

**GENERAL NOTES**

- [A] DESIGN**
- CONSTRUCTION AND DESIGN SHALL CONFORM TO NATIONAL BUILDING CODE OF CANADA [2010], PART 9.
  - SNOW LOAD : SS = 169 P.S.F. [8.1 kPa], SR = 16.7 P.S.F. [0.8 kPa]; L/240 MAXIMUM LIVE-LOAD DEFLECTION; MAXIMUM SPAN 4 FT. [1.2m].
  - WIND LOAD:  $Q[1/50] = 13.4$  P.S.F. [0.64 kPa]; L/180 MAXIMUM DEFLECTION; MAXIMUM SPAN 12 FT. [3.66m].
  - SEISMIC:  $S_q[0.2] = 1.20$
  - OCCUPANCY LOAD = 100 P.S.F. [4.8 kPa]; L/360 MAXIMUM DEFLECTION; MAXIMUM SPAN 4'-4" [1.32m].

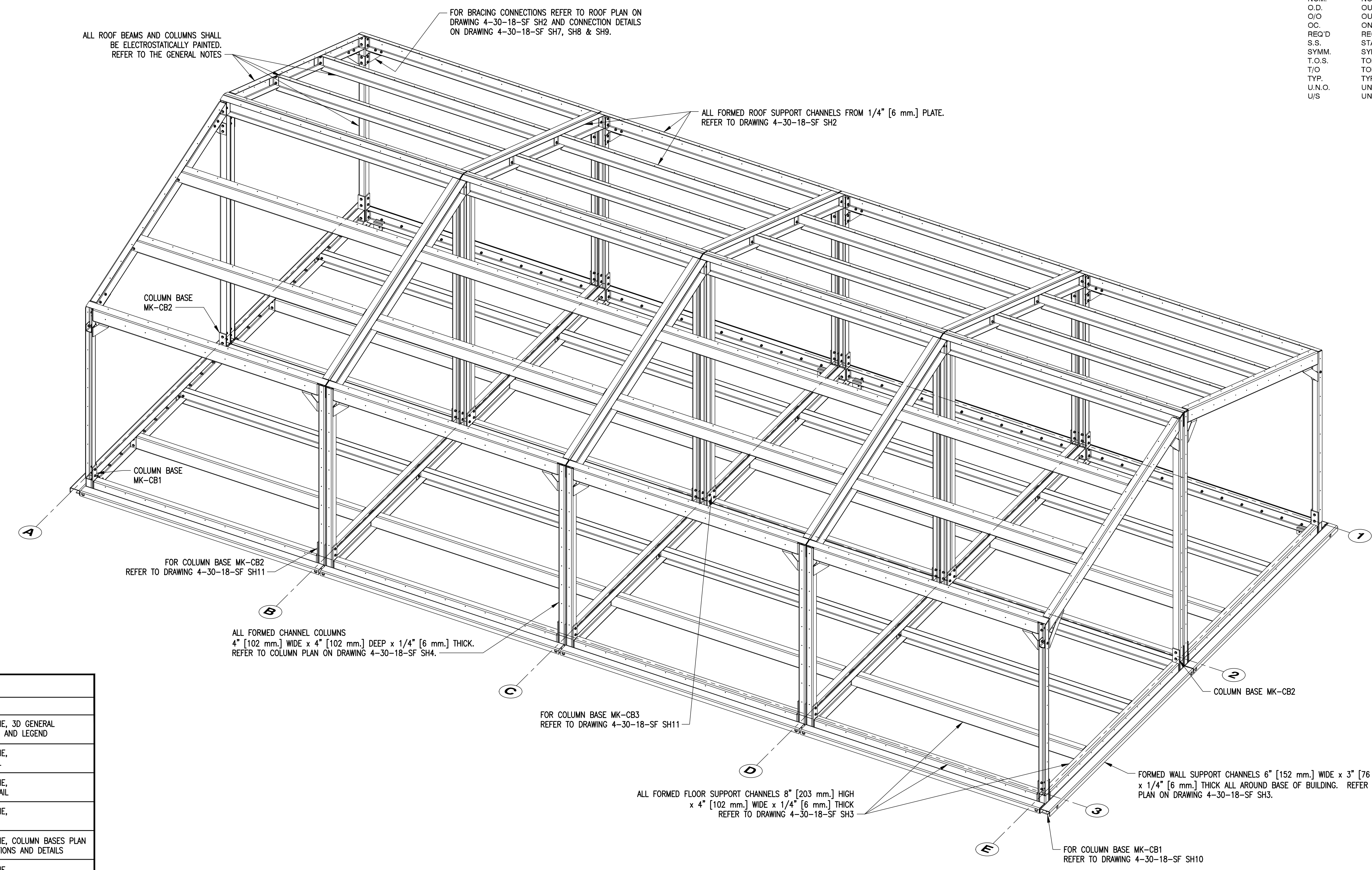
- [B] METALS AND FABRICATION**
- UNLESS OTHERWISE NOTED, ONLY NEW MATERIALS SHALL BE USED.
  - THE ENGINEER MAY INSPECT MATERIALS AND PRODUCTS [EXCLUDING OWNER-SUPPLIED MATERIALS] AT HIS DISCRETION AT ALL STAGES OF THEIR MANUFACTURE, TRANSPORTATION AND ASSEMBLY. SATISFACTORY INSPECTION AT ANY STAGE DOES NOT PRECLUDE FUTURE REJECTION IF THE MATERIALS OR PRODUCTS ARE SUBSEQUENTLY FOUND TO LACK UNIFORMITY OR FAIL TO CONFORM TO THE REQUIREMENTS SPECIFIED.
  - ALUMINUM MANUFACTURING SOURCES AND CERTIFICATES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND RECORD.
  - ALUMINUM ALLOY SHALL CONFORM TO THE ALUMINUM ASSOCIATION PUBLICATION "ALUMINUM STANDARDS AND DATA, ISO 6362-2"
  - ITEMS MANUFACTURED OR FABRICATED FROM SCRAP METAL OF UNKNOWN CHEMICAL COMPOSITION OR PHYSICAL PROPERTIES ARE NOT ACCEPTABLE.
  - ALUMINUM WELDING TO CSA W59.2M-M1991 [R2008] BY FABRICATORS QUALIFIED TO DIVISION 2 OF CSA W47.2
  - FABRICATION PRACTICES AND TOLERANCES SHALL FOLLOW THOSE OF STEEL, AS IN CSA STANDARD CAN3-S16.1-M
  - FORMING OF ALUMINUM SHALL BE CARRIED OUT AT ROOM TEMPERATURE.
  - ALL FORMED SHEET ALUMINUM INCLUDING BEAMS, COLUMNS AND BRACING SHALL BE LAD OUT AND CUT AS FLAT SHEET AND THEN BENT INTO FINAL SHAPE USING STANDARD AIR BRAKE BENDING DIES. ALL FLAT SHEET ALUMINUM COMPONENTS SHALL BE CUT BY THE CNC MILLING PROCESS. FLAME CUTTING AND PLASMA CUTTING WILL NOT BE PERMITTED FOR ALL MAJOR STRUCTURAL COMPONENTS.
  - ALL ALUMINUM PLATE 1/4" [6 mm.] OR LESS IN THICKNESS SHALL HAVE A MINIMUM PERMISSIBLE INSIDE BENDING RADIUS OF 1 1/2 TIMES THE MATERIAL THICKNESS. THE RADIUS IS THE MINIMUM RECOMMENDED FOR BENDING PLATES WITHOUT FRACTURING IN A STANDARD PRESS BRAKE WITH AIR BEND DIES. OTHER TYPES OF BENDING OPERATIONS MAY REQUIRE LARGER RADI. THE MINIMUM PERMISSIBLE RADI WILL ALSO VARY WITH THE DESIGN AND THE CONDITION OF TOOLING. FOR MORE DETAILED REQUIREMENTS REFER TO THE CONTRACT SPECIFICATIONS.
  - THE FABRICATOR SHALL PROVIDE TEST SAMPLES OF A FULL SIZE BEAM AND COLUMN TO THE ENGINEER FOR APPROVAL PRIOR TO PROCEEDING WITH THE PRODUCTION WORK. THE FABRICATOR SHALL DEMONSTRATE TO THE SATISFACTION OF THE ENGINEER'S DESIGNATED TESTING LAB THAT THE ALUMINUM PLATE BENDS ARE FREE OF STRESS FRACTURES.
  - BENDS SHALL BE SMOOTH WITHOUT SHARP KINKS. CRACKS SHALL BE CAUSE FOR REJECTION IF THE CRACK LIES IN A ZONE THAT IS STRESSED IN SERVICE.
  - SUBMIT SHOP DRAWINGS BEARING STAMP AND SIGNATURE OF QUALIFIED PROFESSIONAL ENGINEER REGISTERED OR LICENSED IN THE PROVINCE OF BC
  - STAINLESS STEEL BOLTS SHALL CONFORM TO AISI 316.
  - ALL STRUCTURAL BOLTS, NUTS AND WASHERS SHALL A316 GRADE STAINLESS STEEL HEXAGON HEAD FASTENERS.
  - ALUMINUM EXTRUSIONS AND PLATE THICKER THAN 1/4" [6 mm.] SHALL BE ALCAN STRUCTURAL ALLOY 6061-T6.
  - ALL BENT ALUMINUM SHEET [1/4 mm. OR LESS] SHALL BE ALCAN ALLOY 5052-H32.
  - SAMPLE TESTING SHALL BE CONDUCTED BY THE ENGINEER'S DESIGNATED CERTIFIED TESTING SERVICES PROVIDER.
  - ALUMINUM FABRICATION AND ASSEMBLY SHALL CONFORM TO C.S.A. SPECIFICATION S157.
  - ALUMINUM WELDING SHALL BE EITHER: GMAW [MIG] OR GTAW [TIG] PROCESS USING 5356 FILLER ROD.
  - ALL BURRS, SHARP CORNERS, ROUGH EDGES & WELD SPATTER TO BE GROUND SMOOTH.

- [C] PAINT**
- ALL ROOF BEAMS AND COLUMNS SHALL BE ELECTROSTATICALLY PAINTED [POWDER COATED], COLOUR: WHITE, SHEEN: GLOSS.
  - ALL ALUMINUM SURFACES THAT REQUIRE POWDER COATING SHALL BE PREPARED BY SAND BLASTING AND PRETREATMENT.
  - PAINTING SHALL BE THE SAME OR EQUIVALENT TO AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION SPECIFICATION AAMA 2604 OR APPROVED EQUAL.

- [D] ERECTION**
- THE ERECTOR SHALL MAINTAIN BUILDING SQUARENESS WILL ERECTING THE STRUCTURAL FRAME. THE ERECTOR SHALL PROVIDE DETAILS TO THE ENGINEER OF THE METHOD USED TO KEEP THE BUILDING SQUARE DURING AND AFTER ERECTION. TEMPORARY BRACING IN THE FORM OF TENSION WIRES AND TURNBUCKLES MAY BE USED BUT MUST BE KEPT CLEAR OF THE EXTERIOR FACE OF THE STRUCTURE TO PROVIDE SPACE FOR THE BUILDING ENVELOPE TO BE INSTALLED. EXTRA HOLES MAY BE ADDED TO THE FRAMEWORK TO INSTALL BRACING BUT HOLE SIZE AND LOCATIONS MUST BE APPROVED BY THE ENGINEER. AFTER THE BUILDING ENVELOPE HAS BEEN INSTALLED THE TEMPORARY BRACING SHALL BE REMOVED.

**LEGEND (NOT ALL SYMBOLS USED)**


B/	BACK OF
B/O	BOTTOM OF
C/O	CENTER TO OUT DISTANCE
C/W	COMPLETE WITH
COL	COLUMN
CONN	CONNECTION
CONT.	CONTINUOUS
DWG.	DRAWING
EL.	ELEVATION
EPS	EXPANDED POLYSTYRENE
EXIST.	EXISTING
F.S.	FAR SIDE
I.D.	INSIDE DIAMETER
INW.	INVERT
L.G.	LONG
MAX.	MAXIMUM
MIN.	MINIMUM
N.S.	NEAR SIDE
N.T.S.	NOT TO SCALE
NOM.	NOMINAL
O.D.	OUTSIDE DIAMETER
O/O	OUT TO OUT DISTANCE
OC	ON CENTER
REQ'D	REQUIRED
S.S.	STAINLESS STEEL
SYMM.	SYMMETRICAL
T.O.S.	TOP OF STEEL
T/O	TOP OF
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
US	UNDERSIDE OF



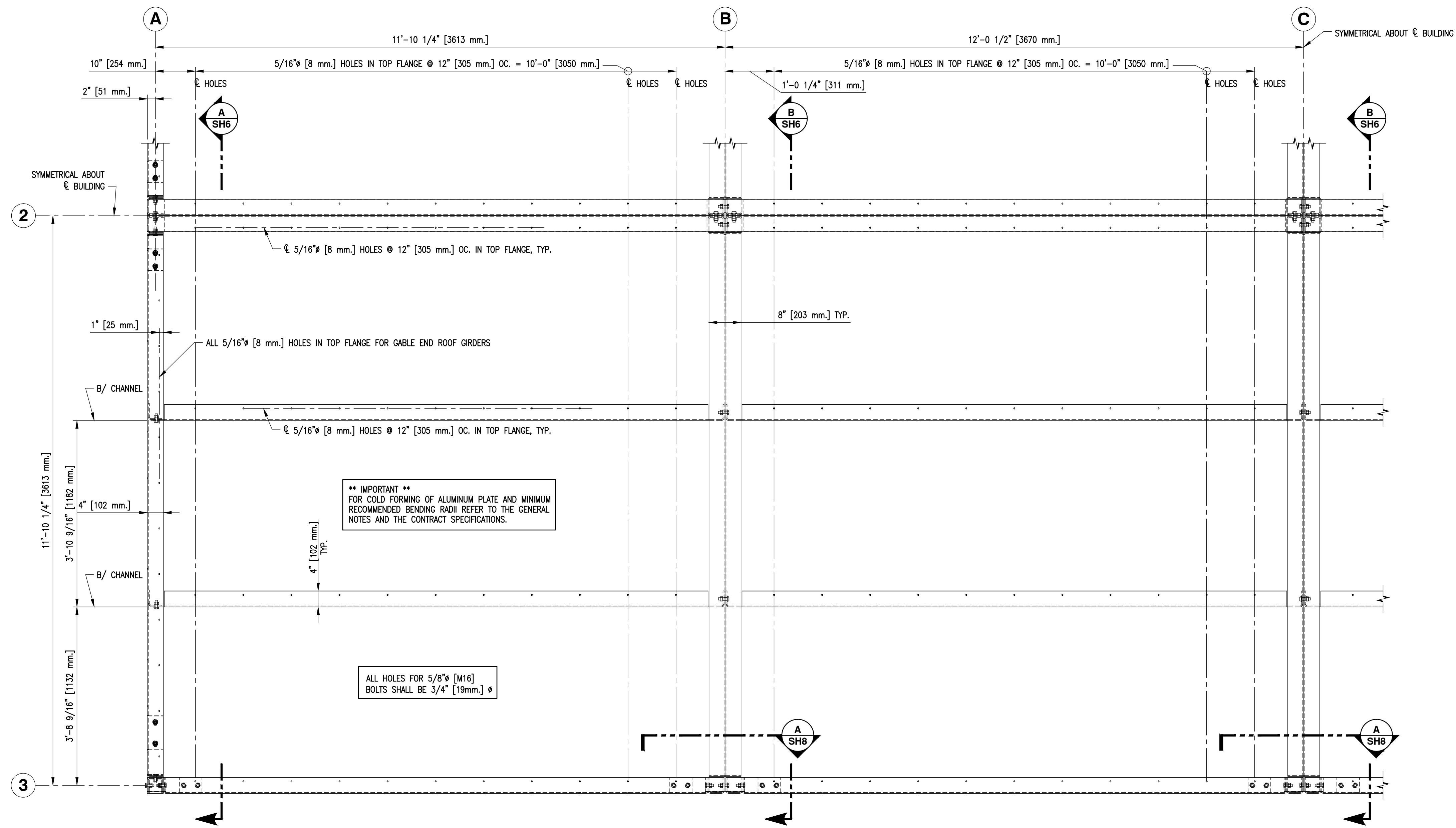
**3D VIEW - PARALLEL PROJECTION**  
SCALE: NONE

DRAWING INDEX	
DWG. / SHEET #	DESCRIPTION
4-30-18-SF SH1	MODEL 24X48-S1, STRUCTURAL ALUMINUM FRAME, 3D GENERAL ARRANGEMENT, GENERAL NOTES, DRAWING INDEX AND LEGEND
4-30-18-SF SH2	MODEL 24X48-S1, STRUCTURAL ALUMINUM FRAME, ROOF FRAMING PLAN AND ROOF FRAMING DETAIL
4-30-18-SF SH3	MODEL 24X48-S1, STRUCTURAL ALUMINUM FRAME, FLOOR FRAMING PLAN AND FLOOR FRAMING DETAIL
4-30-18-SF SH4	MODEL 24X48-S1, STRUCTURAL ALUMINUM FRAME, COLUMN PLAN AND DETAILS
4-30-18-SF SH5	MODEL 24X48-S1, STRUCTURAL ALUMINUM FRAME, COLUMN BASES PLAN AND CABLE BRACING GUSSET PLATE PLAN, SECTIONS AND DETAILS
4-30-18-SF SH6	MODEL 24X48-S1, STRUCTURAL ALUMINUM FRAME, HALF CROSS SECTIONS
4-30-18-SF SH7	MODEL 24X48-S1, STRUCTURAL ALUMINUM FRAME, KNEE BRACING AND ROOF BEAM CONNECTION DETAILS, SHEET 1 OF 2
4-30-18-SF SH8	MODEL 24X48-S1, STRUCTURAL ALUMINUM FRAME, KNEE BRACING AND ROOF BEAM CONNECTION DETAILS, SHEET 2 OF 2
4-30-18-SF SH9	MODEL 24X48-S1, STRUCTURAL ALUMINUM FRAME, ROOF FRAMING AND FLOOR FRAMING, SECTIONS AND DETAILS
4-30-18-SF SH10	MODEL 24X48-S1, STRUCTURAL ALUMINUM FRAME, COLUMN BASE MK-CB1, SECTIONS AND DETAILS
4-30-18-SF SH11	MODEL 24X48-S1, STRUCTURAL ALUMINUM FRAME, COLUMN BASE MK-CB2 AND COLUMN BASE MK-CB3, SECTIONS AND DETAILS

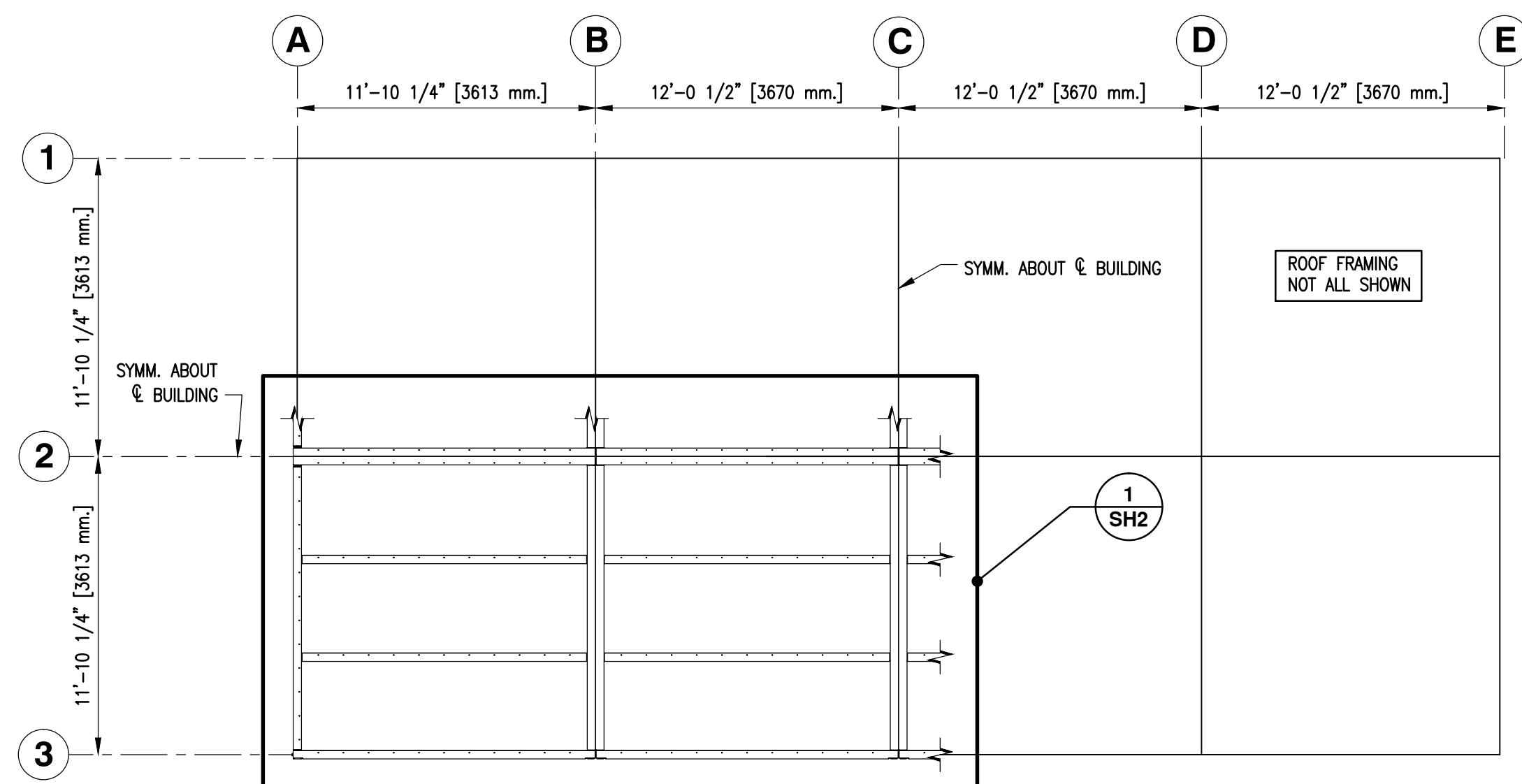
DWG. NO.	DRAWING REFERENCES	NOTES	NO.	DATE	REVISIONS

