

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=	2264	GARAGE=	607
SECOND FLOOR=	N/A	FRONT PORCH=	333
THIRD FLOOR=	N/A	COVERED PORCH=	379
BASEMENT=	N/A	DECK=	N/A
		STORAGE=	374
TOTAL HEATED=	2264	TOTAL UNHEATED=	1693

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)

2264 SQ. FT. OF CRAWL SPACE/1500

1.50 SQ. FT. OF REQUIRED VENTILATION

PROVIDED BY: 4 VENTS AT 0.45 SQ. FT. NET FREE

VENTILATION EACH= 1.8 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 VENTILATION PROVIDED BY EAVE VENTS.

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

3648 SQ. FT. OF ATTIC/300= 12.16

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.

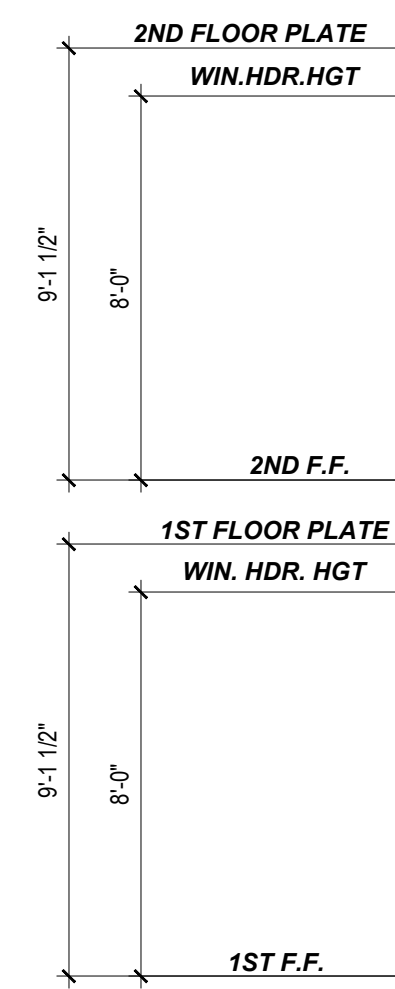
- ROOF VALUES BOTH POSITIVE AND NEGATIVE SHALL BE AS FOLLOWS:

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

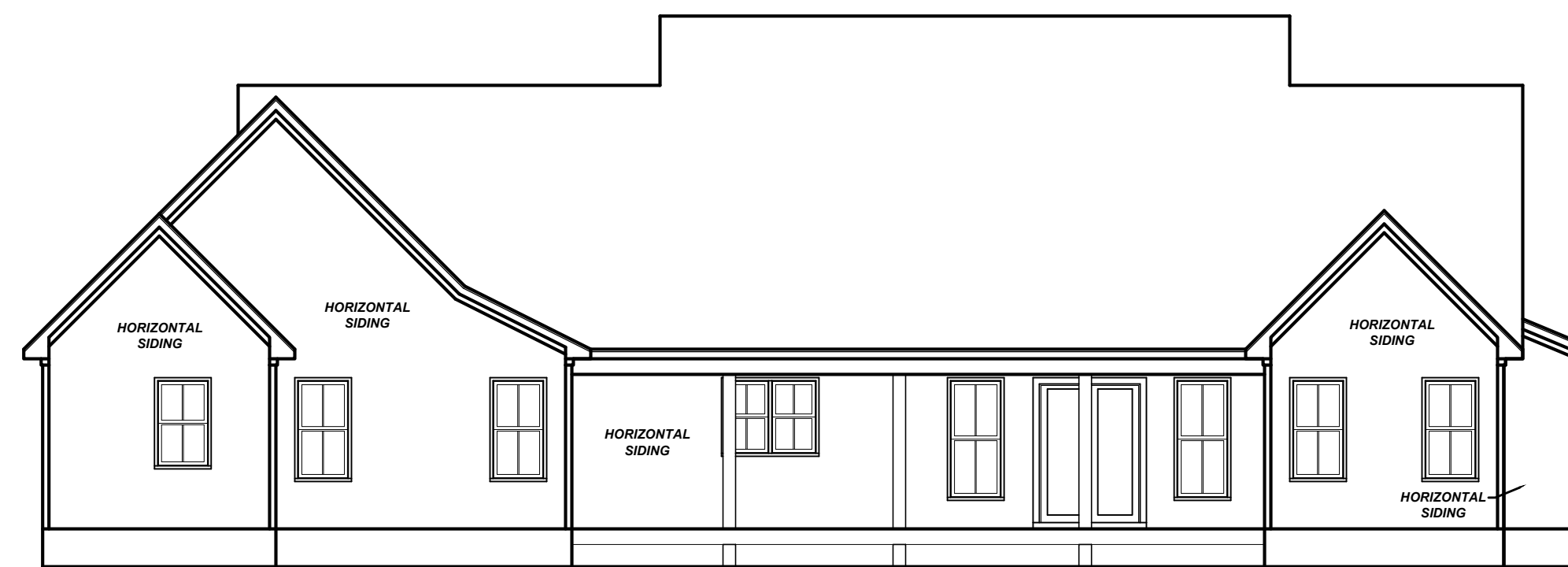
21 LBS. PER SQ. FT. FOR ROOF PITCHES OF 7/12 TO 12/12

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



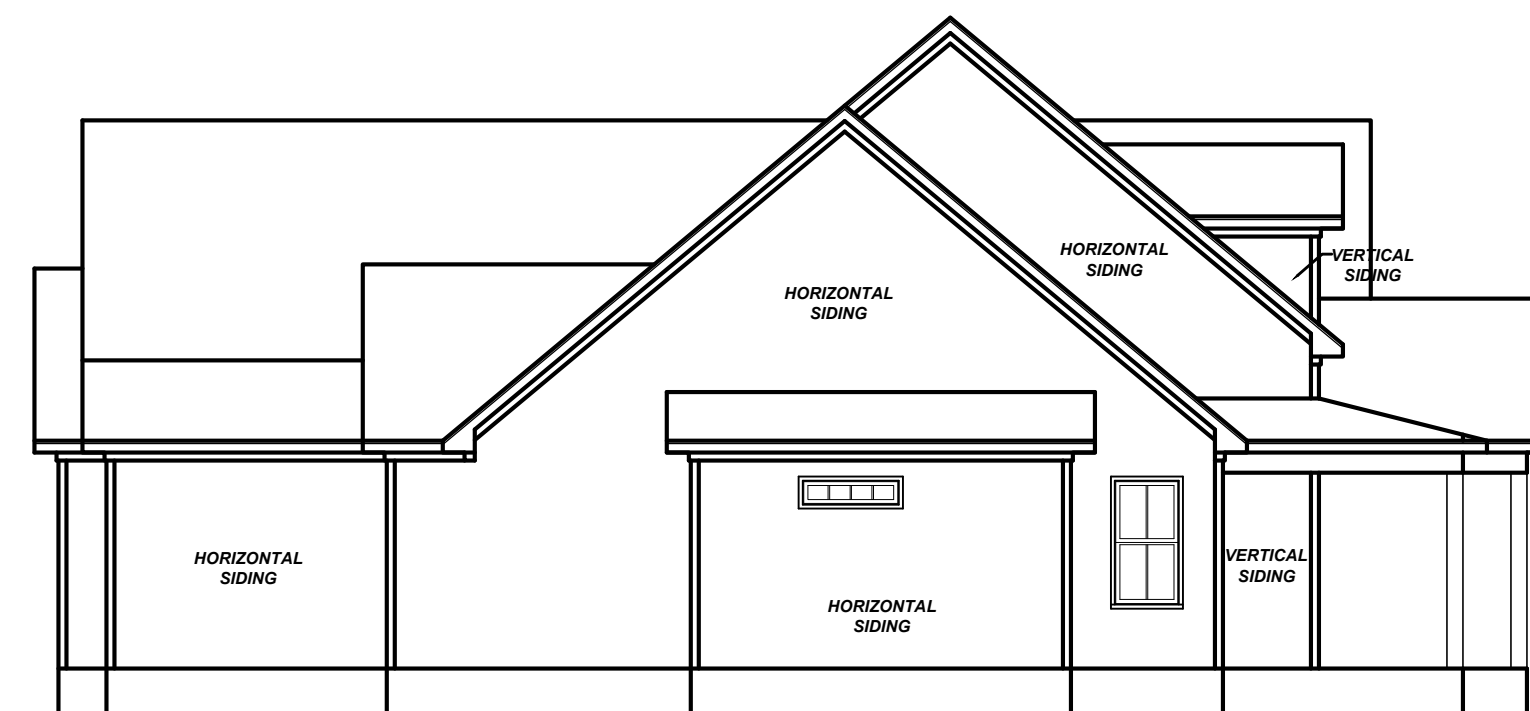
FRONT ELEVATION

1/4" = 1'-0"



