



August 8, 2018

1100 W. Cambridge Cir. Dr. Ste 700 Kansas City, Kansas 66103 (913) 627-9040 Office (816) 333-6688 Fax

Streets of West Pryor, LLC 12701 Metcalf Avenue, Suite 100 Overland Park, KS 66213

efse.com

Geotechnical Consulting Services Re: Streets of West Pryor Lee's Summit, MO

Other Offices: Kansas City. Missouri Lawrence, Kansas Holton, Kansas Topeka, Kansas Branson, Missouri Springfield, Missouri Jefferson City, Missouri

Mr. Olson:

CFS has reviewed the following geotechnical boring logs for the purpose of assembling a summary of the field data and providing a site assessment of the suitability of the subject site for construction of retail and residential buildings.

Reports Reviewed

- 1. Kaw Valley Engr. Logs B1-B4, Report A14D7067, Dated 2/17-3/2/2016
- 2. CFS Engr. Logs B1-B16, Report 16-5078, Dated 4/1/2016
- 3. PEXCO Logs 1-23, Report 20076, Dated 6/19-6/21/2017
- 4. Kaw Valley Engr. Logs B1-B17, Report A14D7067, Dated 8/4/2017
- 5. CFS Engr. Logs B1-B32, Report 18-5125, Dated 6/15/2018
- 6. Report Prepared By Charles D. Spencer Dated October 10, 2013
- 7. Peer Review Report Prepared By Terracon Dated January 17, 2014

Attached (Exhibit A) is a general location Map of Mine Limits based upon the above reviewed boring logs showing the area of subject site that is not underlain by a past mine or "dome out" mine area. Also attached (Exhibit B) a Typical Site Subsurface Cross Section showing a present surface elevation of 961 to 986 feet. The diagram, based upon the above reviewed boring logs, has an approximate top of the mined area elevation of 895 feet and a base of the mined area at an elevation of 884 feet. Subject Site Area topography ranges from approximately 940 to 1015 feet above mean sea level.

Board of Directors: Kenneth M. Blair, P.E. Robert S. Chambers, P.E. Kevin K. Holland, P.E. Daniel W. Holloway, P.E. Charles C. LePage, P.E. Lance W. Scott, P.E. Sabin A. Yañez, P.E.

> Based on the boring log data and existing site topography, it is believed that the Winterset limestone layer is present throughout the site area.

"Dome Outs" are defined as a mine ceiling area between the stone columns that Associates: has caved into the mine floor. Dome Outs are caused in this area when the Aaron J. Gaspers, P.E. normal ceiling thickness of approximately nine (9) feet limestone (Bethany Falls Michael J. Morrissey, P.E. limestone) has been mined thin enough to reduce the structural integrity of the Gene E. Petersen, P.E. Todd R. Polk, P.E. limestone mine ceiling beam to the point of collapse. Often times this Dome Out William J. Stafford, P.E. will also include the upper three (3) feet shale layer exposing the Winterset Richard A. Walker, P.E. Lucas W. Williams, P.E. limestone above the shale. (If viewed from inside the mine).

> Dome outs have occurred on the mined property north of Interstate 470 and the north area of subject property. There is a significant difference between the Dome Outs on the subject property and the Dome Outs on the property north of

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Interstate 470. The Dome Outs on the subject property have not extended to the surface (in the form of a sink hole) most likely because of the presence of the significant layer of Winterset limestone present on the subject site. The Winterset limestone has weathered away and is not present on the property north of Interstate 470 where the Dome Outs have occurred. Refer to the Terracon Peer review conducted on behalf of the City of Lee's Summit dated January 7, 2014.

"Best management practices" (BMP) require retention of surface water. To accommodate the required retention, ponds above the mined areas are planned. Removal of five (5) to ten (10) feet of overburden soil and construction of berms is planned to create the pond(s), neither removal nor berming the soil will cause the mined areas to collapse. Excavation of the earth will marginally reduce the overburden weight on the mine. Subsequently, berming of the soil will have a minimal increase in overburden weight on the mine.

CFS appreciates the opportunity to provide this proposal for services to Streets of West Pryor, LLC and is available to answer any questions.

Respectfully,

Cook, Flatt & Strobel Engineers

William J. Stafford, P.

Associate/Senior Enginee

Attachments:

Exhibit A – Map of Mine Limits
Exhibit B – Typical St.

Exhibit B – Typical Site Subsurface Cross Section

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Sabin A. Yañez, P.E.

Associates:

Aaron J. Gaspers, P.E.

Michael J. Morrissey, P.E.

Gene E. Petersen, P.E.

Todd R. Polk, P.E.

William J. Stafford, P.E.

Richard A. Walker, P.E.

Lucas W. Williams, P.E.



