

DESIGN CRITERIA AND LOADS

Building Code 7th Edition (2020) Florida Building, Residential, Existing Codes	
Code for Design Loads ASCE / SEI 7-16	
Construction Type REPAIR	
Work Area (% of Gross Area) < 15 %	
ROOF LOADING (Cd= 1.25) TOP CHORD LIVE LOAD * 20 psf TOP CHORD DEAD LOAD 7 psf BOTTOM CHORD LIVE LOAD * 10 psf BOTTOM CHORD DEAD LOAD 5 psf	
* CONCURRENTLY LOADED LIVE LOADS MAY BE REDUCED PER FBC 1605.3.1.1	
FLOOR LOADING (Cd= 1.00) TOP CHORD LIVE LOAD 40 psf TOP CHORD DEAD LOAD 10 psf BOTTOM CHORD LIVE LOAD 0 psf BOTTOM CHORD DEAD LOAD 5 psf	
TRUSS DEFLECTION CRITERIA ROOF TRUSS LL/240 TL/180	
WIND LOADING (Cd= 1.60) ASCE 7-16, 3 SEC. GUST ULTIMATE DESIGN WIND SPEED, V _{ult} 116 mph NOMINAL DESIGN WIND SPEED, V _{asd} 90 mph EXPOSURE CATEGORY C RISK CATEGORY II ENCLOSURE CLASSIFICATION II INTERNAL PRESSURE COEFF 0.18 C&G DESIGN PRESSURES SEE TABLES 1, 2 MEAN ROOF HEIGHT 30 FT. (MAX) ROOF ANGLE, Ø 14.0° (3:12)	
FEMA FLOOD INFORMATION PER FBC 1603.1.7 FIRM MAP ITEM ID 12023C0167D EFFECTIVE DATE NOVEMBER 2, 2018 FLOOD ZONE X - UNSHADED	

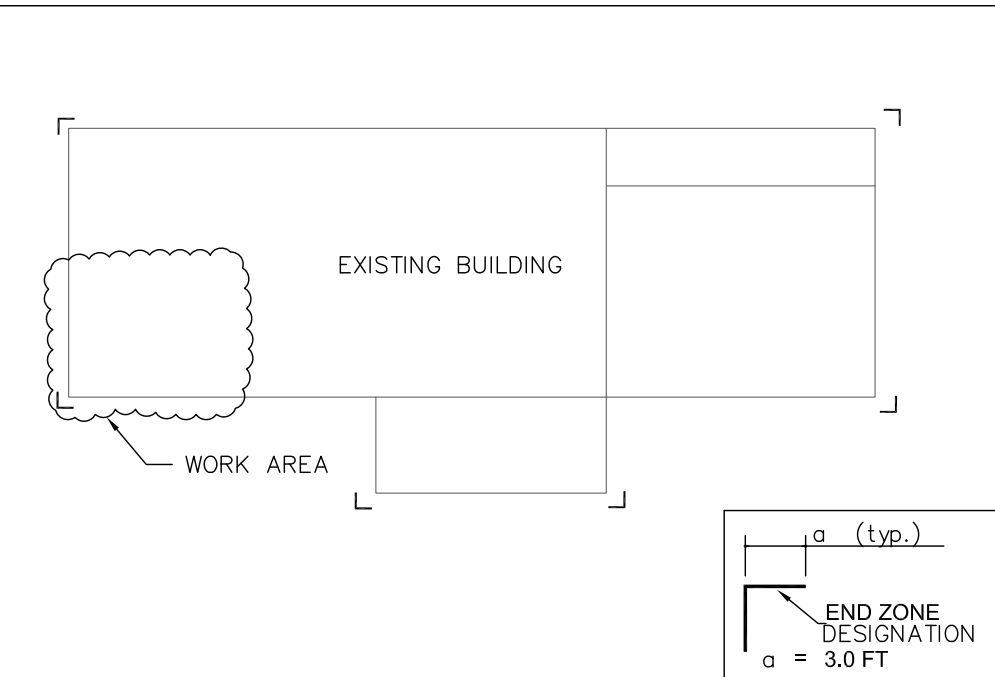


TABLE 1 COMPONENT AND CLADDING DESIGN PRESSURES (ROOF)

Zone Designation \ Effective Wind Area	1 (psf)	2e (psf)	2r (psf)	3 (psf)
10 sq. ft.	+19 -44	+19 -61	+20 -57	+20 -61
20 sq. ft.	+17 -44	+17 -55	+17 -52	+17 -55
50 sq. ft.	+13 -44	+14 -47	+13 -44	+14 -47
100 sq. ft.	+11 -44	+11 -41	+11 -38	+11 -41

TABLE 2 COMPONENT AND CLADDING DESIGN PRESSURES (ROOF OVERHANG)

Zone Designation \ Effective Wind Area	1 (psf)	2e (psf)	2r (psf)	3 (psf)
10 sq. ft.	-51	-61	-74	-73
20 sq. ft.	-47	-51	-63	-58
50 sq. ft.	-42	-37	-50	-40
100 sq. ft.	-37	-35	-40	-40

LEGEND AND FRAMING NOTES:

	INTERIOR ROOF LOAD BEARING WALL
	STRUCTURAL WOOD BEAM
	INTERIOR FLOOR LOAD BEARING WALL, NO ATC REQUIRED, 1/2" x 6" EMBED ANCHORS WITH WASHERS @ 48" O.C.
(UNO)	UNLESS NOTED OTHERWISE ON PLAN OR DETAIL
EOR	ENGINEER OF RECORD

