

D-16-Z

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:

- 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.
- 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.
- 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.

CONSTRUCTION NOTES:

- 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.
- 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.
- 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.
- ALL CONSTRUCTION WITHIN PUBLIC STREET RIGHT-OF-WAY(S) SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE/BERNALILLO COUNTY STANDARDS AND PROCEDURES.

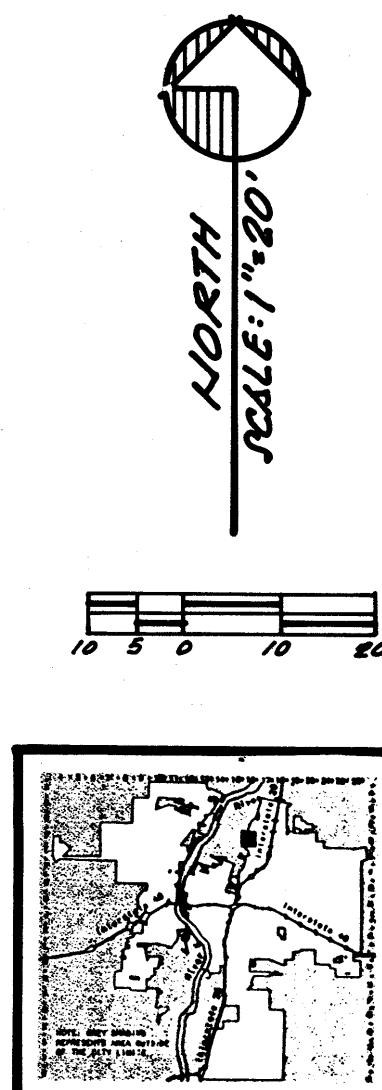
GENERAL NOTES:

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

LEGEND:

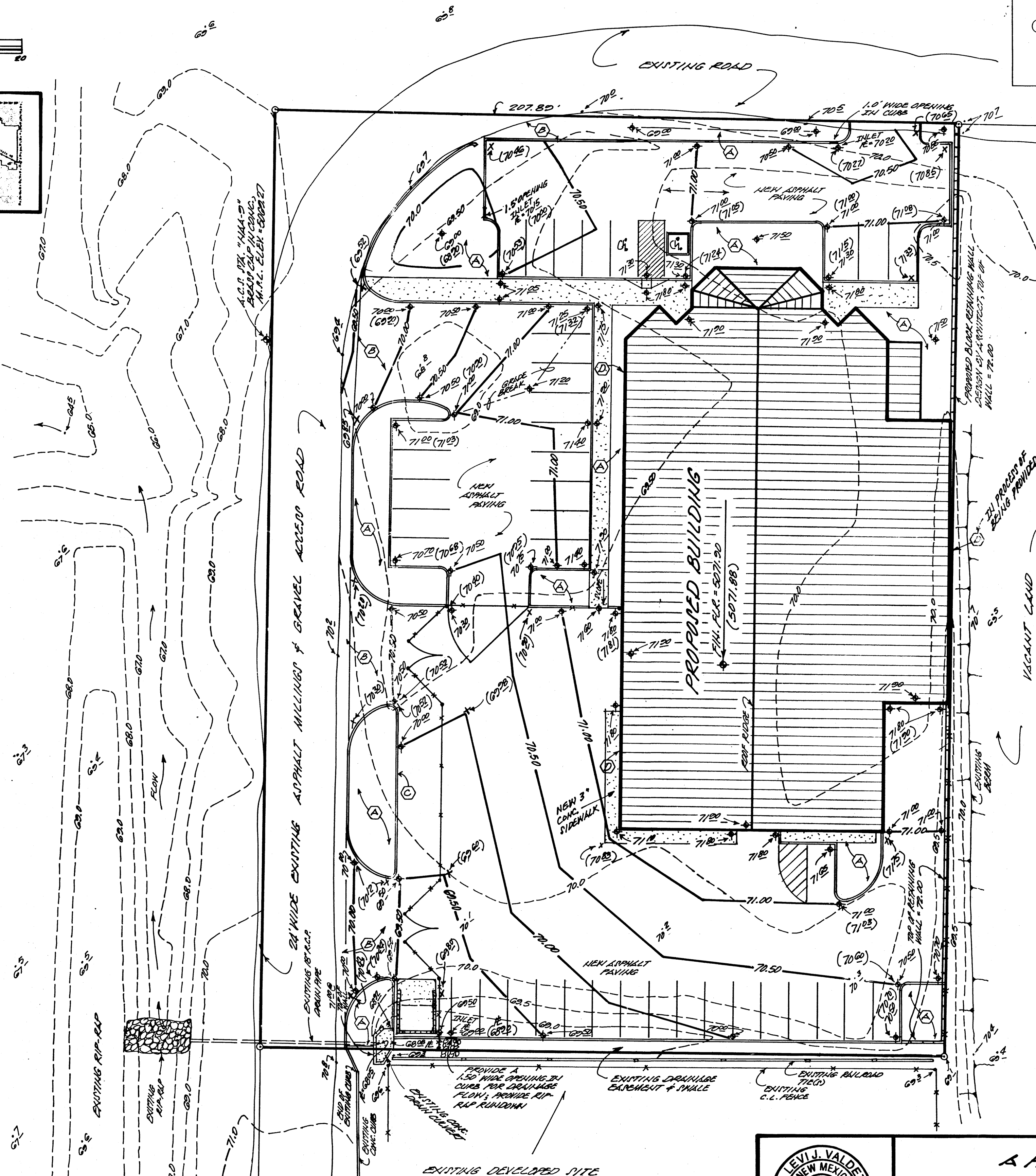
TOP OF CURB ELEVATION = $T.C. = 70.50$
 CURB FLOWLINE ELEVATION = $R.C. = 69.40$
 EXISTING SPOT ELEVATION = $\bullet = 67.5$
 EXISTING CONTOUR ELEVATION = $- - - 69.0$
 PROPOSED SPOT ELEVATION = $\star = 70.2$
 PROPOSED CONTOUR ELEVATION = $- - - 71.0$
 PROPOSED OR EXISTING CONCRETE SURFACE = \square
 EXISTING FENCE LINE = \times
 (HATCHED)

