

# COLORADO GEOLOGICAL SURVEY

1801 Moly Road  
Golden, Colorado 80401



August 4, 2021

Karen Berry  
State Geologist

Kari Schott  
Planning and Community Development  
Development Review Enterprise  
2880 International Circle, Suite 200-7  
Colorado Springs, CO 80901

**Location:**  
E Section 13,  
T13S, R67W of the 6<sup>th</sup> PM  
38.9181°, -104.8333°

**Subject: Creekside at Rockrimmon, Lot 9, 252 Heavy Stone, Development Plan;  
City of Colorado Springs, El Paso County, CO;  
City File Number CPC PUD 20-00109; CGS Unique No. EP-21-0004 4**

Dear Kari:

As requested, Colorado Geological Survey (CGS) has reviewed the revised plans. We previously reviewed this referral on 8.11.20, 12.2.20, and 2.4.21. Resubmittal documents include: City request for review (7.21.21), Drainage report (Drexel, Barrell, 6.21), PUD Development Plan (Drexel, Barrell 7.19.21), and Geologic Hazard Study (Entech Engineering (Entech), Revised 7.16.21). We understand that some changes to the original proposal have occurred in coordination with the Army Corp of Engineering.

Revised Geologic Hazard Study and PUD Development Plan: To avoid future confusion, it would be prudent for the city to require the latest report by Entech to include all CGS letters (only some are included) along with Entech's previous response letters (none are included). Additionally, this latest report by Entech should be referenced (7.16.21) in the Geologic Disclosure Statement on the plans. The comments from our last review letter are still applicable and are repeated here in italics.

*Undermined Area: The Pikeview Mine underlies portions of the site. CTL, Thompson, Inc. conducted a site-specific subsidence investigation in 1984 for a similar development plan at this location. The conclusions and recommendations of that subsidence investigation are being relied on for this submittal. The subsidence investigation included evaluations for subsidence that indicate acceptable factors of safety for the risk of surface subsidence. Additionally, Entech has provided recommendations for specific foundation and infrastructure design and construction that will allow for strains resulting from subsidence should it occur.*

*As our previous concerns have been addressed by the applicant and their consultants, **CGS has no objection to the project as currently proposed, provided there is clear disclosure to future homeowners of the unique risk, however low, from mine-related subsidence at this location.** For this risk, Entech recommends mine subsidence insurance for future homeowners. Our experience is that subsidence insurance for undermined areas, if available, may be challenging to obtain and extremely expensive. Availability can also change and be suspended later at the discretion of the insurance company. Additionally, new homes do not qualify for the state mine subsidence program. Future homeowners should be made fully aware of the subsidence risk, potential problems of obtaining and keeping insurance, as well as the engineering work that has been done to understand and mitigate subsidence risk at this site. Because of the importance of this disclosure,*

- *CGS recommends an additional note be added to the plans stating that subsidence insurance is recommended in portions of the development.*

Thank you for the opportunity to comment on this project. If you have questions or require further review, please e-mail [jlovekin@mines.edu](mailto:jlovekin@mines.edu).

Sincerely,  
Jonathan R. Lovekin, P.G.  
Senior Engineering Geologist

A handwritten signature in blue ink that reads "Jonathan R. Lovekin".