

REBAR LAP LENGTHS		
BAR SIZE	LAP LENGTH (MIN.)	REMARKS
#4	24"	-----
#5	30"	-----
#6	36"	-----
#7	42"	-----
#8	48"	-----
#9	52"	-----
NOTES: 1. ALL FOOTING DOWELS SHALL BE EMBEDDED TO WITHIN (3") OF THE BOTTOM OF FOOTING WITH A MINIMUM 3" LEG. 2. ALL REBAR LAP SPICES SHALL BE CONTACT LAP SPICES WIRED TOGETHER.		

THE DESIGN AND FABRICATION OF WOOD TRUSSES SHALL MEET THE LATEST OF THE FOLLOWING SPECIFICATIONS:

- THE NATIONAL DESIGN SPECIFICATIONS FOR STRESS GRADE LUMBER AND ITS FASTENINGS BY NFPA.
- TIMBER CONSTRUCTION MANUAL, AITC.
- DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES. TRUSS PLATE INSTITUTE.

ALL MEMBERS SHALL BE CERTIFIED IN WRITING BY THE FABRICATOR AS MEETING THE ABOVE REQUIREMENTS.

ALL PREFABRICATED TRUSSES WHICH CANNOT BE SHIPPED AS A WHOLE AND, THEREFORE, MUST REQUIRE A FIELD CONNECTION SHALL BE DESIGNED AS SUCH AND SHALL BE COMPLETELY DETAILED ON THE SHOP DRAWINGS.

TRUSSES ARE SHOWN ON FRAMING PLAN FOR CLARITY ONLY. ACTUAL TRUSS LAYOUT SHALL BE AS SPECIFIED BY THE MANUFACTURER AND THE DESIGN SHALL BE CERTIFIED BY MANUFACTURER'S REGISTERED ENGINEER.

SHOP DRAWINGS SHALL BE PREPARED FOR EACH TRUSS AND PRESENTED TO THE CONTRACTOR FOR HIS APPROVAL PRIOR TO FABRICATION. EACH SHEET SHALL IDENTIFY THE PROJECT BY THE PROPER NAME AND ADDRESS, SIZE AND GRADES OF LUMBER, STRESS INCREASE ALLOWED, THE LOADS USED AS A "BASIS OF DESIGN," AND THE CONNECTOR VALUE. ERECTION PLANS IDENTIFYING THE TRUSSES SHALL BE SUBMITTED WITH THE SHOP DRAWINGS. TRUSS SHOP DRAWINGS AND CALCULATIONS SHALL BE SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE COMMONWEALTH OF VIRGINIA.

ALL DIMENSIONS SHOWN ON THIS DRAWING SHALL BE VERIFIED BY THE CONTRACTOR AT THE PROJECT SITE PRIOR TO COMMENCING CONSTRUCTION OR FABRICATION OF BUILDING ELEMENTS.

FOR DISCREPANCIES IN DIMENSIONS - ARCHITECTURAL DRAWINGS CONTROL.

SEE ARCHITECTURAL DRAWINGS FOR BRICK VENEER LOCATIONS AND BRICK CONTROL JOINT LOCATIONS.

FOOTING SCHEDULE			
MARK	SIZE	REINFORCING	REMARKS
F1	1'-0" X 2'-6" X CONT.	3 #5'S CONT.	---
F2	1'-0" X 3'-0" X 3'-0"	(4) #5'S E.W.	---

COLUMN SCHEDULE				
MARK	SIZE	BASEPLATE	ANCHOR BOLTS	REMARKS
C1	3" DIA. STD. PIPE COL.	3/4" X 12" X 12"	4 - 3/4" DIA.	---

COLUMN NOTES:

- ALL ANCHOR BOLTS SHALL BE F1554 GRADE 36 KSI ALL THREAD ROD WITH MINIMUM 9" EMBEDMENT WITH 3" LEG.
- PROVIDE 1/4" COLUMN CAPS AT ALL PIPE COLUMNS.

HEADER SCHEDULE			
MARK	SIZE	TYPE	REMARKS
H1	(3) 2X8'S		----

HEADER NOTES:

- SEE ARCH. DWGS FOR DOOR/WINDOW HEAD HEIGHT.
- SEE SECTION 8/S1.0 FOR TYPICAL HEADER SUPPORT DETAIL.

