NOTE:

ALL DIMENSIONS ARE TO BE VERIFIED BY OWNER/BUILDER
BEFORE CONSTRUCTION BEGINS. ONCE CONSTRUCTION HAS BEGUN,
DESIGNER IS RELEASED FROM ANY AND ALL LIABILITY ASSOCIATED
WITH THE CONSTRUCTION OF THIS CUSTOM RESIDENCE.
THIS PLAN IS DESIGNED UNDER THE 2018 NORTH CAROLINA
RESIDENTIAL CODE

2x8

FIBERGLASS SHINGLES AS SPEC. STANDING SEAM METAL ROOF 12"x42" VENT~ 3:12 PITCH 2x8 STANDING SEAM . FIBER CEMENT BOARD METAL ROOF & BATTEN SIDING w/ 5/4"x4" CORNER BOARDS TYP. ROOF & BRACKETS 11.875" TJI BY BLDR. O.H. ∤ FIBER CEMENT BOARD & BATTEN SIDING -FIBER CEMENT SIDING w/ 5/4"x4" CORNER w/ 5/4"x4" CORNER BOARDS TYP. BOARDS TYP. 10" BAND w/ 5/4"x4" TRIM TYP. DRIPCAP TYP. PROVIDE STEPS BRACKETS AS PER BLDR. SELECTION 8" COLS. TYP. TO GRADE BRICK VENEER / BRICK VENEER AS PER BLDR. AS PER BLDR. FRONT ELEVATION SCALE 1/4"=1'-0"

TREBOLAS SHINOLES AS STEC.

TR

SCALE 1/4"=1'-0"

PLANS DESIGNED TO THE 2018 NORTH CAROLINA RESIDENTIAL CODE

PLANS DESIGNED FOR MIN. 115 MPH 3 SECOND GUST (89 MPH FASTEST WIND), EXPOSURE B ANCHOR BOLTS TO BE MIN. 1/2" DIAMETER & SHALL EXTEND A MINIMUM OF 7" INTO MASONRY OR CONCRETE. ANCHOR BOLTS TO BE NO MORE THAN 6' O.C. AND WITHIN 12" OF THE CORNER.

MEAN ROOF HEIGHT = $< 30^{\circ}$.0"

COMPONENT & CLADDING FOR THESE PLANS SHALL BE DESIGNED TO MEET SECTION R301.2.1, TABLE R301.2(2) AND R301.2(6) ADJUSTED FOR MEAN ROOF HEIGHT AND EXPOSURE.

MINIMUM VALUES FOR ENERGY COMPLIANCE:

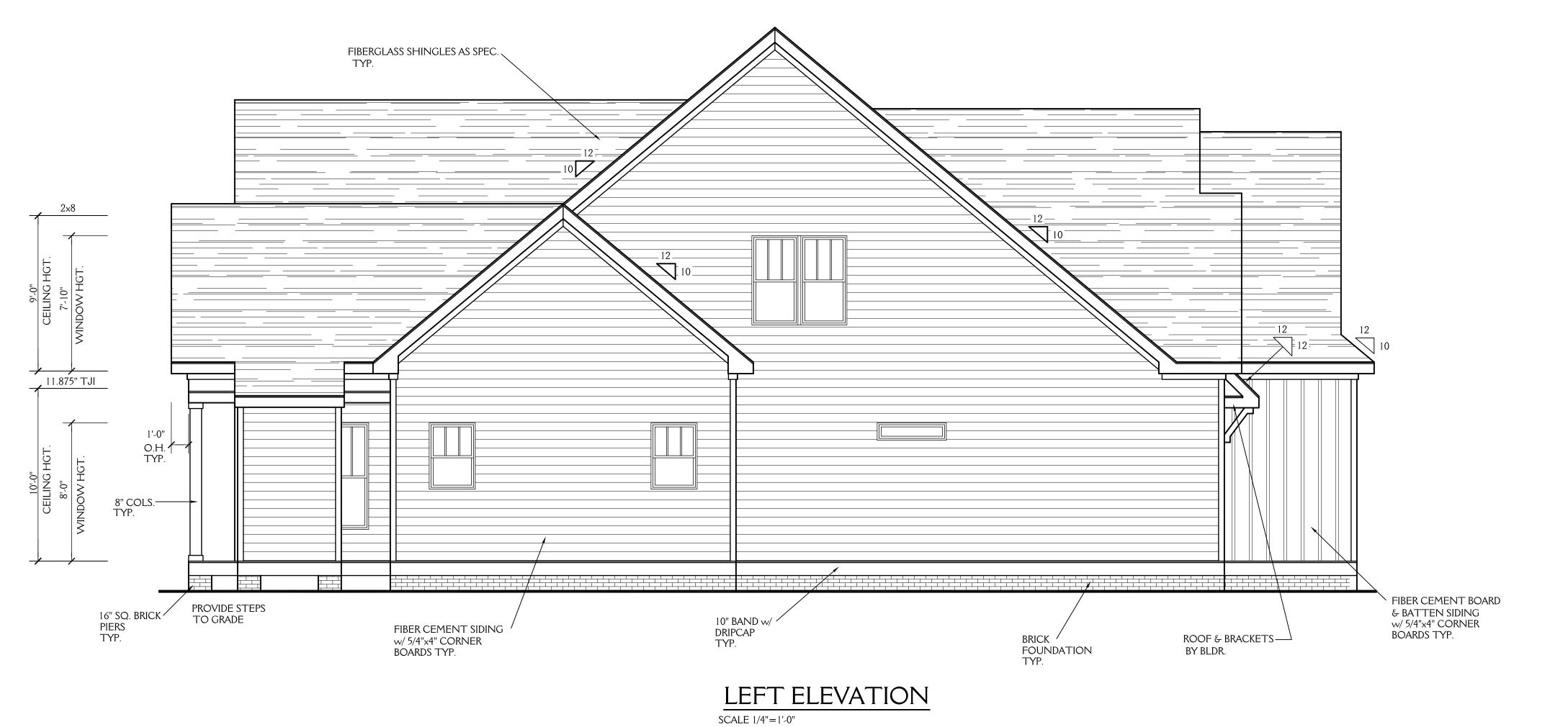
ZONE 4 MAX GLAZING U-FACTOR = 0.35 CEILING R-38 WALLS R-15 FLOORS R-19, SLABS R-10



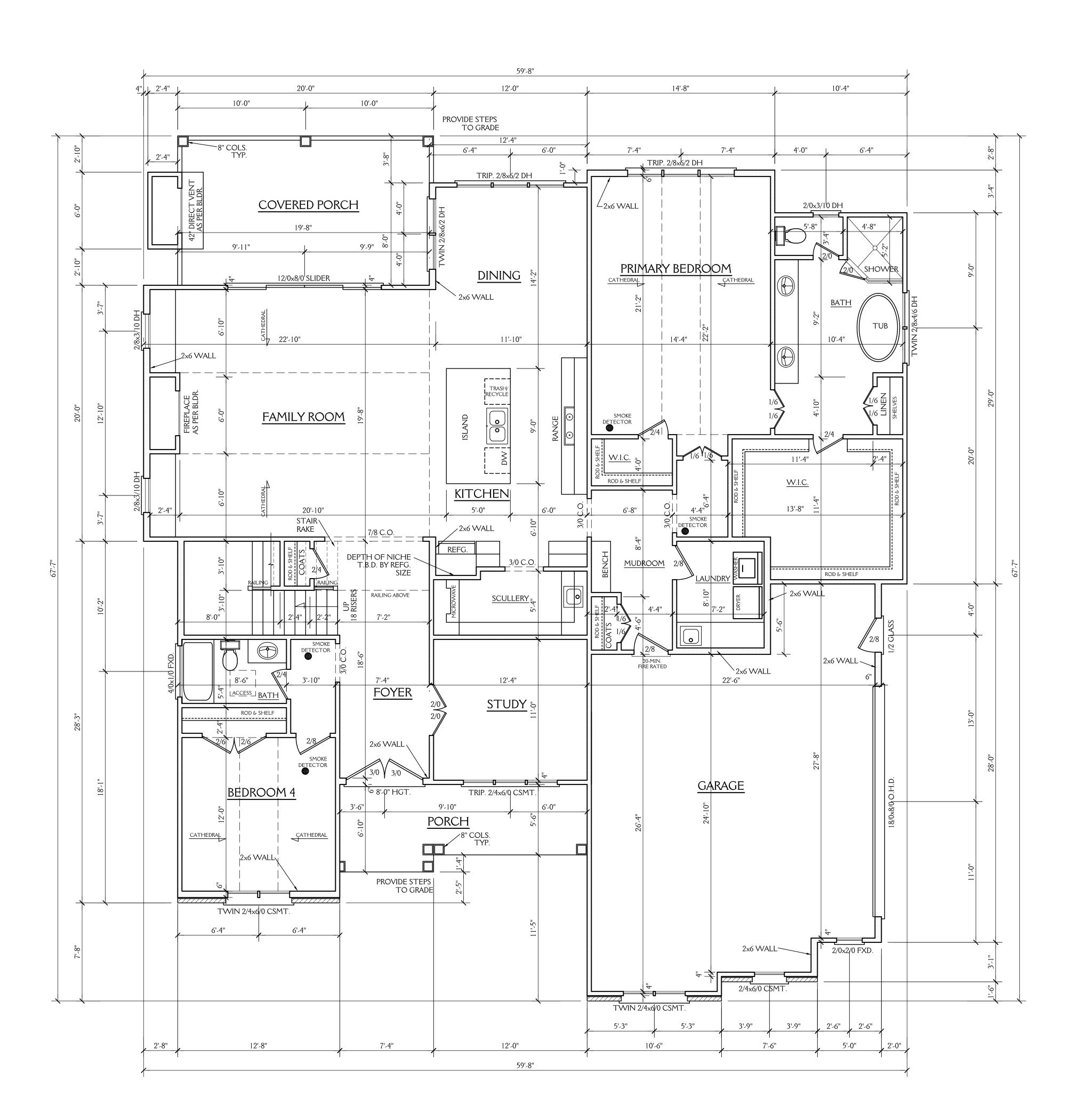
NOTE

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ALL DIMENSIONS ARE TO BE VERIFIED BY OWNER/BUILDER BEFORE CONSTRUCTION BEGINS. ONCE CONSTRUCTION HAS BEGUN, DESIGNER IS RELEASED FROM ANY AND ALL LIABILITY ASSOCIATED WITH THE CONSTRUCTION OF THIS CUSTOM RESIDENCE. THIS PLAN IS DESIGNED UNDER THE 2018 NORTH CAROLINA RESIDENTIAL CODE

