

BEAN BARN: ROOF FRAMING PLAN

1/8"=1'-0"

**GENERAL NOTES**

1. MODIFICATIONS TO ROOF FRAMING ARE DESIGNED FOR LOADINGS SPECIFIED IN 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, ASCE7-10. ALTERATIONS ARE DESIGNED TO SUPPORT DEAD LOADS OF EXISTING AND NEW COMPONENTS AND SNOW LOADS AS FOLLOWS:
  - A. GROUND SNOW LOAD  $P_g = 30$  PSF.
  - B. EXPOSURE FACTOR  $C_e = 1.0$ .
  - C. IMPORTANCE FACTOR  $I_s = 0.8$ .
  - D. THERMAL FACTOR  $C_t = 1.2$ .
  - E. FLAT ROOF SNOW LOAD  $P_f = 34$  PSF.
  - F. UNBALANCED SNOW IN ACCORDANCE WITH ASCE7-10.
2. DIMENSIONS INDICATED ON THE DRAWINGS AND OTHER EXISTING CONDITIONS INFORMATION ARE APPROXIMATE, PROVIDED FOR PRICING. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND OTHER EXISTING CONDITIONS PRIOR TO PERFORMING AFFECTED AREAS OF THE WORK.
3. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT THE BUILDINGS FROM DAMAGE DUE TO WATER INTRUSION, REMOVAL OF ROOF DECK, AND OTHER ACTIVITIES DURING CONSTRUCTION. TO THAT END, DECK REMOVAL ON ANY DAY SHALL BE LIMITED TO WHAT CAN BE REINSTALLED BEFORE LEAVING FOR THE DAY. THE ROOF SHALL HAVE WEATHER PROTECTION AT THE CLOSE OF EACH WORKDAY. THE CONTRACTOR SHALL MONITOR WEATHER CONDITIONS THROUGHOUT THE WORKDAY AND RESPOND TO ANY CHANGES IN WEATHER TO PROVIDE PROTECTION OF EXISTING INTERIORS THROUGHOUT THE WORKDAY AS WARRANTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS OF ANY DAMAGES THAT OCCUR AS A RESULT OF THE CONTRACTOR'S OPERATIONS DURING THE CONSTRUCTION PERIOD.
  - A. THE CONTRACTOR SHALL EXERCISE CAUTION IN LOADING FLOORS WITH CONSTRUCTION MATERIALS AND EQUIPMENT. ANY DAMAGE CAUSED BY THE USE OF EXISTING FLOORS AS A WORKING PLATFORM SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
4. CONDUCT LOCALIZED DEMOLITION IN SUCH FASHION TO MINIMIZE DISTURBANCE OF ADJACENT AREAS. ANY AREAS AFFECTED BY CONSTRUCTION ACTIVITIES SHALL BE RETURNED TO CONDITION AS EXISTED PRIOR TO CONSTRUCTION.
5. REMOVAL OF ROOF DECK TO INSTALL NEW FRAMING MEMBERS IS ACCEPTABLE IF PREFERRED TO PERFORM SPECIFIED REINFORCEMENTS. TEMPORARY PROTECTION AND PERMANENT ROOF SHEATHING INSTALLATION SHALL COMPLY WITH NOTES AND SPECIFICATIONS AS STATED FOR OTHER AREAS.
6. WHERE WIRING AND SIMILAR EXISTING CONDITIONS OBSTRUCT THE SPECIFIED ALTERATIONS, TEMPORARILY RELOCATE THOSE ITEMS. DO NOT DISCONNECT ANY COMPONENT WITHOUT APPROVAL BY THE OWNER. REINSTALL AS APPROVED BY THE OWNER.
7. AT SOME LOCATIONS, IT MAY BE NECESSARY TO DISCONNECT FRAMING MEMBERS FROM SUPPORTS IN ORDER TO INSTALL SPECIFIED REINFORCEMENTS. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING STABILITY OF DISCONNECTED MEMBERS UNTIL FINAL CONNECTIONS ARE COMPLETED.

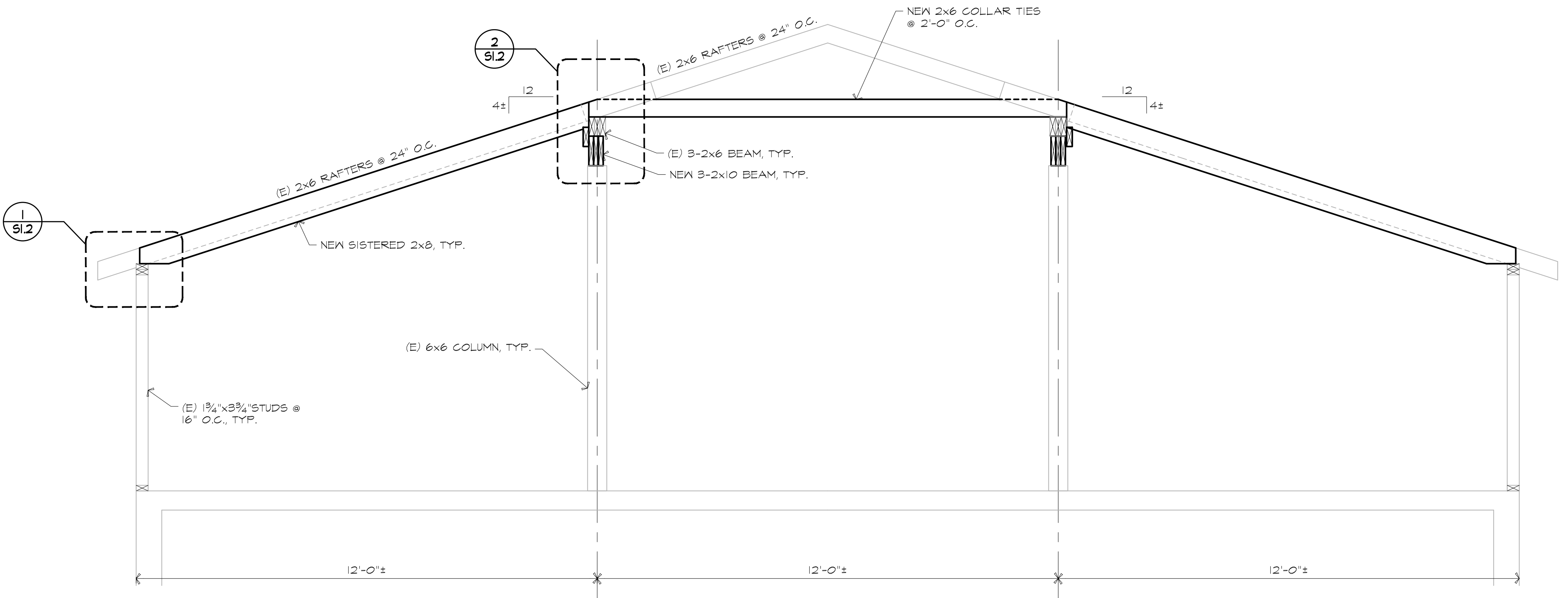
**WOOD FRAMING NOTES**

1. "LVL" DESIGNATES LAMINATED VENEER LUMBER. PROVIDE BOISE CASCADE VERSA-LAM 2.0 3100 FRAMING. WHERE MEMBERS THICKER THAN 1-3/4" ARE SPECIFIED, PROVIDE SINGLE MEMBERS FABRICATED TO THE SPECIFIED THICKNESS. JOINING MULTIPLE MEMBERS TO ATTAIN THE SPECIFIED THICKNESS IS NOT ACCEPTABLE UNLESS SPECIFICALLY APPROVED AS A SUBSTITUTION.
2. NEW DIMENSION LUMBER SHALL BE #2 GRADE OR BETTER SPRUCE-PINE-FIR GRADED UNDER NLGA RULES.
3. WHERE NAILS ARE SPECIFIED, PROVIDE FASTENERS WITH THE FOLLOWING MINIMUM DIMENSIONS:
  - A. 10D NAILS USED FOR FASTENING ROOF SHEATHING = 0.148" DIAMETER X 3".
  - B. 10D NAILS USED FOR FRAMING = 0.12" DIAMETER X 2-7/8".
  - C. 16D NAILS = 0.148" X 3-1/4".
  - D. 8D NAILS = 0.118" DIAMETER X 2-3/8".

4. 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.
5. 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.
6. LAG SCREWS SHALL COMPLY WITH ANSI/ASME B18.2.1. FOR 3/8" DIAMETER LAG SCREWS, THE MAXIMUM PILOT HOLE FOR THE THREADED PORTION OF THE SCREW SHALL BE 70% OF THE SHANK DIAMETER.
7. 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 UNLESS OTHERWISE NOTED.
8. BOLTS SPECIFIED FOR CONNECTING TIMBER MEMBERS AND FOR CONNECTING TIMBER MEMBERS TO STEEL SHALL BE ASTM A307 BOLTS. INSTALL WITH DRILLED HOLES 1/8" LARGER THAN THE BOLT DIAMETER.

**ROOF DECK NOTES**

1. AT AREAS WHERE 1" EXISTING BOARD SHEATHING IS REMOVED, INFILL WITH APA RATED SHEATHING WITH THICKNESS TO MATCH EXISTING DECK. INSTALL WITH LONG DIMENSION PERPENDICULAR TO SUPPORTS. FASTEN TO SUPPORTS WITH 10D NAILS AT 6' ON CENTER.



