

A

B

C

D

E

F

A

B

C

D

E

F

C:\DATA\My Revit\Projects\4611.0174_VA_IOWACITY\Structure\11_11_ham1.rvt

three inches = one foot

one & one half inches = one foot

one inch = one foot

three quarters inch = one foot

one half inch = one foot

one quarter inch = one foot

three eighths inch = one foot

one eighth inch = one foot

GENERAL STRUCTURAL NOTES

DESIGN DATA

BUILDING CODE

A. INTERNATIONAL BUILDING CODE (IBC) - 2006 Edition.

DESIGN STANDARDS

- A. American concrete Institute (ACI) ACI 318-05, Building Code Requirements for Reinforced Concrete.
- B. American Institute of Steel Construction (AISC) - specification for Structural Steel Buildings - 2005 Edition.
- C. American Society of Civil Engineers (ASCE) - ASCE 7-05, Minimum Design Loads for Buildings and Other Structures.
- D. VA H18-8, 2007 Edition.
- E. VA Design Mannuals and Guidance on the Technical Information Library.

DESIGN LIVE LOADS

- A. Public Areas 100 PSF
- B. Corridors and Stairs 100 PSF
- C. Typical Floors 20' + 100 PSF
- D. Mechanical 150' PSF
- E. Roofs used for future floors 100 PSF
- F. Snow**
1. Ground Snow Load (Pg) 40 PSF
2. Exposure Factor (Ce) 1.0
3. Importance Factor (Is) 1.2
4. Thermal Factor (Ct) 1.0

*Partition Load

**Or actual weight if heavier.

***Plus drifting and/or sliding snow.

DESIGN LATERAL LOADS

- A. WIND
1. Basic Wind Speed (3-Second Gust) 90 MPH
2. Importance Factor (Iw) 1.15
3. Exposure B
4. Internal Pressure Coefficients. +/-0.18
- B. SEISMIC
1. Importance Factor (I) 1.50
- Occupancy Category IV
2. Spectral Response Accelerations, S_s 0.100
- Spectral Response Coefficient, S₁ 0.052
3. Site Class D
4. Spectral Response Coefficient, S_{ps} 0.107
- Spectral Response Coefficient, S_{d1} 0.083
5. Seismic Design Category C
6. Basic Seismic Force-Resistance System Ordinary steel moment frames
7. Design Base Shear 205 KIPS for addition
8. Seismic Response Coefficient, C (0.0533)
9. Response Modification Factor, R (3)
7. Analysis Procedure Equivalent Lateral Force
- C. SOIL. (Not applicable)

LATERAL SYSTEMS DESCRIPTION

- A. Stability and wind loads are collected by composite floor systems and distributed to beam/column moment frames in each direction. The loads are transferred to the foundation system and resolved into the soils.

FUTURE CONSTRUCTION

- A. The building is not designed for future vertical or horizontal expansion.

FOUNDATIONS (Not applicable)

CONCRETE

CONCRETE MIXES

Class	Strength at 28 days (PSI)	Type Mix	Location
A	4000	Std Wt	Composite Slabs
S	3000	Std Wt	Stair Fill at Landings & Treads
T	3500	Std Wt	Bond Beams

CONCRETE REINFORCING

- A. Reference Standards: Comply with following unless noted otherwise:
1. CRSI MSP "Manual of Standard Practice".
2. CRSI "Placing Reinforcing Bars".
3. AWS D1.4 "Structural Welding Code - Reinforcing Steel".
- B. Material Properties:
1. All Bars Unless Noted
2. Bars to be Welded
3. Welded Wire Fabric (Smooth)
- Fy(KSI) 60 60 65
- ASTM A615 A706 A185
- C. Reinforcing steel: Fabricate reinforcement and furnish accessories, chairs, spacer bars and supports necessary to secure reinforcement unless otherwise indicated.
- D. Lap splices: Minimum Class B lap unless otherwise indicated.
- E. Dowel embedment: Minimum 22 bar diameter unless otherwise indicated.

- F. In slabs where positive steel is noted but negative steel is not, provide steel area equal to positive steel over interior supports and one-half of positive steel, hooked, over end supports.

- G. Where dowels are not shown, provide to match reinforcement in all walls, columns, piers and foundations.
- H. Splice continuous reinforcing in walls and slabs using bars of longest practicable length. Show all splices on reinforcing shop drawings. Stagger splices.

CONCRETE MASONRY

MATERIAL PROPERTIES

- A. Concrete Masonary Strength: F'm= 1500 PSI
- B. Concrete Block: Hollow, load-bearing units conforming to ASTM C90, Grade N, Type I.
- C. Mortar: ASTM C270, Type S.
- D. Grout: ASTM C476.
- E. Reinforcing Steel: ASTM A615, Fy=60 KSI.

EXECUTION

- A. Grout solid cells containing reinforcing and other walls as indicated.
- B. Bond Beams: Fill with 3500 psi concrete. Refer to Masonary Specifications. See Architectural drawings for bond beams - size and reinforcing.
- C. Wall Reinforcing: Vertical reinforcing at block walls noted on Architectural Drawings. Place vertical bars at wall centerline unless otherwise indicated. Refer to Architectural drawings and Specifications for horizontal joint reinforcing.
- D. Grout cores with masonry grout in 5'-0" maximum lifts unless clean outs are provided, in which case 8'-0" maximum lifts may be used. Grout lifts shall terminate 1 1/2" below bed joint in wall. Lifts shall be consolidated using mechanical vibration.
- E. Lap Splices: 48 bar diameters unless otherwise indicated.

STEEL

STRUCTURAL STEEL

- A. Reference Standard: Comply with AISC "Manual of Steel Construction" unless otherwise indicated.
- B. Material Properties:
- Fy (KSI) 36 50 74 36 36 46 42
- ASTM A36 A592 A325 F1554 A233 A500 Grade B A500 Grade B
1. Plates, Channels, Angles, Etc.
2. W Shapes
3. High Strength Bolts, (UNO)
4. Anchor Rods (Tensile Strength)
5. Welding Electrodes
6. HSS (Square, Rectangular)
7. HSS (Round)

- C. Connections:
1. If Reactions are not shown on the Framing Plans, See 1/SS002 Typical Beam Connections detail.
2. Where slotted connection holes are used, adjust bolt values accordingly.
3. Check following conditions when designing beam connections: bolt shear, bolt bearing on connecting material, block web shear, shear on net area of connecting angles or plates, local bending stresses and hole type.
4. Bolts: 3/4 inch diameter A325N unless otherwise indicated.
5. Welding electrodes shall conform to AWS D1.1, Table 4.1.

STEEL FLOOR DECK

- A. Reference: Comply with Steel Deck Institute "Design Manual for Composite Decks, Form Decks and Roof Decks" unless otherwise indicated.
- B. All floor slab shall be 3" metal, 18 gage galvanized deck acting compositely with 5" normal weight concrete. Total slab thickness shall be 8", UNO.
- C. Studs shall be 3/4" diameter by 7" long.
- D. Reinforce all slab supported on steel floor deck with 6x6x-W2.9X2.9.

CONSTRUCTION MATERIALS AND GUIDELINES

JOINTS

- A. Submit drawings showing proposed construction joints for structural floor systems. Drawing shall be reviewed by Architect/Engineer and returned to contractor prior to pouring any concrete. Furnish construction joint drawing to fabricators before shop drawings are submitted.
- B. If construction joints are changed after being reviewed, submit revised drawings for review.

OPENINGS

- A. Coordinate all opening sizes, regardless of whether they are indicated on Structural Drawings, with Documents of all other disciplines. Some opening sizes and locations indicated are based on single source systems. Actual systems selected may alter opening sizes and locations. Prior to submission of framing especially pan layouts and reinforcing shop drawings, coordinate all openings with respective contractor. Shop drawings submitted without this coordination will be returned without review.

EXPANSION BOLTS

- A. Allowable shear and tension values for expansion bolts and adhesive anchors shall meet or exceed those published for Hilti HY 150 Epoxy. Allowable values for alternate bolts shall be established by independent testing agency acceptable to Architect/Engineer.
- B. Install as indicated and in conformance with manufacturer's specifications and ICC-ES approvals. Furnish Architect/Engineer with bolt specification for review before installation.

MISCELLANEOUS

- A. Bolts: Anchor bolts for mechanical and electrical equipment are furnished and located by respective contractors.
- B. Sleeves: Pipe sleeves are furnished and located by Mechanical and Electrical contractors.
- C. Verifications: Verify opening sizes, pad sizes and locations with respective contractors.
- D. Core Drilling: Do not cut reinforcing.
1. Verify location of reinforcing before core drilling.
2. No core drilling through beams or columns.
3. Maximum core hole through slabs: Pipe diameter plus 1"

NEW WORK IN CONJUNCTION WITH EXISTING CONSTRUCTION

- A. Existing Conditions:
1. Verify, by field check, sizes, dimensions, elevations, locations, etc. of elements of existing construction relative to new construction. Furnish to subcontractor prior to fabrication of work.
2. Notify Contracting Officer's Technical Representatives immediately of discrepancies between construction documents and actual field conditions.
3. Note verified dimensions on first shop drawing submitted.
4. Engineer has assumed that existing structures were designed and constructed in conformity with good design and construction practices.
5. Maintain integrity of existing structure where existing structure is modified to accommodate new construction and to protect from damage existing structure which is to remain.
6. Assume all responsibility for preservation of this property.
- B. Holes: Core drill or saw cut through existing construction.**DO NOT OVERCUT.**
- C. Shaded Areas: Shaded areas on drawings indicate existing construction.

STRUCTURAL TESTS AND SPECIAL INSPECTIONS - CHAPTER 17. INTERNATIONAL BUILDING CODE, 2006

Special Inspection shall be preformed per Section 1704, and include the following:

- A. Structural Steel (IBC Table 1704.3)
1. Periodic inspection for structural steel framing members for member size, configuration and orientation for conformance with approved plans, specifications and approved shop drawings.
2. Periodic inspection for embed plates and shapes with headed studs in conformance with Chapter 17 and Section 05-12-00.
3. Periodic inspection for bolted connections in conformance with Chapter 17 and Section 05-12-00.
4. Continuous inspection for welding of any member or connection for conformance with approved plans and Section 05-12-00.
- a. Visually inspect 100% of all fillet welds for size, length and quality per AWS D1.1.
- b. Test 100% of all full and partial penetration welds exceeding 5/16 inch, using ultrasonic testing or radiography per AWS D1.1. Test 25% of full and partial penetration welds less than 5/16 inch, using magnetic particle testing per ASTM E-109, performed on root pass and on finished weld.
- B. Adhesive Anchors
1. Continuous inspection.
2. Report to include product description (including product name), adhesive expiration date, concrete or masonry type and strength, anchor diameter and steel grade, compliance of the drill bit with IOC Evaluation Service, Inc. Report.
3. Special inspector shall verify in report to Building Official that anchor installation was in compliance with manufacturer's published instructions and evaluation report listed above.

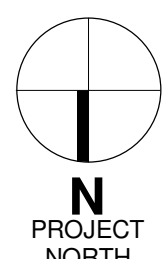
STRUCTURAL ABBREVIATIONS

AD	Area Drain	JST	Joist
ADDM	Addendum	JT	Joint
ADDL	Additional		
ADH	Adhesive	KWY	Keyway
ALT	Alternate	KO	Knockout
ANCH	Anchor		
AR	Anchor Rod	LG	Long/Length
ARCH	Architect, Architectural	LT WT	Lightweight
		LOC	Location
BCE	Bottom Concrete Elevation	LONGIT	Longitudinal
BDPE	Bottom Drilled Pier Elevation	LL	Live Load
BFE	Bottom Footing Elevation	LH	Long Leg Horizontal
BWE	Bottom Wall Elevation	LLV	Long Leg Vertical
BLDG	Building		
BM	Beam	MAX	Maximum
CL	Centerline	MB	Machine Bolt
CL or ½	Centerline	MECH	Mechanical
CLR	Clear/Clearance	MEMB	Membrane
COL	Column	MEZZ	Mezzanine
CONC	Concrete	MFR	Manufacturer
CONN	Connection	MIN	Minimum
CONST	Construction		
CONT	Continuous	NIC	Not In Contract
CONTR	Contractor	NO or #	Number
CT JT	Contraction Joint	NTS	Not To Scale
CTR(D)	Center(ed)		
DET	Detail	PAR	Parallel
DEG or °	Degree	PED	Pedestal
DEMO	Demolition	PERP	Perpendicular
DIA or Ø	Diameter	PL or ½	Plate
DIAG	Diagonal	PROJ	Projection
DIM	Dimension	PSF	Pounds per Square Foot
DJ	Double Joist	PSI	Pounds per Square Inch
DL	Dead Load		
DO	Ditto	R	Riser/Radius
DWG	Drawing	RD	Roof Drain
DWLS	Dowels	REINF	Reinforcing/Reinforcement
		REQD	Required
		REQMT	Requirement
EA	Each	SCHED	Schedule
EF	Each Face	SECT	Section
ES	Each Side	SF	Square Foot
EW	Each Way	SHT	Sheet
EIR	Embedment In Rock	SIM	Similar
EMB	Embed/Embedment	SPEC	Specifications
EL	Elevation	SP	Space(s)
ELEC	Electrical	SO	Square
ELEV	Elevator	STL	Steel
EQ	Equal	STIFF	Stiffener(s)
EQ SPCD	Equally Spaced	STD	Standard
EQUIP	Equipment	STL	Steel
EXIST	Existing	STR	Stirrups
EXP	Expansion	STRUCT	Structural
EXP JT	Expansion Joint		
FAB	Fabricate	T&B	Top and Bottom
FDN	Foundation	TBE	Top Beam Elevation
FD	Floor Drain	TCE	Top Concrete Elevation
FIN	Finish	TBLE	Top Brick Ledge Elevation
FLR	Floor	TDPE	Top Drilled Pier Elevation
FRMG	Framing	TEMP STL	Temperature Steel
FT	Foot (Feet)	TFE	Top Footing Elevation
FTG	Footing	TPE	Top Pedestal Elevation
FV	Field Verify	TSE	Top Slab Elevation
		TWE	Top Wall Elevation
GA	Gage/Gauge	TJ	Triple Joist
GALV	Galvanized	TL	Total Load
GC	General Contractor	TR	Tread
GR BM	Grade Beam	TRANSV	Transverse
GRTG	Grating	TYP	Typical
HDS	Headed Stud	UNEXC	Unexcavated
HS	High Strength	UNO	Unless Noted Otherwise
HT	Height		
HORIZ	Horizontal	VER	Verify
		VERT	Vertical
ID	Inside Diameter		
IF	Inside Face	W/	With
IN	Inch(s)	WP	Work Point
INFO	Information	WS	Waterstop
INV	Invert	WT	Weight
		WWF	Welded Wire Fabric

