

August 23, 2006

Steven Steinberger
Colfax County
116 S 3rd St.
Raton, New Mexico 87740

CERTIFIED MAIL
RETURN RECEIPT
REQUESTED

Anticipated By Fax

Re: Tierra Dorada

Dear Mr. Steinberger:

The Water Use & Conservation/Subdivision Review Bureau of the Office of the State Engineer has reviewed the referenced subdivision proposal pursuant to the Colfax County Subdivision Regulations, the New Mexico Subdivision Act and the OSE Rules and Regulations Governing the Appropriation and Use of Ground Water in New Mexico.

It is the opinion of this office that the subdivider's water supply proposal satisfies the requirements of Appendix G, Sections E.2 (d) and B.3 (b) of the County Regulation. Accordingly, a **positive** opinion is hereby issued.

A staff memorandum providing the specific comments and recommendations is attached for your information. If you have any questions, please call Julie Valdez at 505-827-6790.

Sincerely,

John W. Longworth, P.E.
Water Use & Conservation/Subdivision Review Bureau Chief

Encl.

cc: OSE Water Rights Division, Santa Fe Office

DATE: August 23, 2006
TO: John W. Longworth
FROM: Julie Valdez
CC: Mara Smith
SUBJECT: Tierra Dorada

SUMMARY

On July 24, 2006, the Office of the State Engineer (OSE) received a request to re-review the proposal for the referenced subdivision.

This office reviewed the proposal for Tierra Dorada on January 19, 2006 and April 6, 2006, and issued two negative opinions. For details, please refer to these two letters.

The documents submitted to office consist of a Geohydrologic Report, a Grading and Drainage Analysis and a Plan of Development.

The proposal is a request to subdivide 771.35 acres into 45 lots, with sizes ranging between 10 & 94 acres. The developer states under Item # 14 of the disclosure statement that property owners will be responsible for drilling their own individual 72-12-1 domestic wells. The property is located approximately 6 miles north of the Village of Eagle Nest between U.S. Highway 38 and Pine Road in Sections 19, 20, 29 and 30, Township 28 North, Range 16 East, NMPM.

This proposal was reviewed pursuant to the Colfax County Subdivision Regulations and The New Mexico Subdivision Act. It is the opinion of this office that the water supply proposal satisfies the requirements of Appendix G Sections E.2 (d) and B.3 (b) of the County Regulations and § 47-6-11.F (1) of the New Mexico Subdivision Act. Therefore a **positive** opinion should be issued.

WATER DEMAND ANALYSIS & WATER CONSERVATION

The subdivider quantified the maximum annual water requirements for the subdivision following the procedures set forth in OSE Technical Report 48 (Wilson, 1996). The maximum water demand was quantified as 0.57 acre-feet per year for each parcel or 27.18 acre-feet per year for the entire subdivision, assuming three (4) persons per dwelling (at 61.96 gpcd), 800 ft² of outdoor irrigation, 88,414 gallons of water for a swimming pool, a conveyance efficiency of 0.95, and 60,000 gallons of water for fire protection. This office concurs with this conclusion.

Since, the current proposal does not contain an updated Disclosure Statement it is recommended that the subdivider amend Item # 4 of the Disclosure Statement to reflect the assumptions used in the Geohydrologic Report regarding the number of lots proposed for the subdivision. The Disclosure Statement and Geohydrologic Report should be consistent.

WATER AVAILABILITY ASSESSMENT

The proposed water supply for this subdivision is individual 72-12-1 domestic wells. The subdivider states under Item #14 of the disclosure statement that it will be the responsibility of tract owners to drill 72-12-1 domestic wells for their tract of land.

Section E.2 (d), Appendix G of the County Regulations requires that the subdivider provide the following information:

- Copies of well logs from existing nearby wells and any large non-domestic wells within a one-half mile radius of the proposed subdivision
- A description of the water bearing formations
- A statement of the estimated yield of wells in gallons per minute bases on well logs from existing or nearby wells
- The recommended pump size and setting.

The subdivider provided copies of five well logs from the WATERS database but failed to include statements regarding the maximum and minimum depths of water and estimated well yield in gallons per minute (gpm). Review of the well logs show that the average depth of groundwater is 60 feet and the minimum and maximum well depth is between 147 and 375 feet. The estimated well yield range from 13-80 gpm.

According to the Geohydrologic Report the wells in the Tierra Dorada property should produce water from the valley fill aquifer with estimated well yields of 10 to 100 gpm. The report also concludes that there is sufficient water in the aquifer to support the entire subdivision for at least 100 years. The 100-year water-level decline was calculated to be 0.8 feet using the Theis equation and assuming a continuous pumping rate of 16 gpm (26 acre-feet per annum) for 100 years. This office concurs with these conclusions.