

GENERAL NOTES:

- 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.
- ALL WALLS SHOWN ON THE FLOOR PLANS ARE DRAWN AT 4" UNLESS NOTED OTHERWISE.
- ALL ANGLED WALL SHOWN ON THE PLANS ARE 45 DEGREES UNLESS NOTED OTHERWISE.
- STUD WALL DESIGN SHALL CONFORM TO ALL NORTH CAROLINA STATE BUILDING CODE REQUIREMENTS.
- DO NOT SCALE PLANS. DRAWING SCALE MAY BE DISTORTED DUE TO COPIER IMPERFECTIONS.
- 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=	2649	GARAGE=	664
SECOND FLOOR=	515	FRONT PORCH=	272
THIRD FLOOR=	N/A	CVD. PORCH=	349
BASEMENT=	N/A	STORAGE=	375
TOTAL HEATED=	3164	TOTAL UNHEATED=	1660

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)

2649 SQ. FT. OF CRAWL SPACE/1500

1.76 SQ. FT. OF REQUIRED VENTILATION

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

VENTILATION EACH= 1.80 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.

3584 SQ. FT. OF ATTIC/300= 11.94

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**



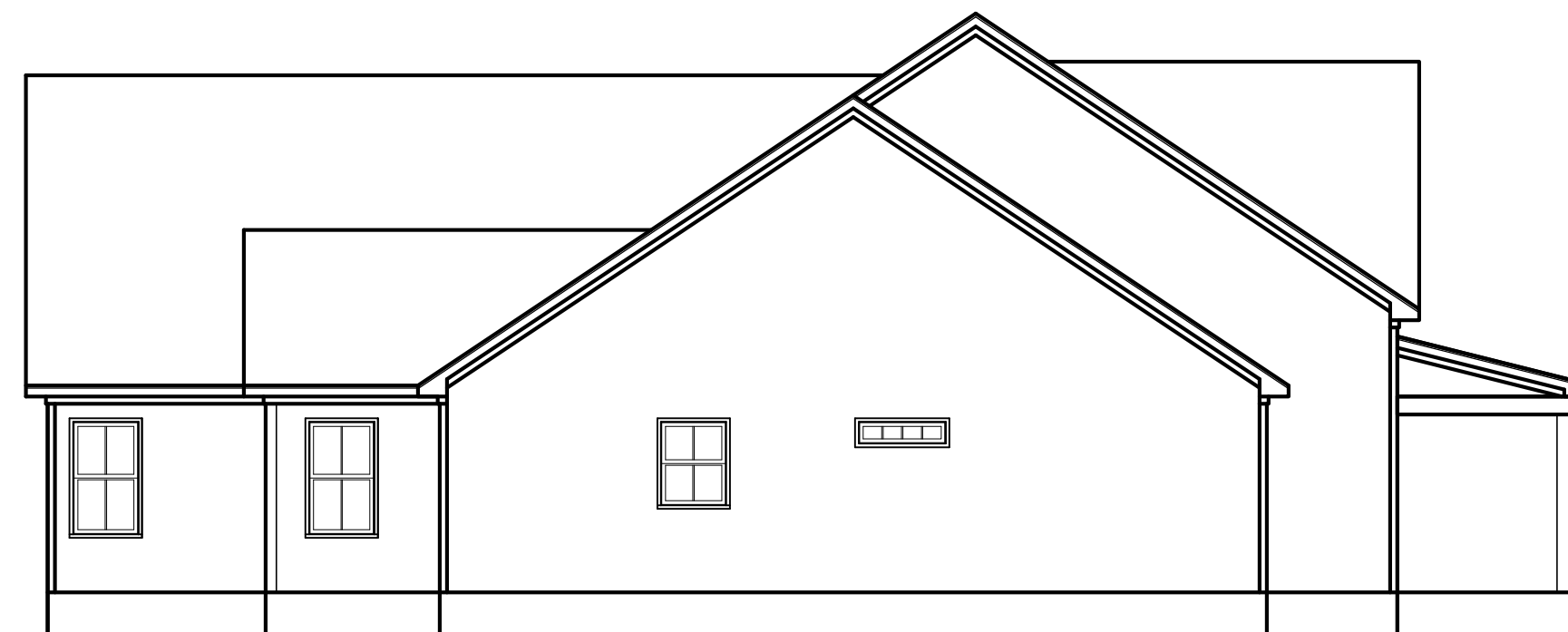
FRONT ELEVATION

1/4" = 1'-0"



REAR ELEVATION

1/8" = 1'-0"



LEFT ELEVATION

1/8" = 1'-0"



RIGHT ELEVATION

1/8" = 1'-0"

Project #:	24-187
Date:	5-21-24
Drawn/Checked 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



Website: www.KandAHomeDesigns.com

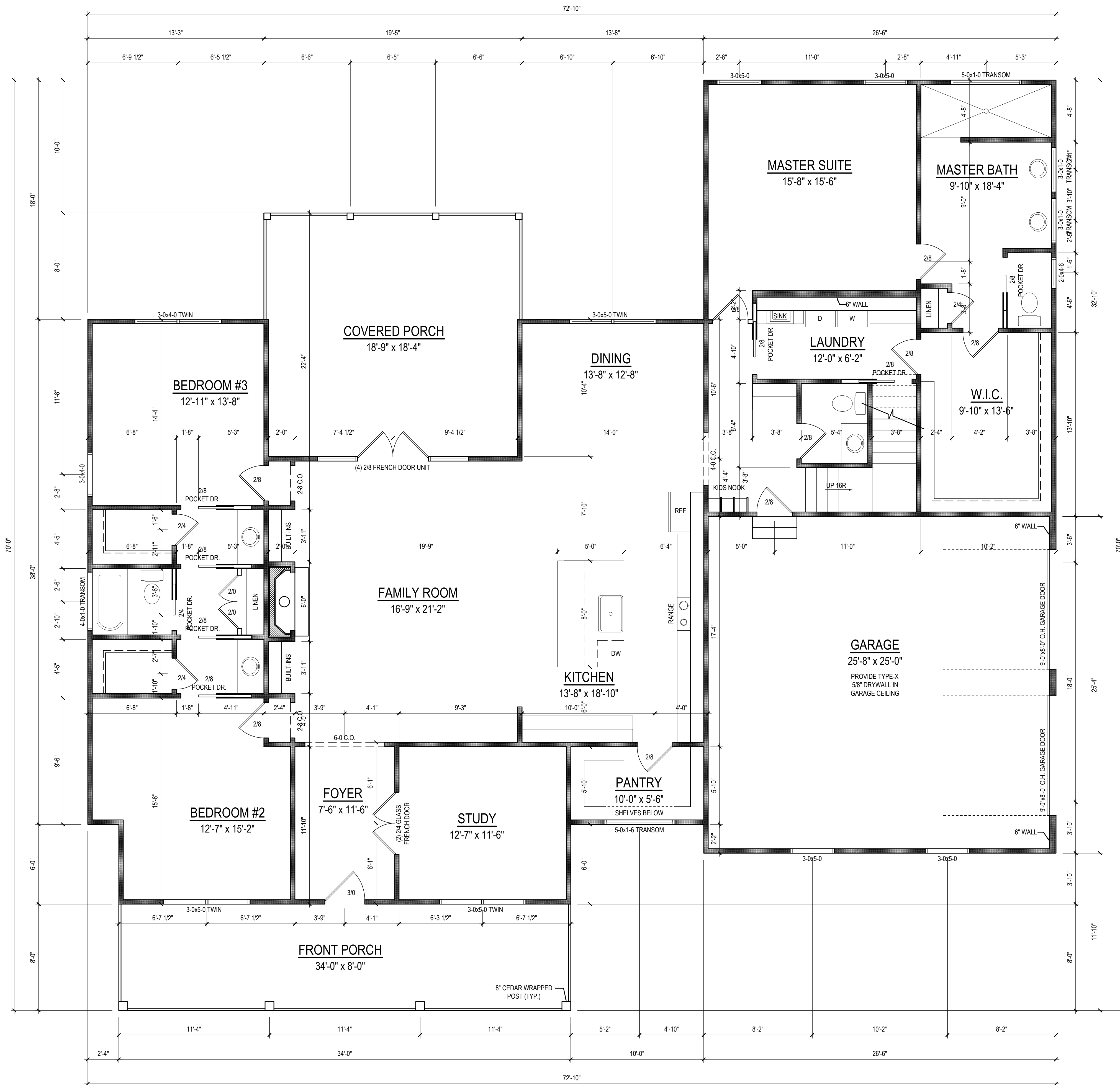
Email: Kent@KandAHomeDesigns.com

Project Name:
**Lot 54,
Timber Rail**

Client Name:
Triangle Home Pros LLC
6312 Lauraca Lane
Fuquay Varina, NC 27526

ELEVATIONS

Sheet Number
1
of 3



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

Project No.	24-187
Date	5-21-24
Drawn/Checked By.	KBB
Scale	1/4" = 1'-0"