BEAN BARN: CROSS SECTION

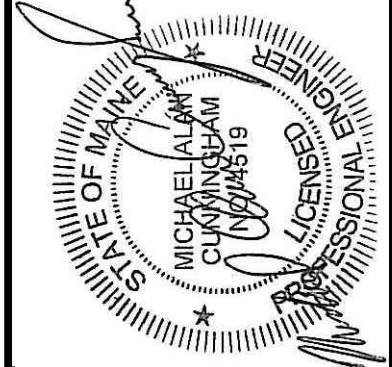
1/2"=1'-0"

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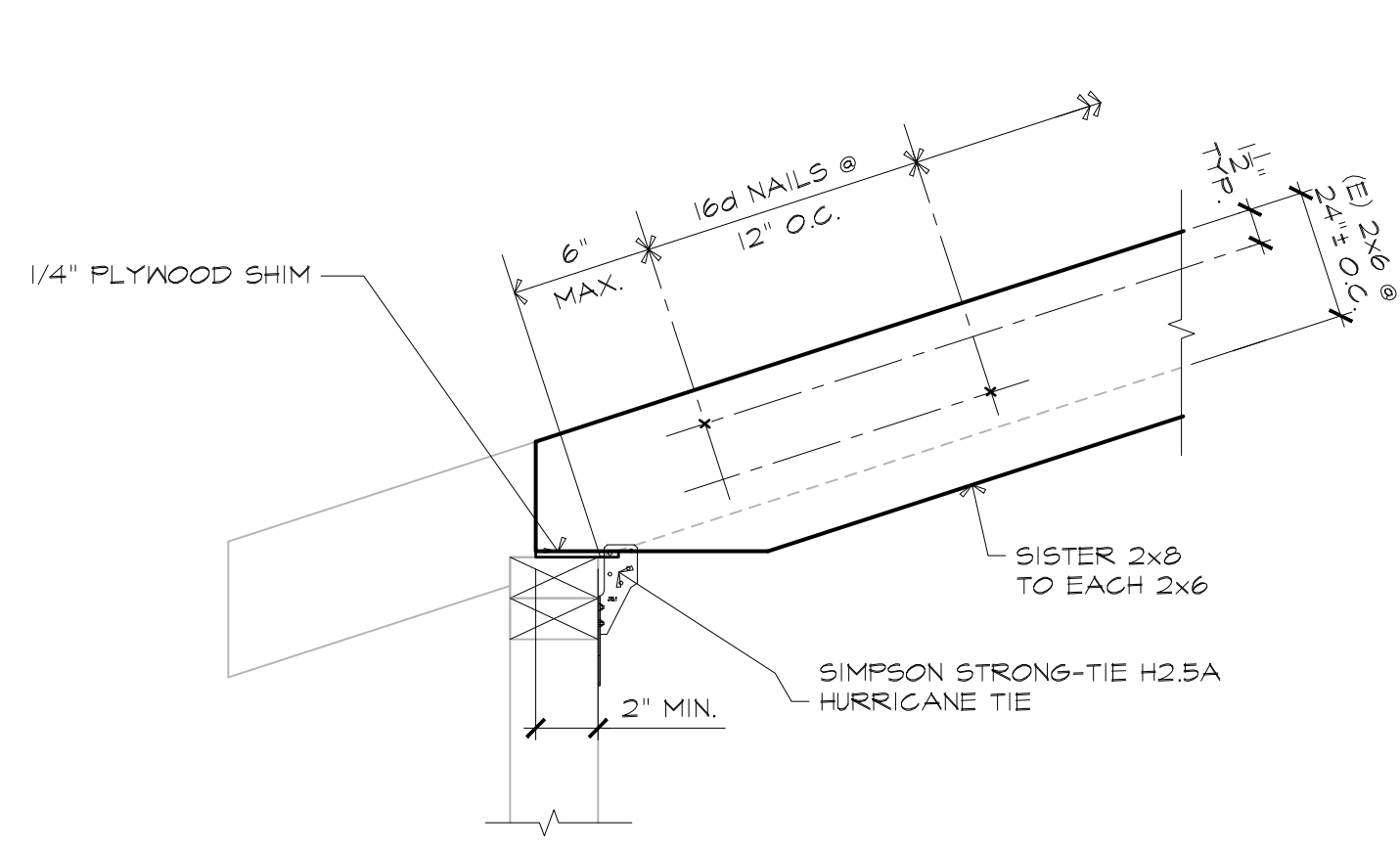
BEAN BARN: FRAMING PLAN AND SECTION

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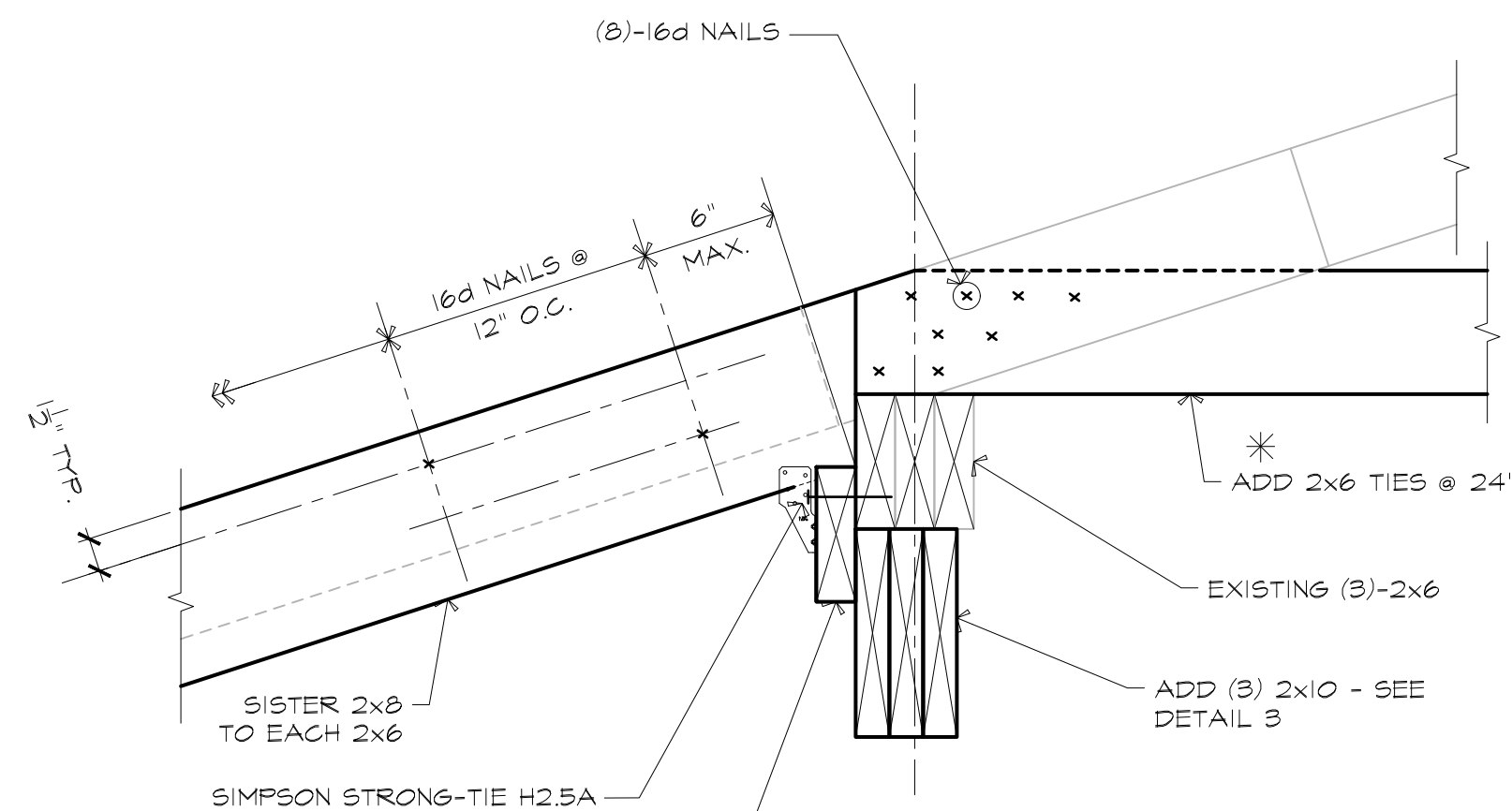


