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The Design MEISTER

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Drawn by: KM
Date: 01/17/2023
Revision:

57 Wesley Circle

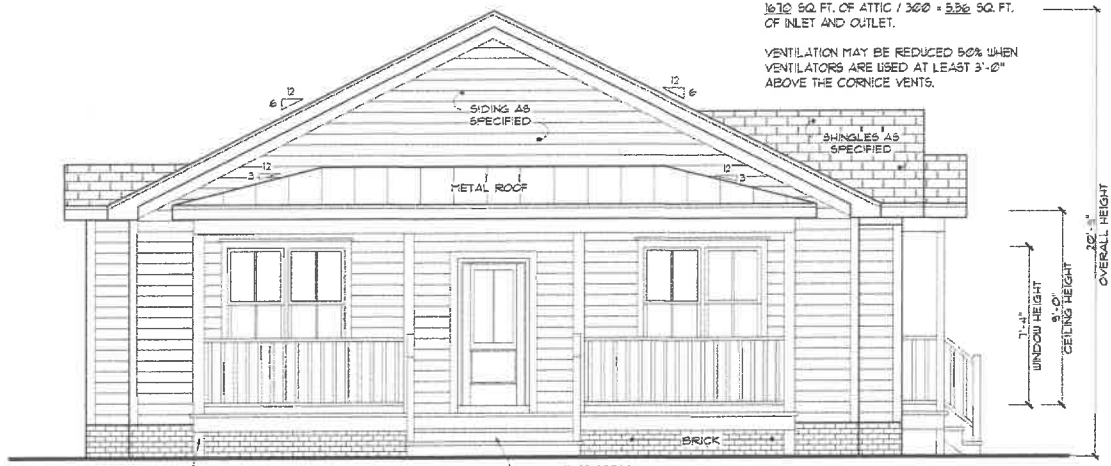
ELEVATIONS

Sheet: A1

ATTIC VENTILATION

1/2" SQ. FT. OF ATTIC / 300 + 5.32 SQ. FT. OF INLET AND OUTLET.

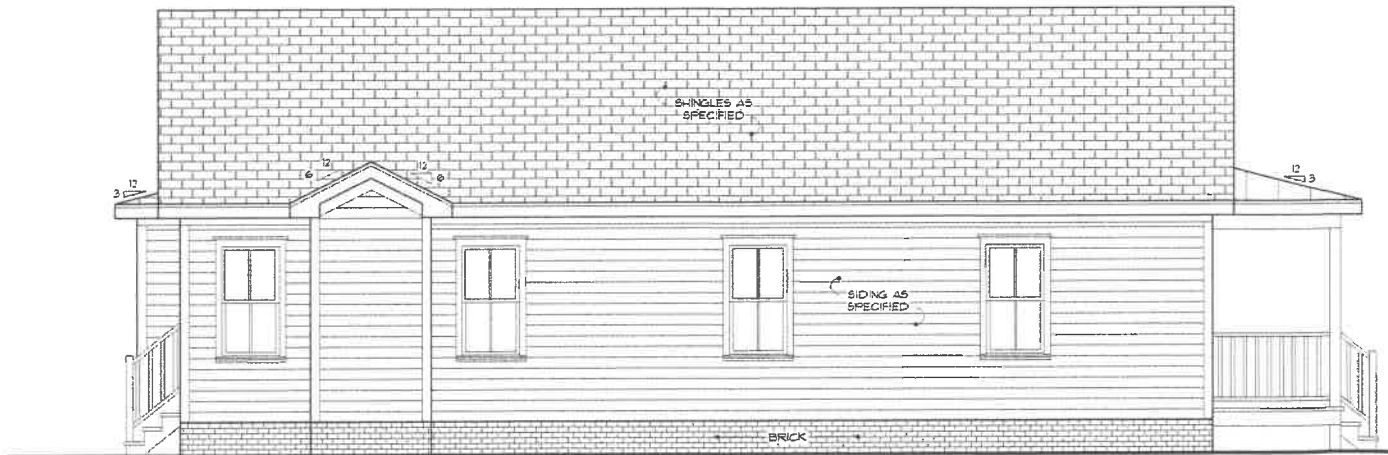
VENTILATION MAY BE REDUCED 50% WHEN VENTILATORS ARE USED AT LEAST 3'-2" ABOVE THE CORNICE VENTS.



FRONT ELEVATION
SCALE: 1/4"=1'



RIGHT SIDE ELEVATION
SCALE: 1/4"=1'



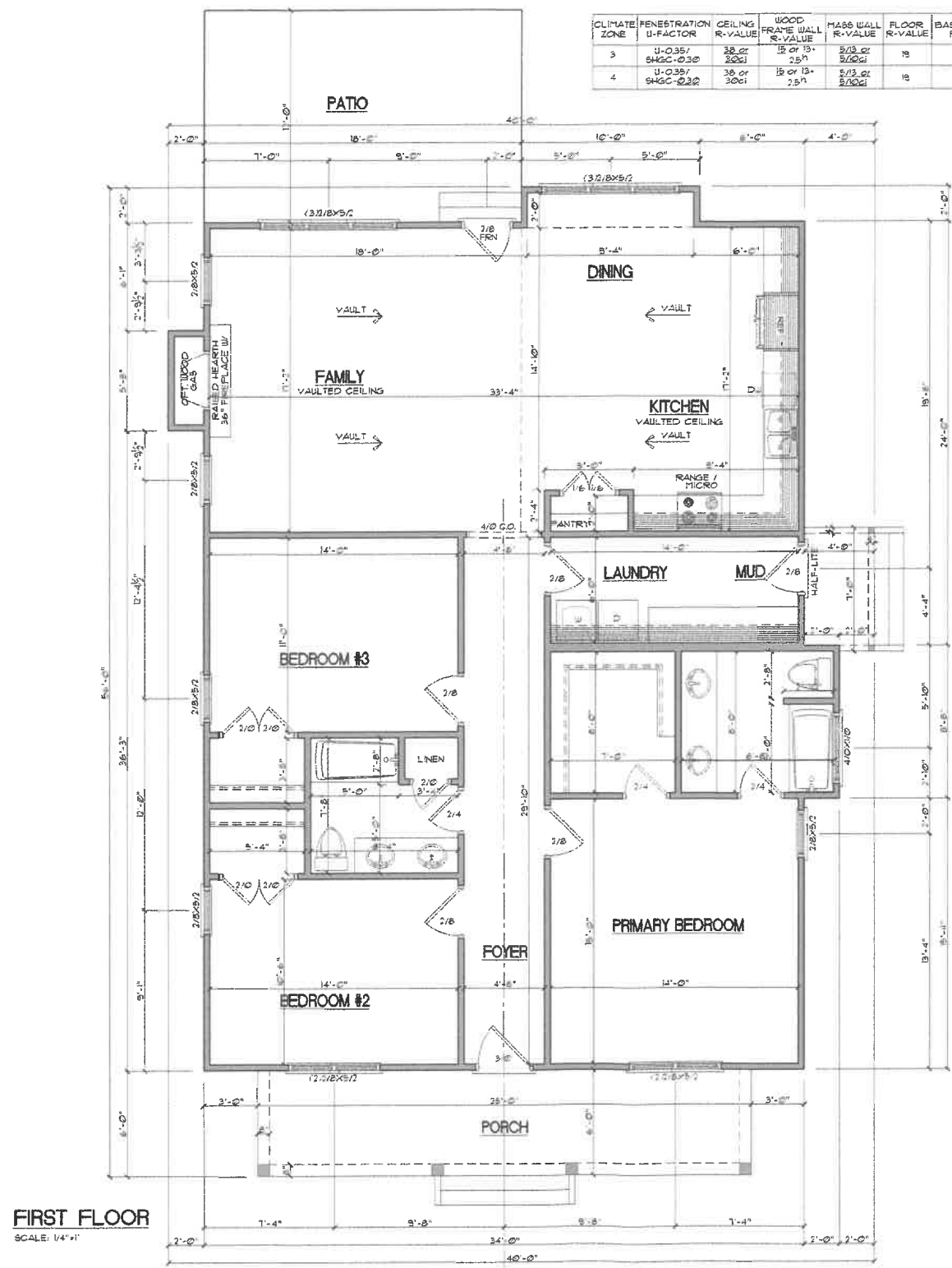
LEFT SIDE ELEVATION
SCALE: 1/4"=1'



