

HELENA FIRE STATION # 3

1872 Kelleher Lane, Helena, MT. 59602

VOLUME I PROJECT #: CF25011



PROJECT TEAM

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VICINITY MAP



PROJECT SPECIFIC NOTES

1. DIMENSIONS ARE SHOWN ON THE DRAWINGS. DO NOT SCALE THE DRAWINGS.

2. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL NEW MATERIALS (UNO) & QUALIFIED CRAFTPERSONS TO COMPLETE THE WORK.

3. CONSTRUCTION DOCUMENTS SHOW THE DESIGN INTENT OF THE PROJECT & MAY NOT SHOW MINOR DETAILS OF PROPOSED INSTALLATION. THE INCLUSION OF THESE MINOR DETAILS IS IMPLIED TO PROVIDE A COMPLETE PROJECT & ARE TO BE INCLUDED AS A PART OF A BID.

4. ALL HEIGHTS ARE DIMENSIONED FROM THE TOP OF FINISHED FLOOR (AFF) UNLESS NOTED OTHERWISE.

5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSPECT EXISTING CONDITIONS PRIOR TO PROCEEDING WITH EACH INSTALLATION OR PART OF THE WORK. DISCREPANCIES MUST BE REPORTED TO THE ARCHITECT PRIOR TO PROCEEDING.

6. THE CONTRACTOR IS TO COORDINATE THE INSTALLATION OF MATERIALS & WORK OF OTHERS WHO ARE NOT SUB-CONTRACTORS TO THE GC, YET ARE REQUIRED IN PROVIDING A COMPLETED PROJECT. AREAS OF WORK REQUIRING COORDINATION INCLUDE BUT ARE NOT LIMITED TO THOSE INDICATED ON THE CONSTRUCTION DOCUMENTS.

7. REFER TO STRUCTURAL, MECHANICAL & ELECTRICAL DRAWINGS FOR COORDINATION OF WORK.

8. ALL DIMENSIONS ARE FROM FACE OF STUD UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL VERIFY ALL DIMENSION CONDITIONS PRIOR TO CONSTRUCTION.

9. IN THE CASE OF CONTRADICTIONS BETWEEN DRAWINGS OR BETWEEN DRAWINGS & SPECIFICATIONS, ASSUME THE MORE COSTLY APPROACH FOR BIDDING PURPOSES. BRING ALL CONTRADICTIONS TO THE ATTENTION OF THE ARCHITECT.

10. THE CONSTRUCTION DOCUMENTS CONSIST OF THE CONSTRUCTION DRAWINGS & SPECIFICATIONS INCLUSIVELY. SOME ITEMS MAY BE SHOWN ONLY ON THE DRAWINGS OR INDICATED ONLY IN THE SPECIFICATIONS. FOR EXAMPLE, THE SPECIFICATIONS MAY SAY TO PAINT ALL EXPOSED STRUCTURAL STEEL, BUT THIS WILL NOT BE CALLED OUT ON ALL OF THE DRAWINGS.

11. 3-D VIEWS MAY BE USED THROUGHOUT THE CONSTRUCTION DOCUMENTS. 3-D VIEWS ARE SHOWN TO CLARIFY CONDITIONS THAT CANNOT BE SHOWN IN OTHER VIEWS. 3-D VIEWS MAY NOT SHOW ALL DETAILS REQUIRED TO COMPLETE THE AREA. REFER TO DETAILS AT ADJACENT AREAS AS NECESSARY OR ASK THE ARCHITECT PRIOR TO BIDDING.

CODE REQUIREMENTS
THIS PROJECT SHALL COMPLY WITH THESE CODES, OR LATER EDITIONS, AS REQUIRED BY THE STATE OF MONTANA:

- 2021 INTERNATIONAL BUILDING CODE
- 2021 INTERNATIONAL EXISTING BUILDING CODE
- 2021 INTERNATIONAL MECHANICAL CODE
- 2021 UNIFORM PLUMBING CODE
- 2021 INTERNATIONAL FUEL GAS CODE
- 2021 INTERNATIONAL ELECTRIC CODE
- 2021 INTERNATIONAL FIRE CODE
- 2021 INTERNATIONAL ENERGY CONSERVATION CODE
- 2017 ICC A17.1 - ACCESSIBILITY
- ADMINISTRATIVE RULES OF MONTANA (ARM) TITLE 24, CH. 301

NO HAZARDOUS MATERIALS EXCEEDING THE LIMITS STATED IN THE 2021 INTERNATIONAL BUILDING CODE TABLES 414.2.5(1) & 414.5.1 WILL BE STORED IN THIS BUILDING.

THIS BUILDING IS TO BE EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM IN ACCORDANCE WITH APPLICABLE CODES.

REQUIRED STRUCTURAL TESTS & SPECIAL INSPECTIONS
IN ADDITION TO REGULAR INSPECTIONS, THE FOLLOWING ITEMS WILL ALSO REQUIRE STRUCTURAL TESTS & SPECIAL INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE 2021 INTERNATIONAL BUILDING CODE. SEE STRUCTURAL SHEET S000 - GENERAL STRUCTURAL NOTES FOR REGULAR INSPECTIONS, STRUCTURAL TEST REQUIREMENTS, & SPECIAL INSTRUCTIONS.

REQUIRED ENERGY CODE TESTS & SPECIAL INSPECTIONS
IN ADDITION TO REGULAR INSPECTIONS, COMPLY WITH TESTS & SPECIAL INSPECTIONS IN ACCORDANCE WITH THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE.

THESE DRAWINGS WERE PREPARED BY DOWLING ARCHITECTS FOR CONSTRUCTION OF THE BUILDING DESCRIBED. AS SUCH, THEY ARE THE PROPERTY OF DSA, P.C. AND MAY NOT BE REPRODUCED, COPIED OR USED IN ANY WAY WITHOUT PRIOR APPROVAL FROM DSA, P.C.

NOTE:
THIS SET OF CONSTRUCTION DOCUMENTS IS GENERATED FROM AN INTELLIGENT, 3 DIMENSIONAL COMPUTER MODEL. THIS CONSTRUCTION DOCUMENT SET IS REPRESENTATIVE OF THE CONDITIONS ACTUALLY MODELED THAT CAN BE SHOWN.

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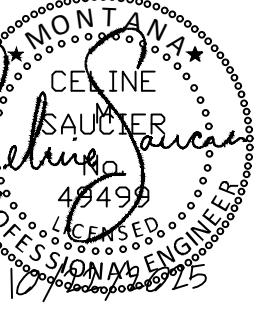
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Morrison & Maierle
engineers • surveyors • planners • scientists

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GENERAL NOTES

PROJECT #: 25-668
ISSUE DATES:

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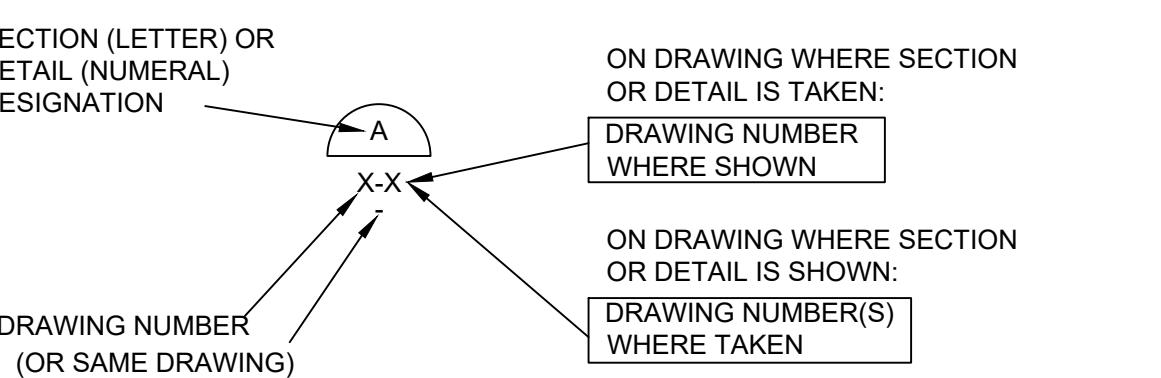
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C1-0

LEGEND

	EXISTING FIRE HYDRANT	SS — SS — PROPOSED GRAVITY SAN SEWER SERVICE
	EXISTING WATER VALVE	WS — WS — PROPOSED DOMESTIC WATER SERVICE
	EXISTING SANITARY SEWER MANHOLE	FIRE — FIRE — PROPOSED FIRE SERVICE
	EXISTING STORM DRAIN FACILITIES	UTIL — UTIL — PROPOSED UTILITY CONDUIT
	EXISTING FIBER/TELEPHONE FACILITIES	IRRIG — IRRIG — PROPOSED IRRIGATION SLEEVE
	EXISTING ELECTRICAL FACILITIES	— EXISTING BUILDING
	EXISTING GAS FACILITIES	— EXISTING CONCRETE
	EXISTING WELL	— EXISTING CURB FACE
	EXISTING TRAFFIC SIGN	— EXISTING CURB FLOWLINE
	EXISTING CMP CULVERT	— EXISTING TOP BACK OF CURB
	EXISTING RCP CULVERT	— EXISTING PARKING STRIPE
	EXISTING STORM SEWER MAIN	— EXISTING ASPHALT
	EXISTING SAN SEWER MAIN	— EXISTING GRAVEL EDGE
	EXISTING SAN SEWER SERVICE	— EXISTING SIDEWALK
	EXISTING SAN SEWER FORCE MAIN	— PROPOSED BUILDING
	EXISTING UNDERGROUND POWER	— PROPOSED CONCRETE
	EXISTING UNDERGROUND TELEPHONE	— PROPOSED CURB FLOWLINE
	EXISTING UNDERGROUND CABLE	— PROPOSED TOP BACK OF CURB
	EXISTING GAS LINE	— PROPOSED PARKING STRIPE
	EXISTING OVERHEAD POWER	— PROPOSED ASPHALT
	EXISTING OVERHEAD TELEPHONE	— PROPOSED GRAVEL EDGE
	EXISTING PETROLEUM LINE	— PROPOSED SIDEWALK
	EXISTING WATER MAIN	— GRAPHICAL SIDEWALK JOINT
	EXISTING WATER SERVICE	— PROPOSED ASPHALT GRADE BREAK
	PROPOSED SAN SEWER CLEANOUTS	— EXISTING MAJOR CONTOUR
	PROPOSED STORM DRAIN INLET	— 38XX — EXISTING MINOR CONTOUR
	PROPOSED STORM DRAIN MANHOLE	— PROPOSED MAJOR CONTOUR
	PROPOSED STORM DRAIN	— 38XX.00 — PROPOSED MINOR CONTOUR
	PROPOSED ROOF DRAIN	

DETAIL AND SECTION DESIGNATION



Know what's below.
Call before you dig.



VICINITY MAP
NOT TO SCALE

GENERAL UTILITY NOTES:

- STANDARD SYMBOLS AND LINE TYPES ARE SHOWN IN THE LEGEND. SOME SYMBOLS OR LINE TYPES SHOWN MAY NOT BE SHOWN ON THE PLANS.
- IN GENERAL, EXISTING STRUCTURES AND FACILITIES ARE NOTED AS "EXISTING" AND ARE SHOWN IN LIGHT LINE WEIGHTS OR AS SCREENED BACKGROUND. NEW STRUCTURES OR FACILITIES ARE SHOWN IN HEAVY LINE WEIGHTS.
- CONSTRUCTION NOTES:**
 - ALL IMPROVEMENTS ON THIS PROJECT SHALL BE COMPLETED IN ACCORDANCE WITH THE MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS, SEVENTH EDITION DATED APRIL 2021 (MPWS); THE CITY OF HELENA DESIGN STANDARDS, AND THE PROJECT SPECIFICATIONS.
 - CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE DIVISION OF INDUSTRIAL REGULATIONS (OSHA) SAFETY STANDARDS. IF REQUESTED BY THE INSPECTOR, THE CONTRACTOR SHALL PROVIDE PROOF OF A PERMIT FROM SAID DIVISION.
 - THE CONTRACTOR'S OPERATIONS SHALL BE CONFINED WITHIN THE PROJECT LIMITS. MATERIALS AND EQUIPMENT SHALL BE STORED ON THE PROJECT SITE WHERE APPROVED BY THE OWNER. IT SHALL BE UNDERSTOOD THAT THE RESPONSIBILITY FOR PROTECTION AND SAFEGEKEEPING OF EQUIPMENT AND MATERIALS ON OR NEAR THE SITE WILL BE ENTIRELY THAT OF THE CONTRACTOR AND THAT NO CLAIM SHALL BE MADE AGAINST THE OWNER BY REASON OF ANY ACT OF AN EMPLOYEE OR TRESPASSER.
 - CONTRACTOR SHALL VERIFY EXISTING CONDITIONS PRIOR TO CONSTRUCTION. ANY DISCREPANCIES FOUND ARE TO BE BROUGHT TO THE ENGINEER'S ATTENTION PRIOR TO COMMENCEMENT OR CONTINUATION OF CONSTRUCTION ACTIVITIES.
 - REFERENCE ALL SURVEY MONUMENTS, SECTION CORNERS, 1/4 CORNERS, AND PROPERTY CORNERS PRIOR TO BEING DISTURBED BY CONSTRUCTION. ANY MONUMENTS AND CORNERS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED BY A PROFESSIONAL LAND SURVEYOR (PLS) REGISTERED IN THE STATE OF MONTANA.
 - A PRE-CONSTRUCTION MEETING (AS REQUIRED) SHALL BE HELD WITH THE GENERAL CONTRACTOR, SITE SUBCONTRACTOR, CITY OF HELENA, OWNER, AND MORRISON-MAIERLE, INC. PRIOR TO THE START OF CONSTRUCTION.
 - THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND THE CITY, COUNTY, AND/OR STATE INSPECTOR 48 HOURS PRIOR TO COMMENCING CONSTRUCTION AND 24 HOURS IN ADVANCE OF SPECIFIC INSPECTION NEEDS DURING THE COURSE OF THE WORK. ALL WORK SHALL BE PERFORMED DURING NORMAL WORKING HOURS AND SUBJECT TO THE AVAILABILITY OF AN INSPECTOR AND APPROVED BY THE ENGINEER. THE CONTRACTOR WILL BE BILLED FOR SAID INSPECTION SERVICES AS PROVIDED IN THE MOST RECENTLY ADOPTED FEES FOR SUCH SERVICES.
 - THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION ACTIVITIES IN A MANNER TO MINIMIZE INCONVENIENCE TO THE ADJACENT BUSINESSES.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PUBLIC AND PRIVATE PROPERTY INSOFAR AS IT MAY BE AFFECTED BY THESE OPERATIONS. ALL COSTS FOR PROTECTING, REMOVING, AND RESTORING EXISTING IMPROVEMENTS SHALL BE BORNE SOLELY BY THE CONTRACTOR.
 - THE CONTRACTOR SHALL IMMEDIATELY CLEAN UP ANY CONSTRUCTION MATERIALS INADVERTENTLY DEPOSITED ON EXISTING STREETS, SIDEWALKS, OR OTHER PUBLIC RIGHTS-OF-WAY AND MAKE SURE STREETS AND WALKWAYS ARE CLEANED AT THE END OF EACH WORKING DAY.
 - CONSTRUCTION WORK ZONE TRAFFIC SIGNS SHALL BE FURNISHED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF THE REGULATORY AGENCIES HAVING JURISDICTION. A TRAFFIC CONTROL PLAN, PREPARED BY THE CONTRACTOR, MAY BE REQUIRED BY THE CITY OR STATE. "CONSTRUCTION AHEAD" WARNING SIGNS ARE TO BE INSTALLED ALONG ADJACENT ROADS OR DRIVEWAYS. FLASHERS WITH CAUTION TAPE ARE TO BE INSTALLED WHERE ANY CONSTRUCTION ACTIVITY CROSSES A SIDEWALK OR PEDESTRIAN PATH IN ACCORDANCE WITH THE SPECIFICATIONS AND ANY OR ALL LOCAL REGULATIONS.
 - AREAS ON THE SITE TO BE GRADED SHALL BE CLEARED AND GRUBBED OF ALL VEGETATION AND DEBRIS. THESE MATERIALS SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
 - SURFACE SOILS WITHIN THE PROJECT LIMITS CONTAINING ROOTS AND ORGANIC MATTER SHALL BE STRIPPED DOWN AND STOCKPILED OR DISCARDED AS DIRECTED BY THE OWNER OR ENGINEER. SOIL BORING INFORMATION IS PROVIDED IN THE GEOTECHNICAL INVESTIGATION REPORT PREPARED BY PIONEER ON AUGUST 7, 2025. DEEPER STRIPPING WHERE REQUIRED TO REMOVE WEAK SOILS OR ACCUMULATIONS OR ORGANIC MATTER, SHALL BE PERFORMED WHEN DETERMINED BY THE ENGINEER OR OWNER'S AUTHORIZED REPRESENTATIVE. STRIPPING SHALL BE REMOVED FROM THE SITE OR STOCKPILED AT A LOCATION DESIGNATED BY THE OWNER.
 - THE GROUND SURFACE EXPOSED BY STRIPPING SHALL BE SCARIFIED TO A MINIMUM DEPTH OF EIGHT INCHES (8"), MOISTURE CONDITIONED TO THE PROPER MOISTURE CONTENT FOR COMPACTION, AND COMPAKED AS REQUIRED FOR COMPACTED FILL. RECOMPACT SHALL BE APPROVED BY THE ENGINEER PRIOR TO PLACING FILL.
 - NO STOPPING, PARKING, OR STORING OF CONSTRUCTION MATERIALS IN THE PUBLIC STREETS/ROADS, RIGHTS-OF-WAY, OR ANY DRIVEWAY IS ALLOWED.
 - THE CONTRACTOR SHALL RESTORE ALL ROADWAY SURFACES TO EQUAL OR BETTER CONDITION THAN EXISTED PRIOR TO EXCAVATION AS DETERMINED BY AGENCY, OWNER, AND/OR ENGINEER.
 - ASPHALT AND CONCRETE SHALL BE SAW CUT OR NEAT CUT AS APPROVED BY THE ENGINEER.
 - THE CONTRACTOR SHALL UTILIZE COMPACTION EQUIPMENT SUITABLE FOR THE SOIL TYPES AND SURFACE MATERIALS ENCOUNTERED ON THE PROJECT.
 - SUBGRADE, SUB-BASE, BASE, AND SURFACE COURSE COMPACTION SHALL CONFORM TO ALL APPLICABLE SPECIFICATIONS NOTED IN THE MPWS; CITY OF HELENA DESIGN STANDARDS; AND THE CITY OF HELENA FIRE STATION 3 GEOGRAPHICAL REPORT AUGUST 7, 2025.
 - CONCRETE SHALL BE CLASS #4000 UNLESS OTHERWISE SPECIFIED.
 - CONTRACTION JOINTS SHALL BE CONSTRUCTED BY SAWING OR SCORING. WHEN SCORING, A TOOL SHALL BE USED THAT WILL LEAVE CORNERS ROUNDED AND TO DESTROY AGGREGATE INTERLOCK FOR SPECIFIED MINIMUM DEPTH.
 - GRADE ELEVATIONS INDICATED BY 'XXX' ON PLANS ARE +3800' TO PROJECT DATUM.
 - SIDE SLOPES FROM DRIVE AND PARKING AREAS SHALL BE 4:1 MAX UNLESS OTHERWISE SPECIFIED.
 - CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT THERE IS A CONSTRUCTION PERMIT APPROVED BY THE MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY (MDEQ) OR LOCAL GOVERNING AGENCY AS APPROPRIATE FOR THE CONTROL OF STORM WATER RUNOFF. IF THERE IS NOT AN APPROVED PERMIT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE NECESSARY APPROVALS FROM MDEQ OR THE LOCAL GOVERNING AGENCY.
 - CONTRACTOR IS RESPONSIBLE FOR PROJECT DUST CONTROL.
 - ACCESSIBLE ROUTES SHALL HAVE A MAXIMUM RUNNING SLOPE OF 5%.

ABBREVIATIONS

ABDN	ABANDON	CSP	CORRUGATED STEEL PIPE	FLR	FLOOR	MH	MANHOLE	SEC	SECTION
AC	ASPHALTIC CONCRETE, ALUMINUM CAP	CTR	CENTER	FT	FOOT, FEET	MIN	MINIMUM	SPEC	SPECIFICATION
ADA	AMERICANS WITH DISABILITIES ACT	CU	CUBIC	FTG	FOOTING	MISC	MISCELLANEOUS	SQ	SQUARE
ADDL	ADDITIONAL	CU FT, CF	CUBIC FEET	GA	GAGE, GAUGE	N	NORTH	SQ FT, SF	SQUARE FOOT
ADJ	ADJACENT, ADJUST	CU IN	CUBIC INCH	GAL	GALLON	NE	NORTHEAST	SQ IN	SQUARE INCH
AFF	ABOVE FINISHED FLOOR	CULV	CULVERT	GB	GRADE BREAK	NIC	NOT IN CONTRACT	STA	STATION
ALT	ALTERNATE	CU YD	CUBIC YARD	GFA	GROSS FLOOR AREA	NOM	NOMINAL	SS	SANITARY SEWER
APPROX	APPROXIMATE	D & L	D&L FOUNDRY AND SUPPLY	GND	GROUND	NTS	NOT TO SCALE	STD	STANDARD
ARCH	ARCHITECTURE, ARCHITECTURAL	DBL	DOUBLE	GSP	GALVANIZED STEEL PIPE	NW	NORTHWEST	SVC	SERVICE
ARCP	ARCHED REINFORCED CONCRETE PIPE	DI	DUCTILE IRON, DRAIN INLET	GVL	GRAVEL	OC	ON CENTER	TW	SIDEWALK, SOUTHWEST
ASP	ASPHALT	DIA, Ø	DIA, Ø DIAMETER	HC	HANDICAP	OD	OUTSIDE DIAMETER	TB	THRUST BLOCK
AVG	AVERAGE	DIM	DIMENSION	HDPE	HIGH DENSITY POLYETHYLENE	OHP	OVERHEAD POWER	TBC	TOP BACK OF CURB
BC	BUILDING CORNER	DIR	DIRECTION	HORIZ	HORIZONTAL	PC	POINT OF CURVE	TEMP	TEMPORARY, TEMPERATURE
BFF	BELOW FINISHED FLOOR	DTL	DETAIL	HP	HIGH POINT	PI	POINT OF INTERSECTION	TOC	TOP OF CONCRETE
BH	BOREHOLE	DWG	DRAWING	HT	HEIGHT	PL	PROPERTY LINE	TRANS	TRANSITION
BLDG	BUILDING	E	EAST	HWY	HIGHWAY	PRELIM	PRELIMINARY	TW	TOP OF WALL
BLK	BLOCK	EA	EACH, EDGE OF ASPHALT	HYD	HYDRANT	PROP	PROPERTY	TYP	TYPICAL
BM	BENCHMARK	EC	EDGE OF CONCRETE	ID	INSIDE DIAMETER	PT	POINT, POINT OF TANGENCY	UG	UNDERGROUND
BRG	BEARING	EG	EDGE OF GRAVEL, EXISTING GROUND	IE	INVERT ELEVATION	PVC	POLYVINYL CHLORIDE	UTIL	UTILITY
BW	BOTTOM OF WALL	EJW	EAST JORDAN IRON WORKS	IN	INCH	PVMT	PAVEMENT	VERT	VERTICAL
CHK	CHECK	EL, ELEV	ELEVATION	INSUL	INSULATE	RACET	ROAD APPROACH CULVERT END	VOL	VOLUME
CI	CAST IRON	ELEC	ELECTRIC, ELECTRICAL	INT	INTERIOR	RAD	REQUIRED	VPD	VEHICLES PER DAY
CIPC	CAST IN-PLACE CONCRETE	ENGR	ENGINEER	INV	INVERT	RC	RADIUS	W	WEST
CIRC	CIRCULAR	EP	EDGE OF PAVEMENT	LAT	LATITUDE	RCP	REINFORCED CONCRETE	W/	WITH
CL	CENTERLINE	EXC	EXCAVATE	LF	LINEAR FEET	REF	REFERENCE	WO	WITHOUT
CMP	CORRUGATED METAL PIPE	EX	EXISTING	LONG	LONGITUDE, LONGITUDINAL	REQD	REQUIRED	WL	WATERLINE
CMU	CONCRETE MASONRY UNITS	EXT	EXTERIOR	LT	LEFT	RT	RIGHT	WSEL	WATER SURFACE ELEVATION
CO	CLEANOUT	FD	FLOOR DRAIN	LVL	LEVEL	R/W	RIGHT-OF-WAY	WV	WATER VALVE
COB	CITY OF BOZEMAN	FDN	FOUNDATION	MATL	MATERIAL	S	SOUTH	XFMR	TRANSFORMER
COMB	COMBINATION	FES	FLARED END SECTION	MAX	MAXIMUM	SAN	SANITARY	YD	YARD
CONC	CONCRETE	FET	FLARED END TERMINAL	MDT	MONTANA DEPARTMENT OF TRANSPORTATION	SCH	SCHEDULE		
CONN	CONNECT, CONNECTION	FF	FINISHED FLOOR	MECH	MECHANICAL	SD	STORM DRAIN		
COORD	COORDINATE	FG	FINISHED GRADE	MFD	MANUFACTURED	SE	SOUTHEAST		
CP	CONTROL POINT	FHYD	FIRE HYDRANT	FL	FLOWLINE	MFR	MANUFACTURER		
CPP	CORRUGATED PLASTIC PIPE								

NOTE:
FOR ABBREVIATIONS NOT LISTED, CONTACT THE
ENGINEER.

PURPOSE OF SURVEY: DESIGN SURVEY FOR PROPOSED FIRE STATION IMPROVEMENTS

DATE OF SURVEY: MARCH–APRIL 2025

SURVEY AREA: SOUTHEAST PORTION OF TRACT 1 OF COS#3137037, BEING THE CITY OF HELENA PUBLIC WORKS YARD, ALONG WITH THE KELLEHER LANE RIGHT-OF-WAY, AND PORTIONS OF LOT 15 OF BURNHAM RANCH SUBDIVISION, PHASE 1.

OWNERS OF RECORD: CITY OF HELENA

SURVEY COMMISSIONED BY: DOWLING SANDHOLM ARCHITECTS

UTILITIES: INFORMATION OBTAINED FROM CITY OF HELENA GIS AND HAS BEEN COMBINED WITH OBSERVED EVIDENCE AND MARKS PROVIDED BY MT ONE CALL TO DEVELOP A VIEW OF UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND UTILITIES CANNOT BE ACCURATELY, COMPLETELY, OR RELIABLY DEPICTED. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION MAY BE NECESSARY.

A HIGH-PRESSURE NATURAL GAS MAIN EXISTS IN A 40' EASEMENT CROSSING THE PROPERTY. CONTACT NORTHWEST ENERGY DAMAGE PREVENTION REPRESENTATIVE RACHEL D'AMICO (406-497-2215) FOR DESIGN COORDINATION AND JOE CARMODY (406-422-3276) WHEN WORKING WITHIN 25' OF THE LOCATED UTILITY.

BOUNDARY & EASEMENTS: BOUNDARIES OF PROPERTIES IN THE SURVEY AREA SHOWN ARE ESTABLISHED FROM FIELD-LOCATED MONUMENTS OF RECORD. ADJACENT PROPERTIES MAY BE SHOWN BASED CALCULATIONS FROM RECORD DIMENSIONS. A TITLE COMMITMENT WAS NOT PROVIDED FOR THIS SURVEY, THUS NOT ALL EASEMENTS OR OTHER ENCUMBRANCES ON TITLE MAY BE SHOWN

BASIS OF BEARINGS

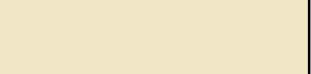
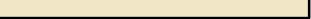
CITY OF HELENA LDP
GEODETIC NORTH OBTAINED BY GPS OBSERVATION
DATUM: NAD83(2011)(EPOCH 2010.00)
PROJECTION: TRANSVERSE MERCATOR
CENTRAL MERIDIAN: W 111°57'00" (-111.95°)
PROJECT ORIGIN LATITUDE: N 46°30'00" (46.5°)
SCALE FACTOR AT CENTRAL MERIDIAN: 1.000191
FALSE NORTHING: 1000,000.00 ift (30,480m)
FALSE EASTING: 200,000.00 ift (60,960m)

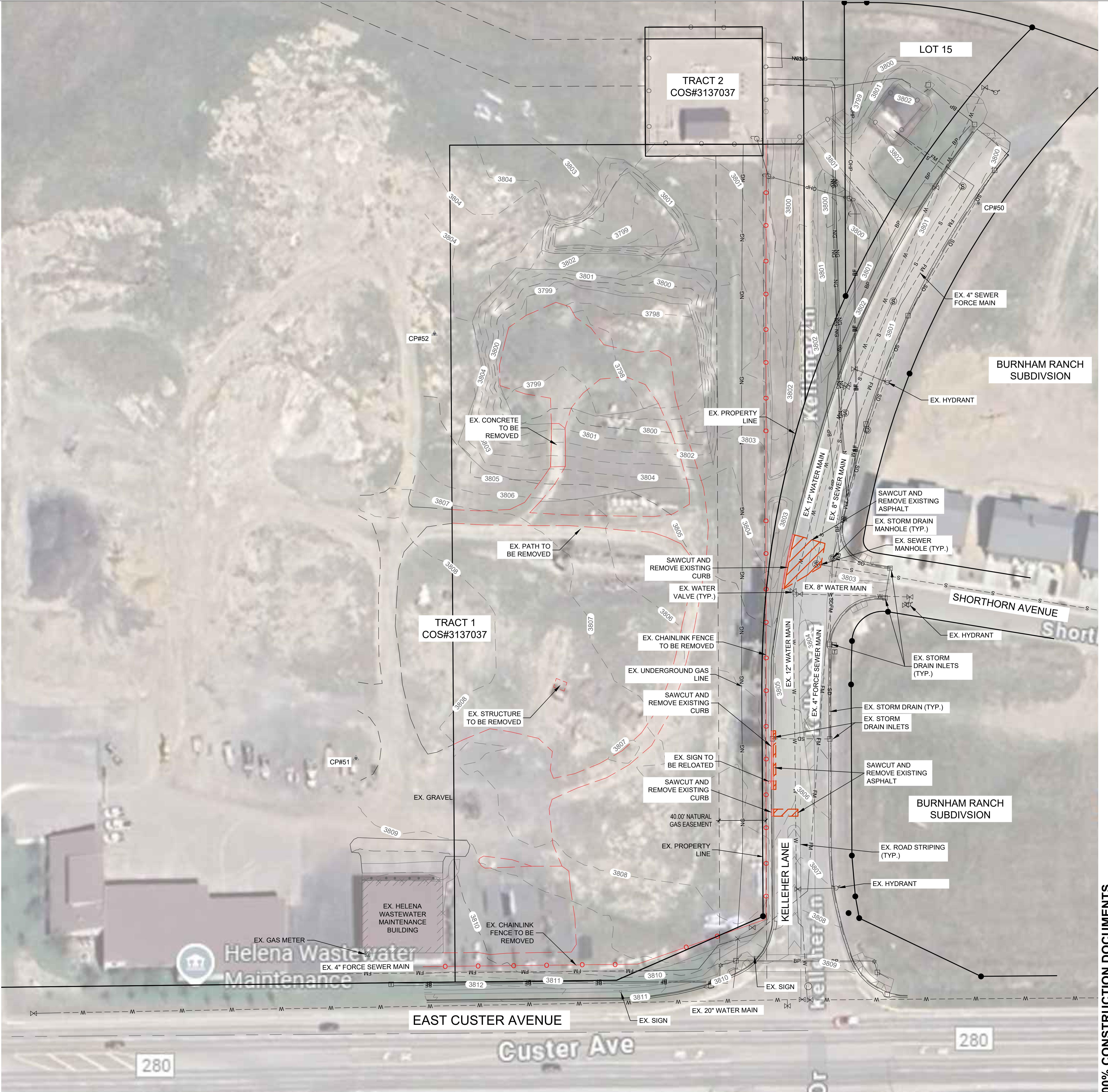
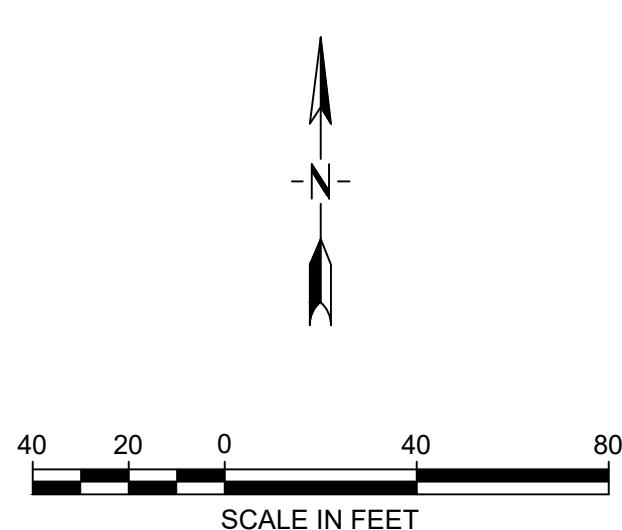
Control Point Table				
Point #	Northing	Easting	Elevation	Raw Description
50	143276.8440	187635.7660	3800.272	1.5" RPC "M-M CP"
51	142803.6060	187105.1070	3808.481	1.5" RPC "M-M CP"
52	143165.5350	187172.0710	3804.467	1.5" RPC "M-M CP"

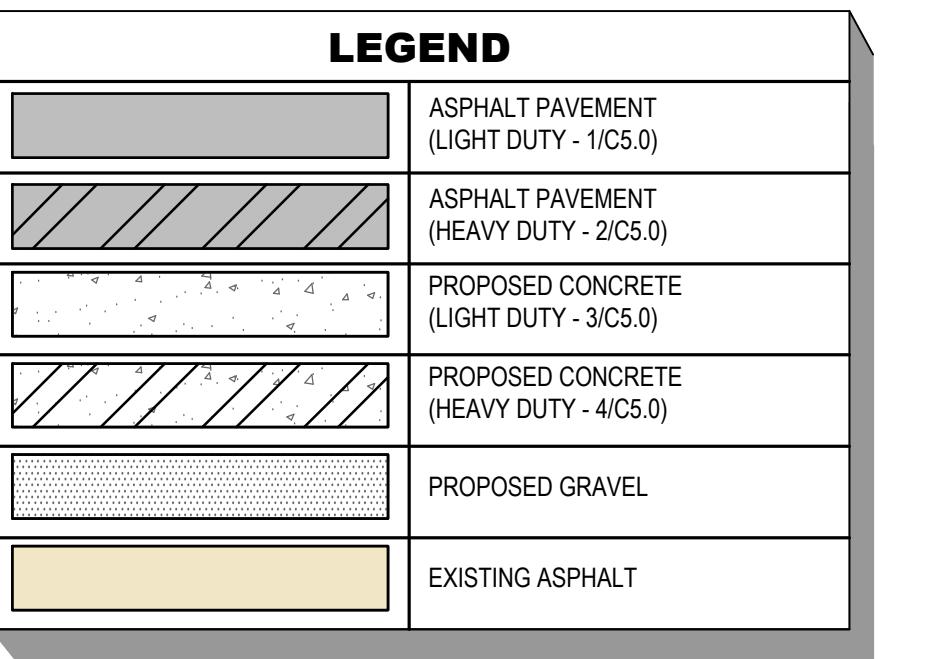
LEGEND

- | | |
|--|-----------------------------------|
| | CONTOURS (1 FOOT INTERVAL) |
| | CONTOUR DEPRESSION |
| | EXISTING BUILDING |
| | SUBJECT PARCEL BOUNDARY |
| | EXISTING EASEMENT, AS NOTED |
| | FOUND SURVEY MONUMENT |
| | EXISTING CURB |
| | EXISTING FENCE |
| | EXISTING CENTERLINE OF ROAD |
| | EXISTING STORM DRAIN |
| | EXISTING WATER MAIN |
| | EXISTING SANITARY SEWER |
| | EXISTING BURIED POWER |
| | EXISTING NATURAL GAS |
| | EXISTING BURIED COMMUNICATION |
| | EXISTING MANHOLE - STORM SEWER |
| | EXISTING MANHOLE - SANITARY SEWER |
| | EXISTING WATER VALVE |
| | EXISTING CLEANOUT |
| | EXISTING STORM INLET |
| | EXISTING FIRE HYDRANT |
| | EXISTING IRRIGATION CONTROL VALVE |
| | EXISTING DELINEATOR POST |
| | EXISTING POWER POLE |
| | EXISTING GUY ANCHOR |
| | EXISTING TELEPHONE PEDESTAL |
| | EXISTING SIGN POST |
| | EXISTING DECIDUOUS TREE |
| | EXISTING LIGHT POLE |

LEGEND

- | | |
|---|------------------------|
|  | EXISTING ASPHALT |
|  | EXISTING MAJOR CONTOUR |
|  | EXISTING MINOR CONTOUR |





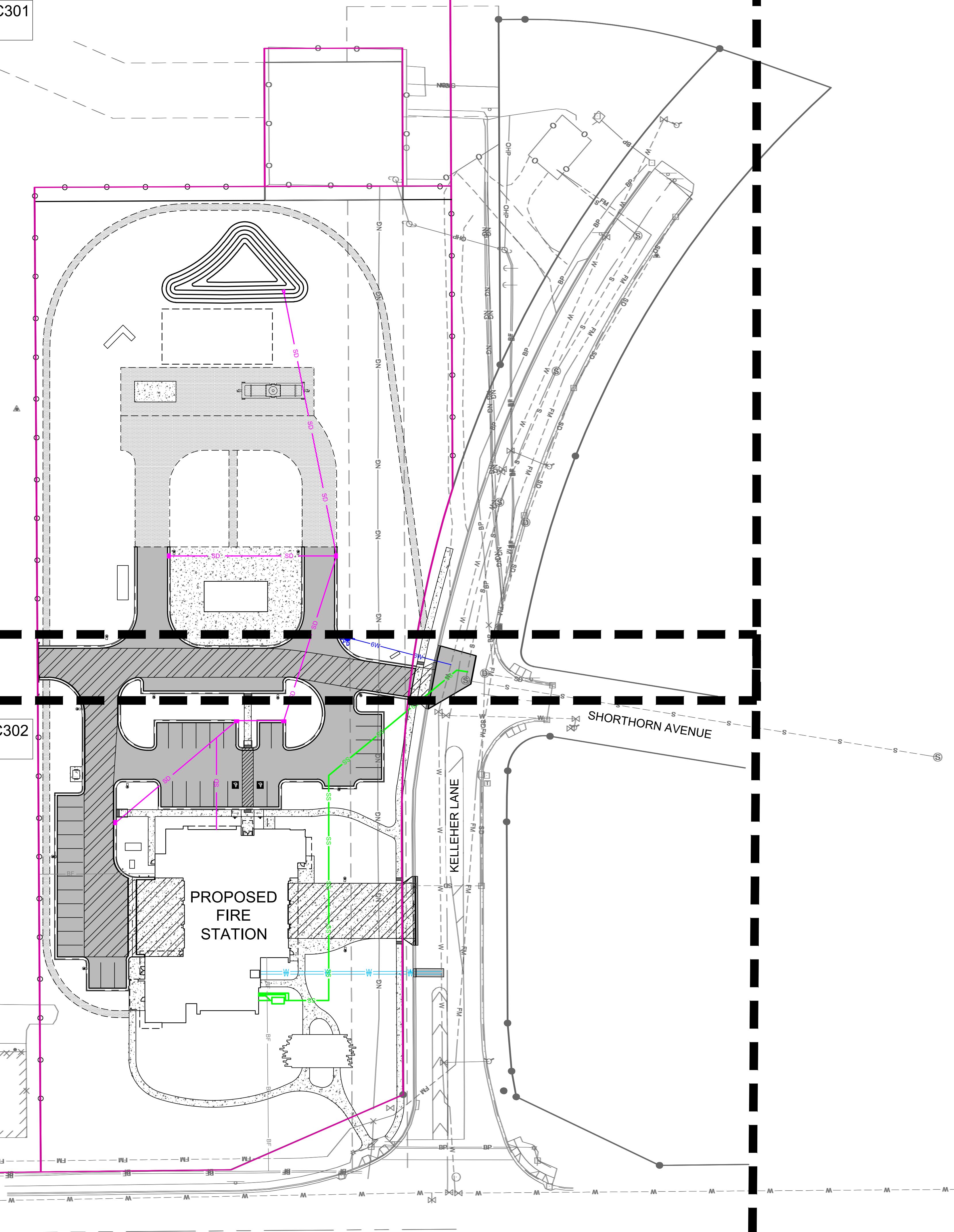
ENLARGED SITE & UTILITY PLAN - C301
ENLARGED GRADING PLAN - C401

GENERAL NOTES:

- ALL IMPROVEMENTS ON THIS PROJECT SHALL BE COMPLETED IN ACCORDANCE WITH THE MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS, 7TH EDITION DATED APRIL 2021 (MPWSS); THE CITY OF HELENA DESIGN STANDARDS; AND THE PROJECT SPECIFICATIONS.
- THE CONTRACTOR SHALL RESTORE ALL ROADWAY SURFACES TO EQUAL OR BETTER CONDITION THAN EXISTED PRIOR TO EXCAVATION AS DETERMINED BY AGENCY, OWNER, AND/OR ENGINEER.
- ASPHALT, CONCRETE CURB, AND SIDEWALK SHALL BE SAW CUT OR NEAT CUT AS APPROVED BY AGENCY AND/OR ENGINEER.
- ALL TEXT AND FEATURES SHOWN SHADED ARE EXISTING. SEE SHEET C2-0 FOR MORE COMPLETE DEPICTION OF EXISTING IMPROVEMENTS.
- PAVEMENT MARKINGS WITHIN THE SITE SHALL BE FOUR INCH (4") YELLOW PAINTED MARKINGS WHERE SHOWN ON THE SITE PLAN IN ACCORDANCE WITH SECTION 02851 OF THE MPWSS UNLESS OTHERWISE INDICATED OR DIRECTED BY THE ENGINEER OR OWNER.
- BASE COURSE AND SUBGRADE SHALL BE COMPAKTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 698.
- CONSTRUCTION JOINTS FOR CURB SHALL BE PLACED AT TEN FOOT (10') INTERVALS ALONG TANGENT CURB SECTIONS AND A MINIMUM OF 5.25' WITHIN THE RADIUS OF ANY CURVES, HAVING A MINIMUM DEPTH OF THREE-QUARTER INCHES (3/4") AND WIDTH OF ONE-EIGHTH INCH (1/8").
- ONE-HALF INCH (1/2") EXPANSION JOINT MATERIAL SHALL BE PLACED AT ALL PCS, PTS, CURB RETURNS, AND AT NOT MORE THAN 300' INTERVALS. THE EXPANSION JOINT MATERIAL SHALL EXTEND THROUGH THE FULL DEPTH OF CURB AND GUTTER.
- NO CURB AND GUTTER SHALL BE PLACED WITHOUT A FINAL FORM INSPECTION BY THE OWNER, THEIR AUTHORIZED REPRESENTATIVE, AND/OR THE CITY OF HELENA (AS REQUIRED).
- CONCRETE SHALL BE CLASS M-4000 UNLESS OTHERWISE SPECIFIED.
- EXTEND CRUSHED BASE COURSE BEYOND THE BACK OF CURB A MINIMUM DISTANCE OF NINE INCHES (9"). MINIMUM THICKNESS OF CRUSHED BASE COURSE BEHIND CURB AND GUTTER SHALL BE SIX INCHES (6").

ENLARGED SITE & UTILITY PLAN - C302
ENLARGED GRADING PLAN - C402

40 20 0 40 80
SCALE IN FEET



LEGEND	
ASPHALT PAVEMENT (LIGHT DUTY - 1C5.0)	
ASPHALT PAVEMENT (HEAVY DUTY - 2C5.0)	
PROPOSED CONCRETE (LIGHT DUTY - 3C5.0)	
PROPOSED CONCRETE (HEAVY DUTY - 4C5.0)	
PROPOSED GRAVEL	
EXISTING ASPHALT	

UTILITY NOTES

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- THE CONTRACTOR SHALL RESTORE ALL ROADWAY SURFACES TO EQUAL OR BETTER CONDITION THAN EXISTED PRIOR TO EXCAVATION AS DETERMINED BY AGENCY, OWNER, AND/OR ENGINEER.
- ASPHALT, CONCRETE CURB, AND SIDEWALK SHALL BE SAW CUT OR NEAT CUT AS APPROVED BY AGENCY AND/OR ENGINEER.
- ALL TEXT AND FEATURES SHOWN SHADED ARE EXISTING. SEE SHEET C2-0 FOR MORE COMPLETE DEPICTION OF EXISTING IMPROVEMENTS.
- THE LOCATION, DEPTH, AND SIZE OF THE EXISTING UTILITIES SHOWN ON THESE PLANS IS APPROXIMATE. THE CONTRACTOR SHALL VERIFY THE EXISTENCE, LOCATION, DEPTH, AND SIZE OF THE UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING FACILITIES DUE TO FAILURE TO LOCATE OR PROPERLY PROVIDE PROTECTION WHEN LOCATION IS KNOWN.
- ALL WATER VALVES OWNED AND OPERATED BY THE CITY OF HELENA SHALL BE OPERATED BY AUTHORIZED CITY OF HELENA PERSONNEL ONLY.
- SEWER AND WATER CONNECTIONS SHALL BE PERFORMED BY A LICENSED PLUMBER.
- GENERAL CONTRACTOR TO COORDINATE DRY UTILITY AND IRRIGATION REQUIREMENTS.
- INSTALL INSULATION OVER ALL SEWER PIPE WITH LESS THAN 4 FEET OF COVER
- INSTALL CLEANOUTS AS DETAILED ON THE PLAN AND AT MAXIMUM SPACING OF 100 FT.

(X) = NUMBER OF PARKING SPACES IN ROW OR GROUP

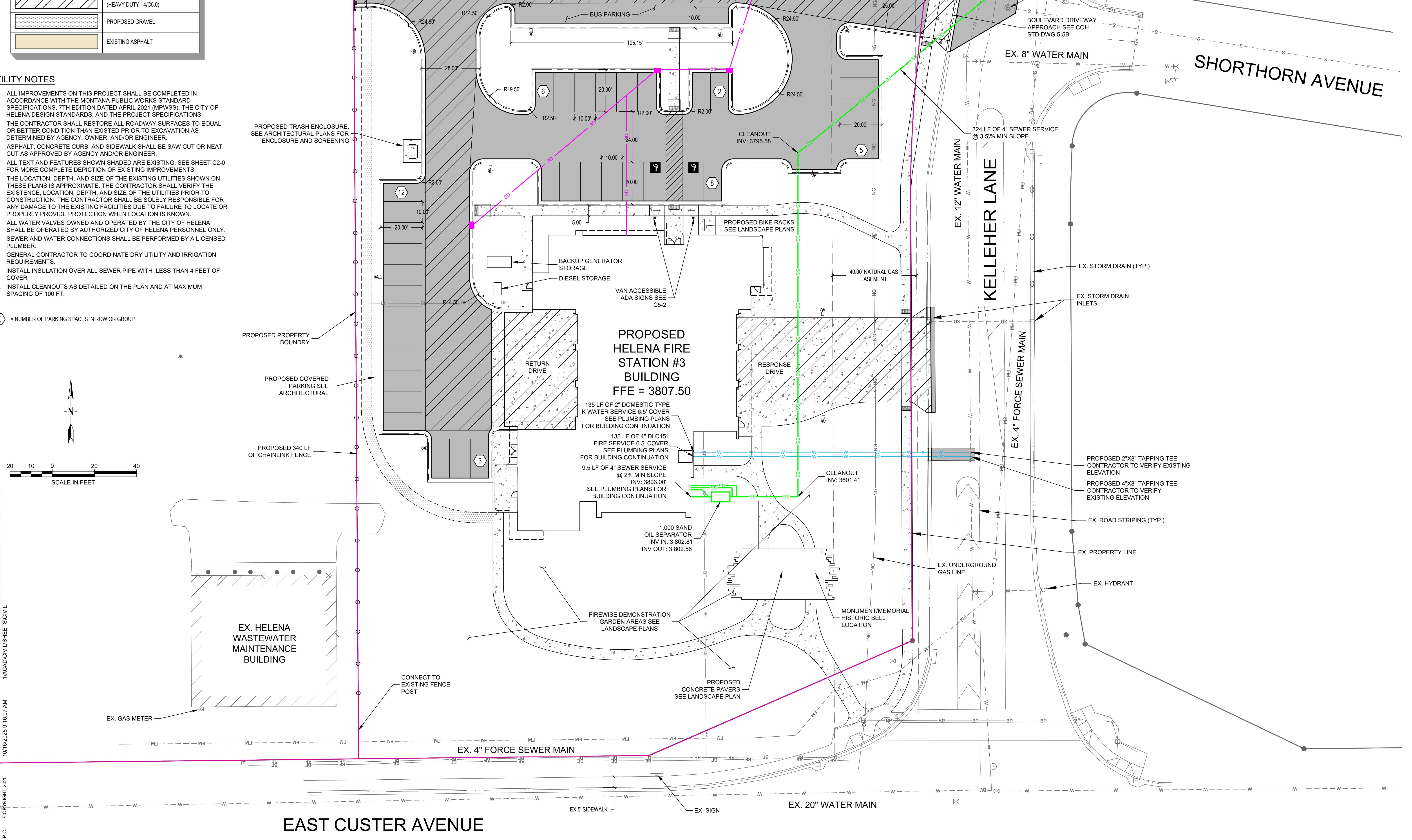
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SCALE IN FEET

P102020 DOWLING STUDIO_ARCH110-00_HELENA FIRE STATION #3 PH
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ENLARGED
GRADING
PLAN

PROJECT #: 25-668
ISSUE DATES:
DRAWN BY: JZ

C4-1

10.22.25

GENERAL NOTES

- ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH MONTANA PUBLIC WORKS STANDARD SPECIFICATIONS (MPWSS), SIXTH EDITION, AND CITY OF HELENA DESIGN STANDARDS, LATEST EDITION.
- LOCATIONS OF EXISTING OVERHEAD AND BURIED UTILITIES SHOWN ON THIS DRAWING ARE APPROXIMATE, AND SHALL BE VERIFIED AND MARKED UNDER THE DIRECTION OF THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES AND SHALL REPAIR ANY FACILITIES DAMAGED DURING PERFORMANCE OF THE WORK.
- ALL STORM DRAIN INLETS AND MANHOLES SHALL BE THE SIZE INDICATED, AND CONSTRUCTED PER CITY OF HELENA STANDARD DETAILS: DETAIL # 4-1.
- MANHOLES INDICATING "RIM=" SHALL HAVE SOLID COVERS, THOSE INDICATING "GRATE=" SHALL HAVE SLOTTED (GRADED) COVERS, AND THOSE INDICATING "TBC=" SHALL HAVE CURB INLET TYPE SLOTTED COVERS.
- ALL PIPES LABELED "SD" (STORM DRAIN) ARE 12" DIA. OR LARGER AND SDR 35.
- ALL ROOF/PATIO DRAINS SHALL CONNECT TO STORM DRAIN PIPING ON SITE AT 1.00% MIN. SLOPE. MINIMUM PIPE SIZE IS 6 INCH (5 FEET BEYOND BUILDING/PATIO WALL). USE SCH. 40 WITHIN 5 FEET OF BUILDING/PATIO WALL AND SDR 35 BEYOND. INSTALL CLEANOUTS AT 100-FOOT MAX. SPACING. COORDINATE PIPE LENGTHS AND LOCATIONS WITH THE ARCHITECTURAL PLANS AS REQUIRED TO COLLECT ALL DOWNSPOUTS. CONNECT TO STORM DRAIN PIPE WITH WYE FITTING.
- SPOT ELEVATIONS ALONG CURB & GUTTER ARE TOP BACK OF CURB (TBC) ELEVATIONS FOR STANDARD (FULL HEIGHT) CURB, UNLESS INDICATED OTHERWISE. CURB FLARES, FLUSH CURBS AND TRANSITIONS MAY ALSO INCLUDE EDGE OF GUTTER (EG) ELEVATIONS. TO OBTAIN EG ELEVATION FOR STANDARD CURB SECTION, SUBTRACT 0.58" (SPILL CURB) OR 0.42" (CATCH CURB) FROM TBC ELEVATIONS ON PLAN.
- LANDSCAPE SHALL BE GRADED TO DRAIN AWAY FROM ALL BUILDINGS. 6' OF BUILDING FOUNDATION REVEAL SHALL BE PROVIDED UNLESS OTHERWISE NOTED.
- FOR CLARITY, SPOT ELEVATIONS HAVE BEEN TRUNCATED TO TWO DIGITS BEFORE THE DECIMAL. ADD BASE ELEVATION OF 3800.00 FEET TO REACH ACTUAL ELEVATIONS ON PROJECT DATUM.

LEGEND	
CATCH CURB	
SPILL CURB	
LAYDOWN CURB	
TRANSITION CURB (T)	
FLOW LINE	
GRADE BREAK	
XXXX	
MEG	
MATCH EXISTING GRADE	

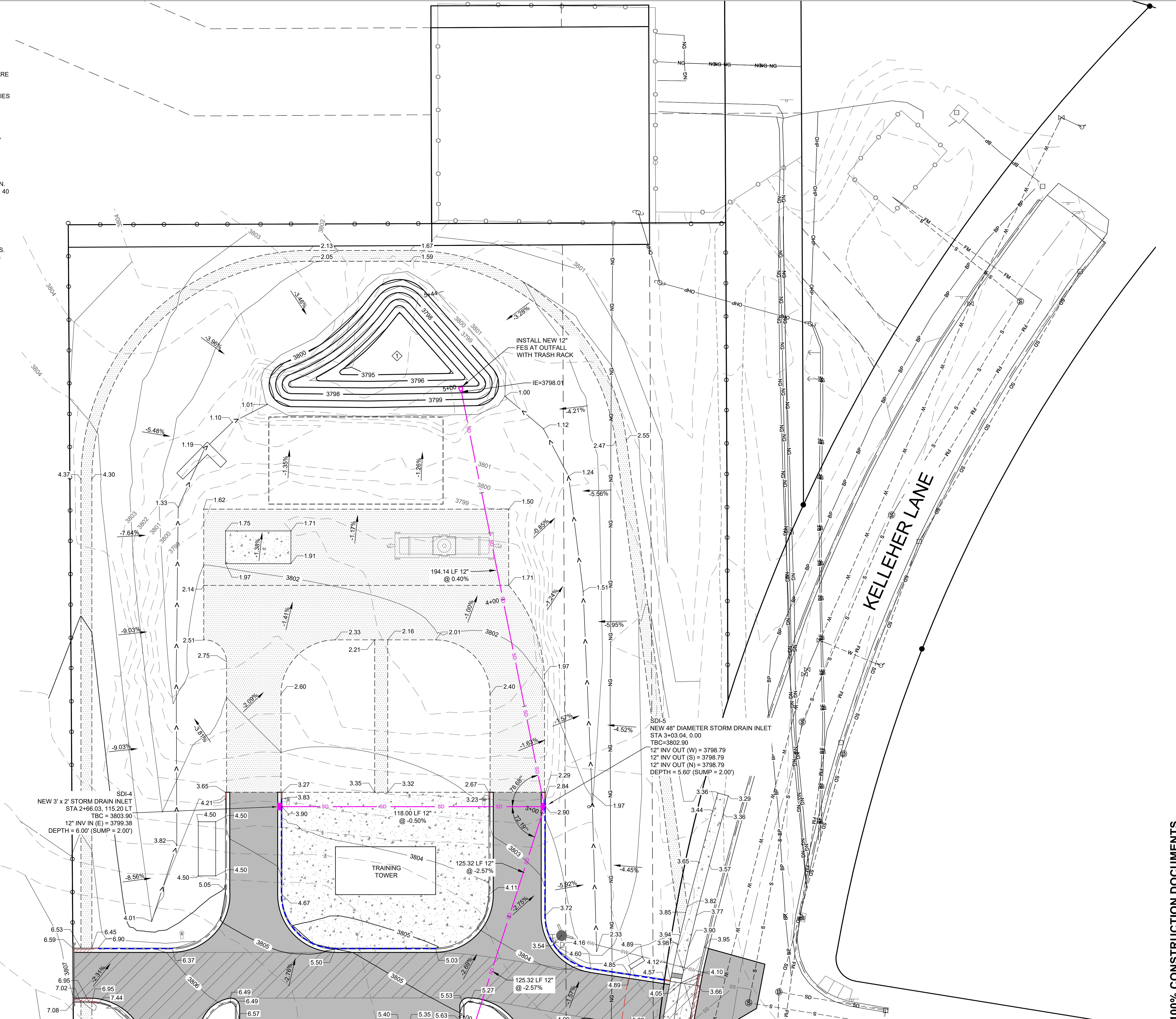


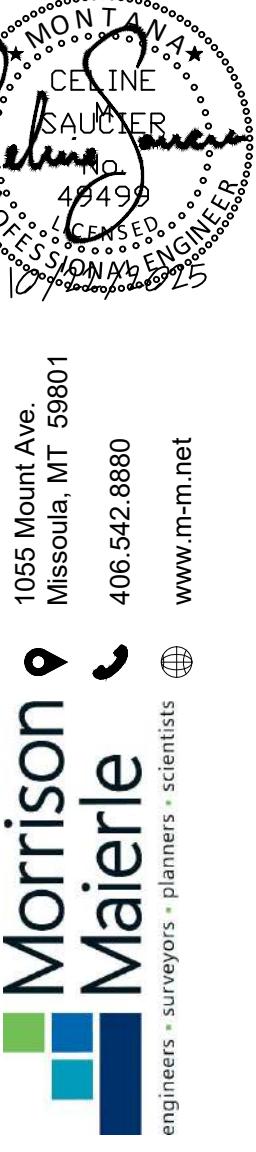
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ENLARGED
GRADING
PLAN

PROJECT #:
25-668
ISSUE DATES:

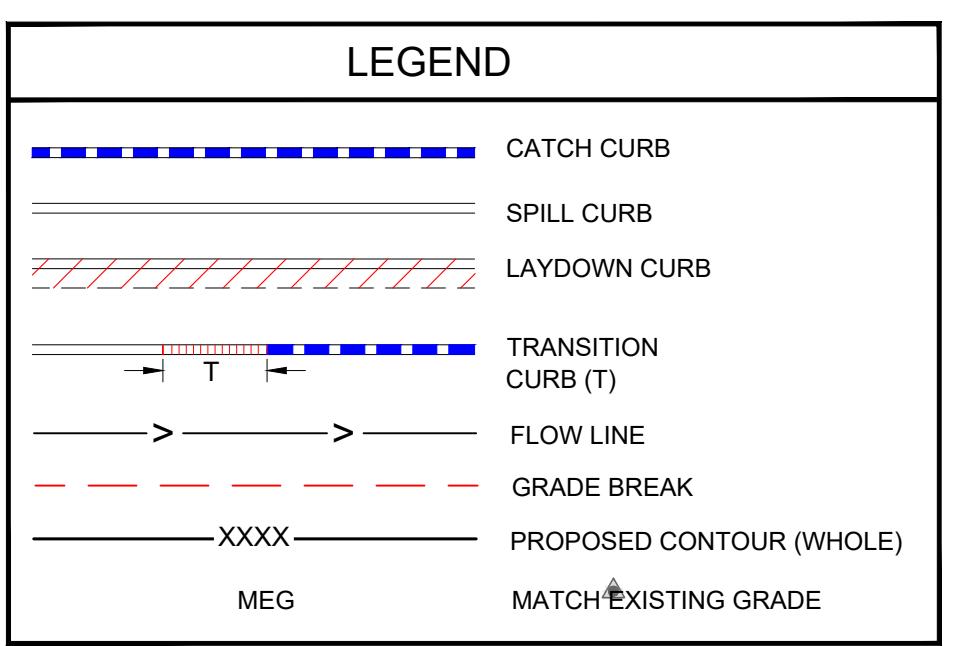
DRAWN BY: JZ

C4-2

10.22.25

GENERAL NOTES

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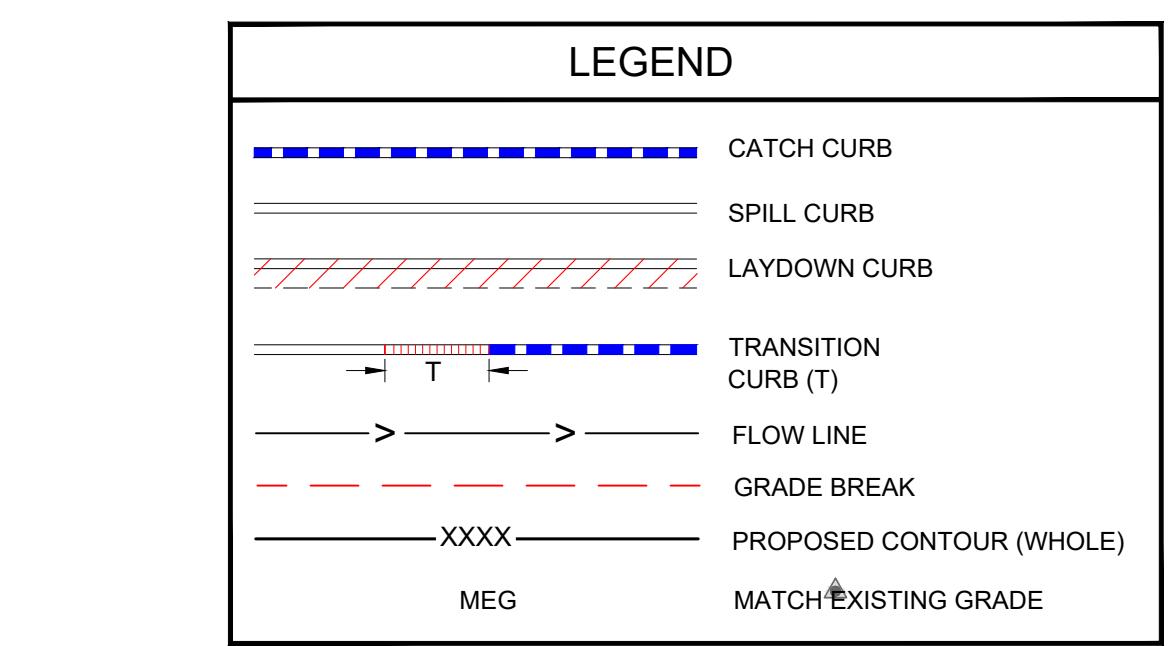
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LANDSCAPE SHALL BE GRADED TO DRAIN AWAY FROM ALL BUILDINGS. 6" OF BUILDING FOUNDATION REVEAL SHALL BE PROVIDED UNLESS OTHERWISE NOTED.

FOR CLARITY, SPOT ELEVATIONS HAVE BEEN TRUNCATED TO TWO DIGITS BEFORE THE DECIMAL. ADD BASE ELEVATION OF 3800.00 FEET TO REACH ACTUAL ELEVATIONS ON PROJECT DATUM.

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Missoula, MT 59801
406.542.2880
www.m-n.net

Morrison & Maierle
engineers • planners • scientists
www.m-n.net

HELENA FIRE STATION #3
HELENA, MT 59602

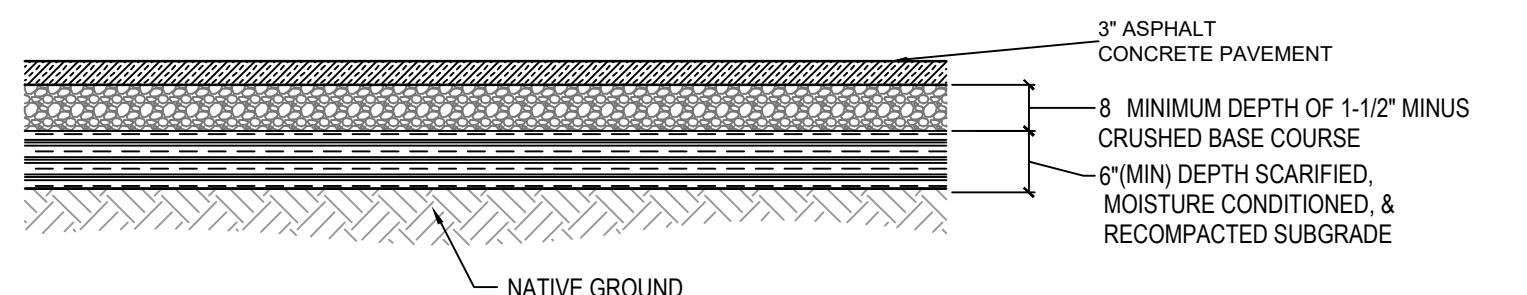
DOWLING ARCHITECTS
734 N Last Chance Gulch Helena, MT 59601 406.547.5470
www.ds-mc.com

SITE DETAILS

PROJECT #: 25-668
ISSUE DATES:
DRAWN BY: JZ

C5-0

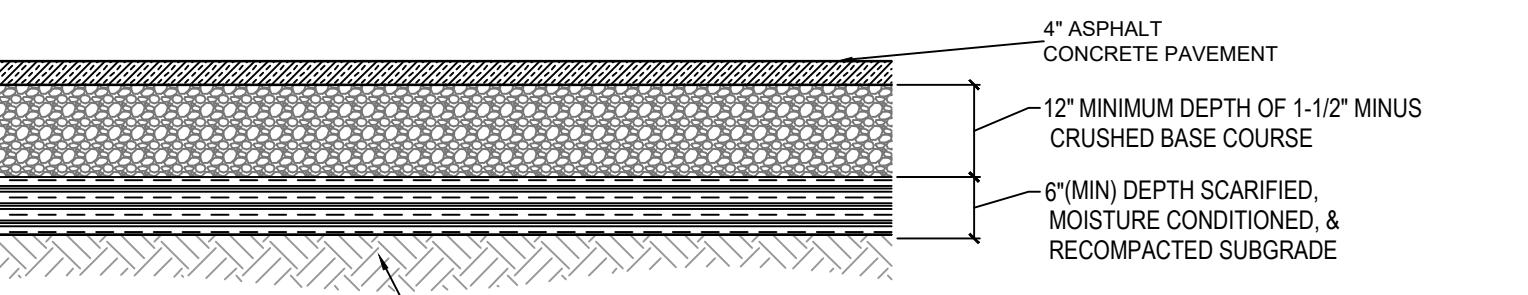
10.22.25



- SECTION TO FOLLOW THE CITY OF HELENA FIRE STATION #3 GEOTECHNICAL REPORT AUGUST 7, 2025 - PIONEER TECHNICAL SERVICES
- EXCAVATE AND REMOVE ANY TOPSOIL, EXISTING FILL, EXISTING ASPHALT, AND/OR DERIS FROM ASPHALT PAVEMENT FOOTPRINT. EXCAVATE TO DESIGN SUBGRADE ELEVATIONS.
- MOISTURE CONDITION SUBGRADE SOIL TO PLUS OR MINUS 2% OF OPTIMUM MOISTURE CONTENT AND COMPACT THE EXCAVATION SURFACE TO A STANDARD RELATIVE COMPACTION (ASTM D698) OF AT LEAST 95%
- PROVIDE BASE COURSE MEETING GRADATION REQUIREMENTS LISTED IN TABLE 5 OF THE REPORT. PLACE AND COMPACT BASE COURSE IN 8-INCH (MAXIMUM) LOOSE LIFTS AND COMPACT EACH LIFT TO A STANDARD RELATIVE COMPACTION OF AT LEAST 95%.
- PROVIDE ASPHALT PLANT MIX WITH BINDER MATERIAL MEETING PG 58-28 GRADE AND AGGREGATES MEETING MPW TYPE B GRADING REQUIREMENTS
- COMPACT ASPHALT TO AT LEAST 93% OF ITS RICE DENSITY (AASHTO T209)
- THE FINISHED SURFACE MUST BE FREE OF RUTS, DEPRESSIONS, OR OTHER SURFACE DEFECTS EXCEEDING ONE-QUARTER INCH (1/4") AS MEASURED WITH A TEN FOOT (10') STRAIGHT EDGE PARALLELING THE FINISHED SURFACE. MAKE CORRECTIONS BY SCARIFYING AND RELAYING THE MIXTURE AT CONTRACTOR EXPENSE.

1 PAVEMENT DETAIL - LIGHT DUTY

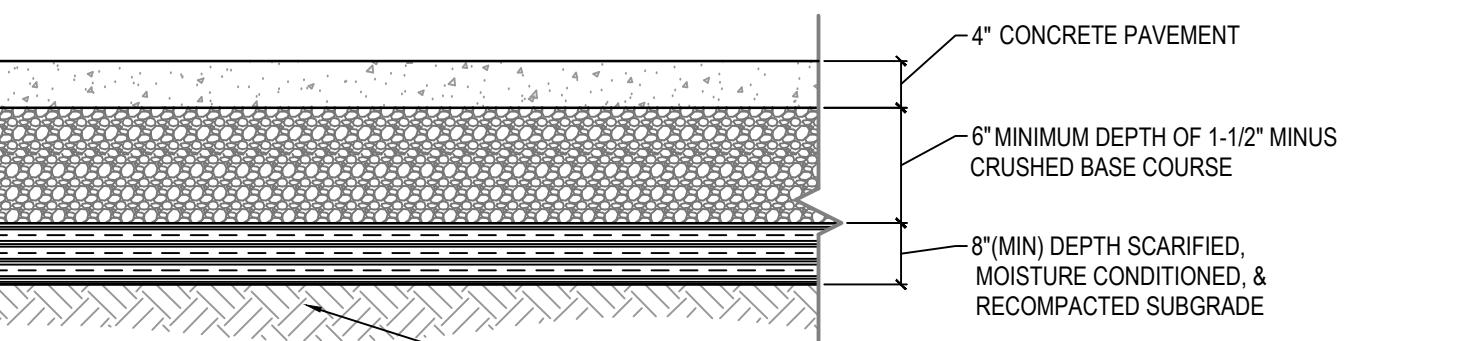
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2 PAVEMENT DETAIL - HEAVY DUTY

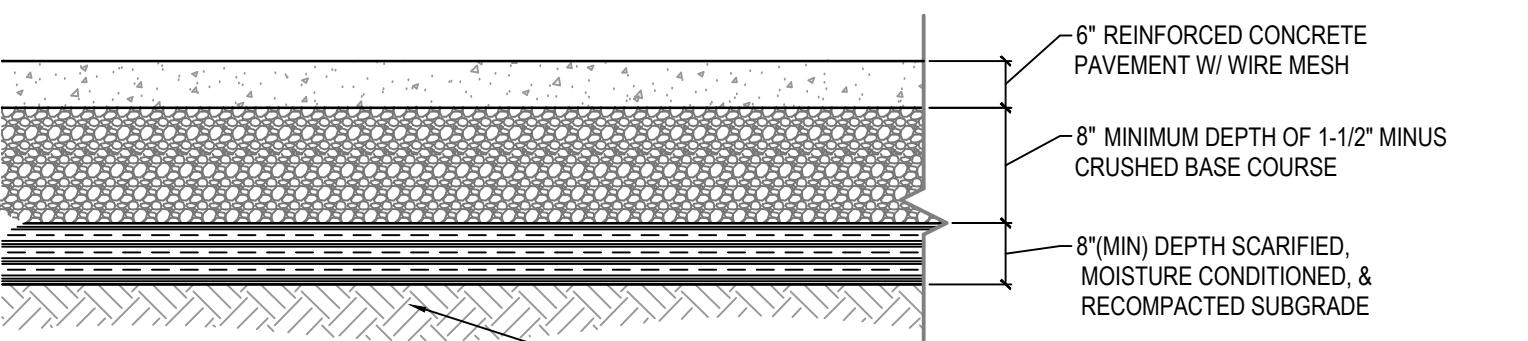
NOT TO SCALE



- SECTION TO FOLLOW THE CITY OF HELENA FIRE STATION #3 GEOTECHNICAL REPORT AUGUST 7, 2025 - PIONEER TECHNICAL SERVICES
- EXCAVATE TO DESIGN SUBGRADE. 6 INCHES OF BASE COURSE IS RECOMMENDED BELOW CONCRETE FLAT WORK AT PEDESTRIAN LOCATIONS.
- MOISTURE CONDITION SUBGRADE SOIL TO PLUS OR MINUS 2% OF OPTIMUM MOISTURE CONTENT AND COMPACT THE EXCAVATION SURFACE TO A STANDARD RELATIVE COMPACTION (ASTM D698) OF AT LEAST 95%
- PLACE BASE COURSE MEETING GRADATION SPECIFICATIONS LISTED IN TABLE 5. PLACE IN 8-INCH (MAXIMUM) LOOSE LIFTS AND COMPACT EACH LIFT TO A STANDARD RELATIVE COMPACTION OF AT LEAST 95% PRIOR TO FORMING FOR THE CONCRETE FLATWORK.
- EXTERIOR SLABS FOR PEDESTRIAN USE SHOULD BE AT LEAST 4 INCHES THICK.
- TO HELP CONTROL SHRINKAGE CRACKING, PIONEER SUGGESTS CONCRETE SLABS BE REINFORCED WITH NUMBER 4 REBAR PLACED AT 18 INCHES ON-CENTER, EACH WAY OR WIRE MESH REINFORCEMENT (6X W2.9K2.9 WWF). PROVIDE WIRE SUPPORTS AND SPACERS TO SUPPORT ALL REINFORCEMENT IN THE PROPER LOCATIONS AND TIE ADEQUATELY AT INTERSECTIONS TO HOLD REINFORCEMENT FIRMLY IN POSITION WHILE CONCRETE IS PLACED. WIRE SUPPORTS AND SPACERS THAT REST ON EXPOSED SURFACES SHOULD BE HOT DIPPED GALVANIZED OR PLASTIC COATED. CENTER THE REINFORCEMENT IN THE SLAB.
- SPACE CONSTRUCTION AND CONTROL JOINTS A MAXIMUM OF 8 FEET ON-CENTER. ALL SAW CUT JOINTS WILL BE 'SOFT CUT SAWN AS SOON AS ALLOWED BY THE SAW MANUFACTURER'S RECOMMENDATIONS. AFTER THE SLAB FINISHING HAS BEEN COMPLETED, CONSTRUCT JOINTS WITHIN 4 HOURS IN HOT WEATHER AND WITHIN 12 HOURS IN COLD WEATHER AFTER SLAB FINISH IS COMPLETED.
- INSTALL EXPANSION JOINTS BETWEEN SLABS NO MORE THAN 40 FEET APART, AT THE SIDEWALK/DRIVEWAY AND SIDEWALK/DOORWAY ENTRY INTERFACES. AT EACH OF THESE LOCATIONS, PROVIDE EXPANSION JOINTS HAVING A MINIMUM 3/8-INCH WIDTH. FILL ALL EXPANSION JOINTS WITH A FIELD-MOLDED SEALANT.

3 LIGHT DUTY CONCRETE

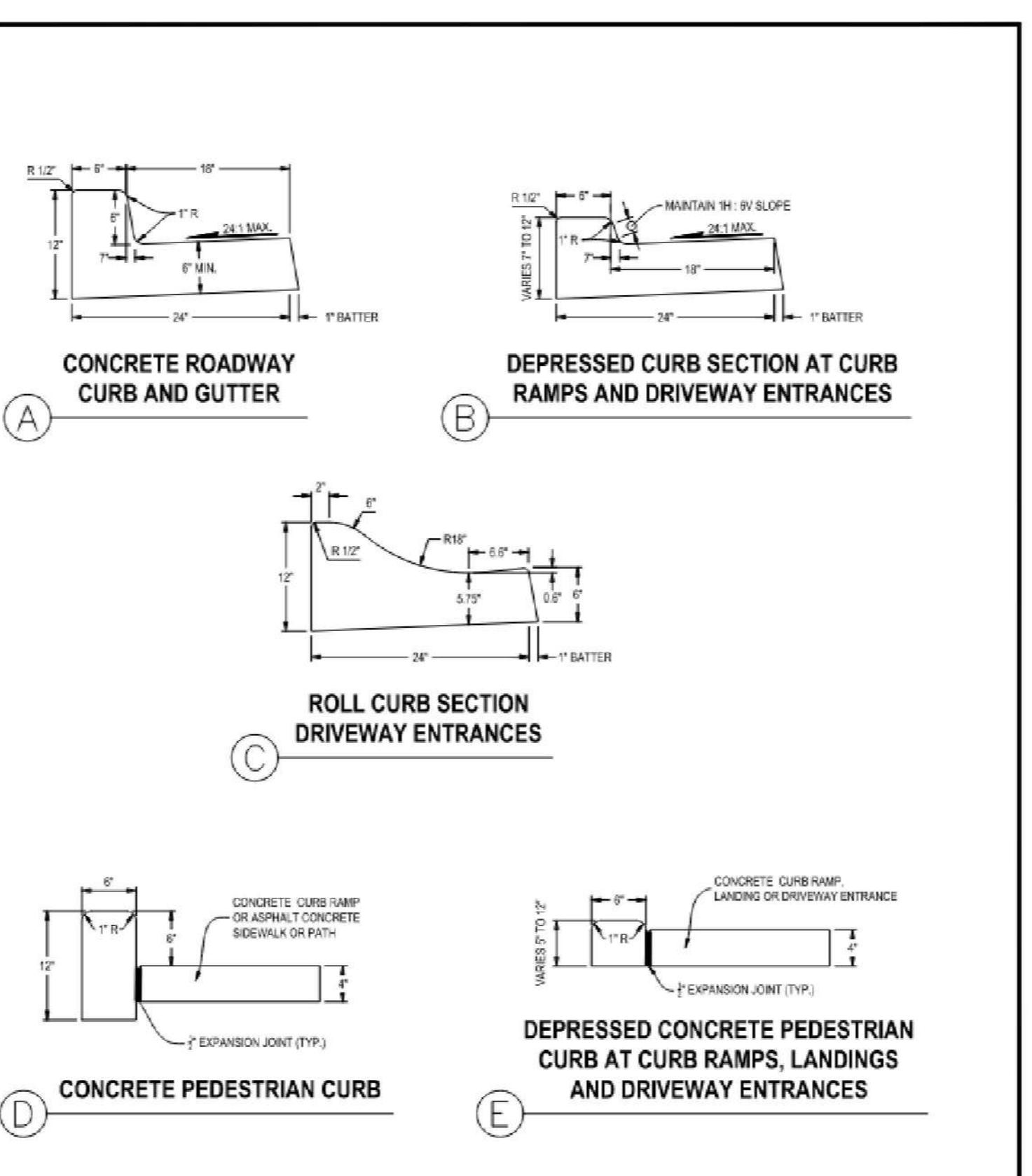
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- SECTION TO FOLLOW THE CITY OF HELENA FIRE STATION #3 GEOTECHNICAL REPORT AUGUST 7, 2025 - PIONEER TECHNICAL SERVICES
- STRIP AND REMOVE TOPSOIL AND UNCONTROLLED FILL FROM PAVEMENT FOOTPRINT. EXCAVATE TO DESIGN ELEVATIONS
- MOISTURE CONDITION SUBGRADE SOIL TO PLUS OR MINUS 2% OF OPTIMUM MOISTURE CONTENT AND COMPACT THE EXCAVATION SURFACE TO A STANDARD RELATIVE COMPACTION OF AT LEAST 95%
- PROVIDE BASE COURSE MEETING GRADATION REQUIREMENTS LISTED IN TABLE 5. PLACE AND COMPACT BASE COURSE IN 8-INCH (MAXIMUM) LOOSE LIFTS AND COMPACT EACH LIFT TO A STANDARD RELATIVE COMPACTION OF AT LEAST 95%.
- PROVIDE CONCRETE WITH A MINIMUM 28-DAY FLEXURAL STRENGTH OF 500 POUNDS PER SQUARE INCH (PSI), COMPRESSIVE STRENGTH OF 4,000 PSI AND AIR-ENTRAINED (4.5 PLUS OR MINUS 1.5%).
- PROVIDE AND PLACE DISTRIBUTED STEEL REINFORCEMENT (REBAR). SPECIFICALLY PLACE NUMBER 4 REBAR AT 18 INCHES ON-CENTER, EACH WAY. PROVIDE SUPPORTS TO POSITION REBAR 2-INCHES FROM TOP OF SLAB AND TIE ADEQUATELY AT INTERSECTIONS TO HOLD REINFORCEMENT FIRMLY IN POSITION WHILE CONCRETE IS PLACED.
- MAXIMUM JOINT (CONTRACTION AND CONSTRUCTION) SPACING OF 15 FEET. TO EXTEND PRACTICAL JOINT PATTERNS SHOULD DIVIDE PAVEMENT INTO APPROXIMATE SQUARE PANELS. JOINT PATTERNS ACROSS LANES SHOULD BE CONTINUOUS.
- PLACE ISOLATION JOINTS AT CONCRETE PAVEMENT INTERFACES WITH OTHER STRUCTURES/FIXED OBJECTS.
- CONTRACTION JOINTS CAN BE CONSTRUCTED WITH TOOLING OR SAW CUTTING. SAW CUTTING SHOULD BE PERFORMED AS SOON AS ALLOWABLE PER SAW MANUFACTURE GUIDELINES. THE DEPTH OF THE JOINT SHOULD BE 1.5-INCHES (1/4 SLAB DEPTH) FOR TRADITIONAL SAWS OR 1-INCH FOR EARLY-ENTRY SAWS. JOINTS SHOULD BE 1/8 TO 1/4-INCH WIDE.
- FILL AND SEAL JOINTS TO MINIMIZE SURFACE WATER INFILTRATION.

4 HEAVY DUTY CONCRETE - FIRE TRUCK ACCESS ROUTE/DRIVEWAY

NOT TO SCALE

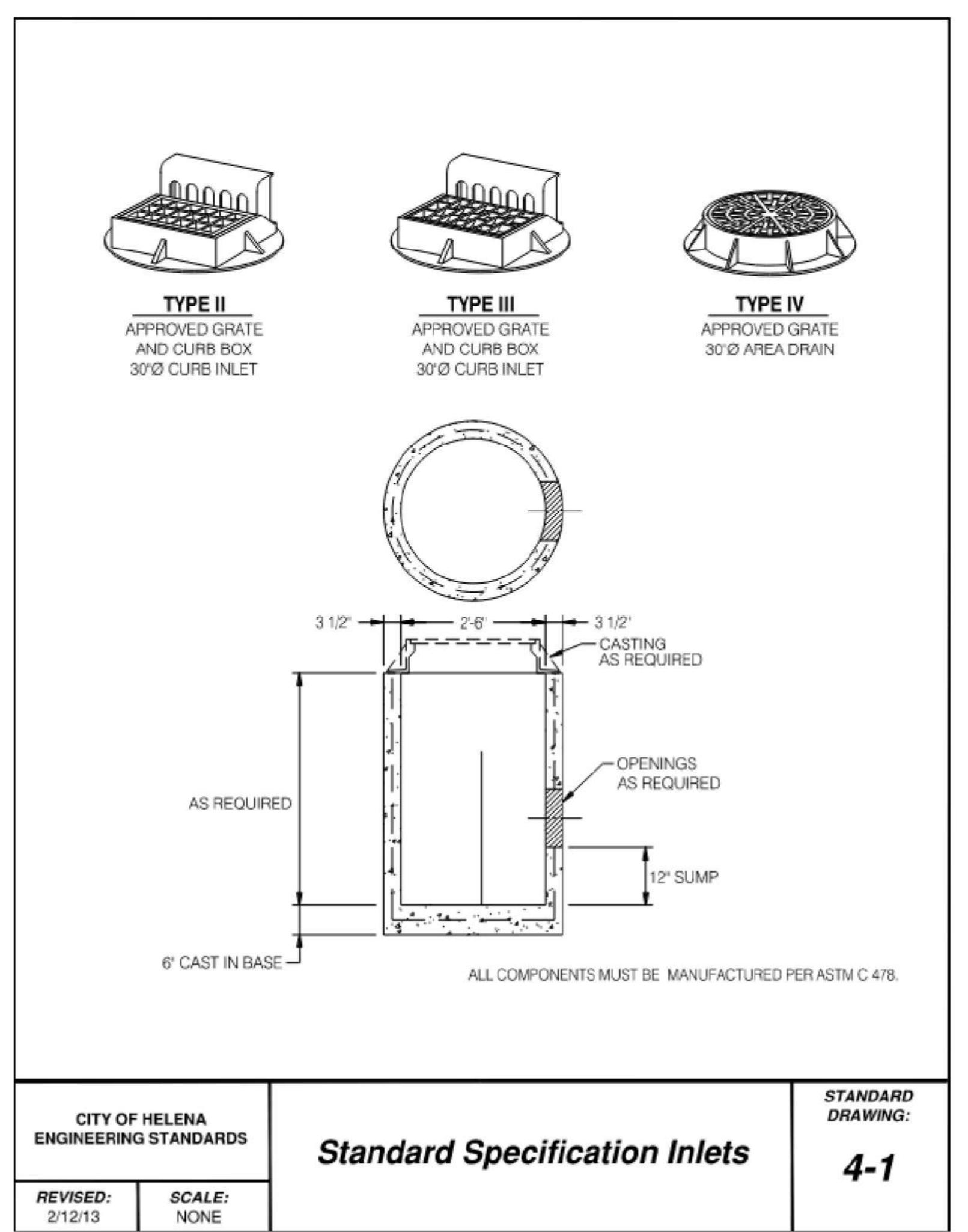
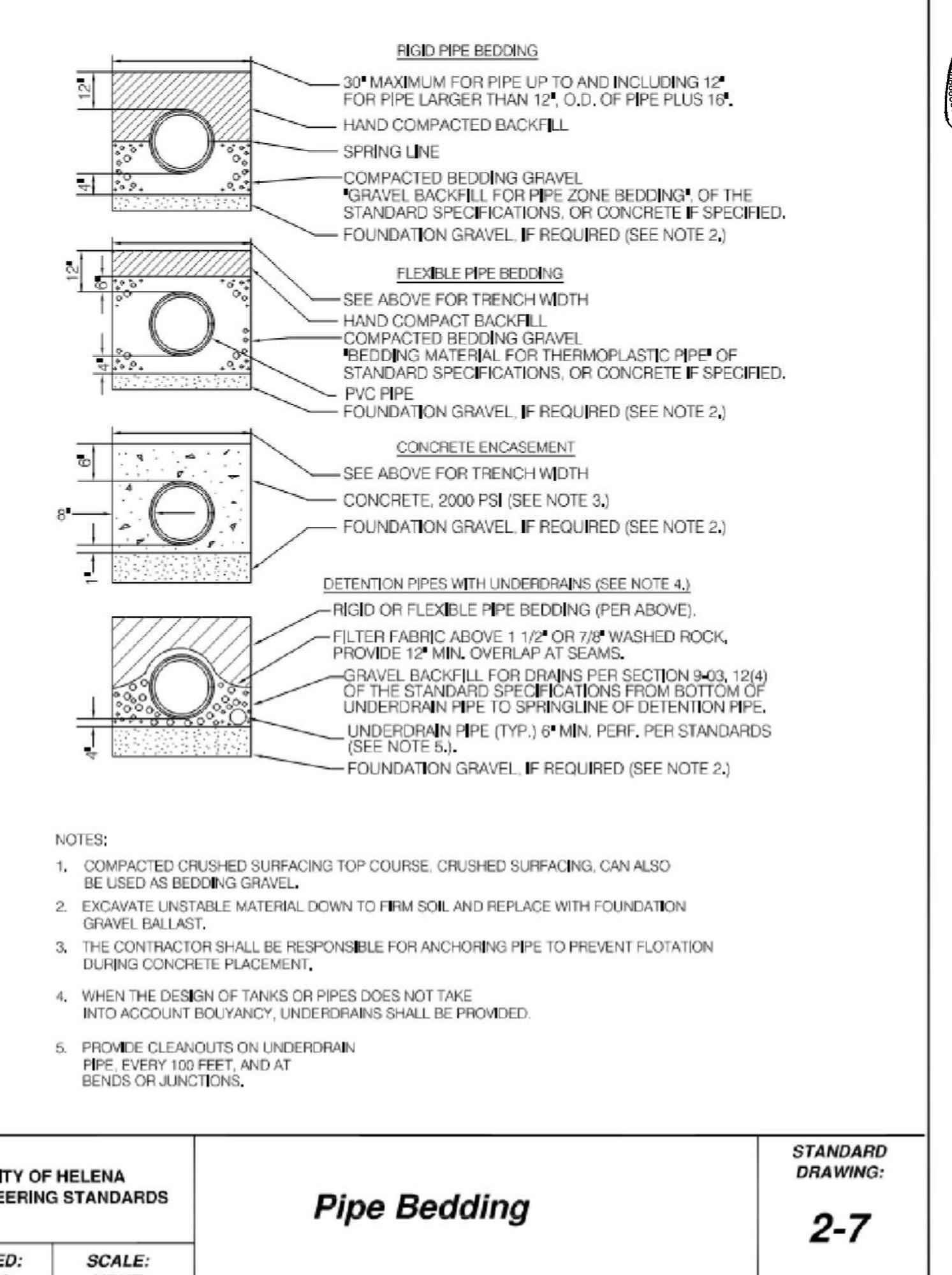
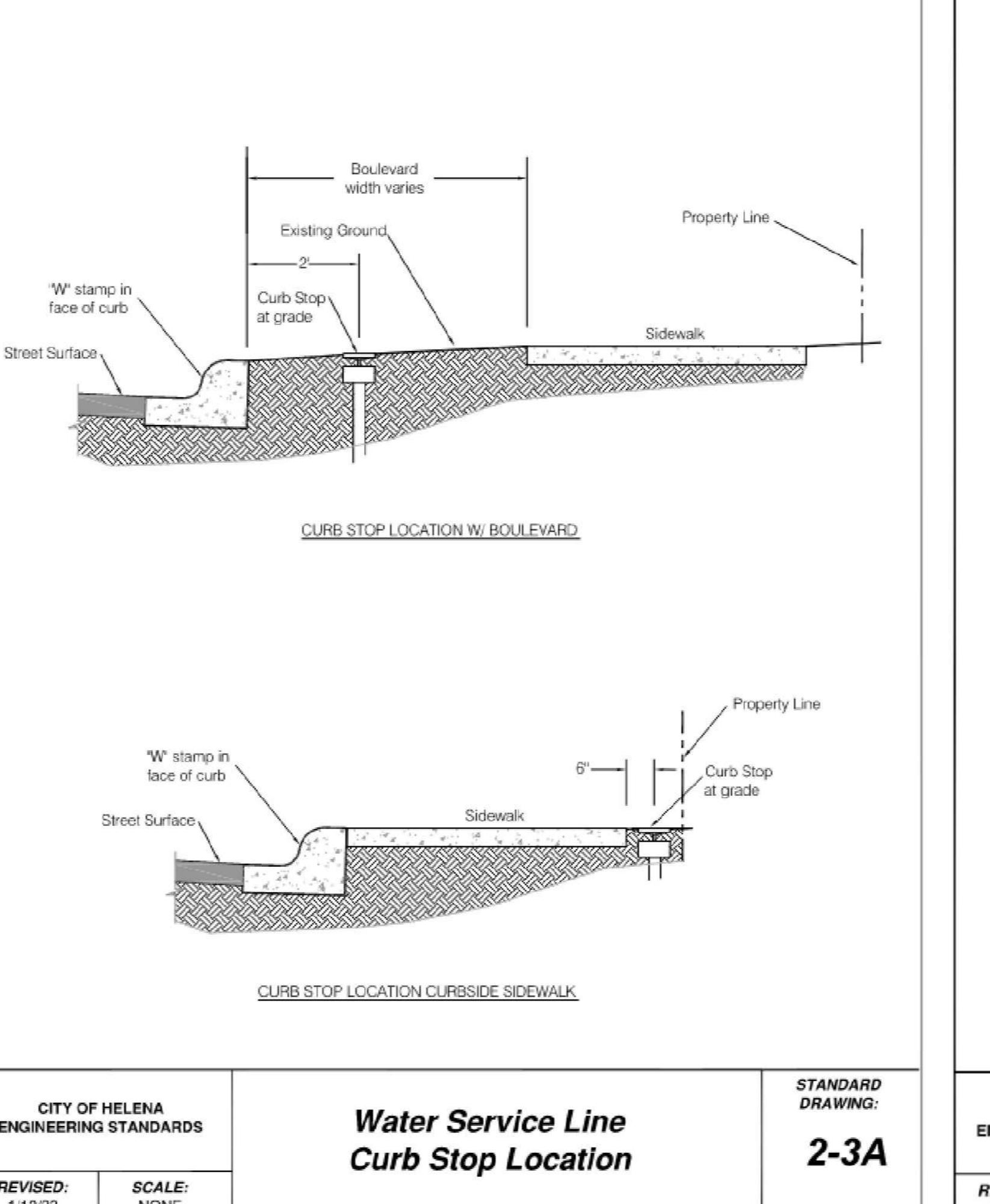
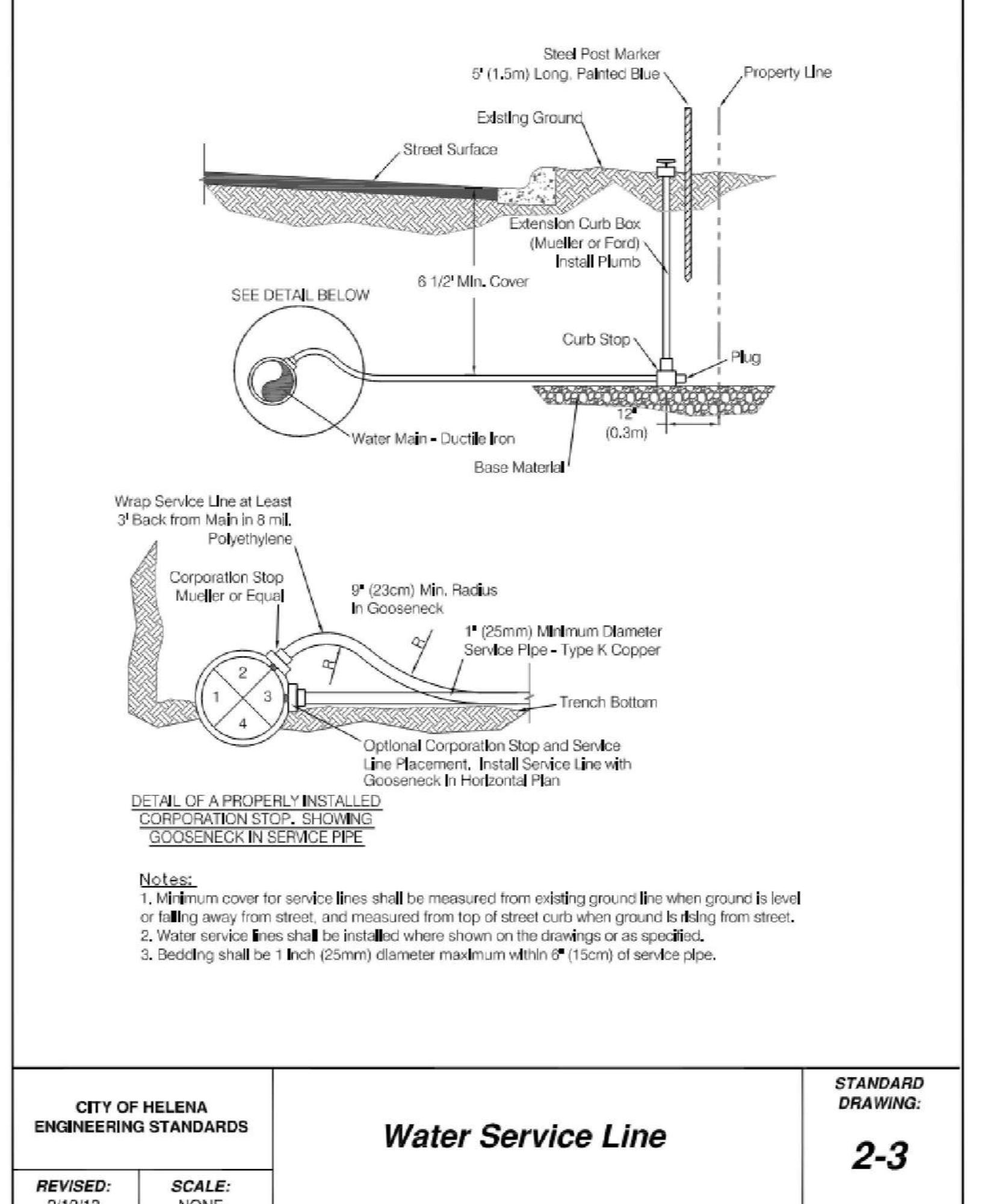
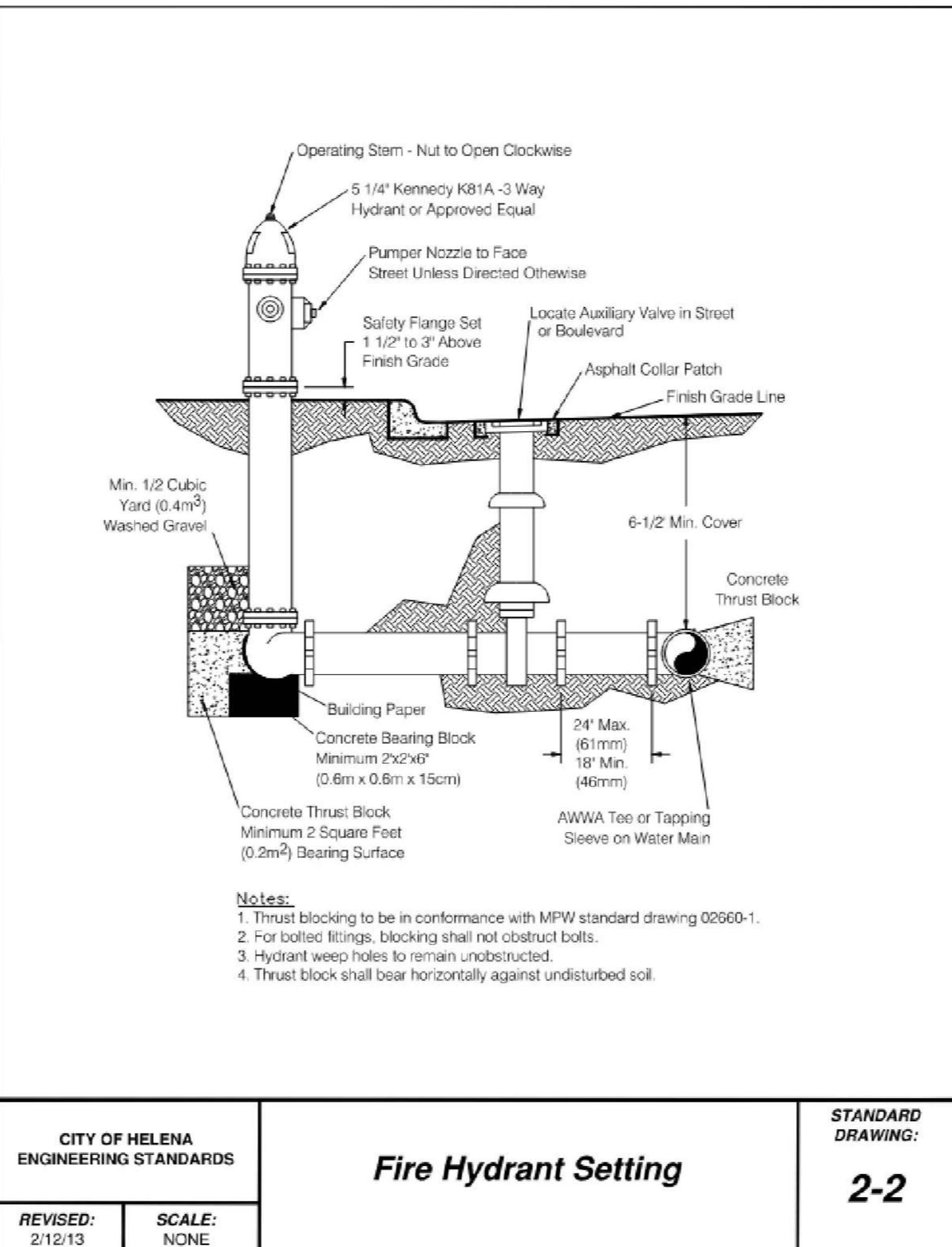


CITY OF HELENA ENGINEERING STANDARDS	CURB TYPES	STANDARD DRAWING: 5-4
REVISED: 1/28/22	SCALE: NONE	

CITY OF HELENA ENGINEERING STANDARDS	ADA CURB RAMP GENERAL NOTES	STANDARD DRAWING: 5-6
REVISED: 1/28/22	SCALE: NONE	

CITY OF HELENA ENGINEERING STANDARDS	SINGLE DIRECTION CURB RAMP	STANDARD DRAWING: 5-7A
REVISED: 1/28/22	SCALE: NONE	

CITY OF HELENA ENGINEERING STANDARDS	PERPENDICULAR CURB RAMP	STANDARD DRAWING: 5-8B
REVISED: 1/28/22	SCALE: NONE	



HELENA FIRE STATION #3

LANDSCAPE DRAWINGS

CITY OF HELENA LANDSCAPE PLANTING REQUIREMENTS

ORDINANCES OF THE CITY OF HELENA 3150, CHAPTER 24

SITE LANDSCAPING- (11-24-3)

GENERAL LANDSCAPING AND TREES- (11-24-3)
60% LIVE VEGETATIVE COVER REQUIRED FOR LANDSCAPED AREAS

TOTAL LANDSCAPE AREA SITE COVERAGE -
113,458 SF
SF REQUIRED - 60% = 68,075 SQ FT
SF PROVIDED - 86,726 SQ FT

ORDINANCES OF THE CITY OF HELENA 3150, CHAPTER 24

PARKING LOT LANDSCAPING- (11-24-4)
EACH PARKING SPACE MUST BE WITHIN 35 FT OF A TREE TRUNK
30 SF MIN. PLANTING PER PARKING SPACE REQUIRED -
36 PARKING SPACES PROVIDED

SF REQUIRED - 1,080 SQ FT
SF PROVIDED - 6,674 SQ FT

ORDINANCES OF THE CITY OF HELENA 3194, CHAPTER 7

BOULEVARD LANDSCAPING AND TREES- (7-10-5)
60% LIVE VEGETATIVE COVER REQUIRED FOR LANDSCAPE

TOTAL SF OF BOULEVARD AREA = 1,548 SF
SF REQUIRED - 60% CANOPY COVERAGE = 929 SF
SF PROVIDED - 3,911 SF
TREES PROVIDED - 17

**NOTE: TREES ALONG CUSTER AVE ARE PLACED NORTH SIDE OF SIDEWALK DUE TO LACK OF EXISTING BOULEVARD

NOTES:

- ESTIMATED DATE OF INSTALL FOR LANDSCAPE- TBD
- (7-10-5-A,3) - BOULEVARD TREES MUST BE PLANTED WITHIN 18 MONTHS FROM DATE OF OCCUPANCY.
- (7-10-5-A,3) - A TREE PERMIT IS REQUIRED FROM THE DEPARTMENT PRIOR TO PLANTING BOULEVARD TREES.
- (7-10-5-A,4) - ALL TREES USED COMPLY WITH HELENA ARBORICULTURAL STANDARDS
- (11-24-6-B) - ALL DECIDUOUS TREES TO BE 1.5 INCH CALIPER AT TIME OF PLANTING. EVERGREEN TREES TO BE NO LESS THAT 5' TALL AT TIME OF PLANTING.
- (7-3-7-B,1) - BOULEVARD TREES THAT HAVE A SINGLE TRUNK TRIMMED TO AT LEAST 8' ABOVE THE CURB ARE PERMITTED WITHIN SIGHT TRIANGLE EXTENTS.

SHEET INDEX

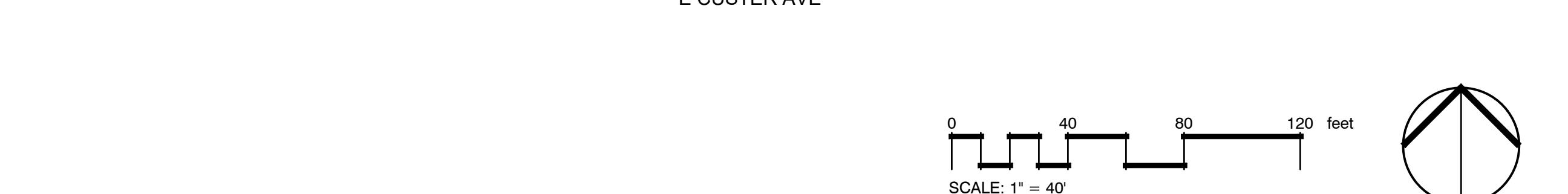
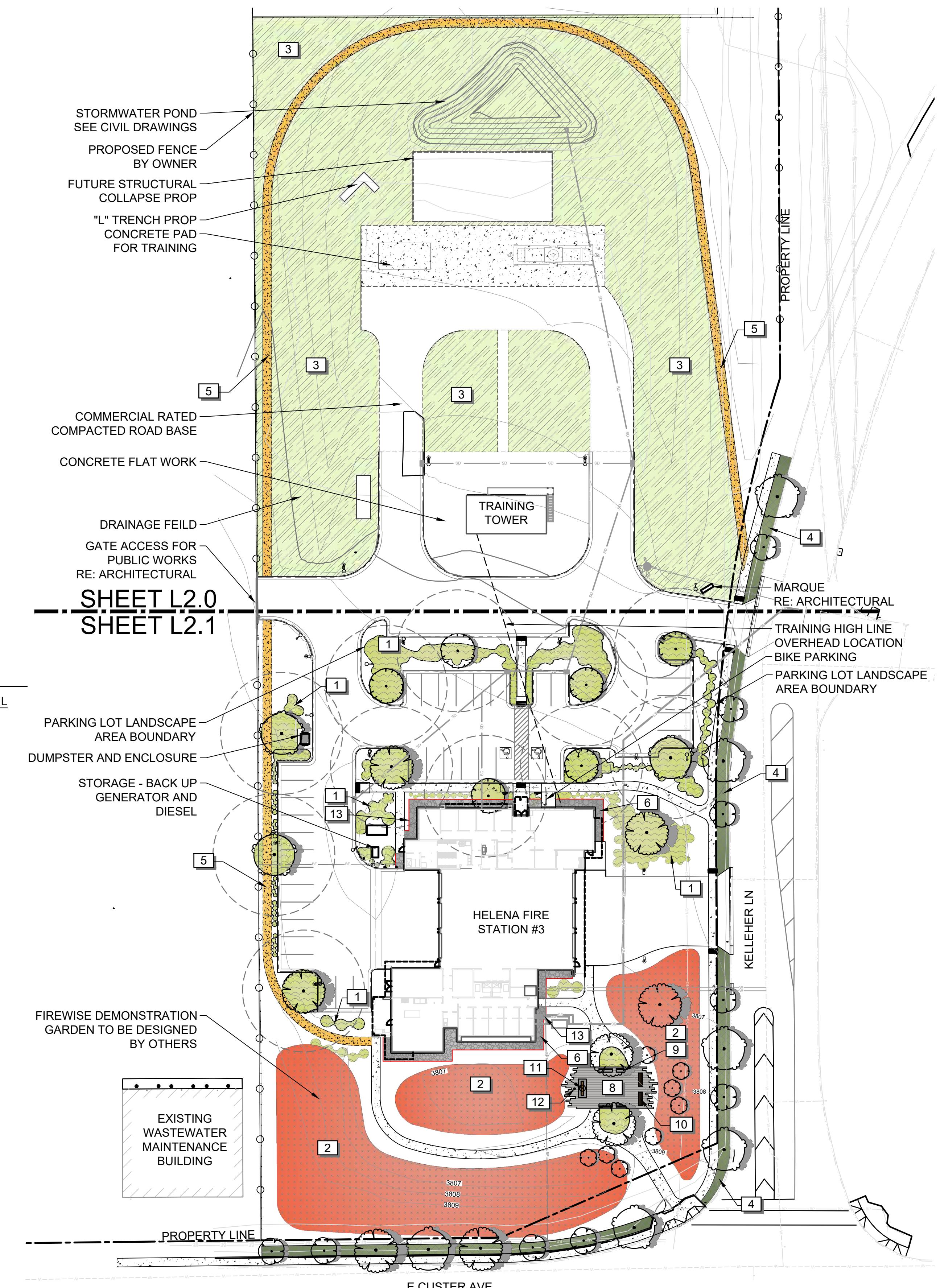
L0.0	COVER SHEET
L1.0	LANDSCAPE NOTES
L1.1	DETAIL SHEET
L1.2	PAVER LAYOUT
L2.0	NORTH PLANTING PLAN
L1.2	SOUTH PLANTING PLAN

PLANT SCHEDULE

SYMBOL	QTY	BOTANICAL / COMMON NAME	CAL
TREES			
•	6	ACER GINNALA AMUR MAPLE	2.5" CAL.
•	9	ACER GLABRUM ROCKY MOUNTAIN MAPLE	2.5" CAL.
•	9	CELTIS OCCIDENTALIS COMMON HACKBERRY	2.5" CAL.
•	8	QUERCUS MACROCARPA BURR OAK	2.5" CAL.
•	8	SYRINGA RETICULATA JAPANESE TREE LILAC	1.5" CAL.

REFERENCE NOTES SCHEDULE

SYMBOL	CODE	DESCRIPTION	QTY	DETAIL
[Wavy Line]	1	PROPOSED LANDSCAPE 6" DEPTH TOPSOIL 2"-3" DEPTH ANGULAR ROCK MULCH OVER NON-WOVEN GEOTEXTILE FABRIC IN ALL PARKING, PLANTING AND BOULEVARD AREAS WHERE PLANTING IS SHOWN	9,036 SF	5/L1.1
[Red Dots]	2	FIREWISE DEMONSTRATION GARDEN PLANTING, PATHWAYS, AND SIGNAGE BY OTHERS	18,632 SF	
[Solid Green]	3	NATIVE RANGE-GRASS FORB MIX NON IRRIGATED, EXCEPT FOR SEED ESTABLISHMENT NO ROCK MULCH	54,680 SF	
[Cross Hatched]	4	BOULEVARD PLANTING 3" DEPTH TOPSOIL 2"-3" DEPTH ANGULAR ROCK MULCH OVER NON-WOVEN GEOTEXTILE FABRIC IN ALL PARKING, PLANTING AND BOULEVARD AREAS WHERE PLANTING IS SHOWN	3,827 SF	
[Yellow Dots]	5	DECOMPOSED GRANITE PATHWAY 4" DEPTH, 3/8" MINUS	5,343 SF	1/L1.1
[Grey Dots]	6	5-FT FIREWISE BUTLER STRIP 1"-3" ANGULAR ROCK CLEAR, NO FINES	1,546 SF	3/L1.1
[Horizontal Lines]	8	PRE-CAST CONCRETE PAVERS STEPSTONE LARGE SCALE CALARC PAVERS IN ADOBE, CAFE BROWN, AND PEBBLE, 12" X 48" SLABS	1,104 SF	2/L1.1
[Vertical Lines]	9	VICTOR STANLEY BENCHES MODEL PRS-10, 8FT LONG, RED HARDWARE, KEBONY WOOD SLATS	4	
[Solid Black]	10	CUSTOM BENCHES REFER TO ARCHITECTURAL PLANS	2	
[Bell Icon]	11	HISTORIC BELL MEMORIAL REFER TO ARCHITECTURAL PLANS	1	
[Flag Icon]	12	FLAG POLE REFER TO ARCHITECTURAL PLANS	1	
[Red Line]	13	LANDSCAPE EDGING COLMET 3/16" THICKNESS BY 4" DEPTH W/ STAKES	308 LF	



HELENA FIRESTATION #3

HELENA, MT. 59602

DOWLING SHIVEHATTER ARCHITECTURE + ENGINEERING

734 N. Lee Chance Gulch Helena, MT 59601 406.457.5470 www.dsarch.com

CONSTRUCTION DOCUMENTS

50% CD 09-12-25

10.22.25

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GENERAL NOTES

0.0 WHERE THESE NOTES ARE IN CONFLICT WITH THE PROJECT SPECIFICATIONS, THE PROJECT SPECIFICATIONS SHALL TAKE PRECEDENCE.

0.1. CONTRACTOR SHALL NOT WILLFULLY PROCEED WITH CONSTRUCTION AS DESIGNED WHEN IT IS OBVIOUS THAT UNKNOWN OBSTRUCTIONS EXIST, SUCH AS DISCREPANCIES AND/OR GRADE DIFFERENCES THAT MAY NOT HAVE BEEN KNOWN DURING DESIGN. SUCH CONDITIONS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER'S AUTHORIZED REPRESENTATIVE. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ALL NECESSARY REVISIONS DUE TO FAILURE TO GIVE SUCH NOTIFICATIONS.

0.2. CONTRACTOR TO CONTACT THE UTILITY NOTIFICATION CENTER OF MONTANA BEFORE DIGGING, INCLUDING BUT NOT LIMITED TO, TRENCHING AND SHRUB AND TREE PLANTING PITS. IF UTILITIES OCCUR AT LOCATIONS OF PROPOSED SHRUBS, OR WITHIN EIGHT (8) FEET OF PROPOSED TREES, THE CONTRACTOR SHALL REPORT SUCH CONDITIONS TO THE OWNER'S REPRESENTATIVE. DAMAGE TO EXISTING UTILITIES BY THE LANDSCAPE CONTRACTOR IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR.

0.3. THE LANDSCAPE PLAN AND DETAILS ARE TO BE USED IN CONJUNCTION WITH THE CIVIL AND ARCHITECTURAL PLANS TO FORM COMPLETE INFORMATION REGARDING SITE WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY COORDINATION WITH SUBCONTRACTORS AS REQUIRED TO ACCOMPLISH ALL CONSTRUCTION OPERATIONS. ALL PIPING, CONDUIT, SLEEVES, ETC., SHALL BE SET IN PLACE PRIOR TO INSTALLATION OF CONSTRUCTION ITEMS AND HARDSCAPES.

0.4. ALL EXISTING IMPROVEMENTS TO REMAIN, INCLUDING BUT NOT LIMITED TO UTILITIES, CURB AND GUTTER, WALKWAYS, AND EXISTING STRUCTURES, SHALL BE PROPERLY AND ADEQUATELY PROTECTED FROM DAMAGE DURING CONSTRUCTION OPERATIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESTORE TO THE ORIGINAL CONDITION ANY EXISTING ITEMS THAT ARE DAMAGED OR DISTURBED IN ANY WAY, AND AT NO ADDITIONAL COST TO THE OWNER.

0.5. THE DEVELOPER, HIS SUCCESSORS AND ASSIGNS, SHALL BE RESPONSIBLE FOR INSTALLATION, MAINTENANCE, AND REPLACEMENT OF ALL LANDSCAPING MATERIALS SHOWN OR INDICATED ON THE APPROVED SITE PLAN. ALL LANDSCAPING WILL BE INSTALLED AS DELINEATED ON THE PLAN.

0.6. ALL LANDSCAPE AREAS WILL BE IRRIGATED WITH A FULLY AUTOMATIC UNDERGROUND IRRIGATION SYSTEM. ALL BUILDINGS WILL HAVE A ROCK DRY ZONE 3'-0" FROM THE BUILDING, IN WHICH THERE WILL BE NO IRRIGATION. NO SPRAY IRRIGATION SHALL BE INSTALLED WITHIN 3'-0" OF BUILDINGS.

SUBMITTALS

1. GENERAL
 - 1.1. CERTIFICATES OF INSPECTION AND ANALYSIS: SUBMIT COPIES OF INVOICES FOR MATERIALS, INCLUDING SOIL AMENDMENTS, FERTILIZER, AND HERBICIDE, WITH STATE, FEDERAL, OR OTHER INSPECTION CERTIFICATES AND SHOWING SOURCE OR ORIGIN.
 - 1.2. PLANTING SCHEDULE: SCHEDULE EACH TYPE OF LANDSCAPE WORK REQUIRED DURING THE NORMAL SEASON FOR SUCH WORK IN THE AREA OF THE SITE. ESTABLISH DATES FOR EACH TYPE OF WORK AND ESTABLISH A COMPLETION DATE. CORRELATE WORK WITH SPECIFIED MAINTENANCE PERIODS TO PROVIDE MAINTENANCE UNTIL ACCEPTANCE BY THE OWNER. DO NOT DEPART FROM ACCEPTED SCHEDULE, EXCEPT WITH WRITTEN AUTHORIZATION BY THE OWNER'S REPRESENTATIVE. SUBMIT REQUEST TO THE OWNER FOR CHANGES IN PLANTING SCHEDULE. WHEN DELAYS IN THE PLANTING SCHEDULE ARE UNAVOIDABLE, INCLUDE DOCUMENTATION OF REASON FOR DELAY. MAINTENANCE PERIODS, IF ANY, WILL BE ADJUSTED TO COMPENSATE FOR EXTENSION OF TIME OR WORK OUTSIDE OF TIME LIMITATIONS.
 - 1.3. SUBMIT COPIES OF LOAD TICKETS FOR MULCH MATERIAL, PLANT MATERIAL, FERTILIZER, AND SOIL AMENDMENT TO OWNER'S REPRESENTATIVE.
 - 1.4. DO NOT MAKE SUBSTITUTIONS: IF SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, SUBMIT TO THE OWNER AND LANDSCAPE ARCHITECT WRITTEN EVIDENCE OF NON-AVAILABILITY AND PROPOSAL FOR USE OF EQUIVALENT MATERIAL.
 - 1.5. PESTICIDES: DO NOT USE UNLESS SPECIFIED.
 - 1.6. PROPER IDENTIFICATION: ALL PLANTS SHALL BE TRUE TO NAME AS ORDERED OR SHOWN ON PLANTING PLANS AND SHALL BE LABELED INDIVIDUALLY OR IN GROUPS BY SPECIES AND CULTIVAR (AS APPROPRIATE).
 - 1.7. CONTRACTOR SHALL PROVIDE A COMPLETE LIST OF ALL PLANT MATERIAL FOR APPROVAL BY THE OWNER A MINIMUM OF TEN (10) DAYS PRIOR TO DELIVERY. ANY SUBSTITUTIONS OF PLANT MATERIAL, INCLUDING BUT NOT LIMITED TO SIZE, TYPE, SPECIES AND VARIETY SHALL BE LISTED AND SUBMITTED TO THE OWNER AND LANDSCAPE ARCHITECT FOR APPROVAL.
 - 1.9. CONTRACT CLOSE-OUT SUBMITTALS:
 - 1.9.1. OPERATING AND MAINTENANCE DATA: AT COMPLETION OF WORK, SUBMIT ONE (1) DIGITAL COPY AND TWO (2) HARD COPIES TO THE OWNER IN ACCORDANCE WITH DIVISION 01 SECTION "CONTRACT CLOSEOUT", INCLUDE RECOMMENDED PROCEDURES FOR CONTINUED AND PROPER MAINTENANCE DURING A FULL CALENDAR YEAR.
 - 1.9.2. WARRANTY FOR TREES, PLANTS, AND GROUNDCOVERS: AT COMPLETION OF WORK, FURNISH WRITTEN WARRANTY TO THE OWNER BASED UPON SPECIFIED REQUIREMENTS.

QUALITY CONTROL

2. THE OWNER RESERVES THE RIGHT TO REJECT, AT ANY TIME OR PLACE PRIOR TO FINAL ACCEPTANCE, ALL PLANT MATERIALS THAT FAIL TO MEET THESE NOTES OR THE PROJECT SPECIFICATIONS. INSPECTION OF MATERIALS IS PRIMARILY FOR QUALITY, SIZE, AND VARIETY, BUT OTHER REQUIREMENTS ARE NOT WAIVED EVEN THOUGH VISUAL INSPECTION RESULTS IN APPROVAL. PLANTS ARE TO BE INSPECTED WHERE AVAILABLE; HOWEVER, INSPECTION AT THE PLACES OF SUPPLY SHALL NOT PRECLUDE THE RIGHT OF REJECTION AT THE SITE OR AT A LATER TIME BEFORE FINAL ACCEPTANCE.
2. REFERENCE STANDARDS:
 - 2.1. ANSI Z60.1 REQUIREMENTS FOR MEASUREMENTS, GRADING, BRANCHING, QUALITY, AND THE BALLING AND BURLAPPING OF PLANTS OF THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
 - 2.2. PLANT MEASUREMENTS SPECIFIED IN THE PLANT LIST ARE MINIMUM ACCEPTABLE SIZES. MEASURE PLANTS BEFORE PRUNING WITH BRANCHES IN NORMAL POSITION.
 - 2.3. PLANTS SHALL HAVE A HABIT OF GROWTH THAT IS NORMAL FOR THE SPECIES. THEY SHALL BE HEALTHY, VIGOROUS, AND FREE FROM INSECT PESTS, PLANT DISEASES, AND INJURIES. ALL PLANT MATERIAL SHALL BE INSPECTED STOCK CONFORMING TO STATE AND FEDERAL REGULATIONS.
 3. ORDINANCES AND REGULATIONS: LOCAL, MUNICIPAL, AND STATE LAWS AND RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE NOTES, AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR. ANYTHING CONTAINED IN THESE NOTES SHALL NOT BE CONSTRUED TO CONFLICT WITH ANY OF THE AFOREMENTIONED RULES, REGULATIONS, AND REQUIREMENTS OF THE SAME. HOWEVER, WHEN THESE NOTES AND DRAWINGS CALL FOR OR DESCRIBE MATERIALS, WORKMANSHIP OR CONSTRUCTION OF A HIGHER QUALITY, HIGHER STANDARD, OR LARGER SIZE THAN IS REQUIRED BY THE ABOVE RULES AND REGULATIONS, THE PROVISIONS OF THESE NOTES AND DRAWINGS SHALL TAKE PRECEDENCE.

DELIVERY, STORAGE, AND HANDLING

4. MATERIALS: DELIVER MATERIALS IN ORIGINAL CONTAINERS WITH TAGS SHOWING GENUS, SPECIES AND SIZE. PROTECT MATERIALS FROM DAMAGE DURING DELIVERY AND WHILE STORED AT SITE. THE OWNER RESERVES THE RIGHT TO INSPECT CONTAINERS BEFORE OR AFTER INSTALLATION TO VERIFY COMPLIANCE WITH SPECIFICATIONS.
5. TREES: NURSERY STOCK SHALL BE HARVESTED AND PLANTED DURING THE SAME GROWING SEASON. DO NOT PRUNE, EXCEPT AS APPROVED BY THE OWNER. PROTECT BARK, BRANCHES, AND ROOT SYSTEMS FROM SUN SCALD, DRYING, SWEATING, WHIPPING, AND OTHER HANDLING AND TYING DAMAGE. DO NOT BEND OR TIE TREES IN SUCH A MANNER AS TO DESTROY NATURAL SHAPE. TREES TO BE INSPECTED AND TAGGED BY THE OWNER AT NURSERY AND PRIOR TO DELIVERY ON SITE. PROVIDE PROTECTIVE COVERING DURING DELIVERY. PLANT MATERIALS DELIVERED WITHOUT PROTECTIVE COVERING MAY BE REJECTED. DO NOT DROP TREES DURING DELIVERY. ALL TREES SHALL BE LABELED WITH A SECURELY ATTACHED WATERPROOF TAG BEARING A LEGIBLE PLANT NAME. REMOVE ALL TAGS AND FLAGGING AS DIRECTED BY THE OWNER.
- 5.1. HANDLE PLANTING STOCK BY THE ROOT BALL ONLY.
6. DELIVER TREES AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND INSTALL IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN SIX (6) HOURS AFTER DELIVERY, SET PLANTING MATERIALS IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST.
- 6.1. SET BALLED STOCK ON GROUND AND COVER BALL WITH WOOD CHIPS, OR OTHER ACCEPTABLE MATERIAL.
- 6.2. DO NOT REMOVE CONTAINER-GROWN STOCK FROM CONTAINERS BEFORE PLANTING.
- 6.3. WATER ROOT SYSTEMS OF TREES STORED ON SITE WITH A FINE-MIST SPRAY. WATER AS OFTEN AS NECESSARY TO MAINTAIN ROOT SYSTEMS IN A MOIST CONDITION.

PROJECT SITE CONDITIONS

7. FIELD MEASUREMENTS: VERIFY ACTUAL GRADE ELEVATIONS, SERVICE AND UTILITY LOCATIONS, IRRIGATION SYSTEM COMPONENTS, AND DIMENSIONS OF PLANTINGS AND CONSTRUCTION CONTOGOUOS WITH NEW PLANTINGS BY FIELD MEASUREMENTS BEFORE PROCEEDING WITH PLANTING WORK.
- 7.1. VEHICULAR ACCESS ON SITE SHALL BE AS DIRECTED BY THE OWNER. REPAIR DAMAGE TO PREPARED TOPSOIL AND EXISTING SURFACES, CAUSED BY VEHICULAR ACCESS AND MOVEMENT DURING WORK UNDER THIS SECTION, TO THE ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
- 7.2. UTILITIES: CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING UTILITIES AND REPAIRING UTILITIES DAMAGED DURING THE WORK. DETERMINE LOCATION OF OVERHEAD AND UNDERGROUND UTILITIES AND PERFORM WORK IN A MANNER THAT WILL AVOID DAMAGE. HAND EXCAVATE, AS REQUIRED. MAINTAIN MARKINGS UNTIL THEIR REMOVAL IS MUTUALLY AGREED UPON BY THE CONTRACTOR AND OWNER.
- 7.3. EXCAVATION: WHEN CONDITIONS DETERMINAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS RUBBLE FILL, ADVERSE DRAINAGE CONDITIONS, OR OBSTRUCTIONS, NOTIFY THE OWNER BEFORE PLANTING.
- 7.4. WEATHER LIMITATIONS: PROCEED WITH PLANTING ONLY WHEN EXISTING AND FORECASTED WEATHER CONDITIONS PERMIT PLANTING TO BE PERFORMED WHEN BENEFICIAL AND OPTIMUM RESULTS MAY BE OBTAINED. APPLY PRODUCTS DURING FAVORABLE WEATHER CONDITIONS ACCORDING TO MANUFACTURER'S WRITTEN INSTRUCTIONS AND WARRANTY REQUIREMENTS.
- 7.5. PROTECTION: ERECT AND MAINTAIN BARRICADES, WARNING SIGNS AND LIGHTS, AND PROVIDE GUARDS AS NECESSARY OR REQUIRED TO PROTECT ALL PERSONS ON THE SITE FROM EXPOSED EXCAVATIONS.

COORDINATION AND SCHEDULING

8. COORDINATE INSTALLATION OF PLANTING MATERIALS DURING NORMAL PLANTING SEASONS FOR EACH TYPE OF PLANT MATERIAL REQUIRED. PLANTING MATERIALS SHOULD BE PLANTED BETWEEN APRIL 15 AND OCTOBER 1, OR AT THE DIRECTION OF THE OWNER. IF IRRIGATION IS NOT AVAILABLE AT THE TIME OF PLANTING THEN THE CONTRACTOR IS RESPONSIBLE FOR WATERING OF ALL PLANT MATERIAL AND NO ADDITIONAL COST TO THE OWNER.
- 8.1. PLANT TREES AFTER FINAL GRADES HAVE BEEN ACCEPTED AND PRIOR TO SEEDING OR SODDING, UNLESS OTHERWISE AUTHORIZED BY THE OWNER.

WARRANTY

9. WARRANTY: THE WARRANTY SPECIFIED IN THIS ARTICLE SHALL NOT DEPRIVE THE OWNER OF OTHER RIGHTS THE OWNER MAY HAVE UNDER OTHER PROVISIONS OF THE CONTRACT DOCUMENTS AND SHALL BE IN ADDITION TO, AND RUN CONCURRENT WITH, OTHER WARRANTIES MADE BY THE CONTRACTOR UNDER REQUIREMENTS OF THE CONTRACT DOCUMENTS.
- 9.1. TREES, PLANTS, AND GROUNDCOVERS SHALL BE WARRANTED FOR A PERIOD OF ONE (1) YEAR AFTER DATE OF FINAL ACCEPTANCE, AGAINST DEFECTS INCLUDING DEATH, STRUCTURAL FAILURES, DIEBACK AS DETERMINED BY THE OWNER.
- 9.2. THE WARRANTY SHALL NOT BE ENFORCED SHOULD ANY PLANT DIE DUE TO VANDALISM AFTER FINAL ACCEPTANCE.
- 9.3. REMEDIAL ACTIONS:
 - 9.3.1. REPLACE ANY PLANT MATERIALS THAT HAVE BEEN EXCESSIVELY PRUNED, MORE THAN TWENTY PERCENT (20%) PERCENT DEAD, OR IN AN UNHEALTHY OR DECLINING CONDITION IMMEDIATELY UPON NOTICE FROM THE OWNER DURING WARRANTY PERIOD.
 - 9.3.2. IMMEDIATELY REMOVE DEAD PLANTS AND REPLACE UNLESS REQUIRED TO PLANT IN THE SUCCEEDING PLANTING SEASON.
 - 9.3.3. ANY MATERIALS FOUND TO BE DEAD, MISSING, UNHEALTHY, IN POOR CONDITION, OR THAT HAVE LOST THEIR NATURAL SHAPE SHALL BE REPLACED IMMEDIATELY.
 - 9.3.4. THE OWNER SHALL BE THE SOLE JUDGE AS TO THE CONDITION OF THE MATERIAL. REPLACEMENT OR REPAIR OF MATERIALS PRIOR TO INITIAL ACCEPTANCE DOES NOT WAIVE THE NORMAL WARRANTY.
- 9.4. ALL PLANTS SHALL BE TRUE TO NAME AND MEET ALL CONDITIONS OF THESE SPECIFICATIONS. ANY PLANT THAT IS NOT TRUE TO NAME AS INDICATED BY FORM, LEAF, FLOWER, OR FRUITING CHARACTERISTICS SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

TREE MAINTENANCE DURING CONSTRUCTION PERIOD

10. MAINTAIN TREES BY PRUNING, CULTIVATING, WATERING, MULCHING, WINTER WATERING, WEEDING, WRAPPING, UNWRAPPING, RESTORING PLANTING SAUCERS, AND RESETTING TO PROPER GRADES OR VERTICAL POSITION, AS REQUIRED TO ESTABLISH HEALTHY, VIBALE PLANTINGS. CONTROLS AS REQUIRED TO KEEP TREES FREE OF INSECTS AND DISEASE. RESTORE OR REPLACE DAMAGED TREE WRAPPINGS, STAKES, GUYING. TREES SHALL BE MAINTAINED BY THE CONTRACTOR THROUGH THE WARRANTY PERIOD OF THE PROJECT, INCLUDING WINTER WATERING.

PRODUCTS

- MULCHES:
11. WOOD MULCH FOR PLANTING:
 - 11.1. SHREDDED OR CHIPPED WOODY MATERIAL FREE FROM WEEDS AND OTHER NON-WOODY DEBRIS.
 12. ROCK MULCH:
 - 12.1. COBBLE AT SWALES: COBBLE SHALL BE ROUNDED RIVERBED ROCK, 4"-12" DIAMETER, SMOOTH AND WITH A MINIMUM (5% MAXIMUM) OF FRACTURED PIECES, NATURAL COLOR RANGE OF GREYS AND BROWNS. CONTRACTOR TO PROVIDE SAMPLE FOR APPROVAL.
 - 12.2. ROCK AT DRY ZONE AROUND BUILDINGS: ROCK SHALL BE SCREENED 1" - 2" DIAMETER ANGULAR AGGREGATE, NATURAL COLOR RANGE OF GREYS AND BROWNS. CONTRACTOR TO PROVIDE SAMPLE FOR APPROVAL.
- WEED-CONTROL BARRIERS:
13. NONWOVEN GEOTEXTILE FILTER FABRIC:
 - 13.1. POLYPROPYLENE OR POLYESTER FABRIC, 3 OZ./SQ. YD. (101G/SQ. M) MINIMUM, COMPOSED OF FIBERS FORMED INTO A STABILE NETWORK SO THAT FIBERS RETAIN THEIR RELATIVE POSITION. FABRIC SHALL BE INERT TO BIOLOGICAL DEGRADATION AND RESIST NATURALLY ENCOUNTERED CHEMICALS, ALKALIS, AND ACIDS.

- LANDSCAPE EDGING:
14. STEEL EDGING: TO BE 4" HEIGHT MINIMUM, ATTACHED-STAKE STEEL EDGING, 14 GAUGE, POWDER COATED BLACK, OR APPROVED SUBSTITUTE. PLANT BED EDGING LAYOUT SHOWN IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL FIELD FIT EDGER USING THE DRAWINGS AS A BASIS FOR LAYOUT. CONTACT OWNER'S REPRESENTATIVE FOR FINAL APPROVAL BEFORE EDGER INSTALLATION.

- PLANT PIT BACKFILL MATERIAL:
15. UNLESS OTHERWISE DIRECTED BY THE OWNER, THE PLANT PIT BACKFILL MATERIAL SHALL CONSIST OF THE FOLLOWING, THOROUGHLY MIXED:
 - 15.1. SOIL ORIGINALLY EXCAVATED FROM THE PIT: TWO THIRDS (2/3) PROPORTION OF TOTAL MIX.
 - 15.2. SOIL AMENDMENT (CLASS 1 COMPOST): ONE-THIRD (1/3) PROPORTION OF TOTAL MIX.

- WINTER WATER:
16. WINTER WATERING
 - 16.1. PROVIDE WINTER WATERING OF PLANT MATERIALS AS NEEDED, OR MINIMUM OF FOUR TIMES UNLESS OTHERWISE AGREED TO. NOTIFY THE OWNER AT LEAST TWO (2) WORKING DAYS IN ADVANCE WHEN WINTER WATERING IS NEEDED, AND, UPON OWNER'S REQUEST, ADJUST WATERING SCHEDULES AS NEEDED TO ALLOW FOR OWNER'S PRESENCE DURING WATERING.
 - 16.2. PERIODICALLY CHECK SOIL MOISTURE AND THE CONDITION OF PLANT MATERIAL THROUGHOUT THE WARRANTY PERIOD, AND NOTIFY THE OWNER IN WRITING WHEN OVER/UNDER WATERING IS IDENTIFIED DURING THE IRRIGATION SEASON.
 - 16.3. FOR THE PERIOD BETWEEN IRRIGATION SYSTEM WINTERIZATION AND SUBSEQUENT SPRING START-UP, MONITOR WEATHER CONDITIONS AND PROVIDE SOIL MOISTURE CHECKS AT LEAST TWICE PER MONTH AND NOTIFY THE OWNER IN WRITING REGARDING SOIL MOISTURE CONDITIONS.
 - 16.4. CONTRACTOR IS RESPONSIBLE FOR A MINIMUM OF FIVE SITE VISITS FOR WINTER WATERING. NOTIFY OWNER AT LEAST 48 HOURS IN ADVANCE OF SITE WATERING VIST. OWNER SHALL BE IN ATTENDANCE TO DOCUMENT EACH WINTER WATERING IN WRITING AS PART OF THE FINAL ACCEPTANCE PROCESS.
 - 16.5. WHEN WINTER WATERING, DELIVER THE FOLLOWING MINIMUM AMOUNTS OF WATER TO EACH PLANT: 15 GAL. PER B&B TREE; 3-5 GAL. PER #5 SHRUB/ORNAMENTAL GRASS; AND 2-3 GAL. PER 100 S.F. (APPROX. 2") IN #1 OR PERENNIAL PLANTING AREAS. IF IRRIGATION SYSTEM IS CHARGED TO WATER, CONTRACTOR SHALL WINTERIZE SYSTEM AFTER EACH USE.
 - 16.6. UNLESS NO CIRCUMSTANCES SHALL PLANT WARRANTIES BE VOIDED BY CONTRACTOR'S CLAIMS OF INADEQUATE OR EXCESSIVE WATERING.

EXECUTION

- EXAMINATION:
17. EXAMINE AREAS TO RECEIVE LANDSCAPING FOR COMPLIANCE WITH REQUIREMENTS AND FOR CONDITIONS AFFECTING THE PERFORMANCE OF WORK OF THIS SECTION. DO NOT PROCEED WITH INSTALLATION UNTIL UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.
 - 17.1. VERIFY THAT NO FOREIGN OR DELETERIOUS MATERIAL OR LIQUID SUCH AS PAINT, PAINT WASHOUT, CONCRETE OR TILE SLURRY, CONCRETE LAYERS OR CHUNKS, CEMENT, PLASTER, OILS, GASOLINE, DIESEL FUEL, PAINT THINNER, TURPENTINE, TAR, ROOFING COMPOUND, OR ACID HAS BEEN DEPOSITED IN SOIL WITHIN THE WORK AREA.
 - 17.2. SUSPEND PLANTING OPERATIONS DURING PERIODS OF EXCESSIVE MOISTURE OR FREEZING TEMPERATURES UNTIL ACCEPTABLE PLANTING CONDITIONS EXIST.
 - 17.3. UNIFORMLY MOISTEN EXCESSIVELY DRY SOIL THAT IS NOT WORKABLE.
 - 17.4. IF CONTAMINATION IS PRESENT IN THE SOIL WITHIN A PLANTING AREA, NOTIFY THE OWNER IMMEDIATELY.
 - 17.4.1. IF CONTAMINATION IS DISCOVERED DURING CONSTRUCTION THE OWNER WILL DETERMINE THE BEST COURSE OF ACTION TO REMEDIATE THE CONTAMINATION, WHICH MAY INCLUDE REQUESTING THE CONTRACTOR PERFORM THE REMOVAL OF CONTAMINATION AND REPLACEMENT OF CLEAN MATERIAL.
 - 17.4.2. IF CONTAMINATION IS DETERMINED TO BE THE RESULT OF CONSTRUCTION OPERATIONS, CONTRACTOR IS TO REMOVE CONTAMINATED MATERIAL AND REPLACE WITH CLEAN MATERIAL AT THE DIRECTION OF THE OWNER. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED AND APPROVED BY OWNER.

FINISH AND FINE GRADE:

18. GENERAL NOTES
 - 18.1. ROUGH GRADE AND FINISHED GRADE WILL BE PERFORMED BY OTHERS. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FINE GRADING AFTER SOIL AMENDMENT OPERATIONS TO ALLOW FOR MULCH INSTALLATION.
 - 18.2. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING POSITIVE DRAINAGE AWAY FROM ALL STRUCTURES.
 - 18.3. CONTRACTOR TO NOTIFY OWNER'S REPRESENTATIVE OF ANY POORLY DRAINED AREAS BEFORE COMMENCING WORK.
 - 18.4. CONTRACTOR SHALL OBTAIN APPROVAL OF THE OWNER'S REPRESENTATIVE OF THE GRADING BEFORE PLANTING.
 - 18.5. FINISH GRADE SHALL BE BELOW EDGE OF PAVEMENT BEFORE SEEDING OR PLANTING.
 - 18.6. NOXIOUS WEEDS OR PARTS THEREOF SHALL NOT BE PRESENT IN THE SURFACE GRADE PRIOR TO SEEDING.

PREPARATION:

19. PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES, TURF AREAS AND EXISTING PLANTS FROM DAMAGE CAUSED BY PLANTING OPERATIONS. REPAIR DAMAGE TO SURROUNDING AREAS AND SITE ELEMENTS NOTED ABOVE RESULTING FROM PLANTING OPERATIONS AT NO ADDITIONAL COST TO THE OWNER.
- 19.1. LAYOUT, STAKE, AND LABEL ALL INDIVIDUAL TREE LOCATIONS FOR APPROVAL BY THE OWNER PRIOR TO INSTALLING TREES.
- 19.2. OUTLINE PLANTING BEDS AND MARK PLANT LOCATIONS WITHIN THE BED(S) FOR APPROVAL BY THE OWNER PRIOR TO INSTALLING ANY PLANT MATERIAL OR MOW BANDS. MAKE ADJUSTMENTS AS DIRECTED AT NO ADDITIONAL COST TO THE OWNER.
- 19.3. IF FORMAL ARRANGEMENTS OR CONSECUTIVE ORDER OF PLANTS IS INDICATED ON CONTRACT DRAWINGS, SELECT STOCK FOR UNIFORM HEIGHT AND SPREAD, AND NUMBER THE LABELS TO ASSURE SYMMETRY IN PLANTING.

WEED CONTROL:

20. PROJECT AREA SHALL BE KEPT FREE OF WEEDS FOR THE DURATION OF THE PROJECT THROUGH PHYSICAL REMOVAL USE HERBICIDES ONLY WITH THE WRITTEN APPROVAL OF OWNER, AND IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

MULCHING:

21. ALL PLANTED AREAS SHALL BE COVERED BY MULCH AS SPECIFIED AND TO THE DEPTH AS SPECIFIED, AS APPROVED BY OWNER.
- 21.1. DO NOT BURY PERENNIALS OR ORNAMENTAL GRASSES WITH MULCH
- 21.2. PULL MULCH BACK 6" FROM TRUNK OF TREES AS PER DETAILS.

PROTECTION:

22. LOCATE, PROTECT AND MAINTAIN THE IRRIGATION SYSTEM DURING SEEDING OPERATIONS. REPAIR IRRIGATION SYSTEM COMPONENTS DAMAGED DURING SEEDING OPERATIONS SHALL BE REPLACED OR REPAIRED TO CURRENT CITY IRRIGATION STANDARDS AT CONTRACTOR'S EXPENSE.
- 22.1. EROSION CONTROL: TAKE MEASURES AND FURNISH EQUIPMENT AND LABOR NECESSARY TO CONTROL AND PREVENT SOIL EROSION, BLOWING SOIL AND ACCUMULATION OF WIND-DEPOSITED MATERIALS ON THE SITE THROUGH

HELENA FIRESTATION #3

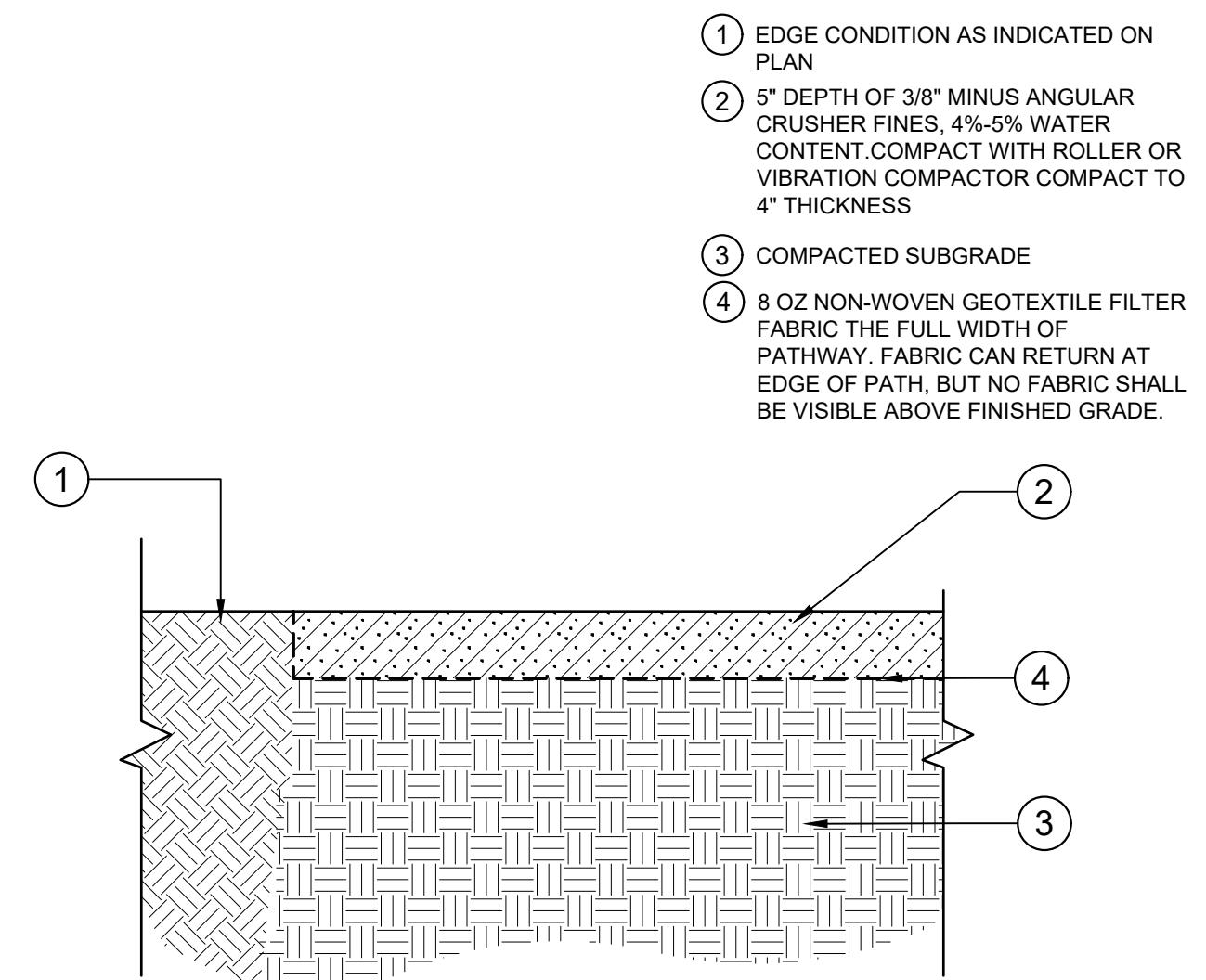
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DETAIL SHEET

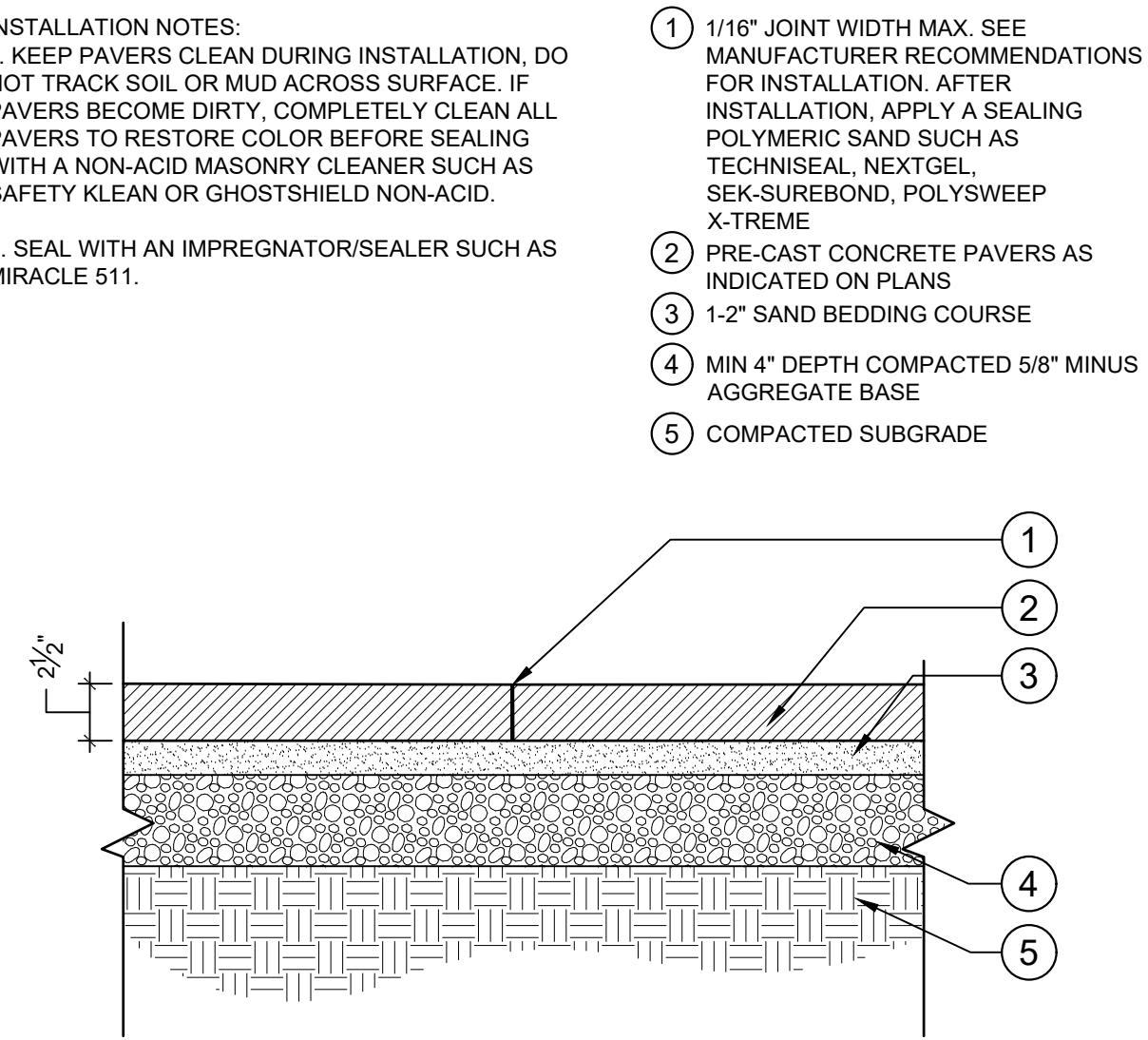
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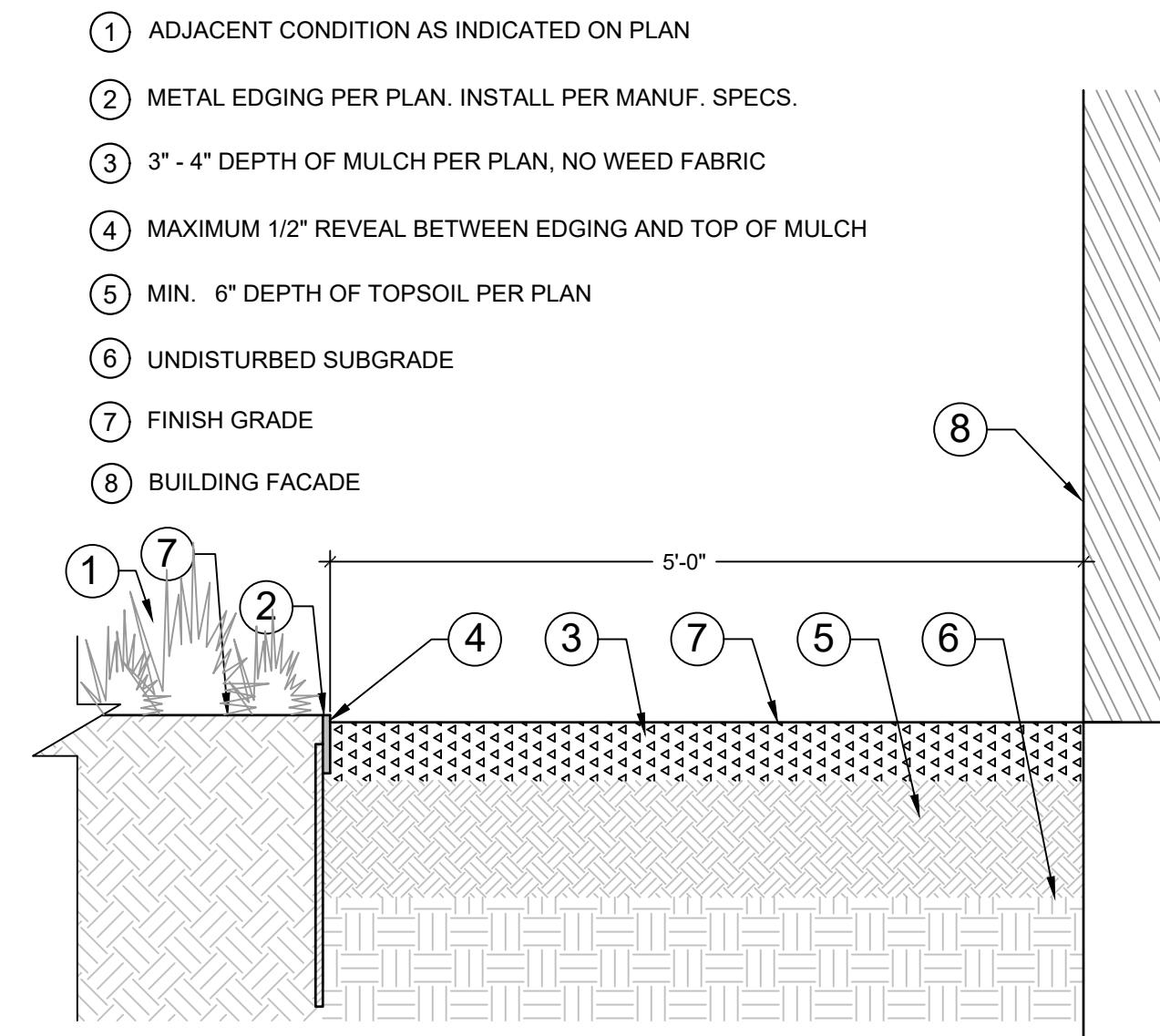
1 DECOMPOSED GRANITE TRAIL
1 1/2" = 1'-0"

P-CO-HEL2-05



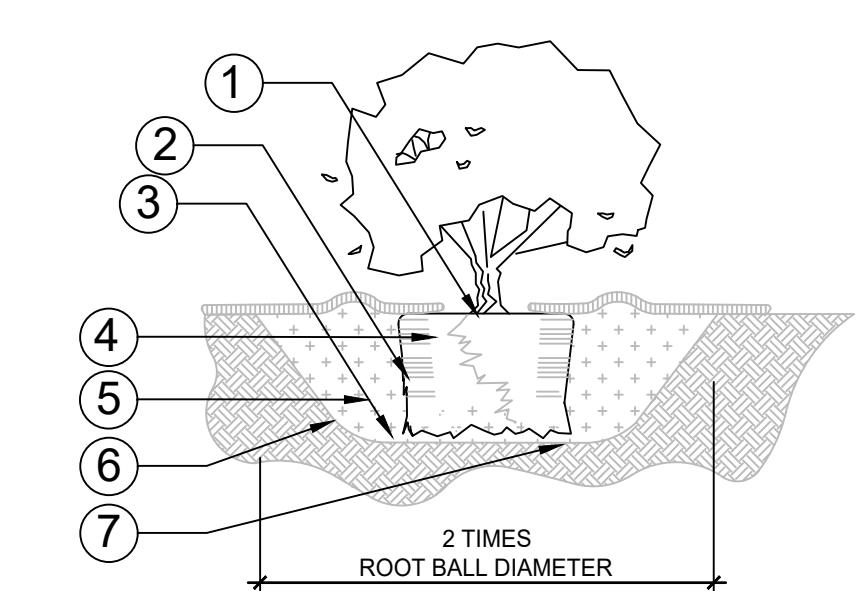
2 SAND SET PRE-CAST CONCRETE PAVERS
1 1/2" = 1'-0"

P-CO-HEL2-04



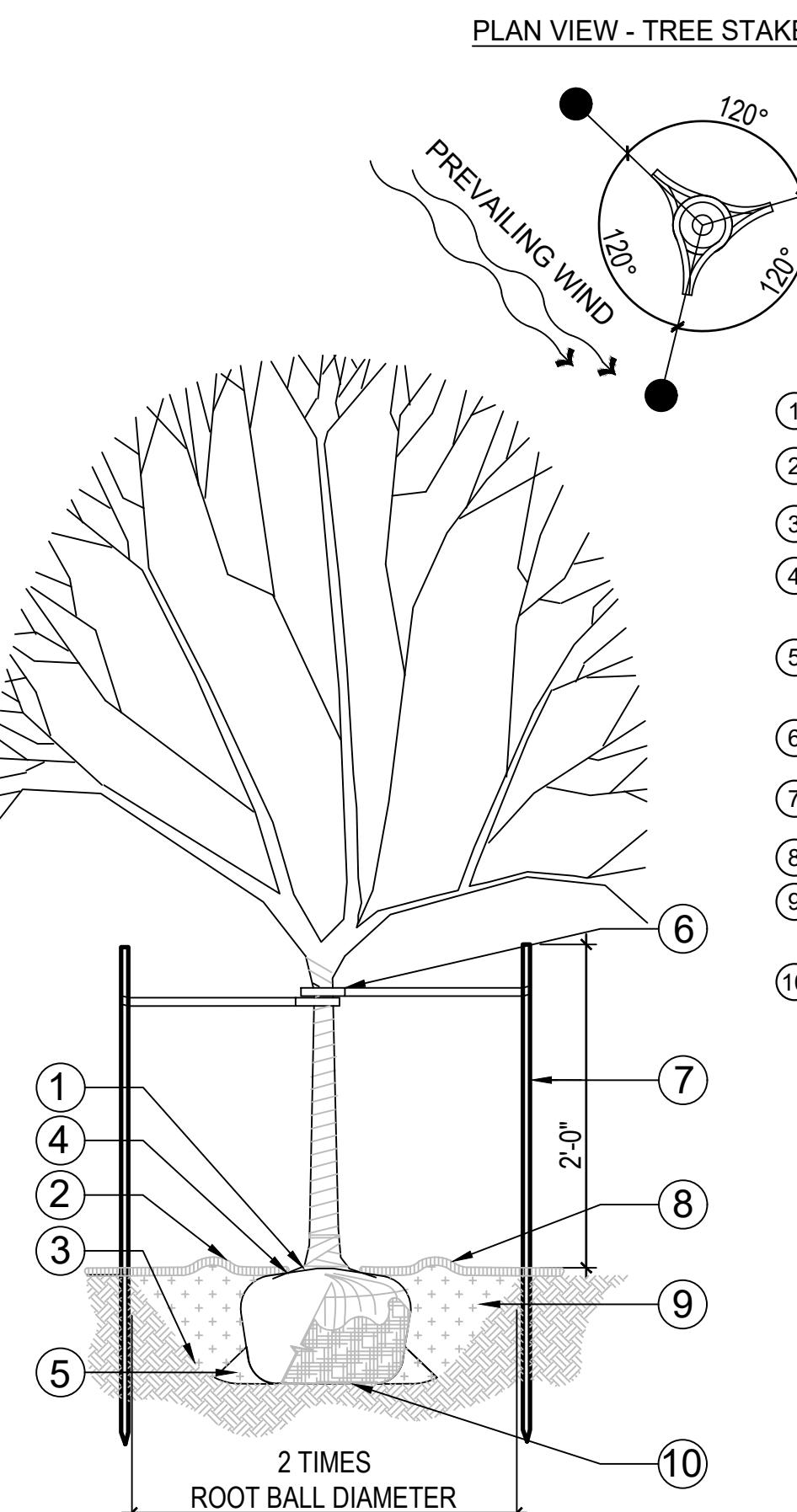
3 BUTLER STRIP WITH METAL EDGING
1" = 1'-0"

P-CO-HEL2-57

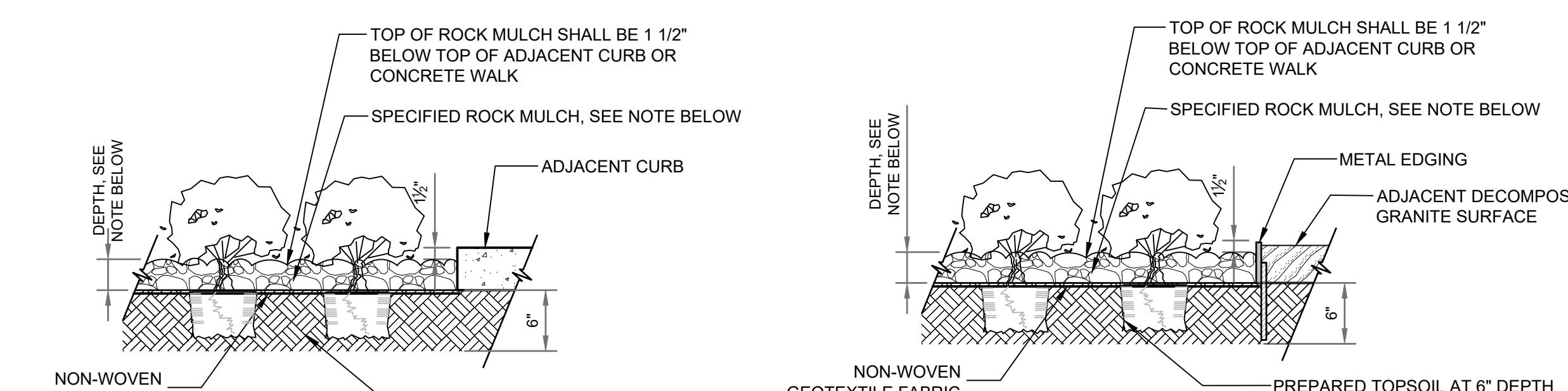


4 SHRUB & ORNAMENTAL GRASS PLANTING
NOT TO SCALE

P-CO-HEL2-03



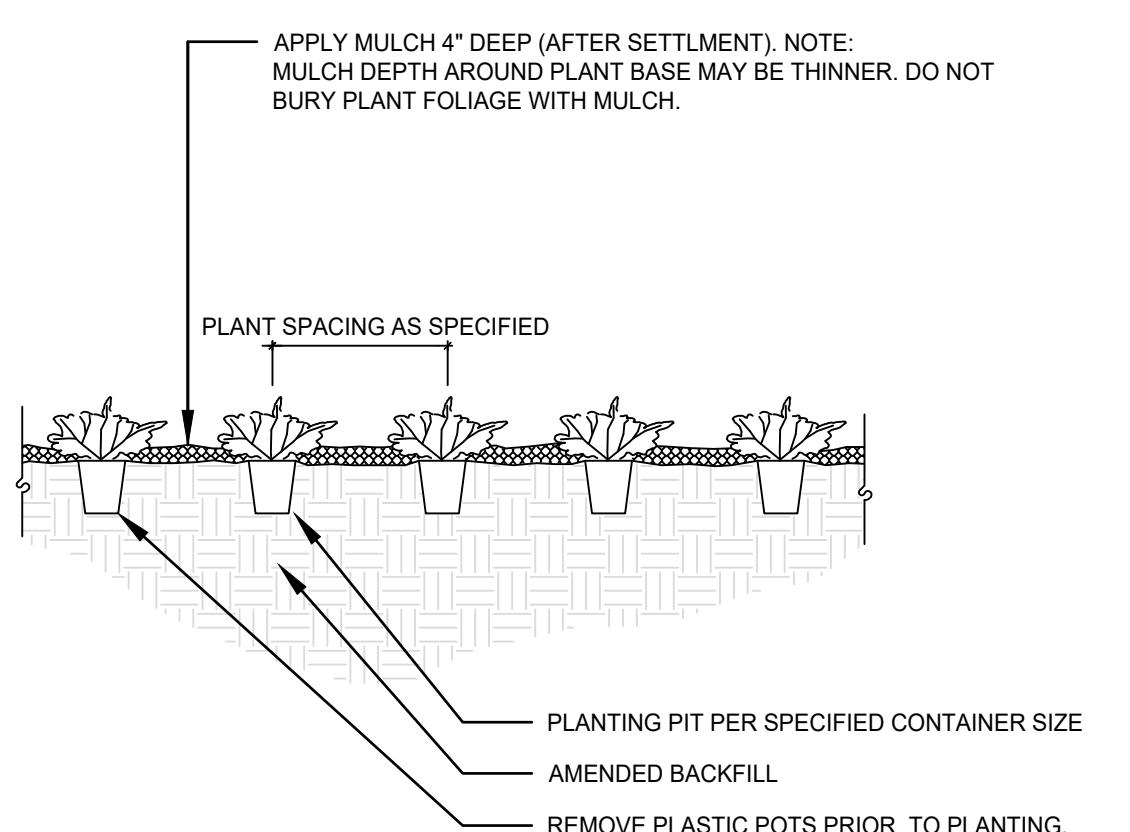
PLAN VIEW - TREE STAKES



NOTES:
1. INSTALL ROCK MULCH IN ALL AREAS SHOWN ON PLAN AT A DEPTH OF 2"-3".

5 ROCK MULCH SECTION IN PLANTING BEDS
1" = 1'-0"

P-CO-HEL2-08



6 PERENNIAL & GROUNDCOVER PLANTING
NOT TO SCALE

P-CO-HEL2-07

7 DECIDUOUS TREE PLANTING
NOT TO SCALE

P-CO-HEL2-01



STEPSTONE COLOR

DARK | ADOBE | COLOR #1425

1,2

MEDIUM | CAFE BROWN | COLOR
#1407

2,3,4

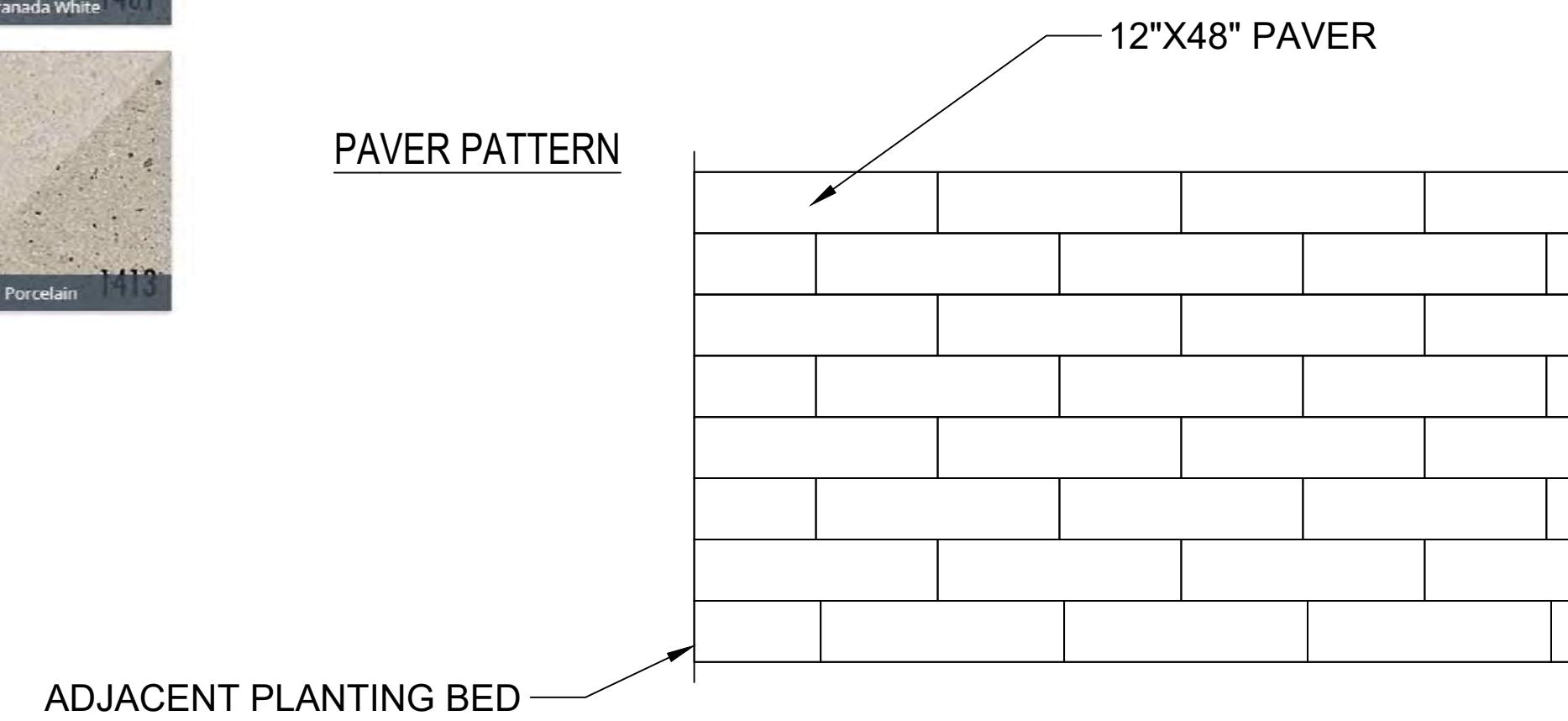
LIGHT | PEBBLE | COLOR # 1424

5,6

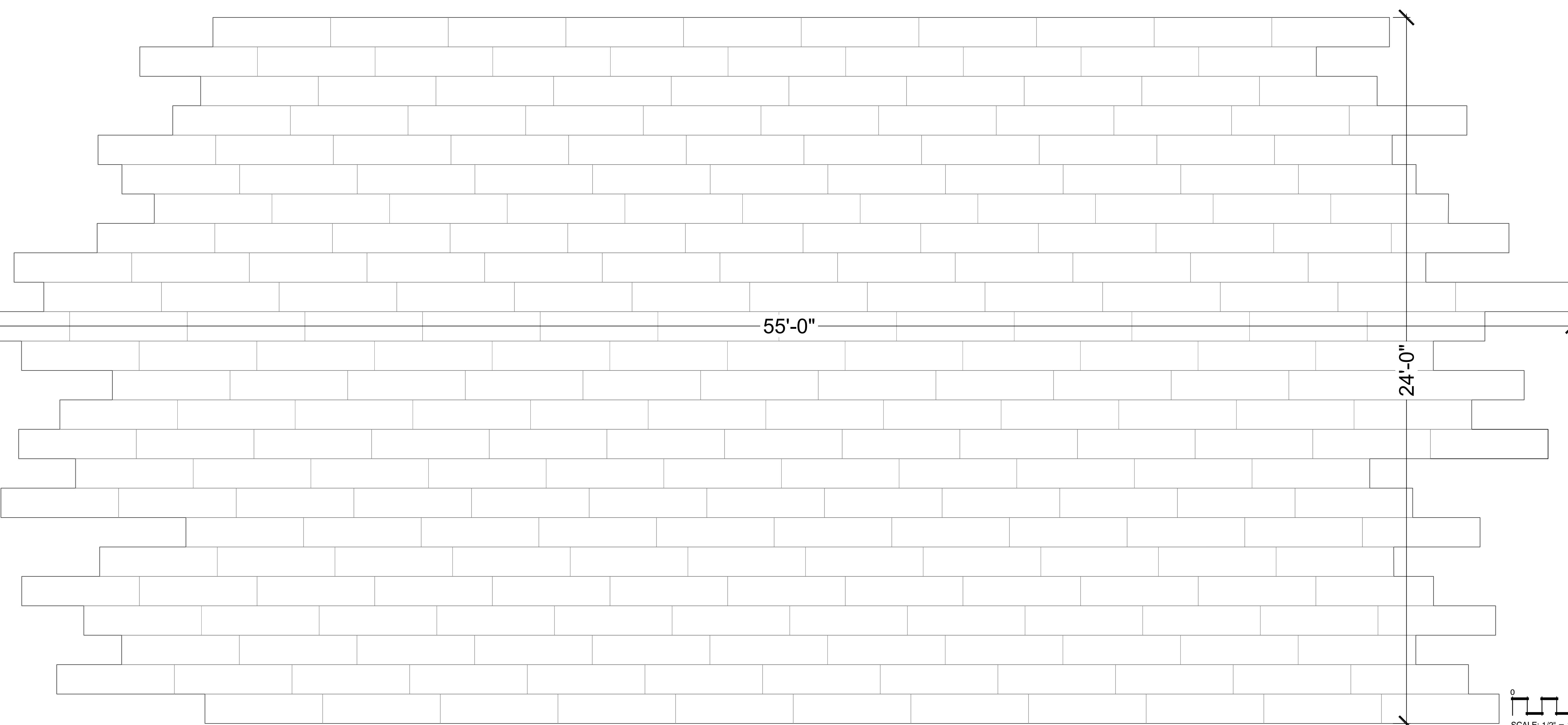
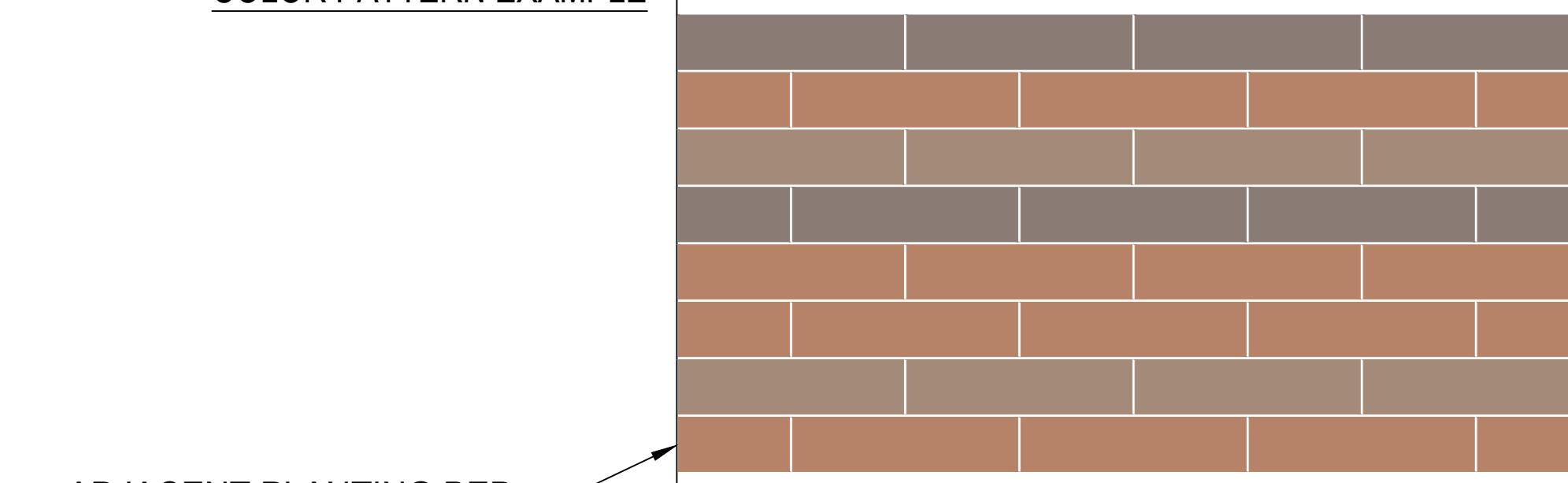
RANDOM PATTERN NOTES:

- SELECT NUMBERS BETWEEN 1-6 USING A RANDOM NUMBER GENERATOR. GOOGLE'S VERSION WORKS WELL.
- RUN THE RANDOM NUMBER GENERATOR TO SELECT THE COLOR OF EACH ROW OF PAVERS, USING THE NUMBERS INDICATED FOR EACH COLOR TO THE LEFT. SOME PAVERS HAVE TWO OR THREE NUMBERS, SELECT THIS PAVER IF EITHER NUMBER IS GENERATED.
- PLACE THE COLORS IN THE PATTERN LISTED BELOW.
- CUT THE EDGE PAVERS AS NEEDED TO MEET THE ADJACENT HARDCAPE.
- PLEASE NOTE, THE PATTERN BELOW IS FOR EXAMPLE ONLY, TO ILLUSTRATE ONE VERSION OF A RANDOM PATTERN. DO NOT COPY THE COLORS AND SIZES BELOW, AS THIS WOULD CREATE A REPEATING PATTERN.

