

WORTH TAYLOR CONSTRUCTION
LOT 1 NUTCUSH RD.

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issue date: 9-20-2023

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content
ELEVATIONS

sheet

1



FRONT ELEVATION

1/4"= 1'-0"



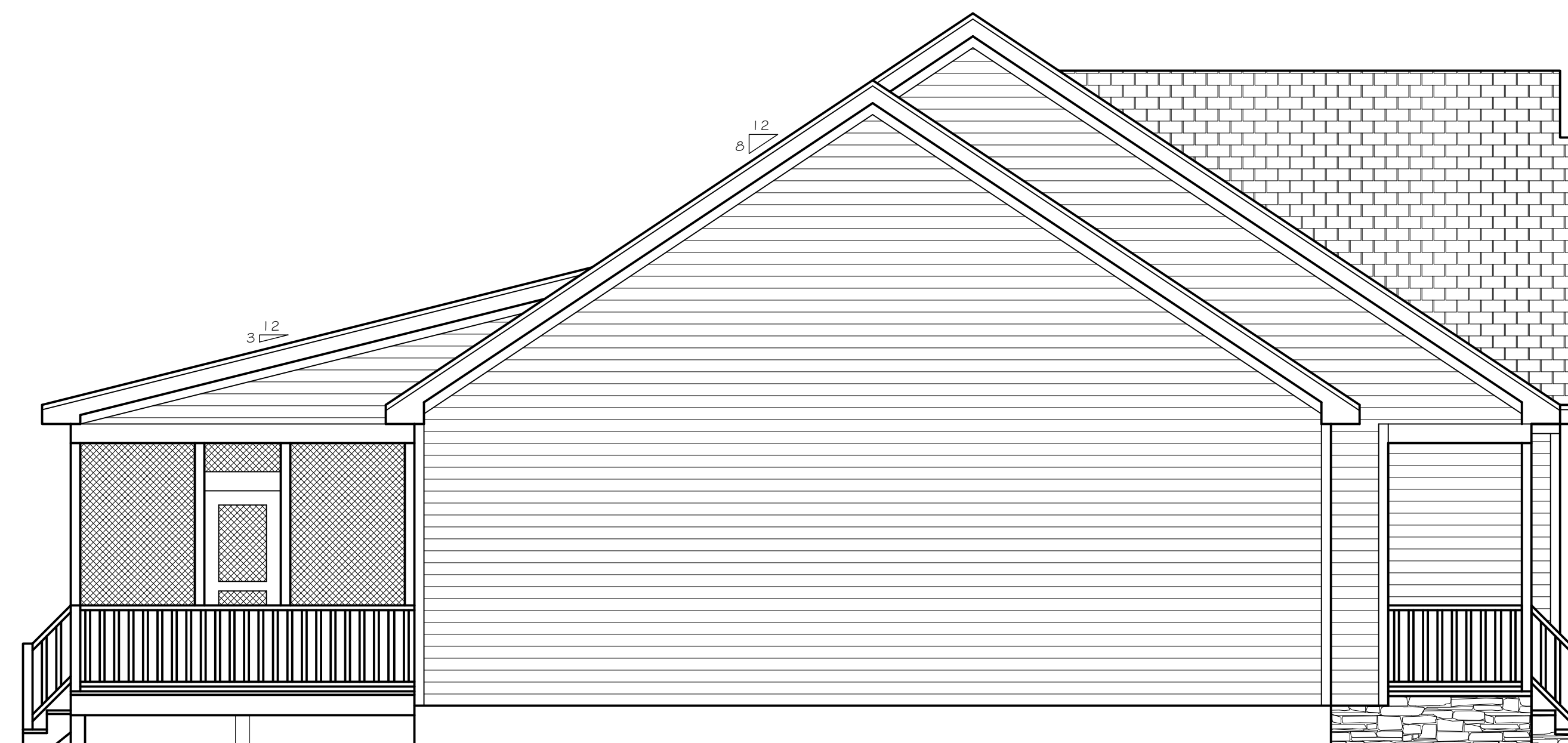
RIGHT SIDE ELEVATION

1/4"= 1'-0"



