PLANS DESIGNED TO THE **2018 NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE**

MEAN ROOF HEIGHT: 17'-2" HEIGHT TO RIDGE: 25'-6				
CLIMATE ZONE	ZONE 3A	ZONE 4A	ZONE 5A	
FENESTRATION U-FACTOR	0.35	0.35	0.35	
SKYLIGHT U-FACTOR	0.55	0.55	0.55	
GLAZED FENESTRATION SHGC	0.30	0.30	0.30	
CEILING R-VALUE	38 or 30ci	38 or 30ci	38 or 30ci	
WALL R-VALUE	15	15	19	
FLOOR R-VALUE	19	19	30	
* BASEMENT WALL R-VALUE	5/13	10/15	10/15	
** SLAB R-VALUE	0	10	10	
* CDAWL CDACE WALL D.VALUE	E/10	10/15	10/10	

* CRAWL SPACE WALL R-VALUE 5/13 10/15 10/19 * "10/13" MEANS R-10 SHEATHING INSULATION OR R-13 CAVITY INSULATION ** INSULATION DEPTH WITH MONOLITHIC SLAB 24" OR FROM INSPECTION GAP TO BOTTOM OF

FOOTING; INSULATION DEPTH WITH STEM WALL SLAB 24" OR TO BOTTOM OF FOUNDATION WALL DESIGNED FOR WIND SPEED OF 120 MPH, 3 SECOND GUST (93 FASTEST MILE) EXPOSURE "B" COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS MEAN ROOF | UP TO 30' | 30'-1" TO 35' | 35'-1" TO 40' | 40'-1" TO 45'

ZONE 1	14.2	-15.0	14.9	-15.8	15.5	-16.4	15.9	-16.8		
ZONE 2	14.2	-18.0	14.9	-18.9	15.5	-19.6	15.9	-20.2		
ZONE 3	14.2	-18.0	14.9	-18.9	15.5	-19.6	15.9	-20.2		
ZONE 4	15.5	-16.0	16.3	-16.8	16.9	-17.4	17.4	-17.9		
ZONE 5	15.5	-20.0	16.3	-21.0	16.9	-21.8	17.4	-22.4		
	DESIGNED FOR WIND SPEED OF 130 MPH, 3 SECOND GUST (101 FASTEST MILE) EXPOSURE "B"									
COMPONENT	' & CLA	DDING	DESIG	NED FC	DR THE	FOLLO	WING I	LOADS		
MEAN ROOF	UP T	O 30'	30'-1"	TO 35'	35'-1"	TO 40'	40'-1"	TO 45'		
ZONE 1	16.7	-18.0	17.5	-18.9	18.2	-19.6	18.7			
ZONE 2	16.7	-21.0	17.5	-22.1	18.2	-22.9	18.7	-23.5		
ZONE 3	16.7	-21.0	17.5	-22.1	18.2	-22.9	18.7	-23.5		
ZONE 4	18.2	-19.0	19.1	-20.0	19.8	-20.7		-21.3		
ZONE 5	18.2	-24.0	19.1	-25.2	19.8	-26.2	20.4	-26.9		

ROOF VENTILATION

SECTION R806

SQUARE FOOTAGE OF ROOF TO BE VENTED = 2,111 SQ.FT. NET FREE CROSS VENTILATION NEEDED:

WITHOUT 50% TO 80% OF VENTING 3'-0" ABOVE EAVE = 14.07 SQ.FT. WITH 50% TO 80% OF VENTING 3'-0" ABOVE EAVE; OR WITH CLASS I OR II VAPOR RETARDER ON WARM-IN-WINTER SIDE OF CEILING = 7.04 SQ.FT.

GUARD RAIL NOTES

SECTION R312

R312.1 Where required. Guards shall be located along open-sided walking surfaces, including stairs, ramps and landings, that are located more than 30 inches (762 mm) measured vertically to the floor or grade below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Insect screening shall not be considered as a guard.

R312.2 Height. Required guards at open-sided walking surfaces, including stairs, porches, balconies or landings, shall be not less than 36 inches (914 mm) high measured vertically above the adjacent walking surface, adjacent fixed seating or the line connecting the leading edges of the treads. Exceptions:

1. Guards on the open sides of stairs shall have a height not less than 34 inches (864 mm) measured vertically from a line connecting the leading edges of the treads.

2. Where the top of the *guard* also serves as a handrail on the open sides of stairs, the top of the guard shall not be not less than 34 inches (864 mm) and not more than 38 inches (965 mm) measured vertically from a line connecting the leading edges of the treads.

R312.3 Opening limitations. Required guards shall not have openings from the walking surface to the required *quard* height which allow passage of a sphere 4 inches (102 mm)in diameter. Exceptions:

1. The triangular openings at the open side of a stair, formed by the riser, tread and bottom rail of a *guard*, shall not allow passage of a sphere 6 inches (153 m) in diameter

2. Guards on the open sides of stairs shall not have openings which allow passage of a sphere 43/8 inches (111 mm) in diameter.

AIR LEAKAGE

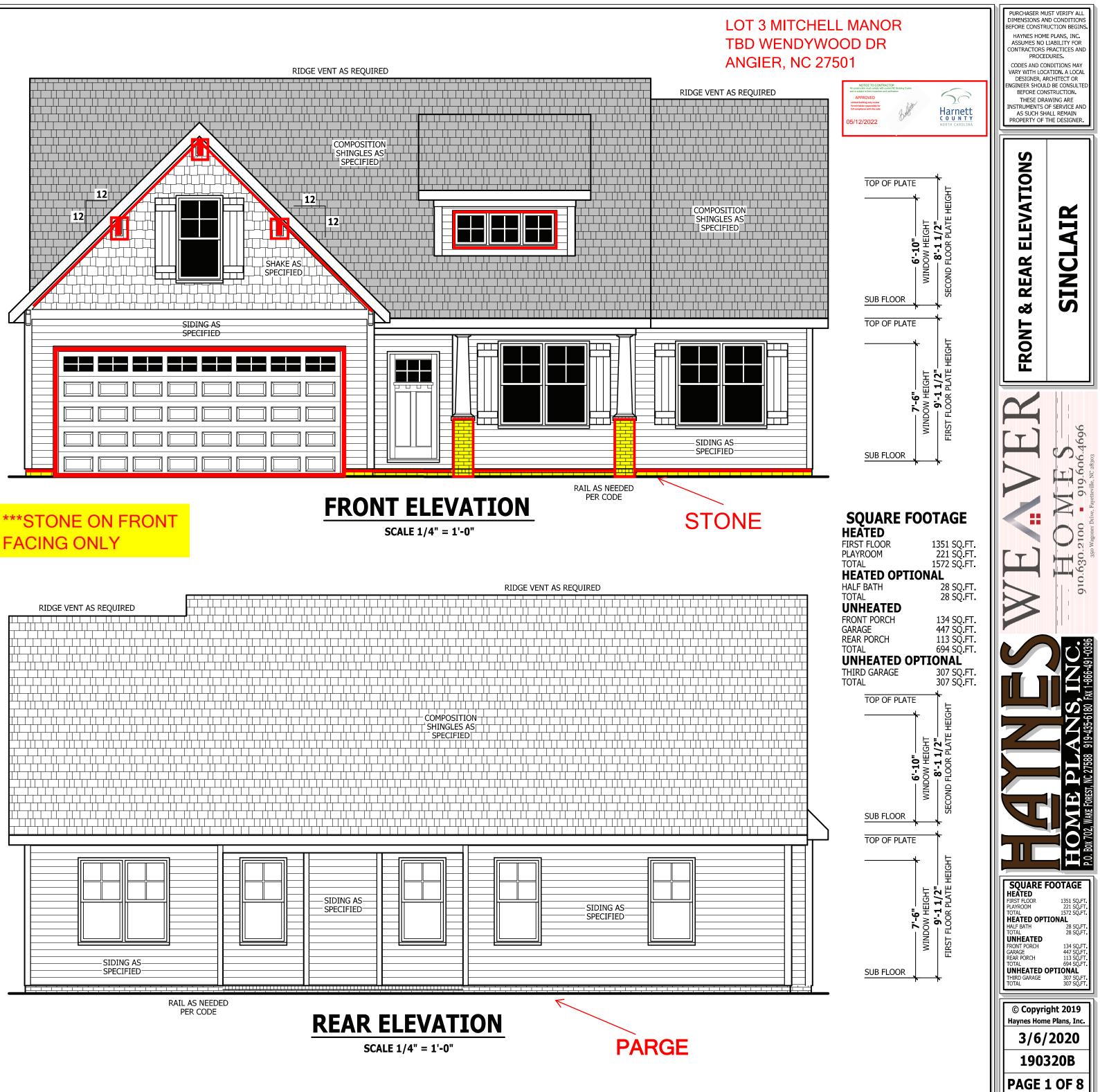
Section N1102.4

N1102.4.1 Building thermal envelope. The building thermal envelope shall be durably sealed with an air barrier system to limit infiltration. The sealing methods between dissimilar materials shall allow for differential expansion and contraction. For all homes, where present, the following shall be caulked, gasketed, weather stripped or otherwise sealed with an air barrier material or solid material consistent with Appendix E-2.4 of this code: 1. Blocking and sealing floor/ceiling systems and under knee walls

