

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 TOP CHORD LIVE LOAD * TOP CHORD DEAD LOAD BOTTOM CHORD LIVE LOAD * BOTTOM CHORD DEAD LOAD	(Cd= 1.25) 20 psf 7 psf 10 psf 5 psf
* CONCURRENTLY LOADED LIVE LOADS MAY BE REDUCED PER FBC 1605.3.1.1	
FLOOR LOADING TOP CHORD LIVE LOAD TOP CHORD DEAD LOAD BOTTOM CHORD LIVE LOAD BOTTOM CHORD DEAD LOAD	(Cd= 1.00) 40 psf 10 psf 0 psf 5 psf
TRUSS DEFLECTION CRITERIA ROOF TRUSS	
	LL/240 TL/180
WIND LOADING ASCE 7-16, 3 SEC. GUST ULTIMATE DESIGN WIND SPEED, V <sub>ult</sub> NOMINAL DESIGN WIND SPEED, V <sub>asd</sub> EXPOSURE CATEGORY RISK CATEGORY ENCLOSURE CLASSIFICATION INTERNAL PRESSURE COEFF C&G DESIGN PRESSURES MEAN ROOF HEIGHT ROOF ANGLE, Ø	
	(Cd= 1.60) 116 mph 90 mph C II ENCLOSED 0.18 SEE TABLES 1, 2 30 FT. (MAX) 14.0° (3:12)
FEMA FLOOD INFORMATION PER FBC 1603.1.7 FIRM MAP ITEM ID EFFECTIVE DATE FLOOD ZONE	
	12023C0167D NOVEMBER 2, 2018 X- UNSHADED



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 3/4 x 3 SCREWS IN STUD GROUP 3/4" 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

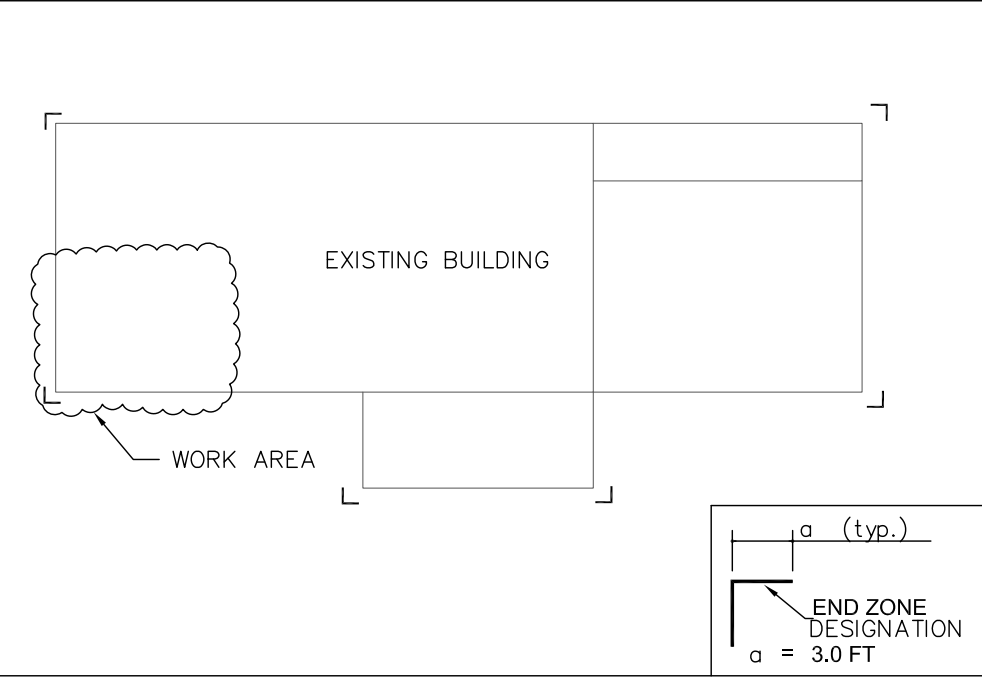


TABLE 1 COMPONENT AND CLADDING DESIGN PRESSURES (ROOF)

