

**GENERAL NOTES**

- DIMENSIONS INDICATED ON THE DRAWINGS AND OTHER EXISTING CONDITIONS INFORMATION ARE TAKEN FROM THE IFTT CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS PRIOR TO PERFORMING AFFECTED AREAS OF THE WORK.
- IT IS INTENDED FOR THE LIBRARY TO REMAIN OPERATIONAL THROUGHOUT THE CONSTRUCTION PERIOD. THE CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH THE OWNER'S REPRESENTATIVE. ACCESS TO THE ATTIC FROM BELOW IS LIMITED TO PERSONNEL AS PERMITTED. IT IS INTENDED THAT AREAS OF ROOF DECK WILL BE REMOVED FOR ALL MATERIALS AND EQUIPMENT ACCESS. THE CONTRACTOR SHALL PROVIDE ADDITIONAL DECKING AS REQUIRED TO WORK FROM THE ATTIC FRAMING, MATERIAL STORAGE AND WORKERS' OPERATIONS SHALL BE DONE IN A MANNER THAT AVOIDS OVERLOADING AND EXCESSIVE DEFLECTIONS TO EXISTING CEILING CONSTRUCTION.
- ANY ROOF OPENINGS SHALL BE CLOSED AT THE END OF EACH WORKING DAY. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL INTERIOR FINISHES FROM DAMAGE DUE TO CONSTRUCTION OPERATIONS AND WEATHER EXPOSURE. ANY DAMAGE THAT OCCURS DURING THE CONSTRUCTION PERIOD THAT IS ATTRIBUTED TO THE CONTRACTOR'S OPERATIONS OR FROM INSUFFICIENT WEATHER PROTECTION SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
- WHERE NEW STEEL BEAMS ARE SPECIFIED, IT WILL BE NECESSARY TO CUT EXISTING STUDS THAT SUPPORT ROOF FRAMING. PROVIDE TEMPORARY SUPPORTS FOR EXISTING ROOF FRAMING BEFORE CUTTING EXISTING LOAD-BEARING STUDS. MAINTAIN TEMPORARY SUPPORTS IN PLACE UNTIL NEW STEEL FRAMING IS SECURED AND STUDS ARE FULLY SUPPORTED.

**DESIGN NOTES**

- ROOF REINFORCEMENTS ARE DESIGNED FOR COMPLIANCE WITH THE SNOW LOAD PROVISIONS OF THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE AND THE 2010 EDITION OF "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES" BY THE AMERICAN SOCIETY OF CIVIL ENGINEERS (ASCE-10). SNOW LOADS UTILIZED ARE BASED ON THE FOLLOWING CRITERIA:  
 A. GROUND SNOW LOAD  $P_g = 60$  PSF.  
 B. FLAT ROOF SNOW LOAD  $P_f = 46.2$  PSF.  
 C. SNOW EXPOSURE FACTOR  $C_e = 1.0$ .  
 D. SNOW IMPORTANCE FACTOR  $I_s = 1.0$ .  
 E. THERMAL FACTOR  $C_t = 1.1$ .  
 F. UNBALANCED SNOW LOADS IN ACCORDANCE WITH ASCE-10.

**WOOD FRAMING NOTES**

- REMOVE EXISTING 5/8" PLYWOOD ROOF DECK AS REQUIRED TO INSTALL REINFORCEMENTS. REMOVE WHOLE PANELS TO PERMIT WHOLE PANEL REPLACEMENT. REPLACEMENT ROOF DECK SHALL BE NEW PANELS AS FOLLOWS:  
 A. APA RATED SHEATHING 5/8" THICK PANELS TO MATCH EXISTING ADJACENT PANELS.  
 B. MINIMUM SPAN RATING 40/20.  
 C. EXPOSURE 1 OR EXPOSURE 2.
- LAY OUT REPLACEMENT ROOF PANELS WITH THE LONG DIMENSION ACROSS SUPPORTS AND WITH SHORT ENDS POSITIONED OVER A SUPPORT. FASTEN TO SUPPORTS WITH 10D NAILS. SPACE NAILS AT 6" ON CENTER AT SUPPORTED PANEL EDGES AND AT 12" ON CENTER AT INTERMEDIATE SUPPORTS.
- PROVIDE FASTENERS FOR CONNECTING WOOD FRAMING AS INDICATED. WHERE NOT INDICATED, COMPLY WITH TABLE 2304.10.1 IN THE 2015 EDITION OF THE INTERNATIONAL BUILDING CODE.
- PROPRIETARY WOOD CONNECTORS ARE IDENTIFIED AS PRODUCTS FROM SIMPSON STRONG-TIE. SUBSTITUTIONS REQUIRE APPROVAL. SUBMIT REQUESTED SUBSTITUTIONS FOR REVIEW WITH ALL PRODUCT DATA REQUIRED FOR STRUCTURAL EVALUATION. ALLOW 2 WEEKS FOR REVIEW.
- WHERE PROPRIETARY CONNECTORS ARE SPECIFIED, INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS. USE ALL SPECIFIED FASTENERS WITHOUT SUBSTITUTION UNLESS OTHERWISE NOTED ON THE DRAWINGS. WHERE MORE THAN ONE FASTENER SPECIFICATION EXISTS, INSTALL THE MAXIMUM FASTENING.
- NAILS SHALL COMPLY WITH ASTM F1667. PROVIDE NAILS OF THE FOLLOWING MINIMUM DIMENSIONS:  
 A.  $2d = 2-3/8"$  LONG X 0.113" DIAMETER  
 B.  $10d = 2-1/2"$  LONG X 0.12" DIAMETER  
 C. AT ROOF DECK NAILING, USE  $10d = 3"$  LONG X 0.148" DIAMETER.  
 D.  $16d = 3-1/4"$  LONG X 0.148" DIAMETER.
- INSTALL TOENAILS AT AN ANGLE 30 DEGREES FROM THE AXIS OF THE SUPPORTED MEMBER. INSTALL WITH THE TIP LOCATED AT A DISTANCE OF 1/3 OF THE NAIL LENGTH FROM THE END OF THE SUPPORTED MEMBER.
- LAG SCREWS SHALL COMPLY WITH ANSI/ASME B18.2.1. FOR 1/2" DIAMETER LAG SCREWS, THE MAXIMUM PILOT HOLE FOR THE THREADED PORTION OF THE SCREW SHALL BE 1/8".
- NEW LUMBER UTILIZED FOR REINFORCEMENTS SHALL BE #2 GRADE OR BETTER OF SPRUCE-PINE-FIR GRADED BY NLGA.
- LVL DESIGNATES LAMINATED VENEER LUMBER. PROVIDE PRODUCTS FROM ONE OF THE FOLLOWING SUPPLIERS:  
 A. VERSA-LAM 2.0 3100 FROM BOISE CASCADE.  
 B. MICRO-LAM FROM TRUS JOIST MEYERHAUSER.  
 C. CF-LAM FROM COASTAL PRODUCTS.