NOTES:

CONSTRUCTION TO MEET OR EXCEED ALL REQUIREMENTS OF THE 2018 NC RESIDENTIAL BUILDING CODE

- 1. SEE SECTION R310 OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR ALL EMERGENCY ESCAPE & RESCUE OPENING
- REQUIREMENTS. SEE SECTION R303 OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR LIGHT & VENTILATION
- SEE SECTION R310.1 & R311 OF THE 2018 NC RESIDENTIAL BUILDING CODE EGRESS REQUIREMENTS.
- 2. BUILDER & WINDOW SALESMAN TO CONFIRM THAT WINDOWS CHOSEN MEET ALL REQUIREMENTS OF SECTION R310 OF THE 2018 NC RESIDENTIAL
- BUILDING CODE. 3. SEE SECTION R308.4 OF THE 2018 NC RESIDENTIAL BLDG. CODE FOR GLAZING REQUIREMENTS IN HAZARDOUS LOCATIONS
- 4. PROVIDE FALL PROTECTION AT WINDOWS AS REQUIRED BY 2018 NC RESIDENTIAL BUILDING CODE
- 5. ALL GLASS TO HAVE A U FACTOR OF 0.32 OR BETTER AND SHGC OF .30 OR BETTER.
- 6. SEE CHAPTER 11 OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR ALL ENERGY CONSERVATION REQUIREMENTS
- 7. SEE SECTION R302.5 & R302.6 OF THE 2018 NC RESIDENTIAL BLDG. CODE FOR DWELLING/ GARAGE FIRE SEPARATION REQUIREMENTS
- 8. SEE APPENDIX M OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR ALL DECK CONSTRUCTION REQUIREMENTS
- 9. PROVIDE CARBON MONOXIDE DETECTORS AS PER SECTION R315 OF THE 2018 NC RESIDENTIAL **BUILDING CODE**
- 10. PROVIDE CRAWLSPACE ACCESS AS PER SECTION 408.8 OF THE 2018 NC RESIDENTIAL BUILDING CODE LOCATION T.B.D. IN FIELD BY BUILDER.
- 11. PROVIDE FOUNDATION DRAINAGE AS PER CODE. SEE SECTIONS 405, 801.3 & 401.3 OF THE

2018 NC RESIDENTIAL BUILDING CODE.

- 12. SEE SECTION R311.7 OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR ALL STAIRWAY REQUIREMENTS. SEE SECTION R312 OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR ALL GUARD RAIL & HAND RAIL REQUIREMENTS.
- 13. SEE SECTION R307 OF THE 2018 NC RESIDENTIAL BUILDING CODE FOR ALL BATH FIXTURE CLEARANCES. 14. SEE CHAPTER 10 OF THE NC RESIDENTIAL BUILDING CODE FOR ALL FIREPLACE & CHIMNEY CLEARANCES & REQUIREMENTS.
- 15. ALL ANGLES WALLS ARE 45° U.N.O.

ABBREVIATIONS

CANT.: CANTILEVER TYP.: TYPICAL CLG.: CEILING C.O.: CASED OPENING D.W.: DISHWASHER HGT.: HEIGHT W.I.C. : WALK IN CLOSET COL.: COLUMN SHWR. : SHOWER DN.: DOWN TRANS.: TRANSOM

FIRST FLOOR PLAN

SCALE 1/4"=1'-0" 10'-0" CLG. HGT. SET WINDOWS AT 8'-0" AFF

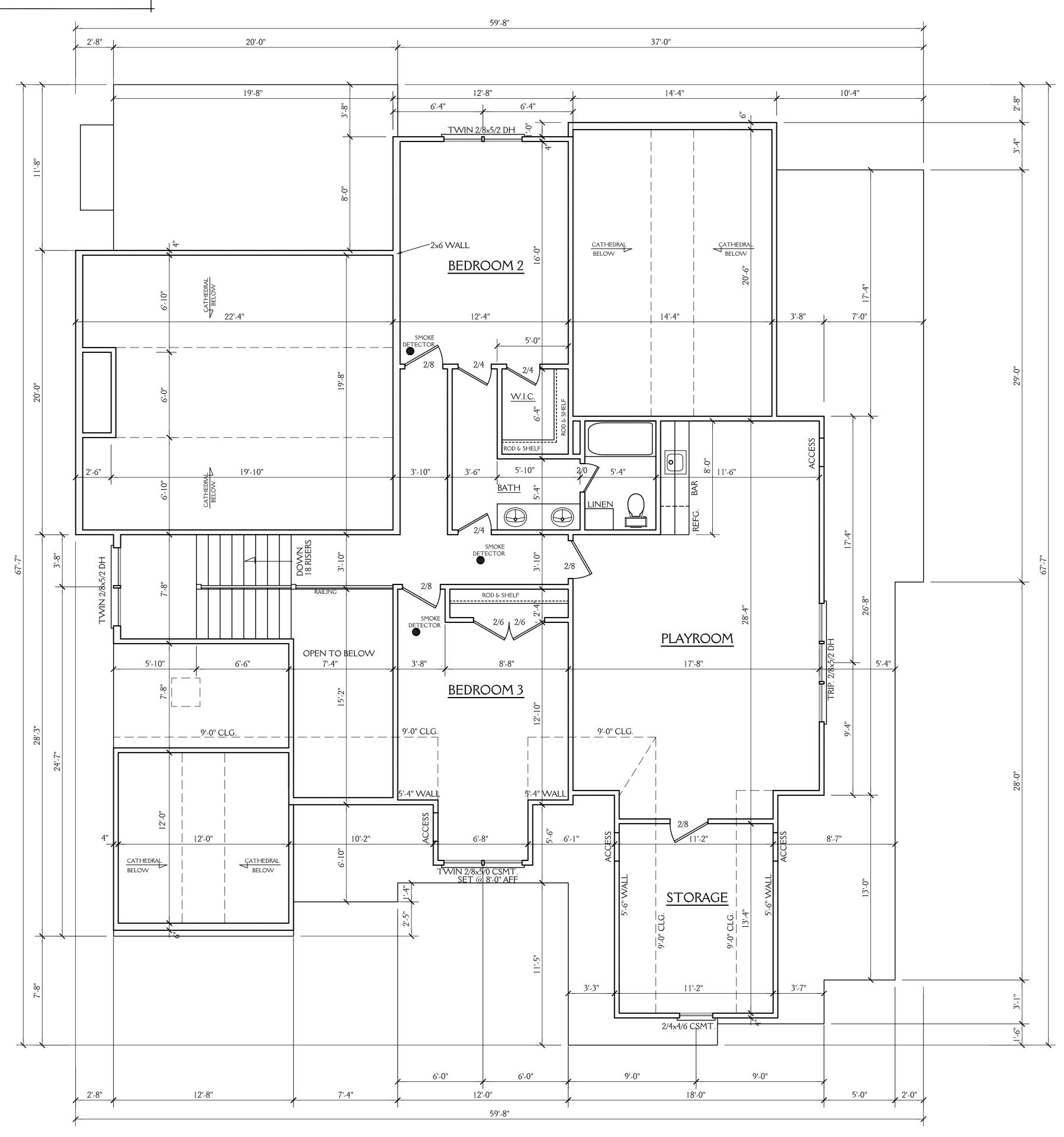
2368 SQ FT HTD (1ST FLOOR) 1149 SQ FT HTD (2ND FLOOR)

