

GENERAL NOTES

THE STRUCTURE HAS BEEN DESIGNED TO RESIST CODE SPECIFIED VERTICAL AND LATERAL FORCES AFTER THE CONSTRUCTION OF ALL STRUCTURAL ELEMENTS HAS BEEN COMPLETED. STABILITY OF THE STRUCTURE PRIOR TO COMPLETION IS THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THIS RESPONSIBILITY INCLUDES BUT IS NOT LIMITED TO JOB SITE SAFETY, ERECTION MEANS, METHODS, AND SEQUENCES; TEMPORARY SHORING, FORMWORK, BRACING; USE OF EQUIPMENT AND CONSTRUCTION PROCEDURES. PROVIDE ADEQUATE RESISTANCE TO LOADS ON THE STRUCTURES DURING CONSTRUCTION PER SEI/ASCE STANDARD NO. 37-14 "DESIGN LOADS ON STRUCTURES DURING CONSTRUCTION."

CONSTRUCTION OBSERVATION BY THE STRUCTURAL ENGINEER IS FOR GENERAL CONFORMANCE WITH DESIGN ASPECTS ONLY AND IS NOT INTENDED IN ANY WAY TO REVIEW THE CONTRACTOR'S CONSTRUCTION PROCEDURES.

STANDARDS

ALL METHODS, MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE 2018 INTERNATIONAL BUILDING CODE (IBC) AS AMENDED AND ADOPTED BY THE LOCAL BUILDING OFFICIAL OR APPLICABLE JURISDICTION.

DESIGN CRITERIA

VERTICAL LOADS

AREA	DESIGN DEAD LOAD	LIVE LOAD	PARTITION LOAD	CONCENTRATED LOADS
MECHANICAL PLATFORM	ACTUAL	40 PSF	+EQUIPMENT	

SNOW: (MINIMUM ROOF SNOW LOAD = 25 PSF)

LATERAL FORCES

SEISMIC: (ASCE 7-16)

$$F_p = \frac{0.4A_p S_{DS} W_p}{(R_p)} (1+2 \frac{Z}{h})$$

MINIMUM = 0.044 S_{DS} I_e ≥ 0.01

COMPONENT IMPORTANCE FACTOR I_p = 1.5
 COMPONENT RESPONSE MODIFICATION FACTOR R_p = 6
 COMPONENT AMPLIFICATION FACTOR a_p = 2.5
 COMPONENT OPERATING WEIGHT W_p = 30k
 HEIGHT OF ATTACHMENT z = 52.5ft
 AVERAGE ROOF HEIGHT h = 52.5ft
 DESIGN SPECTRAL RESPONSE ACCELERATIONS S_{DS} = 1.013
 F_p = 0.76W_p
 HORIZONTAL FORCE, F_p = 22.8k

PIPES, DUCTS AND MECHANICAL EQUIPMENT SUPPORTED OR BRACED FROM STRUCTURE. CONFORM TO SHEET METAL AND AIR CONDITIONING CONTRACTORS' NATIONAL ASSOCIATION, INC. PUBLICATION "SEISMIC RESTRAINT MANUAL: GUIDELINES FOR MECHANICAL SYSTEMS". SPRINKLER LINE ATTACHMENTS SHALL CONFORM TO NFPA PAMPHLET 13.

STRUCTURAL STEEL

DETAILING, FABRICATION AND ERECTION

ALL WORKMANSHIP SHALL CONFORM TO THE AISC MANUAL OF STEEL CONSTRUCTION, 15TH EDITION, THE AISC SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS JULY 7, 2016, THE AISC CODE OF STANDARD PRACTICE, JUNE 15, 2016 AND THE AISC SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS, JULY 12, 2016.

STEEL MEMBERS ARE EQUALLY SPACED BETWEEN COLUMNS AND/OR DIMENSION POINTS UNLESS NOTED OTHERWISE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ERECTION AIDES AND JOINT PREPARATIONS THAT INCLUDE BUT ARE NOT LIMITED TO, ERECTION ANGLES, LIFT HOLES, AND OTHER AIDES, WELDING PROCEDURES, REQUIRED ROOT OPENINGS, ROOT FACE DIMENSIONS, GROOVE ANGLES, BACKING BARS, WELD EXTENSION TABS, COPEs, SURFACE ROUGHNESS VALUES AND TAPERS OF UNEQUAL PARTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COMPLIANCE WITH ALL CURRENT OSHA REQUIREMENTS.

HOLES, COPEs OR OTHER CUTS OR MODIFICATIONS OF THE STRUCTURAL STEEL MEMBERS SHALL NOT BE MADE IN THE FIELD WITHOUT WRITTEN APPROVAL FROM THE STRUCTURAL ENGINEER.

STEEL FABRICATORS

NON-AISC CERTIFIED STEEL FABRICATORS SHALL HAVE FIVE YEARS MINIMUM EXPERIENCE ON SIMILAR PROJECTS OF EQUAL OR LARGER COMPLEXITY AND SCOPE. QUALIFICATIONS SHALL BE SUBMITTED TWO WEEKS PRIOR TO BID.

STEEL ERECTORS

NON-AISC CERTIFIED STEEL ERECTORS SHALL HAVE FIVE YEARS MINIMUM EXPERIENCE ON SIMILAR PROJECTS OF EQUAL OR LARGER COMPLEXITY AND SCOPE. QUALIFICATIONS SHALL BE SUBMITTED TWO WEEKS PRIOR TO BID.

STEEL DETAILERS

ALL STEEL DETAILING SHALL BE PERFORMED BY A DETAILER WITH FIVE YEARS MINIMUM EXPERIENCE ON SIMILAR PROJECTS OF EQUAL OR LARGER COMPLEXITY AND SCOPE. QUALIFICATIONS SHALL BE SUBMITTED TWO WEEKS PRIOR TO BID.