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



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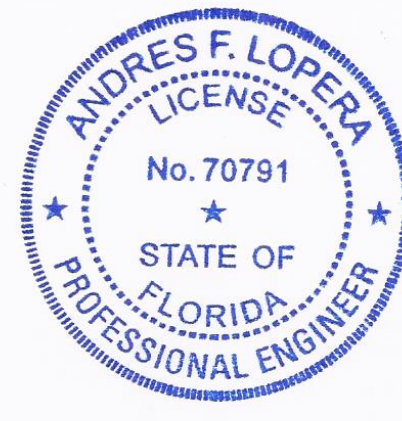
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Jacksonville, FL 32205  
(904) 518-5000

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SIMONS

647 NW NOVA LANE  
WHITE SPRINGS, FL 32096

SHEET NO.: S-1	
Structural Summary	
JOB NO.: 21_16	
SUBDIVISION:	
LOT NO.:	
ADDRESS:	
DESIGNED: AFL	
REVIEWED: AFL	
REVISIONS	DATE



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ANDRES F. LOPERA  
PE # 70791  
06/14/2021



GENERAL PLAN NOTES:

1. FOR GENERAL NOTES AND KEYNOTE SPECIFICATIONS, SEE SHEET S-1.
2. IF HEADER NOT SPECIFIED, CONTACT ENGINEER OF RECORD