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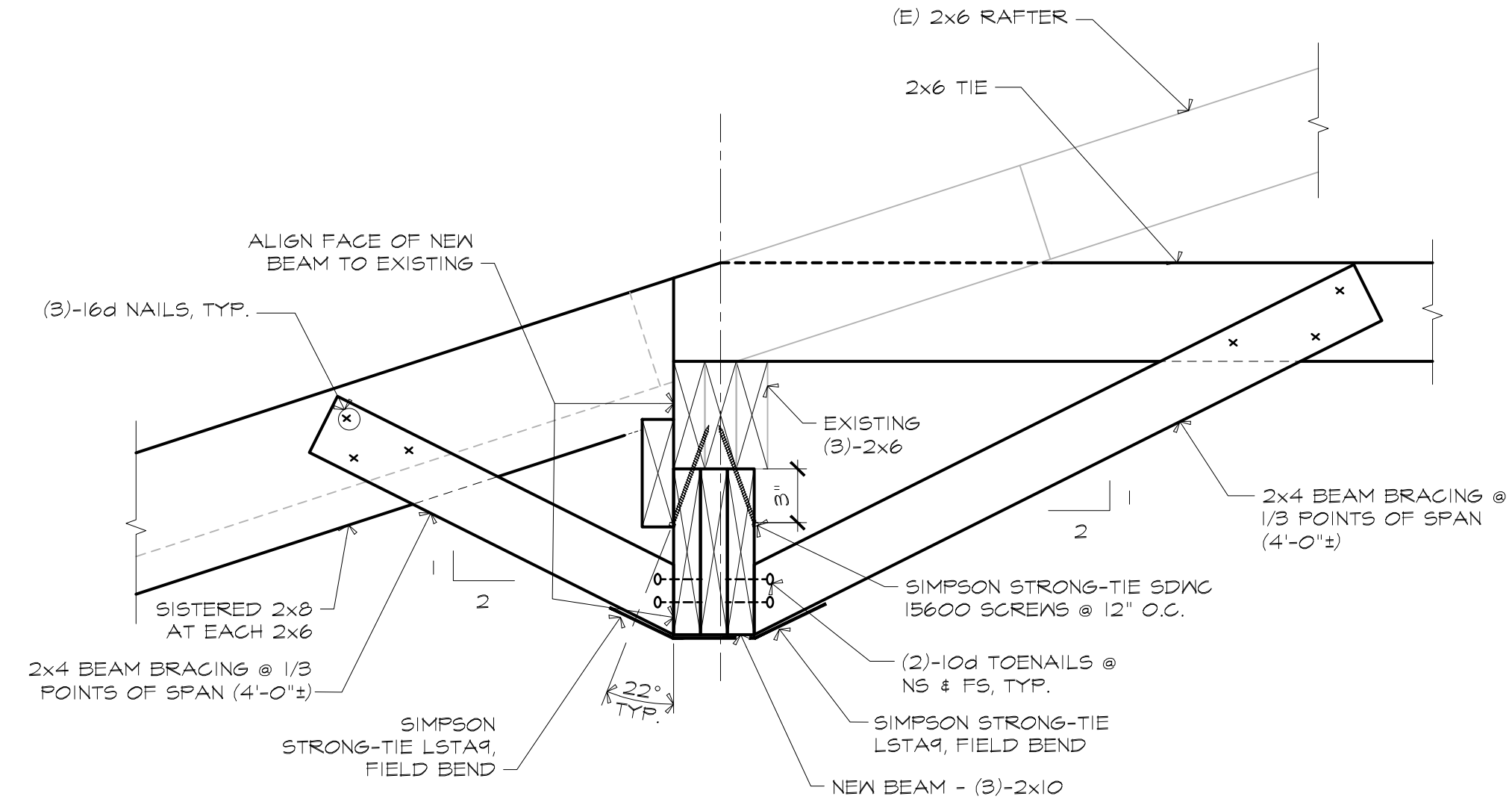
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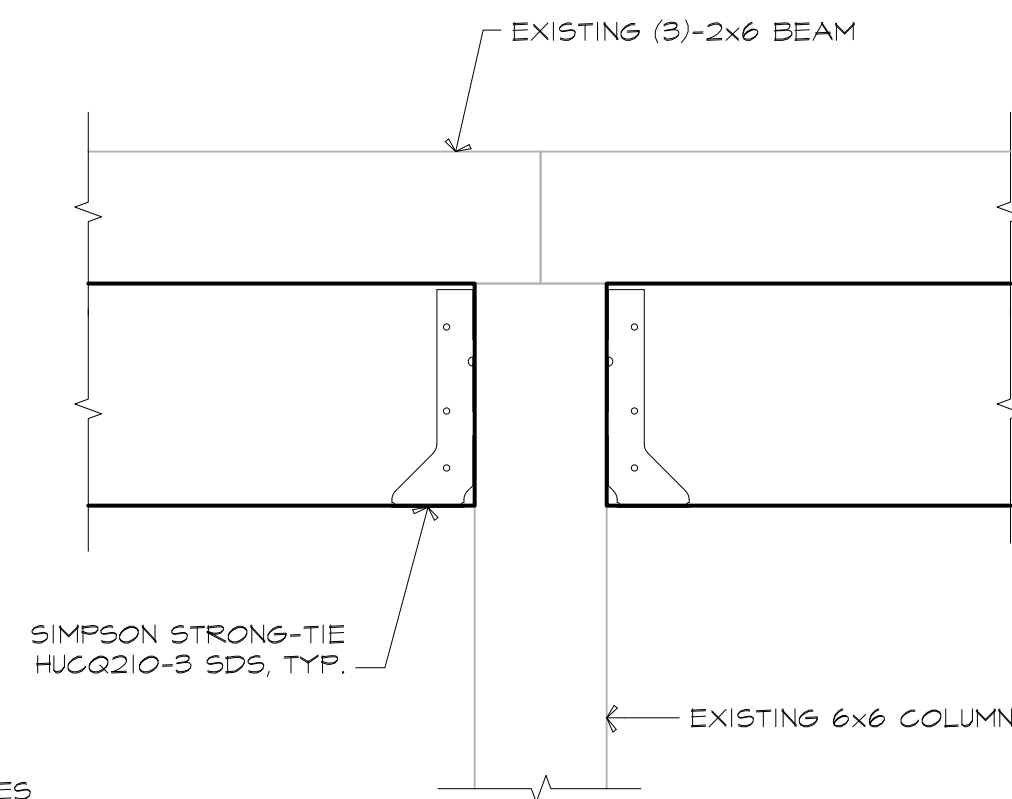
1 SECTION  
1-1/2"=1'-0"



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



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



4 TYPICAL BEARING DETAIL AT NEW BEAM  
1-1/2"=1'-0"

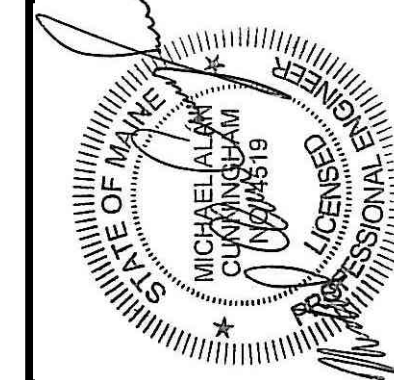
\* THERE ARE EXISTING 1x TIES @ 4'-0" - REMOVE IF INTERFERING W/ NEW TIES

CONT. 2x6 W/ 16d NAILS @ 6" O.C.

NOTE:  
RAFTERS & TIES  
ARE NOT SHOWN

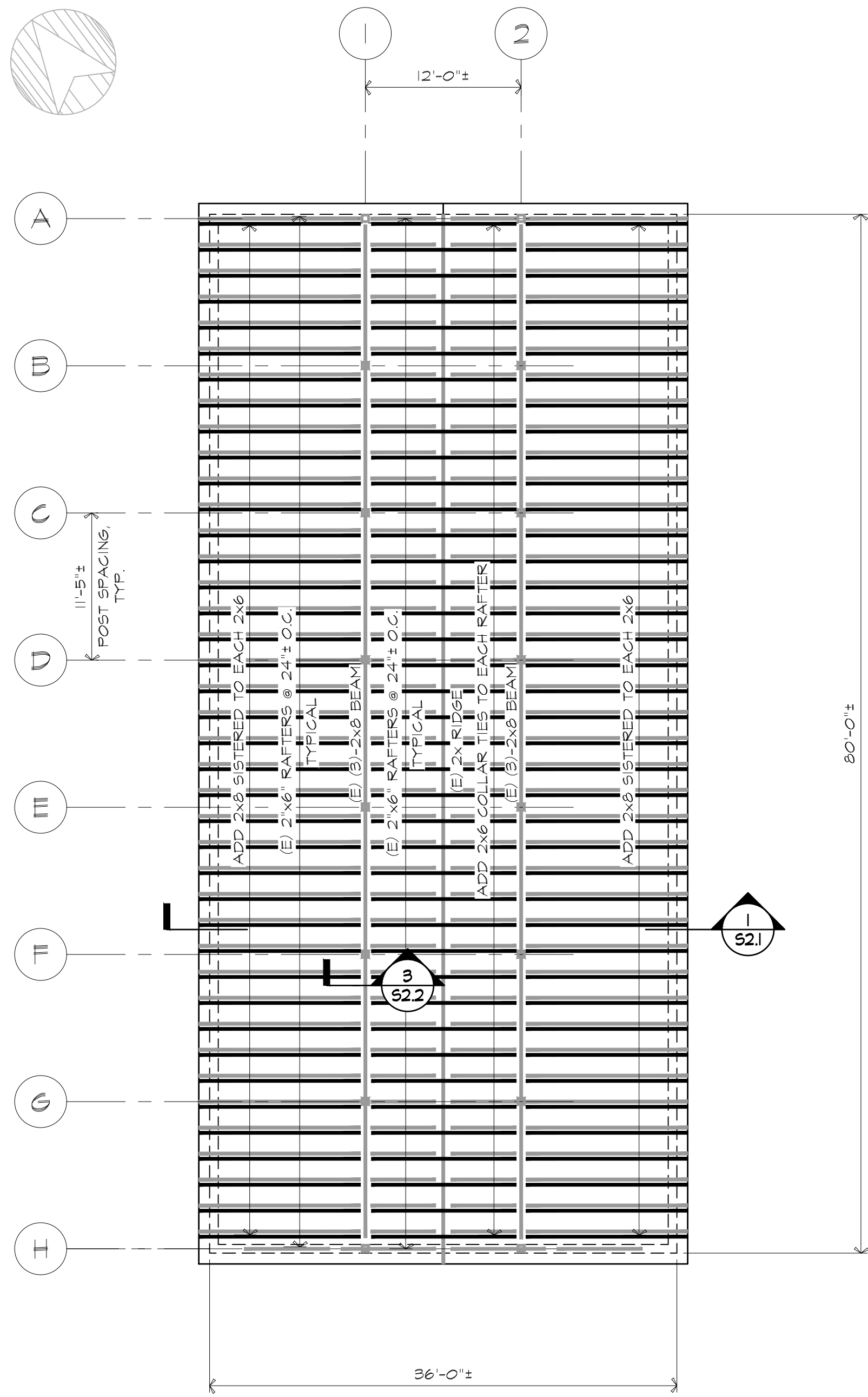
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 BEAN BARN: SECTIONS AND DETAILS