HEADER FRAMING

- HEADER/BEAM CALL-OUT
- NUMBER OF KING STUDS EACH SIDE OF OPENING
 - NUMBER OF JACK STUDS EACH SIDE OF OPENING
 - SIZE OF HEADER MATERIAL (NO. 2 SYP)
 - NUMBER OF PLIES IN HEADER
 - ALL HEADER JACK AND KING STUS SHALL BE FASTENED TO EACH OTHER WITH (2) ROWS 10d COMMON @ 8" O.C. STAGGERED.
 - TOP PLATE TO HEADER CONNECTION (ONE OF THE FOLLOWING):
 - NO CONNECTION FOR HEADERS LES THAN 36"
 - SPH W/ (12) 10d x 1-1/2" @ 32" O.C. OR
 - DSP W/ (14) 10d COMMON @ 16" O.C. OR
 - FASTEN TRUSS DIRECTLY TO HEADER W/ MTS OR HTS W/ (14) 10d x 1-1/2" (OR EQUAL, APPROVED BY EOR).
 - WINDOW OPENINGS 4' AND GREATER REQUIRE 1/2" ANCHOR BOLTS OR REDHEADS W/ 1-1/2" DIA WASHERS AT 48" (MAX) ON CENTER UNDER WINDOW CONNECTION BOTTOM PLATE TO SLAB.
 - IF HEADER NOT SPECIFIED, CONTACT ENGINEER OF RECORD

Openings > 6' (2x4 Walls)

- OPENINGS IN 2x4 STUD WALLS GREATER THAN 6" REQUIRE A (2) 2x4 NO.2 SPF PLANK ORIENTED PLATE DIRECTLY ABOVE AND BELOW THE OPENING W/(6) 12d COMMON TOE-NAILS AT EACH END

Openings > 8' (2x6 Walls)

- OPENINGS IN 2x6 STUD WALLS GREATER THAN 8" REQUIRE A (2) 2x6 NO.2 SPF PLANK ORIENTED PLATE DIRECTLY ABOVE AND BELOW THE OPENING W/(8) 12d COMMON TOE-NAILS AT EACH END

NAILS

- INSTALL COMMON NAILS UNLESS OTHERWISE SPECIFIED
- COMMON WIRE NAILS AND THREADED HARDENED STEEL NAILS SHALL CONFORM TO THE NOMINAL SIZES SPECIFIED IN ASTM F1697. NOMNAL DIAMETER SIZES APPLY TO FASTENERS BEFORE APPLICATION OF PROTECTIVE COATING.
- WHEN A BORED HOLE IS REQUIRED TO PREVENT SPLITTING OF A WOOD DUE TO FASTENER PENETRATION, THE BORED HOLE SHALL NOT EXCEED 75% OF THE NAIL OR SPIKE DIAMETER.
- THE NOMINAL DIAMETER AND LENGTH OF TYPICAL FASTENERS SPECIFIED FOR THIS PROJECT ARE AS LISTED IN TABLE 2 BELOW

TABLE 2: NAIL SIZE LEGEND

	DIAMETER	LENGTH
8d COMMON	0.131"	2-1/2"
8d RINGSHANK	0.120"	2-1/2"
10d x 1-1/2"	0.148"	1-1/2"
10d COMMON	0.148"	3"
12d COMMON	0.148"	3-1/2"
16d SINKER	0.148"	3-1/2"
16d COMMON	0.162"	3-1/2"

TABLE 3: FASTENERS IN PRESSURE TREATED LUMBER

PRESERVATIVE	
ACQ & NON-DOT BORATE	CONNECTORS MUST HAVE Z-MAX, G120 OR TRIPLE ZINC COATED FINISH. ALL FASTENERS MUST BE HOT DIPPED GALVANIZED.
SODIUM BORATE	STANDARD FINISH IS ACCEPTABLE (UNO)
ACZA	NOT RECOMMENDED. STAINLESS CONNECTORS AND FASTENERS REQUIRED.

TABLE 4: SIMPSON METAL CONNECTOR SCHEDULE

H2.5	(5) 8d COMMON IN RAFTER (5) 8d COMMON IN TOP PLATE	MTS12	(7) 10d x 1.5" COMMONS EACH END
H3	(4) 8d COMMON IN RAFTER (4) 8d COMMON IN STUD	SPH4 / SPH6	(12) 10d x 1.5" NAILS IN STUD
H8	(5) 10dx1-1/2" COMMON IN RAFTER (5) 10dx1-1/2" COMMON IN PLATE	SSP	(4) 10d COMMON IN STUD (1) 10d COMMON IN PLATE
HTT16 (NOTE 1)	(18) 16d COMMON IN STUD 3/4" Ø x 6" EMBED ANCHOR IN CONCRETE	A35	(12) 8d x 1-1/2" COMMON NAILS
HTT22 (NOTE 1)	(32) 16dSINKERS IN STUD 3/4" Ø x 6" EMBED ANCHOR IN CONCRETE	HUS26	(14) 16d SINKERS IN HEADER (6) 16d SINKERS IN JOIST
HDO8-SDS3	(20) SDS 1/4 x 3 SCREWS IN STUD GROUP 1/4" Ø x 12" EMBED ANCHOR IN CONCRETE	HU410	(18) 16d COMMON IN HEADER (10) 10d COMMON IN BEAM
LGT2	(14) 16d SINKER IN WALL FRAMING (16) 16d SINKER IN TRUSS	HUC410	(18) 16d COMMON IN HEADER (10) 10d COMMON IN BEAM
MGT	(22) 10d COMMON IN GIRDER	STHD14	(38) 16d SINKERS INTO STUDS (WET EMBED)
MSTA12	(10) 10d COMMON		
MSTA24	(18) 10d COMMON		
MSTA36	(26) 10d COMMON		
HTS20	(12) 10d x 1.5" COMMONS IN RAFTER (12) 10d x 1.5" COMMONS IN STUD		