3. SIMPSON ACRYLIC-TIE ADHESIVE SHALL BE USED IN ALL DRILLED AND EPOXED CONNECTIONS TO CONCRETE. ANCHOR BOLT, THREADED ROD, OR DOWELED REINFORCING STEEL MAY BE EMBEDDED TO THE SPECIFIED DEPTH, IN A HOLE  $\frac{1}{8}$ " GREATER THAN THE DIAMETER OF THE ANCHOR. MANUFACTURER'S SPECIFICATIONS MUST BE FOLLOWED FOR PROPER INSTALLATION.
4. FASTEN ALL MULTI-PLY STUD COLUMNS UNDER BEAMS/GIRDERS W./ (2) ROWS LOW COMMON @ 8" O.C. STAGGERED.
5. ALL LUMBER SPECIFIED ON DRAWINGS IS INTENDED FOR DRY USE ONLY. UNO. ALL WATERPROOFING AND FIRE SAFETY SYSTEMS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE DESIGNED AND DETAILED BY OTHER.
6. ALL METAL CONNECTORS SPECIFIED ON PLAN ARE IN ADDITION TO FRAMING FASTENER REQUIREMENTS LISTED IN FLORIDA BUILDING CODE TABLE 2304.9.1 FASTENING SCHEDULE.
