTES

- UTILITY TRANSFORMER AND CONNECTION TO UTILITY BY THE DRY UTILITY CONSULTANT AS PART OF THE CAMPUS PROJECT UNDER SEPARATE SCOPE.
- NEW CONDUIT AND WIRING FROM NEW UTILITY TRANSFORMER TO NEW SERVICE ENTRANCE POINT. FINAL CONNECTION TO BE COORDINATED IN THE FIELD. REFER TO SINGLE-LINE DIAGRAM ON SHEET E5.01 FOR MORE INFORMATION.

GENERAL NOTES

- CONTRACTOR SHALL INSPECT AND VERIFY ALL FIELD CONDITIONS PRIOR TO COMMENCEMENT OF WORK.
- COORDINATE TRENCH ROUTING AND EQUIPMENT LOCATIONS WITH EXISTING CONDITIONS AND NEW WORK.
- EXTERIOR RECEPTACLES SHALL BE GFI TYPE AND INCLUDE WEATHERPROOF IN-USE COVERS.
- SITE BRANCH CIRCUITING SHALL BE IN MINIMUM 1" CONDUITS WITH #10 COPPER WIRE MINIMUM UNLESS OTHERWISE NOTED.
- ALL CONDUIT STUBS SHALL BE CAPPED, MARKED, LOCATED, AND LABELED.
- PROVIDE WEATHERPROOF JUNCTION BOXES, CONDUIT, FITTINGS, ENCLOSURES, ETC. AT ALL EXTERIOR LOCATIONS

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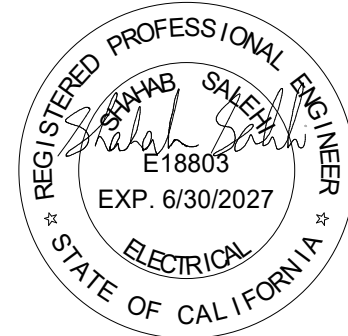
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A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET
2 05.28.2026	BID ADDENDUM 02

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

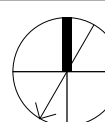
Description

ELECTRICAL SITE PLAN

Scale

1" = 30'-0"

Ref North



E1.101

SHEET NOTES

1. PROVIDE MINIMUM OF 4" X 8" NEMA 3R ENCLOSURE FOR HOUSE PANEL, LCP, AND TELCO MPOE.
2. PROVIDE WEATHERPROOF DUPLEX RECEPTACLE FOR DRINKING FOUNTAIN. COORDINATE POWER REQUIREMENTS WITH EQUIPMENT VENDOR.
3. 8'X4' FIRE RETARDANT WHITE PAINTED BACKBOARD. PROVIDE (2) QUAD RECEPTACLES FED FROM PANEL H1.
4. PROVIDE (1) 4" CONDUIT STUBBED INTO TENANT SPACE ROUTED BACK TO MPOE.
5. PROVIDE MOTOR RATED SWITCH FOR MOTORIZED DOOR. COORDINATE REQUIREMENTS WITH EQUIPMENT VENDOR.
6. PROVIDE POWER CONNECTION TO FUTURE ILLUMINATED SIGNAGE. COORDINATE POWER REQUIREMENTS WITH SIGNAGE VENDOR PRIOR TO ROUGH-IN.
7. PROVIDE 120V POWER FOR ELECTRONIC TRAP PRIMER. COORDINATE REQUIREMENTS WITH PLUMBING AND EQUIPMENT MANUFACTURER.

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

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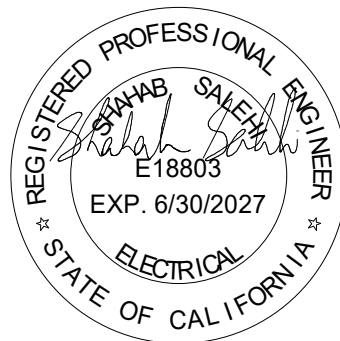


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GENERAL NOTES

Date	Description
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05.02.2025	DESIGN DEVELOPMENT
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A 01.09.2026	ADDENDUM A / PLAN CHECK COMMENTS
05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

LEVEL 01 - POWER PLAN

Scale

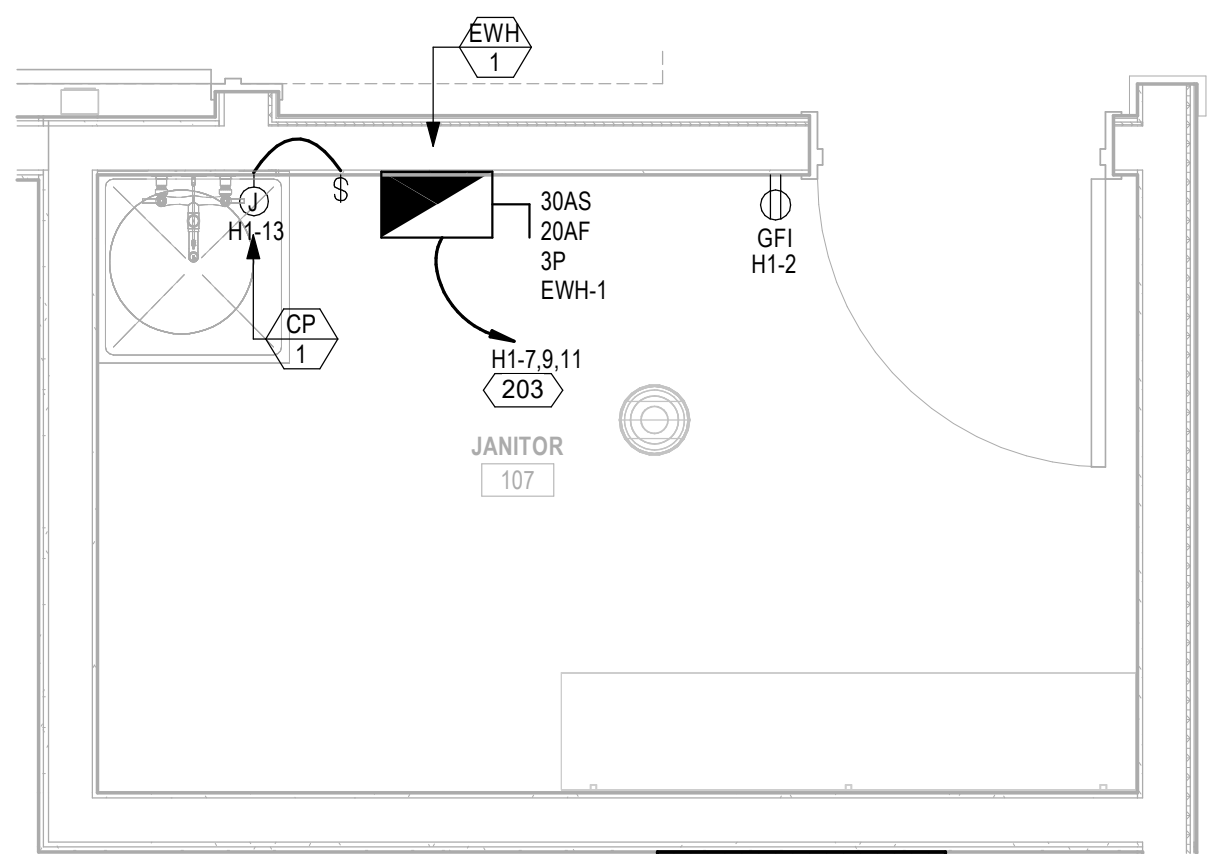
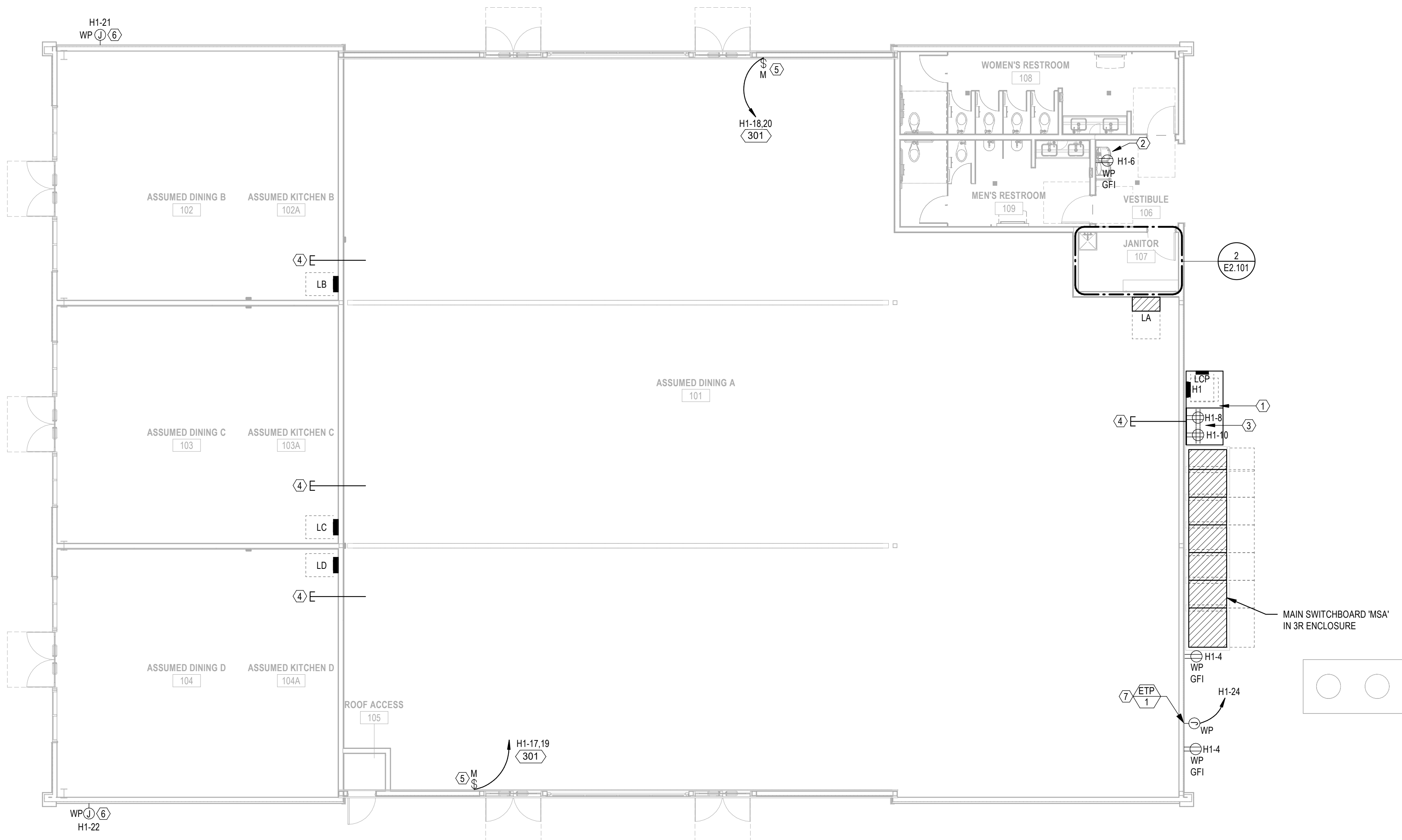
As indicated

Ref North



E2.101

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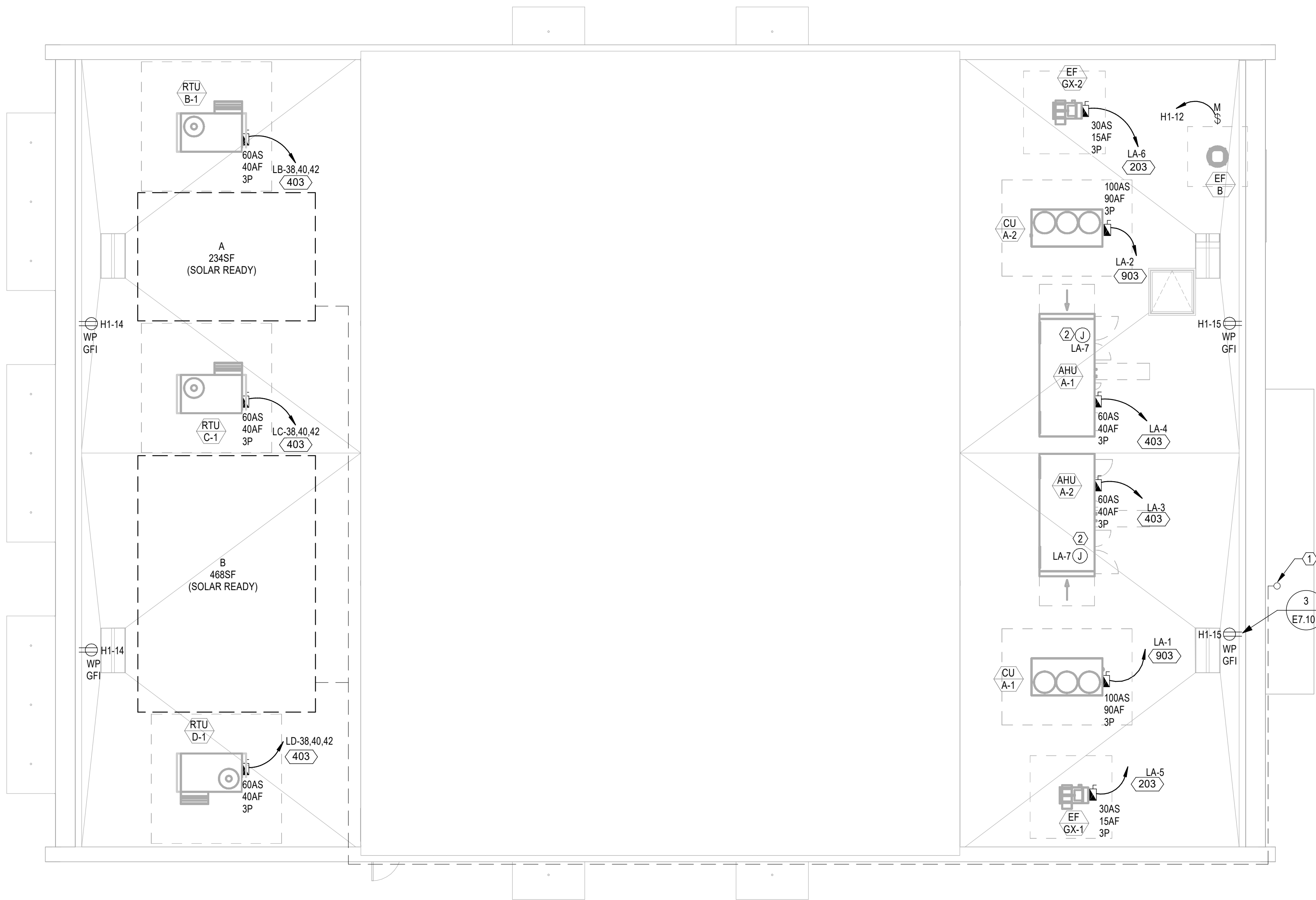


2 ENLARGED PLAN - JANITOR 107

SCALE: 1/2" = 1'-0"

1 POWER PLAN - LEVEL 01

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



(TRA) TOTAL ROOF AREA = 4603SF
MINIMUM (SRA) SOLAR READY AREA = 15% X TRA = 690SF
SRA PROVIDED = 4685SF + 2345SF = 7028SF

SHEET NOTES

- INTERCONNECTION PATHWAY FOR FUTURE SOLAR CONDUIT INDICATED PER TITLE 24 PATHWAY TO BE ROUTED DOWN TO EXTERIOR SWITCHBOARD.
- PROVIDE 120V CONNECTION TO DUCT MOUNTED SMOKE DETECTOR. COORDINATE REQUIREMENTS WITH MECHANICAL.

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

Tel 949.863.9434
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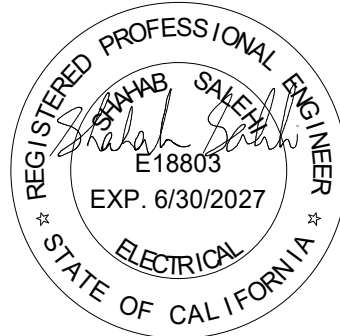
5160 Carroll Canyon Rd, Suite 200
San Diego, California 92121
Consulting Engineers
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www.ma-engr.com

GENERAL NOTES

- CONDUIT PENETRATIONS SHALL BE THROUGH MECHANICAL EQUIPMENT CURBS. NO INDIVIDUAL CONDUIT ROOF JACKS, UNLESS NOTED OTHERWISE.
- REFER TO MECHANICAL AND PLUMBING PLANS FOR EXACT LOCATIONS OF HVAC & PLUMBING EQUIPMENT & RELATED DEVICES, AND COORDINATE POWER AND CONTROL CONNECTIONS PRIOR TO ROUGH-IN.
- THE CONTRACTOR SHALL REVIEW EQUIPMENT MANUFACTURER'S REQUIREMENTS AND PROVIDE FUSE SIZES AS INDICATED, RELAYS, CONNECTIONS, OR OTHER RELATED WORK TO COMPLETE THE ELECTRICAL SYSTEM.
- BRANCH CIRCUIT CONDUITS SHALL ROUTE BELOW STRUCTURE THEN UP TO UNIT EQUIPMENT OR RECEPTACLE CONDUITS SHALL NOT BE ROUTED EXPOSED ON ROOF.
- ALL ELECTRICAL EQUIPMENT ON ROOF SHALL BE NEMA 3R

Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
11.03.2025	ISSUE FOR PLAN CHECK
05.07.2026	BID SET

Seal / Signature



Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

LEVEL 01 - ROOF PLAN

Scale

1/8" = 1'-0"

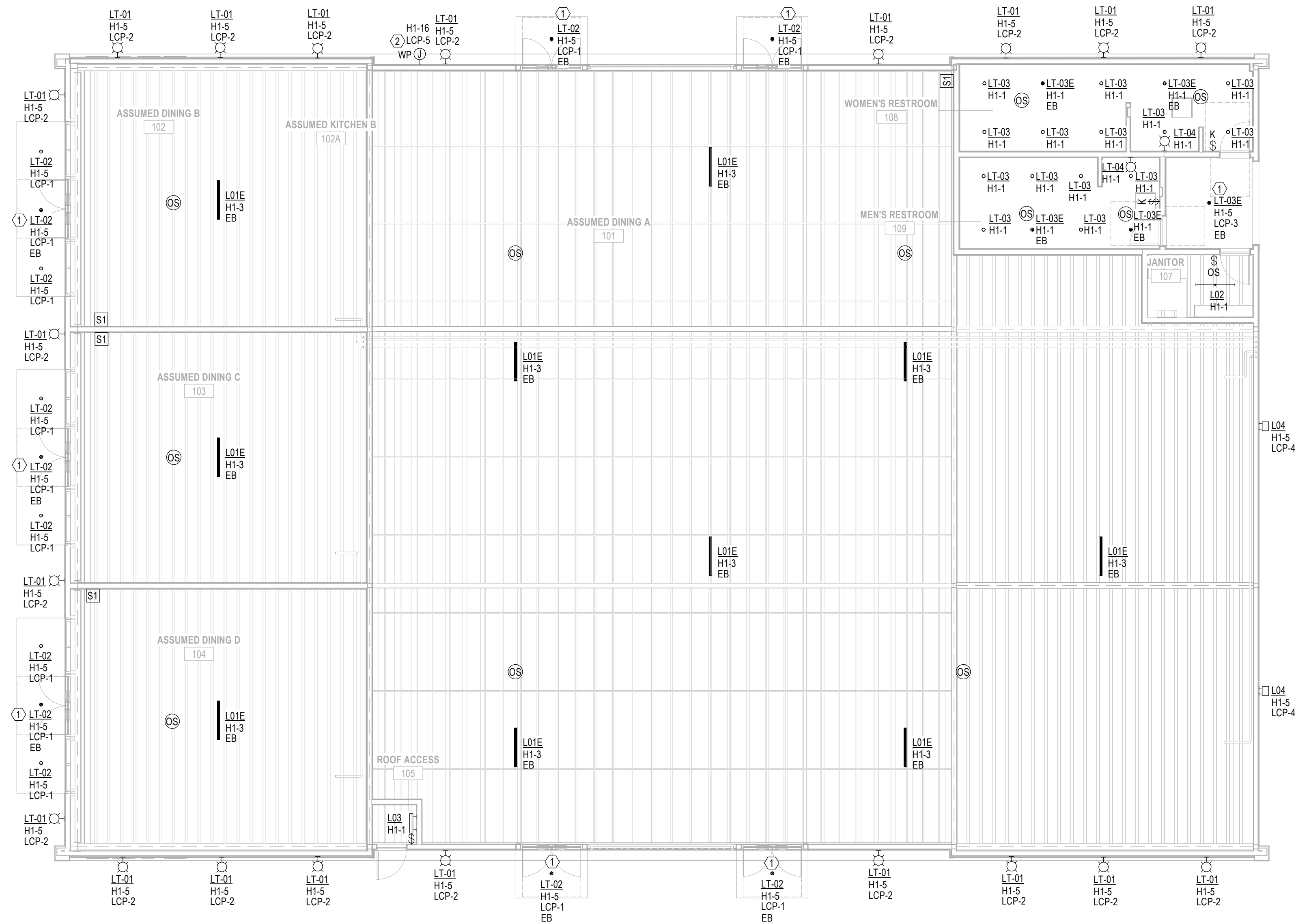
E2.102

1. PROVIDE EMERGENCY BATTERY PACK WITH MINIMUM 90-MINUTE RUNTIME FOR FIXTURES INDICATED.
2. PROVIDE POWER FOR FUTURE ILLUMINATED SIGNAGE. COORDINATE LOCATION AND POWER REQUIREMENTS WITH OWNER. SIGN TO BE CONTROLLED VIA LIGHTING CONTROL PANEL.

