# **Residence for**

## Garman Homes Lot 0159 Serenity Fuquay Varina, North Carolina

#### **INDEX TO DRAWINGS**

S2

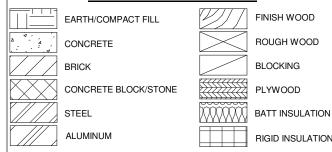
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1	FRONT & LEFT SIDE ELEVATIONS

- **REAR & RIGHT SIDE ELEVATIONS** 2
- FIRST & SECOND FLOOR PLANS FIRST & SECOND FLOOR FLECTRICAL PLANS F
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- FIRST FLOOR PLUMBING PLAN
- CONSTRUCTION DETAILS

### **GENERAL NOTES**

- 1. ALL WORK TO BE DONE IN STRICT ACCORDANCE WITH NORTH CAROLINA STATE RESIDENTIAL BUILDING CODE, 2018 EDITION (HEREWITH SHOWN AS N.C.S.R.B.C.)
- 2. DIMENSIONS SHOWN ON DRAWINGS GOVERN OVER SCALE.
- 3. STUD WALL DESIGN SHALL CONFORM TO ALL N.C.S.R.B.C. REQUIREMENTS
- 4. CONTRACTOR SHALL USE TEMPERED SAFETY GLASS IN ALL LOCATIONS AS REQUIRED BY N.C.S.R.B.C., 2018 EDITION, SECTION R308.4
- 5. ANY HABITABLE ROOM SHALL MEET ALL LIGHT/VENTILATION AND EGRESS AS REQUIRED BY N.C.S.R.B.C. 2018 EDITION, SECTIONS R-303.1 AND R-310.1.
- 6. ALL EXTERIOR WALLS SHOWN ON FLOOR PLANS ARE 2X6 FRAME UNLESS NOTED OTHERWISE. ALL INTERIOR WALLS SHOWN ON FLOOR PLANS ARE 2X4 FRAME UNLESS NOTED OTHERWISE.
- 7. ALL ANGLED WALLS SHOWN ON FLOOR PLANS ARE 45 UNLESS NOTED OTHERWISE.
- 8. ALL WINDOWS SHALL HAVE A MINIMUM DPI RATING OF 25. BUILDER SHALL VERIFY WITH WINDOW MANUFACTURER THAT UNITS INSTALLED MEET THESE REQUIREMENTS AS PER N.C.S.R.B.C., 2018 EDITION, TABLE 301.2(4).
- 9. ENERGY EFFICIENCY REQUIREMENTS FOR THE SPECIFIC CLIMATE ZONE WHERE STRUCTURE IS BEING BUILT SHALL BE IN ACCORDANCE WITH CHAPTER 11 OF THE N.C.S.R.B.C., 2018 EDITION, AS SHOWN IN SECTION N1101.2.

#### MATERIALS LEGEND



#### ATTIC VENTILATION REQUIREMENTS

NATURAL ROOF VENTILATION MECHANICAL ROOF CALCULATIONS VENTILATION CALCULATIONS <u>1340 SQ. FT.</u> = 8.93 SQ. FT. <u>1340 SQ. FT.</u> = 4.47 SQ. FT. VENT REQ'D 150 300 VENT REQ'D **BUILDER TO PROVIDE** BUILDER TO PROVIDE APPROPRIATE VENTILATING AS APPROPRIATE VENTILATING AS REQUIRED PER CODE REQUIRED PER CODE

- FOUNDATION PLAN & FIRST FLOOR FRAMING PLAN
- SECOND FLOOR FRAMING PLAN & ROOF FRAMING PLAN
- GARAGE FOUNDATION PLAN, FIRST FLOOR & ROOF FRAMING PLANS S3
- SD1 STRUCTURAL DETAILS SPEC STRUCTURAL NOTES

#### **RESIDENTIAL BUILDING CODE SUMMARY**

- 1. PLANS ARE DESIGNED TO THE 2018 N.C.S.R.B.C.
- 2. HOUSE IS DESIGNED FOR 115 MPH ULTIMATE DESIGN WIND SPEED (89 MPH NOMINAL DESIGN WIND SPEED), EXPOSURE B.
- 3. ANCHOR BOLTS SHALL BE MIN. 1/2" DIAMETER AND SHALL EXTEND 7" MIN. INTO MASONRY OR CONCRETE. BOLTS TO BE NO MORE THAN 6' O.C. AND WITHIN 12" FROM THE CORNER.
- 4. MEAN ROOF HEIGHT: 29'-7"
- 5. COMPONENT & CLADDING DESIGNED FOR THE FOLLOWING LOADS:

MEAN ROOF HGT:	UP TO 30'	30'-1" TO 35'	<u>35'-1" TO 40'</u>	40'-1" TO 45'
ZONE 1	16.5,-18.0	17.3,-18.9	17.3,-18.9	17.3,-18.9
ZONE 2	16.5,-21.0	17.3,-22.1	17.3,-22.1	17.3,-22.1
ZONE 3	16.5,-21.0	17.3,-22.1	17.3,-22.1	17.3,-22.1
ZONE 4	18.0,-19.5	18.9,-20.5	18.9,-20.5	18.9,-20.5
ZONE 5	18.0,-24.1	18.9,-25.3	18.9,-25.3	18.9,-25.3

- 6. MINIMUM VALUES FOR ENERGY COMPLIANCE: Zone 4
- 7. MAXIMUM GLAZING U-FACTOR: .35
- 8. INSULATING VALUES: CEILING: R-49 / WALLS: R-15 / FLOOR: R-19 SLABS: R-10. CODE REFERENCE: TABLE N1102.1

#### AREA CALCULATIONS

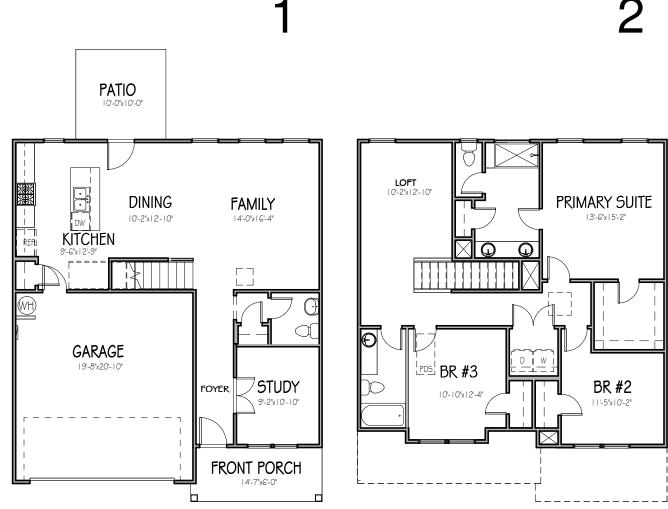
HEATED (SQ. FT.)		<u>UNHEATED (SQ. FT.)</u>		UNFINISHED	<u>(SQ. FT.)</u>
1ST FLOOR: 2ND FLOOR: TOTAL:	830 1112 1942	FRONT PORCH: GARAGE: PATIO:	85 425 100	BASEMENT: 1ST FLOOR: 2ND FLOOR: ATTIC:	N/A N/A N/A N/A
		TOTAL:	525	TOTAL:	N/A
				OVERALL DIMEN	<u>ISIONS</u>
				WIDTH: DEPTH:	34'-4" 50'-2"

#### FOUNDATION VENTILATION CALCULATIONS

(REFERENCE: N.C.S.R.B.C. 2018 EDITION SECTION R408.)