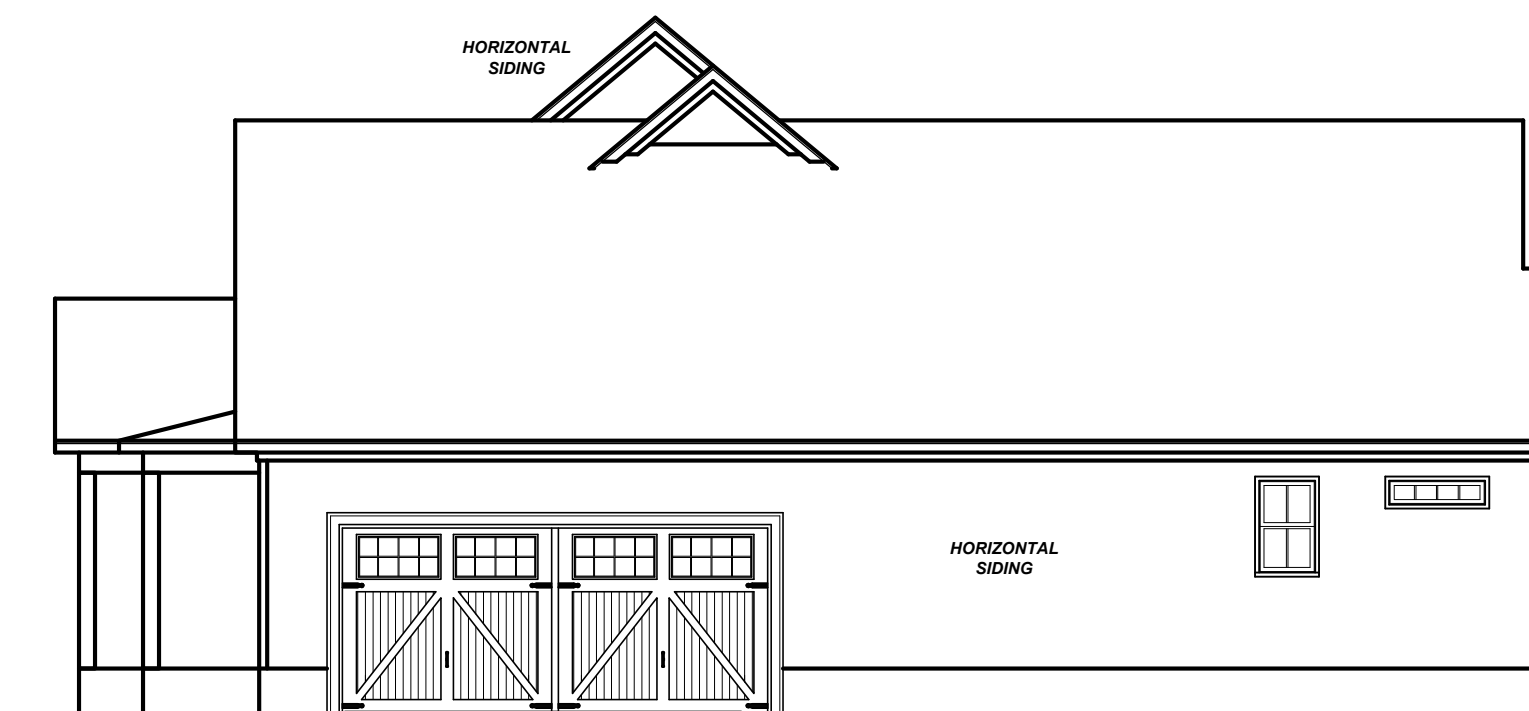
REAR ELEVATION

1/8" = 1'-0"



LEFT ELEVATION

1/8" = 1'-0"



RIGHT ELEVATION

1/8" = 1'-0"

Project #:	22-235
Date:	8-22-22
Drawn/Design By:	KBB
Scale:	REFER TO ELEV.

REVISIONS		
No.	Date	Remarks
1		
2		
3		
4		

9101 Ten-Ten Rd.
Raleigh, NC 27603
Office: (919) 302-0693



Harrison Plan

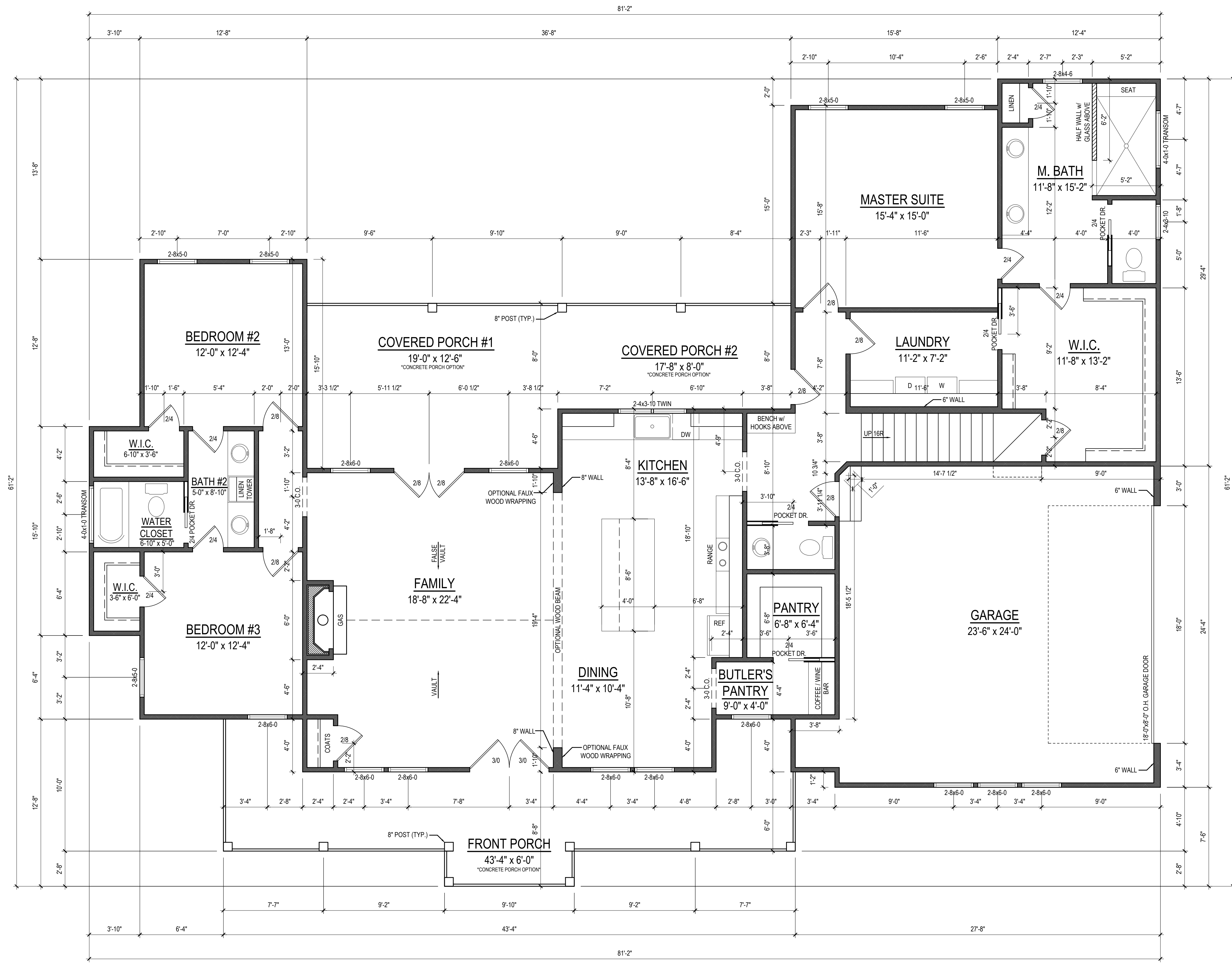
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ELEVATIONS

Sheet Number
1
of 3

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FIRST FLOOR PLAN
 1/4" = 1'-0" CEILING HT. = 9'-0"

Project No.	22-235
Date	8-22-22
Drawn/Design By.	KBB
Scale	1/4" = 1'-0"