GENERAL STRUCTURAL NOTES

CODE: 2021 VIRGINIA CONSTRUCTION CODE

DESIGN LOADS

RISK CATEGORY II

ROOF LIVE LOAD = 20 PSF
FLOOR LIVE LOAD = (SLAB ON GRADE) = 100 PSF

GROUND SNOW LOAD = 42 PSF (ULT), 25.2 PSF (ASD)
IMPORTANCE FACTOR = 1.0
EXPOSURE FACTOR = 1.0
THERMAL FACTOR = 1.0
P_f = 18 PSF (ASD)

WIND LOADS:
BASIC WIND SPEED = 109 MPH (3 SECOND GUST) ULT, 83 MPH (3 SEC GUST) ASD
WIND EXPOSURE = B
K_z = 1.0
G_{cp} = ± 0.18
q_z = 20.0 PSF (VELOCITY WIND PRESSURE) ULT.
q_z = 12.0 PSF (VELOCITY WIND PRESSURE) ASD

SEISMIC LOADS:
SEISMIC IMPORTANCE FACTOR = 1.0
S_s = 0.28g
S_i = 0.08g
SITE CLASSIFICATION = D
S_{ds} = 0.22g
S_{d1} = 0.11g
SEISMIC DESIGN CATEGORY "B"
LIGHT FRAMED SHEAR WALLS WITH WOOD SHEAR WALL PANELS
EQUIVALENT LATERAL FORCE PROCEDURE
R = 6.5
C_s = 0.033
SEISMIC BASE SHEAR: 10 KIPS

ICE:
THICKNESS = 0.89 INCH
CONCURRENT TEMPERATURE = 15° F
GUST SPEED = 38 MPH

RAIN:
15 MINUTE RAINFALL INTENSITY = 5.09 IN/HR

SHEETS S1.0 THRU S3.0 ARE STRUCTURAL DESIGN DRAWINGS ONLY (REQUIRED FOR THE FOUNDATION PLAN, ROOF FRAMING PLAN, SECTIONS, DETAILS AND SCHEDULES). ANY REFERENCE TO ARCHITECTURAL MATERIALS, SYSTEMS, OR CONCEPTS IS FOR CLARITY ONLY.

ALL FILL AND UNSUITABLE FOUNDATION MATERIAL SHALL BE REMOVED AND FOOTINGS SHALL REST ON UNDISTURBED SOIL OR ENGINEERED FILL AS DIRECTED BY THE GEOTECHNICAL ENGINEER.

FOOTINGS ARE DESIGNED FOR A MINIMUM ASSUMED SOIL BEARING CAPACITY OF 1500 PSF.

ALL EXTERIOR CONCRETE EXPOSED TO WEATHER SHALL BE 4000 PSI, AIR-ENTRAINED. USE 3000 PSI NON-AIR ENTRAINED FOR FOUNDATIONS. USE 4000 PSI NON-AIR ENTRAINED CONCRETE FOR INTERIOR SLABS ON GRADE. ALL MATERIALS AND PROCESSES TO THIS END SHALL CONFORM IN GENERAL TO ACI RECOMMENDED PRACTICE FOR THE DESIGN OF CONCRETE MIXES. (ACI-613 LAST REVISED). NON-AIR ENTRAINED < 3% AIR, AIR ENTRAINED 6 1/2% ± 1%, SLUMP 4 TO 5 INCHES.

PROVIDE 3/4" CHAMFER ON EXPOSED CONCRETE EDGES.

UNLESS NOTED OTHERWISE, ALL FLOOR SLABS ON GRADE SHALL BE 4" THICK AND SHALL BE REINFORCED WITH ONE LAYER OF 6 X 6 - W1.4 X W1.4 W.W.F. AT CONTRACTOR'S OPTION USE HELIX MICRO REBAR 5-25 IN LIEU OF WELDED WIRE FABRIC.

DEPRESS ALL FLOOR SLABS AS REQUIRED FOR FLOOR FINISHES. SEE ARCHITECTURAL DRAWINGS.

CONTRACTOR SHALL PLACE 1/2" ASPHALT IMPREGNATED FIBER BOARD IN JOINTS OF CONCRETE SLAB ON GRADE AGAINST VERTICAL SURFACES.

STEEL REINFORCING SHALL BE BILLET STEEL ASTM A-615, GRADE 60.

MESH SHALL BE WELDED WIRE FABRIC ASTM A-185.

GROUT FILL FOR CMU BLOCK = 3000 PSI.

F'm FOR CMU = 2100 PSI (MINIMUM).

PROVIDE 9 GAUGE HORIZONTAL JOINT REINFORCEMENT IN 8" CMU WALLS AT 1'-4" O.C.