NOT APPLICABLE WITH SLAB FOUNDATIONS





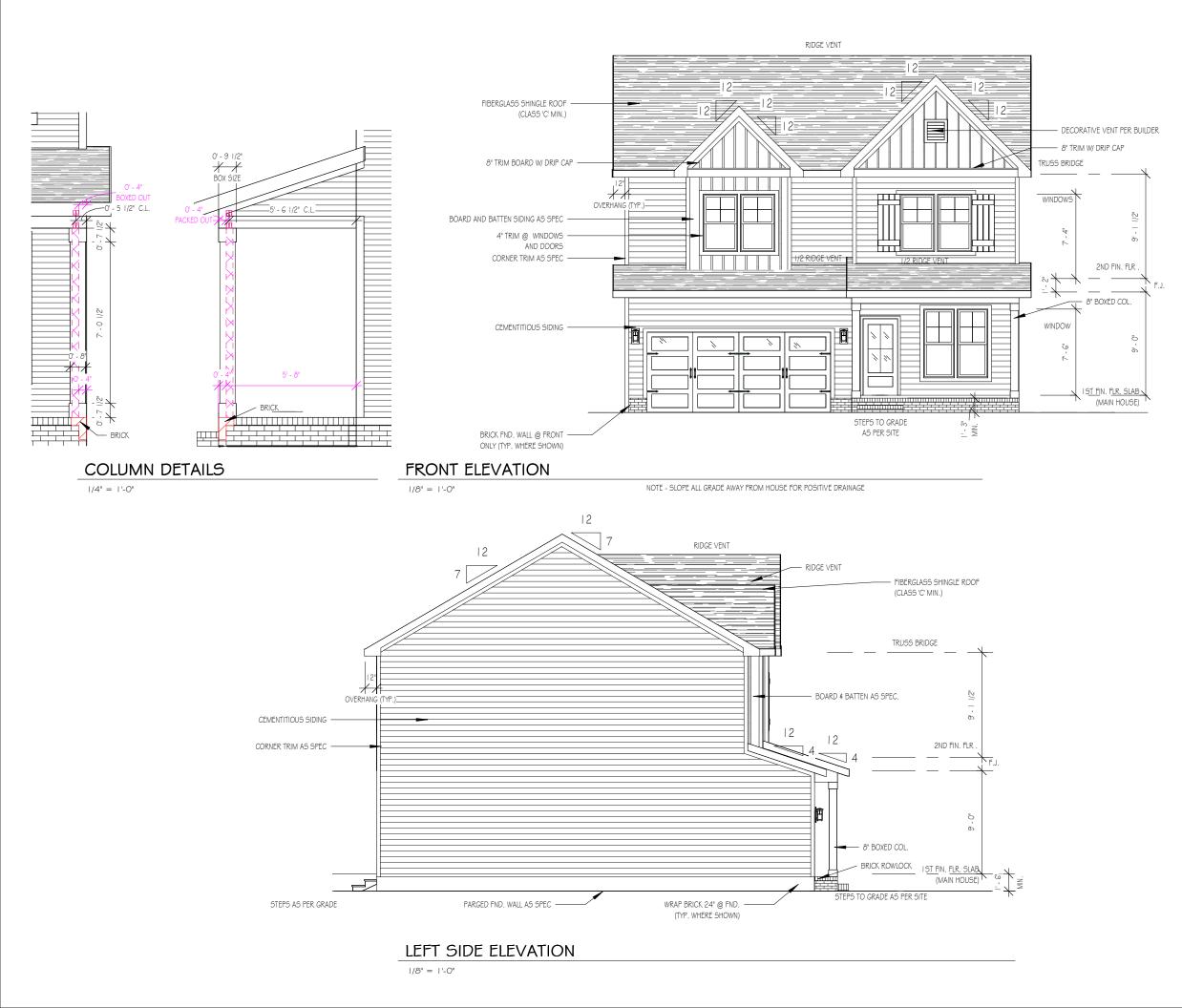


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THE PURPOSE OF THESE DRAWINGS IS TO SHOW THE INTENT OF THE DESIGN AND CONSTRUCTION OF THIS HOME. CONTRACTOR SHOULD VERIFY ALL CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION. ONCE A PERMIT HAS BEEN ISSUED, CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY TO THE ACCURACY OF THE PLANS AND ANY CHANGES MADE DURING CONSTRUCTION. FRESH PAINT by Garman Homes

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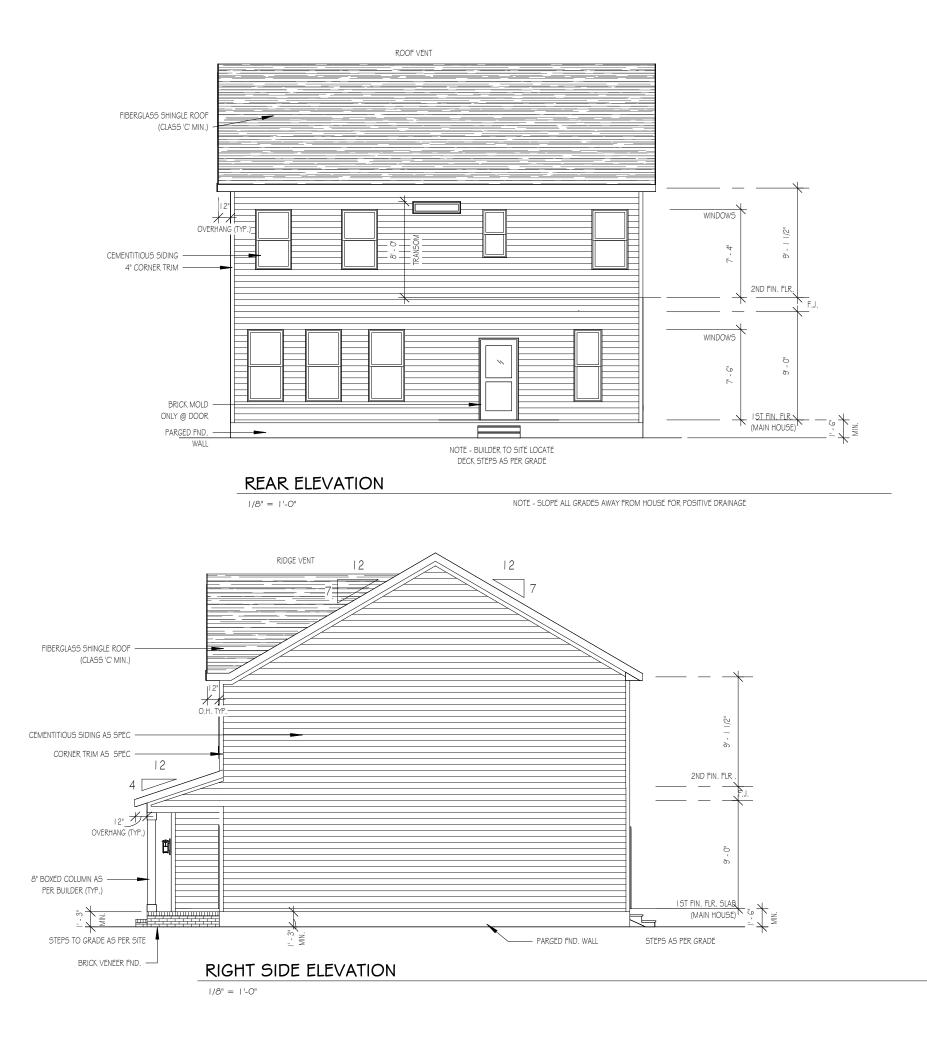
NOTE: PROVIDE RAILS @ PORCH <u>ONLY</u> IF REQUIRED BY CODE

