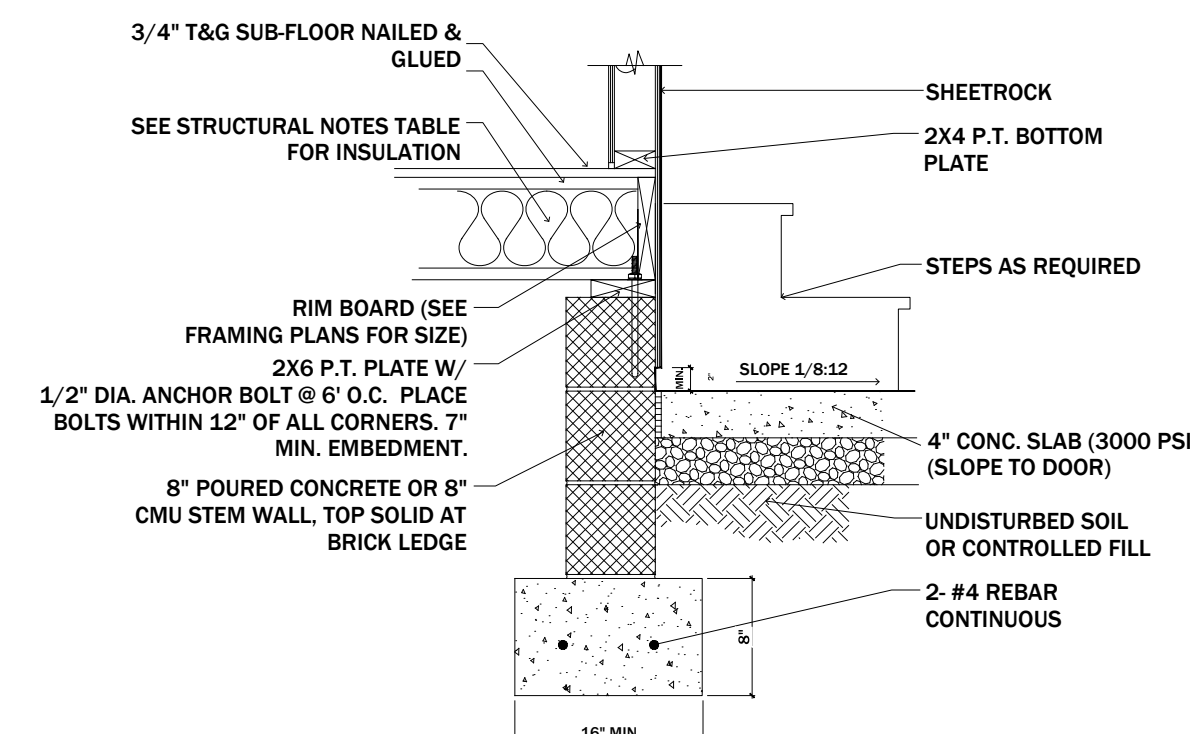
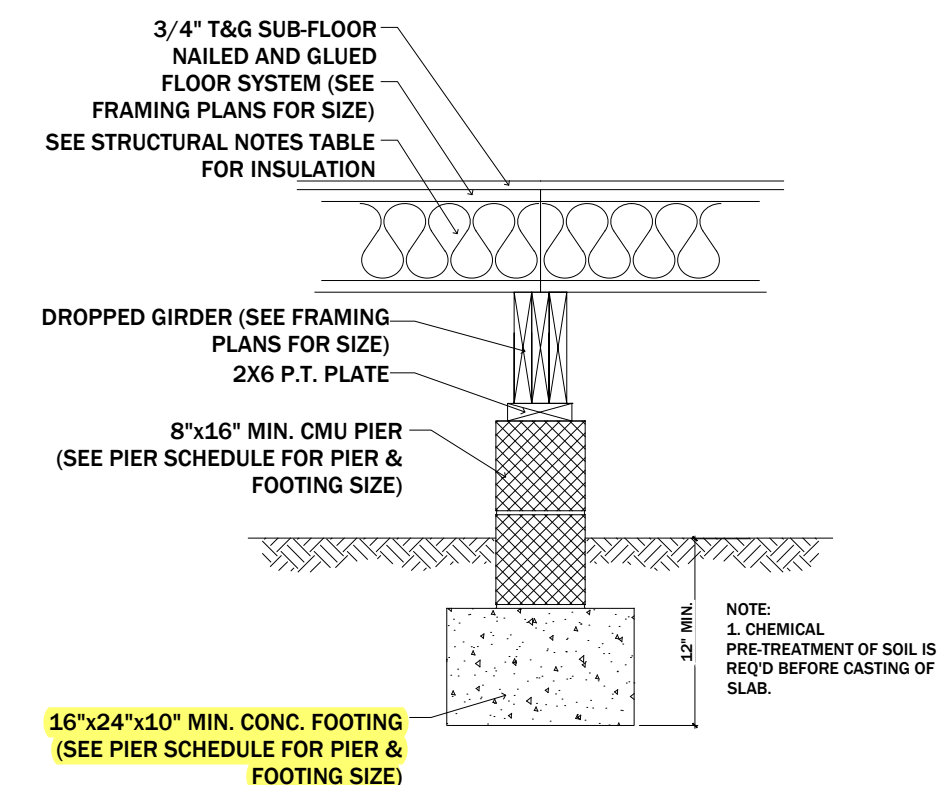


