

Zone	TABLE A-6. PEAK DISCHARGE (cfs/acre)			
	A	B	C	D
1	1.29 (0.00, 0.24)	2.00 (0.00, 0.76)	2.87 (0.47, 1.48)	4.37 (1.00, 2.89)
2	1.56 (0.00, 0.38)	2.28 (0.00, 0.96)	3.14 (0.60, 1.71)	4.70 (1.00, 3.14)
3	1.87 (0.00, 0.58)	2.60 (0.31, 1.19)	3.46 (0.78, 2.00)	5.02 (2.04, 3.28)
4	2.20 (0.00, 0.87)	2.92 (0.38, 1.48)	3.73 (1.00, 2.28)	5.35 (2.17, 3.57)

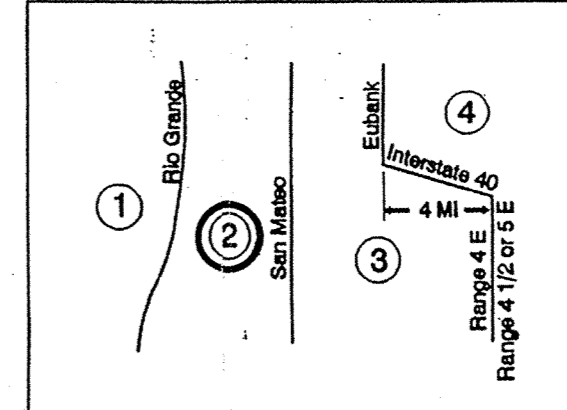
Zone	TABLE A-10. PEAK INTENSITY (in/hr at 1.0 hr)	
	Intensity	100-YR
1	4.70 (1.04, 3.14)	
2	5.05 (2.04, 3.41)	
3	5.35 (2.21, 3.65)	
4	5.61 (2.34, 3.83)	

A.1 PRECIPITATION ZONES

Bernalillo County's four precipitation zones are indicated in TABLE A-1 and on FIGURE A-1.

TABLE A-1. PRECIPITATION ZONES	
Zone	Location
1	West of the Rio Grande
2	Between the Rio Grande and San Mateo
3	Between San Mateo and Eubank, North of Interstate 40; and between San Mateo and the East boundary of Range 4 East, South of Interstate 40
4	East of Eubank, North of Interstate 40; and East of the East boundary of Range 4 East, South of Interstate 40

