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H2E PROJECT No. 1105

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Florida Certificate of Authorization #2485
Ryan L. Chewning, P.E. #63103

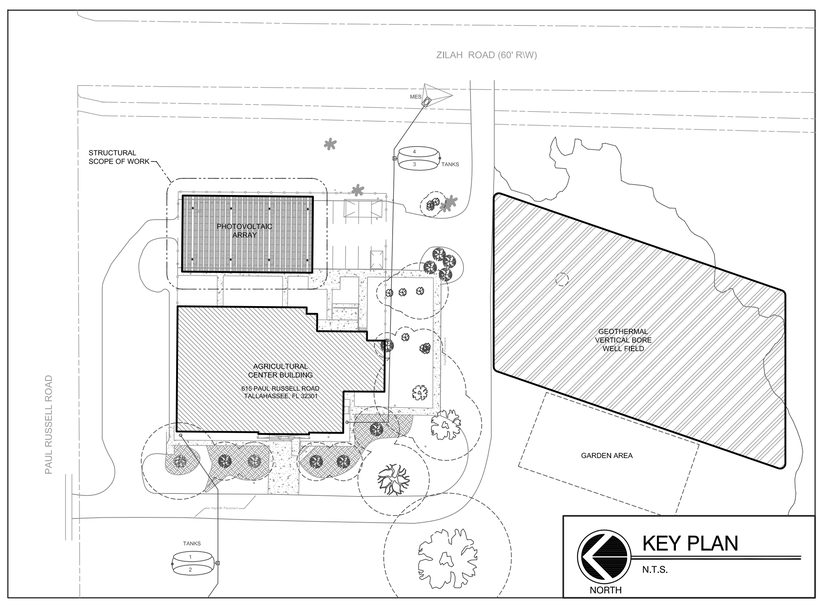
Leon County Sustainable Demonstration Center

Leon County Facilities Management & Construction
Tallahassee, FL

100% CONSTRUCTION DOCUMENTS

Bid Package No. 1 - Structural

SITE LOCATION PLAN



INDEX OF DRAWINGS

BARNETT FRONCZAK BARLOWE ARCHITECTS

Leon County - Sustainable Demonstration Center

10522 Project Code
Drawn By: REM/KAS
Checked By: RLC/RRB

12 SEPTEMBER 2011
Date

100% Construction Documents

Revisions

COVER SHEET
BID PACKAGE 1

Tallahassee Florida

CS-1

225 South Adams St, Tallahassee, FL 32301
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STRUCTURAL NOTES

1. GENERAL:

A. UNLESS OTHERWISE SPECIFIED, ALL WORK AND MATERIALS SHALL CONFORM TO "FLORIDA BUILDING CODE" (FBC) REQUIREMENTS, 2007 ED. WITH 2008 AND 2009 SUPPLEMENTS.
B. ALL ELEVATIONS ON STRUCTURAL SHEETS ARE RELATIVE TO (STRUCTURAL DATUM) FINISHED FLOOR ELEVATION OF 0.00'.
C. DO NOT SCALE DRAWINGS. USE DIMENSIONS AND DETAILS.
D. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING OF CONDITIONS ENCOUNTERED IN THE FIELD CONTRADICTORY TO THOSE SHOWN ON THESE STRUCTURAL CONTRACT DOCUMENTS.
E. STRUCTURAL SUBMITTALS:
   (1) REPRODUCTION OF CONTRACT DOCUMENTS FOR ERECTION AND/OR SHOP DRAWINGS WILL NOT BE PERMITTED.
   (2) REVIEW OF SUBMITTALS AND/OR SHOP DRAWINGS BY THE STRUCTURAL ENGINEER OF RECORD DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW AND CHECK SHOP DRAWINGS PRIOR TO SUBMITTAL TO THE STRUCTURAL ENGINEER OF RECORD. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, AND THE DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS. CONTRACTOR ALSO SHALL BE RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION. SEE SPECIFIC PROVISION.
   (3) SUBMIT THE FOLLOWING SHOP DRAWINGS PRIOR TO PERFORMING WORK:
      1. CONCRETE MIX DESIGN
      2. STRUCTURAL STEEL FABRICATION DRAWINGS