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8. ALL MECHANICAL, ELECTRICAL AND PLUMBING REPAIRS TO BE DESIGNED AND DETAILED BY OTHERS.
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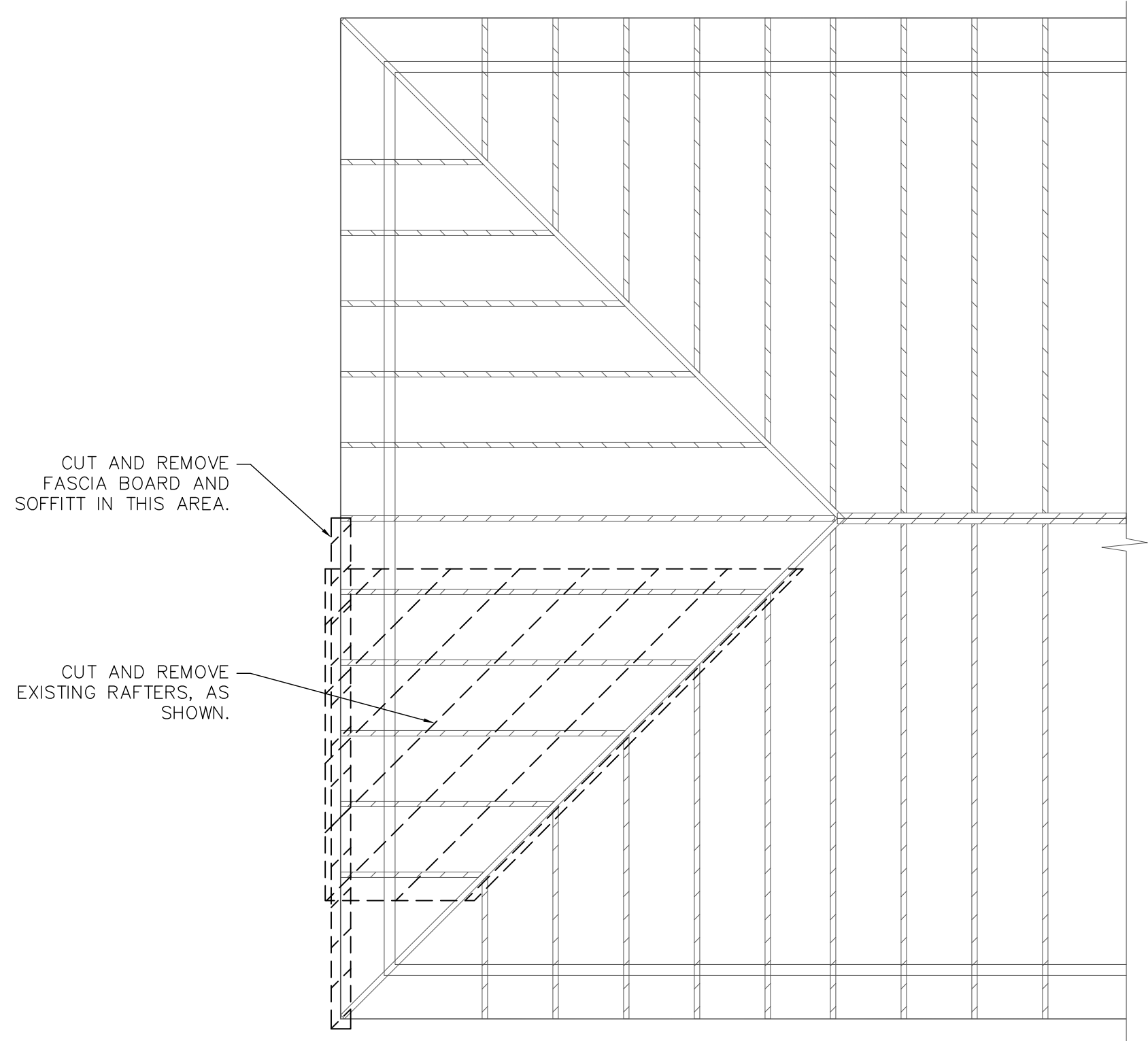
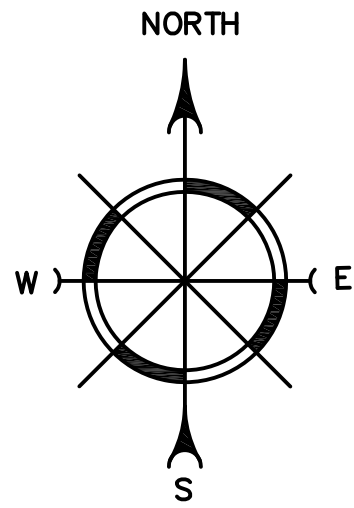
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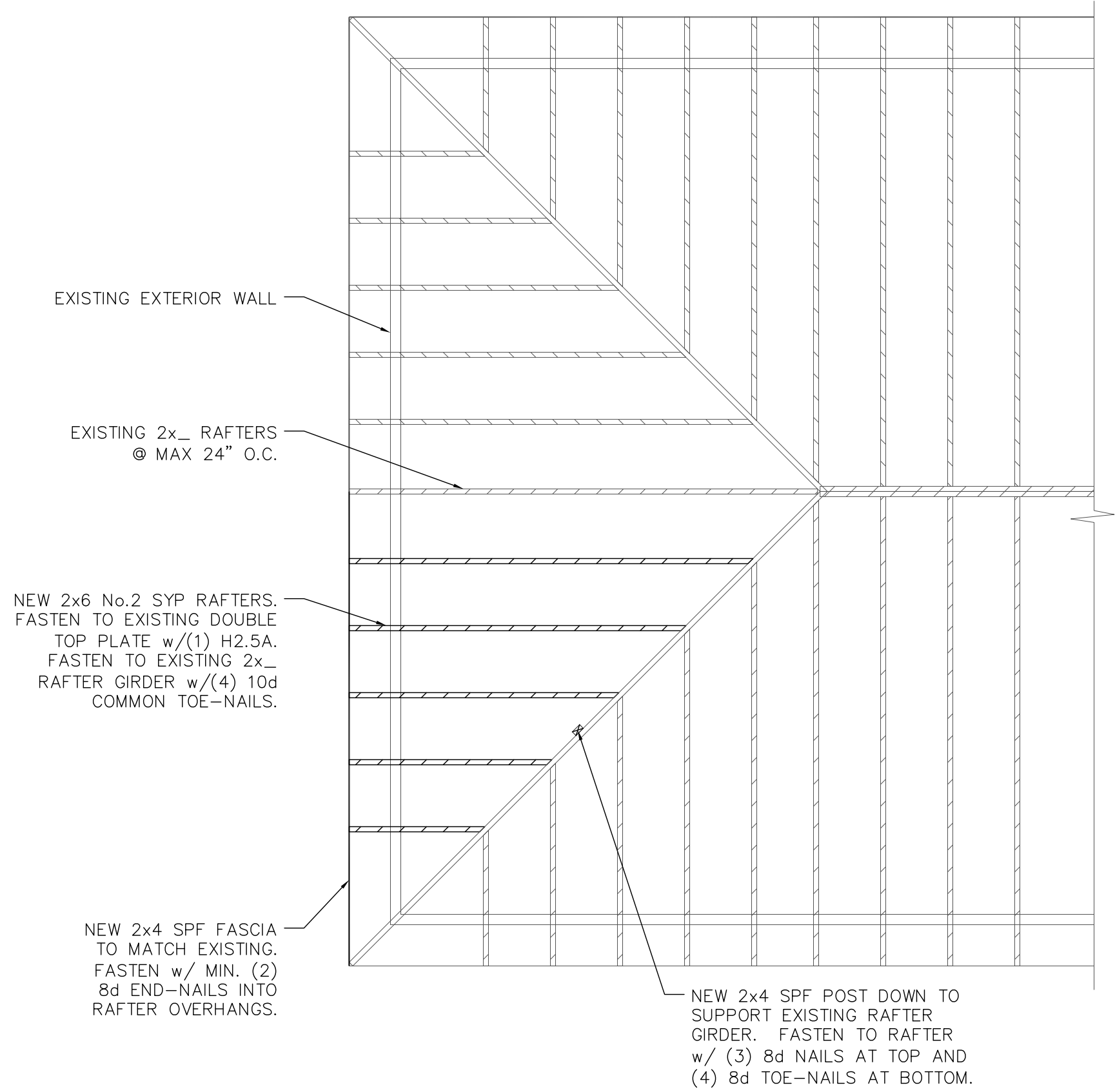
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RAFTER PLAN – EXISTING  $\frac{1}{4}'' = 1'-0''$   
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RAFTER PLAN – NEW  $\frac{1}{4}'' = 1'-0''$   
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LEGEND:



CUT AND REMOVE, AS SHOWN

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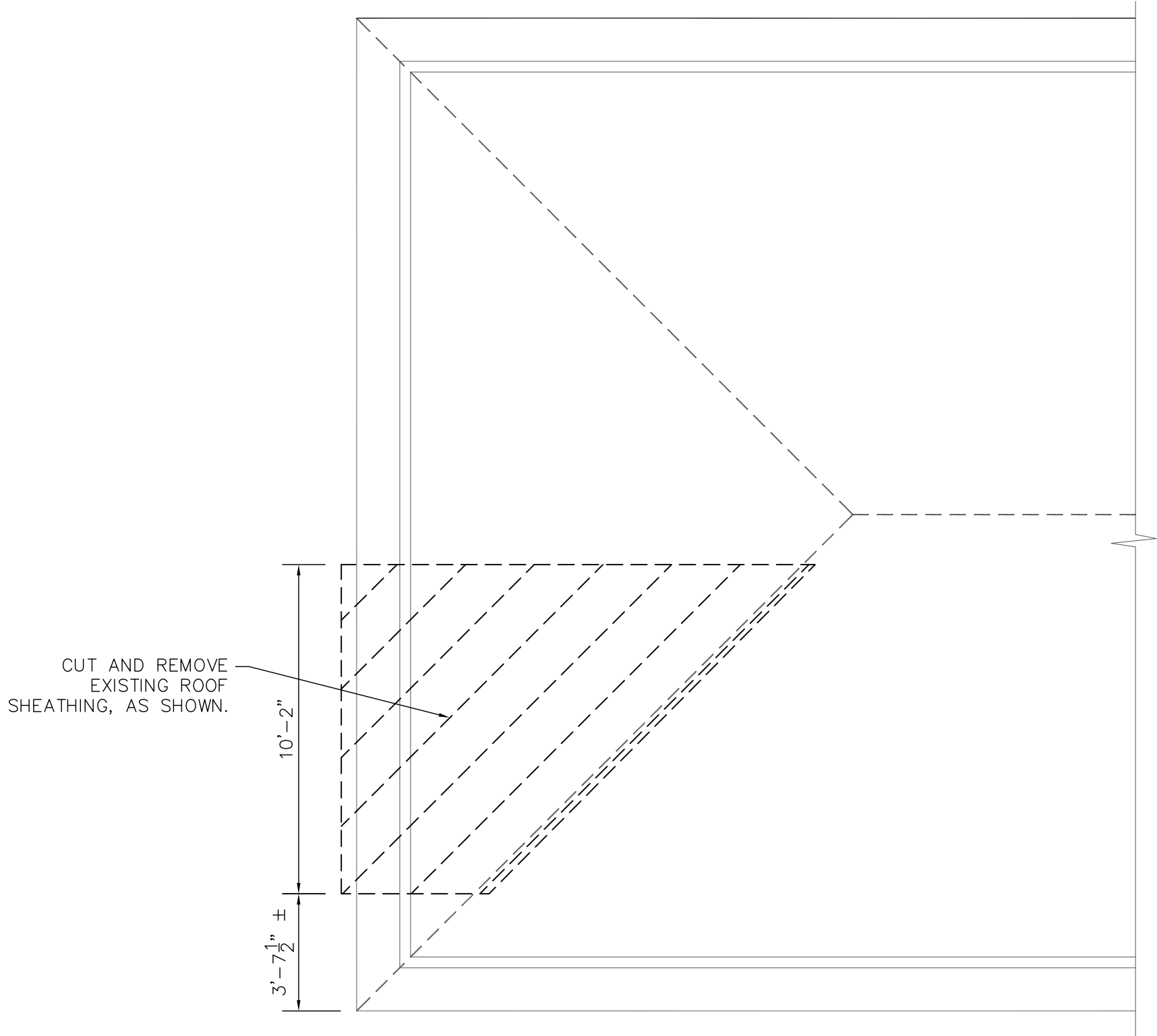
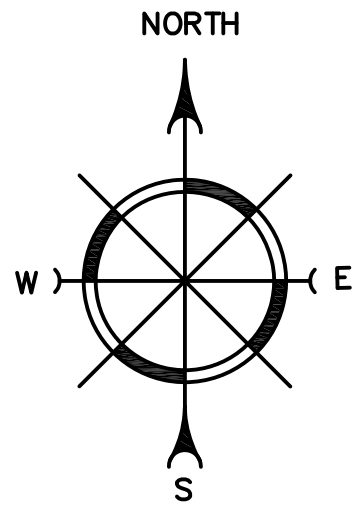
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Rafter Plan	
JOB NO.: 21_16	