**STEEL FRAMING NOTES**

- ALL STEEL WORK SHALL CONFORM TO THE 14<sup>TH</sup> EDITION OF THE SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION, ANSI/AISC 360-10.
- ALL WELDING SHALL BE DONE BY A WELDER CERTIFIED BY THE AMERICAN WELDING SOCIETY FOR THE WELDING PROCEDURE AND POSITIONS UTILIZED.
- ALL WELDING SHALL BE IN COMPLIANCE WITH AWS D.1 STRUCTURAL WELDING - STEEL BY THE AMERICAN WELDING SOCIETY, LATEST EDITION.
- NO FIELD WELDING IS PERMITTED IN THE ATTIC.
- BOLTS USED TO CONNECT STEEL FRAMING MEMBERS SHALL BE IN COMPLIANCE WITH THE 2009 EDITION OF THE SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS BY THE RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS.
- BOLTS USED TO CONNECT STEEL FRAMING MEMBERS SHALL BE ASTM A325 BOLTS. INSTALL TO SNUG-TIGHT CONDITION UNLESS OTHERWISE INDICATED.
- STRUCTURAL STEEL WIDE FLANGE SHAPES SHALL BE ASTM A992.
- STRUCTURAL STEEL ANGLES AND PLATES SHALL BE ASTM A36.
- STEEL HOLLOW STRUCTURAL SECTIONS SHALL BE ASTM A500, GRADE B.
- SUBMIT SHOP DRAWINGS DELINEATING ALL FRAMING AND CONNECTIONS. ALLOW TWO WEEKS FOR REVIEW.

**PLAN NOTES:**

- REMOVE EXISTING 2x10 HIPPS AND CUT BACK EXISTING RAFTERS AS REQUIRED TO INSTALL NEW LVL. CONNECT RAFTERS TO NEW LVL WITH SIMPSON STRONG-TIE LSSJ28 JACK HANGERS FOR FRAMING MEMBERS SHORTER THAN 8'-0" LONG. SUPPORT WITH SIMPSON STRONG-TIE SUR/L26 FOR FRAMING MEMBERS 8'-0" AND LONGER.

**LADDERS**

- PROVIDE 2 FIXED LADDERS AS DESCRIBED BELOW:  
 A. SECOND FLOOR TO ATTIC FLOOR - PROVIDE LENGTH FOR A FLOOR-TO-FLOOR DISTANCE = 12'-0". LOCATE AT ATTIC ACCESS OPENING SHOWN ON THE STRUCTURAL ROOF PLAN. COORDINATE THE EXACT LOCATION WITH THE OWNER. INSTALL EXISTING STEEL PLATE LADDER EXTENSIONS CURRENTLY LOCATED AT THE EXISTING LADDER.  
 B. ATTIC FLOOR TO ROOF - PROVIDE LENGTH FOR A VERTICAL RISE OF 10'-0". LOCATE BENEATH THE EXISTING ROOF ACCESS HATCH.
- REFER TO SPECIFICATION 07 53 23 FOR LADDER SPECIFICATION.
- INSTALL FOR FINISHED LADDER SYSTEM TO COMPLY WITH OSHA REQUIREMENTS.

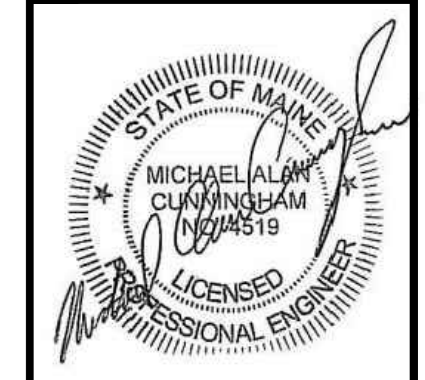
\* EXTEND 2x4 STUD BRACING TO RAFTERS - SEE 1/52

**STRUCTURAL ROOF PLAN**  
3/16"=1'-0"

NO.	DATE	REVISION
1	11-05-19	ISSUED FOR CONSTRUCTION

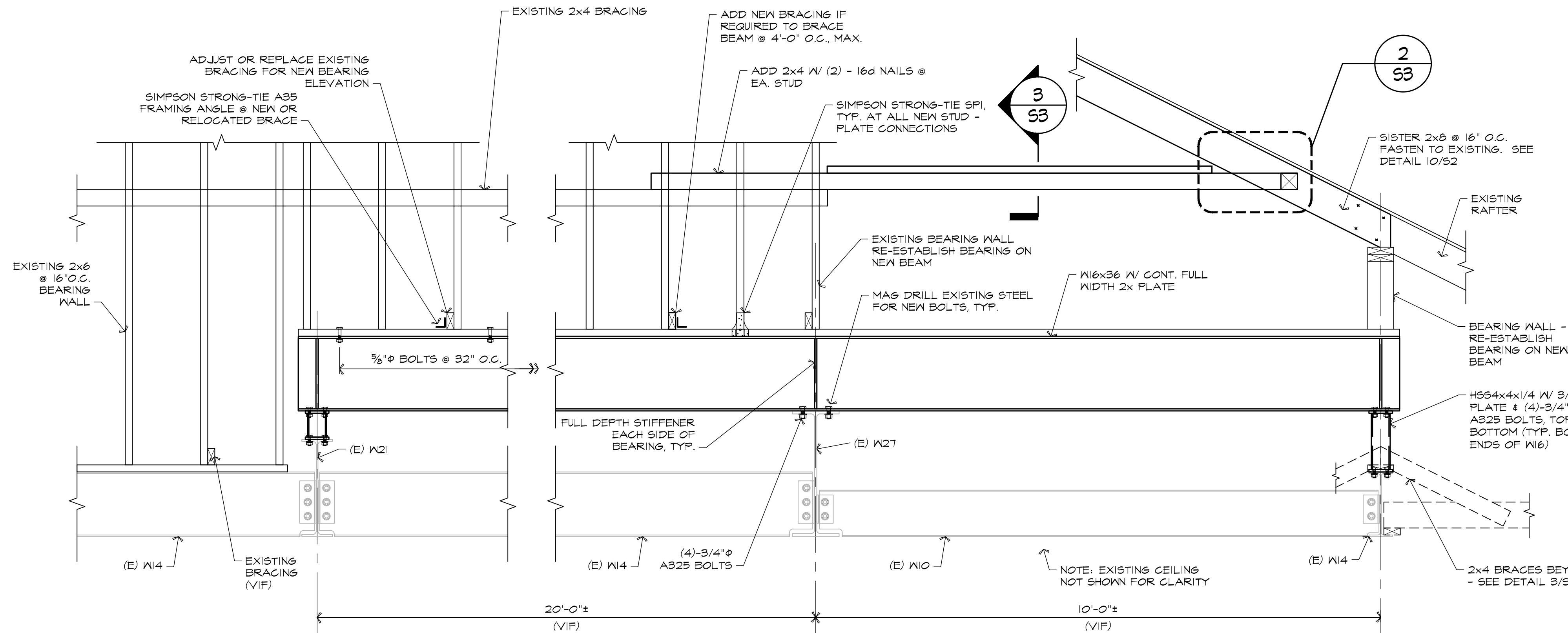
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**Quick / Platz Hall**  
 Maine Maritime Academy  
 Castine, Maine

