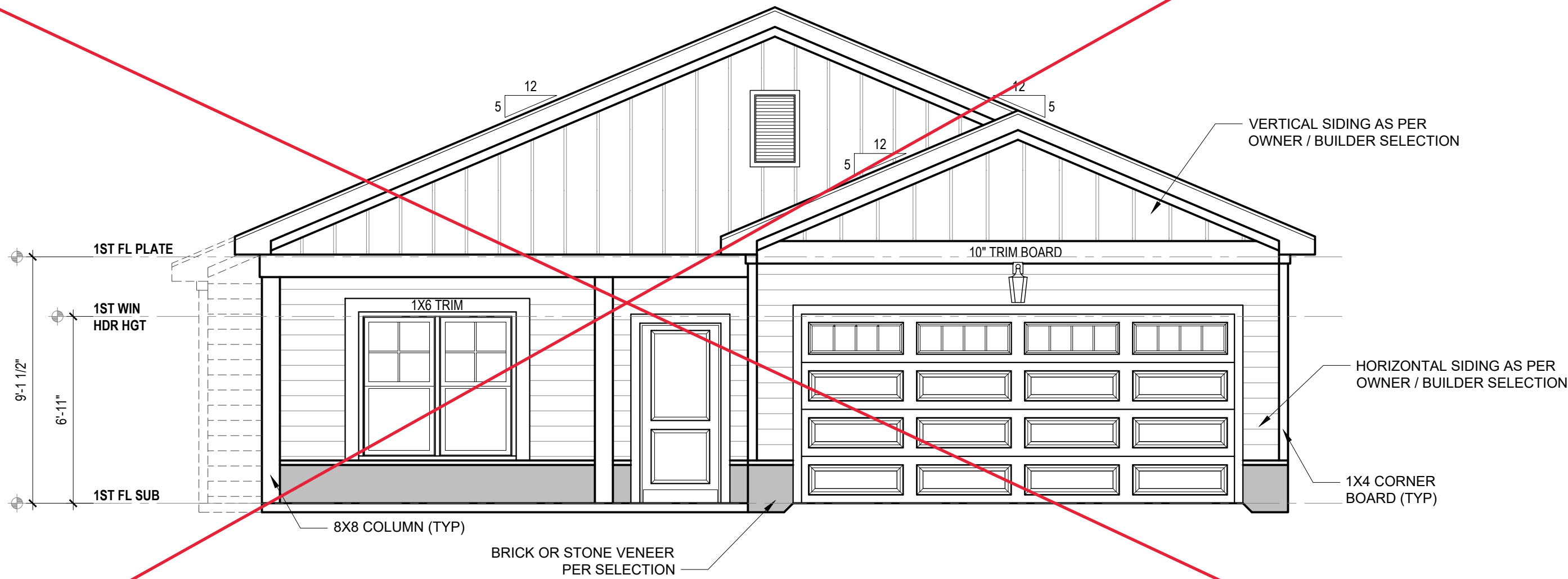


THE HAVILLAND

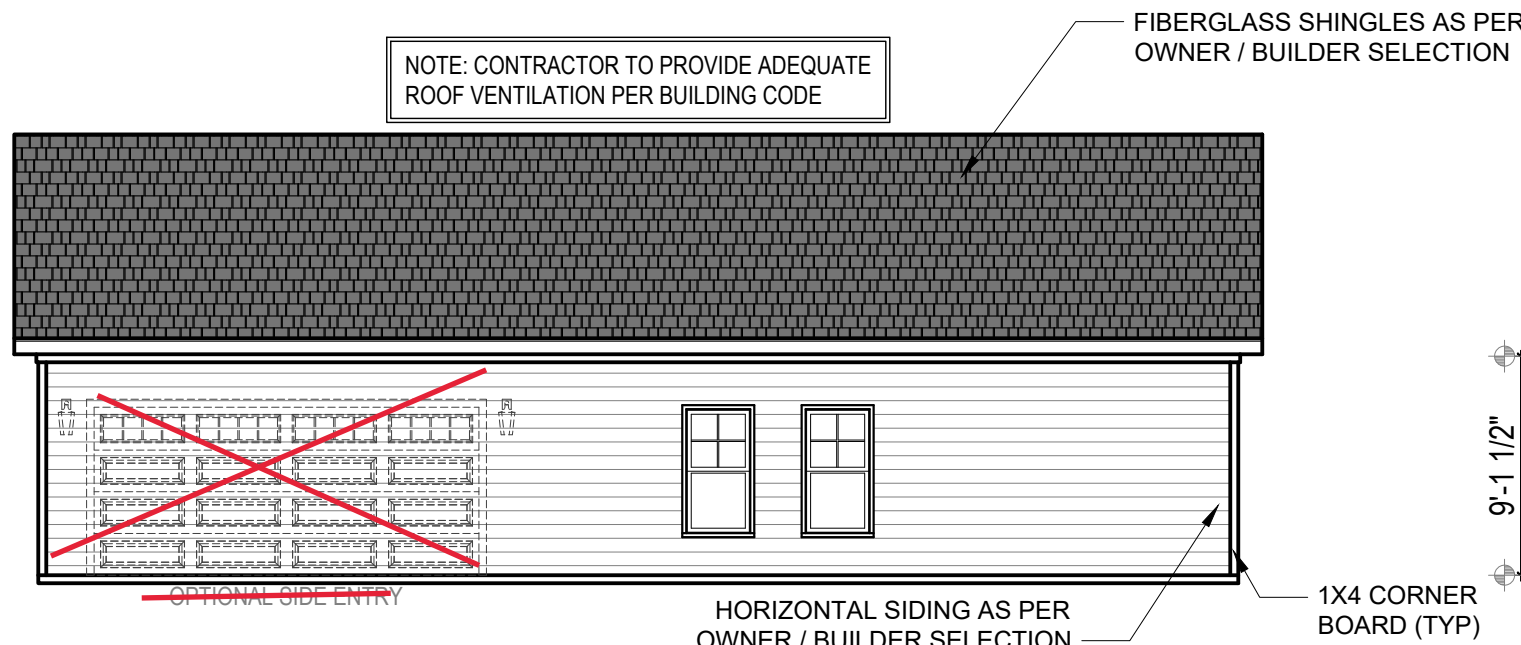
HNL-000-048



FRONT ELEVATION B
1/4" = 1'-0"



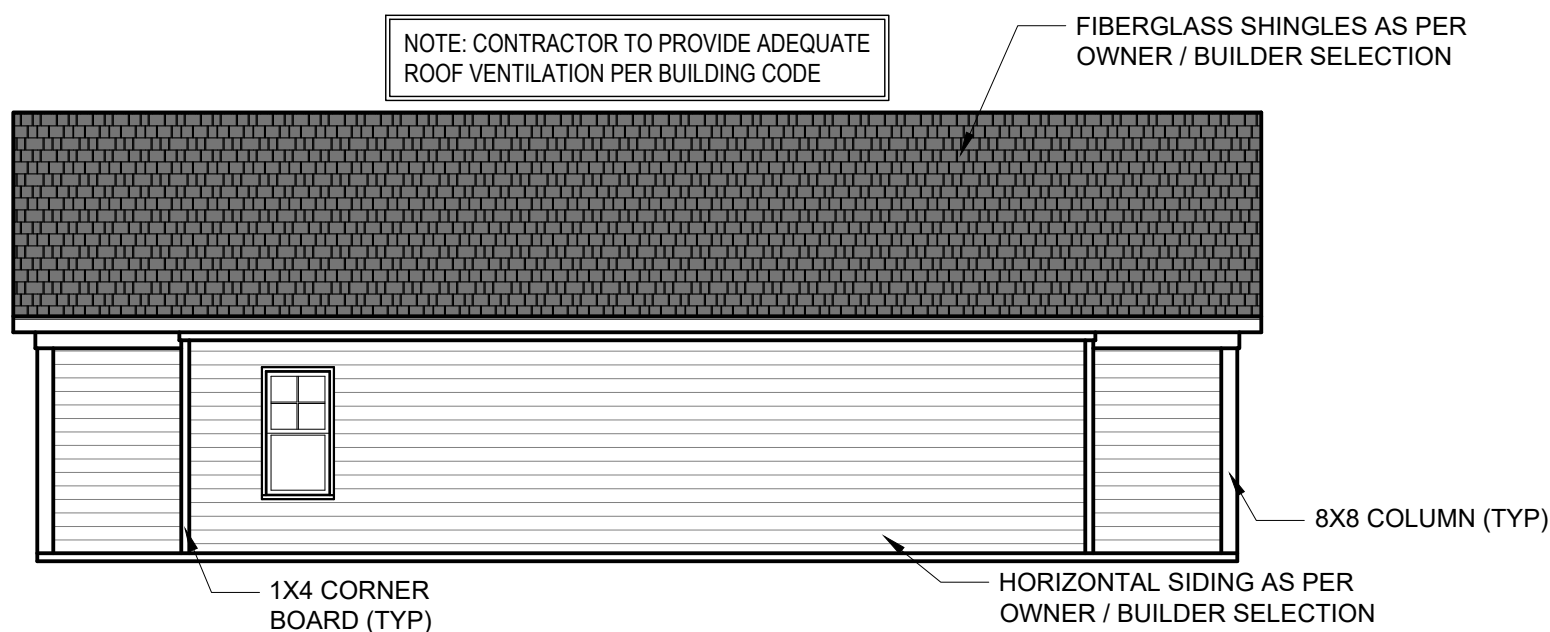
**FRONT ELEVATION B
W/ OPTIONAL VENEER**
1/4" = 1'-0"



RIGHT ELEVATION B
1/8" = 1'-0"



REAR ELEVATION B
1/8" = 1'-0"



LEFT ELEVATION B
1/8" = 1'-0"

2x4 WALLS; 2X4
GARAGE WALLS &
2X6 PLUMBING
WALLS AS NEEDED. 9'
CEILINGS

1. DRB DESIGN assumes no liability for any home constructed from this plan.
2. All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code", in addition to all local codes and regulations.
3. Should these plans require structural calculations for permitting the contractor shall be required to obtain the services of a structural engineer after notifying DRB DESIGN that such services are required.
4. Release of these plans requires further cooperation among the owner, his/her contractor, and DRB DESIGN.
5. Design and construction are complex and, although the designer performed his services with due care and diligence, perfection is not a guarantee.
6. Communication is imperfect and every contingency cannot be anticipated.
7. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to DRB DESIGN. Failure to notify the DRB DESIGN compounds misunderstandings and increases construction costs.
8. A failure to cooperate by a simple notice to DRB DESIGN shall relieve the designer from any and all responsibilities for all consequences.
9. Changes made to these plans without the consent of the designer are unauthorized and shall relieve DRB DESIGN of responsibility for any and all consequences arising out of such changes.
10. Written dimensions on these plans always have precedence over scaled dimensions.
11. It is the contractors responsibility to verify and be responsible for all dimensions and square footage prior to construction, as well as conditions on the job site. DRB DESIGN is not responsible for dimension and square footage errors once construction has begun.
12. DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.