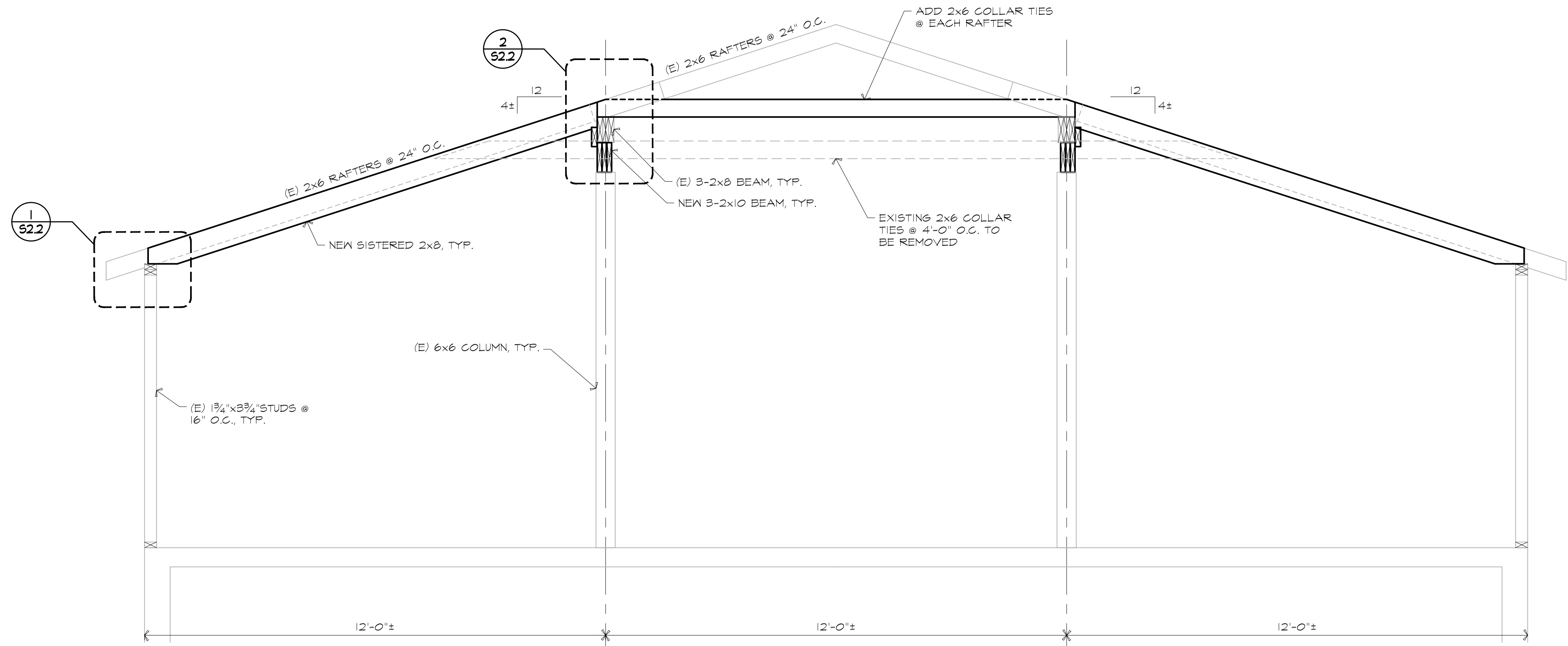
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S1.2



**EQUIPMENT BARN: ROOF FRAMING PLAN**  
1/8"=1'-0"

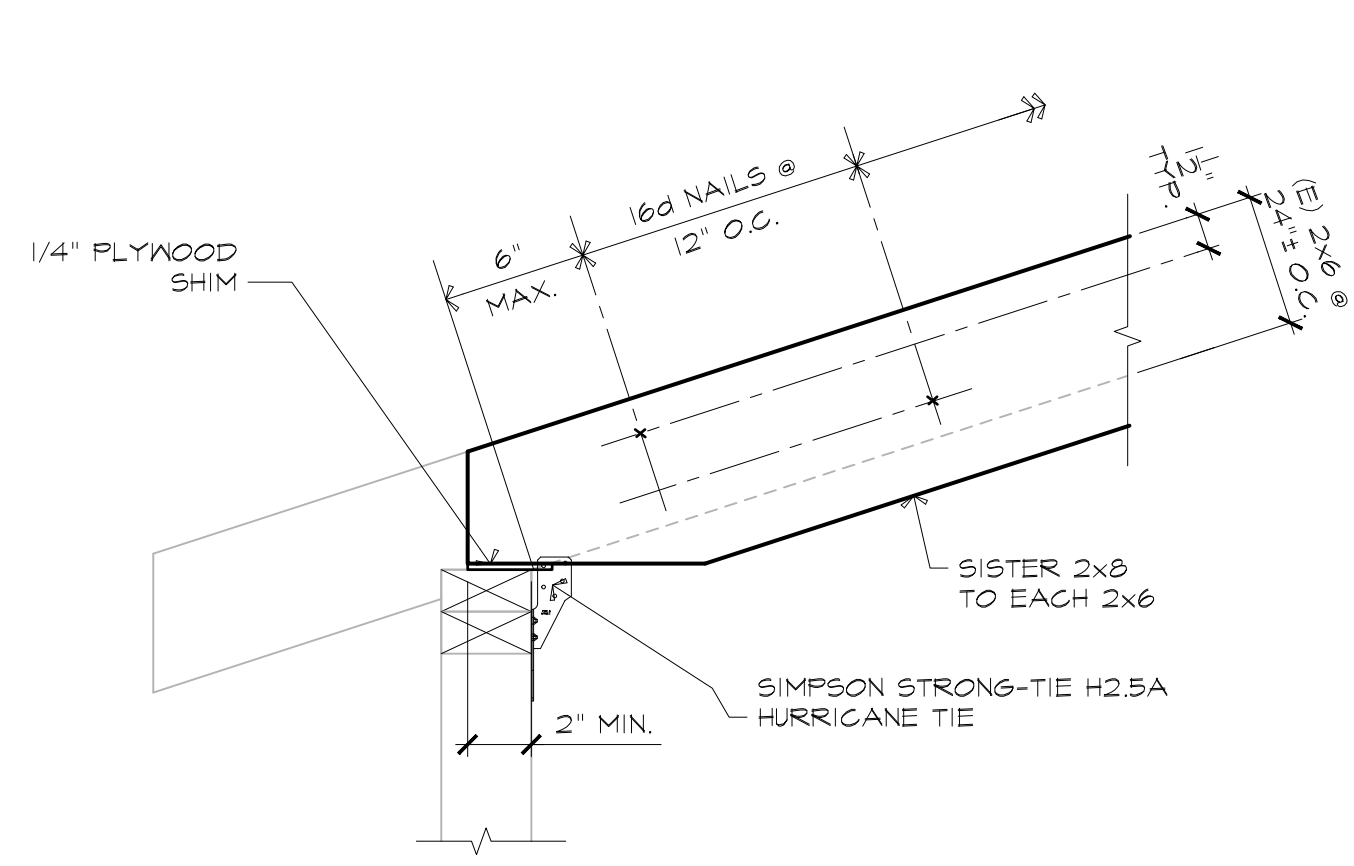
NOTE: REMOVE EXISTING 1/2" FIBERBOARD CEILING. REINSTALLATION IS NOT REQUIRED.



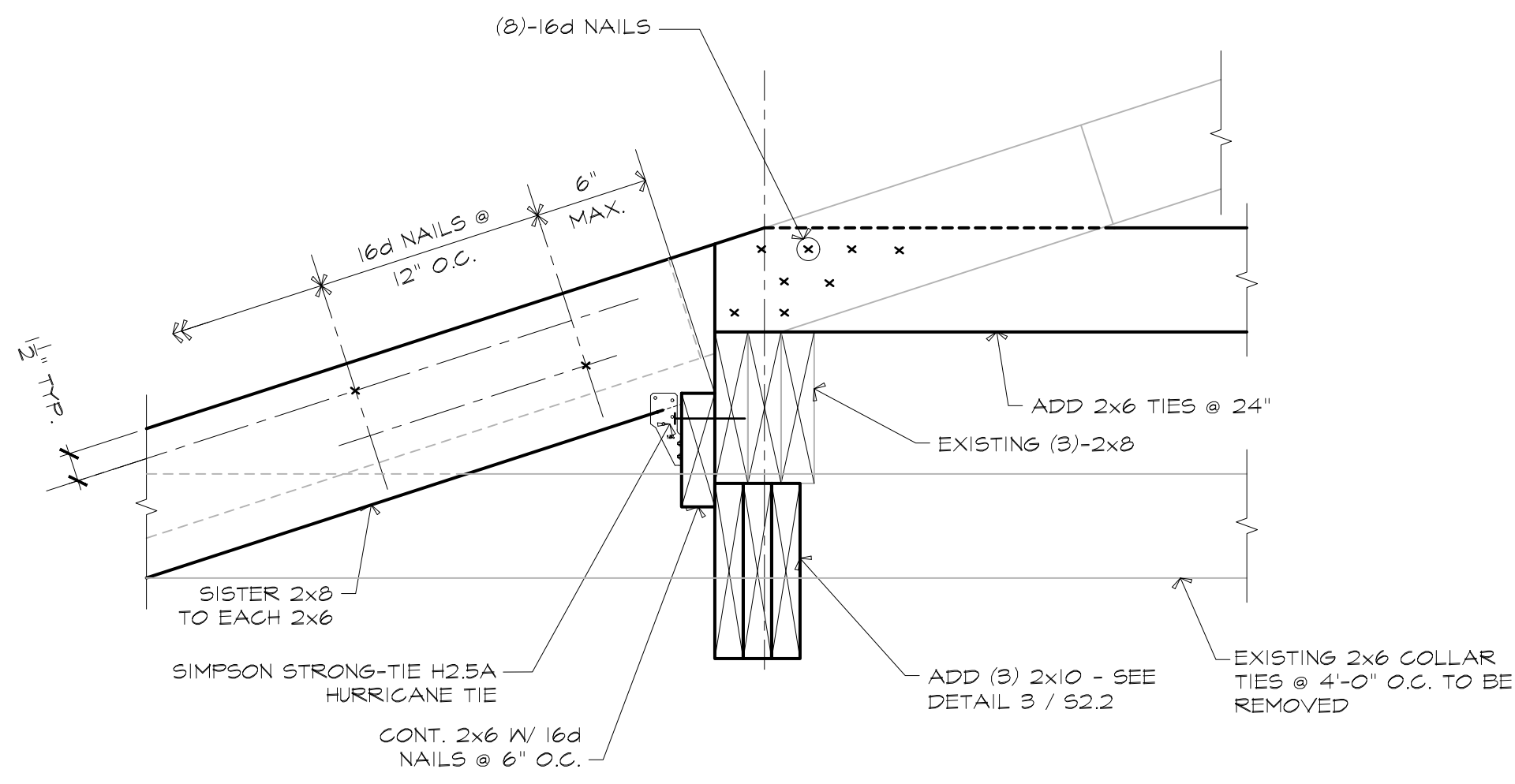
**EQUIPMENT BARN: CROSS SECTION:**  
1/2"=1'-0"