 <b>FISHERIES AND OCEANS CANADA</b> REAL PROPERTY, SAFETY & SECURITY	
<b>PREFABRICATED BUILDING</b> <b>MODEL 24X48-S1</b> <b>STRUCTURAL ALUMINUM FRAME</b> <b>3D GENERAL ARRANGEMENT</b> <b>GENERAL NOTES, DRAWING INDEX</b> <b>AND LEGEND</b>	SCALE NONE DATE MAY 11, 2015 DWG. NUMBER 4-30-18-SF SHEET 1 of 11 SIZE D REVISION 





**ROOF FRAMING DETAIL 1**  
SCALE 1:16 [1/4 ROOF PLAN]



**ROOF FRAMING PLAN**  
SCALE 1:64

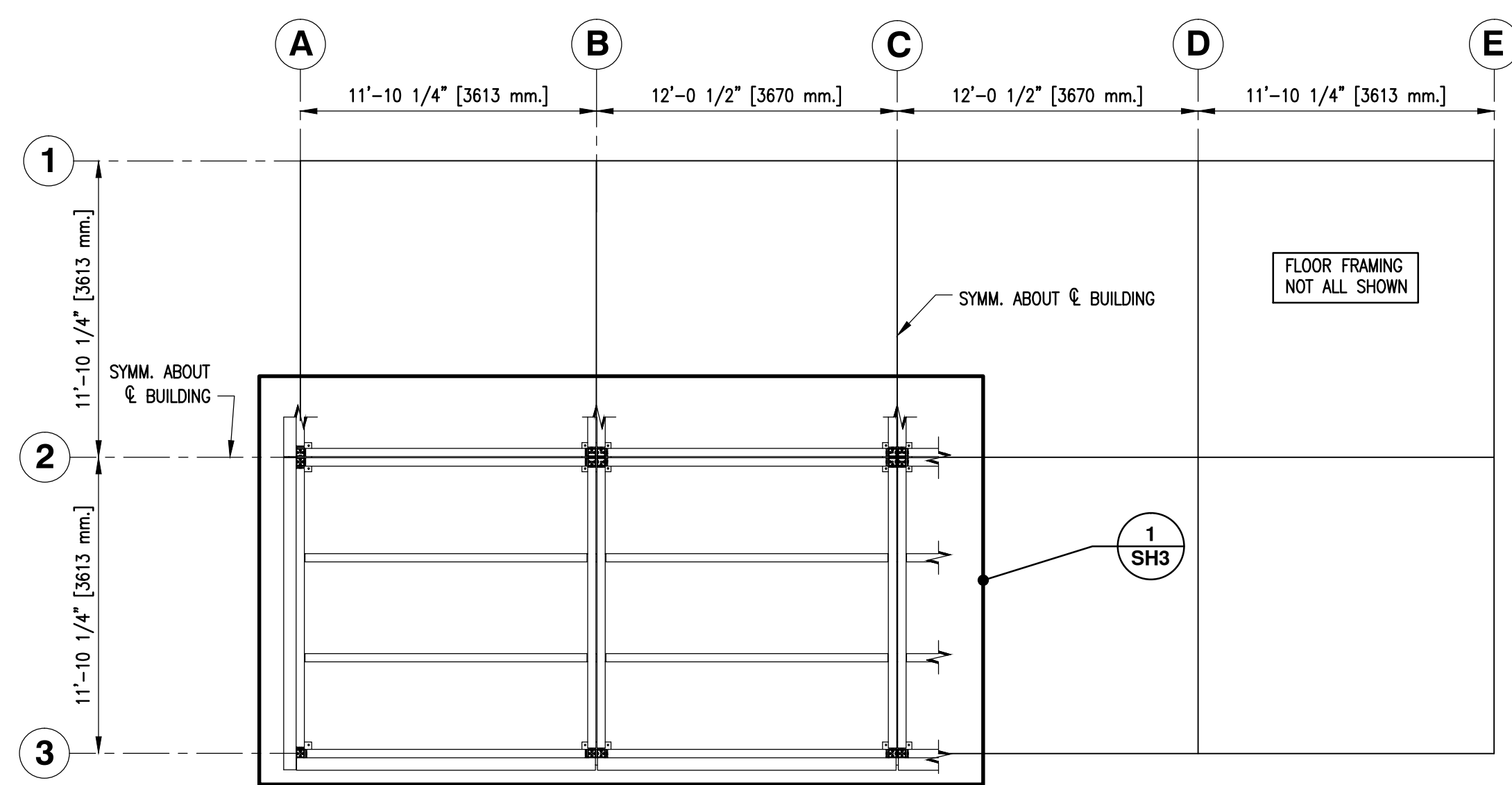
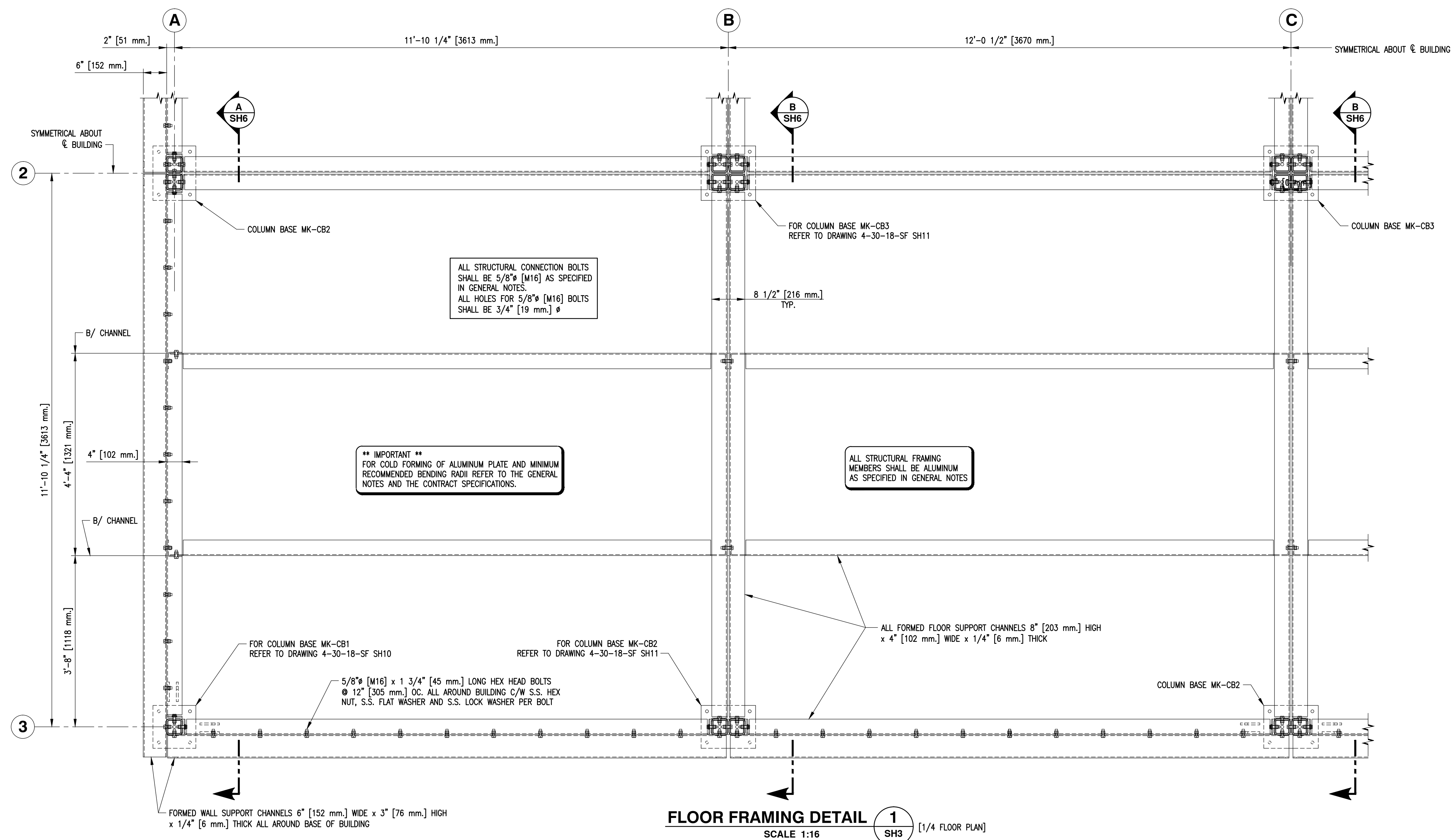
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**PREFABRICATED BUILDING  
MODEL 24X48-S1  
STRUCTURAL ALUMINUM FRAME  
ROOF FRAMING PLAN  
AND ROOF FRAMING DETAIL**

SCALE	AS NOTED
DATE	MAY 11, 2015
DWG. NUMBER	4-30-18-SF
SHEET	2 of 11
SIZE	D
REVISION	

DESIGNED	M. Liang
DRAWN	G. Reichardt
CHECKED	
RECOMMENDED	
APPROVED	
APPROVED	

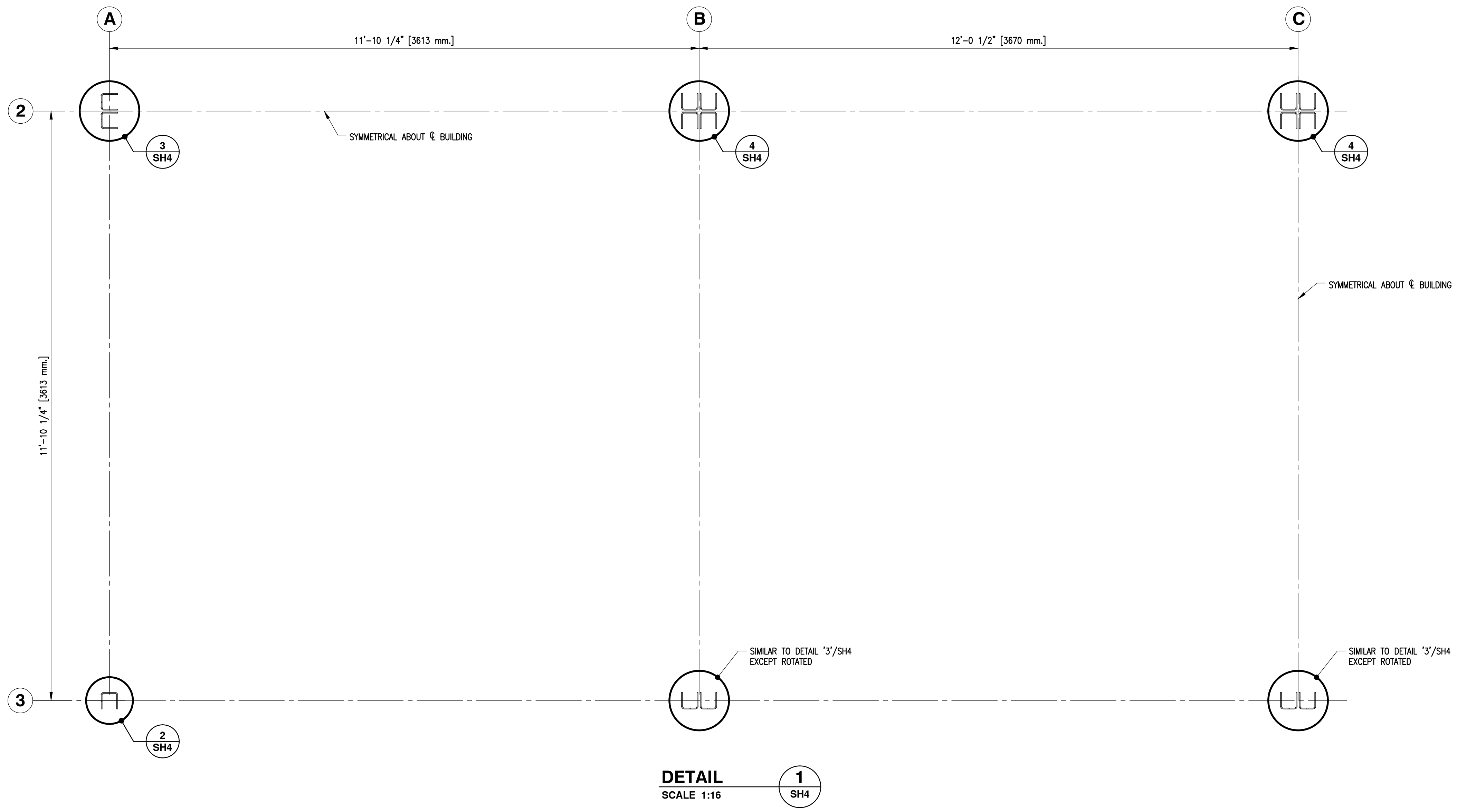
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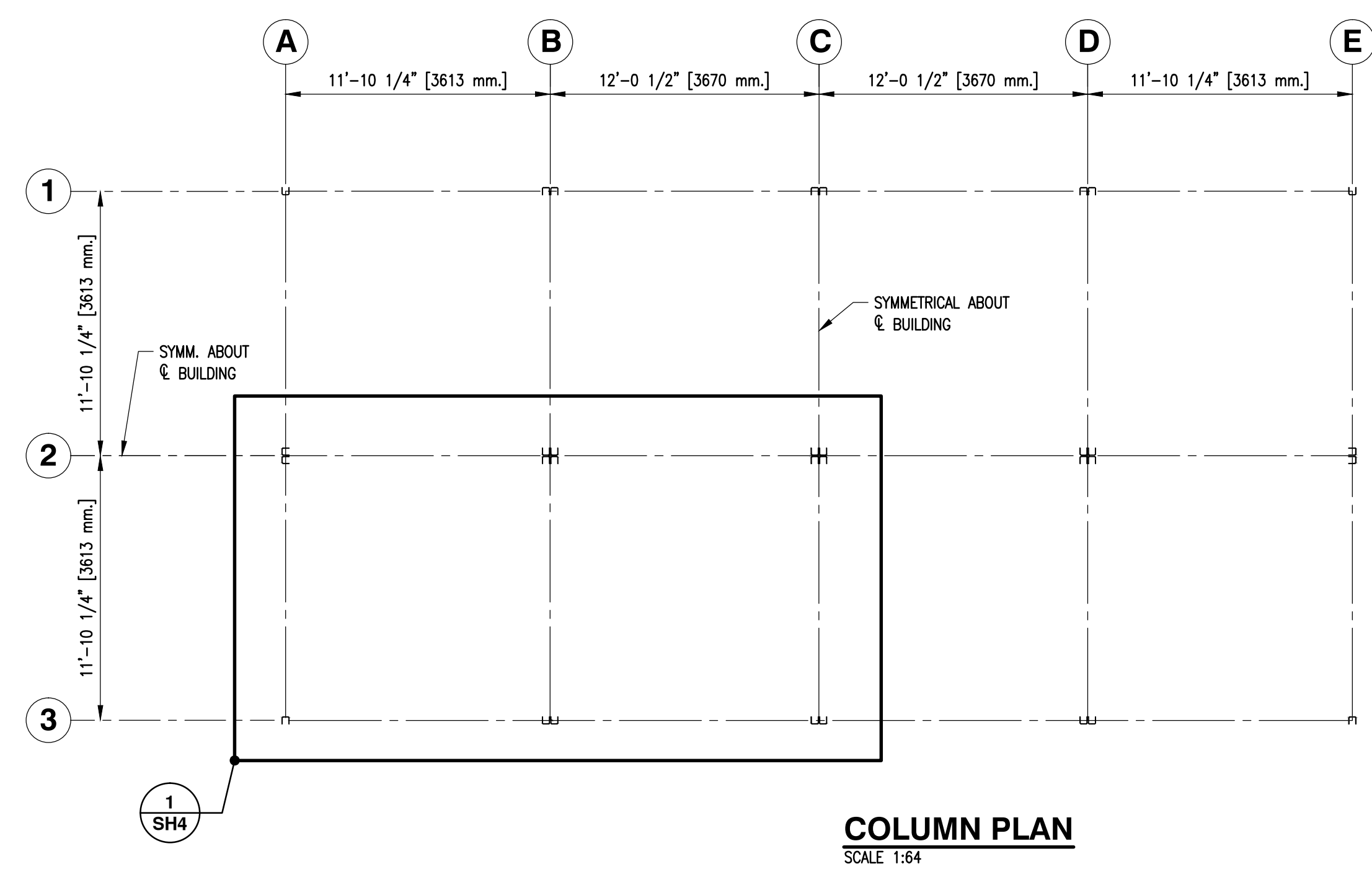
**FLOOR FRAMING PLAN**  
SCALE 1:64

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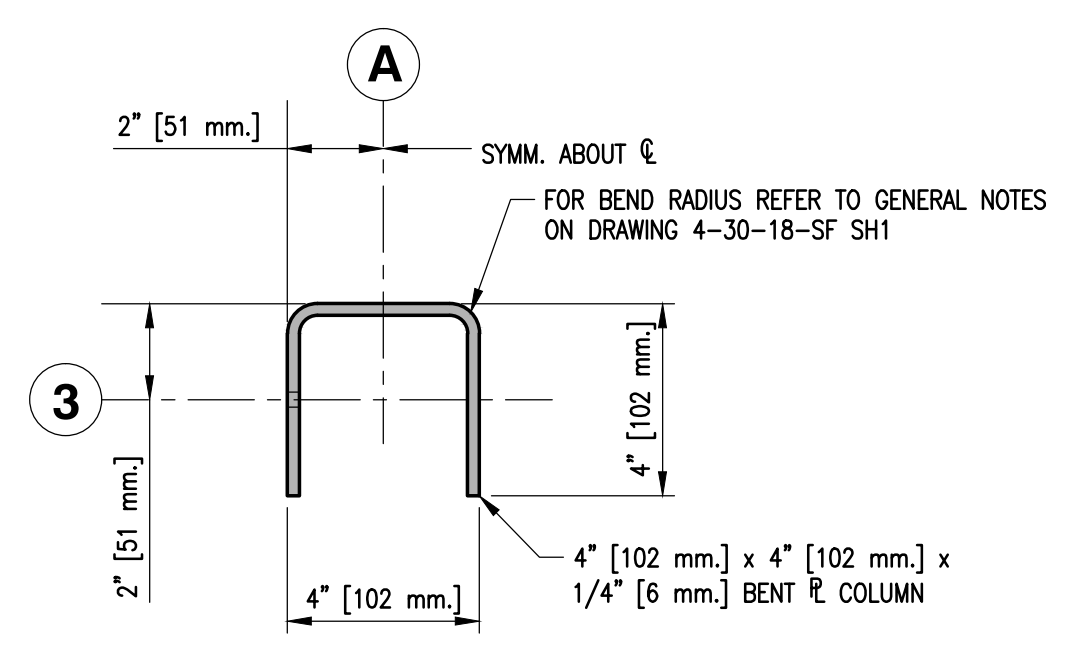
 <b>FISHERIES AND OCEANS CANADA</b> REAL PROPERTY, SAFETY & SECURITY							
<b>PREFABRICATED BUILDING MODEL 24X48-S1 STRUCTURAL ALUMINUM FRAME FLOOR FRAMING PLAN AND FLOOR FRAMING DETAIL</b>	SCALE AS NOTED						
	DATE MAY 11, 2015						
	DWG. NUMBER 4-30-18-SF						
	SHEET 3 of 11 SIZE D						
	REVISION						
DESIGNED M. Liang	<table border="1"> <tr> <td>DWG. NO.</td> <td>DRAWING REFERENCES</td> <td>NOTES</td> <td>NO.</td> <td>DATE</td> <td>REVISIONS</td> </tr> </table>	DWG. NO.	DRAWING REFERENCES	NOTES	NO.	DATE	REVISIONS
DWG. NO.		DRAWING REFERENCES	NOTES	NO.	DATE	REVISIONS	
DRAWN G. Reichardt							
CHECKED							
RECOMMENDED							
APPROVED							



