

NOTICE TO CONTRACTOR
 All construction shall comply with current NC Building Codes and be subject to field inspection and verification.
 APPROVED
 Licensed Building only
 Permit holder responsible for full compliance with the code
 02/22/2021
 HARNETT COUNTY
 NORTH CAROLINA

FRONT ELEVATION

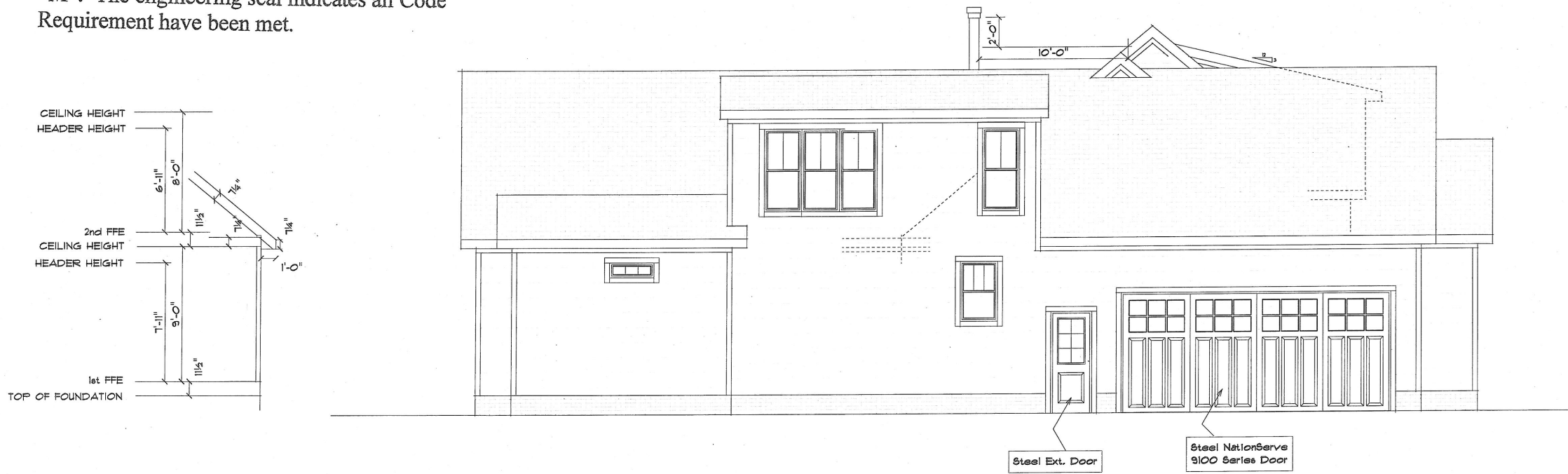
SCALE: 1/4" = 1'-0"



Designed by Brunssen Engineering Services PA
 Fritz Brunssen – NC registered engineer. The Drawings meet the requirements of the 2018 NC State Building Code: Residential Code and App. "M". The engineering seal indicates all Code Requirement have been met.

LEFT ELEVATION

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



Brunssen Engineering
 36 Churchwell Ct.
 Durham, NC 27713

Plan Area Totals		
First Floor Heated	2913	Sq. Ft.
Second Floor Heated	367	Sq. Ft.
Total Heated	3280	Sq. Ft.
Garage	670	Sq. Ft.
Front Porch	260	Sq. Ft.
Screen Porch	393	Sq. Ft.
Deck	0	Sq. Ft.
Attic	0	Sq. Ft.
Total Unheated	1313	Sq. Ft.
Total Gross Sq. Footage	4593	Sq. Ft.

Sheet 1

DATE 11-15-2020

REVISIONS

Grayson Dare Homes, Inc.
 3108 Lyckan Pkwy. Suite 206
 Durham, N.C. 27707

SCALE 1/4" = 1'-0"