REAR ELEVATION
SCALE: 1/4"=1'

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CLIMATE ZONE	PENETRATION U-FACTOR	CEILING R-VALUE	WOOD FRAME WALL R-VALUE	MASS WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB R-VALUE & DEPTH	CRACK SPACE WALL R-VALUE
3	U-0.35 / SHGC-0.30	38 OF 20G	15 OF 13" 2.5" I	5/13 OF 5/20G	15	5/13	0	5/13
4	U-0.35 / SHGC-0.30	38 OF 30G	15 OF 13" 2.5" I	5/13 OF 5/20G	15	10.15	10	10.15



FIRST FLOOR
SCALE: 1/4"=1'

GENERAL NOTES

WALLS:
ALL WALLS ARE DRAWN 4" THICK UNO.
ANGLED WALL ARE DRAWN #45° UNO.

SMOKE DETECTORS:
LOCATION AND NUMBER OF DETECTORS SHALL CONFORM TO NEC.

EGRESS:
ALL BEDROOMS MUST HAVE AT LEAST ONE WINDOW WHICH CONFORMS TO R-310 OF THE N.C. BLDG. CODE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY CHOSEN WINDOWS MEET EGRESS REQUIREMENTS AS MANUFACTURERS VARY.

ATTIC ACCESS:
MIN ATTIC ACCESS SHALL BE PROVIDED BY BUILDER AND LOCATED ON SITE.

WALL / CEILING HGT:
WALL AND CEILING HEIGHT NOTES ARE BASED ON NOMINAL WALL SIZE.
KNEE WALL HEIGHT LABELS FOR WALLS UNDER RAFTERS ASSUME AN EXTRA 2" FOR FURRING (IN HEATED SPACES).
FOR INSULATION THE WALL HEIGHT REFERS TO THE HGT. FROM THE FLOOR DECKING TO THE BOTTOM OF THE FURRING.

PLANS ARE DESIGNED TO MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION

FLOOR AREA:	
FIRST FLOOR HTD. *	1670*
PORCH *	160*
PATIO *	216*



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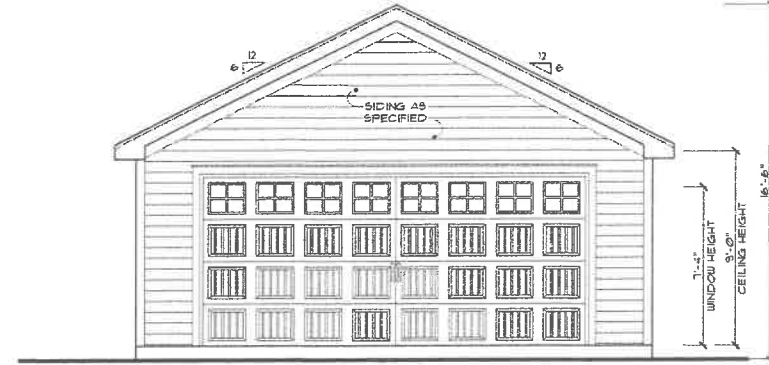
57 Wesley Circle

FIRST FLOOR

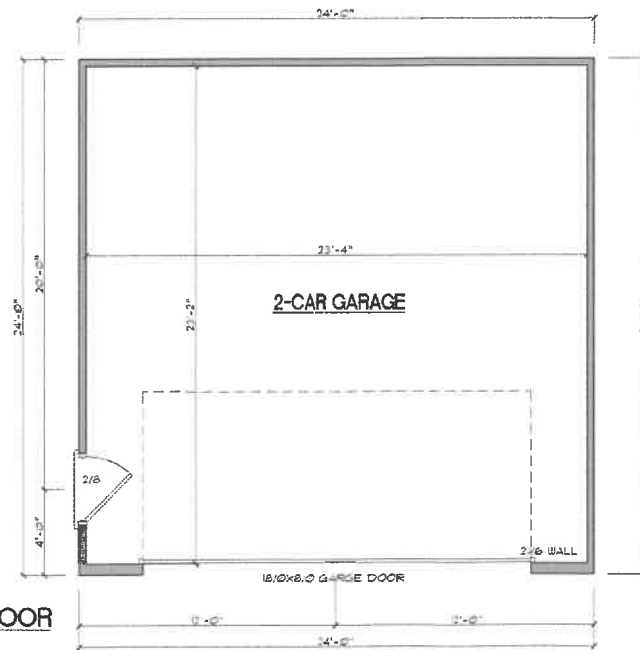
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LEFT SIDE ELEVATION
SCALE: 1/4"=1'



FRONT ELEVATION
SCALE: 1/4"=1'



FIRST FLOOR
SCALE: 1/4"=1'

GENERAL NOTES

WALLS:
ALL WALLS ARE DRAWN 4" THICK UNO. ANGLED WALL ARE DRAWN #48" UNO.

SMOKE DETECTORS:
LOCATION AND NUMBER OF DETECTORS SHALL CONFORM TO NEC.

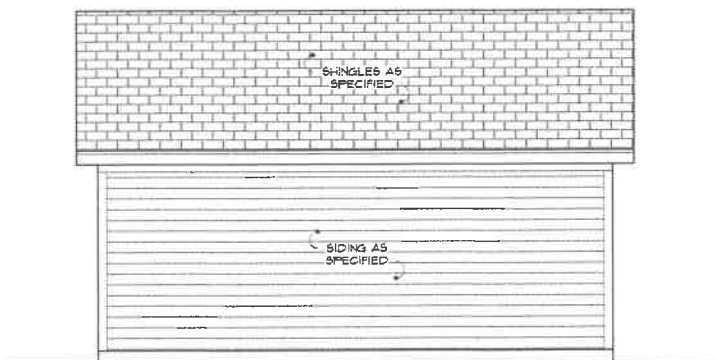
EGRESS:
ALL BEDROOMS MUST HAVE AT LEAST ONE WINDOW WHICH CONFORMS TO R-310 OF THE NC BLDG CODE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY CHOSEN WINDOWS MEET EGRESS REQUIREMENTS AS MANUFACTURERS VARY.

ATTIC ACCESS:
MIN. ATTIC ACCESS SHALL BE PROVIDED BY BUILDER AND LOCATED ON SITE.