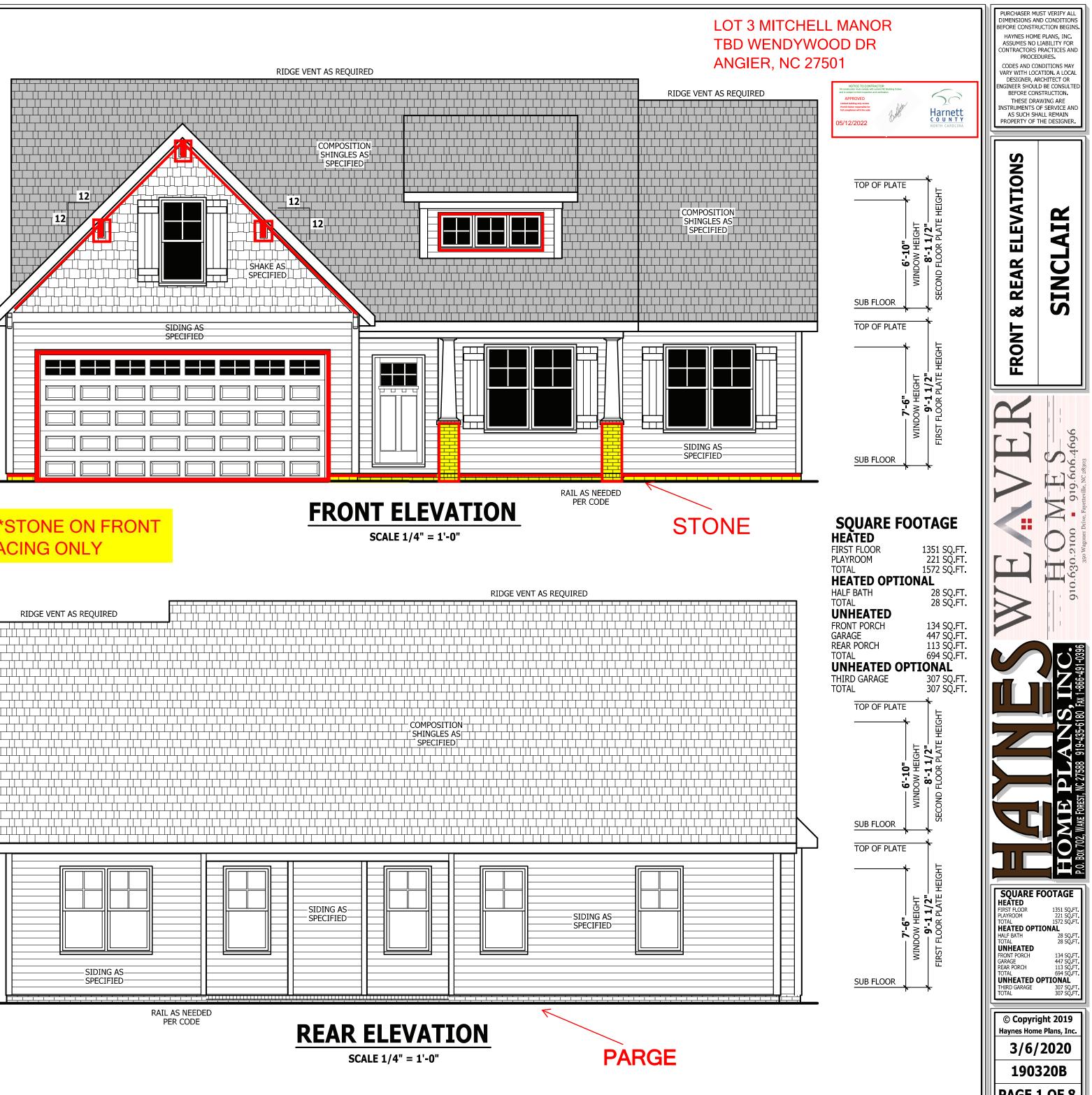
open to unconditioned or exterior space.

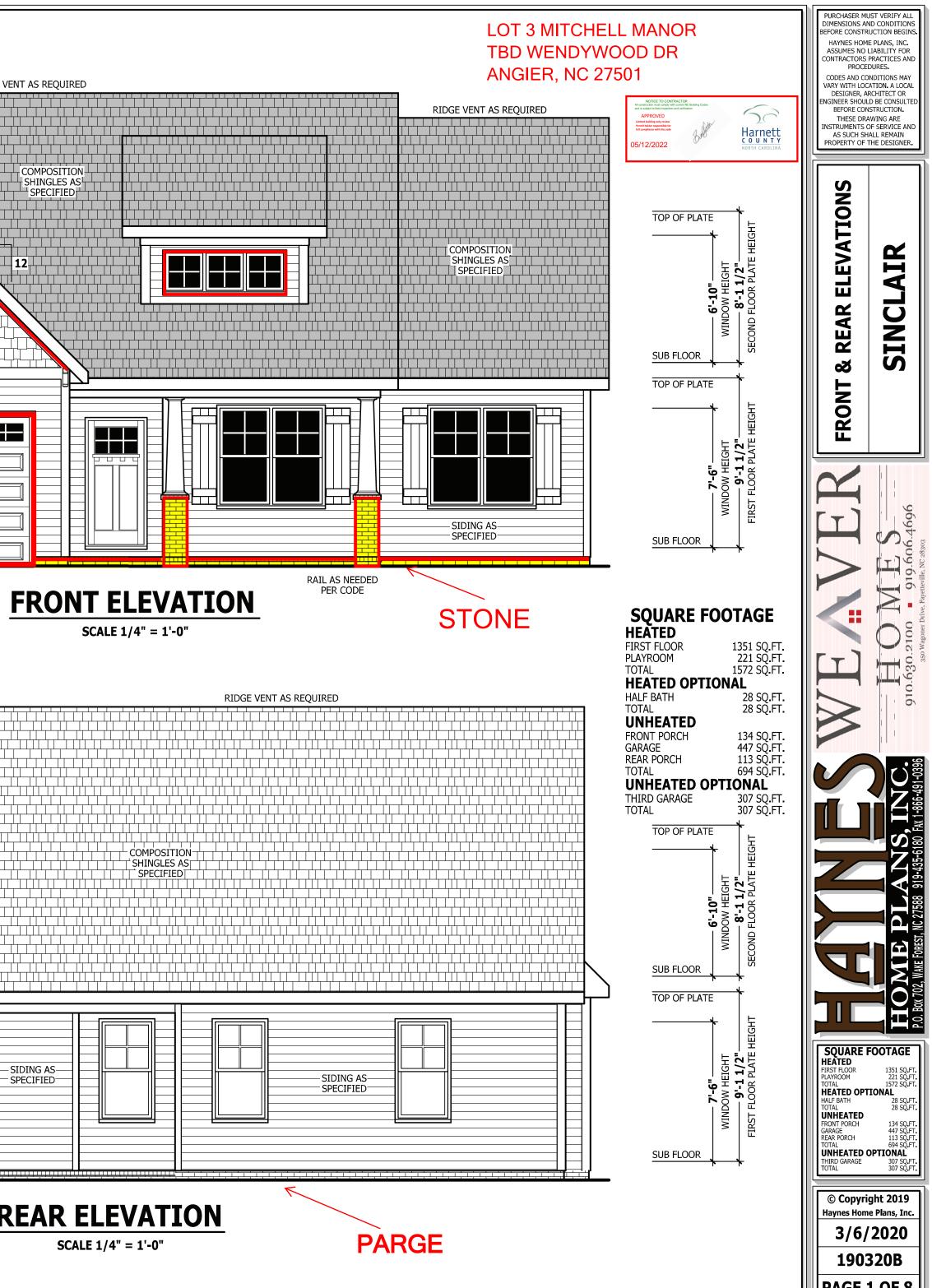
2. Capping and sealing shafts or chases, including flue shafts. 3. Capping and sealing soffit or dropped ceiling areas.

