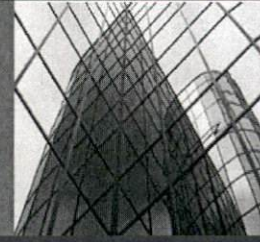




Neal Smith Engineering, Inc.

139 Pinehurst Avenue - Suite C
Southern Pines, NC 28387
Phone: (910) 695-8825
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www.nseengineering.com
License No. C-1425



September 7, 2021

Joe Fancher
387 Gainsborough Lane
Cameron, NC 28326

Telephone: 910-308-6124
Email: joseph.fancher@gmail.com

Subject: **Structural Inspection
387 Gainsborough Lane
Cameron, North Carolina
NSE Project #2100625**

Dear Mr. Fancher:

On September 4, 2021, Neal Smith Engineering, Inc. (NSE) performed a structural inspection at the above subject location. The purpose of the inspection was to evaluate the existing construction of a deck.

This report summarizes the findings and recommendations based upon the site visit and subsequent engineering evaluation.

Scope of Investigation

The scope of the investigation included the following:

- Observation of the property by a Professional Engineer
- Visual structural investigation with minimal destructive testing
- Determine the cause
- Preparation of report and findings

Description

The owner recently had a wrap around deck built that is attached to his house. The building inspector asked that the deck be verified by an engineer. The deck joists are 2x8's 16" on center with a maximum span of 8'-6". The girders are (2) 2x10's with a maximum span of 6'-6". There was multiple 2x6 cross braces, and 4x6 and 6x6 posts embedded into 18" round footings.

Observations and Findings



Photo #1 - This is an overall photo of the deck.

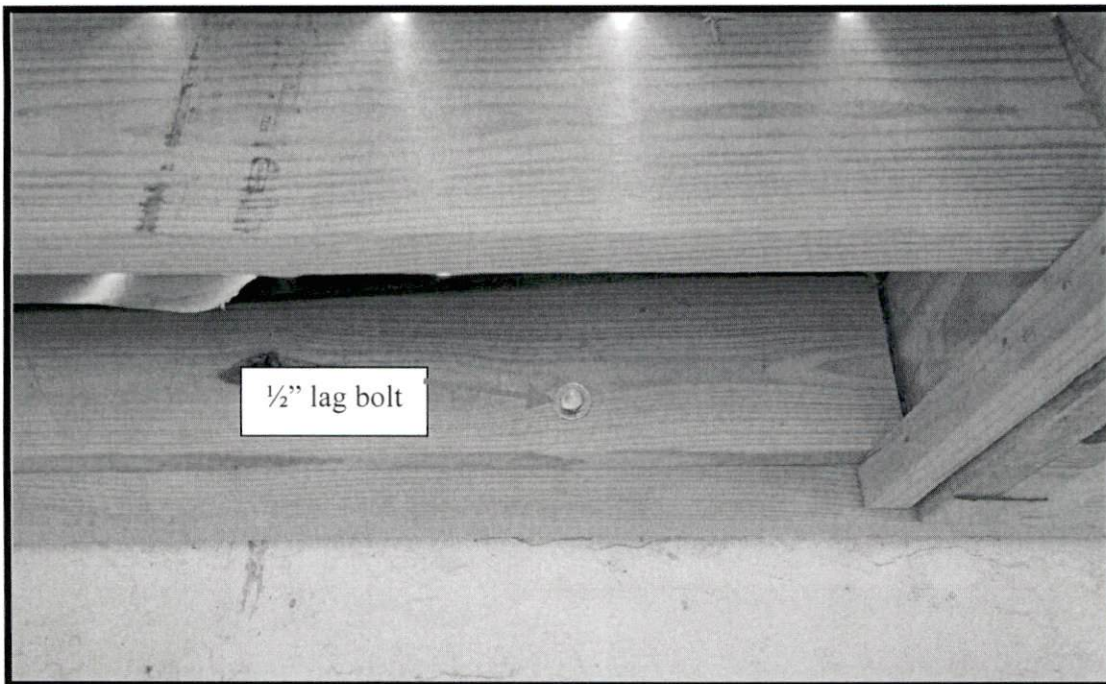


Photo #2 – A double 2X joist was lag bolted into the existing house band board. The bolts averaged 4'-6" on center.

