

November 13, 2024

Kari Parsons, Project Manager

El Paso County Development Services Department

Sent via online portal at: https://epcdevplanreview.com/Agencies/Home

Re: Sterling Ranch East Filing No. 6 Preliminary Plan

File #: SP244 EA21117

Part of SE ¼ of Sec. 27 and NW ¼ of Sec. 34, Twp. 12S, Rng. 65W, 6th P.M.

Water Division 2, Water District 10 CDWR Subdivision File No. 32547

Dear Kari Parsons:

We have received the above-referenced submittal to divide 56.13 acres into 198 single-family lots, with 3.34 acres of irrigation. The submittal also includes parks, open space, a drainage basin and areas for right of way.

Water Supply Demand

The estimated water demand is based on the Sterling Ranch development Single Family Equivalent ("SFE") factor. 73 lots have a SFE of 0.318 Acre-feet per unit, and 125 lots have a SFE of 0.353 acre-feet per unit. The estimated water demand for irrigated landscaping is 4.13 acre-feet/year. The total estimated water demand for this submittal is 71.46 acre-feet per year.

Source of Water Supply

The proposed source of water supply is service provided by the Falcon Area Water and Wastewater Authority (FAWWA). According to the letter dated September 27, 2024, the FAWWA is committed to serving the 71.46 acre-feet/year of water required by Filing No. 6.

According to the Water Resources Report prepared by RESPEC dated September 25, 2024 ("Report") and the information provided by John McGinn on September 25, 2023 to this office, the FAWWA has a water supply of 1962.23 acre-feet/year based on a 300-year supply consisting of Denver Basin aquifer water adjudicated in Water Court case nos. 85CW131 (Shamrock West water), 86CW19, 91CW35, 93CW18/85CW445 (Bar-X Ranch water), 08CW113, 17CW3002, 18CW3002, and 20CW3059 and Determination of Water Right nos. 1689-BD, 1690-BD, and 1691-BD (McCune water) as of September 2024. A summary of these water rights is provided in Table 3 of that Report. Because FAWWA anticipates serving 3,710 SFEs in 2040 and 7,310 SFEs in 2060, FAWWA may seek to connect with other water suppliers and investigate the use of lawn irrigation return flow (LIRF) credits and aquifer storage/recharge to increase its supply. The Water Resources Report states that there are 1105.33 acre-feet of committed water supply as of September 27, 2024

There are 856.9 acre-feet/year of uncommitted supply available to the FAWWA based on their estimate of 1962.23 acre-feet/year of supply and 1105.33 acre-feet/year of commitments, not including this filing. Therefore, there appears to be more than sufficient legal supply to supply this development on a 300-year basis.

The proposed source of water for this subdivision is bedrock aquifers 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. The Denver Basin water rights adjudications have been decreed by the State of Colorado, Water Division 1 District Court, Water Division 2 District Court, and the Colorado Groundwater Commission. 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 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. Additionally, 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." In addition, based on this <u>allocation</u> approach, the annual amounts of water allocated in the determinations 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 shown on attached Table 1 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 300 years, the allowed average annual amount of withdrawal would be reduced to one third of that amount which is <u>greater</u> than the annual demand of FAWWA's commitments. As a result, the water may be withdrawn in those annual amounts for 300 years.

Additional Comments

The application materials indicate that a stormwater 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 section 37-92-602(8), C.R.S., 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)(l) and 30-28-136(1)(h)(ll), 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 Divisions 1 and 2 Water Courts and the Ground Water Commission has retained jurisdiction over the final amount of water available pursuant to the above-referenced water rights, 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.

Please contact me at (303) 866-3581 x8208 with any questions.

Sincerely,

Melissa A. van der Poel, P.E. Water Resource Engineer

EC: Subdivision file 32547

Martha Archuleta, Water Data Analyst

Melissa S. van der Poel