REVISIONS		
No.	Date	Remarks
1		
2		
3		
4		

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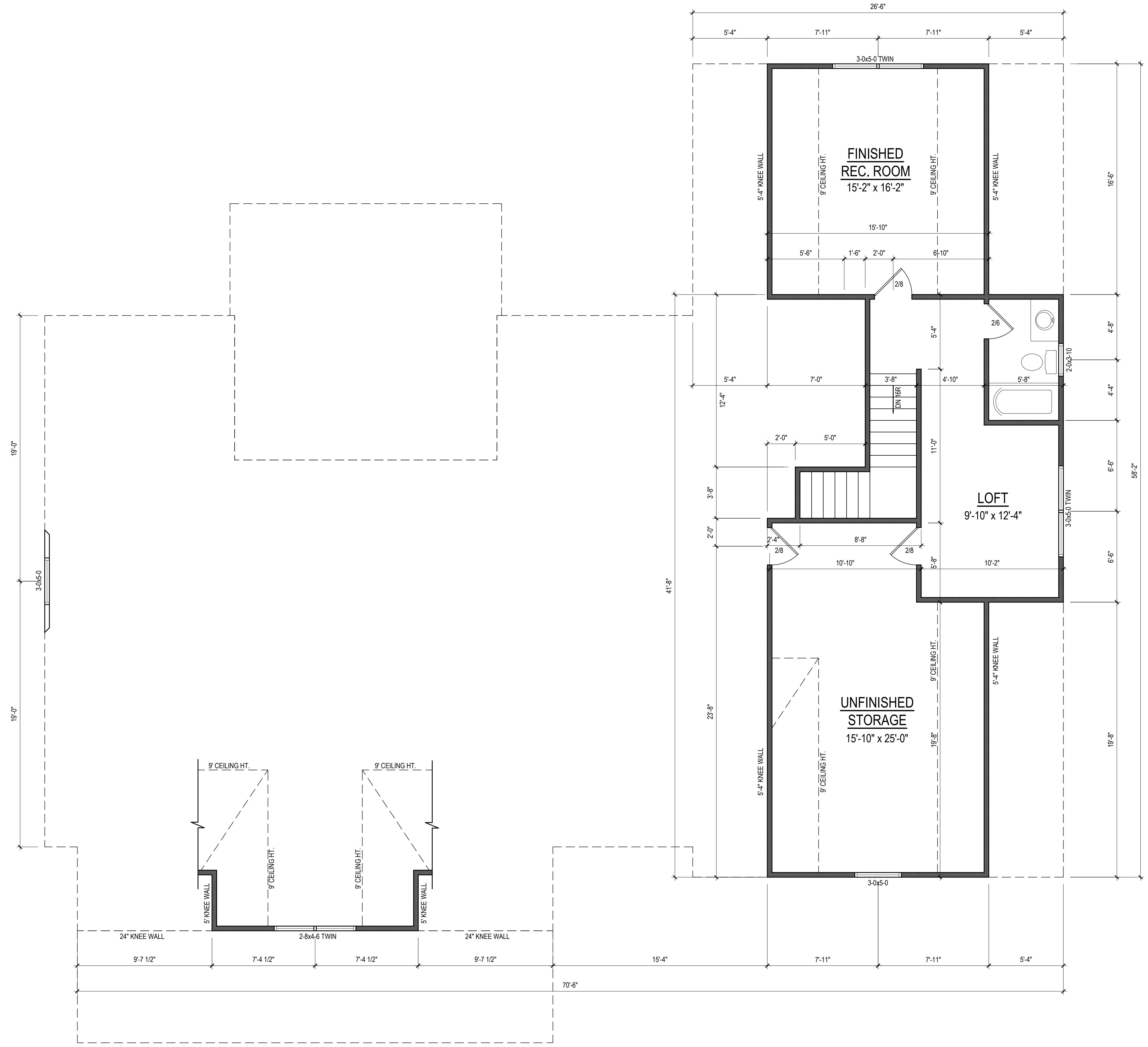
Email: Kent@KandAHomeDesigns.com Website: www.KandAHomeDesigns.com

Project Name:
**Lot 54,
 Timber Rail**

Client Name:
Triangle Home Pros LLC
 6312 Lauraca Lane
 Fuquay Varina, NC 27526

FIRST FLOOR

Sheet Number
2
 of 3



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

Project #:	24-187
Date:	5-21-24
Drawn/Revision By:	KBB
Scale:	1/4" = 1'-0"

REVISIONS		
No.	Date	Remarks
1		
2		
3		
4		

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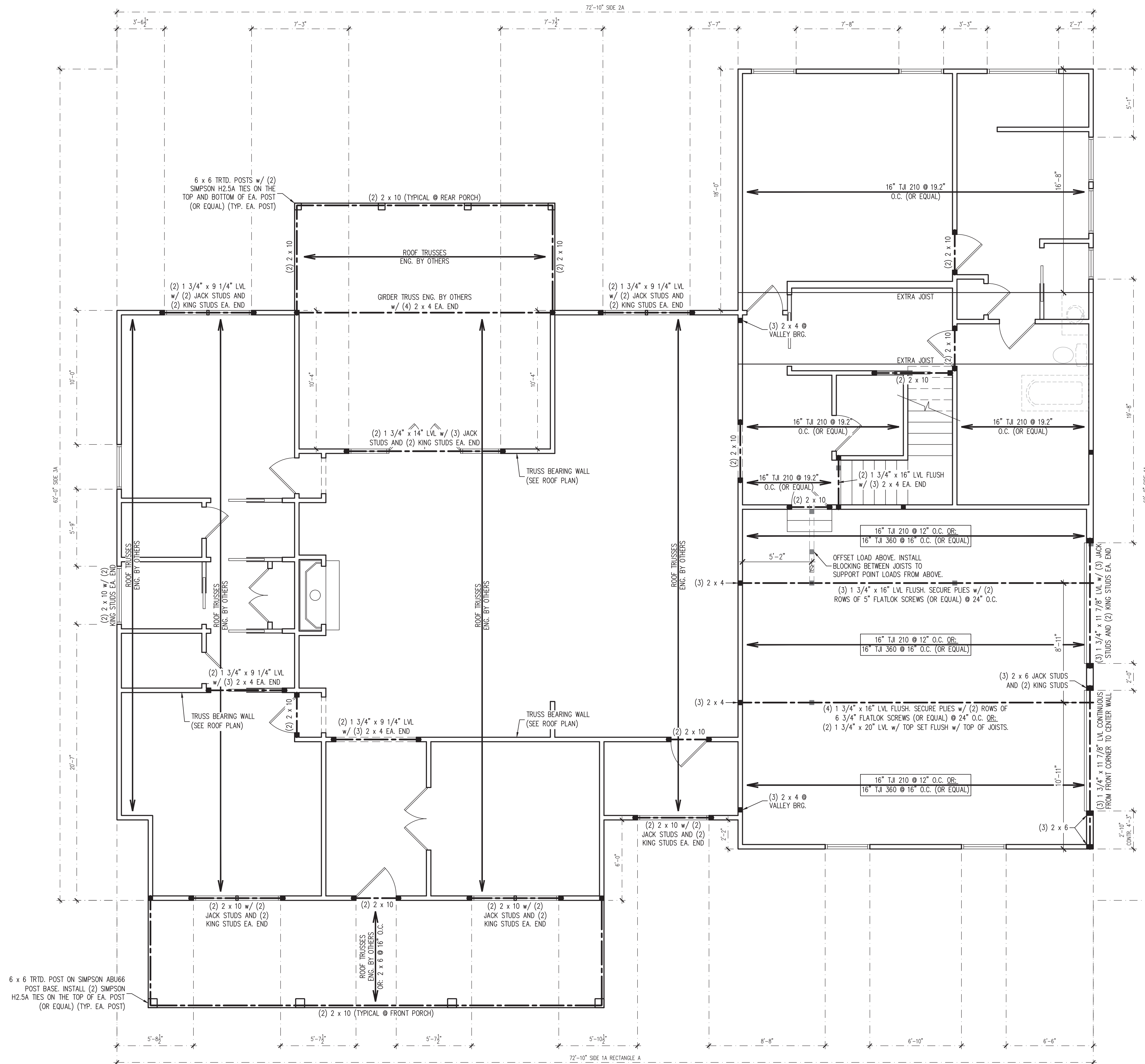
Project Name:
**Lot 54,
 Timber Rail**

