

### LEGAL DESCRIPTION

LOT 19, BLOCK 3, TRACT 3, UNIT 3, NORTH ALBUQUERQUE ACRES

### PERMANENT BENCHMARK

ACS 1-B120 ELEVATION 5474.533

### GRADING CERTIFICATION

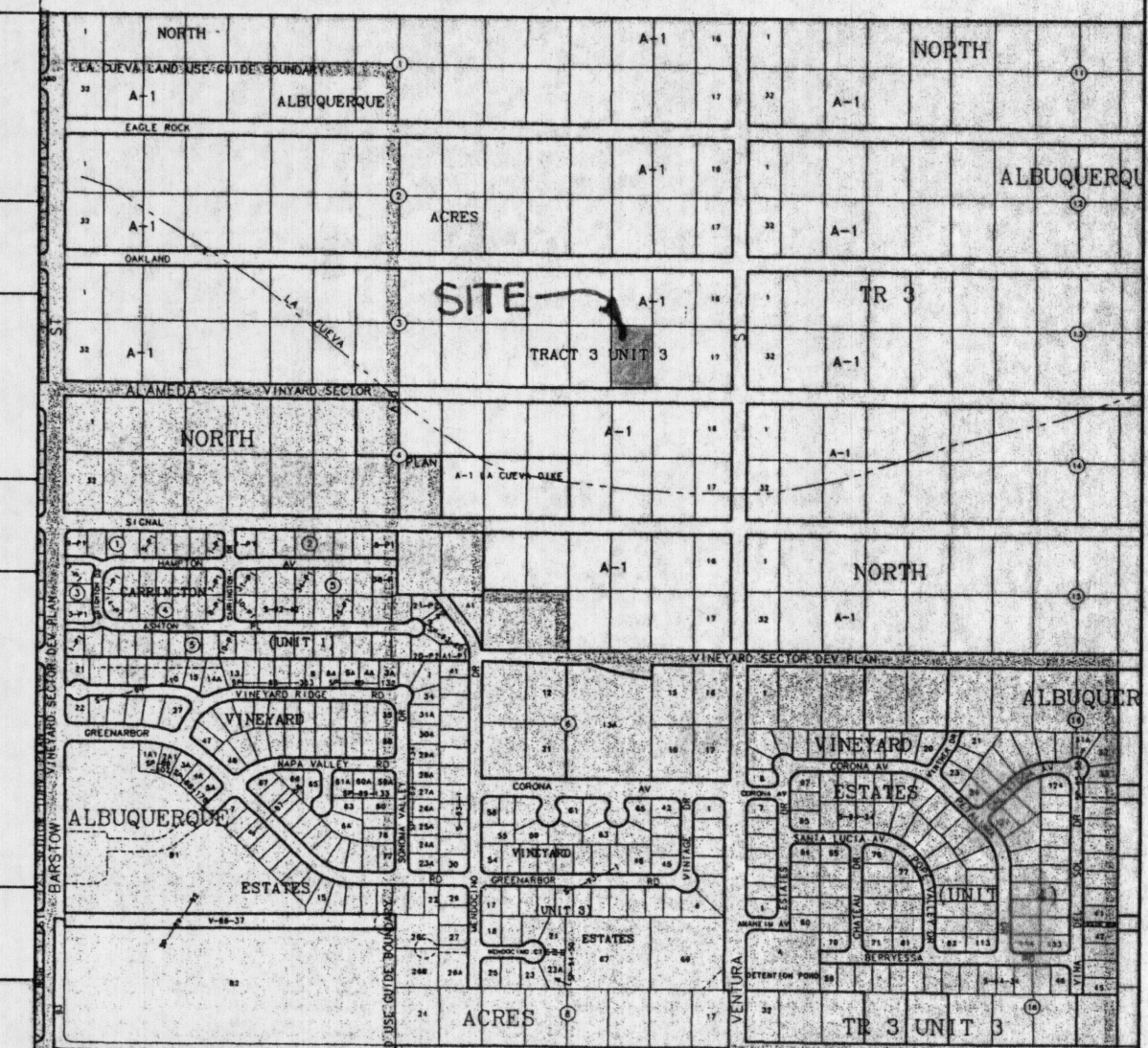
I, Jean J. Bordenave, New Mexico Professional Engineer and Land Surveyor No. 5110, hereby certify that I have personally inspected the property shown hereon and that it appears that no grading, filling or excavation has occurred thereon since the contour map shown hereon was prepared.

