THE LINE SHOWN ABOVE IS EXACTLY
ONE INCH LONG AT THIS SHEETS
ORIGINAL PAGE SIZE

GENERAL NOTES

GENERAL

1. THE STRUCTURAL DESIGN IS IN ACCORDANCE WITH THE 2021 SOUTH CAROLINA BUILDING CODE (BASED ON IBC 2021).

2. THE LOADS THAT HAVE BEEN USED IN THE STRUCTURAL DESIGN INCLUDE THE FOLLOWING:

LIVE LOAD AT GROUND FLOOR	100 PSF
LIVE LOAD AT ROOF (TYP., REDUCIBLE)	20 PSF
SNOW LOAD DESIGN DATA	PER ASCE 7-16
1. GROUND SNOW LOAD, P_g	5 PSF
2. RISK CATEGORY	IV
3. SNOW LOAD IMPORTANCE FACTOR, I_S	1.2
4. SNOW EXPOSURE FACTOR, C_e	1.0
5. THERMAL FACTOR, C_t	1.0
6. MINIMUM SNOW LOAD, P_m	6 PSF
WIND LOADS DESIGN DATA	PER ASCE 7-16
1. BASIC WIND SPEED, V	162 MPH
2. NOMINAL DESIGN WIND SPEED, V_{ASD}	125 MPH
3. RISK CATEGORY	IV
4. WIND EXPOSURE	C
5. INTERNAL PRESSURE COEFFICIENT (ENCLOSED)	±0.18
6. COMPONENTS AND CLADDING PRESSURES	REF. 1/S130
EARTHQUAKE LOAD DESIGN DATA	PER ASCE 7-16
1. RISK CATEGORY	IV
2. SEISMIC IMPORTANCE FACTOR, I_E	1.5
3. MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETER	
S_S	0.328
S_1	0.118
4. SITE CLASS	D
5. DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETER	
S_{DS}	0.336
S_{D1}	0.187
6. SEISMIC DESIGN CATEGORY	D
7. BASIC SEISMIC FORCE RESISTING SYSTEM(S)	STEEL ORDINARY CONCENTRICALLY BRACED FRAMES
8. RESPONSE MODIFICATION COEFFICIENT(S), R	3.25
9. SEISMIC RESPONSE COEFFICIENT(S), C_S	0.155g
10. DESIGN BASE SHEAR(S)	0.155xW
11. ANALYSIS PROCEDURE:	EQUIVALENT LATERAL FORCE

ALL LIVE LOADS HAVE BEEN REDUCED BASED ON TRIBUTARY AREAS IN ACCORDANCE WITH CODE PROVISIONS AND HAVE BEEN APPLIED TO BOTH ALTERNATE AND ADJACENT SPANS WHERE APPROPRIATE TO DERIVE GOVERNING CONDITIONS.

DEAD LOADS HAVE BEEN CALCULATED TO INCLUDE THE ACTUAL WEIGHT OF ALL WORK SHOWN ON THE STRUCTURAL, MECHANICAL, ELECTRICAL AND ARCHITECTURAL DRAWINGS. NO OTHER EQUIPMENT SHALL BE PLACED ON OR HUNG FROM THE ROOF SYSTEM WITHOUT PRIOR WRITTEN APPROVAL OF THE ENGINEER. ROOF-MOUNTED HVAC UNITS SHALL BE PLACED WITHIN THE DESIGNATED AREAS SHOWN ON THE FRAMING PLANS.

3. COMPLETE SHOP DRAWINGS FOR THE STRUCTURAL WORK SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO COMMENCEMENT OF CONSTRUCTION, IN ACCORDANCE WITH THE SPECIFICATIONS. SUCH REVIEW BY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF FULL RESPONSIBILITY FOR CORRECT FABRICATION AND CONSTRUCTION OF THE WORK. THE STRUCTURAL ENGINEER SHALL NOT BE RESPONSIBLE FOR MATERIALS PURCHASED PRIOR TO REVIEW OF SHOP DRAWINGS. THE CONTRACTOR SHALL REVIEW AND STAMP ALL SHOP DRAWINGS PRIOR TO SUBMITTING THE DRAWINGS TO THE ARCHITECT/ENGINEER.

4. THE USE OF ELECTRONIC FILES OR REPRODUCTION OF THESE CONTRACT DOCUMENTS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS SHALL NOT BE PERMITTED.

5. ANY DEVIATION FROM, ADDITION TO, SUBSTITUTION FOR, OR MODIFICATION TO THE STRUCTURE OR ANY PART OF THE STRUCTURE DETAILED ON THESE DRAWINGS SHALL BE SUBMITTED IN WRITING TO THE ENGINEER FOR REVIEW. SHOP DRAWINGS THAT ARE SUBMITTED FOR REVIEW DO NOT CONSTITUTE "IN-WRITING" UNLESS IT IS CLEARLY NOTED THAT SPECIFIC CHANGES ARE BEING SUGGESTED.

6. THE CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS NOT SHOWN AND FOR EXACT LOCATIONS OF ALL ARCHITECTURAL DETAILS. THE CONTRACTOR SHALL COMPARE THE STRUCTURAL AND ARCHITECTURAL DRAWINGS AND REPORT ANY DISCREPANCIES TO THE ENGINEER PRIOR TO COMPLETION OF THE SHOP DRAWINGS.

7. THE CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR ALL DIMENSIONS AND CONDITIONS AT THE SITE AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE ACTUAL CONDITIONS AND INFORMATION SHOWN ON THE DRAWINGS BEFORE PROCEEDING WITH THE WORK.

8. PRINCIPAL OPENINGS ARE SHOWN ON THE STRUCTURAL DRAWINGS. CONTRACTOR SHALL REFER TO ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS FOR SLEEVES, CURBS, INSERTS AND OTHER OPENINGS NOT SHOWN. THE CONTRACTOR SHALL PROVIDE FOR ALL OPENINGS, WHETHER SHOWN ON THE STRUCTURAL DRAWINGS OR NOT. SIZE AND LOCATION OF ALL OPENINGS SHALL BE VERIFIED BY THE CONTRACTOR. ANY DEVIATION FROM OPENINGS SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION FOR APPROVAL PRIOR TO CONSTRUCTION.

9. THE STRUCTURAL DRAWINGS ARE NOT TO BE SCALED FOR DETERMINATION OF QUANTITIES, LENGTHS, OR FIT OF MATERIALS.

10. THE GENERAL CONTRACTOR SHALL OBTAIN ALL CONTRACT DOCUMENTS & LATEST ADDENDA AND SUBMIT SUCH DOCUMENTS TO ALL SUBCONTRACTORS AND MATERIAL SUPPLIERS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS OR FABRICATION OF ANY STRUCTURAL MEMBERS.

11. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHODS OF CONSTRUCTION UNLESS SO STATED OR NOTED. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE WORKMEN AND OTHER PERSONS DURING CONSTRUCTION.

12. THE CONTRACTOR SHALL PROVIDE TEMPORARY ERECTION BRACING AND SHORING OF ALL STRUCTURAL WORK AS REQUIRED FOR STABILITY OF THE STRUCTURE DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY CONDITION WHICH, IN HIS OPINION, MIGHT ENDANGER THE STABILITY OF THE STRUCTURE OR CAUSE DISTRESS IN THE STRUCTURE.

13. CONSTRUCTION MATERIALS SHALL NOT BE STORED ON FLOORS OR ROOFS IN EXCESS OF THE DESIGN LIVE LOADS WHICH ARE INDICATED ON THE DRAWINGS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENFORCE THIS REQUIREMENT. IMPACT SHALL BE AVOIDED WHEN PLACING MATERIALS ON FLOORS OR ROOFS.

14. CONSTRUCTION SEQUENCE SHALL BE COORDINATED BY THE CONTRACTOR AS REQUIRED FOR INSTALLATION OF ALL STRUCTURAL COMPONENTS.

15. FIELD INSPECTION REPORTS SHALL BE SUBMITTED TO THE ENGINEER AS OUTLINED IN THE SPECIFICATIONS. INSPECTIONS SHALL BE PROVIDED BY A QUALIFIED AGENCY HIRED BY THE OWNER.

WELDING NOTES

1. WHEN WELDS ARE NOT CALLED OUT ON THE DRAWINGS, THEY ARE MINIMUM SIZE CONTINUOUS FILLET WELDS IN ACCORDANCE WITH AWS D1.1. FILLET WELDS NOT SPECIFIED AS TO LENGTH SHALL BE CONTINUOUS.

2. UNLESS NOTED OTHERWISE ON THE DRAWINGS, ALL GROOVE WELDS SHALL BE FULL PENETRATION.

3. PROVIDE FILLET WELDS AT ALL CONTACT JOINTS BETWEEN STEEL MEMBERS SUFFICIENT TO DEVELOP THE ALLOWABLE TENSILE STRENGTH OF THE SMALLER MEMBER AT THE JOINT UNLESS NOTED OTHERWISE ON THE DRAWINGS.

4. WELDING OF METAL FORM DECK SHALL CONFORM TO AWS D1.3.

DEFERRED SUBMITTALS

1. THE CONTRACTOR SHALL PROVIDE SUBMITTALS FOR ALL BUILDING COMPONENTS NOT EXPLICITLY DESIGNED AND DETAILED ON THE STRUCTURAL DRAWINGS AS REQUIRED. THE SUBMITTALS SHALL BE PROVIDED TO THE ARCHITECT/ENGINEER FOR REVIEW AND THE APPROVED SUBMITTALS SHALL BE PROVIDED TO THE CITY FOR THEIR RECORD.

2. DEFERRED SUBMITTALS SHALL BE SEALED BY AN ENGINEER LICENSED IN THE STATE OF SOUTH CAROLINA. ALL SUBMITTALS SHALL INCLUDE CALCULATIONS FOR REVIEW. ALL DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.

3. THE DEFERRED SUBMITTALS SHALL INCLUDE THE FOLLOWING ITEMS:
   A. STEEL LADDERS, HANDRAILS AND CONNECTIONS
   B. EXTERIOR WALL FRAMING
   C. COLD FORMED METAL FRAMING
   D. CURTAIN WALL / STOREFRONT / CLADDING AND CONNECTIONS
   E. STEEL JOIST / JOIST GIRDERS
   F. STRUCTURAL STEEL CONNECTIONS
   G. AWNINGS / CANOPIES
   H. CURBS / SUPPORTS AT ROOF MOUNTED EQUIPMENT AND FIXTURES NOT PROVIDED BY THE MANUFACTURER

CAST IN PLACE REINFORCED CONCRETE

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE MOST RECENT EDITION OF ACI 318 "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE".

2. STEEL REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60, EXCEPT WELDED REINFORCEMENT WHICH SHALL CONFORM TO ASTM A706, GRADE 60. REINFORCEMENT SHALL NOT BE WELDED UNLESS SHOWN ON THE DRAWINGS. ALL HOOKS SHALL BE STANDARD ACI 90 DEGREE UNLESS NOTED OTHERWISE.

3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185, GRADE 65. ALL WELDED WIRE FABRIC SHALL BE SUPPLIED IN FLAT SHEETS, NOT IN ROLLS. LAP WELDED WIRE FABRIC A MINIMUM OF 2 CROSSWIRE SPACINGS.

4. ALL CONCRETE SHALL UTILIZE NORMAL WEIGHT AGGREGATE UNLESS NOTED OTHERWISE.

5. CONCRETE SHALL MEET THE FOLLOWING PERFORMANCE CRITERIA:

LOCATION	28 DAY COMP. STRENGTH (f'c)	SLUMP (a)	MAX W/C RATIO
FOOTINGS	4000 PSI	3" - 5"	-
GRADE BEAMS & PILASTERS	4000 PSI	3" - 5"	0.45
SLAB ON GRADE (b, c)	3000 PSI	3" - 5"	0.50

NOTES:
A. CONCRETE SLUMPS GIVEN ARE AT THE POINT OF PLACEMENT.
B. ALL EXTERIOR SLABS SHALL CONTAIN 3%-6% OF AIR ENTRAINMENT.
C. MAXIMUM SLAB POUR SHALL NOT EXCEED A LENGTH OF 150 FEET IN EITHER DIRECTION NOR AN AREA OF 10,000 SQUARE FEET.

6. REFERENCE ACI318-14 SECTION 20.6.1.3 FOR CONCRETE COVER REQUIREMENTS AS NOTED BELOW:

CONCRETE EXPOSED TO EARTH OR WEATHER	
CONCRETE CAST AGAINST EARTH	3"
FORMED CONCRETE (NO. 6 AND LARGER REINF.)	2"
FORMED CONCRETE (NO. 5 AND SMALLER REINF.)	1 1/2"

CONCRETE NOT EXPOSED TO EARTH OR WEATHER	
SLABS	3/4"
BEAMS AND JOISTS	1 1/2"
COLUMNS	1 1/2"
WALLS	3/4"

7. THE TESTING LABORATORY SHALL BE NOTIFIED AFTER THE MILD STEEL REINFORCEMENT AND EMBEDS ARE POSITIONED PRIOR TO EACH CONCRETE PLACEMENT. NO CONCRETE SHALL BE PLACED UNTIL THESE ITEMS ARE CHECKED AND APPROVED BY THE TESTING LABORATORY.

8. PERFORM SAWCUTS AS INDICATED ON THE FOUNDATION PLANS AS QUICKLY AS POSSIBLE AFTER PLACING CONCRETE WITHOUT DISLODGING AGGREGATE. ALL SAWCUTS SHALL BE COMPLETED WITHIN 8 HOURS OF CONCRETE PLACEMENT. SUSPENDED SLABS AND POST-TENSIONED SLABS ON GRADE SHALL NOT BE SAWCUT.

STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL BE NEW STEEL AND SHALL CONFORM TO THE AISC "SPECIFICATION FOR STRUCTURAL STEEL FOR BUILDINGS". BOLTED CONNECTIONS (UNLESS NOTED OTHERWISE) SHALL CONFORM TO THE REQUIREMENTS OF THE AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS".

2. STEEL SHAPES AND FASTENERS SHALL CONFORM TO THE ASTM SPECIFICATIONS BELOW:

SHAPE	ASTM
WIDE FLANGE	A992
CHANNELS	A36
ANGLES	A36
HSS	A500 Gr. C
PIPE	A53 Gr. B
PLATES	A36 (or A572 Gr. 50)
BASE PLATES	REF. SCHED.

BOLTS	ASTM
HIGH STRENGTH BOLTS	A325 N
ANCHOR BOLTS	F1554, GRADE 55 (WELDABILITY PER F1554 SUPPLEMENT)

3. ALL STRUCTURAL STEEL CONNECTIONS AND DETAILS SHALL CONFORM TO THE AISC "CODE OF STANDARD PRACTICE FOR STEEL, BUILDINGS AND BRIDGES."

4. WELDED CONSTRUCTION SHALL CONFORM TO AWS D-1.1, "STRUCTURAL WELDING CODE." WELDING PROCESSES AND OPERATORS SHALL BE QUALIFIED IN ACCORDANCE WITH AWS "STANDARD QUALIFICATIONS PROCEDURE." ELECTRODES FOR FIELD AND SHOP WELDS SHALL BE E70XX, U.N.O.

5. SHEAR STUDS SHALL CONFORM TO ASTM A108, HEADED ANCHORS.

6. STEEL MEMBERS SHALL NOT BE SPLICED EXCEPT AS SHOWN ON THE DRAWINGS.

7. ALL STEEL BEAMS SHALL BE ERECTED WITH NATURAL CAMBER UP.

8. ALL CONNECTIONS OF NON-COMPOSITE BEAMS SHALL BE DESIGNED BY THE FABRICATOR UNLESS OTHERWISE INDICATED. CONNECTIONS SHALL BE DESIGNED TO RESIST A FORCE OF 55% OF THE AISC ALLOWABLE BEAM LOAD, OR THE REACTION SPECIFIED, WHICHEVER IS GREATER. ALL CONNECTION DESIGN REACTIONS SHALL BE NOTED ON THE SHOP DRAWINGS.

9. ALL EXTERIOR STEEL EXPOSED TO WEATHER, INCLUDING LINTELS, SHALL BE HOT-DIPPED GALVANIZED. FABRICATOR TO PREPARE MATERIAL TO BE GALVANIZED TO MEET THE GALVANIZER'S REQUIREMENTS AND THE SPECIFICATIONS.

10. CONNECTION DETAILS SHALL TAKE INTO CONSIDERATION CONSTRUCTION SEQUENCING AND POSSIBLE OBSTRUCTIONS FROM ADJACENT COMPONENTS SUCH AS RETAINING WALLS.

11. GROUT AT STEEL COLUMN BASE PLATES SHALL BE NON-SHRINK, NON-METALLIC AGGREGATE TYPE, COMPLYING WITH ASTM C1107 AND CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 7,000 PSI AT 28 DAYS.

STEEL JOISTS

1. FABRICATION AND ERECTION OF ALL OPEN WEB STEEL JOISTS, JOIST GIRDERS, AND BRIDGING SHALL CONFORM TO THE STANDARDS OF THE STEEL JOIST INSTITUTE.

2. JOIST MANUFACTURER SHALL PROVIDE CAMBER IN CONFORMANCE WITH SJI SPECIFICATIONS.

3. ALL BRIDGING SHALL BE WELDED OR BOLTED AT THE ENDS. ALL JOISTS SHALL BE WELDED AT THE ENDS, UNLESS SHOWN OTHERWISE. ALL JOIST GIRDERS SHALL BE BOLTED AT THE ENDS, UNLESS SHOWN OTHERWISE. BRIDGING SHALL BE DESIGNED FOR A NET WIND UPLIFT AS NOTED.

4. ANY HANGERS SUPPORTED FROM JOISTS SHALL BE LOCATED AT TOP OR BOTTOM CHORD PANEL POINTS AND SHALL BE CONNECTED WITHOUT FIELD WELDING OR DRILLING HOLES IN JOISTS.

5. MECHANICAL DUCTS, ELECTRICAL EQUIPMENT, CONDUIT, LIGHTING FIXTURES, AND PIPING SHALL NOT BE SUPPORTED FROM JOIST BRIDGING.

6. ALL PIPING LARGER THAN 4" DIAMETER RUNNING PARALLEL TO JOISTS SHALL BE SUPPORTED FROM A MINIMUM OF 2 JOISTS AND SUPPORTED AT PANEL POINTS ONLY.

7. ALL PIPING LARGER THAN 4" DIAMETER RUNNING PERPENDICULAR TO JOISTS SHALL BE SUPPORTED AT PANEL POINTS FROM AT LEAST EVERY SECOND JOIST.

8. PIPING LOADS EXCEEDING 4 PSF SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER.

COLD FORMED METAL FRAMING

1. COLD FORMED METAL FRAMING MANUFACTURER SHALL DESIGN THE COMPLETE METAL FRAMING SYSTEM, INCLUDING BUT NOT LIMITED TO BRACING AND CONNECTIONS TO THE METAL STRUCTURE, UNLESS SHOWN ON STRUCTURAL DRAWINGS. CALCULATIONS AND SHOP DRAWINGS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF SOUTH CAROLINA SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD FOR REVIEW. GENERAL CONTRACTOR SHALL PROVIDE ALL COLD FORMED METAL FRAMING AS REQUIRED.

2. WITH EACH TYPE OF METAL FRAMING REQUIRED, PROVIDE MANUFACTURER'S STANDARD STEEL RUNNERS (TRACKS), BLOCKING LINTELS, CLIP ANGLES, SHOES, REINFORCEMENTS, FASTENERS, AND ACCESSORIES AS RECOMMENDED BY MANUFACTURER FOR APPLICATIONS INDICATED, AS NEEDED TO PROVIDE A COMPLETE METAL FRAMING SYSTEM.

3. FOR 16 GAUGE AND HEAVIER STUDS AND JOISTS, FABRICATE COMPONENTS OF STEEL SHEET WITH A MINIMUM YIELD POINT OF 50,000 PSI, CONFORMING TO ASTM A653 AND C955.

4. FOR 16 GAUGE AND HEAVIER TRACK, FABRICATE COMPONENTS OF STEEL SHEET WITH A MINIMUM YIELD POINT OF 33,000 PSI, CONFORMING TO ASTM A653 AND C955.

5. FOR 18 GAUGE AND LIGHTER STUDS, JOISTS, AND TRACK, FABRICATE COMPONENTS OF STEEL SHEET WITH A MINIMUM YIELD POINT OF 33,000 PSI, CONFORMING TO ASTM A653 AND C955.

6. PROVIDE MANUFACTURER'S STANDARD GALVANIZED FINISH TO METAL FRAMING COMPONENTS COMPLYING WITH ASTM A653.

7. THE COLD FORMED FRAMING DESIGN SHALL INCLUDE BUT SHALL NOT BE LIMITED TO THE FOLLOWING DESIGN ELEMENTS:
   - WALL STUDS INCLUDING JAMB LOCATIONS
   - HEADERS DESIGNED FOR GRAVITY AND LATERAL LOADING
   - TOP AND BOTTOM TRACKS INCLUDING ATTACHMENTS AT SLIP TRACKS
   - ALL CONNECTIONS SHALL SPECIFY SIZE AND QUANTITY OF FASTENERS
   - ANY BRACING OF METAL STUDS REQUIRED THAT IS NOT INDICATED ON THE STRUCTURAL DRAWINGS

8. MAXIMUM ALLOWABLE DEFLECTION FOR VERTICAL COLD FORMED GAUGE MEMBERS BACKING BRICK IS L/600 (L/360 FOR OTHER MATERIALS). DEFLECTION CALCULATIONS SHALL BE BASED ON ABSOLUTE DEFLECTIONS (NOT RELATIVE DEFLECTIONS).

9. DEFLECTION OF VERTICAL STUDS WITH PARAPET SHALL BE CALCULATED BASED ON ABSOLUTE DEFLECTION, NOT RELATIVE DEFLECTION.

REINFORCED MASONRY

1. ALL REINFORCED MASONRY SHALL CONFORM TO THE PROVISIONS OF ACI 530.1/ASCE 6 (WITH EXCEPTIONS NOTED IN THE SPECIFICATIONS). CONSTRUCTION SHALL BE RUNNING BOND UNLESS NOTED OTHERWISE.

2. CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 NORMAL WEIGHT UNITS WITH A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 1900 PSI.

3. MORTAR SHALL CONFORM TO ASTM C270, TYPE M OR S. AGGREGATES FOR MORTAR SHALL CONFORM TO ASTM C144. MORTAR SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI AT 28 DAYS.

4. GROUT SHALL CONFORM TO ASTM C476. AGGREGATES FOR GROUT SHALL CONFORM TO ASTM C-404. GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS.

5. MASONRY CONSTRUCTION SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'm) OF 1900 PSI AT 28 DAYS.

6. SPECIAL INSPECTION SHALL BE PROVIDED AS PRESCRIBED IN THE SPECIAL INSPECTION NOTES.

7. BOND BEAMS SHALL BE CONSTRUCTED WITH PORTLAND CEMENT GROUT HAVING A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS, AND A MAXIMUM AGGREGATE SIZE OF 3/4".

8. REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, EXCEPT WELDED REINFORCEMENT SHALL CONFORM TO ASTM A706, GRADE 60.

9. HORIZONTAL JOINT REINFORCEMENT SHALL BE FACTORY FABRICATED, LADDER TYPE, 9 GAGE WIRE CONFORMING TO ASTM A82, AND PLACED AT 16 " ON CENTER (TYPICAL U.N.O.).

10. ALL CELLS CONTAINING REINFORCEMENT, BOLTS, OR OTHER METAL ANCHORS SHALL BE GROUTED SOLID. ANY CELLS AT OR BELOW GRADE SHALL BE GROUTED SOLID, WHETHER REINFORCED OR NOT.

11. BOND BEAM REINFORCING SHALL CONTINUE THROUGH CONTROL JOINTS AT ALL FLOOR AND ROOF LEVELS AS WELL AS AT ALL LINTEL LOCATIONS.

12. ALL WALLS AND LINTELS SHALL BE TEMPORARILY BRACED/SHORED AS REQUIRED UNTIL CONSTRUCTION IS COMPLETE. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEMPORARY BRACING/SHORING.

13. CONTROL JOINTS SHALL NOT BE PLACED ABOVE OR WITHIN 2 '-0" OF OPENINGS OR WITHIN A BOND BEAM. NOTIFY THE STRUCTURAL ENGINEER OF ANY CONTROL JOINTS VIOLATING THESE CRITERIA PRIOR TO STARTING WALL CONSTRUCTION.

14. CONTRACTOR SHALL PROVIDE CONTROL JOINTS IN CMU CONSTRUCTION. JOINT SPACING SHALL NOT EXCEED 1.5 TIMES THE WALL HEIGHT (1.5 x H) OR 25 FEET, WHICHEVER IS LESS. PROVIDE A JOINT WITHIN 10 FEET OF ALL WALL CORNERS. COORDINATE ALL JOINT LOCATIONS WITH ARCHITECTURE AND SUBMIT A JOINT LAYOUT PLAN TO ARCHITECT/ENGINEER FOR REVIEW & APPROVAL.

METAL DECKING

1. ALL METAL DECKING SHALL COMPLY WITH THE SPECIFICATIONS OF THE STEEL DECK INSTITUTE FOR DESIGN AND ERECTION. GALVANIZED DECKS SHALL CONFORM TO ASTM A653. PAINTED DECKS SHALL CONFORM TO ASTM A1008.