NOTE 1: ANCHOR EMBED IN CMU TO BE 12-INCHES



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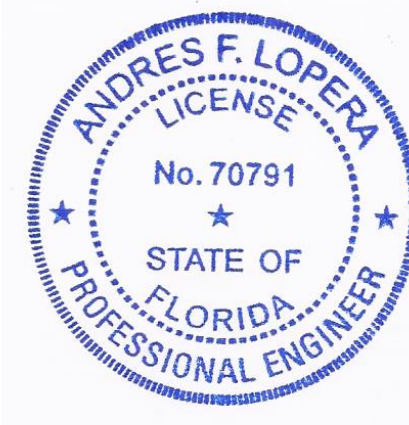
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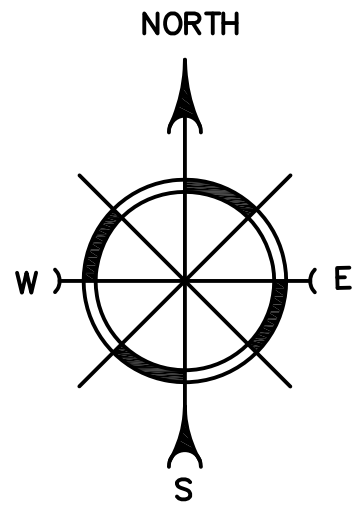
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Structural Summary	
JOB NO.: 21_16	
SUBDIVISION:	
LOT NO.:	
ADDRESS:	
DESIGNED: AFL	
REVIEWED: AFL	
REVISIONS	DATE



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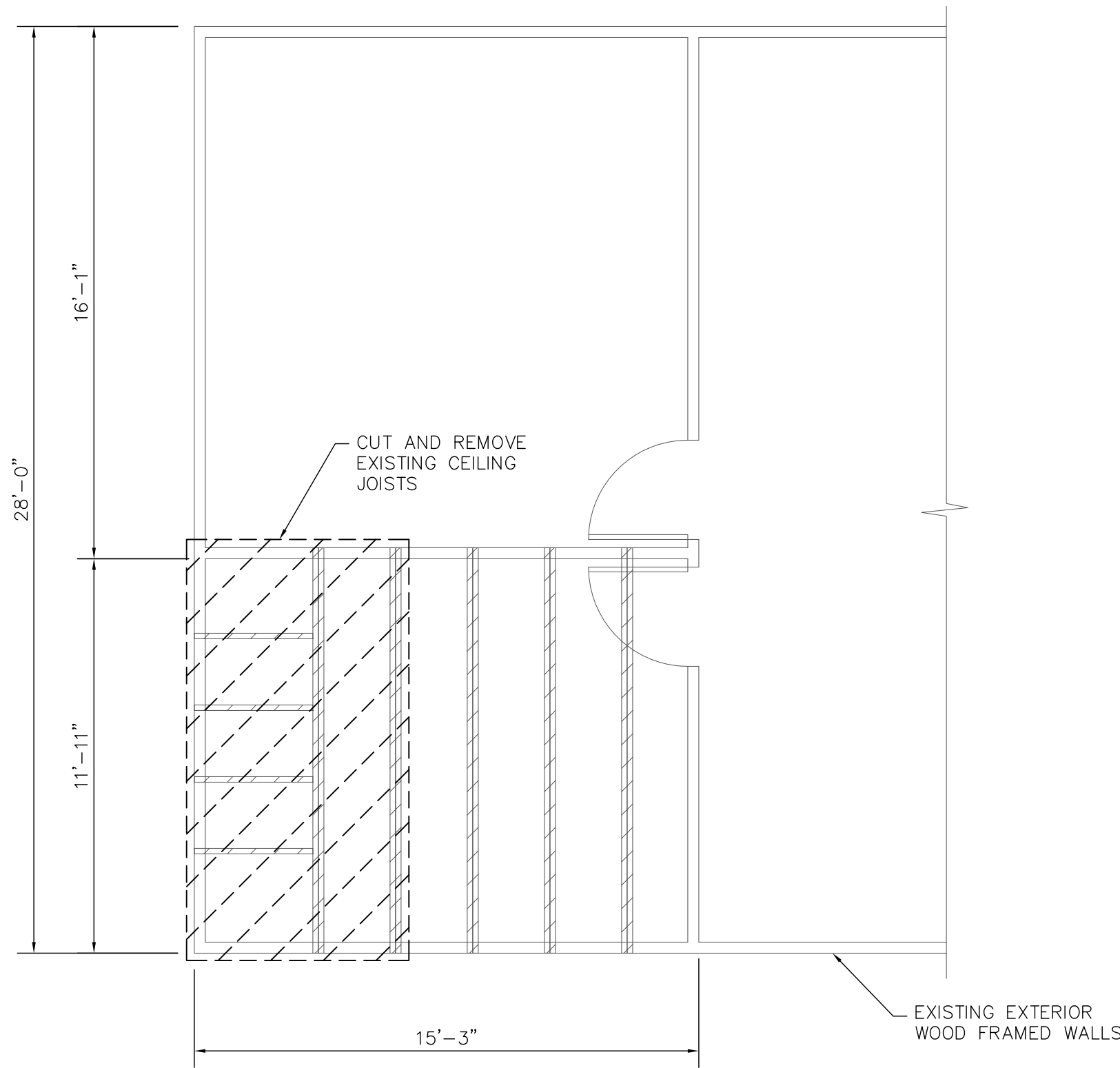
LEGEND:



CUT AND REMOVE,
AS SHOWN

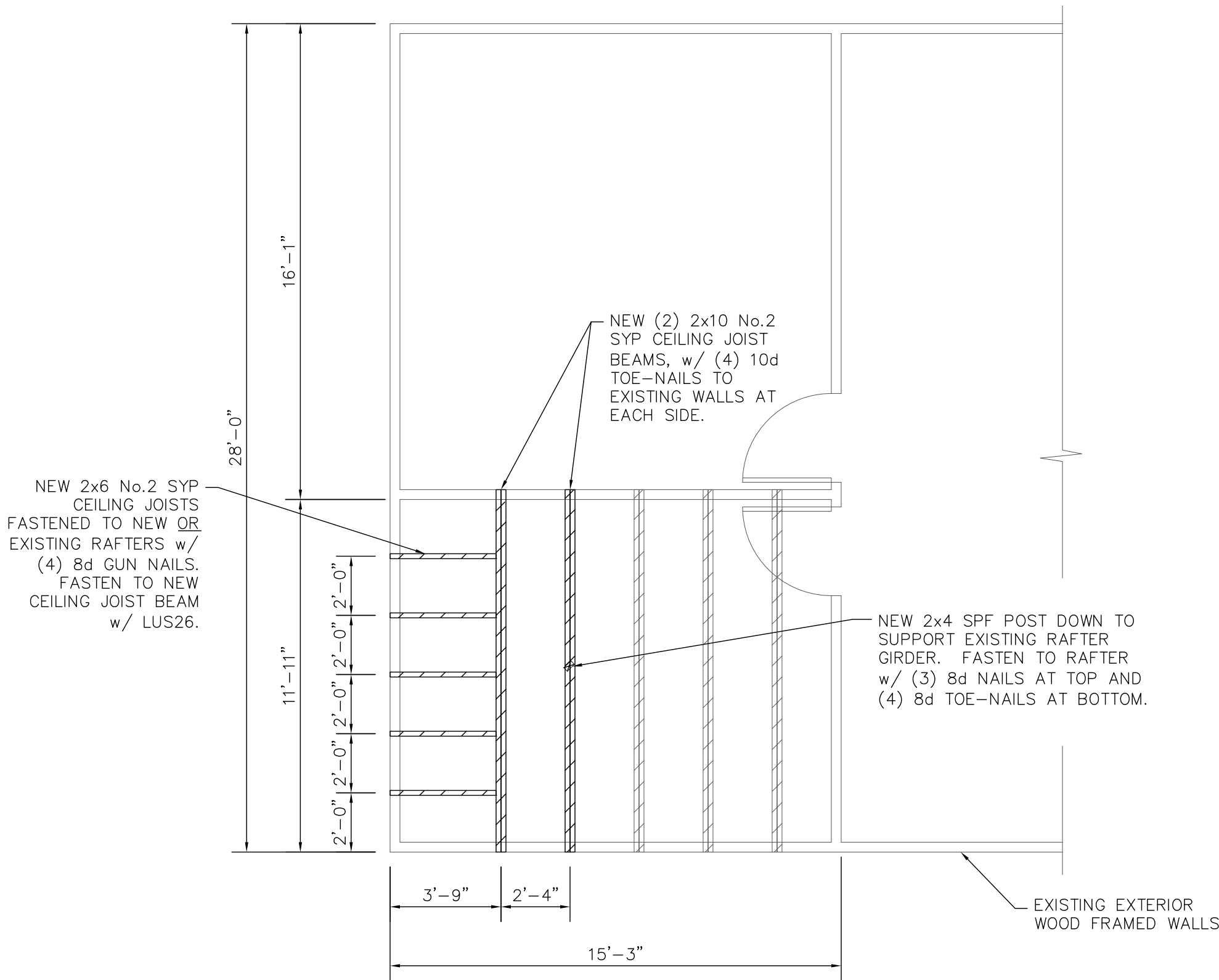
GENERAL PLAN NOTES:

1. FOR GENERAL NOTES AND KEYNOTE SPECIFICATIONS, SEE SHEET S-1.
2. IF HEADER NOT SPECIFIED, CONTACT ENGINEER OF RECORD.
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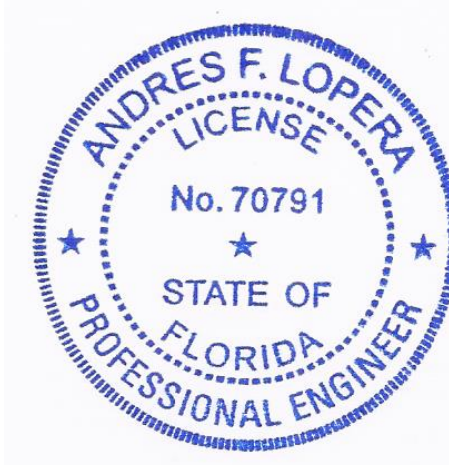
CEILING JOIST PLAN – EXISTING 1/4" = 1'-0"

NOTE: DO NOT SCALE DIMENSIONS FROM THESE DRAWINGS.