FIGURE A-1

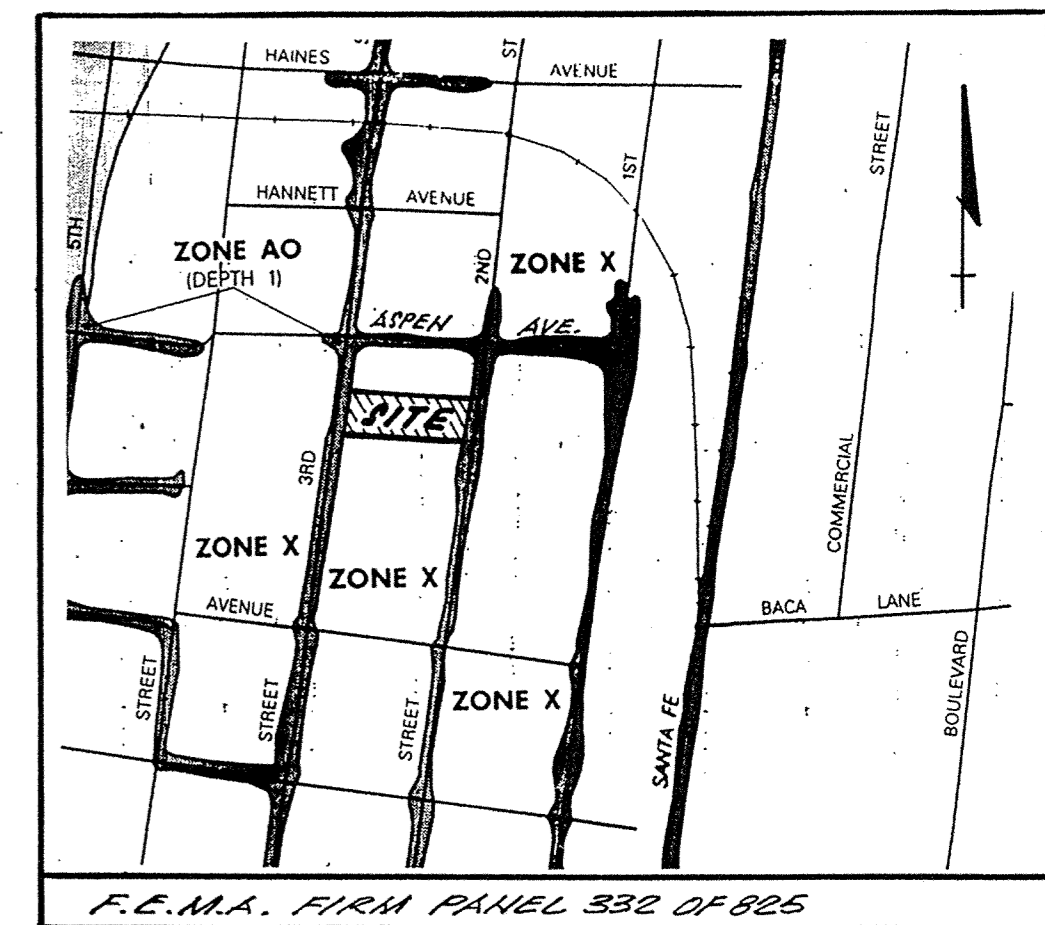


Where a watershed extends across a zone boundary, use the zone which contains the largest portion of the watershed.

DPM SECTION 22.2: HYDROLOGY
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TABLE A-4. LAND TREATMENTS	
Treatment	Land Condition
A	Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands. Unlined arroyos.
B	Irrigated lawns, parks and golf courses with 0 to 10 percent slopes. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes greater than 10 percent and less than 20 percent.
C	Soil uncompacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (desert landscaping). Irrigated lawns and parks with slopes greater than 10 percent. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.

Most watersheds contain a mix of land treatments. To determine proportional treatments, measure respective subareas. In lieu of specific measurement for treatment D, the area percentages in TABLE A-5 may be employed.

