

COLORADO GEOLOGICAL SURVEY

1801 19th Street
Golden, Colorado 80401
303.384.2655



Karen Berry
State Geologist

June 29, 2015

Lonna Thelen, AICP, LEED AP
Planning & Development, Land Use Review Division
City of Colorado Springs
P.O. Box 1575
Colorado Springs, CO 80901

Location:
NW¼ SE¼ NW¼ Section 29,
T13S, R66W of the 6th P.M.
38.8926, -104.807

Subject: Follow-up – Bates Student Housing – 702 Cragmor Road
City of Colorado Springs, El Paso County, CO; CGS Unique No. EP-15-0024

Dear Lonna:

Colorado Geological Survey has reviewed Terracon's Phase II subsidence hazard investigation plan and response (June 24, 2015) to CGS's June 4, 2015 review of the proposed Bates Student Housing Project at 702 Cragmor Road. Terracon's Phase II plan is reasonable and, if implemented as proposed, should satisfactorily address CGS's subsidence-related concerns.

Air shaft setback: Colorado Division of Reclamation, Mining and Safety (DRMS) oversees closure of shafts and other AML (abandoned mine lands)-related features. I am deferring to (and the applicant's geotechnical engineer will need to consult with) them on the guidelines/specifications for stabilizing, sealing and capping the air shaft once located, and setback requirements or recommendations.

Phase II boring plan: The boring location plan shows nine borings to better delineate and characterize depth, condition, and location of mine workings, to determine potential impacts to development plans, and to design mitigation if needed (whether through a grouting/stabilization program or foundation design). Boring locations may need to be adjusted as the Phase II subsidence investigation progresses, and additional borings may be needed, depending on whether mine workings are encountered, and findings.

CGS looks forward to reviewing the results of the Phase II subsidence investigation, analysis, mitigation recommendations (if a subsidence hazard is determined to be present), and shaft location and stabilization results. If you have questions or require further review, please call me at 303-384-2643, or e-mail carlson@mines.edu.

Sincerely,

A handwritten signature in black ink, appearing to read "Jill Carlson".

Jill Carlson, C.E.G.
Engineering Geologist