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1. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN, FLOOR PLANS, AND ELEVATIONS FOR EXACT LIGHTING FIXTURE & MOUNTING DEVICE LOCATIONS, CEILING TYPES & CONTROL HEIGHTS.
2. LIGHT FIXTURES SHOWN CIRCUITED DIRECTLY FROM LIGHTING BRANCH PANELBOARDS VIA ROOM CONTROLLERS AND/OR LIGHTING CONTROL PANELS. REFER TO LIGHTING CONTROL DIAGRAM, CONTROL PANEL SCHEDULES, AND SEQUENCE OF OPERATIONS FOR ADDITIONAL INFORMATION.
3. EXIST SIGNS AND HATCHED EGRESS LIGHTING FIXTURES CIRCUITED TO EMERGENCY INTEGRAL BATTERY BACKUP TO SEQUENCE OF OPERATIONS FOR CONTROLS AND USE OF UL924 DEVICE.
4. PROVIDE TYPES AND QUANTITIES OR OCCUPANCY SENSORS AS REQUIRED FOR ROOMAREA COVERAGE PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE WIRING, DEVICES, ETC. AS NECESSARY FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.

Date	Description
02.06.2025	SCHEMATIC DESIGN/PRICING
05.02.2025	DESIGN DEVELOPMENT
09.03.2025	DESIGN DEVELOPMENT
10.14.2025	CD CLIENT REVIEW/PRICING
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LEVEL 01 - LIGHTING PLAN

$$1/8'' = 1'-0''$$

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Calculation Summary						
Label	Units	Avg	Max	Min	Avg/min	Max/min
MENR 90_Floor	1	6.14	11.3	0.6	19.0	18.83
RR EXT	1	6.08	9.3	5.2	1.34	1.79
SUITE A101_EXT1	1	3.19	3.3	3.0	1.06	1.03
SUITE A101_EXT2	1	3.20	3.3	3.1	1.03	1.06
SUITE A101_EXT3	1	3.18	3.2	3.1	1.03	1.03
SUITE A101_EXT4	1	3.15	3.3	3.0	1.06	1.10
SUITE A101_Floor	1	0.04	3.4	0.3	2.60	4.53
SUITE B101_EXT	1	2.98	3.3	2.6	1.27	1.33
SUITE B102_Floor	1	0.62	2.6	0.3	2.07	8.67
SUITE 100_EXTIOR	1	2.10	3.4	0.6	3.60	8.67
SUITE 100_Floor	1	0.03	2.7	0.3	2.40	9.00
SUITE 104_EXTIOR	1	2.10	3.4	0.6	2.63	8.25
SUITE 104_Floor	1	0.02	2.8	0.3	2.67	8.67
WOMENS 90_Floor	1	4.56	10.5	0.4	11.40	26.25



1. VALUES ILLUSTRATED ARE IN FOOTCANDLES MEASURED AT GRADE THROUGHOUT.
2. LIGHT LOSS FACTOR AT 0.855.
3. REFLECTANCE VALUES UTILIZED ARE INDUSTRY STANDARD 80/50/20.

 Date	Description
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05.07.2026	BID SET

HANGAR 10
RECONSTRUCTION
Project Number

Description
LEVEL 01 - EGRESS PHOTOMETRIC PLAN

Scale
1/8" = 1'-0"

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PANELBOARD: LB

LOCATION: ASSUMED KITCHEN B 102A

SUPPLY: MSA

MOUNTING: SURFACE

ENCLOSURE: NEMA 1

VOLTAGE: 208Y120V, 3PH, 4W

BUS RATING: 400 A

NEUTRAL: 100%

FEED-THRU LUGS: NO

FEATURES & MODIFICATIONS -

MAINS TYPE: MCB 400A

MAINS FNNOTE: -

SCCR: 22,000 A

AVAILABLE FAULT: 13,279 A

CKT	DESCRIPTION	TRIP (A)	POLES	FNNOTE	PHASE A LOAD (VA)	PHASE B LOAD (VA)	PHASE C LOAD (VA)	FNNOTE	POLES	TRIP (A)	DESCRIPTION	CKT
1	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	2
3	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	4
5	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	6
7	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	8
9	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	10
11	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	12
13	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	14
15	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	16
17	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	18
19	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	20
21	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	22
23	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	24
25	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	26
27	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	28
29	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	30
31	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	32
33	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	34
35	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	36
37	PROVISIONS	--	1	--	--	3240	--	--	1	--	PROVISIONS	38
39	PROVISIONS	--	1	--	--	--	3240	--	1	--	PROVISIONS	40
41	PROVISIONS	--	1	--	--	--	--	3240	1	--	PROVISIONS	42
CONNECTED LOAD:					3 kVA	3 kVA	3 kVA					
CONNECTED CURRENT:					27 A	27 A	27 A					
LOAD CLASSIFICATION		CONNECTED		FACTOR		DEMAND						
MOTOR				9720 VA		100.00%		9720 VA		PANEL TOTALS		
								CONNECTED LOAD: 10 kVA				
								CONNECTED CURRENT: 27 A				
								DEMAND LOAD: 10 kVA				
								DEMAND CURRENT: 27 A				
NOTES:												

PANELBOARD: LC												
LOCATION: ASSUMED KITCHEN C 103A					VOLTAGE: 208Y120V, 3PH, 4W				MAINS TYPE: MCB 400A			
SUPPLY: MSA					NEUTRAL: 100%				MAINS FNNOTE: -			
MOUNTING: SURFACE					FEED-THRU LUGS: NO				SCCR: 22,000 A			
ENCLOSURE: NEMA 1					FEATURES & MODIFICATIONS -				AVAILABLE FAULT: 15,282 A			
CKT	DESCRIPTION	TRIP (A)	POLES	FNNOTE	PHASE A LOAD (VA)	PHASE B LOAD (VA)	PHASE C LOAD (VA)	FNNOTE	POLES	TRIP (A)	DESCRIPTION	CKT
1	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	2
3	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	4
5	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	6
7	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	8
9	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	10
11	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	12
13	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	14
15	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	16
17	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	18
19	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	20
21	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	22
23	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	24
25	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	26
27	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	28
29	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	30
31	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	32
33	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	34
35	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	36
37	PROVISIONS	--	1	--	--	3240	--	--	--	--	RTU C-1	38
39	PROVISIONS	--	1	--	--	--	3240	--	--	--	RTU C-1	40
41	PROVISIONS	--	1	--	--	--	--	--	3240	--	RTU C-1	42
CONNECTED LOAD:					3 kVA	3 kVA	3 kVA					
CONNECTED CURRENT:					27 A	27 A	27 A					
LOAD CLASSIFICATION		CONNECTED		FACTOR		DEMAND						
MOTOR				9720 VA		100.00%		9720 VA				
NOTES:												

PANEL TOTALS		
CONNECTED LOAD: 10 kVA		
CONNECTED CURRENT: 27 A		
DEMAND LOAD: 10 kVA		
DEMAND CURRENT: 27 A		

PANELBOARD: LD

LOCATION: ASSUMED KITCHEN D 104A

SUPPLY: MSA

MOUNTING: SURFACE

ENCLOSURE: NEMA 1

VOLTAGE: 208Y120V, 3PH, 4W

BUS RATING: 400 A

NEUTRAL: 100%

FEED-THRU LUGS: NO

FEATURES & MODIFICATIONS -

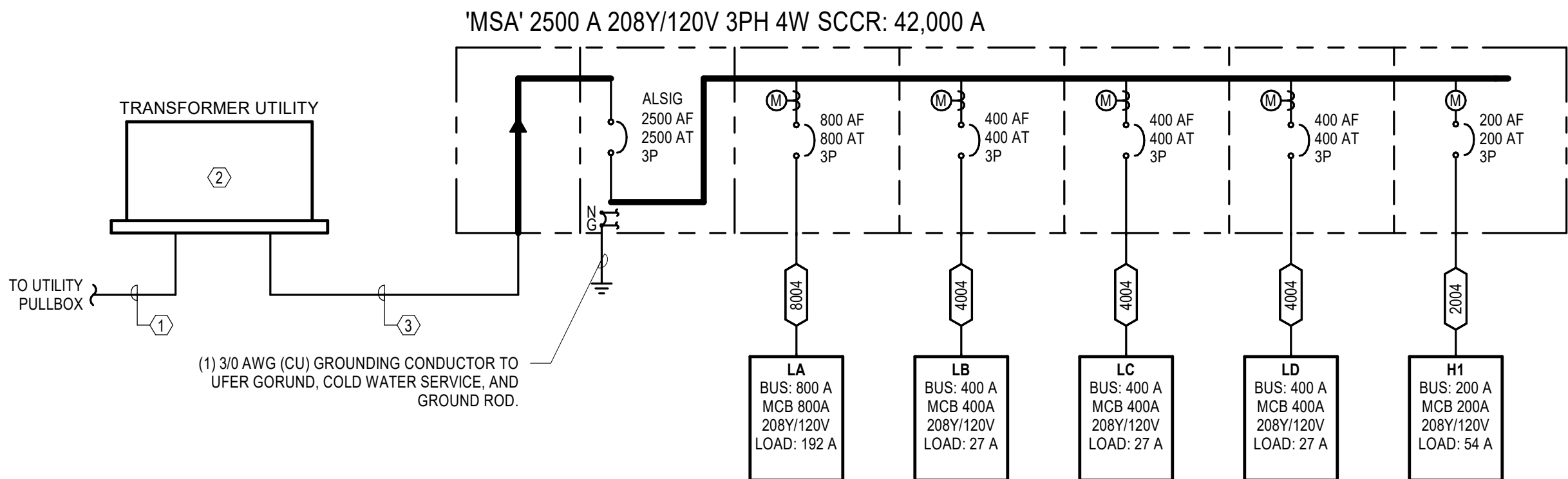
MAINS TYPE: MCB 400A

MAINS FNNOTE: -

SCCR: 22,000 A

AVAILABLE FAULT: 15,650 A

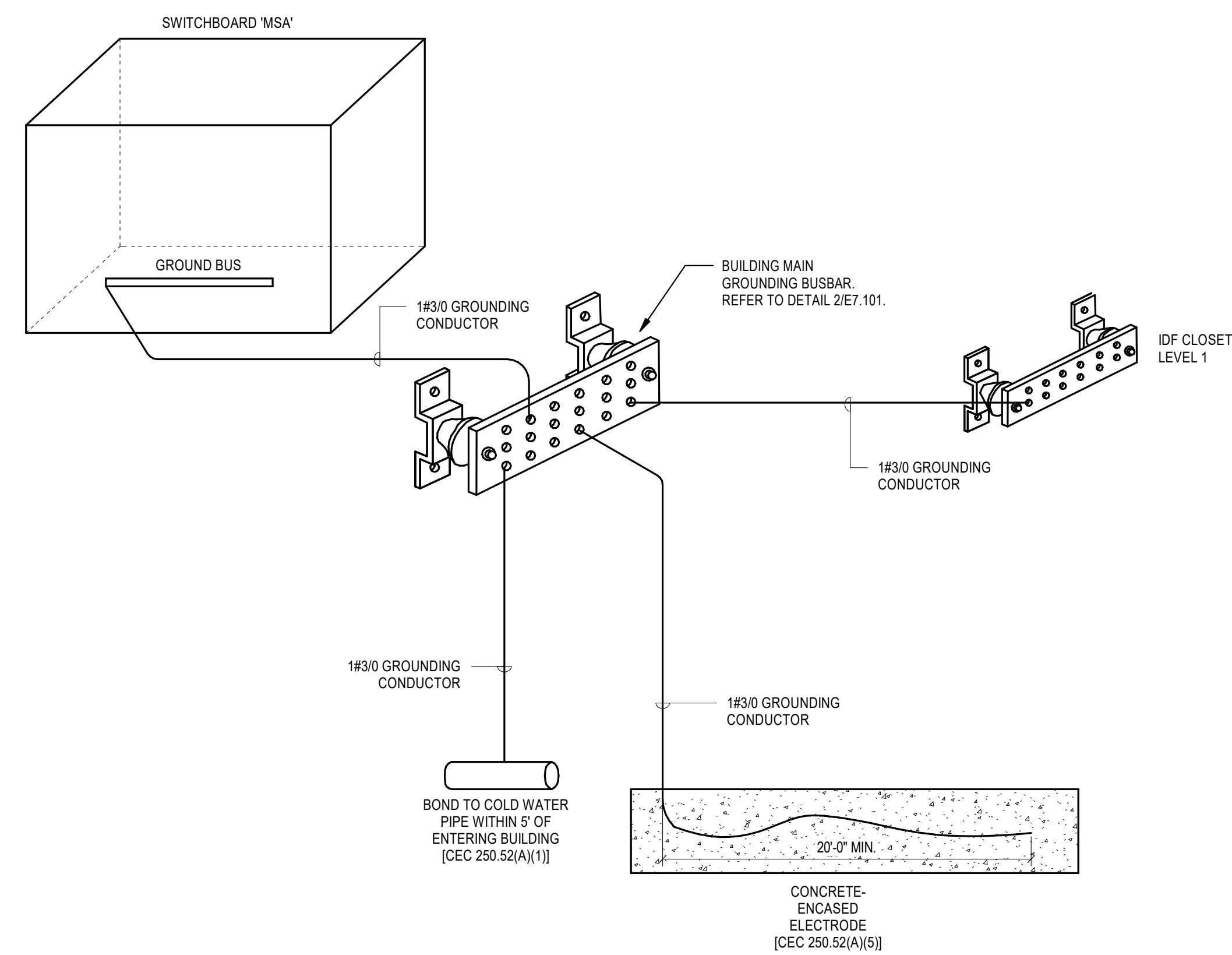
CKT	DESCRIPTION	TRIP (A)	POLES	FNNOTE	PHASE A LOAD (VA)	PHASE B LOAD (VA)	PHASE C LOAD (VA)	FNNOTE	POLES	TRIP (A)	DESCRIPTION	CKT
1	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	2
3	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	4
5	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	6
7	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	8
9	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	10
11	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	12
13	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	14
15	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	16
17	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	18
19	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	20
21	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	22
23	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	24
25	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	26
27	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	28
29	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	30
31	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	32
33	PROVISIONS	--	1	--	--	--	--	--	1	--	PROVISIONS	34
35	PROVISIONS	--	1	--	--	3240	--	--	1	--	PROVISIONS	36
37	PROVISIONS	--	1	--	--	3240	--	--	1	--	PROVISIONS	38
39	PROVISIONS	--	1	--	--	--	3240	--	1	--	PROVISIONS	40
41	PROVISIONS	--	1	--	--	--	--	3240	1	--	PROVISIONS	42
CONNECTED LOAD:					3 kVA	3 kVA	3 kVA					
CONNECTED CURRENT:					27 A	27 A	27 A					
LOAD CLASSIFICATION		CONNECTED		FACTOR		DEMAND						
MOTOR				9720 VA		100.00%		9720 VA		PANEL TOTALS		
								CONNECTED LOAD: 10 kVA				
								CONNECTED CURRENT: 27 A				
								DEMAND LOAD: 10 kVA				
								DEMAND CURRENT: 27 A				
NOTES:												



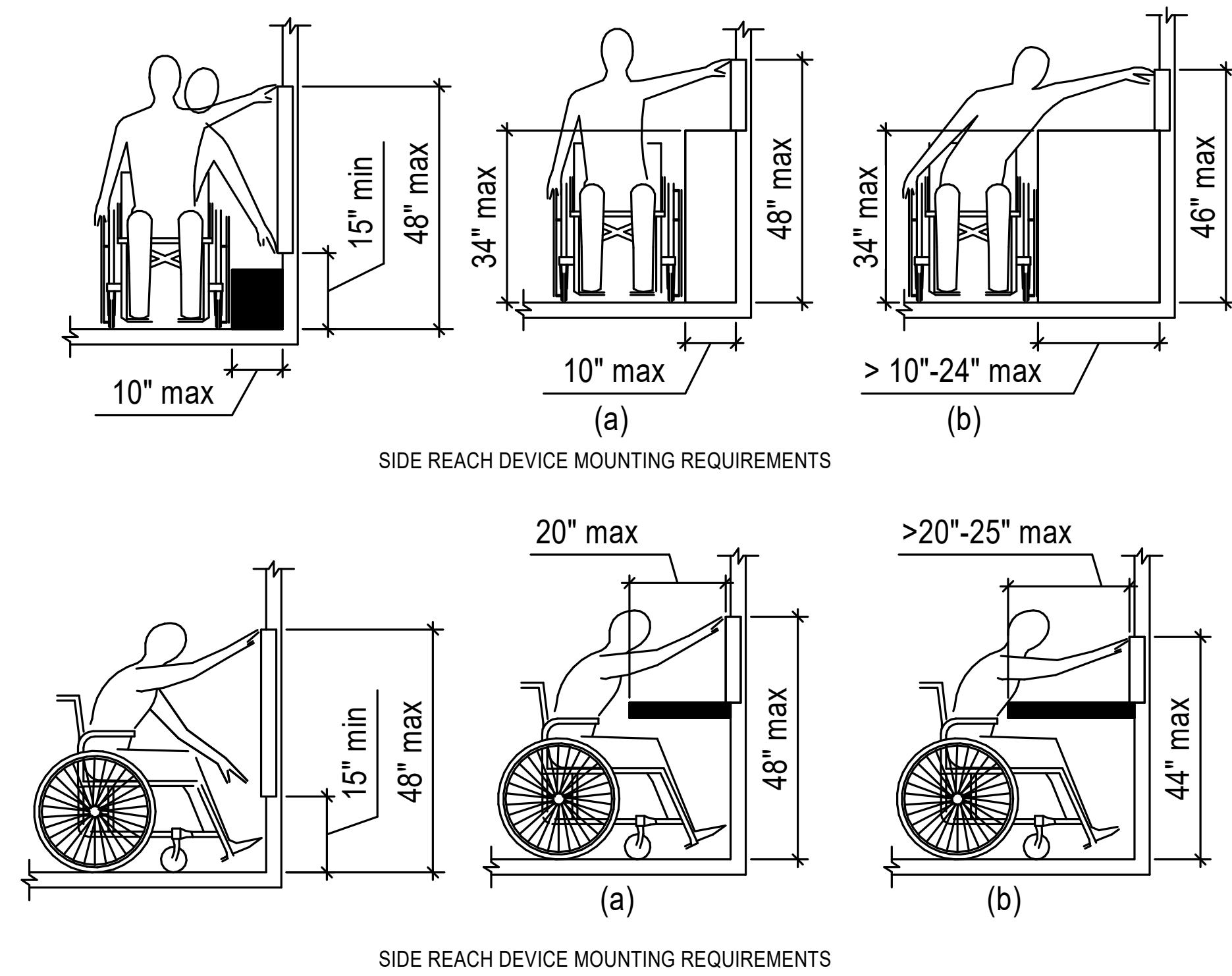
1 SINGLE-LINE DIAGRAM

SCALE: NONE

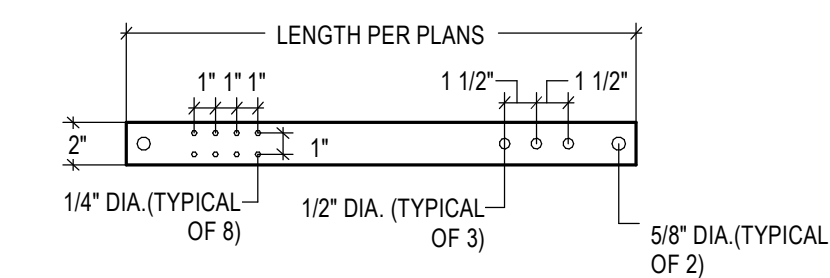
SWITCHBOARD: MSA						
LOCATION:				VOLTAGE: 208Y120V, 3PH, 4W		
SUPPLY: UTILITY				BUS RATING: 2500 A		
MOUNTING: FLOOR				NEUTRAL: 100%		
ENCLOSURE: NEMA 3R				MAINS TYPE: MCB 2500A		
FEATURES & MODIFICATIONS				SCCR: 42,000 A		
				AVAILABLE FAULT: 42,000 A		
CKT	DESCRIPTION:	FRAME (A)	TRIP (A)	POLES	FN/NOTE	LOAD
1	DIST. BRD. LA (SUITE A)	800	800	3		69076
2	PANEL LB (SUITE B)	400	400	3		9720
3	PANEL LC (SUITE C)	400	400	3		9720
4	PANEL LD (SUITE D)	400	400	3		9720
5	PANEL HI	200	200	3		18871
LOAD SUMMARY						
LOAD CLASSIFICATION		Connected	FACTOR	DEMAND	PANEL TOTALS	
LIGHTING		2515 VA	125.00%	3144 VA	CONNECTED LOAD: 117 kVA	
MOTOR		103472 VA	100.00%	103472 VA	CONNECTED... 325 A	
POWER		9680 VA	100.00%	9680 VA	DEMAND LOAD: 118 kVA	
RECEPTACLE		1440 VA	100.00%	1440 VA	DEMAND CURRENT: 327 A	
NOTES:						



