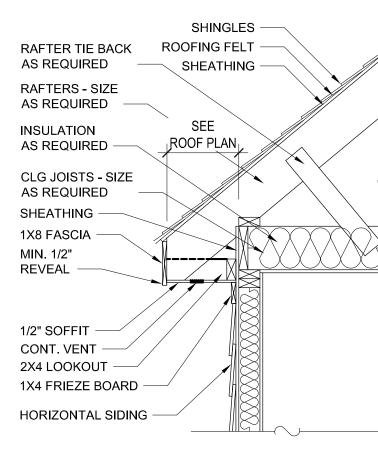
MAYNOR RESIDENCE

NOTE: CONTRACTOR TO PROVIDE ADEQUATE ROOF VENTILATION PER BUILDING CODE

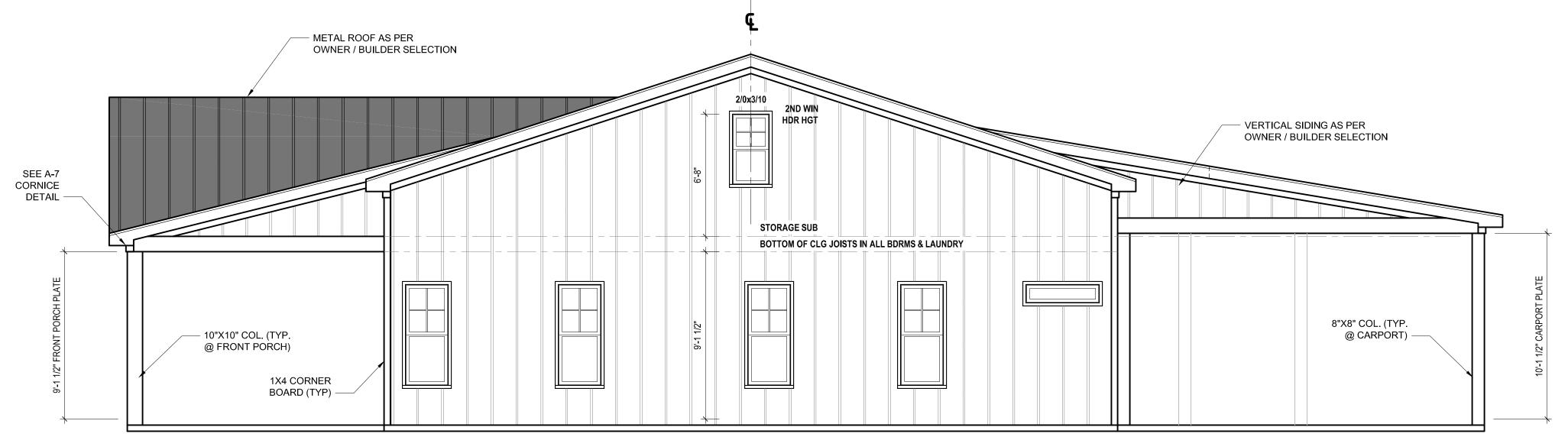




A-7 CORNICE DETAIL

FRONT ELEVATION

1/4" = 1'-0"



RIGHT ELEVATION

1/4" = 1'-0"

1. DRB DESIGN assumes no liability for any home constructed from this plan.

PORCH PLATE

1ST FL SUB

- 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.
- 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. 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.
- responsibilities for all consequences. 9. Changes made to these plans without the consent of the designer are unauthorized and shall relieve DRB

8. A failure to cooperate by a simple notice to DRB DESIGN shall relieve the designer from any and all

- DESIGN of responsibility for any and all consequences arriving 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.

HEATED/HABITABLE **SQUARE FOOTAGE** 3200 First Floor

TOTAL HEATED 3200

UNHTD SQUARE FOOTAGE Front Porch Rear Porch Carport Walkway

1440 **TOTAL UNHEATED**

4640 **TOTAL SQ FT**

ELEVATIONS

DRB2101-0068

DRAWN/DESIGNED BY

04/12/2021

CHECKED BY DRB **SCALE**

1/4" = 1'-0"

MAYNOR RESIDENCE

NOTE: CONTRACTOR TO PROVIDE ADEQUATE ROOF VENTILATION PER BUILDING CODE



ROOFING FELT RAFTER TIE BACK AS REQUIRED SHEATHING **RAFTERS - SIZE** AS REQUIRED INSULATION AS REQUIRED -CLG JOISTS - SIZE AS REQUIRED SHEATHING 1X8 FASCIA MIN. 1/2" REVEAL 1/2" SOFFIT -CONT. VENT -2X4 LOOKOUT -1X4 FRIEZE BOARD HORIZONTAL SIDING

A-7 CORNICE DETAIL

REAR ELEVATION

1/4" = 1'-0"

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.
 Communication is imperfect and every contingency cannot be anticipated.
 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.
 A failure to cooperate by a simple notice to DRB DESIGN shall relieve the designer from any and all responsibilities for all consequences.
 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 arriving out of such changes.
 Written dimensions on these plans always have precedence over scaled dimensions.
 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.
 DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.

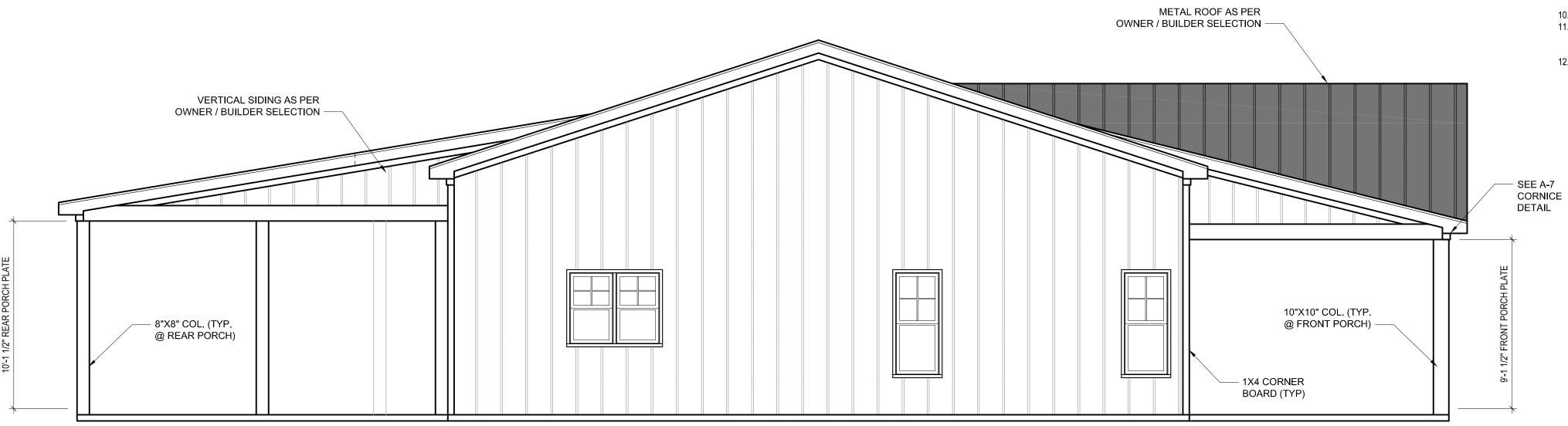
2. All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code",

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.

1. DRB DESIGN assumes no liability for any home constructed from this plan.

in addition to all local codes and regulations

NOTE: RAFTERS ARE PITCHED FROM TOP OF CEILING JOISTS



LEFT ELEVATION

1/4" = 1'-0"

HEATED/HABITABLE
SQUARE FOOTAGE
First Floor 3200

TOTAL HEATED 3200

UNHTD SQUARE FOOTAGE
Front Porch 560
Rear Porch 400
Carport 400
Walkway 80

TOTAL UNHEATED 1440

TOTAL SQ FT 4640

PROJECT #

DRB2101-0068

DATE

04/12/2021

DRAWN/DESIGNED BY

IJE

CHECKED BY

DRB

SCALE

1/4" = 1'-0"

drbhomedesign.con

MAYNOR

DESIGN n@drbhomedesign.com 919.631.5979 nipwash Dr Suite 105 Garner. NC 27529

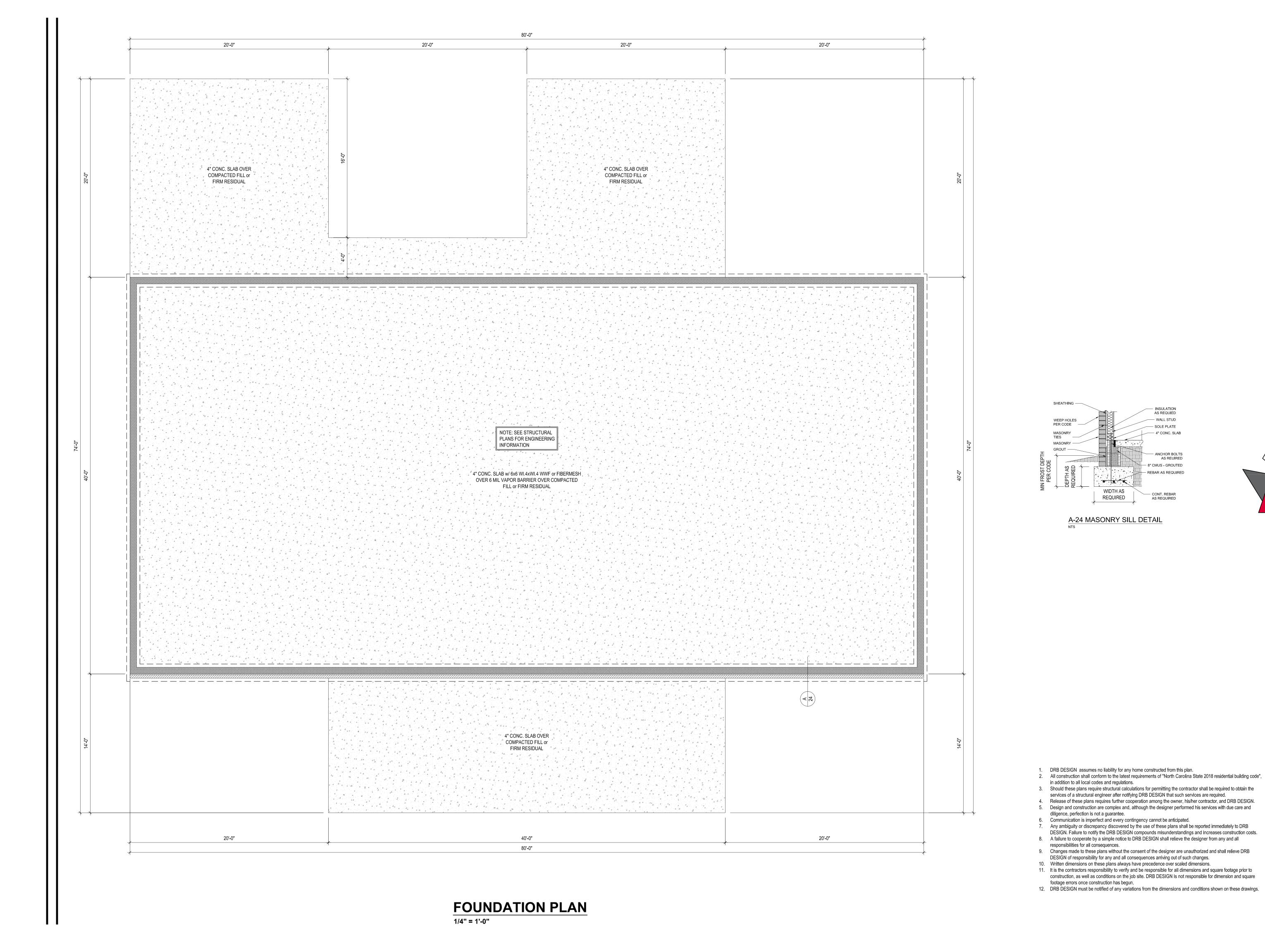
On Time Services 1140 NC 55 E Coats, NC 27521 imeservices.paul@gmail.cc

SHEET NAME
ELEVATIONS
SHEET #

SHEET #

A2

of



CHECKED BY

FOUNDATION



HEATED/HABITABLE **SQUARE FOOTAGE** First Floor **TOTAL HEATED** 3200 **UNHTD SQUARE FOOTAGE Front Porch Rear Porch** Carport Walkway **TOTAL UNHEATED**

4640

ALL EXTERIOR WALLS ARE NOMINAL 6" UNO

TOTAL SQ FT

ALL INTERIOR WALLS ARE NOMINAL 4" UNO

ALL DIMENSIONS ARE FRAME TO FRAME

DRB2101-0068

DRAWN/DESIGNED BY

04/12/2021

CHECKED BY

1/4" = 1'-0"

SCALE

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 arriving out of such changes.