PAVER PATTERN



COLOR PATTERN EXAMPLE



HELENA FIRESTATION #3

DOWLING SHIVEHATTER ARCHITECTS ARCHITECTURE + ENGINEERING

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NORTH PLANTING PLAN

PROJECT #: 24-000844

ISSUE DATES:

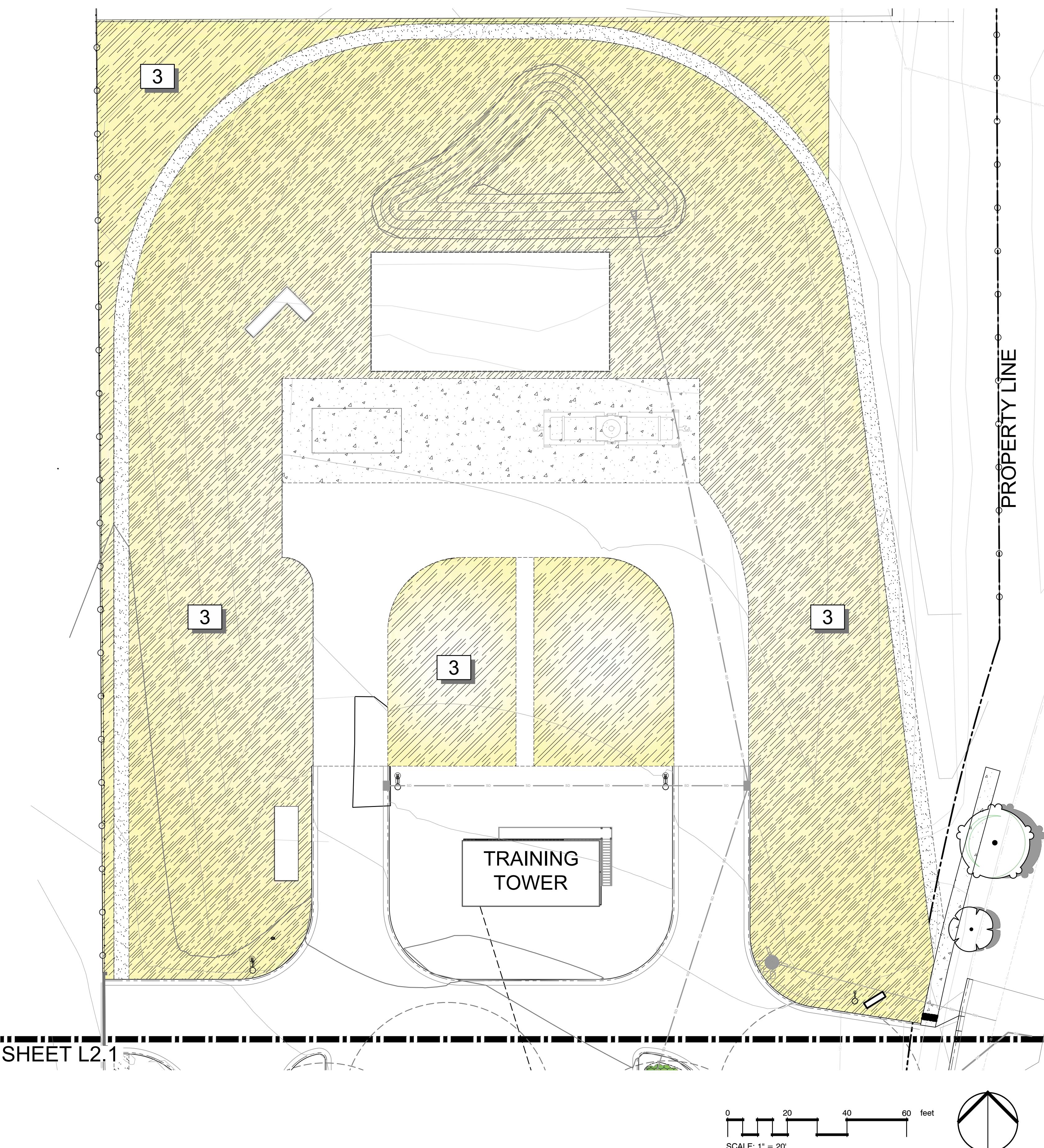
50% CD 09-12-25

DRAWN BY: SS

L2.0

10.22.25

CONSTRUCTION DOCUMENTS



HELENA FIRESTATION #3

DOWLING SHIVEHATTER
ARCHITECTURE + ENGINEERING

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www.dsmt.com

SOUTH PLANTING PLAN

PROJECT #: 24-000844
ISSUE DATES:

50% CD 09-12-25

DRAWN BY: SS

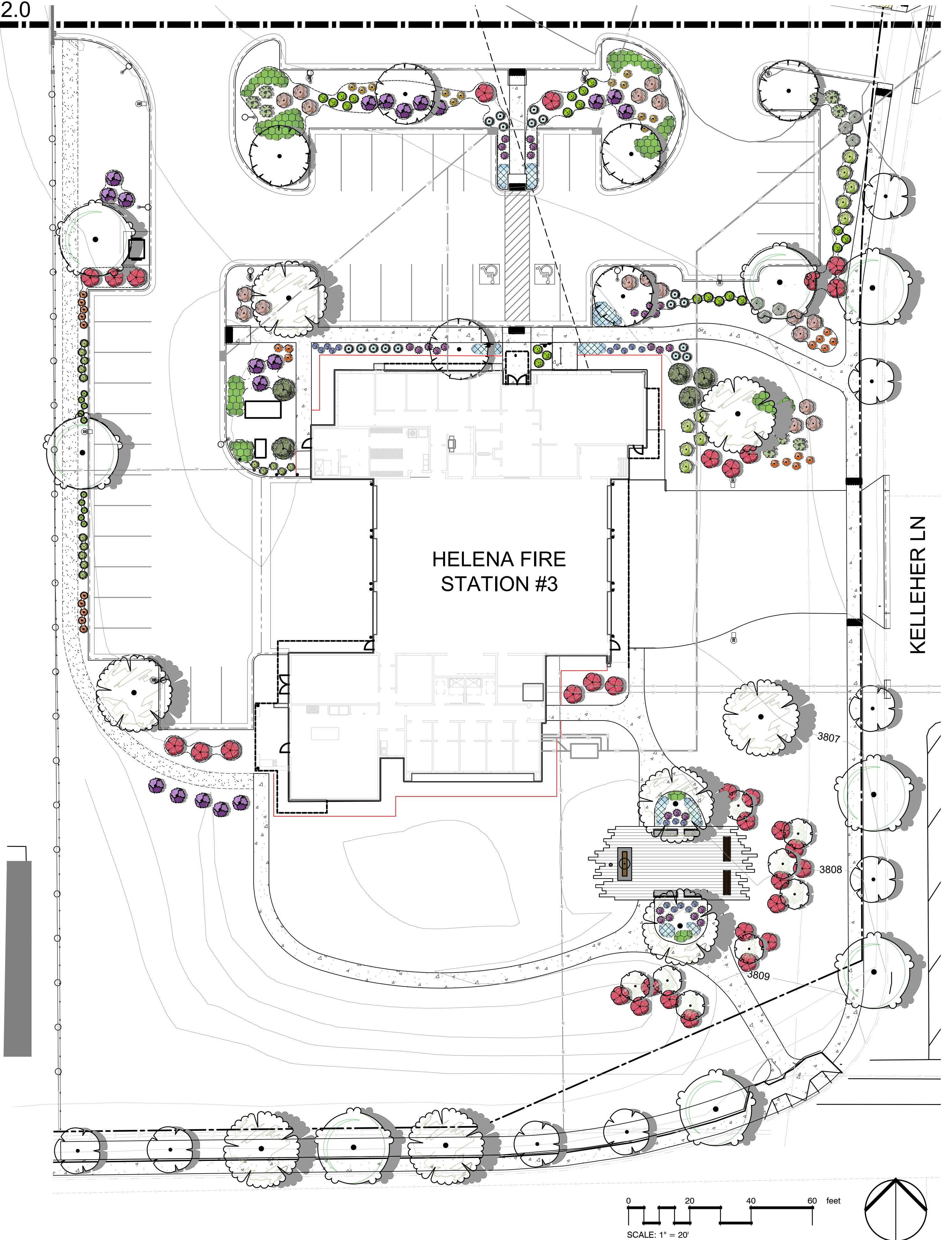
L2.1

10.22.25

SHEET L2.0

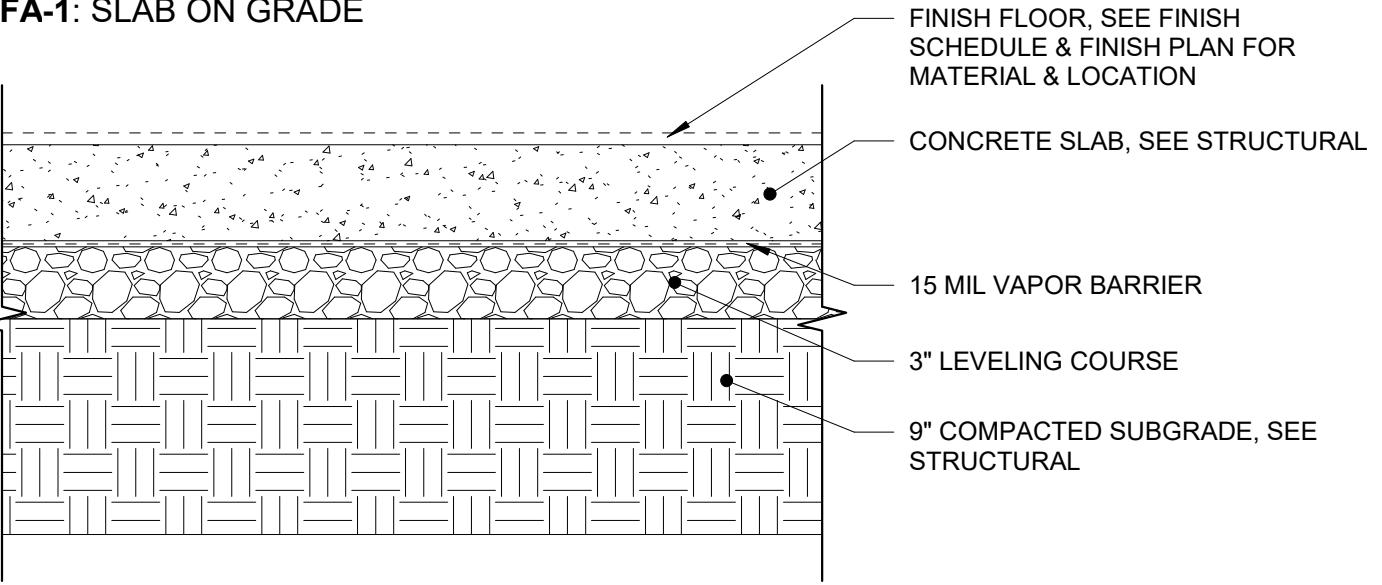
PLANT SCHEDULE

SYMBOL	QTY	BOTANICAL / COMMON NAME	CAL
TREES			
	6	ACER GINNALA AMUR MAPLE	2.5" CAL.
	9	ACER GLABRUM ROCKY MOUNTAIN MAPLE	2.5" CAL.
	9	CELTIS OCCIDENTALIS COMMON HACKBERRY	2.5" CAL.
	8	QUERCUS MACROCARPA BURR OAK	2.5" CAL.
	8	SYRINGA RETICULATA JAPANESE TREE LILAC	1.5" CAL.
SHRUBS			
	12	CHRYSOTHAMNUS NAUSEOSUS BLUE RABBITBRUSH	1 GAL
	5	CORNUS SERICEA RED TWIG DOGWOOD	5 GAL
	9	JUNIPERUS COMMUNIS 'MONDAP' ALPINE CARPET JUNIPER	5 GAL
	6	PHILADELPHUS MICROPHYLLUS LITTLELEAF MOCKORANGE	5 GAL
	19	PHYSOCARPUS OPULIFOLIUS 'COPPERTINA' COPPERTINA NINEBARK	5 GAL
	18	PRUNUS BESSEYI 'P011S' PAWNEE BUTTES® SAND CHERRY	1 GAL
	33	RHUS AROMATICA 'GRO-LOW' GRO-LOW FRAGRANT SUMAC	5 GAL
	21	RIBES ALPINUM 'GREEN MOUND' GREEN MOUND ALPINE CURRANT	5 GAL
	10	RIBES AUREUM GOLDEN CURRANT	5 GAL
GRASSES			
	15	BOUTELLOUA GRACILIS 'BLONDE AMBITION' BLONDE AMBITION BLUE GRAMA	1 GAL
	17	HELIOTRICHON SEMPERVIRENS SAPPHIRE BLUE OAT GRASS	1 GAL
	10	MISCANTHUS 'PURPURASCENS' FLAME GRASS	5 GAL
	10	PANICUM VIRGATUM 'TOTEM POLE' PRAIRIE WINDS® TOTEM POLE SWITCH GRASS	5 GAL
PERENNIALS			
	13	ACHILLEA MILLEFOLIUM 'FIREFLY PEACH SKY' YARROW 'FIREFLY PEACH SKY'	1 GAL
	28	AMORpha CANESCENS LEADPLANT	1 GAL
	18	HEUCHERA X 'PALACE PURPLE' PALACE PURPLE CORAL BELLS	1 GAL
GROUND COVERS			
	270	ARCTOSTAPHYLOS UVA-URSI KINNICKINICK	FLAT
	54,671 SF	MT PF NATIVE RANGE-GRASS FORB SHRUB MIX F	HYDROSEED
	121	PF HABITAT STORE PHLOX DIVARICATA WILD BLUE PHLOX	FLAT
			CONT SPACING

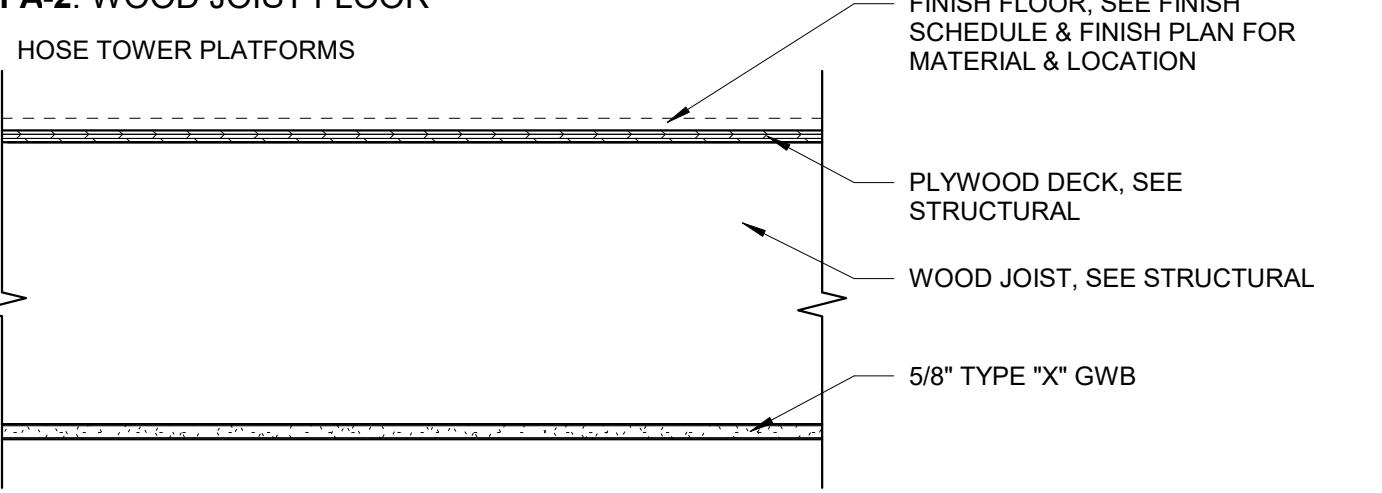


FLOOR ASSEMBLIES

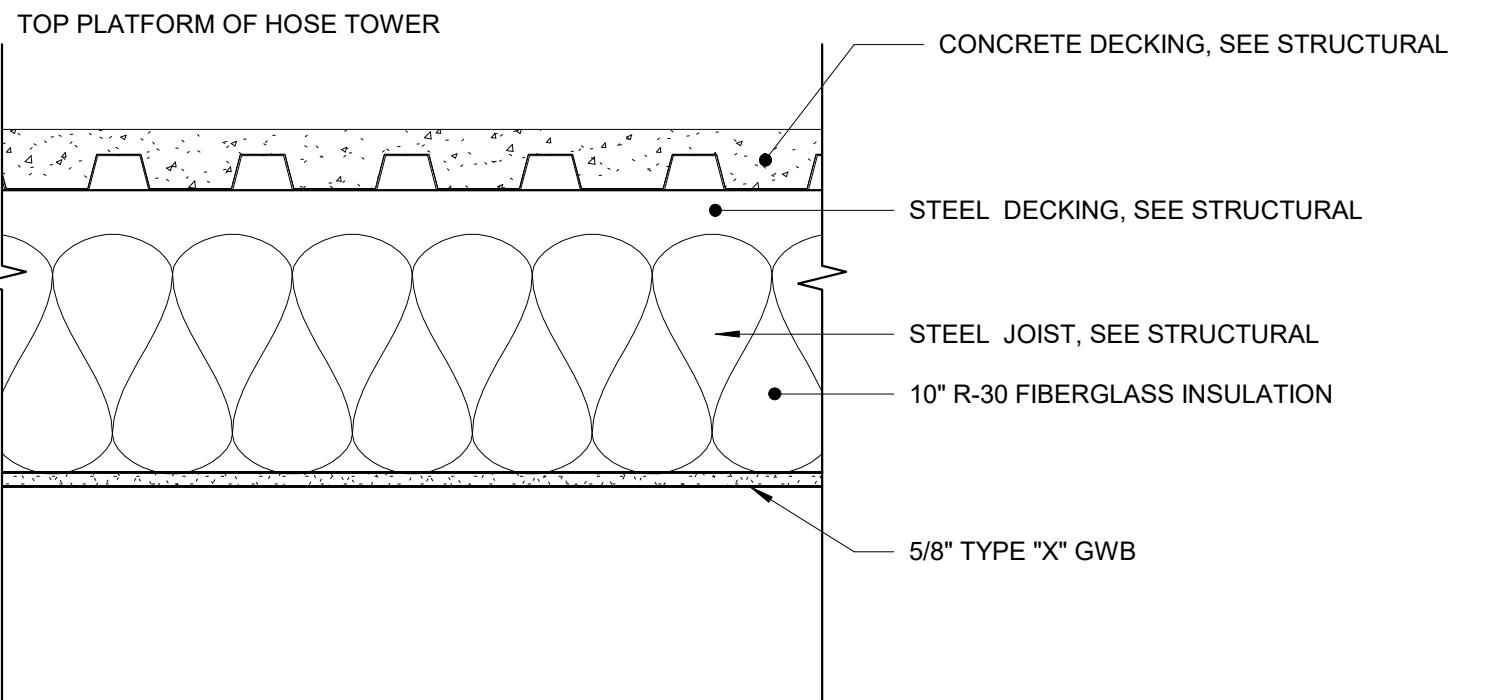
FA-1: SLAB ON GRADE



FA-2: WOOD JOIST FLOOR



FA-3: INSULATED CONCRETE DECK



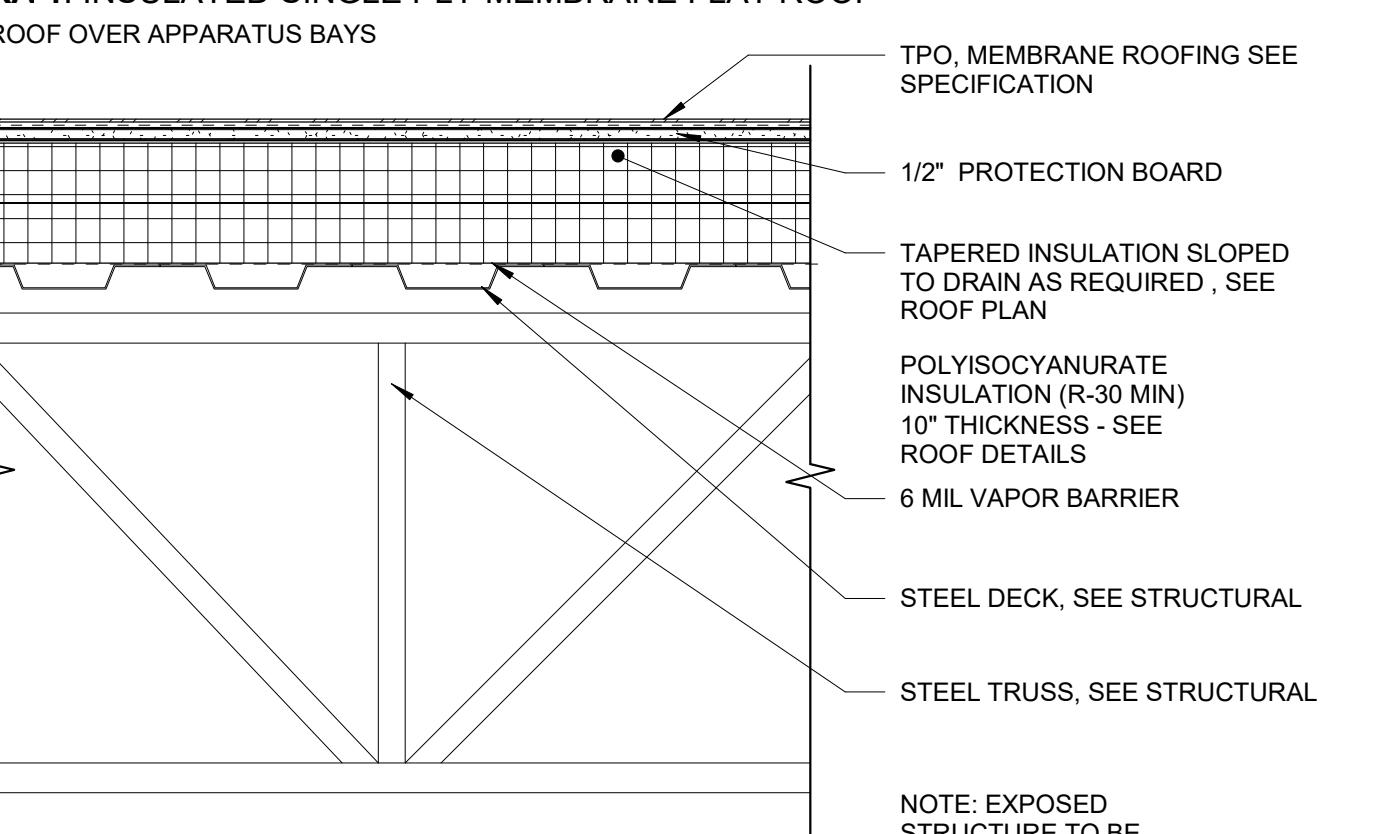
ROOF/CEILING ASSEMBLIES

ROOF NOTE:

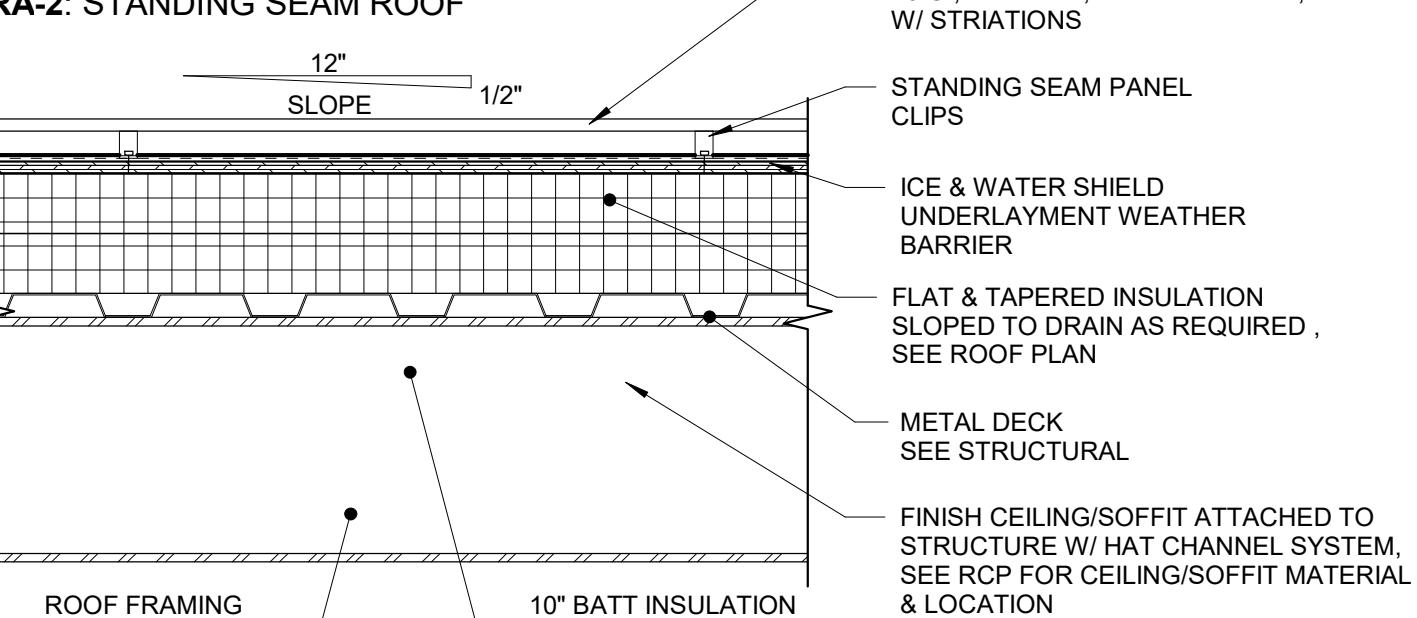
1.0 SEE ROOF PLAN FOR ADDITIONAL INFORMATION INCLUDING CRICKETING & SLOPE TO ROOF DRAIN, TYP.

2.0 MINIMUM R-VALUE FOR ROOF ASSEMBLY IS R 30 SET BY THE 2021 International Energy Conservation Code (IECC).

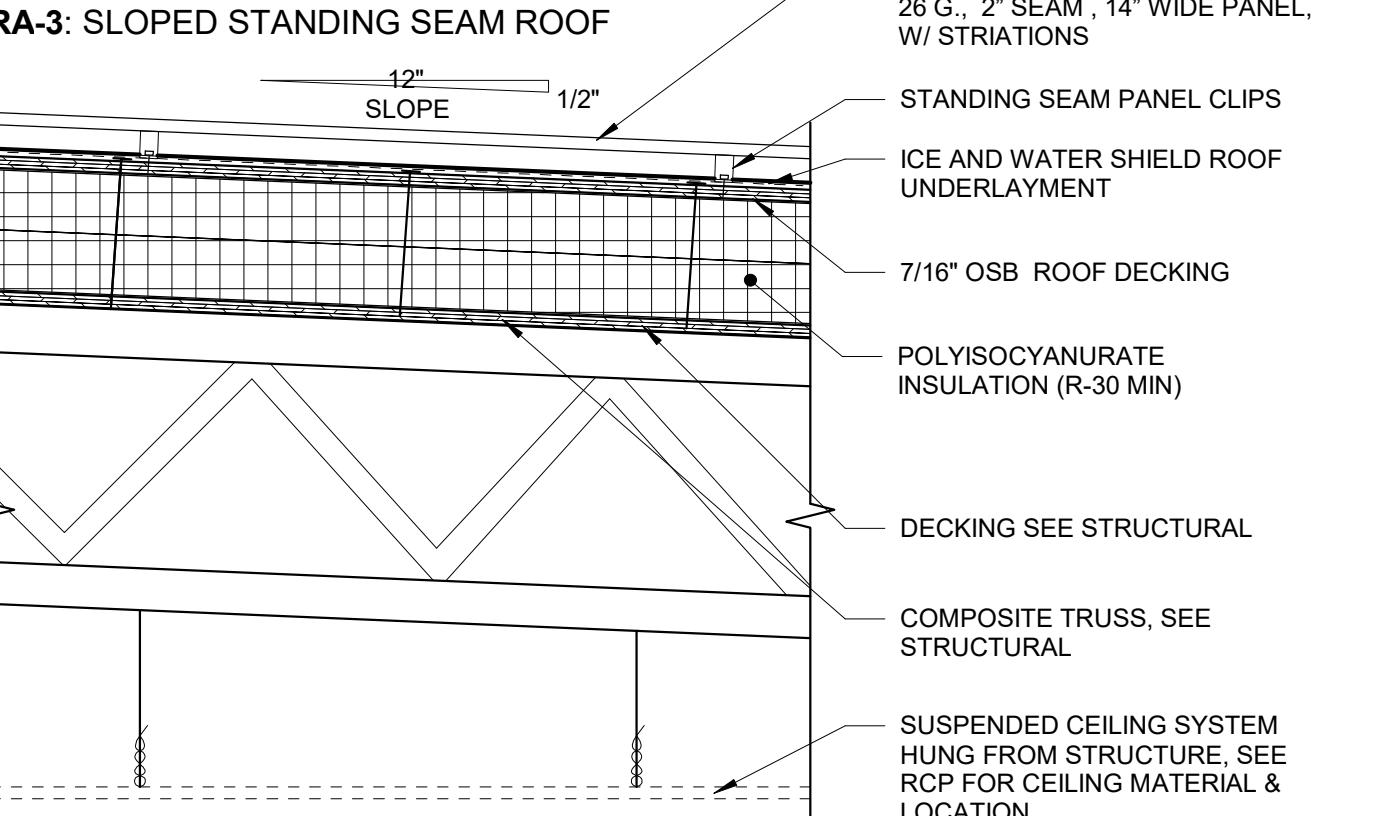
RA-1: INSULATED SINGLE PLY MEMBRANE FLAT ROOF



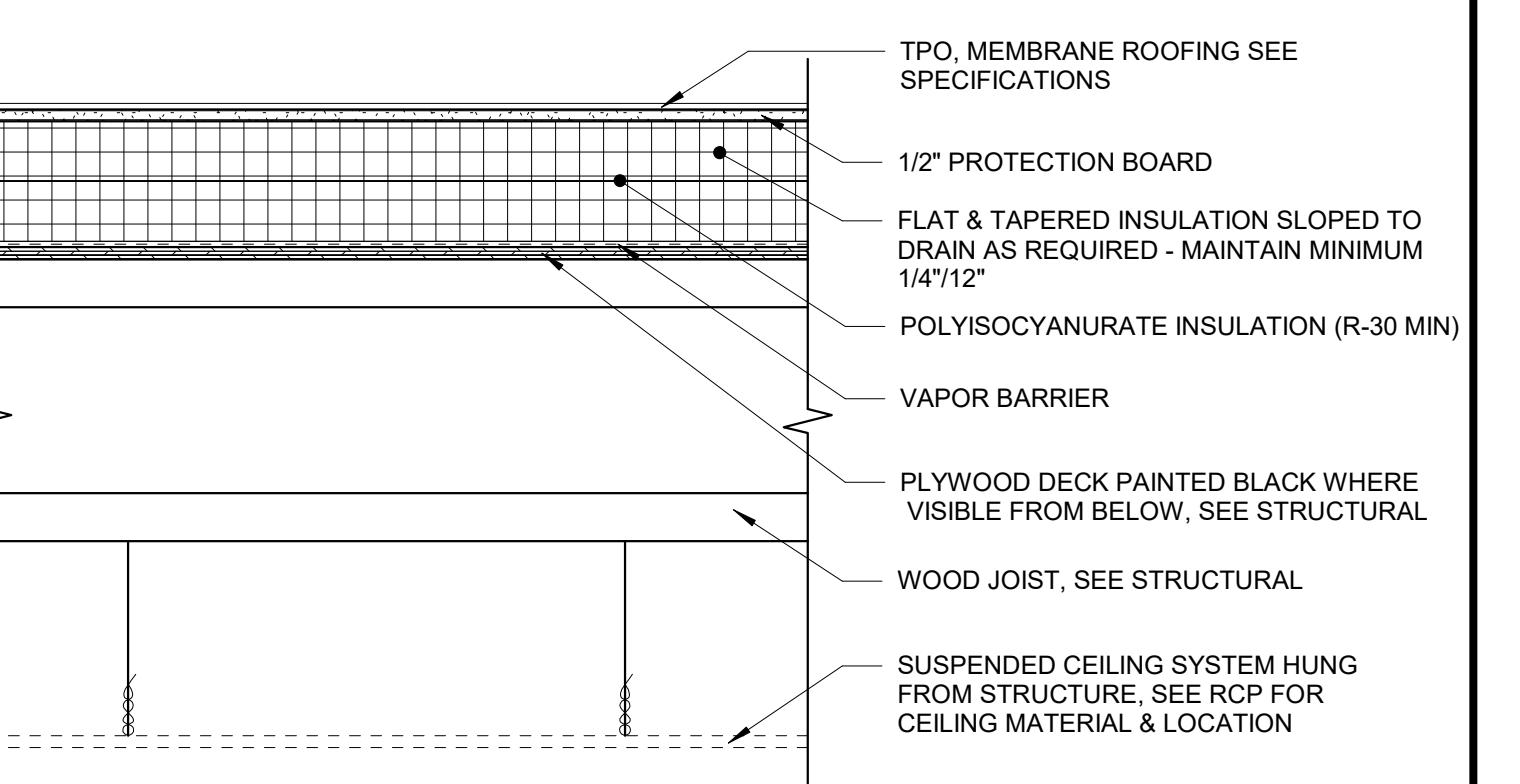
RA-2: STANDING SEAM ROOF



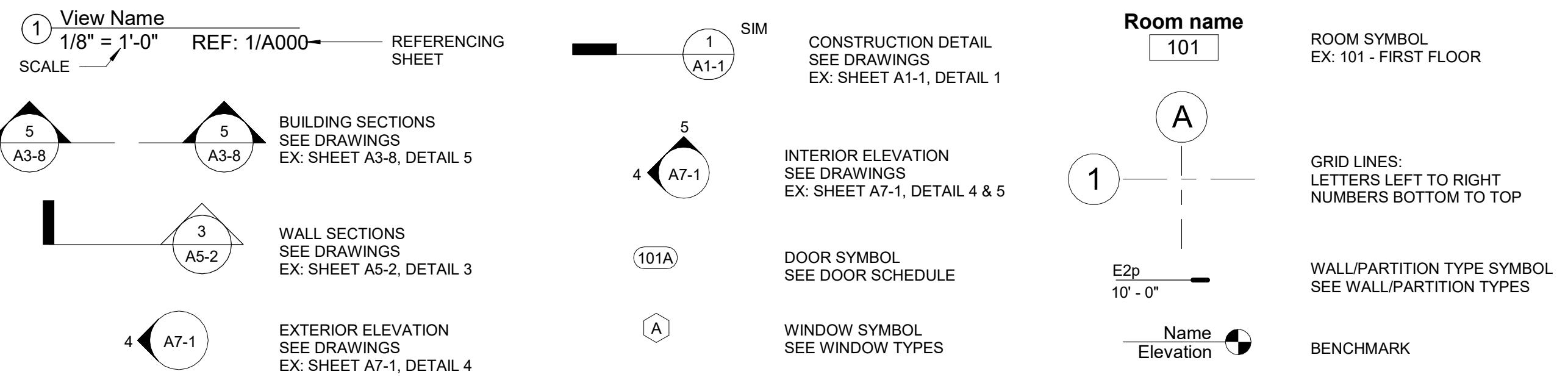
RA-3: SLOPED STANDING SEAM ROOF



RA-4: MEMBRANE FLAT ROOF W/ EXPOSED STRUCTURE



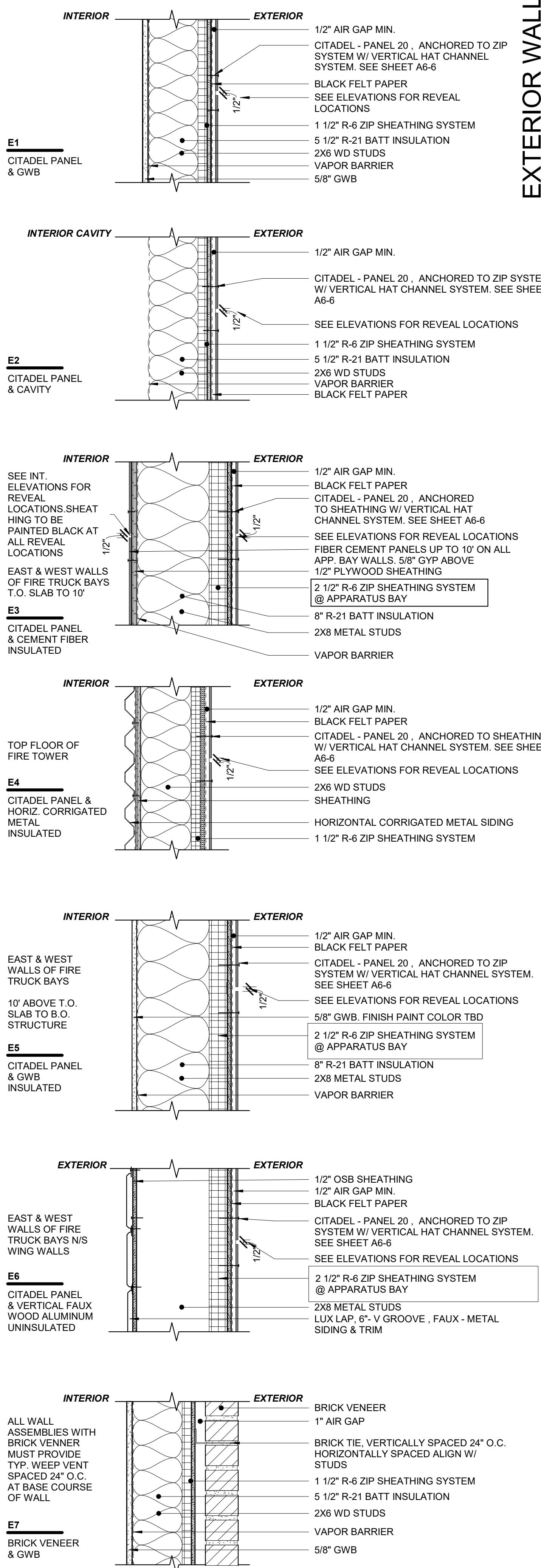
REFERENCE SYMBOLS



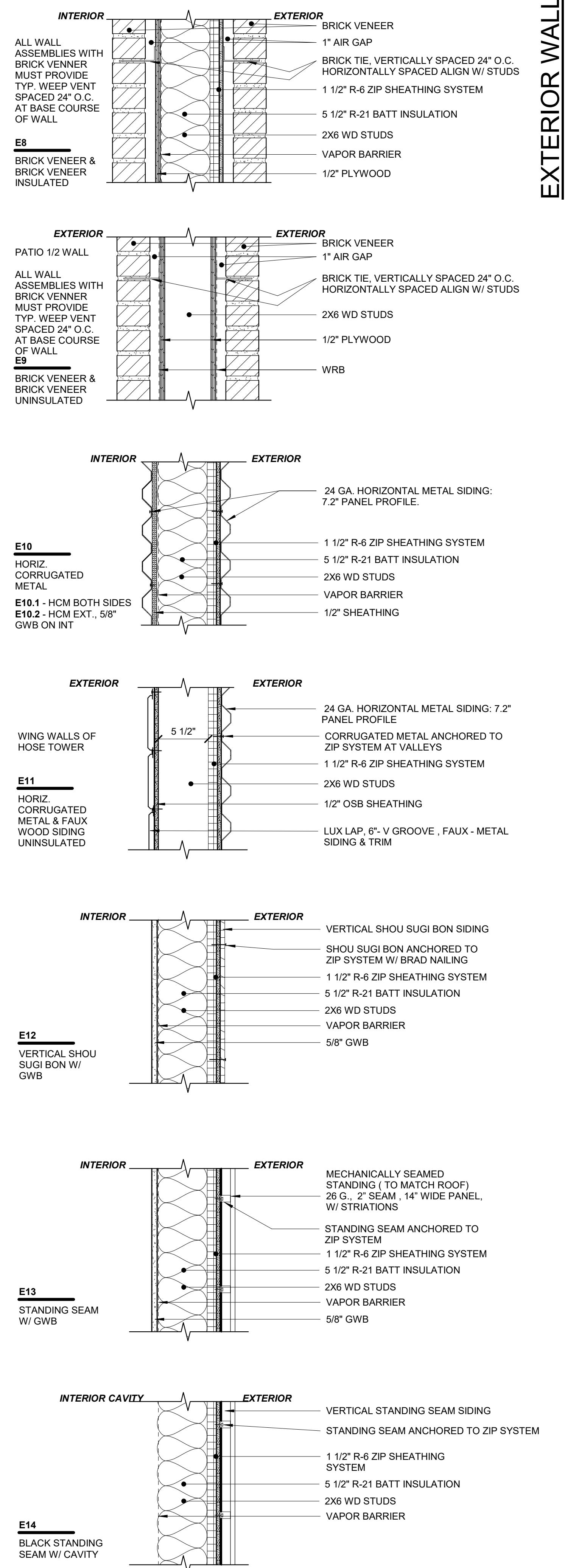
ABBREVIATIONS

(1) & #	QUANTITY AND AT NUMBER	EA	EACH	MAT	MATERIAL	SCHED	SUSPENDED ACOUSTICAL CEILING TILE	SCHEDULE
AB	ANCHOR BOLT	E/SEXTERIOR INSULATION FINISH SYSTEM		MAX	MAXIMUM	SAC	SOAP DISPENSER	
A/C	AIR CONDITIONING	EJ	EXPANSION JOINT	MECH	MECHANICAL	SD	SQUARE FEET	
ACT	ACOUSTICAL CEILING TILE	EQ	ELECTRICAL EQUAL	MDF	MEDIUM DENSITY FIBER BOARD	SF	SHEET	
ADDM	ADDENDUM	EEXIST	EXISTING	MFR	MANUFACTURER	SHT	SHOWER	
ADJ	ADJACENT	EXIST	EXISTING TO REMAIN EXTERIOR	MIL	MILLIMETER	SHTG	SIMILAR	
AFF	ABOVE FINISHED FLOOR	EXT	EXTERIOR	MISC	MISCELLANEOUS	SHWR		
AHU	AIR HANDLING UNIT	FDN	FLOOR DRAIN	MIR	MIRROR	SIP	STRUCTURAL INSULATED PANEL	
ALT	ALTERNATE	FF	FOUNDATION	MO	MASONRY OPENING	SPEC	SANITARY NAPKIN DISPOSAL	
ALUM	ALUMINUM	FDN	FINISH FLOOR	MTL	METAL	SS	SPECIFICATIONS	
ARCH	ARCHITECTURAL	FDN	FOUNDATION	N/A	NOT APPLICABLE	STD	STAINLESS STEEL	
BC	BRICK COURSE	FDN FLR or FF	FINISHED FLOOR	NIC	NOT IN CONTRACT	STL	STANDARD	
BO	BOTTOM OF	FLR	FLOOR	NTS	NOT TO SCALE	STOR	STEEL	
BLDG	BUILDING	FOF	FACE OF FINISH	OTS	OPEN TO STRUCTURE	STRUCT	STRUCTURAL	
BLKG	BLOCKING	FOM	FACE OF MASONRY	PAF	POWER ACTUATED FASTENER	SUB FLR	SUBFLOOR	
BTWN	BETWEEN	FOS	FACE OF STUD	PBD	PARTICLE BOARD			
BOW	BOTTOM OF WALL	FTG	FOOT	PPR	PERPENDICULAR			
BU	BUILT UP	FTG	FOOTING	PPM	PREFINISHED METAL			
CL	CENTERLINE	GB	GRAB BAR	PL	PLATE			
CB	CATCH BASIN	GALV	GENERAL CONTRACTOR	PLAM	PLASTIC LAMINATE			
CC	CENTER TO CENTER	GALV LAM or GLB	GLAZED	PLWD	PLYWOOD			
CDX	EXTERIOR GRADE PLYWOOD	GWB	GYPSUM WALL BOARD	PNL	PANEL			
CF	CUBIC FEET	GC	GENERAL CONTRACTOR	PSF	POUNDS PER SQUARE FOOT			
CT	CHANNEL	HD BD	HOLLOW METAL	PSI	POUNDS PER SQUARE INCH			
CJ	CONTROL JOINT	HORIZ	HORIZONTAL	PSL	PARALLEL STRAND LUMBER			
CLG	CEILING	HP	HIGH POINT	PT	POINT			
CLR	CLEAR	HR	HOUR	P.T.	PRESSURE-TREATED			
CMU	CONCRETE MASONRY UNIT	HT	HEIGHT	PTD	PAPER TOWEL DISPENSER			
COL/COLS	COLUMN/COLUMNS	HTG	HEATING	PVC	POLYVINYLCHLORIDE			
CONC	CONCRETE	HVAC	AIR CONDITIONING	QTY	RADIQUANTITY			
CONST	CONSTRUCTION			RD	ROOF DRAIN			
CONT	CONTINUOUS			REF	REFERENCE			
COORD	COORDINATE			REINF	REFRIGERATOR			
CTR	CENTER			REQD	REINFORCING			
CTRD	CENTERED			RES	REQUIRED			
DBL	DOUBLE	JST	JOIST	RM	RESILIENT			
DF	DRINKING FOUNTAIN	JT	JOIST JOINT	RO	ROOM			
DIA	DIAMETER	LB	POUND		ROUGH OPENING			
DIM	DIMENSION	LF	LINEAL FEET					
DN	DOWN	LWT	LIGHTWEIGHT					
DR	DOOR	LWT	LAMINATED VENEER LUMBER					
DS	DOWNSPOUT	LVL						
DTL/DET	DETAIL							
DWG	DRAWING							

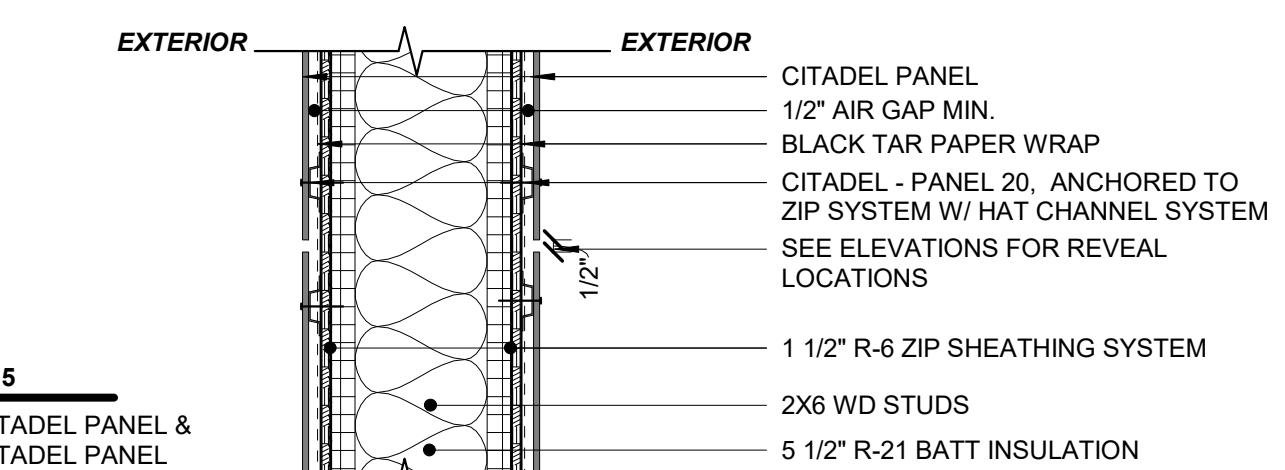
EXTERIOR (E)



EXTERIOR WALL ASSEMBLIES.



EXTERIOR WALL ASSEMBLIES.



GENERAL WALL TYPE NOTES

1. TYPE "X" GYPSUM WALL BOARD SPECIFIED THROUGHOUT. PROVIDE WATER-RESISTANT TYPE "X" GYPSUM BOARD AT WET AREAS, AND TILE BACKER BOARD TYPE "X" ON ALL WALLS WITH TILE.
2. CONFORM TO DETAILED REQUIREMENTS OF DESIGNATED TESTING AUTHORITY NUMBERS AT ALL WALLS. WALLS DESIGNED AS "X" BASED ON VARY AS NOTED IN (PARENTHESIS.) SHEATHING AT DECORATIVE PILASTER WALLS (WHERE CCUR) MAY VARY FROM WALL TYPE ONLY AT PILASTER CONDITION. SEE ASSOCIATED DETAILS.
3. SEE STRUCTURAL SHEAR WALL SCHEDULE FOR SHEAR WALL ATTACHMENT AND EDGE BLOCKING REQUIREMENTS. STRUCTURAL SHEAR WALL SCHEDULE OVERIDES LISTED ASSEMBLY ATTACHMENT AND BLOCKING REQUIREMENTS ONLY WHEN MORE RESTRICTIVE.
4. REFER TO CODE ANALYSIS PLANS WALL TYPE LEGEND FOR IBC DESIGNATION OF FIRE RESISTIVE WALLS WITH OPENING PROTECTION (FIRE RESISTIVE RATED DOORS AND GLAZING). SEE DOOR AND WINDOW SCHEDULES.
5. REFER TO CODE ANALYSIS PLANS WALL TYPE LEGEND FOR IBC DESIGNATION OF FIRE RESISTIVE WALLS WITH DUCTS AND AIR TRANSFER OPENING PROTECTION. SEE MECHANICAL DRAWINGS.
6. APPROVED DRYWALL SCREWS, THE SAME LENGTH AND SHAFT THICKNESS OF SPECIFIED NAILS, CAN BE SUBSTITUTED IN RATED ASSEMBLIES.
7. SEE SPECIFICATIONS FOR APPLICATION OF FINISH REQUIREMENTS.
8. PENETRATIONS OF FIRE-RESISTIVE WALLS, FLOOR-CEILING AND ROOF-CEILINGS SHALL BE PROTECTED AS REQUIRED IN IBC SECTION 713.
9. PENETRATIONS THROUGH HORIZONTAL ASSEMBLIES SHALL COMPLY WITH SECTION 712.4. PROVIDE FIRE, SMOKE AND CEILING RADIATION DAMPERS AT DUCT AND AIR TRANSFER OPENINGS IN FIRE RATED ASSEMBLIES PER IBC SECTION 716.
10. ALL SOUND CONTROL SYSTEMS (INCLUDING ALL STC-RATED WALL AND FLOOR-CEILING ASSEMBLIES) SHALL BE AIRTIGHT. RECESSED WALL FIXTURES, SUCH AS MEDICINE CABINETS OR ELECTRICAL AND LOW-VOLTAGE OUTLETS, THAT PENETRATE THE GYPSUM BOARD SHALL NOT BE LOCATED BACK-TO-BACK OR IN THE SAME STUD CAVITY. ANY OPENING FOR FIXTURES OR PIPES SHALL BE CUT TO PROPER SIZE AND SEALED. THE ENTIRE PERIMETER OF A SOUND INSULATING SYSTEM SHALL BE MADE AIRTIGHT TO PREVENT SOUND FLANKING. FLEXIBLE SEALANT OR AN ACOUSTICAL GASKET SHALL BE USED TO SEAL BETWEEN THE STC RATED SYSTEM AND ALL ADJOINING SURFACES. TAPING GYPSUM BOARD WALL AND WALL-CEILING INTERSECTIONS PROVIDES AN ADEQUATE AIR SEAL AT THESE LOCATIONS. CONSULT GWB MANUFACTURER FOR AN SPECIAL RECOMMENDATIONS.
11. NOTE THERE ARE A FEW SHEAR WALLS REQUIRING 15/32" PLYWOOD ON THE INTERIOR. REFER TO TO STRUCTURAL.

HELENA FIRESTATION #3

1872 KELLEHER LANE, HELENA, MT 59602

DOWLING | SHIVEH-ATTERRY

ARCHITECTURE + ENGINEERING

754 N. Last Chance Gulch | Helena, MT 59601 | (406) 457-5500

www.dowlingarch.com

PROJECT #:

25-668

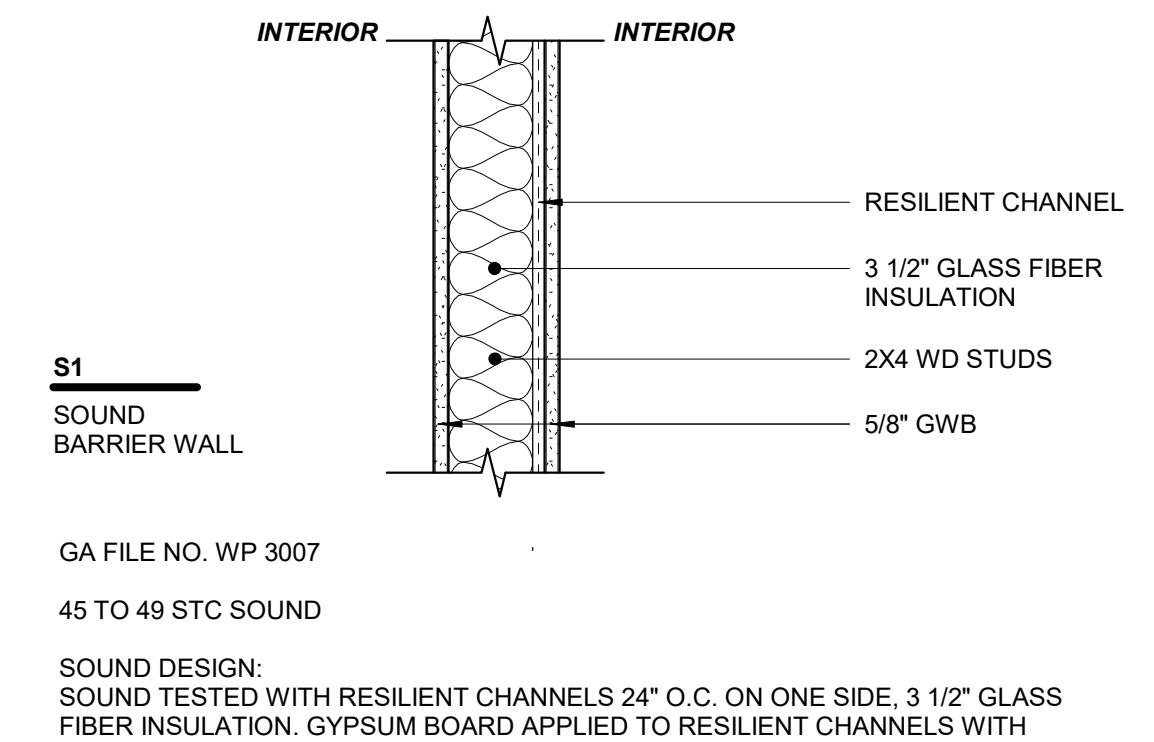
ISSUE DATES:

10/22/2025

A1-2

10.22.25

INTERIOR SOUND-RATED (S)

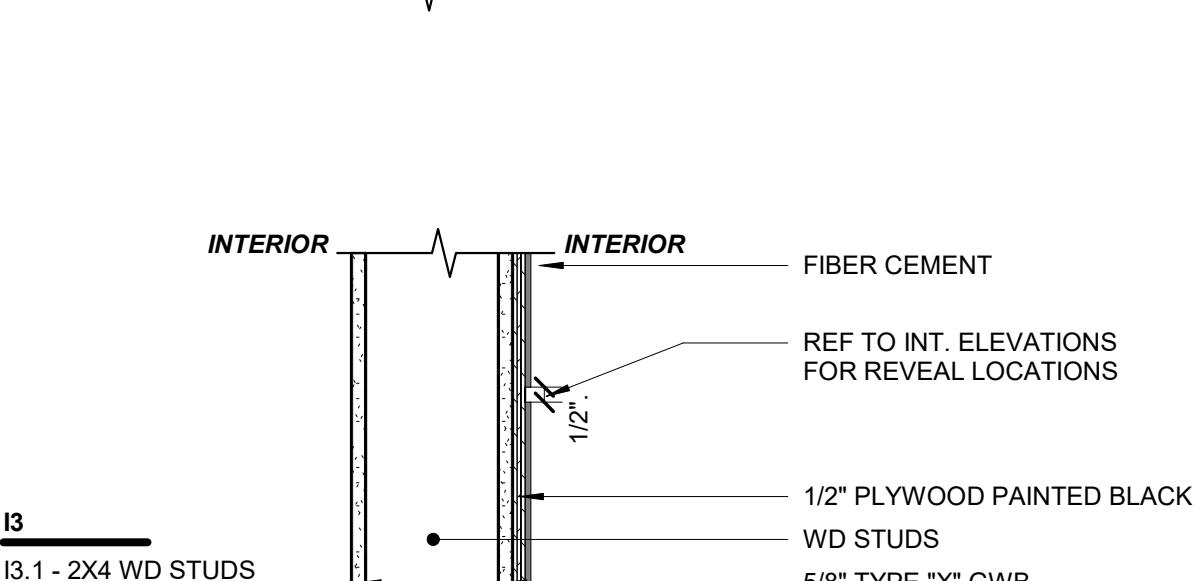
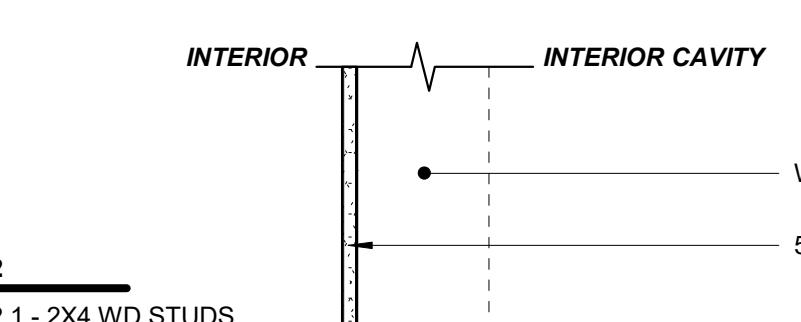
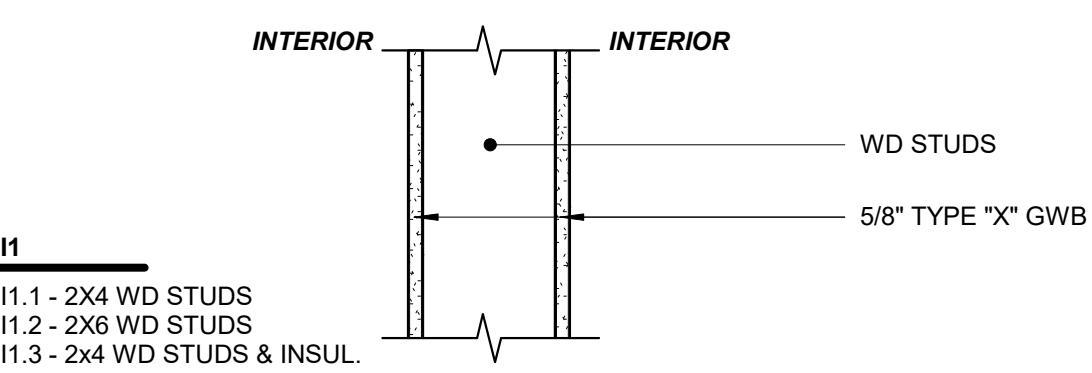


INTERIOR WALL ASSEMBLIES

WALL TYPE TAG

- E2s WALL TYPE
4'-0" WALL HEIGHT
PARTIAL HEIGHT WALL
WALL HEIGHT DESIGNATION
c EXTEND WALL TO UNDERSIDE OF CEILING
d STUDS EXTEND TO STRUCTURE, FINISH EXTENDS TO 6" ABOVE CEILING
p PARTIAL HEIGHT WALL, SEE PLANS & ELEVATIONS
s EXTEND ENTIRE WALL TO UNDERSIDE OF STRUCTURE
(UNDERSIDE OF ROOF SHEATHING, DECK OR SLAB AT FIRE WALLS)
x SHAFT: WALL IS CONTINUOUS THROUGH FLOOR ASSEMBLIES

INTERIOR (I)



REF TO INT. ELEVATIONS FOR REVEAL LOCATIONS

1/2" PLYWOOD PAINTED BLACK
WD STUDS
5/8" TYPE "X" GWB

DRAWN BY: JS/CC

100% CONSTRUCTION SET

10.22.25

REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB
P.C. #807
Michael W. Dowling

HELENA FIRESTATION #3

1872 KELLEHER LANE, HELENA, MT 59602

DOWLING ARCHITECTS

ARCHITECTURE + ENGINEERING

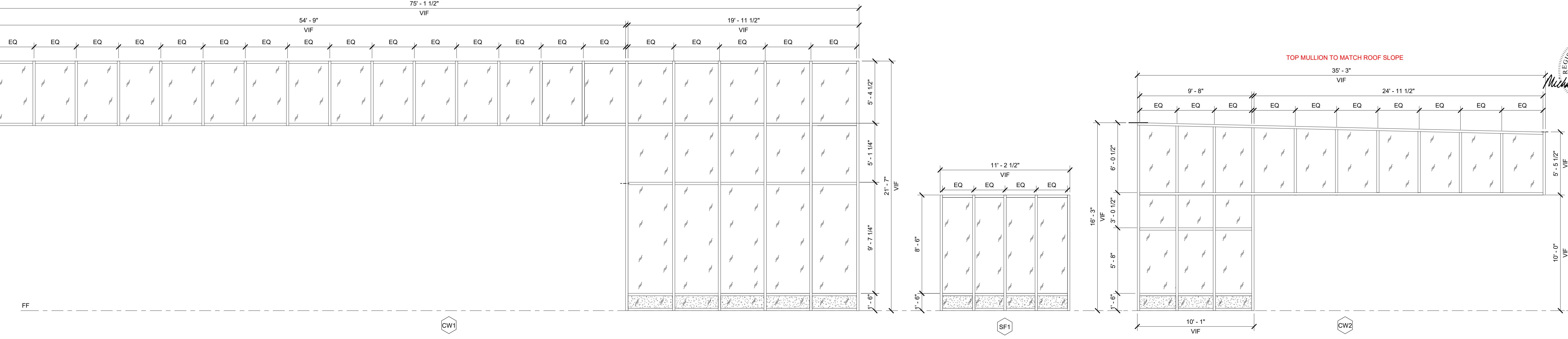
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100% CONSTRUCTION SET

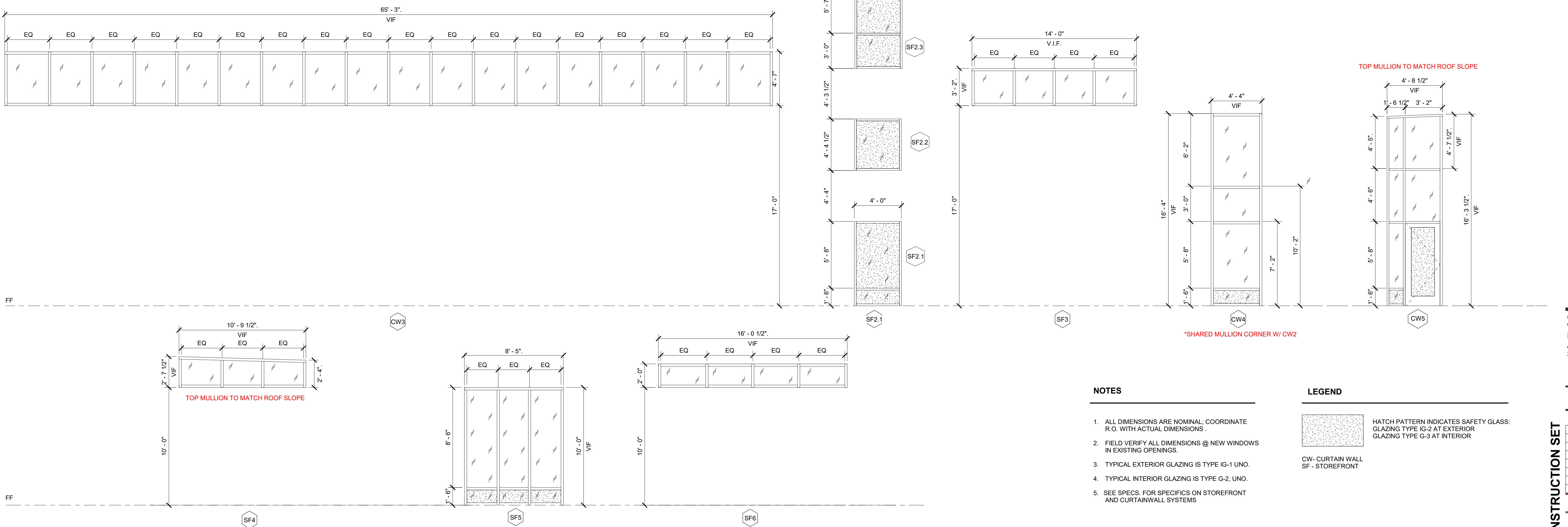
DRAWN BY: JS/CC

A1-4

10.22.25



*SHARED MULLION CORNER W/ CW4



NOTES

1. ALL DIMENSIONS ARE NOMINAL; COORDINATE R.O. WITH ACTUAL DIMENSIONS.
2. FIELD VERIFY ALL DIMENSIONS @ NEW WINDOWS IN EXISTING OPENINGS.
3. TYPICAL EXTERIOR GLAZING IS TYPE IG-1 UNO.
4. TYPICAL INTERIOR GLAZING IS TYPE G-2, UNO.
5. SEE SPECS. FOR SPECIFICATIONS ON STOREFRONT AND CURTAINWALL SYSTEMS

LEGEND

CW - CURTAIN WALL
SF - STOREFRONT
HATCH PATTERN INDICATES SAFETY GLASS:
GLAZING TYPE IG-2 AT EXTERIOR
GLAZING TYPE G-3 AT INTERIOR

STOREFRONT TYPES
1/4" = 1'-0"

REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB
MICHAEL W. DOWLING
LIC. #1027
STATE OF MONTANA

HELENA FIRESTATION #3

1872 KELLEHER LANE, HELENA, MT 59602

DOWLING | SHIVEH-ATTERTY
ARCHITECTS | ARCHITECTURE + ENGINEERING

SITE INFORMATION

PROJECT #: 25-668

ISSUE DATES:

DRAWN BY: JS/C/C

100% CONSTRUCTION SET

A2-1

10.22.25

GENERAL SITE NOTES:

- WORK UNDER THIS CONTACT INCLUDES ALL DESIGNATED CONCRETE WALKS, PADS & CURBS & ASPHALT PAVING IN THE PROJECT LIMITS. PROVIDE ALL SITESWORK INDICATED INCLUDING TOPSOIL, IRRIGATION, LANDSCAPING, ETC TO PROVIDE A COMPLETE FINISHED SITE. SEE CIVIL, LANDSCAPE, MECHANICAL, & ELECTRICAL FOR EXTENT OF WORK UNDER THESE SUBCONTRACTORS.
- DIMENSIONS ARE TYPICALLY TO FACE OF CONCRETE FOUNDATION, EDGE OF WALK OR PAVING SIDE OF CURB.
- LOCATE SIDEWALK CONTROL OR EXPANSION JOINTS AS SHOWN ON WALKS AND SLABS. IF JOINTS ARE NOT SPECIFICALLY DIMENSIONED ALIGN WITH BUILDING COLUMNS, BUILDING OFFSETS, CENTERED ON OPENINGS OR ALIGNED WITH BUILDING ELEMENTS AS SHOWN.
- PRIOR TO FINAL ACCEPTANCE, REPLACE DISTURBED AREAS OF ADJACENT LANDSCAPING & IRRIGATION BACK TO ORIGINAL CONDITION.
- PATCH & REPAIR OR REPLACE ALL EXISTING SIDEWALKS TO REMAIN DAMAGED BY CONSTRUCTION.
- FIRE TRAINING TOWER BY OTHERS. GC TO COORDINATE POWER TO THE TOWER AND SITE USE AND ACCESS FOR SITESWORK, FOUNDATION WORK AND TOWER CONSTRUCTION.

GENERAL DEMOLITION NOTES:

- REMOVE AND DISMANTLE THE EXISTING CHAIN LINK FENCE, VERIFY WITH OWNER FOR SALVAGE / DEMOLISH. REFER TO CIVIL FOR CONNECTION OF NEW FENCE WITH EXISTING.

ZONING ANALYSIS

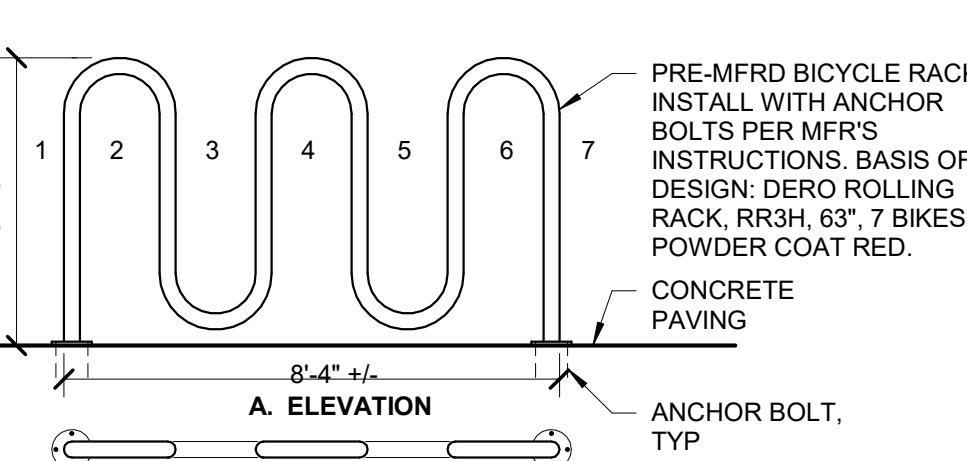
ZONING DISTRICT: PLI - PUBLIC LANDS & INSTITUTIONS DISTRICT
ZONING CODE: HELENA CITY CODE TITLE 11 - ZONING, AS AMENDED
BY ORDINANCE NO. 3097: ZONING
GEOCODE: 05-1888-17-4-01-05-0000
LOT DESC: S17, T10 N, R03 W, C.O.S. 3120033, PARCEL A, & TR 1 COS #3137037 LESS HWY R/W
LOT AREA: 4.42 Acres (based on M-M.)
FLOOR AREA:
FIRST FLOOR :11,556 SF
HOSE TOWER LANDING(S).....448 SF
TOTAL: 12,004 SF
LOT COVERAGE:
MAXIMUM: NONE

SETBACK REQUIREMENTS:
FRONT: NONE
REAR: NONE (UNLESS ABUTTING RESIDENTIAL -15' N/A)
SIDE: NONE (UNLESS ABUTTING RESIDENTIAL -15' N/A)
PROPOSED: SEE SITE PLAN

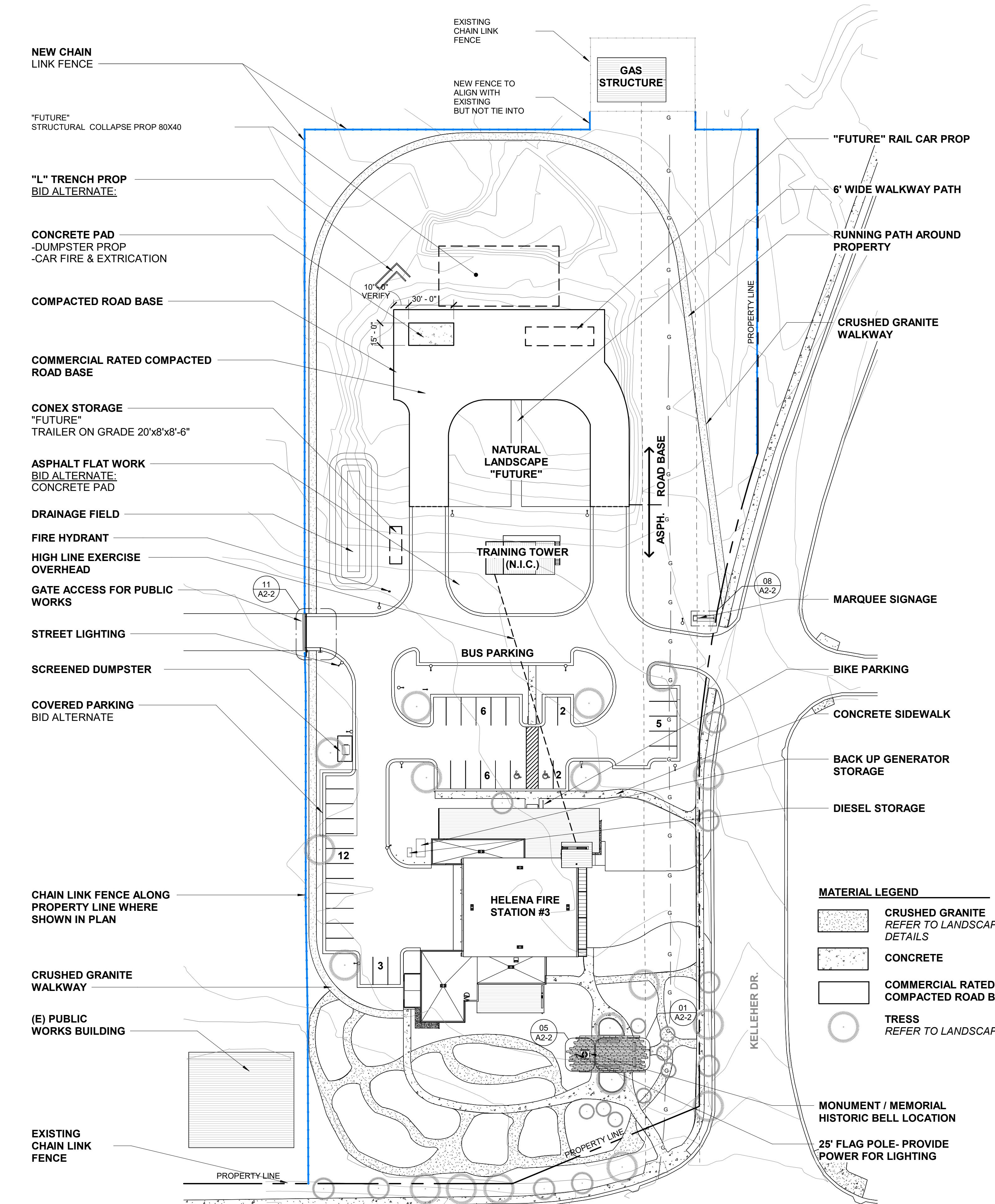
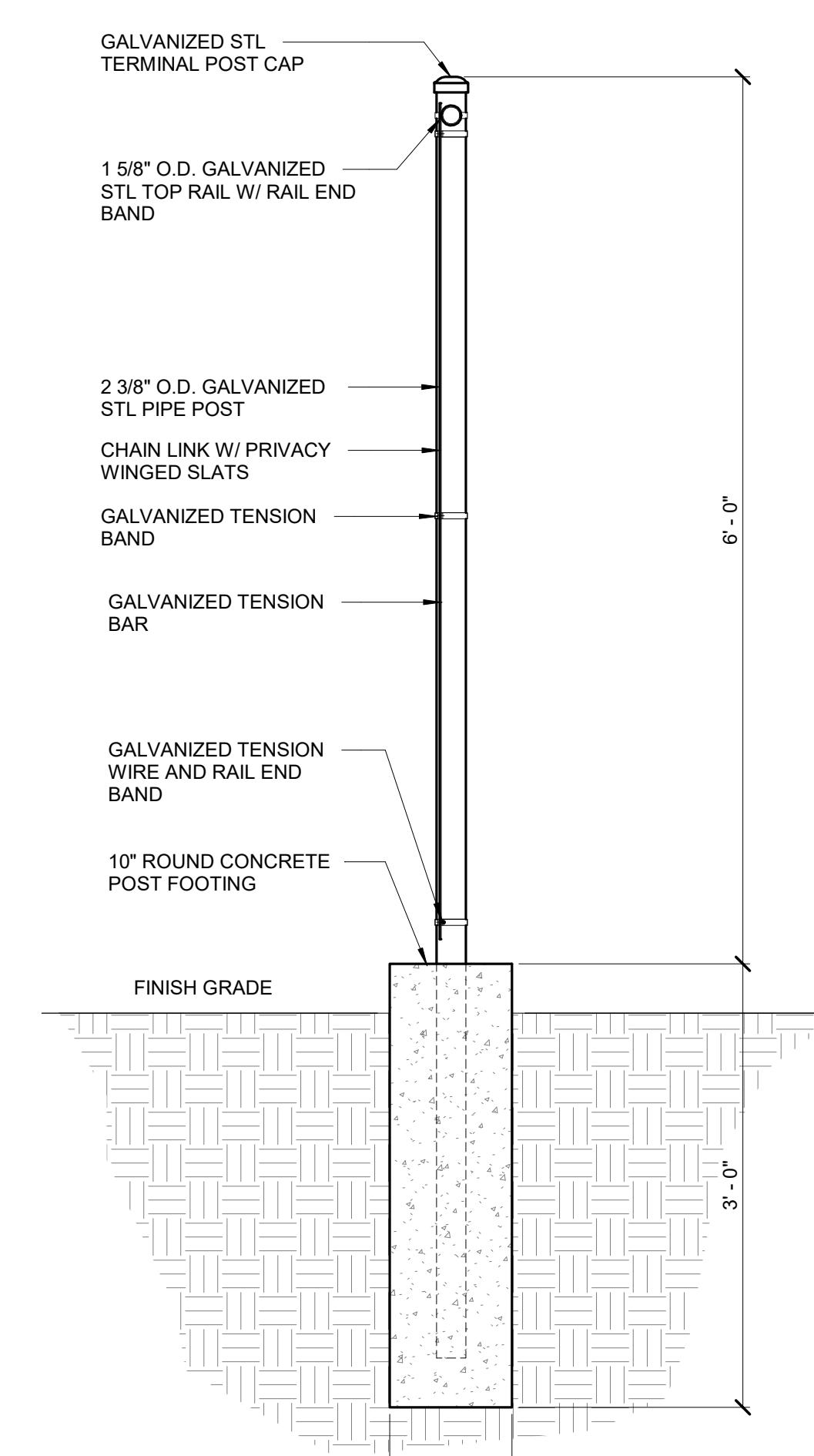
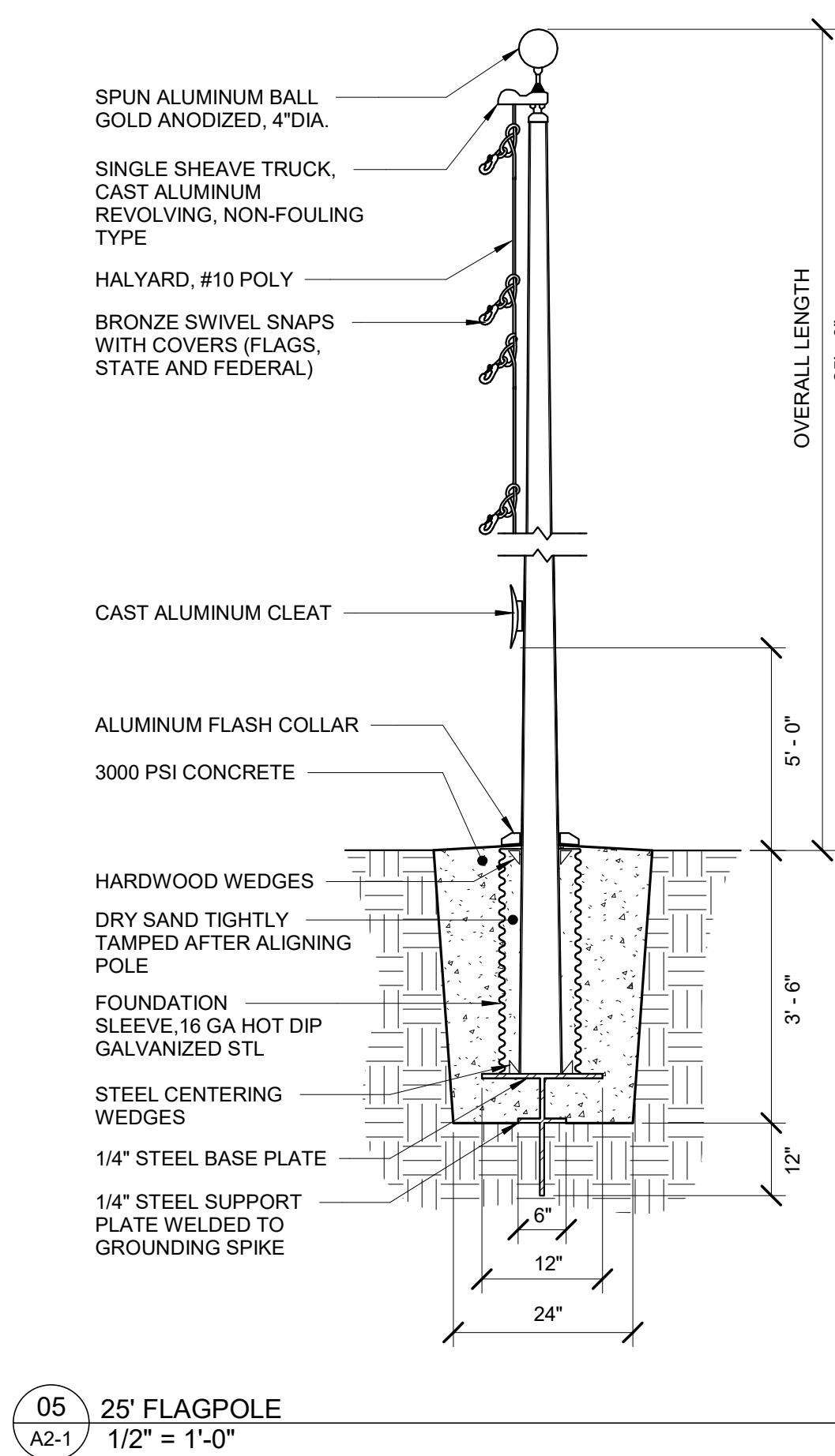
BUILDING HEIGHT:
MAXIMUM: 60'
PROPOSED: 38'-6"
OFF STREET PARKING:
REQUIRED: 3 SPACES PER 1000/ SF = 36 SPACES
PROPOSED: 36 SPACES

ACCESSIBLE PARKING:
REQUIRED: 1 (=1 PER 25 SPACES)
PROPOSED: 2 SPACES
BICYCLE PARKING
REQUIRED: 3
PROPOSED: 7

PARKING AREA LANDSCAPING:
REQUIRED: 30 SF PER VEHICLE PARKING SPACE = 1080 SF
PROPOSED: 27,765 SF (REFER TO LANDSCAPING PLANS)



SECTION PLAN VIEW



REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA
MIC. #1027
State of Montana

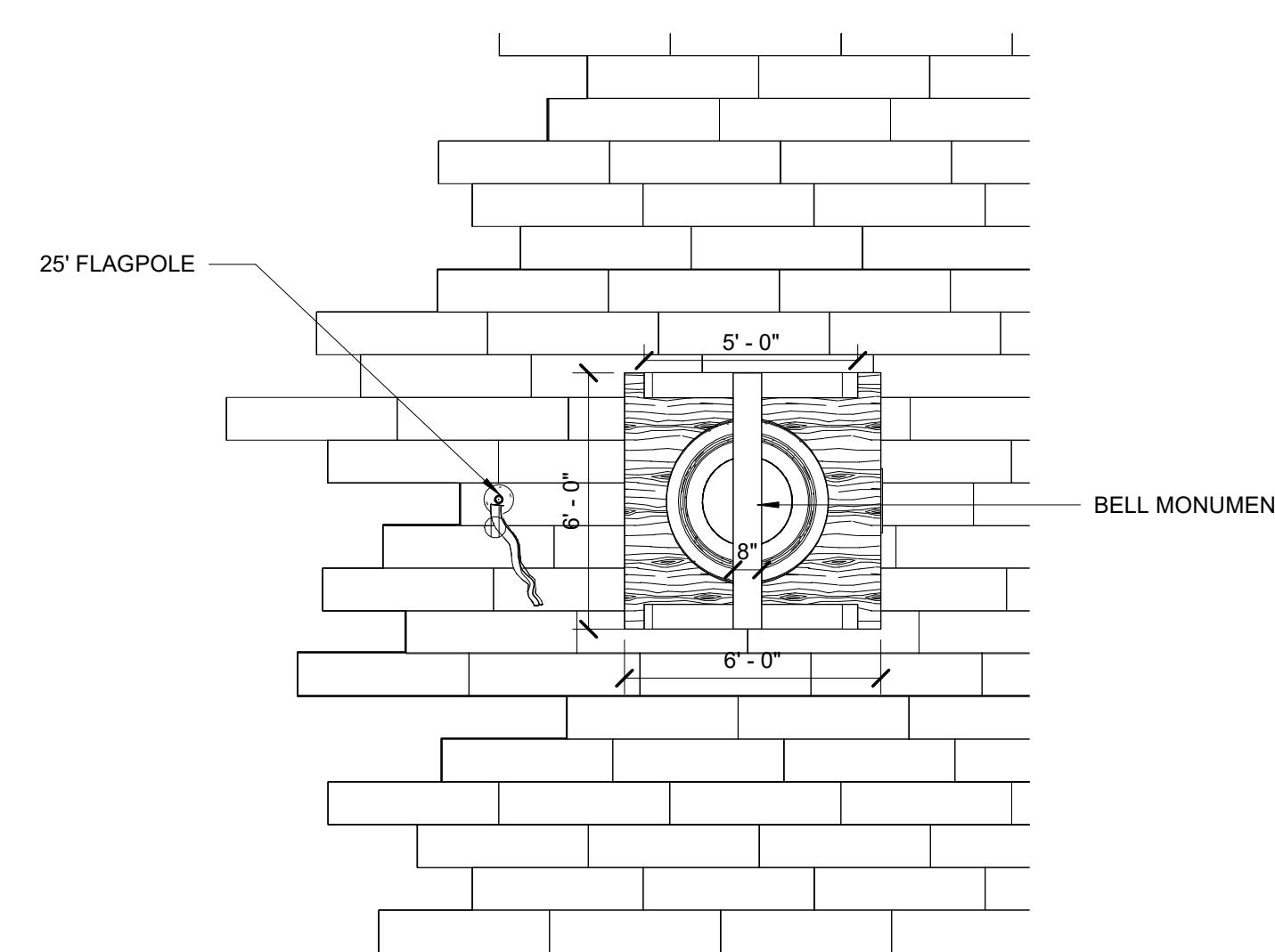
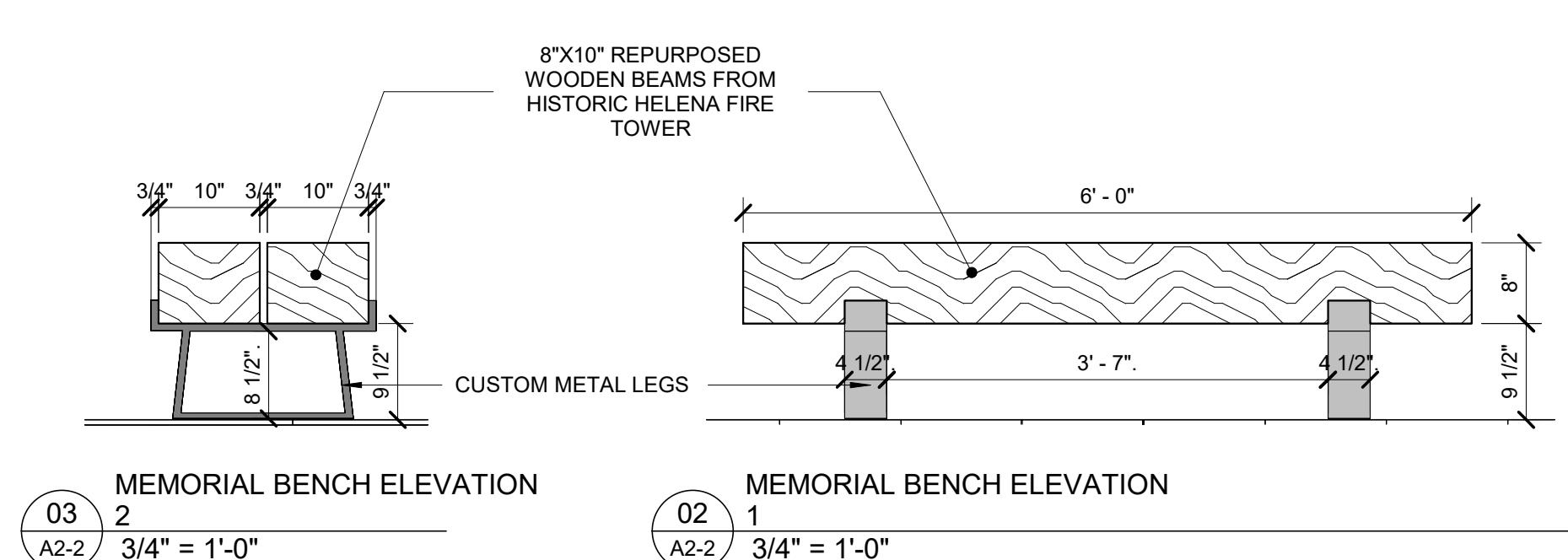
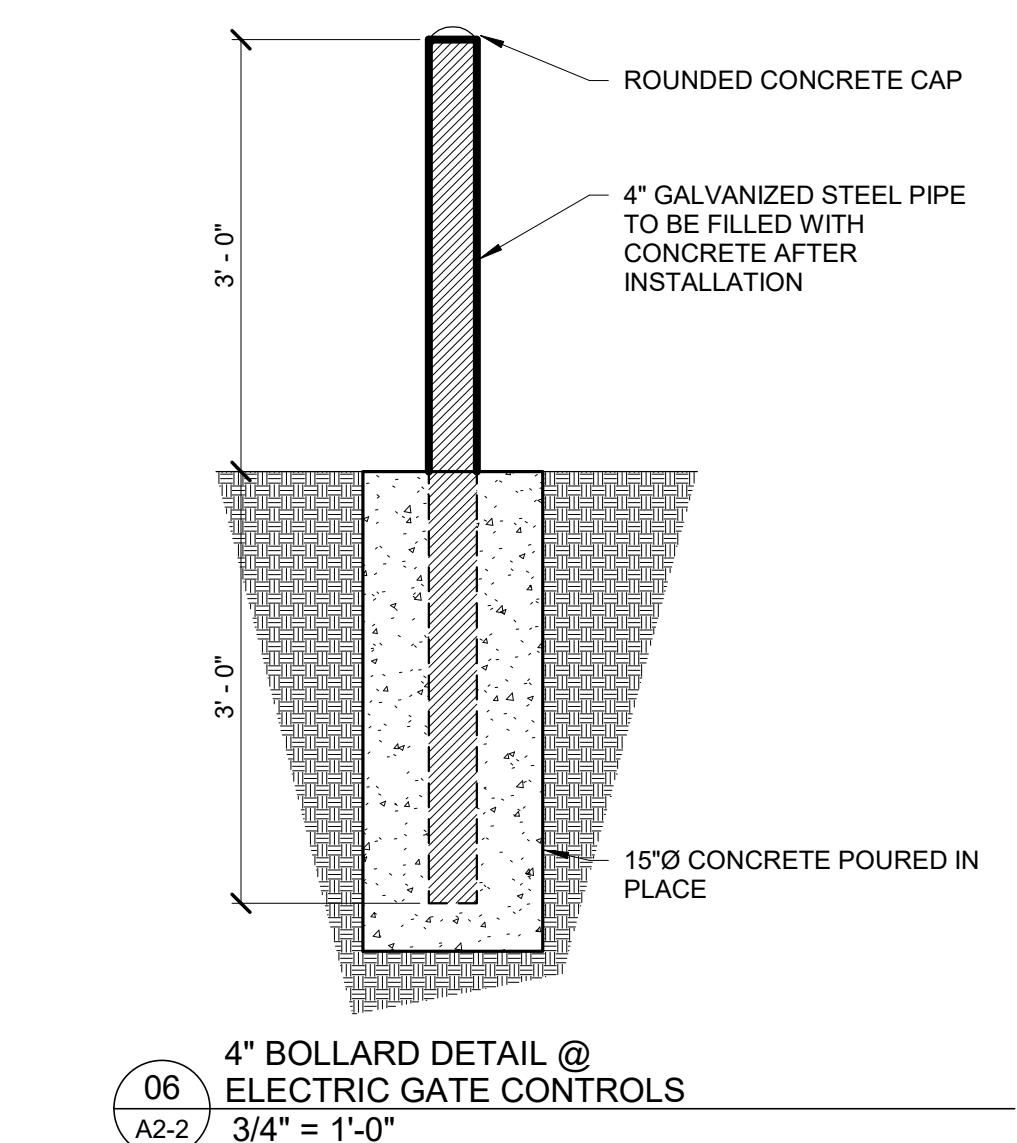
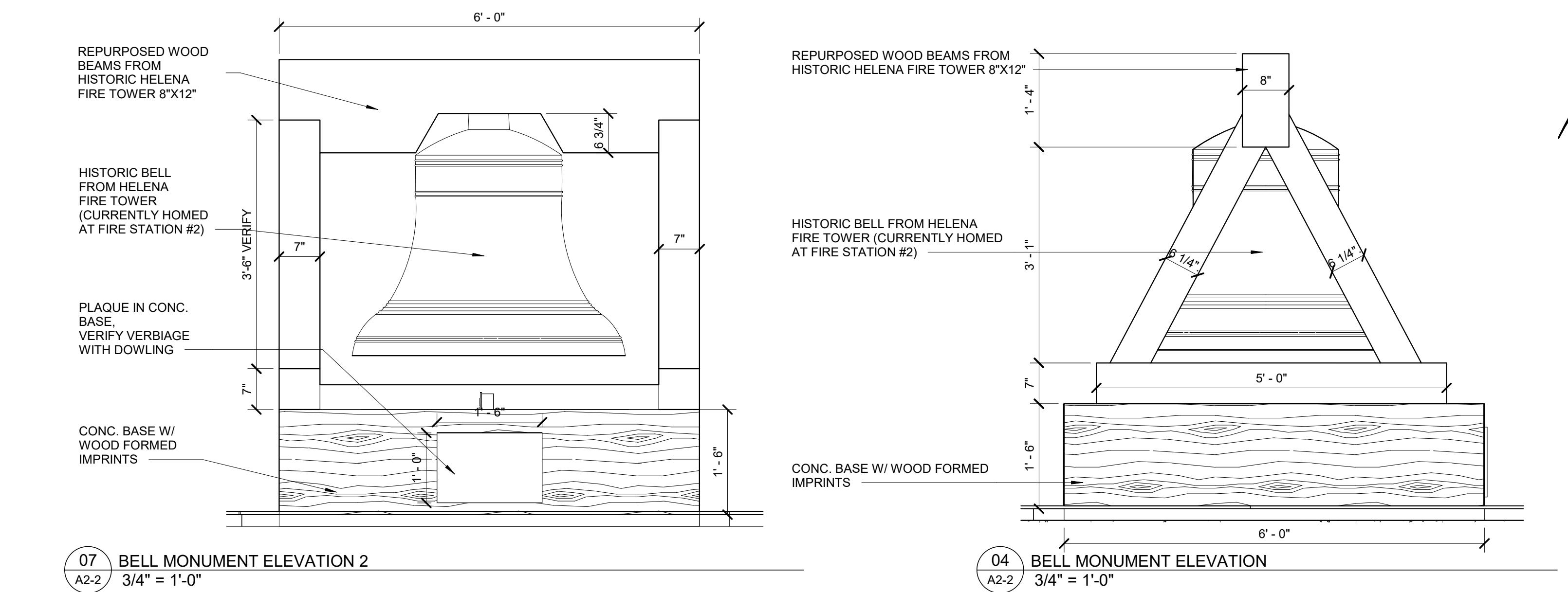
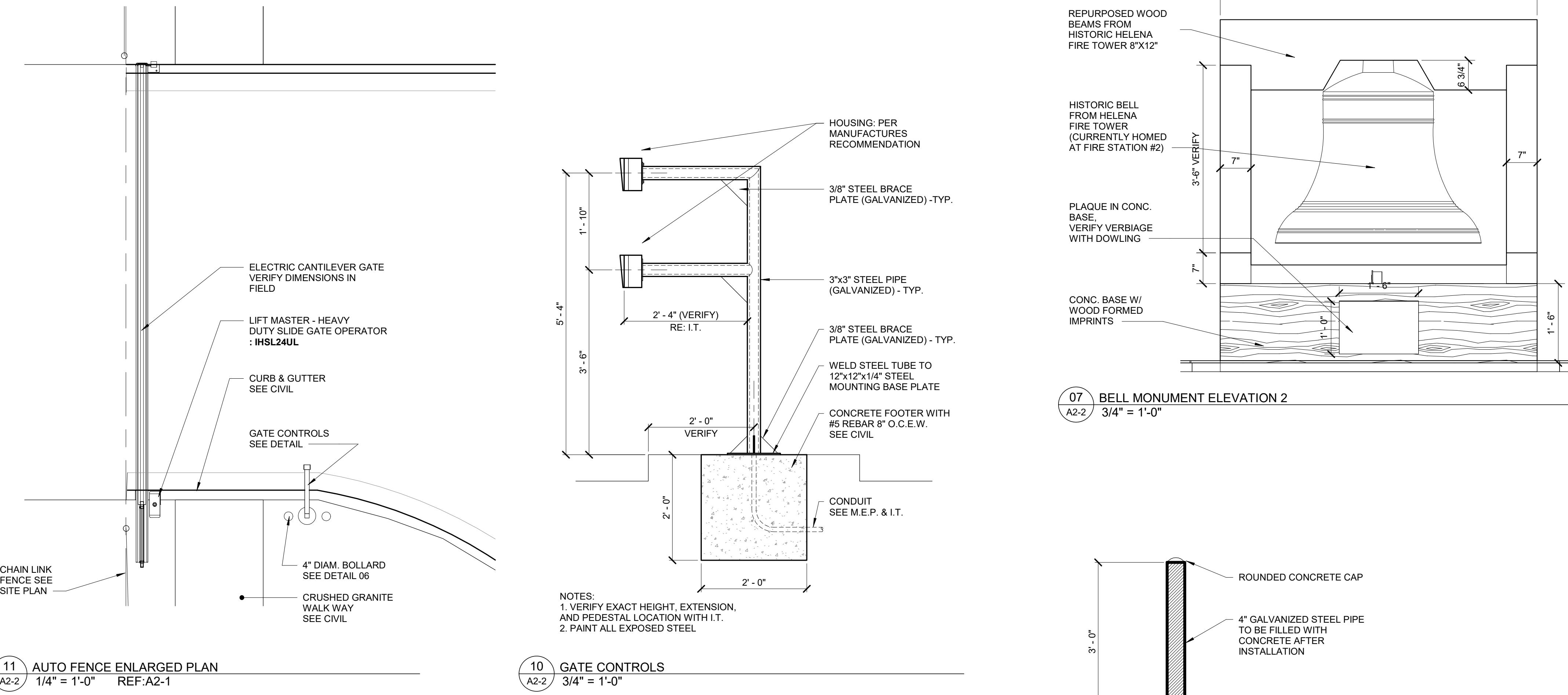
HELENA FIRESTATION #3

1872 KELLEHER LANE, HELENA, MT 59602

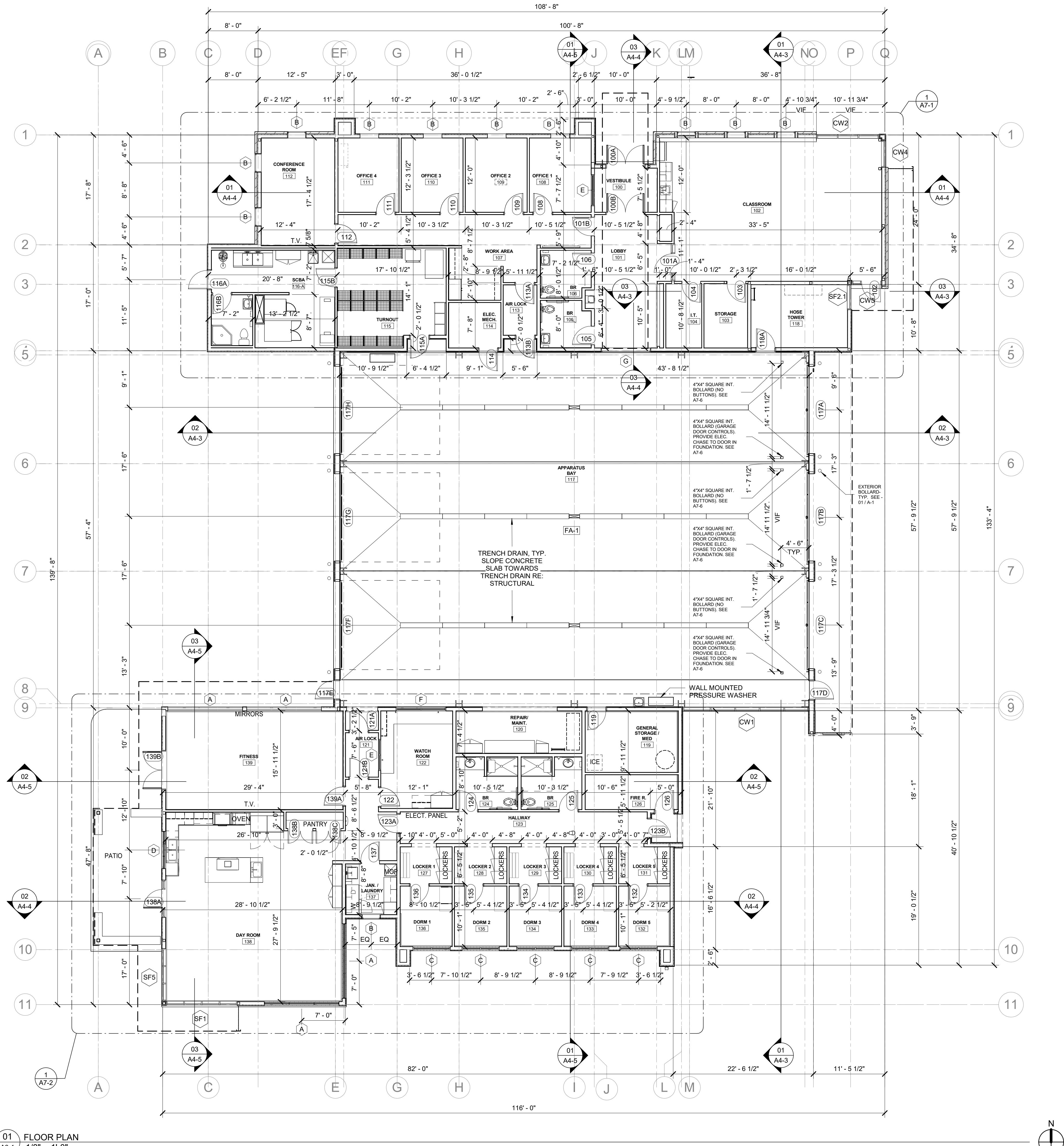
DOWLING ARCHITECTS | SHIVEH-ATTERTY ARCHITECTURE + ENGINEERING

754 N. Last Chance Gulch | Helena, MT 59601 | (406) 457-5500

SITE INFORMATION DETAILS
PROJECT #: 25-668
ISSUE DATES:
DRAWN BY: JS/C/C
A2-2
10.22.25

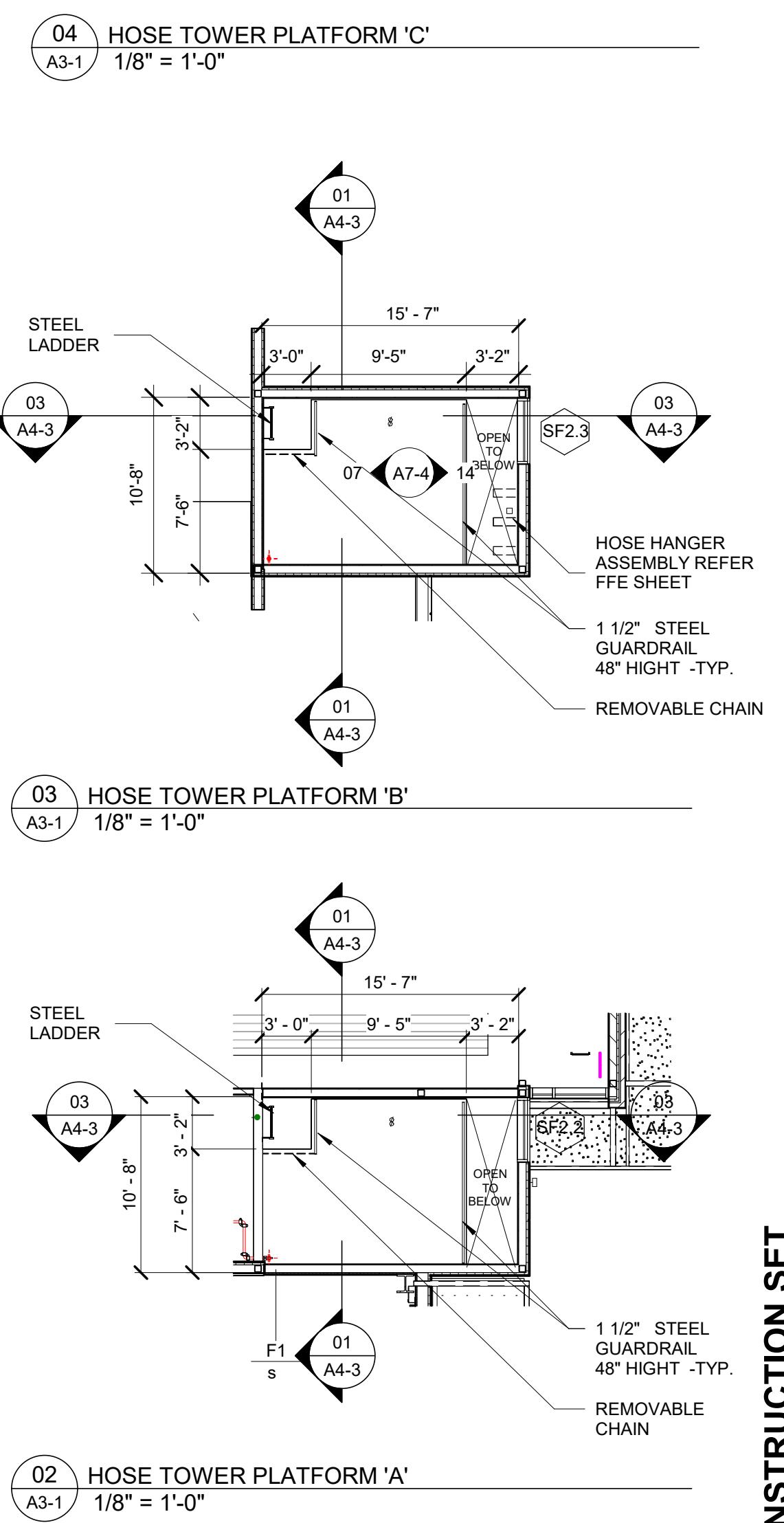
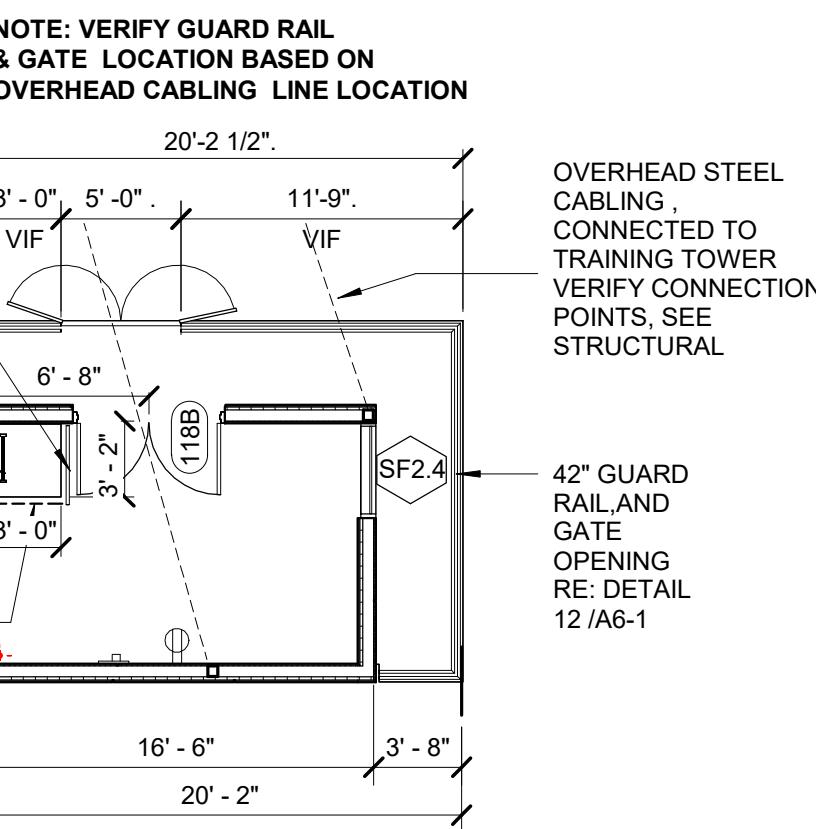


REGISTERED ARCHITECT
MICHAEL W. DOWLING
P.C. #1007
State of Montana



GENERAL NOTES:

1. DIMENSIONS ARE TO GRID, FACE OF STUD, MASONRY, OR DOOR/WINDOW OPENINGS. DIMENSIONS TO OPENINGS ARE NOMINAL. VERIFY ALL OPENINGS WITH ROUGH OPENING REQUIREMENTS.
2. ALL DOOR OPENINGS PERPENDICULAR TO A WALL ARE 6" MIN. TO THE WALL FRAMING UNO.
3. SEE SHEET A1-2 FOR WALL TYPES.
4. ALL INTERIOR WALL TYPES ARE 11s UNO.
5. ALL EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.
6. ALL SIGNAGE TO COMPLY WITH IBC SECTION 1110 AND APPLICABLE ICC/ANSI PROVISIONS. SEE SPECIFICATIONS.



HELENA FIRESTATION #3

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DOWLING | SHIVEH-ATTERTY ARCHITECTURE + ENGINEERING

734 N. Last Chance Gulch | Helena, MT 59601 | 406.457.5500

FIRST FLOOR PLAN

PROJECT #: 25-668

ISSUE DATES:

10/22/2025	10/22/2025
------------	------------

DRAWN BY: JS/CC

A3-1

100% CONSTRUCTION SET

10.22.25

REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB
MIC. #1052
State of Montana

HELENA FIRESTATION #3

1872 KELLEHER LANE, HELENA, MT 59602

DOWLING | SHIVEH-ATTERTY
ARCHITECTS | ARCHITECTURE + ENGINEERING

FIRST FLOOR
PLAN - WALL
TAG PLAN

PROJECT #:
25-668

ISSUE DATE:

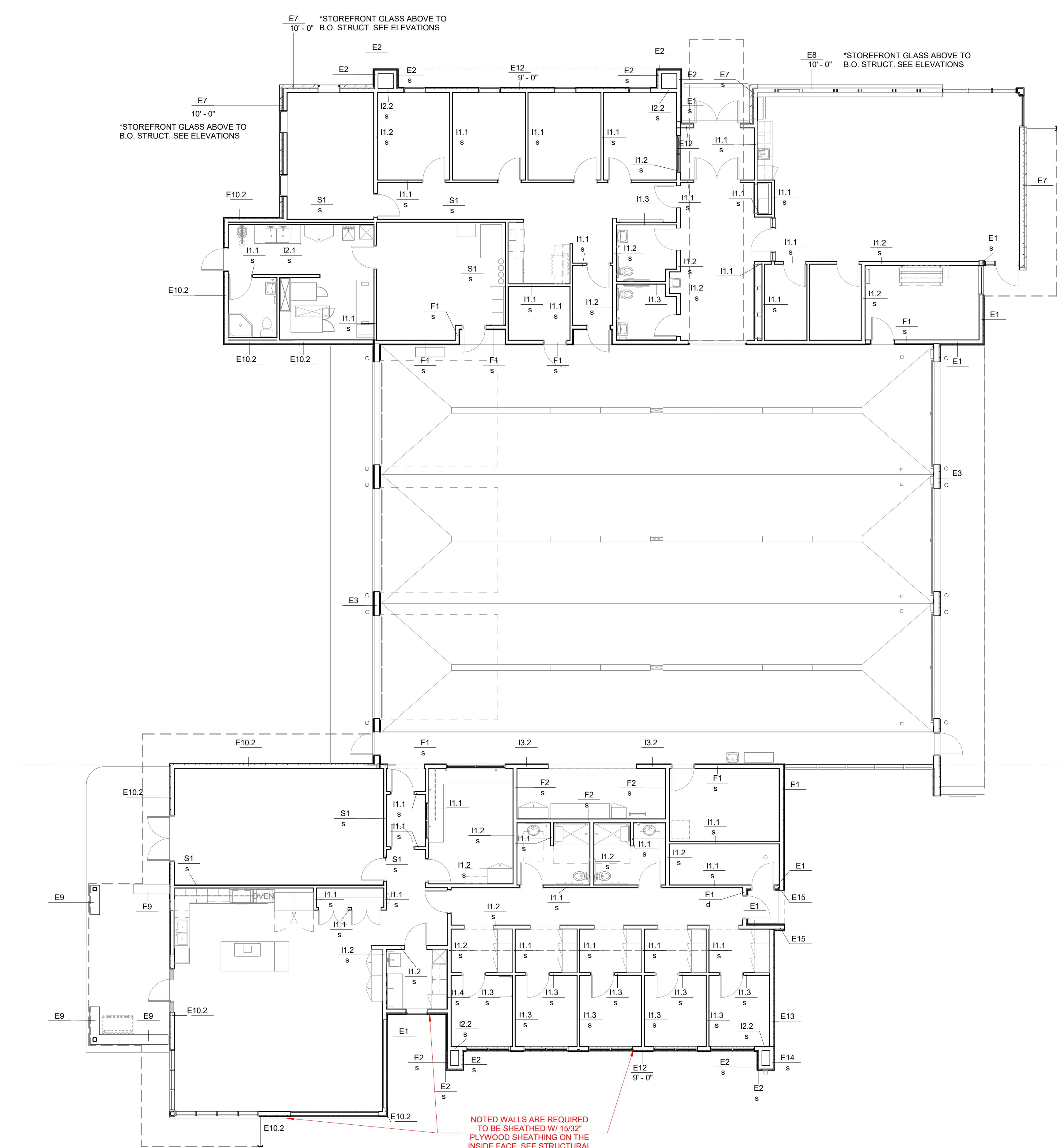
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JS/C

A3-2

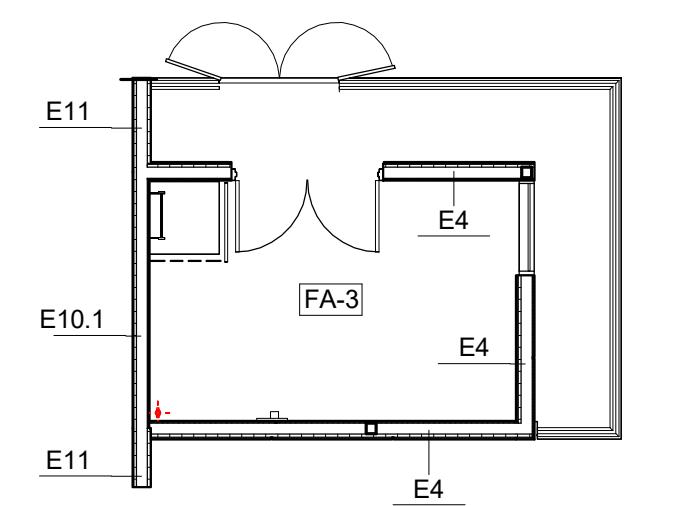
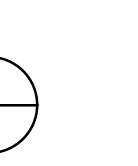
10.22.25

GENERAL NOTES:

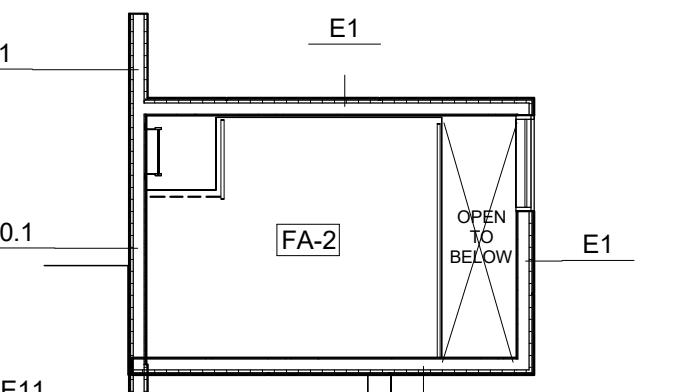
1. DIMENSIONS ARE TO GRID, FACE OF STUD, MASONRY, OR DOOR/WINDOW OPENINGS. DIMENSIONS TO OPENINGS ARE NOMINAL. VERIFY ALL OPENINGS WITH ROUGH OPENING REQUIREMENTS.
2. ALL DOOR OPENINGS PERPENDICULAR TO A WALL ARE 6' MIN. TO THE WALL FRAMING UNO.
3. SEE SHEET A1-2 FOR WALL TYPES.
4. ALL INTERIOR WALL TYPES ARE I1s UNO.
5. ALL EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.
6. ALL SIGNAGE TO COMPLY WITH IBC SECTION 1110 AND APPLICABLE ICC/ANSI PROVISIONS. SEE SPECIFICATIONS.



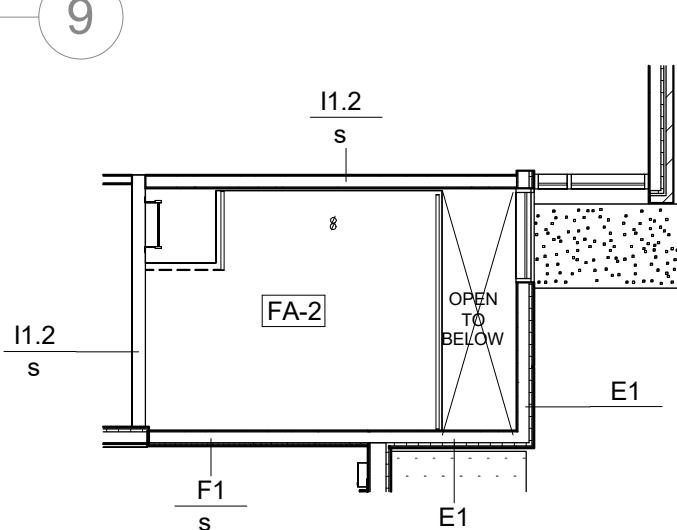
1 FLOOR PLAN - WALL TAGS
A3-2 1/8" = 1'-0"



4 HOSE TOWER - PLATFORM 'C'
A3-2 1/8" = 1'-0" REF:A4-1



3 HOSE TOWER -PLATFORM 'B'
A3-2 1/8" = 1'-0" REF:A4-3



2 HOSE TOWER PLATFORM 'A'
WALL TAGS
A3-2 1/8" = 1'-0" REF:A4-3

REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB, LEED AP
Michael W. Dowling, AIA, NCARB, LEED AP
State of Montana

HELENA FIRESTATION #3

1872 KELLEHER LANE, HELENA, MT 59602

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www.dowlingarch.com

FINISH FLOOR
PLAN

PROJECT #:

25-668

ISSUE DATES:

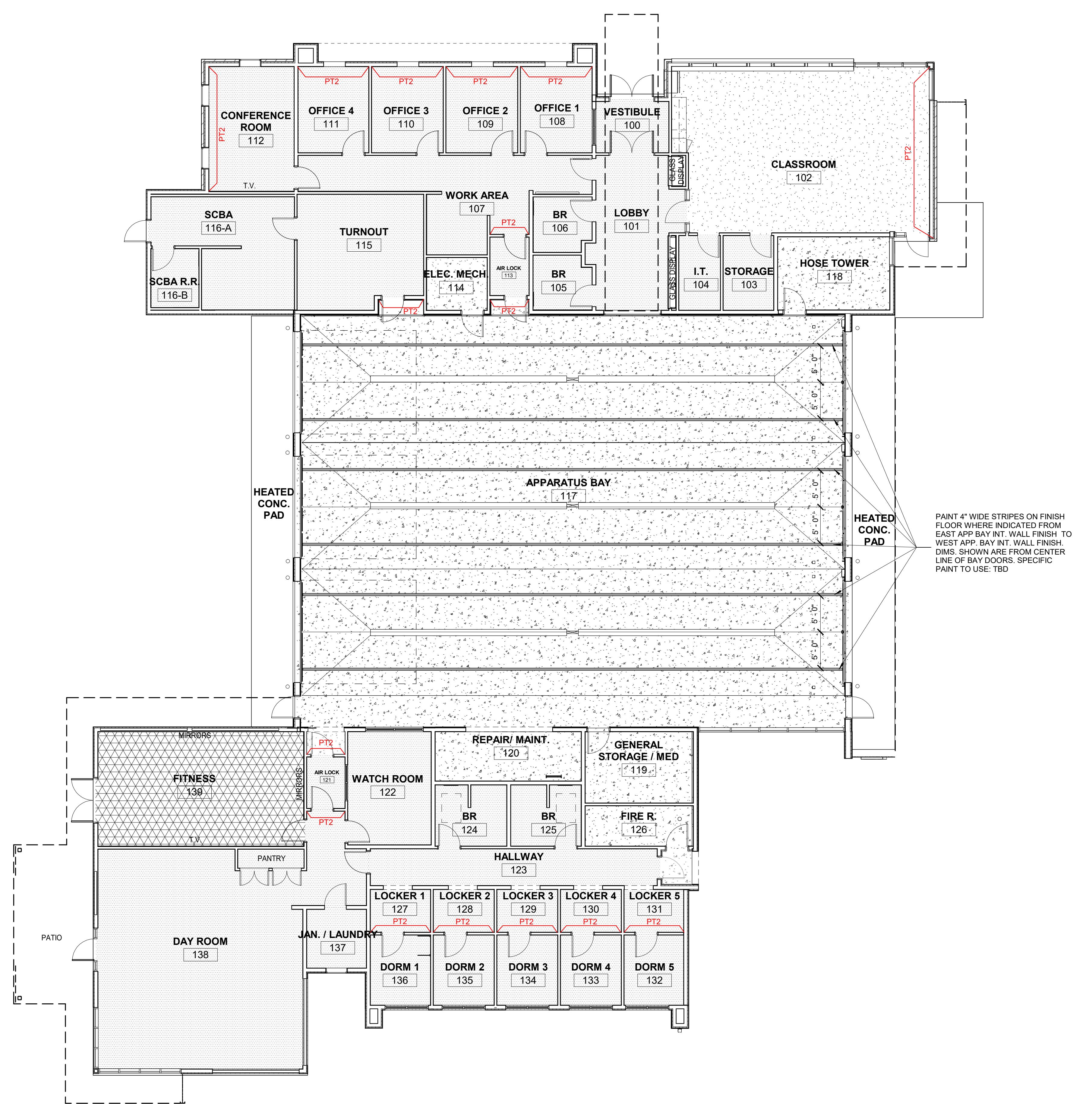
DRAWN BY:

JS/CC

100% CONSTRUCTION SET

A3-3

10.22.25



FLOOR MATERIAL LEGEND

	CONC - SPRAY LOCK P3 INDUSTRIAL FINISH
	CA - CARPET TILES
	RBR - RUBBER INTERLOCKING TILE LAMINATE J1, ES47 PERFORMANCE RIPPIN RED - COMPUTED BY TILE : ILT1-000444
	EP - EPOXY FLOORING - EP1, EP2, EP3 REFER TO DIFFERENT COLOR VARIATIONS OF EPOXY FLOORING. REFERENCE FINISH SCHEDULE FOR ROOM BY ROOM EPOXY FLOORING INFORMATION

GENERAL NOTES

- 1.0 FINISH SCHEDULE APPLIES TO GENERAL ROOM AREAS. ADDITIONAL FINISH REQUIREMENTS MAY BE SHOWN ON OTHER DRAWINGS OR IN THE SPECIFICATIONS.
- 2.0 ACCENT WALL FINISH IS NOTED ON PLAN
- 3.0 SEE INTERIOR ELEVATIONS FOR TILE WALL FINISH
- 4.0 FOR NEEDED RED ACCENTS, Pierce Red #90, IS THE SAME RED COLOR FOR THE FIRE ENGINES .

WALL MATERIAL/BASE FINISH LEGEND

	CF - CEMENT FIBER PANEL VERIFY PAINT FINISH WITH DOWLING
	PT 1 - PAINT FIELD
	PT 2 - ACCENT WALL
	RB 1 - MANNINGTON COMMERCIAL- EDGE EFFECTS, ETCHED EEETC.
	RB 2 - MANNINGTON COMMERCIAL- BURKEBASE TYPE TP

TILE1 - URBAN DISTRICT BRX- EASTSIDE BRX 2x8, STAGGERED THIRD W/ DARK GRAY GROUT

TILE2 - MIX OF SUBWAY TILE (RETROSPACE REMIX-MODERN WHITE OFFSET 3x6) AND PENNY ROUND TILE (COLOR WHEEL MOSAIC- CURRANT) WITH DARK GRAY GROUT.

WP - WATERPROOF PAINT - SEE INT. ELEVATIONS FOR HEIGHT PER WALL. VERIFY COLOR WITH DOWLING ARCH

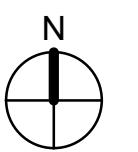
EXAMPLE

	STORAGE	→	ROOM NAME
	105	→	ROOM NUMBER
	RB 1 → WALL MATERIAL CALL OUT		

RB 1 → SPECIAL CONDITION OCCURS PER WALL AS INDICATED. CONDITION ONLY OCCURS ON THE SIDE OF THE WALL INDICATED BY THE BRACKETS, NOT BOTH SIDES

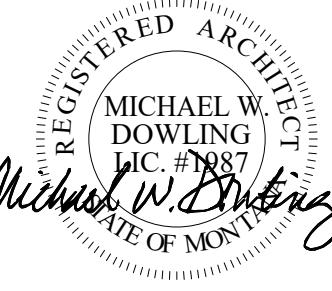
FINISH SCHEDULE

ROOM NUMBER	NAME	BASE FINISH	FLOOR FINISH	NORTH WALL	EAST WALL	SOUTH WALL	WEST WALL	COMMENTS
100	VESTIBULE	RBR	EP1	PT1	PT1	PT1	PT1	
101	LOBBY	RBR	EP1	PT1	PT1	PT1	PT1	
102	CLASSROOM	RB1	CA	PT2	PT2	PT2	PT2	
103	STORAGE	RB1	EP1	PT1	PT1	PT1	PT1	
104	I.T.	RB1	EP1	PT1	PT1	PT1	PT1	
105	BR	EP3	WP	WP	WP	WP	WP	TILE1 SEE INT. ELEVATIONS FOR WALL TILE FINISH DETAILS & DIMENSIONS
106	BR	EP3	WP	WP	WP	WP	WP	TILE1 SEE INT. ELEVATIONS FOR WALL TILE FINISH DETAILS & DIMENSIONS
107	WORK AREA	RB1	EP1	PT1	PT1	PT1	PT1	
108	OFFICE 1	RB1	EP1	PT2	PT1	PT1	PT1	
109	OFFICE 2	RB1	EP1	PT2	PT1	PT1	PT1	
110	OFFICE 3	RB1	EP1	PT2	PT1	PT1	PT1	
111	OFFICE 4	RB1	EP1	PT2	PT1	PT1	PT1	
112	CONFERENCE ROOM	RB1	EP1	PT1	PT1	PT1	PT2	
113	AIR LOCK	RB1	EP1	PT2	PT1	PT2	PT1	SEE FINISH FLOOR PLAN FOR PRECISE PT2 LOCATION
114	ELEC. MECH.	RB2	CONC	PT1	PT1	PT1	PT1	
115	TURNOUT	RB2	EP1	PT1	PT1	PT1	PT1	
116-A	SCBA	FRP BASE	EP1	FRP/PT1	FRP/PT1	FRP/PT1	FRP/PT1	FRP ONLY UP TO 48" FROM F.F., SEE INT. ELEVATIONS
116-B	SCBA R.R.	FRP BASE	EP1	FRP/PT1	FRP/PT1	FRP/PT1	FRP/PT1	FRP ONLY UP TO 48" FROM F.F., SEE INT. ELEVATIONS
117	APPARATUS BAY	RB2	CONC	CF	CF	CF	CF	CF UP TO 10', PAINTED GWB ABOVE. SEE INT. ELEVATIONS
118	HOSE TOWER	RB2	CONC	PT1	PT1	PT1	PT1	
119	GENERAL STORAGE / MED	RB2	CONC	PT1	PT1	PT1	PT1	
120	REPAIR/ MAINT.	RB2	CONC	PT1	PT1	PT1	PT1	
121	AIR LOCK	RB1	EP2	PT2	PT1	PT2	PT1	SEE FINISH FLOOR PLAN FOR PRECISE PT2 LOCATION
122	WATCH ROOM	RB2	EP2	PT1	PT2	PT1	PT1	
123	HALLWAY	RB2	EP2	PT1	PT1	PT1	PT1	
124	BR	EP3	TILE2	TILE2	TILE2	TILE2	TILE2	SEE INT. ELEVATIONS FOR WALL TILE FINISH DETAILS & DIMENSIONS
125	BR	EP3	TILE2	TILE2	TILE2	TILE2	TILE2	SEE INT. ELEVATIONS FOR WALL TILE FINISH DETAILS & DIMENSIONS
126	FIRE R.	RB2	CONC	PT1	PT1	PT1	PT1	
127	LOCKER 1	RB2	EP2	PT1	PT2	PT1	PT1	
128	LOCKER 2	RB2	EP2	PT1	PT1	PT2	PT1	
129	LOCKER 3	RB2	EP2	PT1	PT1	PT2	PT1	
130	LOCKER 4	RB2	EP2	PT1	PT1	PT2	PT1	
131	LOCKER 5	RB2	EP2	PT1	PT1	PT2	PT1	
132	DORM 5	RB2	EP2	PT1	PT1	PT1	PT1	
133	DORM 4	RB2	EP2	PT1	PT1	PT1	PT1	
134	DORM 3	RB2	EP2	PT1	PT1	PT1	PT1	
135	DORM 2	RB2	EP2	PT1	PT1	PT1	PT1	
136	DORM 1	RB2	EP2	PT1	PT1	PT1	PT1	
137	JAN. / LAUNDRY	RB2	EP2	WP	WP	WP	WP	WP FROM F.F. TO CEILING
138	DAY ROOM	RB1	EP2	PT1	PT1	PT1	PT1	SEE INT. ELEVATIONS FOR KITCHEN BACKSPLASH TILE DETAILS
139	FITNESS	RB2	RBR	PT1	PT1	PT1	PT1	
141	CORRIDOR	RBR						



HELENA FIRESTATION #3
1872 KELLEHER LANE, HELENA, MT 59602

1872 KELLEHER LANE, HELENA, MT 59602



GENERAL NOTES

- GENERALLY CENTER CEILING GRIDS IN EACH ROOM AS SHOWN ON PLANS TO PROVIDE EQUALLY SIZED PANELS ON OPPOSITE WALLS. IF PLANS INDICATE A GRID ALIGNING WITH A COLUMN, WALL, SOFFIT, ETC., START GRID AT INDICATED SURFACE.

SEE FLOOR PLAN FOR WALL TYPES AND WALLS THAT EXTEND FULL HEIGHT TO STRUCTURE.

SEE TYPICAL CEILING DETAILS ON SHEET A6-9.

CEILING FIXTURES ARE SHOWN FOR REFERENCE ONLY FOR COORDINATION WITH CEILING FINISH SYSTEM. SEE MECHANICAL, ELECTRICAL AND SPRINKLER DRAWINGS FOR ALL CEILING FIXTURES AND TYPES.

SPOT ELEVATIONS ARE FROM FINISH FLOOR TO SURFACE FINISH OF CEILING AND ARE ROUNDED TO THE NEAREST INCH.

OPEN CEILINGS WITH EXPOSED MECHANICAL & STRUCTURAL TO BE PAINTED VERIFY COLOR WITH ARCHITECT.

LEGEND

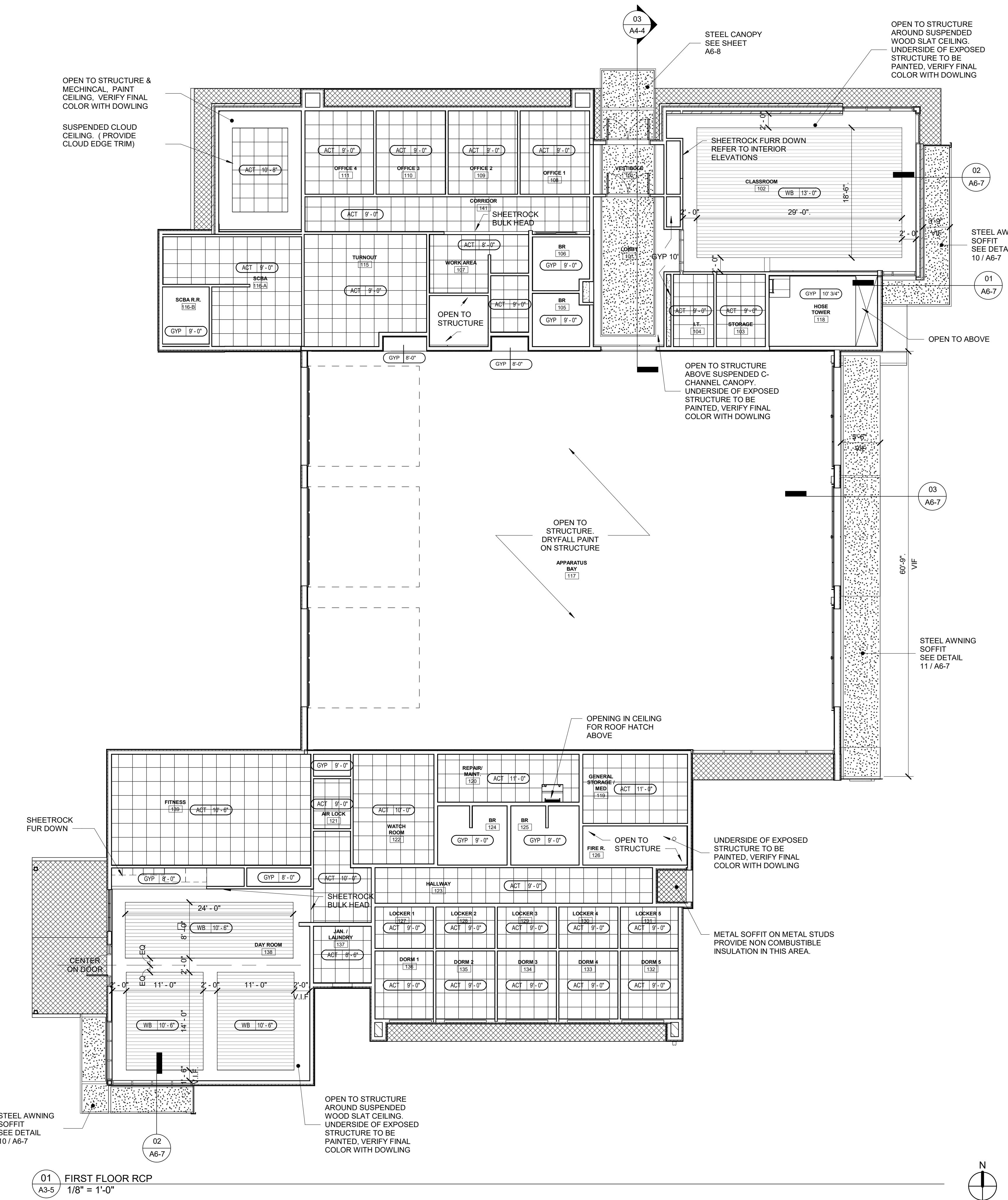
 GYP- GYPSUM BOARD, PAINT

 WB- 2100 SERIES PANELIZED
LINEAR WOOD BAFFLES - 9 WOOD
MOUNTED ON T-BAR SUSPENDED

 ACT- 2x2 ACOUSTIC PANEL

 PSS- PERFORATED STEEL SOFFIT

 EXT. METAL SOFFIT (FAUX WOOD
FINISH)



REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB
State of Montana

HELENA FIRESTATION #3

1872 KELLEHER LANE, HELENA, MT 59602

SHIVEH-ATTERY
ARCHITECTURE + ENGINEERING

754 N. Last Chance Gulch | Helena, MT 59601 | (406) 457-5500

PROJECT #:

25-668

ISSUE DATES:

DRAWN BY:

JS/C

100% CONSTRUCTION SET

A3-6

10.22.25

GENERAL FF&E NOTES:

1. QUANTITIES SHALL BE VERIFIED WITH THE ARCHITECT AND OWNER PRIOR TO PURCHASE OF FURNITURE.
2. ALL HALFTONE (GRAY) ELEMENTS ARE SHOWN ELSEWHERE ON THE DRAWINGS, NOT IN CONTRACT OR QFO.
3. GC TO PROVIDE WALL BLOCKING AS REQUIRED FOR WALL MOUNTED FIXTURES / EQUIPMENT & TELEVISIONS.
4. GC TO PROVIDE ALL EQUIPMENT NOTED

	FURNITURE PROVIDED BY OWNER, CONTRACTOR INSTALLED
	CONTRACTOR SOURCED AND INSTALLED FURNITURE
	MANUAL SHADE - CONTRACTOR SOURCED
	ELECTRIC, MOTORIZED SHADES - CONTRACTOR SOURCED

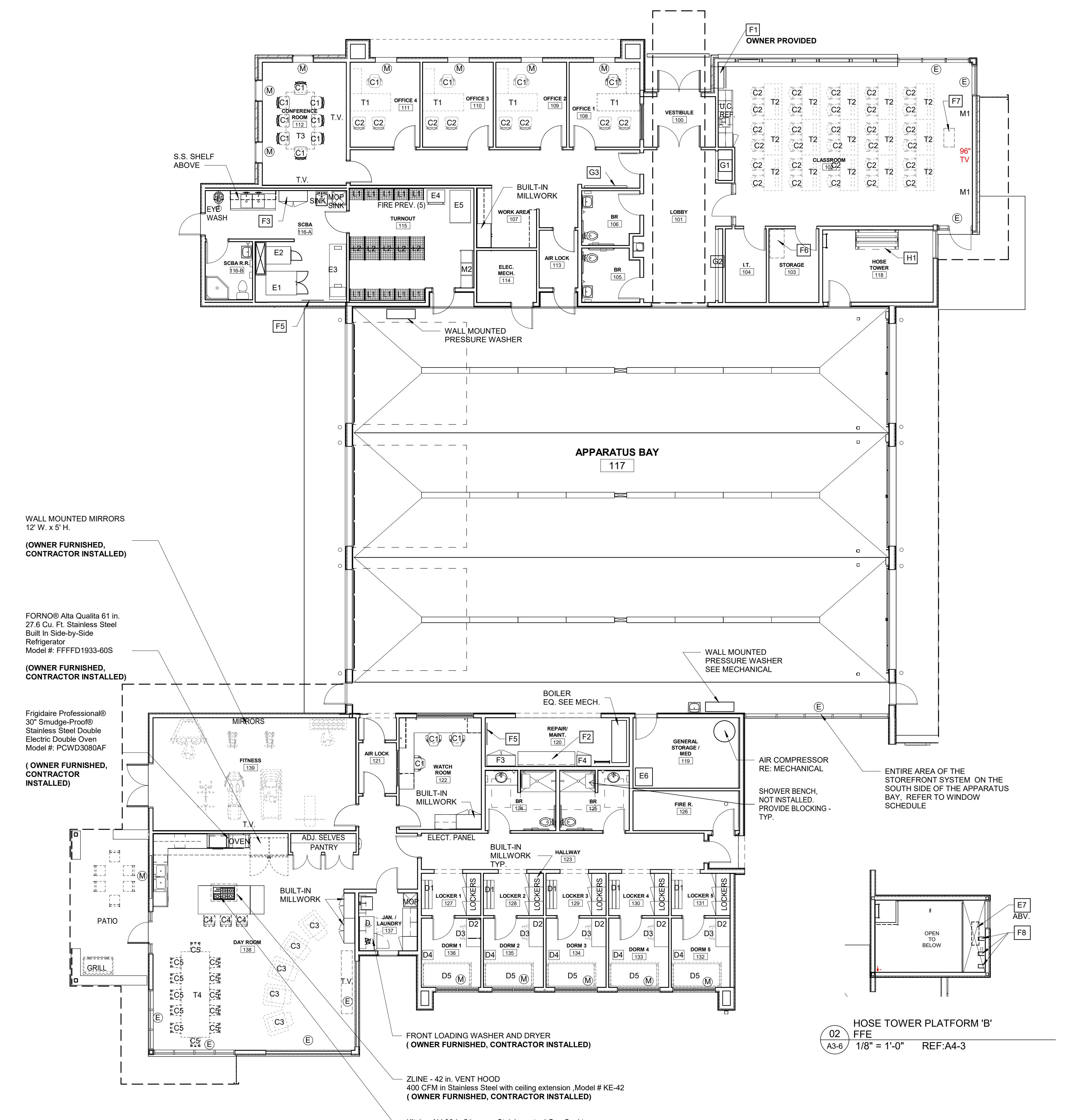
FURNITURE SCHEDULE

MARK	DESCRIPTION	COUNT
T1	FURNITURE - OFFICE TABLE	
C1	FURNITURE - ADJUSTABLE OFFICE CHAIR	
C2	FURNITURE - FIXED CHAIRS	
T2	FURNITURE - TRAINING ROOM TABLES	
T3	FURNITURE - CONFERENCE TABLE	
L1	FURNITURE - GEARGRID - STANDARD FREESTANDING , SINGLE SIDED 24"W X 20" D X 72" GC PROVIDED	
L2	FURNITURE - GEARGRID - STANDARD FREESTANDING , DOUBLE SIDED 24"W X 20" D X 72" GC PROVIDED	
M1	MAGNETIC STEEL DRY ERASE BOARD - 4'X3', ULINE H-5828	
M2	GEARGRID - MODULAR STORAGE - SEATTLE SYSTEM 3 PACK 75"W X 32" D X 82" H	
H1	THREE TIER FIRE HOSE CART (6FT) - FIRE HOSE DIRECT, ITEM# FHC3T6 - GC PROVIDED	
C3	FURNITURE - DAYROOM RECLINERS DUTY- BUILT ULTIMATE FIREFIGHTER RECLINER FIRE FSF STATION FURNITURE.COM	
C4	FURNITURE - KITCHEN ISLAND CHAIRS	
T4	FURNITURE - DAYROOM KITCHEN TABLE	
C5	FURNITURE - DAYROOM KITCHEN CHAIRS	
D1	MILLWORK - WOOD BENCH ON WALL MOUNT STEEL BRACKETS GC PROVIDED	
D2	MILLWORK - DORM DESK ON WALL MOUNT STEEL BRACKETS GC PROVIDED	
D3	FURNITURE - DORM DESK CHAIR	
D4	FURNITURE - DORM NIGHT STAND, FIRE FSF STATION FURNITURE.COM BUILT FIREHOUSE TOUGH SOLID WOOD NIGHTSTAND	
D5	FURNITURE - DORM BEDROOMS, FIRE FSF STATION FURNITURE.COM BUILT FIREHOUSE STRONG ADJUSTABLE HEIGHT STEEL-BED TWIN XL	
G1	RECESSED GLASS DISPLAY - CLARIDGE 370 SERIES, 4'X4"X2", W/ LED LIGHTING GC PROVIDED	
G2	RECESSED GLASS DISPLAY - CLARIDGE 370 SERIES, 4'X10"X1", W/ LED LIGHTING GC PROVIDED	
G3	BULLETIN BOARD, SURFACE MOUNT, IMPERIAL - CLARIDGE, 4' X 6"	
F1	SAFE HAVEN - BABY BOX , https://www.shhb.org/	
F2	ULINE, MODULAR DRAWER 96X30", BLACK , W/ MAPLE TOP- H- 10197-MAP ULINE, POLY PEGBOARD 96X48, BLACK : H-8498BL ULINE, 43 PIECE PEGBOARD ASSORTMENT, BLACK : H-7136 GC PROVIDED	
F3	ULINE, JUMBO HEAVY DUTY STORAGE CABINET - 49X 18 X 78: H3617BL GC PROVIDED	
F4	ULINE, FLAMMABLE STORAGE CABINET- SLIMLINE , SELF CLOSING- H-2570S-Y GC PROVIDED	
F5	ULINE, TOOLFEX BROOM , MOP, SHOVEL , WALL HOLDER : H-7867BL GC PROVIDED	
F6	SHELVING UNIT , 48W x 72H x 24D	
F7	ULINE, LECTERN : H - 7825	
F8	FIRE HOSE SADDLE RACK WALL MOUNTED RED GALVANIZED STEEL SR-12 , FIREHOSE SUPPLY.COM GC PROVIDED	

EQUIPMENT SCHEDULE

MARK	DESCRIPTION
E1	Decon SCBA Extractor - Roto-Decon by Circul-Air Corp SKU: CAC-DECON-240-NA
E2	Commercial Washer - Continental Girbau Inc / RMG040
E3	Continental Express Dry Turnout Gear Dryer, 6 set CON-XD-6
E4	Containment Fill Station CFS5.5-2S Bauer Compressors 2-Position 5.5 Sku: CFSF-F-2S
E5	Cylinder Fill Station, Bauer Verticus, VAC13H-E1, Single Phase 6000 psi Model # CIM-01
E6	Ice Machine - Vibekio, 22.2 400 lb - Commercial Free standing Ice Maker , auto cleaning Model # CIM-01
E7	SVOPES Electric Hoist, 1760 lbs Capacity, 120V Winch with 328 ft Wireless Remote Control. Item #6907374 Model #SVOPESDDGSSH10469V1

NOTE. GC TO PROVIDE ACCESSORY STANDS/ PLATFORMS THAT WOULD BE AN ADDITION TO THE BASE MODEL(S) , SEE MANUFACTURERS RECOMMENDATIONS.



01 F.F. & E.
A3-6 1/8" = 1'-0"

REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, LEED AP, NCARB
State of Montana

HELENA FIRESTATION #3

1872 KELLEHER LANE, HELENA, MT 59602

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EXTERIOR ELEVATIONS

PROJECT #: 25-668

ISSUE DATES:

DRAWN BY: JS/C/C

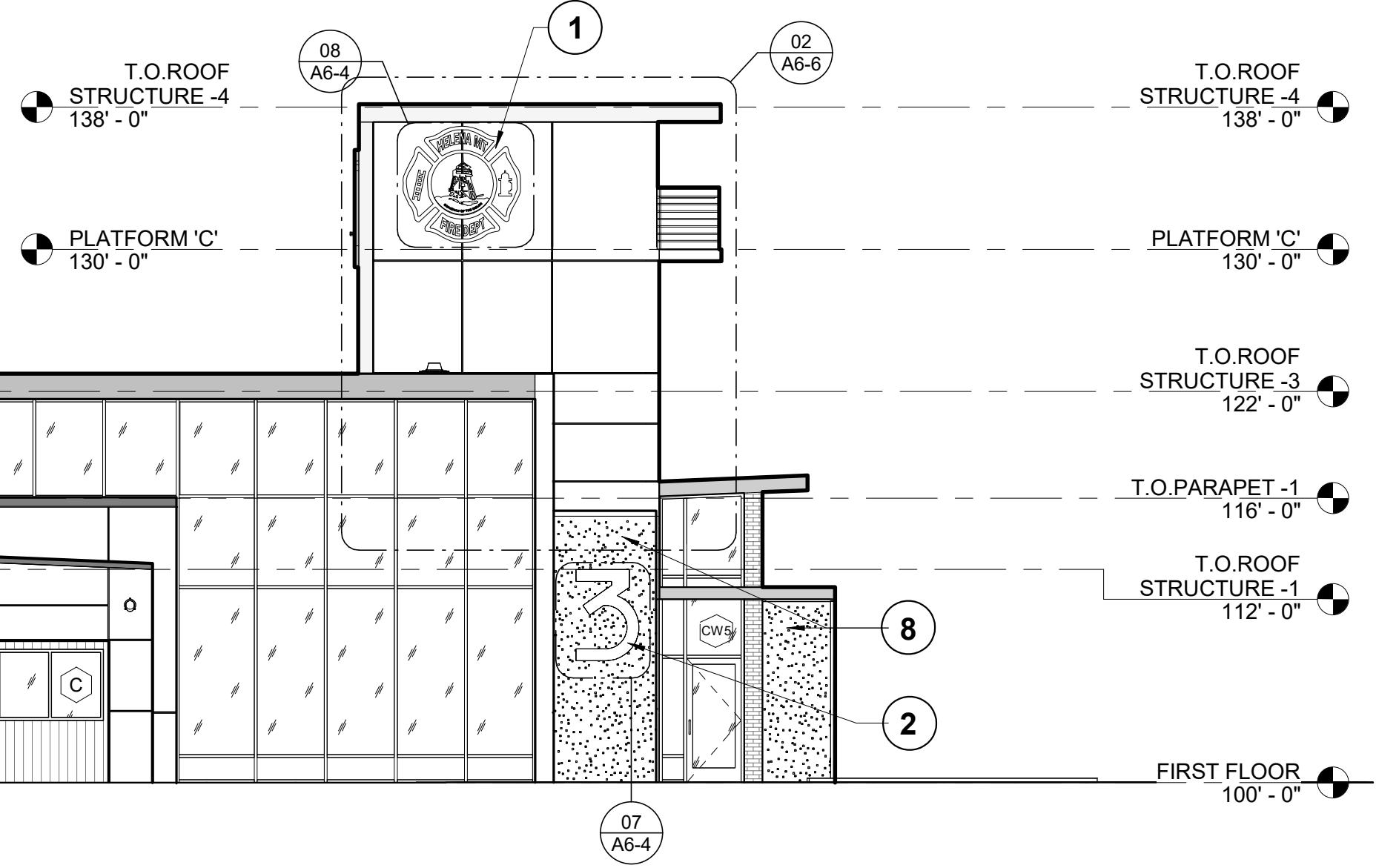
A4-1

10.22.25

100% CONSTRUCTION SET

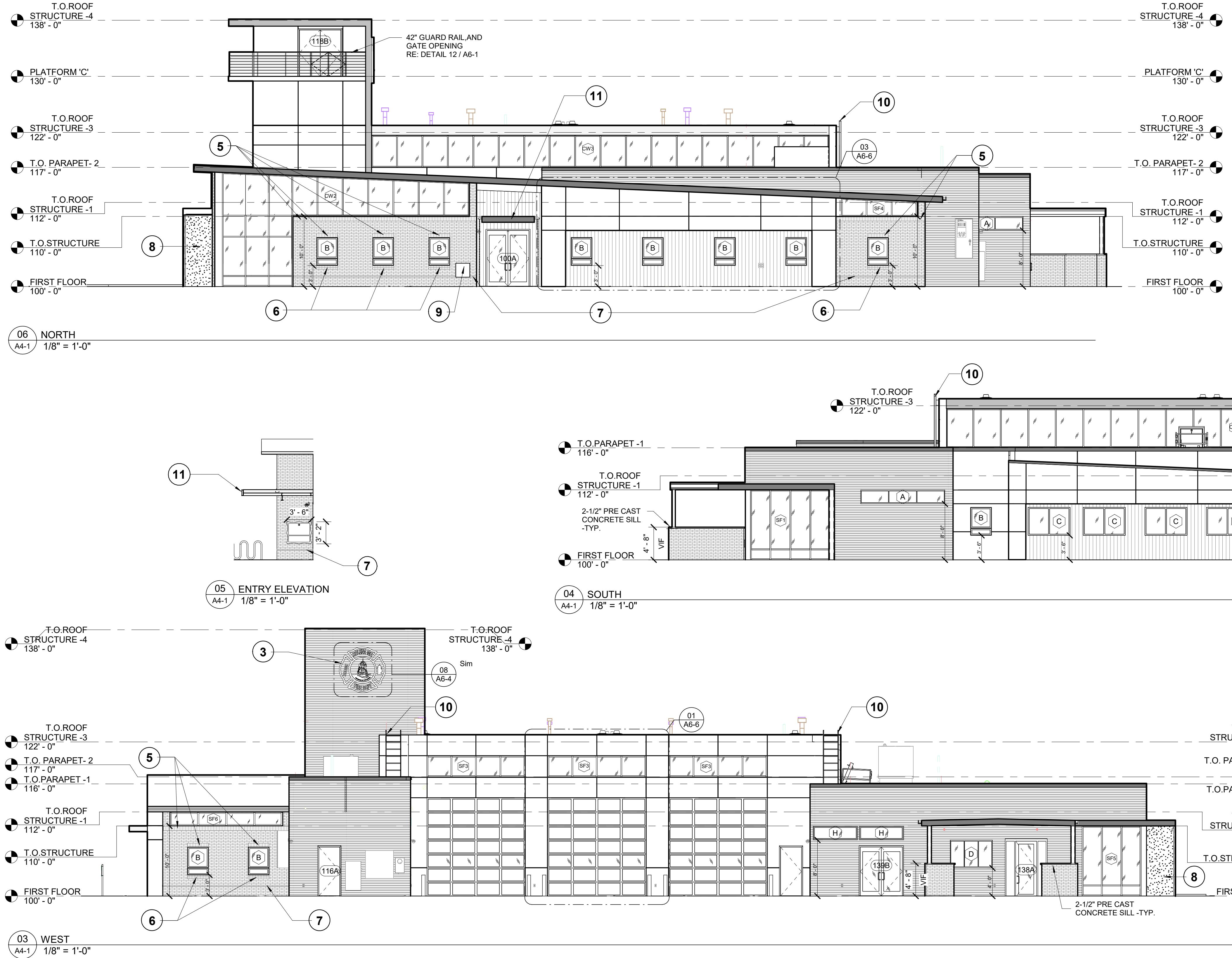
MATERIAL LEGEND AND NOTES

	CITADEL PANEL 20 RAIN SCREEN, FINISH TO BE VERIFIED BY ARCHITECT
	HORIZONTAL CORRUGATED METAL
	DARK BRICK VENEER
	VERTICAL SHOU SUGI BON WOOD SIDING
	1. THIS LEGEND DOES NOT INCLUDE ALL MATERIALS. SEE NOTES AND REFERENCED DETAILS FOR ADDITIONAL INFORMATION.
	2. PAINT ALL EXPOSED STEEL, COLOR TBD
	3. LOCATIONS OF MATERIAL JOINTS AND REVEALS ARE TO BE AS SHOWN ON THE EXTERIOR ELEVATIONS. WHERE NOT DIMENSIONED OR DETAILED JOINTS AND REVEALS ARE TO BE EQUALLY SPACED AND/OR CENTERED ALIGNED WITH ADJACENT ELEMENTS AS SHOWN.
	4. RAIN SCREEN FASTENER SPACING AND LAYOUT TO BE COORDINATED WITH ARCHITECT PRIOR TO INSTALLATION.
	5. REFER TO SHEET A6-6 FASTENER PATTERNS FOR CITADEL



KEY NOTES LEGEND

- 1 HELENA FIRE STATION CREST W/ BACKLIGHTING, SEE DETAIL 08 / A6-4
- 2 1/4" STEEL SURFACE WELDED, SEE DETAIL 07 / A6-4
- 3 HELENA FIRE STATION CREST WITHOUT BACKLIGHTING, SEE DETAILS ON A6-4
- 4 CONTINUOUS WATERFALL ROOF TRANSITIONS INTO WALL
- 5 SOLDIER BRICK COURSE, SEE DETAIL 02 & 04 / A6-11
- 6 MASONRY SILL, SEE DETAIL 01, PG: A6-11
- 7 BRICK REVEAL COURSE, SEE DETAIL 11 & 13, PG: A6-1
- 8 DECORATIVE / PERFORATED METAL PANEL , 1/4" STEEL SOFFIT - TYP. SEE DETAIL: 13 / A6-7
- 9 DOWLING CORNERSTONE/TIME CAPSULE LOCATION, SEE DETAIL: 06 / A6-4
- 10 SURFACE MOUNTED ROOF ACCESS LADDER, 01 / A6-5
- 11 CANTILEVERED ENTRY CANOPY, SEE SHEET A6-8

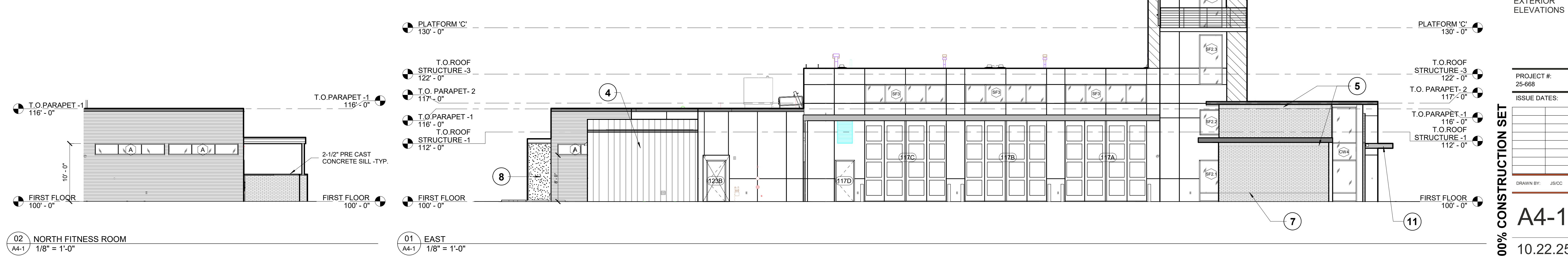


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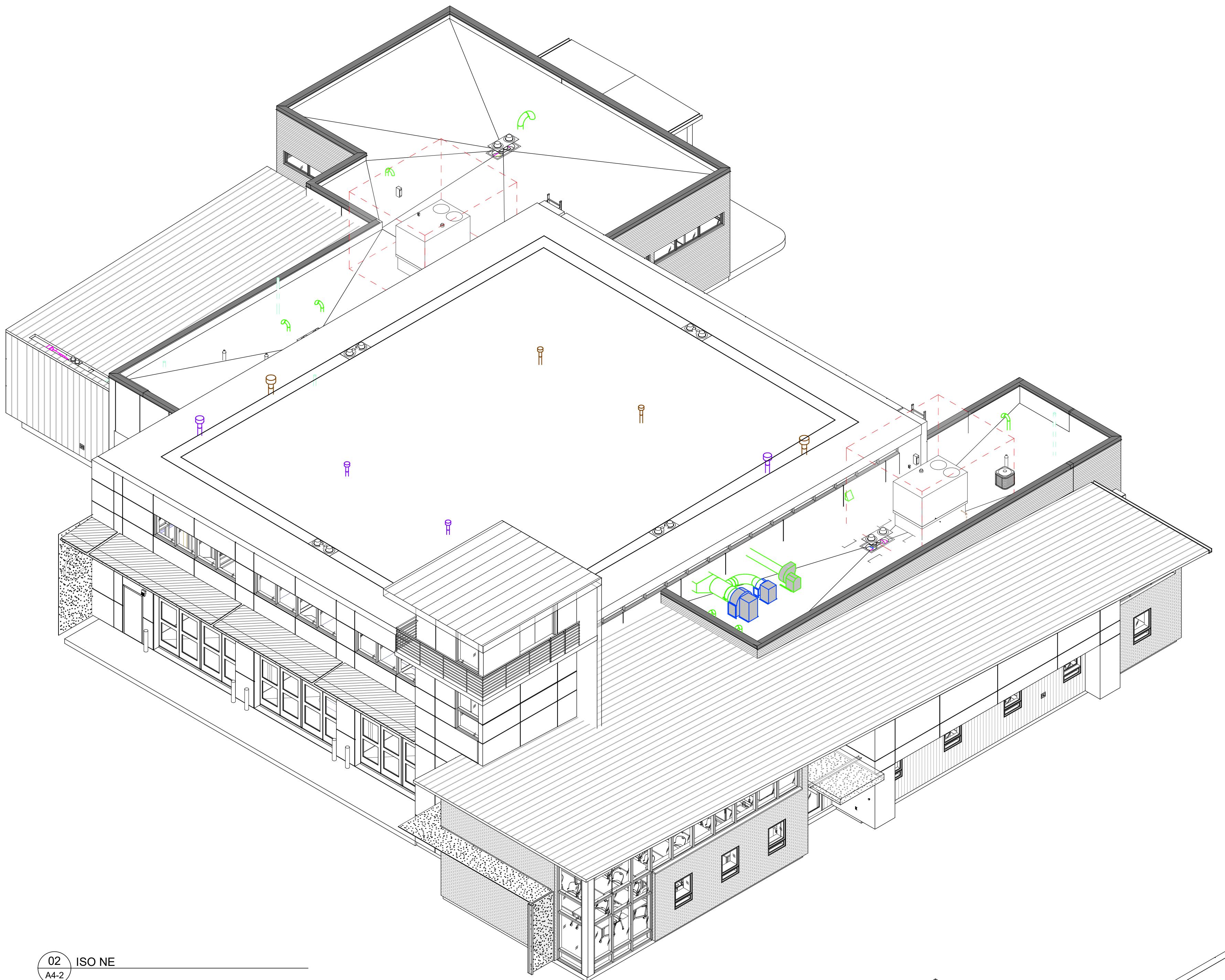
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DOWLING ARCHITECTS, P.C.



NORTH FITNESS ROOM
1/8" = 1'-0"

EAST
1/8" = 1'-0"



PERSPECTIVES ARE SHOWN TO PROVIDE A GENERAL OVERALL AERIAL OF THE ENTIRE BUILDING. THEY ARE NOT SHOWN IN DETAIL & DO NOT SHOW ALL CONDITIONS. PERSPECTIVES ARE MEANT TO GIVE GENERAL FEELING FOR RELATIONSHIPS OF BUILDING ELEMENTS AND ARE TO BE CONSIDERED DIAGRAMMATIC, NOT FOR CONSTRUCTION USES. IN-DEPTH INFORMATION ABOUT ELEMENTS SHOWN IN PERSPECTIVES CAN BE FOUND THROUGHOUT THE REST OF THE CONSTRUCTION DOCUMENT.

HELENA FIRESTATION #3

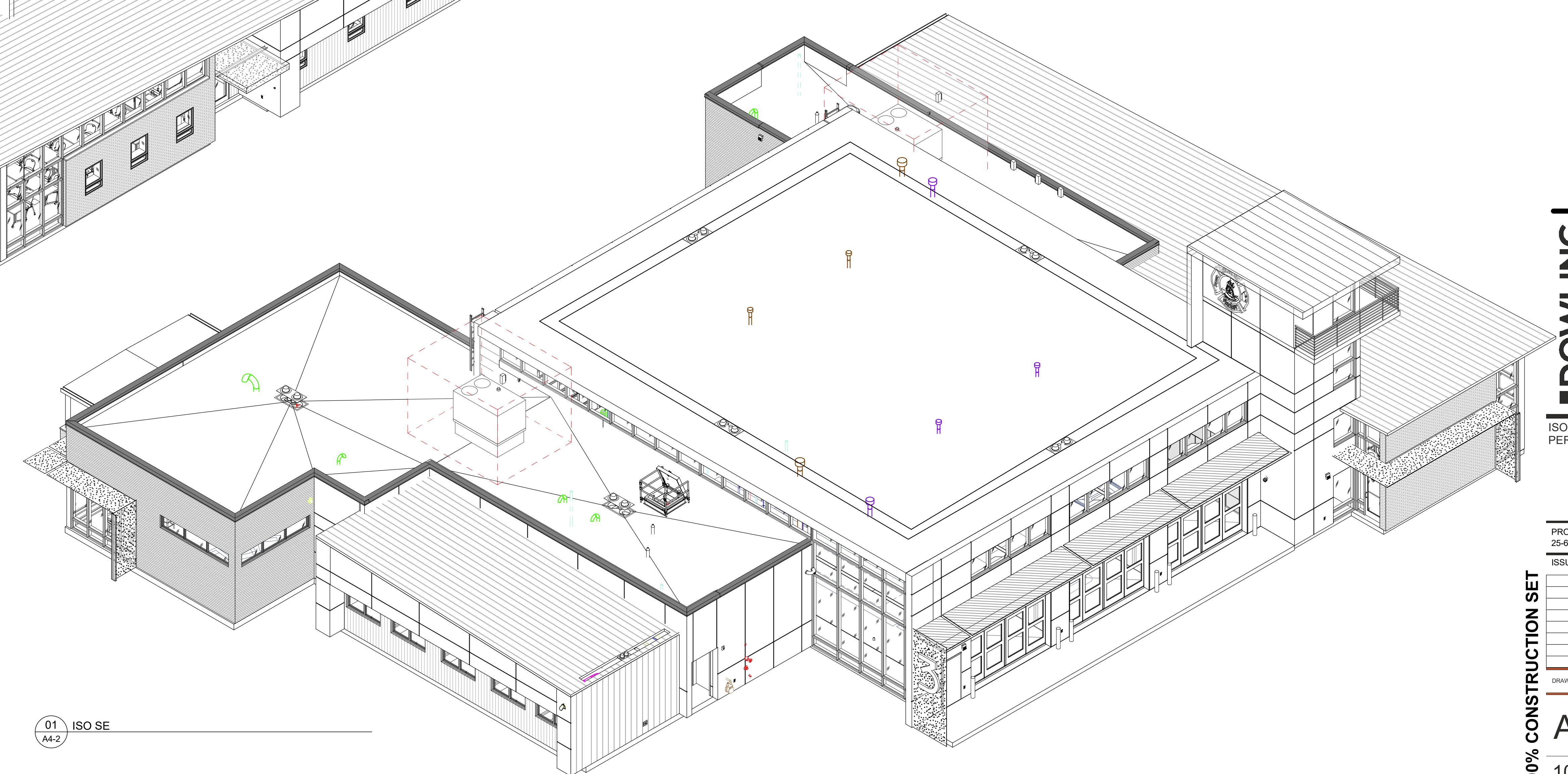
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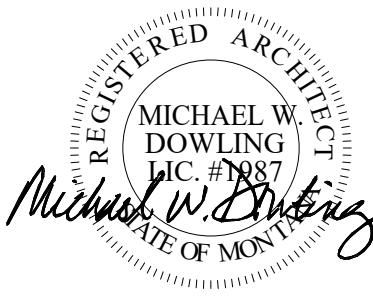
100% CONSTRUCTION SET

A4-2

10.22.25



PERSPECTIVES ARE SHOWN TO PROVIDE A GENERAL OVERALL AERIAL OF THE ENTIRE BUILDING. THEY ARE NOT SHOWN IN DETAIL & DO NOT SHOW ALL CONDITIONS. PERSPECTIVES ARE MEANT TO GIVE GENERAL FEELING FOR RELATIONSHIPS OF BUILDING ELEMENTS AND ARE TO BE CONSIDERED DIAGRAMATIC, NOT FOR CONSTRUCTION USES. IN-DEPTH INFORMATION ABOUT ELEMENTS SHOWN IN PERSPECTIVES CAN BE FOUND THROUGHOUT THE REST OF THE CONSTRUCTION DOCUMENT.