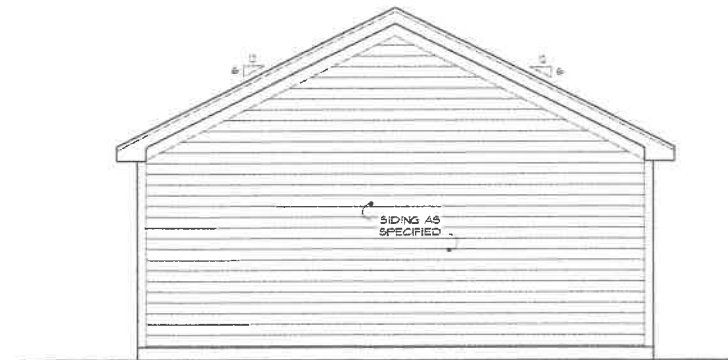
WALL/CEILING HGT.
WALL AND CEILING HEIGHT NOTES ARE BASED ON NOMINAL WALL SIZE. KNEE WALL HEIGHT LABELS FOR WALLS UNDER RAFTERS ASSUME AN EXTRA 2" FOR FURRING (IN HEATED SPACES) FOR INSULATION. THE WALL HEIGHT REFERS TO THE HGT. FROM THE FLOOR DECKING TO THE BOTTOM OF THE FURRING.

PLANS ARE DESIGNED TO MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION

FLOOR AREA GARAGE = 516#



RIGHT SIDE ELEVATION
SCALE: 1/4"=1'



REAR ELEVATION
SCALE: 1/4"=1'

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DETACHED GARAGE

Sheet: A3

DESIGN CRITERIA

- 2018 NORTH CAROLINA STATE BUILDING CODES
- ASCE 7-10
- DESIGN LOADS
 - LIVE LOAD (ROOF) = 20 PSF
 - LIVE LOAD (CEILING-WITH STORAGE) = 20 PSF
 - LIVE LOAD (FLOOR) = 40 PSF
 - LIVE LOAD (DECK) = 40 PSF
 - GROUND SNOW LOAD = 15 PSF
 - ULTIMATE WIND VELOCITY = 120 MPH
 - EXPOSURE CATEGORY = C
 - ASSUMED GROUND BEARING CAPACITY 12" BELOW GRADE: 2,000 PSF (CONTRACTOR RESPONSIBLE FOR VERIFICATION)

GENERAL NOTES

- CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING AND PROTECTING EXISTING UNDERGROUND UTILITIES IN THE AREA OF CONSTRUCTION.
- THE CONTRACTOR SHALL COORDINATE THEIR WORK ACTIVITIES WITH THE OWNER OR OWNER REPRESENTATIVE.
- CONTRACTOR SHALL MAKE A CAREFUL INSPECTION OF THE SITE TO FAMILIARIZE HIMSELF WITH THE ACTUAL CONDITIONS OF THE SITE PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL CHECK AND VERIFY GIVEN DIMENSIONS, TAKE ADDITIONAL DIMENSIONS AS REQUIRED AND REPORT ANY INACCURACIES TO THE ENGINEER BEFORE BEGINNING CONSTRUCTION.
- ALL WORK SHALL CONFORM TO THE CURRENT EDITIONS OF THE NORTH CAROLINA STATE BUILDING CODE, THE AISC CODE, THE ACI BUILDING CODE (ACI 318), THE AMERICAN WELDING SOCIETY CODE, ALL APPLICABLE ASTM STANDARDS, AND LOCAL GUIDELINES. IN CASES OF CONFLICT, THE MOST STRINGENT REQUIREMENT SHALL GOVERN.
- CONTRACTOR SHALL COORDINATE AND VERIFY THE SIZE, LOCATION, TYPE, AND DIRECTION OF ALL PADS, DEPRESSIONS, BOLTS, SLEEVES, ANCHORS, INSERTS, OPENINGS, ETC. TO BE SET OR CAST IN CONCRETE OR MASONRY PRIOR TO PLACEMENT.
- CONTRACTOR SHALL COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO FOUNDATION LAYOUT AND FABRICATION OF ANY STRUCTURAL MEMBERS. DIMENSIONS SHOWN ARE BASED ON PRELIMINARY DRAWINGS PROVIDED BY THE ARCHITECT/CONTRACTOR AND/OR SITE INSPECTION. THESE DIMENSIONS SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL DESIGN AND INSTALL ALL TEMPORARY SHORING REQUIRED TO STABILIZE NEW AND EXISTING STRUCTURES AND FOUNDATIONS UNTIL CONSTRUCTION IS COMPLETE.
- OMISSIONS OR CONFLICTS BETWEEN VARIOUS ELEMENTS OF THE DRAWINGS, SPECIFICATIONS, NOTES, AND DETAILS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER, AND RESOLVED BEFORE PROCEEDING WITH WORK.
- THE DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THE STRUCTURE SHOWN IS STRUCTURALLY SOUND IN ITS COMPLETED FORM ONLY. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION.
- APPLY TERMITE TREATMENT TO GROUND SURFACES WITHIN THE DEFINED SCOPE OF WORK AS REQUIRED BY CODE AND LOCAL BUILDING INSPECTOR.
- ONLY SEALED DRAWINGS WITH MOST RECENT REVISIONS ARE APPLICABLE FOR CONSTRUCTION.
- STRUCTURAL PLANS DO NOT INCORPORATE ADA, PLUMBING, MECHANICAL, ELECTRICAL, OR SITE FEATURES. ENGINEER'S SEAL APPLIES TO STRUCTURAL COMPONENTS ONLY.
- SECTIONS AND DETAILS SHOWN AT LOCATIONS INDICATED ON PLAN ARE TYPICAL FOR OTHER SIMILAR CONDITIONS OF BUILDING. EVEN IF NO SECTION CUT IS INDICATED AT A SIMILAR CONDITION, CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL DETAILS WITH OTHER TRADES, DISCIPLINES, AND ALL SECTIONS AND DETAILS WITHIN STRUCTURAL DOCUMENTS. CONTRACTOR SHALL COORDINATE THESE STRUCTURAL DRAWINGS WITH DRAWINGS OF OTHER DISCIPLINES. SHOULD CONFLICTS OR DEVIATIONS BE NOTED, THEY SHOULD BE IMMEDIATELY BROUGHT TO THE ATTENTION OF SUBJECT DESIGNERS FOR REVIEW.

SOIL FOUNDATIONS

- ALL BOTTOM OF FOOTINGS SHALL BE CAST A MINIMUM OF 12" BELOW ORIGINAL GROUND LINE AND IN NO CASE ABOVE THE FROST LINE BASED ON 2018 NCBC AND LOCAL STANDARDS. NO FOOTINGS SHALL BE CAST ON LOOSE FILL MATERIAL.
- ALL FILL SHALL BE PLACED IN 8" MAXIMUM LOOSE LIFTS AND SHALL BE COMPACTED TO A MINIMUM OF 95 PERCENT MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D-998 (STANDARD PROCTOR METHOD). THIS REQUIREMENT SHALL BE INCREASED TO 98 PERCENT OF ASTM D-998 IN THE FINAL FOOT BEHIND FLOOR SLABS AND PAVEMENTS.
- USE OF A SMOOTH EDGE BUCKET IS RECOMMENDED TO EXCAVATE FOR FOOTINGS. TOOTHED BUCKETS MAY ALLOW BEARING SOILS TO PERFORM INEFFECTIVELY AND ALLOW WATER TO SATURATE THE FOUNDATION SUB-GRADE.
- ONCE FOOTINGS ARE ABLE TO HANDLE LATERAL LOADING, BACKFILL WITH ENGINEERED STONE OR NO. 57 STONE IN 8" UNIFORM LIFTS. EXTERIOR OF THE FOOTING MAY BE BACKFILLED WITH 8" UNIFORM LIFTS OF SUITABLE SOILS COMPACTED TO 95% OF THE DRY DENSITY BEYOND THE PLACEMENT OF THE FOOTING DRAIN.
- A 10 MIL VAPOR BARRIER IS TO BE PLACED OVER THE ENTIRETY OF THE SUB-BASE, PRIOR TO PLACEMENT OF THE FLOOR INSULATION AND ANY CONCRETE SLAB-ON-GRADE. WITHIN CRAWL SPACES A MINIMUM 6MIL VAPOR BARRIER SHALL BE INSTALLED ON BARE SOILS.