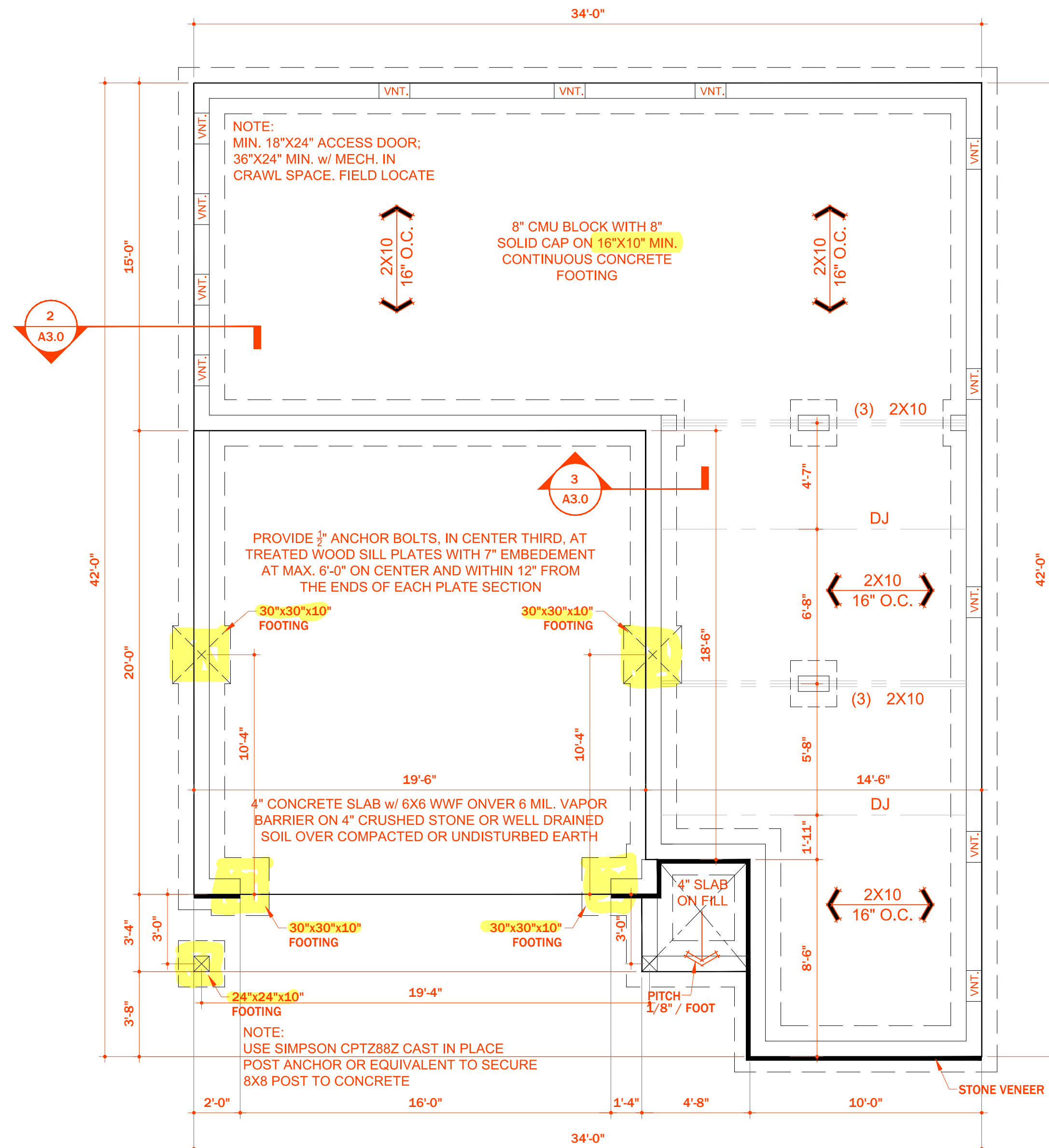
2 / A3.0 PLAN: detail



3 / A3.0 PLAN: detail



4 / A3.0 PLAN: detail



1 / A3.0 PLAN: foundation

WALL VENTED CRAWL SPACE			
REQUIRED			
863	SQ. FT. / 150 =	5.75	SQ. FT. OF VENTILATION
PROVIDED			
.52	SQ. FT. / VENT x	12	VENTS = 6.24 (SQ. FT. OF VENTILATION)
ONE VENTILATING OPENING SHALL BE WITHIN 3 FEET OF EACH CORNER.			

All Joists and beam to be #2 SPF

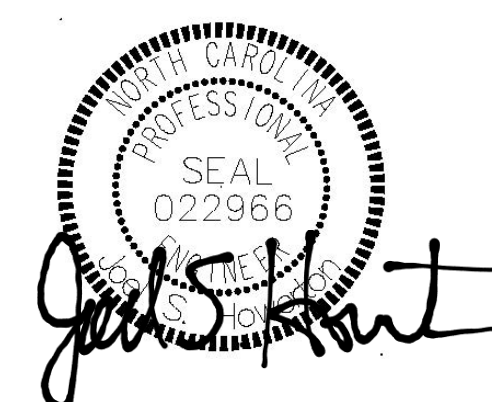
GENERAL FOUNDATION NOTES:

- THIS PLAN DESIGNED IN ACCORDANCE WITH NC RESIDENTIAL CODE, 2018 EDITION.
- EXTERIOR WALL FOOTING TO BE 20" X 8" 3000 PSI STRUCTURAL CONCRETE WITH 2-#4 BARS 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 SITE 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 WITH SECTION R406 OF THE CODE "FOUNDATION WATERPROOFING AND DAMPPROOFING".
- THIS FOUNDATION DESIGN IS VALID FOR 120 MPH WIND ZONES.
- FOUNDATION WALLS SHALL BE 12" IN WIDTH WHERE SUPPORTING FRAMING WITH BRICK VENEER.
- PORCH POST FOOTINGS SHALL BE 24"X24"X10" WITH 2-#4 BARS EACH WAY.