PROJECT #
DRB2301-0091_C
DATE
01/19/2024
DRAWN/DESIGNED BY
NW
CHECKED BY
DRB
SCALE
1/4" = 1'-0"

WEBSITE
www.
drbhomedesign
.com

PROJECT NAME
THE
HAVILLAND

drbdesign@drbhomedesign.com 919.631.5979
250 Shipwash Dr Suite 105 Garner, NC 27529

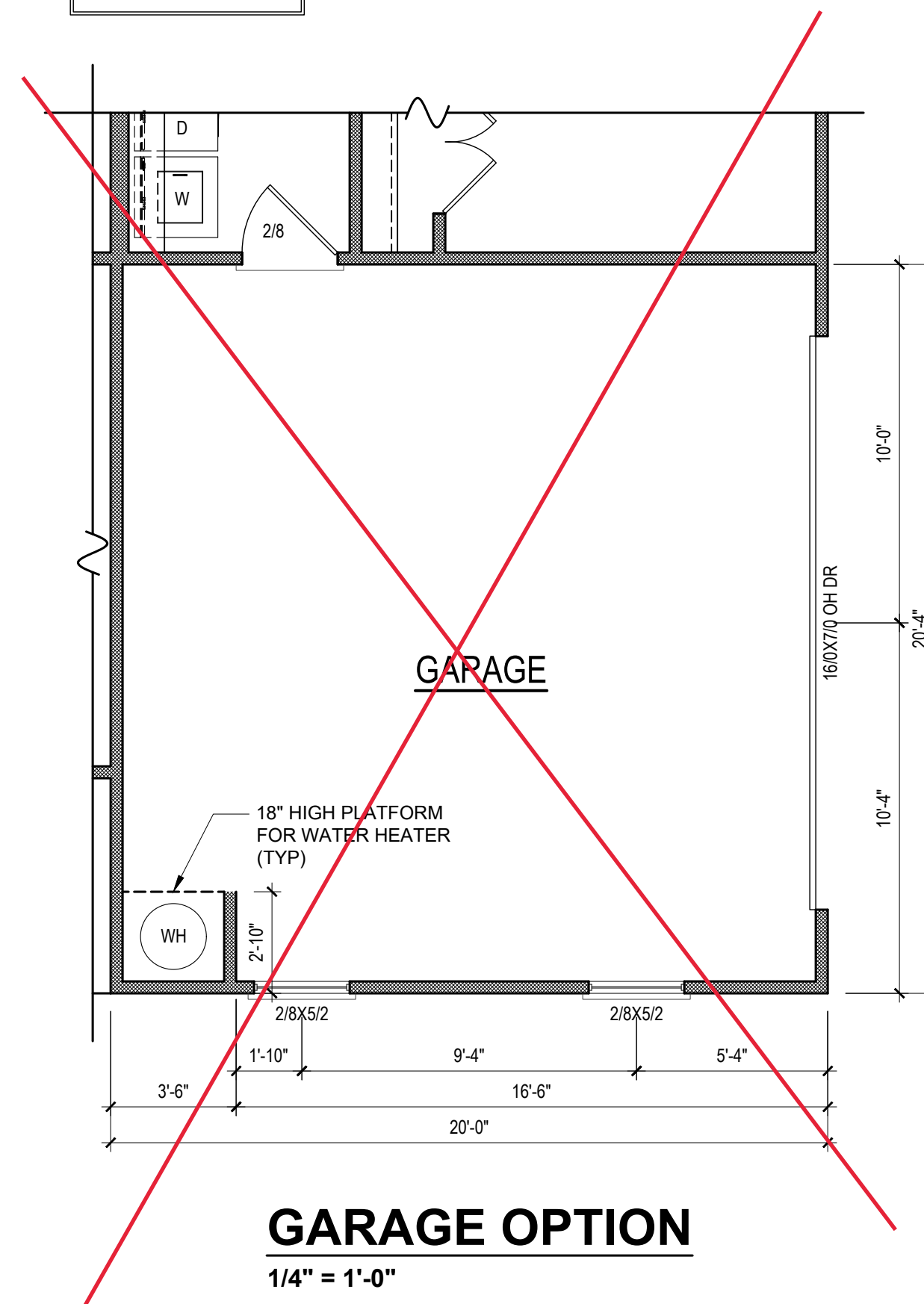
CLIENT NAME
A&G Residential
916 Arsenal Ave. Suite B.
Fayetteville, NC 28305
jenn@agresidentialinc.com
(910) 237-7944

SHEET NAME
ELEVATIONS
SHEET #



NOTE: VERIFY WINDOW SILL HEIGHT CLEARANCE ABOVE TUBS AND COUNTERTOPS TO ALLOW FOR TRIM AND/OR BACKSPASH

<u>NOTE:</u> SEE ELEVATIONS FOR WINDOW HDR HGTS	<u>NOTE:</u> ALL DOORS ARE 6'-8" TALL UNO
<u>NOTE:</u> ALL EXTERIOR WALLS ARE NOMINAL 4" UNO	<u>NOTE:</u> ALL INTERIOR WALLS ARE NOMINAL 4" UNO
<u>NOTE:</u> ALL DIMENSIONS ARE FRAME TO FRAME	



PROJECT #
DRB2301-0091_C

DATE
01/19/2024

DRAWN/DESIGNED BY
NW

CHECKED BY
DRB

SCALE
1/4" = 1'-0"

PROJECT NAME



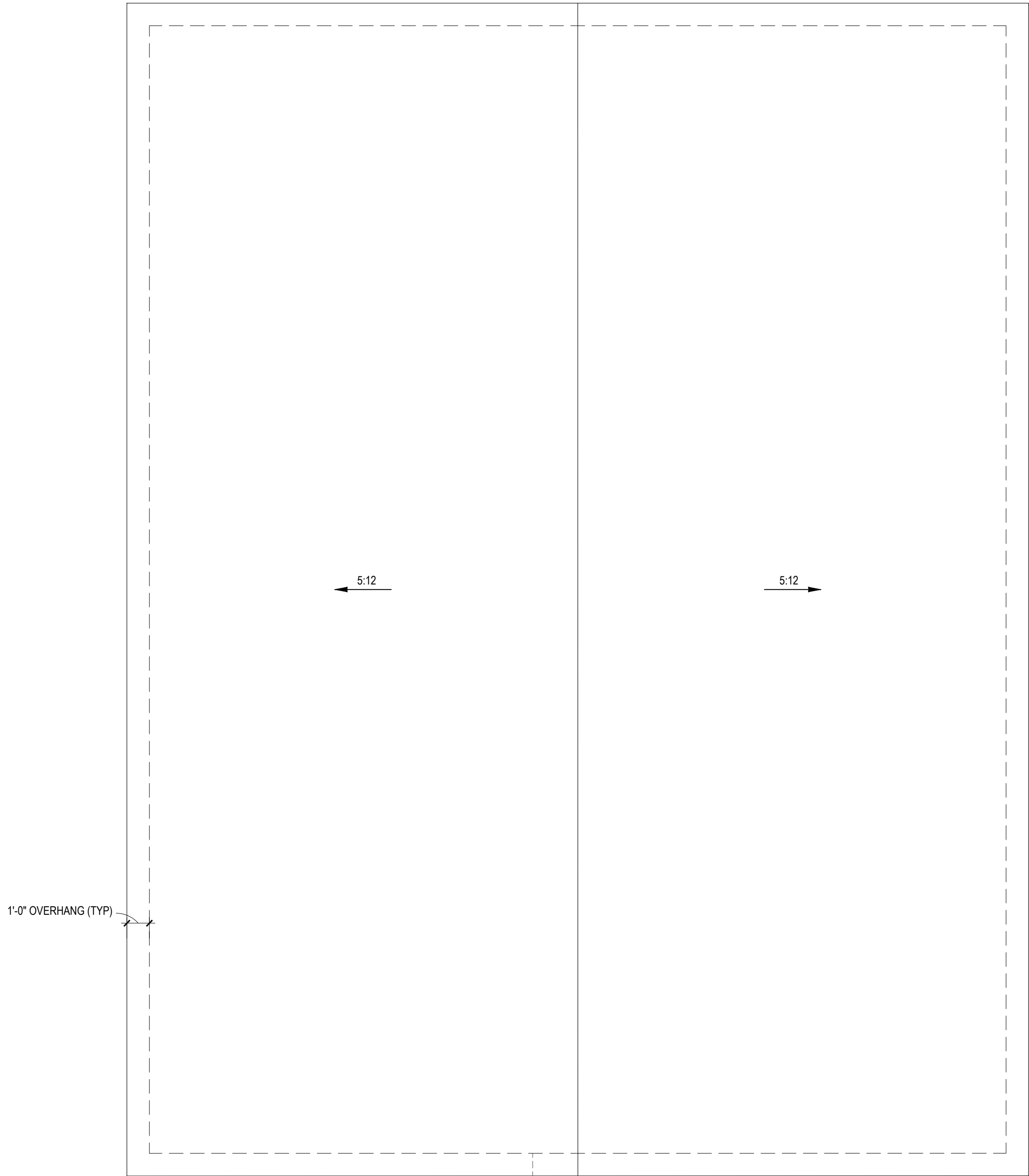
DRB
DESIGN

drbdesign@drbhomedesign.com 919.631.5979
250 Shipwash Dr Suite 105 Garner, NC 27529

CLIENT NAME
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Fayetteville, NC 28305
jenn@agresidentialnc.com
(910) 237-7944