STRUCTURAL SHEET INDEX

- 1-SS001 - STRUCTURAL GENERAL NOTES, ABBREVIATIONS & INDEX
- 1-SS002 - STANDARD STRUCTURAL DETAILS
- 1-SS003 - STANDARD STRUCTURAL DETAILS
- 1-SS104 - PARTIAL FOURTH FLOOR & ROOF FRAMING PLAN
- 1-SS105 - PARTIAL ROOF FRAMING PLAN
- 1-SS701 - FRAMING SECTIONS AND DETAILS
- 1-SS702 - FRAMING SECTIONS AND DETAILS
- 1-SS801 - COLUMN SCHEDULE AND DETAILS
- 1-SS901 - PART PLANS, EQUIPMENT SUPPORT DETAILS

Revisions:	Date	CONSULTANTS:	CERTIFICATION/SEAL	ARCHITECT/ENGINEERS/COST ESTIMATORS:	Drawing Title: STRUCTURAL GENERAL NOTES, ABBREVIATIONS & INDEX	Project Title: RELOCATE SURGICAL OPERATING ROOMS, IOWA CITY IA	Project Number 636-403
		MECH/ELEC/PLUMBING Ellerbe Becket, Inc	STRUCTURAL Ellerbe Becket, Inc	FIRE PROTECTION FP&C CONSULTANTS, INC One Ward Parkway Suite 200 Kansas City, MO 64112			Building Number 1
		800 LaSalle Ave, Suite 250 Minneapolis, MN 55402	800 LaSalle Ave, Suite 250 Minneapolis, MN 55402	Suite 200 Kansas City, MO 64112		Location IOWA CITY, IOWA 52246	Drawing Number 1-SS001
		t: 612.376.2000 f: 612.376.2271	t: 612.376.2000 f: 612.376.2271	t: 816.931.3377 f: 816.931.3378	2380 McGee Street, Suite 200 Kansas City, MO 64108 816 561 4443	Date May 30, 2012	Checked HC
					Ellerbe Becket, Inc. Ellerbe Becket Architects and Engineers Ellerbe Becket Architects and Engineers	Drawn MSH	Dwg. 63 of 130
				2009			



5/29/2012 9:52:00 AM

three inches = one foot

one and one half inches = one foot

one inch = one foot

three quarters inch = one foot

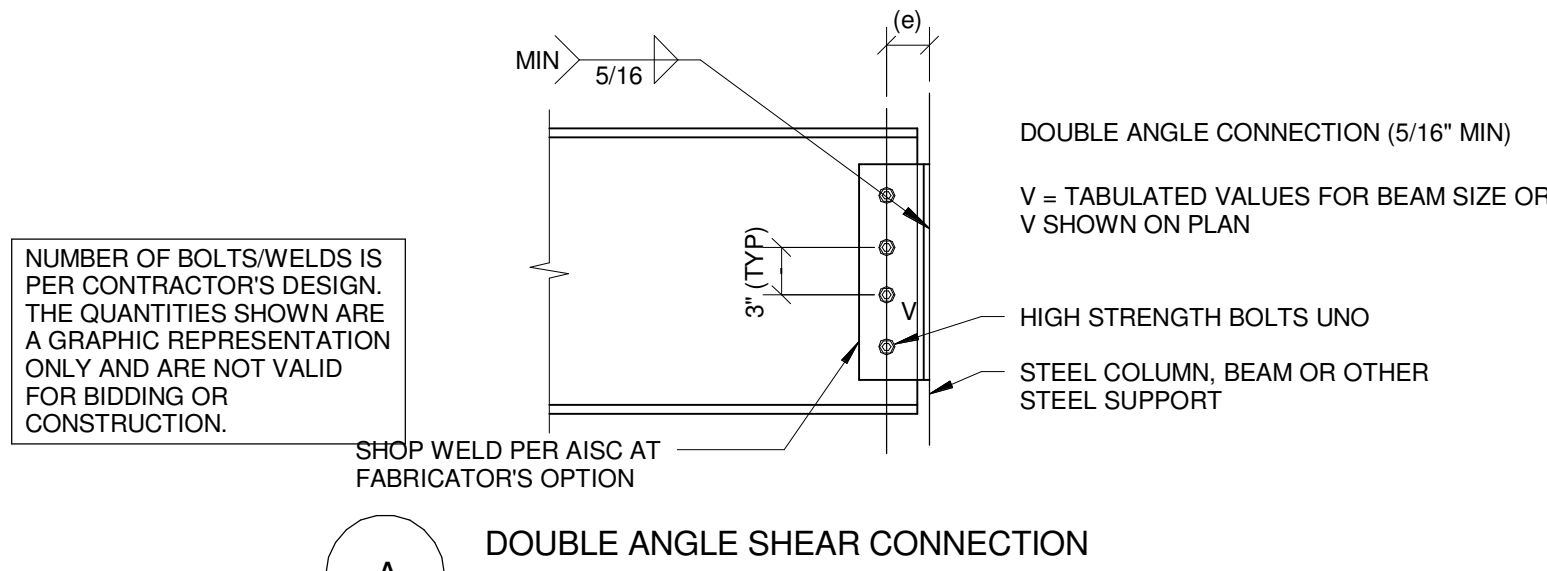
one half inch = one foot

one quarter inch = one foot

three eighths inch = one foot

one eighth inch = one foot

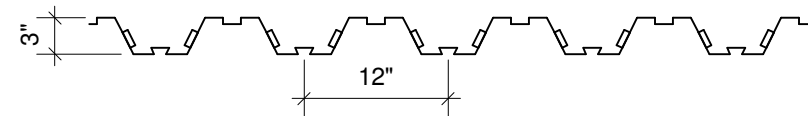
one sixteenth inch = one foot



BEAM SIZE	DOUBLE ANGLE REQUIRED AT BEAM TO COLUMN CONNECTION	
	MIN ROWS OF 3/4\" DIA BOLTS	MIN DESIGN SHEAR (V) KIPS (SERVICE LOADS)
W44	X	X
W40	X	X
W36 & W33	7	129
W30	7	129
W27	6	111
W24	5	90
W21	4	65
W18	4	56
W16	3	36
W14	3	33
W12	3	23
W10	2	15
W8	2	9

- NOTE:
- MINIMUM CONNECTIONS SHOWN IN TABLES SHALL BE USED FOR DESIGN UNLESS END REACTIONS, SHOWN ON DRAWINGS, EXCEED MINIMUM DESIGN SHEAR. WHERE END REACTIONS ARE NOT SHOWN ON PLAN, USE MINIMUM DESIGN SHEARS LISTED ABOVE.
 - PROPORTION ALL CONNECTION ELEMENTS, INCLUDING BUT NOT LIMITED TO BOLTS, WELDS, PLATES, ANGLES, BEAM WEBS AND COPIES FOR MAXIMUM EFFECT OF THE DESIGN FORCES AND THEIR ECCENTRICITIES (e). SUPPORT HAS NOT BEEN DESIGNED FOR MOMENT DUE TO CONNECTION ECCENTRICITY.
 - BOLT SIZE AND GRADE SHALL BE SELECTED FROM THE FOLLOWING: 3/4\" DIA A325.
 - ALL BOLTED CONNECTIONS IN BRACE FRAMES SHALL BE SLIP CRITICAL USING TYPE \"SC\".
 - FABRICATOR'S OPTION TO USE DOUBLE ANGLE'S AT BEAM TO BEAM CONNECTION.
 - FABRICATOR IS REQUIRED TO DESIGN ALL SKEWED BEAM CONNECTIONS. SEE PLANS FOR REACTIONS (V).

1 TYPICAL BEAM CONNECTION (UNO)
3/4\" = 1'-0\"



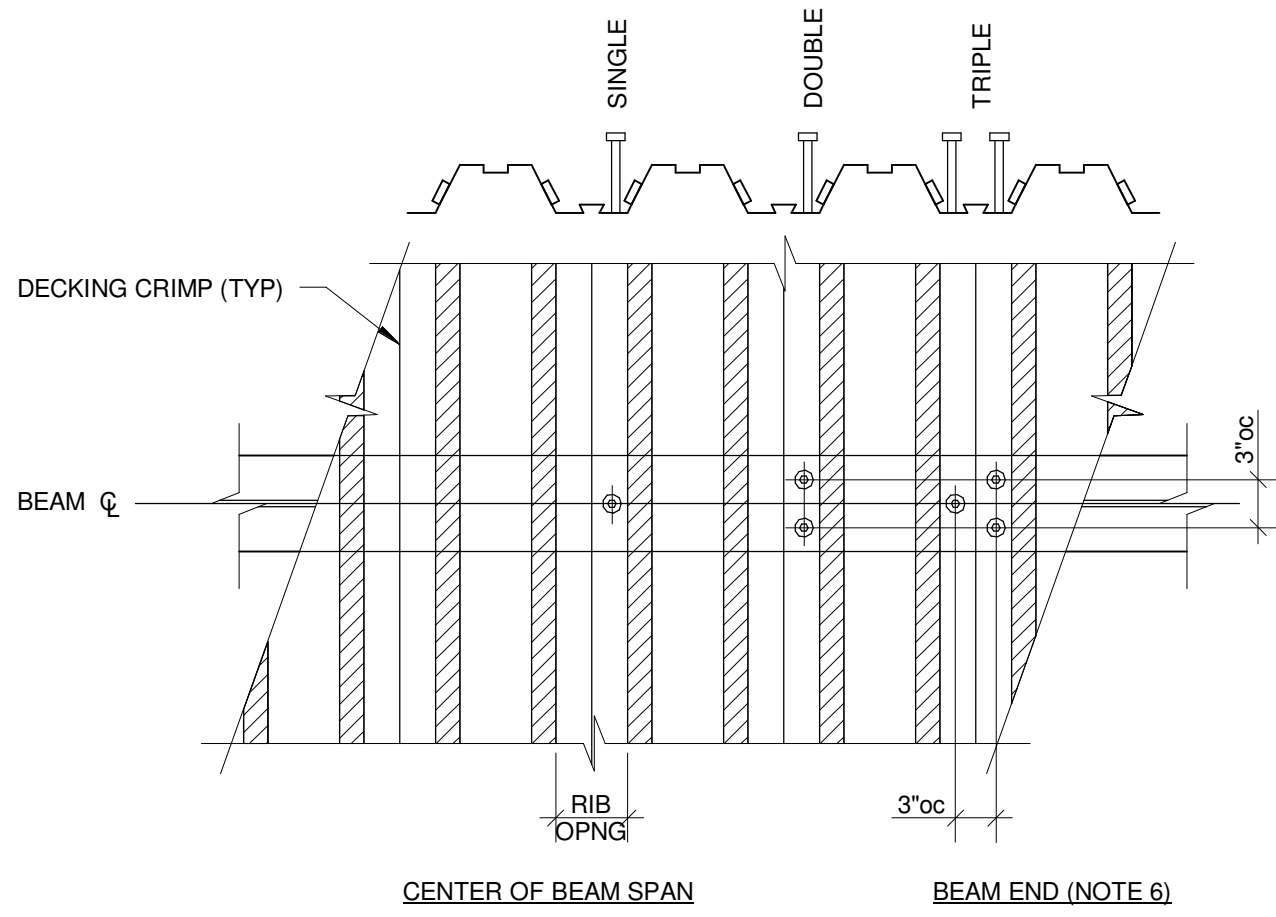
DECK PROPERTIES *		
3\" - 18 GA GALV STEEL FLOOR DECK		
I _N 4	1.25 MIN	
S _N 3	0.79 MIN	
THICK INCHES	0.0474 MIN	