**STRUCTURAL ROOF PLAN AND NOTES**

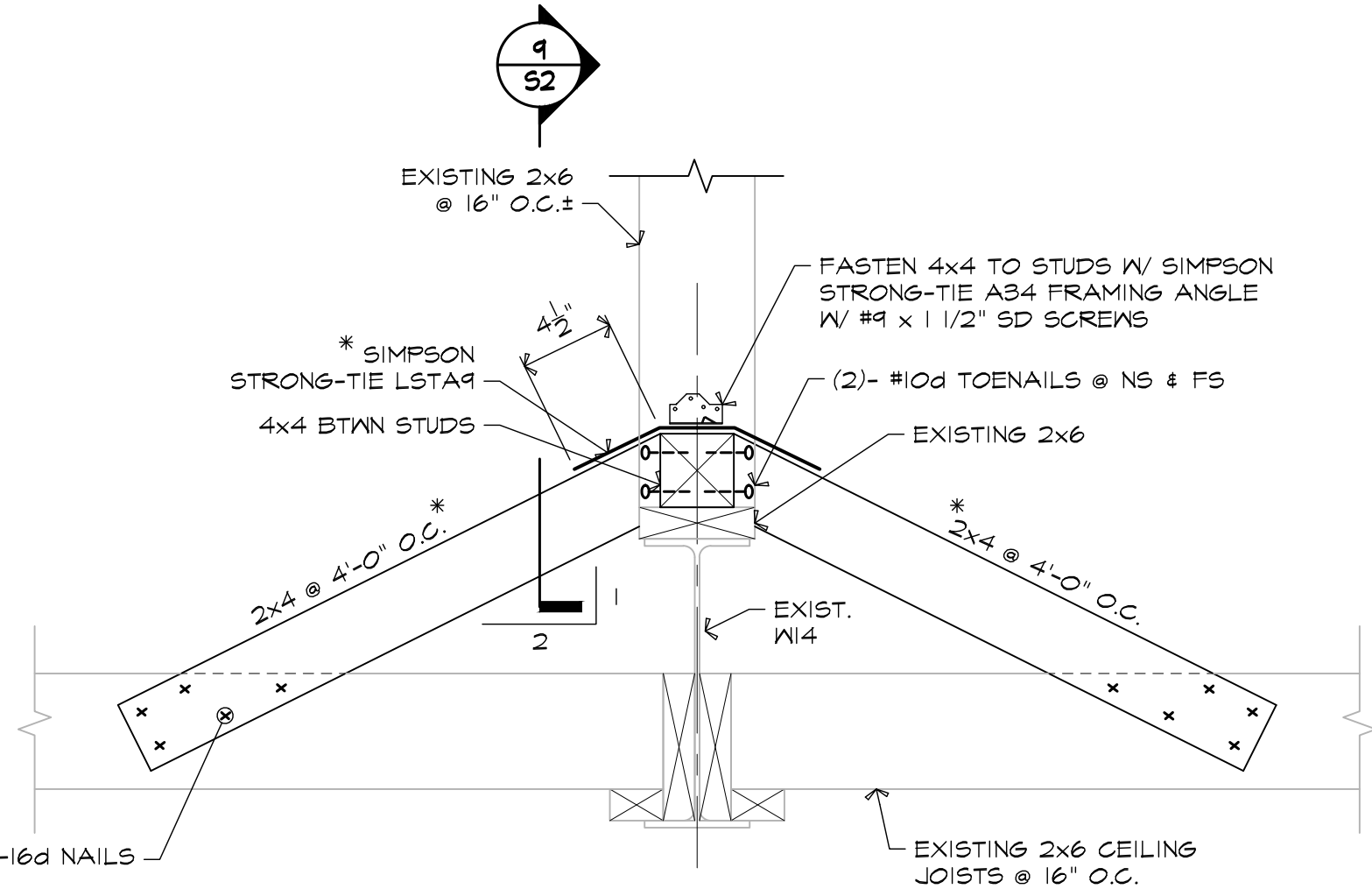


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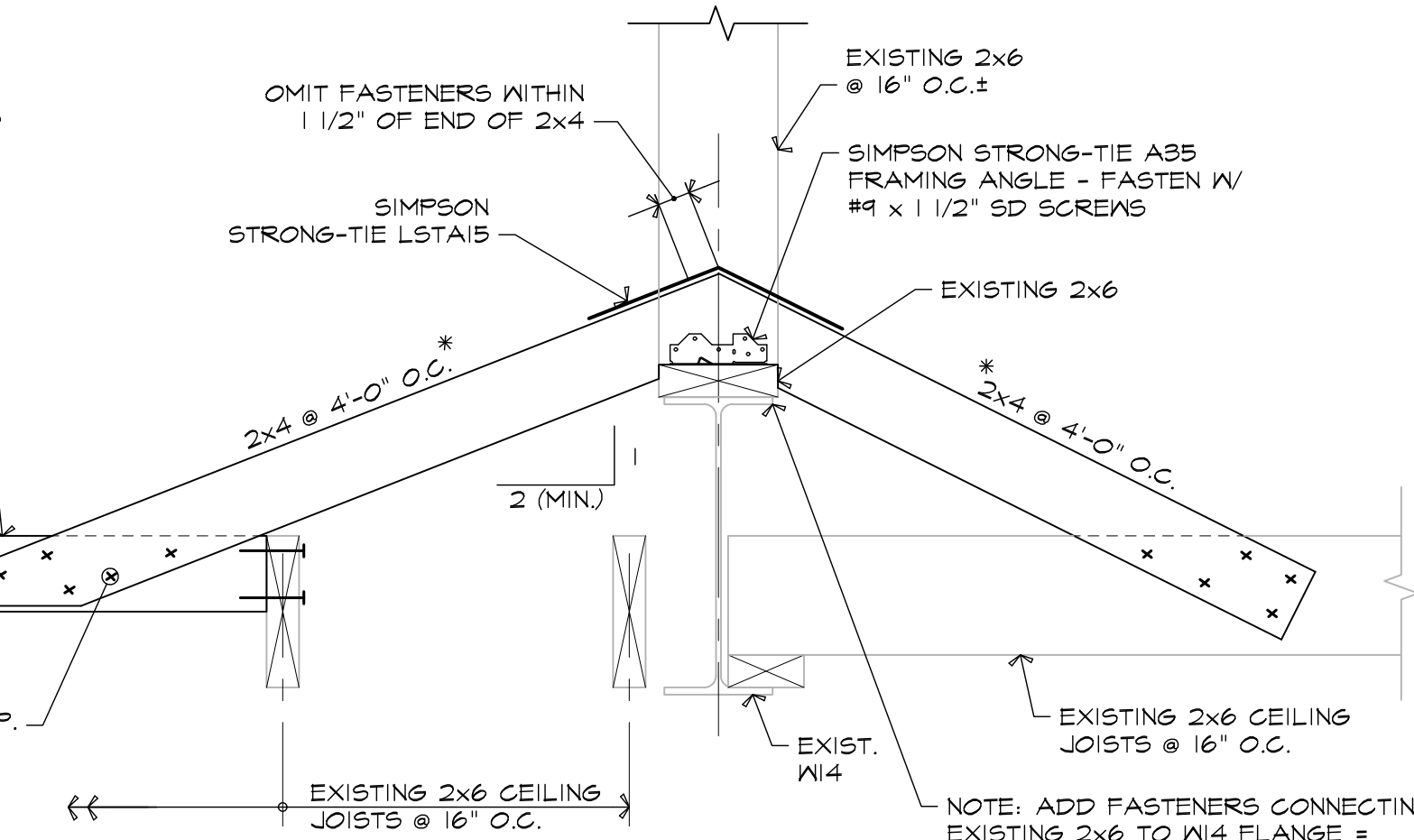
**S1**