2. DESIGN LOADS:

A. LIVE LOADS
   (1) ROOF LOAD — 20 PSF

B. BUILDING CATEGORY (OCCUPANCY): — II

C. WIND LOAD
   (1) WIND VELOCITY = — 110 MPH
   (2) WIND IMPORTANCE FACTOR, Iw: — 1.00
   (3) WIND EXPOSURE CATEGORY = — B
   (4) ENCLOSURE CLASSIFICATION = — OPEN
   (5) INTERNAL PRESSURE, GCpi = — ±0.18
   (6) PANEL CLADDING SUCTION/PRESSURE (PSF): — (−34.0/+39.1)

3. MATERIALS AND CONSTRUCTION:

A. GENERAL:
   (1) THE CONTRACTOR SHALL REPAIR AND REPLACE ALL PAVEMENT, CURB AND WALKS DAMAGED OR REMOVED DURING TRENCHING OPERATIONS. REPLACED AND REPAIRED MATERIAL SHALL MATCH THE EXISTING.
B. SOIL:
   (1) ALLOWABLE SOIL BEARING CAPACITY IS ASSUMED TO BE 2,000 PSF ON UNDISTURBED SOILS OR STRUCTURAL FILLS.
   (2) ALL SOIL BELOW SLABS-ON-GRADE AND FOOTINGS SHALL BE COMPACTED TO A DEPTH OF 12" AT OPTIMUM MOISTURE CONTENT TO 98% OF STANDARD PROCTOR, ASTM D698.
   (3) CONTRACTOR SHALL OBTAIN THE SERVICES OF A QUALIFIED GEOTECHNICAL ENGINEER TO PERFORM TESTING ON COMPACTED SUBGRADE AT EVERY OTHER COLUMN FOOTING.

C. CONCRETE:
   (1) ALL CONCRETE WORK SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE'S "STANDARD BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (A.C.I. 318-05). CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3,000.
   (2) CHAMFER ALL CONCRETE EXPOSED EDGES ¾" UNLESS INDICATED OTHERWISE.
   (3) ALL DRILLING AND EPOXYING OF ANCHOR BOLTS SHALL BE DONE WITH THE HILTI HIT HY 150 ADHESIVE ANCHORING SYSTEM, OR APPROVED EQUIVALENT.

D. REINFORCING STEEL:
   (1) ALL REINFORCING STEEL SHALL BE INTERMEDIATE GRADE BILLET STEEL CONFORMING TO ASTM A615, GRADE 60, WITH A MINIMUM SPLICE LENGTH OF 36 BAR DIAMETERS UNLESS INDICATED OTHERWISE.
   (2) PROVIDE ADDITIONAL HORIZONTAL CORNER BARS TO MATCH MAIN HORIZONTAL REINFORCING STEEL AT ALL BEAMS, OR WALL INTERSECTIONS, CORNERS AND OTHER CONCRETE DIRECTIONAL CHANGES AND CORNERS.
   (3) WELDED WIRE FABRIC (W.W.F.) SHALL BE ASTM A185. MINIMUM LAP SHALL BE 8".

E. STRUCTURAL STEEL:
   (1) ALL STRUCTURAL STEEL WORK SHALL CONFORM TO AMERICAN INSTITUTE OF STEEL CONSTRUCTION'S (AISC) "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", (2005 EDITION).
   (2) STRUCTURAL STEEL SHAPES SHALL BE FABRICATED FROM THE FOLLOWING MATERIALS:
      a. ROLLED W AND WT SHAPES: ASTM A992, Fy=50 KSI.
      b. ALL OTHER ROLLED SHAPES: ASTM A36/A572, GRADE 50 CONFORMING TO THE REQUIREMENTS OF AISC TECHNICAL BULLETIN 3.
   (3) ALL STEEL CONNECTIONS SHALL CONFORM TO AISC MANUAL (2005 EDITION) "STANDARD FRAMED BEAM CONNECTIONS" UNLESS SHOWN OTHERWISE. HIGH STRENGTH BOLTS SHALL BE ASTM A325-N BEARING TYPE, THREAD INCLUDED IN SHEAR PLANE.
   (4) ANCHOR BOLTS AND ALL OTHERS SHALL BE ASTM F1554.
   (5) ALL WELDING WORK SHALL BE PERFORMED AS PER THE AMERICAN SOCIETY'S RECOMMENDATIONS BY CERTIFIED WELDERS.
   (6) ALL FULL PENETRATION WELDS SHALL BE NON-DESTRUCTIVELY TESTED USING ULTRASONIC (UT) OR RADIOGRAPHIC (RT) METHOD.
   (7) NONSHRINK GROUT SHALL BE NONMETALLIC SHRINKAGE-RESISTANT GROUT CONFORMING TO ASTM C1107
   (9) AFTER FABRICATION ALL STRUCTURAL STEEL MEMBERS SHALL BE GALVANIZED PER ASTMA123 TO A MINIMUM THICKNESS OF 3.9 MILS.