*PER ONE FOOT WIDE SECTION

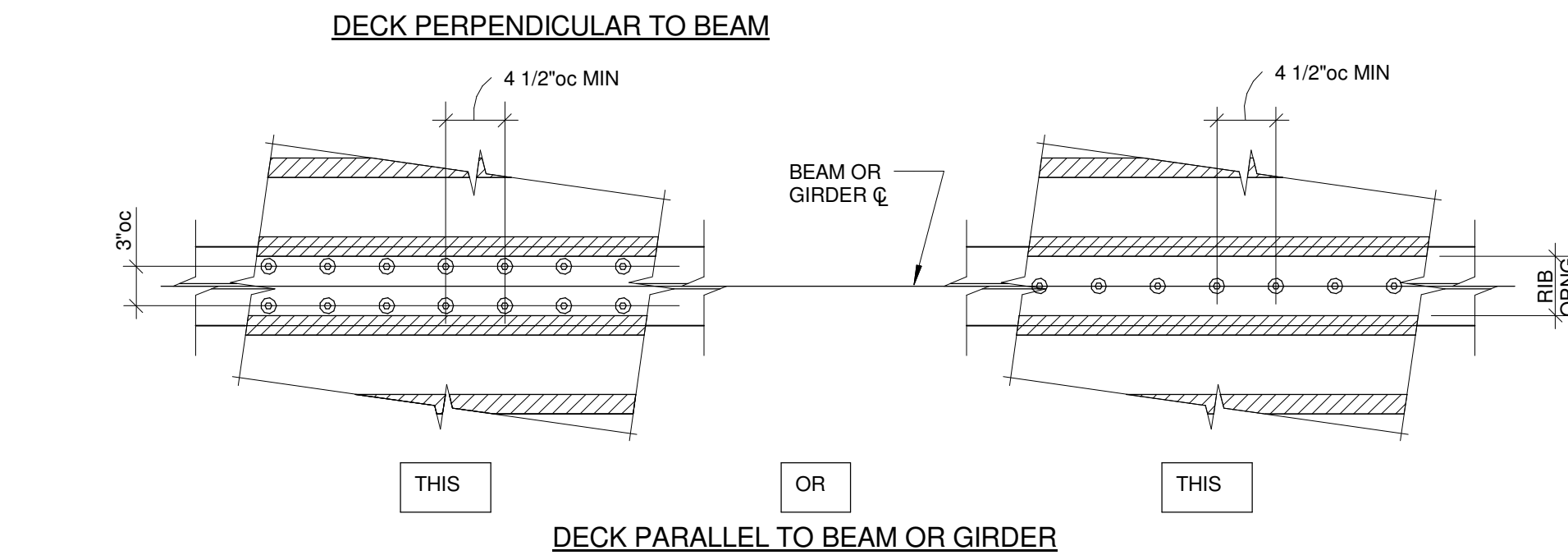
DECK ATTACHMENT SCHEDULE			
END SUPPORTS	INTERMEDIATE SUPPORTS	SIDE SUPPORTS	SIDE JOINTS
WELD @ 12\" oc	WELD @ 12\" oc	WELD @ 36\" oc	#10 SCREWS OR BUTTON PUNCHES @24\" oc

- NOTES:
- ALL WELDS CALLED OUT AS 5/8\" DIA PLUG WELDS ARE TO BE 1/2\" DIA EFFECTIVE.
 - 3/4\" DIA SHEAR CONNECTORS CAN BE SUBSTITUTED FOR 5/8\" DIA PLUG WELDS.
 - SEE 35002 FOR STUD PLACEMENT.
 - AT BUTTED DECK, WELD BOTH SIDES OF DECK TO SUPPORTING MEMBER.

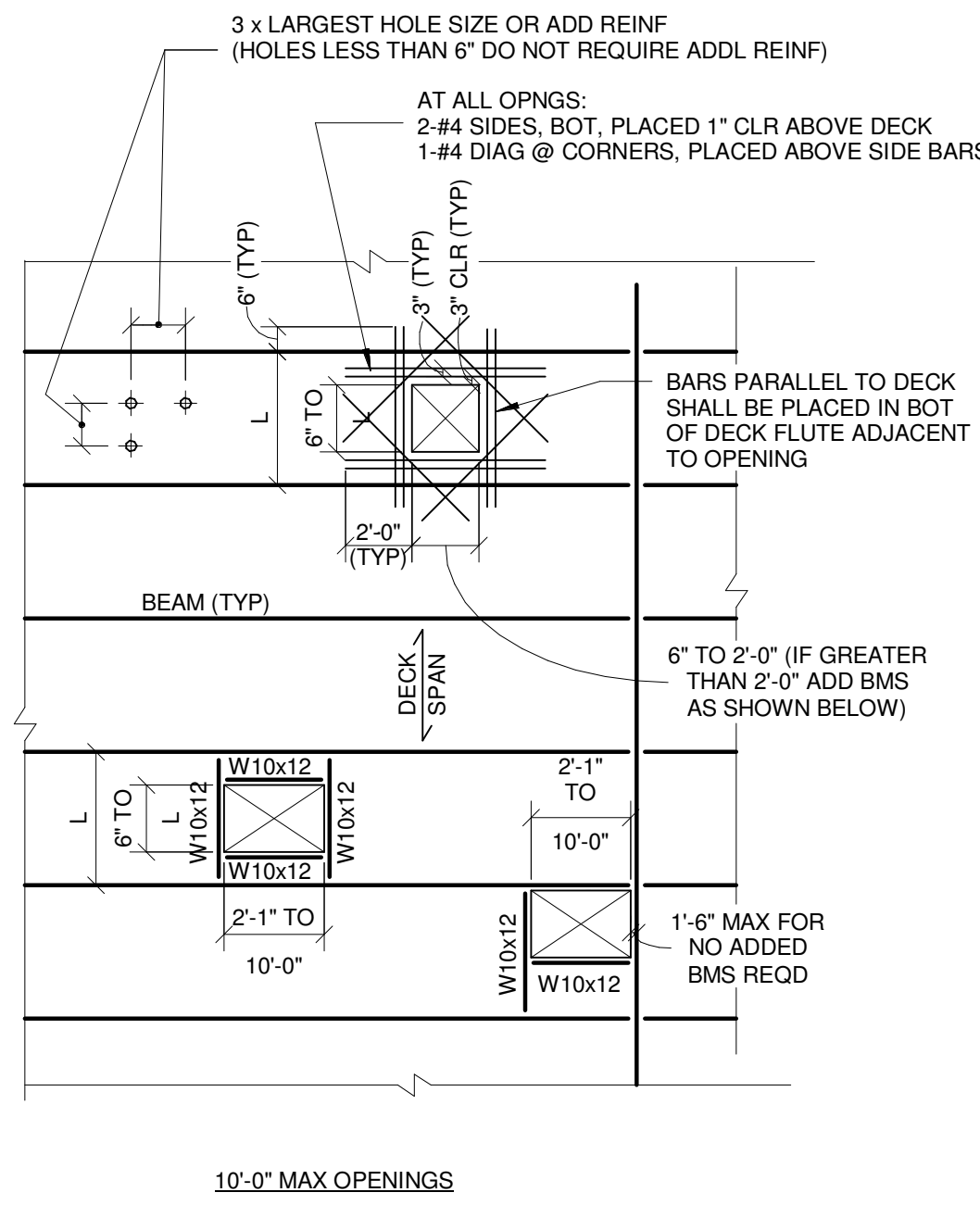
2 TYPICAL PROFILE COMPOSITE STEEL FLOOR DECK
3/4\" = 1'-0\"



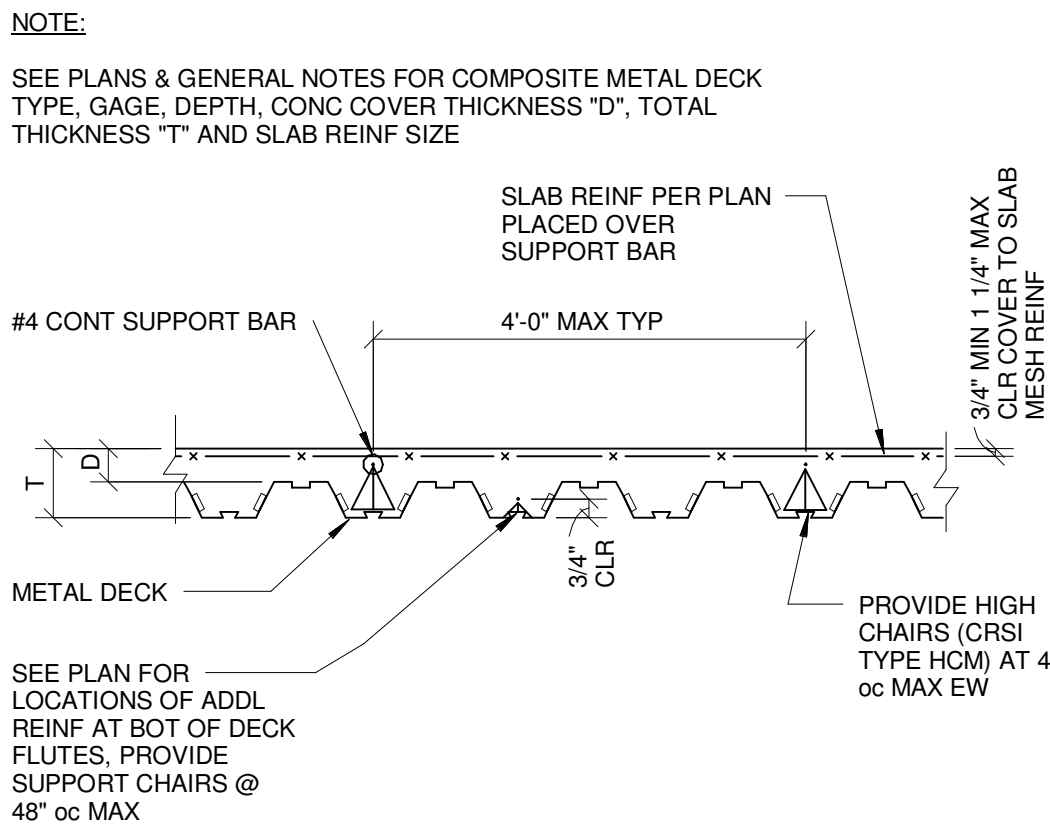
- NOTE:
- 3 STUDS AS SHOWN ARE MAX NUMBER ALLOWABLE PER DECK RIB.
 - USE ONLY ONE STUD PER RIB UNIT NUMBER OR STUDS EXCEEDS DECK RIBS AVAILABLE.
 - WHEN DOUBLING OR TRIPLING OF STUDS IN DECK RIBS BECOMES NECESSARY, BEGIN FROM EACH END OF THE BEAM & PROCEED TOWARDS THE CENTER OF THE BEAM SPAN.
 - STUDS 3/4\" DIA (UNO).
 - PLACE EQUAL NUMBERS OF STUDS UNIFORMLY SPACED EACH SIDE OF THE CENTER OF THE BEAM SPAN (UNO).
 - FOR SINGLE OR DOUBLE STUDS, PLACE THE STUDS ON THE SIDE OF THE DECK CRIMP CLOSEST TO THE BEAM END.
 - MAXIMUM STUD SPACING = 36\" (PLUG WELDS REQUIRED WHEN STUD SPACING EXCEEDS 12\").



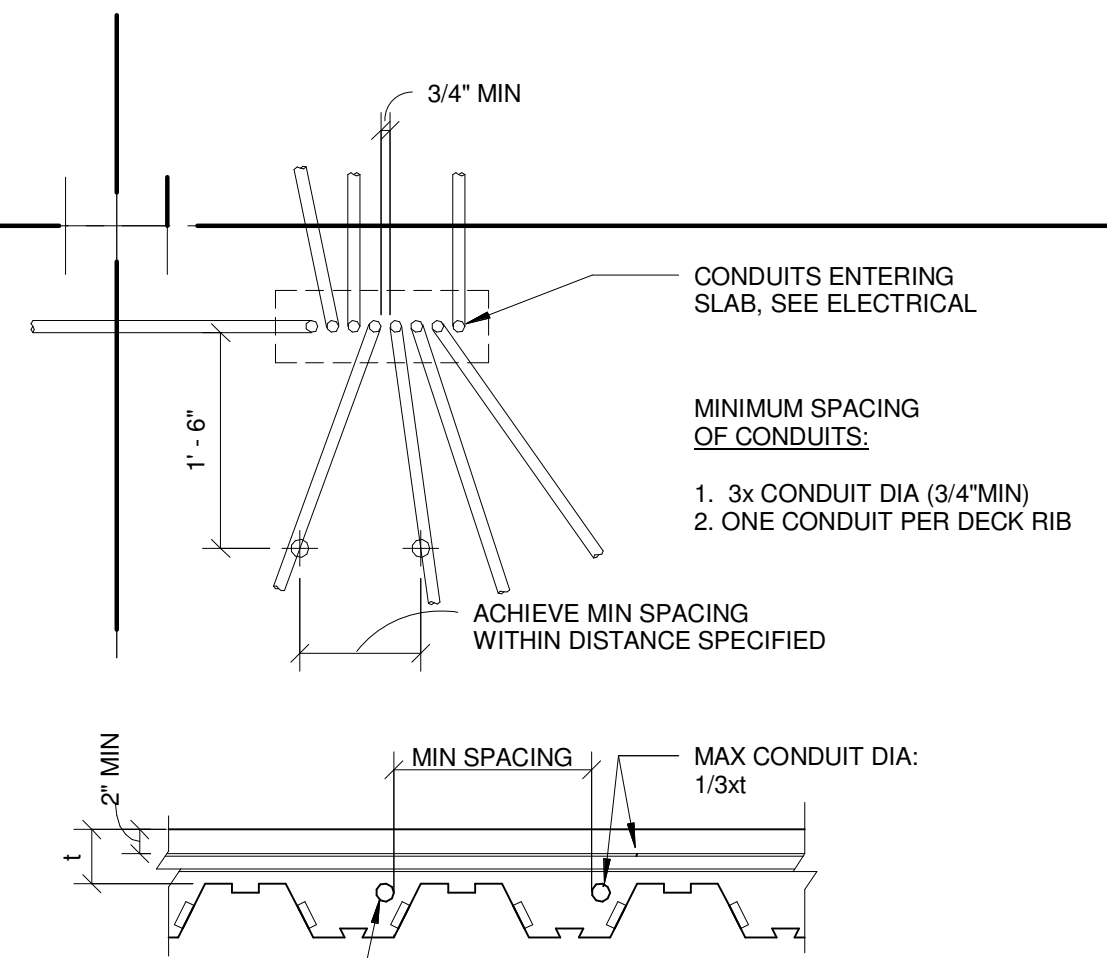
3 COMPOSITE DECK STUD PLACEMENT
1\" = 1'-0\"



