



ASM Engineering, PLLC

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License # P-2502

March 24, 2024

Attn: Mr. Etowski
Pride Custom Homes, Inc.
30 McFarland Rd.
Pinehurst, NC 28374

Re: 1204 W. Blackman Rd.
Dunn, NC 28334
ASM# 24040

Dear Mr. Etowski,

ASM Engineering, PLLC (ASM) was requested to size the footings at major load points for the above referenced site on March 7, 2024.

The major load points that ASM was requested to design was based on Figure 1.0, specifically at

1. FB1-1 End reaction 2
2. FB3-1 Both ends
3. FB6-1 Both ends

The proposed house is planned to be built with a "slab-on-grade" foundation, and to be poured monolithically. ASM designed the footings based on the IBC Building Code Chapter 16, Table 1607.1. The footings with the required loading was designed as a 3'X3'X1' with (4) #4 rebar each way (Figure 2.0).

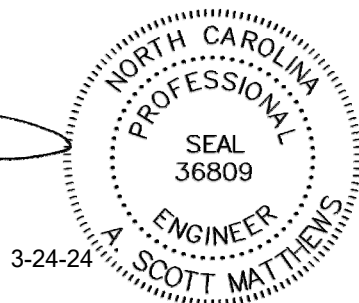
On March 11, 2024, footings were dug based on the design by ASM at the specific load points. This letter certifies that the footings were constructed per the minimum design of ASM, based on the minimum requirements for Chapter 4 of the 2018 Residential Building Code,

ASM attached pictures of the inspection in the following pages for reference.

Thank you for this opportunity to serve you. Please contact ASM Engineering, PLLC. For any further information.

Sincerely,

A. Scott Matthews, PE
President



DocuSigned by:

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Design based on plans and/or revisions dated :
2/14/2020
 Plans and/or revisions received on :
10/12/2023

THIS LAYOUT IS TO BE USED AS A TRUSS PLACEMENT GUIDE ONLY. PLEASE REFER TO BUILDING PLANS FOR BUILDING CONSTRUCTION AND DETAILS, SUCH AS PLUMBING OR DUCT DROPS.

CONSTRUCTION COPY-
FOR FIELD USE

Job #

P-10061

Blackman
1024 W Blackman
Dunn NC

UNIT / Lot:

- Notes:
- Exterior dimensions shown are assumed to be:
 Out-to-out of stud
 Out-to-out of sheathing
 Out-to-out of _____
 - Adjust truss locations as needed for plumbing and mechanical clearance. Unless otherwise noted, trusses may be shifted as long as O.C. spacing shown is not exceeded.
 - Do not cut, drill, or otherwise damage any part of any truss without prior approval from Peak Truss.
 - Do not approve drawings if any information herein is unclear. Once ordered trusses will be fabricated as approved.
 - Please contact Peak Truss Builders with any questions. We are available to help any way we can. We can be reached at 919-545-5555 or sales@peaktruss.com

Roof Truss Loading specified by building designer on Residential jobs

Top Chord Live Load	20.0 lb/ft ²
Top Chord Dead Load	10.0 lb/ft ²
Bottom Chord Live Load	0.0 lb/ft ²
Bottom Chord Dead Load	10.0 lb/ft ²

Trusses are designed for additional storage load wherever a 42"x24" box will fit between the webs.

Floor Truss Loading specified by building designer on Residential jobs

Top Chord Live Load	40.0 lb/ft ²
Top Chord Dead Load	10.0 lb/ft ²
Bottom Chord Live Load	0.0 lb/ft ²
Bottom Chord Dead Load	5.0 lb/ft ²

Floor Live Load deflection limit L/480
 Roof Live Load deflection limit L/240

This layout has been designed using the IRC2015 building code.

Model created using a wind speed of 120 mph specified for Harnett County.



Scan for EWP Installation Guide.

- △ - This symbol denotes left end of truss as shown on truss drawings
- - Approximate location of toilet drop. Builder please confirm.

Truss connections by others:

- Nailed
- Ledger

1st Floor & Low Roof Trusses

Overhang: 12"

Depth: 24"