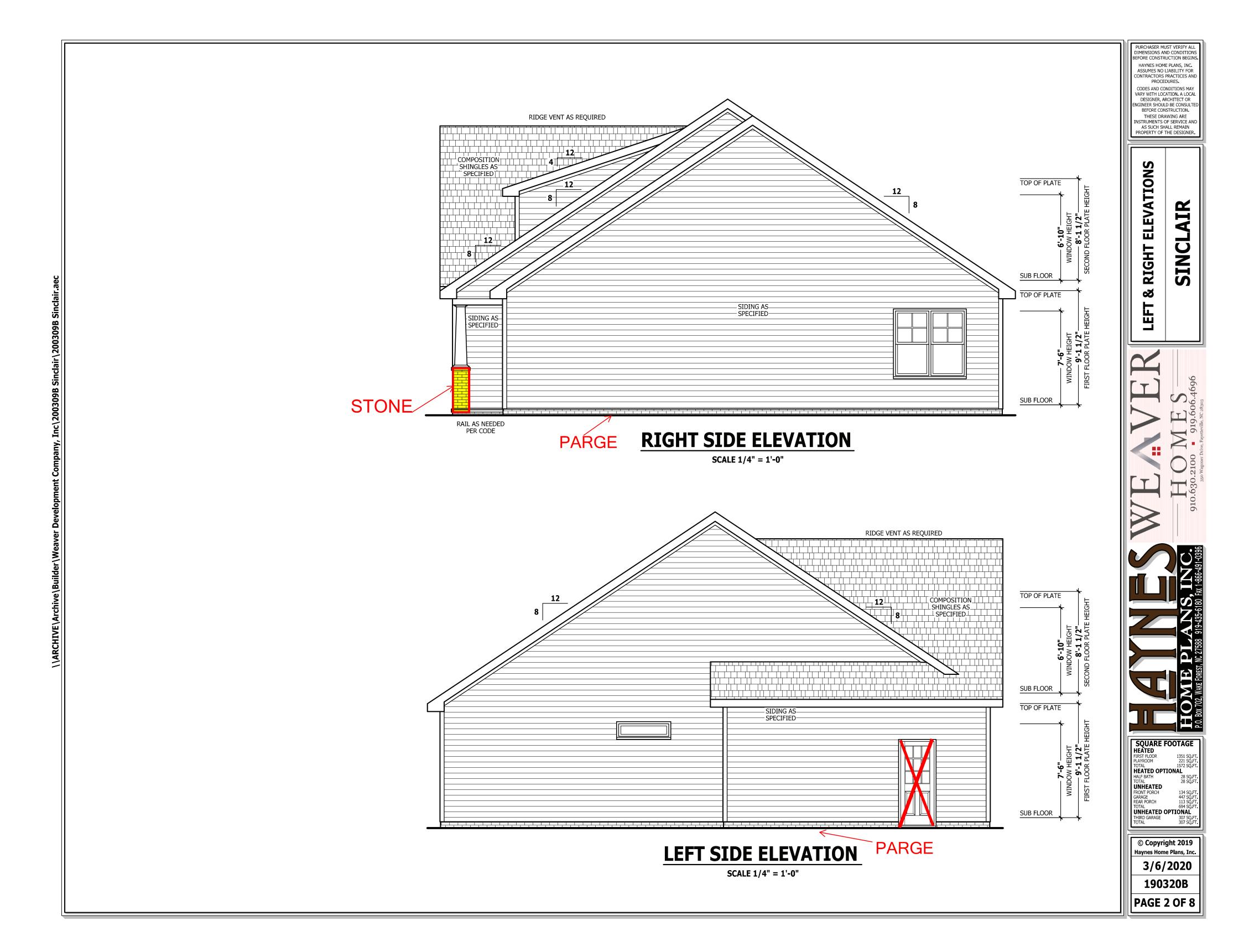
HVAC: CERTIFIED HEATING & AIR PLUMBING: DOUBLE J **ELECTRICAL: PIONEER**

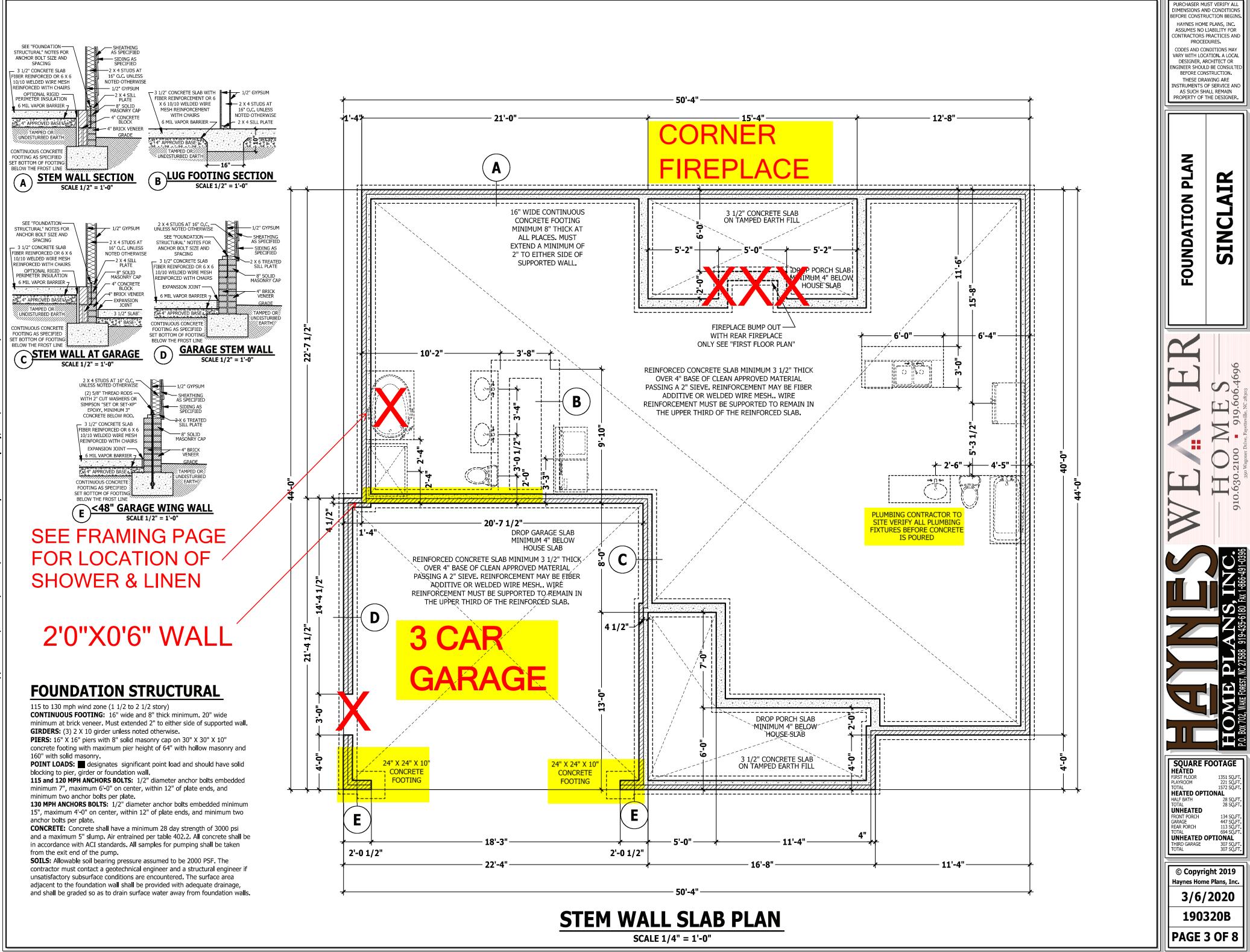


FACING ONLY

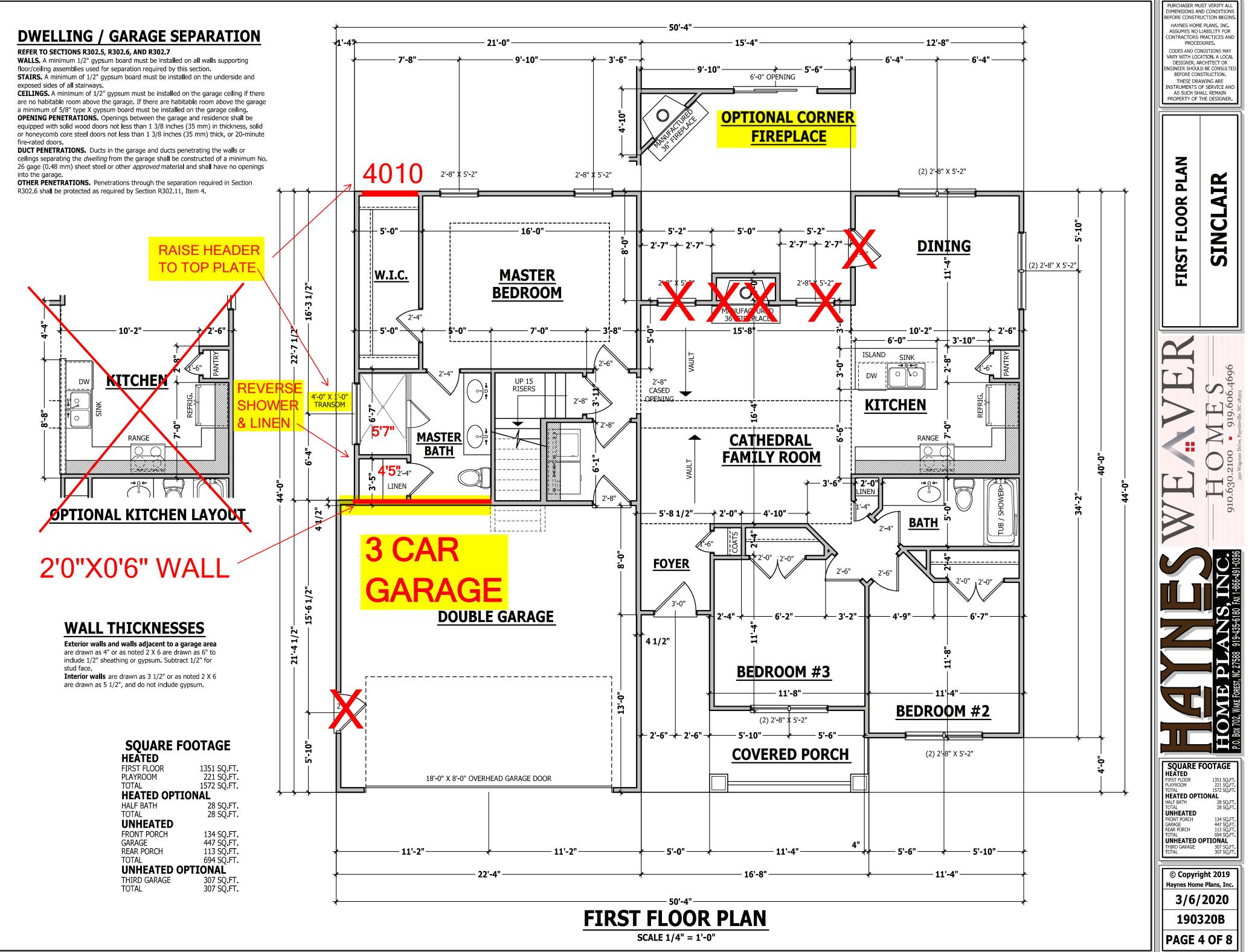








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STRUCTURAL NOTES

All construction shall conform to the latest requirements of the 2018 North Carolina Residential Building Code, plus all local codes and regulations. This document in no way shall be construed to supersede the code. **JOB SITE PRACTICES AND SAFETY:** Haynes Home Plans, Inc. assumes no liability for contractors practices and procedures or safety program. Haynes Home Plans, Inc. takes no responsibility for the contractor's failure to carry out the construction work in accordance with the contract documents. All

 out the construction work in accordance with the contract documents. All members shall be framed, anchored, and braced in accordance with good construction practice and the building code.

