

September 9, 2024

Joe Letke, Project Manager El Paso County Development Services Department

Transmitted via the EPC EDARP Portal: https://epcdevplanreview.com

RE: Misfit Crew Estates Subdivision
Case No. SF2417
Part of the E ½ of the SE ¼, Section 24, T11S, R66W, 6th P.M.
Water Division 1, Water District 8

Dear Joe Letke,

We have reviewed the submittal documents related to Misfit Crew Subdivision, concerning the above referenced proposal to subdivide approximately 35.729 acres into three single-family residential lots of 25.692 acres (Lot 1) and 5.005 acres each for the two Lots 2 and 3.

Water Supply Demand

Based on the water supply information summary and the July 25, 2024 Water Resource Report from M.V.E., Inc. ("Report") the estimated annual water requirements totals 0.90 acre-feet for in-house use (0.3 acre-feet/lot), 1.56 acre-feet for irrigation of up to 0.63 acres (10,600 square-feet for Lot 1 and 8,500 square-feet for each of Lots 2 and 3), 1.08 acre-feet for the watering of 18 heads of livestock (10 heads for Lot 1 and 4 heads on each of Lots 2 and 3), and 2.3 acre-feet for commercial use on Lot 1. The total annual demand for the subdivision would be 5.8 acre-feet or 3.8 acre-feet for Lot 1 and 2 acre-feet for Lots 2 and 3 (1 acre-foot/lot).

Source of Water Supply

The proposed water source is individual on lot wells constructed in the Dawson aquifer operating pursuant to the decreed augmentation plan in case no. 2021CW3202. The decree in case no. 2021CW3202 quantified the amount of water underlying a 36-acre parcel of which the 35.729 is a part. The following amounts of water were determined to be available underlying the 36-acre parcel:



Aquifer	Annual amount available for 36-acre parcel (acre-feet)		Type
	Based on 100 year allocation approach	Based on 300 year allocation approach	— Type
Dawson	35.3	11.76	Not-Nontributary
Denver	31.8	10.6	Nontributary
Arapahoe	14.4	4.8	Nontributary
Laramie- Fox Hills	10.8	3.6	Nontributary

The decreed augmentation plan in case no. 2021CW3202 allows for the total annual withdrawal of 5.8 acre-feet (3.8 acre-feet/year for Lot 1 and 1 acre-foot/year/lot for each of Lots 2 and 3) from the not nontributary Dawson aquifer, based on a 300-year allocation approach. The augmentation plan states that indoor use will utilize an estimated 0.30 acre-feet of water per year per residence for each lot. The remaining pumping entitlement available for other uses on Lot 1, include irrigation of lawn, garden, pasture and greenhouse, and the watering of domestic animals and livestock. In addition, the well on Lot 1 will pump an additional 2.3 acre-feet/year, of which 1.0 acre-feet will be dedicated for use within a commercial equestrian facility for washing, cleaning, animal bathing, dust control, and other sanitary needs for the facility. The remaining additional 1.3 acre-feet will be used for other permitted uses including irrigation of pasture and stock watering.

Further, the remaining pumping entitlement available for other uses on Lots 2 and 3 include irrigation of lawn, garden and greenhouse watering of up to four horses and eight chickens or equivalent livestock and poultry on each lot.

The existing well on the property permit no. 209839 was re-permitted under permit no. 88703-F. The issuance of permit no. 88703-F canceled permit no. 209839. The use of groundwater from this well is limited to in-house uses inside a single-family dwelling and guest house, irrigation of lawn, garden, pasture, and greenhouse; the watering of domestic animals and livestock; and equestrian facility for washing, cleaning, animal bathing, dust control, and other sanitary needs for the facility. The average annual amount of groundwater to be withdrawn shall not exceed 3.8 acre-feet and the total volume of groundwater to be withdrawn shall not exceed 1,140 acre-feet.

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 case no. 2021CW3202 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:

(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 proposed annual water demand equals the allowed average annual amount of withdrawal of 5.8 acre-feet per year, allowed by the augmentation plan in the case no. 2021CW3202. As a result, the water may be withdrawn in that annual amount for a maximum of 300 years.

Any application for on lot well permits for Lots 2 and 3 of Misfit Crew Estates Subdivision, submitted by entities other than the water court Applicants in case no. 2021CW3202 (Mark E. McDonald and Amanda M. Enloe) must include evidence that the Applicant has acquired the right to the portion of the water being requested on the application.

Additional Comments

The Applicant should be aware that any proposed detention pond for this project must meet the requirements of a "storm water detention and infiltration facility" as defined in section 37-92-602(8), C.R.S., otherwise the structure may be subject to 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, attached, 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 to meet the notification requirements, located at https://maperture.digitaldataservices.com/gvh/?viewer=cswdif.

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 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 aguifer 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 <u>allocation</u> approach, for the proposed uses 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 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 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.

Should you or the Applicant have any questions, please contact me at this office at 303-866-3581 x8246 or ioana.comaniciu@state.co.us

Sincerely,

Ioana Comaniciu, P.E. Water Resource Engineer

Ec: Subdivision file: 32472

File permit no. 88703-F