



COLORADO

Division of Water Resources

Department of Natural Resources

1313 Sherman Street, Room 821
Denver, CO 80203

July 11, 2019

Raimere Fitzpatrick
El Paso County Planning Department
Transmitted via email:
raimerefitzpatrick@elpasoco.com

RE: Hadden Heights No. 2, Lot 18B
SE ¼ of Sec 13, T13S, R65W, 6th P.M.
Upper Black Squirrel Creek Designated Ground Water Basin
Water Division 2, Water District 10

Dear Mr. Fitzpatrick:

We have received your June 19, 2019 submittal concerning the above-referenced proposal to vacate an existing 10.210 acre lot (original Lot 18, Hadden Heights Subdivision) and re-plat 5.105 acres of that original lot into a new residential lot (Hadden Heights No. 2, Lot 18B).

We previously commented on this proposal in a letter dated March 23, 2018. The reason for the current submittal is because of a change in well permit for the existing Denver Aquifer well that is the proposed current water supply (from permit no. 1611023 to permit no. 82920-F), and the inclusion of water supplies from the Arapahoe and/or Laramie-Fox Hills aquifers. This letter replaces our March 23, 2018 letter.

According to the information provided in the submittal Lot 18 of Hadden Heights Subdivision was originally platted in 1973 as a 10-acre park site. The El Paso County Board of County Commissioners disposed of the property in 1981 with Resolution 81-65, which made the property illegible for home construction. The subject parcel was separated from Lot 18 by deed in 1982. This proposed replat will create one (1) lot with an area of 5.105± acres to be designated Hadden Heights No. 2, Lot 18B. The property is proposed to be vacated and replatted in order to create a legal lot to allow development of a single family residence on the site by the owners, Jose and Mary Contreras.

This submittal is presented as a one lot subdivision (Hadden Heights No. 2, Lot 18B). This submittal does not address the water supply of the remaining 5.105 acre portion of original Lot 18, Hadden Heights.

Water Supply Demand

According to the Water Supply Information Summary, the estimated annual water requirement for the lot is 1 acre-foot for in-house use, irrigation of 0.14 acres of lawn, garden and greenhouse, and the watering of 5 large domestic animals.

Source of Water Supply

According to a May 10, 2019 letter from MVE, Inc. ("water supply letter") the proposed water source for the first 216 years is an existing Denver aquifer well currently permitted under well



permit no. 82920-F, with the source after that time proposed to be wells into the Laramie-Fox Hills aquifer and/or Arapahoe aquifer.

On February 5, 2019 our office issued well permit no. 82920-F pursuant to 37-90-107(7), C.R.S. and the Findings and Order of the Colorado Ground Water Commission dated February 4, 2019, for Determination of Water Right No. 3640-BD and its associated Replacement Plan. The well permit, Determination of Water Right and replacement plan allow the well to divert 1 acre-foot annually for 215 years for domestic use (in home use, lawn and garden irrigation and domestic animal watering), irrigation and replacement. Permit no. 82920-F was issued for the use of an existing well constructed under permit no. 191102 and well permit no. 191102 was cancelled upon issuance of well permit no. 82920-F.

Determination of Water Right nos. 3638-BD and 3639-BD were issued by the Ground Water Commission on February 4, 2019, for water beneath the parcel that is the subject of this submittal in the Laramie-Fox Hills and Arapahoe aquifers respectively. The following amounts of water were determined to be available.

Aquifer	Determination of Water Right Number	Annual amount available based on 100 yr. allocation approach (acre-feet/year)	Type
Arapahoe	3639-BD	1.95	Not-Nontributary (4% replacement)
Laramie-Fox Hills	3638-BD	1.53	Nontributary

The proposed sources of water for this subdivision are from bedrock aquifers in the Denver Basin. The State Engineer's Office does not have evidence regarding the length of time for which these sources will be a physically and economically viable source of water. 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." Based on this allocation approach, the annual amounts of water determined in 3638-BD and 3639-BD 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 for a maximum of 100 years.

The subdivision lies within the allowed place of use of Determination of Water Right nos. 3638-BD and 3639-BD and the proposed uses are uses allowed by those Determinations.

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 Applicant's replacement plan under Determination of Water Right 3640-BD allows withdrawal of Denver aquifer ground water for 215 years, and Determinations of Water Rights nos. 3639-BD and/or 3638-BD allow withdrawals for at least another 100 years from the Arapahoe and/or Laramie-Fox Hills aquifers. This plan would meet the county's requirement of providing the average annual demand of the subdivision for a period of 300 years.

State Engineer's Office Opinion

Based upon the above and pursuant to Sections 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 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 **allocation** approach, for the proposed uses on the subdivided land 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 amounts of water in the Denver Basin aquifers, and identified in this letter, are calculated based on estimated current aquifer conditions. For planning purposes 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.

If you, or the applicant, have any questions, please contact Joanna Williams at 303-866-3581 ext. 8265.

Sincerely,



Keith Vander Horst
Chief of Water Supply, Basins

Cc: Division 1
Well permit no. 82920-F

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