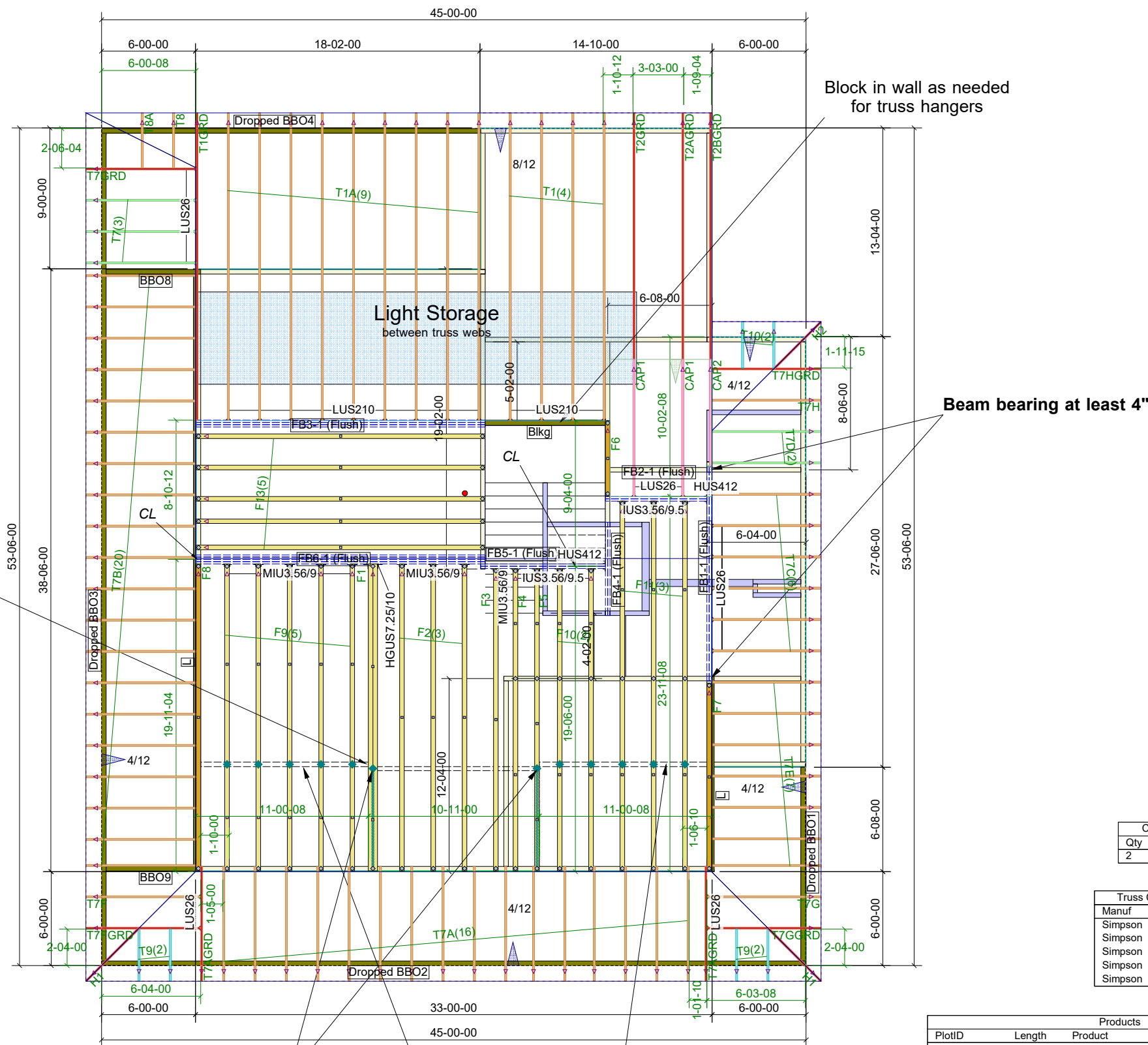
Spacing: 2' OC

Wall Types

- Load Bearing
- Non Load Bearing

Pride Custom Homes, Inc
 P.O. Box 4178
 Pinehurst, NC
 28374

Peak Truss Builders, LLC
 PO Box 340, New Hill, NC 27562



Connect 2-ply floor trusses per line 8 on detail sheet ST-2PLY_SCREW included in delivery package

Point load from girder truss above

Line load from walls above

Figure 1.0

Connector Summary		
Qty	Manuf	Product
2	Simpson	HUS412

Truss Connector Total List			
Manuf	Product	Qty	
Simpson	HGUS7.25/10	1	
Simpson	IUS3.56/9.5	7	
Simpson	LUS210	13	
Simpson	LUS26	15	
Simpson	MIU3.56/9	9	

Products				
PlotID	Length	Product	Plies	Net Qty
FB3-1 (Flush)	20-00-00	1-3/4X24 LP-LVL 2900Fb-2.0E	3	3
FB6-1 (Flush)	20-00-00	1-3/4X24 LP-LVL 2900Fb-2.0E	4	4
FB1-1 (Flush)	14-00-00	1-3/4X24 LP-LVL 2900Fb-2.0E	2	2
FB2-1 (Flush)	8-00-00	1-3/4X24 LP-LVL 2900Fb-2.0E	2	2
FB5-1 (Flush)	8-00-00	1-3/4X24 LP-LVL 2900Fb-2.0E	2	2
FB4-1 (Flush)	6-00-00	1-3/4X24 LP-LVL 2900Fb-2.0E	2	2

PASS

DATE:	3/11/2024	COMPANY:	ASM Engineering, PLLC
STRUCALC BUILD:	StruCalc Pro	DESIGNED BY:	Scott Matthews
CUSTOMER:		REVIEWED BY:	--
PROJ. ADDRESS:	--	PROJECT NAME:	1204 W. Blackman Rd
LEVEL:	Main Floor	LOADING:	ASD
MEMBER NAME:	New Isolated Footing	CODE:	2021 International Building Code
MEMBER TYPE:	ISOLATED FOOTING	ACI:	ACI 318-19
MATERIAL:	Concrete		
3 (ft) X 3 (ft) X 12 (in)		Soil Depth TOF: 0 (ft)	Bot. (4) #4 Long, (4) #4 Short

