

MEMORANDUM

New Mexico Office of the State Engineer

Water Use & Conservation Bureau

Date: November 27, 2002

To: Brian C. Wilson, P.E., Chief, Water Use & Conservation Bureau

From: John T. Romero, P.E.

Subject: Northgate Plaza Subdivision, Preliminary Plat Review, Otero County

This proposal is a request to develop a Type III subdivision containing 10 parcels on approximately 12-acres of land. The subdivision is located in Section 5, Township 16 South, Range 10 East, New Mexico Principal Meridian. The Office of the State Engineer (OSE) pursuant to the Otero County Subdivision Regulations and provisions of the New Mexico Subdivision Act reviewed this proposal on September 12, 2002 and on October 22, 2002.

The subdivider proposes that water for the subdivision will be provided by individual 72-12-1 domestic wells. Although not an issue, the OSE made reference, correctly, to Appendix C, Section C.2C of the Otero County Subdivision Regulations in the October review. This section does fall under Section C.2, Public Water System Requirements, however; reference was made to Sub-section C, which allows a 72-12-1 domestic well to divert up to 3.0 acre-feet per parcel per year. Section C.4 is the section pertaining to water availability assessments for private or shared wells. This section does not quantify the amount of the maximum annual water use from a 72-12-1 domestic well. The subdivider has stated that 3.0 acre-feet per year of water will be allowed for each parcel and the maximum amount of land that may be irrigated is 1-acre. Once again, in the interest of water conservation the OSE is only suggesting, **to the county**, that they require the subdivider to limit the amount of water available to each parcel owner to 0.6 acre-feet per year and limit the amount of land that can be irrigated to 1,600 square-feet. This amount will be more than sufficient for a typical family of four (4) in this area.

Additionally, during our previous responses it was mentioned that the subdivider had not sufficiently addressed water conservation as required by Appendix C, Section C.2 (last paragraph) of the Otero County Subdivision Regulations. The subdivider has stated, in the disclosure statement, that there are no covenants or other restrictions on water use. In addition to the county regulations addressing conservation, the New Mexico Subdivision Act (Chapter 47, Article 6 NMSA 1978), **Section 47-6-9 (A) 4**, requires the subdivider to address *conservation measures* in their proposal. It is again suggested that the subdivider refer to Office of the State Engineer (OSE) Technical Report 48 entitled "Water Conservation and Quantification of Water Demands in Subdivisions" (Wilson, 1996) to use as an aid in formulating **substantive** conservation measures. The subdivider has also stated that the only restrictions on water use and any measures to monitor water use in the

subdivision are none other than which may be employed by the OSE. It is suggested that the county require the subdivider to further address these issues in their disclosure statement. For instance, as mentioned twice before the subdivider could limit the amount of irrigated turf, including trees and shrubs, to 1,600 square feet or less as a restriction on water use and as a conservation measure. It is again suggested that the subdivider restrict other outdoor water uses such as swimming pools, hot tubs, water fountains, and decorative ponds.

The subdivider has attempted to address water availability and the life expectancy of the water source by referencing the Otero County Forty Year Water Plan performed by John Shomaker (1993) and by submitting average well depth information for the area. The subdivider also mentioned, in the September review, that they do not guarantee that water will be found under any lot. This statement is contrary to State Subdivision Statute 47-6-11(B). The subdivider has submitted actual well logs of wells located within the proposed subdivision, however; they have not submitted any statements addressing the maximum and minimum depths to water or a statement estimating the yield of wells in gallons per minute (gpm) and the basis for these statements. The subdivider should submit additional information addressing water availability and life expectancy pursuant to Appendix C, Section C4.A (1-4) of the Otero County Subdivision Regulations. Neither of these statements has been submitted for review.

It is my opinion that the subdivider's water supply proposal does not conform to the Otero County Subdivision Regulations or the New Mexico Subdivision Act. A **Negative** opinion regarding the availability of water for the subdivision will be issued at this time.