2. METAL DECKING SHALL BE INSTALLED CONTINUOUSLY ACROSS 3 OR MORE SPANS. IF LESS THAN THREE SPANS ARE UTILIZED TEMPORARY SHORING MAY BE REQUIRED PER MANUFACTURER'S RECOMMENDATIONS. DECKING SHALL BE ATTACHED TO STEEL, JOISTS AND FRAMEWORK IMMEDIATELY AFTER ALIGNMENT.

3. UNLESS NOTED OTHERWISE, ROOF DECK SHALL BE 20 GAUGE, 1-1/2" WIDE RIB DECK (TYPE B), ASTM A1008 STRUCTURAL QUALITY, MINIMUM YIELD POINT OF 50,000 PSI, WITH MANUFACTURER'S STANDARD BAKED ON COATING. ATTACH TO STEEL STRUCTURE PER 2/S130. PROVIDE 5/8" DIA. PUDDLE WELDS AT 6" O.C. AT PERIMETER.

4. ALL DECK IS TO BE FABRICATED TO RUN CONTINUOUSLY OVER ALL OPENINGS. DO NOT CUT OPENING IN DECK PRIOR TO INSTALLING SUPPORT FRAMING BELOW.

5. SUSPENDED CEILINGS, LIGHT FIXTURES, DUCTS, OR OTHER UTILITIES SHALL NOT BE SUPPORTED BY THE STEEL ROOF DECK.

6. DECK FINISH SHALL BE REPAIRED WITH TOUCH-UP PAINT IMMEDIATELY AFTER WELDING TO PREVENT CORROSION.

CURTAINWALL & STOREFRONT CONNECTIONS / SUPPORT

1. GLAZED CURTAINWALL MANUFACTURER SHALL PROVIDE ALL BRACING AND CONNECTIONS TO THE STRUCTURE. CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF SOUTH CAROLINA SHALL BE SUBMITTED TO THE STRUCTURAL ENGINEER OF RECORD FOR REVIEW.

EARTHWORK AND FOUNDATIONS

1. THE FOUNDATION DESIGN IS BASED ON A SUBSURFACE EXPLORATION AND REPORT BY S&ME, INC. (PROJECT NO. 25630015) DATED MARCH 21, 2025. THE CONTRACTOR SHALL OBTAIN A COPY OF THIS REPORT, AND THE REPORT SHALL BE CONSIDERED A PART OF THE CONTRACT DOCUMENTS.

2. A GEOTECHNICAL ENGINEER SHALL VERIFY THAT SOILS OF THE DESIGN BEARING CAPACITY HAVE BEEN ENCOUNTERED AND THAT THE BUILDING PAD IS SUITABLE FOR CONSTRUCTION.

3. THE FOUNDATION DESIGN IS BASED ON POTENTIAL SLAB TOTAL AND DIFFERENTIAL MOVEMENTS OF ONE (1) INCH AND ONE-HALF (1/2) INCH, RESPECTIVELY. THE SLAB/FOUNDATION DESIGN IS BASED ON THE *SHALLOW FOUNDATIONS WITH "RIGID INCLUSIONS"* SECTION OF THE GEOTECHNICAL REPORT. THE CONTRACTOR SHALL PREPARE THE SUBGRADE AS OUTLINED IN THE REPORT/SECTION.

4. CONTINUOUS AND ISOLATED FOOTINGS ARE DESIGNED FOR AN ALLOWABLE NET BEARING PRESSURE OF 3,000 PSF FOR TOTAL LOAD. THESE VALUES ARE APPLICABLE FOR FOOTINGS BEARING ON WELL-COMPACTED FILLS AS OUTLINED IN THE GEOTECHNICAL REPORT. ALL FOOTINGS MUST BEAR A MINIMUM OF 12 INCHES BELOW FINISHED GRADE FOR FROST PROTECTION.

5. A QUALIFIED SOIL TECHNICIAN SHALL PERFORM SUFFICIENT IN- PLACE DENSITY TESTS DURING FILL OPERATIONS TO VERIFY THAT PROPER LEVELS OF COMPACTION ARE ATTAINED AND THAT FOOTINGS ARE BEARING ON THE PROPER MATERIAL. **THE CONTRACTOR/OWNER SHALL USE THE SAME GEOTECHNICAL ENGINEER THAT PREPARED THE GEOTECHNICAL REPORT FOR FOUNDATION INSPECTIONS.**

6. AFTER THE FOOTINGS HAVE BEEN EXCAVATED AND BEFORE REINFORCING STEEL PLACEMENT, A GEOTECHNICAL ENGINEER SHALL VERIFY SOILS OF THE DESIGN BEARING CAPACITY HAVE BEEN ENCOUNTERED. A WRITTEN REPORT, INCLUDING REMEDIAL ACTION, SHALL BE PROVIDED TO THE STRUCTURAL ENGINEER OF RECORD.

7. ALL GRADE BEAMS AND FOUNDATION WALLS SHALL BE FORMED OVER THEIR ENTIRE HEIGHT.

8. CONCRETE FOR SLABS ON FILL SHALL BE PLACED OVER A CONTINUOUS 15 MIL. MOISTURE BARRIER OVER A 4 INCH LAYER OF CLEAN UNIFORM SAND. ALL SEAMS SHALL BE LAPPED 12 INCHES AND TAPED. VAPOR BARRIER SHALL CONFORM TO ASTM E 1745 CLASS A AND ASTM E 96 WITH A PERMEANCE RATING OF 0.01 PERMS OR LOWER FOR FROST PROTECTION. GC SHALL REFER TO THE ARCHITECTURAL SPECIFICATIONS FOR ADDITIONAL VAPOR BARRIER CRITERIA.

9. POSITIVE SITE DRAINAGE SHALL BE MAINTAINED TO DIVERT WATER AWAY FROM THE BUILDING AREAS. WEATHER PERIODS WILL PRODUCE PROBLEMS DUE TO SOIL SATURATION. CONSULT THE GEOTECHNICAL ENGINEER REPORT OR GEOTECHNICAL ENGINEER FOR METHODS OF IMPROVING HIGHLY SATURATED SOILS.

10. THE ABOVE REQUIREMENTS ARE A SUMMARY OF THE REQUIREMENTS OF THE GEOTECHNICAL REPORT. CONTRACTOR SHALL NOT BE ABSOLVED FROM THE RESPONSIBILITY OF REVIEWING AND COMPLYING WITH THE ENTIRE GEOTECHNICAL REPORT.

POST-INSTALLED ANCHORS AND REINFORCING

1. THIS INFORMATION IS TYPICAL, U.N.O. IN CASE OF CONFLICT WITH STRUCTURAL SECTIONS, INFORMATION IN THE SECTIONS SHALL CONTROL.

2. POST-INSTALLED ANCHORS CALLED TO BE EPOXIED INTO CONCRETE OR GROUTED CMU SHALL BE ASTM F1554 GRADE 55 THREADED RODS. TYPICAL EMBEDMENT (U.N.O.) FOR ANCHORS IN CONCRETE OR GROUTED CMU SHALL BE:

DIAMETER	EMBEDMENT
3/8"	3 3/8"
1/2"	4 1/2"
5/8"	5 5/8"
3/4"	6 3/4"

3. POST-INSTALLED REINFORCING BARS CALLED TO BE EPOXIED INTO CONCRETE SHALL BE ASTM A615 GRADE 60. TYPICAL EMBEDMENT (U.N.O.) FOR REINFORCING SHALL BE:

REINF. SIZE	EMBEDMENT
#3	4 1/2"
#4	6"
#5	7 1/2"
#6	9"

4. POST-INSTALLED ANCHORS AND REINFORCING BARS CALLED TO BE EPOXIED INTO CONCRETE SHALL BE INSTALLED WITH HILTI HIT-HY200 ADHESIVE, USING THE HILTI SAFESET SYSTEM, OR APPROVED EQUAL ADHESIVE AND SYSTEM.

5. POST-INSTALLED ANCHORS CALLED TO BE EPOXIED INTO CMU SHALL BE INSTALLED WITH HILTI HIT-HY270 ADHESIVE, USING THE HILTI SAFESET SYSTEM, OR APPROVED EQUAL ADHESIVE AND SYSTEM.

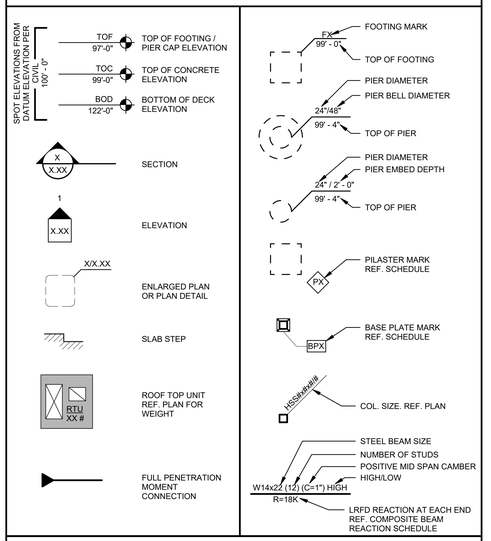
6. POST-INSTALLED ANCHORS SPECIFIED AS SCREW ANCHORS SHALL BE HILTI KWIK HUS-EZ ANCHORS.

7. POST-INSTALLED ANCHORS SHALL NOT BE INSTALLED INTO CONCRETE OR CMU THAT HAS CURED FOR LESS THAN SEVEN DAYS.

8. POST-INSTALLED ANCHORS AND REINFORCING SHALL BE INSPECTED PER SPECIAL INSPECTION NOTES FOR "POST-INSTALLED ANCHORS".

9. POST-INSTALLED ANCHORS SHALL NOT BE USED TO REPLACE BASE PLATE ANCHOR BOLTS THAT ARE MISPLACED OR DAMAGED DURING CONSTRUCTION WITHOUT FIRST CONSULTING THE EOR.

SYMBOL LEGEND



STANDARD ABBREVIATIONS

ABBREV.	MEANING	ABBREV.	MEANING
@	AT	JG	JOIST GIRDER
AB	ANCHOR BOLT		
A/C	AIR CONDITIONING	K	KIP (1000 LB.)
ADD'L	ADDITIONAL	KF	KIP FEET
AESS	ARCHITECTURALLY EXPOSED STRUCTURAL STEEL	KLF	KIPS PER LINEAR FOOT
		KSF	KIPS PER SQUARE FOOT
AFF	ABOVE FINISHED FLOOR		
AHU	AIR HANDLING UNIT	L	LENGTH
ALT.	ALTERNATE	LAM.	LAMINATED
ARCH.	ARCHITECT OR ARCHITECTURE	LB.	POUND
		LBS.	POUNDS
BL	BRICK LEDGE	LLH	LONG LEG HORIZONTAL
BLDG.	BUILDING	LLV	LONG LEG VERTICAL
BOT.	BOTTOM	LOC.	LOCATION
BO	BOTTOM OF	LSH	LONG SIDE HORIZONTAL
BOC	BOTTOM OF CONCRETE	LSV	LONG SIDE VERTICAL
BOD	BOTTOM OF DECK	LT.	LIGHT
BOS	BOTTOM OF STEEL	LWC	LIGHT WEIGHT CONCRETE
BOW	BOTTOM OF WALL		
BP	BASE PLATE	MANUF.	MANUFACTURER
BRDG.	BRIDGING	MATL.	MATERIAL
BRG.	BEARING	MAX.	MAXIMUM
BTWN.	BETWEEN	MECH.	MECHANICAL
		MEP	MECHANICAL/ELECTRICAL/PLUMBING
C	COMPRESSION	MIN.	MINIMUM
CFMF	COLD FORMED METAL FRAMING	MISC.	MISCELLANEOUS
CIP	CAST IN PLACE	MTL.	METAL
CJ	CONTROL JOINT OR CONSTRUCTION JOINT		
CHAN.	CHANNEL	N/A	NOT APPLICABLE
CL	CENTER LINE	NIC	NOT IN CONTRACT
CLG.	CEILING	NO.	NUMBER
CLR.	CLEAR	NTS	NOT TO SCALE
CMU	CONCRETE MASONRY UNIT	NWC	NORMAL WEIGHT CONCRETE
COL.	COLUMN		
COMP.	COMPOSITE	OC	ON CENTER
CONC.	CONCRETE	OD	OUTSIDE DIAMETER
CONNX.	CONNECTION	OF	OUTSIDE FACE
CONS.	CONSTRUCTION	OH	OPPOSITE HAND
CONT.	CONTINUOUS	OPNG.	OPENING
CTR.	CENTER	OSB	ORIENTED STRAND BOARD
d	NAIL SIZE (PENNY)	PAF	POWDER ACTUATED FASTENER
D	DEPTH	PEMB	PRE-ENGINEERED METAL BUILDING
DBA	DEFORMED BAR ANCHOR	PL.	PLATE
DEFL.	DEFLECTION	PLBG.	PLUMBING
DIA.	DIAMETER	PLF	POUNDS PER LINEAR FOOT
DIAG.	DIAGONAL	PLWD.	PLYWOOD
DIM.	DIMENSION	PNL.	PANEL
DN.	DOWN	PRELIM.	PRELIMINARY
DTL.	DETAIL	PSF	POUNDS PER SQUARE FOOT.
DWG.	DRAWING	PSI	POUNDS PER SQUARE INCH
DWL.	DOWEL	PT	POST-TENSIONED OR POST-TENSIONING
		PTD.	PAINTED
EA.	EACH		
EF	EACH FACE	R	RADIUS
EJ	EXPANSION JOINT	RD	ROOF DRAIN
EL.	ELEVATION	REF.	REFER
ELEC.	ELECTRICAL	REINF.	REINFORCE(D)(MENT)(ING)
ELEV.	ELEVATOR	REQ'D	REQUIRED
EMBED.	EMBEDMENT	REV.	REVISION
ENG.	ENGINEER	RND.	ROUND
EOR	ENGINEER OF RECORD	RTU	ROOFTOP UNIT
EQ.	EQUAL		
EW	EACH WAY	SCHED.	SCHEDULE(D)
EXIST.	EXISTING	SECT.	SECTION
EXP.	EXPANSION	SF	SQUARE FEET
EXT.	EXTERIOR	SIM.	SIMILAR
		SPA.	SPACE(S)(ING)
FF	FINISHED FLOOR	SPEC.	SPECIFICATION
FFE	FINISHED FLOOR ELEVATION	STD.	STANDARD
FIN.	FINISH	STIFF.	STIFFENER
FLR.	FLOOR	STRUCT.	STRUCTURE(D) OR STRUCTURAL
FND.	FOUNDATION	SQ.	SQUARE
FT.	FOOT OR FEET	SUSP.	SUSPENDED
FTG.	FOOTING		
FV	FIELD VERIFY	TG	TRUSS GIRDER
		TO	TOP OF
GA.	GAUGE OR GAGE	TOC	TOP OF CONCRETE
GALV.	GALVANIZED	TOF	TOP OF FOOTING
GC	GENERAL CONTRACTOR	TOP	TOP OF PIER
GEN.	GENERAL	TOS	TOP OF STEEL
GYP.	GYPSUM	TOW	TOP OF WALL
GYP. BD.	GYPSUM BOARD	TYP.	TYPICAL
HORIZ.	HORIZONTAL	UNO	UNLESS NOTED OTHERWISE
HSA	HEADED STUD ANCHOR		
HSS	HOLLOW STRUCTURAL SECTION	VERT.	VERTICAL
HT.	HEIGHT		
HT	HIP TRUSS	W/	WITH
		W/O	WITHOUT
ID	INSIDE DIAMETER	W	WIDTH
IF	INSIDE FACE	WF	WIDE FLANGE
IN.	INCH	WP	WORK POINT
INSUL.	INSULATION	WT.	WEIGHT
INT.	INTERIOR	WWF	WELDED WIRE FABRIC

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ARCH NAME ARCH ##

ORIG SUBMISSION: 01/28/2025
CURRENT:

SHEET TITLE AND NUMBER:

S110

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SPECIAL INSPECTIONS PER 2021 SOUTH CAROLINA BUILDING CODE (IBC 2021)

1. THE OWNER SHALL EMPLOY ONE OR MORE SPECIAL INSPECTORS TO PROVIDE INSPECTIONS DURING CONSTRUCTION ON THE TYPES OF WORK LISTED UNDER IBC SECTION 1704. THE SPECIAL INSPECTOR SHALL BE A QUALIFIED PERSON WHO SHALL DEMONSTRATE COMPETENCE, TO THE SATISFACTION OF THE BUILDING OFFICIAL, FOR INSPECTION OF THE PARTICULAR TYPE OF CONSTRUCTION OR OPERATION REQUIRING INSPECTION.
2. THESE INSPECTIONS ARE IN ADDITION TO THE INSPECTIONS SPECIFIED IN IBC SECTION 110.
3. REPORTS:

   A. SPECIAL INSPECTORS SHALL KEEP RECORDS OF INSPECTIONS. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE. REPORTS SHALL INDICATE THAT THE WORK INSPECTED WAS DONE IN CONFORMANCE TO APPROVED CONSTRUCTION DOCUMENTS.

   B. DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL AND TO THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO THE COMPLETION OF THAT PHASE OF THE WORK.

   C. A FINAL REPORT OF INSPECTIONS DOCUMENTING REQUIRED SPECIAL INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED PERIODICALLY AT A POINT IN TIME AGREED UPON BY THE PERMIT APPLICANT AND THE BUILDING OFFICIAL PRIOR TO THE START OF THE WORK.

4. INSPECTIONS REQUIRED:

REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION (SECTION 1705.3 AND TABLE 1705.3)

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD[A]	IBC REFERENCE
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT	-	X	ACI 318: CH. 20, 25.2, 25.3, 26.6.1-26.6.3	-
2. REINFORCING BAR WELDING:				
A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706	-	-	AWS D1.4 ACI 318: 26.6.4	-
B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"	-	X		
C. INSPECT ALL OTHER WELDS	X	X		
3. INSPECT ANCHORS CAST IN CONCRETE	-	X	ACI 318: 17.8.2	-
4. INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS [B]				
A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS	X	-	ACI 318: 17.8.2.4 ACI 318: 17.8.2	-
B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A	-	X		
5. VERIFY USE OF REQUIRED MIX DESIGN	-	X	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	X	-	ASTM C31 ASTM C172 ACI 318: 26.5, 26.12	1908.10
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X	-	ACI 318: 26.5	-
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	-	X	ACI 318: 26.5.3-26.5.5	-
9. INSPECT PRESTRESSED CONCRETE FOR:				
A. APPLICATION OF PRESTRESSING FORCES	X	-	ACI 318: 26.10	-
B. GROUTING OF BONDED PRESTRESSING TENDONS	X	-		
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS	-	X	ACI 318: 26.9	-
11. FOR PRECAST CONCRETE DIAPHRAGM CONNECTIONS OR REINFORCEMENT AT JOINTS CLASSIFIED AS MODERATE OR HIGH DEFORMABILITY ELEMENTS (MDE OR HDE) IN STRUCTURES ASSIGNED TO SEISMIC CATEGORY C, D, E OR F, INSPECT SUCH CONNECTIONS AND REINFORCEMENT IN THE FIELD FOR:				
A. INSTALLATION OF THE EMBEDDED PARTS	X	-	ACI 318: 26.13.1.3 ACI 550.5	-
B. COMPLETION OF THE CONTINUITY OF REINFORCEMENT ACROSS JOINTS	X	-		
C. COMPLETION OF CONNECTIONS IN THE FIELD	X	-		
12. INSPECT INSTALLATION TOLERANCES OF PRECAST CONCRETE DIAPHRAGM CONNECTIONS FOR COMPLIANCE WITH ACI 550.5	-	X	ACI 318: 26.13.1.3	-
13. VERIFY IN-SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS	-	X	ACI 318: 26.11.2	-
14. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED	-	X	ACI 318: 26.11.1.2(B)	-

(A) WHERE APPLICABLE, SEE SECTION 1705.13, SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE
(B) SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH 17.8.2 IN ACI 318, OR OTHER QUALIFICATION PROCEDURES. WHERE SPECIFIC REQUIREMENTS ARE NOT PROVIDED, SPECIAL INSPECTION REQUIREMENTS SHALL BE SPECIFIED BY THE REGISTERED DESIGN PROFESSIONAL AND SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO COMMENCEMENT OF THE WORK.

REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS (SECTION 1705.6 AND TABLE 1705.6)

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY	-	X
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL	-	X
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS	-	X
4. DURING FILL PLACEMENT, VERIFY USE OF PROPER MATERIALS AND PROCEDURES IN ACCORDANCE WITH THE PROVISIONS OF THE APPROVED GEOTECHNICAL REPORT. VERIFY DENSITIES AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF COMPACTED FILL	X	-
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY	-	X

REQUIRED SPECIAL INSPECTIONS OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS (SECTION 1705.2.3 AND TABLE 1705.2.3)

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDARD[A]
1. INSTALLATION OF OPEN-WEB STEEL JOISTS AND JOIST GIRDERS			
A. END CONNECTIONS - WELDING OR BOLTED	-	X	SJI SPECIFICATIONS LISTED IN SECTION 2207.1
B. BRIDGING - HORIZONTAL OR DIAGONAL			
1. STANDARD BRIDGING	-	X	SJI SPECIFICATIONS LISTED IN SECTION 2207.1
2. BRIDGING THAT DIFFERS FROM THE SJI SPECIFICATIONS LISTED IN SECTION 2207.1	-	X	-

(A) WHERE APPLICABLE, SEE SECTION 1705.13, SPECIAL INSPECTIONS FOR SEISMIC RESISTANCE.

AISC 360-16 TABLE N5.4-1 INSPECTION TASKS PRIOR TO WELDING OF STEEL

INSPECTION TASKS PRIOR TO WELDING	QUALITY CONTROL	QUALITY ASSURANCE
1. WELDER QUALIFICATION RECORDS AND CONTINUITY RECORD	PERFORM	OBSERVE
2. WELDING PROCEDURE SPECIFICATIONS AVAILABLE	PERFORM	PERFORM
3. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	PERFORM	PERFORM
4. MATERIAL IDENTIFICATION (TYPE/GRADE)	OBSERVE	OBSERVE
5. WELDER IDENTFCATION SYSTEM (A)	OBSERVE	OBSERVE
6. FIT-UP OF GROOVE WELDS (INCLUDING JOINT GEOMETRY) • JOINT PREPARATIONS • DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION) • BACKING TYPE AND FIT (IF APPLICABLE)	OBSERVE	OBSERVE
7. FIT-UP OF CJP GROOVE WELDS OF HSS T-, Y- AND K-JOINTS WITHOUT BACKING • JOINT PREPARATIONS • DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION)	OBSERVE	OBSERVE
8. CONFIGURATION AND FINISH OF ACCESS HOLES	OBSERVE	OBSERVE
9. FIT-UP OF FILLET WELDS • DIMENSIONS (ALIGNMENT, ROOT OPENING, ROOT FACE, BEVEL) • CLEANLINESS (CONDITION OF STEEL SURFACES) • TACKING (TACK WELD QUALITY AND LOCATION)	OBSERVE	OBSERVE
10. CHECK WELDING EQUIPMENT	OBSERVE	OBSERVE

(A) THE FABRICATOR OR ERECTOR, AS APPLICABLE, SHALL MAINTAIN A SYSTEM BY WHICH A WELDER WHO HAS WELDED A JOINT OR MEMBER CAN BE IDENTIFIED. STAMPS, IF USED, SHALL BE THE LOW-STRESS TYPE.

AISC 360-16 TABLE N5.4-2 INSPECTION TASKS DURING WELDING OF STEEL

INSPECTION TASKS DURING WELDING	QUALITY CONTROL	QUALITY ASSURANCE
1. CONTROL AND HANDLING OF WELDING CONSUMABLES • PACKAGING • EXPOSURE CONTROL	OBSERVE	OBSERVE
2. NO WELDING OVER CRACKED TACK WELDS	OBSERVE	OBSERVE
3. ENVIRONMENTAL CONDITIONS • WIND SPEED WITHIN LIMITS • PRECIPITATION AND TEMPERATURE	OBSERVE	OBSERVE
4. WELDING PROCEDURE SPECIFICATIONS FOLLOWED • SETTINGS ON WELDING EQUIPMENT • TRAVEL SPEED • SELECTED WELDING MATERIALS • SHIELDING GAS TYPE/FLOW RATE • PREHEAT APPLIED • INTERPASS TEMPERATURE MAINTAINED (MIN./MAX.) • PROPER POSITION (F,V, H, OH)	OBSERVE	OBSERVE
5. WELDING TECHNIQUES • INTERPASS AND FINAL CLEANING • EACH PASS WITHIN PROFILE LIMITATIONS • EACH PASS MEETS QUALITY REQUIREMENTS	OBSERVE	OBSERVE
6. PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS	PERFORM	PERFORM

AISC 360-16 TABLE N5.4-3 INSPECTION TASKS AFTER WELDING OF STEEL

INSPECTION TASKS AFTER WELDING	QUALITY CONTROL	QUALITY ASSURANCE
1. WELDS CLEANED	OBSERVE	OBSERVE
2. SIZE, LENGTH AND LOCATION OF WELDS	PERFORM	PERFORM
3. WELDS MEET VISUAL ACCEPTANCE CRITERIA • CRACK PROHIBITION • WELD/BASE-METAL FUSION • CRATER CROSS SECTION • WELD PROFILES • WELD SIZE • UNDERCUT • POROSITY	PERFORM	PERFORM
4. ARC STRIKES	PERFORM	PERFORM
5. k-AREA (A)	PERFORM	PERFORM
6. WELD ACCESS HOLES IN ROLLED HEAVY SHAPES AND BUILT-UP HEAVY SHAPES (B)	PERFORM	PERFORM
7. BACKING REMOVED AND WELD TABS REMOVED (IF REQUIRED)	PERFORM	PERFORM
8. REPAIR ACTIVITIES	PERFORM	PERFORM
9. DOCUMENT ACCEPTANCE OR REJECTION OF WELDED JOINT OR MEMBER	PERFORM	PERFORM
10. NO PROHIBITED WELDS HAVE BEEN ADDED WITHOUT THE APPROVAL OF THE EOR	OBSERVE	OBSERVE

(A) WHEN WELDING OF DOUBLER PLATES, CONTINUITY PLATES OR STIFFENERS HAS BEEN PERFORMED IN THE k-AREA, VISUALLY INSPECT THE WEB k-AREA FOR CRACKS WITHIN 3 INCHES (75mm) OF THE WELD.
(B) AFTER ROLLED HEAVY SHAPES (SEE SECTION A3.1c) AND BUILT-UP HEAVY SHAPES (SEE SECTION A3.1d) ARE WELDED, VISUALLY INSPECT THE WELD ACCESS HOLE FOR CRACKS.