REINFORCING

- ALL DETAILING, FABRICATION AND PLACING OF REINFORCING STEEL SHALL BE IN ACCORDANCE WITH THE LATEST "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES" ACI 315.
- CLEAR CONCRETE COVER OVER BARS SHALL BE 3" FOR FOOTINGS AND OTHER CONCRETE CAST AGAINST GROUND. CONCRETE COVER IN OTHER LOCATIONS TO BE A MINIMUM 1.5" (TYP. U.N.O.)
- PROVIDE CORNER BARS AT ALL FOOTING STEPS AND CORNERS. THE REINFORCING BARS SHALL BE A MINIMUM OF 2-6" LONG AND SHALL HAVE THE SAME SIZE AND SPACING AS THE HORIZONTAL REINFORCING.
- LAP ALL SPLICES IN CONCRETE AS SPECIFICALLY CALLED FOR, BUT AT LEAST 48 BAR DIAMETERS FOR TENSION OR COMPRESSION, UNLESS NOTED OTHERWISE.
- PROVIDE VERTICAL REINFORCEMENT IN FOUNDATION WALLS FOR UNBALANCED BACKFILL IN ACCORDANCE WITH APPLICABLE DESIGN DETAILS. WHERE NOT DETAILED IN PLAN, REINFORCEMENT SHALL BE INSTALLED PER TABLE R404.1.1(1) & (2) IN THE 2018 NCBC-RC.
- REINFORCING BARS SHALL BE DEFORMED AND PLAIN CARBON-STEEL CONFORMING TO ASTM A615, GRADE 60.
- WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064 AND BE SUPPLIED IN SHEETS, NOT ROLLS. U.N.O. MINIMUM 4" X 14" W/ 4 WELDED WIRE FABRIC. MINIMUM 1.5" FROM BOTTOM OF CONCRETE SLAB ON GRADES.

CONCRETE NOTES

- CONCRETE CONSTRUCTION SHALL COMPLY WITH ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (LATEST EDITION), ACI 318 "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (LATEST EDITION), AND ACI 302 "GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION" (LATEST EDITION).
- MIX DESIGN SHALL BE IN ACCORDANCE WITH ACI 318 (CURRENT EDITION).
- MINIMUM CEMENT CONTENT = 500 LBS PER CUBIC YARD.
- CONCRETE SHALL BE NORMAL WEIGHT CONCRETE AND SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI AT 28 DAYS (4,000 PSI FOR SLABS-ON-GRADE).
- MAXIMUM SLUMP = 4" PLUS OR MINUS 1" PRIOR TO THE ADDITION OF ADMIXTURES.
- THE MAX. AGGREGATE SIZE SHALL BE 3/4" UNLESS MIX DESIGN IS APPROVED BY ENGINEER PRIOR TO PLACEMENT.
- CONCRETE AGGREGATES SHALL COMPLY WITH ASTM C33 AND SHALL BE FREE OF CLAY, FOAM, LUMPS, OR OTHER HAZARDOUS SUBSTANCES.
- CONCRETE SHALL BE CONSOLIDATED USING CONCRETE VIBRATOR IN ACCORDANCE WITH ACI 306R-05.
- EXTERIOR SLABS SHALL HAVE 8% ± 1% AIR ENTRAINMENT. DO NOT USE AIR ENTRAINMENT ON INTERIOR SLABS (3% MAXIMUM AIR ENTRAINMENT). AIR ENTRAINMENT SHALL COMPLY WITH ASTM C260.
- THE CONTROL JOINT SPACING SHALL BE A MAXIMUM OF 12' OR AS SHOWN ON PLANS FOR A 4" THICK SLAB. PLACE CONTROL JOINTS TO AVOID RE-ENTRANT CORNERS. MAKE SAWCUTS TO FORM WEAKEN PLANE CONTROL JOINTS AS SOON AS POSSIBLE.

GENERAL FRAMING DESIGN NOTES

- FRAMING STANDARD: COMPLY WITH A/F&P'S "DETAILS FOR CONVENTIONAL WOOD FRAME CONSTRUCTION", UNLESS OTHERWISE INDICATED.
- ALL EXTERIOR WALLS SHALL BE FRAMED WITH 2X4 STUDS SPACED AT 16" O.C. U.N.O. (MAXIMUM HEIGHT = 10'-0")
- ALL INTERIOR WALLS SHALL BE FRAMED PER THE FOLLOWING SPECIFICATIONS:
 - 3.1. LOAD BEARING WALLS = 2X4 STUDS SPACED AT 16" O.C. U.N.O. (MAXIMUM HEIGHT = 10'-0")
 - 3.2. NON-LOAD BEARING, PARTITION WALLS = 2X4 STUDS SPACED UP TO 24" O.C.
- ALL WALLS TO BE BALLOON FRAMED FROM BOTTOM PLATE TO TOP PLATE, U.N.O. SPECIAL CARE SHALL BE OBSERVED DURING CONSTRUCTION OF WALLS WITH STUDS GREATER THAN 10" IN HEIGHT TO ENSURE CONTINUITY.
- USE 1/2" DIAMETER ANCHOR BOLTS, 7" MINIMUM EMBEDMENT IN CONCRETE. AT A MAXIMUM OF 6" ON CENTER AND A MAXIMUM OF 12" FROM CORNERS AND OPENINGS EXCEEDING 4" IN WIDTH.
- NAIL 2X BOTTOM PLATE TO RIM JOIST BELOW WITH 16D NAILS AT 4" O.C. SPACING.
- INSTALL METAL HANGERS, TIES, CLIPS, ETC. PER MANUFACTURER'S WRITTEN INSTRUCTIONS.

- DO NOT SPLICE BUILT-UP BEAM MEMBERS BETWEEN SUPPORTS UNLESS OTHERWISE INDICATED. IF A SPLICE IS REQUIRED, LOCATE SPLICES DIRECTLY CENTERED OVER THE SUPPORT.
- WHERE BUILT-UP BEAMS OR GIRDERS OF 2-INCH NOMINAL DIMENSIONAL LUMBER ON EDGE ARE REQUIRED, FASTEN TOGETHER WITH 3 ROWS OF 16D NAILS SPACED NOT LESS THAN 24" O.C. LOCATED ONE ROW 1.5" FROM TOP EDGE AND ONE ROW 1.5" FROM BOTTOM EDGE.
- WHERE MULTI-PLY LVL BEAMS ARE REQUIRED, FASTEN PILES TOGETHER PER MANUF. SPECIFICATIONS.
- FOR BUILT-UP (GANG) COLUMNS, CONNECT EACH PLY W/ (2) ROWS OF 10D NAILS AT 12" O.C.
- INSTALL EQUIVALENT, SOLID BLOCKING BELOW ALL STUD GROUPS TO ENSURE CONTINUOUS LOAD PATH TO THE FOUNDATION.
- INSTALL MINIMUM FULL LENGTH (BEARING POINT TO BEARING POINT) 2-PLY JOISTS BELOW PARALLEL PARTITION WALL SECTIONS U.N.O.
- SEE FRAMING PLANS FOR ALL BEARING HEADER SIZES. MINIMUM HEADER SIZE 2-2X8 (U.N.O.).
- ALL ROOF FRAMING MUST BE TIED TO THE FRAMING BELOW WITH SIMPSON H2.5A TIES, TRUSS SCREWS, OR EQUIVALENT FASTENING MECHANISM.
- ALL LUMBER EXPOSED TO CONCRETE/MASONRY OR WEATHER MUST BE PRESSURE TREATED.
- ALL FASTENERS/METAL HARDWARE EXPOSED TO WEATHER OR PRESSURE TREATED LUMBER MUST BE GALVANIZED.
- ALL FASTENING SHALL CONFORM TO TABLE R602.3(1) IN THE 2018 NCBC-RC.
- ALL DECK FRAMING COMPONENTS ARE TO BE INSTALLED PER 2018 NCBC-RC APPENDIX M.
- PROVIDE KING STUDS AT NEW EXTERIOR OPENINGS PER 2018 NCBC-RC TABLE R602.3(5) SUBNOTE 1". ONE HALF OF THE STUDS INTERRUPTED BY A WALL OPENING SHALL BE PLACED IMMEDIATELY OUTSIDE THE JACK STUDS ON EACH SIDE OF THE OPENING AS KING STUDS ... KING STUDS SHALL EXTEND FULL HEIGHT FROM SOLE PLATE TO TOP PLATE OF WALL.

