

Monday, September 30, 2024

Hunter Thompson Owner, SH Renovations, LLC (405)310-2064 | (405)435-1002 hunter@shrenovations.org www.shrenovations.org

Subject: Structural Evaluation and Recommendation

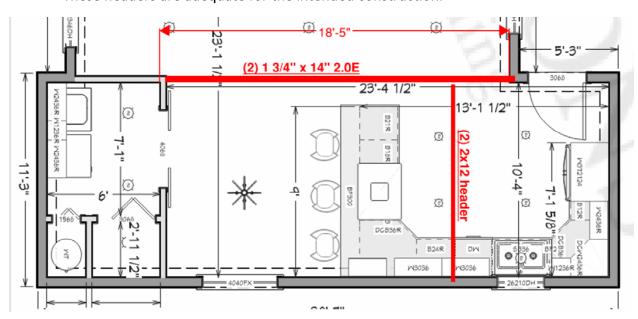
454 W Tonhawa St. Norman, OK, 73069

Mr. Hunter Thompson,

Thank you for contacting me regarding the renovation at 454 W. Tonhawa Street. As I understand, the City of Norman needs confirmation that the headers you will install to replace two bearing walls will be adequate for the renovation. Additionally, since the home is in a FEMA designated Floodway, the City of Norman requires an engineer to verify that the construction/renovation will not cause a change to the Base Flood Elevation of adjacent properties.

Header Evaluation

You are proposing to install a new double 1 3/4"x14" 2.0E LVL spanning 18'-5" that will replace the bearing wall between the existing living room and garage. Additionally, you are proposing to replace the bearing wall between the existing kitchen and laundry room with a double 1 3/4" x 7 1/4" 2.0E LVL header that will span 10'-4". These headers are adequate for the intended construction.





No Rise Statement

This statement is provided as part of a floodplain permit application to the City of Norman for the renovation of the home located at 454 W. Tonhawa St. in Norman. The renovations will not change the perimeter of the structure, nor require a change to the grading of the property. I observed that the grading of the site is sloped to an existing culvert that is on the west side of the property.

As I understand the existing finished floor elevation falls approximately 4" below the Base Flood Elevation established by FEMA. Consequently, the home will need to be raised as part of the renovations you are performing. The existing foundation system of concrete stem walls and CMU piers can be extended up to 2'-8" using the same materials. This allowance should allow for a floor elevation of 2'-0" or more above the BFE. This would give ample room for structural, electrical, and mechanical underfloor elements to be installed above BFE.

Finally, after elevating the home, there will be approximately 40 cubic feet of structure left in the floodway, below BFE. By providing a swale on the south side of the property as your plans indicate, the flood level will be reduced to levels before the original construction of the structure.

Closing:

Thank you again for the opportunity to provide a structural evaluation and report. Photos taken during my site observations are available on request. If you have any questions or if I may be of any more assistance, please let me know.

Kind regards,

Uwem J. Ekpenyong P.E. Urban James Engineering

Be advised that my recommendations are based on limited visual observations only. No physical testing was performed, and no calculations have been made to determine the adequacy of the structural system or its compliance with accepted building code requirements. The building structure was not investigated for structural damage or improper construction or inadequate design, except as noted. Not all conditions were observed. Nor was the building evaluated beyond the scope indicated in the project understanding. The acceptance of the report or payment for services indicates an agreement to limit the liability of Urban James Engineering to the extent of the fee paid for service.