*Jean J. Bordenave* 02/26/98  
Jean J. Bordenave, NM PE & PS No. 5110

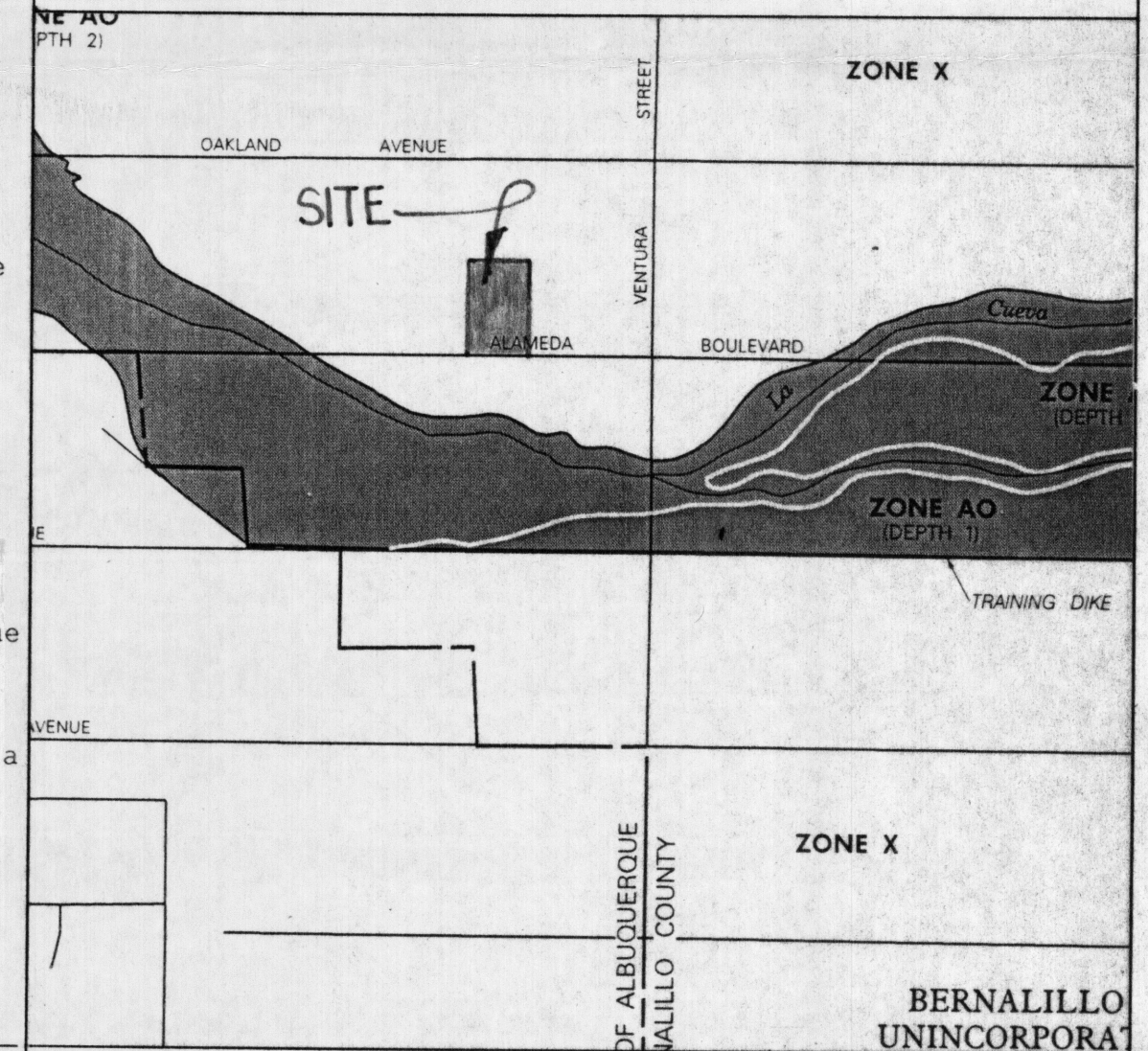
### GENERAL NOTES

- There is a flow increase of 0.57 and 0.66 cfs for the 10 year and 100 year storms respectively. The 6 hour runoff volumes for the two storms increase by 745 and 1041 cubic feet. The peak 100 year flow rate for the proposed development 0.22 cfs less than the accepted average for the area.
- The proposed development is located on the north bank of the La Cueva Arroyo. The structure has been located so that it is outside the calculated erosion setback line for the arroyo. In addition the site is approximately ten feet higher than the arroyo flood plain. There are no waterways of significance crossing the subject site; offsite drainage being limited to sheet flow from a basin less than one-quarter acre in size.
- The site is not located in a designated flood hazard area per FEMA FIRM Panel No. 141, dated September 20, 1996.
- Topography shown on this sheet was obtained by E. Maxwell Doak, dated 01/25/98.
- Earth surfaces disturbed in the construction process will either be treated with formal landscaping (lawn, flower beds, etc.) or with native plant seeding. City of Albuquerque Standard Specification No.1012 shall be used to control native plant seeding when the permanent structure is built.
- No perimeter fencing is to be installed on the site in such a manner that it will interfere with cross lot drainage.