231 SQ FT (COV. PORCH) 116 SQ FT (PORCH) 157 SQ FT (STORAGE) 626 SQ FT (GARAGE) 3517 SQ FT HTD TOTAL 1130 UNHEATED TOTAL



NOTE

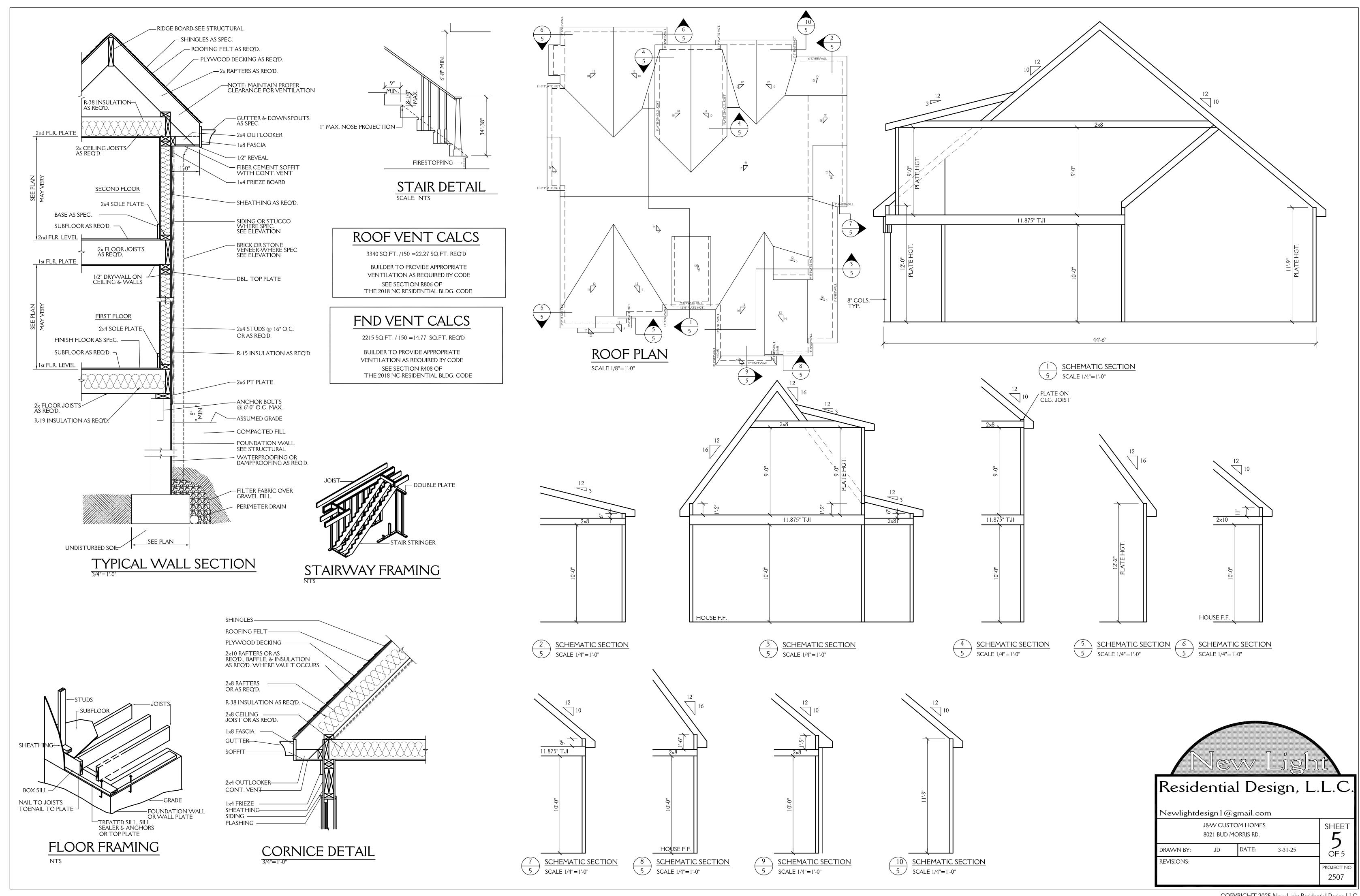
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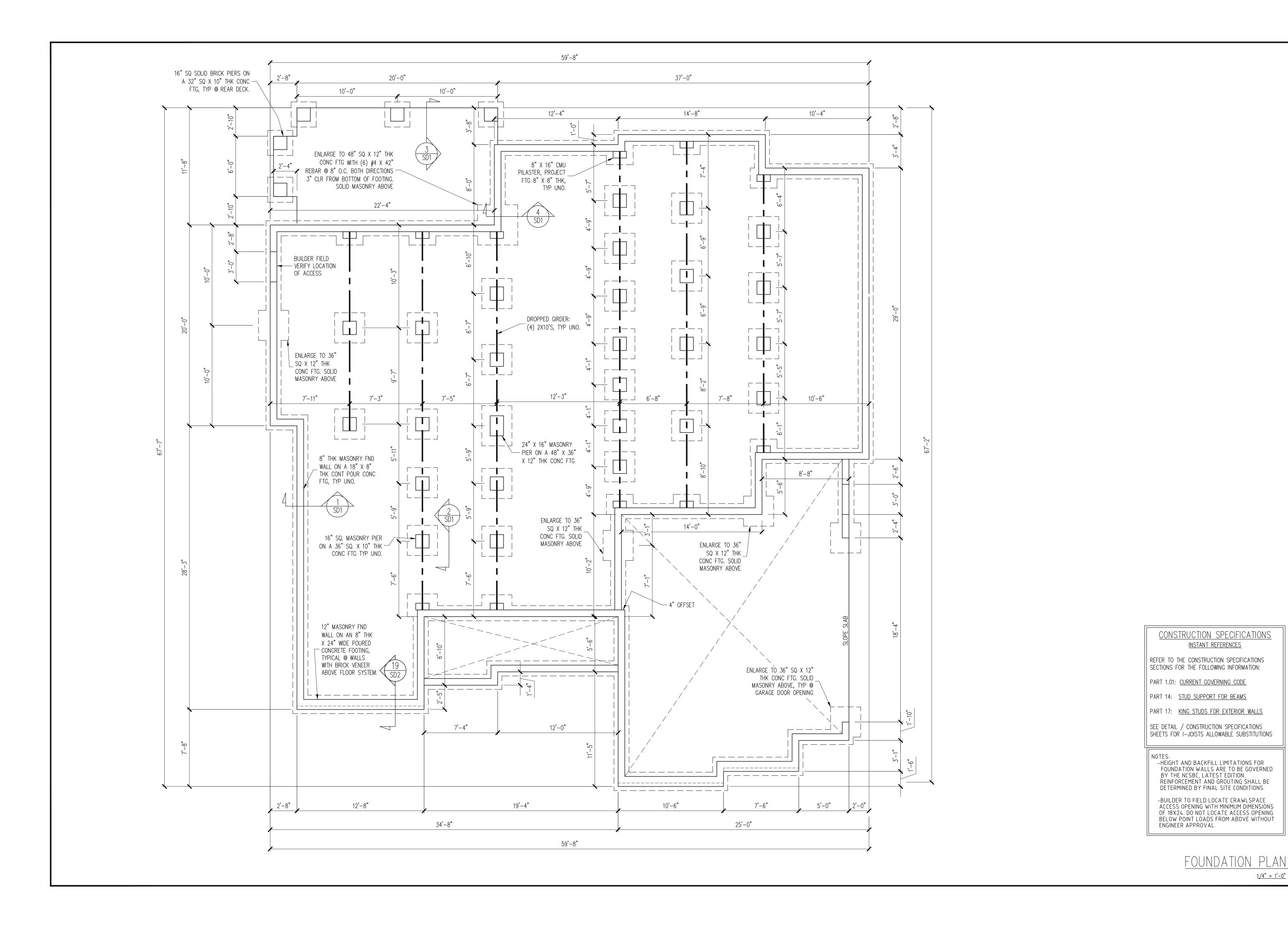


SECOND FLOOR PLAN

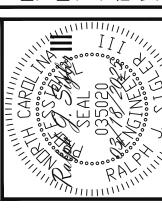
SCALE 1/4"=1'-0" 9'-0" CLG. HGT. SET WINDOWS AT 7'-10" AFF U.N.O.







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HOMES ENDUM

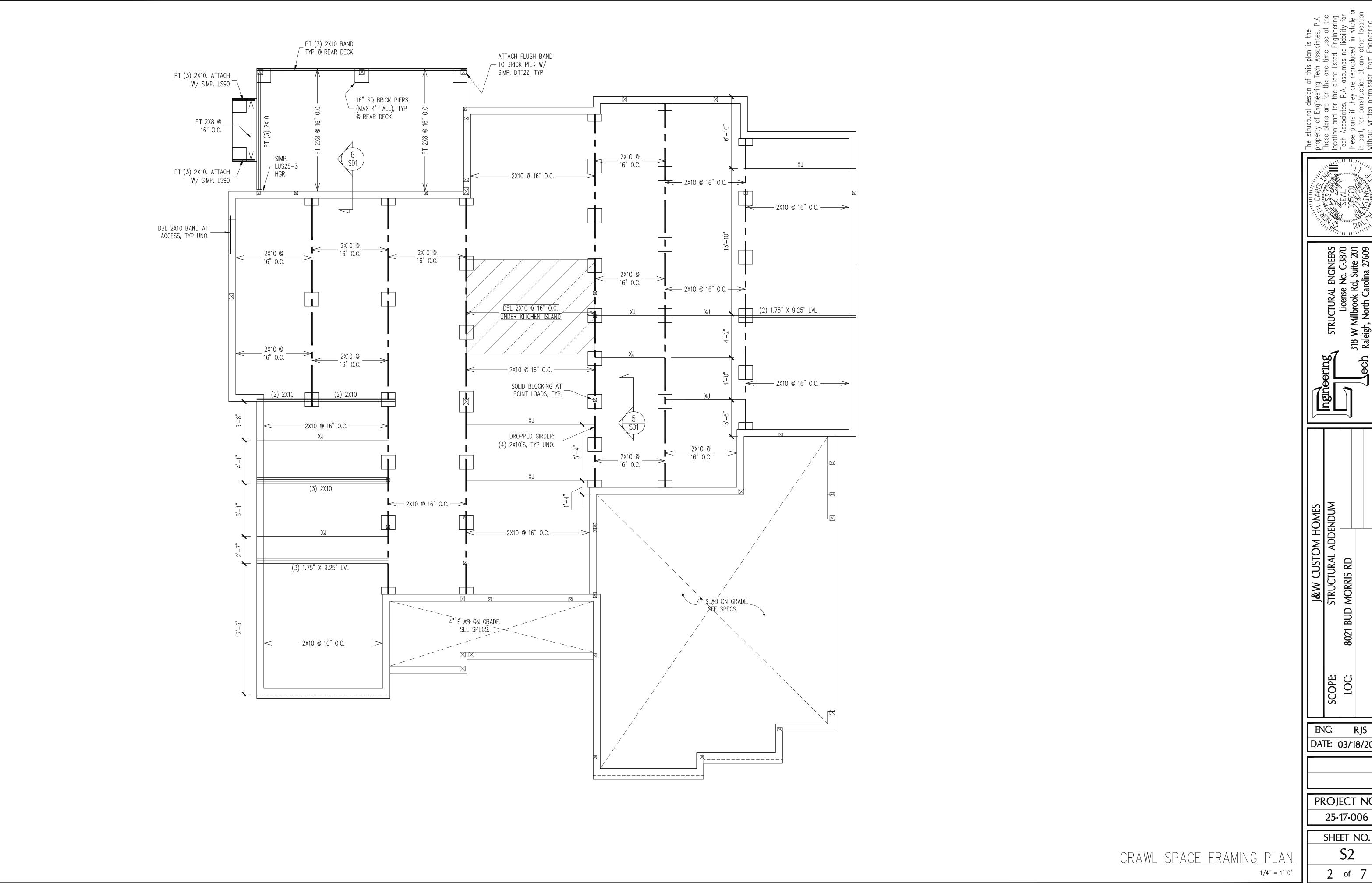
SCOPE: STRUCTURAL ADDENDUM
LOC: 8021 BUD MORRIS RD

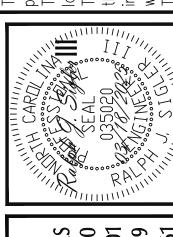
ENG: RJS
DATE: 03/18/2025

PROJECT NO.