DIMENSIONAL LUMBER FRAMING

- MAXIMUM MOISTURE CONTENT: 19%
- NO. 2 GRADE OR BETTER (EXCEPT STUD WALLS U.N.O.) AND ANY OF THE FOLLOWING SPECIES:
 - HEM-FIR (NORTH), NLGA
 - SOUTHERN PINE, SPIB
 - DOUGLAS FIR-LARCH, WCLIB OR WWPA
 - MIXED SOUTHERN PINE, SPMB
 - SPRUCE-PINE-FIR, NLGA
 - DOUGLAS FIR-SOUTH, WWPA
 - HEM-FIR, WCLIB OR WWPA
 - DOUGLAS FIR-LARCH (NORTH), NLGA
- EXTERIOR LOAD BEARING AND INTERIOR PARTITION WALLS: ANY SPECIES (STUD GRADE OR BETTER) WITH A MODULUS OF ELASTICITY OF AT LEAST 1,300,000 PSI AND EXTREME FIBER STRESS IN BENDING OF AT LEAST 850 PSI FOR 2" NOMINAL THICKNESS AND 12" NOMINAL WIDTH FOR A SINGLE MEMBER USE.
- JOISTS, RAFTERS, AND OTHER FRAMING NOT LISTED ABOVE: ANY SPECIES (NO. 2 OR BETTER) WITH A MODULUS OF ELASTICITY OF AT LEAST 1,300,000 PSI AND AN EXTREME FIBER STRESS IN BENDING OF AT LEAST 850 PSI FOR 2" NOMINAL THICKNESS AND 12" NOMINAL WIDTH FOR SINGLE MEMBER USE.

ENGINEERED WOOD PRODUCTS

- LAMINATED VENEER LUMBER: STRUCTURAL COMPOSITE LUMBER MADE FROM WOOD VENEERS WITH GRAIN PRIMARILY PARALLEL TO MEMBER LENGTHS. EVALUATED AND MONITORED ACCORDING TO ASTM D5458 AND MANUFACTURED WITH AN EXTERIOR-TYPE ADHESIVE COMPLYING WITH ASTM D2569 AND CONTAINING NO UREA FORMALDEHYDE. ALL LVL BEAMS EXPOSED TO WEATHER SHALL BE WRAPPED PER THE MANUFACTURER'S SPECIFICATIONS.
- AVAILABLE MANUFACTURERS: SUBJECTS TO COMPLIANCE WITH REQUIREMENTS, MANUFACTURERS OFFERING PRODUCTS THAT MAY BE INCORPORATED INTO THE WORK INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
 - BOISE CASCADE CORPORATION
 - GEORGIA-PACIFIC
 - LOUISIANA-PACIFIC CORPORATION
 - ROSBURG FOREST PRODUCTS CO.
 - WELLDWOOD OF CANADA LIMITED, SUBSIDIARY OF INTERNATIONAL PAPER COMPANY
 - WEYERHAEUSER COMPANY
- EXTREME FIBER STRESS IN BENDING, EDGEWISE: 3,100 PSI
- MODULUS OF ELASTICITY, EDGEWISE: 2,000,000 PSI.

SHEATHING DESIGN NOTES

- UNLESS NOTED OTHERWISE: SHEATH ROOF AND WALLS WITH EXPOSURE 1, 7/16"-THICK APA RATED OSB (SPAN RATING 32/16) WITH 8D NAILS AT 6" O.C. EDGES, 12" O.C. FIELD, BLOCKING REQUIRED AT PANEL EDGES.
- INSTALL "H" CLIPS AT PANEL EDGES BETWEEN EACH RAFTER/TRUSS FOR ALL ROOF SHEATHING.
- NAIL ALL SHEATHING AT GABLE AND EAVE ROOF OVERHANGS WITH 8D NAILS AT 6" O.C. EDGES, 6" O.C. FIELD.
- NAIL ALL SHEATHING AT PERIMETER AND PEAK OF ROOF WITH 8D NAILS AT 6" O.C. EDGES, 6" O.C. FIELD.
- NAIL ALL SHEATHING WITHIN 4'-0" OF WALL CORNERS WITH 8D NAILS AT 6" O.C. EDGES, 6" O.C. FIELD.
- SUBFLOORING SHALL BE IN ACCORDANCE WITH TABLE R503.1 WITHIN RESIDENTIAL BUILDING CODE OR ENGINEER APPROVED ALTERNATIVE.
- MEMBERS AND BLOCKING AT ADJOINING PANEL EDGES SHALL BE MINIMUM 3" NOMINAL OR DOUBLE 2" NOMINAL WITH STAGGERED NAILING AT ALL PANEL EDGES.
- HORIZONTAL BLOCKING MAY BE 2X LAID FLAT AGAINST SHEATHING.

STRUCTURAL MASONRY

- LOAD BEARING MASONRY WALLS, PILASTERS, PIER, RETAINING WALLS, FOUNDATION WALLS AND ANY OTHER MASONRY SO DESIGNATED ON DRAWINGS IS CONSIDERED HERE TO BE STRUCTURAL MASONRY.
- REQUIRED COMPRESSIVE STRENGTH OF MASONRY UNITS:
 - a. CONCRETE UNITS - 1900 PSI ON NET AREA
- CONCRETE MASONRY UNITS (CMU) SHALL BE NORMAL WEIGHT (125 PCF) CONFORMING TO ASTM C90. REFER TO ARCHITECTURAL DRAWINGS FOR UNIT SIZE, FACE, COLOR, JOINTING, ETC.
- MORTAR - TYPE S, ASTM C270
- GROUT FOR REINFORCED MASONRY - FINE GROUT, ASTM C478. MINIMUM 28 DAY COMPRESSIVE STRENGTH - 2000 PSI.
- MAXIMUM HEIGHT TO WHICH MASONRY SHALL BE LAID BEFORE GROUTING IS 5-FEET ABOVE CONSTRUCTION SURFACE OR PREVIOUSLY GROUTED MASONRY. PROVIDE CLEANOUT OPENINGS AT THE BOTTOM OF EACH GROUT LIFT.
- REINFORCE MASONRY WHERE SHOWN ON STRUCTURAL DRAWINGS. THE REINFORCING IN POSITION AND PLACE GROUT AROUND REINFORCING. DO NOT PUSH REINFORCING DOWN INTO PREVIOUSLY PLACED GROUT FILL. SET BOLTS SIMILARLY.
- EMBEDDED ANCHORS INTO MASONRY (OR CONCRETE) ARE TO BE INSTALLED PER PLAN WITH SIMPSON "SET" EPOXY (OR EQUIV.). PROVIDE ADHESIVE SCREENS OR OTHER APPROVED ANCHORAGE FOR HOLLOW MASONRY. MECHANICAL WEDGE ANCHORS ARE NOT PERMITTED WITHIN MASONRY.
- ALL CORNERS AND INTERSECTIONS OF STRUCTURAL MASONRY SHALL BE CONSTRUCTED BY INTERLOCKING COURSES.

