

Martin J. Chávez, Mayor

November 7, 1997

Jake Bordenave
Bordenave Designs
P.O. Box 91194
Albuquerque, New Mexico 87199

RE: DRAINAGE PLAN FOR THE NEW MEXICO ZOOLOGICAL SOCIETY
(K13-D71) ENGINEER'S STAMP DATED 10/8/97

Dear Mr. Bordenave:

Based on the information provided on your October 15, 1997 submittal, 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, Engineer Certification per the DPM checklist will be required prior to the release of the Certificate of Occupancy.

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

C: Andrew Garcia
File

Sincerely

Bernie J. Montoya
Bernie J. Montoya CE
Associate Engineer

Good for You, Albuquerque!



DRAINAGE INFORMATION SHEET

PROJECT DATA:

TITLE: NEW MEXICO ZOOLOGICAL SOCIETY

DRNG. FILE #:

New
K-13 04

DRB #:

EPC #:

-

WORK ORDER #:

-

LEGAL DESCRIPTION: LOTS 8-10, BLOCK 52, RAYNOLDS ADDITION
TRACT 'A', LANDS OF YOUTH ACTIVITIES COUNCIL
CITY ADDRESS: IRON AVE. SW

ENGINEERING FIRM: BORDENAVE DESIGNS

CONTACT: J. BORDENAVE

ADDRESS: P.O. BOX 91194, 87199

PHONE: 823-1344

OWNER: NM ZOOLOGICAL SOCIETY

CONTACT:

ADDRESS:

PHONE: 764-6280

ARCHITECT:

CONTACT:

ADDRESS:

PHONE:

SURVEYOR:

CONTACT:

ADDRESS:

PHONE:

CONTRACTOR: RON ROMERO, INC.

CONTACT: T. WILD

ADDRESS: 511 MARBLE NW, 87102

PHONE: 242-5760

TYPE OF SUBMITTAL:

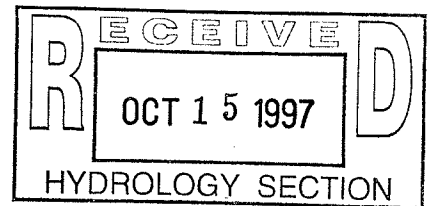
☐ CONCEPT GRADING & DRAINAGE PLAN
☒ GRADING PLAN
☒ DRAINAGE PLAN
☐ DRAINAGE REPORT
☐ EROSION CONTROL PLAN
☐ ENGINEER'S CERTIFICATION
☐ OTHER:

PRE-DESIGN MEETING:

☐ YES
☐ NO
☐ COPY OF MINUTES PROVIDED

TYPE OF APPROVAL SOUGHT:

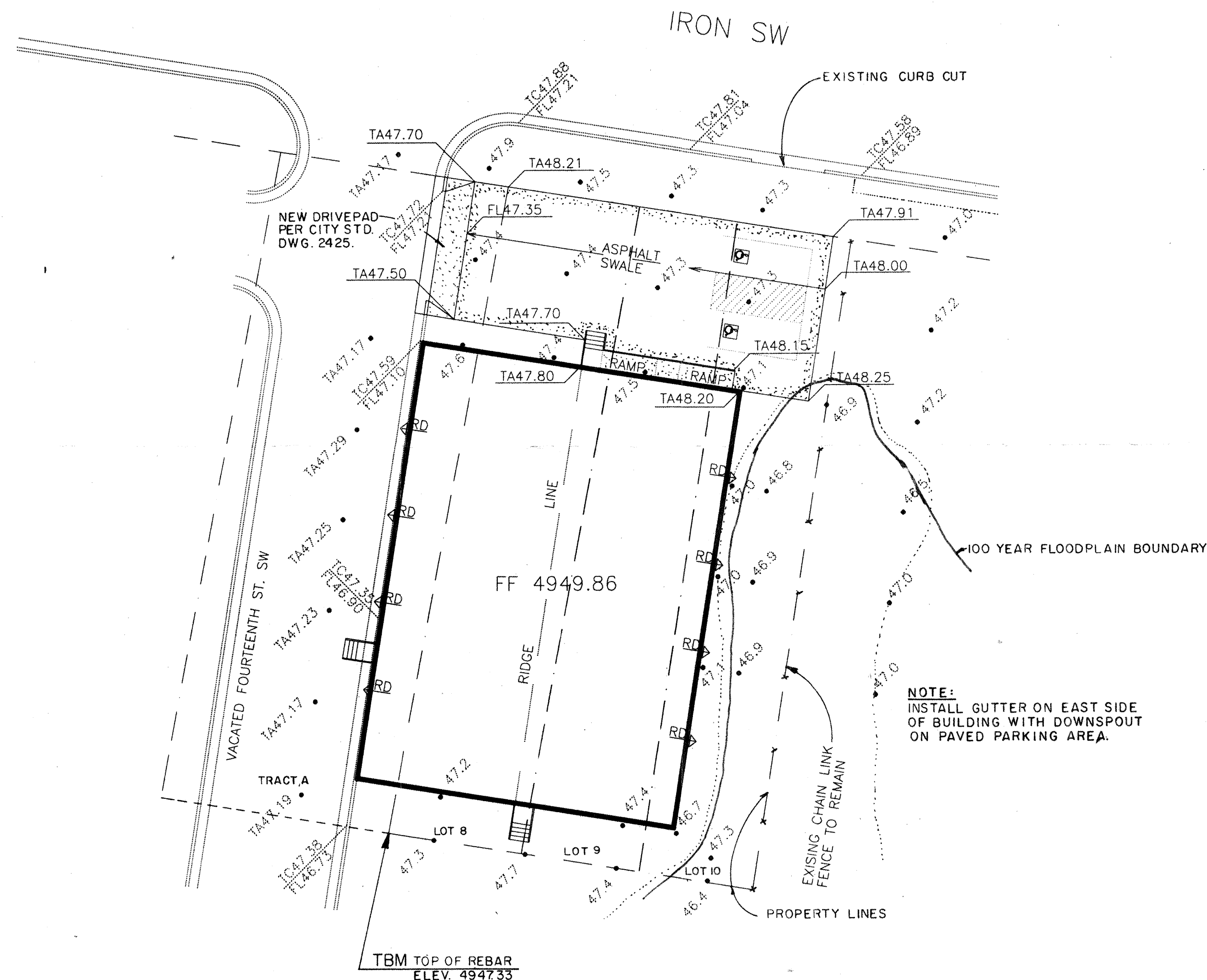
☐ SECTOR PLAN
☐ SKETCH PLAT
☐ PRELIMINARY PLAT
☐ FINAL PLAT
☐ SITE DEV. PLAN FOR SUBD.
☐ SITE DEV. PLAN FOR PERMIT
☐ GRADING PERMIT
☐ PAVING PERMIT
☐ FOUNDATION PERMIT
☒ BUILDING PERMIT
☐ CERTIFICATE OF OCCUPANCY
☐ S.A.D. DRAINAGE REPORT
☐ DRAINAGE REQUIREMENTS
☐ OTHER:



DATE SUBMITTED: 10/12/97

BY:

[Signature]



LEGAL DESCRIPTION

LOTS 8 THRU 10, BLOCK 52, RAYNOLDS ADDITION
TRACT A, LANDS OF YOUTH ACTIVITIES COUNCIL

PERMANENT BENCHMARK

ACS 6-K13 ELEVATION 4956.95

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
Jean J. Bordenave, NM PE & PS No. 5110

GENERAL NOTES

1. THE SITE HAS BEEN GRADED IN THE PAST IS VOID OF VEGETATION EXCEPT FOR SCATTERED WEEDS AND HAS BEEN CONSIDERED LAND TREATMENT TYPE 'C' IN THE DRAINAGE CALCULATIONS. WHEN DEVELOPED A SMALL PORTION OF THE SITE WILL BECOME TYPE 'B' AND A LARGE PORTION WILL BECOME TYPE 'D'. THE 100 YEAR PEAK RUNOFF WILL INCREASE BY 0.30 CFS AND THE 100 YEAR, 6 HOUR RUNOFF VOLUME WILL INCREASE BY 725 CUBIC FEET.

