July 14, 2006

Mr. Dale Palkki
Planning Coordinator
Otero County
1000 New York Avenue, Room 101
Alamogordo, NM 88310-6935

CERTIFIED MAIL
RETURN RECEIPT
REQUESTED

Re: Desert Edge Subdivision

Anticipated By Fax

Dear Mr. Palkki:

The Water Use & Conservation/Subdivision Review Bureau of the Office of the State Engineer has reviewed the referenced subdivision proposal pursuant to the Otero 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.

Based on the information provided, this office has determined that the subdivider can furnish water sufficient in quantity to fulfill the maximum annual water requirements of the subdivision, including water for indoor and outdoor domestic uses, and cannot determine that the subdivider can fulfill the proposals in his disclosure statement concerning water, excepting water quality. Accordingly, a **negative** opinion is issued.

A staff memorandum providing specific comments is attached for your information. If you have any questions, please call Jerry Keller at 505-827-3845.

Sincerely,

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

Encl.

cc: OSE Water Rights Division, Roswell Office

JK:jk

MEMORANDUM
New Mexico Office of the State Engineer
Water Use and Conservation Bureau

DATE: July 13, 2006
TO: John Longworth, P.E. Water Use & Conservation Bureau Chief
CC: Mara Smith, Water Resource Master
FROM: Jerry Keller, Senior Water Resource Specialist
SUBJECT: Desert Edge Subdivision in Otero County

SUMMARY

On June 16, 2006 the Office of the State Engineer (OSE) received additional/revised documentation for the Preliminary Plat for Desert Edge, a Type Two subdivision. The City of Alamogordo "Subdivision–Full-Application" indicates the gross acres are 85.82 and 35 proposed lots. The Otero County Subdivision Regulations Application indicates 76.25 as the total acreage and 61 proposed lots. The accompanying plat shows 61 lots. It is assumed the developer proposes to subdivide 76.25-acres into 61 lots with sizes ranging between 1.79 acres and 0.86 acres. This property is located approximately 5 miles north of the City of Alamogordo on the west side of Chihuahua Road north of Alamogordo Relief Route, within the Southwest ¼ of Section 1, Township 16 South, Range 9 East, NMPM. The proposed water supply is individual and/or shared 72-12-1 wells.

This office issued a negative opinion by letter dated November 22, 2005 for the reason that the proposal did not satisfy the requirements of Appendix C, Sections C.2.D and C.4.A of the Otero County Regulations. See the previous letter for specific details.

The additional/revised documents received are pages 6 through 11 of the revised Disclosure Statement, a Water Demand Analysis, Page 6 of the revised Restrictive Covenants, and a Water Availability Assessment.

The current proposal was reviewed pursuant to the Otero County Subdivision Regulations (Regulations), the New Mexico Subdivision Act (Act) and the OSE Rules and Regulations Governing the Appropriation and Use of Ground Water In New Mexico. The revised water supply proposal is not in compliance with the requirements of Section 47-6-11 F (1) (b) of the Act. Accordingly, a **negative** opinion should be issued.

WATER DEMAND ANALYSIS AND WATER CONSERVATION

The current proposal contains a detailed water demand analysis. The developer has quantified the maximum annual water requirement for the subdivision pursuant to Section C.1.B, Appendix C, of the Regulations. The water demand analysis is based on OSE Technical Report 51 (Wilson et. al, 2003). The estimated water demand is 0.50 acre-feet per lot per year or 31 acre-feet per year for the subdivision assuming 2.7 persons per dwelling unit, evaporative cooling, water softening, a lawn area of 700 square feet, and 100 square feet of drip irrigated tress and shrubs for each lot.

The analysis includes unspecified miscellaneous outdoor water use of 0.10 acre-feet per year per lot and a recommended assumption to increase the calculated demand of 0.42 acre-feet to 0.50 acre-feet per year.

Part VII – Water Restrictions: Wells of the Covenants states that individual wells shall be restricted to 0.56 acre feet per lot per year and shared wells 2.24 acre-feet per year.

Item No. 16 of the Disclosure Statement indicates 0.56 acre-feet per year per lot and shared wells restricted to 2.25 acre feet per year.

The Covenants and the Disclosure Statement should be in agreement with the water quantity shown in the Water Demand Analysis.

WATER AVAILABILITY ASSESSMENT

The water supply for the proposed subdivision is individual and/or shared 72-12-1 domestic wells. A Shared well Agreement is not included in the proposal. The Disclosure Statement and Covenants limit the number of lots per shared well to four.

The revised proposal includes a water availability assessment in accordance with Section C.4.A of the Regulations. The assessment is based on available data and reports pertaining to the availability of groundwater in subdivision. No additional on-site investigation was performed.

The assessment contains three well logs from wells in the vicinity of the subdivision, a summary of calculated potential drawdown effects for forty-years of continuous pumping, a discussion of regional groundwater decline, a geologic map, water level contours, and a hydrogeologic cross-section.

The conclusions presented in the analysis state that drilling successful domestic wells is feasible. To account for seasonal and long-term water level fluctuations, domestic wells should be drilled to a minimum depth of 600 feet and the screen interval should be at least 100 feet.

Item No. 18 of the Disclosure Statement states the recommended total depth of wells is 200 to 350 feet. The Disclosure Statement must be revised to incorporate the recommendations contained in the water availability assessment.