MATERIAL PROPERTIES

WIDE FLANGE SECTIONS: ASTM A992 (F_y = 50 KSI)

OTHER SHAPES AND PLATES: ASTM A36 (F_y = 36 KSI) TYP. U.N.O.; ASTM A572 (F_y = 50 KSI) WHERE INDICATED

HOLLOW STRUCTURAL SECTIONS: RECTANGULAR & SQUARE - ASTM A500 GRADE C (F_y = 50 KSI) ROUND - ASTM A500 GRADE C (F_y = 46 KSI)

STRUCTURAL STEEL PIPES: ASTM A53, GRADE B, TYPE E OR S (F_y = 35 KSI)

MACHINE BOLTS (M.B.): ASTM A307, GRADE A

HIGH-STRENGTH BOLTS: ASTM F3125, GRADE F1852, UNLESS NOTED OTHERWISE, ASTM F3125, GRADE F2280 WHERE INDICATED

WELDING

STRUCTURAL STEEL: WELD IN ACCORDANCE WITH "STRUCTURAL WELDING CODE" AWS D1.1.

CERTIFICATION: ALL WELDING SHALL BE PERFORMED BY WABO/AWS CERTIFIED WELDERS. WELDERS SHALL BE PREQUALIFIED FOR EACH POSITION AND WELD TYPE WHICH THE WELDER WILL BE PERFORMING.

WELD TABS (ALSO KNOWN AS WELD "EXTENSION" TABS OR "RUN OFF" TABS) SHALL BE USED. AFTER THE WELD HAS BEEN COMPLETED THE WELD TABS SHALL BE REMOVED AND THE WELD END GROUND TO A SMOOTH CONTOUR. WELD "DAMS" OR "END DAMS" SHALL NOT BE USED.

THE PROCESS CONSUMABLES FOR ALL WELD FILLER METAL INCLUDING TACK WELDS, ROOT PASS AND SUBSEQUENT PASSES DEPOSITED IN A JOINT SHALL BE COMPATIBLE.

ALL WELD FILLER METAL AND WELD PROCESS SHALL PROVIDE THE TENSILE STRENGTH AND CHARPY V-NOTCH RATINGS AS FOLLOWS:

WELD TYPE	FILLER METAL TENSILE STRENGTH	CHARPY V-NOTCH (CVN) RATING
FILLET	70 KSI	----
PARTIAL PENETRATION	70 KSI	----
COMPLETE PENETRATION	70 KSI	20 FT-LBS @ 40 DEG F

WELDED CONNECTIONS INSPECTION:

- ALL WELDING SHALL BE CHECKED BY VISUAL MEANS AND BY OTHER METHODS DEEMED NECESSARY BY THE WELDING INSPECTOR.
- ALL FULL PENETRATION WELDS TO MEMBERS WHICH FORM A PORTION OF THE LATERAL FORCE-RESISTING SYSTEM SHALL BE CHECKED 100 PERCENT BY ULTRASONIC TESTING.

THE STANDARDS OF ACCEPTANCE FOR WELDS TESTED BY ULTRASONIC METHODS SHALL CONFORM TO AWS D1.1.

ALL WELDS FOUND TO BE DEFECTIVE SHALL BE REPAIRED AND REINSPECTED BY THE SAME METHODS ORIGINALLY USED, AND THIS REPAIR AND REINSPECTION SHALL BE PAID FOR BY THE CONTRACTOR

GENERAL REQUIREMENTS

HIGH-STRENGTH BOLTS: ALL A325 HIGH-STRENGTH BOLTS (HSB) SHALL BE ASTM F3125, GRADE F1852, UNLESS OTHERWISE DESIGNATED AS A490. ALL HSB DESIGNATED AS A490 SHALL BE ASTM F3125, GRADE F2280. ALL HSB SHALL BE BY "LEJEUNE BOLT COMPANY" OR PRE-APPROVED EQUAL AND SHALL BE INSTALLED PER SECTION 8.2 OF THE "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS", AUGUST 2014 BY THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS (RCSC SPECIFICATION). ALL BOLT HOLES SHALL BE STANDARD ROUND HOLES UNLESS NOTED OTHERWISE. THE FAYING SURFACES OF ALL PLIES WITHIN THE GROUP OF SLIP-CRITICAL BOLTS (A325SC OR A490SC) SHALL MEET THE REQUIREMENTS FOR A CLASS A SURFACE PER SECTION 3.2 OF THE RCSC SPECIFICATION.

BOLTED CONNECTIONS INSPECTION: CONNECTIONS MADE WITH BEARING TYPE BOLTS SHALL BE INSPECTED PER SECTION 9.1 AND CONNECTIONS MADE WITH SLIP-CRITICAL TYPE BOLTS (A325SC OR A490SC) SHALL BE INSPECTED PER SECTION 9.3 OF RCSC SPECIFICATION.

FINISH: WHERE STRUCTURAL STEEL IS NOTED TO BE GALVANIZED, IT SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123, A384, AND A385. ALL SURFACES WITHIN TWO INCHES OF ANY FIELD WELD LOCATION SHALL BE FREE OF MATERIALS THAT WOULD PREVENT PROPER WELDING OR PRODUCE OBJECTIONABLE FUMES. FIELD TOUCH-UP OF PRIMED, PAINTED, AND GALVANIZED SURFACES SHALL BE PERFORMED TO REPAIR COATING ABRASIONS, AS WELL AS TO PROTECT ALL AREAS AT CONNECTIONS.

BAR GRATING: SHALL BE RYERSON "RY-WELD" STEEL GRATING OR PRE-APPROVED EQUAL AND DESIGNED TO OSHA STANDARDS. GRATING SHALL BE DESIGNED TO CARRY THE LOADS LISTED IN THE DESIGN CRITERION AND ANY ADDITIONAL LOADS INDICATED ON THE FRAMING PLAN. PROVIDE SHOP AND INSTALLATION DRAWINGS PRODUCED UNDER THE SUPERVISION OF AND BE STAMPED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. DETAIL DRAWINGS TO INDICATE TYPES, SIZE, SPACING, CONNECTIONS, ANCHORING AND OTHER PERTINENT DETAILS.

SHOP DRAWINGS/SUBMITTALS

THE FOLLOWING SHOP DRAWINGS/SUBMITTALS SHALL BE PROVIDED FOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER PRIOR TO FABRICATION OR DELIVERY.