STRUCTURAL EVALUATION BY:

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

- \* ENGINEER'S SEAL APPLIES ONLY TO STRUCTURAL COMPONENTS ON THIS DOCUMENT. SEAL DOES NOT INCLUDE CONSTRUCTION REVIEW, MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES OR SAFETY PRECAUTIONS.
- \* ANY DEVIATIONS OR DISCREPANCIES ON PLANS ARE TO BE BROUGHT TO IMMEDIATE ATTENTION OF THE ENGINEER. FAILURE TO DO SO WILL VOID ENGINEER'S LIABILITY.



08 17 2021



Trinity Park  
Lots 5 & 7

812 Trinity Park Dr

Structural Review Only  
Town of Wake Forest  
**APPROVED**  
02/01/2022  
Larry Rochelle

Scale  $1/4"=1'-0"$

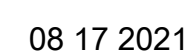
- BRACED WALL NOTES:

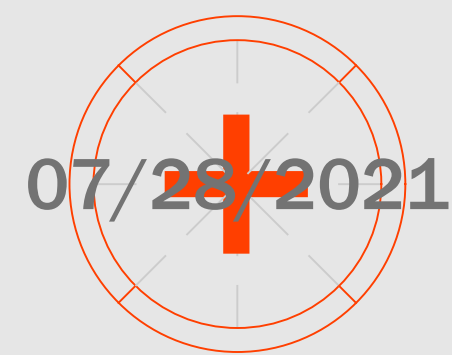
1. BRACED WALLS ARE REQUIRED PER SECTION R602.10.1 2018 NBCB RESIDENTIAL CODE
2. THE EXTERIOR WALL STRUCTURE SHALL BE CONTINUOUSLY SHEATHED, FULL HEIGHT WITH MIN. THICKNESS 7/16" OSB. THESE WALLS SHALL BE CONSTRUCTED IN CONFORMANCE TO TYPE CS-WSP DETAILS. REFER TO PLAN FOR LOCATION OF REQUIRED BRACING LABELED "CS BRACING" AND LENGTH OF WALL BRACING LABELED IN LINEAR FEET.
3. INTERIOR WALLS WHERE NOTED SHALL BE BRACED PER INDICATED METHOD IN REFERENCE TO NBCB-RESIDENTIAL CODE, TABLE R602.10.2.

**LIB METHOD:**  
INSTALL 1X4 WOOD OR CONTINUOUS METAL STRAPPING AT 45 DEGREES TO 60 DEGREES FROM TOP PLATE TO BOTTOM PLATE ACROSS STUDS WITH MAXIMUM STUD SPACING OF 16" ON CENTER. CONNECT AS INDICATED IN CODE SECTION.

**GB METHOD:**  
MINIMUM 1/2" GYPSUM BOARD TURNED VERTICALLY AND CONTINUOUS FROM TOP PLATE TO BOTTOM PLATE. SCREW CONNECTION TO FRAMING USING SPACING CRITERIA AS INDICATED IN CODE TABLES.

4. SPECIAL BRACING DETAILS ARE ILLUSTRATED IN THE CODE AND ALLOWED WHERE WALLS DO NOT MEET THE **MINIMUM** REQUIREMENTS FOR SUPPORT.
5. SEE TABLE R602.7.5 FOR CORRECT NUMBER OF KING STUDS PER HEADER.





Revisions

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

812 Trinity Park Dr

Structural Review Only  
Town of Wake Forest  
APPROVED  
02/01/2022  
Larry Rochelle

Notes

1. ....
2. ....
3. ....

Project North

Drawing Title  
Roof Plan

Scale 3/4"=1'-0"

Sheet No.