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

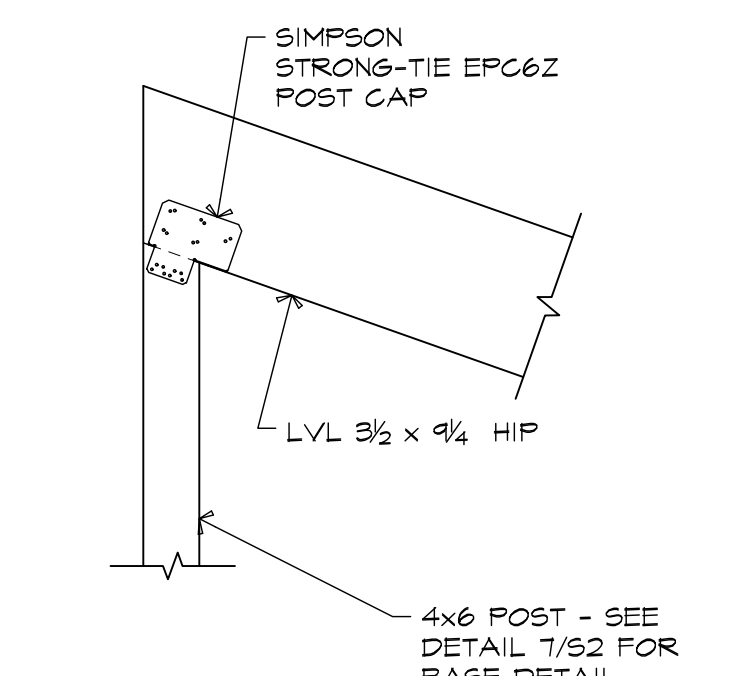


2 SECTION AT TOP FLANGE BRACE 1-1/2"=1'-0"

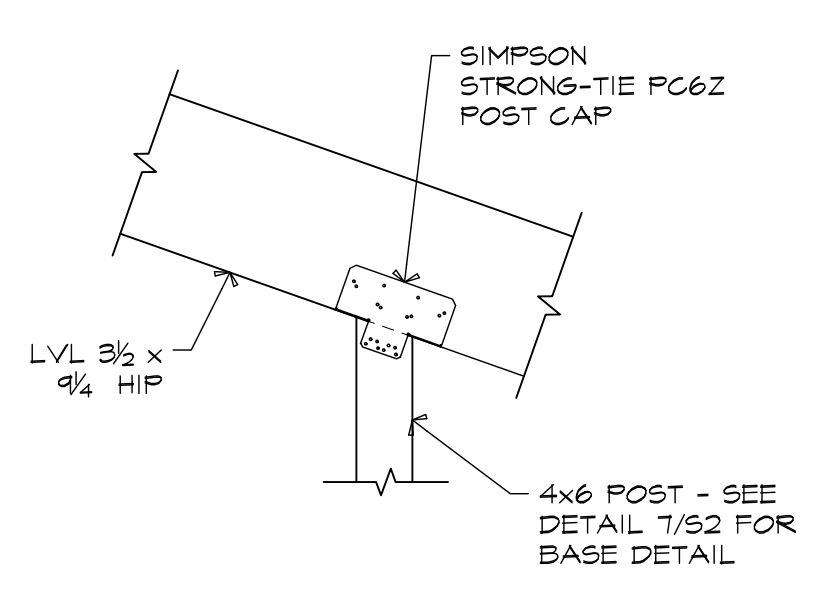


3 SECTION AT TOP FLANGE BRACE 1-1/2"=1'-0"

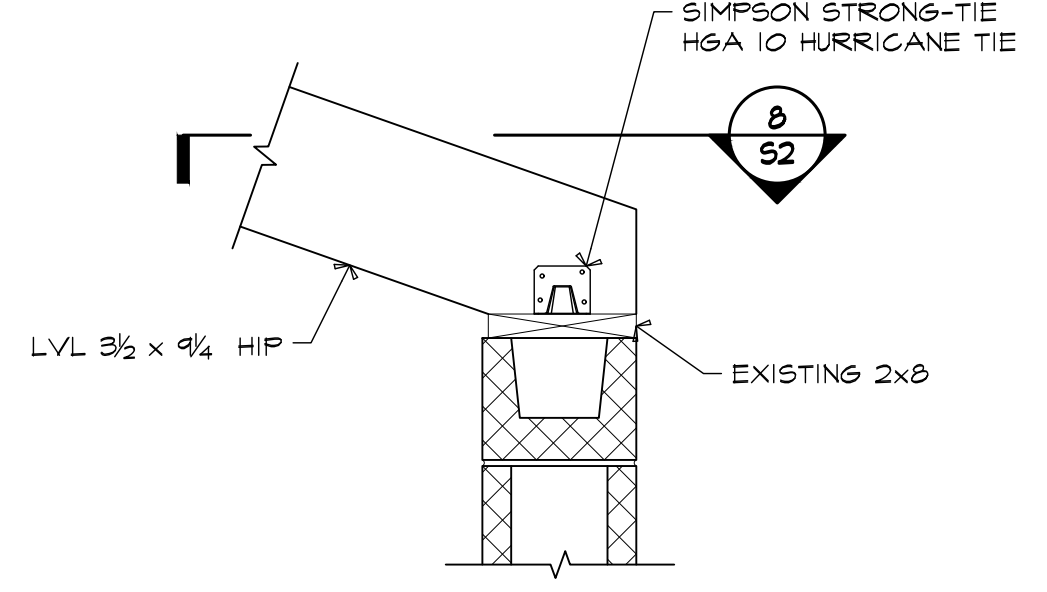
NOTE: PROVIDE TEMPORARY SUPPORT FOR EXISTING ROOF FRAMING AS REQUIRED TO CUT EXISTING STUDS AND INSTALL NEW W6 BEAM.