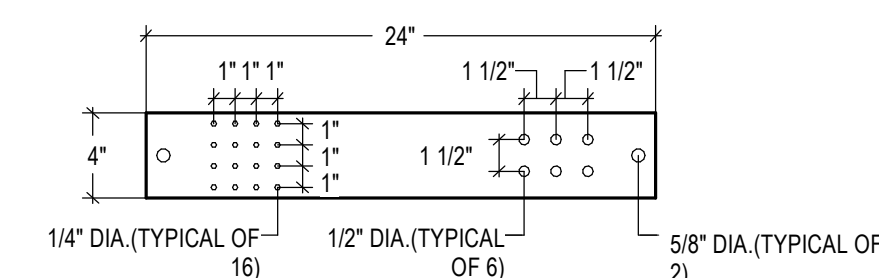
4 GROUNDING/BONDING BACKBONE DIAGRAM



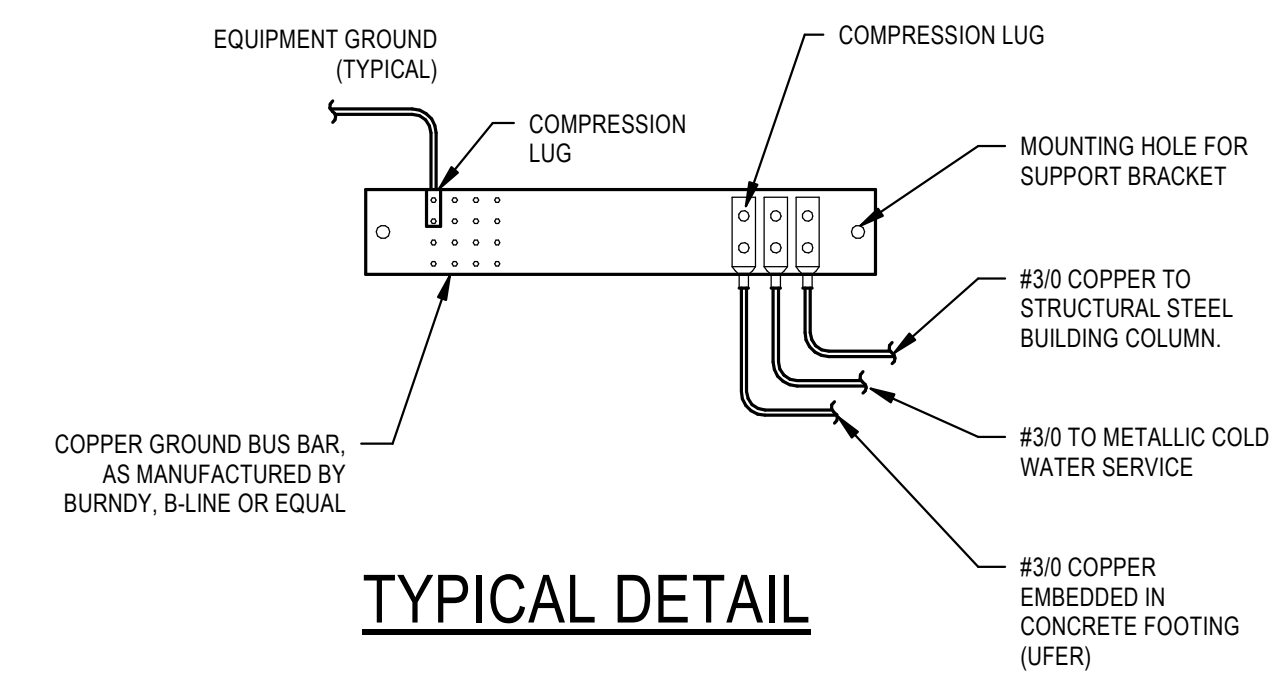
1 REACH DEVICE MOUNTING REQUIREMENTS



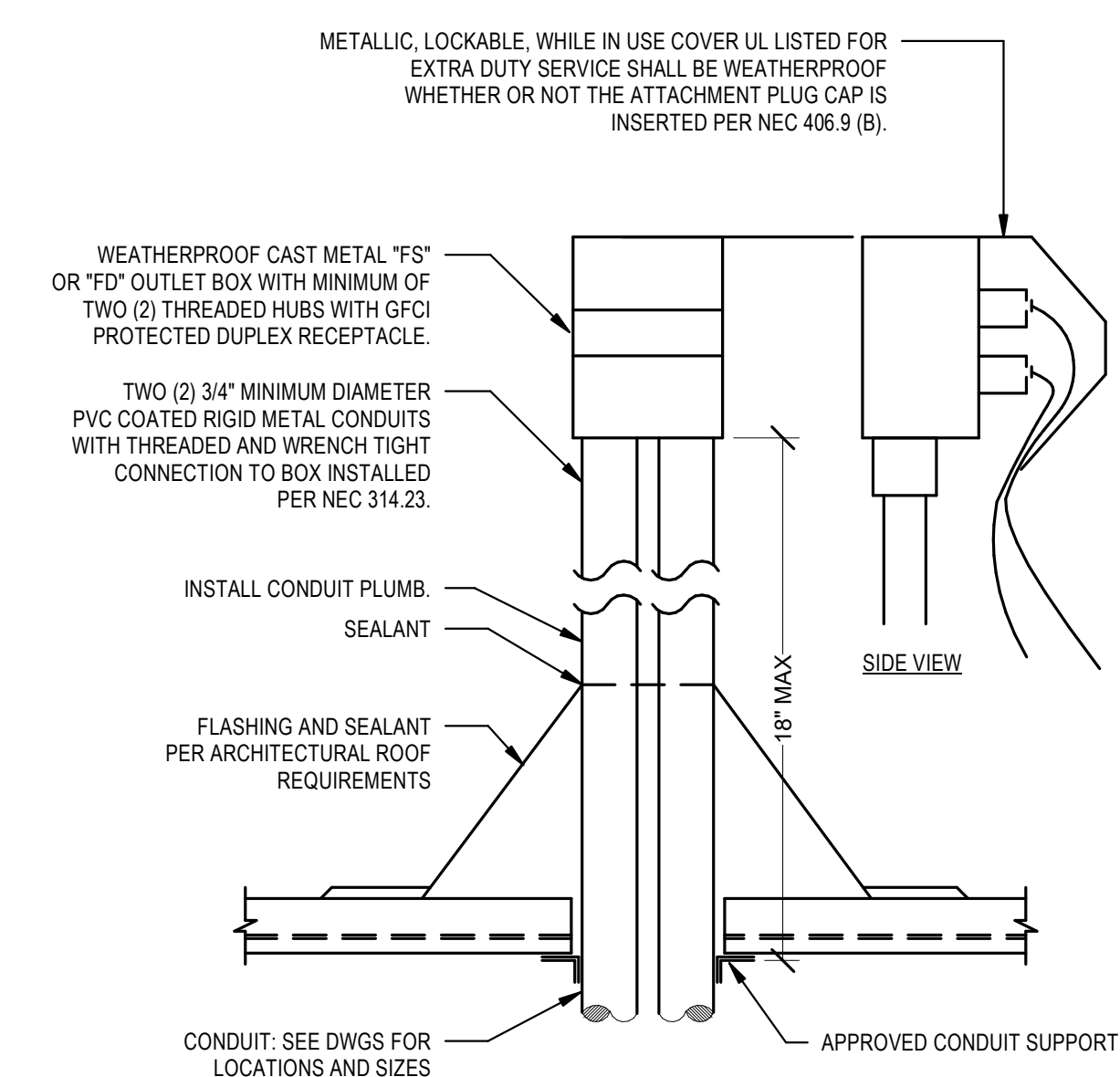
TYPICAL GROUND BUS BAR (TGB)



MAIN GROUND BUS BAR



2 TYPICAL GROUND BUS BAR DETAIL



3 ROOF PENETRATION AND RECEPTACLE DETAIL

410 BEACON
IRVINE, CA 92618

Gensler

4675 MacArthur Court
Suite 100
Newport Beach, CA 92660
United States

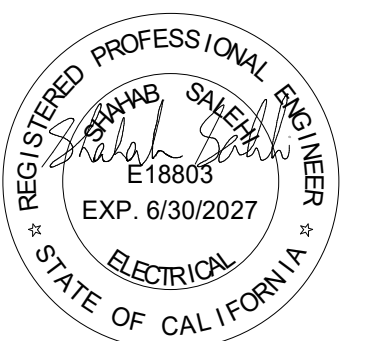
Tel 949.863.9434
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San Diego, California 92121
Consulting Engineers
① 858 200-0030 ② 858 200-0037
www.ma-engr.com

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Seal / Signature



Project Name

HANGAR 10 RECONSTRUCTION

Project Number

Description
ELECTRICAL DETAILS

Scale

NO SCALE

E7.101



February 18, 2026

Nicholas Balagtas
Hangar 10 (Rahab)
Hangar 10
Irvine, CA 92618

RE: 1st Submittal - Plan Approval
R16C2147-Hangar 10 (Rahab) - Hangar 10, Irvine, CA 92618

Dear Nicholas Balagtas:

The submitted plans for Hangar 10 (Rahab) located at Hangar 10, in Irvine, CA, have been reviewed. The IRWD's FOG Control Program Rules and Regulations, the identified FOG control issues have been subsequently addressed. The plans, as submitted, have been approved.

Note:

Elevated dissolved sulfide in wastewater can cause sewer system corrosion, nuisance odors from the generation of hydrogen sulfide (H₂S), and potential health risks. The allowable discharge limit for dissolved sulfide is 0.50 milligrams per liter (mg/L). When sulfide levels in excess of 0.50 mg/L are detected, the owner/operator of the wastewater system is required to reduce the load below the allowable discharge limit. In order to do this, you may need adjust costs in billing to pump the interceptor more frequently, costs from potential treatment of the interceptor effluent and potential compliance and monitoring/enforcement issues, including fines, if dissolved sulfide levels are consistently above the discharge limit.

Detailed information of IRWD's FOG, Oils, and Grease Program (FOG) including IRWD's Rules and Regulations is available at IRWD's website: <http://www.irwd.com/fao-oils-grease-program>. If you have any questions, please call me at 949-433-5862.

Sincerely,

Jim Kolt
FOG Program

This document is specific to the IRWD FOG control program. It should not be interpreted as approval of any other IRWD programs or connections to IRWD public facilities. Please submit to IRWD's Development Services at development@irwd.com. It is also the applicant's responsibility to submit to the respective agency the planning department in order to make any agency requirements.

From: Nicholas Balagtas | 5160 Carroll Canyon Rd., Suite 200 | San Diego, California 92121 | P: 619-594-0000 | F: 619-594-0001 | nbalagtas@ma-engineers.com

WATER CALCULATION				
PRESSURE AVAILABLE				
STATIC PRESSURE IN MAIN	=	+52.05	PSI	
ESTIMATED PRESSURE LOSS THRU METER	=	-3	PSI	
MINIMUM PRESSURE REQUIRED AT LAST FIXTURE	=	-30	PSI	
STATIC HEAD LOSS (17 FEET x 43)	=	-7.31	PSI	
TOTAL	=	+11.74	PSI	
TOTAL DEVELOPED LENGTH (TDL)	=	300	FEET	
TOTAL EQUIVALENT LENGTH (TDLx1.5)	=	450	FEET	
(11.74x100) = 2.597 PSI ALLOWABLE LOSS PER 100 FT				
452				
PIPE SIZING CHART BASED ON 2 PSH/100FT LOSS.				

CW PIPING SIZING CHART 2 psi / 100 ft				
SIZE	GPM	FIXTURE UNITS		VELOCITY (FPS)
		FLUSH TANK	FLUSH VALVE	
1/2"	1.5	---	---	1.8
3/4"	3.8	3	---	2.5
1"	7.5	8	---	2.8
1 1/4"	14	20	---	3.4
1 1/2"	22	34	5	3.8
2"	45	107	37	4.8
2 1/2"	80	275	148	5.5
3"	150	638	559	6.2
4"	270	1500	1500	6.8

HW PIPING SIZING CHART 2 psi / 100 ft				
SIZE	GPM	FIXTURE UNITS		VELOCITY (FPS)
		FLUSH TANK	FLUSH VALVE	
1/2"	1.5	---	---	1.8
3/4"	3.8	3	---	2.5
1"	7.5	8	---	2.8
1 1/4"	14	20	---	3.4
1 1/2"	22	34	---	3.8
2"	45	107	---	4.8
2 1/2"	72	236	---	5
3"	113	455	---	5
4"	180	809	---	5
			---	5

PLUMBING LEGEND AND ABBREVIATIONS					
SYMBOL	ABBREV.	DESCRIPTION	SYMBOL	ABBREV.	DESCRIPTION
	POC	POINT OF CONNECTION		ABV	ABOVE
	W	WASTE OR SEWER ABOVE SLAB		A/C	ABOVE CEILING
	GW	GREASE WASTE		A.F.F.	ABOVE FINISH FLOOR
	V	SANITARY VENT		A.F.G.	ABOVE FINISH GRADE
	CW	COLD WATER		A/G	ABOVE GRADE
	HW	HOT WATER		A.P.	ACCESS PANEL
	HW/R	HOT WATER RETURN		B/F	BELOW FLOOR
	G	LOW PRESSURE GAS		B/G	BELOW GRADE
	SD	STORM DRAIN		DWGS.	DRAWINGS
	OSD	STORM DRAIN OVERFLOW		EA	EACH
	SOV	SHUT OFF VALVE		EXIST.	EXISTING
	BLV	BALANCING VALVE		(E)	EXISTING
	PRV	PRESSURE REDUCING VALVE		FT.	FEET OR FOOT
	FS	FLOOR SINK		FLR.	FLOOR
	FD	FLOOR DRAIN		G.P.F.	GALLONS PER FLUSH
	FCO	FLOOR CLEAN-OUT		G.P.H.	GALLONS PER HOUR
	WCO	WALL CLEAN-OUT		G.P.M.	GALLONS PER MINUTE
	GCO	GRADE CLEAN-OUT		I.E.	INVERT ELEVATION
	DN	DOWN OR DROP		NTS	NOT TO SCALE
	UP	RISE OR RISER		ORD	OVERFLOW ROOF DRAIN
	HB	HOSE BIBB		LB	POUNDS
	U	VALVE ON RISE OR DROP		PSI	POUNDS PER SQUARE INCH
	RV	TEMPERATURE & PRESSURE RELIEF VALVE		RD	ROOF DRAIN
	CD	CONDENSATE DRAIN PIPING		RPBP	REDUCED PRESSURE BACKFLOW PREVENTER
	CP	CIRCULATING PUMP		SF	SQUARE FEET
	CV	CHECK VALVE		T.D.H.	TOTAL DEVELOPED HEAD
	TP	TRAP PRIMER		TP	TRAP PRIMER
	WHA	WATER HAMMER ARRESTOR		V.T.R.	VENT THROUGH ROOF
	RPBP	REDUCED PRESSURE BACKFLOW PREVENTER		W.C.	WATER COLUMN
	ICW	INDUSTRIAL COLD WATER		WHA	WATER HAMMER ARRESTOR
				COP	CLEAN OUT PLUG
				WSFU	WATER SUPPLY FIXTURE UNITS
				DFU	DRAINAGE FIXTURE UNITS

PIPE MATERIALS

- WATER ABOVE GRADE: COPPER TYPE "L" HARD DRAWN WITH WROUGHT COPPER SOLDER JOINT FITTINGS.
- WATER BELOW GRADE: COPPER TYPE "K" WITH CAST SOLDER JOINT FITTINGS. ROUGH SOLDER JOINT FITTINGS, OR FLARED JOINT FITTINGS. PROVIDE POLYETHYLENE SLEEVE.
- SOIL/WASTE AND VENT ABOVE GRADE: HUBLESS CAST IRON PIPE AND FITTINGS. HEAVY DUTY COUPLINGS.
- SOIL/WASTE AND VENT BELOW GRADE: SOLID WALL POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS PER ASTM D2665.
- GREASE WASTE AND VENT ABOVE GRADE: HUBLESS CAST IRON PIPE AND FITTINGS. HEAVY DUTY COUPLINGS.
- GREASE WASTE AND VENT BELOW GRADE: HUBLESS CAST IRON PIPE AND FITTINGS. HEAVY DUTY COUPLINGS. PROVIDE WITH POLYETHYLENE SLEEVE.
- STORM DRAIN ABOVE GRADE: HUBLESS CAST IRON PIPE AND FITTINGS. HEAVY DUTY COUPLINGS.
- STORM DRAIN BELOW GRADE: SCHEDULE 40 POLYVINYL CHLORIDE (PVC) AND FITTINGS PER ASTM D2665.
- CONDENSATE DRAIN: COPPER TYPE "L" HARD DRAWN WITH WROUGHT COPPER SOLDER JOINT FITTINGS.
- NATURAL GAS ABOVE GRADE: BLACK STEEL, SCHEDULE 40 WITH MALLEABLE IRON-THREADED FITTINGS.