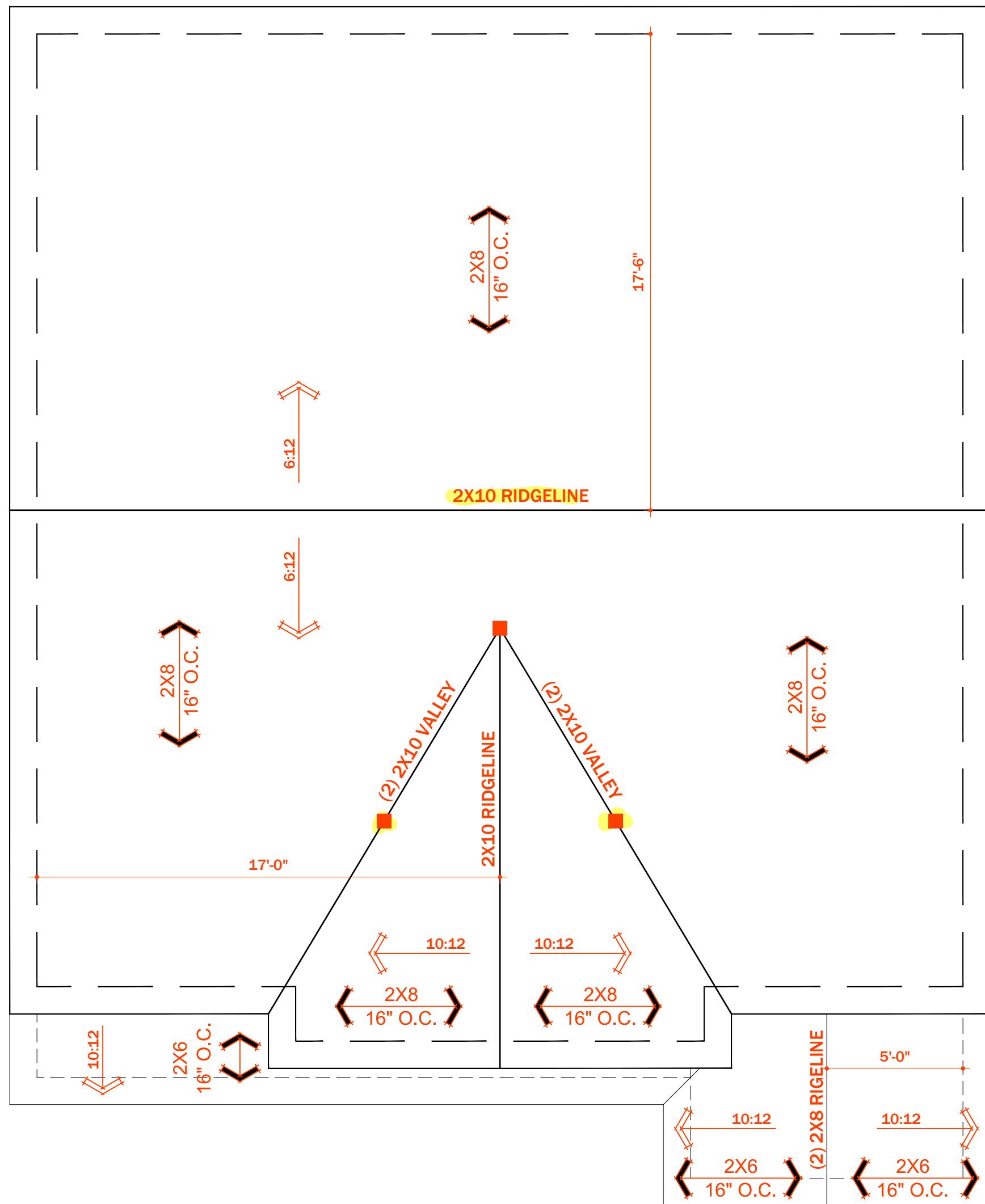
A5.0

© SSDS, LLC 2021

GENERAL ROOF NOTES:

1. THIS PLAN DESIGNED IN ACCORDANCE WITH NC RESIDENTIAL CODE, 2018 EDITION.
2. ROOF CLADDING DESIGN VALUES (POSITIVE/NEGATIVE) SHALL BE AS FOLLOWS:  
45.5 #/SF FOR ROOF PITCHES FROM 0/12 TO 2.25/12  
34.5 #/SF FOR ROOF PITCHES FROM 2.25/12 TO 7/12  
21 #/SF FOR ROOF PITCHES FROM 7/12 TO 12/12
3. ALL ROOFING ELEMENTS SHALL MEET THE REQUIREMENTS OF CHAPTER 8 OF THE CODE.
4. ALL LUMBER SHALL BE #2 SPF OR BETTER. RAFTERS MAY BE FINGER JOINTED PER NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION, AND MUST HAVE THE STRUCTURAL CERTIFICATION STAMPED ON THE MEMBER.
5. RAFTER SIZES, SPANS AND SPACING SHALL NOT EXCEED THE FOLLOWING:

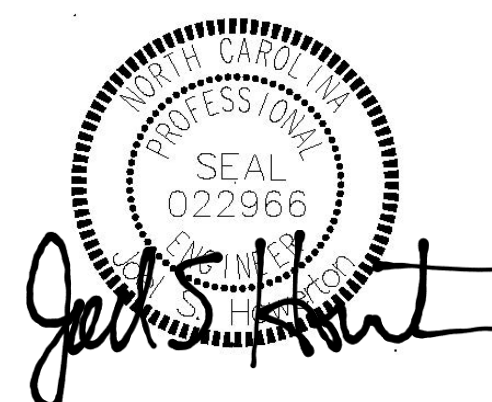
SIZE	2X6	2X8	2X10
SPACING 12" O.C.	16'-3"	21'-0"	25'-8"
SPACING 16" O.C.	14'-4"	18'-2"	22'-3"
6. ALL RAFTERS TO BE 2X8 @ 16" O.C. #2 SPF UNLESS NOTED OTHERWISE.
7. 2X10 HIPs MAY BE SPLICED WITH A MIN. 6'-0" OVERLAP.
8. PROVIDE DOUBLE RAFTER EACH SIDE OF DORMERS WITH DOUBLE HEADER.
9. ATTACH VAULTED RAFTERS WITH HURRICANE CLIP SIMPSON 14-5" OR EQUIVALENT. PROVIDE DOUBLE OPPOSING RAFTERS WHERE NOTED.
10. 2X8 RAFTERS @ CATHEDRAL OR VAULTED CEILINGS TO BE FURRED DOWN 2" OR USE 2X10 RAFTERS FOR INSULATION PER CODE.
11. PROVIDE 2X4 COLLAR TIES EVERY SECOND RAFTER (TYPICAL)
12. PROVIDE 2X4 RAFTER TIES @ 32" O.C. (TYPICAL)
13. FRAME RAFTERS ON 2X4 PLATE ON TOP OF CEILING JOISTS UNLESS NOTED OTHERWISE.
14. SHINGLES ASSUMED TO BE #40 LB. FIBERGLASS OR EQUAL MINIMUM ROOF PITCH TO BE AS INDICATED ON ARCHITECTURAL PLAN SHEETS.
15. PROVIDE DOUBLE LAYER OF ROOF FELT WHERE ROOF PITCH IS LESS THAN 4/12.
16. THESE DESIGN DRAWINGS WERE PRODUCED BY HOWERTON SERVICES, PLLC AND ASSUMES NO LIABILITY FOR THE CORRECTNESS OF ARCHITECTURAL FEATURES, DIMENSIONS OR FIXTURES.
17. ALL HIP RIDGES AND VALLEYS SHALL BE DOUBLE 2X10 UNLESS NOTED OTHERWISE.
18. CONTRACTOR IS RESPONSIBLE FOR REVIEWING DRAWINGS FOR CONSTRUCTABILITY PRIOR TO BEGINNING CONSTRUCTION.
19. VALLEY RAFTERS WITH SPANS LONGER THAN 18' SHALL BE LVLS SUPPORTED AS NOTED. PROVIDE TEMPORARY STIFF KNEE SUPPORT UNTIL ALL SHEATHING AND RAFTER TIE/COLLARS ARE INSTALLED.
20. DO NOT SCALE THESE DRAWINGS. IF DISCREPANCIES ARE NOTED, CONTACT THE ENGINEER.
21. DESIGN BASIS PROVIDED BY ARCHITECT AND ARCHITECT IS RESPONSIBLE FOR ALL ARCHITECTURAL FEATURES, DIMENSIONS, COMPLIANCE WITH ALL ACCESS/EGRESS REQUIREMENTS, FIRE CODE AND LIFE SAFETY DESIGN ISSUES.