EPOXY ADHESIVE ANCHORS

- ALL EPOXY SHALL BE SIMPSON BRAND "SET" EPOXY SYSTEM, OR APPROVED EQUAL, UNLESS NOTED OTHERWISE.
- EPOXY ADHESIVES TO BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND INSTRUCTIONS.
- ALL EPOXY ANCHOR BOLTS TO BE SIZED AS SHOWN IN NOTES/DETAILS AND SHALL CONFORM TO THE FOLLOWING:
 - ANCHOR BOLTS INTO FOUNDATION: ASTM F1554, GRADE 36
 - ALL OTHER APPLICATIONS: ASTM 307, U.N.O.
- ALL EPOXY ANCHOR BOLTS AND REBAR DOWELS SHOULD BE CLEAN AND OIL FREE.
- CONCRETE DUST SHALL BE REMOVED FROM ALL DRILLED HOLES BY USE OF A NYLON BRUSH AND OIL FREE COMPRESSED AIR. CORRECT PROCEDURE INVOLVES BLOWING THE DUST OUT OF THE HOLE, BRUSHING THE HOLE CLEAN, AND THEN BLOWING AGAIN.
- DRILLED HOLES SHALL BE KEPT DRY AND ANY STANDING WATER MUST BE BLOWN OUT WITH OIL FREE COMPRESSED AIR AND ALLOWED TO DRY PRIOR TO EPOXY INSTALLATION.
- EPOXY SHALL NOT BE INSTALLED IN CONCRETE WHICH IS LESS THAN 7 DAYS OLD.
- EPOXY ADHESIVES MUST BE ALLOWED THE FULL CURE TIME AS SPECIFIED BY THE MANUFACTURER PRIOR TO APPLICATION OF ANY LOAD AND ANCHOR BOLTS OR REBAR DOWELS MUST REMAIN UNDISTURBED DURING THIS SETTING PERIOD.
- EPOXY ADHESIVE ANCHORS ARE NOT TO BE USED EXCEPT WHERE SPECIFICALLY INDICATED ON PLANS.

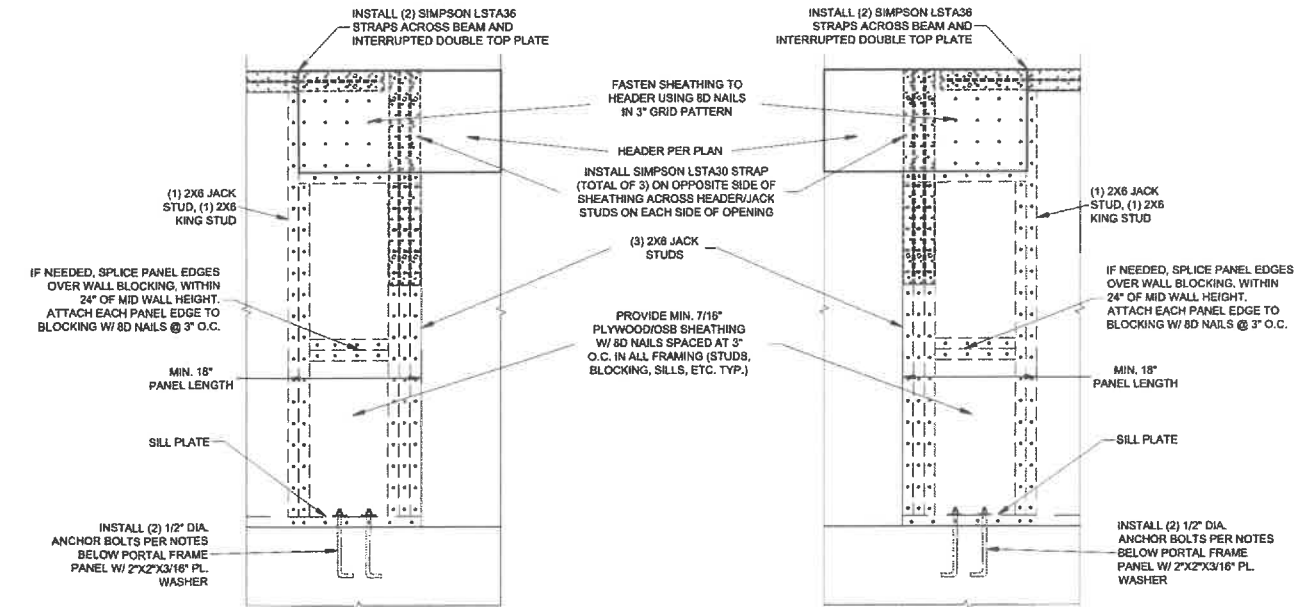
TYPICAL ABBREVIATIONS

&	= AND	MFG.	= MANUFACTURER
@	= AT	MAX.	= MAXIMUM
±	= PLUS OR MINUS	MIN.	= MINIMUM
C.J.	= CEILING JOIST	N.T.S.	= NOT TO SCALE
C.M.U.	= CONCRETE MASONRY UNIT	O.C.	= ON CENTER
CONT.	= CONTINUOUS	P.B.	= PERIMETER BAND
CONC.	= CONCRETE	P.T.	= PRESSURE TREATED
Ø, Ø DIA.	= DIAMETER	PL.	= PLATE
EQ.	= EQUAL	SIM.	= SIMILAR
EQUIV.	= EQUIVALENT	STR.	= STRUCTURAL
E.W.	= EACH WAY	TEMP.	= TEMPORARY
EX.	= EXISTING	TYP.	= TYPICAL
FLR.	= FLOOR	U.N.O.	= UNLESS NOTED OTHERWISE
F.J.	= FLOOR JOISTS	VERT.	= VERTICAL
HT.	= HEIGHT	W/	= WITH

JACK STUD/HEADER SCHEDULE (U.N.O.)

OPENING <= 3'-0"	1
OPENING <= 6'-0"	2
OPENING > 6'-0" OR LVL BEAMS	3

PROVIDE KING STUDS AT EACH END OF EXTERIOR OPENINGS PER GENERAL FRAMING NOTE #20 (TYP. U.N.O.)



1 DETACHED GARAGE PORTAL FRAME
SCALE: N.T.S.

SHEET INDEX

S1.0	GENERAL NOTES
S2.0	HOUSE FOUNDATION PLAN & DETAILS
S3.0	HOUSE FLOOR & WALL/CILING FRAMING PLAN & DETAILS
S4.0	HOUSE ROOF FRAMING PLAN & DETAILS
S5.0	DETACHED GARAGE FOUNDATION PLAN & DETAILS

GILLES & FLYTHE
ENGINEERS
7334 CHAPEL HILL ROAD, SUITE 200
RALEIGH, NC 27607 (919) 465-3001
NC LICENSE NO. C-2871



Digitally signed
by Sean M
McDonald
Date: 2024.05.15
15:40:47 -04'00'