ROUND STEEL PIPE SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-501. SQUARE AND RECTANGULAR STEEL TUBING SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-500, GRADE B. ALL STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A992, F_y = 50KSI. ALL STEEL SHALL RECEIVE ONE COAT OF SHOP PAINT, UNLESS NOTED OTHERWISE.

FOR OPENINGS IN THE ROOF, SEE ARCHITECTURAL AND MECHANICAL DRAWINGS.

ALL BOLTS SHALL BE 3/4" DIAMETER, ASTM A-325 TYPE "X", UNLESS OTHERWISE SHOWN OR NOTED.

PROVIDE HORIZONTAL BRIDGING AT 4'-0" O.C. VERTICALLY IN ALL LOAD BEARING WOOD STUD WALLS.

ALL NON HIGH STRENGTH BOLTS SHALL BE F1554 GRADE 36 KSI.

TRUSSES SHALL BE FABRICATED IN ACCORDANCE WITH THE FOLLOWING TRUSS DESIGN CRITERIA. TRUSS BRACING SHALL CONFORM TO THE REQUIREMENTS OF STANDARDS FOR DESIGN OF STRUCTURAL TIMBER FRAMING, AND TRUSS PLATE INSTITUTE.

WOOD ROOF TRUSS DESIGN CRITERIA:
TOP CHORD LIVE LOAD 20 PSF, SNOW 18 PSF (ASD)
TOP CHORD DEAD LOAD 10 PSF
BOTTOM CHORD LIVE LOAD 0 PSF
BOTTOM CHORD DEAD LOAD 10 PSF

LIMIT LIVE LOAD DEFLECTION TO SPAN/360 FOR ROOF TRUSSES.

WOOD: SYP NO. 2
LVL: Fbx = 2800 PSI
E = 2,000,000 PSI

529.9004
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470 LITHIA RD.
WYTHEVILLE, VIRGINIA

GENERAL STRUC. NOTES, SCHEDULES & TYP SECTIONS AND DETAILS

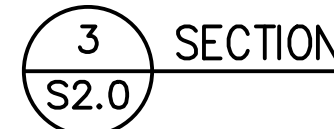
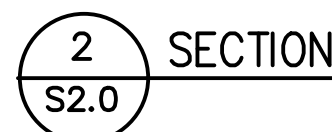
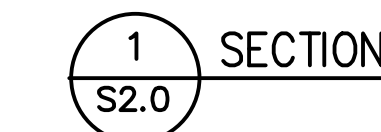
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OF: --

