

January 25, 2021

Kari Parsons El Paso County, Planning and Community Development DSDcomments@elpasoco.com

RE: Falcon Meadows at Bent Grass

Part of the W ½, Sec. 1, T13S, R65W, 6<sup>th</sup> P.M.

Water Division 2, Water District 10

Upper Black Squirrel Creek Designated Basin

Dear Ms. Parsons:

We have received your January 5, 2021 submittal concerning the above-referenced proposal for the subdivision of 67 acres into 267 single family lots and 17 tracts. This office previously commented on the submittal for the subdivision of the same 67 acres into 260 residential lots in a letter dated September 16, 2020. This letter supersedes the September 16, 2020 letter.

## Water Supply Demand

According to the Water Supply Information Summary, the total estimated water requirement for the 267 single family lots is 95.16 acre-feet per year for a 300 year water supply.

## **Source of Water Supply**

Woodmen Hills Metropolitan District ("District") is the proposed water supplier. The District has provided a letter dated December 11, 2020 committing to serve 267 residential lots with a water commitment of 95.16 acre-feet per year.

The District's sources of water are a combination of bedrock aquifer allocations from the Denver Basin as well as alluvial sources. 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 <u>allocation</u> approach, the annual amounts of water determined 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 Therefore, the water may be withdrawn in those annual amounts for a maximum of 100 years.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 <u>allocation</u> approach based on three hundred years, the annual amounts of water available from the bedrock aquifers that may be withdrawn from a maximum period of 300 years are equal to one-third of one percent of the total amount.



Information available in our files indicates the District's water supply totals approximately 1,426 acre-feet/year for a period of 300 years (987 acre-feet/year from bedrock aquifers and 439 acre-feet/year from the alluvial aquifer), and it has approximately 1,006 acre-feet/year committed to supplying subdivisions and 30 acre-feet/year committed to replacement obligations, for a total commitment of 1,036 acre-feet/year.

The uncommitted annual water supply of 390 acre-feet/year is more than the estimated annual demand of 95.16 acre-feet/year for Falcon Meadows at Bent Grass 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.

## **Additional Comments**

According to the Falcon Meadows at Bent Grass Preliminary PUD Water Resources Report & Wastewater Treatment Report by JDS-Hydro Consultants revised August 2020 ("Water Resources Report") the District has a total legal supply of 3500.44 acre-feet based on a 100-year allocation approach. That quantity includes a claim for 18.28 acre-feet from the Denver aquifer associated with Determination of Water Right no. 1314-BD. According to Determination of Water Right no. 1314-BD the allowed average annual amount of withdrawal of ground water from the aquifer shall not exceed 12.7 acre-feet which would be 1,270 total based on a 100 year allocation approach. The Water Resources Report should be modified to correctly state the available water. In addition, the Water Resources Report claims water associated with Determination of Water Right Nos. 503-BD, 504-BD and 505-BD. According to those Determination of Water Rights the place of use of the water should be removed from the available water supplies until such time as the place of use of the water

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is changed to allow use within the District. The District should also provide information showing the water rights associated with Determination of Water Right Nos. 503-BD, 504-BD, 505-BD, 1312-BD, 1313-BD and 1314-BD were transferred to the District.

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.

Should you have any questions, please contact Ailis Thyne at ailis.thyne@state.co.us.

Sincerely,

Joanna Williams, P.E. Water Resources Engineer

Ec: Upper Black Squirrel Creek Ground Water Management District SEO referral no. 27299