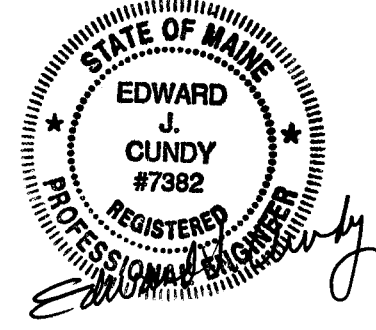
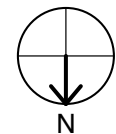
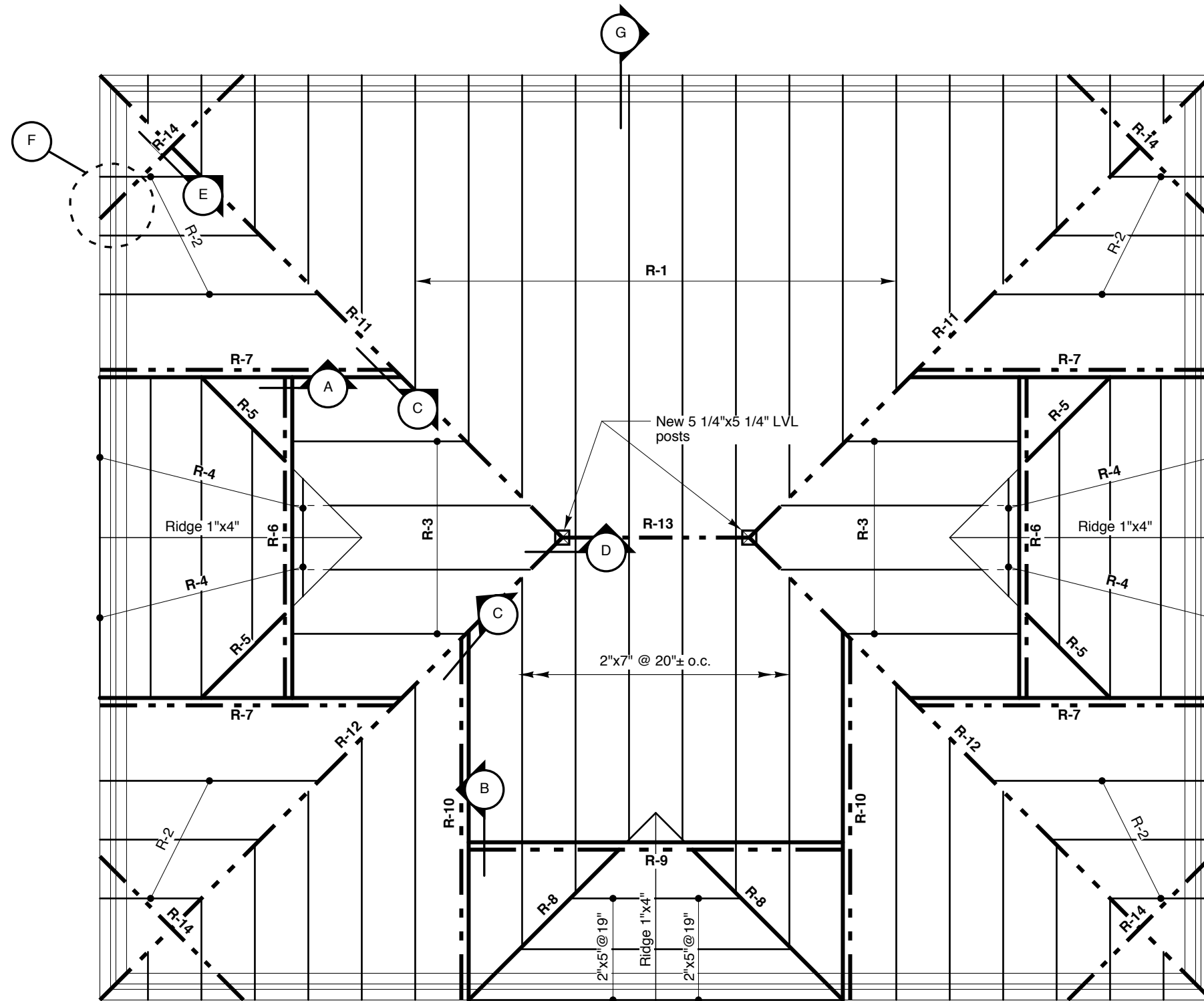
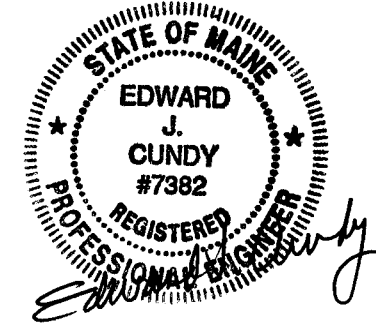


