



January 17, 2018

Nina Ruiz
El Paso County Development Services Department
Transmission via email: NinaRuiz@elpasoco.com

**RE: Flying Horse North Preliminary Plan
File No. SP-17-012
Flying Horse North Preliminary Plan Filing 1 Final Plat
File No. SF181
Portions of the Sections 34, 35 and 36, T11S, R66W and portions of Section 30 and 31, T11S,
R65W, 6th P.M.
Water Division 1, Water District 8**

Dear Ms. Ruiz:

We have reviewed your referrals of January 10, 2018 concerning the above referenced proposed preliminary plan for a planned community of 283 single-family residential lots on a 1417-acre parcel and the final plat of phase one of the planned community consisting of 80 lots. Residential lots will be served by individual on-lot wells and septic systems. The Applicant obtained an augmentation plan for Dawson aquifer wells in Division 1 Water Court case no. 2016CW3190.

Water Supply Demand

The Water Supply Information Summary Sheet (“Summary Sheet”) provided indicates that the property will be subdivided into 282 single-family residential lots and the total demand required for the subdivision is 197.4 acre-feet (based on 0.7 acre-feet/year/lot). Additional information submitted with the application in a letter dated November 24, 2017 from the Applicants’ water consultant Mr. Curt Wells indicates that the property will be developed into 283 single-family residential lots and the maximum water demand per lot is 0.7 acre-feet/year/lot totaling to 198 acre-feet/year for the entire subdivision. The in-house use water is estimated at 84.9 acre-feet/year (0.3 acre-feet/year/lot x 283 lots), the irrigation of lawn and garden is estimated at 81.2 acre-feet/year (2.5 acre-feet/irrigated acre x 0.115 acre/lot x 283 lots), the domestic animals watering is estimated at 3.3 acre-feet/year (based on 0.11 acre-feet/year for 10-large domestic animals and 366 total animals for the subdivision), and the demand for the common area is estimated at 28.06 acre-feet/year. We note that based on the assumption of 0.11 acre-feet/year for 10-large domestic animals and 366 animals for the subdivision the demand for the domestic animals would be 4.0 acre-feet. It is unclear from the provided information if Dawson aquifer wells will be drilled specifically for the irrigation of common areas, or if the on lot Dawson wells will be used for that purpose. The Applicant should clarify how the open space will be irrigated. If the open space will be irrigated with separate irrigation wells in the Dawson aquifer the Applicant must show that the decreed augmentation plan allows for such wells. We recommend that Applicant provide clarification on all the proposed uses for on-lot wells and irrigation well within the subdivision, and the water requirements for those uses, prior to the subdivision approval. In addition, since there is a discrepancy on the number of lots proposed in the Summary Sheet and the number of lots identified in the November 24, 2017 letter we recommend the Applicant provides clarification on the number of lots they intend to create.



Source of Water Supply

The proposed source of water for this subdivision is individual on lot wells producing from the not nontributary Dawson aquifer. The decree granted in case nos. 94CW023(B) (Division 1) (amended case no. 85CW446) quantified the amount of water underlying 701 acres generally located in Sections 30 and 31, Township 11 South, Range 65 West of the 6th P.M. and the decree in case no. 2004CW098 (Division 2) quantified the amount of water underlying 640 acres located in Section 36, Township 11 South, Range 66 West of the 6th P.M. According to the decrees the following amounts of water were determined to be available underlying the 701 acres parcel and the 640 acre parcel respectively:

Aquifer	Status	Annual amount available for case no. 94CW023(B) for the 701 acre parcel (acre-feet)	Status	Annual amount available for case no. 2004CW098 for the 640 acre parcel (acre-feet)
		Based on 100 year allocation approach		Based on 100 year allocation approach
Dawson	NNT*	591	NNT	515
Denver	NT**	600	NNT	577
Arapahoe	NT	280	NT	239
Laramie-Fox Hills	NT	210	NT	182

*NNT=Not nontributary
 **NT=Nontributary

According to the information provided Applicant owns a portion of the ground water adjudicated in case no. 94CW023(B) underlying the 701 acres. Also, the Applicant’s predecessor-in-interest entered into a Groundwater Production Lease, No. OT-109328 with the State Board of Land Commissioners. Based on the same the Groundwater Production Lease, the Applicant leased the not nontributary and nontributary groundwater underlying the 640 acres decreed in case no. 2004CW098 through February 27, 2048. On that date all of the groundwater rights from case no. 2004CW098 revert to the Applicant. The estimated amounts owned and leased by the Applicant are listed in the table below:

Aquifer	Annual amount available to Applicant from case nos. 94CW023(B) and 2004CW098 (acre-feet)
	Based on 100 year allocation approach
Dawson	716
Denver	577
Arapahoe	239
Laramie-Fox Hills	386

According to our records, on July 24, 2017 the Applicant obtained well permit no. 81145-F for the amount of water transferred to the Applicant in case no. 2004CW098 in the Arapahoe aquifer (239 acre-feet). The use of ground water from this well is limited to municipal, industrial, domestic, commercial, irrigation, stock watering, recreational, fish and wildlife, fire protection, and augmentation purposes. Although a copy of this well permit was provided in the referral material no information was provided whether this well will be used within the development.

The recently 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. The decree allows the withdrawal from

wells in the Dawson aquifer pursuant to the decreed augmentation plan. 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. 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. Maximum area to be irrigated on each lot and open space will be limited by the restrictive covenants. 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 allocation 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.

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 this source 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 annual demand for the subdivision is equal to the allowed average annual amount of withdrawal of 198 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.

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

Records available in this office show that there are four existing stock wells operating under permit nos. 17278-A, 17279, 17280, 75882 and one existing domestic well operating under permit no. 2132, located on the subject 1417 acre parcel that appear to be producing water from the nontributary Dawson aquifer. CRS 37-92-602(3)(b)(III) requires that the cumulative effect of all wells in a subdivision be considered when evaluating material injury to decreed water rights. **Accordingly, if the parcel is subdivided the well constructed under permit nos. 17278-A, 17279, 17280, 75882 and 2132 must either be plugged and abandoned or included in the augmentation plan in case no. 2016CW3190, prior to subdivision approval, in order to prevent injury to decreed water rights.**

Furthermore, the applicant should be aware that any proposed detention pond for this Planned Development, must meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92-602(8), Colorado Revised Statutes, to be exempt from administration by this office. The applicant should review DWR's [Administrative Statement Regarding the Management of Storm Water Detention Facilities and Post-Wildland Fire Facilities in Colorado](#) to ensure that the notification, construction and operation of the proposed structure meets statutory and administrative requirements. The applicant is encouraged to use Colorado Stormwater Detention and Infiltration Facility Notification Portal, located at <https://maperture.digitaldataservices.com/gyh/?viewer=cswdif>, to meet the notification requirements.

State Engineer's Office Opinion

Since insufficient information was provided, we cannot comment on the potential for injury to decreed water rights or the adequacy of the proposed water supply under the provisions of Section 30-28-136(1)(h)(I), C.R.S. Prior to further review of the subdivision water supply plan by this office, the Applicant must clarify the number of lots to be created, clarify all the proposed uses for the development and if the existing wells mentioned above will be plugged and abandoned or covered under by the existing augmentation plan decreed in case no. 2016CW3190 prior to subdivision approval.

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

Sincerely,

A handwritten signature in blue ink that reads "Joanna Williams". The signature is written in a cursive style with a large initial "J".

Joanna Williams, P.E.
Water Resource Engineer

Ec: Subdivision File 24155