	STRUCTURAL ENGR.	BLDG. DEPT.
1. STRUCTURAL STEEL	X	X
2. CONTRACTOR'S STATEMENT OF RESPONSIBILITY	X	X

SPECIAL INSPECTION: SPECIAL INSPECTION SHALL BE PROVIDED BY AN INDEPENDENT TESTING LABORATORY PER THE REQUIREMENTS OF IBC CHAPTER 17 AND THE LOCAL BUILDING OFFICIAL OR APPLICABLE JURISDICTION AND THE CONTRACT DOCUMENTS. THE SPECIAL INSPECTOR SHALL SUBMIT INSPECTION REPORTS AND A FINAL SIGNED REPORT TO THE BUILDING OFFICIAL FOR THE ITEMS LISTED IN THE QUALITY ASSURANCE/SPECIAL INSPECTION SECTION:

STATEMENT OF SPECIAL INSPECTIONS:

SPECIAL INSPECTION: SPECIAL INSPECTION SHALL BE PROVIDED PER THE REQUIREMENTS OF IBC SECTION 1704 AND 1705 AND AS NOTED HEREIN.

STRUCTURAL SYSTEM	VERIFICATION AND INSPECTION	CONTINUOUS	PERIODIC	COMMENTS	REFERENCES
STEEL CONSTRUCTION	MATERIAL VERIFICATION OF HIGH-STRENGTH BOLTS, NUTS AND WASHERS		X		AISC 360 CHAPTER N5
	HIGH-STRENGTH BOLTING A. SNUG-TIGHT JOINTS B. PRETENSIONED AND SLIP-CRITICAL JOINTS USING TURN-OF-NUT WITH MATCHMARKING, TWIST OFF BOLTS OR DIRECT TENSION INDICATOR METHODS OF INSTALLATION		X		AISC 360 CHAPTER N5 AISC 341 CHAPTER J7
	MATERIAL VERIFICATION OF STRUCTURAL STEEL A. FOR STRUCTURAL STEEL, IDENTIFICATION MARKINGS TO CONFORM TO AISC 360 B. MANUFACTURER'S CERTIFIED MILL TEST REPORTS		X	MANUFACTURER TO PROVIDE CERTIFIED MILL TEST REPORTS	AISC 360 CHAPTER N5 AISC 341 CHAPTER J6
	MATERIAL VERIFICATION OF WELD FILLER MATERIALS A. IDENTIFICATION MARKINGS TO CONFORM TO AWS SPECIFICATIONS LISTED IN GENERAL NOTES B. MANUFACTURER'S CERTIFICATE OF COMPLIANCE		X	MANUFACTURER TO PROVIDE CERTIFICATE OF COMPLIANCE	AISC 360 CHAPTER N5
	INSPECTION OF WELDING A. COMPLETE AND PARTIAL JOINT PENETRATION GROOVE WELDS	X		SPECIAL INSPECTIONS IN THIS SECTION ARE WAIVED WHERE FABRICATION IS PERFORMED ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED IN ACCORDANCE WITH IBC SECTION 1704.2.5	AISC 360 CHAPTER N5 AISC 341 CHAPTER J6 AWS D1.1

TESTING AND SPECIAL INSPECTION REPORTS SHALL BE PREPARED FOR EACH INSPECTION ITEM ON A DAILY BASIS WHENEVER WORK IS PERFORMED ON THAT ITEM. REPORTS SHALL BE DISTRIBUTED TO OWNER, CONTRACTOR, BUILDING OFFICIAL, ARCHITECT AND STRUCTURAL ENGINEER OF RECORD.

STRUCTURAL OBSERVATIONS SHALL BE PERFORMED BY THE STRUCTURAL ENGINEER OF RECORD OR DESIGNATED REPRESENTATIVE IN ACCORDANCE WITH IBC 1704.6.

STRUCTURAL OBSERVATION SHALL BE PERFORMED AS FOLLOWS:

- PERIODIC VISUAL OBSERVATION OF STRUCTURAL SYSTEMS FOR GENERAL CONFORMANCE TO CONSTRUCTION DOCUMENTS AT SIGNIFICANT CONSTRUCTION STAGES.
- REVIEW OF TESTING AND INSPECTION REPORTS.
- REPORTS SHALL BE PREPARED FOR EACH SITE VISIT AND SHALL BE DISTRIBUTED TO ARCHITECT.

GENERAL CONTRACTOR SHALL SUBMIT A WRITTEN CONTRACTOR'S STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND OWNER PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL INCLUDE ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL INSPECTION REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTION.

APPROVED

Authorized to Begin Construction

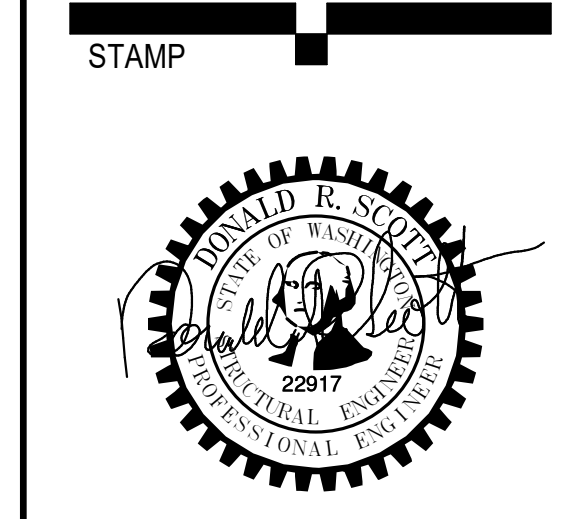
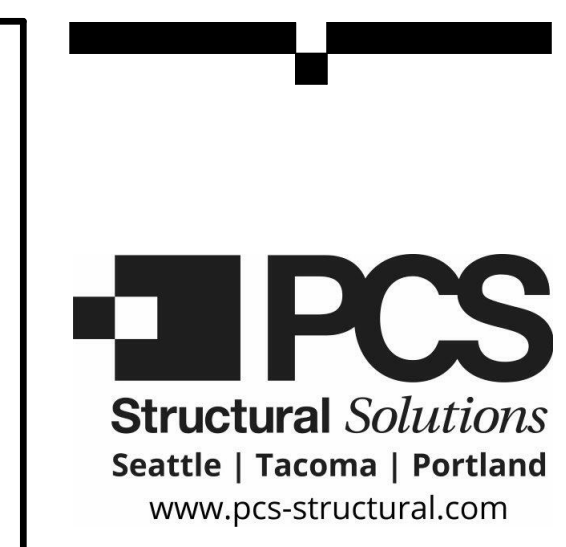
Construction Review Services has authorized this project to begin construction.