Existing Roof Framing Plan

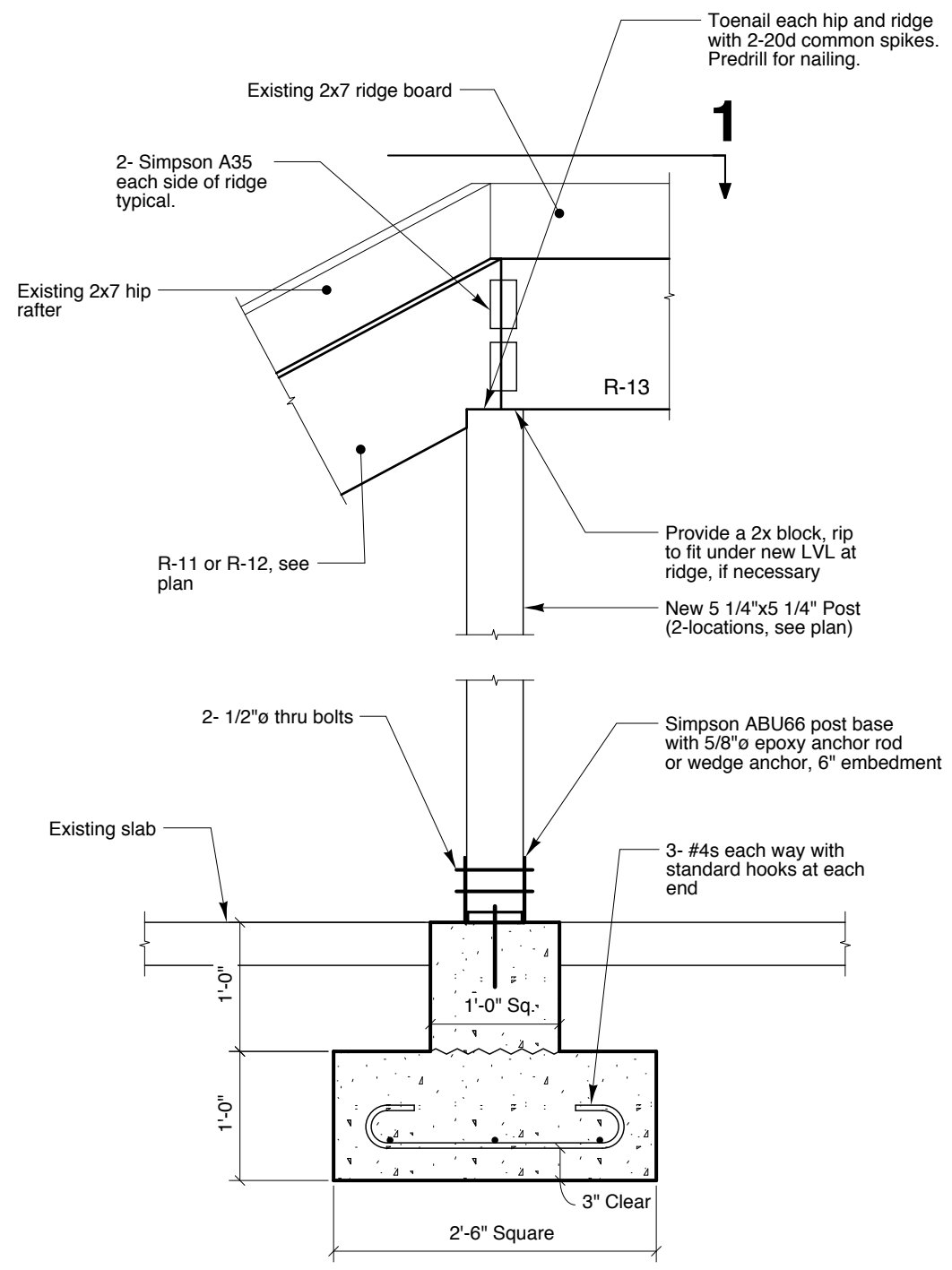




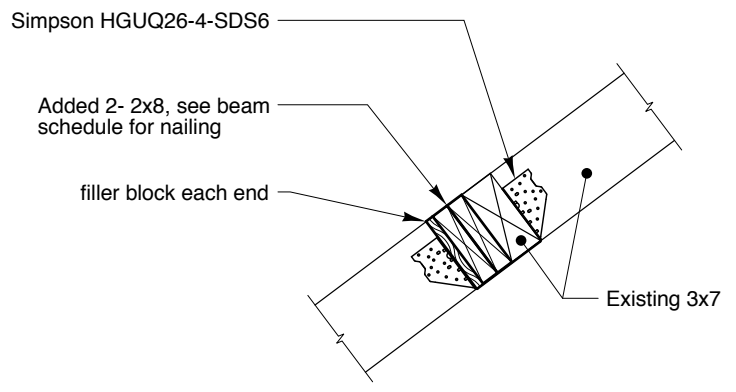
Roof Framing Stabilization Plan



BEAM SCHEDULE	
MARK	REQUIRED FIX
R-1	Sister 2x10 to each rafter. Rafters 10 feet and shorter do not require sistering.
R-2	Member is OK
R-3	Member is OK
R-4	Member is OK
R-5	Cut and re-nail to R-6
R-6	Add 2- 2x8. Nail with two rows of 16d common galvanized nails at 12" o.c. Stagger rows. Apply PL400 adhesive to entire surface between existing 3x7 and new framing.
R-7	Add 2- 1 3/4" x 9 1/2" LVL. Nail with two rows of 16d common galvanized nails at 6" o.c. Stagger rows. Apply PL400 adhesive to entire surface between existing 3x7 and new LVL.
R-8	Cut and re-nail to R-9
R-9	Add 2- 1 3/4" x 9 1/4" LVL. Nail with two rows of 16d common galvanized nails at 6" o.c. Stagger rows. Apply PL400 adhesive to entire surface between existing 3x7 and new LVL.