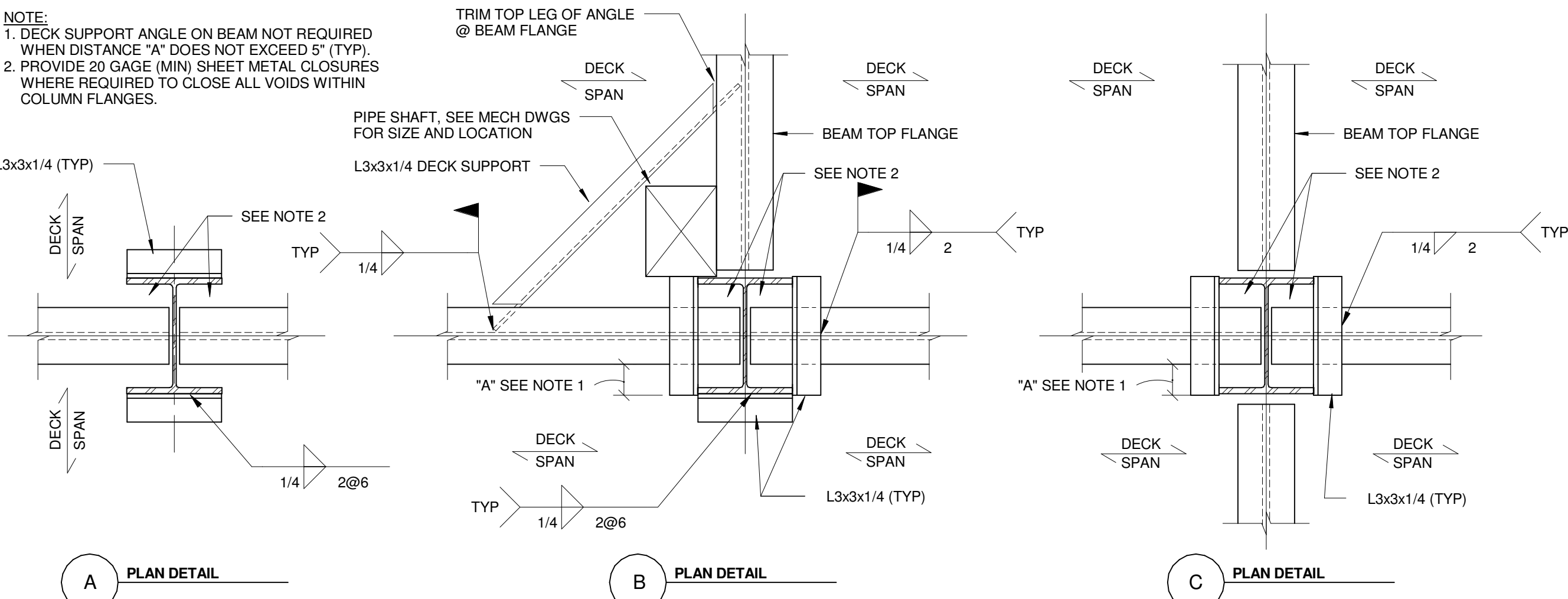
4 TYPICAL COMPOSITE DECK OPENING DETAIL
3/4\" = 1'-0\"



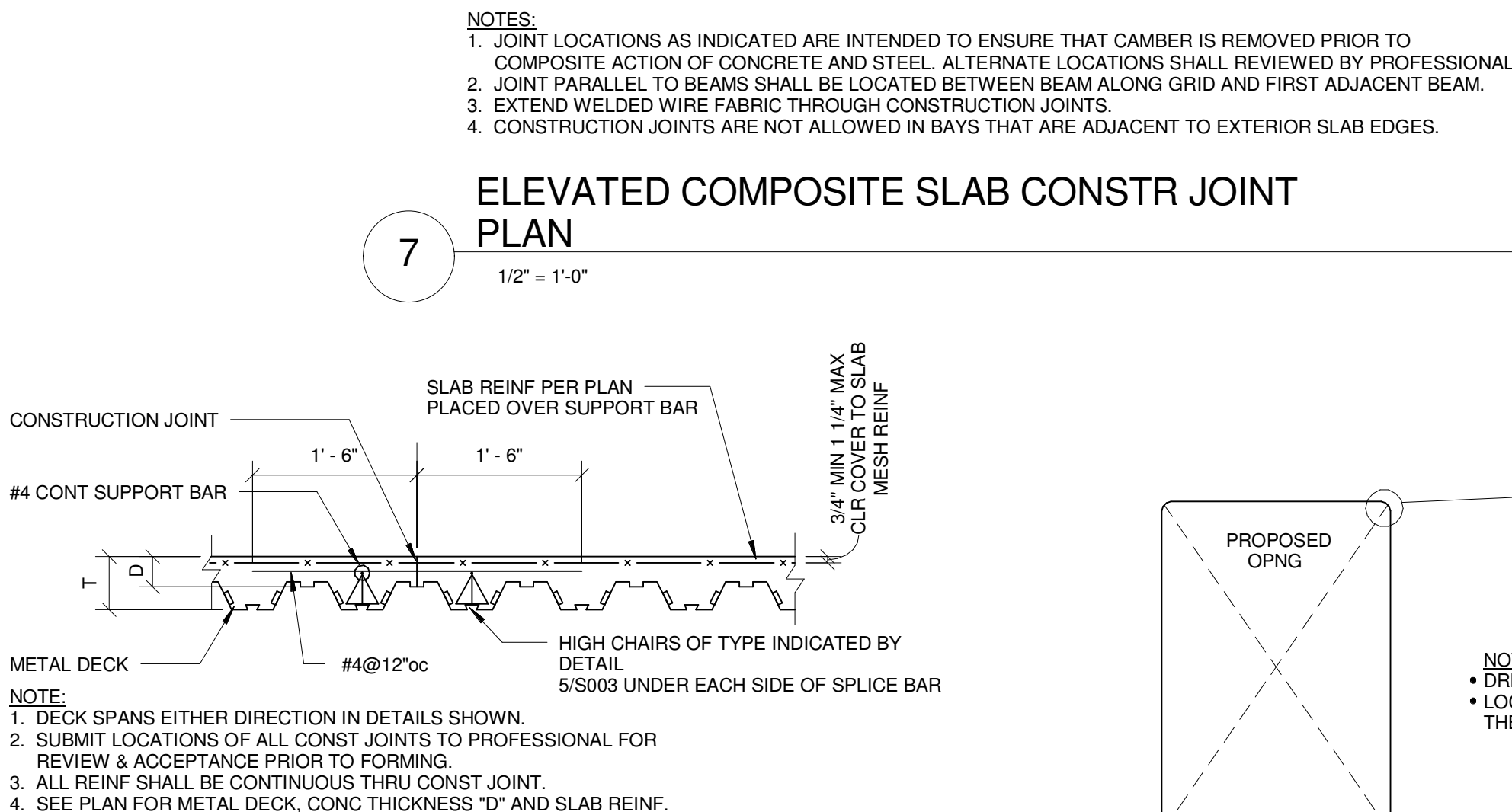
5 TYPICAL COMPOSITE DECK REINFORCING SUPPORT DETAIL
3/4\" = 1'-0\"



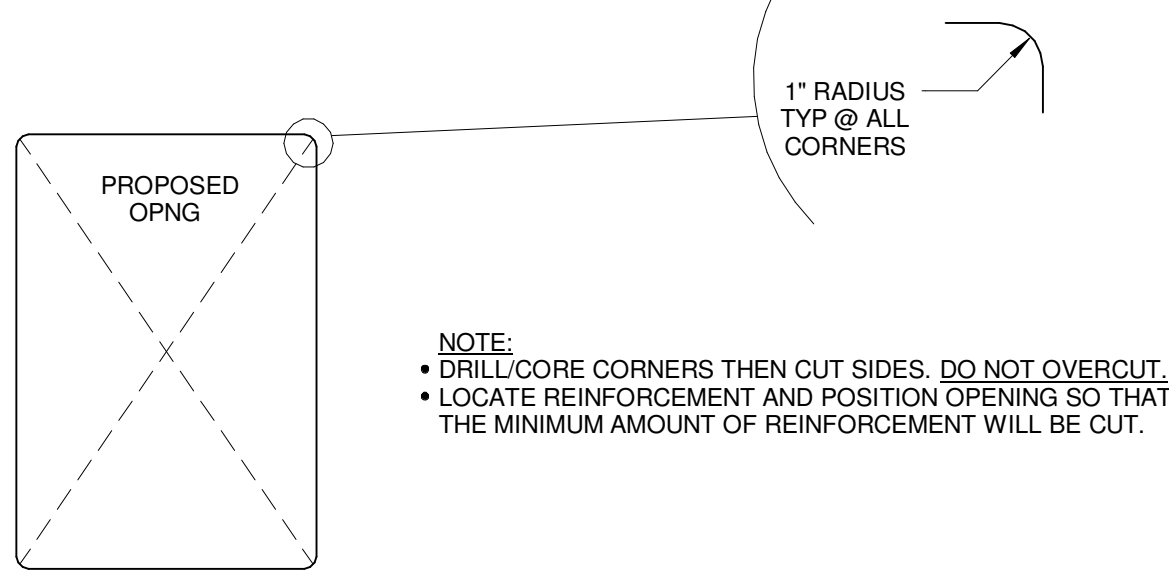
6 ELECTRICAL CONDUIT WITHIN COMPOSITE SLAB
3/4\" = 1'-0\"



8 TYPICAL COMPOSITE DECK SUPPORT DETAIL @ STL COLUMNS
3/4\" = 1'-0\"



9 TYPICAL COMPOSITE DECK CONSTRUCTION JOINT DETAIL
3/4\" = 1'-0\"



10 NEW SAWCUT OPENING IN EXISTING ELEVATED CONC SLAB
3/4\" = 1'-0\"

Revisions:

Date

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CERTIFICATION/SEAL

ARCHITECT/ENGINEERS/COST ESTIMATORS:

Drawing Title:
STANDARD STRUCTURAL DETAILS

Approved: Project Director

Project Title:
RELOCATE SURGICAL OPERATING ROOMS, IOWA CITY IA

Location
IOWA CITY, IOWA 52246
Date
May 30, 2012

Checked
HC

Drawn
MSH

Project Number
636-403

Building Number
1

Drawing Number
1-SS002

Dwg. 64 of 130

ELLERBE BECKET

2380 McGee Street, Suite 200
Kansas City, MO 64108
816 561 4443

Ellerbe Becket, Inc.
Ellerbe Becket Architects and Engineers, Inc.
Ellerbe Becket Architects and Engineers
2009