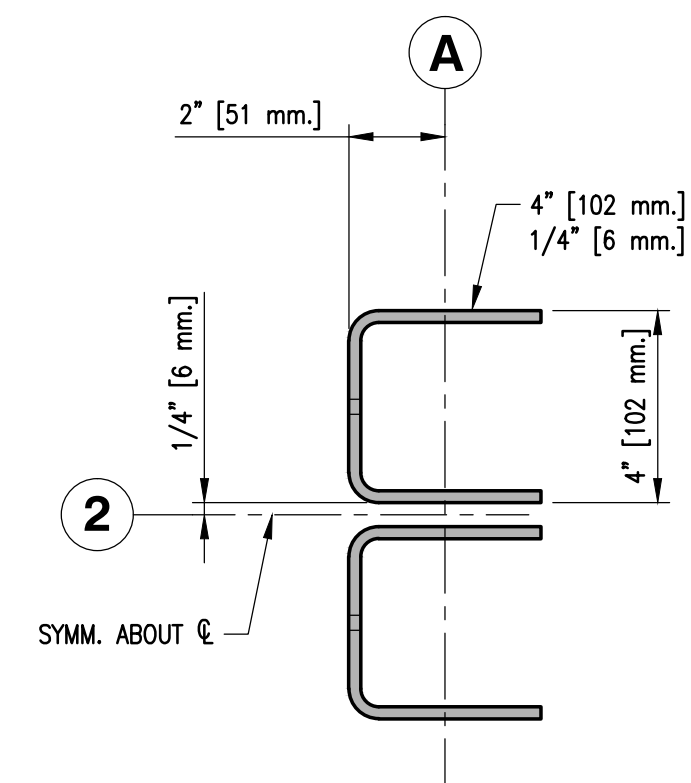
**DETAIL 1**  
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SH4



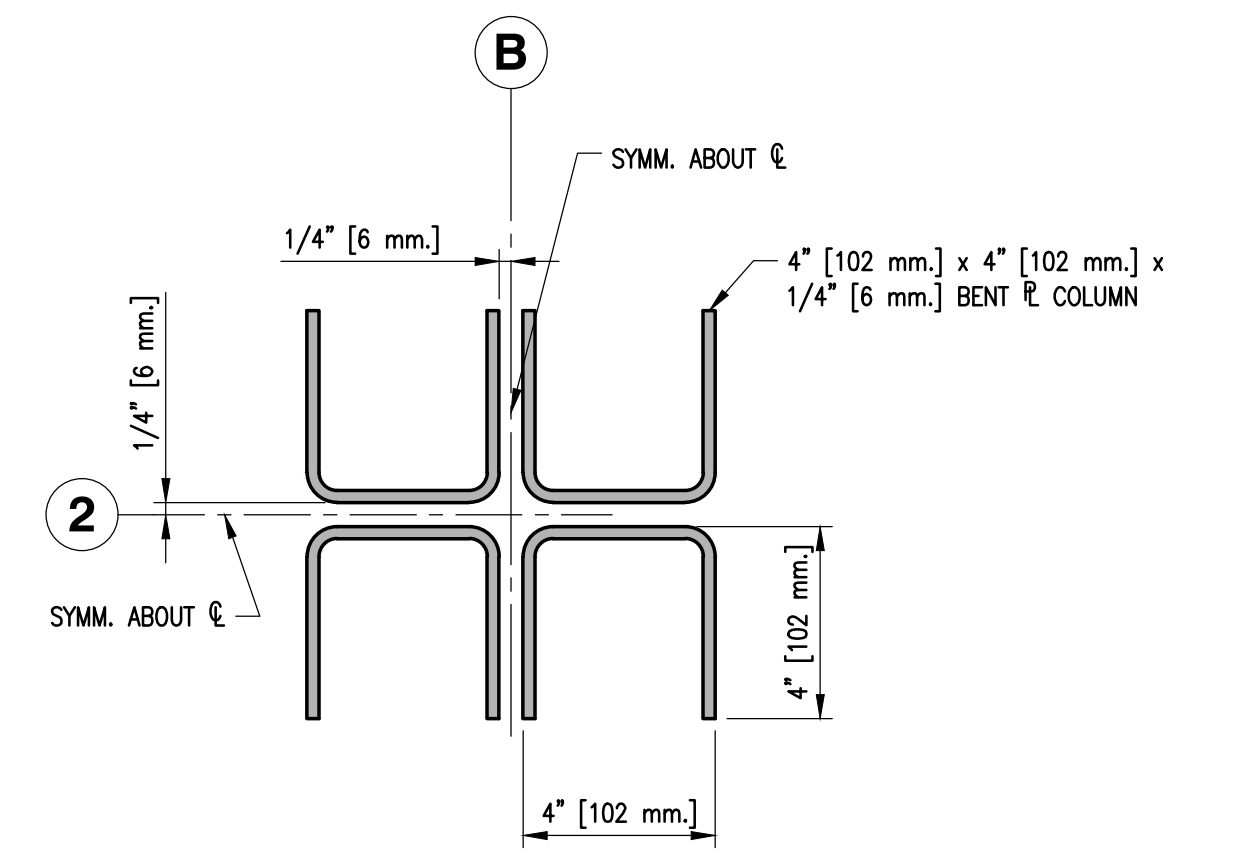
**COLUMN PLAN**  
SCALE 1:64



**DETAIL 2**  
SCALE 1:4  
SH4



**DETAIL 3**  
SCALE 1:4  
SH4



**DETAIL 4**  
SCALE 1:4  
SH4

1. FOR GENERAL NOTES AND LEGEND REFER TO DRAWING 4-30-18-SF SH1.

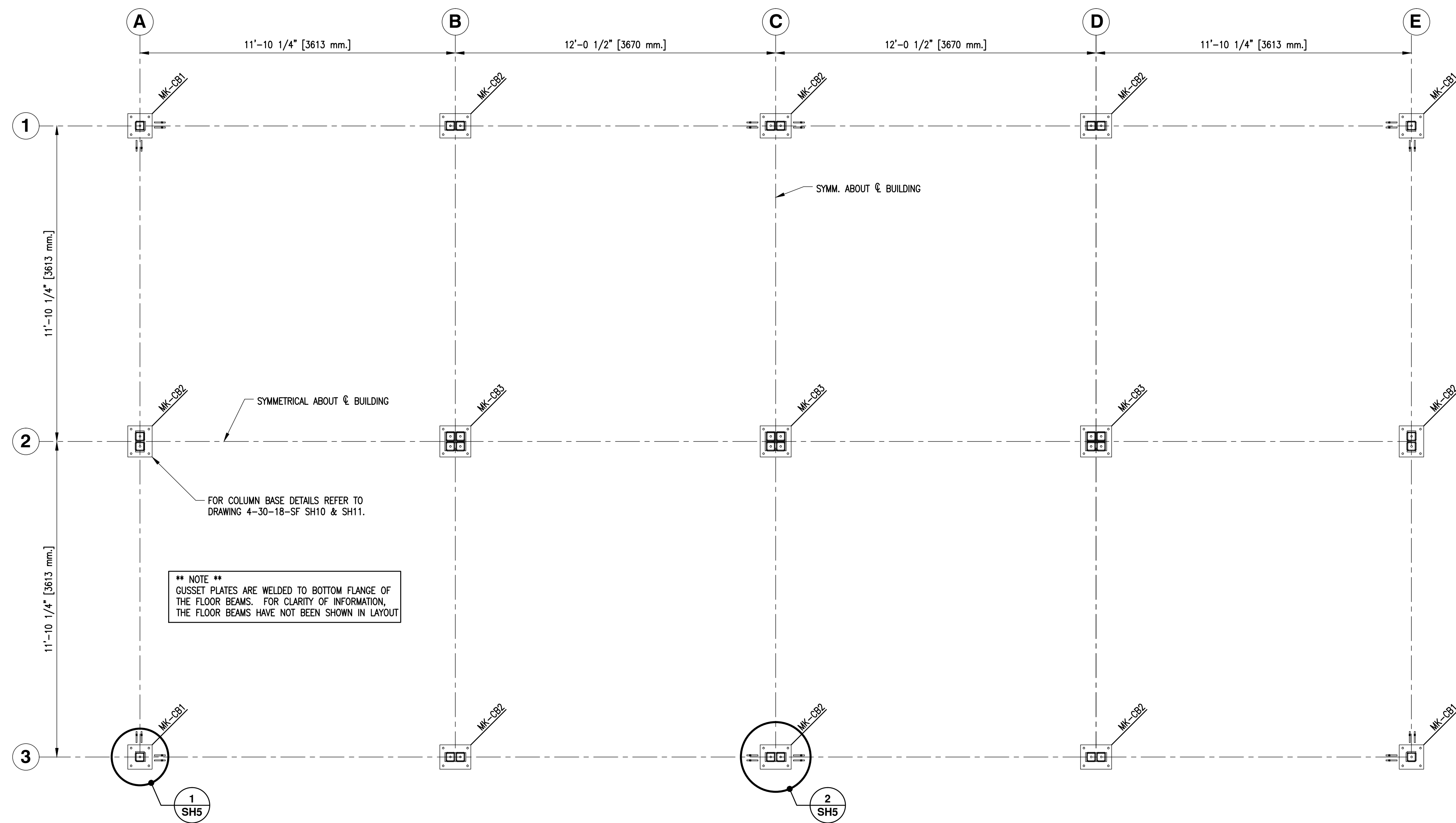
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<b>FISHERIES AND OCEANS CANADA</b> REAL PROPERTY, SAFETY & SECURITY	
<b>PREFABRICATED BUILDING</b> <b>MODEL 24X48-S1</b> <b>STRUCTURAL ALUMINUM FRAME</b> <b>COLUMN PLAN AND DETAILS</b>	SCALE AS NOTED DATE MAY 11, 2015 DWG. NUMBER <b>4-30-18-SF</b> SHEET <b>4 of 11</b> SIZE <b>D</b>
DESIGNED M. Liang DRAWN G. Reichardt CHECKED RECOMMENDED APPROVED APPROVED	NO.    DATE    REVISIONS

DWG. NO.    DRAWING REFERENCES

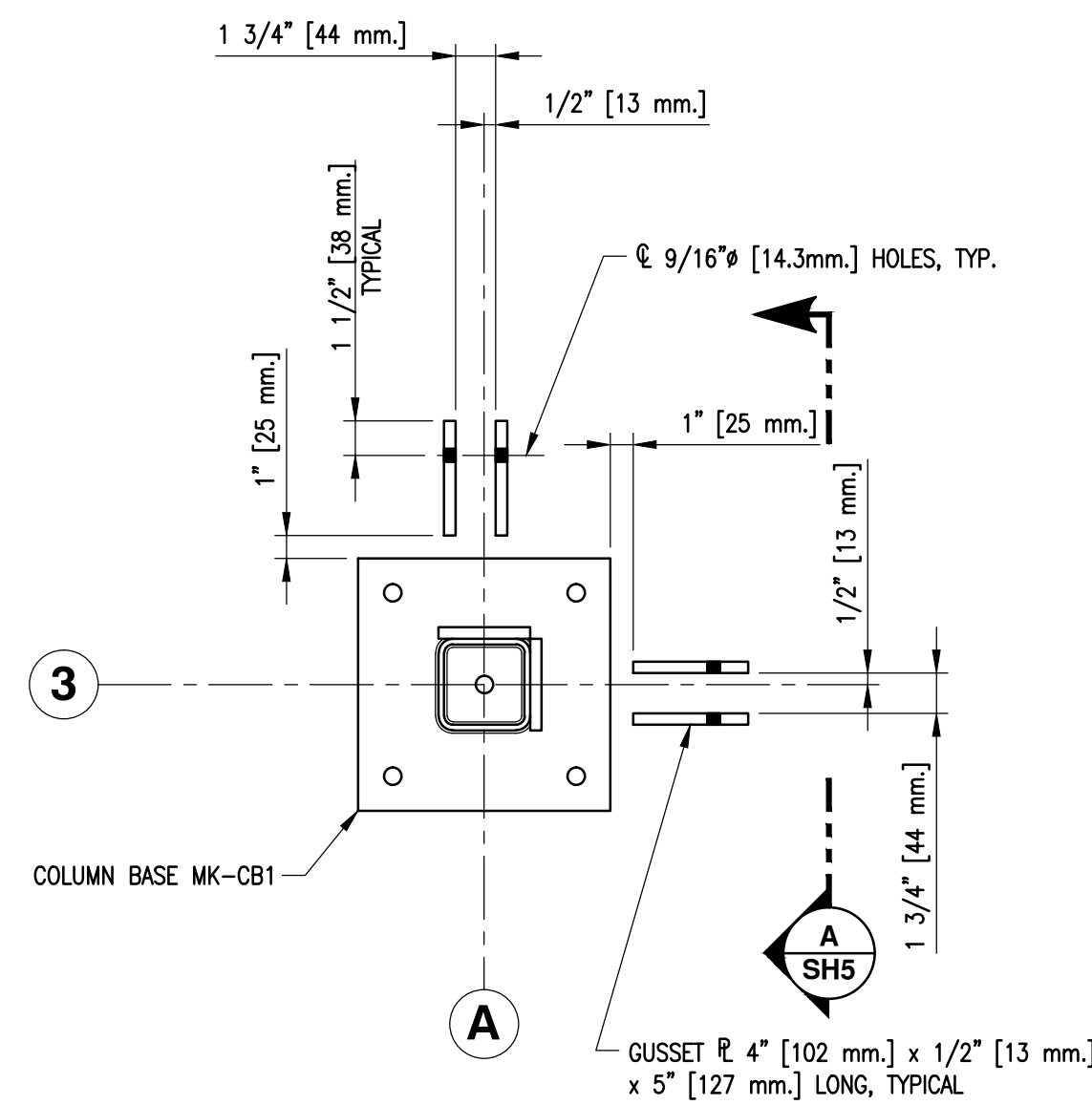
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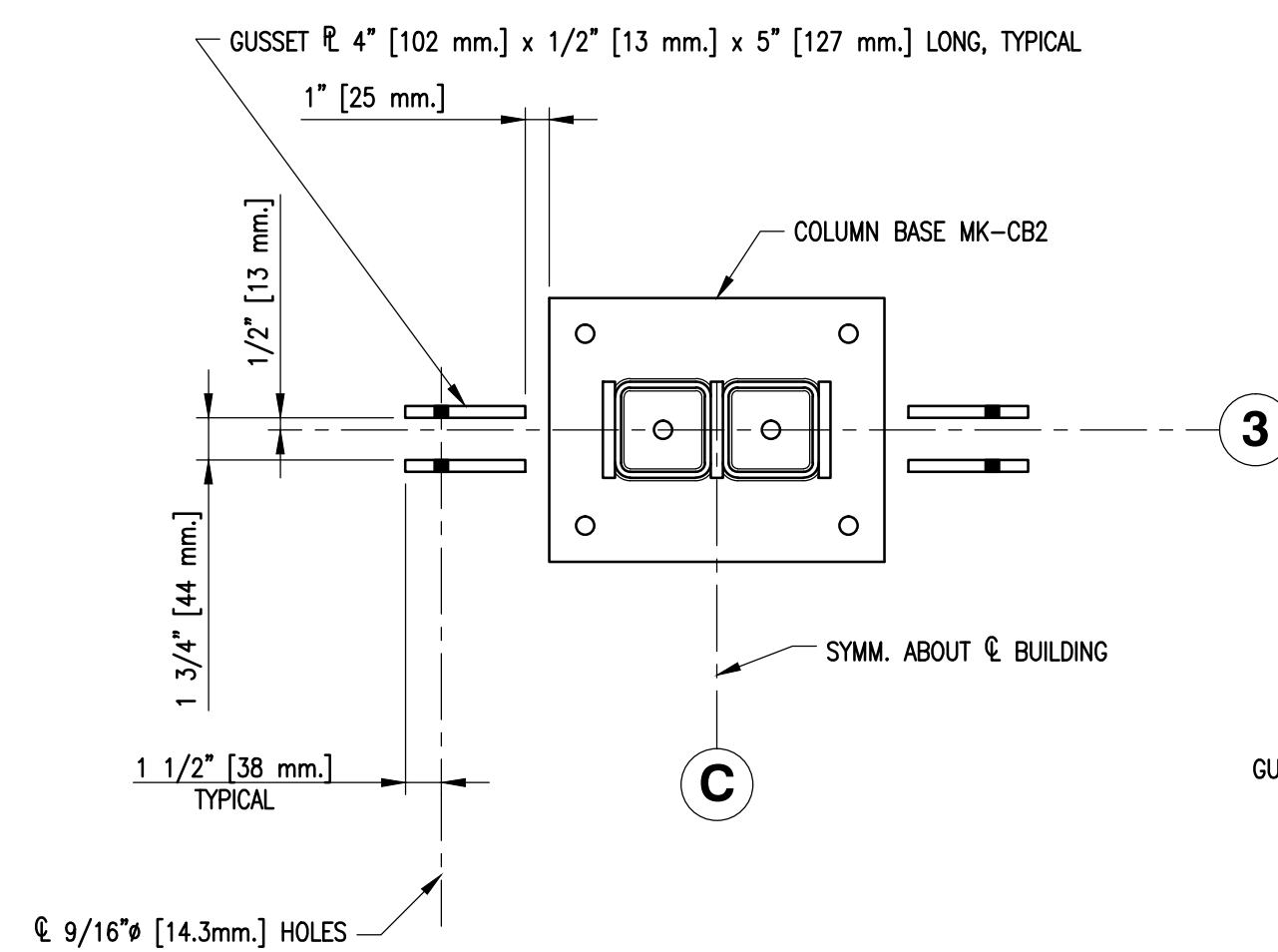