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A4-2.1

10.22.25

01

A4-2.1

ISO NW

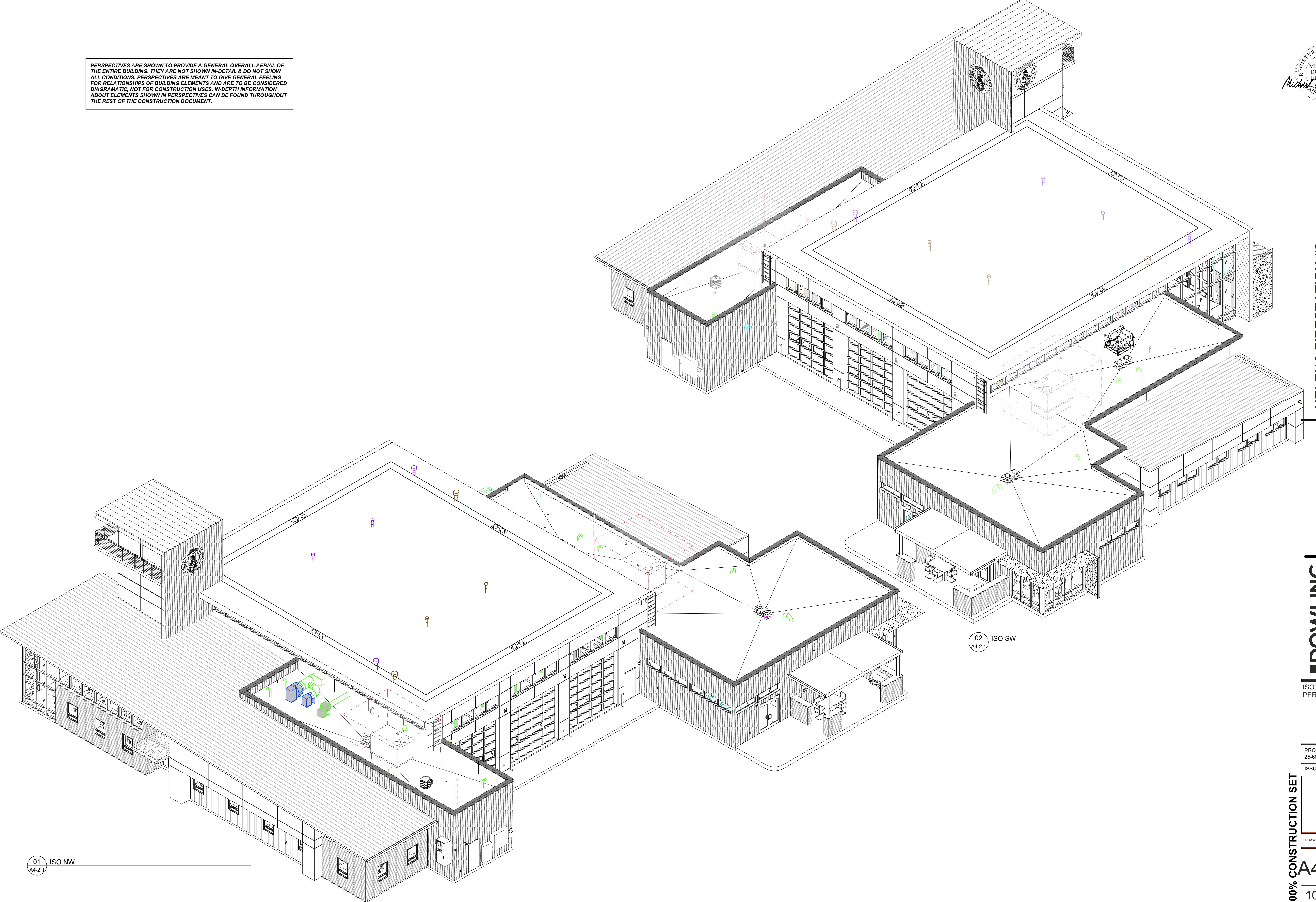
DRAWN BY: JS/CC

02

A4-2.1

ISO SW

DRAWN BY: JS/CC



REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA
MC. #1087
State of Montana

HELENA FIRESTATION #3

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ARCHITECTURE + ENGINEERING

BUILDING SECTIONS

PROJECT #:
25-668

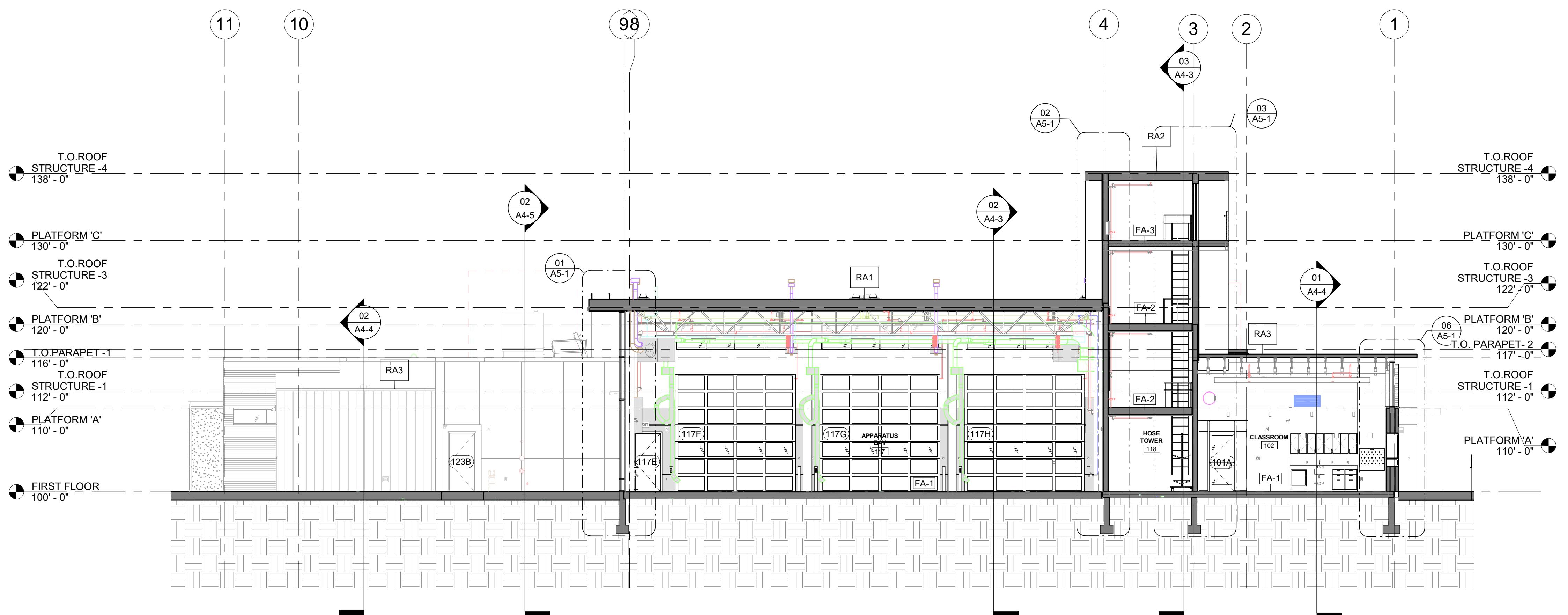
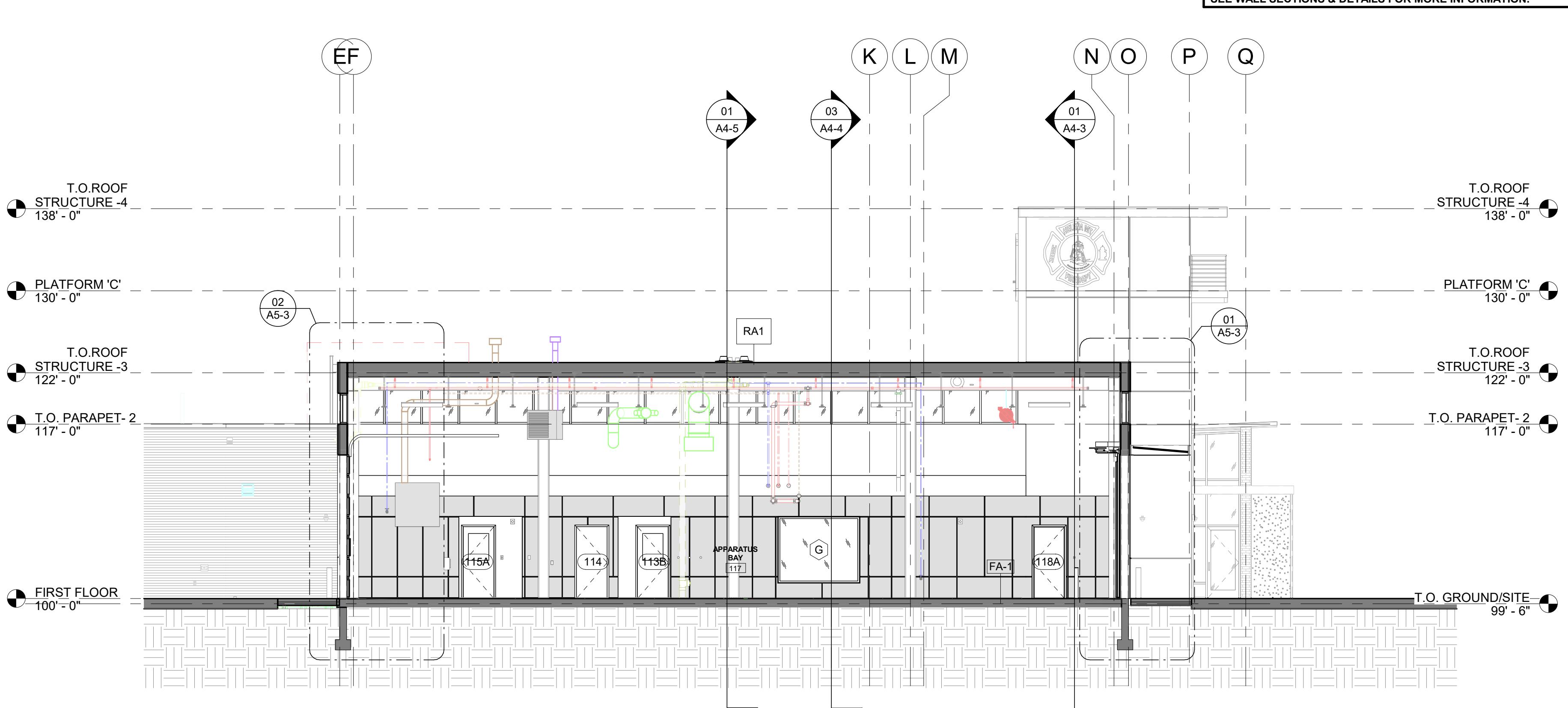
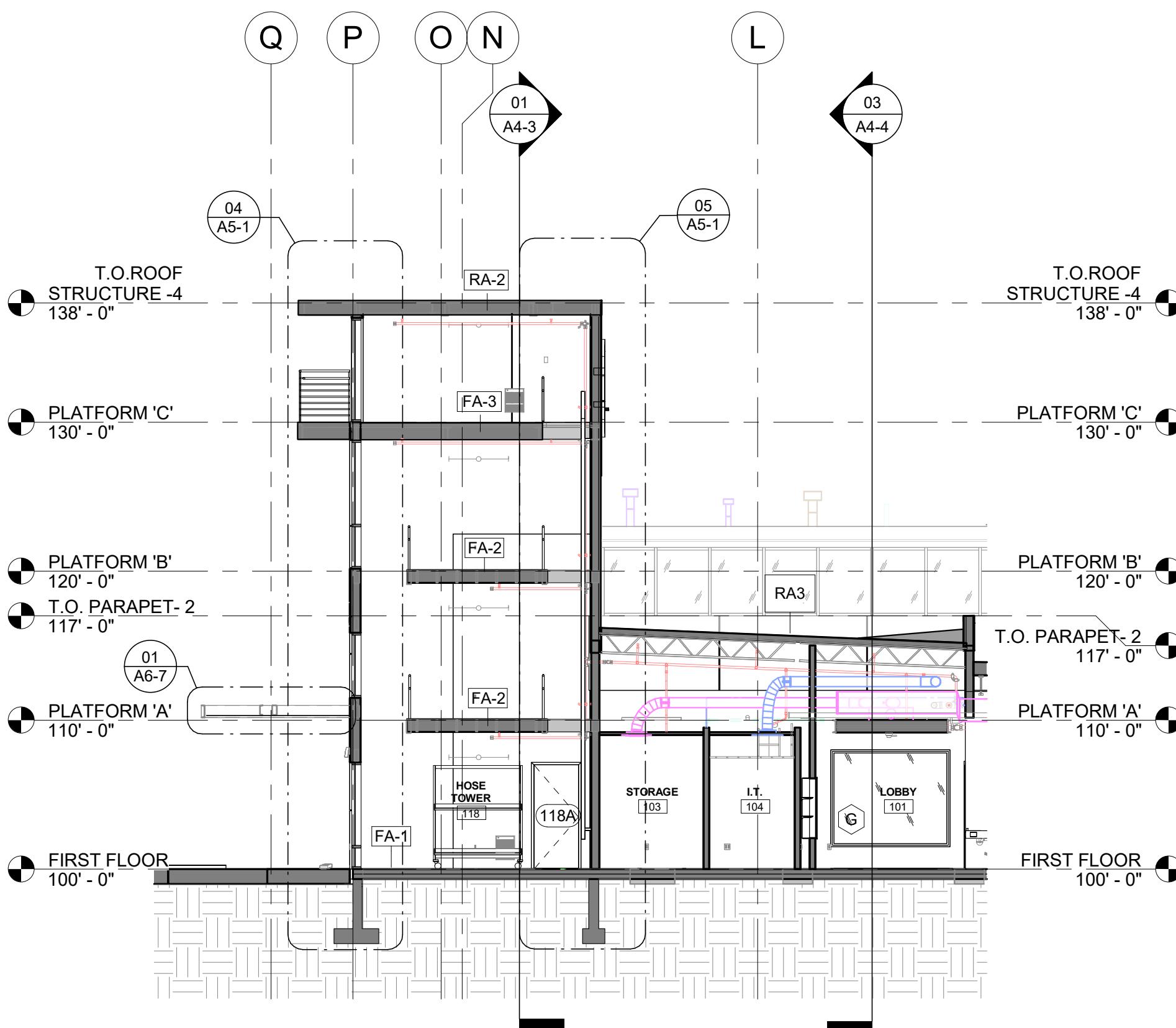
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DRAWN BY: JS/CC

A4-3

10.22.25

BUILDING SECTIONS ARE SHOWN TO PROVIDE A GENERAL OVERALL SECTION OF THE ENTIRE BUILDING. THEY ARE NOT SHOWN IN DETAIL & DO NOT SHOW ALL CONDITIONS, INCLUDING INSULATION. THE BUILDING ENVELOPE SHALL INCLUDE AN UNINTERRUPTED INSULATION BARRIER. SEE WALL SECTIONS & DETAILS FOR MORE INFORMATION.



REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA
LIC. #1087
State of Montana

HELENA FIRESTATION #3

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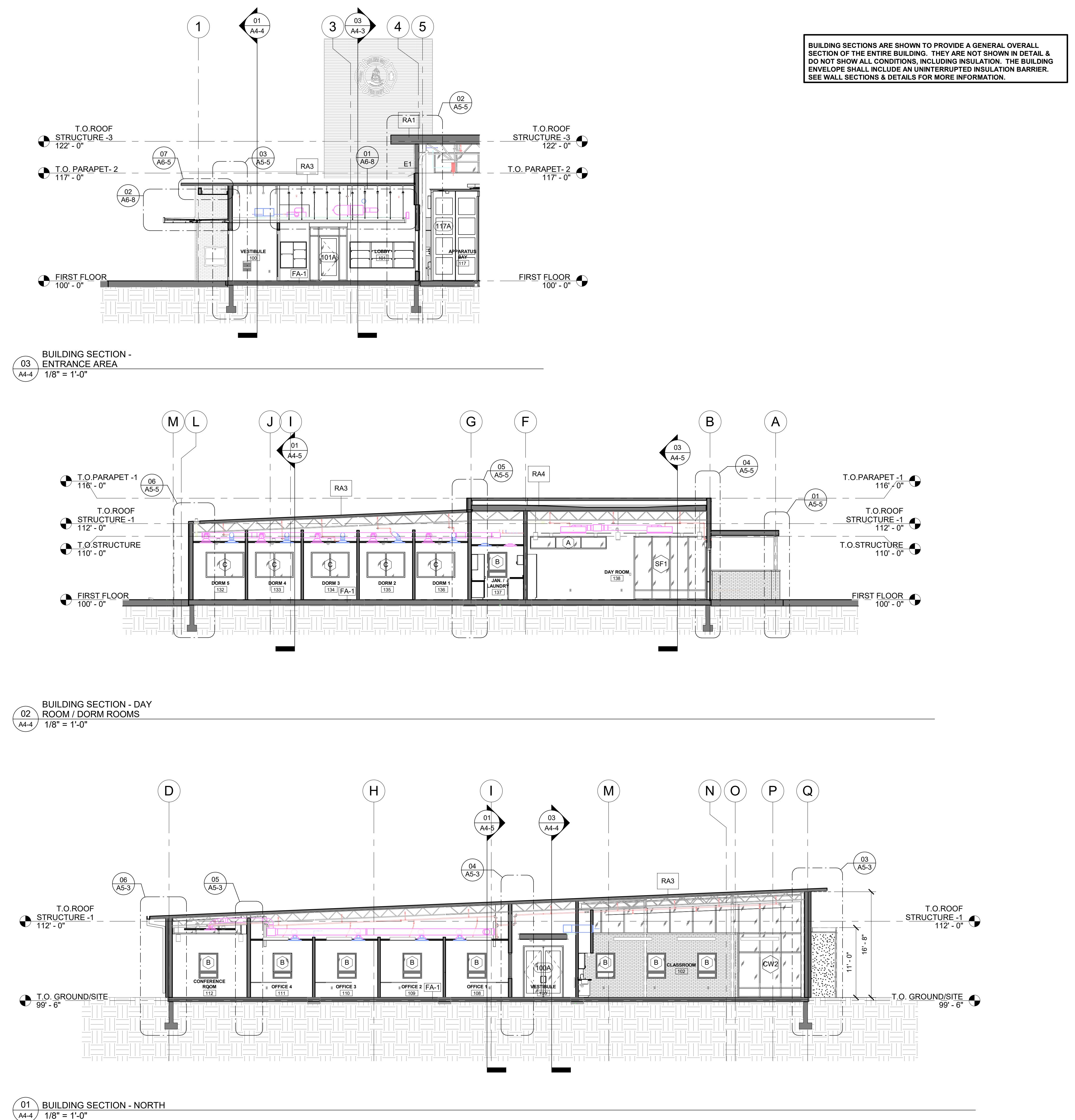
BUILDING SECTIONS

PROJECT #: 25-668
ISSUE DATES:

DRAWN BY: JS/CC

A4-4

10.22.25



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MICHAEL W. DOWLING, AIA, NCARB
State of Montana

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BUILDING SECTIONS

PROJECT #: 25-668

ISSUE DATES:

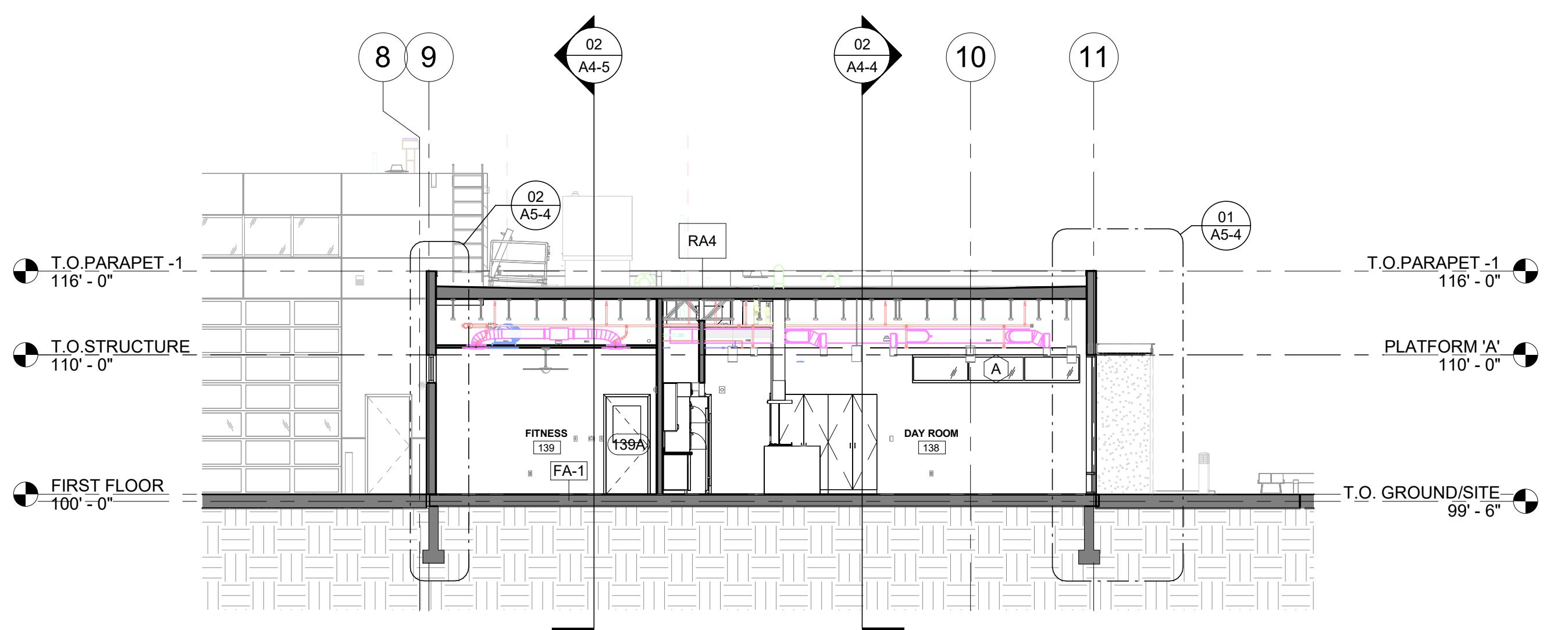
100% CONSTRUCTION SET

A4-5

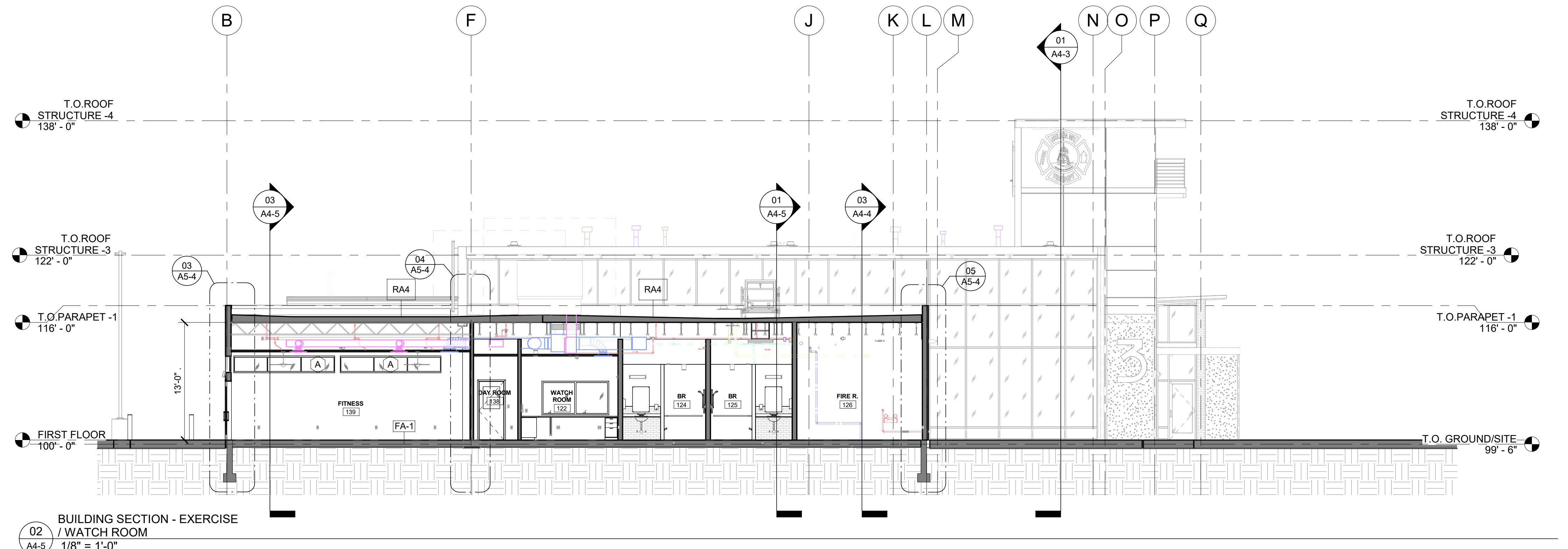
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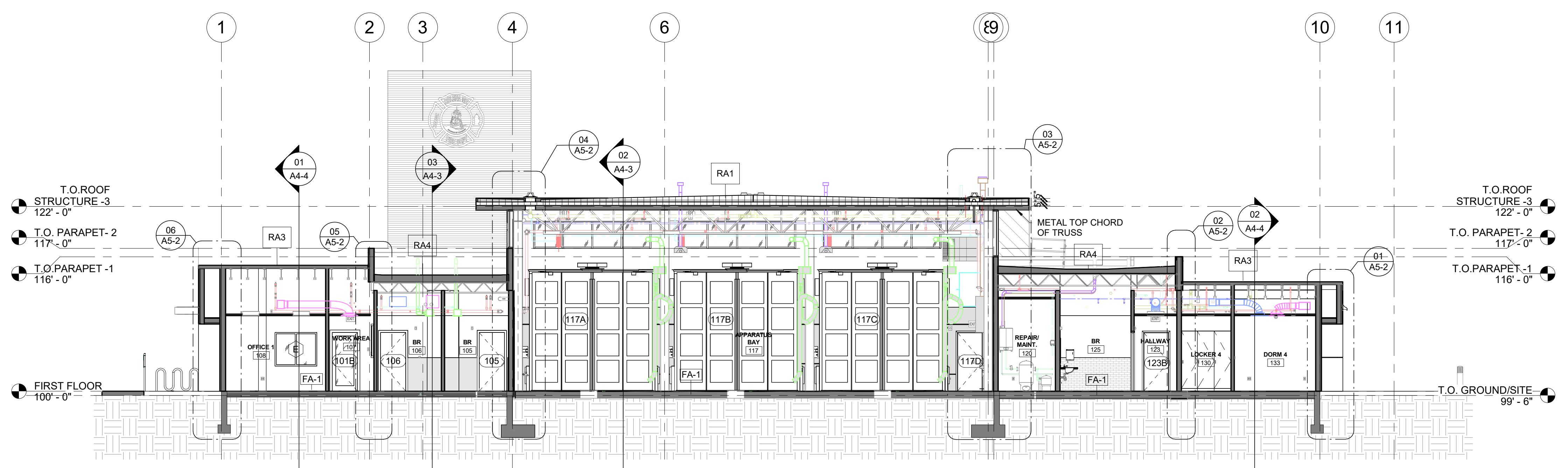
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BUILDING SECTION - DAY ROOM / DORM ROOMS
03 A4-5
1/8" = 1'-0"



BUILDING SECTION - EXERCISE / WATCH ROOM
02 A4-5
1/8" = 1'-0"



01 BUILDING SECTION
A4-5
1/8" = 1'-0"

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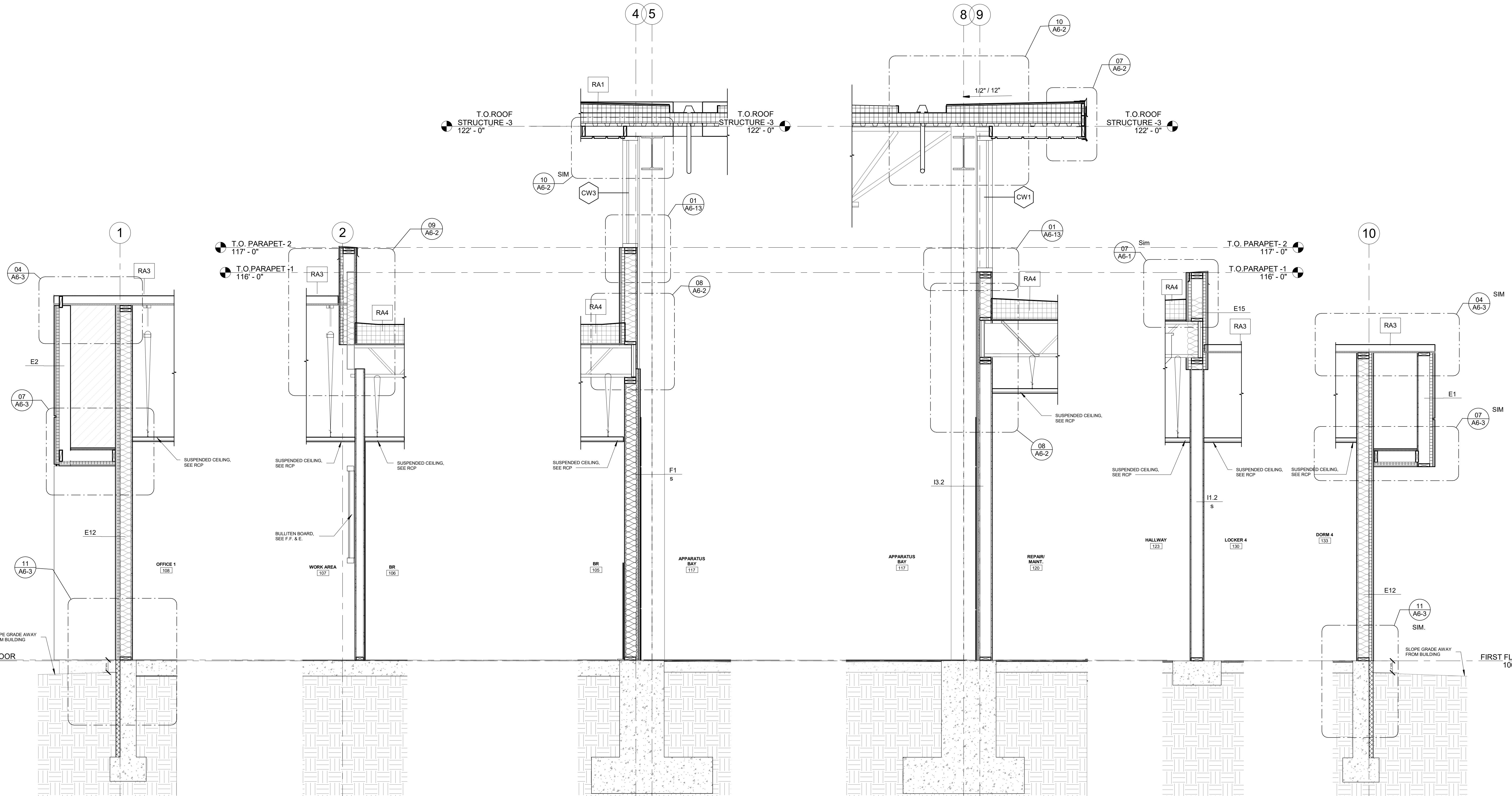
ISSUE DATES:

DRAWN BY:

JS/C

A5-2

10.22.25



06 OFFICES WALL SECTION
A5-2 1/2" = 1'-0" REF: A4-5

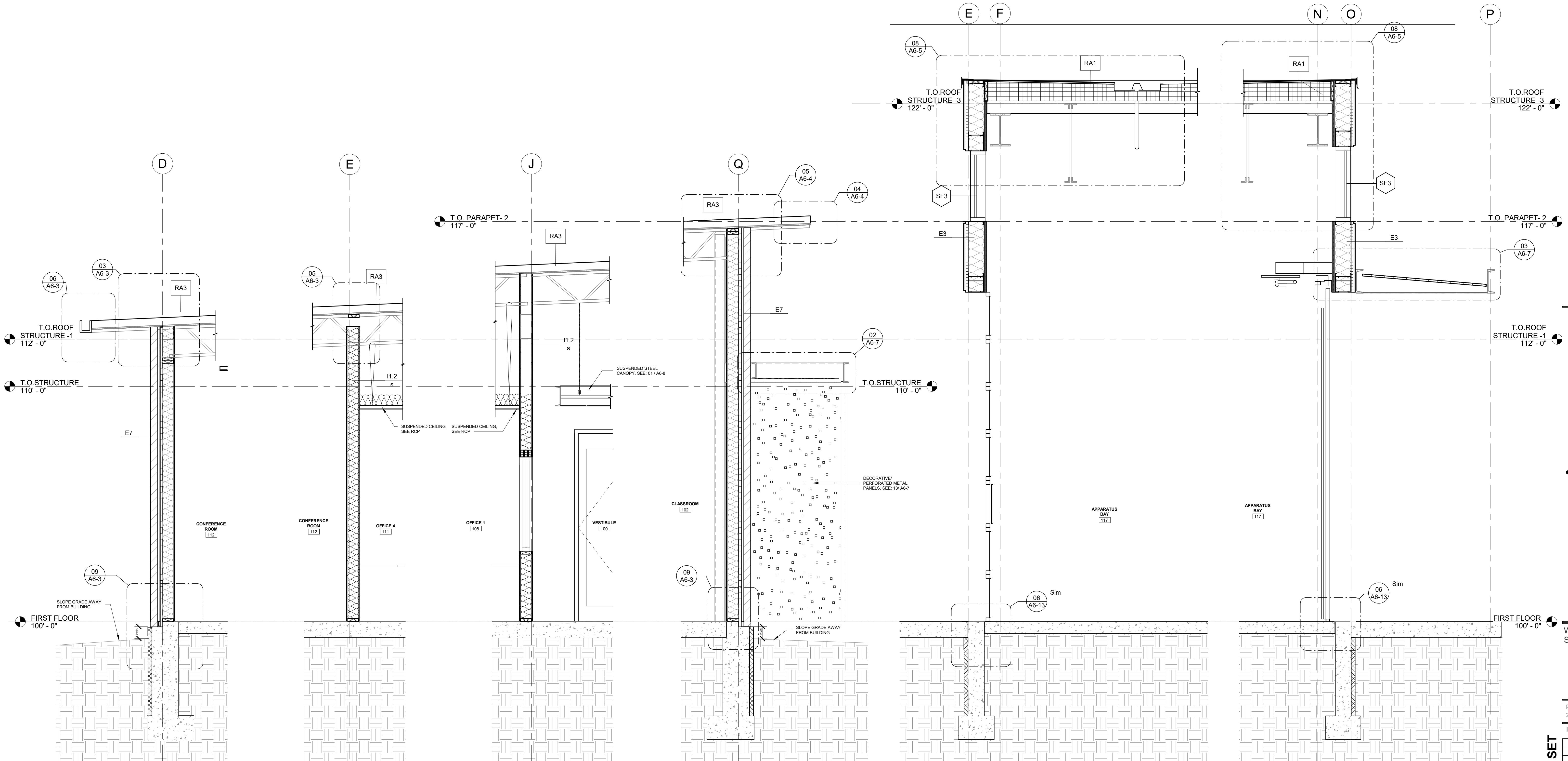
05 WALL SECTION
A5-2 1/2" = 1'-0" REF: A4-5

04 WALL SECTION
A5-2 1/2" = 1'-0" REF: A4-5

03 WALL SECTION
A5-2 1/2" = 1'-0" REF: A4-5

02 WALL SECTION
A5-2 1/2" = 1'-0" REF: A4-5

01 DORMS WALL SECTION
A5-2 1/2" = 1'-0" REF: A4-5



MICHAEL W.
DOWLING
REG. ARCHITECT
MIC. #1027
State of Montana
Michael W. Dowling

HELENA FIRESTATION #3

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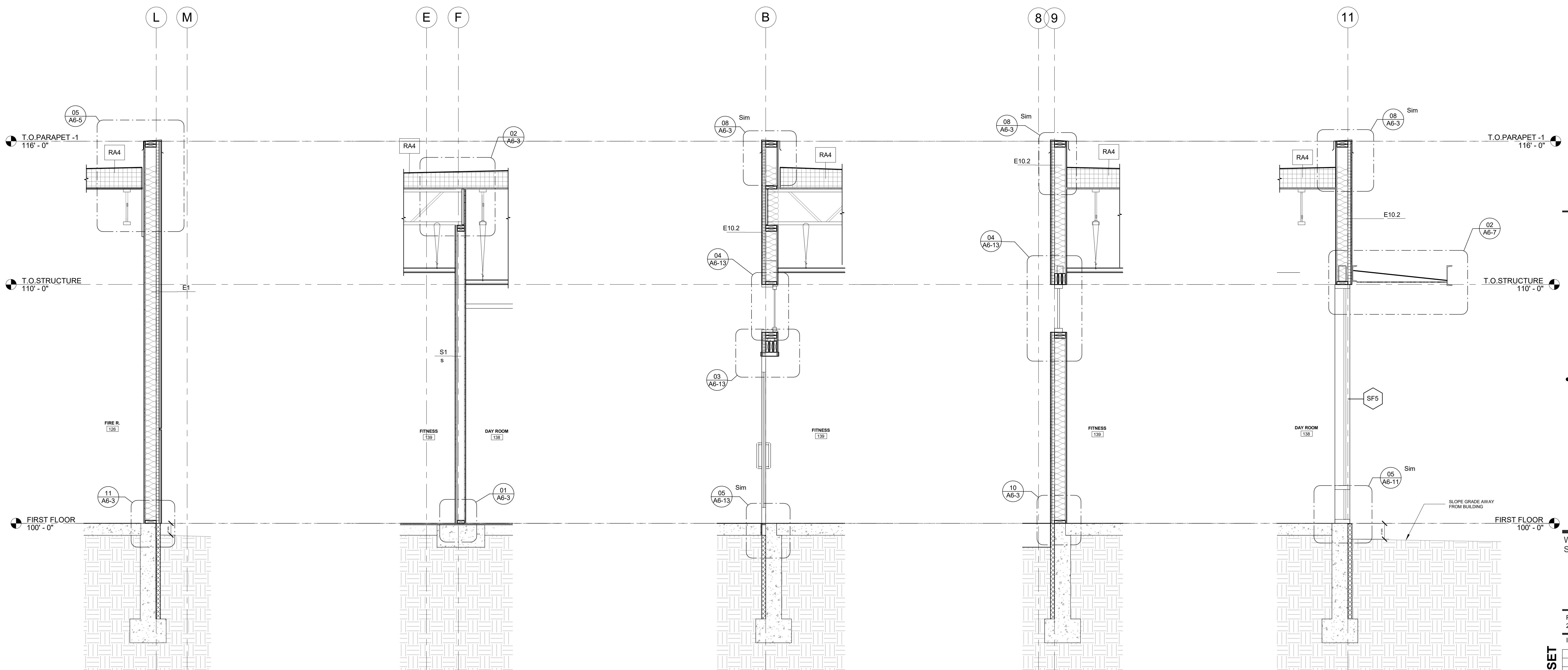
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A5-4

10.22.25



05 WALL SECTION
A5-4 1/2" = 1'-0" REF:A4-5

04 WALL SECTION
A5-4 1/2" = 1'-0" REF:A4-5

03 FITNESS ROOM WALL SECTION
A5-4 1/2" = 1'-0" REF:A4-5

02 FITNESS ROOM WALL SECTION
A5-4 1/2" = 1'-0" REF:A4-5

01 WALL SECTION
A5-4 1/2" = 1'-0" REF:A4-5

PROJECT #:

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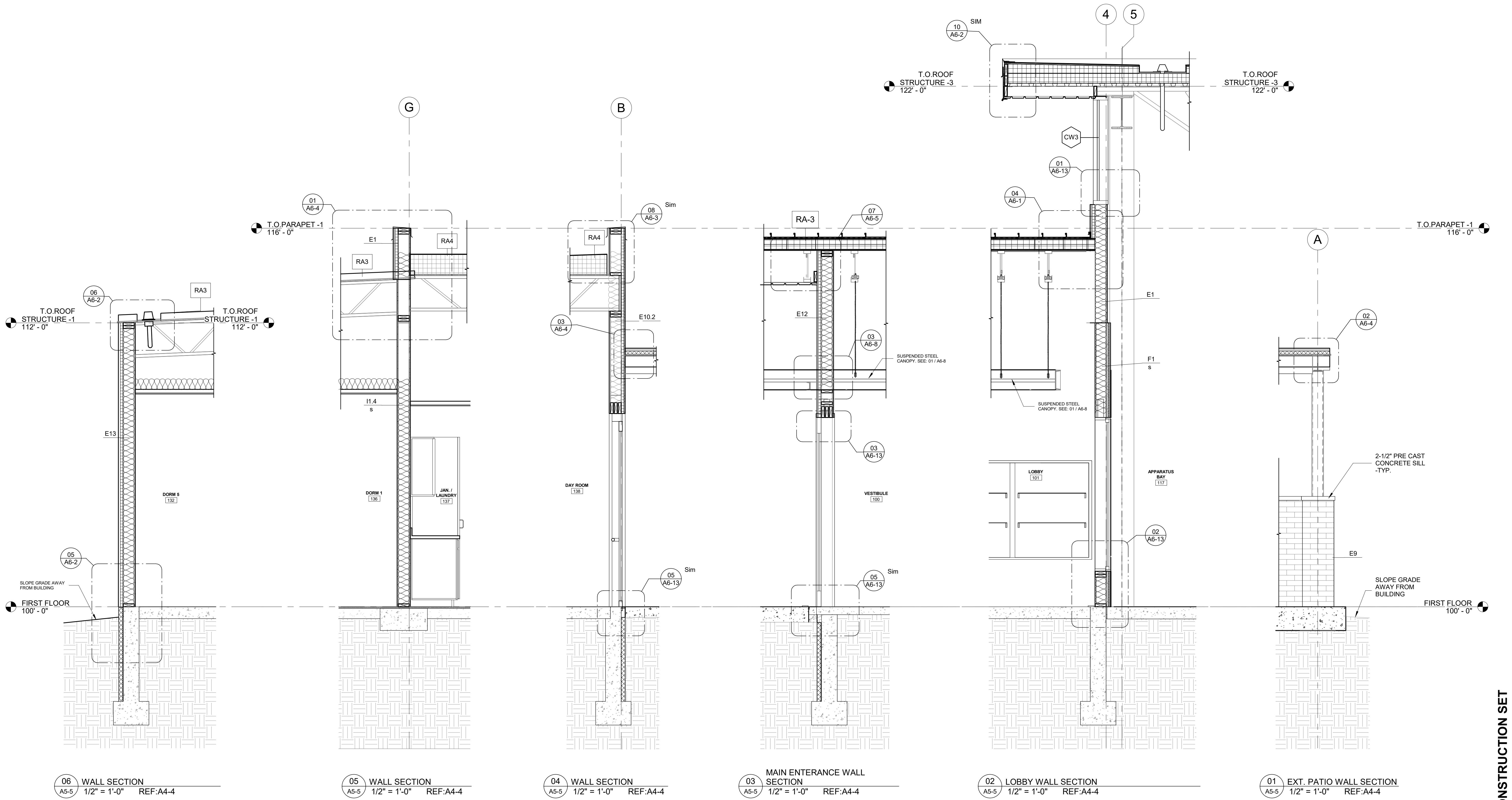
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A5-5
10.22.25

WALL
SECTIONS

PROJECT #:
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REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB
MICHAEL W. DOWLING
MICHAEL W. DOWLING
MICHAEL W. DOWLING

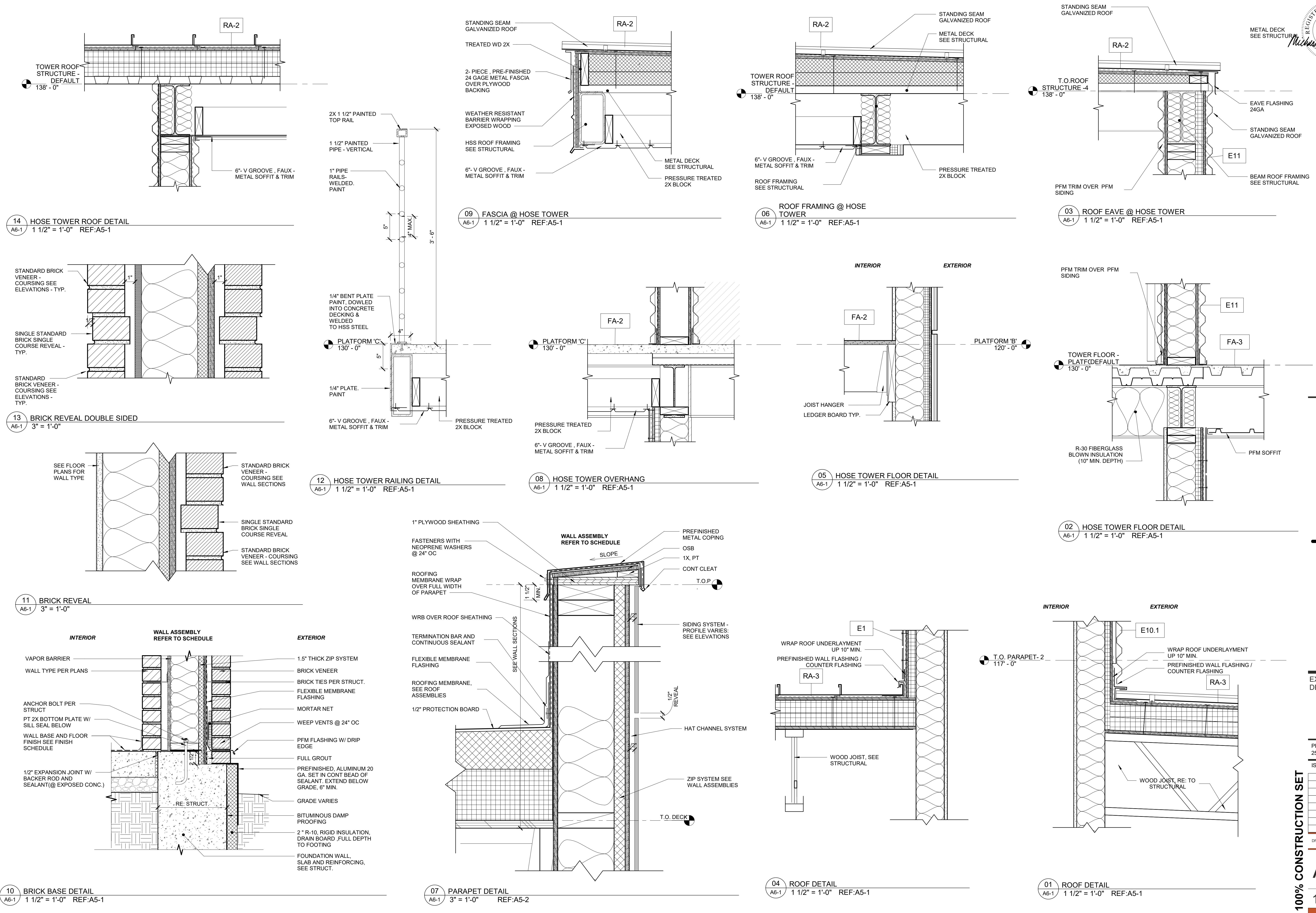
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100% CONSTRUCTION SET
A6-1
10.22.25



REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB
STATE OF MONTANA

HELENA FIRESTATION #3

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EXTERIOR DETAILS

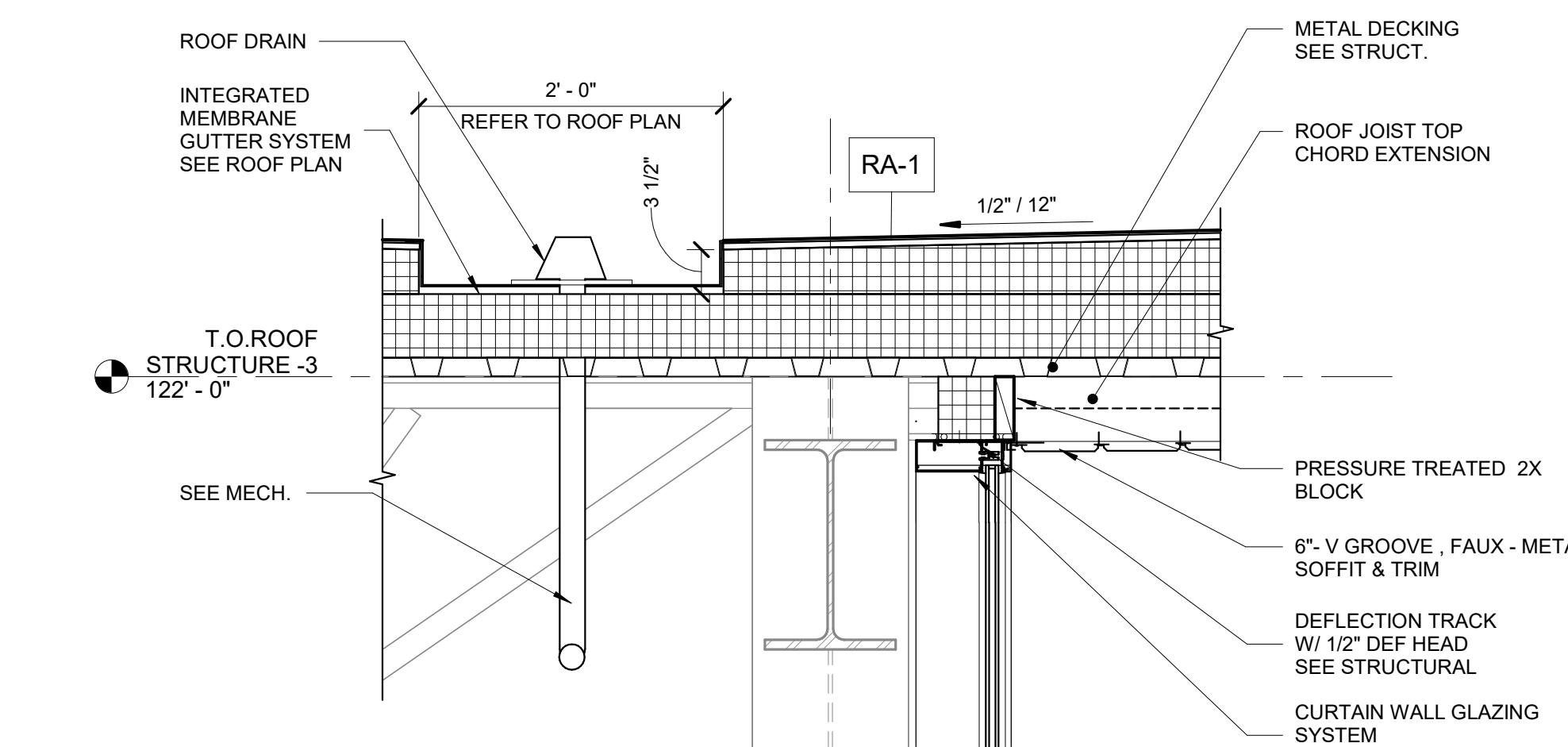
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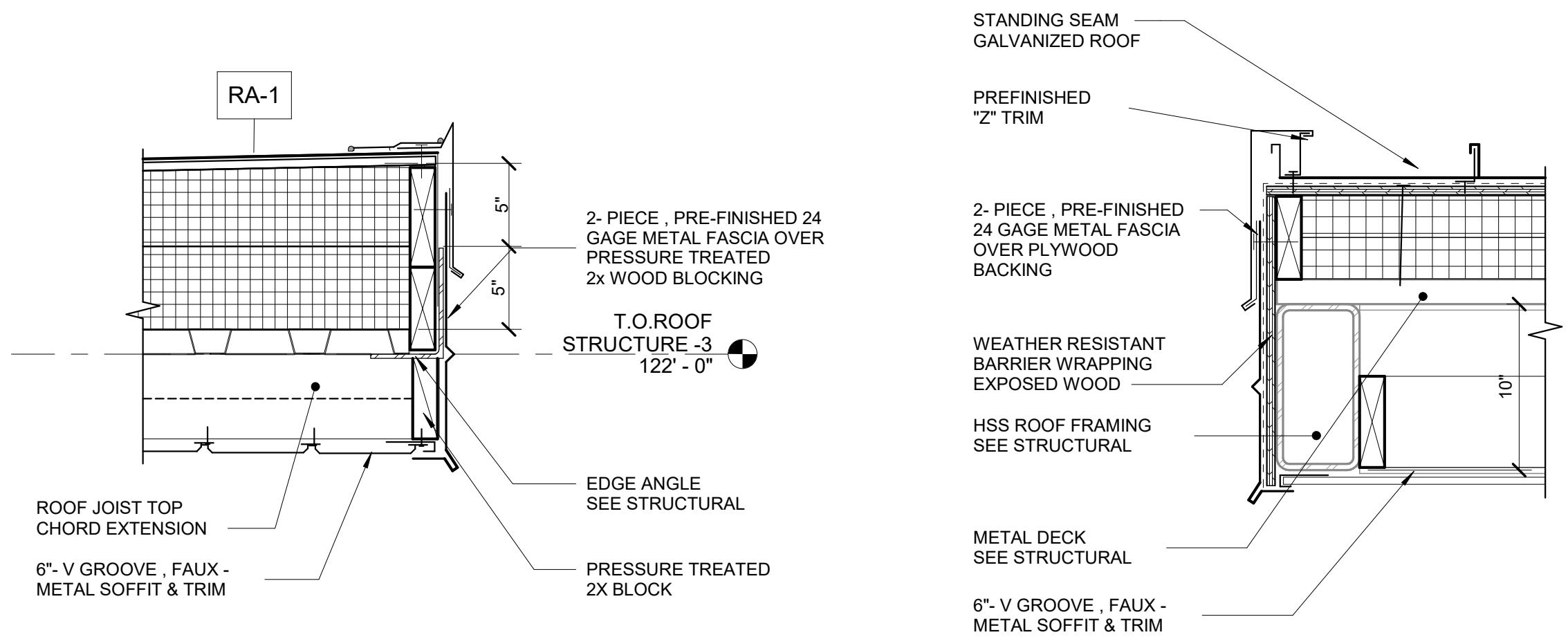
A6-2

10.22.25

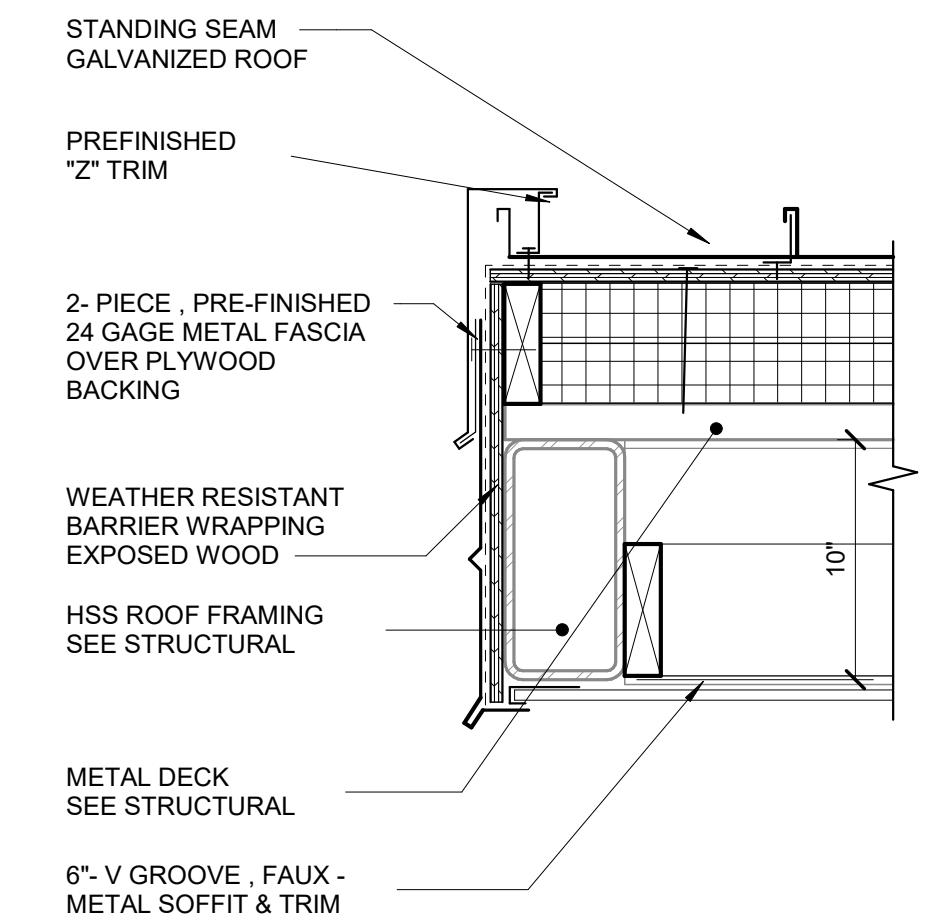
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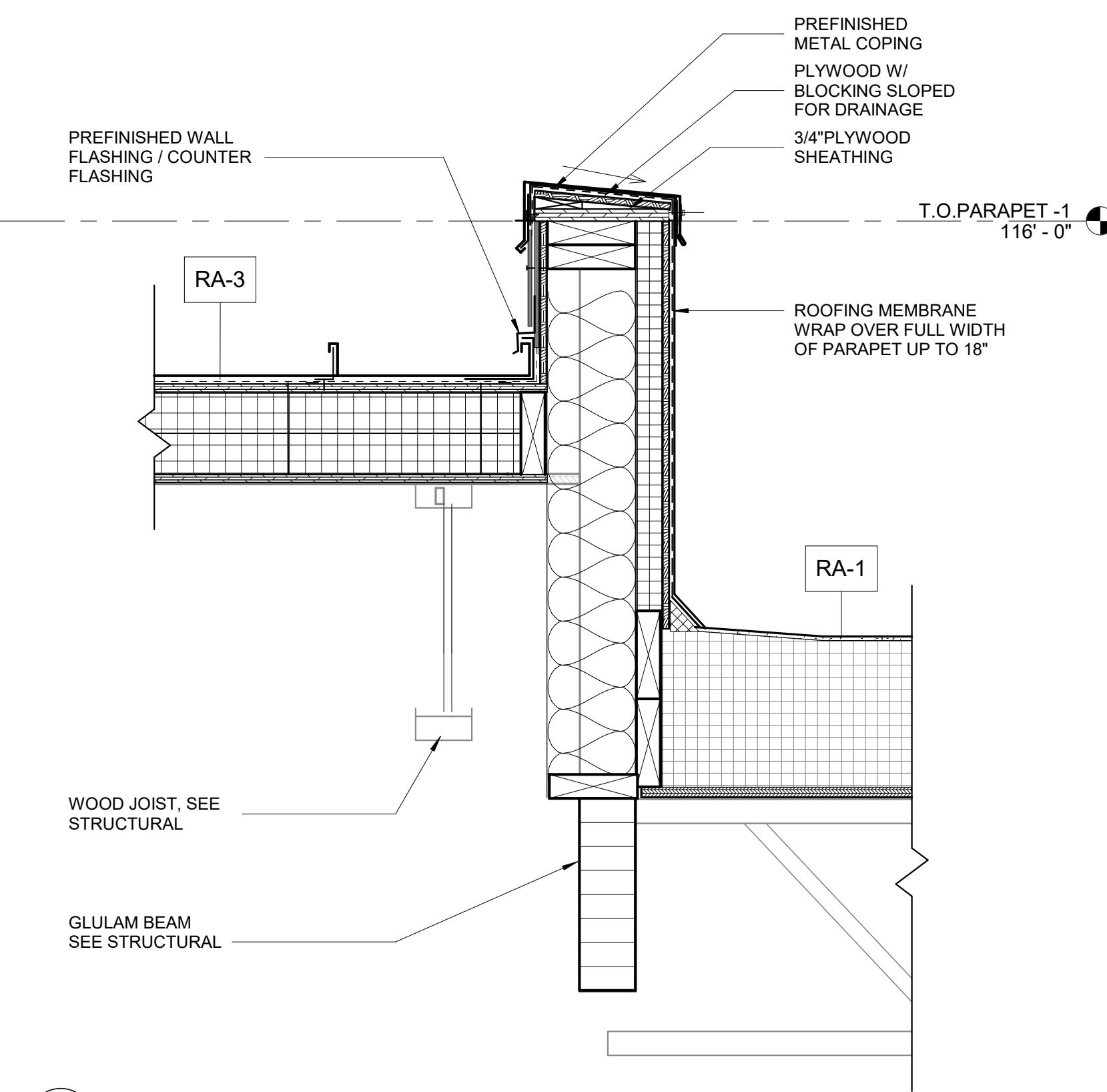
APPARATUS BAY ROOF -
10 DETAIL
A6-2 1" = 1'-0" REF:A5-1



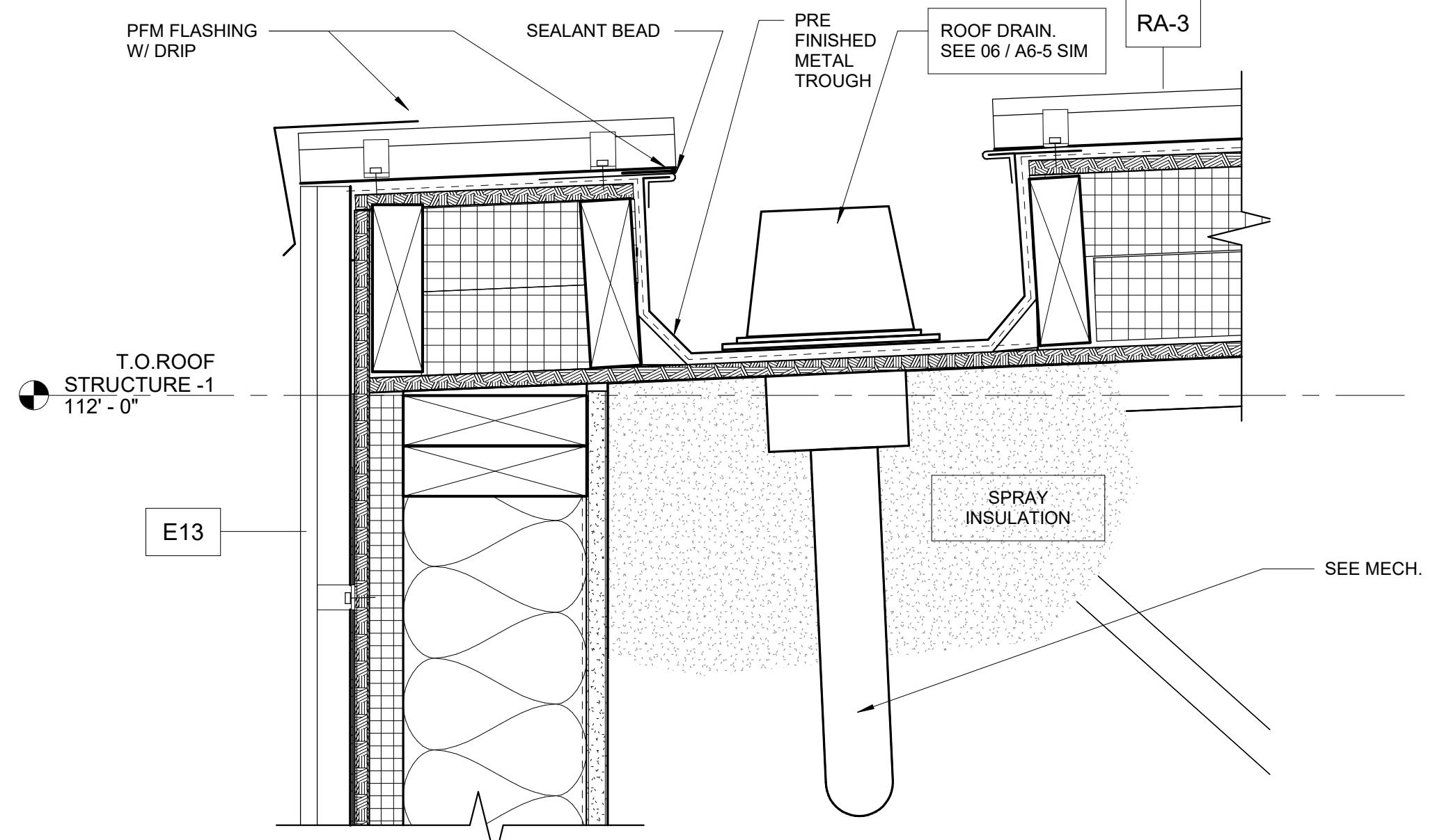
APPARATUS BAY FASCIA -
07 DETAIL
A6-2 1 1/2" = 1'-0" REF:A5-1



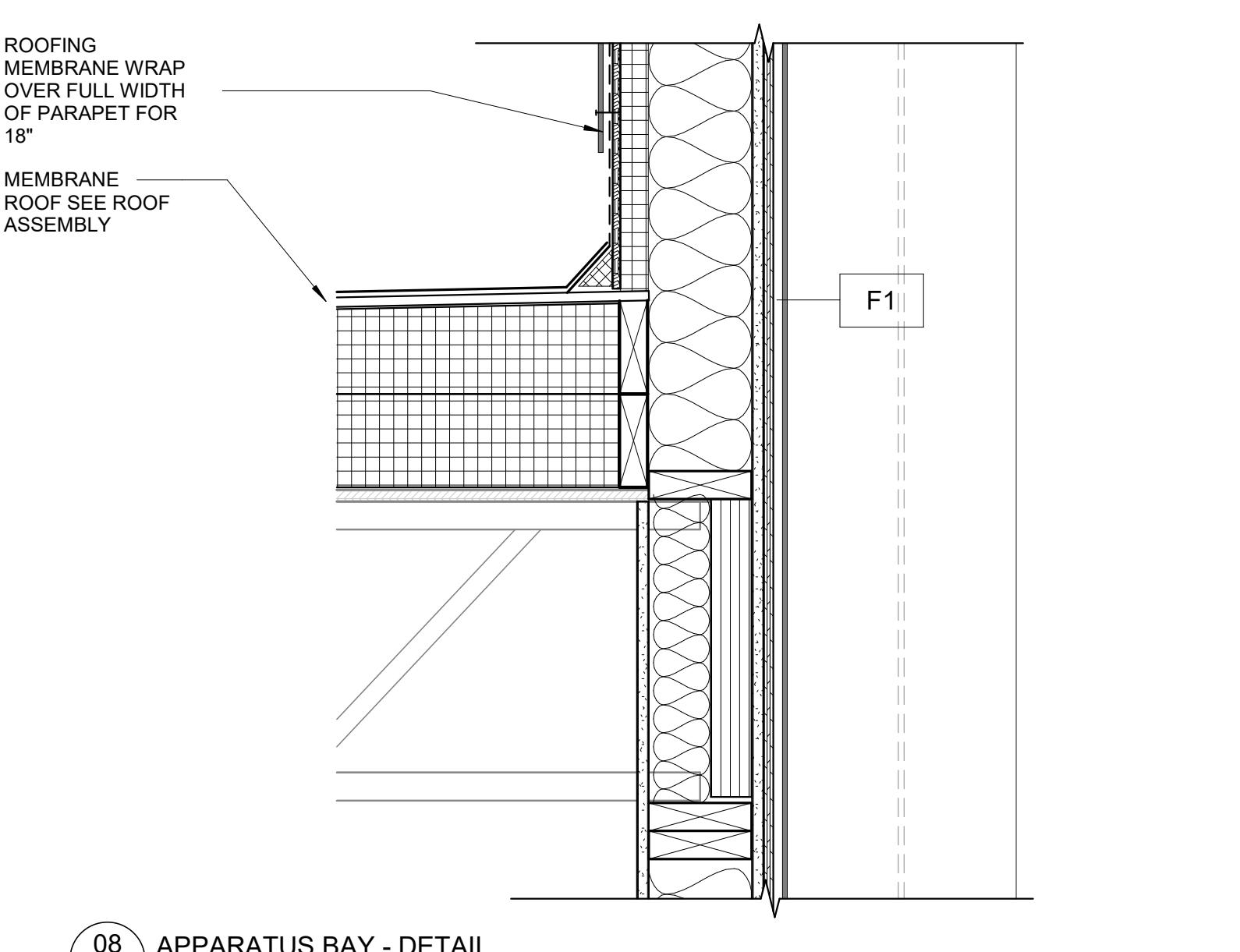
HOSE TOWER ROOF DETAIL
03
A6-2 1 1/2" = 1'-0" REF:A5-1



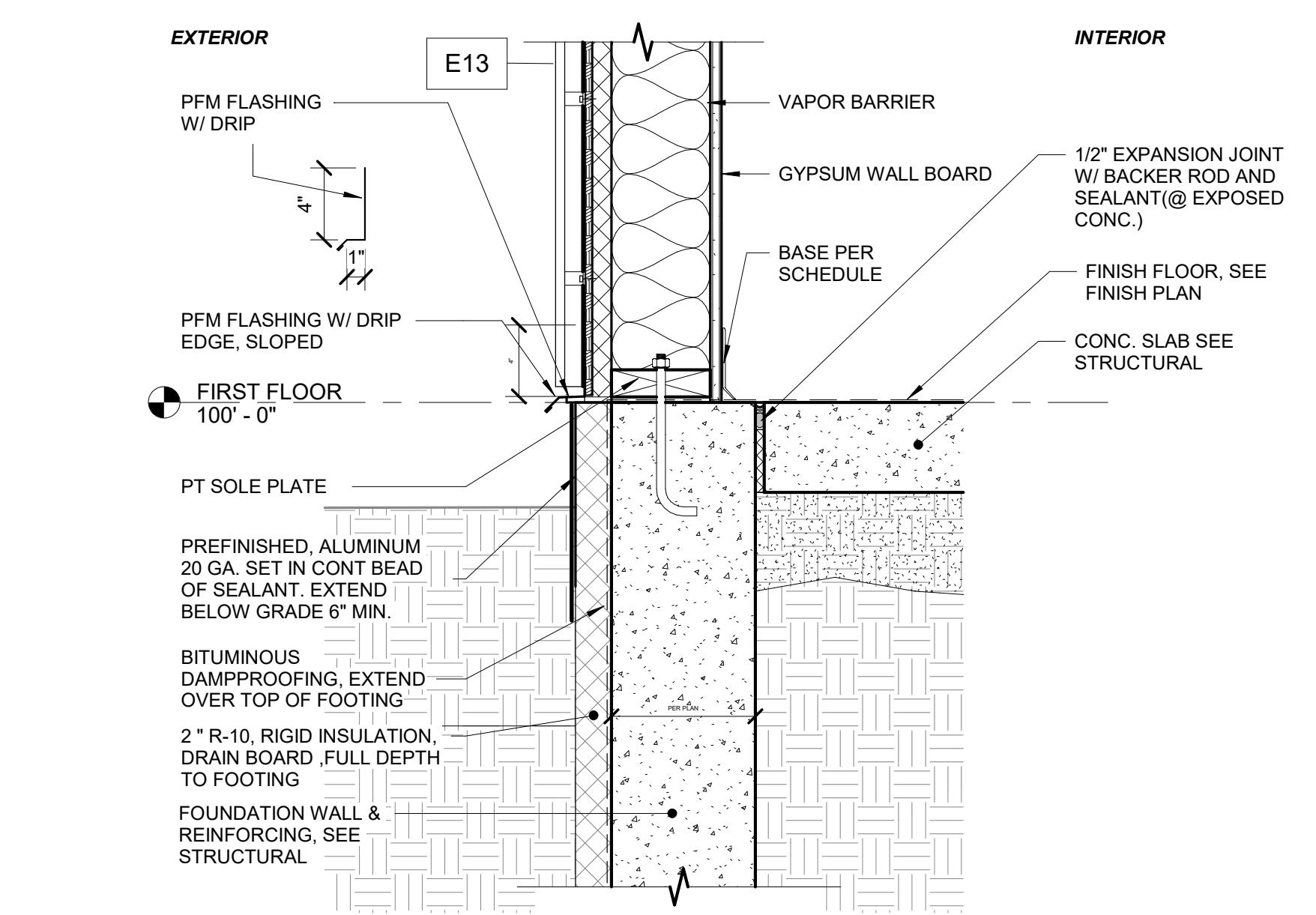
DAY ROOM ROOF DETAIL
09
A6-2 1 1/2" = 1'-0" REF:A5-2



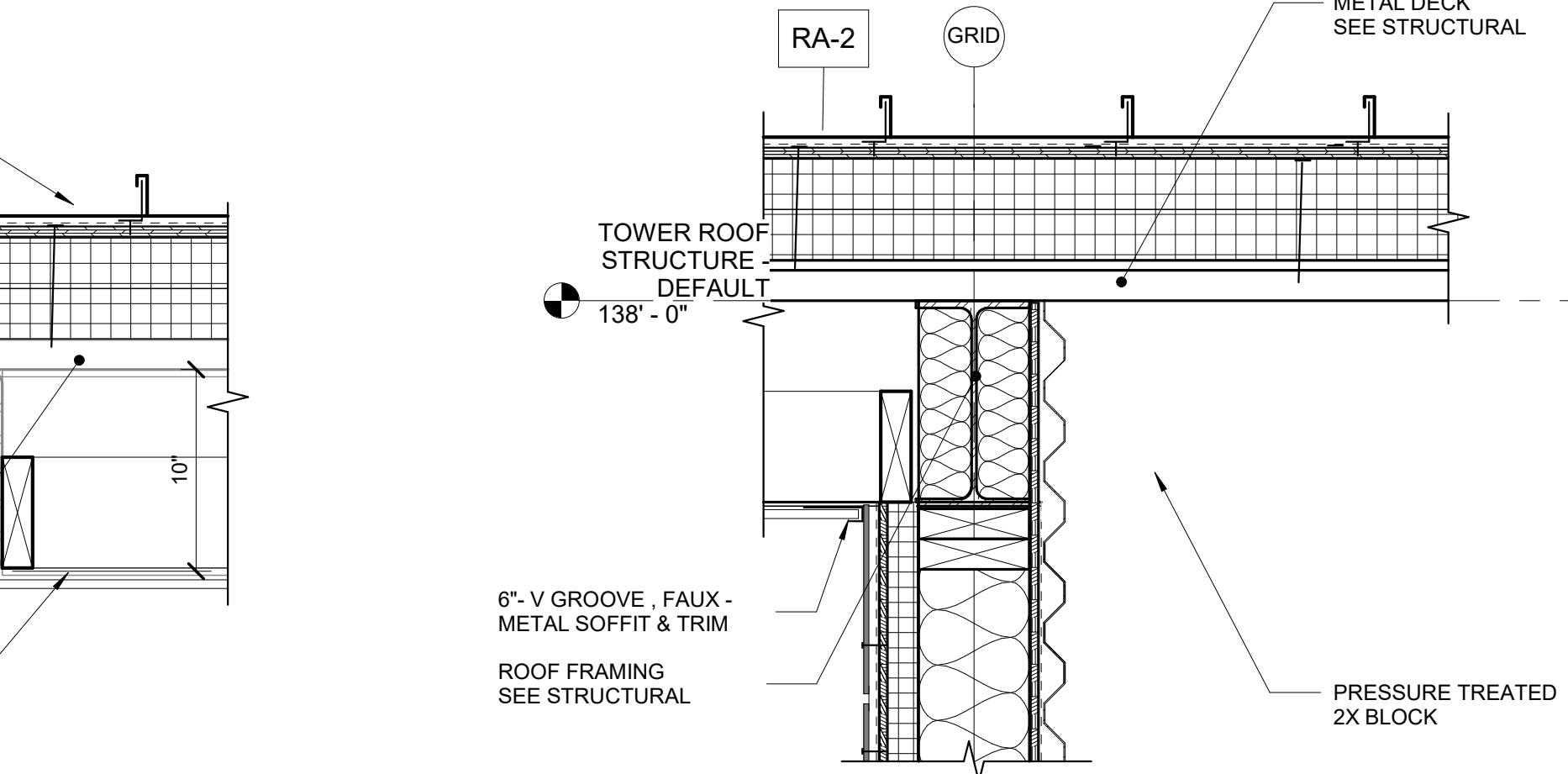
HIDDEN GUTTER DETAIL
06
A6-2 3" = 1'-0" REF:A5-5



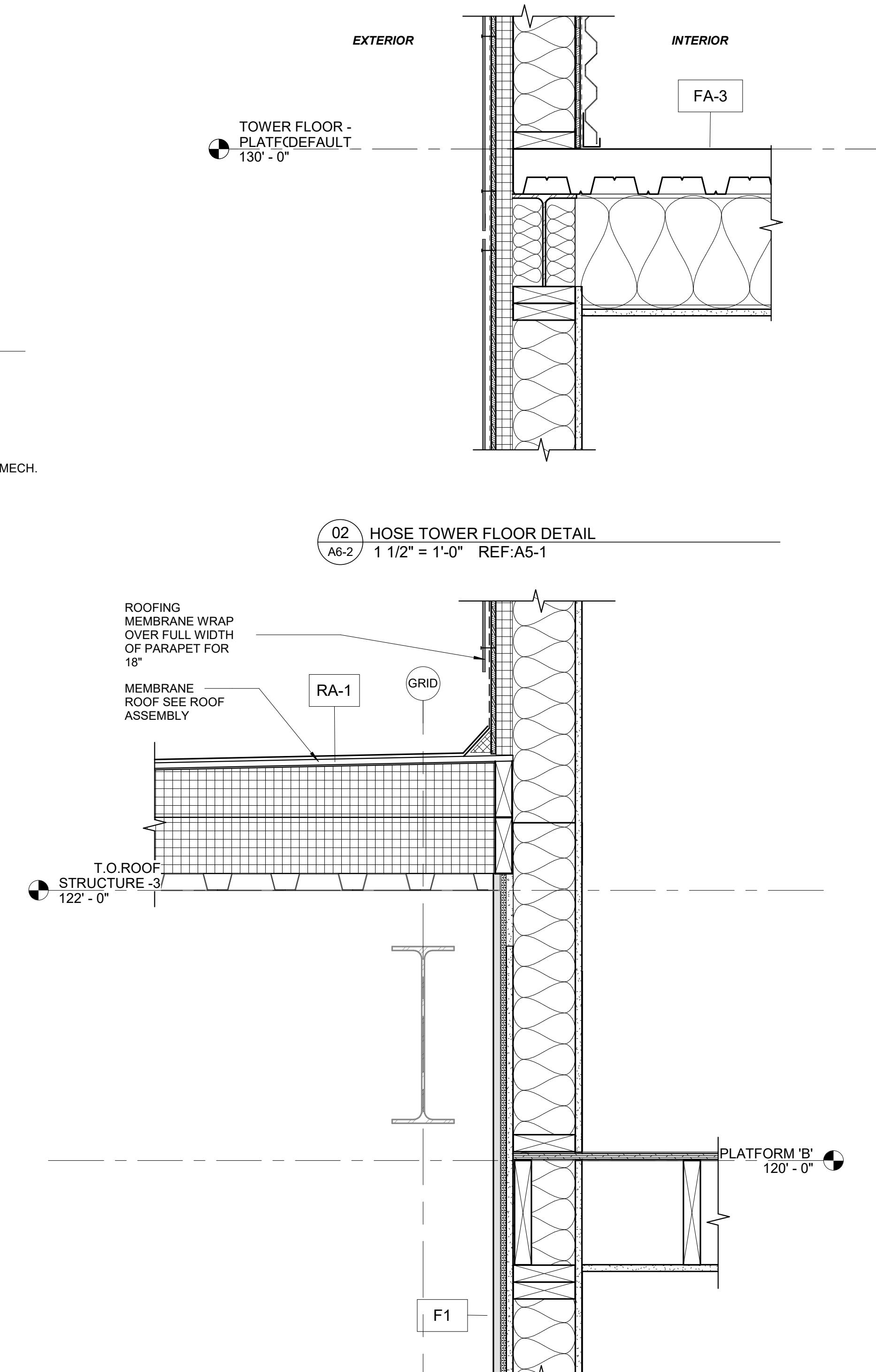
APPARATUS BAY - DETAIL
08
A6-2 1 1/2" = 1'-0" REF:A5-2



FOUNDATION WALL DETAIL
05
A6-2 1 1/2" = 1'-0" REF:A5-5



APPARATUS BAY ROOF -
DETAIL
01
A6-2 1 1/2" = 1'-0" REF:A5-1



HOSE TOWER FLOOR DETAIL
02
A6-2 1 1/2" = 1'-0" REF:A5-1

REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB, LEED AP
Michael W. Dowling, AIA, NCARB, LEED AP

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EXTERIOR DETAILS

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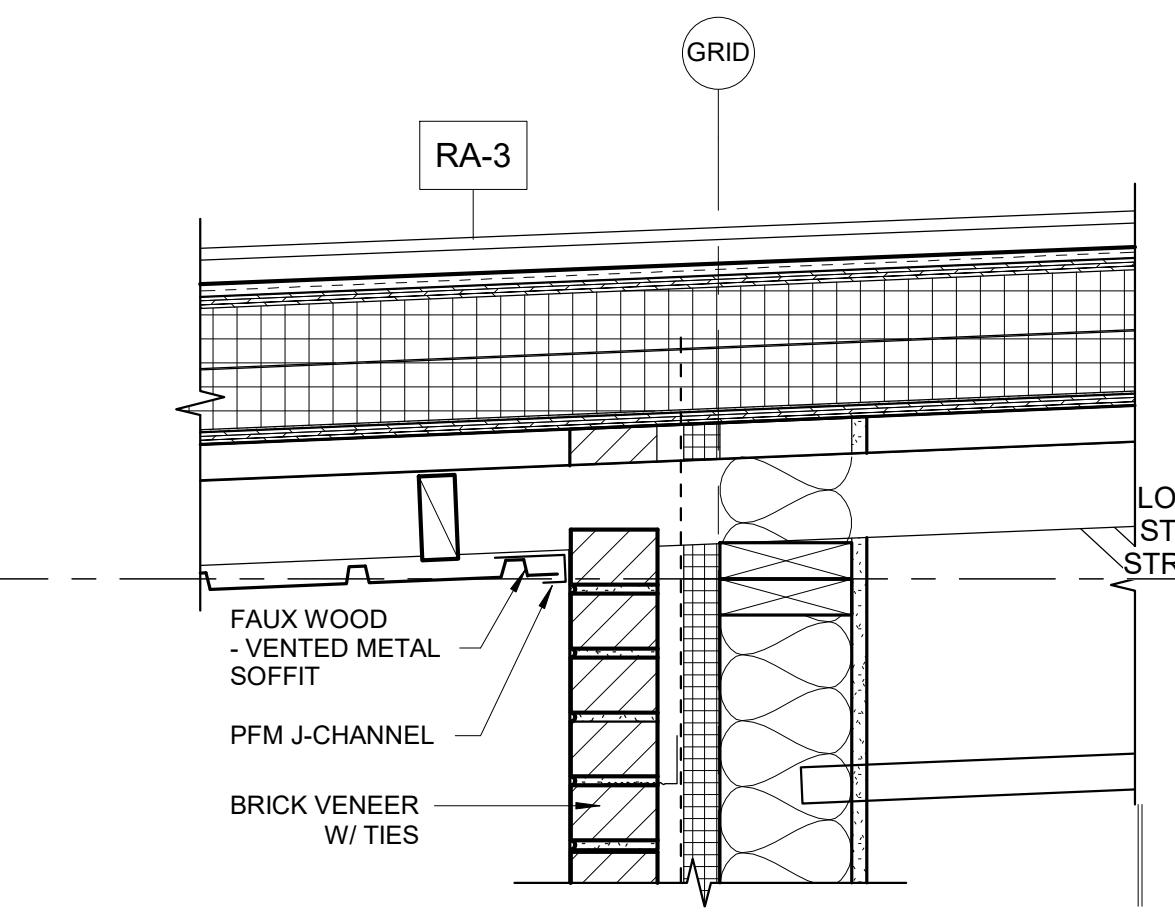
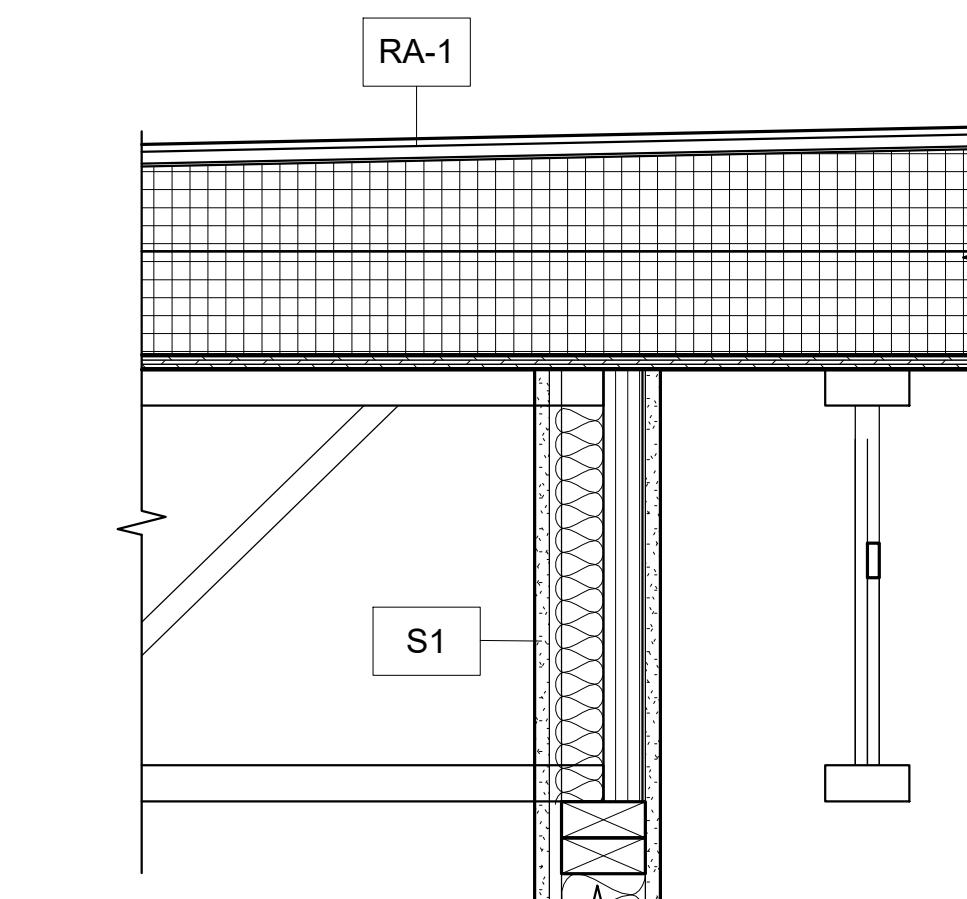
A6-3

10.22.25

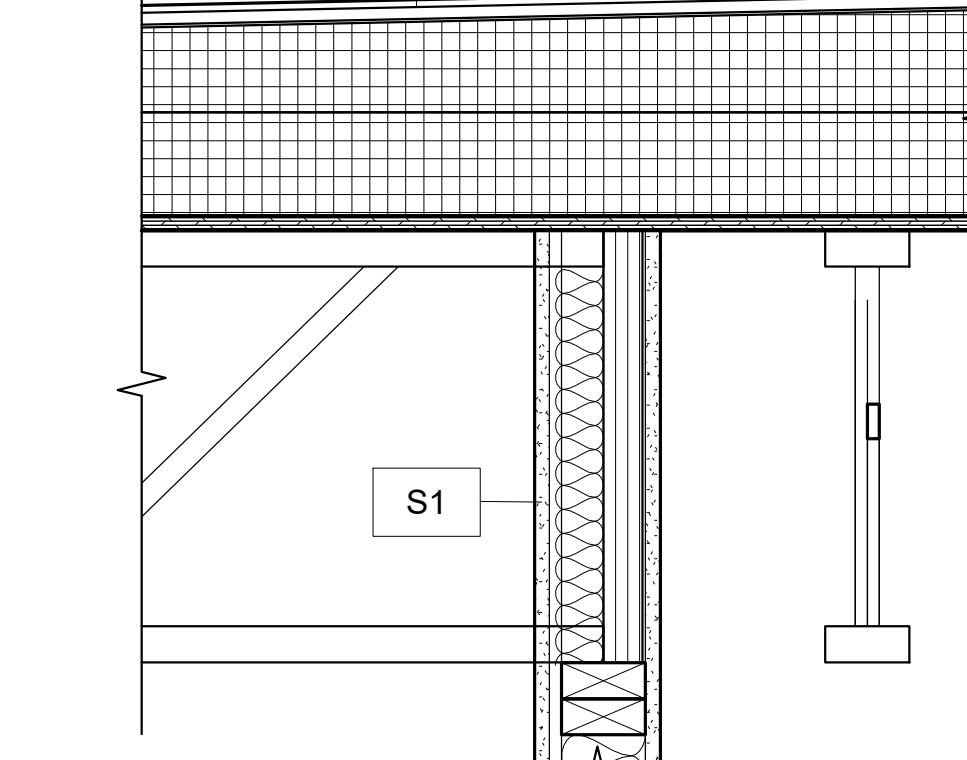
01 SCBA - SOUND WALL
A6-3 1 1/2" = 1'-0" REF:A5-4

02 SCBA - SOUND WALL
A6-3 1 1/2" = 1'-0" REF:A5-4

03 SOFFIT @ BRICK VENEER
A6-3 1 1/2" = 1'-0" REF:A5-3

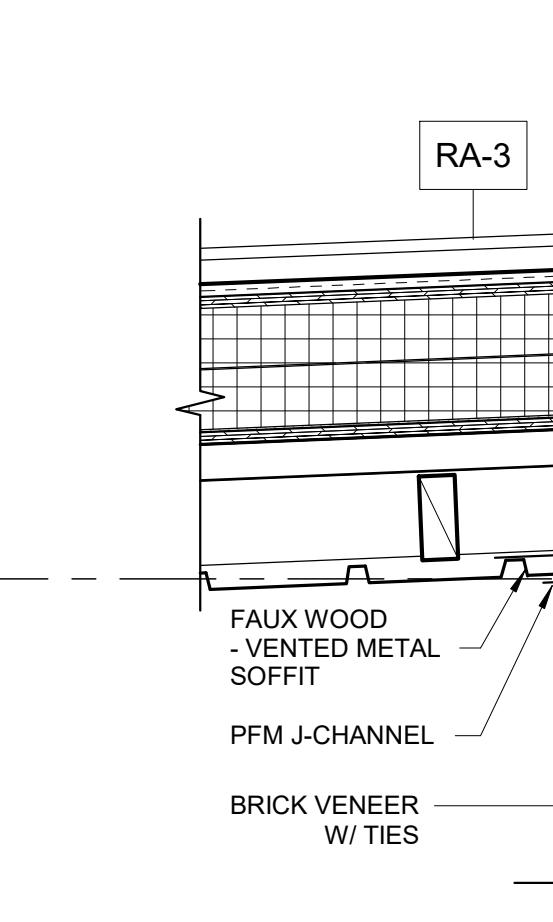
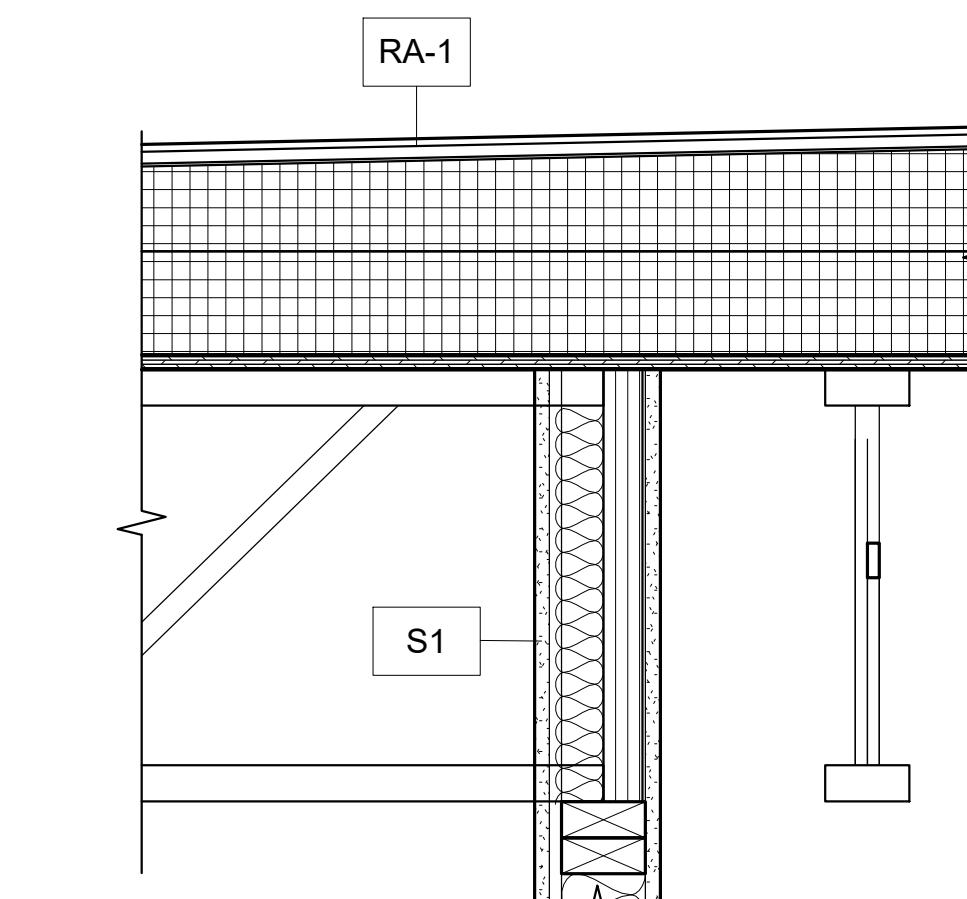


04 DORM WALL ROOF DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2

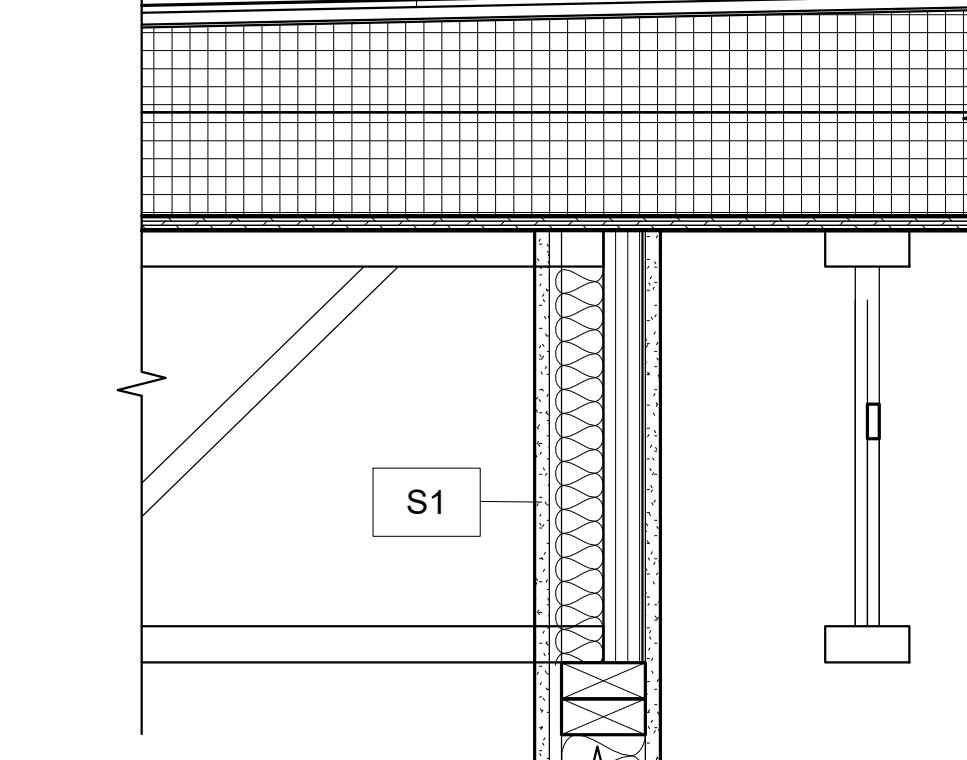


05 METAL ROOF
A6-3 1 1/2" = 1'-0" REF:A5-3

06 FASCIA DETAIL
A6-3 3" = 1'-0" REF:A5-3

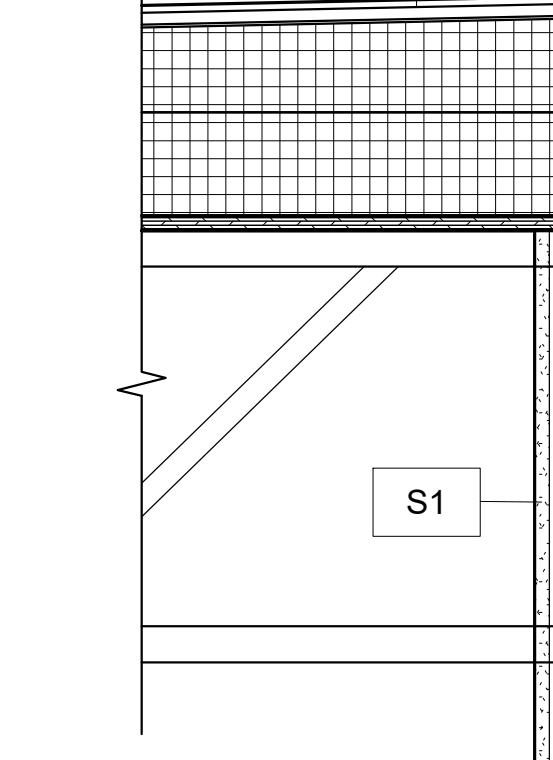
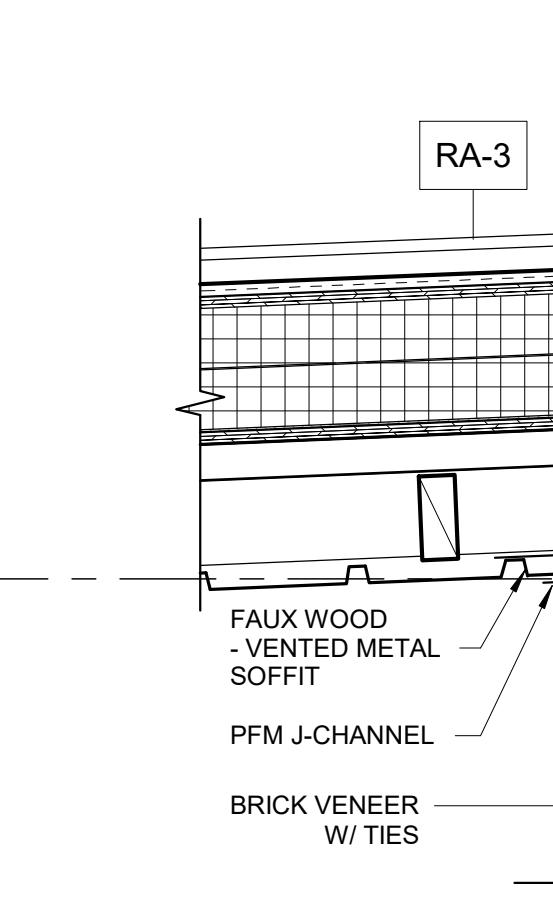


07 DORM WALL DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2



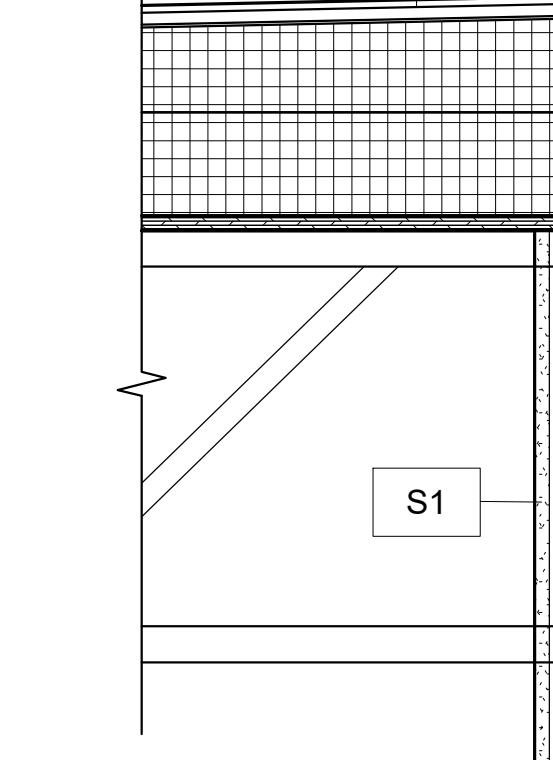
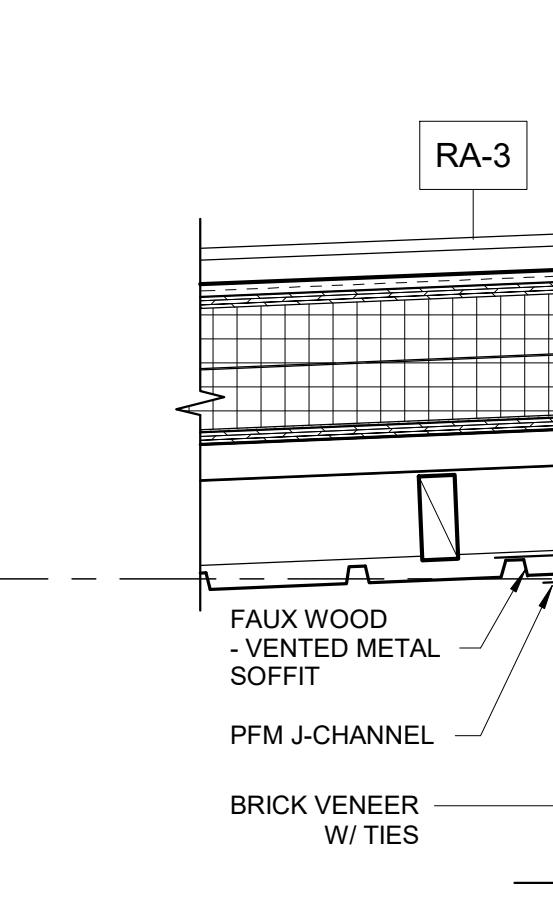
08 PARAPET @ CORR. METAL
SIDING
A6-3 1 1/2" = 1'-0" REF:A5-4

09 BRICK BASE DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-3



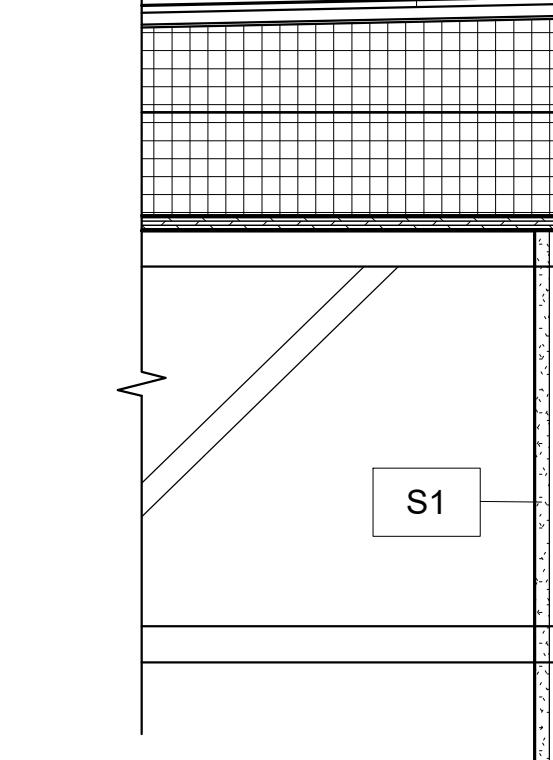
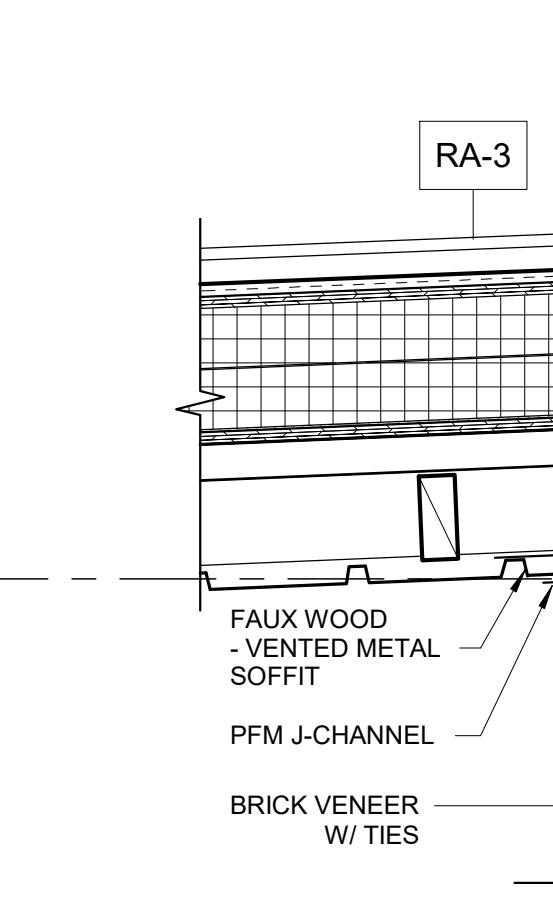
10 FRAMED HORIZONTAL CORR. METAL
MEETS FOUNDATION WALL
DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-4

11 FRAMED WALL MEETS
FOUNDATION WALL DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2



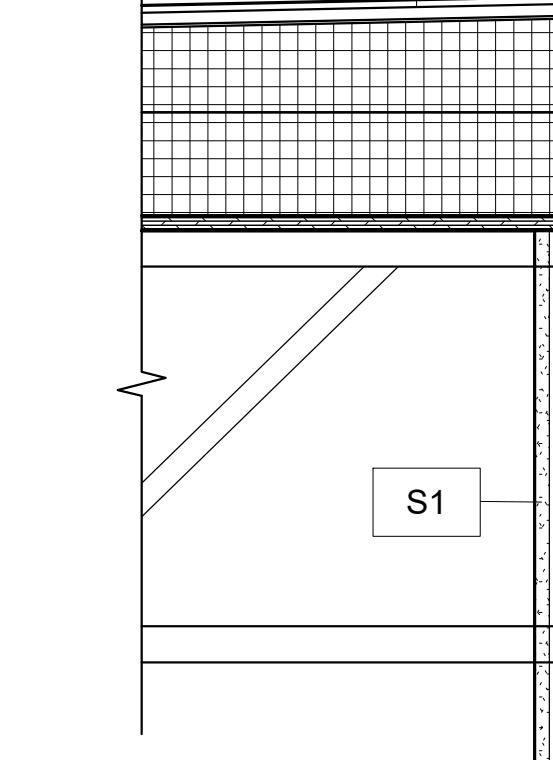
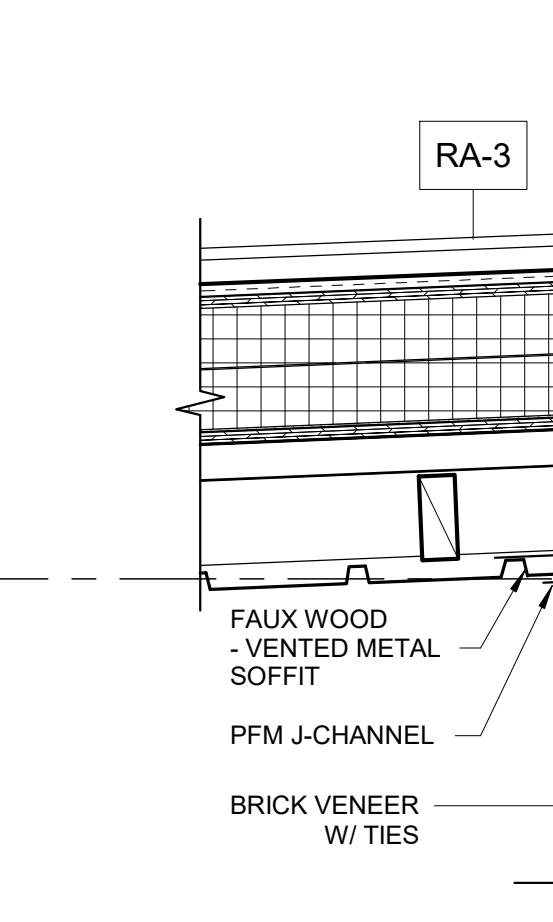
12 DORM WALL ROOF DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2

13 DORM WALL DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2



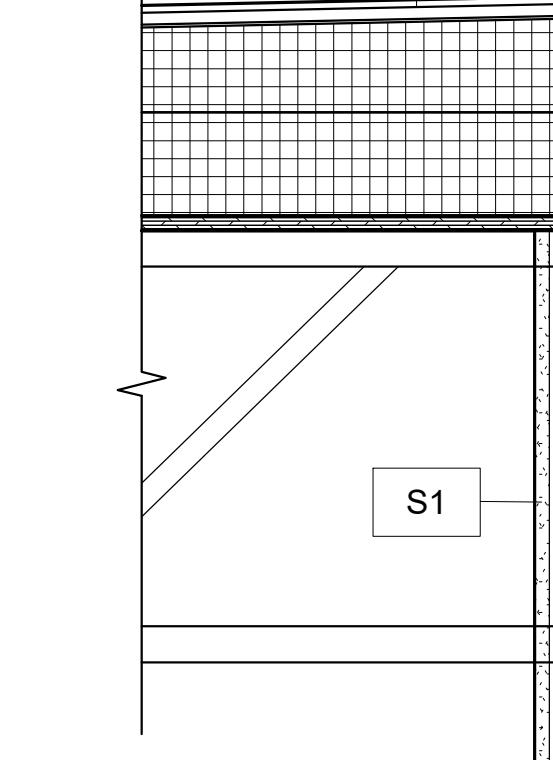
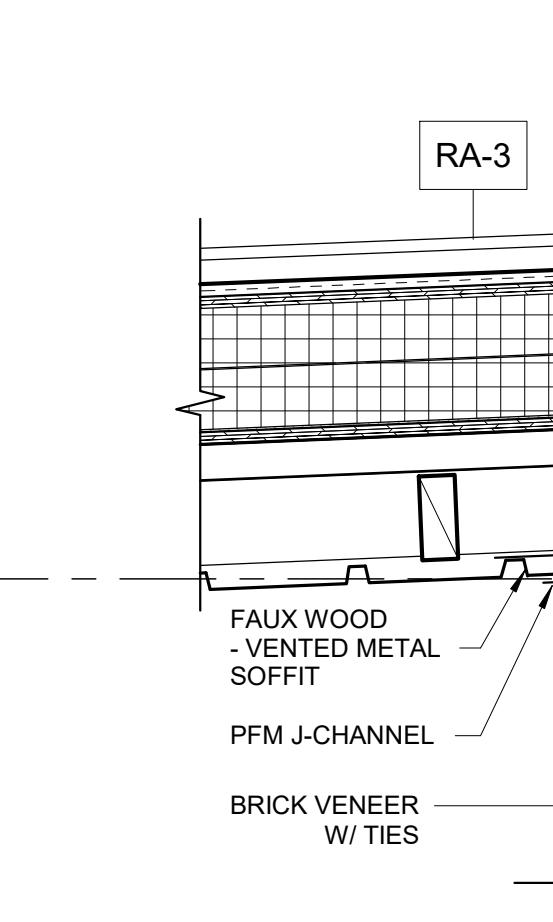
14 DORM WALL ROOF DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2

15 DORM WALL DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2



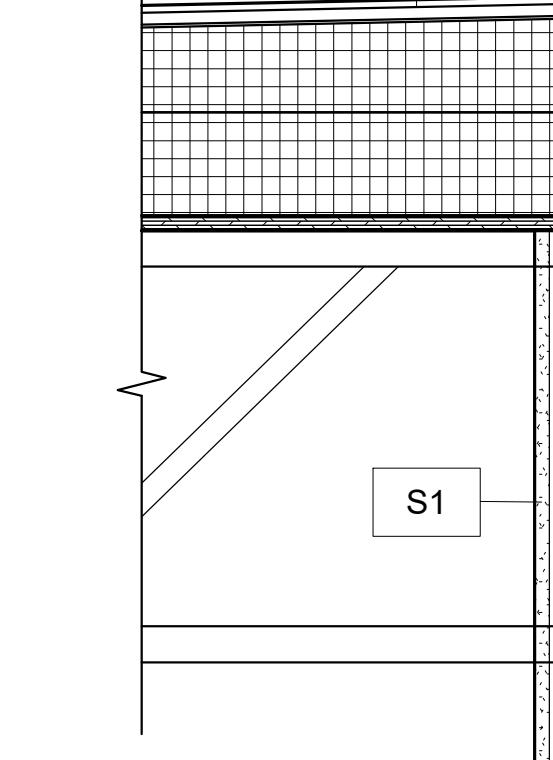
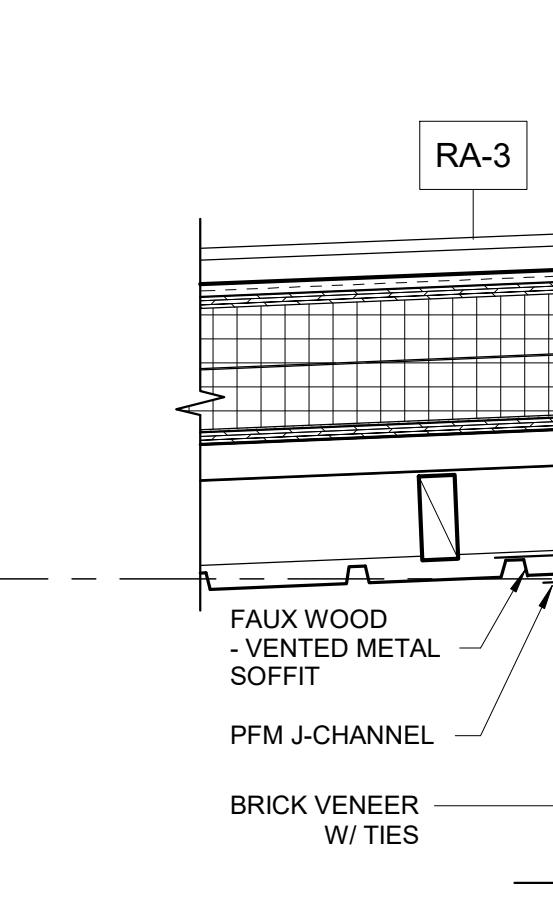
16 DORM WALL ROOF DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2

17 DORM WALL DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2



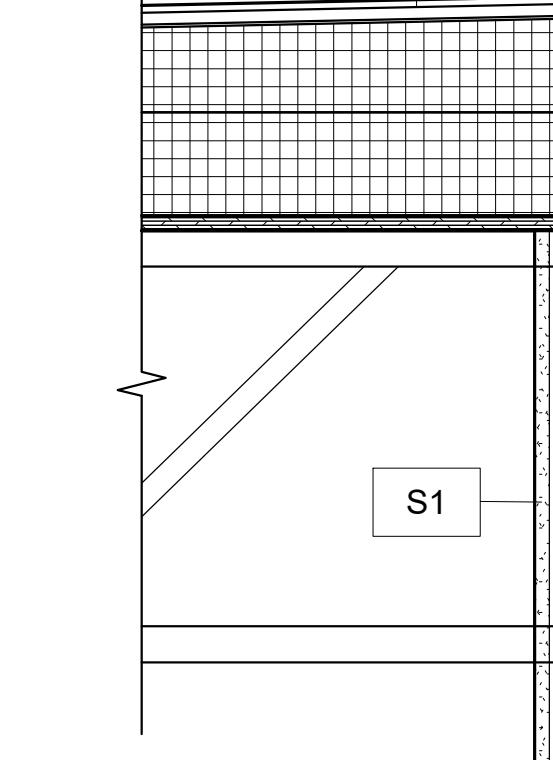
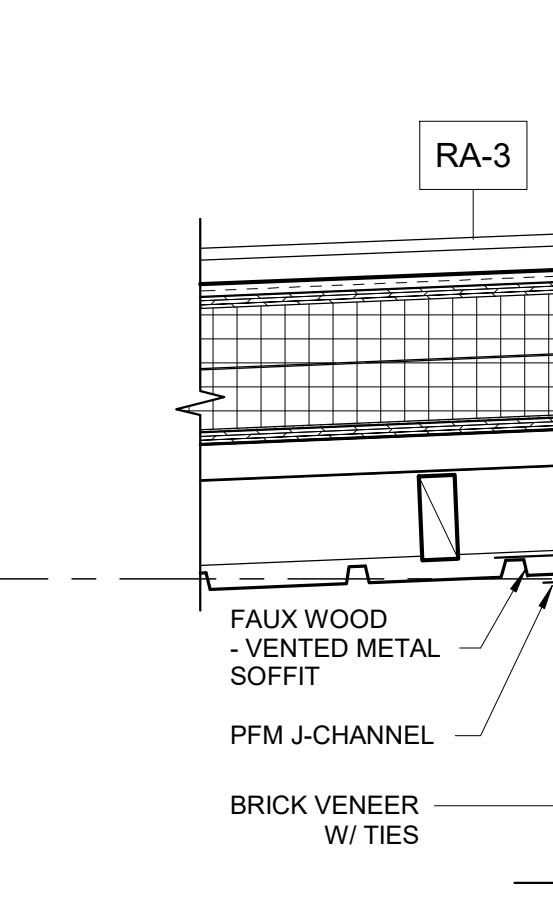
18 DORM WALL ROOF DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2

19 DORM WALL DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2



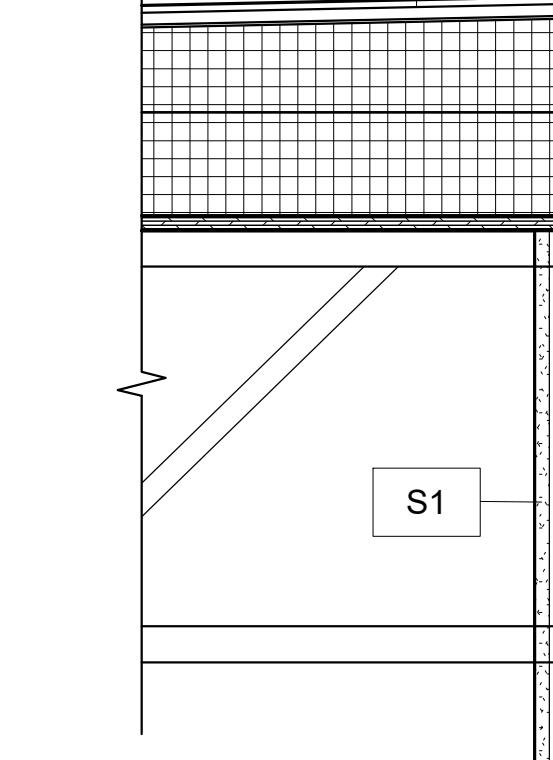
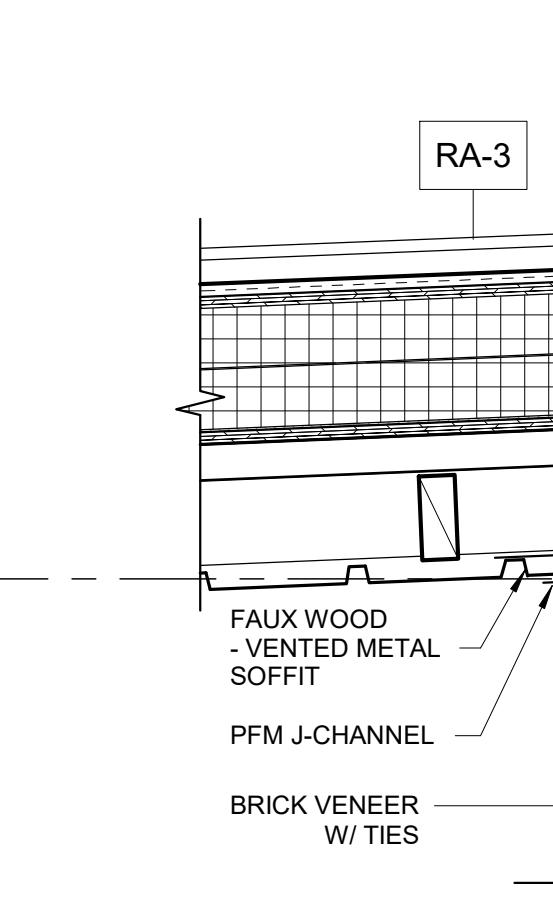
20 DORM WALL ROOF DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2

21 DORM WALL DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2



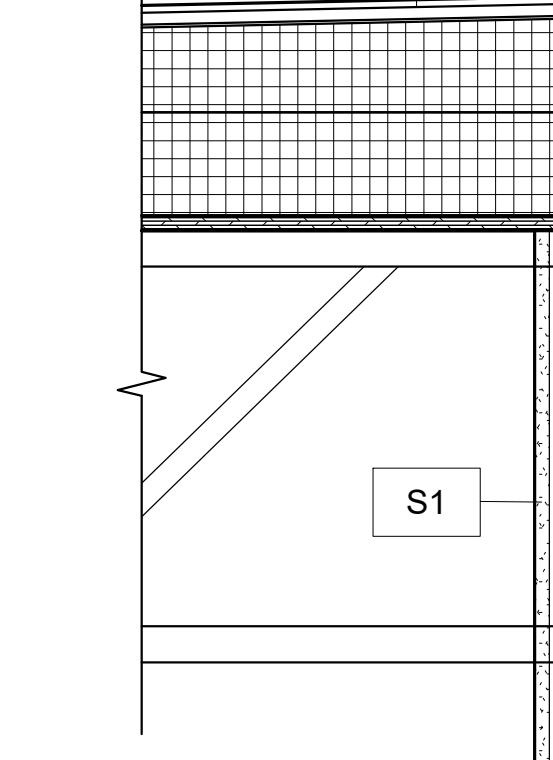
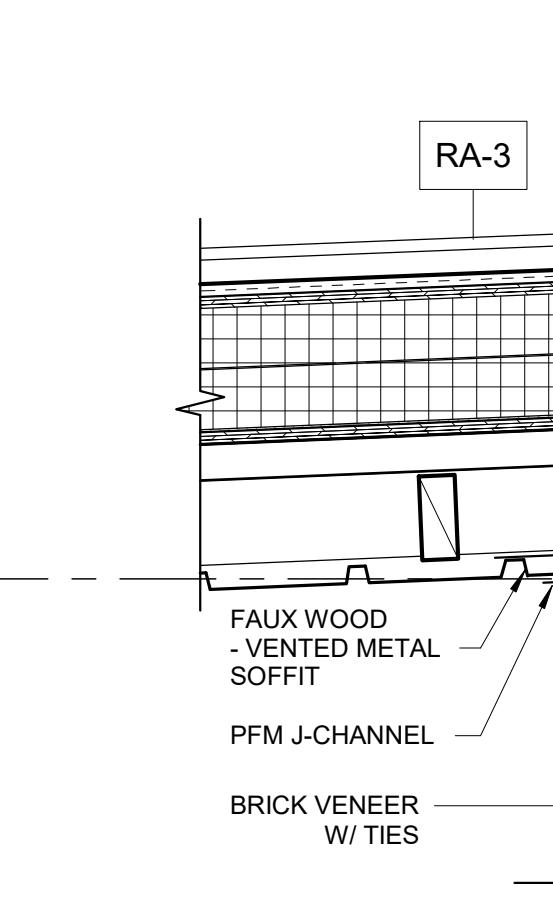
22 DORM WALL ROOF DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2

23 DORM WALL DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2



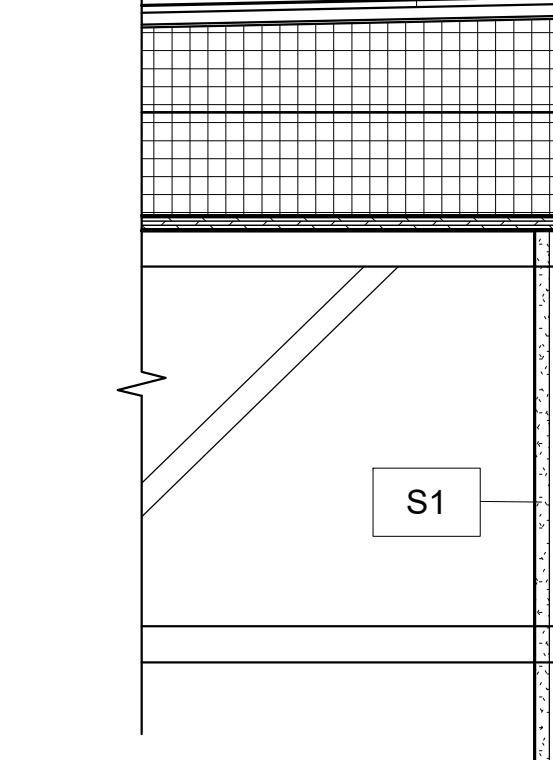
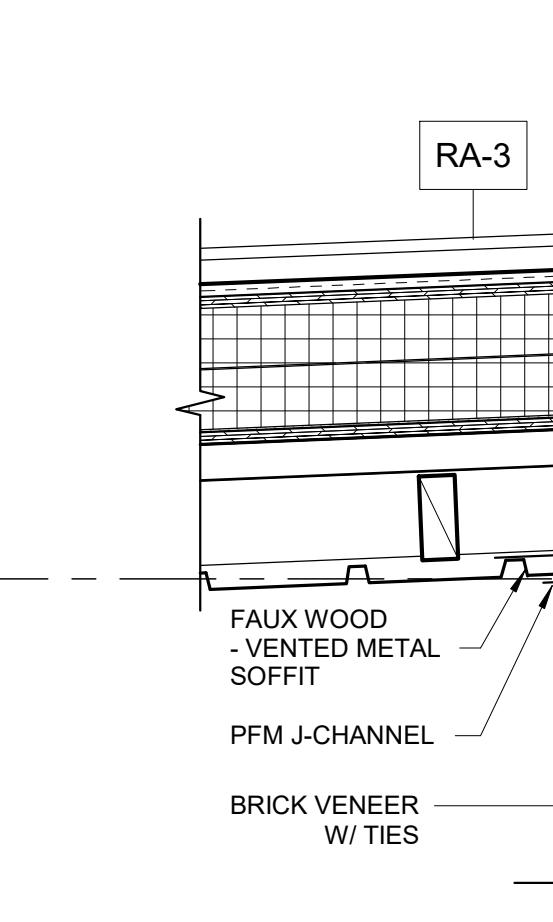
24 DORM WALL ROOF DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2

25 DORM WALL DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2



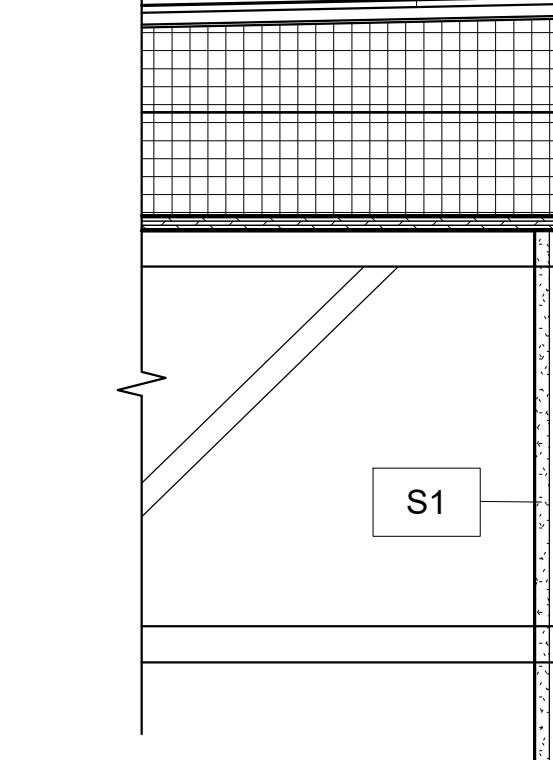
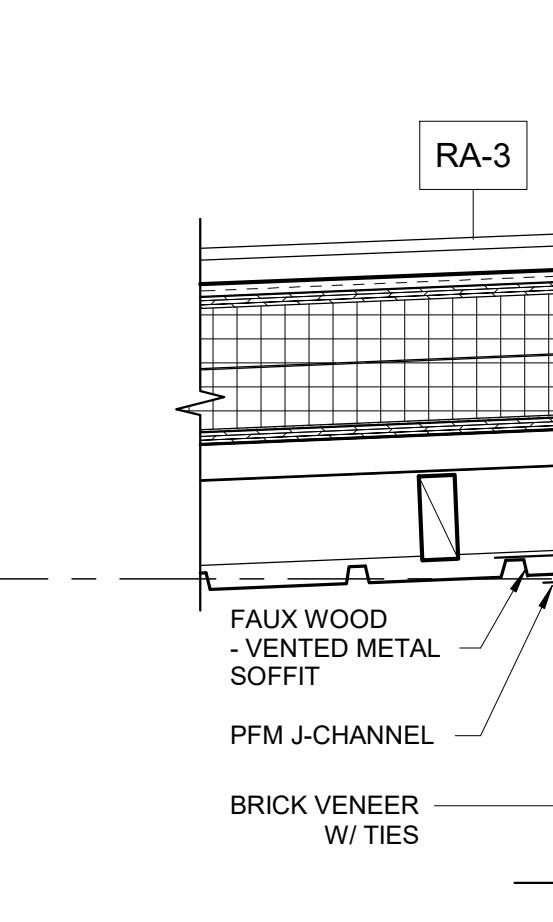
26 DORM WALL ROOF DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2

27 DORM WALL DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2



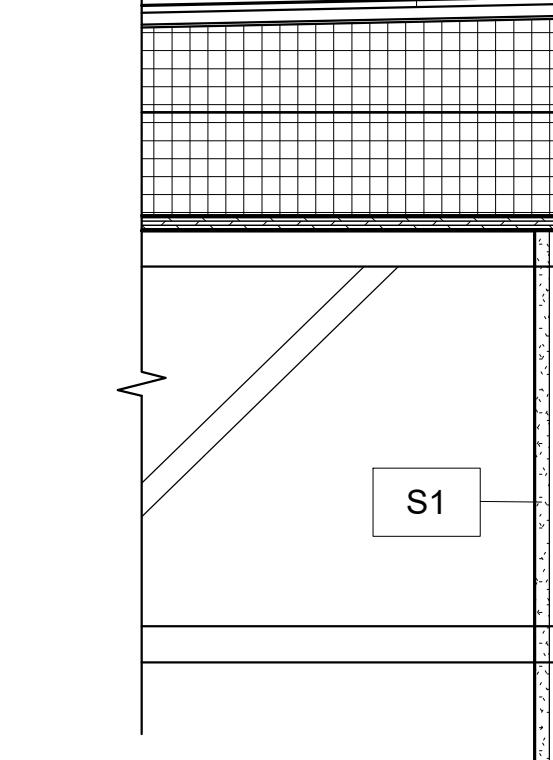
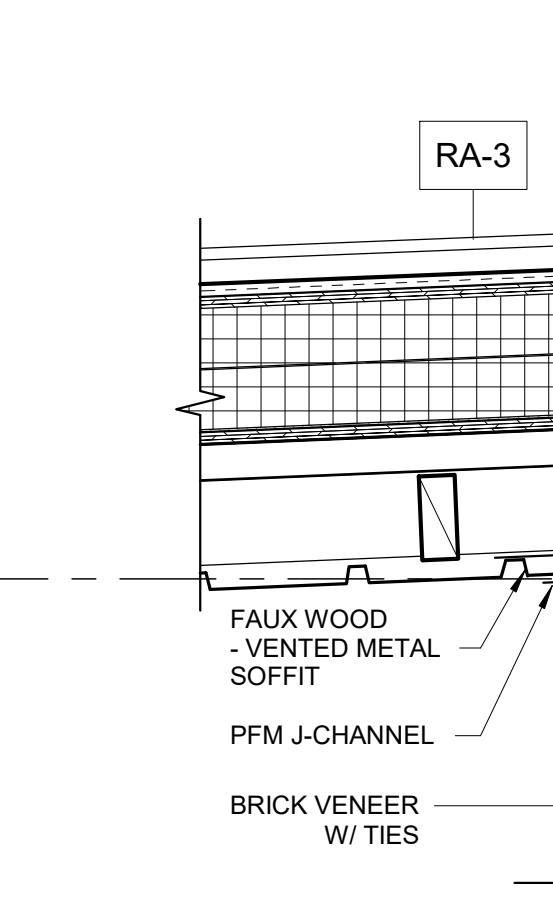
28 DORM WALL ROOF DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2

29 DORM WALL DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2



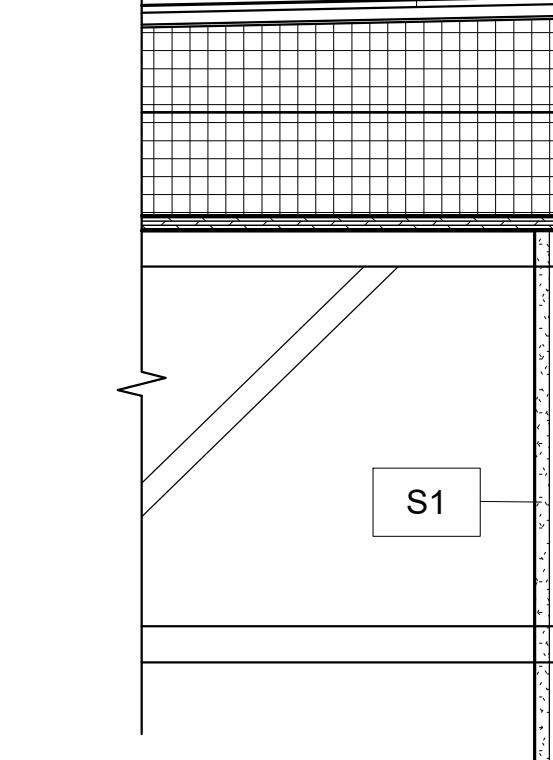
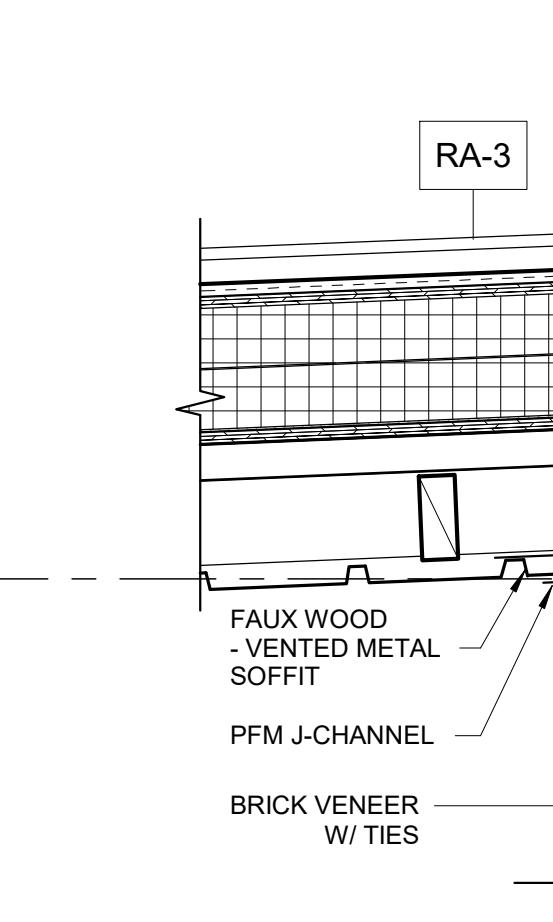
30 DORM WALL ROOF DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2

31 DORM WALL DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2



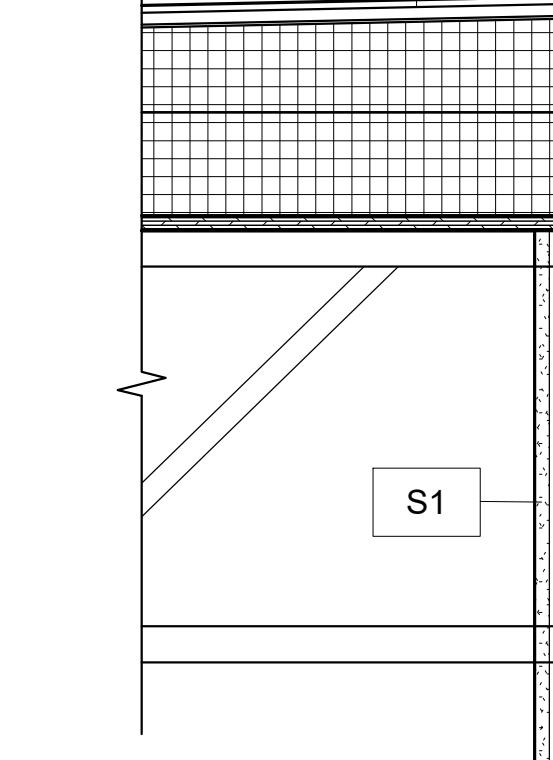
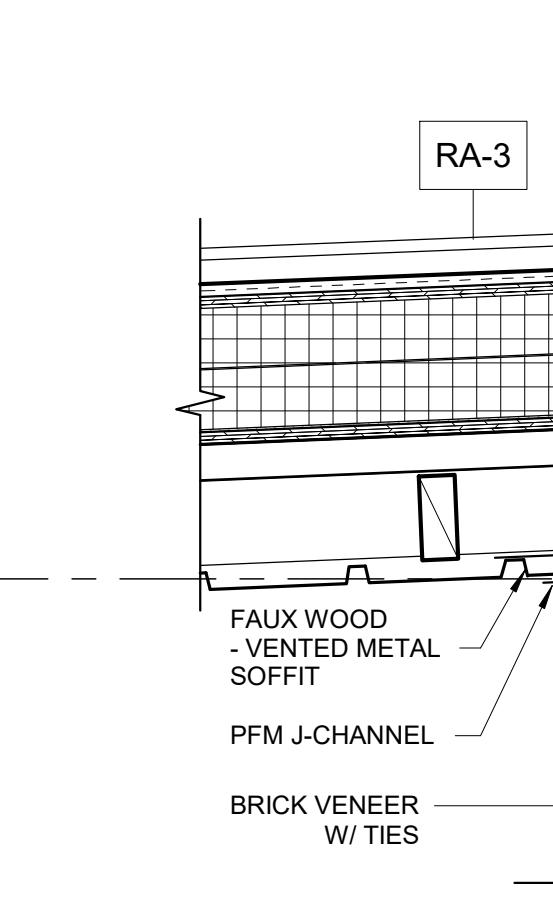
32 DORM WALL ROOF DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2

33 DORM WALL DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2



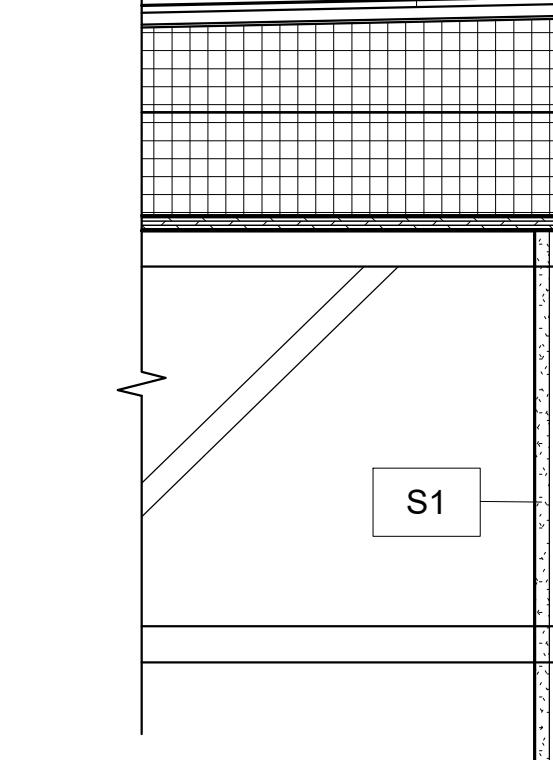
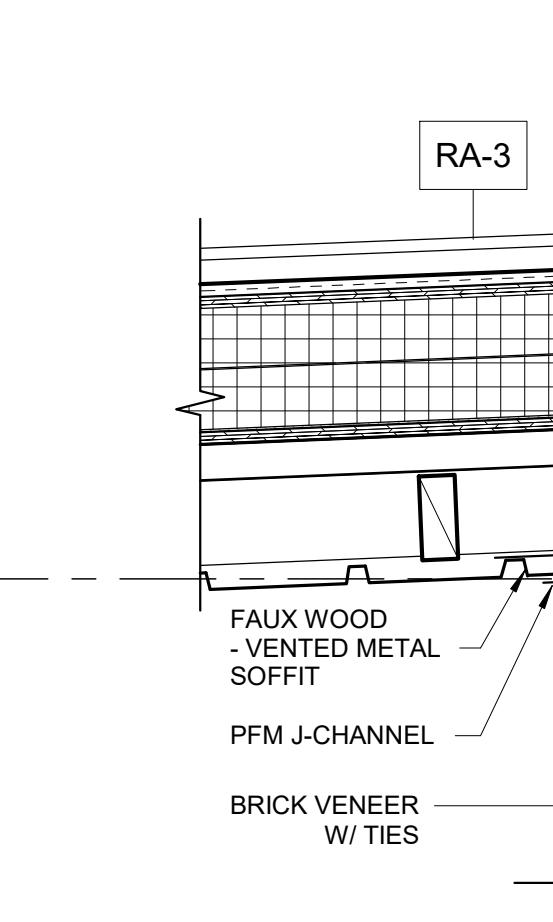
34 DORM WALL ROOF DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2

35 DORM WALL DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2



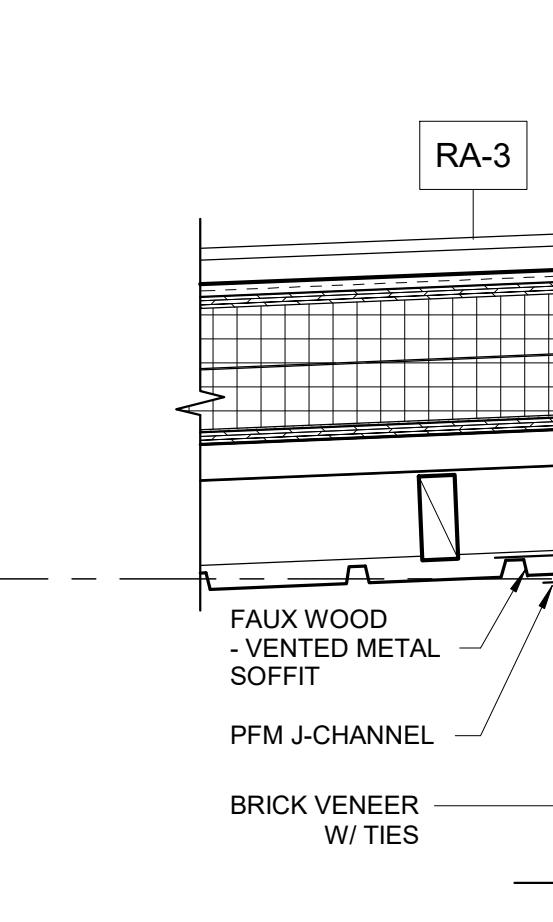
36 DORM WALL ROOF DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2

37 DORM WALL DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2



38 DORM WALL ROOF DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2

39 DORM WALL DETAIL
A6-3 1 1/2" = 1'-0" REF:A5-2



REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB
MICHAEL W. DOWLING
AIA, NCARB
STATE OF MONTANA

HELENA FIRESTATION #3

1872 KELLEHER LANE, HELENA, MT 59602

DOWLING | SHIVEH-ATTERTY ARCHITECTURE + ENGINEERING

734 N. Last Chance Gulch | Helena, MT 59601 | (406) 457-3500 | www.dowlingarch.com

EXTERIOR DETAILS

PROJECT #: 25-668

ISSUE DATES:

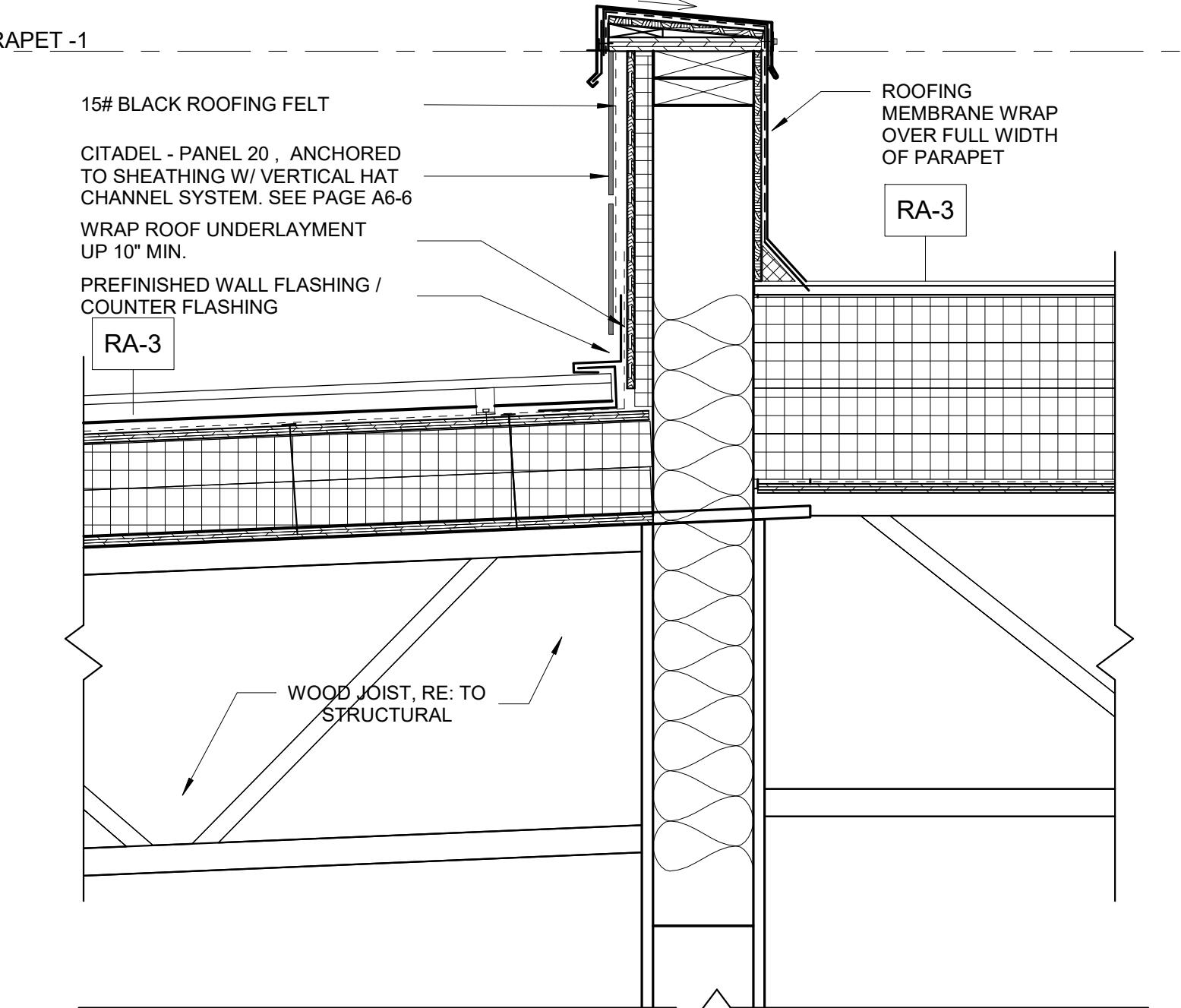
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A6-4

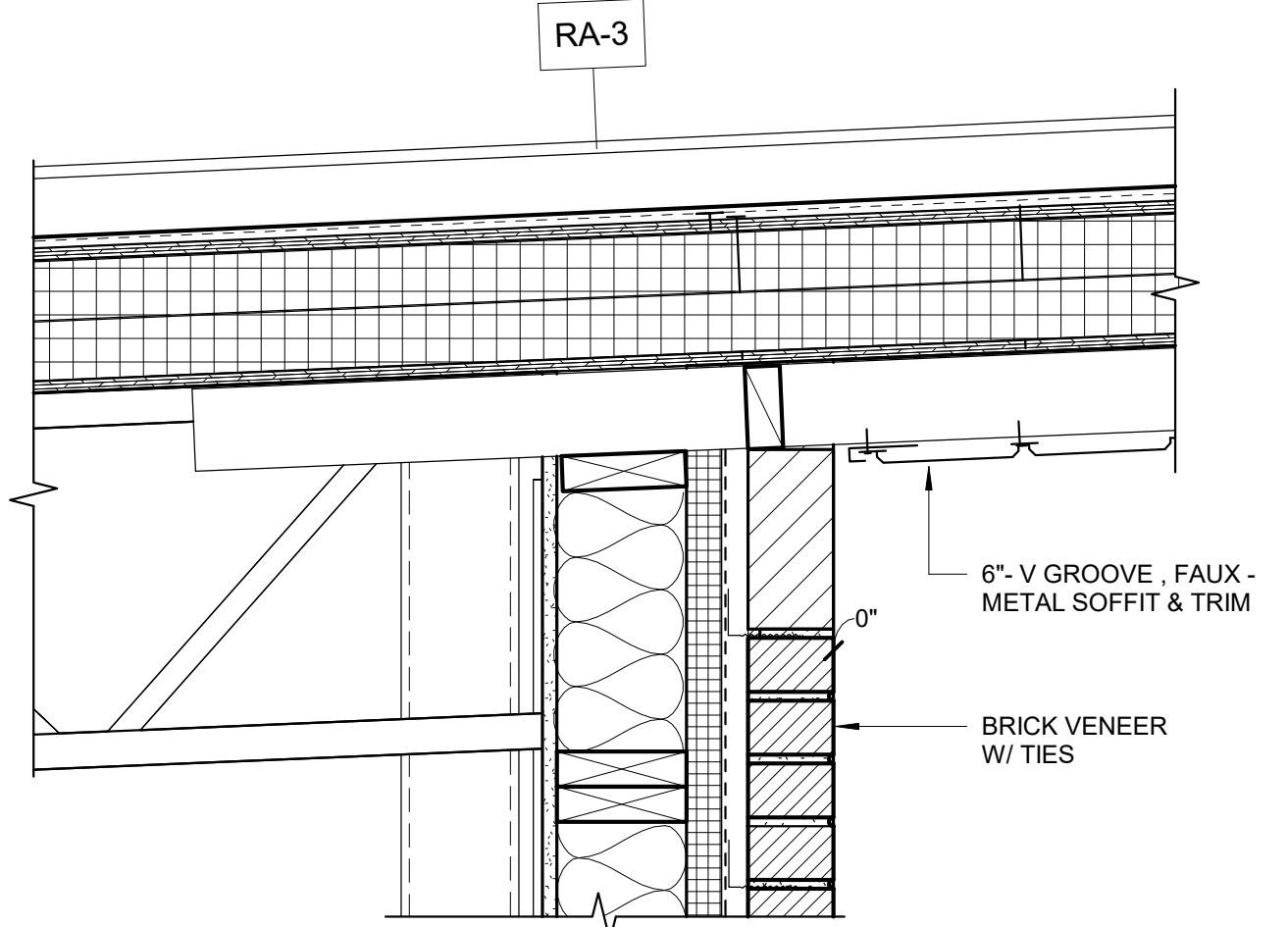
10.22.25

100% CONSTRUCTION SET

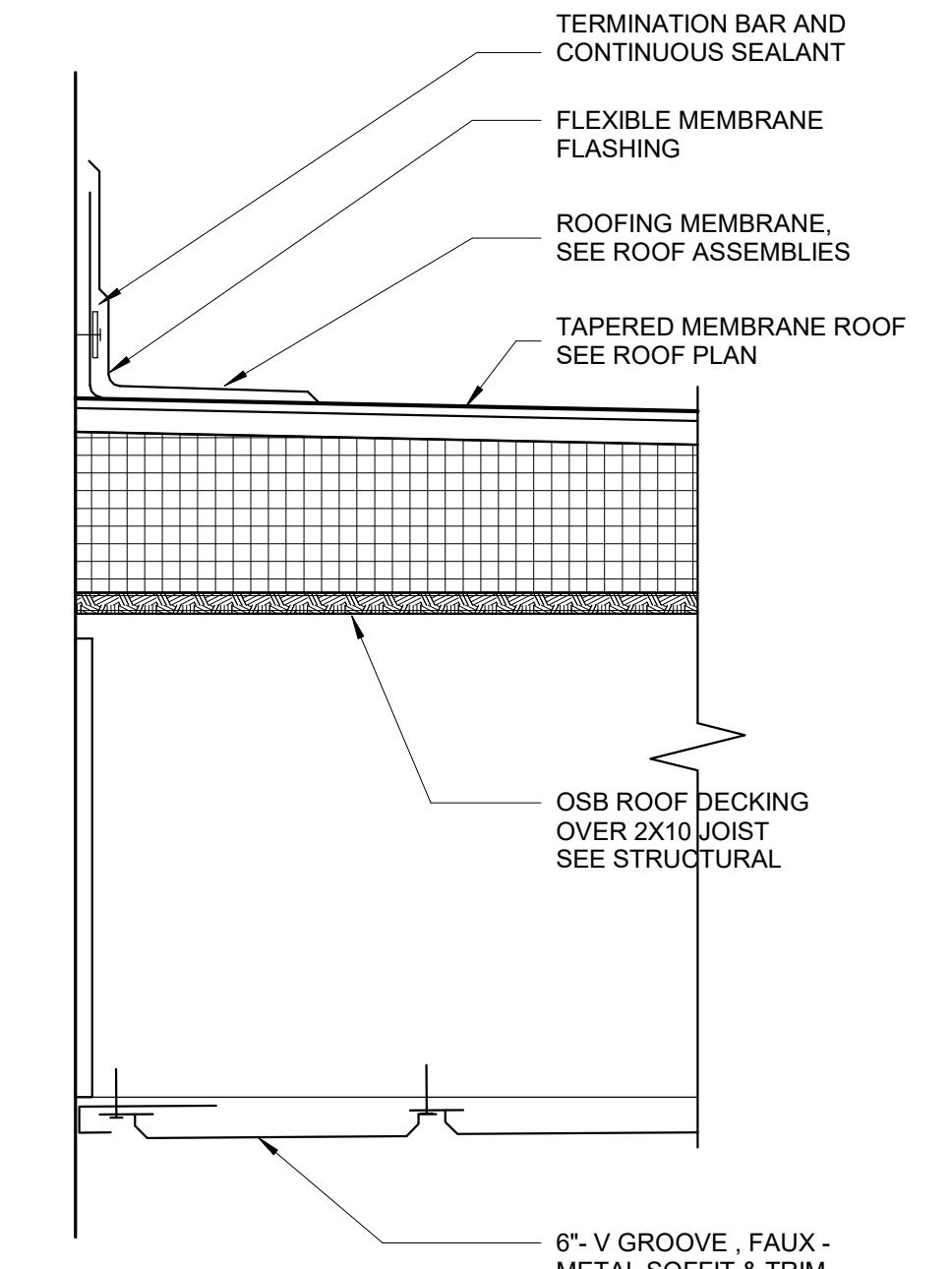
01 ROOF DETAIL
A6-4 1 1/2" = 1'-0" REF:A5-5



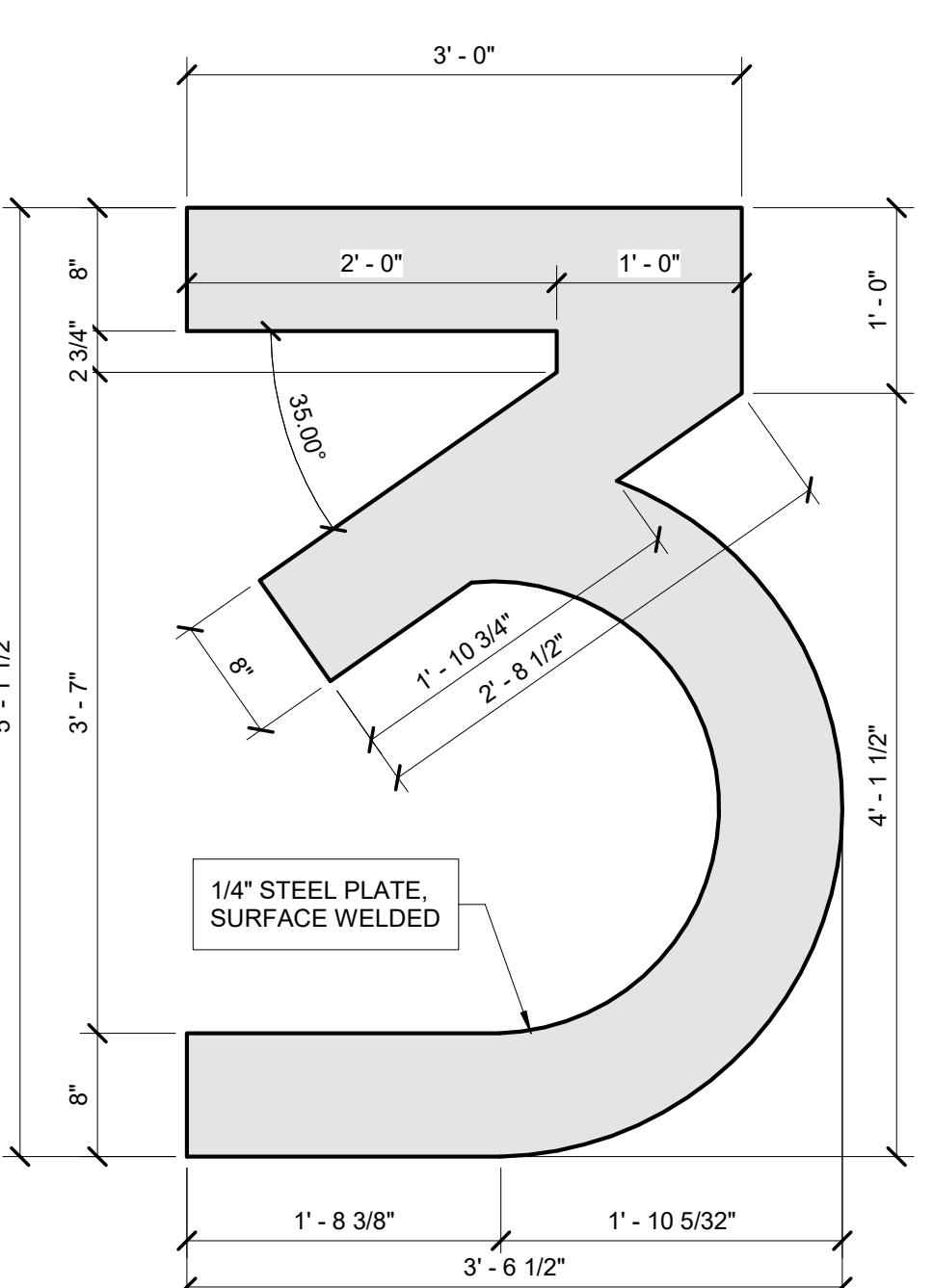
RA-3



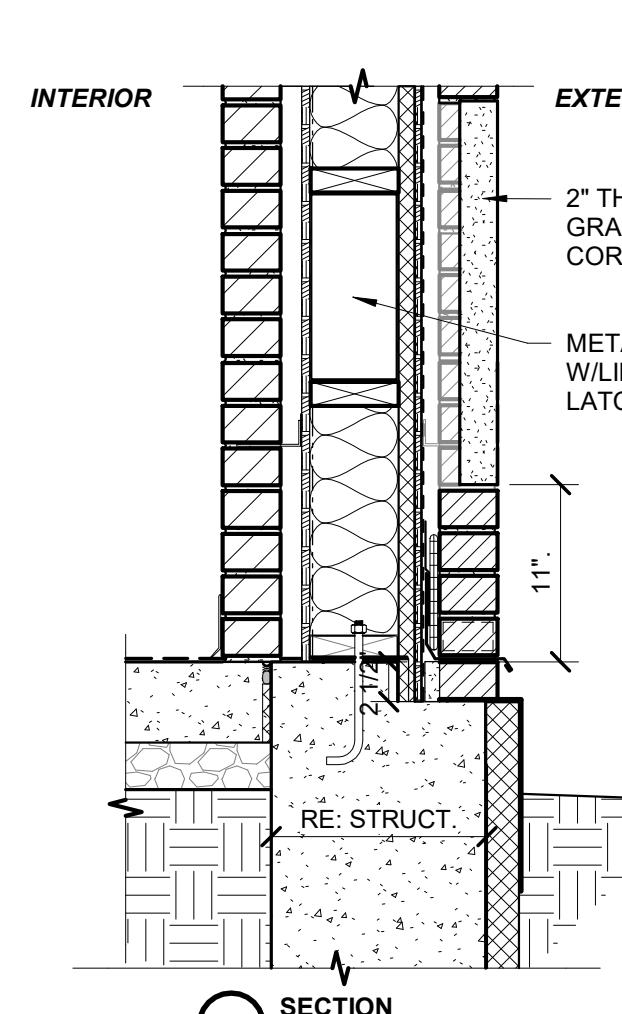
05 ROOF DETAIL @ CLASSROOM
A6-4 1 1/2" = 1'-0" REF:A5-3



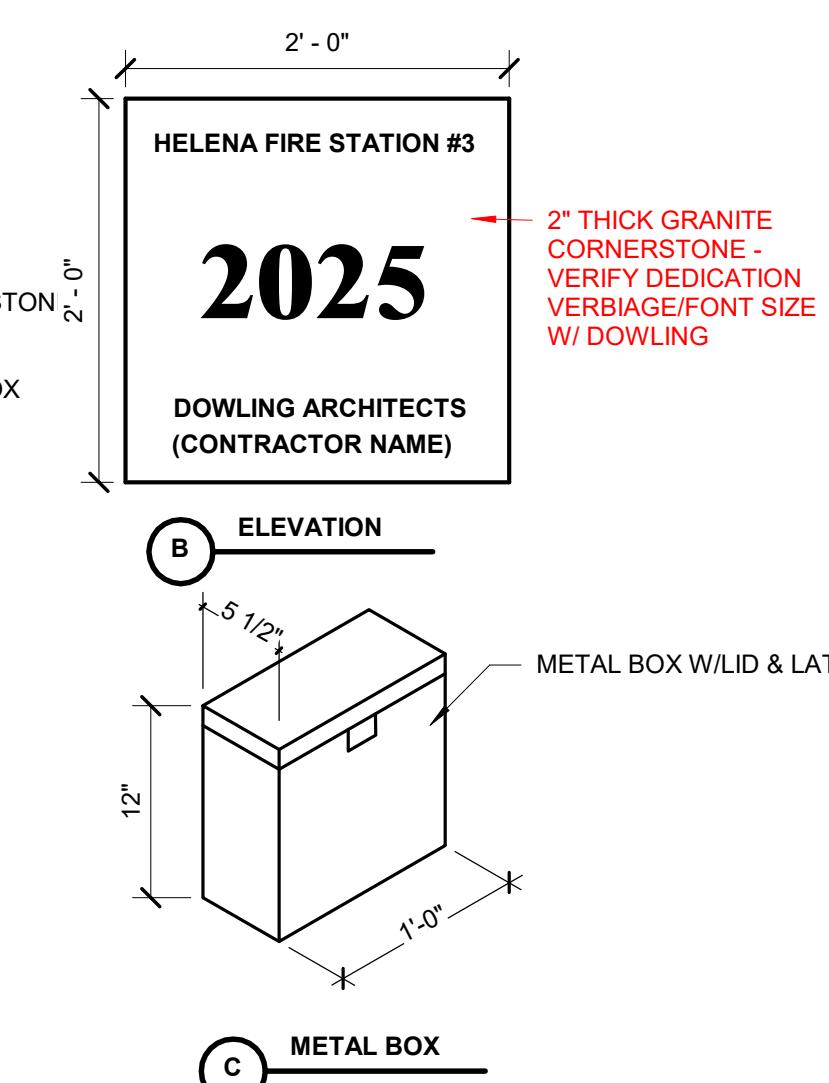
03 AWNING DETAIL
A6-4 3" = 1'-0" REF:A5-5



07 METAL LOGO / WALL SIGNAGE
A6-4 1" = 1'-0" REF:A4-1



06 BRICK BASE DETAIL
A6-4 1" = 1'-0" REF:A5-5

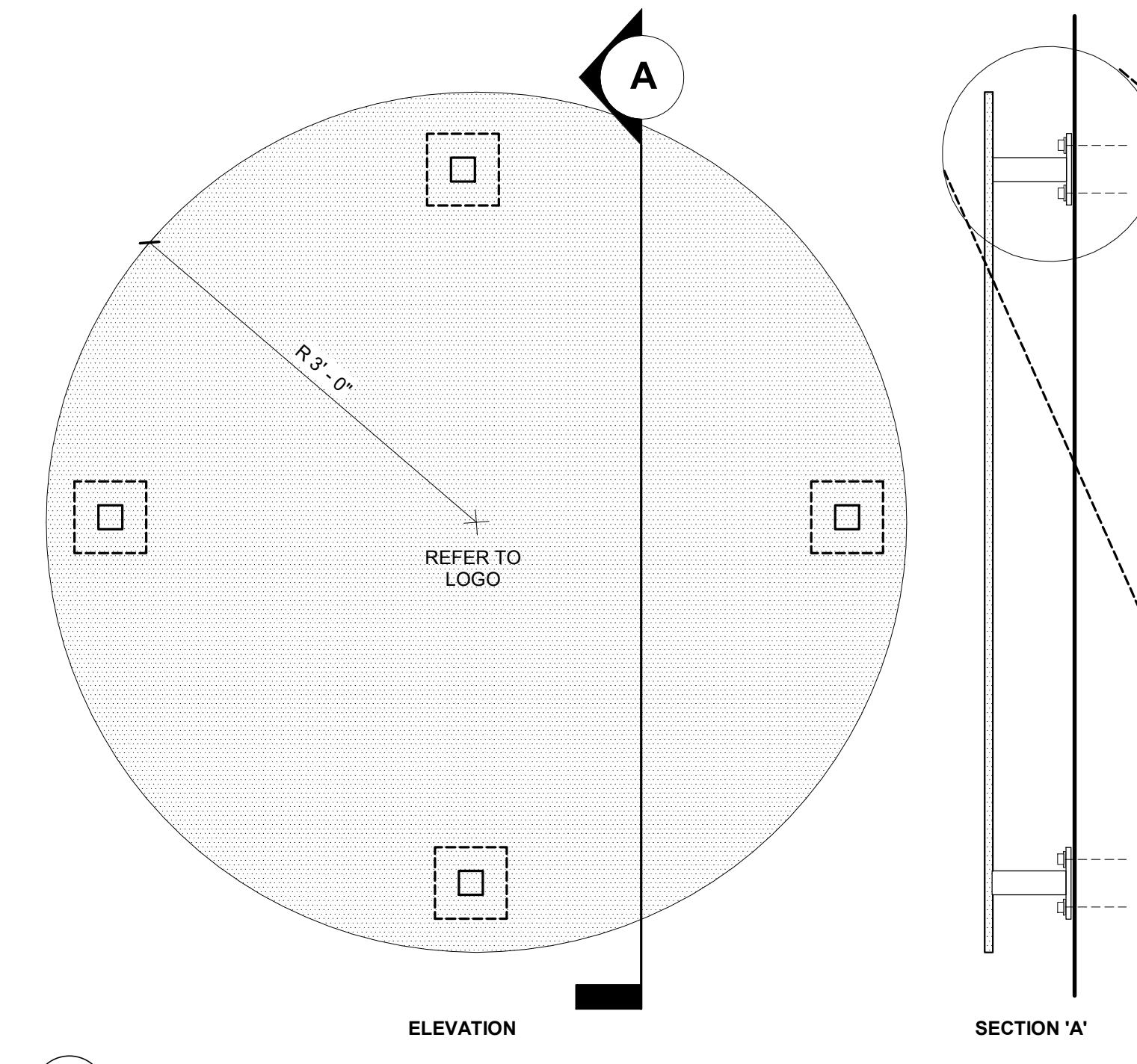


B ELEVATION
C SECTION

METAL BOX



08 FIRE DEPARTMENT - METAL LOGO/ WALL SIGNAGE
A6-4 1" = 1'-0" REF:A4-1



09 Decorative Signage - Detail
A6-4 1" = 1'-0" REF:A4-1

REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB
MICHAEL W. DOWLING, INC., #1057
STATE OF MONTANA