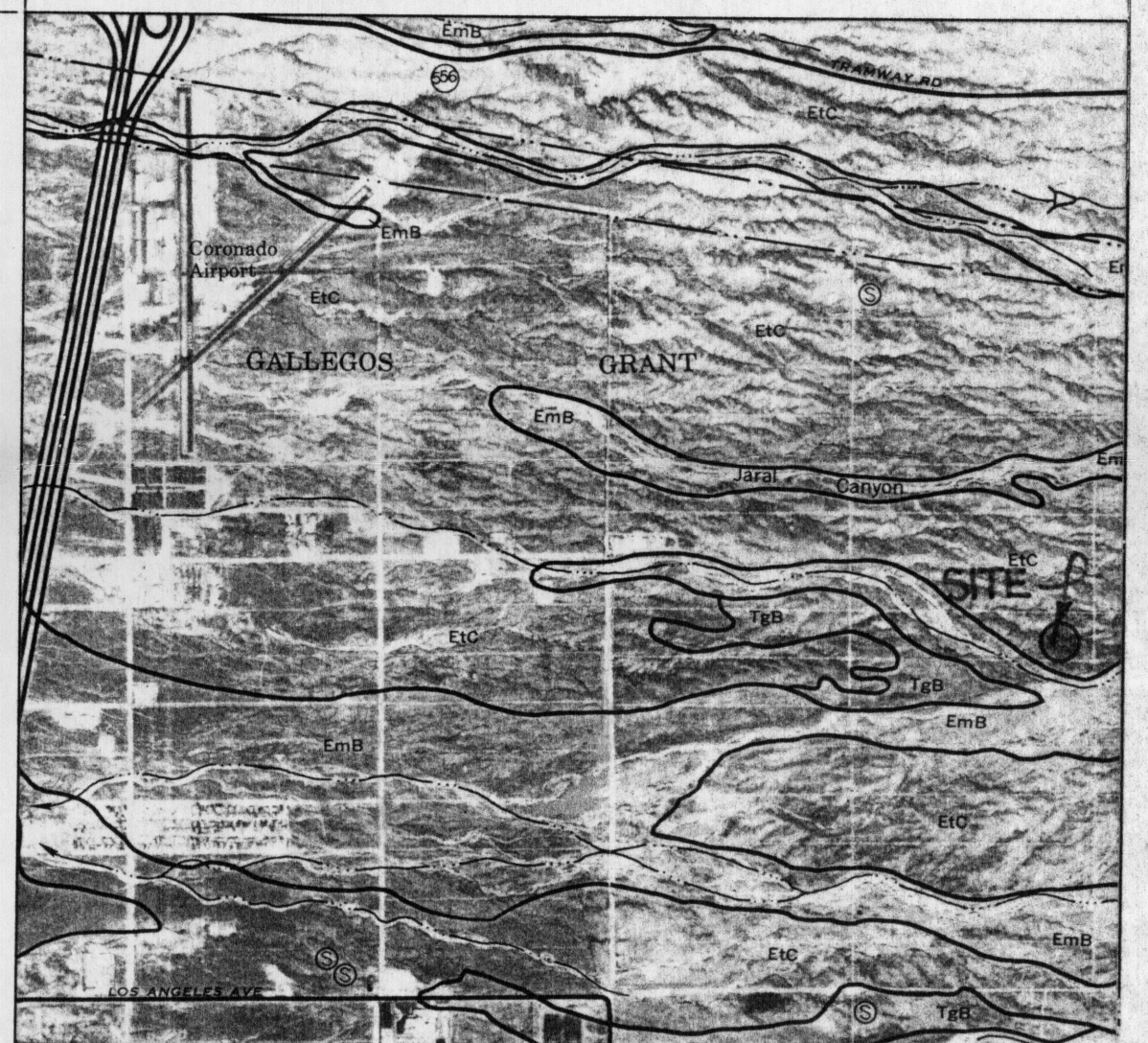
### VICINITY MAP NO. C-20



### FEMA FIRM PANEL NO. 141



### SCS SOILS MAP NO. 11



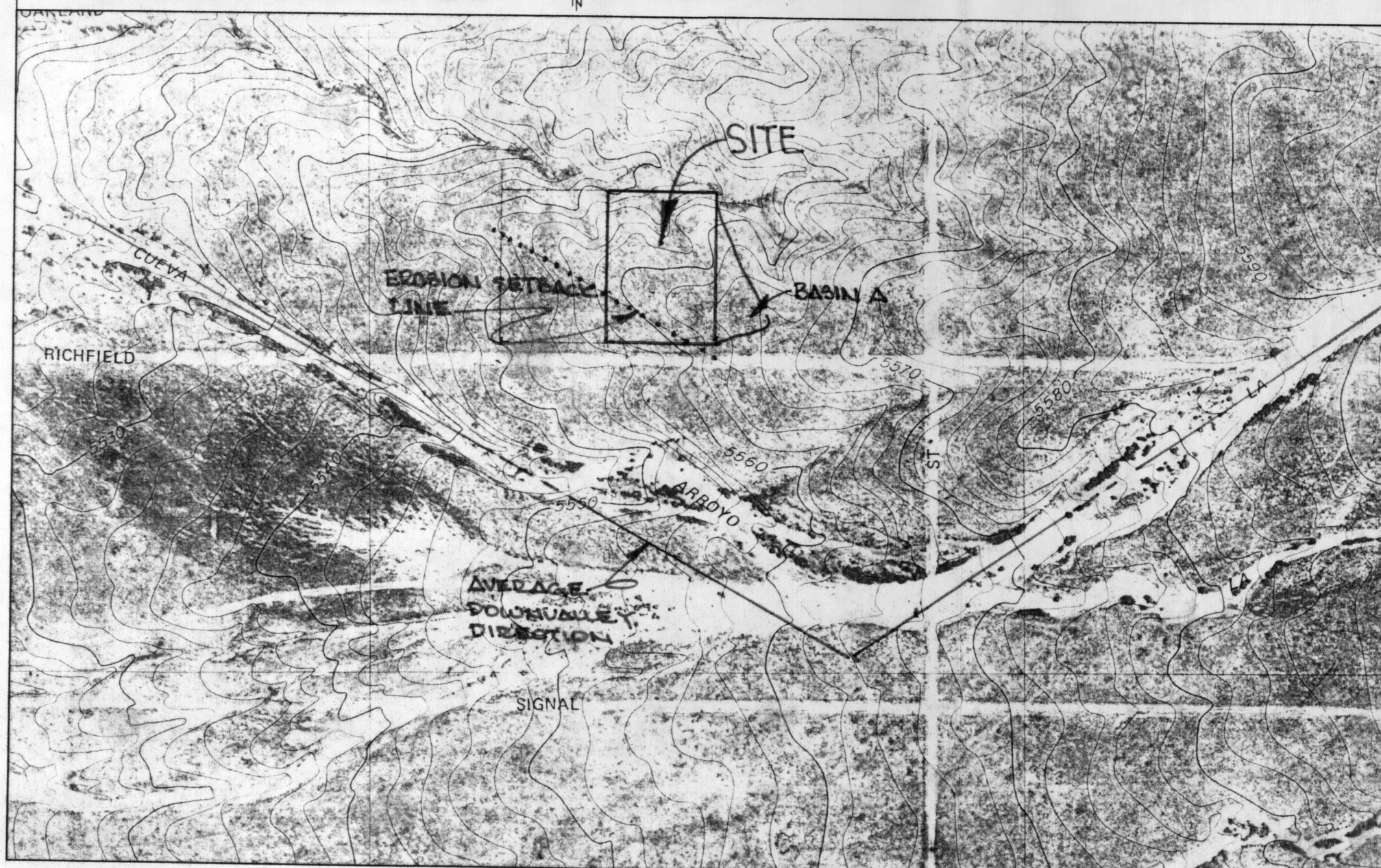
### LEGEND

TBM	TEMPORARY BENCHMARK
FF	FINISH FLOOR
FG	FINISH GRADE
FL	FLOWLINE
TA	TOP OF ASPHALT
TCP	TOP OF CONCRETE
TC	TOP OF CURB
TP	TOP OF EARTH PAD
TS	TOP OF SIDEWALK
TW	TOP OF WALL
FH	FIRE HYDRANT
WM	WATER METER
WV	WATER VALVE
MH	MANHOLE
CB	CATCH BASIN GRATE
GM	GAS METER
GV	GAS VALVE
LP	LIGHT POLE
PP	POWER POLE
GW	GUY WIRE
PED	ELEC. OR TEL. PEDESTAL
RD	ROOF DRAINAGE POINT

SCALE 1 INCH = 20 FEET  
20 10 0 10 20 40 60

### OFFSITE DRAINAGE MAP

SCALE 1" = 200'



### DRAINAGE DATA

CONDITION	STORM RETURN PERIOD	TREATMENT TYPE	TREATMENT AREA	EXCESS PRECIPITATION	PEAK RUNOFF	RUNOFF VOLUME	RUNOFF RATE
	year	(table 4)	sq ft	(table 8)	(table 8)	cu ft	cfs
EXISTING	10	A	38497	0.19	0.58	610	0.51