1 / A5.0

PLAN: roof

All rafters to be #2 SPF

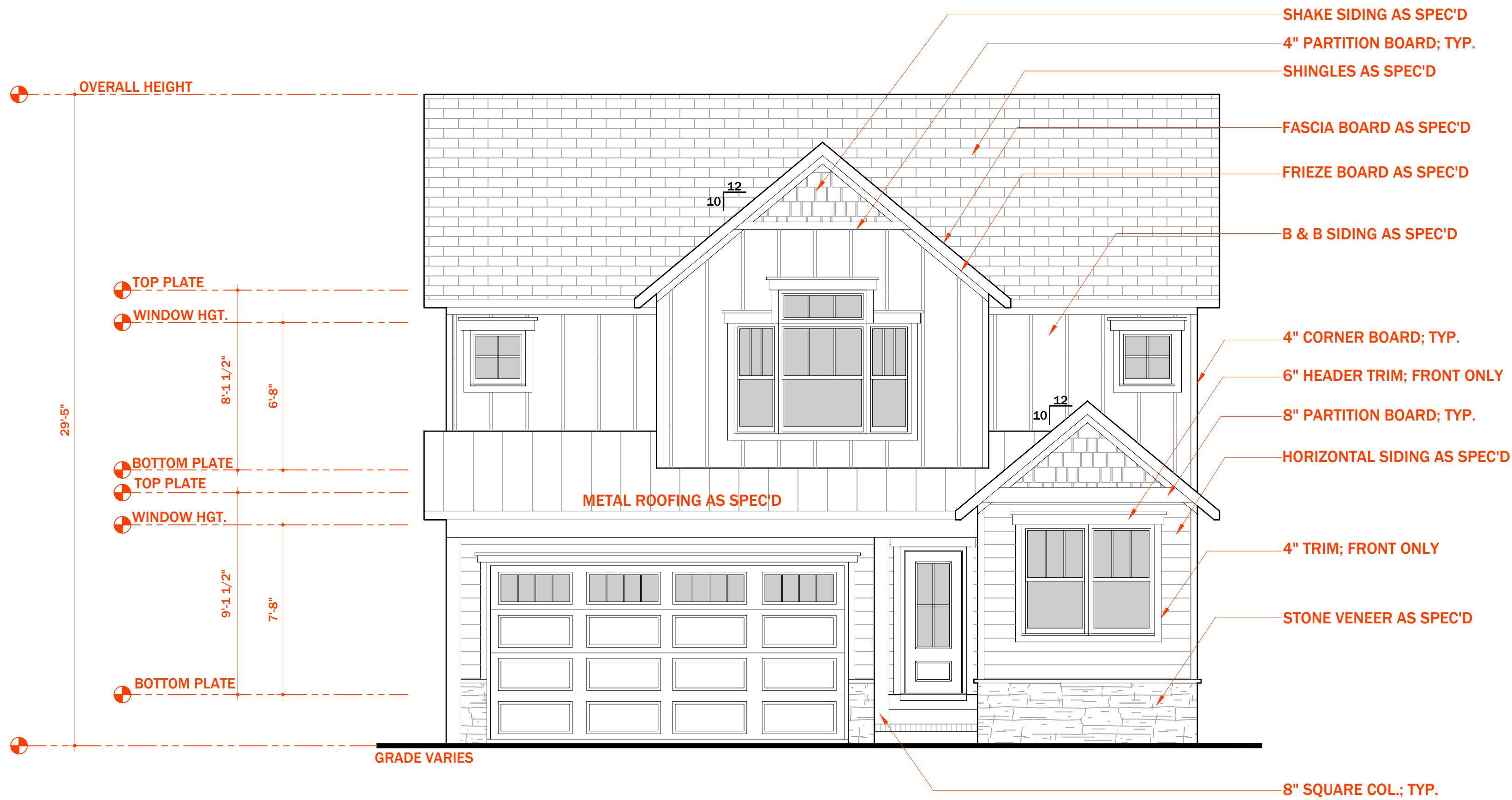


08 17 2021

ATTIC VENTILATION

REQUIRED			
1366 SQ. FT. OF ATTIC / 300 =		4.55 SQ. FT. OF INLET & OUTLET	
PROVIDED (INLET)			(TOTAL OF INLET)
SOFFIT .07 SQ. FT. PER x	40	LINEAR FT. =	2.8
LINEAR FT.		OF VENT.	
			SQ. FT. OF VENT. 58 %
(OUTLET)			(TOTAL OF OUTLET)
RIDGE .11 SQ. FT. PER x	20	LINEAR FT. =	2.2
LINEAR FT.		OF VENT.	
			SQ. FT. OF VENT. 46 %
GABLE			
SQ. FT. PER x		NO. VENTS =	
VENT.			SQ. FT. OF VENT. %
			TOTAL SQ. FT. OF VENT. 4.8





1 / A1.0 ELEVATION: front

GENERAL ELEVATION NOTES:

1. ROOF OVERHANGS ARE 12" UNLESS NOTED OTHERWISE.
2. PROVIDE FOUNDATION AND ROOF VENTS AS REQUIRED BY STATE BUILDING CODE.
3. PROVIDE STEPS TO FINISH FLOOR LEVEL AS REQUIRED BY STATE BUILDING CODES.
4. SECOND FLOOR WINDOWS TO BE 24" ABOVE FINISH FLOOR.

