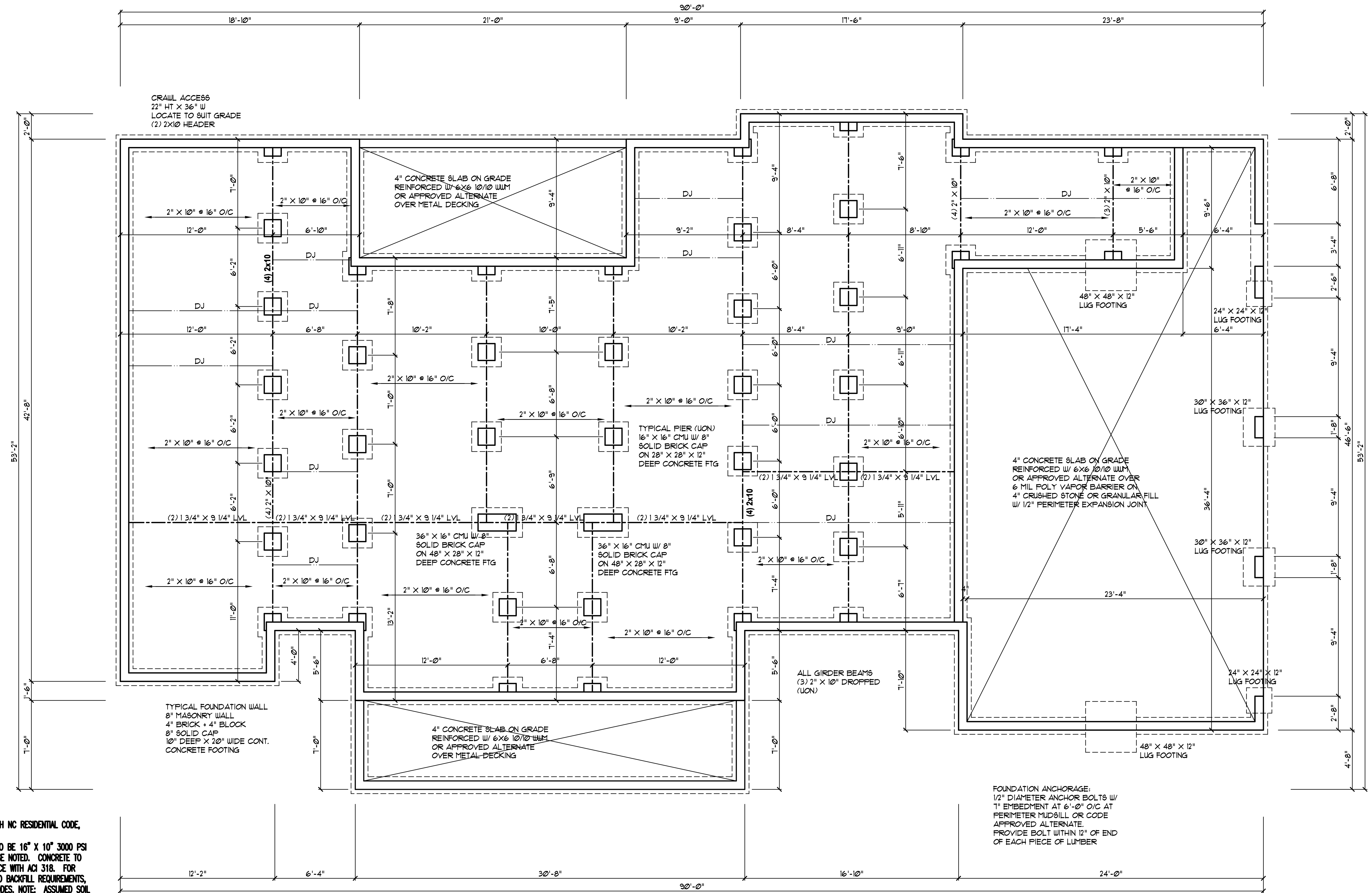




- GENERAL FOUNDATION NOTES:**
- THIS PLAN DESIGNED IN ACCORDANCE WITH NC RESIDENTIAL CODE, 2018 EDITION.
 - EXTERIOR WALL FOOTING WHERE NOTED TO BE 16" X 10" 3000 PSI STRUCTURAL CONCRETE UNLESS OTHERWISE NOTED. CONCRETE TO BE PREPARED AND PLACED IN ACCORDANCE WITH ACI 318. FOR FOUNDATION WALL HEIGHT, THICKNESS AND BACKFILL REQUIREMENTS, REFER TO STATE AND LOCAL BUILDING CODES. NOTE: ASSUMED SOIL BEARING CAPACITY=2000 PSF. CONTRACTOR MUST VERIFY CONDITIONS AND CONTACT SOIL ENGINEER IF MARGINAL OR UNSTABLE SOILS ARE ENCOUNTERED.
 - FOOTINGS TO BEAR ON UNDISTURBED EARTH A MIN. OF 12" BELOW ADJACENT FINISH GRADE OR AS OTHERWISE DIRECTED BY LOCAL INSPECTOR.
 - FOUNDATION DRAINAGE SHALL BE IN ACCORDANCE WITH SECTION R405 OF THE CODE "FOUNDATION DRAINAGE".
 - THE FOUNDATION SHALL BE TREATED IN ACCORDANCE W/SECTION R406 OF THE CODE "FOUNDATION WATERPROOFING AND DAMPROOFING".