Construction & Facilities Management

CFM

Department of Veterans Affairs

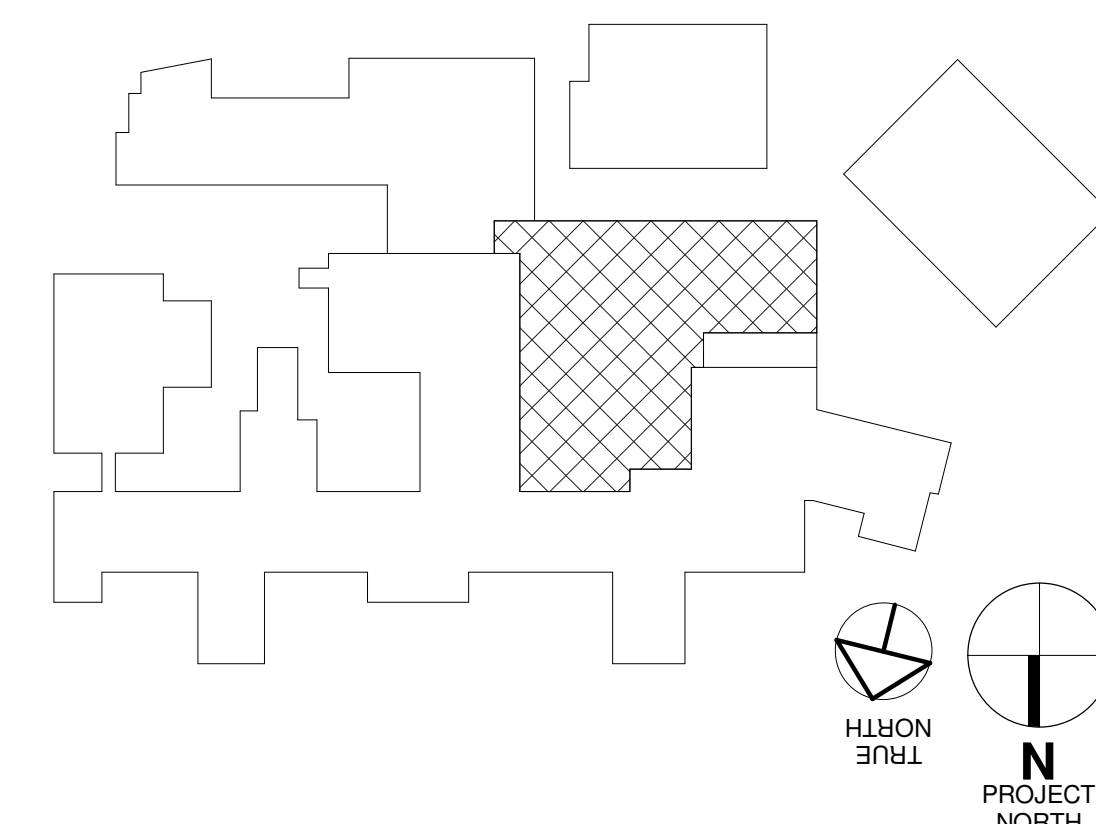


Revisions:	Date	CONSULTANTS:	CERTIFICATION/SEAL:	ARCHITECT/ENGINEERS/COST ESTIMATORS:	<div> <div> Drawing Title: STANDARD STRUCTURAL DETAILS </div> <div> Project Title: RELOCATE SURGICAL OPERATING ROOMS, IOWA CITY IA </div> <div> Project Number 636-403 </div> <div> Building Number 1 </div> <div> Drawing Number 1-SS003 </div> <div> Dwg. 65 of 130 </div> </div>	<div> <div> <div> Date May 30, 2012 </div> <div> Checked HC </div> <div> Drawn MSH </div> </div> <div> Approved: Project Director </div> </div>	<div> <div> <div> MECH/ELEC/PLUMBING Ellerbe Becket, Inc </div> <div> STRUCTURAL Ellerbe Becket, Inc </div> <div> FIRE PROTECTION FP&C CONSULTANTS, INC </div> </div> <div> <div> 800 LaSalle Ave, Suite 250 Minneapolis, MN 55402 </div> <div> 800 LaSalle Ave, Suite 250 Minneapolis, MN 55402 </div> <div> One Ward Parkway Suite 200 Kansas City, MO 64112 </div> </div> <div> <div> t: 612.376.2000 f: 612.376.2271 </div> <div> t: 612.376.2000 f: 612.376.2271 </div> <div> t: 816.931.3377 f: 816.931.3378 </div> </div> </div> <div> <div> <div> ELLERBE BECKET </div> <div>  </div> </div> <div> <div> 2380 McGee Street, Suite 200 Kansas City, MO 64108 816 561 4443 </div> <div> Ellerbe Becket, Inc. Ellerbe Becket Architects and Engineers, Inc. Ellerbe Becket Architects and Engineers </div> </div> <div> 2009 </div> </div>	<div> <div>  </div> <div>  </div> </div>
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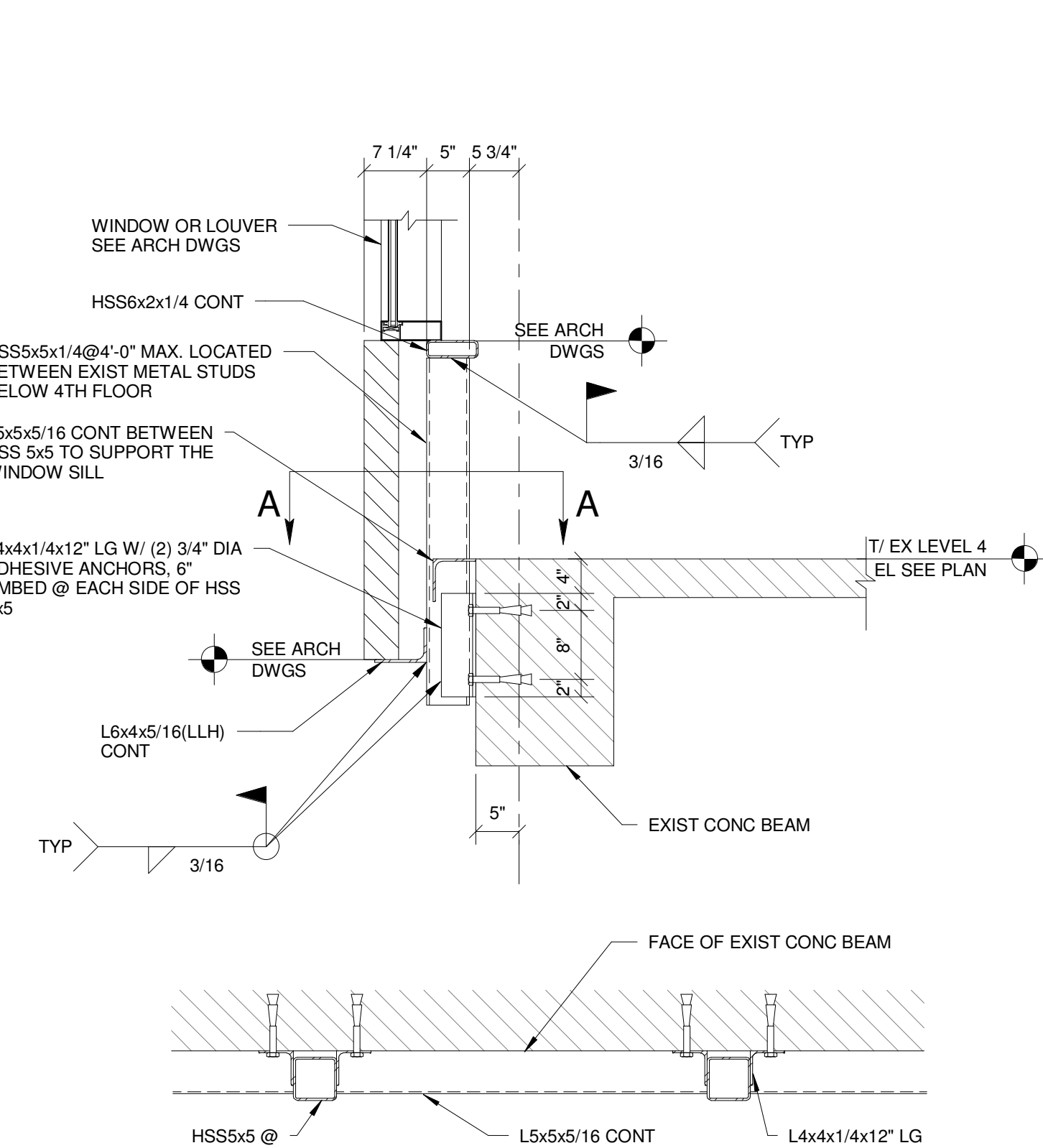

$$1/8" = 1'-0"$$

- NOTES:
1. T/S LAB EL. = AS NOTED ON PLAN.
 2. T/S LT EL. = "0'-8" FROM T/S LAB EL. UNO.
 3. ELEVATIONS NOTED THUS $\frac{X}{Y}$ ARE FROM REF. EL.
 4. ALL STEEL BEAMS SHALL BE SPACED EVENLY BETWEEN COLUMN GRIDLINE. UNO.
 5. SEE 1-S8001 SHEET FOR GENERAL NOTES.
 6. SEE 1-S8001 AND 1-S8000 SHEETS FOR TYPICAL STEEL FRAMING DETAILS.
 7. SEE 1-S8801 SHEET FOR COLUMN SCHEDULE AND TYPICAL DETAILS.
 8. COORD ALL SLAB OPENGS, SLEEVES, DEPRESSIONS, CURBS, EMBEDS, INSERTS, STAIRS, ETC WITH ARCH AND MEP.
 9. SEE ARCHITECTURAL DRAWINGS FOR PLAN DIMENSIONS NOT SHOWN HEREIN.