Client Name:
Triangle Home Pros LLC
 6312 Laura Lane
 Fuquay Varina, NC 27526

SECOND FLOOR

Sheet Number
3
 of 3

Email: Kent@KandAHomeDesigns.com Website: www.KandAHomeDesigns.com



BRACED WALL DESIGN NOTES:

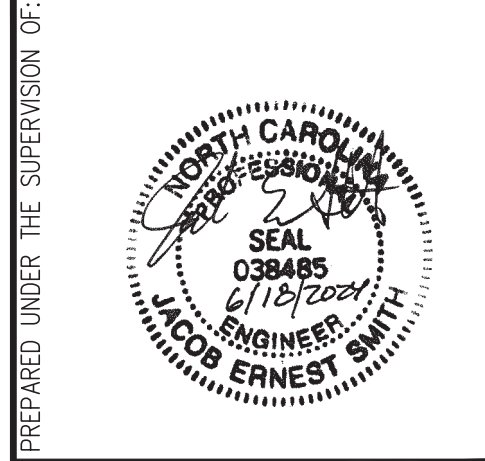
- BRACED WALL DESIGN PER SECTION R602.10 OF THE NRC 2018 EDITION.
- CS-WSP REFERS TO THE "CONTINUOUS SHEATHING - WOOD STRUCTURAL PANELS" WALL BRACING METHOD. 7/16" OSB SHEATHING SHALL BE INSTALLED ON ALL SHEATHABLE SURFACES OF ALL EXTERIOR WALLS ATTACHED w/ 6d COMMON NAILS OR 8d (2 1/2" LONG x 0.113" 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:

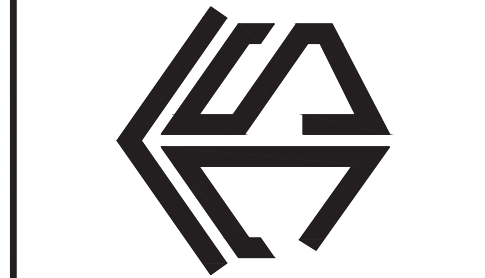
SIDE 1A	SIDE 3A
METHOD: CS-WSP	METHOD: CS-WSP
REQUIRED LENGTH: 15.6'	REQUIRED LENGTH: 18.1'
PROVIDED LENGTH: 44.83'	PROVIDED LENGTH: 63'
SIDE 2A	SIDE 4A
METHOD: CS-WSP	METHOD: CS-WSP/PF
REQUIRED LENGTH: 15.6'	REQUIRED LENGTH: 18.1'
PROVIDED LENGTH: 35.5'	PROVIDED LENGTH: 51.16'

FIRST FLOOR 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 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.



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 N.C. CERTIFICATE NUMBER: P-2212



**LOT 54 TIMBER RAIL LANE
 HOLLY SPRINGS, NORTH CAROLINA
 TRIANGLE HOME PROS**

REVISIONS:

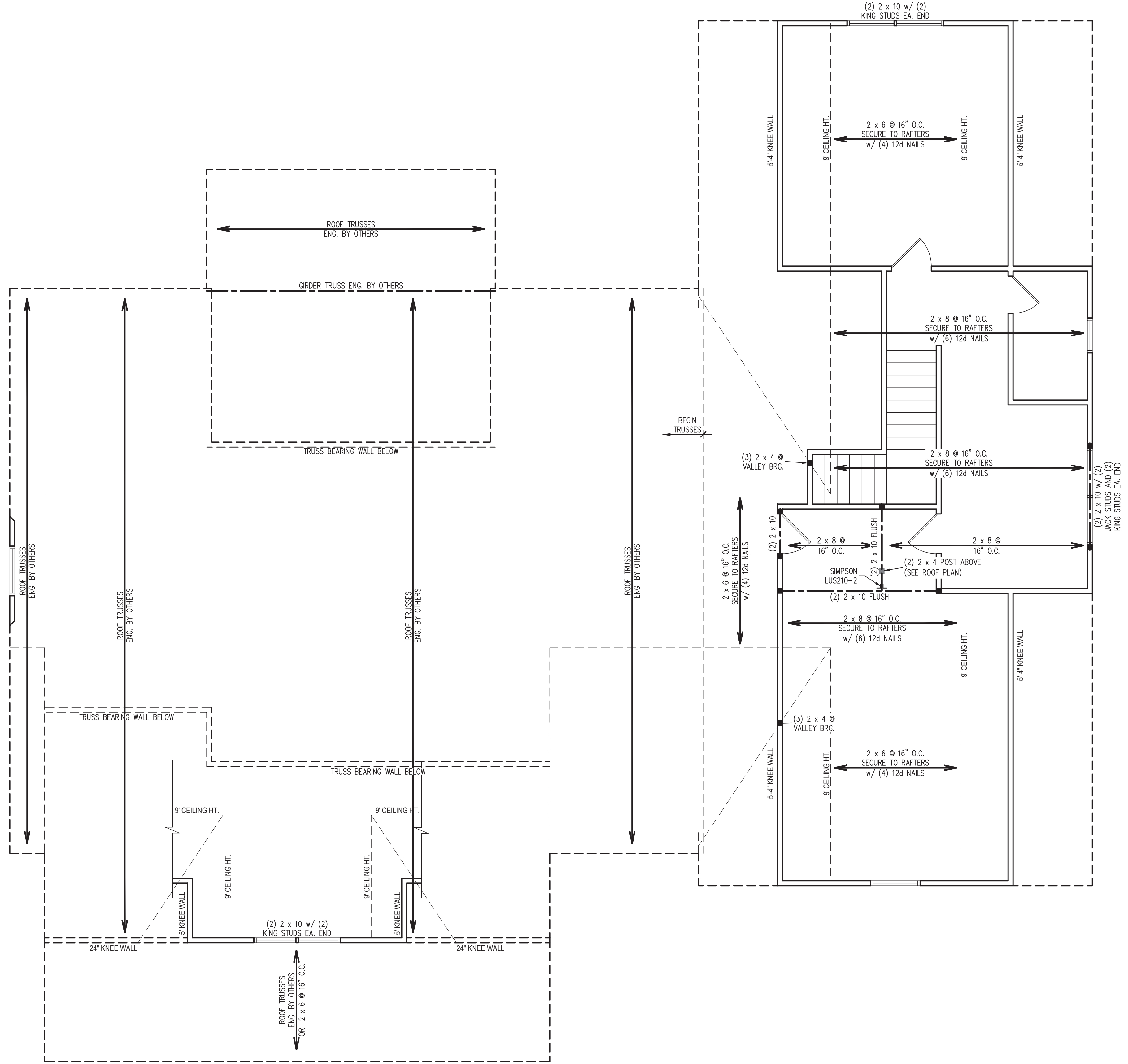
NO.	DESCRIPTION

DRAWN BY: K&A HOME DESIGN, INC.
 ENGINEERED BY: J. SMITH
 SCALE: 1/4" = 1'-0" (UNO)
 DATE: 6-18-2024
 SHEET: 2 OF 5

LEGEND

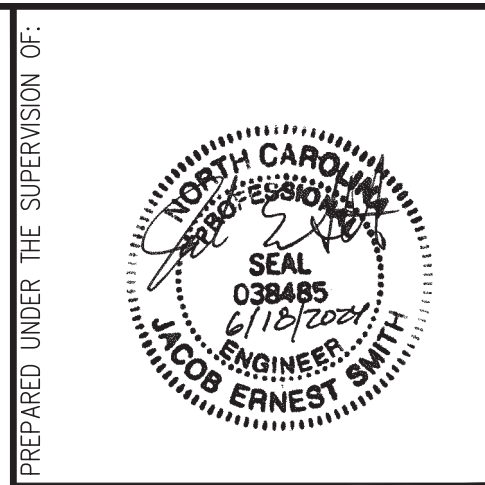
■	STUD COLUMN AT POINT LOADS THAT REQUIRE SOLID BLOCKING TO ORDER OR FOUNDATION. AT DROPPED HEADERS: (1) JACK STUD AND (1) KING STUD (UNO). AT FLUSH BEAMS AND (UNO): (2) STUDS (UNO)
■	OFFSET POINT LOAD FROM FLOOR ABOVE. MUST BE SUPPORTED BY BEAM, JOIST, OR BLOCKING AS NOTED ON THE PLANS.
---	BEAM OR HEADER AS NOTED
○	THIS LINE TYPE INDICATES PLUMBING OR APPLIANCES ON THE FLOOR ABOVE TO HELP ELIMINATE FRAMING CONFLICTS WITH UTILITIES. (FOR REFERENCE ONLY, SEE ARCHITECTURAL DRAWINGS)
X-X	BRACED WALL DIMENSIONS (FOR REFERENCE ONLY)
(UNO)	UNLESS NOTED OTHERWISE

S-2
**FIRST FLOOR
 CEILING FRAMING
 PLAN**



- BRACED WALL DESIGN NOTES:**
1. BRACED WALL DESIGN PER SECTION R602.10 OF THE NRC 2018 EDITION.
 2. PER SECTION R602.10.3.2 OF THE 2018 NRC, THE AMOUNT OF BRACING ON THE SECOND FLOOR EXCEEDS THE AMOUNT REQUIRED FOR THE FIRST FLOOR AND NO BRACED WALL ANALYSIS IS REQUIRED.
 3. 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).
 4. SEE NOTES AND DETAIL SHEETS FOR ADDITIONAL BRACED WALL INFORMATION.

- SECOND FLOOR CEILING FRAMING STRUCTURAL NOTES:**
1. ALL FRAMING LUMBER TO BE SPF #2 (UNO). ALL TREATED LUMBER TO BE SYP #2 (UNO).
 2. ALL LOAD BEARING HEADERS TO BE (2) 2 x 10 (UNO).
 3. WINDOW AND DOOR HEADERS TO BE SUPPORTED w/ (1) JACK STUD AND (1) KING STUD EA. END (UNO).
 4. INSTALL 2 x 4 COLLAR TIES @ 48" O.C. MAX. IN ALL ATTIC SPACES.
 5. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.



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 N.C. CERTIFICATE NUMBER: P-2212



**LOT 54 TIMBER RAIL LANE
 HOLLY SPRINGS, NORTH CAROLINA
 TRIANGLE HOME PROS**

REVISIONS:

NO.	DESCRIPTION

DRAWN BY: K&A HOME DESIGN, INC.

ENGINEERED BY: J. SMITH

SCALE: 1/4" = 1'-0" (UNO)

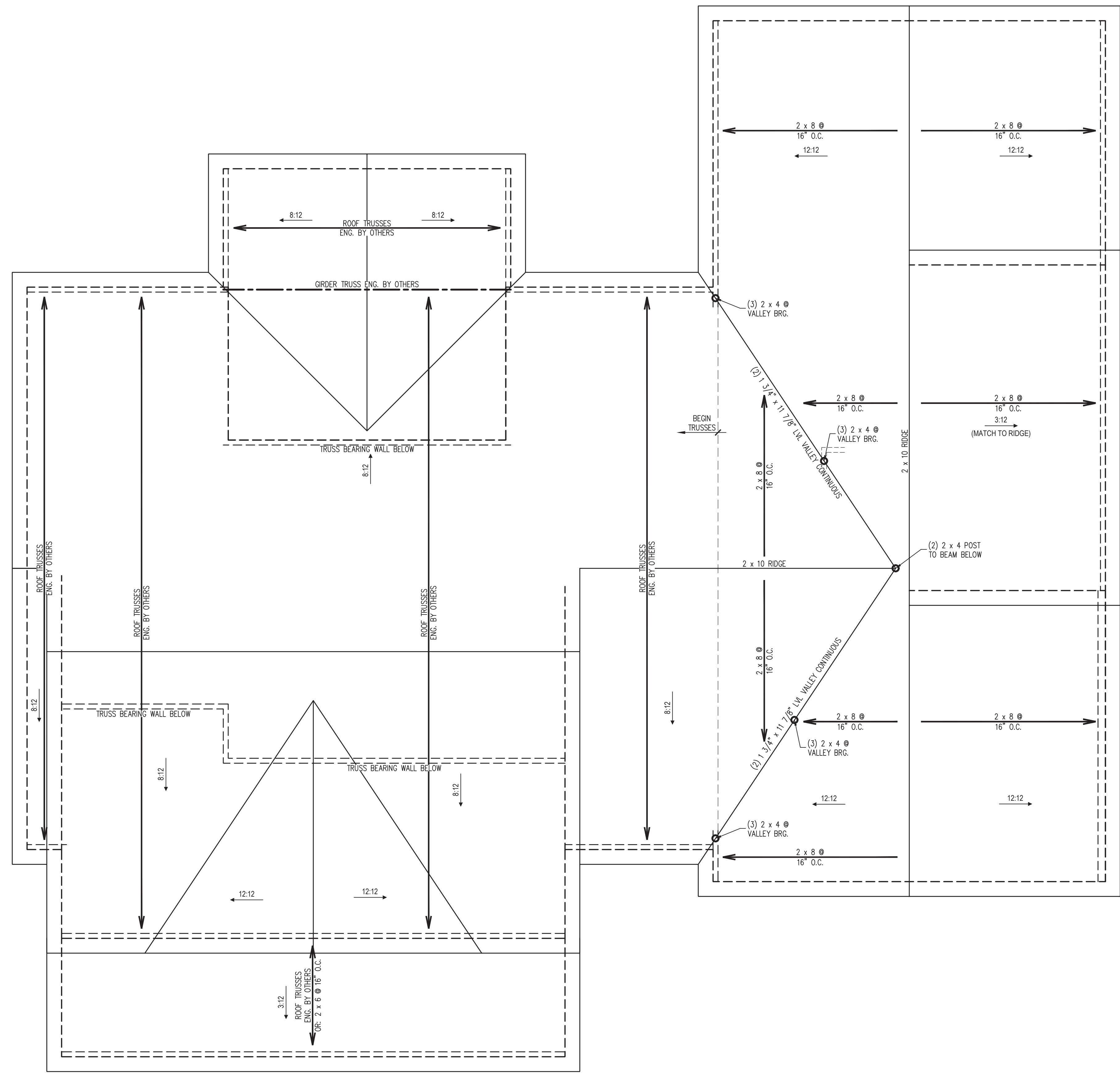
DATE: 6-18-2024

SHEET: 3 OF 5

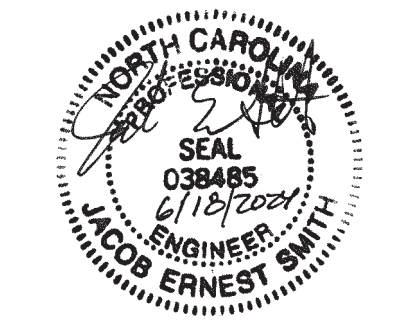
S-3
**SECOND FLOOR
 CEILING FRAMING
 PLAN**

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



- ROOF FRAMING STRUCTURAL NOTES:
1. ALL FRAMING LUMBER TO BE #2 SPF (UNO).
 2. SHEATH ROOF w/ 7/16" OSB SHEATHING SECURED w/ 8d NAILS @ 6" O.C. ALONG EDGES AND 12" O.C. IN THE FIELD.
 3. CIRCLES DENOTE POSTS FOR ROOF SUPPORT AS NOTED.
 4. 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.
 5. 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.
 6. INSTALL (1) SIMPSON H2.5A HURRICANE TIE (OR EQUAL) @ EA. RAFTER BEARING.
 7. TRUSS TO TRUSS CONNECTIONS AND TIE-DOWNS PER TRUSS MANUFACTURER.
 8. REFER TO NOTES AND DETAIL SHEETS FOR ADDITIONAL STRUCTURAL INFORMATION.