   (10) NO FIELD DRILL, CUTTING, WELDING OR OTHER ADJUSTMENTS WILL BE PERMITTED AFTER HOT DIP GALVANIZING
   (11) TOUCH UP ANY DAMAGE TO GALVANIZED SURFACES WITH TWO COATS OF ZINC-BASED TOUCHUP COATING: "ZRC COLD GALVANIZING COMPOUND" MANUFACTURED BY XRC WORLDWIDE.

LEGEND

A.B.	–	ANCHOR BOLT
ADD'L	–	ADDITIONAL
B.B.	–	BOND BREAKER(30# FELT)
B/L	–	BUILDING LINE
BM.	–	BEAM
BRG.	–	BEARING
B.S.	–	BOTTOM STEEL
C.J.	–	CONSTRUCTION JOINT
C.J.1	–	CONSTRUCTION JOINT AT NON-LOAD BEARING WALL
CL.	–	CLEAR
C.M.U.	–	CONCRETE MASONRY UNIT
COL.	–	COLUMN
CONT.	–	CONTINUOUS
C.W.B.	–	CAPILLARY WATER BARRIER
DBL.	–	DOUBLE
DN.	–	DOWN
EL.	–	ELEVATION
E.O.C.	–	EDGE OF CONCRETE
EQ.	–	EQUAL
E.J.	–	EXPANSION JOINT
FIN.	–	FINISH
FL.	–	FLOOR
F.S.	–	FIELD SPLICE
H.B.	–	HIGH BEAM
HORZ.	–	HORIZONTAL
H.S.B.	–	HIGH STRENGTH BOLT
I.D.	–	INSIDE DIAMETER
L.B.	–	LOW BEAM
LG.	–	LONG
L.L.V.	–	LONG LEG VERTICAL
MAT'L	–	MATERIAL
MB	–	METAL BUILDNG
M.B.	–	MACHINE BOLT
M.D.	–	METAL DECK
MAX.	–	MAXIMUM
MFR.	–	MANUFACTURER
MIN.	–	MINIMUM
O.D.	–	OUTSIDE DIAMETER
OP.HD.	–	OPPOSITE HAND
R/C	–	REINFORCED CONCRETE
REINF.	–	REINFORCEMENT
REQ'R	–	REQUIREMENTS
S.C.J.	–	SAW CUT CONSTRUCTION JOINT
SGL.	–	SINGLE
S.L.V.	–	SHORT LEG VERTICAL
SPA.	–	SPACES
S.S.T.	–	SIMPSON STRONG TIE
STD.	–	STANDARD
T&B	–	TOP AND BOTTOM
T.C.	–	TOP OF CONCRETE
T.S.	–	THICKENED SLAB
TS	–	TOP STEEL
TYP.	–	TYPICAL
U.N.O.	–	UNLESS NOTED OTHERWISE
V.B.	–	VAPOR BARRIER
V.C.J.	–	VERTICAL CONTROL JOINT
V.E.J.	–	VERTICAL EXPANSION JOINT
W.P.	–	WORKING POINT
W.W.F.	–	WELDED WIRE FABRIC

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E.O.R.: Patrick M. McKee
Florida Registration #: 63122

BARNETT FRONCZAK BARLOWE ARCHITECTS

Leon County - Sustainable Demonstration Center

000000	Drawn By:	PMM
Project Code	Checked By:	PMM

12 September 2011
Date

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Revisions
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STRUCTURAL NOTES

