

Mark E. Jones, PE
Structural Engineering and Design

July 8, 2019

Ken and Lynne Griffin
881 McNeil Mill Rd.
Broadway, NC 27505

Ref: Site Observations and Analysis
881 McNeil Mill Rd.
Broadway, NC
Project No: 19-135

To Whom it may concern;

The above referenced site was visited June 26, 2019 and July 7, 2019 to evaluate the construction of the front porch, side porch and rear steps.

At the original visit several deficiencies were observed and noted, including;

- inadequate attachment of the deck band to the main house
- no diagonal bracing on support posts
- girders and headers spliced within supports
- inadequate connections between the porch posts and floor/ceiling
- handrails not at Code required height
- roof rafters not adequately tied down

Note that footings were exposed and verified as being of adequate size and location for all porch support posts.

An itemized list of repairs was generated and given to the homeowner to correct the deficiencies (see attached). Upon reinspection on July 7, all deficient items had been corrected, albeit some slightly different than the recommended repairs. Specifically;

- the deck band has been adequately attached with the required number of fasteners
- diagonal bracing has been installed along the exterior line of the front porch
- a new 2-2x10 girder has been installed on the exterior line of the front porch
- all porch posts have been mechanically fastened at the base and top
- the 3-2x10 headers along the front porch have been adequately repaired
- ceiling joists/rafters have been adequately anchored
- handrails have been corrected to meet Code requirements.
- The side porch headers have been adequately fastened and connected to the support posts.
- The rear steps were observed to be adequately constructed

Mark E. Jones, PE
Structural Engineering and Design

In summary, the construction of the front porch, side porch and rear steps are structurally sound and meet the requirements of the 2018 NC Residential Building Code.

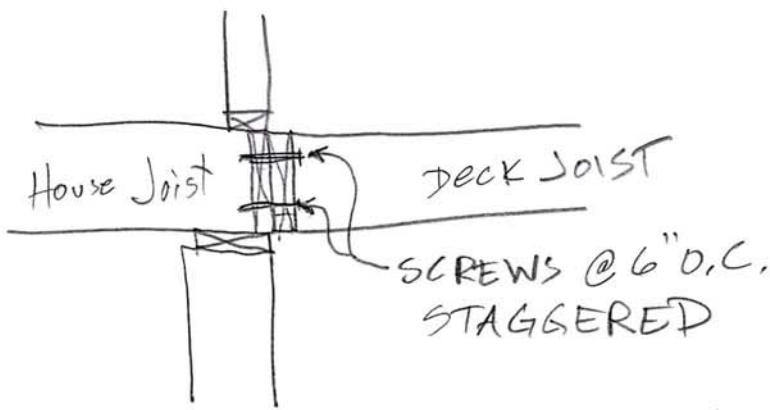
Thank you for this opportunity to assist you. If you have any questions or need any further assistance, please do not hesitate to call.