 - THIS FOUNDATION DESIGN IS VALID FOR 115 MPH WIND ZONES ONLY.
 - FOUNDATION WALLS SHALL BE 8" BLOCK UNLESS NOTED OTHERWISE.
 - (2) #4 BARS IN FOOTINGS RUN CONTINUOUSLY.
- ⊙ INDICATES POINT LOAD ABOVE

CRAWL SPACE VENTILATION

PROVIDE AT LEAST 150 SQ. FT. NET FREE VENTILATION AREA FOR EACH 150 SQ. FT. OF CRAWL SPACE

CRAWL SPACE AREA:
2845 / 150 = 18.97 SQ. FT. REQ'D.

REDUCE REQUIRED AREA TO 150 SQ. FT. NET FREE VENTILATION AREA FOR EACH 1500 SQ. FT. OF CRAWL SPACE WITH APPROVED VAPOR BARRIER

PROVIDE (1) VENT WITHIN 3'-0" OF EACH CORNER

REFER TO MANUFACTURER SPECIFICATIONS FOR ACTUAL VENTS USED TO DETERMINE NUMBER OF VENTS REQUIRED

STRUCTURAL EVALUATION BY:

HOWERTON SERVICES, PLLC
3513 CATHEDRAL BELL ROAD RALEIGH, NC 27614
LICENSE P-1716

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* DO NOT SCALE THESE DRAWINGS - ENGINEERING APPROVAL EXPIRES 08/01/2026



S1 FOUNDATION
1/4"=1'-0"