GENERAL NOTES

- NO PLUMBING SHALL BE INSTALLED UNTIL ALL REQUIRED PLUMBING PLAN CHECK PERMITS AND APPROVALS HAVE BEEN OBTAINED FROM ALL REQUIRED AGENCIES.
- LAVATORY FAUCETS, SINK FAUCETS (NOT INCLUDING SERVICE SINK FAUCETS OR FAUCETS DESIGNATED AS INSTITUTIONAL) SHALL MEET THE FLOW REQUIREMENTS OUTLINED IN THE APPLIANCE EFFICIENCY STANDARDS.
- COORDINATE WITH THE ARCHITECTURAL DRAWINGS FOR EXACT LOCATION OF PLUMBING FIXTURES AND DRAINS.
- HOSE BIBBS SHALL BE PROTECTED BY AN APPROVED NON REMOVABLE TYPE BACKFLOW PROTECTION DEVICE. HOSE BIBBS SHALL BE MOUNTED AT +18" ABOVE FLOOR UNLESS OTHERWISE NOTED.
- PROVIDE ALL TAILPIECES, TRAPS, STOPS, SUPPLY PIPES TO LAVATORIES DESIGNED AS ACCESSIBLE, WITH PREFORMED INSULATION JACKET.
- COORDINATE AND VERIFY SIZES, LOCATIONS, DEPTHS AND PRESSURIZED PIPING PRESSURES OF ALL BUILDING UTILITIES WITH CIVIL.
- COORDINATE AND SCHEDULE TIMING FOR UTILITY SERVICE CONNECTION.
- ALL LINES BELOW SLAB ON GRADE TO BE LOCATED AWAY FROM ALL LOAD BEARING FOOTINGS.
- FOR PIPE PENETRATION THROUGH STRUCTURAL MEMBERS, SEE STRUCTURAL DRAWINGS FOR CONSTRUCTION.
- ALL VENTS THRU ROOF SHALL BE MINIMUM OF 18 INCHES VERTICAL AND FIFTEEN FEET HORIZONTAL AWAY FROM ALL AIR CONDITIONING FRESH AIR INTAKES AND PROVIDED WITH VANDAL PROOF HOODS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING OF WALLS, ROOFS, FOOTINGS, FLOORS, INCLUDING ALL SAW CUTTING AND CORE DRILLING. COORDINATE ALL SAW CUTTING AND CORE DRILLING WITH STRUCTURAL DRAWINGS. ANY CUTTING AND DRILLING REQUIRED OF STRUCTURAL ELEMENTS THAT IS NOT SPECIFICALLY SHOWN ON THE PLANS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION PRIOR TO CUTTING AND DRILLING. CONTRACTOR SHALL SUBMIT PROPOSED LOCATION AND SIZES OF SUCH CUTTING AND DRILLING FOR THE ARCHITECTS AND STRUCTURAL ENGINEERS APPROVAL.
- COORDINATE ALL EQUIPMENT LOCATIONS, PIPE PENETRATIONS AND EQUIPMENT PAD LOCATIONS WITH STRUCTURAL DRAWINGS PRIOR TO WORK.
- COORDINATE INSTALLATION OF ALL EQUIPMENT AND PIPING WITH OTHER TRADES PRIOR TO INSTALLATION. ENSURE THAT ALL CONTROL DEVICES, SHUT-OFF VALVES, ETC. ARE ACCESSIBLE FOR MAINTENANCE. WHERE ACCESS PANELS IN FINISHED SPACES, OTHER THAN THAT SHOWN, CONTRACTOR SHALL PROVIDE AND COORDINATE EXACT LOCATION OF PANELS WITH ARCHITECT PRIOR TO INSTALLATION.
- INSTALL VALVES WITH UNIONS OR FLANGES AT EACH PIECE OF EQUIPMENT ARRANGED TO ALLOW SERVICE, MAINTENANCE, AND EQUIPMENT REMOVAL WITHOUT SYSTEM SHUT-DOWN.
- ANY STRUCTURAL FIREPROOFING DAMAGED DURING INSTALLATION OF PLUMBING EQUIPMENT, PIPING, ETC. SHALL BE REPAIRED AT NO COST TO THE OWNER. REPAIRS SHALL BE AS DIRECTED BY THE ARCHITECT.
- PROVIDE VACUUM BREAKERS AT HOSE BIBBS.
- FAUCETS, OTHER THAN LAVATORIES, SHALL BE 1.8 GPM MAXIMUM.
- WATER HEATER TO BE USED SHALL BE ON CALIFORNIA ENERGY COMMISSION (CEC) LIST.
- PROVIDE EXPANSION TANK OR OTHER APPROVED METHOD OF RELIEVING PRESSURE (SECTION 608.3 CPC).
- CROSS CONNECTION PROTECTION SHALL BE PROVIDED AT ALL POTABLE WATER SUPPLIED APPLIANCES AND EQUIPMENT.
- COORDINATE WITH ELECTRICAL AND CONTROL CONTRACTORS FOR ALL POWER REQUIREMENTS PRIOR TO BID.
- COORDINATE WITH ELECTRICAL AND CONTROL CONTRACTORS FOR ALL POWER REQUIREMENTS PRIOR TO ORDERING ANY EQUIPMENT.
- UPON INSTALLATION OF ALL EQUIPMENT, DEVICES, VIBRATION ISOLATION, ETC., PROVIDE WRITTEN CONFIRMATION BY EQUIPMENT MANUFACTURER'S REPRESENTATIVES TO ENSURE COMPLIANCE WITH MANUFACTURER'S REQUIREMENTS.
- PROVIDE DETAILS AND SEISMIC CALCULATIONS FOR ALL EQUIPMENT ON VIBRATION ISOLATION. ALL DETAILS SHALL BE STAMPED BY A STRUCTURAL ENGINEER FROM VIBRATION ISOLATIONS MANUFACTURER.
- FOR EACH SUBMITTAL, THE CONTRACTOR SHALL PROVIDE A LETTER (ON COMPANY LETTERHEAD) AND SIGNED BY THE PROJECT MANAGER INDICATING THE SUBMITTAL HAS BEEN FULLY IN HOUSE REVIEWED TO ENSURE FULL COMPLIANCE WITH THE CONTRACT DOCUMENTS AND COORDINATION WITH OTHER TRADES. ANY EXCEPTIONS TO THE CONTRACT DOCUMENTS SHALL BE CLEARLY INDICATED ON THIS LETTER. ANY DISCREPANCIES/EXCEPTIONS NOT IDENTIFIED IN WRITING SHALL BE CORRECTED AT THE SOLE EXPENSE OF THE CONTRACTOR AND AT NO EXPENSE TO THE OWNER AND ENGINEER.
- TESTING, ADJUSTING, AND BALANCING OF PLUMBING SYSTEMS SHALL BE PERFORMED IN ACCORDANCE WITH THE 2022 CALIFORNIA ENERGY CODE (TITLE 24) SECTION 120.8. TAB SHALL INCLUDE MEASUREMENT AND ADJUSTMENT OF HOT WATER SUPPLY AND RETURN TO DESIGN VALUES; VERIFICATION OF REQUIRED HOT WATER TEMPERATURE AND CONFIRMATION OF PROPER SYSTEM OPERATION WHERE APPLICABLE. A COMPLETED TAB REPORT DOCUMENTING MEASURED AND FINAL ADJUSTED VALUES SHALL BE PROVIDED TO THE CITY PRIOR TO FINAL INSPECTION APPROVAL.

CITY OF IRVINE HANGAR 10 RECONSTRUCTION

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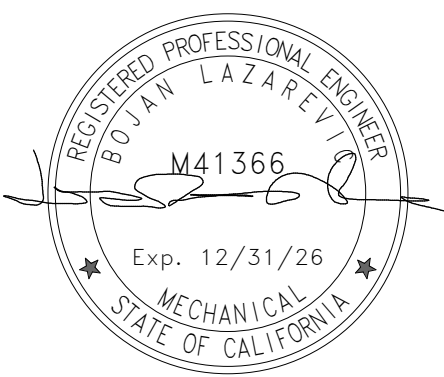
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Date Description
05.07.2026 BID SET



Seal / Signature

Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

PLUMBING LEGENDS AND GENERAL
NOTES

Scale

NO SCALE

P0.001

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION









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PLUMBING EQUIPMENT SCHEDULE												
SYMBOL	TYPE	ELECTRICAL DATA				CAPACITY		STORAGE VOLUME (GALLON)	WEIGHT (LBS)	DESCRIPTION	LOCATION	
		POWER (HP)	VOLTS (V)	PHASE (PH)	HERTZ (HZ)	INPUT (MBH)	OUTPUT (MBH)					
	GREASE INTERCEPTOR	--	--	--	--	--	--	1,500	20,000	JENSEN PRECAST JP-1500-ECE-G, SINGLE BAFFLE, TRAFFIC RATED.	EXTERIOR	
	SAMPLE PORT	--	--	--	--	--	--	--	1,700	JENSEN PRECAST EV200, TRAFFIC RATED.	EXTERIOR	
	ELECTRIC WATER HEATER	4.5 KW	208	3	60	--	--	33	500	AO SMITH DURA-POWER DEL-30, 20 GALLONS PER HOUR RECOVERY RATE @ 90°F TEMPERATURE RISE, 0.92 UEF, GLASSLINED TANK, PROVIDE TEMPERATURE AND PRESSURE RELIEF PIPING.	--	
	EXPANSION TANK	--	--	--	--	--	--	6.4	80	AMTROL THERM-X-TROL ST-12C-DD, 3.2 GALLON MAX ACCEPTANCE VOLUME, STAINLESS STEEL SYSTEM CONNECTION, DEEP DRAWN DIAPHRAGM.	--	
	THERMOSTATIC MIXING VALVE	--	--	--	--	--	--	--	--	LEONARD ECO-MIX LV-20-E-LF, 1 GPM MINIMUM FLOW CAPACITY, 7 GPM @ 9 PSI PRESSURE DROP.	--	
	CIRCULATION PUMP	0.0778 HP	115	1	60	--	--	--	--	GRUNDFOS UPS 15-55 SFC, THREE SPEED, CORROSION-FREE, STAINLESS STEEL HOUSING, 3.21 GPM @ 11.52 FT OF HEAD.	--	
	WATER METER	--	--	--	--	--	--	--	--	NEPTUNE T10.	--	
	REDUCED PRESSURE BACKFLOW PREVENTER	--	--	--	--	--	--	--	--	ZURN 975XL2	--	

PLUMBING FIXTURE SCHEDULE												
SYMBOL	FIXTURE	ROUGH-IN					VALVE/FAUCET TYPE				REMARKS	
		HW	CW	W	TRAP	V	MANUAL	PUSH BUTTON	BATTERY	ELECTRIC		FLOW
	WATER CLOSET	--	1"	4"	INTEGRAL	2"	--	--	X	--	1.28 GPF	AMERICAN STANDARD MADERA FLOWISE 2234-001, FLOOR MOUNTED @ 15 INCHES, WHITE VITREOUS CHINA, ELONGATED BOWL, SIPHON JET, TOP SPUD, WATER SENSE LABELED. SLOAN ROYAL 111 SFSM-1.28-TMO, POLISHED CHROME FINISH, TOP SPUD, TRUE MECHANICAL OVERRIDE, EXPOSED, DIAPHRAGM, WATER SENSE LABELED.
	WATER CLOSET - ACCESSIBLE	--	1"	4"	INTEGRAL	2"	--	--	X	--	1.28 GPF	BEMIS 2155SSCCT, HEAVY-DUTY, PLASTIC, ELONGATED, OPEN FRONT LESS COVER, ANTIMICROBIAL, SELF-SUSTAINING CHECK HINGES, NON-CORRODING 300 SERIES STAINLESS STEEL POSTS AND PINTLES. AMERICAN STANDARD MADERA FLOWISE 3461-001, FLOOR MOUNTED @ 16-1/2 INCHES, WHITE VITREOUS CHINA, ELONGATED BOWL, SIPHON JET, TOP SPUD, WATER SENSE LABELED. SLOAN ROYAL 111 SFSM-1.28-TMO, POLISHED CHROME FINISH, TOP SPUD, TRUE MECHANICAL OVERRIDE, EXPOSED, DIAPHRAGM, WATER SENSE LABELED.
	URINAL	--	3/4"	2"	2"	1 1/2"	--	--	X	--	0.125 GPF	BEMIS 2155SSCCT, HEAVY-DUTY, PLASTIC, ELONGATED, OPEN FRONT LESS COVER, ANTIMICROBIAL, SELF-SUSTAINING CHECK HINGES, NON-CORRODING 300 SERIES STAINLESS STEEL POSTS AND PINTLES. AMERICAN STANDARD ALBROOK FLOWISE 0.5 6550-005, WALL MOUNTED @ ACCESSIBLE HEIGHT, WHITE VITREOUS CHINA, FLUSHING RIM, SIPHON JET, TOP SPUD. SLOAN ROYAL 186 SFSM-0.125-TMO, POLISHED CHROME FINISH, TOP SPUD, TRUE MECHANICAL OVERRIDE, EXPOSED, DIAPHRAGM, WATER SENSE LABELED.
	URINAL - ACCESSIBLE	--	3/4"	2"	2"	1 1/2"	--	--	X	--	0.125 GPF	KOHLER TEND K-20713-ETSS, WALL MOUNTED @ STANDARD HEIGHT, TOP SPUD, WASHOUT, ANTIMICROBIAL FINISH, EXTENDED LIP, WHITE VITREOUS CHINA, WATER SENSE LABELED. SLOAN ROYAL 186 SFSM-0.125-TMO, POLISHED CHROME FINISH, TOP SPUD, TRUE MECHANICAL OVERRIDE, EXPOSED, DIAPHRAGM, WATER SENSE LABELED.
	LAVATORY	1/2"	1/2"	2"	1 1/2"	1 1/2"	--	--	X	--	0.5 GPM	KOHLER VERTICYL K-2882, UNDERMOUNT, 19-3/4" RECTANGULAR, OVERFLOW DRAIN, WHITE VITREOUS CHINA. AMERICAN STANDARD 4THG4 6055105.002.
	LAVATORY - ACCESSIBLE	1/2"	1/2"	2"	1 1/2"	1 1/2"	--	--	X	--	0.5 GPM	KOHLER VERTICYL K-2882, UNDERMOUNT, 19-3/4" RECTANGULAR, OVERFLOW DRAIN, WHITE VITREOUS CHINA. AMERICAN STANDARD 4THG4 6055105.002.
	MOP SINK	3/4"	3/4"	3"	3"	1 1/2"	--	--	--	--	--	KOHLER WHITBY K-6710, ENAMELED CAST IRON, CORNER TYPE, 28"x28" DIM. T&S B-0665-BSTR, WALL MOUNTED, VACUUM BREAKER, PAIL HOOK.
	ELECTRIC WATER COOLER - ACCESSIBLE	--	3/4"	2"	1 1/2"	1 1/2"	--	--	--	115 V 60 HZ	8.0 GPH	ELKAY PRO FILTRATION LZ35TL8WSBPRO-FLP4, ON-WALL MOUNTED, BI-LEVEL, BOTTLE FILLING STATION, REFRIGERATED, FILTERED, ELECTRONIC BOTTLE FILLER SENSOR, ELECTRONIC FRONT & SIDE BUBBLER PUSHBAR.
	FLOOR DRAIN	--	--	3"	3"	1 1/2"	--	--	--	--	--	JAY R. SMITH 2005Y, ROUND TOP, DUCO CAST IRON BODY, FLASHING COLLAR, ADJUSTABLE NICKEL BRONZE STRAINER HEAD, TRAP PRIMER CONNECTION, HEELPROOF GRATE.
	TRAP PRIMER	--	1/2"	--	--	--	--	--	--	--	--	MIFAB M2-500-NPB, PRESSURE DROP ACTIVATED, 3 PSI DROP ACTIVATION, 3 DRAINS SERVE MAXIMUM.
	HOSE BIBB	--	3/4"	--	--	--	--	--	--	--	--	ACORN 8151-SSLF, VACUUM BREAKER, STAINLESS STEEL RECESSEED HOSE BOX, WALL FLANGE, 18 GAGE, 304 STAINLESS STEEL.
	WATER HAMMER ARRESTOR	--	--	--	--	--	--	--	--	--	--	PLUMBING PRECISION PRODUCTS, THREADED, SEE DETAIL.
	ROOF DRAIN	--	--	--	--	--	--	--	--	--	--	JAY R. SMITH 1010Y, NO-HUB OUTLET, LOW PROFILE DOME, DUCO CAST IRON BODY, FLASHING CLAMP, GRAVEL STOP, CAST IRON DOME, UNDERDECK CLAMP, SEE PLANS FOR SIZE.
	OVERFLOW ROOF DRAIN	--	--	--	--	--	--	--	--	--	--	JAY R. SMITH 1080Y, NO-HUB OUTLET, DUCO CAST IRON DOME, FLASHING CLAMP, GRAVEL STOP, CAST IRON DOME, CAST IRON WATER DAM, UNDERDECK CLAMP, SEE PLANS FOR SIZE.
	DOWNSPOUT NOZZLE	--	--	--	--	--	--	--	--	--	--	JAY R. SMITH 1770Y, NO-HUB OUTLET, CAST BRONZE NOZZLE & FLANGE.
	AREA DRAIN	--	--	--	--	--	--	--	--	--	--	JAY R. SMITH 2005Y, ROUND TOP, DUCO CAST IRON BODY, FLASHING COLLAR, ADJUSTABLE NICKEL BRONZE STRAINER HEAD, TRAP PRIMER CONNECTION, HEELPROOF GRATE.
	DRAIN RECEPTOR	--	--	3"	3"	2"	--	--	--	--	--	JAY R. SMITH 3960, DUCO CAST IRON RECEPTOR, SOLID WATER DAM, SECURED CAST IRON DOME BOTTOM STRAINER.
	ELECTRONIC TRAP PRIMER	--	1/2"	--	--	--	--	--	--	115 V 60 HZ	--	PLUMBING PRECISION PRODUCTS MP-500, PROVIDE WITH ACCESS DOOR.

△	Date	Description
	05.07.2026	BID SET



Seal / Signature

Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

PLUMBING SCHEDULES

Scale

NO SCALE

P0.002



SHEET NOTES

- 1" ICW CONNECTION FOR KOI POND. SEE SHEET P1.003.
- SEE SHEET P1.200 FOR CONTINUATION.

CITY OF IRVINE HANGAR 10 RECONSTRUCTION

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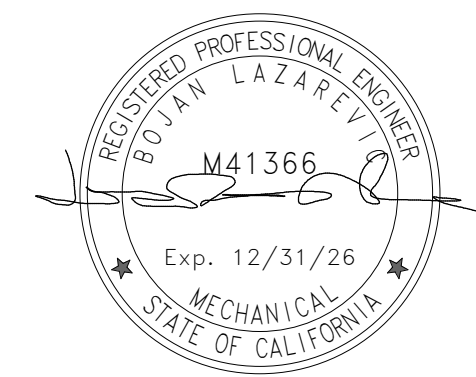
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GENERAL NOTES

Date	Description
05.07.2026	BID SET



Seal / Signature

Project Name
HANGAR 10
RECONSTRUCTION

Project Number
007.3945.000

Description
PLUMBING CONSTRUCTION PLAN -
PARTIAL SITE PLAN

Scale
1/8" = 1'-0"

P1.003

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION

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Date	Description
05.07.2026	ISSUE FOR BID
05.28.2026	BID ADDENDUM 02



Seal / Signature

Project Name
HANGAR 10
RECONSTRUCTION
Project Number
007.3945.000
Description
PLUMBING CONSTRUCTION PLAN -
UNDERGROUND PLAN

Scale
1/8" = 1'-0"

