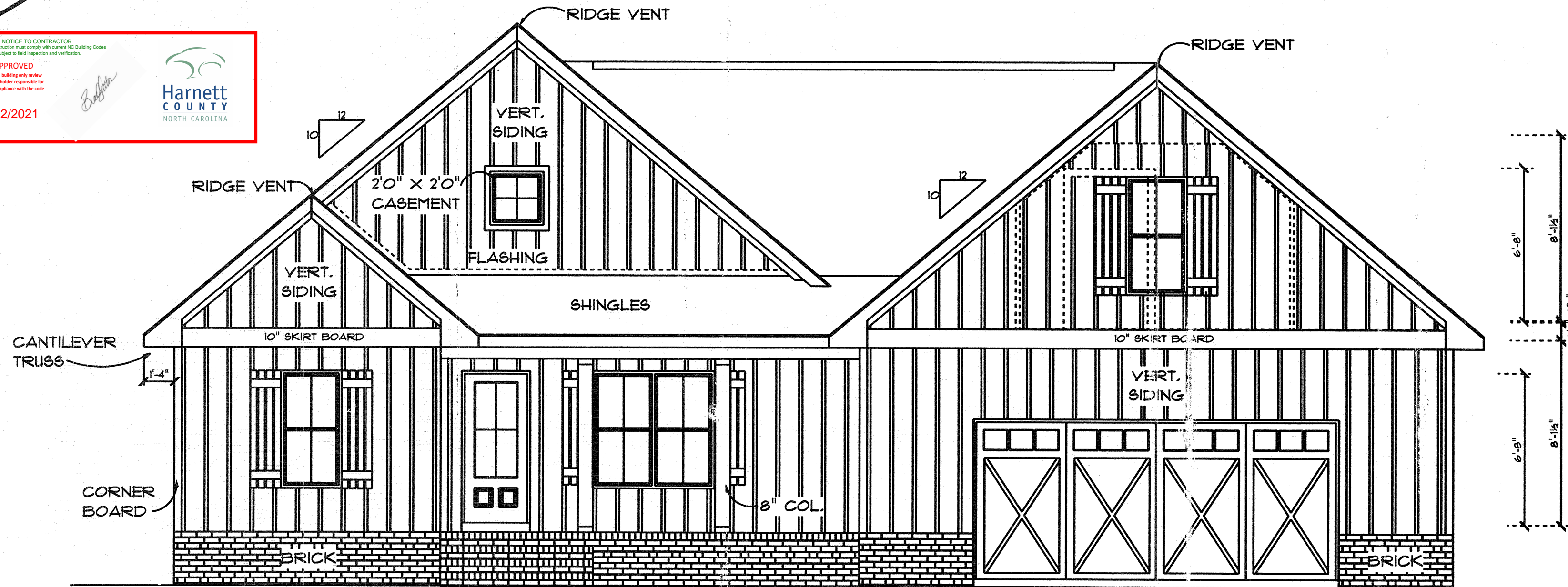


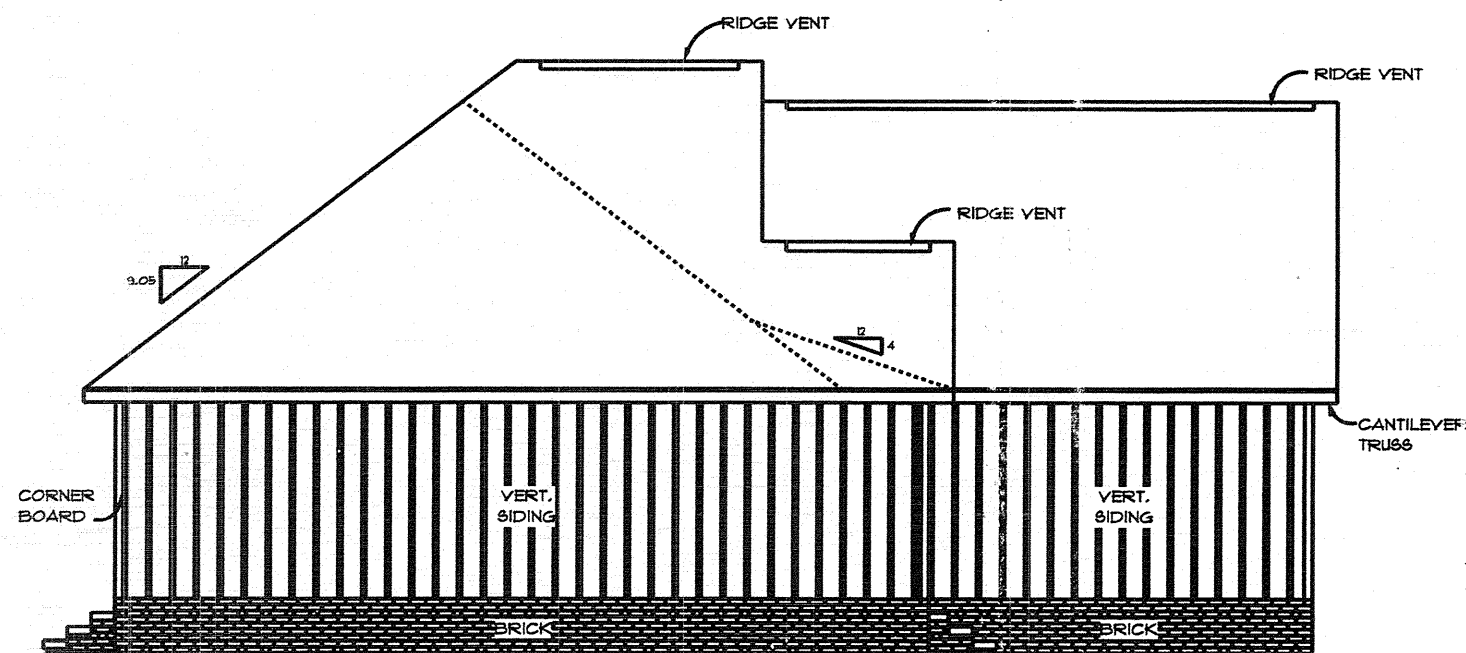
NOTICE TO CONTRACTOR
 All construction must comply with current NC Building Codes and is subject to field inspection and verification.