Plan No. 2845-10

TM Homes
Lot #1 3180 Oak Ridge River Rd
Fuquay Varina, Harnett Co., NC

STRUCTURAL EVALUATION BY:
HOWERTON SERVICES, PLLC
3513 CATHEDRAL BELL RD, RALEIGH N.C.
27614

BUILDING DESIGN BY:
VUNCANNON DESIGNS

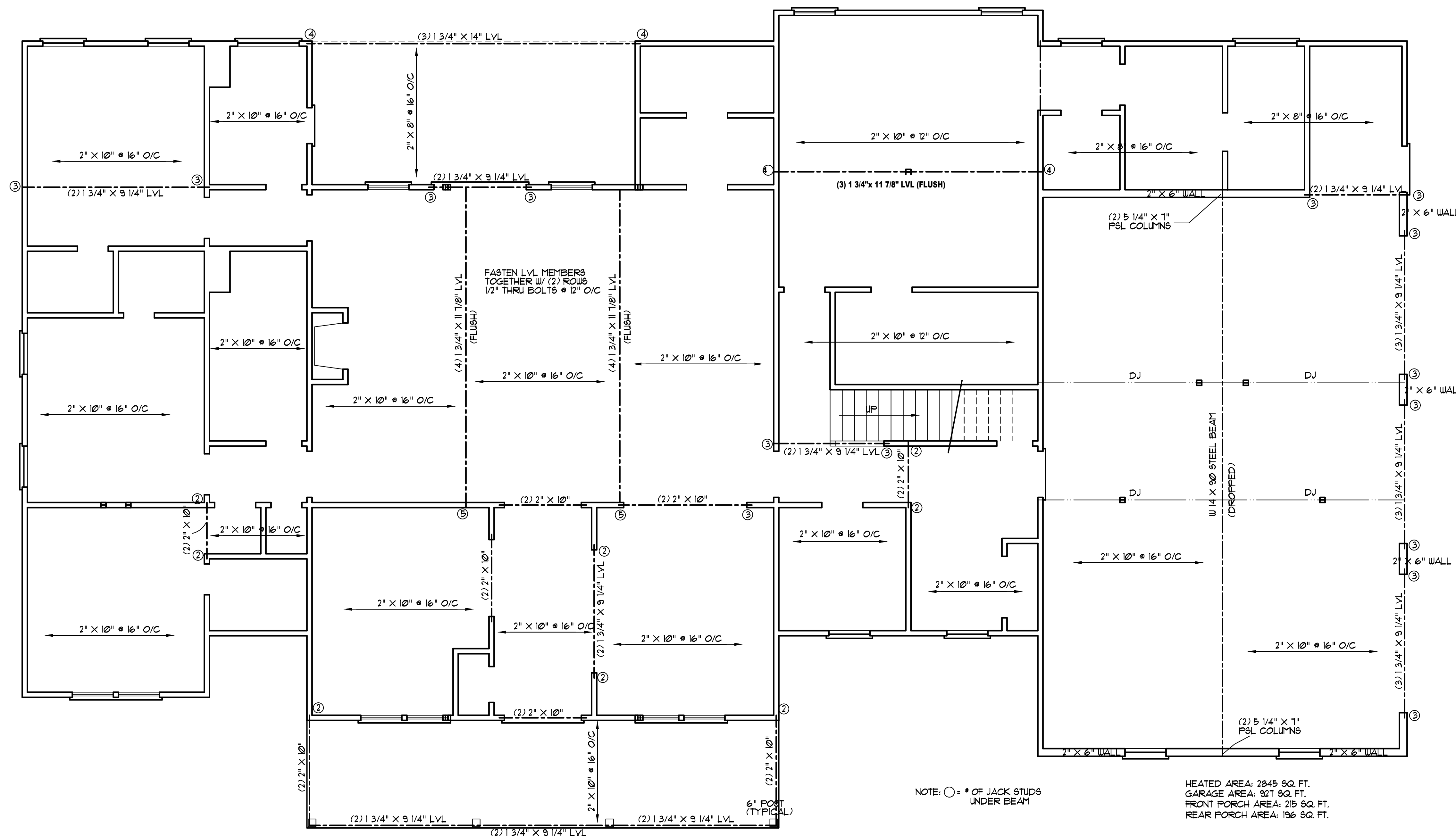
DESCRIPTION:
FOUNDATION PLAN

REVISION:

DATE:
07/14/2025

DRAWING:

S1



NOTE: ○ = * OF JACK STUDS
UNDER BEAM

HEATED AREA: 2845 SQ. FT.
GARAGE AREA: 927 SQ. FT.
FRONT PORCH AREA: 215 SQ. FT.
REAR PORCH AREA: 136 SQ. FT.