P1.200

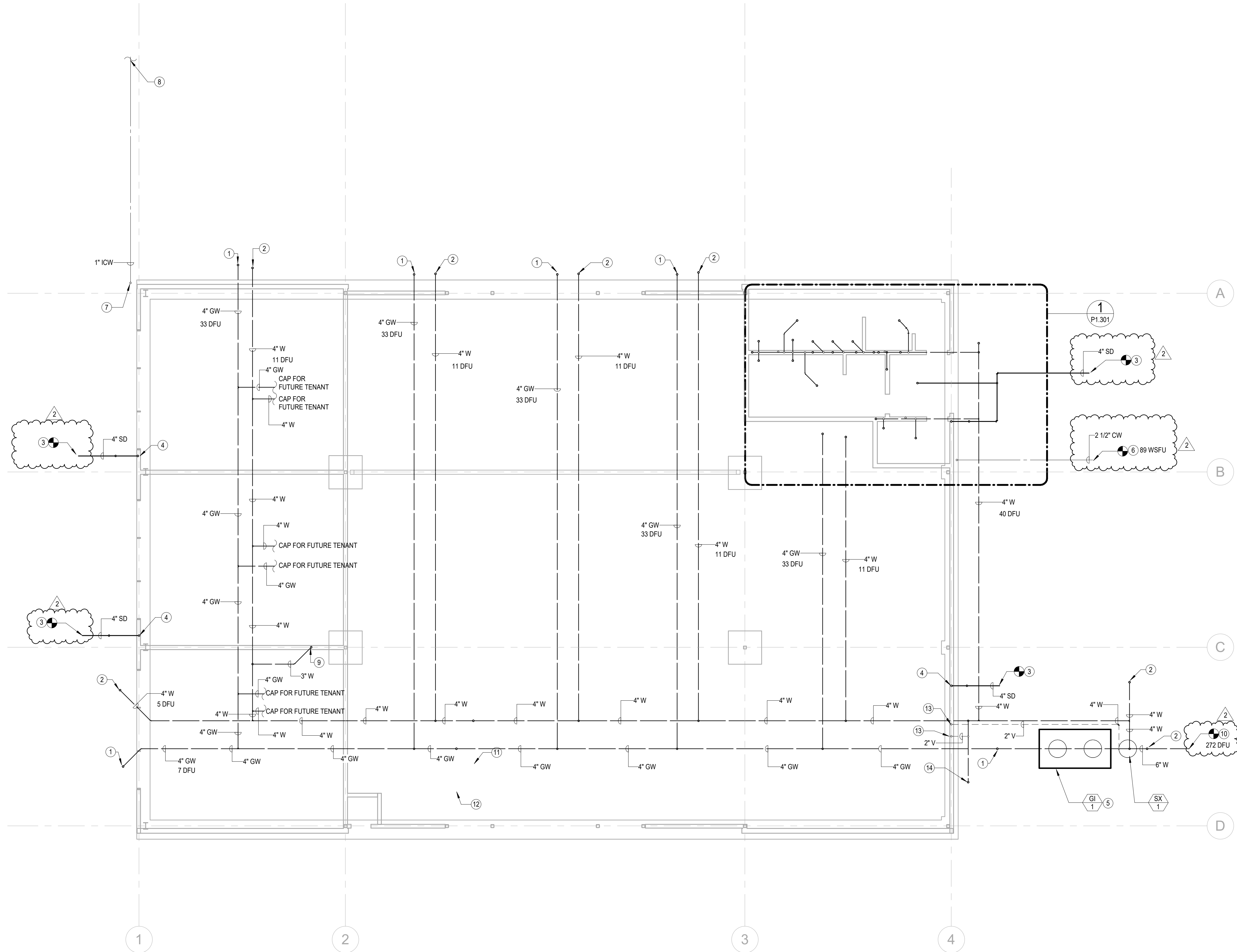
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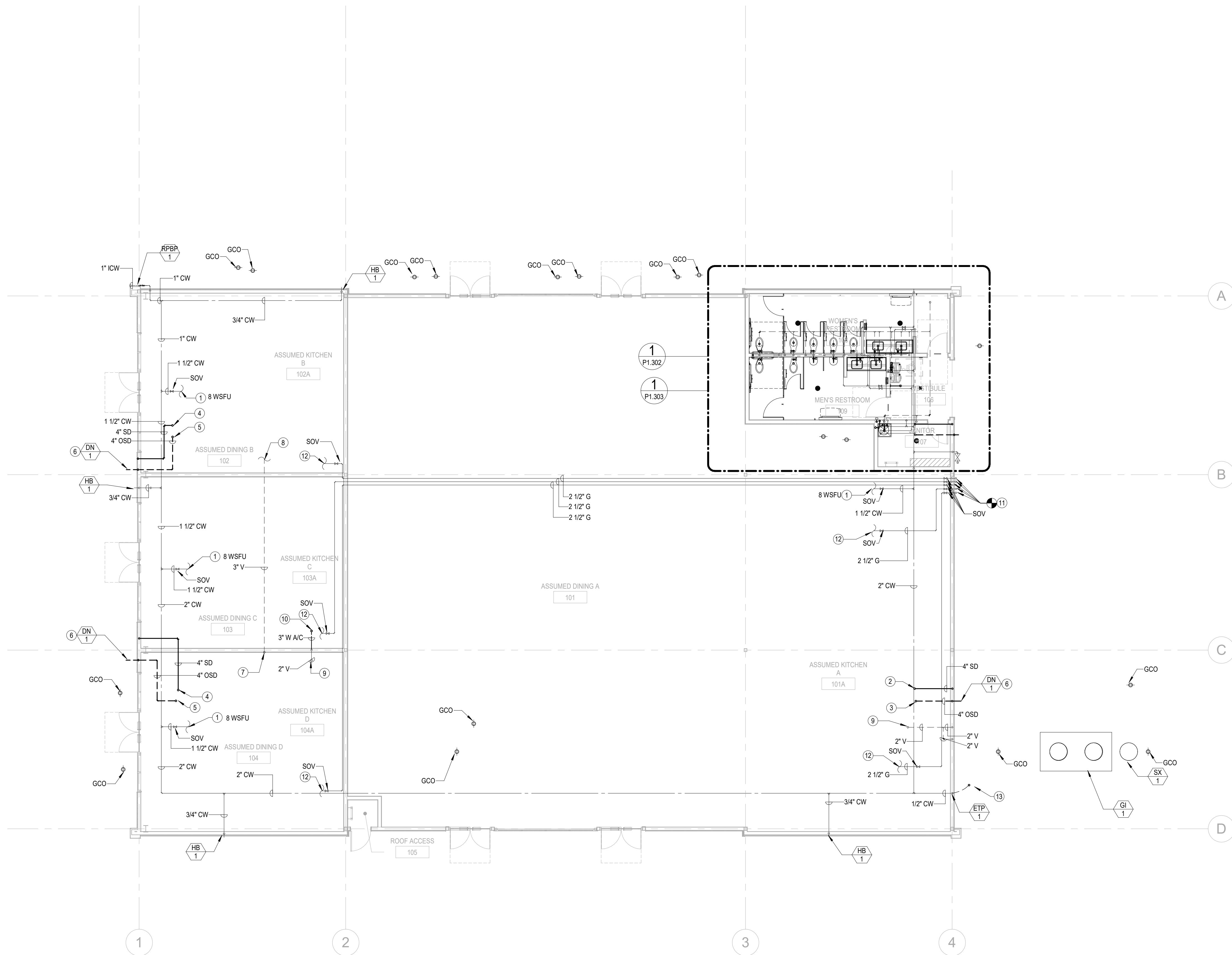
SHEET NOTES

- 4" GREASE WASTE UP TO GRADE CLEANOUT.
- 4" WASTE UP TO GRADE CLEANOUT.
- 4" STORM DRAIN BELOW FINISHED GRADE. POC TO CITY STORM 4" OR LARGER. INVERT -3'-0" BELOW FINISHED GRADE. FINAL CONNECTION TO BE COORDINATED IN THE FIELD.
- 4" STORM DRAIN UP TO CEILING.
- FOR MORE INFORMATION ON THE GREASE INTERCEPTOR SEE DETAIL.
- 2-1/2" CW BELOW FINISHED GRADE. POC TO CITY WATER (2-1/2" OR LARGER). INVERT -3'-0" BELOW FINISHED GRADE. FINAL CONNECTION TO BE COORDINATED IN THE FIELD.
- 1" ICW UP TO REDUCED PRESSURE BACKFLOW PREVENTER.
- 1" ICW OUT TO SITE TO FEED KOI POND.
- 3" WASTE UP TO CEILING.
- 6" WASTE BELOW FINISHED GRADE. POC TO CITY WASTE. INVERT -7'-0" BELOW FINISHED GRADE. FINAL CONNECTION TO BE COORDINATED IN THE FIELD.
- 4" WASTE UP TO FLOOR CLEANOUT.
- 4" GREASE WASTE UP TO FLOOR CLEANOUT.
- 2" VENT UP TO CEILING.
- 4" WASTE UP TO HUB DRAIN.

GENERAL NOTES

- A. A SLOPE OF NOT LESS THAN 1/8 INCH PER FOOT OR 1 PERCENT IS PROVIDED FOR NORMAL DRAINAGE PIPING 4 INCHES OR LARGER ONLY WHERE IT IS IMPRACTICAL DUE TO THE DEPTH OF THE STREET SEWER, TO THE STRUCTURAL FEATURES, OR TO THE ARRANGEMENT OF A BUILDING OR STRUCTURE TO OBTAIN A SLOPE 1/4 INCH PER FOOT OR 2 PERCENT AND THAT IS SUBJECT TO THE PLUMBING FIELD INSPECTOR'S APPROVAL.
- B. ALL GREASE WASTE SHALL SLOPE AT 2 PERCENT SLOPE OR 1/4 INCH PER FOOT.
- C. ALL FLOOR DRAINS SHALL RECEIVE A TRAP PRIMER CONNECTION.
- D. EACH TENANT SHALL BE PROVIDED 11 DFU.





SHEET NOTES

- 1-1/2" CW STUB OUT FOR FUTURE TENANT. CAP FOR FUTURE.
- 4" STORM DRAIN UP TO ROOF DRAIN.
- 4" OVERFLOW STORM DRAIN UP TO OVERFLOW ROOF DRAIN.
- 6" STORM DRAIN UP TO ROOF DRAIN.
- 6" OVERFLOW STORM DRAIN UP TO OVERFLOW ROOF DRAIN.
- DAYLIGHT 4" OVERFLOW STORM DRAIN AT PLUS 6 INCHES ABOVE FINISHED GRADE.
- 3" VTR.
- 3" VENT STUB OUT FOR FUTURE TENANT. CAP FOR FUTURE.
- 2" VTR.
- 3" WASTE UP TO DRAIN RECEPTOR.
- POINT OF CONNECTION TO GAS MANIFOLD. THE GAS MANIFOLD AND ALL GAS UPSTREAM OF THE GAS MANIFOLD SHALL BE PROVIDED BY THE DRY UTILITY CONSULTANT.
- 2-1/2" GAS STUB OUT FOR FUTURE TENANT. FUTURE TENANT SHALL PROVIDE THEIR OWN GAS METER. 1,100 CFH GAS LOAD.
- HUB DRAIN SEE DETAIL.

CITY OF IRVINE
HANGAR 10
RECONSTRUCTION410 BEACON
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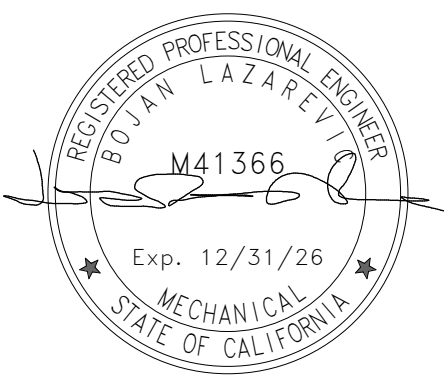
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GENERAL NOTES

- ALL FAN COIL UNITS SHALL HAVE A CONDENSATE CONNECTION AND SHALL DRAIN TO AN APPROVED RECEPTOR.
- ALL FLOOR DRAINS SHALL RECEIVE A TRAP PRIMER CONNECTION.
- EACH TENANT SHALL BE PROVIDED 8 WSFU.



Seal / Signature

Project Name

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RECONSTRUCTION

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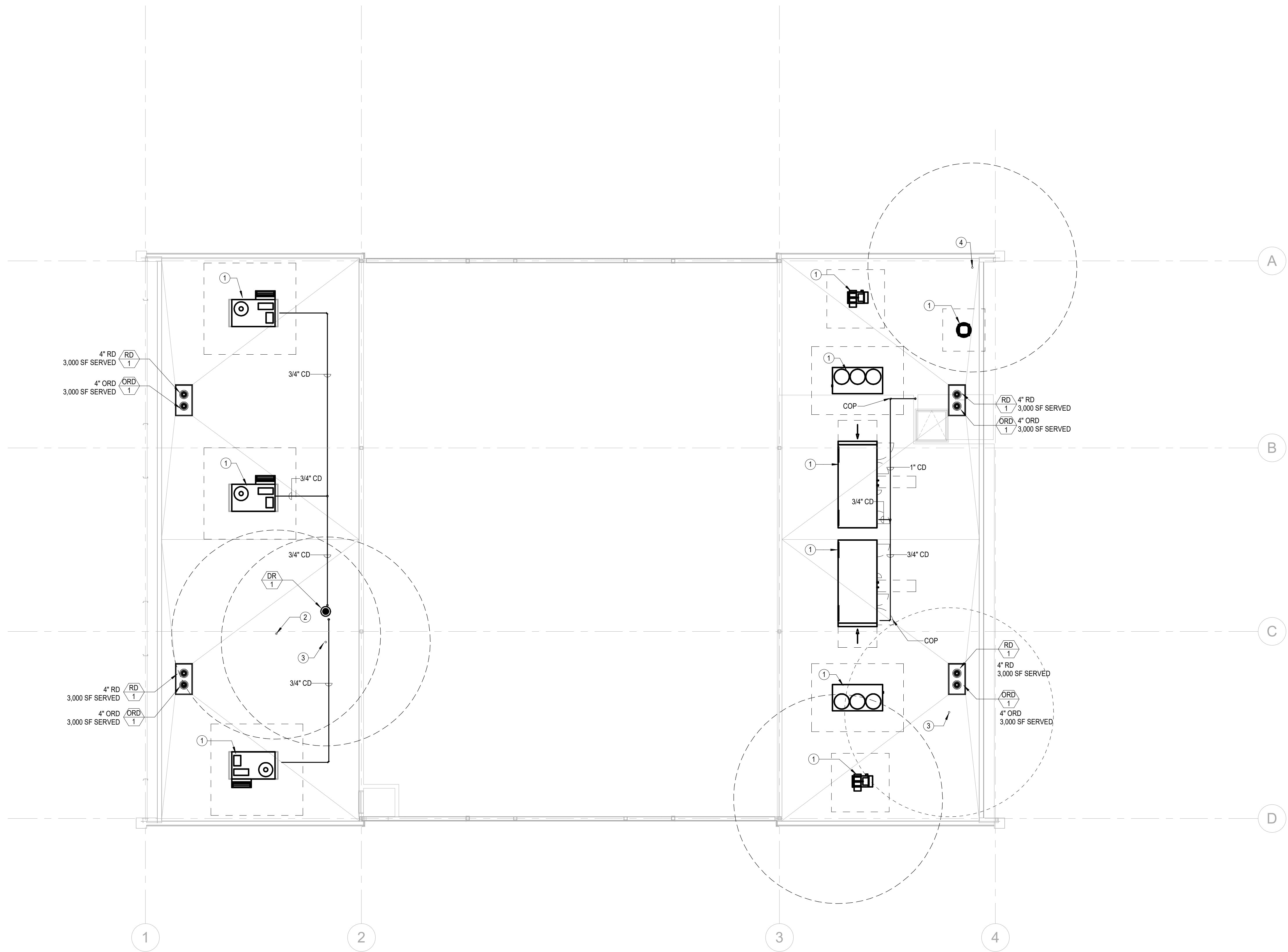
Description

PLUMBING CONSTRUCTION PLAN -
LEVEL 01

Scale

1/8" = 1'-0"

P1.201



SHEET NOTES

- 1 MECHANICAL EQUIPMENT SHOWN FOR REFERENCE ONLY. SEE MECHANICAL DRAWINGS.
- 2 3\" VTR PROVIDE AT MINIMUM A 15 FOOT CLEARANCE FROM ANY MECHANICAL INTAKE OR OPERABLE WINDOW.
- 3 2\" VTR PROVIDE AT MINIMUM A 15 FOOT CLEARANCE FROM ANY MECHANICAL INTAKE OR OPERABLE WINDOW.
- 4 4\" VTR PROVIDE AT MINIMUM A 15 FOOT CLEARANCE FROM ANY MECHANICAL INTAKE OR OPERABLE WINDOW.

GENERAL NOTES

- A ALL SANITARY VENTS SHALL HAVE AT MINIMUM A 15 FOOT CLEARANCE FROM ANY OPERABLE WINDOW OR MECHANICAL INTAKE.

CITY OF IRVINE HANGAR 10 RECONSTRUCTION

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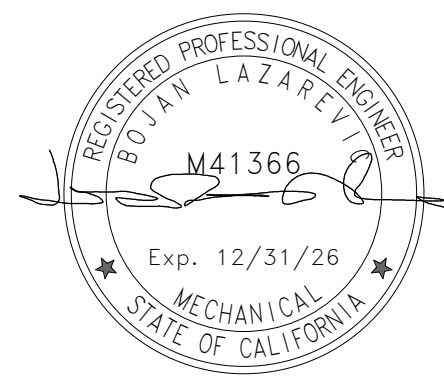
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Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

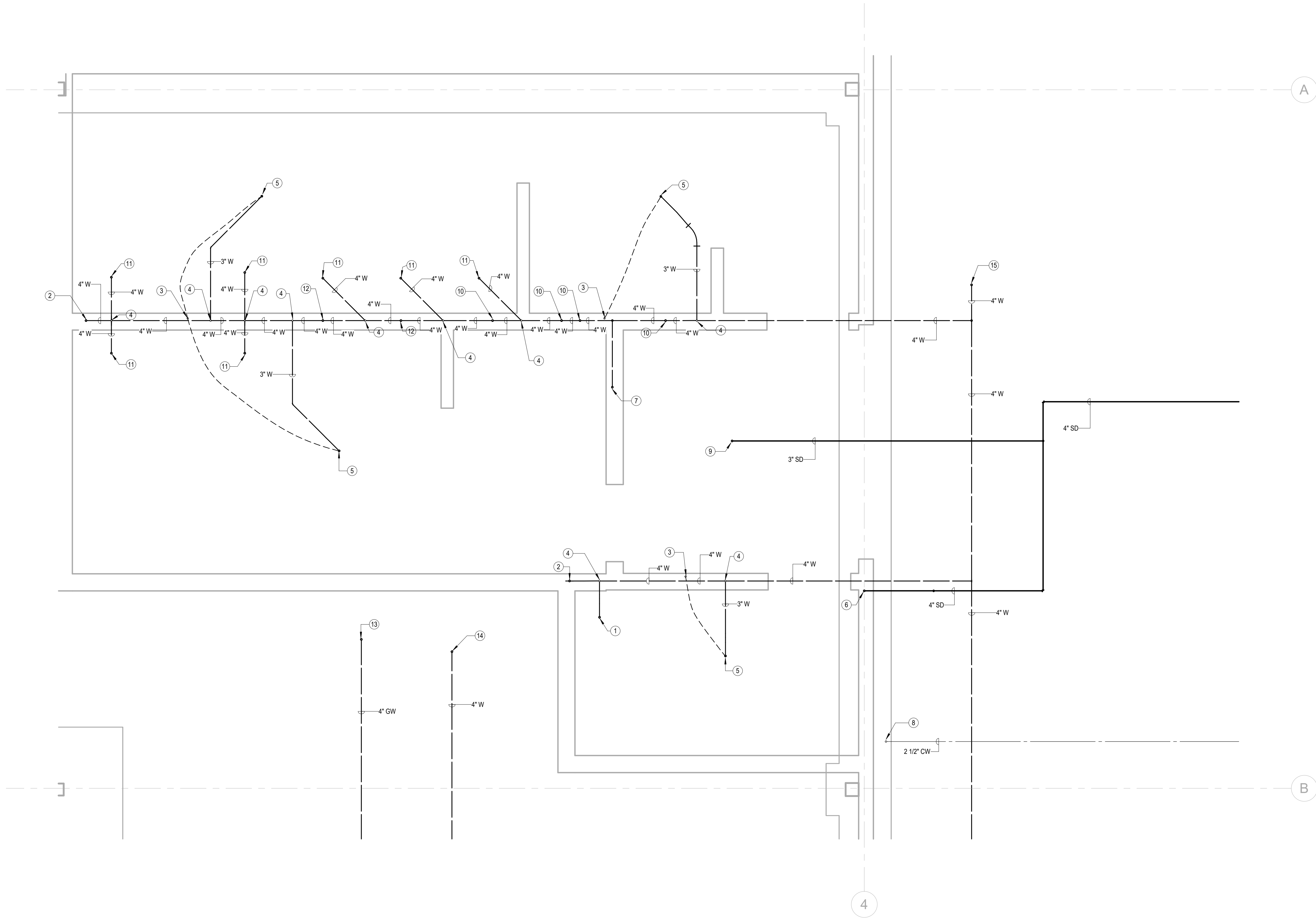
PLUMBING ROOF PLAN

Scale

1/8" = 1'-0"

P1.202

1 ENLARGED PLAN - UNDERGROUND PLAN - BATHROOM AREA
1/2" = 1'-0"



SHEET NOTES

- 1 3" WASTE UP TO MOP SINK.
- 2 4" WASTE UP TO WALL CLEANOUT.
- 3 1/2" CW UP TO TRAP PRIMER.
- 4 2" VENT UP TO CEILING.
- 5 3" WASTE UP TO FLOOR DRAIN.
- 6 4" STORM DRAIN UP TO CEILING.
- 7 2" WASTE UP TO ELECTRIC WATER COOLER.
- 8 2-1/2" CW UP TO BUILDING MAIN SOV & PRESSURE REGULATOR.
- 9 3" STORM DRAIN UP TO AREA DRAIN.
- 10 2" WASTE UP TO LAVATORY.
- 11 4" WASTE UP TO WATER CLOSET.
- 12 2" WASTE UP TO URINAL.
- 13 4" GREASE WASTE UP TO FLOOR CLEANOUT.
- 14 4" WASTE UP TO FLOOR CLEANOUT.
- 15 4" WASTE UP TO GRADE CLEANOUT.

GENERAL NOTES

- A. A SLOPE OF NOT LESS THAN 1/8 INCH PER FOOT OR 1 PERCENT IS PROVIDED FOR DRAINAGE PIPING 4 INCHES OR LARGER ONLY WHERE IT IS IMPRACTICAL DUE TO THE DEPTH OF THE STREET SEWER, TO THE STRUCTURAL FEATURES, OR TO THE ARRANGEMENT OF A BUILDING OR STRUCTURE TO OBTAIN A SLOPE 1/4 INCH PER FOOT OR 2 PERCENT AND THAT IS SUBJECT TO THE PLUMBING FIELD INSPECTOR'S APPROVAL.
- B. ALL GREASE WASTE SHALL SLOPE AT 2 PERCENT SLOPE OR 1/4 INCH PER FOOT.
- C. ALL FLOOR DRAINS SHALL RECEIVE A TRAP PRIMER CONNECTION.