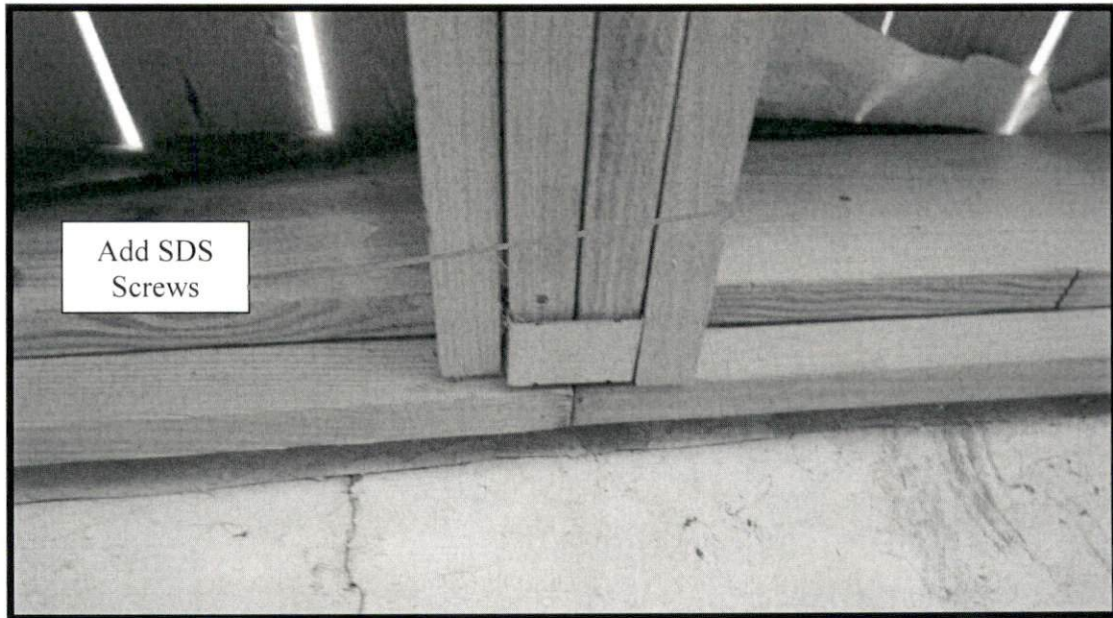


Photo #3 – The girders framed into the 2X band with a Simpson LU210-2 clip.

Conclusions and Recommendations

This report certifies that the deck meets Appendix M of the North Carolina State Residential Code with the following exception:

The lag bolts at the girder connection are inadequate. Add (3) ¼ x 6” Simpson SDS screws on each side of the girder. Another option is to provide (1) 5/8” galvanized through bolt on each side at each girder location. The end girders will only have ½ the screws or bolts, they also only have ½ the load.

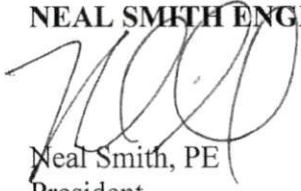
Neal Smith Engineering, Inc., uses the generally accepted practices and principles used within the profession, and expresses its opinion based on visual observation of the current condition of the structure relative to its condition as generally constructed. **NSE** does not assume any legal responsibilities of the original designers, developers, architects, engineers, or contractors for the property. If other conditions than those assumed by this report are discovered during repairs, recommendations contained in this report will not be considered valid unless the changes are reviewed, and conclusions modified or verified in writing.

Joe Fancher
Cameron, North Carolina
NSE Project #2100625

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If you have any questions or if we can be of additional assistance, please, contact us.

Sincerely,
NEAL SMITH ENGINEERING, INC.



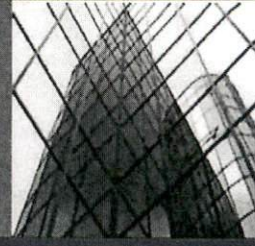
Neal Smith, PE
President





Neal Smith Engineering, Inc.

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October 4, 2021

Joe Fancher
387 Gainsborough Lane
Cameron, NC 28326

Telephone: 910-308-6124
Email: joseph.fancher@gmail.com

Subject: **Structural Inspection
387 Gainsborough Lane
Cameron, North Carolina
NSE Project #2100625**

To whom it may concern:

Screws have been added to the above subject project per the recommendation in NSE's report dated September 7, 2021, and no further repairs are required.

If you have any questions or if we can be of additional assistance, please, contact us.

Sincerely,
NEAL SMITH ENGINEERING, INC.

Neal Smith, PE
President