		B		0.36	1.19	0	0.00
		C		0.62	2	0	0.00
		D		1.5	3.39	0	0.00
		TOTAL	38497			610	0.51
DEVELOPED	10	A	38497	0.66	1.87	2117	1.65
		B		0.92	2.6	0	0.00
		C		1.29	3.45	0	0.00
		D		2.36	5.02	0	0.00
		TOTAL	38497			2117	1.65
EXISTING	100	A	15397	0.19	0.58	244	0.21
		B	15920	0.36	1.19	478	0.43
		C	3600	0.62	2	186	0.17
		D	3580	1.5	3.39	448	0.28
		TOTAL	38497			1355	1.08
DEVELOPED	100	A	15397	0.66	1.87	847	0.66
		B	15920	0.92	2.6	1221	0.95
		C	3600	1.29	3.45	387	0.29
		D	3580	2.36	5.02	704	0.41
		TOTAL	38497			3158	2.31
EXISTING	100	A(43%)	16554	0.66	1.87	910	0.71
		B(20%)	7699	0.92	2.6	560	0.46
		C(20%)	7699	1.29	3.45	828	0.61
		D(17%)	6544	2.36	5.02	1287	0.75
		TOTAL	38497			3616	2.53
A	100	A(43%)	3784	0.66	1.87	208	0.16
		B(20%)	1760	0.92	2.6	135	0.11
		C(20%)	1760	1.29	3.45	189	0.14
		D(17%)	1496	2.36	5.02	294	0.17