SHEET NAME
1ST_FLOOR

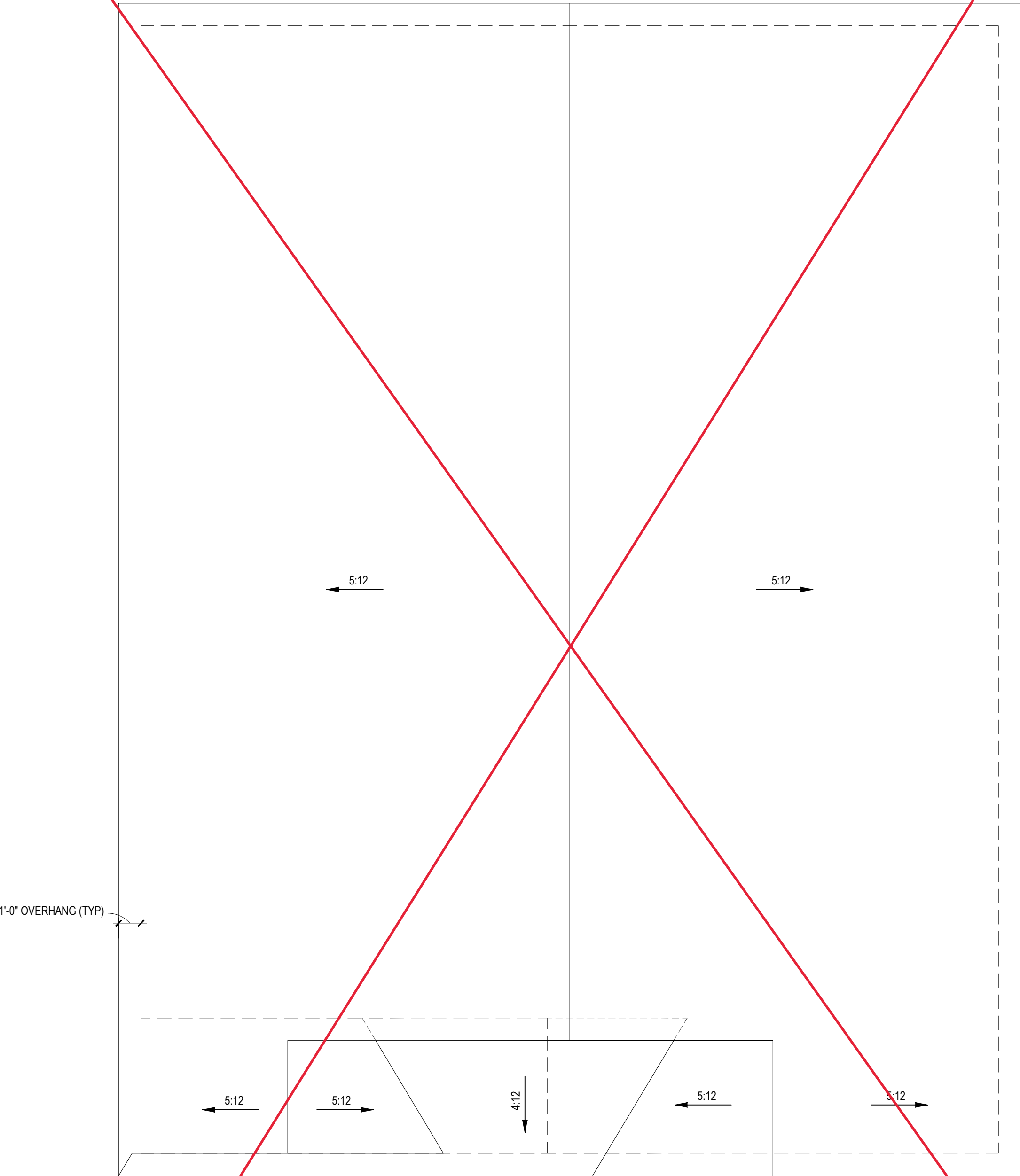
2x4 WALLS; 2X4 GARAGE WALLS & 2X6
PLUMBING WALLS AS NEEDED. 9'
CEILINGS



NOTE: SEE STRUCTURAL PLANS FOR
ATTIC VENTILATION CALCULATIONS

NOTE: ANY ROOF PITCH 4:12 OR LESS SHALL BE
PROPERLY WATERPROOFED PER BLDG. CODE

ROOF PLAN - ELEVS A,B
1/4" = 1'-0"

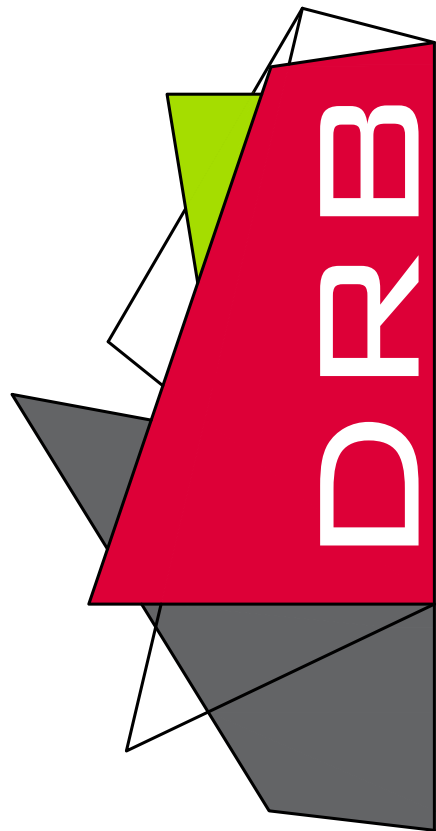


NOTE: SEE STRUCTURAL PLANS FOR
ATTIC VENTILATION CALCULATIONS

NOTE: ANY ROOF PITCH 4:12 OR LESS SHALL BE
PROPERLY WATERPROOFED PER BLDG. CODE

ROOF PLAN - ELEVS C,D
1/4" = 1'-0"

1. DRB DESIGN assumes no liability for any home constructed from this plan.
2. All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code", in addition to all local codes and regulations.
3. Should these plans require structural calculations for permitting the contractor shall be required to obtain the services of a structural engineer after notifying DRB DESIGN that such services are required.
4. Release of these plans requires further cooperation among the owner, his/her contractor, and DRB DESIGN. Design and construction are complex and, although the designer performed his services with due care and diligence, perfection is not a guarantee.
5. Communication is imperfect and every contingency cannot be anticipated.
6. Any ambiguity or discrepancy discovered by the use of these plans shall be reported immediately to DRB DESIGN. Failure to notify the DRB DESIGN compounds misunderstandings and increases construction costs.
7. A failure to cooperate by a simple notice to DRB DESIGN shall relieve the designer from any and all responsibilities for all consequences.
8. Changes made to these plans without the consent of the designer are unauthorized and shall relieve DRB DESIGN of responsibility for any and all consequences arising out of such changes.
9. Written dimensions on these plans always have precedence over scaled dimensions.
10. It is the contractors responsibility to verify and be responsible for all dimensions and square footage prior to construction, as well as conditions on the job site. DRB DESIGN is not responsible for dimension and square footage errors once construction has begun.
11. DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.
- 12.



drbdesign@drbhomedesign.com 919.631.5979
250 Shipwash Dr Suite 105 Garner, NC 27529

CUSTOMER NAME

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jenn@agresidentialinc.com
(910) 237-7944

SHEET NAME

ROOF

SHEET #

9

of 10

WEBSITE

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drbhomedesign
.com

PROJECT NAME

THE
HAVILLAND

PROJECT #
DRB2301-0091_C
DATE
01/19/2024
DRAWN/DESIGNED BY
NW
CHECKED BY
DRB
SCALE
1/4" = 1'-0"



GARAGE

KEYLESS

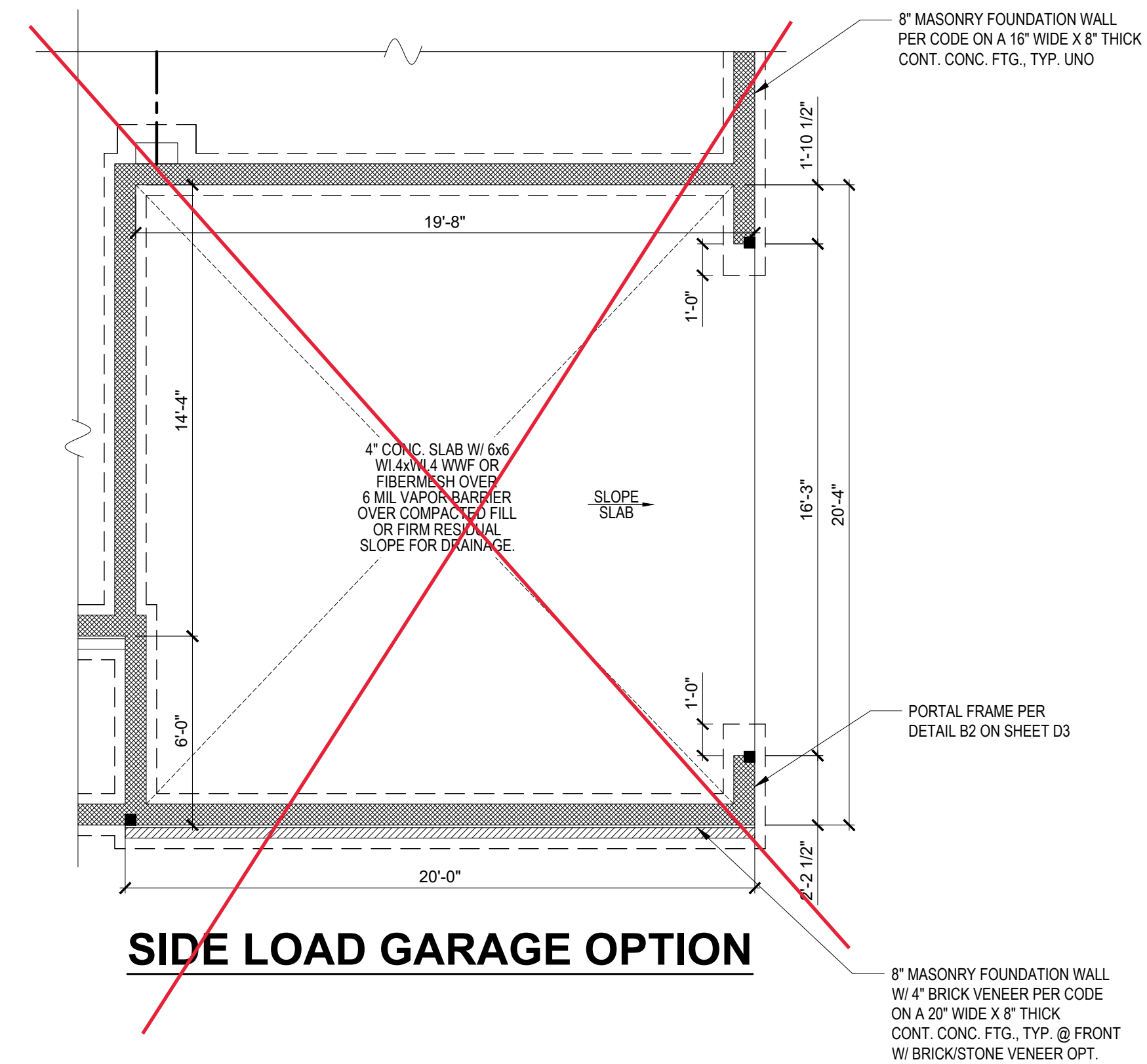
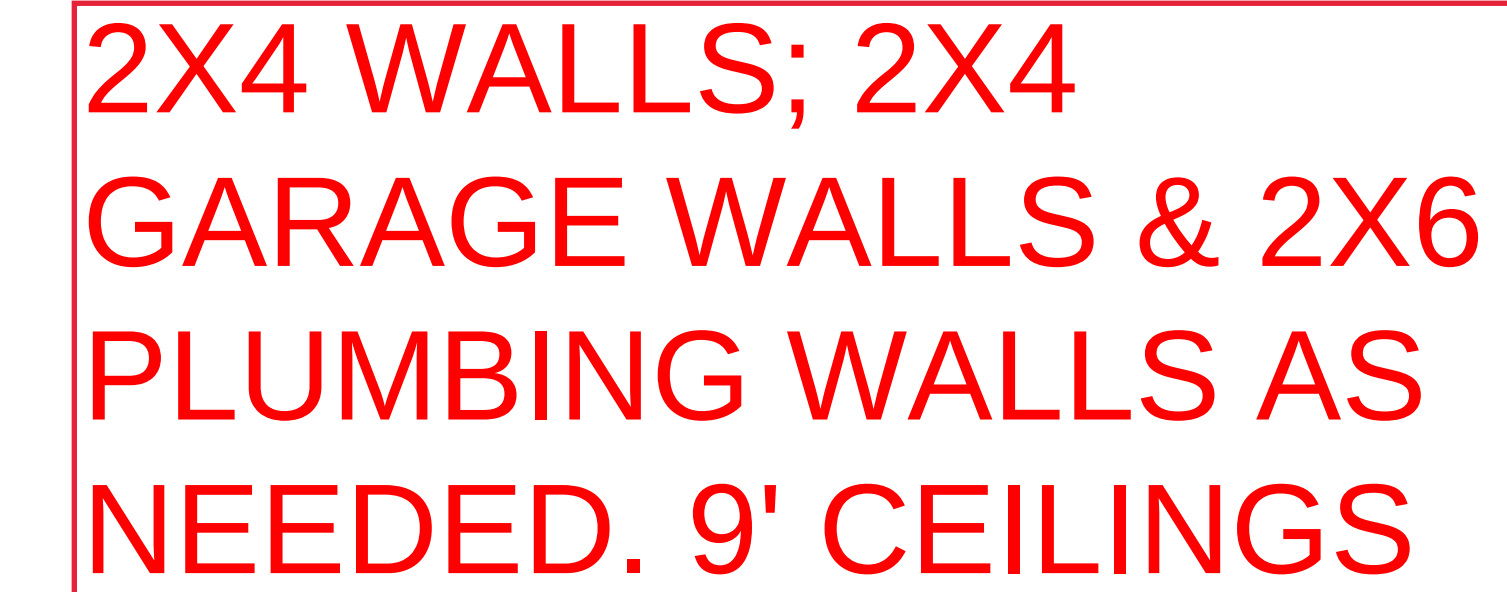
KEYLESS