TOTAL SQUARE FOOTAGES:

863 - FIRST FLOOR  
1,220 - SECOND FLOOR

TOTAL HEATED - 2,083

8 - FRONT PORCH  
390 - GARAGE

PLANS DESIGNED TO THE  
2018 NORTH CAROLINA STATE  
RESIDENTIAL BUILDING CODE



2 / A1.0 ELEVATION: right

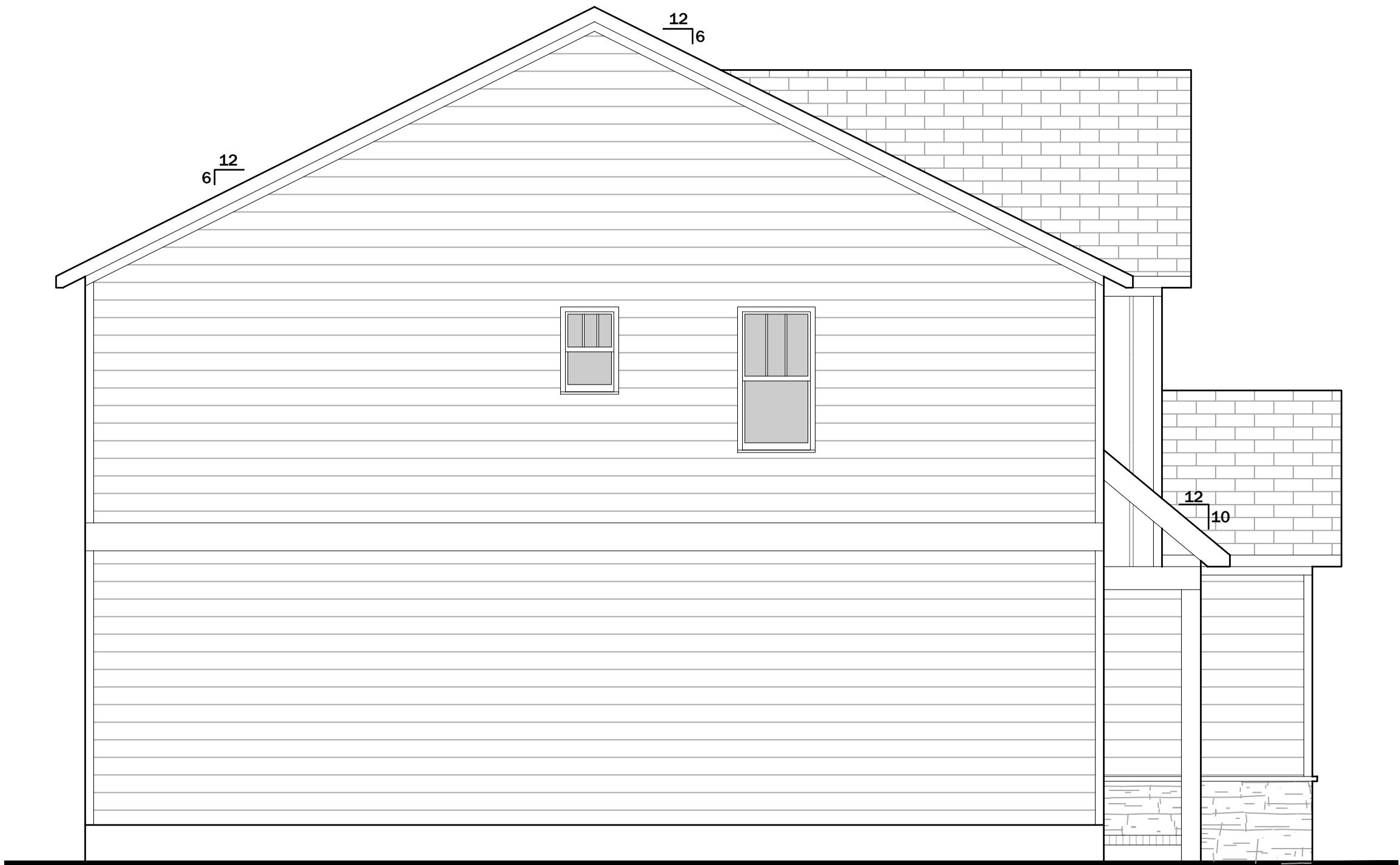


GRADE VARIES

1 / A2.0 ELEVATION: rear

GENERAL ELEVATION NOTES:

- 1. ROOF OVERHANGS ARE 12" UNLESS NOTED OTHERWISE.
- 2. PROVIDE FOUNDATION AND ROOF VENTS AS REQUIRED BY STATE BUILDING CODE.
- 3. PROVIDE STEPS TO FINISH FLOOR LEVEL AS REQUIRED BY STATE BUILDING CODES.
- 4. SECOND FLOOR WINDOWS TO BE 24" ABOVE FINISH FLOOR.



GRADE VARIES

2 / A2.0 ELEVATION: left

Revisions


812 Trinity Park Dr

Structural Review Only  
Town of Wake Forest  
APPROVED  
02/01/2022  
Larry Rochelle

Notes
1. ....
2. ....
3. ....