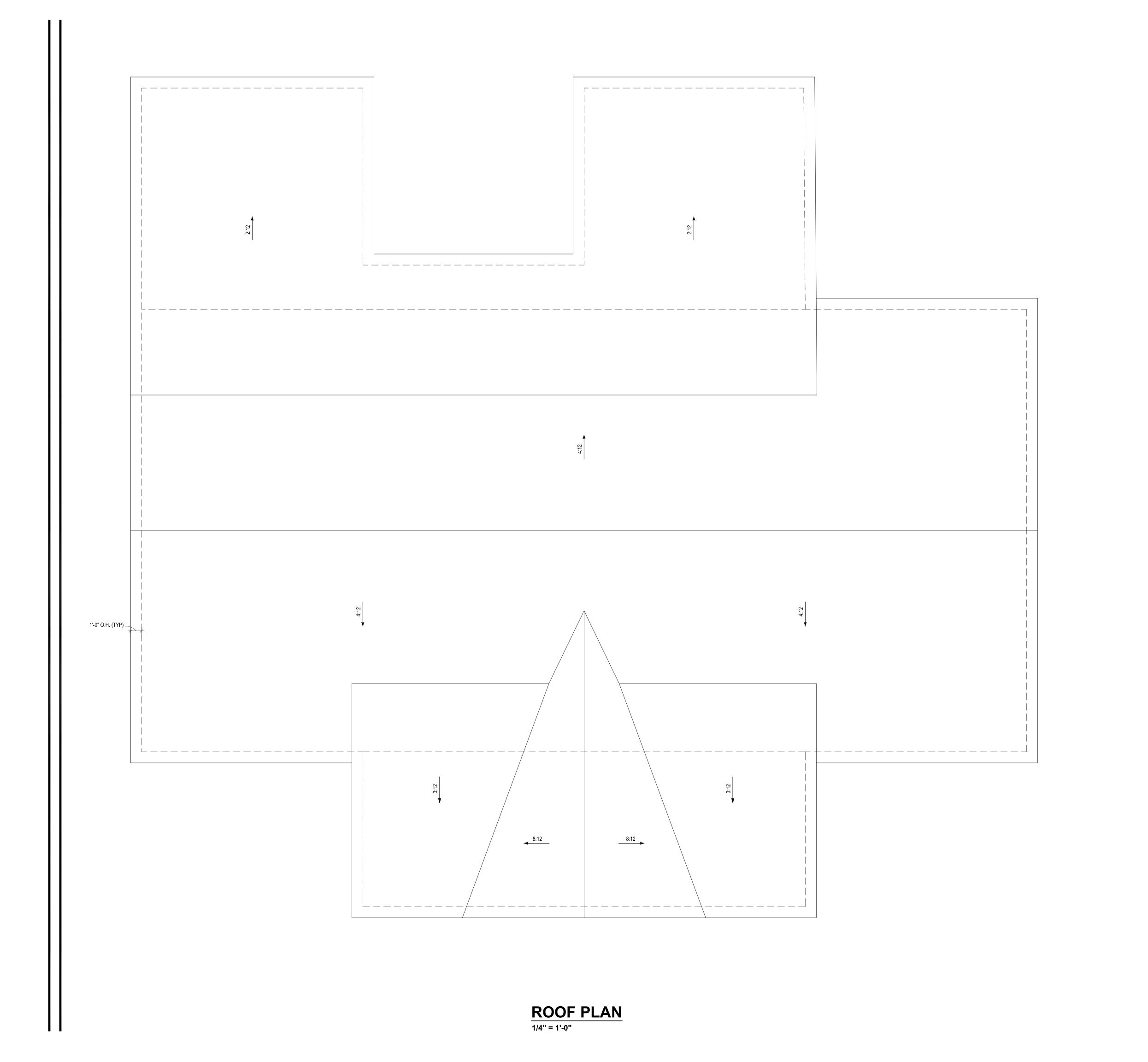
10. Written dimensions on these plans always have precedence over scaled dimensions. 11. It is the contractors responsibility to verify and be responsible for all dimensions and square footage prior to construction, as well as conditions on the job site. DRB DESIGN is not responsible for dimension and square

12. DRB DESIGN must be notified of any variations from the dimensions and conditions shown on these drawings.

footage errors once construction has begun.

1ST_FLOOR

FIRST FLOOR PLAN 1/4" = 1'-0" CLG HGT. = 9'-0" (UNO)



 DRB DESIGN assumes no liability for any home constructed from this plan.
 All construction shall conform to the latest requirements of "North Carolina State 2018 residential building code", in addition to all local codes and regulations.

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.
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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.

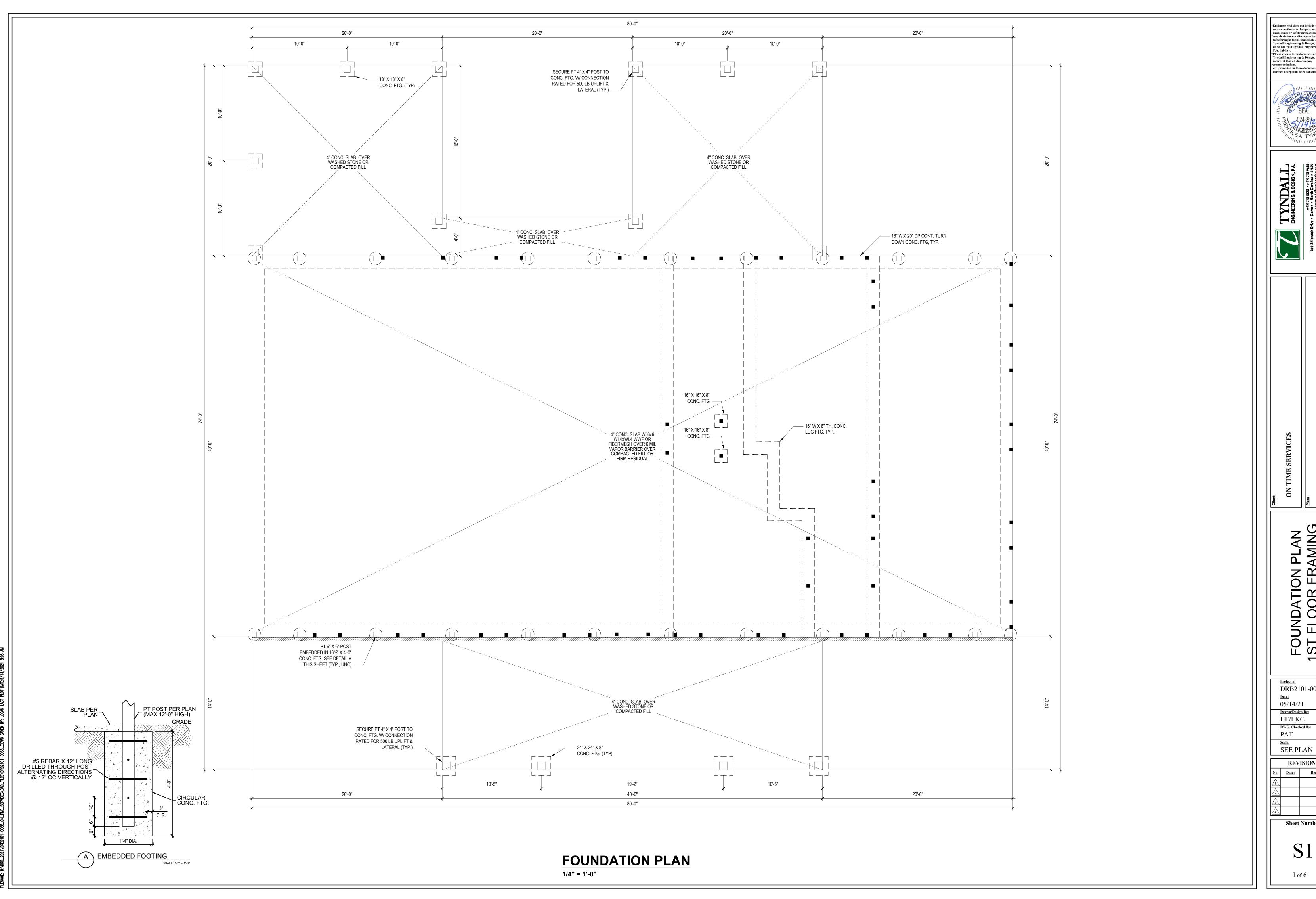
9. Changes made to these plans without the consent of the designer are unauthorized and shall relieve DRB

DESIGN of responsibility for any and all consequences arriving 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.



*Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution.
*Any deviations 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 begi



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REVISIONS

Sheet Number

DESIGN LOADS LIVE LOAD DEAD LOAD ATTIC (w/ storage) ATTIC (no access) EXTERNAL BALCONY WIND LOAD BASED ON 120 MPH (EXPOSURE B) BASED ON SEISMIC ZONES A, B & C SEISMIC ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF "NORTH CAROLINA STATE 2018 RESIDENTIAL BUILDING CODE", IN ADDITION TO ALL LOCAL CODES AND REGULATIONS. 2) 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. 3) ALL LUMBER SHALL BE SYP #2 (UNO) ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2600 PSI, E = 1.9M PSI (I.E. iLEVEL MICROLAM) ALL LSL LUMBER IS TO BE 1.55E (Fb = 2325 PSI) 4) 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'-8", MINIMUM BOTTOM OF THE WINDOW HEIGHT IS 1'-6". OTHERWISE REFER TO TABLES R602.7(1) 5) 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) 6) REFER TO 2018 NC BUILDING CODE SECTION R602 FOR CONSTRUCTION OF ALL WALLS OVER 10'-0" IN HEIGHT. 7) ALL STRUCTURAL STEEL SHALL BE ASTM A992 GRADE 50 Fy = 50 KSI MIN. (UNO) 8) ALL EXTERIOR LUMBER TO BE #2 SYP PT ALL CONCRETE, fc = 3000 PSI MIN. PRESUMPTIVE BEARING CAPACITY = 2000 PSF SHALL EXTEND 7" INTO CONCRETE OR MASONRY. 12) PSL COLUMNS DESIGNED WITH MAX. HEIGHT OF 9'-0" (UNO) OF PORCH COLUMNS. (U.N.O.) PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.4 OF THE 2018 IRC. 15) MAXIMUM MASONRY PIER HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION. 16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE 17) METAL HANGERS SHALL BE SIMPSON OR APPROVED EQUAL.

11) 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

13) PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM

STRUCTURAL SHEATHING NOTES

1) DESIGNED FOR SEISMIC ZONE A-C AND WIND SPEEDS OF 120 MPH OR

2) WALLS SHALL BE BRACED IN ACCORDANCE WITH SECTION R602.10 OF THE 2018 NCRC.