HELENA FIRESTATION #3

1872 KELLEHER LANE, HELENA, MT 59602

DOWLING | SHIVEH-ATTERTY
ARCHITECTS | ARCHITECTURE + ENGINEERING

EXTERIOR DETAILS

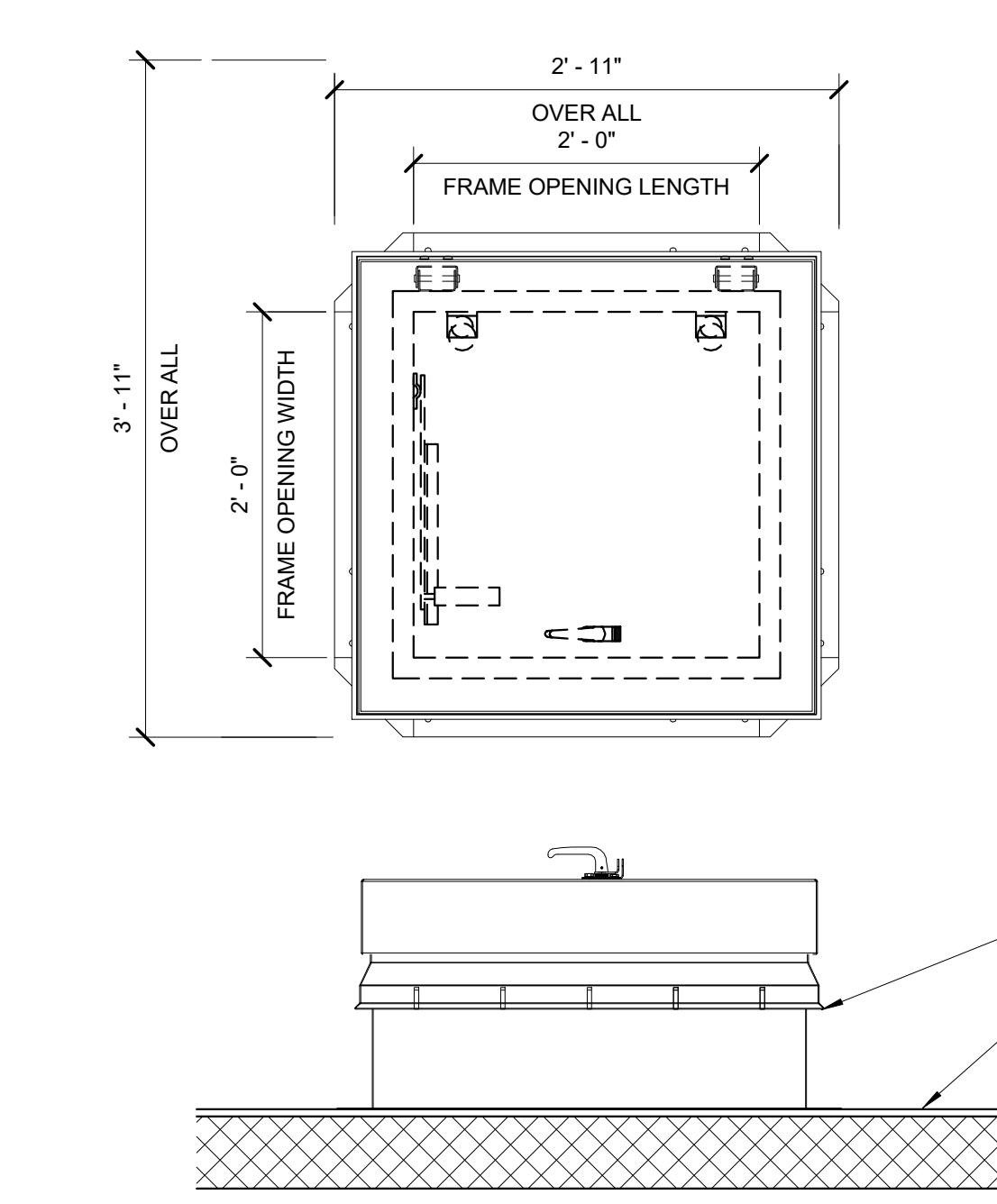
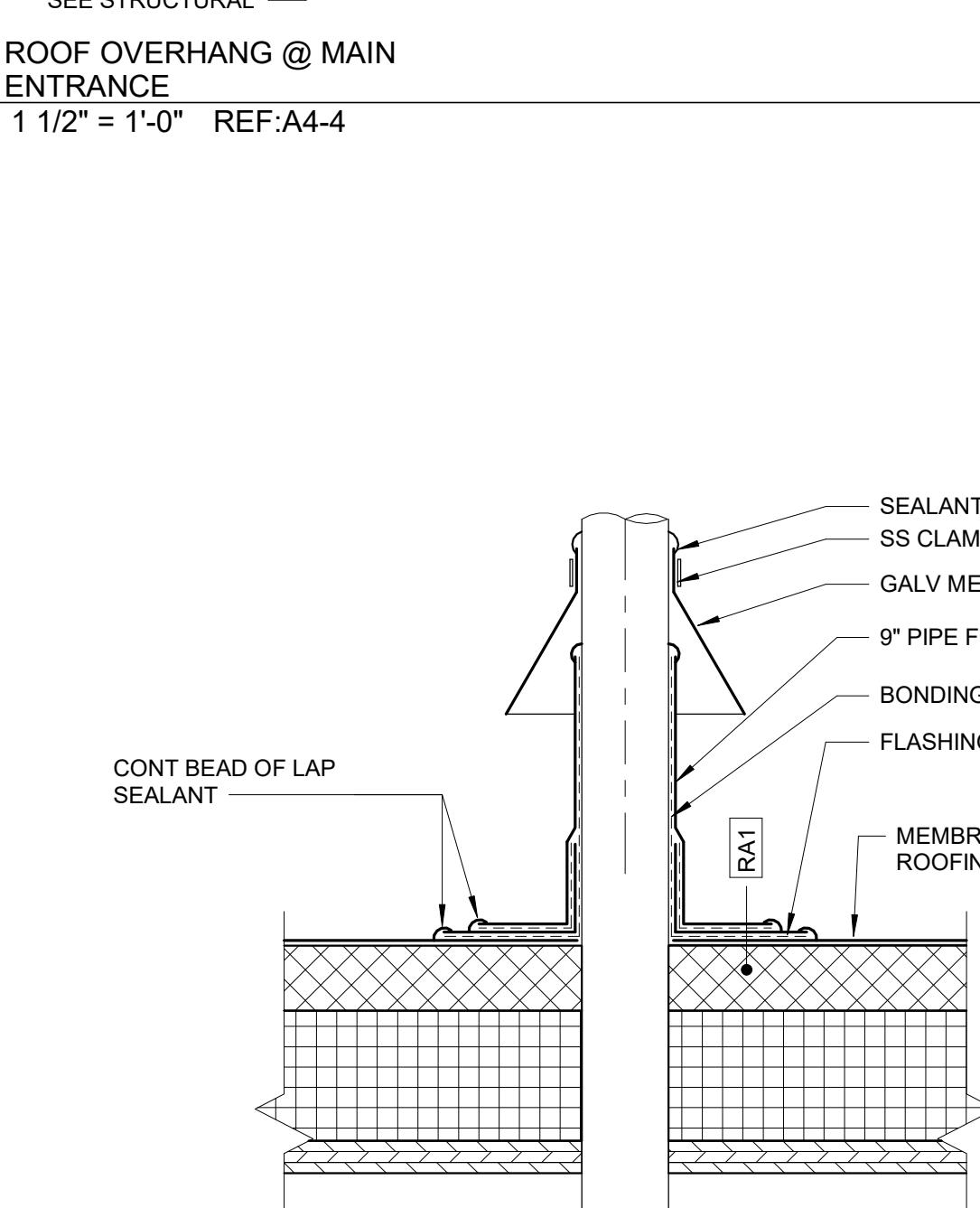
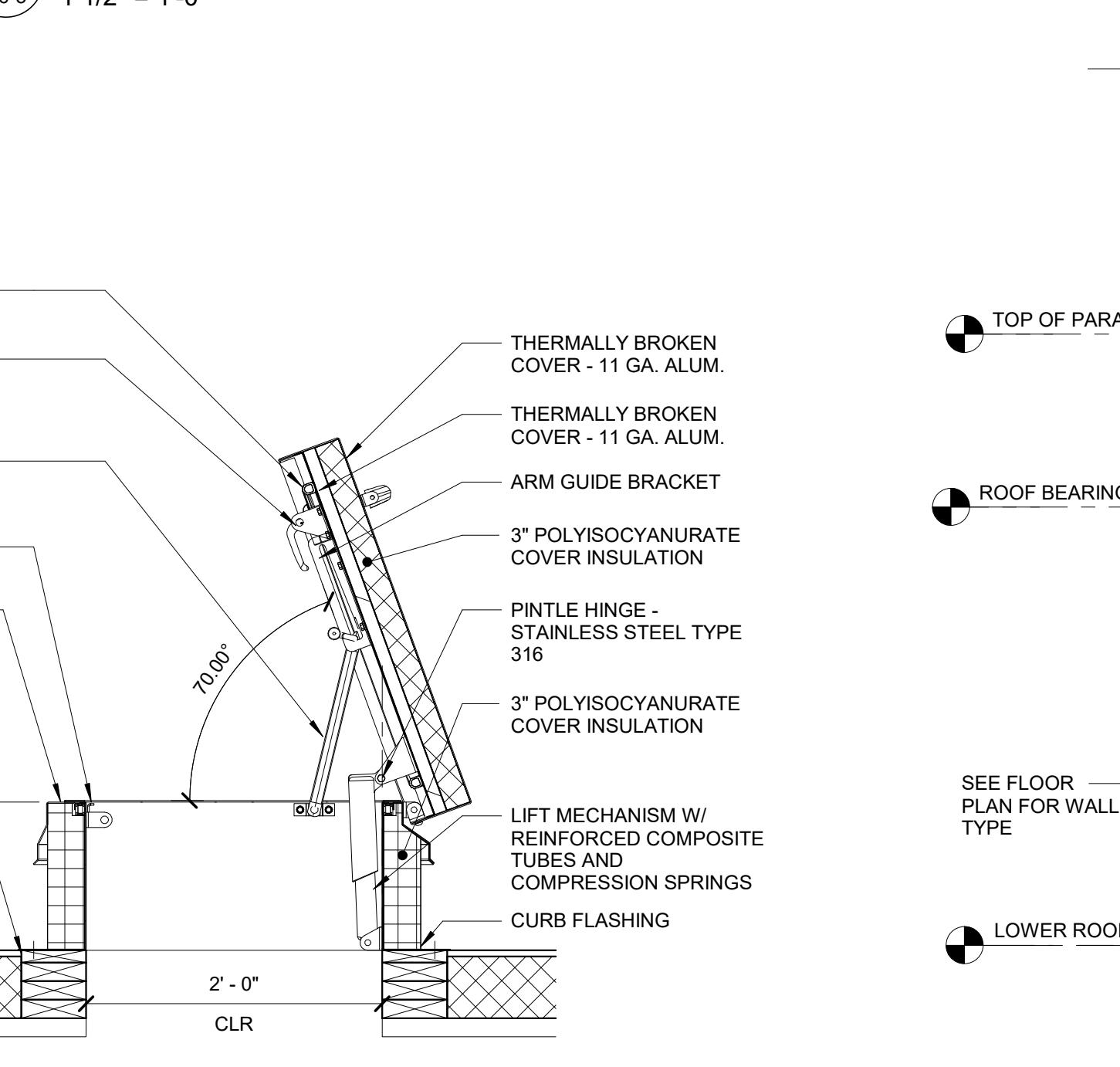
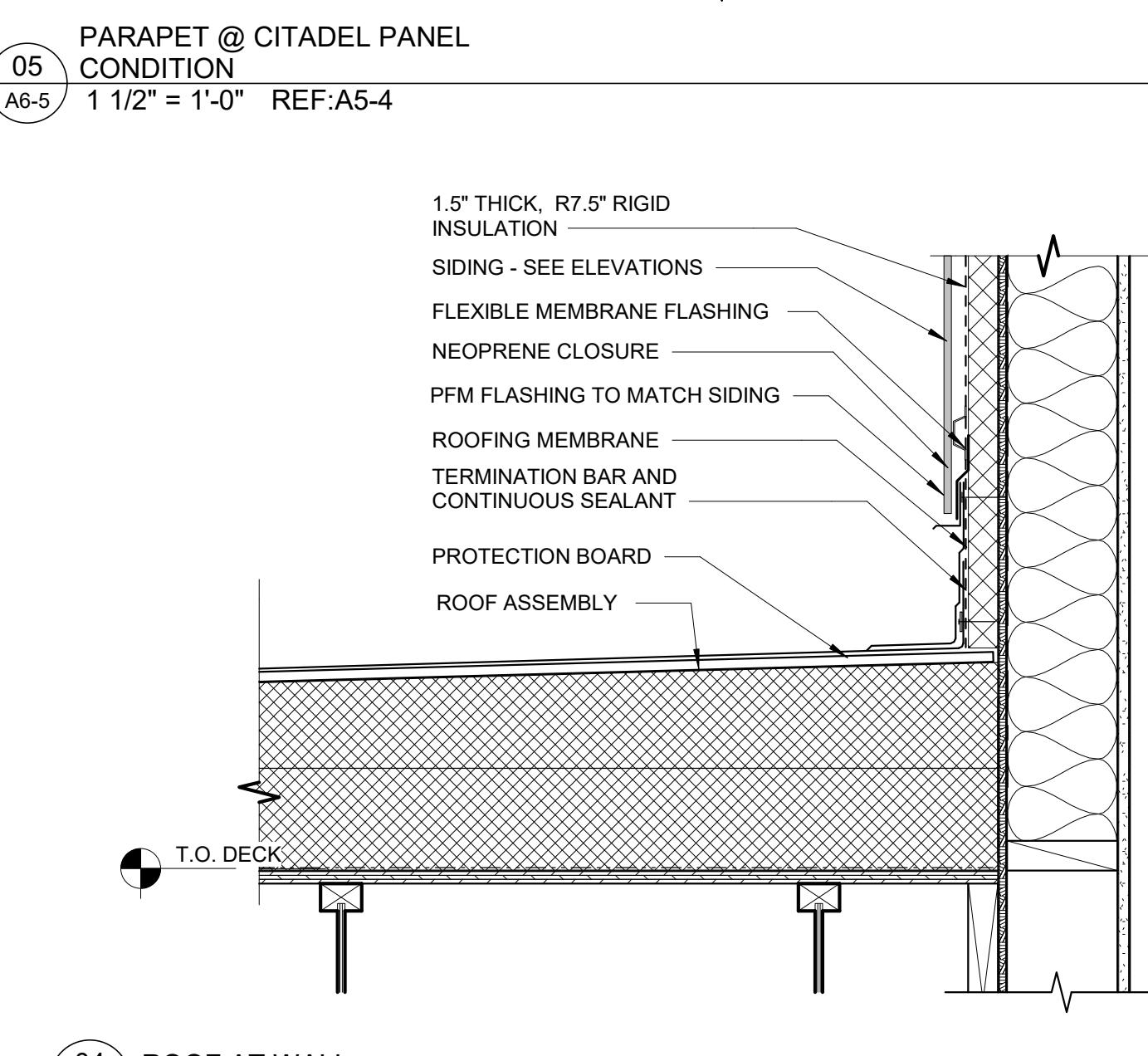
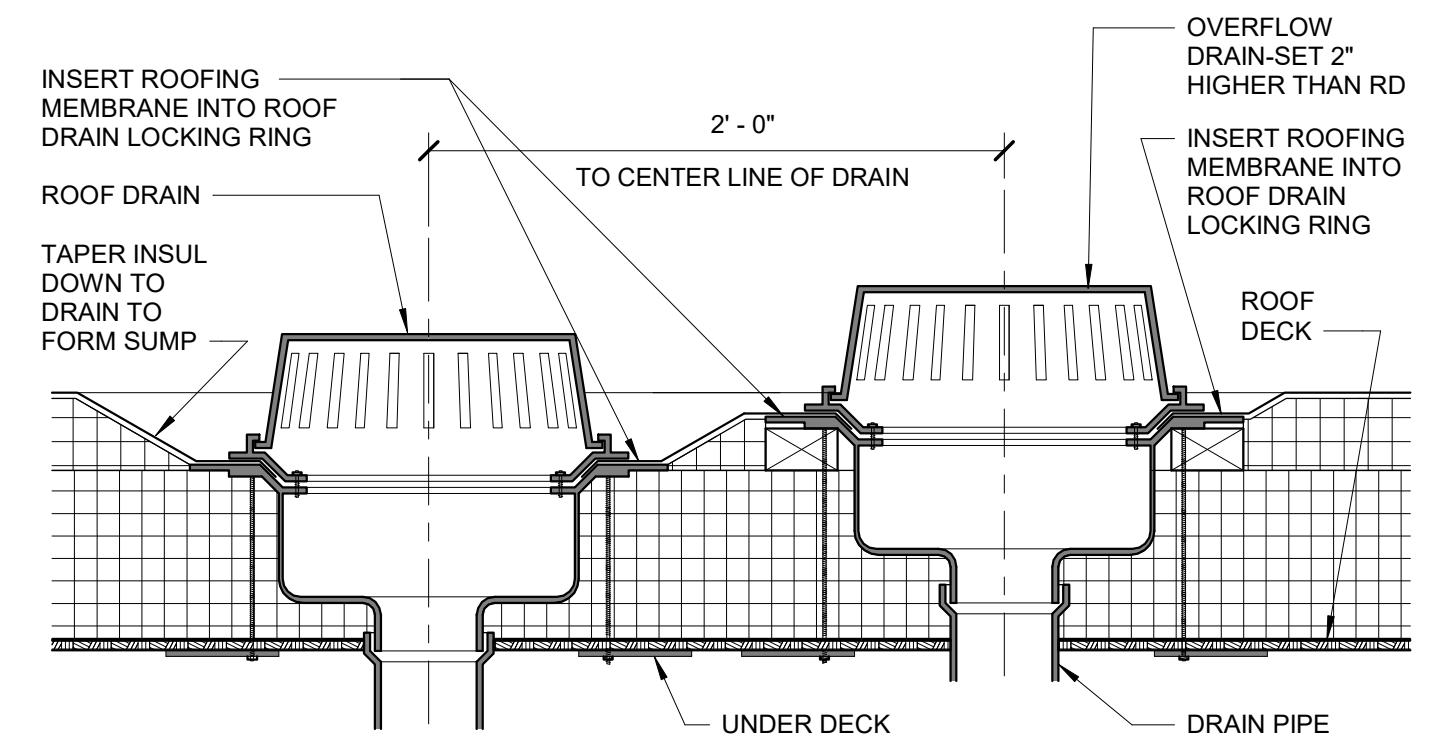
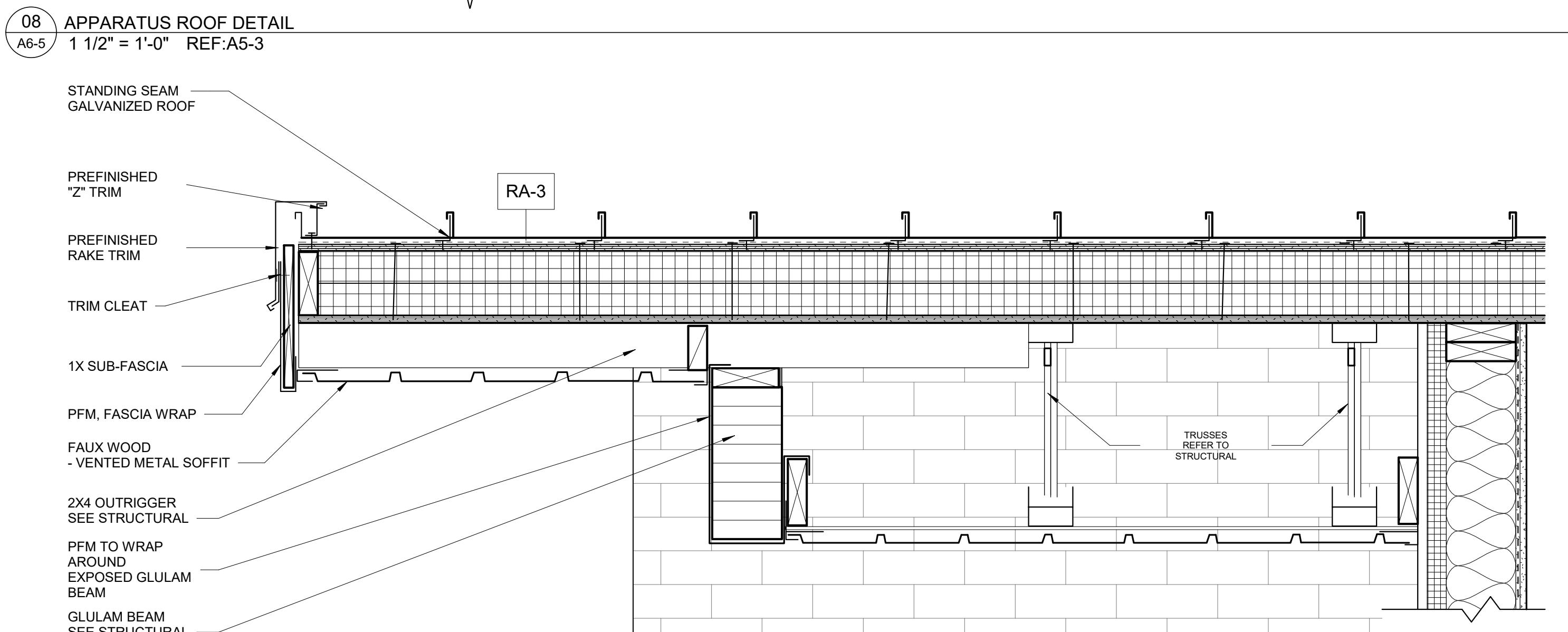
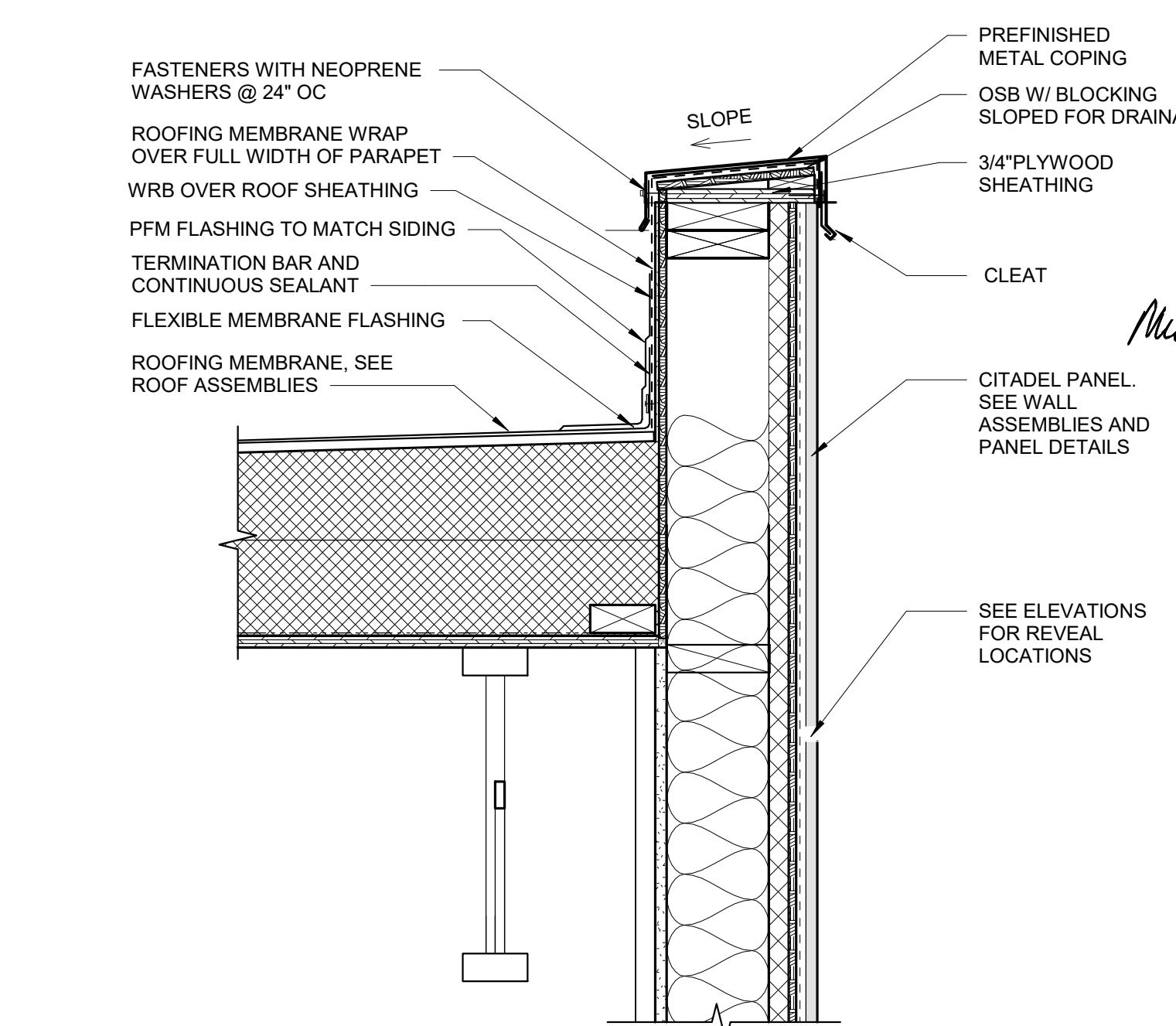
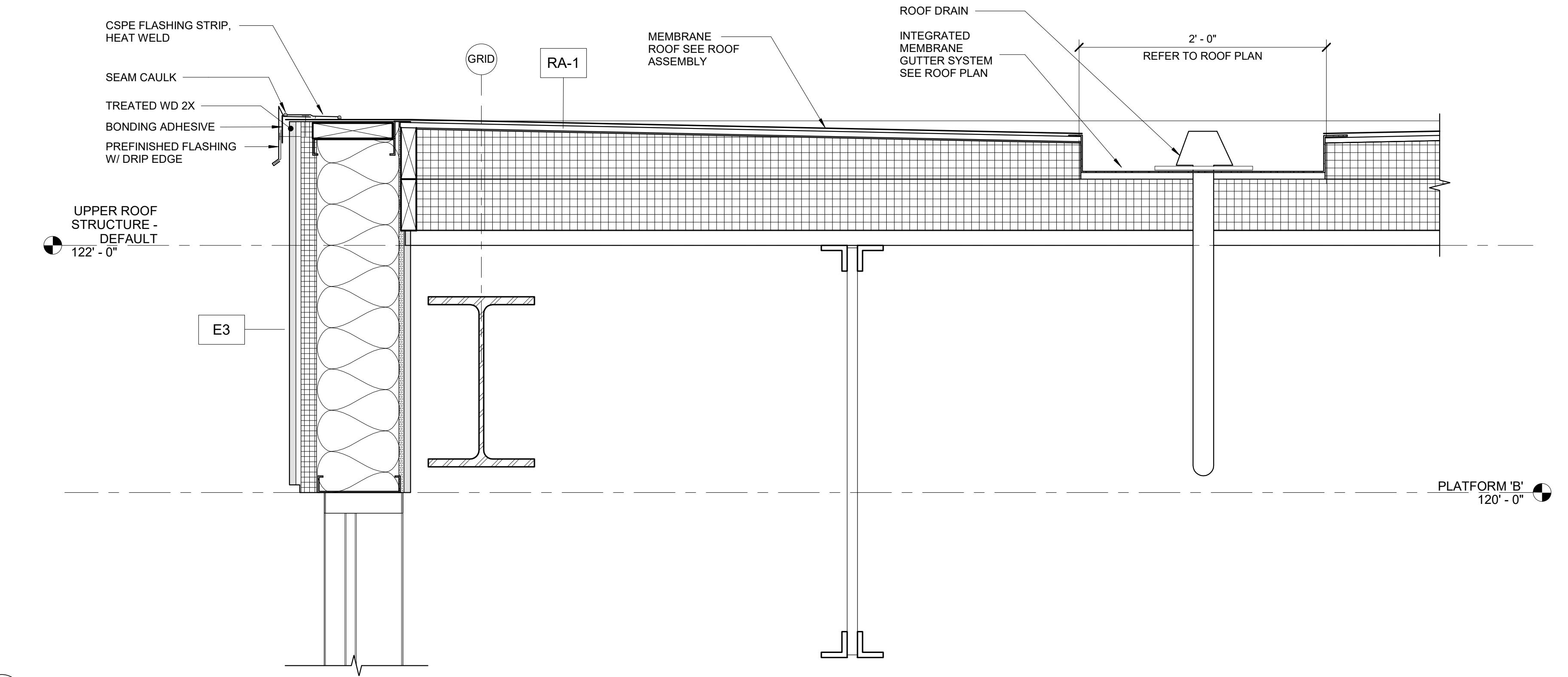
PROJECT #: 25-668
ISSUE DATES:

DRAWN BY: JS/C

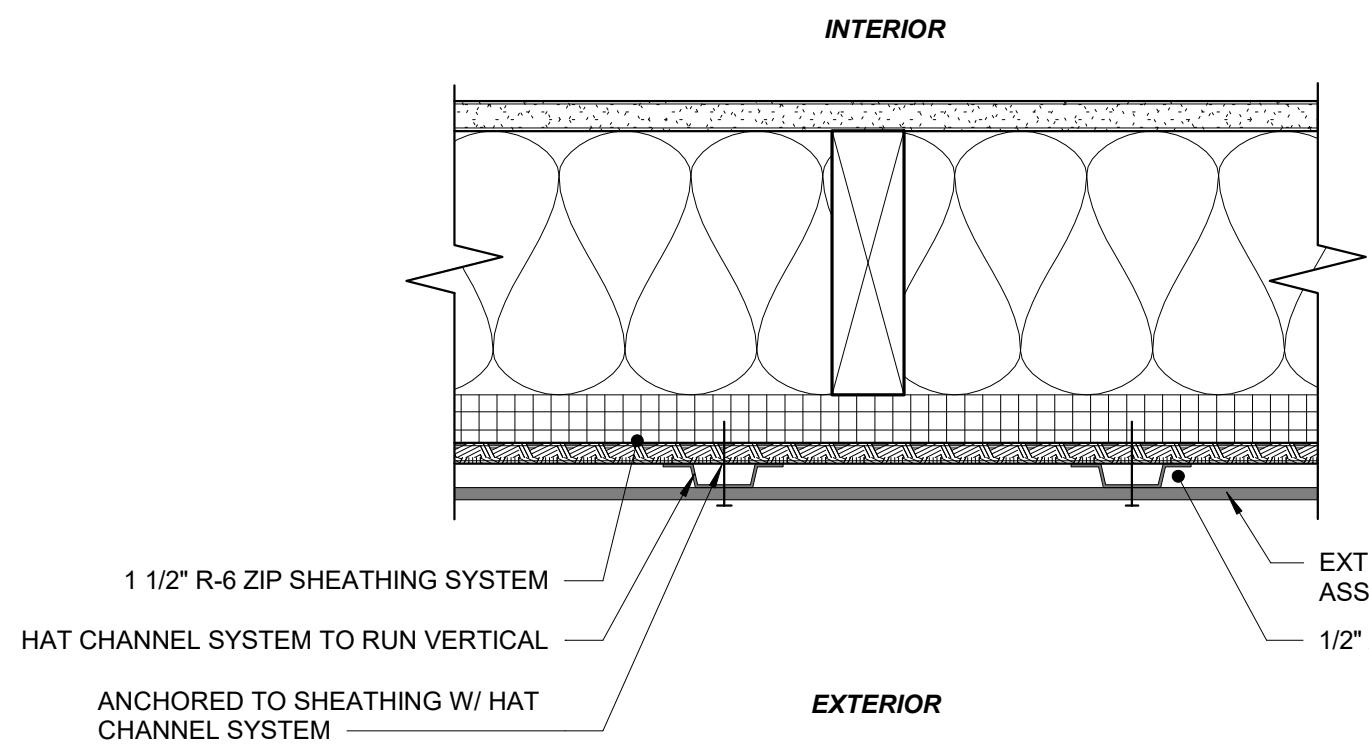
A6-5

10.22.25

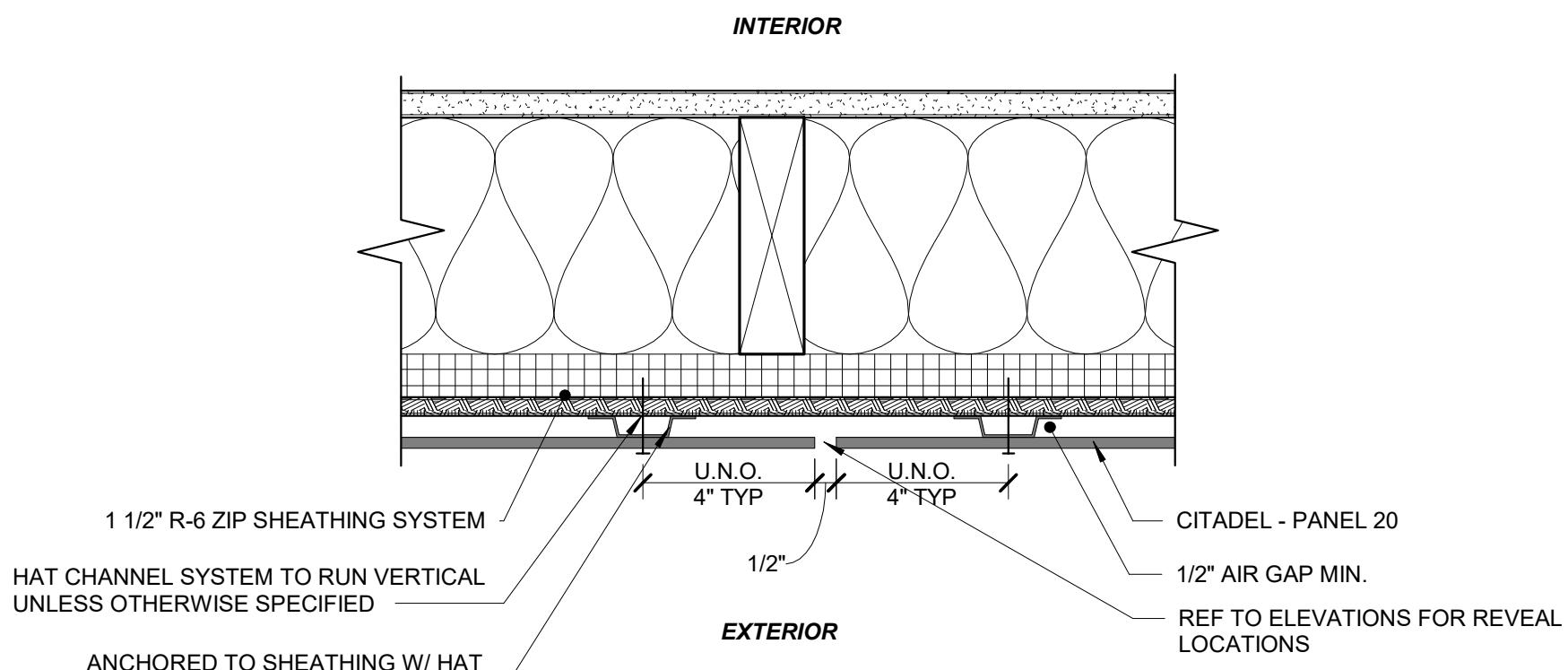
100% CONSTRUCTION SET



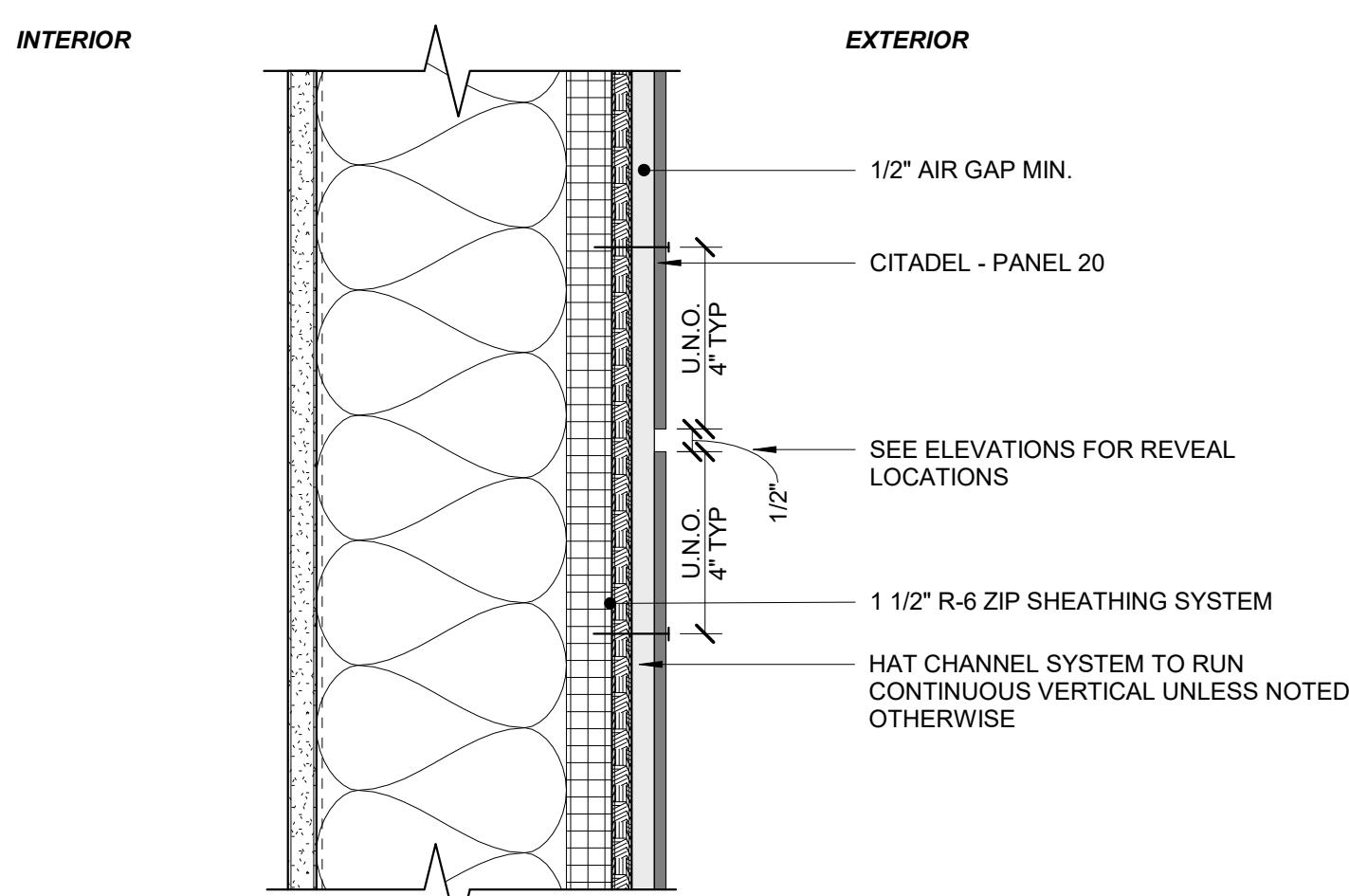
GENERAL DETAIL FOR WALL ASSEMBLIES WITH VERTICAL HAT CHANNEL SYSTEMS. ALWAYS REFER TO SPECIFIC WALL ASSEMBLIES FOR HAT CHANNEL ORIENTATION AND MATERIALS.



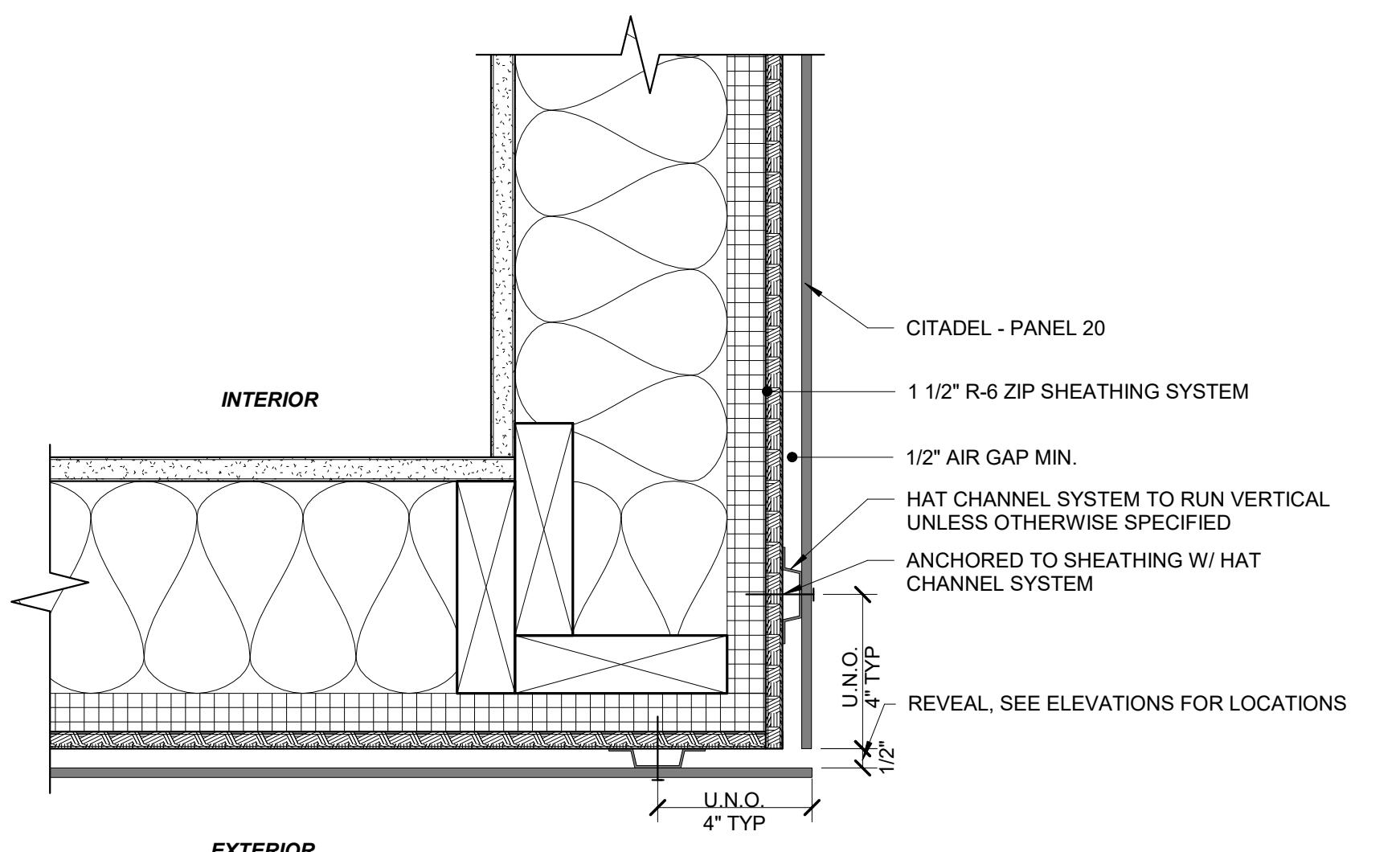
07 GENERAL VERTICAL HAT CHANNEL DETAIL
A6-6 3" = 1'-0"



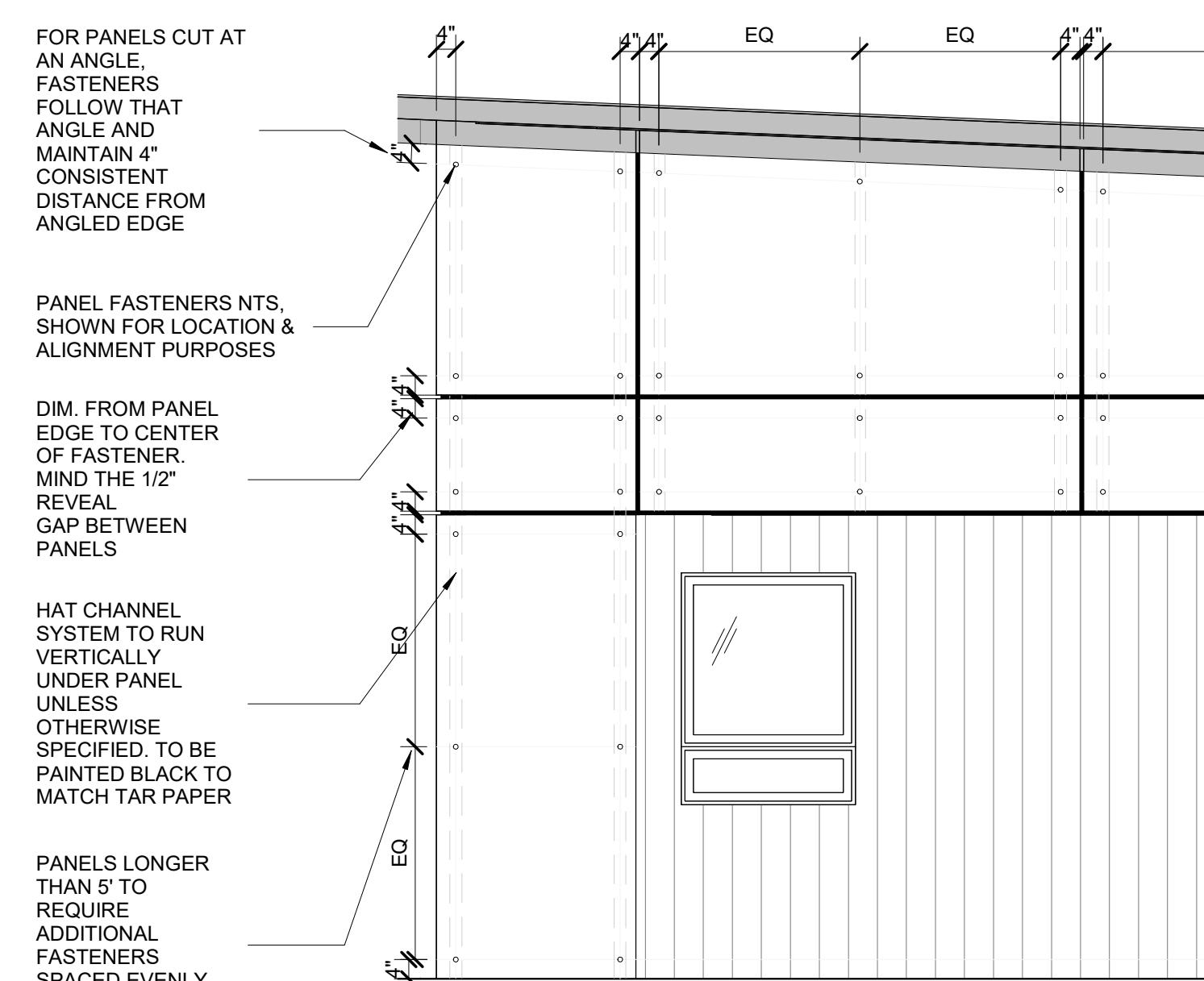
06 CITADEL PANEL DETAIL
A6-6 3" = 1'-0"



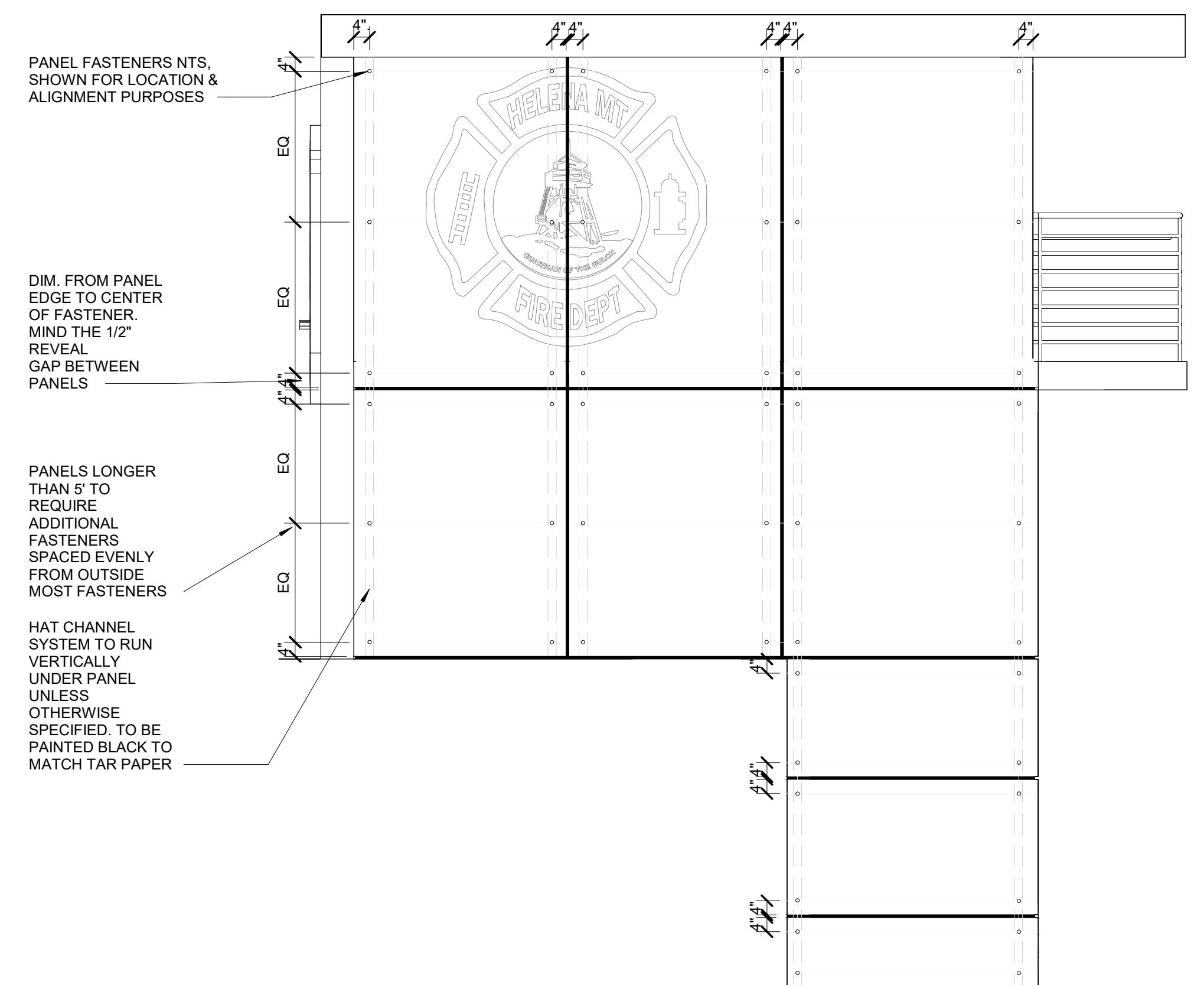
05 CITADEL DETAIL SECTION
A6-6 3" = 1'-0"



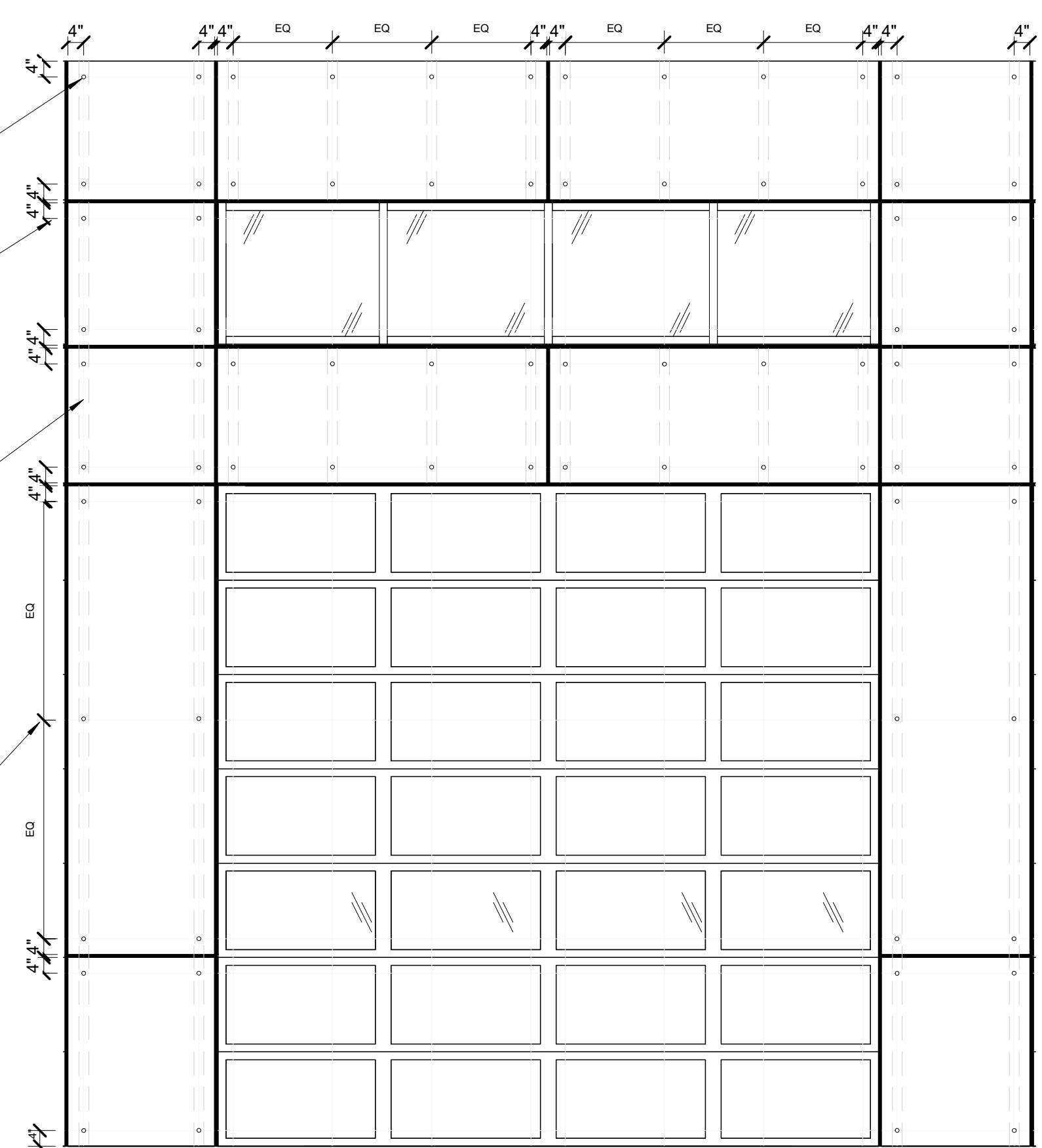
04 CITADEL PANEL DETAIL @ CORNER CONDITION TYP
A6-6 3" = 1'-0"



03 ANGLED PANEL FASTENER DETAIL @DORMS/OFFICE CONDITION
A6-6 3/8" = 1'-0" REF:A4-1



02 PANEL FASTENER DETAIL @ HOSE TOWER CONDITION
A6-6 3/8" = 1'-0" REF:A4-1



01 PANEL FASTENER @ APPARATUS BAY DETAIL
A6-6 3/8" = 1'-0" REF:A4-1

REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB
MICHAEL W. DOWLING
Architects, Inc.

HELENA FIRESTATION #3

1872 KELLEHER LANE, HELENA, MT 59602

DOWLING ARCHITECTS | SHIVEH-ATTERRY ARCHITECTURE + ENGINEERING

EXTERIOR DETAILS - ENTRY CANOPY

PROJECT #: 25-668

ISSUE DATES:

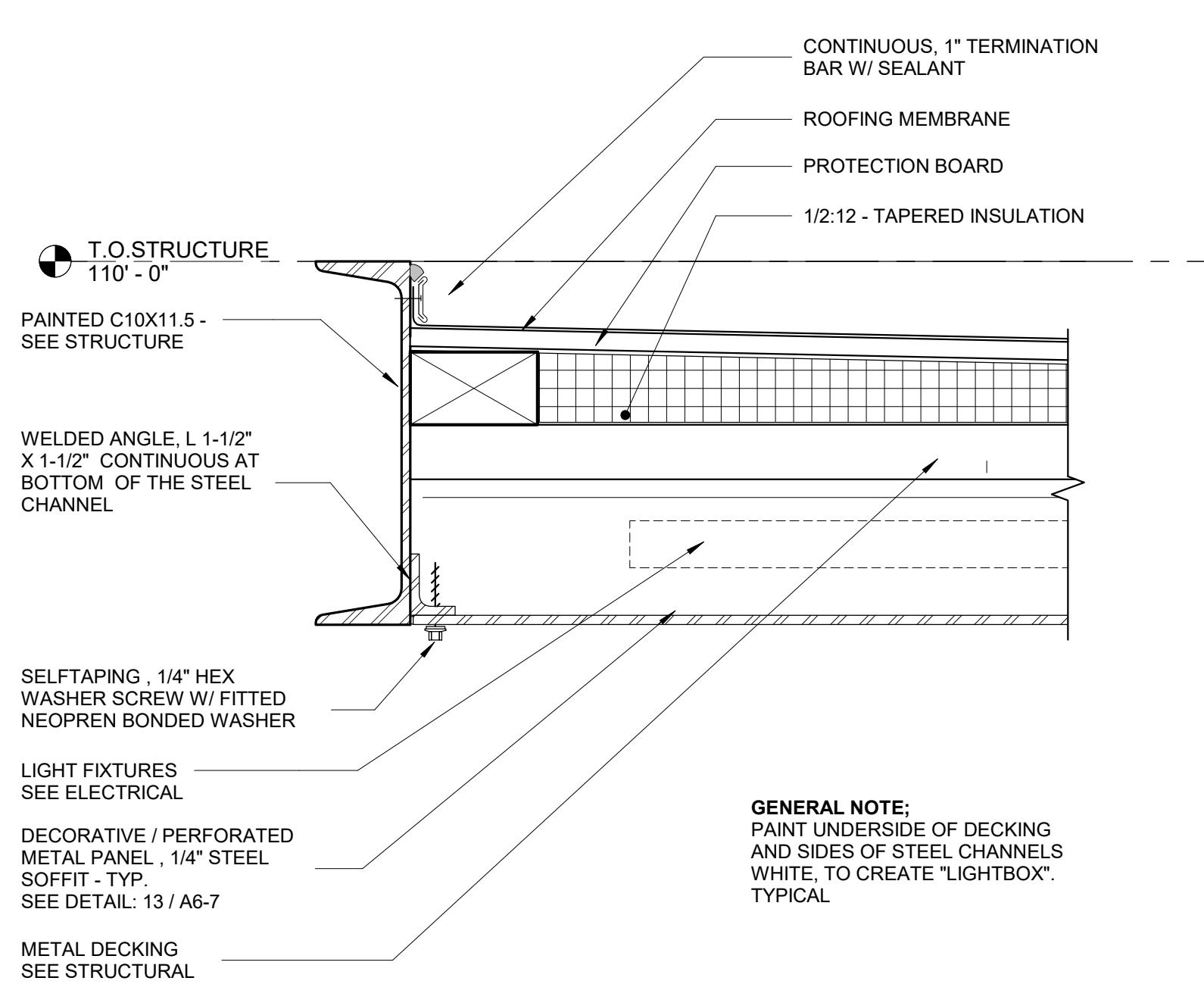
DRAWN BY: JS/CC

A6-8

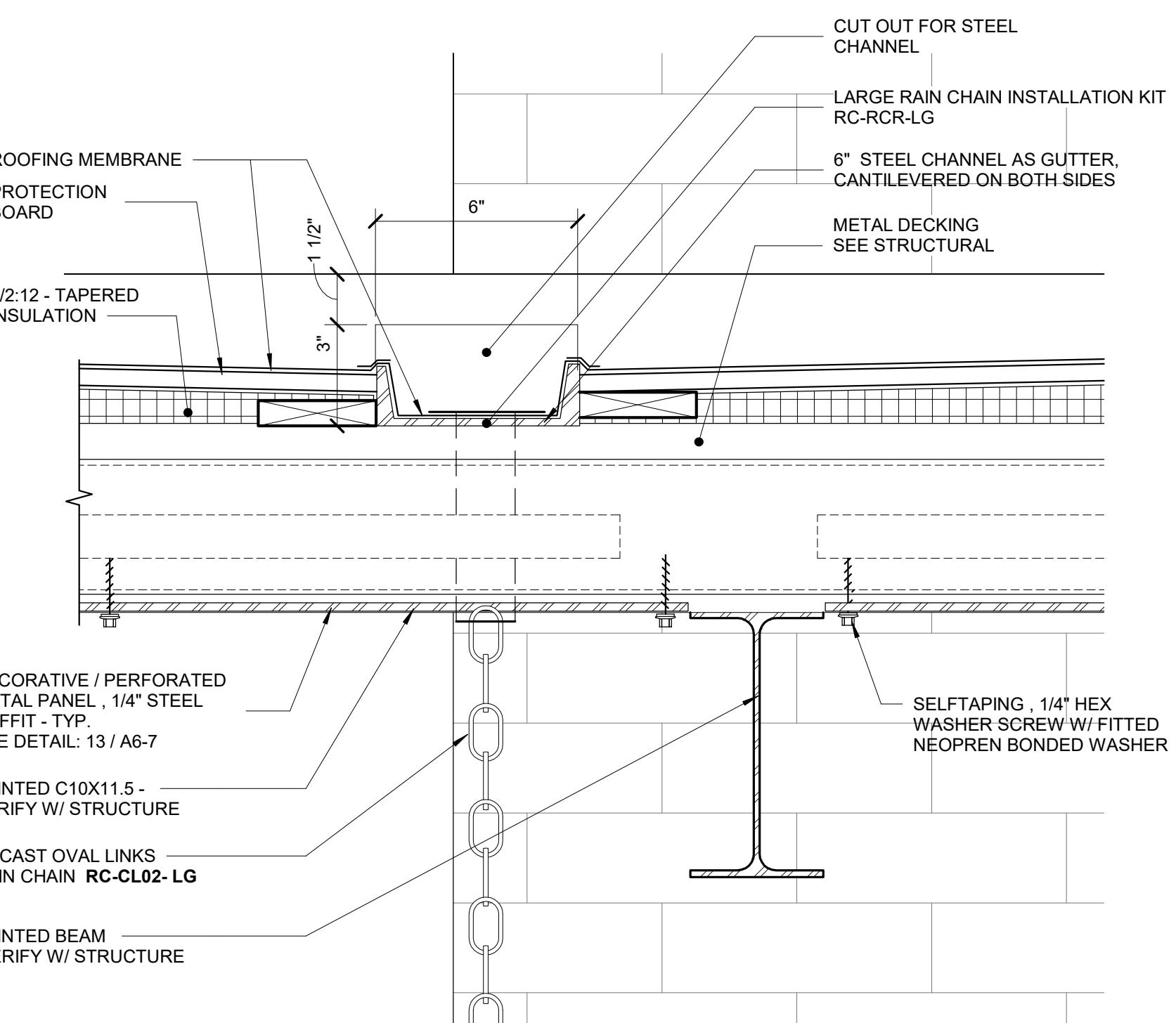
10.22.25

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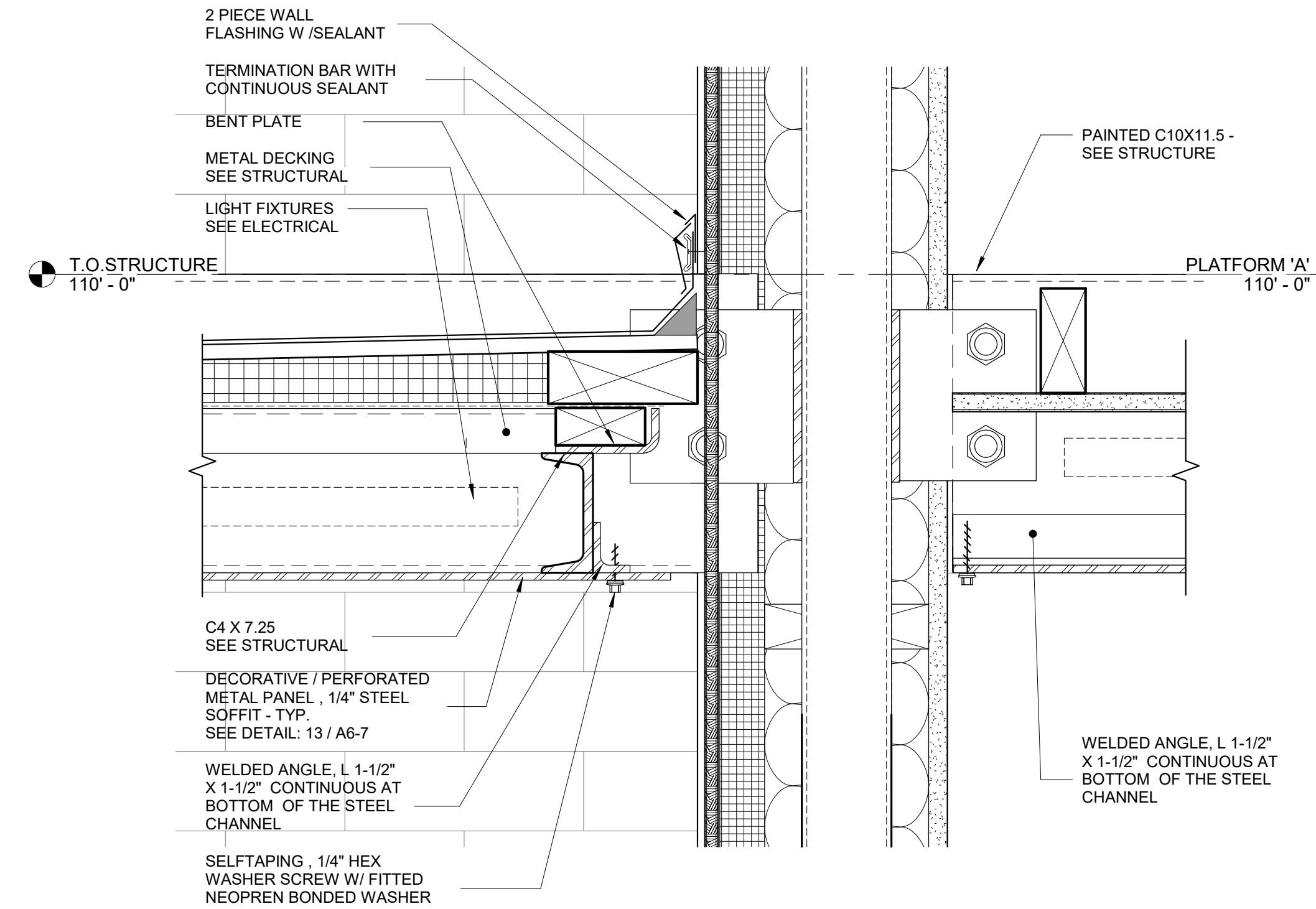
08 SUSPENDED STEEL CANOPY
A6-8 3" = 1'-0"



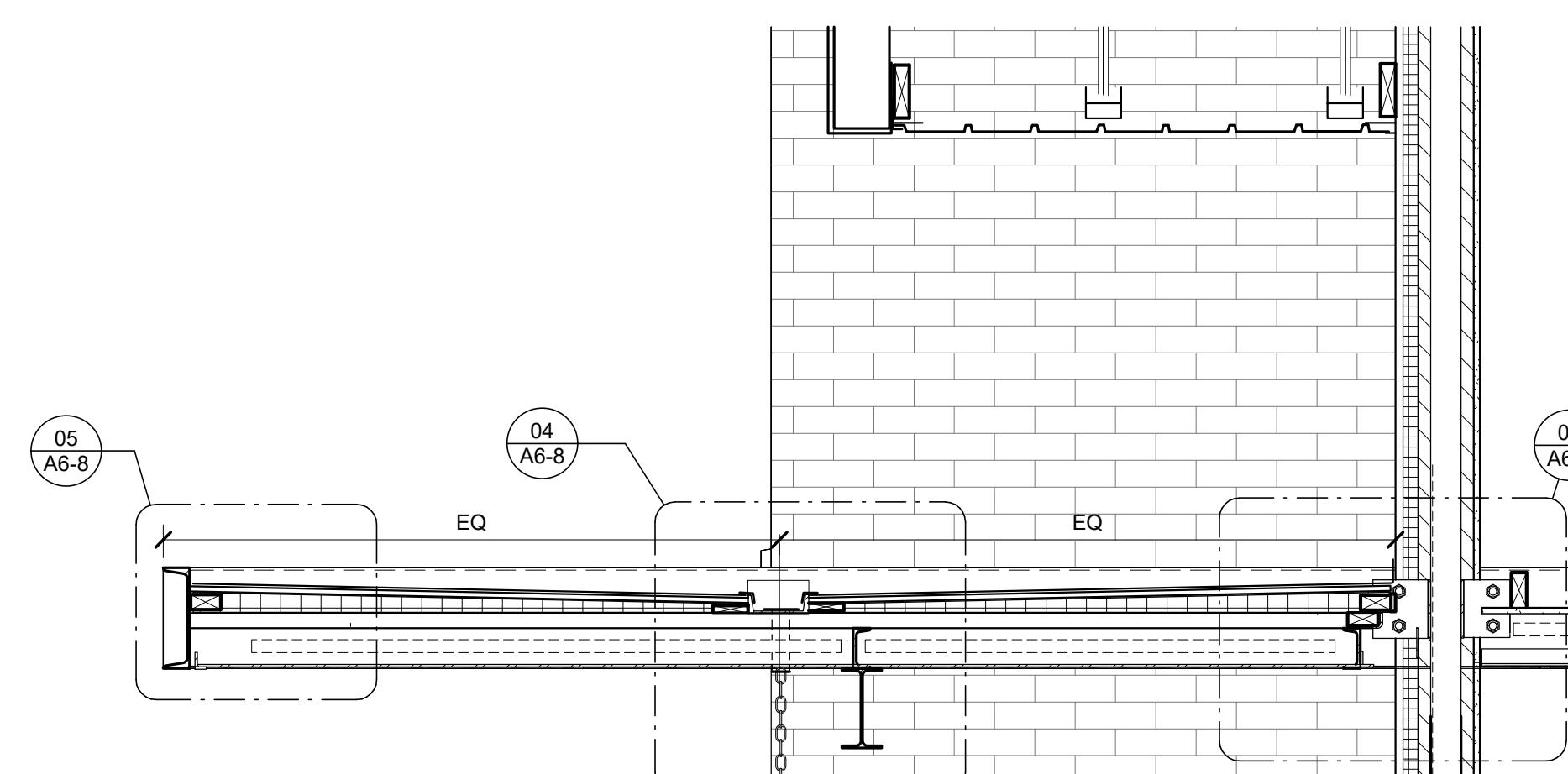
07 SUSPENDED STEEL CANOPY
A6-8 3" = 1'-0"



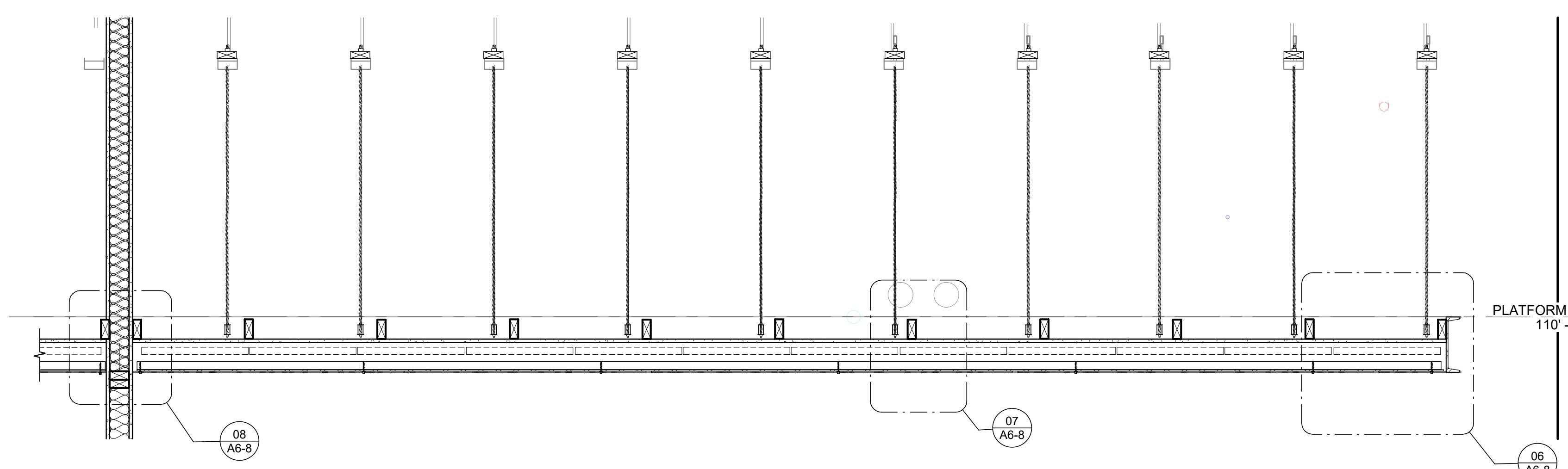
06 SUSPENDED STEEL CANOPY
A6-8 3" = 1'-0"



05 CANTILEVERED, ENTRY CANOPY
A6-8 3" = 1'-0"



01 SUSPENDED STEEL CANOPY
A6-8 3/4" = 1'-0"



02 CANTILEVERED, ENTRY CANOPY
A6-8 3/4" = 1'-0"

REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB
MICHAEL W. DOWLING
MICHAEL W. DOWLING

HELENA FIRESTATION #3

1872 KELLEHER LANE, HELENA, MT 59602

DOWLING ARCHITECTS | SHIVEH-ATTERTY ARCHITECTURE + ENGINEERING

734 N. Last Chance Gulch | Helena, MT 59601 | (406) 457-5500

INTERIOR, CEILING DETAILS

PROJECT #: 25-668

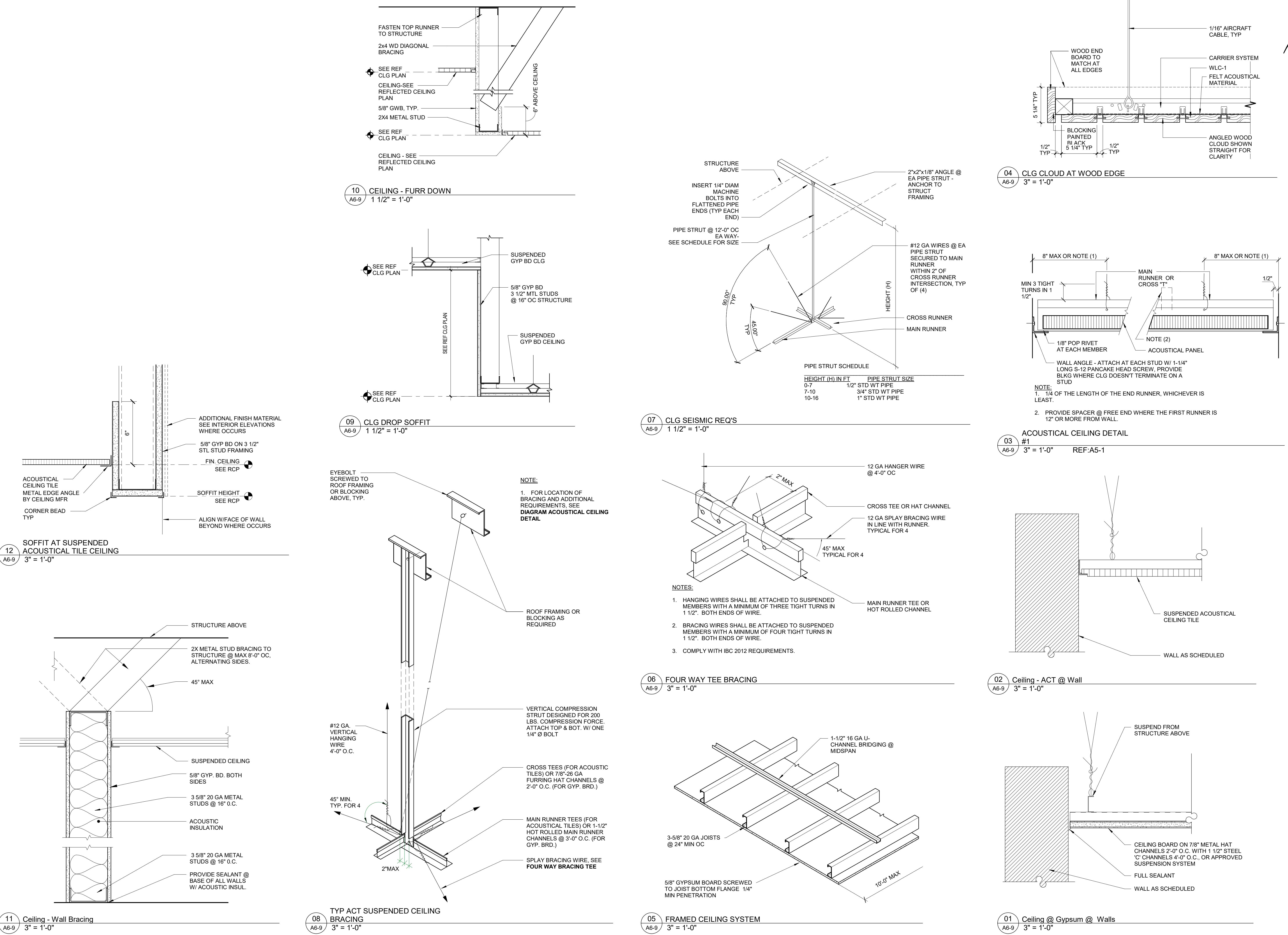
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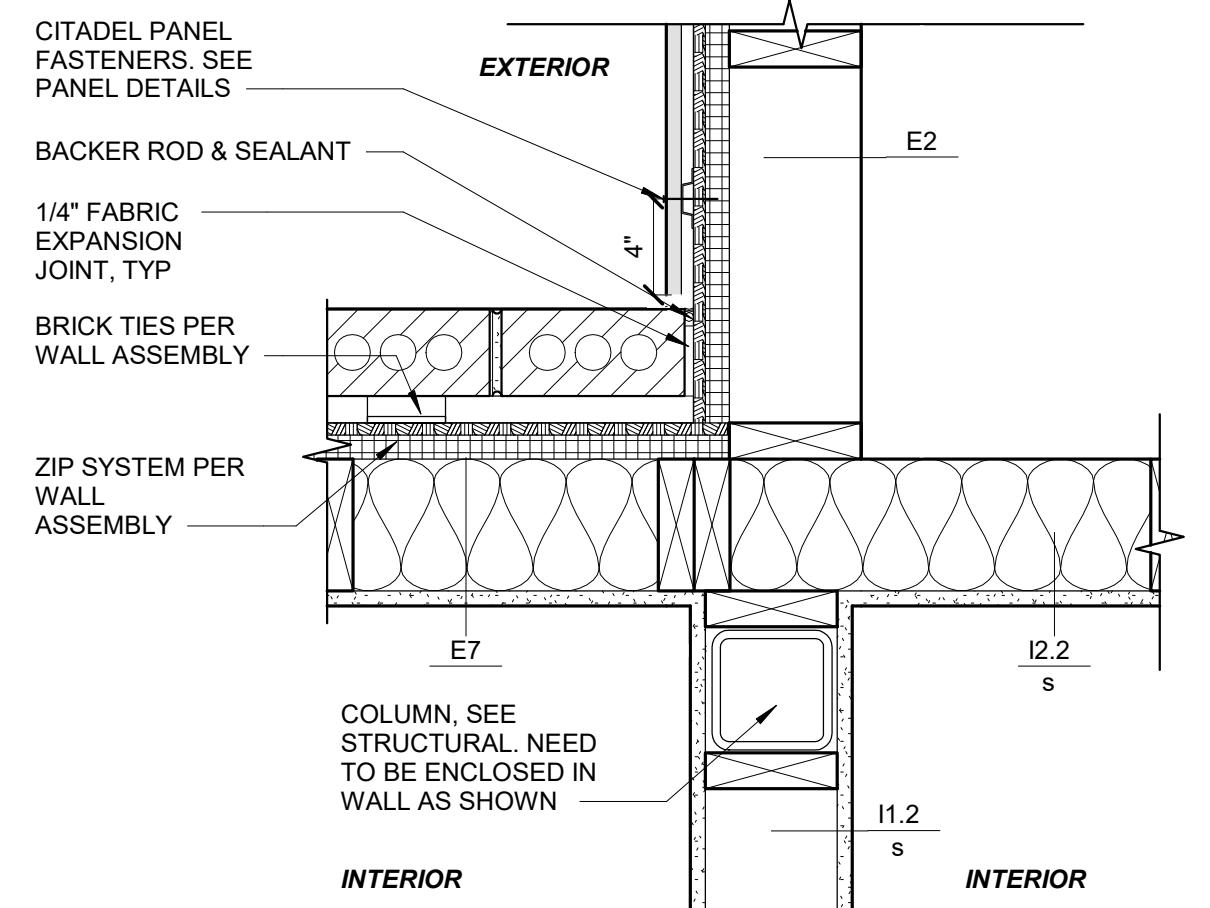
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A6-9

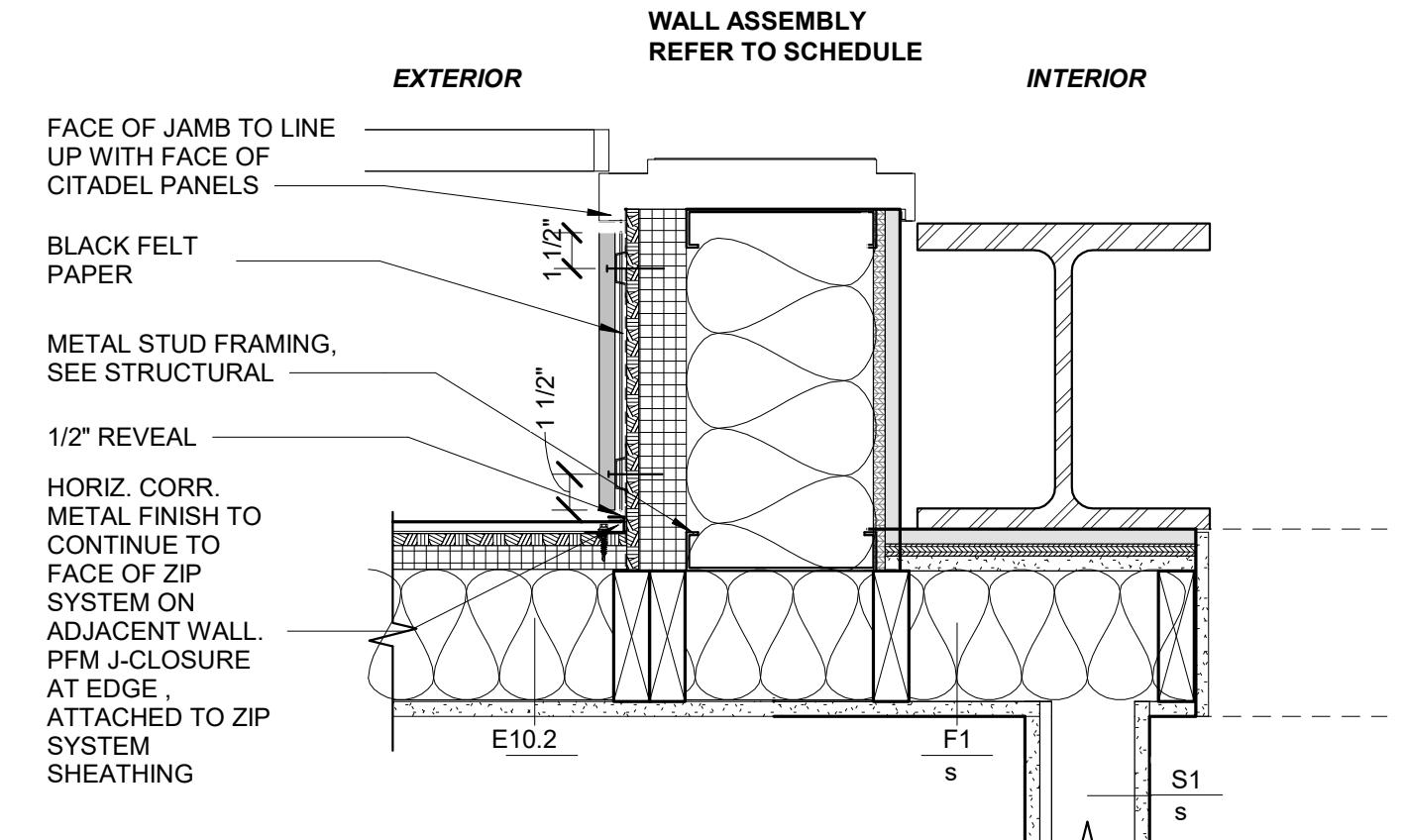
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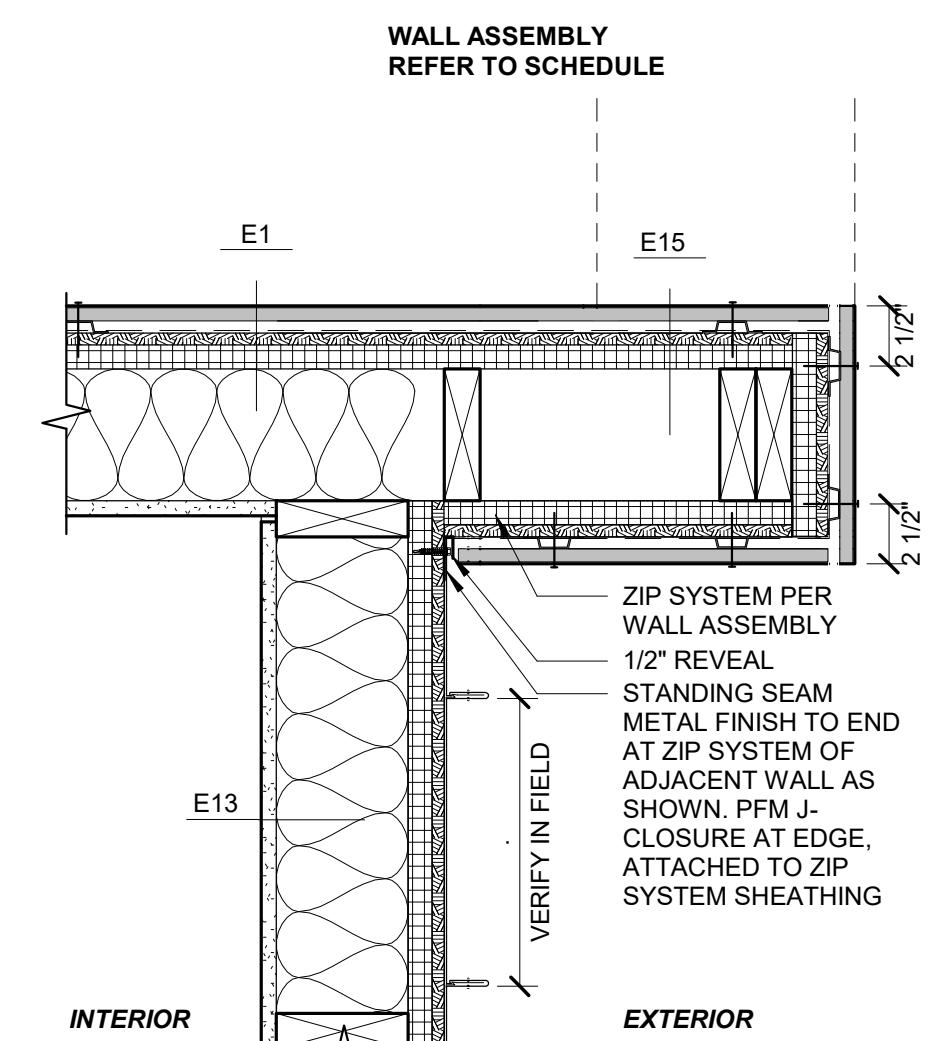




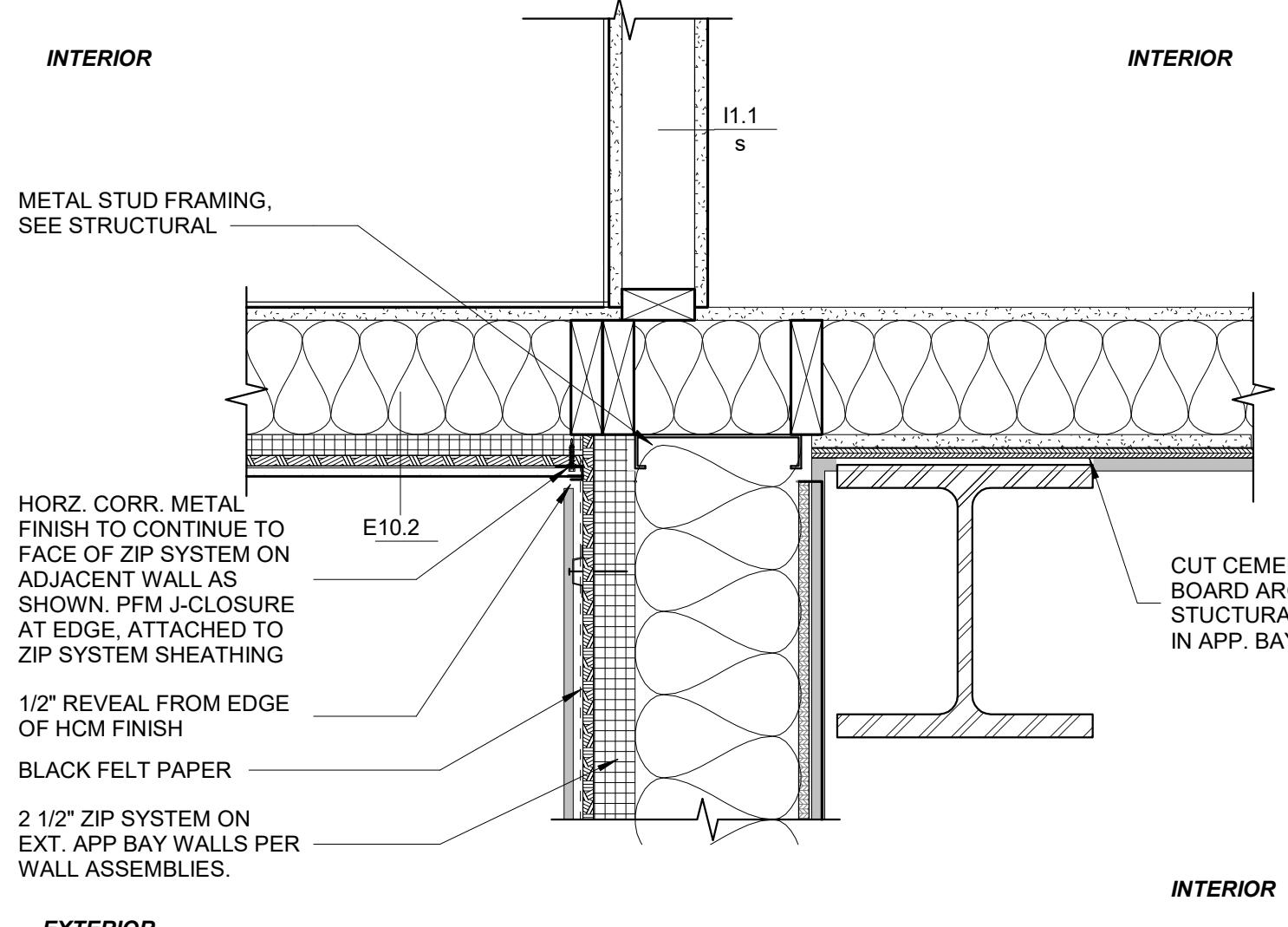
03 BRICK & CITADEL PANEL PLAN DETAIL
A6-10 1 1/2" = 1'-0" REF: A7-1



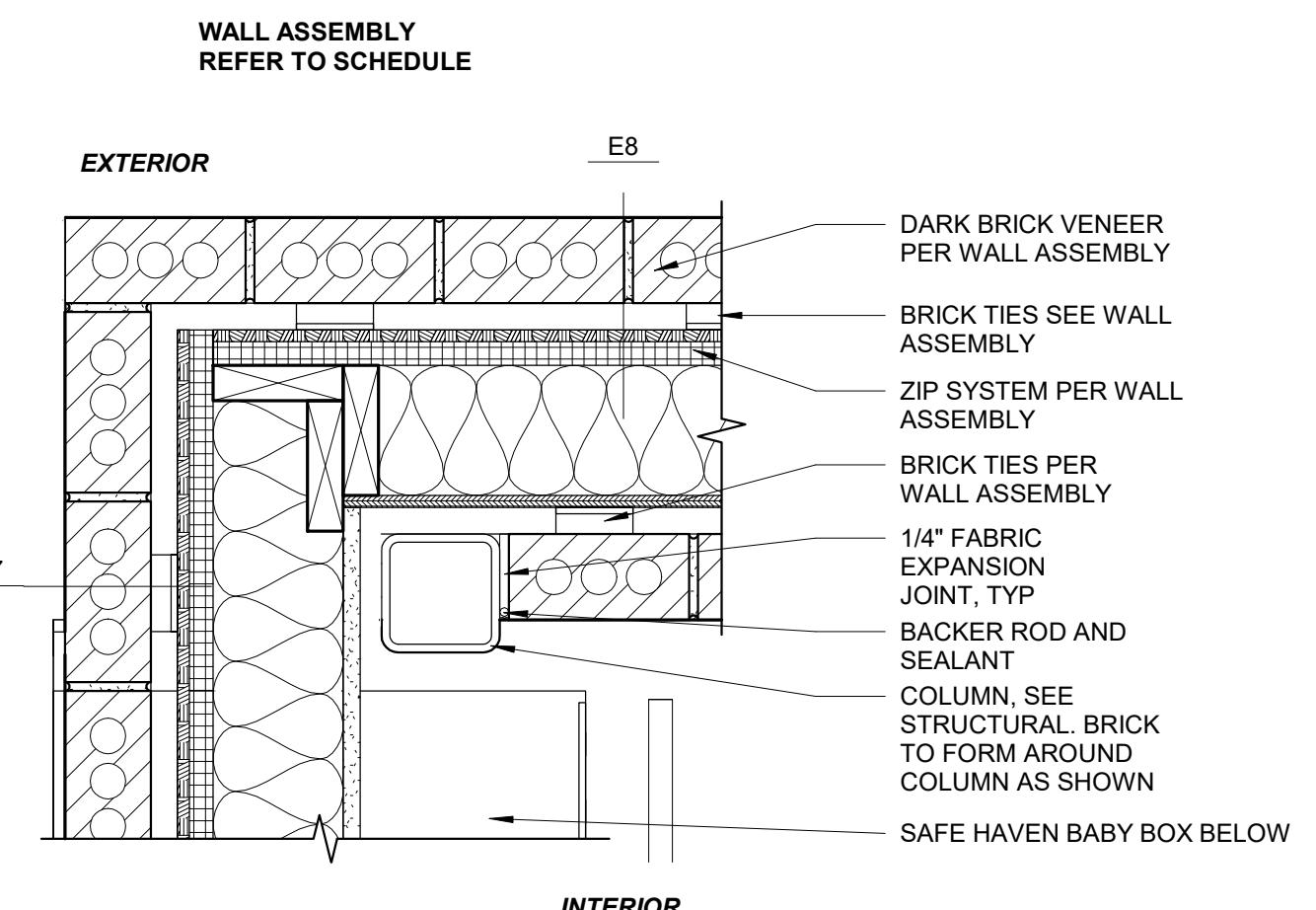
06 H.C.M. & CITADEL PANEL @ DOOR JAMB PLAN DETAIL
A6-10 1 1/2" = 1'-0" REF: A7-2



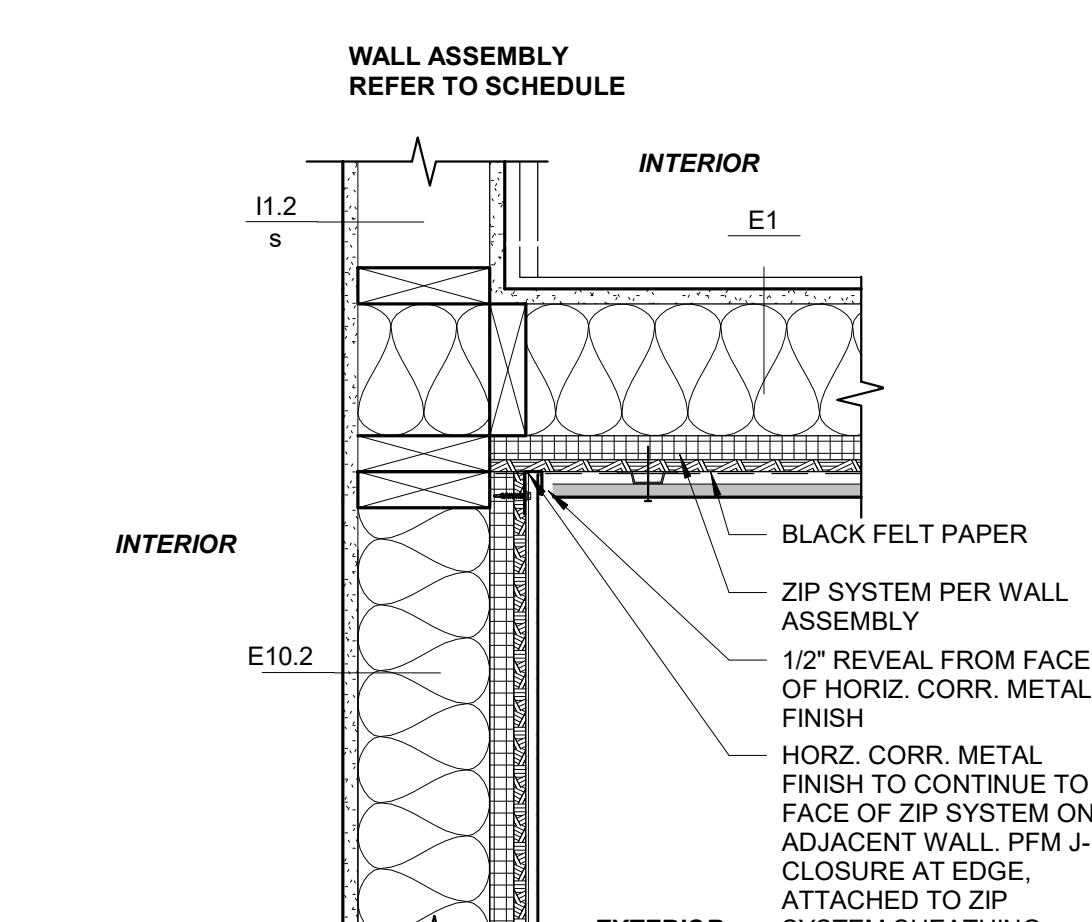
08 STANDING SEAM & CITADEL PANEL PLAN DETAIL
A6-10 1 1/2" = 1'-0" REF: A7-2



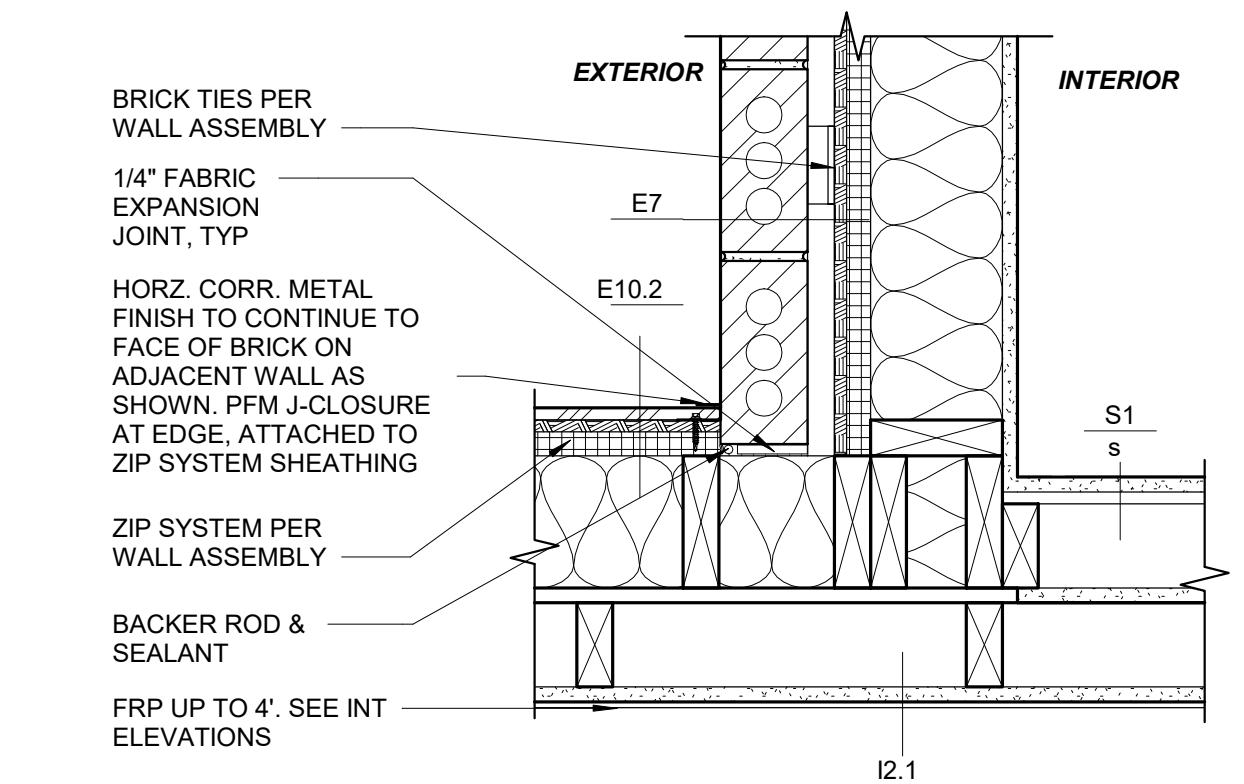
05 H.C.M. & CITADEL PANEL PLAN DETAIL
A6-10 1 1/2" = 1'-0" REF: A7-1



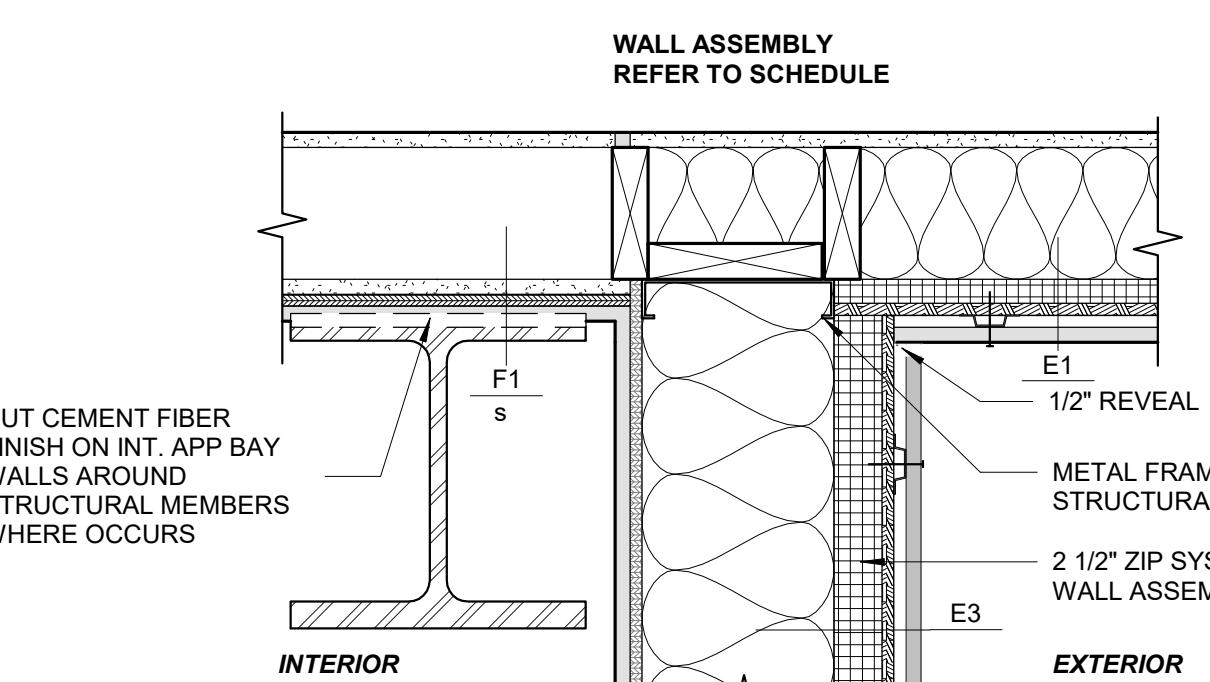
02 BRICK CORNER PLAN DETAIL
A6-10 1 1/2" = 1'-0" REF: A7-1



07 H.C.M. & CITADEL PANEL PLAN DETAIL
A6-10 1 1/2" = 1'-0" REF: A7-2



04 H.C.M. & BRICK PLAN DETAIL
A6-10 1 1/2" = 1'-0" REF: A7-1



01 CITADEL PANEL & CITADEL PANEL PLAN DETAIL
A6-10 1 1/2" = 1'-0" REF: A7-1

REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB
MICHAEL W. DOWLING
Architects, Inc.
Montana State of

HELENA FIRESTATION #3

1872 KELLEHER LANE, HELENA, MT 59602

DOWLING ARCHITECTS | ARCHITECTURE + ENGINEERING

DOOR & WINDOW DETAILS

PROJECT #:

25-668

ISSUE DATES:

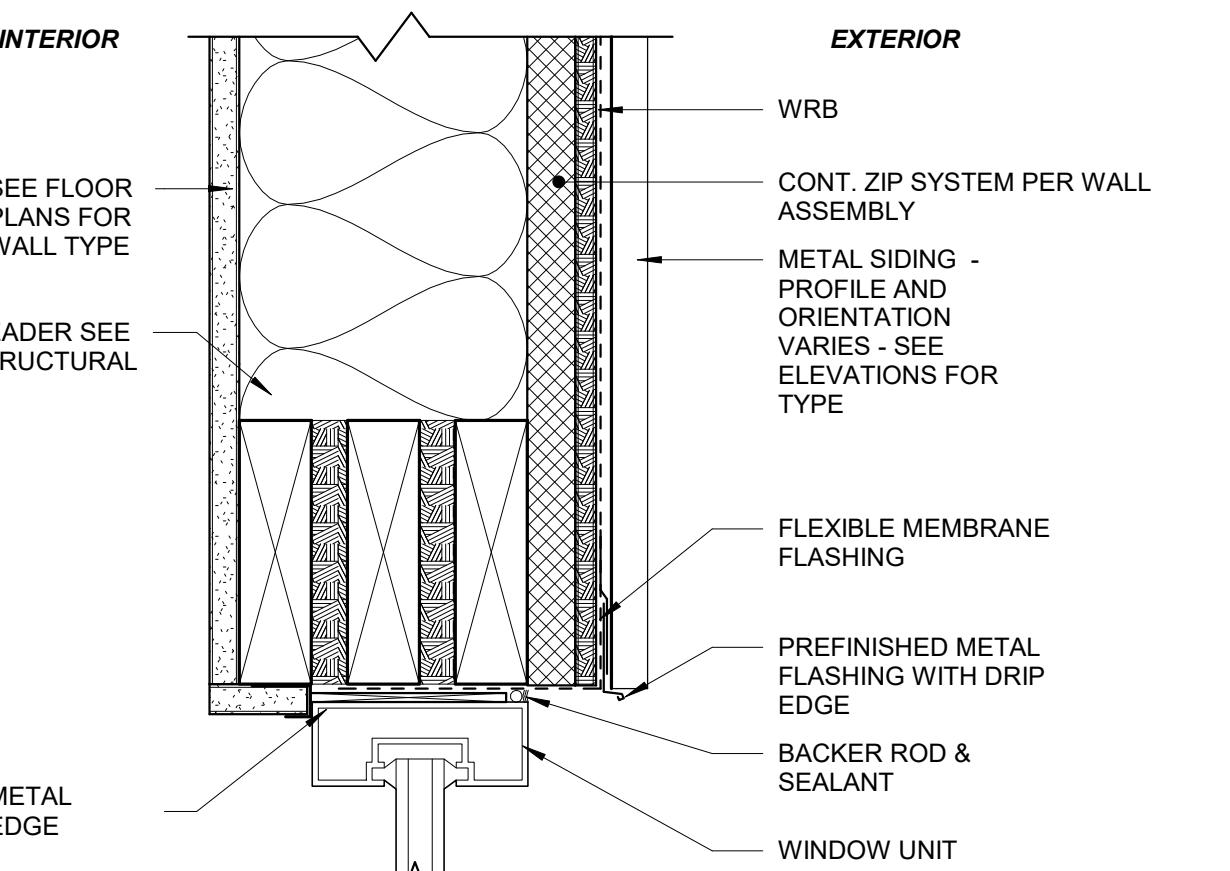
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JS/C

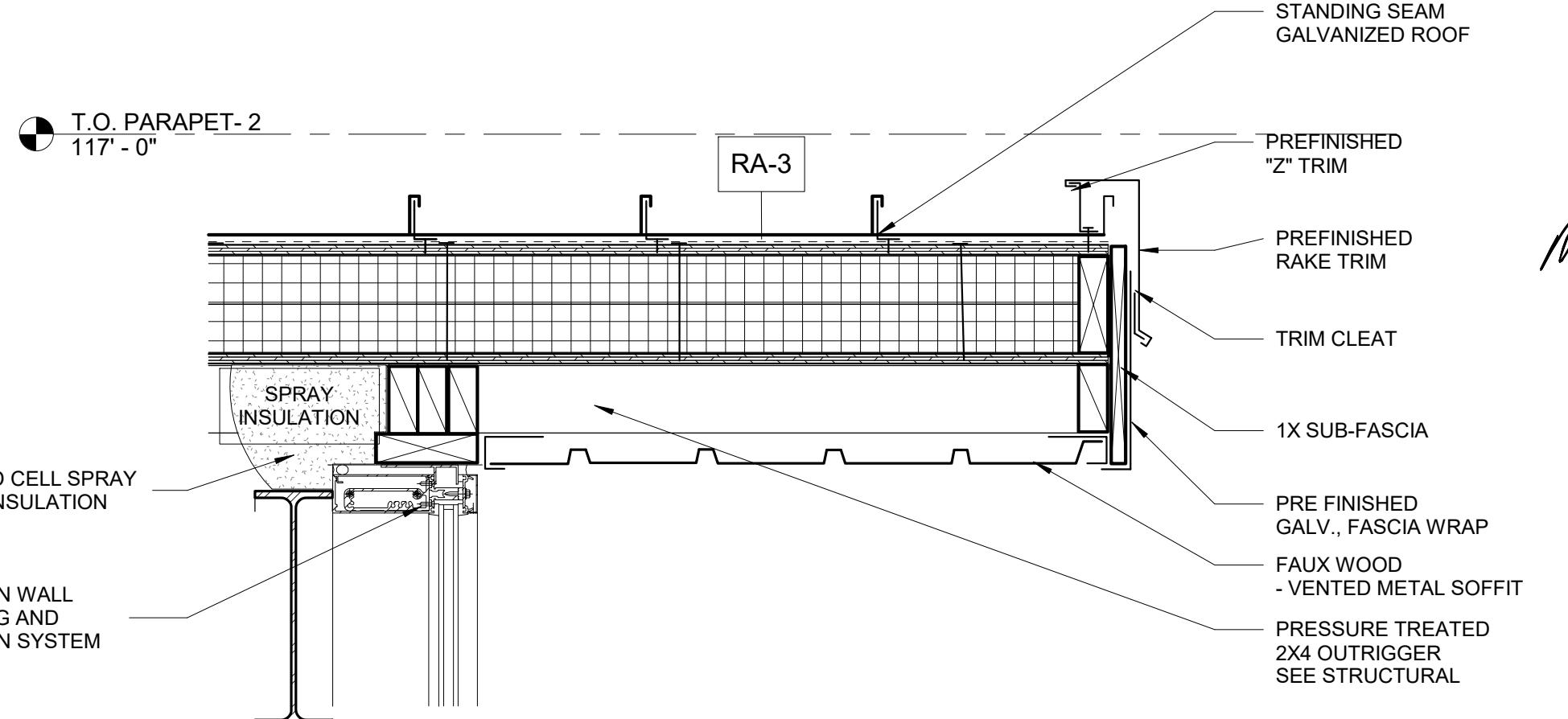
100% CONSTRUCTION SET

A6-11

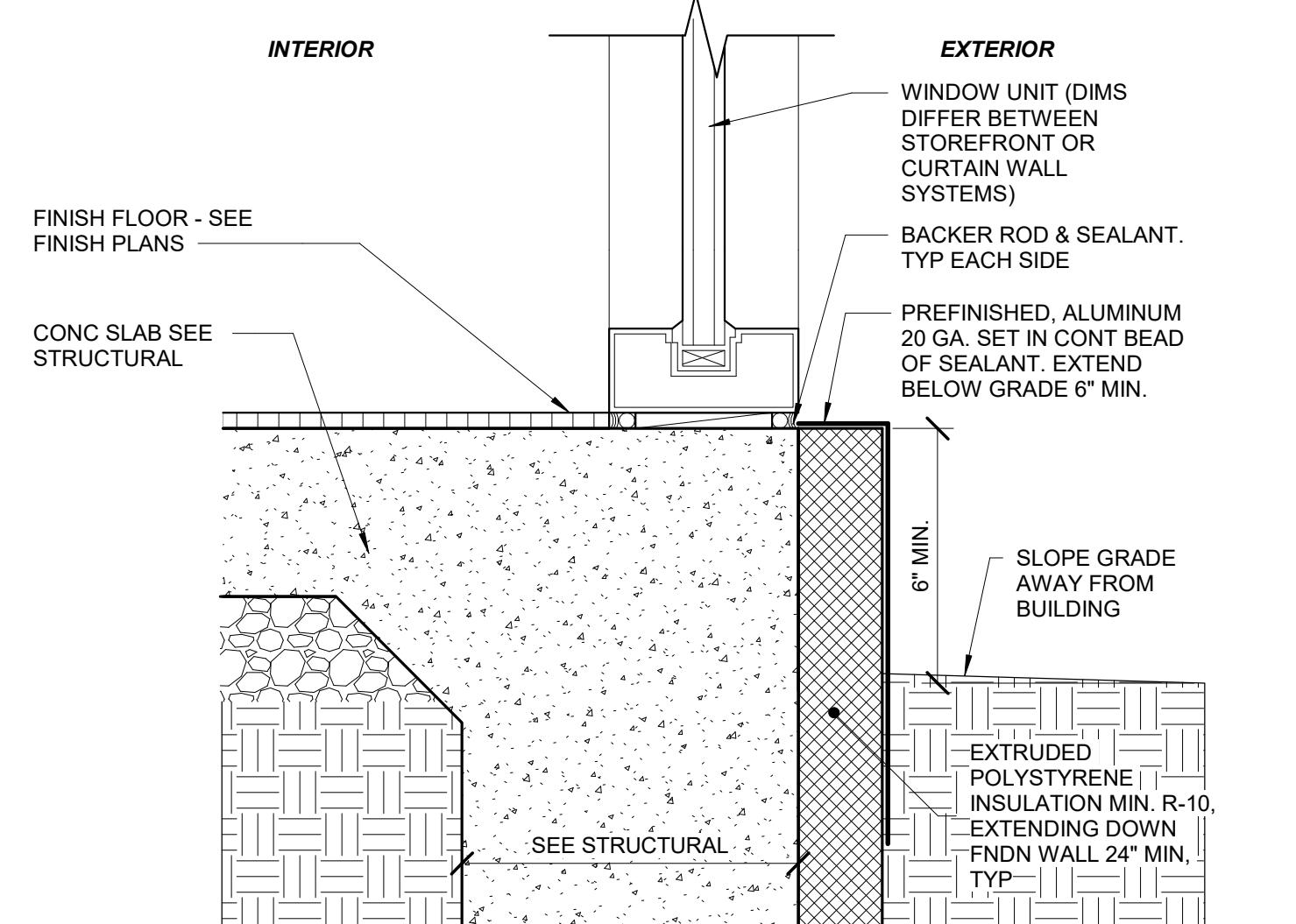
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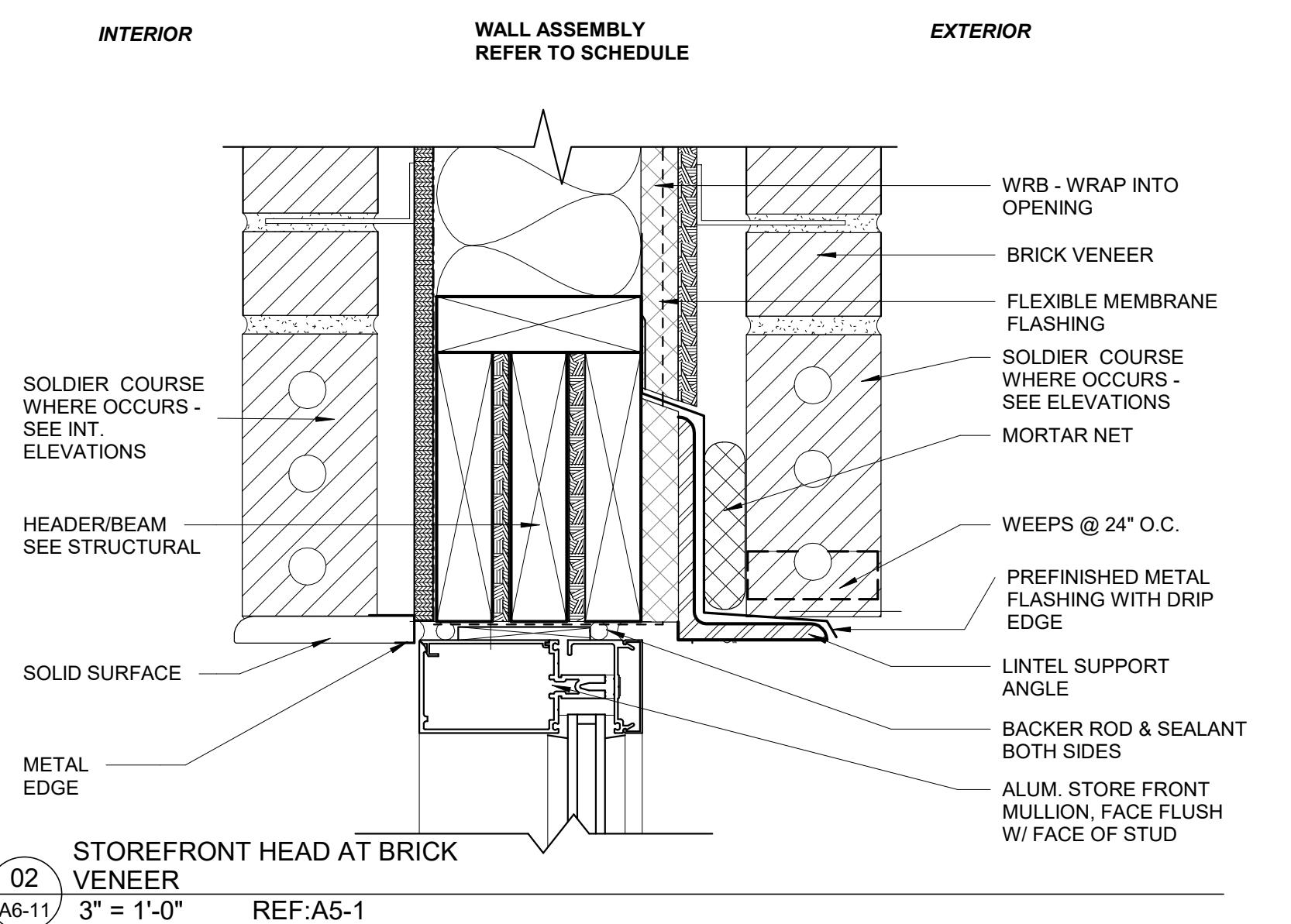
06 STOREFRONT HEAD AT CORRUGATED METAL SIDING
A6-11 3" = 1'-0" REF:A5-1



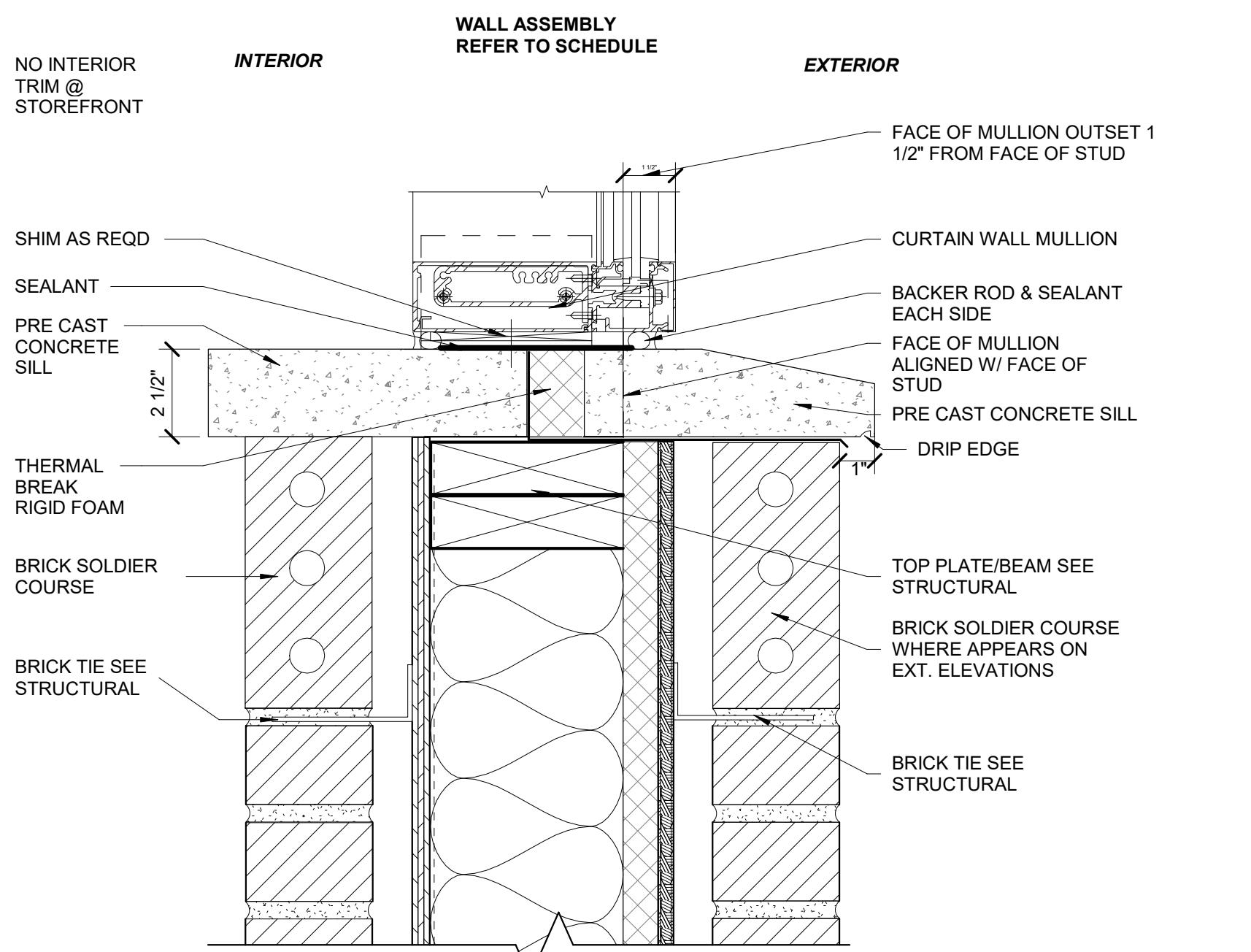
03 Section 1 - Callout 4 - Callout 1
A6-11 1 1/2" = 1'-0" REF:A5-1



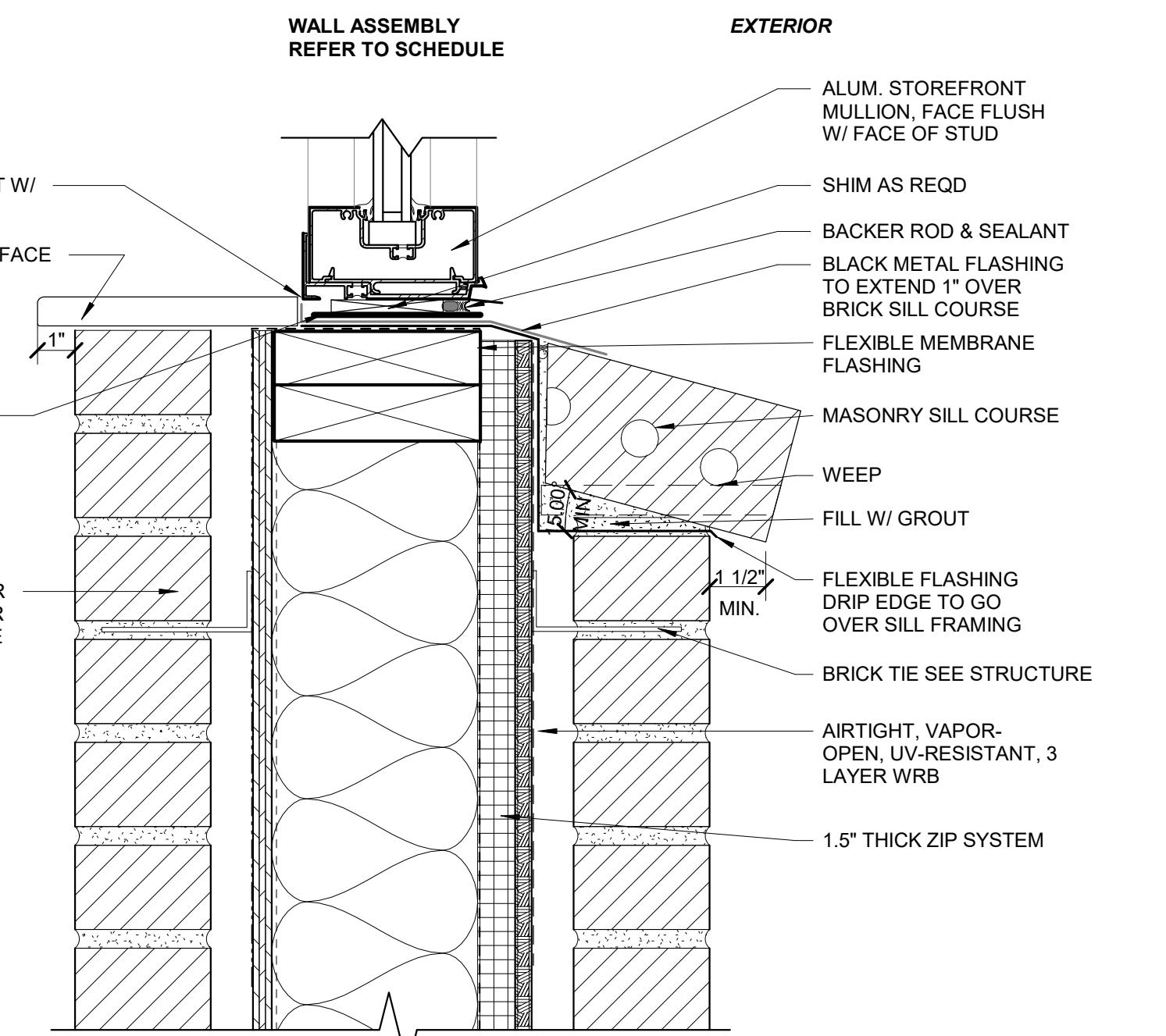
05 STOREFRONT SILL @ CONC
A6-11 3" = 1'-0" REF:A5-1



02 VENEER
A6-11 3" = 1'-0" REF:A5-1



04 CURTAINWALL WINDOW SILL
A6-11 3" = 1'-0" REF:A5-1



01 STOREFRONT AT BRICK
01 VENEER W/ MASONRY SILL
A6-11 3" = 1'-0" REF:A5-1

REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB
Michael W. Dowling
State of Montana

HELENA FIRESTATION #3

1872 KELLEHER LANE, HELENA, MT 59602

DOWLING ARCHITECTS | ARCHITECTURE + ENGINEERING
734 N. Last Chance Gulch | Helena, MT 59601 | (406) 457-5500
www.dowlingarchitects.com

DOOR & WINDOW DETAILS

PROJECT #: 25-668

ISSUE DATES:

10/22/2025	11/30/2025
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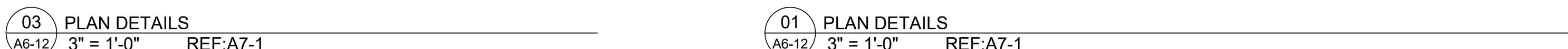
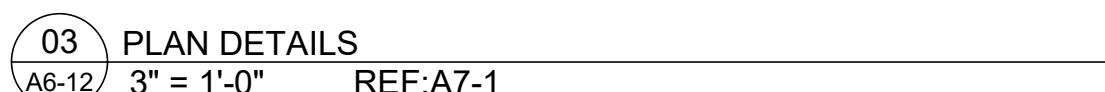
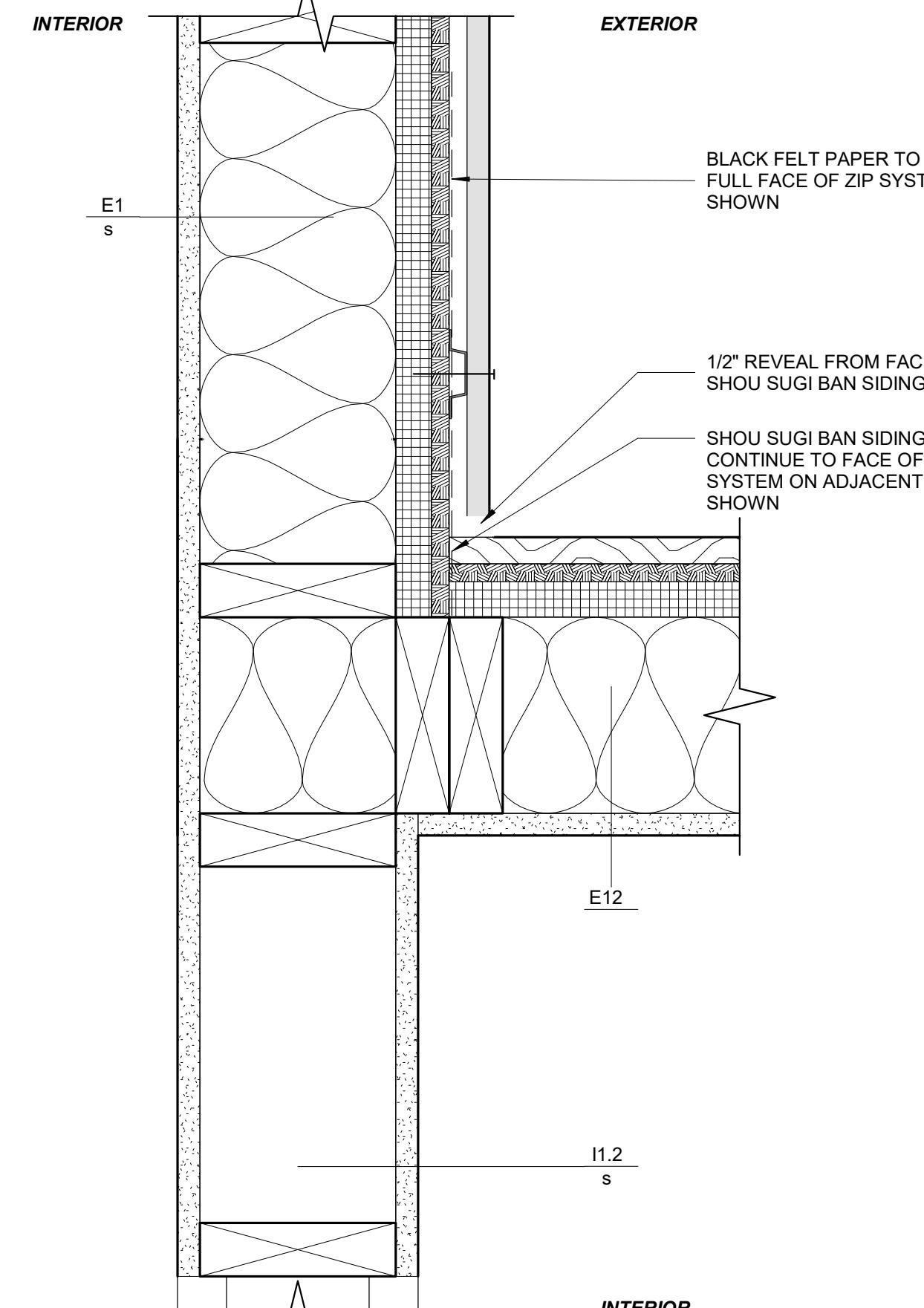
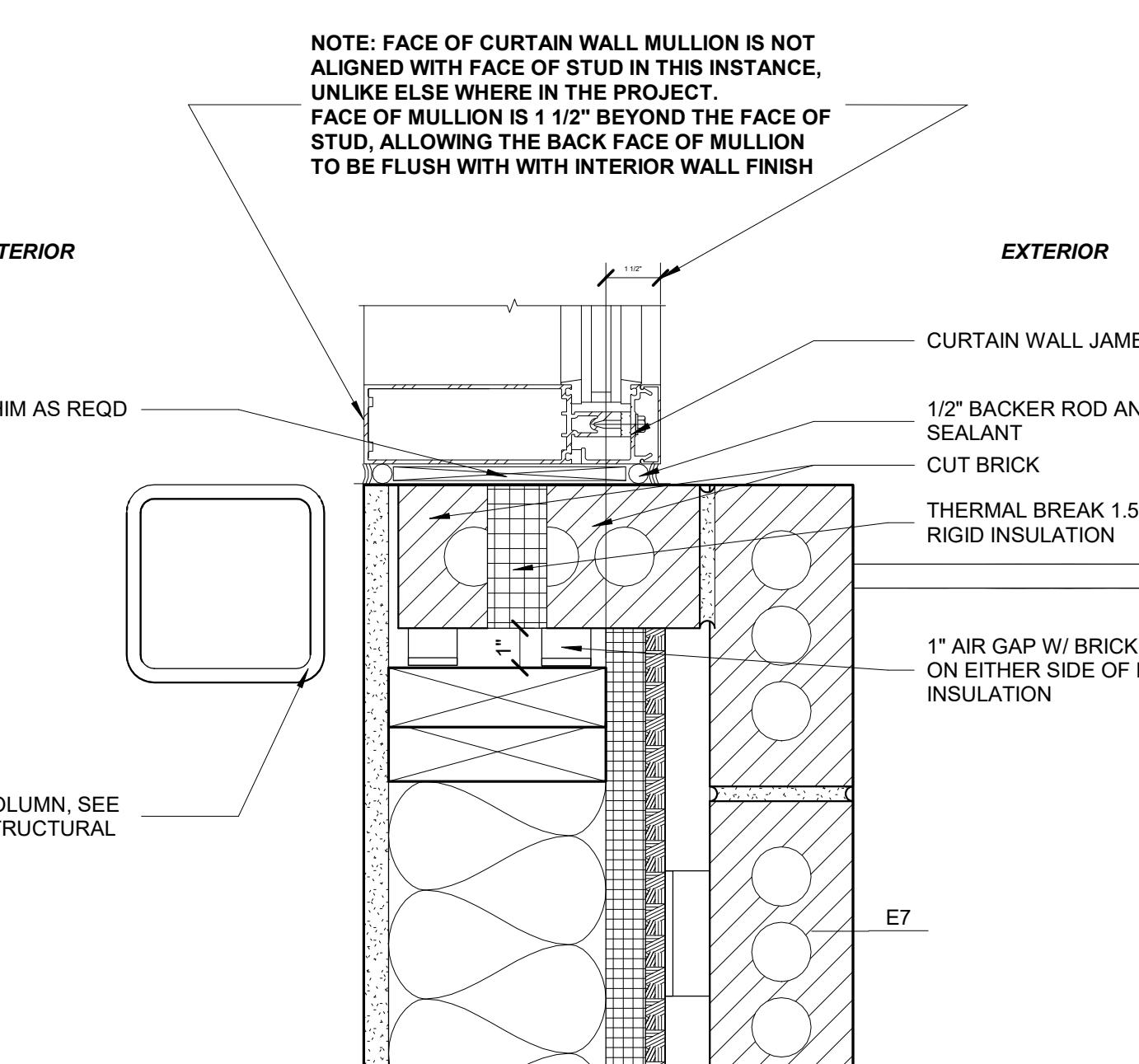
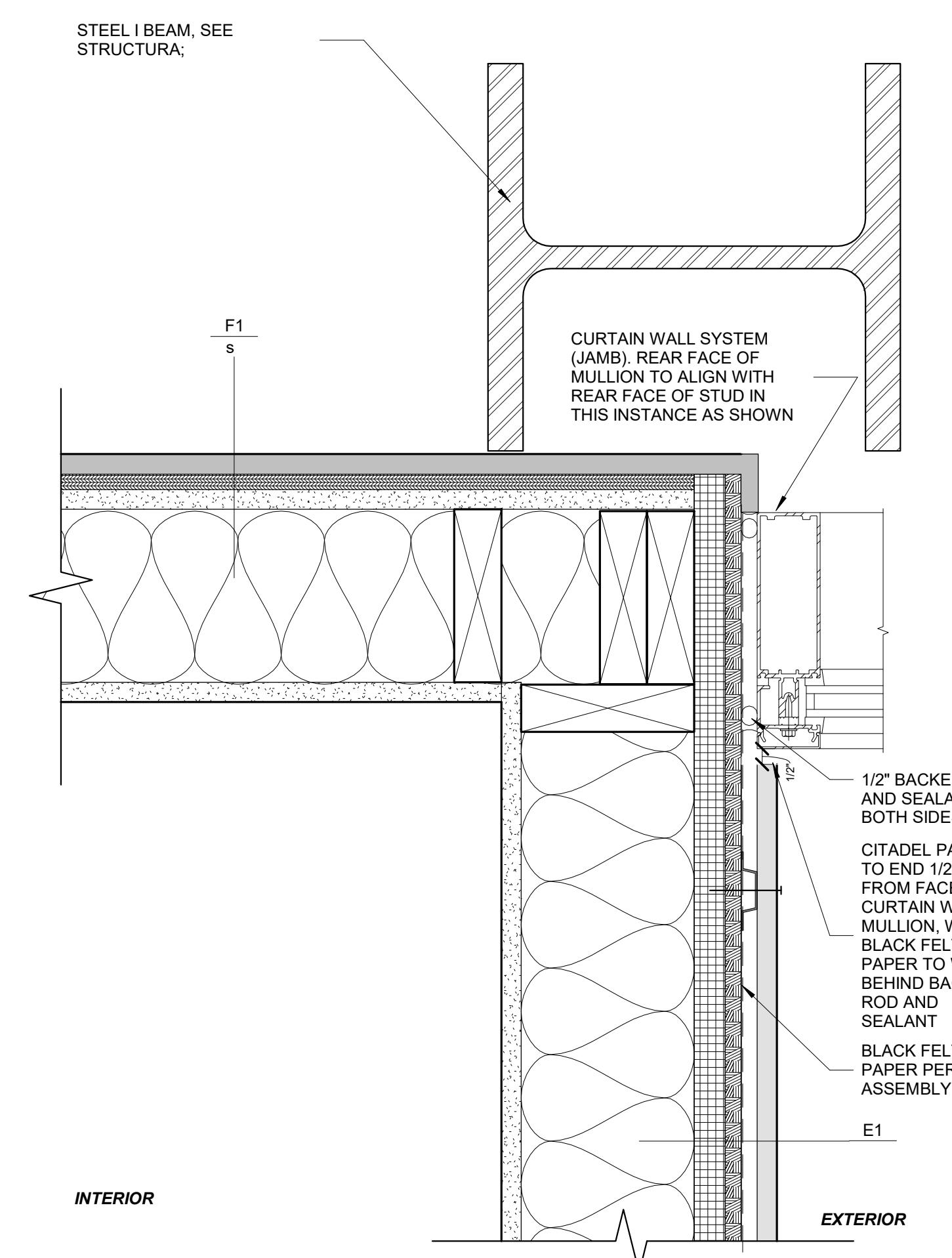
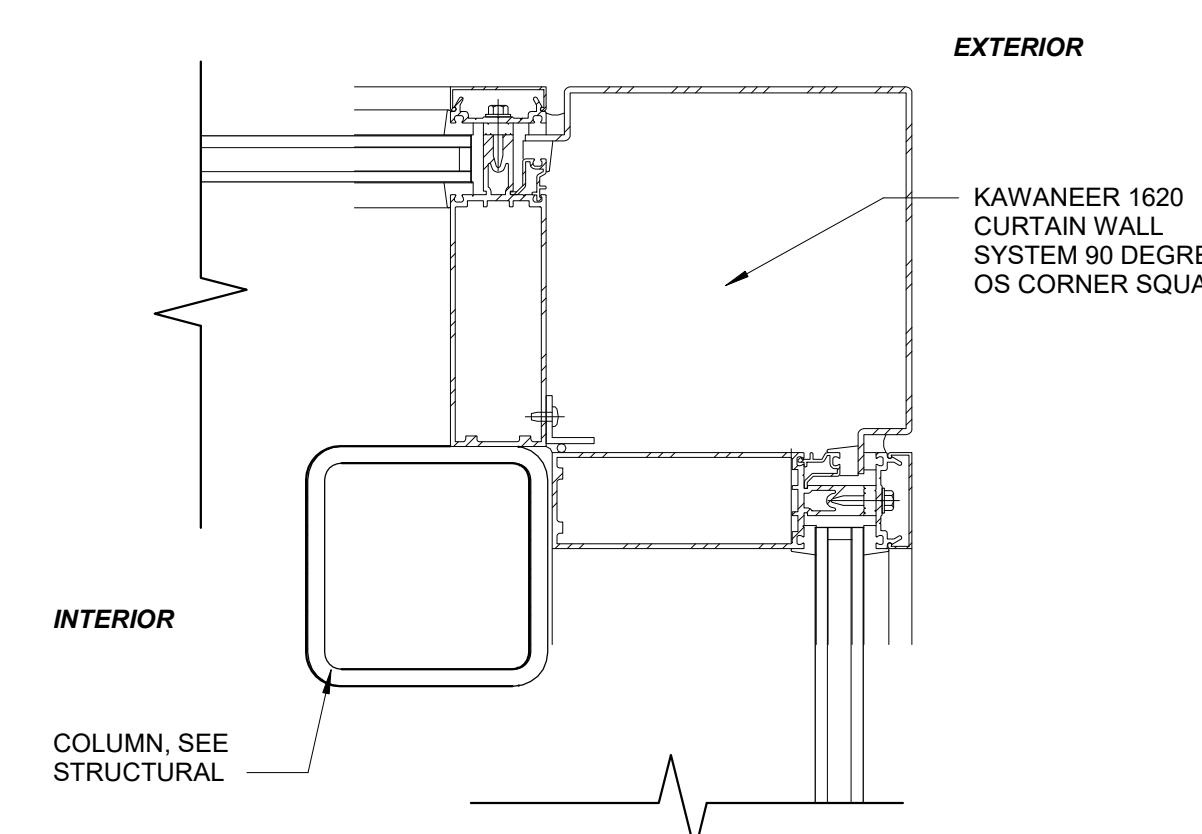
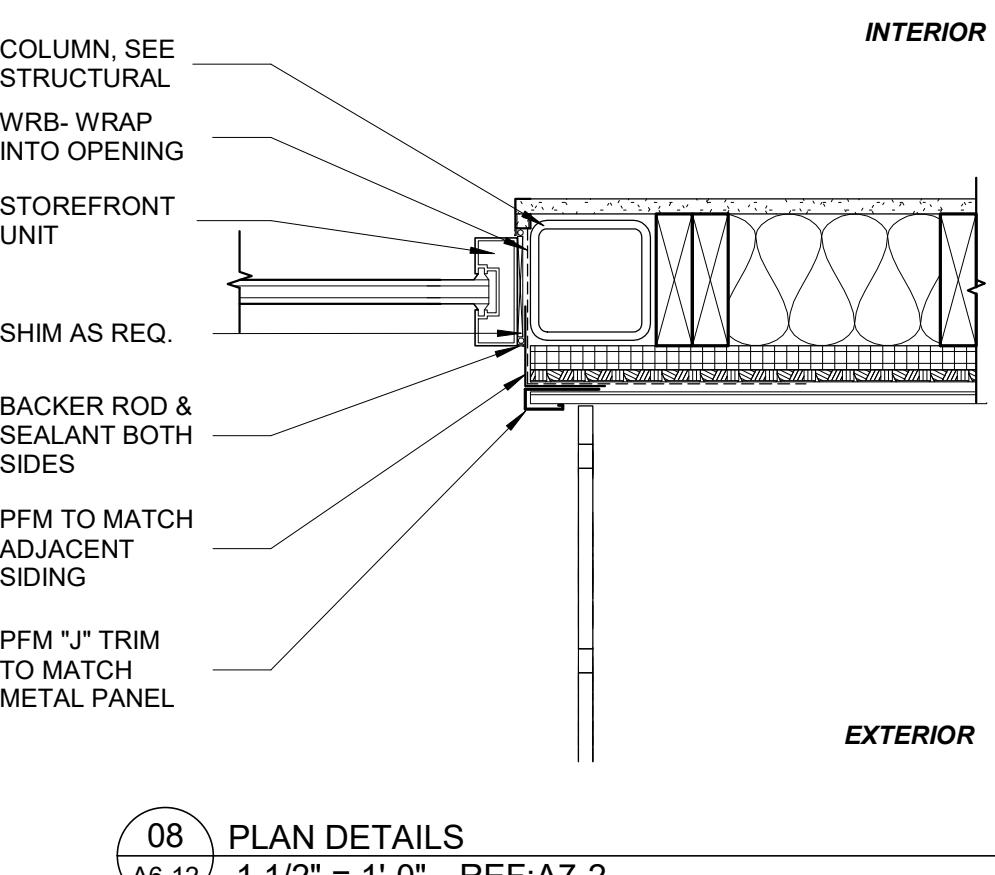
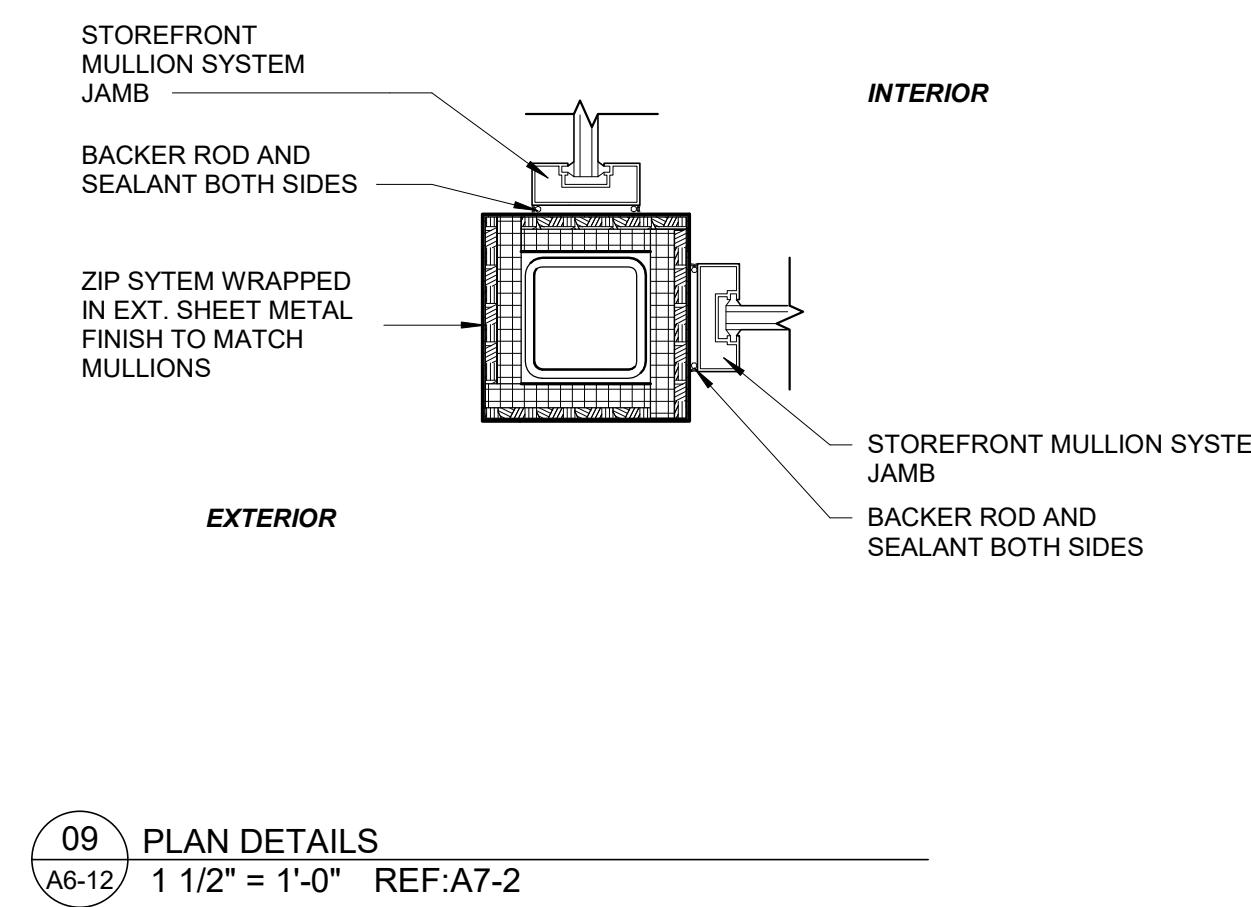
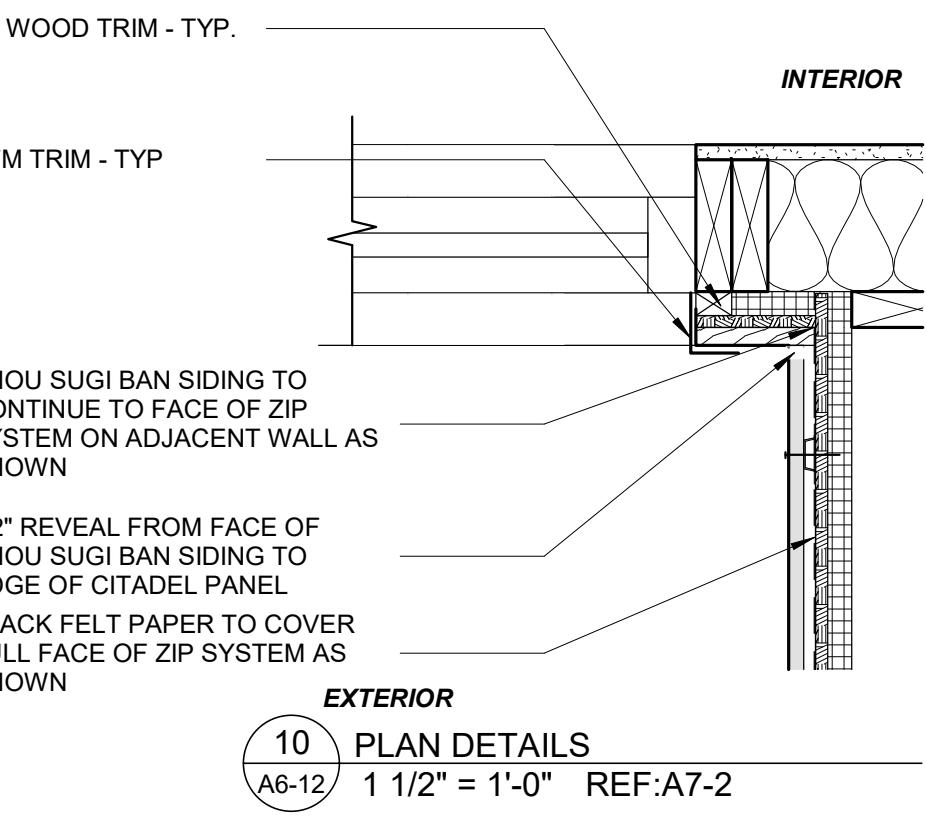
DRAWN BY: JS/C

REVISIONS:

10.22.25

100% CONSTRUCTION SET

A6-12



HELENA FIRESTATION #3

1872 KELLER LANE, HELENA, MT 59602

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734 N. Last Chance Gulch | Helena, MT 59601 | (406) 457-5500 | www.dowlingarch.com

DOOR & WINDOW DETAILS

PROJECT #: 25-668

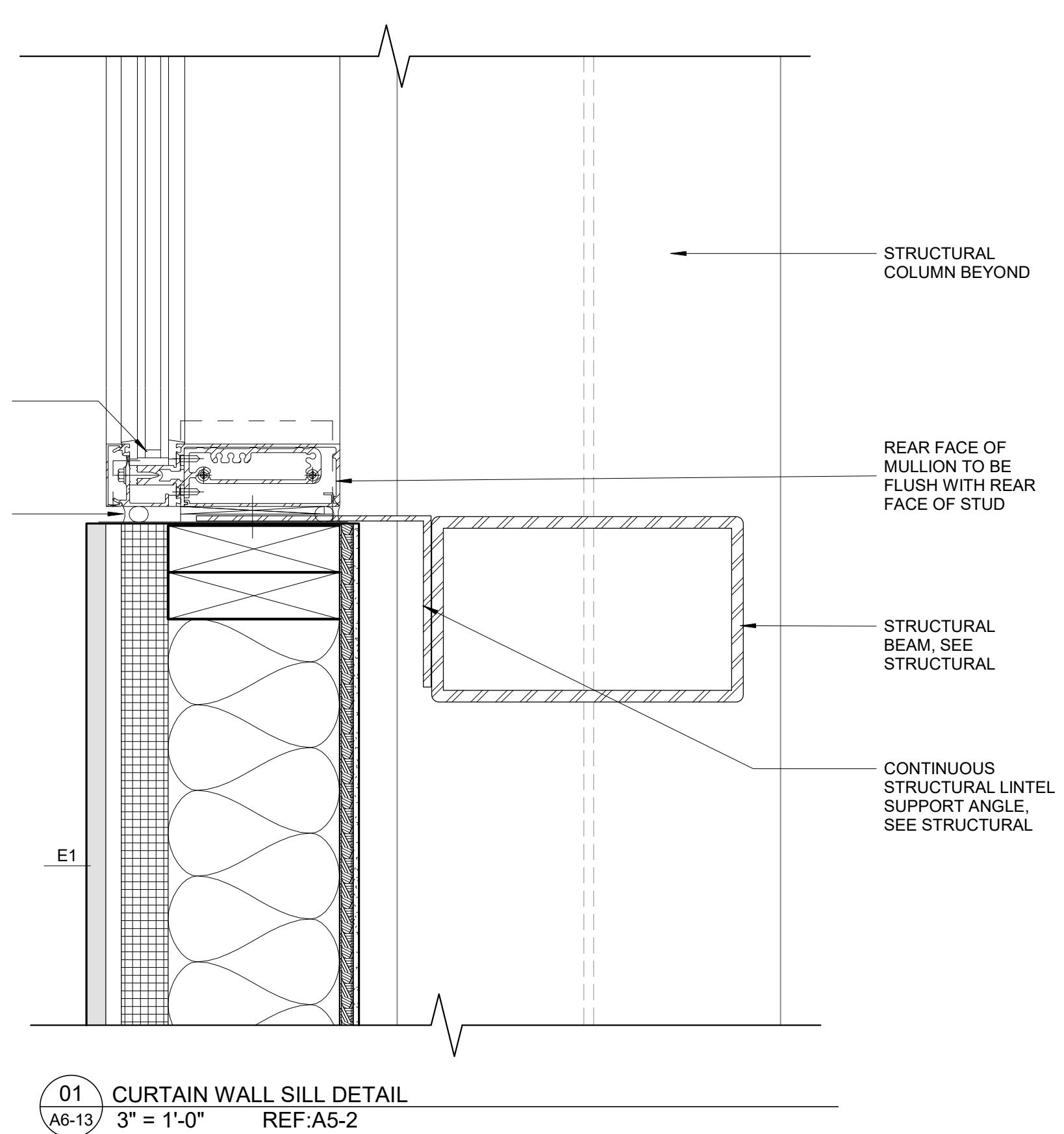
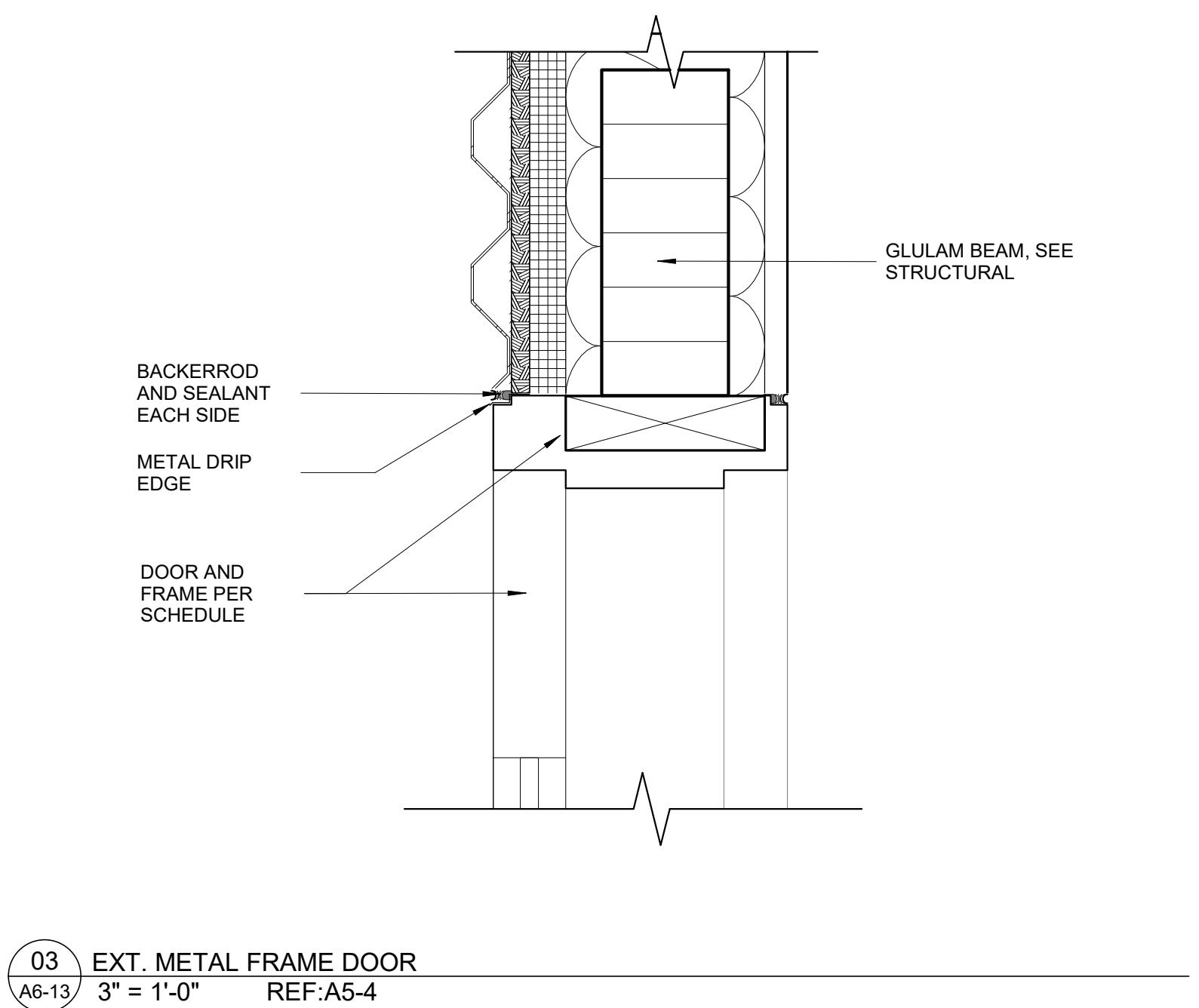
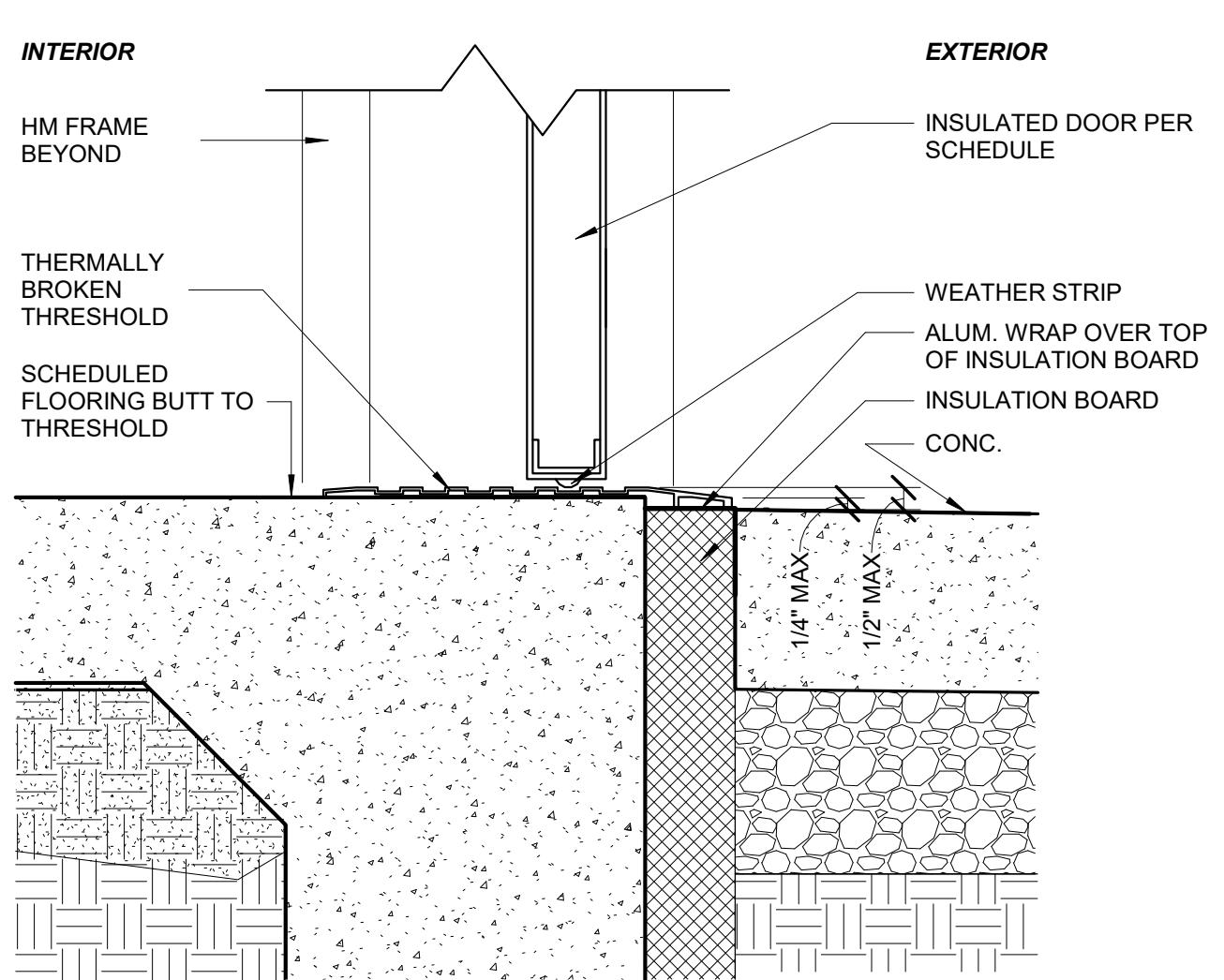
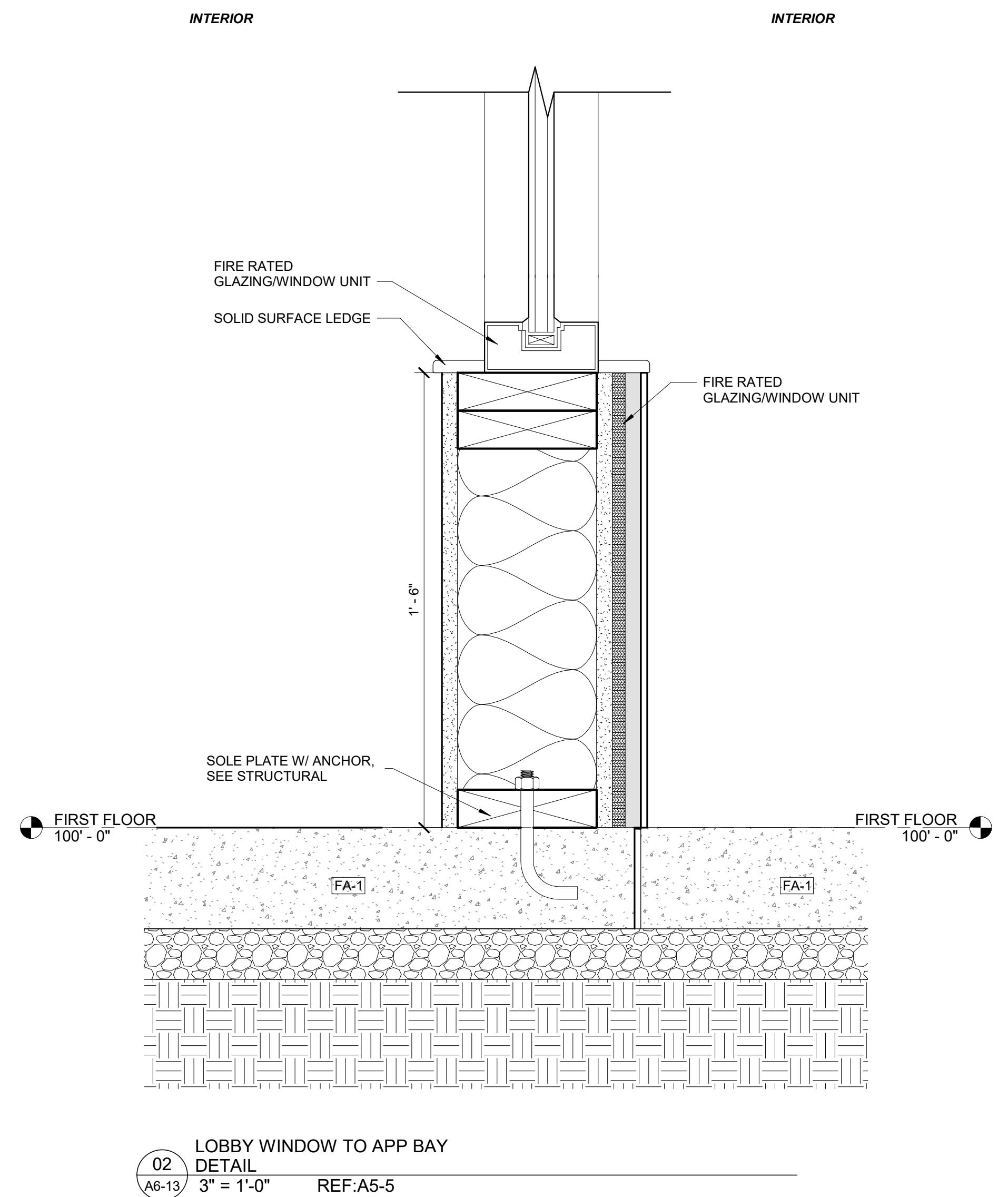
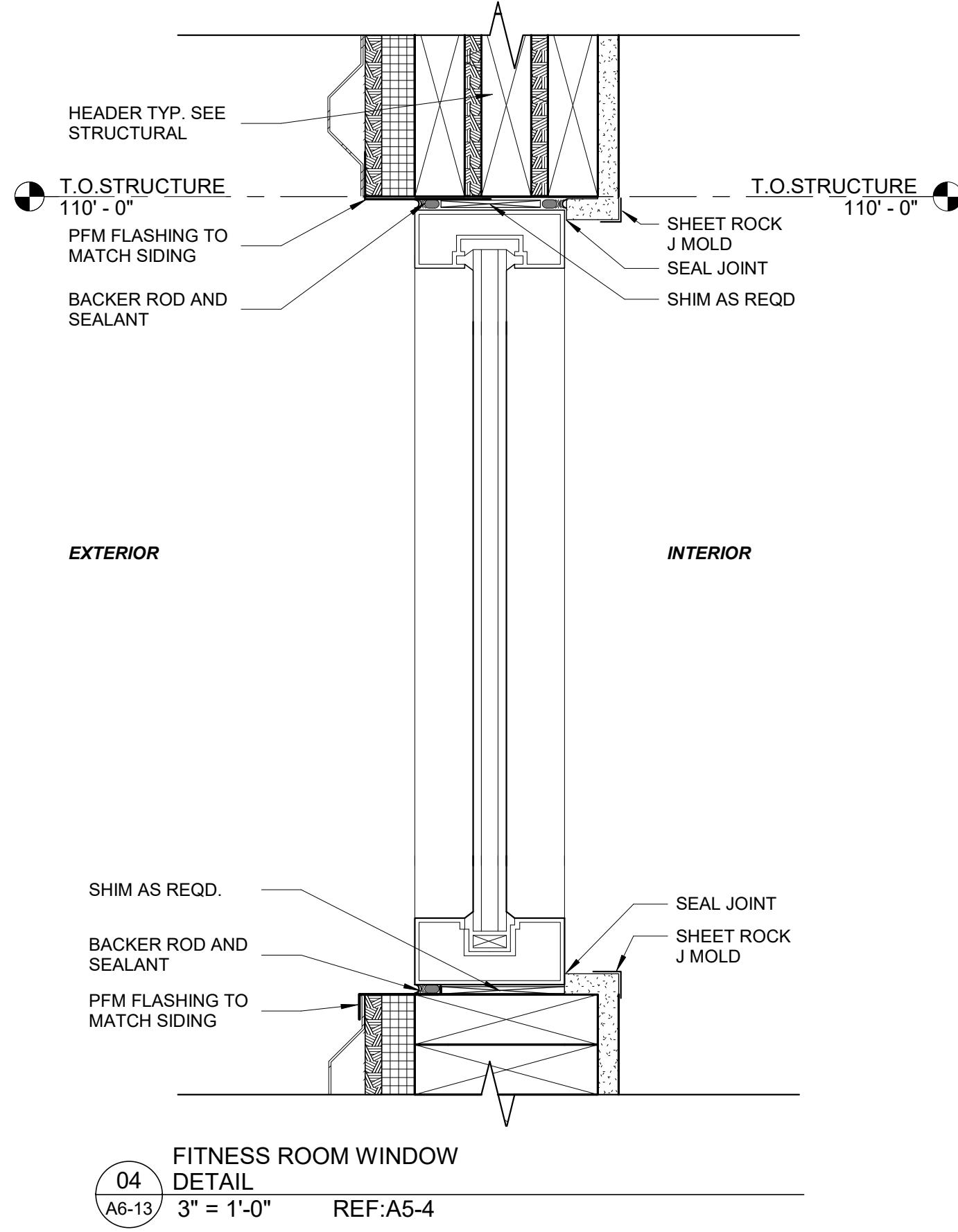
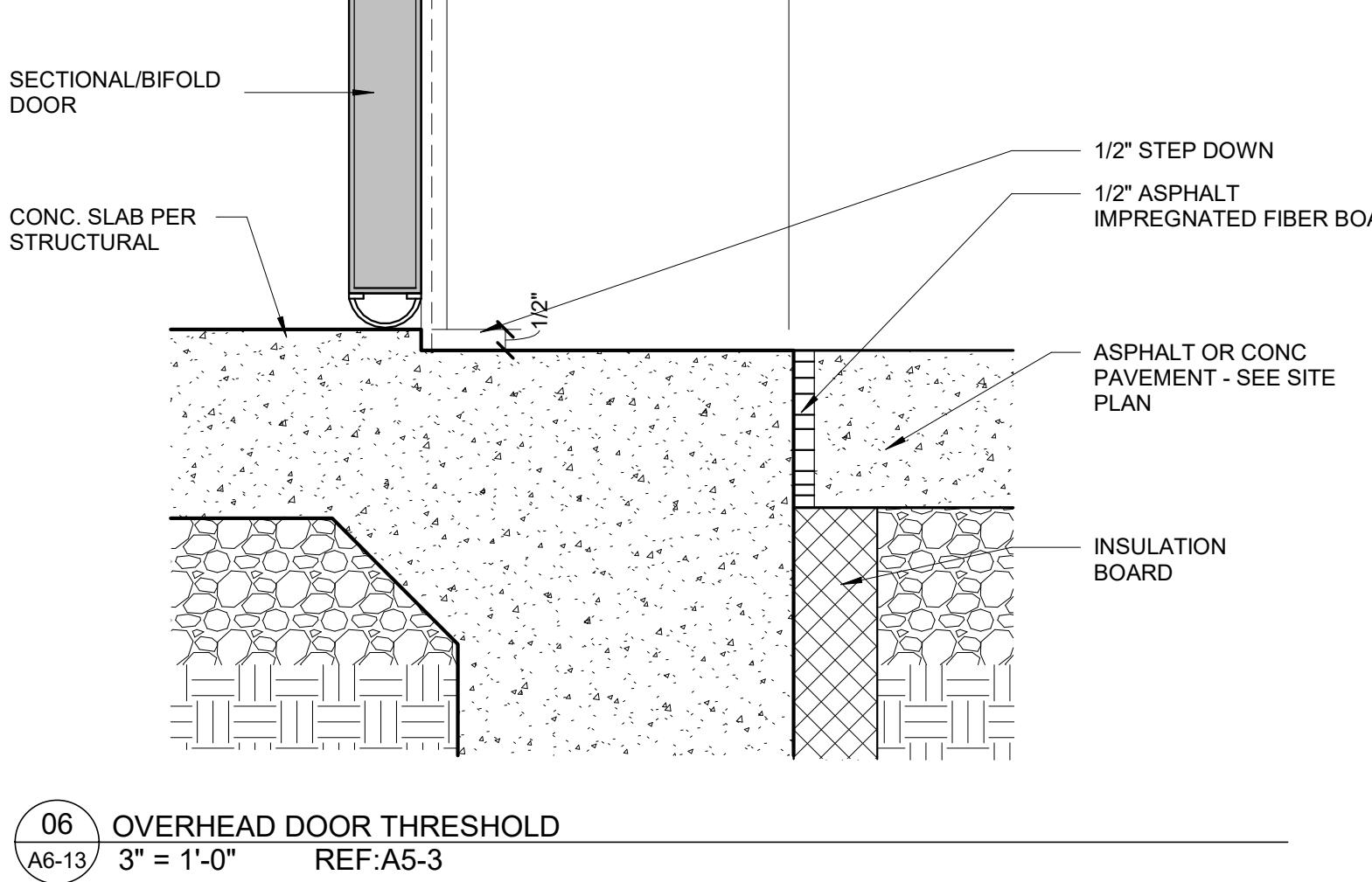
ISSUE DATES:

100% CONSTRUCTION SET

DRAWN BY: JS/C

A6-13

10.22.25



REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB
State of Montana

GENERAL NOTES:

1. DIMENSIONS ARE TO GRID, FACE OF STUD, MASONRY, OR DOOR/WINDOW OPENINGS. DIMENSIONS TO OPENINGS ARE NOMINAL. VERIFY ALL OPENINGS WITH ROUGH OPENING REQUIREMENTS.
2. ALL DOOR OPENINGS PERPENDICULAR TO A WALL ARE 6' MIN. TO THE WALL FRAMING UNO.
3. SEE SHEET A1-2 FOR WALL TYPES.
4. ALL INTERIOR WALL TYPES ARE 11s UNO.
5. ALL EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.
6. ALL SIGNAGE TO COMPLY WITH IBC SECTION 1110 AND APPLICABLE ICC/ANSI PROVISIONS. SEE SPECIFICATIONS.

HELENA FIRESTATION #3

1872 KELLERHER LANE, HELENA, MT 59602

DOWLING | SHIVEH-ATTERTY ARCHITECTURE + ENGINEERING

734 N. Last Chance Gulch | Helena, MT 59601 | (406) 457-5500 | www.dowlingshiveh.com

ENLARGED NORTH FIRST FLOOR PLAN

PROJECT #: 25-668

ISSUE DATES:

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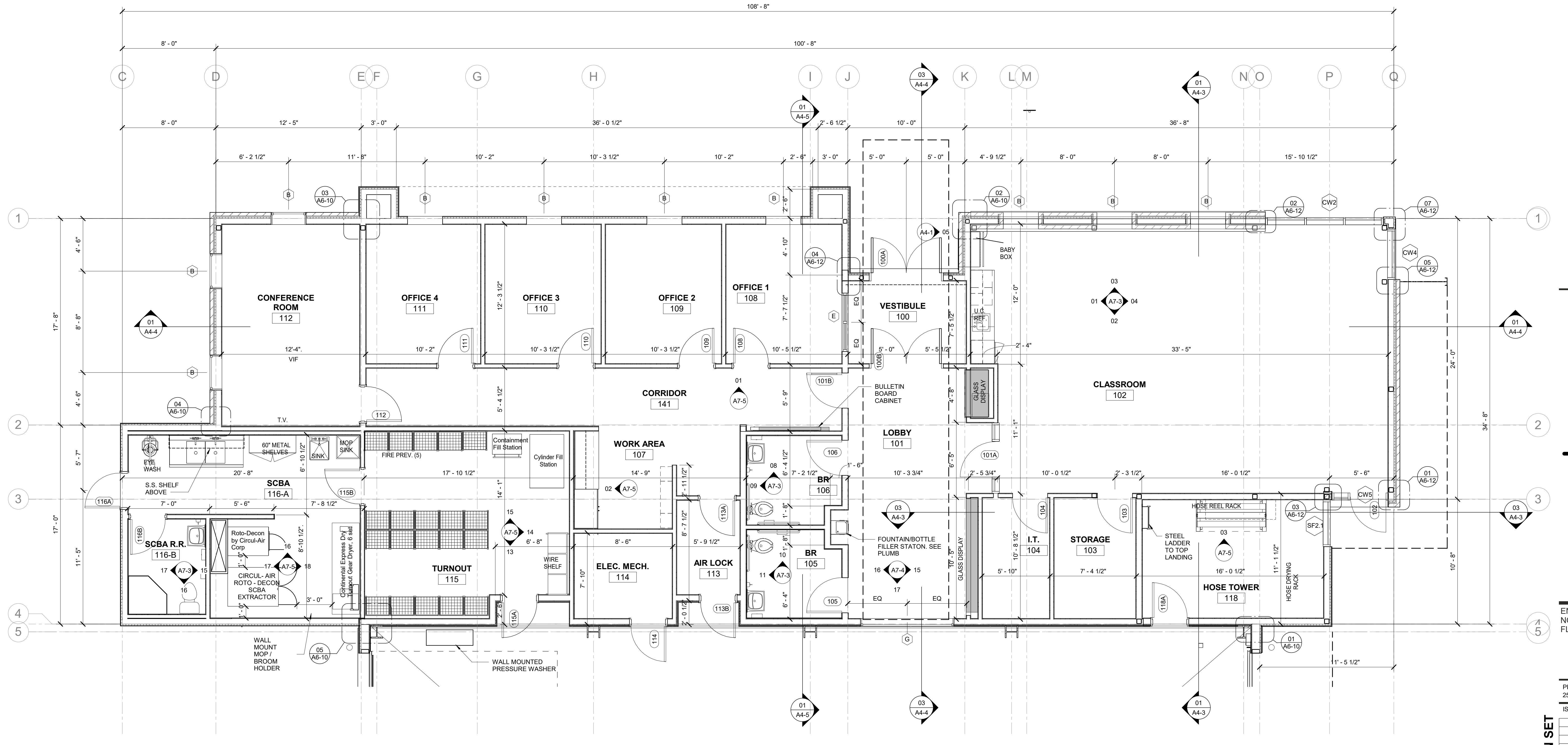
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100% CONSTRUCTION SET

Z

A7-1

10.22.25



REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB
1872 KELLEHER LANE, HELENA, MT 59602

HELENA FIRESTATION #3

1872 KELLEHER LANE, HELENA, MT 59602

DOWLING | SHIVEH-ATTERTY ARCHITECTURE + ENGINEERING

734 N. Last Chance Gulch | Helena, MT 59601 | (406) 457-3500

ENLARGED SOUTH FIRST FLOOR PLAN

PROJECT #: 25-668
ISSUE DATES:

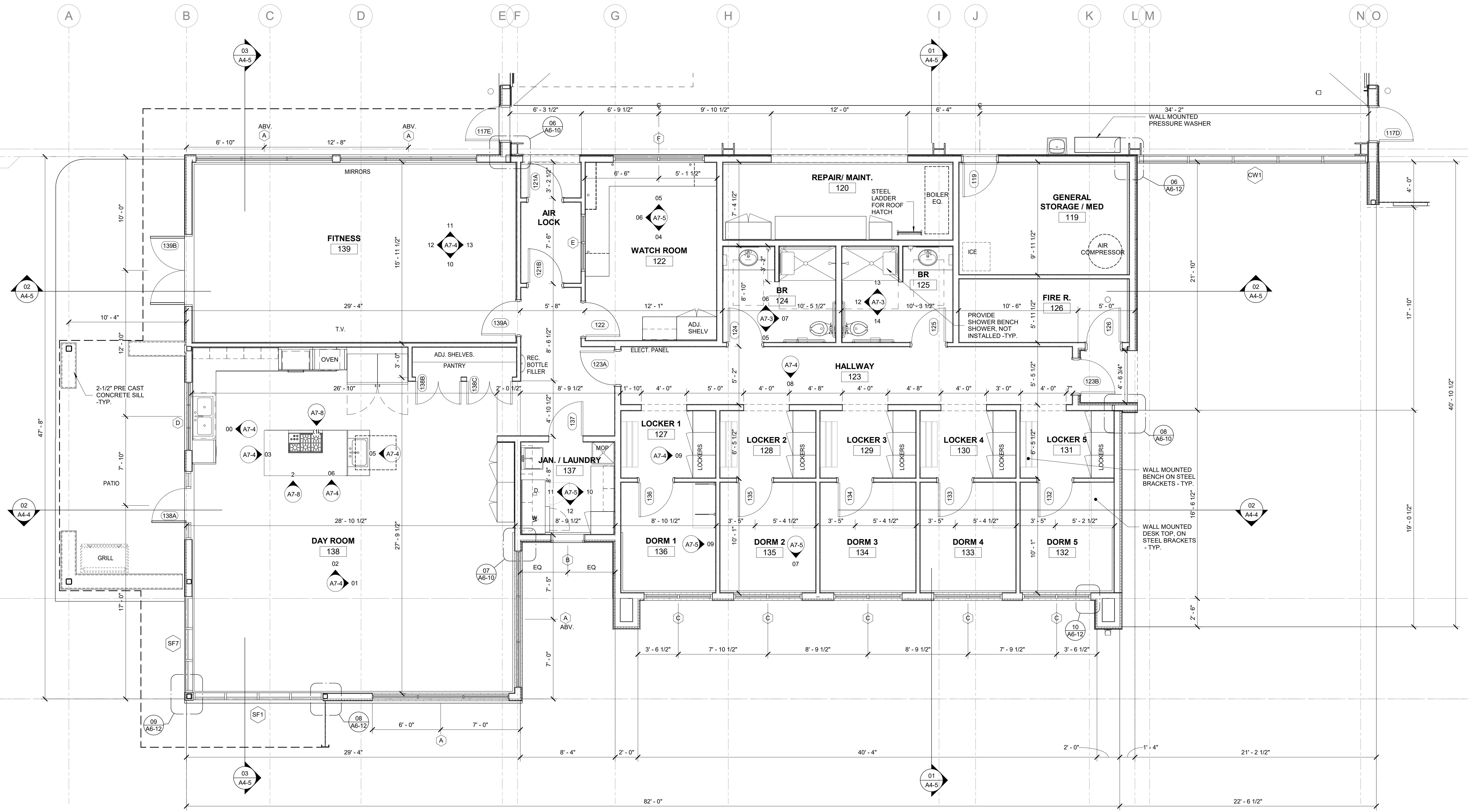
DRAWN BY: JS/C

A7-2

10.22.25

GENERAL NOTES:

1. DIMENSIONS ARE TO GRID, FACE OF STUD, MASONRY, OR DOOR/WINDOW OPENINGS. DIMENSIONS TO OPENINGS ARE NOMINAL. VERIFY ALL OPENINGS WITH ROUGH OPENING REQUIREMENTS.
2. ALL DOOR OPENINGS PERPENDICULAR TO A WALL ARE 6' MIN. TO THE WALL FRAMING UNO.
3. SEE SHEET A1-2 FOR WALL TYPES.
4. ALL INTERIOR WALL TYPES ARE I1s UNO.
5. ALL EGRESS DOORS SHALL BE READILY OPENABLE FROM THE EGRESS SIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.
6. ALL SIGNAGE TO COMPLY WITH IBC SECTION 1110 AND APPLICABLE ICC/ANSI PROVISIONS. SEE SPECIFICATIONS.