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**LOT 54 TIMBER RAIL LANE
 HOLLY SPRINGS, NORTH CAROLINA
 TRIANGLE HOME PROS**

REVISIONS:

DRAWN BY: K&A HOME DESIGN, INC.

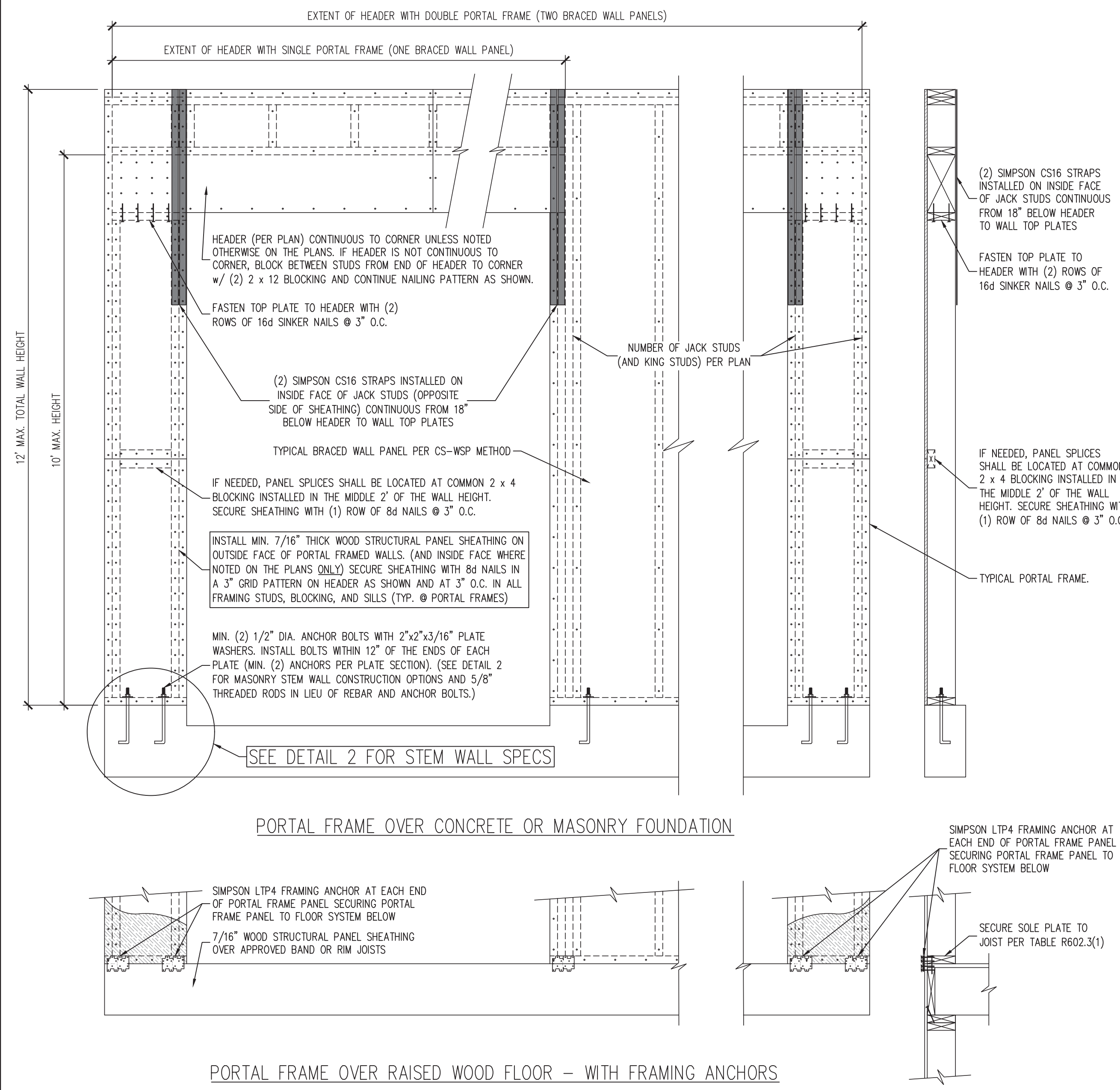
ENGINEERED BY: J. SMITH

SCALE: 1/4" = 1'-0" (UNO)