APPROVED
 Limited building only review
 Permit holder responsible for full compliance with the code

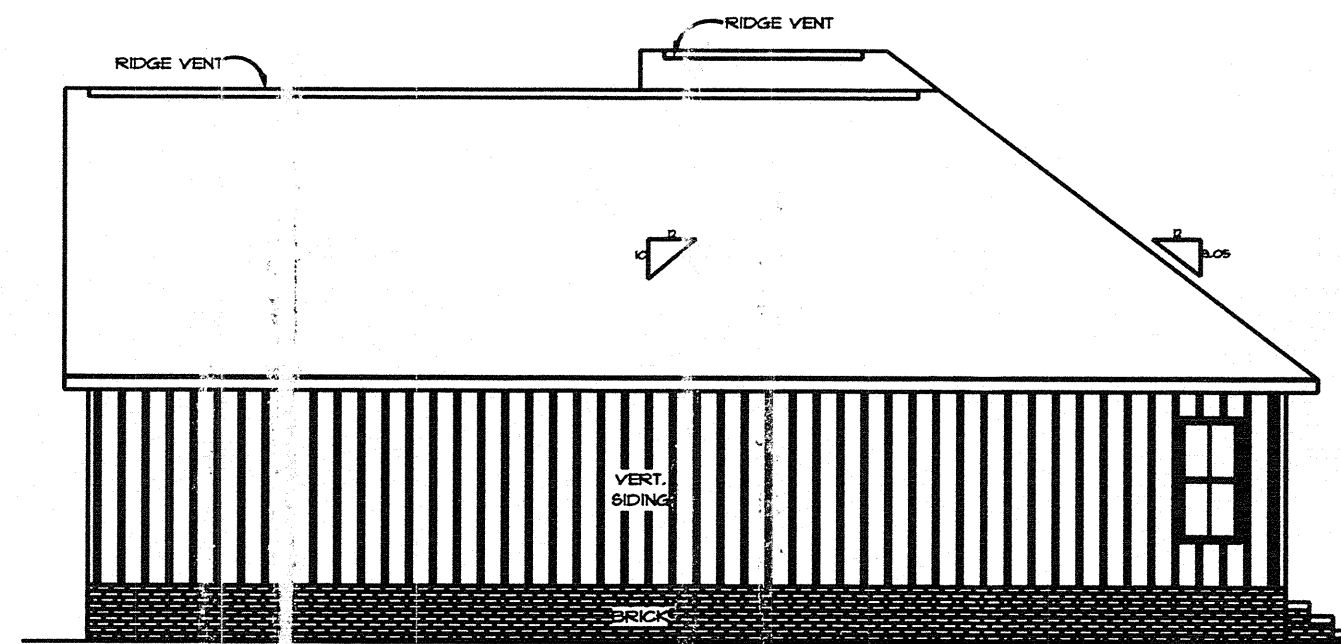
02/12/2021

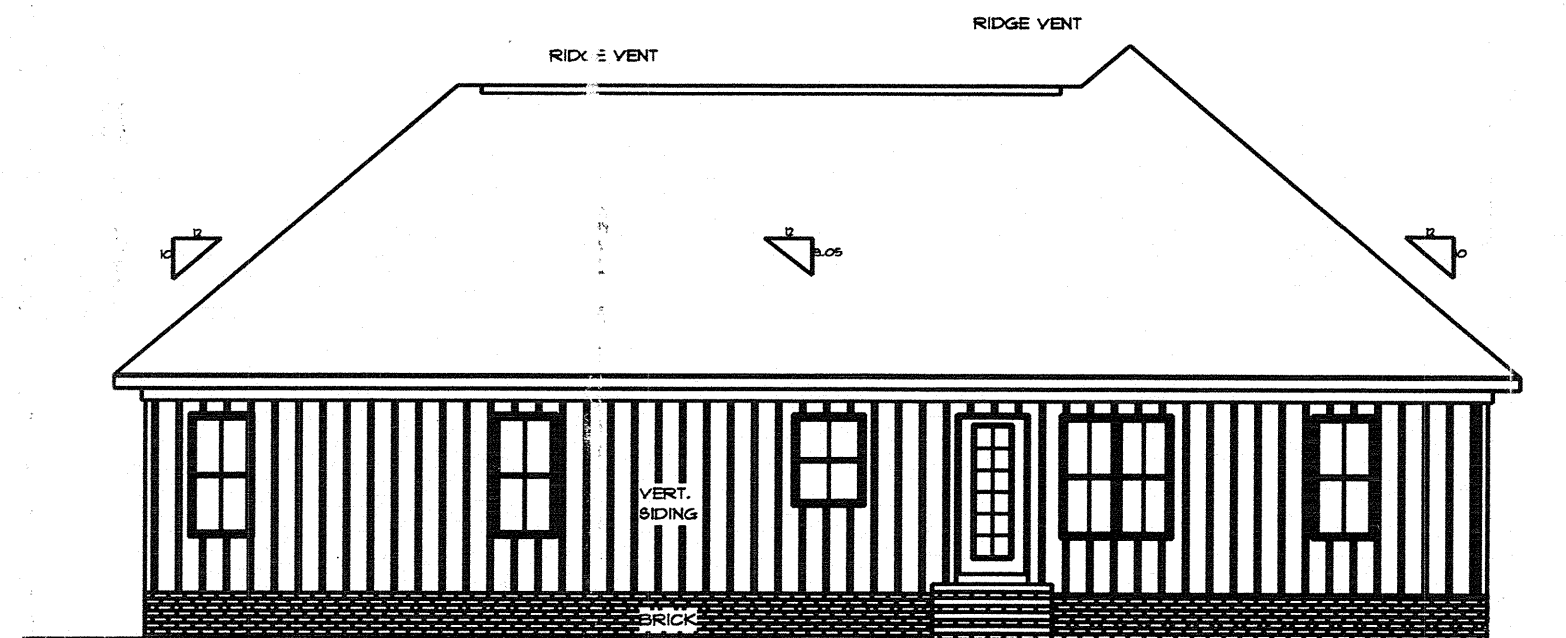
FRONT ELEVATION
 SCALE: 1/4" = 1'0"



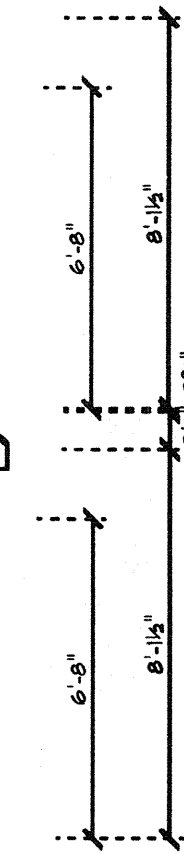
LEFT ELEVATION
 SCALE: 1/8" = 1'0"



RIGHT ELEVATION
 SCALE: 1/8" = 1'0"



REAR ELEVATION
 SCALE: 1/8" = 1'0"



"I DO HEREBY CERTIFY THAT THIS DRAWING OR PLAN AND RELATED SPECIFICATIONS MEET ALL LOCAL REQUIREMENTS AND ARE IN SUBSTANTIAL CONFORMITY WITH VA MINIMUM PROPERTY REQUIREMENTS INCLUDING THE ENERGY CONSERVATION STANDARDS OF THE 1992 COUNCIL OF AMERICAN BUILDING OFFICIALS (CABO) MODEL ENERGY