CEILING JOIST PLAN – NEW 1/4" = 1'-0"

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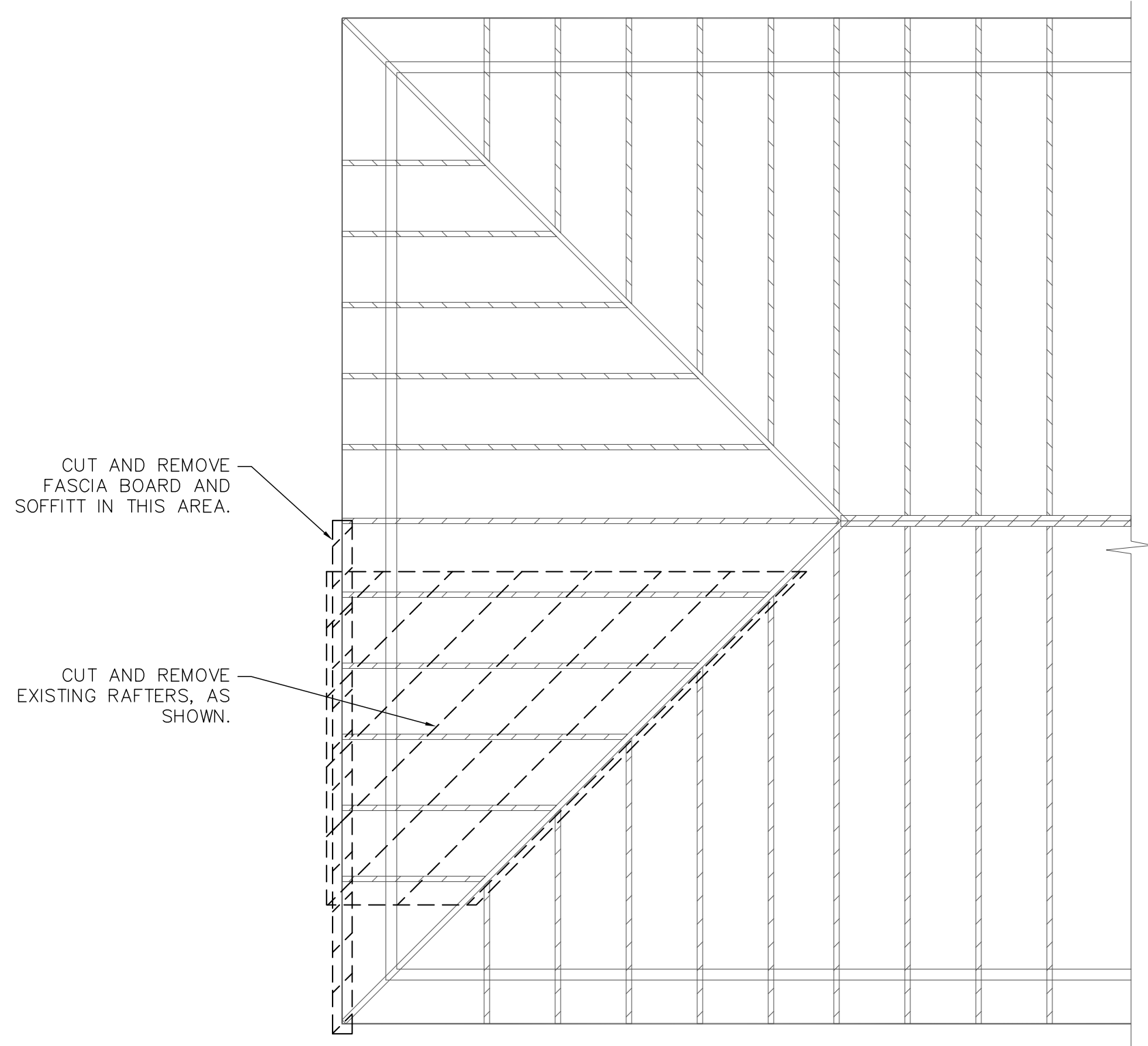
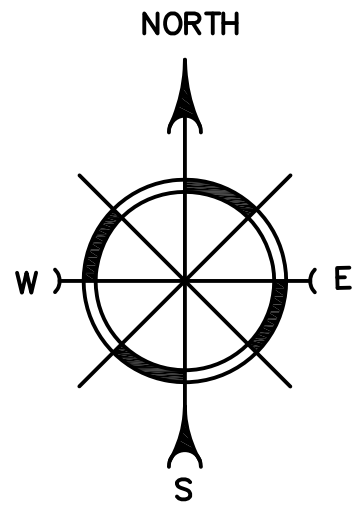
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