Project Number: 05322879
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Professional Service Industries, Inc.
1070 West 124th Avenue, Suite 800
Westminster, Colorado 80234
Phone: (303) 424-5578
Fax: (303) 423-5625

Mr. Tim Govert
Thompson Thrift Residential
111 Monument Circle, Suite 1500
Indianapolis, Indiana 46204

Subject: Transmittal Letter – CGS Comments
Proposed Multi-family Development
Venetucci Boulevard at South Academy Boulevard
Colorado Springs, Colorado

Dear Mr. Tim Govert:

Professional Service Industries, Inc (PSI), an Intertek Company, is pleased to transmit this letter in response to comments received by Colorado Geological Survey (CGS). PSI has provided a Report of Geotechnical Engineering Evaluation for the proposed multifamily development and issued a report dated January 2, 2025.

Comments from CGS were provided in a letter dated December 20, 2024. We understand a Geological Hazard Report will be needed, and PSI can provide a report following receipt of further design documents.

PSI has briefly reviewed the hazards maps provided on the CGS website for abandoned mines, landslides, faults/earthquakes. Based on those maps, the predominant mapped hazard on the subject site appears to be landslide possibility (further addressed below).

Regarding the comments provided in the CGS letter, PSI provides the following responses:

- Geotechnical Documentation: Submit finalized, signed geotechnical and geologic hazard reports that meet county standards and include all relevant project information and previous reports that are relied on.
    - PSI has completed a geotechnical report for the subject site. PSI will complete a geologic hazard report following design completion.
- Existing Fill Assessment: Provide comprehensive documentation of existing fill placement, materials used, and extent, corroborated with historical aerial images or lidar differencing. Verify the suitability of existing fill for supporting proposed structures and additional fill, especially along the project's western or northern edges.
    - Regarding suitability of existing fill: PSI has recommended extensive site work to be performed below structures, including reconditioning on-site soil (not including claystone

bedrock) and imported fill in the upper 10 feet. Furthermore, placement testing reports were provided by the developer from the time of the initial site grading. While the testing reports indicate slightly inconsistent compaction results, it does appear that the existing fill was placed with some effort. Additionally, PSI has provided information regarding the new fill placement in the area of the existing slopes.

- Slope Stability Analysis: Conduct thorough analyses covering the pre-fill stability of potentially unstable slopes and buried landslides, the stability of existing and planned fill, planned cuts, and the global stability of retaining walls (ranging from 4 to 30 feet in height).
    - Extensive site grading and retaining walls will be performed and constructed as part of this development, significantly altering the current conditions. PSI will review the existing and proposed slopes and new retaining wall design once complete in order to evaluate the proposed conditions.
- Drainage Considerations: Clarify how water from historic groundwater flow will drain from the former valley now infilled, where the existing drainpipe will be removed (Existing Conditions Sheet C200).
    - PSI did not observe groundwater during our geotechnical investigation with the exception of one boring at the bottom of the existing slopes. For the geologic hazard report, PSI will review site drainage plans. We will need to coordinate with the Civil Engineer in regard to drainage routing and its effects once design is complete.
- Water Feature Design: For the planned detention pond and swimming pool, provide recommendations for a liner and perform slope stability analyses for these features to mitigate potential impacts on geologic hazards from long-term infiltration.
    - Once plans are complete for the planned detention pond and swimming pool by others, PSI can review plans as part of the geologic hazard report.

We appreciate the opportunity to perform services and look forward to continued participation during the design and construction phases of this project. If you have any questions, please contact our office.

Respectfully Submitted,

PROFESSIONAL SERVICE INDUSTRIES, INC.

Hannah C. Tawfik, PE
Senior Project Engineer

Kyle R. Duitsman, PE
Regional Director