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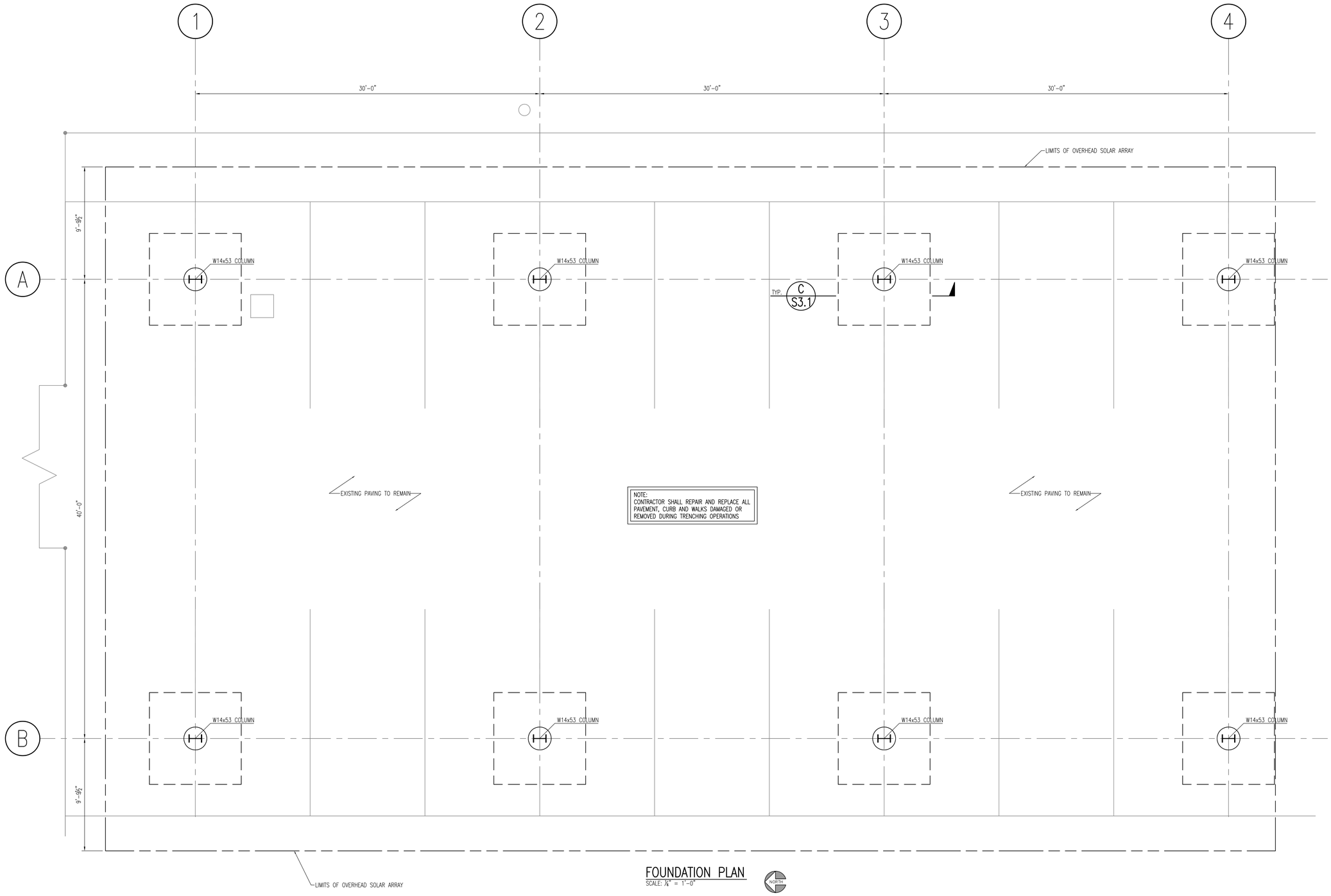

FOUNDATION PLAN
SCALE: ¼" = 1'-0"