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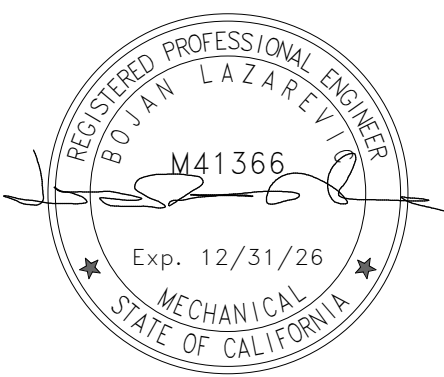
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Project Name

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RECONSTRUCTION

Project Number

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Description

ENLARGED PLANS

Scale

1/2" = 1'-0"

P1.301

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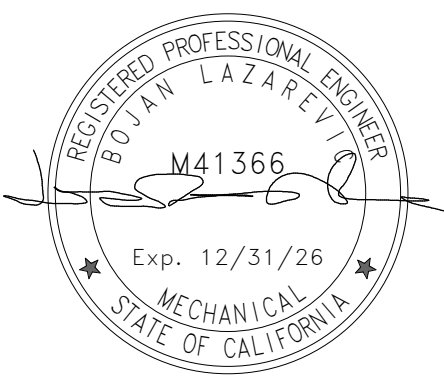
SHEET NOTES

- 1 TEMPERATURE AND PRESSURE RELIEF VALVE,
DRAIN TO MOP SINK.
- 2 4" OVERFLOW STORM DRAIN UP TO OVERFLOW
ROOF DRAIN.
- 3 4" STORM DRAIN UP TO ROOF DRAIN.
- 4 DAYLIGHT 4" OVERFLOW STORM DRAIN AT
PLUS 6 INCHES ABOVE FINISHED GRADE.
- 5 1" CONDENSATE DRAIN UP TO ROOF.
- 6 1" CONDENSATE DRAIN DRAIN INDIRECT TO
MOP SINK.
- 7 4" VTR.

GENERAL NOTES

- A. PROVIDE A WATER HAMMER ARRESTOR PRIOR
TO THE LAST FLUSH VALVE.
- B. PROVIDE A TRAP PRIMER CONNECTION TO ALL
FLOOR DRAINS.
- C. ALL RESTROOMS SHALL BE PROVIDED THEIR
OWN SET OF SHUT OFF VALVES FOR ISOLATION
OF THE WATER SYSTEM.

Date	Description
05.07.2026	BID SET



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Project Name

HANGAR 10
RECONSTRUCTION

Project Number

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Description

ENLARGED PLANS

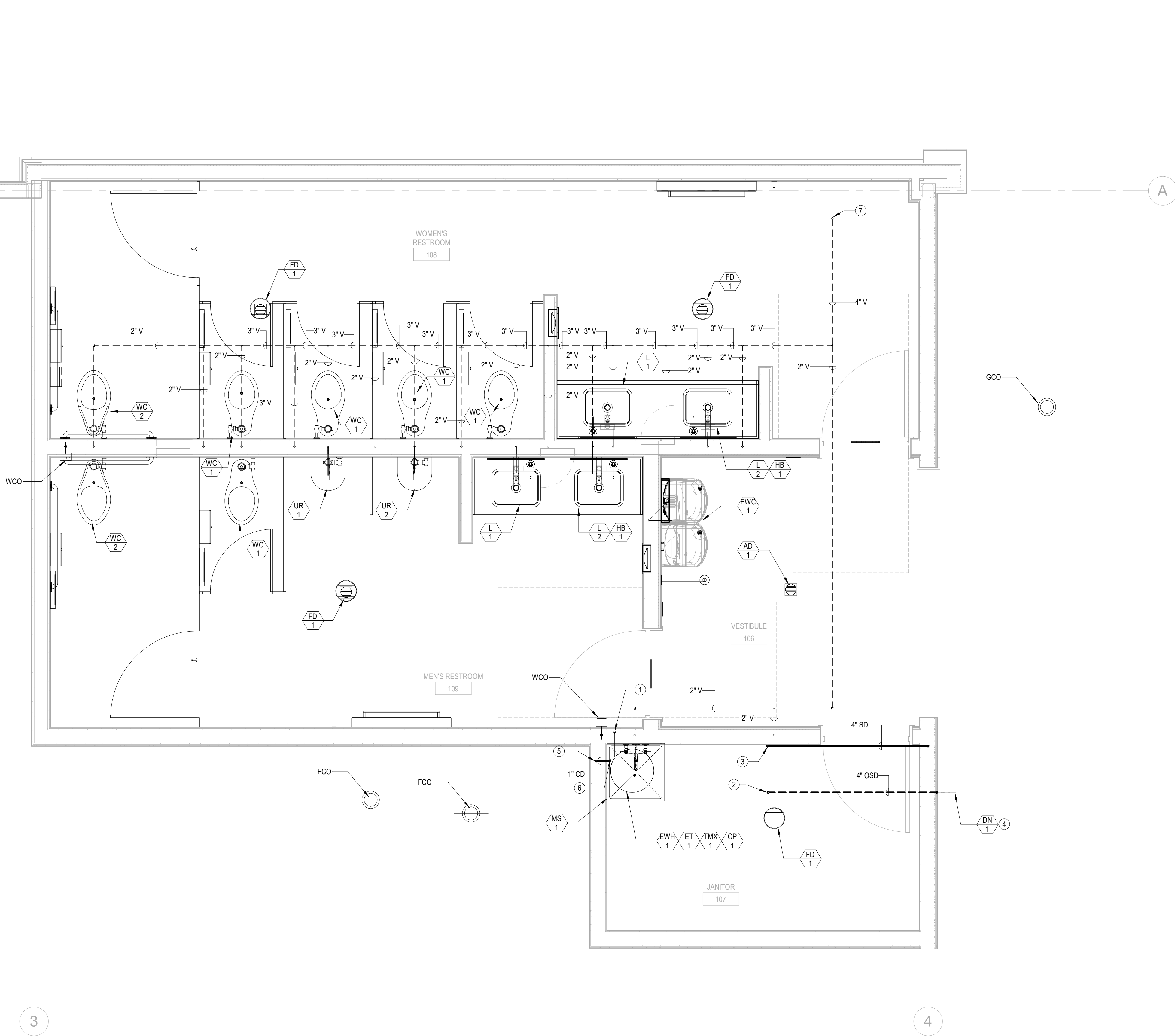
KEY PLAN

Scale

1/2" = 1'-0"

P1.302

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SHEET NOTES

- 1 BUILDING MAIN SOV AND PRESSURE REGULATOR

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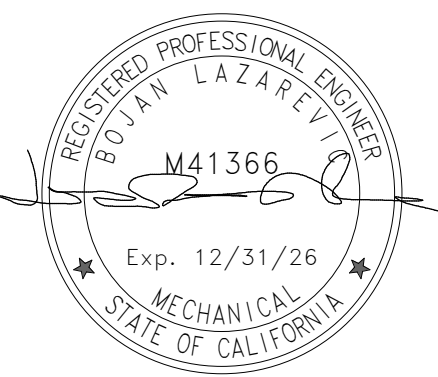


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GENERAL NOTES

- A. PROVIDE A WATER HAMMER ARRESTOR PRIOR TO THE LAST FLUSH VALVE.
B. PROVIDE A TRAP PRIMER CONNECTION TO ALL FLOOR DRAINS.
C. ALL RESTROOMS SHALL BE PROVIDED THEIR OWN SET OF SHUT OFF VALVES FOR ISOLATION OF THE WATER SYSTEM.
D. RESTROOM SHUT OFF VALVES SHALL BE READILY ACCESSIBLE FOR OPERATION AND INSTALLED AS TO BE PROTECTED FROM PHYSICAL DAMAGE.

Date	Description
05.07.2026	BID SET



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Project Name

HANGAR 10
RECONSTRUCTION

Project Number

007.3945.000

Description

ENLARGED PLANS

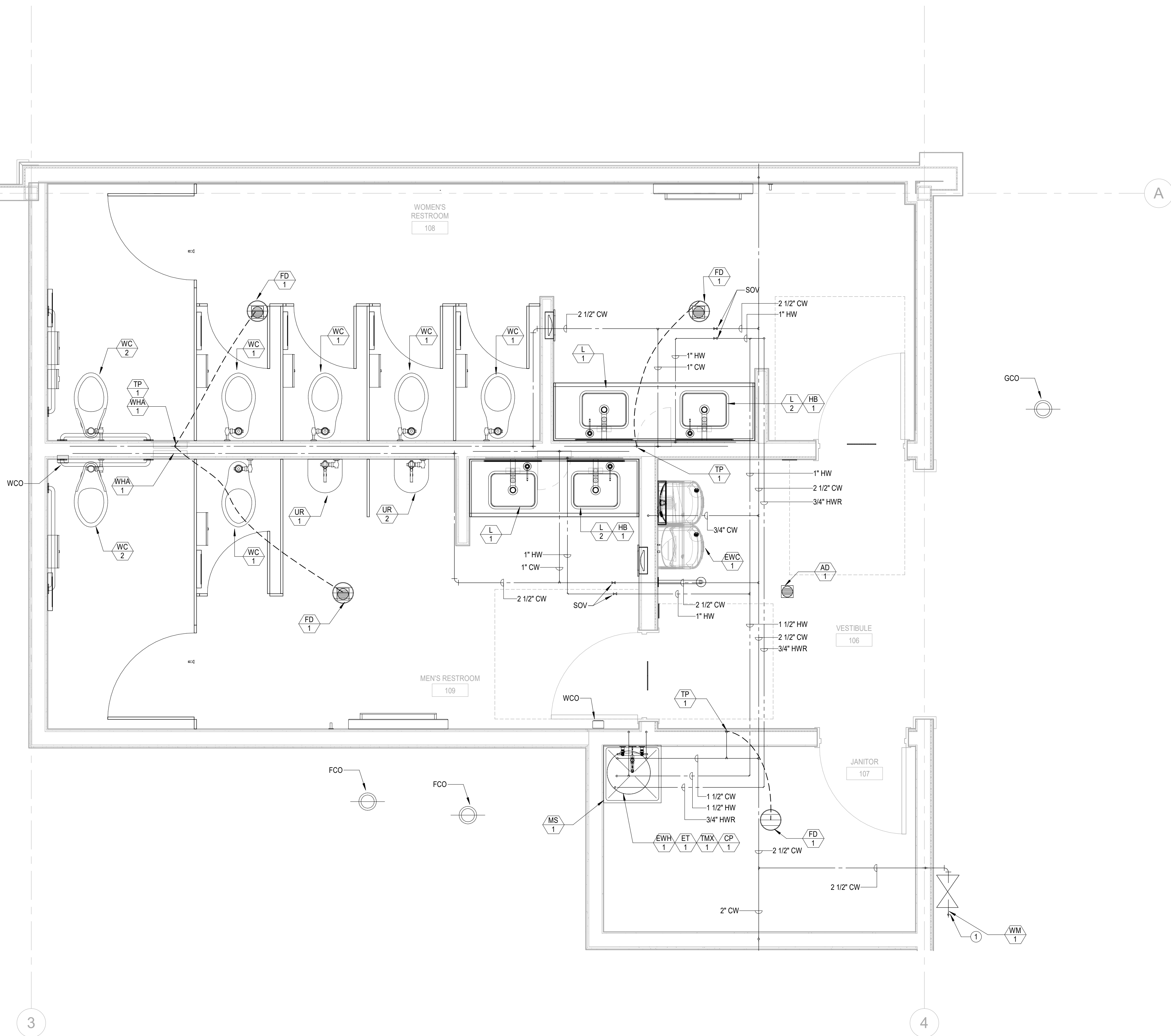
Scale

1/2" = 1'-0"

P1.303

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KEY PLAN



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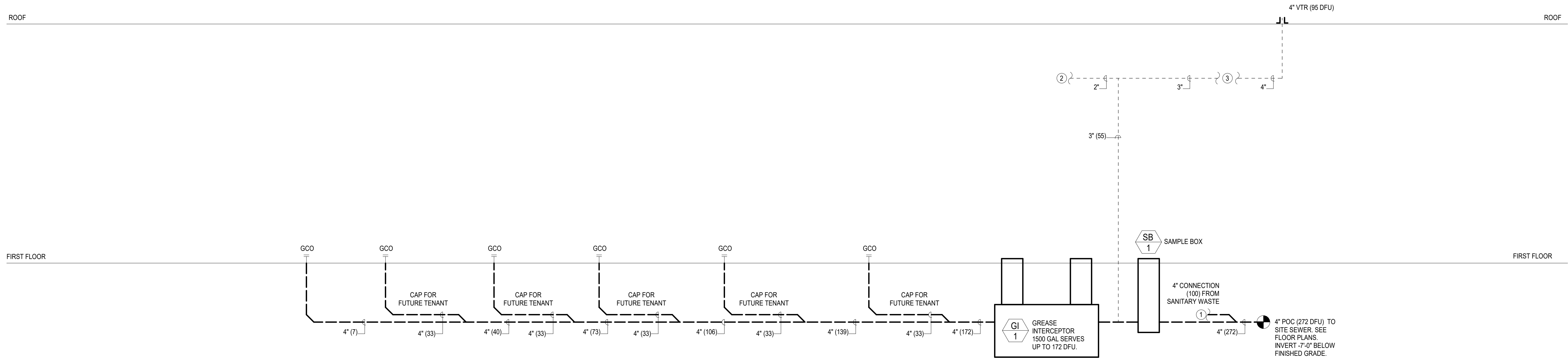
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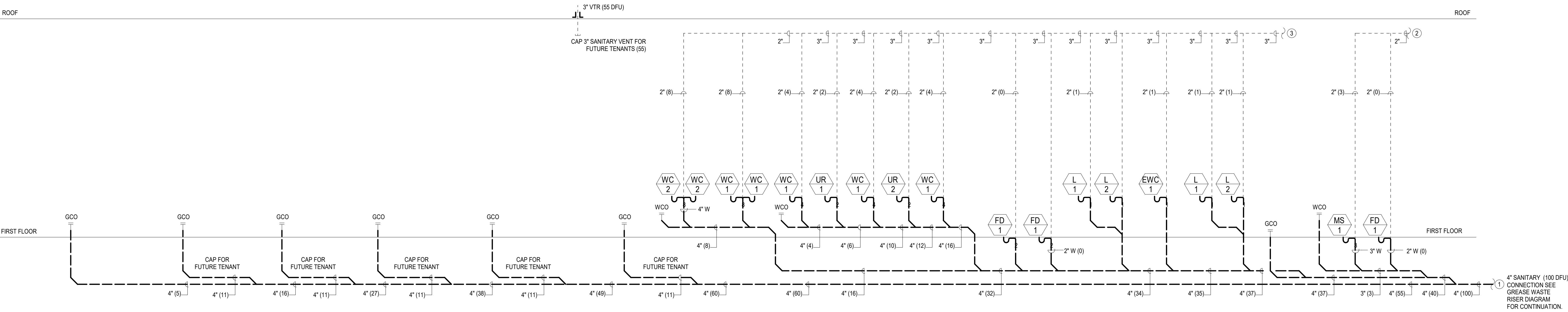
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GREASE WASTE RISER DIAGRAM



SANITARY WASTE RISER DIAGRAM

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Project Name
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RECONSTRUCTION

Project Number
007.3945.000

Description
PLUMBING RISER DIAGRAM

Scale
12" = 1'-0"

P4.101

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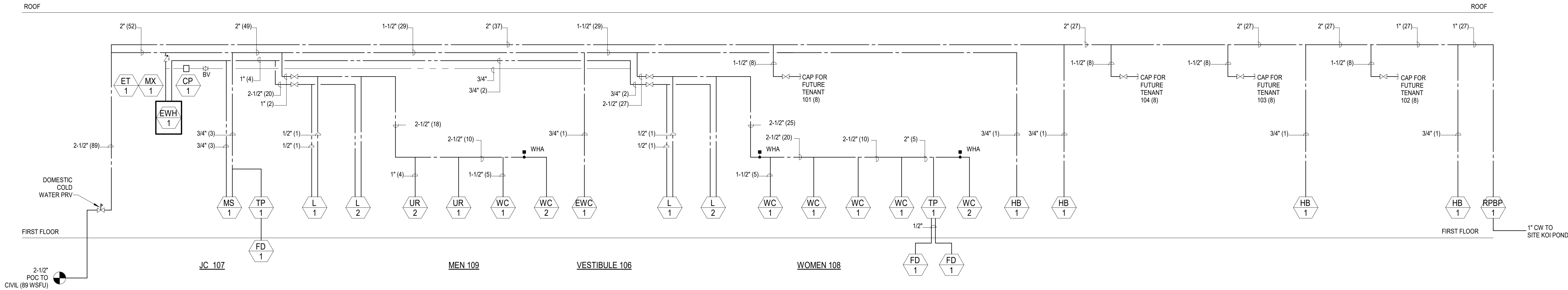
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DOMESTIC WATER RISER DIAGRAM

COLD PIPING SIZING CHART 2 psi				
SIZE	GPM	FIXTURE UNITS		VELOCITY (FPS)
		FLUSH TANK	FLUSH VALVE	
1/2"	1.5	---	---	1.8
3/4"	3.8	3	---	2.5
1"	7.5	7	---	2.8
1 1/4"	14	18	---	3.4
1 1/2"	22	34	5	3.8
2"	45	86	28	4.8
2 1/2"	82	236	116	5.5
3"	110	533	430	6.2
4"	270	1355	1355	6.8

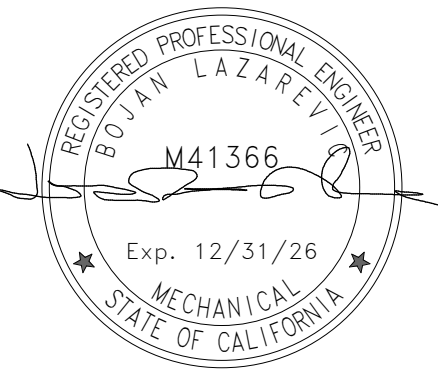
HOT PIPING SIZING CHART 2 psi				
SIZE	GPM	FIXTURE UNITS		VELOCITY (FPS)
		FLUSH TANK	FLUSH VALVE	
1/2"	1.5	---	---	1.8
3/4"	3.8	3	---	2.5
1"	7.5	7	---	2.8
1 1/4"	14	18	---	3.4
1 1/2"	22	34	---	3.8
2"	45	86	---	4.8
2 1/2"	82	284	---	5.0
3"	140	585	---	5.0
4"	180	255	---	5.0



GAS RISER DIAGRAM

GAS LOAD SUMMARY 14" W.C.	
SPACE	TOTAL CFH
TENANT 101 (A)	1,100
TENANT 101 (A)	1,100
TENANT 102 (B)	1,100
TENANT 103 (C)	1,100
TENANT 104 (D)	1,100
TOTAL CFH	5,500
PIPE SIZING BASED ON 225 FT TOTAL DEVELOPED LENGTH, TABLE 1208.4, 2026 CPC	

Date	Description
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Project Name	HANGAR 10 RECONSTRUCTION
Project Number	007.3945.000
Description	PLUMBING RISER DIAGRAM

Scale
12" = 1'-0"