I 5" MIN. HGT. FOUNDATION FRONT GRADE TO FINISHED FRONT PORCH

HONEYSUCKLE

SER ELEVATION A LOT 0159 SERENITY

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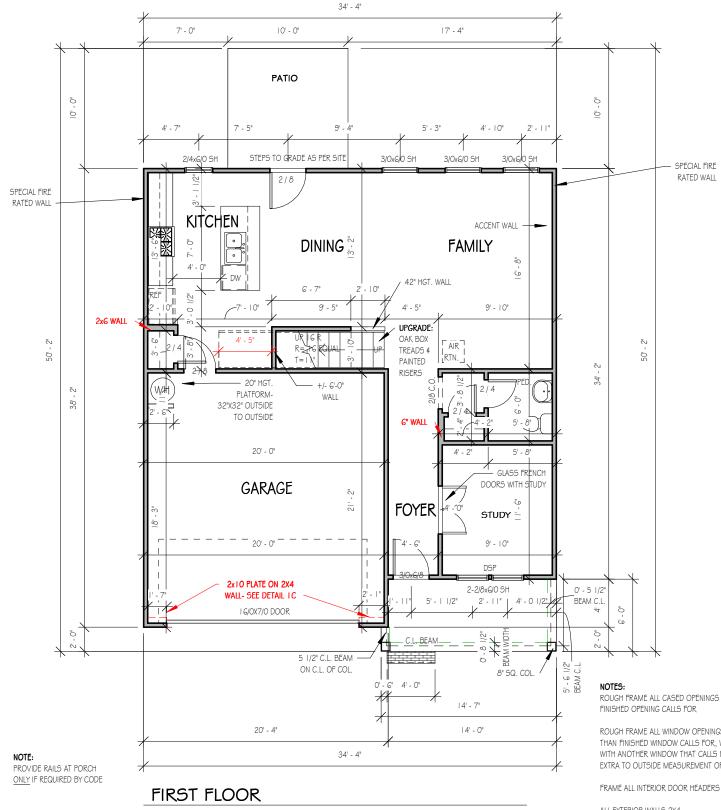
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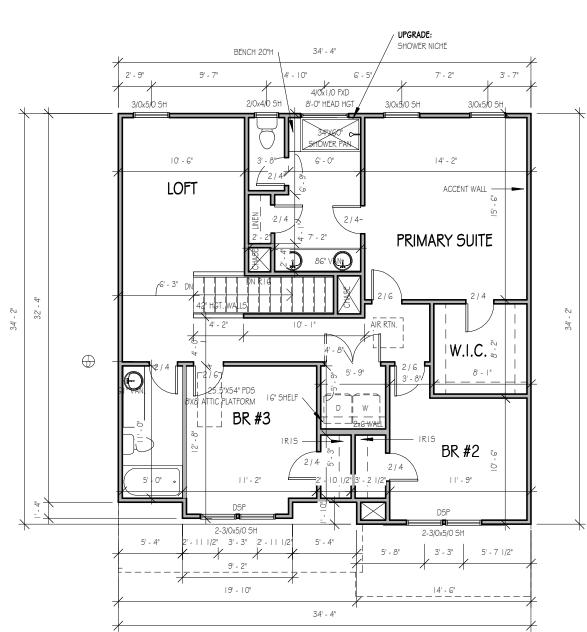
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9'-0" CLG. HGT. U.N.O. SET WINDOWS @ 7'-6" U.N.O. CASED OPENINGS 8'-0" TALL



### ROUGH FRAME ALL CASED OPENINGS 2" BIGGER THAN

ROUGH FRAME ALL WINDOW OPENINGS 1/2" LARGER THAN FINISHED WINDOW CALLS FOR, WHEN PAIRED WITH ANOTHER WINDOW THAT CALLS FOR DSP, ADD EXTRA TO OUTSIDE MEASUREMENT OF WINDOW

FRAME ALL INTERIOR DOOR HEADERS AT 84" A.F.F.

ALL EXTERIOR WALLS 2X4

TOP OF ALL WINDOWS SILLS SHALL BE 24" MINIMUM ABOVE THE FINISHED FLOOR OR A FALL PREVENTION DEVICE SHALL BE INSTALLED IN ACCORDANCE WITH SECTION R312.2 OF N.C.S.R.B.C., 2018 EDITION

GBG (GRILL BETWEEN GLASS) TO BE ADDED TO CORNER LOT WINDOWS

#### SECOND FLOOR

1/8" = 1'-0"

9'-0" CLG. HGT. U.N.O. SET WINDOWS @ 7-4" U.N.O.

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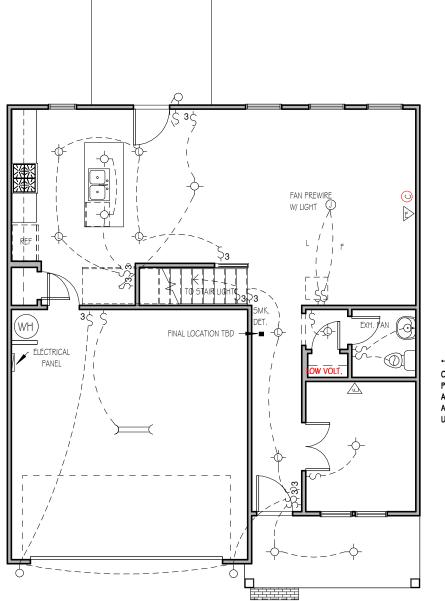


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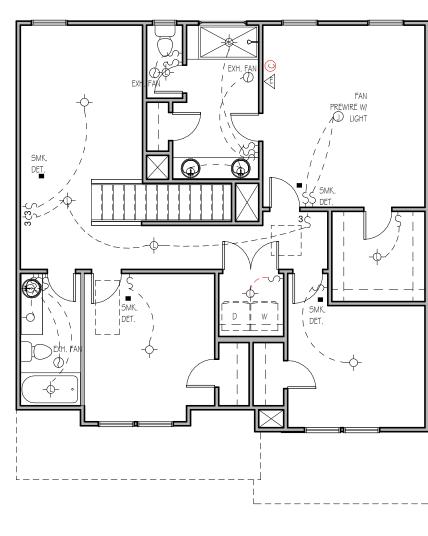
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#### FIRST FLOOR ELECTRICAL PLANS

1/8" = 1'-0"

NOTE - ELECTRICAL RECEPTACLE AND SWITCH QUANTITIES AND LOCATIONS SHOWN ON PLAN ARE FOR ILLUSTRATION PURPOSES ONLY. ACTUAL NUMBER AN D LOCATIONS SHALL BE FIELD DETERMINED AS PER CLIENT AND BUILDER EXCEPT WHERE CODE REQUIREMENTS APPLY. \*\*NOTE: THREE ETHERNET OUTLETS IN THESE PREDETERMINED LOCATIONS ARE STANDARD. ANY ADDITIONAL OUTLETS ARE AN UPGRADE.

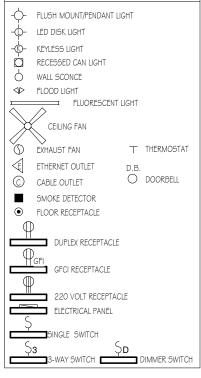


#### SECOND FLOOR ELECTRICAL PLAN

|/8" = |'-0"