- LANDSCAPED AREA(S) PER ARCHITECT'S SITE PLAN
- TRANSITION NEW ASPHALT PAVED AREA(S) TO EDGE OF EXISTING ASPHALT MILLINGS AND GRAVELED ACCESS ROAD.
- PROPOSED CONCRETE CURBING PER DETAIL SHOWN ON ARCHITECT'S PLAN(S); REFER TO ARCHITECT'S SITE PLAN FOR PROPOSED ASPHALT PAVEMENT SECTION.
- PROVIDE ROOF DRAIN GUTTERS WITH DOWNSPOUTS TO DIRECT ROOF FLOWS TO ASPHALT PAVED AREA(S).



LOCATION MAP

A.M.A.F.C.A. NORTH DIVERSION CHANNEL



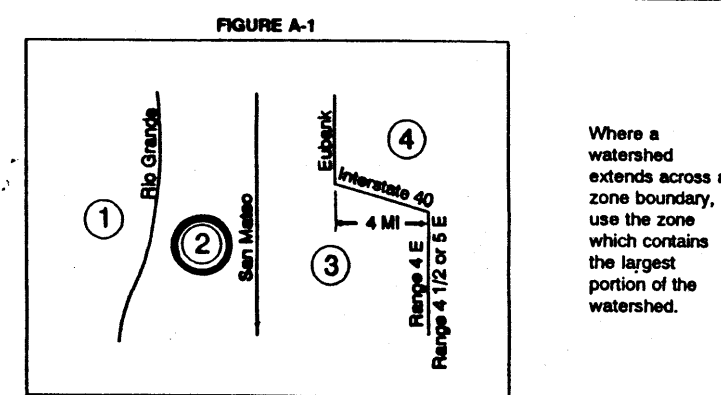
Zone	Intensity	100-YR [2-YR, 10-YR]
1	4.70	[1.84, 3.14]
2	5.05	[2.04, 3.41]
3	5.38	[2.21, 3.55]
4	5.61	[2.34, 3.83]

Zone	Treatment				100-YR [2-YR, 10-YR]
	A	B	C	D	
1	1.20 [0.00, 0.24]	2.03 [0.03, 0.78]	2.87 [0.47, 1.49]	4.37 [1.60, 2.89]	
2	1.56 [0.00, 0.38]	2.28 [0.08, 0.95]	3.14 [0.80, 1.71]	4.70 [1.80, 3.14]	
3	1.87 [0.00, 0.58]	2.80 [0.21, 1.19]	3.45 [0.78, 2.00]	5.02 [2.04, 3.39]	
4	2.20 [0.05, 0.87]	3.22 [0.38, 1.45]	3.73 [1.00, 2.28]	5.25 [2.17, 3.57]	

A-1 PRECIPITATION ZONES

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

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



DPM SECTION 22.2 - HYDROLOGY
January, 1993

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. Cacti. Unirrigated areas.
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. Cacti. Unirrigated areas.
C	Soil compacted by human activity. Minimal vegetation. Unirrigated parking, roads, trails. Most vacant lots. Gravel or rock on plastic (sheet) 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.

DRAINAGE COMMENTS AND CALCULATIONS:

AS SHOWN ON THE VICINITY MAP HEREON, THE SUBJECT SITE IS LOCATED IMMEDIATELY SOUTH OF PASEO DEL NORTE BOULEVARD AND EAST OF THE A.M.A.F.C.A. NORTH DIVERSION CHANNEL, IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, (CITY ZONE ATLAS MAP "D-16-2").

