GENERAL NOTES:

1. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THAT ALL DIMENSIONS, ROOF PITCHES, AND SQUARE FOOTAGE ARE CORRECT PRIOR TO CONSTRUCTION. K&A HOME DESIGNS, INC. IS NOT RESPONSIBLE FOR ANY DIMENSIONING, ROOF PITCH, OR SQUARE FOOTAGE ERRORS ONCE CONSTRUCTION BEGINS.
2. ALL WALLS SHOWN ON THE FLOOR PLANS ARE DRAWN AT 4" UNLESS NOTED OTHERWISE.
3. ALL ANGLED WALL SHOWN ON THE PLANS ARE 45 DEGREES UNLESS NOTED OTHERWISE.
4. STUD WALL DESIGN SHALL CONFORM TO ALL NORTH CAROLINA STATE BUILDING CODE REQUIREMENTS.
5. DO NOT SCALE PLANS. DRAWING SCALE MAY BE DISTORTED DUE TO COPIER IMPERFECTIONS.
6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH NORTH CAROLINA RESIDENTIAL STATE BUILDING CODE, 2018 EDITION.

SQUARE FOOTAGE

HEATED SQUARE FOOTAGE		UNHEATED SQUARE FOOTAGE	
FIRST FLOOR=	1731	GARAGE=	481
SECOND FLOOR=	N/A	FRONT PORCH=	203
THIRD FLOOR=	N/A	CVD. PORCH=	121
BASEMENT=	N/A	3RD CAR GARAGE=	278
		STORAGE=	N/A
TOTAL HEATED=	1731	TOTAL UNHEATED=	1110

CRAWL SPACE VENTILATION CALCULATIONS

-VENT LOCATIONS MAY VARY FROM THOSE SHOWN ON THE PLAN BUT SHOULD BE PLACED TO PROVIDE ADEQUATE VENTILATION AT ALL POINTS TO PREVENT DEAD AIR POCKETS.

-100% VAPOR BARRIER MUST BE PROVIDED WITH 12" MIN. LAP JOINTS.

-THE TOTAL AREA OF VENTILATION OPENINGS MAY BE REDUCED TO 1/1500 AS LONG AS REQUIRED OPENINGS ARE PLACED SO AS TO PROVIDE CROSS-VENTILATION OF THE SPACE. THE INSTALLATION OF OPERABLE LOUVERS SHALL NOT BE PROHIBITED. (COMPLY WITH NC CODE MIN. WITH REGARD TO VENT PLACEMENT FROM CORNERS)

1731 SQ. FT. OF CRAWL SPACE/1500

1.15 SQ. FT. OF REQUIRED VENTILATION

PROVIDED BY: 3 VENTS AT 0.45 SQ. FT. NET FREE

VENTILATION EACH= 1.35 SQ. FT. OF VENTILATION

*****FOUNDATION DRAINAGE- WATERPROOFING PER SECTIONS 405 & 406.***

ATTIC VENTILATION CALCULATIONS

- CALCULATIONS SHOWN BELOW ARE BASED ON VENTILATORS USED AT LEAST 3 FT. ABOVE THE CORNICE VENTS WITH THE BALANCE OF VENTIALTION PROVIDED BE EAVE VENTS.

- CATHEDRAL CEILINGS SHALL HAVE A MIN. 1" CLEARANCE BETWEEN THE BOTTOM OF THE ROOF DECK AND THE INSULATION.

2814 SQ. FT. OF ATTIC/300= 9.38

EACH OF INLET AND OUTLET REQUIRED.

****WALL AND ROOF CLADDING DESIGN VALUES***

- WALL CLADDING IS DESIGNED FOR A 24.1 SQ. FT. OR GREATER POSITIVE AND NEGATIVE PRESSURE.

- ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE AS FOLLOWS:

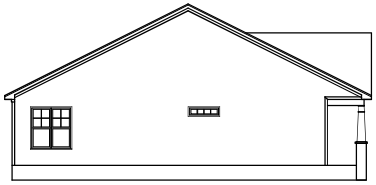
45.5 LBS. PER SQ. FT. FOR ROOF PITCHES OF 0/12 TO 2.25/12

34.8 LBS. PER SQ. FT. FOR ROOF PITCHES OF 2.25/12 TO 7/12

21 LBS. PER SQ. FT. FOR ROOF PITCHES OF 7/12 TO 12/12

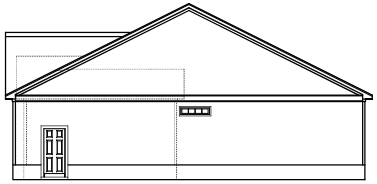
***** MEAN ROOF HEIGHT 30' OR LESS***

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



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

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



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

Project #: 24-208
Date: 5-22-24
Drawn/Design By: KBB
Scale: REFER TO ELEV.

REVISIONS

No.	Date:	Remarks
1		
2		
3		
4		

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Project Name: Tyler Plan-GR

Client Name: Neuse River Homes LLC
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ELEVATIONS

Sheet Number
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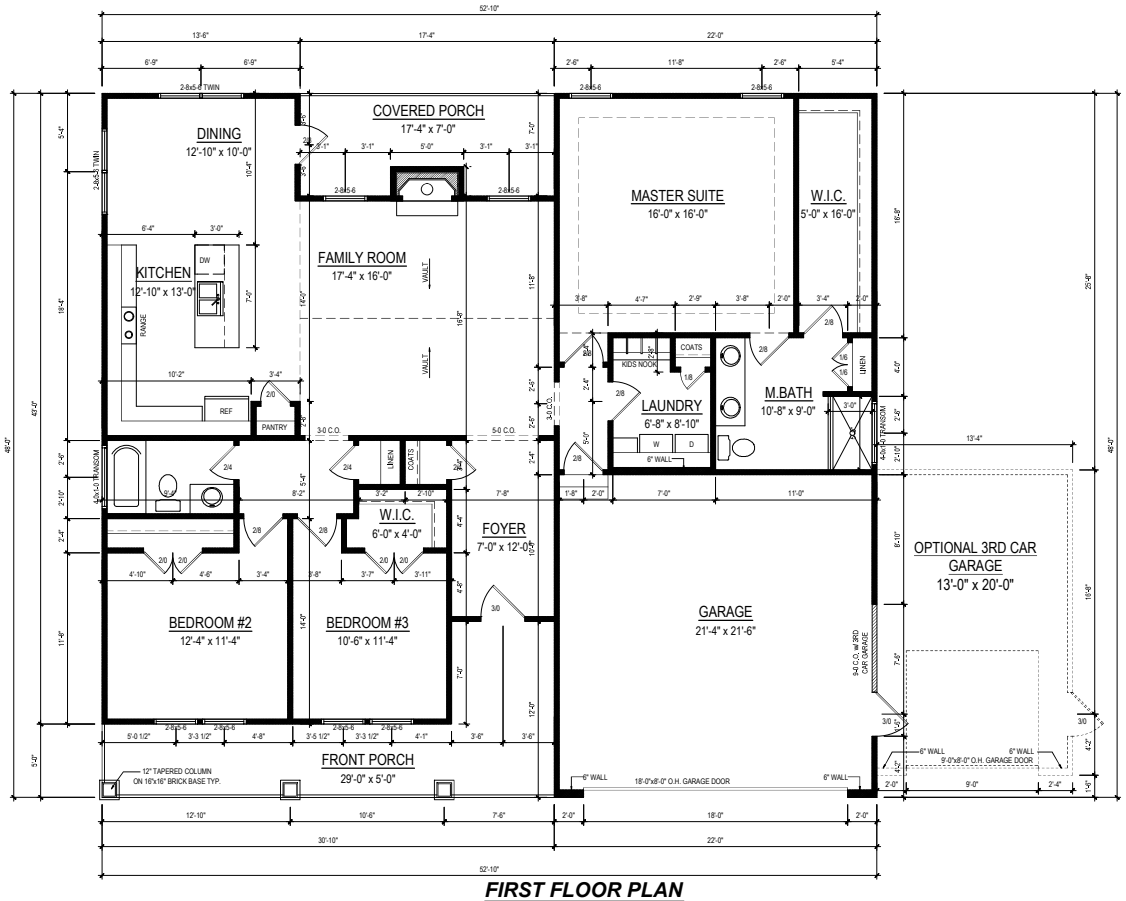
of 2



FIRST FLOOR PLAN

1/4" = 1'-0" *CEILING HT. = 9'-0"*

Project #: 24-208
Date: 5-22-24
Drawn/Design By: KBB
Scale: 1/4" = 1-0"

REVISIONS

No.	Date:	Remarks
1		
2		
3		
4		

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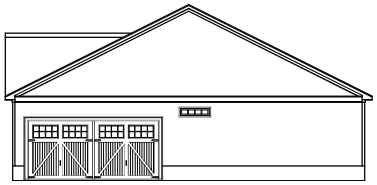
Clayton, NC 27528

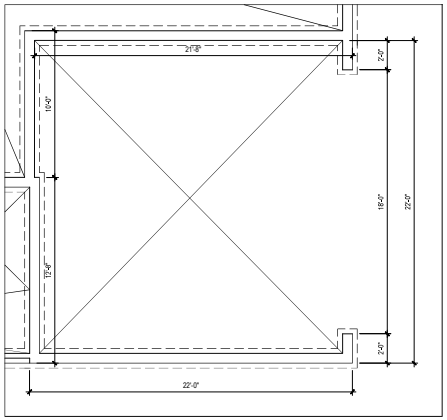
FIRST FLOOR

Sheet Number
2
of 2

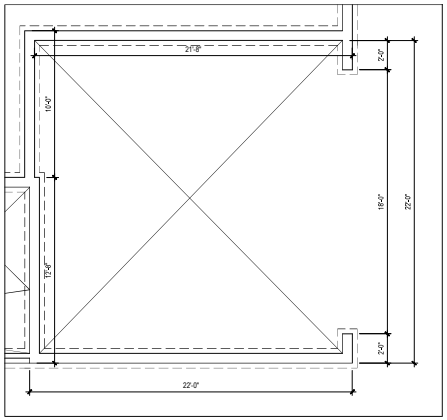
FRONT ELEVATION
1/4" = 1'-0"



