

# COLORADO GEOLOGICAL SURVEY

1801 19<sup>th</sup> Street  
Golden, Colorado 80401



Karen Berry  
State Geologist

January 2, 2019

Kari Parsons  
El Paso County  
Planning and Community Development  
2880 International Circle, Suite 110  
Colorado Springs, CO 80910

**Location:**  
N½ SE ¼ Section 9,  
T12S, R65W of the 6<sup>th</sup> P.M.  
39.0182°, -104.6681°

**Subject: Redtail Ranch Subdivision (SP184), Preliminary Plan,  
Black Forest, CO; CGS Unique No. EP-18-0064 2**

Dear Kari:

Colorado Geological Survey has reviewed the Redtail Ranch resubmittal. Updated documents provided for our review included: Letter of Intent (N.E.S., December, 2018), Drainage Report (Classic Consulting, November 2018), Preliminary Plan (N.E.S., December 7, 2018), and Soils and Geology Report (RMG Engineers, Revised November 9, 2018).

CGS previously reviewed this submittal on August 21, 2018. We continue to agree with the geotechnical assessment that no geologic hazards or constraints exist at the site that would preclude development as planned and that all of RMG's engineering recommendations be strictly adhered to. However, the updated documents indicate that there is some confusion about what those geologic hazards and constraints actually are. This can be seen when comparing the geologic hazard report and the geologic hazard disclosure statement provided on the preliminary plan.

Geologic Hazard Report: The report states (p.18): "*Geologic hazards (as described in section 7.0 of this report) and geologic constraints (also as described in section 7.0 of this report) other than Seismicity, Radioactivity/Radon Gas and the potential for uncontrolled fill were not found to be present at this site.*" Yet, the report, its subsurface data, and geologic mapping identify site conditions that are either not discussed (shallow bedrock) or not included in the summary of the conditions that exist on the site (erosion, corrosion, potentially expansive bedrock, and flooding in the natural drainage).

Preliminary Plan: Note 16 states: "*Constraints identified consist of Potentially Expansive Soils, Radon which is generally considered high in most of Colorado, Flooding and Surface Drainage, potentially Shallow Groundwater, and Erosion.*"

- CGS recommends that the geology and soils report provide a complete and clear summary of the geologic hazards and constraints actually identified at the site and mitigation planned for these conditions. This should include a discussion of the shallow bedrock constraint located at the site. The notes on the Preliminary Plan should be consistent with this summary.

RMG provides a useful map (Fig.18) depicting areas with significant ground conditions. For instance, areas with known septic fields are shown.

- We recommend that the Preliminary Plan also depict these known septic field areas with notes on requirements for additional investigation and engineering should building be planned in these areas or label them as no-build areas.
- The Preliminary Plan should indicate that the natural drainage on Lot 4 is a no-build area.

Kari Parsons  
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Thank you for the opportunity to review and comment on this project. If you have questions or require further review, please call at 303-384-2654, or email [jlovekin@mines.edu](mailto:jlovekin@mines.edu).

Sincerely,

A handwritten signature in blue ink that reads "Jonathan R. Lovekin". The signature is written in a cursive style with a large initial 'J' and a distinct 'L'.

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