

EP-24-0022_3 Overlook at Homestead Filing No. 1 Final Plat
File Number: SF2425
Location: Section 27, T11S, R64W, 6th P.M.
39.0681, -104.5456

The available referral documents include the Response to CGS Review Comments (Entech Engineering, Inc., November 13, 2024), a Soil and Geology Study (Entech Engineering Inc., Revised November 13, 2024), Final Plat (Edward-James Surveying, Inc., June 5, 2024), Letter of Intent (N.E.S., Inc., November 2024), Final Drainage Report (Kimley Horn and Associates, November 6, 2024), and other documents. We understand that Filing No. 1 comprises 36 single-family lots within 202 acres. Entech's response to our review comments generally addresses some of our previous comments. We offer the following comments.

Rockfall and potentially unstable slopes. Entech identified potentially unstable slopes along the mesa with rockfall hazards associated with the rock outcrops. The lots listed on Entech's site plan have been updated to match the final plat (Edward-James Surveying, Inc., June 5, 2024). Entech states in their response letter, "Lots impacted by the Rockfall and Potentially Unstable Slopes within Filing No. 1 include Lots 18-26. These areas should be identified as no-build areas." **CGS recommends that Note 28 of the final plat is updated to include rockfall hazards associated with Lots 18 to 26 and "no-build areas" noted on the plat.** Site improvements must not be located within areas mapped with hazards/constraints.

Debris fans/debris flow susceptibility. The lots listed on Entech's site plan have been updated to match the final plat (Edward-James Surveying, Inc., June 5, 2024). Entech states in their response letter, "Lots impacted by the Debris Fan/Debris Flow Susceptibility includes Lots 11-23." However, Fig. 7 of their revised report states, "Debris Flow Susceptibility – (Figure 9) Lots affecting by this potential hazard include Lots 23-35." **CGS recommends that Fig. 7 of Entech's report and Note 28 of the final plat be updated to include debris flow hazards associated with Lots 11-23.**

Groundwater, perched water, and foundation drainage recommendations. Groundwater was encountered in test holes 2, 7, 8, 17, and 18 at depths of 3 to 8.5 feet below grade within Filing No. 1. It does not appear that a groundwater monitoring/observation program was performed for Filing No. 1. CGS disagrees with Entech regarding the impacts of shallow groundwater being identified on a lot by lot basis before construction. CGS continues to recommend that no basements be allowed in areas/lots mapped with potentially seasonal shallow groundwater, seasonal shallow groundwater, ponded or flowing water, or springs unless a groundwater and observation program is performed verifying the 3-foot minimum separation between foundation components and maximum groundwater levels can be maintained year-round.

Entech states (p. 9), "Where shallow groundwater is encountered, underslab drains or interceptor drains may be necessary." An underdrain system should be allowed ONLY if it can gravity discharge to a daylight outfall. Additionally, Entech states, "In areas where high subsurface moisture conditions are anticipated periodically, a subsurface perimeter drain will be necessary to help prevent the intrusion of water into areas located below grade." Individual foundation perimeter drains are intended to handle small amounts of intermittent, perched water and may NOT be used to mitigate persistent shallow groundwater conditions.

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