25-17-006 SHEET NO. \$1

51 1 of 7



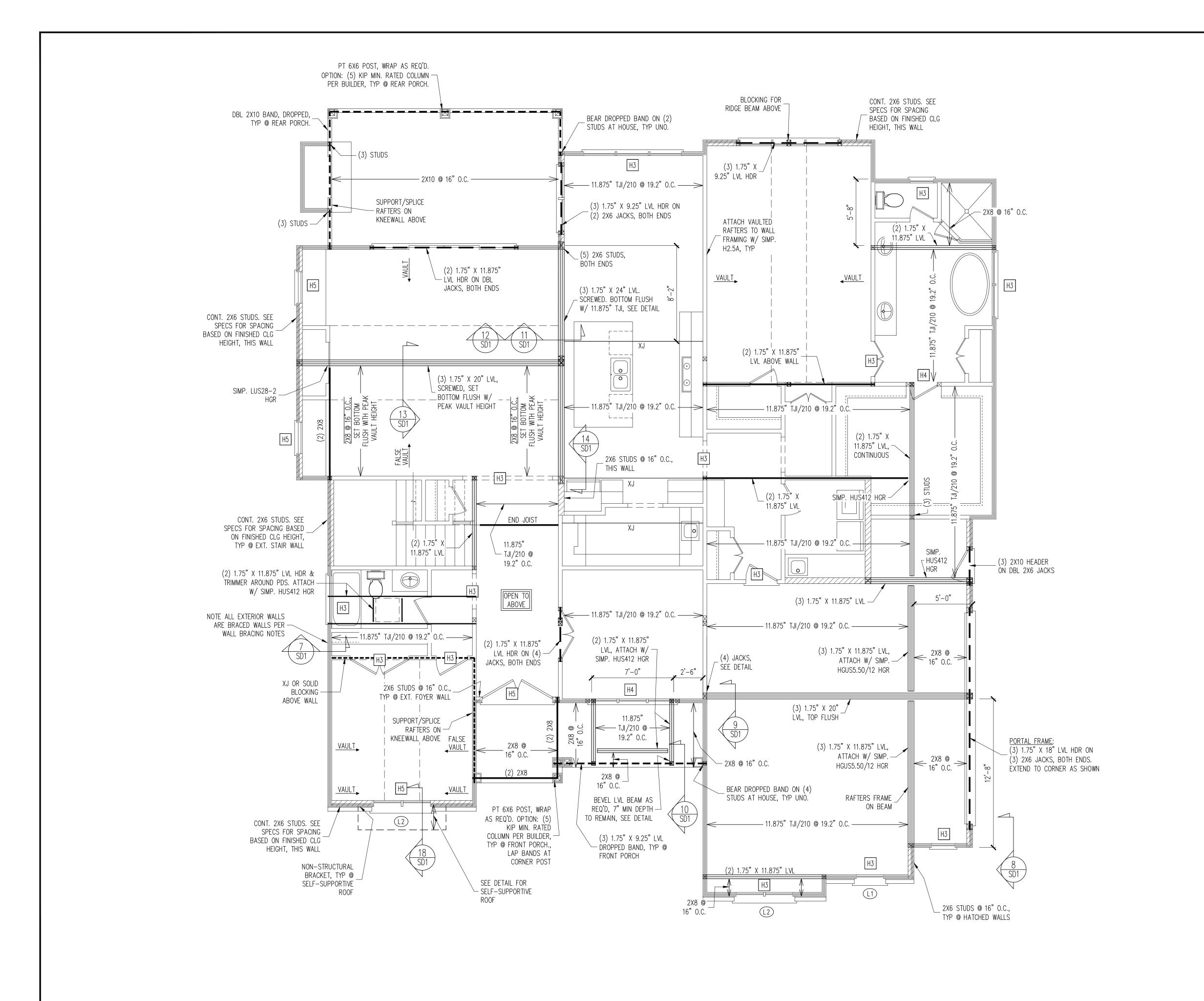


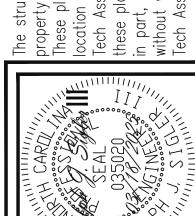
RJS DATE: 03/18/2025

PROJECT NO.

SHEET NO.

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LINTEL SCHEDULE

- L2 L 5 X 3 1/2 X 5/16
- L3 L 6 X 4 X 5/16 ATTACHED TO HEADER (2)- 1/2" DIA. X 3" LONG LAG SCREWS AT 16" O.C. (ONE LAG SCREW @ 16" O.C. PERMITTED FOR 5' OR LESS BRICK ABOVE)
- L4 16 GAUGE FLEX LINTEL PER BUILDER

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 (3) 2X10'S ON SINGLE JACKS
- (A) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38" MAX.
- (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.

WALL BRACING

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 @ 6" 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 @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD.
- GB INTERIOR BRACED WALL. 1/2" GB SECURED PER TABLE R602.10.2 OF THE 2018 NCRBC. (FASTENERS @ 7" O.C.) BOTH SIDES OF WALL, OR (FASTENERS @ 4" O.C.) ONE SIDE OF WALL AT STAIRS (BUILDER PERMITTED TO SUBSTITUTE "WSP" FOR ANY "GB" WALL)

PROVIDED CONTINUOUS SHEATHING = 280' MIN.

REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION.

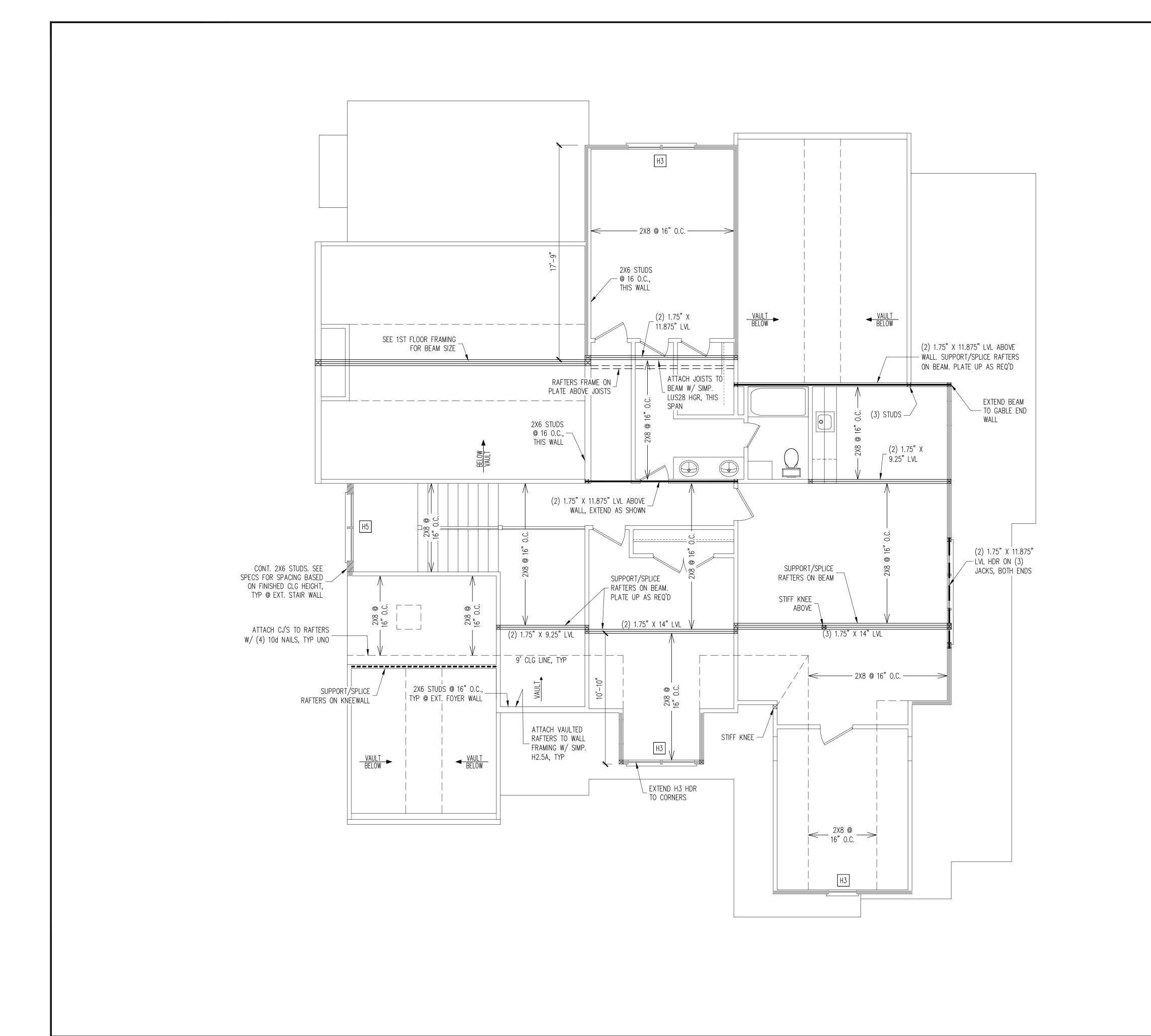
WALLS AND CEILING 1/4" = 1'-0"

J&W CUSTOM HOMES
STRUCTURAL ADDENDUM

ENG: RJS DATE: 03/18/2025

PROJECT NO. 25-17-006

> SHEET NO. 3 of 7





J&W CUSTOM HOMES
STRUCTURAL ADDENDUM
MORRIS RD

HEADER SCHEDULE H1 SINGLE 2X4 TURNED FLAT (A)

H2 (2) 2X4'S ON SINGLE JACKS (B)

H3 (2) 2X10'S ON SINGLE JACKS (C)

(A) TYPICAL FOR INTERIOR NON LOAD BEARING WALLS ONLY, ROUGH OPENING 38" MAX.