- See accompanying project comment form for review status and corrections.
- This is not a building permit, check with your local building department.

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ABBREVIATION LIST			
•	AT	HDR	HEADER
A.B.	ANCHOR BOLT	HGR	HANGER
ADD'L	ADDITIONAL	HORIZ.	HORIZONTAL
A.F.F.	ABOVE FINISH FLOOR	H55	HOLLOW STRUCTURAL SECTION
ALT.	ALTERNATE	HT	HEIGHT
ARCH.	ARCHITECTURAL	INT.	INTERIOR
BLD'G	BUILDING	JST	JOIST
BLK'G	BLOCKING	JT	JOINT
BM	BEAM	L	ANGLE
B.O.F.	BOTTOM OF FOOTING	L.F.R.S.	LATERAL FORCE-RESISTING SYSTEM
BOT.	BOTTOM	L.L.	LIVE LOAD
BRB	BUCKLING RESTRAINED BRACE	LLH	LONG LEG HORIZONTAL
BRG	BEARING	LLV	LONG LEG VERTICAL
B/TW	BETWEEN	LOC.	LOCATION
B.U.	BUILT UP	LSL	LAMINATED STRAND LUMBER
(C=)	CAMBER	LVL	LAMINATED VENEER LUMBER
CANT.	CANTILEVER	MAX.	MAXIMUM
CFS	COLD-FORMED STEEL	M.B.	MACHINE BOLT
C.J.	CONTROL/CONSTRUCTION JOINT	MECH.	MECHANICAL
¢	CENTERLINE	MEZZ.	MEZZANINE
CLR.	CLEARANCE	MFR	MANUFACTURER
CMU	CONCRETE MASONRY UNIT	MIN.	MINIMUM
COL.	COLUMN	MISC.	MISCELLANEOUS
CONC.	CONCRETE	MTL	METAL
CONN.	CONNECTION	N.F.	NEAR FACE
CONST.	CONSTRUCTION	N.S.	NEAR SIDE
CONT.	CONTINUOUS	NT5	NOT TO SCALE
CONTR.	CONTRACTOR	O.C.	ON CENTER
COORD.	COORDINATE	OPN'G	OPENING
C.P.	COMPLETE PENETRATION	OPP.	OPPOSITE
CTR'D	CENTERED	P.A.F.	POWDER ACTUATED FASTENER
C.Y.	CUBIC YARD	PERP.	PERPENDICULAR
DBL.	DOUBLE	PL	PLATE
DGW	DEMAND CRITICAL WELD	P.P.	PARTIAL PENETRATION
D.F.	DOUGLAS FIR	P.P.T.	PRESERVATIVE PRESSURE TREATED
DIA. OR Ø	DIAMETER	P.S.F.	POUNDS PER SQUARE FOOT
DIAG.	DIAGONAL	PSL	PARALLAM
DIM.	DIMENSION	P.T.	POST TENSION
D.L.	DEAD LOAD	PLY.	PLYWOOD
DWG	DRAWING	REINF.	REINFORCEMENT
DWL	DOWEL	REQ'D	REQUIRED
(E)	EXISTING	SCHED.	SCHEDULE
EA.	EACH	SCL	STRUCTURAL COMPOSITE LUMBER
E.F.	EACH FACE	SHT'G	SHEATHING
EL.	ELEVATION	SIM.	SIMILAR
ELEV.	ELEVATOR	S.O.G.	SLAB ON GRADE
ENGR	ENGINEER	SQ.	SQUARE
EQ.	EQUAL	STD	STANDARD
E.W.	EACH WAY	STIFF.	STIFFENER
EXP.	EXPANSION	STL	STEEL
EXT.	EXTERIOR	STRUCT.	STRUCTURAL
FDN	FOUNDATION	T4B	TOP 4 BOTTOM
F.F.	FAR FACE	T4G	TONGUE AND GROOVE
FLR	FLOOR	THR'D	THREADED
F.O.M.	FACE OF MASONRY	T.O.F.	TOP OF FOOTING
F.O.S.	FACE OF STUD	T.O.S.	TOP OF STEEL
FRM'G	FRAMING	TRT'D	TREATED
F.R.T.	FIRE RETARDANT TREATED	TYP.	TYPICAL
F.S.	FAR SIDE	UN.O.	UNLESS NOTED OTHERWISE
FTG	FOOTING	U.T.	ULTRASONIC TESTED
GA.	GAGE/GAUGE	VERT.	VERTICAL
GALV.	GALVANIZED	W	WITH
GL.	GLULAM	W.P.	WORK POINT
GR.	GRADE	WT	WEIGHT
GWB	GYPSUM WALL BOARD	WWR.	WELDED WIRE REINFORCING

Received
Development Services
September 13, 2021
CITY OF PUYALLUP



PROJECT

MULTICARE - GSH CENTER WING AHU REPL
 GOOD SAMARITAN HOSPITAL
 401 15TH AVE SE
 PUYALLUP, WA 98372

REVISION

DATE	08-31-21
JOB #	21-476
DRAWN	RSC
CHECKED	KDK
TITLE	

GENERAL NOTES

SHEET

S0.00

STRUCTURAL DRAWING INDEX	
SHEET NUMBER	SHEET DESCRIPTION
S0.00	GENERAL NOTES
S1.00	ROOF FRAMING PLAN AND DETAILS
Grand total: 2	