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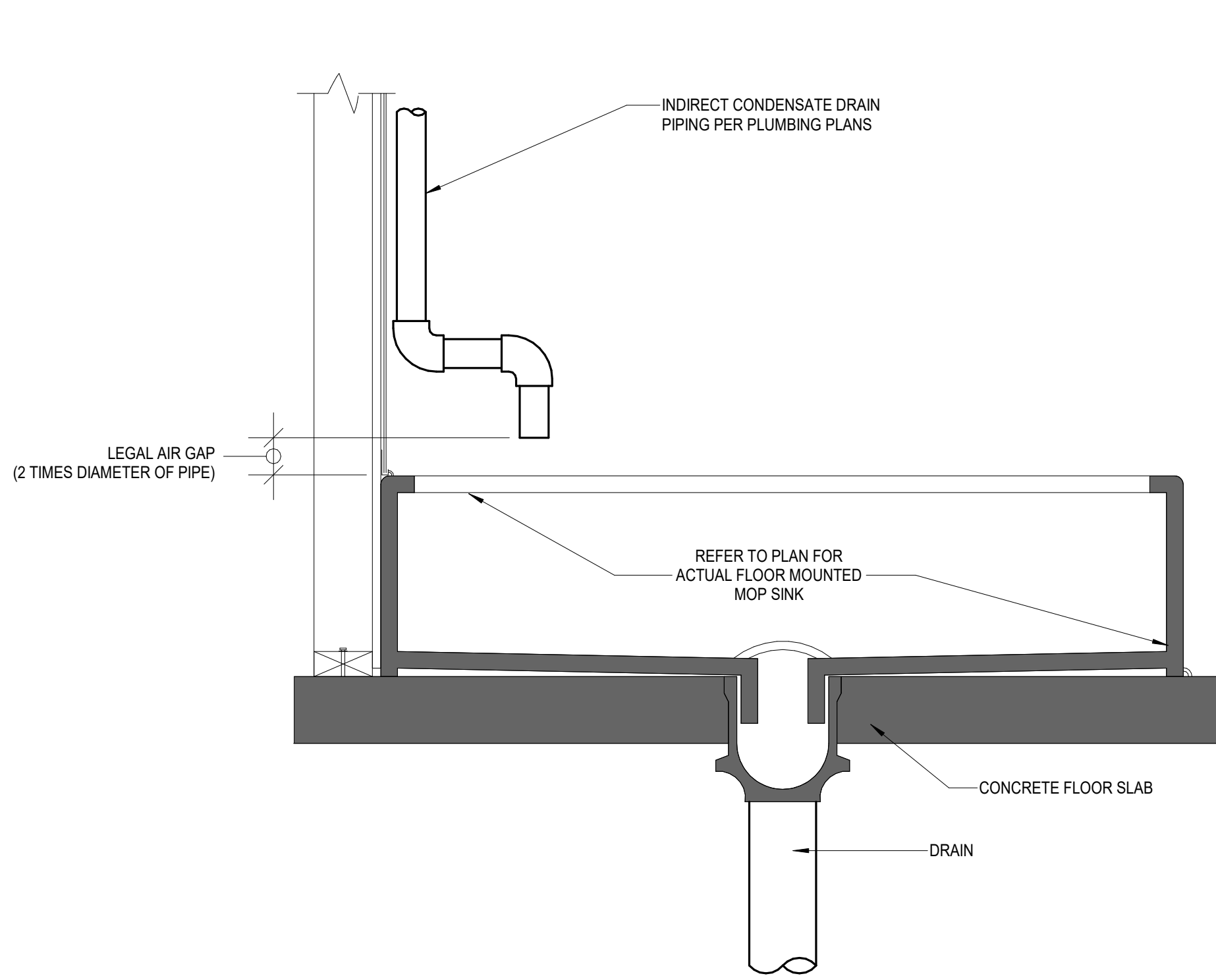
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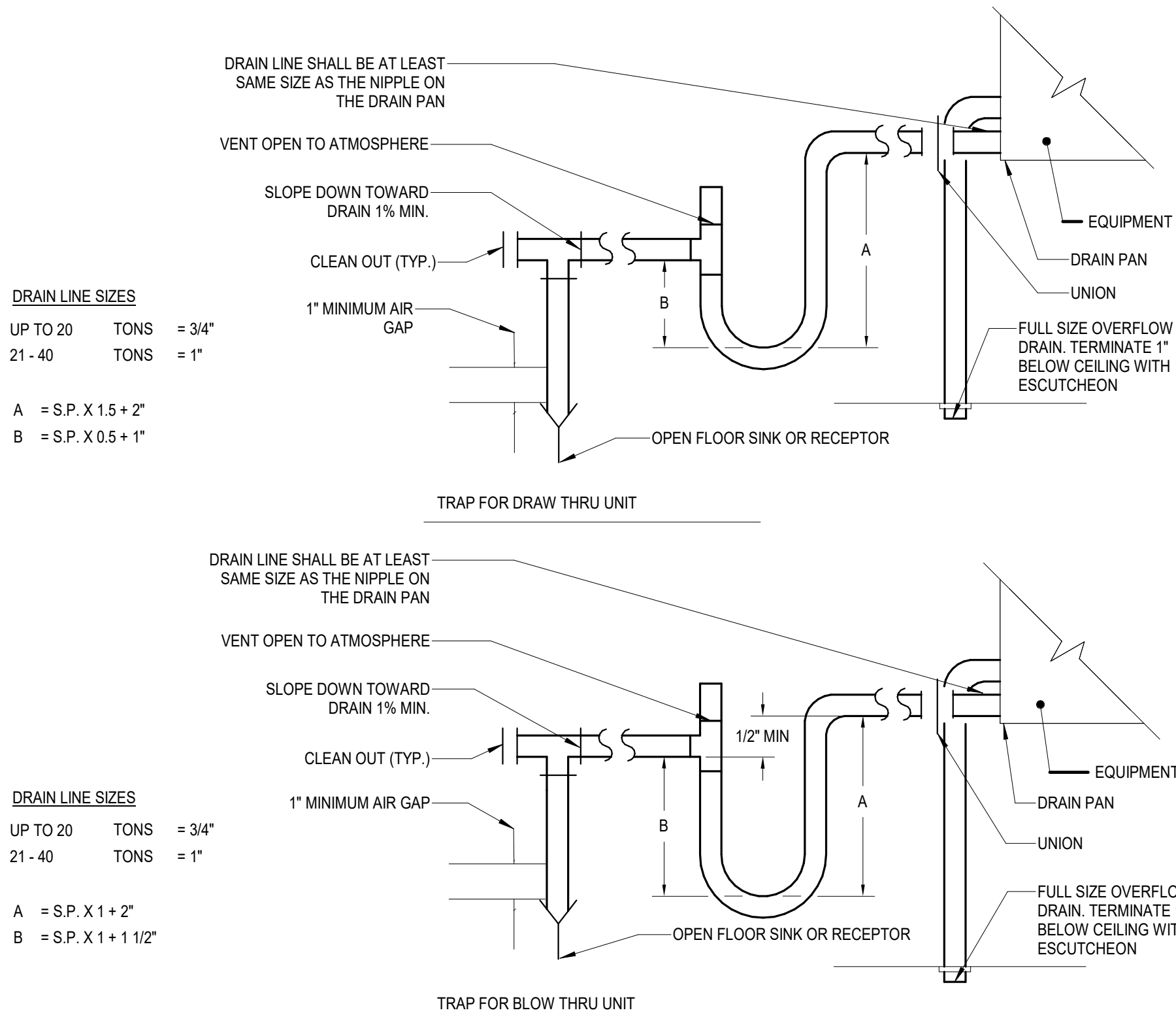
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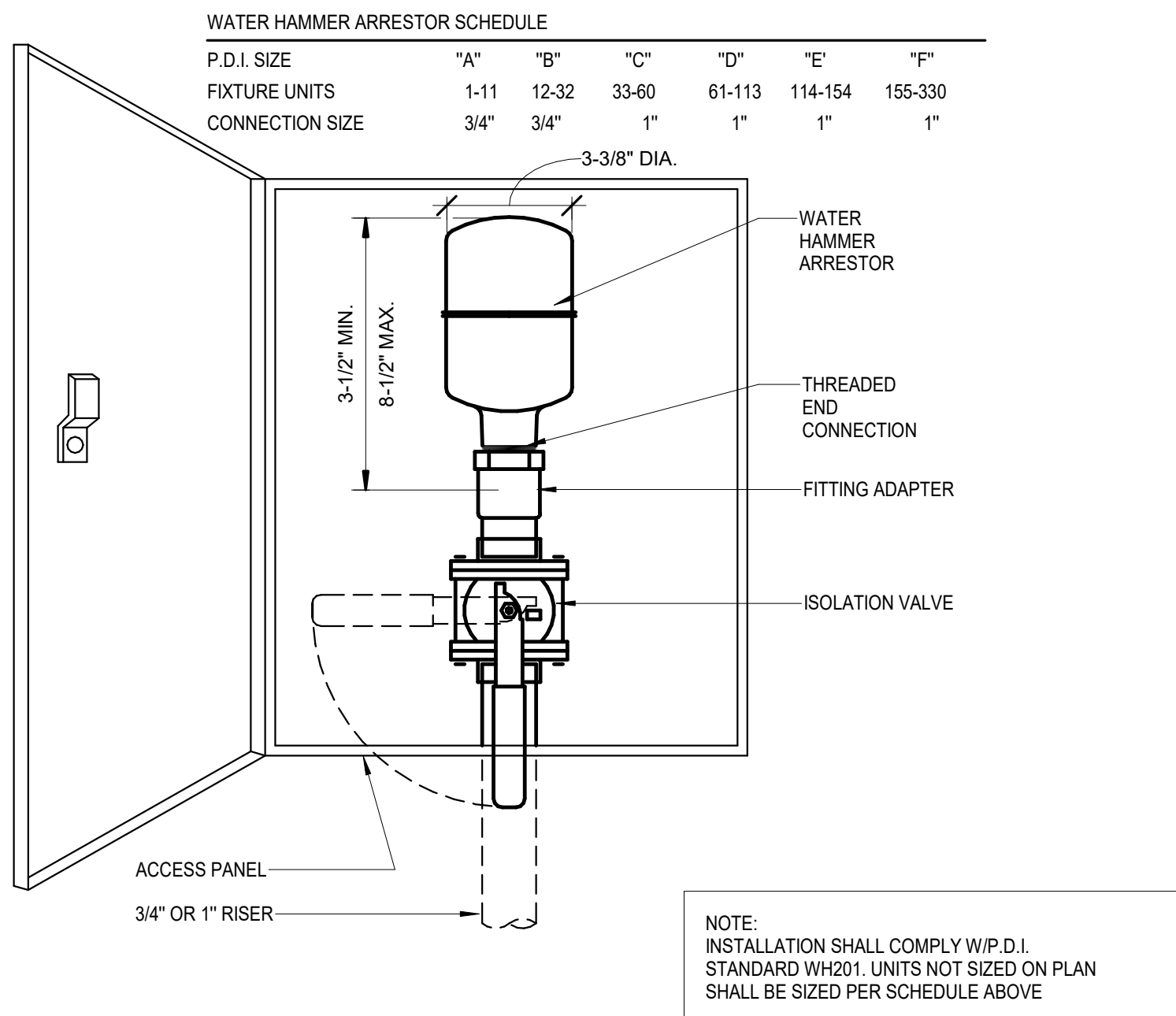
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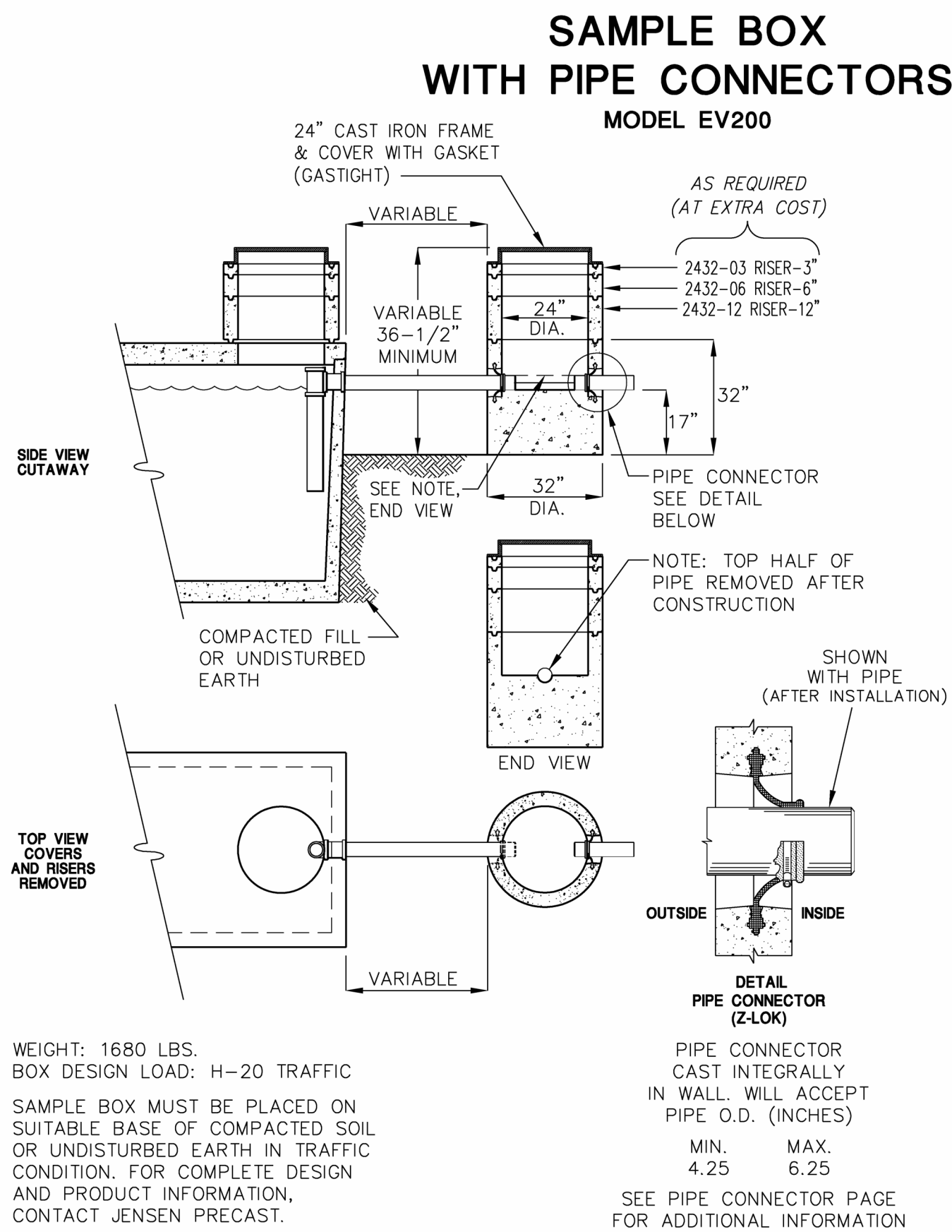
5 CONDENSATE DRAIN DISCHARGED INTO MOP SINK DETAIL
NO SCALE



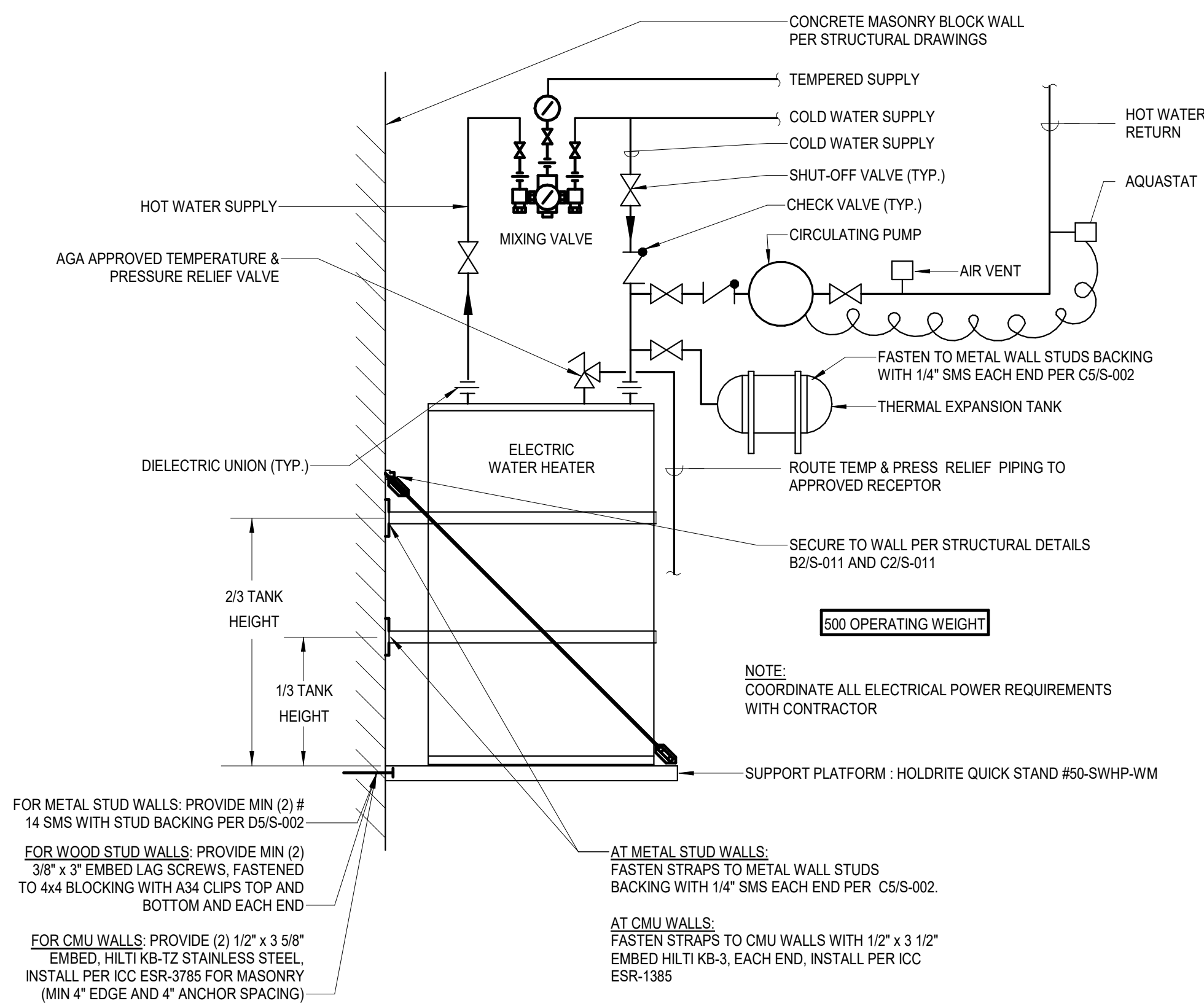
3 TYPICAL CONDENSATE DRAIN DETAIL
NO SCALE



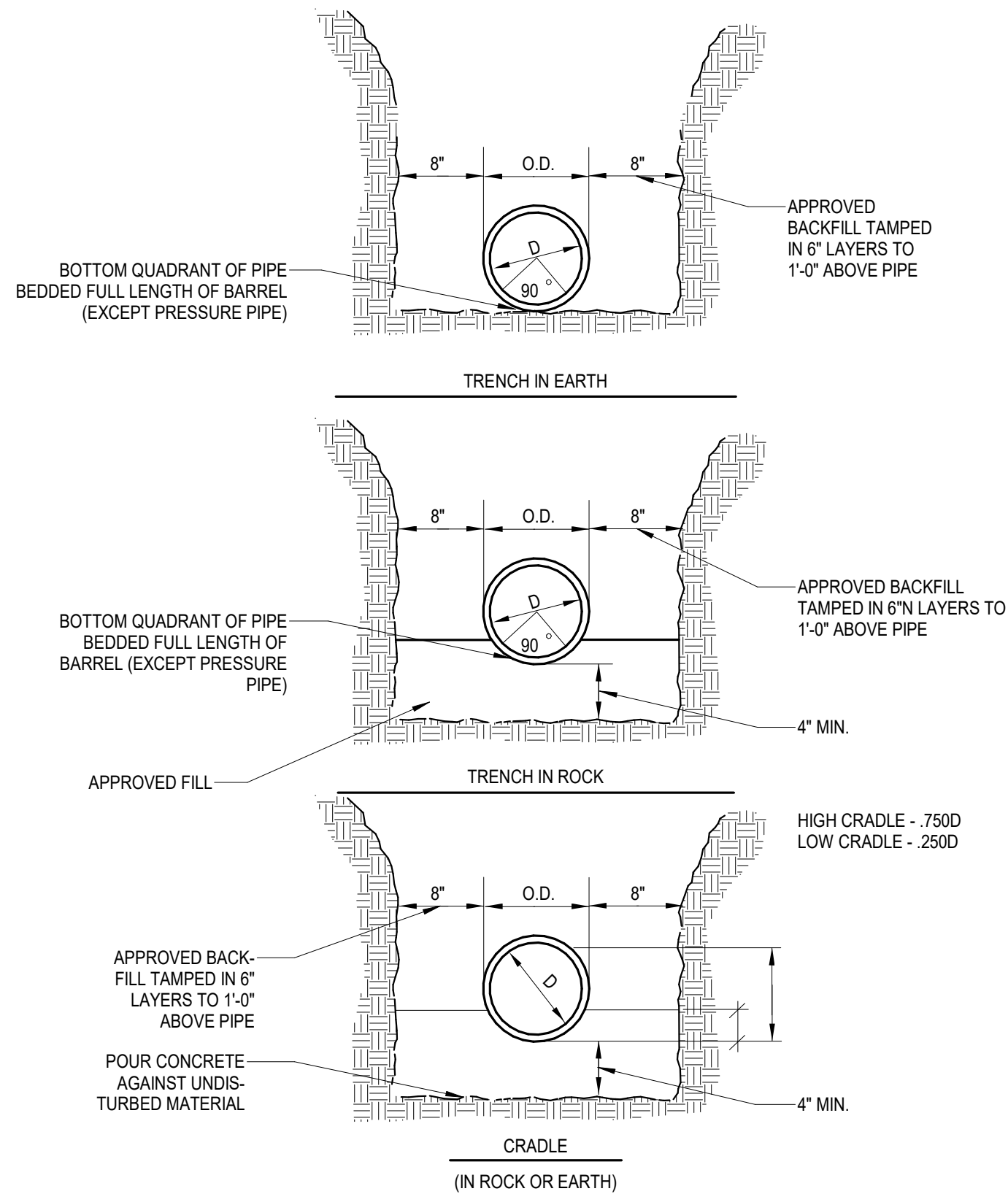
1 WATER HAMMER ARRESTOR ASSEMBLY DETAIL
NO SCALE



