



November 3, 2017

Gary Robinson Homes, LLC  
6200 Ramsey St., Suite 200  
Fayetteville, North Carolina 28311  
Email: james.grhomes@gmail.com

Reference: Engineering Services  
1233 Josey Williams Rd.  
Erwin, NC  
Project No.: 1701-010342

As requested by the client, Tyndall Engineering & Design, PA (TE&D) is providing recommendations for the following items:

- 1) Analyze the construction of an 8" CMU & Brick Stem Foundation in-lieu of the originally specified 4" CMU & Brick Stem Foundation. Note: the foundation wall/footing projection is less than 2" with the 8" CMU option.

The following conclusions and recommendations were noted:

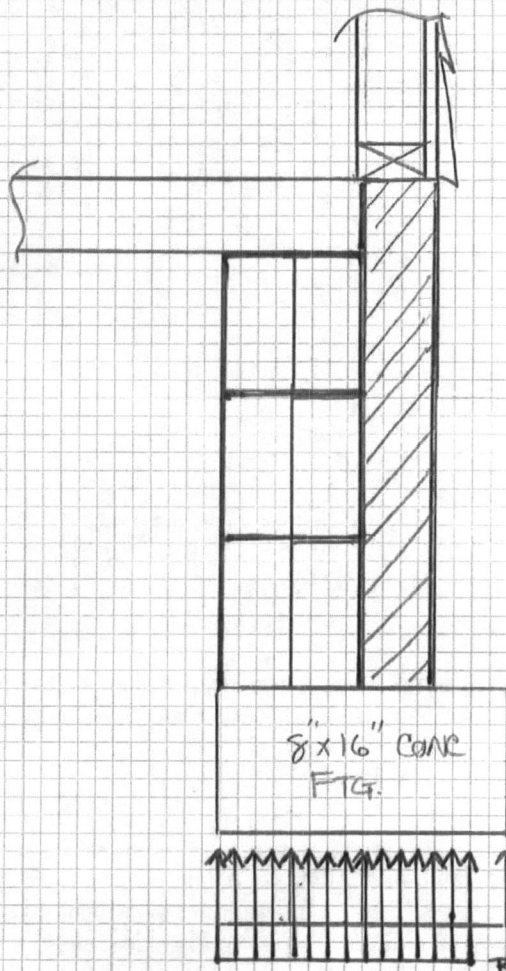
- 1) Based on our conversations with the client, review of the provided project documents, and our worst-case analyses, it was determined that the 8" CMU and Brick Stem Foundation with 0" of projection on the plan specified 16" x 8" concrete footing is structurally adequate to support the anticipated and NC Building Code specified loading conditions. No remedial actions were recommended. The reader is referred to page 2 of this letter for supplemental information.

We appreciate being able to assist you during this phase of the project. If you need further assistance or require additional information, please do not hesitate to contact us.

Sincerely,  
Tyndall Engineering & Design, PA

Prentice Tyndall Jr., P.E.  
PTII/1701-010342





- = Original Plan Specified Foundation Detail (i.e. 4' CMU w/ Brick)
- = Actual Foundation Construction (i.e. 8' CMU w/ Brick)

8" x 16" CONC FTG.

BRG ≈ 951 PSF  
BRG' ≈ 1081 PSF

Worst Case Analysis

$$P = 1264 \text{ \#/ft}$$

$$Brg = \frac{P}{B(1.4)}$$

$$= \frac{1264}{(1.33)(1)}$$

$$Brg = 951 \text{ PSF}$$

$$P, e = 2"$$

$$B' = B - e$$

$$= 16" - 2"$$

$$= 14"$$

$$B' = 1.17'$$

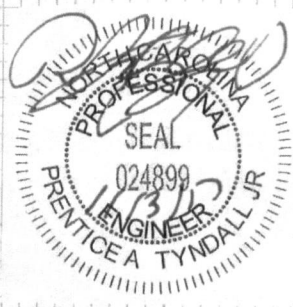
$$P = 1264 \text{ \#/ft}$$

$$Brg = \frac{P}{B'(1.4)}$$

$$= \frac{1264}{(1.17)(1)}$$

$$Brg = 1081 \text{ PSF} < 2000 \text{ PSF}$$

OK



**TYNDALL**  
ENGINEERING & DESIGN, P.A.

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JOB 1701-010342  
LOCATION 1233 Josey Williams Rd.  
CALCULATED BY RT DATE 11/3/17  
SHEET NO. 2 OF 2  
SCALE N/A

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ADDRESS . . : 94782 \*UNASSIGNED SUBDIV:  
 CONTRACTOR : GARY ROBINSON HOMES LLC PHONE : (910) 977-2562  
 OWNER . . : DREWRY LOTTIE R PHONE :  
 PARCEL . . : 12-0555- - -0096- -02-  
 APPL NUMBER: 17-50041930 CP NEW RESIDENTIAL (SFD)  
 DIRECTIONS : T/S: 07/31/2017 11:50 AM DJOHNSON --  
 WIRE RD TO JOSEY WILLIAMS RD PROPERTY  
 IS DOWN ON THE RIGHT.  
 PREMISE#38389075  
 T/S: 10/25/2017 11:38 AM LLUCAS ----  
 APPL NOTES : BPMN 10/13/17 T/S: 10/13/2017 01:09 PM BPETRICH --  
 PREMISE NUMBER 38389075

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**STRUCTURE: 000 000 59X67 3 BR 2 BTH ATT GRG PORCH SLAB**

FLOOD ZONE . . . . : FLOOD ZONE X  
 # BEDROOMS . . . . . : 3.00 PROPOSED USE . . . . . : SFD  
 SEPTIC - EXISTING? . . . . : NEW WATER SUPPLY . . . . . : COUNTY

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**PERMIT: CPSF 00 CP \* SFD**

TYP/SQ	REQUESTED COMPLETED	INSP RESULT	DESCRIPTION RESULTS/COMMENTS
A814 01	10/11/17 10/12/17	SB AP	ADDRESS CONFIRMATION TIME: 17:00 VRU #: 003036738 1233 JOSEY WILLIAMS RD ERWIN 28339 T/S: 10/12/2017 02:17 PM SBENNETT -----
B101 01	10/11/17 10/11/17	KS AP	R*BLDG FOOTING / TEMP SVC POLE TIME: 17:00 VRU #: 003036761 T/S: 10/10/2017 08:19 AM DJOHNSON ----- TSP INSPECTION ALSO T/S: 10/11/2017 01:34 PM KSLATTUM -----
B103 01	10/26/17 10/26/17	JH DA	R*BLDG FOUND & TEMP SVC POLE TIME: 17:00 VRU #: 003044484 T/S: 10/25/2017 11:47 AM LLUCAS ----- 1)Clean off footings inside & out of foundation wall.2)Need R10 insulation or RES check.
B103 02	10/31/17 10/31/17	JH DP	R*BLDG FOUND & TEMP SVC POLE TIME: 17:00 VRU #: 003046901 T/S: 10/30/2017 12:05 PM LLUCAS ----- 1)Missing projection on inside of foundation wall uncover and you will see it.2)Missing anchor bolts on garage/house wall.
B103 03	11/06/17 <i>11-6-17</i>	TI <i>AP JH</i>	R*BLDG FOUND & TEMP SVC POLE TIME: 17:00 VRU #: 003049541 T/S: 11/03/2017 12:38 PM DJOHNSON ----- ENGINEER LETTER WILL BE IN PERMIT BOX

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COMMENTS AND NOTES  
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