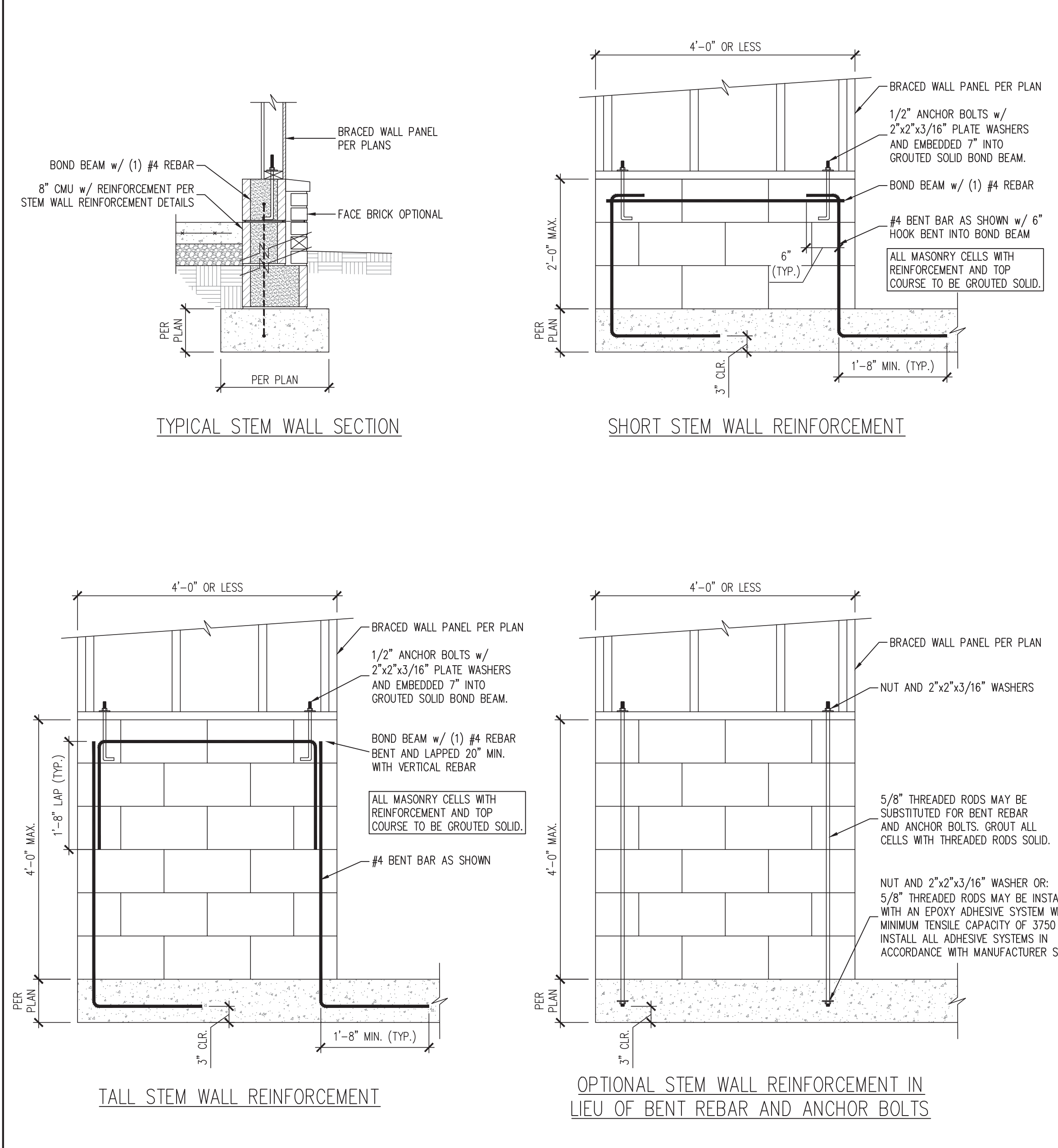
DATE: 6-18-2024

SHEET: 4 OF: 5

S-4
ROOF FRAMING PLAN

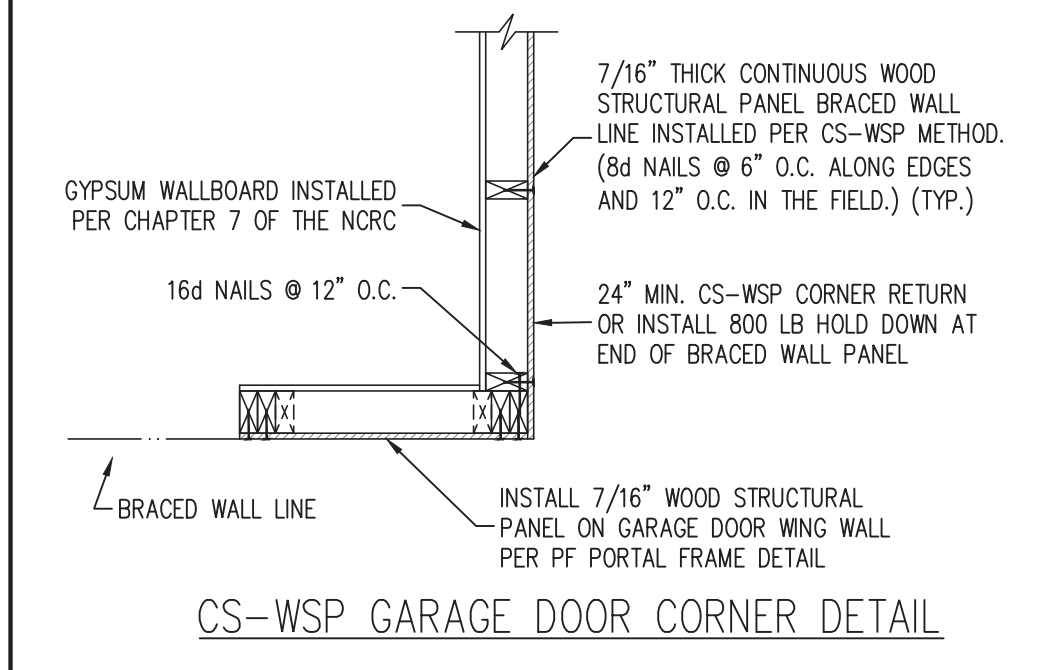
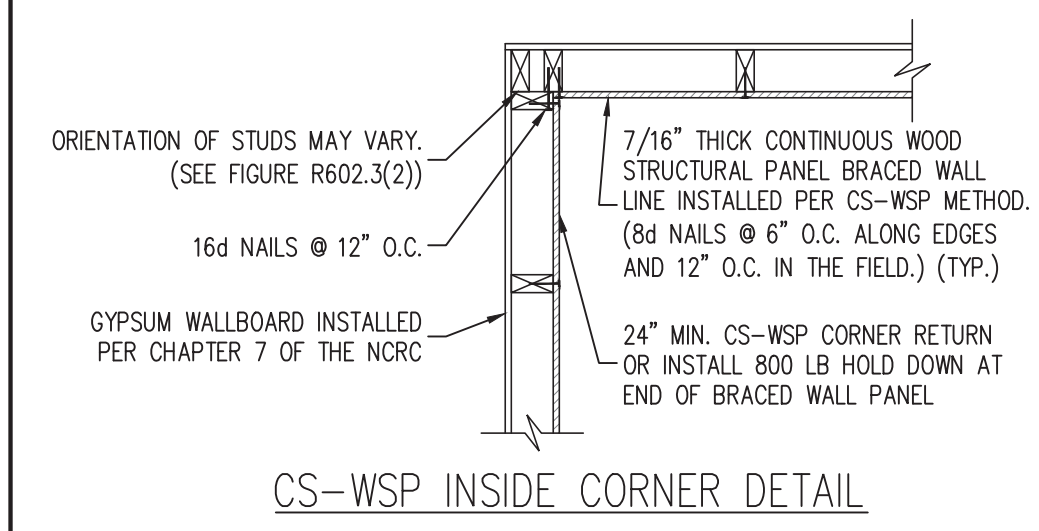
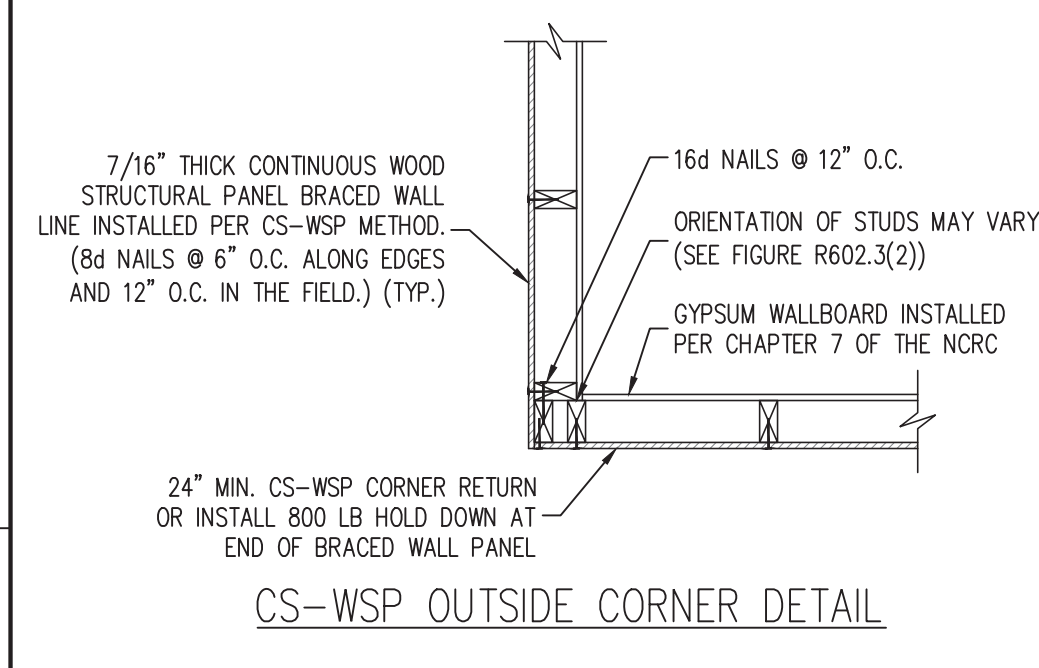