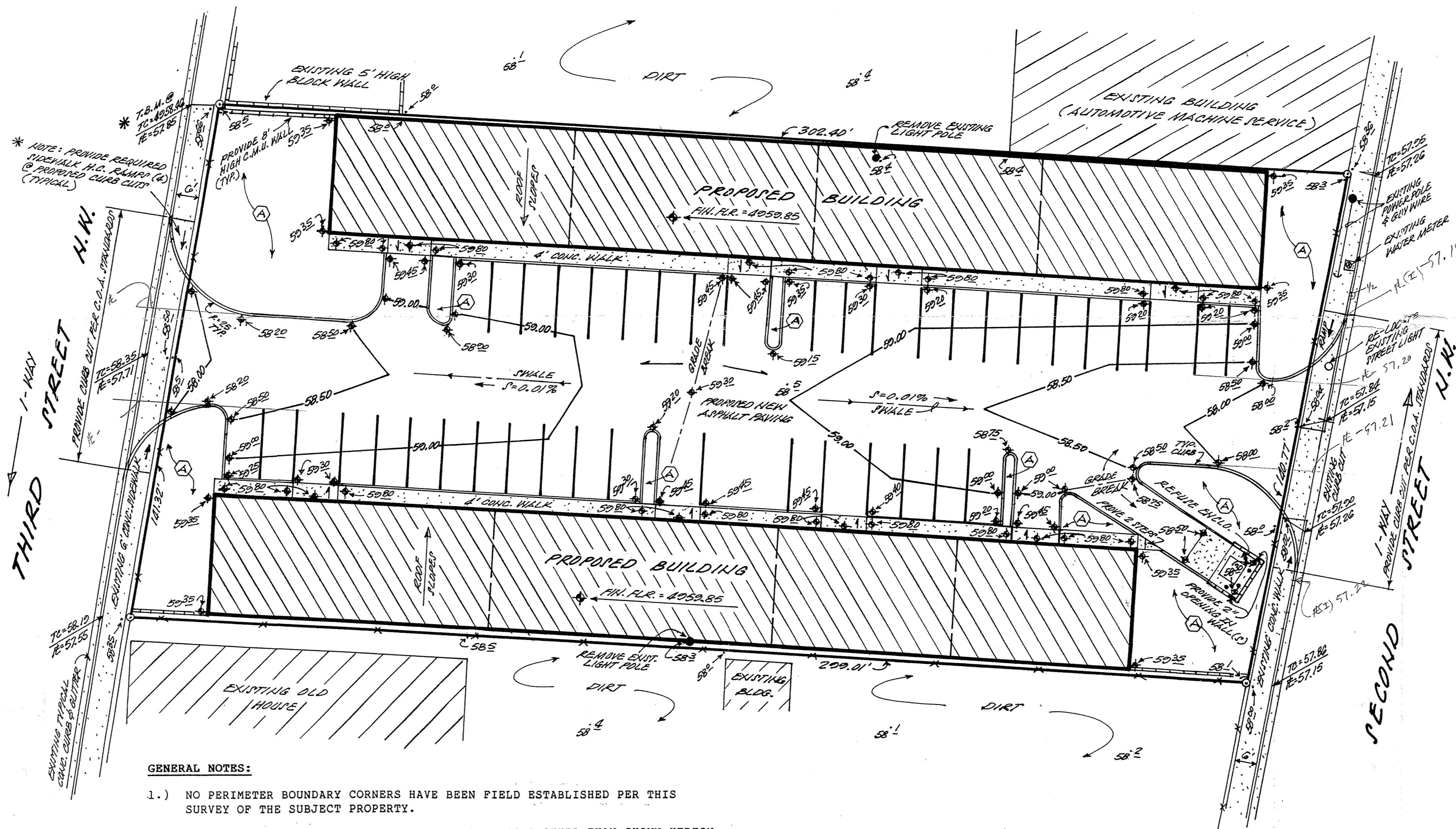


NOTICE TO CONTRACTOR:

- 1.) AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY. AN APPROVED COPY OF THIS PLANS MUST BE SUBMITTED AT THE TIME OF APPLICATION OF THIS PERMIT.
- 2.) ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HERON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE INTERIM STANDARD SPECIFICATION - PUBLIC WORKS CONSTRUCTION - 1985.
- 3.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, (765-1234) FOR LOCATION OF EXISTING UTILITIES.
- 4.) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS, SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- 5.) BACKFILL COMPACTION SHALL BE ACCORDING TO ARTERIAL STREET USE.
- 6.) MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.

APPROVALS	NAME	DATE
A.C.E./DESIGN		
INSPECTOR		
A.C.E./FIELD		

NOTE: ALL WORK WITHIN PUBLIC EASEMENT SHALL BE PERFORMED UNDER SEPARATE PERMIT.



GENERAL NOTES:

- 1.) NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.
- 2.) NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN SHOWN HERON.

CONSTRUCTION NOTES:

- 1.) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 260-1990 FOR THE ACTUAL FIELD LOCATION OF THE EXISTING SURFACE OR SUB-SURFACE UTILITIES.
- 2.) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION(S) OF ALL POTENTIAL OBSTRUCTIONS; SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF DELAY.
- 3.) ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
- 4.) ALL CONSTRUCTION WITHIN PUBLIC STREET RIGHT-OF-WAY(S) SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE/BERNALILLO COUNTY STANDARDS AND PROCEDURES.