		TOTAL	8800			626	0.58

### EROSION SETBACK LINE

PER AMAFCA SEDG  
DRAINAGE DATA FROM RTI RESTUDY OF AREA

$Q_{100} = 4904 \text{ cfs}$

$Q_c = (0.2)(Q_{100}) = 981 \text{ cfs}$

$BANK \text{ OFFSET} = (0.92 + 4.61 \log Q_c) Q_c^{0.4} = 231 \text{ ft}$

$W_c = 4.6 Q_c^{0.4} = 72 \text{ ft}$

$CENTERLINE \text{ OFFSET} = BANK \text{ OFFSET} + 0.5 W_c = 267 \text{ ft}$

FEMA FLOODPLAIN BOUNDARY

DRAINAGE BASIN BOUNDARY

EROSION SETBACK LINE

EXISTING CONTOUR

PROPOSED CONTOUR

XX XX EXISTING SPOT ELEVATION

XX.XX PROPOSED SPOT ELEVATION

XX.XX RECORD SPOT ELEVATION

### REVISIONS

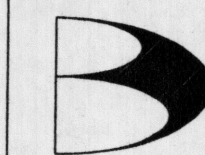
project title  
**GEORGE RESIDENCE  
RICHFIELD AVE. NE  
ALBUQUERQUE, NM**

sheet title  
**GRADING & DRAINAGE PLAN**

sheet date  
02/26/98

design by  
JJB

project no.  
9805



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