**COLUMN BASES AND CABLE BRACING GUSSET PLATE PLAN**

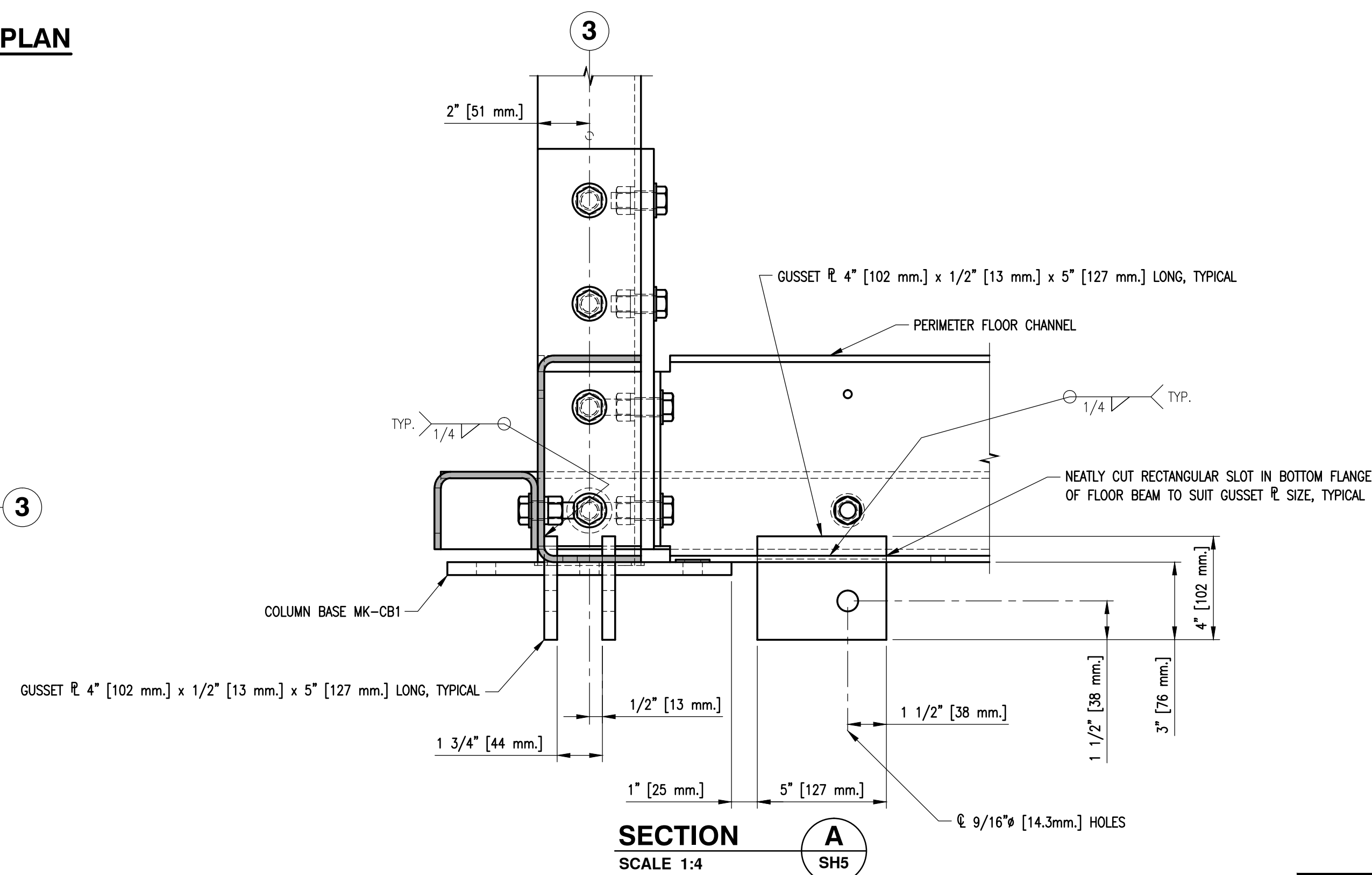
SCALE 1:32



**DETAIL 1**  
SCALE 1:8  
SH5 (FOUR [4] LOCATIONS)



**DETAIL 2**  
SCALE 1:8  
SH5 (FOUR [4] LOCATIONS)

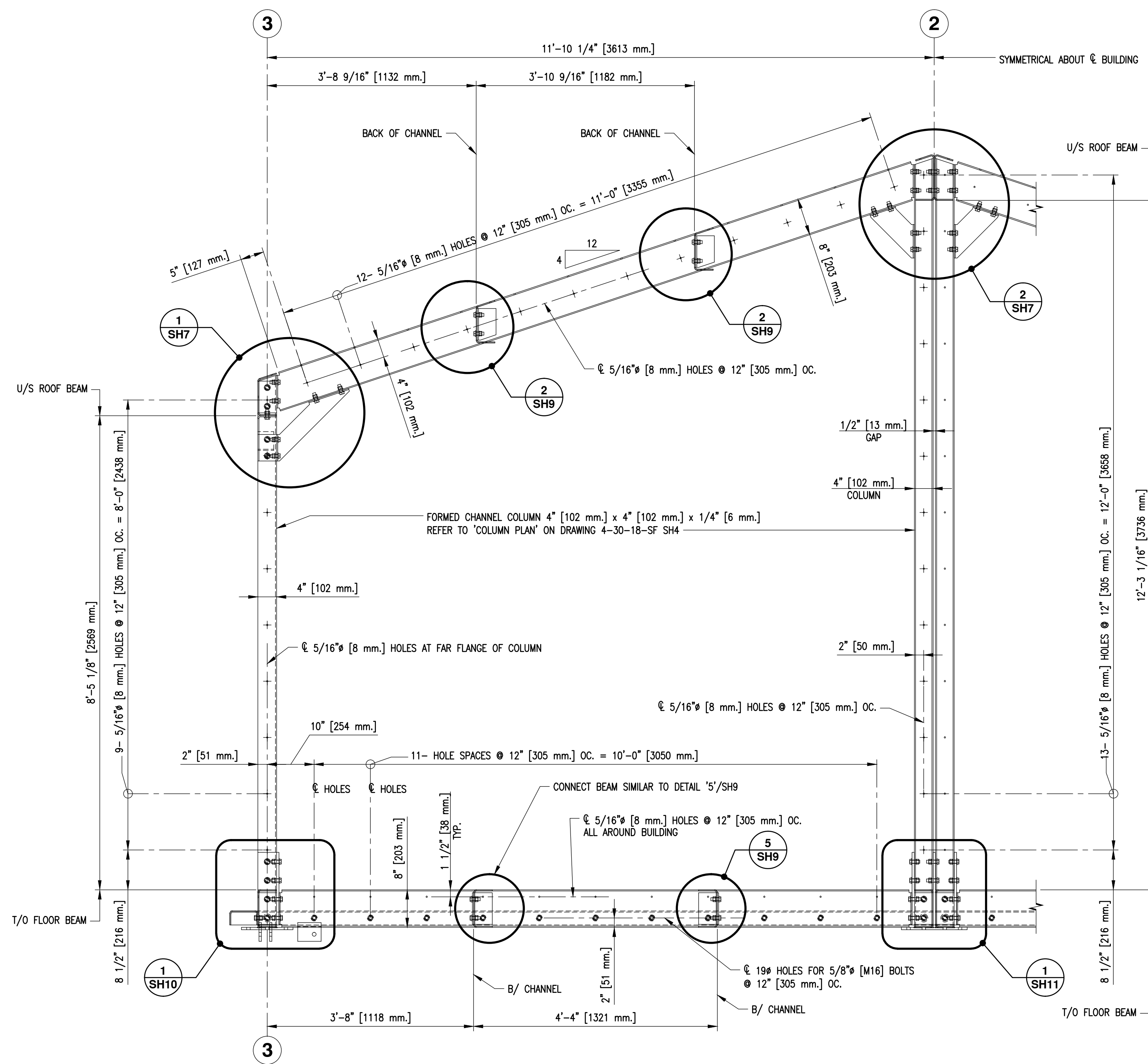


**TYPICAL GUSSET PLATE CONNECTIONS TO FLOOR BEAMS**  
SCALE 1:4  
SH5

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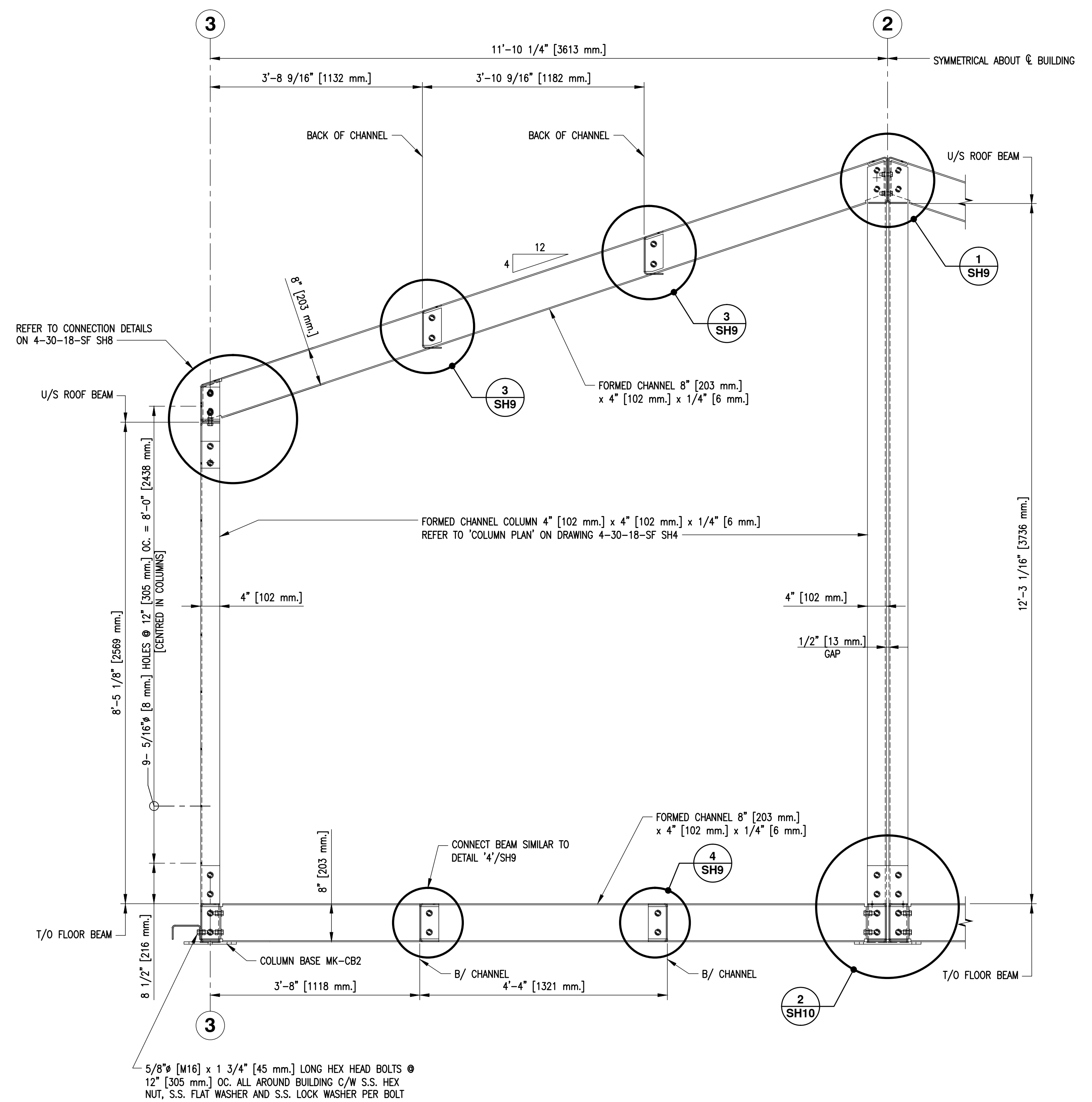
<p><b>FISHERIES AND OCEANS CANADA</b> REAL PROPERTY, SAFETY &amp; SECURITY</p>		DESIGNED M. Liang	SCALE AS NOTED
		DRAWN G. Reichardt	DATE MAY 11, 2015
<p><b>PREFABRICATED BUILDING MODEL 24X48-S1 STRUCTURAL ALUMINUM FRAME COLUMN BASES PLAN AND CABLE BRACING GUSSET PLATE PLAN SECTION AND DETAILS</b></p>		CHECKED	DWG. NUMBER 4-30-18-SF
		RECOMMENDED	SHEET 5 of 11
		APPROVED	SIZE D
<p>DWG. NO. DRAWING REFERENCES</p>		<p>NO. DATE REVISIONS</p>	<p>REVISION</p>