Reviewed for Building Code Compliance

By David Leahy

Building Permit No. B-21-0700

Date of Approval 1/12/2022

B-21-0700

STAMP



PROJECT

MULTICARE - GSH CENTER WING AHU REPL
GOOD SAMARITAN HOSPITAL
401 15TH AVE SE
PUYALLUP, WA 98372

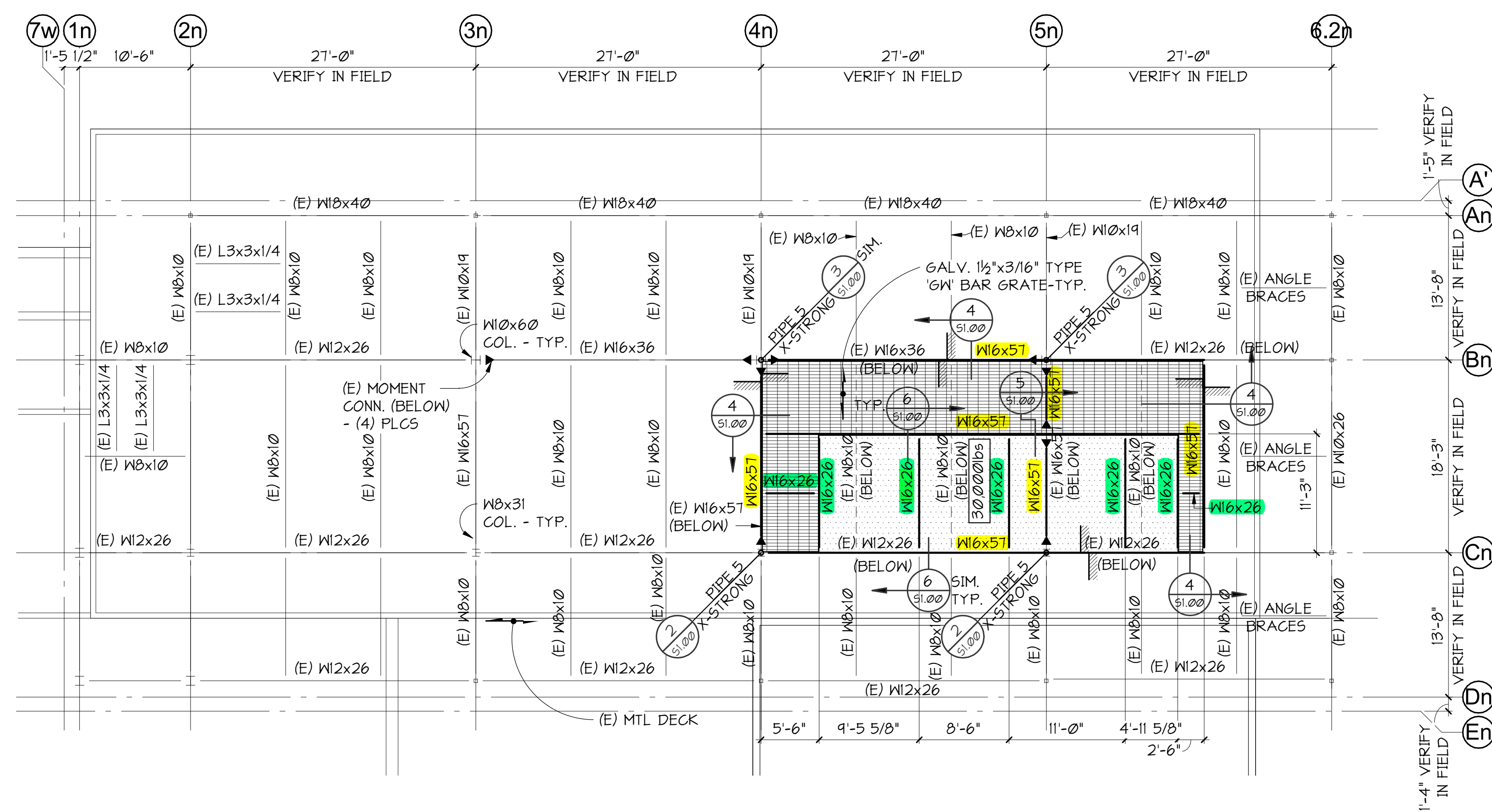
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ROOF FRAMING PLAN
AND DETAILS