3) 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. 4) 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) $\sqrt{2}$ \ 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

5) EXTERIOR BRACED WALL PANELS (BWP) SHALL BE CONSTRUCTED IN

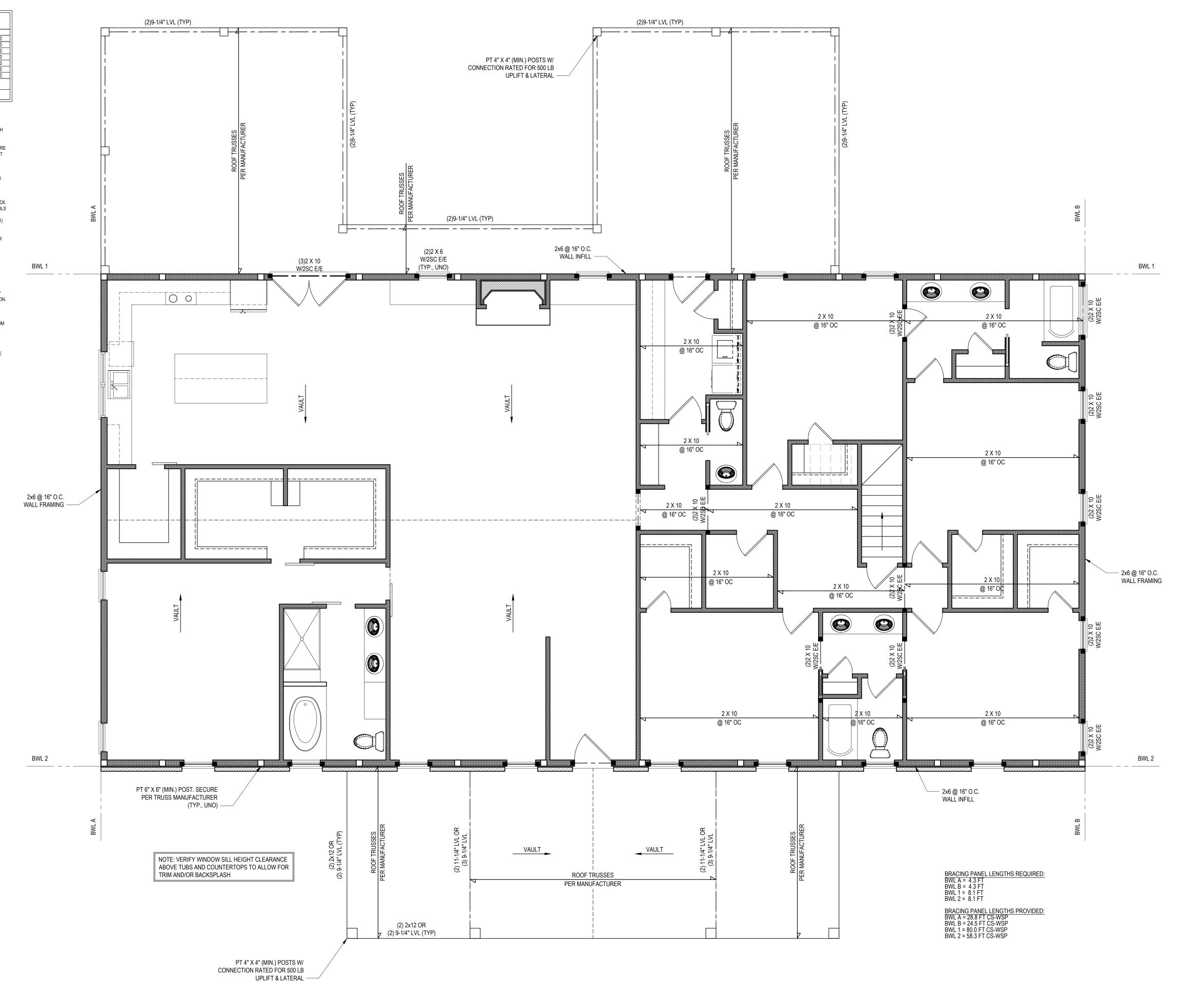
R602.10.3 (UNO) 6) ALL SHEATHABLE SURFACES OF EXTERIOR WALLS (INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS) SHALL BE CONTINUOUSLY SHEATHED WITH WOOD STRUCTURAL PANEL (WSP) SHEATHING WITH A MINIMUM THICKNESS OF 3/8". SHEATHING SHALL BE SECURED WITH MINIMUM 6d COMMON NAILS SPACED AT 6" O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT INTERMEDIATE SUPPORTS. 7) 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

8) 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



ALL EXTERIOR WALLS ARE NOMINAL 6" UNO

ALL INTERIOR WALLS ARE NOMINAL 4" UNO

ALL DIMENSIONS ARE FRAME TO FRAME

> SEE PLAN REVISIONS Date:

DRB2101-0068

05/14/21

IJE/LKC

PAT

Drawn/Design By:

DWG. Checked By:

*Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution. *Any deviations 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.

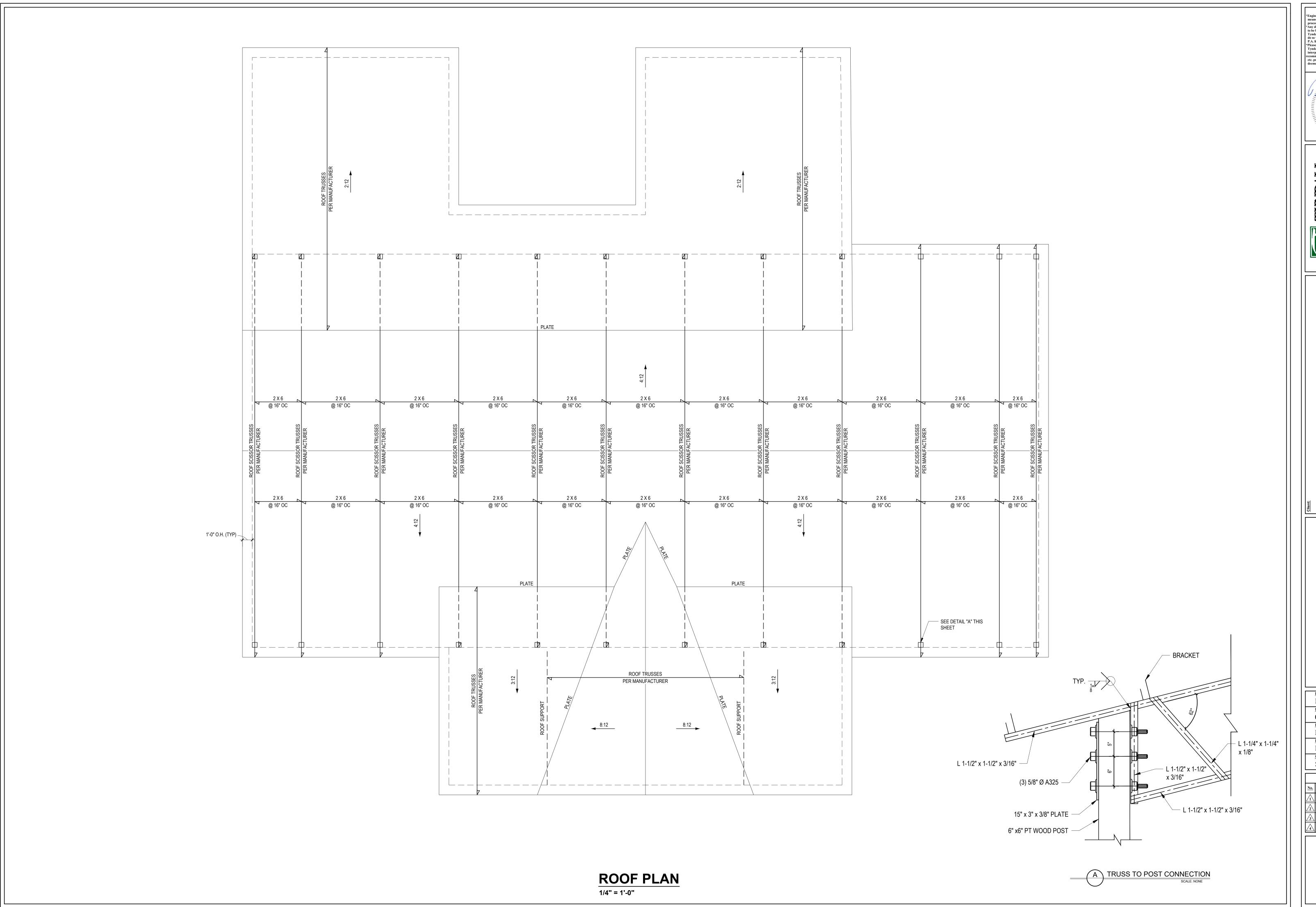
P.A. liability. Please review these documents carefully. Tyndall Engineering & Design, P.A. will interpret that all dimensions,

recommendations, etc. presented in these documents were

Sheet Number

2 of 6

FIRST FLOOR PLAN 1/4" = 1'-0" CLG HGT. = 9'-0" (UNO)



*Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution.

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*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. Project #: DRB2101-0068 <u>Date:</u> 05/14/21 IJE/LKC PAT Scale: SEE PLAN **REVISIONS Sheet Number**

3 of 6

2) DESIGN LOADS:

	LIVE LOAD (PSF)	LIVE LOAD DEAD LOAD (PSF)	DEFLECTION	
	(. 5.)		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			

- 3) MINIMUM ALLOWABLE SOIL BEARING PRESSURE = 2000 PSF
- 4) CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI AND A MAXIMUM SLUMP OF FIVE INCHES UNLESS NOTED OTHERWISE. (U.N.O.)
- MAXIMUM DEPTH OF UNBALANCED FILL AGAINST FOUNDATION WALLS TO BE LESS THAN 4'-0" WITHOUT USING SUFFICIENT WALL BRACING. REFER TO SECTION R404 OF 2018 NC BUILDING CODE FOR BACKFILL LIMITATIONS BASED ON WALL HEIGHT, WALL THICKNESS, SOIL TYPE, AND UNBALANCED BACKFILL HEIGHT.
- ALL FRAMING LUMBER SHALL BE SYP #2 (Fb = 800 PSI, BASED ON 2x10) UNO. ALL FRAMING LUMBER EXPOSED TO THE ELEMENTS SHALL BE TREATED MATERIAL ALL LVL LUMBER TO BE 1.75" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2600 PSI, E = 1.9M PSI (U.N.O.) ALL LSL LUMBER TO BE 3.5" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2325 PSI, E = 1.6M PSI (U.N.O.) ALL PSL LUMBER TO BE 3.5" WIDE NOMINAL EACH SINGLE MEMBER AND Fb = 2400 PSI, E = 1.8M PSI (U.N.O.)
- 7) ALL LOAD BEARING EXTERIOR HEADERS SHALL BE AT (2) 2x10. (U.N.O.) REFER TO TABLE R602.7(1) & (2) FOR JACK STUD REQUIREMENTS FOR HEADER SPANS FOR INTERIOR AND EXTERIOR LOAD CONDITIONS UNLESS SPECIFICALLY NOTED ON PLANS.
- 8) ALL STRUCTURAL STEEL W-SHAPES (I-BEAMS) SHALL BE ASTM A992 GRADE 50. ALL STEEL ANGLES, PLATES, AND C-CHANNELS SHALL BE ASTM A36. ALL STEEL PIPE SHALL BE ASTM A53 GRADE B.
- 9) STEEL BEAMS SHALL BE SUPPORTED AT EACH END WITH A MINIMUM BEARING LENGTH OF 3-1/2" AND FULL FLANGE WIDTH. PROVIDE SOLID BEARING FROM BEAM SUPPORT TO FOUNDATION. BEAMS SHALL BE ATTACHED TO EACH SUPPORT WITH TWO (2) LAG SCREWS (1/2"Ø x 4" LONG). LATERAL SUPPORT IS CONSIDERED ADEQUATE PROVIDED THE JOISTS ARE TOE NAILED TO THE SOLE PLATES, AND THE SOLE PLATES ARE NAILED OR BOLTED TO THE BEAM FLANGES @ 48" O.C.
- 10) PROVIDE ANCHOR BOLT PLACEMENT PER SECTION 403.1.6: 1/2"Ø ANCHOR BOLTS SPACED AT 6'-0" O.C. AND PLACED 12" FROM THE END OF EACH PLATE SECTION. ANCHOR BOLTS SHALL BE SPACED AT 3'-0" O.C. FOR BASEMENTS. ANCHOR BOLT SHALL EXTEND 7" INTO CONCRETE OR MASONRY. THE BOLTS SHALL BE LOCATED IN THE MIDDLE THIRD OF THE WIDTH OF THE PLATE. THERE SHALL BE A MINIMUM TWO ANCHOR BOLTS PER PLATE SECTION.
- 11) FOUNDATION DRAINAGE-DAMP PROOFING OR WATERPROOFING PER SECTION 405 AND 406 OF NC BUILDING CODE.
- 12) WALL AND ROOF CLADDING VALUES: WALL CLADDING SHALL BE DESIGNED FOR 28.0 POUNDS PER SQUARE FOOT (LBS/SQFT) OR GREATER POSITIVE AND NEGATIVE PRESSURE. ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE AS FOLLOWS: 39.0 LBS/SQFT FOR ROOF PITCHES 0/12 TO 1.5/12 36.0 LBS/SQFT FOR ROOF PITCHES 1.5/12 TO 6/12 18.0 LBS/SQFT FOR ROOF PITCHES 6/12 TO 12/12 **MEAN ROOF HEIGHT 30'-0" OR LESS
- 13) FOR ROOF SLOPES FROM 2/12 THROUGH 4/12, BUILDER TO INSTALL 2 LAYERS OF 15# FELT PAPER.
- 14) REFER TO SECTION R602.3 FOR FRAMING OF ALL WALLS OVER 10'-0" IN HEIGHT.
- 15) PROVIDE CONTINUOUS SHEATHING PER SECTION 602.10.3 OF THE 2018 NCRC.
- 16) UPLIFT LOADS GREATER THAN 500# SHALL BE CONTINUOUSLY ANCHORED TO THE FOUNDATION.
- 17) REFER TO TABLE N1102.1 FOR PRESCRIPTIVE BUILDING ENVELOPE THERMAL COMPONENT CRITERIA.
- 18) PSL COLUMNS DESIGNED WITH MAXIMUM HEIGHT OF 9'-0" (U.N.O.)
- 19) PROVIDE A MINIMUM OF 500# UPLIFT & LATERAL CONNECTION AT TOP AND BOTTOM OF PORCH COLUMNS. (U.N.O.)
- 20) MAXIMUM MASONRY PEIR HEIGHT SHALL NOT EXCEED FOUR TIMES ITS LEAST HORIZONTAL DIMENSION.
- 21) IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY ALL DIMENSIONS AND SQUARE FOOTAGE PRIOR TO CONSTRUCTION. TYNDALL ENGINEERING & DESIGN, PA IS NOT RESPONSIBLE FOR DIMENSION OR SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.