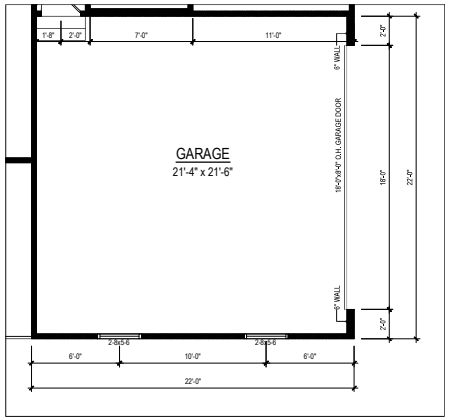
RIGHT ELEVATION
1/8" = 1'-0"



SIDE LOAD OPTION: STEM WALL
1/4" = 1'-0" CEILING HT. = 9'-0"



SIDE LOAD OPTION: CRAWL SPACE
1/4" = 1'-0" CEILING HT. = 9'-0"



SIDE LOAD OPTION: FLOOR PLAN
1/4" = 1'-0" CEILING HT. = 9'-0"

Project #: 24-208
Date: 5-22-24
Drawn/Design By: KBB
Scale: REFER TO PLAN

REVISIONS

No.	Date:	Remarks
1		
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Sheet Name: *Neuse River Homes LLC*
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Clayton, NC 27528

SIDE LOAD OPTION

Sheet Number
1
of 1

1) GENERAL STRUCTURAL NOTES:

1.1) THE DESIGN PROFESSIONAL WHOSE SEAL APPEARS ON THESE DRAWINGS IS THE STRUCTURAL ENGINEER OF RECORD (SER) FOR THIS PROJECT. THE SER BEARS RESPONSIBILITY FOR THE STRUCTURAL COMPONENTS INCLUDING RAFTERS, HIPS, VALLEYS, RIDGES, CEILING AND FLOOR JOISTS, LOAD-BEARING WALLS, BEAMS AND HEADERS, COLUMNS AND POSTS, CANTILEVERS, PIERS, GIRDERS, AND FOOTINGS.

1.2) THE SER DOES NOT CERTIFY THE DIMENSIONAL ACCURACY OF THE ARCHITECTURAL DRAWINGS, INCLUDING THE ROOF. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW THE ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO CONSTRUCTION AND NOTIFY THE SER OF ANY DISCREPANCIES AND/OR INCOMPLETE INFORMATION.

1.3) THE SER IS NOT RESPONSIBLE FOR I-JOIST AND/OR FLOOR AND ROOF TRUSS DESIGN AND LAYOUT. FLOOR AND ROOF TRUSSES ARE TO BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW FINAL TRUSS DRAWINGS PRIOR TO CONSTRUCTION AND NOTIFY THE SER OF ANY DISCREPANCIES.

1.4) THE SER IS NOT RESPONSIBLE FOR VERIFICATION OF ASSUMED FIELD CONDITIONS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ASSUMED FIELD CONDITIONS ARE MET OR EXCEEDED PRIOR TO CONSTRUCTION AND NOTIFY THE SER OF ANY DISCREPANCIES.

1.5) THE STRUCTURE IS ONLY STABLE IN ITS COMPLETED FORM. THE CONTRACTOR SHOULD PROVIDE ALL REQUIRED TEMPORARY BRACING DURING CONSTRUCTION TO STABILIZE THE STRUCTURE.

1.6) THE SER DOES NOT BEAR RESPONSIBILITY FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, NOR SAFETY PRECAUTIONS IN CONNECTION WITH THE CONSTRUCTION OF THIS STRUCTURE. THE SER WILL NOT BE HELD RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT CONSTRUCTION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

1.7) ANY ERRORS DUE TO FAILURE TO FOLLOW THE ABOVE PROCEDURES SHALL NOT BE THE RESPONSIBILITY OF THE SER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE ANY REVISIONS ISSUED BY THE SER ARE PROMPTLY DISTRIBUTED TO THE SUBCONTRACTORS.

1.8) THE SER DOES NOT PERFORM FENESTRATION OR VENTING CALCULATIONS OR ANY OTHER CALCULATIONS THAT ARE NOT DIRECTLY RELATED TO THE STRUCTURAL DESIGN. IT IS THE RESPONSIBILITY OF THE ARCHITECTURAL DESIGNER AND/OR CONTRACTOR TO PROVIDE ANY REQUIRED CALCULATIONS OUTSIDE OF THE SCOPE OF THE STRUCTURAL DESIGN.

2) DESIGN SPECIFICATIONS:

2.1) BUILDING CODES:
- 2018 NORTH CAROLINA RESIDENTIAL CODE (NCRC)
- ASCE/SEI 7-10 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES"

2.2) DESIGN LIVE LOADS:

- ROOF	20 PSF
- UNINHABITABLE ATTICS WITHOUT STORAGE	10 PSF
- UNINHABITABLE ATTICS WITH LIMITED STORAGE	20 PSF
- HABITABLE ATTICS AND ATTICS SERVED WITH FIXED STAIRS	30 PSF
- SLEEPING AREAS	30 PSF
- LIVING AREAS	40 PSF
- DECKS AND BALCONIES	40 PSF
- STAIRS	40 PSF
- PASSENGER VEHICLE GARAGE	50 PSF

2.3) DESIGN DEAD LOADS:

- ROOF TRUSSES	20 PSF (10 PSF TC, 10 PSF BC)
- SOLID SAWN RAFTERS AND JOISTS	10 PSF
- I-JOISTS	12 PSF
- FLOOR TRUSSES	15 PSF (10 PSF TC, 5 PSF BC)
- INTERIOR WALLS	8 PSF
- EXTERIOR WALLS	10 PSF
- BRICK, MASONRY, AND NATURAL STONE VENEER	40 PSF
- CERAMIC TILE FLOORING	10 PSF
- NATURAL STONE TILE FLOORING	32 PSF
- NORMAL WEIGHT CONCRETE	145 PCF

2.4) DESIGN SNOW LOADS:

- GROUND SNOW LOAD	20 PSF

2.5) DESIGN LATERAL LOADS AND CRITERIA:

- ULTIMATE WIND SPEED	UP TO 130 MPH
- WIND EXPOSURE	B
- DESIGN WIND PRESSURE	24 PSF
- SEISMIC DESIGN CATEGORY	B

2.6) DESIGN SOIL LOADS:

- SOIL BEARING CAPACITY	2000 PSF (MINIMUM, ASSUMED)
- LATERAL SOIL PRESSURE	45 PCF (MAXIMUM, ASSUMED)

2.7) DESIGN DEFLECTION LIMITS:

	LIVE LOAD	TOTAL LOAD
- ROOF TRUSSES	L/360	L/240
- SOLID SAWN RAFTERS	L/240	L/180
- SOLID SAWN CEILING JOISTS	L/240	L/180
- I-JOISTS AND FLOOR TRUSSES	L/480	L/240
- SOLID SAWN FLOOR JOISTS	L/360	L/240
- BEAMS AND HEADERS	L/360	L/240
- FRAMING SUPPORTING CERAMIC TILE		L/360
- FRAMING SUPPORTING NATURAL STONE TILE		L/720 (7/32" MAX)
- LINTELS AND FRAMING SUPPORTING BRICK OR MASONRY		L/600 (9/32" MAX)

3) FOOTING AND FOUNDATION NOTES:

3.1) FOUNDATIONS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CHAPTER 4 OF THE 2018 NCRC.

3.1) VERIFICATION OF THE ASSUMED SOIL BEARING CAPACITY IS THE RESPONSIBILITY OF THE CONTRACTOR. CONCRETE FOOTINGS SHALL NOT BE PLACED UNTIL THE SOIL BEARING CAPACITY HAS BEEN VERIFIED BY A QUALIFIED GEOTECHNICAL ENGINEER OR BUILDING INSPECTOR. CONSULT THE SER SHOULD THE SOIL BEARING CAPACITY NOT BE MET OR IF ANY OTHER ADVERSE SOIL CONDITION IS ENCOUNTERED.

3.2) THE BOTTOM OF ALL FOOTINGS SHALL EXTEND A MINIMUM OF 12" BELOW GRADE OR BELOW THE FROST LINE FOR THE CONSTRUCTION LOCATION, WHICHEVER IS GREATER.

3.3) ANY COMPACTED FILL SHALL BE PLACED UNDER THE DIRECTION OF A QUALIFIED GEOTECHNICAL ENGINEER. THE RESULTING SOIL SHALL BE COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM DRY DENSITY.

3.4) FOOTINGS SHALL BE FREE OF VEGETATION, TOPSOIL, AND FOREIGN MATERIAL. NO CONCRETE SHALL BE PLACED AGAINST ANY SUBGRADE CONTAINING WATER, ICE, FROST, OR LOOSE MATERIAL.

3.5) FOOTINGS SUPPORTING FOUNDATION WALLS SHALL HAVE A MINIMUM PROJECTION OF 2" AT ALL SIDES. MAXIMUM FOOTING PROJECTION AT FOUNDATION WALLS SHALL NOT EXCEED THE THICKNESS OF THE FOOTING.

3.6) WOOD SILL PLATES SHALL BE ANCHORED TO THE FOUNDATION WITH 1/2" DIA ANCHOR BOLTS WITH MINIMUM 7" EMBEDMENT INTO CONCRETE OR SOLID-GROUTED MASONRY SPACED A MAXIMUM OF 6'-0" O.C. UNLESS NOTED OTHERWISE. PROVIDE A MINIMUM OF TWO ANCHOR BOLTS PER PLATE SECTION AND ONE ANCHOR BOLT WITHIN 12" OF EACH CORNER UNLESS NOTED OTHERWISE. ANCHOR BOLTS SHALL BE LOCATED WITHIN THE MIDDLE THIRD OF THE SILL PLATE.

