CGS Unique Number: EP-27-0016_1 Welsch at Howell's Final Plat
El Paso File No.: SF2628
Location: SW¼ Section 14, T12S, R66W, 6th P.M.
38.998, -104.7528

As requested by the county (email, October 15, 2026), the Colorado Geological Survey (CGS) has reviewed the submittal (County File # SF2628, located at 38.998° N, 104.7528° W). The letter of intent states that the existing 5-acre site will be subdivided into two 2.5-acre parcels, with one single-family home on each lot. A soils and geology study was submitted with this application (Rocky Mountain Group (RMG), May 26, 2026). CGS generally agrees with the geologic interpretation, the hazards and constraints identified that are related to site geology, and the recommendations for mitigating these conditions. RMG's recommendations concerning identified hazards and constraints should be followed except where noted in the following paragraphs, where additional recommendations are provided.

Groundwater: RMG states on page 9, "*Groundwater was not encountered in the test borings or test pits performed for this investigation. We do understand surface and subsurface water elevations will fluctuate throughout the year. The test borings (both previous and current) were performed in the winter season. Generally boring performed in the winter months' exhibit "deeper" groundwater during the "drier" season (winter)."* The test borings were drilled during the winter of 2025. RMG did not recheck the test borings following drilling, however concluded that "*groundwater is not expected to influence the construction of the proposed single-family residence of the new eastern lot.*"

RMG states (page 12), "*At this time, there is not enough conclusive evidence to preclude basement construction."* However, because of the proximity to Kettle Creek and unknown groundwater conditions through the spring/summer, CGS concludes that there is not enough evidence to permit basement construction. The flow in Kettle Creek is intermittent and varies from year to year, with some years experiencing greater flow than others. CGS recommends that the county require a note on the final plat stating that no basements are allowed unless a monitoring program over a 12-month period establishes the depth and fluctuation of groundwater at this location.

Scour erosion and slope stability: RMG has identified the potential for future scour erosion that can destabilize and erode the creek banks. RMG has proposed the northeastern portion of the property as a "No-Build Area." This area should also be noted on the plat. CGS recommends that, once the proposed residence footprint is known, RMG review its location relative to the No-Build Zone and determine whether a slope stability analysis is required. CGS recommends that the county require permanent mitigation of potential scour erosion of the current stream banks for the design storm event. The civil engineer should evaluate the extent of scour erosion for the design event and provide mitigation, such as armoring of the slope bank.

Before approval of this final plat, CGS recommends that the county require:

- A geologic hazard statement, as per the El Paso County Land Development Code, should be included in the plat.
- A note on the plat stating that no basements are allowed unless a monitoring program over 12 months establishes the depth and fluctuations of groundwater at this location.
- Permanent mitigation be developed for the potential scour erosion of the stream banks during the design storm event. The civil engineer should evaluate the extent of scour erosion for the design event and provide mitigation, such as armoring of the slope bank.
- The proposed structure footprint to be reviewed by RMG in relation to the No-Build Zone to determine if a slope stability analysis is warranted.

Submitted November 4, 2026 by Amy Crandall, Engineering Geologist, Colorado Geological Survey
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