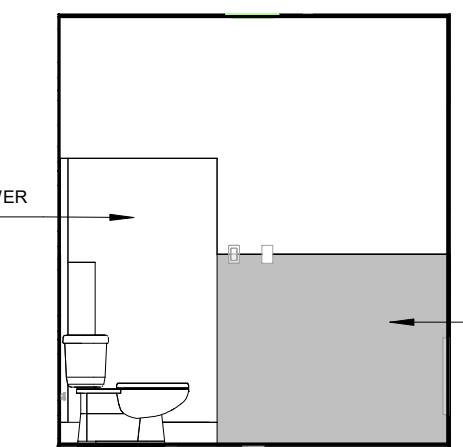
REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB
State of Montana

GENERAL NOTES

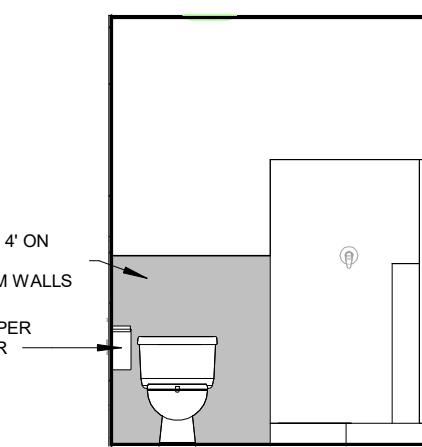
- SEE STANDARD FIXTURE MOUNTING HEIGHTS AND REQUIREMENTS THIS SHEET UNLESS OTHERWISE NOTED.
- FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBS.
- FLUSH CONTROLS SHALL BE OPERABLE BY AN OSCILLATING HANDLE WITH A MAXIMUM OPERATING FORCE OF 5 LBS AND SHALL BE MOUNTED ON OPEN FLOOR SIDE OF THE TOILET.
- DIA. OR WIDTH OF THE GRAB BARS SHALL BE 1 1/4" TO 1 1/2" WITH 1 1/2" CLEARANCE BETWEEN GRAB BAR AND WALL. GRAB BARS SHALL HAVE STRENGTH AND ANCHORAGE TO SUSTAIN 250 LB CONCENTRATED LOAD.
- WHERE TOWEL, WASTE RECEPTACLE AND OTHER DISPENSING AND DISPOSING FIXTURES ARE PROVIDED, AT LEAST ONE OF EACH FIXTURE IS TO BE MOUNTED WITH OPERABLE PARTS WITHIN 48" FROM FLOOR.
- HOT WATER AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED.
- PROVIDE CODE-COMPLIANT BLOCKING WITHIN WALLS AS REQUIRED FOR ALL WALL-MOUNTED ITEMS.
- SECURELY ANCHOR HANDWASH SINKS TO WITHSTAND AN APPLIED VERTICAL LOAD OF 250 LB ON THE FRONT OF THE FIXTURE.
- 6" SELF-COVED WALL BASE REQUIRED AT KITCHENS, SOILED UTILITY ROOMS, AND JANITOR CLOSETS.
- EXPOSED TILE TO HAVE SCHLUTER TILE EDGE TRIM WHERE TILE DOESN'T DIE INTO ANOTHER SURFACE/ CASEWORK.
- REFER TO SHEET A3-6 F.F. & E. FOR SPECIFICATIONS ON ANY FURNITURE/EQUIPMENT SEEN IN INT. ELEVATIONS TO BE OWNER/CONTRACTOR SUPPLIED.
- EXPOSED SINK DRAINS TO BE COVERED BY ADA PROTECTIVE BOOT.

HELENA FIRESTATION #3

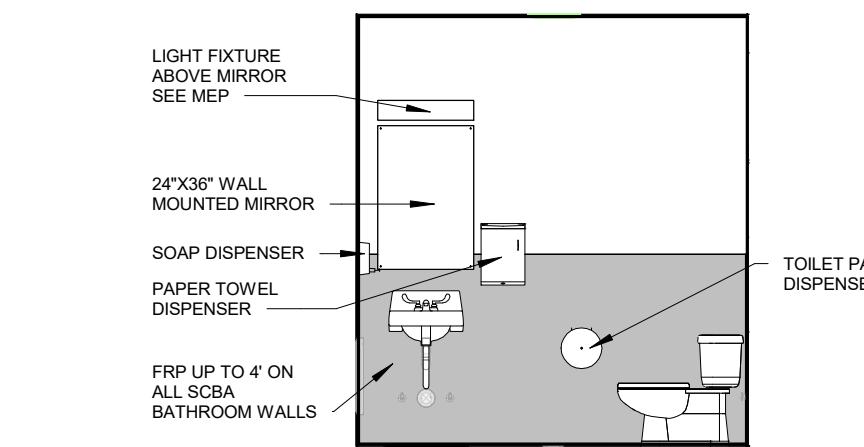
1872 KELLERHER LANE, HELENA, MT 59602



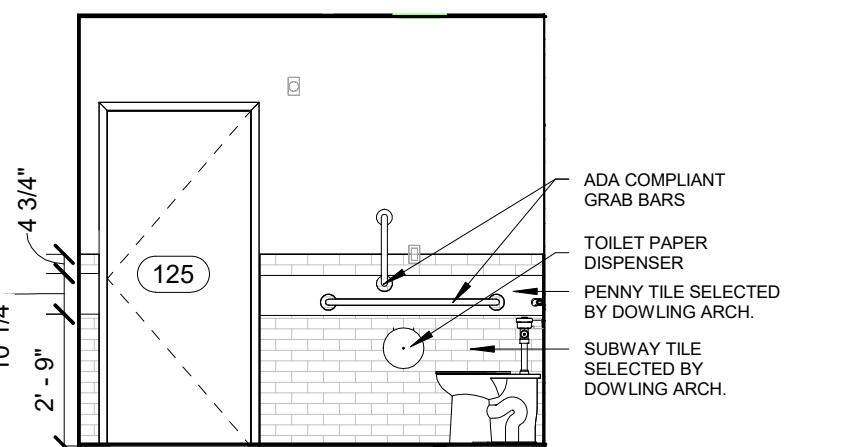
116 SCBA BATHROOM
ELEVATION 1
A7-3 1/4" = 1'-0"



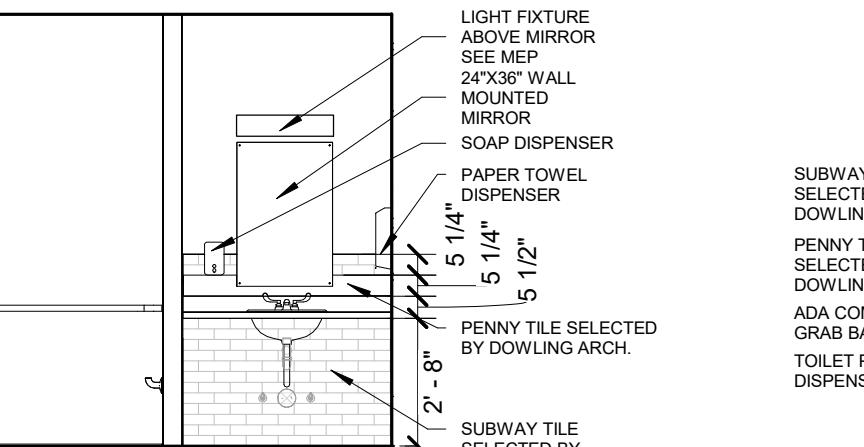
116 SCBA BATHROOM
ELEVATION 2
A7-3 1/4" = 1'-0"



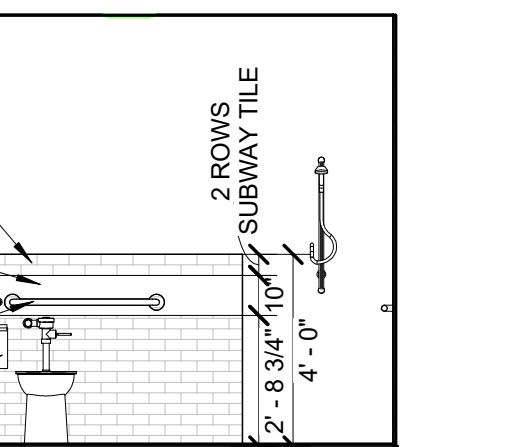
116 SCBA BATHROOM
ELEVATION 3
A7-3 1/4" = 1'-0"



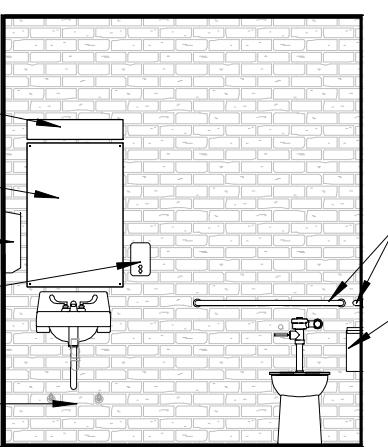
125 DORM SIDE BATHROOM
ELEVATION 1
A7-3 1/4" = 1'-0"



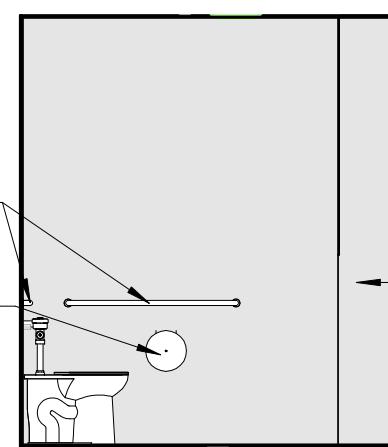
125 DORM SIDE BATHROOM
ELEVATION 2
A7-3 1/4" = 1'-0"



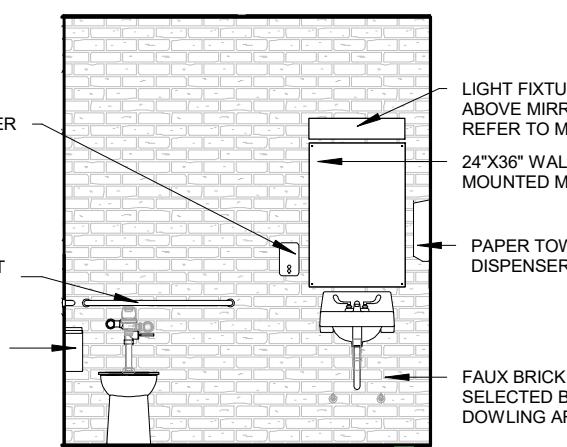
125 DORM SIDE BATHROOM
ELEVATION 3
A7-3 1/4" = 1'-0"



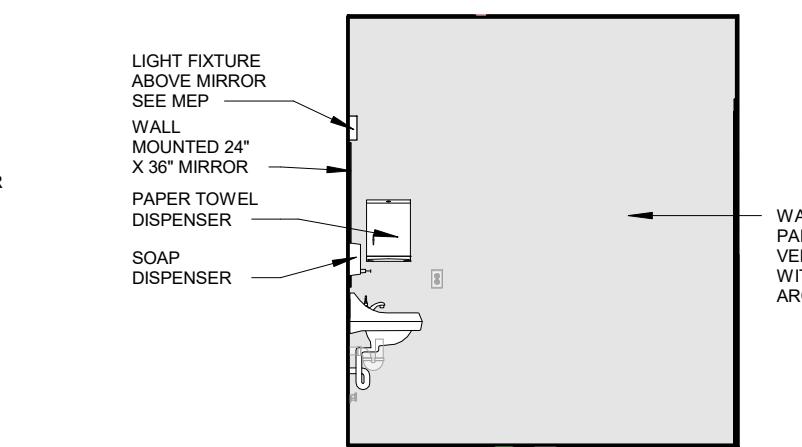
105 PUBLIC BATHROOM
ELEVATION 1
A7-3 1/4" = 1'-0"



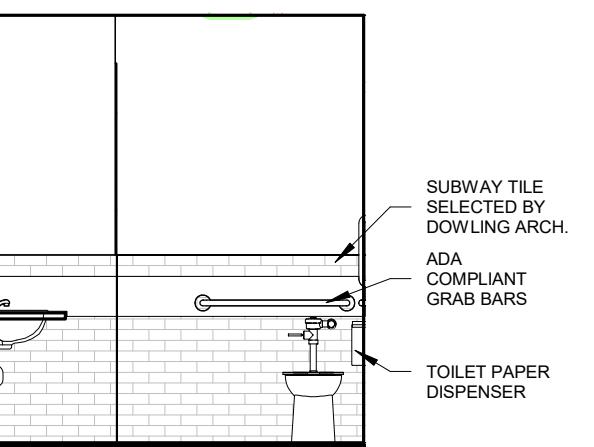
105 PUBLIC BATHROOM
ELEVATION 2
A7-3 1/4" = 1'-0"



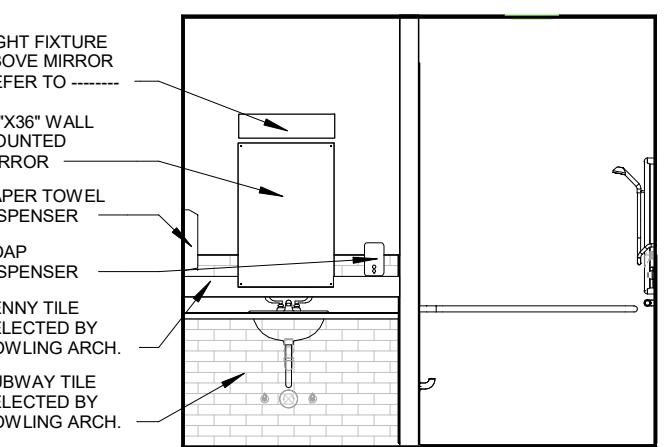
106 PUBLIC BATHROOM
ELEVATION 1
A7-3 1/4" = 1'-0"



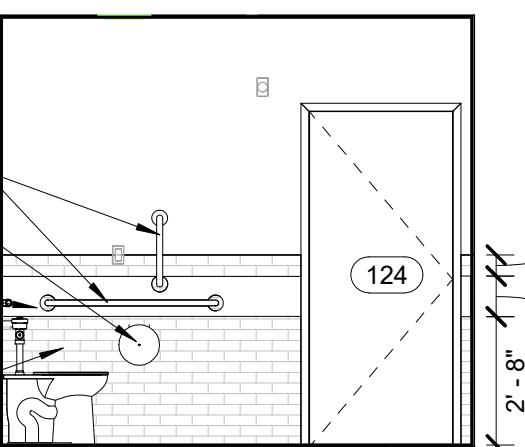
106 PUBLIC BATHROOM
ELEVATION 2
A7-3 1/4" = 1'-0"



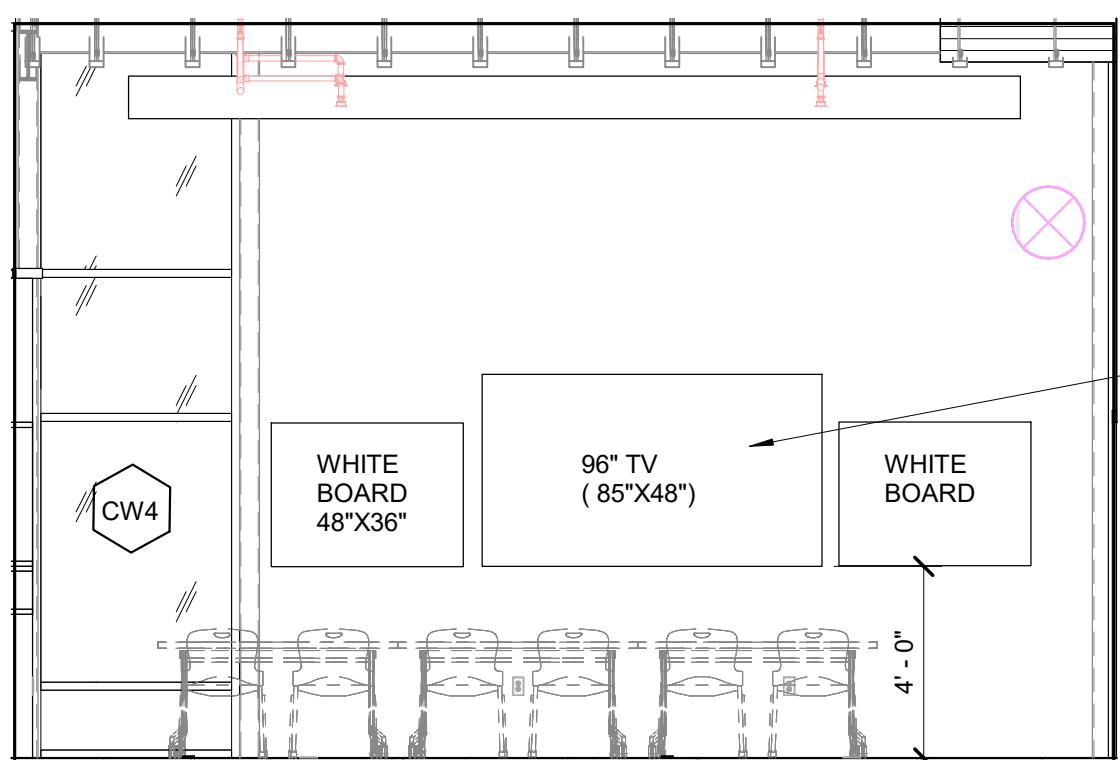
124 DORM SIDE BATHROOM
ELEVATION 1
A7-3 1/4" = 1'-0"



124 DORM SIDE BATHROOM
ELEVATION 2
A7-3 1/4" = 1'-0"

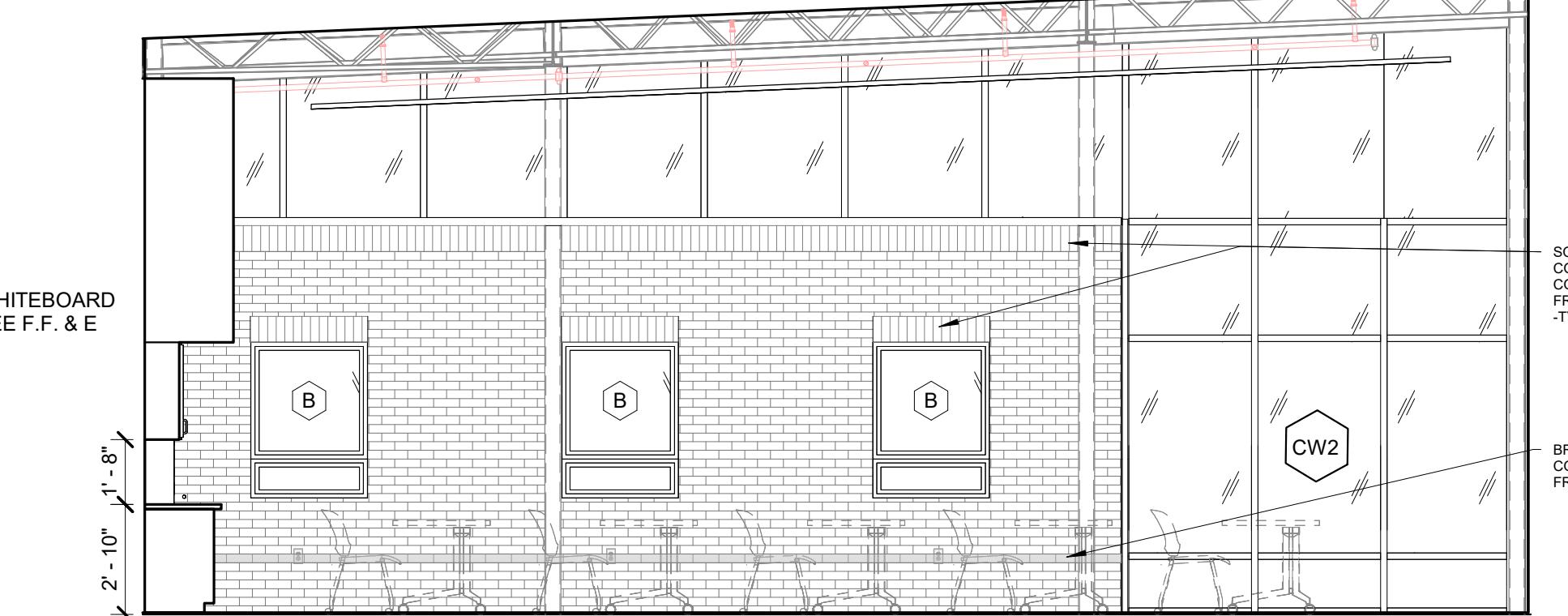


124 DORM SIDE BATHROOM
ELEVATION 3
A7-3 1/4" = 1'-0"

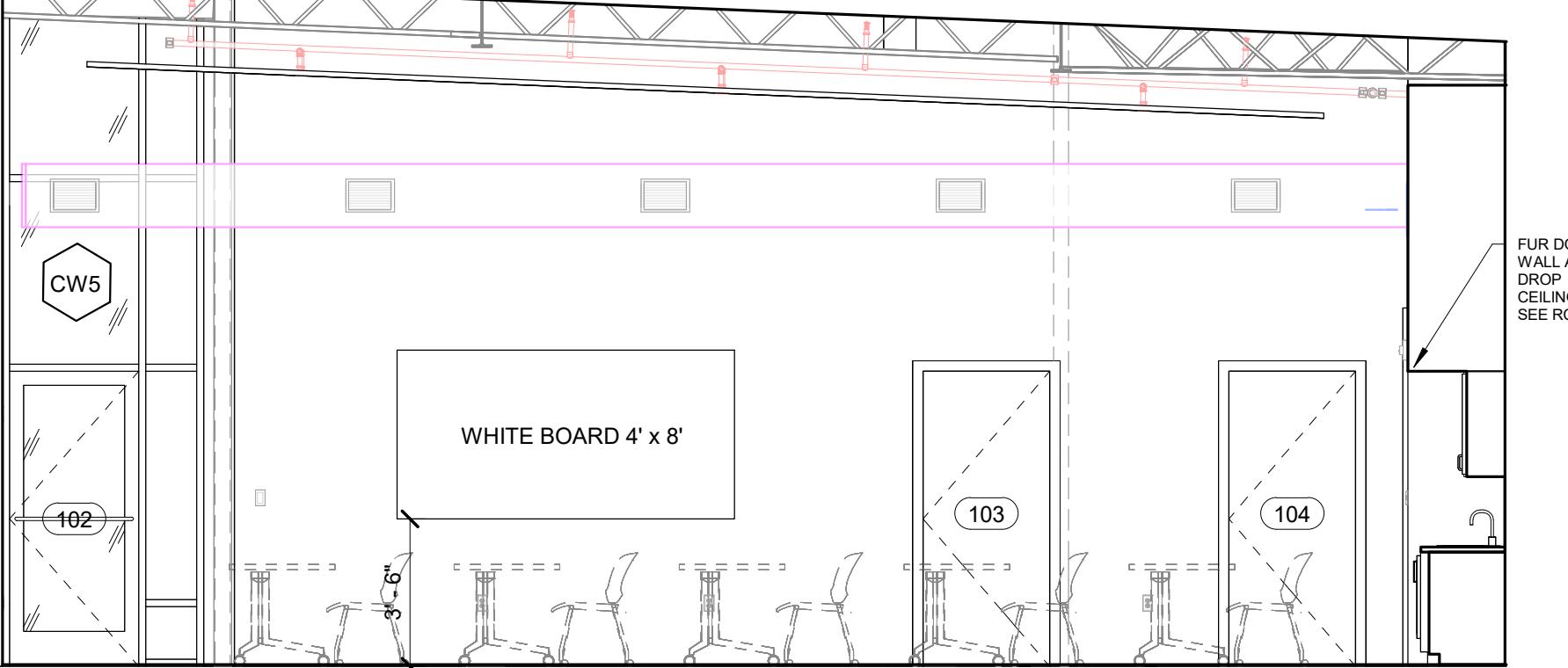


Autodesk Docs://Helena Fire Station #3.nct

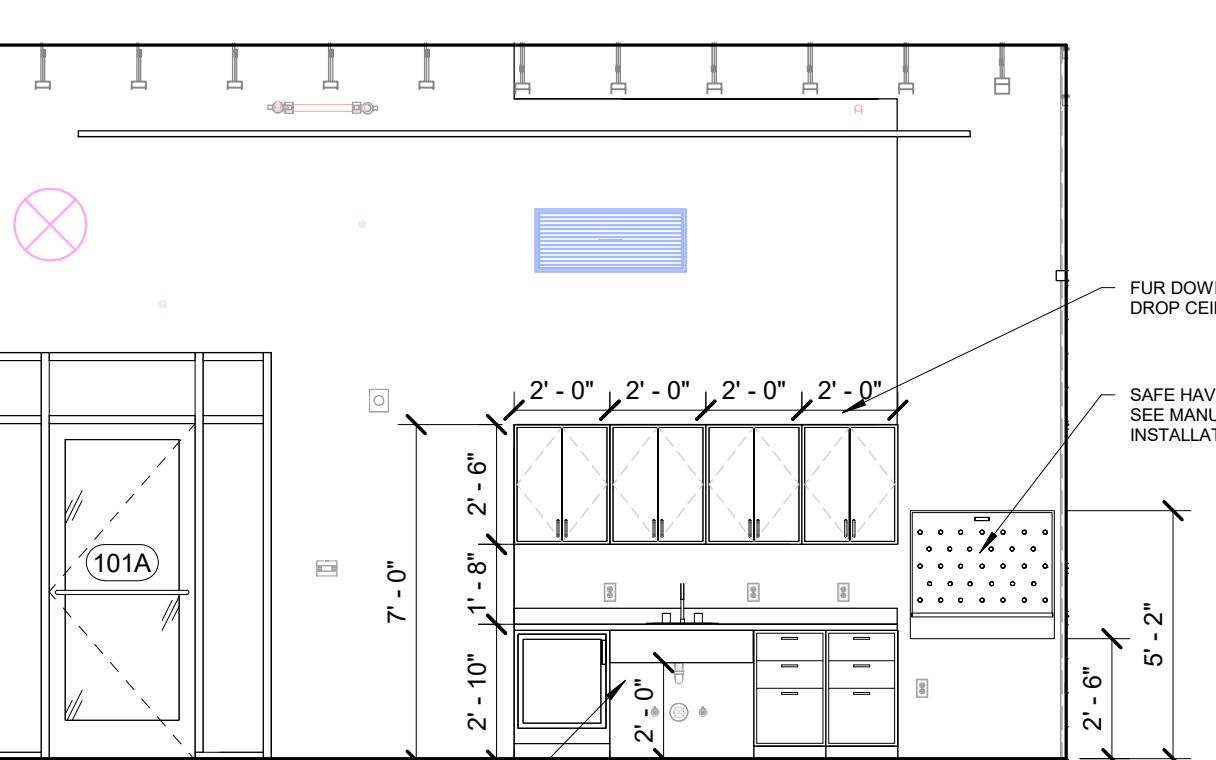
04 102 CLASSROOM ELEVATION 1
A7-3 1/4" = 1'-0"



03 102 CLASSROOM ELEVATION 2
A7-3 1/4" = 1'-0"



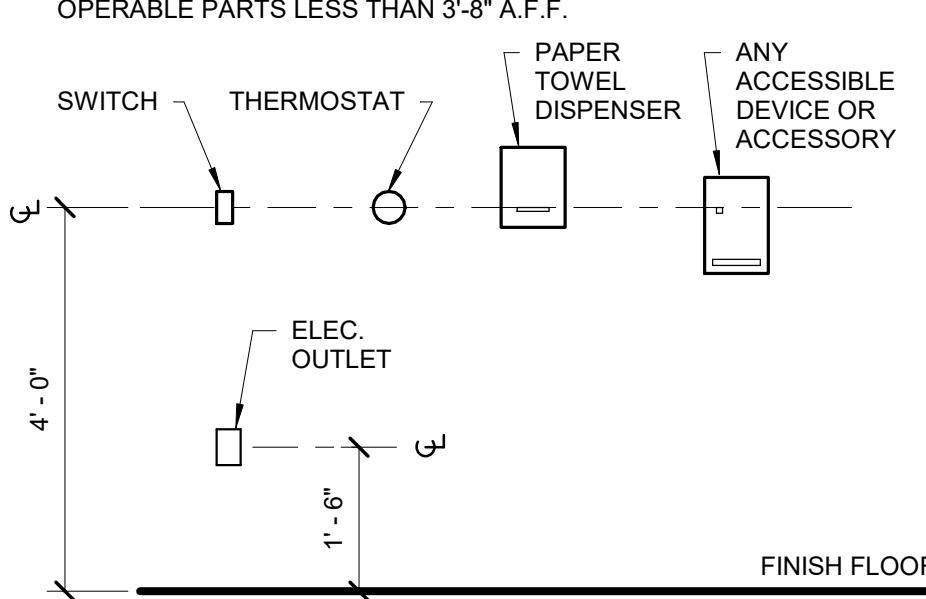
02 102 CLASSROOM ELEVATION 3
A7-3 1/4" = 1'-0"



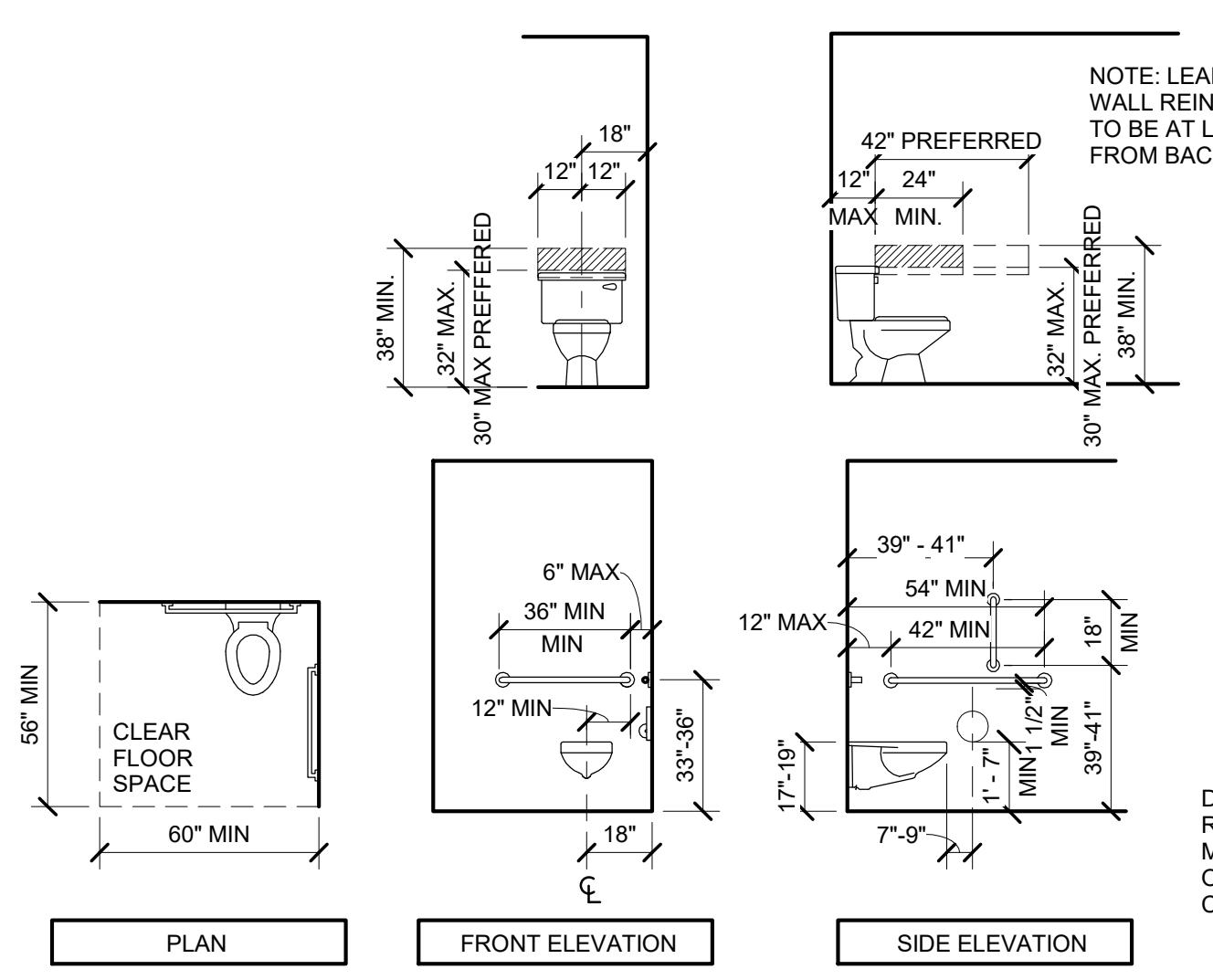
01 102 CLASSROOM ELEVATION 4
A7-3 1/4" = 1'-0"

STANDARD FIXTURE MOUNTING HEIGHTS AND CLEARANCE REQUIREMENTS

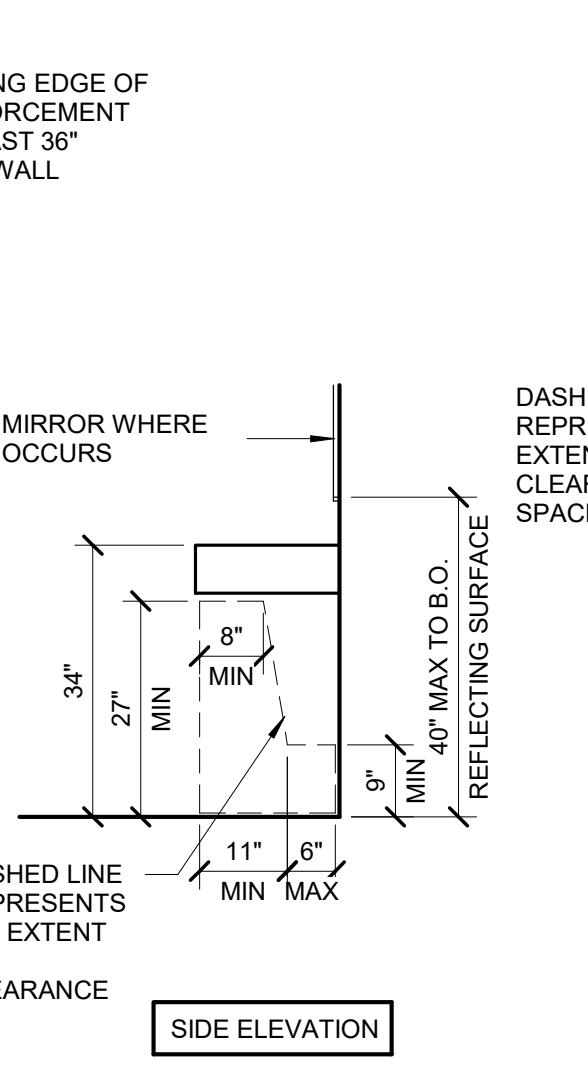
- DIMENSIONS TO TOILET ROOM ACCESSORIES ARE TO THE TOP OF THE HIGHEST OPENING OR OPERABLE PART.
- ACCESSORIES ABOVE COUNTERS SHALL BE MOUNTED WITH TO. OPERABLE PARTS LESS THAN 3'-8" A.F.F.



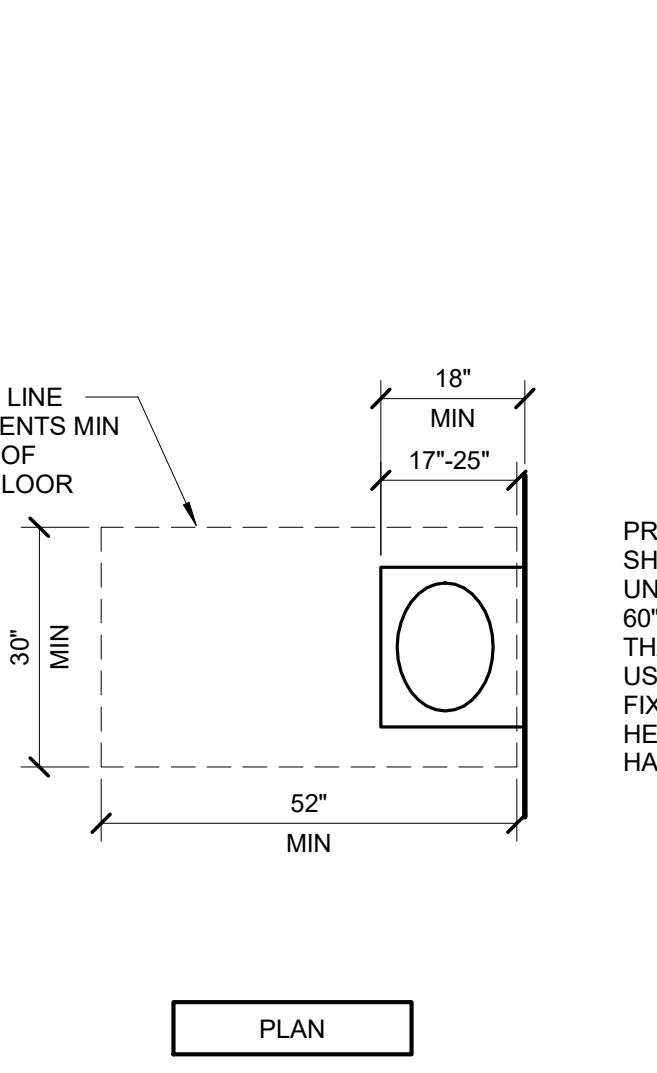
TYP ACCESSIBLE MOUNTING HEIGHTS



ACCESSIBLE TOILET



SINK CLEARANCE



ACCESSIBLE SHOWER

DOWLING ARCHITECTS | SHIVEHATTERY ARCHITECTURE + ENGINEERING

ENLARGED PLANS, INTERIOR ELEVATIONS & DETAILS

PROJECT #: 25-668

ISSUE DATES:

DRAWN BY: JS/C

A7-3

10.22.25

REGISTERED ARCHITECT
MICHAEL W. DOWLING, AIA, NCARB
STATE OF MONTANA

HELENA FIRESTATION #3

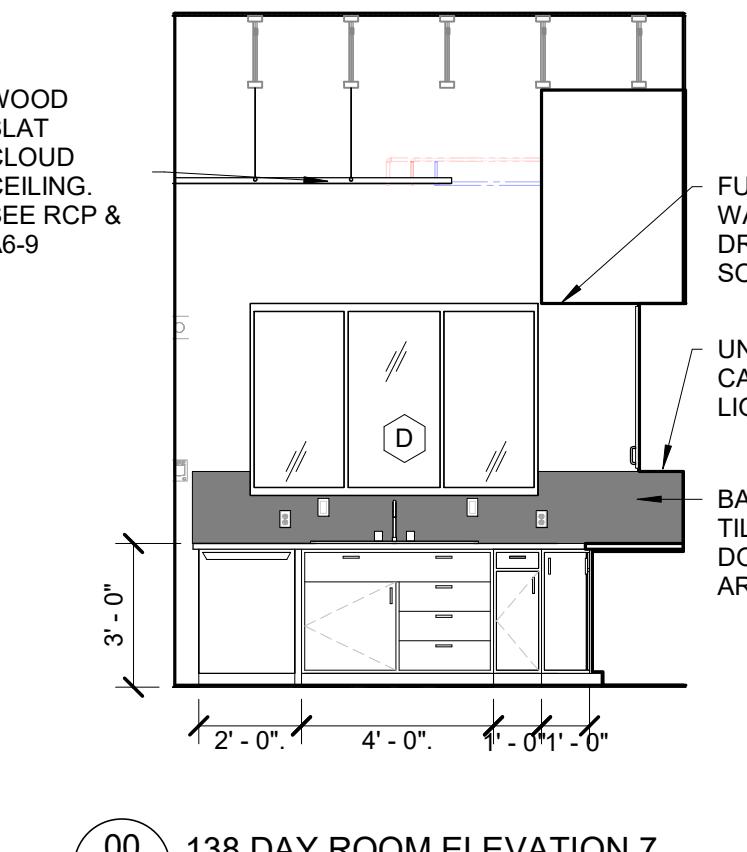
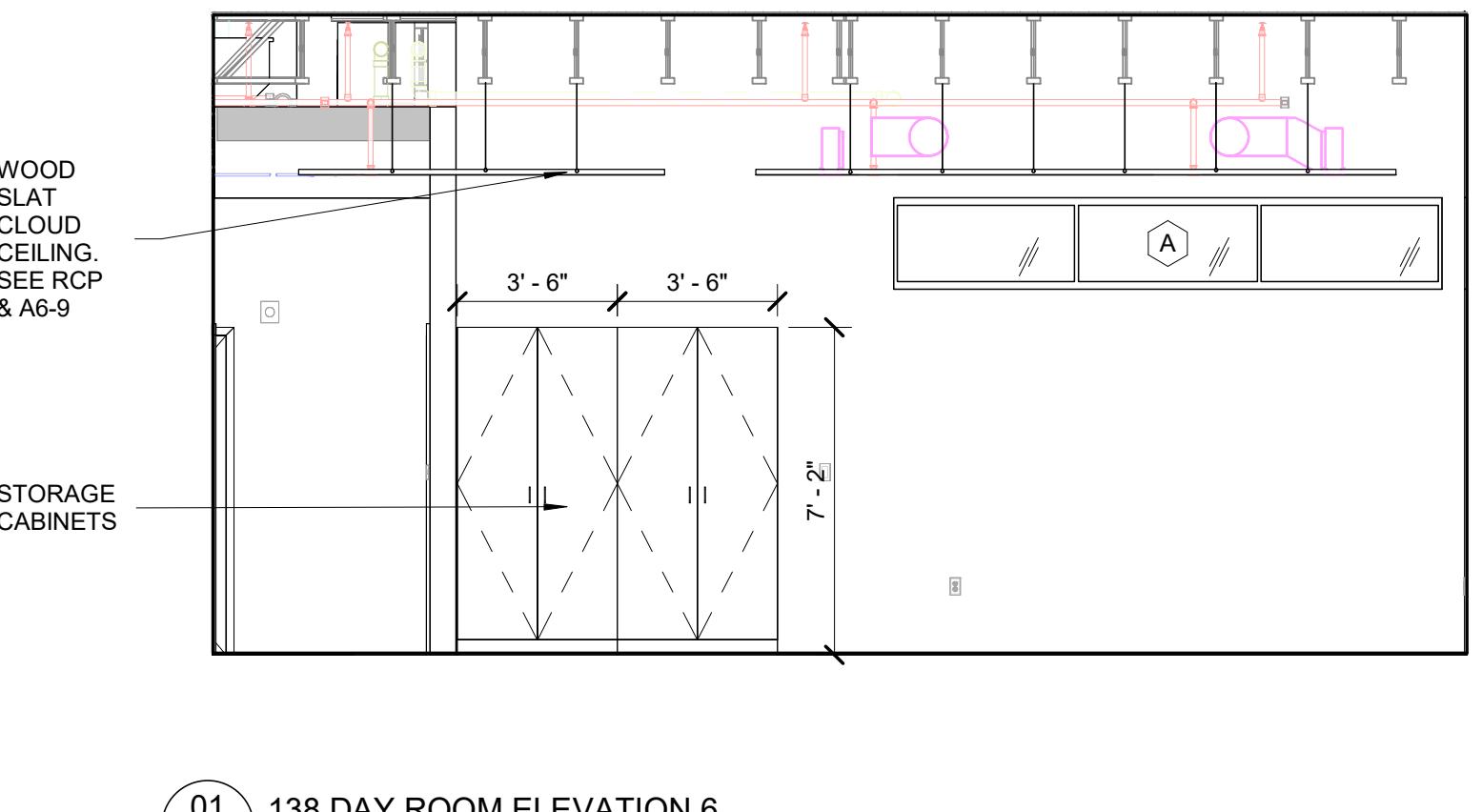
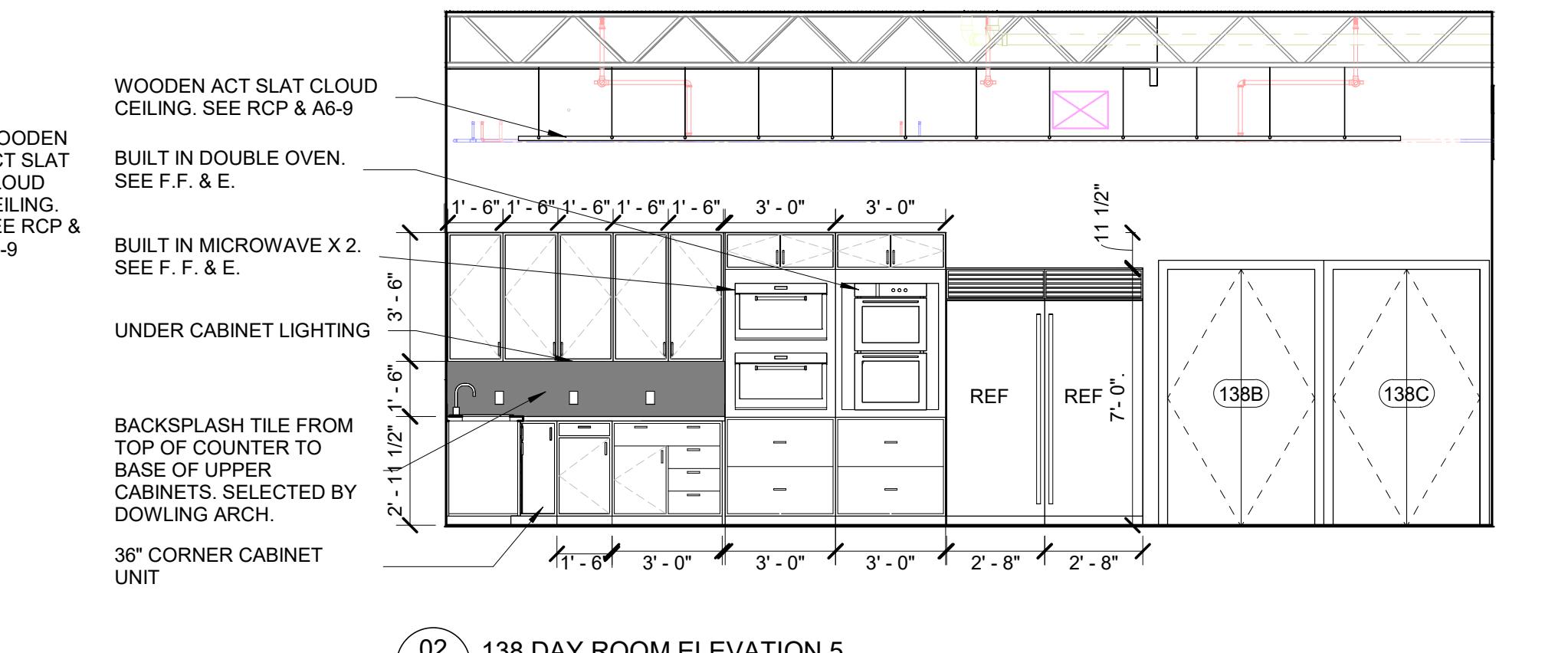
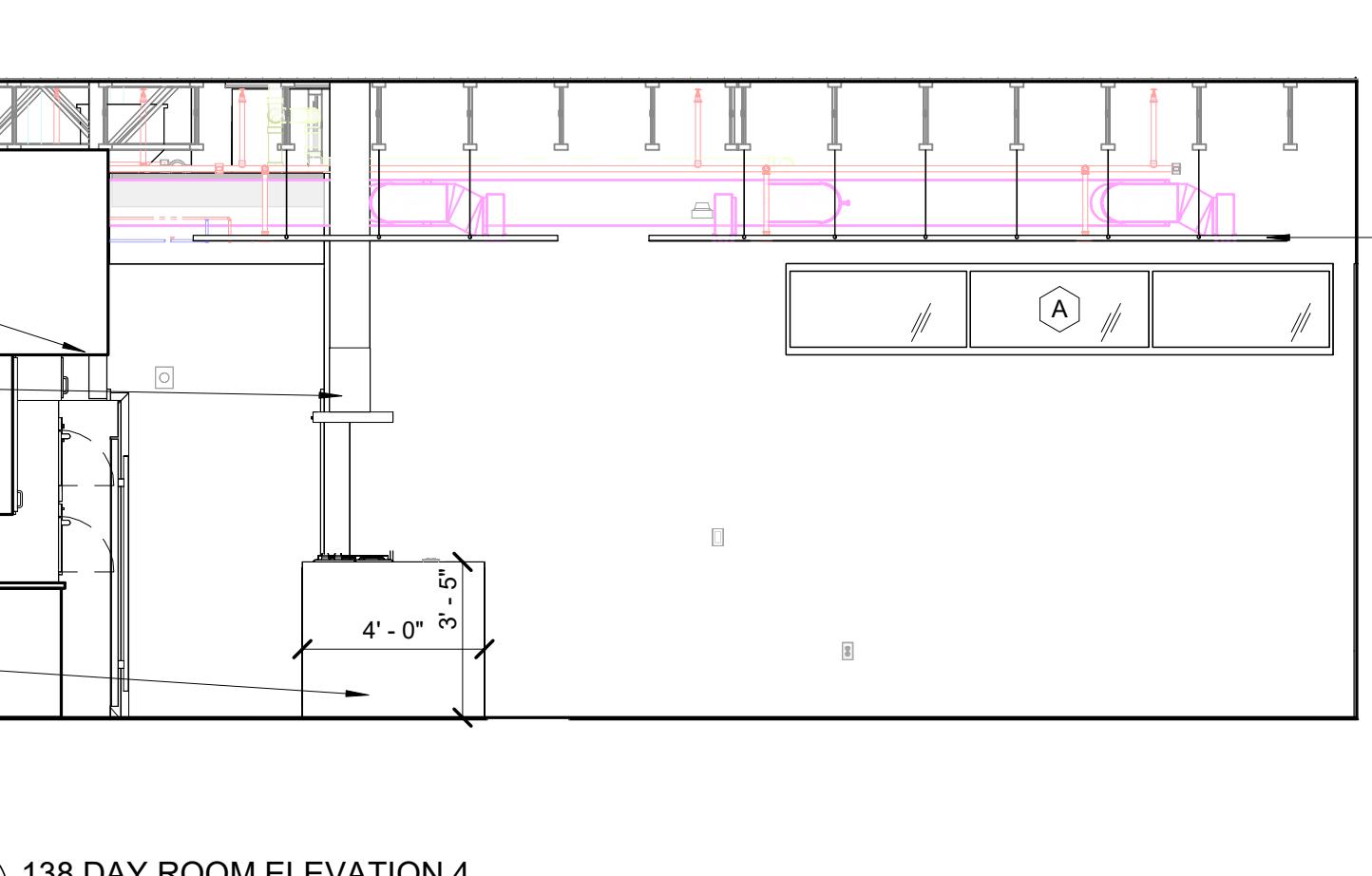
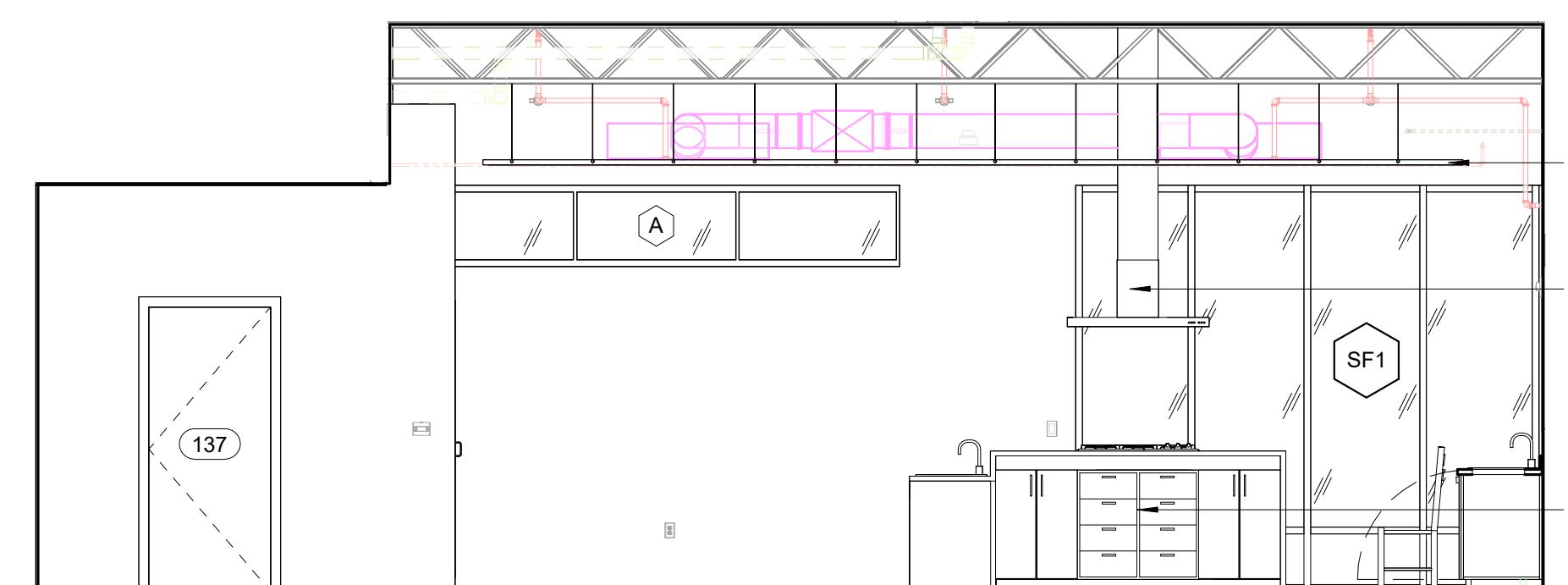
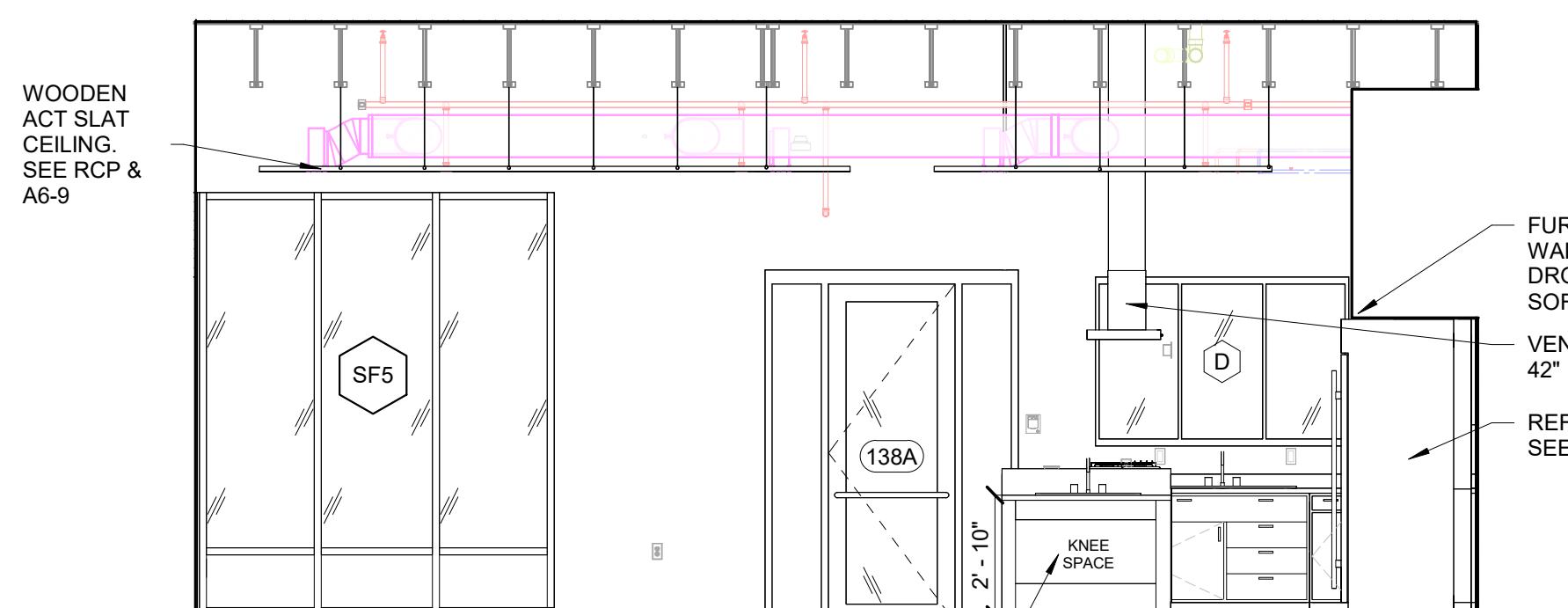
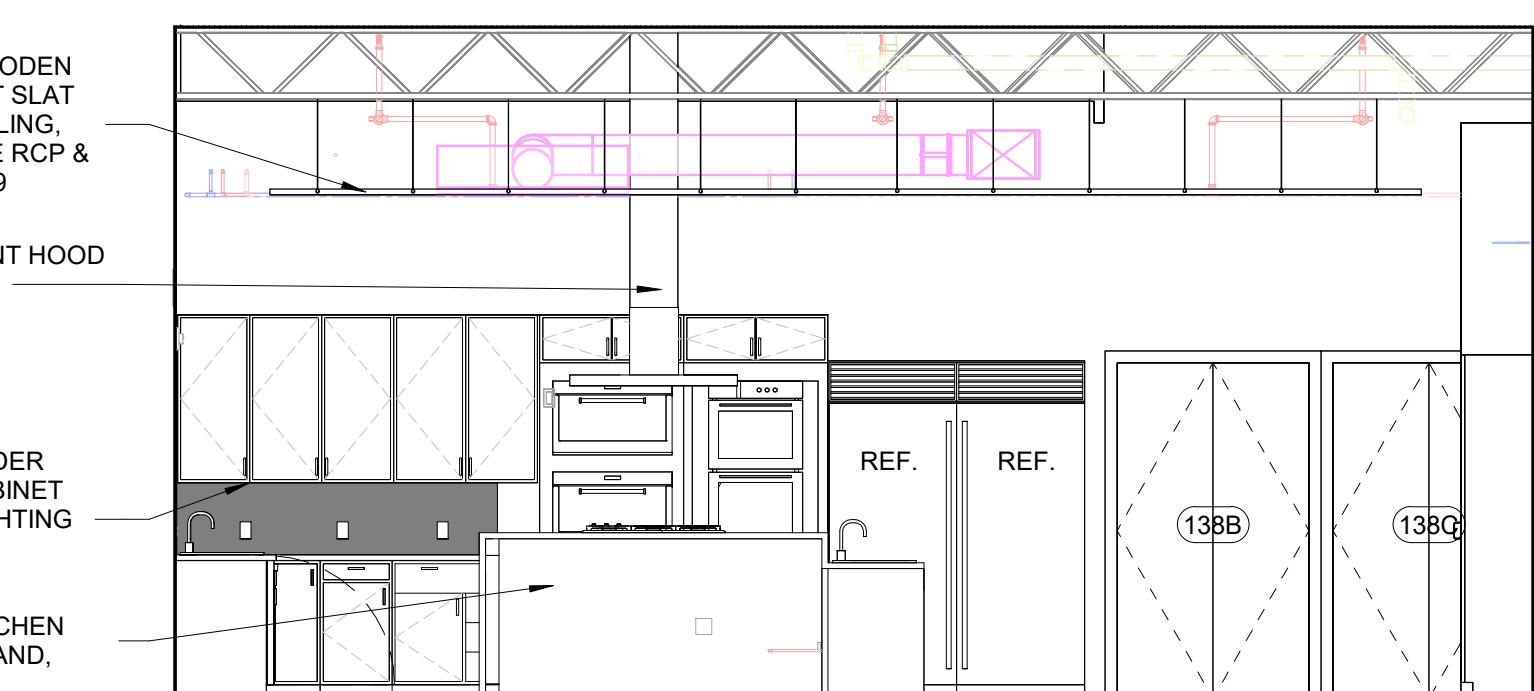
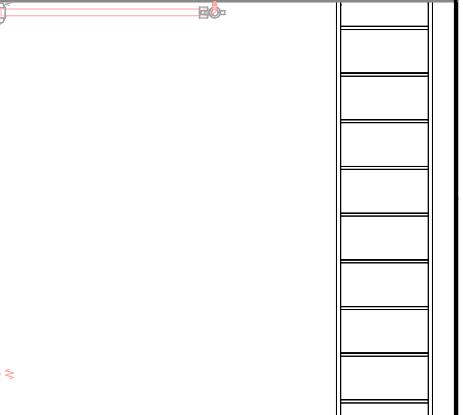
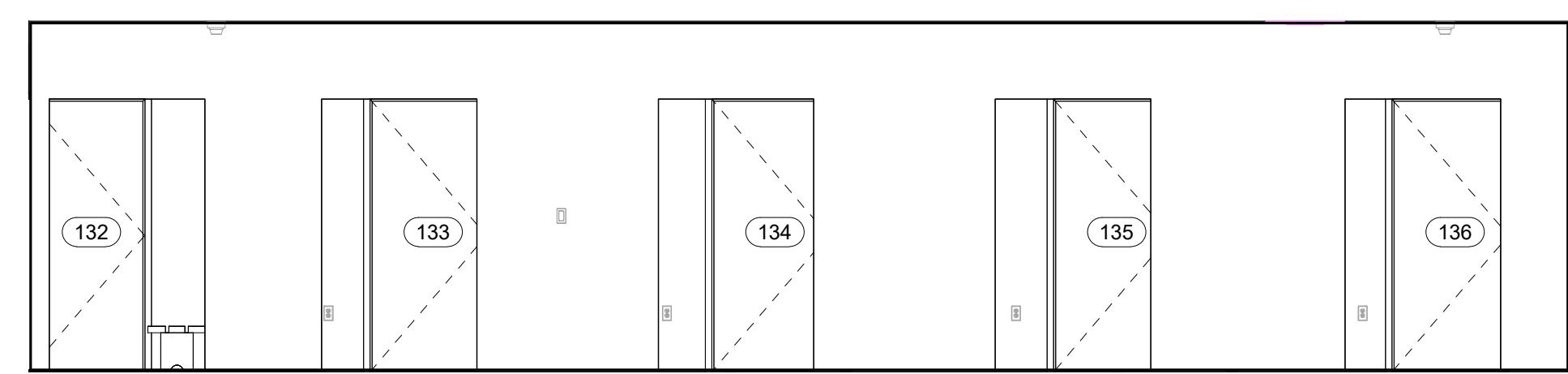
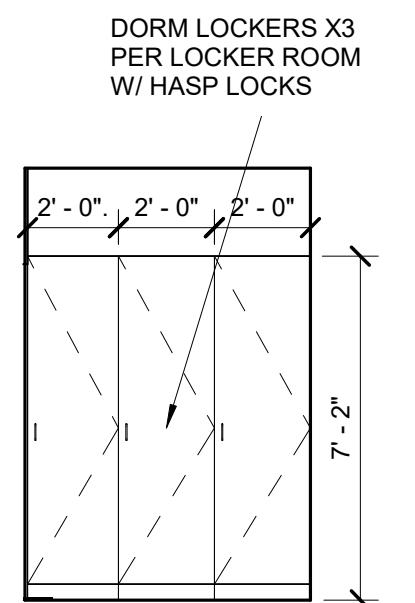
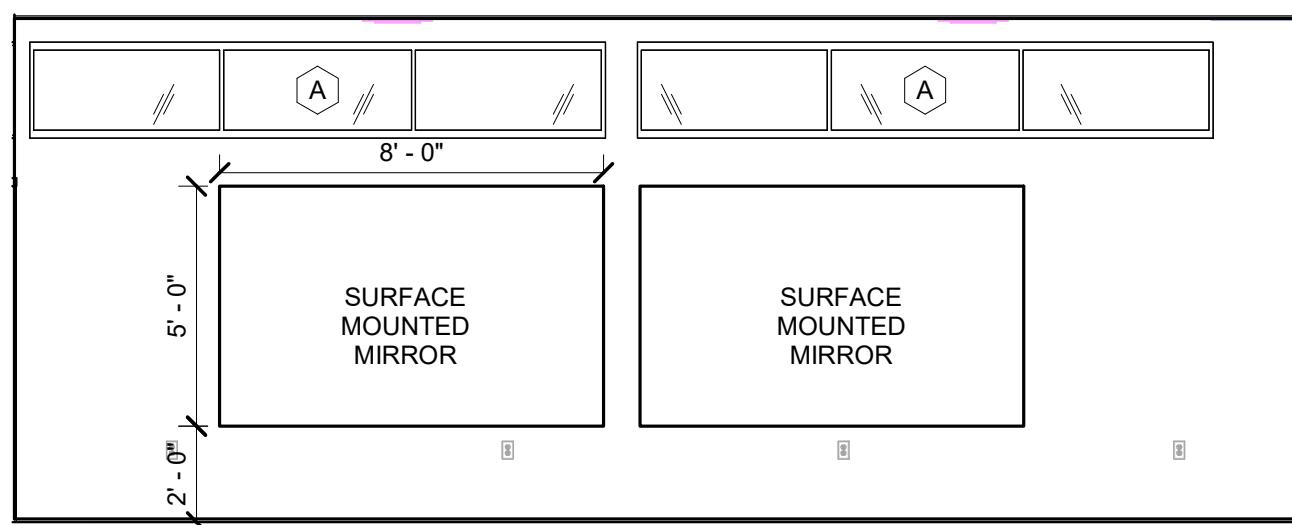
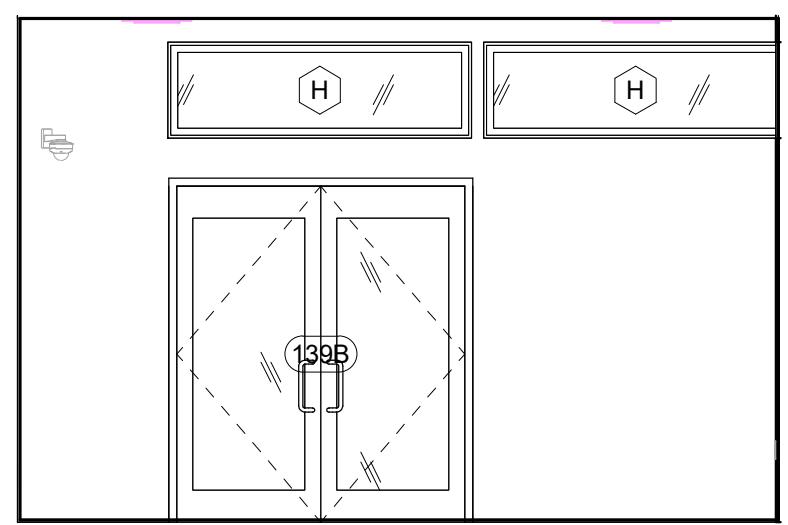
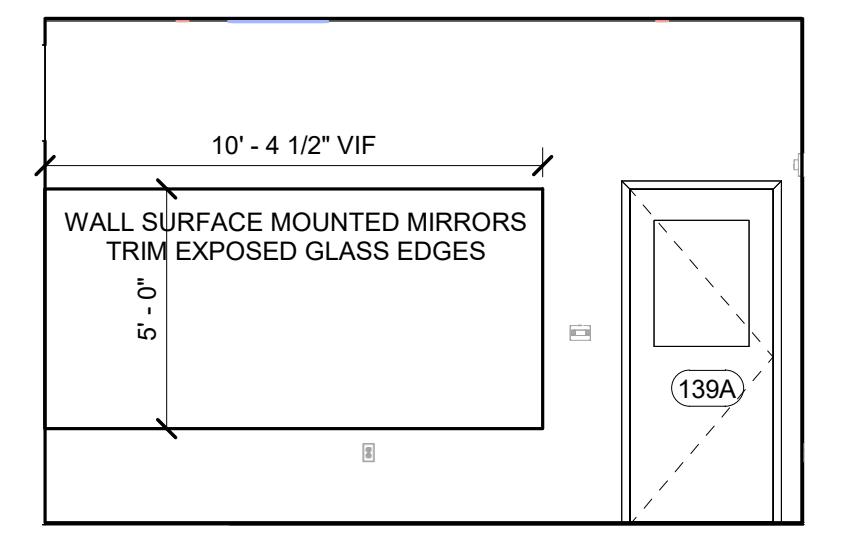
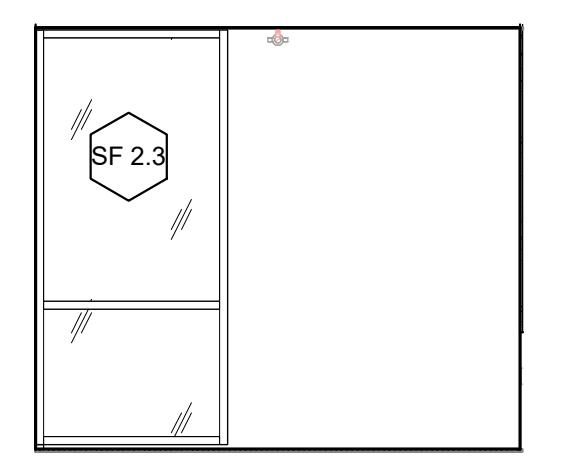
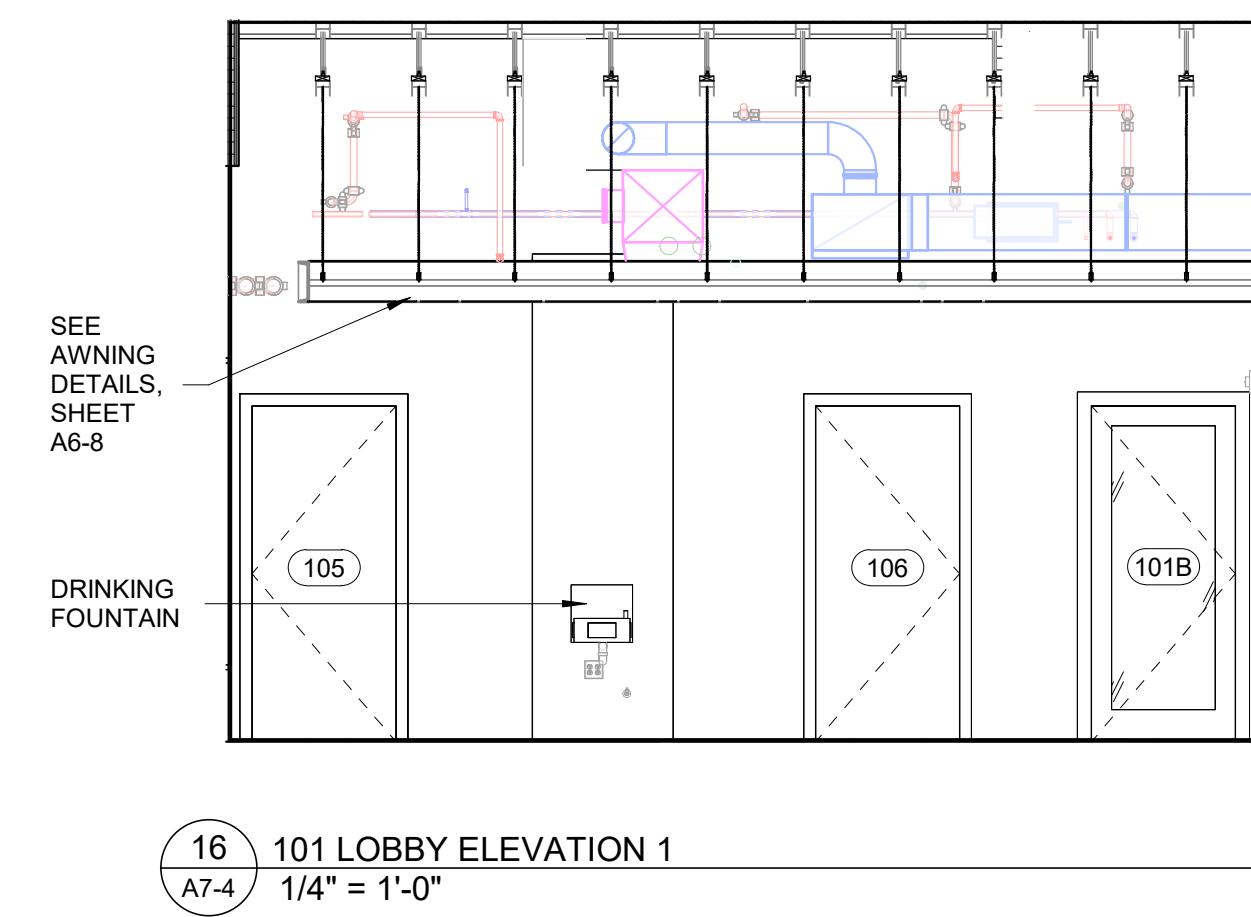
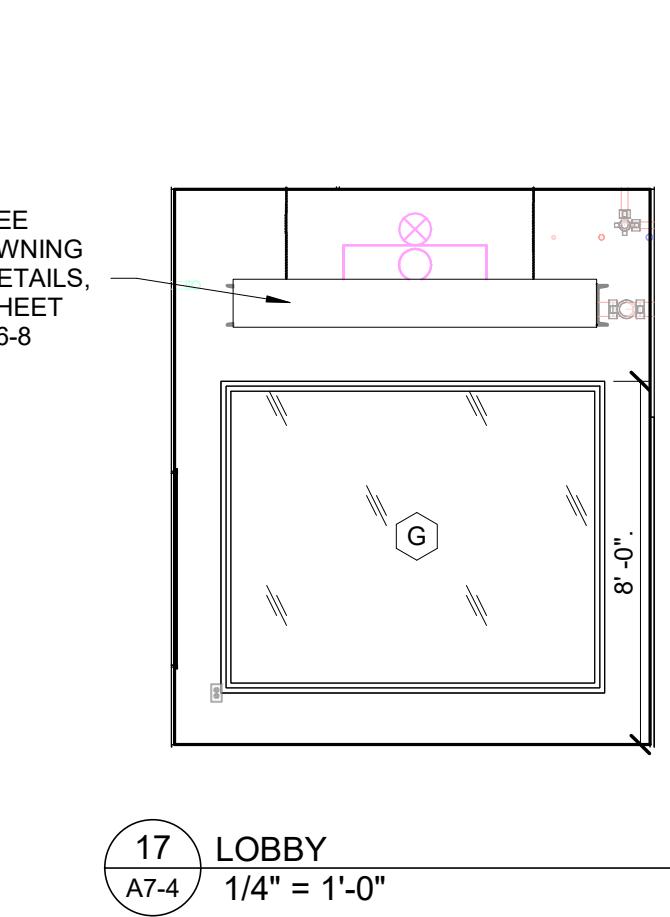
1872 KELLEHER LANE, HELENA, MT 59602

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ENLARGED PLANS, INTERIOR ELEVATIONS & DETAILS
PROJECT #: 25-668
ISSUE DATES:
DRAWN BY: JS/C
100% CONSTRUCTION SET
A7-4
10.22.25

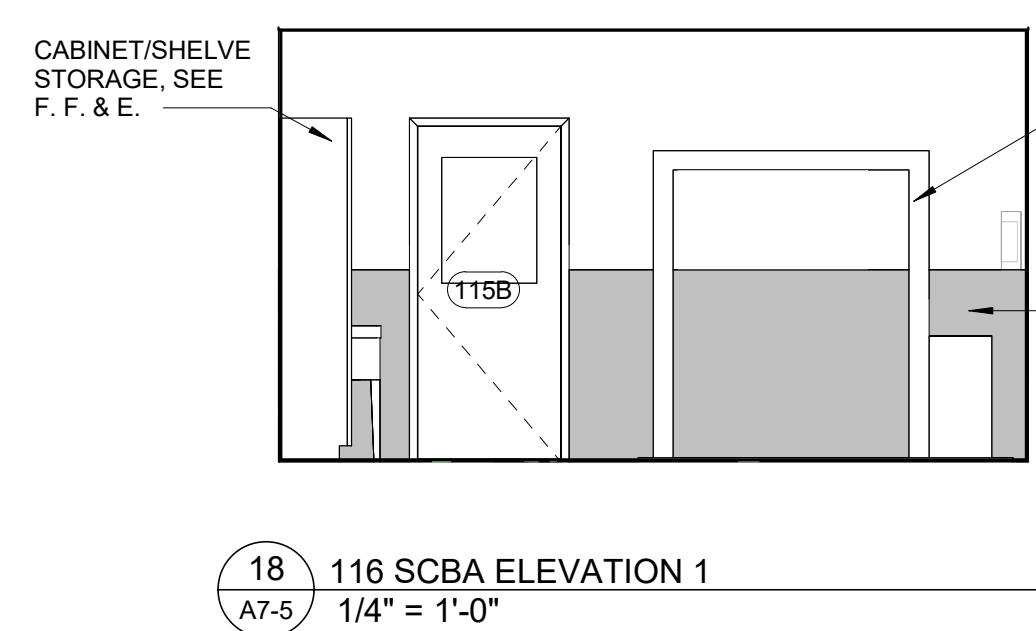
GENERAL NOTES

- SEE STANDARD FIXTURE MOUNTING HEIGHTS AND REQUIREMENTS THIS SHEET UNLESS OTHERWISE NOTED.
- FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBF.
- FLUSH CONTROLS SHALL BE OPERABLE BY AN OSCILLATING HANDLE WITH A MAXIMUM OPERATING FORCE OF 5 LBS AND SHALL BE MOUNTED ON OPEN FLOOR SIDE OF THE TOILET.
- DIA. OR WIDTH OF THE GRAB BARS SHALL BE 1 1/4" TO 1 1/2" WITH 1 1/2" CLEARANCE BETWEEN GRAB BAR AND WALL. GRAB BAR ENDS TO BE RETURNED TO WALL. GRAB BARS SHALL HAVE STRENGTH AND ANCHORAGE TO SUSTAIN 250 LB CONCENTRATED LOAD.
- WHERE TOWEL, WASTE RECEPTACLE AND OTHER DISPENSING AND DISPOSING FIXTURES ARE PROVIDED, AT LEAST ONE OF EACH FIXTURE IS TO BE MOUNTED WITH OPERABLE PARTS WITHIN 48" FROM FLOOR.
- HOT WATER AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED.
- PROVIDE CODE-COMPLIANT BLOCKING WITHIN WALLS AS REQUIRED FOR ALL WALL-MOUNTED ITEMS.
- SECURELY ANCHOR HANDWASH SINKS TO WITHSTAND AN APPLIED VERTICAL LOAD OF 250 LB ON THE FRONT OF THE FIXTURE.
- 6" SELF-COVED WALL BASE REQUIRED AT KITCHENS, SOILED UTILITY ROOMS, AND JANITOR CLOSETS.
- EXPOSED TILE TO HAVE SCHLUTER TILE EDGE TRIM WHERE TILE DOESN'T DIE INTO ANOTHER SURFACE/CASEWORK.
- REFER TO SHEET A3-6 F.F. & E. FOR SPECIFICATIONS ON ANY FURNITURE/EQUIPMENT SEEN IN INT. ELEVATIONS TO BE OWNER/CONTRACTOR SUPPLIED
- EXPOSED SINK DRAINS TO BE COVERED BY ADA PROTEC BOOT.

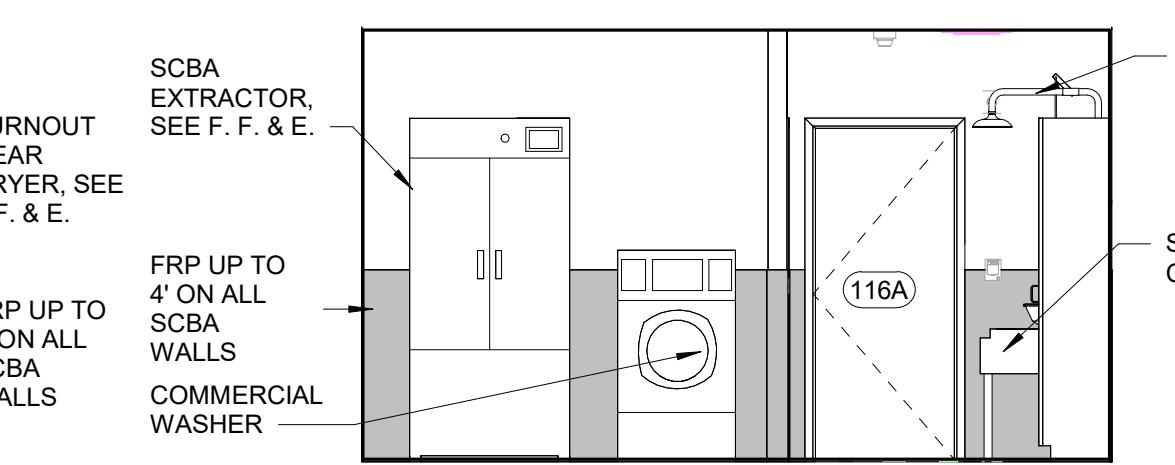


GENERAL NOTES

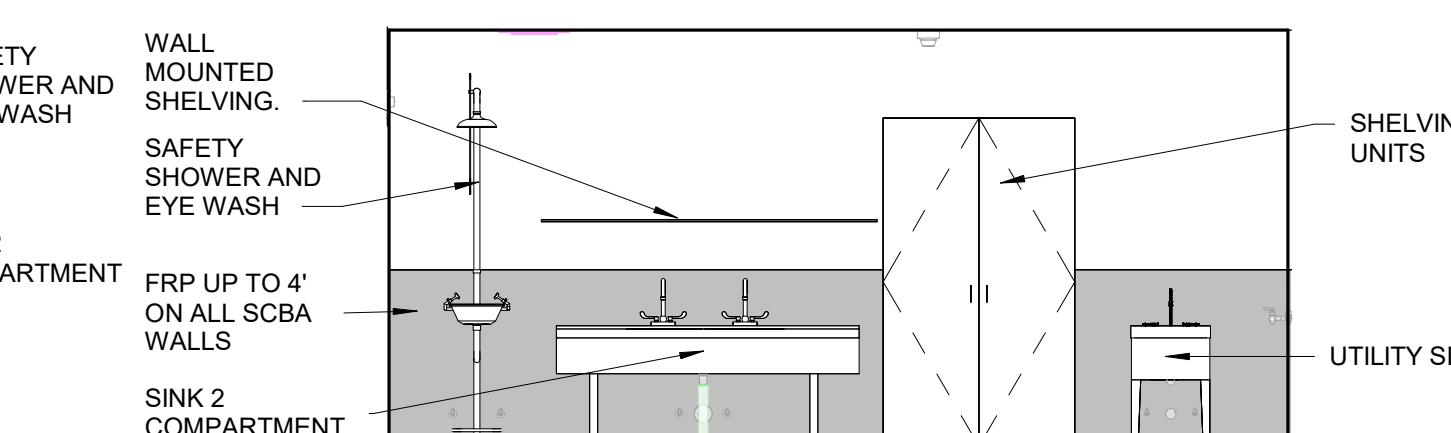
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- EXPOSED TILE TO HAVE SCHUTTER TILE EDGE TRIM WHERE TILE DOESN'T DIE INTO ANOTHER SURFACE/ CASEWORK
- REFER TO SHEET A-3 & F.F. & E. FOR SPECIFICATIONS ON ANY FURNITURE/EQUIPMENT SEEN IN INT. ELEVATIONS TO BE OWNER/CONTRACTOR SUPPLIED
- EXPOSED SINK DRAINS TO BE COVERED BY ADA PROTECTIVE BOOT.



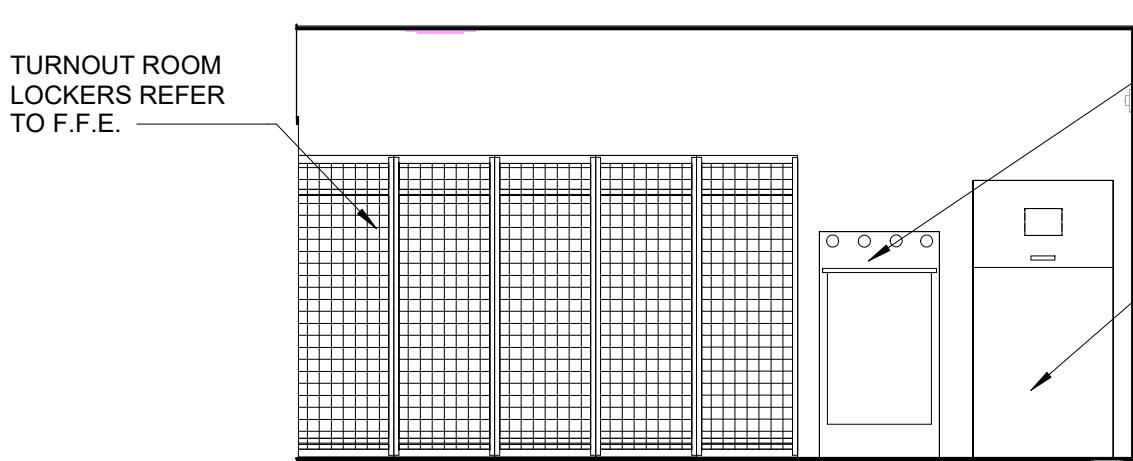
(18) 116 SCBA ELEVATION 1
A7-5 1/4" = 1'-0"



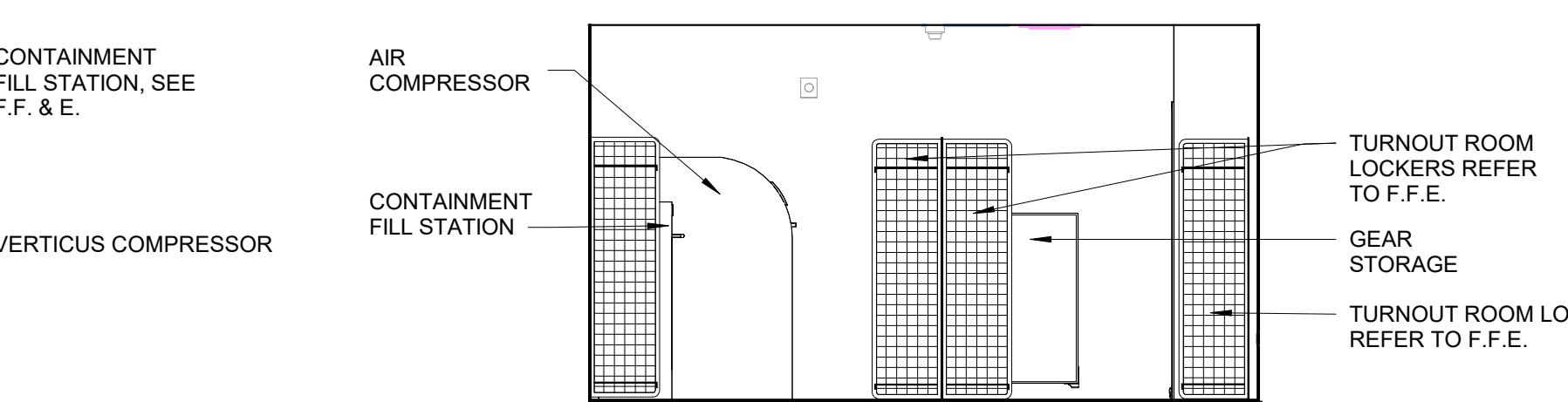
(17) 116 SCBA ELEVATION 2
A7-5 1/4" = 1'-0"



(16) 116 SCBA ELEVATION 3
A7-5 1/4" = 1'-0"



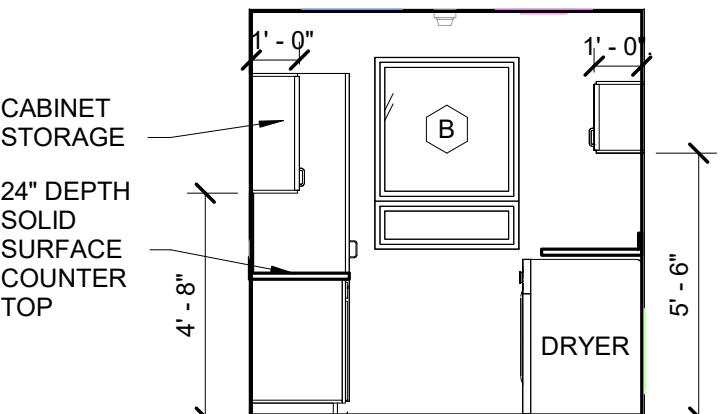
(15) 115 TURNOUT ELEVATION 1
A7-5 1/4" = 1'-0"



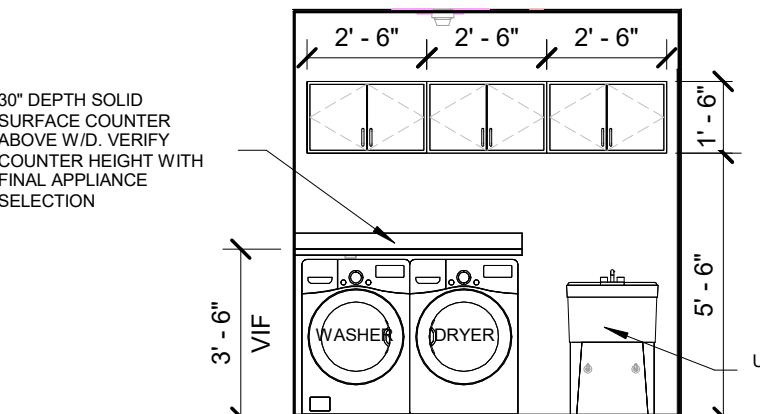
(14) 115 TURNOUT ELEVATION 2
A7-5 1/4" = 1'-0"



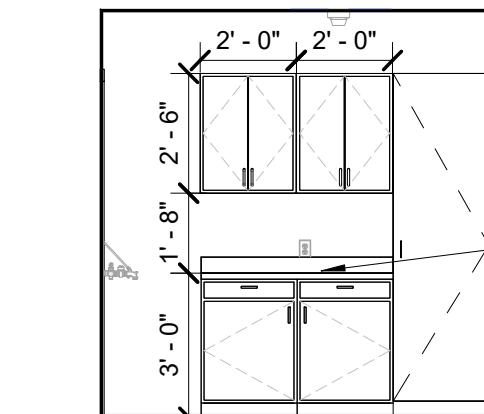
(13) 115 TURNOUT ELEVATION 3
A7-5 1/4" = 1'-0"



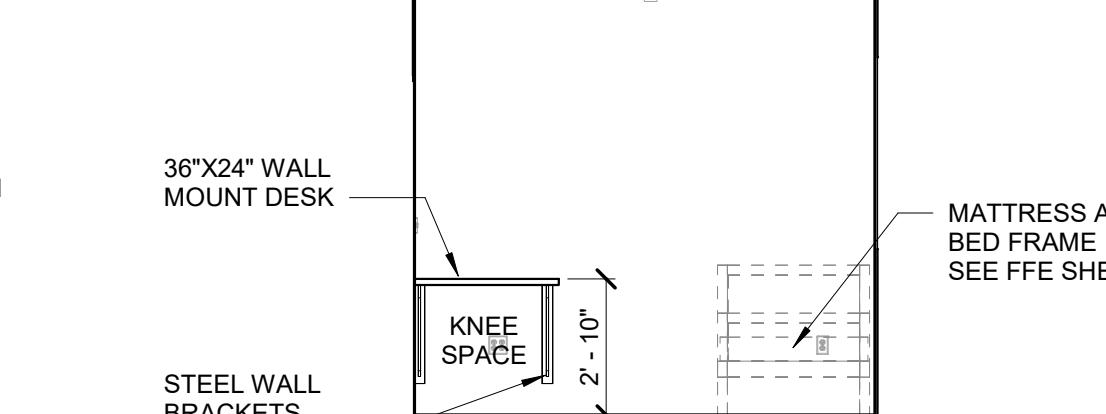
(12) 137 LAUNDRY ELEVATION 1
A7-5 1/4" = 1'-0"



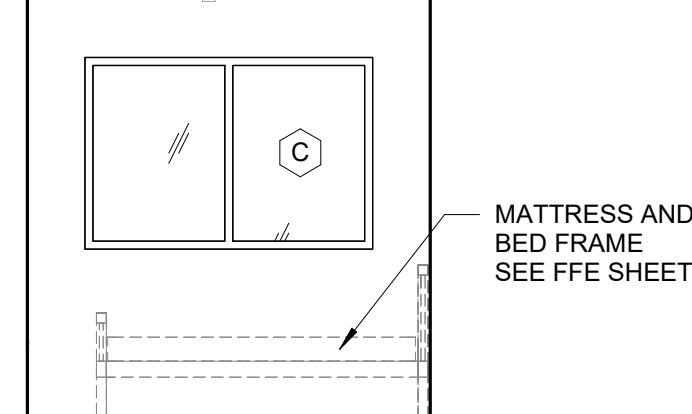
(11) 137 LAUNDRY ELEVATION 2
A7-5 1/4" = 1'-0"



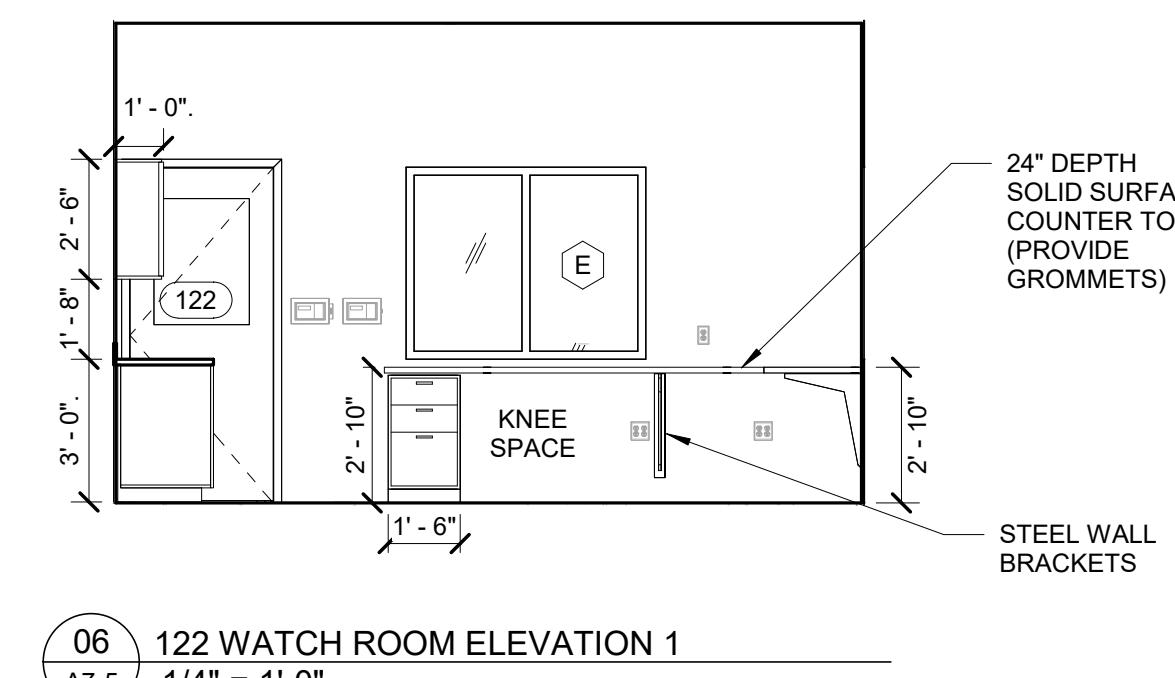
(10) 137 LAUNDRY ELEVATION 3
A7-5 1/4" = 1'-0"



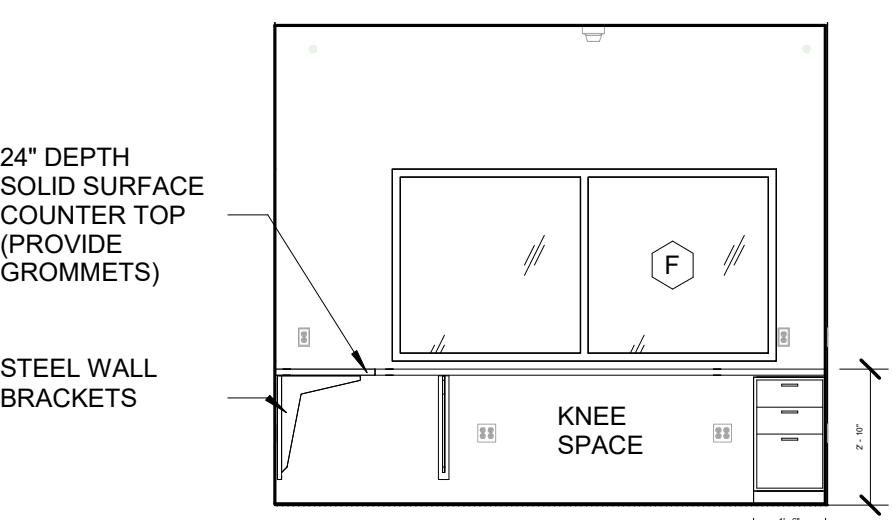
(09) 136 DORM 1 ELEVATION 1
A7-5 1/4" = 1'-0"



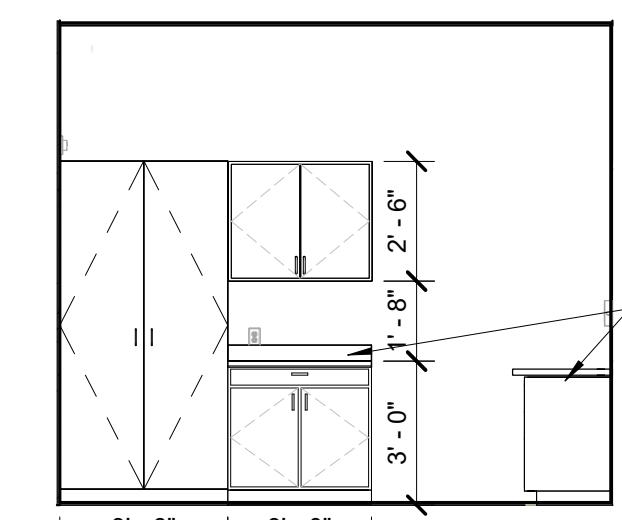
(07) 135 DORM 2 ELEVATION 1
A7-5 1/4" = 1'-0"



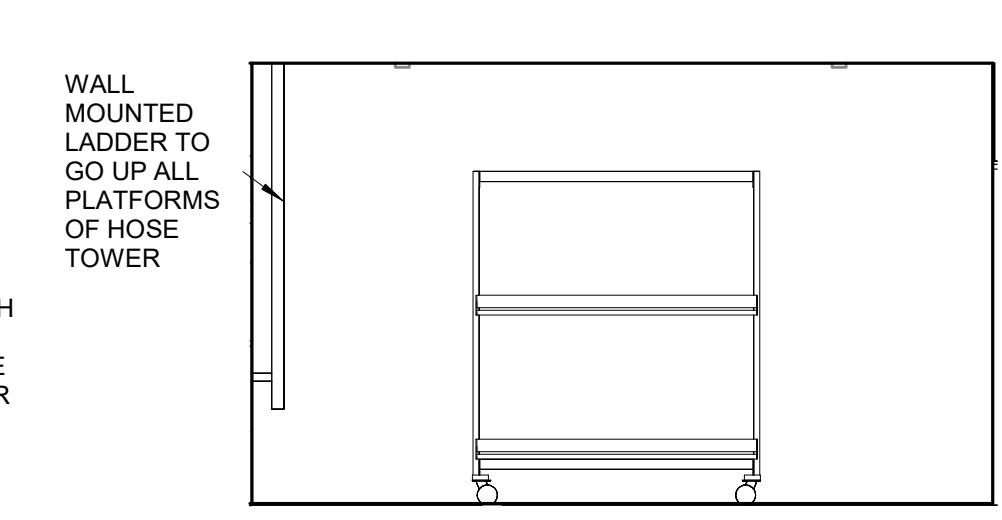
(06) 122 WATCH ROOM ELEVATION 1
A7-5 1/4" = 1'-0"



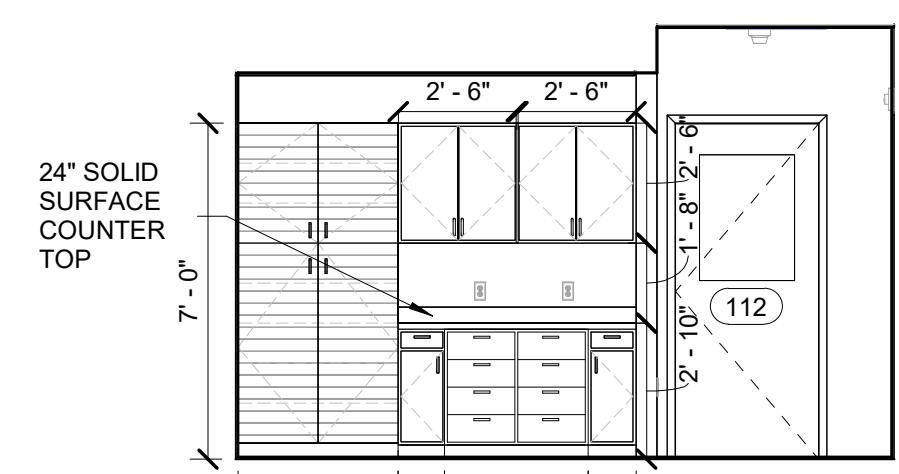
(05) 122 WATCH ROOM ELEVATION 2
A7-5 1/4" = 1'-0"



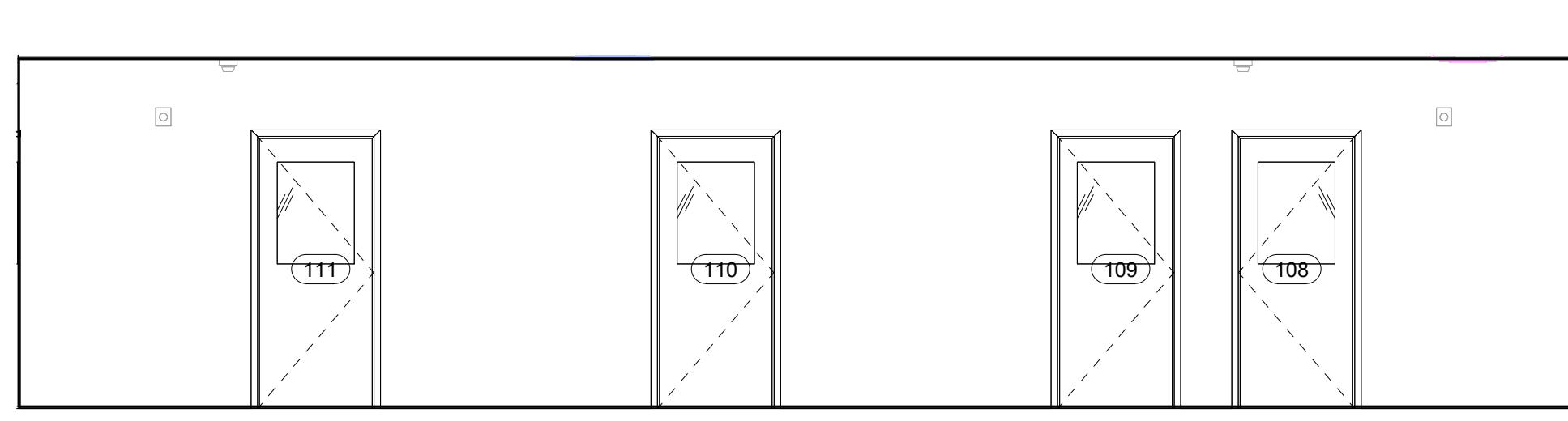
(04) WATCHROOM ELEVATION 3
A7-5 1/4" = 1'-0"



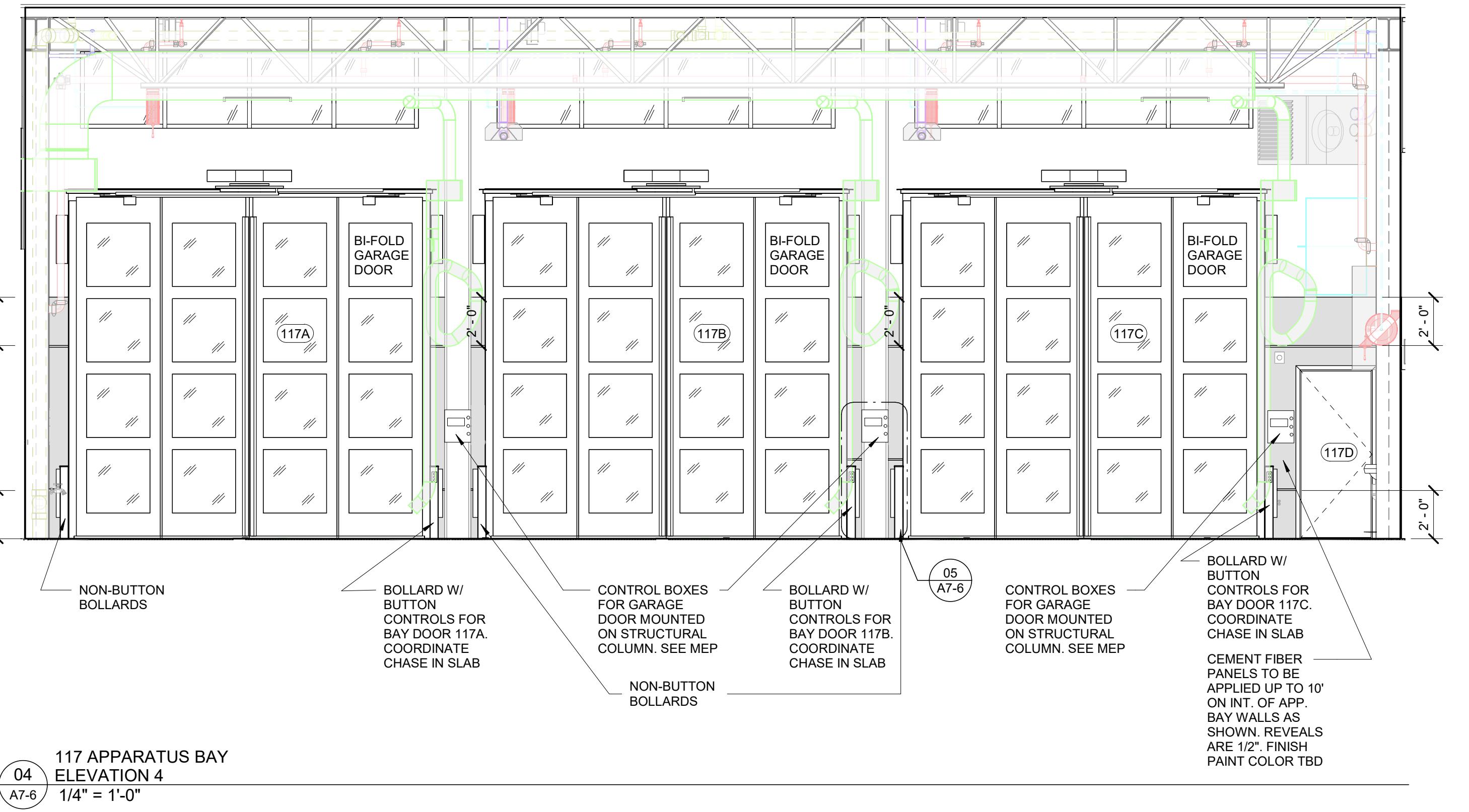
(03) HOSE TOWER
A7-5 1/4" = 1'-0"



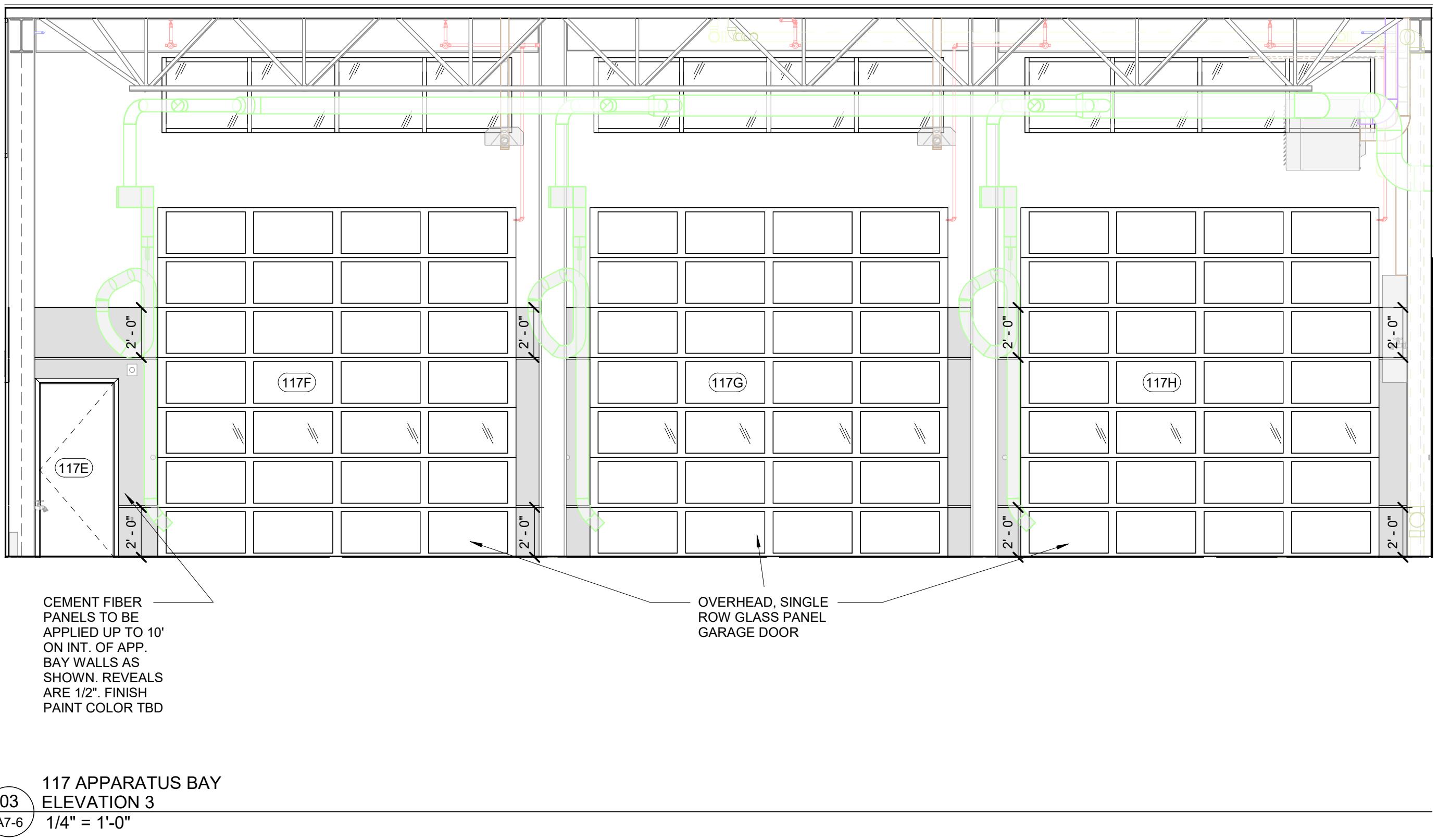
(02) 107 WORKROOM HALLWAY
ELEVATION 1
A7-5 1/4" = 1'-0"



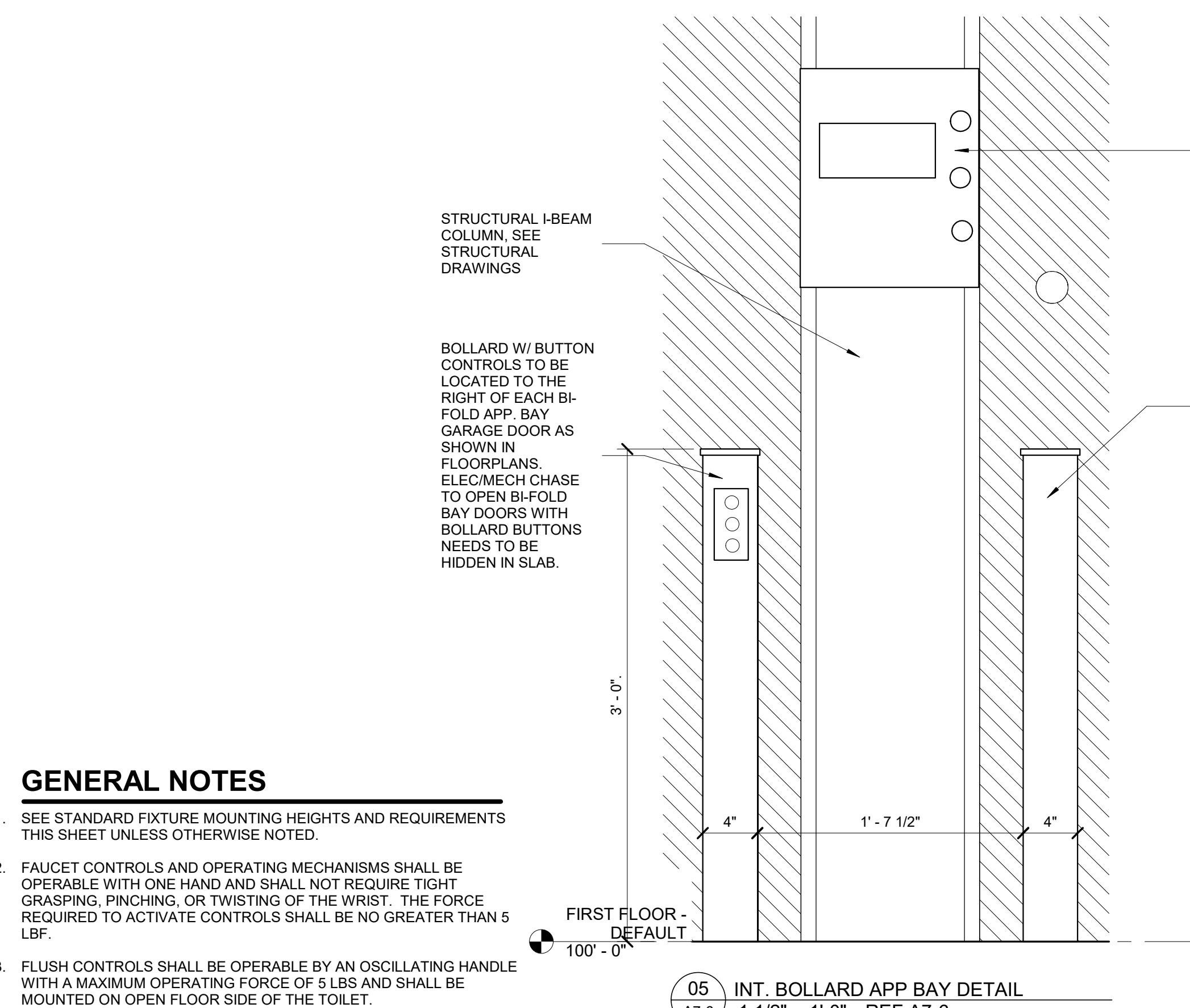
(01) 107 WORKROOM HALLWAY
ELEVATION 2
A7-5 1/4" = 1'-0"



04
117 APPARATUS BAY
ELEVATION 4
1/4" = 1'-0"

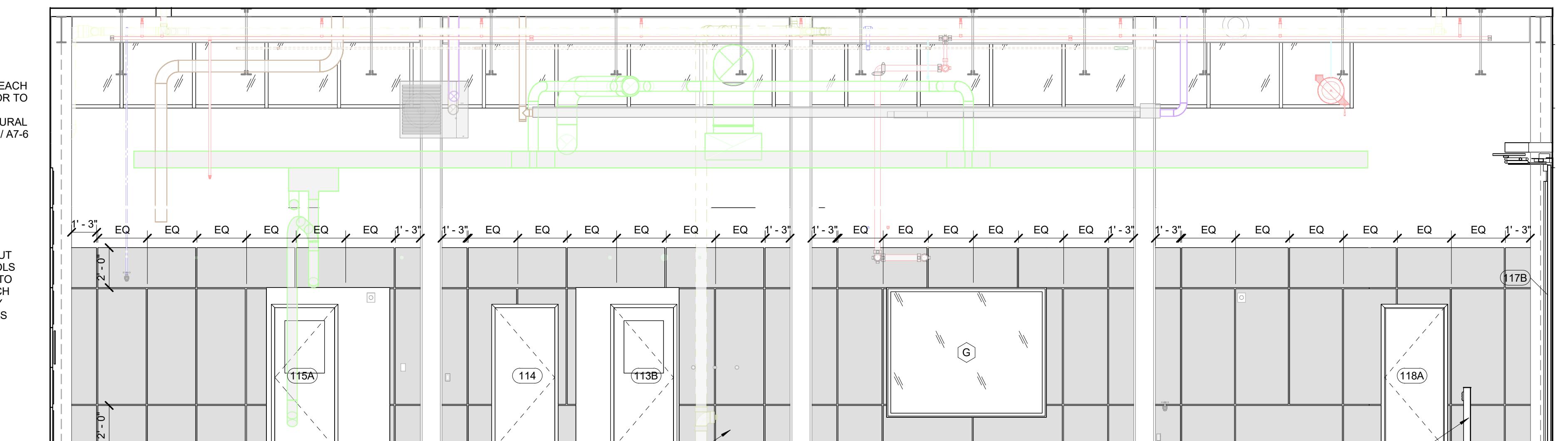


03
117 APPARATUS BAY
ELEVATION 3
1/4" = 1'-0"

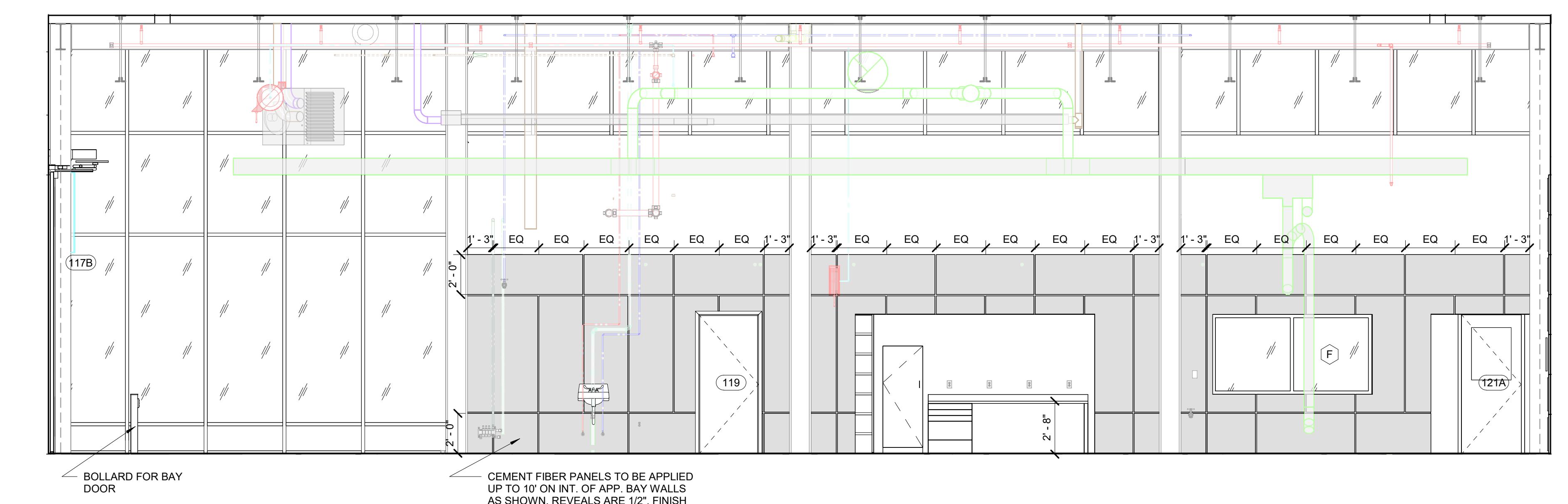


GENERAL NOTES

- SEE STANDARD FIXTURE MOUNTING HEIGHTS AND REQUIREMENTS THIS SHEET UNLESS OTHERWISE NOTED.
- FAUCET CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN 5 LBF.
- FLUSH CONTROLS SHALL BE OPERABLE BY AN OSCILLATING HANDLE WITH A MAXIMUM OPERATING FORCE OF 5 LBS AND SHALL BE MOUNTED ON OPEN FLOOR SIDE OF THE TOILET.
- DIA. OR WIDTH OF THE GRAB BARS SHALL BE 1 1/4" TO 1 1/2" WITH 1 1/2" CLEARANCE BETWEEN GRAB BAR AND WALL. GRAB BAR ENDS TO BE RETURNED TO WALL. GRAB BARS SHALL HAVE STRENGTH AND ANCHORAGE TO SUSTAIN 250 LB CONCENTRATED LOAD.
- WHERE TOWEL WASTE RECEPTACLE AND OTHER DISPENSING AND DISPOSING FIXTURES ARE PROVIDED, AT LEAST ONE OF EACH FIXTURE IS TO BE MOUNTED WITH OPERABLE PARTS WITHIN 48" FROM FLOOR.
- HOT WATER AND DRAIN PIPES UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED.
- PROVIDE CODE-COMPLIANT BLOCKING WITHIN WALLS AS REQUIRED FOR ALL WALL-MOUNTED ITEMS.
- SECURELY ANCHOR HANDWASH SINKS TO WITHSTAND AN APPLIED VERTICAL LOAD OF 250 LB ON THE FRONT OF THE FIXTURE.
- 6" SELF-COVED WALL BASE REQUIRED AT KITCHENS, SOILED UTILITY ROOMS, AND JANITOR CLOSETS.
- EXPOSED TILE TO HAVE SCHLUTER TILE EDGE TRIM WHERE TILE DOESN'T DIE INTO ANOTHER SURFACE/ CASEWORK
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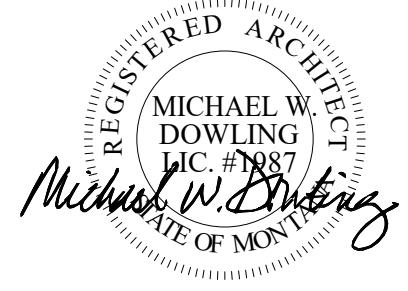


02
117 APPARATUS BAY
ELEVATION 2
1/4" = 1'-0"



01
117 APPARATUS BAY
ELEVATION 1
1/4" = 1'-0"

STANDARD CASEWORK DIMENSIONS



GENERAL NOTES

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HELENA FIRESTATION #3
1872 KELLEHER LANE, HELENA, MT 59602

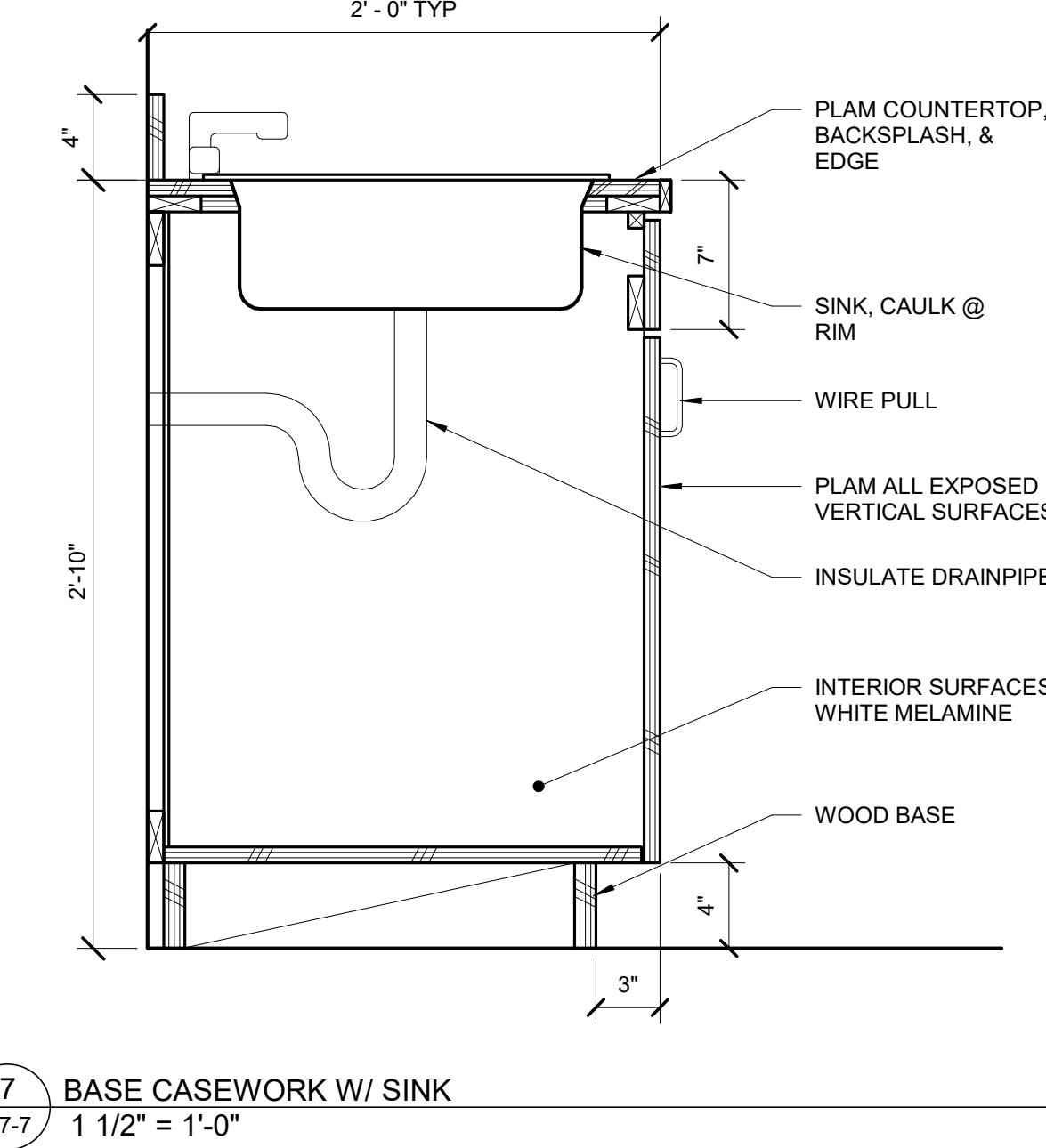
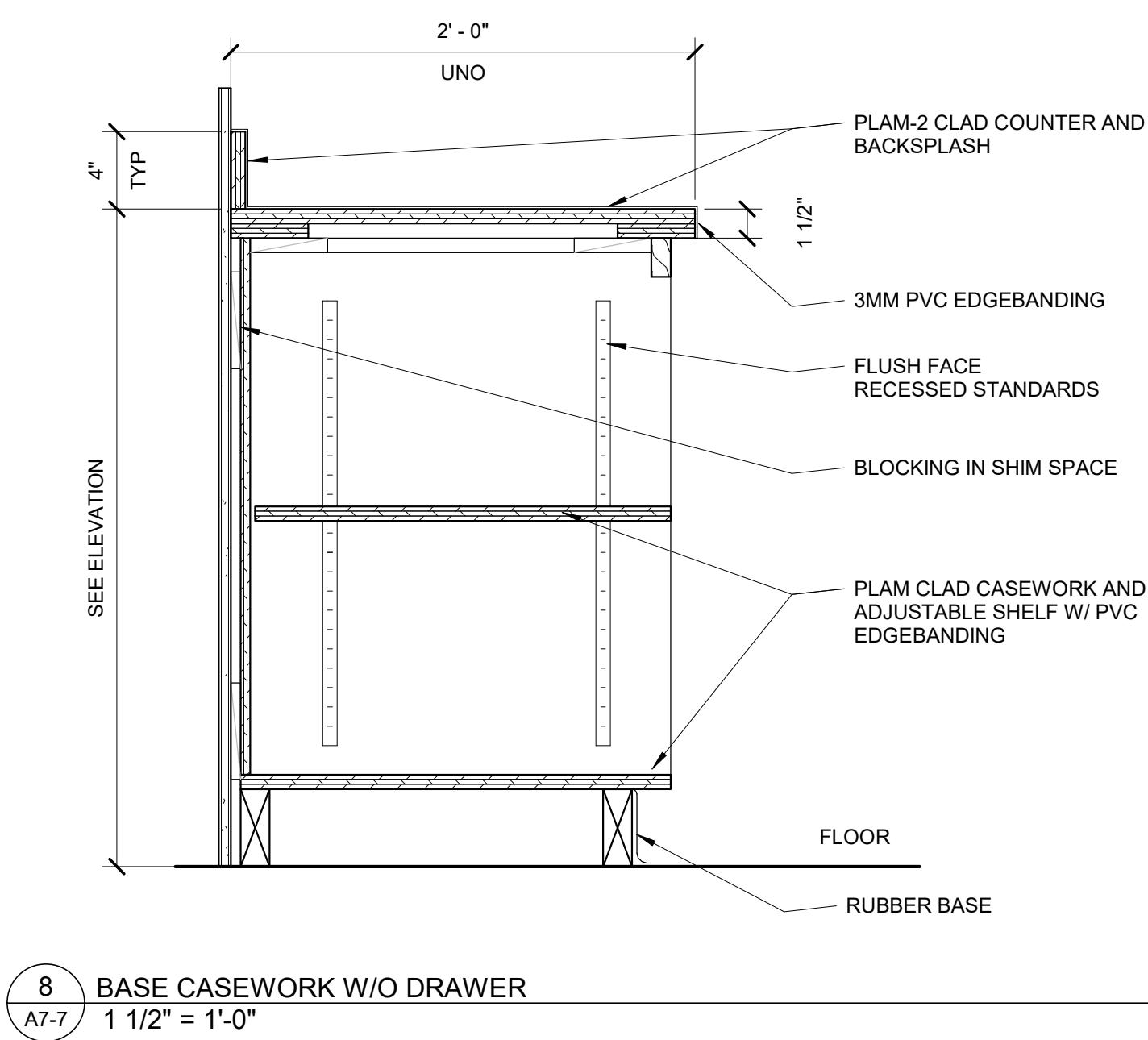
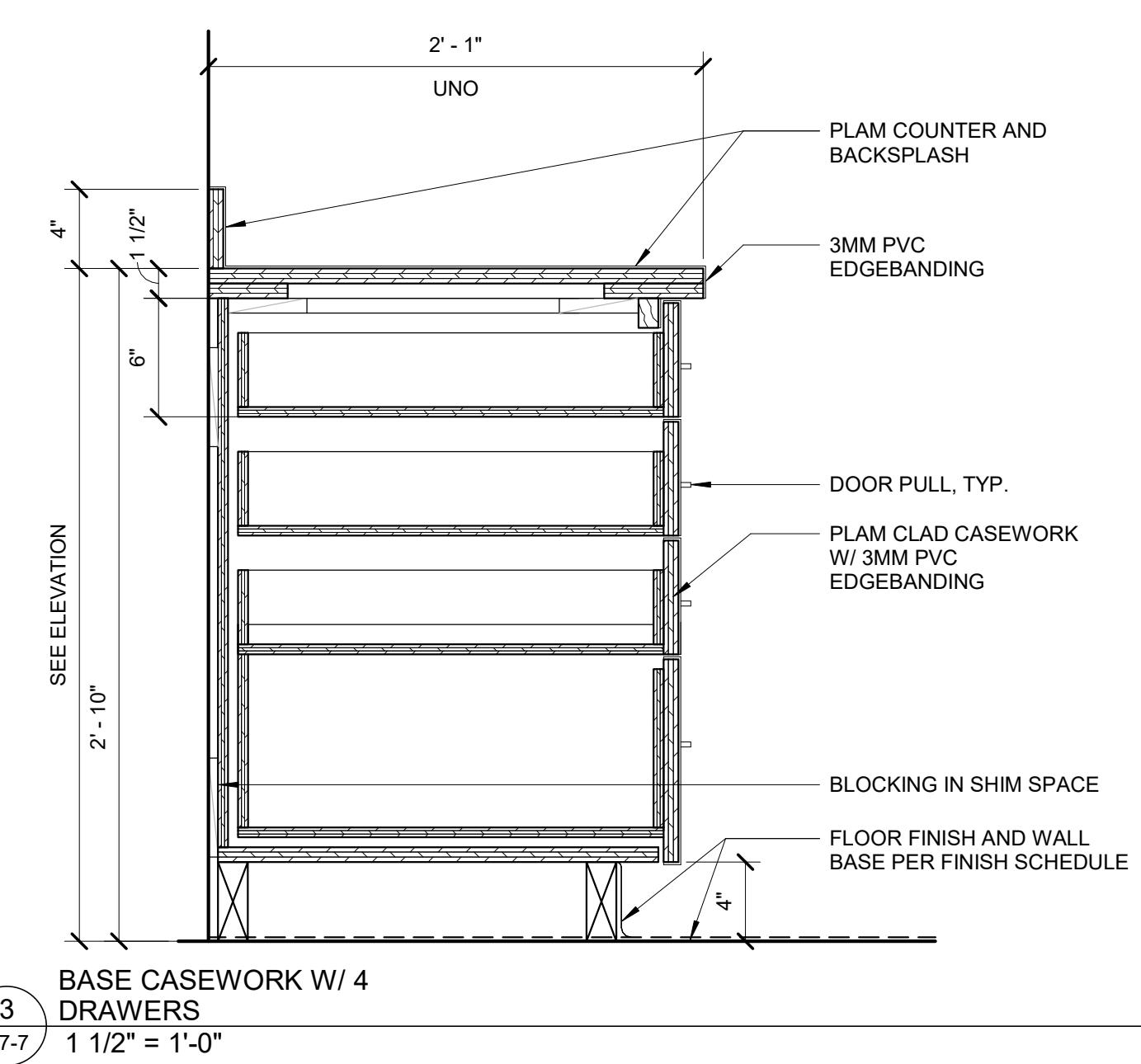
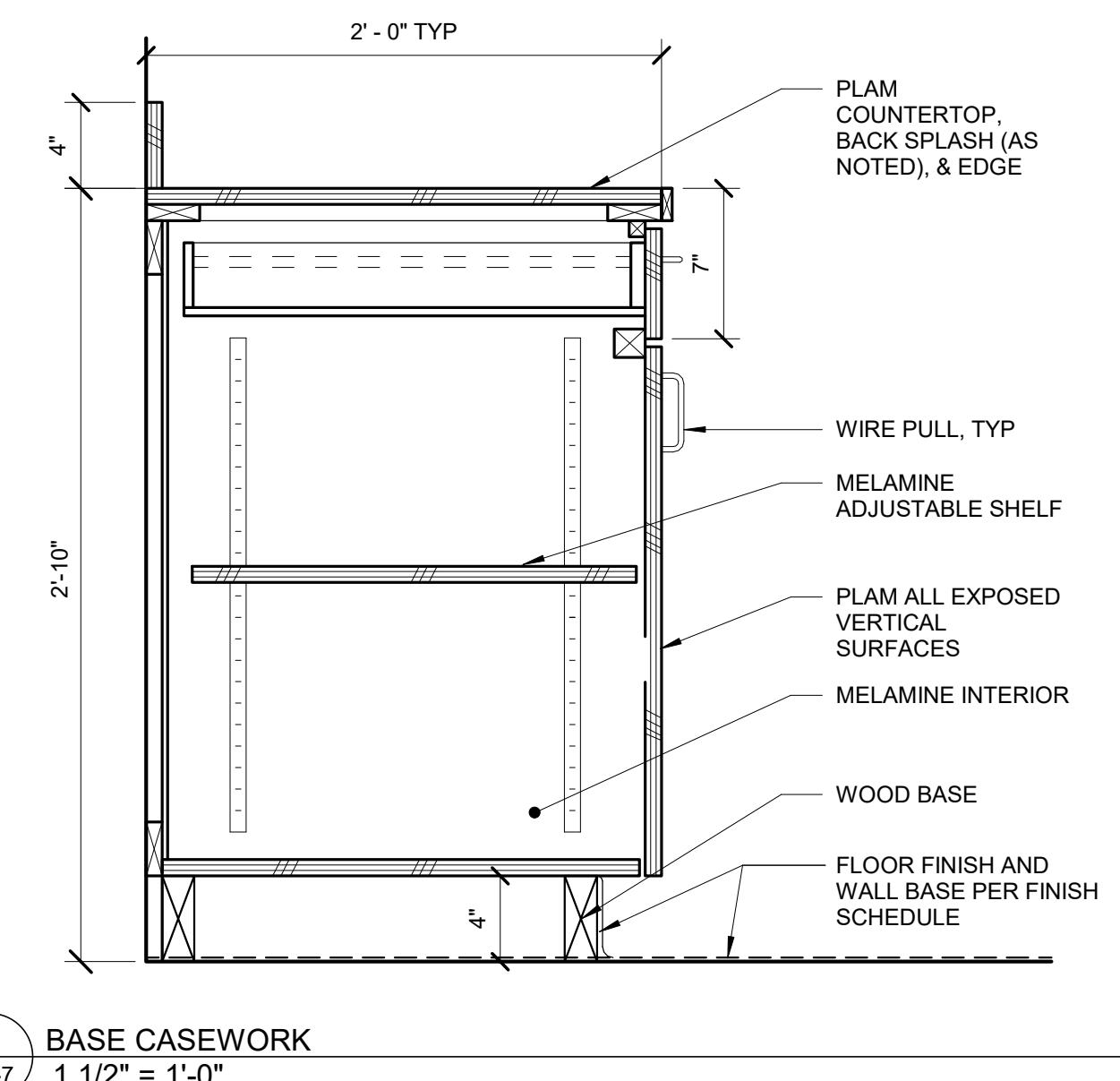
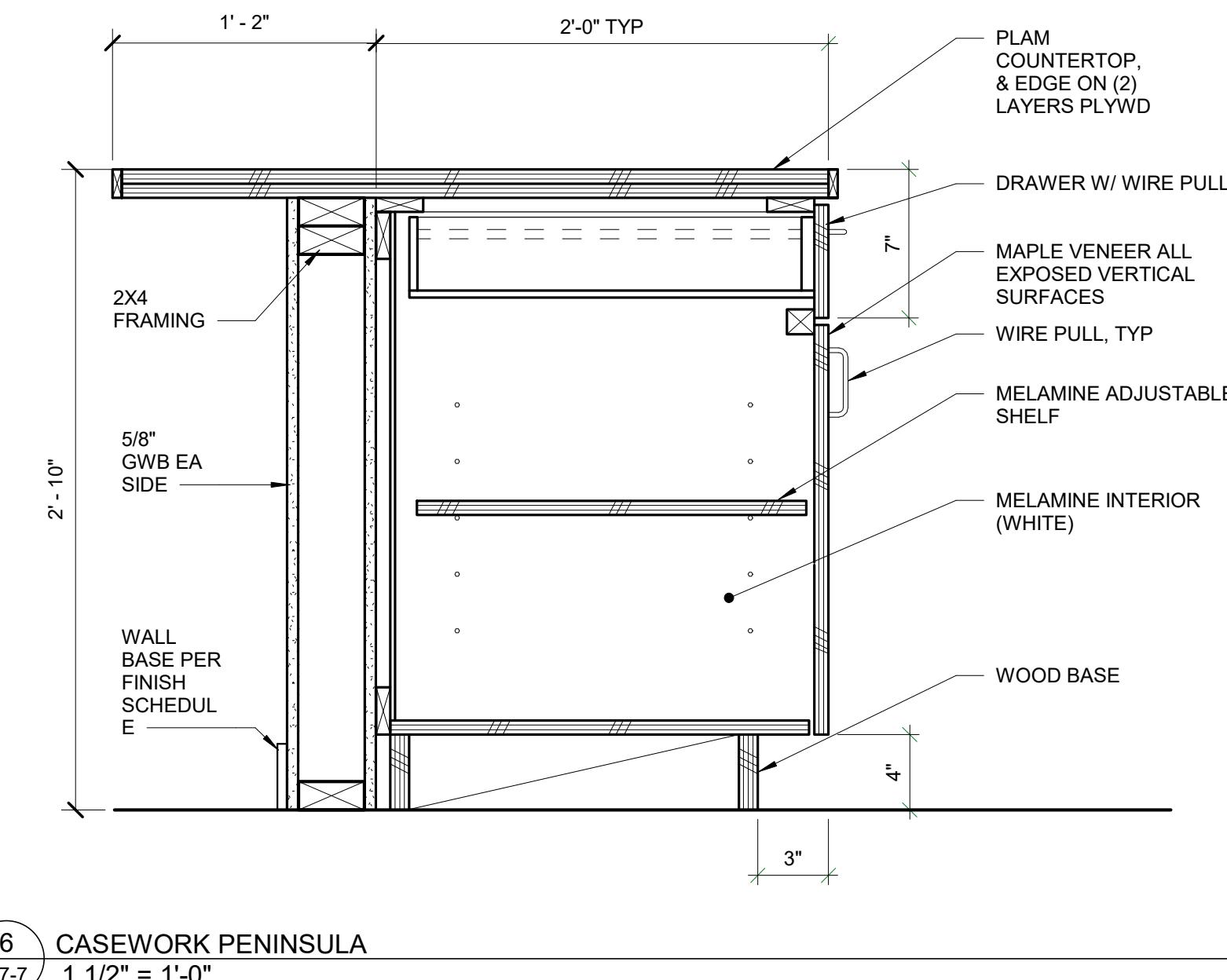
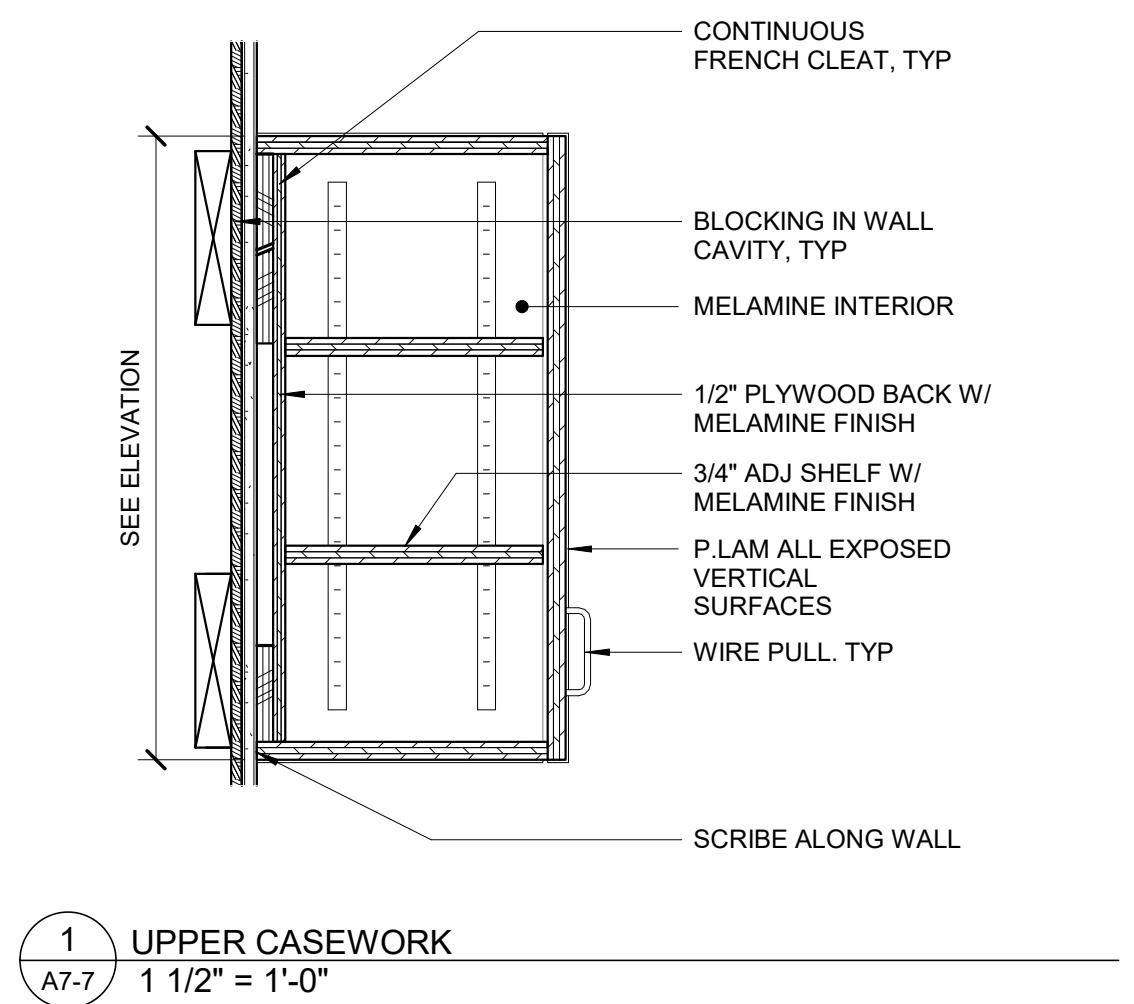
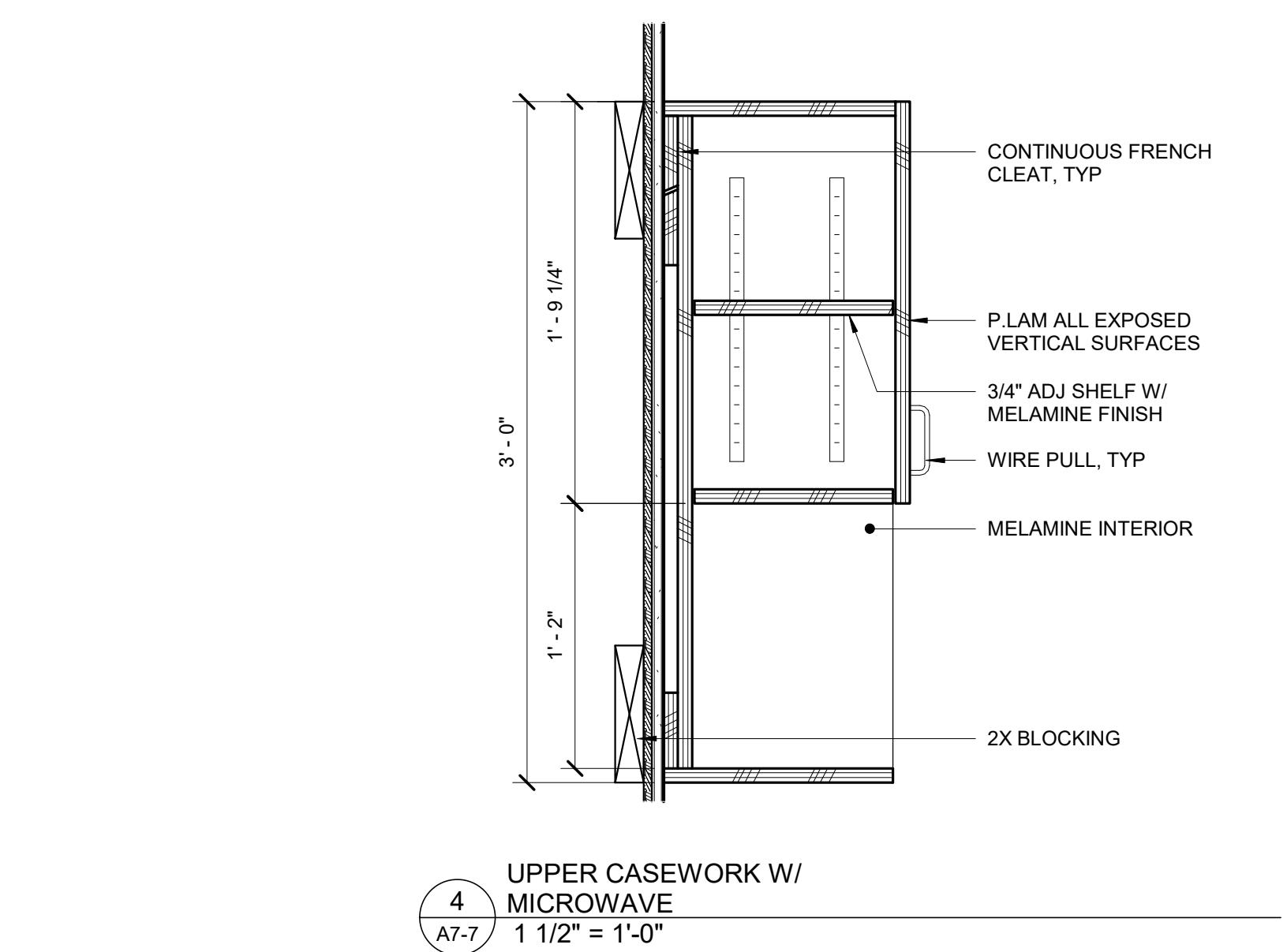
DOWLING ARCHITECTS | SHIVEHATTERRY
ARCHITECTURE + ENGINEERING

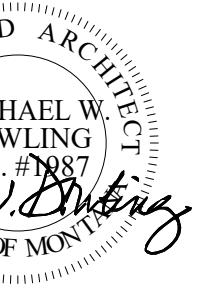
CASEWORK,
INTERIOR
ELEVATIONS &
DETAILS

PROJECT #:
25-668

ISSUE DATES:

100% CONSTRUCTION SET
A7-7
10.22.25





HELENA FIRESTATION #3

1872 KELLEHER LANE, HELENA, MT 59602

DOWLING | SHIVEH-ATTERTY
ARCHITECTS | ARCHITECTURE + ENGINEERING

CASEWORK,
INTERIOR
ELEVATIONS &
DETAILS

PROJECT #:
25-668
ISSUE DATES:

DRAWN BY: JS/CC

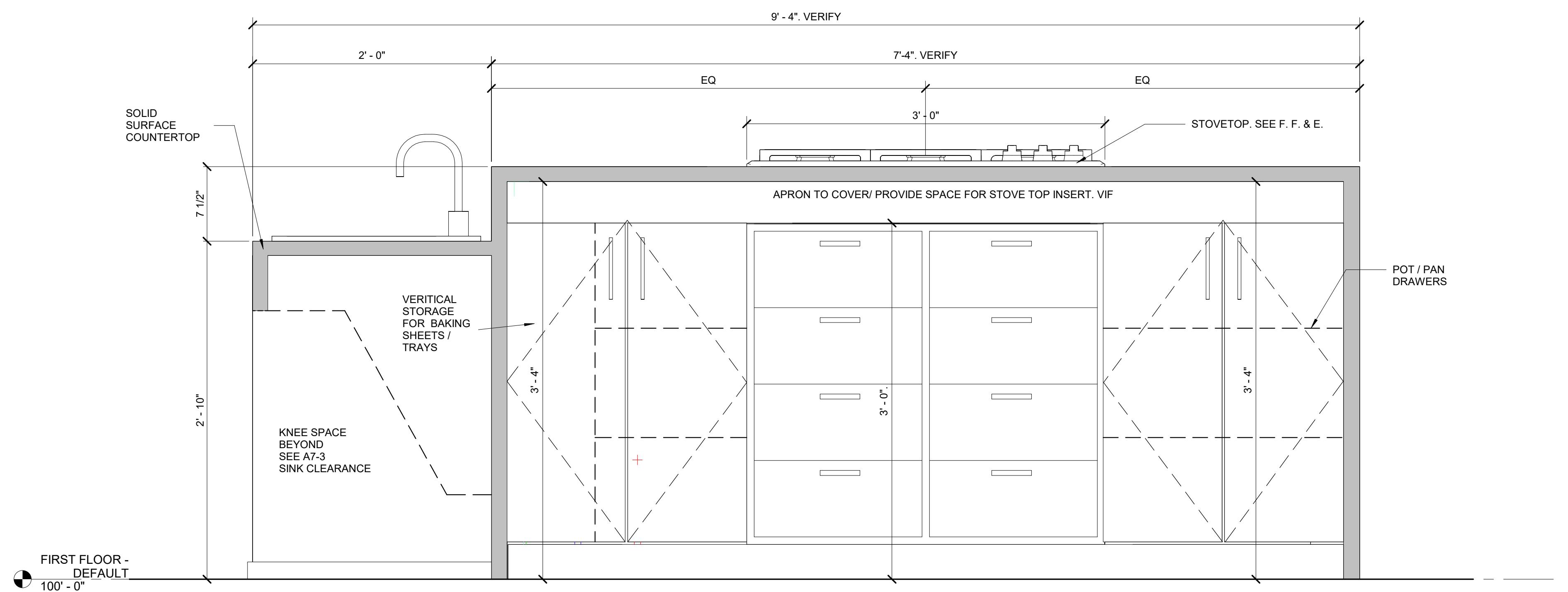
100% CONSTRUCTION SET

A7-8

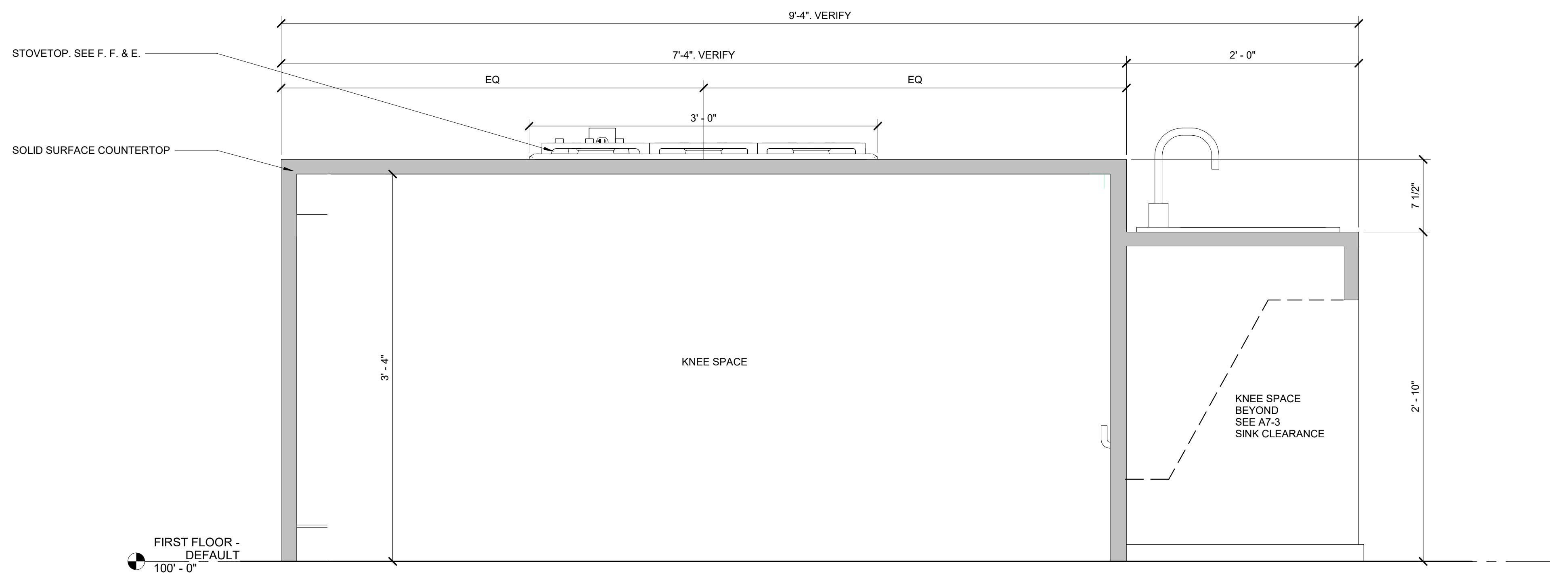
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GENERAL NOTES

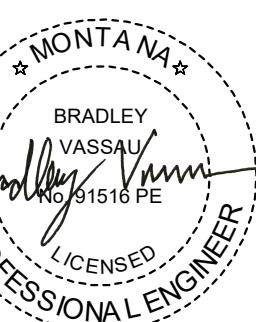
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DAYROOM ISLAND CASEWORK
DETAIL 1
A7-8 1 1/2" = 1'-0" REF:A7-2



DAYROOM ISLAND CASEWORK
DETAIL 2
A7-8 1 1/2" = 1'-0" REF:A7-2



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www.dowlingarchitects.com

GENERAL STRUCTURAL NOTES:

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GENERAL:

- THESE DRAWINGS HAVE BEEN PREPARED SOLELY FOR USE IN THE CONSTRUCTION OF HELENA FIRE STATION #3 AT THE LOCATION OF HELENA, MT. POSSESSION OF THESE DRAWINGS DOES NOT GRANT A LICENSE TO CONSTRUCT OR FABRICATE THE WHOLE, OR PARTS OF THIS PROJECT IN OTHER LOCATIONS.
- STRUCTURAL DRAWINGS ARE A PORTION OF THE CONTRACT DOCUMENTS AND ARE INTENDED TO BE USED WITH ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND SITE CIVIL DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE REQUIREMENTS FROM THESE DRAWINGS INCLUDING BUT NOT LIMITED TO DIMENSIONS, ECKOUTS, OPENINGS, SLEEVES, EMBEDDED ITEMS, ETC. INTO THEIR SHOP DRAWINGS AND WORK. NOTIFY THE ARCHITECT/STRUCTURAL ENGINEER OF RECORD OF ANY DISCREPANCIES OR IF ACTUAL CONDITIONS DIFFER FROM THOSE SHOWN OR NOTED.
- DO NOT SCALE OR RESIZE THE DRAWINGS IN ANY MANNER. ANY ADJUSTMENTS TO THE SIZE OR SCALE OF THE DRAWINGS MAY RESULT IN MISINTERPRETATION OF CRITICAL DIMENSIONS AND DETAILS.
- THE STRUCTURAL DRAWINGS ARE INTENDED TO SHOW THE GENERAL CHARACTER AND EXTENT OF THE PROJECT AND ARE NOT INTENDED TO SHOW ALL DETAILS OF WORK. USE ENTIRE DETAIL SHEETS AND SPECIFIC DETAILS REFERENCED IN THE PLANS AS "TYPICAL" WHEREVER THEY APPLY. USE DETAILS ON ENTIRE SHEETS WITH "TYPICAL" IN THE NAME WHEREVER THEY APPLY.
- WHERE DISCREPANCIES OCCUR BETWEEN THE GENERAL STRUCTURAL NOTES, SPECIFICATIONS, PLANS/DETAILS OR REFERENCE STANDARDS, THE ARCHITECT/ENGINEER SHALL DETERMINE WHICH SHALL GOVERN. DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ENGINEER BEFORE PROCEEDING WITH THE WORK. SHOULD ANY DISCREPANCY BE FOUND IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL INCLUDE IN THE PRICE THE MOST EXPENSIVE WAY OF COMPLETING THE WORK, UNLESS PRIOR TO THE SUBMISSION OF THE PRICE, THE CONTRACTOR ASKS FOR A DECISION FROM THE ARCHITECT AS TO WHICH SHALL GOVERN. CONFLICTS BETWEEN THE CONTRACT DOCUMENTS SHALL NOT BE A BASIS FOR ADJUSTMENT IN CONTRACT PRICE.
- THE CONTRACTOR SHALL FURNISH THE PRODUCTS SPECIFIED ON THE DRAWINGS. SUBSTITUTIONS WILL BE CONSIDERED ONLY IF THE CONTRACTOR PROVIDES DOCUMENTATION TO PROVE THE ALTERNATIVE EQUALS OR EXCEEDS THE STRUCTURAL PERFORMANCE CHARACTERISTICS OF THE SPECIFIED PRODUCT.
- CODE REQUIREMENTS:**
 - A. ALL WORK SHALL BE IN STRICT COMPLIANCE WITH:
 - a. 2021 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED BY THE STATE OF MONTANA (INTERNATIONAL BUILDING CODE, 2021 EDITION, EFFECTIVE JUNE 11, 2022)
 - b. ALL OTHER STATE AND LOCAL BUILDING REQUIREMENTS THAT APPLY.
- TEMPORARY CONDITIONS:**
 - A. THE STRUCTURAL DRAWINGS REPRESENT THE STRUCTURE IN THE FINAL CONSTRUCTED CONDITION. CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY SUPPORT PRIOR TO COMPLETION OF VERTICAL AND LATERAL LOAD SYSTEMS. MORRISON-MAIERLE HAS NOT BEEN RETAINED TO PROVIDE ANY SERVICES RELATED TO JOB SITE SAFETY PRECAUTIONS, OR TO REVIEW THE MEANS, METHODS, TECHNIQUES, SERVICES, OR PROCEDURES OF THE CONTRACTOR PERTAINING TO THE WORK. UNLESS WORKERS ARE SPECIFICALLY RETAINED AND COMPENSATED, THEY DO NOT DO OTHERWISE. OUR WORK IS LIMITED TO THE FINAL DESIGN OF THE WORK DESCRIBED ON OUR DRAWINGS FOR THIS PROJECT.
 - B. CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.
- ASSUMED FUTURE CONSTRUCTION:**
 - A. VERTICAL: NONE
 - B. HORIZONTAL: NONE

DESIGN CRITERIA:

- DESIGN IS BASED ON THE FOLLOWING LOADING FOR THE BASIS OF STRENGTH, PERFORMANCE, AND SERVICABILITY OF THE STRUCTURE:

DESIGN CRITERIA

LIVE LOAD CRITERIA (IBC 1603.1.1)

FLOOR LIVE LOADS:	UNIFORM LOAD	CONCENTRATED LOAD
ASSEMBLY AREAS	100 PSF (NON-REDUCIBLE)	N/A
CORRIDORS: FIRST FLOOR	100 PSF	N/A
OFFICE BUILDINGS: OFFICES	50 PSF + 15 PARTITIONS	2000 LBS
OFFICE BUILDINGS: CORRIDORS	80 PSF	2000 LBS
DORMITORY/SLEEPING ROOMS	40 PSF	N/A
STORAGE: LIGHT	125 PSF (NON-REDUCIBLE)	N/A
STAIRS AND EXIT WAYS	100 PSF	300 LBS

ROOF LIVE LOAD CRITERIA (IBC 1603.1.2)

ORDINARY FLAT, PITCHED, CURVED	20 PSF (SEE SNOW LOAD)	N/A
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SNOW LOAD CRITERIA (IBC 1603.1.3)

DESIGN ROOF SNOW LOAD	30 PSF (MT STATE MINIMUM)
SNOW DRIFT	PER ASCE 7-22 AS SHOWN ON PLANS
GROUND SNOW LOAD	Pg = 45 PSF (ASCE 7-22 HAZARD TOOL)
FLAT ROOF SNOW LOAD	Pf = 24 PSF
SNOW EXPOSURE FACTOR	Ce = 0.9
SNOW LOAD IMPORTANCE FACTOR	Is = 1.2
TERMAL FACTOR	Ct = 1.1

WIND LOAD CRITERIA (IBC 1603.1.4)

BASIC DESIGN WIND SPEED	V = 118 MPH
RISK CATEGORY	IV
WIND EXPOSURE	C
INTERNAL PRESSURE COEFFICIENT	GCPi = +/- 0.18
COMPONENT & CLADDING PRESSURE FOR DEFERRED DESIGN ELEMENTS	SEE TABLE, NOTES AND DIAGRAMS BELOW

SEISMIC LOAD CRITERIA (IBC 1603.1.5)

RISK CATEGORY	IV	
SEISMIC IMPORTANCE FACTOR	Ie = 1.25	
MAPPED SPECTRAL RESPONSE	Ss = 0.485	S1 = 0.153
SITE CLASS	D	
DESIGN SPECTRAL RESPONSE	Sds = 0.457	Sd1 = 0.234
SEISMIC DESIGN CATEGORY	D	
X DIRECTION (E/W)	Z DIRECTION (N/S)	
BASIC SEISMIC FORCE RESISTING SYSTEM (SFRS)	NORTH & SOUTH WINGS: LIGHT FRAMED WOOD WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR LATERAL RESISTANCE APPARATUS BAY: STEEL SPECIAL MOMENT FRAMES	NORTH & SOUTH WINGS: LIGHT FRAMED WOOD WALLS SHEATHED WITH WOOD STRUCTURAL PANELS RATED FOR LATERAL RESISTANCE APPARATUS BAY: STEEL SPECIAL MOMENT FRAMES
DESIGN BASE SHEAR	NORTH WING = 13 KIPS SOUTH WING 14 KIPS APPARATUS BAY = 9 KIPS	NORTH WING = 13 KIPS SOUTH WING 14 KIPS APPARATUS BAY = 9 KIPS
SEISMIC RESPONSE COEFFICIENT	0.071	0.071
RESPONSE MODIFICATION FACTOR	8 (APPARATUS BAY) 6.5 (NORTH & SOUTH WINGS)	8 (APPARATUS BAY) 6.5 (NORTH & SOUTH WINGS)
ANALYSIS PROCEDURE USED	EQUIVALENT LATERAL FORCE	EQUIVALENT LATERAL FORCE

GEOTECHNICAL CRITERIA (IBC 1603.1.6)

DESIGN BASED ON REPORT BY	PIONEER GEOTECHNICAL REPORT DATED 08/07/25	
DESIGN SOIL BEARING PRESSURE	3000 PSF (DL + LL)	4000 PSF (EL / WL INCLUDED)
RETAINING WALLS EQ. FLUID PRESSURE	35 PCF (ACTIVE)	55 PCF (AT REST)
PASSIVE BEARING PRESSURE	250 PSF/FT	

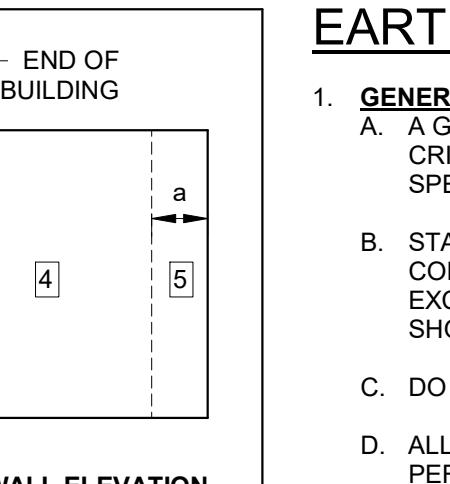
COEFFICIENT OF SLIDING FRICTION

0.4

COMPONENTS AND CLADDING WIND PRESSURES

NOTATION:

1. h = MEAN ROOF HEIGHT (23 FT)
2. a = 6 FT
3. LISTED PRESSURE VALUES ARE IN POUNDS PER SQUARE FOOT (PSF) AND WERE DETERMINED AT THE MEAN ROOF HEIGHT. WIND PRESSURE VALUES MAY BE REDUCED FOR ELEMENTS AT LOWER ELEVATION PER ASCE 7 SECTION 30.5
4. POSITIVE VALUES INDICATE LOAD ACTING TOWARDS A SURFACE. NEGATIVE VALUES INDICATE LOAD ACTING AWAY FROM A SURFACE.
5. LISTED PRESSURES ARE FOR ELEMENTS WITH A TRIBUTARY WIND AREA OF 10 SQUARE FEET OR LESS. FOR ELEMENTS WITH LARGER TRIBUTARY AREAS, THE VALUES MAY BE ADJUSTED PER ASCE 7, CHAPTER 30.
6. LISTED VALUES DO NOT APPLY TO SIGNS, CHIMNEYS, TANKS, ROOFTOP EQUIPMENT OR SIMILAR STRUCTURES.
7. DESIGN FOR THE LARGEST POSITIVE AND NEGATIVE PRESSURE ACTING INDEPENDENTLY.
8. THE MINIMUM DESIGN PRESSURE FOR ALL ELEMENTS IS 16 PSF



EARTHWORK:

1. GENERAL:

- A GEOTECHNICAL INVESTIGATION AND REPORT HAS BEEN COMPLETED AS NOTED IN THE 'DESIGN CRITERIA'. REFER TO GEOTECHNICAL REPORT FOR RECOMMENDATIONS ON SITE PREPARATIONS, FILL SPECIFICATIONS AND SITE SPECIFIC CONSTRUCTION CONSIDERATIONS.
- STABILITY OF CONSTRUCTION EXCAVATION AND WORKER SAFETY ARE THE RESPONSIBILITY OF THE CONTRACTOR. BASED UPON THE GEOTECHNICAL REPORT, TEMPORARY CONSTRUCTION EXCAVATIONS, ABOVE GROUND WATER, TO BE PLANNED IN ACCORDANCE WITH OSHA PROVISIONS SHOULD ASSUME TYPE B MATERIAL FOR STIFF CLAY, AND TYPE C MATERIAL FOR SAND.
- DO NOT EXCAVATE CLOSER THAN 2:1 SLOPE BELOW FOOTING EXCAVATIONS.
- ALL SLABS-ON-GRADE SHALL BEAR ON COMPACTED STRUCTURAL FILL OR COMPETENT NATIVE SOIL PER THE GEOTECHNICAL REPORT. ALL MOISTURE SENSITIVE SLABS-ON-GRADE OR THOSE SUBJECT TO RECEIVE MOISTURE SENSITIVE COATINGS OR COVERINGS SHALL BE PROVIDED WITH AN APPROPRIATE CAPILLARY BREAK AND VAPOR BARRIER OR RETARDANT OVER THE SUBGRADE PREPARED AND INSTALLED AS NOTED IN THE GEOTECHNICAL REPORT, BARRIER MANUFACTURER'S WRITTEN RECOMMENDATIONS AND COORDINATED WITH THE FINISHES SPECIFIED BY THE ARCHITECT.