CLIMATE ZONES	FENESTRATION U-FACTOR	SKYLIGHT ^b U-FACTOR	GLAZED FENESTRATION SHGC ^{b,<u>k</u>}	CEILING ^m R-VALUE	WOOD FRAMED WALL R-VALUE	MASS WALL R-VALUE [†]	FLOOR R-VALUE	BASEMENT ^{c,©} WALL R-VALUE	SLAB ^d R-VALUE AND DEPTH	CRAWL SPACE G WALL R-VALUE
3	0.35	0.55	0.30	38 or 30 cont	1 <u>5</u> or 13 + <u>2.5</u>	<u>5/13 or</u> 5/10 cont	19	<u>5/13</u> ^f	0	5/13
4	0.35	0.55	0.30	38 or 30 cont	15 or 13 + <u>2.5</u> h	<u>5/13 or</u> 5/10 cont	19	10/15	10	10/15
5	0.35	0.55	NR	38 or 30 cont	ⁿ <u>19, or 13 + 5</u> <u>or 15 + 3</u>	13/17 <u>or</u> 13/12.5 cont	30 ^g	<u>10/15</u>	10	10/19

* TABLE N1102.1 CLIMATE ZONES 3-5

- a. 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.
- b. THE FENESTRATION U-FACTOR COLUMN EXCLUDED SKYLIGHTS. THE SOLAR HEAT GAIN COEFFICIENT (SHGC) COLUMN APPLIES TO ALL GLAZED FENESTRATION.
- c. "10/15" MEANS R-10 CONTINUOUS INSULATED SHEATHING ON THE INTERIOR OR EXTERIOR OF THE HOME OR R-15 CAVITY INSULATION AT THE INTERIOR OF THE BASEMENT WALL OR CRAWL SPACE WALL.

 d. FOR MONOLITHIC SLABS, INSULATION SHALL BE APPLIED FROM THE INSPECTION GAP DOWNWARD TO THE BOTTOM
- OF THE FOOTING OR A MAXIMUM OF 24" BELOW GRADE WHICHEVER IS LESS. FOR FLOATING SLABS, INSULATION SHALL EXTEND TO THE BOTTOM OF THE FOUNDATION WALL OR 24", WHICHEVER IS LESS. R-5 SHALL BE ADDED TO THE REQUIRED SLAB EDGE R-VALUES FOR HEATED SLABS.
- e. DELETED
- f. BASEMENT WALL INSULATION IS NOT REQUIRED IN WARM-HUMID LOCATIONS AS DEFINED BY FIGURE N1101.7 AND TABLE N1101.7. g. OR INSULATION SUFFICIENT TO FILL THE FRAMING CAVITY. R-19 MINIMUM.
- h. THE FIRST VALUE IS CAVITY INSULATION, THE SECOND VALUE IS CONTINUOUS INSULATION, SO "13+5" MEANS R-13 CAVITY INSULATION PLUS R-5 INSULATED SHEATHING. "15+3" MEANS R-15 CAVITY INSULATION. PLUS R-3 INSULATED SHEATHING. IF STRUCTURAL SHEATHING COVERS 25% OR LESS OF THE EXTERIOR
- $\underline{\textbf{INSULATING SHEATHING IS NOT REQUIRED WHERE THE STRUCTURAL SHEATHING IS USED. IF STRUCTURAL SHEATHING COVERS MORE THAN 25 PERCENT AND ADDRESS MORE THAN 25 PERCENT ADDRESS MORE THAN 25 PERCENT$ $\underline{\text{OF THE EXTERIOR, SHALL BE SUPPLEMENTED WITH INSULATED SHEATHING OF AT LEAST R-2.}} \text{"} 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{"} 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{"} 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{"} 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY INSULATED SHEATHING OF AT LEAST R-2.} \text{ } 13 + 2.5 \text{"} \text{ MEANS R-13 CAVITY R-13 CAVI$
- i. FOR MASS WALLS, THE SECOND R-VALUE APPLIES WHEN MORE THAN HALF THE INSULATION IS ON THE INTERIOR MASS WALL. j. IN ADDITION TO THE EXEMPTION IN SECTION N1102.3.3, A MAXIMUM OF TWO GLAZED FENESTRATION PRODUCT ASSEMBLIES HAVING A U-FACTOR NO GREATER THAN 0.55 SHALL BE
- $\underline{\textbf{PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLIES WITHOUT PENALTY}.$ k. IN ADDITION TO THE EXEMPTION IN SECTION N1102.3.3, A MAXIMUM OF TWO GLAZED FENESTRATION PRODUCT ASSEMBLIES HAVING A SHGC NO GREATER THAN 0.70 SHALL BE PERMITTED TO BE SUBSTITUTED FOR MINIMUM CODE COMPLIANT FENESTRATION PRODUCT ASSEMBLIES WITHOUT PENALTY.
- R-30 SHALL BE DEEMED TO SATISFY THE CEILING INSULATION REQUIREMENT WHEREVER THE FULL HEIGHT OF UNCOMPRESSED R-30 INSULATION EXTENDS OVER THE WALL TOP PLATE

 AT THE EAVES. OTHERWISE R-38 INSULATION IS REQUIRED WHERE ADEQUATE CLEARANCE EXISTS OR INSULATION MUST EXTEND TO EITHER THE INSULATION BAFFLE OR WITHIN 1 INCH
- m. TABLE VALUE REQUIRED EXCEPT FOR ROOF EDGE WHERE THE SPACE IS LIMITED BY THE PITCH OF THE ROOF; THERE THE INSULATION MUST FILL THE SPACE UP TO THE AIR BAFFLE. n. R. -19 FIBERGLASS BATTS COMPRESSED AND INSTALLED IN A NOMINAL 2 × 6 FRAMING CAVITY IS DEEMED TO COMPLY. FIBERGLASS BATTS RATED R-19 OR HIGHER COMPRESSED AND INSTALLED IN A 2X4 WALL IS NOT DEEMED TO COMPLY.
- 2. BASEMENT WALL MEETING THE MINIMUM MASS WALL SPECIFIC HEAT CONTENT REQUIREMENT MAY USE THE MASS WALL R-VALUE AS THE MINIMUM REQUIREMENT.

-- SQ. FT. OF CRAWL SPACE / 150 = -- SQ. FT. OF REQ'D VENTILATION WITHOUT CROSS VENTILATION -- SQ. FT. OF VENTILATION REQ'D / 0.45 SQ.FT. PER VENT = -- VENTS REQ'D1

-- SQ. FT. OF CRAWL SPACE / 1500 = -- SQ. FT. OF REQ'D VENTILATION WITH CROSS VENTILATION -- SQ. FT. OF VENTILATION REQ'D / 0.45 SQ.FT. PER VENT = - VENTS REQ'D2

PROVIDE ADEQUATE VENTILATION AT ALL POINTS AND TO PREVENT DEAD AIR POCKETS.

2) THE TOTAL AREA OF VENTILATION OPENINGS MAY BE REDUCED TO 1/1500 OF THE CRAWL SPACE GROUND AREA WHERE THE REQUIRED OPENINGS ARE PLACED SO AS TO PROVIDE CROSS VENTILATION OF THE CRAWL SPACE. THE INSTALLATION OF OPERABLE LOUVERS SHALL NOT BE PROHIBITED. ONE FOUNDATION VENT SHALL BE WITHIN 3 FEET OF EACH CORNER OF THE BUILDING. TO PREVENT RAINWATER ENTRY WHEN THE CRAWL SPACE IS BUILT ON A SLOPED SITE, THE UPHILL FOUNDATION WALLS MAY BE CONSTRUCTED WITHOUT WALL VENT OPENINGS. VENT DAMS SHALL BE PROVIDED VHEN THE BOTTOM OF THE FOUNDATION VENT OPENING IS LESS THAN 4 INCHES ABOVE THE FINISHED

WALL VENTED CRAWL SPACES REQUIRE FULL COVERAGE GROUND VAPOR RETARDERS.