Project North

Drawing Title  
Elevation

Scale 1/4"=1'-0"

Sheet No.  
A2.0

© SSDS,LLC 2021

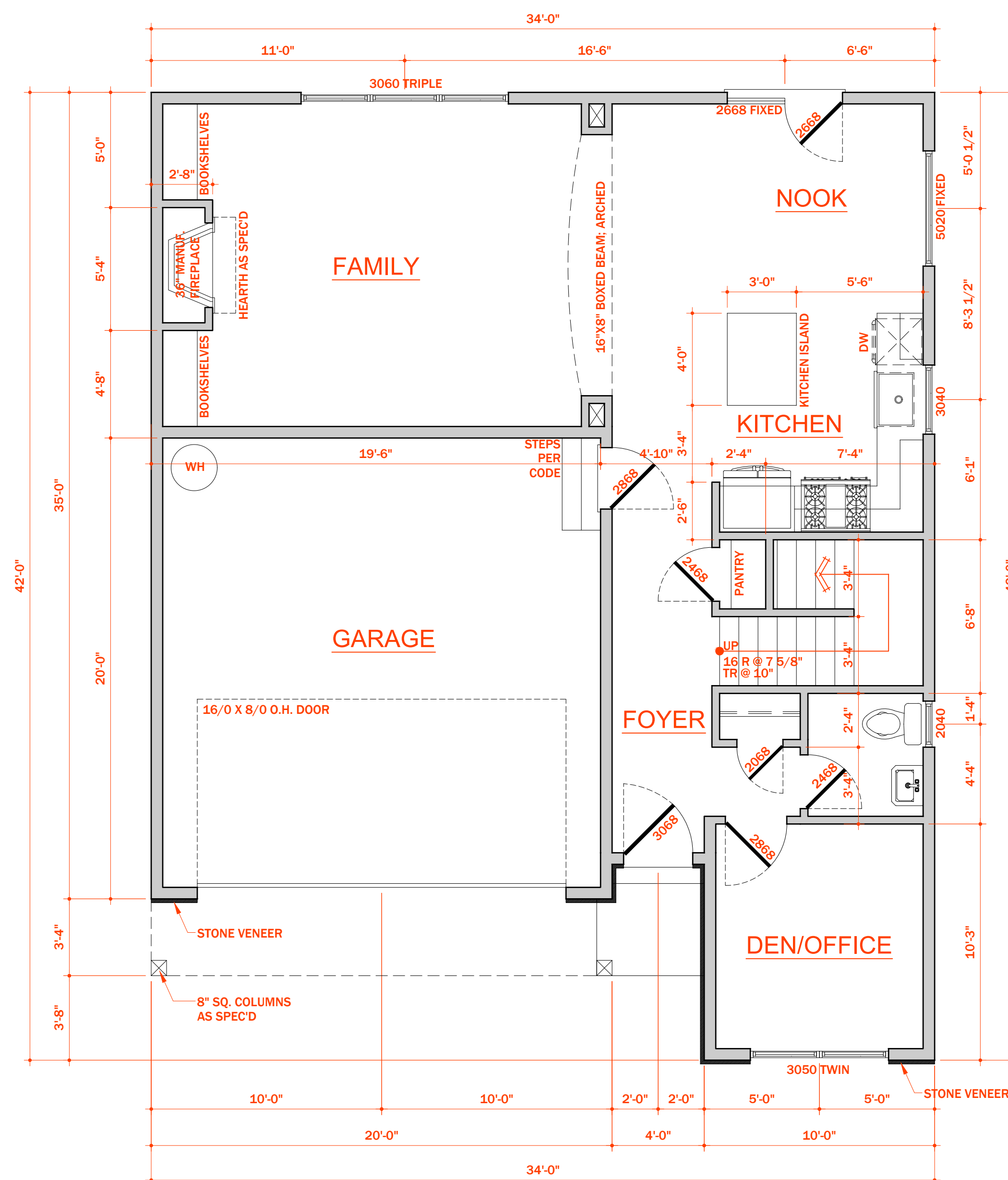


1

Structural Review Only  
Town of Wake Forest  
**APPROVED**  
02/01/2022  
Larry Rochelle

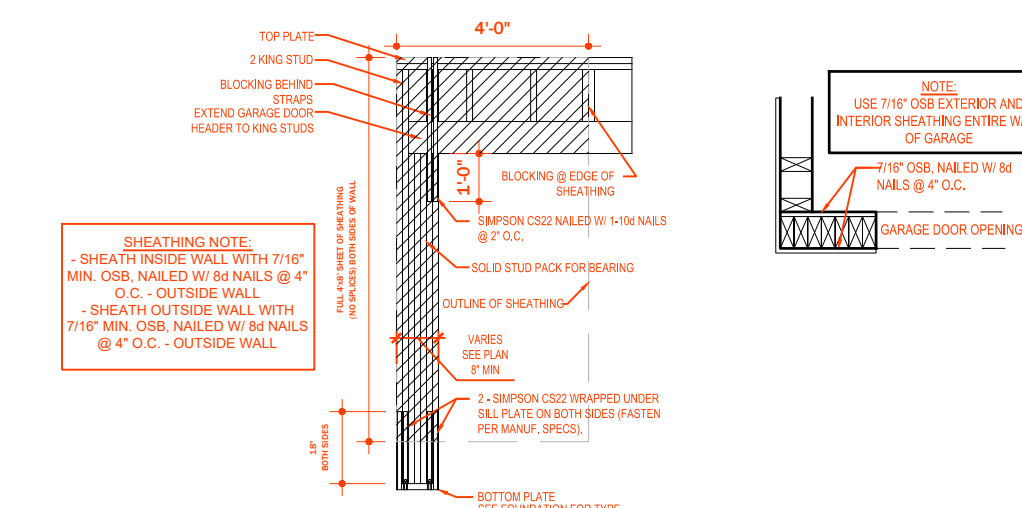
Scale  $1/4"=1'-0"$ 

# A4.0



863 HEATED SQUARE FEET  
390 SQUARE FEET - GARAGE  
8 SQUARE FEET - FRONT PORCH

- 1) 9'-0" CEILING HGT 9'1" 1/2" PLATE HGT.) U.N.O.
- 2) ALL WALLS FIGURED AT 4" WIDTHS U.N.O.
- 3) SET WINDOWS AT 7'4" A.F.F.  
UNLESS NOTED OTHERWISE
- 4) DIMENSIONS ARE TO FRAMING  
UNLESS NOTED OTHERWISE
- 5) CONSULT WINDOW MANUFACTURER'S  
SPECS. FOR EGRESS REQUIREMENTS,  
PRESSURE RATINGS, & ROUGH OPEN'GS.
- 6) ALL DIMENSIONS SHOWN ARE TO FACE OF FOUNDATION  
AND/OR FACE OF STUD (FRAMING) UNLESS NOTED  
OTHERWISE
- 7) PROVIDE WOOD BLOCKING IN WALL FRAMING FOR ALL  
ACCESSORIES INCLUDING BUT NOT LIMITED TO:  
TOWEL BARS, TOILET PAPER HOLDERS, SHELVE  
ATTACHMENT, ROBE HOOKS, GRAB BARS, ETC.