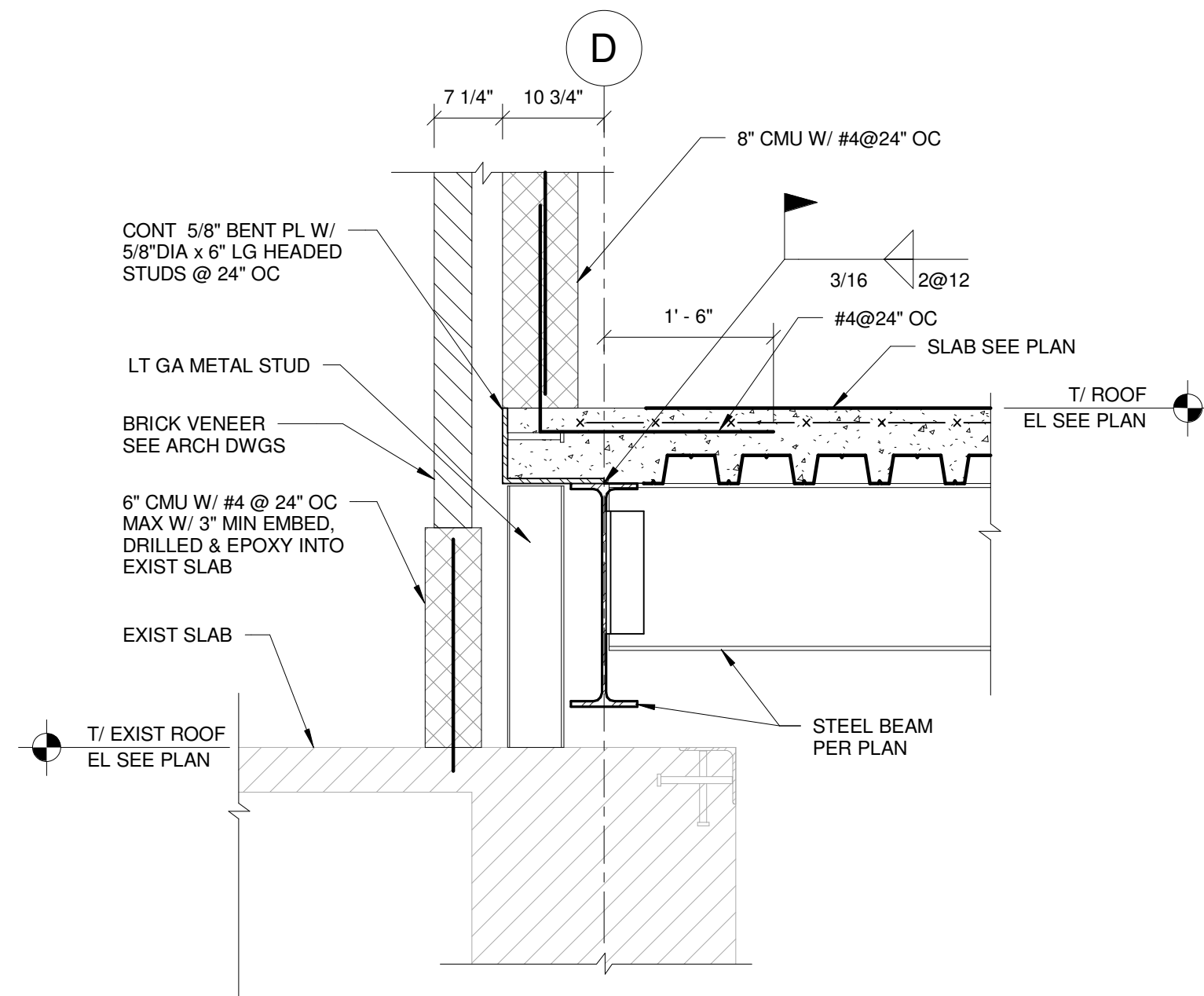



$$1/8" = 1'-0"$$

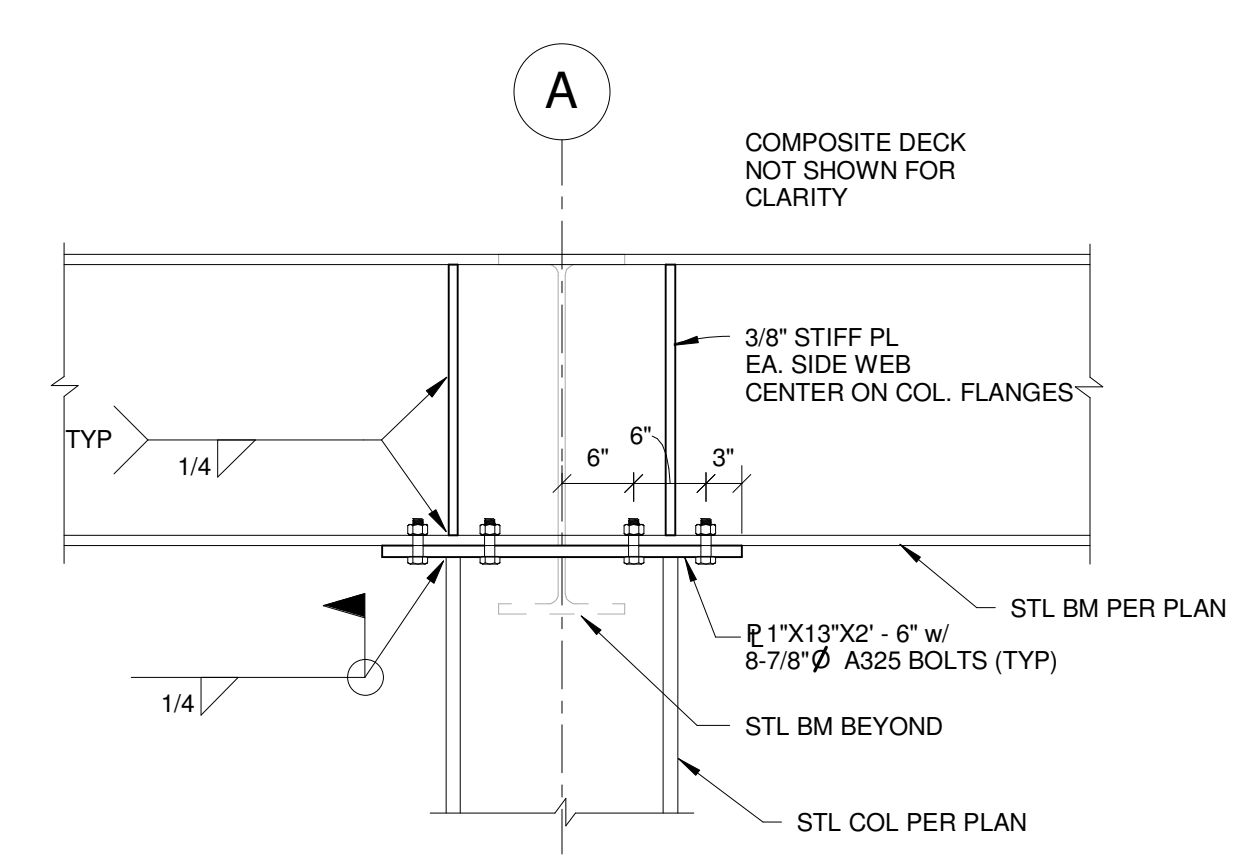
Revisions:		Date	CONSULTANTS:			CERTIFICATION/SEAL:	ARCHITECT/ENGINEERS/COST ESTIMATORS:			Drawing Title: PARTIAL ROOF FRAMING PLAN			Project Title: RELOCATE SURGICAL OPERATING ROOMS, IOWA CITY IA			Project Number 636-403		<div> Department of Veterans Affairs</div>		
			MECH/ELEC/PLUMBING Ellerbe Becket, Inc			STRUCTURAL Ellerbe Becket, Inc	FIRE PROTECTION FP&C CONSULTANTS, INC One Ward Parkway Suite 200 Kansas City, MO 64112			<div>ELLERBE BECKET</div> <div></div> <div>2380 McGee Street, Suite 200 Kansas City, MO 64108 816 561 4443</div> <div>Ellerbe Becket, Inc. Ellerbe Becket Architects and Engineers, Inc. Ellerbe Becket Architects and Engineers</div> <div>2009</div>			Building Number 1			Drawing Number 1-SS105			Dwg. 67 of 130	
			800 LaSalle Ave, Suite 250 Minneapolis, MN 55402			800 LaSalle Ave, Suite 250 Minneapolis, MN 55402			Location IOWA CITY, IOWA 52246				Date May 30, 2012		Checked HC	Drawn MSH				
			t: 612.376.2000 f: 612.376.2271			t: 612.376.2000 f: 612.376.2271														



5 SECTION
3/4" = 1'-0"

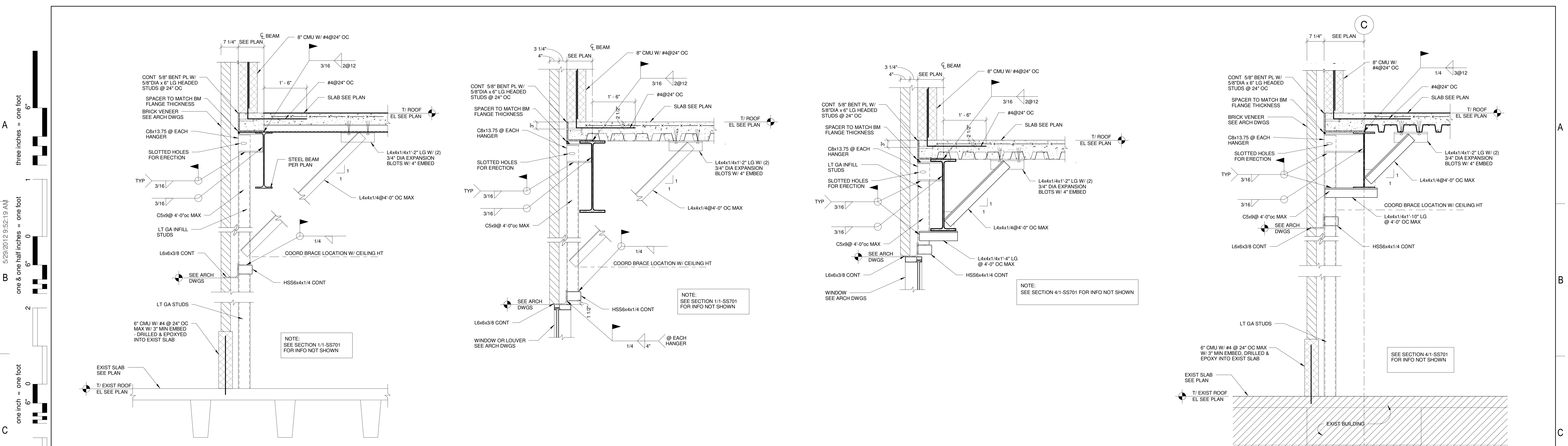


9 SECTION



13 SECTION @ CANTILEVER BEAM

Revisions:		Date	CONSULTANTS:			CERTIFICATION/SEAL:	ARCHITECT/ENGINEERS/COST ESTIMATORS:			Drawing Title: FRAMING SECTIONS AND DETAILS		Project Title: RELOCATE SURGICAL OPERATING ROOMS, IOWA CITY IA		Project Number 636-403		<div>Construction & Facilities Management</div> <div>CFM</div> <div>Department of Veterans Affairs</div>	
			MECH/ELEC/PLUMBING Ellerbe Becket, Inc			STRUCTURAL Ellerbe Becket, Inc	FIRE PROTECTION FP&C CONSULTANTS, INC One Ward Parkway Suite 200 Kansas City, MO 64112							Building Number 1			
			800 LaSalle Ave, Suite 250 Minneapolis, MN 55402			800 LaSalle Ave, Suite 250 Minneapolis, MN 55402						Location IOWA CITY, IOWA 52246		Drawing Number 1-SS701			
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							<div>ELLERBE BECKET</div> <div></div> <div>2380 McGee Street, Suite 200 Kansas City, MO 64108 816 561 4443</div> <div>Ellerbe Becket, Inc. Ellerbe Becket Architects and Engineers, Ellerbe Becket Architects and Engineers</div> <div>2009</div>										

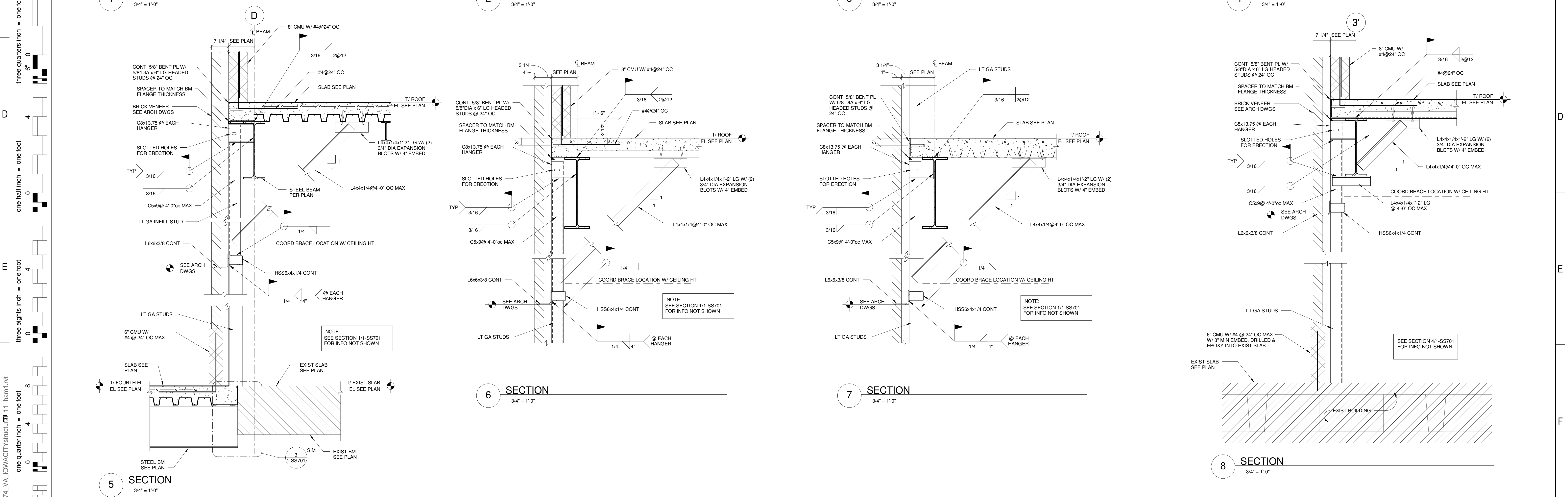


1 SECTION
3/4" = 1'-0"

2 SECTION
3/4" = 1'-0"

3 SECTION
3/4" = 1'-0"

4 SECTION
3/4" = 1'-0"





5 SECTION
3/4" = 1'-0"

6 SECTION
3/4" = 1'-0"

7 SECTION
3/4" = 1'-0"

8 SECTION
3/4" = 1'-0"

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5/29/2012 9:52:19 AM
three inches = one foot
one and one half inches = one foot
one inch = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
one half inch = one foot
three eighths inch = one foot
one eighth inch = one foot
one quarter inch = one foot

Revisions:		Date	CONSULTANTS:			CERTIFICATION/SEAL	ARCHITECT/ENGINEERS/COST ESTIMATORS:			Drawing Title: FRAMING SECTIONS AND DETAILS			Project Title: RELOCATE SURGICAL OPERATING ROOMS, IOWA CITY IA			Project Number 636-403								
			MECH/ELEC/PLUMBING Ellerbe Becket, Inc				ELLERBE BECKET			2380 McGee Street, Suite 200 Kansas City, MO 64108 816 561 4443			Ellerbe Becket, Inc. Ellerbe Becket Architects and Engineers, Inc. Ellerbe Becket Architects and Engineers			Building Number 1								
			800 LaSalle Ave, Suite 250 Minneapolis, MN 55402							2009			Location IOWA CITY, IOWA 52246			Drawing Number 1-SS702								
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			t: 612.376.2000 f: 612.376.2271																					

