



December 29, 2020

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

RE: Circle A Subdivision
Part of the SW $\frac{1}{4}$ of the NE $\frac{1}{4}$, Section 23, T11S, R65W, 6th P.M.
Kiowa Bijou Designated Ground Water Basin
Water Division 1, Water District 1

Dear Ryan Howser:

We have received your December 7, 2020 submittals concerning the above-referenced proposal to subdivide a 14.9-acre parcel of land into three lots.

Water Supply Demand

According to the submitted Water Supply Information Summary Sheet and report for Denver Basin Groundwater Assessment dated August 19, 2019 by Julia Murphy (“Water Resources Report”) provided with the submittal, the estimated water requirements total 4.05 acre-feet annually (1.35 acre-feet/year per lot), for in-home purposes, outdoor irrigation of landscape, lawn and gardens, domestic animals and greenhouse use.

Source of Water Supply

The proposed source of water supply is individual on-lot wells producing from the non-tributary (actual replacement) Dawson aquifer, including well permit no. 101207, pursuant to the Replacement Plan for Determination of Water Right No. 4043-BD.

Determination of Water Right no. 4043-BD was issued by the Ground Water Commission (“Commission”) on November 9, 2020 for an allowed average annual amount of withdrawal of ground water of 13.18 acre-feet from the Dawson Aquifer (based on an aquifer life of 100 years) to be used on the 14.9 acre parcel that is the subject of this referral.

On November 9, 2020 the Commission approved the Replacement Plan for Determination of Water Right no. 4043-BD. The Replacement Plan for Determination of Water Right no. 4043-BD allows for the withdrawal of 4.05 acre-feet per year of ground water from the Dawson aquifer for 300 years, through three wells, including the existing well constructed under permit no. 101207, to be located on three residential lots on the 14.9 acres which is the subject property of this referral. Each well may withdraw 1.35 acre-feet per year of groundwater to be used for in-home use, irrigation of landscape and gardens, domestic animals, commercial, fire protection, recreational, greenhouse, replacement and the watering of stock animals, either directly or after storage. These allowed uses are consistent with the proposed uses specified in the Water Supply Report.

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. 4043-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.

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 4.05 acre-feet per year from the Dawson aquifer pursuant to the Replacement Plan for Determination of Water Right no. 4043-BD for a maximum of 300 years, is sufficient to supply the requirement of 4.05 acre-feet/year.

The Water Supply Information Summary Sheet submitted indicates the existing well under permit no. 101207 will be used for the subdivision. 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. As the well would be located within a post-June 1, 1972 subdivision, material injury to other water rights are a consideration in both the proposed water supply to the subdivision and any re-permitting of the well. It appears that the existing well permit no. 101207 would have to be re-permitted pursuant to the Replacement Plan for Determination of Water Right no. 4043-BD, which has not been proposed.

State Engineer’s Office Opinion

Based upon the above and pursuant to Section 30-28-136(1)(h)(I), C.R.S., it is our opinion that the proposed water supply is not adequate and cannot be provided without causing injury to decreed water rights.

It appears that in order to obtain a favorable opinion from this office on the proposed water supply to the subdivision, the applicant must do the following:

1. The existing well under permit no. 101207 must either be re-permitted pursuant to the Replacement Plan for Determination of Water Right no. 4043-BD or the well must be plugged and abandoned prior to subdivision approval.

If you, or the applicant, have any questions, please contact Ailis Thyne at ailis.thyne@state.co.us.

Sincerely,



Joanna Williams, P.E.
Water Resources Engineer

Ec: Well permit no. 101207
SEO referral no. 27464

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