SHEET

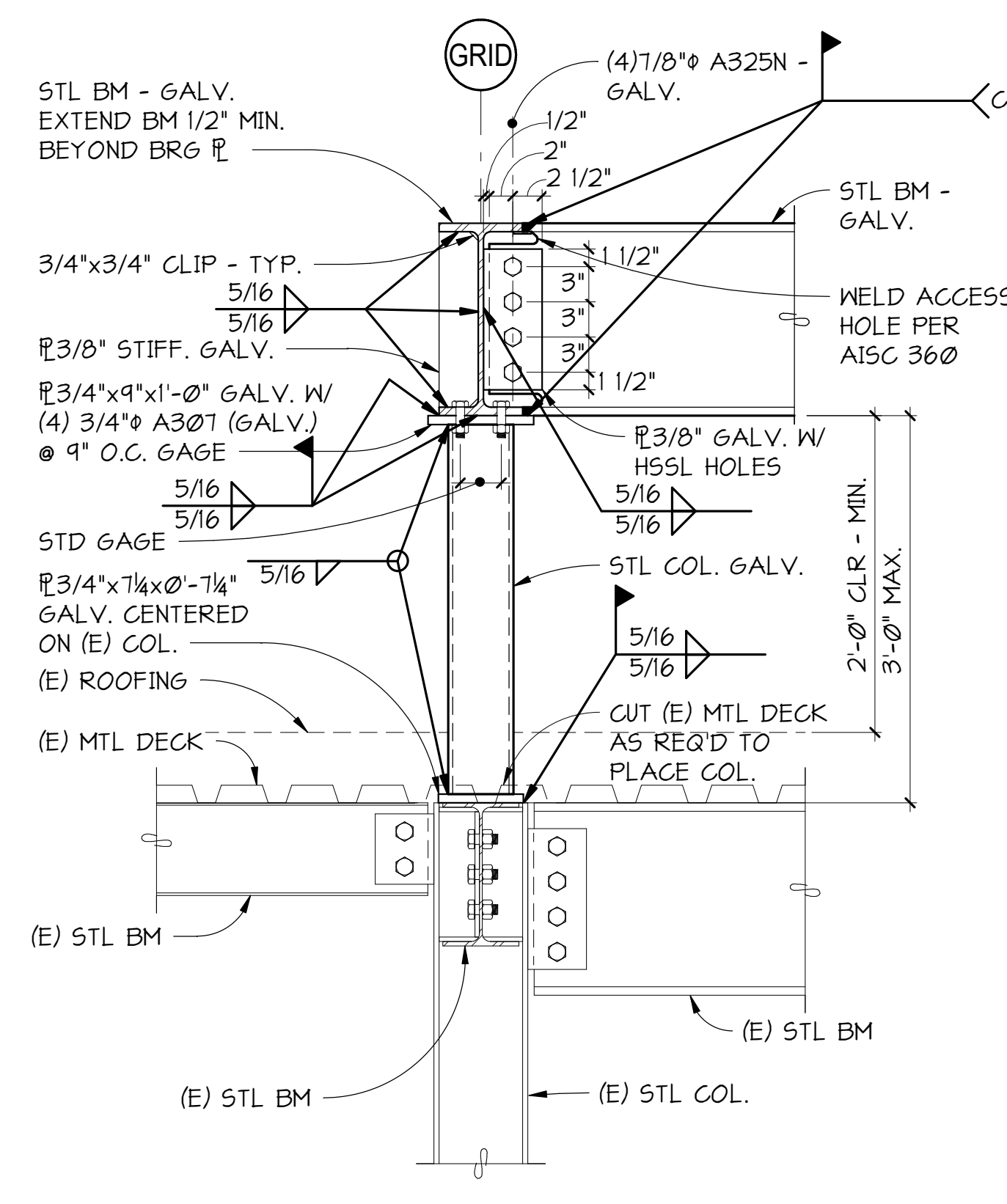
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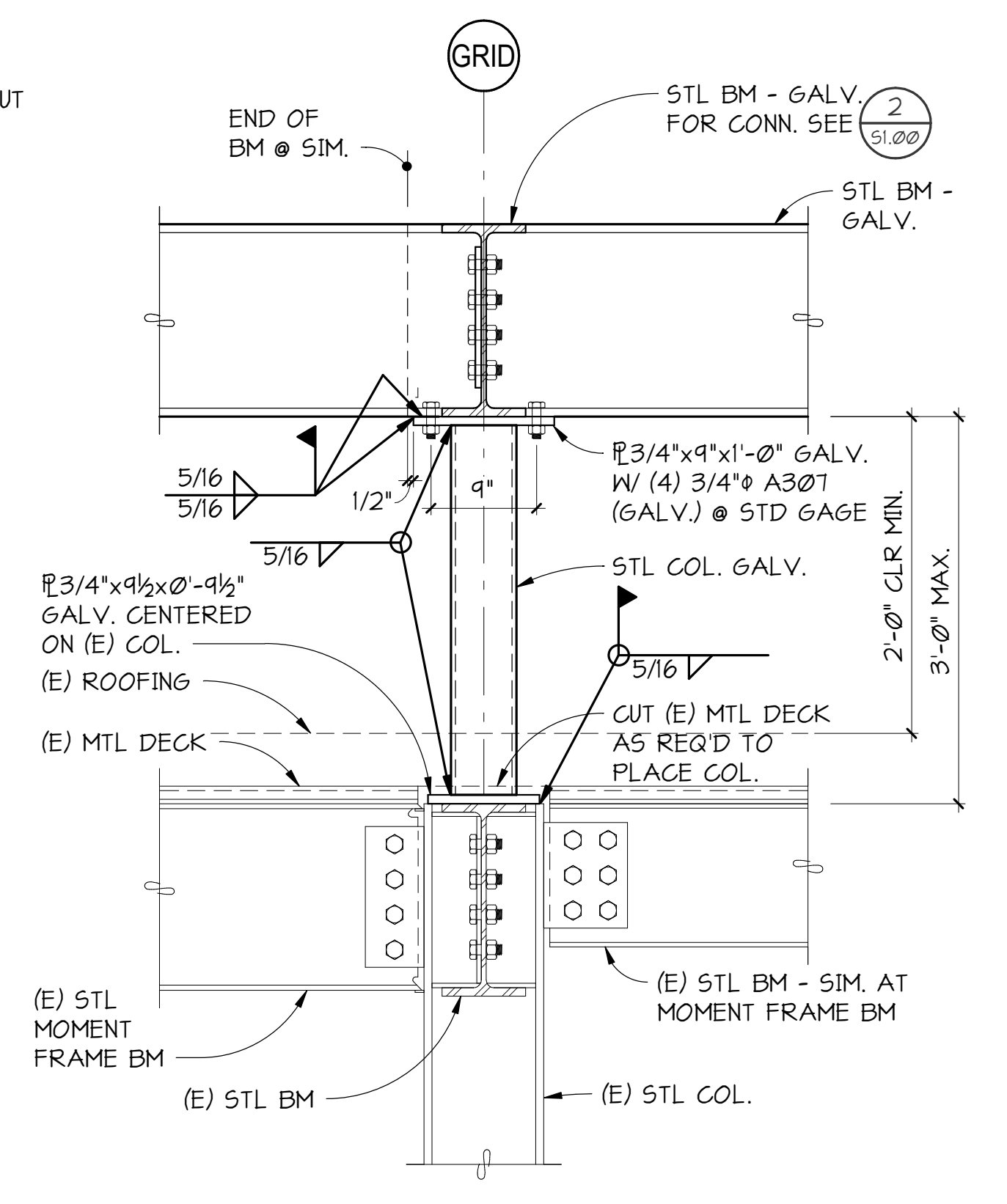
PLAN NOTES

- COORDINATE ALL DIMENSIONS WITH MECHANICAL.
- FIELD VERIFY ALL MEMBER SIZES AND DIMENSIONS PRIOR TO FABRICATION.
- ALL NEW MEMBERS AND THEIR CONNECTIONS SHALL BE GALVANIZED.
- INDICATES MOMENT CONNECTION.
- INDICATES MECHANICAL UNIT ON NEW ELEVATED DECK WITH MAXIMUM WEIGHT SHOWN.
- COORDINATE ATTACHMENT OF MECHANICAL UNIT TO PLATFORM STRUCTURE WITH MANUFACTURER.
- INDICATES DIRECTION OF SPAN FOR METAL DECK.
- INDICATES COLUMN POSTING DOWN TO EXISTING ROOF STRUCTURE.