GENERAL FRAMING NOTES:

- THIS PLAN DESIGNED IN ACCORDANCE WITH NC RESIDENTIAL CODE, 2018 EDITION.
- GLAZING AREAS SHOWN ON THESE DESIGN DRAWINGS DO NOT EXCEED 15% OF THE GROSS AREA OF THE EXTERIOR WALLS. THIS STRUCTURE MEETS THE REQUIREMENTS OF N1101.2.1, RESIDENTIAL BUILDING, TYPE A-1.
- WALL CLADDING IS DESIGNED FOR A 24.1 #/SF OR GREATER POSITIVE/NEGATIVE PRESSURE.
- ALL WALLS, FLOORS AND CEILINGS SHALL BE INSULATED IN ACCORDANCE WITH PART IV, ENERGY CONSERVATION, CHAPTER 11, ENERGY EFFICIENCY OF THE CODE FOR ZONE 7 (TABLE N1101.2).
- DESIGN CRITERIA

	DEAD	LIVE
PRIMARY FLOOR	10 PSF	40 PSF
SECONDARY FLOOR	10 PSF	40 PSF
SLEEPING AREAS	10 PSF	30 PSF
ATTIC	10 PSF	20 PSF
ROOF	10 PSF	20 PSF
WIND	120 MPH	
- DEFLECTION LIMITS FLOOR - L/360
(LIVE LOAD ONLY) ROOF - L/240
- ALL HEADERS IN LOAD BEARING WALLS SHALL BE DOUBLE 2X10.
- ALL WALLS ARE 2X4 @ 16" O.C. UNLESS OTHERWISE NOTED.
- FLOOR INSULATION = R-19, EXTERIOR = R-15 AND CEILING = R-38.
- PROVIDE DOUBLE FLOOR JOISTS OR TRUSS UNDER WALLS ABOVE.

R602.7.5 SUPPORTS FOR HEADERS

HEADERS SHALL BE SUPPORTED ON EACH END WITH ONE OR MORE JACK STUDS OR WITH APPROVED FRAMING ANCHORS IN ACCORDANCE WITH TABLE R602.7(1) OR R602.7(2). THE FULL-HEIGHT STUD ADJACENT TO EACH END OF THE HEADER SHALL BE END NAILED TO EACH END OF THE HEADER WITH FOUR-16D NAILS (3.5 INCHES X 0.135 INCHES). THE MINIMUM NUMBER OF FULL-HEIGHT STUDS AT EACH END OF A HEADER SHALL BE IN ACCORDANCE WITH TABLE R602.7.5.

TABLE R602.7.5
MINIMUM NUMBER OF FULL-HEIGHT STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS

HEADER SPAN	MAXIMUM STUD SPACING (INCHES) PER TABLE R602.3(5)	
LESS THAN/EQUAL TO 3'	16	24
4'	1	1
8'	2	2
12'	3	3
16'	5	4

BRACED WALL NOTES:

- BRACED WALLS ARE REQUIRED PER SECTION R602.10.1 2018 NCBC RESIDENTIAL CODE.
- THE EXTERIOR WALL STRUCTURE SHALL BE CONTINUOUSLY SHEATHED, FULL HEIGHT WITH MIN. THICKNESS 7/16" OSB. THESE WALLS SHALL BE CONSTRUCTED IN CONFORMANCE TO TYPE CS-WSP DETAILS.
- BASIS OF DESIGN FOR INTERIOR BRACE WALLS IS GYPSUM BOARD METHOD AS DETAILED PER CODE TABLE R602.10.2.
- SPECIAL BRACING DETAILS ARE ILLUSTRATED IN THE CODE AND ALLOWED WHERE WALLS DO NOT MEET THE MINIMUM REQUIREMENTS FOR SUPPORT. REFER TO GARAGE OPENING, PORTAL FRAMING DETAILS.