<b>Lincoln / Haney</b> Engineering Associates, Inc. 14 Maine Street Suite 301, Box 7 Brunswick, Maine 04011 Phone: 207-729-1061 Fax: 207-729-2941	DRAWN BY: SAM CHECKED BY: MAC ISSUE DATE: 10-27-23 PROJ. NO.: 2023.110	BOLDUC CORRECTIONAL FACILITY STRUCTURAL IMPROVEMENTS & REROOFING WARREN, MAINE	NO. _____ DATE _____ REVISION _____
	EQUIPMENT BARN FRAMING PLAN AND SECTION		

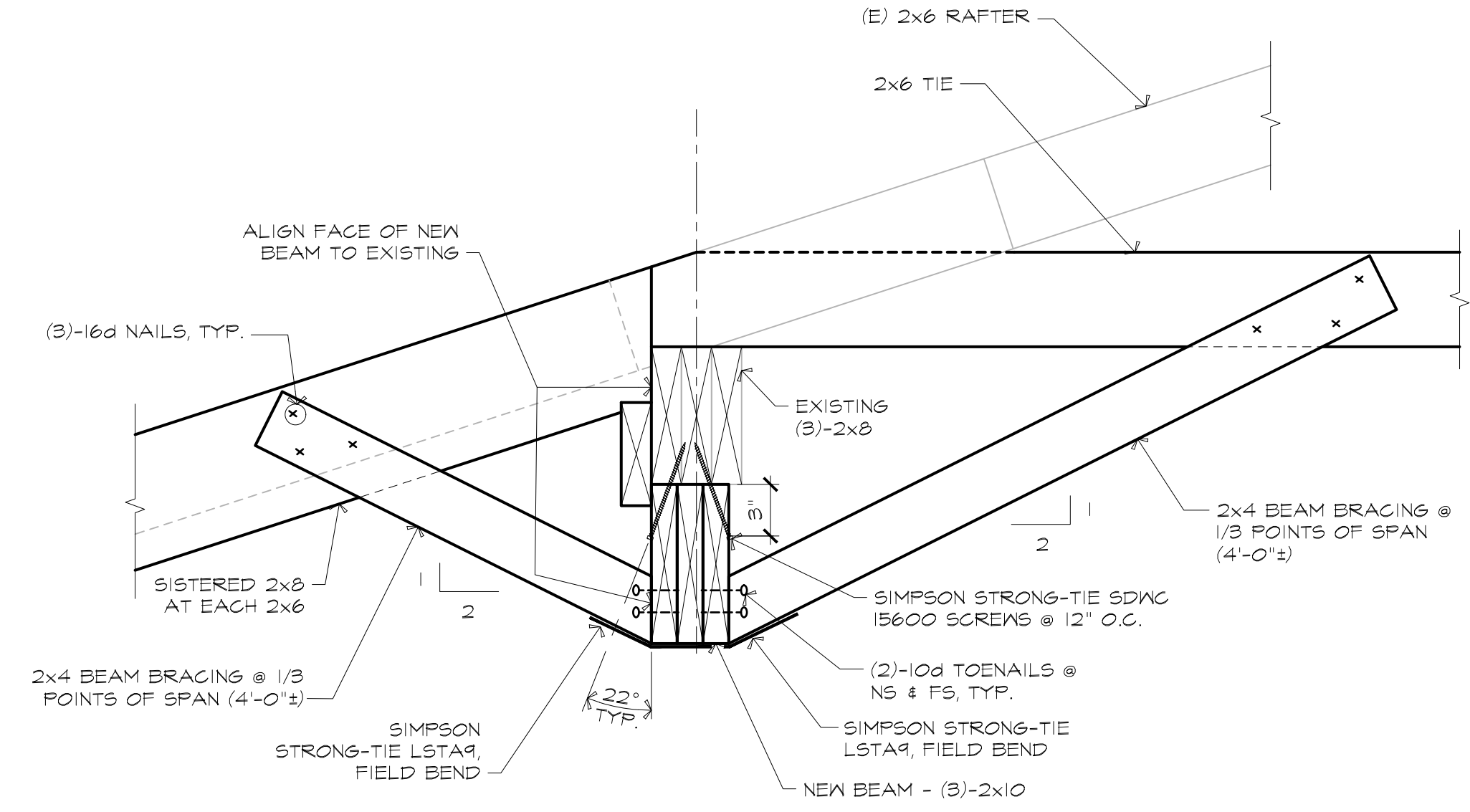
**S2.1**



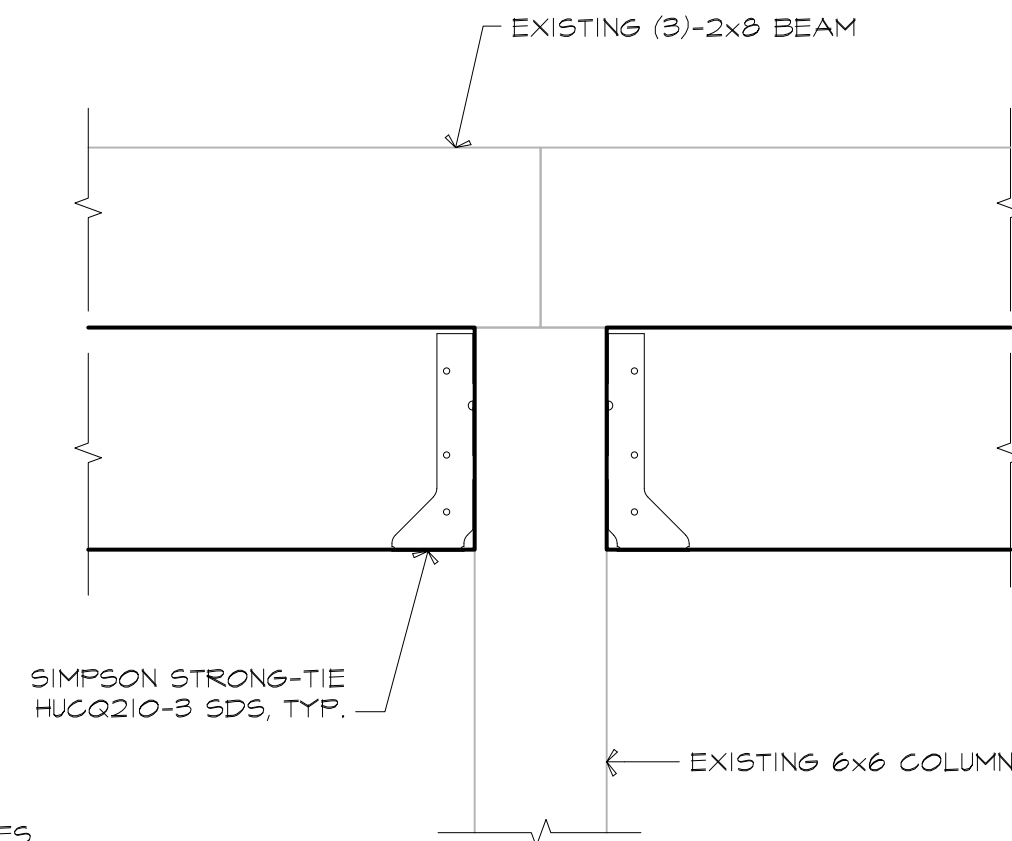
1 SECTION 1-1/2"=1'-0"