CHARLES SMITH ASSOC.
 RESIDENTIAL DESIGNER
 FAYETTEVILLE, NORTH CAROLINA
 WWW.CSAPLANS.COM
 PHONE: (910) - 484-5924

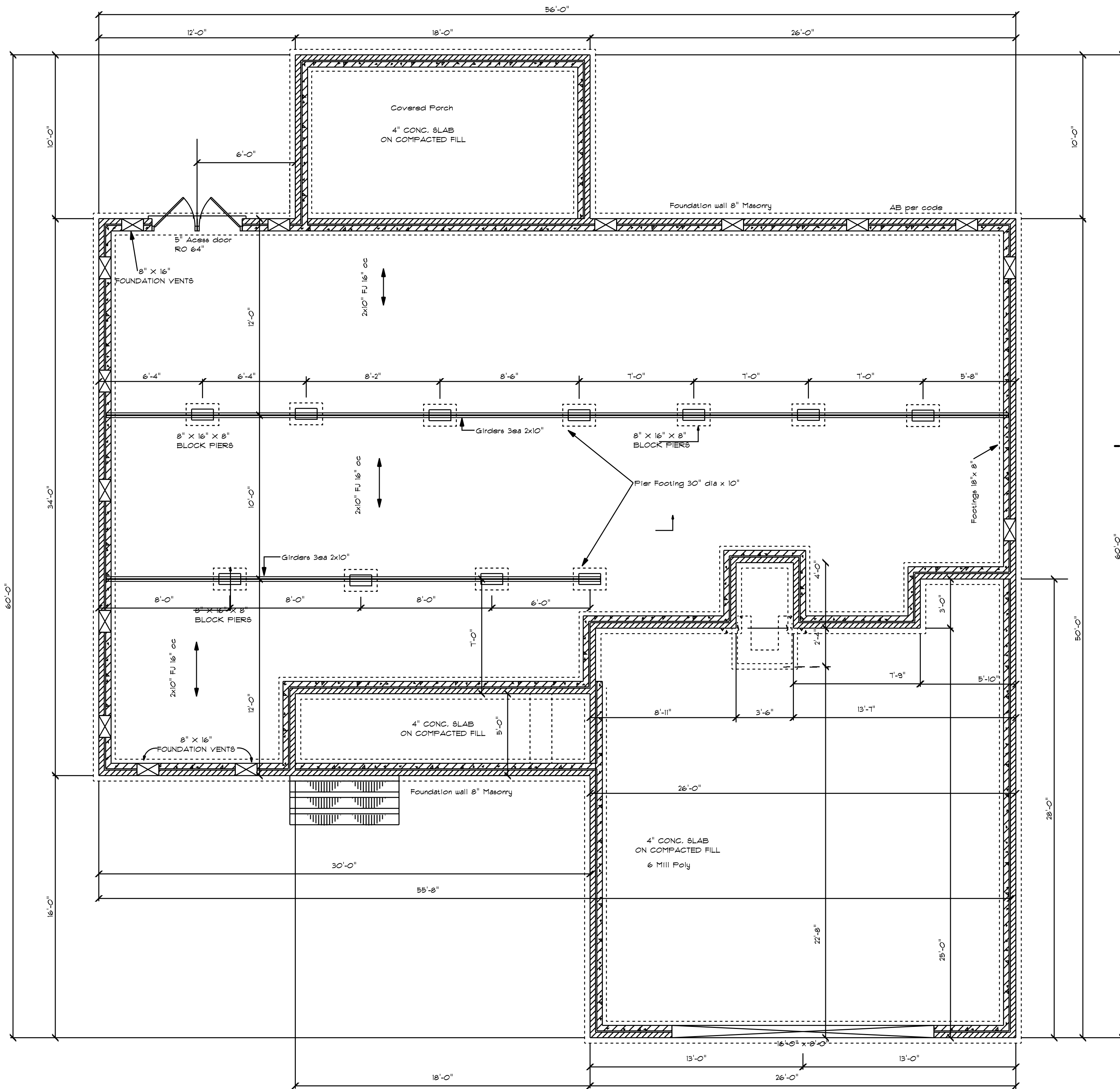
SCALE: AS NOTED
 DATE: SEP. 2020
 DRAWN BY: ECL