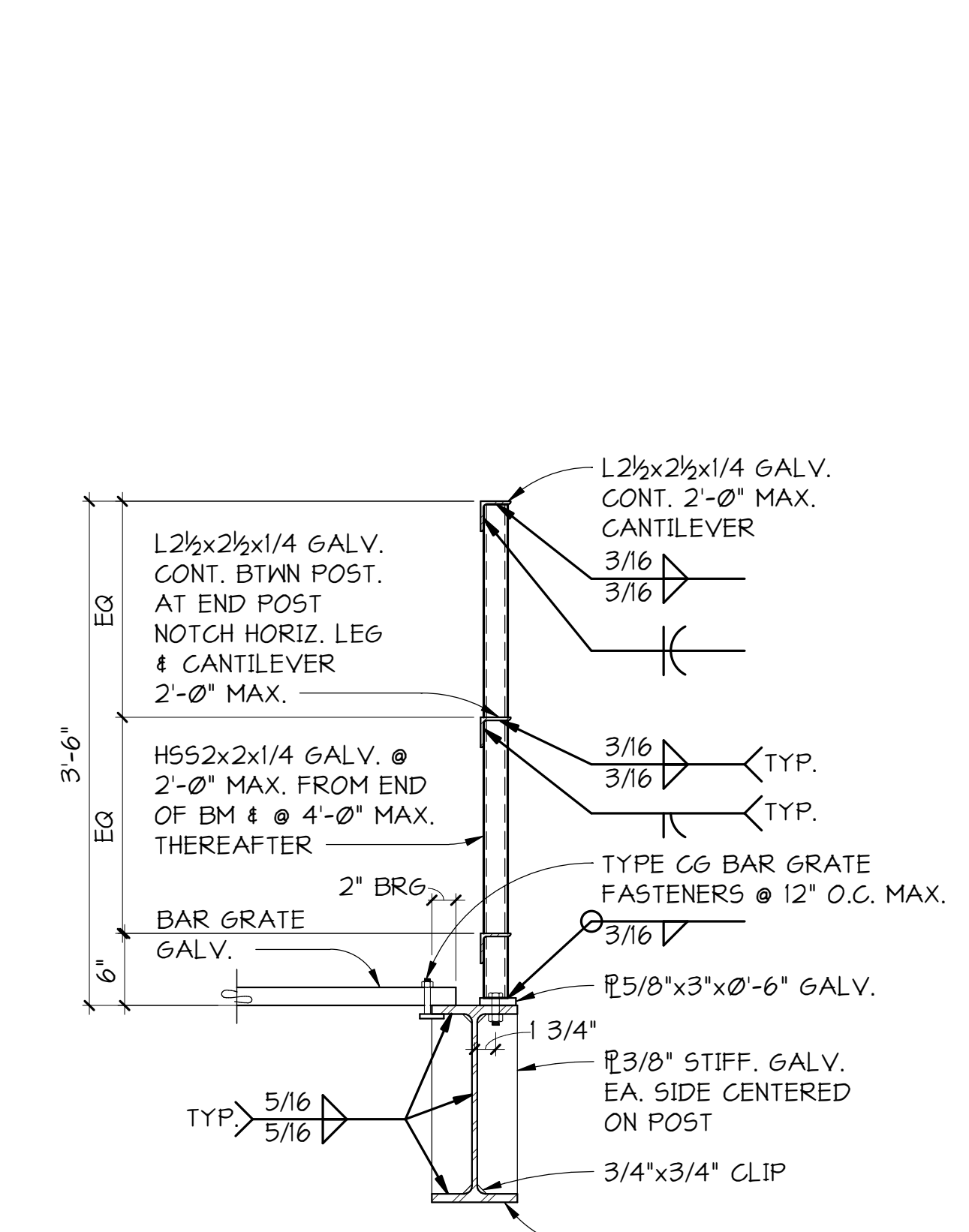
1 ROOF FRAMING PLAN
1/8" = 1'-0"