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three inches = one foot

one & one half inches = one foot

one inch = one foot

three quarters inch = one foot

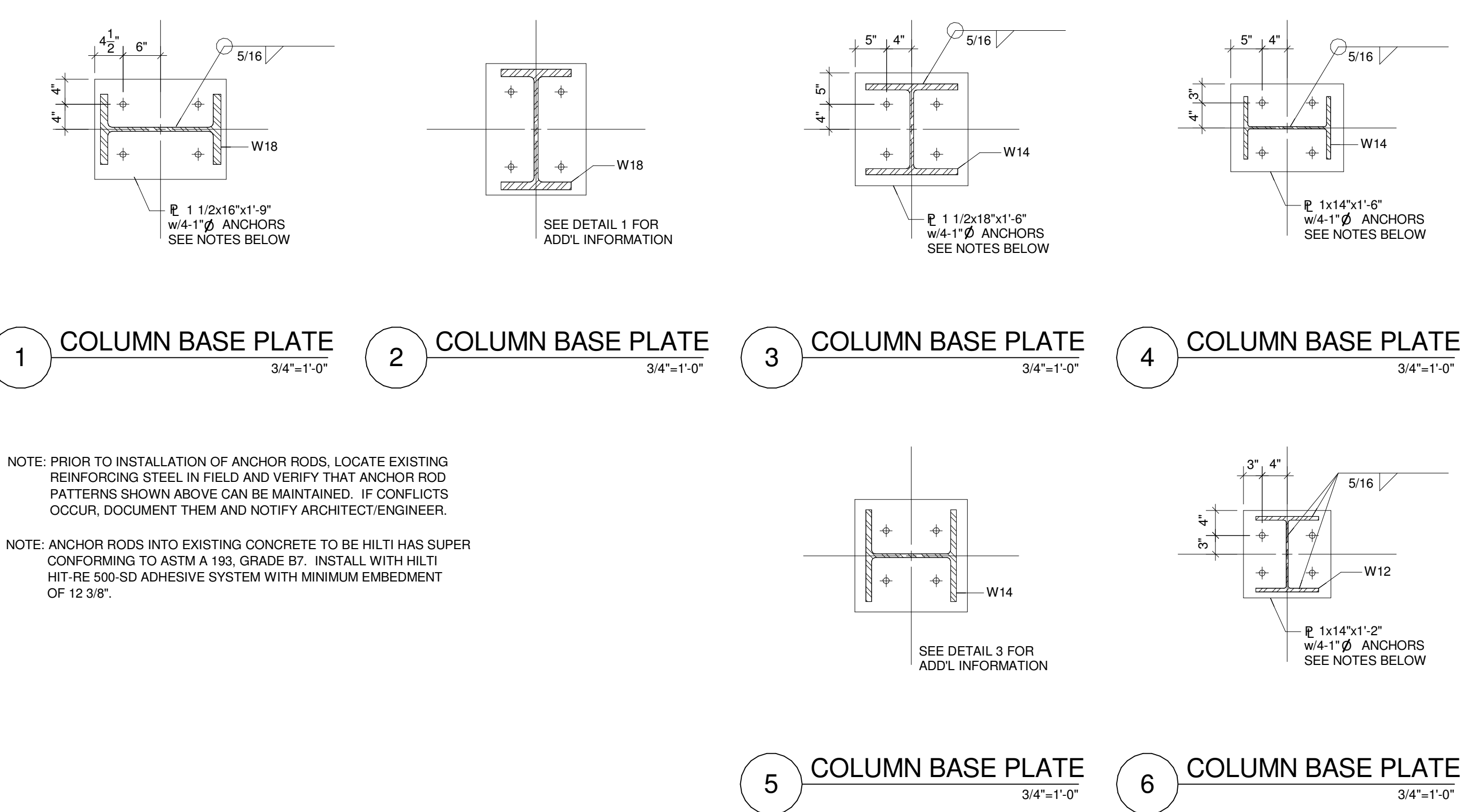
one half inch = one foot

three eighths inch = one foot

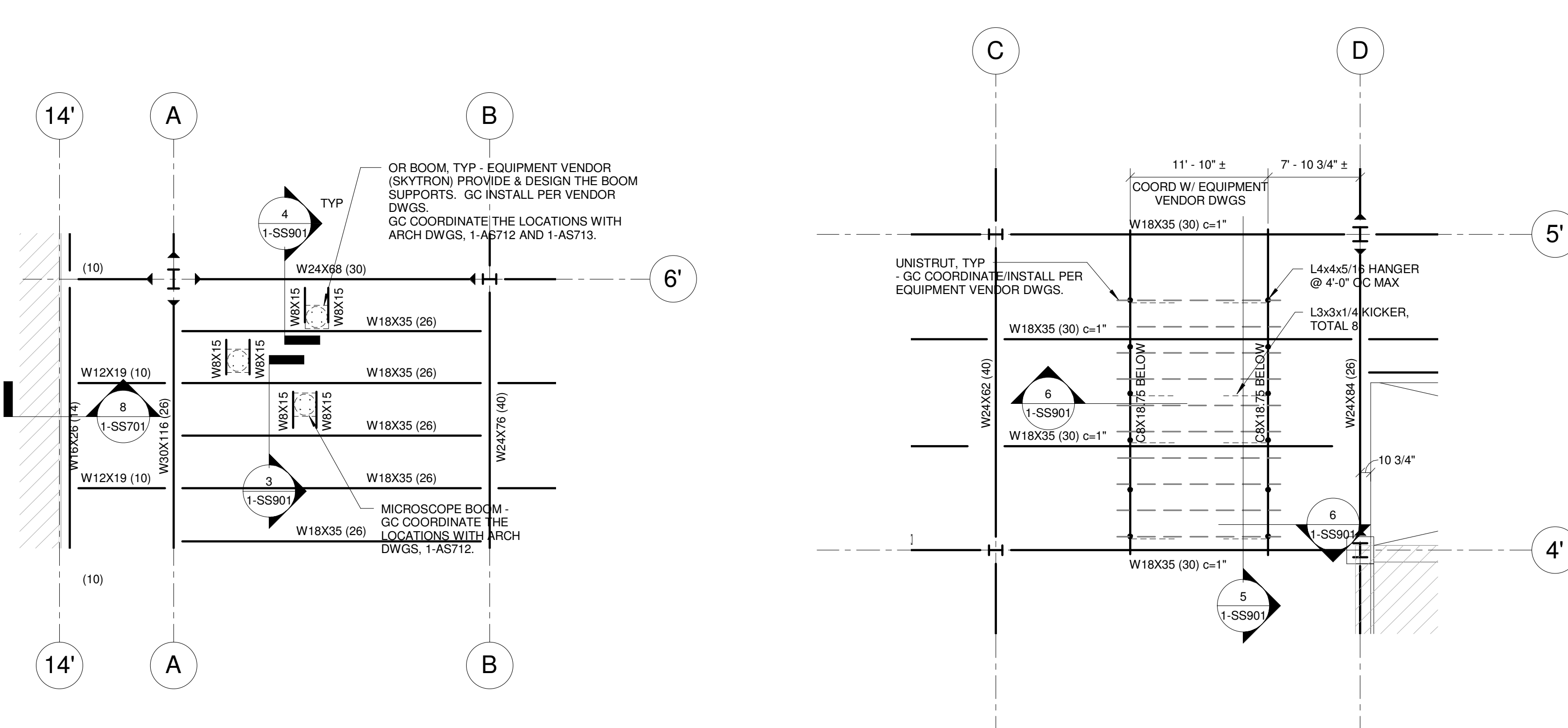
one quarter inch = one foot

one eighth inch = one foot

COLUMN SCHEDULE																		
GRID LOCATIONS		A-3 B-3 C-3	A-4 A-5 A-6	A-7	B-4, B-5 B-6, C-4 C-5, C-6 E-6	B-7	C-7 D-7 E-7	D-3	D-4	D-5 D-6	E-5	F-5	F-6	F-7	14'-6.1'	14'-6.6	14'-7'	B-6.6
STORY	STAIR ROOF TSE EL 778'-3 1/2"					W12x53												
	ROOF TSE EL 766'-3 1/2"							W14x120	W14x120							W12x53		W12x53
	FOURTH FLOOR TSE EL 750'-3 1/2"	W18x130	W18x130	W14x120	W14x51 W14x55 @ B-6	W18x130	W18x130			W14x120	W14x51	W18x130	W18x130	W14x120	W12x53		W12x53	
BOT/BASE F. EL		750' - 5"	750' - 5"	750' - 5"	750' - 5"	750' - 5"	750' - 5"	763'-5"	763'-5"	750' - 5"	750' - 5"	750' - 5"	750' - 5"	750' - 5"	750' - 5"	765' - 7 1/2"	750' - 5"	765' - 7 1/2"
COL LOAD (SERVICE)		195 k	200 k	155 k	220 k	225 k	150 k	40 k	100 k	205 k	260 k	175 k	125 k	100 k	75 k	45 k	40 k	50 k
COL BASE DETAIL		1 1-SS801	2 1-SS801	3 1-SS801	4 1-SS801	1 1-SS801	1 1-SS801	5 1-SS801	3 1-SS801	3 1-SS801	4 1-SS801	2 1-SS801	2 1-SS801	3 1-SS801	6 1-SS801		6 1-SS801	

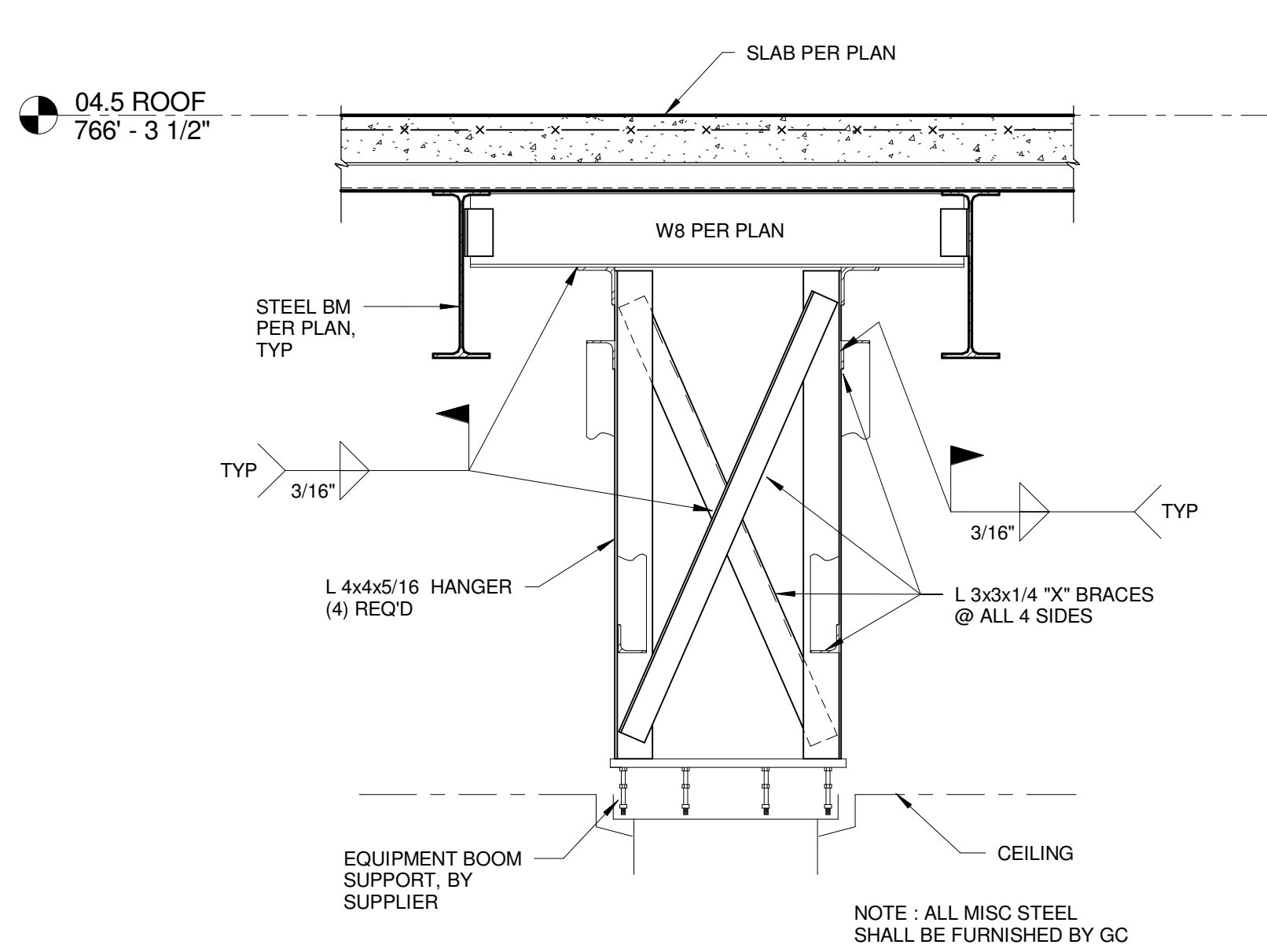


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three inches = one foot
one & one half inches = one foot
one inch = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
one half inch = one foot
three eighths inch = one foot
one eighth inch = one foot
one quarter inch = one foot
one eighth inch = one foot
one eighth inch = one foot