(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.

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 @ 6" O.C. AT PANEL EDGES, 12" O.C. IN PANEL FIELD. -----

PROVIDED CONTINUOUS SHEATHING = 111' MIN.

REFERENCE PART 16.02 OF CONSTRUCTION SPECIFICATIONS FOR GENERAL WIND BRACING INFORMATION.

2ND FLOOR FRAMING PLAN

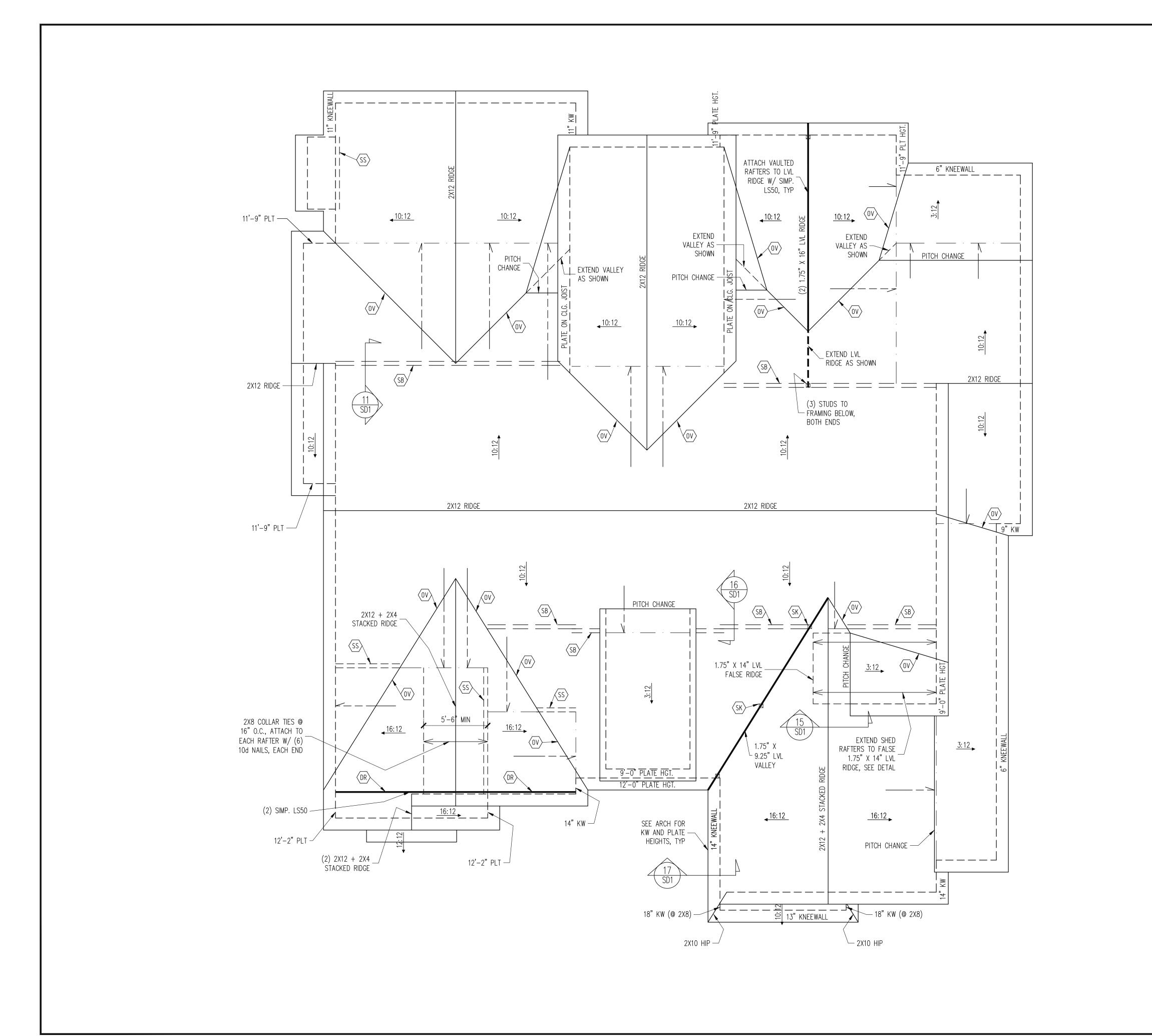
WALLS AND CEILING 1/4" = 1'-0"

ENG: RJS DATE: 03/18/2025

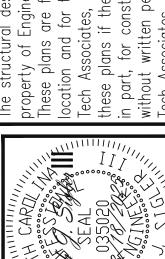
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J&W CUSTOM HOMES

E. STRUCTURAL ADDENDUM

C. 8021 BUD MORRIS RD

ENG: RJS DATE: 03/18/2025

PROJECT NO.

25-17-006 SHEET NO.

ROOF FRAMING PLAN

1/4" = 1'-0"

5 of 7

FRAMING NOTES

ROOF ONLY

-COMMON RAFTERS 2X8 @ 16" O.C. TYP U.N.O. -COLLAR TIES 2X4 EVERY 3RD SET OF RAFTERS TYP U.N.O.

-VERIFY ROOF PITCHES, OVERHANG LENGTHS, AND KNEEWALL FRAMING HGTS WITH ARCHITECTURAL DRAWINGS, TYPICAL.

FRAMING SCHEDULE

ROOF ONLY

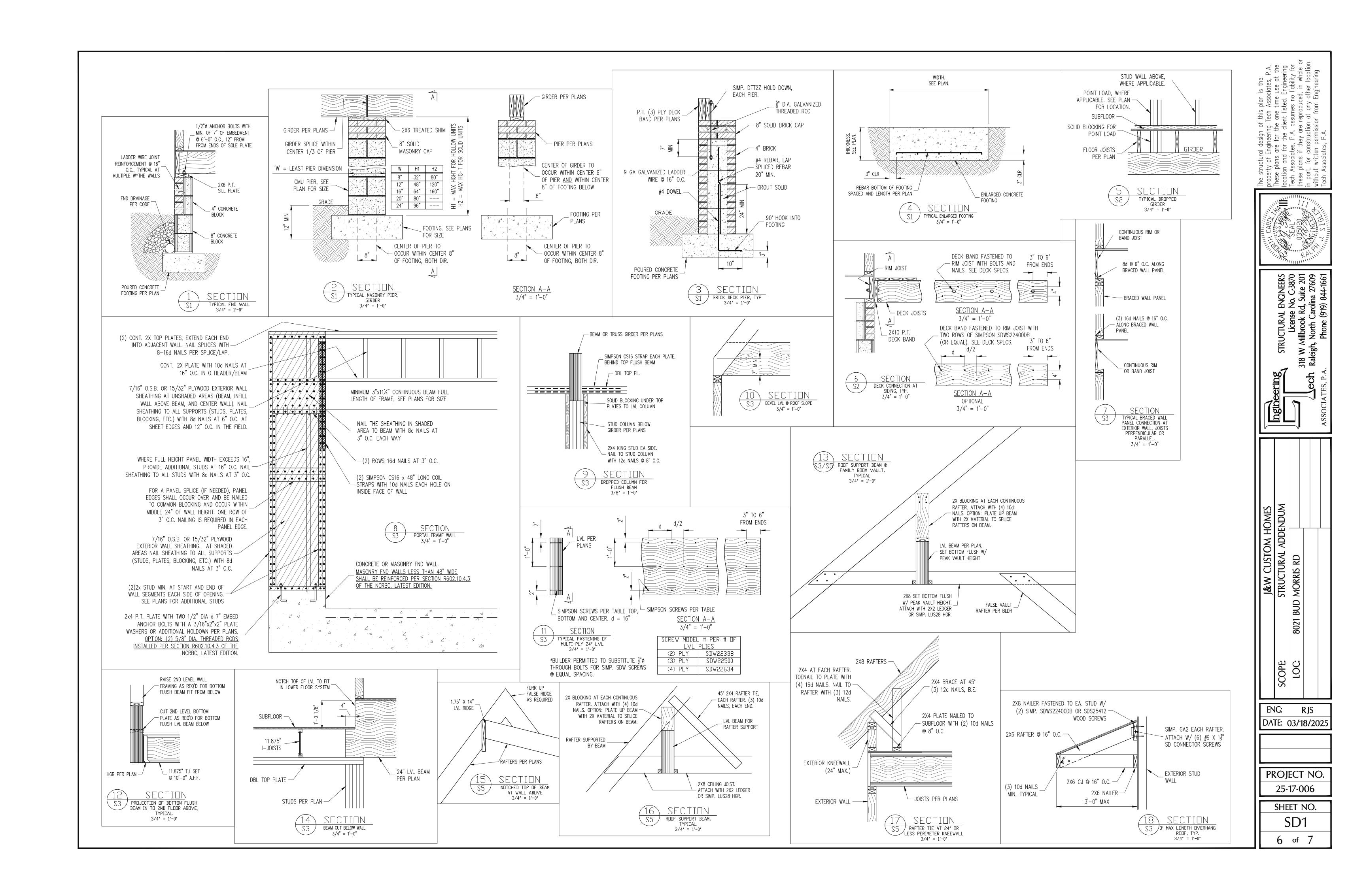
SB SUPPORT/SPLICE RAFTERS ON BEAM BELOW

SS SUPPORT/SPLICE RAFTERS ON KNEEWALL BELOW

OV OVERFRAME VALLEY (2X10 SLEEPER)