Respectfully,

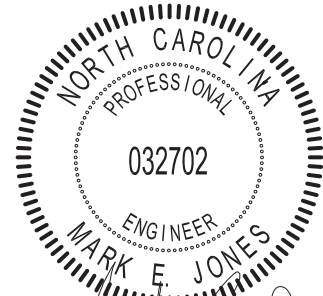


Mark E. Jones, PE

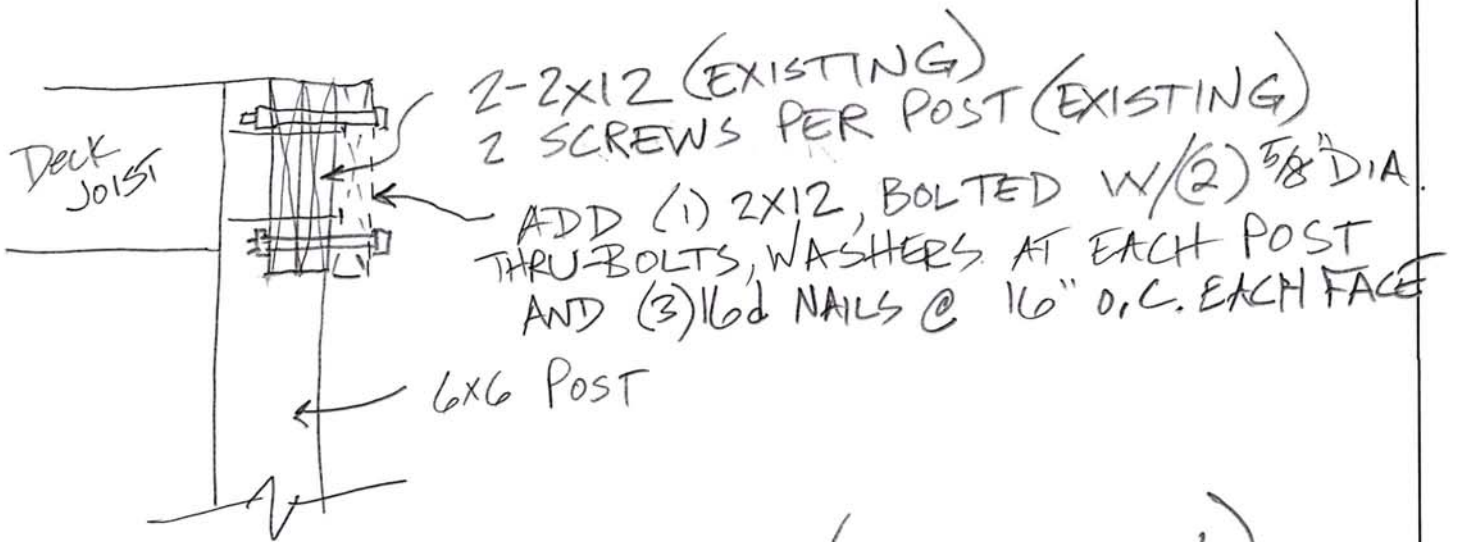




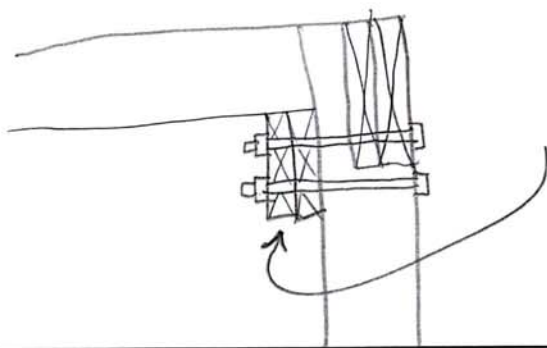
DECK TO HOUSE ATTACHMENT



Mark E. Jones



DECK BAND TO POST (OPTION 1)
OR (OPTION 2)