CHARLES SMITH ASSOCIATES
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RESIDENCE OF
BRENDA JACOBS

BJ-1519

1519 S/F FIRST FLOOR
 (DOES NOT INCLUDE STAIRS)
 337 S/F UNFINISHED BONUS ROOM
 (INCLUDES STAIRS)



Plan 1519

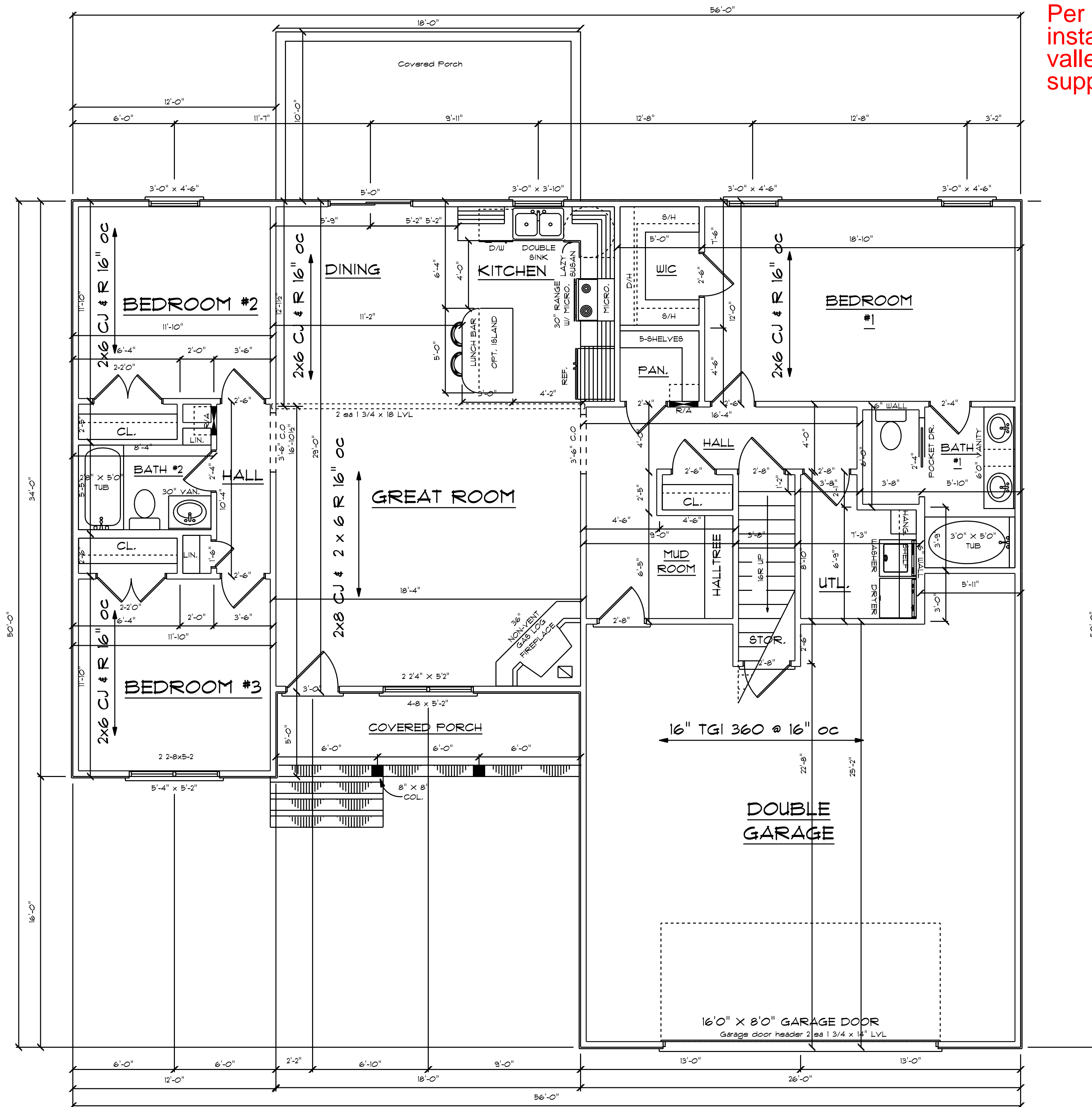
Brenda Jacobs
232 Vic Keith Road

FOUNDATION VENTILATION
- 1519 S/F / 150 = 10.12 S/F REQUIRED

FOUNDATION PLAN

SCALE: 1/4" = 1'0"

Per Builder, midpoint supports to be installed for rafter support. Live LVL valley over garage left side, to be supported per code.