AISC 360-16 SECTION N5.5 NONDESTRUCTIVE TESTING OF WELDED JOINTS

SPECIAL INSPECTION TASKS	QUALITY CONTROL	QUALITY ASSURANCE
5B. ULTRASONIC TESTING (UT) SHALL BE PERFORMED ON COMPLETE-JOINT-PENETRATION (CJP) GROOVE WELDS SUBJECT TO TRANSVERSELY APPLIED TENSION LOADING IN BUTT, T- AND CORNER JOINTS, IN MATERIAL 5/16" THICK OR GREATER AS FOLLOWS:		
A. 100% FOR STRUCTURES IN RISK CATEGORY III OR IV	-	PERFORM
B. 10% FOR STRUCTURES IN RISK CATEGORY II		
5C. WELDED JOINTS SUBJECTED TO FATIGUE AS REQUIRED BY APPENDIX 3, TABLE A-3.1	-	PERFORM

AISC 360-16 SECTION N5.7 INSPECTION OF GALVANIZED STRUCTURAL STEEL MAIN MEMBERS

SPECIAL INSPECTION TASK	ACTION
1. EXPOSED CUT SURFACES OF GALVANIZED STRUCTURAL STEEL MAIN MEMBERS AND EXPOSED CORNERS OF RECTANGULAR HSS SHALL BE VISUALLY INSPECTED FOR CRACKS SUBSEQUENT TO GALVANIZING. CRACKS SHALL BE REPAIRED OR THE MEMBER SHALL BE REJECTED	PERFORM

AISC 360-16 SECTION N5.8 OTHER STEEL INSPECTION TASKS

SPECIAL INSPECTION TASK	ACTION
1. FABRICATOR'S QCI SHALL INSPECT THE FABRICATED STEEL TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE SHOP DRAWINGS. THIS INCLUDES SUCH ITEMS AS THE CORRECT APPLICATION OF SHOP JOINT DETAILS AT EACH CONNECTION	PERFORM AND DOCUMENT
2. ERECTOR'S QCI SHALL INSPECT THE ERECTED STEEL FRAME TO VERIFY COMPLIANCE WITH THE FIELD INSTALLED DETAILS SHOWN ON THE ERECTION DRAWINGS. THIS INCLUDES SUCH ITEMS AS BRACES, STIFFENERS, MEMBER LOCATIONS AND CORRECT APPLICATION OF FIELD JOINT DETAILS AT EACH CONNECTION	PERFORM AND DOCUMENT
3. THE QAI SHALL BE ON THE PREMISES FOR INSPECTION DURING THE PLACEMENT OF ANCHOR RODS AND OTHER EMBEDMENTS SUPPORTING STRUCTURAL STEEL FOR COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS. AS A MINIMUM, THE DIAMETER, GRADE, TYPE AND LENGTH OF THE ANCHOR ROD OR EMBEDDED ITEM, AND THE EXTENT OR DEPTH OF EMBEDMENT INTO THE CONCRETE, SHALL BE VERIFED AND DOCUMENTED PRIOR TO PLACEMENT OF CONCRETE	PERFORM AND DOCUMENT
4. THE QAI SHALL INSPECT THE FABRICATED STEEL OR ERECTED STEEL FRAME, AS APPLICABLE, TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE CONSTRUCTION DOCUMENTS. THIS INCLUDES SUCH ITEMS AS BRACES, STIFFENERS, MEMBER LOCATIONS AND THE CORRECT APPLICATION OF JOINT DETAILS AT EACH CONNECTION	PERFORM AND DOCUMENT

TMS 602-16 TABLE 3 MINIMUM VERIFICATION REQUIREMENTS FOR MASONRY

TYPE	ACTION	REFERENCE FOR CRITERIA
1. PRIOR TO CONSTRUCTION, VERIFICATION OF COMPLIANCE OF SUBMITTALS	VERIFY	ART. 1.5
2. PRIOR TO CONSTRUCTION, VERIFICATION OF f'm AND f'_{AAC}, EXCEPT WHERE SPECIFICALLY EXEMPTED BY THE CODE	VERIFY	ART. 1.4 B
3. DURING CONSTRUCTION, VERIFICATION OF SLUMP FLOW AND VISUAL STABILITY INDEX (VSI) WHEN SELF-CONSOLIDATING GROUT IS DELIVERED TO THE PROJECT SITE	VERIFY	ART. 1.5 & 1.6.3
4. DURING CONSTRUCTION, VERIFICATION OF f'm AND f'_{AAC} FOR EVERY 5,000 SQUARE FEET	VERIFY	ART. 1.4 B
5. DURING CONSTRUCTION, VERIFICATION OF PROPORTIONS OF MATERIALS AS DELIVERED TO THE PROJECT SITE FOR PREMIXED OR PREBLENDED MORTAR, PRESTRESSING GROUT, AND GROUT OTHER THAN SELF-CONSOLIDATING GROUT	VERIFY	ART. 1.4 B

TMS 602-16 TABLE 4 MINIMUM SPECIAL INSPECTION REQUIREMENTS FOR MASONRY

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	TMS 402 REFERENCE	TMS 602 REFERENCE
1. AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. PROPORTIONS OF SITE-PREPARED MORTAR	-	X	-	ART. 2.1, 2.6 A & 2.6 C
B. GRADE AND SIZE OF PRESTRESSING TENDONS AND ANCHORAGES	-	X	-	ART. 2.4 B & 2.4 H
C. GRADE, TYPE AND SIZE OF REINFORCEMENT, CONNECTORS, ANCHOR BOLTS AND PRESTRESSING TENDONS AND ANCHORAGES	-	X	-	ART. 3.4 & 3.6 A
D. PRESTRESSING TECHNIQUE	-	X	-	ART. 3.6 B
E. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY	X	X	-	ART. 2.1 C.1
F. SAMPLE PANEL CONSTRUCTION	X	X	-	ART. 1.6 D
2. PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE:				
A. GROUT SPACE	X	X	-	ART. 3.2 D & 3.6 F
B. PLACEMENT OF PRESTRESSING TENDONS AND ANCHORAGES	-	X	SECT. 10.8 & 10.9	ART. 2.4 & 3.6
C. PLACEMENT OF REINFORCEMENT, CONNECTORS AND ANCHOR BOLTS	X	X	SEC. 6.1, 6.3.1, 6.3.6 & 6.3.7	ART. 3.2 E & 3.4
D. PROPORTIONS OF SITE-PREPARED GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS	-	X	-	ART. 2.6 B & 2.4 G.1.b
3. VERIFY COMPLIANCE OF THE FOLLOWING DURING CONSTRUCTION:				
A. MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS	-	X	-	ART. 1.5
B. PLACEMENT OF MASONRY UNITS AND MORTAR JOINT CONSTRUCTION	-	X	-	ART. 3.3 B
C. SIZE AND LOCATION OF STRUCTURAL MEMBERS	-	X	-	ART. 3.3 F
D. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION	X	X	SEC. 1.2.1(e), 6.2.1 & 6.3.1	-
E. WELDING OF REINFORCEMENT	X	-	SEC. 6.1.6.1.2	-
F. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE ABOVE 90°F)	-	X	-	ART. 1.8 C & 1.8 D
G. APPLICATION AND MEASUREMENT OF PRESTRESSING FORCE	X	-	-	ART. 3.6 B
H. PLACEMENT OF GROUT AND PRESTRESSING GROUT FOR BONDED TENDONS IS IN COMPLIANCE	X	-	-	ART. 3.5 & 3.6 C
I. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS	X	-	-	ART. 3.3 B.9 & 3.3 F.1.b
4. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS	X	X	-	ART. 1.4 B.2.a.3, 1.4 B.2.b.3, 1.4 B.2.c.3, 1.4 B.3 & 1.4 B.4

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CMC CONWAY MEDICAL CENTER with Novant Health

CMC Socastee FSED
6016 HIGHWAY 707
MYRTLE BEACH, SC

PROJECT NUMBER: 3024096.00

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ORIG SUBMISSION: 01/28/2025
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S120

SPECIAL INSPECTIONS

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SDI QA/QC 2017 TABLE 1.1
INSPECTION OR EXECUTION TASKS PRIOR TO DECK PLACEMENT

TASK	QUALITY CONTROL	QUALITY ASSURANCE
1. VERIFY COMPLIANCE OF MATERIALS (DECK AND ALL DECK ACCESSORIES) WITH CONSTRUCTION DOCUMENTS, INCLUDING PROFILES, MATERIAL PROPERTIES, AND BASE METAL THICKNESS	PERFORM	PERFORM
2. DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES	PERFORM	PERFORM

SDI QA/QC 2017 TABLE 1.2
INSPECTION OR EXECUTION TASKS AFTER DECK PLACEMENT

TASK	QUALITY CONTROL	QUALITY ASSURANCE
1. VERIFY COMPLIANCE OF DECK AND ALL DECK ACCESSORIES INSTALLATION WITH CONSTRUCTION DOCUMENTS	PERFORM	PERFORM
2. VERIFY DECK MATERIALS ARE REPRESENTED BY THE MILL CERTIFICATIONS THAT COMPLY WITH THE CONSTRUCTION DOCUMENTS	N/A	PERFORM
3. DOCUMENT ACCEPTANCE OR REJECTION OF INSTALLATION OF DECK AND DECK ACCESSORIES	PERFORM	PERFORM

SDI QA/QC 2017 TABLE 1.3
INSPECTION OR EXECUTION TASKS PRIOR TO DECK WELDING

TASK	QUALITY CONTROL	QUALITY ASSURANCE
1. WELDING PROCEDURE SPECIFICATIONS (WPS) AVAILABLE	OBSERVE	OBSERVE
2. MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE	OBSERVE	OBSERVE
3. MATERIAL IDENTIFICATION (TYPE/GRADE)	OBSERVE	OBSERVE
4. CHECK WELDING EQUIPMENT	OBSERVE	OBSERVE

SDI QA/QC 2017 TABLE 1.4
INSPECTION OR EXECUTION TASKS DURING DECK WELDING

TASK	QUALITY CONTROL	QUALITY ASSURANCE
1. USE OF QUALIFIED WELDERS	OBSERVE	OBSERVE
2. CONTROL AND HANDLING OF WELDING CONSUMABLES	OBSERVE	OBSERVE
3. ENVIRONMENTAL CONDITIONS (WIND SPEED, MOISTURE, TEMPERATURE)	OBSERVE	OBSERVE
4. WELDING PROCEDURE SPECIFICATIONS (WPS) FOLLOWED	OBSERVE	OBSERVE

SDI QA/QC 2017 TABLE 1.5
INSPECTION OR EXECUTION TASKS AFTER DECK WELDING

TASK	QUALITY CONTROL	QUALITY ASSURANCE
1. VERIFY SIZE AND LOCATION OF WELDS, INCLUDING SUPPORT, SIDELAP, AND PERIMETER WELDS	PERFORM	PERFORM
2. WELDS MEET VISUAL ACCEPTANCE CRITERIA	PERFORM	PERFORM
3. VERIFY REPAIR ACTIVITIES	PERFORM	PERFORM
4. DOCUMENT ACCEPTANCE OR REJECTION OF WELDS	PERFORM	PERFORM

SDI QA/QC 2017 TABLE 1.6
INSPECTION OR EXECUTION TASKS PRIOR TO MECHANICAL FASTENING OF DECK

TASK	QUALITY CONTROL	QUALITY ASSURANCE
1. MANUFACTURER INSTALLATION INSTRUCTIONS AVAILABLE FOR MECHANICAL FASTENERS	OBSERVE	OBSERVE
2. PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION	OBSERVE	OBSERVE
3. PROPER STORAGE FOR MECHANICAL FASTENERS	OBSERVE	OBSERVE

SDI QA/QC 2017 TABLE 1.7
INSPECTION OR EXECUTION TASKS DURING MECHANICAL FASTENING OF DECK

TASK	QUALITY CONTROL	QUALITY ASSURANCE
1. FASTENERS ARE POSITIONED AS REQUIRED	OBSERVE	OBSERVE
2. FASTENERS ARE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS	OBSERVE	OBSERVE

SDI QA/QC 2017 TABLE 1.8
INSPECTION OR EXECUTION TASKS AFTER MECHANICAL FASTENING OF DECK

TASK	QUALITY CONTROL	QUALITY ASSURANCE
1. CHECK SPACING, TYPE, AND INSTALLATION OF SUPPORT FASTENERS	PERFORM	PERFORM
2. CHECK SPACING, TYPE, AND INSTALLATION OF SIDELAP FASTENERS	PERFORM	PERFORM
3. CHECK SPACING, TYPE, AND INSTALLATION OF PERIMETER FASTENERS	PERFORM	PERFORM
4. VERIFY REPAIR ACTIVITIES	PERFORM	PERFORM
5. DOCUMENT ACCEPTANCE OR REJECTION OF MECHANICAL FASTENERS	PERFORM	PERFORM

SPECIAL CASES
(SECTION 1705.1.1)

TASK	ACTION	FREQUENCY
1. SPECIAL INSPECTIONS AND TESTS SHALL BE REQUIRED FOR PROPOSED WORK THAT IS, IN THE OPINION OF THE BUILDING OFFICIAL, UNUSUAL IN ITS NATURE, SUCH AS, BUT NOT LIMITED TO, THE FOLLOWING EXAMPLES:		
A) CONSTRUCTION MATERIALS AND SYSTEMS THAT ARE ALTERNATIVES TO MATERIALS AND SYSTEMS PRESCRIBED BY THIS CODE.	PERFORM AND DOCUMENT	CONTINUOUS
B) UNUSUAL DESIGN APPLICATIONS OF MATERIALS DESCRIBED BY THIS CODE.	PERFORM AND DOCUMENT	CONTINUOUS
C) MATERIALS AND SYSTEMS REQUIRED TO BE INSTALLED IN ACCORDANCE WITH ADDITIONAL MANUFACTURER'S INSTRUCTIONS THAT PRESCRIBE REQUIREMENTS NOT CONTAINED IN THIS CODE OR IN STANDARDS REFERENCED BY THIS CODE.	PERFORM AND DOCUMENT	CONTINUOUS

FABRICATED ITEMS
(SECTION 1705.11)

TYPE	ACTION	REFERENCE FOR CRITERIA
1. 1. SPECIAL INSPECTIONS OF FABRICATED ITEMS SHALL BE PERFORMED IN ACCORDANCE WITH THE LISTED REFERENCES	PERFORM	1704.2.5

SPECIAL INSPECTIONS FOR WIND RESISTANCE
(SECTION 1705.12)

SPECIAL INSPECTION TASK	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION
SPECIAL INSPECTIONS FOR WIND RESISTANCE SPECIFIED IN SECTIONS 1705.12.1 THROUGH 1705.12.3, UNLESS EXEMPTED BY THE EXCEPTIONS TO SECTION 1704.2, ARE REQUIRED FOR BUILDINGS AND STRUCTURES CONSTRUCTED IN THE FOLLOWING AREAS: 1. IN WIND EXPOSURE CATEGORY B, WHERE V IS 150 MILES/HOUR OR GREATER 2. IN WIND EXPOSURE CATEGORY C OR D, WHERE V IS 140 MILES/HOUR OR GREATER		
1. STRUCTURAL WOOD (SECTION 1705.12.1)		
A) FIELD GLUING OPERATIONS OF ELEMENTS OF THE MAIN WINDFORCE-RESISTING SYSTEM	X	-
B) NAILING, BOLTING, ANCHORING AND OTHER FASTENING OF ELEMENTS OF THE MAIN WINDFORCE-RESISTING SYSTEM, INCLUDING WOOD SHEAR WALLS, WOOD DIAPHRAGMS, DRAG STRUTS, BRACES AND HOLD-DOWNS	-	X
EXCEPTION: SPECIAL INSPECTIONS ARE NOT REQUIRED FOR WOOD SHEAR WALLS, SHEAR PANELS AND DIAPHRAGMS, INCLUDING NAILING, BOLTING, ANCHORING AND FASTENING TO OTHER ELEMENTS OF THE MAIN WINDFORCE-RESISTING SYSTEM, WHERE THE LATERAL RESISTANCE IS PROVIDED BY STRUCTURAL SHEATHING AND THE SPECIFIED FASTENER SPACING AT PANEL EDGES IS MORE THAN 4 INCHES ON CENTER.		
2. COLD-FORMED STEEL LIGHT-FRAME CONSTRUCTION (SECTION 1705.12.2)		
A) WELDING OPERATIONS OF ELEMENTS OF THE MAIN WINDFORCE-RESISTING SYSTEM	-	X
B) SCREW ATTACHMENT, BOLTING, ANCHORING AND OTHER FASTENING OF ELEMENTS TO THE MAIN WINDFORCE-RESISTING SYSTEM, INCLUDING SHEAR WALLS, BRACES, DIAPHRAGMS, COLLECTORS (DRAG STRUTS) AND HOLD-DOWNS	-	X
EXCEPTION: SPECIAL INSPECTIONS ARE NOT REQUIRED FOR COLD-FORMED STEEL LIGHT-FRAME SHEAR WALLS AND DIAPHRAGMS, INCLUDING SCREWING, BOLTING, ANCHORING AND OTHER FASTENING TO COMPONENTS OF THE WINDFORCE-RESISTING SYSTEM, WHERE EITHER OF THE FOLLOWING APPLIES: i) THE SHEATHING IS GYPSUM BOARD OR FIBERBOARD ii) THE SHEATHING IS WOOD STRUCTURAL PANEL OR STEEL SHEETS ON ONLY ONE SIDE OF THE SHEAR WALL, SHEAR PANEL OR DIAPHRAGM ASSEMBLY AND THE SPECIFIED FASTENER SPACING AT THE PANEL OR SHEET EDGES IS MORE THAN 4 INCHES ON CENTER		
3. WIND-RESISTING COMPONENTS (SECTION 1705.12.3)		
A) ROOF COVERING, ROOF DECK AND ROOF FRAMING CONNECTIONS	-	X
B) EXTERIOR WALL COVERING AND WALL CONNECTIONS TO ROOF AND FLOOR DIAPHRAGMS AND FRAMING	-	X

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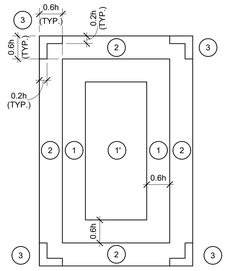
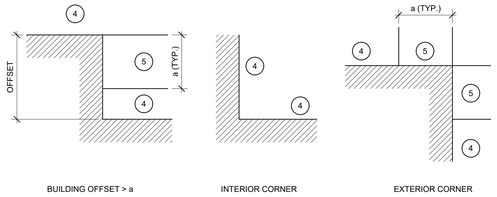


PLAN VIEW OF ZONE 1'/1/2/3 APPLICATION
FOR ENCLOSED GABLE ROOFS θ ≤ 7°

FSED - H ≤ 15 FT

ZONE	WIND PRESSURE (PSF) BASED ON EFFECTIVE WIND AREA			
	10 FT²	20 FT²	50 FT²	100 FT²
1, 2, 3 (+)	24	22	20	19
1' (-)	53	53	53	53
1 (-)	92	86	78	72
2 (-)	121	113	103	95
3 (-)	164	149	128	113



PLAN VIEW OF ZONE 4/5 APPLICATION

FSED - H ≤ 15 FT

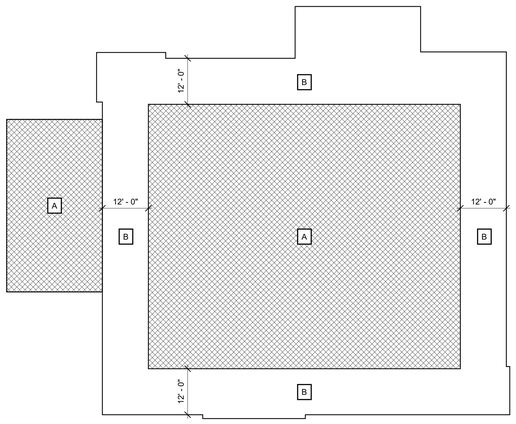
ZONE	WIND PRESSURE (PSF) BASED ON EFFECTIVE WIND AREA			
	10 FT²	20 FT²	50 FT²	100 FT²
4 , 5 (+)	53	51	47	45
4 (-)	57	55	52	49
5 (-)	70	66	60	55

NOTES:

1. PRESSURES PROVIDED ARE ULTIMATE LOADS (1.0W) CALCULATED PER ASCE 7-16.
2. PRESSURES ARE BASED ON THE BASIC WIND SPEED PROVIDED IN GENERAL NOTES.
3. PRESSURES SHOWN INCLUDE A DIRECTIONALITY FACTOR, Kd, OF 0.85.
4. PRESSURES SHOWN ACCOUNT FOR INTERNAL PRESSURES BASED ON AN INTERNAL PRESSURE COEFFICIENT OF ±0.18.
5. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARDS AND AWAY FROM SURFACES, RESPECTIVELY.
6. H = ROOF HEIGHT (FT)
7. EDGE DISTANCE (a) = THE LESSER OF 10% OF THE LEAST HORIZONTAL DIMENSION OR 0.4*H, BUT NOT LESS THAN 4% OF THE LEAST HORIZONTAL DIMENSION OR 3 FT.
8. JOIST DESIGNER TO ASSUME A RELIABLE DEAD LOAD OF 8 PSF FOR PURPOSES OF RESISTING UPLIFT FORCES.

1 COMPONENTS AND CLADDING WIND DIAGRAMS

1/8" = 1'-0"



DECK NOTES:

A. TYPE A: PROVIDE 1 1/2" - 20 GA. METAL DECK. ATTACH TO SUPPORTS w/ 5/8" PUDDLE WELDS IN 36/5 PATTERN. FASTEN SIDELAPS w/ 10 TEK SCREWS @ 12" O.C. PER SPAN.

B. TYPE B: PROVIDE 1 1/2" - 20 GA. METAL DECK. ATTACH TO SUPPORTS w/ 5/8" PUDDLE WELDS IN 36/7 PATTERN. FASTEN SIDELAPS w/ #10 TEK SCREWS @ 12" O.C. PER SPAN.

1. ATTACH ALL DECKING TO PERIMETER PERPENDICULAR SUPPORTS w/ 5/8" DIA. PUDDLE WELDS IN EACH DECK FLUTE (6" O.C. FOR 1 1/2" DECK).
2. ATTACH ALL DECKING TO PERIMETER PARALLEL SUPPORTS w/ 5/8" DIA. PUDDLE WELDS @ 6" O.C.
3. PAINT WELDS IMMEDIATELY AFTER INSTALLATION TO PREVENT CORROSION.

2 ROOF DECK ATTACHMENT DIAGRAM

1/16" = 1'-0"

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TYPICAL DIAGRAMS

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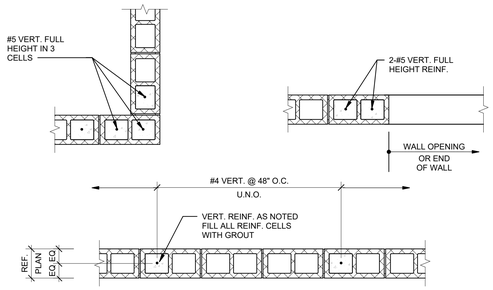


NOTES:

1. PROVIDE CLEANOUTS AT BOTTOM OF EACH REINFORCED CELL IN ACCORDANCE WITH ACI 530.
2. PROVIDE HORIZONTAL JOINT REINF. PER GENERAL NOTES @ 16" O.C. MAX. U.N.O.

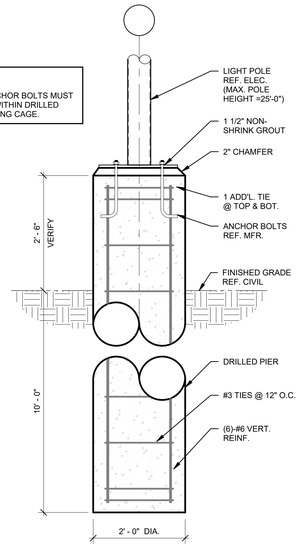
BAR SIZE	LAP LENGTH
4	3' - 0"
5	3' - 9"
6	4' - 10"
7	6' - 7"

REINFORCING AT EXT. & INT. WALLS

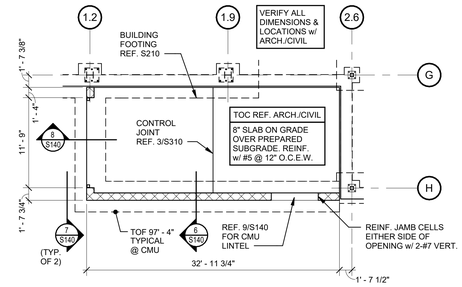
1 CMU WALL REINFORCEMENT SCHEDULE AND DETAILS
3/4" = 1'-0"

NOTE:

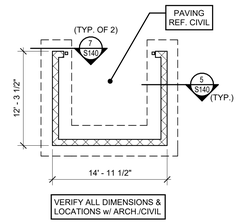
LIGHT POLE ANCHOR BOLTS MUST BE INSTALLED WITHIN DRILLED PIER REINFORCING CAGE.