 DESIGN LOADS
 LIVE LOAD
 DEAD LOAD
 DEFLECTION

DESIGN LOADS			DELECTION
USE	(PSF)	(PSF)	(LL)
Attics without storage	10		L/240
Attics with limited storage	20	10	L/360
Attics with fixed stairs	40	10	L/360
Balconies and decks	40	10	L/360
Fire escapes	40	10	L/360
Guardrails and handrails	200		
Guardrail in-fill components	50		
Passenger vehicle garages	50	10	L/360
Rooms other than sleeping	40	10	L/360
Sleeping rooms	30	10	L/360
Stairs	40		L/360
Snow	20		

FRAMING LUMBER: All non treated framing lumber shall be SPF #2 (Fb = 875 PSI) or SYP #2 (Fb = 750 PSI) and all treated lumber shall be SYP #2 (Fb = 750 PSI) unless noted other wise.

ENGINEERED WOOD BEAMS :

Laminated veneer lumber (LVL) = Fb=2600 PSI, Fv=285 PSI, E=1.9x10⁶ PSI Parallel strand lumber (PSL) = Fb=2900 PSI, Fv=290 PSI, E=2.0x10⁶ PSI Laminated strand lumber (LSL) Fb=2250 PSI, Fv=400 PSI, E=1.55x10⁶ PSI Install all connections per manufacturers instructions.

TRUSS AND I-JOIST MEMBERS: All roof truss and I-joist layouts shall be prepared in accordance with this document. Trusses and I-joists shall be installed according to the manufacture's specifications. Any change in truss or I-joist layout shall be coordinated with Haynes Homes Plans, Inc. **LINTELS:** Brick lintels shall be 3 1/2" x 3 1/2" x 1/4" steel angle for up to 6'-0" span. 6" x 4" x 5/16" steel angle with 6" leg vertical for spans up to 9'-0" unless noted otherwise. 3 1/2" x 3 1/2" x 1/4" steel angle with 1/2" bolts at 2'-0" on center for spans up to 18'-0" unless noted otherwise. **FLOOR SHEATHING:** OSB or CDX floor sheathing minimum 1/2" thick for 16" on center joist spacing, minimum 5/8" thick for 19.2" on center joist spacing. **ROOF SHEATHING:** OSB or CDX roof sheathing minimum 3/8" thick for 16" on center rafters and 7/16" for 24" on center rafters. **CONCRETE AND SOILS:** See foundation notes.

BRACE WALL PANEL NOTES

EXTERIOR WALLS: All exterior walls to be sheathed with CS-WSP or CS-SFB in accordance with section R602.10.3 unless noted otherwise.

GYPSUM: All interior sides of exterior walls and both sides interior walls to have 1/2" gypsum installed. When not using method GB gypsum to be fastened per table R702.3.5. Method GB to be fastened per table R602.10.1.

REQUIRED LENGTH OF BRACING: Required brace wall length for each side of the circumscribed rectangle are interpolated per table R602.10.3. Methods CS-WSP and CS-SFB contribute their actual length. Method GB contributes 0.5 it's actual length. Method PF contributes 1.5 times its actual length. **HD:** 800 lbs hold down hold down device fastened to the edge of the brace wall panel closets to the corner.

Methods Per Table R602.10.1 **CS-WSP**: Shall be minimum 3/8" OSB or CDX nailed at 6" on center at edges and 12" on center at intermediate supports with 6d common nails or 8d(2 1/2" long x 0.113" diameter). **CS-SFB:** Shall be minimum 1/2" structural fiber board nailed at

3" on center at edges and 3" on center at intermediate supports with 1 1/2" long x 0.12" diameter galvanized roofing nails. **GB:** Interior walls show as GB are to have minimum 1/2"

gypsum board on both sides of the wall fastened at 7" on center at edges and 7" on center at intermediate supports with minimum 5d cooler nails or #6 screws. **PF**: Portal fame per figure R602.10.1

- 6-16D SINKER NAILS FROM KING STUD TO HEADER-

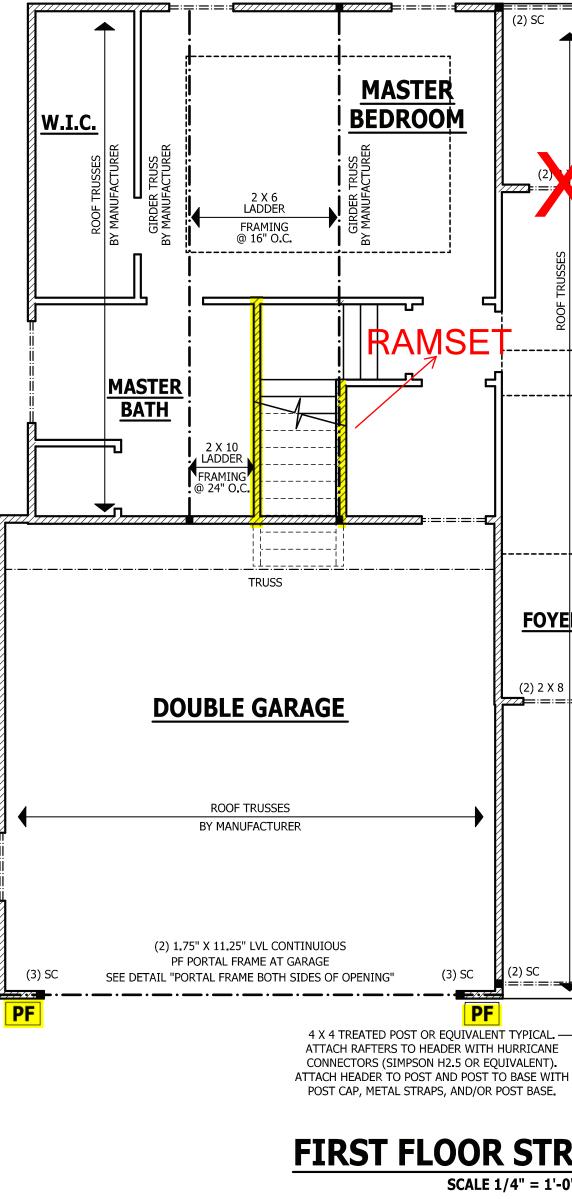
****** PONY WALL HEIGHT TO VARY HEADER PER PLAN Щ - STAP HEADER TO JACK -STUD ON INSIDE 1000 LBS OR Б 4000 LBS WITH PONY WALL. P 16D 3" O тор **"-0"** тор (-FASTEN SHEATHING TO-.... 10 12'-Ъ© HEADER WITH 8D COMMON 0 **0** NAIL IN 3" GRID AND TO HEIGHT НЕІGHT Т ---- 10'-FRAMING AT 3" ON CENTER TWO INKER - OPTIONAL SPLICE WITHIN — MAXIMUM 24" OF MIDDLE OF WALL HEIGHT ٩UM - JACK STUDS PER PLAN — MAX -SHEATHING DIRECTION -- ANCHORAGE PER FOUNDATION ----**PORTAL FRAME AT OPENING** PF (METHOD PF PER FIGURE AND SECTION R602.10.1) SCALE 1/4" = 1'-0"

EXTERIOR HEADERS

- (2) 2 X 6 WITH 1 JACK STUD EACH END UNLESS NOTED OTHERWISE - KING STUDS EACH END PER TABLE BELOW HEADER SPAN < 3' 3'-4' 4'-8' 8'-12' 12'-16' KING STUD(S) 1 2 3 5 6

INTERIOR HEADERS

- LOAD BEARING HEADERS (2) 2 X 6 WITH 1 JACK STUD AND 1 KING STUD EACH END UNLESS NOTED OTHERWISE - NON LOAD BEARING HEADERS TO BE LADDER FRAMED



ROOF TRUSS REQUIREMENTS TRUSS DESIGN. Trusses to be designed and engineered in accordance with these drawings. Any variation with these drawings must be brought to Haynes Home Plan, Inc. attention before construction begins. **KNEE WALL AND CEILING HEIGHTS.** All finished knee wall heights and ceiling heights are shown furred down 10" from roof decking for insulation. If for any reason the truss manufacturer fails to meet or exceed designated heel heights, finished knee wall heights, or finished ceiling heights shown on these drawings the finished square footage may vary. Any discrepancy must be brought to Haynes Home Plans, Inc. attention, so a suitable solution can be reached before construction begins. Any variation due to these conditions not being met is the reasonability of the truss manufacturer. **ANCHORAGE.** All required anchors for trusses due to uplift or bearing

shall meet the required anchors for trusses due to uplift or bearing shall meet the requirements as specified on the truss schematics. **BEARING.** All trusses shall be designed for bearing on SPF #2 plates or ledgers unless noted otherwise.

Plate Heights & Floor Systems. See elevation page(s) for plate heights and floor system thicknesses.