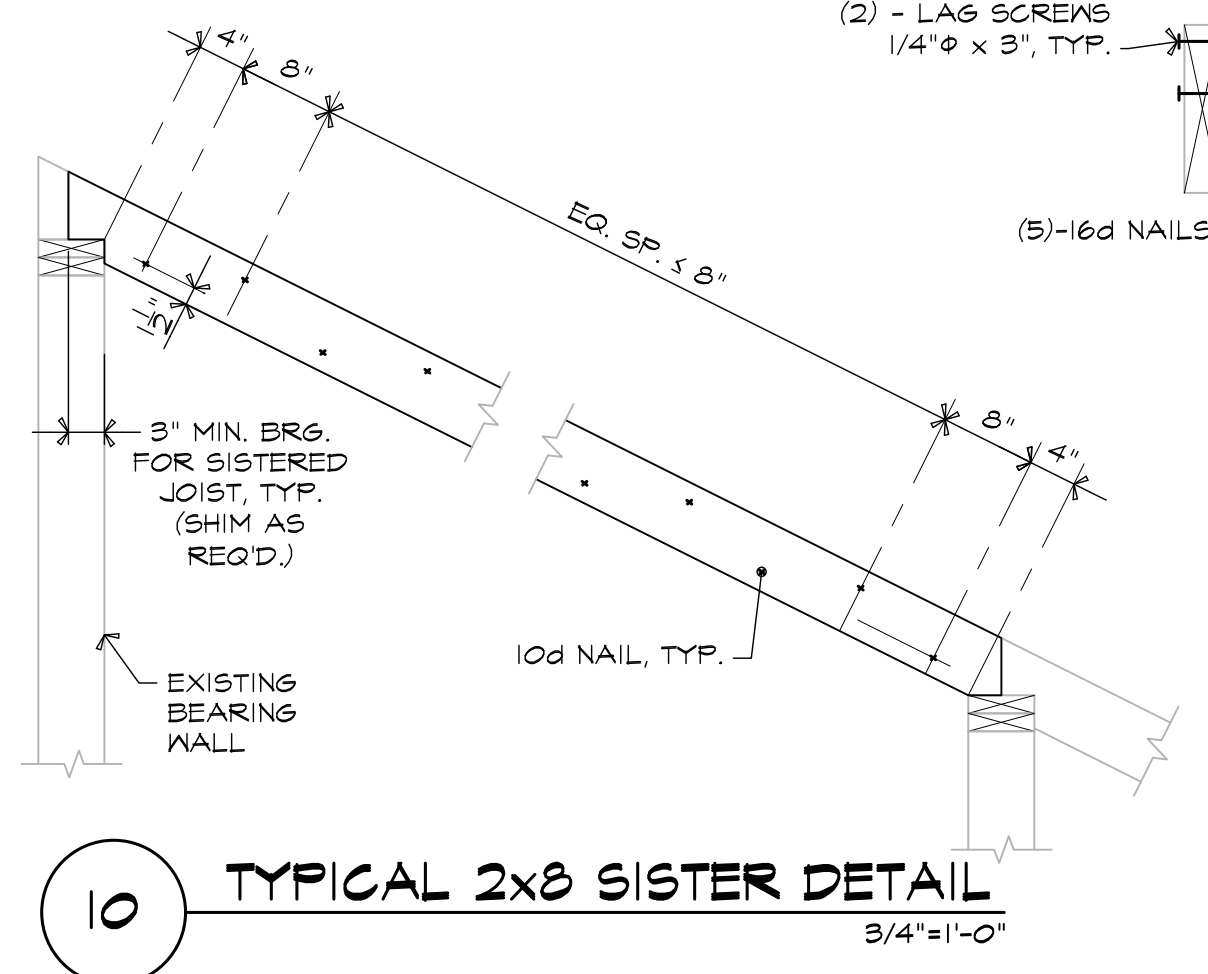
4 SECTION 1"=1'-0"



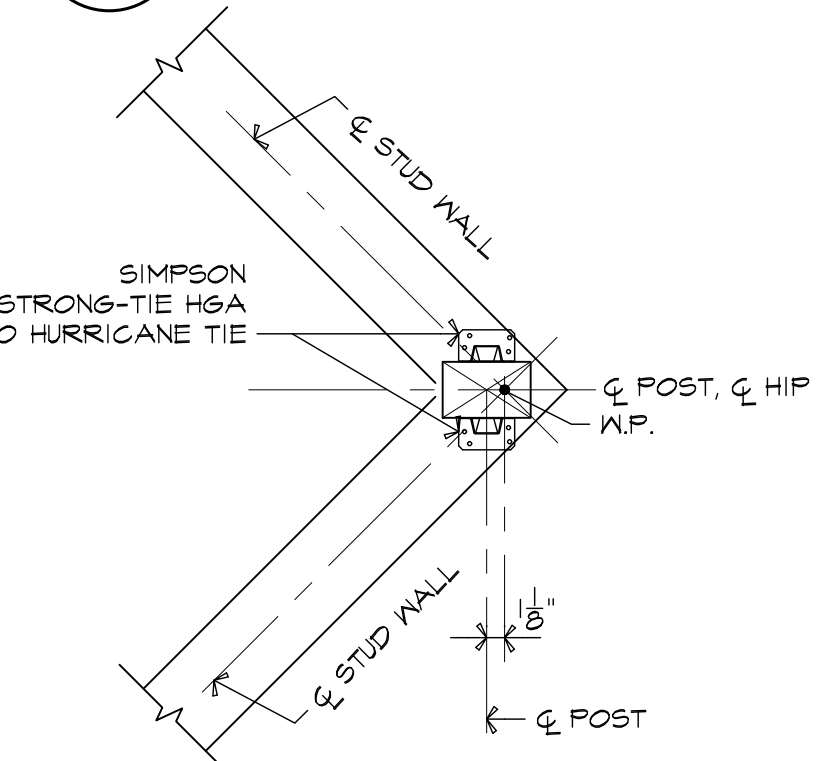
5 SECTION 1"=1'-0"



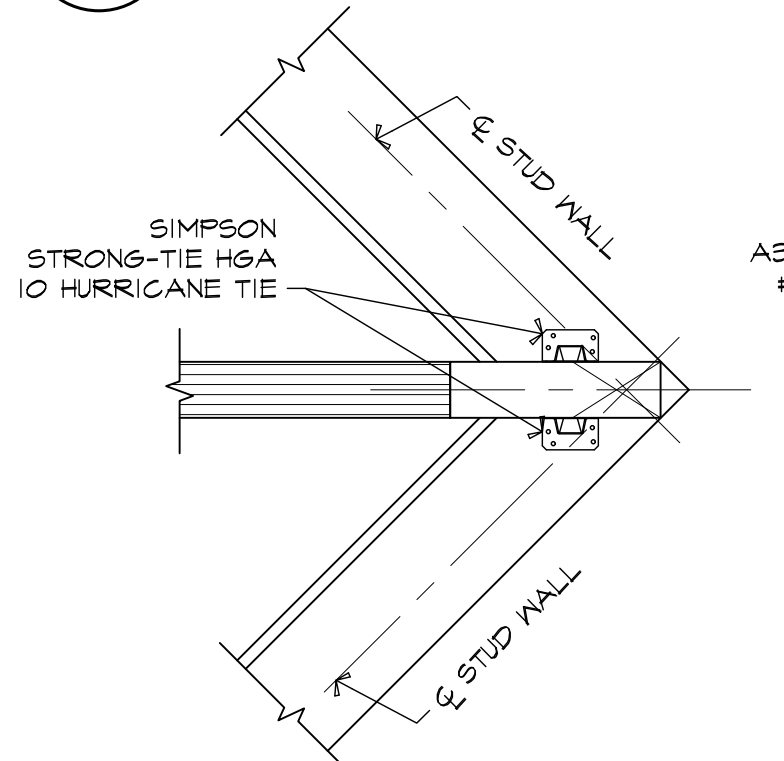
6 SECTION 1"=1'-0"