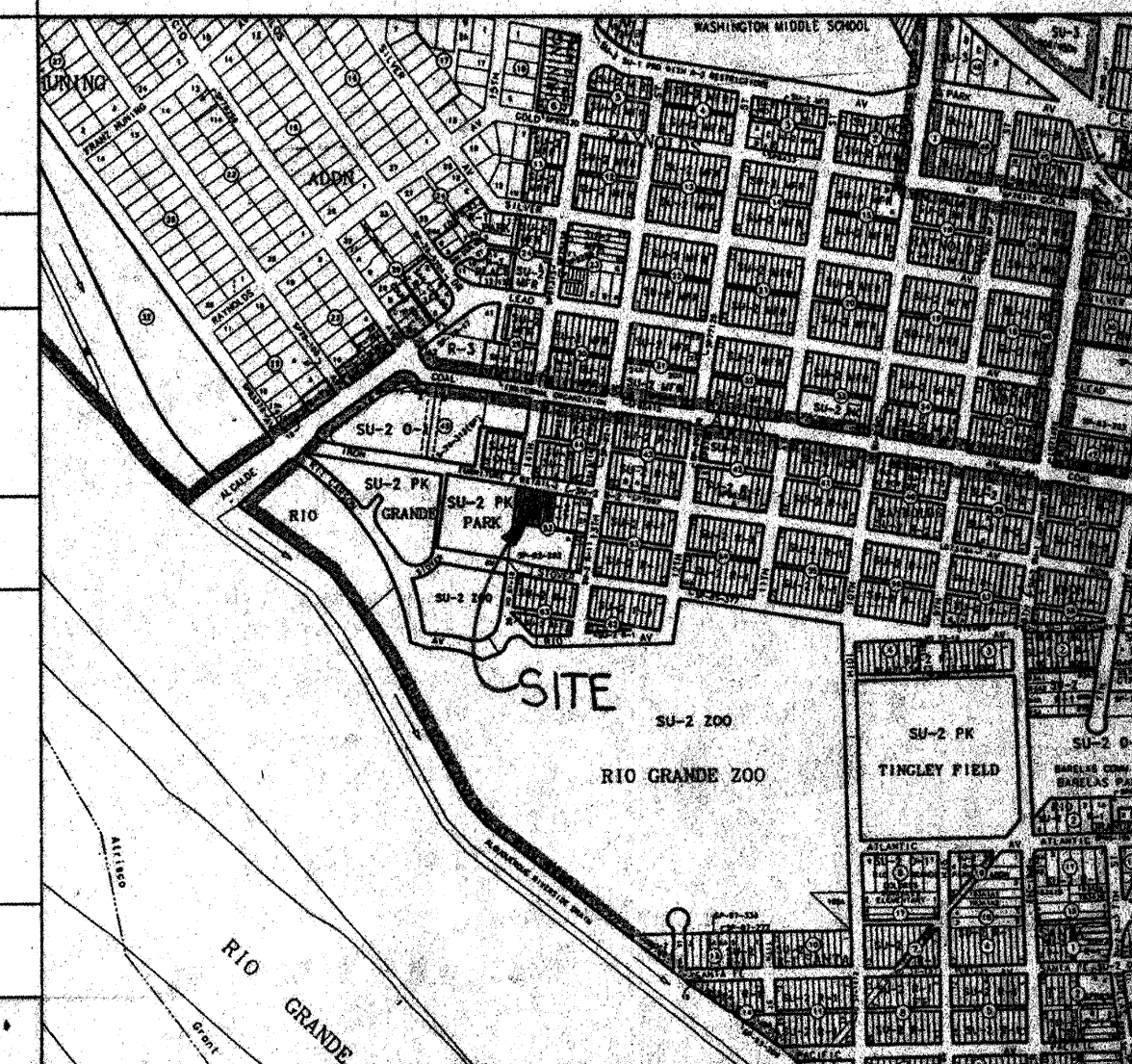
2. THE PROPOSED STRUCTURE IS A MODULAR BUILDING SET ON PIERS AND THE FINISHED FLOOR IS APPROXIMATELY TWO AND ONE-HALF FEET ABOVE THE EXISTING GROUND. ALL ONSITE DEVELOPED RUNOFF FROM IMPERVIOUS SURFACES IS DIRECTED TO THE VACATED 14th STREET. 14th STREET AND STOVER AVE. HAVE BEEN KEPT INTACT THOUGH THEY ARE NOW INCORPORATED INTO THE RIO GRANDE ZOO COMPLEX. NO OFFSITE FLOWS ENTER THE SITE.