(2) 2 X 10 (2) SC (2) SC (2) 2 X 10 2 JACKS EACH END **COVERED PORCH** DINING **KITCHEN P** _____ **CATHEDRAL FAMILY ROOM** BATH FOYER (2) 2 X 8 =:=77 7**3**=:=:=:|= BEDROOM #2 **BEDROOM #3** (2) 2 X 12 2 JACKS EACH END (2) 2 X 12 2 JACKS EACH END ===:=:=:=:=:=:= (2) SC **COVERED PORCH** (2) 2 X 10 (2) SC PF PLACE BEAM OVER BEARING PROVIDED BY COLUMN(S) AND FURR BEAM AS DESIRED **FIRST FLOOR STRUCTURAL** SCALE 1/4" = 1'-0"

(2) 2 X 12

2 JACKS EACH END

OPTIONAL CORNER

FIREPLACE



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Fire escapes	40	10	L/360	
Guardrails and handrails	200		225	
Guardrail in-fill components	50	<u>1.2</u> 1	1111 B	
Passenger vehicle garages	50	10	L/360	
Rooms other than sleeping	40	10	L/360	
Sleeping rooms	30	10	L/360	
Stairs	40	(<u>111</u>)	L/360	
Snow	20	1220	628	

FRAMING LUMBER: All non treated framing lumber shall be SPF #2 (Fb = 875 PSI) or SYP #2 (Fb = 750 PSI) and all treated lumber shall be SYP #2 (Fb = 750 PSI) unless noted other wise.

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ROOF TRUSS REQUIREMENTS

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ANCHORAGE. All required anchors for trusses due to uplift or bearing shall meet the requirements as specified on the truss schematics. BEARING. All trusses shall be designed for bearing on SPF #2 plates or ledgers unless noted otherwise.

Plate Heights & Floor Systems. See elevation page(s) for plate heights and floor system thicknesses.

EXTERIOR HEADERS

- (2) 2 X 6 WITH 1 JACK STUD EACH END UNLESS NOTED OTHERWISE - KING STUDS EACH END PER TABLE BELOW EADER SPAN < 3' 3'-4' 4'-8' 8'-12' 12'-16'

INTERIOR HEADERS

KING STUD(S) 1 2 3 5 6

- LOAD BEARING HEADERS (2) 2 X 6 WITH 1 JACK STUD AND 1 KING STUD EACH END UNLESS NOTED OTHERWISE - NON LOAD BEARING HEADERS TO BE LADDER FRAMED

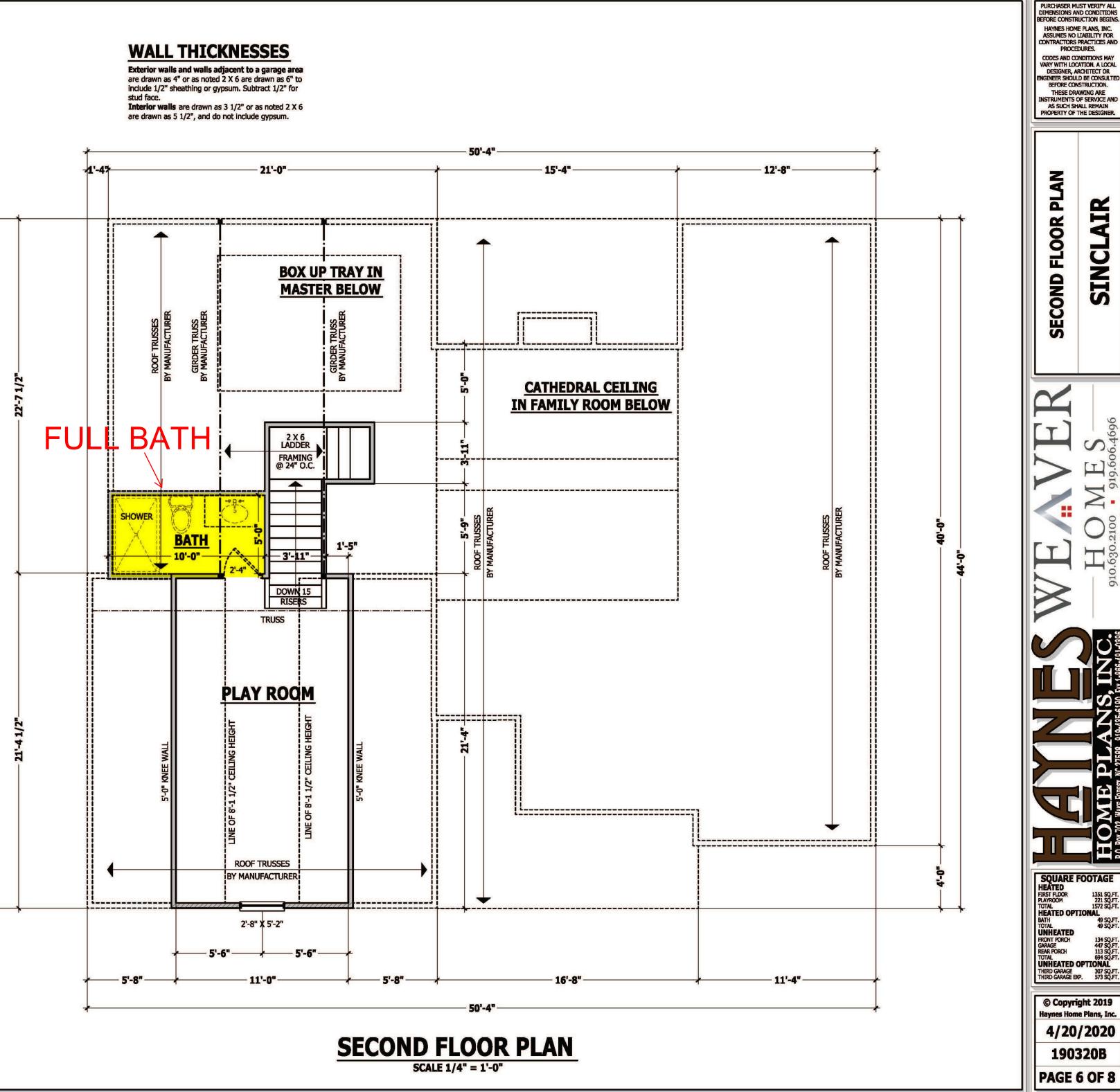
ATTIC ACCESS

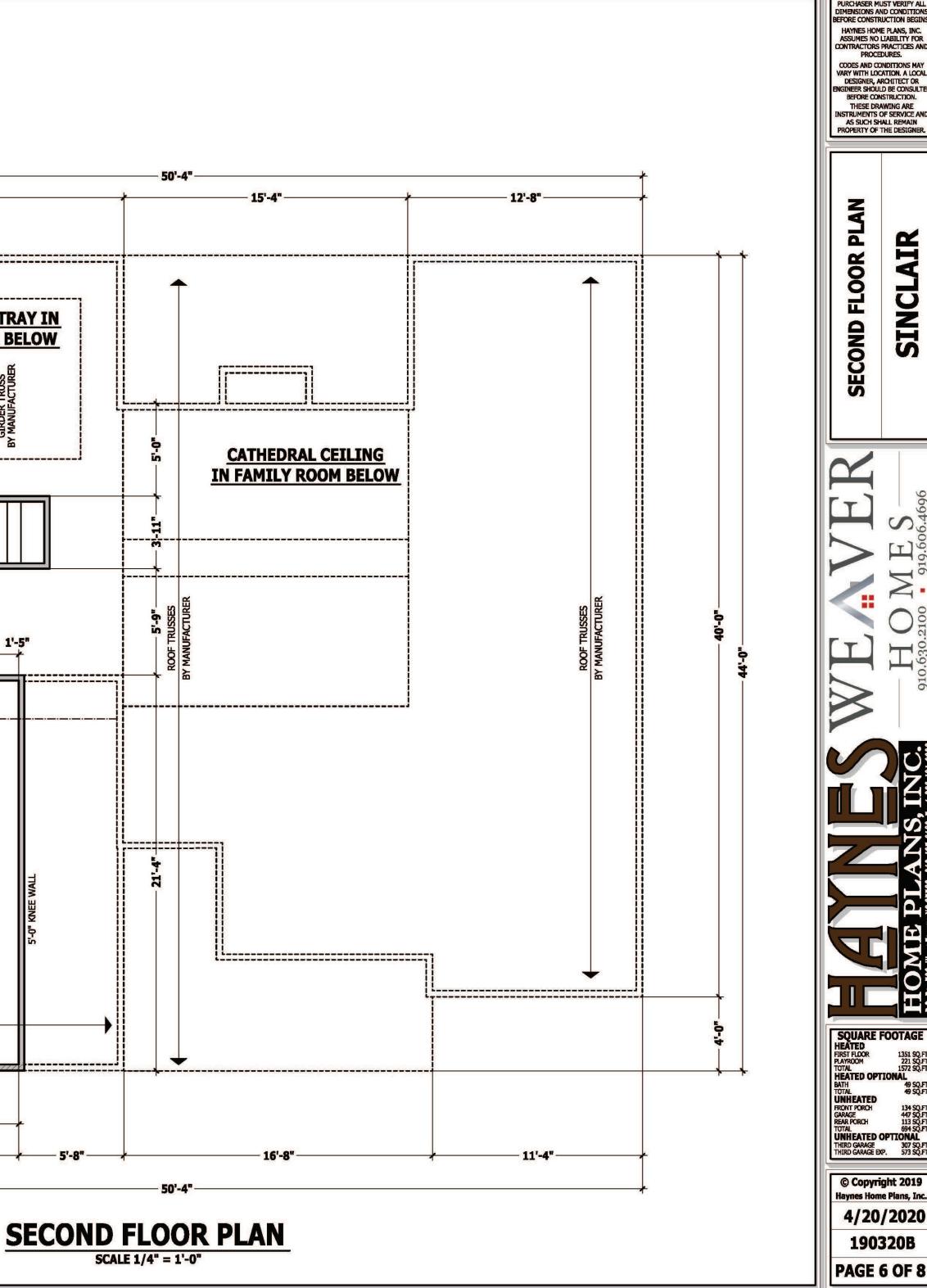
SECTION R807

R807.1 Attic access. An attic access opening shall be provided to attic areas that exceed 400 square feet (37.16 m2) and have a vertical height of 60 inches (1524 mm) or greater. The net clear opening shall not be less than 20 inches by 30 inches (508 mm by 762 mm) and shall be located in a hallway or other readily accessible location. A 30-inch (762 mm) minimum unobstructed headroom in the attic space shall be provided at some point above the access opening. See Section M1305.1.3 for access requirements where mechanical equipment is located in attics. **Exceptions:**

1. Concealed areas not located over the main structure including porches, areas behind knee walls, dormers, bay windows, etc. are not required to have access.