REVISIONS		
No.	Date	Remarks
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2		
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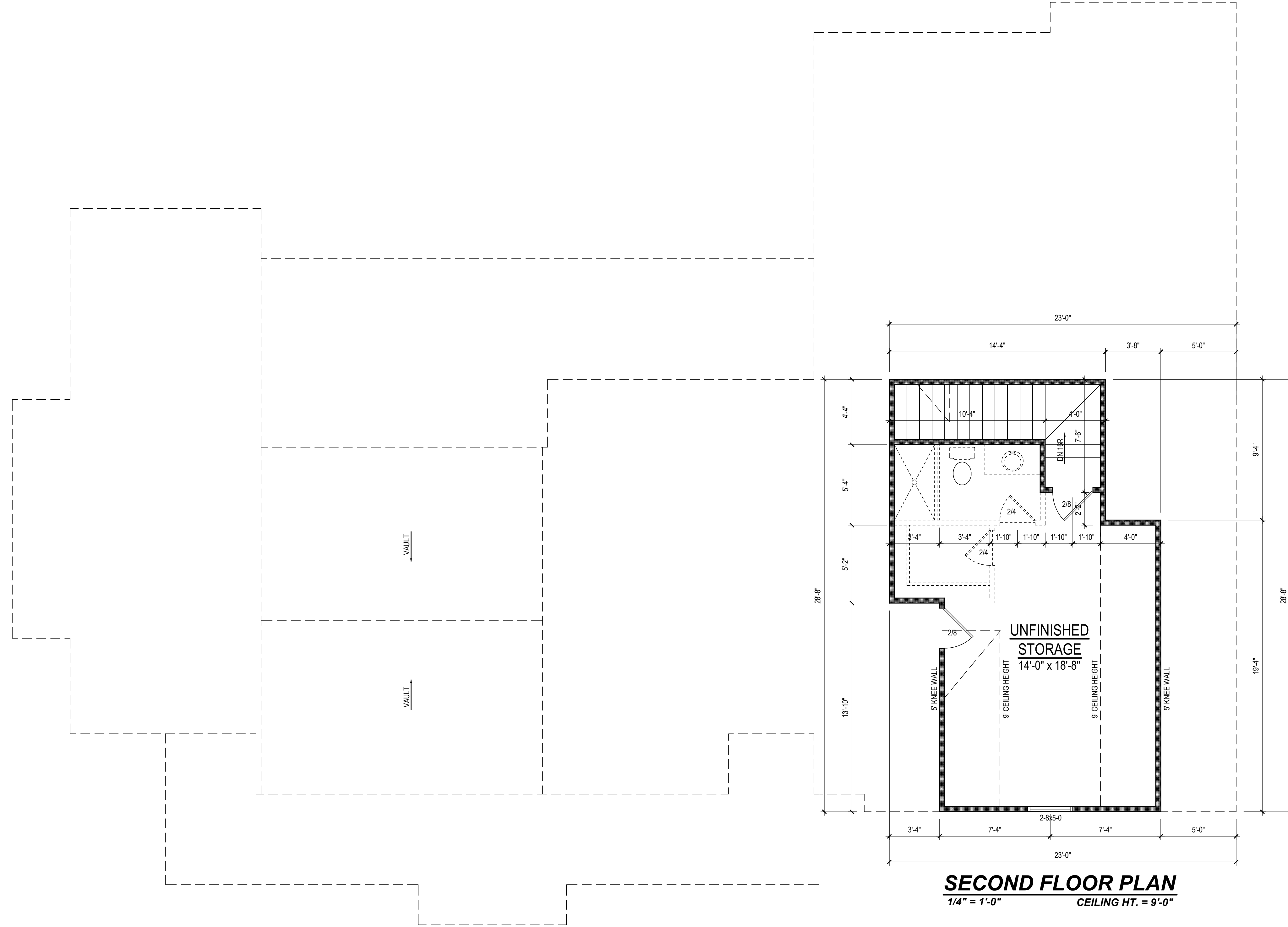
Email: Kent@KandAHomeDesigns.com Website: www.KandAHomeDesigns.com

**Harrison
 Plan**

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 Fuquay Varina, NC 27526

FIRST FLOOR

Sheet Number
2
 of 3



SECOND FLOOR PLAN
 1/4" = 1'-0" CEILING HT. = 9'-0"

Project No.	22-235
Date	8-22-22
Drawn/Design By.	KBB
Scale	1/4" = 1'-0"

REVISIONS		
No.	Date	Remarks
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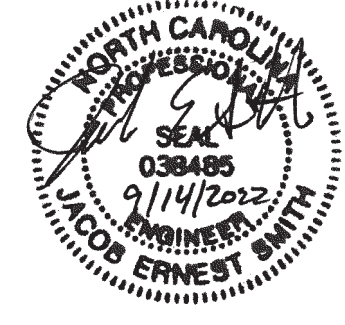
Harrison Plan

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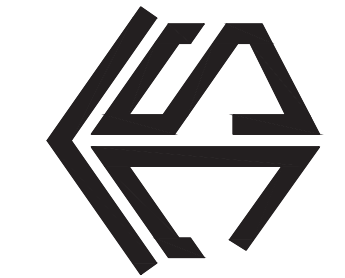
SECOND FLOOR

Sheet Number
3
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 N.C. CERTIFICATE NUMBER: P-2212



**HARRISON RESIDENCE
 TRIANGLE HOME PROS LLC**

REVISIONS:

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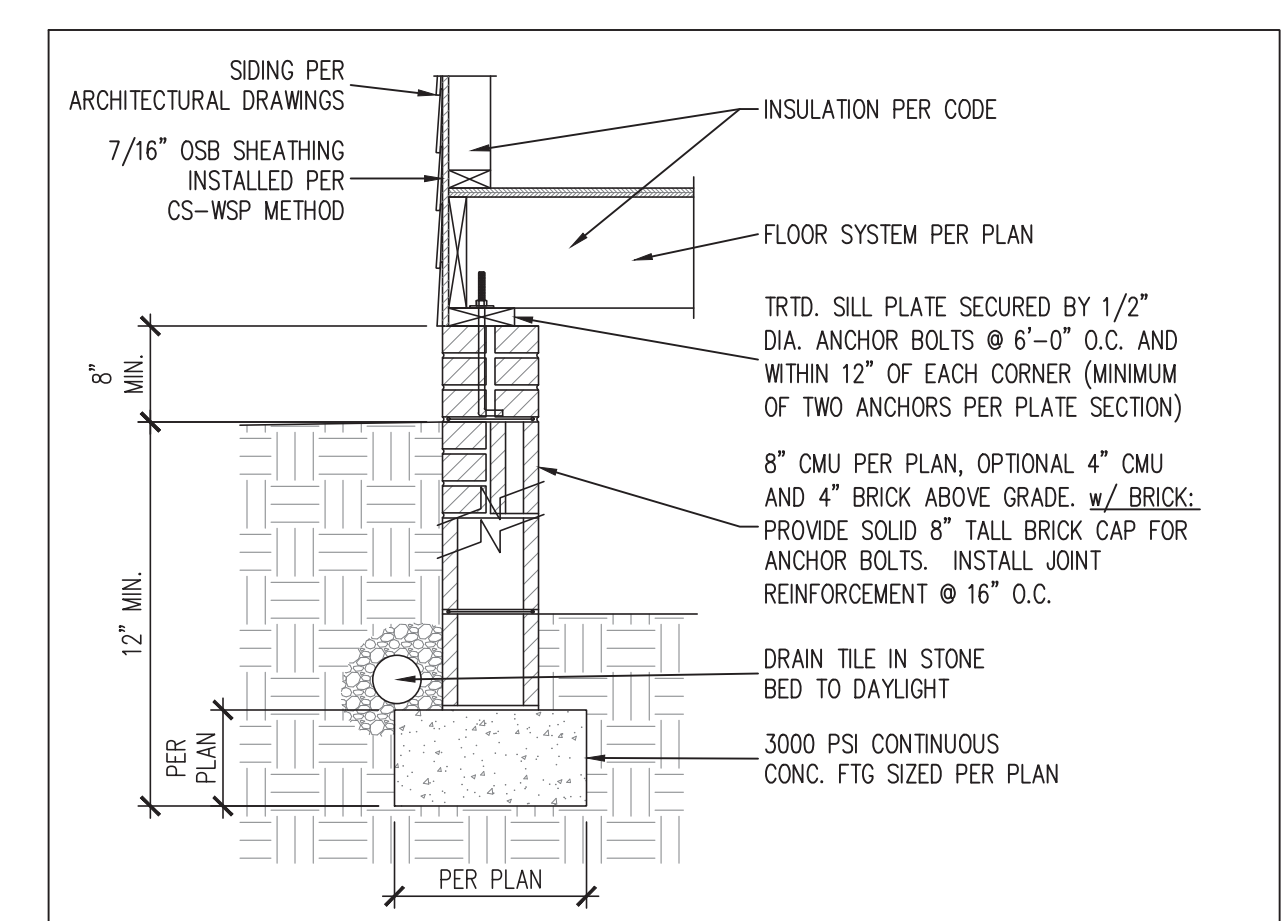
ENGINEERED BY: J. SMITH

SCALE: 1/4" = 1'-0"