3. AS CAN BE SEEN ON THE STORM DRAIN MAP SHOWN HEREON THERE IS A COMPREHENSIVE STORM DRAIN SYSTEM IN THE AREA. A SIXTY INCH STORM DRAIN TRANSPORTING FLOWS TO THE ALCALDE PUMP STATION IS LOCATED IN IRON AVE. ADJACENT TO THE SITE. THE LINE TO THE ALCALDE PUMP STATION AND THE PUMP STATION ITSELF HAVE BEEN UPGRADED SINCE THE FLOOD PLAIN MAP WAS REVISED.

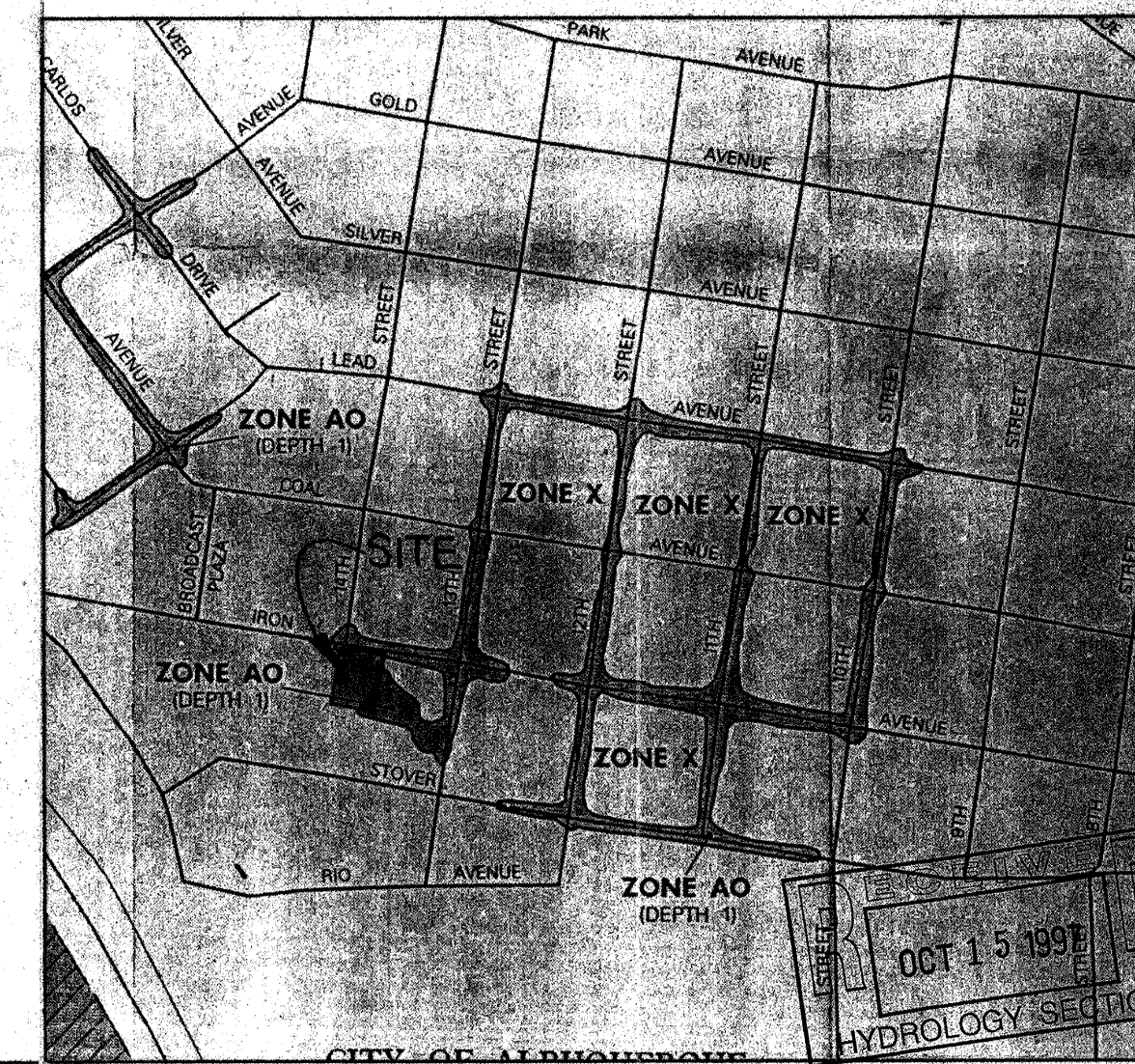
4. A PORTION OF THE SITE IS LOCATED IN A DESIGNATED FLOOD PLAIN PER FEMA FIRM PANEL NO. 33 DATED SEPTEMBER 20, 1996. NO GRADING IS PROPOSED WITHIN THE DESIGNATED FLOOD PLAIN AREA AND A PORTION OF THE SITE THAT DRAINED TO THE FLOODED AREA HAS BEEN DIVERTED TO THE PAVED AREA AND THE 14th STREET STORM DRAIN.