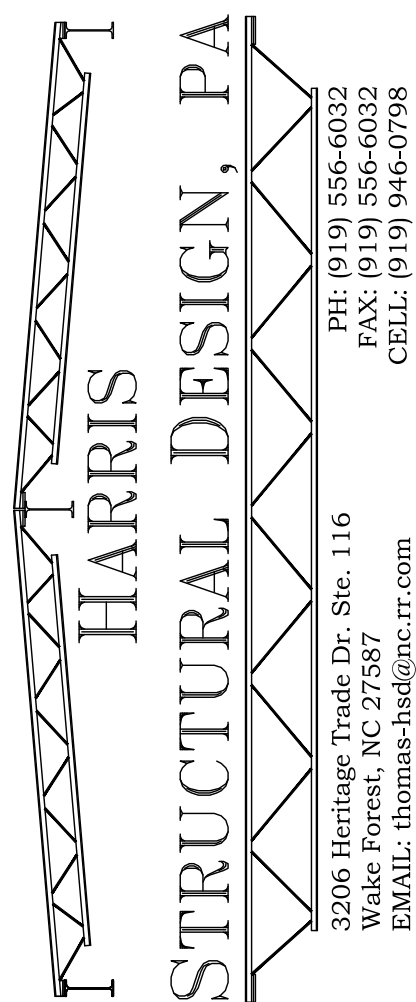
REAR ELEVATION

1/4"= 1'-0"