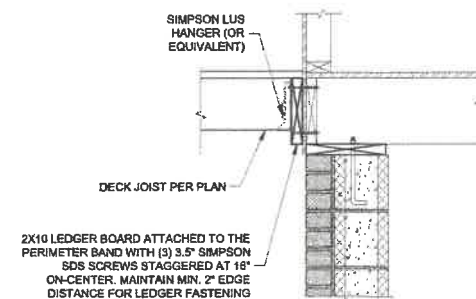
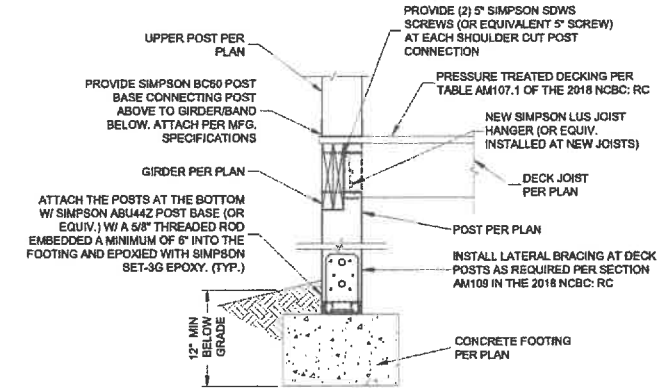
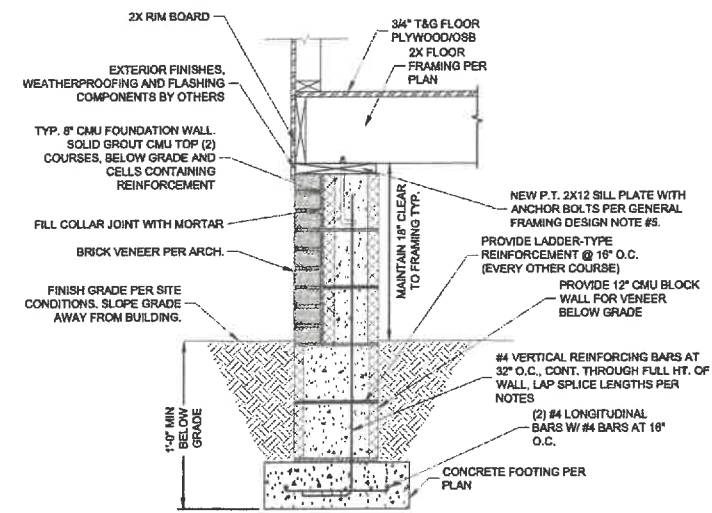
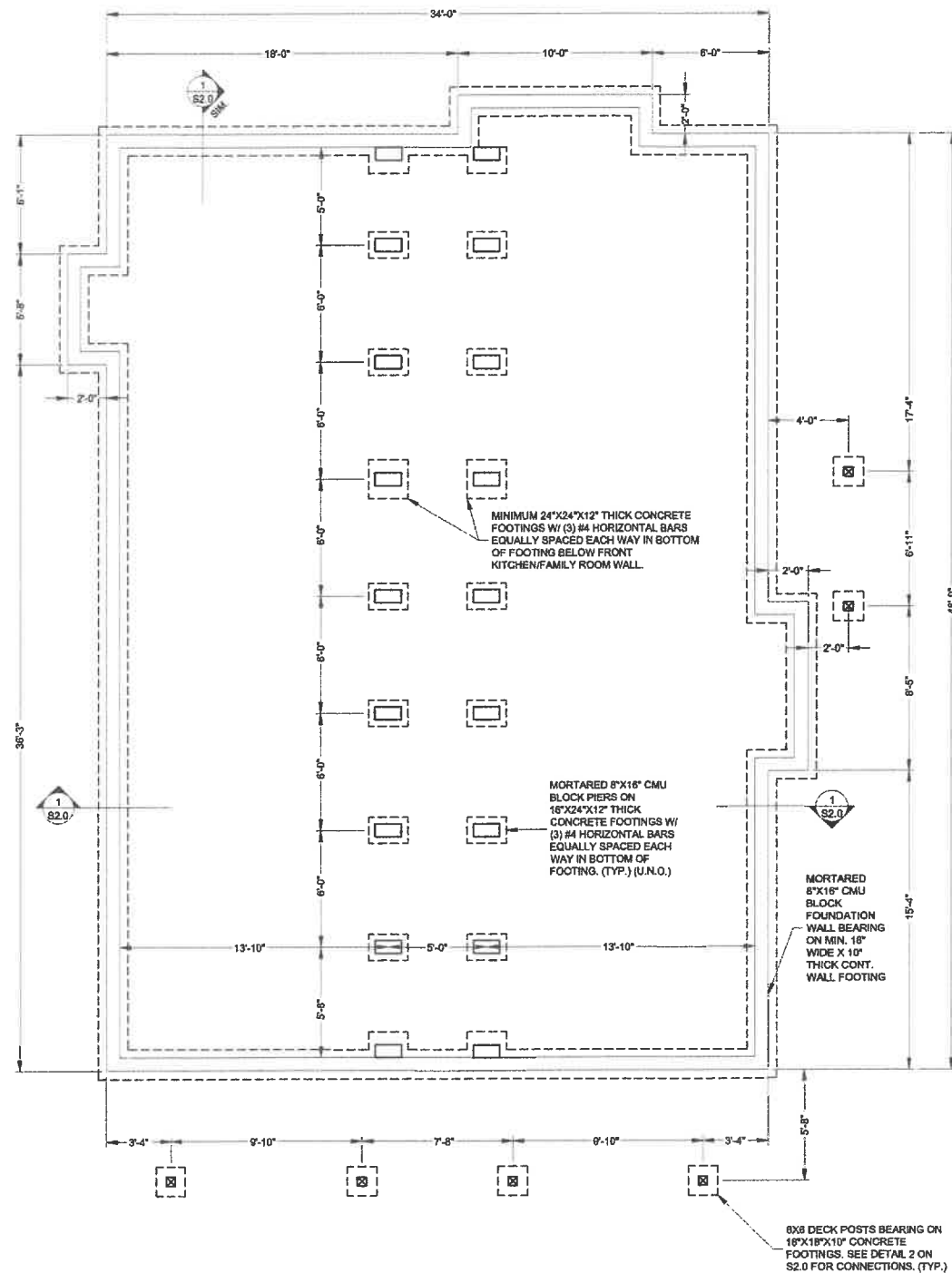
STRUCTURAL DESIGN PLANS
BUTLER HOMES, LLC
C/O STEVEN EISENBERG
57 WESLEY CIRCLE, FLOUJAY-VARINA, NC

REVISIONS

NO.	DATE	DESCRIPTION
0	05/15/2024	FOR CONSTRUCTION

SCALE: AS SHOWN
REVIEWED BY: SMM
DRAWN BY: JPG
DATE: MAY 15, 2024

S1.0



GILES FLYTHE
ENGINEERS
7334 CHAPEL HILL ROAD, SUITE 200
RALEIGH, NC 27607 (919) 465-3801
NC LICENSE NO. C-2671



Digitally signed
by Sean M
McDonald
Date: 2024.05.15
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STRUCTURAL DESIGN PLANS
BUTLER HOMES, LLC
C/O STEVEN EISENBERG
57 WESLEY CIRCLE, FUGUAY-VARINA, NC