**GABLE END**

**HALF CROSS SECTION A** [NEAR BAYLINE 'A', 'E']  
SCALE 1:16 SH2, SH3.



**INTERMEDIATE LOCATIONS**

**HALF CROSS SECTION B** [NEAR BAYLINE 'B', 'C', 'D']  
SCALE 1:16 SH2, SH3.

1. FOR GENERAL NOTES AND LEGEND REFER TO DRAWING 4-30-18-SF SH1.

DESIGNED  
M. Liang  
DRAWN  
G. Reichardt  
CHECKED  
RECOMMENDED  
APPROVED  
APPROVED

**PREFABRICATED BUILDING  
MODEL 24X48-S1  
STRUCTURAL ALUMINUM FRAME  
HALF CROSS SECTIONS**

SCALE  
AS NOTED  
DATE  
MAY 11, 2015  
DWG. NUMBER  
4-30-18-SF  
SHEET  
6 of 11  
SIZE  
D  
REVISION

DWG. NO. DRAWING REFERENCES

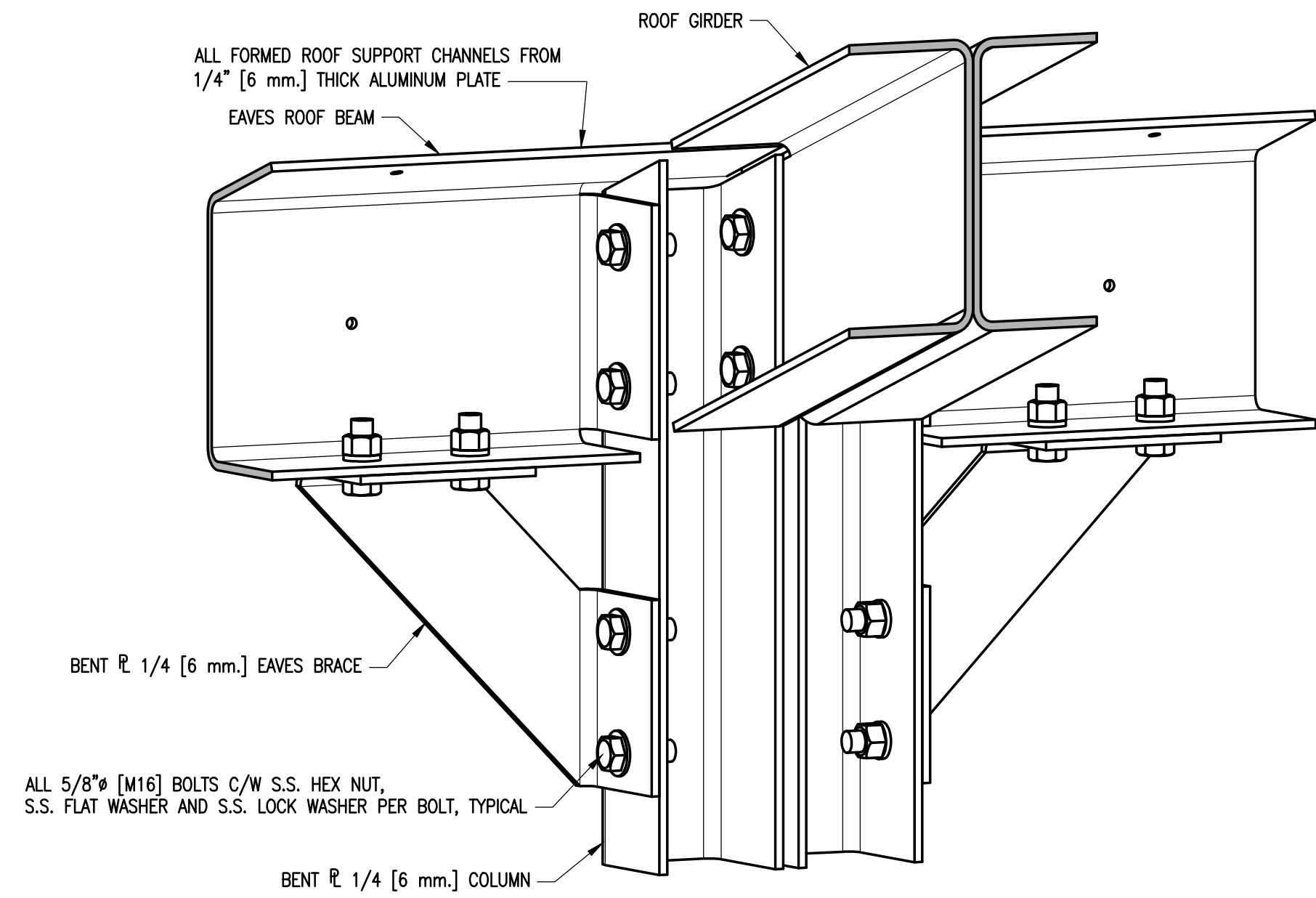
NOTES

NO. DATE

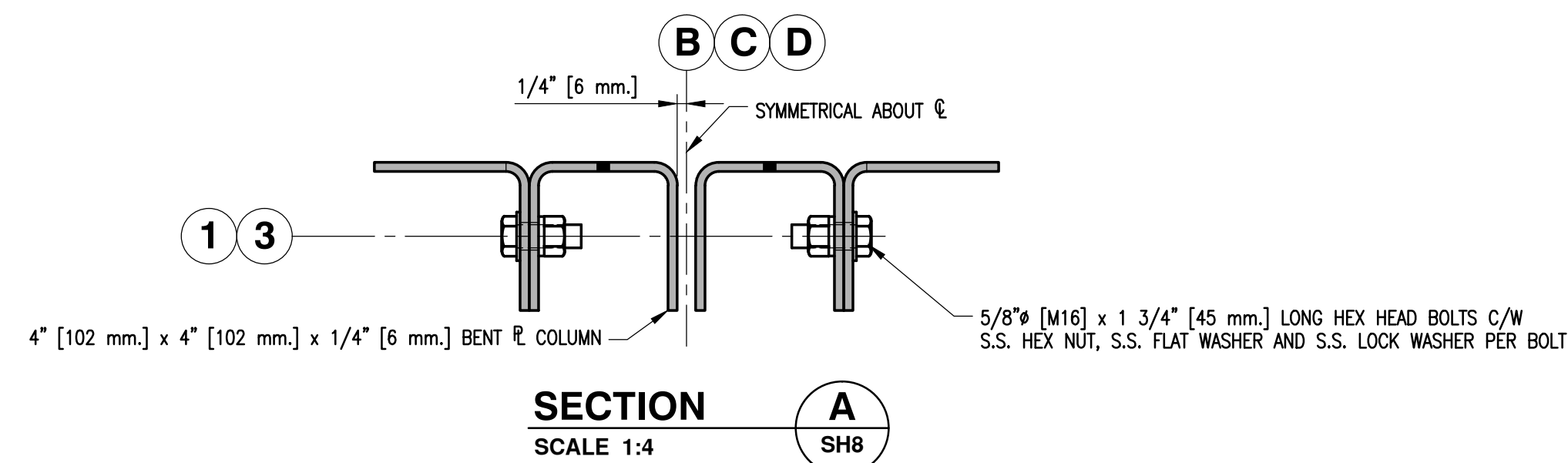
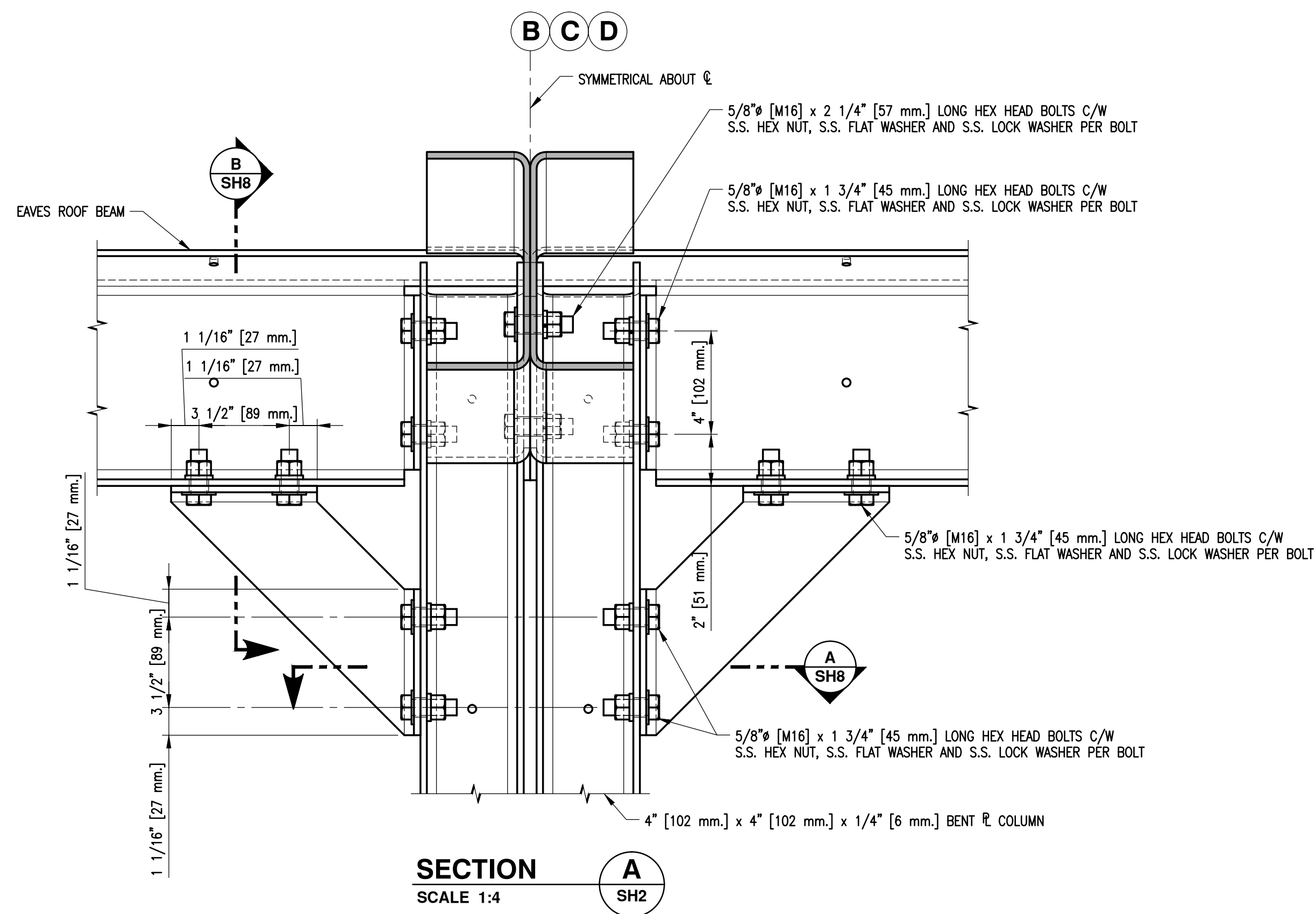
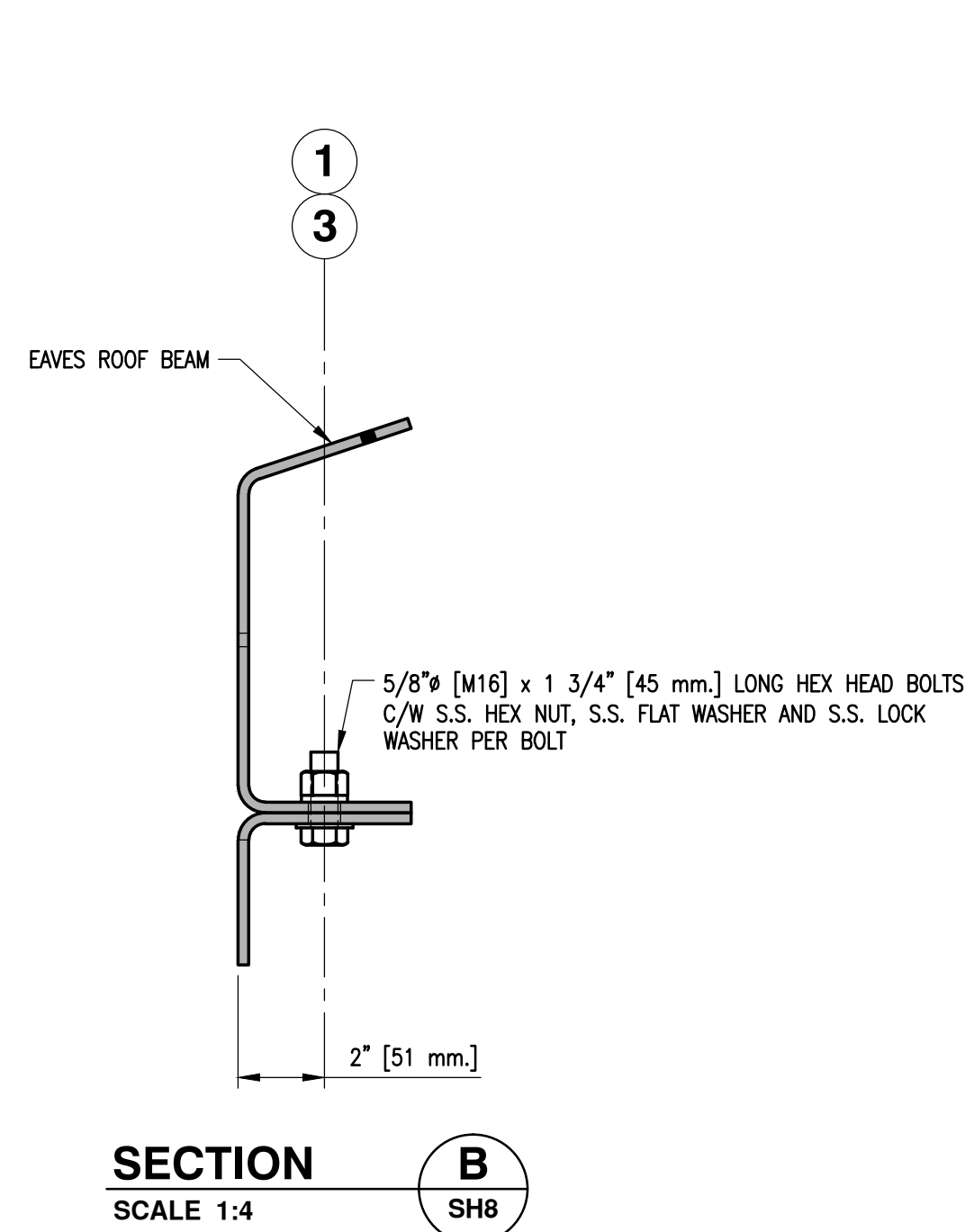
REVISIONS







**INTERIOR 3D VIEW AT ROOF EAVES**



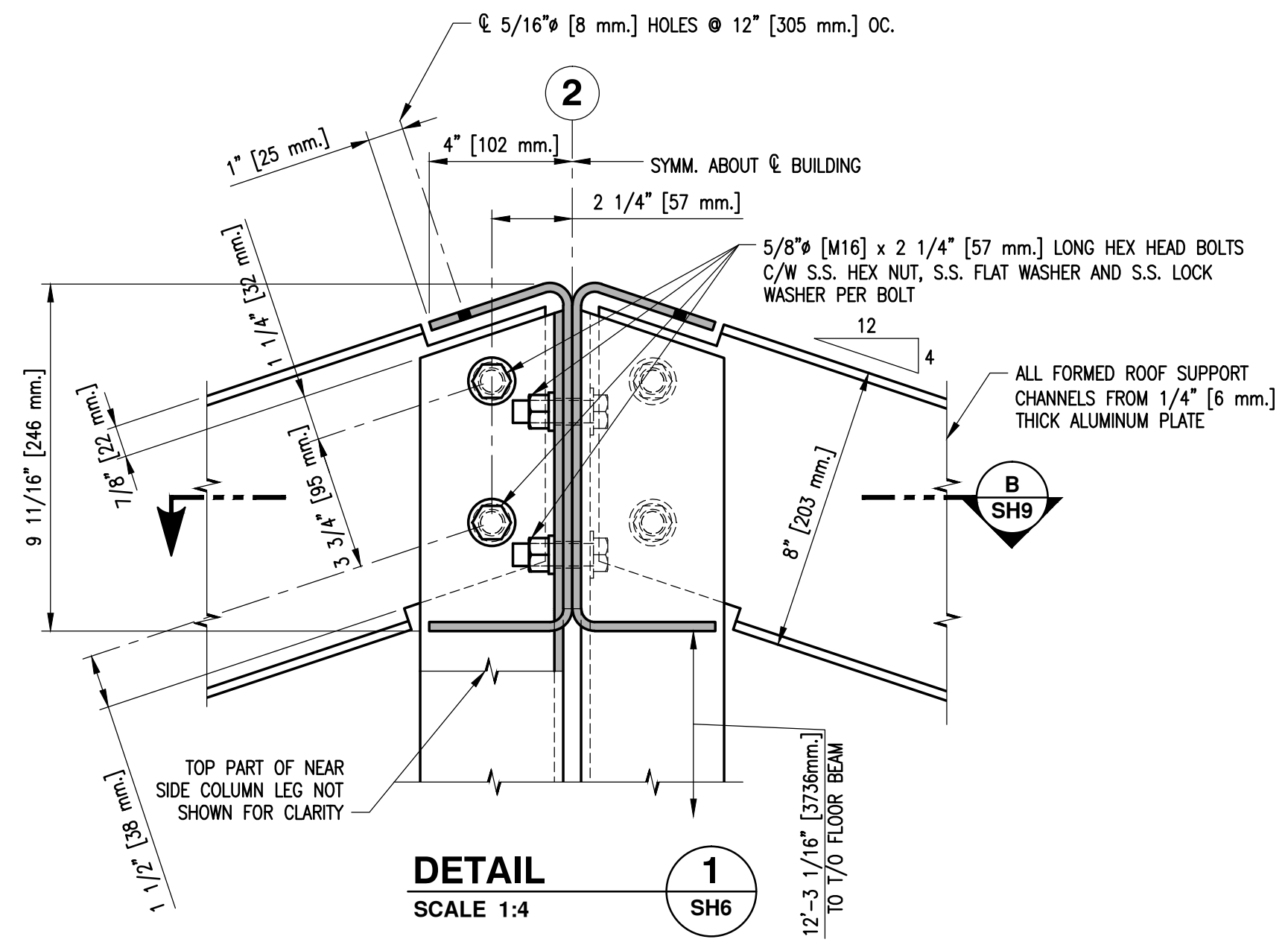
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**\*\* IMPORTANT \*\***  
FOR COLD FORMING OF ALUMINUM PLATE AND MINIMUM RECOMMENDED BENDING RADI REFER TO THE GENERAL NOTES AND THE CONTRACT SPECIFICATIONS.

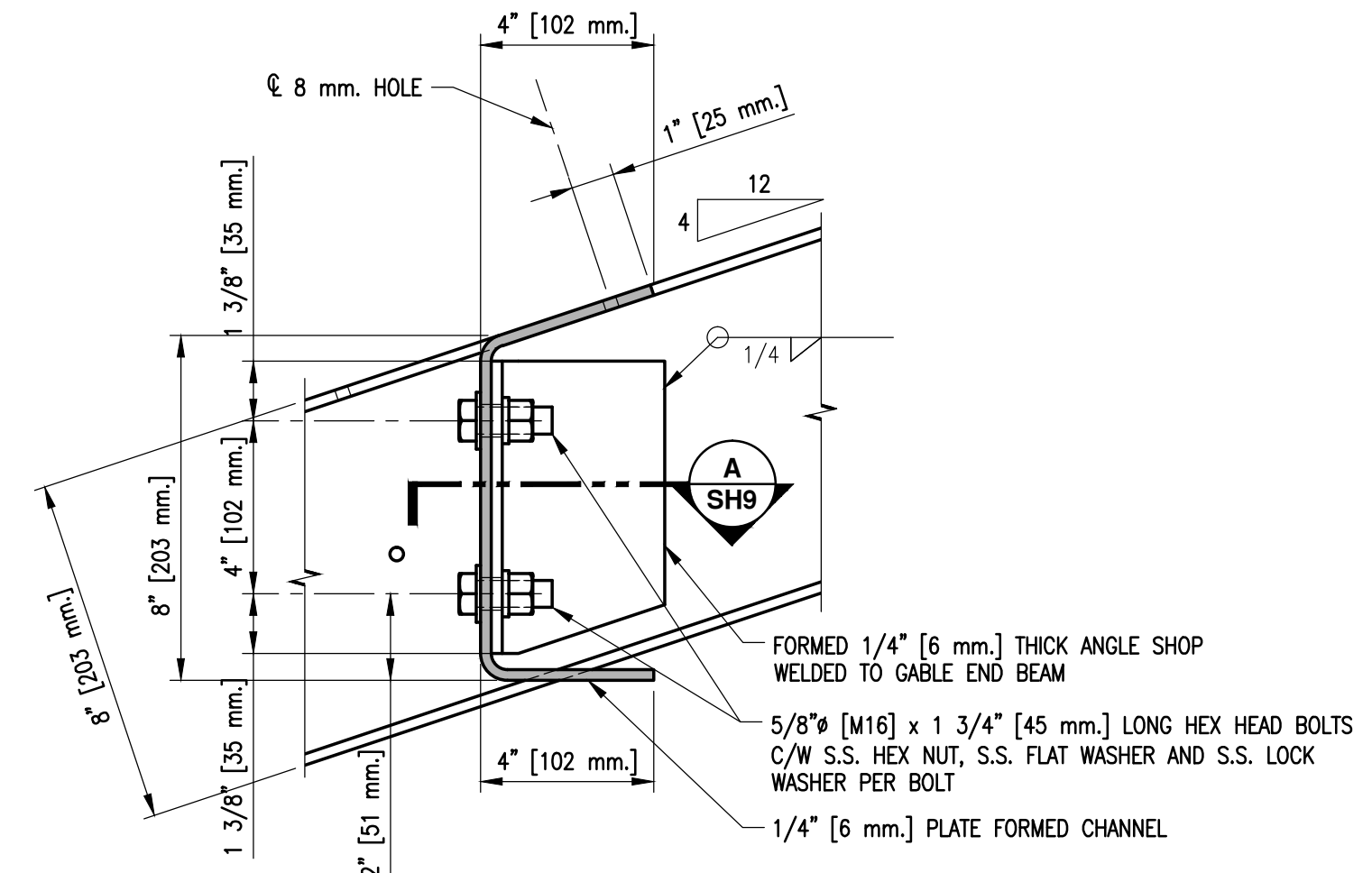
<b>FISHERIES AND OCEANS CANADA</b> REAL PROPERTY, SAFETY & SECURITY	
<b>PREFABRICATED BUILDING</b> <b>MODEL 24X48-S1</b> <b>STRUCTURAL ALUMINUM FRAME</b> <b>KNEE BRACING AND</b> <b>ROOF BEAM CONNECTION DETAILS</b> <b>SHEET 2 OF 2</b>	SCALE AS NOTED DATE MAY 11, 2015 DWG. NUMBER 4-30-18-SF SHEET <b>8 of 11</b> SIZE <b>D</b> REVISION

