



March 18, 2020

Nina Ruiz
El Paso County Development Services Department
DSDcomments@elpasoco.com

RE: Saddlehorn Ranch Subdivision (a.k.a. 824 Acre Curtis Road Subdivision)
El Paso County Case No. SP196 and Final Plat Case No. SF1912
Section 3 and the N ½ of the N ½ of Section 10, T13S, R64W, 6th P.M. Water
Division 2, Water District 10
Upper Black Squirrel Creek Designated Basin

Dear Ms. Ruiz:

We have reviewed your March 12, 2020 submittal concerning the above referenced proposal for the development of 816.5 acres into 218 single family lots, including roads, drainage facilities, and utilities. We previously provided comments to this proposed development by our letters dated May 30, 2019, June 6, 2019, and October 9, 2019, when the proposal was to subdivide the 816.5 acres into 224 single-family lots. This letter replaces our previous comment letters.

Water Supply Demand

According to the submitted JDS-Hydro Water Resources & Wastewater Report revised July 2019 ("Water Resource Report") the total estimated water requirement is 150.08 acre-feet/year based on a demand per lot of 0.67 acre-feet/year. In addition, the Water Supply Information Summary Sheet ("Sheet") included in the referral material indicates that the total estimated water requirement is 133,982 gallons/day or 150.08 acre-feet/year also based on a demand per lot of 0.67 acre-feet/year. We note that the total estimated demand is for 224 single-family lots, previously proposed for this development. Based on a demand per lot of 0.67 acre-feet/year the total demand for the 218 single-family lots would be 146.06 acre-feet. Since this amount is within the limitation of the estimated demand we will not require further clarification and the Applicant shall provide clarification on the total demand to the county.

Source of Water Supply

The proposed water supply for this subdivision is still listed as the nontributary ground water from the Arapahoe and Laramie-Fox Hills aquifers that is the subject of Determination of Water Rights Nos. 458-BD and 457-BD, respectively, to be provided by a central system.

The subdivision lies within the allowed places of use of Determination of Water Right nos. 458-BD and 457-BD, and the proposed uses are uses allowed by those Determinations.

Determination of water Rights No. 457-BD allows for an average annual diversion of 2,347 acre-feet for a maximum of 100 years and the Determination of Water Right No. 458-BD allows for an annual average diversion of 2,719 acre-feet for a maximum 100 years. According to a Water Rights Deed signed on August 30, 2018 that is contained within Exhibit E of the Water Resources Report the developer owns only 243.83 acre-feet/year of Determination of



Water Right no. 458-BD and 210.47 acre-feet/year of Determination of Water Right no. 457-BD.

The proposed sources of water for this development are bedrock aquifers in 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 Nos. 458-BD and 457-BD are 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.

In the El Paso County Land Development Code, effective November 1986, Chapter 5, Section 49.5, (D), (2) states:

"- Finding of Sufficient Quantity - The water supply shall be of sufficient quantity to meet the average annual demand of the proposed subdivision for a period of three hundred (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 243.83 acre-feet/year from the Arapahoe aquifer (458-BD) that the developer owns and 210.47 acre-feet/year from the Laramie-Fox Hills aquifer (457-BD) that the developer owns would be reduced to one-third of those amounts, or 81.28 acre-feet/year from the Arapahoe aquifer and 70.16 acre-feet/year from the Laramie-Fox Hills aquifer. As a result, the water may be withdrawn in those annual amounts for a maximum of 300 years.

The proposed annual water supply of 151.44 acre-feet/year (81.28 acre-feet/year from the Arapahoe aquifer plus 70.16 acre-feet/year from the Laramie-Fox Hills aquifer) is more than the estimated annual demand of 150.08 acre-feet/year.

State Engineer's Office Opinion

Based upon the above and pursuant to Sections 30-28-136(1)(h)(I), C.R.S., it is our opinion that the proposed water supply is adequate and can be provided without causing injury to water rights.

Our opinion that the water supply is adequate is based on our determination that the amount of water required annually to serve the subdivision is currently physically available, based on current estimated aquifer conditions.

Our opinion that the water supply can be provided without causing injury is based on our determination that the amount of water that is legally available on an annual basis, according to the statutory allocation approach, for the proposed uses on the subdivided land is greater than the annual amount of water required to supply the demands of the proposed subdivision.

Our opinion is qualified by the following:

The amounts of water in the Denver Basin aquifer, and identified in this letter, are calculated based on estimated current aquifer conditions. For planning purposes, the county should be aware that the economic life of a water supply based on wells in a given Denver Basin aquifer may be less than the 100 years (or 300 years) used for allocation due to anticipated water level declines. We recommend that the county determine whether it is appropriate to require

development of renewable water resources for this subdivision to provide for a long-term water supply.

Additional Comments

Information in a SGM Technical Memorandum dated July 11, 2019 provided with the submittal indicates that two existing wells, permit nos. 66937-F and 66938-F, are owned by the developer and will be used to supply the subdivision. Well permit no. 66937-F allows for an annual withdrawal of 1,600 acre-feet/year from the Arapahoe aquifer pursuant to Determination of Water Right no. 458-BD, and well permit no. 66938-F allows for an annual withdrawal of 800 acre-feet/year from the Laramie-Fox Hills aquifer pursuant to Determination of Water Right no. 457-BD. Since the developer does not own the amount of the right for which the permits are issued the developer must obtain new well permits in accordance with Section 37-90-107(7) C.R.S., for the amounts owned and request that permit nos. 66937-F and 66938-F be cancelled.

The submittal indicates that a storm water detention structure will be constructed as a part of this project. The applicant should be aware that, unless the structure can meet the requirements of a "storm water detention and infiltration facility" as defined in Designated Basin Rule 5.11, the structure may be subject to administration by this office. The applicant should review Rule 5.11 to determine whether the structure meets the requirements of the Rule and ensure any notification requirement is met.

If you, or the applicant, have any questions, please contact Ioana Comaniciu at 303-866-3581 ext. 8246.

Sincerely,



Keith Vander Horst
Chief of Water Supply, Designated Basins

Ec: Division 2
Referral no. 26492
Well permit nos. 66937-F & 66938-F
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