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#### ELECTRICAL LEGEND

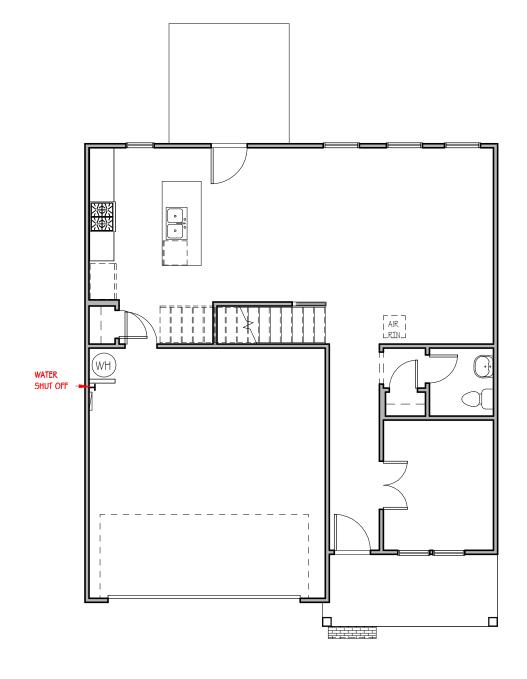




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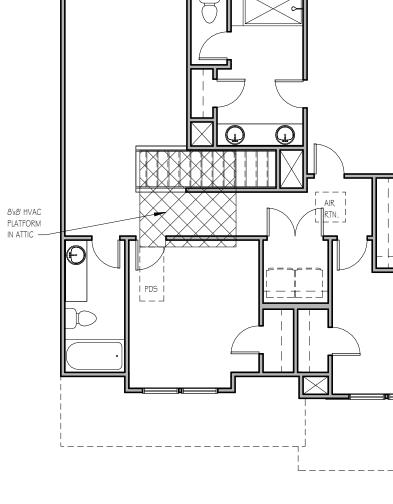
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SECOND FLOOR MECHANICAL PLAN

1/8" = 1'-0"

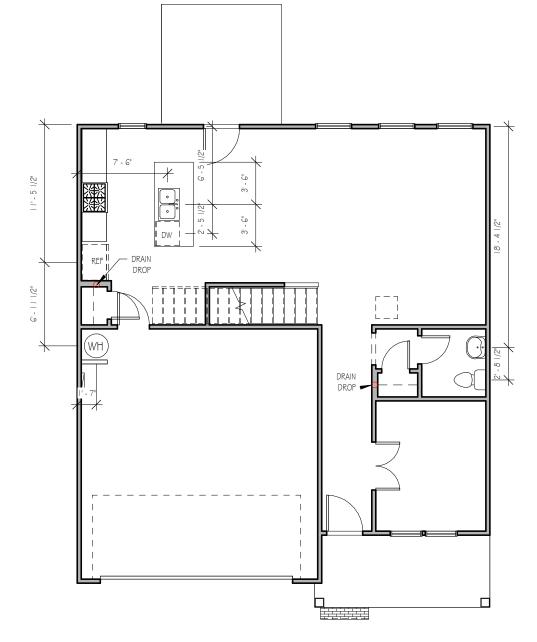
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|/8" = |'-0"

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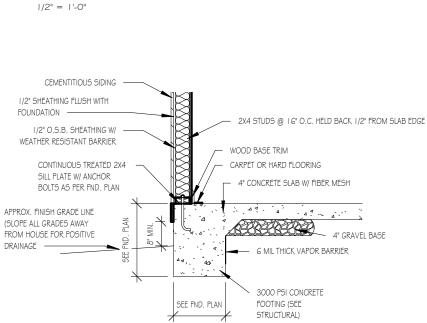
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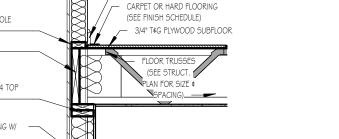
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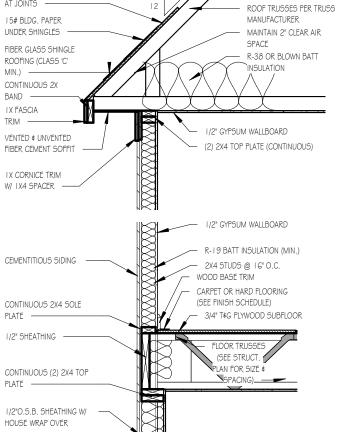
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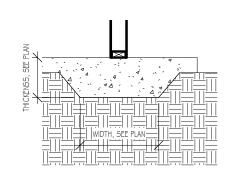






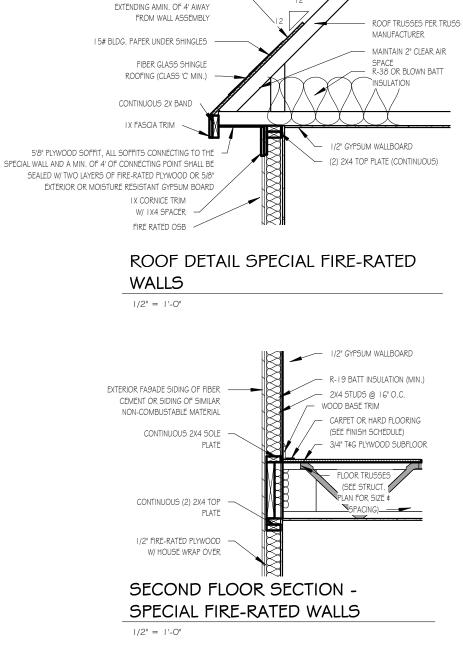






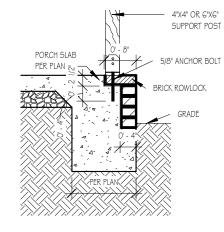
LUG FOOTING





1/2" FIRE-RATED PLYWOOD -

DECKING W/ PLY CLIPS AT JOINTS





5/8" PLYWOOD

AT JOINTS

DECKING W/ PLY CLIPS

#### FRONT PORCH COLUMNS SUPPORT ATTACHMENT

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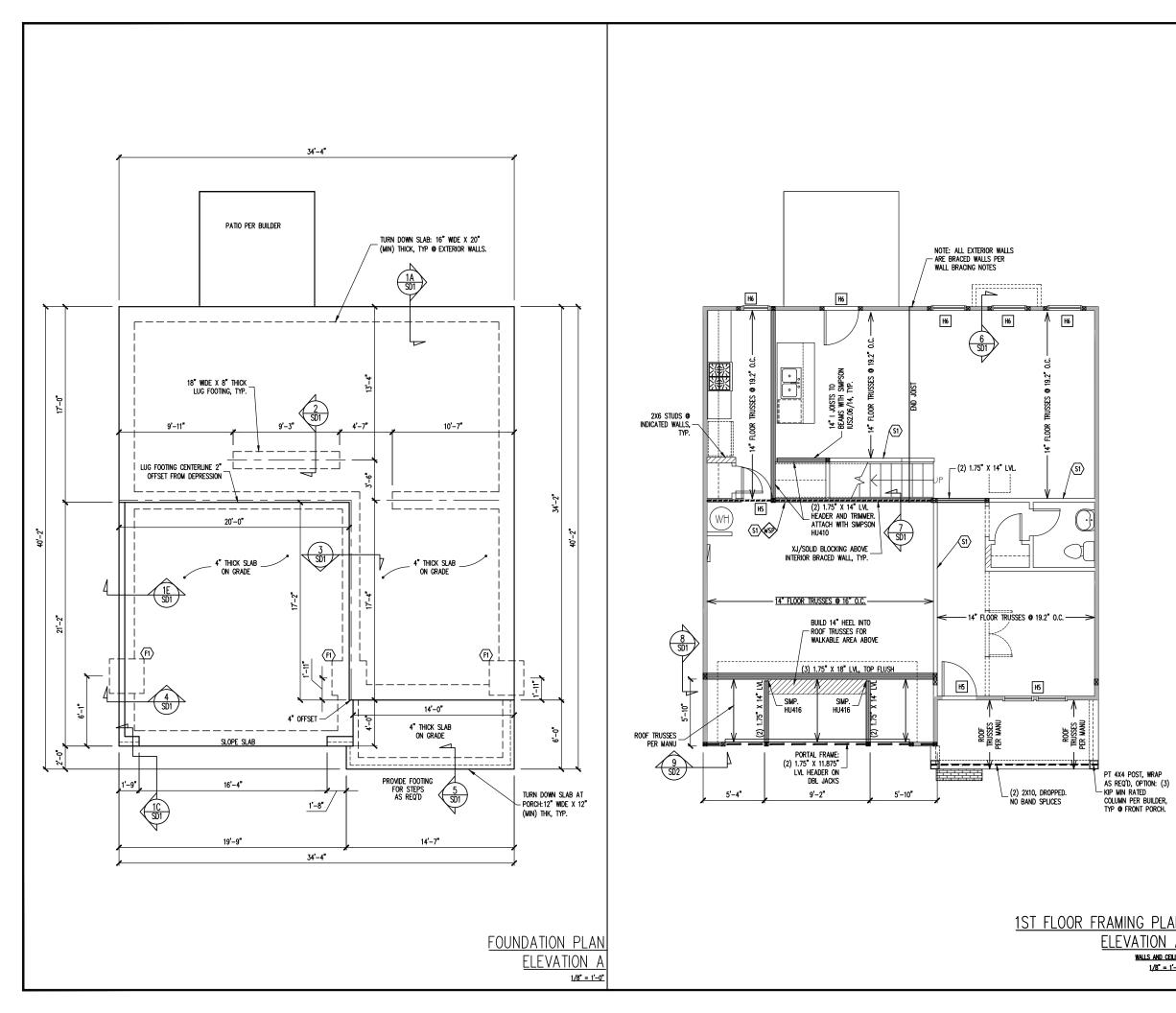
CONSTRUCTION.