2. Pull down stair treads, stringers, handrails, and hardware may protrude into the net clear opening.



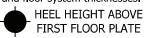


ROOF TRUSS REQUIREMENTS

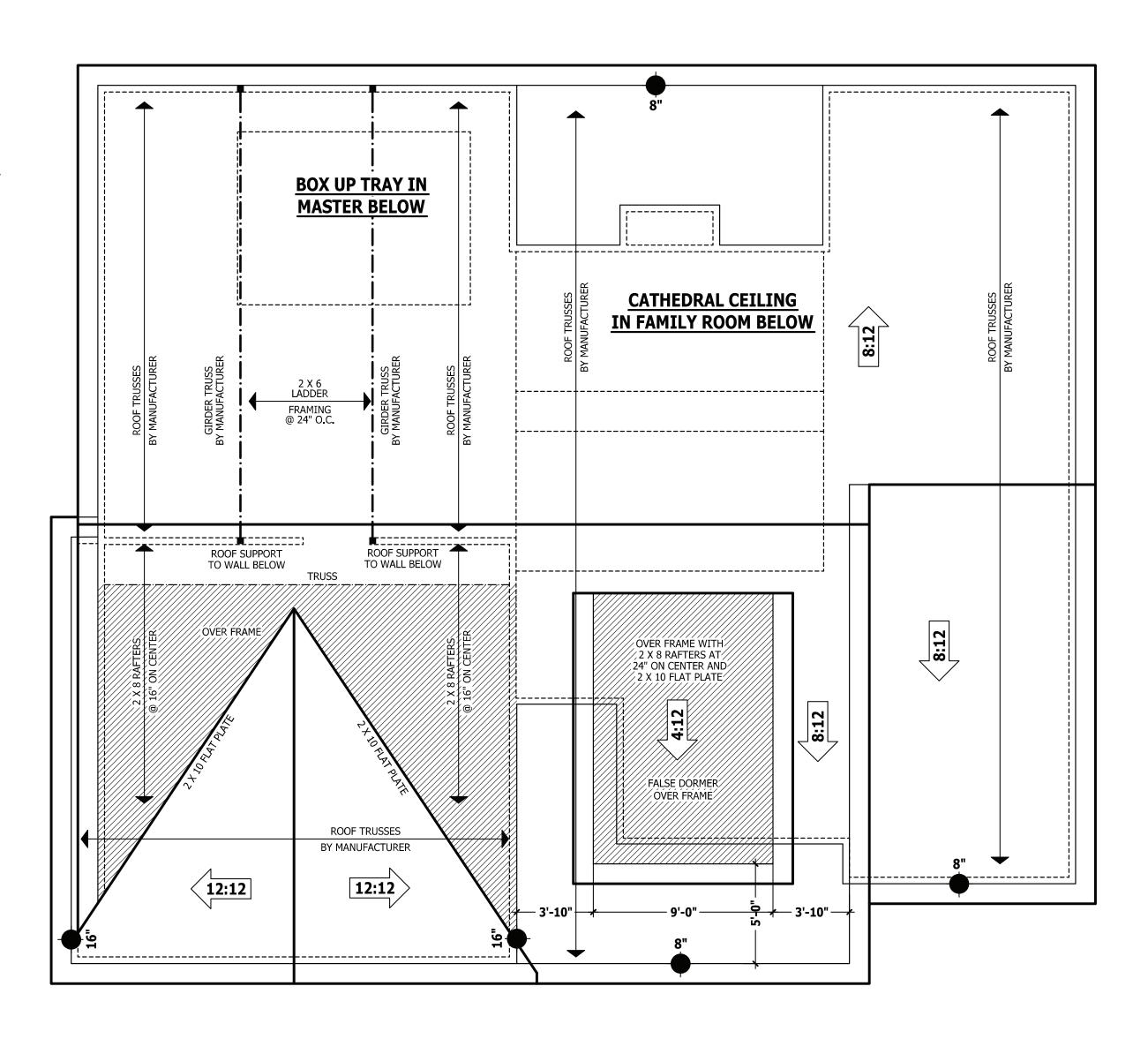
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ANCHORAGE. All required anchors for trusses due to uplift or bearing shall meet the requirements as specified on the truss schematics. **BEARING.** All trusses shall be designed for bearing on SPF #2 plates or ledgers unless noted otherwise.

Plate Heights & Floor Systems. See elevation page(s) for plate heights and floor system thicknesses.