1 PF PORTAL FRAME DETAIL
SCALE: 3/4" = 1'-0" (REFERENCE FIGURE R602.10.1)

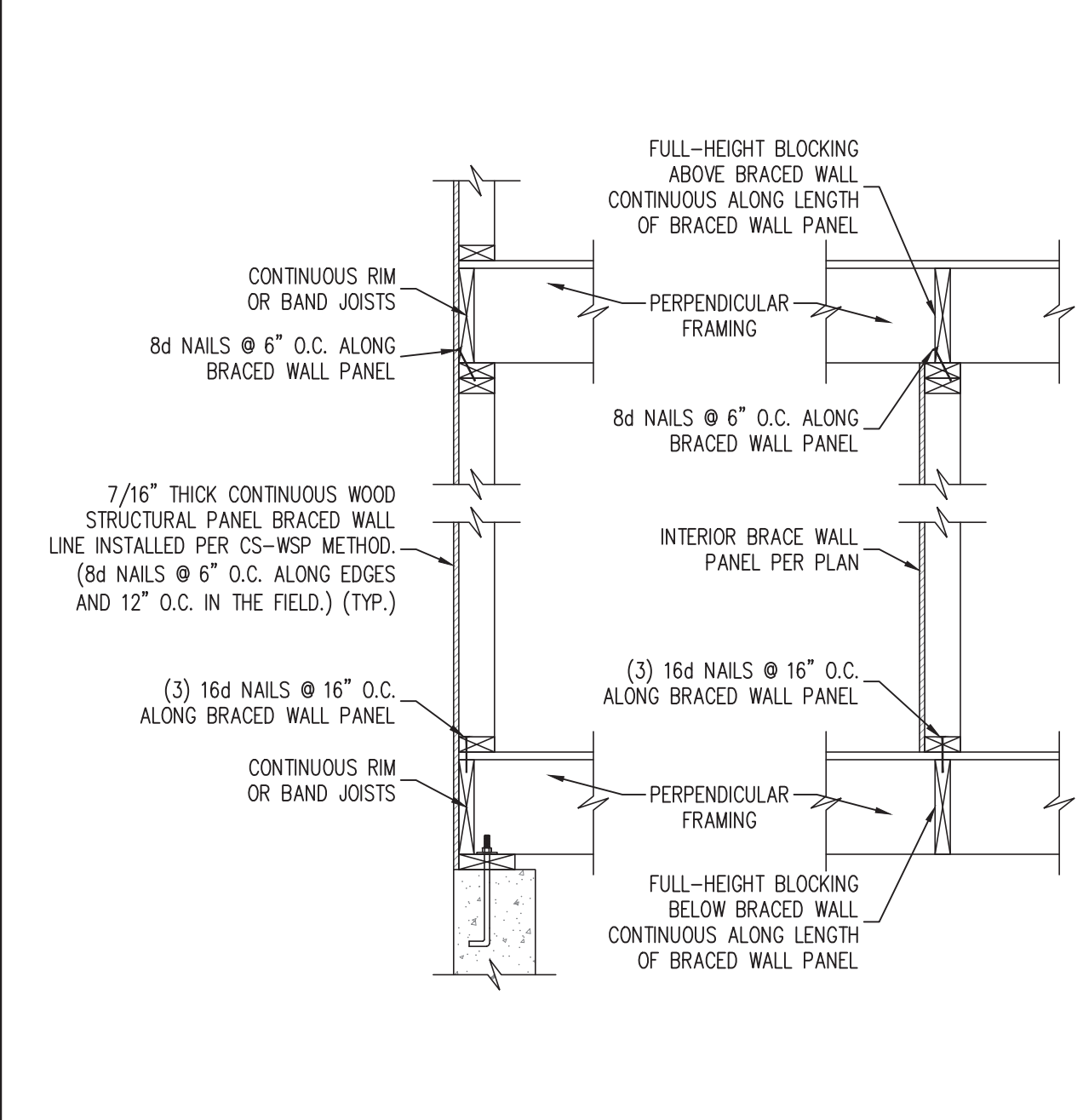


2 MASONRY STEM WALL DETAILS FOR WALLS 48" LONG OR LESS
SCALE: 3/4" = 1'-0" (REFERENCE FIGURE R602.10.4.3)

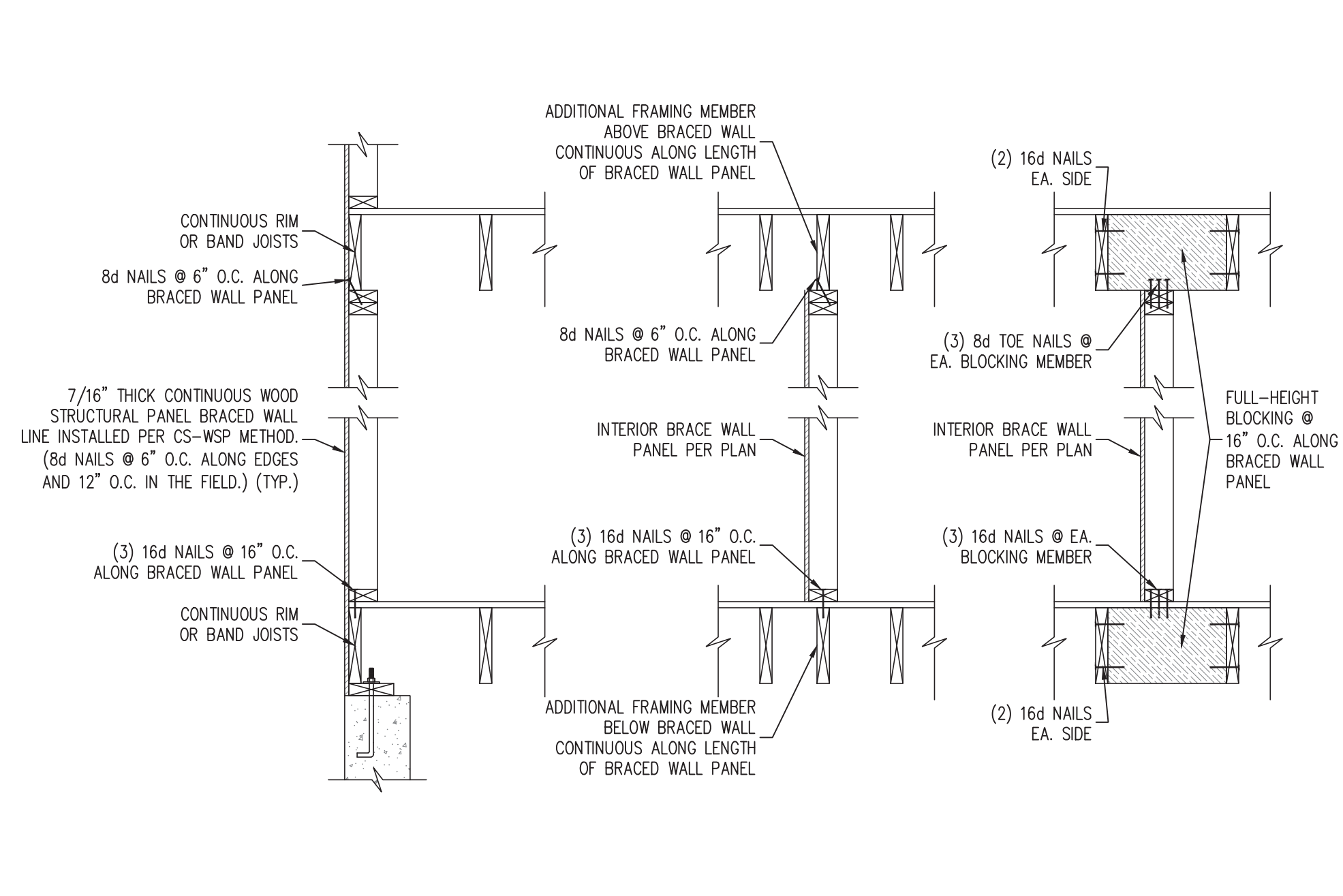
- GENERAL WALL BRACING NOTES:
- WALL BRACING DESIGNED IN ACCORDANCE WITH CHAPTER 6 OF THE 2018 NORTH CAROLINA RESIDENTIAL BUILDING CODE (NRC). TABLES AND FIGURES REFERENCED ARE FROM THE 2018 NRC. REFER TO THE 2018 NRC FOR ADDITIONAL INFORMATION AS NEEDED.
 - SEE STRUCTURAL SHEETS FOR THE BRACED WALL DESIGN SUMMARY WHICH SPECIFIES THE TOTAL AMOUNT OF BRACING REQUIRED AND PROVIDED EACH BRACED WALL LINE ON EACH FLOOR (WHERE REQUIRED), THE LENGTH AND LOCATION OF BRACED WALLS, HOLD DOWN(S) TYPE AND LOCATIONS, AND ANY SPECIAL NOTES OR REQUIREMENTS DETERMINED BY ENGINEERED DESIGN ARE INCLUDED ON EACH STRUCTURAL FLOOR PLAN (WHERE REQUIRED).
 - ALL EXTERIOR WALLS ARE TO BE SHEATHED ON THE EXTERIOR FACE WITH 7/16" OSB WOOD STRUCTURAL PANELS IN ACCORDANCE WITH THE CS-WSP METHOD AS SPECIFIED IN SECTION R602.10.3 OF THE 2018 NRC UNLESS NOTED OTHERWISE (UNO).
 - 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" DIAMETER) NAILS SPACED 6" O.C. ALONG PANEL EDGES AND 12" O.C. IN THE FIELD (UNO).
 - THE INTERIOR SIDE OF ALL EXTERIOR WALLS AND BOTH SIDES OF INTERIOR WALLS SHALL BE SHEATHED WITH 1/2" GYPSUM WALL BOARD. WHEN NOT USING BRACING METHOD "GB", GYPSUM WALL BOARD SHALL BE FASTENED PER TABLE R702.3.5. BRACING METHOD "GB" WALL BOARD SHALL BE FASTENED PER TABLE R602.10.1.
 - "GB" REFERS TO THE "GYPSUM BOARD" WALL BRACING METHOD. WHERE NOTED ON THE PLANS, 1/2" (MIN.) GYPSUM WALL BOARD SHALL BE INSTALLED ON BOTH SIDES OF THE BRACED WALL FASTENED WITH 1 1/4" #6 SCREWS OR 1 5/8" 5d COOLER NAILS SPACED 7" O.C. ALONG PANEL EDGES AND 7" O.C. ALONG INTERMEDIATE SUPPORTS (UNO). THE REQUIRED BRACED WALL LENGTHS FOR EACH SIDE OF THE CIRCUMSCRIBED RECTANGLE ARE INTERPOLATED PER TABLE R602.10.3. METHOD CS-WSP CONTRIBUTES ITS ACTUAL LENGTH. METHOD GB CONTRIBUTES .5 ITS ACTUAL LENGTH, AND METHOD PF CONTRIBUTES 1.5 TIMES ITS ACTUAL LENGTH.