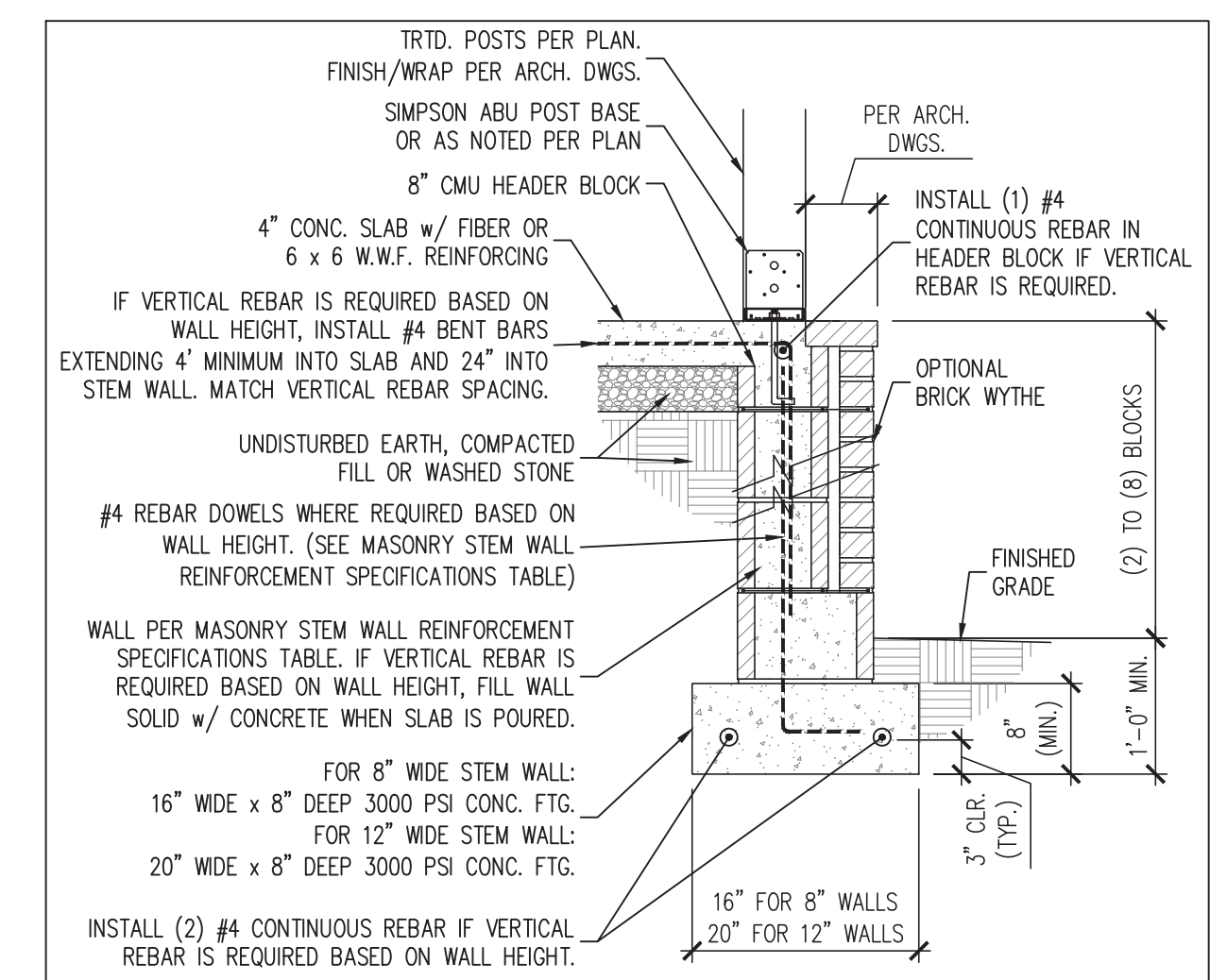
DATE: 9-14-2022

SHEET: 1 OF 5

**S-1
 CRAWL SPACE
 FOUNDATION PLAN**



(A) TYPICAL CRAWL SPACE FOUNDATION DETAIL
 SCALE: 3/4" = 1'-0"



(B) TYPICAL PORCH STEM WALL SLAB FOOTING DETAIL
 (SEE REINFORCEMENT SPECIFICATIONS TABLE)
 SCALE: 3/4" = 1'-0"

MAX WALL HGT. (# OF BLOCKS)	MASONRY STEM WALL TYPE		
	4" CMU AND 4" BRICK WYTHE	8" CMU (WITH OR WITHOUT 4" BRICK)	12" CMU
24" OR LESS	GROUTED SOLID	GROUTED SOLID	UNGROUTED
32" (4 BLOCK)	GROUTED SOLID w/ #4 REBAR @ 48" O.C.	GROUTED SOLID	UNGROUTED
40" (5 BLOCK)	GROUTED SOLID w/ #4 REBAR @ 32" O.C.	GROUTED SOLID	UNGROUTED
48" (6 BLOCK)	NOT APPLICABLE	GROUTED SOLID w/ #4 REBAR @ 48" O.C.	GROUTED SOLID w/ #4 REBAR @ 64" O.C.
56" (7 BLOCK)	NOT APPLICABLE	GROUTED SOLID w/ #4 REBAR @ 48" O.C.	GROUTED SOLID w/ #4 REBAR @ 64" O.C.
64" (8 BLOCK)	NOT APPLICABLE	GROUTED SOLID w/ #4 REBAR @ 36" O.C.	GROUTED SOLID w/ #4 REBAR @ 48" O.C.
72" (9 BLOCK)	NOT APPLICABLE	GROUTED SOLID w/ #4 REBAR @ 24" O.C.	GROUTED SOLID w/ #4 REBAR @ 48" O.C.
GREATER THAN 72"	CONTACT ENGINEER FOR DESIGN PER SITE AND PLAN CONDITIONS		

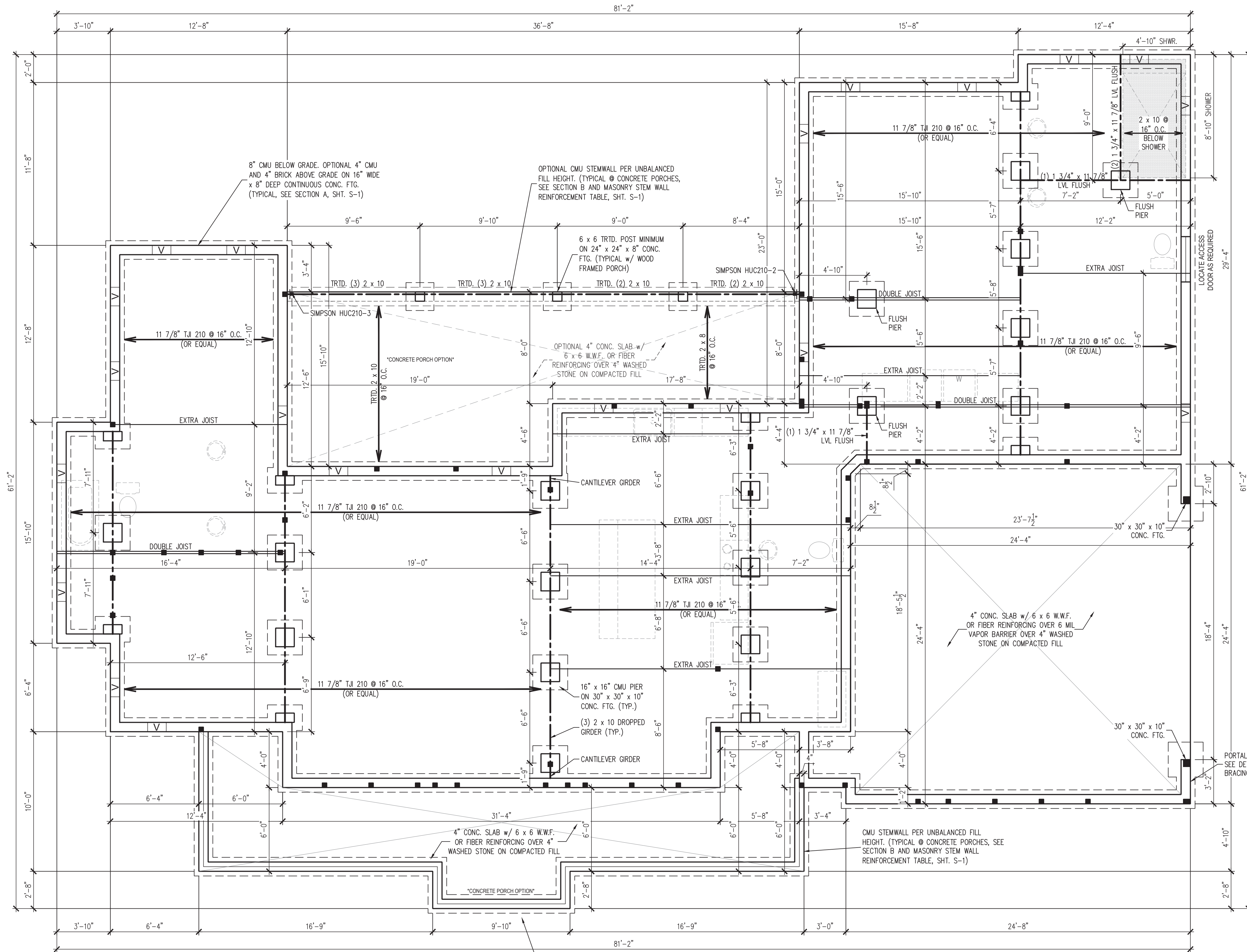
PORCH STEM WALL SLAB FOUNDATION NOTES:

- PREPARE AREA WITHIN LIMITS OF FOUNDATION OR SLAB PER SECTION R506 OF THE 2018 NRC.
- FILL ALL CELLS WITH REINFORCEMENT OR ANCHOR RODS SOLID WITH TYPE "S" MORTAR OR 3000 PSI CONCRETE.
- WHERE VERTICAL WALL REINFORCEMENT IS REQUIRED IN THE TABLE ABOVE, THE TOP OF THE MASONRY STEM WALL MUST BE TIED TO THE SLAB WITH BENT "L" BARS PER DETAIL B.
- HORIZONTAL JOINT REINFORCEMENT SHALL BE INSTALLED @ 16" O.C. VERTICALLY, WHERE MULTIPLE WYTHE WALLS ARE CONSTRUCTED, JOINT REINFORCEMENT MUST TIE THE WYTHES TOGETHER.
- REBAR LAP SPICES SHALL BE 24" FOR #4 REBAR AND 32" FOR #5 REBAR.

LEGEND	
■	STUD COLUMN ON FLOOR ABOVE THAT REQUIRE SOLID BLOCKING TO GIRDER OR FOUNDATION
D	PLUMBING OR APPLIANCES ON THE FLOOR ABOVE TO HELP ELIMINATE FRAMING CONFLICTS WITH UTILITIES. (FOR REFERENCE ONLY, SEE ARCHITECTURAL DRAWINGS)
---	NEW BEAM OR GIRDER AS NOTED
(UNO)	UNLESS NOTED OTHERWISE

CRAWL SPACE STRUCTURAL NOTES

- SEE SHEET S-4 FOR DESIGN CRITERIA, SPECIFICATIONS AND GENERAL STRUCTURAL NOTES.
- ALL FRAMING LUMBER TO BE #2 SPF (UNO). ALL TREATED LUMBER TO BE #2 SYP (UNO).
- INSTALL AN EXTRA OR DOUBLE JOIST UNDER WALLS PARALLEL TO THE FLOOR JOISTS WHERE NOTED ON THE PLANS.
- SHADED PIERS TO BE FILLED SOLID.
- INSTALL 1/2" ANCHOR BOLTS 6'-0" O.C. AND WITHIN 1'-0" FROM END OF EACH CORNER. (MIN (2) ANCHORS PER PLATE SECTION.) ANCHOR BOLTS MUST EXTEND A MINIMUM OF 7" INTO MASONRY OR CONCRETE. LOCATE BOLT WITHIN MIDDLE THIRD OF PLATE WIDTH.
- INSTALL JOINT REINFORCEMENT @ 16" O.C. TO SECURE MULTIPLE WYTHE FOUNDATION WALLS TOGETHER.
- REFER TO NOTES AND DETAIL PAGES FOR ADDITIONAL INFORMATION.



8" THICK CONC. STEP PAD w/ 3" PROJECTION EA. SIDE OF STEPS (PER GRADE) (TYP.)

4" CONC. SLAB w/ 6 x 6 W.W.F. OR FIBER REINFORCING OVER 4" WASHED STONE ON COMPACTED FILL

CONCRETE PORCH OPTION

8" CMU STEM WALL PER UNBALANCED FILL HEIGHT. (TYPICAL @ CONCRETE PORCHES, SEE SECTION B AND MASONRY STEM WALL REINFORCEMENT TABLE, SHT. S-1)

OPTIONAL CMU STEM WALL PER UNBALANCED FILL HEIGHT. (TYPICAL @ CONCRETE PORCHES, SEE SECTION B AND MASONRY STEM WALL REINFORCEMENT TABLE, SHT. S-1)

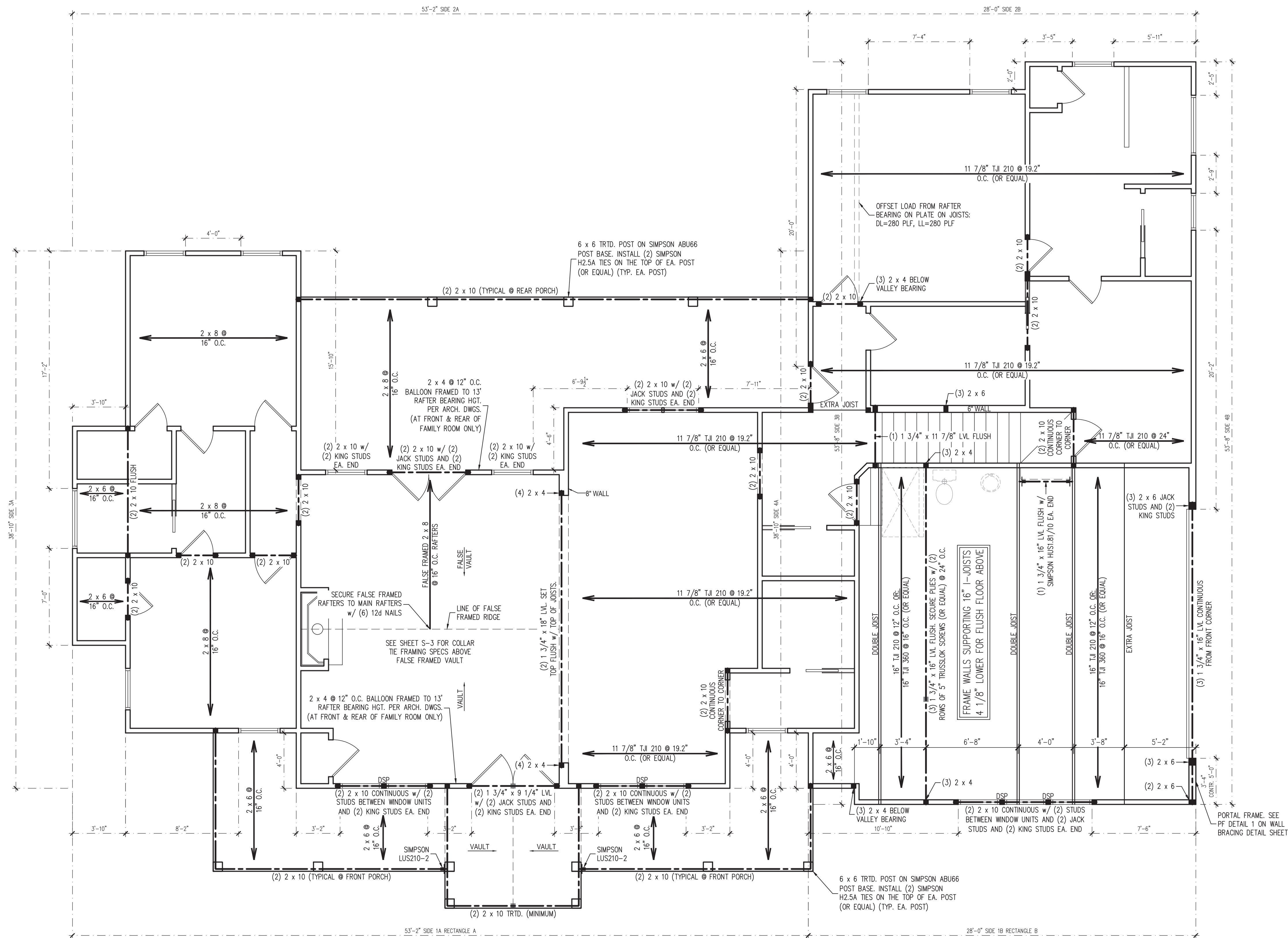
6 x 6 TRTD. POST MINIMUM ON 24" x 24" x 8" CONC. FTG. (TYPICAL w/ WOOD FRAMED PORCH)

OPTIONAL 4" CONC. SLAB w/ 6 x 6 W.W.F. OR FIBER REINFORCING OVER 4" WASHED STONE ON COMPACTED FILL

16" x 16" CMU PIER ON 30" x 30" x 10" CONC. FTG. (TYP.)