R-10	Add 2- 1 3/4" x 9 1/2" LVL. Nail with two rows of 16d common galvanized nails at 6" o.c. Stagger rows. Apply PL400 adhesive to entire surface between existing 3x7 and new LVL.
R-11	Hip Support: 3 1/2" x 14" LVL under existing 2x7 hip member. Existing rafters may have to be notched for a tight fit to existing hip.
R-12	Hip Support: 3 1/2" x 14" LVL under existing 2x7 hip member. Existing rafters may have to be notched for a tight fit to existing hip.
R-13	Ridge Support: 3 1/2" x 14" LVL under existing 2x7 ridge member. Existing rafters may have to be notched for a tight fit to existing ridge.
R-14	R-11, R12 Support at Eave: HSS 5x5x1/4 Refer to Sections

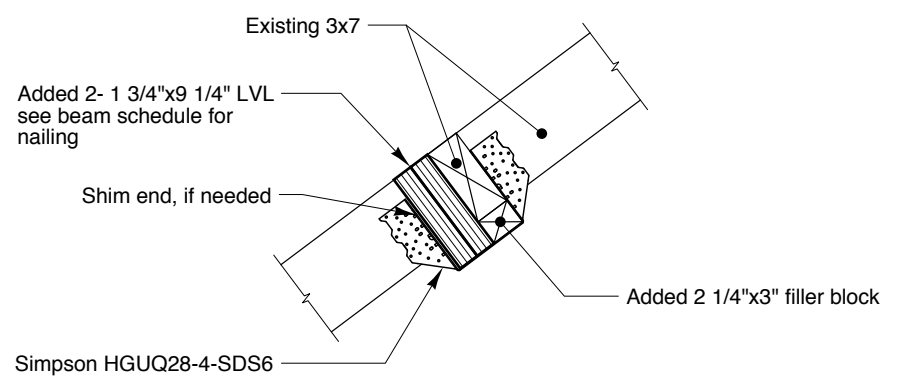


D SECTION
SCALE: 3/4" = 1'-0"