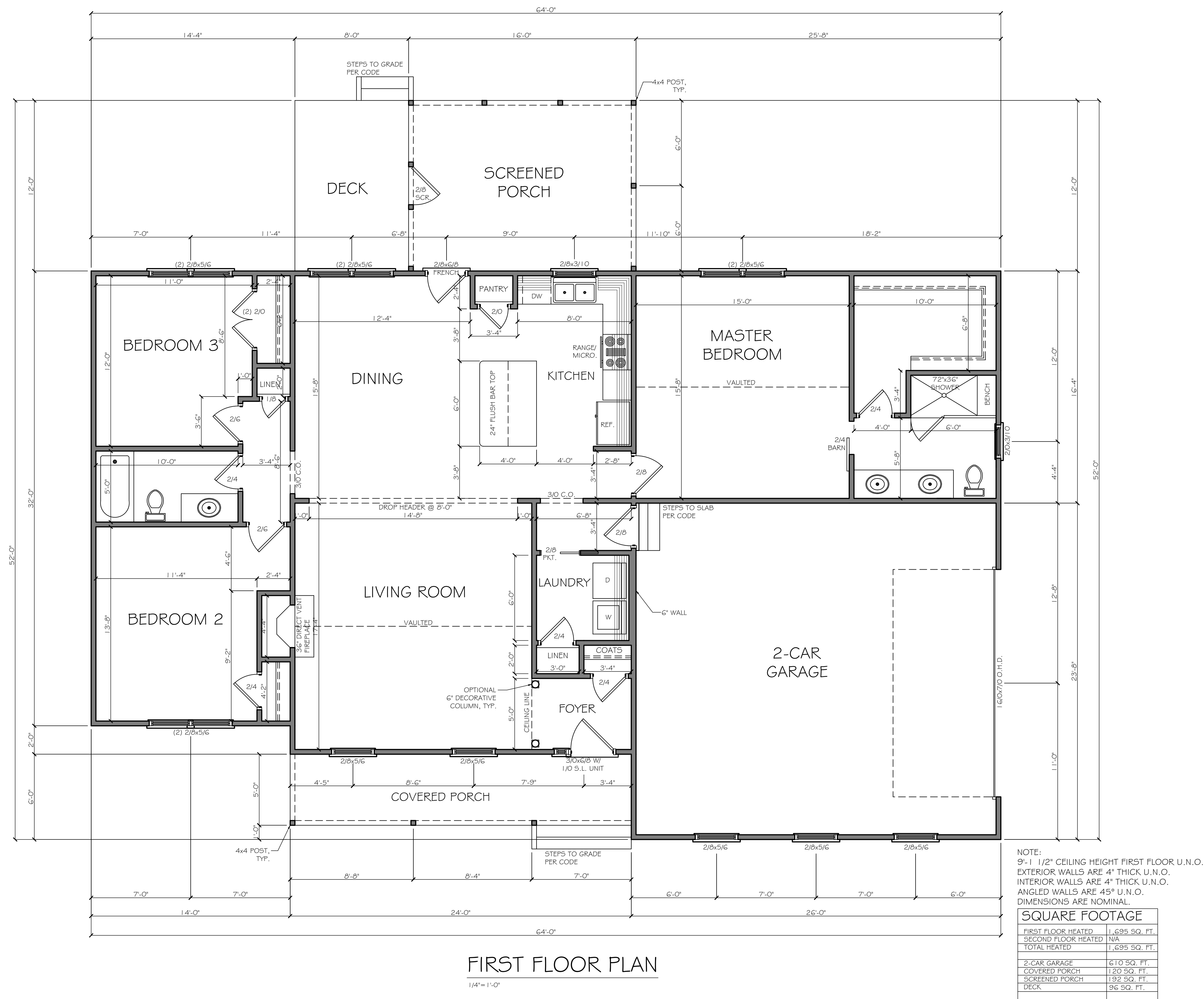
LEFT SIDE ELEVATION

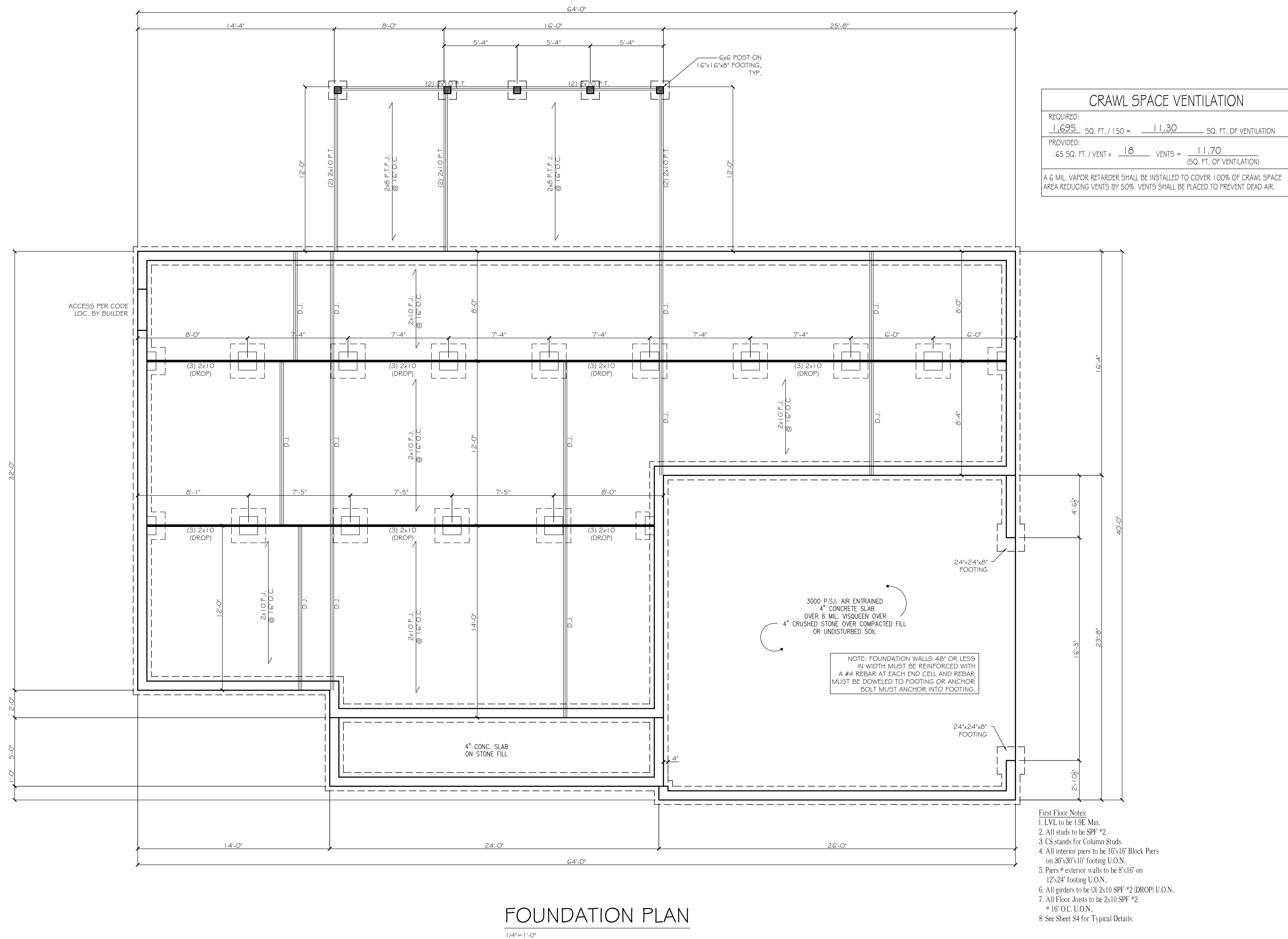
1/4"= 1'-0"