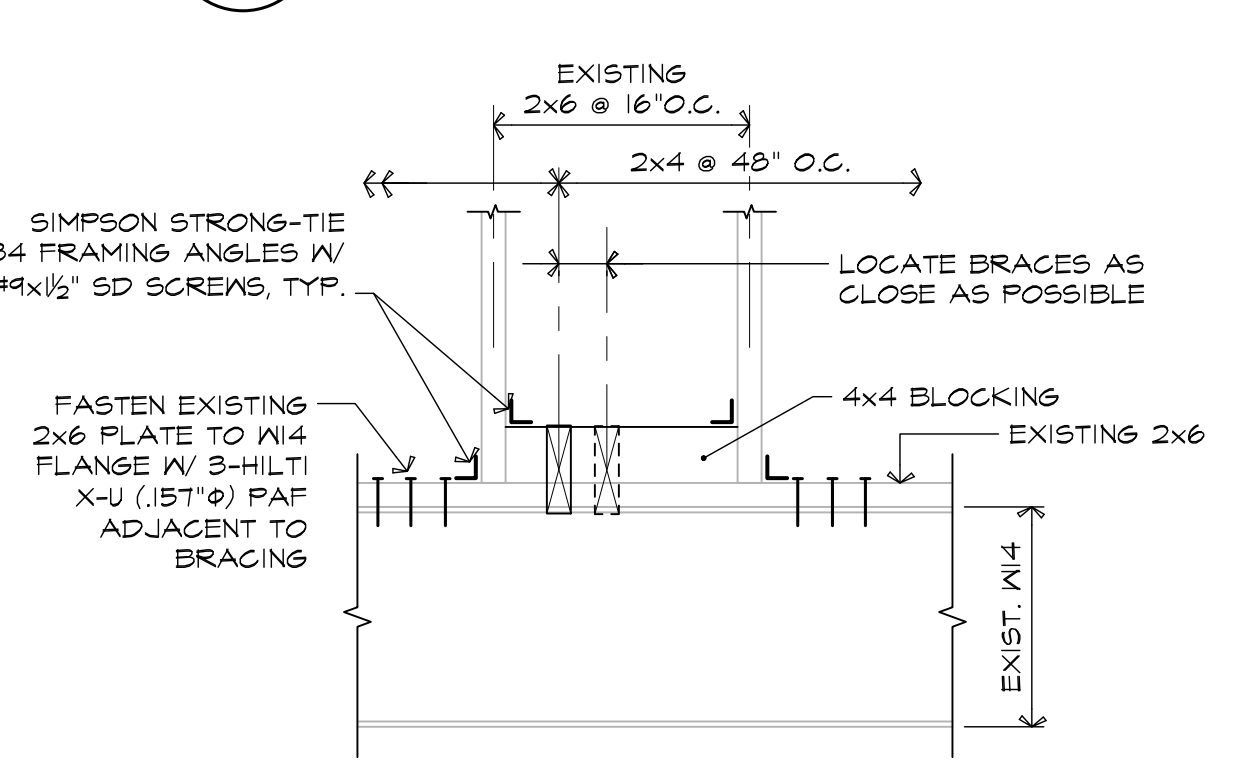
10 TYPICAL 2x8 SISTER DETAIL 3/4"=1'-0"



7 SECTION 1"=1'-0"

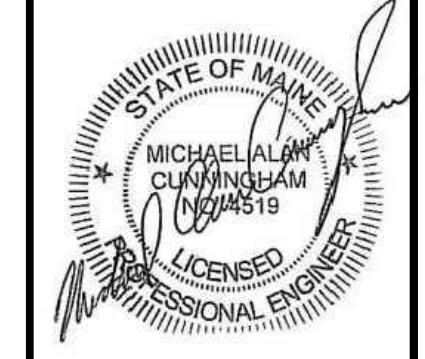


8 SECTION 1"=1'-0"



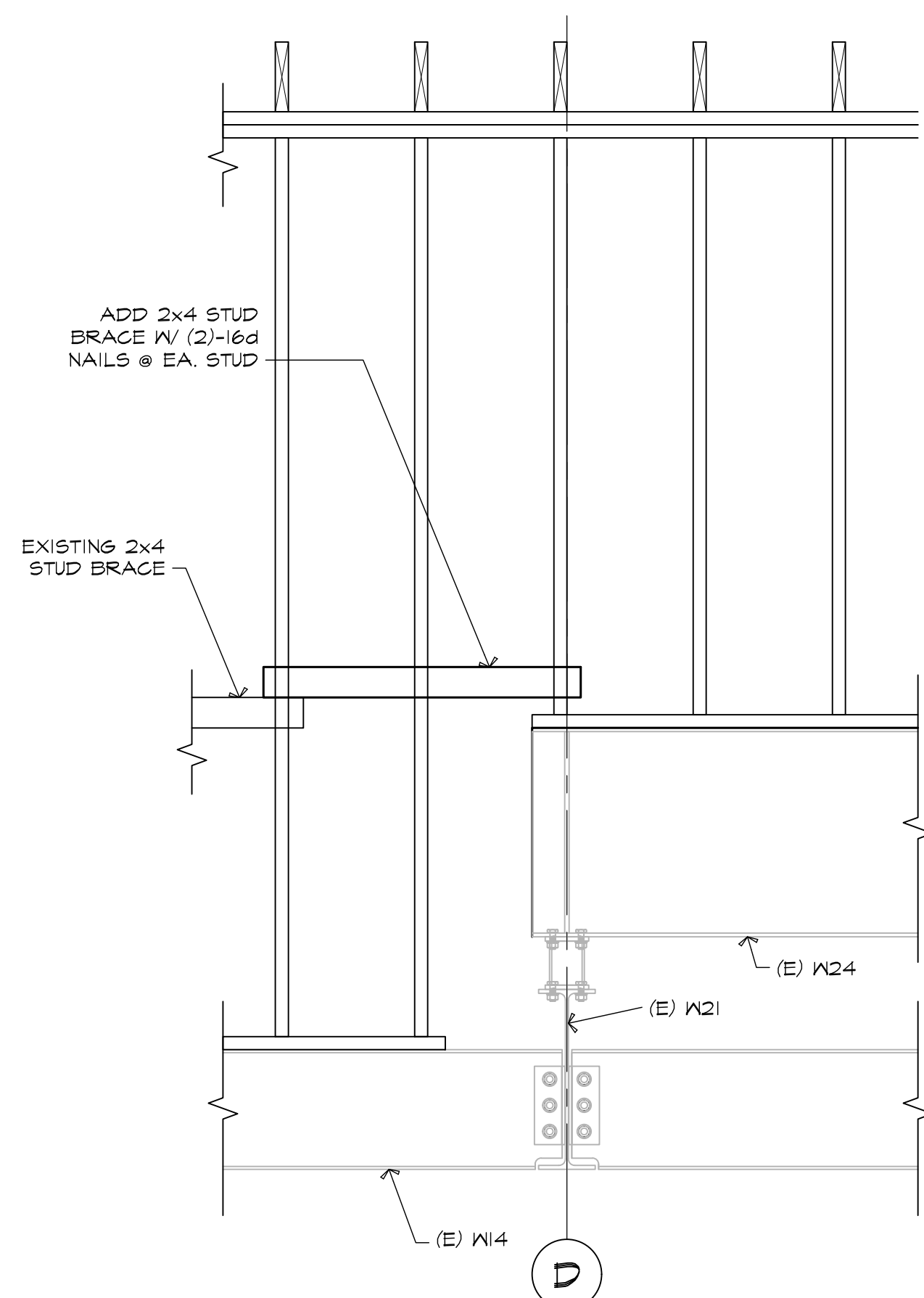
9 SECTION 1"=1'-0"

REVISION	ISSUED FOR CONSTRUCTION
DATE	11-05-19
NO.	
Structural Improvements & Reroofing at: Quick / Platz Hall Maine Maritime Academy Castine, Maine	
DRAWN BY	SAM
CHECKED BY	MAC
ISSUE DATE	11-05-19
PROJECT NO.	2019115
SECTIONS AND DETAILS	