3.7) FOUNDATION WALLS MAY BE STEPPED AND FRAMED WITH CRIPPLE WALLS WHERE GRADE PERMITS (SEE NOTE 7.14 FOR WALL FRAMING REQUIREMENTS).

3.8) PROVIDE FOUNDATION WATERPROOFING AND AND DRAIN WITH POSITIVE SLOPE TO DAYLIGHT AS REQUIRED BY SITE CONDITIONS.

3.9) THE SITE SHALL BE GRADED TO DRAIN SURFACE WATER AWAY FROM FOUNDATION WALLS. THE GRADE SHALL FALL A MINIMUM OF 6" WITHIN THE FIRST TEN FEET.

3.10) CRAWL SPACES SHALL BE GRADED LEVEL AND CLEAR OF ALL DEBRIS. CRAWL SPACE GRADE SHALL BE LINED WITH MINIMUM 6 MIL APPROVED VAPOR BARRIER WITH ALL JOINTS LAPPED MINIMUM 12" AND SEALED. PROVIDE A MINIMUM ACCESS OPENING MEASURING 18" BY 24".

4) CONCRETE NOTES:

4.1) INTERIOR SLABS ON GRADE, EXCEPT FOR GARAGE FLOORS, AND FOOTINGS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS. FOUNDATION WALLS, GARAGE SLABS ON GRADE, AND EXTERIOR SLABS ON GRADE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS. ALL CONCRETE SHALL BE CAST IN PLACE.

4.2) CONCRETE SHALL BE PROPORTIONED, MIXED, AND PLACED IN ACCORDANCE WITH THE LATEST EDITIONS OF ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" AND AC1 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS".

4.3) ALL CONCRETE EXPOSED TO FREEZE/THAW CYCLES SHALL BE AIR ENTRAINED WITH TOTAL AIR VOLUME NOT LESS THAN 5% OR MORE THAN 7%.

4.4) CONCRETE SLABS ON GRADE SHALL BE MINIMUM 4" THICK AND REINFORCED WITH POLYPROPYLENE FIBERS OR 6x6 WELDED WIRE FABRIC (WWF). POLYPROPYLENE FIBERS SHALL BE APPLIED AT A MINIMUM RATE OF 1.5 LBS PER CUBIC YARD. WWF SHALL BE PLACED AT THE MID-DEPTH OF THE SLAB.

4.5) CONCRETE SLABS ON GRADE SHALL BE PLACED ON MINIMUM 4" THICK GRANULAR FILL COMPACTED TO MINIMUM 95% OF THE MAXIMUM DRY DENSITY. INTERIOR SLABS ARE TO BE PLACED ON A MINIMUM 6 MIL VAPOR BARRIER PLACED ON TOP OF THE GRANULAR FILL.

4.6) 3/4" TO 1" DEEP CONTROL JOINTS (SAW-CUT OR TOOLED) ARE TO BE PLACED IN SLABS ON GRADE WITHIN 4 TO 12 HOURS OF CONCRETE FINISHING. CONTROL JOINTS ARE TO BE SPACED 8'-0" TO 12'-0" O.C.

4.7) ALL CAST-IN-PLACE CONCRETE WALLS SHALL CONFORM TO SECTIONS R404 AND/OR R608 OF THE 2018 NCRC, ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE", AND/OR ACI 332 "CODE REQUIREMENTS FOR RESIDENTIAL CONCRETE".

5) MASONRY NOTES:

5.1) CONCRETE MASONRY SHALL CONFORM TO ASTM C90. ALL BRICK SHALL CONFORM TO ASTM C62. ALL MASONRY SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 1500 PSI.

5.2) ALL MORTAR SHALL BE TYPE "S". GROUT AND MORTAR SHALL CONFORM TO ASTM C270 AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS.

5.3) ALL MASONRY WALLS SHALL CONFORM TO SECTION SECTIONS R404 AND/OR R606 OF THE 2018 NCRC, NCMA TR68-A "CONSTRUCTION USING CONCRETE MASONRY", AND/OR ACE 530/ASCE 5/TMS 402 "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES".

5.4) THE UNSUPPORTED HEIGHT OF UNGROUTED HOLLOW MASONRY PIERS SHALL NOT EXCEED FOUR TIMES THEIR LEAST DIMENSION. THE UNSUPPORTED HEIGHT OF SOLID OR SOLID-GROUTED MASONRY PIERS SHALL NOT EXCEED TEN TIMES THEIR LEAST DIMENSION.

5.5) EACH CRAWL SPACE PIER SHALL BEAR WITHIN THE MIDDLE THIRD OF ITS RESPECTIVE FOOTING AND EACH GIRDER SHALL BEAR WITHIN THE MIDDLE THIRD OF THE PIERS. PILASTERS SHALL BE BONDED TO THE PERIMETER FOUNDATION WALL.

5.6) THE TOP COURSE OF MASONRY SHALL BE GROUTED SOLID. ALL CELLS CONTAINING REINFORCING STEEL OR EMBEDDED ITEMS SHALL BE GROUTED SOLID.

5.7) HORIZONTAL WALL JOINT REINFORCEMENT SHALL BE STANDARD 9 GAUGE GALVANIZED LADDER OR TRUSS TYPE SPACED AT 16" O.C. MAXIMUM, UNLESS NOTED OTHERWISE ON THE DRAWINGS, AND SHALL CONFORM TO ASTM A951. LAP HORIZONTAL REINFORCEMENT MINIMUM 6" FOR CONTINUOUS WALL APPLICATIONS.

6) REINFORCING STEEL NOTES:

6.1) WELDED WIRE FABRIC SHALL CONFORM TO ASTM 185. CONCRETE REINFORCING STEEL SHALL CONFORM TO ASTM 615, GRADE 60. REINFORCING STEEL WITHIN FOOTINGS SHALL MAINTAIN MINIMUM 3" CONCRETE COVER AND REINFORCING STEEL WITHIN SLABS SHALL MAINTAIN MINIMUM 1 1/2" CONCRETE COVER. CONCRETE COVER FOR #5 AND SMALLER REINFORCING BARS WITHIN CONCRETE WALLS SHALL BE MINIMUM 1 1/2" AND CONCRETE COVER FOR #6 AND LARGER REINFORCING BARS WITHIN CONCRETE WALLS SHALL BE MINIMUM 2".

6.2) LAP REINFORCING STEEL, AS REQUIRED, A MINIMUM OF 48 TIMES THE BAR DIAMETER (18" FOR #3 BARS, 24" FOR #4 BARS, 30" FOR #5 BARS, 36" FOR #6 BARS, ETC.).

7) WOOD FRAMING NOTES:

7.1) SOLID SAWN FRAMING MEMBERS SHALL BE SPRUCE-PINE-FIR (SPF) #2 OR SOUTHERN YELLOW PINE (SYP) #2 WITH THE FOLLOWING MINIMUM DESIGN VALUES:
- SPF #2: Fb=875 PSI, Fv=135 PSI, E=1,400,000 PSI
- SYP #2: Fb=750 PSI, Fv=175 PSI, E=1,400,000 PSI

7.2) ENGINEERED LUMBER BEAMS SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:
- LAMINATED STRAND LUMBER (LSL): Fb=2,325 PSI, Fv=310 PSI, E=1,550,000 PSI
- LAMINATED VENEER LUMBER (LVL): Fb=2,600 PSI, Fv=285 PSI, E=2,000,000 PSI
- PARALLEL STRAND LUMBER (PSL): Fb=2,900 PSI, Fv=290 PSI, E=2,000,000 PSI

7.3) ENGINEERED LUMBER COLUMNS SHALL HAVE THE FOLLOWING MINIMUM DESIGN VALUES:
- LAMINATED STRAND LUMBER (LSL): Fb=1,700 PSI, Fc=710 PSI, E=1,300,000 PSI
- LAMINATED VENEER LUMBER (LVL): Fb=2,600 PSI, Fc=750 PSI, E=2,000,000 PSI
- PARALLEL STRAND LUMBER (PSL): Fb=2,400 PSI, Fc=545 PSI, E=1,800,000 PSI

7.4) WOOD IN CONTACT WITH THE GROUND, CONCRETE, OR MASONRY SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARD C-15. ALL OTHER MOISTURE EXPOSED LUMBER SHALL BE TREATED IN ACCORDANCE WITH AWPA STANDARD C-2 OR SHALL BE A NATURALLY DURABLE DECAY RESISTANT WOOD AS DEFINED IN SECTION R202 OF THE 2018 NCRC.

7.5) NAILS SHALL BE COMMON WIRE NAILS UNLESS NOTED OTHERWISE AND SHALL CONFORM TO ASTM F1667-05.

7.6) BOLTS SHALL CONFORM TO ASTM A307 UNLESS NOTED OTHERWISE. INSTALL STANDARD STEEL WASHERS FOR THE NUT AND BOLT HEAD WHEN BOLTING WOOD MEMBERS. HOLES FOR BOLTS SHALL BE 1/16" LARGER THAN THE BOLT DIAMETER UNLESS NOTED OTHERWISE.

7.7) LAG SCREWS SHALL CONFORM TO ANSI/ASME B18.2.1. INSTALL STANDARD STEEL WASHERS FOR THE SCREW HEAD. PILOT HOLES SHALL BE USED FOR LAG SCREW INSTALLATION AND SHALL BE BORED ACCORDING TO NDS SPECIFICATIONS.