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LOT NO.:	
ADDRESS:	
DESIGNED: AFL	
REVIEWED: AFL	
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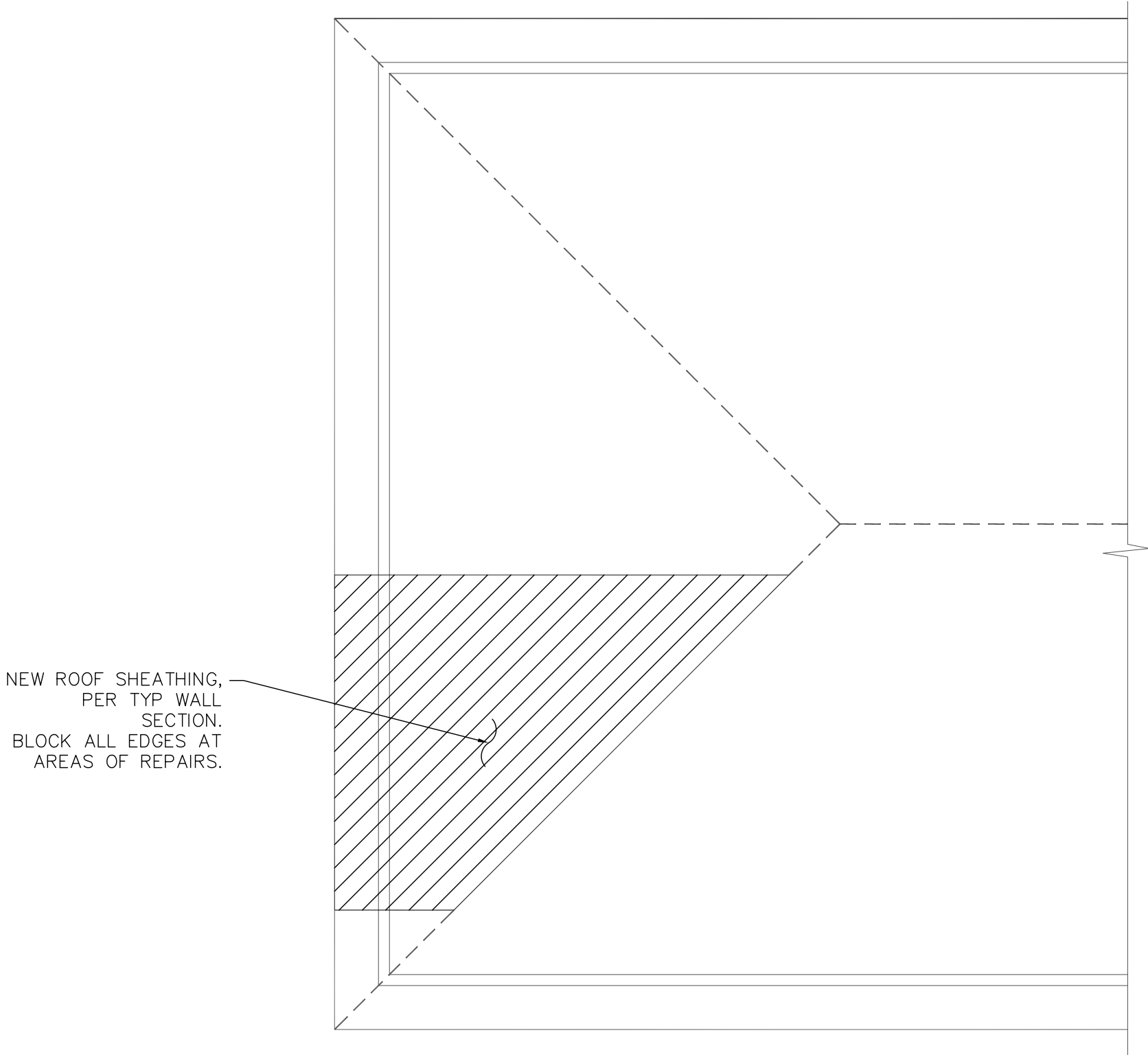
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ROOF SHEATHING PLAN – EXISTING 1/4" = 1'-0"