(3) 2 x 10 DROPPED GIRDER (TYP.)

CMU STEM WALL PER UNBALANCED FILL HEIGHT. (TYPICAL @ CONCRETE PORCHES, SEE SECTION B AND MASONRY STEM WALL REINFORCEMENT TABLE, SHT. S-1)



BRACED WALL DESIGN NOTES:

- BRACED WALL DESIGN PER SECTION R602.10 OF THE NRC 2018 EDITION.
- CS-WSP REFERS TO THE "CONTINUOUS SHEATHING - WOOD STRUCTURAL PANELS" WALL BRACING METHOD. 7/16" OSB SHEATHING SHALL BE INSTALLED ON ALL SHEATHABLE SURFACES OF ALL EXTERIOR WALLS ATTACHED w/ 6d COMMON NAILS OR 8d (2 1/2" LONG x 0.113" DIA.) NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD (UNO).
- SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

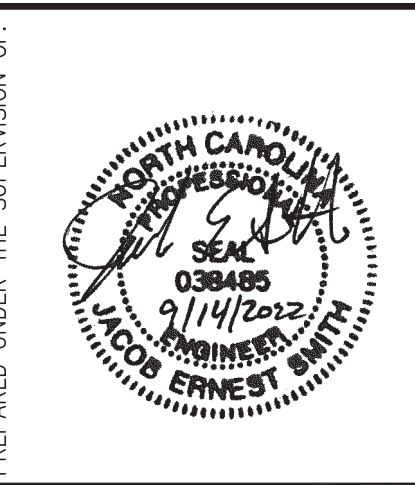
BRACED WALL DESIGN SUMMARY:

RECTANGLE A	RECTANGLE B
SIDE 1A	SIDE 1B
METHOD: CS-WSP	METHOD: CS-WSP
TOTAL REQUIRED LENGTH: 5.48'	TOTAL REQUIRED LENGTH: 6.62'
TOTAL PROVIDED LENGTH: 24.66'	TOTAL PROVIDED LENGTH: 18.33'
SIDE 2A	SIDE 2B
METHOD: CS-WSP	METHOD: CS-WSP
TOTAL REQUIRED LENGTH: 5.48'	TOTAL REQUIRED LENGTH: 6.62'
TOTAL PROVIDED LENGTH: 22.53'	TOTAL PROVIDED LENGTH: 16.66'
SIDE 3A	SIDE 3B / 4A COMBINED
METHOD: CS-WSP	METHOD: CS-WSP
TOTAL REQUIRED LENGTH: 7.25'	TOTAL REQUIRED LENGTH: 10.77'
TOTAL PROVIDED LENGTH: 44'	TOTAL PROVIDED LENGTH: 32.5'
SIDE 4A / 3B COMBINED	SIDE 4B
METHOD: CS-WSP	METHOD: CS-WSP/PF
TOTAL REQUIRED LENGTH: 10.77'	TOTAL REQUIRED LENGTH: 3.52'
TOTAL PROVIDED LENGTH: 32.5'	TOTAL PROVIDED LENGTH: 30.33'

- SECOND FLOOR FRAMING STRUCTURAL NOTES:**
- ALL FRAMING LUMBER TO BE SPF #2 (UNO). ALL TREATED LUMBER TO BE SYP #2 (UNO).
 - ALL LOAD BEARING HEADERS TO BE (2) 2 x 10 (UNO).
 - WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO).
 - INSTALL AN EXTRA OR DOUBLE JOIST UNDER WALLS PARALLEL TO THE JOISTS WHERE NOTED ON THE PLANS.
 - REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

LEGEND

■	STUD COLUMN AT POINT LOADS THAT REQUIRE SOLID BLOCKING TO ORDER OR FOUNDATION. AT DROPPED HEADERS: (1) JACK STUD AND (1) KING STUD (UNO).
■	OFFSET POINT LOAD FROM FLOOR ABOVE. MUST BE SUPPORTED BY BEAM, JOIST, OR BLOCKING AS NOTED ON THE PLANS.
---	BEAM OR HEADER AS NOTED
D	THIS LINE TYPE INDICATES PLUMBING OR APPLIANCES ON THE FLOOR ABOVE TO HELP ELIMINATE FRAMING CONFLICTS WITH UTILITIES. (FOR REFERENCE ONLY, SEE ARCHITECTURAL DRAWINGS)
DSP	DOUBLE STUD POCKET BETWEEN WINDOW UNITS
X-X	BRACED WALL DIMENSIONS (FOR REFERENCE ONLY)
(UNO)	UNLESS NOTED OTHERWISE



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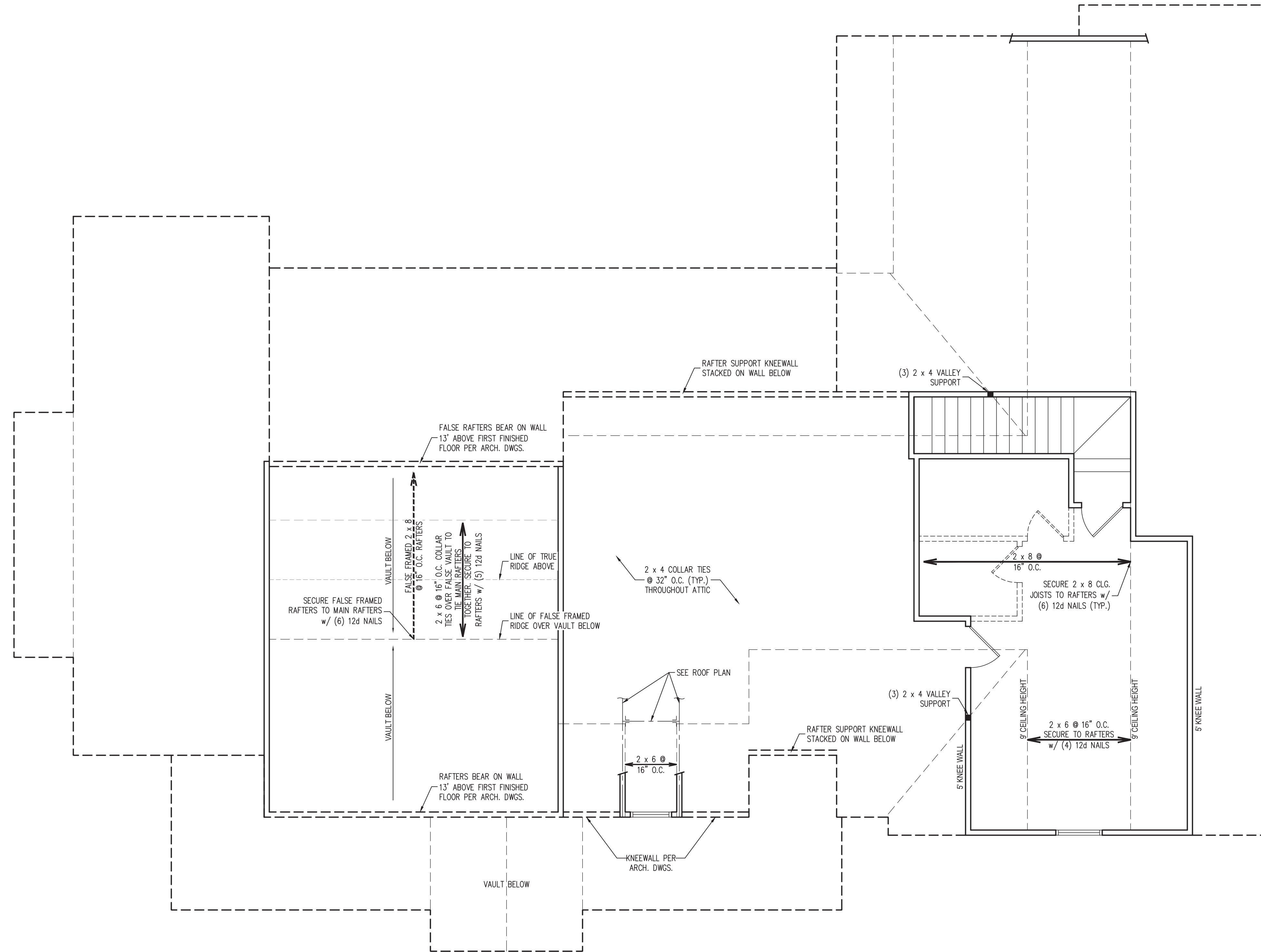
**HARRISON RESIDENCE
 TRIANGLE HOME PROS LLC**

REVISIONS:

NO.	DESCRIPTION

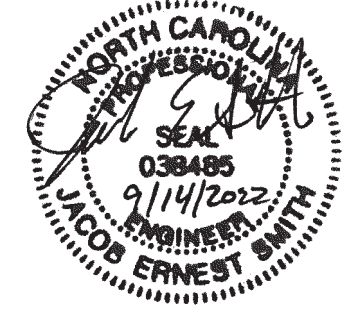
DRAWN BY: K&A HOME DESIGN INC.
 ENGINEERED BY: J. SMITH
 SCALE: 1/4" = 1'-0"
 DATE: 9-14-2022

SHEET: **2** OF: **5**
S-2
SECOND FLOOR
FRAMING PLAN



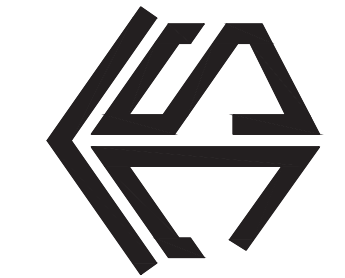
- BRACED WALL DESIGN NOTES:**
- BRACED WALL DESIGN PER SECTION R602.10 OF THE NRC 2018 EDITION.
 - PER TABLE R602.10.3 OF THE 2018 NRC, THE 2ND FLOOR IS CONTAINED WHOLLY WITHIN THE ROOF SYSTEM AND WALL BRACING ANALYSIS IS NOT REQUIRED ON THE 2ND FLOOR. IN ADDITION, THE 2ND FLOOR NEED NOT BE CONSIDERED A STORY IN THE FIRST FLOOR WALL BRACING ANALYSIS.
 - CS-WSP REFERS TO THE "CONTINUOUS SHEATHING - WOOD STRUCTURAL PANELS" WALL BRACING METHOD. 7/16" OSB SHEATHING SHALL BE INSTALLED ON ALL SHEATHABLE SURFACES OF ALL EXTERIOR WALLS ATTACHED w/ 6d COMMON NAILS OR 8d (2 1/2" LONG x 0.113" DIA.) NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD (UNO).
 - SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

- CEILING FRAMING STRUCTURAL NOTES:**
- ALL FRAMING LUMBER TO BE SPF #2 (UNO). ALL TREATED LUMBER TO BE SYP #2 (UNO).
 - ALL LOAD BEARING HEADERS TO BE (2) 2 x 10 (UNO).
 - WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO).
 - INSTALL 2 x 4 COLLAR TIES @ 32" O.C. MAX. IN ALL ATTIC SPACES.
 - REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.



PREPARED UNDER THE SUPERVISION OF:

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 N.C. CERTIFICATE NUMBER: P-2212



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REVISIONS:

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ENGINEERED BY: J. SMITH

SCALE: 1/4" = 1'-0"

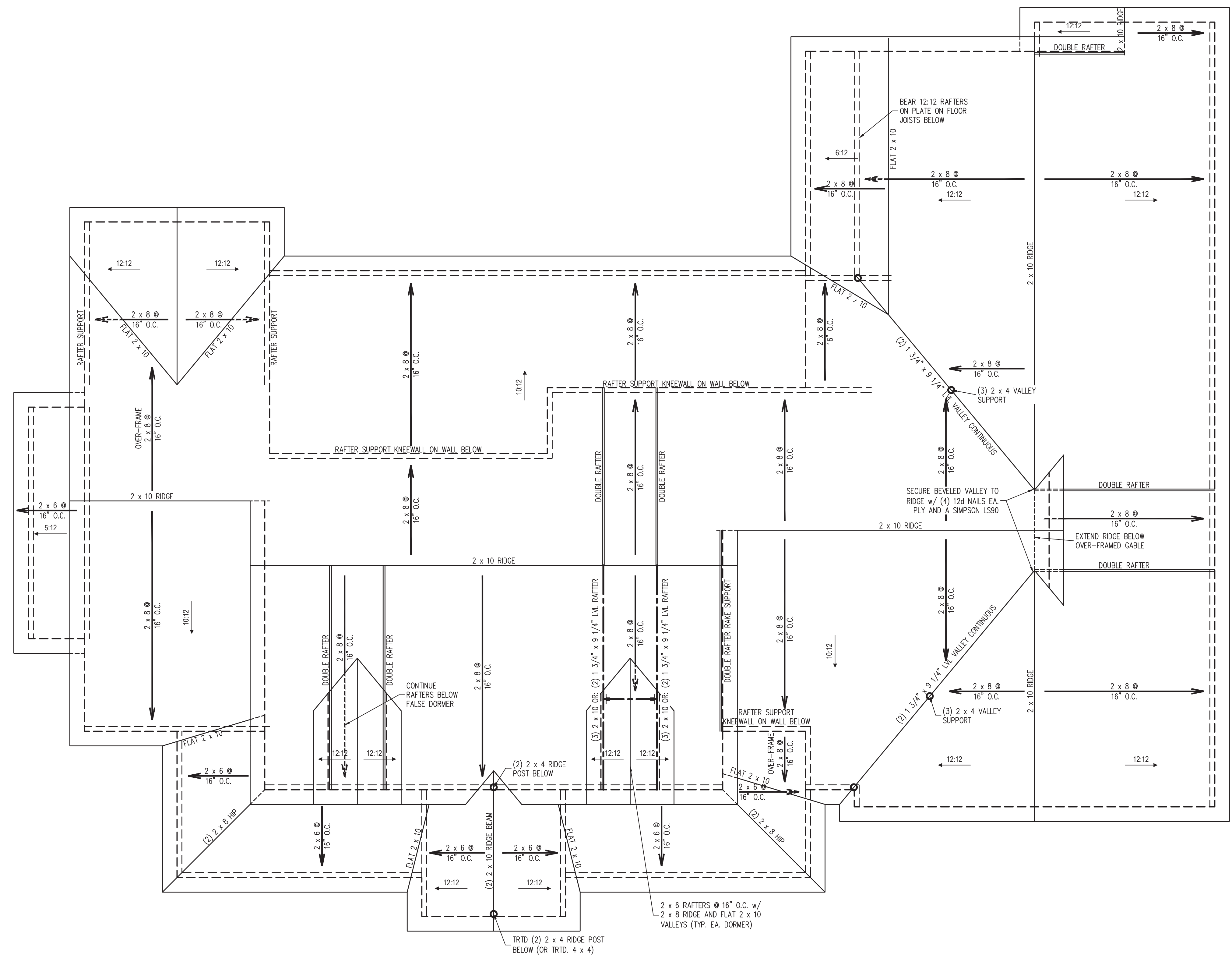
DATE: 9-14-2022

SHEET: 3 OF: 5

LEGEND

■	STUD COLUMN AT POINT LOADS THAT REQUIRE SOLID BLOCKING TO ORDER OR FOUNDATION.
■	AT DROPPED HEADERS: (1) JACK STUD AND (1) KING STUD (UNO).
■	AT FLUSH BEAMS AND (UNO): (2) STUDS (UNO)
■	OFFSET POINT LOAD FROM FLOOR ABOVE. MUST BE SUPPORTED BY BEAM, JOIST, OR BLOCKING AS NOTED ON THE PLANS.
---	BEAM OR HEADER AS NOTED
(UNO)	UNLESS NOTED OTHERWISE

**S-3
 CEILING FRAMING
 PLAN**



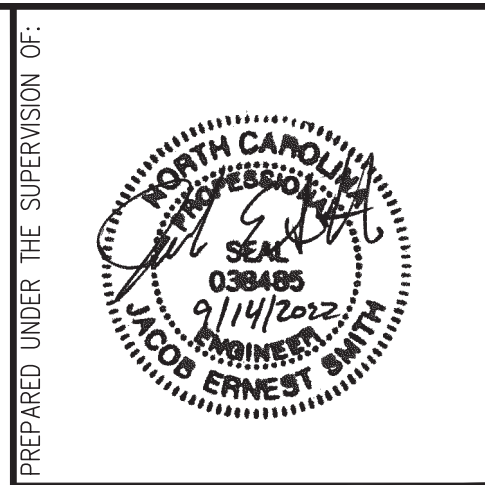
- ROOF FRAMING STRUCTURAL NOTES:**
- ALL FRAMING LUMBER TO BE #2 SPF (UNO).
 - SHEATH ROOF w/ 7/16" OSB SHEATHING SECURED w/ 8d NAILS @ 6" O.C. ALONG EDGES AND 12" O.C. IN THE FIELD.
 - CIRCLES DENOTE POSTS FOR ROOF SUPPORT AS NOTED.
 - STICK FRAME OVER-FRAMED ROOF SECTIONS w/ 2 x 8 RIDGES, 2 x 6 RAFTERS @ 16" O.C. AND FLAT 2 x 10 VALLEYS OR USE VALLEY TRUSSES.
 - FASTEN FLAT VALLEYS TO RAFTERS OR TRUSSES WITH SIMPSON H2.5A HURRICANE TIES @ 32" O.C. MAX. PASS HURRICANE TIES THROUGH NOTCH IN ROOF SHEATHING IF REQUIRED. SECURE RAFTERS TO FLAT VALLEYS WITH A MIN. OF (6) 12d TOE NAILS.
 - INSTALL (1) SIMPSON H2.5A HURRICANE TIE (OR EQUAL) @ EA. RAFTER BEARING.
 - REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.

