

February 15, 2022

Ryan Howser El Paso County Development Services Department Transmission via email: ryanhowser@elpasoco.com

RE: Flying Horse North Filing 2
File No. SF228
A Portion of the S1/2 of Section 36, T11S, R66W
Water Division 1, Water District 8

Dear Ryan Howser:

We have reviewed your referral of February 2, 2022 concerning the above referenced proposal for a final plat of a single lot of 2.898 acres within the Flying Horse North development. This lot is shown as Lot 91 within the Flying Horse North preliminary plan. Our office previously provided comments on the Flying Horse North Preliminary Plan (SF-17-012) by our letters dated January 17, 2018, May 17, 2018, July 3, 2018 and September 19, 2018. The new residential lot will be served by an individual on-lot well and septic system. The Applicant obtained an augmentation plan for Dawson aquifer wells in Division 1 Water Court case no. 2016CW3190.

According to previous information received in this office Flying Horse North development was approved for 283 single-family residential lots, 324.1 acres of open space comprised of a golf course and a park on a 1417.8-acre parcel. Based on the information provided Filing 1 of this development was approved by the Board of County Commissioners (Res. No. 18-352), for 80 single-family residential lots and 21 tracts comprised of a golf course, open space, drainage, and other uses.

Water Supply Demand

A Subdivision Summary Form Sheet was not provided, however according to information in the referral material the water requirement for this single lot was estimated at 0.3 acre-feet per year for household use and 0.2875 acre-feet per year for irrigation use.

Based on our records, the total demand for the development is 198 acre-feet/year based on inhouse demand of 0.3 acre-feet/year/lot (84.9 acre-feet/year total), with the remaining of 113.1 acre-feet available for irrigation of residential lawn and common open space. According to a March 15, 2018 letter from the Applicant's water attorney Mr. Alan G. Hill (provided as part of the Flying Horse North preliminary plan) the on-lot residential wells will be limited to 5,000 square feet of lawn and garden by covenants. In addition, the letter states that 28.06 acre-feet per year will be used for common area irrigation, which would leave 85.04 acre-feet for residential lot irrigation (0.3 acre-feet/year/lot). Therefore the total water requirement for the residential lot would be 0.6 acre-feet/year.



Source of Water Supply

The proposed source of water for this one lot is an individual on lot well producing from the not nontributary Dawson aquifer, that will be operated in accordance with the terms and conditions of the augmentation plan approved by the Division 1 Water Court in case no. 2016CW3190. The decreed plan for augmentation in case no. 2016CW3190 allows for an average diversion of 198 acre-feet annually and 59,400 acre-feet total over a 300-year period. According to the decree, the allowed withdrawal from each Dawson aquifer well will be limited to 0.7 acre-feet/year/lot totaling 198 acre-feet/year for the 283 lots for the entire development. The in-house use is limited 84.9 acre-feet/year while the irrigation of individual lots and open space land is limited to 113.1 acre-feet/year. According to the augmentation plan no Dawson aquifer well approved pursuant to the plan for augmentation shall be allowed to pump water for any purpose unless it is also used in a residence on the lot on which such well is located, or for irrigation of open space lands.

The proposed source of water for this subdivision is a bedrock aquifer in the Denver Basin. The State Engineer's Office does not have evidence regarding the length of time for which this source will be a physically and economically viable source of water. According to 37-90-137(4)(b)(I), C.R.S., "Permits issued pursuant to this subsection (4) shall allow withdrawals on the basis of an aquifer life of one hundred years." Based on this <u>allocation</u> approach, the annual amounts of water decreed in consolidated case nos. 94CW023(B) and 2004CW098 are equal to one percent of the total amount, as determined by rules 8.A and 8.B of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7. 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 this source 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 demand for this one lot equals the allowed average annual amount of withdrawal of 0.7 acre-feet/year, allowed by the augmentation plan. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

An application for an on lot well permit, submitted by entities other than the Applicant (PRI #2, LLC) must include evidence that the Applicant has acquired the right to the portion of the water being requested on the application.

State Engineer's Office Opinion

Based upon the above and pursuant to Section 30-28-136(1)(h)(l), C.R.S., it is our opinion that the proposed water supply for the one lots is adequate and can be provided without causing injury to decreed water rights, provided the total annual amount allowed to be withdrawn by the Dawson aquifer wells for the total development, including the new well, will not

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exceed the total annual amount allowed by the augmentation plan approved in the decree in case no. 2016CW3190.

Our opinion that the water supply is **adequate** is based on our determination that the amount of water required annually to serve the in-house use, residential lot lawn and garden irrigation and irrigation of common open space 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 is greater than the annual amount of water required to supply existing water commitments and the in-house use, residential lot lawn and garden irrigation and irrigation of common open space demands of the proposed subdivision.

Our opinion is qualified by the following:

The Division 1 Water Court 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 aquifers, 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.

Should you or the applicant have any questions, please contact Ioana Comaniciu at (303) 866-3581 x8246.

Sincerely,

Joanna Williams, P.E. Water Resource Engineer

Ec: Subdivision File 29091