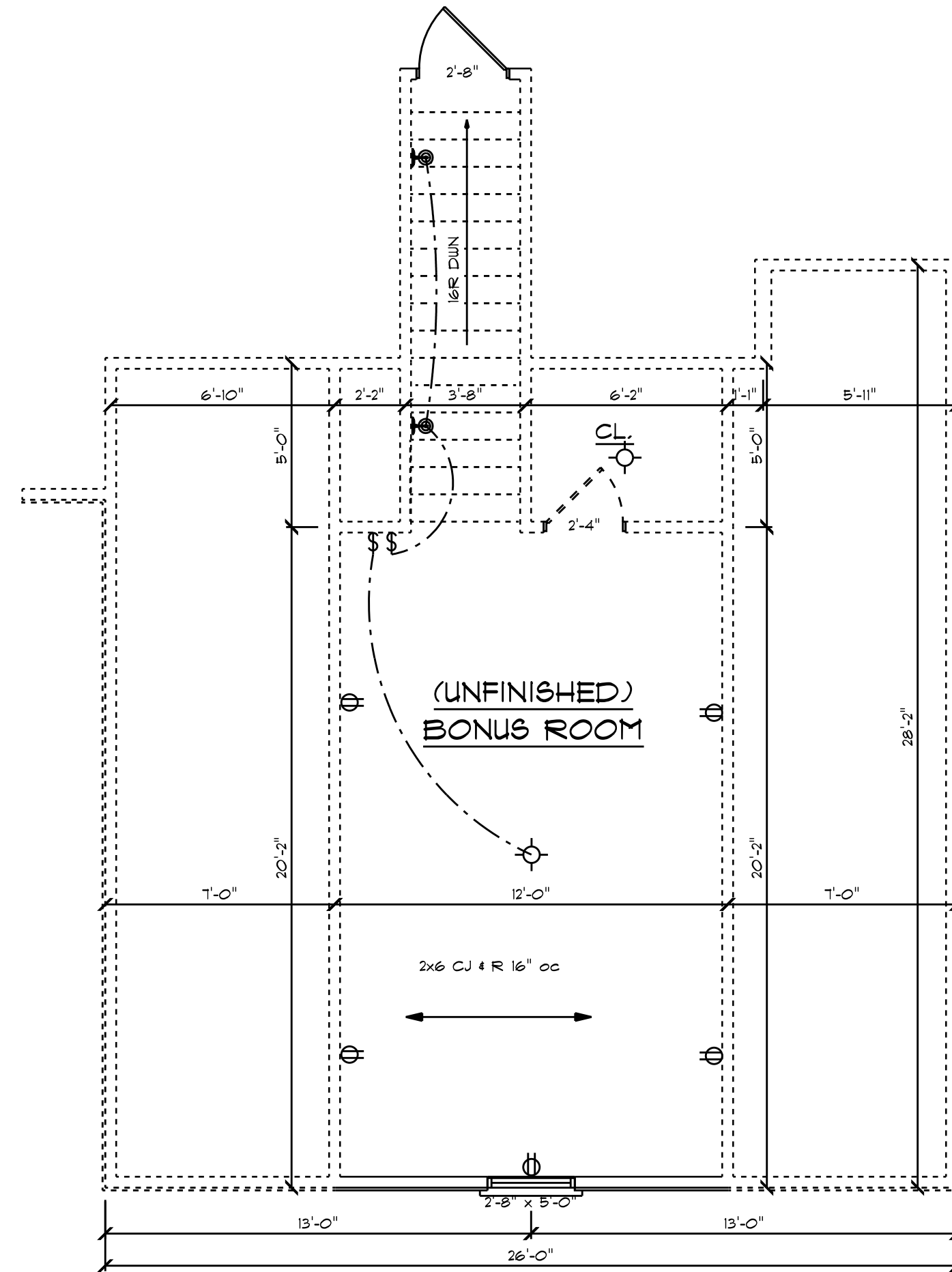


Plan 1519

Brenda Jacobs
232 Vic Keith Road

FLOOR PLAN

SCALE: 1/4" = 1'0"



Plan 1519

Brenda Jacobs
232 Vic Keith Road

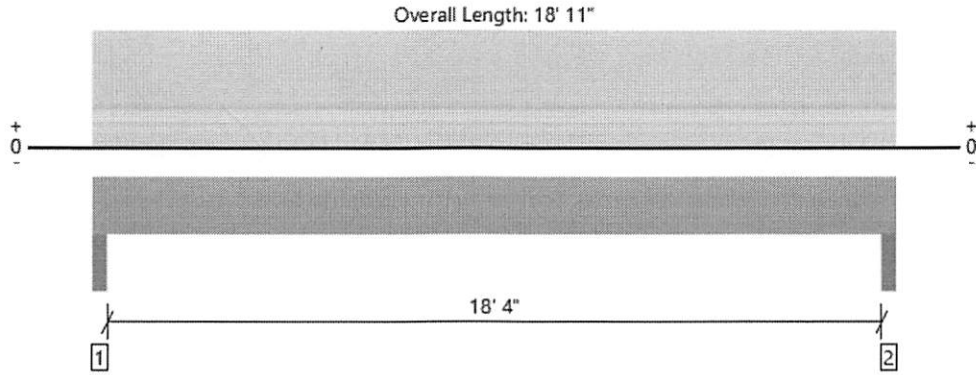
SECOND FLOOR
(UNFINISHED)
SCALE: 1/4" = 1'0"