DWG. NO.	DRAWING REFERENCES	NOTES	NO.	DATE	REVISIONS

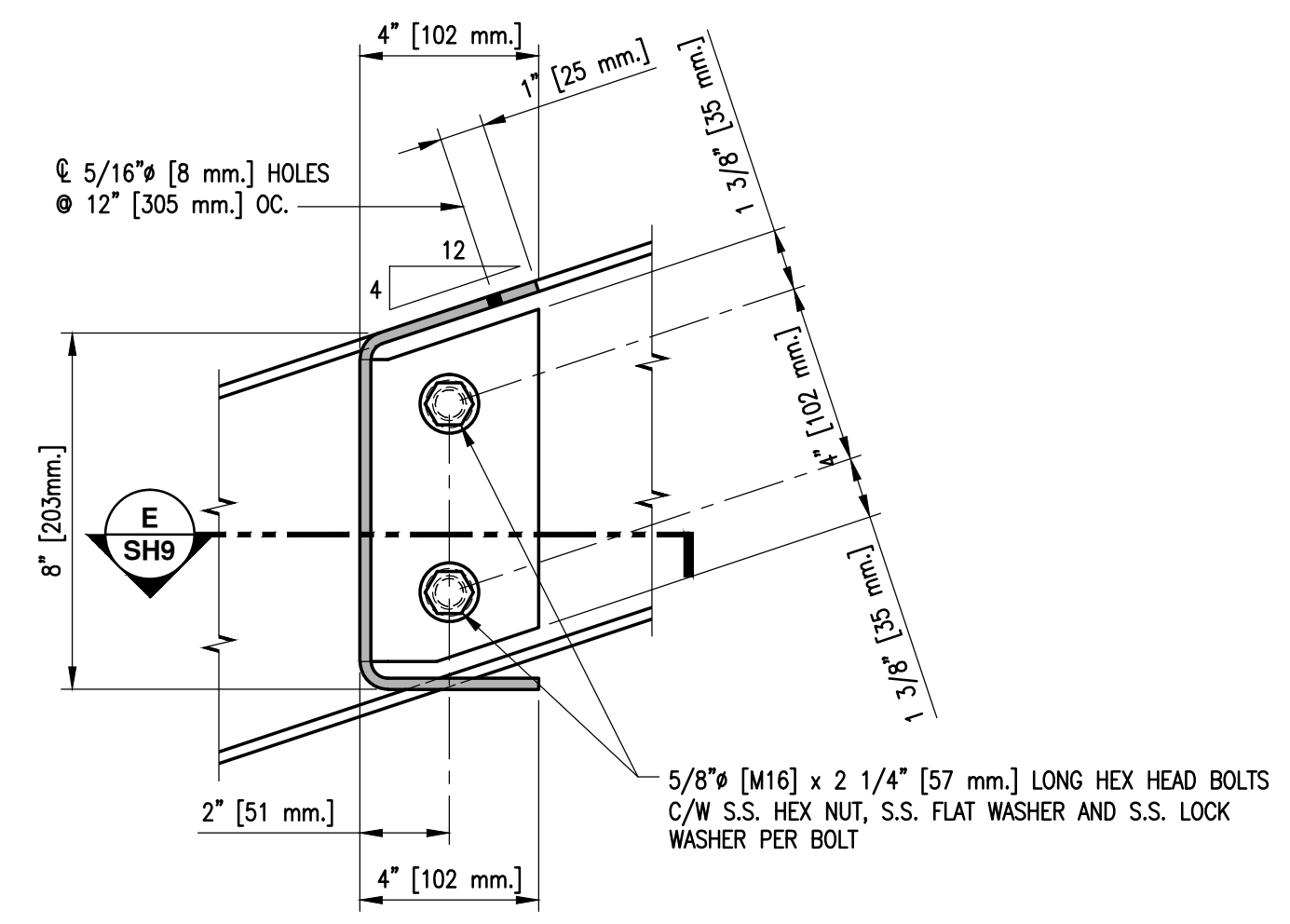




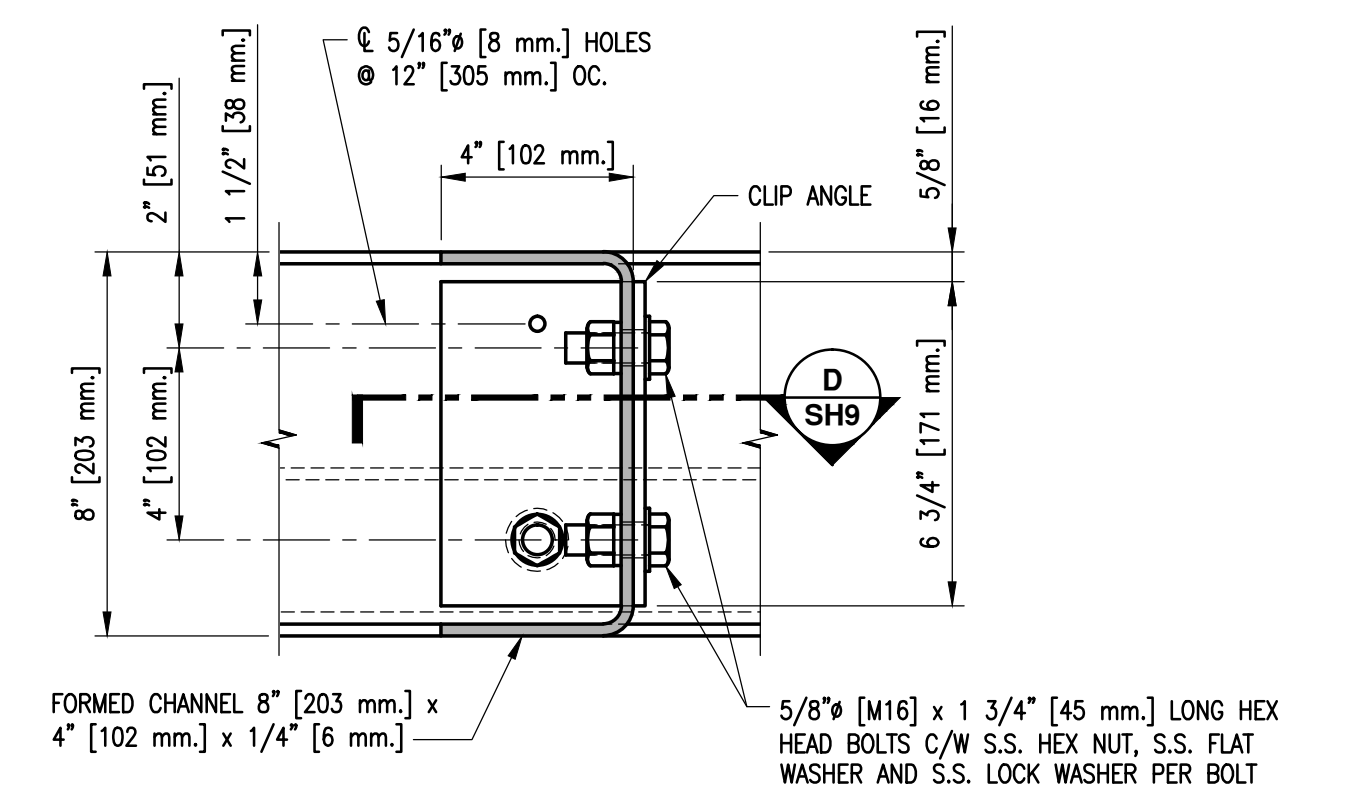
**DETAIL 1**  
SCALE 1:4  
SH6



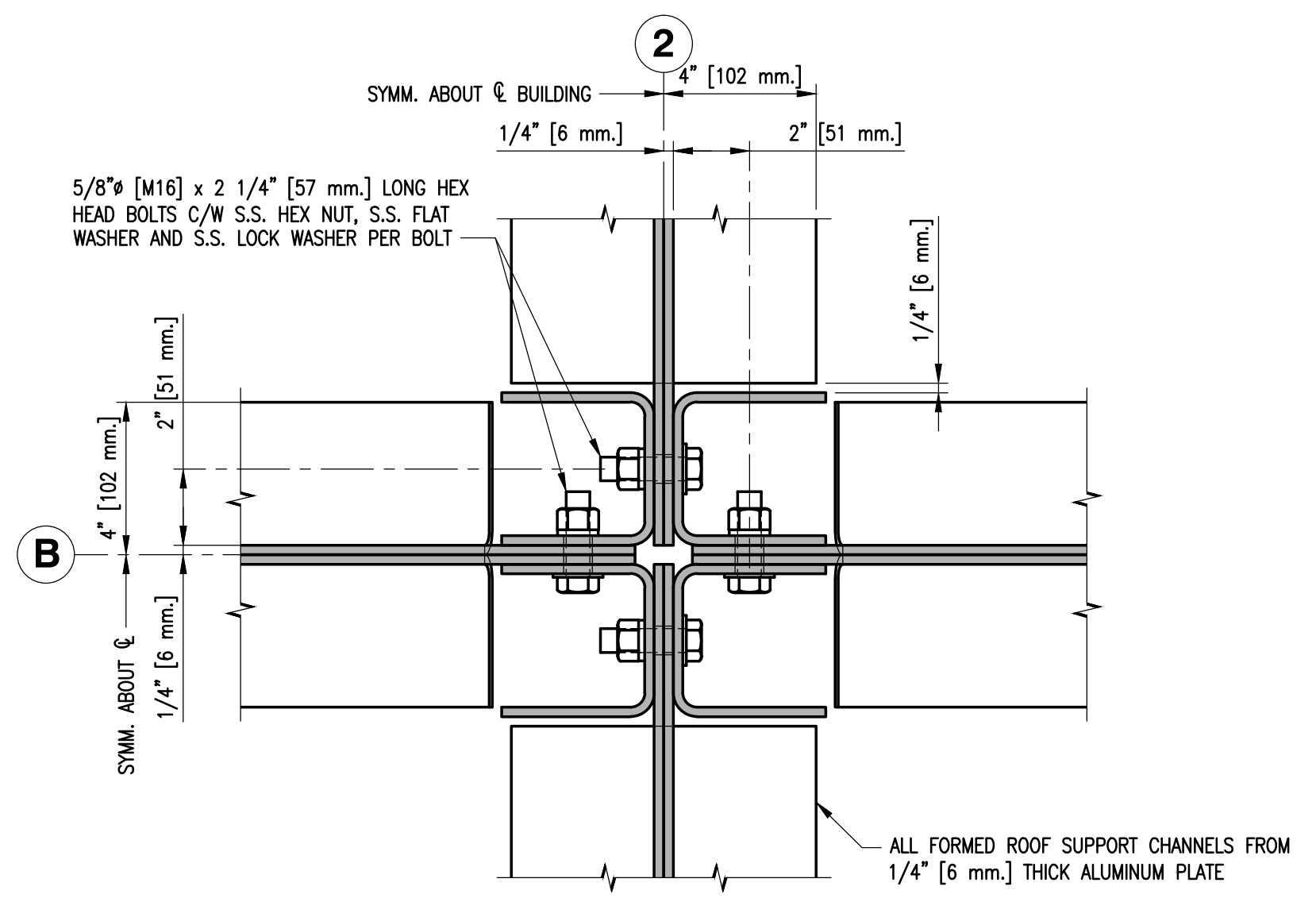
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SCALE 1:4  
SH6



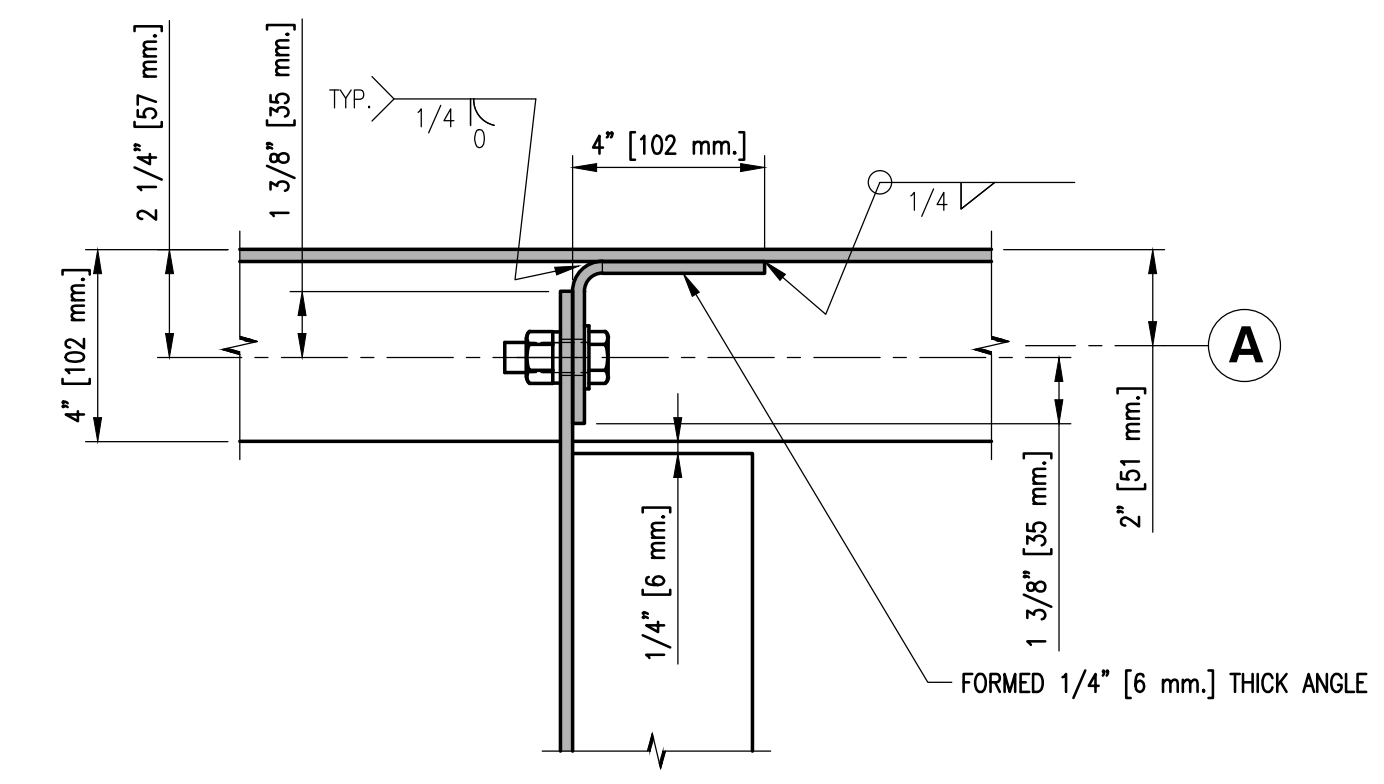
**DETAIL 3**  
SCALE 1:4  
SH6



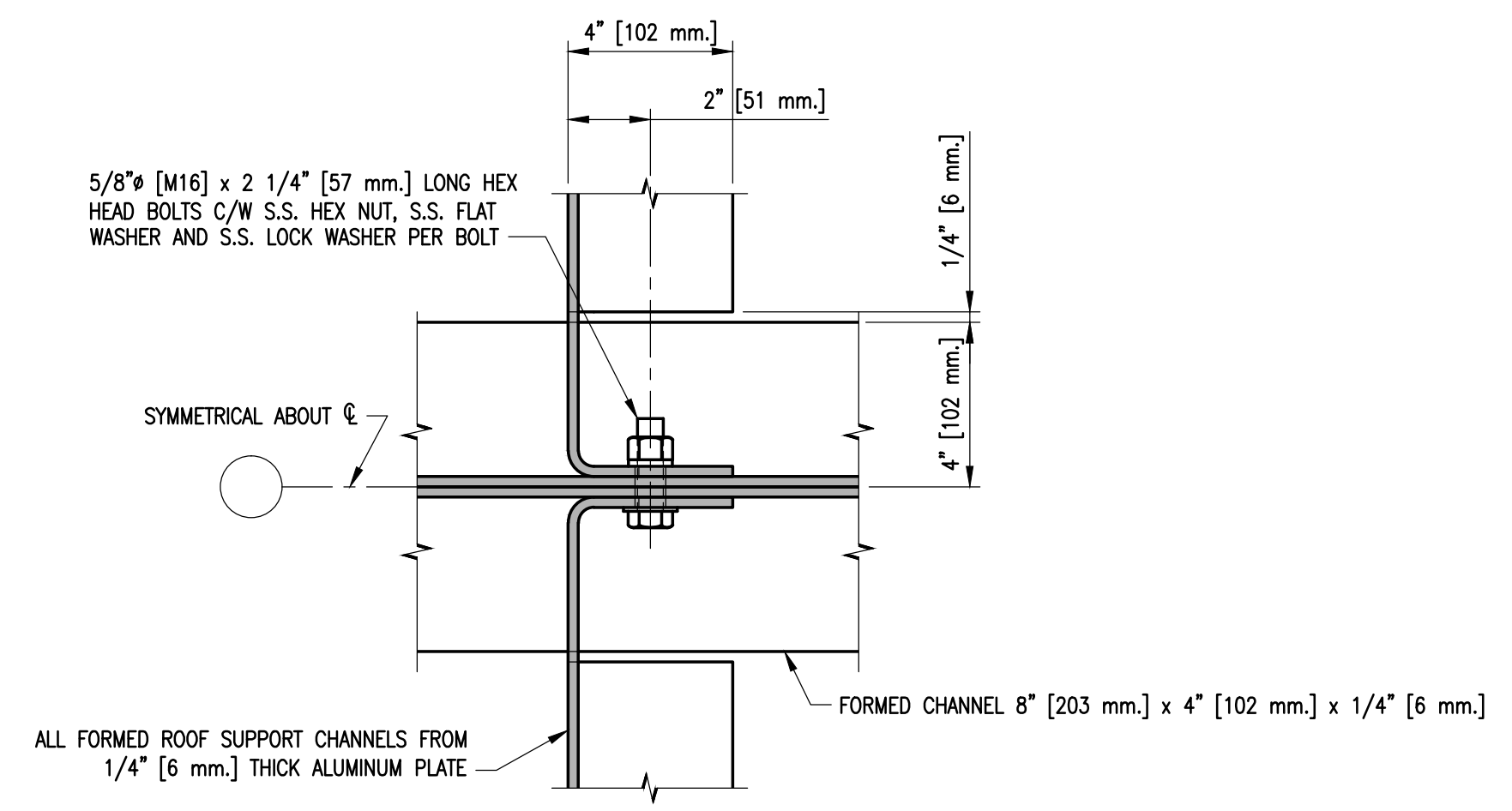
**DETAIL 5**  
SCALE 1:4  
SH6



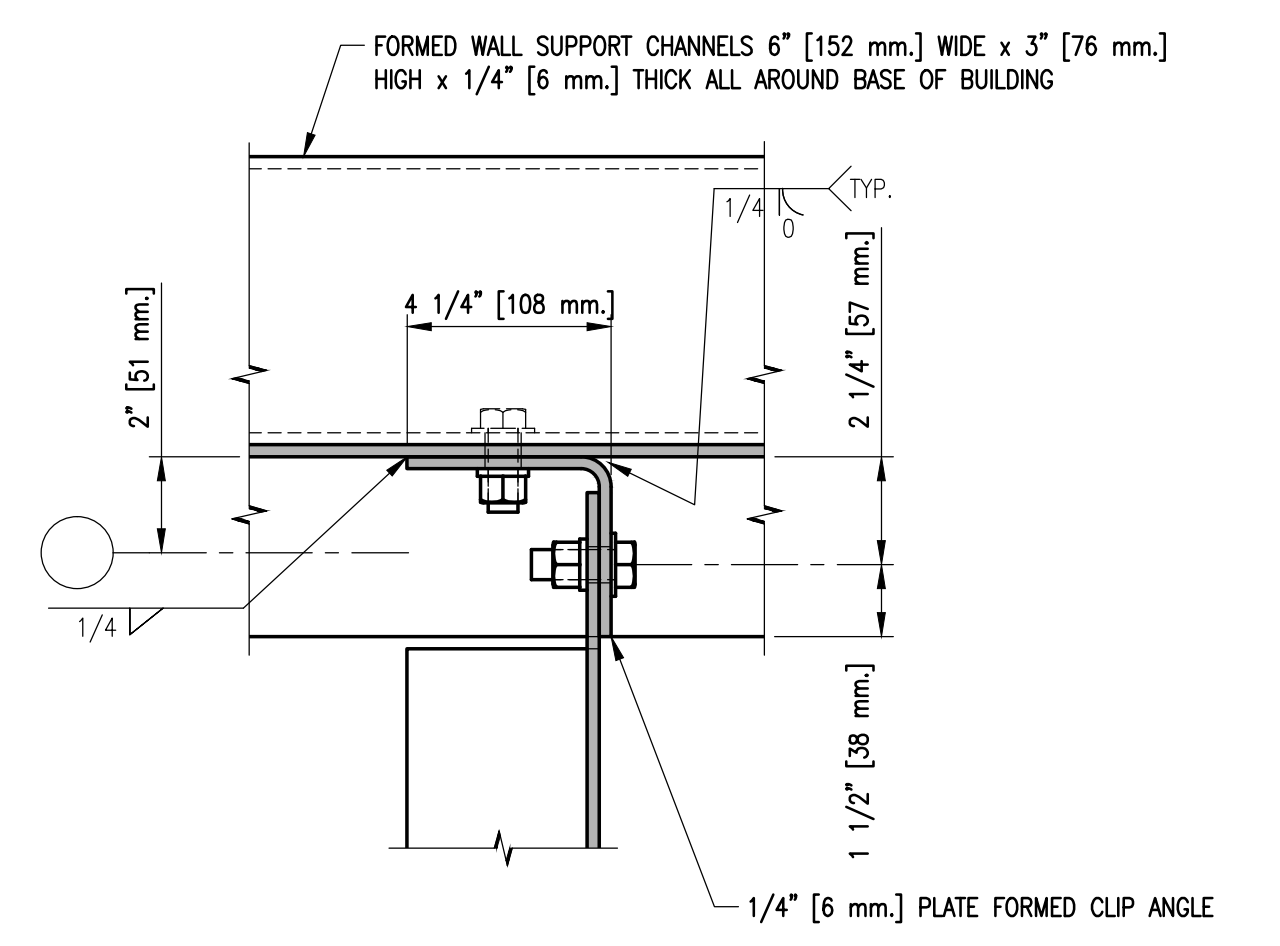
**SECTION B**  
SCALE 1:4  
SH9



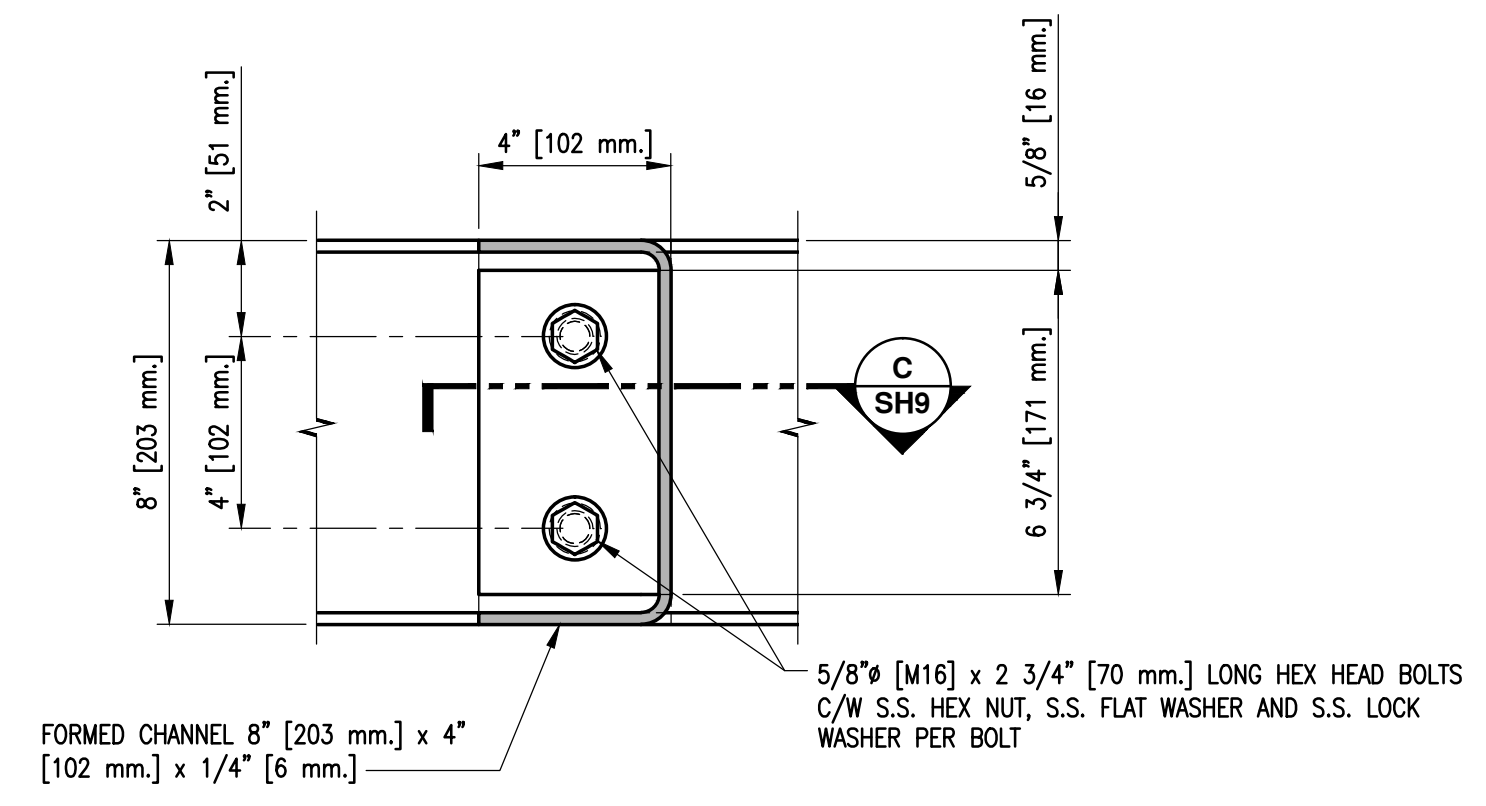
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SCALE 1:4  
SH9