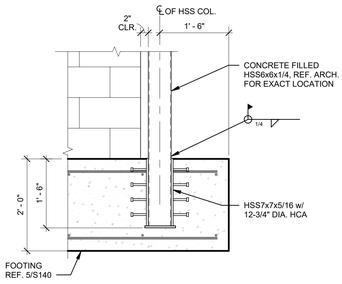
2 TYPICAL LIGHT POLE BASE SECTION
3/4" = 1'-0"



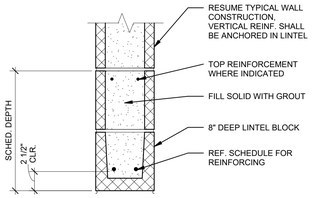
3 FOUNDATION PLAN - GENERATOR
1/8" = 1'-0"

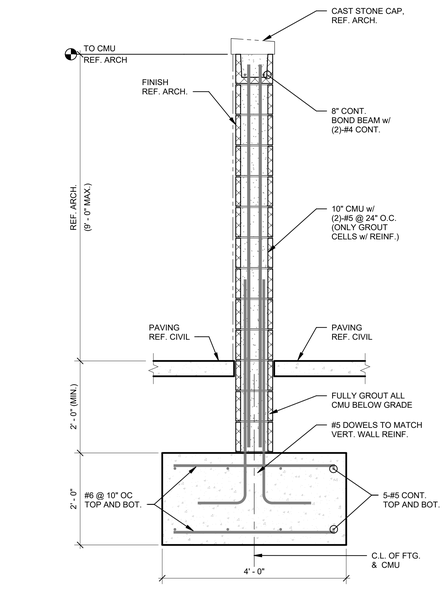


4 FOUNDATION PLAN - DUMPSTER
1/8" = 1'-0"

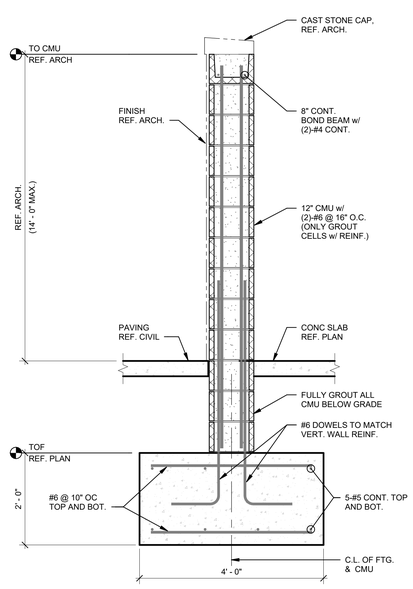


7 SECTION AT GATE POST
3/4" = 1'-0"

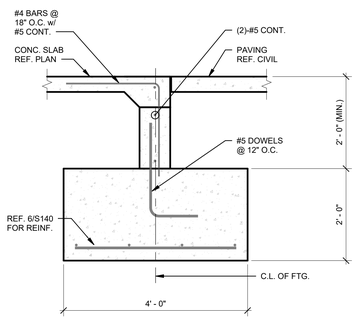




5 SECTION AT TRASH ENCLOSURE
3/4" = 1'-0"



6 SECTION AT GENERATOR ENCLOSURE
3/4" = 1'-0"



8 SECTION AT GENERATOR ENCLOSURE ENTRY
3/4" = 1'-0"

UNSCHEDULED MASONRY LINTEL TABLE			
CLEAR OPENING	6" CMU	8" CMU	12" CMU
UP TO 4'-0"	8" DEEP LINTEL WITH (1) #4	8" DEEP LINTEL WITH (2) #5	8" DEEP LINTEL WITH (2) #5
4'-0" TO 7'-11"	8" DEEP LINTEL WITH (1) #5	8" DEEP LINTEL WITH (2) #5	8" DEEP LINTEL WITH (2) #5
8'-0" TO 10'-0"	16" DEEP LINTEL WITH (1) #5 TOP & BOTTOM	16" DEEP LINTEL WITH (2) #5 TOP & BOTTOM	16" DEEP LINTEL WITH (2) #5 TOP & BOTTOM

NOTES:

1. PROVIDE 16" MIN. OF BEARING AT EACH END OF OPENING.
2. FOR UNSCHEDULED OPENINGS GREATER THAN 10'-0", CONSULT THE STRUCTURAL ENGINEER.
3. PROVIDE 180° HOOKS AT EACH END OF LINTEL VERTICAL BARS.
4. EXTEND HORIZONTAL REINFORCING PAST CORNERS OF OPENINGS PER ELEVATION 1.

9 CMU LINTEL TABLES
3/4" = 1'-0"

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SITE STRUCTURES AND SECTIONS

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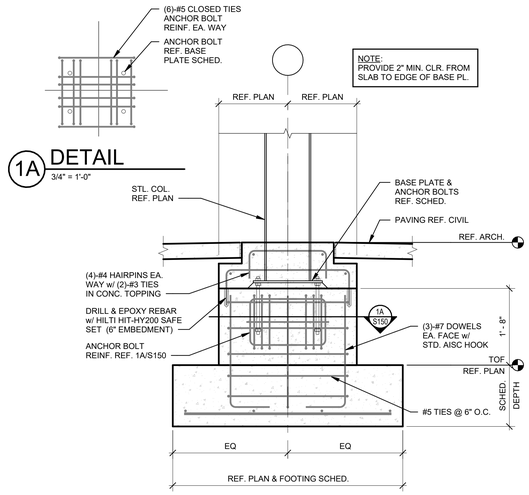
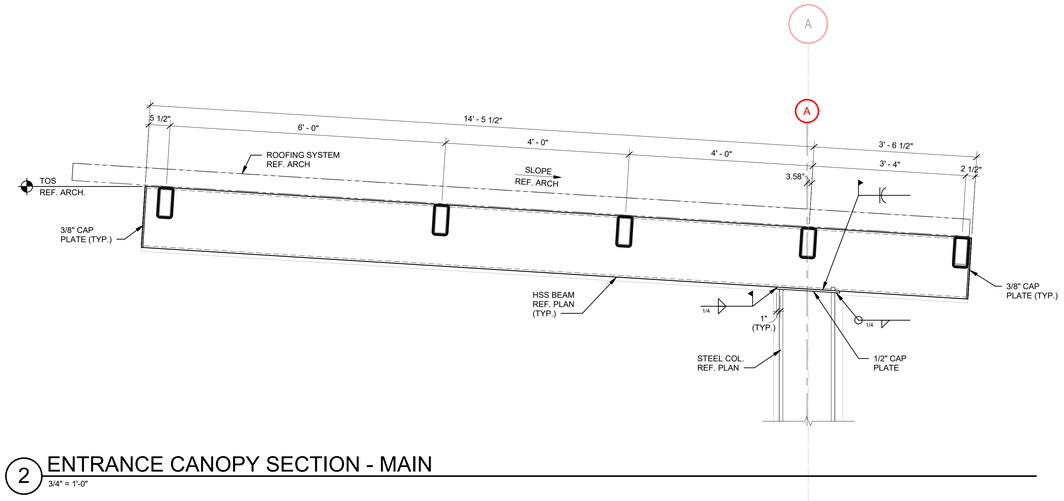
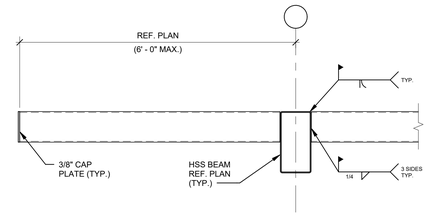


1A DETAIL
3/4" = 1'-0"

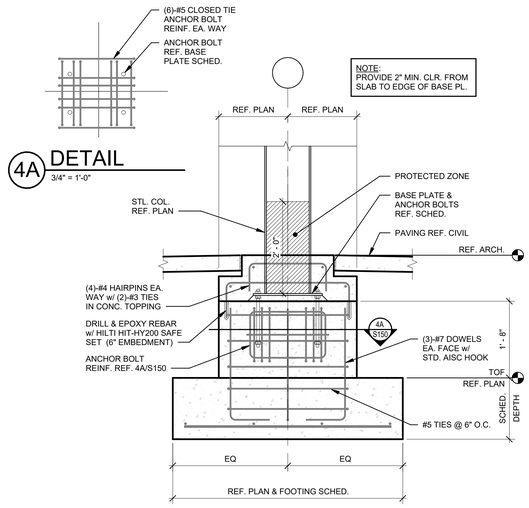
1 ENTRANCE CANOPY FOOTING
3/4" = 1'-0"



2 ENTRANCE CANOPY SECTION - MAIN
3/4" = 1'-0"

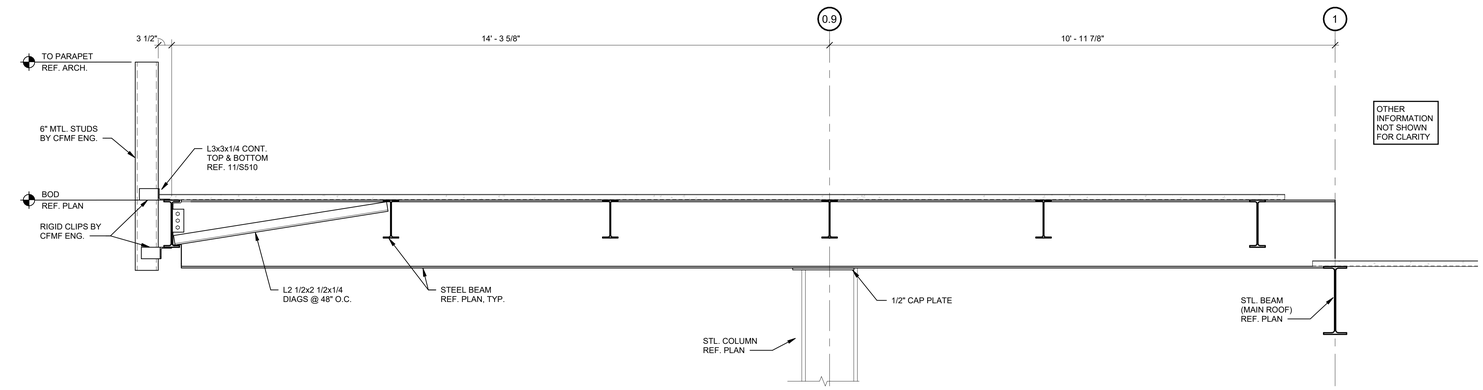


3 ENTRANCE CANOPY SECTION - SIDE
3/4" = 1'-0"

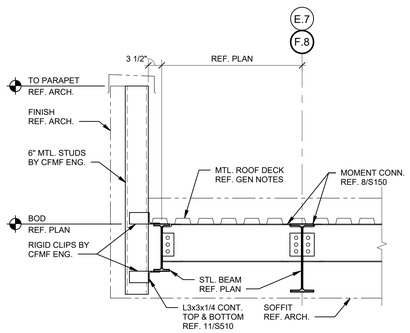


4A DETAIL
3/4" = 1'-0"

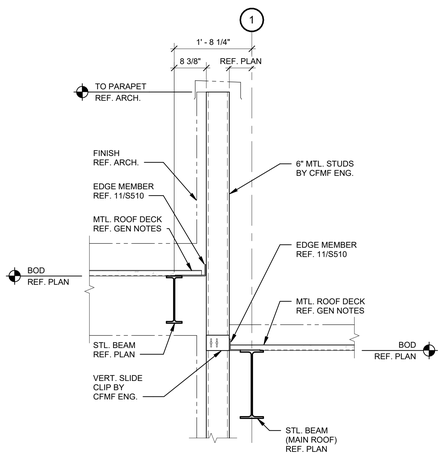
4 AMBULANCE CANOPY FOOTING
3/4" = 1'-0"



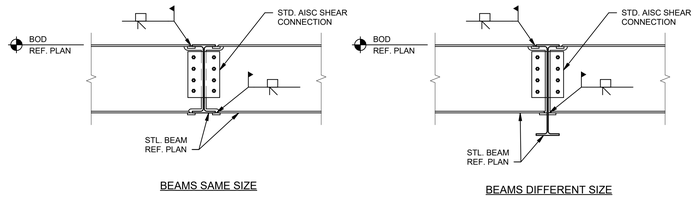
5 AMBULANCE CANOPY SECTION - MAIN
3/4" = 1'-0"



6 AMBULANCE CANOPY SECTION - SIDE
3/4" = 1'-0"



7 AMBULANCE CANOPY SECTION - REAR
3/4" = 1'-0"



8 TYPICAL BEAM TO BEAM MOMENT CONNECTIONS
3/4" = 1'-0"

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CANOPY FRAMING SECTIONS

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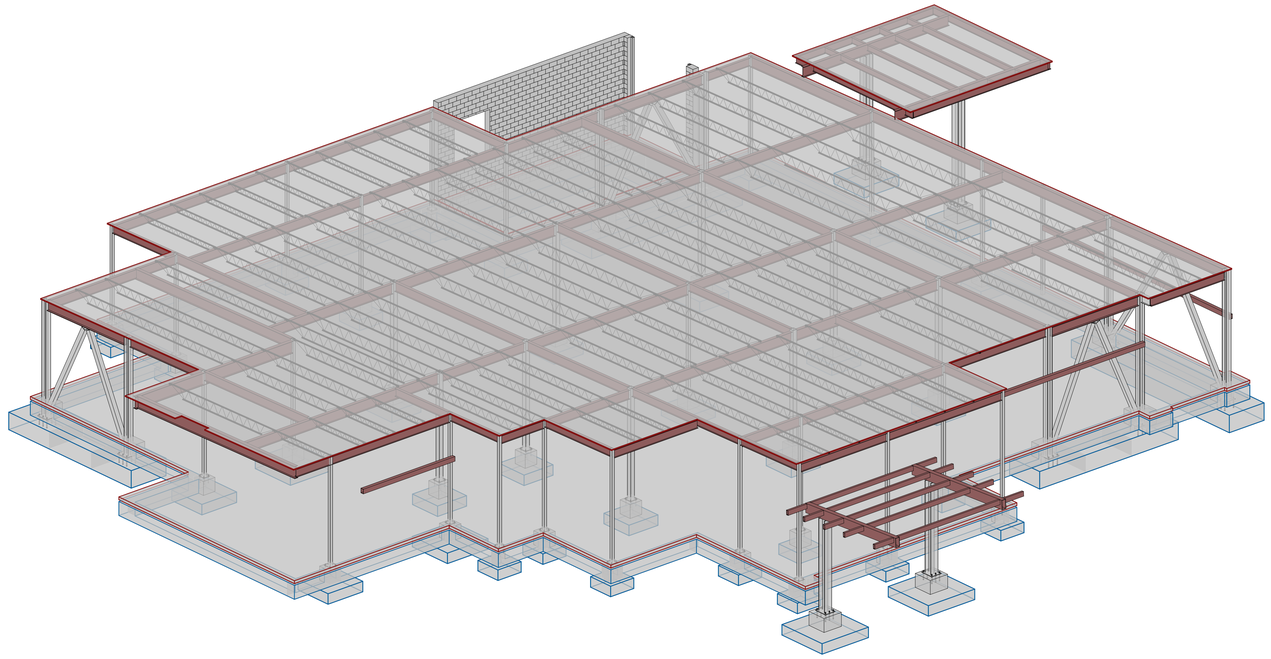
THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG AT FULL SIZED ORIGINAL ARCH D SHEETS



1 ISOMETRIC VIEW

NOTES:

1. ISOMETRIC VIEW IS FOR REFERENCE ONLY. THIS DRAWING IS NOT TO BE USED FOR SCALE, DETAILING OR QUANTITIES.
2. ONLY PRIMARY STRUCTURE IS SHOWN IN THIS VIEW. REFER TO PLAN & DETAILS FOR CONNECTIONS AND MISCELLANEOUS STEEL REQUIRED.

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with Novant Health

CMC Socastee FSED
6016 HIGHWAY 707
MYRTLE BEACH, SC

PROJECT NUMBER: 3024096.00

Δ	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

ARCH NAME ARCH ##

ORIG SUBMISSION: 01/28/2025
CURRENT:

SHEET TITLE AND NUMBER:

S200

ISOMETRIC VIEW

HART GAUGLER + ASSOCIATES
STRUCTURAL ENGINEERS
8350 N. Central Expwy. Suite 600
Dallas, TX 75206
972.239.5111
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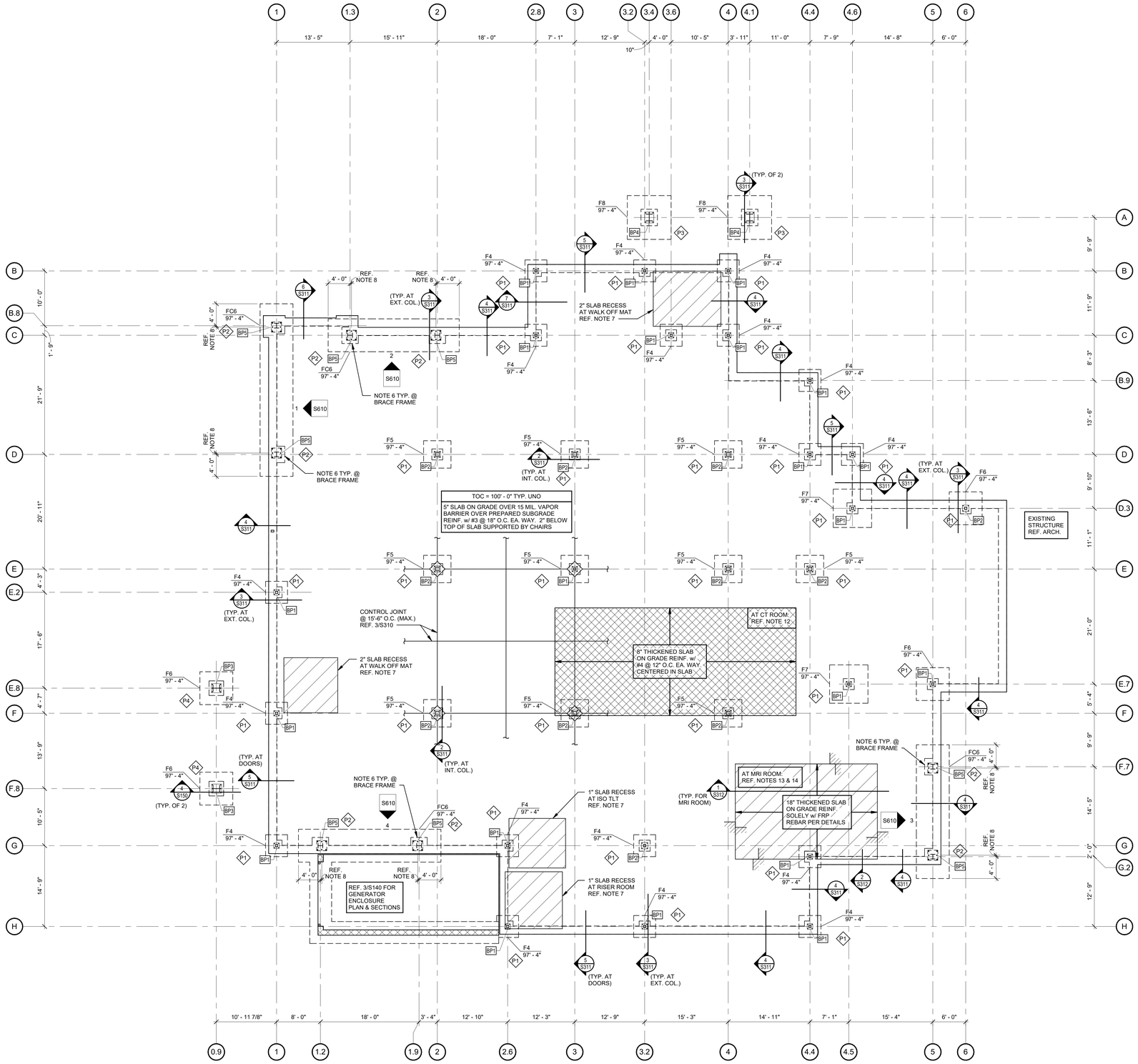

TRUE NORTH PROJECT NORTH

1 FOUNDATION PLAN

1/8" = 1'-0"

FOUNDATION PLAN NOTES:

1. DATUM ELEVATION =100'-0", REFER TO CIVIL FOR ACTUAL ELEVATION.
2. REFER TO 13/S310 FOR FOOTING SCHEDULE.
3. REFER TO 12/S310 FOR PILASTER SCHEDULE.
4. REFER TO 1/S310 FOR BASE PLATE SCHEDULE.
5. PROVIDE SLAB CONTROL/CONSTRUCTION JOINTS PER PLAN. REFER TO 3/S310.
6. LEAVEOUT ENOUGH SLAB SUFFICIENT TO INSTALL BRACE FRAMES. BRACED FRAME COLUMNS EXTEND TO TOP OF FOOTING & PILASTER REINF. SHALL BE LOCATED WITHIN THE COLUMN FOOTING ITSELF.
7. ▨ HATCH ON PLAN DENOTES A SLAB RECESS. VERIFY LOCATIONS AND EXTENTS WITH ARCH. REFER TO 8/S310.
8. AT GUSSET BASE PLATES, BASE PLATE & PILASTER CENTERLINES ARE OFFSET 3" FROM COLUMN CENTERLINES, TOWARDS THE BRACE SIDE.
9. REF. S310 FOR TYPICAL FOUNDATION DETAILS.
10. REF. 1A/S311 & 1B/S311 FOR TYPICAL FOUNDATION PENETRATION DETAILS.
11. REF. S140 FOR SITE STRUCTURE PLANS AND SECTIONS.
12. AT CT & X-RAY ROOMS, GC SHALL PROVIDE A SLAB THAT MEETS THE MANUFACTURERS' FLOOR FLATNESS AND FLOOR FINISH REQUIREMENTS. REFER TO THE RESPECTIVE PRE-INSTALLATION MANUALS FOR FLOOR LEVELNESS CRITERIA.
13. AT MRI ROOM PROVIDE 2 3/4" STEP AT BOUNDARY PER 8/S310, REF. ARCH. FOR EXTENTS. VERIFY FLOORING ASSEMBLY w/ ARCH. & MRI MANUFACTURER. REFER TO THE PRE-INSTALLATION MANUAL FOR FLOOR LEVELNESS CRITERIA.
14. STRUCTURAL DRAWINGS SHALL BE SUBMITTED TO THE MRI MANUFACTURER FOR REVIEW OF THE PROPOSED SLAB AND REINFORCING.