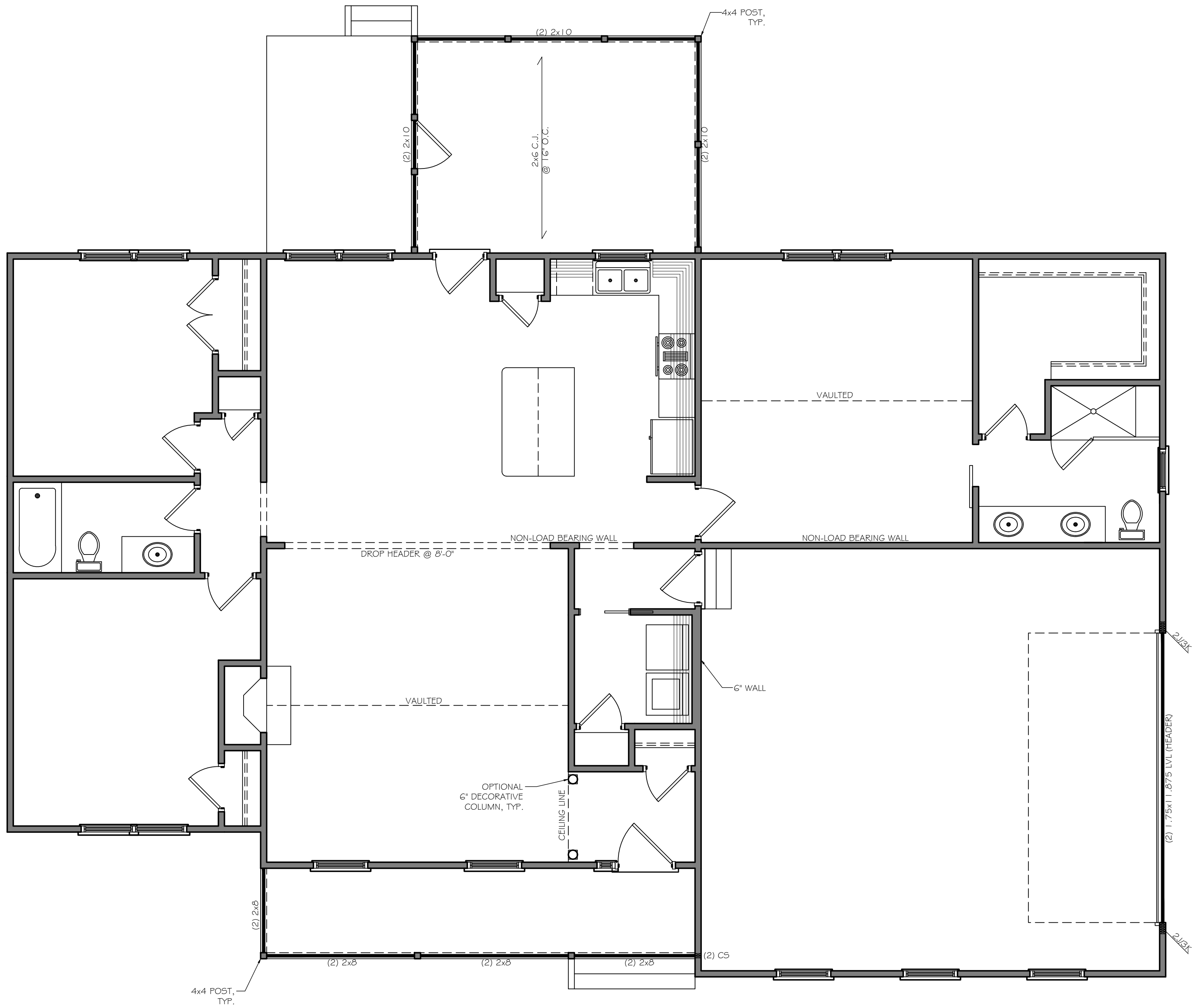


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CEILING FRAMING PLAN

1/4"= 1'-0"