GARAGE OPTION

1/4" = 1'-0"

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION	
			LL	TL
FLOOR (primary)	40	10	L/360	L/240
FLOOR (secondary)	40	10	L/360	L/240
ATTIC (w/ storage)	20	10	L/240	L/180
ATTIC (no access)	10	5	L/240	L/180
EXTERNAL BALCONY	40	10	L/360	L/240
ROOF	20	10	L/240	L/180
ROOF TRUSS	20	20	L/240	L/180
WIND LOAD	BASED ON 120 MPH (EXPOSURE B)			
SEISMIC	BASED ON SEISMIC ZONES A, B & C			

- 1 ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS
- 2 OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN
- 3 ADDITION TO ALL LOCAL CODES AND REGULATIONS.
- 4 ALL IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS
- 5 AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYPICAL
- 6 ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSIONS
- 7 AND SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
- 8 ALL LUMBER SHALL BE SYP #2 (UNO)
- 9 ALL IS THE CONTRACTOR TO RESPOND TO EACH SINGLE MEMBER AND
- 10 Fb = 2000 PSI (E = 1.9M PSI) (OR GREATER)
- 11 (I.E. LIVE MICROLAM)
- 12 ALL LSL LUMBER IS TO BE 1.55E (Fb = 2325 PSI) (OR GREATER)
- 13 ALL LSL LUMBER IS TO BE 1.8E (Fb = 2400 PSI) (OR GREATER)
- 14 FOR DEAD BEARING EXTERIOR WINDOW HEADERS ARE TO BE (2) 2x10 W/
- 15 1/2" JACK STUD (U.N.O.) AND KNUD SPANS PER TABLE R602.7.5
- 16 AND TOGETHER W/ (2) 10d NAILS @ 8" O.C., PROVIDED THAT THE TOP OF
- 17 THE WINDOW HEIGHT IS 6", MINIMUM BOTTOM OF THE WINDOW HEIGHT
- 18 IS 1'-6", OTHERWISE REFER TO TABLES R602.1(1) AND R602.7(2).
- 19 ALL INTERIOR LOAD BEARING HEADERS TO BE (2) 2x10 (U.N.O.) REFER
- 20 TO TABLE R602.7(1) AND KNUD SPANS PER STUD REQUIREMENTS
- 21 FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS
- 22 (UNO)
- 23 REFER TO 2018 NC BUILDING CODE SECTION R602 FOR CONSTRUCTION
- 24 OF ALL WALLS OVER 10'-0" IN HEIGHT.
- 25 ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50
- 26 Fy = 50 KSI MIN, (UNO)
- 27 ALL EXTERIOR LUMBER TO BE #2 SYP PPT
- 28 ALL CONCRETE, f_c = 3000 PSI MIN.
- 29 PRESUMPTIVE BEARING CAPACITY = 2000 PSF
- 30 1/2" ANCHOR BOLTS SPACED AT MAXIMUM OF 6'-0" O.C. AND NOT MORE
- 31 THAN 1'-2" FROM THE CORNER. THERE SHALL BE MINIMUM (2) BOLTS
- 32 PER PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C.
- 33 FOR BASEMENTS. ANCHOR BOLTS SHALL EXTEND 7'-0" INTO CONCRETE OR
- 34 MASONRY.
- 35 PSL COLLUMS DESIGNED WITH MAX. HEIGHT OF 9'-0" (UNO)
- 36 PROVIDE A MINIMUM OF 500K LIFT & LATERAL CONNECTION AT TOP
- 37 AND BOTTOM OF PORCH COLLUMS. (U.N.O.)
- 38 PROVIDE CONTINUOUS SHEATHING PER SECTION 802.1.3 OF THE 2018
- 39 NCRC
- 40 MAXIMUM MASONRY PIER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS
- 41 LEAST HORIZONTAL DIMENSION.
- 42 UNLESS THE FOUNDATION IS 500R SHALL BE CONTINUOUSLY
- 43 ANCHORED TO THE FOUNDATION.
- 44 METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.



*** CRAWL SPACE VENTILATION CALCULATION**

A circular professional engineer seal for the State of North Carolina. The outer ring contains the text "NORTH CAROLINA" at the top and "PRENTICE A TYNDALL JR" at the bottom. Inside the ring, the words "PROFESSIONAL" and "ENGINEER" are written in a semi-circle. In the center, the word "SEAL" is above the license number "024899". A blue ink signature is written across the seal.

TYNDALL
ENGINEERING & DESIGN, P.A.

T 919 775-3500 • F 919 775-9668
Gartner • North Carolina • 27629
www.tyndallengineering.com

250 Shipwreck Drive

A circular professional seal for the North Carolina Professional Engineer and Designer, P.A. The seal features the text "NORTH CAROLINA" at the top, "PROFESSIONAL" below it, "SEAL" in the center, and "C-2303" below "SEAL". The words "ENGINEER AND DESIGNER, P.A." are written along the bottom curve of the seal.

A&G RESIDENTIAL
916 ARSENAL AVE, SUITE B,
FAYETTEVILLE, NC 28305

Plan:

THE HAVILLAND

FOUNDATION PLAN CRAWL SPACE

SEE PLAN

Sl. No.	Date:	Remarks
1		
2		
3		
4		

S1C

of 6

DESIGN LOADS

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION	
			LL	TL
FLOOR (primary)	40	10	L/360	L/240
FLOOR (secondary)	40	10	L/360	L/240
ATTIC (w/ storage)	20	10	L/240	L/180
ATTIC (no access)	5	10	L/240	L/180
EXTERNAL BALCONY	40	10	L/360	L/240
ROOF	20	10	L/240	L/180
ROOF TRUSS	20	20	L/240	L/180
WIND LOAD	BASED ON 120 MPH (EXPOSURE B)			
SEISMIC	BASED ON SEISMIC ZONES A, B & C			

STRUCTURAL NOTES:

- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.
- IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSIONS AND SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
- ALL LUMBER SHALL BE SYP #2 (UNO)
ALL LVL LUMBER TO BE 1.75" WIDE (ACTUAL) EACH SINGLE MEMBER AND $F_b = 2600$ PSI, $E = 1.9M$ PSI (OR GREATER)
(I.E. I-LEVEL MICROLAM)
ALL LSL LUMBER IS TO BE 1.55E ($F_b = 2325$ PSI) (OR GREATER)
ALL PSL LUMBER IS TO BE 1.8E ($F_b = 2,400$ PSI) (OR GREATER)
ALL LOAD BEARING EXTERIOR WINDOW HEADERS ARE TO BE (2) 2x10 w/ (1) 2x4 JACK STUD (U.N.O.) AND KING STUDS PER TABLE R602.7.5, AND TOGETHER w/ (2) 10d NAILS @ 8" O.C., PROVIDED THAT THE TOP OF THE WINDOW HEIGHT IS 6'-6", MINIMUM BOTTOM OF THE WINDOW HEIGHT IS 1'-6". OTHERWISE REFER TO TABLES R602.7(1) AND R602.7(2).
- ALL INTERIOR LOAD BEARING HEADERS TO BE (2) 2x10 (U.N.O.) REFER TO TABLES R602.7(1) AND R602.7(2) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS (UNO)
- REFER TO 2018 NC BUILDING CODE SECTION R602 FOR CONSTRUCTION OF ALL WALLS OVER 10'-0" IN HEIGHT.
- ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50
 $F_y = 50$ KSI MIN. (UNO)
- ALL EXTERIOR LUMBER TO BE #2 SYP PT
- ALL CONCRETE, $f_c = 3000$ PSI MIN.
- PRESUMPTIVE BEARING CAPACITY = 2000 PSF
- 1/2"Ø ANCHOR BOLTS SPACED AT MAXIMUM OF 6'-0" O.C. AND NOT MORE THAN 12" FROM THE CORNER. THERE SHALL BE A MINIMUM OF (2) BOLTS PER PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY
- PSL COLUMNS DESIGNED WITH MAX. HEIGHT OF 9'-0" (UNO)
- PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
- PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.3 OF THE 2018 NCRC.
- MAXIMUM MASONRY PIER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
- UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.
- METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.