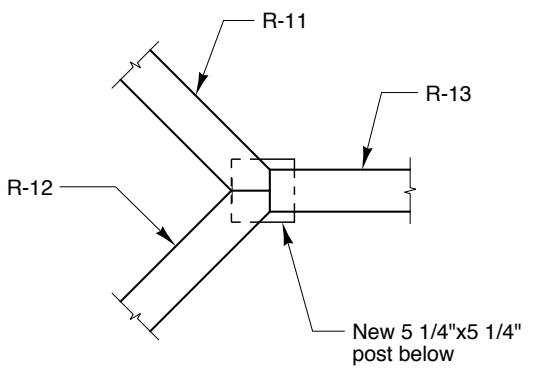
Typical R-6 to R-7 Connection Detail

A SECTION
SCALE: 3/4" = 1'-0"

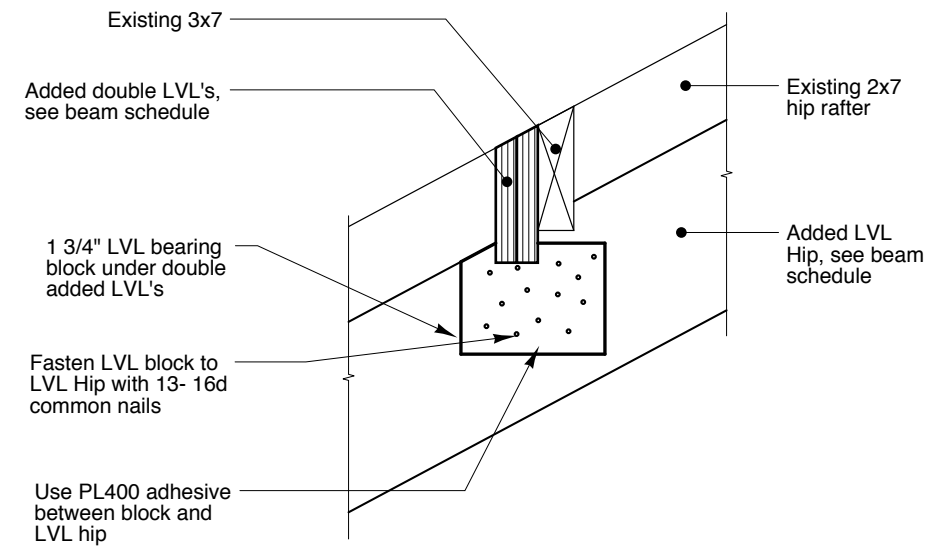


Typical R-9 to R-10 Connection Detail

B SECTION
SCALE: 3/4" = 1'-0"