THE SUBJECT SITE, 1.1 IS VACANT LAND THE IS NOT LOCATED WITHIN A DESIGNATED FLOODPLAIN, (REFERENCE F.E.M.A. PANEL 136 OF 825, DATED SEPTEMBER 20, 1996), 2.) DOES NOT CONTRIBUTE TO THE OFFSITE FLOWS OF ADJACENT PROPERTIES, 3.) DOES AT THE PRESENT TIME ACCEPT OFF-SITE FLOWS FROM THE ADJACENT PROPERTIES THAT LIE TO THE EAST AND SOUTHEAST OF THE SUBJECT SITE, (THESE FLOWS WILL CONTINUE TO BE ACCEPTED AND ROUTED THROUGH THE SUBJECT SITE VIA A RECORDED DRAINAGE EASEMENT ALONG THE SOUTH BOUNDARY LINE OF THE SUBJECT PROPERTY WHICH DISCHARGE INTO THE EXISTING 18" DRAINAGE CULVERT PIPE THAT IS LOCATED AT THE SOUTHWEST PROPERTY CORNER AND WHICH EVENTUALLY DRAINS INTO THE AFOREMENTIONED A.M.A.F.C.A. NORTH DIVERSION CHANNEL, 4.) IS DESIGNED TO DIRECT ALL PROPOSED DEVELOPED FLOWS TOWARD AND INTO THE AFOREMENTIONED 18" DRAINAGE CULVERT PIPE.

CALCULATIONS:

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

SITE AREA: 1.36 ACRES
 PRECIPITATION ZONE: TWO (2), TABLE A-1.
 PEAK INTENSITY: IN./HR. AT T_c = TWELVE (12) MINUTES, 100-YR. = 5.05
 LAND TREATMENT FOR THE CALCULATION OF " Q_p ", TABLES A-8 & A-9.
 LAND TREATMENT FACTORS, TABLE A-4.

EXISTING CONDITIONS: (VACANT LAND)

TREATMENT	AREA/ACRES	FACTOR	CFS
C	1.36	X 3.14	= 4.27
$Q_p = 4.27$ CFS			

PROPOSED DEVELOPED CONDITIONS:

TREATMENT	AREA/ACRES	FACTOR	CFS
C	0.16	X 3.14	= 0.50
D	1.20	X 4.70	= 5.64
$Q_p = 6.14$ CFS			

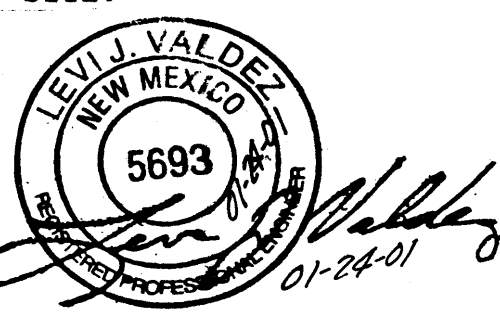
*** 6.14 - 4.27 = 1.87 CFS INCREASE

LEGAL DESCRIPTION: LOT "A-1", LANDS OF KUDIS SUBDIVISION, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

BENCH MARK REFERENCE: A.C.S. (BRASS CAP) STATION "NAA-9", LOCATED ALONG THE WEST BOUNDARY LINE OF THE SUBJECT PROPERTY, M.S.L.D. ELEVATION = 5069.27.

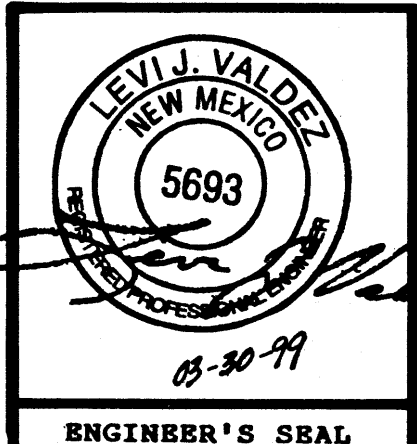
ENGINEER'S CERTIFICATION:

I, LEVI J. VALDEZ, NEW MEXICO REGISTERED PROFESSIONAL ENGINEER NO. 5693, LICENSED AND REGISTERED UNDER THE LAWS OF THE STATE OF NEW MEXICO, DO HEREBY CERTIFY THAT AN ACTUAL ON THE GROUND FIELD SURVEY OF THE GRADES OF THE NEW IMPROVEMENTS SHOWN HEREON VERIFY THAT SAID IMPROVEMENTS WERE CONSTRUCTED IN "SUBSTANTIAL COMPLIANCE" WITH THE APPROVED DRAINAGE PLAN FOR SAID SITE.



ENGINEER'S CERTIFICATION
(JANUARY, 2001)

A PROPOSED GRADING & DRAINAGE PLAN
 FOR
 RADER SKIING FACILITIES
 ALBUQUERQUE, NEW MEXICO
 MARCH, 1999



ENGINEER'S SEAL