7.8) INDIVIDUAL STUDS BUILT UP TO FORM A COLUMN SHALL BE FASTENED WITH (2) ROWS OF 10d NAILS @ 6" O.C. STAGGERED. BLOCKING MATCHING OR EXCEEDING THE WIDTH OF THE STUD COLUMN SHALL BE INSTALLED AT ALL FLOOR LEVELS TO ENSURE PROPER LOAD TRANSFER THROUGH THE STRUCTURE.

7.9) MULTI-PLY SOLID SAWN BEAMS AND HEADERS SHALL BE FASTENED WITH (2) ROWS OF 10d NAILS @ 16" O.C. STAGGERED FOR 2x8 AND SMALLER OR (3) ROWS OF 10d NAILS @ 16" O.C. STAGGERED FOR 2x10 AND LARGER. APPLY NAILING FROM BOTH FACES FOR (3) OR MORE PLIES.

7.10) MULTI-PLY ENGINEERED LUMBER BEAMS AND HEADERS SHALL BE FASTENED PER THE MANUFACTURER SPECIFICATIONS UNLESS NOTED OTHERWISE.

7.11) BEAMS PERPENDICULAR TO THE SUPPORTING WALL SHALL BEAR THE FULL WIDTH OF THE WALL UNLESS NOTED OTHERWISE AND SHALL BE SUPPORTED BY A COLUMN OF BUILT UP STUDS THAT MATCHES OR EXCEEDS THE WIDTH OF THE BEAM (NOT LESS THAN TWO STUDS).

7.12) BEAMS PARALLEL TO THE SUPPORTING WALL SHALL BEAR THE WIDTH OF THE SPECIFIED STUD COLUMN ON THE END OF THE WALL (BEARING SHALL NOT BE LESS THAN 3" TO BEAR OVER TWO STUDS UNLESS NOTED OTHERWISE).

7.13) HEADERS SHALL BE SUPPORTED BY JACK STUDS AND KING STUDS BASED ON THE FOLLOWING CONDITIONS UNLESS NOTED OTHERWISE:

CLEAR SPAN:	# OF JACK STUDS:	# OF KING STUDS (EXTERIOR):	# OF KING STUDS (INTERIOR):
UP TO 3'-0"	(1)	(1)	(1)
>3'-0" TO 6'-0"	(2)	(2)	(1)
>6'-0" TO 9'-0"	(2)	(3)	(2)
>9'-0" TO 12'-0"	(3)	(4)	(2)
>12'-0" TO 15'-0"	(3)	(5)	(3)
>15'-0" TO 18'-0"	(4)	(6)	(3)

7.14) STUD SPACING FOR EXTERIOR AND INTERIOR BEARING WALLS SHALL BE BASED ON THE FOLLOWING CONDITIONS UNLESS NOTED OTHERWISE:
- SUPPORTING UP TO ONE STORY ABOVE:

UP TO 10'-1 1/2" IN HEIGHT	2x4 @ 16" O.C. OR 2x6 @ 24" O.C.
>10'-1 1/2" UP TO 12'-1 1/2"	2x4 @ 12" O.C. OR 2x6 @ 16" O.C.

- SUPPORTING UP TO TWO STORIES ABOVE:

UP TO 10'-1 1/2" IN HEIGHT	2x4 @ 12" O.C. OR 2x6 @ 16" O.C.
> 10'-1 1/2" UP TO 12'-1 1/2"	2x6 @ 12" O.C.

7.15) ALL EXTERIOR WALLS TO BE FULLY SHEATHED WITH 7/16" APA RATED OSB EXPOSURE 1 ATTACHED WITH 8d NAILS @ 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN PANEL FIELD UNLESS NOTED OTHERWISE.

7.16) ROOF SHEATHING SHALL BE MINIMUM 7/16" APA RATED OSB EXPOSURE 1 ATTACHED TO ROOF FRAMING WITH 8d NAILS @ 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN PANEL FIELD UNLESS NOTED OTHERWISE. SHEATHING SHALL HAVE A SPAN RATING THAT MATCHES OR EXCEEDS THE FRAMING SPACING.

7.17) FLOOR SHEATHING SHALL BE MINIMUM 23/32" APA RATED TONGUE AND GROOVE OSB EXPOSURE 1 ATTACHED TO FLOOR FRAMING WITH 8d NAILS @ 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN PANEL FIELD UNLESS NOTED OTHERWISE. SHEATHING SHALL HAVE A SPAN RATING THAT MATCHES OR EXCEEDS THE FRAMING SPACING.

7.18) EXTERIOR WOOD DECKS SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPENDIX M OF THE 2018 NCRC UNLESS NOTED OTHERWISE.

7.19) EXTERIOR WOOD POSTS SHALL BE SECURED TO THE BAND AT THE BOTTOM AND BEAM AT THE TOP WITH (1) SIMPSON STRONG-TIE H6 HURRICANE TIE, (2) H2.5A HURRICANE TIES, OR (1) SECTION OF CS16 COIL STRAPPING WITH MINIMUM 9" END LENGTHS. FOR MASONRY OR CONCRETE FOUNDATIONS, SECURE POSTS AT THE BOTTOM WITH A SIMPSON STRONG-TIE ABU POST BASE FOR THE SPECIFIED POST SIZE.

8) STEEL FRAMING NOTES:

8.1) STEEL FRAMING SHALL CONFORM TO THE FOLLOWING SPECIFICATIONS:

- W SHAPES	ASTM A992
- CHANNELS AND ANGLES	ASTM A36
- PLATES AND BARS	ASTM A36
- HOLLOW STRUCTURAL SECTIONS (HSS)	ASTM A500, GRADE B
- PIPES	ASTM A53, GRADE B, TYPE E OR S

8.2) STEEL BEAMS SHALL BE ANCHORED AT THE BOTTOM FLANGE TO EACH SUPPORT AS FOLLOWS UNLESS NOTED OTHERWISE:

- WOOD FRAMING	(2) 1/2" DIAMETER x 4" LONG LAG SCREWS
- CONCRETE	(2) 1/2" DIAMETER x 4" LONG SST TITEN HD (OR EQUAL) SCREW ANCHORS
- MASONRY (GROUTED SOLID)	(2) 1/2" DIAMETER x 4" LONG SST TITEN HD (OR EQUAL) SCREW ANCHORS
- STEEL COLUMN	(2) 1/2" DIAMETER BOLTS OR 3/16" CONTINUOUS FILLET WELD

8.3) ATTACH A 2x NAILER TO THE TOP FLANGE OF STEEL BEAMS w/ (2) ROWS OF 1/2" DIAMETER CARRIAGE BOLTS @ 48" O.C. STAGGERED UNLESS NOTED OTHERWISE.

8.4) FLITCH BEAMS SHALL BE BOLTED WITH (2) ROWS OF 1/2" DIAMETER BOLTS @ 16" O.C. STAGGERED.

9) SUPPORT OF MASONRY OR NATURAL STONE VENEER:

9.1) VENEER ABOVE OPENINGS SHALL BE SUPPORTED BY STEEL ANGLES AS FOLLOWS UNLESS NOTED OTHERWISE:

CLEAR SPAN:	SIZE OF STEEL ANGLE:
UP TO 3'-0"	L3x3x1/4
>3'-0" UP TO 6'-0"	L5x3 1/2x5/16 (LONG LEG VERTICAL)
>6'-0" UP TO 8'-0"	L6x4x5/16 (LONG LEG VERTICAL)

9.2) VENEER ABOVE OPENINGS WITH A CLEAR SPAN EXCEEDING 8'-0" SHALL BE SUPPORTED BY A 6x4x5/16 STEEL ANGLE FASTENED TO THE HEADER WITH (2) ROWS OF 1/2" DIAMETER x 3" LONG LAG SCREWS @ 16" O.C. UNLESS NOTED OTHERWISE.

9.3) STEEL ANGLES SHALL BE EMBEDDED MINIMUM 4" INTO THE VENEER AT EACH SIDE OF THE OPENING.

9.4) VENEER ABOVE ROOF LINES SHALL BE SUPPORTED BY AN L6x4x5/16 STEEL ANGLE FASTENED TO (2) 2x10 BLOCKING w/ (2) ROWS OF 1/2" DIAMETER x 3" LONG LAG SCREWS @ 16" O.C. BLOCKING TO BE FASTENED TO WALL STUDS AT EACH END WITH (4) 10d TOE NAILS PER PLY. FOR ROOF SLOPES EXCEEDING 7:12, WELD 3"x3"x1/4" STEEL PLATE STOPS @ 24" O.C. TO STEEL ANGLE.