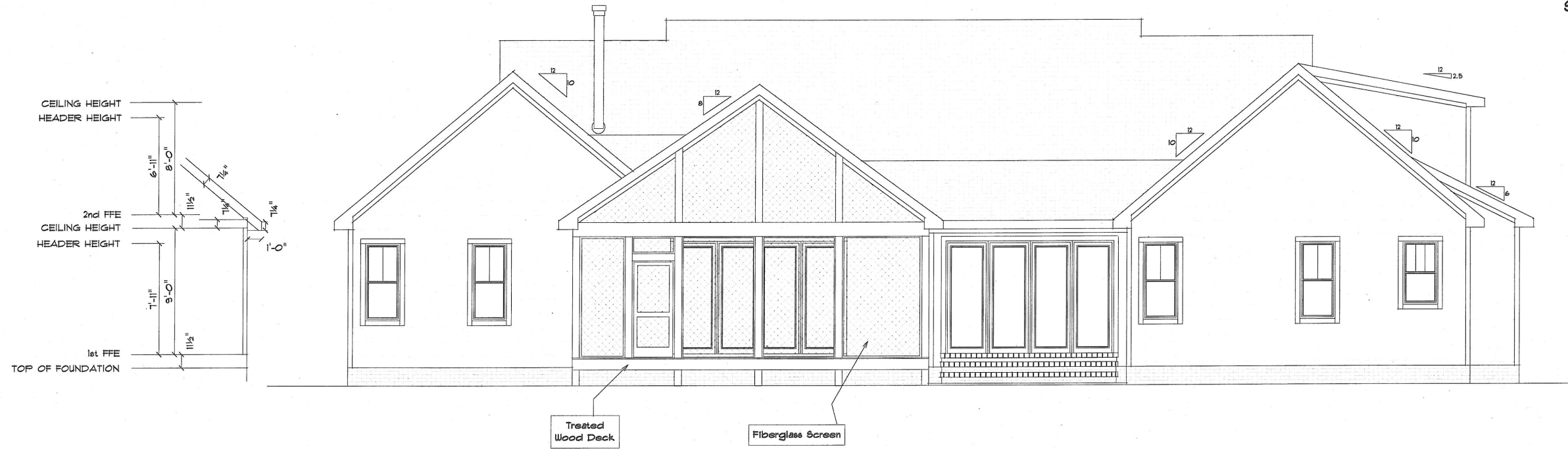
DRAWN BY

APPROVED

Mike and Tracey Hyder
 0 Jackson Rd. Fuquay Varina NC 27536

REAR ELEVATION

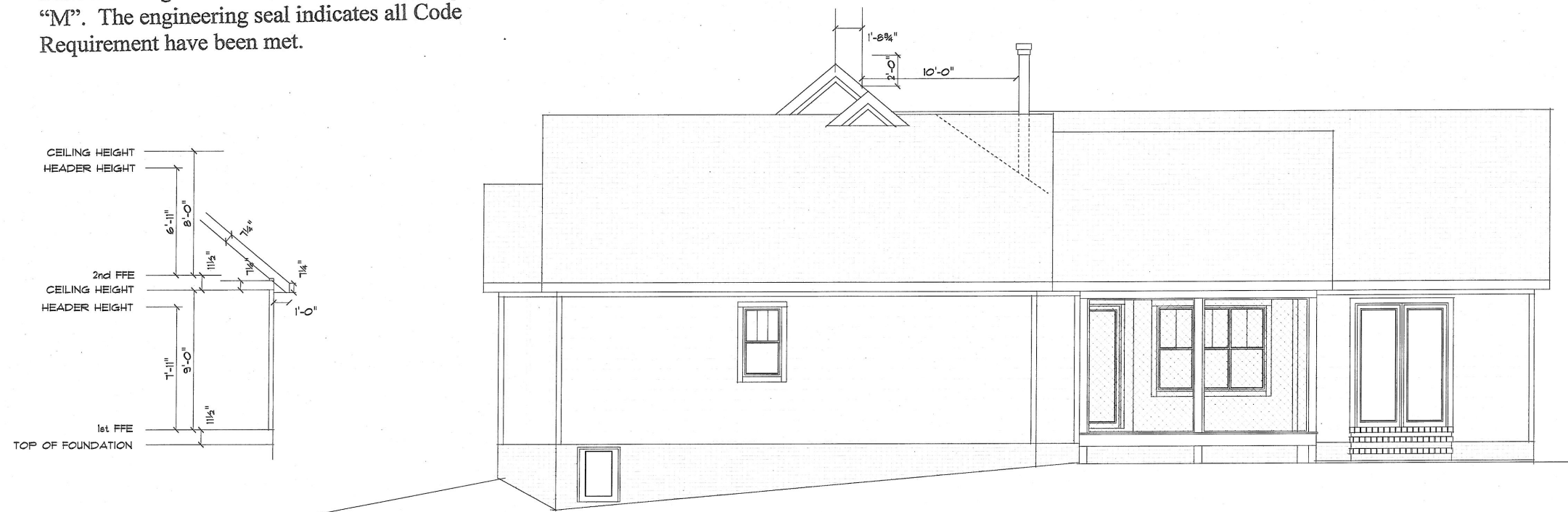
SCALE: 1/4" = 1'-0"



Designed by Brunssen Engineering Services PA
 Fritz Brunssen – NC registered engineer. The
 Drawings meet the requirements of the 2018 NC
 State Building Code: Residential Code and App.
 “M”. The engineering seal indicates all Code
 Requirement have been met.