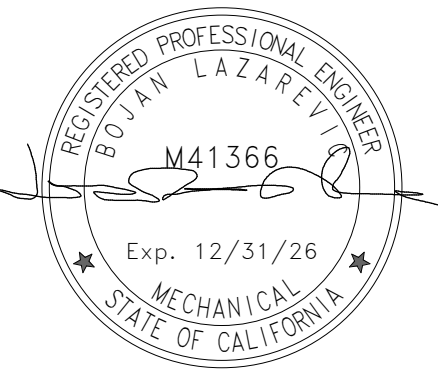
6 SAMPLE PORT DETAIL
NO SCALE



4 ELECTRIC WATER HEATER ON PLATFORM
NO SCALE



2 PIPE TRENCH BEDDING DETAIL
NO SCALE



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Project Name

HANGAR 10
RECONSTRUCTION

Project Number

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Description

PLUMBING DETAILS

Scale

12" = 1'-0"

P5.101

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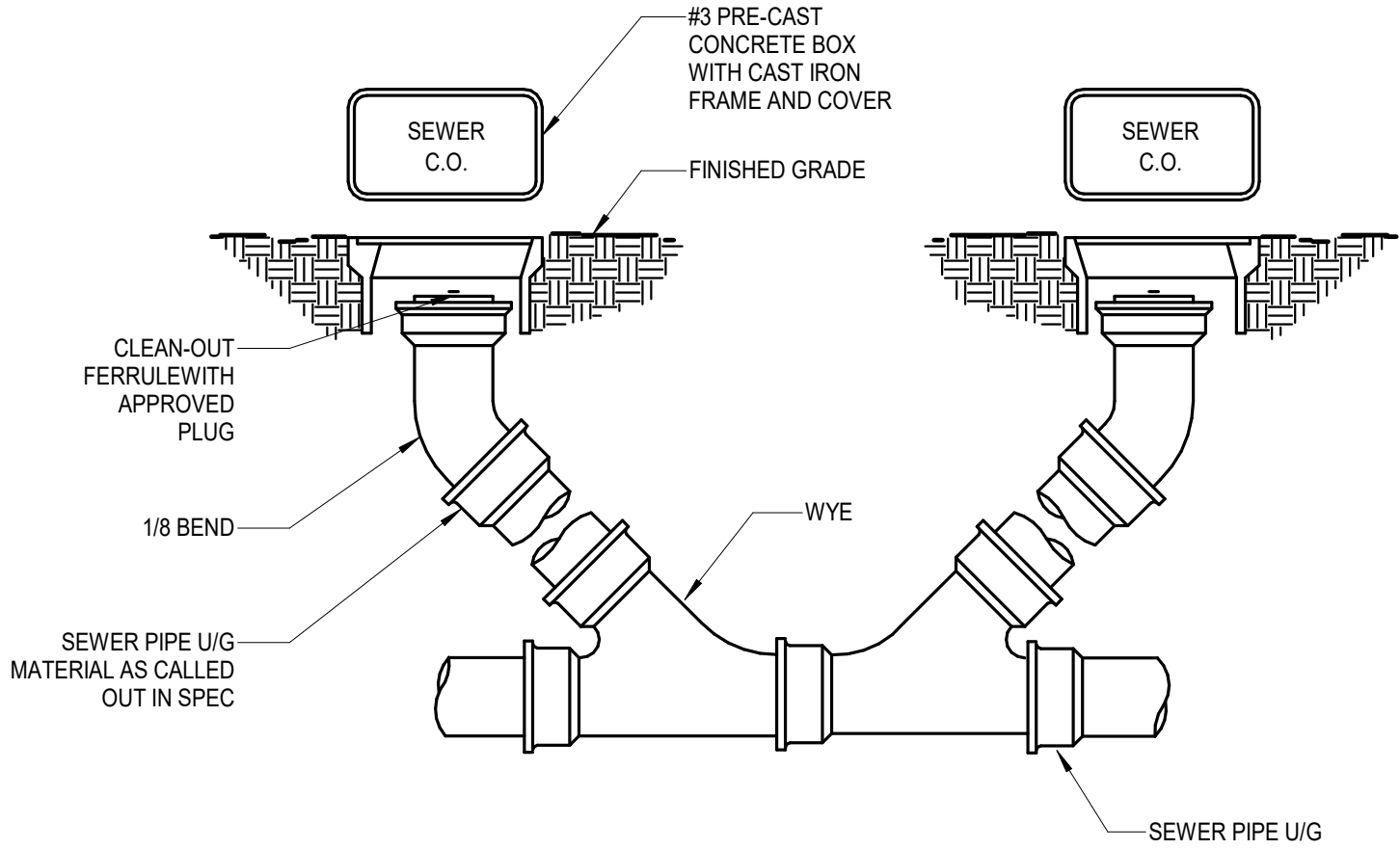
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HANGAR 10
RECONSTRUCTION
Project Number
007.3945.000
Description
PLUMBING DETAILS

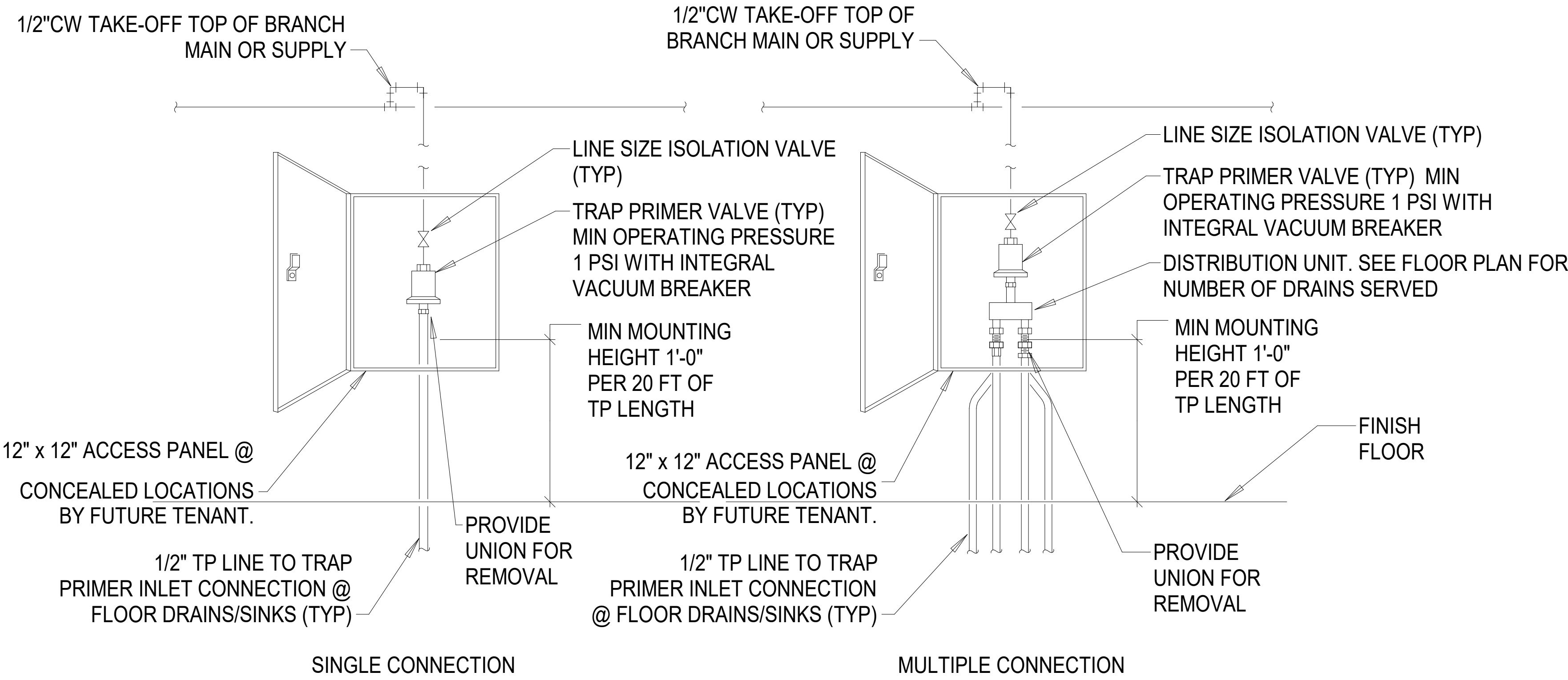
Scale
NO SCALE

P5.102

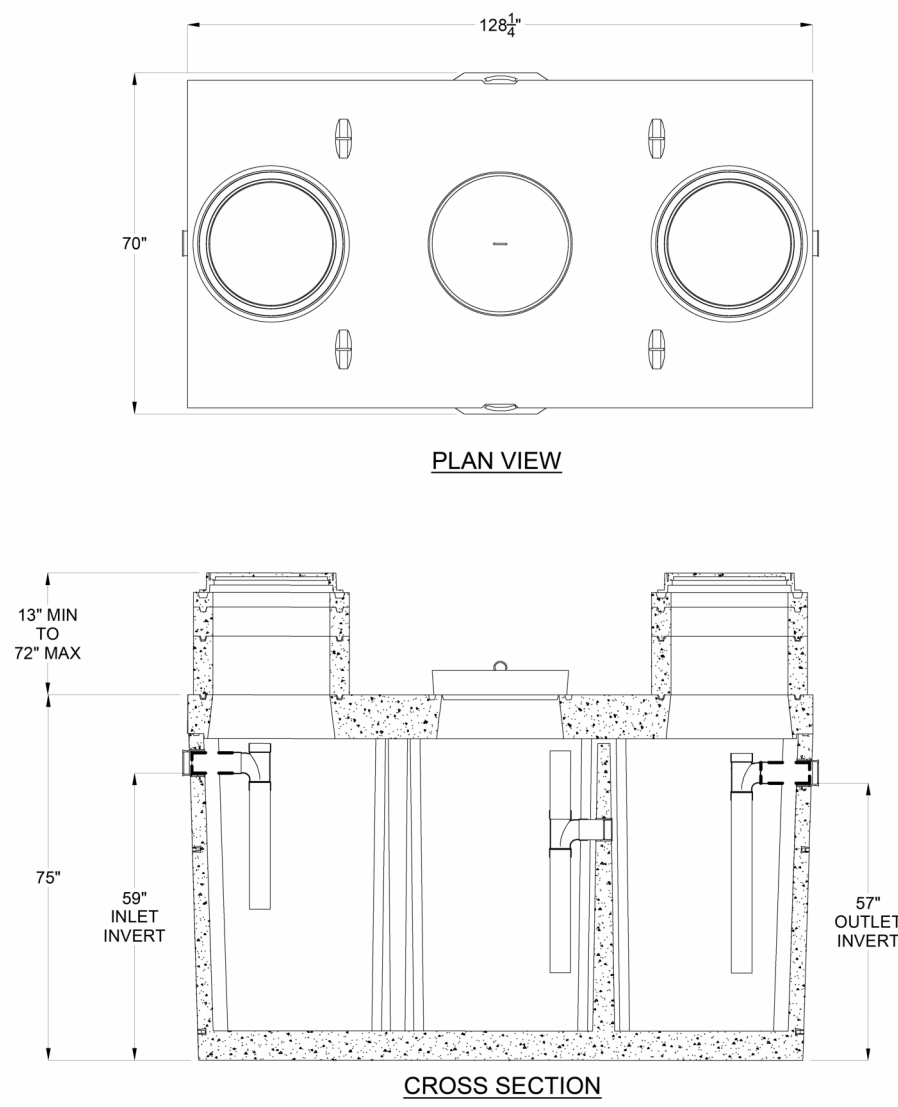
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3 TWO-WAY GRADE CLEAN OUT DETAIL
NO SCALE

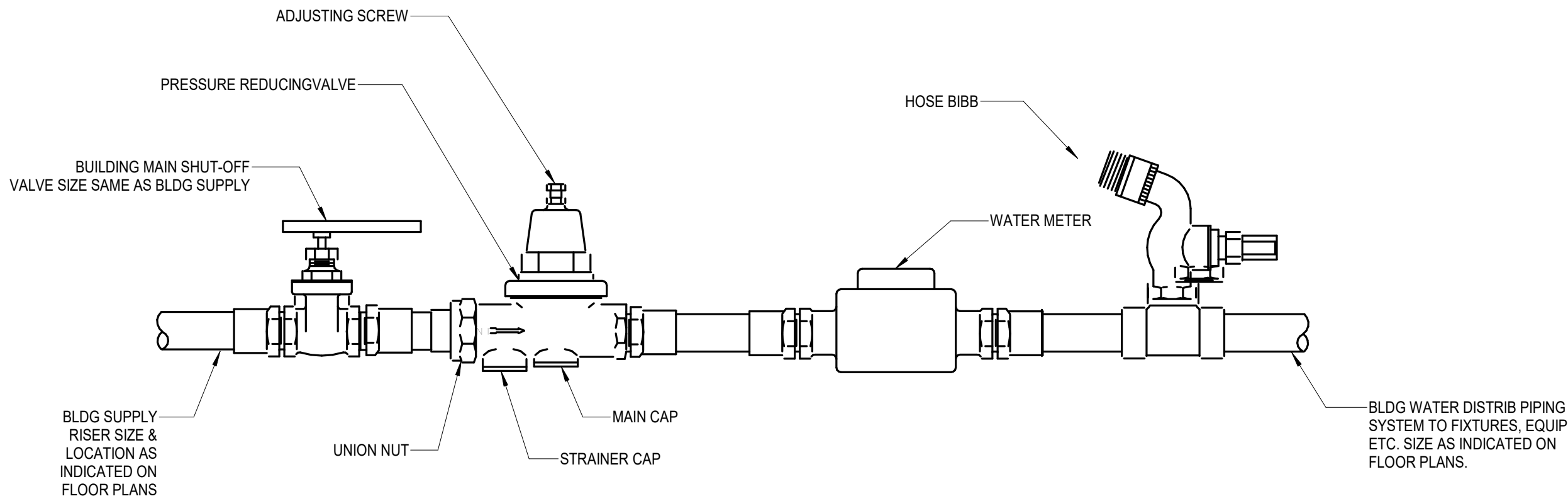


1 TRAP PRIMER IN ACCESS PANEL DETAIL
NO SCALE



REVISION:	1. 1" - 6/17/16 Top	DESIGNER:	19133.45 Lila	EST. 1980	WWW.JENSENPRECAST.COM	DESCRIPTION:	Tank 1P 1000 Gallon 4 Inch Laying Gravel Grease Interceptor 24"E, 24"D, 24"H	REV:	9-1
REVISION:	2. 1/10/16 Top	DESIGNER:	A-18 (AASHTO H20-44)	EST. 1980	WWW.JENSENPRECAST.COM	DESCRIPTION:	Tank 1P 1000 Gallon 4 Inch Laying Gravel Grease Interceptor 24"E, 24"D, 24"H	REV:	9-1
REVISION:	3. 1/10/16 Top	DESIGNER:	A-18 (AASHTO H20-44)	EST. 1980	WWW.JENSENPRECAST.COM	DESCRIPTION:	Tank 1P 1000 Gallon 4 Inch Laying Gravel Grease Interceptor 24"E, 24"D, 24"H	REV:	9-1

4 GREASE INTERCEPTOR DETAIL
NO SCALE



2 BUILDING MAIN WATER SHUT OFF VALVE, WATER METER AND PRESSURE REGULATOR DETAIL
NO SCALE

CITY OF IRVINE
HANGAR 10
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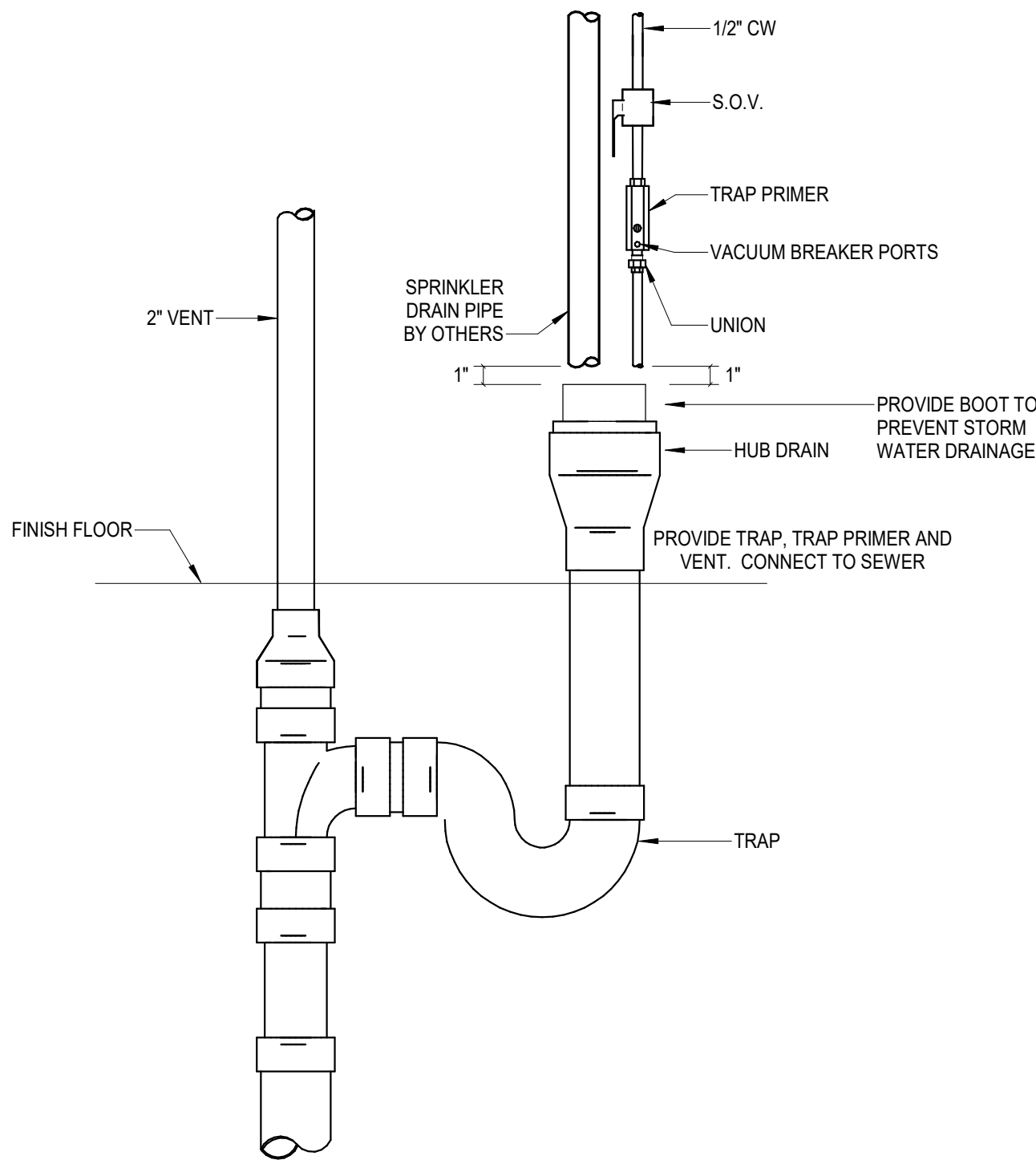
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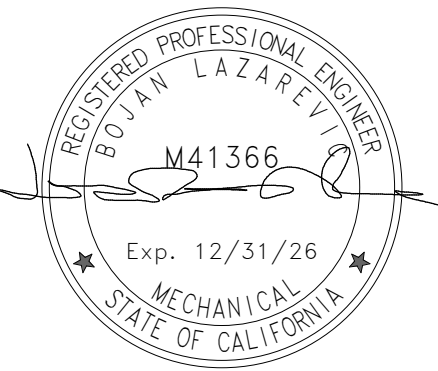


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1 HUB DRAIN DETAIL
NO SCALE

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Description
PLUMBING DETAILS

Scale
12" = 1'-0"

P5.103