COMMON ABBREVIATIONS

AFF	ABOVE FINISHED FLOOR	MAX	MAXIMUM
ALT	ALTERNATE	MFR	MANUFACTURER
ARCH	ARCHITECTURAL	MIN	MINIMUM
BRG	BEARING	NTS	NOT TO SCALE
BTM	BOTTOM	O.C.	ON CENTER
CIP	CAST-IN-PLACE	PCF	POUNDS PER CUBIC FOOT
CLR	CLEAR	PLF	POUNDS PER LINEAR FOOT
CMU	CONCRETE MASONRY UNIT	PSF	POOUNDS PER SQUARE FOOT
CONC	CONCRETE	PSI	POUNDS PER SQUARE INCH
CONN	CONNECTION	PSL	PARALLEL STRAND LUMBER
CONT	CONTINUOUS	PT	PRESSURE TREATED
DBL	DOUBLE	QJ	QUADRUPLE JOIST
DIA	DIAMETER	REINF	REINFORCE
DJ	DOUBLE JOIST	SER	STRUCTURAL ENGINEER OF RECORD
DSP	DOUBLE STUD POCKET	SF	SQUARE FEET
EA	EACH	SJ	SINGLE JOIST
EQ	EQUAL	SP	SPACE (SPACING)
FLR	FLOOR	SPEC(S)	SPECIFICATION(S)
FND	FOUNDATION	SPF	SPRUCE-PINE-FIR
FTG	FOOTING	SST	SIMPSON STRONG-TIE
GA	GAUGE	SYP	SOUTHERN YELLOW PINE
HDG	HOT-DIPPED GALVANIZED	TJ	TRIPLE JOIST
HDR	HEADER	TRPL	TRIPLE
HGR	HANGER	TSP	TRIPLE STUD POCKET
HORIZ	HORIZONTAL	TYP	TYPICAL
ICF	INSULATED CONCRETE FORMS	UNO	UNLESS NOTED OTHERWISE
INFO	INFORMATION	VERT	VERTICAL
LBS	POUNDS	W/	WITH
LSL	LAMINATED STRAND LUMBER	WWF	WELDED WIRE FABRIC
LVL	LAMINATED VENEER LUMBER	XJ	EXTRA JOIST

LEGEND

■(#)	STUD COLUMN AT POINT LOADS THAT REQUIRES SOLID BLOCKING TO GIRDER OR FOUNDATION (#) DENOTES NUMBER OF STUDS. (2) STUDS REQUIRED IF NOT SPECIFIED
■	OFFSET POINT LOAD FROM ABOVE TO BE SUPPORTED BY GIRDER, BEAM, HEADER, JOIST, OR BLOCKING AS SPECIFIED
	BEARING WALL
	OFFSET BEARING WALL ABOVE
	BEAM, GIRDER, OR HEADER AS SPECIFIED
	JOIST, RAFTER, OR TRUSS AS SPECIFIED
	MECHANICAL FASTENER (REFER TO SCHEDULE BELOW)
	FULL HEIGHT MASONRY OR NATURAL STONE VENEER
	MASONRY OR NATURAL STONE VENEER WATERTABLE BELOW
	PLUMBING OR APPLIANCES ABOVE (FOR REFERENCE ONLY, REFER TO ARCHITECTURAL PLANS)
	SOLID GROUTED MASONRY
	ROOF SUPPORT BELOW
	FULL HEIGHT BRICK VENEER BELOW ROOF

MECHANICAL FASTENERS

BEAM SIZE:	FASTENER:
(2)-2x6 OR (2)-2x8	LUS26-2
(2)-2x10 OR (2)-2x12	LUS210-2
(1)-PLY LSL OR LVL	HUS1.81/10
(2)-PLY LSL OR LVL	HHUS410
(3)-PLY LSL OR LVL	HHUS5.50/10
(4)-PLY LSL OR LVL	HHUS7.25/10

NOTES:
- MECHANICAL FASTENERS TO BE INSTALLED BASED ON THIS SCHEDULE UNLESS NOTED OTHERWISE.
- ALL SPECIFIED MECHANICAL FASTENERS ARE SIMPSON STRONG-TIE BRAND. OTHER BRAND FASTENERS WITH EQUIVALENT OR BETTER CAPACITY MAY BE SUBSTITUTED.
- ALL MECHANICAL FASTENERS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE HOT-DIPPED GALVANIZED OR EQUIVALENT CORROSIVE RESISTANT COATING.

ALLOWABLE I-JOIST SUBSTITUTIONS

SPECIFIED SERIES:	EQUIVALENT SERIES:
TJI 110	BCI 4500s 1.8
TJI 210	BCI 5000s 1.8, BLI 40, LPI 20PLUS, NI-40x
TJI 230	BCI 6000s 1.8, LPI 32PLUS
TJI 360	BCI 60s 2.0, BLI 60, LPI 36, NI-60
TJI 560	BCI 90s 2.0, BLI 80, LPI 56, NI-80

NOTES:
- MAINTAIN SPECIFIED JOIST DEPTH, DIRECTION, AND SPACING.
- JOISTS NOT LISTED IN THIS SCHEDULE MAY BE SUBSTITUTED PROVIDED THEY MEET OR EXCEED THE PROPERTIES OF THOSE LISTED.

NORTH CAROLINA PROFESSIONAL SEAL 052324 ENGINEER ZACHARY H. HAYES
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NEUSE RIVER HOMES LLC
TYLER - GARAGE RIGHT

PROJECT NO.: 24-KAHD-034

DATE: JULY 22, 2024

SCALE: NOT TO SCALE

SHEET: STANDARD STRUCTURAL NOTES

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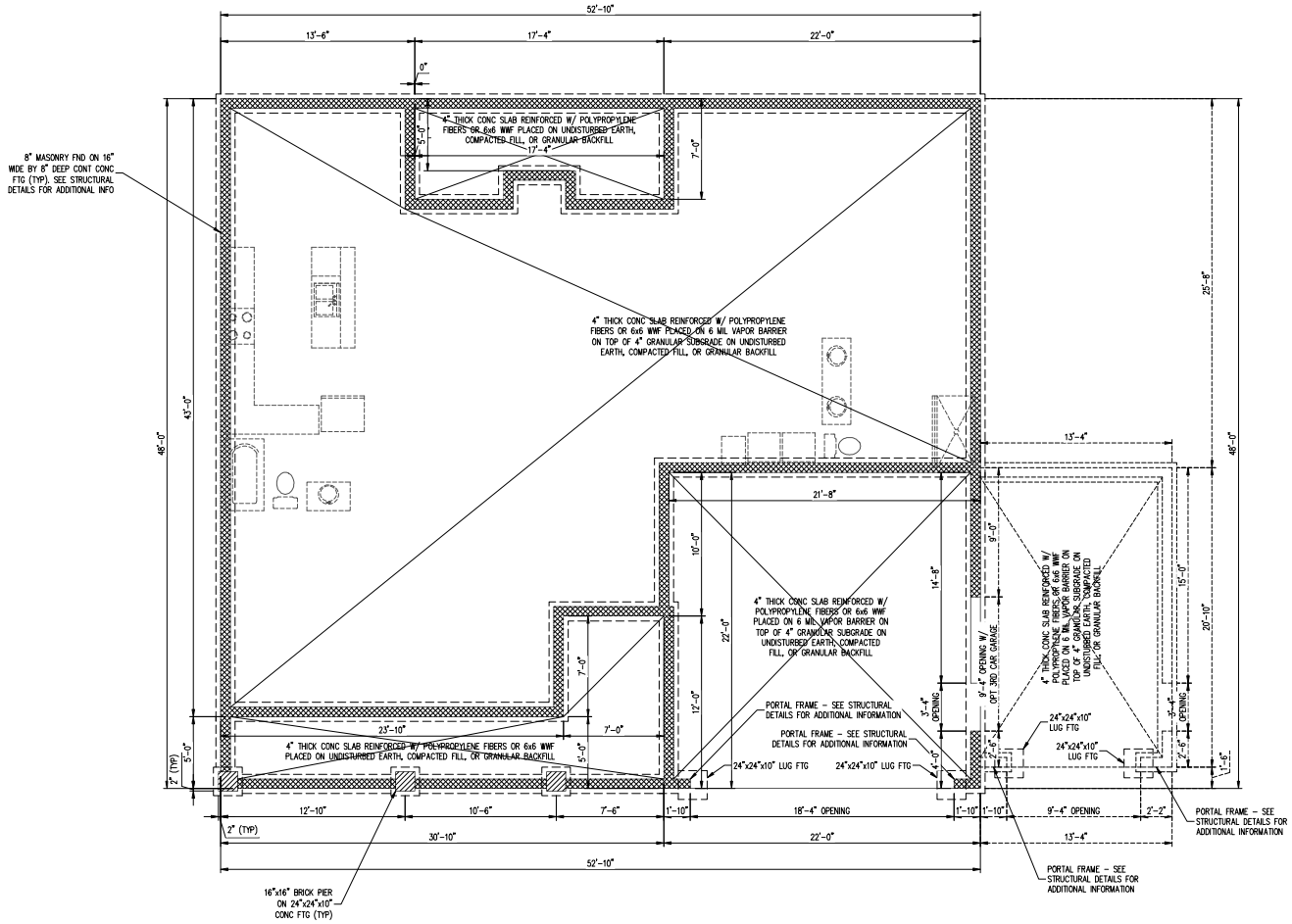

STEM WALL FOUNDATION NOTES:

1. THE BOTTOM OF ALL FOOTINGS SHALL EXTEND A MINIMUM OF 12" BELOW GRADE OR BELOW THE FROST LINE, WHICHEVER IS GREATER.
2. ALL FOOTINGS TO BE EXCAVATED TO FIRM SOIL WITH A MINIMUM REQUIRED BEARING CAPACITY OF 2,000 PSF. CONSULT THE SER SHOULD THE SOIL BEARING CAPACITY NOT BE MET OR IF ANY OTHER ADVERSE SOIL CONDITION IS ENCOUNTERED.
3. UNSUPPORTED FOUNDATION WALLS SHALL NOT EXCEED 48" IN HEIGHT. CONSULT THE SER FOR REINFORCEMENT REQUIREMENTS SHOULD FOUNDATION WALL HEIGHT EXCEED 48".
4. ALL COURSES OF MASONRY SHALL BE GROUTED SOLID WITH CONCRETE OR MORTAR USING THE LOW LIFT GROUTING METHOD.
5. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

LEGEND

	PLUMBING ABOVE (FOR REFERENCE ONLY, REFER TO ARCH PLANS)

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DATE: JULY 22, 2024

11x17 PRINT SCALE: 3/32" = 1'-0" (UNO)
24x36 PRINT SCALE: 1/8" = 1'-0" (UNO)