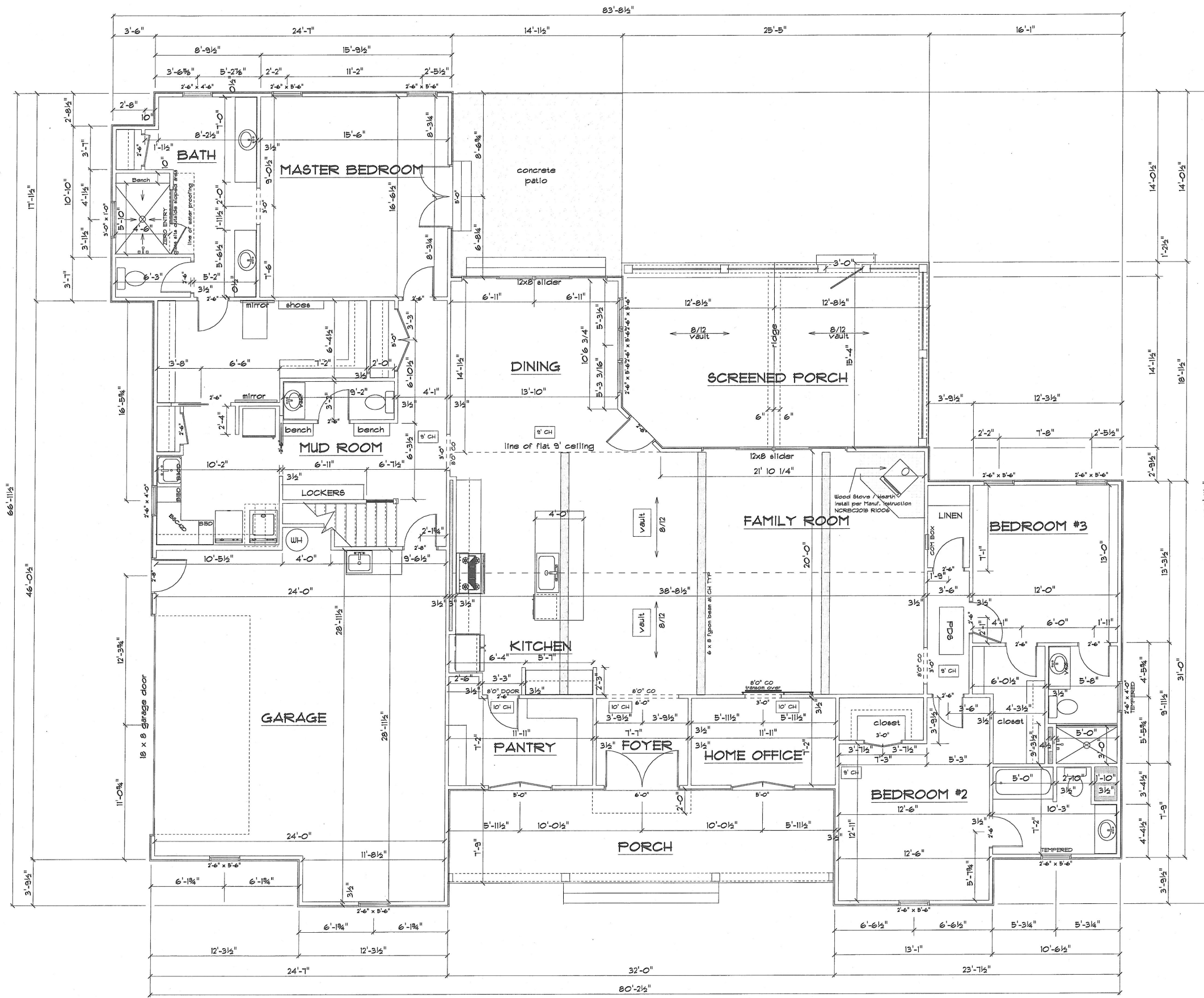
RIGHT ELEVATION

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



Brunssen Engineering
 36 Churchwell Ct.
 Durham, NC 27713

Sheet		2	
DATE	11-15-2020	SCALE	1/4" = 1'-0"
REVISED		DRAWN BY	
Grayson Dare Homes, Inc. 3108 Lyckan Pkwy, Suite 206 Durham, N.C. 27707		APPROVED	
Mike and Tracey Hyder O Jackson Rd. Fuquay Varina NC 27536			