-- SQ. FT. OF ATTIC / 300 = -- SQ. FT. INLETS/OUTLETS REQUIRED 1) CALCULATION BASED ON VENTILATORS USED AT LEAST 3'-0" ABOVE HE COMICE VENTS WITH THE BALANCE OF VENTILATION PROVIDED

\ CRAWL SPACE VENTILATION CALCULATION



DEFINITIONS FOR COMMON ABBREVIATIONS

ALT	=	ALTERNATE	MAX	=	MAXIMUM
CANT	=	CANTILEVER	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
DIA	=	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
FTG	=	FOOTING	TYP	=	TYPICAL
GALV	=	GALVANIZED	UNO	=	UNLESS NOTED OTHERWISE
HORIZ	=	HORIZONTAL	W	=	WIDE FLANGE BEAM
HT	=	HEIGHT	WWF	=	WELDED WIRE FABRIC
MANUF	=	MANUFACTURER	XJ	=	EXTRA JOIST

MAXIMUM HEIGHT OF DECK SUPPORT POSTS AS FOLLOWS:

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

- THIS TABLE IS BASED ON NO. 2 TREATED SOUTHERN PINE POSTS. MAXIMUM TRIBUTARY AREA IS BASED ON 128 TOTAL SQUARE FEET
- WHICH MAY BE LOCATED AT DIFFERENT LEVELS. FROM TOP OF FOOTING TO BOTTOM OF GIRDER
- *** DECKS WITH POST HEIGHTS OVER 20'-0" SHALL BE DESIGNED AND SEALED BY A PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT.
- 2) DECKS SHALL BE BRACED TO PROVIDE LATERAL STABILITY BY ONE OF THESE METHODS:
- A. THE DECK FLOOR HEIGHT IS LESS THAN 4'-0" AND THE DECK IS

ATTACHED TO THE STRUCTURE IN ACCORDANCE WITH SECTION (4)

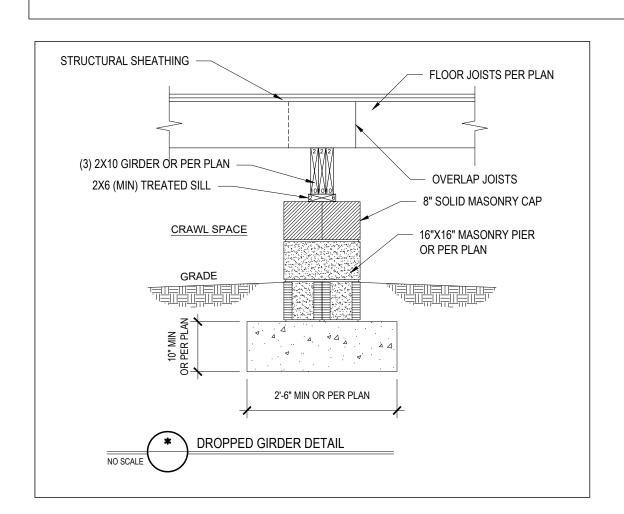
TO THE POST AND GIRDER WITH ONE 5/8"Ø HOT DIPPED GALVANIZED

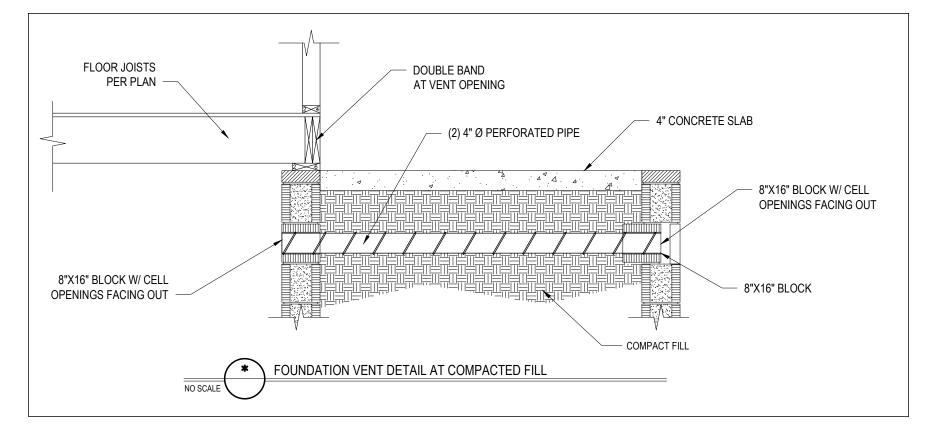
- ABOVE. LATERAL BRACING IS NOT REQUIRED. B. 4 x 4 WOOD KNEE BRACES MAY BE PROVIDED ON EACH COLUMN IN BOTH DIRECTIONS. THE KNEE BRACES SHALL ATTACH TO EACH POST AT A POINT NOT LESS THAN 1/3 OF THE POST LENGTH FROM THE TOP OF THE POST, AND THE BRACES SHALL BE ANGLED BETWEEN 45° AND 60° FROM THE HORIZONTAL. KNEE BRACES SHALL BE BOLTED
- BOLT AT EACH END OF THE BRACE. C. FOR FREESTANDING DECKS WITHOUT KNEE BRACES OR DIAGONAL BRACING, LATERAL STABILITY MAY BE PROVIDED BY EMBEDDING THE

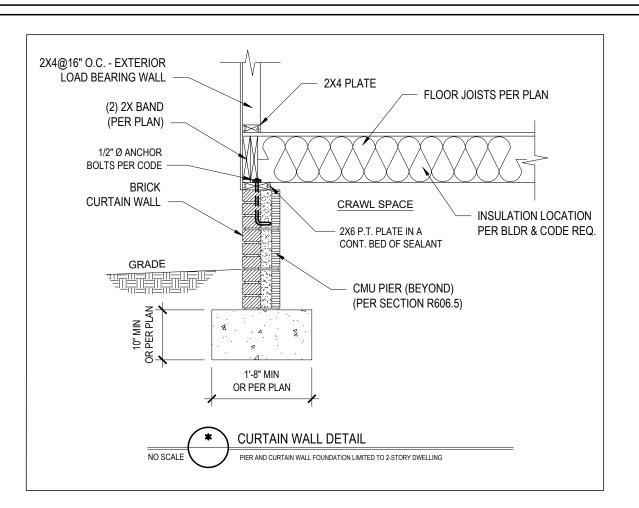
POSTS IN ACCORDANCE WITH THE FOLLOWING:

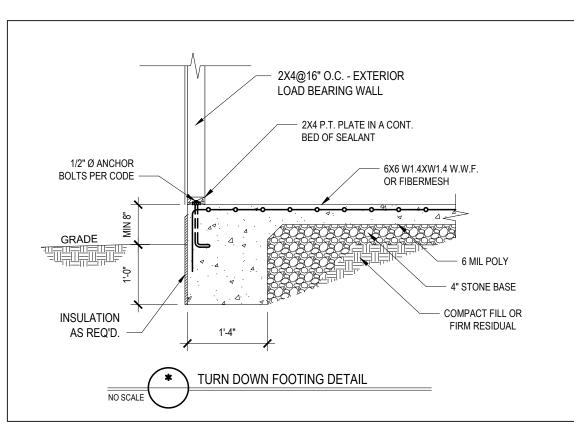
Г			I		
	POST SIZE	MAX. TRIBUTARY AREA	MAX. POST HEIGHT	EMBEDMENT DEPTH	CONCRETE DIAMETER
	4 x 4	48 SQ. FT.	4'-0"	2'-6"	1'-0"
	6 x 6	120 SQ. FT.	6'-0"	3'-6"	1'-8"

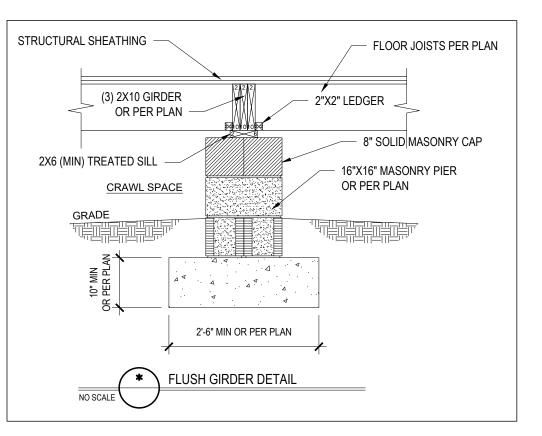
D. 2 x 6 DIAGONAL VERTICAL CROSS BRACING MAY BE PROVIDED IN TWO (2) PERPENDICULAR DIRECTIONS FOR FREESTANDING DECKS OR PARALLEL TO THE STRUCTURE AT THE EXTERIOR COLUMN LINE FOR ATTACHED DECKS. THE 2 x 6s SHALL BE ATTACHED TO THE POSTS WITH ONE 5/8"Ø HOT DIPPED GALVANIZED BOLT AT EACH END OF EACH BRACING MEMBER. E. FOR EMBEDMENT OF PILES IN COASTAL REGIONS, SEE CHAPTER 46.











2X SILL PLATE -

CONCRETE

FOOTING SECTION A

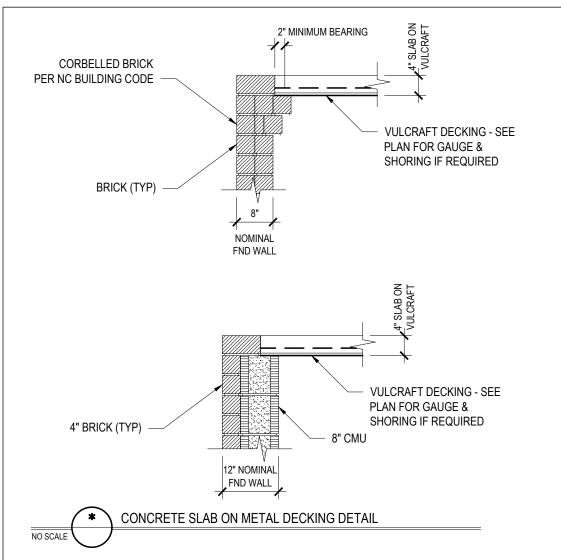
STEPPED FOOTING

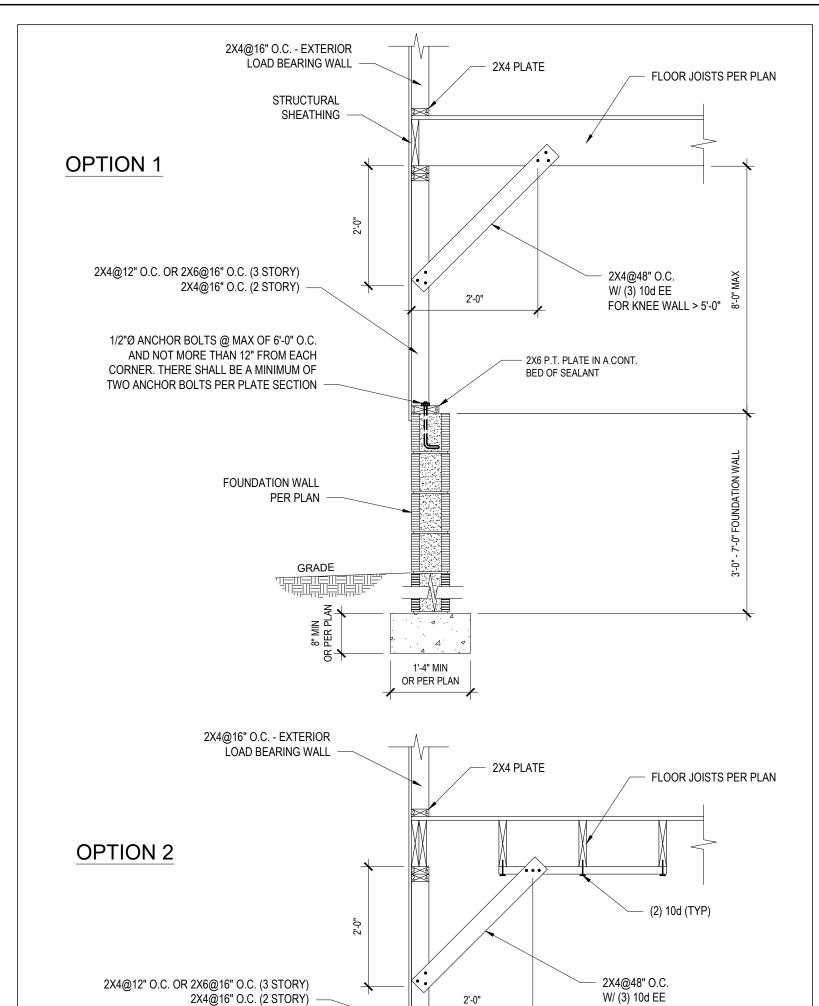
2'-0"

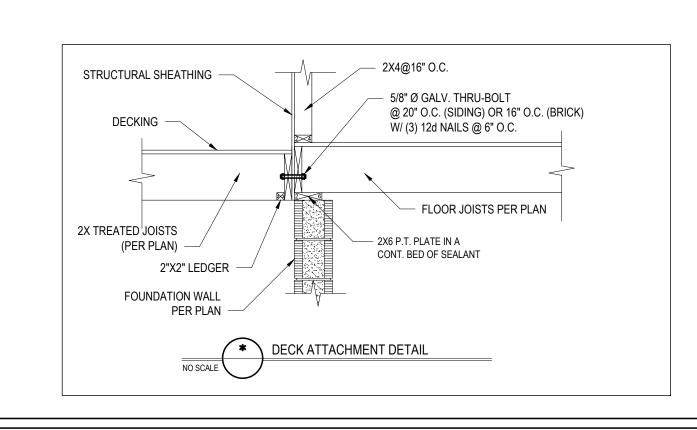
2'-0"

