

December 19, 2024

Ashlyn Mathy, Project Manager El Paso County Development Services Department Transmitted via the EPC EDARP Portal: <u>https://epcdevplanreview.com</u>

RE: Skye Vista Subdivision Case No. SF2434 Part of the NE ¼ of the SE ¼, Section 23, T11S, R66W, 6<sup>th</sup> P.M. Water Division 1, Water District 8

Dear Ashlyn Mathy,

We have reviewed the submittal documents related to Skye Vista Subdivision, concerning the above referenced proposal to subdivide approximately 36 acres into thirteen (13) single-family residential lots.

## Water Supply Demand

Based on the water supply information summary and the November 2024 Water Resource Report from Matrix ("Report") the estimated annual water requirements total 8,120 gallons per day or 9.1 acre-feet for in-house use inside thirteen units and landscape irrigation.

## 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.



2022CW3175. The decree in case no. 2022CW3175 quantified the amount of water underlying a 36.38-acre parcel of which the 36 acres 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) |                     | Туре             |
|-----------|--|---------------------|------------------|
|           | Based on 100 year                                      | Based on 300 year   | Type             |
|           | allocation approach                                    | allocation approach |                  |
| Dawson    | 34.2   | 11.4                | Not-Nontributary |
| Denver    | 33.7   | 10.23               | Nontributary     |
| Arapahoe  | 14.5   | 4.83                | Nontributary     |
| Laramie-  | 10.9   | 3.63                | Nontributary     |
| Fox Hills |  |                     |                  |

The decreed augmentation plan in case no. 2022CW3175 allows for the total annual withdrawal of 9.1 acre-feet from the not nontributary Dawson aquifer, based on a 300-year allocation approach to be used in up to fourteen (14) wells. Each well will provide in-house use in one (1) single-family dwelling, (0.3 acre-feet per year per well; 4.2 acre-feet per year total), irrigation, including home lawn, garden, and trees, of up to 6,000 square-feet (0.3 acre-feet per year per well; 4.2 acre-feet per year total), stock watering for up to 4 large domestic animals (0.05 acre-feet per year per well, 0.7 acre-feet total), and fire protection, on the subject property.

There is an existing well on the property operating under permit no. 88718-F (previous permit no. 101508 was canceled). The use of groundwater from this well is limited to in-house use in one (1) single-family dwelling; irrigation, including home lawn, garden, and trees, of up to 6,000 square-feet; stock watering for up to 4 large domestic animals; and fire protection. The average annual amount of

groundwater to be withdrawn shall not exceed 0.65 acre-feet and the total volume of groundwater to be withdrawn shall not exceed 195 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 <u>allocation</u> approach, the annual amounts of water decreed in case no. 2022CW3175 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 proposed annual water demand equals the allowed average annual amount of withdrawal of 9.1 acre-feet per year, allowed by the augmentation plan in the case no. 2022CW3175. 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 Skye Vista Subdivision, submitted by entities other than the water court Applicants in case no. 2022CW3175 (Alfred C.

Stewart and Donna M. Steward) 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/gyh/?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 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 <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 <u>ioana.comaniciu@state.co.us</u>

Sincerely,

Joana Comaniciu, P.E. Water Resource Engineer

Ec: Subdivision file: 32603 Permit no. 88718-F