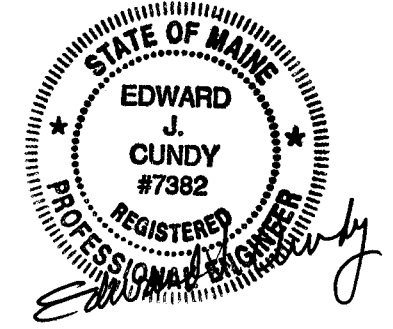


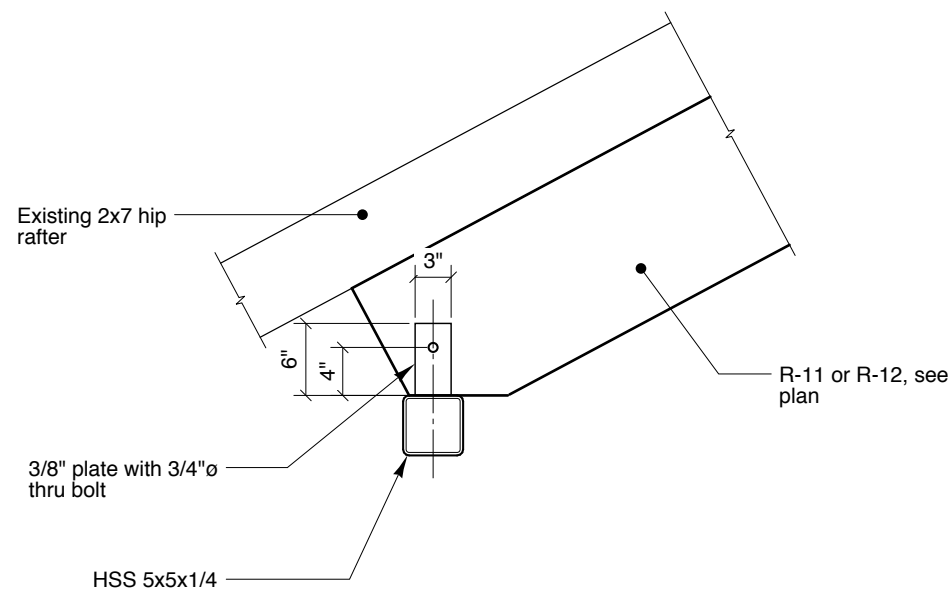
Detail - 1



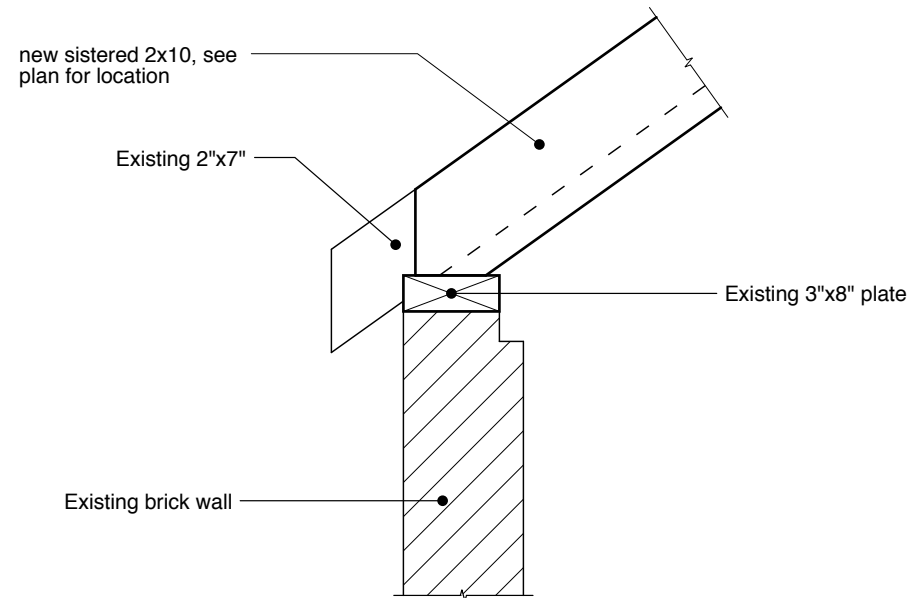
Typical R-7 to R-11, R-7 to R-12, and R-10 to R-12 Connection Detail

C SECTION
SCALE: 3/4" = 1'-0"