OPENING	HEADER TYPE	NUMBER OF JACK STUDS	NUMBER OF LVL'S
0' - 3'-0"	2 - 2x8 BOX HEADER	1	1
3'-0" - 6'-0"	2 - 2x10 BOX HEADER	2	2

- Ceiling Notes:
- LVL to be 1.9E Min.
 - All studs to be SPF #2.
 - Abbreviations:
 - CS = Column Studs
 - CS-WSP = Continuous Sheathed - Wood Structural Panel
 - GB = Gypsum Board Braced Wall
 - CS-PF = Continuous Portal Frame (See Detail Sheet)
 - PFG = Portal Frame at Garage Door (See Detail Sheet)
 - PFH = Portal Frame with Hold-Downs (See Detail Sheet)
 - J = Jack Studs
 - K = King Studs (Full Height)
 - All ceiling joists to be SPF #2 U.O.N.
 - See Sheet S4 for Typical Details.

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SEAL DATE: 9-20-2023

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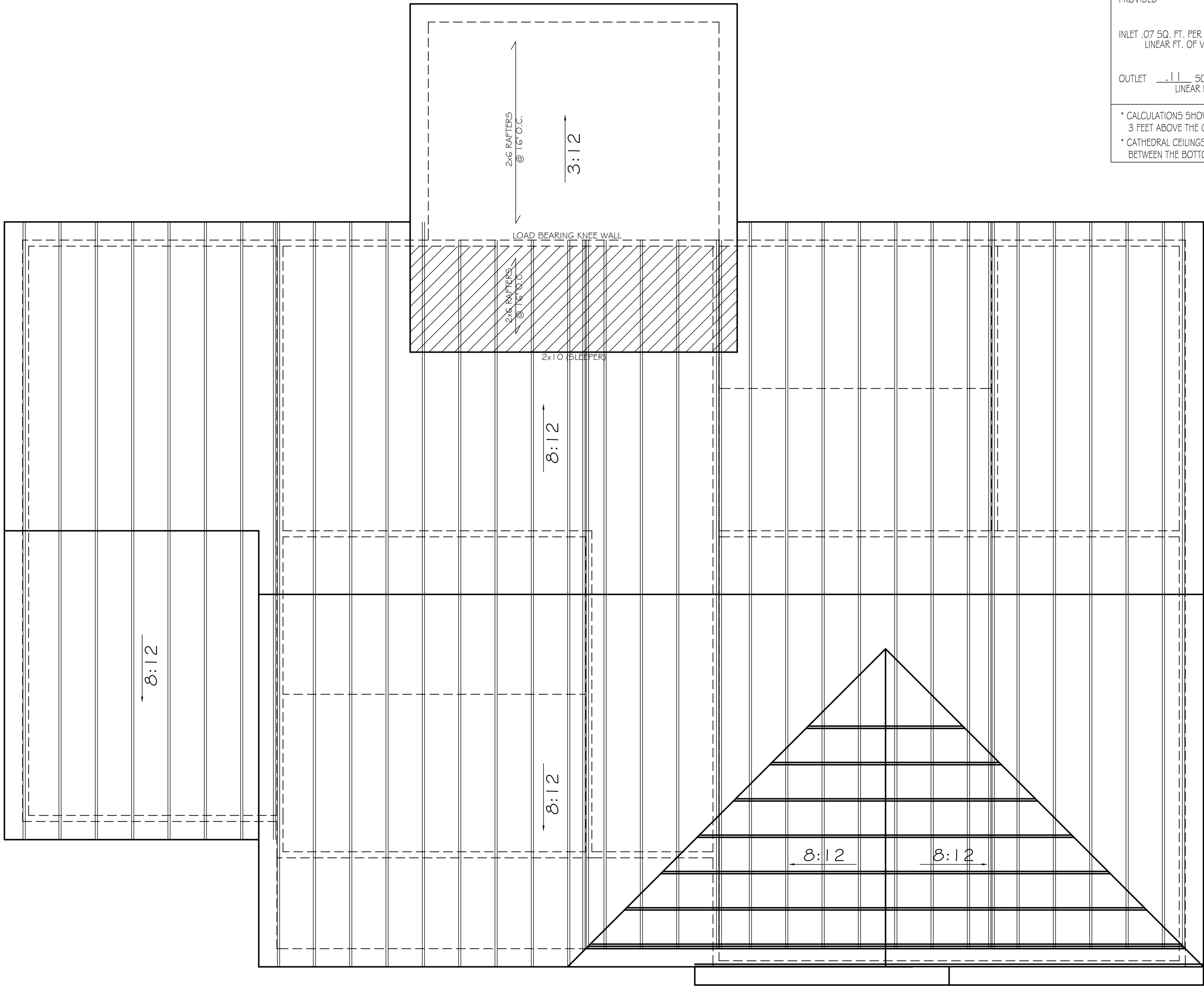
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content
CEILING FRAMING PLAN

