

April 27, 2020

Project No. 20-1379

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Malcolm Stone
3411 Cokesbury Rd
Fuquay-Varina, NC 27527

Re: HUD Manufactured Permanent Foundation—3411 Cokesbury Road, Fuquay-Varina, NC 27527

Mr. Stone,

At your request, on April 22nd, 2020 we performed a visual structural observation of the reported over-height foundation system of the existing double-wide manufactured home located at the Fuquay-Varina address noted above. The foundation system consisted of stacked CMU piers that supported the interior and perimeter I-beams of the home. The home was braced with what appeared to be (2) *Minute Man Anchors* with brace tubes in both the lateral and longitudinal directions. Hold down tie straps were not installed at the time of our inspection (*see pictures 1-3*).

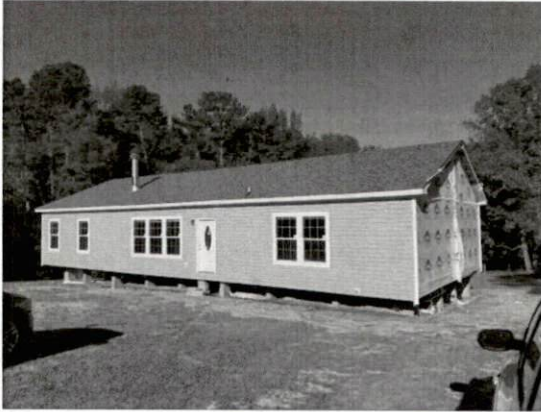
The observed masonry piers were noted to be constructed in accordance with the 2004 edition of the *North Carolina Regulations for Manufactured Homes*. Due to the proposed curtain wall height being greater than 40" tall, we recommend the perimeter skirting wall be constructed as a "pier and curtain wall" with piers spaced no more than 6'-0" on center and in accordance with section 3.6.4 of the 2004 edition of the *North Carolina Regulations for Manufactured Homes*. Hold down tie straps should be installed per the home manufacturer's instructions (*see pictures 4-5 for examples*).

After the completion of the work specified above, this foundation system will be considered adequate to resist wind loading for Wind Zone I. The above-listed determinations were made in accordance with common engineering principles and the intent of the 2004 edition of the *North Carolina Regulations for Manufactured Homes*. Please feel free to contact us, should you have any questions or concerns regarding this matter.

Sincerely,
Matt Brueshaber, PE
Stonewall Structural Engineering, PLLC
Lic. #P-0951



PICTURE ADDENDUM:



*Picture 1 – 3411 Cokesbury Rd
Fuquay-Varina, NC*



Picture 2 – Existing bracing system



Picture 3 – Existing bracing system



Picture 4 – Example of existing masonry piers



*Picture 5 – Example of proposed curtain wall
location greater than 40" in height*