MATERIAL PROPERTIES

FOOTING

Width (ft)	Length (ft)	Depth (in)	Volume (ft ³)	Footing Weight (lb/ft)
3	3	12	9	1305

CONCRETE

fc' (psi)	Ec (psi)	Density (lb/ft ³)	Agg. Dia. (in)
3000	0	145	0.75

CALCULATION VARIABLES

Bo (in)
0

COLUMN

Width (in)	Length (in)	Material	Offset X (in)	Offset Y (in)
4	4	Concrete	0	0

SOIL

Bearing Strength (lb/ft ²)	Density (lb/ft ³)	Cohesion	Friction Angle	Depth (ft)	Rankine Coefficient (Kp)
2000	110	0	30	0	3

REBAR

Bottom Bar Size #	fy (psi)	Es (psi)
4	40000	2.9E+07

COVER

Top Cover (in.)	Bottom Cover (in.)	Side Cover (in.)
3	3	3

PASS-FAIL

	PASS/FAIL	MAGNITUDE	STRENGTH	LOAD COMBO	CALCULATION TYPE
Soil Bearing Pressure (lb/ft ²)	PASS (47.8%)	1045.0	2000.0	D+L	ASD
One-Way Shear X (lb)	PASS (86.4%)	3862.1	28393.9	1.2D+1.6L+0.5Lr	LRFD
One-Way Shear Y (lb)	PASS (86.4%)	3862.1	28393.9	1.2D+1.6L+0.5Lr	LRFD
Two-Way Shear (lb)	PASS (87.0%)	10459.8	80449.5	1.2D+1.6L+0.5Lr	LRFD
Moment X (lb-ft)	PASS (82.5%)	3543.7	20212.3	1.2D+1.6L+0.5Lr	LRFD
Moment Y (lb-ft)	PASS (82.5%)	3543.7	20212.3	1.2D+1.6L+0.5Lr	LRFD
Crushing (lb)	PASS (77.5%)	11960.0	53040.0	1.2D+1.6L+0.5Lr	LRFD
Compression (ft ²)	PASS (100.0%)	9.0	9.0	D	LRFD

LOAD LIST

Type	Name	Left Magnitude	Right Magnitude	Load Start (ft)	Load End (ft)	Load Type	Direction
Point (lb)	Point	2500	-	0	-	Dead	Z
Point (lb)	Point	5600	-	0	-	Live	Z



Figure 2.0

New Isolated Footing DIAGRAMS

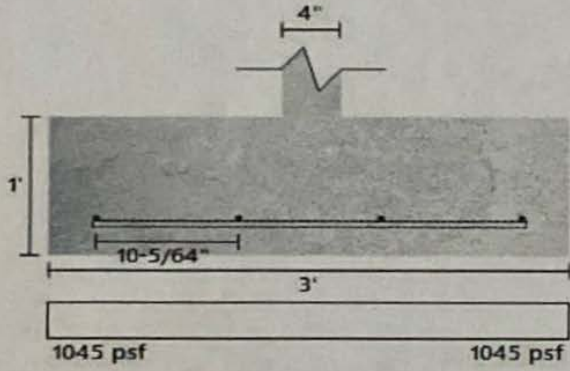
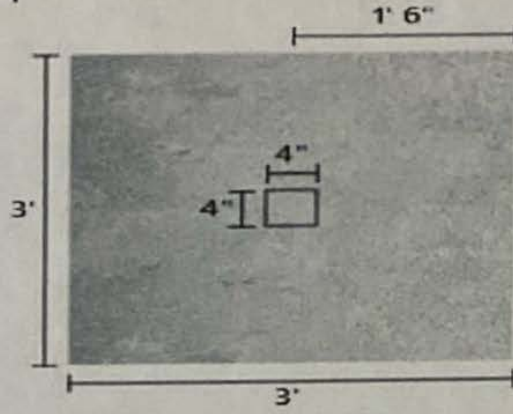
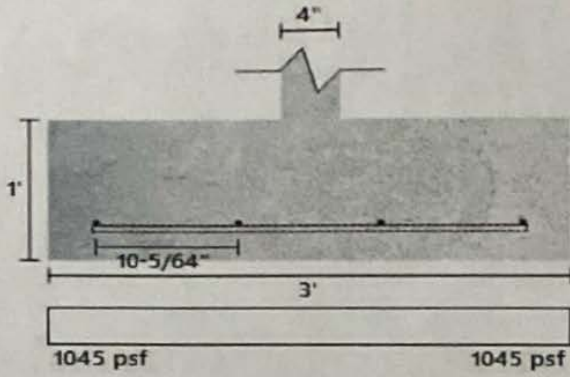




Figure 3.0
Installing footings



Figure 4.0
Depth of footing (12")



Figure 4.0
Installing interior footing.