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



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



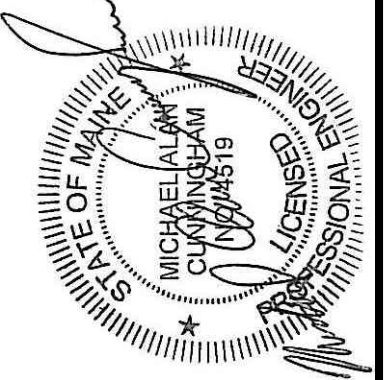
NOTE:  
RAFTERS & TIES  
ARE NOT SHOWN

4 TYPICAL BEARING DETAIL AT NEW BEAM 1-1/2"=1'-0"

NO.	DATE	REVISION

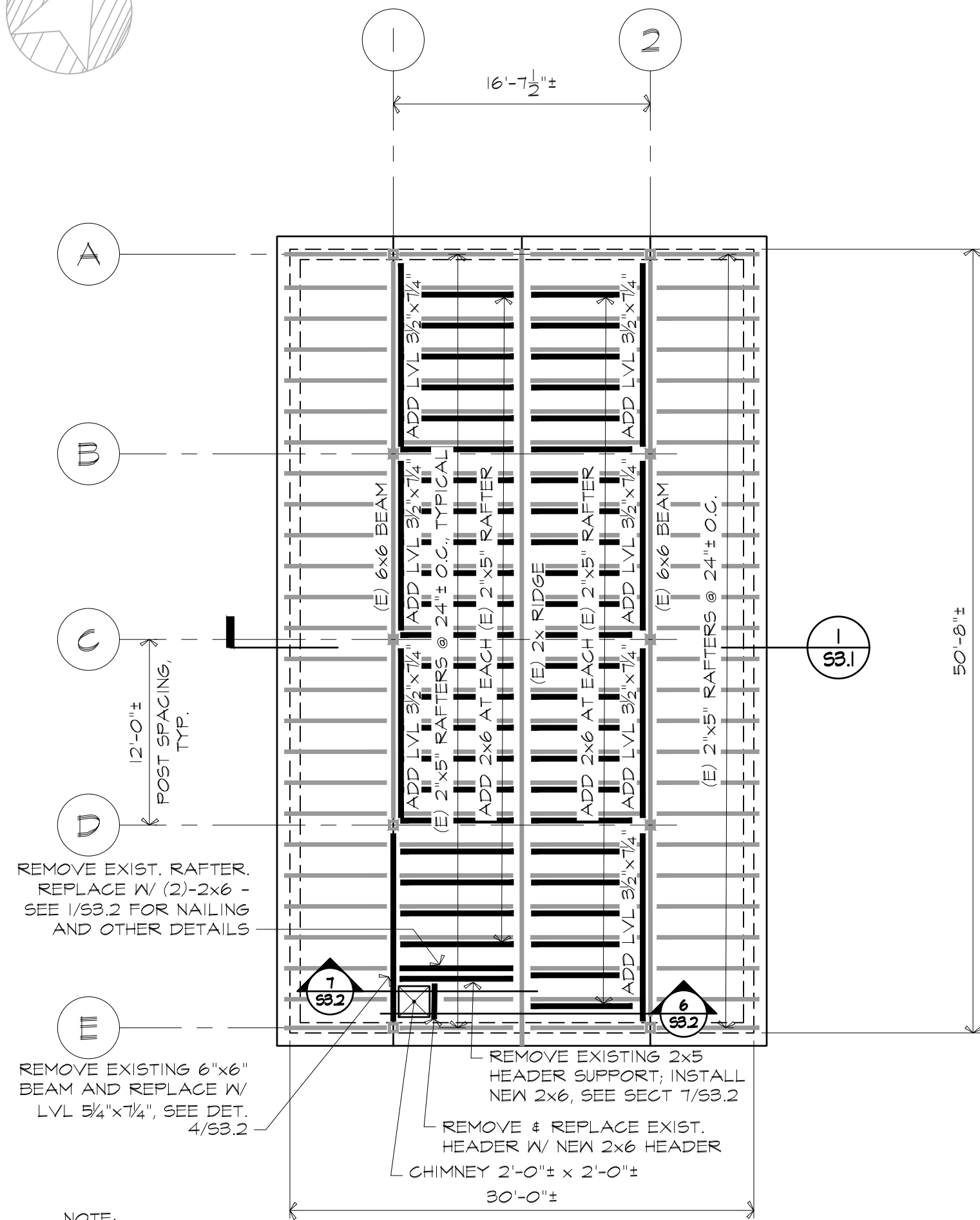
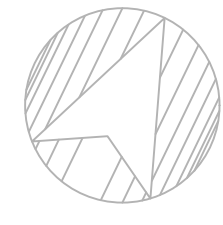
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 EQUIPMENT BARN: SECTIONS AND DETAILS

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**S2.2**



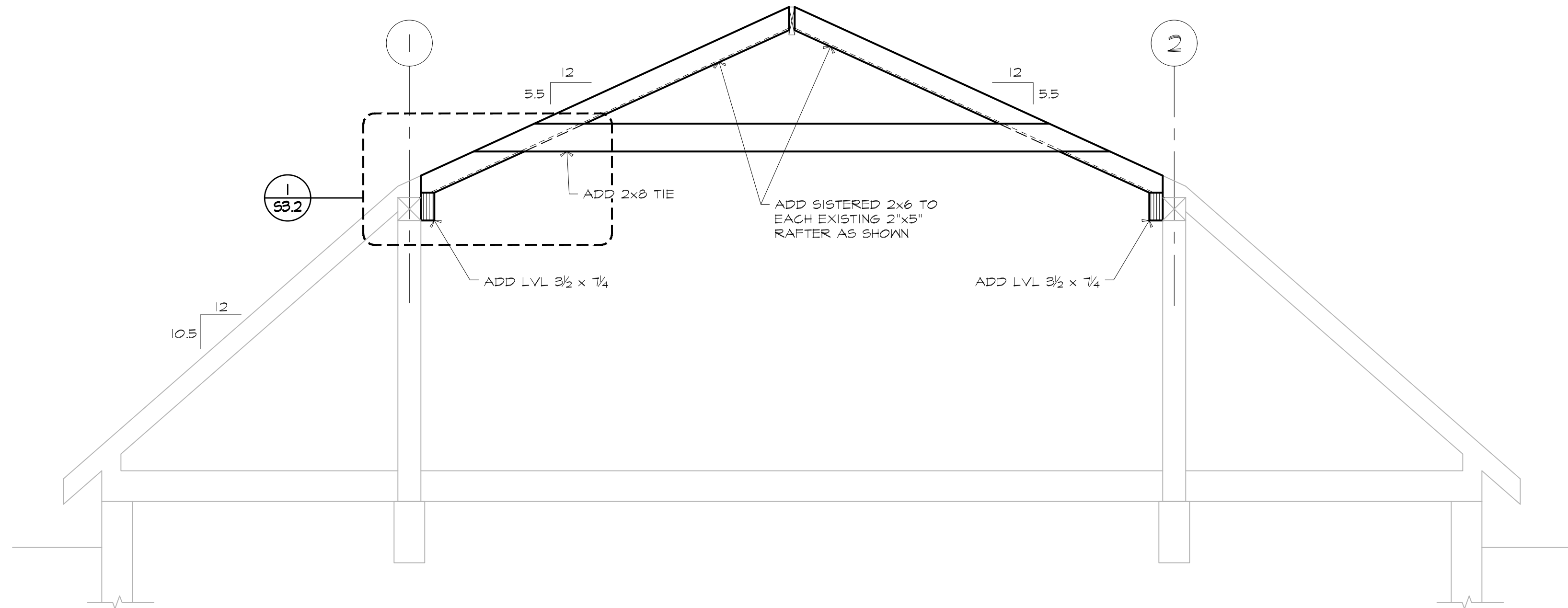
REMOVE EXIST. RAFTER, REPLACE W/ (2)-2x6 - SEE 1/53.2 FOR NAILING AND OTHER DETAILS

REMOVE EXISTING 6"x6" BEAM AND REPLACE W/ LVL 3/4"x7/4", SEE DET. 4/53.2

REMOVE EXISTING 2x5 HEADER SUPPORT; INSTALL NEW 2x6, SEE SECT 1/53.2  
REMOVE & REPLACE EXIST. HEADER W/ NEW 2x6 HEADER  
CHIMNEY 2'-0" ± x 2'-0" ±  
30'-0" ±

NOTE:  
REMOVE EXISTING 1" BOARD ROOF DECK. REPLACE WITH 1 1/2" THICK APA RATED SHEATHING. NEW SHEATHING SHALL BE EXPOSURE 1 WITH MINIMUM SPAN RATING = 40/20 FASTENED TO SUPPORTS WITH 10d NAILS SPACES AS FOLLOWS:  
1. 6" ON CENTER AT SUPPORTED PANEL EDGES  
2. 12" ON CENTER AT INTERMEDIATE SUPPORTS

**POTATO BARN: ROOF FRAMING PLAN**  
1/8"=1'-0"



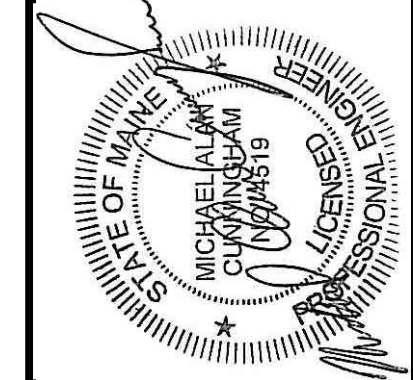
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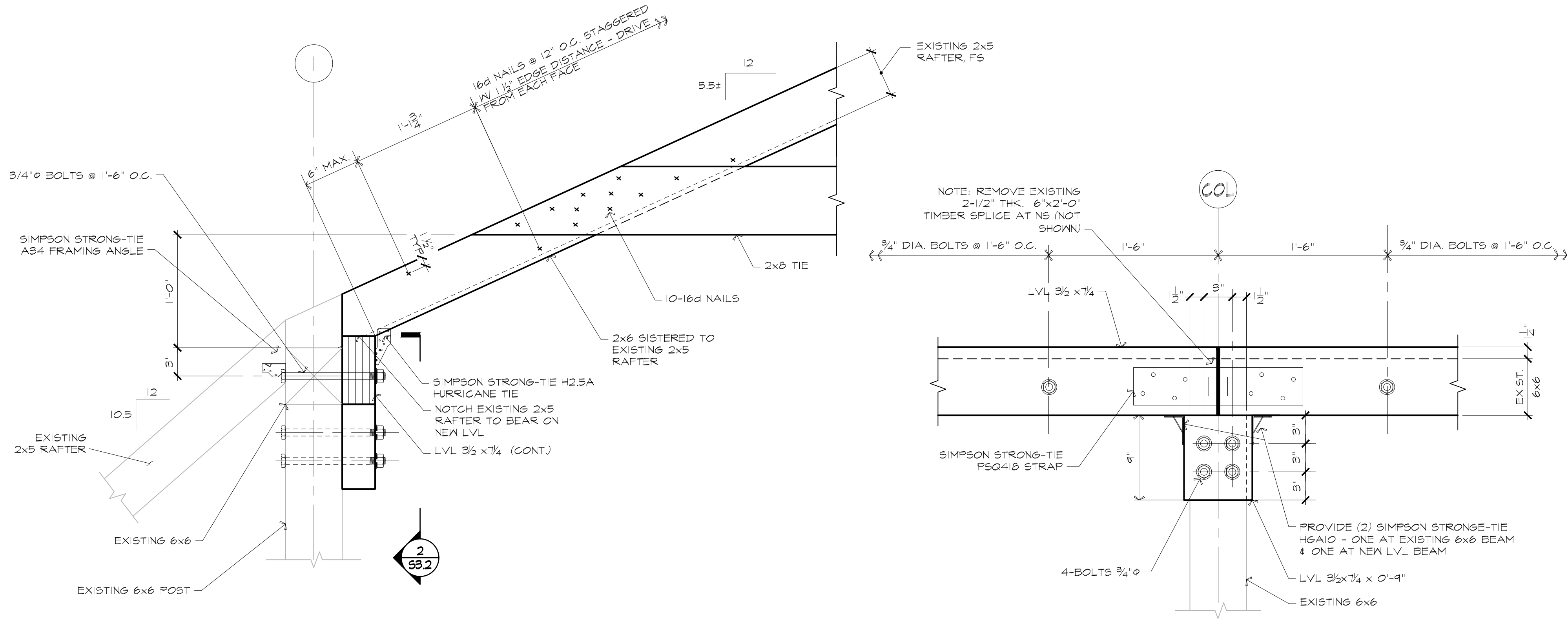
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**POTATO BARN: FRAMING PLAN AND SECTION**