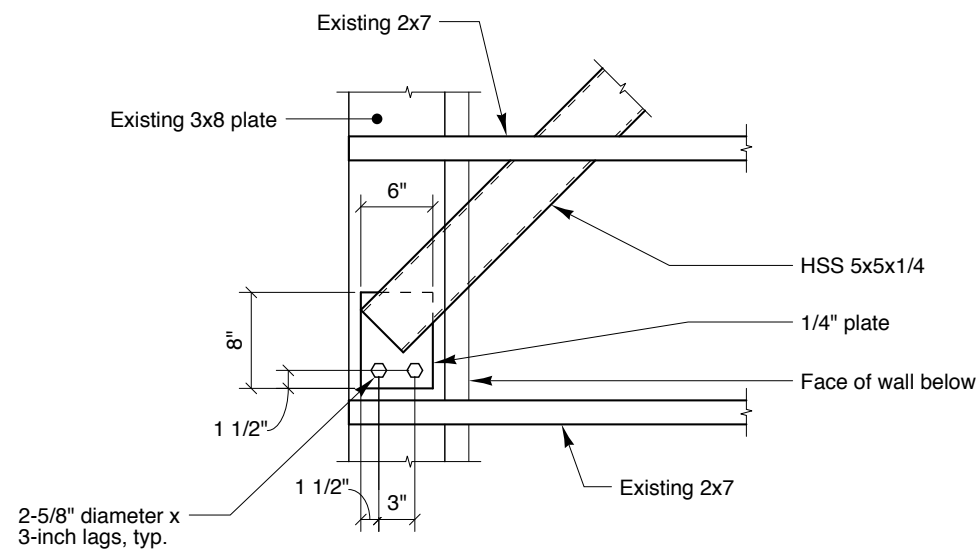
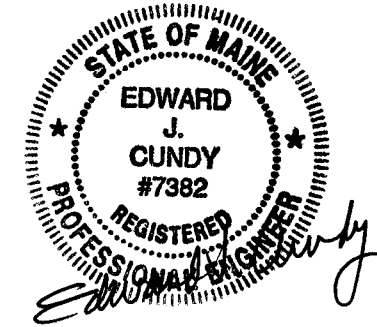




E SECTION
SCALE: 3/4" = 1'-0"



G SECTION
SCALE: 3/4" = 1'-0"



F SECTION
SCALE: 3/4" = 1'-0"

NOTES

- ROOF DEAD LOAD: 15 PSF.
FLAT ROOF DESIGN SNOW LOAD, $P_f = 50$ PSF.
- REQUIRED WOOD SPECIES (DESIGN VALUES PUBLISHED IN THE 2001 SUPPLEMENT TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION):

 SPRUCE-PINE-FIR: SPF #1/#2, GRADED ACCORDING TO NLGA RULES WITH THE FOLLOWING BASE DESIGN PROPERTIES FOR LUMBER 2 TO 4 INCHES THICK:
 $F_b = 875$ psi
 $F_v = 70$ psi
 $F_c \text{ parallel} = 1150$ psi
 $F_c \text{ perpendicular} = 425$ psi
 $E = 1400$ ksi

 SOUTHERN PINE: SP #2, SPIB GRADE STAMP WITH DESIGN PROPERTIES FOR VISUALLY GRADED LUMBER 2 TO 4 INCHES THICK AND VISUALLY GRADED TIMBERS 5 INCHES BY 5 INCHES AND LARGER AS PUBLISHED IN THE 2001 SUPPLEMENT TO THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION.

 LAMINATED VENEER LUMBER (LVL) WITH THE FOLLOWING BASE DESIGN PROPERTIES:

Beams:
 $F_b = 2900$ psi
 $F_v = 290$ psi
 $F_c \text{ parallel} = 3000$ psi
 $F_c \text{ perpendicular} = 850$ psi
 $E = 2000$ ksi

Columns:
 $F_b = 2200$ psi
 $F_v = 285$ psi
 $F_c \text{ parallel} = 3000$ psi
 $F_c \text{ perpendicular} = 900$ psi
 $E = 1800$ ksi
- SHIM THE TOPS OF HIPPS AND RIDGE R-11, R-12 AND R-13 TO THE EXISTING MEMBERS THAT THEY'RE SUPPORTING AT NO GREATER THAN TWO-FOOT INTERVALS.
- 5 1/4" x 5 1/4" LVL COLUMNS SUPPORTING THE NEW RIDGE BEAM, R-13, MUST BE LATERALLY SUPPORTED BY FRAMING IN BOTH ORTHOGONAL DIRECTIONS AT THE SECOND FLOOR LEVEL.