sheet
S2



ATTIC VENTILATION			
REQUIRED			
	2,617 SQ. FT. OF ATTIC/600 =	4.36	SQ. FT. EACH OF INLET & OUTLET
PROVIDED			
INLET .07 SQ. FT. PER LINEAR FT. OF VENT.	64 LINEAR FT. =	4.48	SQ. FT. OF VENT.
OUTLET .11 SQ. FT. PER LINEAR FT. OF VENT.	40 LINEAR FT. =	4.4	SQ. FT. OF VENT.
* CALCULATIONS SHOWN, CONSIDER VENTILATORS USED AT LEAST 3 FEET ABOVE THE CORNICE VENTS			
* CATHEDRAL CEILINGS SHALL HAVE A 1" MINIMUM CLEARANCE BETWEEN THE BOTTOM OF THE ROOF DECK AND THE INSULATION.			

ROOF FRAMING PLAN

1/4" = 1'-0"

- NOTES:
1. TRUSSES TO BE DESIGNED BY TRUSS MANUFACTURER.
 2. THIS DRAWING IS TO BE USED AS A GUIDE FOR TRUSS LAYOUT. SEE TRUSS MANUFACTURER'S LAYOUT FOR FINAL ERECTION.
 3. ROOF TRUSSES ARE SPACED AT 24" O.C..

- Roof Notes
1. All rafters SPF #2 U.O.N.
 2. LVL to be 1.9E or Greater.
 3. CS Stands for Column Studs.
 4. See Sheet S4 for Typical Details.



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ROOF FRAMING PLAN

sheet

S3

- 1) ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS INCLUDING ROOF RAFTERS, HPS, VALLEYS, RIDGES, FLOORS, WALLS, BEAMS AND HEADERS, COLUMNS, CANTILEVERS, OFFSET LOAD BEARING WALLS, PIER & GIRDER SYSTEM AND FOOTING. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM.
- 2) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2018 EDITION, PLUS ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK. NOR WILL THE ENGINEER BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- 3) DESIGN LOADS (R301.5)
- | | LIVE LOAD | DEAD LOAD | DEFLECTION |
|---------------------------------|---|-----------|------------|
| ROOMS OTHER THAN SLEEPING ROOMS | 40 | 10 | L/360 |
| SLEEPING ROOMS | 30 | 10 | L/360 |
| ATTIC WITH STORAGE | 20 | 10 | L/240 |
| ATTIC WITH OUT STORAGE | 10 | 10 | L/360 |
| STAIRS | 40 | 10 | L/360 |
| EXTERIOR BALCONIES | 60 | 10 | L/360 |
| DECKS | 40 | 10 | L/360 |
| GUARDRAILS AND HANDRAILS | 200 | 10 | --- |
| PASSENGER VEHICLE GARAGES | 50 | 10 | L/360 |
| FIRE ESCAPES | 40 | 10 | L/360 |
| SNOW | 20 | --- | --- |
| WIND LOAD | (BASED ON 115 MPH WIND VELOCITY & EXPOSURE B) | | |