CAST-IN-PLACE CONCRETE:

- CONCRETE SHALL BE IN ACCORDANCE WITH ACI 301, SPECIFICATION FOR STRUCTURAL CONCRETE, AND ACI 111, SPECIFICATION FOR TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS, UNLESS NOTED OTHERWISE.
- AVERAGE CONCRETE STRENGTH DETERMINED BY JOB CAST LAB CURED CYLINDER PER ASTM C39 TO BE AS INDICATED BELOW PLUS INCREASE DEPENDING ON THE PLANT'S STANDARD DEVIATION AS SPECIFIED IN ACI 318. MINIMUM CONCRETE PROPERTIES SHALL BE AS FOLLOWS:

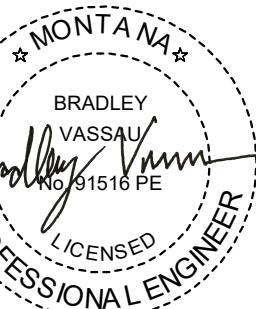
CONCRETE PROPERTIES					
USE	CONCRETE TYPE	MIN COMPRESSIVE STRENGTH	TEST AGE DAYS	AIR CONTENT	MAX WATER TO CEMENT RATIO
EXTERIOR FOOTINGS AND WALLS	NW	4,500 PSI	28	6% +/- 1.5%	0.45
INTERIOR FOOTINGS AND WALLS	NW	4,000 PSI	28	--	0.45
EXTERIOR SLABS ON GRADE	NW	3,500 PSI	28	4.5% +/- 1.5%	0.55
INTERIOR SLABS ON GRADE	NW	3,500 PSI	28	--	0.50
SLAB ON METAL DECK	NW	3,500 PSI	28	--	N/A
APPARATUS BAY SLAB ON GRADE	NW	5,000 PSI	28	6% +/- 1.5%	0.45

NOTES:
1. NORMAL WEIGHT CONCRETE (NW): 145 PCF, STONE AGGREGATE

- DURABILITY REQUIREMENTS: CONCRETE MIXES USED ON THE PROJECT SHALL BE PROPORTIONED TO SATISFY THE FOLLOWING DURABILITY REQUIREMENTS:

CONCRETE PROPERTIES				
USE	FREEZE-THAW (ACI 318, 19.3.1)	PERMEABILITY (ACI 318, 19.3.1)	CHLORIDES (ACI 318, 19.3.1)	SULFATES (ACI 318, 19.3.1)
EXTERIOR FOOTINGS AND WALLS	F2	W1	C0	S0
INTERIOR FOOTINGS AND WALLS	F0	W0	C0	S0
EXTERIOR SLABS ON GRADE	F1	W1	C1	S0
INTERIOR SLABS ON GRADE	F0	W0	C0	S0
SLAB ON METAL DECK	F0	W0	C0	S0
APPARATUS BAY SLAB ON GRADE	F2	W1	C2	S0

- THE CONTRACTOR SHALL SUBMIT CON



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STATEMENT OF SPECIAL INSPECTION AND TESTING NOTES:

- SPECIAL INSPECTIONS SHALL CONFORM TO SECTION 1705 OF THE 2021 IBC. CONTRACT DOCUMENTS AND APPROVED SUBMITTALS REFER TO SPECIAL INSPECTION AND TESTING TABLES FOR PROJECT REQUIREMENTS.
- SPECIAL INSPECTIONS AND ASSOCIATED TESTING SHALL BE PERFORMED BY AN APPROVED ACCREDITED INDEPENDENT AGENCY MEETING THE REQUIREMENTS OF ASTM E329 (MATERIALS). THE INSPECTION AND TESTING AGENCY SHALL FURNISH TO THE STRUCTURAL ENGINEER/ ARCHITECT A COPY OF THEIR SCOPE OF ACCREDITATION. SPECIAL INSPECTORS SHALL BE APPROVED BY THE BUILDING OFFICIAL. WELDING INSPECTORS SHALL BE QUALIFIED PER SECTION 6.1.4.1(1) OF AWS D1.1.
- THE SPECIAL INSPECTOR SHALL OBSERVE THE INDICATED WORK FOR COMPLIANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION AND NOTED IN THE INSPECTION REPORTS. ISSUES REQUIRING IMMEDIATE CORRECTIVE ACTIONS OR ENGINEERING INPUT ARE TO BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY UPON DISCOVERY.
- THE SPECIAL INSPECTION OR WORK FOR WHICH SPECIAL INSPECTION IS REQUIRED SHALL REMAIN ACCESSIBLE AND EXPOSED FOR SPECIAL INSPECTION PURPOSES UNTIL COMPLETION OF THE REQUIRED SPECIAL INSPECTIONS.
- THE SPECIAL INSPECTOR AND GEOTECHNICAL ENGINEER SHALL FURNISH INSPECTION REPORTS FOR EACH INSPECTION TO THE BUILDING OFFICIAL, STRUCTURAL ENGINEER, ARCHITECT, CONTRACTOR, AND OWNER. THE SPECIAL INSPECTION AGENCY SHALL SUBMIT A FINAL REPORT STATING THAT THE WORK REQUIRING SPECIAL INSPECTION WAS INSPECTED AND IS IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS AND THAT ALL DISCREPANCIES NOTED IN THE INSPECTION REPORTS HAVE BEEN CORRECTED.
- QUALITY ASSURANCE (QA) IS REQUIRED FOR STRUCTURAL STEEL ITEMS PER AISC 360 AND 341 UNLESS SPECIFICALLY NOTED OTHERWISE. QUALITY CONTROL (QC) TO BE PROVIDED BY THE FABRICATOR, ERECTOR OR OTHER RESPONSIBLE CONTRACTOR AS APPLICABLE. CONTRACTOR AND SPECIAL INSPECTOR TO DOCUMENT QUALITY CONTROL AS REQUIRED IN AISC 360 SECTION N3 AND AISC 341 SECTION J2
- INSPECTION TYPES:**
 - CONTINUOUS: THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED.
 - PERIODIC: THE SAME OR INFERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK.
 - OBSERVE (O): OBSERVE THESE FUNCTIONS ON A RANDOM, DAILY BASIS. OPERATIONS NEED NOT BE DELAYED PENDING OBSERVATIONS.
 - PERFORM (P): INSPECTIONS SHALL BE PERFORMED PRIOR TO THE FINAL ACCEPTANCE OF THE ITEM.
 - DOCUMENT (D): INDICATES CONTRACTOR AND SPECIAL INSPECTOR TO PROVIDE DOCUMENTATION IN ACCORDANCE WITH AISC 341.
- SPECIAL INSPECTION OF MECHANICAL POST INSTALLED ANCHORS SHALL BE IN STRICT CONFORMANCE WITH THE ICC REPORT AND MANUFACTURER'S INSTALLATION REQUIREMENTS. ANCHOR INSTALLERS SHALL BE QUALIFIED AS REQUIRED BY JURISDICTION REQUIREMENTS.
- INSPECTION REPORTS SHALL IDENTIFY NAMES OF INSTALLERS.
- SPECIAL INSPECTOR SHALL PROVIDE DOCUMENTATION AT THE END OF ANCHOR INSTALLATIONS STATING THAT THE ANCHORS WERE INSPECTED PER APPROVED ANCHOR EVALUATION REPORT.
- EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF THE MAIN WIND-OR SEISMIC-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM OR A WIND-OR SEISMIC- RESISTING COMPONENT LISTED IN THE TABLES SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO THE COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN THE FOLLOWING:
 - ACKNOWLEDGEMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS.
 - ACKNOWLEDGEMENT THAT CONTROL WILL BE EXERCISED TO OBTAIN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE BUILDING OFFICIAL.
 - PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION, THE METHOD AND FREQUENCY OF REPORTING AND DISTRIBUTION OF THE REPORTS.
 - IDENTIFICATION AND QUALIFICATIONS OF THE PERSON(S) EXERCISING SUCH CONTROL AND THEIR POSITION(S) IN THE ORGANIZATION.

GENERAL - SPECIAL INSPECTIONS					
SYSTEM OR MATERIAL	IBC CODE REFERENCE	CODE OR STANDARD REFERENCE	FREQUENCY (NOTE 7)	REMARKS	
			CONTINUOUS	PERIODIC	
FABRICATORS	1705.11 1704.2.5				SPECIAL INSPECTION IS REQUIRED FOR STRUCTURAL LOAD-BEARING MEMBERS AND ASSEMBLIES FABRICATED ON THE PREMISES OF A FABRICATOR'S SHOP. SPECIAL INSPECTIONS SHALL BE PERFORMED DURING THE FABRICATION PROCESS. SPECIAL INSPECTION IS NOT REQUIRED WHERE FABRICATOR HAS BEEN APPROVED AS AN APPROVED FABRICATOR, PER IBC SECTION 1704.2.5. -STRUCTURAL INSTALLERS CERTIFIED THROUGH AISC COMPLY WITH THIS PROVISION. THE FABRICATOR AND OR INSTALLER MUST STILL COMPLETE AND DOCUMENT THE QUALITY CONTROL TASKS AND NON-DESTRUCTIVE TESTING OUTLINED IN AISC 360 AND AISC 341, AS APPLICABLE.

DEFERRED SUBMITTALS			X		SPECIAL INSPECTION REQUIREMENTS FOR DEFERRED SUBMITTAL ITEMS, INCLUDING REQUIREMENTS FOR DESIGNATED SEISMIC SYSTEMS, IN ACCORDANCE WITH SECTION 1705.2.1.1. THE APPROVAL IS TO BE SPECIFIED BY THE SYSTEM ENGINEER AND INCLUDED WITH DEFERRED SUBMITTAL DOCUMENTS.
SUBMITTALS TO THE BUILDING OFFICIAL	1704.5			X	CERTIFICATES OF COMPLIANCE, REPORTS OF PRE-CONSTRUCTION TESTS, OR REPORTS OF MATERIAL PROPERTIES SHALL BE SUBMITTED TO THE BUILDING OFFICIAL.
POST INSTALLED ADHESIVE ANCHORS WITH SUSTAINED TENSION LOADS INSTALLED HORIZONTALLY OR AT AN UPWARD INCLINE IN HARDENED CONCRETE			X		SPECIAL INSPECTION OF MECHANICAL POST INSTALLED ANCHORS SHALL BE IN STRICT CONFORMANCE WITH THE ICC REPORT AND MANUFACTURER'S INSTALLATION REQUIREMENTS. ANCHOR INSTALLERS SHALL BE QUALIFIED AS REQUIRED BY JURISDICTION REQUIREMENTS. INSPECTION - REPORTS SHALL IDENTIFY NAMES OF INSTALLERS.
POST INSTALLED MECHANICAL ANCHORS AND ADHESIVE ANCHORS (EXCLUDING CONDITIONS NOTED ABOVE) IN HARDENED CONCRETE			X		

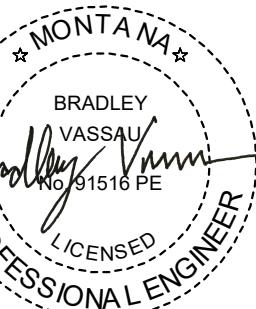
SOILS/GEOTECHNICAL - SPECIAL INSPECTIONS					
SYSTEM OR MATERIAL	IBC CODE REFERENCE	CODE OR STANDARDS REFERENCE	FREQUENCY (NOTE 7)	REMARKS	
			CONTINUOUS	PERIODIC	
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIRED BEARING CAPACITY				X	
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL				X	
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS				X	BY THE GEOTECHNICAL ENGINEER
DURING FILL PLACEMENT, VERIFY USE OF PROPER MATERIALS AND PROCEDURES IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPROVED GEOTECHNICAL REPORT. VERIFY DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION				X	
PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SOILS AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY					

SOILS/GEOTECHNICAL - TESTING					
SYSTEM OR MATERIAL	IBC CODE REFERENCE	CODE OR STANDARD REFERENCE	FREQUENCY (NOTE 7)	REMARKS	
			CONTINUOUS	PERIODIC	
FILL IN-PLACE DENSITY OR PREPARED SUBGRADE DENSITY	1705.6	VARIES: GEOTECHNICAL REPORT OR MINIMUM PER IBC APPENDIX J107.5, WHICHEVER IS GREATER		X	BY THE GEOTECHNICAL ENGINEER
MATERIAL VERIFICATION		VARIES: CLASSIFICATION AND TESTING OF CONTROLLED FILL MATERIALS		X	BY THE GEOTECHNICAL ENGINEER

CONCRETE - SPECIAL INSPECTIONS					
SYSTEM OR MATERIAL	IBC CODE REFERENCE	CODE OR STANDARD REFERENCE	FREQUENCY (NOTE 7)	REMARKS	
			CONTINUOUS	PERIODIC	
GENERAL	1705.3 1901.6	ACI 318: 26.13			SPECIAL INSPECTIONS OF CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF SECTION 1705.3 OF THE IBC AND SECTION 26.13 OF ACI 318.
REINFORCING STEEL	1901.5	ACI 318: CH. 20, 25.2, 25.3, 26.6-26.6.3		X	REINFORCING TO COMPLY WITH ALL CODE PROTECTION, SPACING AND TOLERANCE LIMITS.
WELDING REINFORCING STEEL	1705.3.1 1903.1 1903.2	ASTM D.14 ACI 318: 26.6.4		X	
1. VERIFICATION OF WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A706	1705.3.1				
2. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16" FILLET	1903.1 1903.2			X	
3. ALL OTHER REINFORCING STEEL WELDING				X	
INSPECT ANCHORS/BOLTS CAST IN CONCRETE		ACI 318:		X	ALL CAST-IN-PLACE ANCHORS/BOLTS SHALL BE VISIBLY INSPECTED FOR CONFORMITY. INSPECTIONS FOR ADDITIONAL INSTALLATION MATERIAL AND WELDING INSPECTIONS OF STEEL ITEMS EMBEDDED IN CONCRETE (HEADED STUDS, DBA's, ETC.)
VERIFYING USE OF REQUIRED MIX DESIGN(S)	1904.1 1904.2	ACI 318: CH. 19, 26.4.3, 26.4.4		X	
CONCRETE SPECIMENS FOR TESTING		ASTM C172 ASTM C31 ACI 318: 26.5, 26.12		X	PRIOR TO CONCRETE PLACEMENT, FABRICATE CONCRETE SPECIMENS FOR TESTING. SEE THE CONCRETE TESTING TABLE FOR ADDITIONAL INFORMATION.
CONCRETE PLACEMENT		ACI 318: 26.5, 26.13.2(a)		X	
CONCRETE CURING		ACI 318: 26.5.3 - 26.5.5		X	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURES AND TECHNIQUES
VERIFICATION OF FORMWORK		ACI 318: 26.11.1.2(b), 26.13.3.3		X	SPECIAL INSPECTIONS APPLY TO SHAPE, LOCATION, SIZE AND SPACING OF THE CONCRETE MEMBER BEING FORMED
EMBEDDED ITEMS IN CONCRETE				X	ALL NON-STRUCTURAL EMBEDDED ITEMS, SUCH AS CONDUITS, PIPES AND SLEEVES, SHALL BE REVIEWED FOR CONFORMANCE WITH STRUCTURAL DOCUMENTS FOR SIZE, SPACING, LOCATION, EDGE DISTANCE AND TRIM REINFORCING.

CONCRETE - TESTING					
SYSTEM OR MATERIAL	IBC CODE REFERENCE	CODE OR STANDARD REFERENCE	FREQUENCY (NOTE 7)	REMARKS	
			CONTINUOUS	PERIODIC	
CONCRETE STRENGTH	1705.3	ASTM C39			
CONCRETE SLUMP	ASTM C172	ASTM C143	EACH 150 CY NOR LESS THAN EACH 5000 SF OF SLAB OR WALL PLACED		
CONCRETE AIR CONTENT	ACI 318: 26.12	ASTM C231	EACH SHIFT		FABRICATE SPECIMENS AT TIME FRESH CONCRETE IS PLACED
CONCRETE TEMPERATURE	ACI 318: 26.5	ASTM C1064			

STEEL - SPECIAL INSPECTIONS					
SYSTEM OR MATERIAL	IBC CODE REFERENCE	CODE OR STANDARD REFERENCE	FREQUENCY (NOTE 7)	REMARKS	
			CONTINUOUS	PERIODIC/ OBSERVE	
CONTRACTOR QUALITY CONTROL REQUIREMENTS		AISC 360 CHAPTER N	X	X	CONTRACTOR TO PROVIDE QUALITY CONTROL FOR ALL ITEMS INDICATED TO BE OBSERVED AND/OR PERFORMED IN TABLE BELOW
FABRICATION OF STRUCTURAL ELEMENTS	1704.2.5.1	AISC 360		X	REFER TO INSPECTION OF FABRICATOR...
MATERIAL VERIFICATION OF STRUCTURAL STEEL COMPONENTS	1705.2	ASTM STANDARDS SPECIFIED IN CONSTRUCTION DOCUMENTS AISC 360 A3.1 AISC 360 N2.1		X	CERTIFIED MILL TEST REPORTS
MATERIAL VERIFICATION OF ANCHOR BOLTS AND THREADED RODS		ASTM 360 A3.4 ASTM 360 N3.2 ASTM STANDARDS SPECIFIED IN CONSTRUCTION DOCUMENTS		X	MANUFACTURER'S CERTIFIED TEST REPORTS
MATERIAL VERIFICATION OF WELD FILLER METALS	1705.2.1.1 TABLE 1705.2-5	AISC 360 A3.5 AISC 360 N3.2APPLICABLE AWS A5 DOCUMENTS		X	MANUFACTURER'S CERTIFIED TEST REPORTS
PLACEMENT OF ANCHOR BOLTS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL: VERIFY THE DIAMETER, GRADE, TYPE, AND LENGTH OF THE ANCHOR ROD OR EMBEDDED ITEM AND THE EXTENT OR DEPTH OF EMBEDMENT INTO THE CONCRETE PRIOR TO PLACEMENT OF CONCRETE	1705.2	AISC N.8		X	

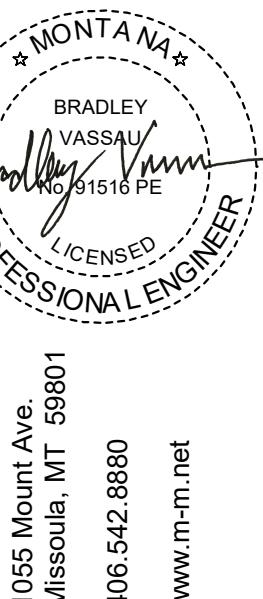


STEEL LATERAL SYSTEM - SPECIAL INSPECTIONS					
SYSTEM OR MATERIAL	IBC CODE REFERENCE	CODE OR STANDARD REFERENCE	QA/QC TASKS (NOTES &7)	OBSERVE / PERFORM	REMARKS
VISUAL INSPECTION TASKS PRIOR TO WELDING					
MATERIAL IDENTIFICATION (TYPE/GRADE)			X		
WELDER IDENTIFICATION SYSTEM			X		
FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY, JOINT PREPARATION, DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL), CLEANLINESS, (CONDITION OF STEEL SURFACE) TACKING (TACK WELD QUALITY AND LOCATION), BACKING TYPE AND FIT (IF APPLICABLE))	1705.13.1	AISC 341 TABLE J6.1 AWS D1.8/D1.8M	X** X**		
FIT-UP OF FILLET WELDS: DIMENSIONS (ALIGNMENT, ROOT OPENING, THICKNESS (CONDITION OF STEEL SURFACE) TACKING (TACK WELD QUALITY AND LOCATION))			X		
** FOLLOWING PERFORMANCE OF THIS INSPECTION FOR TEN WELDS TO BE MADE BY A GIVEN WELDER, WITH THE WELDER DEMONSTRATING UNDERSTANDING OF REQUIREMENTS AND POSSESSION OF SKILLS AND TOOLS TO VERIFY THESE ITEMS, THE PERFORM DESIGNATION OF THIS TASK SHALL BE REDUCED TO OBSERVE, AND THE WELDER SHALL PERFORM THIS TASK. SHOULD THE INSPECTOR DETERMINE THAT THE WELDER HAS DISCONTINUED PERFORMANCE OF THIS TASK, THE TASK SHALL BE RETURNED TO PERFORM UNTIL SUCH TIME AS THE INSPECTOR HAS RE-ESTABLISHED ADEQUATE ASSURANCE THAT THE WELDER WILL PERFORM THE INSPECTION TASKS LISTED.			X** X**		
VISUAL INSPECTION TASKS DURING WELDING					
WPS FOLLOWED: SETTINGS ON WELDING EQUIPMENT, TRAVEL SPEED, SELECTED WELDER, WELDING POSITION, TYPE/FLOW RATE, PREHEAT APPLIED, INTERPASS TEMPERATURE MAINTAINED, PROPER WELDING POSITION			X		
USE OF QUALIFIED WELDERS			X		
CONTROL AND HANDLING OF WELDING CONSUMABLES: PACKAGING, EXPOSURE CONTROL, STORING	1705.13.1	AISC 341 TABLE J6.2 AWS D1.8/D1.8M	X		
ENVIRONMENTAL CONDITIONS: WIND SPEED WITHIN LIMITS, PRECIPITATION AND TEMPERATURE			X		
WELDING TECHNIQUES: INTERPASS AND FINAL CLEANING, EACH PASS WITHIN PROFILE LIMITS, EACH PASS MEETS QUALITY REQUIREMENTS			X		
NO WELDING OVER CRACKED TACKS			X		
FIELD INSTALLED DBAS IN DIAPHRAGMS	AWS D1.1 CLAUSE 7		X		
WELDED REBAR ANCHORS IN DIAPHRAGMS	AWS D1.4		X #6 AND LARGER BARS ARE TO BE WELDED		
VISUAL INSPECTION TASKS AFTER WELDING					
WELDS CLEANED			X		
SIZE, LENGTH, AND LOCATION OF WELDS			X		
WELDS MEET VISUAL ACCEPTANCE CRITERIA			X (D)		
K-AREA *			X (D)		
PLACEMENT OF REINFORCING OR CONTOURING FILLET WELDS (IF REQUIRED)	1705.13.1	AISC 341 TABLE J6.3 AWS D1.8/D1.8M	X (D)		* WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES, OR STIFFENERS HAS BEEN PERFORMED IN THE K-AREA, VISUALLY INSPECT THE WEB K-AREA FOR CHECKS WITHIN 3 INCHES OF THE END OF THE WELD. THE INSPECTION WILL BE PERFORMED NO SOONER THAN 48 HOURS FOLLOWING COMPLETION OF THE WELDING
BACKING REMOVED, WELD TABS REMOVED AND FINISHED, AND FILLED WELDS ADDED (IF REQUIRED BY THE CONSTRUCTION DOCUMENTS)			X (D)		
REPAIR ACTIVITIES			X (D)		
INSPECTION TASKS PRIOR TO BOLTING					
PROPER FASTENERS SELECTED FOR THE JOINT DETAIL			X		
PROPER BOLTING PROCEDURE SELECTED FOR JOINT DETAIL			X		
CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION, IF SPECIFIED, MEET APPLICABLE REQUIREMENT	1705.13.1	AISC 341 TABLE J7.1 RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH-STRENGTH BOLTS	X		
PRE-INSTALLATION VERIFICATION TESTING BY INSPECTOR FOR ALL BOLTS OBSERVED FOR FASTENER ASSEMBLIES AND METHODS USED			X (D)		
PROPER STORAGE PROVIDED FOR BOLTS, NUTS, WASHERS AND OTHER FASTENER COMPONENTS			X		
INSPECTION TASKS DURING BOLTING					
FASTENER ASSEMBLIES PLACED IN ALL HOLES AND WASHERS (IF REQUIRED) ARE POSITIONED AS REQUIRED			X		
JOINT BROUGHT TO THE SNUG TIGHT CONDITION PRIOR TO THE PRETENSIONING OPERATION			X		
FASTENER COMPONENT NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING			X		
BOLTS ARE PRETENSIONED PROGRESSIVELY SYSTEMATICALLY FROM THE MOST RIGID POINT TOWARD THE FREE EDGES			X		
INSPECTION TASKS AFTER BOLTING					
DOCUMENT ACCEPTED AND REJECTED CONNECTION	1705.13.1	AISC 341 TABLE J7.3		X (D)	
PROPRIETARY SYSTEMS					
PROPRIETARY MOMENT RESISTING FRAME CONNECTION SYSTEMS	1705.1.1				REFER TO WELDING AND HIGH STRENGTH BOLTING SPECIAL INSPECTION REQUIREMENTS AND MATERIAL SPECIFIC TESTING REQUIREMENTS. REFER TO DEFERRED SUBMITTAL FOR ADDITIONAL INFORMATION

STEEL - TESTING					
SYSTEM OR MATERIAL	IBC CODE REFERENCE	CODE OR STANDARD REFERENCE	FREQUENCY (NOTE 7)	REMARKS	
STEEL					
ULTRASONIC (UT) TESTING OF WELDS	1705.2.1	AWS D1.6.13 & 6.14.3 AISC 341 NS.5	P (D)	IN RISK CATEGORY III AND IV, ALL C.J.P. WELDS IN MATERIAL 5/16" AND THICKER SUBJECT TO TRANSVERSELY APPLIED TENSION. - IN RISK CATEGORY II, 10% OF C.J.P. WELDS IN MATERIAL 5/16" AND THICKER SUBJECT TO TRANSVERSELY APPLIED TENSION. - INCREASE OR DECREASE RATES PER AISC 341 NS.5E AND NS.5F	
MAGNETIC PARTICLE (MT) TESTING OF WELDS	1705.2.1	AWS D1.6.14.4 AISC60 NS.5c	P (D)	- REQUIRED AT THERMALLY CUT ACCESS HOLES WHERE FLANGE THICKNESS EXCEEDS 2" FOR ROLLED SHAPES OR WHEN THE WEB THICKNESS EXCEEDS 2" FOR BUILT-UP SHAPES. - REQUIRED WHERE SPECIFICALLY NOTED ON DRAWINGS	
PRE-INSTALLATION VERIFICATION OF PRETENSIONED HIGH STRENGTH BOLTS	1705.2.1	RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS SECTION 7	EACH COMBINATION OF DIAMETER, LENGTH, GRADE, AND LOT TO BE USED IN THE WORK		

STEEL LATERAL SYSTEM - TESTING					
SYSTEM OR MATERIAL	IBC CODE REFERENCE	CODE OR STANDARD REFERENCE	DESCRIPTION/FREQUENCY	REMARKS	
CJP GROOVE WELD NON DESTRUCTIVE TESTING			UT SHALL BE PERFORMED ON 100% OF WELDS MT SHALL BE PERFORMED ON 25% OF ALL BEAM TO COLUMN CJP GROOVE WELDS.	WELD DISCONTINUITIES SHALL BE ACCEPTED OR REJECTED ON THE BASIS OF CRITERIA OF AWS D1.1/D1.1M TABLE 6.2. UT TESTING NOT REQUIRED ON THICKNESS LESS THAN 5/16"	
COLUMN SPLICING AND COLUMN TO BASE PLATE PJP GROOVE WELD NON DESTRUCTIVE TESTING			UT SHALL BE PERFORMED ON 100% OF PJP GROOVE WELDS IN COLUMN SPlices AND COLUMN TO BASE PLATE WELDS	WELD DISCONTINUITIES SHALL BE ACCEPTED OR REJECTED ON THE BASIS OF CRITERIA OF AWS D1.1/D1.1M TABLE 6.2. UT TECHNICIANS SHOULD BE QUALIFIED IN ACCORDANCE WITH AWS D1.8/D1.8M USING WELD JOINT MOCK-UPS INCORPORATING PJP GROOVE WELDS	
CJP BASE METAL NON DESTRUCTIVE TESTING FOR LAMELLAR TEARING AND LAMINATIONS	1705.13.1	AISC 341 SECTION J6.2	FOR BASE METAL THICKNESS (t) OF 1 1/2" AND GREATER AND CONNECTED MATERIAL THICKNESS OF 3/4" AND GREATER, UT 100% OF BASE METAL DISCONTINUITIES AND ADJACENT TO THE FUSION LINE	ANY BASE METAL DISCONTINUITIES FOUND SHALL BE ACCEPTED OR REJECTED ON THE BASIS OF THE CRITERIA OF AWS D1.1/D1.1M TABLE 6.2. I IS THE THICKNESS OF THE PART SUBJECTED TO THE THROUGH-THICKNESS STRAIN	
BEAM COPE AND ACCESS HOLE NON DESTRUCTIVE TESTING			MT OR UT TESTING OF WELL SPICES AND COPING MARGINS AND ADJACENT AREA OF THE BEAM COPIES AND ACCESS HOLE WHERE FLANGE THICKNESS EXCEEDS 1 1/2" FOR ROLLED SHAPES OR WHEN THE WEB THICKNESS EXCEEDS 1 1/2" FOR BUILT-UP SHAPES	MT OR UT TESTING OF WELL SPICES AND COPING MARGINS AND ADJACENT AREA OF THE BEAM COPIES AND ACCESS HOLE WHERE FLANGE THICKNESS EXCEEDS 1 1/2" FOR ROLLED SHAPES OR WHEN THE WEB THICKNESS EXCEEDS 1 1/2" FOR BUILT-UP SHAPES	
REDUCED BEAM SECTION REPAIR NON DESTRUCTIVE TESTING			MT SHALL BE PERFORMED ON ANY WELD AND ADJACENT AREA IF THE RBS CUT SURFACE THAT HAS BEEN PREPARED FOR REPAIR HAS BEEN LEFT ON THE BASE METAL OF THE RBS CUT SURFACE IF A SHARP NOTCH HAS BEEN REMOVED BY...	MT SHALL BE PERFORMED ON ANY WELD AND ADJACENT AREA IF THE RBS CUT SURFACE THAT HAS BEEN PREPARED FOR REPAIR HAS BEEN LEFT ON THE BASE METAL OF THE RBS CUT SURFACE IF A SHARP NOTCH HAS BEEN REMOVED BY...	
WELD TAB REMOVAL SITES			AT THE END OF WELDS WHERE WELD TABS HAVE BEEN REMOVED, MT SHALL BE PERFORMED ON THE SAME BEAM-TO-COLUMN JOINTS RECEIVING UT AS REQUIRED UNDER "CJP GROOVE WELD NON DESTRUCTIVE..."	MT OF CONTINUITY PLATE WELD TABS REMOVAL SITES IS NOT REQUIRED.	

LIGHT GAUGE AND OTHER STEEL - SPECIAL INSPECTIONS					
SYSTEM OR MATERIAL	IBC CODE REFERENCE	CODE OR STANDARD REFERENCE	FREQUENCY (NOTE 7)	CONTINUOUS / PERIODIC	REMARKS
GENERAL					
MATERIAL VERIFICATION OF WELD FILLER METALS				X	MANUFACTURER'S CERTIFIED TEST REPORTS
VERIFYING USE OF PROPER WPS'S				AWS D1.3	RETAIN A RECORD OF WELDING PROCEDURE SPECIFICATIONS
VERIFYING WELDER QUALIFICATIONS					RETAIN A RECORD OF QUALIFICATION CARDS
IDENTIFICATION MARKINGS TO CONFORM TO ASTM STANDARDS SPECIFIED IN THE APPROVED CONSTRUCTION DOCUMENTS	1705.2.2	1705.2.3	1705.2.4	APPLICABLE ASTM STANDARDS	X MANUFACTURER'S CERTIFIED TEST REPORTS
STEEL JOISTS AND JOIST GIRDERS: INSTALLATION OF END CONNECTIONS, WELDING OR BOLTING, BRIDGING - HORIZONTAL AND DIAGONAL	1705.2.3	SJI 100, SJI 200			PER SJI SPECIFICATIONS LISTED IN IBC 2207.1
COLD-FORMED STEEL TRUSSES SPANNING 60 FT OR GREATER	1705.2.4				VERIFY TEMPORARY INSTALLATION OF RESTRAINT/BRACES AND PERMANENT INDIVIDUAL TRUSS MEMBERS RESTRAINT/BRACES ARE INSTALLED IN ACCORDANCE WITH THE APPROVED TRUSS SUBMITTAL
INSPECTION TASKS PRIOR TO STEEL DECK PLACEMENT					
VERIFY COMPLIANCE OF MATERIALS (DECK AND ALL DECK ACCESSORIES) WITH APPROVED CONSTRUCTION DOCUMENTS, INCLUDING PROFILES, MATERIAL PROPERTIES, AND BASE METAL THICKNESS	1705.2.2	SDI 2017 – STANDARD FOR QAOQC 1.3, APP. 1, TABLE 1.1	P		
DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES			P		
INSPECTION TASKS AFTER STEEL DECK PLACEMENT					
VERIFY COMPLIANCE OF DECK AND ALL DECK ACCESSORIES INSTALLATION WITH APPROVED CONSTRUCTION DOCUMENTS	1705.2.2	SDI 2017 – STANDARD FOR QAOQC 1.3, APP. 1, TABLE 1.2	P		
VERIFY DECK MATERIALS ARE REPRESENTED BY THE MILL CERTIFICATIONS THAT COMPLY WITH THE APPROVED CONSTRUCTION DOCUMENTS			P		
DOCUMENT ACCEPTANCE OR REJECTION OF INSTALLATION OF DECK AND DECK ACCESSORIES			P		
INSPECTION TASKS PRIOR TO STEEL DECK WELDING					
WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE	1705.2.2	SDI 2017 – STANDARD FOR QAOQC 1.3, APP. 1, TABLE 1.3	P		
MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE			P		
MATERIAL IDENTIFICATIONS (TYPE/GRADE)			P		



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ANNOTATIONS
AND SYMBOLS
&
ABBREVIATIONS

PROJECT #:
25-668
ISSUE DATES:

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REVIEWED BY:	
APPROVED BY:	
DATE:	
REVISED BY:	

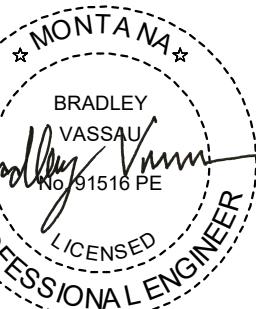
STRUCTURAL ANNOTATIONS

S0-5

10.22.25

SYMBOL/ANNOTATION	DESCRIPTION	SYMBOL/ANNOTATION	DESCRIPTION	SYMBOL/ANNOTATION	DESCRIPTION	SYMBOL/ANNOTATION	DESCRIPTION
	EARTH/SOIL HATCH		NONSTRUCTURAL PARTITION WALL EXTENDING TO FLOOR ABOVE		WOOD OR STEEL STUD BEARING WALL BELOW		INDICATES TAGGED ELEMENT OR ELEMENTS ALONG A TAGGED GRID ARE PART OF THE SEISMIC FORCE RESISTING SYSTEM. REFER TO DETAIL SINGLE SHEAR PLATE CONNECTIONS DETAIL
	GRANULAR FILL/GRAVEL HATCH		PENETRATION IN BEAM (SHOP FABRICATED): • "A": MAX PENETRATION SIZE • "D": TOP OF BM TO CL OF PENETRATION • "W": CL OF PENETRATION ALONG BM LENGTH • "U": UNREINFORCED OR REINFORCE PENETRATION		WOOD TOP PLATE ELEVATION STEP		INDICATES KNIFE PLATE CONNECTION THROUGH COLUMN. REFER TO DETAIL SINGLE SHEAR PLATE CONNECTIONS DETAIL
	RIGID INSULATION HATCH		WOOD STRUCTURAL PANEL HATCH		INDICATES ANGLE STRUT BOTTOM FLANGE BRACE. ARROW HEAD INDICATES LOW SIDE OF BRACE. REFER TO DETAIL ANGLE STRUT		WOOD STUD WALL HATCH
	KEYED NOTE		STEEL HATCH		CONCRETE SLAB ON STEEL DECK		WOOD STUD WALL HATCH
	DETAIL CALLOUT (90 DEGREE ORIENTATION TO CURRENT VIEW) VIEW ORIENTED TOWARD ARROW		WOOD SHEAR/BEARING WALL MARK (SEE SCHEDULE)		STEEL STUD WALL HATCH		BARE STEEL DECK
	DETAIL CALLOUT (MATCHES ORIENTATION OF CURRENT VIEW) ENLARGED VIEW		HOLD-DOWN MARK (SEE SCHEDULE)		STEEL DECK MARK (SEE SCHEDULE)		CONCRETE HATCH
	ELEVATION CALLOUT		WOOD HEADER MARK (SEE SCHEDULE)		SQUARE/RECTANGULAR HSS COLUMN		GROUT HATCH
	SECTION CALLOUT		SAWN LUMBER COLUMN		ROUND HSS COLUMN		CONCRETE SPREAD FOOTING MARK (SEE SCHEDULE) & TOP OF FOOTING ELEVATION (IF INDICATED)
	COMPONENT ELEVATION		GLULAM COLUMN		WIDE-FLANGE COLUMN		CONCRETE CONTINUOUS FOOTING MARK (SEE SCHEDULE) & TOP OF FOOTING ELEVATION (IF INDICATED)
	SLAB/DECK/WALL OPENING		SAWN LUMBER BEAM		STEEL BEAM SIMPLE SHEAR CONNECTION TO COLUMN, UNLESS NOTED OTHERWISE		CONCRETE GRADE BEAM MARK (SEE SCHEDULE)
	SLAB/DECK STEP		GLULAM BEAM		STEEL BEAM SIMPLE SHEAR CONNECTION TO BEAM, UNLESS NOTED OTHERWISE		CONCRETE PIER MARK (SEE SCHEDULE)
	SLAB/DECK SLOPE TRANSITION		LVL BEAM		STEEL BEAM TO COLUMN GRAVITY MOMENT CONNECTION. REFER TO DETAIL BEAM TO COLUMN MOMENT CONNECTION		CONCRETE COLUMN/PIER
	JOIST/TRUSS SYSTEM CALLOUT		WOOD I-JOIST		STEEL BEAM TO BEAM GRAVITY MOMENT CONNECTION. REFER TO DETAIL TYPICAL BM TO BM MOMENT CONN		FOOTING ELEVATION STEP
	AREA LOAD DESIGNATION NUMBER INDICATES SUPERIMPOSED DEAD LOAD MARK LETTER INDICATES LIVE LOAD MARK		WOOD BLOCKING		STEEL BRACED FRAME/MOMENT FRAME IN PLAN		TOP OF WALL ELEVATION STEP
	SNOW DRIFT LOAD 'Pd' - MAXIMUM DRIFT SURCHARGE 'Wd' - WIDTH OF SNOW DRIFT		WOOD OR STEEL STUD BEARING WALL EXTENDING TO FLOOR ABOVE		INDICATES FULL DEPTH SHEAR PLATE BEAM-TO-BEAM CONNECTION. REFER TO DETAIL SINGLE SHEAR PLATE CONNECTIONS DETAIL		BLOCKOUT AT TOP OF WALL OR DOOR OPENING
	MECHANICAL UNIT / AREA ADD LOAD CONTRACTOR TO COORDINATE SIZE, WEIGHT AND LOCATION WITH JOIST MANUFACTURER		WOOD OR STEEL STUD SHEAR WALL (GRAY HATCH)		INDICATES BEAM-TO-BEAM OR BEAM TO COLUMN CONNECTION USES SLIP CRITICAL BOLTS. REFER TO DETAIL SINGLE SHEAR PLATE CONNECTIONS DETAIL		CONCRETE PILE/PIER CAP MARK (SEE SCHEDULE) & TOP OF CAP ELEVATION

# & Ø @	NUMBER OR POUNDS AND DIAMETER	L	ANGLE
2L	LAMINATED POUND	2L	DOUBLE ANGLE
LBS	LINEAR FEET	LD	DEVELOPMENT LENGTH
LL	LIVE LOAD	LF	LINEAR FEET
LLH	LONG LEG HORIZONTAL	LLV	LONG LEG VERTICAL
LS	LAP SPICE	LSL	LAMINATED STRAND LUMBER
LVL	LAMINATED VENEER LUMBER	LVL	LAMINATED VENEER LUMBER
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	M	MASONRY MATERIAL
ACR	ARCHITECT OF RECORD	MATL	MAXIMUM
APPROM	APPROXIMATELY	MB	MACHINE BOLT
AR	ANCHOR ROD	MBR	MEMPHIS
ARCH	ARCHITECT	MDL	MEDAL DECK
AS	ANGLE STRUT	MECH	MECHANICAL
ASTM	AMERICAN SOCIETY OF CIVIL ENGINEERS	MEP	MECHANICAL, ELECTRICAL, PLUMBING
AWS	AMERICAN SOCIETY OF TESTING AND MATERIALS	MEZZ	MEZZANINE
BC	BOTTOM CHORD	MFR	MOMENT FRAME
BLDG	BRADED FRAME	MIN	MANUFACTURER
BLKG	BREAKING	MISC	MINIMUM
BLW	BLOW	ML	MISCELLANEOUS
BM	BOTTOM	MM	MASONRY LINTEL
BOT	BOTTOM	MTL	MASONRY PIER
BP	BASE PLATE	BU	METAL
BRB	BUCKLING RESTRAINED BRACE	CANTL	NORTH
BRBF	BUCKLING RESTRAINED BRADED FRAMED	CA	NEW
BRG	BEARING	CB	NOT APPLICABLE
BSMT	BASEMENT	CC	NOT IN CONTRACT
BTWN	BETWEEN	CD	NONLOAD BEARING
BU	BUILT UP	CDF	NUMBER
OC	ON CENTER	CFS	NOMINAL
OD	OUTSIDE DIAMETER	CIP	NOT TO SCALE
OPNG	OPENING	CIP	OPEN WEB JOIST
OPP	OPPOSITE	PAF	POWER-ACTUATED FASTENERS
OWJ	OPEN WEB JOIST	PAR	PARALLEL
PERP	PERPENDICULAR	PC	PIER CAP/CONCRETE PILE
PH	PHASE	PERP	PERPENDICULAR
PJP	PARTIAL JOINT PENETRATION	PL	PLATE
PL	PLATE	PLF	POUNDS PER LINEAR FOOT
P/WFD	PLYWOOD	PLV	POUNDS PER SQUARE FOOT
PREFAB	PREFABRICATE	PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH	PSL	PARALLEL STRAND LUMBER
PT	PRESSURE TREATED/POST TENSIONED	PT	PRESSURE TREATED/POST TENSIONED
QA	QUALITY ASSURANCE	R/RAD	RADIUS
RD	ROUND	RD	ROUND
REBAR	REINFORCING STEEL BARS	REF	REFER TO
REF	REFERENCE, REINFORCING	REQ	REQUIREMENT
REQ	REQUIREMENT	REV	REVISION
REVD	REVISION	RO	ROUGH OPENING
REQT	REVISION	RT	RIGHT
SA	SCREW ANCHOR	SC	SLIP CRITICAL
SC	SCREW CRITICAL	SCHED	SCHEDULE
SCHED	SCHEDULE	SD	STEEL DECK
SD	STEEL DECK	SF	SQUARE FEET
SF	SQUARE FEET	SHTHG	SHADING
SHTHG	SHADING	SIM	SIMILAR
SIM	SIMILAR	SIP	STRUCTURAL INSULATED PANEL
SIP	STRUCTURAL INSULATED PANEL	SL	SNOW LOAD
SL	SNOW LOAD	SMS	SHEET METAL SCREW
SMS	SHEET METAL SCREW	SOG	SLAB ON GRADE
SOG	SLAB ON GRADE	SOMD	SLAB ON METAL DECK
SOMD	SLAB ON METAL DECK	SPEC	SPECIFICATION
SPEC	SPECIFICATION	SQ	SQUARE
SQ	SQUARE	SS	STAINLESS STEEL
SS	STAINLESS STEEL	STD	STANDARD
STD	STANDARD	STIFF	STIFFENER
STIFF	STIFFENER	STL	STEEL
STL	STEEL	STRUCT	STRUCTURAL
STRUCT	STRUCTURAL	SUB	SUBSTITUTE
SUB	SUBSTITUTE	SUB FLR	SUBFLOOR
T	TON	T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE	THRU	THROUGH
THRU	THROUGH	TJI	TRUSS JOIST
TJI	TRUSS JOIST	TMBR	Timber
TMBR	Timber	TOP	TOP OF
TOP	TOP OF BEAM	TOC	TOP OF CONCRETE
TOC	TOP OF CONCRETE	TOD	TOP OF DECK/SHEATHING
TOD	TOP OF DECK/SHEATHING	TOF	TOP OF FOOTING
TOF	TOP OF FOOTING	TOM	TOP OF MASONRY
TOM	TOP OF MASONRY	TOS	TOP OF STEEL
TOS	TOP OF STEEL	TOW	TOP OF WALL
TOW	TOP OF WALL	TRANS	TRANSVERSE
TRANS	TRANSVERSE	TYP	Typical
TYP	Typical	UNO	UNLESS NOTED OTHERWISE
URM	UNREINFORCED MASONRY	VERT	VERTICAL
VERT	VERTICAL	VIF	VERIFY IN FIELD
W OR WF	WIDE FLANGE	W/O	WITHOUT
W/O	WITHOUT	WD	WOOD
WD	WOOD	WL	WIND LOAD
WL	WIND LOAD	WLD	WELD/WELDED
WLD	WELD/WELDED	WP	WORKING POINT
WP	WORKING POINT	WSP	WOOD STRUCTURAL PANEL
WSP	WOOD STRUCTURAL PANEL	WT	STRUCTURAL TEE
WT	STRUCTURAL TEE	WWF	WELDED WIRE FABRIC
WWF	WELDED WIRE FABRIC	X BRACE	CROSS BRACE
KIPS	KIPS PER SQUARE INCH		
# & Ø @	NUMBER OR POUNDS AND DIAMETER	L	ANGLE
2L	LAMINATED POUND	2L	DOUBLE ANGLE
LBS	LINEAR FEET	LD	DEVELOPMENT LENGTH
LL	LIVE LOAD	LF	LINEAR FEET
LLH	LONG LEG HORIZONTAL	LLV	LONG LEG VERTICAL
LS	LAP SPICE	LSL	LAMINATED STRAND LUMBER
LVL	LAMINATED VENEER LUMBER	LVL	LAMINATED VENEER LUMBER
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	M	MASONRY MATERIAL
ACR	ARCHITECT OF RECORD	MATL	MAXIMUM
APPROM	APPROXIMATELY	MB	MACHINE BOLT
AR	ANCHOR ROD	MBR	MEMPHIS
ARCH	ARCHITECT	MDL	MEDAL DECK
AS	ANGLE STRUT	MECH	MECHANICAL
ASTM	AMERICAN SOCIETY OF CIVIL ENGINEERS	MEP	MECHANICAL, ELECTRICAL, PLUMBING
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BC	BOTTOM CHORD	MFR	MOMENT FRAME
BLDG	BRADED FRAME	MIN	MINIMUM
BLKG	BREAKING	MISC	MISCELLANEOUS
BLW	BLOW	ML	MASONRY LINTEL
BM	BOTTOM	MM	MASONRY PIER
BOT	BOTTOM	MTL	METAL
BP	BASE PLATE	BU	N
BRB	BUCKLING RESTRAINED BRACE	(N)	NORTH
BRBF			



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STRUCTURAL SCHEDULES

PROJECT #:
25-668

ISSUE DATE:

DRAWN BY: MM

S0-6

10.22.25

CONTINUOUS FOOTINGS - SCHEDULE					
MARK	WIDTH	THICKNESS	# OF REINF MATS	TRANS REINF	LONG REINF
FA	1' - 6"	1' - 0"	1	#5 @ 12" OC	(3) #4
FB	2' - 0"	1' - 0"	1	#5 @ 12" OC	(3) #4
FC	2' - 0"	1' - 0" THICKENED SLAB	1	#5 @ 12" OC	(3) #4

HEADER SCHEDULE			
MARK	HEADER SIZE	BEARING STUDS	KING STUDS
H1	(2) 2x10	(1) 2x6	(2) 2x6
H2	3 1/2x9 GLB	(2) 2x6	(2) 2x6
H3	5 1/2x9 GLB	(2) 2x6	(2) 2x6
H4	5 1/2x12 GLB	(2) 2x6	(2) 2x6
H5	3 1/2x12 GLB	(2) 2x6	(2) 2x6

NOTES:
1. REF 7 / S7-1 FOR TYPICAL WOOD HEADER DETAIL

SPREAD FOOTING - SCHEDULE					
MARK	WIDTH	LENGTH	REINFORCEMENT	THICKNESS	COMMENTS
F1	2' - 6"	2' - 6"	(3) #5 EW, T&B	1' - 0"	SEE PLAN
F2	3' - 0"	3' - 0"	#4 @ 16" OC, EW, T & B	1' - 0"	SEE PLAN
F3	5' - 0"	5' - 0"	(6) #5 EW, T&B	1' - 0"	SEE PLAN

HOLD-DOWN SCHEDULE			
MARK	TIE / HOLD-DOWN	STUD / POST SIZE	ANCHORAGE
HD1	'SIMPSON' CS14	(1) 2x WALL STUDS	STRAP LENGTH = 32" + CLEAR SPAN
HD2	'SIMPSON' HDU-2-SDS2.5	(2) 2x WALL STUDS	• 'SIMPSON' SB5/8x24 W/ 18" EMBED IN STEMWALL • 5/8" Ø CAST-IN OR ADHESIVE ANCHOR W/ 10" EMBEDMENT AT THICKENED SLAB
HD3	'SIMPSON' HDU-8-SDS2.5	(3) 2x WALL STUDS	'SIMPSON' SB7/8x24 W/ 18" EMBED IN STEMWALL
HD4	'SIMPSON' HDU-4-SDS2.5	(2) 2x WALL STUDS	• 'SIMPSON' SB5/8x24 W/ 18" EMBED IN STEMWALL • 5/8" Ø CAST-IN OR ADHESIVE ANCHOR W/ 10" EMBEDMENT AT THICKENED SLAB

NOTES:
1. HOLDDOWN LOCATION SHOWN ON PLANS IS APPROXIMATE. LOCATE AT OPENING JAMB OR CORNER. SEE ARCHITECTURAL DRAWINGS FOR OPENING LOCATIONS AND SIZE.
2. SEE GENERAL STRUCTURAL NOTES FOR ADDITIONAL REQUIREMENTS.

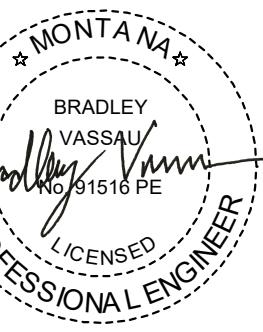
CONCRETE WALLS - SCHEDULE					
MARK	THICKNESS	HORIZ REINF	VERT REINF		
C1	8"	#5 @ 16" OC	#5 @ 16" OC		
C2	1' - 1 1/2"	#5 @ 16" OC EA FACE	#5 @ 16" OC EA FACE		

CONCRETE PIERS - SCHEDULE					
MARK	LENGTH	WIDTH	VERT REINF	TIE REINFORCEMENT	
P1	2' - 6"	2' - 6"	(14) #6	#4 TIES & CROSSTIES @ 6" OC	
P2	1' - 6"	1' - 6"	(8) #5	#4 TIES & CROSSTIES @ 6" OC	
P3	1' - 8"	1' - 2"	(8) #5	#4 TIES & CROSSTIES @ 6" OC	

NOTES:
SEE CROSS SECTIONS FOR ADDITIONAL REINFORCEMENT REQUIREMENTS.

SHEATHED SHEARWALL - SCHEDULE											
MARK	SHEATHING, STUDS, AND ATTACHMENT			SILL PLATE AND ATTACHMENT		STRAPPING AT OPENING (AS NOTED)					
	STUD SIZE	STUD SPACING	PANEL	SHARP PANEL ATTACHMENT	FRAMING AT PANEL EDGES	SILL PLATE	ANCHOR	STRAP TYPE	STRAP END LENGTH	ATTACHMENT AT EACH LENGTH OF STRAP	BLOCKING SIZE
W1	2x	16" OC	R-6 ZIP PANEL SHTG	0.131" Ø SHANK NAIL @ 3" OC EDGE; 0.131" Ø SHANK NAIL @ 12" OC FIELD	(1) 2x	2x	5/8" DIA W/ 7" EMBED @ 4' - 0" OC	--	--	--	--
W2	(3) 2x	24" OC	R-6 ZIP PANEL SHTG	0.131" Ø SHANK NAIL @ 3" OC EDGE; 0.131" Ø SHANK NAIL @ 12" OC FIELD	(1) 2x	2x	5/8" DIA W/ 7" EMBED @ 4' - 0" OC	--	--	--	--
W3	2x	16" OC	15/32" WOOD STRUCTURAL PANEL	8d @ 6" OC EDGE NAIL; 8d @ 12" OC FIELD NAIL	(1) 2x	2x	5/8" DIA W/ 7" EMBED @ 4' - 0" OC	--	--	--	--
W4	(3) 2x	24" OC	15/32" WOOD STRUCTURAL PANEL	8d @ 6" OC EDGE NAIL; 8d @ 12" OC FIELD NAIL	(1) 2x	2x	5/8" DIA W/ 7" EMBED @ 4' - 0" OC	--	--	--	--
W5	2x	16" OC	15/32" WOOD STRUCTURAL PANEL	8d @ 3" OC EDGE NAIL; 8d @ 12" OC FIELD NAIL	(2) 2x	2x	5/8" DIA W/ 7" EMBED @ 2' - 0" OC	--	--	--	--
W6	2x	16" OC	R-6 ZIP PANEL SHTG @ EXT; 15/32" WOOD STRUCTURAL PANEL @ INTERIOR	0.131" Ø SHANK NAIL @ 3" OC EDGE; 0.131" Ø SHANK NAIL @ 12" OC FIELD @ EXTERIOR; 8d NAILS @ 3" OC EDGE NAIL; 8d @ 12" OC FIELD NAIL @ INTERIOR	(2) 2x	2x	5/8" DIA W/ 7" EMBED @ 2' - 0" OC	--	--	--	--
W7	2x	16" OC	R-6 ZIP PANEL SHTG @ EXT; 15/32" WOOD STRUCTURAL PANEL @ INTERIOR	0.131" Ø SHANK NAIL @ 3" OC EDGE; 0.131" Ø SHANK NAIL @ 12" OC FIELD @ EXTERIOR; 8d NAILS @ 3" OC EDGE NAIL; 8d @ 12" OC FIELD NAIL @ INTERIOR	(2) 2x	2x	5/8" DIA W/ 7" EMBED @ 2' - 0" OC	SIMPSON CS16	1'-3"	(11) 10d NAILS	2x

SHEATHED SHEAR WALL SCHEDULE NOTES:
1. SEE GENERAL STRUCTURAL NOTES AND SCHEMATIC SHEAR WALL DETAILS ON S7-2 FOR ADDITIONAL REQUIREMENTS.
2. WHERE A SHEATHING DESIGNATION IS NOT PROVIDED AT EXTERIOR WALLS, PROVIDE SHEATHING AND ATTACHMENT PER TYPE W1. BLOCKING AT PANEL EDGES IS NOT REQUIRED IN THESE CASES.
3. SHEATHING SHALL BE 15/32" APA STRUCTURAL PLYWOOD w/ APA 24/16 MINIMUM RATING UNLESS OTHERWISE NOTED. SHEATHING AND ATTACHMENT TYPE IS REQUIRED OVER THE ENTIRE LENGTH OF THE WALL INDICATED.
4. WHERE DOUBLE SIDED SHEATHING IS SPECIFIED, STAGGER VERTICAL PANEL JOINTS BETWEEN OUTSIDE AND INSIDE SHEATHING.
5. WHERE DOUBLE MEMBERS ARE SPECIFIED AT PANEL EDGES, PROVIDE DOUBLE 2X MEMBERS AT ALL VERTICAL AND HORIZONTAL PANEL EDGES, INCLUDING STUDS, BLOCKING, SILL AND TOP AND BOTTOM PLATES.
6. PROVIDE 3"X3"X1/4" PLATE WASHERS AT SILL PLATE FOR ALL ANCHOR AND LAG BOLTS. SLOT PLATE WASHERS WITH A DIAGONAL, 1 3/4" LONG SLOTTED HOLE (CENTERED) AND ORIENT PLATE WASHERS ON SILL PLATE SO THAT THE EDGE OF EACH PLATE WASHER IS WITHIN 1/2" OF THE SHEATHED EDGE OF THE SILL PLATE. PROVIDE STANDARD CUT WASHERS BETWEEN NUTS AND PLATE WASHERS.
7. STRAPPING REFERS TO HORIZONTAL STEEL STRAP AT HEADER AND SILL OF OPENINGS. SEE MANUFACTURER'S SPECIFICATIONS FOR INSTALLATION INFORMATION.
8. WHERE STRAPPING AT OPENINGS IS NOTED IN SHEAR WALL SCHEDULE, REFER TO DETAIL 2/S7-2 FOR ADDITIONAL INFORMATION.
9. AT ZIP SHEATHED WALLS, PROVIDE 1 1/2" FASTENER PENETRATION INTO FRAMING.
10. WHERE SHEATHING IS DESIGNATED ON EXTERIOR AND INTERIOR FACES, INSTALL ZIP SHEATHING AT EXTERIOR FACE AND STRUCTURAL PANEL SHEATHING ON INTERIOR FACE WITH FASTENERS DENOTED. WHERE STRAPPING IS NOTED, INSTALL STRAPPING ON BOTH EXTERIOR AND INTERIOR FACES.
11. WHERE STRAPPING AT OPENINGS OCCURS AT EXTERIOR ZIP SHEATHED WALLS, PROVIDE 0.131" Ø SHANK NAILS AT STRAPPING W/ 1 1/2" PENETRATION INTO BLOCKING.



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ROOF
LOADING PLAN

PROJECT #:
25-668
ISSUE DATE:

DRAWN BY: MM

S0-7

10.22.25

100% CONSTRUCTION DOCUMENTS

SNOW LOAD (SL) DESIGNATION		
MARK	USE	UNIFORM LOAD
A	FLAT ROOF SNOW LOAD	31 PSF

DEAD LOAD (SDL) DESIGNATIONS			
MARK	USE	SUPERIMPOSED UNIFORM LOAD	CONCENTRATED LOAD
1	ROOF: METAL DECK	16.0 PSF	500 LBS
2	ROOF: LIGHT FRAMED	12.5 PSF	N/A

WIND UPLIFT PLAN NOTES			
1. COMPONENTS AND CLADDING WIND PRESSURES ARE BASED ON ASCE 7-16 CHAPTER 30, PART 3: BUILDINGS WITH $h \leq 60$ FT.			
2. COMPONENTS AND CLADDING ZONE LOCATIONS AND WIND PRESSURES ARE BASED ON ASCE 7-16, TABLE 30.3-1 & FIGURE 30.3-2A.			
3. CANOPY WIND PRESSURES ARE NET PRESSURES ON ATTACHED CANOPIES CONSIDERING SIMULTANEOUS CONTRIBUTIONS FROM UPPER AND LOWER SURFACES. NEGATIVE AND POSITIVE SIGNS SIGNIFY UPLIFTING AND DOWNWARD PRESSURES, RESPECTIVELY.			

STRENGTH LEVEL WIND UPLIFT PRESSURES ON ROOF AREAS (PSF)				
ZONE	EFFECTIVE WIND AREA (SQUARE FEET)			
$h = XX$	<=10	100	200	>500
1	16/46	16/36	16/33	16/29
1'	16/26	16/26	16/24	16/18
2	16/61	16/48	16/44	16/39
3	16/83	16/57	16/49	16/39
2 TOWER	16/68	16/53	16/49	16/43
3 TOWER	16/92	16/63	16/55	16/43
CANOPY 1	21/21	16/16	16/16	16/16
CANOPY 2	22/22	16/16	16/16	16/16

NUMBER INDICATES SUPERIMPOSED DEAD LOAD MARK
LETTER INDICATES LIVE LOAD MARK

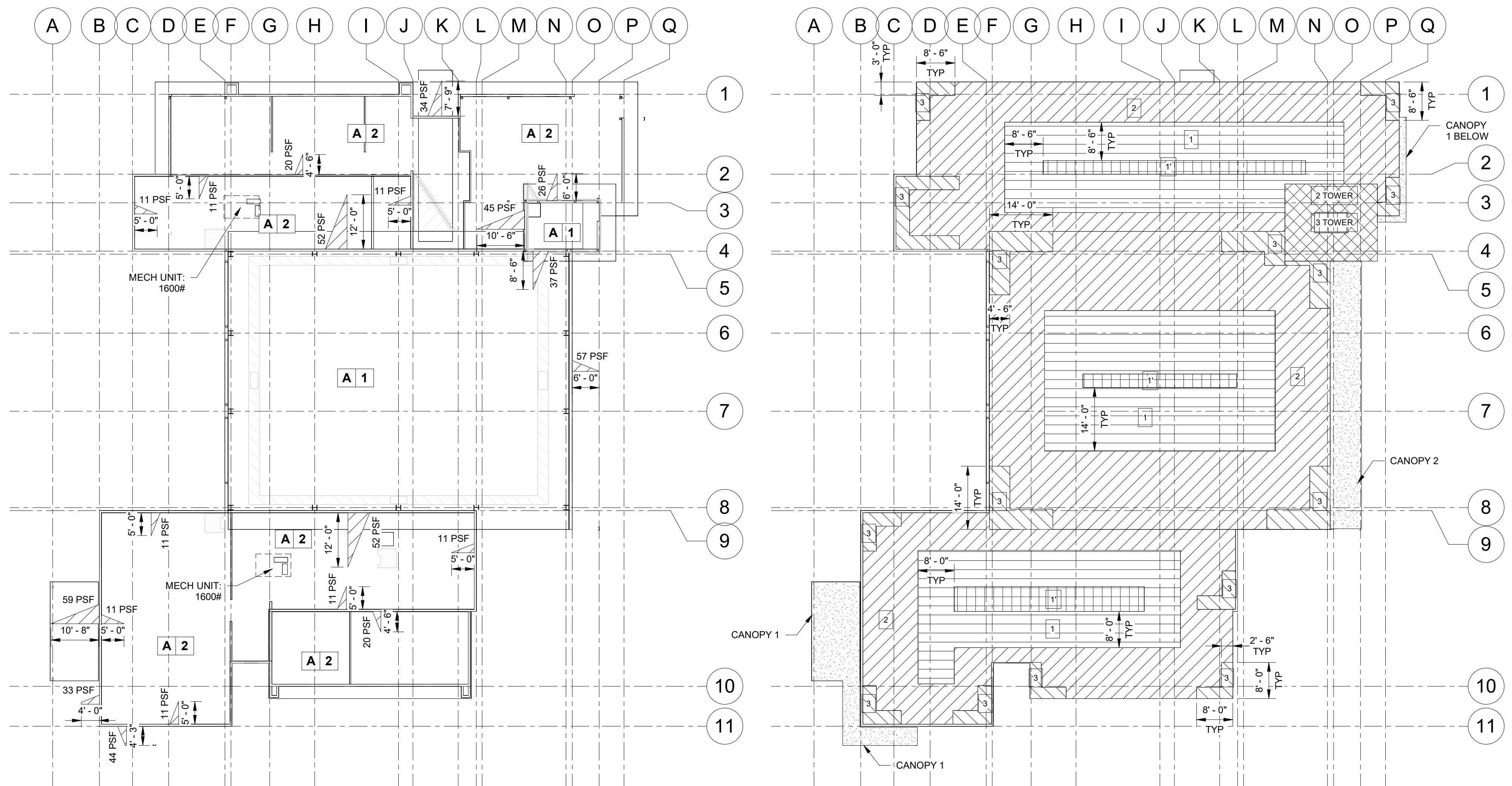
AREA LOAD DESIGNATION

Pd — MAXIMUM DRIFT SURCHARGE, IN ADDITION TO UNIFORM SNOW LOAD
Wd — WIDTH OF SNOW DRIFT

SNOW DRIFT LOAD

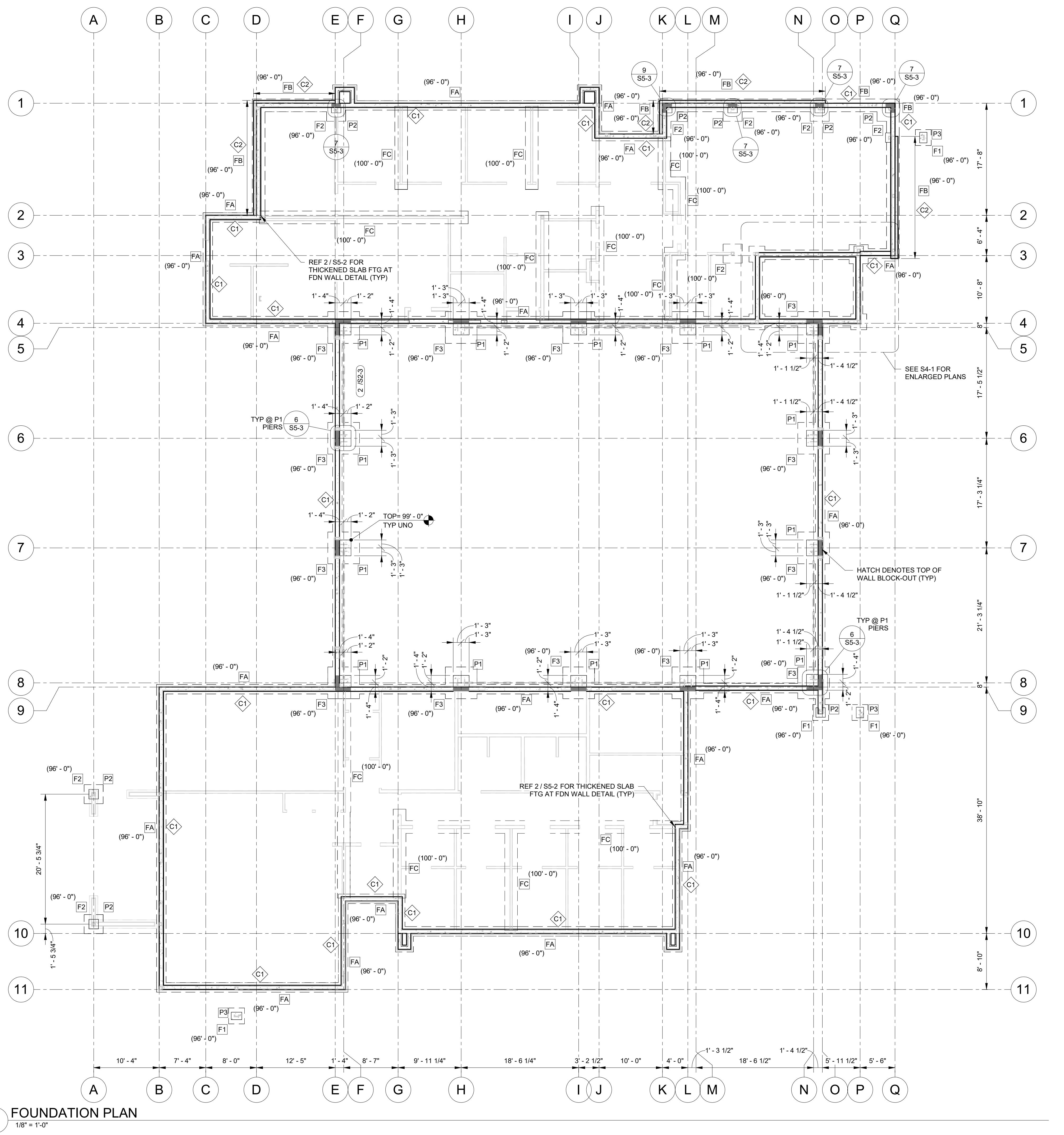
MECH XXXX# — MECHANICAL UNIT / AREA ADD LOAD CONTRACTOR TO COORDINATE SIZE, WEIGHT AND LOCATION WITH JOIST MANUFACTURER

MECHANICAL UNIT / AREA ADD LOAD
LOADING SYMBOLS LEGEND



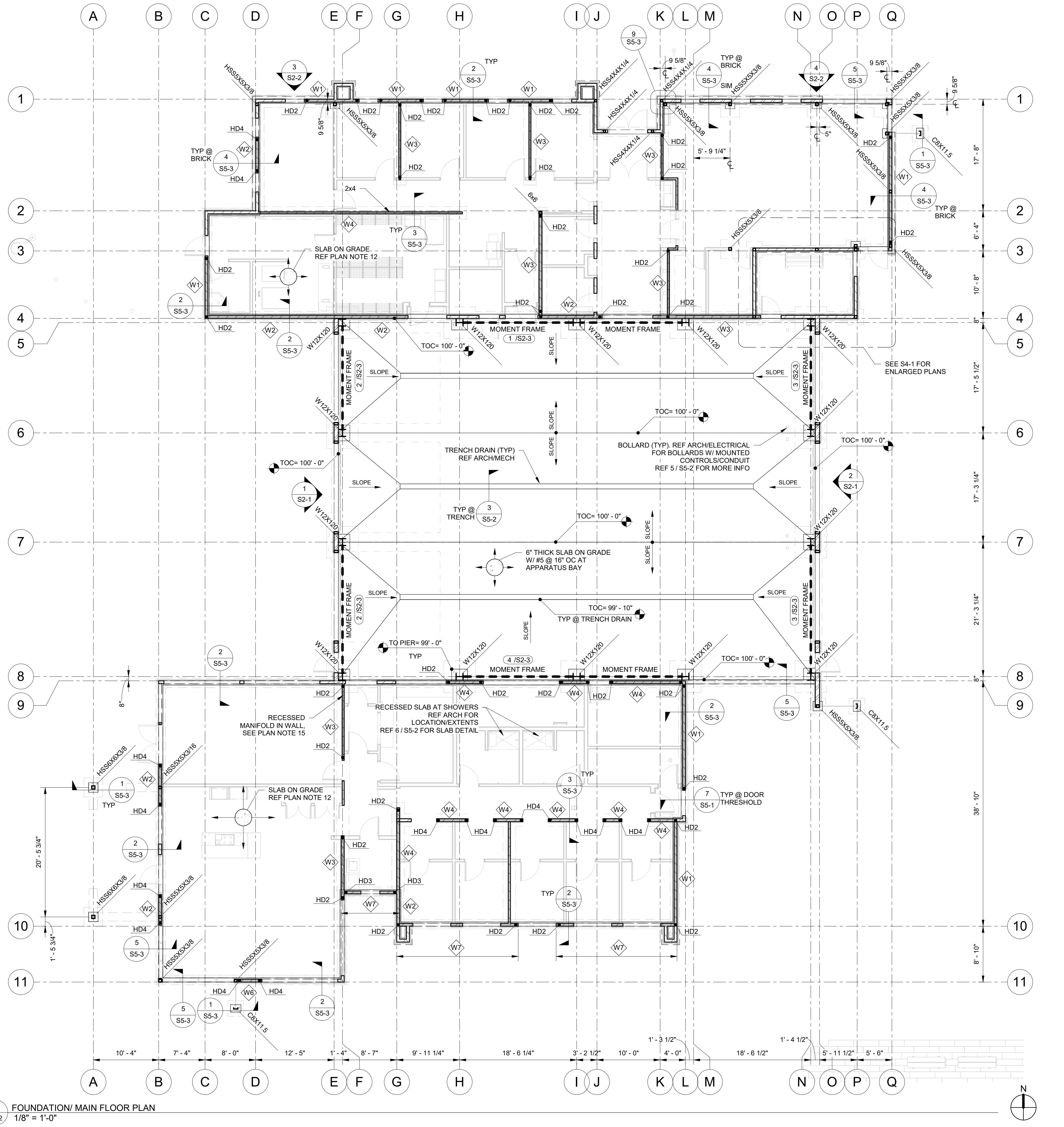
1 ROOF - LOADING PLAN
1/16" = 1'-0"

2 WIND UPLIFT LOAD MAP
1/16" = 1'-0"



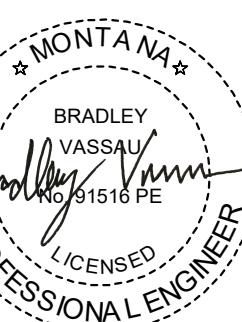
FOUNDATION PLAN NOTES

- PROJECT DATUM ELEVATION = 100'-0" AT TOP OF SLAB ON GRADE (SEE CIVIL DRAWINGS FOR ABSOLUTE ELEVATION). ALL SPOT ELEVATIONS ARE IN REFERENCE TO THE DATUM ELEVATION.
- VERIFY ALL DIMENSIONS AND ELEVATION WITH THE ARCHITECTURAL DRAWINGS. SEE CIVIL DRAWINGS FOR EXTERIOR SLABS AND GRADING.
- REFER TO THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.
- REFER TO THE DRAWING ANNOTATIONS & SYMBOLS FOR EXPLANATION OF DRAWING CONVENTIONS.
- REFER TO DRAWINGS S5, S6, S7, & S-9 FOR TYPICAL CONCRETE, STEEL, WOOD, CONCRETE RETAINING WALLS, ETC. TYPICAL DETAILS ARE NOT NECESSARILY REFERENCED BY CALLOUTS ON THIS PLAN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW THE REQUIREMENTS OF THE DETAILS AT THE LOCATION AT WHICH THEY OCCUR.
- COORDINATE THE FOLLOWING ITEMS WITH DRAWINGS OF OTHER DISCIPLINES:
 - SUBGRADE PREPARATION REQUIREMENTS BELOW FOOTINGS AND SLABS ON GRADE AND BACKFILL REQUIREMENTS BEHIND BASEMENT AND RETAINING WALLS; SEE THE PROJECT GEOTECHNICAL REPORT.
 - SIZES AND LOCATIONS OF OPENINGS AND PENETRATIONS THROUGH WALLS AND FLOORS; SEE ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING DRAWINGS.
 - EXTERIOR CONCRETE, INCLUDING SLABS AND SITE RETAINING WALLS; SEE ARCHITECTURAL, CIVIL, AND LANDSCAPE DRAWINGS.
 - ELEVATOR SUMP PITS; SEE ARCHITECTURAL AND ELEVATOR SUPPLIER DRAWINGS.
 - RECESSED AND DEPRESSED FLOOR AREAS; SEE ARCHITECTURAL DRAWINGS.
 - EXTENT OF AND REQUIREMENTS FOR MASONRY VENEER; SEE ARCHITECTURAL DRAWINGS.
 - LOCATIONS AND REQUIREMENTS FOR NON-BEARING / NON-STRUCTURAL PARTITION WALLS; SEE ARCHITECTURAL DRAWINGS.
 - LOCATION, SIZE, AND ANCHORAGE OF ELECTRICAL, MECHANICAL, AND PLUMBING EQUIPMENT; SEE ELECTRICAL, MECHANICAL, AND PLUMBING DRAWINGS.
- EXTERIOR GRIDLINES ARE ALIGNED TO THE FACE OF FOUNDATION WALL AND INTERIOR GRIDLINES ARE ALIGNED TO THE CENTER OF COLUMN OR WALL, UNLESS NOTED OTHERWISE.
- WALLS AND COLUMNS ABOVE SHOWN HALFTONE FOR CLARITY. REFER TO FIRST FLOOR FRAMING PLAN FOR MORE INFORMATION.
- FOR STRUCTURAL SCHEDULES, REFER TO SHEET S0-6.



FLOOR PLAN NOTES

- PROJECT DATUM ELEVATION = 100'-0" AT TOP OF SLAB ON GRADE (SEE CIVIL DRAWINGS FOR ABSOLUTE ELEVATION) ALL SPOT ELEVATIONS ARE IN REFERENCE TO THE DATUM ELEVATION.
- VERIFY ALL DIMENSIONS AND ELEVATION WITH THE ARCHITECTURAL DRAWINGS. SEE CIVIL DRAWINGS FOR EXTERIOR SLABS AND GRADING.
- REFER TO THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.
- REFER TO THE DRAWING ANNOTATIONS & SYMBOLS FOR EXPLANATION OF DRAWING CONVENTIONS.
- REFER TO DRAWINGS S5, S6, S7, & S9 FOR TYPICAL CONCRETE, STEEL, WOOD, & COLD FORM DETAILS RESPECTIVELY. TYPICAL DETAILS ARE NOT NECESSARILY REFERENCED BY CALLOUTS ON PLAN; IT IS THE CONTRACTOR'S RESPONSIBILITY TO FOLLOW THE REQUIREMENTS OF THE DETAILS AT THE LOCATION AT WHICH THEY OCCUR.
- COORDINATE THE FOLLOWING ITEMS WITH DRAWINGS OF OTHER DISCIPLINES:
 - SUBGRADE PREPARATION REQUIREMENTS BELOW FOOTINGS AND SLABS ON GRADE AND BACKFILL REQUIREMENTS BEHIND BASEMENT AND RETAINING WALLS; SEE THE PROJECT GEOTECHNICAL REPORT.
 - SIZES AND LOCATIONS OF OPENINGS AND PENETRATIONS THROUGH WALLS AND FLOORS; SEE ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING DRAWINGS.
 - EXTERIOR CONCRETE, INCLUDING SLABS AND SITE RETAINING WALLS; SEE ARCHITECTURAL, CIVIL, AND LANDSCAPE DRAWINGS.
 - RECESSED AND DEPRESSED FLOOR AREAS; SEE ARCHITECTURAL DRAWINGS.
 - EXACT TOE AND REQUIREMENTS FOR MASONRY VENEER; SEE ARCHITECTURAL DRAWINGS.
 - LOCATIONS AND REQUIREMENTS FOR NON-BEARING / NON-STRUCTURAL PARTITION WALLS; SEE ARCHITECTURAL DRAWINGS.
 - LOCATION, SIZE, AND ANCHORAGE OF ELECTRICAL, MECHANICAL, AND PLUMBING EQUIPMENT; SEE ELECTRICAL, MECHANICAL, AND PLUMBING DRAWINGS.
- EXTERIOR GRIDLINES ARE ALIGNED TO THE FACE OF FOUNDATION WALL AND INTERIOR GRIDLINES ARE ALIGNED TO THE CENTER OF COLUMN OR WALL, UNLESS NOTED OTHERWISE.
- BEARING AND EXTERIOR WALL FRAMING SHALL BE 2X6 STUDS AT 16" ON CENTER, UNLESS NOTED OTHERWISE.
- PROVIDE KING STUDS AT JAMB'S OF OPENINGS IN WOOD FRAMED EXTERIOR WALLS; SEE S4-1.
- FASTEN PLIES OF WALL STUDS FOR COLUMNS, KING STUDS, AND TRIMMER STUDS AS SPECIFIED IN THE GENERAL NOTES AND/OR TYPICAL DETAILS.
- PROVIDE SOLID BLOCKING THROUGH RIM JOIST SPACE BELOW POSTS OR BUILT-UP STUDS.
- SLAB ON GRADE SHALL BE 4" THICK AND REINFORCED WITH #4 AT 16" ON CENTER, EA WAY UNO.
- FOR STRUCTURAL SCHEDULES, REFER TO SHEET S6-6.
- FOOTINGS SHOWN HALFTONE FOR CLARITY. REFER TO FOUNDATION PLAN FOR MORE INFORMATION.
- REFER TO MECHANICAL DRAWINGS FOR EXACT SIZE AND LOCATION OF RECESSED MANIFOLD IN STRUCTURAL WALL. AT MANIFOLD LOCATION, PROVIDE HEADER TYPE 'H1' WITH BEARING AND KING STUDS DENOTED IN HEADER SCHEDULE.



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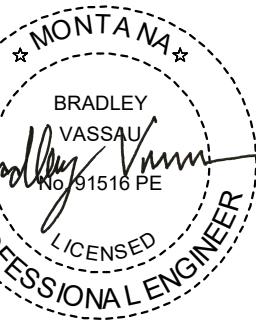
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FIRST FLOOR
FRAMING
PLAN

PROJECT #:
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S1-2

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EXTERIOR WALL ELEVATIONS

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ISSUE DATES:

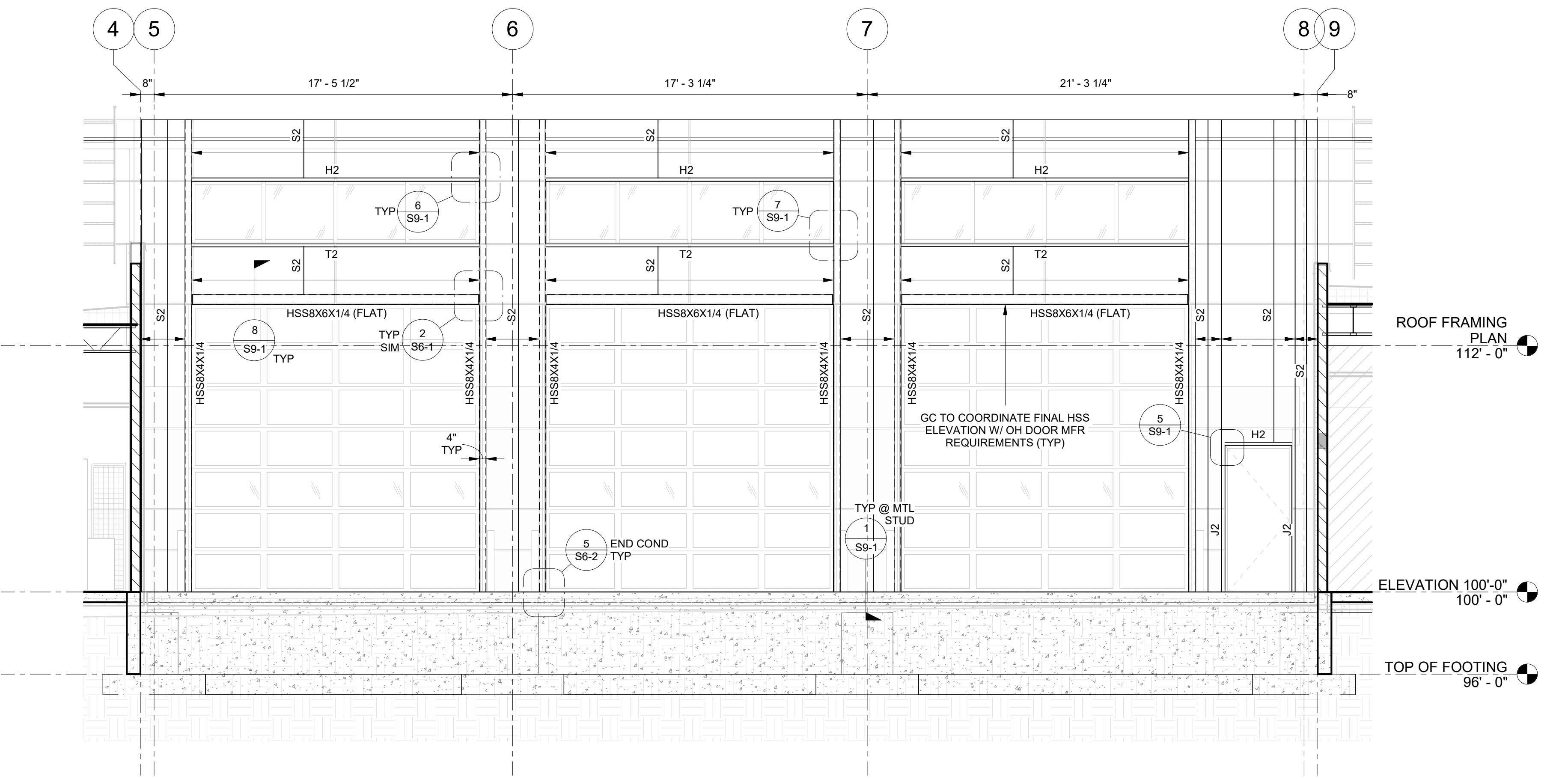
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S2-1

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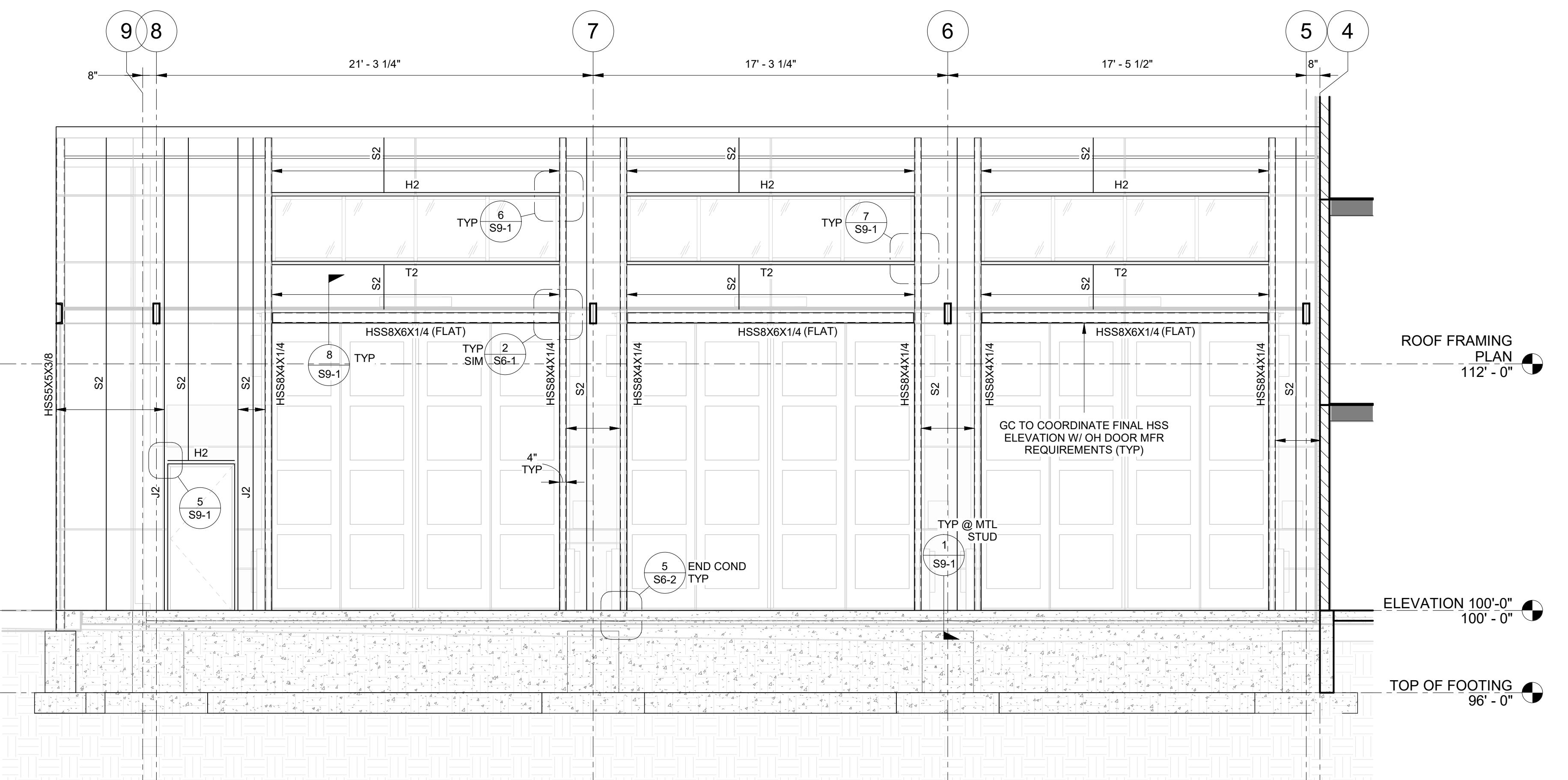
ELEVATION NOTES	
1. PROJECT DATUM ELEVATION = 100'-0" AT TOP OF SLAB-ON-GRADE (SEE CIVIL DRAWINGS FOR ABSOLUTE ELEVATION) ALL SPOT ELEVATIONS ARE IN REFERENCE TO THE DATUM ELEVATION.	
2. REFER TO THE GENERAL NOTES FOR ADDITIONAL REQUIREMENTS.	
3. REFER TO THE DRAWING ANNOTATIONS & SYMBOLS FOR EXPLANATION OF DRAWING CONVENTIONS.	
4. COORDINATE THE FOLLOWING ITEMS WITH DRAWINGS OF OTHER DISCIPLINES:	
• SIZES AND LOCATIONS OF OPENINGS AND PENETRATIONS THROUGH WALLS AND FLOORS; SEE ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING DRAWINGS.	
• WINDOW AND DOOR LOCATIONS AND ROUGH OPENING SIZES IN WALLS; SEE ARCHITECTURAL DRAWINGS.	
5. REFER TO SS-1 FOR TYPICAL LIGHT GAUGE FRAMING DETAILS.	
6. ATTACHMENT OF GLAZING TO STEEL OR LIGHT GAUGE FRAMING BY PROVIDER; HEAD OF GLAZING SHALL BE ABLE TO ACCOMMODATE 1/2" OF DOWNWARD DEFLECTION & 1/2" OF UPWARD DEFLECTION	

METAL FRAMING SCHEDULE		
USE	MARK	MEMBER SIZE
STUD	S1	600S162-54 AT 16" O.C.
	S2	800S162-54 AT 16" O.C.
JAMB	J1	600S162-54 600T150-54
	J2	(2) 800S162-54 BACK-TO-BACK (1) 800T150-54
HDR	H1	(2) 600S162-54 & (2) 600T150-54
	H2	(2) 600S162-54 & (2) 800T150-54
SILL	T1	600T150-54
	T2	800T150-68



1 GRID E BUILDING ELEVATION

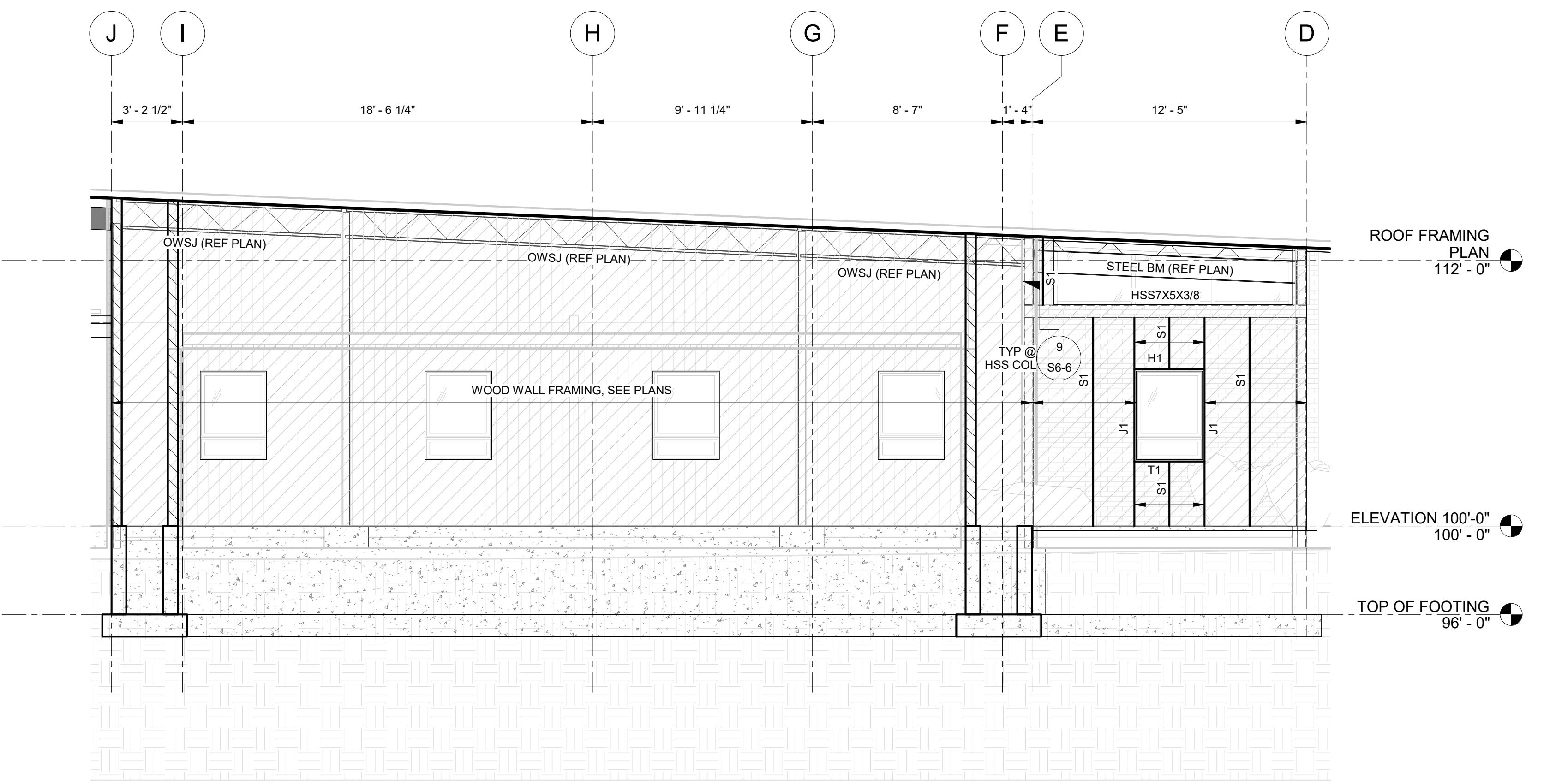
1/4" = 1'-0"



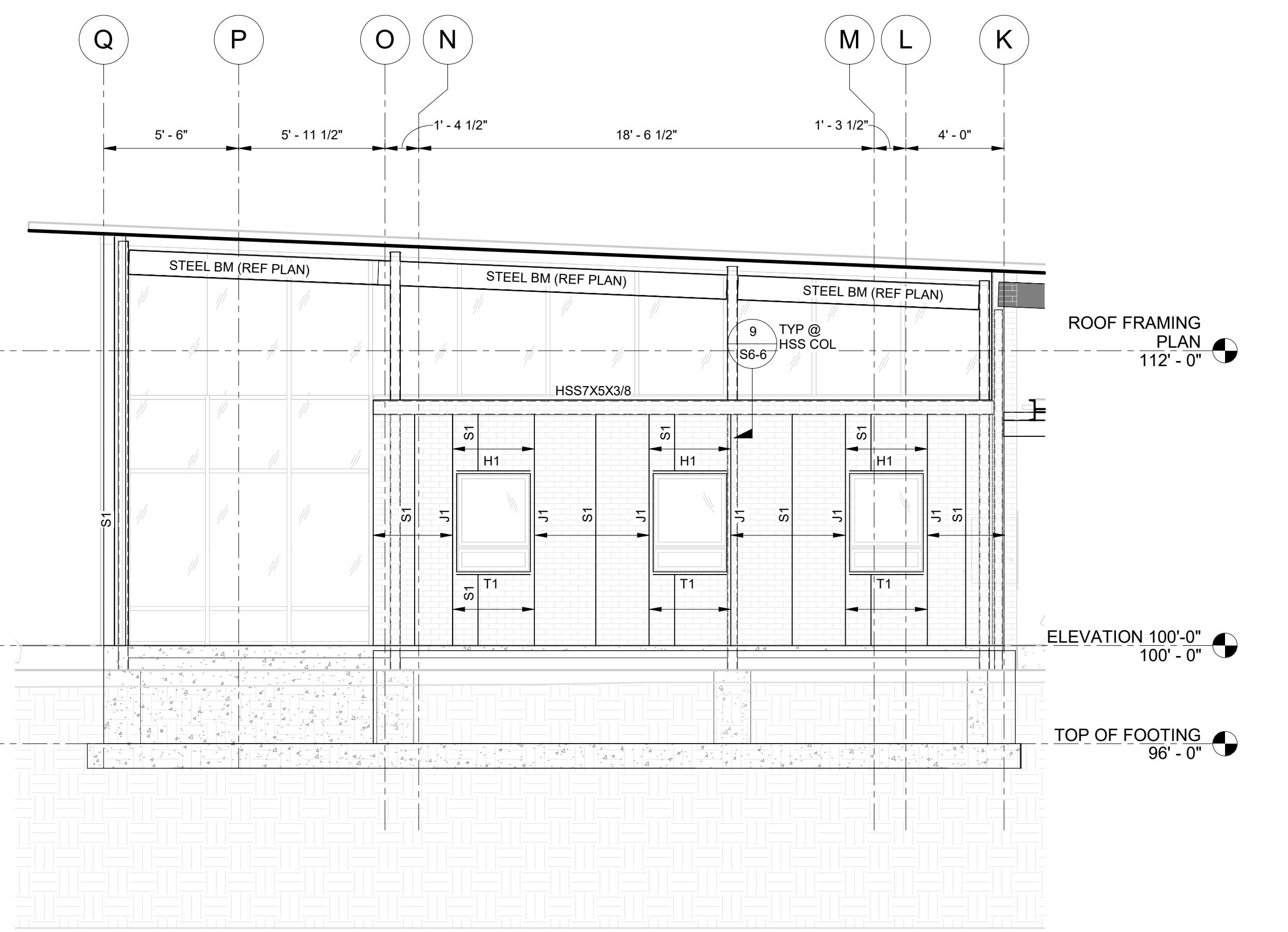
1/4" = 1'-0"

ELEVATION NOTES		
1. PROJECT DATUM ELEVATION = 100'-0" AT TOP OF SLAB-ON-GRADE (SEE CIVIL DRAWINGS FOR ABSOLUTE ELEVATION) ALL SPOT ELEVATIONS ARE IN REFERENCE TO THE DATUM ELEVATION.		
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• WINDOW AND DOOR LOCATIONS AND ROUGH OPENING SIZES IN WALLS; SEE ARCHITECTURAL DRAWINGS.		
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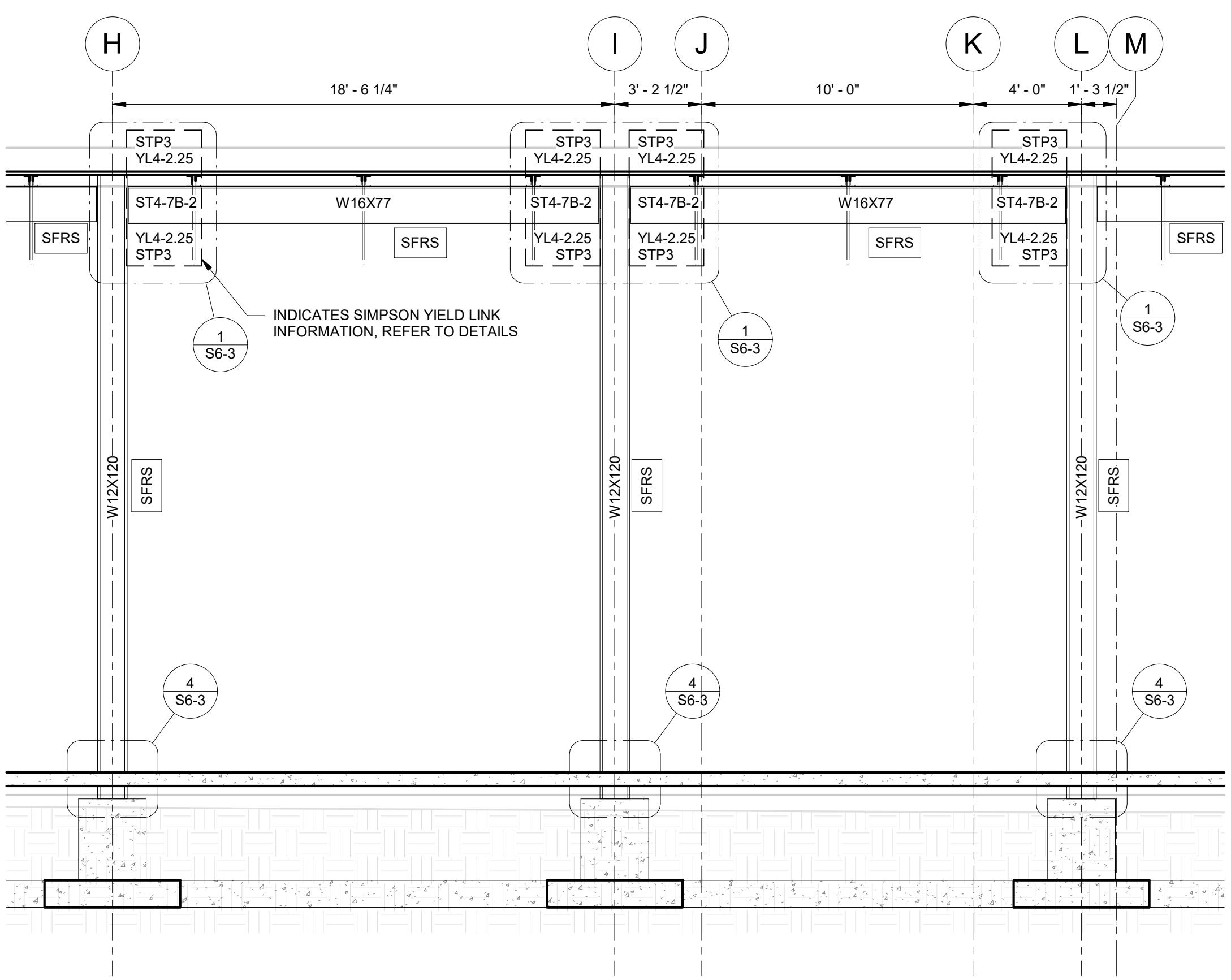
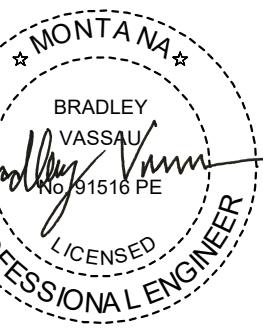
METAL FRAMING SCHEDULE			
USE	MARK	MEMBER SIZE	CONFIGURATION
STUD	S1	600S162-54 AT 16" O.C.	[] ---
	S2	800S162-54 AT 16" O.C.	[] ---
JAMB	J1	600S162-54 600T150-54	[] #10 SCREWS AT 12" O.C., EA FLANGE LEG
	J2	(2) 800S162-54 BACK-TO-BACK (1) 800T150-54	[] (2) ROWS OF #10 SCREWS @ 12" OC AT WEB, #10 SCREWS @ 12" OC EA FLANGE LEG
HDR	H1	(2) 600S162-54 & (2) 600T150-54	[] #10 SCREWS AT 12" O.C., EA FLANGE LEG
	H2	(2) 600S162-54 & (2) 800T150-54	[] #10 SCREWS AT 12" O.C., EA FLANGE LEG
SILL	T1	600T150-54	[] ---
	T2	800T150-68	[] ---



3 GRID 1 BUILDING ELEVATION
1/4" = 1'-0"

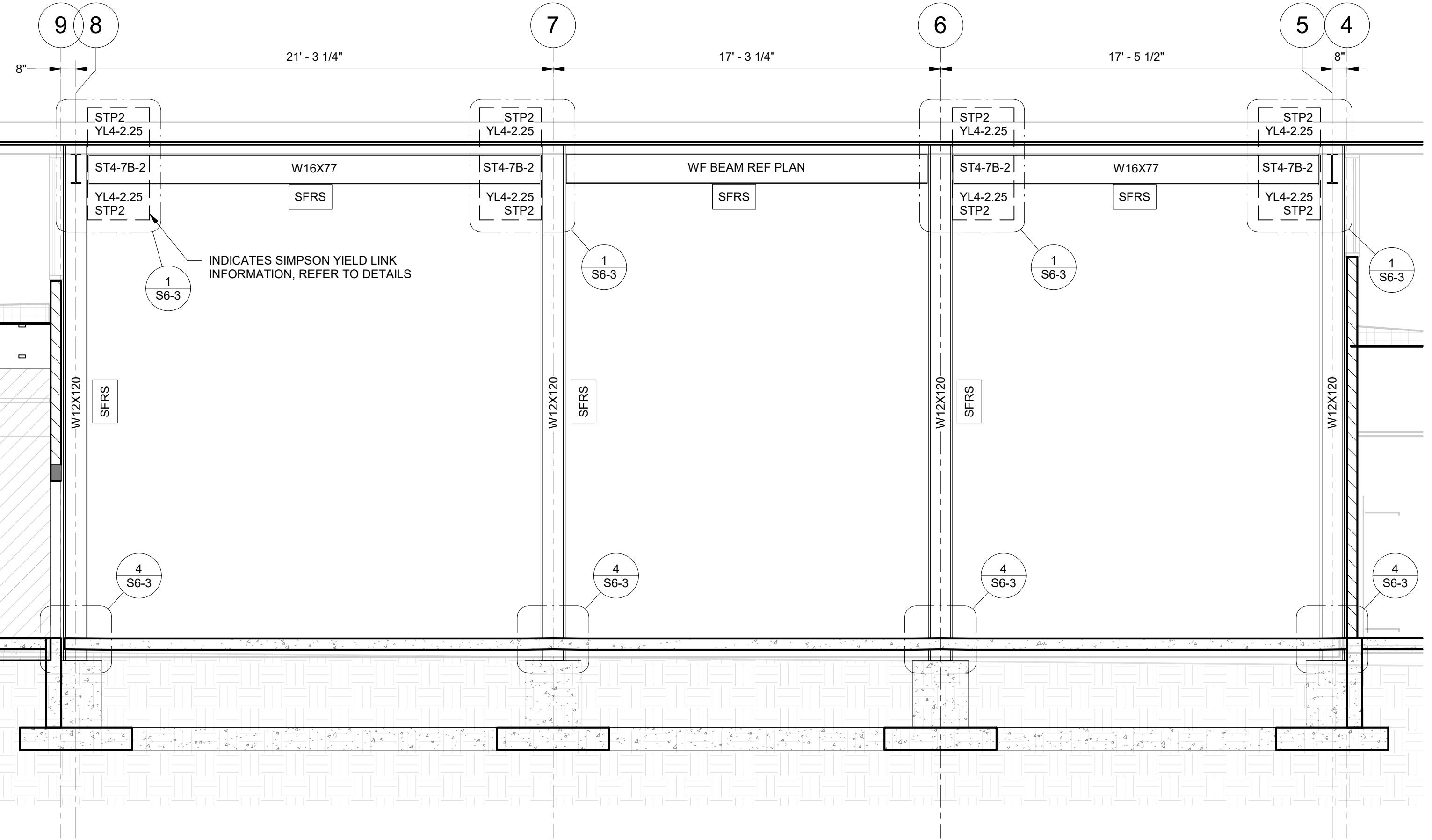


4 GRID 1 BUILDING ELEVATION
1/4" = 1'-0"



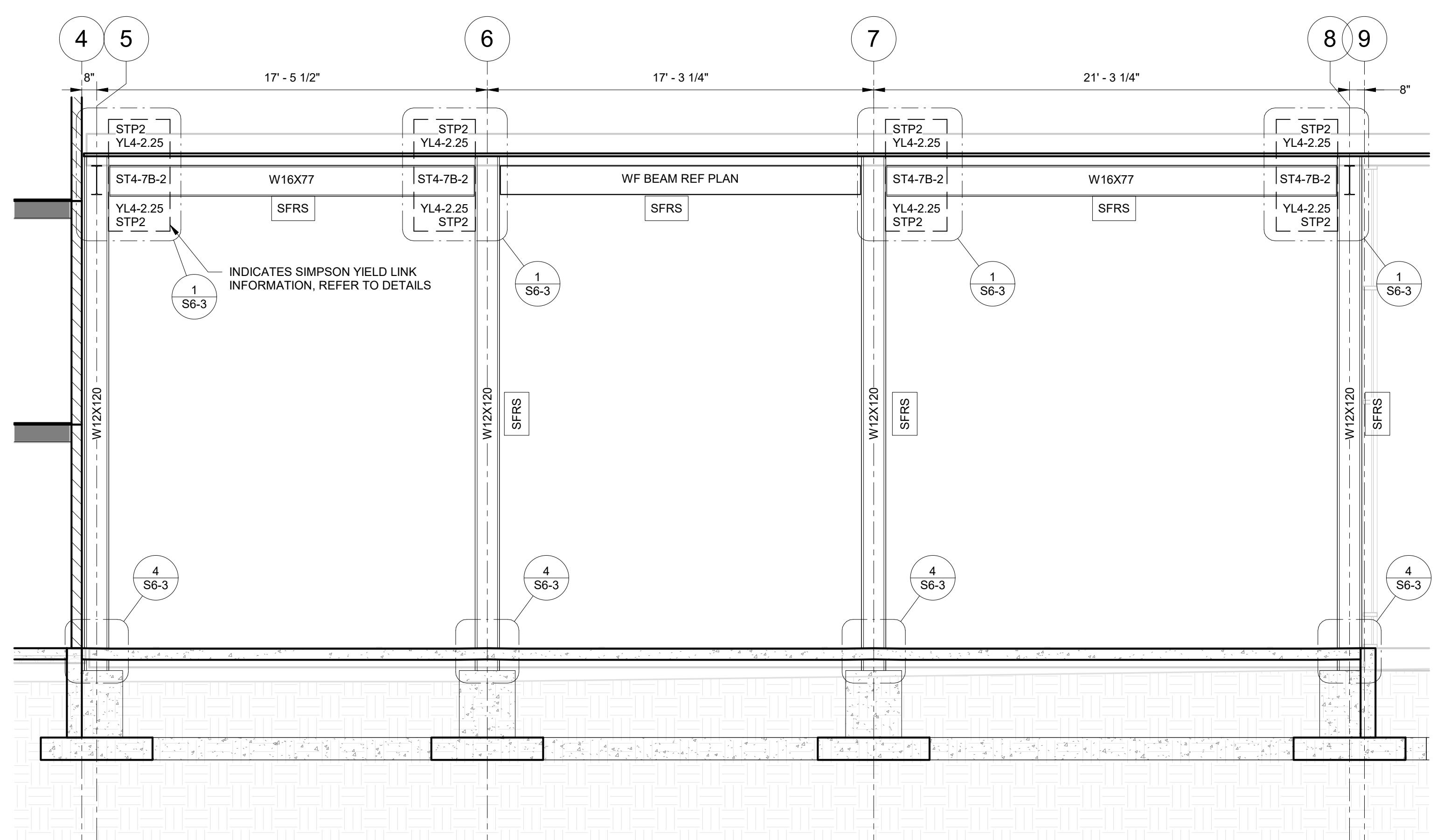
1 MOMENT FRAME ELEVATION

1/4" = 1'-0"



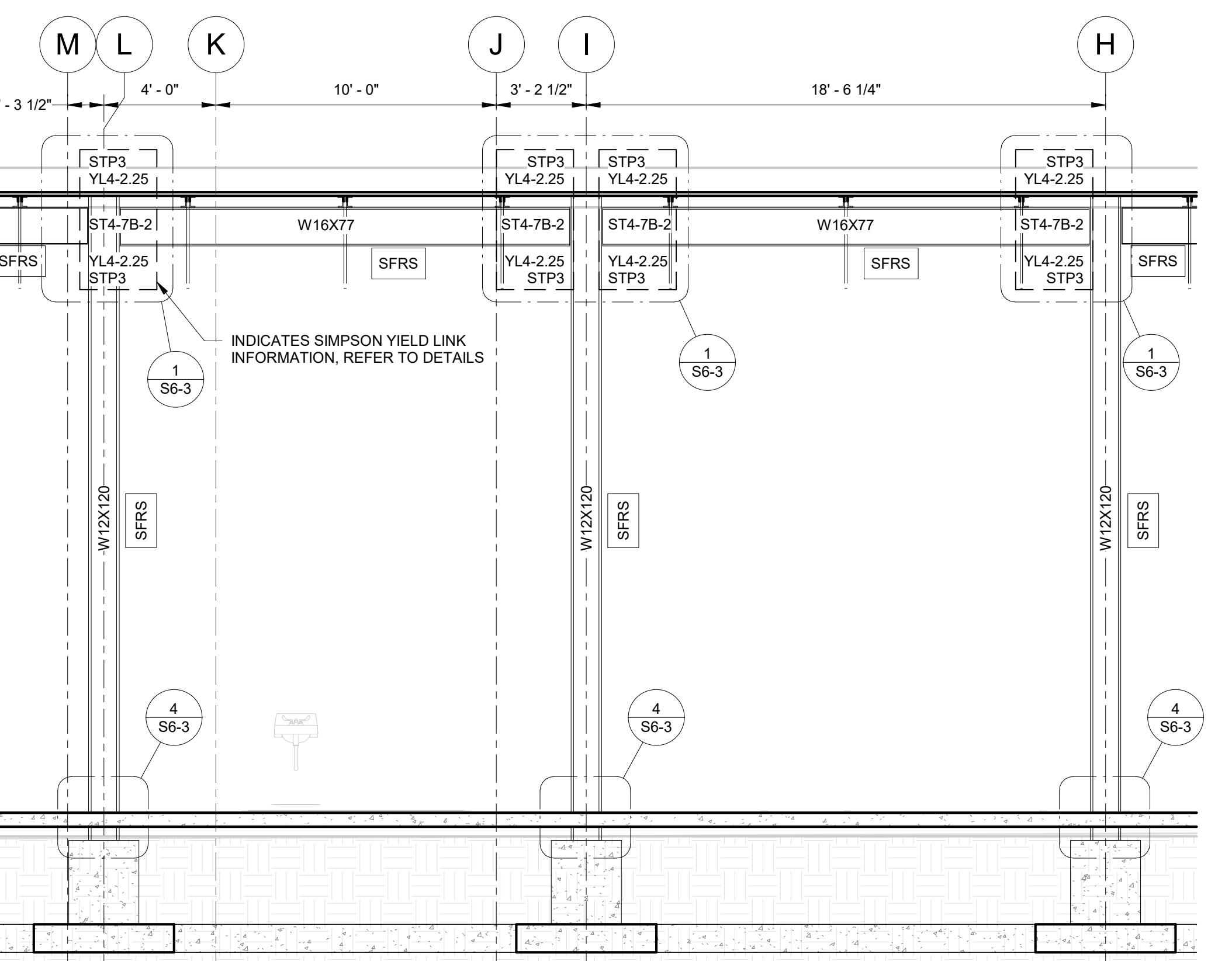
2 MOMENT FRAME ELEVATION

1/4" = 1'-0"



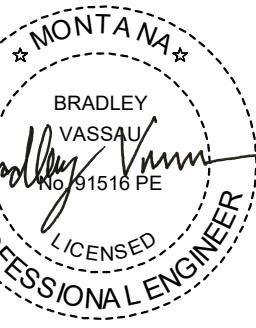
3 MOMENT FRAME ELEVATION

1/4" = 1'-0"



4 MOMENT FRAME ELEVATION

1/4" = 1'-0"



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HOSE TOWER
ENLARGED
FRAMING
PLANS

PROJECT #:
25-668

ISSUE DATES:

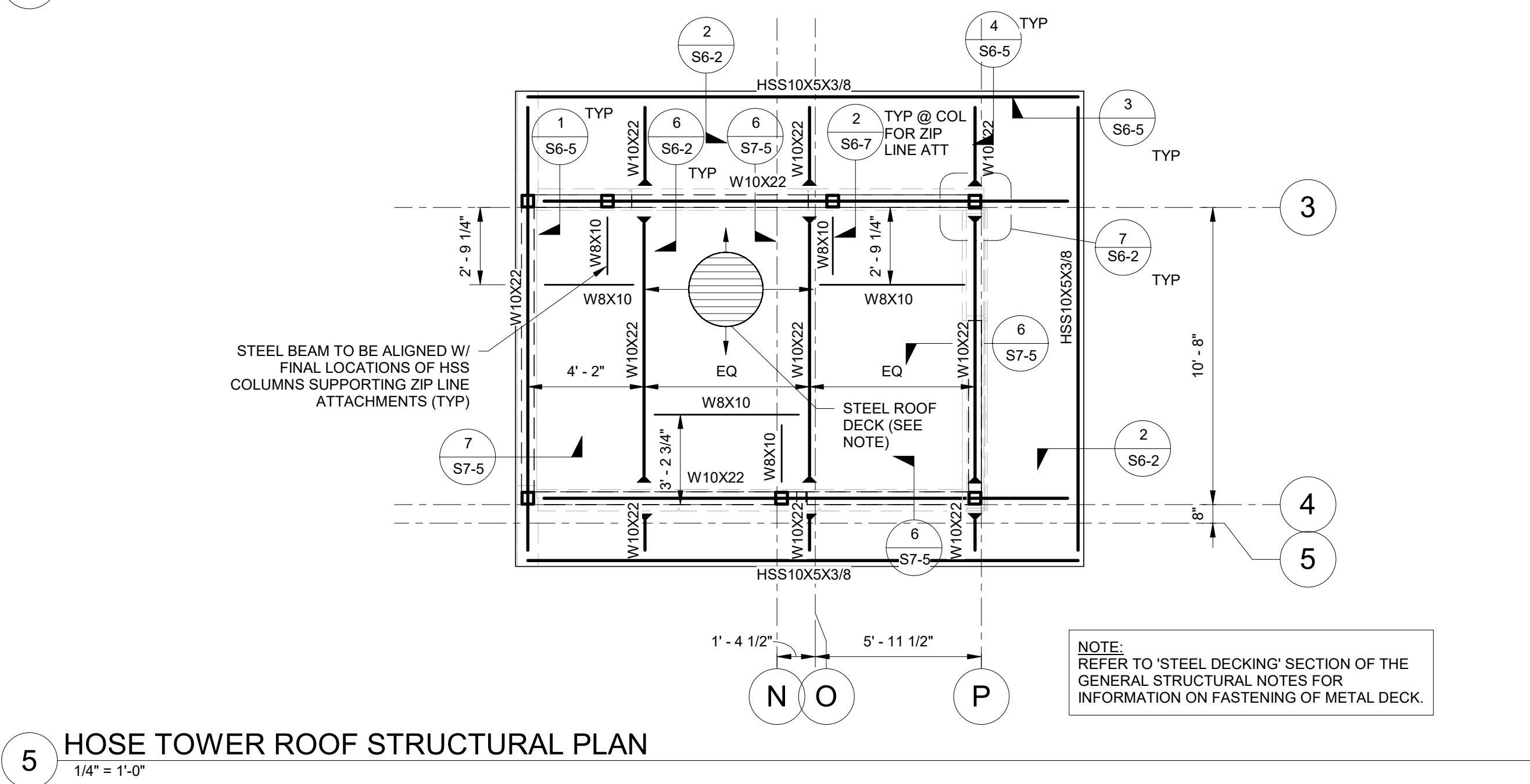
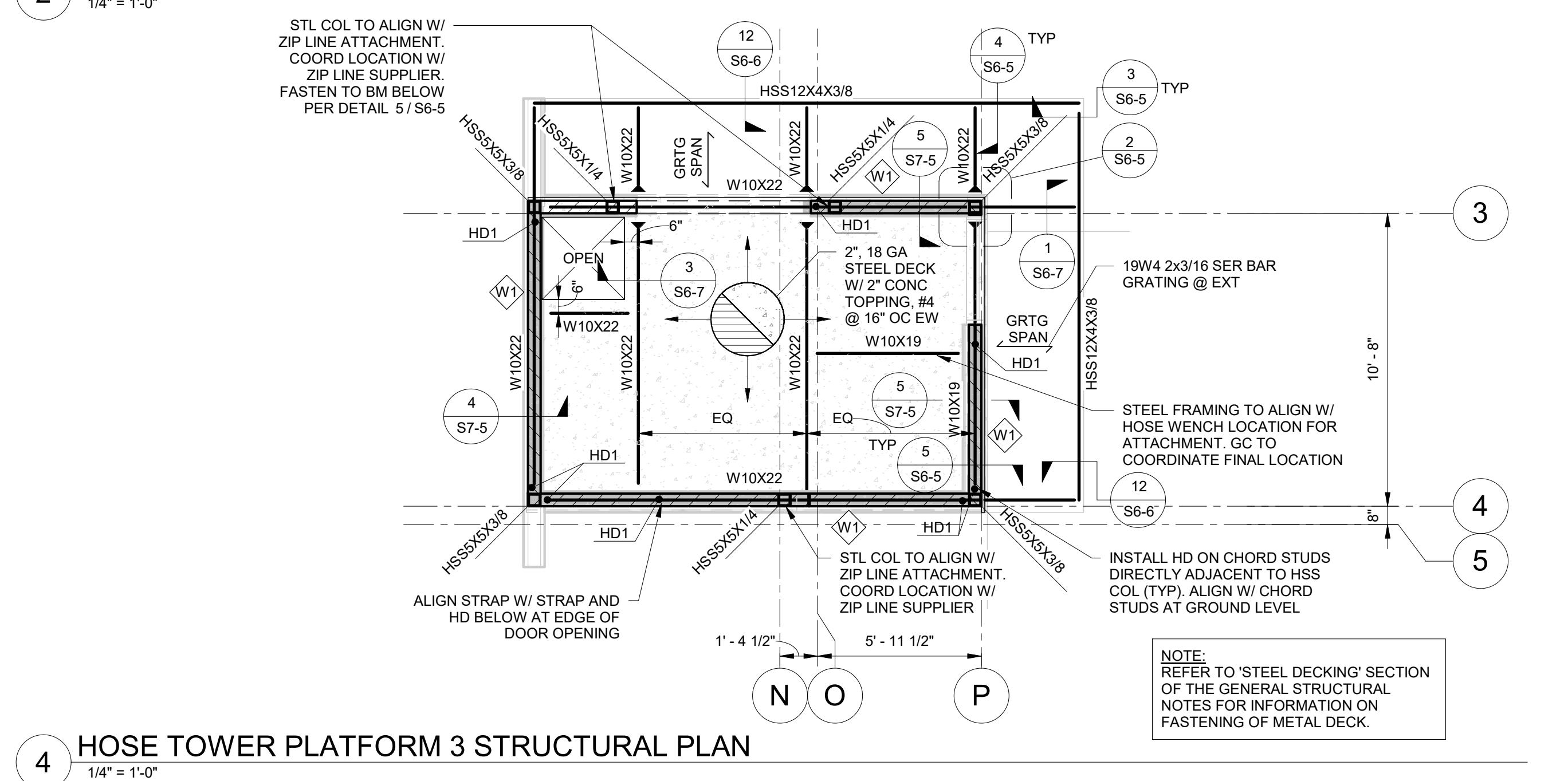
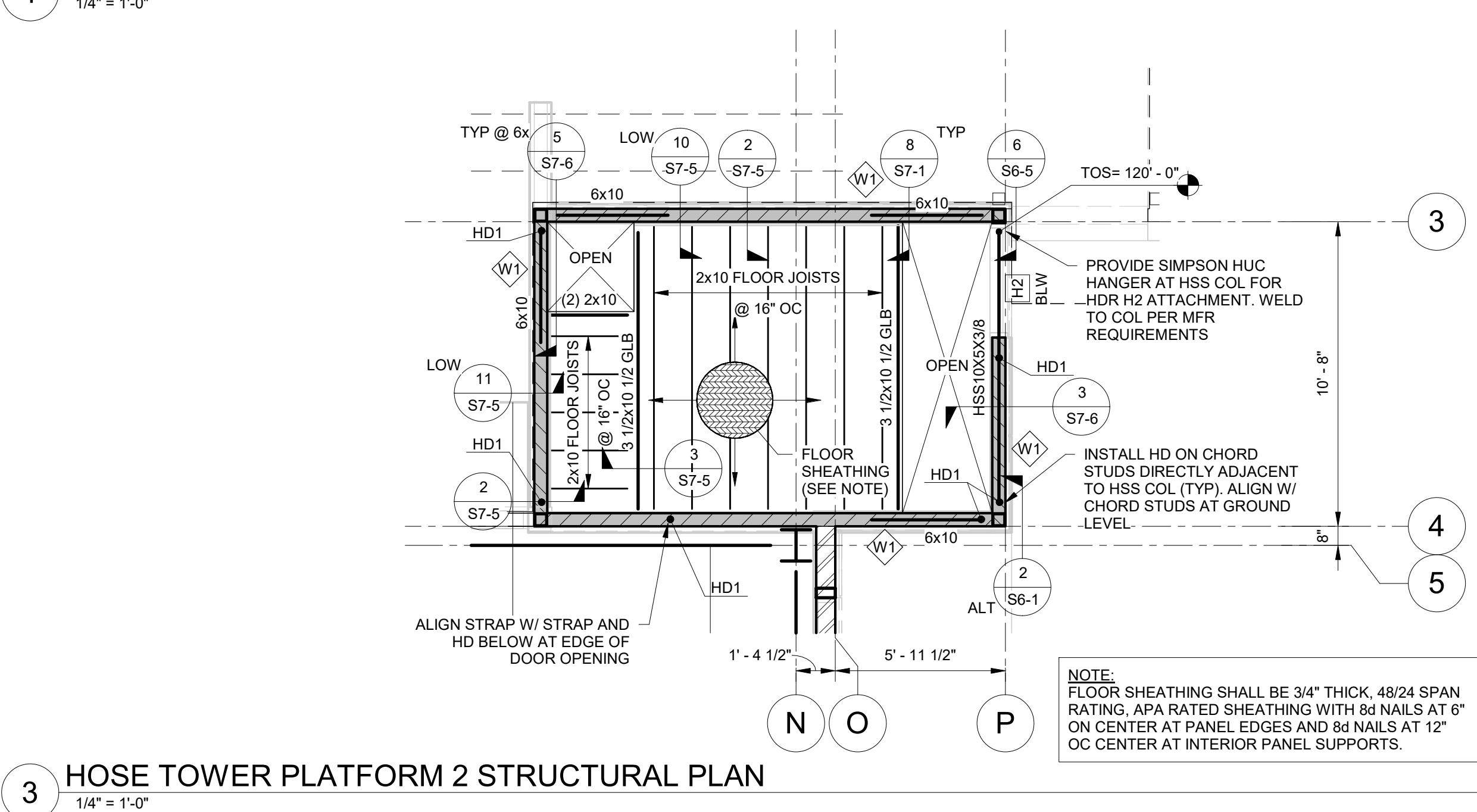
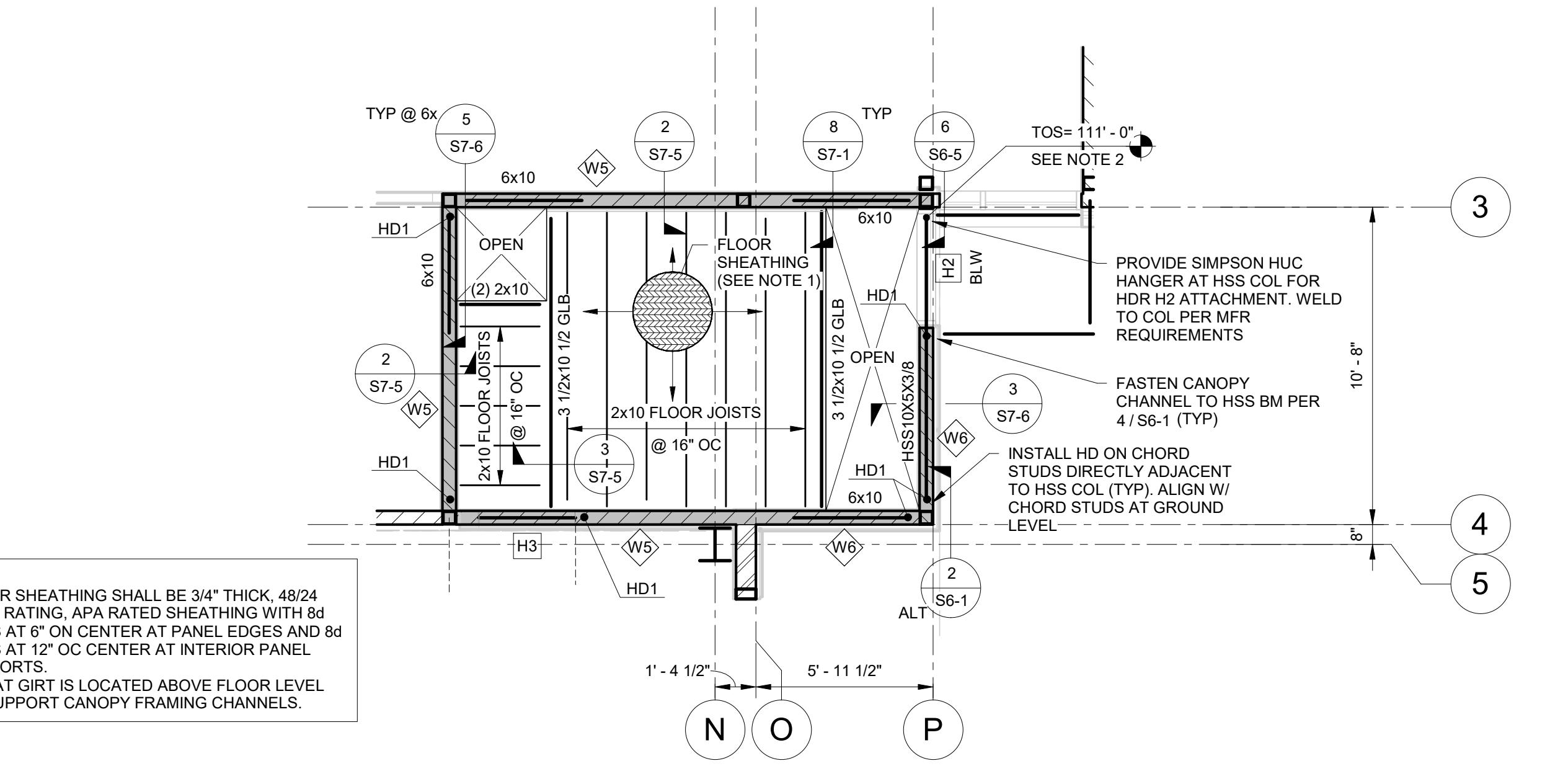
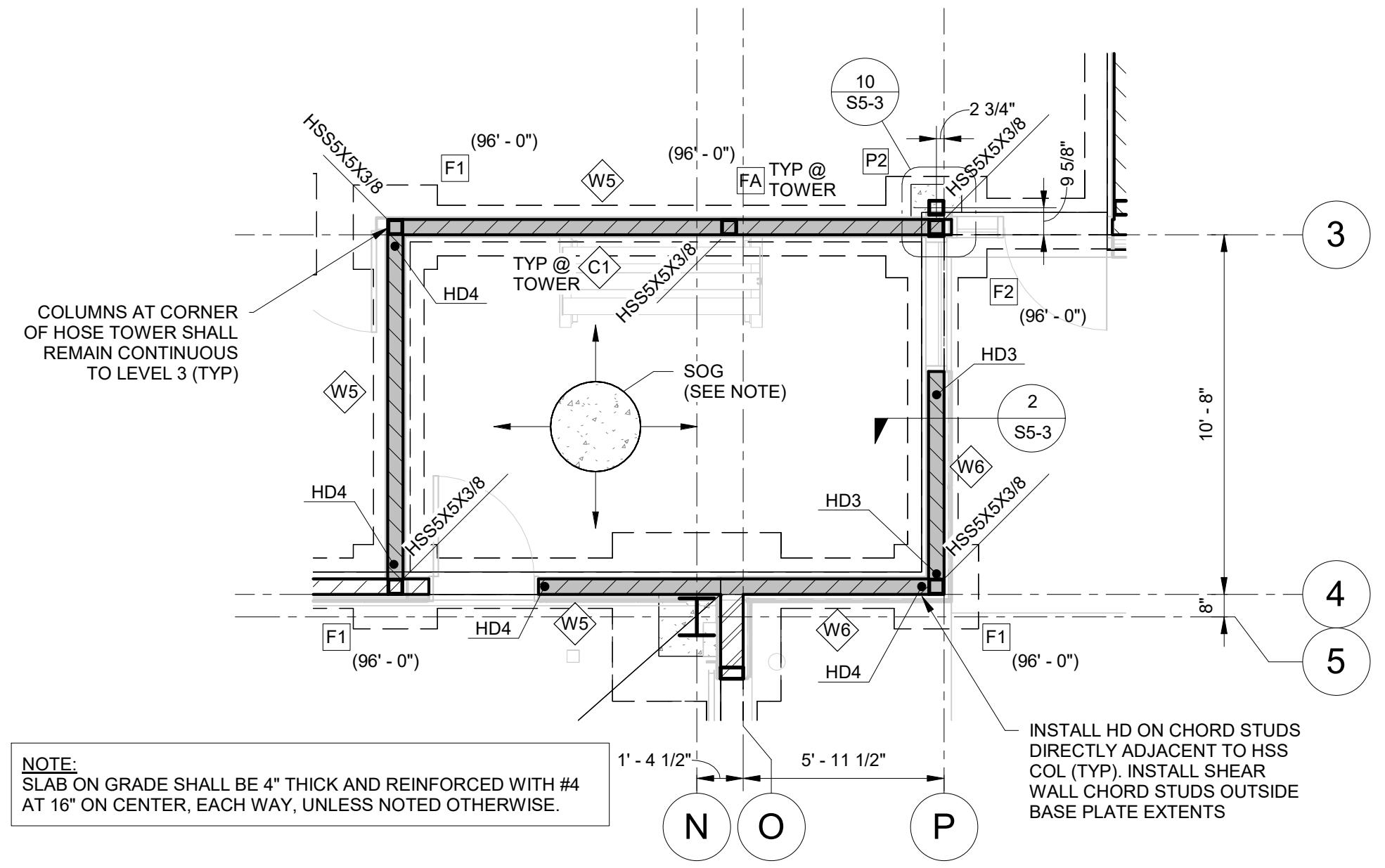
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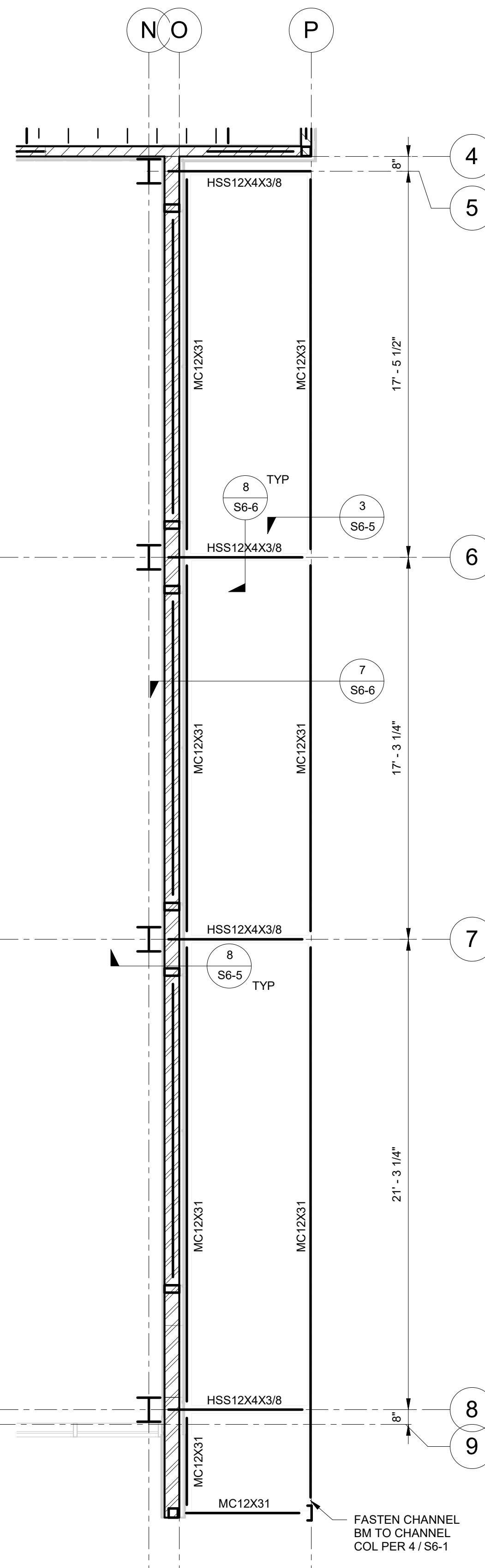
S4-1

10.22.25

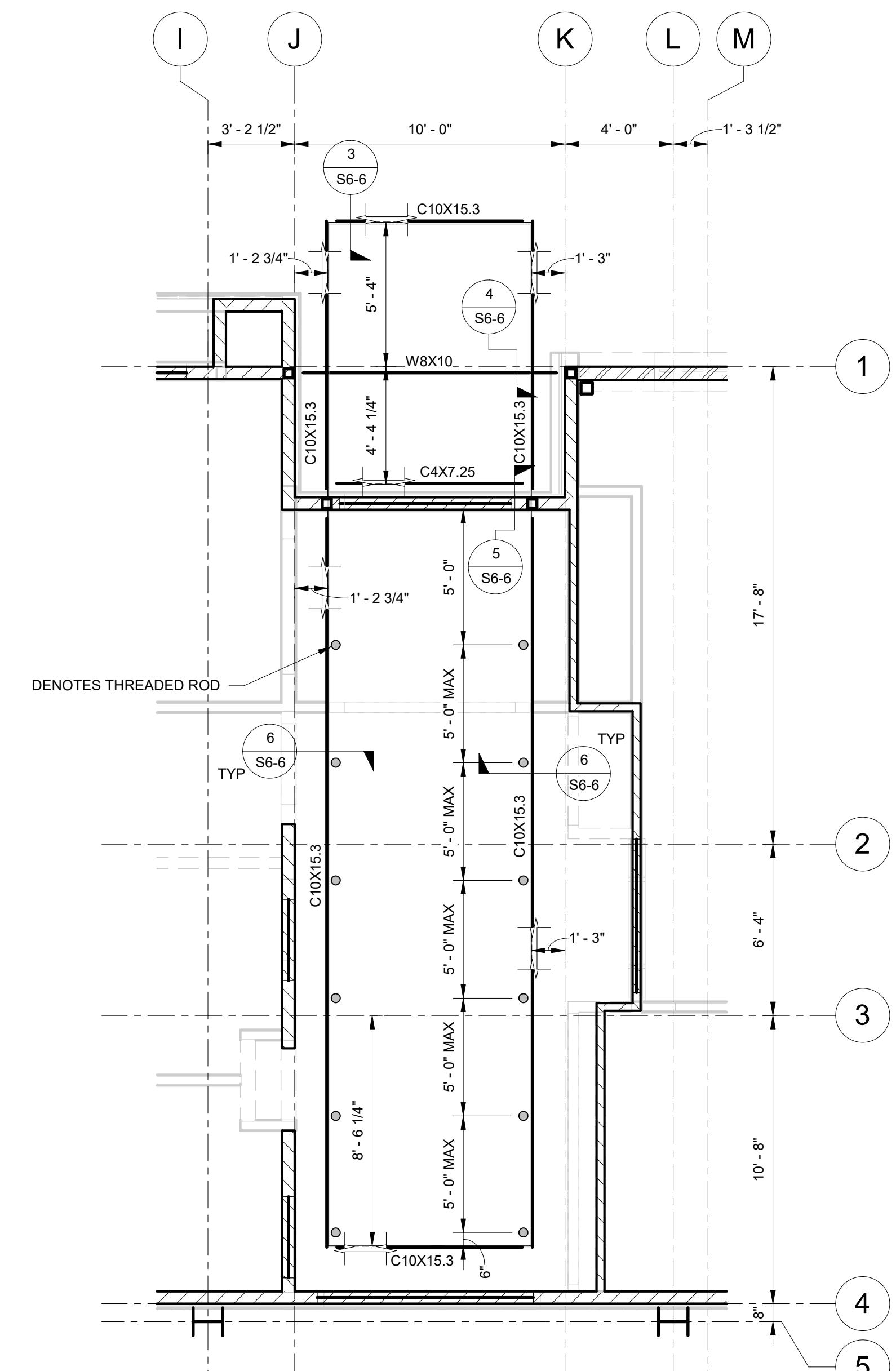
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NOTE:
SEE SHEET S0-6
FOR SCHEDULES.

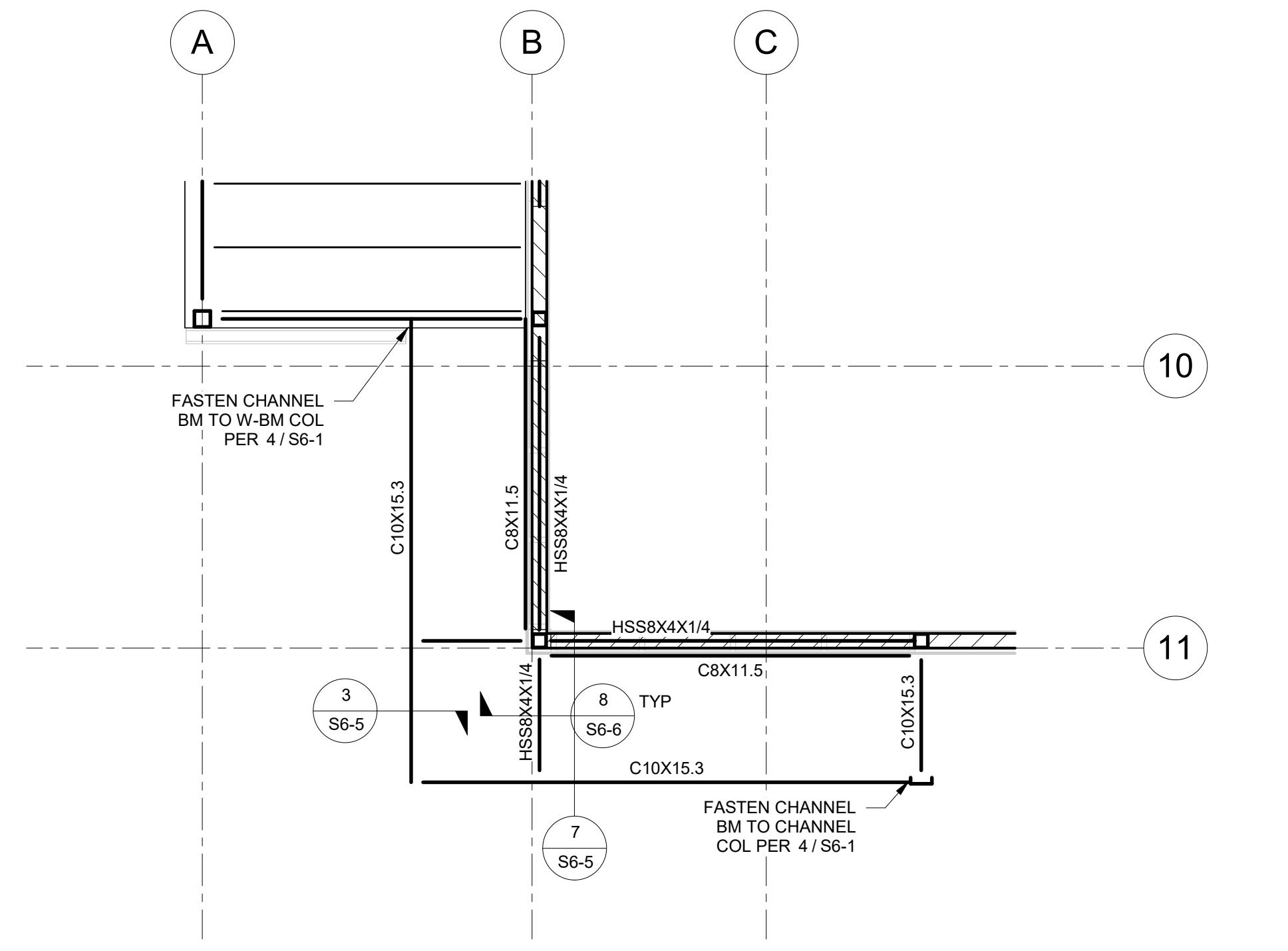




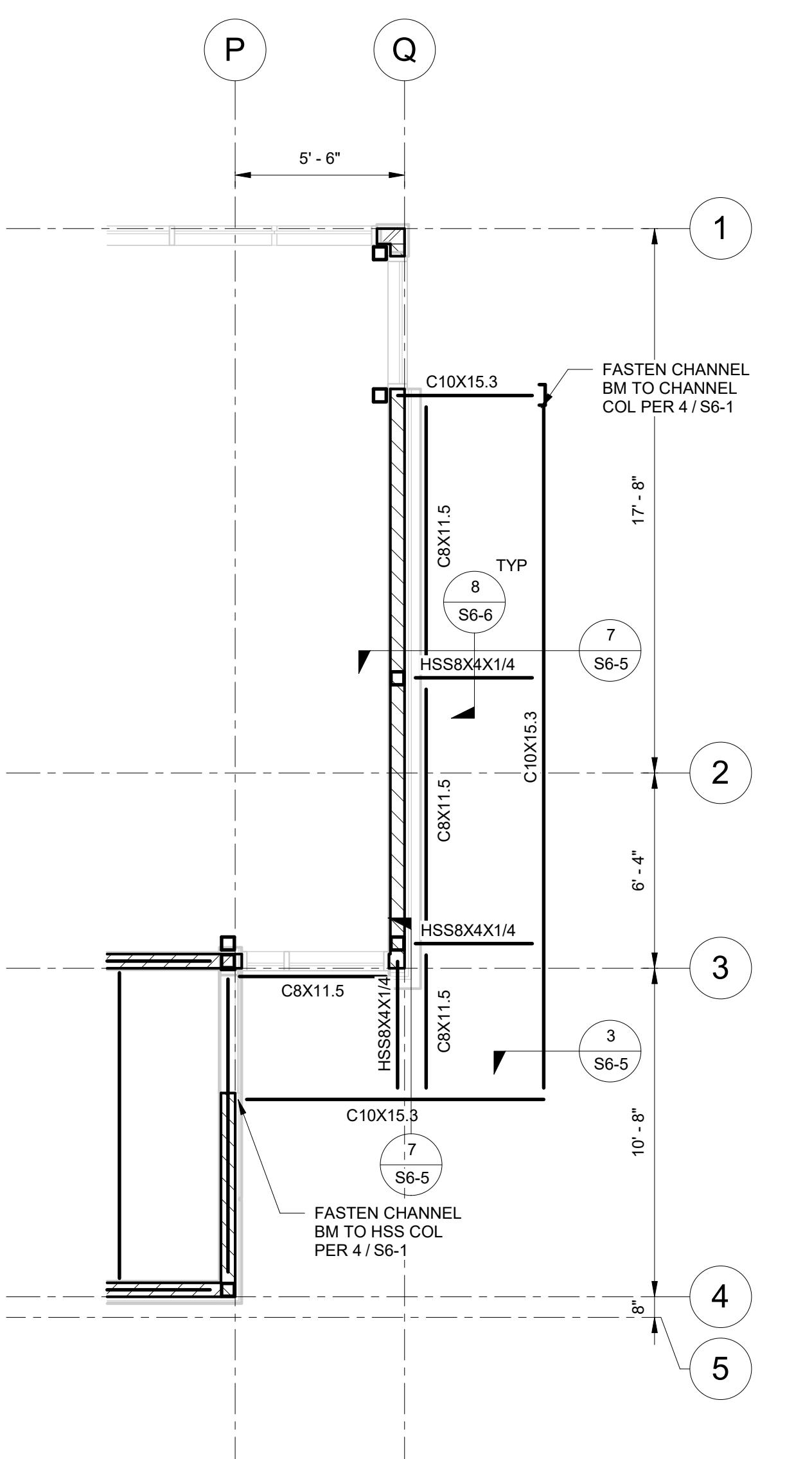
1 APPARATUS BAY CANOPY FRAMING PLAN
NTS



2 NORTH ENTRY CANOPY FRAMING PLAN
NTS



3 SOUTHWEST CANOPY FRAMING PLAN
NTS



4 NORTHEAST CANOPY FRAMING PLAN
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EXTERIOR
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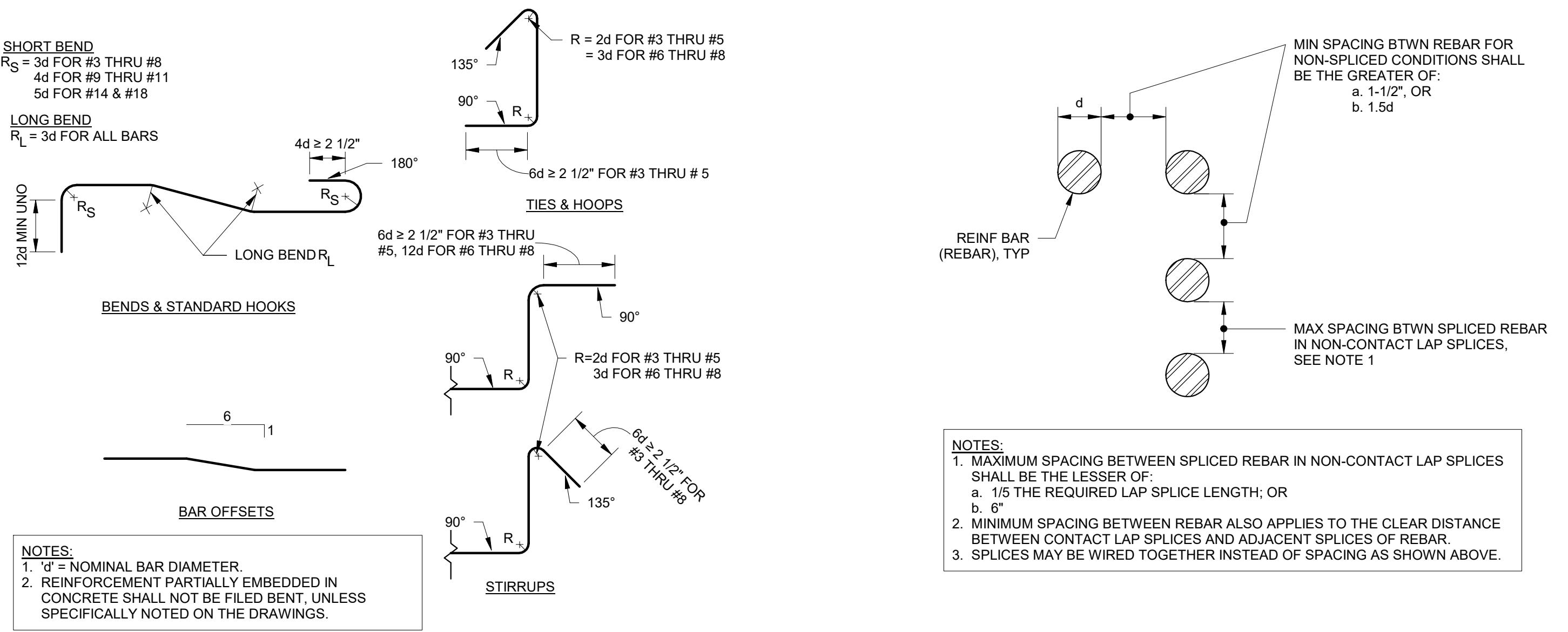
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HELENA FIRE STATION #3 Structural - Helena Fire Station 3.rvt

* MONTANA *

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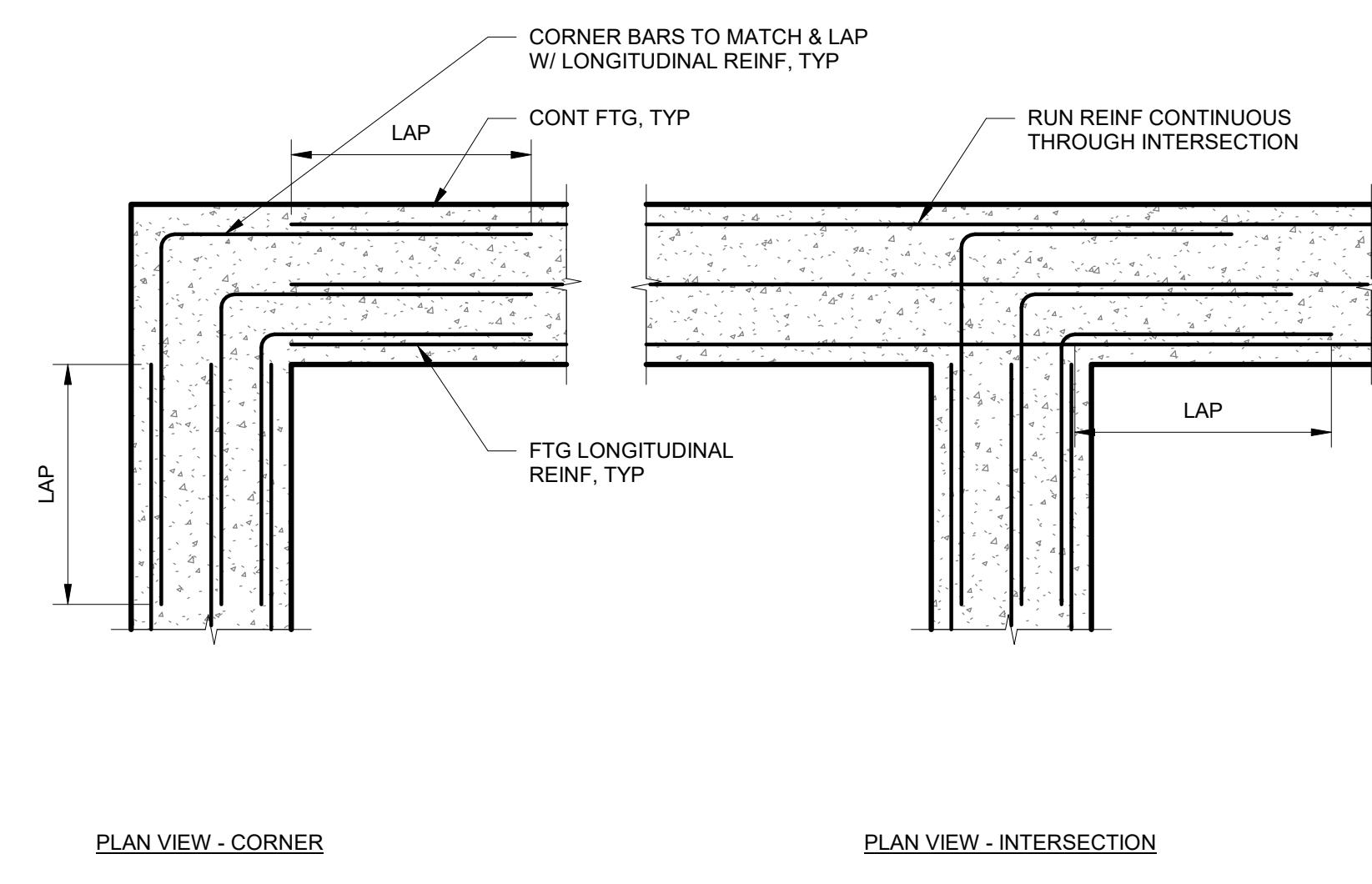
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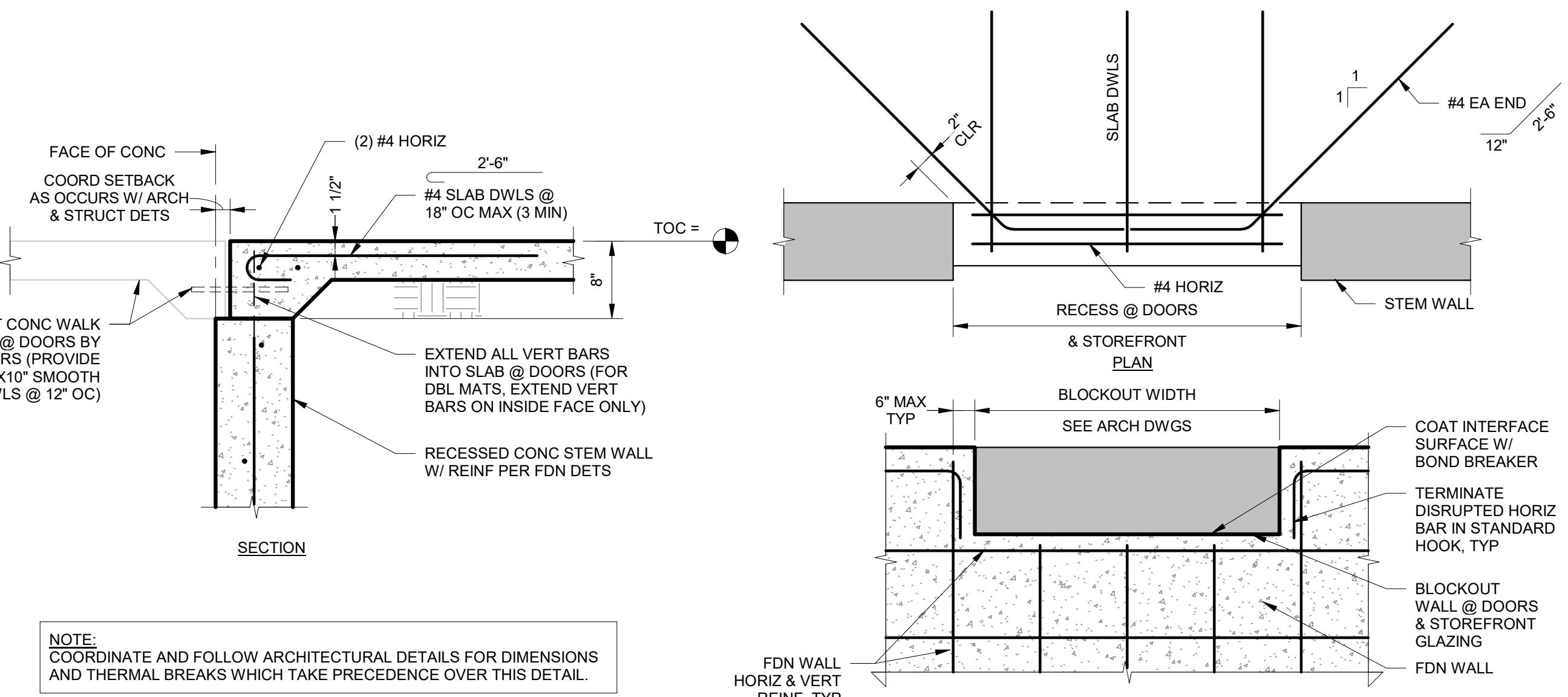


1 NTS REINFORCING HOOKS AND BENDS

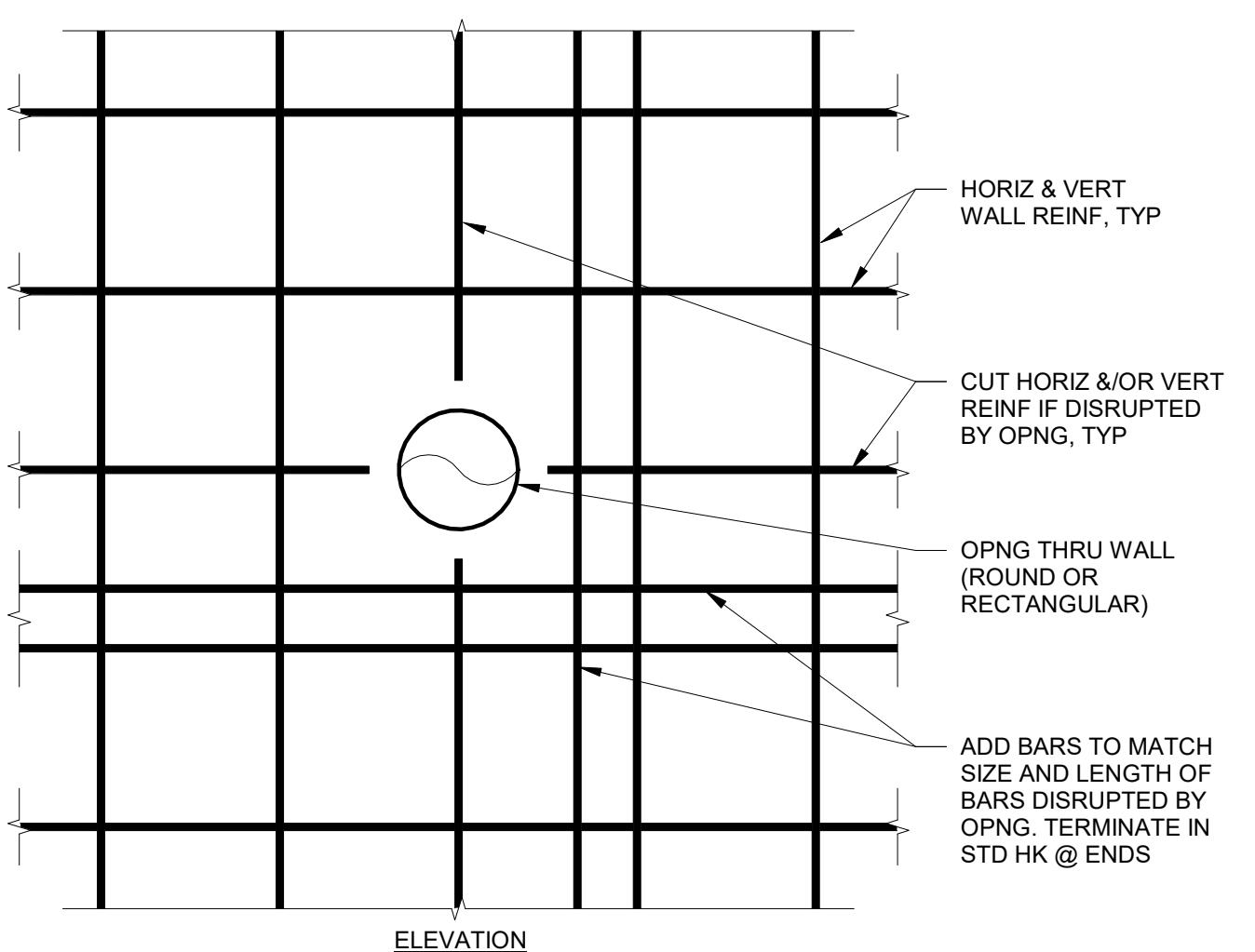
2 NTS CONCRETE REBAR SPACING



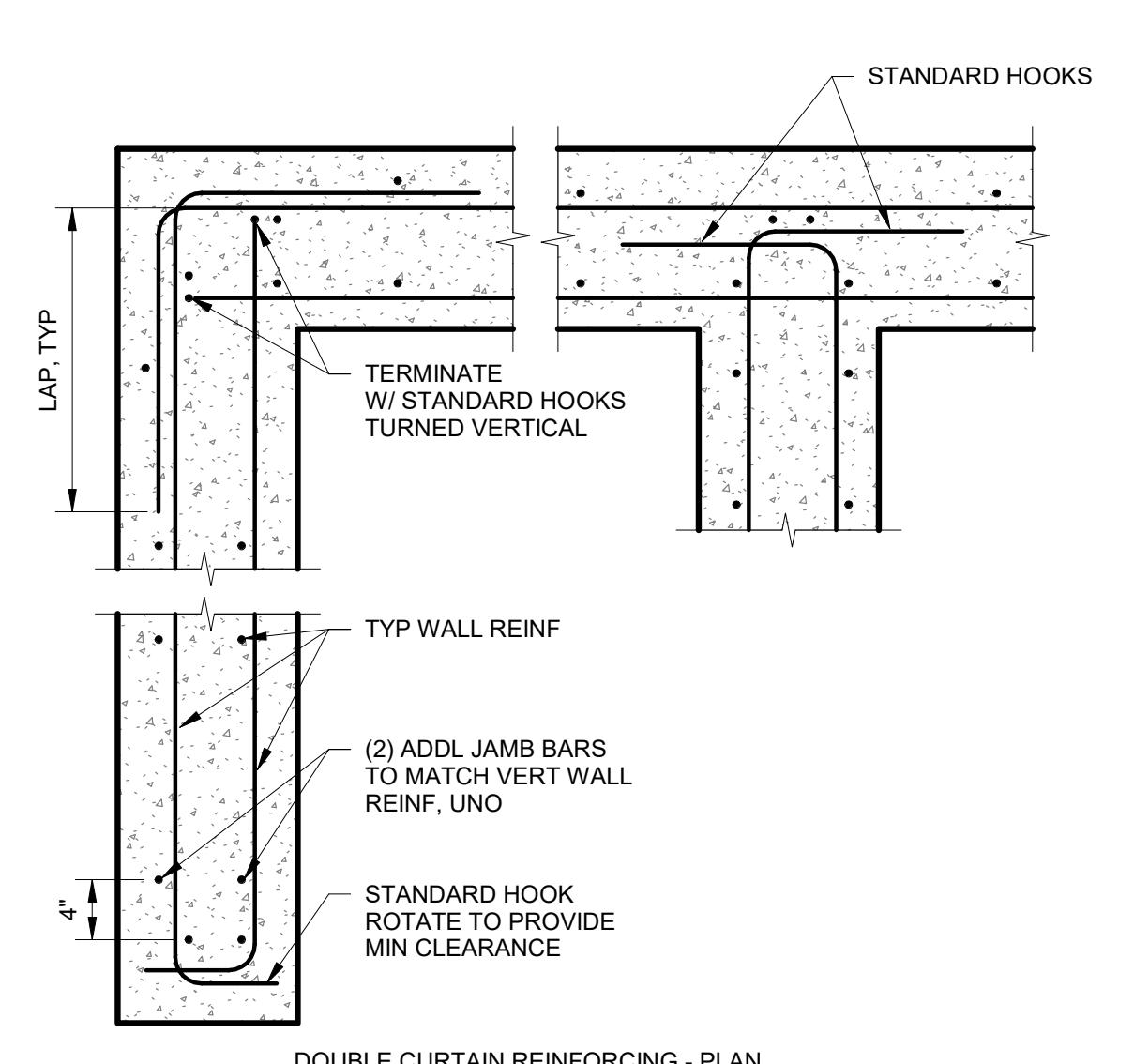
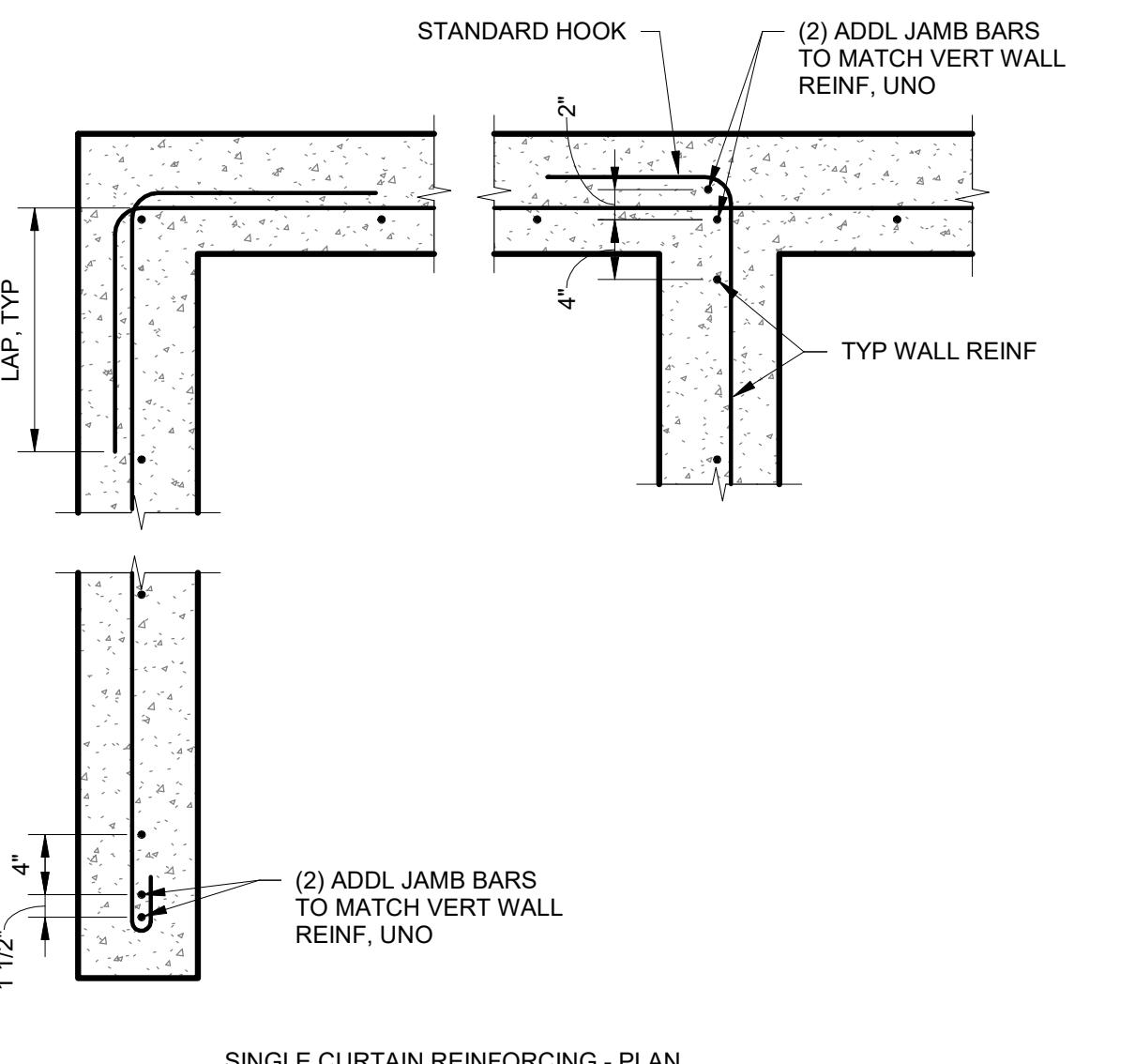
5 NTS FOOTING REINFORCING AT CORNERS AND INTERSECTIONS



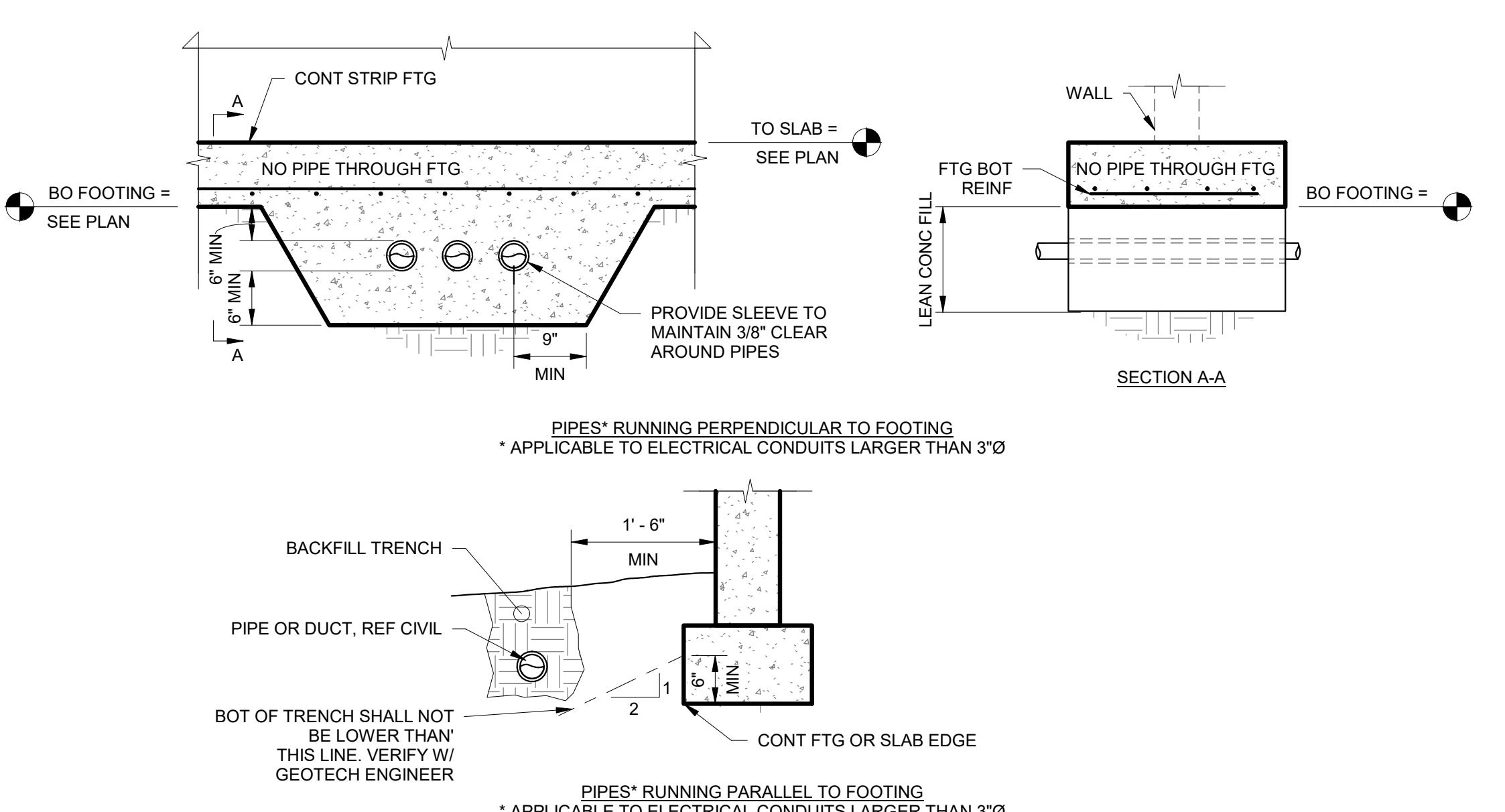
7 NTS TYPICAL SLAB/ FDN WALL @ WALL OPENING



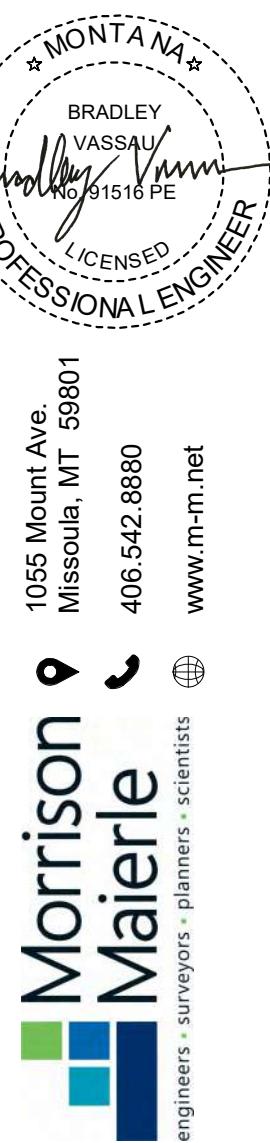
3 NTS TYPICAL WALL REINF AT SMALL OPNGS



6 NTS WALL REINF AT CORNERS, INTERSECTIONS, AND ENDS



8 NTS PIPE/CONDUIT TRENCH AT FOOTING



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SHIVE-HATTERY

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TYPICAL CONCRETE DETAILS

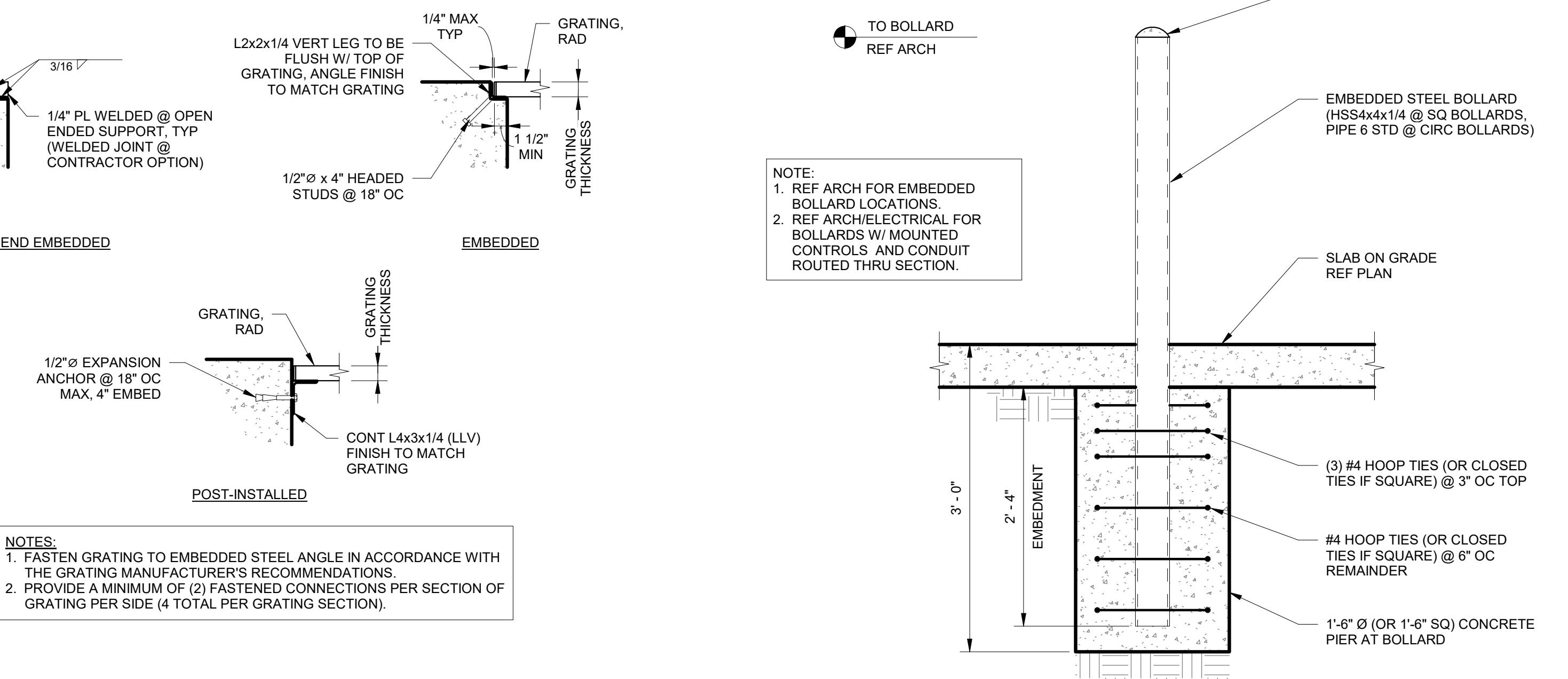
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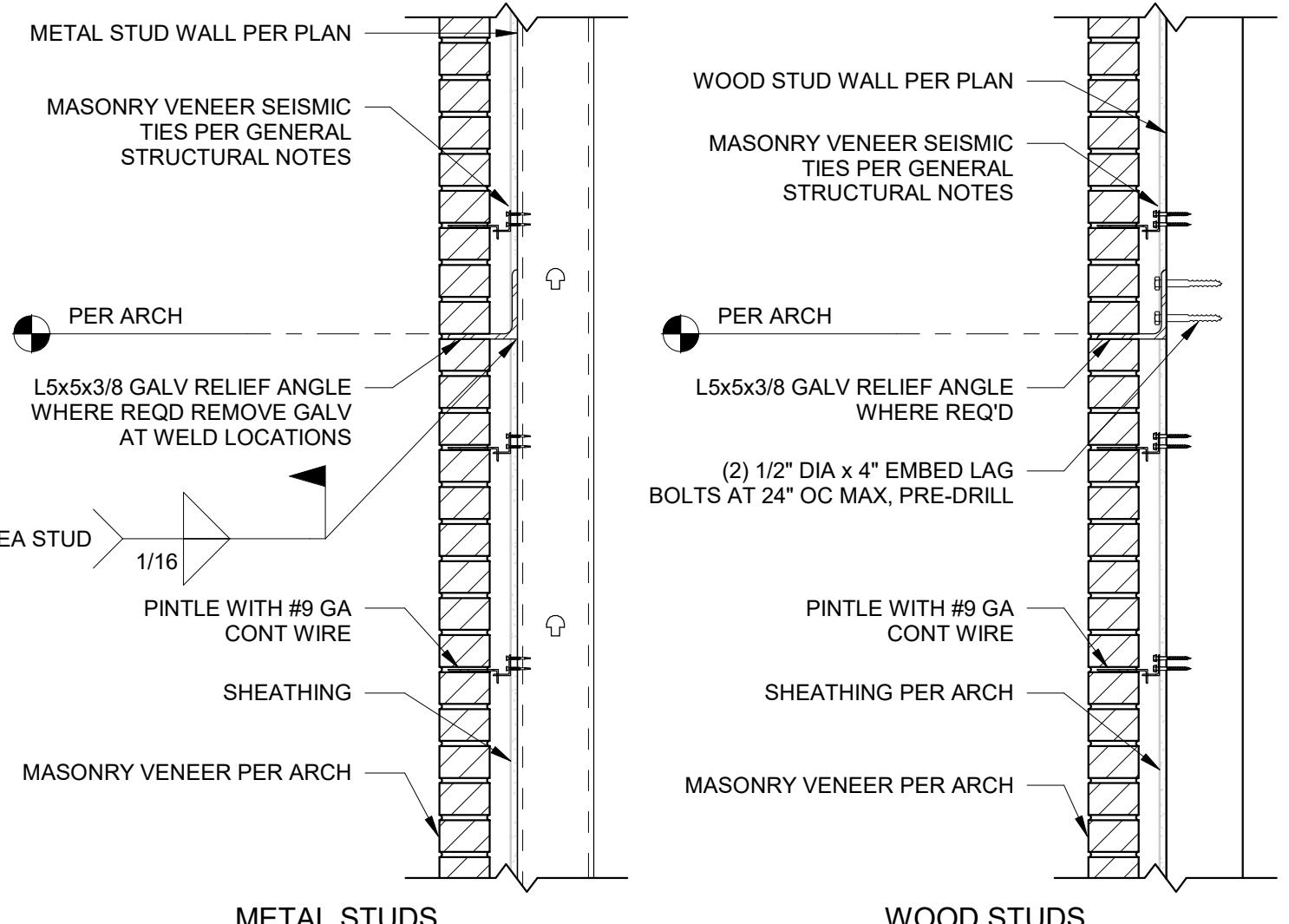
S5-

10.22

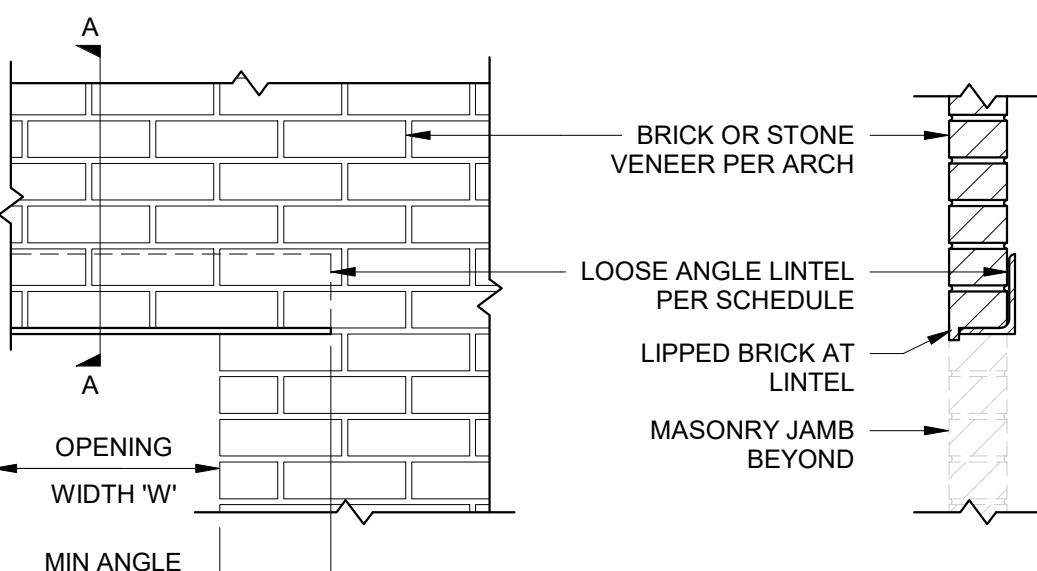
1 SLAB ON GRADE CONTROL JOINT



4 GRATING SUPPORT NTS



— 5 TYPICAL BOLLARD DETAIL NTS



Halon Fire Station 2 n't

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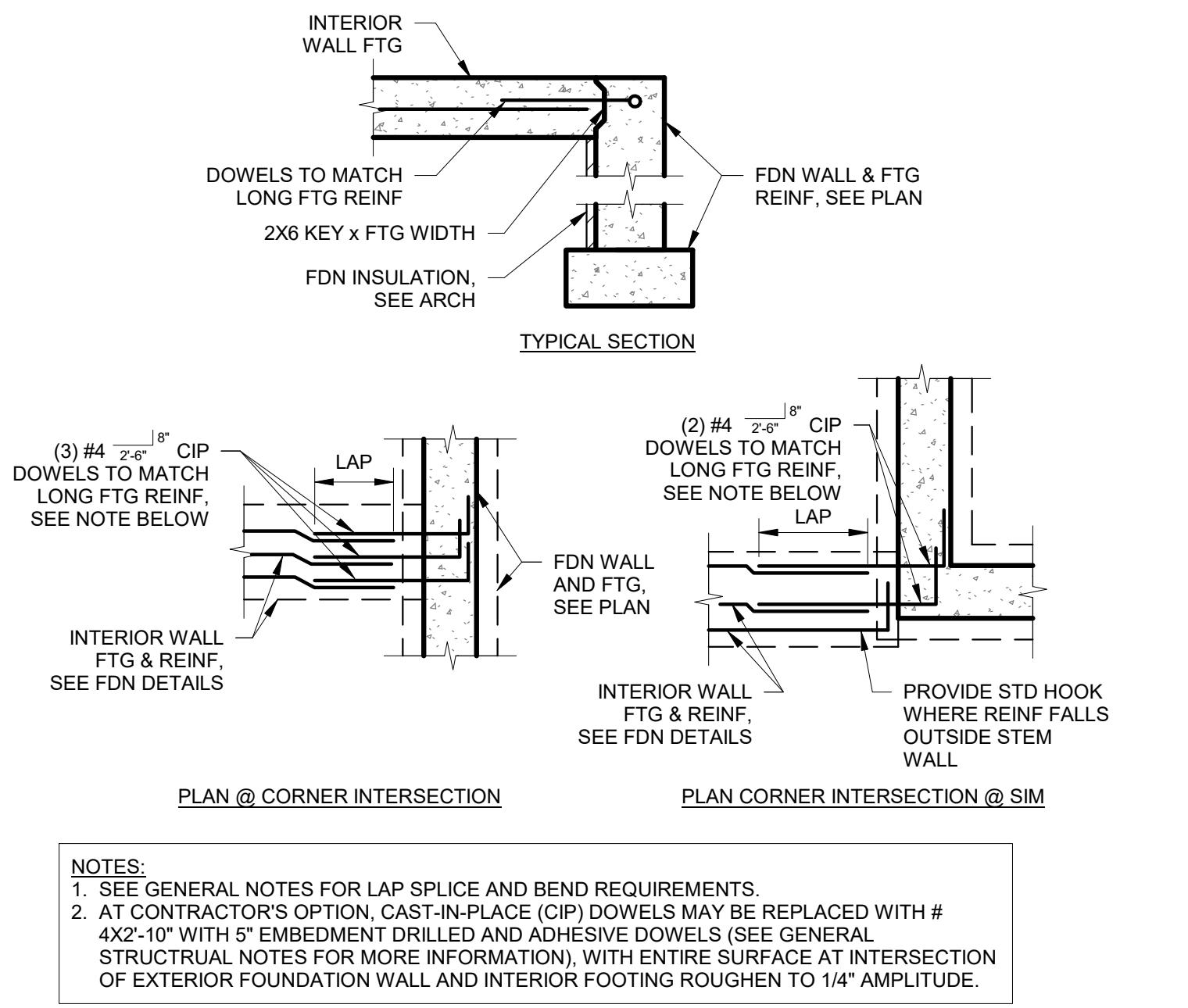
DOWLING ARCHITECTS, P.C.