SHEET: STEM WALL FOUNDATION PLAN

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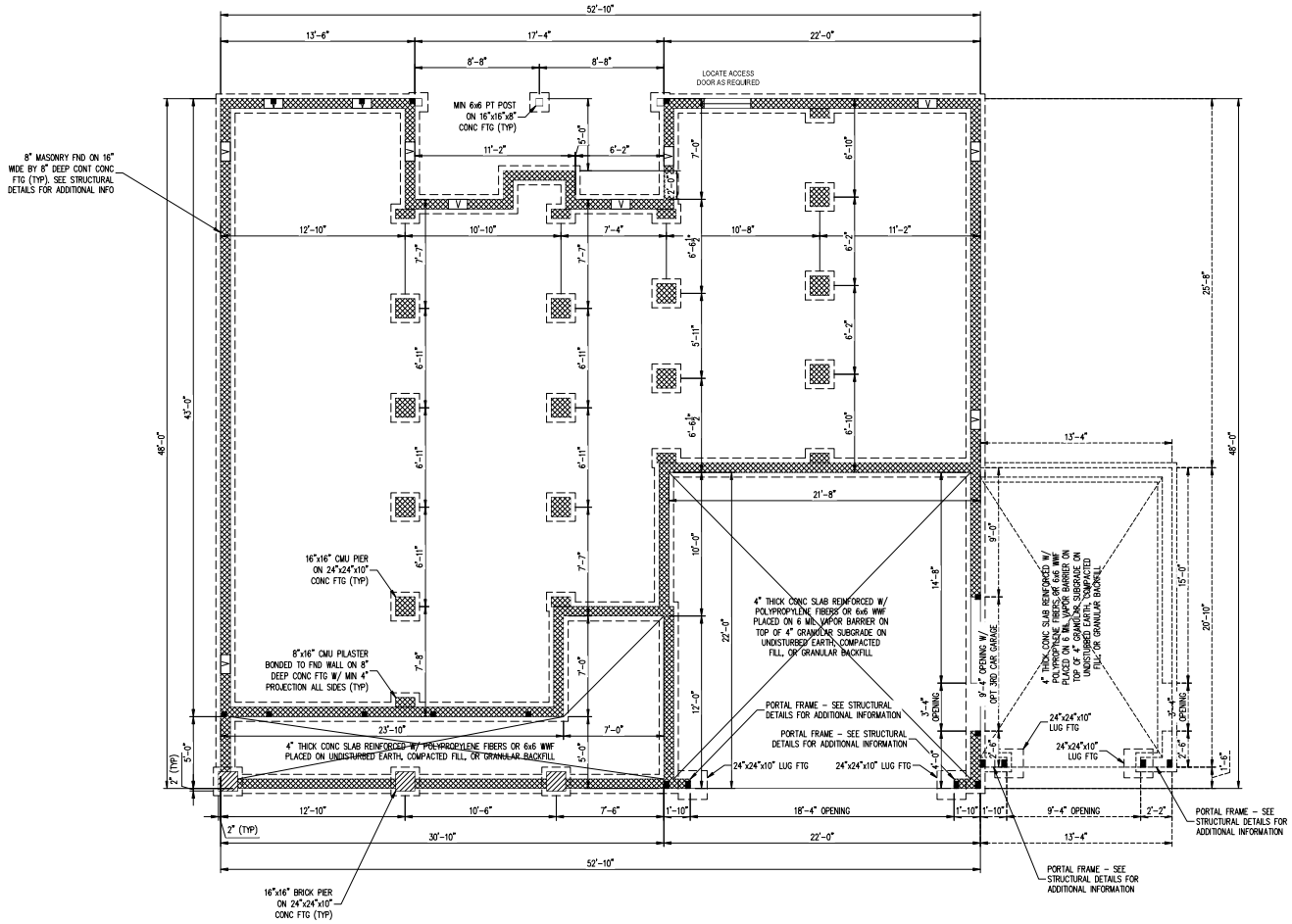

CRAWL SPACE FOUNDATION NOTES:

1. THE BOTTOM OF ALL FOOTINGS SHALL EXTEND A MINIMUM OF 12" BELOW GRADE OR BELOW THE FROST LINE, WHICHEVER IS GREATER.
2. ALL FOOTINGS TO BE EXCAVATED TO FIRM SOIL WITH A MINIMUM REQUIRED BEARING CAPACITY OF 2,000 PSF. CONSULT THE SER SHOULD THE SOIL BEARING CAPACITY NOT BE MET OR IF ANY OTHER ADVERSE SOIL CONDITION IS ENCOUNTERED.
3. THE UNSUPPORTED HEIGHT OF UNGROUTED HOLLOW MASONRY PIERS SHALL NOT EXCEED FOUR TIMES THEIR LEAST DIMENSION. THE UNSUPPORTED HEIGHT OF SOLID OR SOLID-GROUTED MASONRY PIERS SHALL NOT EXCEED TEN TIMES THEIR LEAST DIMENSION.
4. UNSUPPORTED PORCH AND GARAGE FOUNDATION WALLS SHALL NOT SUPPORT MORE THAN 48" OF UNBALANCED BACKFILL. CONSULT THE SER FOR REINFORCEMENT REQUIREMENTS SHOULD UNBALANCED BACKFILL AGAINST UNSUPPORTED FOUNDATION WALLS EXCEED 48".
5. THE TOP COURSE OF MASONRY SHALL BE GROUTED SOLID. ALL CELLS CONTAINING REINFORCING STEEL OR EMBEDDED ITEMS SHALL BE GROUTED SOLID.
6. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

LEGEND	
■	POINT LOAD ABOVE THAT REQUIRES SOLID BLOCKING TO FOUNDATION

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SHEET: CRAWL SPACE FOUNDATION PLAN

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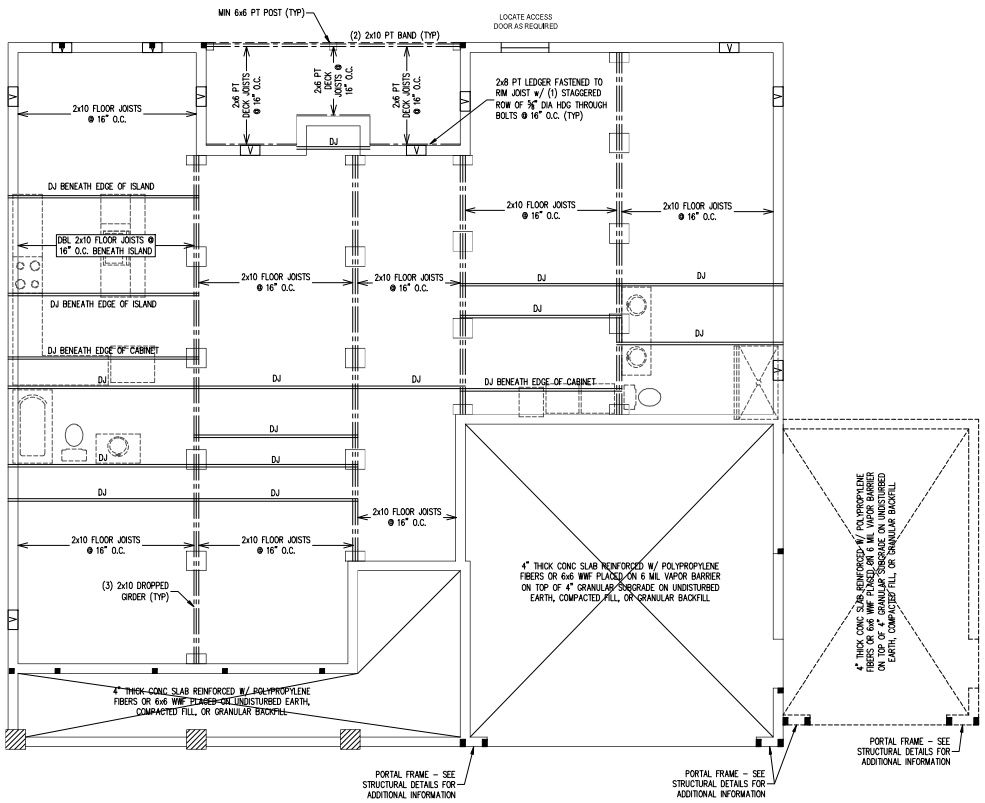

CRAWL SPACE FRAMING NOTES:

1. SOLID SAWN FRAMING LUMBER TO BE SPF #2 OR SYP #2.
2. PROVIDE A DOUBLE JOIST UNDER WALLS PARALLEL TO FLOOR JOISTS WHERE NOTED ON THE PLAN.
3. FOUNDATION WALLS MAY BE STEPPED DOWN TO FRAMED CRIPPLE WALLS AS GRADE PERMITS. CRIPPLE WALLS TO BE 2x4 @ 12" O.C. OR 2x6 @ 16" O.C. UNO.
4. ALL FRAMED WALLS TO BE SHEATHED WITH 7/16" APA RATED OSB EXPOSURE 1 ATTACHED WITH 8d NAILS @ 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN PANEL FIELD (UNO) TO SATISFY WALL BRACING REQUIREMENTS PER SECTION R602.10.3 "CONTINUOUS SHEATHING" OF THE 2018 NCRC.
5. EXTERIOR POSTS TO BE SECURED TO BAND AT TOP WITH (1) SST H6, (2) SST H2.5A, OR (1) SST CS16 STRAP WITH MIN 9" END LENGTHS. SECURE POSTS TO FOOTING AT BOTTOM WITH A SST ABU POST BASE FOR THE SPECIFIED POST SIZE.
6. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

LEGEND

■	POINT LOAD ABOVE THAT REQUIRES SOLID BLOCKING TO FOUNDATION
— — —	BEAM, GIRDER, OR HEADER AS SPECIFIED
———	JOIST, RAFTER, OR TRUSS AS SPECIFIED
	PLUMBING ABOVE (FOR REFERENCE ONLY, REFER TO ARCH PLANS)

NORTH CAROLINA PROFESSIONAL SEAL 052324 ENGINEER ZACHARY HAYES

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SHEET: CRAWL SPACE FRAMING PLAN