STRUCTURAL SHEATHING NOTES

- DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR LESS.
- WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2018 NCRC.
- BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.3. REFER TO SECTION R602.10.4 FOR LOAD PATH DETAILS INCLUDING CONNECTIONS & SUPPORT OF BRACED WALL PANELS.

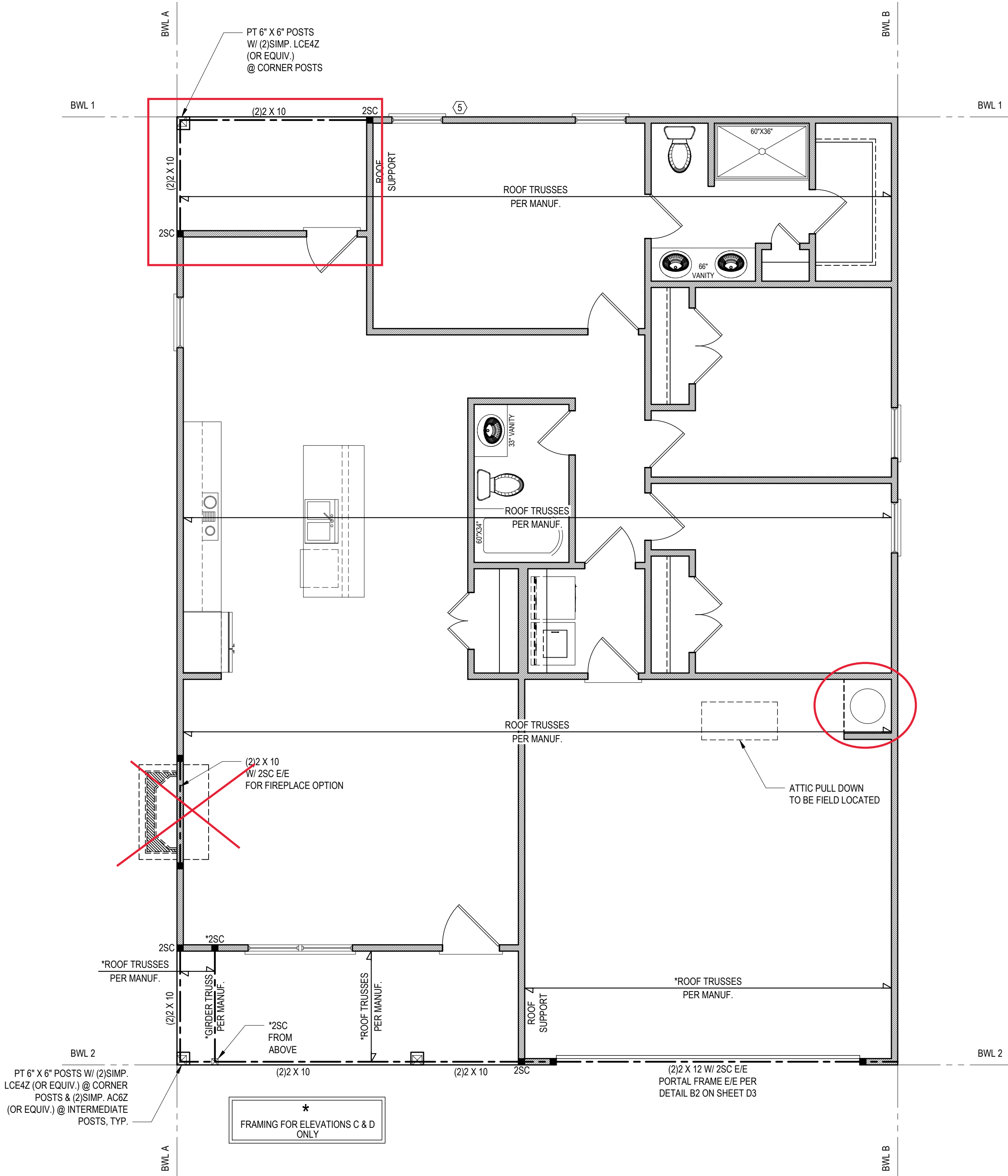
1 REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.
- INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS PRESCRIBED IN SECTION R602.10.1 (UNO)

2 1/2" GYPSUM BOARD (GB) MINIMUM LENGTH OF 8'-0" (ISOLATED PANELS) OR 4'-0" (CONTINUOUS SHEATHING). SECURE w/ 5d COOLER NAILS (OR EQUAL PER TABLE R702.3.5) SPACED @ 7" O.C. AT PANEL EDGES, INCLUDING TOP AND BOTTOM PLATES & 7" O.C. AT INTERMEDIATE SUPPORTS

3 3/8" WOOD STRUCTURAL PANEL (WSP) SECURE w/ 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND 12" O.C. AT INTERMEDIATE SUPPORTS
- EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO)
- ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHED WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8". SHEATHING SHALL BE SECURED WITH MINIMUM 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT INTERMEDIATE SUPPORTS.
- MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP METHOD SHALL BE AS FOLLOWS:
- 24" ADJACENT TO OPENINGS NOT MORE THAN 67% OF WALL HEIGHT
- 30" ADJACENT TO OPENINGS GREATER THAN 67% AND LESS THAN 85% OF WALL HEIGHT.
- 48" FOR OPENINGS GREATER THAN 85% OF WALL HEIGHT

4 SHEATH INTERIOR & EXTERIOR
- FOR CS-WSP METHOD, A MINIMUM 24" BRACED WALL PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH FIGURE R602.10.3(4). IN LIEU OF A CORNER RETURN, EITHER A MIN. 48" BRACED WALL PANEL SHALL BE PROVIDED AT THE CORNER OR A HOLD-DOWN DEVICE WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE FASTENED TO THE EDGE OF THE BRACED WALL PANEL CLOSEST TO THE CORNER AND TO THE FOUNDATION OR FRAMING BELOW.

5 MINIMUM 800# HOLD-DOWN DEVICE



FIRST FLOOR PLAN

1/4" = 1'-0" CEILING HGT. = 9'-0"

2X4 WALLS; 2X4
GARAGE WALLS & 2X6
PLUMBING WALLS AS
NEEDED. 9' CEILINGS

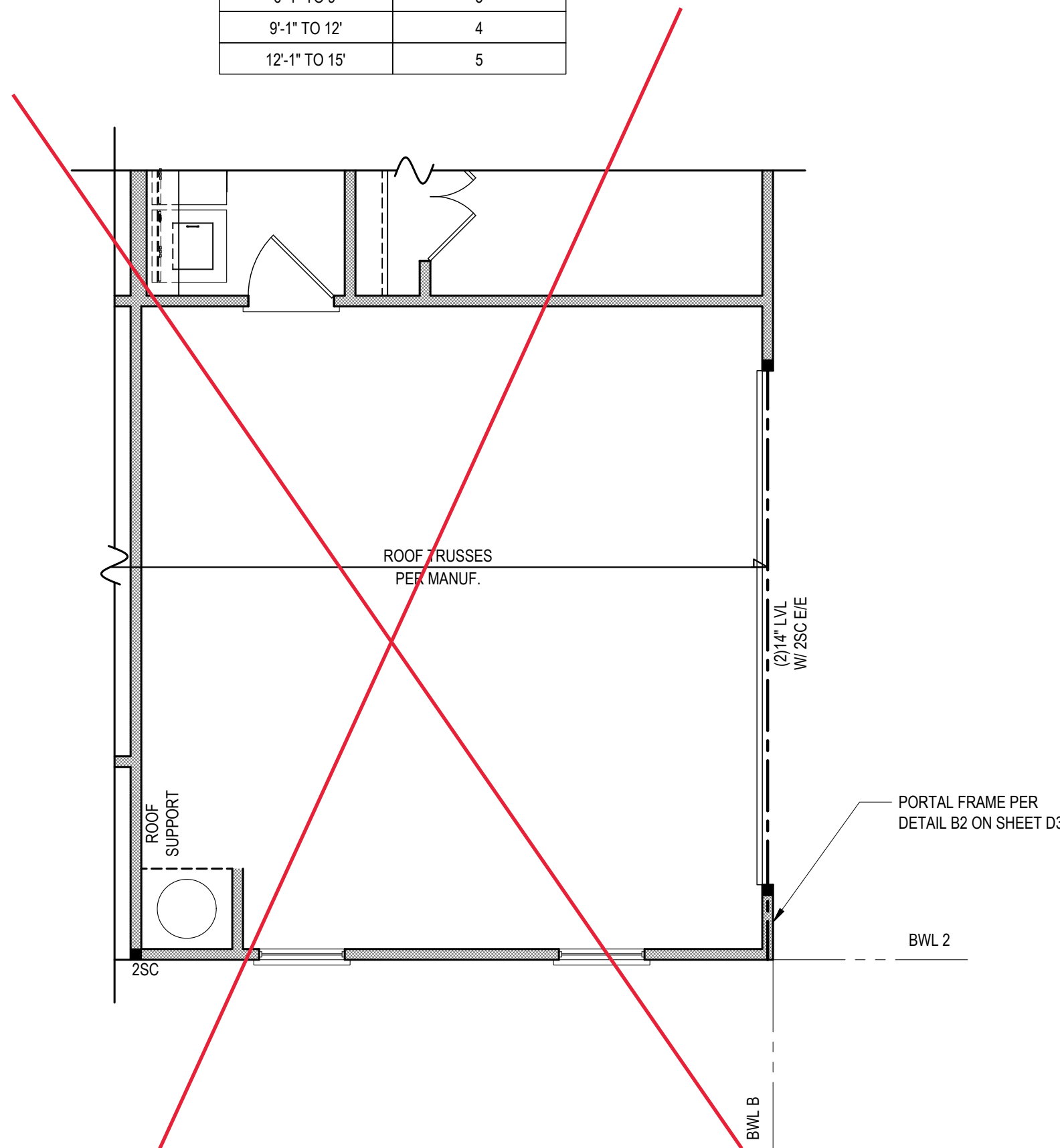
BRACING PANEL LENGTHS REQUIRED:

BWL A = 4.4 FT
BWL B = 4.4 FT
BWL 1 = 5.7 FT
BWL 2 = 5.7 FT

BRACING PANEL LENGTHS PROVIDED:

BWL A = 29.3 FT CS-WSP
BWL B = 44.7 FT CS-WSP
BWL 1 = 28.2 FT CS-WSP
BWL 2 = 14.5 FT CS-WSP

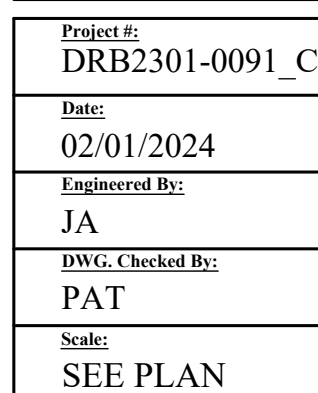
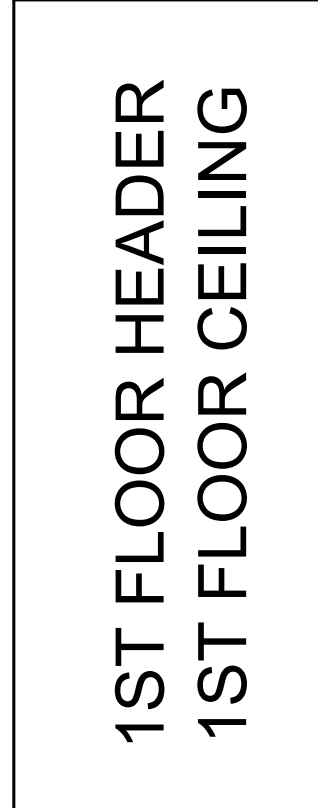
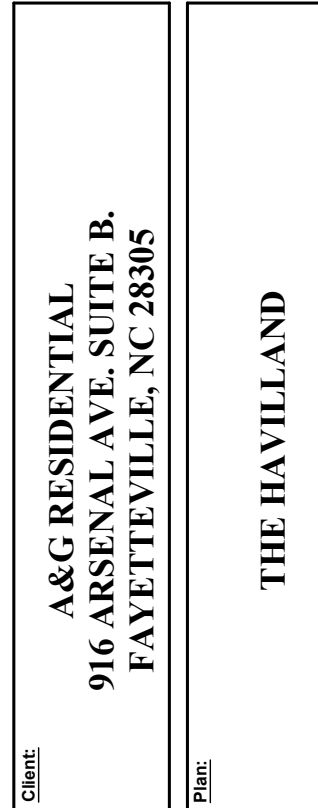
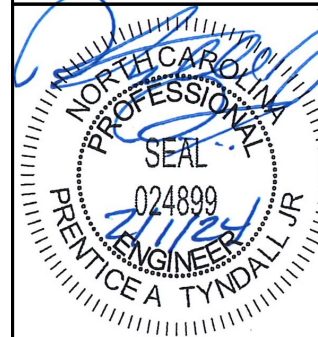
HEADER SPAN (FT)	MIN. # OF FULL HEIGHT STUDS (KING) 2 X 4 STUDS
UP TO 3'	1
3'-1" TO 6'	2
6'-1" TO 9'	3
9'-1" TO 12'	4
12'-1" TO 15'	5



GARAGE OPTION

1/4" = 1'-0"

*Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution.
Any deviation or discrepancies on plans are to be brought to the immediate attention of Tyndall Engineering & Design, P.A. Failure to do so will void Tyndall Engineering & Design, P.A. liability.
*Please review these documents carefully. Tyndall Engineering & Design, P.A. will interpret that all dimensions, recommendations, etc. presented in these documents were deemed acceptable once construction begins.



REVISIONS		
No.	Date	Remarks
1		
2		
3		
4		

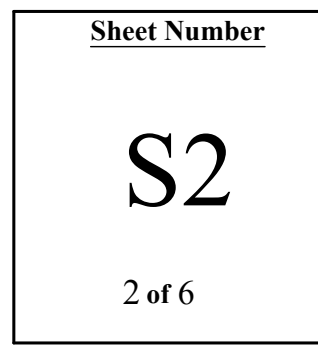


Diagram illustrating the roof layout plan. The plan shows a rectangular area defined by dashed lines, representing the roof boundary. Key features include:

- Roof Trusses:** A horizontal line across the middle is labeled "ROOF TRUSSES PER MANUF.".
- Roof Support:** Two vertical lines are labeled "ROOF SUPPORT". One is located near the top left corner, and the other is near the bottom center.
- Pitch:** Two arrows indicate the roof pitch, both labeled "5:12". One arrow points left from the center line, and the other points right from the center line.
- Notes:**
 - "NG (TYP)" is noted near the bottom left corner.
 - "ROOF TRUSSES PER MANUF." is noted near the center horizontal line.
 - "ROOF SUPPORT" is noted near the top left support line.
 - "ROOF SUPPORT" is noted near the bottom center support line.

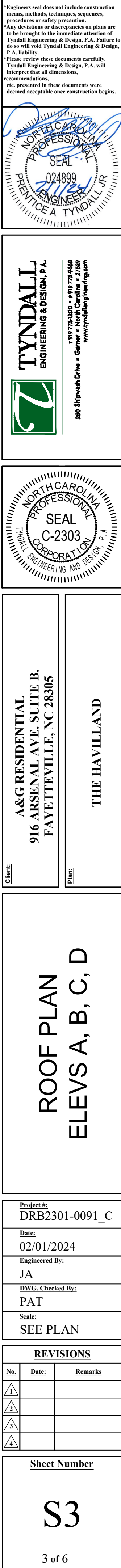
1900 SQ. FT. OF ATTIC / 300 = 7 SQ. FT. INLETS/OUTLETS REQUIRED

1) CALCULATION BASED ON VENTILATORS USED AT LEAST 3" ABOVE THE COMBIE VENTS WITH THE BALANCE OF VENTILATION PROVIDED BY EAVE VENTS.

2) CATHEDRAL CEILINGS SHALL HAVE A 1" MINIMUM CLEARANCE BETWEEN THE BOTTOM OF THE ROOF DECK AND THE INSULATION

 ATTIC VENTILATION CALCULATION

NO SCALE



1) ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS.

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION	
			LL	TL
ALL FLOORS	40	10	L/360	L/240
ATTIC (w/ walk up stairs)	30	10	L/360	L/240
ATTIC (pull down access)	20	10	L/240	L/180
ATTIC (no access)	10	5	L/240	L/180
EXTERNAL BALCONY	40	10	L/360	L/240
ROOF	20	10	L/240	L/180
ROOF-TRUSS	20	20	L/240	L/180
WIND LOAD		BASED ON 120 MPH (EXPOSURE B)		
SEISMIC		SEISMIC ZONES A, B & C		

- | | | |
|--|--|---|
| | | <u>DEFINITIONS FOR COMMON ABBREVIATIONS</u> |
|--|--|---|

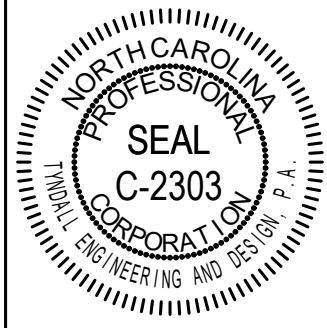
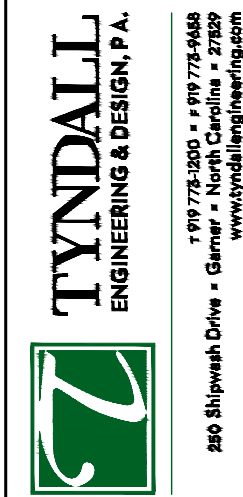
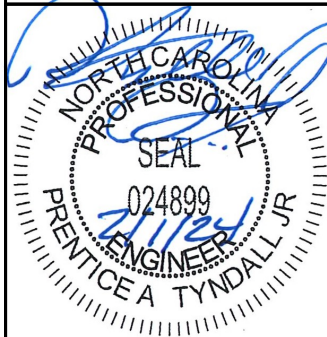
ALT	=	ALTERNATE	MAX	=	MAXIMUM
CANT	=	CANTLEVER	MIN	=	MINIMUM
CJ	=	CEILING JOIST	NOM	=	NOMINAL
CMU	=	CONCRETE MASONRY UNIT	O.C.	=	ON CENTER
COL	=	COLUMN	PL	=	POINT LOAD
CONC	=	CONCRETE	PT	=	PRESSURE TREATED
CONT	=	CONTINUOUS	REINF	=	REINFORCED
CT	=	COLLAR TIE	REQD	=	REQUIRED
DBL	=	DOUBLE	RJ	=	ROOF JOIST
DI	=	DIAMETER	RS	=	ROOF SUPPORT
DJ	=	DOUBLE JOIST	SC	=	STUD COLUMN
DR	=	DOUBLE RAFTER	SCH	=	SCHEDULE
EA	=	EACH	SPEC	=	SPECIFIED
EE	=	EACH END	THK	=	THICK
FJ	=	FLOOR JOIST	TJ	=	TRIPLE JOIST
FND	=	FOUNDATION	TRTD	=	TREATED
FTNG	=	FOOTING	TRYP	=	TYPICAL
GALV	=	GALVANIZED	UNO	=	UNLESS NOTED OTHERWISE
HORIZ	=	HORIZONTAL	W	=	WIDE FLANGE BEAM
HT	=	HEIGHT	WWF	=	WELDED WIRE FABRIC
MANUF	=	MANUFACTURER	XJ	=	EXTRA JOIST

- | POST SIZE | MAX. POST HEIGHT** |
|-----------|--------------------|
| 4 x 4 | 8'-0" |
| 6 x 6 | 20'-0" |
| *** | OVER 20'-0" |

2) DECKS SHALL BE BRACED TO PROVIDE LATERAL STABILITY BY ONE OF THESE METHODS:

- | POST SIZE | MAX. TRIBUTARY AREA | MAX. POST HEIGHT | EMBEDMENT DEPTH | CONCRETE DIAMETER |
|-----------|---------------------|------------------|-----------------|-------------------|
| 4 x 4 | 48 SQ. FT. | 4'-0" | 2'-6" | 1'-0" |
| 6 x 6 | 120 SQ. FT. | 6'-0" | 3'-6" | 1'-8" |

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THE HAVILLAND

Client

Plan:

STANDARD DETAILS

NO SCALE

8. R-VALUES ARE MINIMUMS. U-FACTORS AND SHGC ARE MAXIMUMS. WHEN INSULATION IS INSTALLED IN A CAVITY WHICH IS LESS THAN THE LABEL OR DESIGN THICKNESS OF THE INSULATION, THE INSTALLED R-VALUE OF THE INSULATION SHALL NOT BE LESS THAN THE R-VALUE SPECIFIED IN THE TABLE.