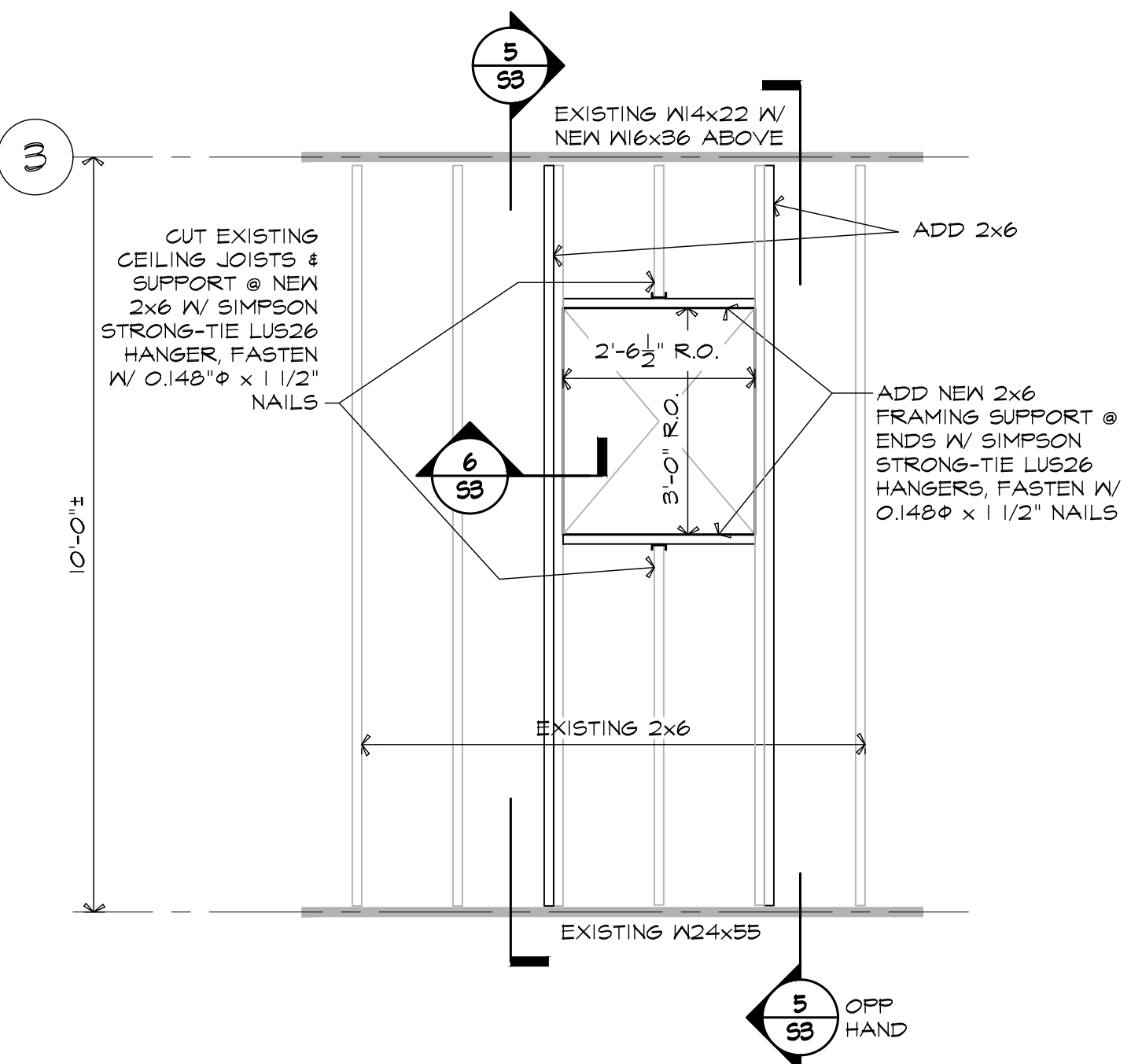


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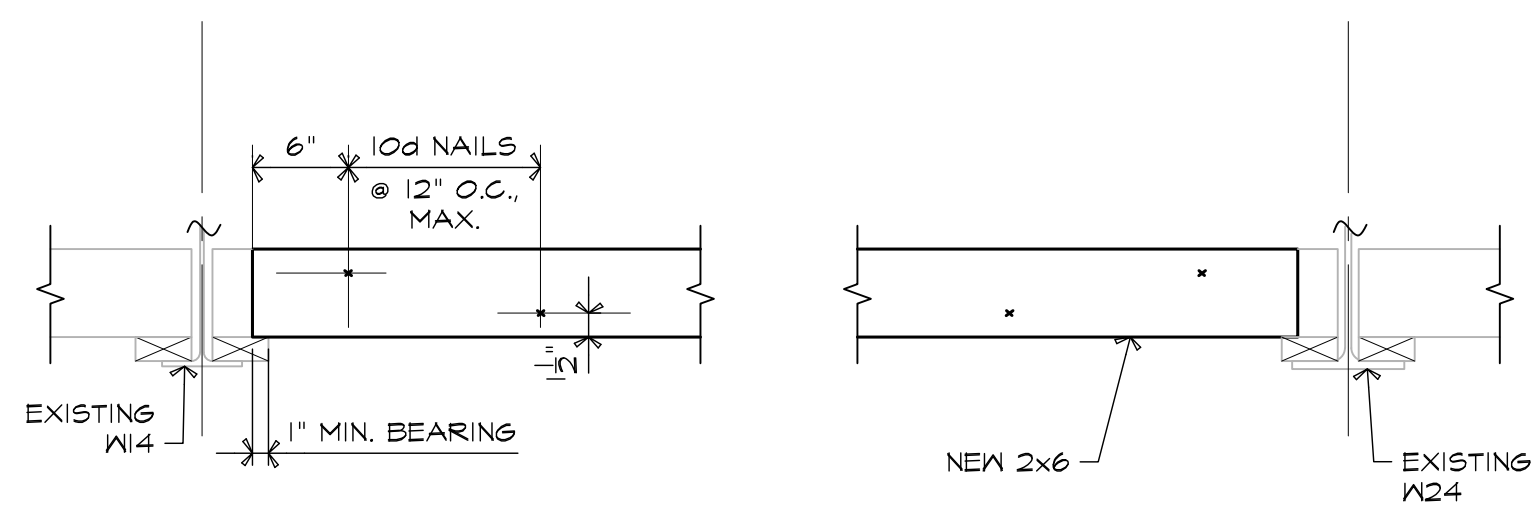
**S2**



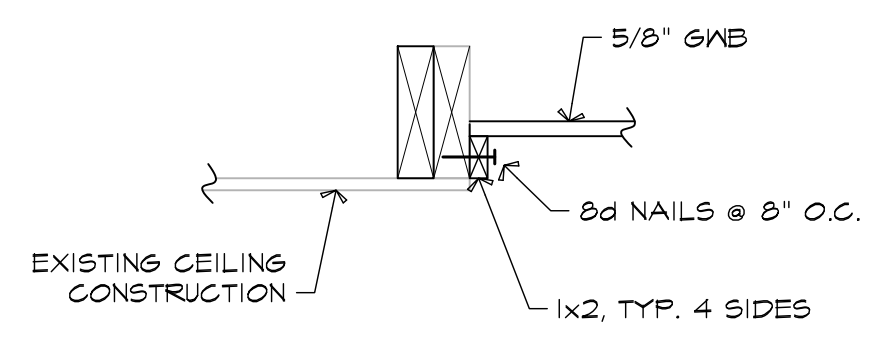
1 SECTION 3/4"=1'-0"