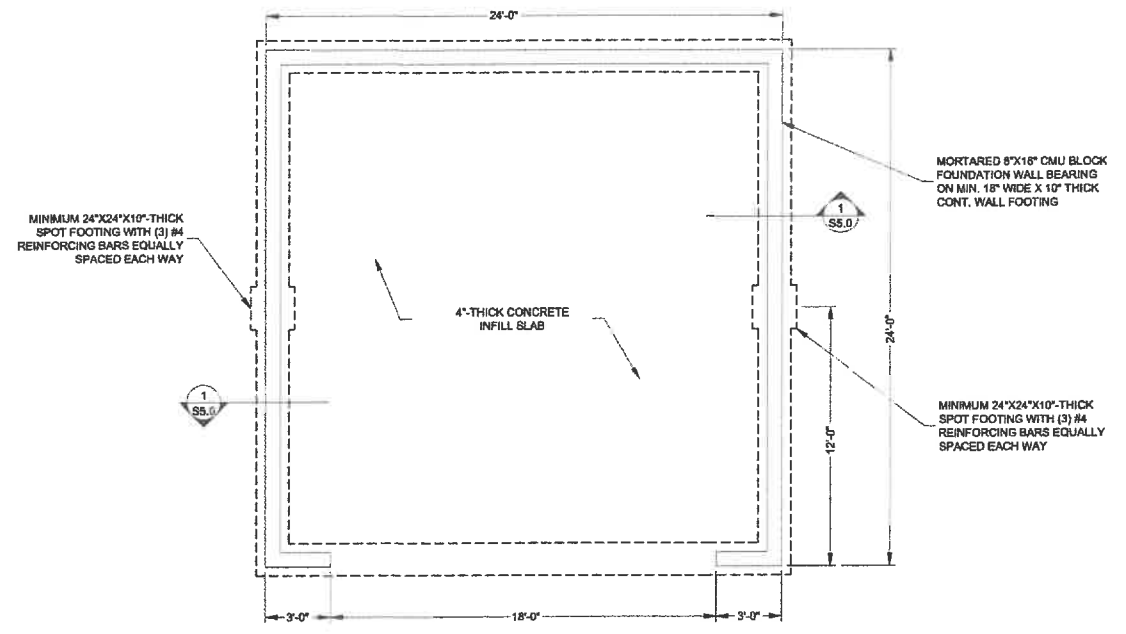
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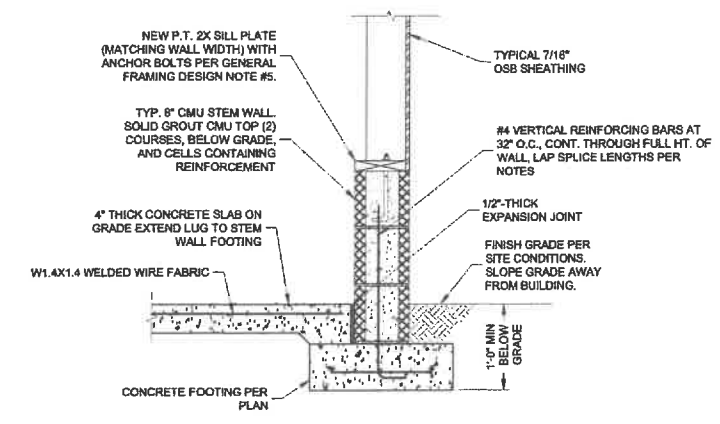
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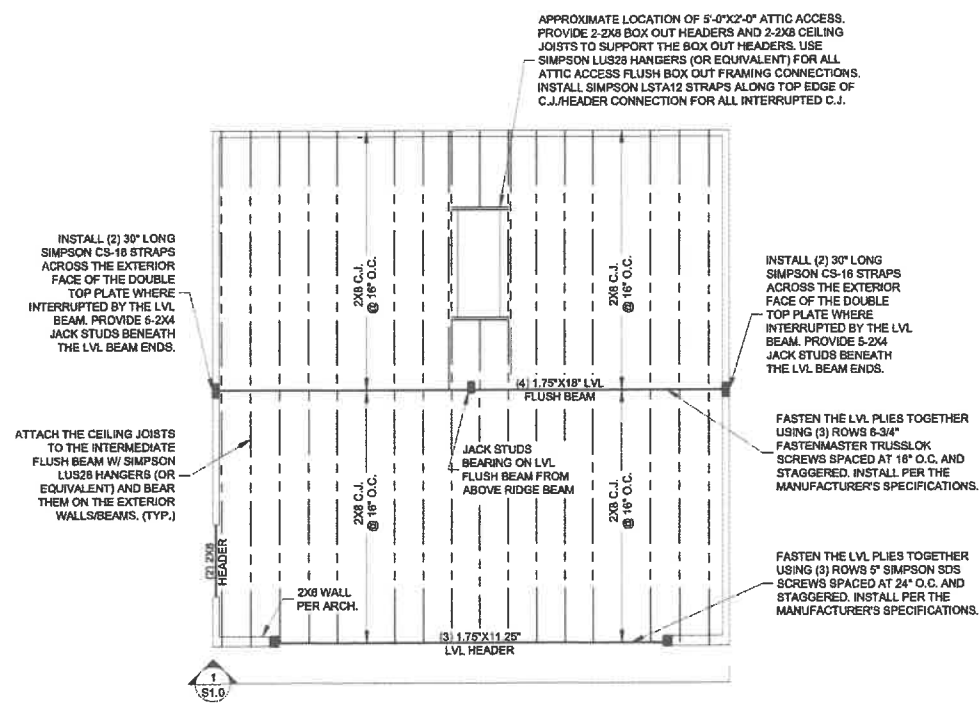
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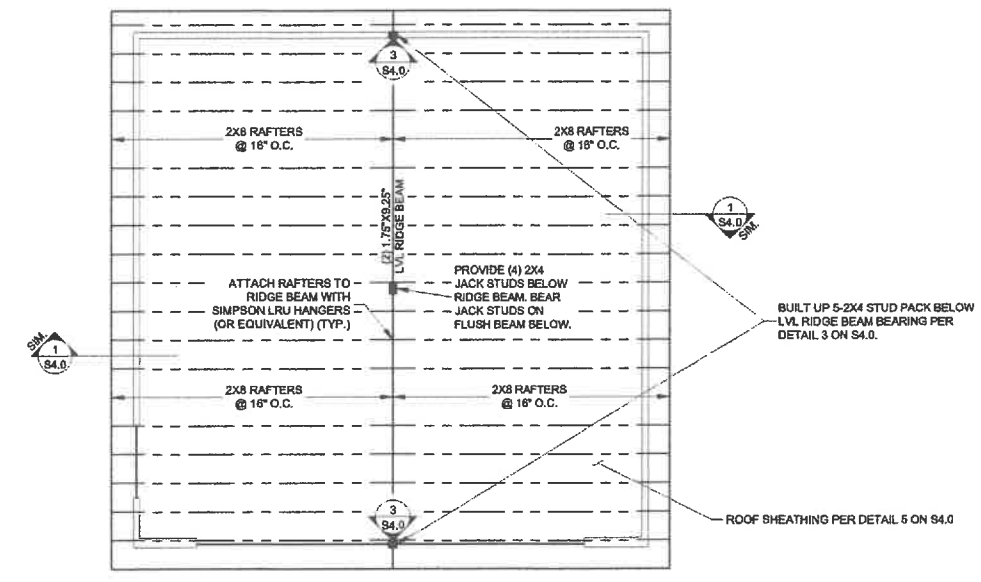
DETACHED GARAGE FOOTING/FOUNDATION PLAN
SCALE: 1/4" = 1'-0"



1 DETACHED GARAGE FOUNDATION SECTION
SCALE: N.T.S.



DETACHED GARAGE WALL/CEILING FRAMING PLAN
SCALE: 1/4" = 1'-0"



DETACHED GARAGE ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

STRUCTURAL DESIGN PLANS
BUTLER HOMES, LLC
C/O STEVEN EISENBERG
57 WESLEY CIRCLE, FUGUAY-VARINA, NC

REVISIONS		
NO.	DATE	DESCRIPTION
0	05/15/2024	FOR CONSTRUCTION

SCALE: AS SHOWN
REVIEWED BY: SMM
DRAWN BY: JFG
DATE: MAY 15, 2024

S5.0