STRUCTURAL EVALUATION BY:

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LICENSE P-1716

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S2 FIRST FLOOR FRAMING
01 1/4"=1'-0"

Plan No. 2845-10

STRUCTURAL EVALUATION BY:
HOWERTON SERVICES, PLLC
3513 CATHEDRAL BELL RD., RALEIGH N.C.
27614

BUILDING DESIGN BY:
VUNCANNON DESIGNS

TM Homes
Lot #1 3180 Oak Ridge River Rd
Fuquay Varina, Harnett Co., NC

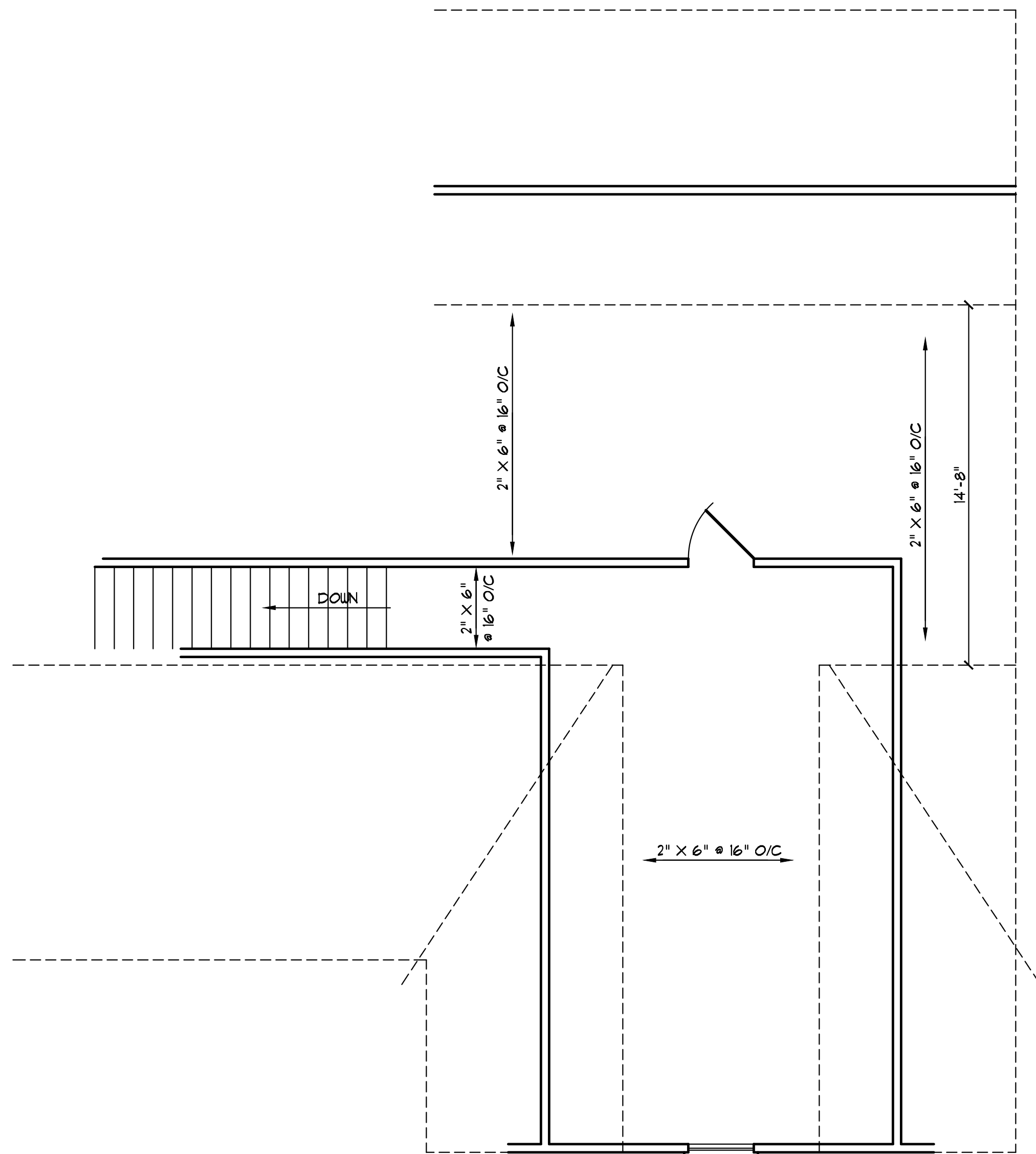
DESCRIPTION:
MAIN LEVEL
FLOOR FRAMING

REVISION:

DATE:
07/14/2025

DRAWING:

S2



HEATED AREA: 380 SQ. FT.