3 10'-0"± 1/2"=1'-0"

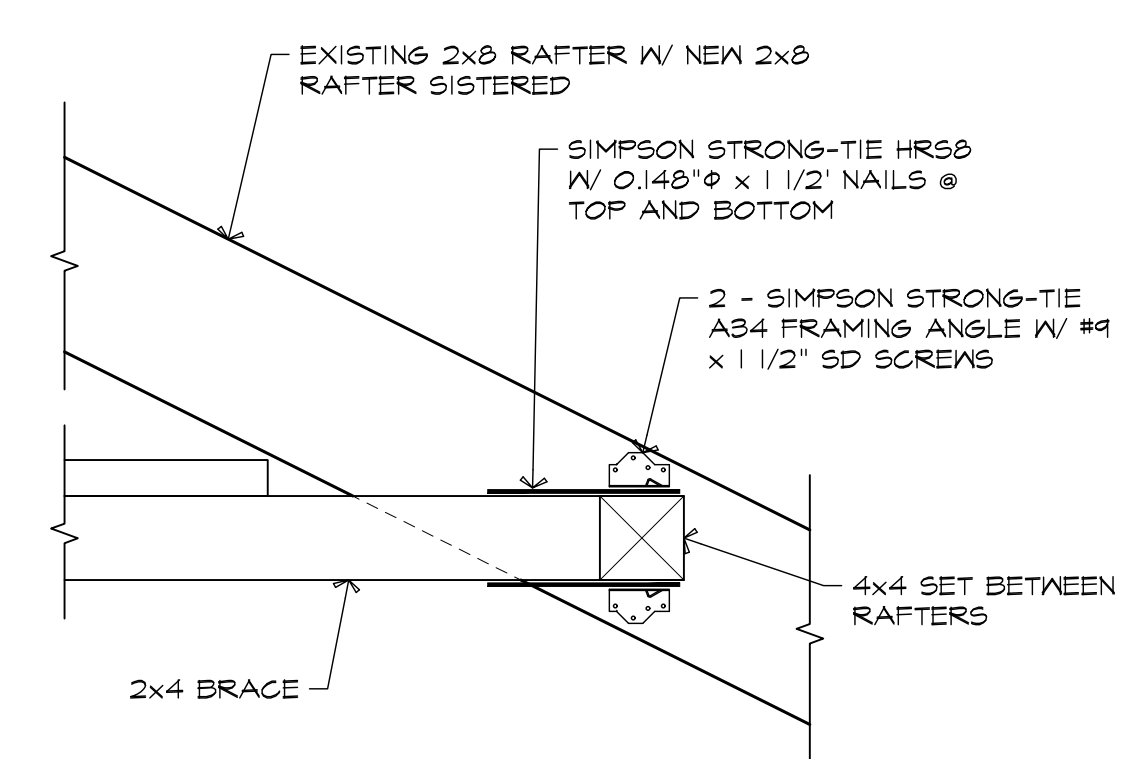


5 SECTION 1"=1'-0"

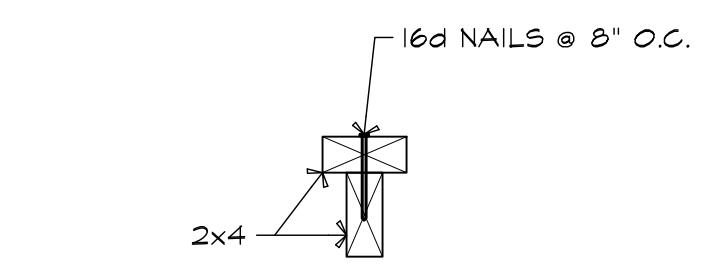


6 SECTION 1-1/2"=1'-0"

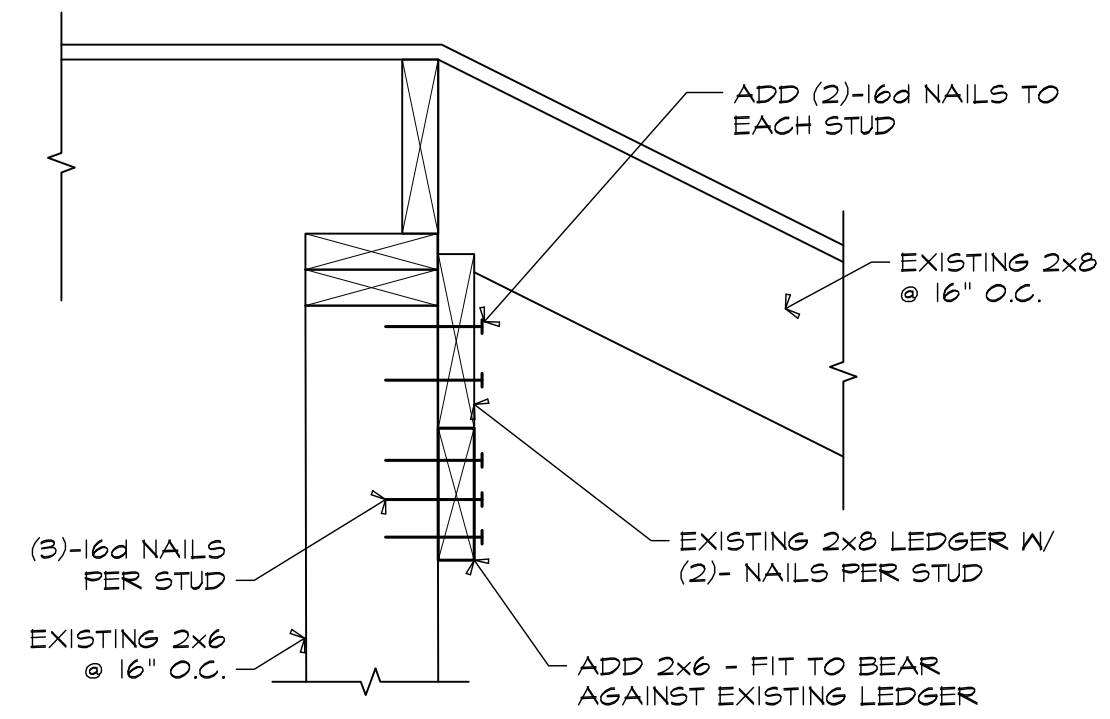
- NOTES:
- CUT EXISTING CEILING AS REQUIRED FOR NEW OPENING. REPAIR CUT EDGES FOR FINISHED APPEARANCE.
  - INSTALL 1x2 TRIM AS SHOWN.
  - PROVIDE 3/8" GYPSUM WALLBOARD FOR LOOSE INSTALLATION. TAPE EDGES.
  - PAINT ALL EXPOSED SURFACES TO MATCH EXISTING CEILING.



2 DETAIL 1-1/2"=1'-0"



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

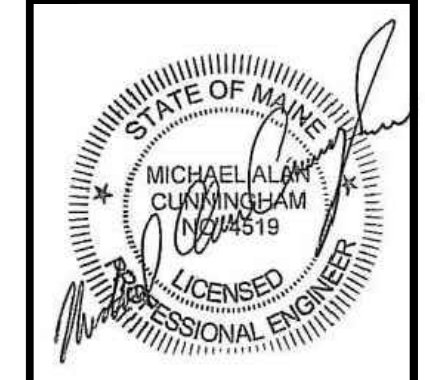


7 SECTION 1-1/2"=1'-0"

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S3