7 MASONRY VENEER ANCHORAGE NTS

8 MASONRY VENEER LOOSE LINTEL NTS

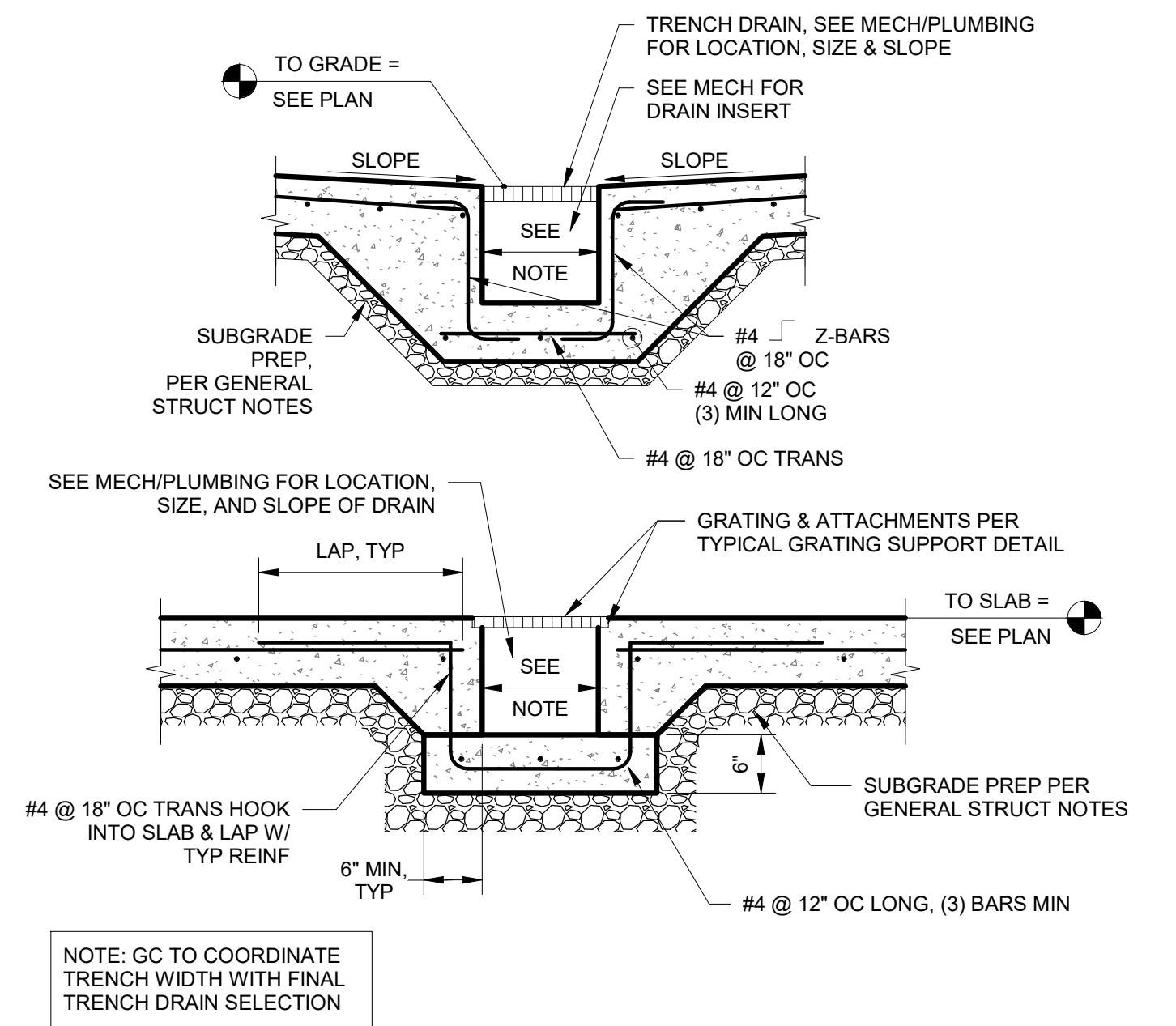
INTERIOR FTG INTERSECTION DETAIL

NTS



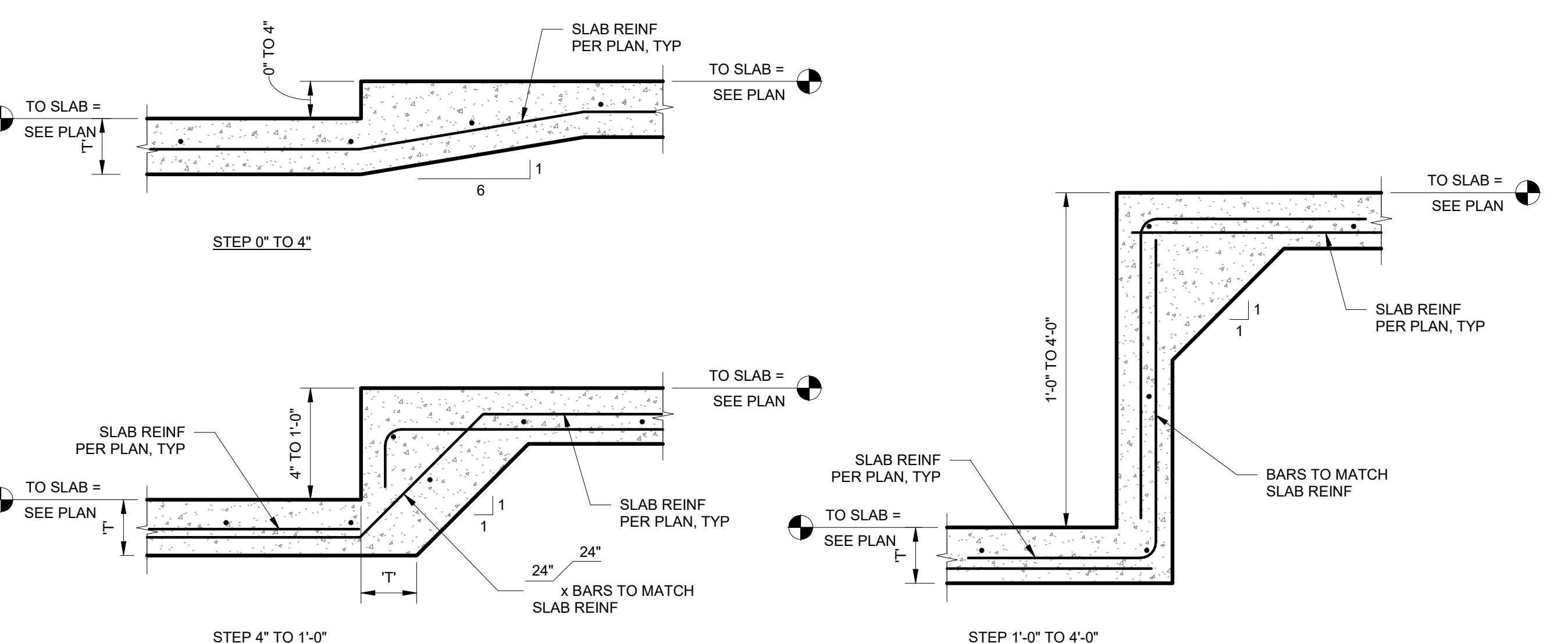
TRENCH SECTION

3 NTS



STEP/DEPRESSION IN SLAB-ON-GRADE

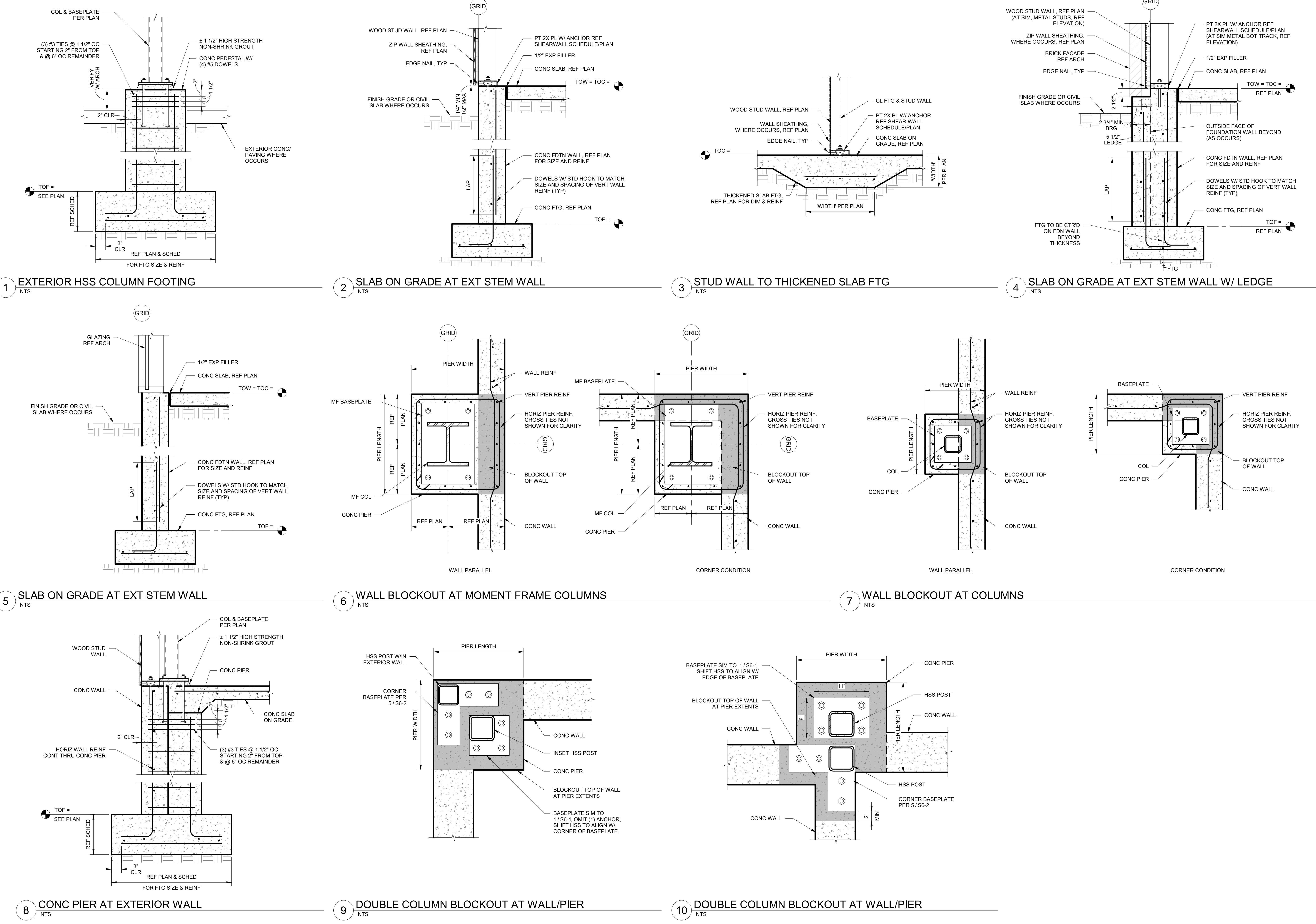
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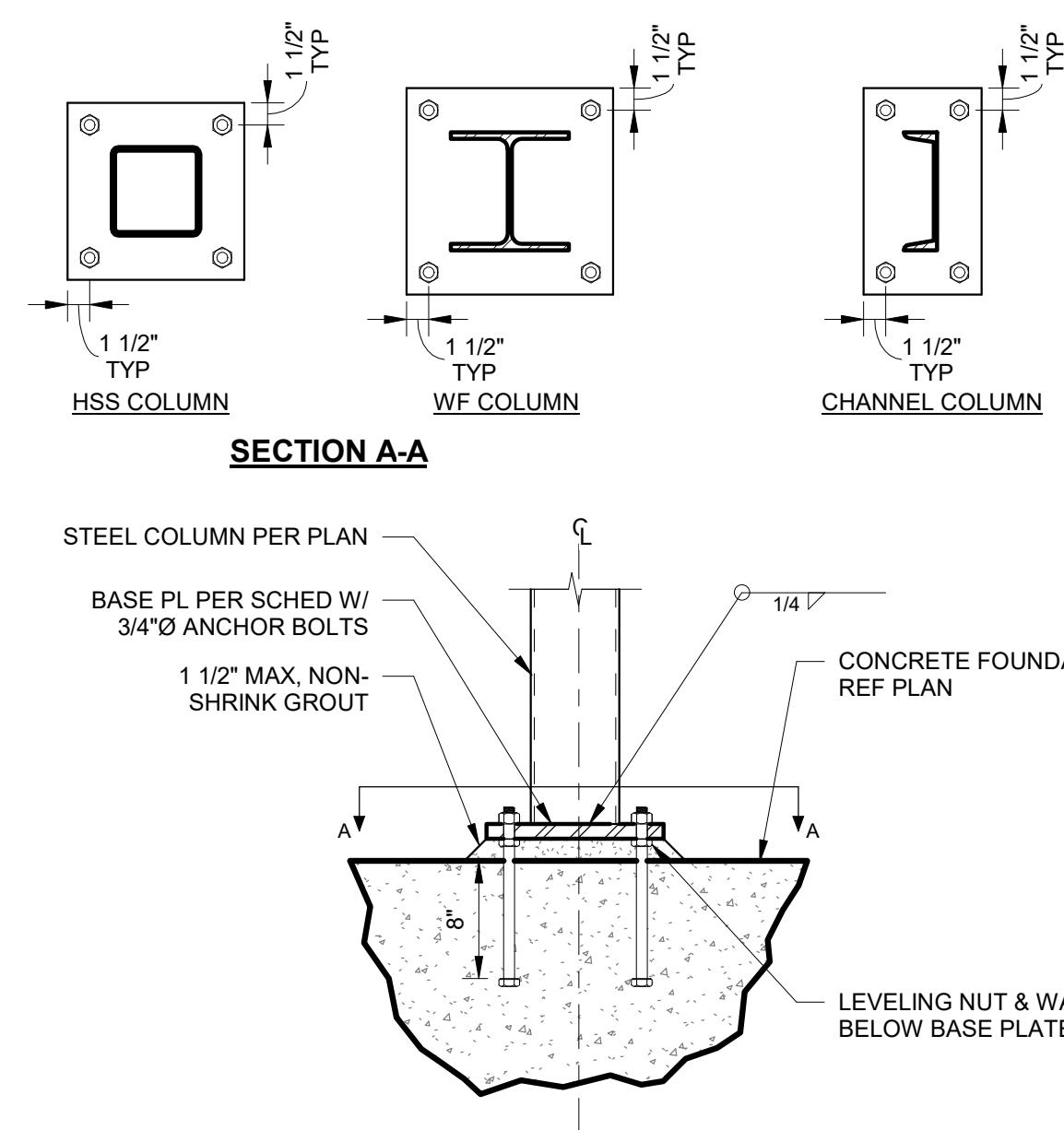
PROJECT #:	25-668
ISSUE DATE:	
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VENEER LOOSE LINTEL SCHEDULE		
OPNG WIDTH OR MARK	ANGLE LINTEL SIZE	MIN ANGLE END BRG
W \leq 3'-4"	L3-1/2x3x1/4 LLH	4"
3'-4" < W \leq 6'-8"	L4x3-1/2x1/4 LLV	6"
6'-8" < W < 10'-8"	L6x3-1/2x3/8 LLV	7"

NOTE:
FOR USE WITH 4" NOMINAL VENEER ONLY

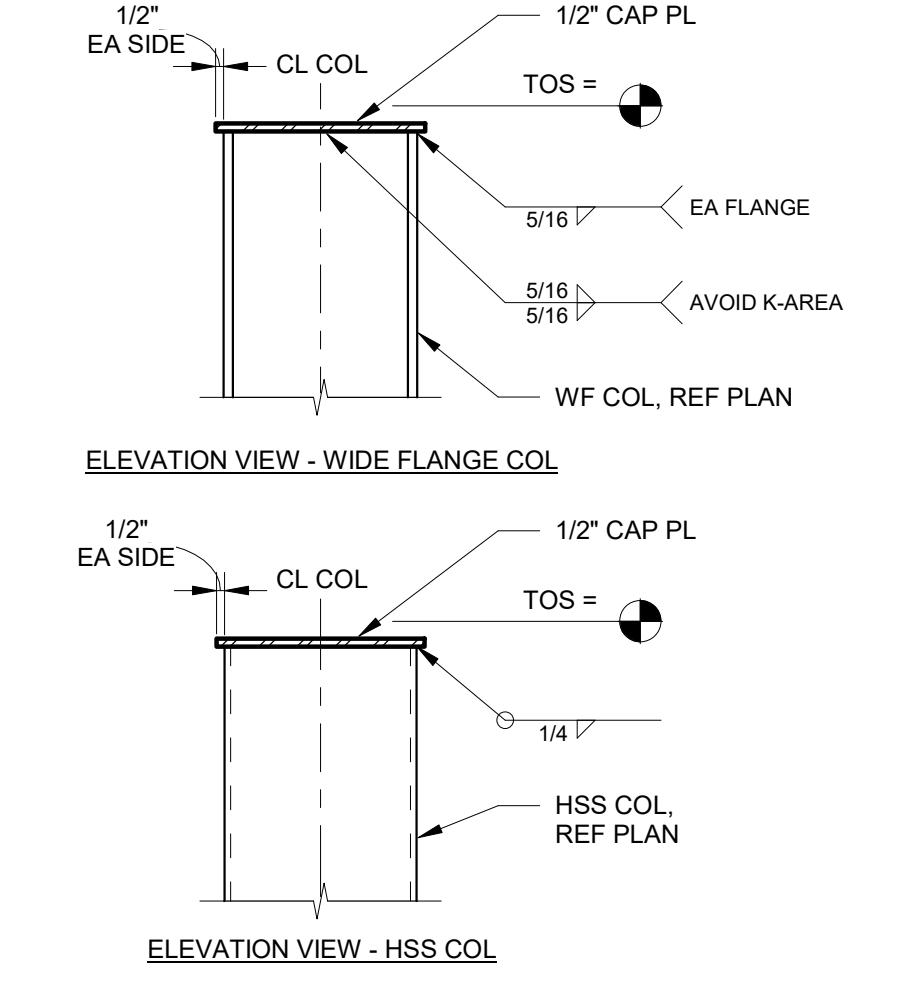
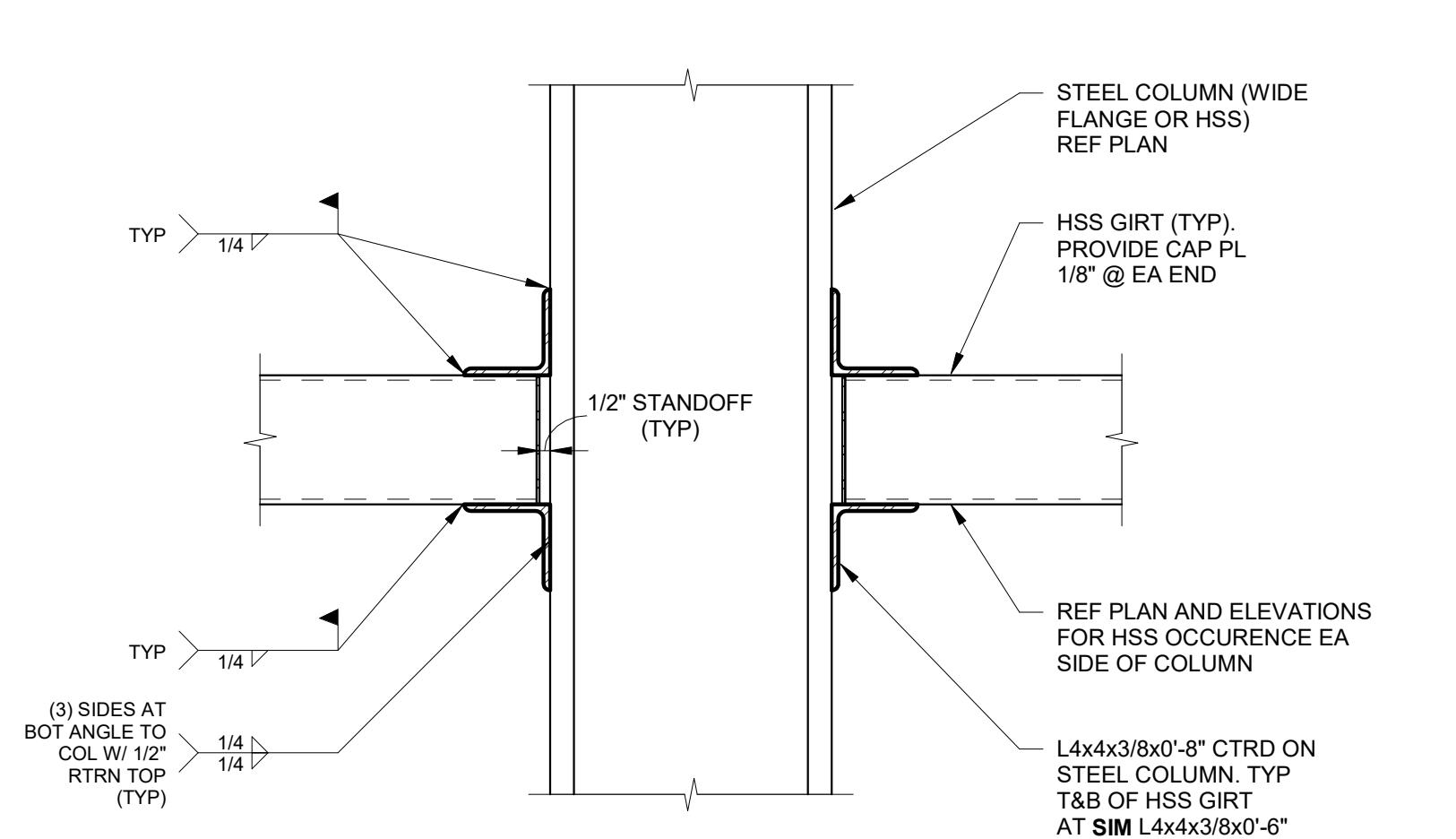


1 TYPICAL BASE PL DETAIL



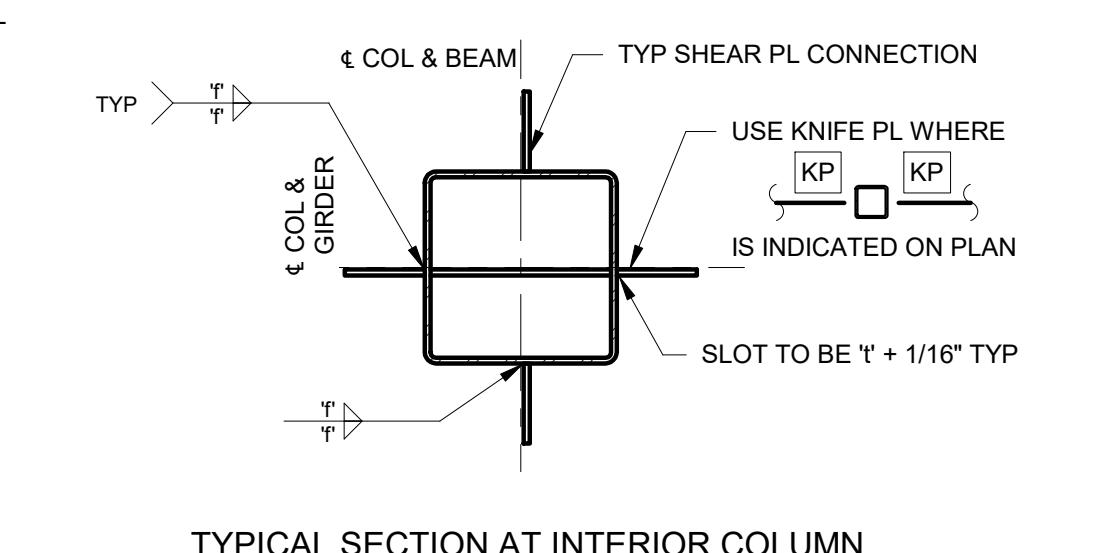
COLUMN SIZE	BASE PL
HSSX5	PL3/4X11X0-11"
HSSX6	PL3/4X12X1-0"
C8	PL3/4X8X1-2"

2 HSS GIRT TO COLUMN CONNECTION

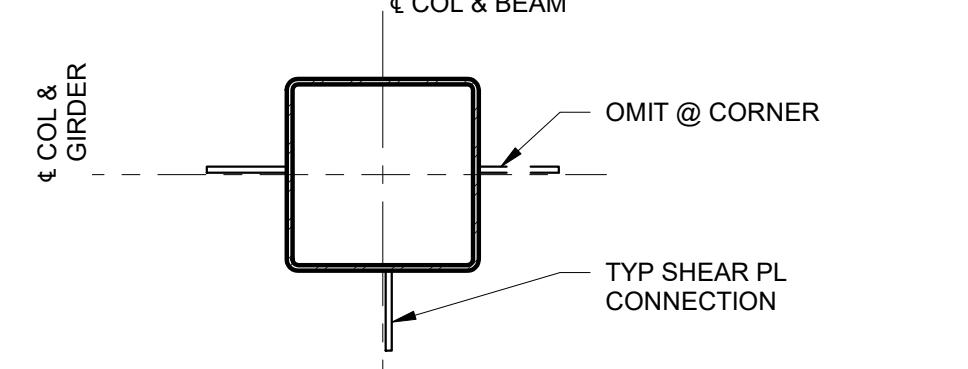


NOTES:
 1. TOP OF STEEL ELEVATION IS MEASURED AT TOP OF CAP PLATE AT CENTERLINE OF COLUMN.
 2. AT HSS COLUMNS, PROVIDE SQUARE CAP PLATE AT SQUARE SECTIONS & ROUND PLATES AT ROUND SECTIONS.

3 TYPICAL CAP PL @ TOP OF COL



TYPICAL SECTION AT INTERIOR COLUMN

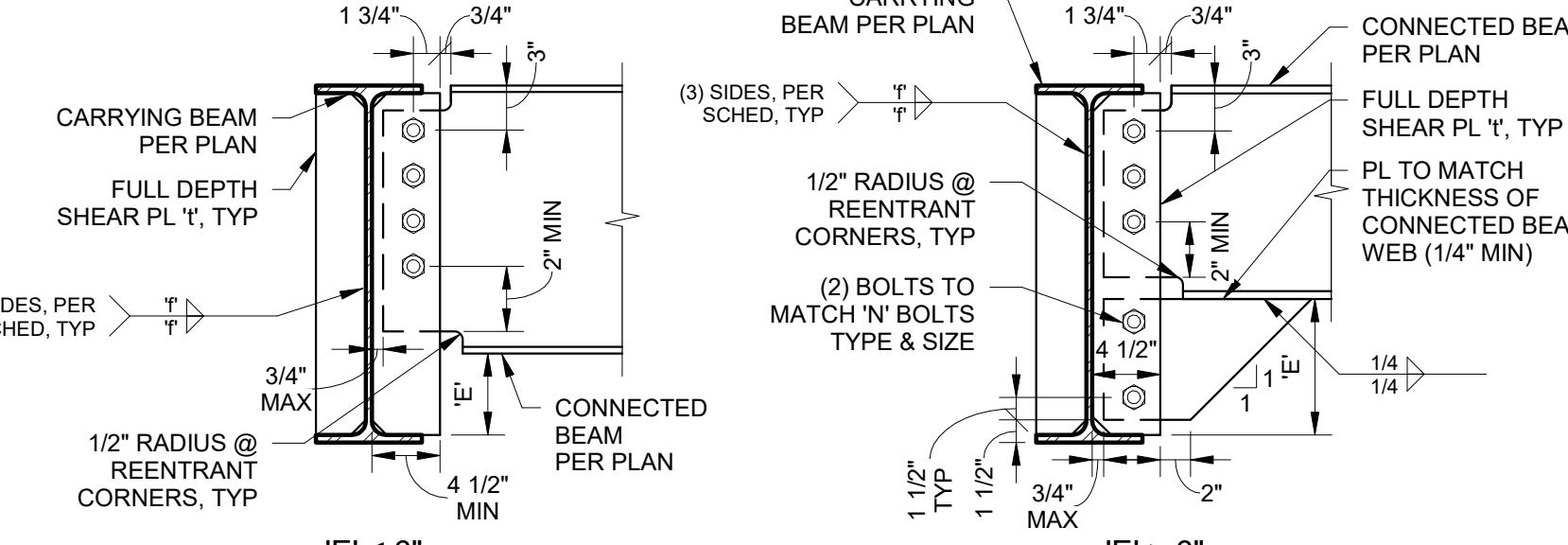


TYPICAL SECTION AT CORNERS
AND (3) SIDED CONDITIONS

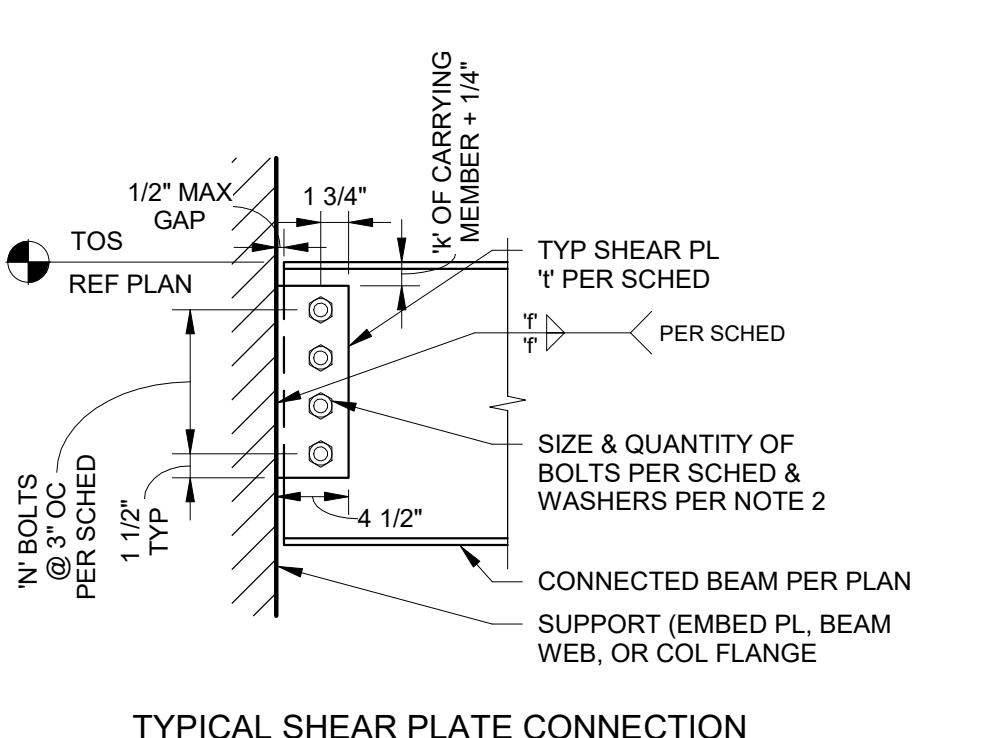
BOLTED SINGLE SHEAR PLATE CONNECTION SCHEDULE						
BEAM SIZE	'N' 7/8 A325-N BOLTS REQUIRED (NOTE 3)	SHEAR PLATE THICKNESS 'I'	WELD SIZE 'I'	MAX SINGLE COPE DEPTH (NOTE 4)	MAX DOUBLE COPE DEPTH (NOTE 4)	MIN HSS COLUMN WALL THICKNESS
C8, C9, C10	2	1/4"	3/16"	1"	NR (NOTE 5)	1/4"
W8	2	1/4"	3/16"	2"	1 1/4"	1/4"
W10	2	1/4"	3/16"	2"	1 1/4"	1/4"
C12, C15	3	1/4"	3/16"	2"	1 1/4"	1/4"
W12	3	1/4"	3/16"	2"	1 1/4"	1/4"
W14	3	5/16"	1/4"	2"	1 1/2"	1/4"
W16	4	5/16"	1/4"	2"	1 1/2"	1/4"
W18	5	5/16"	1/4"	2"	1 1/4"	5/16"
W21	6	5/8"	5/16"	2"	1 1/4"	5/16"
W24	7	5/8"	5/16"	2"	1 1/4"	5/16"

BOLTED SINGLE ROW SHEAR PLATE CONNECTION NOTES:

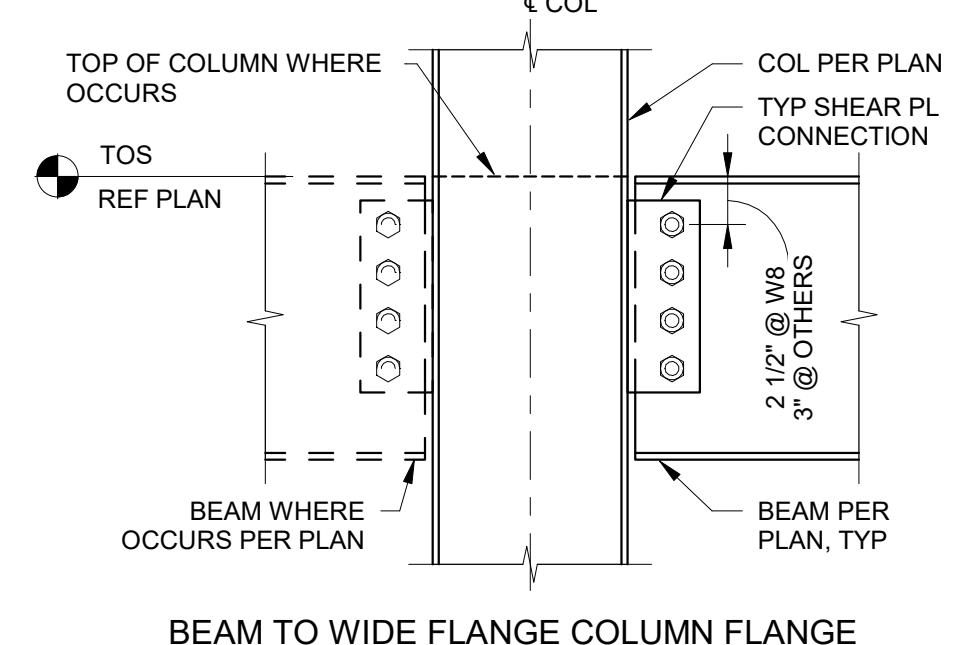
1. PROVIDE EITHER STANDARD OR HORIZONTAL SHORT SLOTTED HOLES AS PERMITTED BY AISC J3.2 IN THE BEAM WEB AND/OR THE SHEAR PLATE.
2. WHERE SHORT-SLOTTED HOLES ARE USED, PROVIDE HARDENED WASHERS PER AISC J3.2.
3. ASTM A325-N BOLTS TO BE SNUG TIGHT UNLESS OTHERWISE NOTED.
4. COPE DEPTHS (SINGLE AND DOUBLE) SHALL NOT EXCEED THE LESSER OF THOSE SHOWN IN SCHEDULE, NOR AS ALLOWED BY BOLT HOLE SPACING AND MINIMUM EDGE DISTANCE REQUIREMENTS. SINGLE COPE LENGTH SHALL NOT EXCEED 6 1/2", DOUBLE COPE LENGTHS SHALL NOT EXCEED THAT REQUIRED TO ACCOMMODATE GIRDER FLANGE + 1/2" MAXIMUM GAP BETWEEN FLANGES.
5. NR = NOT RECOMMENDED. DOUBLE COPIES FOR THESE BEAMS ARE RESTRICTED BY CONNECTION GEOMETRY AND/OR LARGE REDUCTIONS IN SHEAR CAPACITY. DOUBLE COPIES ARE POSSIBLE, BUT CAPACITIES MUST BE CALCULATED FOR SPECIFIC BEAM AND GIRDER GEOMETRIES AND MUST BE DETAILED SEPARATELY.
6. WELD SIZE 'I' TO BE THE GREATER OF THE SIZE SHOWN AND THE AWS MINIMUM.
7. DIMENSION 'K' IS AS DEFINED IN THE AISC MANUAL OF STEEL CONSTRUCTION FOR EACH STEEL SHAPE.
8. WHERE [SC] IS INDICATED ON PLAN, CONNECTION IS SLIP CRITICAL. BOLTS ARE TO BE A325-SC AND FAYING SURFACES ARE TO BE PREPARED AS REQUIRED FOR CLASS A OR BETTER SLIP CRITICAL JOINTS. AT SLIP CRITICAL CONNECTIONS, CENTER SHEAR PLATE VERTICALLY ON CONNECTED BEAM.
9. WHERE [SFRS] IS INDICATED ON PLAN, CONNECTION IS PART OF THE SEISMIC FORCE RESISTING SYSTEM. REFER TO NOTES 3, 4 AND 5 IN THE "SEISMIC FORCE RESISTING SYSTEM" SECTION OF THE GENERAL STRUCTURAL NOTES FOR BOLTING AND WELDING REQUIREMENTS.



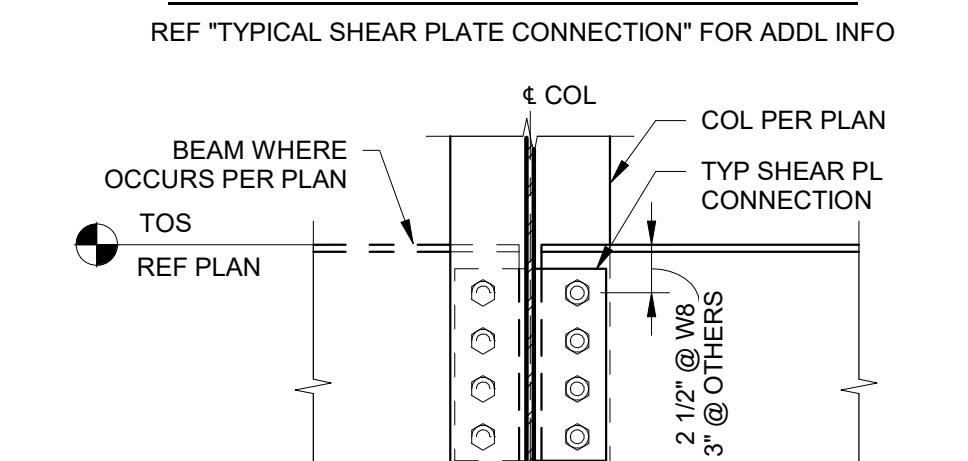
FULL DEPTH SHEAR PL CONNECTION (DENOTED BY [] ON PLAN)
REF "TYPICAL SHEAR PLATE CONNECTION" FOR ADDL INFO



TYPICAL SHEAR PLATE CONNECTION



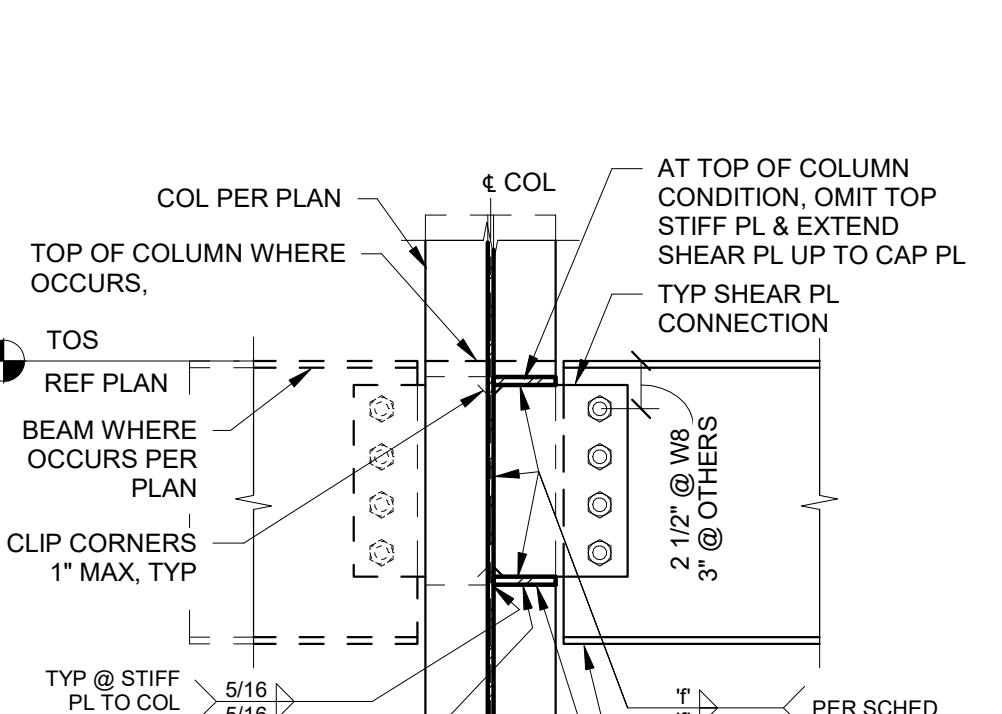
BEAM TO WIDE FLANGE COLUMN FLANGE



BEAM TO BEAM CONNECTION

REF "TYPICAL SHEAR PLATE CONNECTION" FOR ADDL INFO

REF "TYPICAL SHEAR PLATE CONNECTION" FOR ADDL INFO



BEAM TO WIDE FLANGE COLUMN WEB (BEAM FITS INSIDE COLUMN)

REF "TYPICAL SHEAR PLATE CONNECTION" FOR ADDL INFO

1 TYPICAL PENETRATIONS THROUGH STL ROOF DECK

NTS

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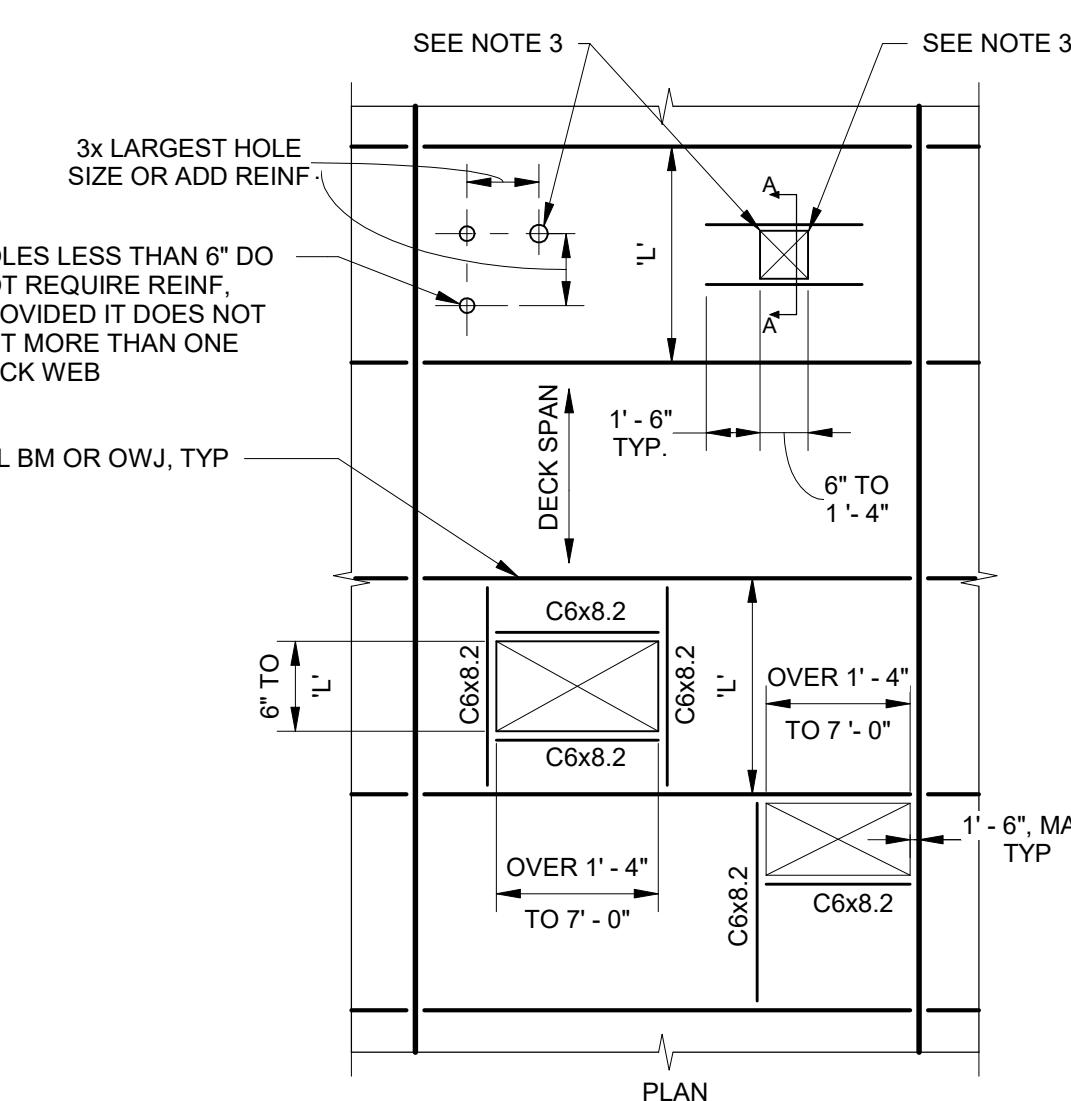
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DOWLING ARCHITECTS, P.C.

6 BM TO BM MOMENT CONNECTION

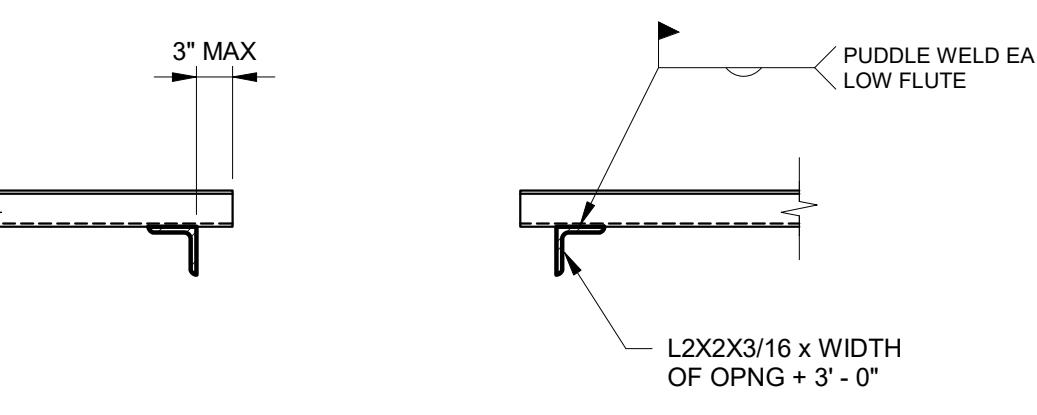
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FOR OPENINGS 7'-0" AND LESS

NOTES:
 1. DETAIL APPLIES FOR PENETRATIONS AND OPENINGS NOT SHOWN IN THE PLANS.
 2. COORDINATE LOCATIONS AND SIZES WITH DRAWINGS FROM OTHER DISCIPLINES.
 3. INSTALL REINFORCING BEFORE CUTTING HOLES.
 3. THE OPENING NOTED REQUIRES A CLEAR SPACING BETWEEN ADJACENT OPENINGS OF THREE TIMES THE MAXIMUM OPENING DIMENSION. IF THE REQUIRED LAYOUT CANNOT CONFORM TO THIS REQUIREMENT, REINFORCE THE GROUP OF OPENINGS AS IF IT IS ONE COMBINED PENETRATION.

SECTION A-A
NTS

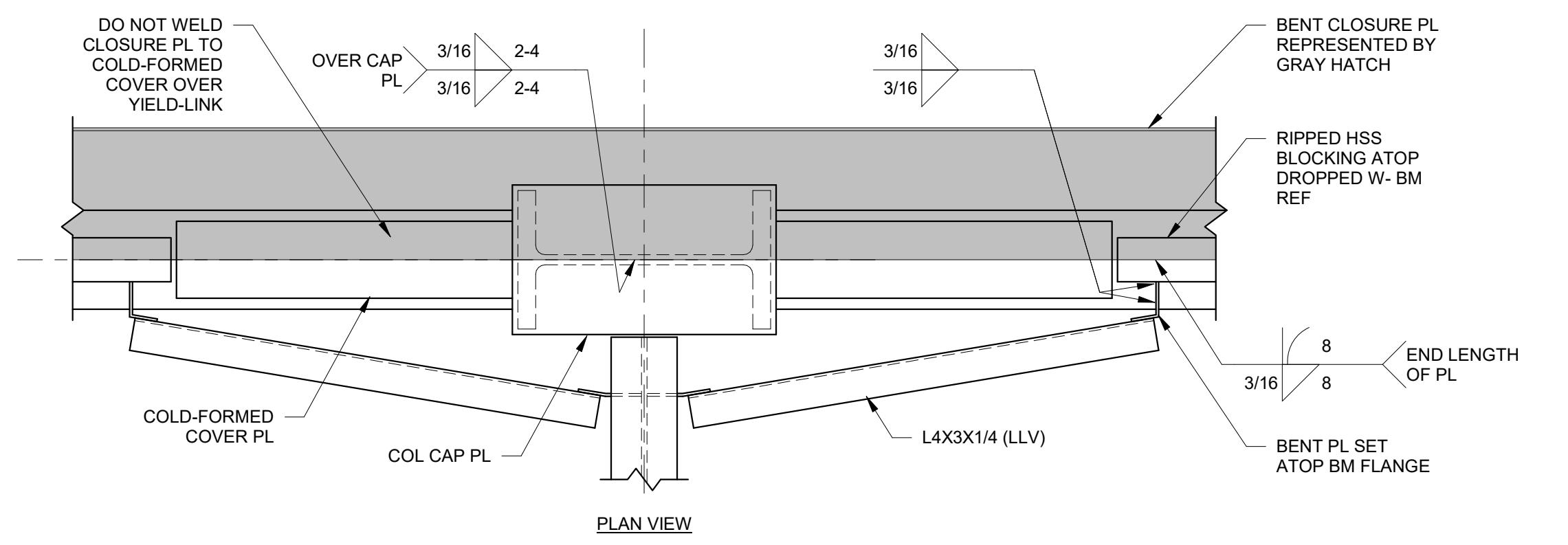


7 DOUBLE BM OVER COLUMN MOMENT CONNECTION

NTS

2 TYPICAL EDGE OF ROOF DECK

NTS



MOMENT FRAME CONN @ ROOF W/ DROPPED BEAM

1

4

TYPICAL DECK SUPPORT @ MOMENT CONN

NTS

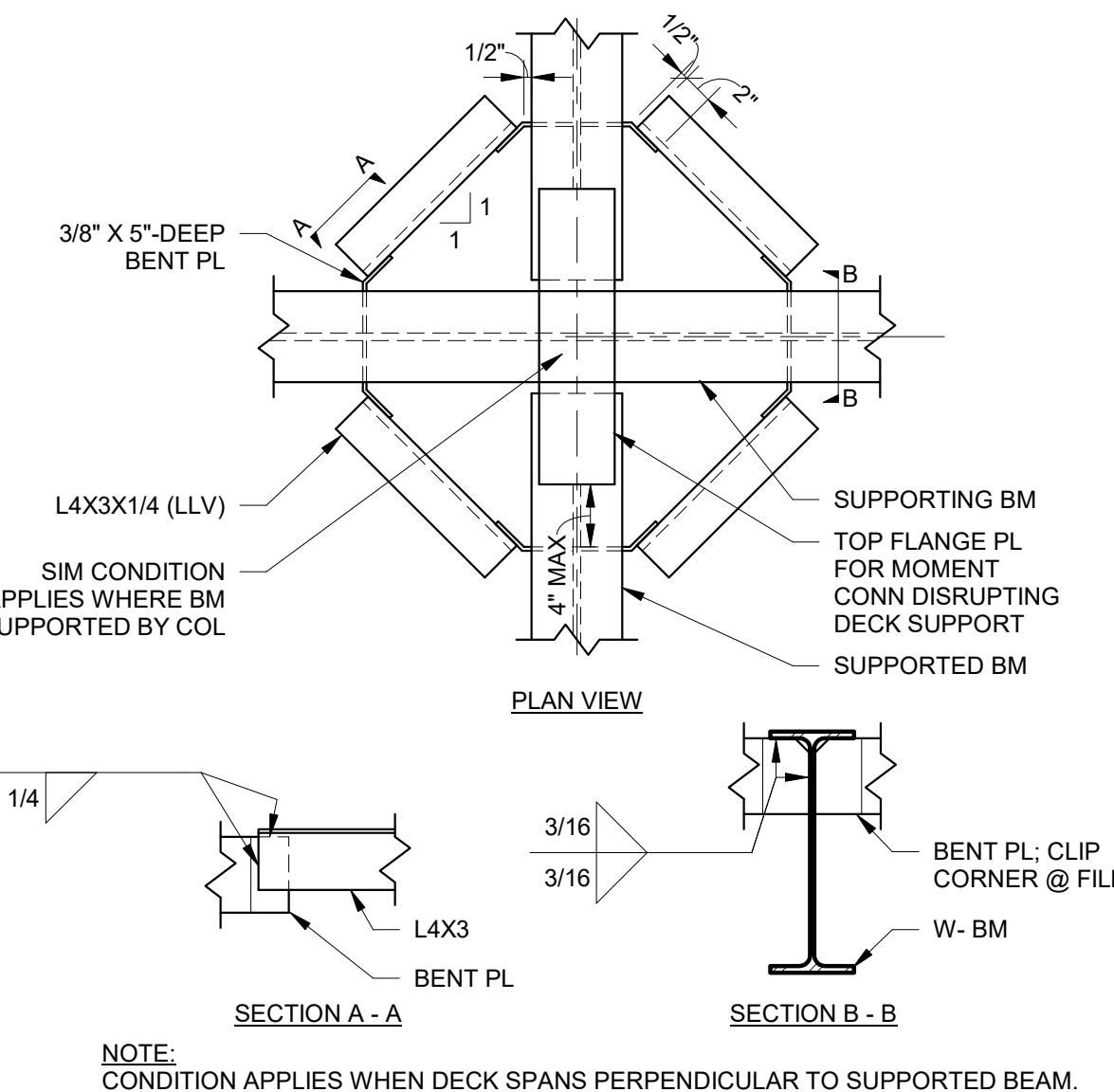
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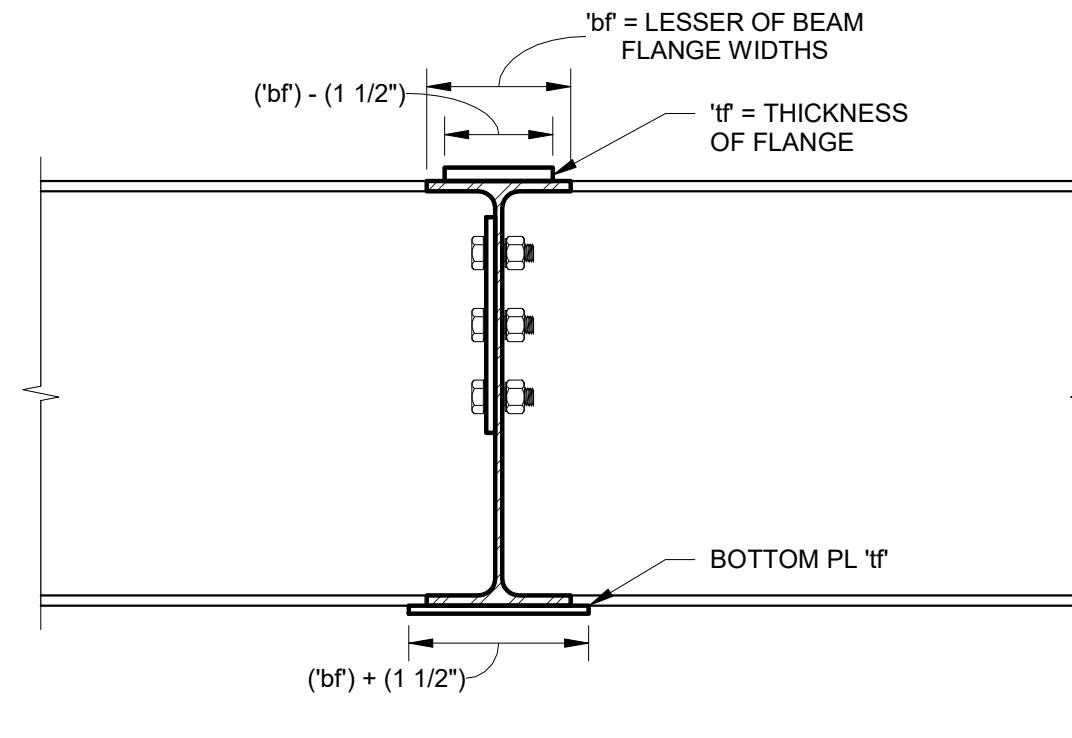
DOWLING ARCHITECTS, P.C.

6 BM TO BM MOMENT CONNECTION

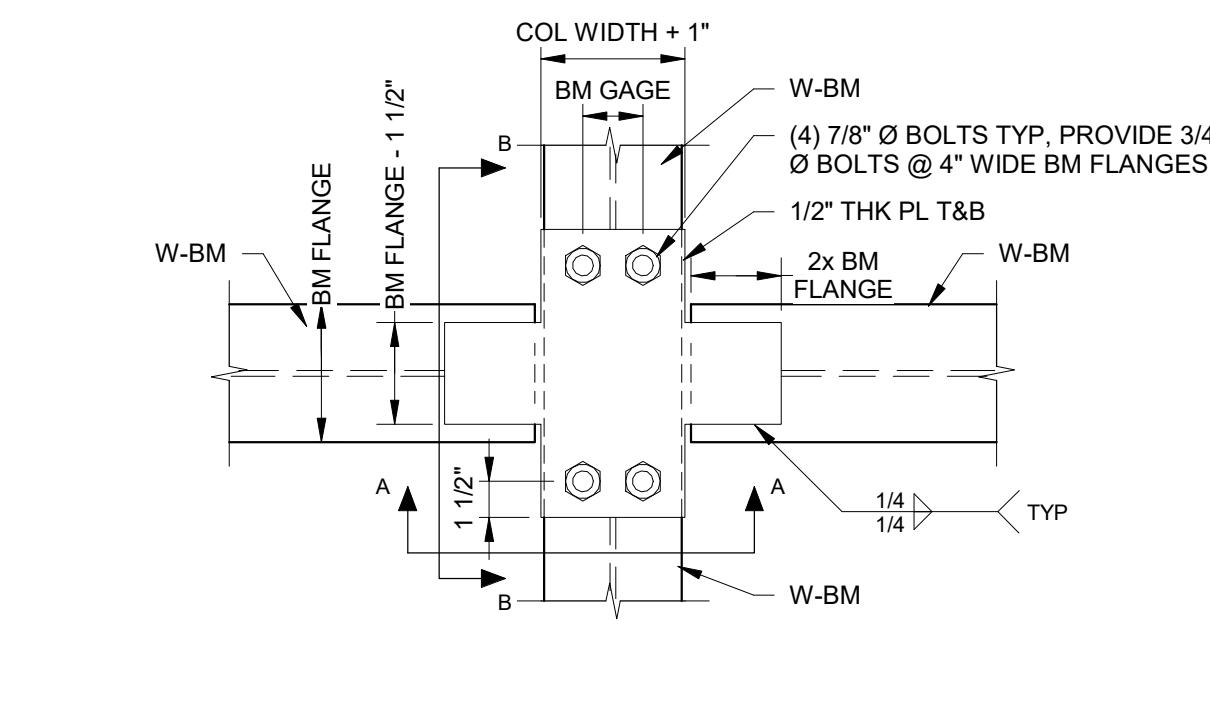
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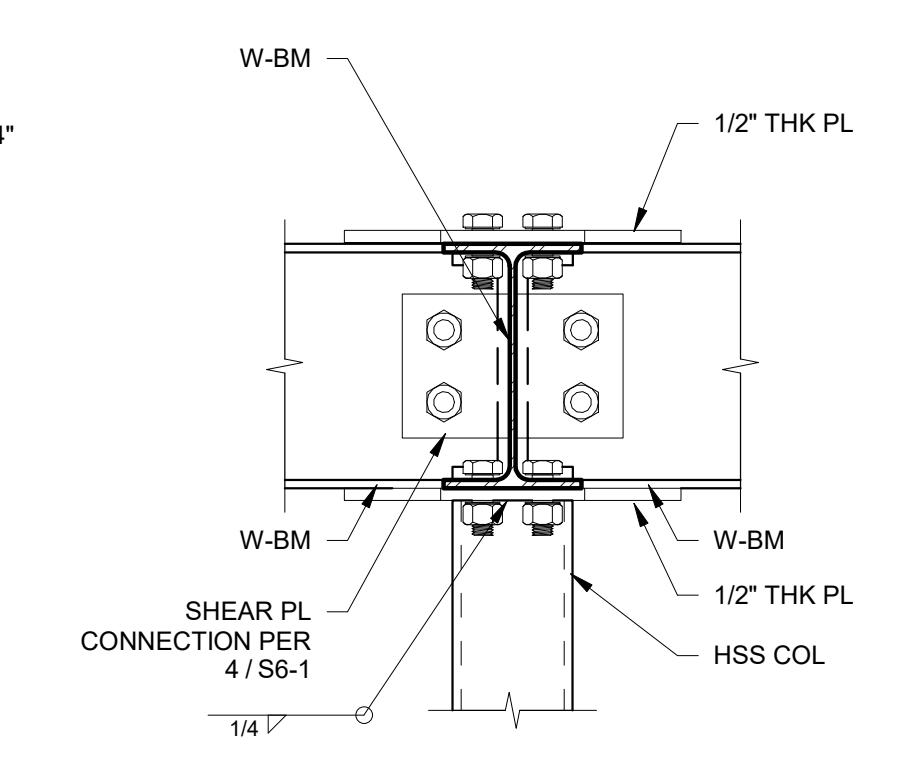
NOTE:
 CONDITION APPLIES WHEN DECK SPANS PERPENDICULAR TO SUPPORTED BEAM.
BM TO BM OR BM TO COL MOMENT CONN



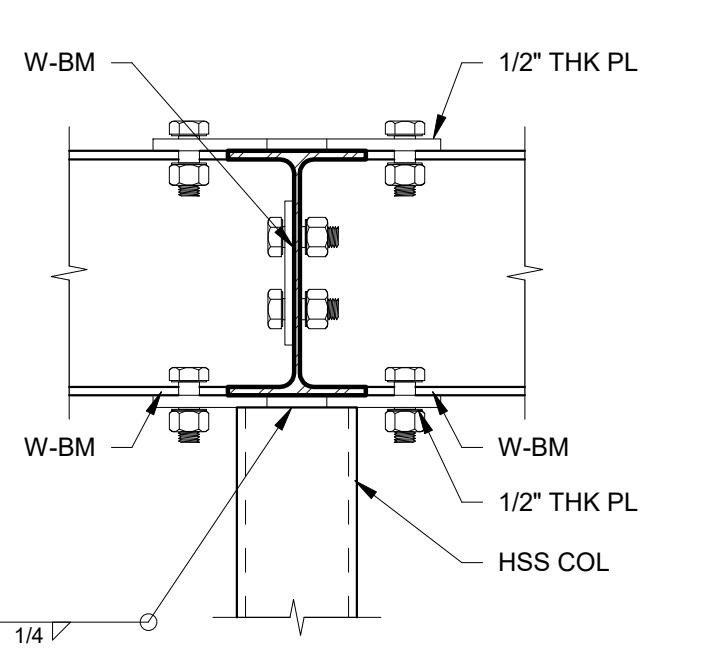
ELEVATION



PLAN VIEW



SECTION A-A



SECTION B-B

5 TYPICAL STL COL BASE ON FDN WALL - 4 BOLT

NTS

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DOWLING ARCHITECTS, P.C.

6 BM TO BM MOMENT CONNECTION

NTS

3 SLAB ON METAL DECK SUPPORT AT CORNER COLUMN

NTS

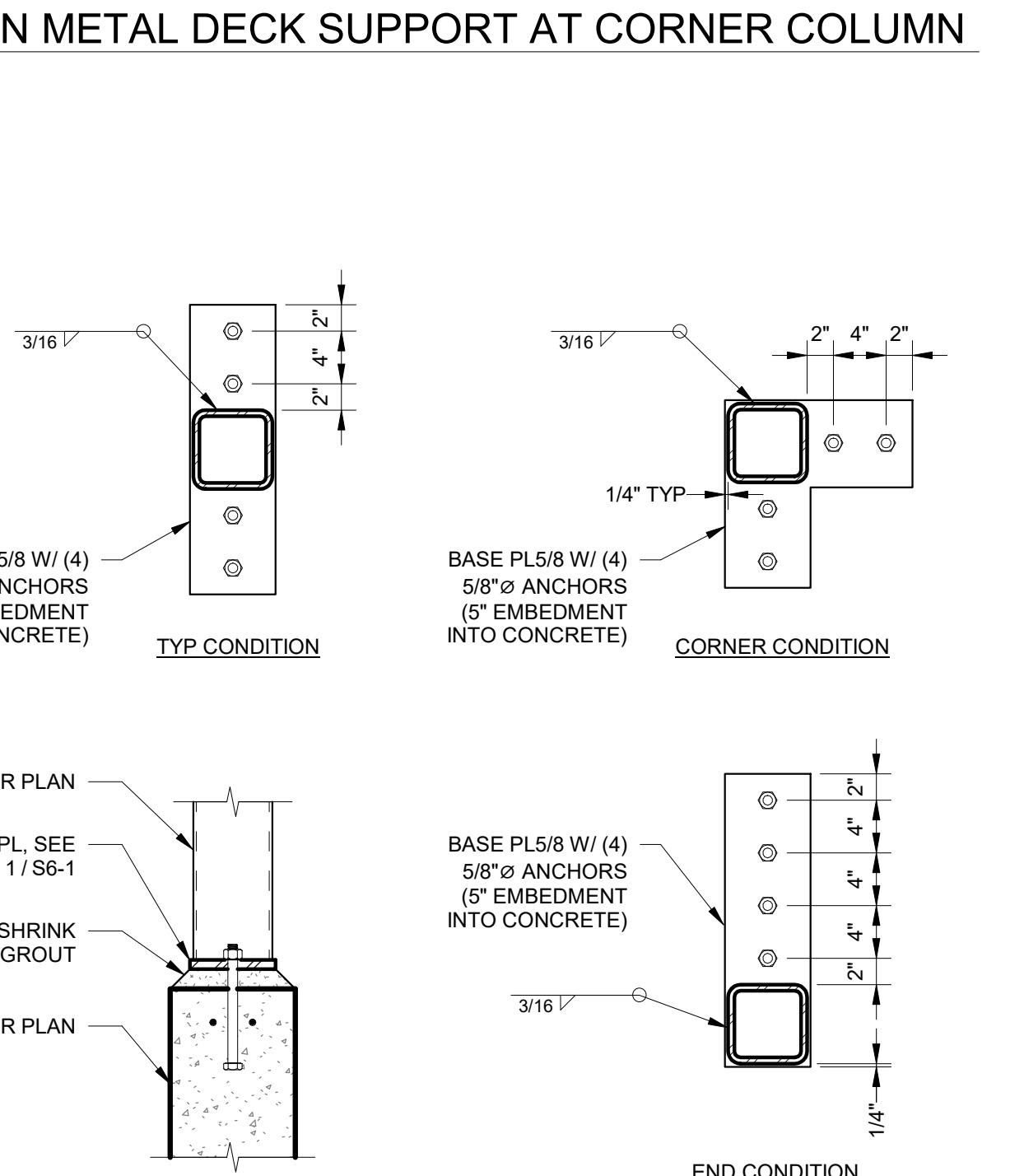
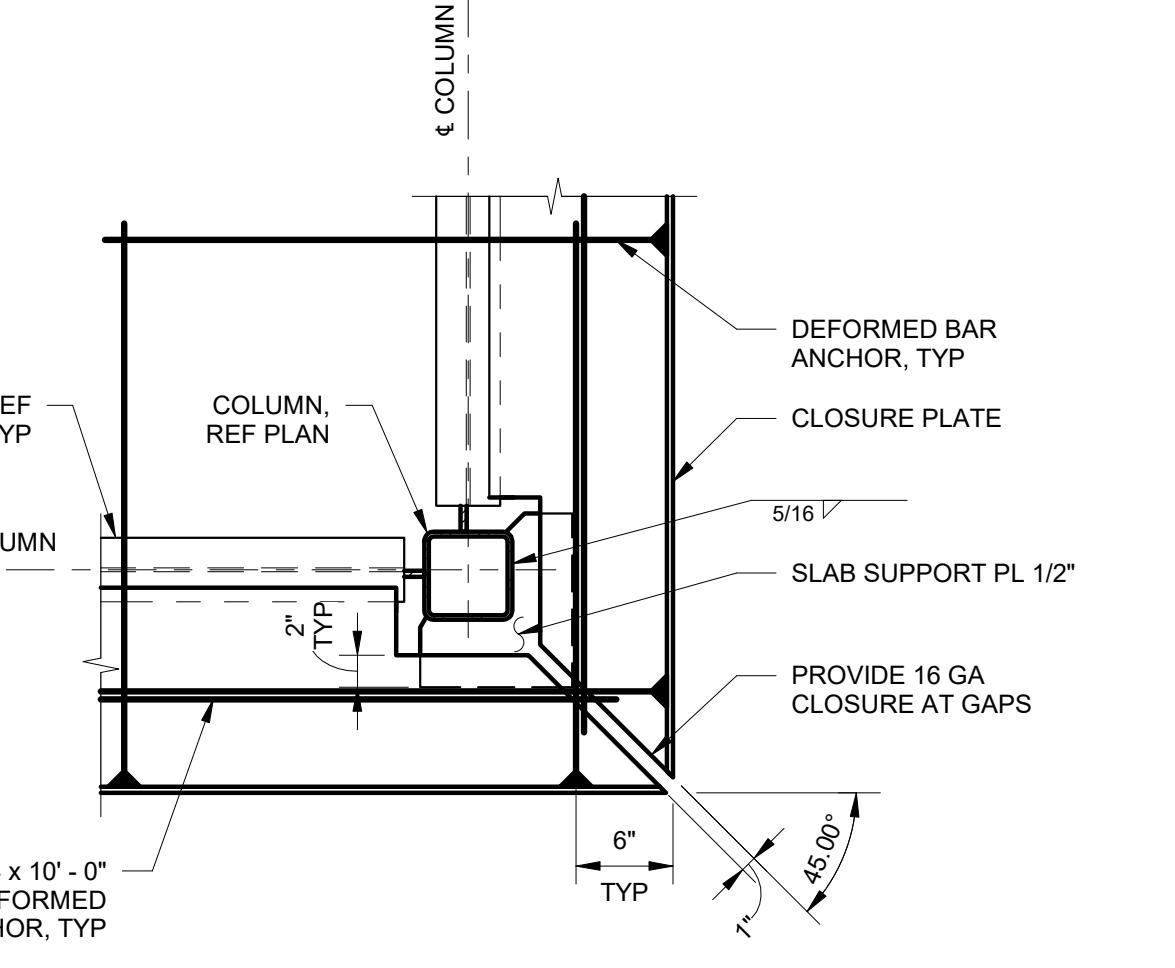
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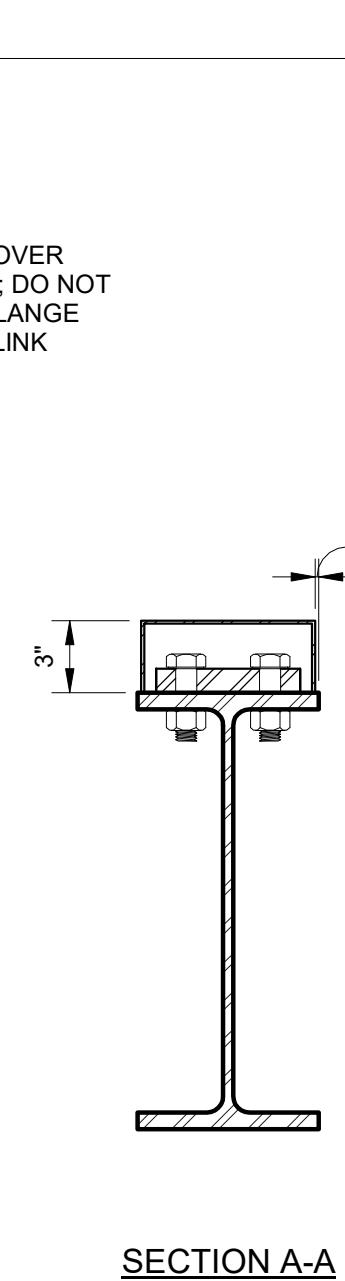
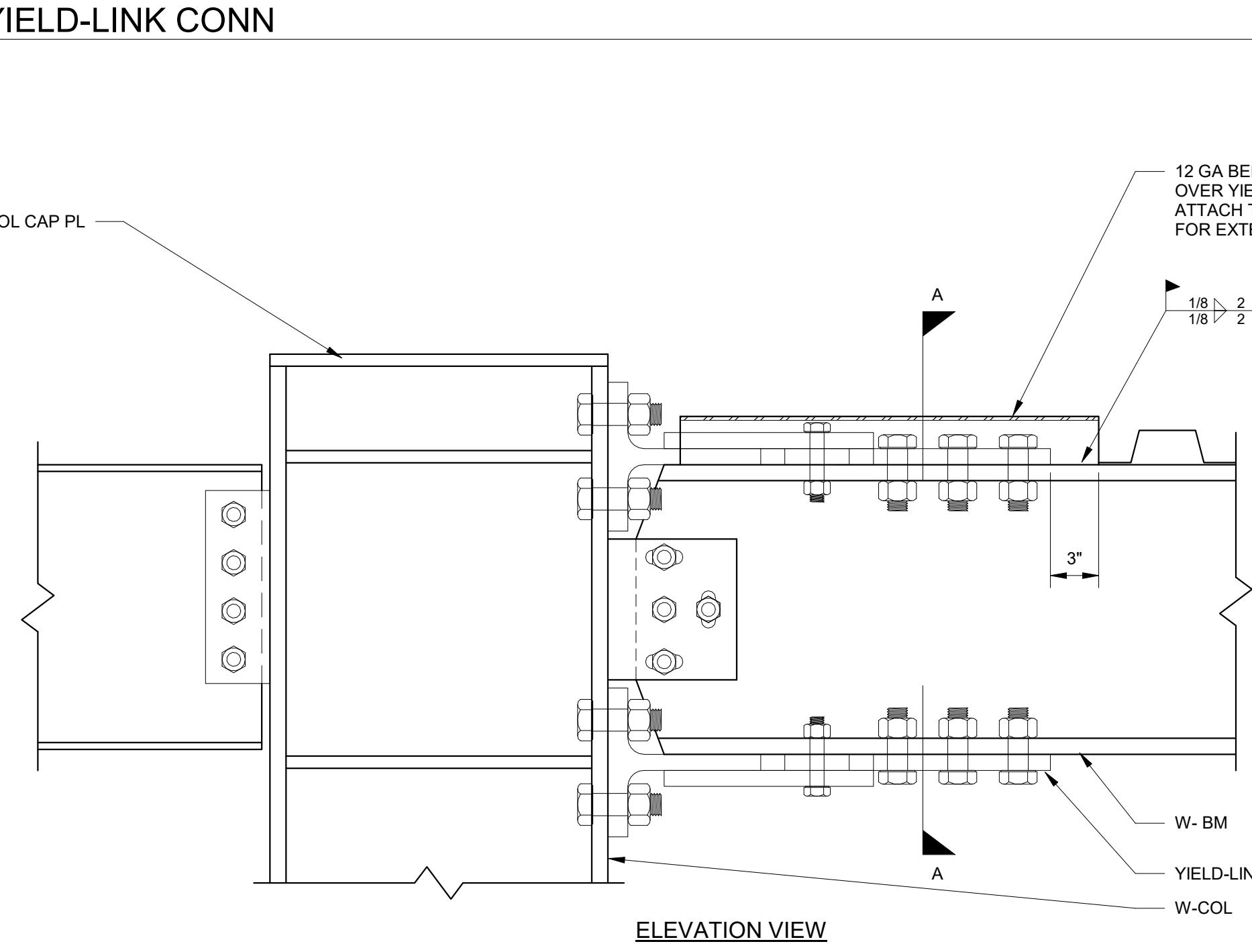
DOWLING ARCHITECTS, P.C.

6 BM TO BM MOMENT CONNECTION

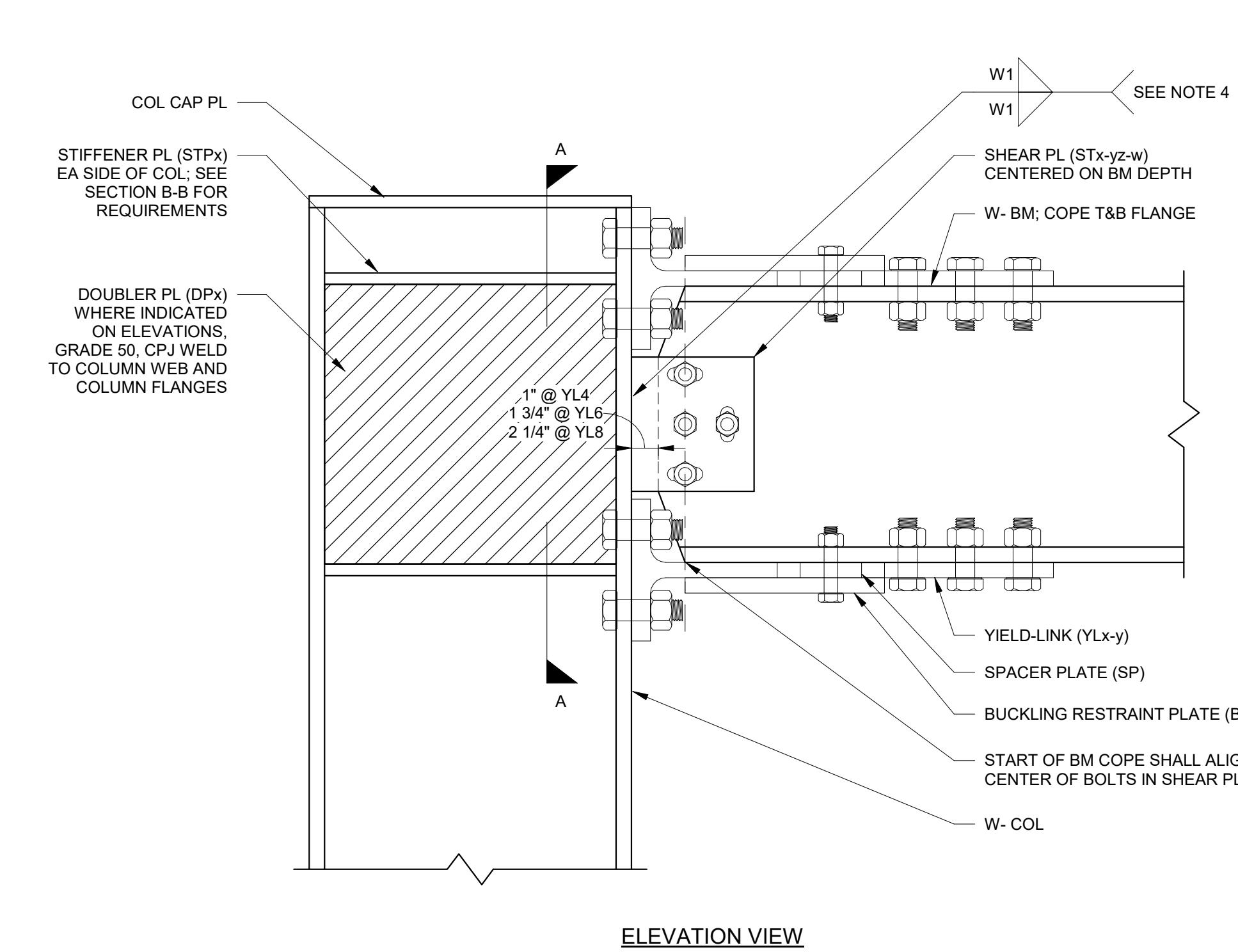
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END CONDITION

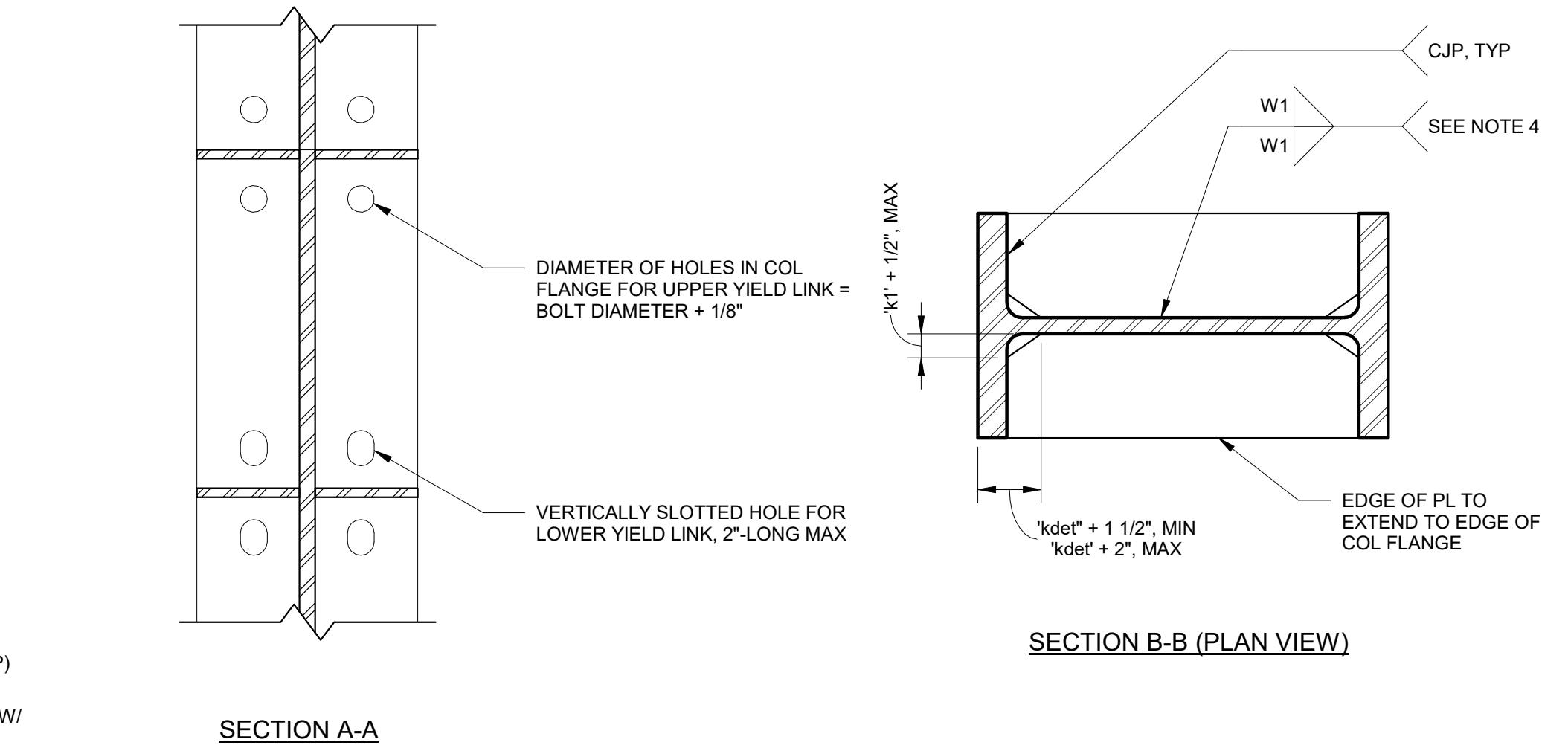


1 TYPICAL YIELD-LINK CONN
NTS

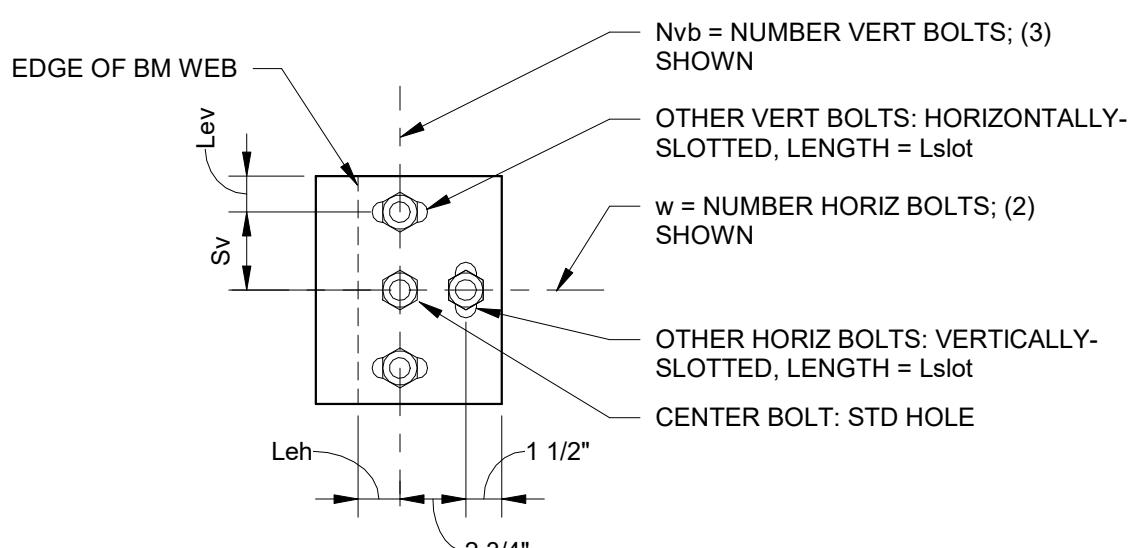


NOTES:

1. SIMPSON STRONG-TIE YIELD-LINK MOMENT CONNECTION STRUCTURAL FUSE ARE PROTECTED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS AND APPLICATIONS: U.S. PATENT NO. 8,017,734 B2, U.S. PATENT NO. 7,755,022, AND U.S. PATENT PUBLICATION NO. 2015/0159362, AND MUST BE SUPPLIED OR LICENSED THROUGH SIMPSON STRONG-TIE.
2. THE FABRICATOR SHALL REQUEST YIELD LINK DETAIL SHEETS FROM SIMPSON STRONG-TIE FOR LINK DIMENSIONS AND THICKNESSES, BOLT DIAMETERS AND SPACINGS, AND REQUIREMENTS FOR BUCKLING-RESTRAINT PLATES AND SPACER PLATES.
3. REFER TO MOMENT FRAME ELEVATIONS FOR INFORMATION ON STIFFENER PLATES, SHEAR PLATES, AND YIELD-LINKS AT EACH BEAM/COLUMN CONNECTION. NOMENCLATURE FOLLOWS THESE CONVENTIONS:
A. STPx: x IS #/8-INCH THICK STIFFENER PLATE. E.G., STP4 DENOTES A 1/2" PLATE.
B. STx-y-z: x IS #/8-INCH THICK SHEAR PLATE; y IS #/8-INCH DIAMETER BOLT; z IS BOLT GRADE/THREAD CONDITION: A = A325N, B = A325X, C = A490N, D = A490X; w IS THE NUMBER OF HORIZONTAL BOLTS. E.G., ST4-7A-4 IS #/8-INCH THICK SHEAR PLATE, 7 IS THE LINK YIELDING WIDTH; SEE YIELD-LINK DETAIL.
C. Dpx: x IS #/8-INCH THICK DOUBLER PLATES (i.e. DPA IS 1/2" THICK DOUBLER PLATE.)
4. SIZE OF WELD W1 SHALL BE 5/8 TIMES THE THICKNESS OF THE CONNECTED PLATE.
5. PROTECTED ZONES OF THE CONNECTION INCLUDES THE FOLLOWING ELEMENTS:
A. YIELD-LINK
B. BUCKLING RESTRAINT PLATES
C. BEAM FLANGE AREAS CONNECTED TO THE YIELD-LINK STEM
D. COLUMN FLANGE AREAS CONNECTED TO THE YIELD-LINK FLANGE
E. SHEAR PLATE AND BEAM WEB INTERFACING WITH SHEAR PLATE
6. BOLT HOLES IN THE BEAM FLANGES AND BEAM WEBS SHALL BE STANDARD HOLES.
7. COMPLY WITH THE FOLLOWING BOLT INSTALLATION REQUIREMENTS:
A. LINK FLANGE TO COLUMN FLANGE: SNUG-TIGHT OR PRETENSIONED
B. LINK STEM TO BEAM FLANGE: PRETENSIONED
C. BUCKLING-RESTRAINT PLATE TO BEAM FLANGE: MUST BE SNUG-TIGHT
D. SHEAR PLATE TO BEAM WEB: SNUG-TIGHT OR PRETENSIONED

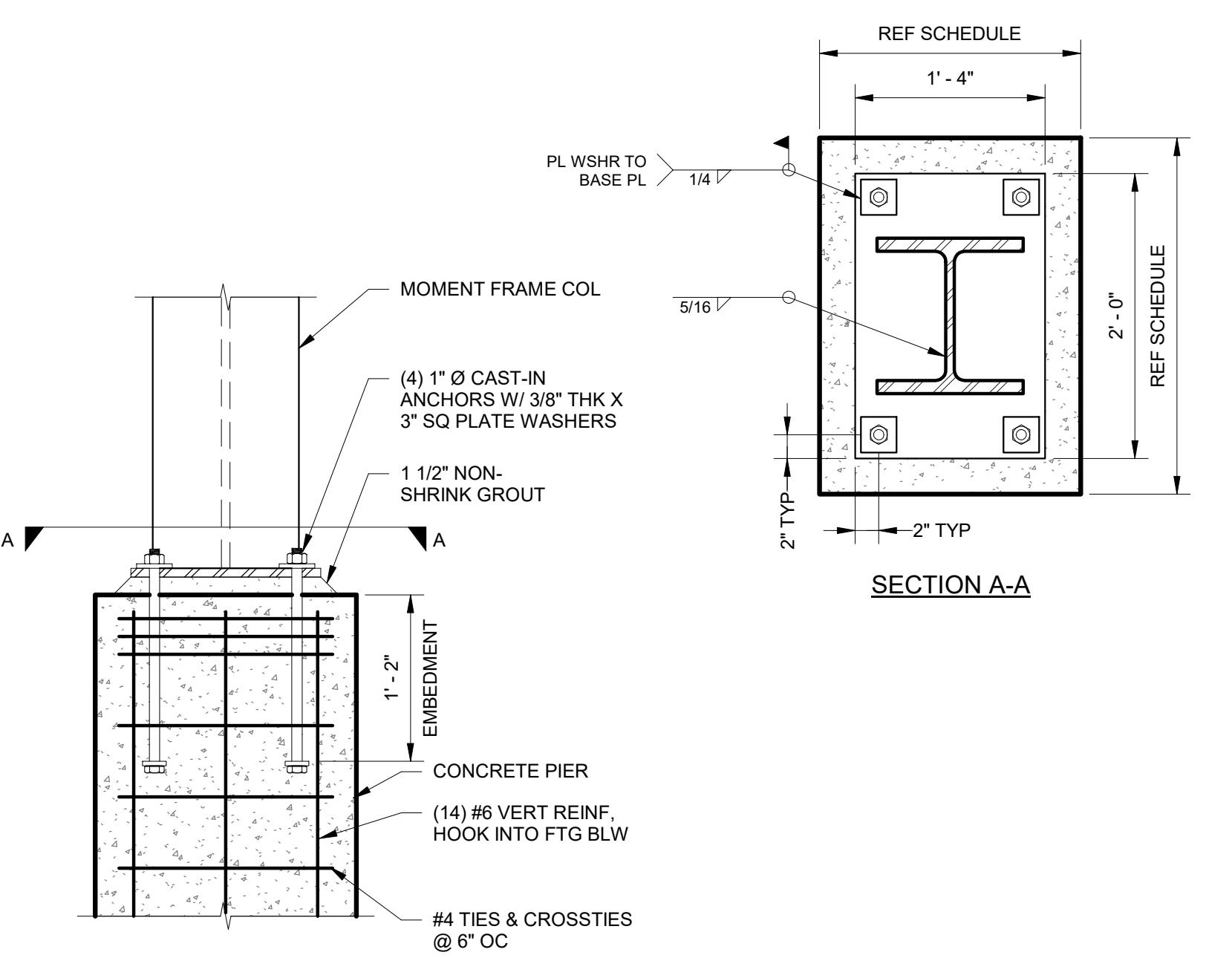


SECTION B-B (PLAN VIEW)

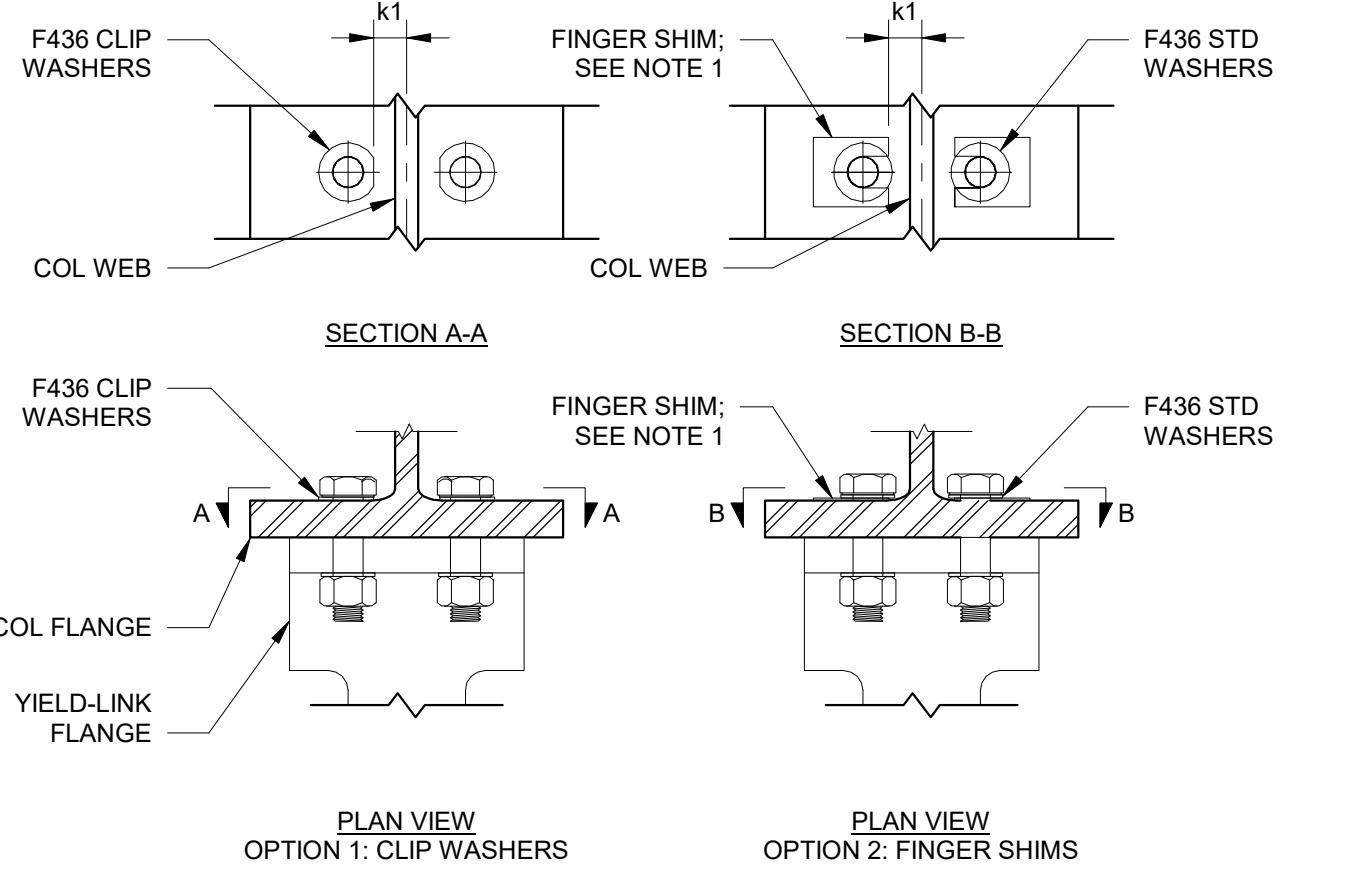


BM SIZE	Nvb	Sv	Lslot	Lev	Leh
W12	(3)	2 3/16"	1 1/2"	1 1/8"	1 3/4"
W14	(3)	2 3/4"	1 1/2"	1 1/8"	1 3/4"
W16	(3)	2 3/4"	1 1/2"	1 1/8"	1 3/4"
W18	(3)	3 1/4"	1 1/2"	1 1/8"	1 3/4"
W21	(5)	2 3/8"	1 7/8"	1 1/8"	1 3/4"
W24	(5)	2 3/4"	1 7/8"	1 1/4"	1 3/4"
W27	(7)	2 5/16"	2 3/8"	1 1/4"	1 3/4"
W30	(7)	2 3/4"	2 3/8"	1 1/4"	1 3/4"

SHEAR PL DETAIL



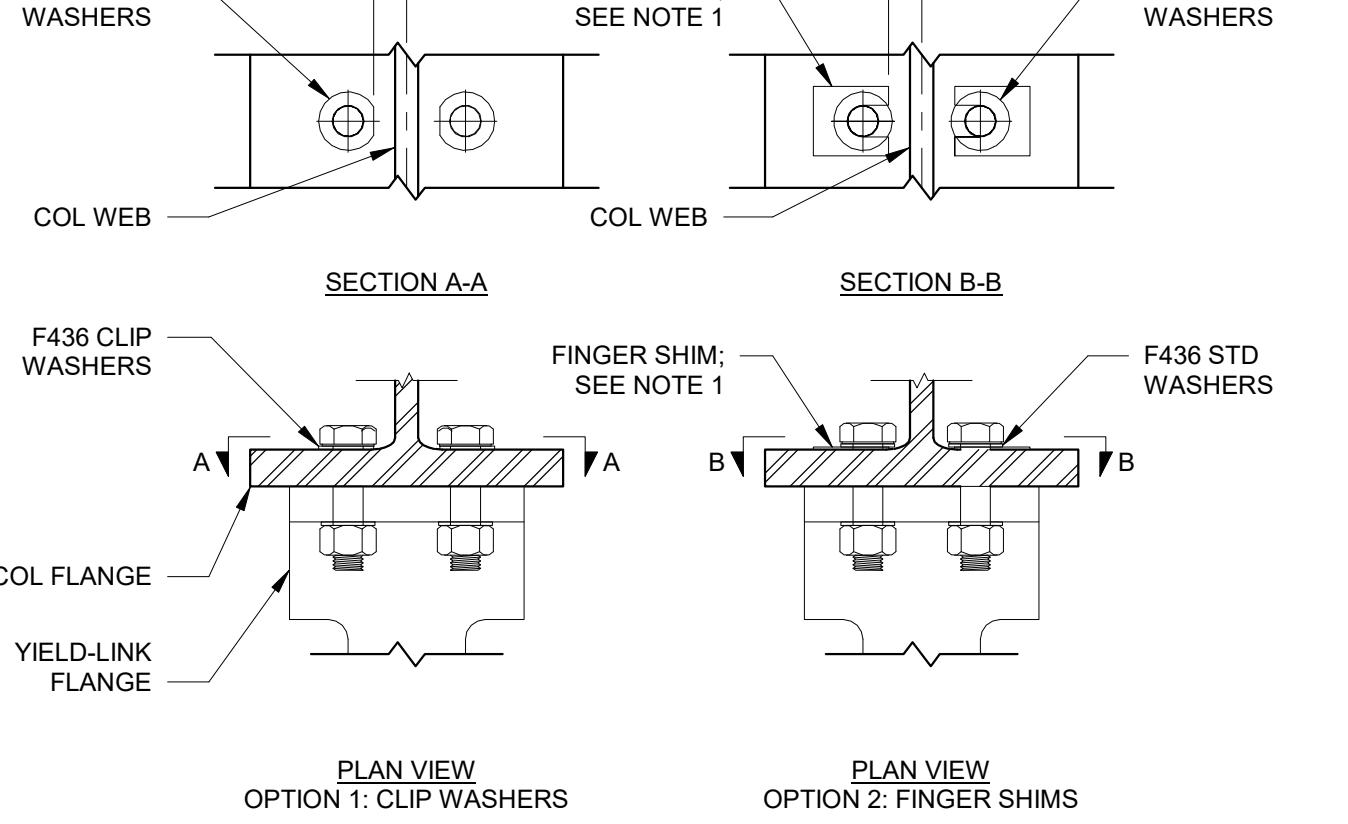
4 MOMENT FRAME BASEPLATE
NTS



NOTES:

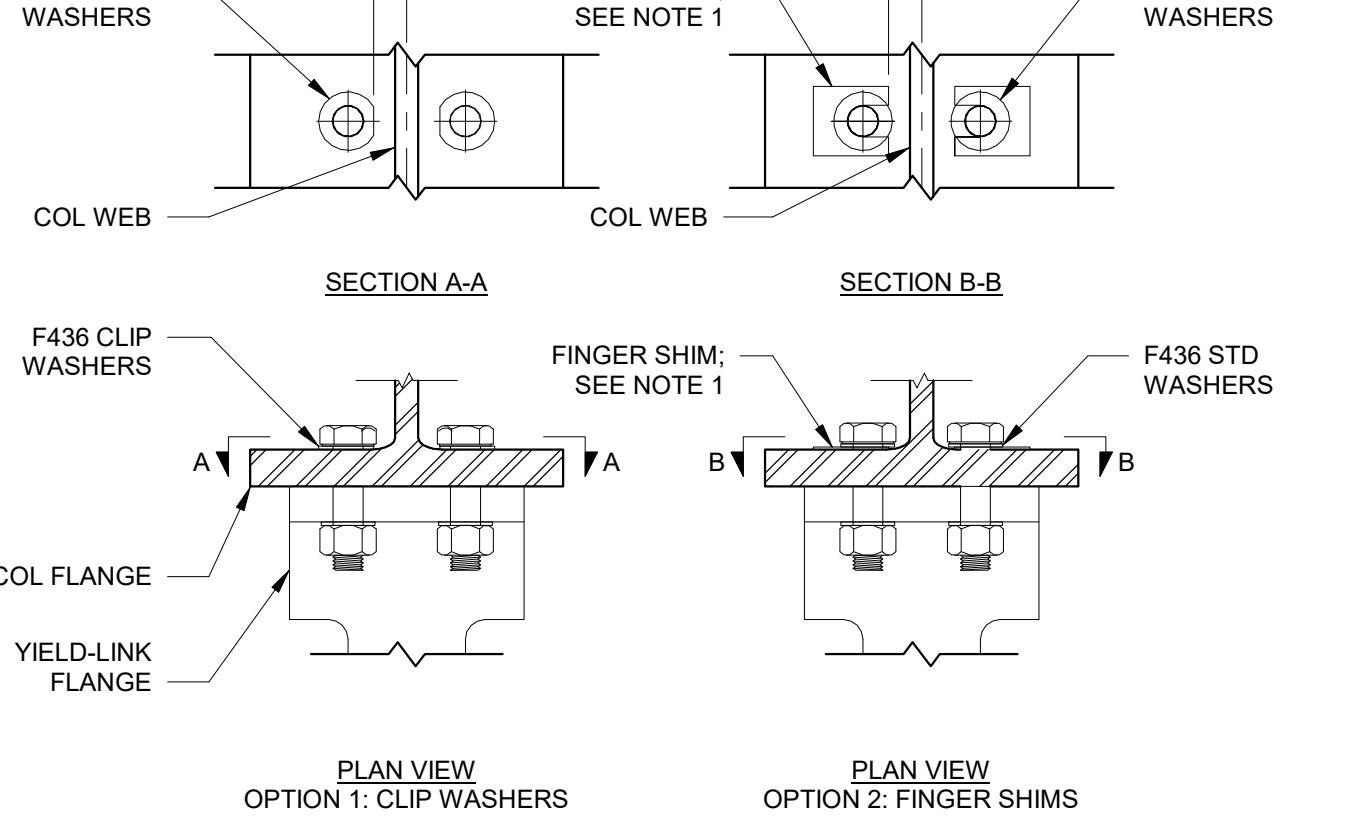
1. DETAIL APPLIES WHERE BOLTS ENCROACH UPON K-REGION OF COLUMN FLANGE
2. FINGER SHIM SHALL BE STRUCTURAL GRADE STEEL MATERIAL TRIM TO FIT AS REQUIRED
3. K1 VALUE FOR STEEL SHAPE VARIES. BOLT WASHER/SHIM SHALL BEAR FLAT ON COLUMN FLANGE.
4. SEE RCSC SPECIFICATION ON USE OF WASHERS ON SLOPING SURFACES.

2 TYP BOLT BEARING NEAR COLUMN WEB
NTS



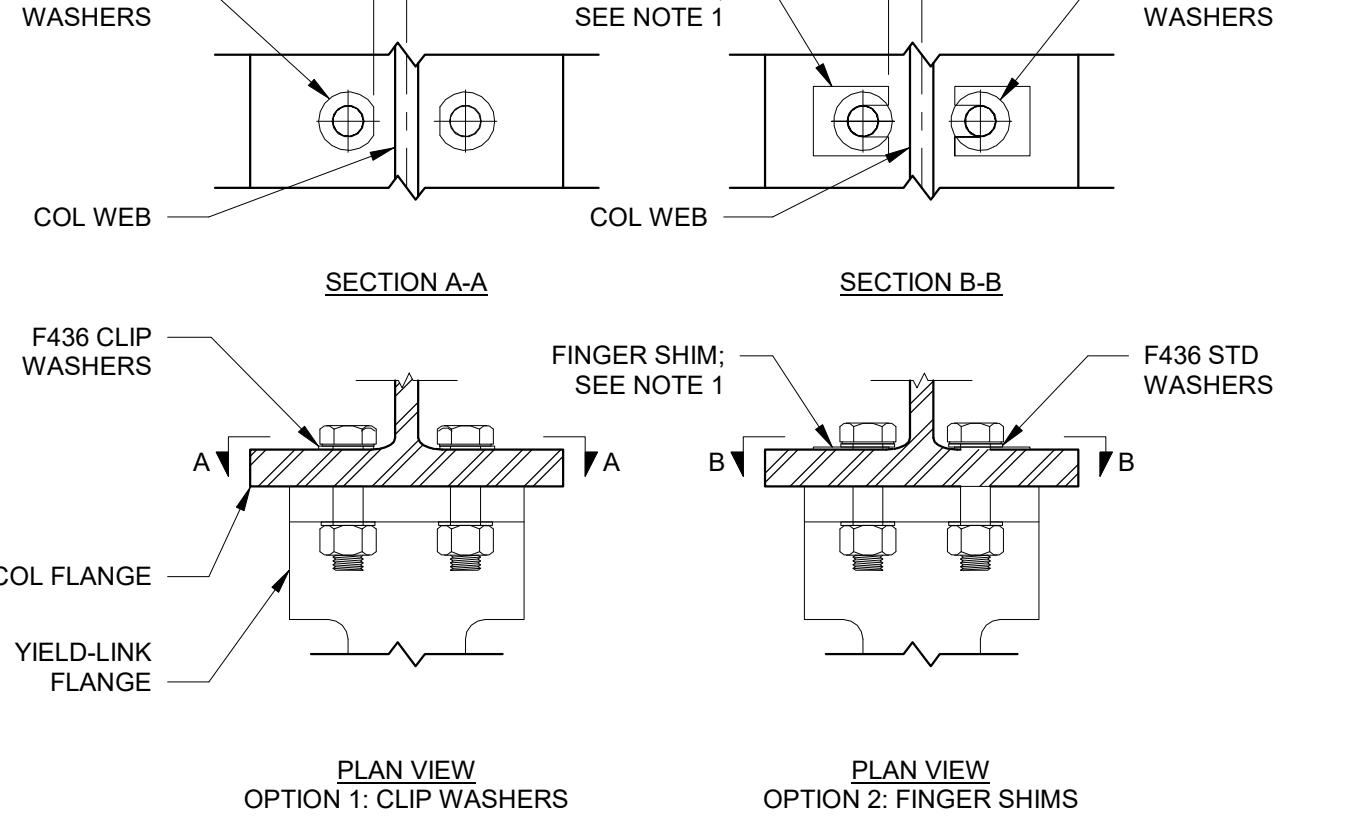
NOTES:

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3. K1 VALUE FOR STEEL SHAPE VARIES. BOLT WASHER/SHIM SHALL BEAR FLAT ON COLUMN FLANGE.
4. SEE RCSC SPECIFICATION ON USE OF WASHERS ON SLOPING SURFACES.



NOTES:

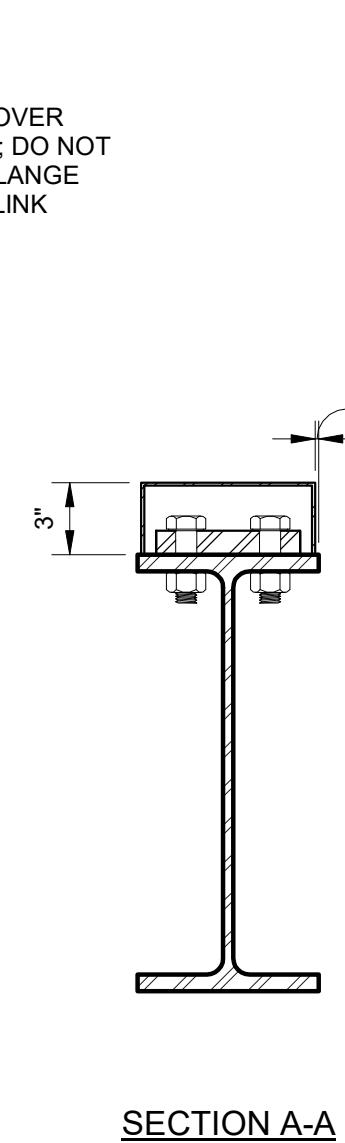
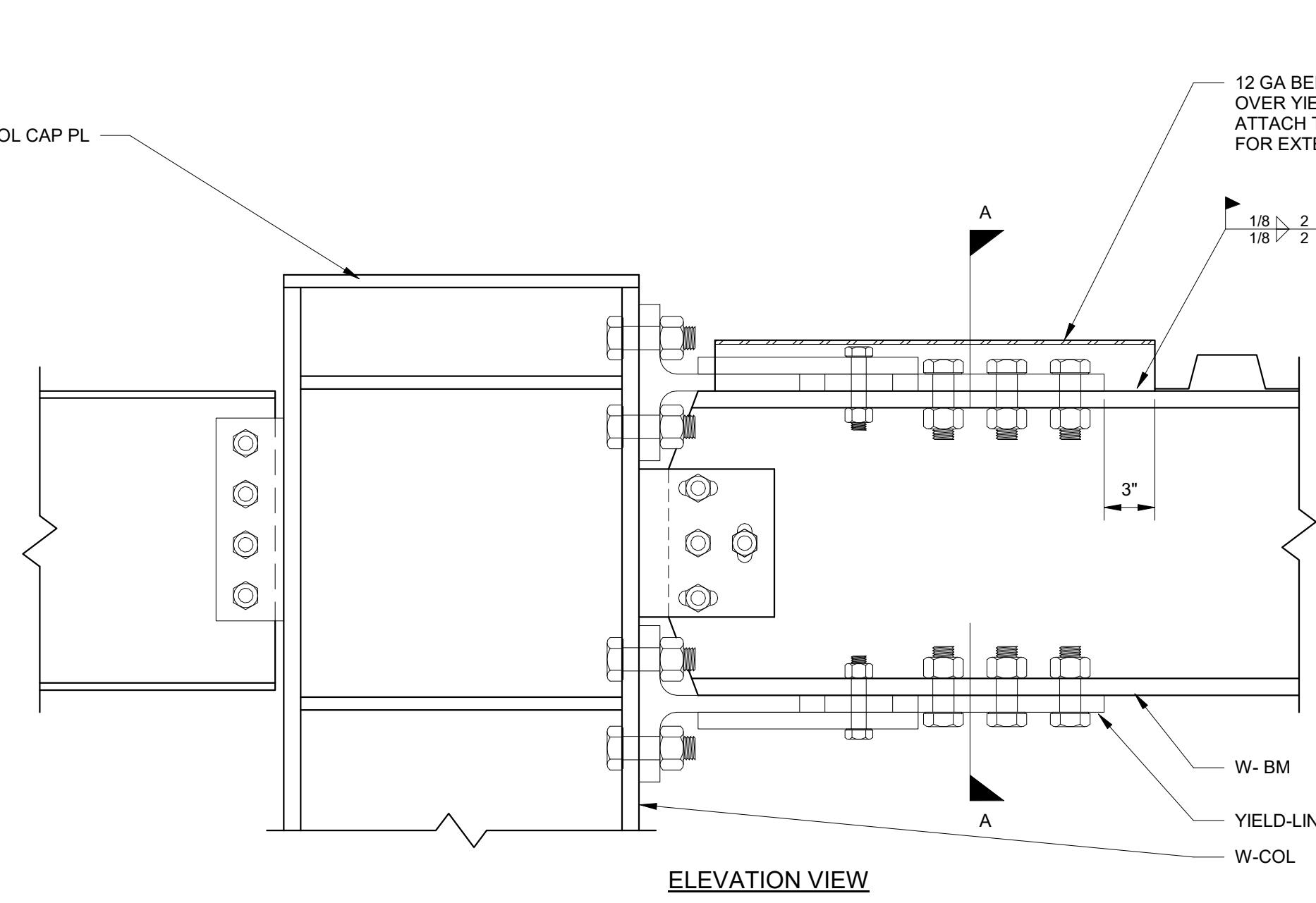
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4. SEE RCSC SPECIFICATION ON USE OF WASHERS ON SLOPING SURFACES.



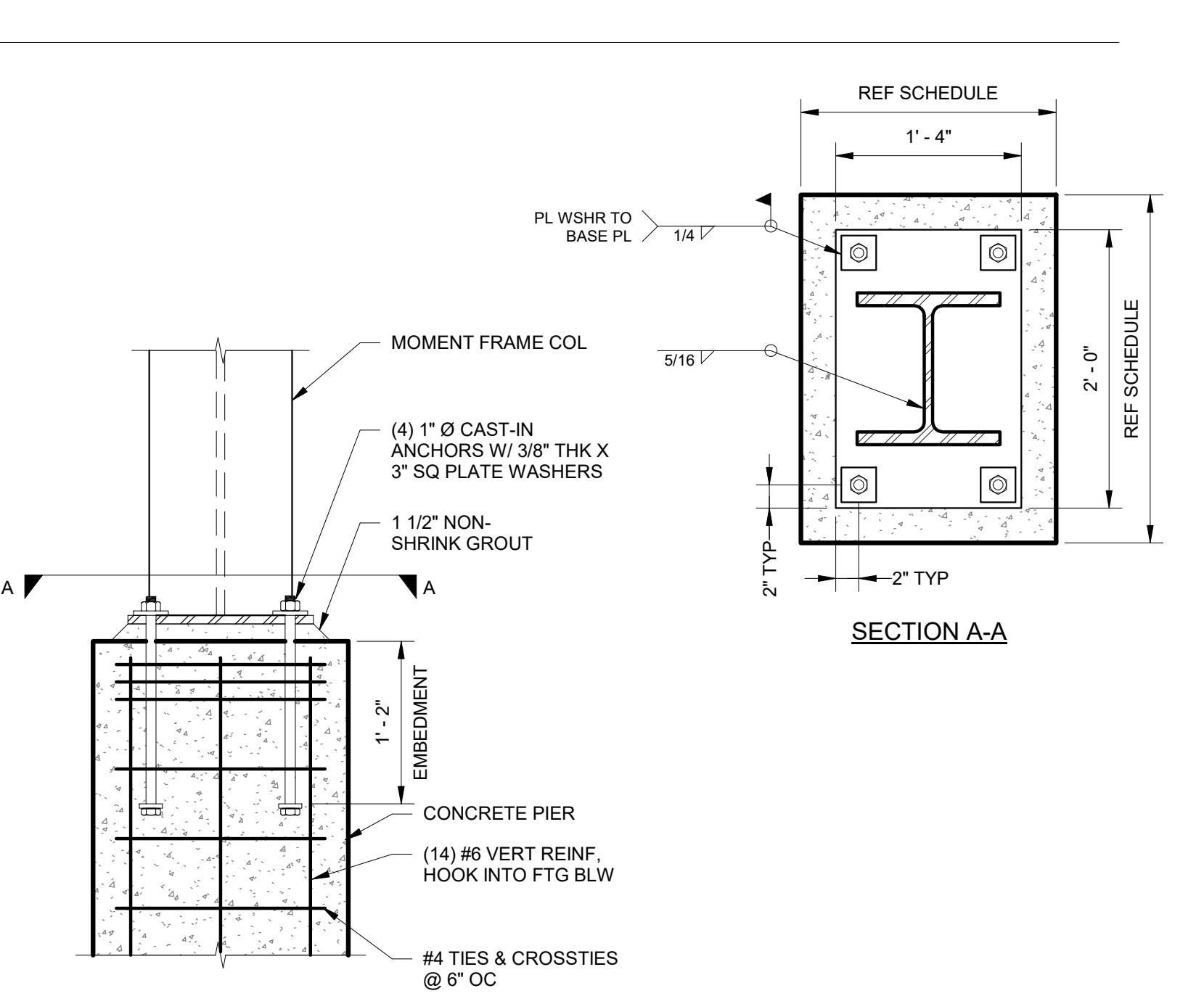
NOTES:

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3. K1 VALUE FOR STEEL SHAPE VARIES. BOLT WASHER/SHIM SHALL BEAR FLAT ON COLUMN FLANGE.
4. SEE RCSC SPECIFICATION ON USE OF WASHERS ON SLOPING SURFACES.

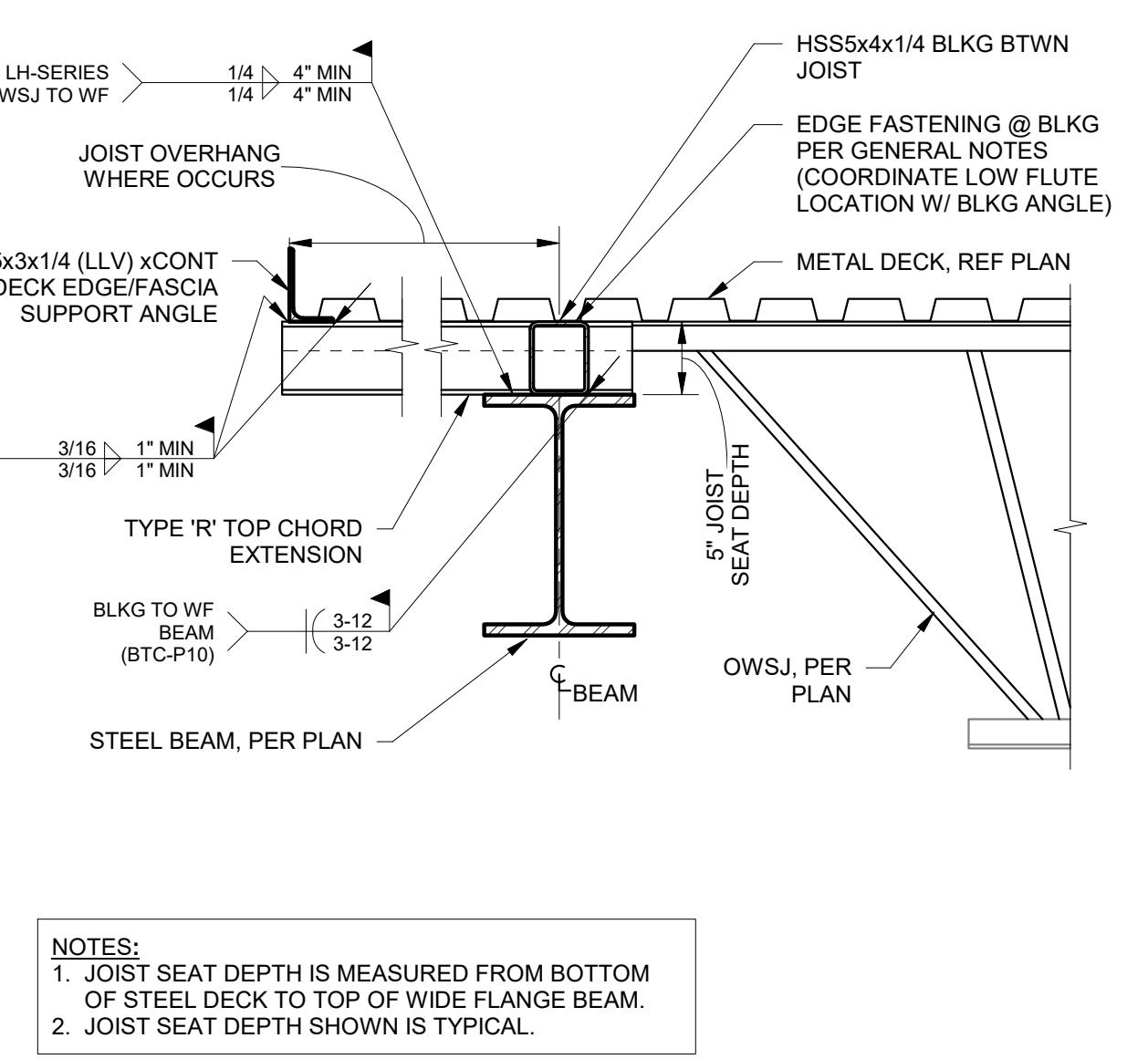
1 TYPICAL YIELD-LINK CONN
NTS



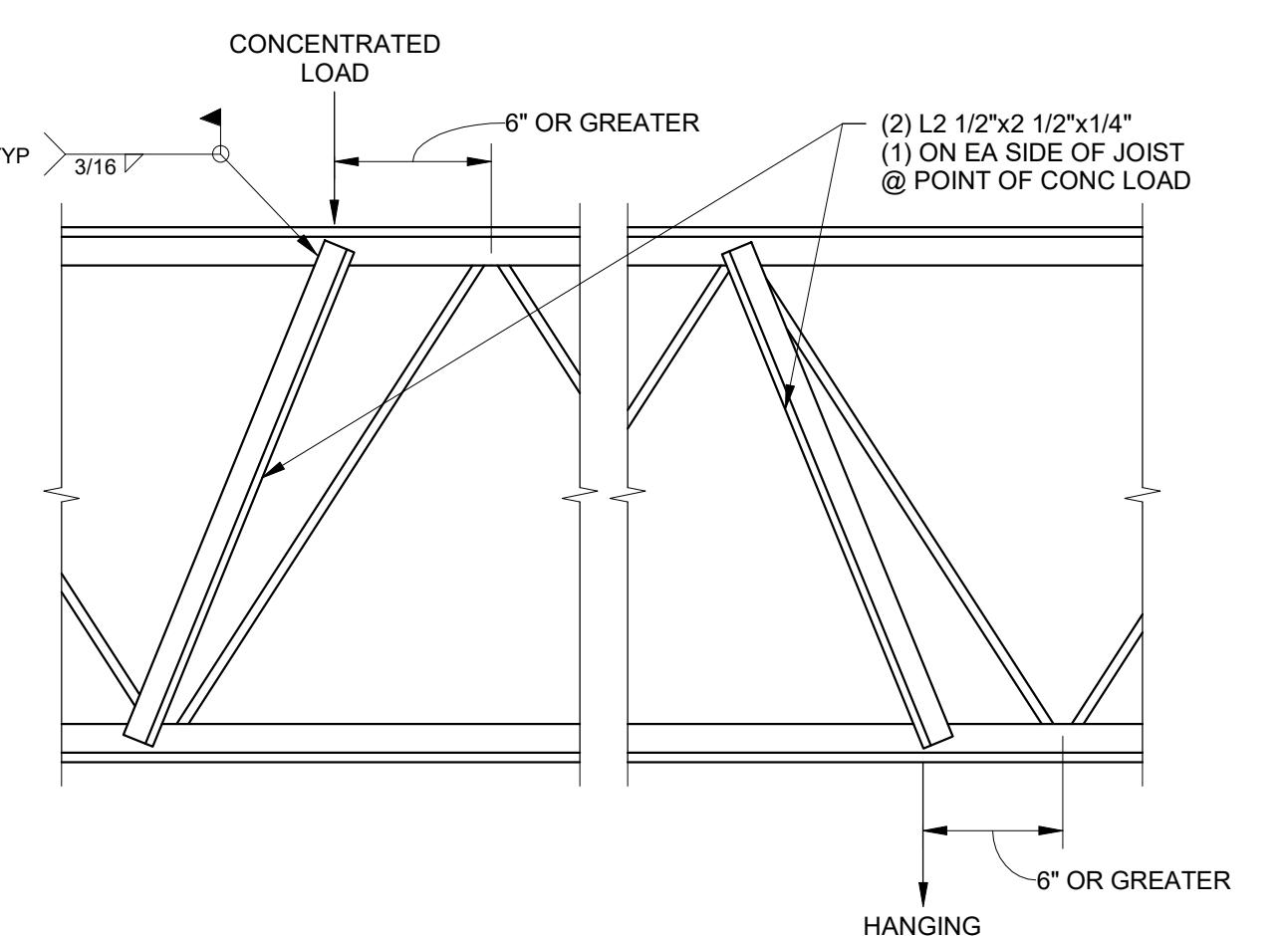
3 TYPICAL COVER PL OVER YIELD-LINK
NTS



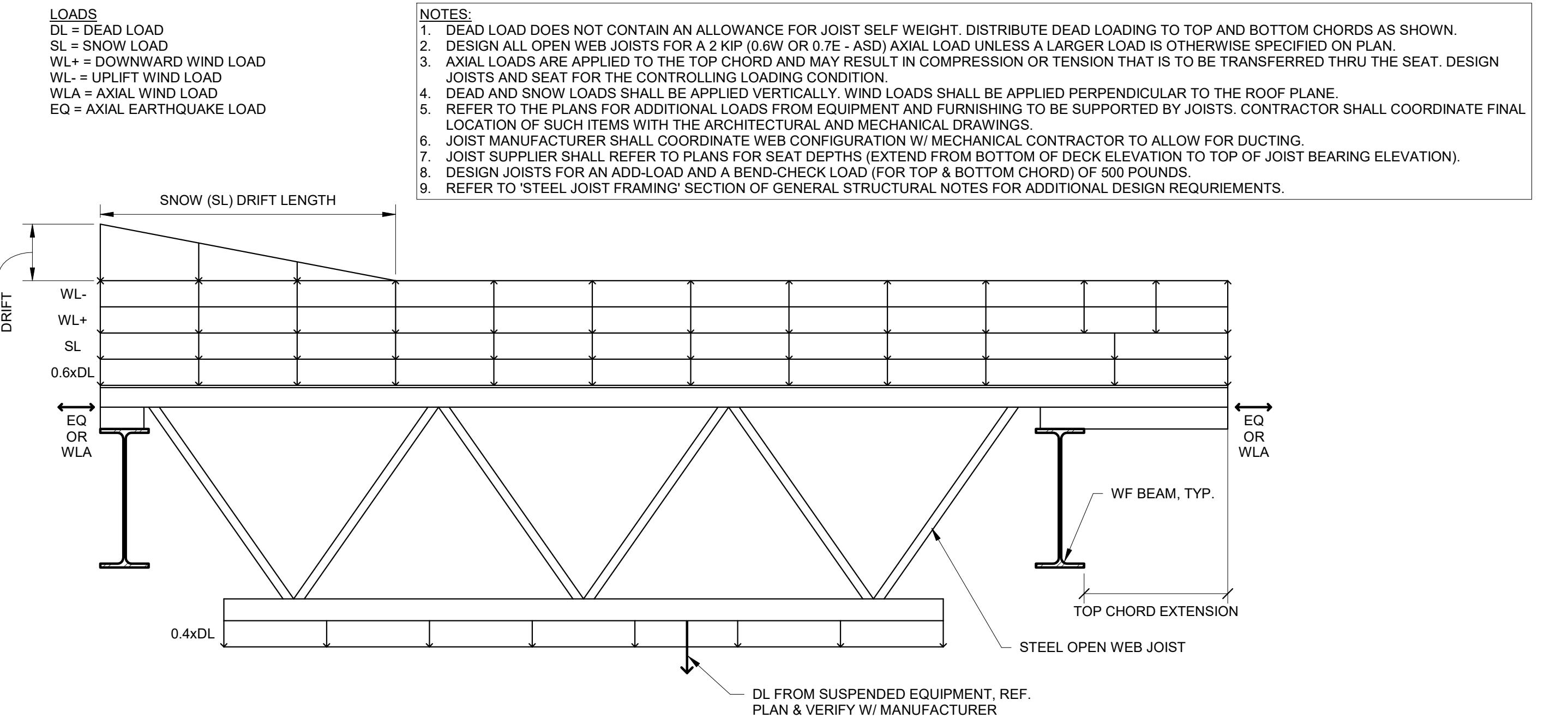
4 MOMENT FRAME BASEPLATE
NTS



1 OWSJ PERPENDICULAR TO EXTERIOR WF BM
NTS



2 JOIST REINFORCING DETAIL
NTS



3 OPEN-WEB STEEL JOIST LOADING
NTS

1 STEEL BEAM AT HSS COLUMN NTS

2 DOUBLE BM OVER COLUMN MOMENT CONNECTION W/ COLUMN ABOVE NTS

3 HSS TO HSS CONNECTION NTS

4 HSS EDGE BM TO W-BM NTS

5 HSS COLUMN TO TOP OF WF BEAM NTS

6 HSS BM TO HSS COL WELDED NTS

7 HSS POST BURIED IN WOOD WALL NTS

8 CANOPY CANTILEVER AT APPARATUS BAY NTS

9 TYPICAL HSS BM TO HSS COL CONN NTS

10 APPARATUS BAY - WALL TRANSITION NTS

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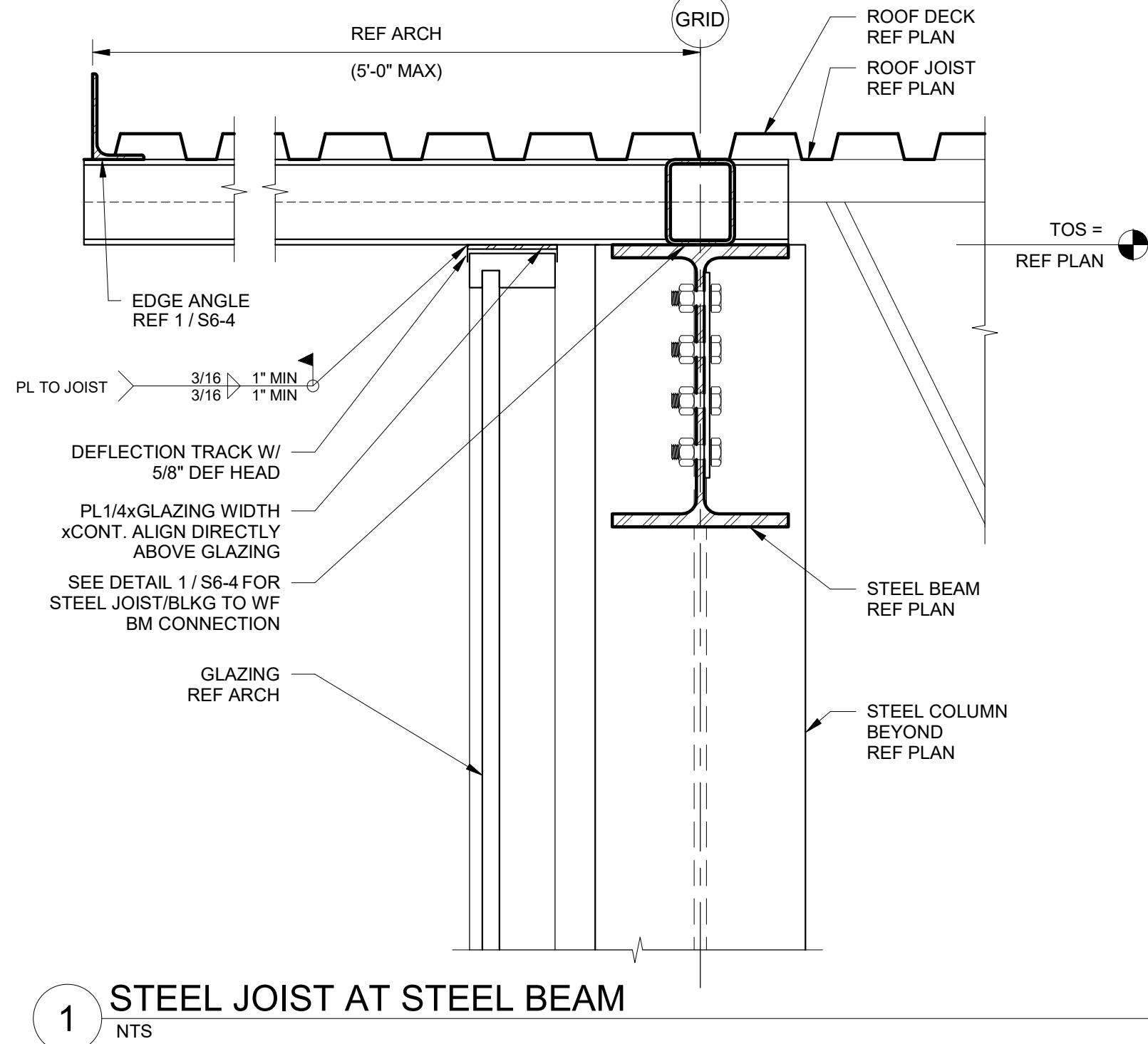
NOTE: WHERE W-BM FRAMES INTO BURIED HSS POST, PROVIDE BEAM TO POST CONNECTION PER 4 / S6-1

NOTES:
 1. PROVIDE FABREKKA-TIM WASHERS AND BUSHINGS AND HARDENED WASHERS AS RECOMMENDED BY MANUFACTURER TO THERMALLY ISOLATE BOLTS; INSTALL BOLTS SNUG TIGHT.
 2. PLATE WIDTH, 'B', SHALL BE THE GREATER OF THE BEAM WIDTH PLUS 1" (ROUNDED UP TO NEAREST 1/2") AND 6".
 3. NUMBER OF BOLTS, 'N', SHALL BE AS FOLLOWS, UNLESS OTHERWISE NOTED:
 A. 14" DEEP BEAMS AND SHALLOWER: 'N' = 4

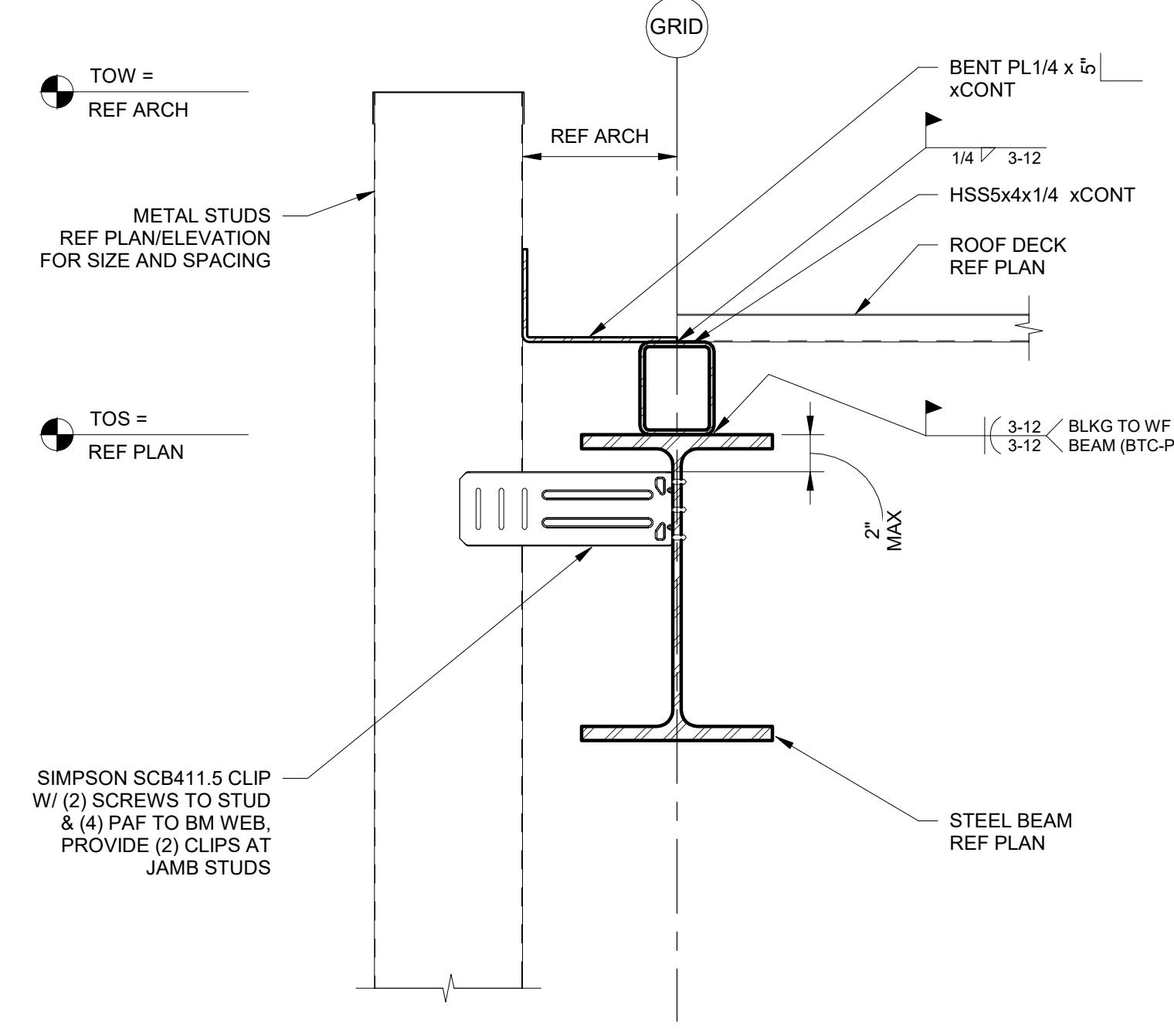
NOTE: FOR BALANCE OF REQUIREMENTS, SEE 4 / S6-1.

NOTE: SEE DETAIL 2 / S7-4 FOR ADDITIONAL INFORMATION AT PERPENDICULAR TRUSS CONNECTION.

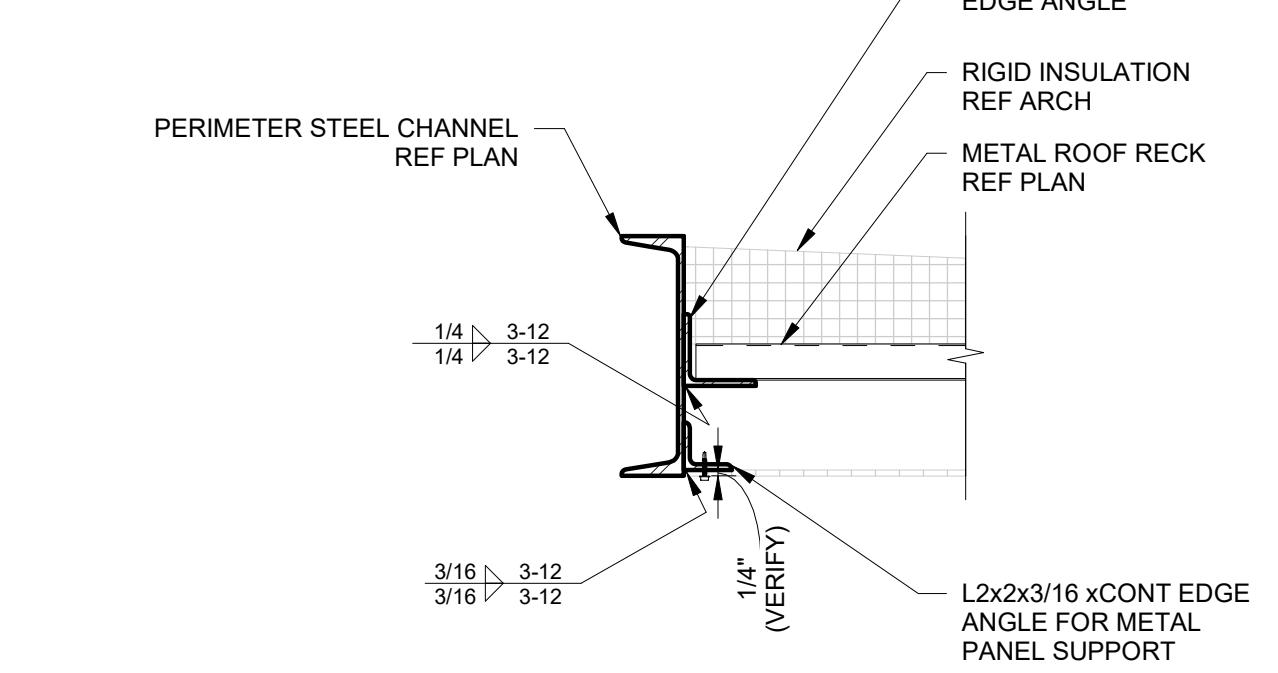
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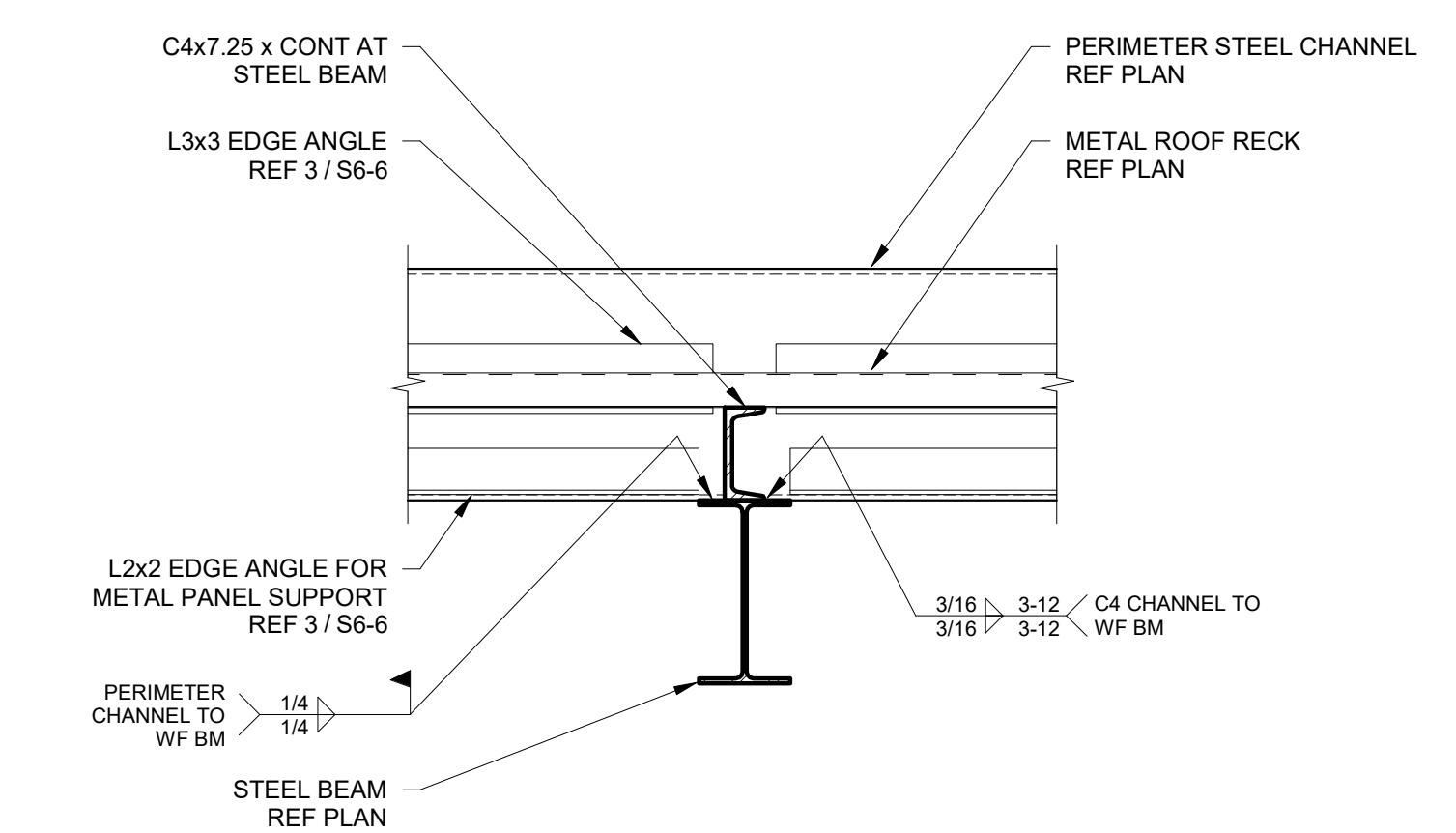
1 STEEL JOIST AT STEEL BEAM
NTS



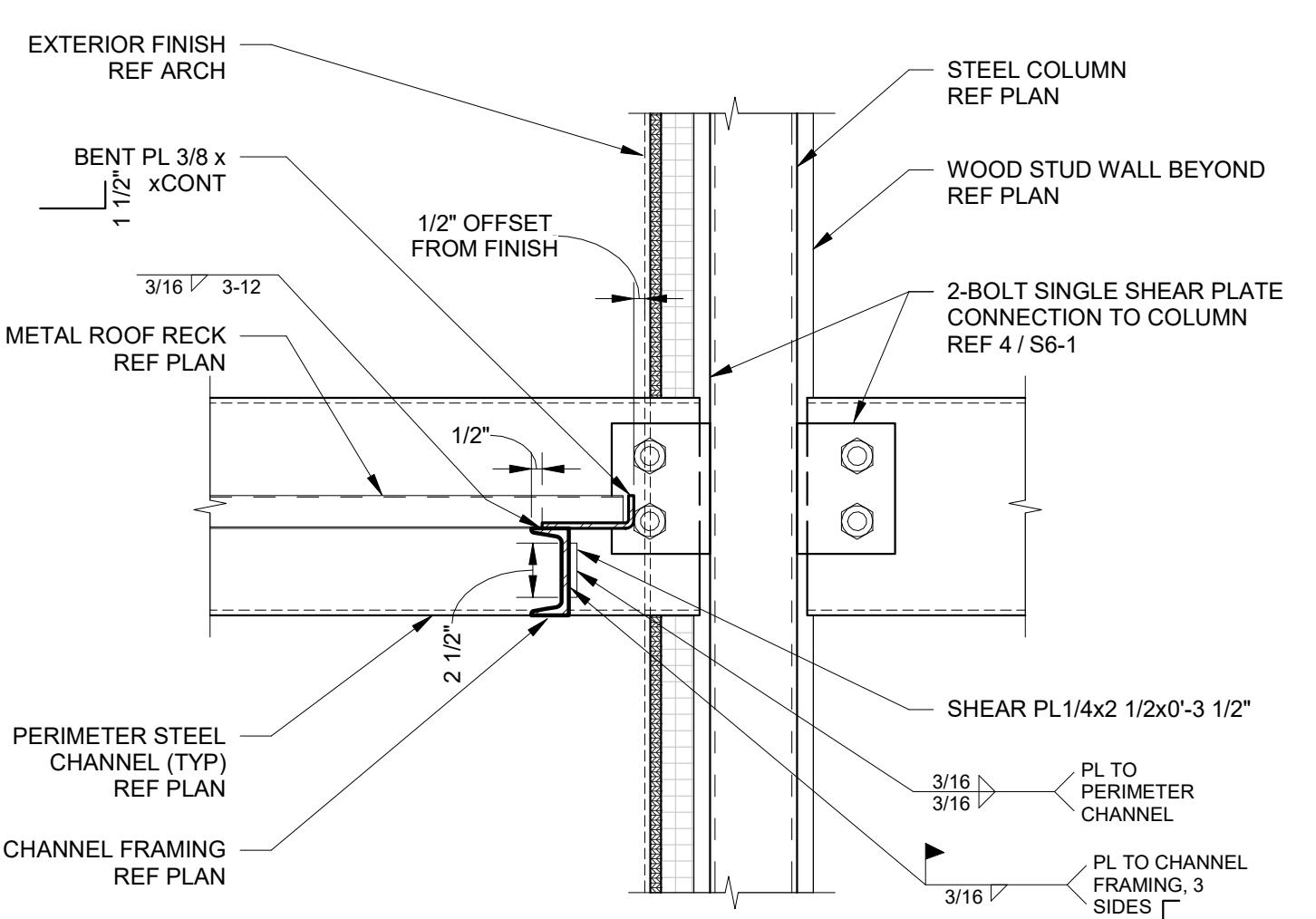
2 STEEL DECK AT STEEL BEAM
NTS



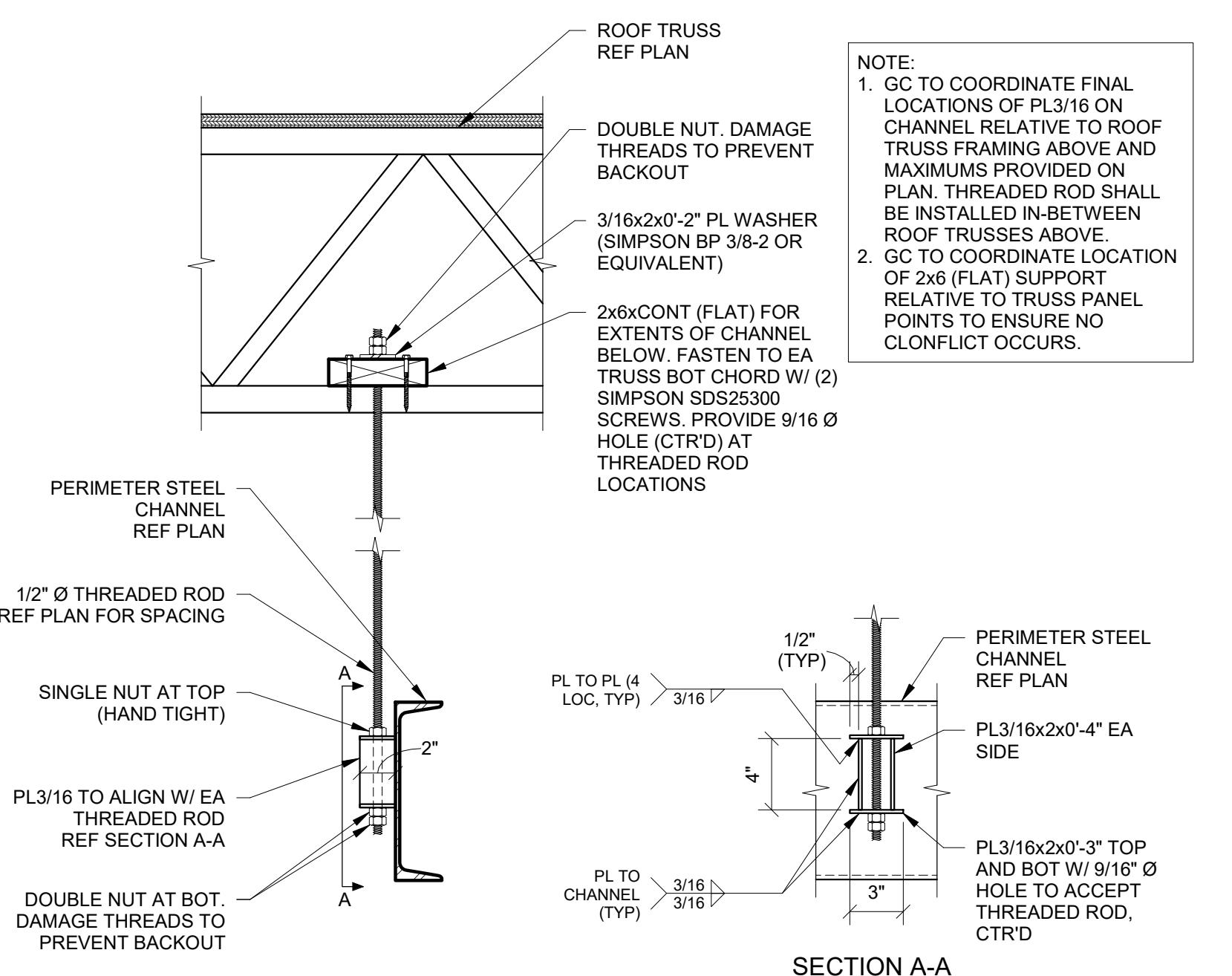
3 STEEL DECK AT STEEL BEAM
NTS



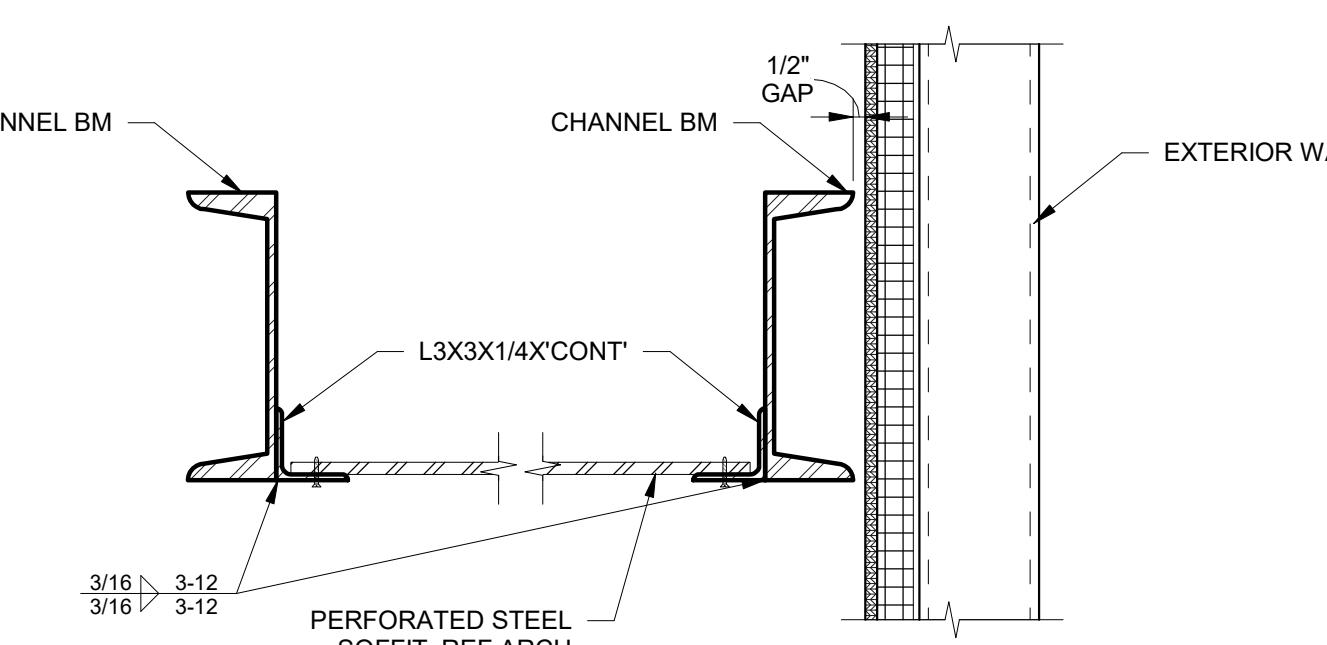
4 STEEL CHANNEL AT STEEL BEAM
NTS



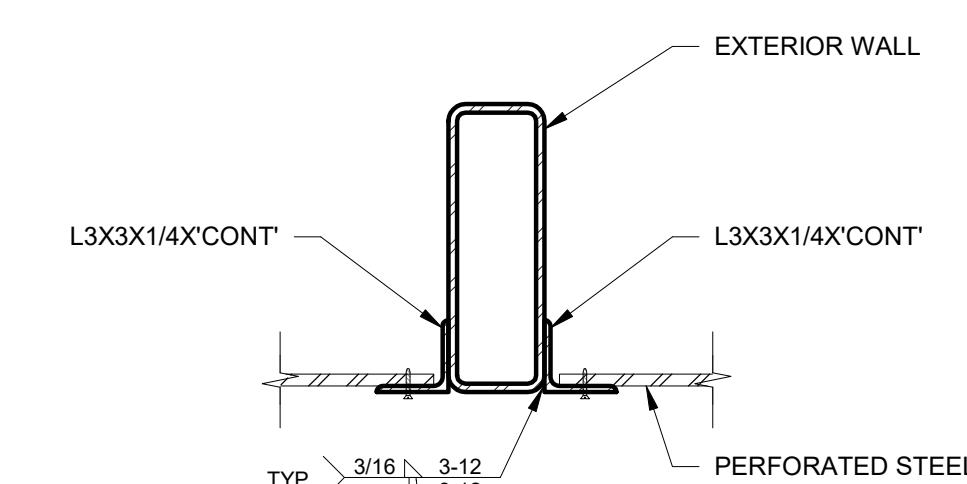
5 STEEL CHANNEL AT STEEL COLUMN
NTS



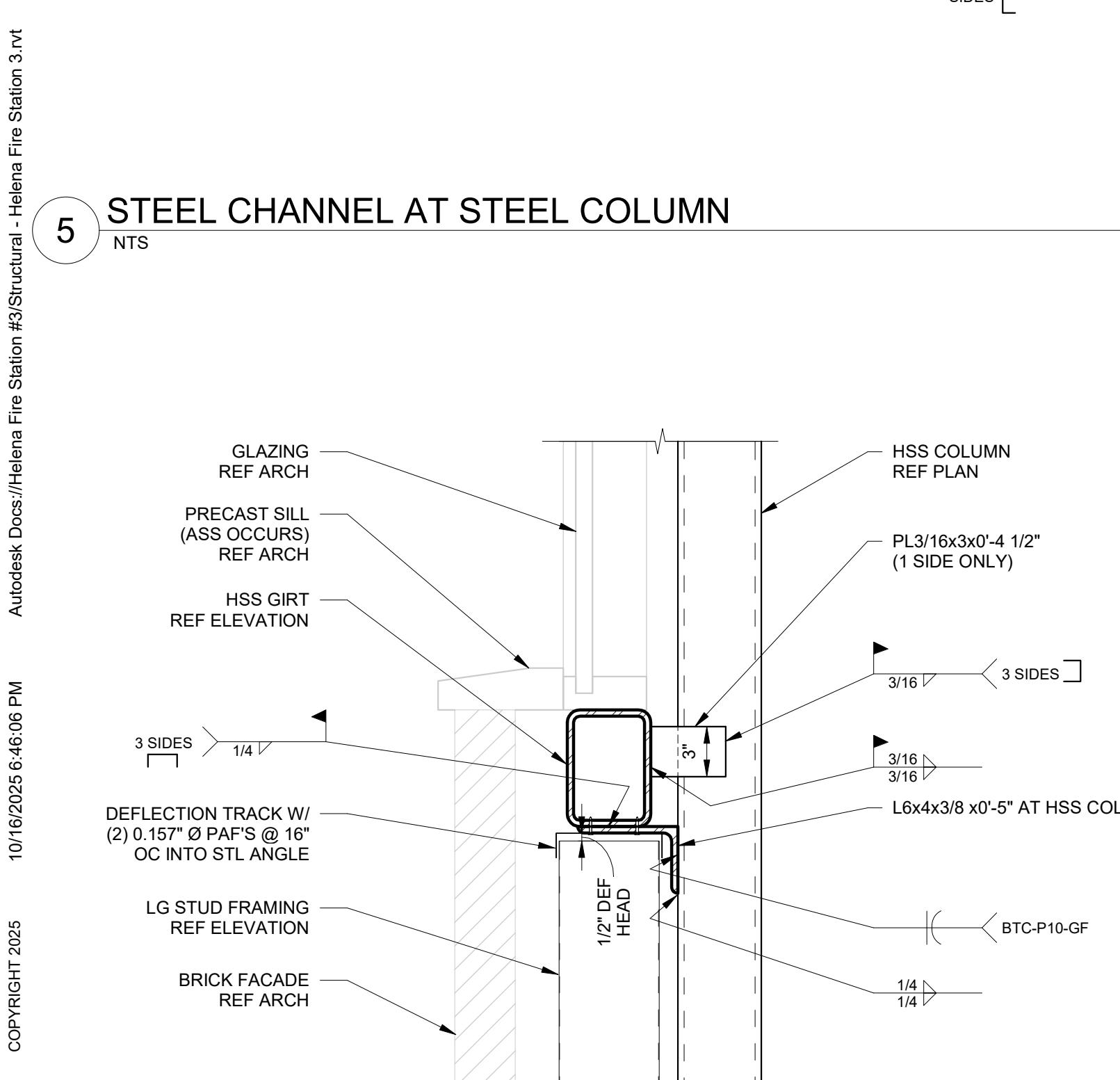
6 STEEL ROD AT PERIMETER CHANNEL
NTS



7 APPARATUS BAY SOFFIT SUPPORT
NTS



8 SOFFIT SUPPORT AT HSS STUBS
NTS

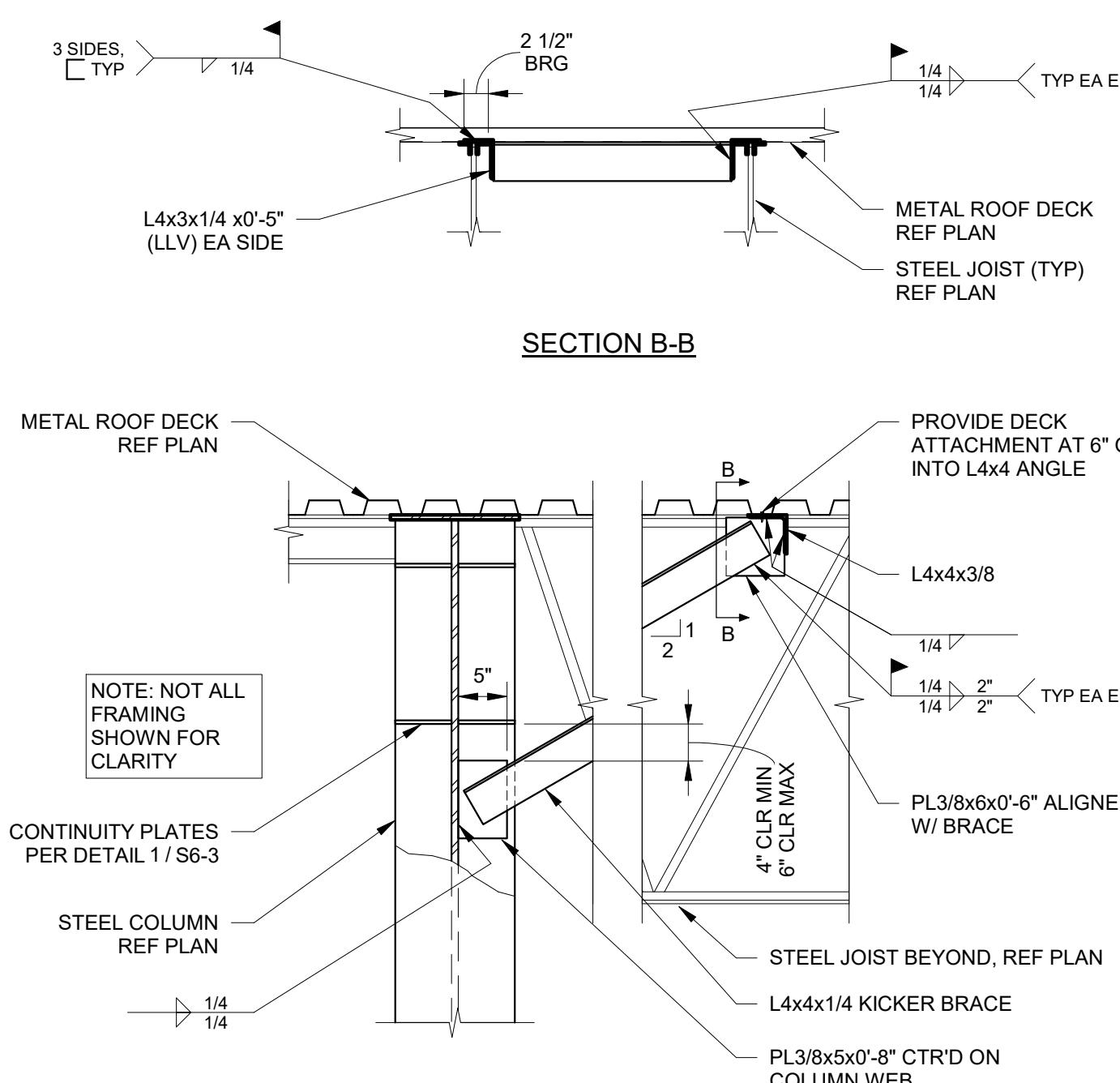


Autodesk Docs/Helena Fire Station 3.rvt

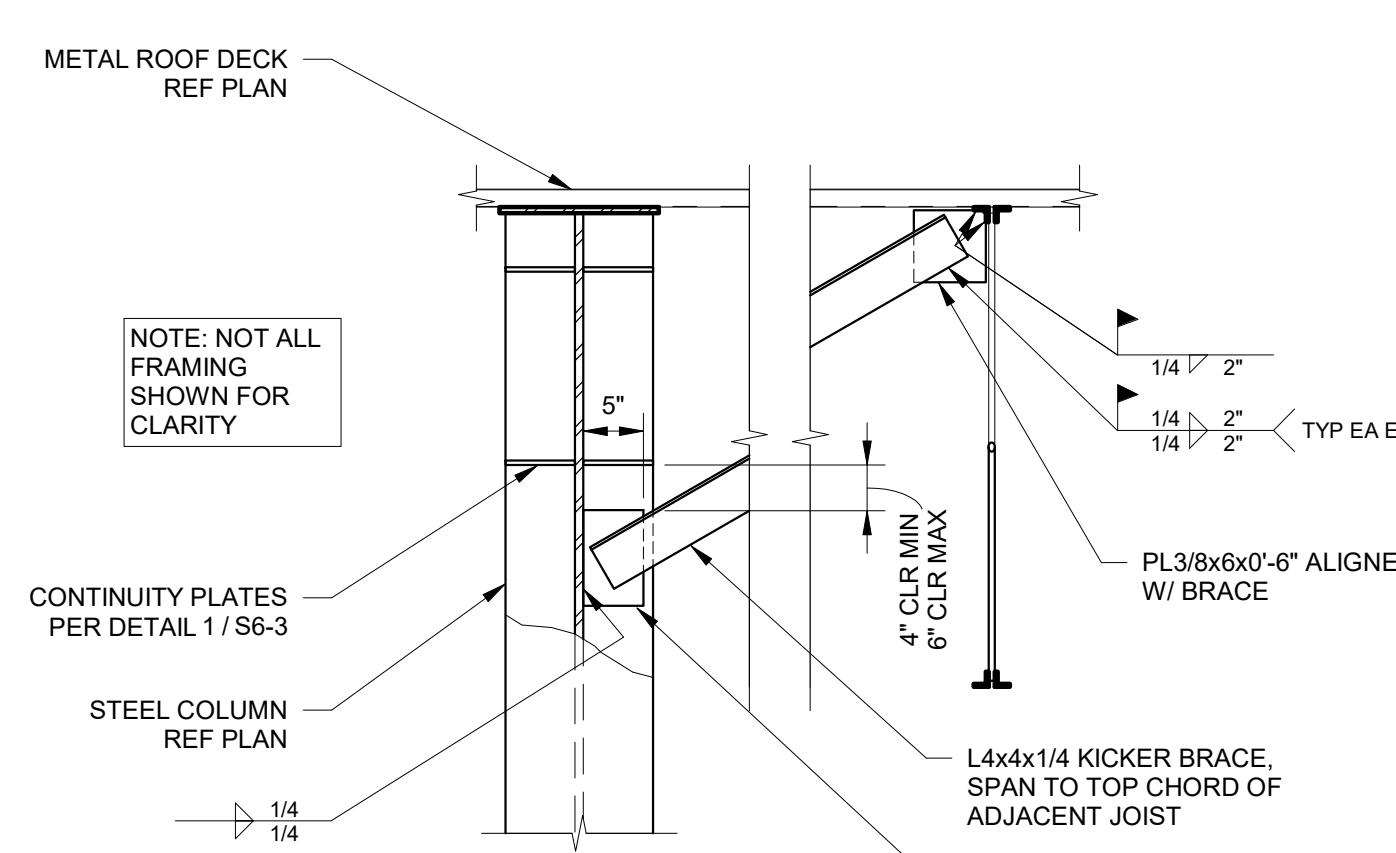
10/16/2023 6:46:06 PM

COPYRIGHT 2025

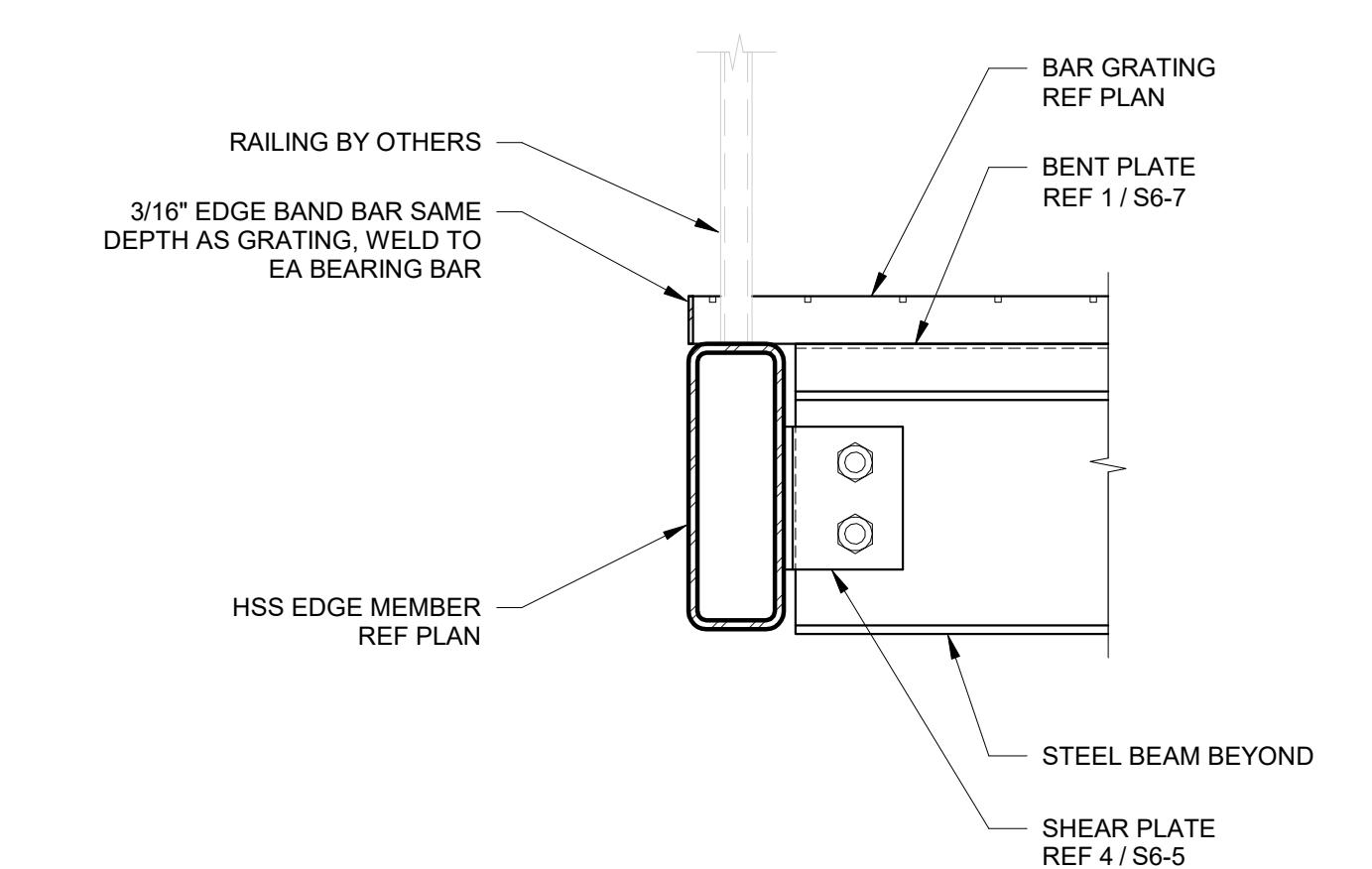
DOWLING ARCHITECTS, PC.