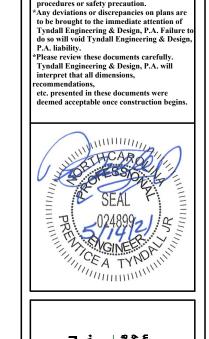
STEP DOWN FOUNDATION AT CRIPPLE WALL

USED WITH BOTH OPTIONS ABOVE









FOR KNEE WALL > 5'-0"

WHERE FOOTING SECTION "A" IS MORE THAN 8'-0"

PROVIDE METAL TIE 16 GA X 1.5 X 4'-0" MI.,

2X4@12" O.C. OR 2X6@16" O.C. (3 STORY)

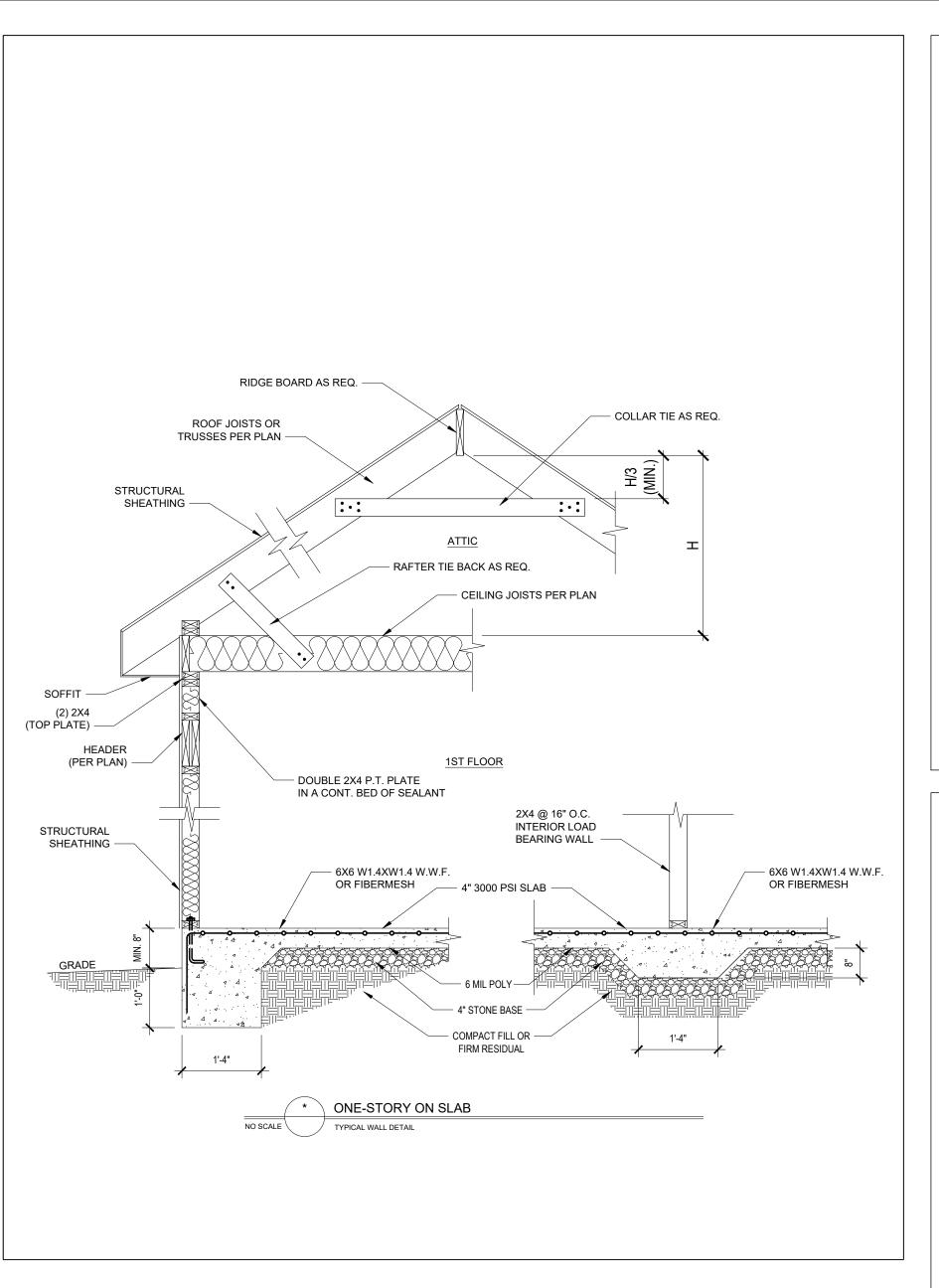
EACH SIDE OF SPLICE W/ 8-16d

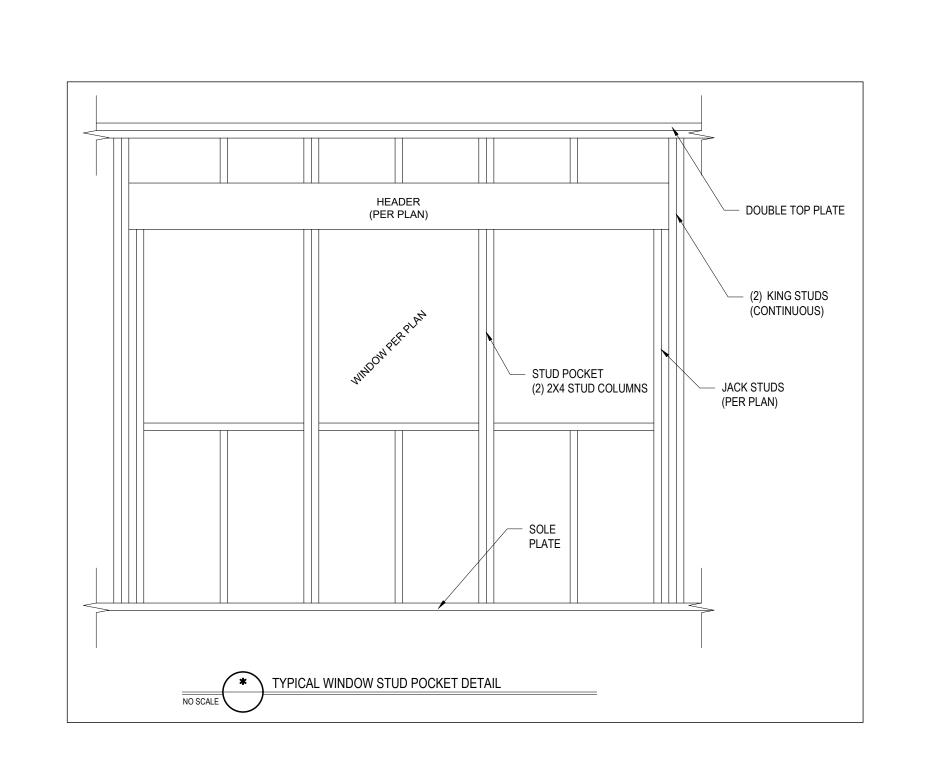
DRB2101-0068 05/14/21 Drawn/Design By: IJE/LKC DWG. Checked By: PAT

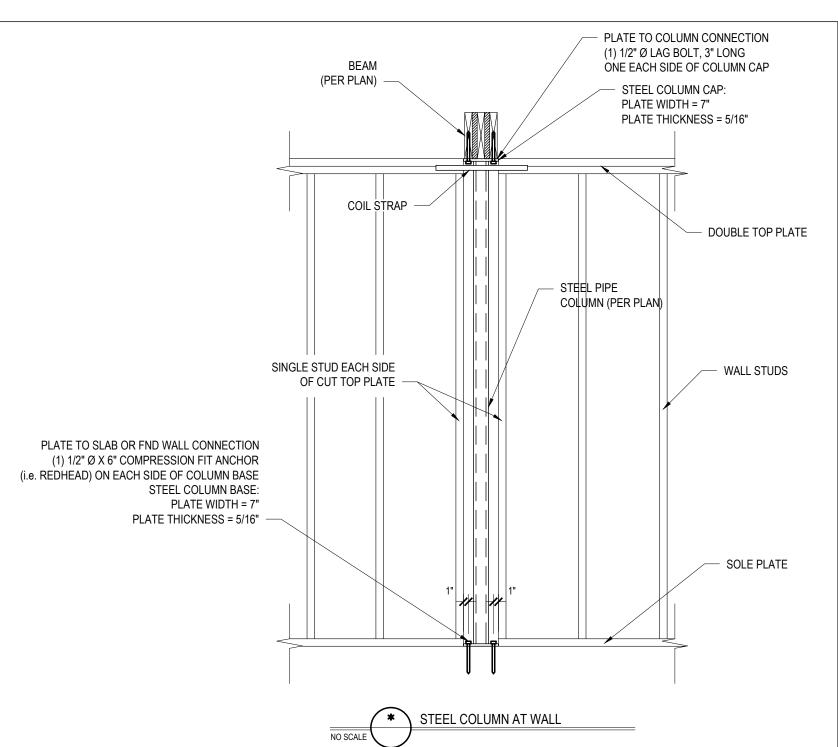
SEE PLAN

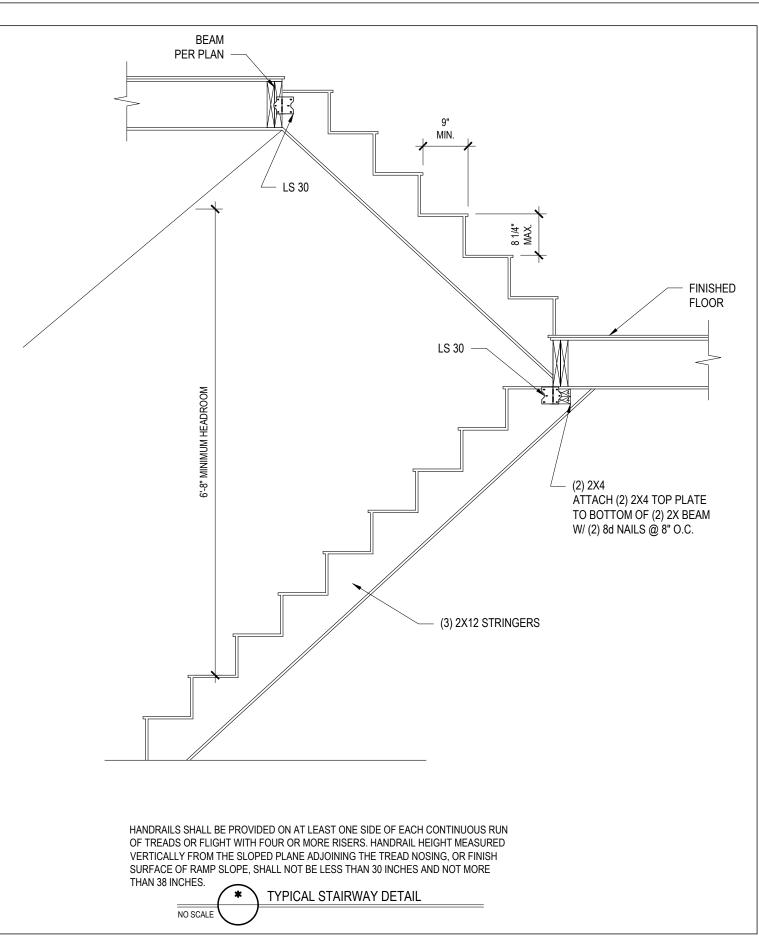
REVISIONS Date:

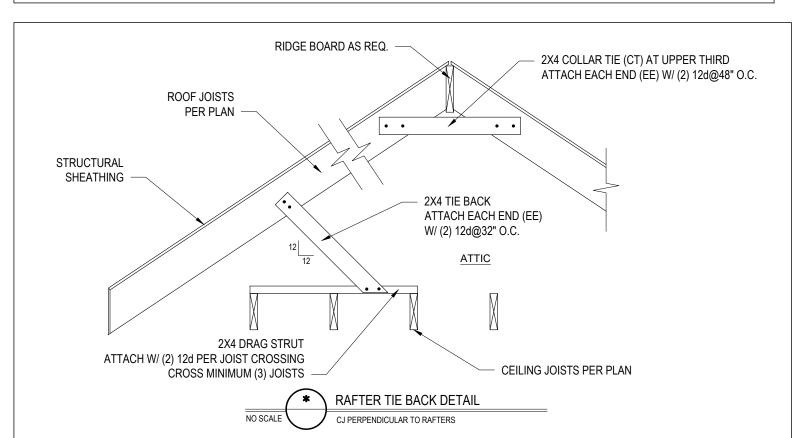
Sheet Number

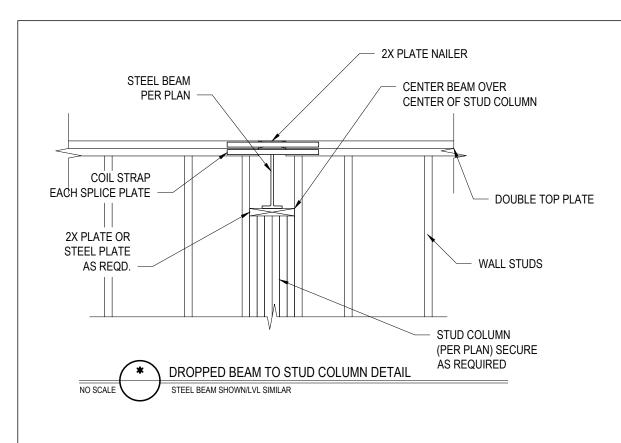


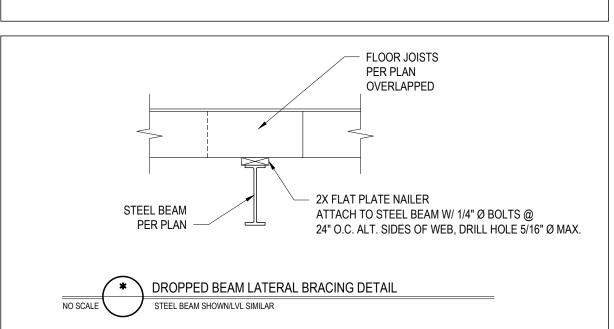


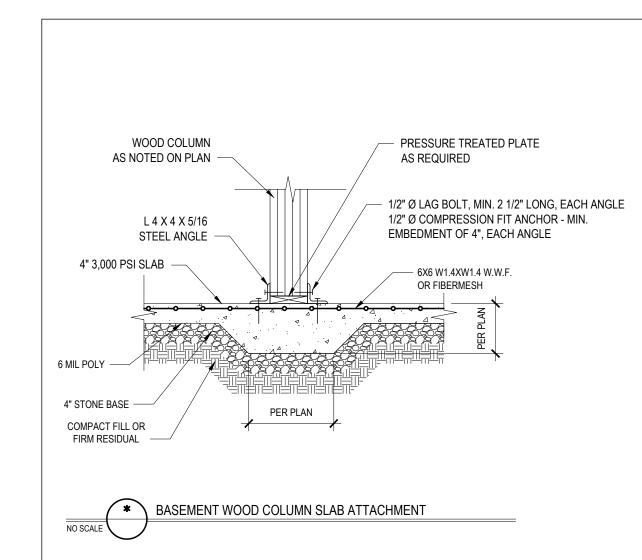


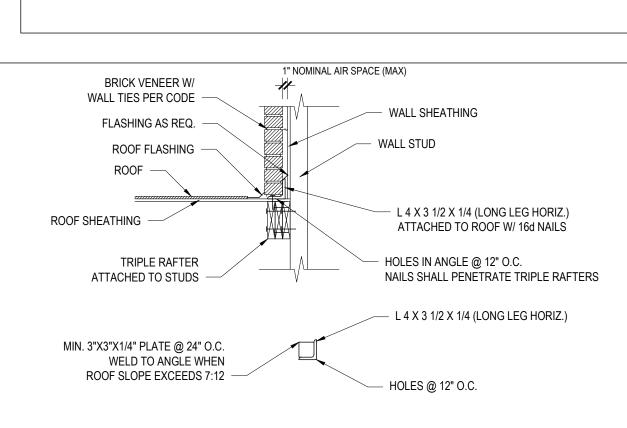












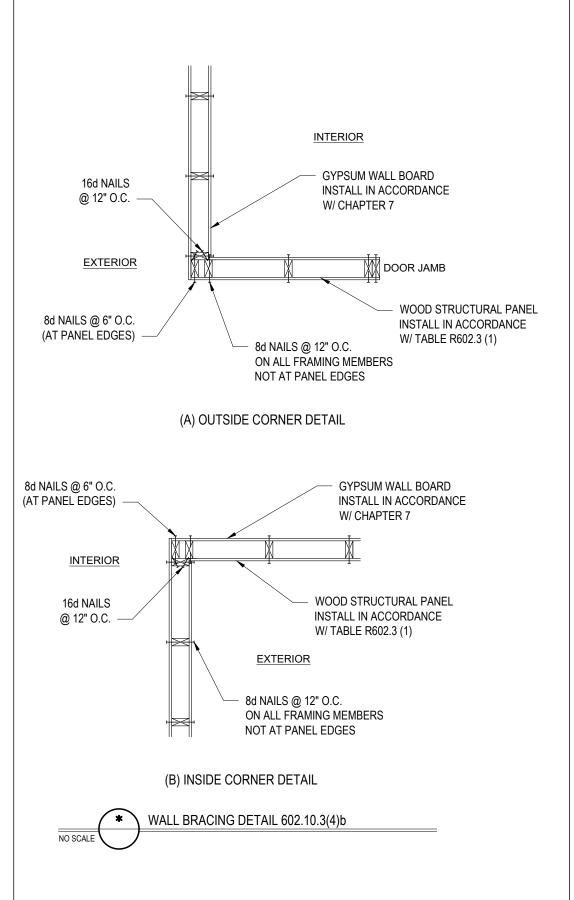
ALLOWABLE SPANS FOR LINTELS SUPPORTING MASONRY VENEER

SIZE OF ANGLE (1,3)	NO STORY ABOVE (5)	1 STORY ABOVE (5)	2 STORIES ABOVE (5)	# OF $\frac{1}{2}$ " (OR EQUIV.) REINFORCING BARS IN REINFORCED LINTEL (2,4,5)
L 3 x 3 x 1/4	6'-0"	4'-6"	3'-0"	1
L 4 x 3 x 1/4	8'-0"	6'-0"	4'-6"	1
L 5 x 3 ½ x 5/16	10'-0"	8'-0"	6'-0"	2
L 6 x 3 ½ x 5/16	14'-0"	9'-6"	7'-0"	2
2L 5 x 3 ½ x 5/16	20'-0"	12'-0"	9'-6"	4

- 1. LONG LEG OF THE ANGLE SHALL BE PLACED IN A VERTICAL POSITION. DEPTH OF REINFORCED LINTELS SHALL NOT BE LESS THAN 8" AND ALL CELLS OF HOLLOW MASONRY LINTELS SHALL
- BE GROUTED. REINFORCING BARS SHALL EXTEND NOT LESS THAN 8" INTO THE SUPPORT 3. STEEL MEMBERS INDICATED ARE ADEQUATE TYPICAL EXAMPLES; OTHER STEEL MEMBERS MEETING STRUCTURAL
- DESIGN REQUIREMENTS SHALL BE PERMITTED TO BE USED. 4. EITHER STEEL ANGLE OR REINFORCED LINTEL SHALL SPAN OPENING

5.	SPANS OVER 4'-0" SHALL BE SHORED UP UNTIL CURED.			
	*	MASONRY VENEER SUPPORT FIG 703.8.3.1		
	NO SCALE			

HARDWARE CI	ROSS-REFERENCE CHART
SIMPSON STRONG-TIE	USP STRUCTURAL CONNECTORS
PRODUCT NUMBER	PRODUCT NUMBER
A35	MPA1
∤ BE	PAE
CBSQ	CBSQ
CCQ	KCCQ
CMSTC16	CMSTC16
S	RS
11	RT15
12.5A	RT7A
110	RT16
HDQ8-SDS3	UPHD8
HDU2-SDS2.5	PHD2
HDU5-SDS2.5	PHD5
HETA	НТА
IGAM10KTA	HGAM
HHDQ14-SDS2.5	UPHD14
ITS	HTW
ІТТ	НТТ
HUS	HUS
.TA1	LPTA
THJA26	HJC26
TP4	MP4F
US	JUS
MAS	FA3
MSTAM	MSTAM
PC	PCM
PHD-SDS3	PHD
SSP	RSPT6
STC	TR1
STHD	STAD



2X4 @ 16" O.C.

2X4 PLATE

CANTILEVER SPAN

(PER PLAN)

____ 2X BAND

FLOOR JOISTS

2X4 @ 16" O.C.

OR PER PLAN -

BACK SPAN MIN. 3X

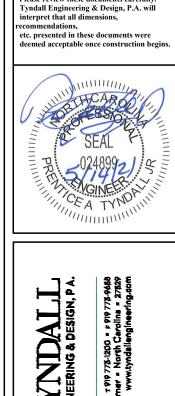
CANTILEVER SPAN

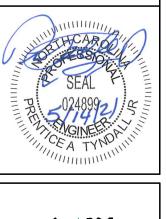
(OR PER PLAN)

* CANTILEVER FLOOR JOIST DETAIL

(PER PLAN) —

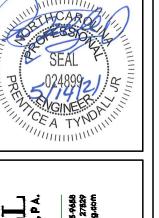
OR PER PLAN -

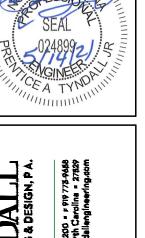




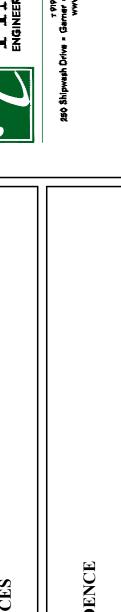
*Engineers seal does not include construction means, methods, techniques, sequences, procedures or safety precaution. *Any deviations or discrepancies on plans are to be brought to the immediate attention of Tyndall Engineering & Design, P.A. Failure to do so will void Tyndall Engineering & Design, P.A. liability.

P.A. liability. Please review these documents carefully.