NORTH

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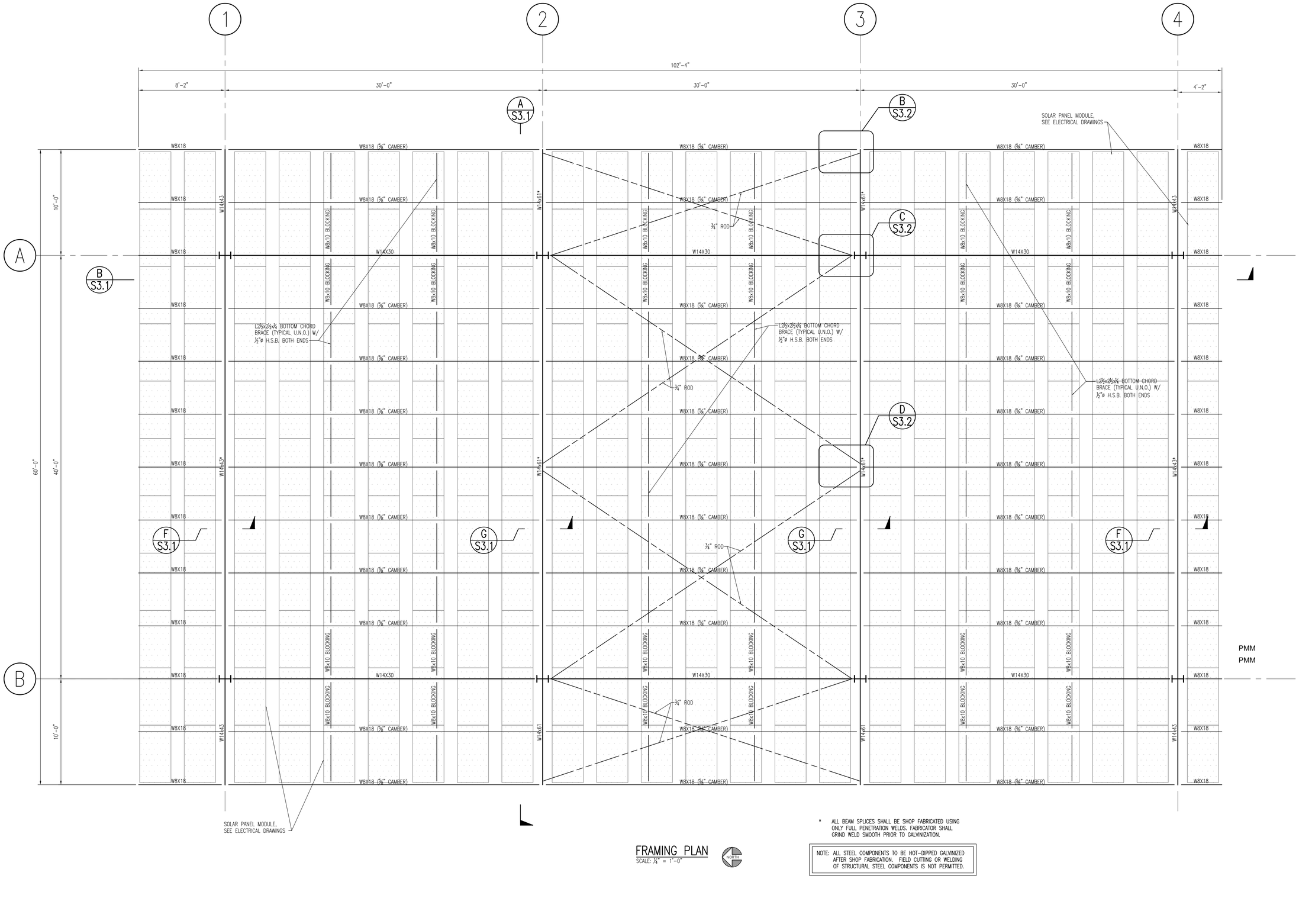

FRAMING PLAN
SCALE: 1/4" = 1'-0"

NORTH

* ALL BEAM SPLICES SHALL BE SHOP FABRICATED USING ONLY FULL PENETRATION WELDS. FABRICATOR SHALL GRIND WELD SMOOTH PRIOR TO GALVINIZATION.

NOTE: ALL STEEL COMPONENTS TO BE HOT-DIPPED GALVINIZED AFTER SHOP FABRICATION. FIELD CUTTING OR WELDING OF STRUCTURAL STEEL COMPONENTS IS NOT PERMITTED.