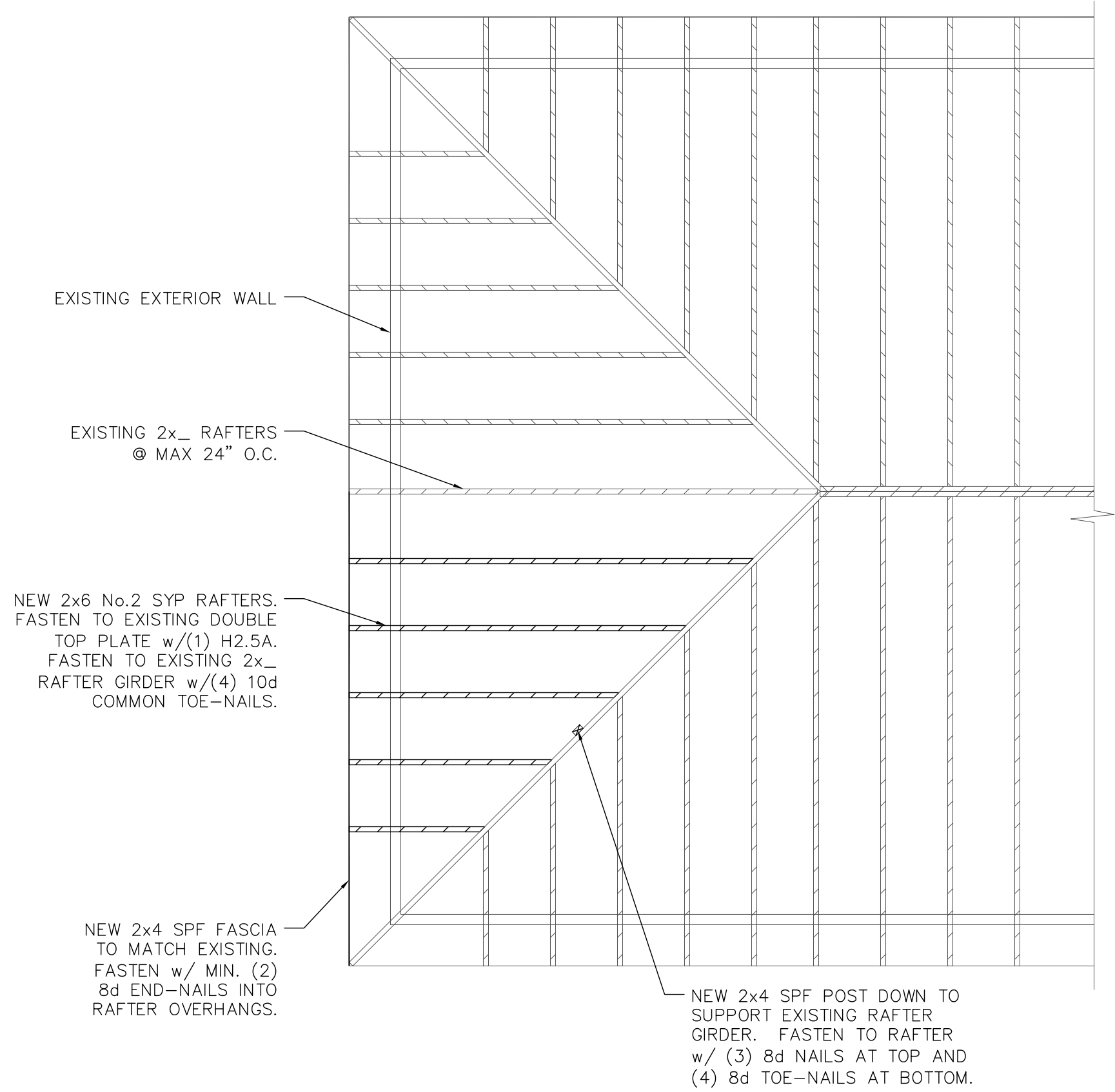
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SHEET NO.: S-2	
Ceiling Joist Plan	
JOB NO.: 21_16	
SUBDIVISION:	
LOT NO.:	
ADDRESS:	
DESIGNED: AFL	
REVIEWED: AFL	
REVISIONS	DATE