## PORTAL FRAMING

# A4.0



Revisions:


---

---

---

---

---

---

---

---

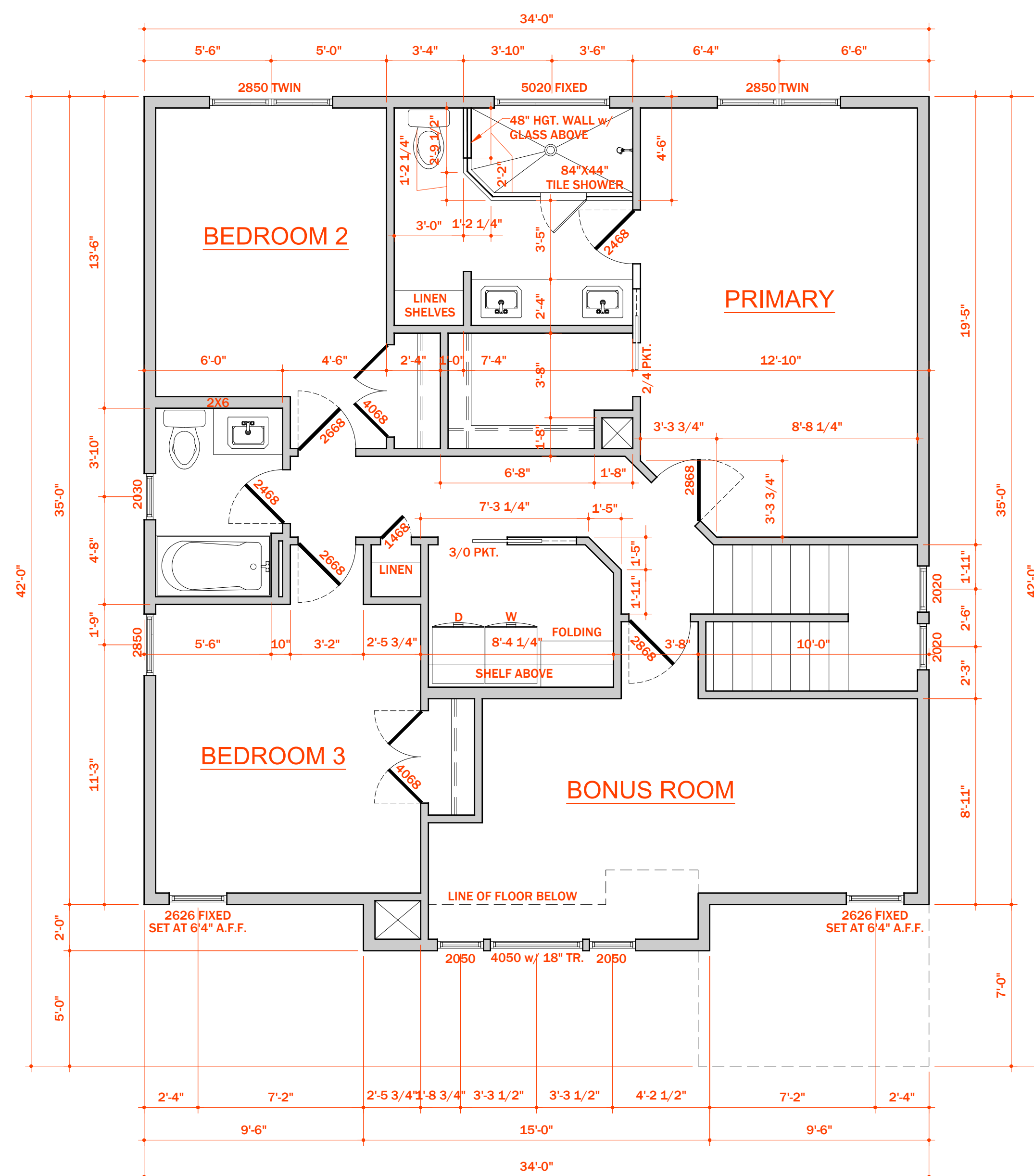
---

---

Sheet No.

# A4.1

© SSDS, LLC 2021



**1,220 HEATED SQUARE FEET**

- 1) 8'-0" CEILING HGT. 8'-1 1/2" PLATE HGT.) U.N.O.
- 2) ALL WALLS FIGURED AT 4' WIDTHS U.N.O.
- 3) SET WINDOWS AT 7'-4" A.F.F.  
UNLESS NOTED OTHERWISE.
- 4) DIMENSIONS ARE TO FRAMING  
UNLESS NOTED OTHERWISE.
- 5) CONSULT WINDOW MANUFACTURER'S  
SPECS. FOR EGRESS REQUIREMENTS,  
PRESSURE RATINGS, & ROUGH OPNG'S.
- 6) ALL DIMENSIONS SHOWN ARE TO FACE OF FOUNDATION  
AND/OR FACE OF STUD (FRAMING) UNLESS NOTED  
OTHERWISE.
- 7) PROVIDE WOOD BLOCKING IN WALL FRAMING FOR ALL  
ACCESSORIES INCLUDING BUT NOT LIMITED TO:  
TOWEL BARS, TOILET PAPER HOLDERS, SHELVING  
ATTACHMENT, ROBE HOOKS, GRAB BARS, ETC.