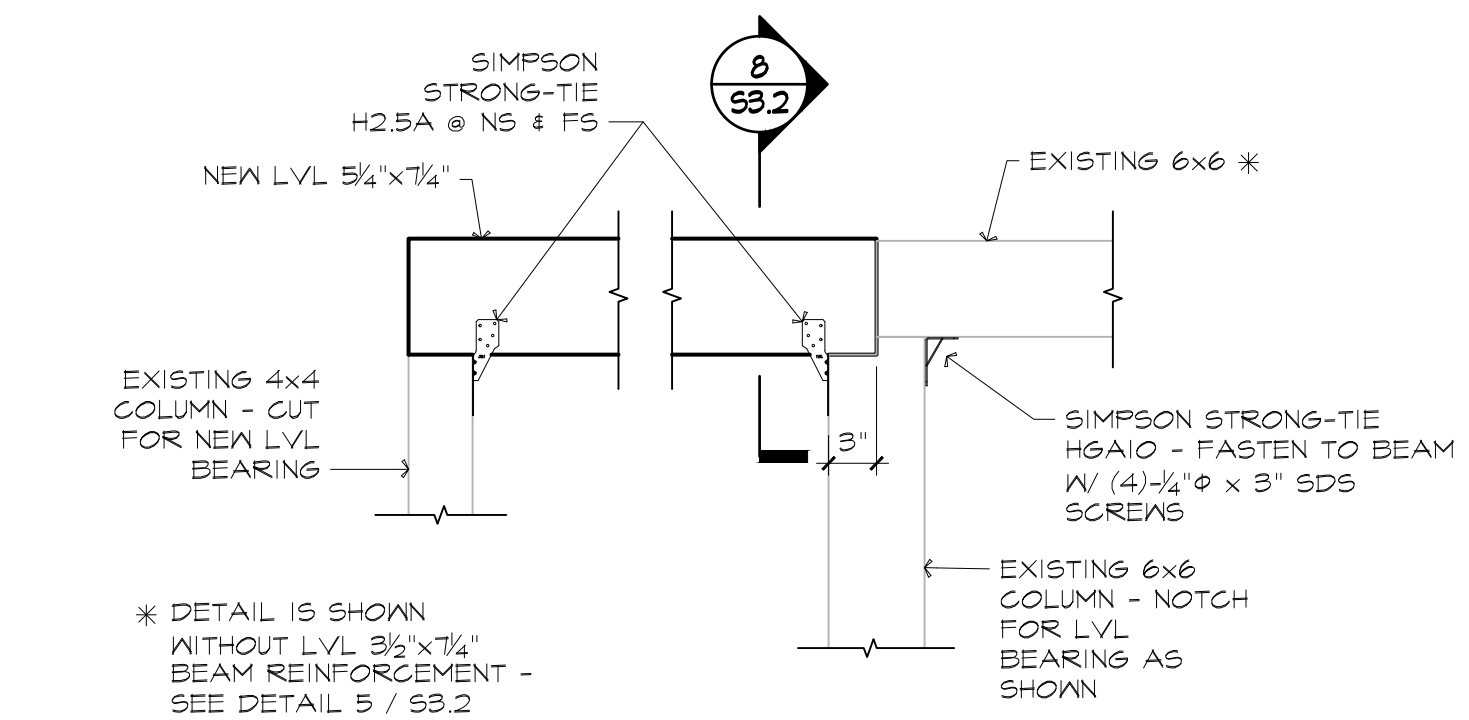
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**S3.1**