1ST FLOOR LAYOUT
SCALE: 1/4" = 1'-0"

Brunssen Engineering
36 Churchwell Ct.
Durham, NC 27713

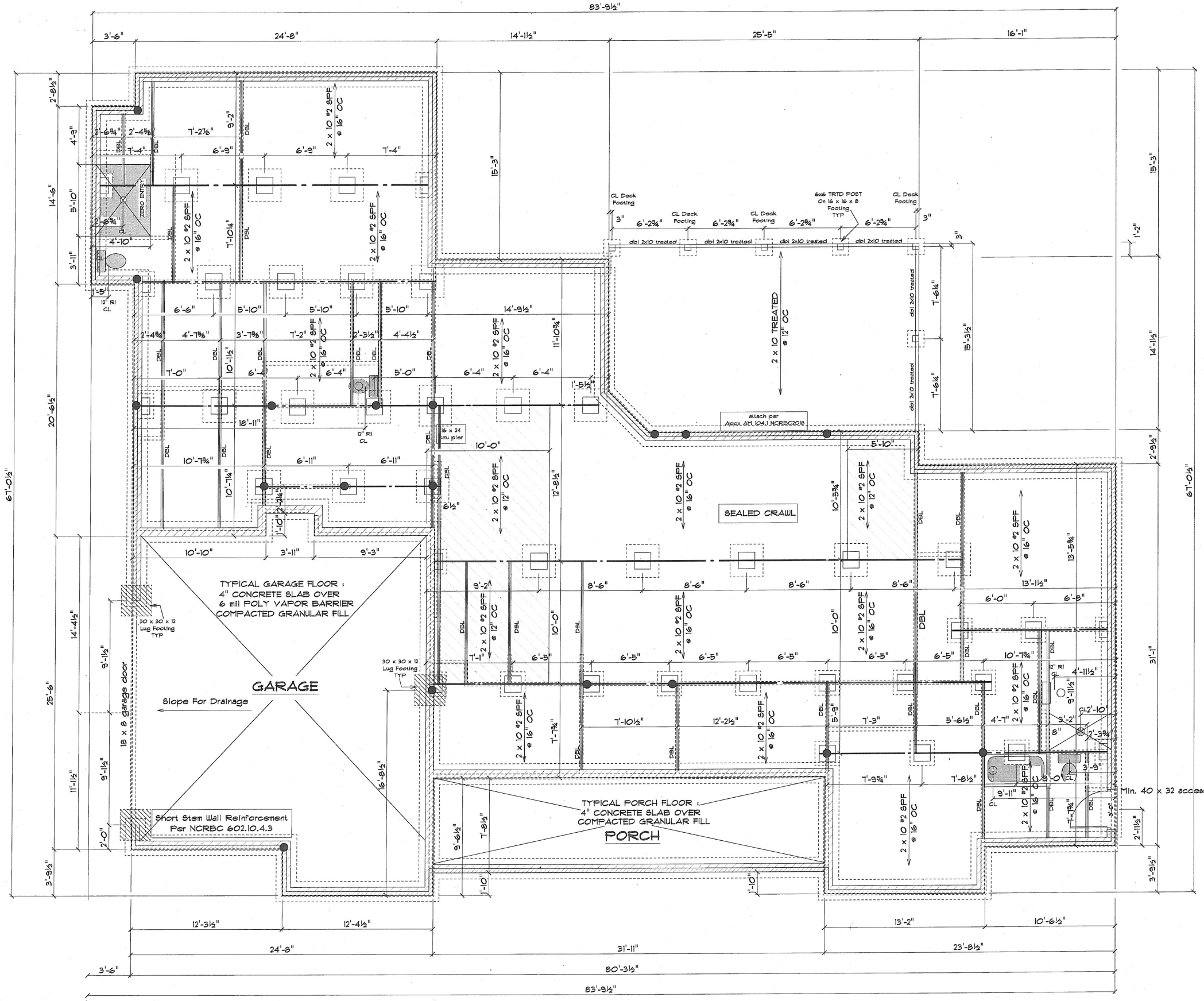
Designed by Brunssen Engineering Services PA
Fritz Brunssen – NC registered engineer. The
Drawings meet the requirements of the 2018 NC
State Building Code: Residential Code and App.
"M". The engineering seal indicates all Code
Requirement have been met.