ADD (2) 2X10 ON INSIDE ATTACHED W/(2) 5/8" DIA THRU BOLTS, WASHERS, EACH POST

Mark E. Jones, PE

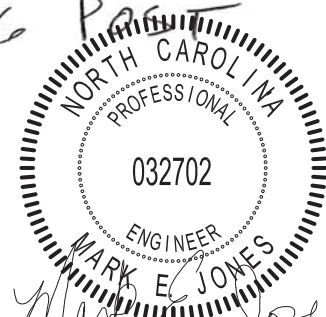
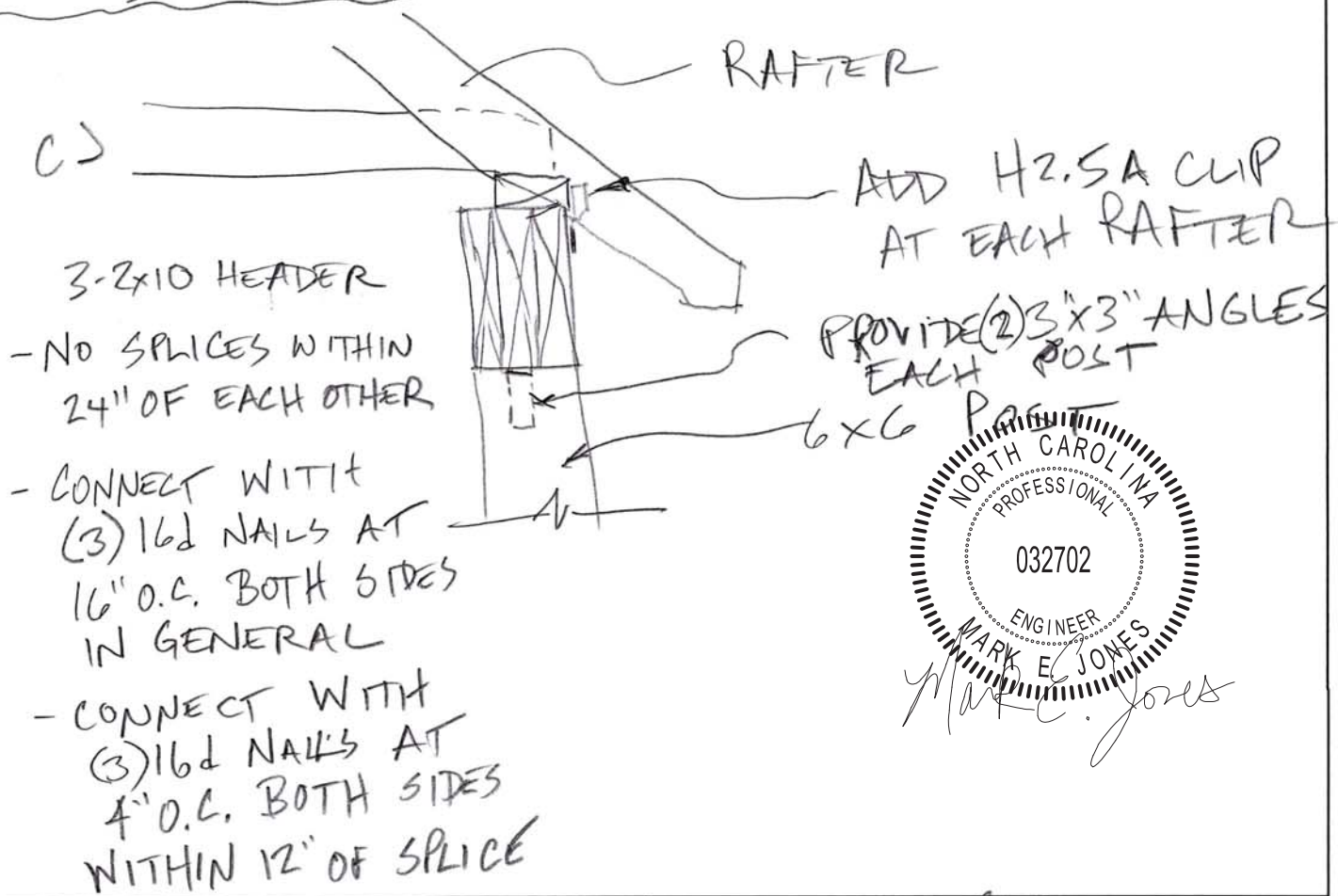
6425 GLEN DEAN COURT
RALEIGH, NC 27603
PHONE: (919) 395-5618

PROJECT	Ken + Lynn Griffin		
LOCATION	821 McNeil Mill Rd.		
DESIGNED BY	MEJ	DATE	
SCALE		PAGE	1 OF 2

- PROVIDE 4x4 DIAGONAL KNEE BRACING

OR
2x6 CROSS BRACING,
ATTACH W/ 5/8" DIA. THRU BOLTS TOP
AND BOTTOM, ALSO PROVIDE CENTER
BLOCK W/ THRU BOLT

- STAIR HANDRAIL HEIGHT MUST
BE BETWEEN 34" - 38"



Mark E. Jones, PE

6425 GLEN DEAN COURT
RALEIGH, NC 27603
PHONE: (919) 395-5618

PROJECT	Ken & Lynne Griffin		
LOCATION	881 McNeil Mill Rd.		
DESIGNED BY	MEJ	DATE	
SCALE		PAGE	2 OF 2