

November 24, 2021

Ryan Howser El Paso County Development Services Department DSDcomments@elpasoco.com

> RE: Mountains Edge Subdivision, Final Plat Section 13, T12S, R63W, 6th P.M. Water Division 2, Water District 10 Upper Black Squirrel Creek Designated Basin

Dear Ryan Howser:

We have reviewed your November 12, 2021 submittal concerning the above referenced proposal for the subdivision of 30.613 acres into 5 residential lots. We previously commented on this development by letters dated April 26, 2010, September 30, 2010, October 12, 2018 and February 25, 2020. At the time of our prior reviews the proposal was to divide 40 acres into 5 residential lots. From the submitted information it is unclear if the remaining 9.387 acre parcel is a part of this subdivision, and if, not how that parcel was created.

Water Supply Demand

According to the Mountains Edge Filing 1 subdivision Water Resources Report dated May 12, 2021 ("Water Resources Report") provided with the submittal, the estimated water requirements total 2.28 acre-feet annually (0.456 acre-feet/year per lot), for in house use; a maximum of 3,000 square feet of landscape/irrigation of lawn and gardens; and watering of 2 domestic animals per lot.

Source of Water Supply

The proposed source of water supply is individual on-lot wells producing from the nontributary Arapahoe aquifer pursuant to Determination of Water Right No. 1484-BD.

Determination of Water Right no. 1484-BD was issued by the Ground Water Commission ("Commission") on March 12, 2008 for an allowed average annual amount of withdrawal of groundwater of 13.3 acre-feet from the Arapahoe Aquifer (based on an aquifer life of 100 years) to be used on 40 acres generally described as the N1/2 of the N1/2 of the SW1/4, Section 13, Township 12 South, Range 63 West, 6th P.M. (Overlying Land). The 30.613 acres that are the subject of this referral are within the 40 acres of Overlying Land.

According to the Water Resources Report, 10.18 acre-feet of allowed annual withdrawal allocated in 1484-BD is available for use by this proposed subdivision.

The proposed source of water for this development is a bedrock aquifer allocation from the Denver Basin. The State Engineer's Office does not have evidence regarding the length of time for which the bedrock aquifer sources will be a physically and economically viable source of water. According to 37-90-107(7)(a), C.R.S., "Permits issued pursuant to this subsection (7) shall allow withdrawals on the basis of an aquifer life of 100 years." Based on this allocation approach, the annual amounts of water determined in Determination of Water Right No. 1484-



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BD is equal to one percent of the total amount, as determined by rule 5.3.2.1 of the Designated Basin Rules, 2 CCR 410-1. Therefore, the water may be withdrawn in those annual amounts for a maximum of 100 years.

The El Paso County Land Development Code, Section 8.4.7.(B)(7)(b) states:

- "(7) Finding of Sufficient Quantity
 - (b) Required Water Supply. The water supply shall be of sufficient quantity to meet the average annual demand of the proposed subdivision for a period of 300 years."

The State Engineer's Office does not have evidence regarding the length of time for which the bedrock aquifer sources will "meet the average annual demand of the proposed subdivision." However, treating El Paso County's requirement as an allocation approach based on three hundred years, the allowed average annual amount of withdrawal of 10.18 acre-feet per year from the Arapahoe aquifer would be reduced to one third of the allocation, or 3.39 acre-feet per year. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years, and is sufficient to meet the proposed on lot demands.

According to our records the well constructed under permit no. 225983 is located on the 40 acres of Overlying Land described above and may be located on the 30.613 acre parcel that is the subject of this referral. Well 225983 is constructed in the not nontributary (actual impact replacement) Denver aquifer. If the well is located on the 30.613 acre property, upon approval of this subdivision the conditions under which this permit was issued would no longer exist, making the well out of compliance with its permit. Continued use of the well would require that it be re-permitted. As the well would be located within a post-June 1, 1972 subdivision material injury to other water rights would be a consideration in re-permitting the well. Prior to further evaluation of the subdivision water supply plan the Applicant must clarify if this well is located on the 30.613 acre parcel. If the well is located on the 30.613 acre parcel then the Applicant must clarify if the well will be plugged and abandoned or if it will be re-permitted to operate pursuant to Determination of Water Right no. 1485-BD and its associated replacement plan prior to subdivision approval.

If the well is not located on the 30.613 acre parcel then the well would be located on the remaining 9.387 acre portion of the 40 acre Overlying Land. From the submitted information it is unclear if that 9.387 acre parcel is a part of this subdivision and if it is not, how that parcel was created.

State Engineer's Office Opinion

Based on the above and pursuant to section 30-28-136(1)(h)(l), C.R.S., the State Engineer's Office has not received enough information to render an opinion regarding the potential for causing material injury to decreed water rights, or the adequacy of the proposed water supply. Prior to further review of the subdivision water supply plan the following information is required:

- 1. The Applicant must clarify if the well constructed under permit 225983 is located on the 30.613 acre parcel that is the subject of this referral. If the well is located on the 30.613 acre parcel then the Applicant must clarify if the well will be plugged and abandoned or if it will be re-permitted to operate pursuant to Determination of Water Right no. 1485-BD and its associated replacement plan prior to subdivision approval.
- 2. The Applicant must clarify if the remaining 9.387 acre portion of the 40 acre Overlying Land is part of this subdivision and if not how that parcel was created.

If you, or the applicant, have any questions, please contact me at 303-866-3581 ext. 8265 or Joanna. Williams@state.co.us.

Sincerely,

Joanna Williams, P.E. Water Resources Engineer

Ec: Upper Black Squirrel Creek GWMD Well permit no. 225983

SEO Subdivision referral no. 22285