SK DBL 2X4 STIFF KNEE

DR DOUBLE RAFTER



CONSTRUCTION SPECIFICATIONS PART 1: GENERAL 11.02 LVL OR PSL MEMBERS MAY BE RIPPED FROM DEEPER MEMBERS TO MATCH THE MEMBER CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL DEPTH SPECIFIED IN THE PLANS CODE, 2018 EDITION. PART 12: PRESSURE TREATED LUMBER .02 DIMENSIONS SHOWN SHALL GOVERN OVER SCALE ON THESE DRAWINGS. 12.01 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-2 OR BY ANY METHOD 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. GIVING EQUAL PROTECTION. THE BUILDING CODE OFFICE MAY ALSO APPROVE A NATURAL DECAY RESISTANT WOOD PER SECTION 19-6(A) PART 2: DESIGN LOADS PART 13: STEEL FLITCH PLATE BEAMS 2.01 DESIGN LOADS SHALL CONFORM WITH THE TABLE BELOW: 13.01 FLITCH PLATE BEAMS SHALL CONSIST OF A CONTINUOUS STEEL PLATE BOLTED BETWEEN TWO PIECES OF CONTINUOUS LUMBER AS SIZED ON THE PLANS. BOLT PIECES TOGETHER LIVE LOAD (PSF) DEAD LOAD (PSF) USING 1/2" Ø BOLTS SPACED AT 24" O.C. STAGGERED TOP TO BOTTOM OF THE BEAM. MAINTAIN A 2" EDGE DISTANCE. PLACE TWO BOLTS, ONE ABOVE THE OTHER, $6"\pm 2"$ BALCONIES, DECKS, ATTICS WITH FIXED STAIR ACCESS, DWELLING UNITS INCLUDING ATTICS WITH FROM EACH END OF THE BEAM. FIXED STAIR ACCESS, STAIRS, FIRE ESCAPES PART 14: STUD SUPPORTS FOR BEAMS GARAGES (PASSENGER CARS ONLY) 14.01 STEEL, ENGINEERED LUMBER, AND FLITCH PLATE BEAMS BEARING ON A STUD WALL ATTICS (NO STORAGE, LESS THAN 5' HEADROOM) ATTICS (WITH STORAGE) I-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM SHALL BEAR <u>FULL WIDTH</u> 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 STUDS SUCH THAT THE STUD COLUMN IS AT LEAST AS WIDE AS THE TRUE WIDTH OF THE BEAM BEING SUPPORTED, WHICHEVER IS GREATER, TYP UND. FOR THE SKEWED R00F 20 10 (15 FOR VAULTS) - 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 CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON |; OF 4 SQ. WHICHEVER PRODUCES THE GREATER STRESS. - BUILDER TO VERIFY DEAD LOAD DOES NOT EXCEED 10 PSF WHEN HEAVY FLOOR OR 2—BEAMS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR ROOF FINISHES SUCH AS TILE OR SLATE ARE UTILIZED. NOTIFY ENGINEERING UNDER A MINIMUM OF 4 1/2" ONTO THE WALL AND BE SUPPORTED BY A TRPL STUD GANGED THESE CONDITIONS COLUMN TYP UNO. 2.02 INTERIOR WALLS: 5 PSF LATERAL. 14.02 DIMENSIONAL LUMBER BEAMS BEARING ON A STUD WALL SHALL BEAR AS FOLLOWS: 2.03 BASIC WIND DESIGN VELOCITY OF 120 MPH. I-WHEN THE BEAM IS PERPENDICULAR TO, OR SKEWED RELATIVE TO THE WALL, THE BEAM SHALL BEAR <u>FULL WIDTH</u> ON THE SUPPORTING WALL INDICATED (LESS 1 1/2" TO ALLOW 2.04 SOIL BEARING CAPACITY 2000 PSF (PRESUMPTIVE). FOR A CONTINUOUS RIM JOIST WHERE APPLICABLE) AND SHALL BE SUPPORTED BY A GANGED STUD COLUMN THE SAME WIDTH AS THE BEAM TYP UNO. (E.G. A TRIPLE 2X10 IS PART 3: STRUCTURAL STEEL TO BE SUPPORTED BY (3) STUDS). FOR THE SKEWED CONDITION PARTICULAR CARE SHALL BE TAKEN TO ENSURE STUD COLUMN IS CENTERED ON THE BEAM 3.01 WIDE FLANGE BEAMS AND TEE SECTIONS SHALL CONFORM TO ASTM A992 MINIMUM 2-BEAMS BEARING ONTO THE END OF A STUD WALL PARALLEL TO THE BEAM SHALL BEAR A MINIMUM OF 3" ONTO THE WALL AND BE SUPPORTED BY A DBL STUD GANGED COLUMN 3.02 SQUARE AND RECTANGULAR TUBING SHALL CONFORM TO ASTM A500 GRADE B MINIMUM 14.03 EXTRA JOISTS BEARING ON A STUD WALL PERPENDICULAR TO OR SKEWED RELATIVE TO 3.03 STEEL PIPE SHALL CONFORM TO ASTM A53 GRADE B, TYPE S, MINIMUM GRADE THE BEAM SHALL BE SUPPORTED BY ONE ADDITIONAL STUD. 3.04 ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 MINIMUM GRADE 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 3.05 STRUCTURAL STEEL CONSTRUCTION SHALL MEET THE REQUIREMENTS OF THE AISC OF 10d NAILS @ 8" O.C., 3" APART, FOR 2X8 OR 2X10 STUDS) ALL COLUMNS SHALL SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL BE CONTINUOUS DOWN TO THE FOUNDATION OR OTHER PROPERLY DESIGNED FOR BUILDINGS. STRUCTURAL ELEMENT SUCH AS A BEAM. COLUMNS TRANSFERRING LOADS THROUGH FLOOR LEVELS SHALL BE SOLIDLY BLOCKED <u>FOR THE FULL WIDTH</u> OF THE STUD COLUMN WITHIN THE CAVITY FORMED BY THE WELDING ELECTRODES SHALL BE E70XX AND ALL WELDING SHALL BE PERFORMED BY AN AWS CERTIFIED WELDER PART 15: NAILING OF MULTI PLY WOOD BEAMS PART 5: CONCRETE AND SLABS ON GRADE 15.01 SOLID 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 6.01 CAST IN PLACE CONCRETE SHALL BE OF NORMAL WEIGHT, 6% AIR ENTRAINMENT, AND @ 16" O.C. FOR 2X10 OR LARGER, TWO ROWS OF 10d NAILS @ 16" O.C. FOR 2X8, ONE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS TYP UNO. ROW OF 10d NAILS @ 16" O.C. FOR 2X6 OR SMALLER. STAGGER ROWS 5" MIN. ALL CONCRETE, INCLUDING CONCRETE FOR FOOTINGS, IS TO BE CAST IN PLACE, TYP 15.02 LVL MEMBERS THAT ARE GANGED TO FORM A BEAM SHALL HAVE ADJACENT MEMBERS IN THE BEAM FASTENED TOGETHER PER MANUFACTURERS RECOMMENDATIONS, TYP 5.02 REINFORCED CAST IN PLACE CONCRETE SHALL BE PROPORTIONED, MIXED AND PLACED IN ACCORDANCE WITH THE SPECIFICATIONS OF ACI 318, LATEST EDITION. PART 16: WALL FRAMING AND BRACING 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 16.01 STUD WALLS SHALL CONSIST OF 2X4 STUDS SPACED AT 16" O.C. UNO. STUDS SHALL PLACED ON A 6 MIL VAPOR BARRIER ON 2" MIN GRANULAR FILL ON SOIL WITH 90% BE CONTINUOUS FROM SOLE PLATE AT FLOOR TO DOUBLE TOP PLATE AT THE CEILING MIN STANDARD PROCTOR DENSITY. VAPOR BARRIER MAY BE OMITTED FOR SLABS NOT R ROOF. NO INTERMEDIATE BANDS OR PLATES SHALL CAUSE DISCONTINUITIES IN A IN ENCLOSED AREAS TUD WALL EXCEPT AS REQUIRED FOR DOOR OR WINDOW OPENINGS. THE KING STUDS FOR SUCH OPENINGS SHALL BE CONTINUOUS, TYP UNO. PART 6: REBAR AND WIRE REINFORCEMENT MAX ALLOWABLE WALL HEIGHTS FOR EXTÉRIOR STUD WALLS. INCLUSIVE OF SOLE PLATE AND DBL TOP PLATE AND 7/16" OSB EXTERIOR BRACING AND ROW OF 2X4 REBAR SHALL BE DEFORMED STEEL CONFORMING TO ASTM A615 GRADE 60 TYP UNO 2X6 PURLINS AT 8' HEIGHT (AND AT 16' HEIGHT FOR TALL WALLS), TYP UNO: 2X4 @ 16" O.C.: 11'-1 1/2" 2X6 @ 16" O.C.: 17'-0" 2X4 @ 12" O.C.: 12'-1 1/2" 2X6 @ 12" O.C.: 18'-8" 6.02 LAP SPLICES SHALL BE CLASS B AS DEFINED BY ACI 318, TYP UNO 6.03 WIRE REINFORCEMENT SHALL BE 9 GA AND SHALL CONFORM TO ASTM A1064. DBL 2X4 @ 16" O.C.: 13'-4" DBL 2X6 @ 16" O.C.: 21'-0" 16.02 FOR WALL BRACING THE FOLLOWING SHALL APPLY: -BLOCKING AT UNSUPPORTED PANEL EDGES IS REQUIRED TYP UNO. 7.01 CONCRETE MASONRY UNITS SHALL CONFORM TO ASTM C90 AND C55, NORMAL WEIGHT, -WALL BRACING IS BY ENGINEERED DESIGN AND NOT PRESCRIPTIVE PER SECTION

f'M = 1,500 PSI MIN

COMPRESSIVE STRENGTH OF 2000 PSI.