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

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969 James St  
Jacksonville, FL 32205  
(904) 518-5000

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SHEET NO.: S-4

Roof Plan;  
Details

JOB NO.: 21\_16

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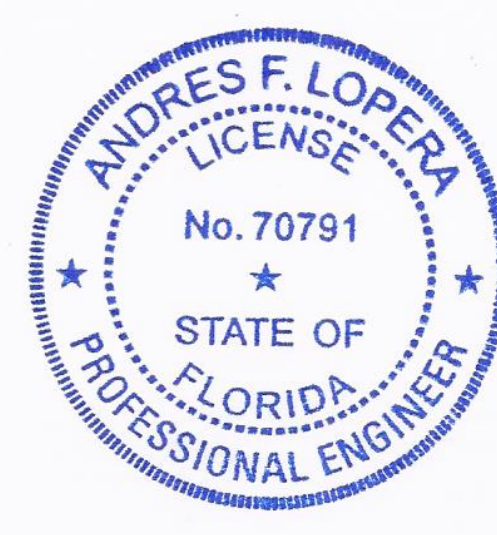
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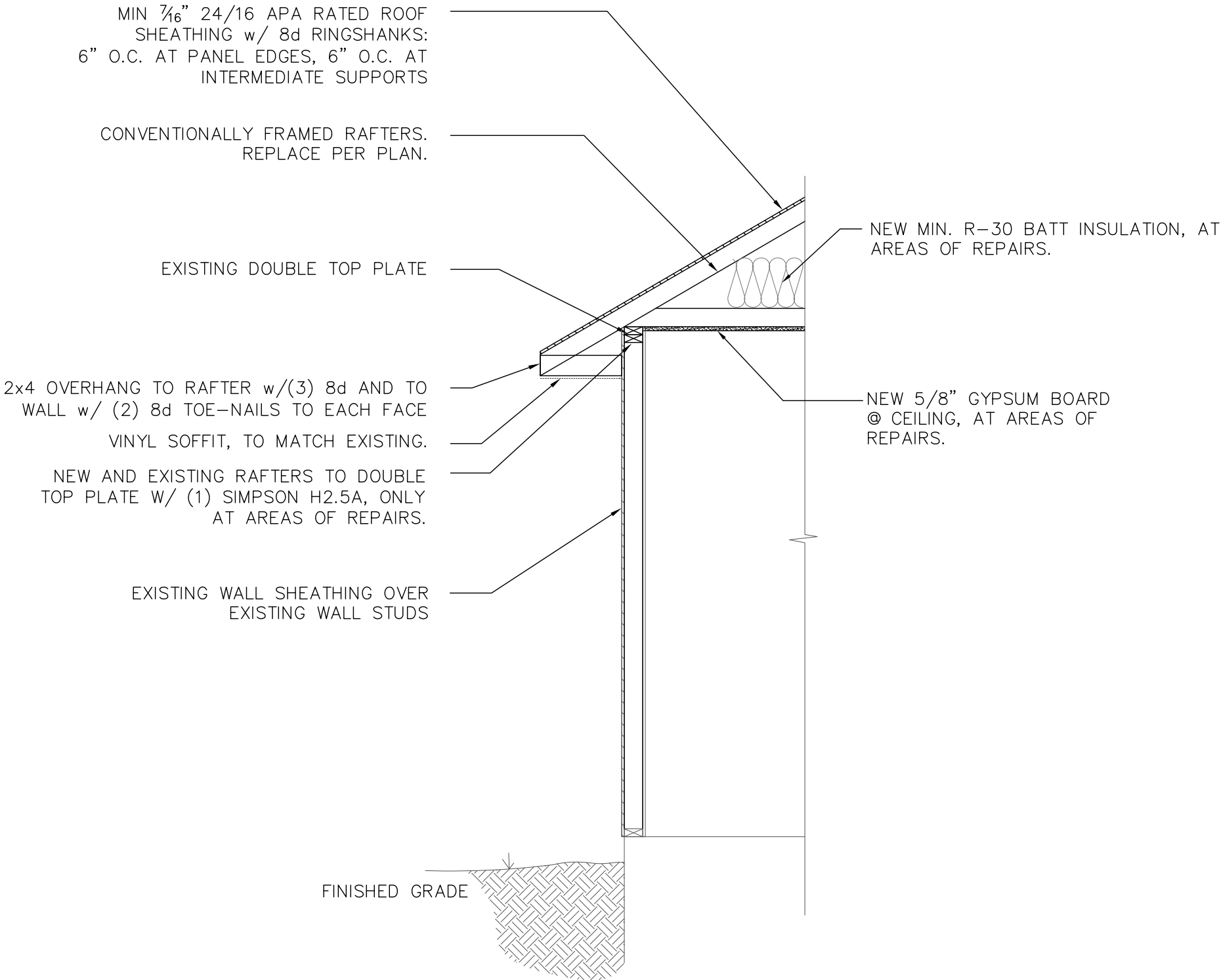
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ONE STORY TYP LOAD BEARING WALL SECTION

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