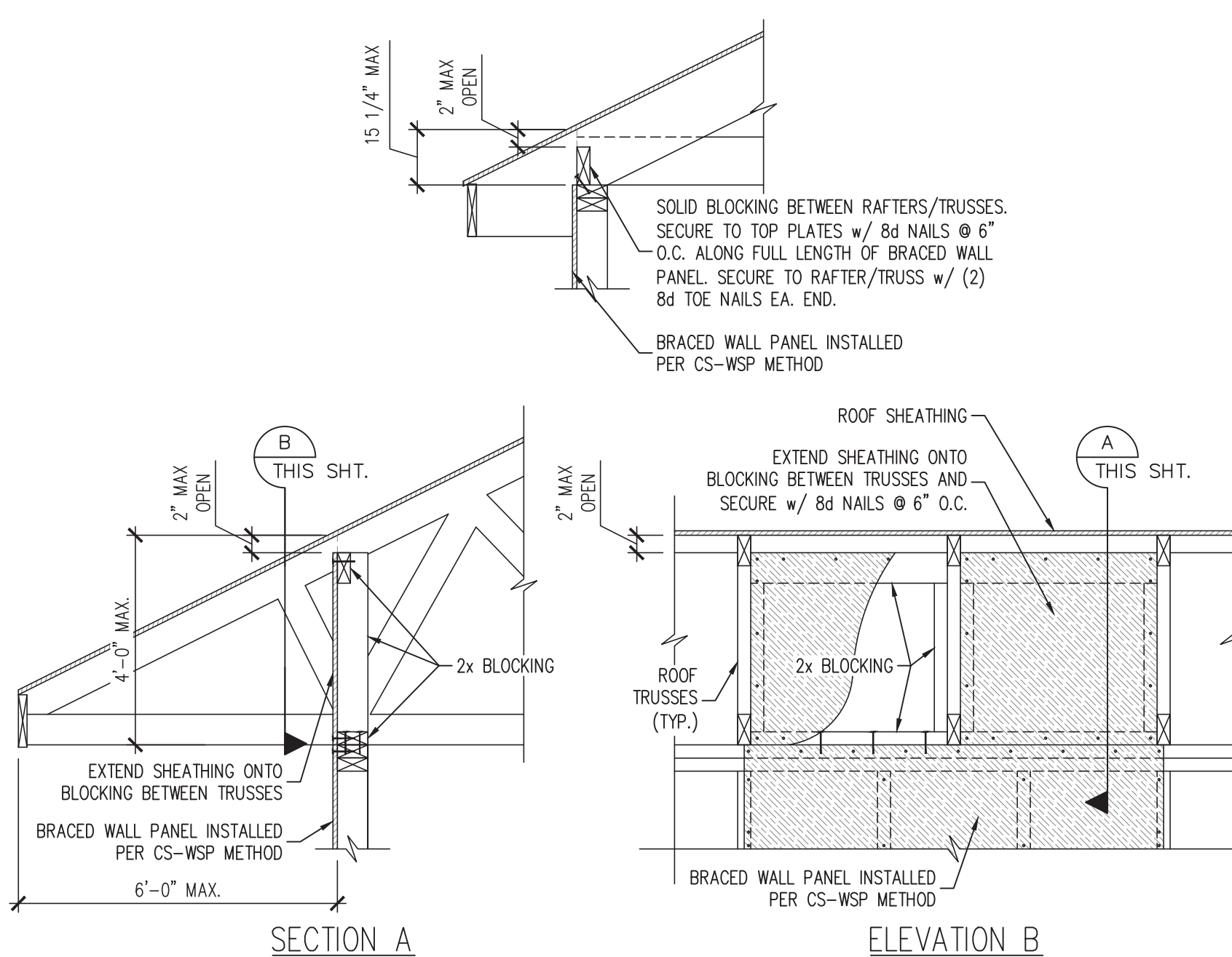
6 TYPICAL EXTERIOR CORNER FRAMING DETAILS
SCALE: 3/4" = 1'-0" (REFERENCE FIGURES R602.10.3(4) AND (5))



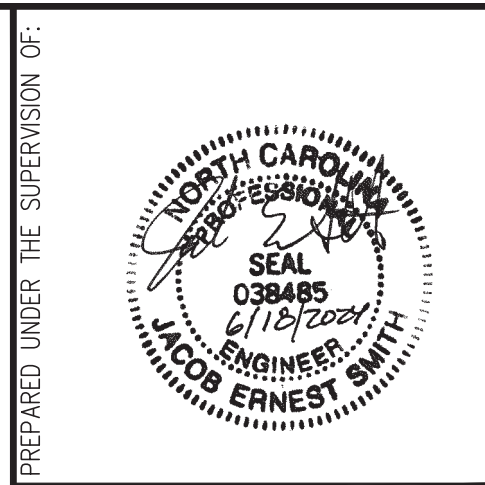
3 BRACED WALL PANEL CONNECTION WHEN PERPENDICULAR TO FLOOR/CEILING FRAMING
SCALE: NTS (REFERENCE FIGURE R602.10.4.4(1))



4 BRACED WALL PANEL CONNECTION WHEN PARALLEL TO FLOOR/CEILING FRAMING
SCALE: NTS (REFERENCE FIGURE R602.10.4.4(2))



5 BRACED WALL PANEL CONNECTION TO PERPENDICULAR RAFTERS OR TRUSSES
SCALE: NTS (REFERENCE FIGURES R602.10.4.5(1) AND (3))



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HOLLY SPRINGS, NORTH CAROLINA
TRIANGLE HOME PROS

REVISIONS:

DRAWN BY: K&A HOME DESIGN, INC.
ENGINEERED BY: J. SMITH
SCALE: 1/4" = 1'-0" (UNO)
DATE: 6-18-2024
SHEET: 5 OF 5

S-5
WALL BRACING
DETAILS AND NOTES