LEGEND:

- TOP OF CURB ELEVATION = 70.57.86
- CURB FLOWLINE ELEVATION = 70.57.16
- EXISTING SPOT ELEVATION = 58.5
- EXISTING CONTOUR ELEVATION = 58.5
- PROPOSED SPOT ELEVATION = 58.5
- PROPOSED CONTOUR ELEVATION = 58.5
- PROPOSED OR EXISTING CONCRETE SURFACE =
- EXISTING FENCE LINE =
- LANDSCAPED AREA PER ARCHITECT'S SITE PLAN

EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION; HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

- 1.) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SUBJECT SITE AND ENTERING ADJACENT PROPERTIES.
- 2.) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SUBJECT SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREET RIGHT-OF-WAYS.
- 3.) THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT FROM PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SUBJECT SITE AND DEPOSITED THEREON.

DRAINAGE COMMENTS:

AS SHOWN ON THE VICINITY MAP HERON, THE SUBJECT SITE IS LOCATED SOUTH OF ASPEN AVENUE N.W. BETWEEN SECOND STREET N.W. AND THIRD STREET N.W., IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO. (CITY ZONE ATLAS MAP "J-14-2").

THE SUBJECT SITE, 1.) IS PRESENTLY A VACANT UNDEVELOPED PROPERTY THAT IS TO HAVE PROPOSED OFFICE/WAREHOUSE FACILITIES CONSTRUCTED THEREON, 2.) DOES NOT ACCEPT OFFSITE FLOWS FROM ADJACENT PROPERTIES, 3.) DOES NOT CONTRIBUTE TO THE OFFSITE FLOWS OF ADJACENT PROPERTIES, 4.) DOES NOT ITSELF LIE WITHIN A DESIGNATED FLOODPLAIN; HOWEVER, DOES LIE ADJACENT TO DESIGNATED AO-1' DEPTH FLOODPLAINS THAT ARE WITHIN THE ADJACENT STREET RIGHT-OF-WAYS OF AFOREMENTIONED SECOND STREET N.W. AND THIRD STREET N.W. (RE: F.E.M.A. PANEL 332 OF 825, DATED SEPTEMBER 20, 1996), 5.) WILL HAVE NO ADVERSE AFFECT TO DOWNSTREAM PROPERTIES BY THE FREE DISCHARGE OF PROPOSED DEVELOPED FLOWS.

CALCULATIONS:

PER SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2., DESIGN CRITERIA FOR THE CITY OF ALBUQUERQUE, NEW MEXICO, JANUARY 1993, AND PER THE BERNALILLO COUNTY STORM DRAINAGE ORDINANCE.

SITE AREA: 0.97 ACRE

PRECIPITATION ZONE: TWO (2), TABLE A-1

PEAK INTENSITY: IN./HR. AT T_D = TWELVE (12) MINUTES, 100-YR. = 5.05

LAND TREATMENT METHOD FOR CALCULATION OF " Q_p ", TABLES A-8 & A-9

"LAND TREATMENT FACTORS", TABLE A-4

EXISTING CONDITIONS:

TREATMENT	AREA/ACRES	FACTOR	CFS
C	0.97	X 3.14	= 3.05

" Q_p " = 3.05 CFS

PROPOSED DEVELOPED CONDITIONS:

TREATMENT	AREA/ACRES	FACTOR	CFS
B? C	0.15	X 3.14	= 0.47
D	0.82	X 4.70	= 3.85

" Q_p " = 4.32 CFS *** 4.32 CFS - 3.05 CFS = 1.27 CFS INCREASE 42%

LEGAL DESCRIPTION:

TRACT 279-A, M.R.G.C.D. PROPERTY MAP NO. 37, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

BENCH MARK REFERENCE:

A.C.S. MONUMENT STATION "17-J14", M.S.L.D. ELEVATION = 4954.83; PROJECT T.B.M. AS SHOWN ON THE PLAN HERON.

A PROPOSED GRADING & DRAINAGE PLAN
FOR AN OFFICE/WAREHOUSE DEVELOPMENT FOR
ALAN & FRANCINE REGIS
ALBUQUERQUE, NEW MEXICO
JULY, 1999