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ARCH NAME ARCH ##

ORIG SUBMISSION: 04/09/09

CURRENT:

SHEET TITLE AND NUMBER:

S210

FOUNDATION PLAN

HART GAUGLER + ASSOCIATES
STRUCTURAL ENGINEERS
8350 N. Central Expwy, Suite 600
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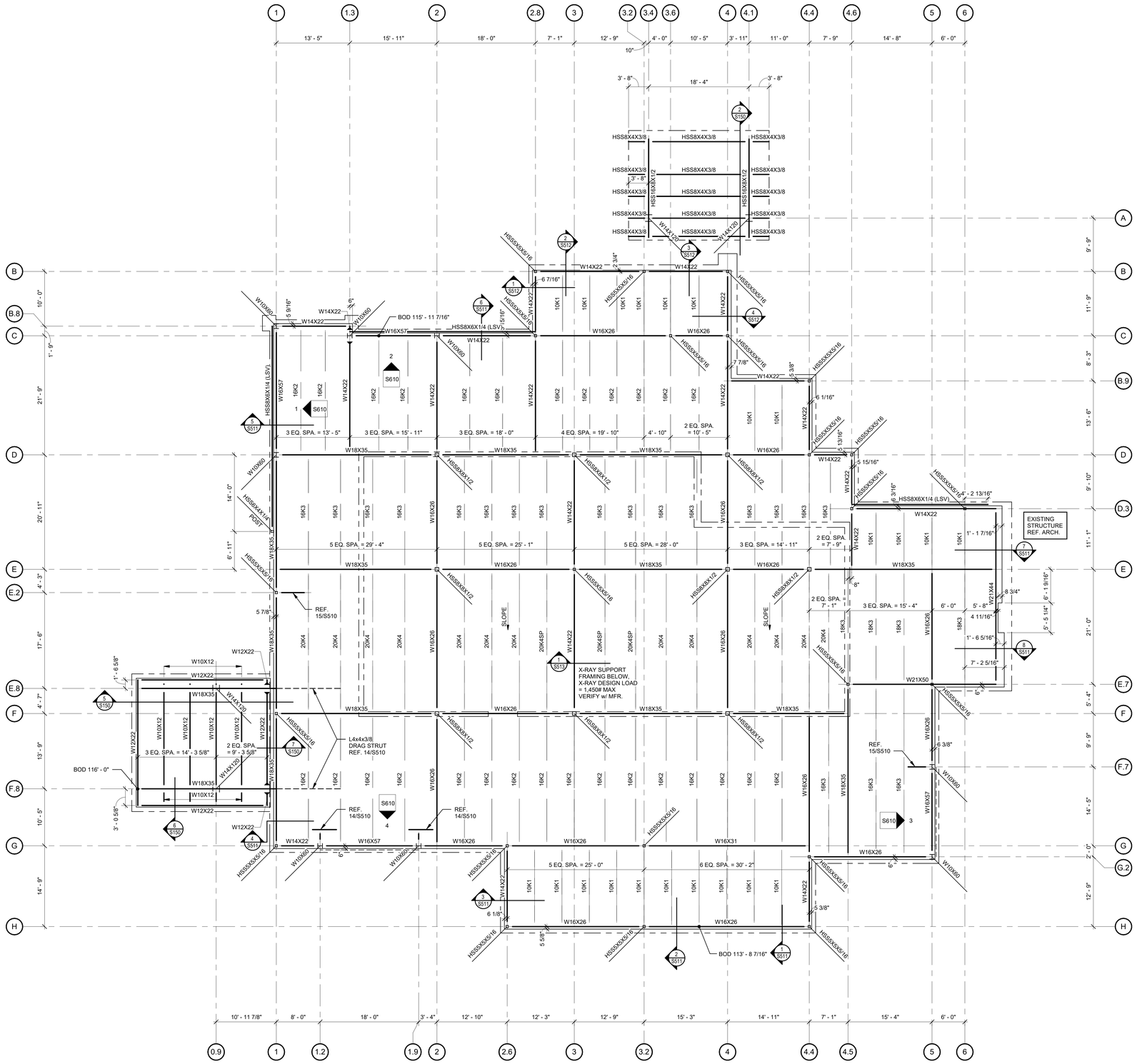
THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG AT FULL SIZE ORIGINAL ARCH SHEET



TRUE NORTH PROJECT NORTH

1 ROOF PLAN

1/8" = 1'-0"

ROOF FRAMING PLAN NOTES:

1. BOD INDICATES BOTTOM OF DECK BEARING ELEVATION.
2. OPENINGS FOR ROOF DRAINS SHALL BE LOCATED PER ARCHITECTURAL ROOF PLAN.
3. TOTAL WEIGHT OF RTU'S, CHILLERS, ETC., INCLUSIVE OF CURB, SHALL NOT EXCEED THE AMOUNT NOTED ON PLAN.
4. COLUMNS SUPPORTING SCREEN WALL SHALL EXTEND TO TOP OF SCREENWALL (EL = 125' - 8") AND BE GALVANIZED AND CAPPED.
5. EDGES OF ALL RTU FAN CURBS SHALL BE SUPPORTED BY ANGLES FRAMED BELOW ROOF DECK, REF. 3/S510 AT LOCATIONS WHERE CURBS ARE NOT SUPPORTED BY STEEL BEAMS OR JOISTS.
6. REF. 2/S510 FOR ROOF FRAMING AT ROOF OPENINGS.
7. JOISTS DESIGNATED AS "SP" INDICATE A SPECIAL LOADING CONDITION IN ADDITION TO UNIFORM ROOF LOADS PER GENERAL NOTES. JOISTS DESIGNATED AS "SP" SHALL BE DESIGNED AS FOLLOWS:
   A. JOISTS SUPPORTING MECHANICAL EQUIPMENT SHALL BE DESIGNED FOR 125% OF LOAD INDICATED ON PLAN.
   B. JOISTS SUPPORTING OTHER CONCENTRATED LOADS SHOWN SUCH AS ROOF SCREENS, VENEERS, HANGING LOADS, ETC. SHALL BE DESIGNED FOR LOAD SHOWN ON PLAN OR IN SECTION.
8. JOIST MANUFACTURER SHALL DESIGN JOIST BRIDGING TO RESIST NET UPLIFT FORCES AS SHOWN ON 1/S130.
9. CONTRACTOR SHALL VERIFY MECHANICAL EQUIPMENT AND ROOF OPENING SIZES AND LOCATIONS WITH THE MECHANICAL CONTRACTOR.
10. (A = ± XX K) DENOTES THE ULTIMATE AXIAL LOAD THAT THE BEAM TO COLUMN CONNECTION SHALL BE DESIGNED FOR IN ADDITION TO THE SHEAR LOADS OUTLINED WITHIN THE GENERAL NOTES.
11. ALL HANGING EQUIPMENT LOCATIONS AND QUANTITIES ARE TO BE VERIFIED WITH ARCHITECTURAL DRAWINGS.
12. REF. S513 FOR EQUIPMENT SUPPORT SECTIONS.
13. REF. S510 FOR TYPICAL ROOF FRAMING SECTIONS.
14. ALL MAIN ROOF BEAMS TO HAVE BOTTOM FLANGES BRACED PER 8/S510 OR 4/S510 AS APPLICABLE, UNO.

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ARCH NAME ARCH ##

ORIG SUBMISSION: 04/09/09

CURRENT:

SHEET TITLE AND NUMBER:

S220

ROOF FRAMING PLAN

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STRUCTURAL ENGINEERS
8350 N. Central Expwy, Suite 600
Dallas, TX 75206
972.239.5311
www.hartgaugler.com

DRAWN: CRS | DESIGN: MP | HGA JOB # 224286

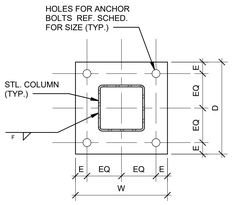
THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG AT ALL SHEETS ONE INCH LONG AT ALL SHEETS

BASE PLATE SCHEDULE

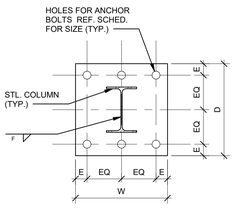
BASE PLATE MARK	BASE PLATE T x D x W	BASE PLATE TYPE	BASE PLATE GRADE	ANCHOR BOLTS NO., DIA., EMBEDMENT	E = (IN)	WELD SIZE	NOTES
BP1	3/4" x 1' - 0" x 1' - 0"	A	36 KSI	4- 3/4" x 1' - 0"	1 1/2"	5/16"	1, 2, 3 TYP.
BP2	3/4" x 1' - 2" x 1' - 2"	A	36 KSI	4- 3/4" x 1' - 0"	1 1/2"	5/16"	-
BP3	1 1/2" x 1' - 10" x 1' - 8"	B	50 KSI	6- 1 1/4" x 1' - 2"	2"	1/2"	-
BP4	1 1/2" x 2' - 0" x 1' - 8"	B	50 KSI	6- 1 1/4" x 1' - 2"	2"	1/2"	-
BP5	1 1/2" x 1' - 10" x 1' - 10"	C	50 KSI	6- 1 1/4" x 1' - 4"	2"	3/8"	1, 2, 3, 4

NOTES:

1. REF. ADJACENT FOR TYPICAL BASE PLATES DETAILS.
2. F-MIN DENOTES THE FILLET WELD SIZE OF THE COLUMN TO PLATE WELD PER BASE PLATE SCHEDULE.
3. HGA TAKES NO EXCEPTION TO THE USE OF GRADE 50 STEEL IN LIEU OF GRADE 36 STEEL FOR BASE PLATES WHERE GRADE 36 STEEL IS SCHEDULED.
4. REFER TO 8/S610 FOR ADDITIONAL GUSSET BASE PLATE INFORMATION AT BRACED FRAME COLUMNS.



TYPE "A"



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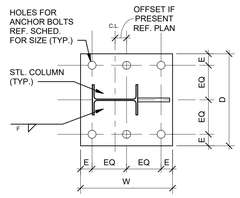
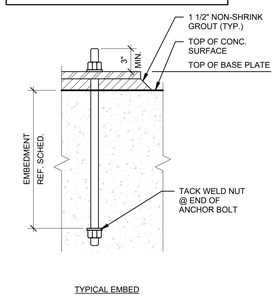
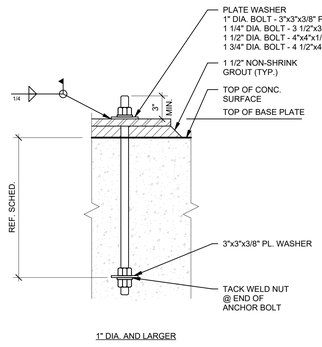


TYPE "C"

NOTE: IF HOLES IN BASEPLATE ARE MORE THAN 5/16" LARGER THAN ANCHOR BOLT, PROVIDE PLATE WASHERS BETWEEN NUT AND PLATE PER TABLE 14-2 IN AISC STANDARD.



TYPICAL EMBED



1" DIA. AND LARGER

1 BASE PLATE SCHEDULE

3/4" = 1'-0"

BAR SPLICE SCHEDULE

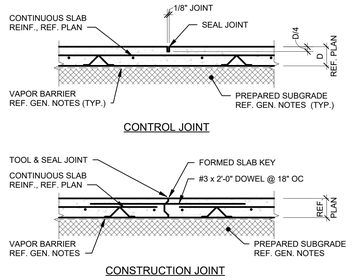
f'c	SPLICE CLASS	BAR SIZE								
		#3	#4	#5	#6	#7	#8	#9	#10	#11
3000	CLASS A 1.0 Ld	17	22	28	33	48	55	62	70	78
	CLASS B 1.3 Ld	23	29	37	43	63	72	81	91	102
4000	CLASS A 1.0 Ld	15	19	24	29	42	48	54	61	67
	CLASS B 1.3 Ld	20	25	32	38	55	63	71	80	88

NOTES:

1. USE THE ABOVE DEVELOPMENT LENGTH AND LAP SPLICE TABLE FOR BEAMS, JOISTS COLUMNS, WALLS, SLABS, ETC. WHEN THE CLEAR SPACING OF BARS IS GREATER THAN 2 BAR DIAMETERS AND THE CLEAR COVER IS NOT LESS THAN 1 BAR DIAMETER.
2. WHEN THE CLEAR SPACING OF BARS IS LESS THAN OR EQUAL TO 2 BAR DIAMETERS, OR WHEN THE CLEAR COVER IS LESS THAN 1 BAR DIAMETER, MULTIPLY DEVELOPMENT AND SPLICE LENGTHS LISTED IN THE TABLE BY 1.50.
3. TENSION DEVELOPMENT LENGTH = Ld. LENGTHS LISTED IN THE TABLE ARE IN INCHES.
4. PROVIDE LAP SPLICE LENGTH BASED ON THE LARGER BAR BEING OVERLAPPED WHEN BARS OF DIFFERENT SIZES ARE SPLICED.
5. FOR TOP BARS, MULTIPLY THE DEVELOPMENT AND SPLICE LENGTHS BY 1.3. TOP BARS ARE DEFINED AS HORIZONTAL REINFORCEMENT PLACED SO THAT MORE THAN 12 INCHES OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE BAR.

2 BAR SPLICE SCHEDULE

1 : 1

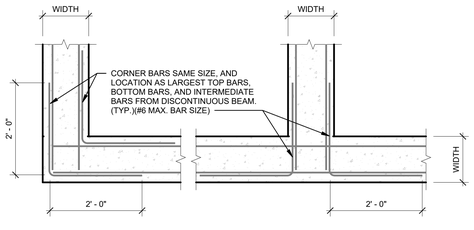


CONTROL JOINT

CONSTRUCTION JOINT

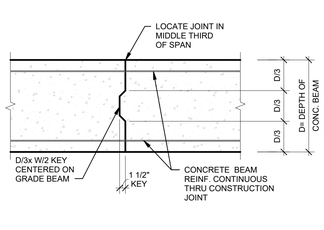
3 TYPICAL CONTROL/ CONSTRUCTION JOINT SECTION

3/4" = 1'-0"



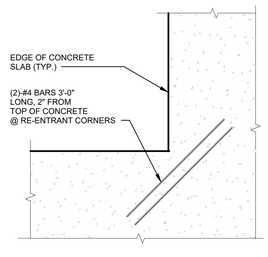
4 TYPICAL CORNER BARS AT BEAMS/WALLS/FOOTING DETAIL

3/4" = 1'-0"



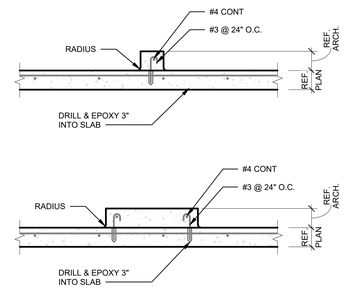
5 TYPICAL BEAM CONSTRUCTION JOINT DETAIL

3/4" = 1'-0"



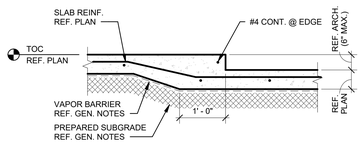
6 TYPICAL RE-ENTRANT CORNER REINFORCING DETAIL

3/4" = 1'-0"



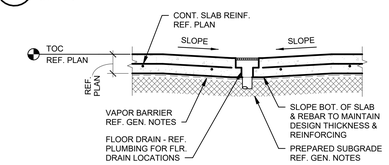
7 TYPICAL SECTION AT CURBS

3/4" = 1'-0"



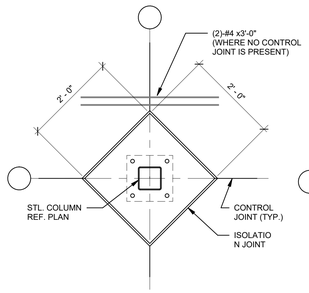
8 SLAB STEP SECTION

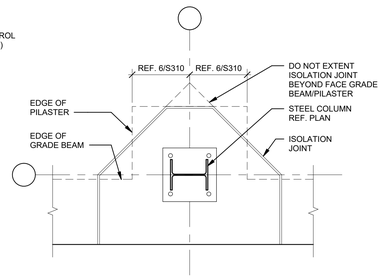
3/4" = 1'-0"



9 TYPICAL FLOOR DRAIN SECTION

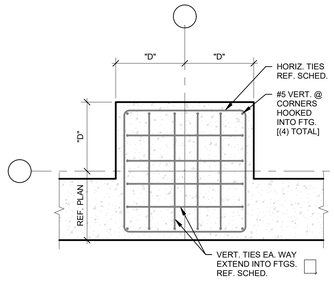
3/4" = 1'-0"

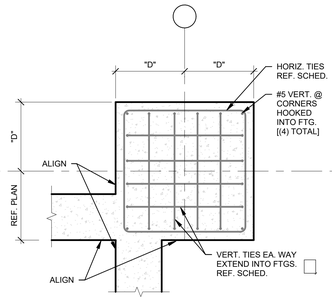


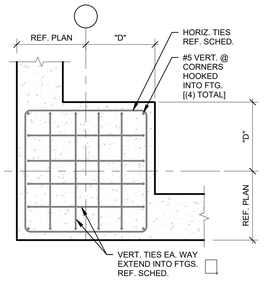


10 TYPICAL COLUMN LEAVEOUT SECTION

3/4" = 1'-0"







11 TYPICAL PILASTER DETAIL

3/4" = 1'-0"

FOOTING SCHEDULE

FOOTING MARK	SIZE BxWxT	BOTT. REINF. EA. WAY (U.N.O.)	TOP REINF. EA. WAY (U.N.O.)	NOTES
F4	4'-0"x4'-0"x1'-6"	(5)-#6	-	1 TYP.
F5	5'-0"x5'-0"x1'-6"	(6)-#6	-	-
F6	6'-0"x6'-0"x1'-6"	(7)-#6	-	-
F7	7'-0"x7'-0"x1'-6"	(8)-#6	(8)-#6	-
F8	8'-0"x8'-0"x1'-6"	(9)-#6	(9)-#6	-
FC6	8'-0"x REF. PLAN x 2'-6"	(11)-#8 CONT. (LONG DIR.) #6 @ 8" OC (SHORT DIR.)	(11)-#8 CONT. (LONG DIR.) #6 @ 8" OC (SHORT DIR.)	1, 2

NOTES:

1. PROVIDE STD. ACI HOOKS AT EACH END.
2. PROVIDE #5 AT 12" O.C. (LONG DIR.) AT MID HEIGHT OF FOOTING.

12 FOOTING SCHEDULE

3/4" = 1'-0"

PILASTER SCHEDULE

PILASTER MARK	"D"	REINFORCEMENT		NOTES
		VERTICAL TIES (EA. WAY)	HORIZONTAL TIES	
P1	1' - 0"	(4)-#5	(3)-#3 @ 2" OC, R @ 12" OC	1
P2	1' - 6"	(6)-#5	(2)-#4 @ 2" OC, R @ 6" OC	1, 2
P3	REF. PLAN	REF. 1A/S150	REF. 1/S150	-
P4	REF. PLAN	REF. 4A/S150	REF. 4/S150	-

NOTES:

1. REFER TO 11/S310 FOR TYPICAL PILASTER DETAILS.
2. ADD ADD'L #5 VERTICAL HOOKED INTO FTG. EACH FACE OF PILASTER.

13 PILASTER SCHEDULE

3/4" = 1'-0"

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ARCH NAME ARCH ##

ORIG SUBMISSION: 01/28/2025
CURRENT:

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S310

TYPICAL FOUNDATION DETAILS

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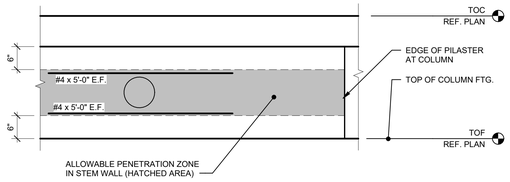
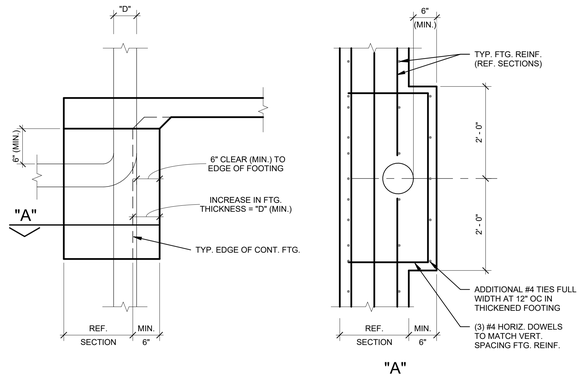
THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG AT ALL SHEETS ORIGINAL ARCH SIZE

NOTES FOR PENETRATION IN STEMWALL AND CONTINUOUS FOOTING:

1. PENETRATIONS LARGER THAN 10" DIAMETER SHALL BE SUBMITTED TO EOR FOR REVIEW.
2. MULTIPLE PENETRATIONS SHALL BE SPACED 3 x DIAMETER, CENTER TO CENTER SPACING, BASED ON THE LARGER PENETRATION.
3. PENETRATIONS OF 2" DIAMETER AND SMALLER DO NOT REQUIRE MODIFICATION AS LONG AS MINIMUM CLEAR DIMENSIONS TO EDGES OF CONCRETE ARE MAINTAINED.
4. NO PENETRATIONS ARE PERMITTED IN PILASTERS AT COLUMNS
5. PENETRATIONS SHALL BE LOCATED TO AVOID CUTTING VERTICAL REINFORCING



ALLOWABLE HORIZONTAL PENETRATION



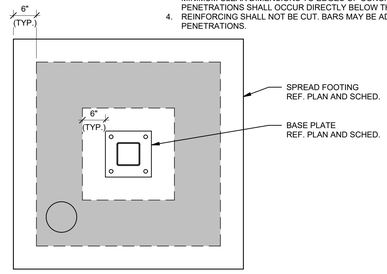
ALLOWABLE VERTICAL PENETRATION

1A PENETRATION THROUGH STEM WALL AND CONTINUOUS FOOTINGS

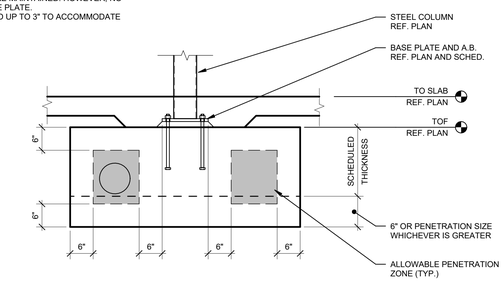
3/4" = 1'-0"

NOTES FOR PENETRATION IN COLUMN SPREAD FOOTING:

1. PENETRATIONS LARGER THAN 10" DIAMETER SHALL BE SUBMITTED TO EOR FOR REVIEW.
2. MULTIPLE PENETRATIONS SHALL BE SPACED 3 x DIAMETER, CENTER TO CENTER SPACING, BASED ON THE LARGER PENETRATION.
3. PENETRATIONS OF 2" DIAMETER AND SMALLER DO NOT REQUIRE MODIFICATION AS LONG AS MINIMUM CLEAR DIMENSIONS TO EDGES OF CONCRETE ARE MAINTAINED. HOWEVER, NO PENETRATIONS SHALL OCCUR DIRECTLY BELOW THE BASE PLATE.
4. REINFORCING SHALL NOT BE CUT. BARS MAY BE ADJUSTED UP TO 3" TO ACCOMMODATE PENETRATIONS.



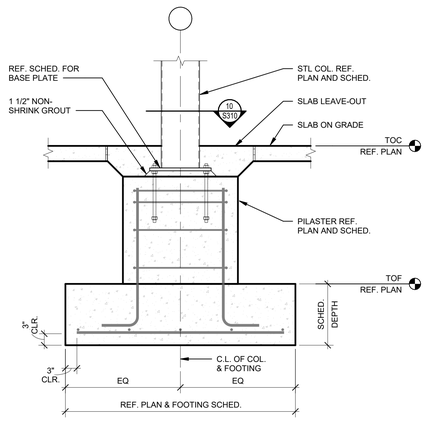
ALLOWABLE VERTICAL PENETRATION



ALLOWABLE HORIZONTAL PENETRATION

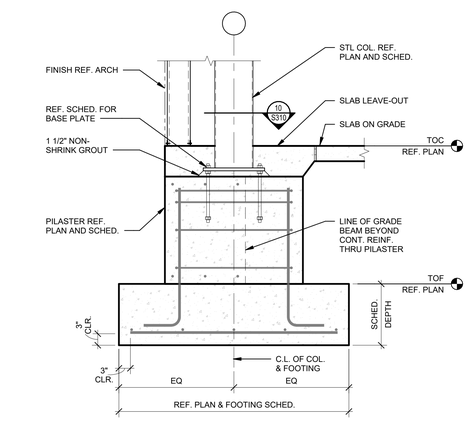
1B PENETRATION THROUGH COLUMN SPREAD FOOTINGS

3/4" = 1'-0"



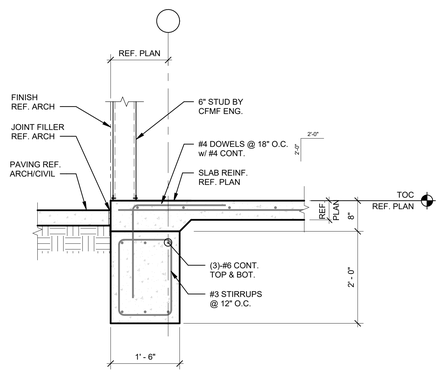
2 SECTION AT INTERIOR COLUMN

3/4" = 1'-0"



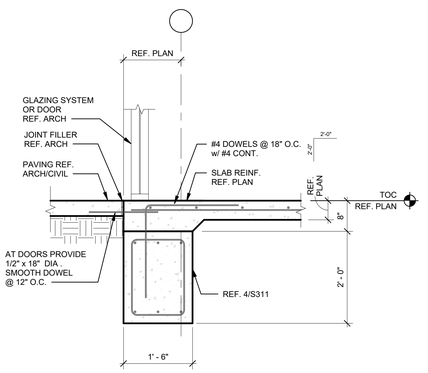
3 SECTION AT EXTERIOR COLUMN

3/4" = 1'-0"



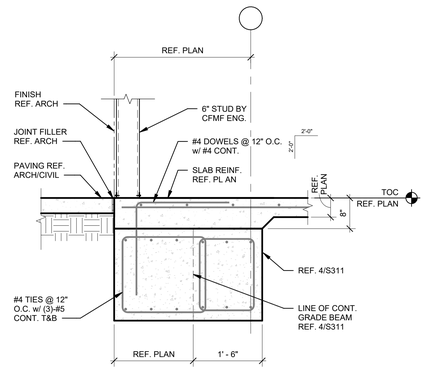
4 SECTION AT TYPICAL EXTERIOR

3/4" = 1'-0"



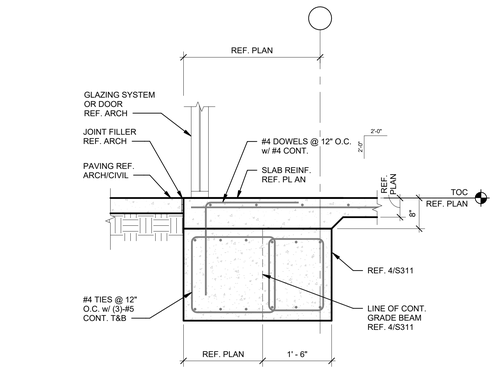
5 SECTION AT TYPICAL GLAZING OR DOOR

3/4" = 1'-0"



6 SECTION AT BUMPED-OUT EXTERIOR

3/4" = 1'-0"



7 SECTION AT BUMPED-OUT GLAZING OR DOOR

3/4" = 1'-0"

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CMC
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with Novant Health

CMC Socastee FSED
6016 HIGHWAY 707
MYRTLE BEACH, SC

PROJECT NUMBER: 3024096.00

Δ	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

ARCH NAME ARCH ##

ORIG SUBMISSION: 01/28/2025

CURRENT:

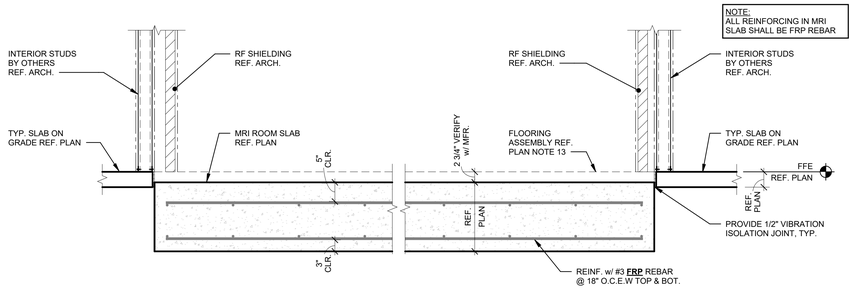
SHEET TITLE AND NUMBER:

S311

FOUNDATION SECTIONS

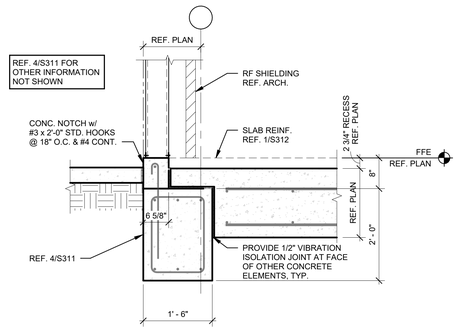
HART GAUGLER + ASSOCIATES
STRUCTURAL ENGINEERS
8350 N. Central Expwy, Suite 600
Dallas, TX 75206
972.239.5111
www.hartgaugler.com

DRAWN CRS | DESIGN MP | HGA JOB # 224286



1 SECTION AT MRI ROOM INTERIOR

3/4" = 1'-0"



2 SECTION AT MRI ROOM EXTERIOR

3/4" = 1'-0"

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S312

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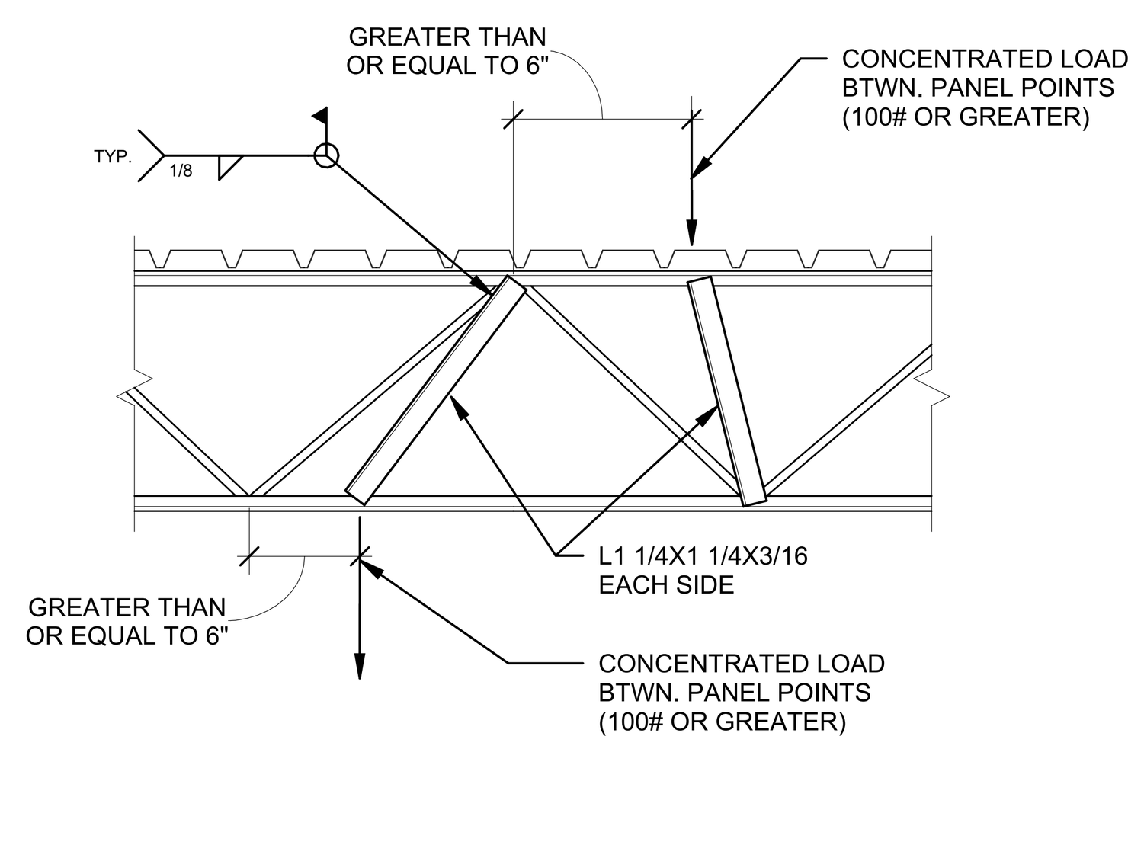
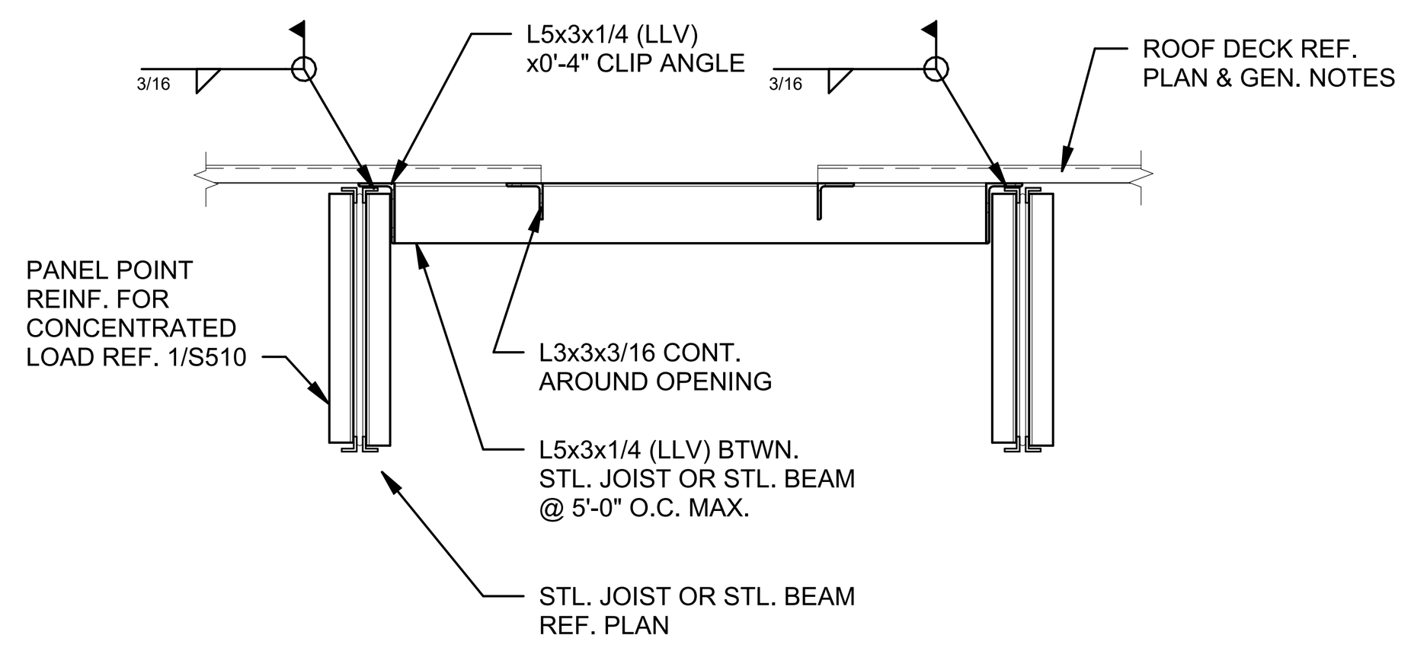
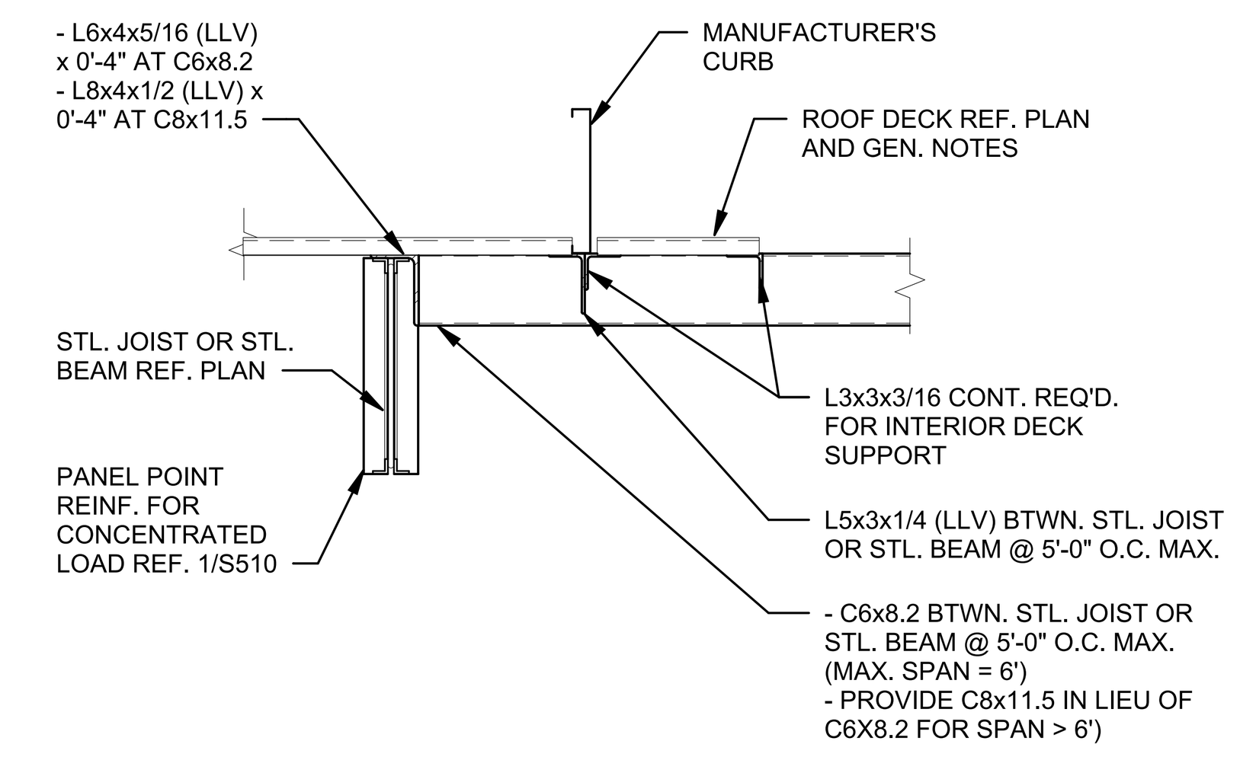


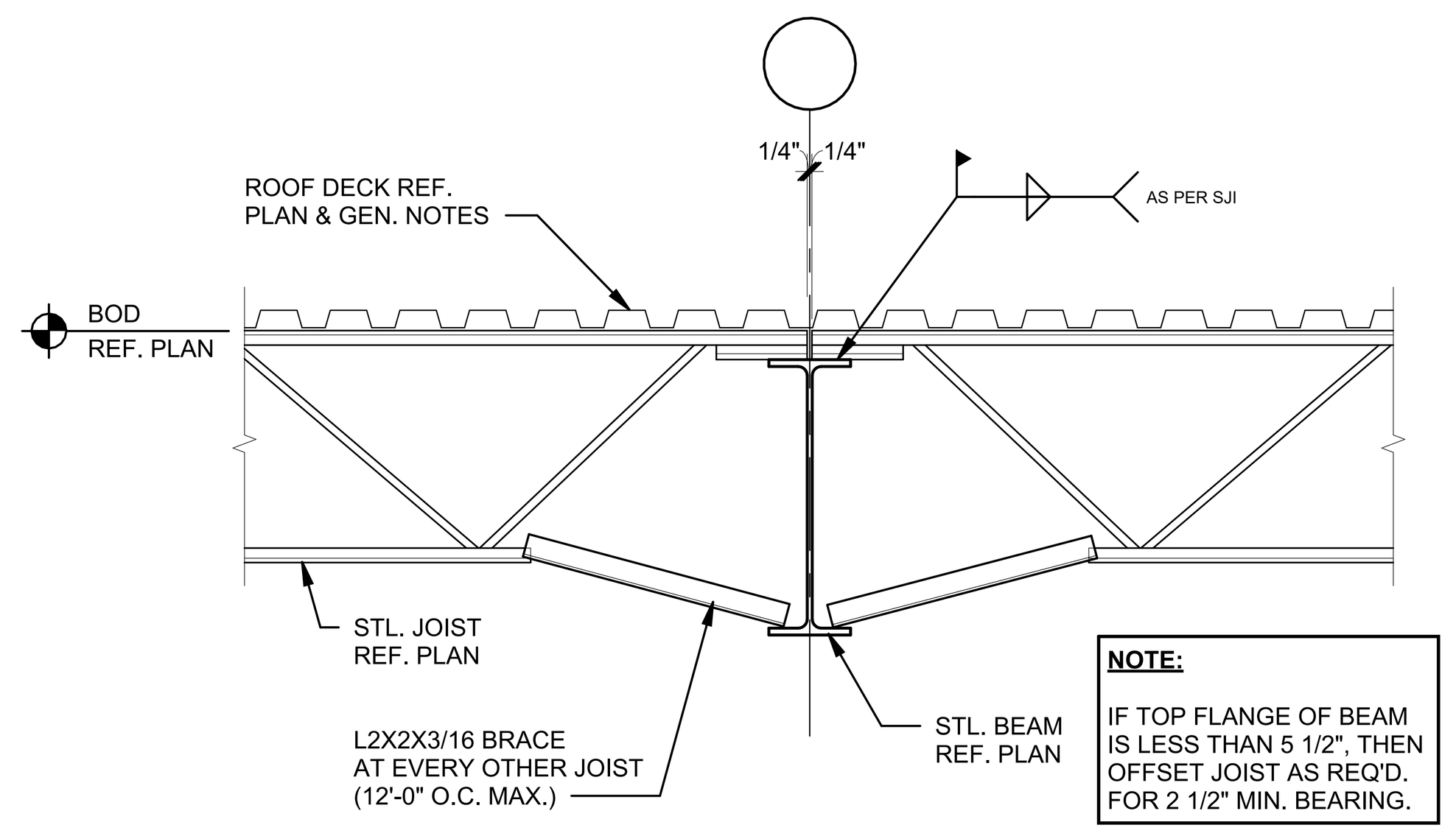
1 PANEL POINT REINFORCING
3/4" = 1'-0"



2 TYPICAL ROOF OPENING FRAME
3/4" = 1'-0"



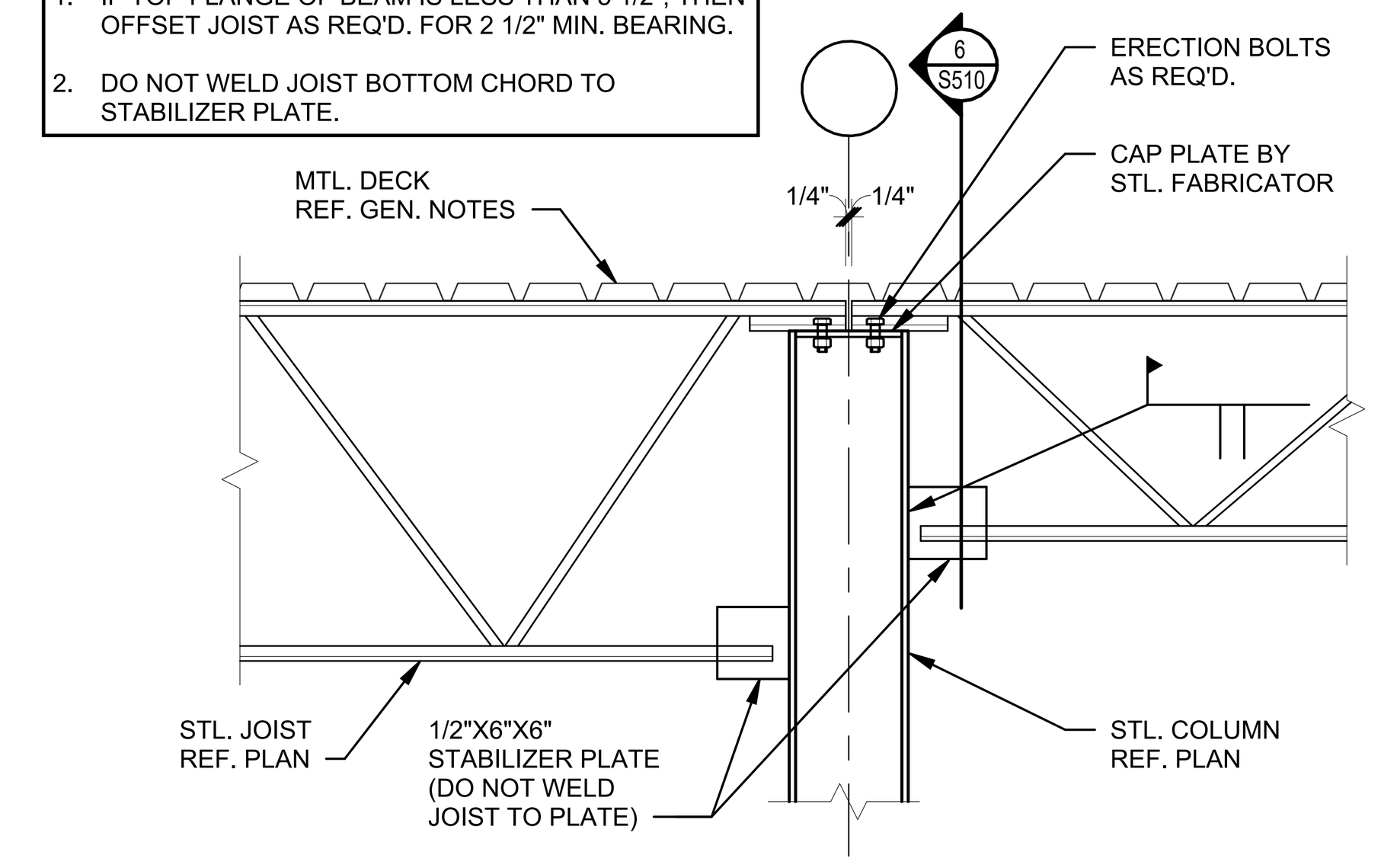
3 TYPICAL ROOFTOP UNIT FRAMING
3/4" = 1'-0"



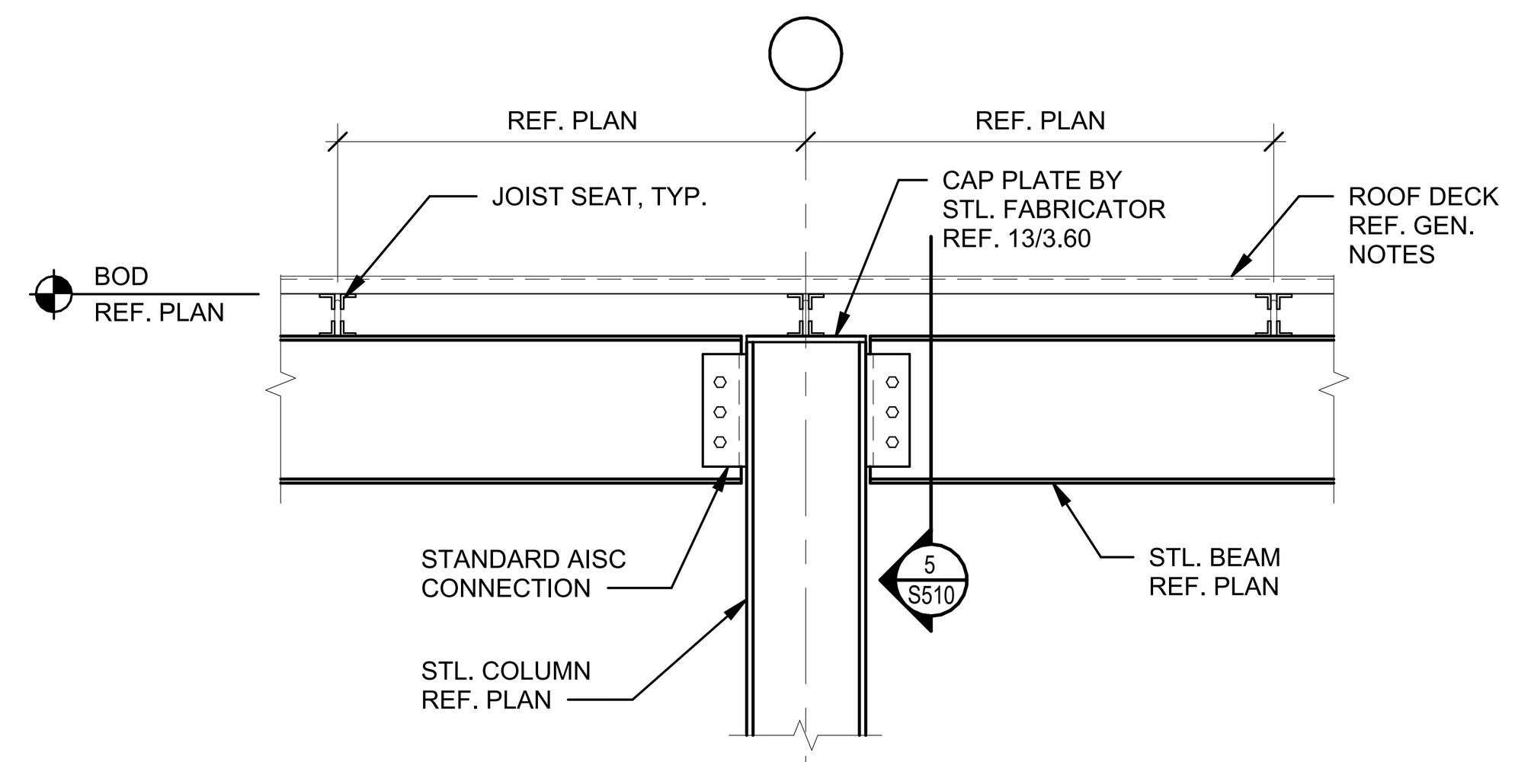
4 TYPICAL JOIST TO BEAM
3/4" = 1'-0"

NOTES:

1. IF TOP FLANGE OF BEAM IS LESS THAN 5 1/2", THEN OFFSET JOIST AS REQ'D. FOR 2 1/2" MIN. BEARING.
2. DO NOT WELD JOIST BOTTOM CHORD TO STABILIZER PLATE.

