

COLORADO GEOLOGICAL SURVEY

1801 19th Street
Golden, Colorado 80401



Karen Berry
State Geologist

June 5, 2017

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

Location:
SW $\frac{1}{4}$ Section 8,
T14S, R65W of the 6th P.M.
38.8451, -104.6937

Subject: Meadowbrook Crossing Residential – Preliminary Plan (revised)
File Number SP-17-002; El Paso County, CO; CGS Unique No. EP-17-0035_2

Dear Kari:

Colorado Geological Survey has reviewed the revised Meadowbrook Crossing Residential preliminary plan referral/resubmittal. I understand the applicant now proposes 114 units (previously 104) on approximately 32.3 acres located between the East Fork of Sand Creek and Meadowbrook Parkway. The Letter of Intent and Natural Features Report (Thomas & Thomas Planning, March 30, 2017 and April 27, 2017, respectively) have been revised. The Geologic Hazards Evaluation and Preliminary Geotechnical Investigation (CTL|Thompson, revised December 9, 2016) is the same report previously reviewed by CGS (review letter dated February 16, 2017). Our previous comments therefore remain valid, with revisions based on the revised lot layout and numbering:

CTL provides a valid description of surface and subsurface conditions, and makes appropriate *preliminary* recommendation to mitigate potential damage related to hydrocompactive soils, shallow groundwater, and erosion along the East Fork of Sand Creek.

Shallow groundwater. The very shallow groundwater area identified by CTL is correctly shown on the preliminary plan. **The current referral documents do not include the final plat, so we cannot determine whether the final plat has been corrected, as recommended in our 2/16/2017 review letter, to identify the shallow groundwater area.** Basements should not be considered feasible on, at a minimum, proposed lots 25 through 31 and 46 through 52 unless site grades are raised sufficiently to provide a minimum 3 ft. separation distance between lowermost floor levels and shallowest anticipated seasonal groundwater levels.

Erosion and erosion-related slope instability along Sand Creek East Fork. According to FEMA Flood Insurance Rate Map panels 08041C0752F and 08041C0754F (March 17, 1997), portions of the site are located within the Sand Creek East Fork 100-year flood zone. The applicant states that drainage improvements are planned to remove proposed lots from the flood zone, and that a Letter of Map Revision (LOMR) has been submitted to FEMA. CGS recommends that all proposed lots be set back an adequate distance from channel slopes to reduce hazards associated with erosion, shallow downslope creep, undercutting, and erosion-related slope instability. **CTL should verify that the 30 ft. setback/sanitary sewer easement shown on the preliminary plan behind proposed lots 24 through 33 is adequate.**

Kari Parsons
June 5, 2017
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Thank you for the opportunity to review and comment on this project. If you have questions or require additional 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". The signature is fluid and cursive, with a large initial "J" and "C".

Jill Carlson, C.E.G.
Engineering Geologist