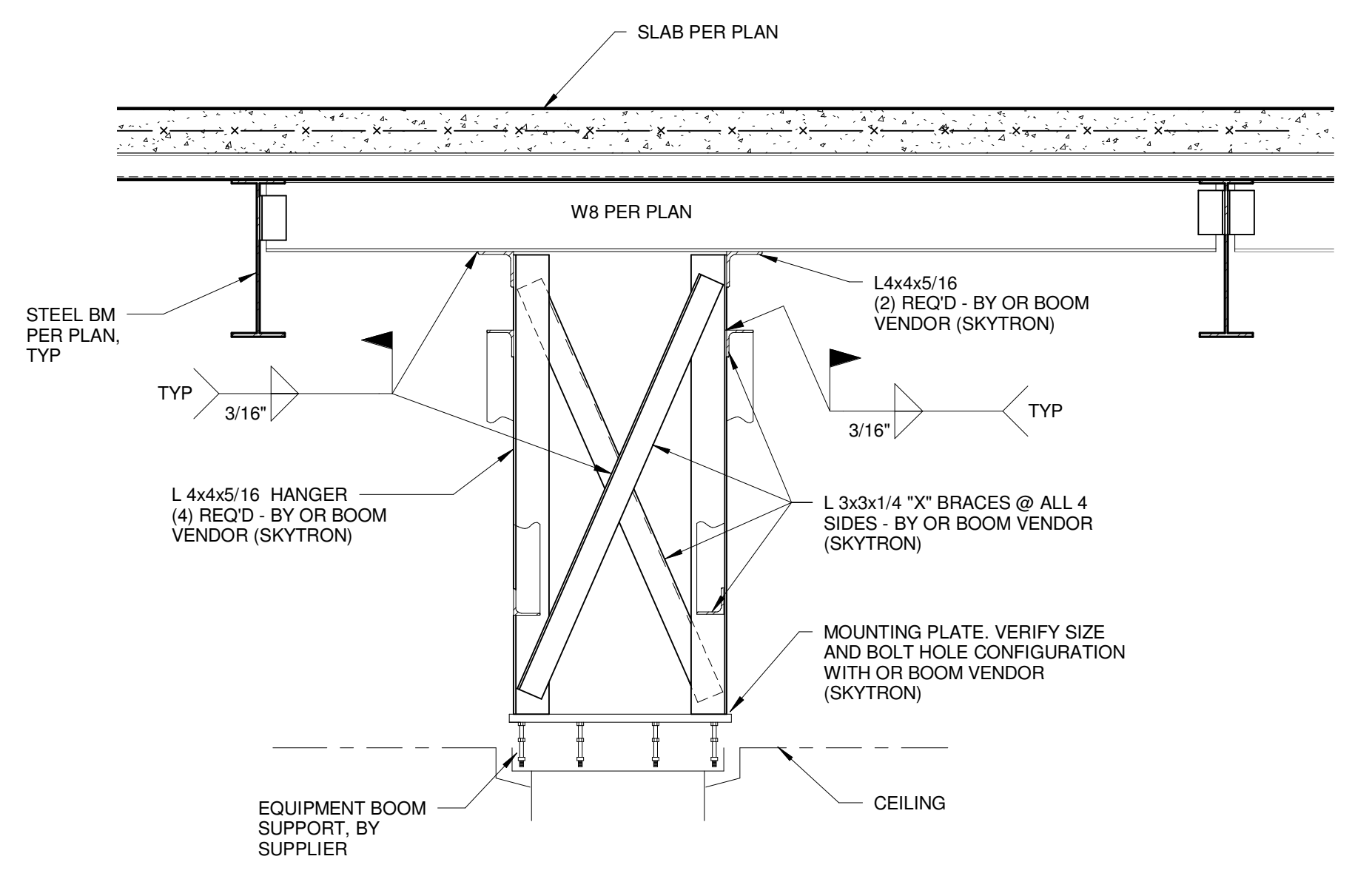


1 ROOF PARTIAL PLAN - OR#3
1/8" = 1'-0"

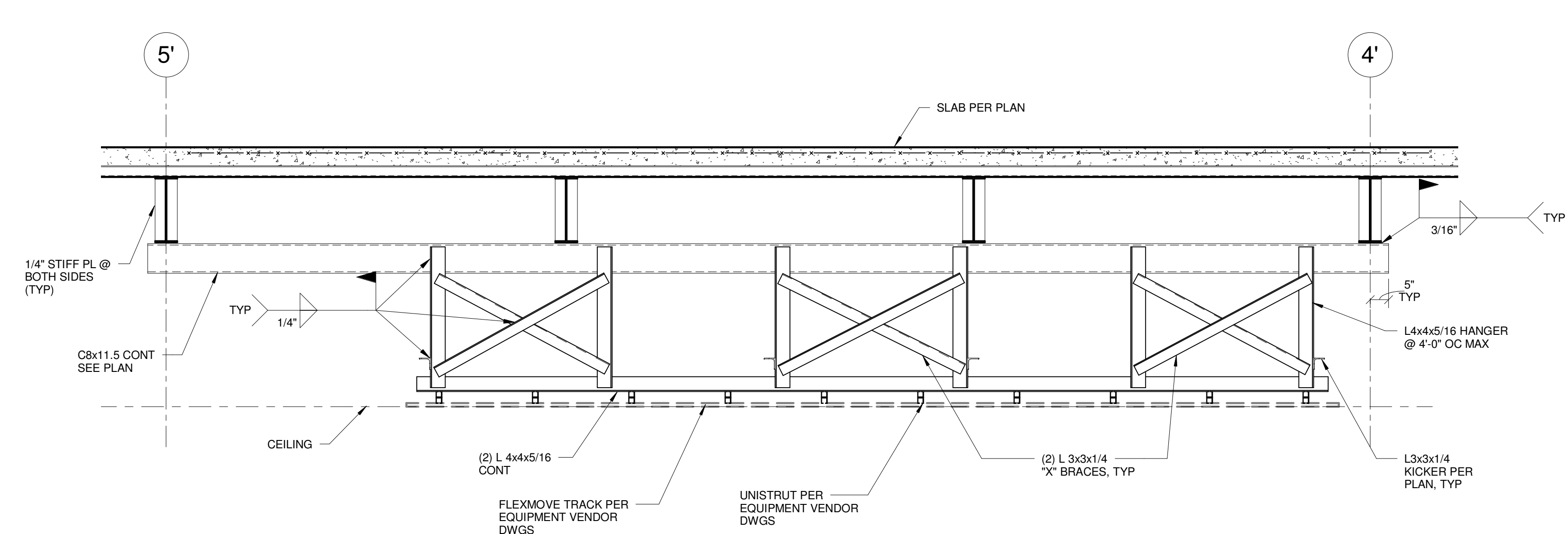
2 ROOF PARTIAL PLAN - OR#1
1/8" = 1'-0"



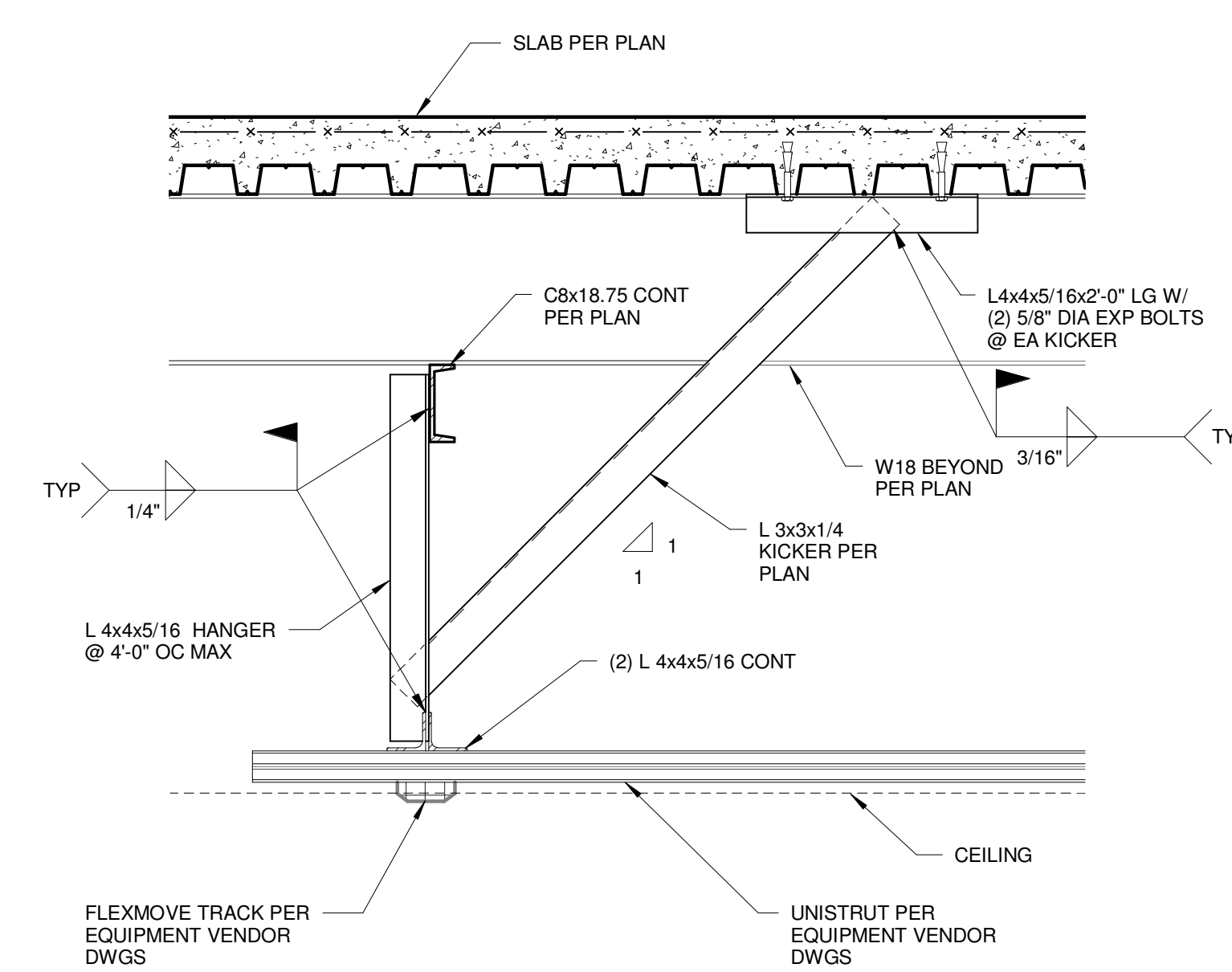
3 MICROSCOPE BOOM SUPPORT DETAIL
3/4" = 1'-0"



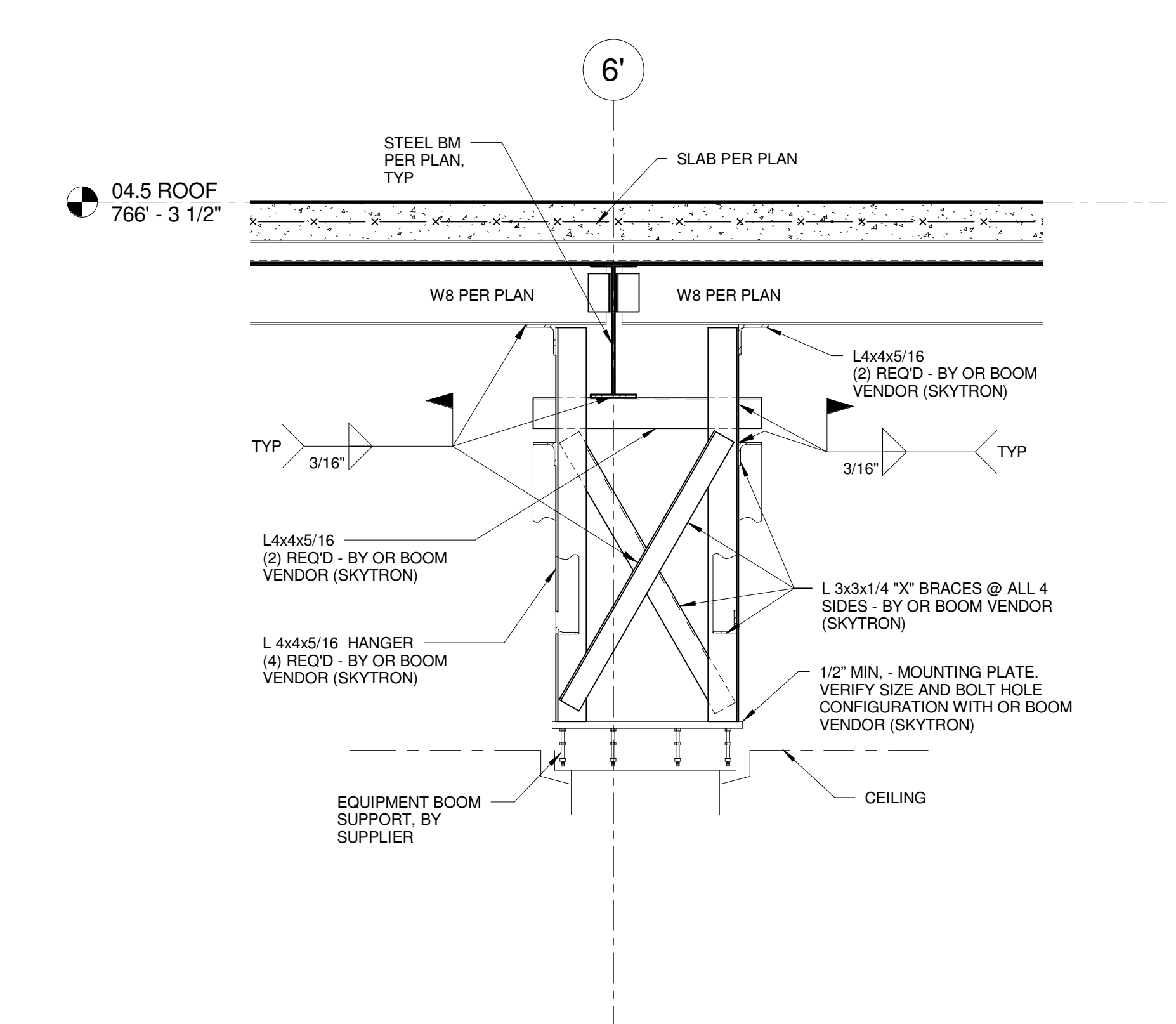
4 TYPICAL OR BOOM SUPPORT DETAIL
3/4" = 1'-0"



5 FLEXMOVE SUPPORT DETAIL
1/2" = 1'-0"



6 FLEXMOVE SUPPORT DETAIL
3/4" = 1'-0"



7 OR BOOM SUPPORT DETAIL
3/4" = 1'-0"

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Revisions:	Date	CONSULTANTS:	CERTIFICATION/SEAL	ARCHITECT/ENGINEERS/COST ESTIMATORS:	Drawing Title:	Project Title:	Project Number
		MECH/ELEC/PLUMBING Ellerbe Becket, Inc 800 LaSalle Ave, Suite 250 Minneapolis, MN 55402 t: 612.376.2000 f: 612.376.2271	STRUCTURAL Ellerbe Becket, Inc 800 LaSalle Ave, Suite 250 Minneapolis, MN 55402 t: 612.376.2000 f: 612.376.2271	FIRE PROTECTION FP&C CONSULTANTS, INC One Ward Parkway Suite 200 Kansas City, MO 64112 t: 816.931.3377 f: 816.931.3378	PART PLANS, EQUIPMENT SUPPROT DETAILS	RELOCATE SURGICAL OPERATING ROOMS, IOWA CITY IA	636-403
					Approved: Project Director	Location IOWA CITY, IOWA 52246 Date May 30, 2012	Building Number 1
						Checked HC	Drawing Number 1-SS901
						Drawn MSH	Dwg. 71 of 130

ELLERBE BECKET

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816 561 4443

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Ellerbe Becket Architects and Engineers, Inc.
Ellerbe Becket Architects and Engineers
2009

CFM

Construction & Facilities Management

Department of Veterans Affairs