ASSUME ALL RESPONSIBILITY TO THE

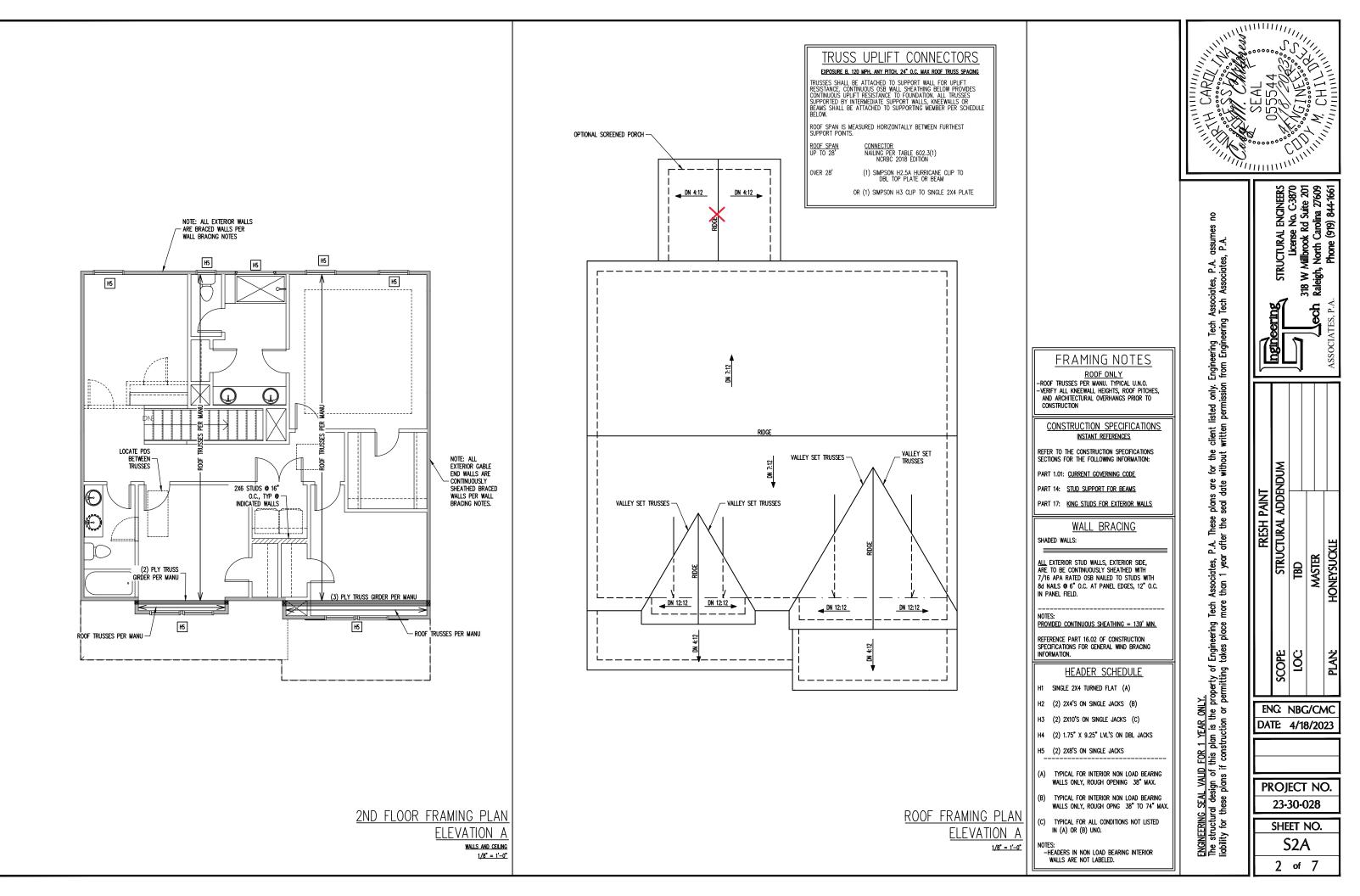
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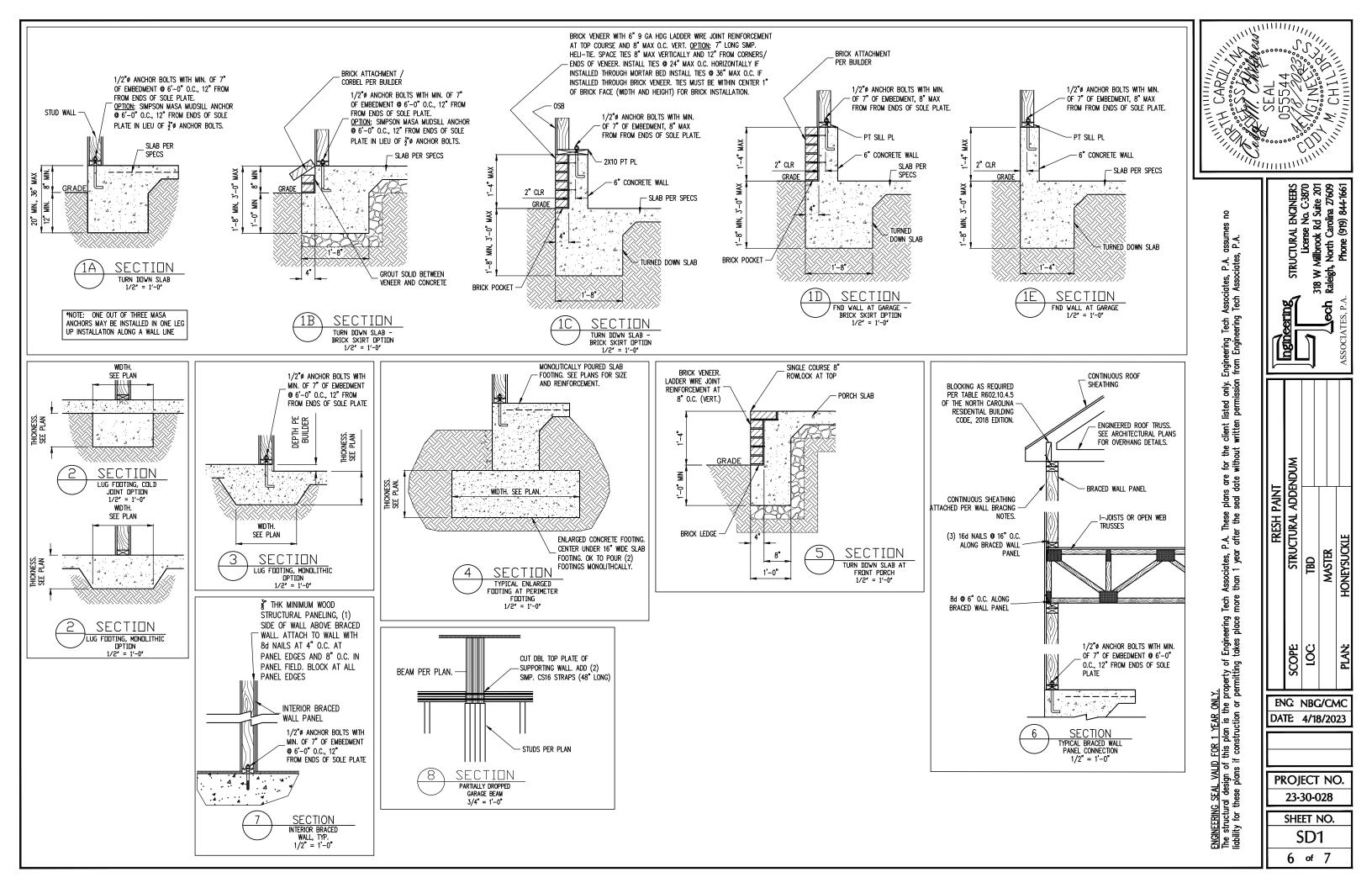