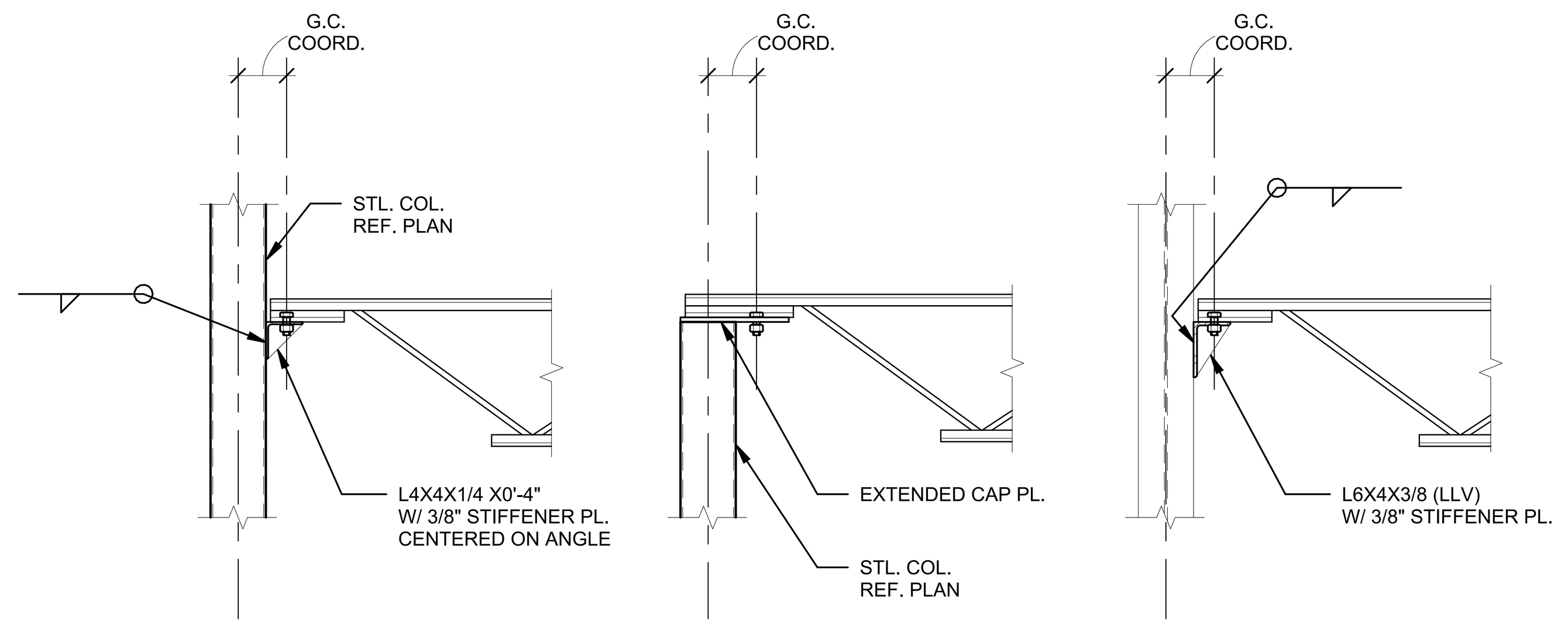


5 TYPICAL JOIST TO COLUMN
3/4" = 1'-0"

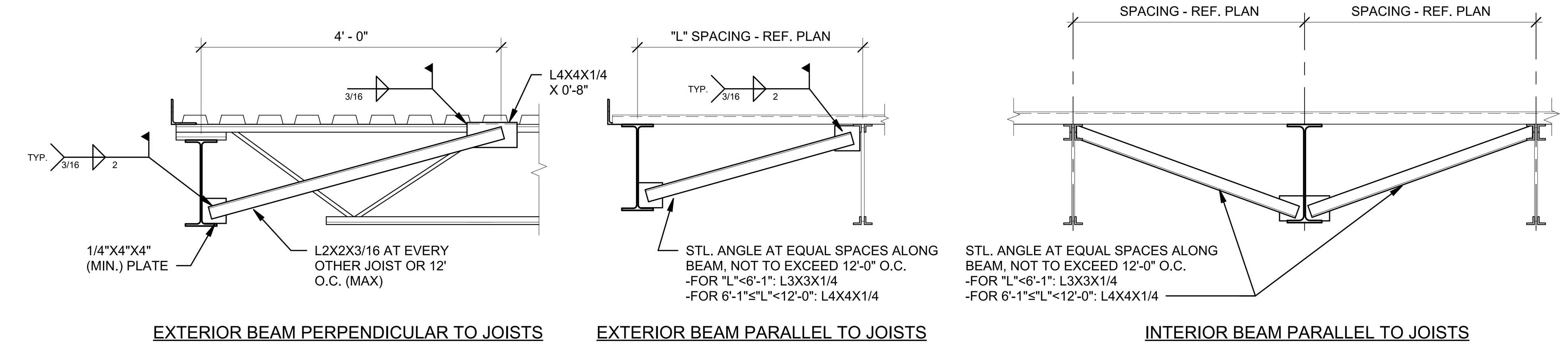


6 TYPICAL JOIST TO BEAM AT COLUMN
3/4" = 1'-0"

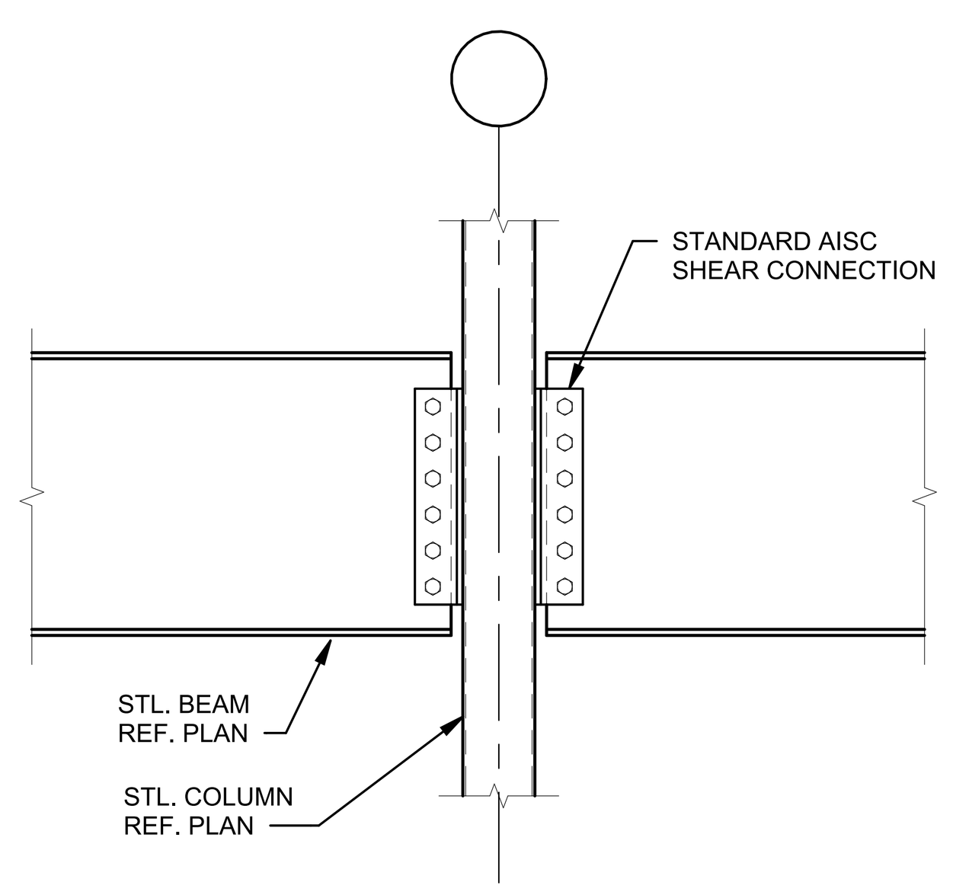
NOTE:
G.C. TO COORDINATE JOIST SEAT AND CONNECTION REQUIREMENTS WITH STEEL DETAILER.



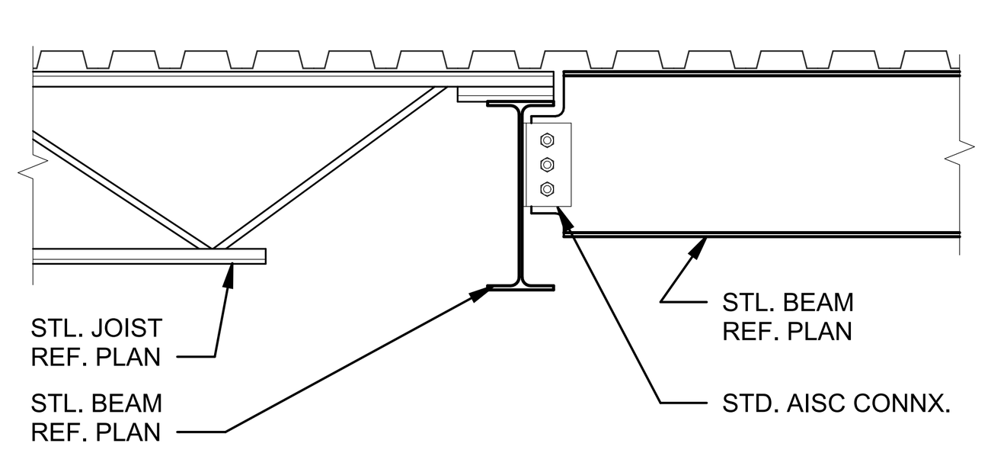
7 TYPICAL JOIST SEAT AT COLUMNS
3/4" = 1'-0"



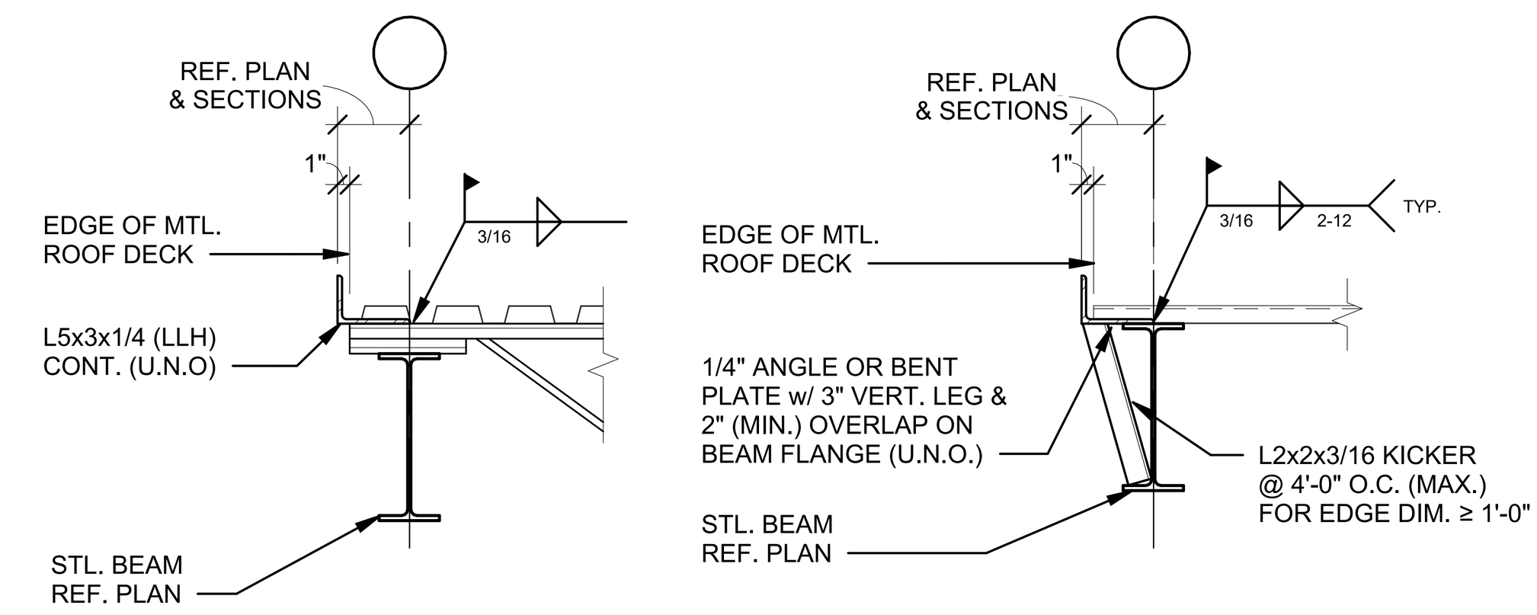
8 TYPICAL ROOF BEAM BOTTOM FLANGE BRACING
3/4" = 1'-0"



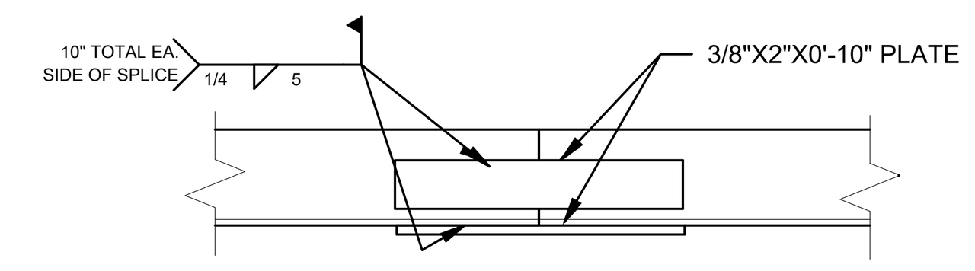
9 TYPICAL BEAM TO COLUMN CONNECTION
3/4" = 1'-0"



10 TYPICAL OPPOSING BEAM AND JOIST BEARING
3/4" = 1'-0"

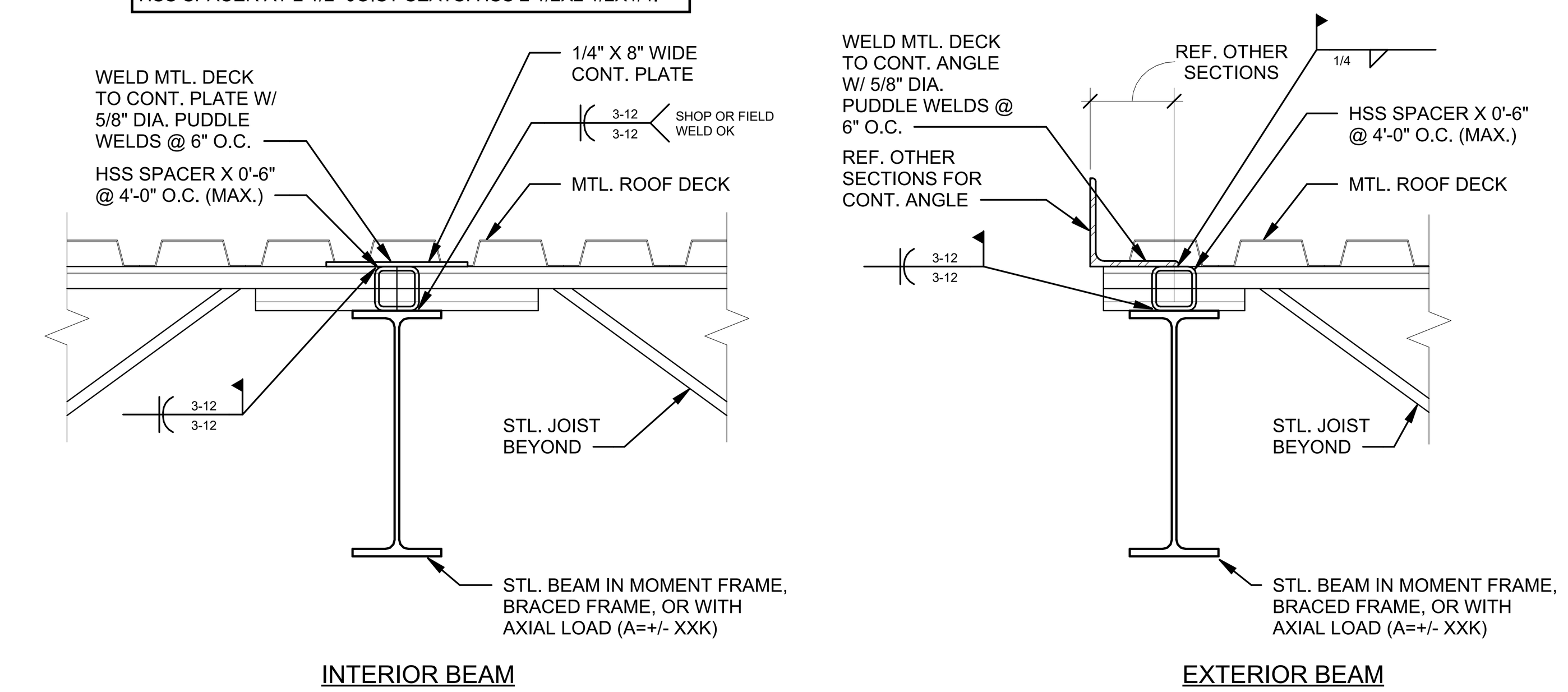


11 TYPICAL ROOF DECK EDGE MEMBER
3/4" = 1'-0"

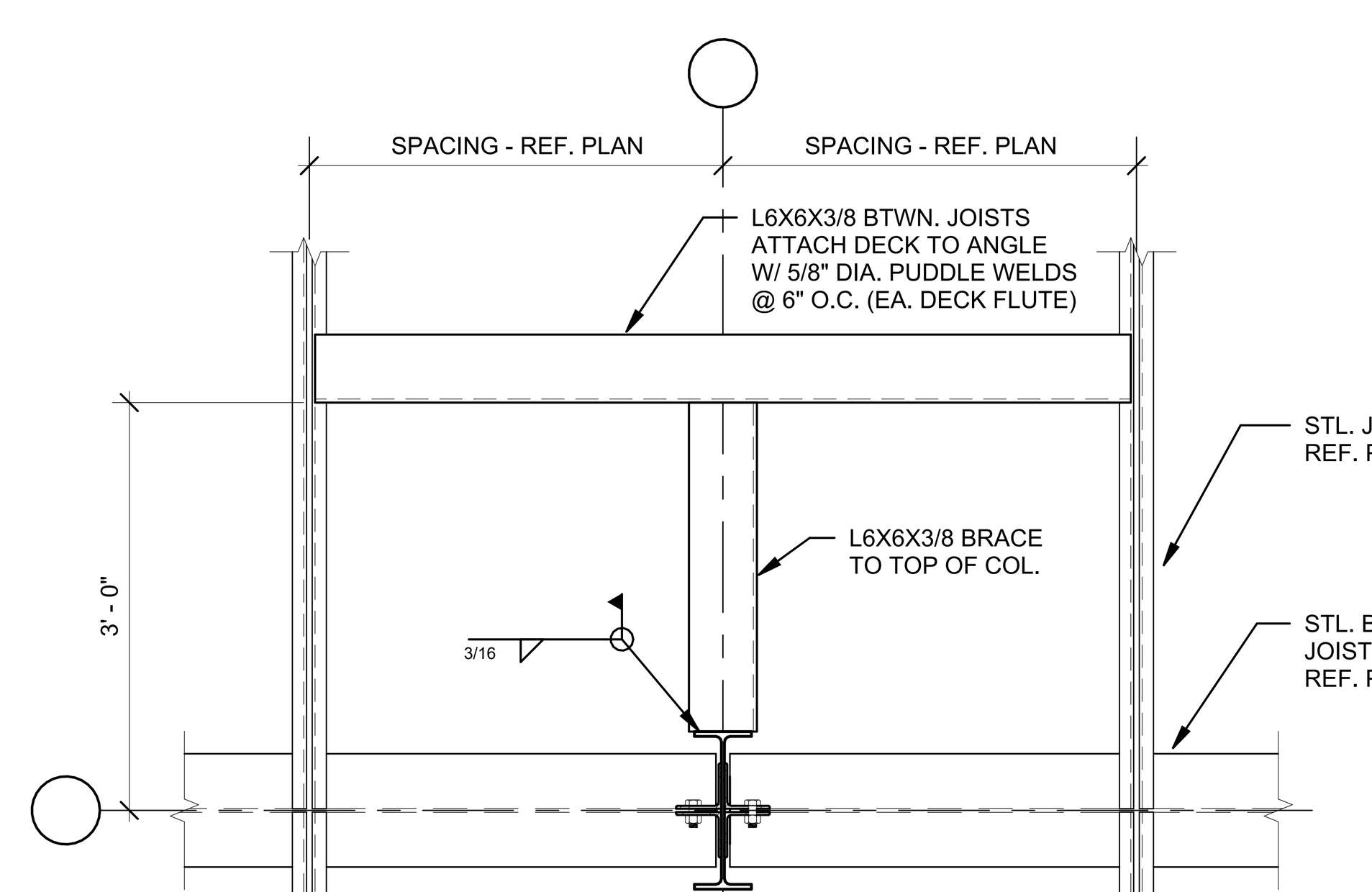


12 TYPICAL SPLICE OF DECK EDGE MEMBER
1 1/2" = 1'-0"

NOTE:
HSS SPACER AT 2 1/2" JOIST SEATS: HSS 2 1/2X2 1/2X1/4.

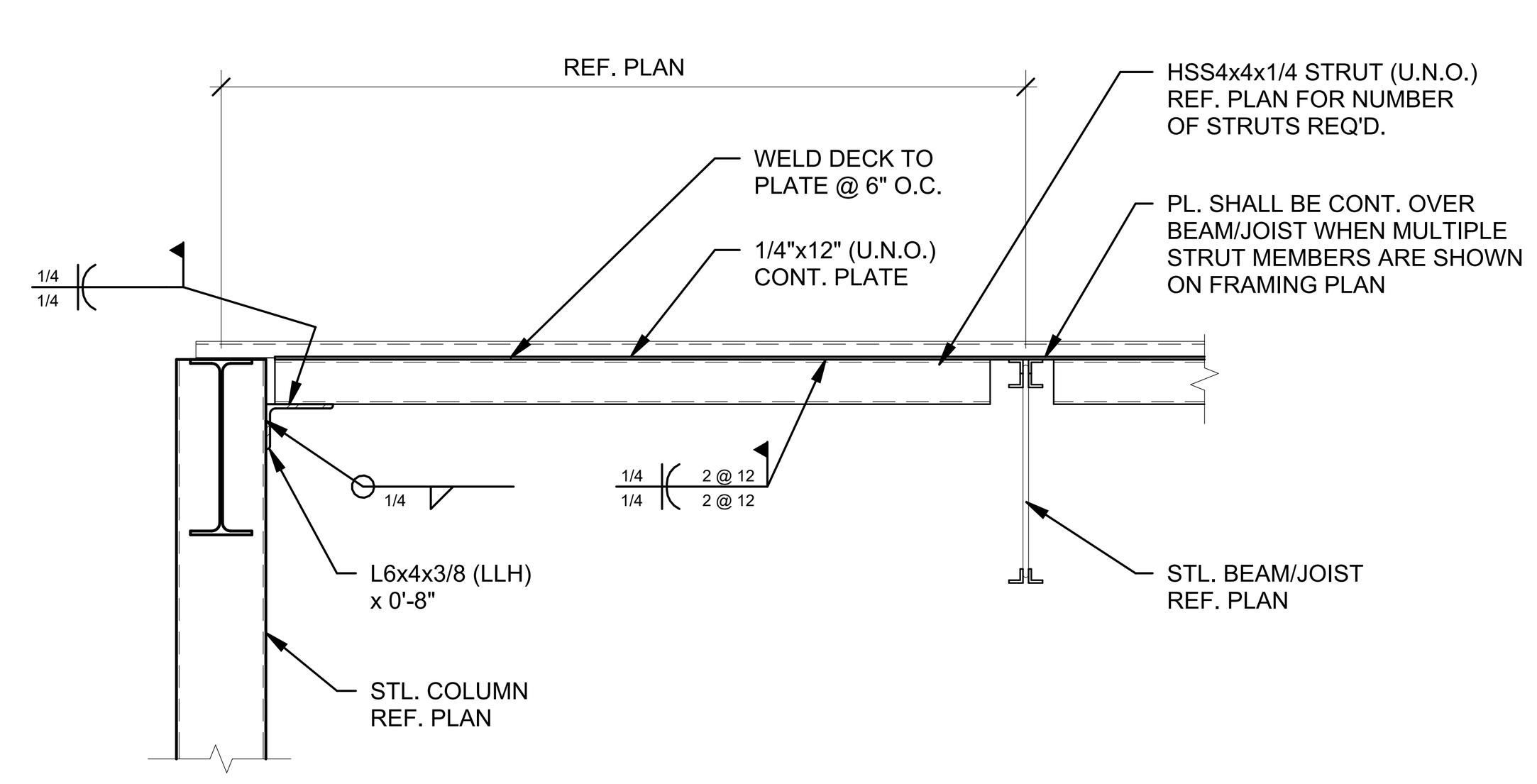


13 TYPICAL ROOF BEAM DECK SHEAR TRANSFER SPACERS
1 1/2" = 1'-0"



NOTE:
IF COLUMN DOES NOT EXTEND TO BOTTOM OF DECK ANGLE BRACE DOWN DIAGONALLY TO TOP OF COLUMN.