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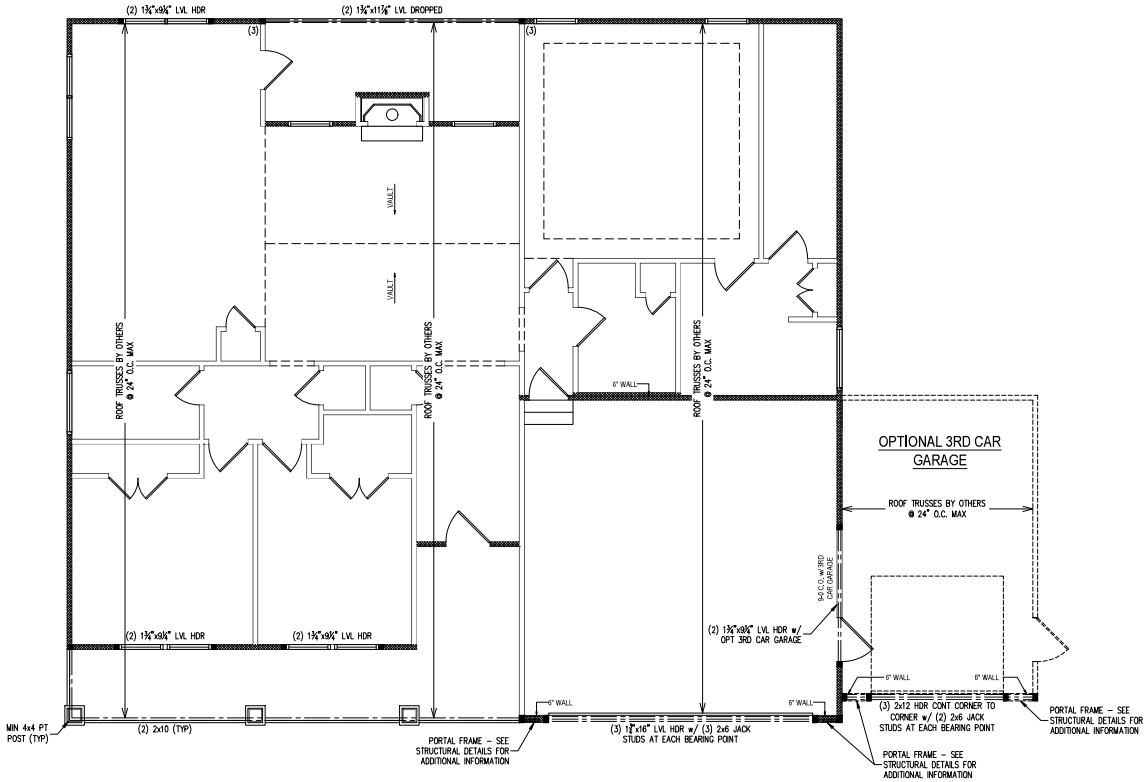

FIRST FLOOR FRAMING NOTES:

1. SOLID SAWN FRAMING LUMBER TO BE SPF #2 OR SYP #2.
2. ALL LOAD BEARING HEADERS TO BE (2) 2x6 UNO.
3. HEADERS TO BE SUPPORTED BY JACK STUDS AND KING STUDS PER THE TABLE BELOW UNO.
4. EXTERIOR AND INTERIOR LOAD BEARING WALLS TO BE 2x4 @ 16" O.C. OR 2x6 @ 24" O.C. UNO.
5. ALL EXTERIOR WALLS TO BE SHEATHED WITH ½" APA RATED OSB EXPOSURE 1 ATTACHED WITH 8d NAILS @ 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN PANEL FIELD (UNO) TO SATISFY WALL BRACING REQUIREMENTS PER SECTION R602.10.3 "CONTINUOUS SHEATHING" OF THE 2018 NCRC.
6. EXTERIOR POSTS TO BE SECURED TO BAND AT BOTTOM AND BEAM AT TOP WITH (1) SST H6, (2) SST H2.5A, OR (1) SST CS16 STRAP WITH MIN 9" END LENGTHS. FOR MASONRY OR CONCRETE FOUNDATIONS, SECURE POSTS AT BOTTOM WITH A SST ABU POST BASE FOR THE SPECIFIED POST SIZE.
7. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

HEADER SUPPORT

CLEAR SPAN:	JACK STUDS:	KING STUDS (EXTERIOR):	KING STUDS (INTERIOR):
UP TO 3'	(1)	(1)	(1)
>3' TO 6'	(2)	(2)	(1)
>6' TO 9'	(2)	(3)	(2)
>9' TO 12'	(3)	(4)	(2)
>12' TO 15'	(3)	(5)	(3)
>15' TO 18'	(4)	(6)	(3)

LEGEND

■(#)	STUD COLUMN AT POINT LOADS THAT REQUIRES SOLID BLOCKING TO GIRDER OR FOUNDATION. (#) DENOTES NUMBER OF STUDS. (2) STUDS REQUIRED IF NOT SPECIFIED.
▬▬▬	BEARING WALL
— — —	BEAM, GIRDER, OR HEADER AS SPECIFIED

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SHEET: FIRST FLOOR FRAMING PLAN

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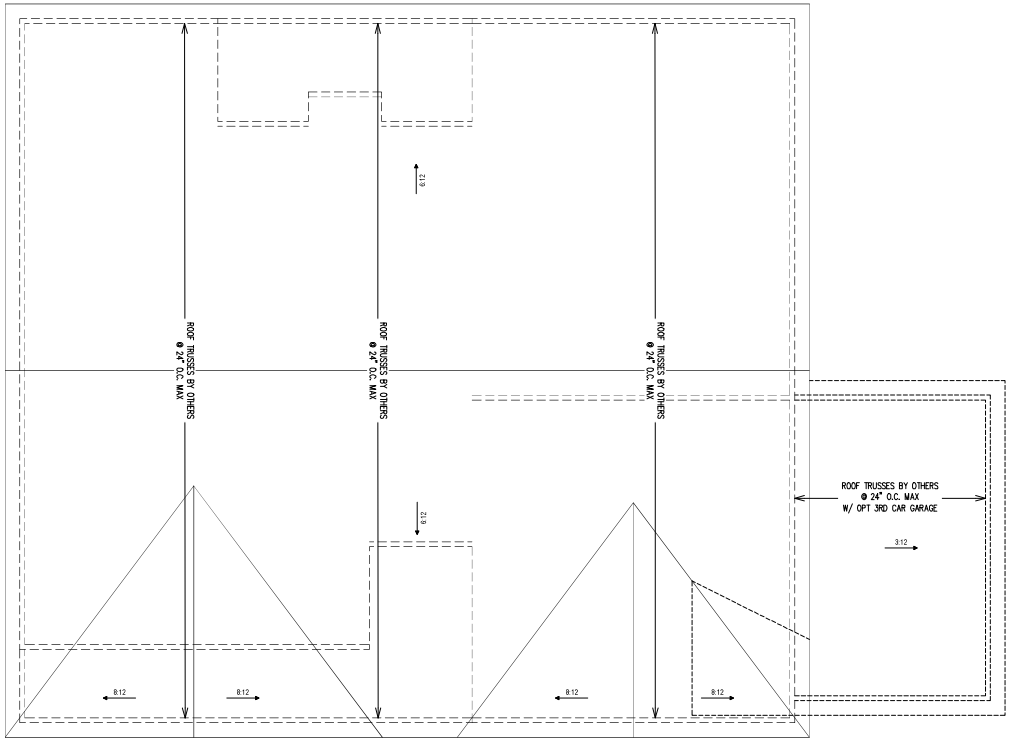

ROOF FRAMING NOTES:

1. SOLID SAWN FRAMING LUMBER TO BE SPF #2 OR SYP #2.
2. ROOF SHEATHING TO BE 7/16" MINIMUM APA RATED OSB EXPOSURE 1 ATTACHED TO ROOF FRAMING WITH 8d NAILS @ 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN PANEL FIELD UNO. SHEATHING SHALL HAVE A SPAN RATING THAT MATCHES OR EXCEEDS THE FRAMING SPACING.
3. USE VALLEY TRUSSES BY OTHERS FOR OVER-FRAMED SECTIONS OF ROOF.
4. TIE ROOF TRUSSES TO FRAMING AT EACH SUPPORT WITH (1) SST H2.5A HURRICANE TIE UNO BY TRUSS DRAWINGS.
5. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

LEGEND

= = = =	ROOF SUPPORT BELOW

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 052314 ZACHARY H. HAYES

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DATE: JULY 22, 2024

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24x36 PRINT SCALE: 1/4" = 1'-0" (UNO)

SHEET: ROOF FRAMING PLAN

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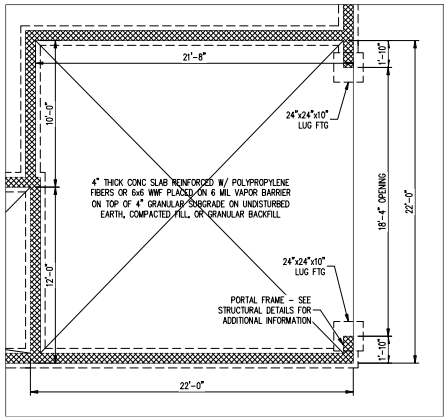
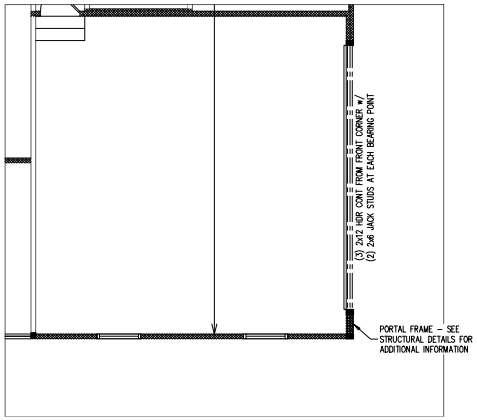