DATE: 9-2-25
REV. NO.: --

DESIGNED BY: JJK
DRAWN BY: BMB
CHECKED BY: JJK

PROJECT NO.: --
COMMISSION NO.: --



9. TOP OF PIERS (P1) AT (-0'-8").



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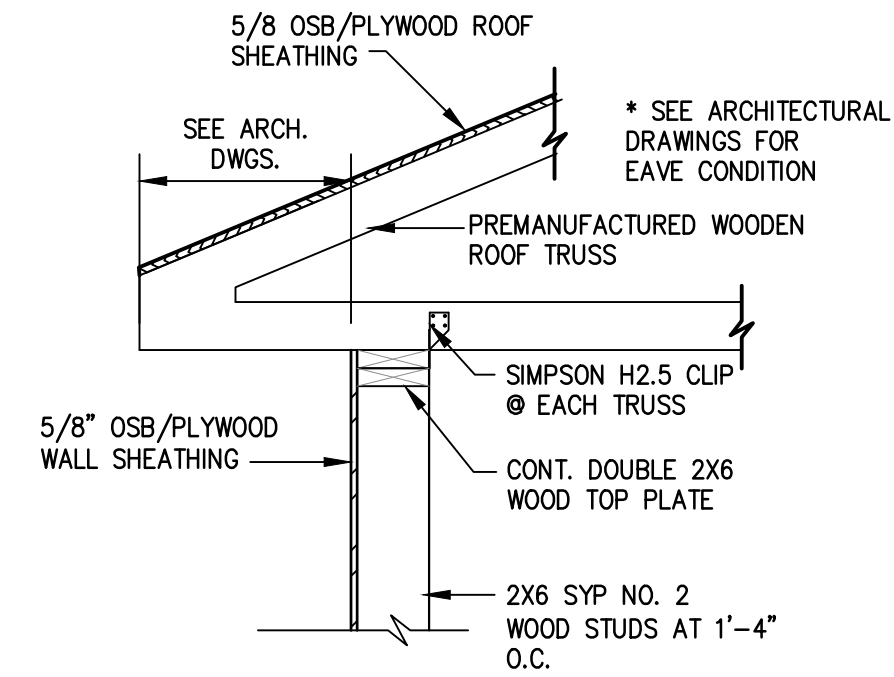
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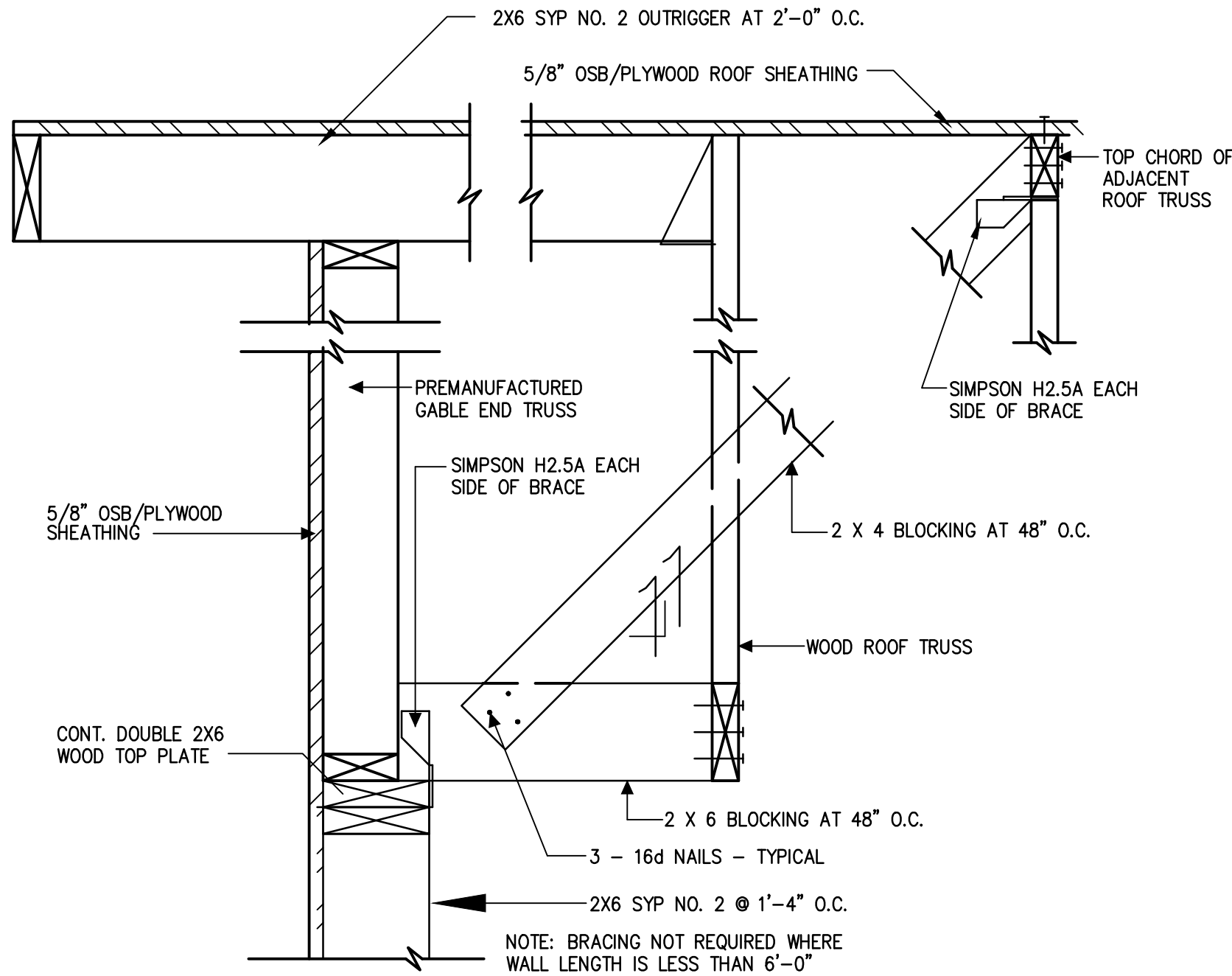
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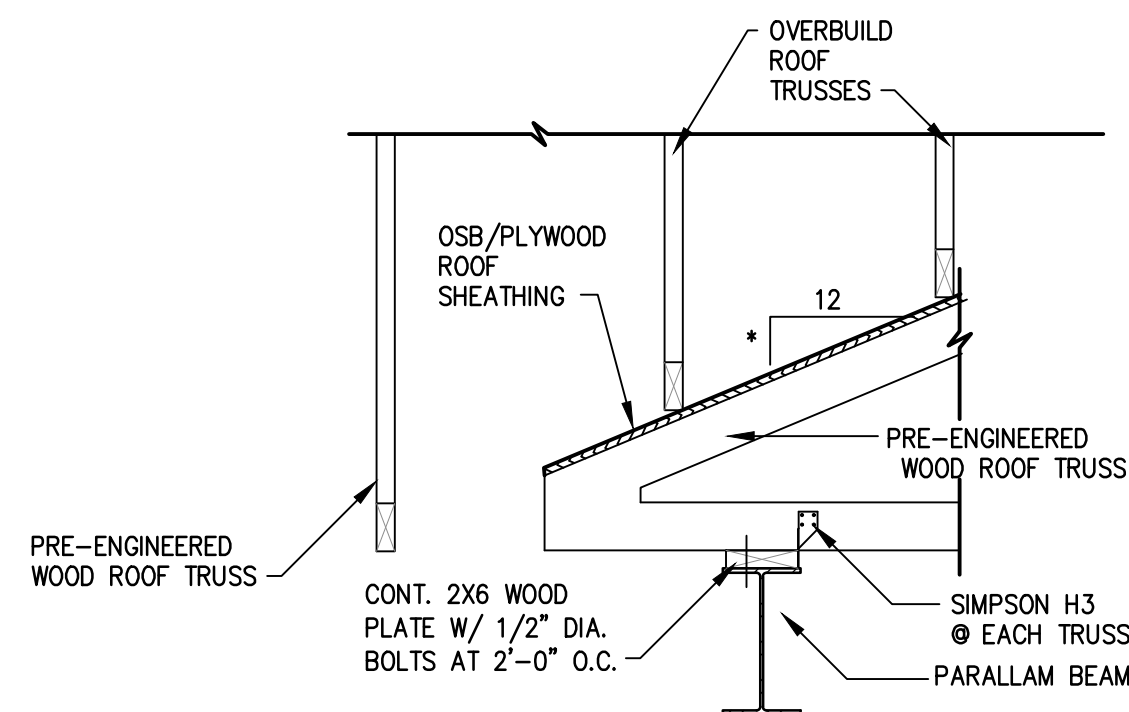
DESIGNED BY: JFK
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CHECKED BY: JFK