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	FRAMING SCEDULE S1 INTERIOR LOAD BEARING WALL: SECURE TO THICKENED SLAB BELOW WITH 1/2"# RED HEADER ANCHOR (OR EQUAL) @ 6"-0" O.C., 12" MAX FROM ENDS / CORNERS OF WALL, 7" MIN EMBEDMENT INTO SLAB BELOW. JOIST SUBSTITUTION 14" FLOOR TRUSSES PERMITTED TO BE SUBSTITUTED	
	WITH 14" 1-JOISTS. MAINTAIN MINIMUM SPACING AS CALLED OUT ON PLANS. SIMP. IUS/ITS3.56/14 HANGERS TO BE SUBSTITUTED WITH SIMP. IUS/ITS2.06/14 HANGER WHEN 1-JOISTS HAVE BEEN INSTALLED. CONSTRUCTION SPECIFICATIONS INSTANT REFERENCES REFER TO THE CONSTRUCTION SPECIFICATIONS SECTIONS FOR THE FOLLOWING INFORMATION: PART 1.01: CURRENT GOVERNING CODE PART 14: STUD SUPPORT FOR BEAMS PART 17: KING STUDS FOR EXTERIOR WALLS SEE DETAIL / CONSTRUCTION SPECIFICATIONS SHEETS FOR 1-JOISTS ALLOWABLE SUBSTITUTIONS WALL BRACING	plans are for the client listed only. Engineering Tech Associates, P.A. assumes no seal date without written permission from Engineering Tech Associates, P.A. PAINT ADDENDUM ADDENDUM ADDENDUM ASSOCIATES, P.A. ASSOCIATES, P.A. ASSOCIATES, P.A. ASSOCIATES, P.A. ASSOCIATES, P.A.
	SHADED WALLS: ALL EXTERIOR STUD WALLS, EXTERIOR SIDE, ARE TO BE CONTINUOUSLY SHEATHED WITH 7/16 APA RATED OSB NAILED TO STUDS WITH 8d NAILS of ° O.C. AT PANEL EDGES, 12° O.C. IN PANEL FIELD. WSP – ONE SIDE OF INTERIOR WALL OR INSIDE OF EXTERIOR WALL WITH 3/8° MIN. THICKNESS WOOD STRUCTURAL PANELING. ATTACH WSP TO STUD WALL WITH 8d NAILS of 4° O.C. AT PANEL EDGES, 8° O.C. IN PANEL FIELD. NOTES: PROVIDED CONTINUOUS SHEATHING = 145' MIN. REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION. HEADER SCHEDULE H1 SINGLE 2X4 TURNED FLAT (A) H2 (2) 2X4'S ON SINGLE JACKS (B) H3 (2) 2X10'S ON SINGLE JACKS (C) H4 (2) 1.75° X 9.25° LVL'S ON DBL JACKS H5 (2) 2X8'S ON SINGLE JACKS H6 (2) 2X8'S ON SINGLE JACKS H6 (2) 2X8'S ON SINGLE JACKS (A) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38° MAX.	FOR 1 YEAR ONLY.         this plan is the property of Engineering Tech Associates, P.A. These plans are for the client listed only.         f construction or permitting takes place more than 1 year after the seal date without written permission         THE
	(B) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPNG 38" TO 74" MAX. (C) TYPICAL FOR ALL CONDITIONS NOT LISTED IN (A) OR (B) UNO. NOTES: -HEADERS IN NON LOAD BEARING INTERIOR WALLS ARE NOT LABELED. FOUNDATION SCHEDULE F1 ENLARGE FOOTING TO 36" SQ. X 12" THK	ENG: NBG/CMC The structural design of this plan is the pd In the structural design of this plan is the pd In the pd I
<u>N</u> A ≊ 9	NOTES: -HEIGHT AND BACKFILL LIMITATIONS FOR FOUNDATION WALLS ARE TO BE GOVERNED BY THE NCSBC, LATEST EDITION.	SHEET NO. SHEET NO. If the structure If the structure SHEET NO. SHEET NO. 1 of 7