SIDE LOAD OPTION: FOUNDATION PLAN



SIDE LOAD OPTION: FLOOR FRAMING PLAN

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SHEET: OPTIONAL SIDE LOAD GARAGE PLANS

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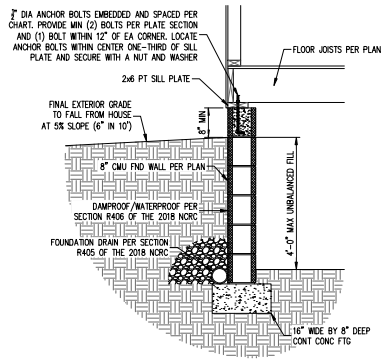
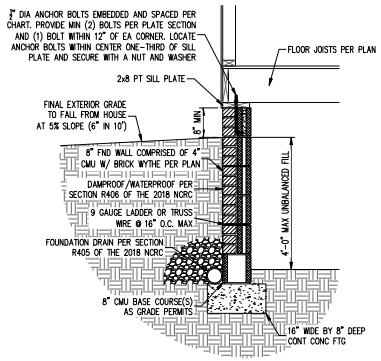


TYPICAL CRAWL SPACE FOUNDATION WALL

1 SD-1

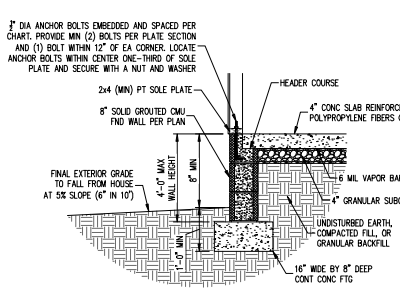
11x17 PRINT SCALE: 3/8" = 1'-0"
24x36 PRINT SCALE: 3/4" = 1'-0"



OPTIONAL CRAWL SPACE FOUNDATION WALL WITH BRICK WYTHE

2 SD-1

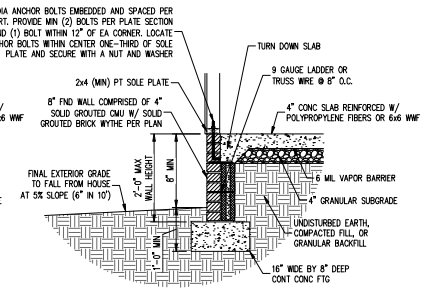
11x17 PRINT SCALE: 3/8" = 1'-0"
24x36 PRINT SCALE: 3/4" = 1'-0"



TYPICAL 8" CMU STEM WALL FOUNDATION

3 SD-1

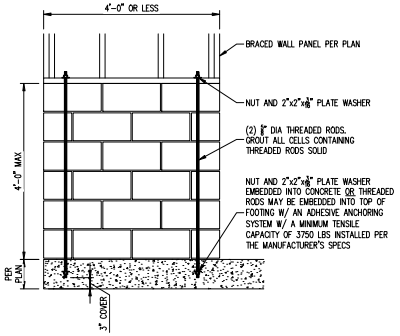
11x17 PRINT SCALE: 3/8" = 1'-0"
24x36 PRINT SCALE: 3/4" = 1'-0"



OPTIONAL 4" CMU STEM WALL FOUNDATION WITH BRICK WYTHE

4 SD-1

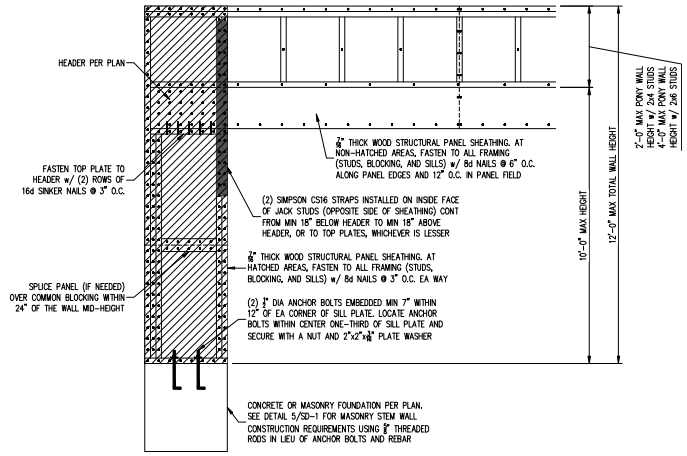
11x17 PRINT SCALE: 3/8" = 1'-0"
24x36 PRINT SCALE: 3/4" = 1'-0"



MASONRY STEM WALL SUPPORTING BRACED WALL PANEL WITH LENGTH OF 4'-0" OR LESS

5 SD-1

11x17 PRINT SCALE: 3/8" = 1'-0"
24x36 PRINT SCALE: 3/4" = 1'-0"



METHOD PF-PORTAL FRAME CONSTRUCTION DETAIL

6 SD-1

11x17 PRINT SCALE: 3/8" = 1'-0"
24x36 PRINT SCALE: 3/4" = 1'-0"

ANCHOR BOLT EMBEDMENT AND SPACING FOR MASONRY FOUNDATION WALLS

WIND ZONE:	MIN EMBEDMENT:	MAX SPACING:
UP TO 120 MPH	7"	6'-0" O.C.
130 MPH	15"	4'-0" O.C.

Digitally signed by Zachary H. Hayes, PE
Date: 2024.07.22 16:33:51 -04'00'

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PROJECT NO.: 24-KAHO-034
DATE: JULY 22, 2024
SCALE: AS NOTED
SHEET: STRUCTURAL DETAILS

SD-1

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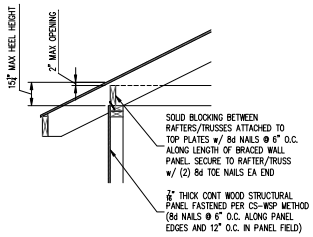


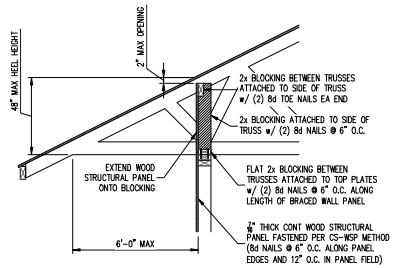
BRACED WALL PANEL CONNECTION TO PERPENDICULAR RAFTERS OR ROOF TRUSSES WITH HEEL HEIGHTS >9¼" TO 15¼"

1 / SD-2

11x17 PRINT SCALE: 3/4" = 1'-0"
24x36 PRINT SCALE: 1/2" = 1'-0"

NOTES:

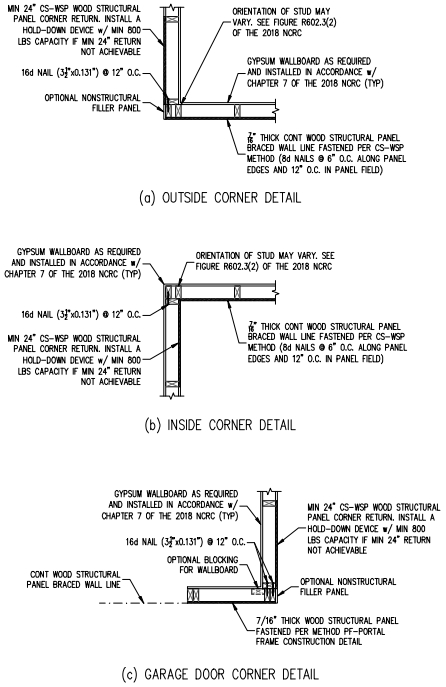
1) RAFTERS OR ROOF TRUSSES WITH HEEL HEIGHTS OF 9¼" OR LESS DO NOT REQUIRE BLOCKING.
2) PROVIDE VENTING PER SECTION R806 OF THE 2018 NCRC (NOT SHOWN).



BRACED WALL PANEL CONNECTION TO PERPENDICULAR ROOF TRUSSES WITH HEEL HEIGHTS >15¼" TO 48"

2 / SD-2

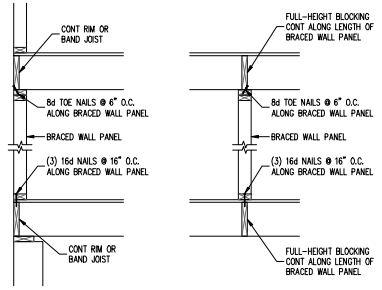
11x17 PRINT SCALE: 3/4" = 1'-0"
24x36 PRINT SCALE: 1/2" = 1'-0"



TYPICAL EXTERIOR CORNER FRAMING FOR EXTERIOR SHEATHING

5 / SD-2

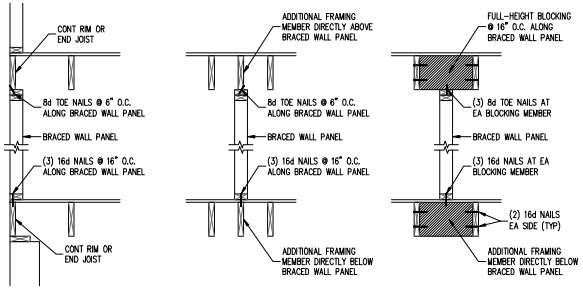
11x17 PRINT SCALE: 3/4" = 1'-0"
24x36 PRINT SCALE: 1" = 1'-0"



BRACED WALL PANEL CONNECTION WHEN PERPENDICULAR TO FLOOR/CEILING FRAMING

3 / SD-2

11x17 PRINT SCALE: 3/4" = 1'-0"
24x36 PRINT SCALE: 1/2" = 1'-0"



BRACED WALL PANEL CONNECTION WHEN PARALLEL TO FLOOR/CEILING FRAMING

4 / SD-2

11x17 PRINT SCALE: 3/4" = 1'-0"
24x36 PRINT SCALE: 1/2" = 1'-0"

Digitally signed by Zachary H. Hayes, PE
Date: 2024.07.22 16:34:05 -04'00'

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SD-2

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