- THE INSULATION+FACTOR COLUMN EXCLUDED SLOYS/NOTS. THE SOLAR HEAT COEFFICIENT
(SHGC) COLUMN APPLIES TO ALL GRAZED FINISHATIONS.
- c. "10% MEANS R-3 CONTINUOUS INSULATING SHEATHING ON THE INTERIOR OR EXTERIOR OF THE HOME OR R-9 IS CAUTY INSULATION AT THE INTERIOR OF THE BASEMENT WALL OR DRAIN SPACE OFFICE
- d. FOR KNOCKHOLE SLABS, INSULATION SHALL BE APPLIED FROM THE INSPECTION GAP DOWNWARD TO THE BOTTOM OF THE FOOTING ON A MAXIMUM OF 24 INCHES LONG UNLESS OTHERWISE STATED. FOR PLATTING SLABS, INSULATION SHALL EXTEND TO THE BOTTOM OF THE FOUNDATION WALLS OF 24 INCHES LESS UNLESS OTHERWISE STATED. R-9 SHALL BE ADDED TO THE REQUIRED SLAB EDGE R-VALUES FOR RELATED SLABS.
- e. DELETED
- f. BASEMENT WALL INSULATION IS NOT REQUIRED IN NEARWALL LOCATIONS AS DEFINED BY FIGURE N1101.2 AND TABLE N1101.7.
- g. OR INSULATION SUFFICIENT TO FLAT THE FRAMING GYPSUM. R-19 MINIMUM.
- h. THE FIRST VALUE IS CAVITY INSULATION, THE SECOND VALUE IS CONTINUOUS INSULATION. "10%-15" MEANS R-13 CAVITY INSULATION PLUS R-5 INSULATED SHEATHING. "15"-R-15 MEANS R-15 CAVITY INSULATION. "15" IS R-15 INSULATED SHEATHING. IF STRUCTURAL SHEATHING COVERS 25% OR LESS OF THE EXTERIOR, INSULATING SHEATHING IS NOT REQUIRED WHERE THE STRUCTURAL SHEATHING IS USED. IF STRUCTURAL SHEATHING COVERS MORE THAN 25 PERCENT OF THE EXTERIOR, SHALL BE SUPPLEMENTED WITH INSULATED SHEATHING OF AT LEAST R-7. "13"-15" MEANS R-13 CAVITY INSULATION PLUS R-2 INSULATED SHEATHING.
- i. FOR MASS WALLS, THE SECOND R-VALUE APPLIES WHEN MORE THAN HALF THE INSULATION IS ON THE INTERIOR MASS SURFACE.
- j. IN ADDITION TO THE EXEMPTION IN SECTION N1103.3.3, A MAXIMUM OF TWO GLAZED FINISHATION PRODUCT ASSEMBLIES HAVING A U-FACTOR NO GREATER THAN .35 SHALL BE PERMITTED TO USE INSULATION FOR MINIMA CODE COMPLIANCE WITHOUT PENALTY.
- k. IN ADDITION TO THE EXEMPTION IN SECTION N1103.3.3, A MAXIMUM OF TWO GLAZED-FINISHMENT PRODUCT ASSEMBLIES HAVING A SHGC NO GREATER THAN .75 SHALL BE PERMITTED TO BE SUBSTITUTED FOR COMMAFINET FINISHMENT PRODUCT ASSEMBLIES WITHOUT PENALTY.
- l. IN ADDITION TO THE EXEMPTION IN SECTION N1103.3.3, A MAXIMUM OF TWO GLAZED-FINISHMENT PRODUCT ASSEMBLIES HAVING AN INSULATION EXTENDING OVER THE WALL TOP LATE AT THE EAVE, OTHERWISE SO DESIGN INSULATIONS IS REQUIRED WHERE ABOVE CLEARANCE EXCEEDS OR INSULATION MUST EXTEND TO EITHER THE INSULATION Baffle OR WITHIN 1 INCH OF THE ATIC ROOF DECK.
- m. INSULATION SHALL BE PROVIDED FOR ROOF EDGE WHERE THE SPACE IS LIMITED BETWEEN THE PITCH OF THE ROOF. THERE THE INSULATION MUST FLAT THE SPACE UP TO THE RAFFLE.
- n. R-19 FIBERGLASS BATTING COMPRESSED AND INSTALLED IN A NOMINAL 2x6 FRAMING GYPSUM IS DEEMED TO COMPLY. FIBERGLASS BATTINS RATED R-19 OR HIGHER COMPOSED AND INSTALLED TO COMPLY.
- o. BASEMENT WALL MEETS THE MINIMUM WALL SPECIFIC HEAT TREATMENT REQUIREMENT MAY USE THE MASS WALL R-VALUE AS THE BASIS FOR REQUIRING.

FLUSH GIRDER DETAIL

Diagram illustrating the cross-section of a flush girder detail, showing the connection between the girder, ledger, masonry pier, and sill.

Key components and dimensions labeled:

- STRUCTURAL SHEATHING
- FLOOR JOISTS PER PLAN
- (3) 2X10 GIRDER OR PER PLAN
- 2"X2" LEDGER
- 8" SOLID MASONRY CAP
- 2X6 (MIN) TREATED SILL
- 16"X16" MASONRY PIER OR PER PLAN
- CRAWL SPACE
- GRADE
- 10" MIN OR PER PLAN (height of crawl space)
- 2'-6" MIN OR PER PLAN (width of masonry pier)
- * (star symbol indicating detail)
- NO SCALE

A detailed cross-section diagram of a foundation vent detail at compacted fill. The diagram shows a vertical section through a foundation wall and floor. At the top, floor joists are shown above a double band at the vent opening. Below this is a 4-inch concrete slab. The main body of the foundation is constructed from 8x16 inch blocks with cell openings facing out. A (2) 4-inch diameter perforated pipe runs horizontally through the center of the blockwork. The bottom of the foundation is compacted fill. The diagram is labeled with various components and their dimensions.

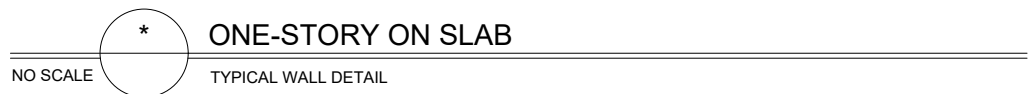
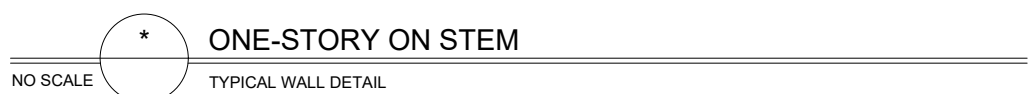
Labels and dimensions in the diagram include:

- FLOOR JOISTS PER PLAN
- DOUBLE BAND AT VENT OPENING
- (2) 4" Ø PERFORATED PIPE
- 4" CONCRETE SLAB
- 8"x16" BLOCK W/ CELL OPENINGS FACING OUT
- 8"x16" BLOCK
- COMPACT FILL

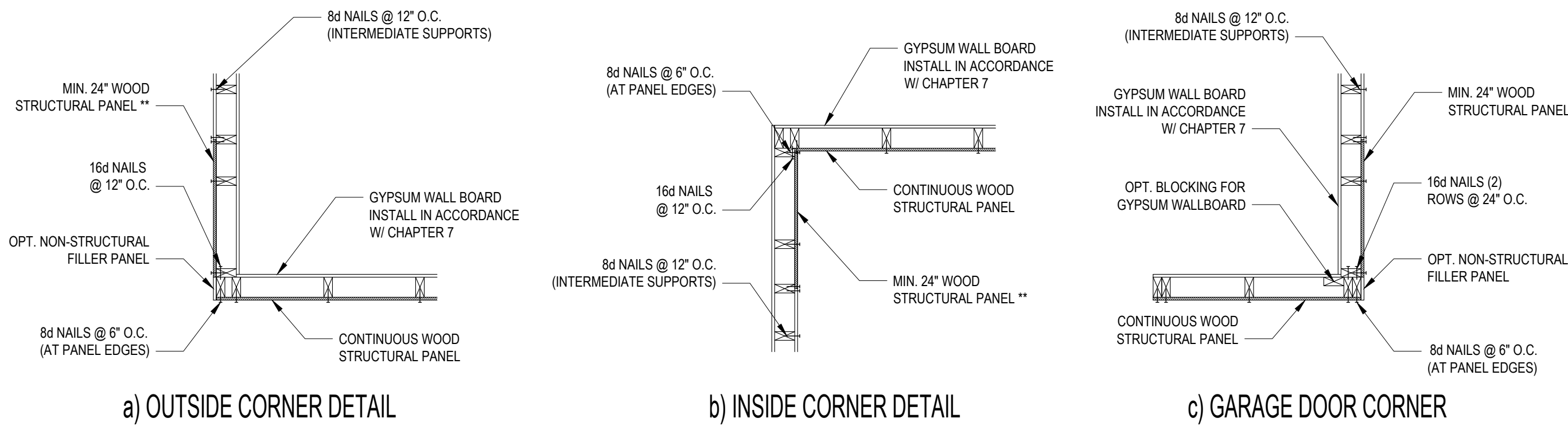
A circular symbol with an asterisk (*) is located at the bottom left of the diagram, indicating a detail view.