CONSTRUCTION	SPECIFICATIONS		
PART 1: GENERAL 1.01 CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE, 2018 EDITION. 1.02 DIMENSIONS SHOWN SHALL GOVERN OVER SCALE ON THESE DRAWINGS.	1-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM SHALL BEAR FULL WIDTH ON THE SUPPORTING WALL INDICATED AND SHALL BE SUPPORTED BY A MINIMUM OF THREE GANGED STUDS, OR A GANGED STUD COLUMN WITH A NUMBER OF STUDD SUCH THAT THE STUD COLUMN IS AT LEAST AS WIDE AS THE TRUE WOTH OF THE BEAM BEING SUPPORTED, WHICHEVER IS GREATER, TYP UNO. FOR THE SKEWED CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON THE BEAM	(2) CONT. 2X TOP PLATES, EXTEND EACH END INTO ADJACENT WALL. NAIL SPLICES WITH 8–16d NAILS PER SPLICE/LAP. CONT. 2X PLATE WITH 10d NAILS AT	
1.05 METHODS, PROCEDURES AND SEQUENCES OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL TAKE ALL NECESSARY PRECAUTIONS TO MAINTAIN AND INSURE THE INTEGRITY OF THE STRUCTURE AT ALL STAGES OF CONSTRUCTION.	2-BEANS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A MINIMUM OF 4 1/2" ONTO THE WALL AND BE SUPPORTED BY A TRPL STUD GANGED COLUMN TYP UNO.	16" O.C. INTO HEADER/BEAM	
PART 2: DESIGN LOADS         2.01       DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW:         USE       LIVE LOAD (PSF)         BALCONIES, DECKS, ATTICS WITH FIXED STAIR         ACCESS, DWELLING UNITS INCLUDING ATTICS WITH         FIXED STAIR ACCESS, STAIRS, FIRE ESCAPES         40         GARAGES (PASSENGER CARS ONLY)         50	14.02 DIMENSIONAL LUMBER BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS: 1-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM SHALL BEAR FULL WIDTH ON THE SUPPORTING WALL INDICATED (LESS 1 1/2" TO ALLOW FOR A CONTINUOUS RIM JOIST WHERE APPLICABLE) AND SHALL BE SUPPORTED BY A CANCED STUD COLUMN THE SAME WIDTH AS THE BEAM TYPU UNO. (E.G. A TRIPLE 2X10 IS TO BE SUPPORTED BY (3) STUDS). FOR THE SKEWED CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON THE BEAM 2-BEAMS BEARING ONTO THE END FA STUD WALL PARALLEL TO THE BEAM 2-BEAMS BEARING ONTO THE WALL AND BE SUPPORTED BY A DBL STUD GANGED COLUMN	7/16" O.S.B. OR 15/32" PLYWOOD EXTERIOR WALL SHEATHING AT UNSHADED AREAS (BEAM, INFILL WALL ABOVE BEAM, AND CENTER WALL). NAIL SHEATHING TO ALL SUPPORTS (STUDS, PLATES, BLOCKING, ETC.) WITH 8d NAILS AT 6" O.C. AT SHEET EDGES AND 12" O.C. IN THE FIELD.	MINIMUM LENGTH NAIL AREA 3" 0.
ATTICS (NO STORAGE, LESS THAN 5' HEADROOM) 10 10 ATTICS (WITH STORAGE) 20 10 ROOF 20 10 (15 FOR VAULTS) NOTES: - INDIVIDUAL STAIR TREADS ARE TO BE DESIGNED FOR THE UNIFORMLY DISTRIBUTED LIVE LOAD OF 40 PSF OR A 300 LB. CONCENTRATED LOAD ACTING OVER AN AREA OF 4 SQ. WHICHEVER PRODUCES THE GREATER STRESS. - BUILDER TO VERIFY DEAD LOAD DOES NOT EXCEED 10 PSF WHEN HEAVY FLOOR OR ROOF FINISHES SUCH AS TILE OR SLATE ARE UTILIZED. NOTIFY ENGINEERING UNDER THESE CONDITIONS	<ul> <li>TYP UNO.</li> <li>14.03 EXTRA JOISTS BEARING ON A STUD WALL PERPENDICULAR TO OR SKEWED RELATIVE TO THE BEAM SHALL BE SUPPORTED BY ONE ADDITIONAL STUD.</li> <li>14.04 STUDS THAT ARE GANGED TO FORM A COLUMN SHALL HAVE ADJACENT STUDS WITHIN THE COLUMN NAILED TOGETHER WITH ONE ROW OF 10d NAILS AT 8" O.C. (TWO ROWS OF 10d NAILS @ 8" O.C., 3" APART, FOR 2X8 OR 2X10 STUDS) ALL COLUMNS SHALL BE CONTINUOUS DOWN TO THE FOUNDATION OR OTHER PROPERLY DESIGNED STRUCTURAL ELEMENT SUCH SA BEAM. COLUMNS THANSFERRING LOADS THROUGH FLOOR LEVELS SHALL BE SOLIDLY BLOCKED FOR THE FULL WIDTH OF THE STUD COLUMN WITHIN THE CANTY FORMED BY THE FLOOR JOISTS.</li> </ul>		(2) (2) S STRAI INSIDE
<ul> <li>2.02 INTERIOR WALLS: 5 PSF LATERAL.</li> <li>2.03 BASIC WIND DESIGN VELOCITY OF 120 MPH.</li> <li>2.04 SOIL BEARING CAPACITY 2000 PSF (PRESUMPTIVE).</li> <li>PART 5: CONCRETE AND SLABS ON GRADE</li> </ul>	PART 15: NAILING OF MULTI PLY WOOD BEAMS. 15.01 SOUD SAWN LUMBER JOISTS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM NAILED TOGETHER WITH THREE ROWS OF 10d NAILS @ 16" O.C. FOR 2X10 OR LARGER, TWO ROWS OF 10d NAILS @ 16" O.C. FOR 2X8, ONE ROW OF 10d NAILS @ 16" O.C. FOR 2X6 OR SMALLER. STAGGER ROWS 5" MIN.	BE NAILED TO COMMON BLOCKING AND OCCUR WITHIN MIDDLE 24" OF WALL HEIGHT. ONE ROW OF 3" O.C. NAILING IS REQUIRED IN EACH PANEL EDGE. 7/16" O.S.B. OR 15/32" PLYWOOD	
<ul> <li>5.01 CAST IN PLACE CONCRETE SHALL BE OF NORMAL WEIGHT, 6% AIR ENTRAINMENT, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS TYP UNO. ALL CONCRETE, INCLUDING CONCRETE FOR FOOTINGS, IS TO BE CAST IN PLACE, TYP UNO.</li> <li>5.03 SLABS ON GRADE, IF ANY, SHALL CONTAIN SYNTHETIC POLYPROPYLENE FIBRILLATED MICRO FIBERS, FIBER LENGTH 1 1/2", DOSAGE RATE 1 1/2 LBS/CU YD. SLAB TO BE PLACED ON A 6 MIL VAPOR BARRIER MAY BE OMITTED FOR SLABS NOT</li> </ul>	<ul> <li>15.02 LVL MEMBERS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM FASTENED TOGETHER PER MANUFACTURERS RECOMMENDATIONS, TYP UNO</li> <li><u>PART 16: WALL FRAMING AND BRACING</u></li> <li>16.01 STUD WALLS SHALL CONSIST OF 2X4 STUDS SPACED AT 16" O.C. UNO. STUDS SHALL BE CONTINUOUS FROM SOLE PLATE AT FLOOR TO DOUBLE TOP PLATE AT THE CEILING OR ROOF. NO INTERMEDIATE BANDS OR PLATES SHALL CAUSE DISCONTINUITIES IN A STUD WALL EXCEPT AS REQUIRED FOR DOOR OR WINDOW OPENINGS. THE KING STUDS</li> </ul>	EXTERIOR WALL SHEATHING. AT SHADED AREAS NAIL SHEATHING TO ALL SUPPORTS (STUDS, PLATES, BLOCKING, ETC.) WITH 8d NAILS AT 3" O.C.	CONC MASO SHALL OF TH
IN ENCLOSED AREAS <u>PART 7: MASONRY</u> 7.03 MORTAR SHALL BE TYPE S. MORTAR AND GROUT SHALL CONFORM TO ASTM C476, MIN COMPRESSIVE STRENGTH OF 2000 PSI.	FOR SUCH OPENINGS SHALL BE CONTINUOUS, TYP UNO. MAX ALLOWABLE WALL HEIGHTS FOR EXTERIOR STUD WALLS, WITH SOLE PLATE AND DBL TOP PLATE AND 7/16" OSB EXTERIOR BRACING AND ROW OF 2X4 / 2X6 PURLINS AT 8" HEIGHT (AND AT 16" HEIGHT FOR TALL WALLS), TYP UNO: 16.02 FOR WALL BRACING THE FOLLOWING SHALL APPLY: -BLOCKING AT UNSUPPORTED PANEL EDGES IS REQUIRED TYP UNO.	(2)2x STUD MIN. AT START AND END OF WALL SEGMENTS EACH SIDE OF OPENING. SEE PLANS FOR ADDITIONAL STUDS 2x4 P.T. PLATE WITH TWO 1/2" DIA x 7" EMBED	