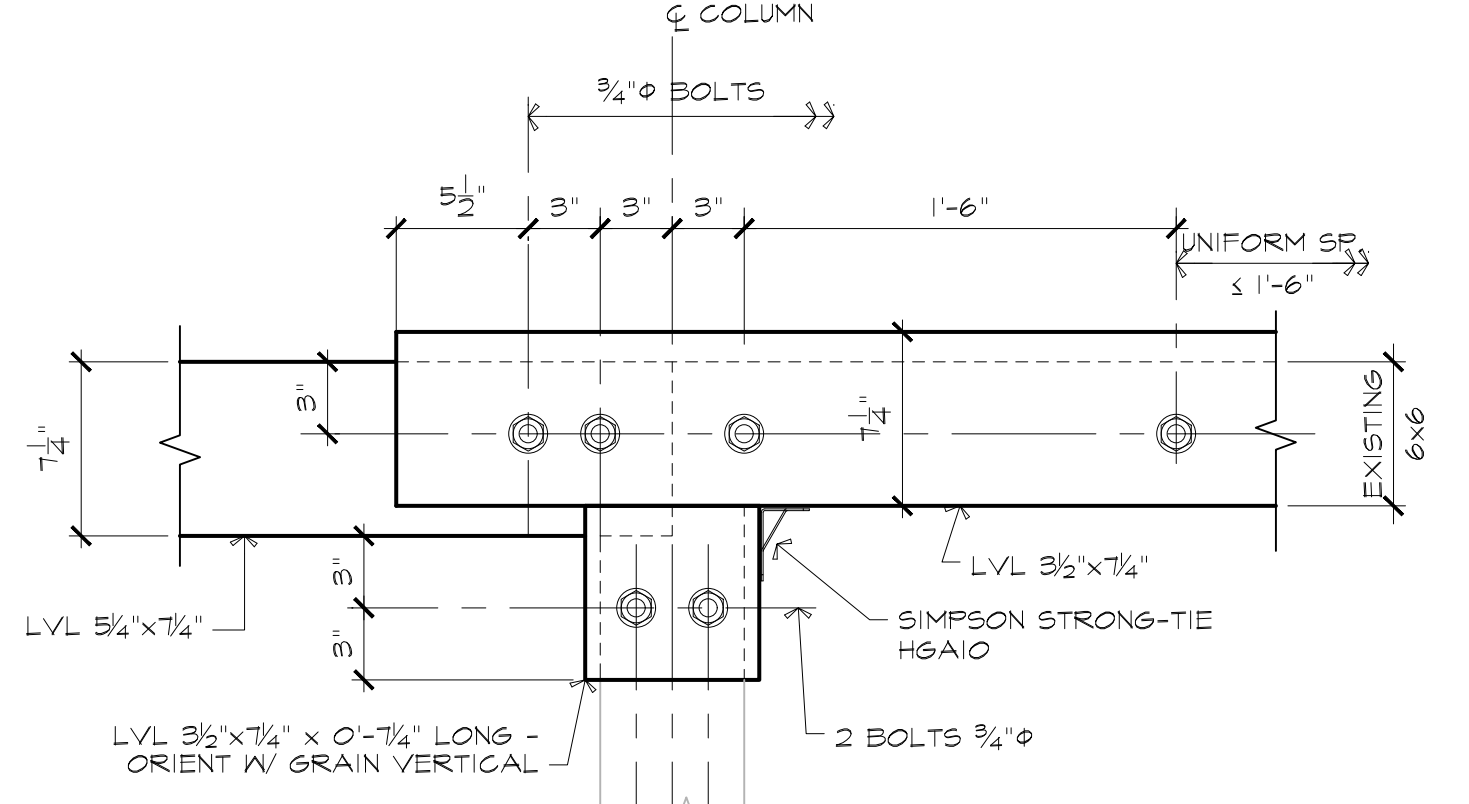


1 SECTION 1-1/2"=1'-0"

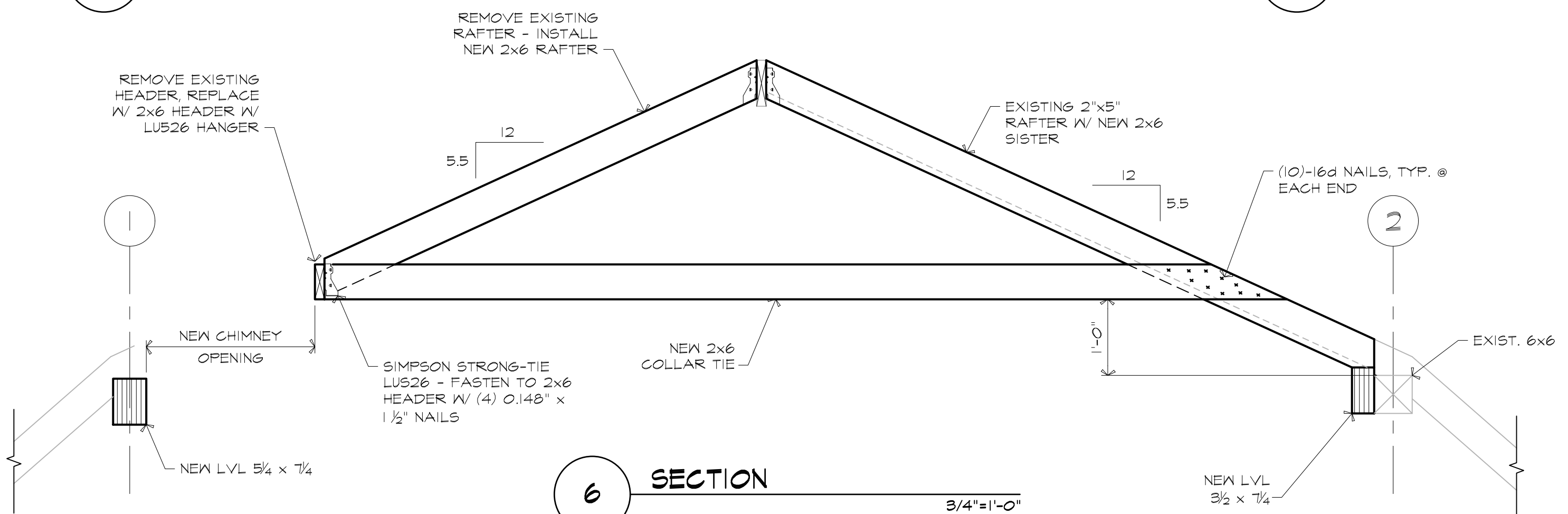
2 SECTION 1-1/2"=1'-0"



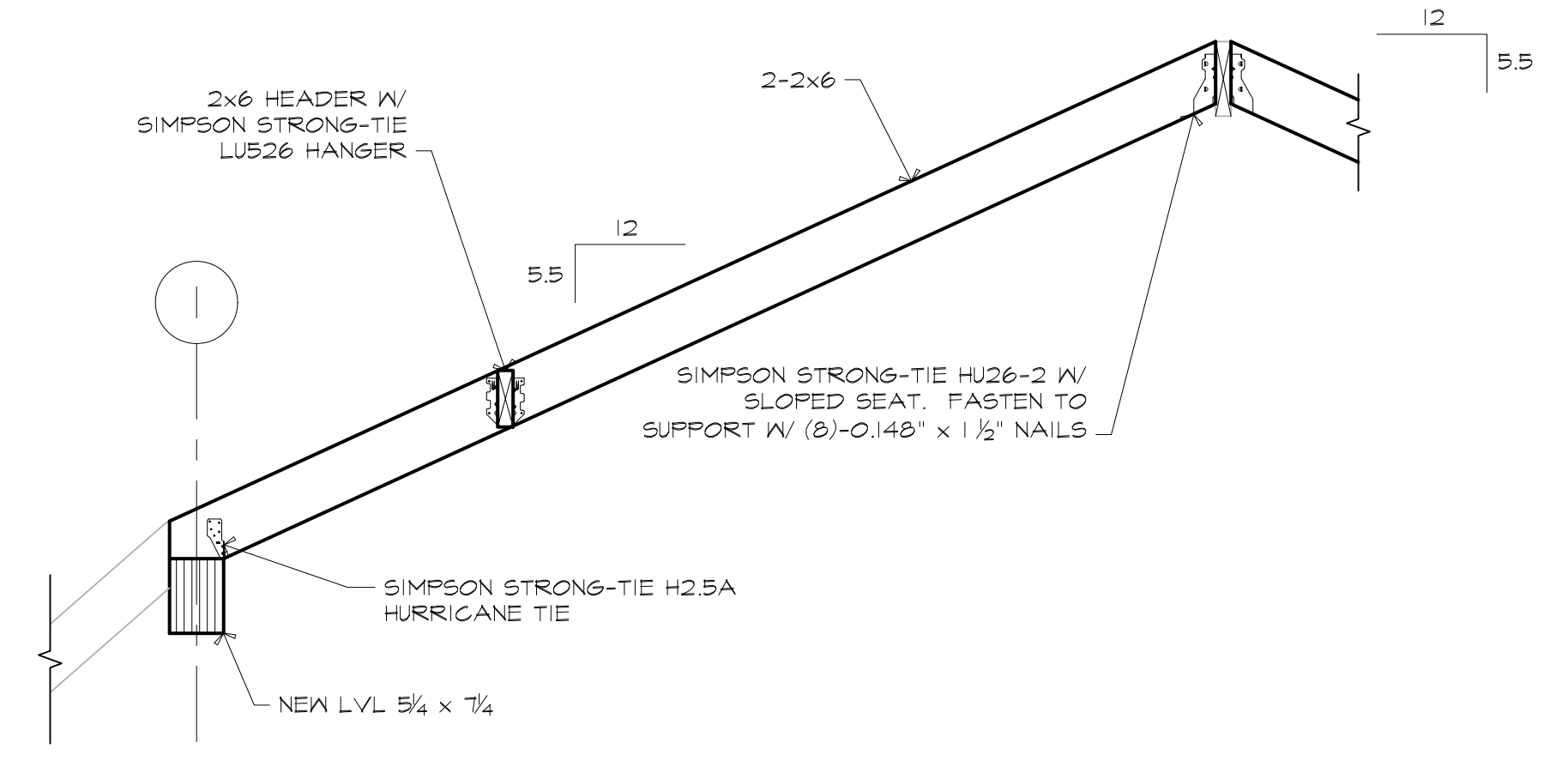
4 DETAIL 1"=1'-0"



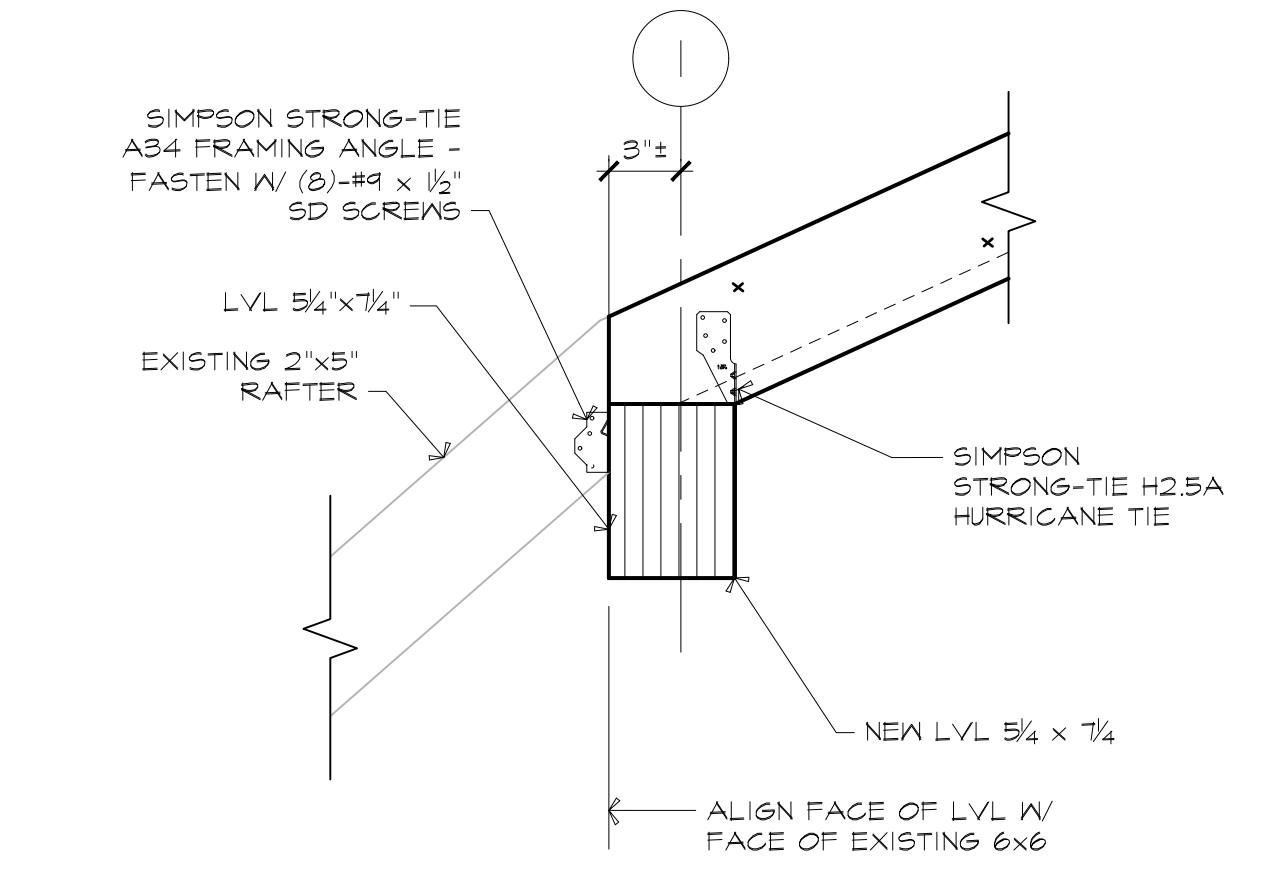
5 DETAIL 1-1/2"=1'-0"



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



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



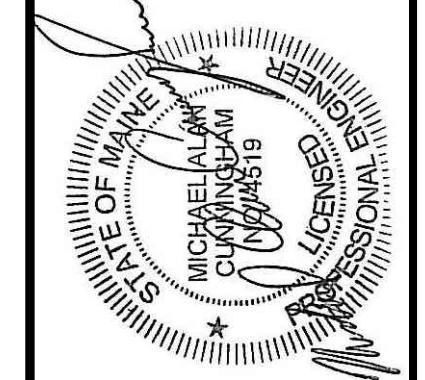
8 DETAIL 1-1/2"=1'-0"

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**S3.2**