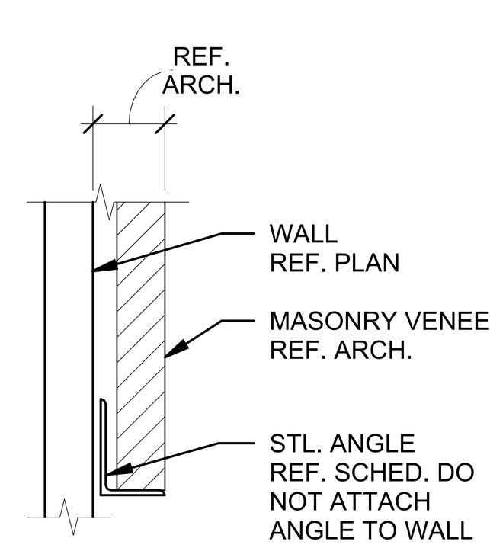
14 COLUMN BRACE PARALLEL TO JOISTS
3/4" = 1'-0"



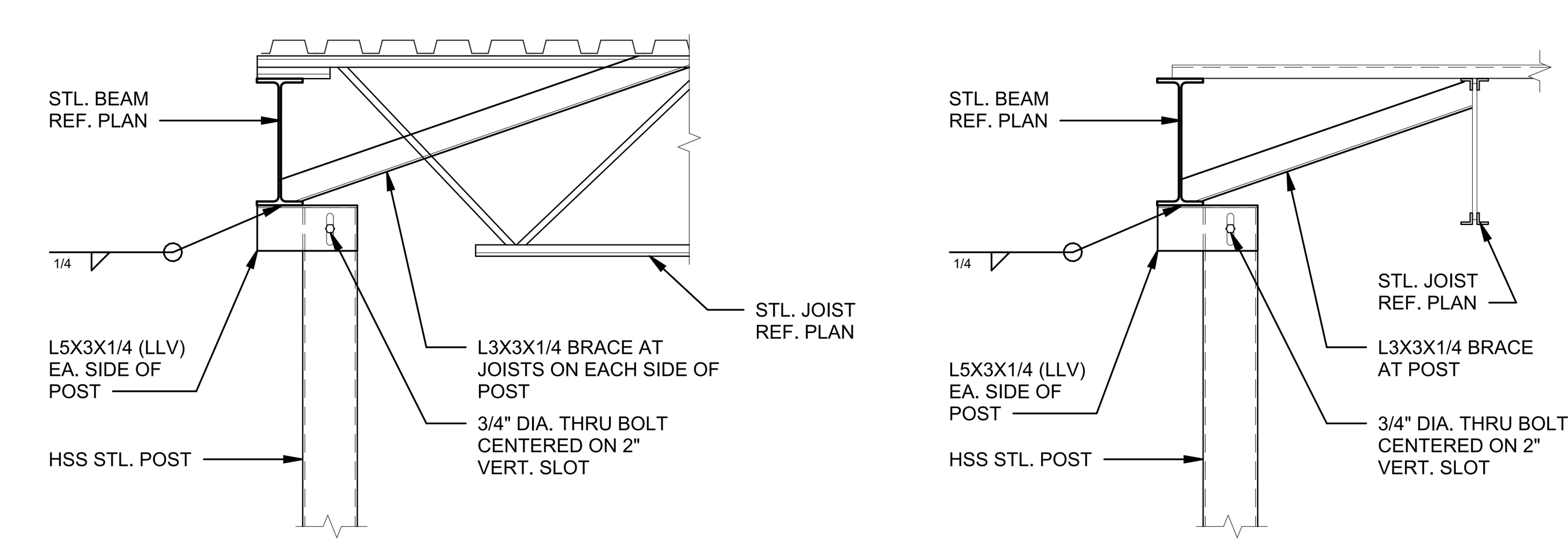
15 COLUMN BRACING STRUT PERPENDICULAR TO JOIST
3/4" = 1'-0"

LOOSE LINTEL SCHEDULE

MASONRY OPENING (MAX.)	ANGLE SIZE	MINIMUM END BEARING
_< 4'-0"	L4x4x1/4	6"
4'-0" TO 6'-0"	L5x5x5/16	8"
6'-0" TO 8'-0"	L6x4x5/16 (LLV)	12"
8'-0" TO 10'-2"	L7x4x3/8 (LLV)	12"



16 LOOSE LINTEL SCHEDULE
1 : 1



17 TYPICAL POST CONNECTION TO UNDERSIDE OF BEAM
3/4" = 1'-0"

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MYRTLE BEACH, SC

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ARCH NAME ARCH ##
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CURRENT:

SHEET TITLE AND NUMBER:

S510

TYPICAL ROOF FRAMING SECTIONS

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STRUCTURAL ENGINEERS
8350 N. Central Expwy, Suite 600
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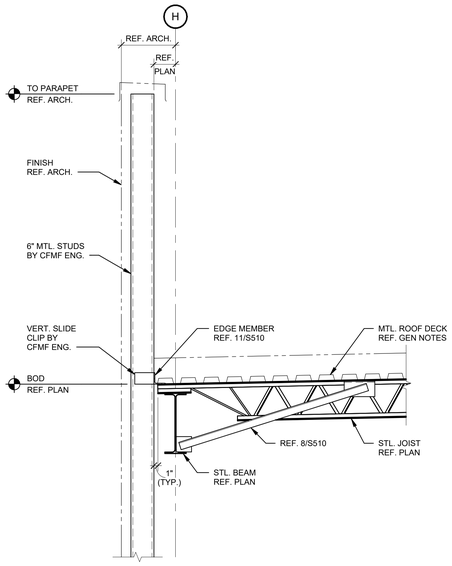
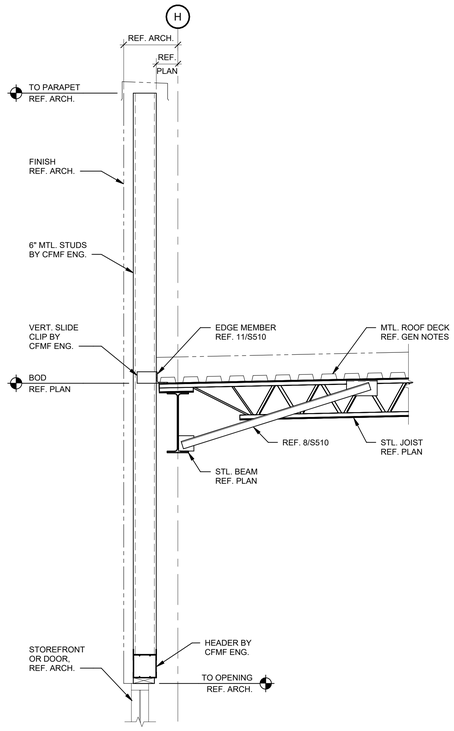
www.hartgaugler.com

DRAWN CRS DESIGN MP HGA JOB # 224286

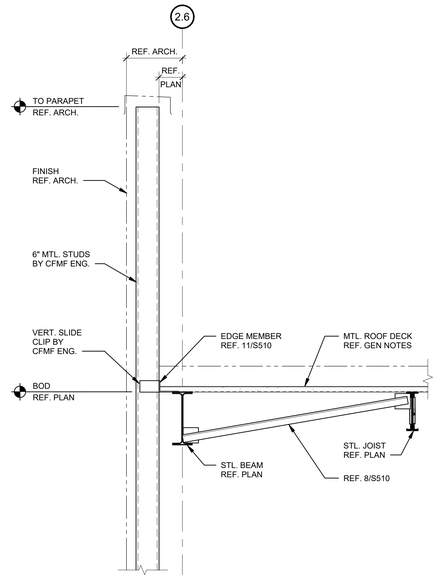
THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG AT FULL SIZE ORIGINAL ARCH'L SHEET



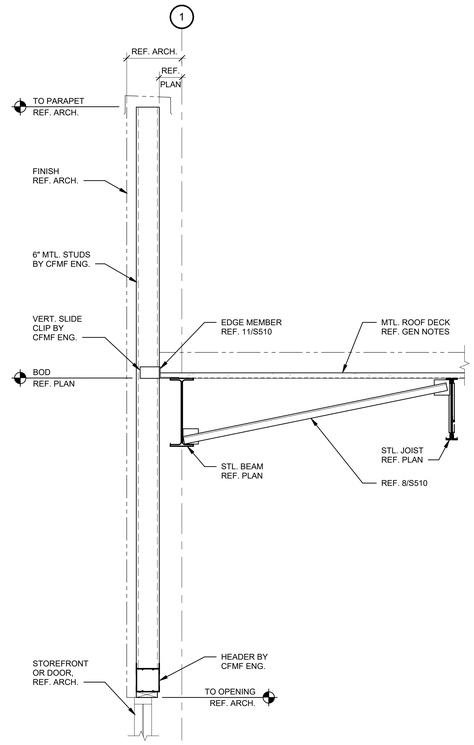
1 SECTION
3/4" = 1'-0"



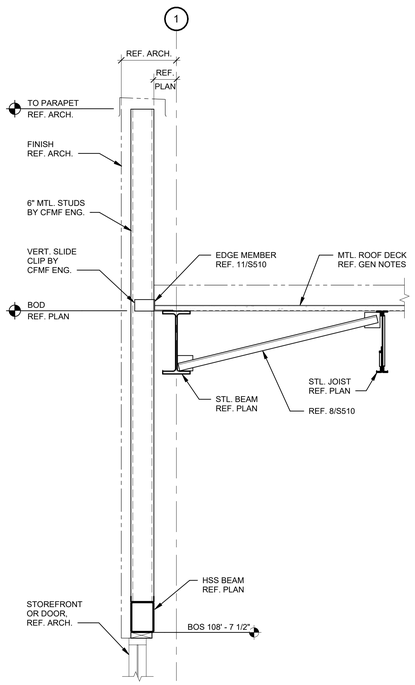
2 SECTION
3/4" = 1'-0"



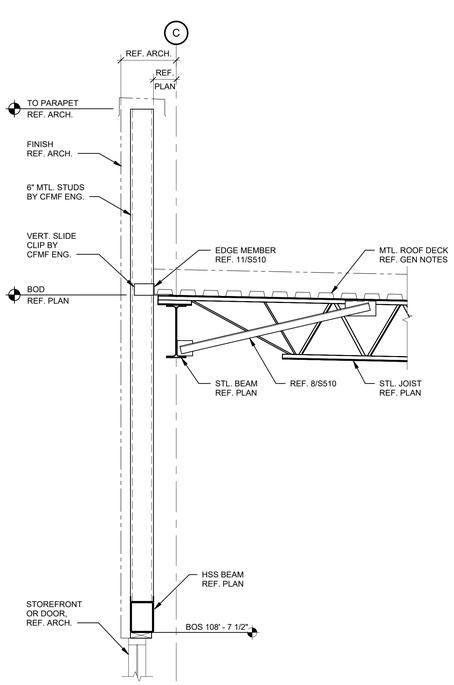
3 SECTION
3/4" = 1'-0"



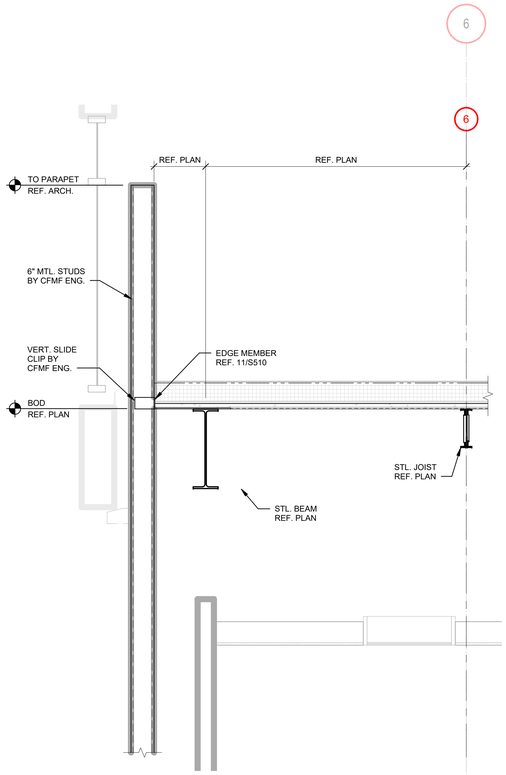
4 SECTION
3/4" = 1'-0"



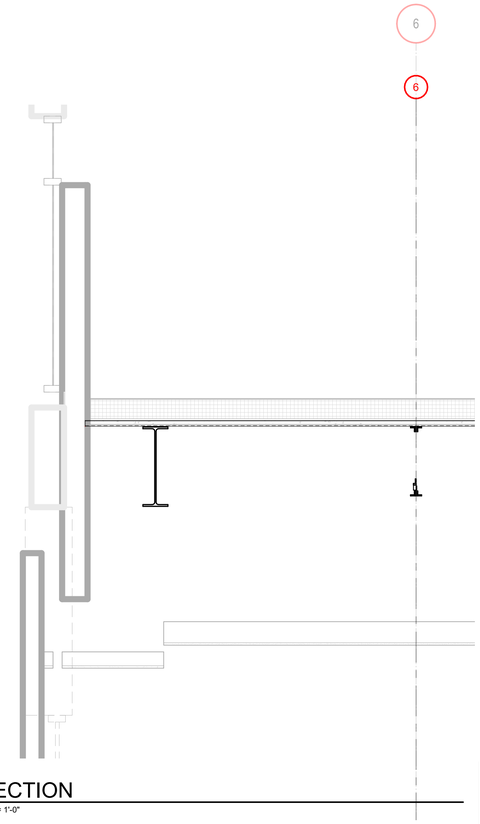
5 SECTION
3/4" = 1'-0"



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



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



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

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CMC Socastee FSED
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MYRTLE BEACH, SC

PROJECT NUMBER: 3024096.00

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ARCH NAME ARCH ##

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CURRENT:

SHEET TITLE AND NUMBER:

S511

FSED ROOF FRAMING SECTIONS

HART GAUGLER + ASSOCIATES
STRUCTURAL ENGINEERS
8350 N. Central Expwy, Suite 600
Dallas, TX 75206
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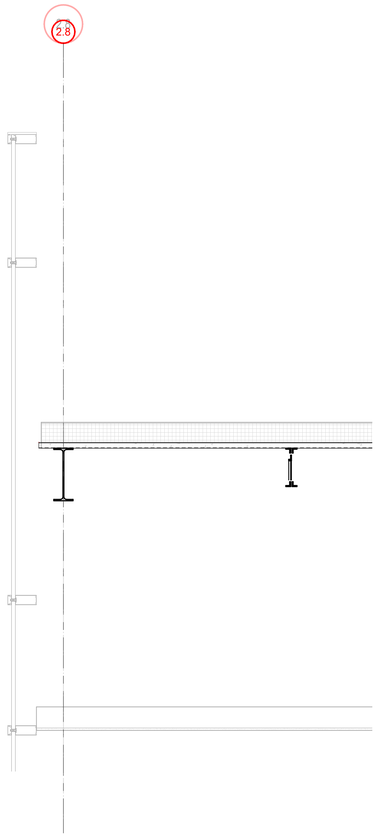
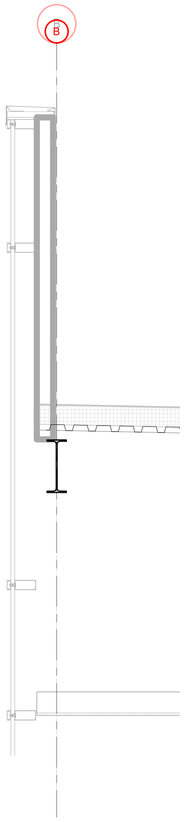
www.hartgaugler.com

DRAWN: CRS | DESIGN: MP | HGA JOB #: 224286

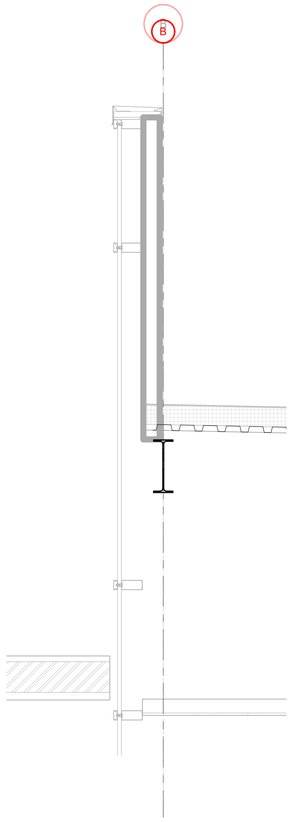
THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG AT FULL SIZED ORIGINAL ARCH'L SHEET



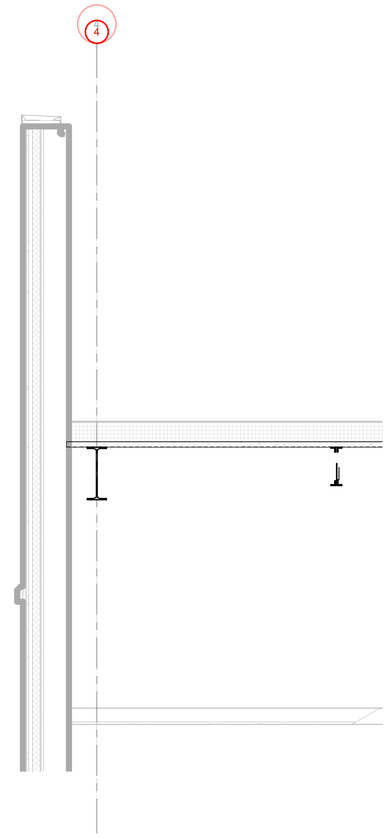
1 SECTION
3/4" = 1'-0"



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



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



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

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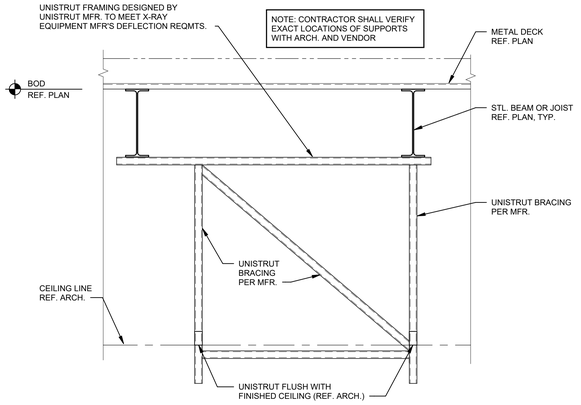
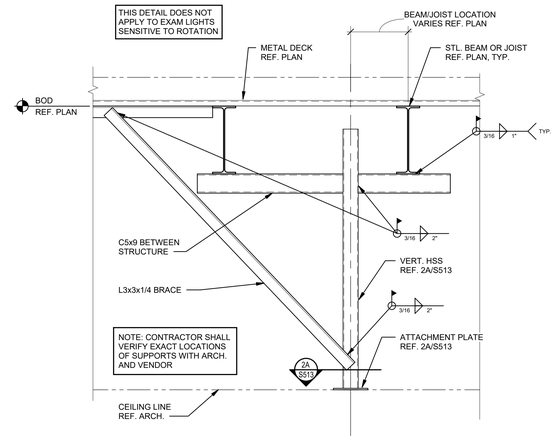
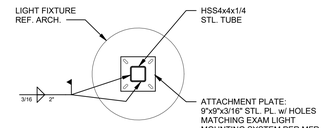
THE LINE SHOWN ABOVE IS EXACTLY ONE INCH LONG AT FULL SIZE ON ORIGINAL ARCHITECTURAL SHEETS



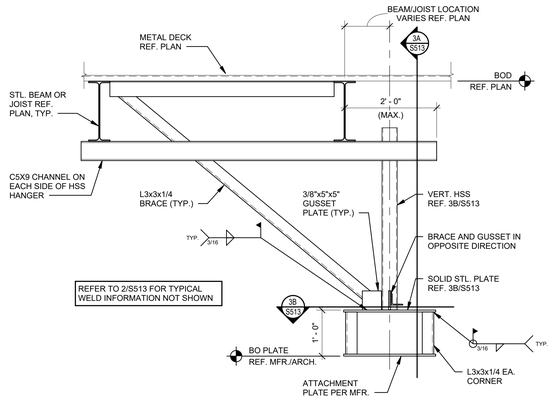
1 OVERHEAD X-RAY SUPPORT SECTION
3/4" = 1'-0"



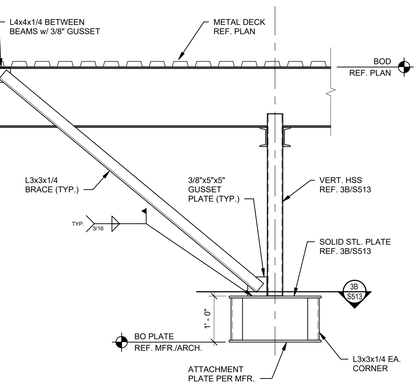
2 TYPICAL EXAM LIGHT SUPPORT SECTION
3/4" = 1'-0"



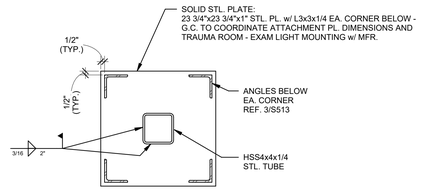
2A TYPICAL EXAM LIGHT SUPPORT
3/4" = 1'-0"



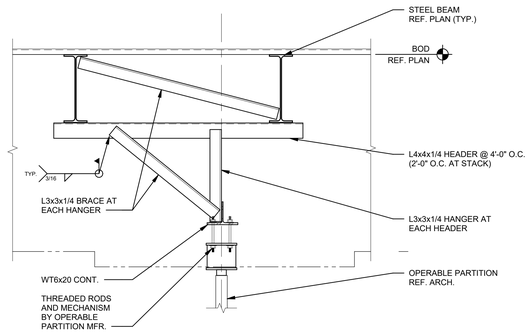
3 TRAUMA ROOM EXAM LIGHT SUPPORT SECTION
3/4" = 1'-0"



3A TRAUMA ROOM EXAM LIGHT SUPPORT SECTION
3/4" = 1'-0"



3B TRAUMA ROOM EXAM LIGHT SUPPORT SECTION
1 1/2" = 1'-0"



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

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S513

EQUIPMENT SUPPORT SECTIONS

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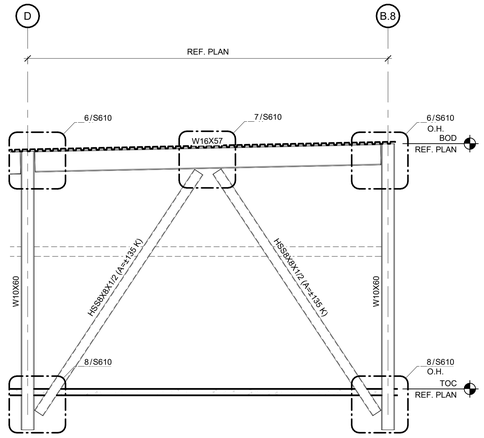
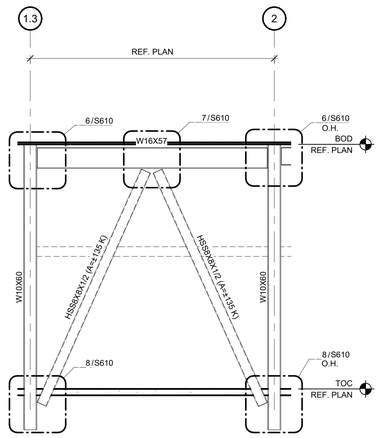


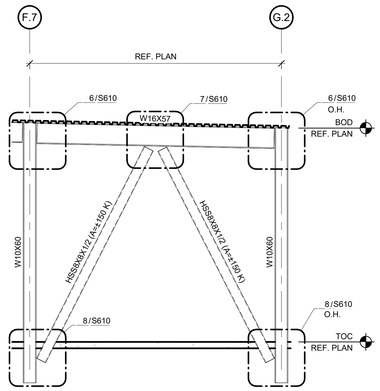
1 BRACE FRAME ELEVATION ALONG GRIDLINE 1

1/4" = 1'-0"



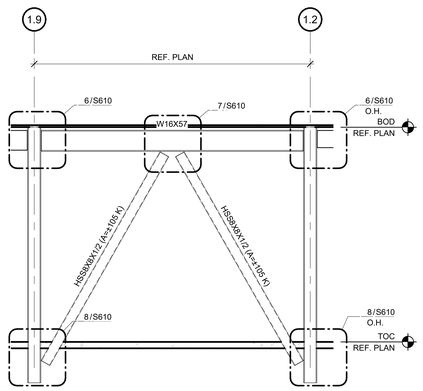
2 BRACE FRAME ELEVATION ALONG GRIDLINE C

1/4" = 1'-0"



3 BRACE FRAME ELEVATION ALONG GRIDLINE 5

1/4" = 1'-0"



4 BRACE FRAME ELEVATION ALONG GRIDLINE G

1/4" = 1'-0"

TYPICAL NOTE:

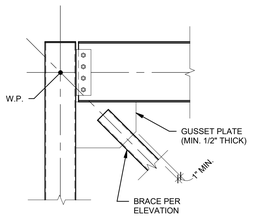
ALL BRACED FRAMES ARE STEEL ORDINARY CONCENTRICALLY BRACED FRAMES.

BRACED FRAME CONNECTION DESIGN NOTES:

1. THE CONTRACTOR SHALL DESIGN THE CONNECTIONS FOR THE BRACED FRAMES UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER.
2. BRACE TO GUSSET PLATE CONNECTIONS SHALL BE DESIGNED FOR THE BRACE FORCES SHOWN IN THE STRUCTURAL DRAWINGS. IF NO FORCES ARE SHOWN, THE CONNECTIONS SHALL BE DESIGNED TO DEVELOP THE FULL TENSION CAPACITY OF THE BRACE MEMBER.
3. BEAM TO COLUMN CONNECTIONS SHALL BE DESIGNED FOR THE TYPICAL SHEAR REQUIRED PER THE STRUCTURAL STEEL NOTE #8 ON SHEET S110 IN ADDITION TO THE VERTICAL AND HORIZONTAL COMPONENTS OF THE BRACE FORCE.
4. ALL CONNECTIONS IN BRACED FRAMES SHALL BE DESIGNED AS WELDED CONNECTIONS OR SLIP CRITICAL BOLTED CONNECTIONS DUE TO LOAD REVERSALS.
5. CONNECTION DESIGNS SHALL CONSIDER ALL CONCENTRIC AND ECCENTRIC FORCES.
6. ALL BRACE CONNECTIONS SHALL BE DESIGNED FOR THE FACTORED TENSION & COMPRESSION LOADS SHOWN ON ELEVATIONS.

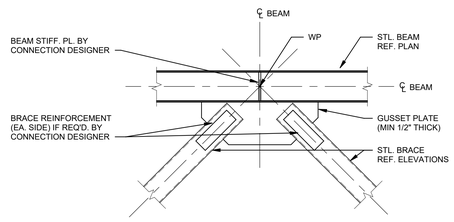
5 BRACING NOTES

1/4" = 1'-0"



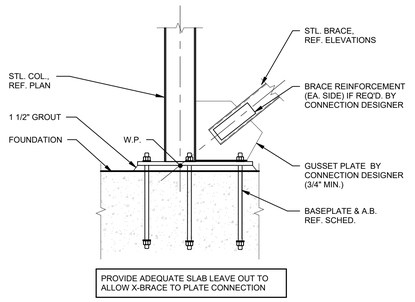
6 TYPICAL DETAIL

3/4" = 1'-0"



7 TYPICAL DETAIL

3/4" = 1'-0"



PROVIDE ADEQUATE SLAB LEAVE OUT TO ALLOW X-BRACE TO PLATE CONNECTION

8 TYPICAL DETAIL

3/4" = 1'-0"

ENVIRONMENTS FOR HEALTH **ARCHITECTURE**
e4h
501 Elm St., Ste 500, Dallas, TX 75202
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CMC
CONWAY MEDICAL CENTER
with Novant Health

CMC Socastee FSED
6016 HIGHWAY 707
MYRTLE BEACH, SC

PROJECT NUMBER: 3024096.00

Δ	DATE	DESCRIPTION

NOT FOR CONSTRUCTION

ARCH NAME ARCH ##

ORIG SUBMISSION: 01/28/2025

CURRENT:

SHEET TITLE AND NUMBER:

S610

BRACE FRAME ELEVATIONS

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