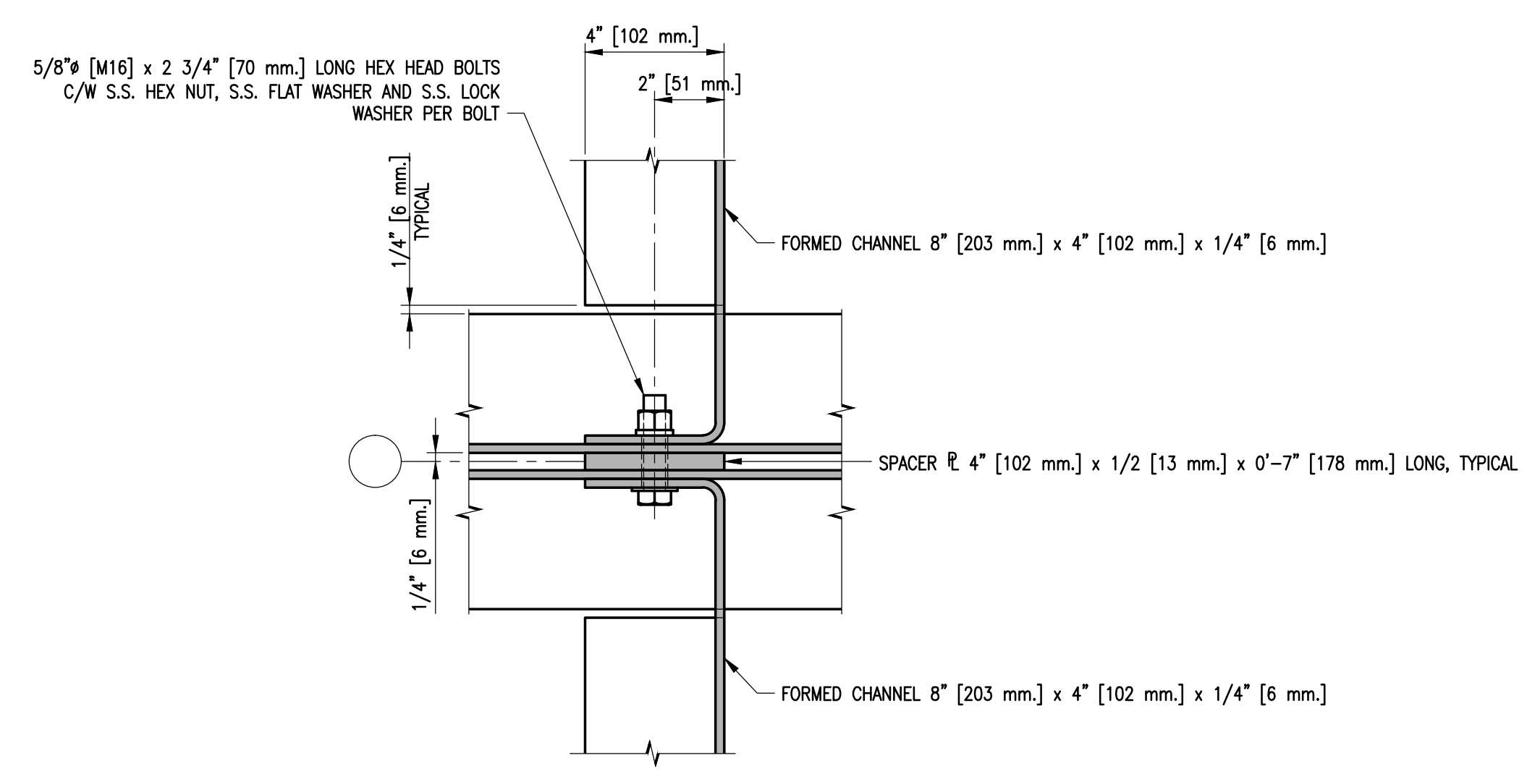
**SECTION E**  
SCALE 1:4  
SH9



**SECTION D**  
SCALE 1:4  
SH9



**DETAIL 4**  
SCALE 1:4  
SH6



**SECTION C**  
SCALE 1:4  
SH9

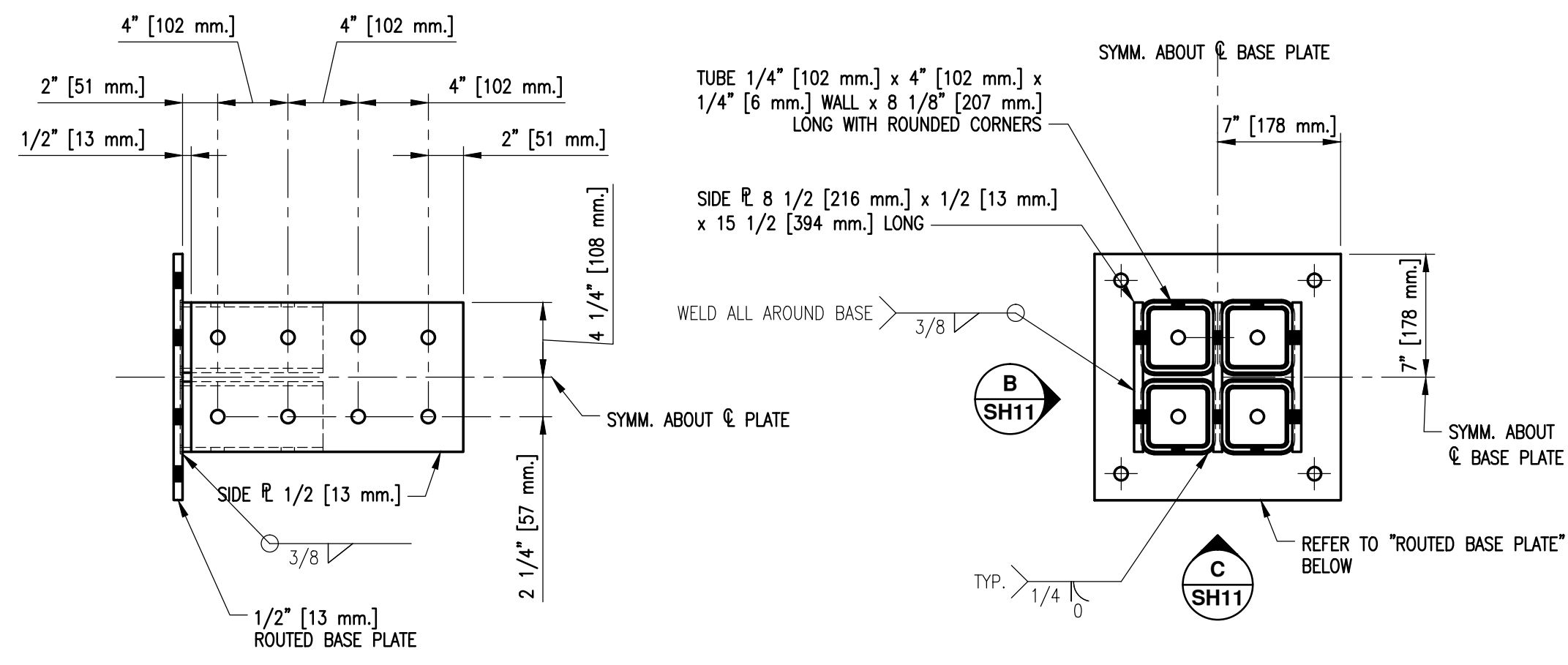
1. FOR GENERAL NOTES AND LEGEND REFER TO DRAWING 4-30-18-SF SH1.

<b>FISHERIES AND OCEANS CANADA</b> REAL PROPERTY, SAFETY & SECURITY	
<b>PREFABRICATED BUILDING MODEL 24X48-S1 STRUCTURAL ALUMINUM FRAME ROOF FRAMING AND FLOOR FRAMING SECTIONS AND DETAILS</b>	SCALE AS NOTED DATE MAY 11, 2015 DWG. NUMBER <b>4-30-18-SF</b> SHEET <b>9 of 11</b> SIZE <b>D</b>
DESIGNED M. Liang DRAWN G. Reichardt CHECKED RECOMMENDED APPROVED	REVISION

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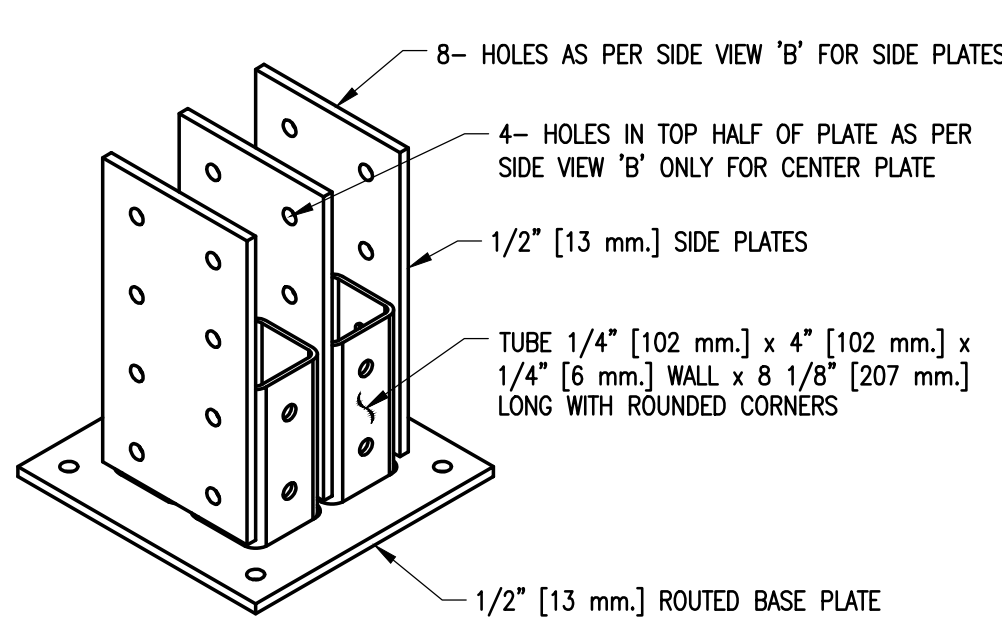