FOR CONTINUOUS WALL APPLICATIONS

ANCHOR BOLTS SHALL HAVE A 2" MIN HOOK UNO

FOR JOISTS, RAFTERS, GIRDERS, BEAMS, STUDS, ETC.

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:

E= 1.3 X 10E6 PSI, Fb = 1700 PSI, Fv = 400 PSI, Fc = 680 PSI

PART 8: BOLTS AND LAG SCREWS

PART 9: DRIVEN FASTENERS

PART 10: DIMENSIONAL LUMBER

COMMÓN WIRE OR BOX

PART 11: ENGINEERED LUMBER

7.02 CLAY MASONRY UNITS SHALL CONFORM TO ASTM C62-17 GRADE SW

7.03 MORTAR SHALL BE TYPE S. MORTAR AND GROUT SHALL CONFORM TO ASTM C476, MIN

7.04 MASONRY CONSTRUCTION SHALL CONFORM TO THE SPECIFICATIONS OF ACI 530

8.01 BOLTS SHALL CONFORM TO ASTM A307 MINIMUM GRADE TYP UNO. INSTALL STANDARD STEEL WASHERS (ASTM F844-07a) FOR THE NUT / BOLT HEAD WHEN BOLTING WOOD

8.02 LAG SCREWS SHALL CONFORM TO ANSI/ASME STANDARD B18.2.1—1981. PILOT HOLES

8.03 ANCHOR RODS AND BOLTS SHALL CONFORM TO ASTM F1554-15 GRADE 36 UNO. BENT

9.01 NAILS, SPIKES AND STAPLES SHALL CONFORM TO ASTM F 1667— 05. NAILS ARE TO BE

10.01 SOLID SAWN WOOD FRAMING DESIGN IS BASED ON NO. 2 SPRUCE PINE FIR OR SYP #2

SHALL BE USED FOR LAG SCREW INSTALLATION AND SHALL BE BORED ACCORDING TO NDS SPECIFICATIONS. INSTALL STANDARD STEEL WASHERS (ASTM F844-07a) FOR

7.05 LADDER WIRE REINFORCEMENT SHALL CONFORM TO ASTM A951. 6" MIN LAPS

| <u>NOTES</u> | | | AB | BREVIATIO | VS | |
|---|---|--|---|--|---------------------------|--|
| THE BUILDER IS RESPONSIBLE FOR REVIEWING PLANS PRIOR TO CONSTRUCTION. THE BUILDER 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 RESPONSIBILITY OF THE EOR. FURTHERMORE, IT IS THE RESPONSIBILITY OF THE BUILDER TO ENSURE THAN 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 TRUSS DRAWING SHOULD BE SUBMITTED TO THE EOR FOR REVIEW | ABV B. B.E. BTWN CIP CONC CS DIA DBL DJ DSP EQ EA FLG FL PL FLR | ABOVE BOTH BOTH ENDS BETWEEN CAST IN PLACE CONCRETE CONTINUOUS SHEATHING DIAMETER DOUBLE DOUBLE JOIST DBL STUD POCKET EQUAL EACH FLANGE FLITCH PLATE FLOOR | FND FTG HDG HGR LVL NTS O.C. PSL PT QJ SP SQ | HOT DIPPED GALVANIZED HANGER LAMINATED VENEER LUMBER NOT TO SCALE ON CENTER PARALLEL STRAND LUMBER PRESSURE TREATED QUAD JOIST STUD POCKET | TYP TRPL TSP UNO | TRIPLE JOIST TYPICAL TRIPLE TRIPLE STUD F UNLESS NOTED OTHERWISE EXTRA JOIST |
| DECK SPECIFICATIONS | | | | | | |

| SUPPORT POSTS SHALL BE SUPPORTED BY A FOOTING. | |
|--|---|
| WHEN ATTACHED TO A STRUCTURE, THE STRUCTURE TO WHICH ATTACHED SHALL HAVE A TREATED WOOD BAND FOR THE LENGTH OF THE DECK, OR CORROSION RESISTANT FLASHING | q |
| SHALL BE USED TO PREVENT MOISTURE FROM COMING IN CONTACT WITH THE UNTREATED |] |
| FRAMING OF THE STRUCTURE. THE DECK BAND AND THE STRUCTURE BAND SHALL BE | ĺ |
| CONSTRUCTED IN CONTACT WITH EACH OTHER EXCEPT AT BRICK VENEER AND WHERE | ĺ |
| PLYWOOD SHEATHING IS REQUIRED AND PROPERLY FLASHED. SIDING SHALL NOT BE | ĺ |
| INSTALLED BETWEEN THE STRUCTURE AND THE DECK BAND. IF ATTACHED TO A BRICK | ĺ |
| STRUCTURE, NEITHER FLASHING NOR A TREATED BAND FOR THE BRICK STRUCTURE | ĺ |
| IS REQUIRED. IN ADDITION, THE TREATED DECK BAND SHALL BE CONSTRUCTED IN CONTACT | ĺ |

A DECK IS AN EXPOSED EXTERIOR WOOD FLOOR STRUCTURE WHICH MAY BE ATTACHED TO

A STRUCTURE OR BE FREE STANDING. ROOFED PORCHES, OPEN OR SCREENED IN, MAY BE

WHEN THE DECK IS SUPPORTED AT THE STRUCTURE BY ATTACHING THE DECK TO THE STRUCTURE, THE FOLLOWING ATTACHMENT SCHEDULES SHALL APPLY FOR ATTACHING THE DECK BAND TO THE STRUCTURE:

A. ALL STRUCTURES EXCEPT BRICK STRUCTURES

CONSTRUCTED USING THESE PROVISIONS.

| | JOIST LENGTH | | | | | |
|-----------------------|------------------------------------|---|--|--|--|--|
| | UP TO 8' MAX. | UP TO 16' MAX. | | | | |
| REQUIRED FASTENERS | (2) ROWS OF 12d NAILS @ 8" O.C. OR | ONE- 5/8" Ø BOLT @ 20" O.C. AND (3) ROWS OF 12d NAILS @ 6" O.C. OR TWO ROWS OF SIMPSON SDWS22400DB @ d = 16" O.C. STAGGERED | | | | |
| DDICK VE | DDICK NEWEED CIDITOTHEC | | | | | |

FASTENERS

602.10 OF THE 2018 NCRC. CONTINUOUS SHEATHING HAS BEEN PROVIDED, ALONG

WITH ALTERNATIVE METHODS TO INSURE THE MINIMUM INTENT OF SECTION 602.10

-BRACED WALL PANELS SHALL BE FASTENED IN ACCORDANCE WITH TABLE 602.3(1) TO

PROVIDE CONTINUOUS PANEL UPLIFT RESISTANCE AND COMPLIANCE WITH NCRBC R602.3.5 AND R802.11 UNLESS NOTED OTHERWISE ON STRUCTURAL PLANS.

-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

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

NUMBER OF KING STUDS

18.01 MATERIAL OR MEMBER SIZE SUBSTITUTIONS OR PLAN DEVIATIONS REQUIRE THE WRITTEN AUTHORIZATION OF THE DESIGNERS. UNAUTHORIZED DEVIATIONS ARE THE SOLE

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 PLAN

IF THEY ARE REPRODUCED, IN WHOLE OR IN PART, FOR CONSTRUCTION AT ANY OTHER

OF THE 2018 NCRC HAS BEEN MET AND EXCEEDED.

WALL LINES ONLY REQUIRED AT SHADED WALLS, UNO.

17.01 KING STUDS FOR OPENINGS IN EXTERIOR WALLS SHALL BE AS FOLLOWS:

MAX OPENING WIDTH 5'-0" 9'-0" 13'-0" 17'-0" 21'-0"

-MAY SUBSTITUTE WSP FOR GB

PART 17: KING STUDS

PART 18: SUBSTITUTIONS

RESPONSIBILITY OF THE CONTRACTOR.

PART 19: OWNERSHIP OF STRUCTURAL DESIGN

LOCATION WITHOUT WRITTEN PERMISSION FROM ETA

| | TWO ROWS OF SIMPSON SDWS22400DB @ d = 32" O.C. STAGGERED | TWO ROWS OF SIMPSON SDWS22400DB @ d = 16" O.C. STAGGERED | | | | | |
|---------------------------|---|---|--|--|--|--|--|
| . BRICK VENEER STRUCTURES | | | | | | | |
| | JOIST LENGTH | | | | | | |
| | UP TO 8' MAX. | UP TO 16' MAX. | | | | | |

ONE- 5/8" Ø BOLT @ 16" O.C.