Mike and Tracey Hyder
O Jackson Rd. Fuquay Varina NC 27526

SCALE: 1/4" = 1'-0"
DRAWN BY:
APPROVED:

Grayson Dare Homes, Inc.
3708 Lyckan Pkwy, Suite 206
Durham, N.C. 27707

DATE: 11-15-2020
REVISIONS:
Sheet: **3**



TYPICAL GARAGE FLOOR:
4" CONCRETE SLAB OVER
6 mil POLY VAPOR BARRIER
COMPACTED GRANULAR FILL

GARAGE

TYPICAL PORCH FLOOR:
4" CONCRETE SLAB OVER
COMPACTED GRANULAR FILL

PORCH

SEALED CRAWL

- General Notes:
All Symbols Unless Otherwise Noted (AON)
- 8" Masonry (4" brick block) w/ 8" solid cap on 18" x 8" Continuous Footing 3000 PSI Concrete
 - 8" CMU Wall w/ 8" solid cap on 20" x 8" Continuous Footing 3000 PSI Concrete
 - 3 Ply 2 x 10 SYP Girder
 - Double 2 x 10 Floor
 - Wall from floor above
 - Operable vinyl crawl vent
 - 16" x 16" w/ 8" solid cap masonry pier on 24" x 24" x 10" footing 4000
 - 8" x 16" w/ 8" solid cap masonry pier on 24" x 24" x 10" footing
 - Point Load Above Solid Block to Bearing
- 1/2" x 10" anchor bolts w/ T-embed to be installed on all foundation walls @ 6' OC 4 within 12" of corner
- TRANSFER ALL POINT LOADS FROM ABOVE TO FULL BEARING
- DESIGNED TO NCRBC 2018
- Vent Calculations
- Venting Requirement
Provide 100% of ground surface covered with an approved vapor barrier and vents are located within 3 feet of each corner.
- XXXX/500 = XX Sq. Ft. of vent required
VENTS PROVIDE 31 SQ FT OF NET FREE AREA EA.
XXXX/0.31 = XXX Vents Required
XXXX VENTS PROVIDED *** SEALED CRAWL ****



1-25-2021

Designed by Brunssen Engineering Services PA
Fritz Brunssen - NC registered engineer. The Drawings meet the requirements of the 2018 NC State Building Code: Residential Code and App. "M". The engineering seal indicates all Code Requirement have been met.

