BOB D. CAMPBELL & CO.
Structural Engineers Since 1957
4338 Belleview Ave. 816.531.4144
Kansas City, MO 64111 www.bdc-engrs.com

PRINCIPALS

President
Michael J. Falbe, P.E.

Lee S. Johnson, P.E.
Steven R. Carroll, P.E.
Richard C. Crabtree, P.E.
Wayne E. Davis, P.E.
Jeffrey L. Wright, P.E.
Christopher W. Boos, P.E.
Clark A. Basinger, P.E.
Brandon M. Ford, P.E.
Christopher A. Beverlin, P.E.

Administrative Manager
Paul M. Spena

June 20, 2018

Lori Haun
Executive Director
Downtown Joplin Alliance
931 E 4th
Joplin, MO 64801

RE: Review of Structures
506 & 508 Virginia Ave.
Joplin, Missouri

Dear Lori:

Per your request, we visited the above referenced buildings on Monday, June 18, 2018. The purpose of our visit was to review the condition of these two existing structures. In summary, we feel the 508 Virginia Avenue structure is in need of demolition; however, the 506 Virginia Avenue structure can be rehabilitated if rehabilitation work of the building commences in the very near future. If rehabilitation work does not begin soon, partial collapses, similar to the collapse observed at 508 Virginia Avenue can be expected at 506 Virginia Avenue.

In addition to our job visit, a report on the two buildings was provided by Allgeier Martin and Associates of Joplin, Missouri, dated 5-30-18. We have attempted not to replicate their report, but to supplement that report with our assessment of the buildings. The 506 Virginia Avenue structure is a three story building with a partial basement constructed in 1903. Building construction consists of wood floor decking atop north-south wood joists atop east-west wood girders with center wood and cast iron columns supported by exterior load bearing multiwyeth brick masonry. The 508 Virginia Avenue structure was constructed south of 506 Virginia Avenue in 1920. Similar to the 506 Virginia Avenue structure, the 508 Virginia Avenue structure is a three story building with a partial basement. Building construction consists of wood floor decking atop north-south wood joists atop east-west wood girders with center wood and cast iron columns supported by exterior load bearing multiwyeth brick masonry. The south multiwyeth brick masonry wall of 506 Virginia Avenue was used as the north bearing wall of 508 Virginia Avenue.

At the end of May, a significant collapse of the floors and roof at 508 Virginia Avenue occurred. Some photos of the collapse are as follows:



Photo #1



Photo #2



Photo #3



Photo #4

In review of this collapse at 508 Virginia Avenue, it is quite evident wet rot deterioration of wood members triggered this collapse. This building is not in condition to be rehabilitated and should be demolished at this time. Based upon its present condition, we recommend Virginia Avenue remain closed and the alley south of 508 Virginia Avenue remain barricaded until demolition of this building can occur. Discussions with Bryan Wickland, City of Joplin Chief Building Official, indicated that sagging of members in this building was observed prior to the collapse. This observation is consistent in what we would anticipate for this type of structure.

The 506 Virginia Avenue structure is obviously in better condition than 508 Virginia Avenue, but if neglected in the future, a similar type collapse should be expected. Photos #5 and #6 show the condition of the roof at 506 Virginia Avenue with open holes in the roof directing storm water inside the building.



Photo #5



Photo #6

In its present condition, no sagging of floors was observed, but a partial collapse of a wood mezzanine at the west end of the structure between the first and second floors was observed. Some signs of wet rot deterioration were observed; however, this deterioration appeared to be limited at this time. A building in this condition will continue to deteriorate over time. As was the case with 508 Virginia Avenue, a partial collapse of an isolated area can trigger a major collapse which renders a building dangerous and in need of demolition. If immediate rehabilitations of 506 Virginia Avenue is undertaken, the building can be waterproofed and deteriorated building members can be repaired or replaced at minimal expense. If these issues are left unaddressed, this build can expect a similar collapse to 508 Virginia Avenue, as it is of similar construction type and condition. 5th Street located north of 506 Virginia Avenue is at risk, if collapse occurs at 506 Virginia Avenue.

The rehabilitation of 506 Virginia Avenue should involve the immediate shoring of the floors in combination with repairing the roof of the structure. Repair of all deteriorated floor members can occur after this. We would estimate this cost to be at its lowest at this time and increasing exponentially if the building is left in its present condition.

In summary, we feel the 508 Virginia Avenue structure is in need of demolition; however, the 506 Virginia Avenue structure can be rehabilitated if rehabilitation work commences in the very near future. If rehabilitation work does not begin soon, partial collapses, similar to the collapse observed at 508 Virginia Avenue can be expected at 506 Virginia Avenue.

If you have any questions or if we may be of additional service, please let us know.

Sincerely,

BOB D. CAMPBELL & CO., INC.
Structural Engineers

Michael J. Falbe, P.E., President

MJF/jf

cc: File/D1805