



October 2, 2017

BlueStone Engineers, PLLC
3703 Taylorsville Road, Suite 205
Louisville, Kentucky 40220

Attention: Chris Crumpton
Subject: Karst Survey Letter
6015 Lovers Lane
Louisville, Kentucky
GEM Project G-5021

Dear Mr. Crumpton:

GEM Engineering, Inc. (GEM) conducted a karst survey for the referenced site in accordance with GEM Proposal No. GP-6789, dated August 23, 2017. The karst survey was conducted in general accordance with Chapter 4 Part 9 (Development on Karst Terrain, dated July 2008) of the most recent Louisville-Jefferson County Land Development Code (LDC). The karst survey included the following elements: a reconnaissance of site conditions for the karst geologic features specifically defined in the LDC; a review of current and historical aerial photographs; a review of soil survey information; a review of geologic maps; and a review of topographic maps.

The geologic formation underlying the site (Louisville Limestone) is designated with a medium karst potential. The karst potential level is based on the tendency for the site to develop or have karst features as shown on the Kentucky Geological Survey Geologic Information Service Karst Potential Map and is not necessarily indicative of the actual presence or absence of existing karst activity at the site. No karst-related features were identified on the site in the documents reviewed, including historical aerial photos, geologic maps and topographic maps. A former pond was noted near the southeast corner of the property. Based on observations, the pond appeared to be a result of a man-made dam and not a karst feature. It was marked as a closed depression on some of the sources reviewed. No karst features were observed on the property during the site reconnaissance conducted on September 20, 2017.

We appreciate the opportunity to serve as your geotechnical consultants. If we can answer any questions concerning this letter, please contact the writers.

Sincerely,
GEM Engineering, Inc.

Brian Glass, E. I. T.
Project Engineer

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Senior Engineer
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