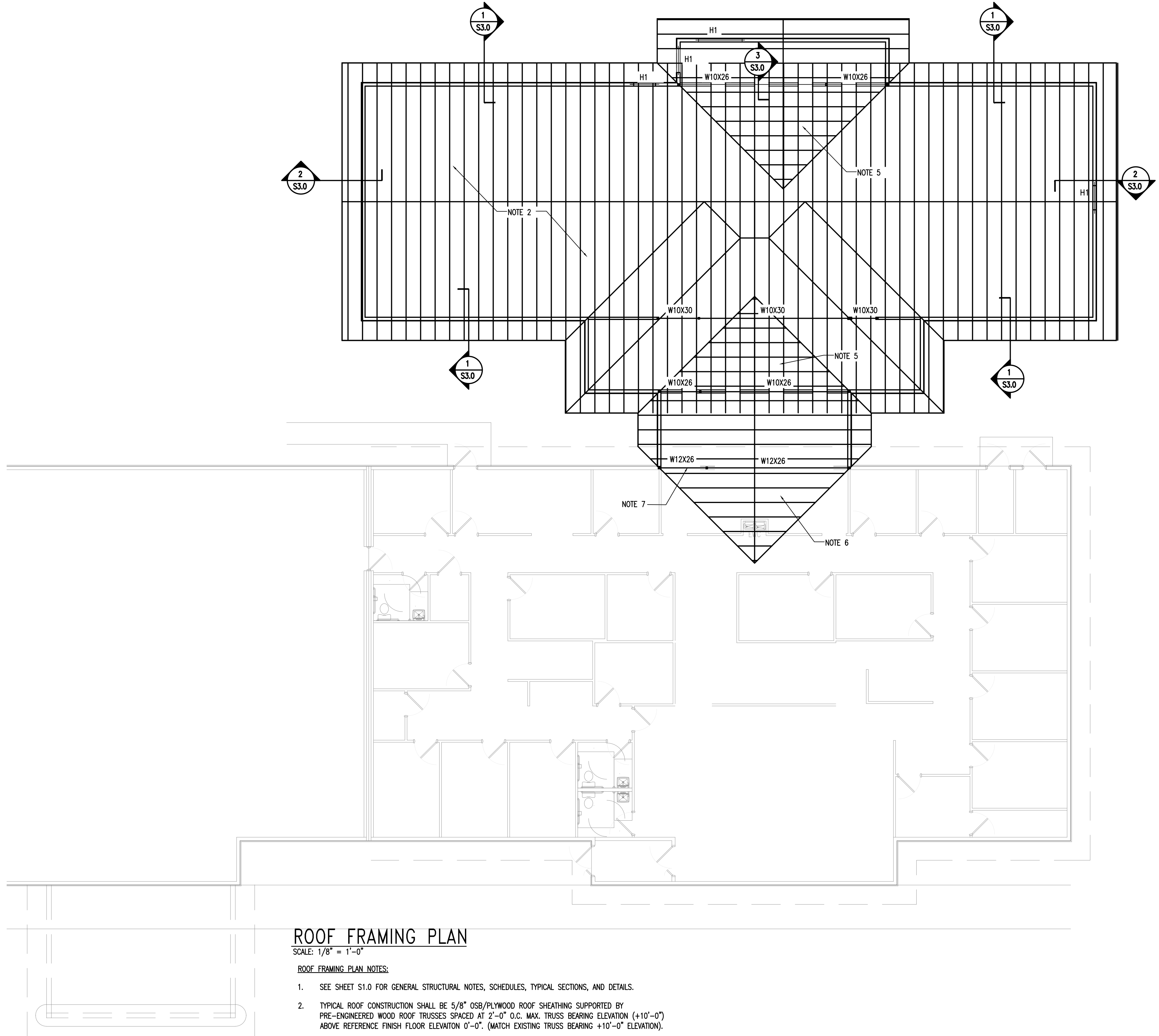
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SCALE: N.T.S.