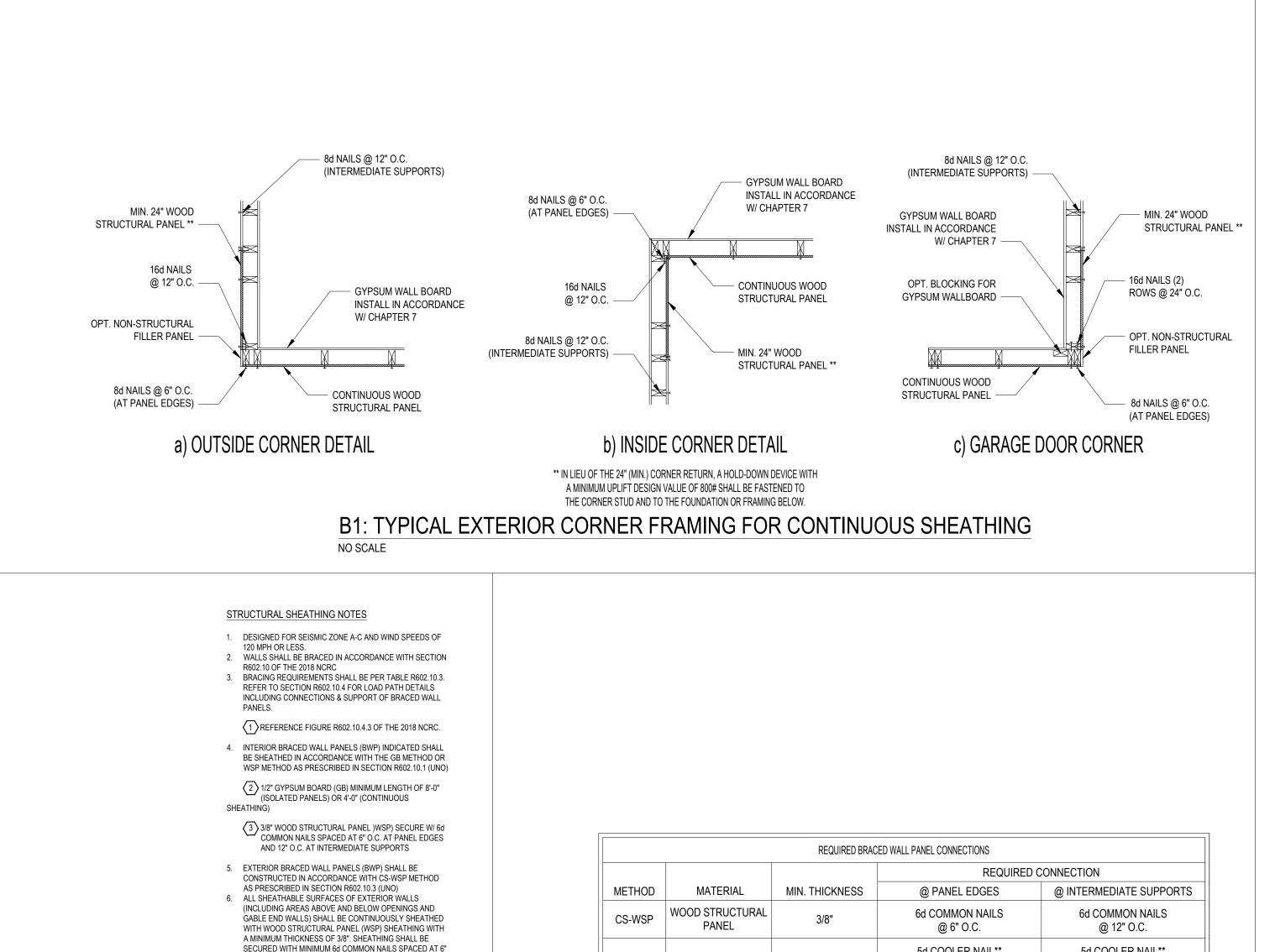


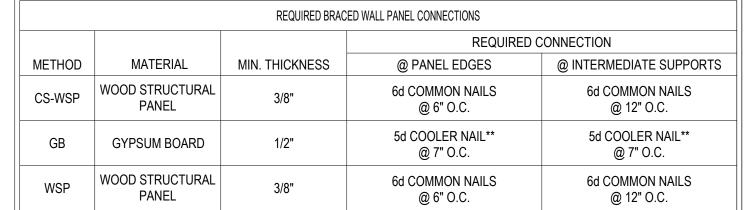
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Date:
05/14/21
Drawn/Design By:
IJE/LKC
DWG. Checked By:
PAT
Scale:
SEE PLAN

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REVISIONS					
<u>No.</u>	Date:	Remarks			
1					
<u>^2</u>					
<u></u>					
<u>_4</u>					

Sheet Number





**OR EQUIVALENT PER TABLE R702.3.5

B3: BRACE WALL PANEL CONNECTIONS

NO SCALE

O.C. AT PANEL EDGES AND SPACED AT 12" O.C. AT

'. MINIMUM BRACED WALL PANEL LENGTHS WITH CS-WSP

- 24" ADJACENT TO OPENINGS NOT MORE THAN 67%

- 48" FOR OPENINGS GREATER THAN 85% OF WALL

PANEL CORNER RETURN SHALL BE PROVIDED AT BOTH

ENDS OF A BRACED WALL LINE IN ACCORDANCE WITH

WITH A MINIMUM UPLIFT DESIGN VALUE OF 800# SHALL BE

CLOSEST TO THE CORNER AND TO THE FOUNDATION OR

FASTENED TO THE EDGE OF THE BRACED WALL PANEL

FIGURE R602.10.3 (4). IN LIEU OF A CORNER RETURN, EITHER A MINIMUM 48" BRACED WALL PANEL SHALL BE PROVIDED AT THE CORNER OR A HOLD-DOWN DEVICE

- 30" ADJACENT TO OPENINGS GREATER THAN 67% AND

INTERMEDIATE SUPPORTS.

OF WALL HEIGHT

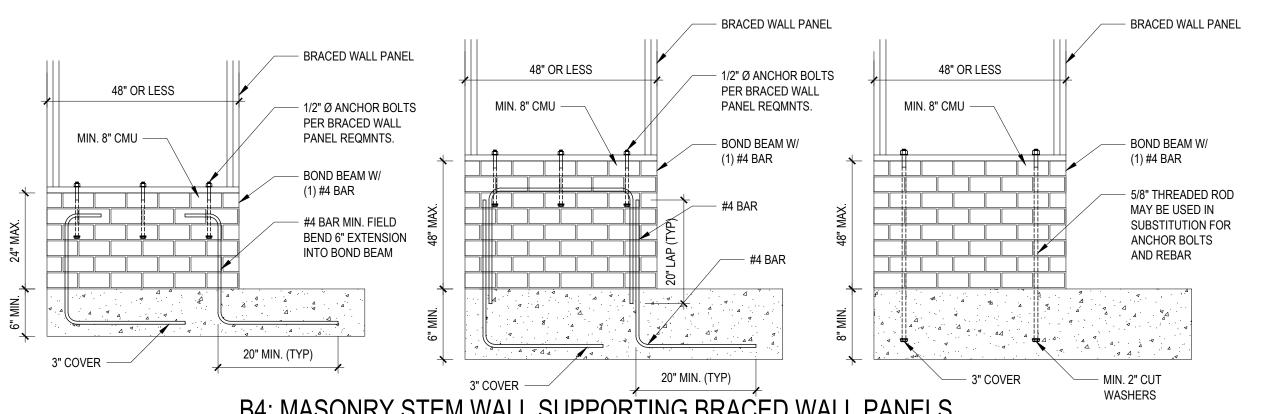
METHOD SHALL BE AS FOLLOWS:

LESS THAN 85% OF WALL HEIGHT

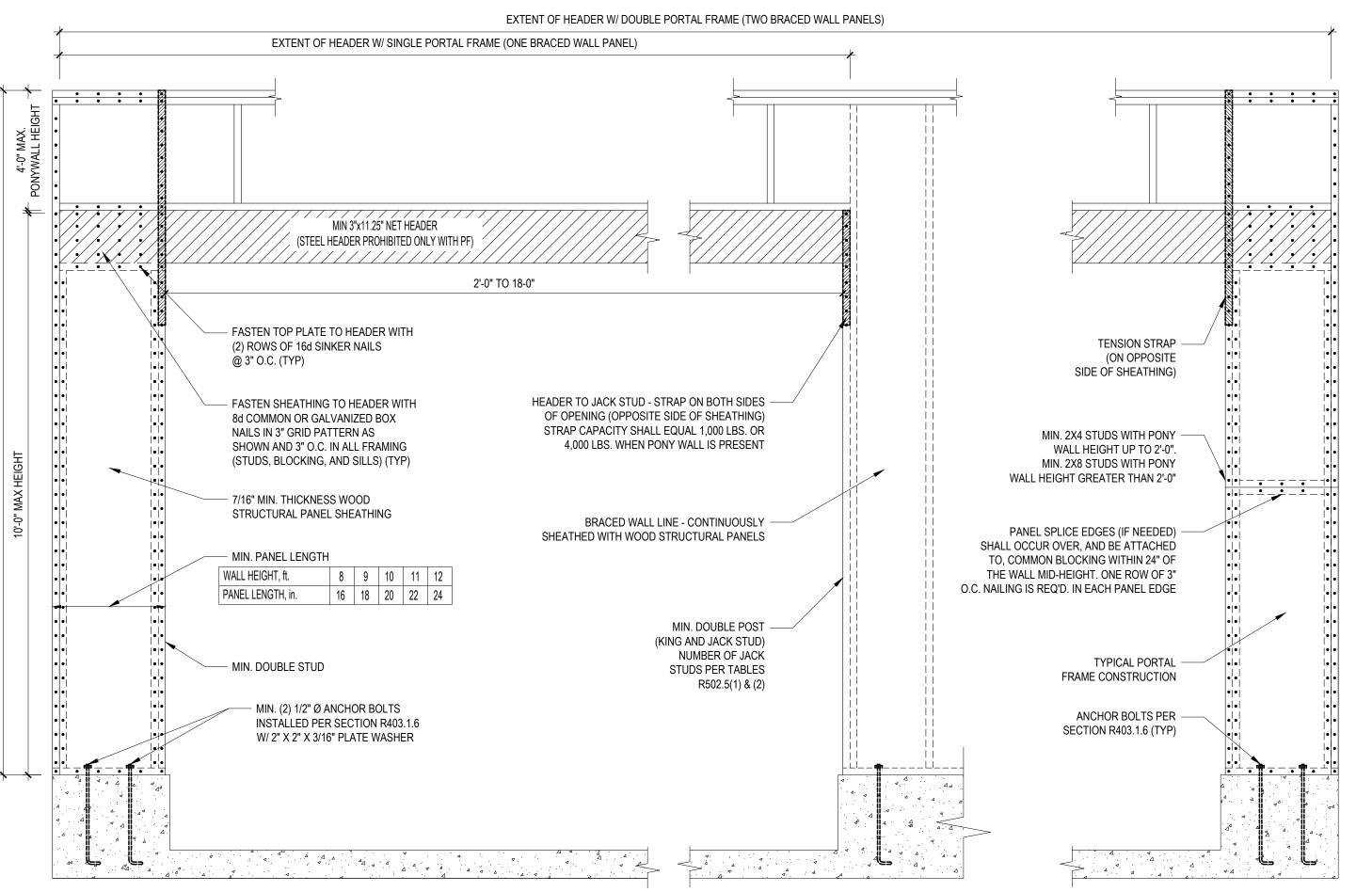
 $\overline{\langle 4 \rangle}$ SHEATH INTERIOR AND EXTERIOR

5 MINIMUM 800# HOLD-DOWN DEVICE

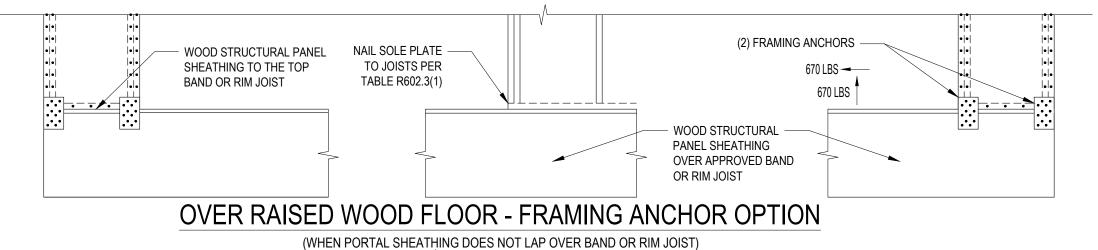
8. FOR CS-WSP METHOD, A MINIMUM 24" BRACED WALL



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



OVER CONCRETE OR MASONRY BLOCK FOUNDATION



ATTACH SHEATHING TO BAND NAIL SOLE PLATE WOOD STRUCTURAL PANEL OR RIM JOIST WITH 8d COMMON TO JOISTS PER SHEATHING TO THE TOP NAILS 3" O.C. TOP AND BOTTOM BAND OR RIM JOIST TABLE R602.3(1) WOOD STRUCTURAL PANEL SHEATHING OVER APPROVED BAND OR RIM JOIST

> OVER RAISED WOOD FLOOR - OVERLAP OPTION (WHEN PORTAL SHEATHING LAPS OVER BAND OR RIM JOIST)

B2: METHOD CS-PF: CONTINUOUSLY SHEATHED PORTAL FRAME FIGURE R602.10.1

ocedures or safety precaution. Any deviations 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 Please review these documents carefully Tyndall Engineering & Design, P.A. will interpret that all dimensions, etc. presented in these documents were



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SEE PLAN

REVISIONS Date:

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