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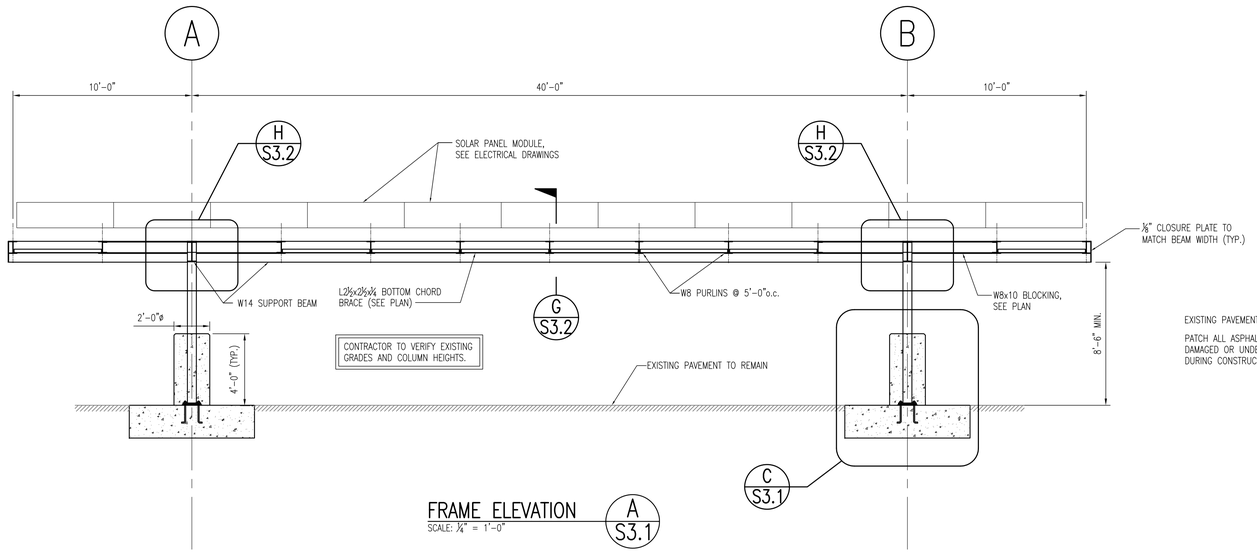