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RAFTER PLAN – EXISTING $\frac{1}{4}'' = 1'-0''$
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RAFTER PLAN – NEW $\frac{1}{4}'' = 1'-0''$
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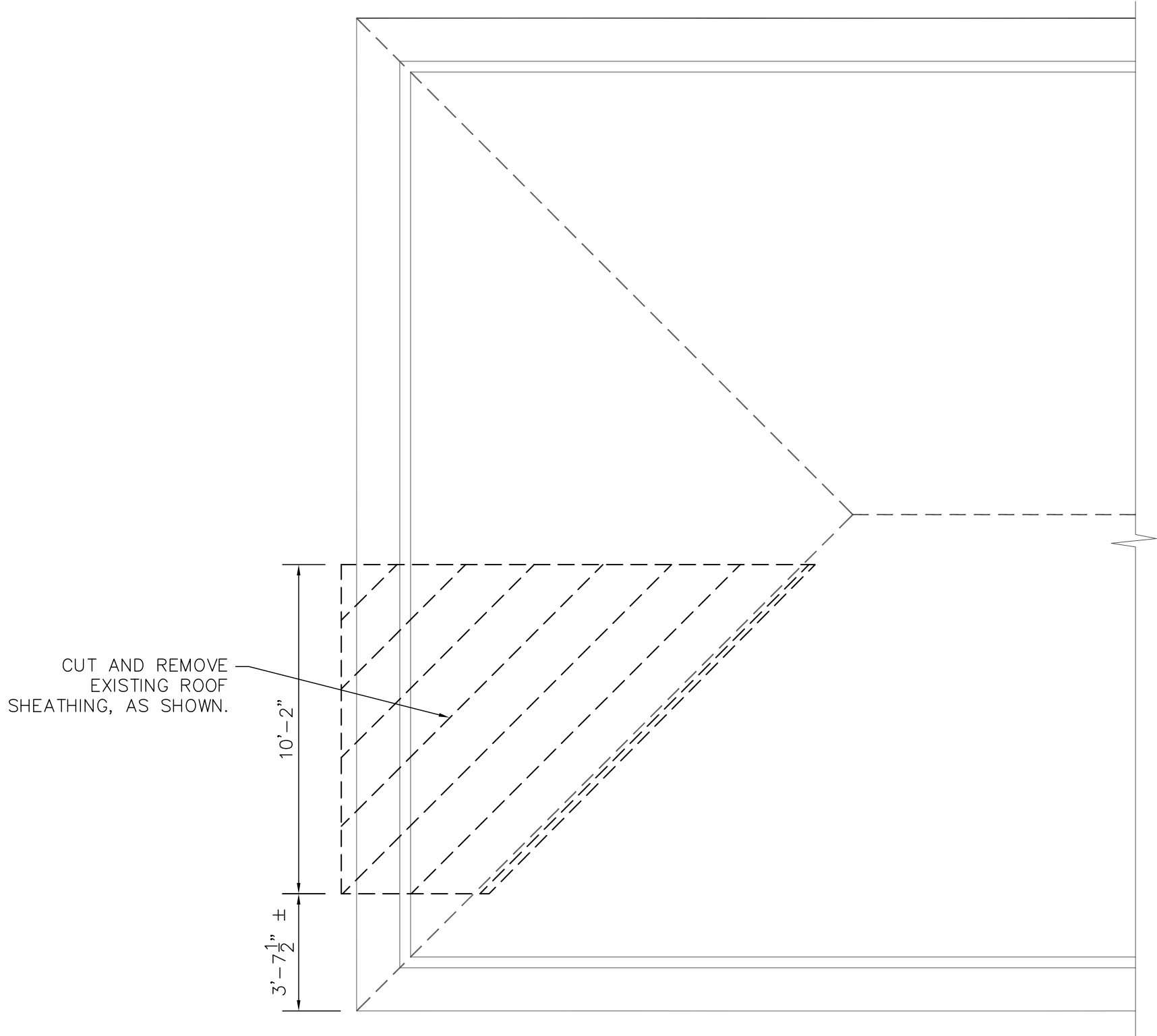
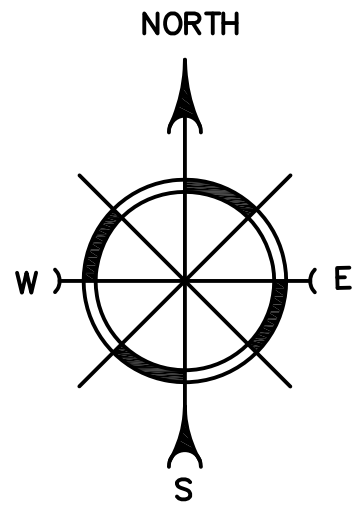
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Rafter Plan	
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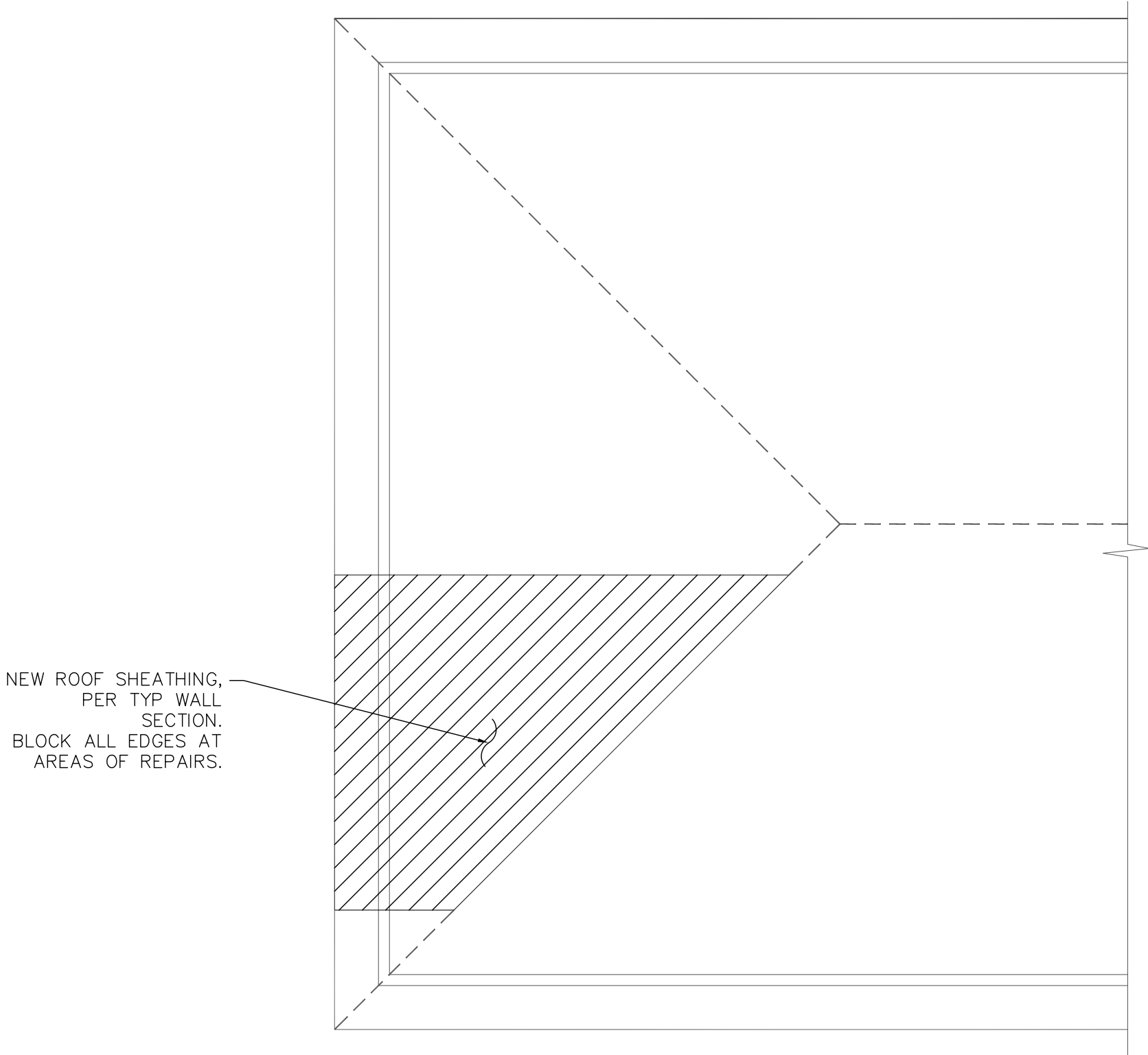