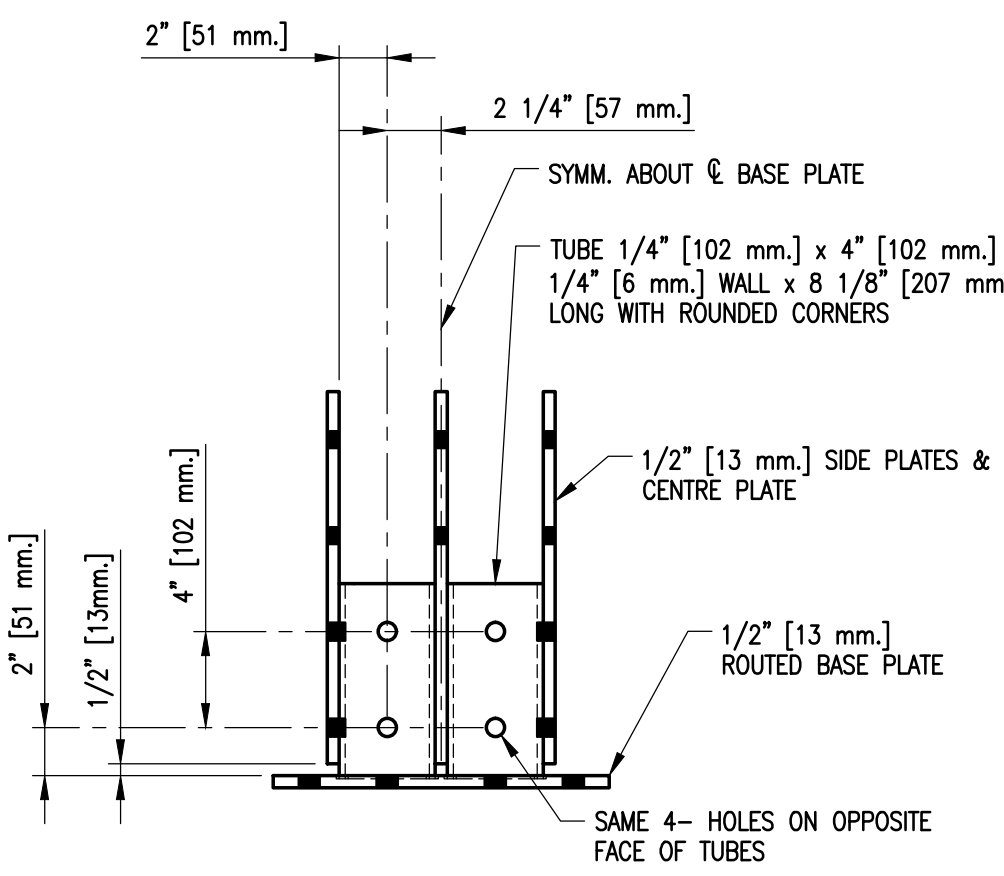
**SIDE VIEW** B SH11

**PLAN**

ALL HOLES 3/4" [19 mm] Ø



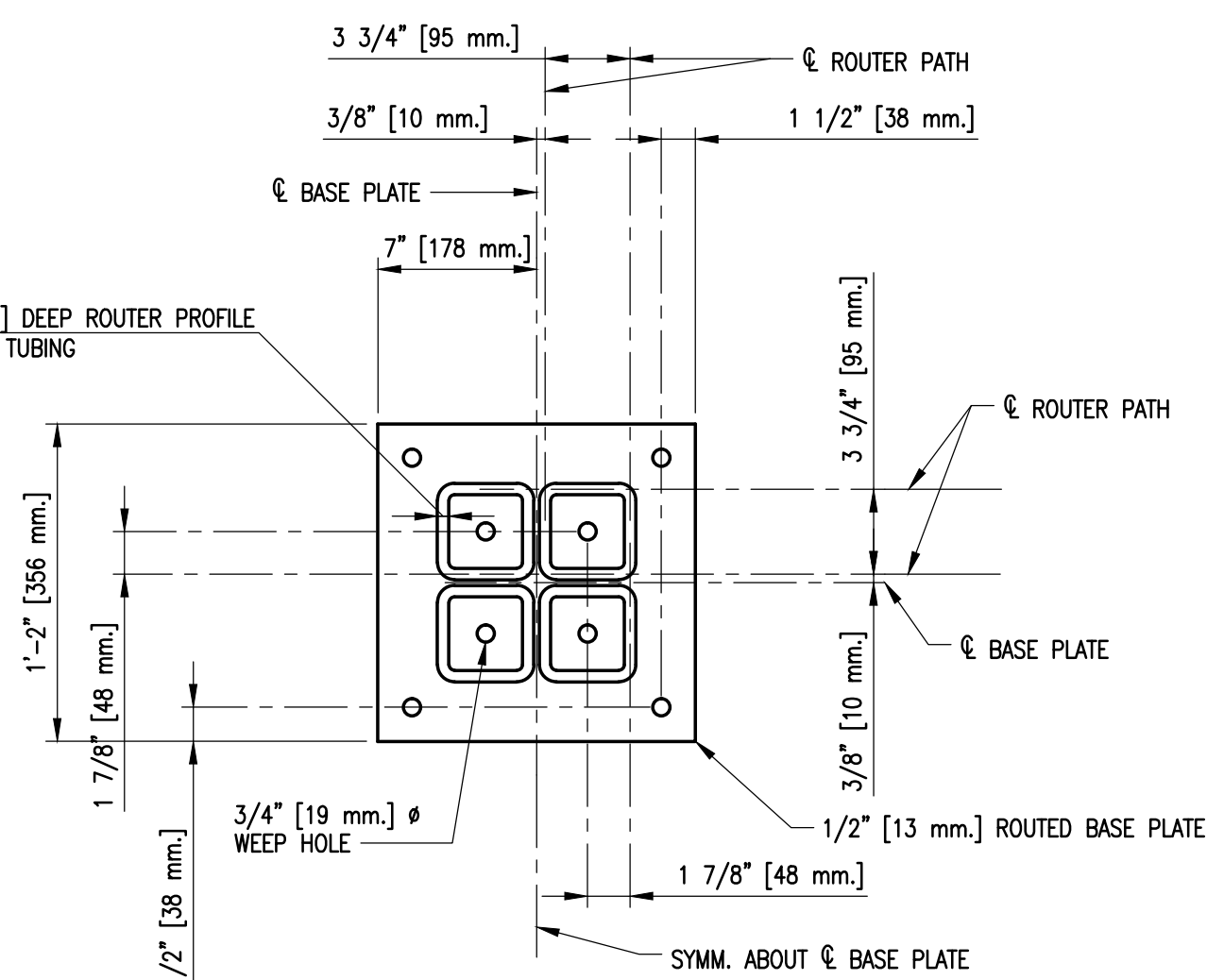
**3D VIEW**



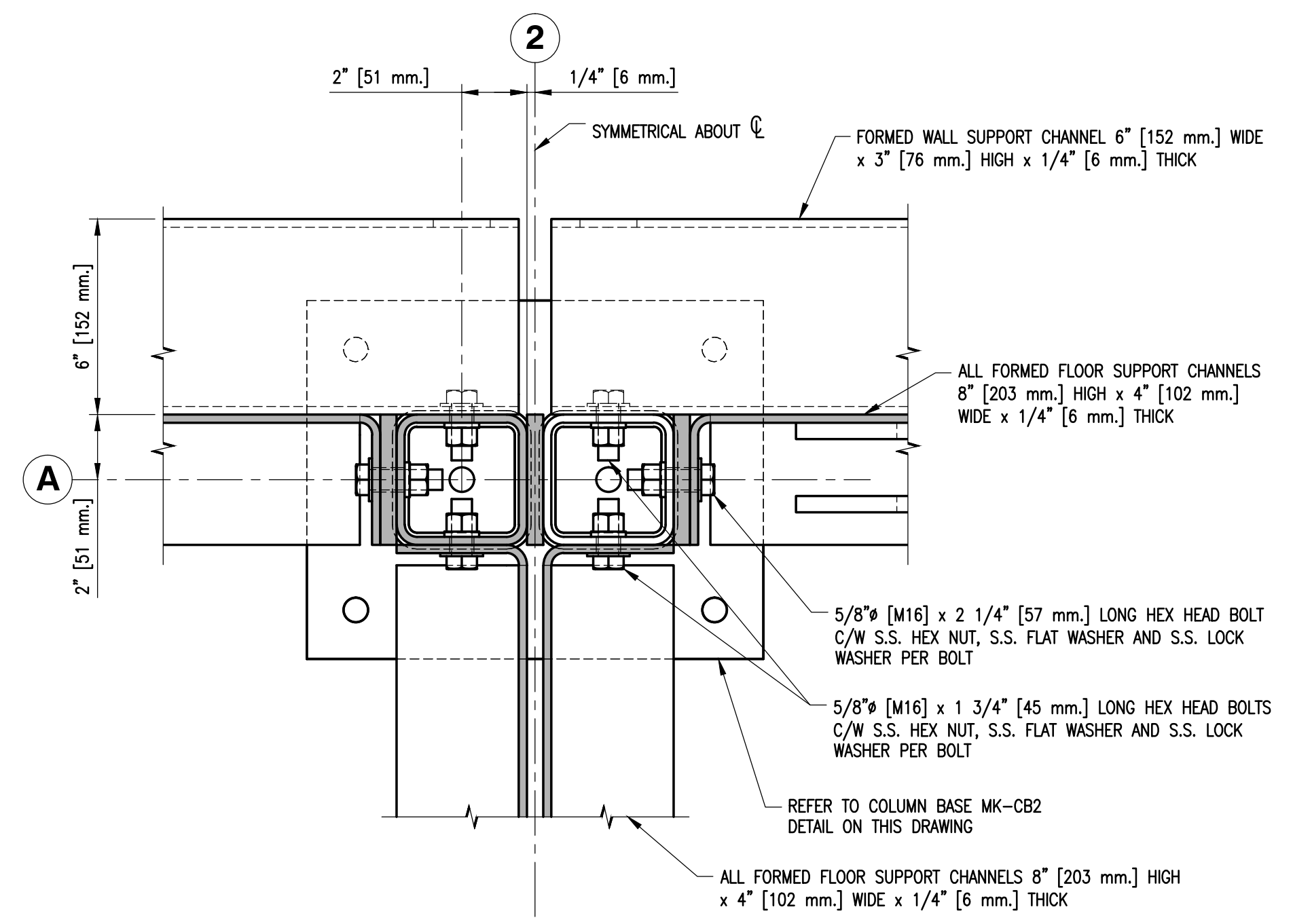
**SIDE VIEW** C SH11

**MAKE THREE [3] ALUMINUM COLUMN BASES MK-CB3**  
SCALE 1:8

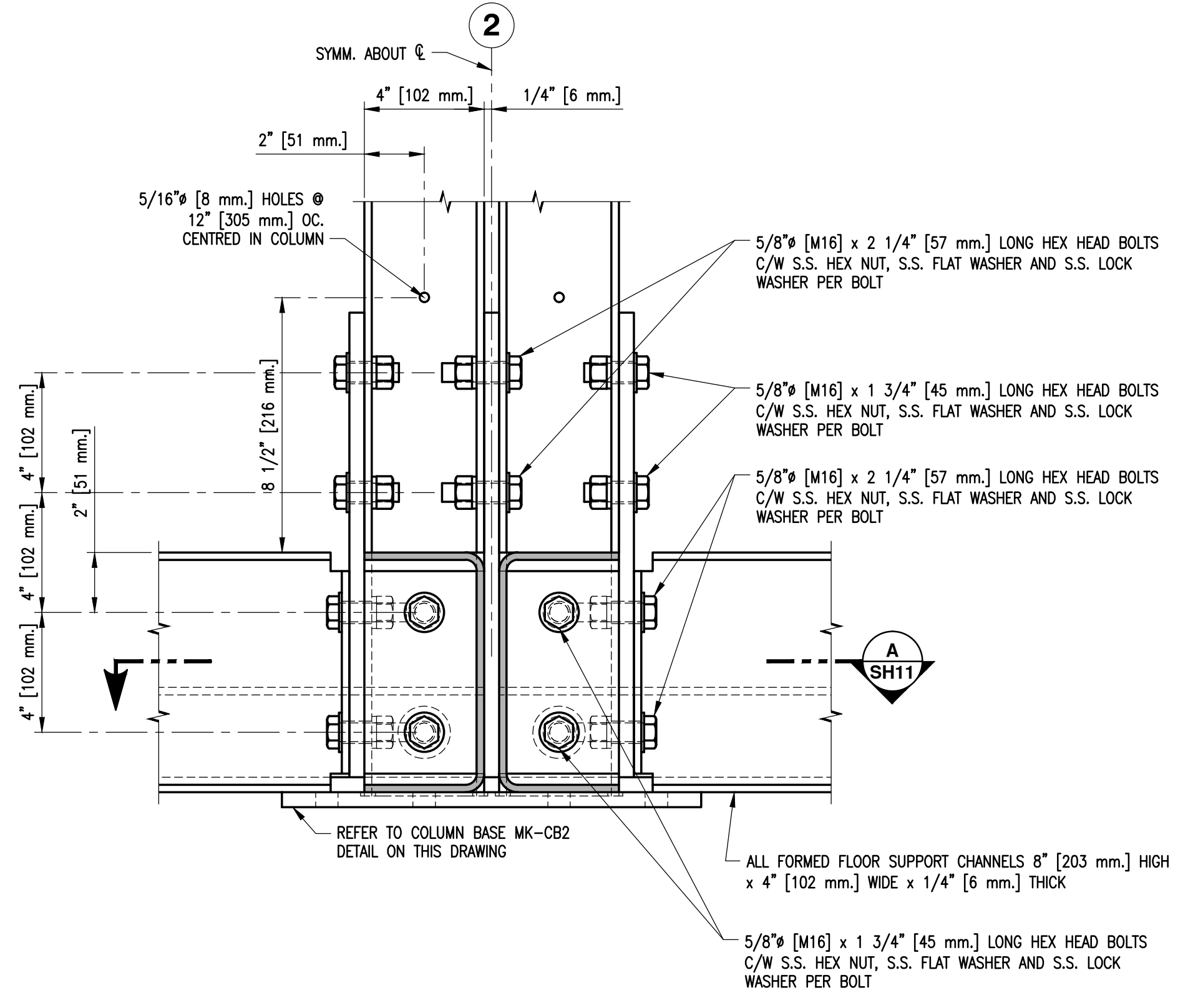
**ROUTED BASE PLATE**



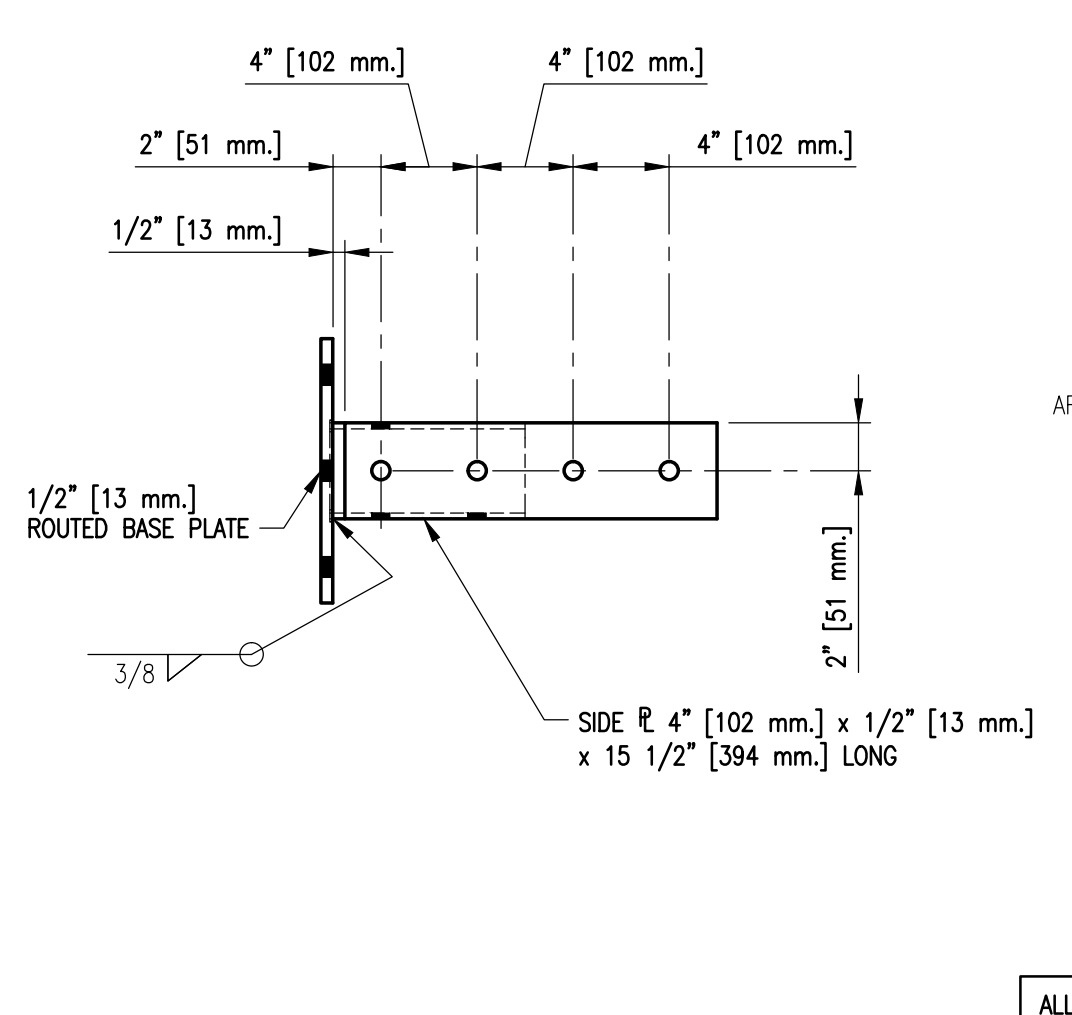
1. FOR GENERAL NOTES AND LEGEND REFER TO DRAWING 4-30-18-SF SH1.



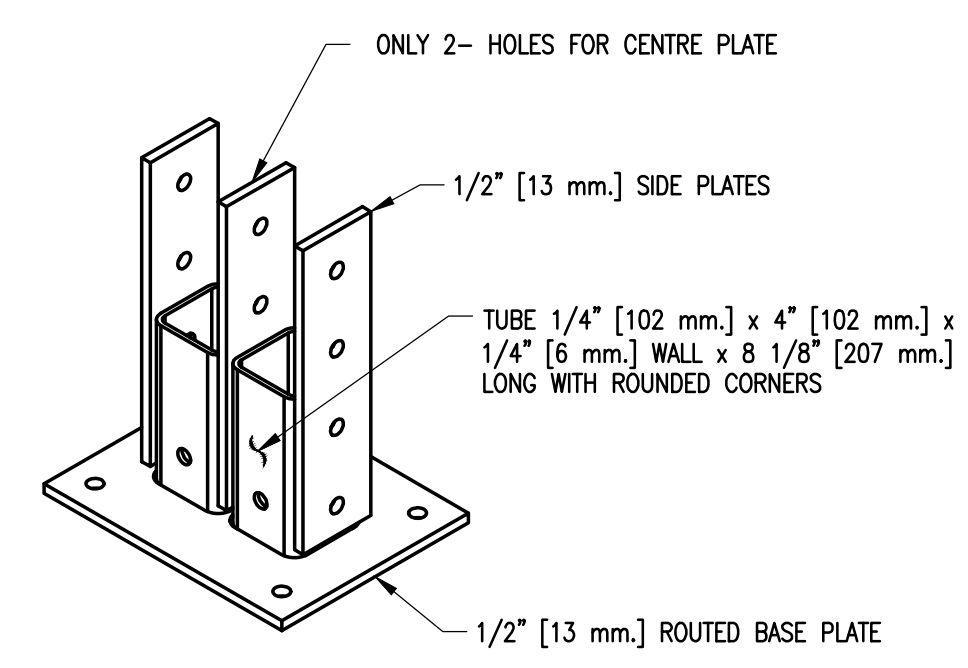
**SECTION** A SH11  
SCALE 1:4



**DETAIL** 1 SH6  
SCALE 1:4

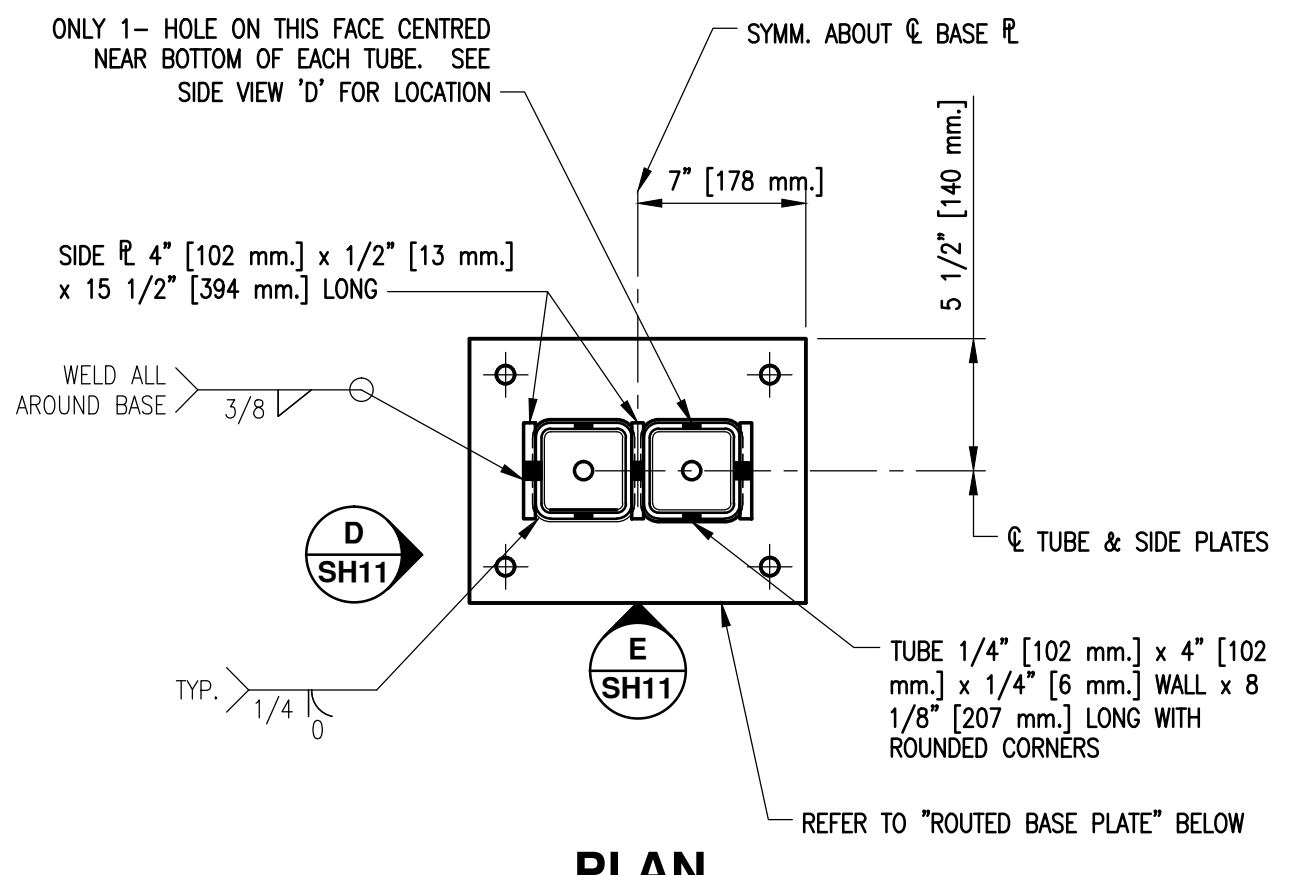


**SIDE VIEW** D SH11

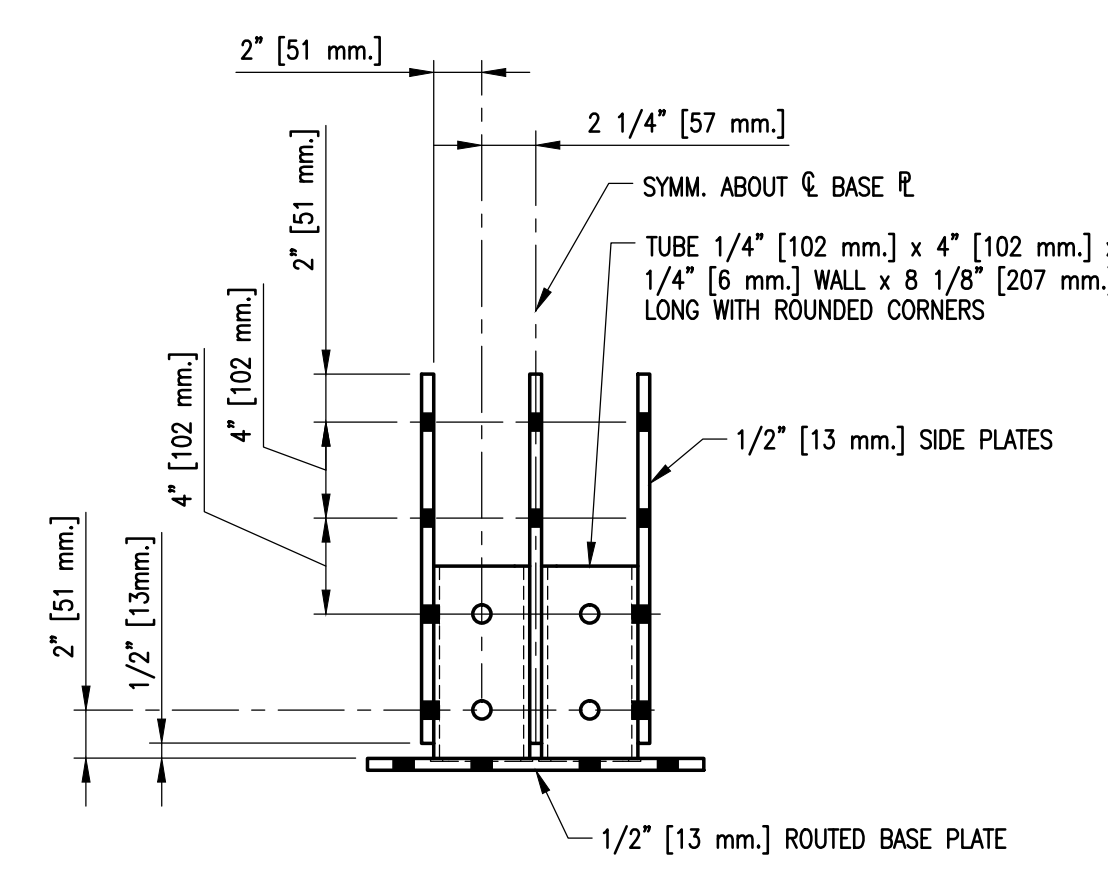


**3D VIEW**

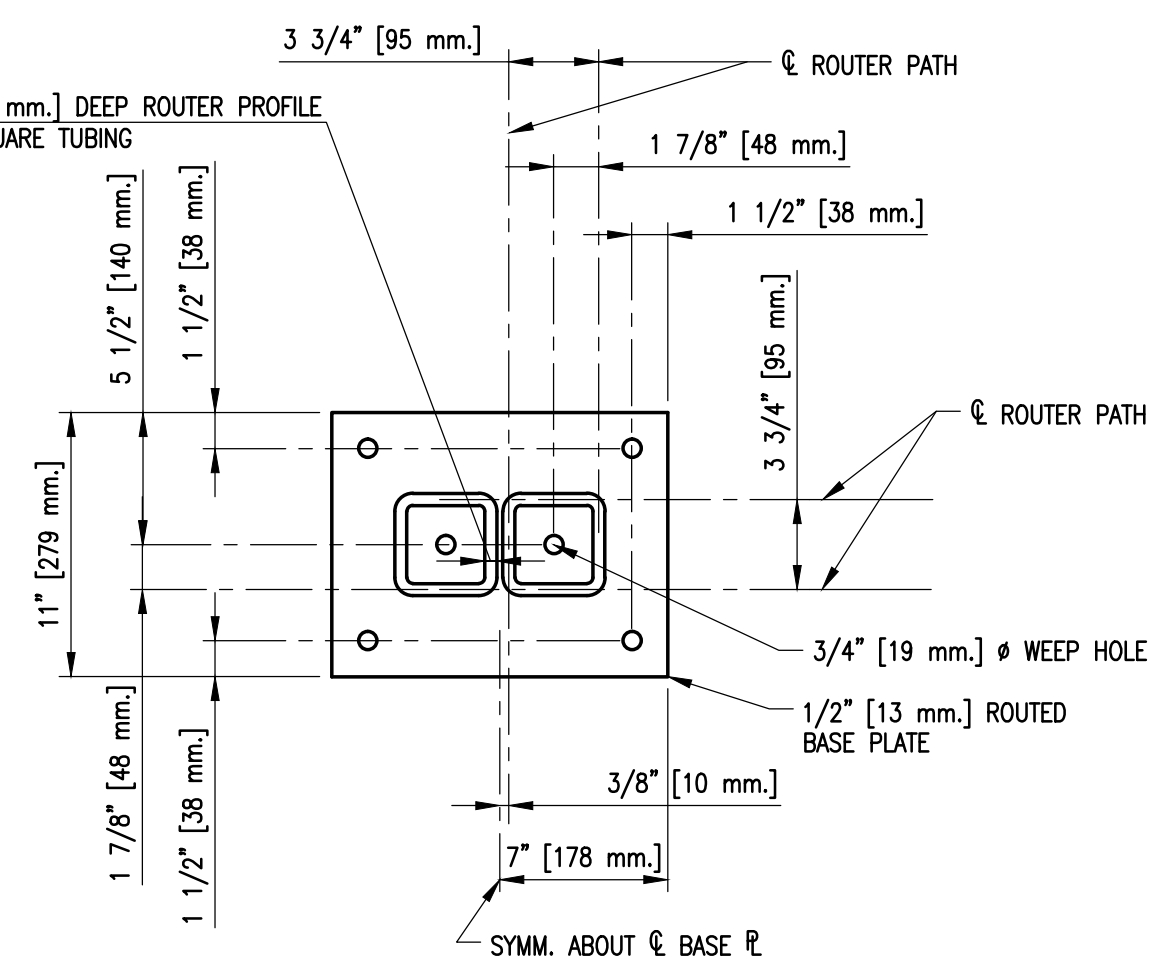
**MAKE EIGHT [8] ALUMINUM COLUMN BASES MK-CB2**  
SCALE 1:8



**PLAN**



**SIDE VIEW** E SH11



**ROUTED BASE PLATE**

<b>FISHERIES AND OCEANS CANADA</b> REAL PROPERTY, SAFETY & SECURITY	
<b>PREFABRICATED BUILDING MODEL 24X48-S1 STRUCTURAL ALUMINUM FRAME COLUMN BASE MK-CB2 AND COLUMN BASE MK-CB3 SECTIONS AND DETAILS</b>	SCALE AS NOTED DATE MAY 11, 2015 DWG. NUMBER <b>4-30-18-SF</b> SHEET <b>11 of 11</b> SIZE <b>D</b>
DESIGNED M. Liang	APPROVED
DRAWN G. Reichardt	APPROVED
CHECKED	APPROVED
RECOMMENDED	APPROVED
APPROVED	APPROVED
APPROVED	APPROVED

DWG. NO.	DRAWING REFERENCES	NOTES	NO.	DATE	REVISIONS
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