<ul> <li>7.05 LADDER WIRE REINFORCEMENT SHALL CONFORM TO ASTM A951. 6" MIN LAPS FOR CONTINUOUS WALL APPLICATIONS</li> <li>PART 8: BOLTS AND LAG SCREWS</li> <li>8.03 ANCHOR RODS AND BOLTS SHALL CONFORM TO ASTM F1554–15 GRADE 36 UNO. BENT ANCHOR BOLTS SHALL HAVE A 2" MIN HOOK UNO</li> <li>PART 9: DRIVEN FASTENERS</li> <li>9.01 NAILS, SPIKES AND STAPLES SHALL CONFORM TO ASTM F 1667–05. NAILS ARE TO BE</li> </ul>	-WALL BRACING IS BY ENGINEERED DESIGN AND NOT PRESCRIPTIVE PER SECTION 602.10 OF THE 2018 NCRC. CONTINUOUS SHEATHING HAS BEEN PROVIDED, ALONG WITH ALTERNATIVE METHODS TO INSORE THE MINIMUM INTENT OF SECTION 602.10 OF THE 2018 NCRC HAS BEEN MET AND EXCEEDED. BRACED WALL PANELS SHALL BE FASTENED IN ACCORDANCE WITH TABLE 602.3(1) TO PROVIDE CONTINUOUS PANEL UPLIFT RESISTANCE AND COMPLANCE WITH NCRE' R602.35 AND R802.11 UNLESS NOTED OTHERWISE ON STRUCTURAL PLANS. MAY SUBSITIUTE WSP FOR GB SINGLE JOIST, CONTINUOUS RIM JOIST, OR BLOCKING OF EQUAL DEPTH IS REQUIRED ABOVE AND BELOW ALL BRACED WALLS. NAIL BLOCKING ABOVE WALL TO TOP PLATE	ANCHOR BOLTS WITH A 3/16"x2"x2" PLATE WASHERS OR ADDITIONAL HOLDOWN PER PLANS. <u>OPTION: (2) 5/8" DIA. THREADED RODS</u> INSTALLED PER SECTION R602.10.4.3 OF THE NCRBC, LATEST EDITION.	
COMMON WIRE OR BOX PART 10: DIMENSIONAL LUMBER	WITH 16d TOE NAILS ⊕ 6° O.C. NAIL SOLE PLATE OF BRACED WALL TO BLOCKING BELOW WITH (3) 16d NAILS ⊕ 16° O.C. BLOCKING AT HORIZONTAL JOINTS IN BRACED WALL LINES ONLY REQUIRED AT SHADED WALLS, UNO.	NOTES	
<ul> <li>10.01 SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SPRUCE PINE FIR <u>OR</u> SYP #2 FOR JOISTS, RAFTERS, GIRDERS, BEAMS, STUDS, ETC.</li> <li><u>PART 11: ENGINEERED LUMBER</u></li> <li>11.01 LVL OR PSL MINIMUM ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS: E = 1.9 X 10E6 PSI, Fb = 2600 PSI, Fv = 285 PSI, Fc = 750 PSI LSL MINIMUM, ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS: DSL MINIMUM, ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS: DSL MINIMUM, ALLOWABLE DESIGN STRESSES ARE AS FOLLOWS:</li> </ul>	PART 17: KING STUDS         17.01       KING STUDS FOR OPENINGS IN EXTERIOR WALLS SHALL BE AS FOLLOWS:         NUMBER OF KING STUDS         MAX OPENING WIDTH 5'-0" 9'-0" 13'-0" 17'-0" 21'-0"         2X4       1       2       3       5         STUD SIZE       2X6       1       2       2       2	SHALL IMMEDIATELY CONTACT THE ENGINEER OF RECORD (EOR) BEFORE PROCEEDING IF THE         FOLLOWING CONDITIONS ARE NOTED BEFORE OR DURING CONSTRUCTION:         1) THE WORKING PLANS DO NOT BEAR THE SEAL OF THE EOR         2) THE PLANS CONTAIN DISCREPANT OR INCOMPLETE INFORMATION         ANY ERRORS DUE TO A FAILURE TO FOLLOW THE ABOVE PROCEDURES SHALL NOT BE THE	ABV ABOVE B. BOTH B.E. BOTH ENDS BTWN BETWEEN CIP CAST IN PLACE CONC CONCRETE CS CONTINUOUS S DIA DIAMETER
<ul> <li>E= 1.3 X 10E6 PSI, Fb = 1700 PSI, Fv = 400 PSI, Fc = 680 PSI</li> <li>LVL OR PSL MEMBERS MAY BE RIPPED FROM DEEPER MEMBERS TO MATCH THE MEMBER DEPTH SPECIFIED IN THE PLANS</li> <li><u>PART 12: PRESSURE TREATED LUMBER</u></li> <li>LUMBER IN CONTACT WITH THE GROUND, CONCRETE OR MASONRY SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA STANDARD C-15. ALL OTHER EXPOSED LUMBER SHALL BE TREATED IN ACCORDANCE WITH AWPA STANDARD C-15 WAY METHOD</li> </ul>	2X8 1 1 1 1 2 PART 18: SUBSTITUTIONS 18.01 MATERIAL OR MEMBER SIZE SUBSTITUTIONS OR PLAN DEVIATIONS REQUIRE THE WRITTEN AUTHORIZATION OF THE DESIGNERS, UNAUTHORIZED DEVIATIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. PART 19: OWNERSHIP OF STRUCTURAL DESIGN	THE EOR TO ENSURE THAT ANY REVISIONS ISSUED BY THE EOR ARE PROMPLY DISTRIBUTED TO THE BUILDER TO ENSURE THAT ANY REVISIONS ISSUED BY THE EOR ARE PROMPLY DISTRIBUTED TO THE SUBCONTRACTORS THE EOR DOES NOT PERFORM FENESTRATION OR VENTING CALCULATIONS OR ANY OTHER CALCULATIONS THAT ARE NOT DIRECTLY RELATED TO STRUCTURAL ENGINEERING. ROOF AND FLOOR TRUSSES TO BE DESIGNED BY AN ENGINEER REGISTERED BY THE STATE. FINAL	DIA DAMETER DBL DOUBLE DJ DOUBLE JOIST DSP DBL STUD POC EQ EQUAL EA EACH FLG FLANGE FL PL FLITCH PLATE FL FLOOR
GIVING EQUAL PROTECTION. THE BUILDING CODE OFFICE MAY ALSO APPROVE A NATURAL DECAY RESISTANT WOOD PER SECTION 19–6(A) PART 14: STUD SUPPORTS FOR BEAMS 14.01 STEEL, ENGINEERED LUMBER, AND FLITCH PLATE BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS:	19.01 THE STRUCTURAL DESIGN OF THIS PLAN IS THE PROPERTY OF ENGINEERING TECH ASSOCIATES (ETA). THESE PLANS ARE FOR THE ONE TIME USE AT THE LOCATION INDICATED AND FOR THE CLIENT LISTED. ETA ASSUMES NO LIABILITY FOR THESE PLANS IF THEY ARE REPRODUCED, IN WHOLE OR IN PART, FOR CONSTRUCTION AT ANY OTHER LOCATION WITHOUT WRITTEN PERMISSION FROM ETA	ALLOWABLE I-JOIST SUBSTITUTION NOTE: MAINTAIN JOIST DEPTH, DIRECTION, AND SPACING SPECIFIED ON PLANS. SIMPSON FACE SIMPSON TOP	
		MANUFACTURER         DEPTH         SERIES         MOUNT         HGR         FLANGE         HGR           BLUELINX         14"         BLI         40         IUS2.56/14         ITS2.56/14           BOISE         CASCADE         14"         BCI         5000s         IUS2.06/14         ITS2.06/14           BOISE         CASCADE         14"         BCI         6000s         IUS2.06/14         ITS2.06/14           DOISE         CASCADE         14"         BCI         6000s         IUS2.06/14         ITS2.56/14           DOISE         CASCADE         14"         BCI         6000s         IUS2.06/14         ITS2.56/14           LP         CORP         14"         IPI         20+         IUS2.56/14         ITS2.56/14           NORDIC         14"         NI 40X         IUS2.56/14         ITS2.56/14         ITS2.56/14           ROSEBURG         14"         REPI 40s         IUS2.06/14         ITS2.56/14         ITS2.56/14           WEYERHAEUSER         14"         TJI 210         IUS2.06/14         ITS2.56/14         ITS2.56/14	

JOISTS NOT LISTED IN THE ABOVE TABLE MAY BE USED PROVIDED THEY MEET OR EXCEED THE PROPERTIES OF THOSE LISTED. SUBSTITUTE USP BRAND HANGERS WITH EQUIVALENT VALUES AS DESIRED.

