



September 23, 2020

Lindsay Darden
El Paso County Development Services Department
DSDcomments@elpasoco.com

RE: Pine View Estates Subdivision
The SW ¼ of the NW ¼, Section 13, T11S, R64W, 6th P.M.
Kiowa Bijou Designated Ground Water Basin
Water Division 1, Water District 1

Dear Lindsay Darden:

We have received your September 1, 2020 submittals concerning the above-referenced proposal to subdivide a 38.8-acre parcel of land into seven lots.

Water Supply Demand

According to a report from JDS-Hydro Consultants, Inc. dated December 2019 (“Water Resources Report”) provided with the submittal, the estimated water requirements total 3.36 acre-feet annually (0.48 acre-feet/year per lot), for domestic use, irrigation, stock watering, commercial and replacement.

Source of Water Supply

The proposed source of water supply is individual on-lot wells producing from the non-tributary (actual replacement) Dawson aquifer pursuant to the Replacement Plan for Determination of Water Right No. 1588-BD.

Determination of Water Right no. 1588-BD was issued by the Ground Water Commission (“Commission”) on May 20, 2008 for an allowed average annual amount of withdrawal of ground water of 19.4 acre-feet from the Dawson Aquifer (based on an aquifer life of 100 years) to be used on 74.5 acres, of which the 38.8 acre parcel that is the subject of this referral is a portion.

On January 24, 2020 the Commission approved the Replacement Plan for Determination of Water Right no. 1588-BD. The Replacement Plan for Determination of Water Right no. 1588-BD allows for the withdrawal of 3.36 acre-feet per year of ground water from the Dawson aquifer for 300 years, through seven wells to be located on seven residential lots on the 38.8 acres which is the subject property of this referral. Each well may withdraw 0.48 acre-feet per year of groundwater to be used for use in one single family dwelling, irrigation, stock watering, commercial and replacement. 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. 1588-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 3.36 acre-feet per year from the Dawson aquifer pursuant to the Replacement Plan for Determination of Water Right no. 1588-BD for a maximum of 300 years, is sufficient to supply the requirement of 3.36 acre-feet/year.

The Water Resources Report submitted makes reference to other water rights, including those in the Denver, Arapahoe and Laramie-Fox Hills Aquifers under Determination of Water Right nos. 1587-BD, 1586-BD and 1585-BD, but those rights are not identified as a sources of water for the subdivision.

State Engineer’s Office Opinion

Based upon the above and pursuant to Section 30-28-136(1)(h)(II), C.R.S., it is our opinion that the proposed water supply is adequate and can be provided without causing injury to decreed 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 existing water commitments and the demands of the proposed subdivision.

Our opinion is qualified by the following:

The Ground Water Commission has retained jurisdiction over the final amount of water available pursuant to the above-referenced decree, pending actual geophysical data from the aquifer.

The amounts of water in the Denver Basin aquifer, and identified in this letter, are calculated based on estimated current aquifer conditions. The source of water is from a non-renewable aquifer, the allocations of which are based on a 100 year aquifer life. 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.

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

Sincerely,

A handwritten signature in black ink that reads "Keith Vander Horst". The signature is written in a cursive, flowing style.

Keith Vander Horst, P.E.
Chief of Water Supply, Designated Basins

Ec: SEO referral no. 27305

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