Mike and Tracey Hyder
0 Jackson Rd. Fuquay Varina, NC 27526

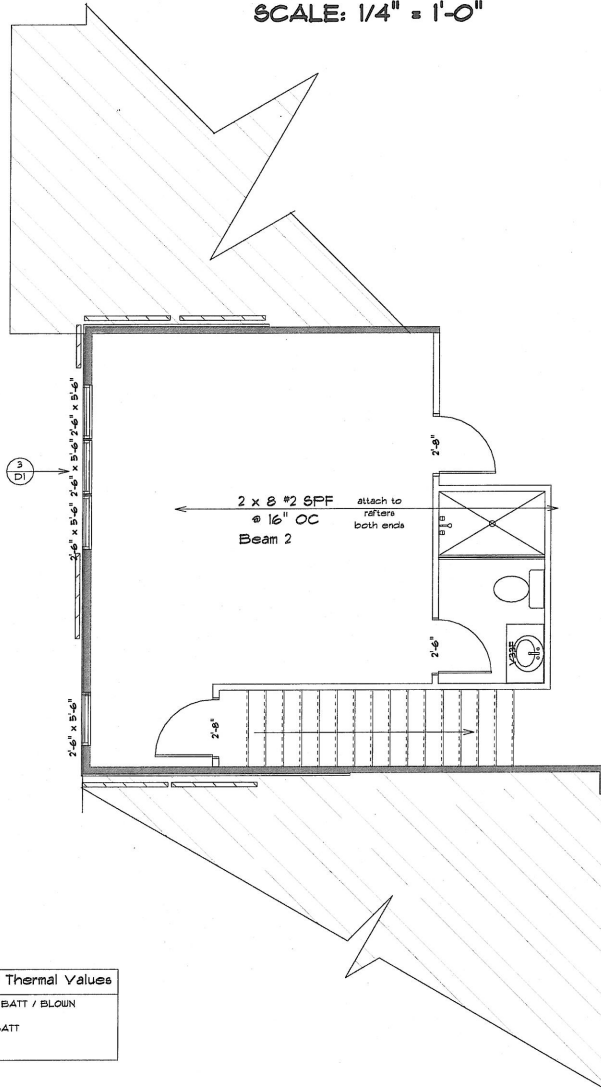
SCALE 1/4" = 1'-0"
DRAWN BY
APPROVED

Grayson Dare Homes, Inc.
3708 Lyckan Pkwy. Suite 206
Durham, N.C. 27707

DATE 11-15-2020
REVISID
Sheet 5

2ND FLOOR STRUCTURAL PLAN

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



Insulation / Thermal Values

CEILING	R-38 BATT / BLOWN
WALL	R-19
FLOOR	R-19 BATT
U FACTOR	.31
SHGC	.28

Beam Schedule

beam #	beam size	support
Beam 1	double 1.75 x 24 LVL - portal frame	4 studs / 4 studs
Beam 2	double 1.75 x 24 LVL - stack on Beam 1	/ 6 Studcs
Beam 3	double 1.75 x 14 LVL - 3 Studcs	/ 3 Studcs
Beam 4	double 1.75 x 9.25 - 4 studs	/ 4 studs
Beam 5	double 1.75 x 9.25 - 4 studs	/ 4 studs
Beam 6	double 1.75 x 9.25 - 2 studs	/ 2 studs
Beam 7	double 1.75 x 9.25 - 4 studs	/ Simpson HHUS410
Beam 8	double 1.75 x 18 LVL - 6 Studcs	/ 4 studs
Beam 9	double 1.75 x 9.25 - 4 studs	/ 4 studs
Beam 10	double 1.75 x 18 LVL - 6 Studcs	/ 4 cripple
Beam 11	double 1.75 x 14 LVL - 5 Studcs	/ 5 Studcs
Beam 12	double 1.75 x 9.25 - 2 studs	/ 2 studs
Beam 13	double 1.75 x 9.25 - 2 studs	/ 2 studs
Beam 14	double 1.75 x 9.25 - 2 studs	/ 2 studs
Beam 15	double 1.75 x 14 LVL - 5 Studcs	/ 5 Studcs
Beam 16	double 1.75 x 9.25 - 3 studs	/ columns / 3 studs
Beam 17	double 1.75 x 14 LVL - 4 Studcs	/ Studcs

Bracing Shall Be CS-WSP

END CONDITIONS SHOWN
NCRBC R602.10.1

▶ 800 lb tie down

▬ 24" Braced Wall Panel

▬ 48" Braced Wall Panel

Dwelling / Garage Separation

SEPARATION	MATERIAL
From the Residence and Attics	Not less than 1/2 gypsum board or equivalent, applied to the garage side
From all habitable rooms above garage	Not less than 5/8 Inch TYPE X gypsum board or equivalent
Structure(s) supporting floor/ceiling assemblies used for separation required by this code	Not less than 1/2 inch gypsum board or equivalent
Garages located less than 3 ft. from a dwelling unit on the same lot	Not less than 1/2 inch gypsum board or equivalent, applied to the interior side of exterior walls that are within this area lot
Door from Garage to House	Min. 2 hour fire rated

Notes:

- All headers to be 2 x 8 unless otherwise noted
- Indicates wall this floor
- Indicates wall floor above / below
- Indicates bearing wall
- Stud under double and triple joists for full bearing
- stud column (see beam chart for # of jack studs reqd.) all other stud columns to be 2 studs unless otherwise noted.
- Simpson HUS-210 or similar unless otherwise noted