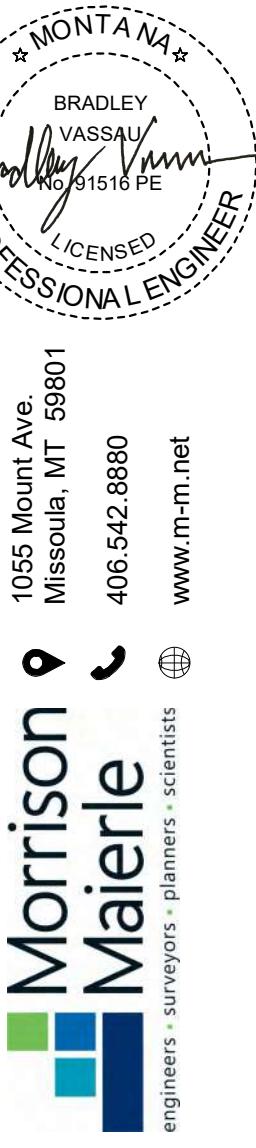
10 STEEL BRACE AT STEEL COLUMN
NTS



11 STEEL BRACE AT STEEL COLUMN
NTS



12 GRATING AT HSS
NTS



HELENA FIRESTATION #3
HELENA, MT. 59602

DOWLING ARCHITECTS
ARCHITECTURE + ENGINEERING

STEEL DETAILS

PROJECT #:
25-668

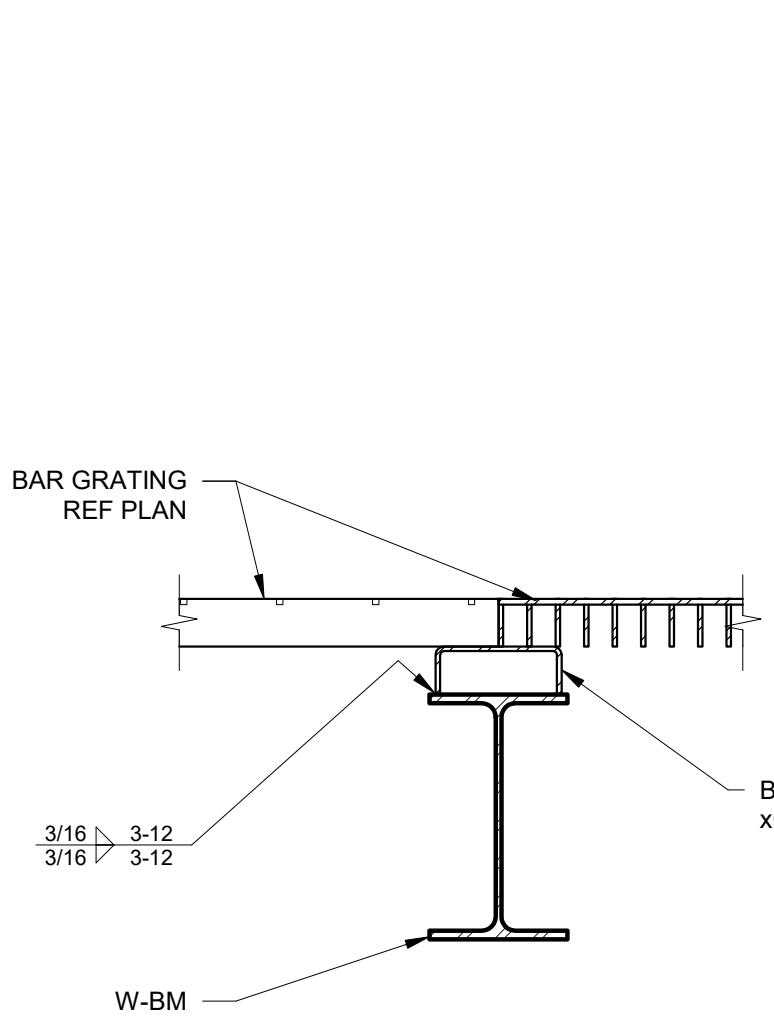
ISSUE DATES:

DRAWN BY: MM

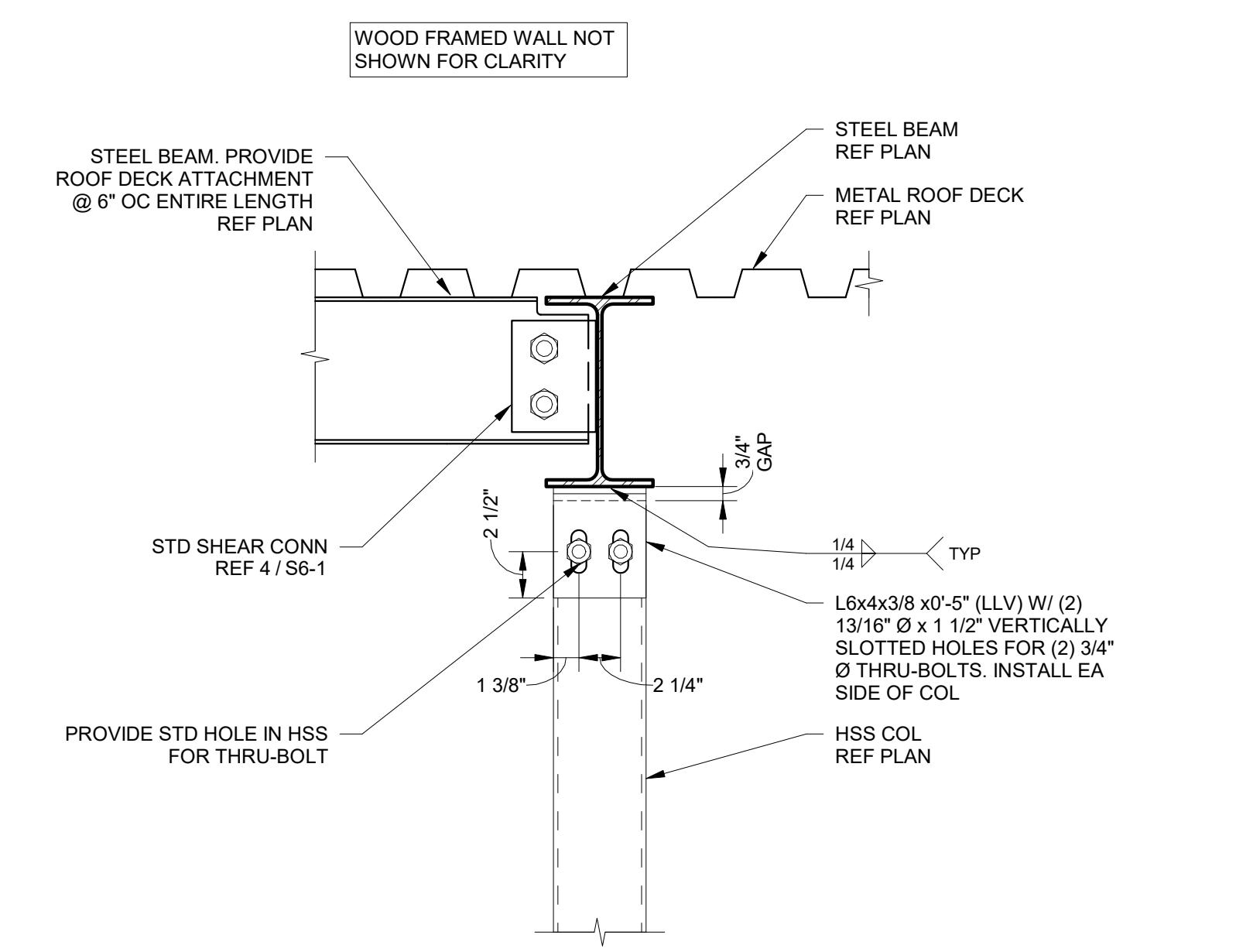
S6-7

10.22.25

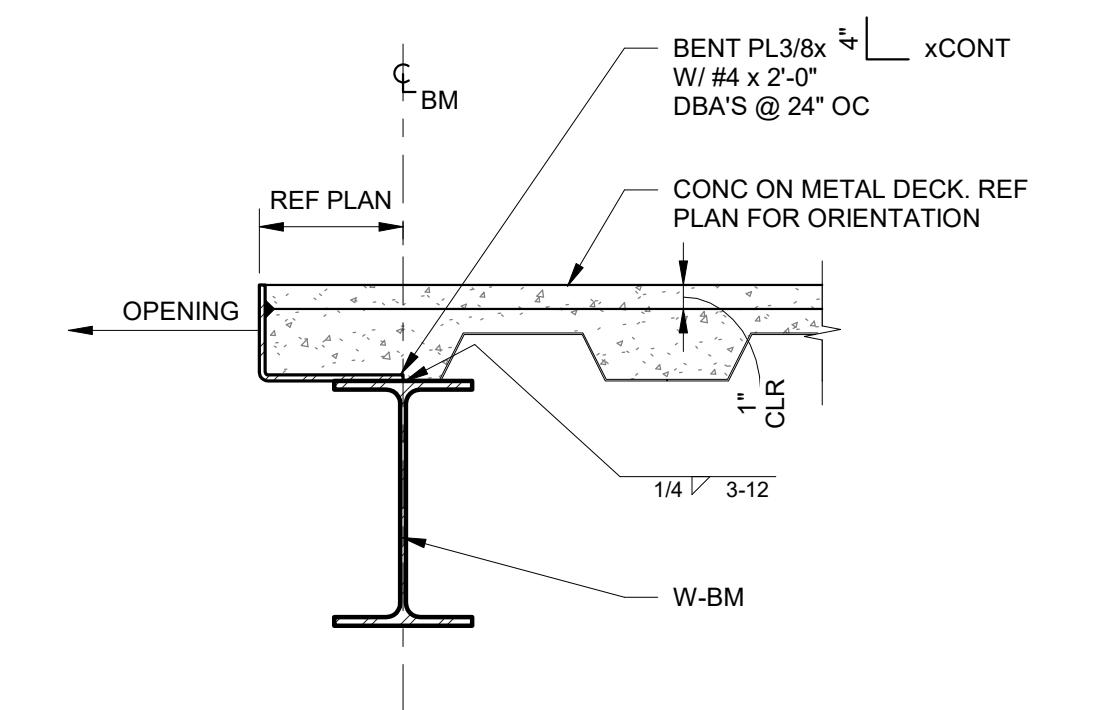
1 GRATING AT WF BEAM
NTS



2 ZIP LINE HSS - ROOF DETAIL
NTS



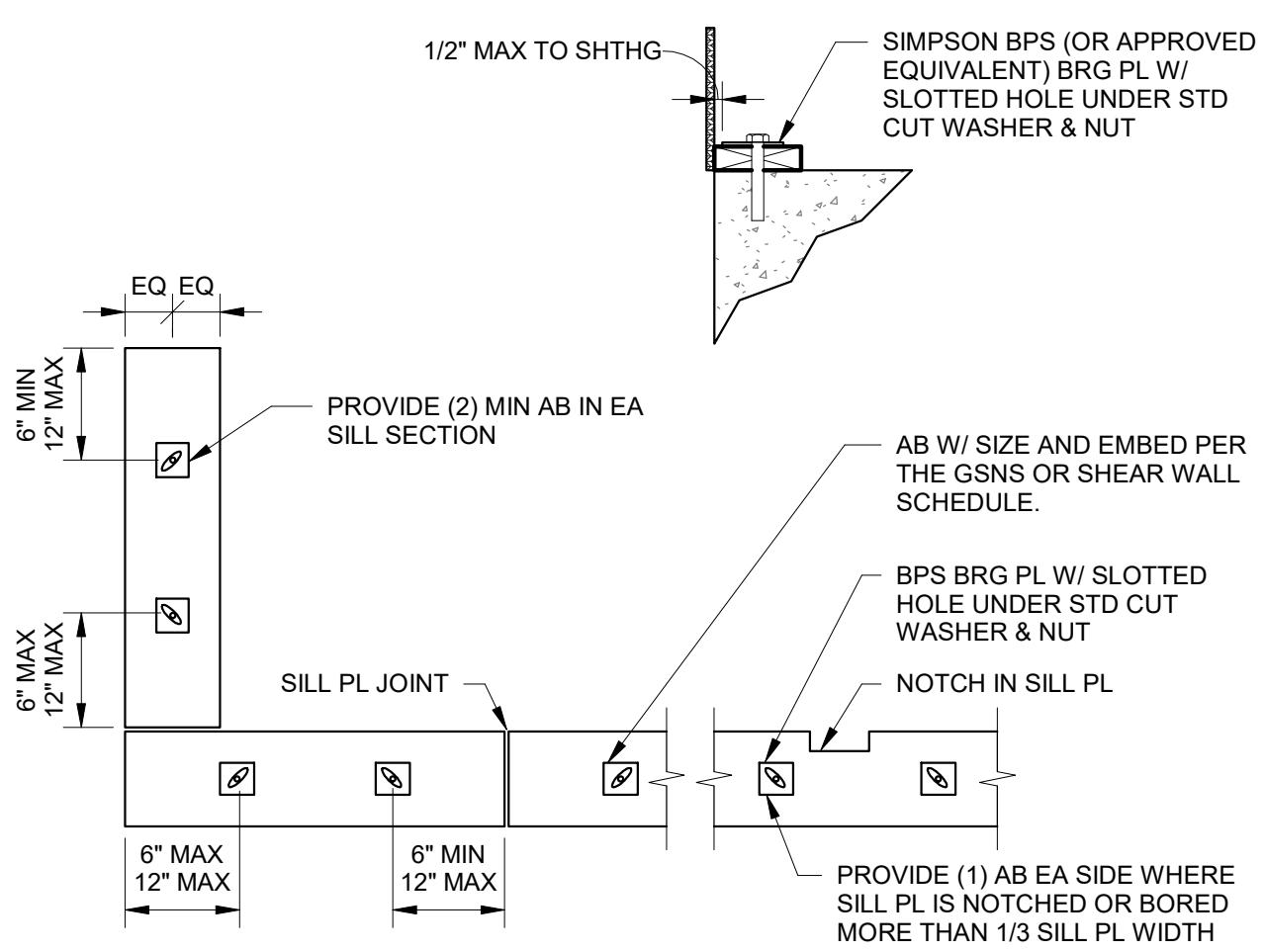
3 STEEL BEAM AT OPENING
NTS



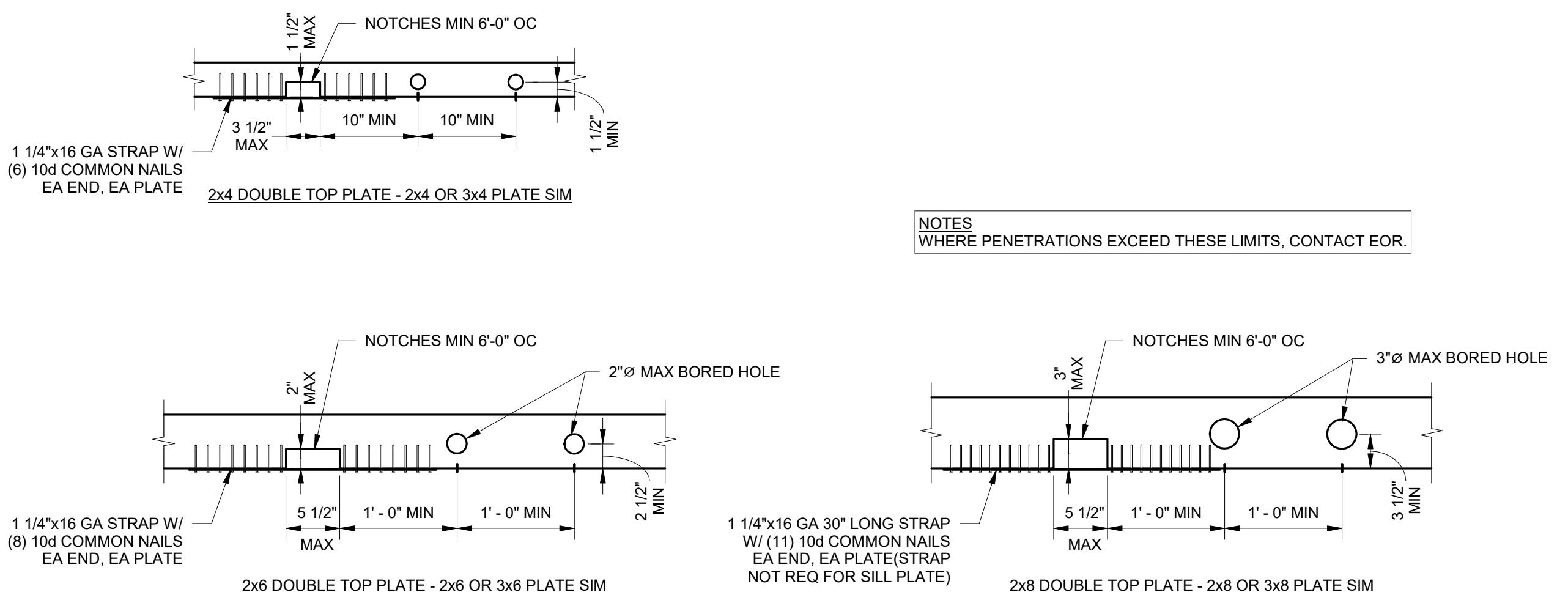
SCT	NO OF LAMINATIONS	NAIL SIZE	EDGE DISTANCE	END DISTANCE
2x4	2	10d	1"	2 1/2"
	3	30d	1 1/4"	3 1/2"
	4	60d	1 3/8"	4"
2x6	2	10d	1 1/2"	2 1/2"
	3	30d	1 1/2"	3 1/2"
	4	60d	1 3/8"	4"

NOTES:
 1. TABLE VALUES ABOVE ARE BASED ON COMMON PENNY NAILS. SINKER NAILS MAY BE USED WITH SAME EDGE/END DISTANCES IF 16d SIZE IS USED IN LIEU OF 10d. BOX NAILS ARE NOT ALLOWED.
 2. * DENOTES BUILT-UP MEMBERS REQUIRING (3) ROWS OF FASTENERS. SEE ADJACENT LAYOUT.
 3. ALL NAILS MUST PENETRATE ALL LAMINATIONS AND @ LEAST 3/4 OF THE THICKNESS OF THE OUTERMOST LAMINATION (ENSURE THIS REQUIREMENT IS MET WHEN SPACERS ARE USED).

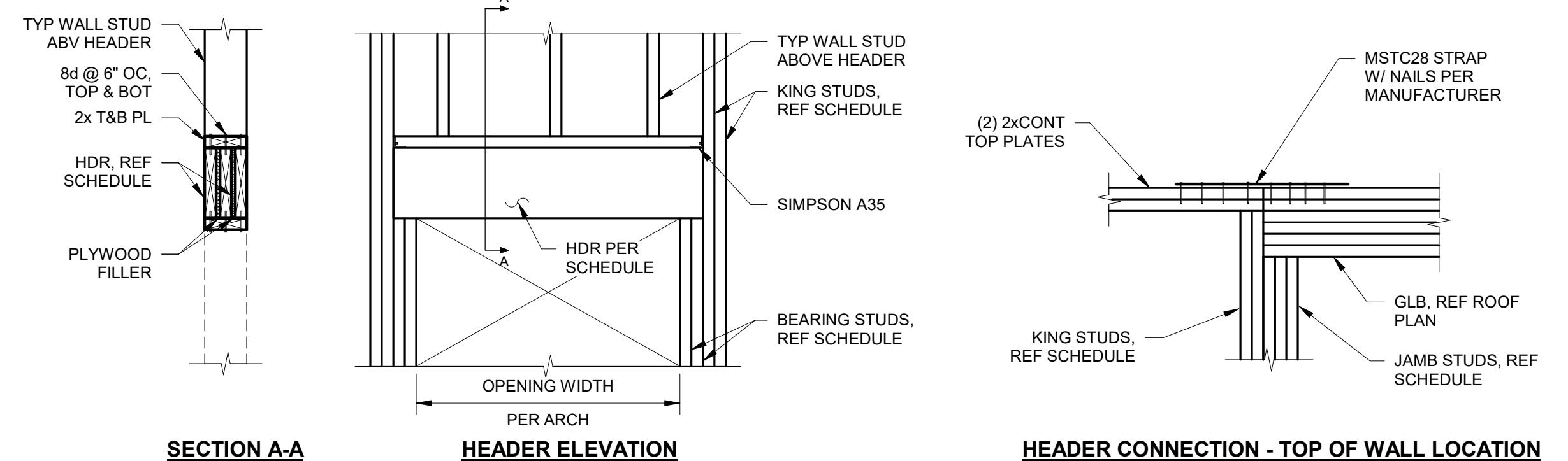
1 TYPICAL SILL PLATE ANCHORAGE
NTS



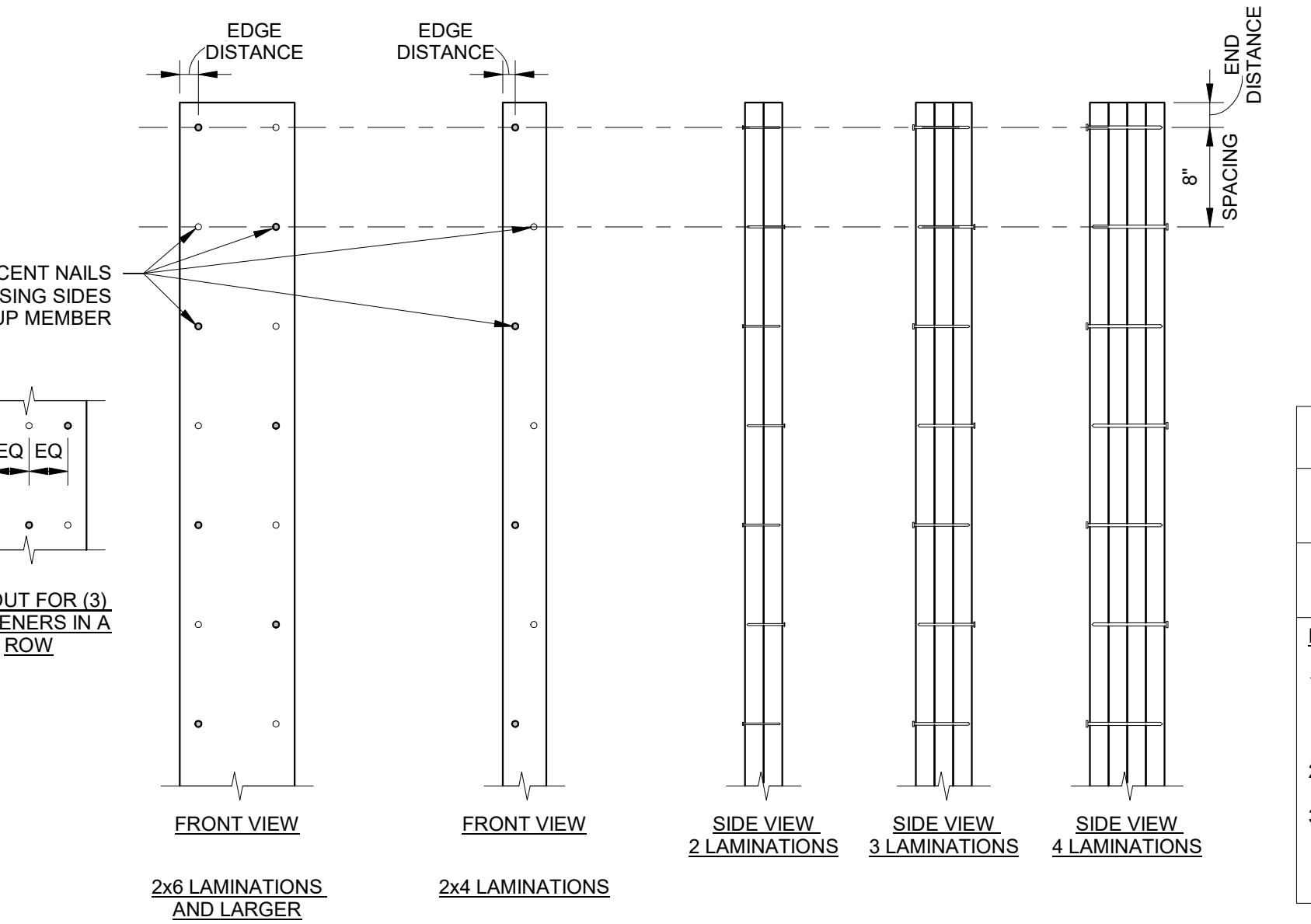
2 HOLES AND NOTCHES IN STUD
NTS



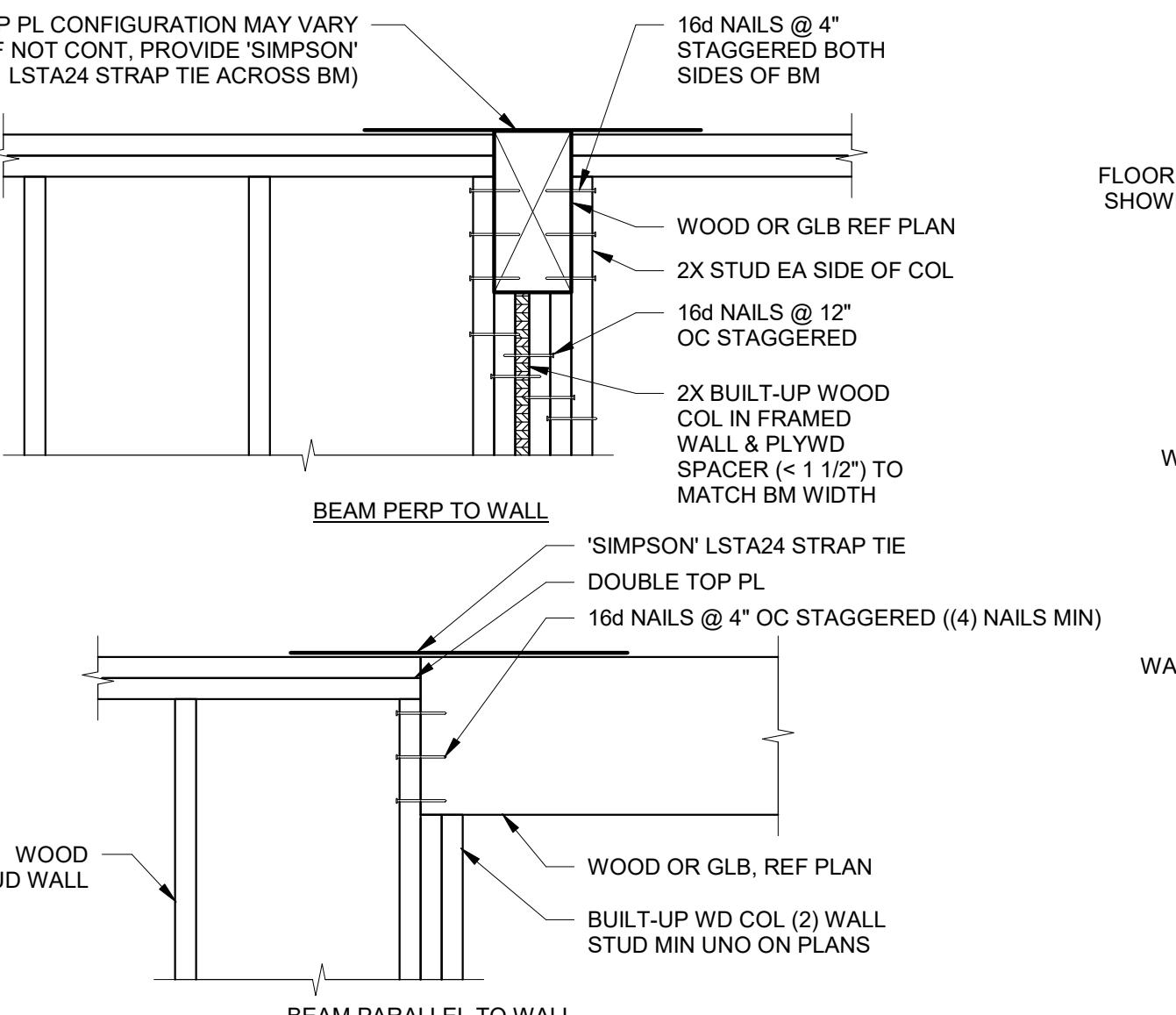
4 NOTCHES AND PENETRATIONS IN TOP/SILL PLATES
NTS



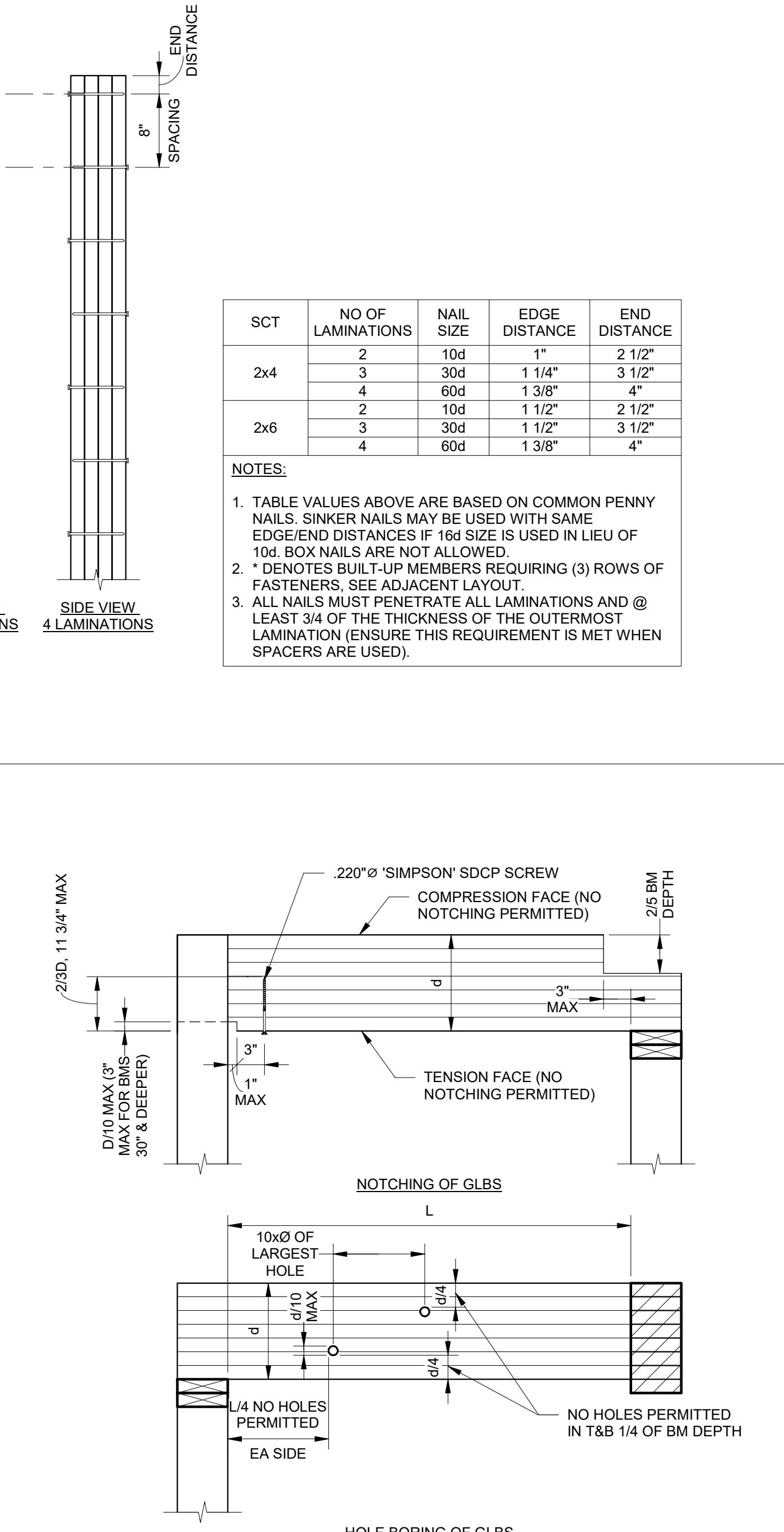
3 TYPICAL BUILT-UP STUD PACK FASTENING
NTS



5 TYPICAL TOP PLATE SPLICE
NTS

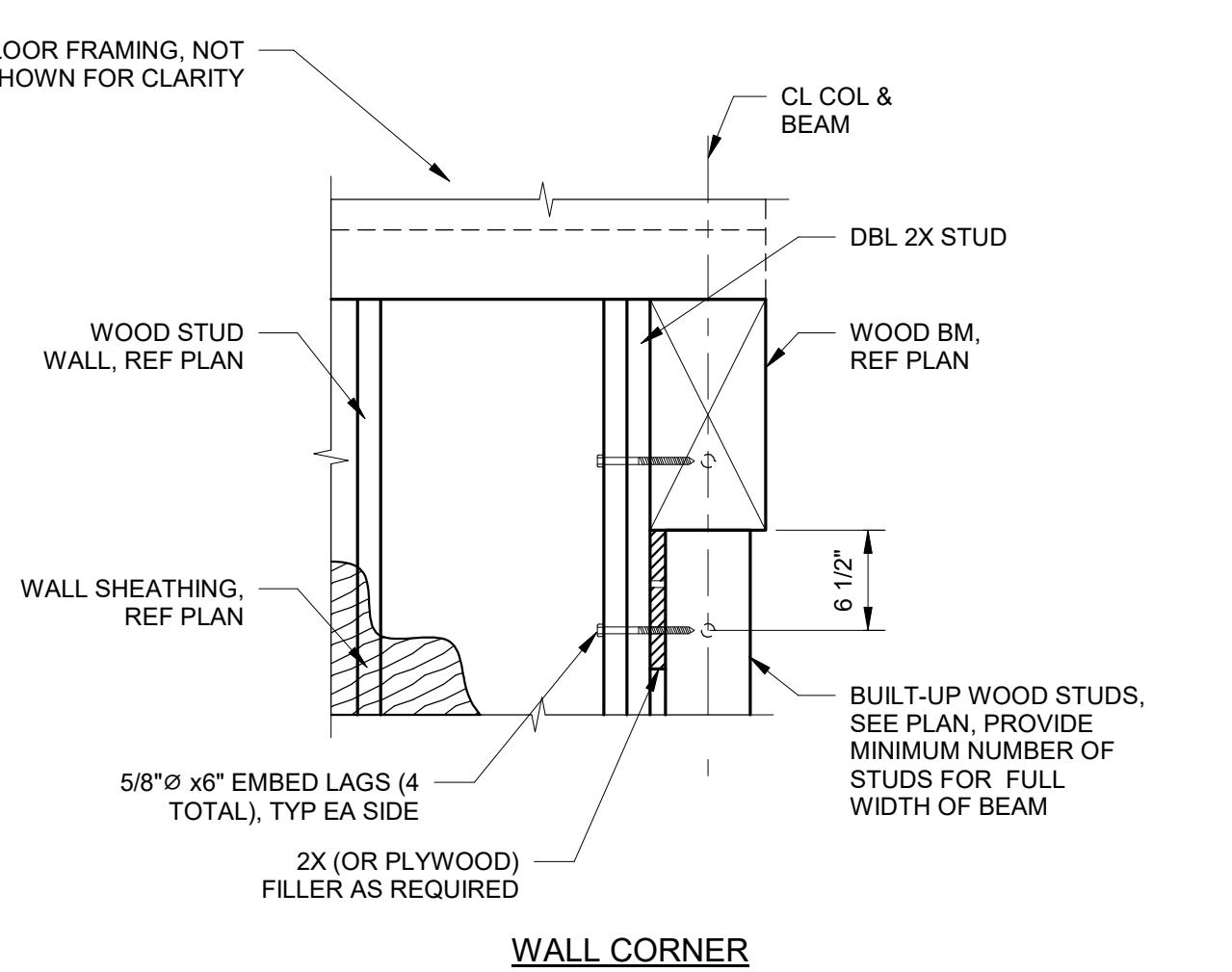


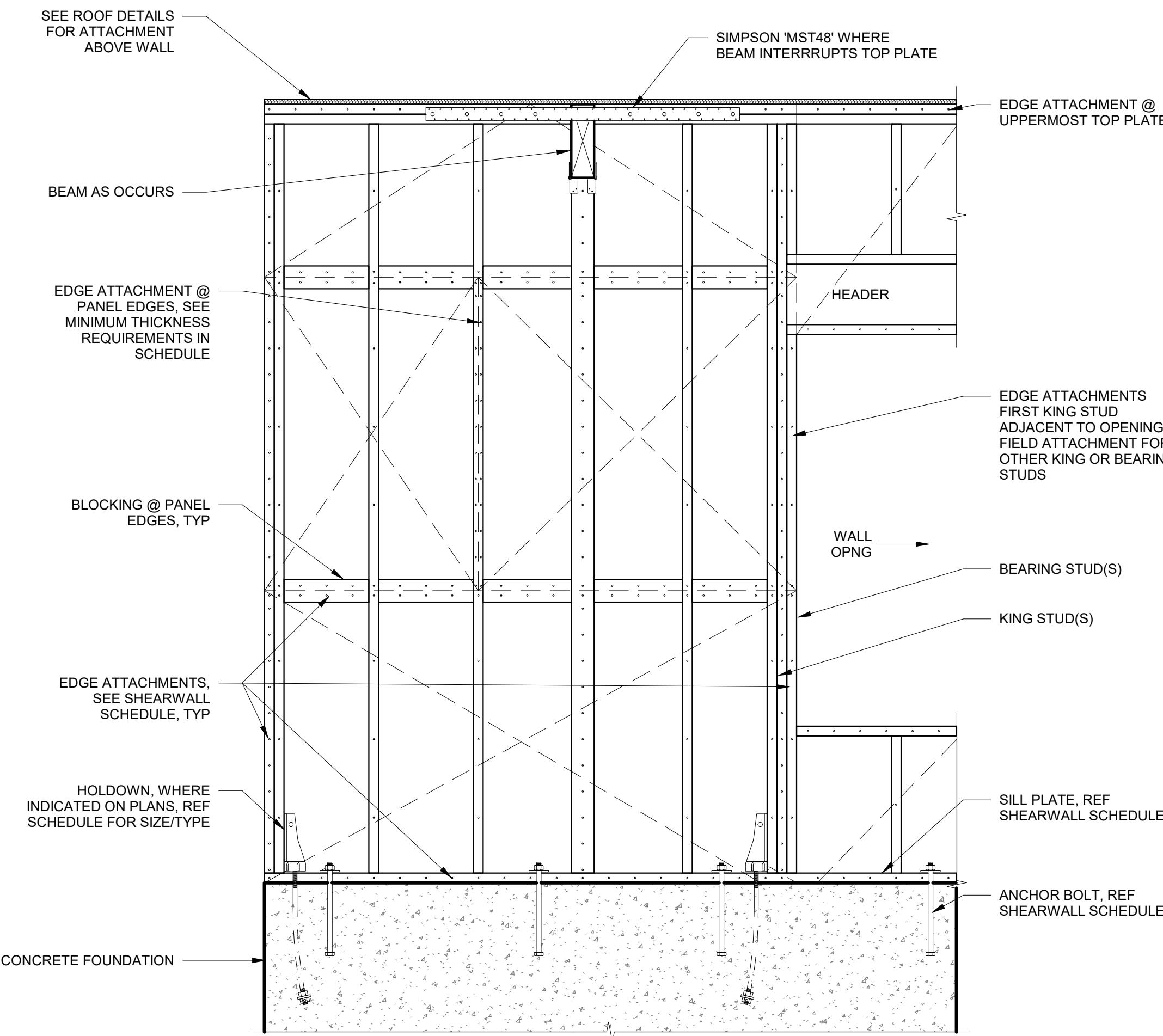
6 ALLOWABLE PENETRATIONS IN GLBS
NTS



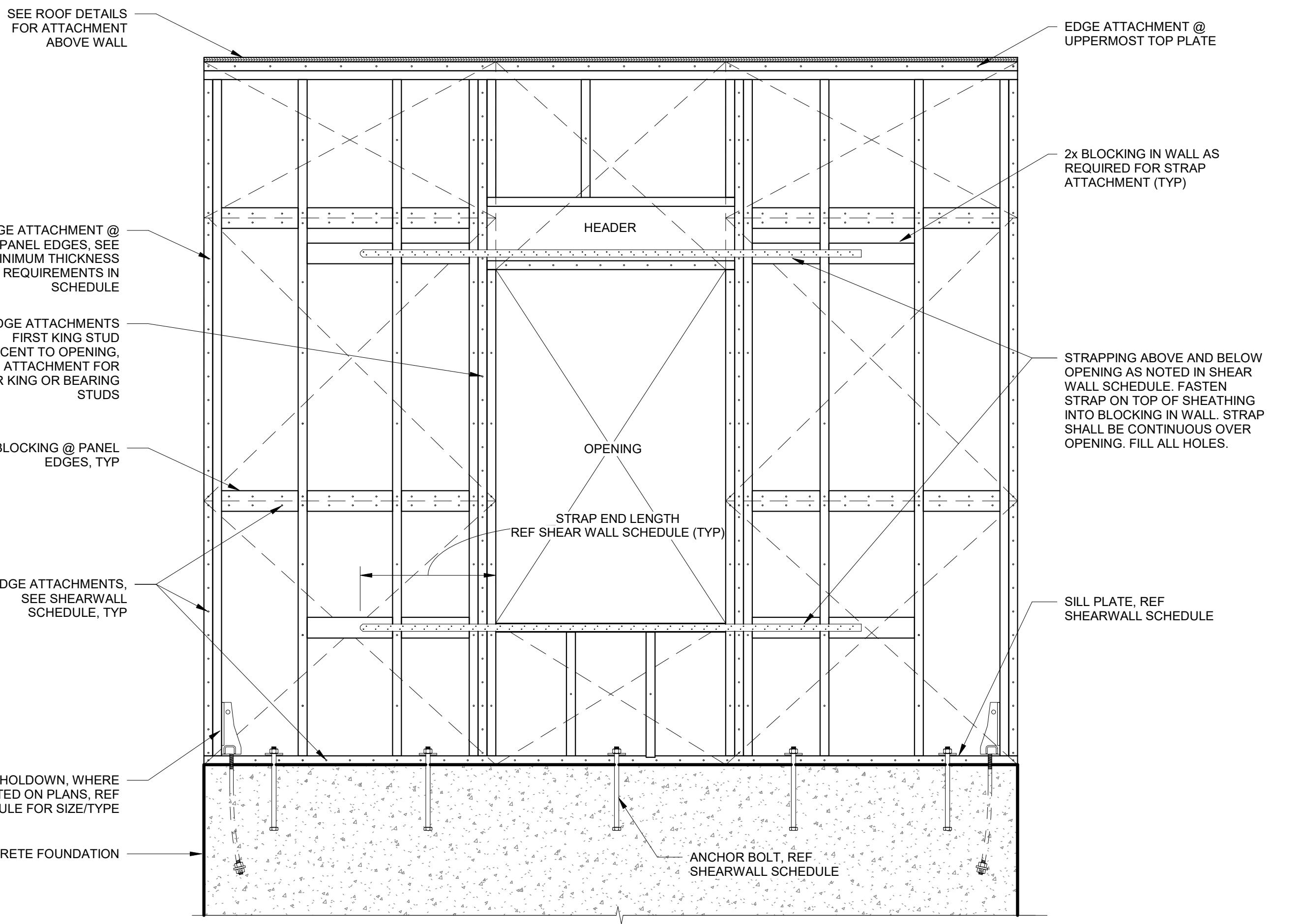
7 WOOD HEADER DETAIL
NTS

8 BEAM TO STUD WALL CONNECTION
NTS

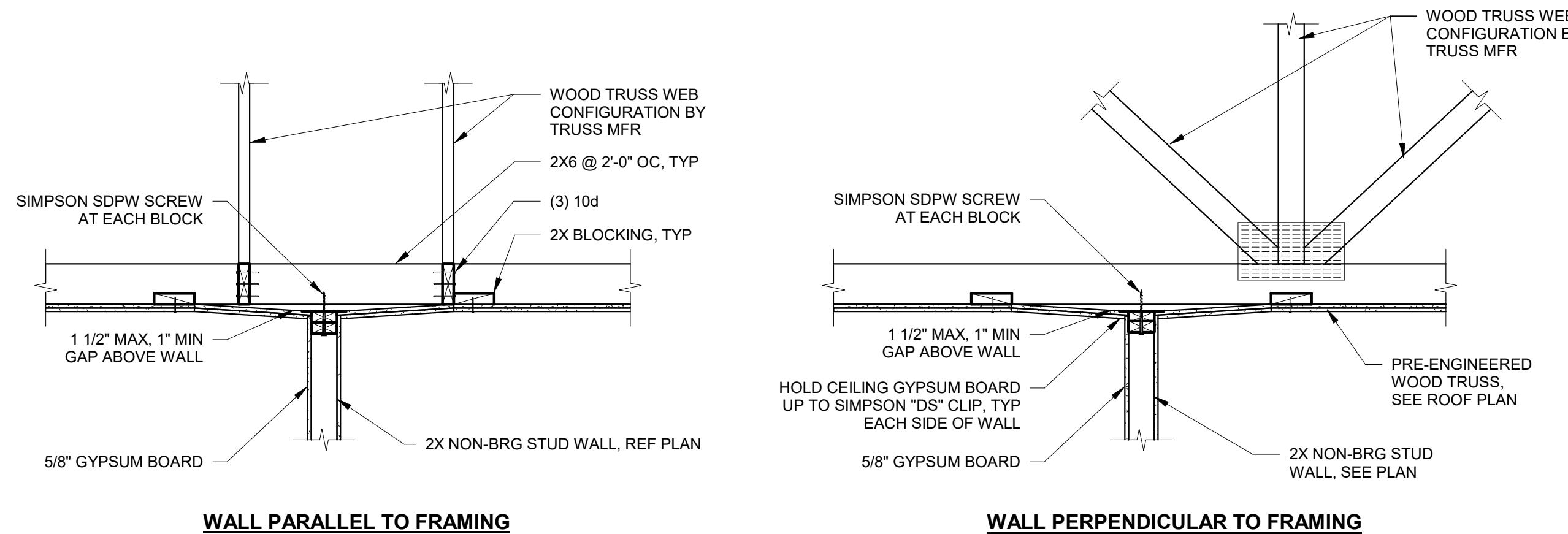




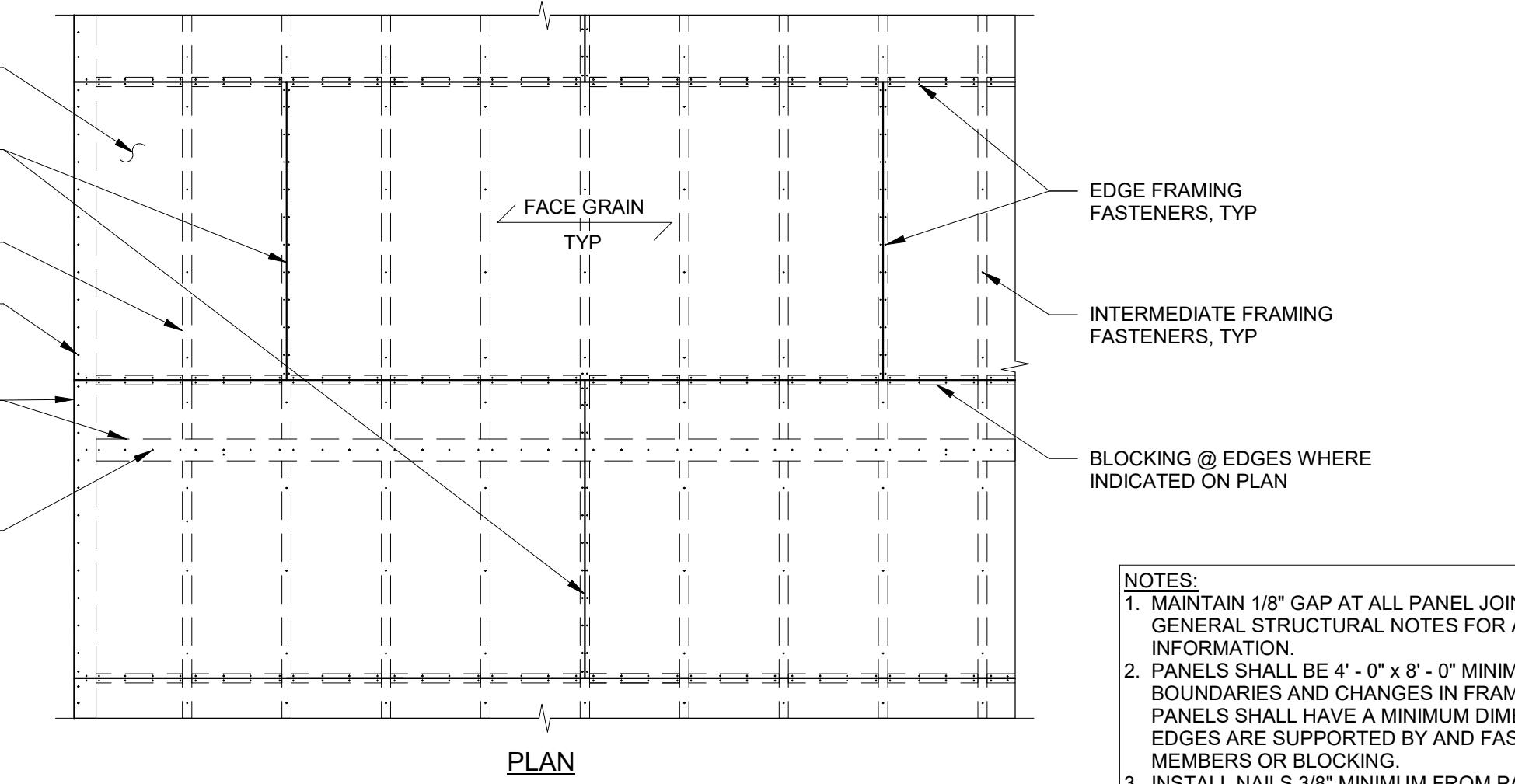
WOOD SHEATHED SHEARWALL - SINGLE STORY



2 WOOD SHEATHED SHEARWALL - WITH STRAPPING



DOWLING
3 NTS NON-BRG ROOF FRAMING DETAIL



4 PLYWOOD DIAPHRAGM PANEL EDGES

* MONTANA
 BRADLEY VASSAU
 MC 31516 PE
 LICENSED PROFESSIONAL ENGINEER
 1055 Mount Ave.
 Missoula, MT 59801
 406.542.3880
 www.m-m.net

HELENA FIRESTATION #3

HELENA, MT. 59602

SHIVEH-ATTERTY
ARCHITECTS

ARCHITECTURE + ENGINEERING

TYPICAL
WOOD
DETAILS

PROJECT #:
25-668

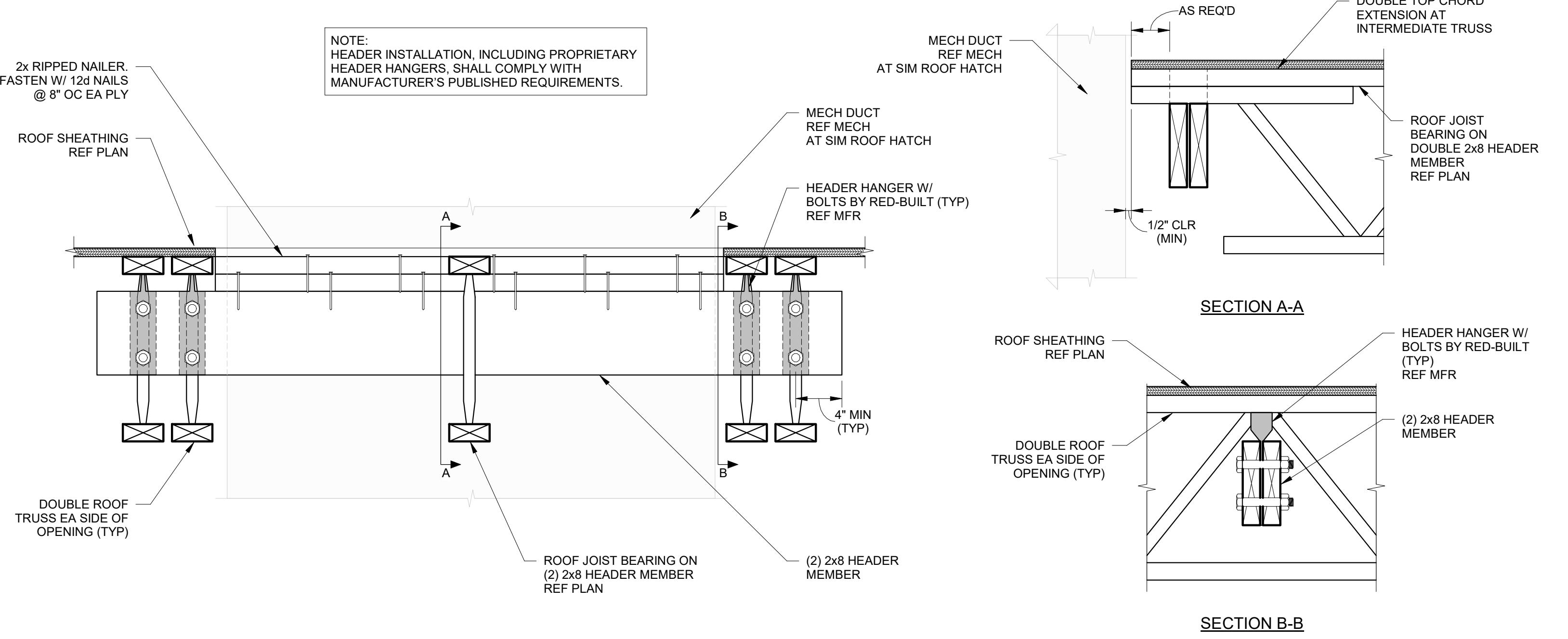
ISSUE DATES:

DRAWN BY: MM

S7-3

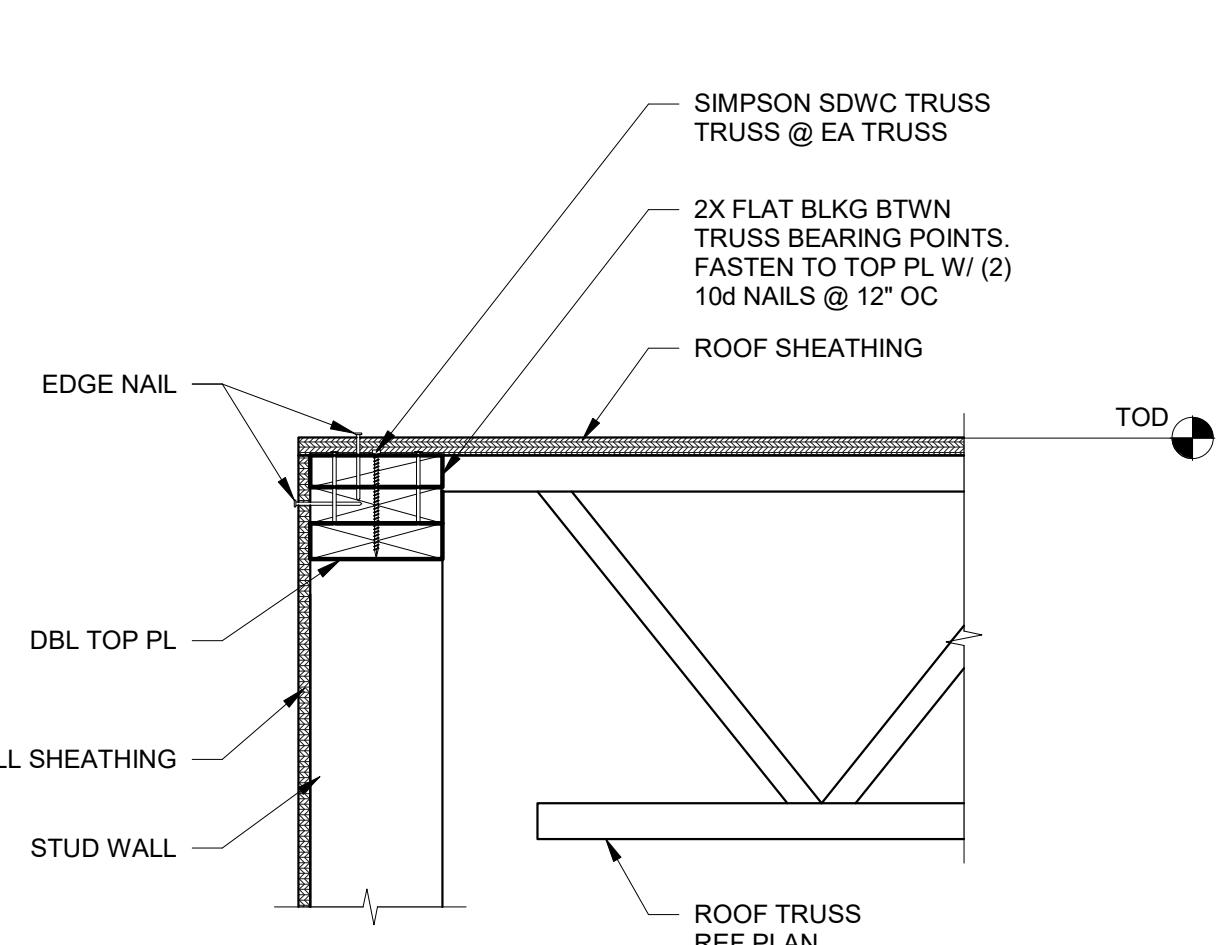
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100% CONSTRUCTION DOCUMENTS

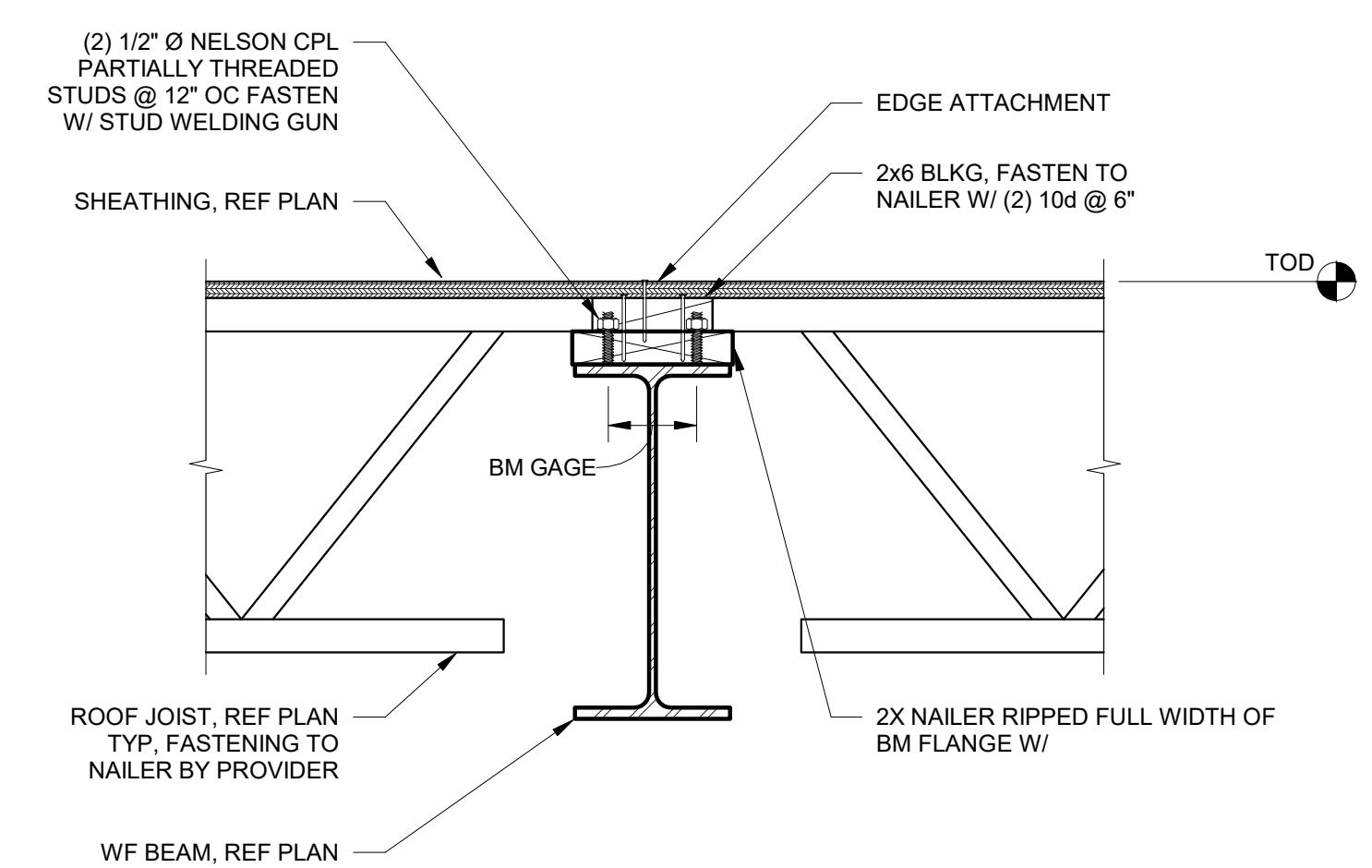
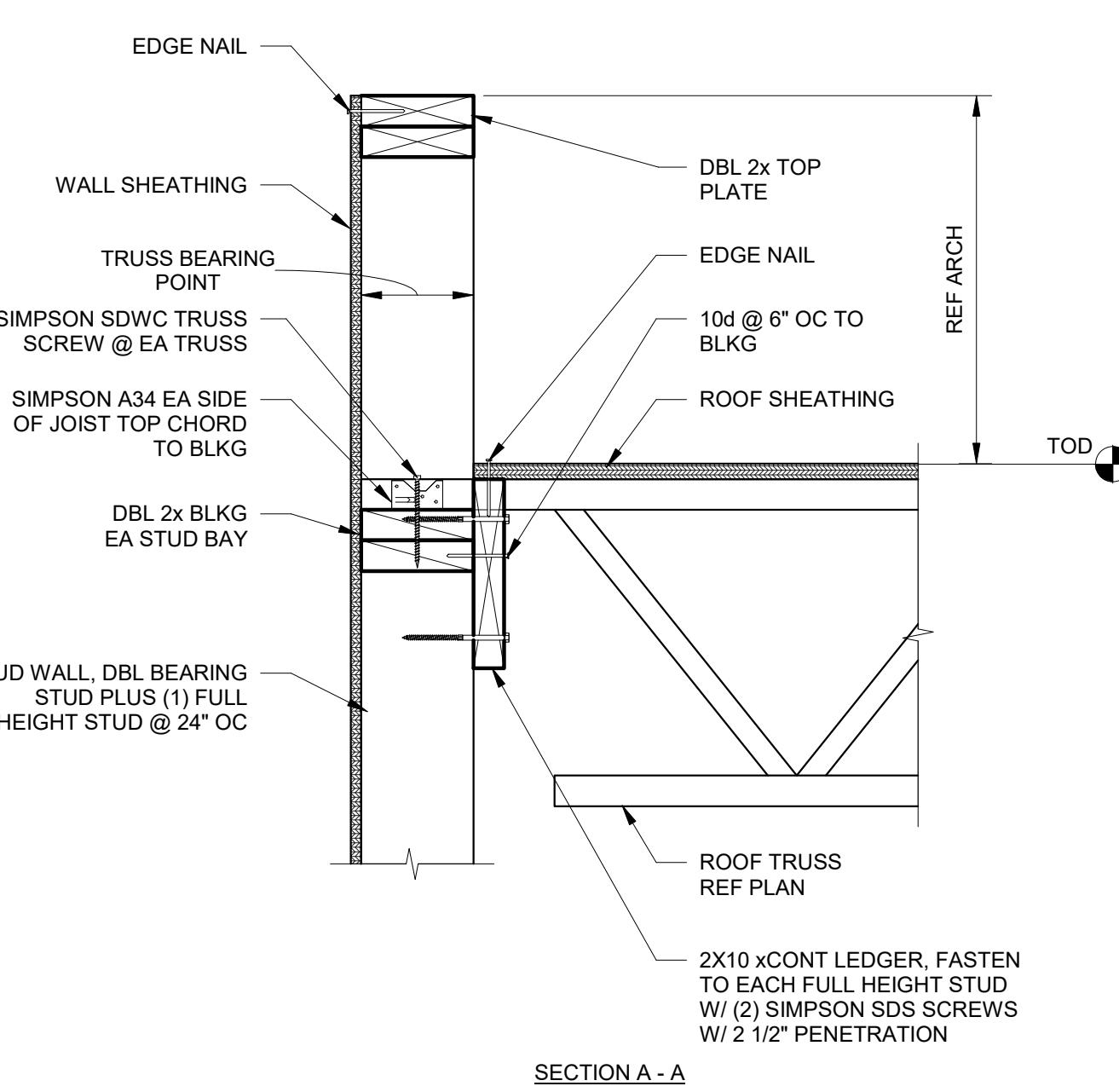
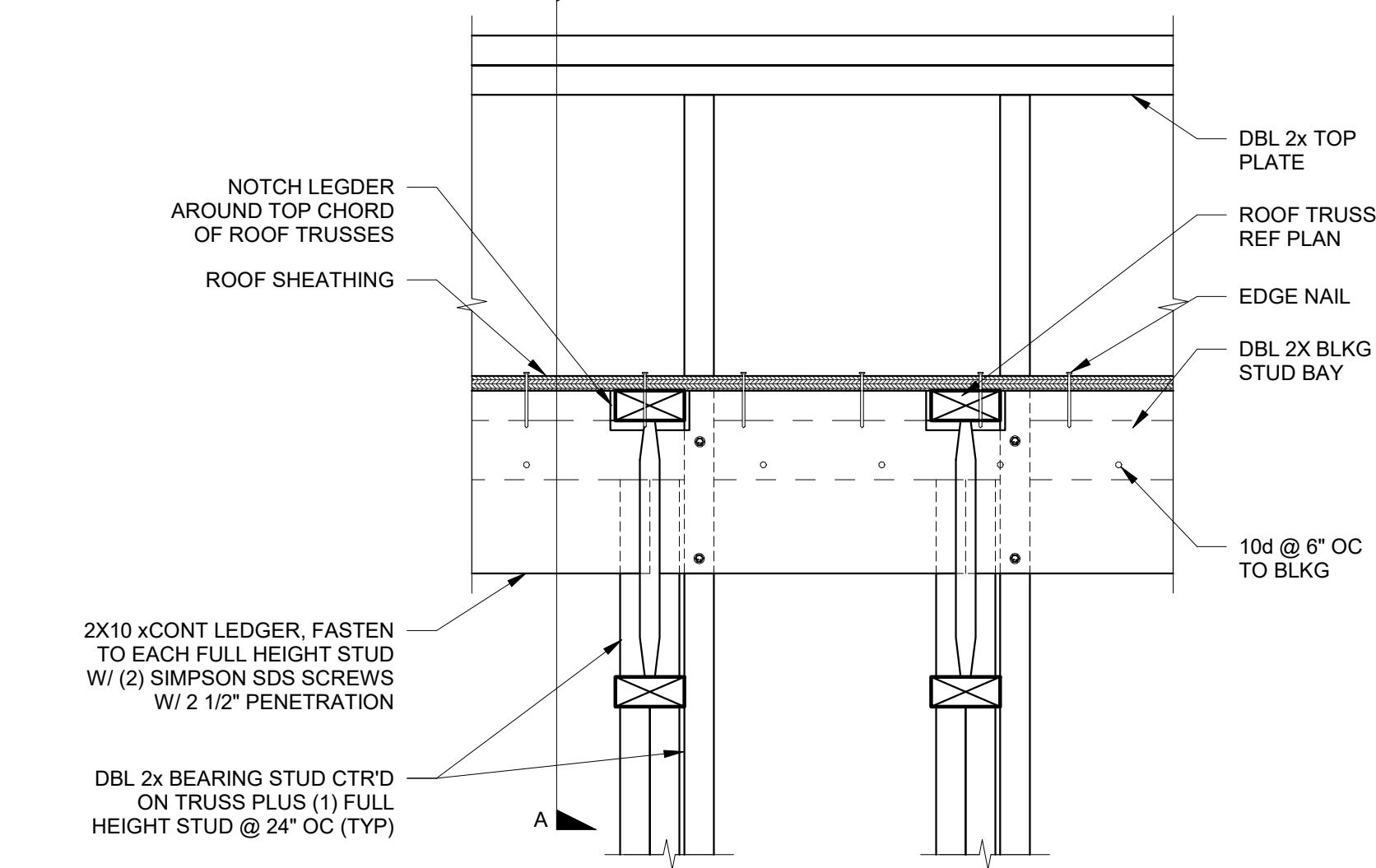


1 TYPICAL ROOF BLOCKOUT DETAIL - TRUSSES
NTS

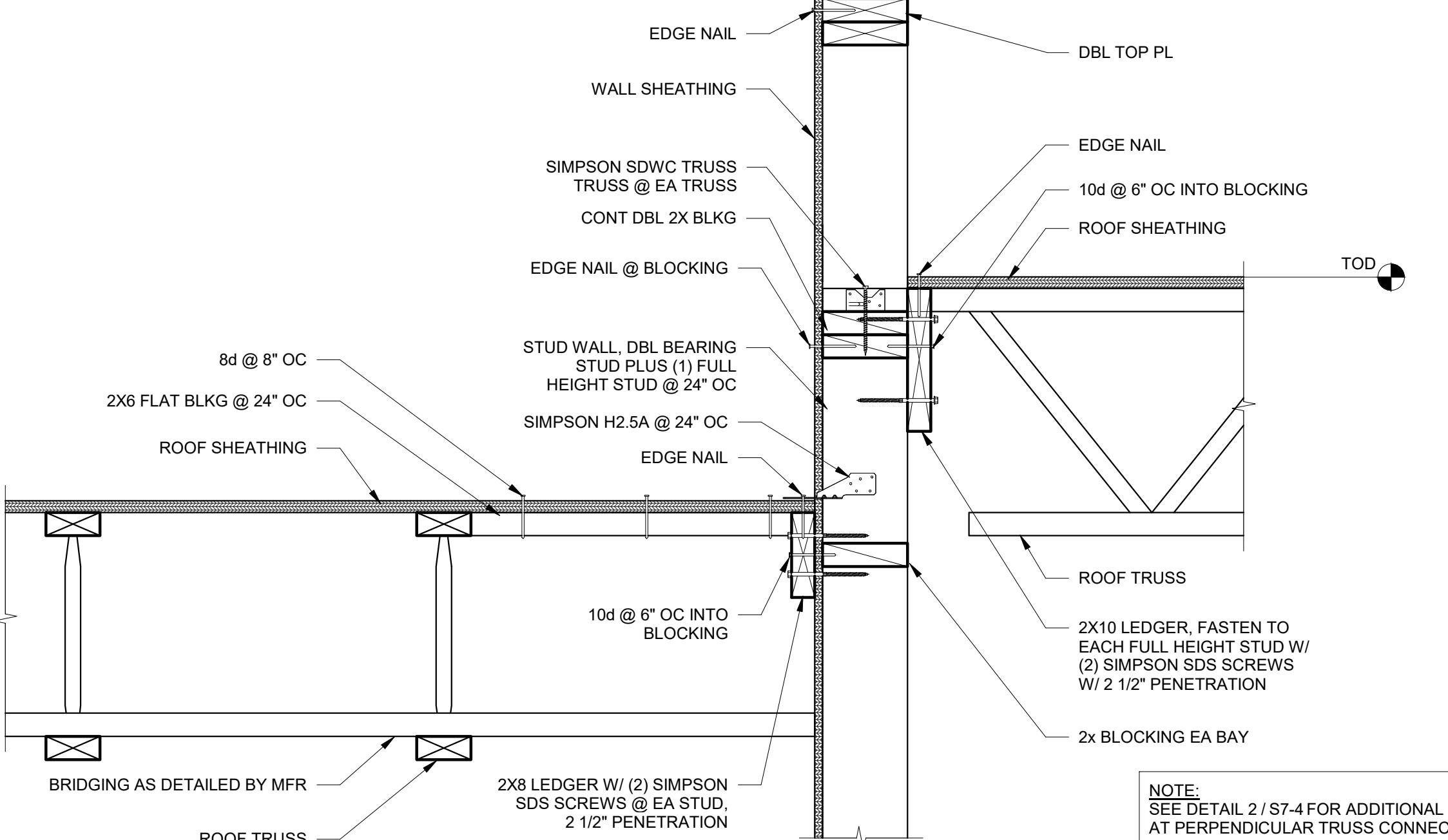
1 RED BUILT TRUSSES @ EXTERIOR WALL
NTS



2 RED BUILT TRUSSES @ EXTERIOR WALL - NO OVERHANG
NTS

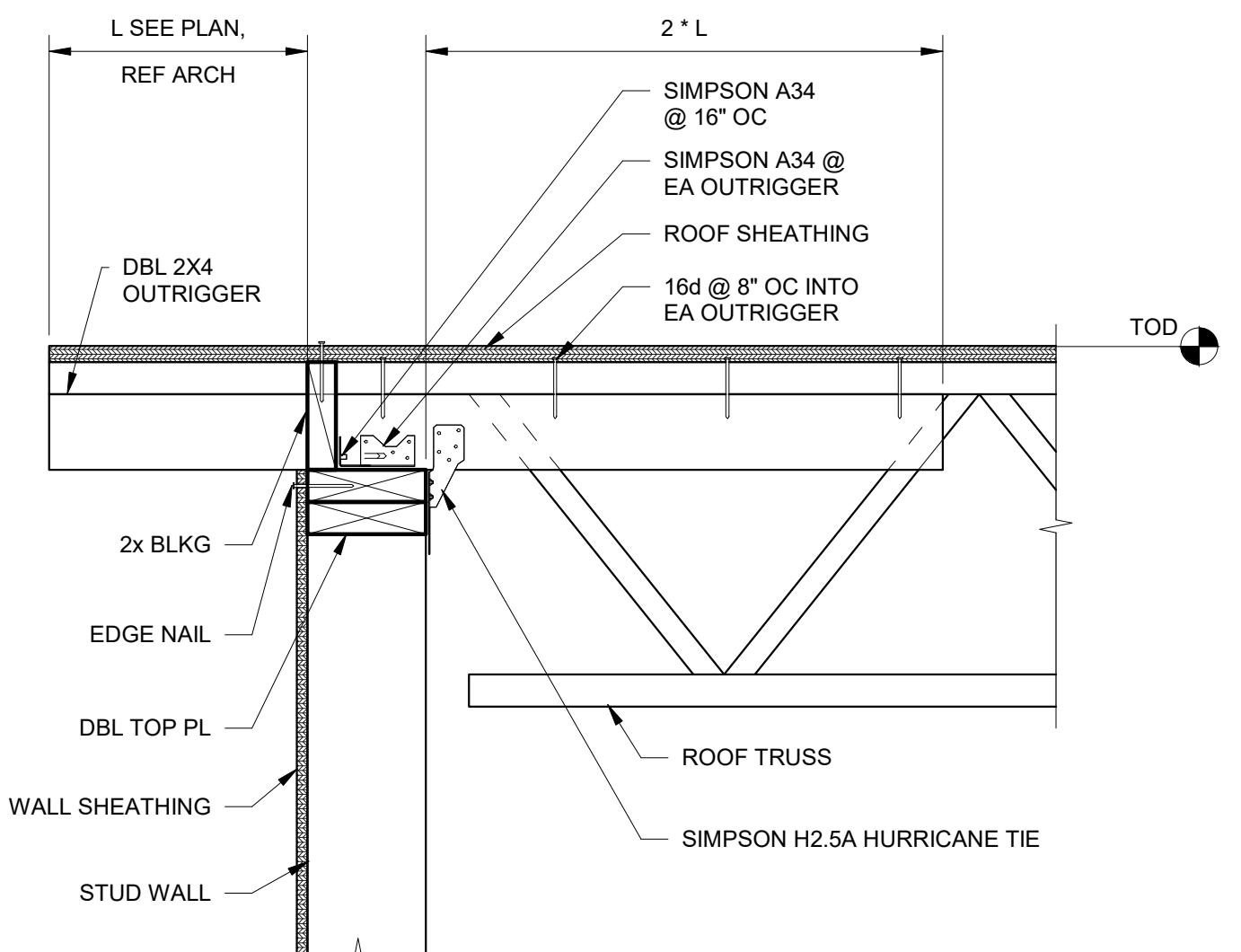
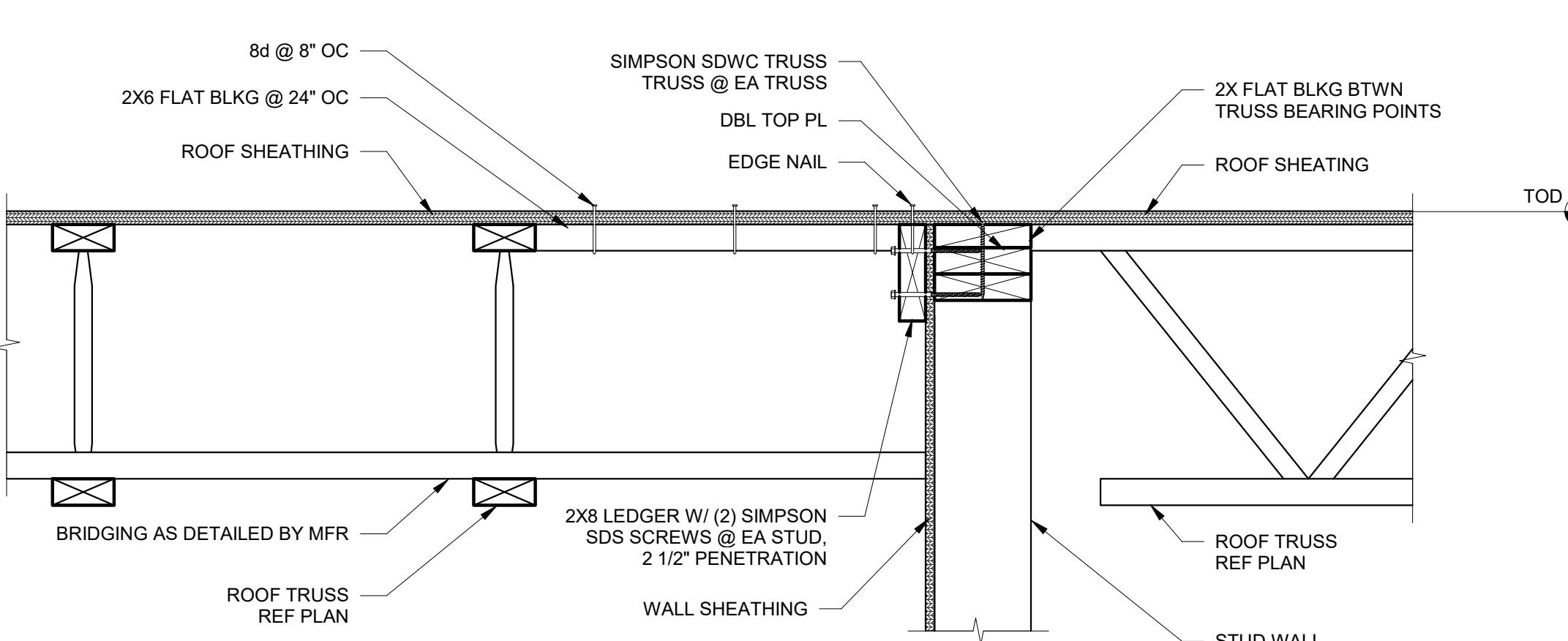
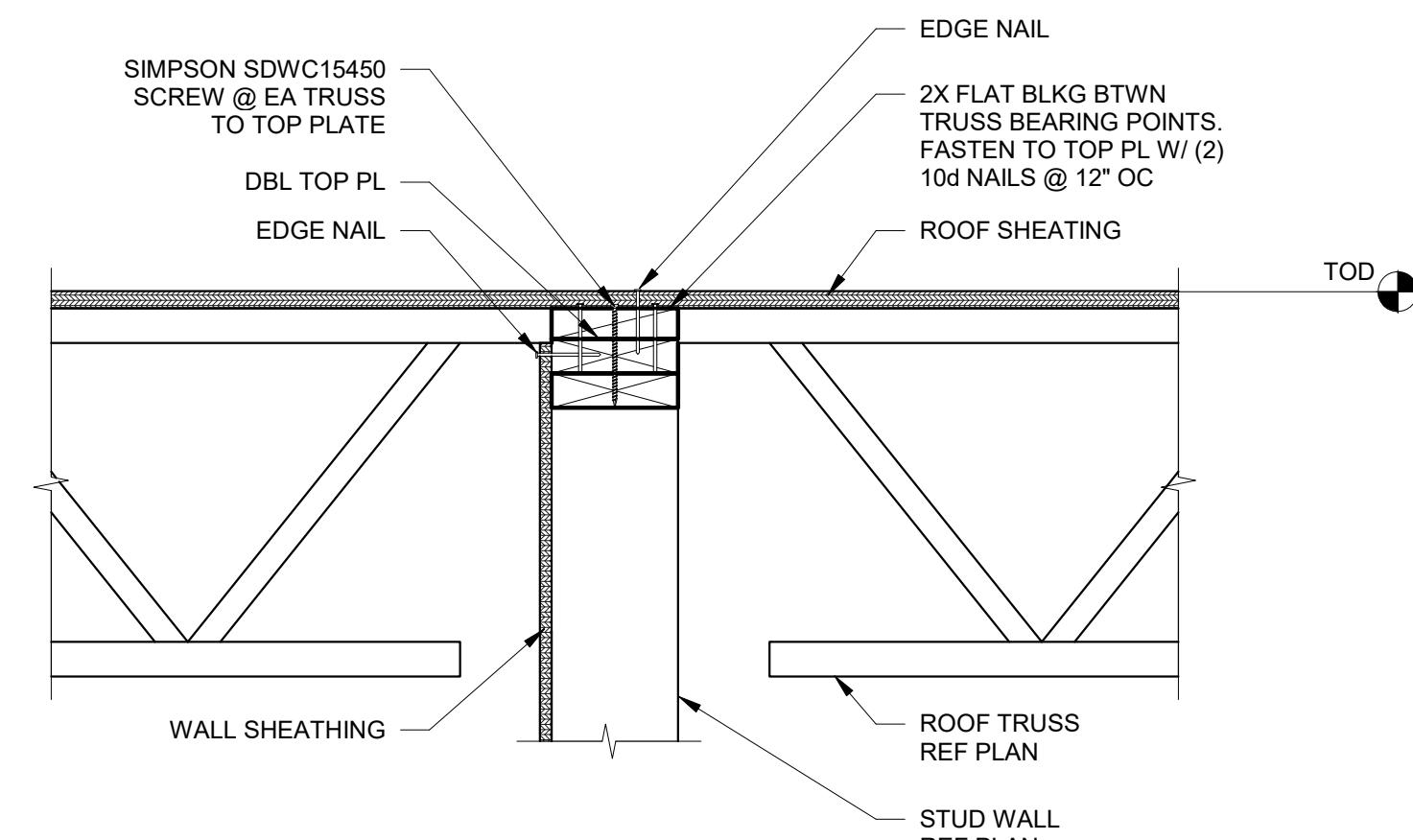


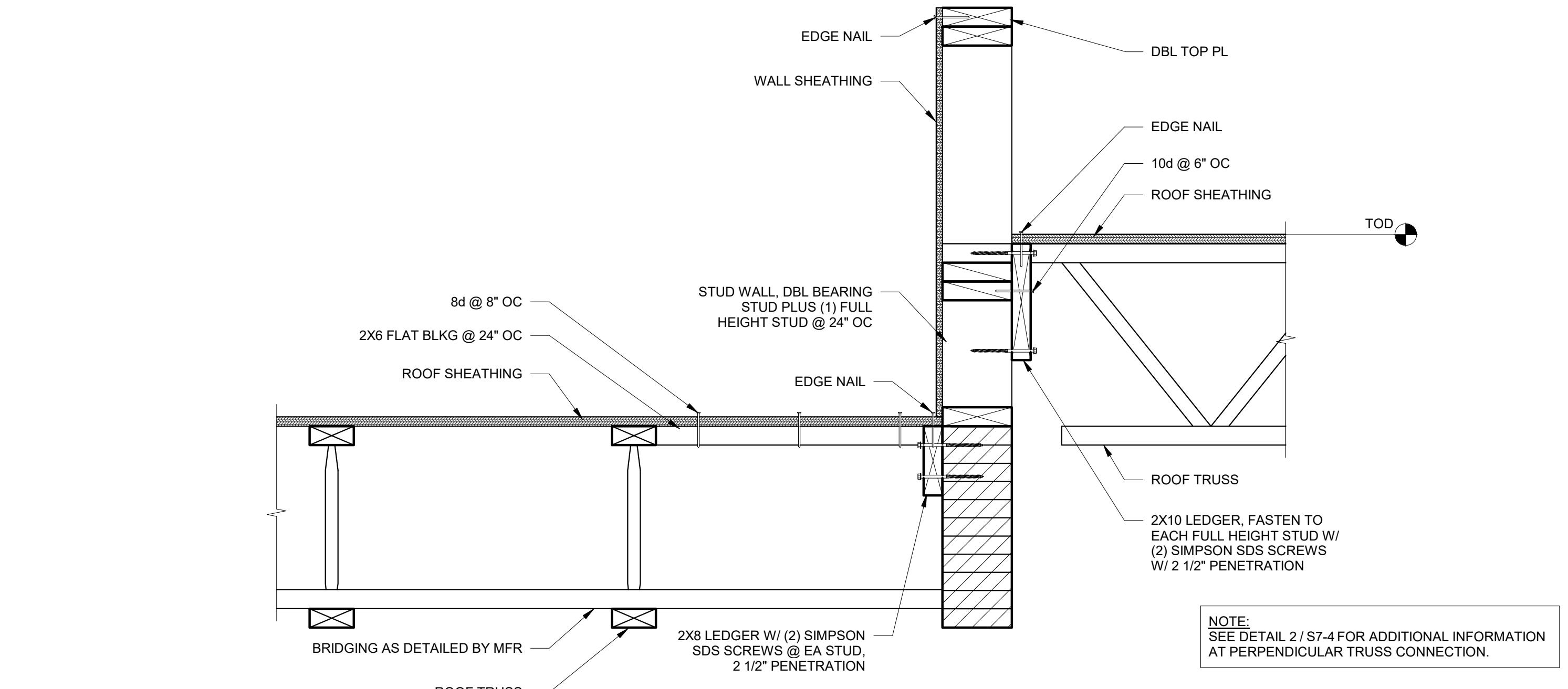
3 WF BEAM AT RED BUILT TRUSSES
NTS



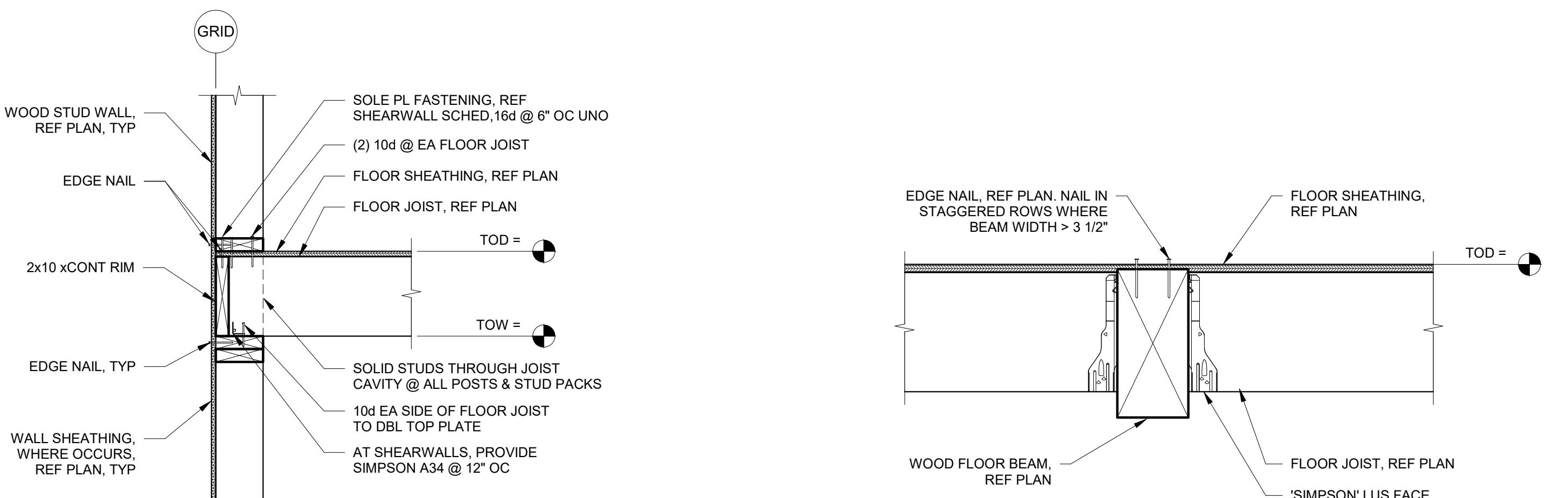
NOTE:
SEE DETAIL 2 / S7-4 FOR ADDITIONAL INFORMATION
AT PERPENDICULAR TRUSS CONNECTION.

RED BUILT TRUSSES @ EXTERIOR WALL WITH INSET STEEL BEAM
NTS

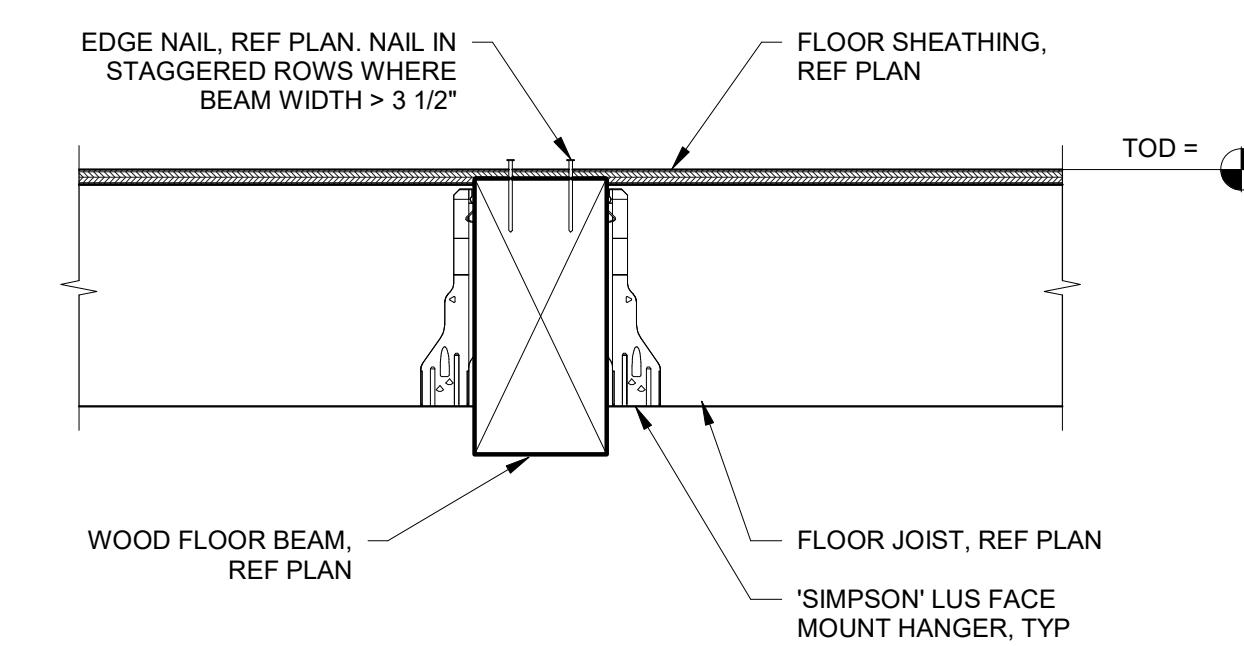




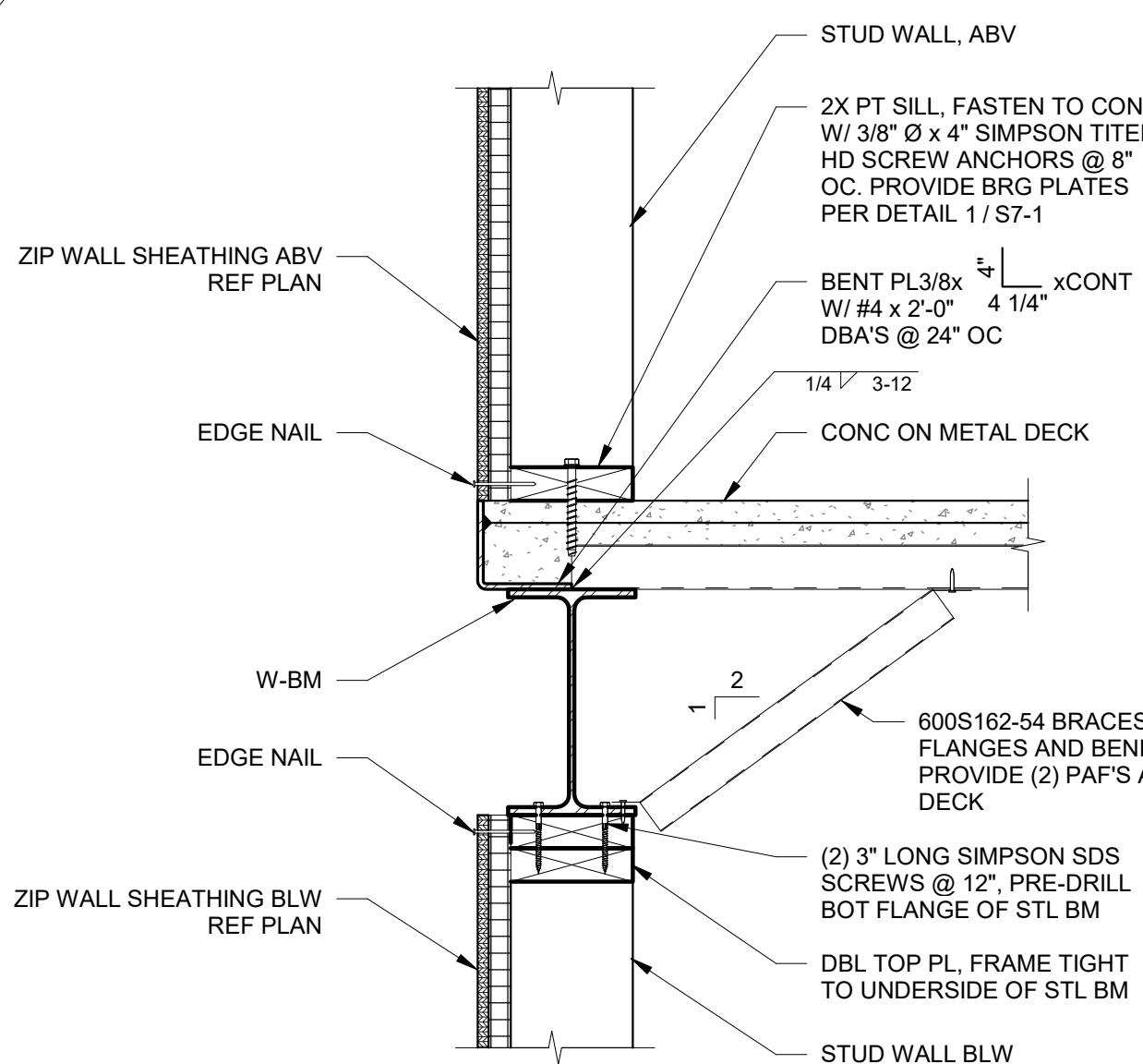
1 RED BUILT TRUSSES @ INTERIOR GLULAM BEAM
NTS



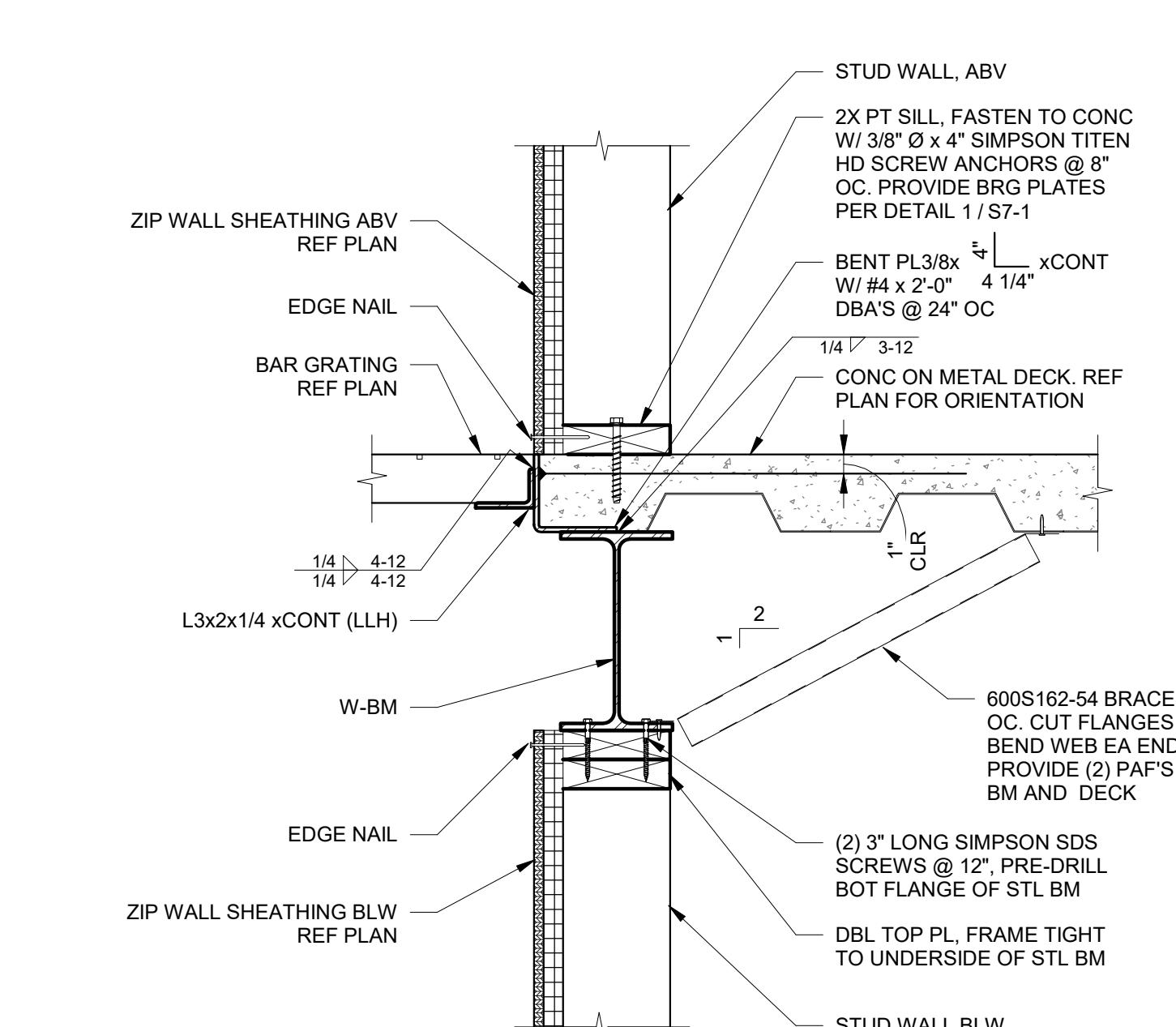
2 PERP FLOOR JOISTS @ EXT WOOD WALL
NTS



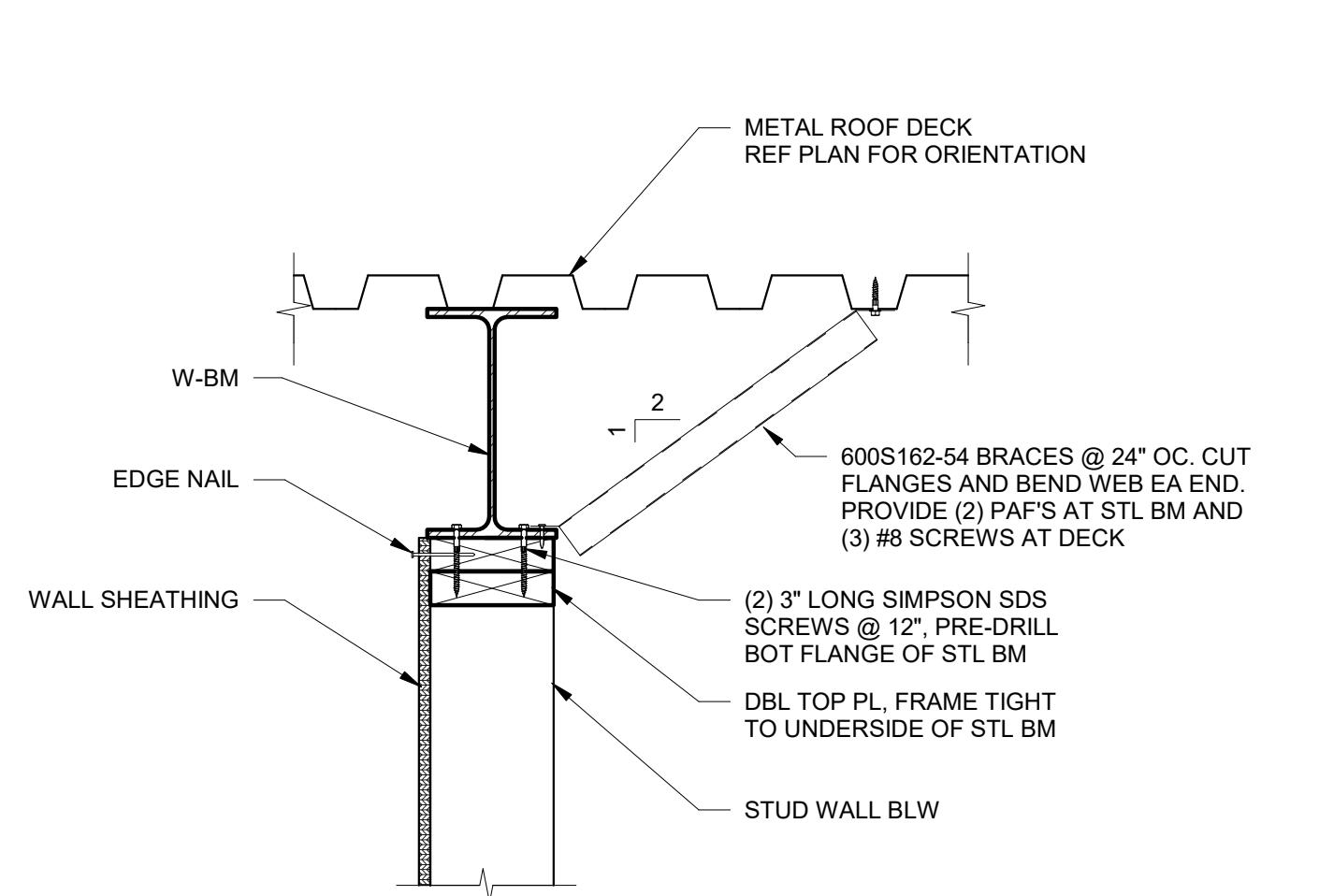
3 FLUSH FRAMED WOOD FLOOR BEAM
NTS



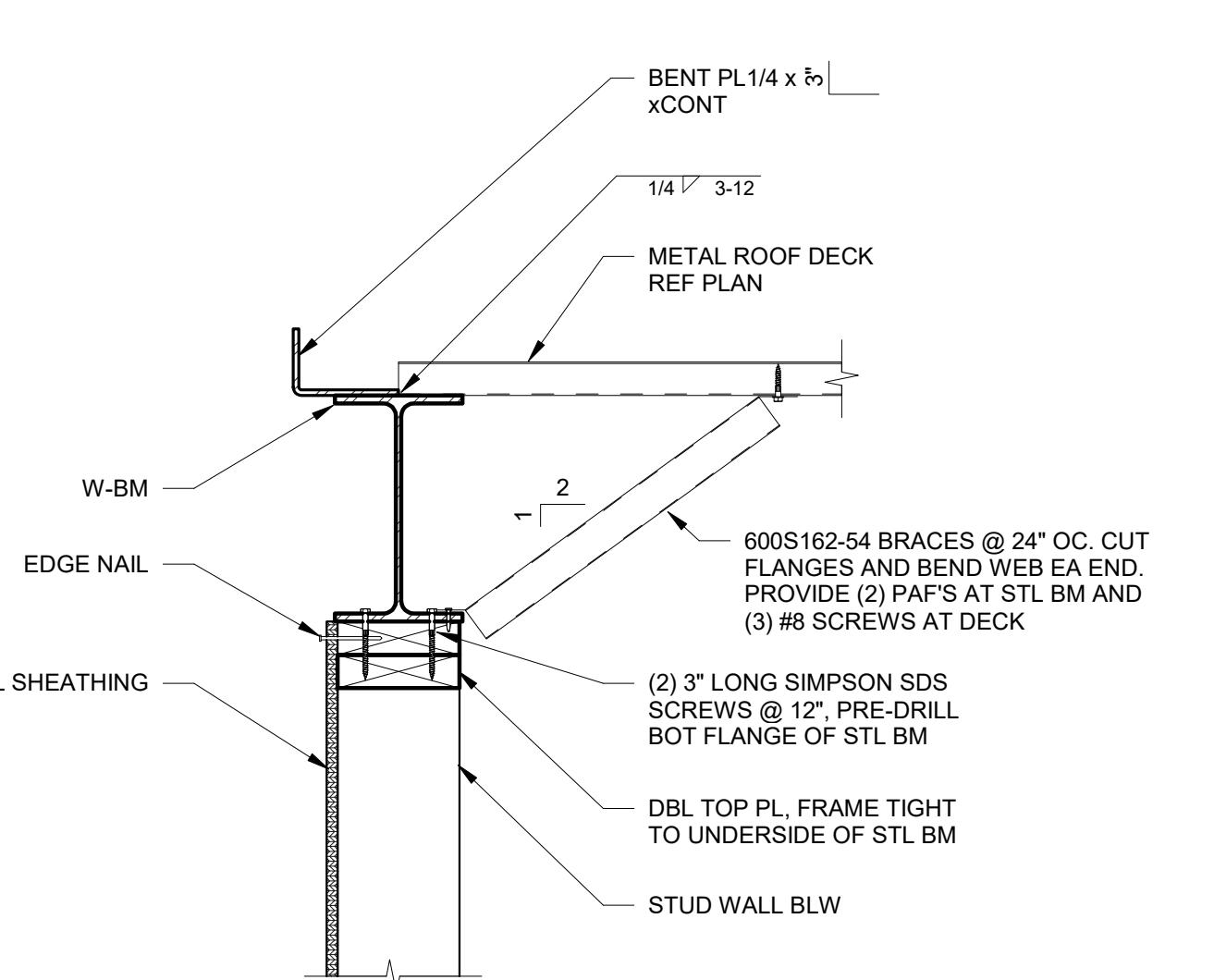
4 WOOD WALL FRAMING AT STEEL BEAM
NTS



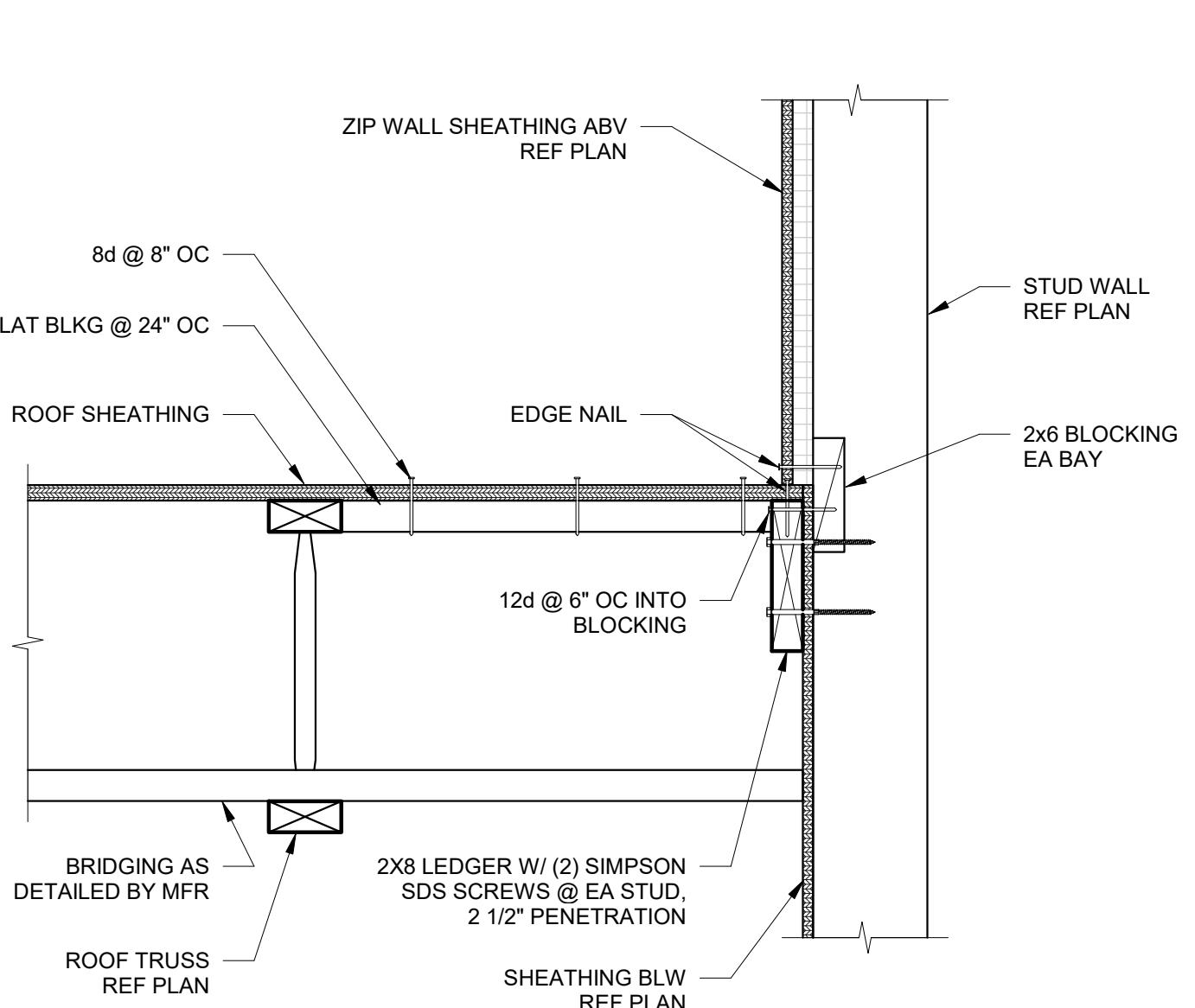
5 WOOD WALL FRAMING AT STEEL BEAM
NTS



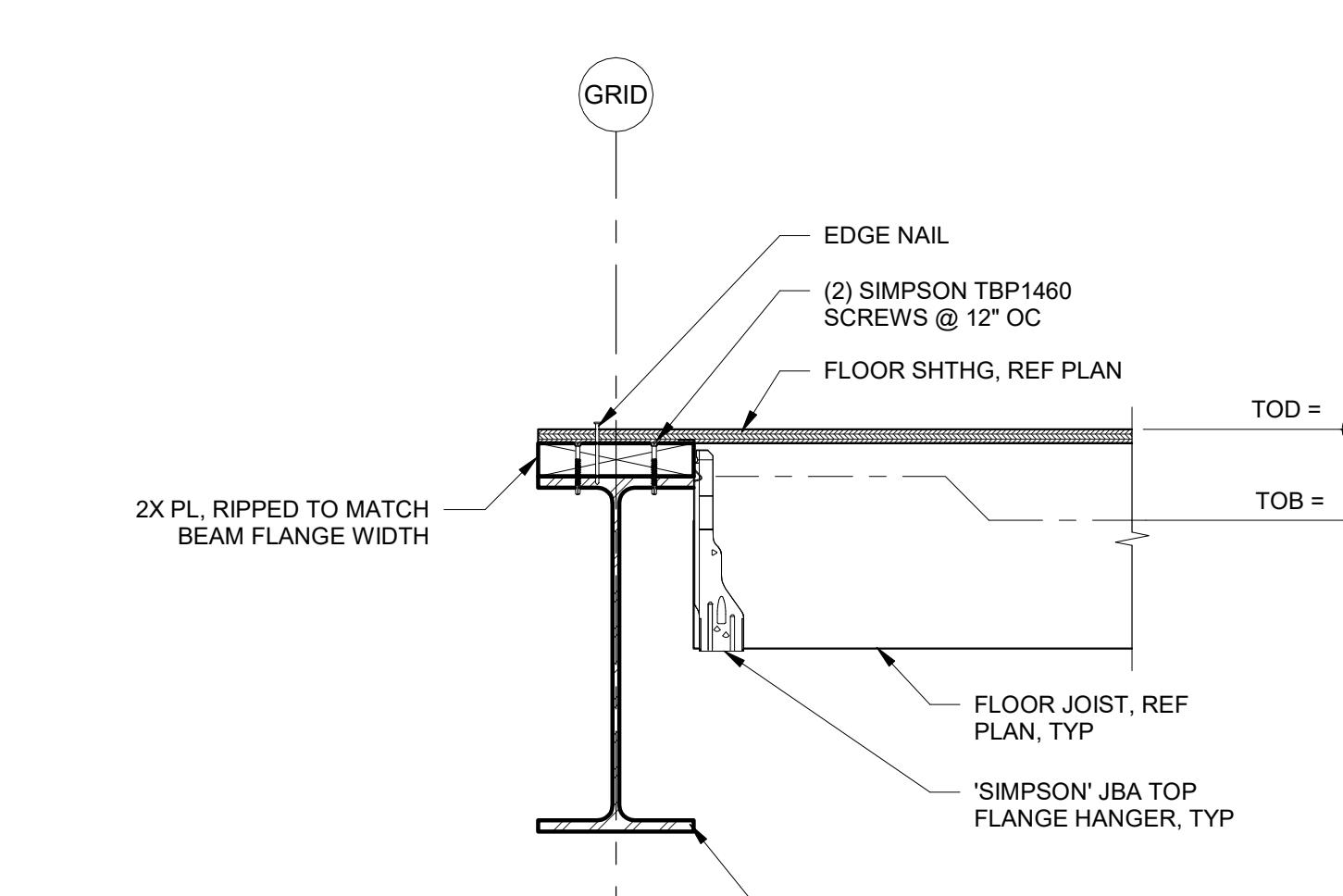
6 WOOD WALL FRAMING AT STEEL BEAM
NTS



7 WOOD WALL FRAMING AT STEEL BEAM
NTS

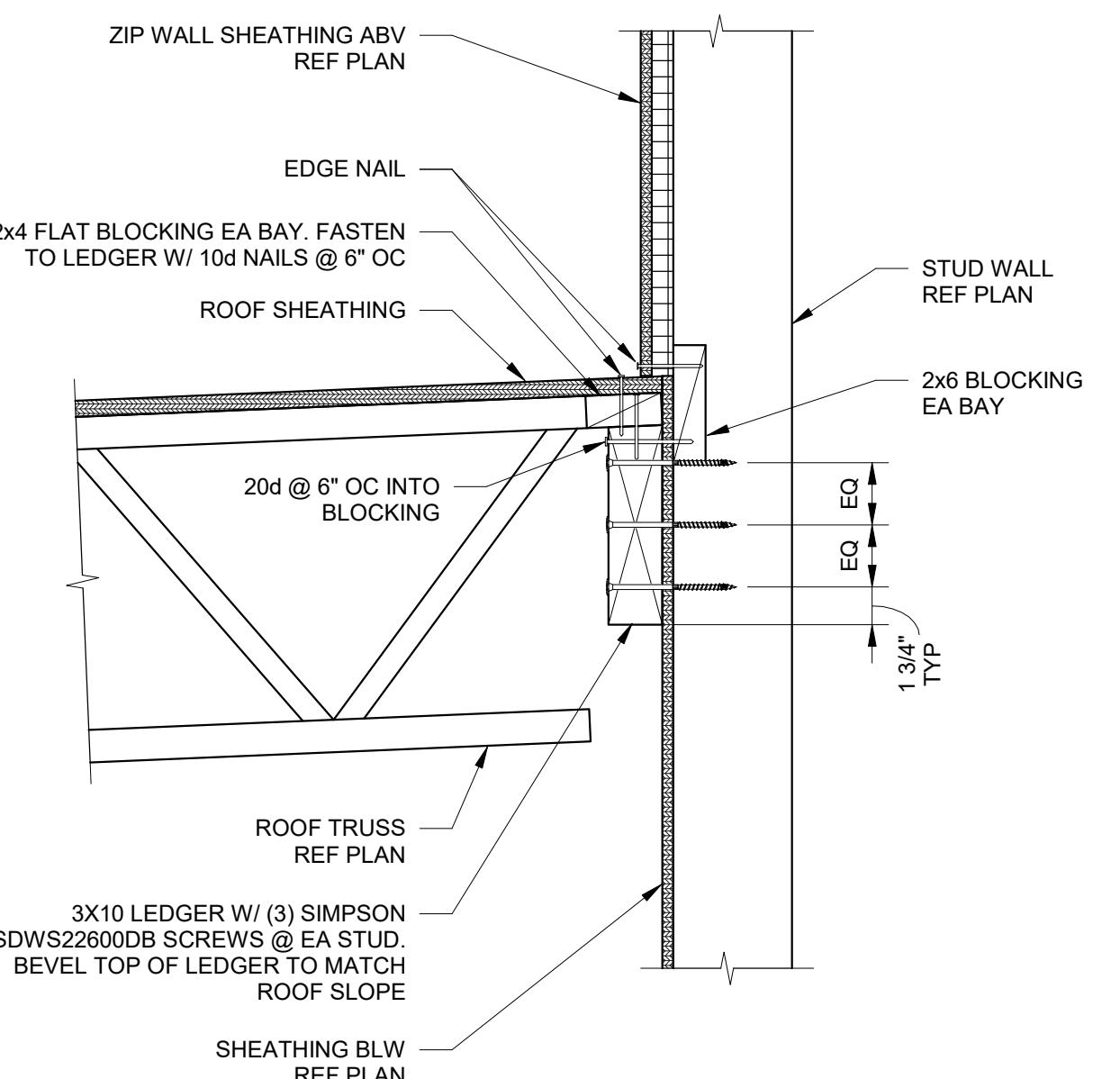


8 PATIO RAFTERS LEDGER
NTS

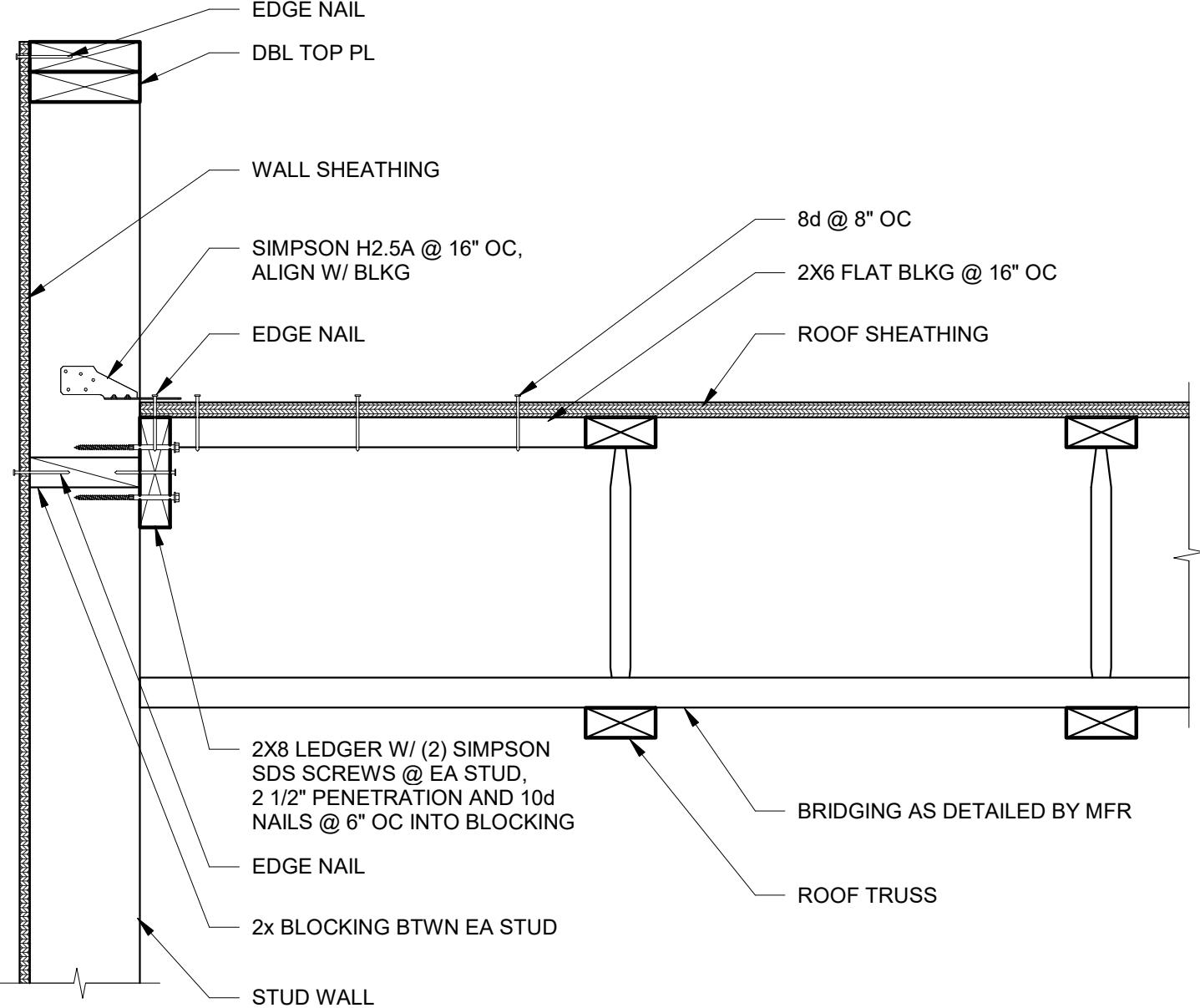


9 WOOD I-JOIST TO WF BEAM - FLUSH
NTS

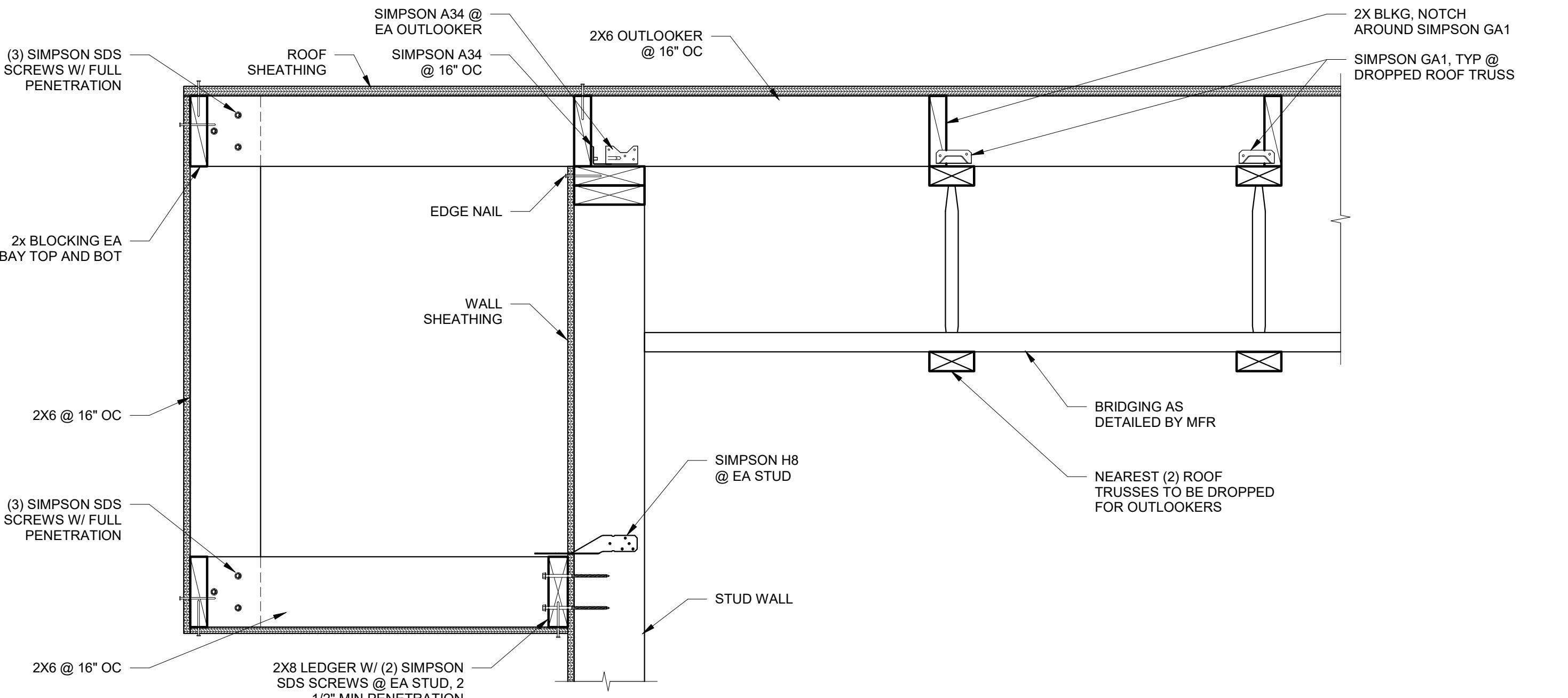
10 RED BUILT TRUSSES @ STUD WALL
NTS



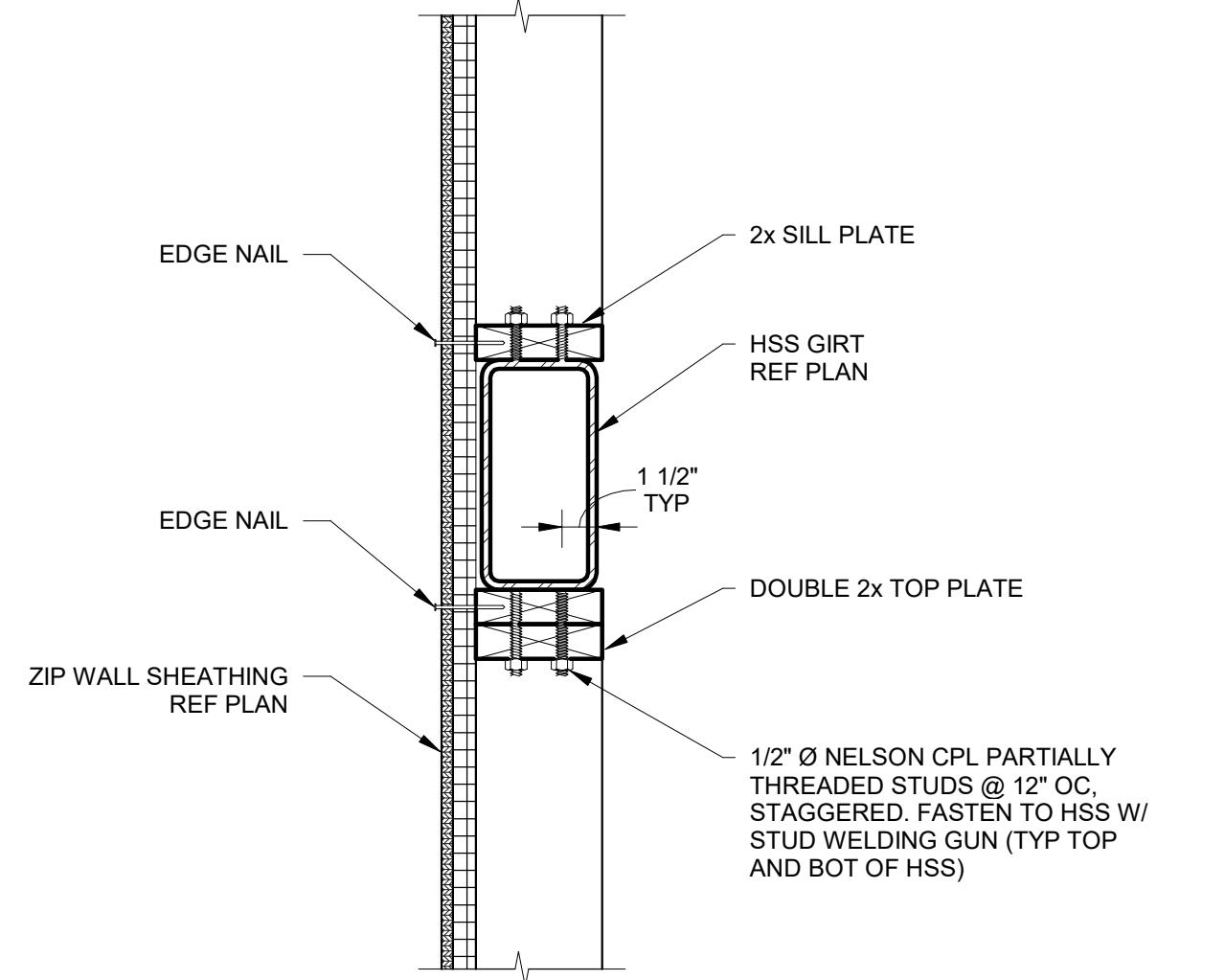
11 RED-BUILT TRUSSES AT WOOD WALL
NTS



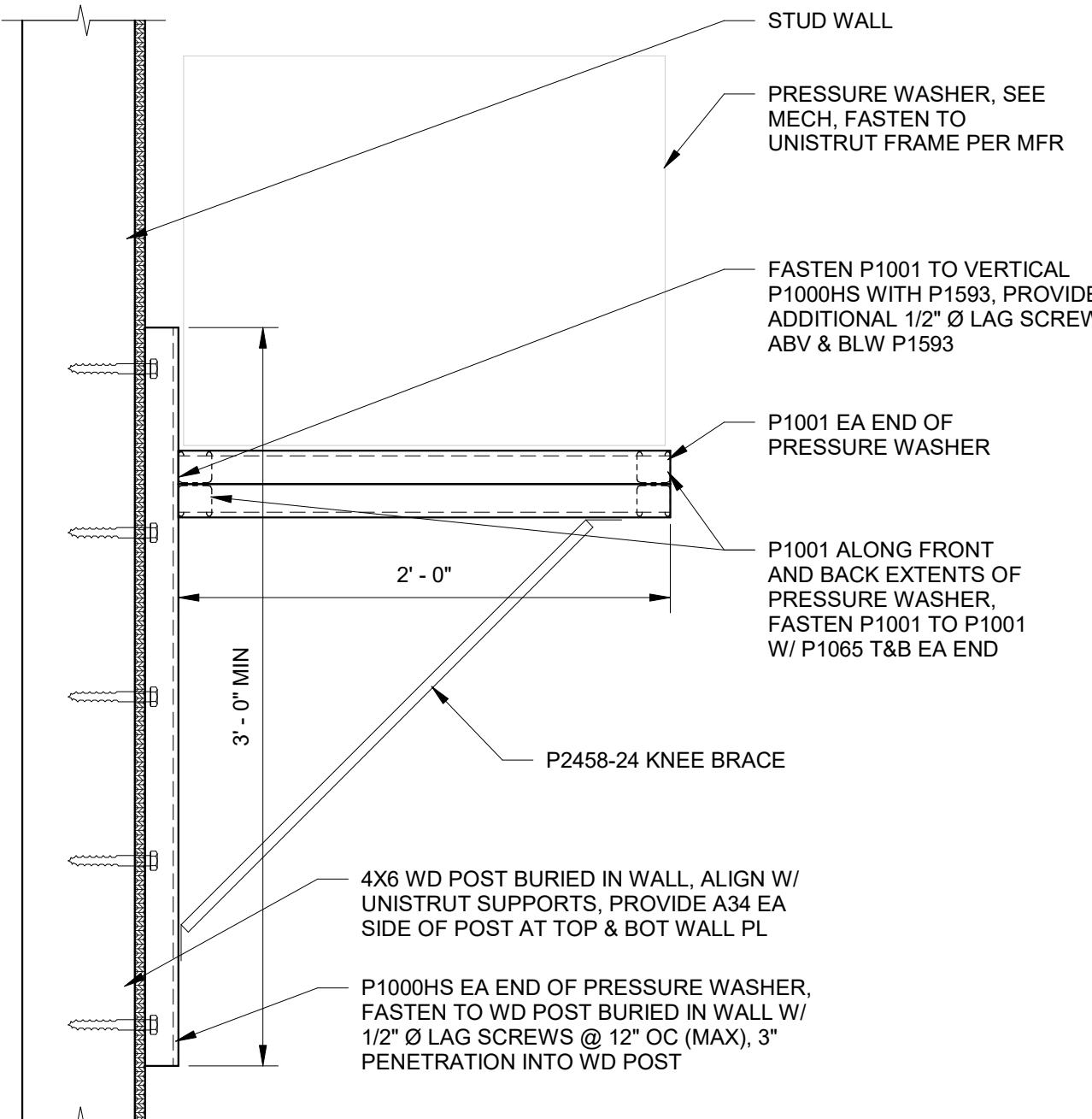
1 RED BUILT TRUSSES @ EXTERIOR WALL NTS



2 NTS RED BUILT TRUSSES @ EXTERIOR WALL WITH SOFFIT

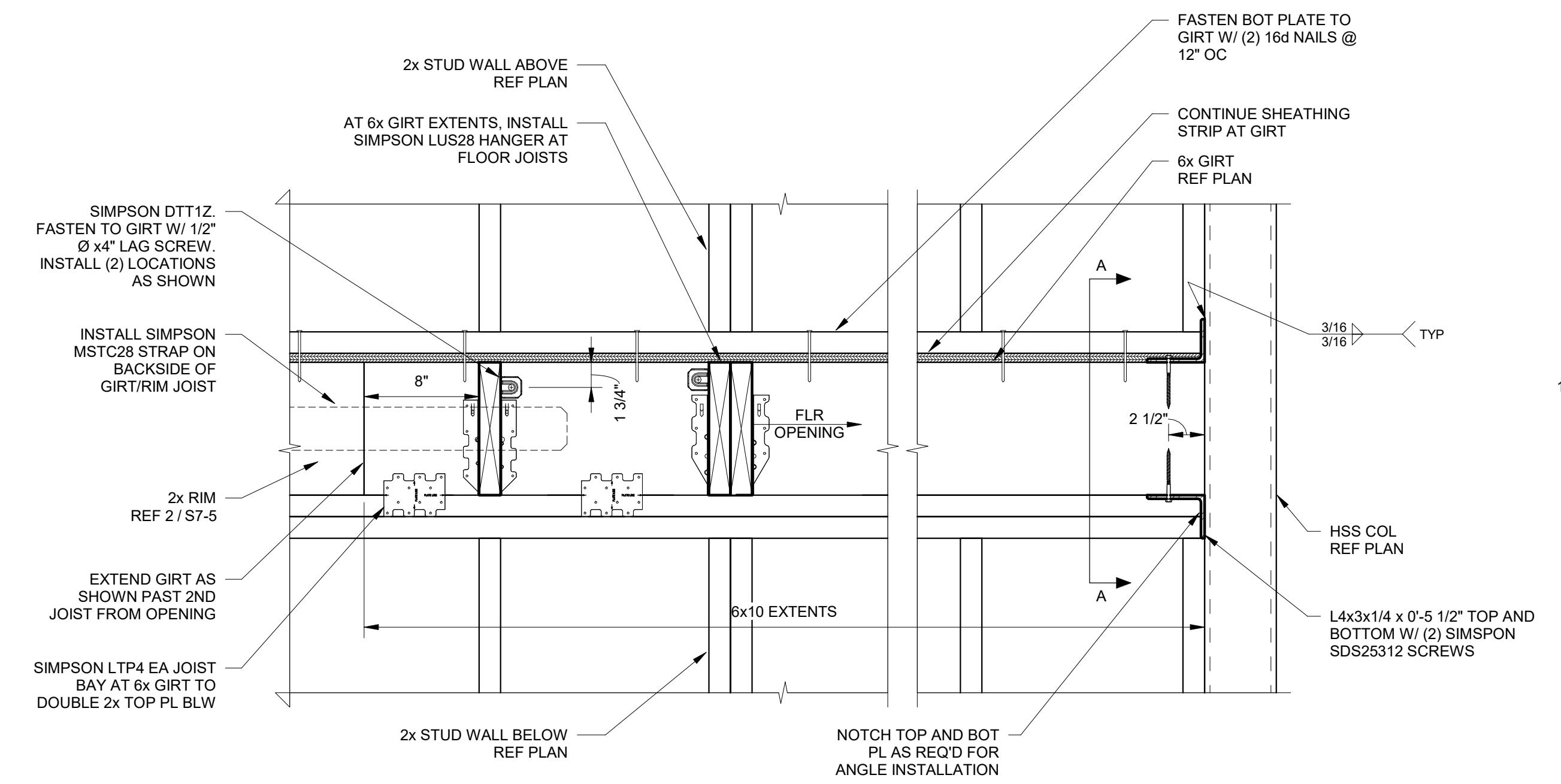


WOOD STUD WALL AT HSS GIRT

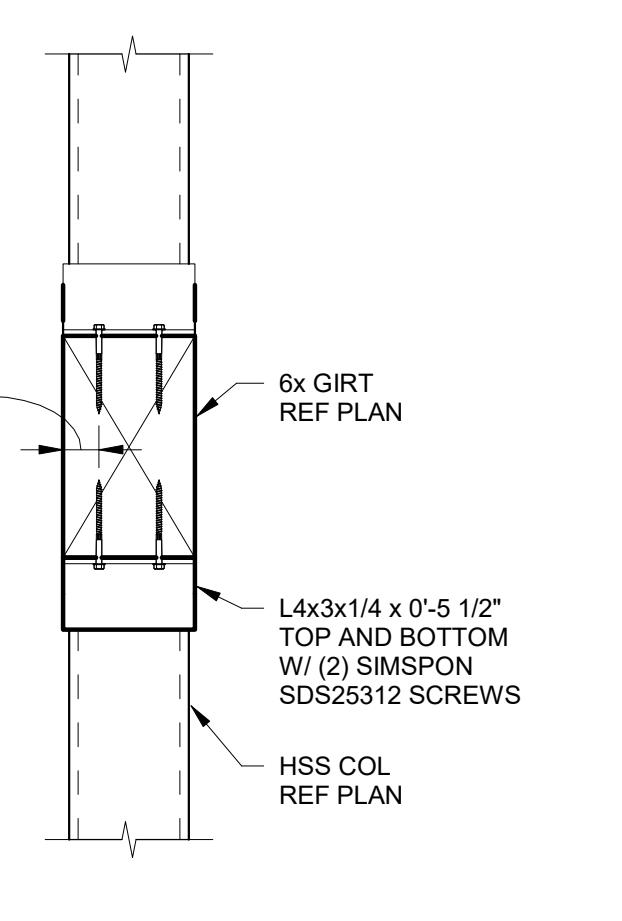


 Ø LAG SCREWS @ 12" OC (MAX), 3" PENETRATION INTO WD POST'."/>

FASTEN TO WD POST BURIED IN WALL W/
1/2" Ø LAG SCREWS @ 12" OC (MAX), 3"
PENETRATION INTO WD POST

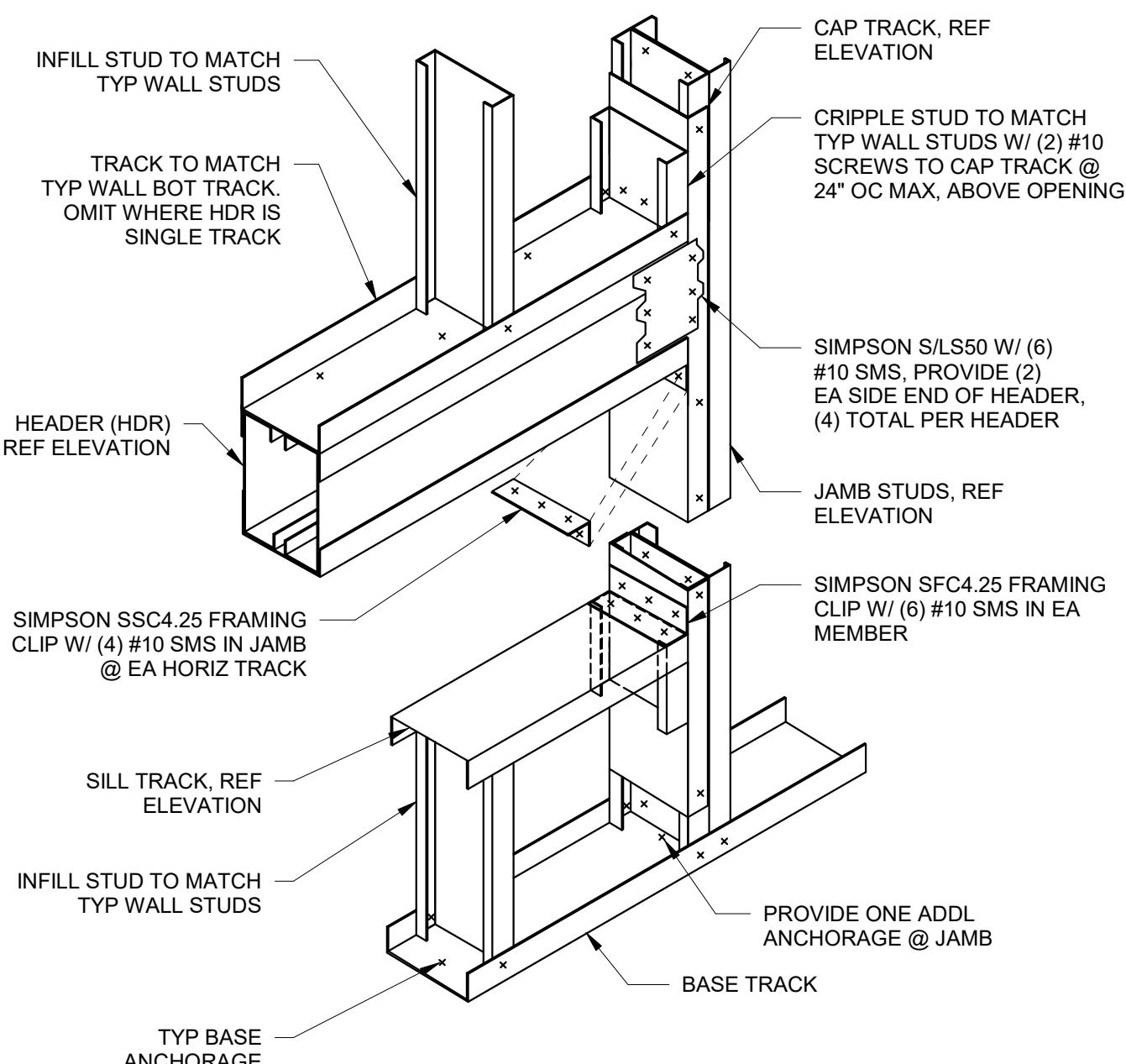


WOOD GIRT HOSE TOWER

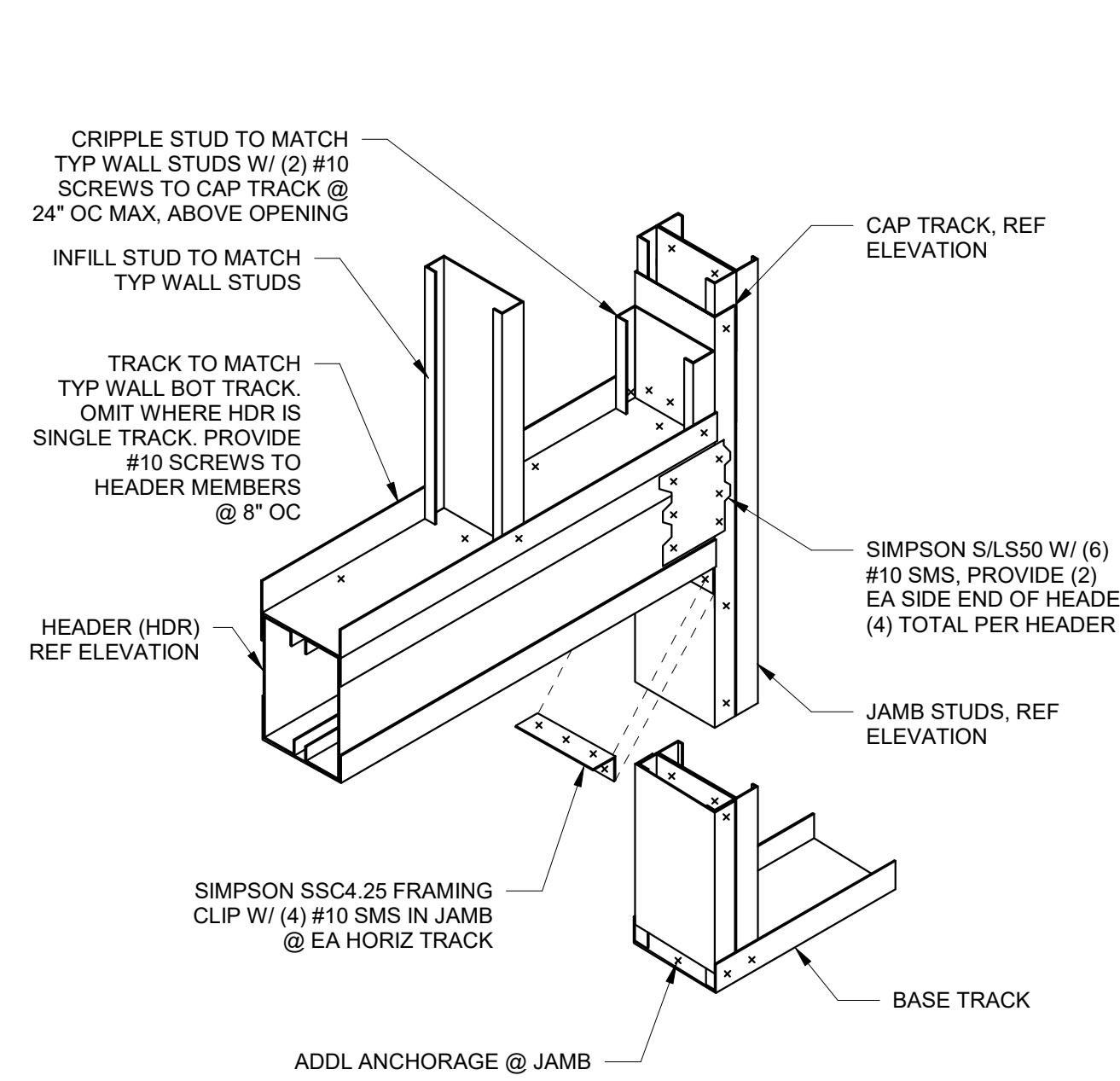


SECTION A A

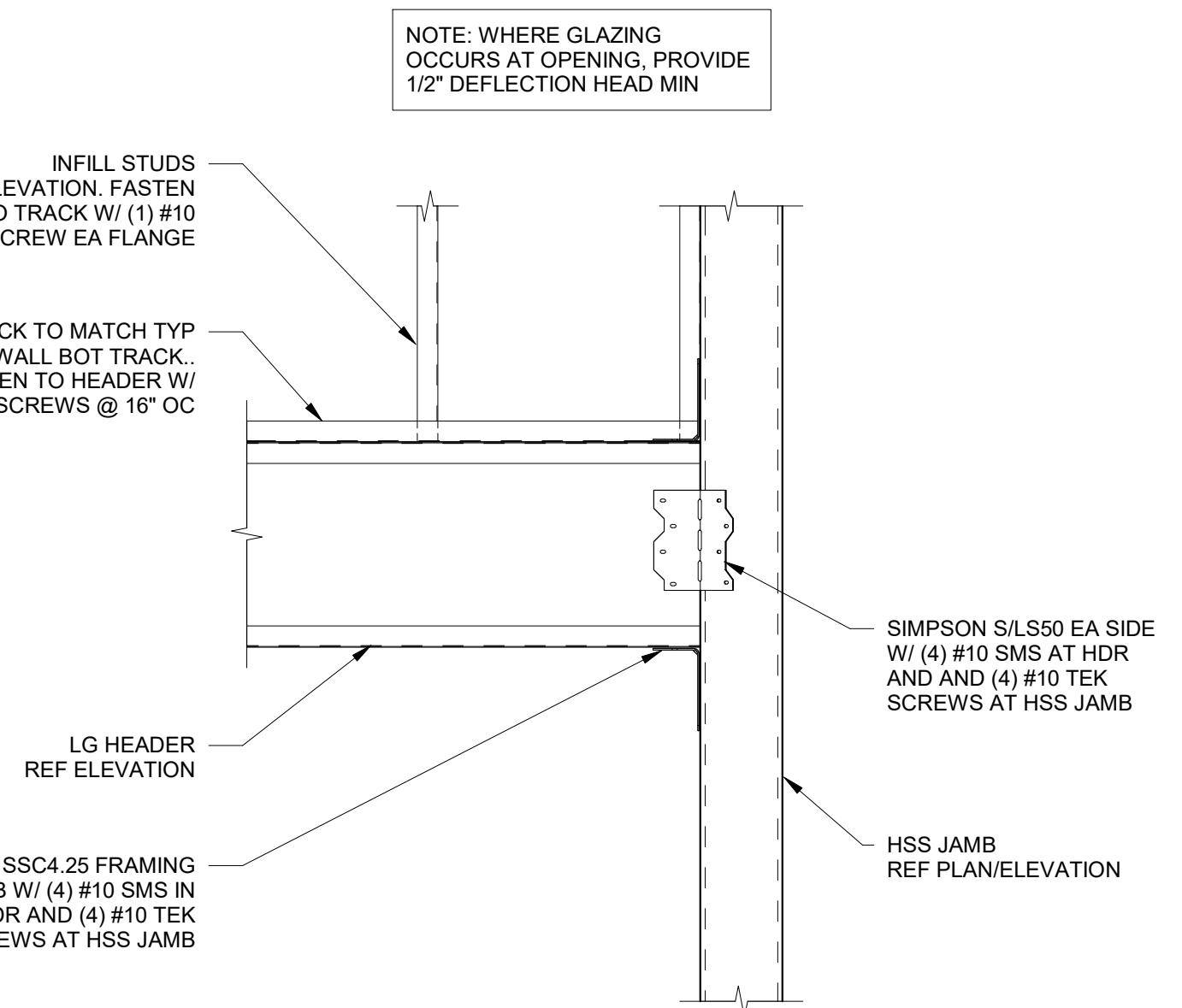
1 TRACK TO STRUCTURE
NTS



2 TRACK SPLICE AT TRACK TO STRUCTURE
NTS

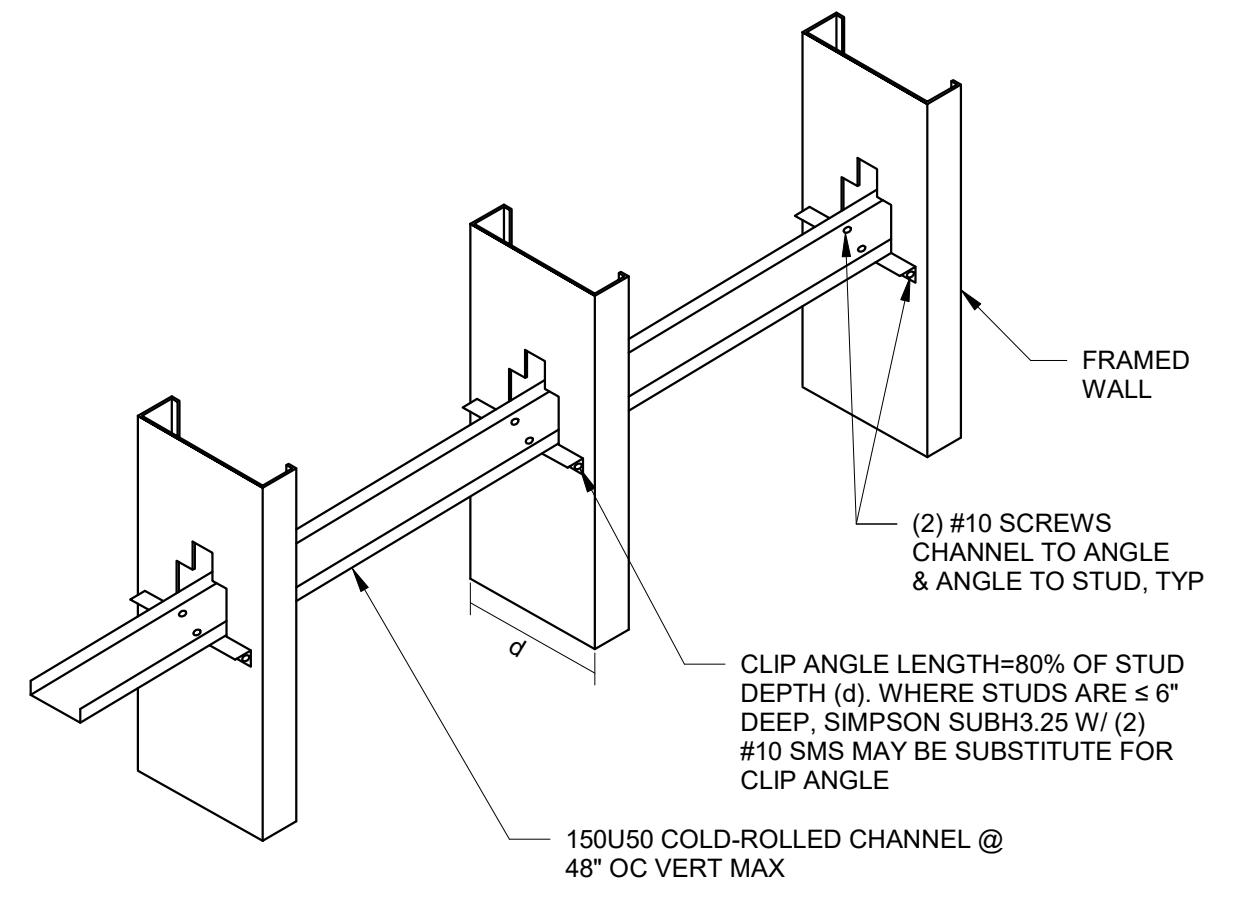


3 TYP WALL BRIDGING
NTS

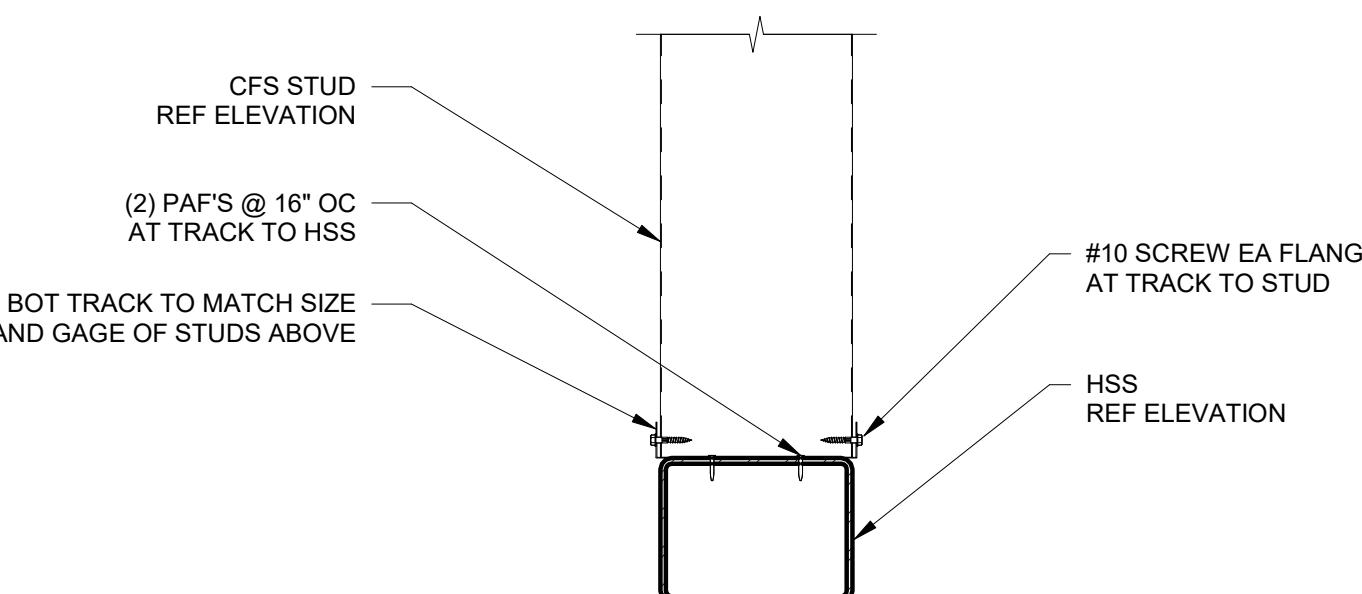


TYPE 1 BRIDGING

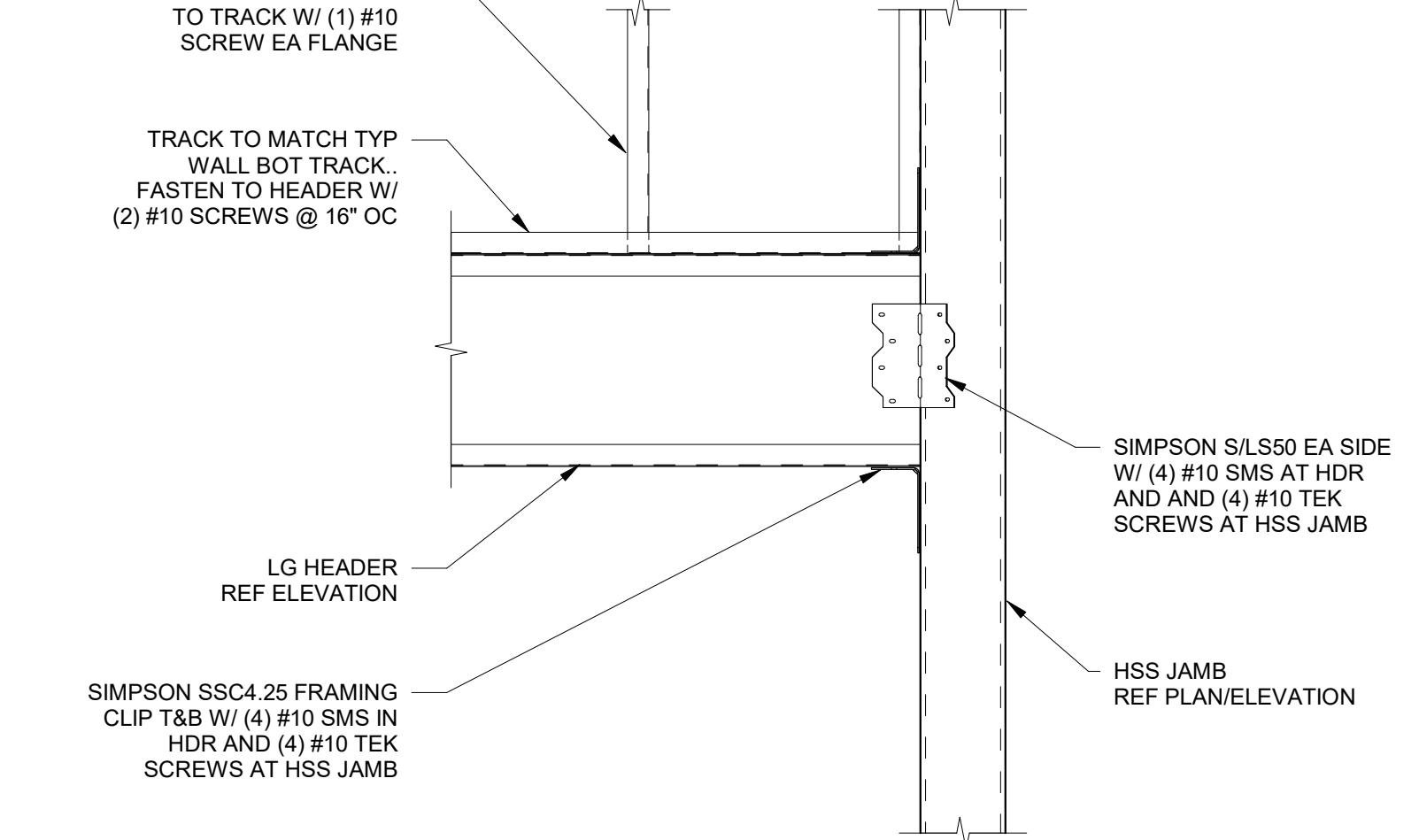
NOTES:
1. PROVIDE BRIDGING ON ALL WALL STUDS.
2. INSTALL BRIDGING PRIOR TO INSTALLATION OF SUPPORTED FRAMING.
3. TYPE 1 BRIDGING NOT ALLOWED ON STUDS GREATER THAN 6" DEEP, SIMPSON SUBH3.25 W/ (2) #10 SMS MAY BE SUBSTITUTE FOR CLIP ANGLE.



TYPE 2 BRIDGING



6 CFS HEADER AT HSS COLUMN
NTS



7 CFS SILL AT HSS COLUMN
NTS