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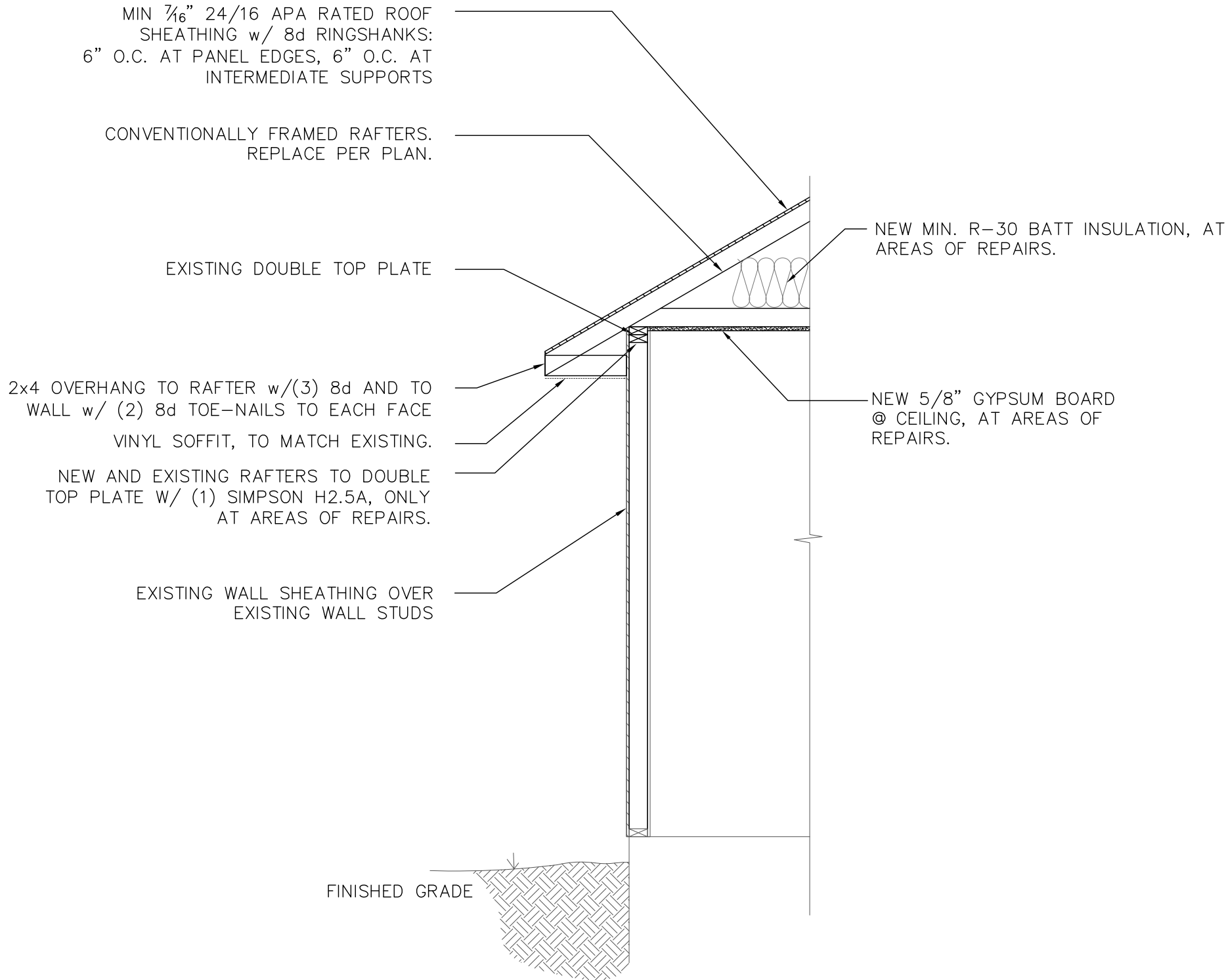
ROOF SHEATHING PLAN – EXISTING 1/4" = 1'-0"

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ROOF SHEATHING PLAN – NEW 1/4" = 1'-0"

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ONE STORY TYP LOAD BEARING WALL SECTION

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SHEET NO.: S-4

Roof Plan;
Details

JOB NO.: 21_16

SUBDIVISION:

LOT NO.:

ADDRESS:

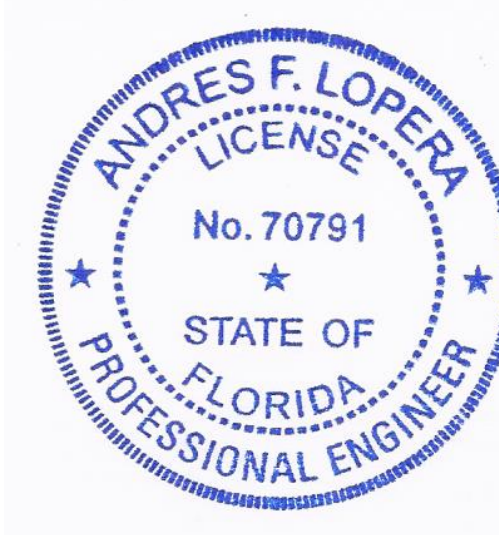
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