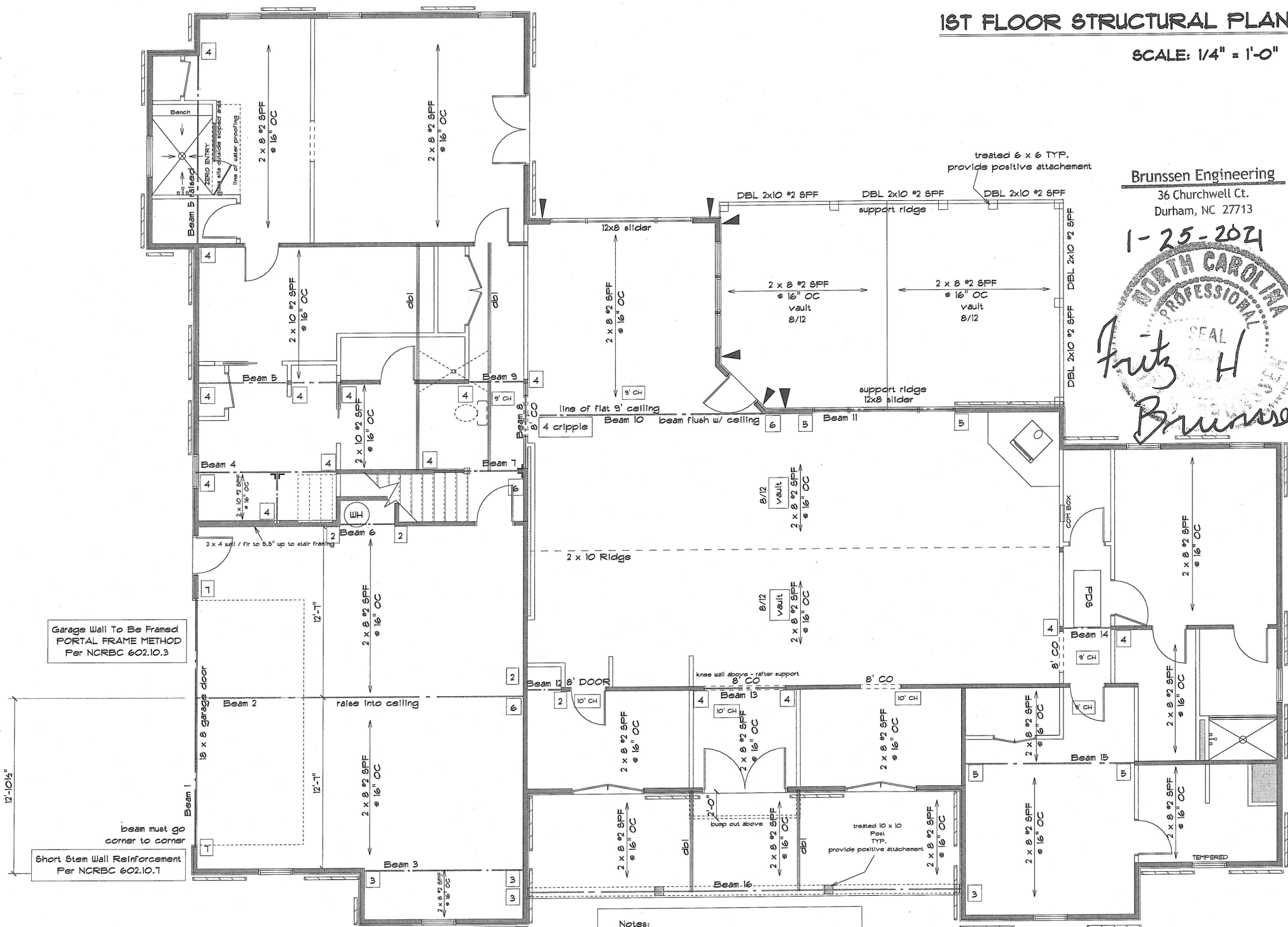
Windows exceeding height requirements per NCRBC 612.2
Must have opening limiters installed per NCRBC 612.4

Designed to NCRBC2018

All stairs / landings shall meet or exceed NCRBC2018 R311.1 and R312
All Exterior Porches / Decks / Screen Porches Shall have Rail & Guards where required
Exterior Rails and Guards shall meet or exceed NCRBC2018 AM111