FRAME ELEVATION A S3.1
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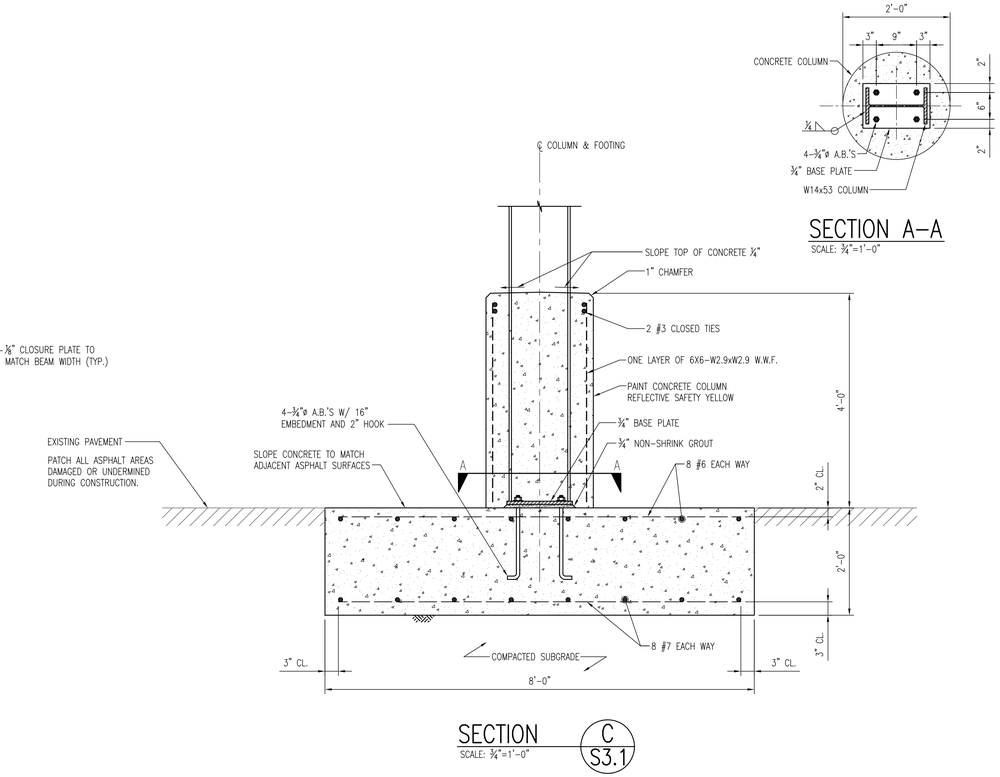
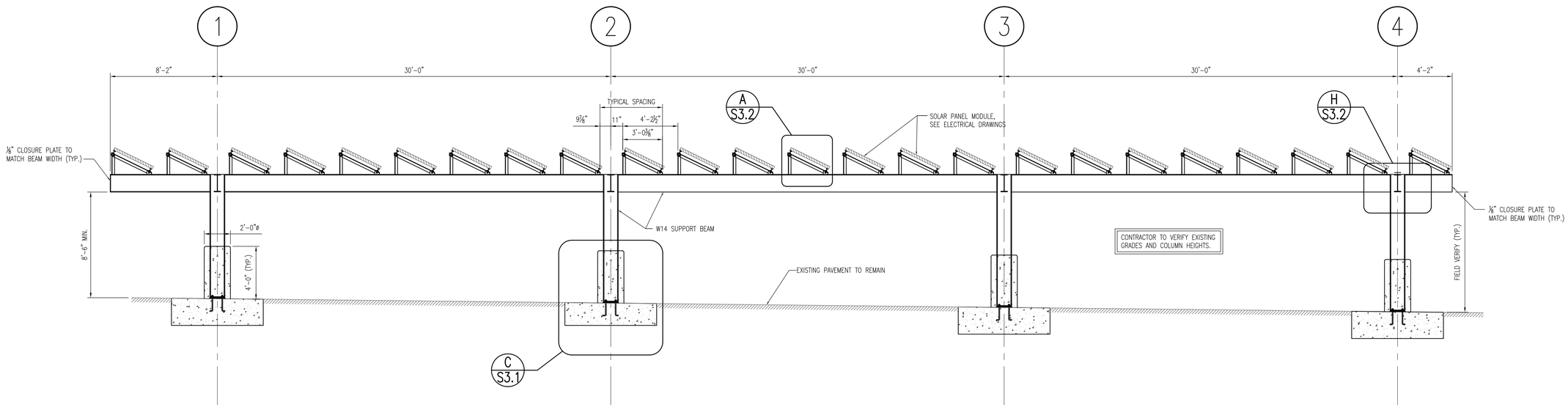


SECTION A-A
SCALE: ¾"=1'-0"

SECTION C S3.1
SCALE: ¾"=1'-0"



FRAME ELEVATION B S3.1
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DETAILS

Tallahassee Florida

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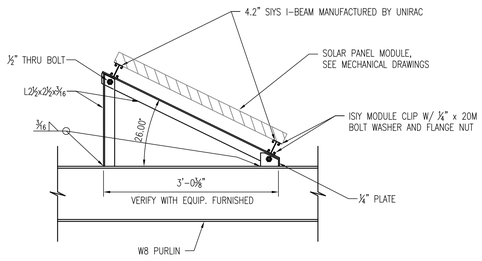
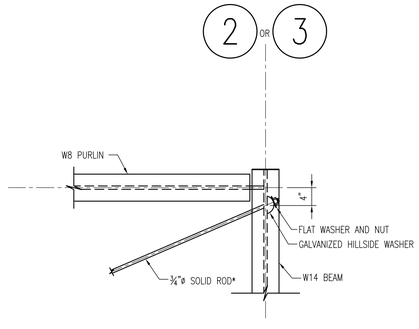


PROVIDE ANGLE SUPPORT FRAME AT EACH BEAM LOCATED AT 5'-0"o.c.