- 4) FOR WALL BRACING REQUIREMENTS REFER TO SECTION R602.10 OF THE NORTH CAROLINA STATE RESIDENTIAL CODE - 2018 EDITION (U.N.O.). LATERAL BRACING SHALL BE SATISFIED BY CONTINUOUSLY SHEATHING WALLS WITH STRUCTURAL SHEATHING INSTALLED PER TABLE R602.10.2. NOTE THAT ANY SPECIFIC BRACED WALL DETAIL SHALL BE INSTALLED AS SPECIFIED.
- 5) CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF 5 INCHES UNLESS NOTED OTHERWISE (UNO). AIR ENTRAINMENT PER TABLE 402.2
- 6) ALL FRAMING LUMBER SHALL BE SPF #2 (Fb = 875 PSI) UNLESS NOTED OTHERWISE (UNO).
- 7) L.V.L. SHALL BE LAMINATED VENEER LUMBER OR PARALLEL STRAND LUMBER (PSL) WITH THE FOLLOWING PROPERTIES: Fb = 2800 PSI, Fv = 285 PSI, E = 1,900,000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S INSTRUCTIONS.
- 8) ALL STRUCTURAL STEEL SHALL BE ASTM A-992. STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3 1/2" INCHES AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO LAG SCREWS (1/2" DIAMETER x 4" LONG). LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDING THE JOIST ARE TOE NAILED TO THE SOLE PLATE, AND SOLE PLATE IS NAILED OR BOLTED TO THE BEAM FLANGE @ 48" O.C.
- 9) FLITCH BEAMS SHALL BE BOLTED TOGETHER USING 1/2" DIAMETER BOLTS (ASTM A307) WITH WASHERS PLACED UNDER THREADED END OF BOLT. BOLTS SHALL BE SPACED AT 24" CENTERS (MAXIMUM), AND STAGGERED TOP AND AT BOTTOM OF BEAM (2" EDGE DISTANCE), WITH 2 BOLTS LOCATED AT 6" FROM EACH END.
- 10) BRICK LINTELS SHALL BE 3 1/2"x3 1/2"x1/4" STEEL ANGLE FOR UP TO 6'-0" SPAN AND 6"x4"x5/16" STEEL ANGLE WITH 6" LEG VERTICAL FOR SPANS UP TO 9'-0" (UNO).
- 11) THE POSITIVE AND NEGATIVE DESIGN PRESSURE FOR DOORS AND WINDOWS FOR A MEAN ROOF HEIGHT OF 35 FEET OR LESS SHALL BE 23 PSF.
- 12) IF ANY PART OF THE CLEAR OPENING OF THE OPERABLE PORTION OF A WINDOW IS LOCATED MORE THAN 72" ABOVE THE EXTERIOR GRADE THEN THE LOWEST PART OF THE CLEAR OPENING MUST BE AT LEAST 24" ABOVE THE FLOOR OF THE ROOM IN WHICH IT IS LOCATED.

PLANS DESIGNED TO THE 2018 NORTH CAROLINA RESIDENTIAL CODE
HOUSE DESIGNED FOR 115 MPH WIND,
EXPOSURE B

ANCHOR BOLTS SHALL BE MIN. 1/2" DIAMETER & SHALL EXTEND A MINIMUM 7" INTO MASONRY OR CONCRETE. ANCHOR BOLTS TO BE NO MORE THAN 6" O.C. AND WITHIN 12" OF ALL PLATE SPICES.

MEAN ROOF HEIGHT = 19.00'

COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS	30'-1" - 35'	35'-1" - 40'	40'-1" - 45'
MEAN ROOF HGT UP TO 30'	30'-1" - 35'	35'-1" - 40'	40'-1" - 45'
ZONE 1	16.5, -18.0	17.3, -18.9	18.0, -19.6
ZONE 2	16.5, -21.0	17.3, -22.1	18.0, -22.9
ZONE 3	16.5, -21.0	17.3, -22.1	18.0, -22.9
ZONE 4	18.0, -19.5	18.9, -20.5	19.6, -21.3
ZONE 5	18.0, -24.1	18.9, -25.3	19.6, -26.3

MINIMUM VALUES FOR ENERGY COMPLIANCE:
ZONE 4
MAX. GLAZING U-FACTOR = 0.35
CEILING: R-38, WALLS: R-15, FLOORS: R-19

HEATED SQUARE FOOTAGE

FINISHED BASEMENT	N/A
FIRST FLOOR	1695 SF
SECOND FLOOR	N/A
THIRD FLOOR	N/A

UNHEATED SQUARE FOOTAGE

UNFIN BASEMENT	N/A
GARAGE	610 SF
UNFIN STORAGE	N/A
OTHER	406 SF

RESIDENTIAL CODE SUMMARY & NOTES