Level			
Member Name	Results	Current Solution	Comments
Great Room	Passed	2 piece(s) 1 3/4" x 18" 2.0E Microllam® LVL	
Bonus Room Joist	Passed	1 piece(s) 16" TJI® 360 @ 16" OC	
Garage Door Header	Passed	2 piece(s) 1 3/4" x 14" 2.0E Microllam® LVL	

ForteWEB Software Operator	Job Notes
James (Jay) Johnson Weyerhaeuser (910) 495-5383 jay.johnson@weyerhaeuser.com	



Level, Great Room
 2 piece(s) 1 3/4" x 18" 2.0E MicroIam® LVL



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDF	Load Combination (Pattern)
Member Reaction (lbs)	5901 @ 2"	8881 (3.50')	Passed (66%)	--	1.0 D + 1.0 L (All Spans)
Shear (lbs)	4783 @ 1' 9 1/2"	11970	Passed (40%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	26931 @ 9' 5 1/2"	38753	Passed (69%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.375 @ 9' 5 1/2"	0.619	Passed (L/594)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.541 @ 9' 5 1/2"	0.929	Passed (L/412)	--	1.0 D + 1.0 L (All Spans)

System : Floor
 Member Type : Flush Beam
 Building Use : Residential
 Building Code : IBC 2018
 Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Column - SPF	3.50"	3.50"	2.33"	1810	4091	5901	None
2 - Column - SPF	3.50"	3.50"	2.33"	1810	4091	5901	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	6' 7" o/c	
Bottom Edge (Lu)	18' 11" o/c	

•Maximum allowable bracing intervals based on applied load.

Multiple Member Connections								
Type	Location	Fastener		Placement	Rows	O.C.	# of Fasteners	Details
Uniform	0 to 18' 11"	10d Nail (0.128" x 3")		One Side	3	12"	--	L17

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Comments
0 - Self Weight (PLF)	0 to 18' 11"	N/A	18.4	--	
1 - Uniform (PSF)	0 to 18' 11" (Front)	7' 2 1/2"	12.0	30.0	Attic storage
2 - Uniform (PSF)	0 to 18' 11" (Back)	7' 2 1/2"	12.0	30.0	Attic storage

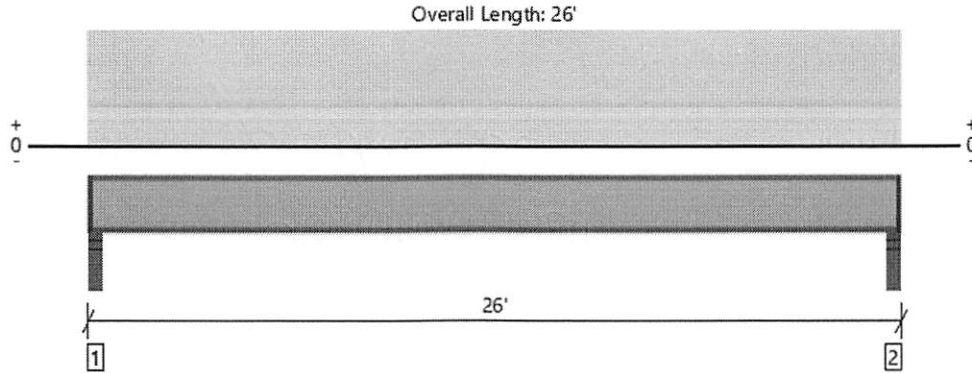
Member Notes
No roof load added to beam

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The product application, input design loads, dimensions and support information have been provided by ForteWEB Software Operator

ForteWEB Software Operator	Job Notes
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Level, Bonus Room Joist
1 piece(s) 16" TJI® 360 @ 16" OC



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDF	Load Combination (Pattern)
Member Reaction (lbs)	895 @ 2 1/2'	1232 (2.38")	Passed (73%)	1.00	1.0 D + 1.0 L (All Spans)
Shear (lbs)	881 @ 3 1/2'	2190	Passed (40%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	5672 @ 13'	8405	Passed (67%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.588 @ 13'	0.640	Passed (L/522)	--	1.0 D + 1.0 L (All Spans)
Total Load Defl. (in)	0.765 @ 13'	1.279	Passed (L/401)	--	1.0 D + 1.0 L (All Spans)
TJ-Pro™ Rating	28	Any	Passed	--	--

System : Floor
Member Type : Joist
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/480) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.
- A structural analysis of the deck has not been performed.
- Deflection analysis is based on composite action with a single layer of 23/32" Weyerhaeuser Edge™ Panel (24" Span Rating) that is glued and nailed down.
- Additional considerations for the TJ-Pro™ Rating include: None.

