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September 10, 2018

C17G9615

Mr. Justin Zimmerman
Zimmerman Properties Investments, LLC
1329 East Lark Street
Springfield, Missouri 65804

**RE: PRELIMINARY GEOTECHNICAL EVALUATION
VALLEY RIDGE APARTMENTS
COLLEGE ROAD AND RAILROAD AVENUE
COUNCIL BLUFFS, IOWA**

Dear Mr. Zimmerman:

Kaw Valley Engineering, Inc. has performed a preliminary geotechnical review of the proposed project. This site is located at the northeast corner of College Road and Railroad Avenue in Council Bluffs, Iowa. The proposed project is to consist of a three-story, slab-on-grade wood-framed structure. Site reconnaissance indicates generally a 5-foot grade change across the site, except the extreme northeast corner which grades up an additional 10 feet. Historical review indicates up to six feet of fill has been placed in the central portion of the site.

Review of regional soils data indicates that a combination of loess and glacial till make up the upper soil stratum, and the fill placed upon the site. Exact water table has not been determined at the time of the issuance of this preliminary evaluation.

Preliminary grading plans indicate the building finished floor to be 1,012 feet which is within one foot of the existing surface grade in the building area.

Due to the existence of up to six feet of apparently uncontrolled fill, it is anticipated the site will need to be overexcavated to a depth of at least three feet below the existing uncontrolled fill, and recompacted to bearing and slab elevations. The need for dewatering is unknown at this time.

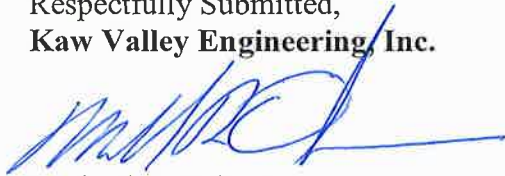
Preliminary recommendations are that the building be founded using shallow foundations bearing upon newly placed engineered fill. An allowable bearing capacity of 2,500 psf is anticipated.

Shallow foundations shall bear at a minimum depth of 42 inches below lowest adjacent exterior grade.


Further details and specific recommendations will be presented once field work and full laboratory evaluations are completed.

If you have any questions, please do not hesitate to contact me.

Respectfully Submitted,
Kaw Valley Engineering, Inc.



Michael R. Osbourn
Principal


for Martin T. Arling, P.E.
Principal