2 SECTION
SCALE: N.T.S.



3 SECTION
SCALE: N.T.S.

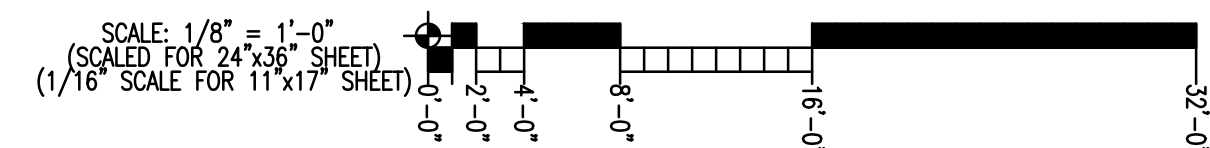


ROOF FRAMING PLAN

SCALE: 1/8" = 1'-0"

ROOF FRAMING PLAN NOTES:

- SEE SHEET S1.0 FOR GENERAL STRUCTURAL NOTES, SCHEDULES, TYPICAL SECTIONS, AND DETAILS.
- TYPICAL ROOF CONSTRUCTION SHALL BE 5/8" OSB/PLYWOOD ROOF SHEATHING SUPPORTED BY PRE-ENGINEERED WOOD ROOF TRUSSES SPACED AT 2'-0" O.C. MAX. TRUSS BEARING ELEVATION (+10'-0") ABOVE REFERENCE FINISH FLOOR ELEVATION 0'-0". (MATCH EXISTING TRUSS BEARING +10'-0" ELEVATION).
- G.C. SHALL COORDINATE SIZE, WEIGHT, AND LOCATION OF ROOF TOP UNITS WITH ROOF TRUSS MANUFACTURER PROPER TRUSS DESIGN.
- SEE ARCH. DWGS. FOR ROOF SLOPE REQUIREMENTS.
- OVERBUILD ROOF TRUSSES - CONTINUE OSB/PLYWOOD ROOF SHEATHING BENEATH OVERBUILT ROOF TRUSSES.
- OVERBUILD ROOF TRUSSES ON EXISTING ROOF SYSTEM.
- G.C. PROVIDE TEMPORARY SHORING TO SUPPORT EXISTING ROOF STRUCTURE FOR INSTALLATION OF NEW BEAM. SHORING LOAD IS APPROXIMATELY 1,750 POUNDS PER FOOT.



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ROOF FRAMING PLAN

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