- GENERAL STRUCTURAL NOTES**
- ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS. ENGINEER'S SEAL DOES NOT CERTIFY DIMENSIONAL ACCURACY OR ARCHITECTURAL LAYOUT INCLUDING ROOF SYSTEM. ENGINEER'S SEAL DOES NOT APPLY TO I-JOIST OR FLOOR/ROOF TRUSS LAYOUT DESIGN AND ACCURACY.
 - ALL CONSTRUCTION SHALL CONFORM TO THE LATEST REQUIREMENTS OF THE NORTH CAROLINA RESIDENTIAL CODE (NRC), 2018 EDITION AND ALL LOCAL CODES AND REGULATIONS. THE STRUCTURAL ENGINEER IS NOT RESPONSIBLE FOR, AND WILL NOT HAVE CONTROL OF, CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES, OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE CONSTRUCTION WORK.
 - DESIGN LOADS (R301)

	LIVE LOAD (PSF)	DEAD LOAD (PSF)	DEFLECTION (L)
ROOMS OTHER THAN SLEEPING ROOMS	40	10	L/360
SLEEPING ROOMS	30	10	L/360
ATTIC WITH LIMITED STORAGE	20	10	L/240
ATTIC WITHOUT STORAGE	10	10	L/360
STAIRS	40	10	L/360
DECKS	40	10	L/360
HANDRAILS	200 LB OR 50 PLF	10	L/360
PASSENGER VEHICLE GARAGES	50	10	L/360
GROUND SNOW LOAD	20		

WIND LOAD PER SECTION R301.2. (MEAN ROOF HEIGHT <35 FEET, EXPOSURE B)

- I-JOIST FLR. SYSTEMS DESIGNED WITH 12 PSF DL AND L/480 DEFLECTION.
 - THE STRUCTURE IS DESIGNED FOR 120 MPH ULTIMATE DESIGN WIND SPEEDS.
 - WALL CLADDING DESIGNED FOR +15.5 PSF AND -20 PSF (+/- INDICATE POSITIVE / NEGATIVE PRESSURE (TYP)).
 - ROOF CLADDING DESIGNED FOR +14.2 PSF AND -18 PSF FOR ROOF PITCHES 7/12 TO 12/12 AND +10 PSF AND -36 PSF FOR ROOF PITCHED 2.25/12 TO 7/12.
 - THE POSITIVE AND NEGATIVE DESIGN PRESSURE FOR DOORS AND WINDOWS FOR A MEAN ROOF HEIGHT OF 35 FEET OR LESS IS 25 PSF.
 - FOUNDATION DESIGN BASED ON A MINIMUM ALLOWABLE BEARING CAPACITY OF 2000 PSF. CONTACT ENGINEER IF ALLOWABLE BEARING CAPACITY CAN NOT BE ACHIEVED.
 - FOUNDATION ANCHORAGE TO COMPLY WITH SECTION R403.1.6 OF THE 2018 NRC.
 - FOR ALL CONCRETE SLABS AND FOOTINGS, THE AREA WITHIN THE PERIMETER OF THE BUILDING ENVELOPE SHALL HAVE ALL VEGETATION, TOP SOIL AND FOREIGN MATERIAL REMOVED. FILL MATERIAL SHALL BE FREE OF VEGETATION AND FOREIGN MATERIAL. THE FILL SHALL BE COMPACTED TO 95% TO ASSURE UNIFORM SUPPORT OF THE SLAB, AND EXCEPT WHERE APPROVED, THE FILL DEPTHS SHALL NOT EXCEED 24" FOR CLEAN SAND OR GRAVEL. A 4" THICK BASE COURSE CONSISTING OF CLEAN GRADED SAND OR GRAVEL SHALL BE PLACED. A BASE COURSE IS NOT REQUIRED WHERE A CONCRETE SLAB IS INSTALLED ON WELL-DRAINED OR SAND-GRAVEL MIXTURE SOILS CLASSIFIED AS GROUP 1, ACCORDING TO THE UNITED SOIL CLASSIFICATION SYSTEM IN ACCORDANCE WITH TABLE R405.1 OF THE NRC, 2018 EDITION.
 - CONCRETE SHALL CONFORM TO SECTION R402.2 OF THE NRC, 2018 EDITION. CONCRETE SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 3000 PSI. CONCRETE REINFORCING STEEL SHALL BE ASTM A615 GRADE 60. WELDED WIRE FABRIC SHALL BE ASTM A185. MAINTAIN A MINIMUM CONCRETE COVER AROUND REINFORCING STEEL OF 3" IN FOOTINGS AND 1 1/2" IN SLABS.
 - MASONRY UNITS TO CONFORM TO ACE 530/ASCE 5/TMS 402. MORTAR SHALL CONFORM TO ASTM C270.
 - THE UNSUPPORTED HEIGHT OF MASONRY PIERS SHALL NOT EXCEED FOUR TIMES THEIR LEAST DIMENSION FOR UNFILLED HOLLOW CONCRETE MASONRY UNITS AND TEN TIMES THEIR LEAST DIMENSION FOR SOLID OR SOLID FILLED PIERS. PIERS MAY BE FILLED SOLID WITH CONCRETE OR TYPE M OR S MORTAR. PIERS AND WALLS SHALL BE CAPPED WITH 8" OF SOLID MASONRY.
 - THE CENTER OF EACH PIER SHALL BEAR IN THE MIDDLE THIRD OF ITS RESPECTIVE FOOTING. EACH GIRDER SHALL BEAR IN THE MIDDLE THIRD OF EA. PIER.
 - ALL CONCRETE AND MASONRY FOUNDATION WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PROVISIONS OF SECTION R404 OF THE 2018 NRC, OR IN ACCORDANCE WITH ACI 318, ACI 332, NOMA TR68-A OR ACE 530/ASCE 5/TMS 402. MASONRY FOUNDATION WALLS SHALL BE REINFORCED PER TABLE R404.1.1(1), R404.1.1(2), R404.1.1(3), OR R404.1.1(4) OF THE 2018 NRC. CONCRETE FOUNDATION WALLS SHALL BE REINFORCED PER TABLE R404.1.1(5) OF THE NRC, 2018 EDITION. STEP FOUNDATION WALLS TO 2 x 6 FRAMED WALLS AT 16" O.C. WHERE GRADE PERMITS (UNO).
 - ALL FRAMING LUMBER SHALL BE SPF #2 AND ALL TREATED LUMBER SHALL BE SYP #2 (UNO).
 - LAMINATED VENEER LUMBER (LVL) SHALL HAVE THE FOLLOWING MIN. PROPERTIES: Fb = 2600 PSI, Fv = 285 PSI, E = 1900000 PSI. INSTALL ALL CONNECTIONS PER MANUFACTURER'S SPECIFICATIONS.
 - ALL LOAD BEARING HEADERS SHALL CONFORM TO TABLES R602.7(1) AND R602.7(2) OF THE 2018 NRC UNLESS NOTED OTHERWISE ON THE PLANS. ALL HEADERS SHALL BE SUPPORTED WITH (1) JACK STUD AND (1) KING STUD EACH END (UNO). SECURE THE FIRST KING STUD EACH SIDE OF THE HEADER TO THE HEADER WITH (4) 16d END-NAILS. INSTALL KING STUDS PER SECTION R602.7.5 OF THE 2018 NRC (UNO).
 - ALL I-JOIST AND TRUSS LAYOUTS SHALL BE IN COMPLIANCE WITH THE OVERALL DESIGN SPECIFIED ON THE PLANS. IF ALTERNATE I-JOISTS ARE USED, THE JOISTS MUST HAVE EQUIVALENT STRUCTURAL PROPERTIES TO THOSE SPECIFIED ON THE PLANS. ALL DEVIATIONS TO I-JOIST OR TRUSS LAYOUTS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO CONSTRUCTION.



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HARRISON RESIDENCE TRIANGLE HOME PROS LLC

REVISIONS:

NO.	DESCRIPTION

DRAWN BY: K&A HOME DESIGN INC.
 ENGINEERED BY: J. SMITH
 SCALE: 1/4" = 1'-0"
 DATE: 9-14-2022
 SHEET: 4 OF 5

S-4
ROOF FRAMING PLAN

