

July 12, 2021

The Equity Group  
90 South Cascade Avenue, Suite 1500  
Colorado Springs, Colorado 80903

Attention: Kelly Nelson

Subject: Review Comment Response  
Geologic Hazards Evaluation  
Preliminary Geotechnical Investigation  
Crossroads North  
Marksheffel Road and State Highway 24  
El Paso County, Colorado  
Project No. CS18526.001-105

This report letter presents our response to the Colorado Geological Survey (CGS) review comments regarding our Preliminary Geotechnical Investigation. The following discussion provides specific items from the CGS comments and our responses.

CGS Comment:

“CGS received grading plans with this submittal, while CTL|Thompson indicated they did not review such plans. CGS recommends that the county or developer provide CTL|Thompson with grading plans, and they review the plans for conformance with the geotechnical report recommendations. The geotechnical report states that eolian soils underlie the site. Once wetted and loaded, such soils can settle and cause damages to buildings, pavements, and other infrastructure. CTL|Thompson indicates that the risks to proposed structures form hydrocompactive soils are low for lightly to moderately load structures (one to two-story buildings). The report contains limited soil testing to determine the risk or degree of the potential of hydrocompaction.”

CTL Response:

We have received the preliminary grading plans from Kimley-Horn. As the CGS notes, the sands that underlie the site have the potential to be hydro-compactive. Based on the testing data available on the site the soils classify as having low to moderate collapse potential using the criteria from CGS publication EG-14 “Collapsible Soils in Colorado,” Fig. 4-13. The soils with the higher potentials are generally spread across the site. Limited testing was preformed because the lack of fines and low moisture contents in the natural sands precluded

most of the samples from being suitable for swell/consolidation testing, due to a lack of structure in the soil matrix.

We provided a brief discussion of possible mitigation options in our report. Based on the preliminary grading plans portions of the site will have significant amounts of fill in excess of 15-feet. Deep fill could help mitigate potential differential movements if settlement of natural soils were to occur below the fill. The possible presence of potentially hydro-compactive soils should be further addressed at the time of the design level reports. We did not find any contradictory conditions based on our review of the preliminary grading plans, and hold that the findings of the Preliminary Geotechnical Investigation and Geologic Hazard Evaluation remain valid for the site.

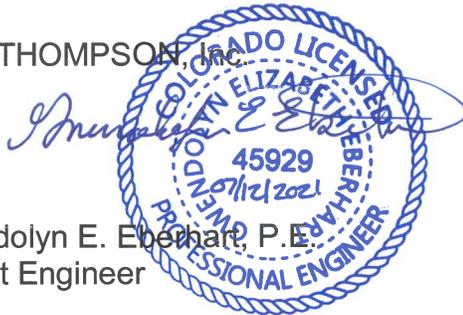
## LIMITATIONS

This letter has been prepared for the exclusive use of The Equity Group for the purpose of reviewing existing documentation to determine the suitability of fill on site for the proposed development. We believe this investigation was conducted with that level of skill and care normally used by geotechnical engineers practicing under similar conditions. No warranty, express or implied, is made.

If we can be of further service in discussing the contents of this letter, please call.

Sincerely yours,

CTL | THOMPSON, Inc



Gwendolyn E. Eberhart, P.E.  
Project Engineer

Reviewed By:

A handwritten signature in blue ink, appearing to read "Timothy A. Mitchell".

Timothy A. Mitchell, P.E.  
Division Manager

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Via email: [kelly@theequitygroup.net](mailto:kelly@theequitygroup.net)  
[Jim.Houk@kimley-horn.com](mailto:Jim.Houk@kimley-horn.com)