GENERAL FRAMING NOTES:

- THIS PLAN DESIGNED IN ACCORDANCE WITH NC RESIDENTIAL CODE, 2018 EDITION.
- GLAZING AREAS SHOWN ON THESE DESIGN DRAWINGS DO NOT EXCEED 15% THE GROSS AREA OF THE EXTERIOR WALLS. THIS STRUCTURE MEETS THE REQUIREMENTS OF N1101.2.1, RESIDENTIAL BUILDING, TYPE A-1.
- WALL CLADDING IS DESIGNED FOR A 24.1 #/SF OR GREATER POSITIVE/NEGATIVE PRESSURE.
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- DESIGN CRITERIA

	DEAD	LIVE
PRIMARY FLOOR	10 PSF	40 PSF
SECONDARY FLOOR	10 PSF	40 PSF
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ATTIC	10 PSF	20 PSF
ROOF	10 PSF	20 PSF

DEFLECTION LIMITS FLOOR - L/360
(LIVE LOAD ONLY) ROOF - L/240
- ALL HEADERS IN LOAD BEARING WALLS SHALL BE DOUBLE 2X10.
- ALL WALLS ARE 2X4 @ 16" O.C. UNLESS OTHERWISE NOTED.
- FLOOR INSULATION = R-19, EXTERIOR =R-15 AND CEILING = R-38.
- PROVIDE DOUBLE FLOOR JOISTS UNDER WALLS ABOVE.

R602.7.5 SUPPORTS FOR HEADERS:

HEADERS SHALL BE SUPPORTED ON EACH END WITH ONE OR MORE JACK STUDS OR WITH APPROVED FRAMING ANCHORS IN ACCORDANCE WITH TABLE R602.7(1) OR R602.7(2). THE FULL-HEIGHT STUD ADJACENT TO EACH END OF THE HEADER SHALL BE END NAILED TO EACH END OF THE HEADER WITH FOUR-16D NAILS (3.5 INCHES X 0.135 INCHES). THE MINIMUM NUMBER OF FULL-HEIGHT STUDS AT EACH END OF A HEADER SHALL BE IN ACCORDANCE WITH TABLE R602.7.5.

TABLE R602.7.5
MINIMUM NUMBER OF FULL-HEIGHT STUDS AT EACH END OF HEADERS IN EXTERIOR WALLS

HEADER SPAN	MAXIMUM STUD SPACING (INCHES) PER TABLE R602.3(5)	
	16	24
LESS THAN/EQUAL TO 3'	1	1
4'	2	1
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16'	6	4

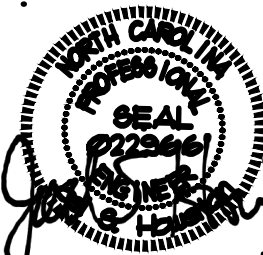
BRACED WALL NOTES:

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07/11/2025 EDT

NOTE: ○ = * OF JACK STUDS
UNDER BEAM

S3 SECOND FLOOR FRAMING
01 1/4"=1'-0"

Plan No. 2845-10

STRUCTURAL EVALUATION BY:
HOWERTON SERVICES, PLLC
3513 CATHEDRAL BELL RD., RALEIGH N.C.
27614

BUILDING DESIGN BY:
VUNCANNON DESIGNS

TM Homes
Lot #1 3180 Oak Ridge River Rd
Fuquay Varina, Harnett Co., NC

DESCRIPTION:
CEILING FRAMING
PLAN

REVISION:

DATE:
07/14/2025

DRAWING:

S3

S4