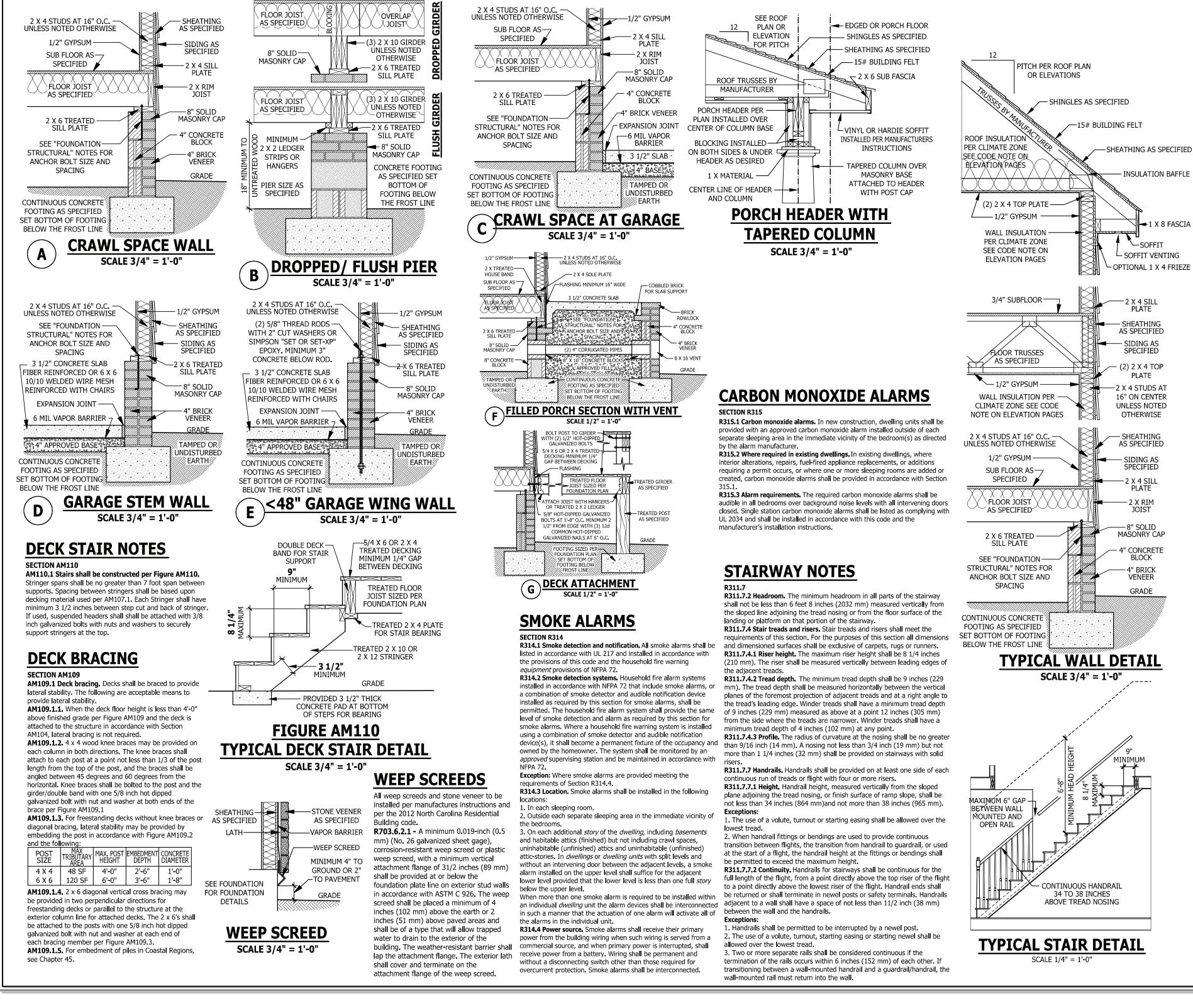


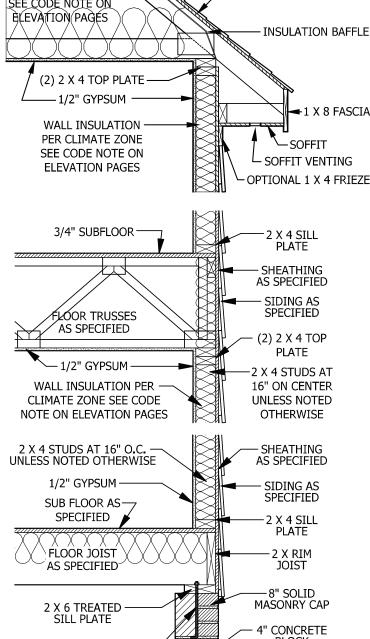
HEEL HEIGHT ABOVE



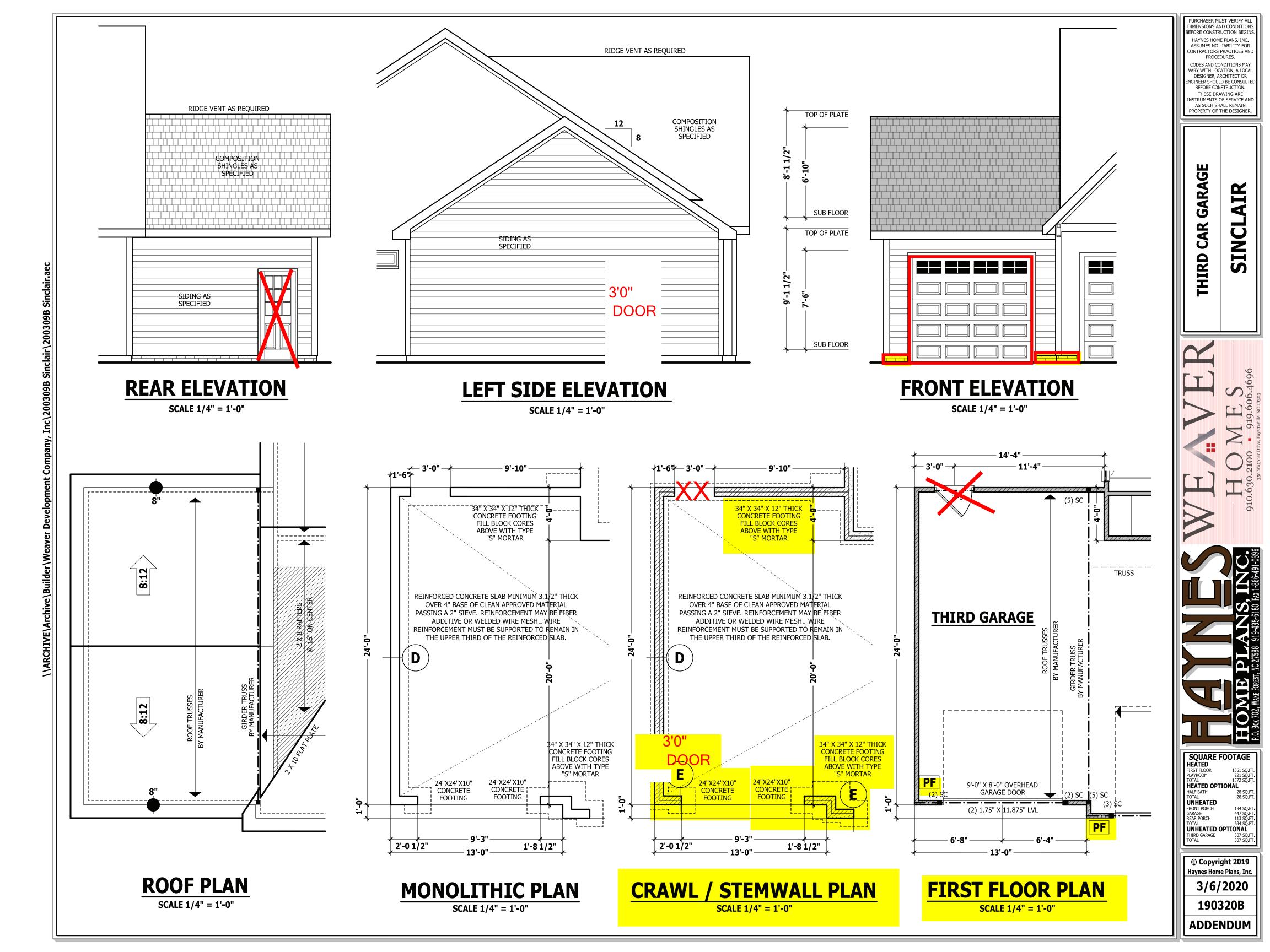


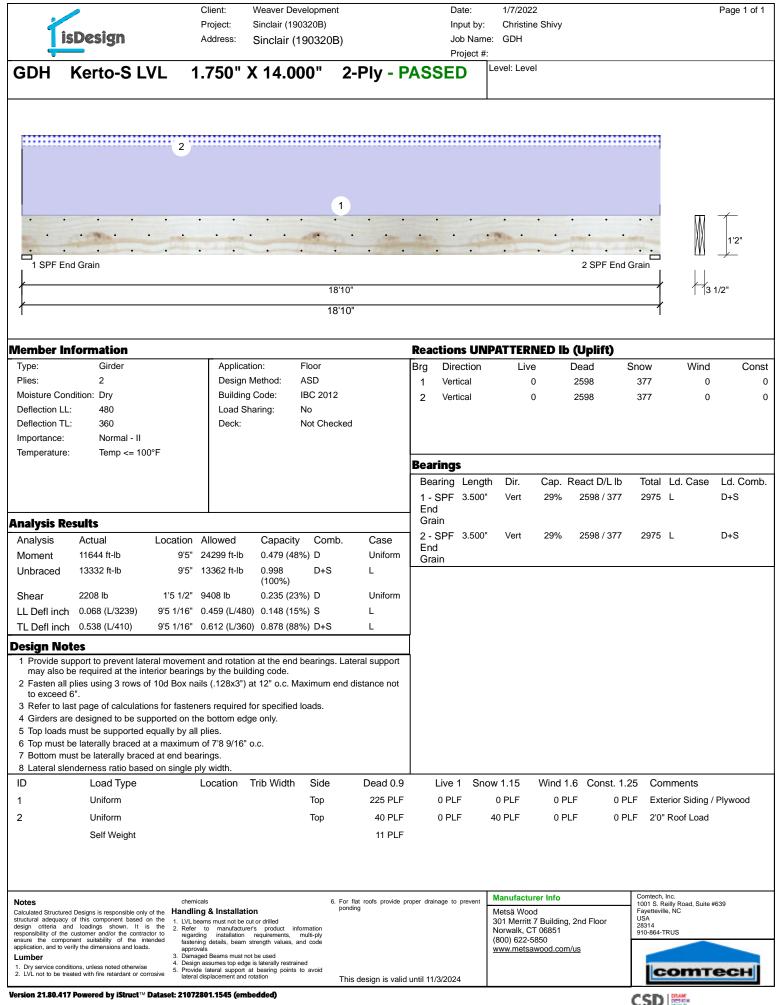




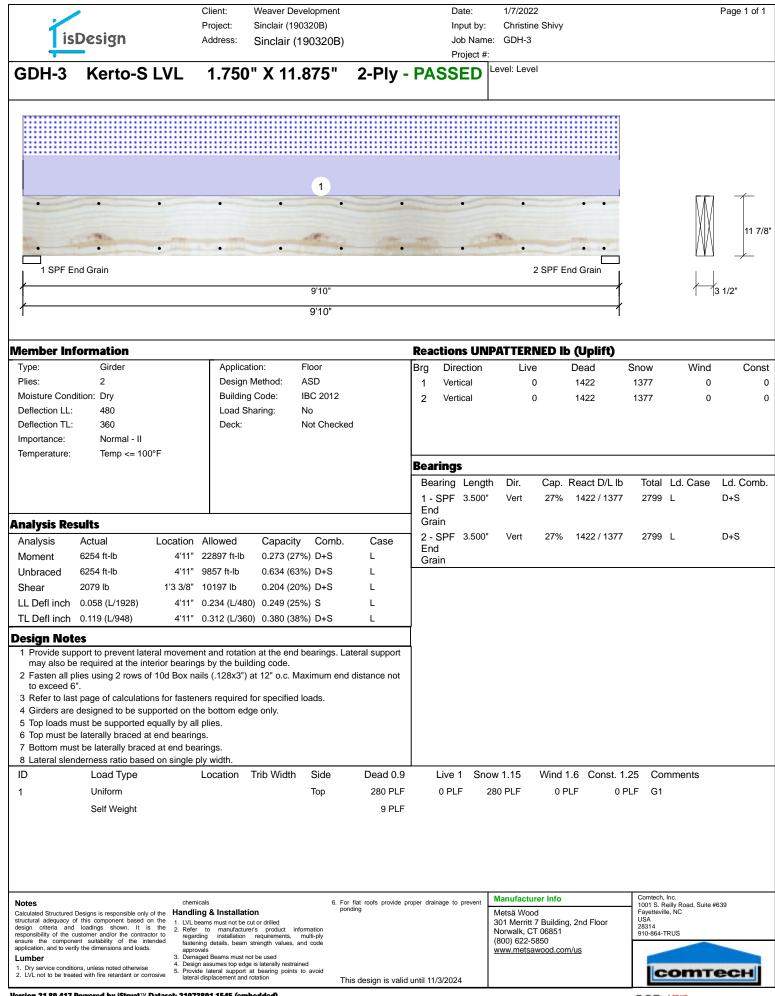




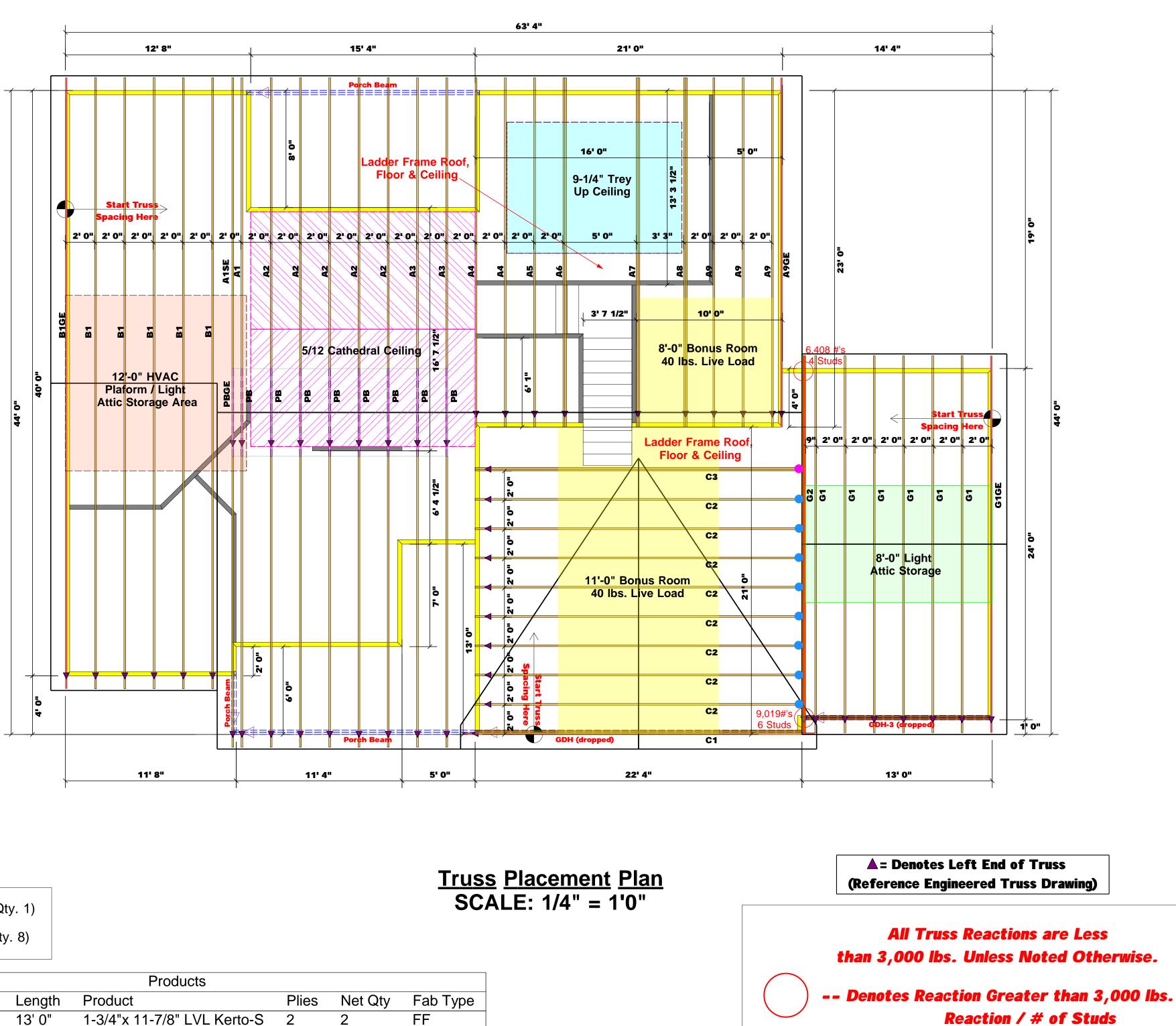




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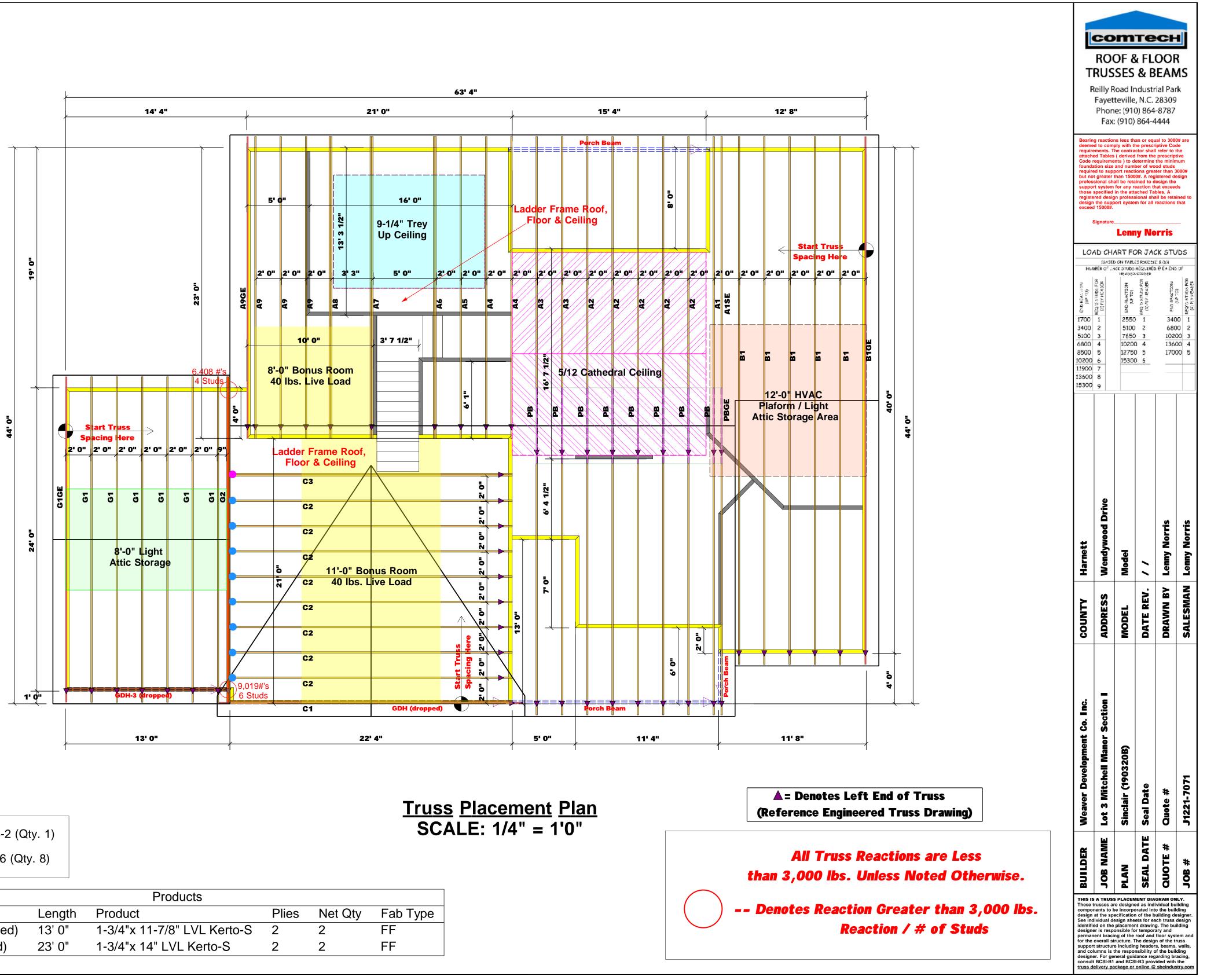
Version 21.80.417 Powered by iStruct™ Dataset: 21072801.1545 (embedded)



• = THD26-2 (Qty. 1) = HUS26 (Qty. 8)

Products							
PlotID	Length	Product	Plies	Net Qty	Fab Type		
GDH-3 (dropped)	13' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF		
GDH (dropped)	23' 0"	1-3/4"x 14" LVL Kerto-S	2	2	FF		

Bearin deeme require attache Code r founda require but no profes suppoi those s registe design exceed	<section-header></section-header>					
x 1700 3400 5100 6800 8500 10200 11900 13600 15300	804 900 14 614 22 1 2 3 4 5 6 7 8 9	2550 5100 7650 12750) <u>3</u>) <u>3</u>) 4) 5	340 680 1022 1360	00 1 00 2 00 3 00 4	
Harnett	Wendywood Drive	Model	11	DRAWN BY Lenny Norris	SALESMAN Lenny Norris	
COUNTY	ADDRESS	MODEL	DATE REV.	DRAWN BY	SALESMAN	
Weaver Development Co. Inc.	Lot 3 Mitchell Manor Section I	Sinclair (190320B)	Seal Date	Quote #	J1221-7071	
BUILDER	JOB NAME	PLAN	SEAL DATE	QUOTE #	JOB #	
THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com						



= THD26-2 (Qty. 1) = HUS26 (Qty. 8)

Products							
PlotID	Length	Product	Plies	Net Qty	Fab Type		
GDH-3 (dropped)	13' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2	FF		
GDH (dropped)	23' 0"	1-3/4"x 14" LVL Kerto-S	2	2	FF		