Supports	Bearing Length			Loads to Supports (lbs)			Accessories
	Total	Available	Required	Dead	Floor Live	Total	
1 - Stud wall - SPF	3.50"	2.38"	1.75"	208	693	901	1 1/8" Rim Board
2 - Stud wall - SPF	3.50"	2.38"	1.75"	208	693	901	1 1/8" Rim Board

• Rim Board is assumed to carry all loads applied directly above it, bypassing the member being designed.

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	4' 7" o/c	
Bottom Edge (Lu)	25' 10" o/c	

- TJI joists are only analyzed using Maximum Allowable bracing solutions.
- Maximum allowable bracing intervals based on applied load.

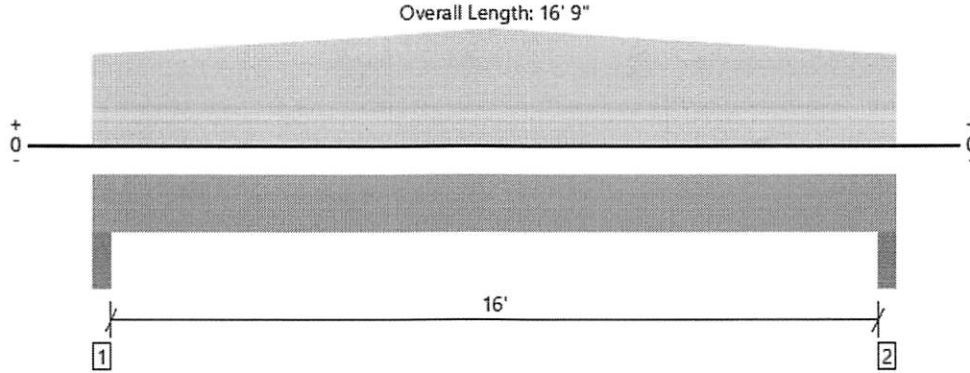
Vertical Load	Location (Side)	Spacing	Dead (0.90)	Floor Live (1.00)	Comments
1 - Uniform (PSF)	0 to 26'	16"	12.0	40.0	Default Load

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ForteWEB Software Operator	Job Notes
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Level, Garage Door Header
2 piece(s) 1 3/4" x 14" 2.0E Microllam® LVL



All locations are measured from the outside face of left support (or left cantilever end). All dimensions are horizontal.

Design Results	Actual @ Location	Allowed	Result	LDF	Load Combination (Pattern)
Member Reaction (lbs)	2031 @ 3"	11419 (4.50")	Passed (18%)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Shear (lbs)	1565 @ 1' 6 1/2"	9310	Passed (17%)	1.00	1.0 D + 1.0 L (All Spans)
Moment (Ft-lbs)	7753 @ 8' 4 1/2"	24258	Passed (32%)	1.00	1.0 D + 1.0 L (All Spans)
Live Load Defl. (in)	0.063 @ 8' 4 1/2"	0.542	Passed (L/999+)	--	1.0 D + 0.75 L + 0.75 S (All Spans)
Total Load Defl. (in)	0.268 @ 8' 4 1/2"	0.813	Passed (L/728)	--	1.0 D + 0.75 L + 0.75 S (All Spans)

System : Wall
Member Type : Header
Building Use : Residential
Building Code : IBC 2018
Design Methodology : ASD

- Deflection criteria: LL (L/360) and TL (L/240).
- Allowed moment does not reflect the adjustment for the beam stability factor.

Supports	Bearing Length			Loads to Supports (lbs)					Accessories
	Total	Available	Required	Dead	Floor Live	Roof Live	Snow	Total	
1 - Trimmer - SPF	4.50"	4.50"	1.50"	1529	335	335	335	2534	None
2 - Trimmer - SPF	4.50"	4.50"	1.50"	1529	335	335	335	2534	None

Lateral Bracing	Bracing Intervals	Comments
Top Edge (Lu)	16' 9" o/c	
Bottom Edge (Lu)	16' 9" o/c	

•Maximum allowable bracing intervals based on applied load.

Vertical Loads	Location (Side)	Tributary Width	Dead (0.90)	Floor Live (1.00)	Roof Live (non-snow: 1.25)	Snow (1.15)	Comments
0 - Self Weight (PLF)	0 to 16' 9"	N/A	14.3	--	--	--	
1 - Uniform (PSF)	0 to 16' 9"	1'	12.0	40.0	-	-	Floor
2 - Uniform (PSF)	0 to 16' 9"	2'	15.6	-	20.0	20.0	Roof
3 - Tapered (PLF)	0 to 8' 4 1/2"	N/A	90.0 to 160.0	-	-	-	Gable end wall
4 - Tapered (PLF)	8' 4 1/2" to 16' 9"	N/A	160.0 to 90.0	-	-	-	Gable end wall

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