SECTION A S3.2
SCALE: ¾"=1'-0"



(PLAN VIEW)

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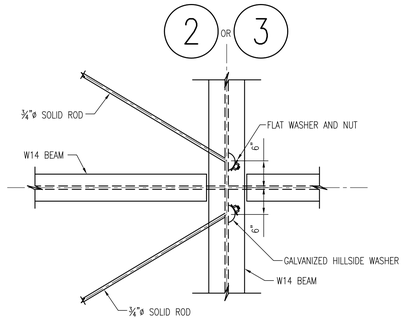

(PLAN VIEW)

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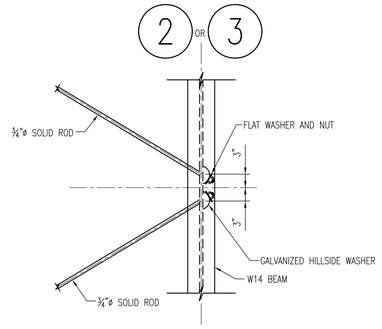

(PLAN VIEW)

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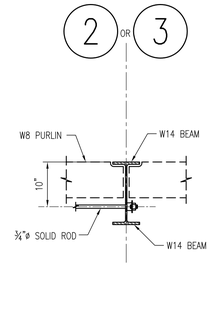
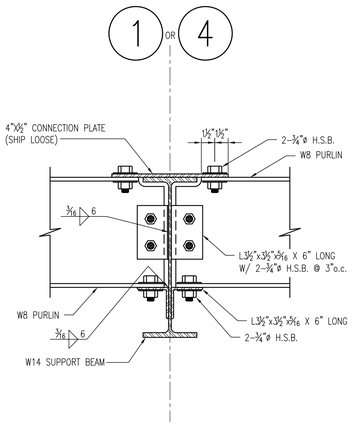


SECTION E S3.2
SCALE: ¾"=1'-0"

* CONNECT AND TIGHTEN ¾"ø SOLID RODS WITH GALVANIZED TURNBUCKLE

NOTE: ALL STEEL COMPONENTS TO BE HOT-DIPPED GALVINIZED AFTER SHOP FABRICATION. FIELD CUTTING OR WELDING OF STRUCTURAL STEEL COMPONENTS IS NOT PERMITTED.



SECTION F S3.2
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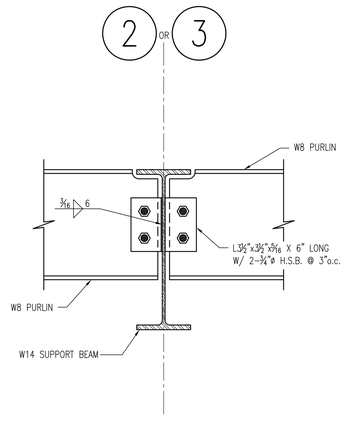

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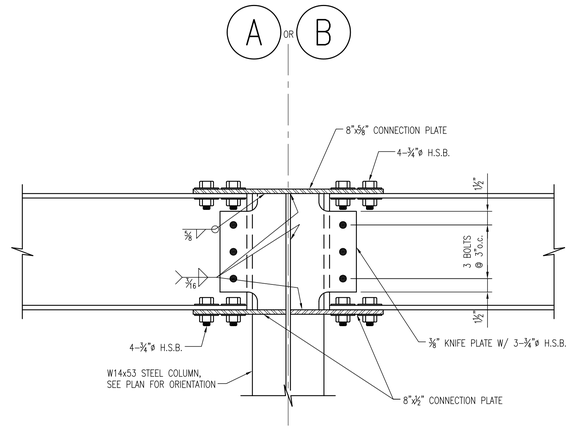
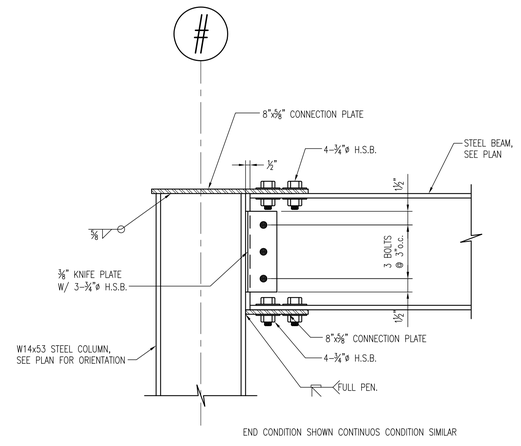


BEAM FRAMING INTO COLUMN WEB



END CONDITION SHOWN CONTINUOS CONDITION SIMILAR

BEAM FRAMING INTO COLUMN FLANGE

RIGID FRAME TO COLUMN CONNECTION DETAILS H S3.2
NO SCALE

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