City of Albuquerque

January 11, 2000

Chris Weiss, P.E.
C.L. Weiss Engineering
P.O. Box 97
Sandia Park, NM 87047

RE: MOUNTAIN STATES MUTUAL CASUALTY GROUP @ JOURNAL CENTER (D17-D3Z). ENGINEER'S CERTIFICATION FOR CERTIFICATE OF OCCUPANCY APPROVAL. ENGINEER'S STAMP DATED DECEMBER 6, 1999.

Dear Mr. Weiss:

Based on the information provided on your December 6, 1999 submittal, the above referenced project is approved for Certificate of Occupancy. G&D Plan stamped May 5, 1998.

If I can be of further assistance, please feel free to contact me at 924-3984.

Sincerely,

John P. Murray, P.E.
Hydrology

c: WR
File

CITY OF
Albuquerque

June 9,1998

Chris Weiss
C.L. Weiss Engineering
P.O. Box 97
Sandia Park, New Mexico 87047

RE: REVISED DRAINAGE PLAN FOR MOUNTAIN STATES MUTUAL CASUALITY GROUP (D17-D3Z) REVISION DATED 5/5/98

Dear Mr. Weiss:

Based on the information provided on your May 5,1998 resubmittal, the above referenced site is approved for Building Permit.

Please attach a copy of this approved plan to the construction sets prior to sign-off by Hydrology.

Also, prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

If I can be of further assistance, please feel free to contact me at 924-3986.

C: Andrew Garcia
File

Sincerely

Bernie J. Montoya CE
Associate Engineer

HYDROGRAPH FOR SMALL WATERSHED
DPM SECTION 22-2 * PAGE A-13/14

Base time, t_p, for a small watershed hydrograph is,

$tB = (2.667 * E * AT) / Qp + (0.25 * AD) / AT)$

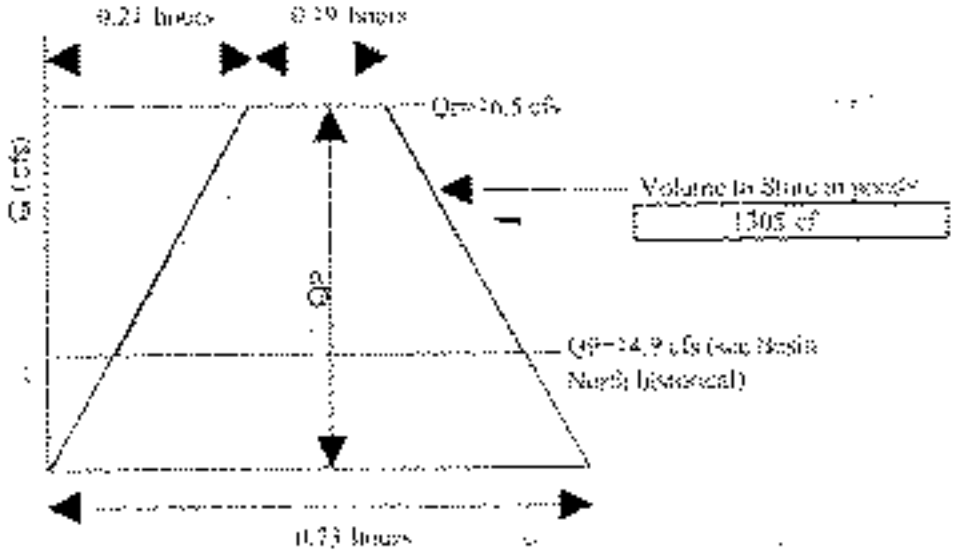
Where			
	E	=	1.81 inches
	AT	=	3.09 acres
	AD	=	3.06 acres
	Qp	=	16.5 cfs
	tB	=	0.23 hours

E is the excess precipitation in inches (from DPM TABLE A-8), Qp is the peak flow, AD is the area in treatment D, and AT is the total area in acres. Using the time of concentration, tC (hours), the time to peak in hours is:

$tP = (0.7 * tC) + ((3.5 - (AD / AT)) / 12)$

Where			
	tC	=	0.28 hours
	tP	=	0.21 hours

Generate the peak for 0.25 * AD / AT hours. When AD is zero, the hydrograph will be triangular. When AD is not zero, the hydrograph will be trapezoidal, see the graph below:



INFLOW / OUTFLOW HYDROGRAPH