*** FOUNDATION VENT DETAIL AT COMPACTED FILL**

FOUNDATION VENT DETAIL AT COMPACTED FILL



5 of 6



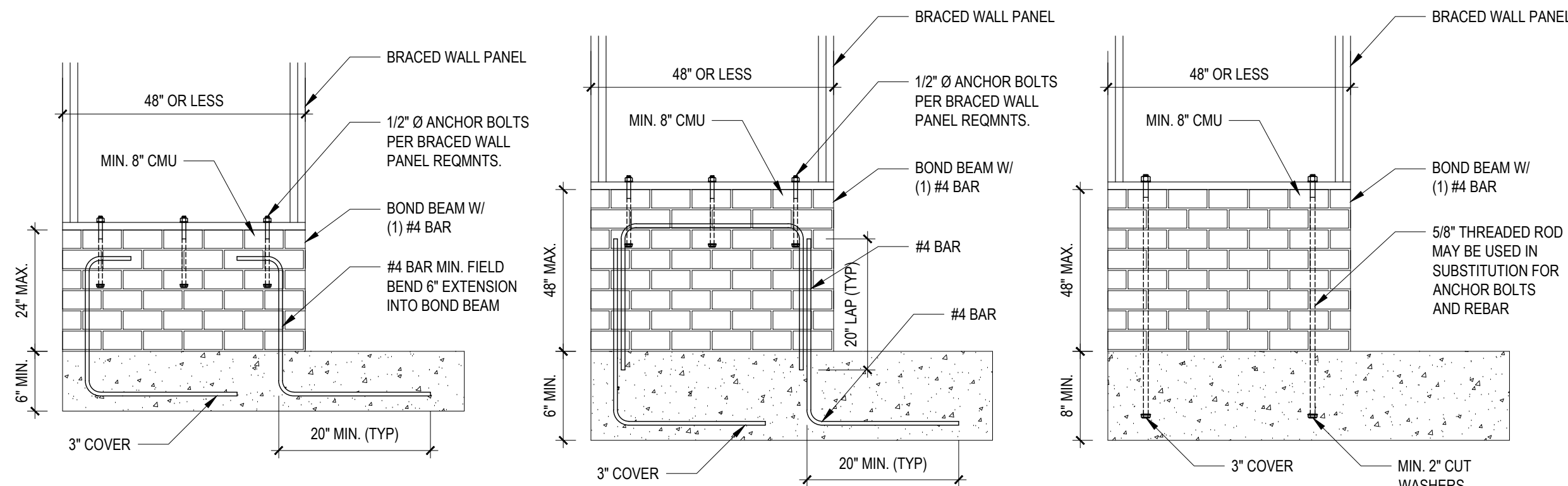
B1: TYPICAL EXTERIOR CORNER FRAMING FOR CONTINUOUS SHEATHING
NO SCALE

STRUCTURAL SHEATHING NOTES

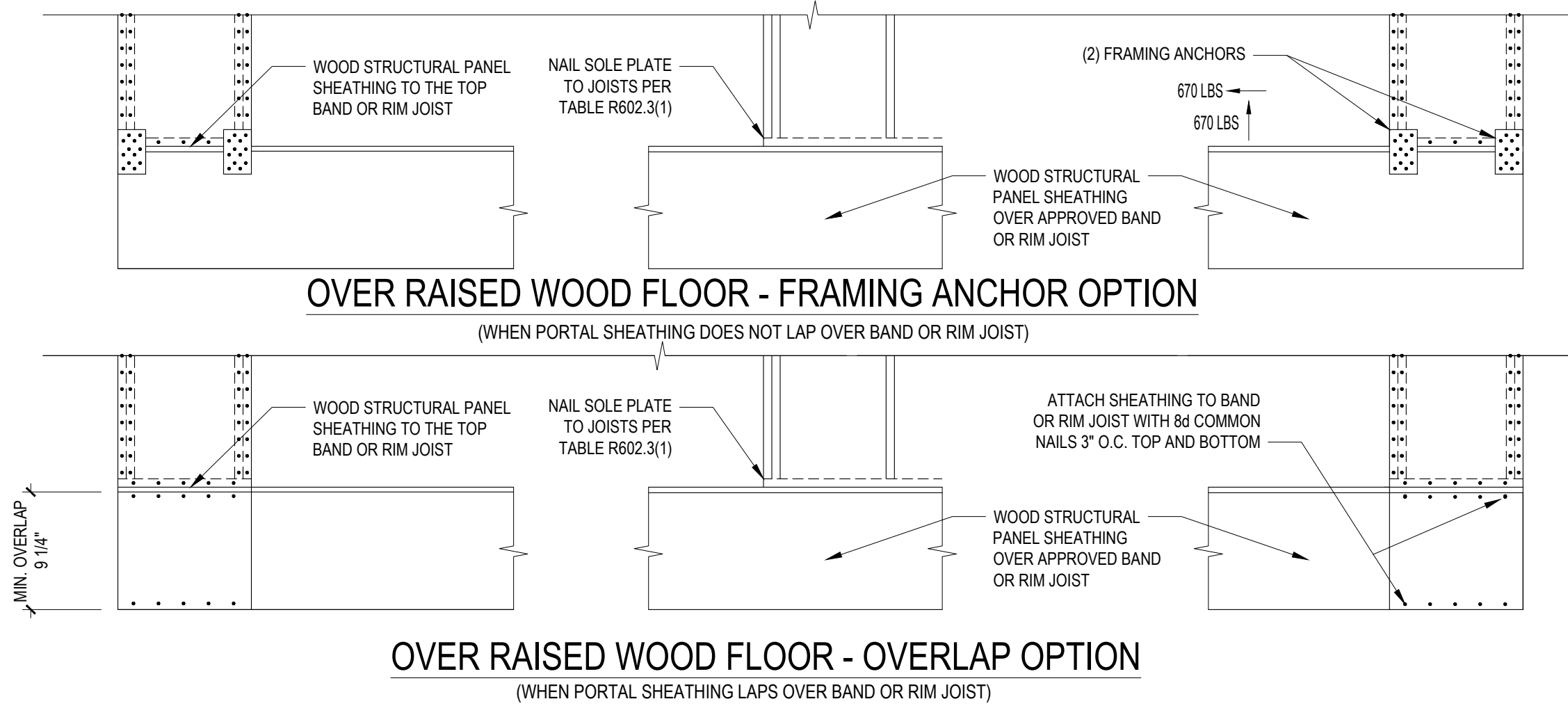
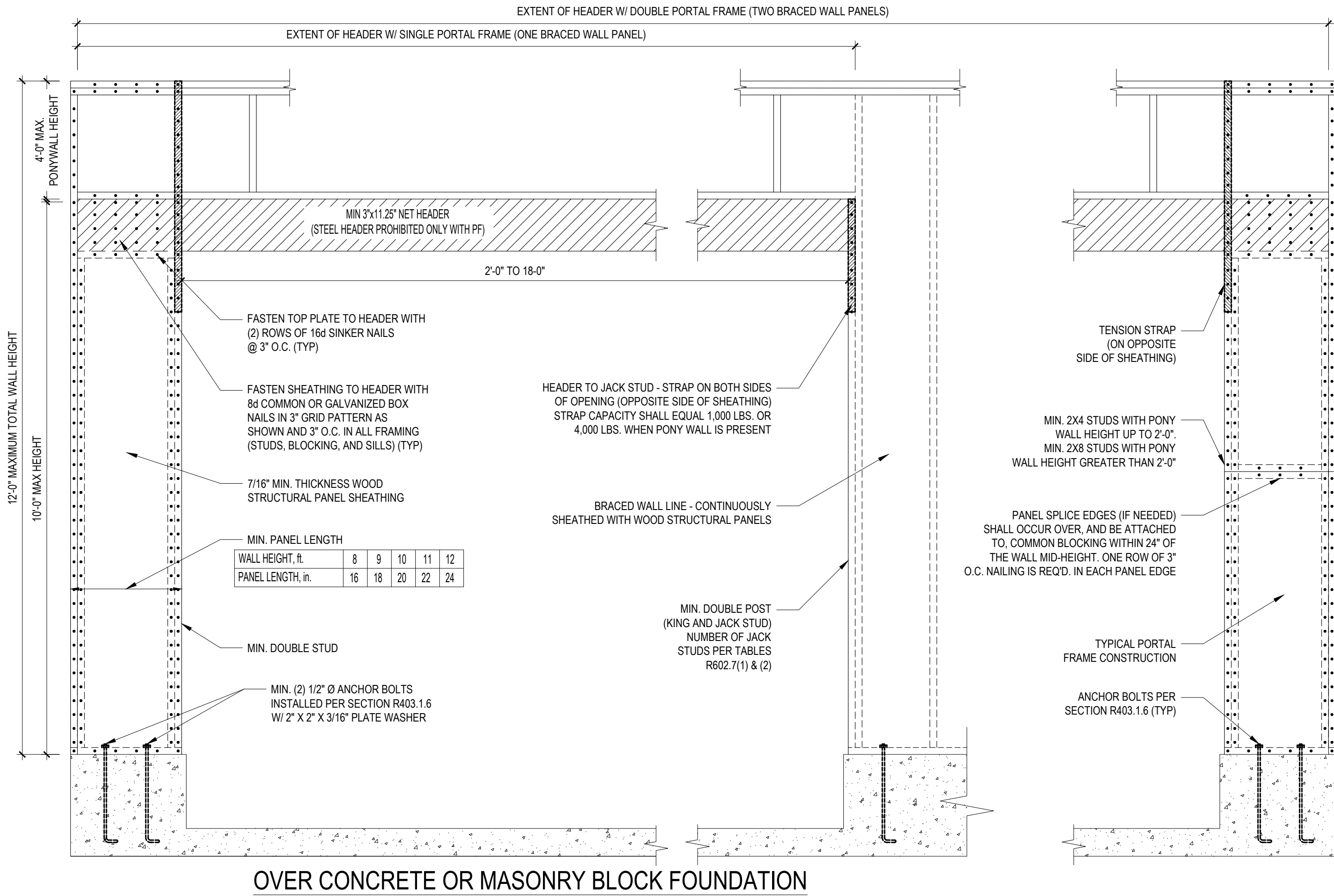
- DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR LESS.
- WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10.4 OF THE 2018 NCRC.
- BRACING REQUIREMENTS SHALL BE PER TABLE R602.10.3. REFER TO SECTION R602.10.4 FOR LOAD PATH DETAILS INCLUDING CONNECTIONS & SUPPORT OF BRACED WALL PANELS.
(1) REFERENCE FIGURE R602.10.4.3 OF THE 2018 NCRC.
- INTERIOR BRACED WALL PANELS (BWP) INDICATED SHALL BE SHEATHED IN ACCORDANCE WITH THE GB METHOD OR WSP METHOD AS PRESCRIBED IN SECTION R602.10.1 (UNO)
(2) 1/2\"/>
- EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN ACCORDANCE WITH CS-WSP METHOD AS PRESCRIBED IN SECTION R602.10.3 (UNO)
- ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHED WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8\"/>
- MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP METHOD SHALL BE AS FOLLOWS:
24\"/>
- FOR CS-WSP METHOD, A MINIMUM 24\"/>

REQUIRED BRACED WALL PANEL CONNECTIONS				
METHOD	MATERIAL	MIN. THICKNESS	REQUIRED CONNECTION	
			@ PANEL EDGES	@ INTERMEDIATE SUPPORTS
CS-WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.
GB	GYPSUM BOARD	1/2"	5d COOLER NAIL** @ 7" O.C.	5d COOLER NAIL** @ 7" O.C.
WSP	WOOD STRUCTURAL PANEL	3/8"	6d COMMON NAILS @ 6" O.C.	6d COMMON NAILS @ 12" O.C.

**OR EQUIVALENT PER TABLE R702.3.5
B3: BRACE WALL PANEL CONNECTIONS
NO SCALE



B4: MASONRY STEM WALL SUPPORTING BRACED WALL PANELS
FIGURE R602.10.4.3 OF THE 2018 NCRC
NOTE: GROUT BOND BEAMS AND ALL CELLS WHICH CONTAIN REBAR, THREADED RODS AND ANCHOR BOLTS



B2: METHOD PF: PORTAL FRAME CONSTRUCTION
FIGURE R602.10.1

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Client: A&G RESIDENTIAL
916 ARENETAL AVE. SUITE B.
FAYETTEVILLE, NC 28305

Plan: THE HAVILLAND

Project #: DRB2301-0091_C
Date: 02/01/2024
Engineered by: JA
DWG. Checked by: PAT
Scale: SEE PLAN

REVISIONS		
No.	Date:	Remarks
1		
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4		

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6 of 6

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