5. THE EXISTING TOPOGRAPHY INFORMATION SHOWN HEREON WAS OBTAINED BY OTHERS.

VICINITY MAP NO. K-13



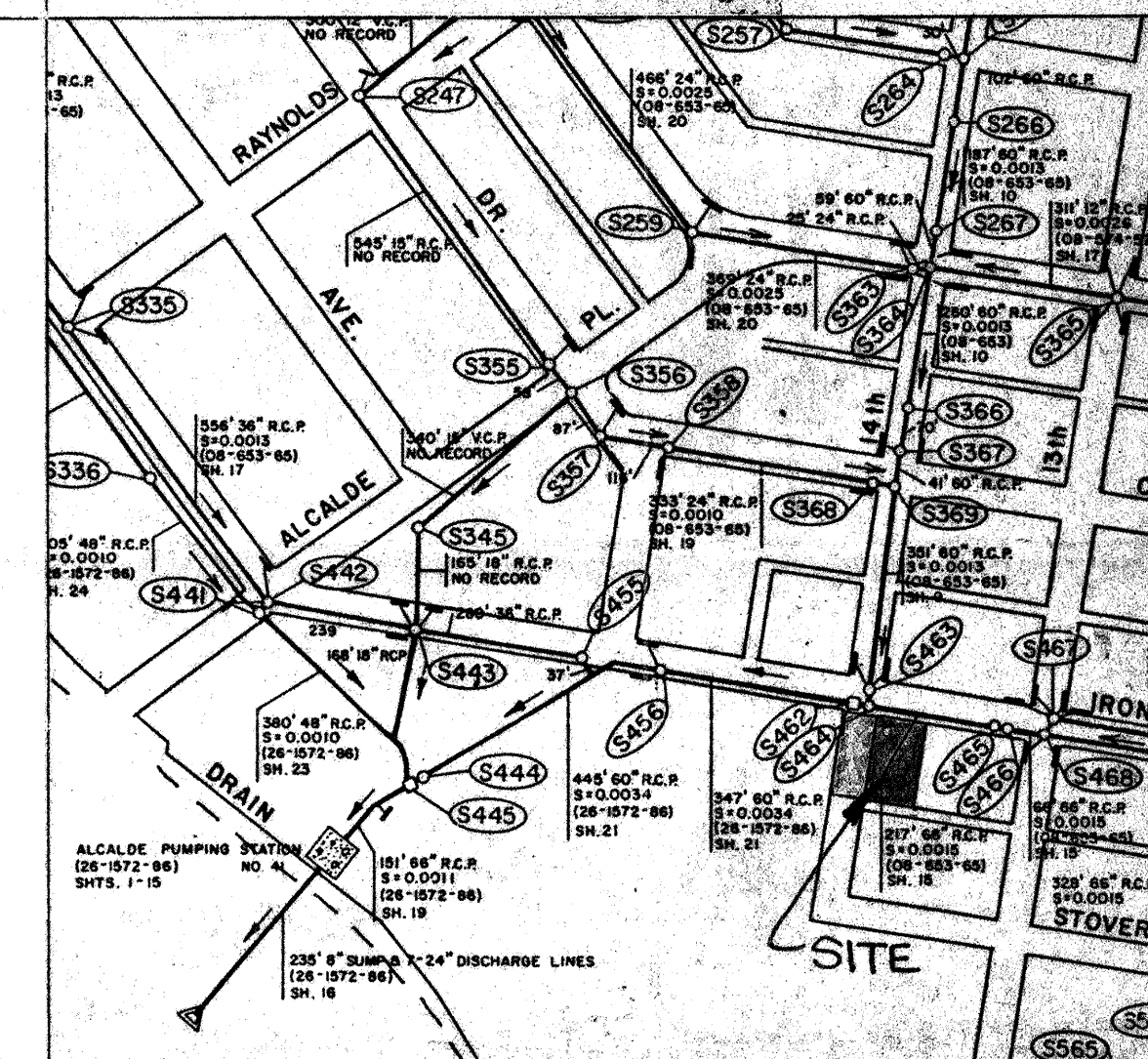
FEMA FIRM PANEL NO. 333



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
CW	GUY WIRE
PED	ELEC. OR TEL. PEDESTAL
RD	ROOF DRAINAGE POINT

STORM DRAIN MAP K-13



OFFSITE DRAINAGE MAP

SCALE 1" = 200'



DRAINAGE DATA

CONDITION	B	STORM	TREATMENT	TREATMENT	EXCESS	PEAK	RUNOFF	RUNOFF
	A	RETURN	TYPE	AREA	PRECIPITATION	RUNOFF	VOLUME	RATE
		PERIOD						
		year	(table 4)	sq. ft.	(table 5)	(table 9)	cu. ft.	cfs
EXISTING	S	10	A	0	0.13	0.38	0	0.00
			B	0	0.28	0.95	0	0.00
			C	12212	0.52	1.71	529	0.48
			D	5538	1.34	3.14	618	0.40
			TOTAL	17750			1148	0.88
		100	A	0	0.53	1.56	0	0.00
			B	0	0.78	2.28	0	0.00
			C	12212	1.13	3.14	1150	0.88
			D	5538	2.12	4.7	978	0.80
			TOTAL	17750			2128	1.48
DEVELOPED	S	10	A	0	0.13	0.38	0	0.00
			B	2080	0.28	0.95	49	0.05
			C	607	0.52	1.71	26	0.02
			D	15063	1.34	3.14	1682	1.09
			TOTAL	17750			1757	1.15
		100	A	0	0.53	1.56	0	0.00
			B	2080	0.78	2.28	135	0.11
			C	607	1.13	3.14	57	0.04
			D	15063	2.12	4.7	2681	1.63
			TOTAL	17750			2853	1.78

no.	date	remarks	by
REVISIONS			
project title			
NM ZOOLOGICAL SOCIETY			
IRON SW			
ALBUQUERQUE, NM			
sheet title			
GRADING & DRAINAGE PLAN			
sheet date	design by	project no.	sheet
10/06/97	JJB	9726	
BORDENAVE DESIGNS			
P.O. BOX 91194, ALBUQUERQUE, NM 87199			
(505) 823-1344			