IF THE DECK BAND IS SUPPORTED BY A 1/2" MINIMUM MASONRY LEDGE ALONG THE FOUNDATION WALL, 5/8" Ø BOLTS SPACED @ 48" O.C. MAY BE USED FOR SUPPORT.

ONE- 5/8" Ø BOLT @ 28" O.C.

OTHER MEANS OF SUPPORT, SUCH AS JOIST HANGERS, MAY BE USED TO CONNECT DECK JOISTS TO A TREATED STRUCTURE BAND

GIRDERS SHALL BEAR DIRECTLY ON POSTS OR BE BE CONNECTED TO THE SIDES OF POSTS | NOTES: 1) ALL NAILS AND BOLTS ARE TO BE HOT DIPPED GALVANIZED.

FLOOR DECKING SHALL BE NO. 2 GRADE TREATED SOUTHERN PINE OR EQUIVALENT. THE MINIMUM FLOOR DECKING THICKNESS SHALL BE AS FOLLOWS:

| | JUIST SPAN | DECKING | | | | |
|---|------------|-----------------|--|--|--|--|
| 12" O.C. | | 1" S4S | | | | |
| 16" O.C. | | 1" T&G | | | | |
| 24" O.C. | | 1 1/4" S4S | | | | |
| | 32" O.C. | 2" S4S | | | | |
| MAXIMUM HEIGHT OF DECK SUPPORT POSTS IS AS FOLLOWS: | | | | | | |
| POST SIZE | | MAX POST HEIGHT | | | | |
| | | 8' | | | | |

INICT CDAN

6X6

ENGINEERED

NOTES: 1) THIS TABLE IS BASED ON NO. 2 TREATED SOUTHERN PINE POSTS. 2) THIS TABLE IS BASED ON A MAXIMUM TRIBUTARY AREA OF 128 SQ. FT. 3) POST HEIGHT IS FROM TOP OF FOOTING TO BOTTOM OF GIRDER.

10. DECKS SHALL BE BRACED TO PROVIDE LATERAL STABILITY BY ONE OF THE FOLLOWING

A. WHEN THE DECK FLOOR HEIGHT IS LESS THAN 4'-0" AND THE DECK IS ATTACHED TO

THE STRUCTURE IN ACCORDANCE WITH SECTION 4, LATERAL BRACING IS NOT REQUIRED. B. 4X4 WOOD KNEE BRACES MAY BE PROVIDED ON EACH COLUMN IN BOTH DIRECTIONS. THE KNEE BRACES SHALL ATTACH TO EACH POST AT A POINT NOT LESS THAN 1/3 OF

THE POST LENGTH FROM THE TOP OF THE POST, AND THE BRACES SHALL BE ANGLED

BETWEEN 45° AND 60° FROM THE HORIZONTAL. KNEE BRACES SHALL BE ATTACHED AT

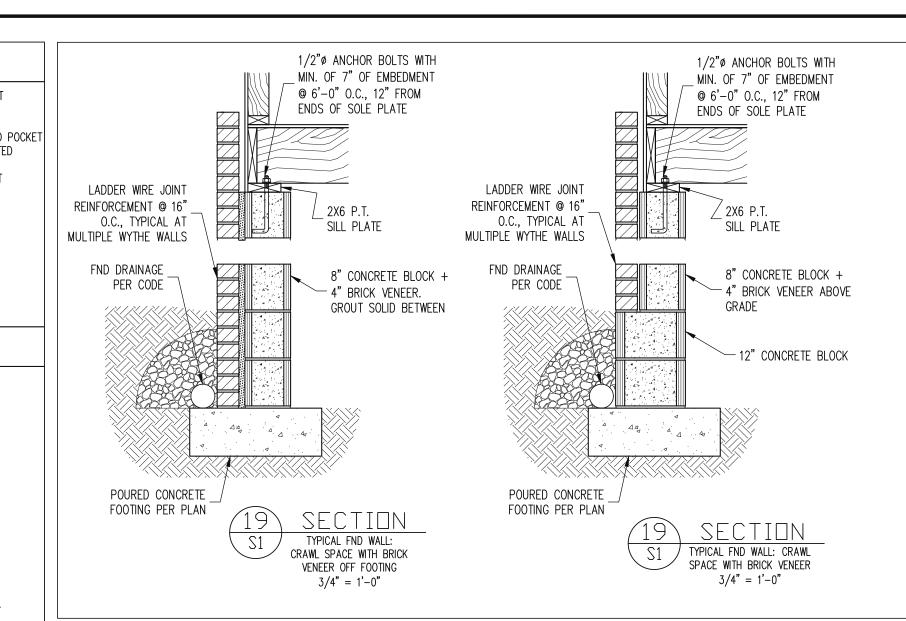
C. FOR FREE STANDING DECKS WITHOUT KNEE BRACES OR DIAGONAL BRACING, LATERAL STABILITY MAY BE PROVIDED BY EMBEDDING THE POSTS IN CONCRETE IN ACCORDANCE

THE ENDS TO THE GIRDER AND THE POST WITH ONE - 5/8" BOLT

| POST SIZE | TRIBUT. AREA | POST HEIGHT | EMB. DEPTH | CONC. DIAM. |
|------------|---------------------------|----------------|----------------|----------------|
| 4X4 6X6 | 48 SQ. FT. 120 SQ. FT. | 4'-0" 6'-0" | 2'-6" 3'-6" | 1'-0" 1'-8" |

D. 2X6 DIAGONAL VERTICAL CROSS BRACING SHALL BE PROVIDED IN TWO PERPENDICULAR DIRECTIONS FOR FREE STANDING DECKS OR PARALLEL TO THE STRUCTURE AT THE EXTERIOR COLUMN LINE FOR ATTACHED DECKS. THE BRACES SHALL BE ATTACHED TO THE POSTS WITH ONE -5/8" \emptyset BOLT AT EACH END OF THE BRACE.

2) MINIMUM EDGE DISTANCE FOR BOLTS IS 2 1/2". 3) NAILS MUST PENETRATE THE SUPPORTING STRUCTURE BAND A MINIMUM OF 1 1/2".



ENG: RJS DATE: 03/18/2025

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of 7

SHEET NO.

ALLOWABLE I-JOIST SUBSTITUTION

| MANUFACTURER | DEPTH | SERIES | SIMPSON FACE MOUNT HGR | SIMPSON TOP FLANGE HGR | | | |
|-------------------|------------|-------------|--|---------------------------|--|--|--|
| BLUELINX | 11.875" | BLI 40 | IUS2.56/11.88 | ITS2.56/11.88 | | | |
| BOISE CASCADE | 11.875" | BCI 5000s | IUS2.06/11.88 | ITS2.06/11.88 | | | |
| BOISE CASCADE | 11.875" | BCI 6000s | IUS2.37/11.88 | ITS2.37/11.88 | | | |
| INTERNATIONAL | 11.875" | IB 400 | IUS2.56/11.88 | ITS2.56/11.88 | | | |
| BEAMS | | | | | | | |
| LP CORP | 11.875" | LPI 20+ | IUS2.56/11.88 | ITS2.56/11.88 | | | |
| NORDIC | 11.875" | NI 40X | IUS2.56/11.88 | ITS2.56/11.88 | | | |
| ROSEBURG | 11.875" | RFPI 40s | IUS2.56/11.88 | ITS2.56/11.88 | | | |
| WEYERHAEUSER | 11.875" | TJI 210 | IUS2.06/11.88 | ITS2.06/11.88 | | | |
| WEYERHAEUSER | 11.875" | EEI-20 | IUS2.37/11.88 | ITS2.37/11.88 | | | |
| | | | • | , | | | |
| JOISTS NOT LISTED |) IN THE A | ABOVE TABLE | MAY BE USED PF | ROVIDED THEY | | | |
| MEET OR EXCEED | THE PROP | ERTIES OF T | HOSE LISTED. SUBS | STITUTE USP | | | |
| BRAND HANGERS | WITH FOLIN | /ALFNT VALL | BRAND HANGERS WITH FOLITVALENT VALUES AS DESIRED | | | | |

NOTE: MAINTAIN JOIST DEPTH, DIRECTION, AND SPACING SPECIFIED ON

| MANUFACTURER | DEPTH | SERIES | MOUNT HGR | FLANGE HGR | | |
|--|------------|--------------|-----------------|---------------|--|--|
| BLUELINX | 11.875" | BLI 40 | IUS2.56/11.88 | ITS2.56/11.88 | | |
| BOISE CASCADE | 11.875" | BCI 5000s | IUS2.06/11.88 | ITS2.06/11.88 | | |
| BOISE CASCADE | 11.875" | BCI 6000s | IUS2.37/11.88 | ITS2.37/11.88 | | |
| INTERNATIONAL | 11.875" | IB 400 | IUS2.56/11.88 | ITS2.56/11.88 | | |
| BEAMS | | | | · | | |
| LP CORP | 11.875" | LPI 20+ | IUS2.56/11.88 | ITS2.56/11.88 | | |
| NORDIC | 11.875" | NI 40X | IUS2.56/11.88 | ITS2.56/11.88 | | |
| ROSEBURG | 11.875" | RFPI 40s | IUS2.56/11.88 | ITS2.56/11.88 | | |
| WEYERHAEUSER | 11.875" | TJI 210 | IUS2.06/11.88 | ITS2.06/11.88 | | |
| WEYERHAEUSER | 11.875" | EEI-20 | IUS2.37/11.88 | ITS2.37/11.88 | | |
| | | | | | | |
| 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. | | | | | | |
| DRAIND HANGERS | WITH EQUIT | VALEINI VALU | IES AS DESIRED. | | | |