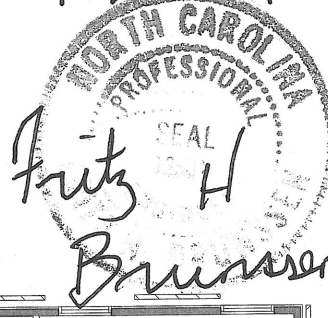
1ST FLOOR STRUCTURAL PLAN

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

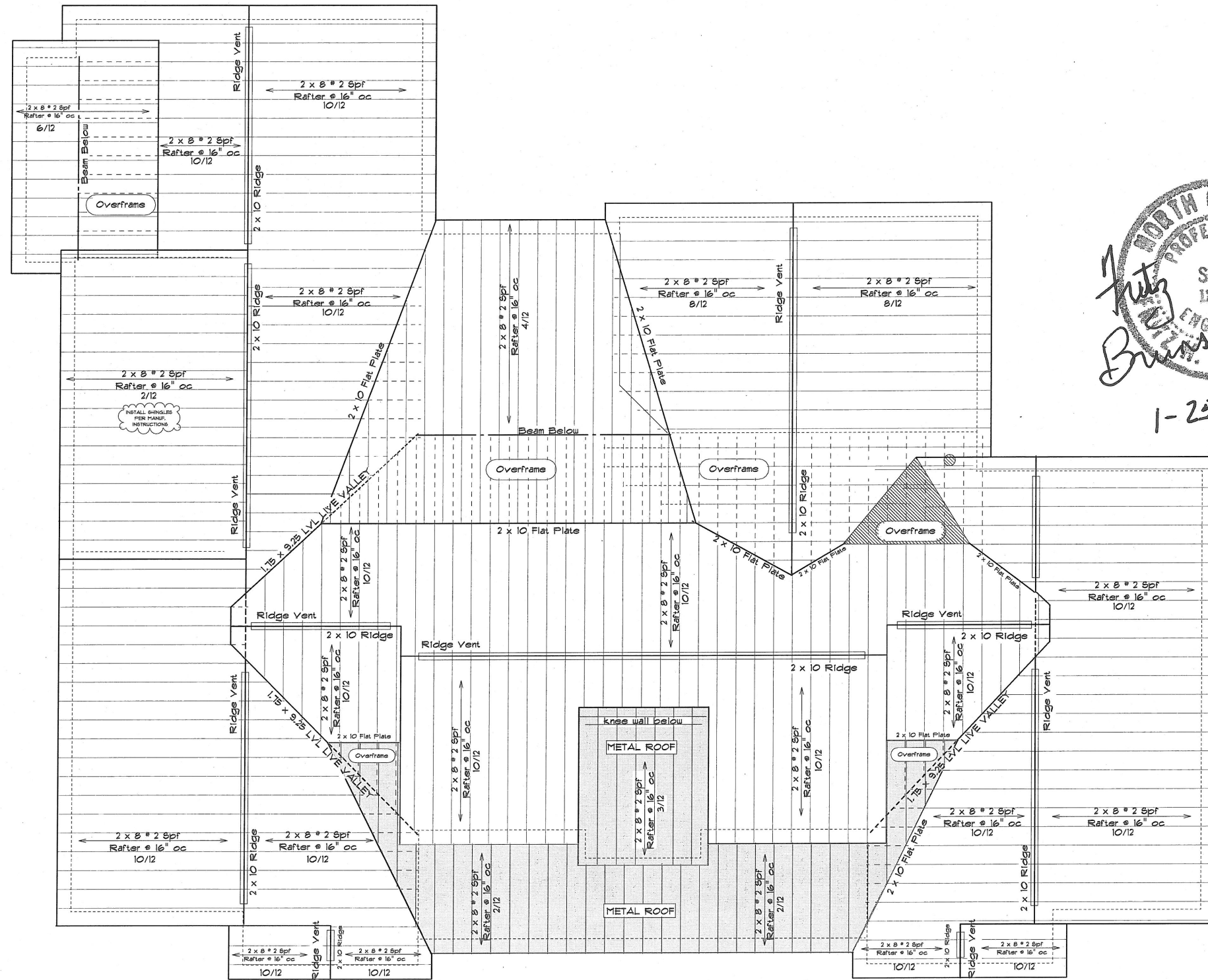


Brunssen Engineering
36 Churchwell Ct.
Durham, NC 27713

1-25-2021



Designed by Brunssen Engineering Services PA
Fritz Brunssen - NC registered engineer. The Drawings meet the requirements of the 2018 NC State Building Code: Residential Code and App. "M". The engineering seal indicates all Code Requirement have been met.



1-25-2021

1-25-2021

PROFESSIONAL SEAL
 NORTH CAROLINA
 ENGINEER
 BRUNSEN

Roof General Notes:
 All rafters to be 2 x 8 spf U.O.N.
 All Ridge to be 2 x 10 spf U.O.N.
 All Overhangs to be 12" U.O.N.
 Dormer and screen porch Overhangs to be 12" in front 6" on sides.
 All Shingle Types to be installed per manufacturers instructions over 15lb felt attached per code.

Roof Venting Calculations:
 Roof Area = 3137
 3137 / 300 = 10.45 Sq. Ft. of Net free Area Req.
 Install Minimum 50% Venting and no more than 80% in upper areas of roof.
 Use continuous soffit vent.
 185 Linear Ft. Provided = .0625 Sq. Ft. Net free Area
 185 * .0625 = 12.38 Net free Area
 Ridge vent Provided
 140 Linear Ft. Ridge Vent Provided = 16.1 Sq. Ft. per Linear Ft. Net free Area
 140 * 16.1 = 2254.6/144 = 15.65 Net free Area
 Total Soffit Venting Provided = 12.38 Sq. Ft.
 Total Ridge Venting Provided = 15.65 Sq. Ft.
 Total Net free Area Provided = 27.83 Sq. Ft.
 Total required = 10.45 Sq. Ft.

Mike and Tracey Hyder
 00 Jackson Rd. Fuquay Varina NC 27526

SCALE 1/4" = 1'-0"
 DRAWN BY
 APPROVED

Grayson Dare Homes, Inc.
 3708 Lyckan Pkwy, Suite 206
 Durham, N.C. 27701

DATE 11-5-2020
 REVISED