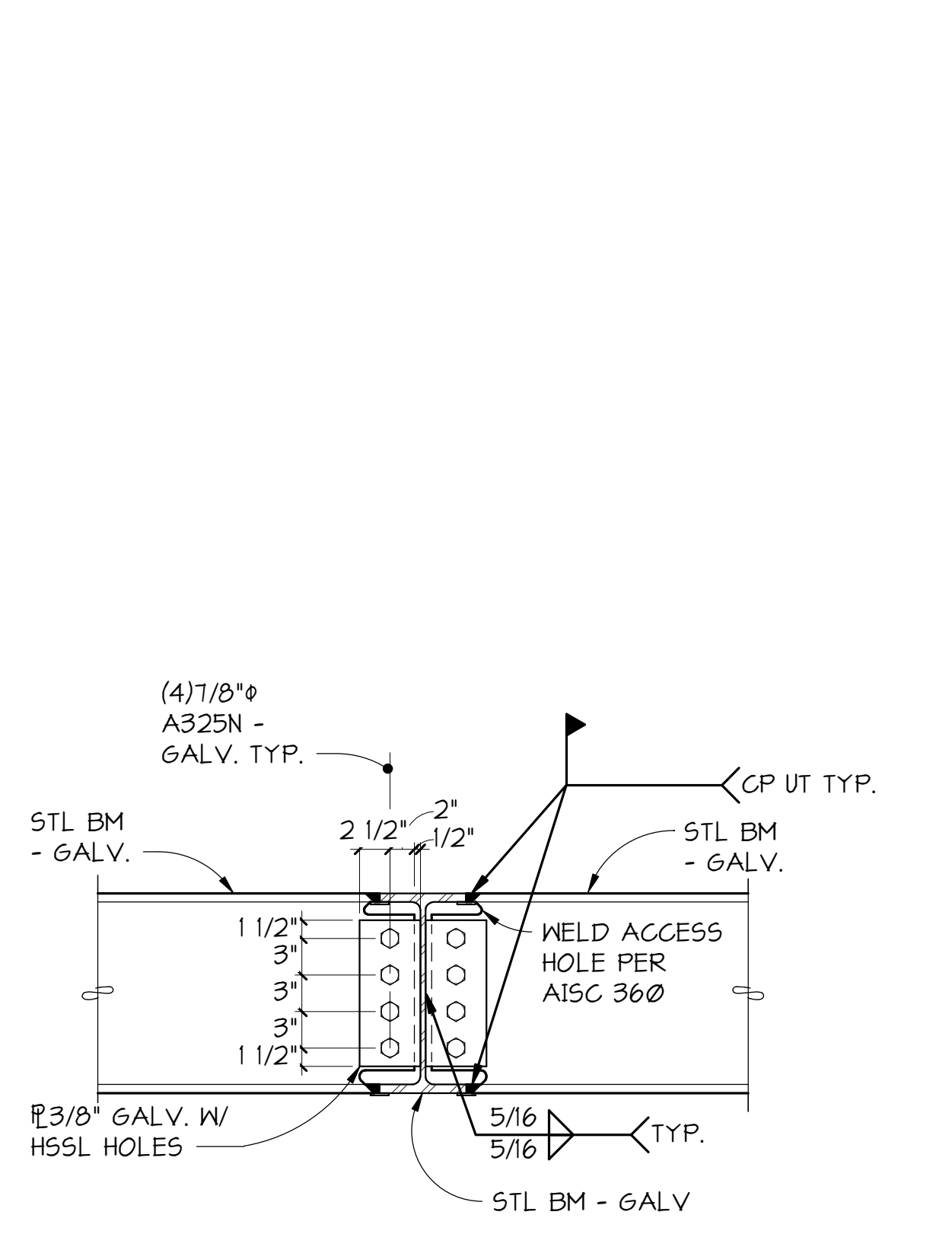
2 SECTION
1" = 1'-0"



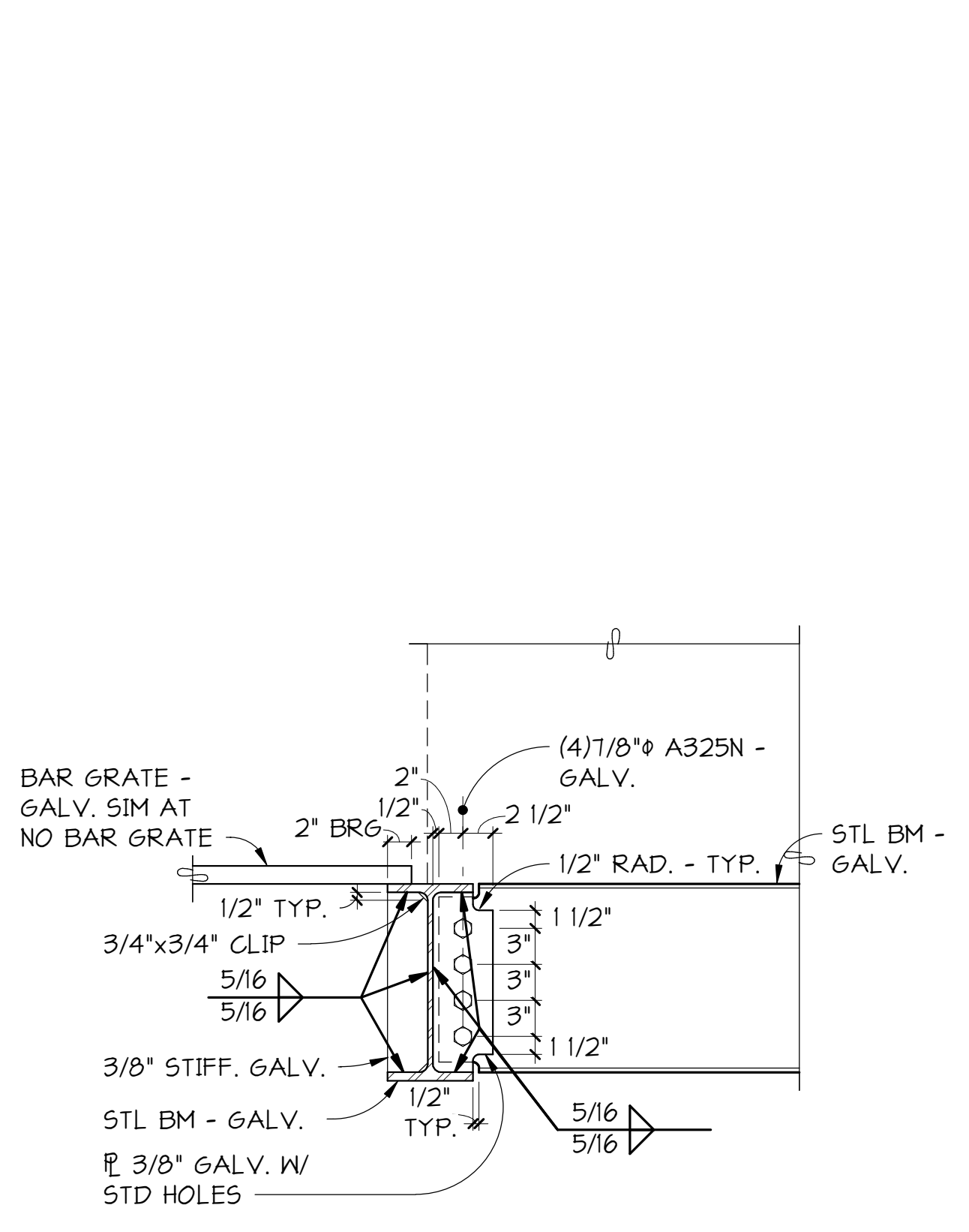
3 SECTION
1" = 1'-0"



4 SECTION
1" = 1'-0"



5 SECTION
1" = 1'-0"



6 SECTION
1" = 1'-0"

B-21-0700