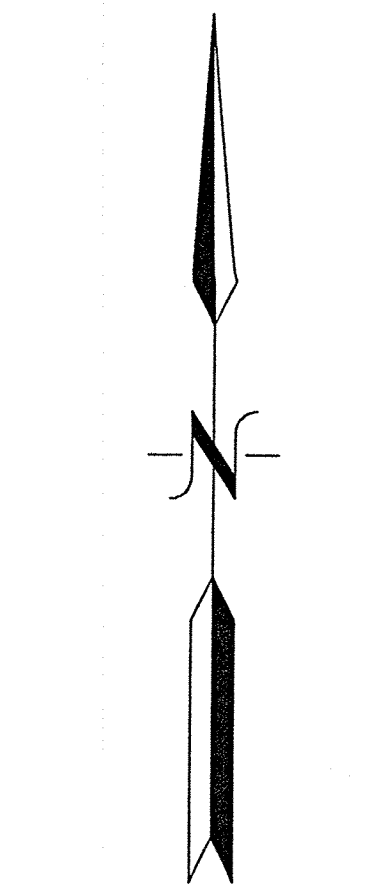
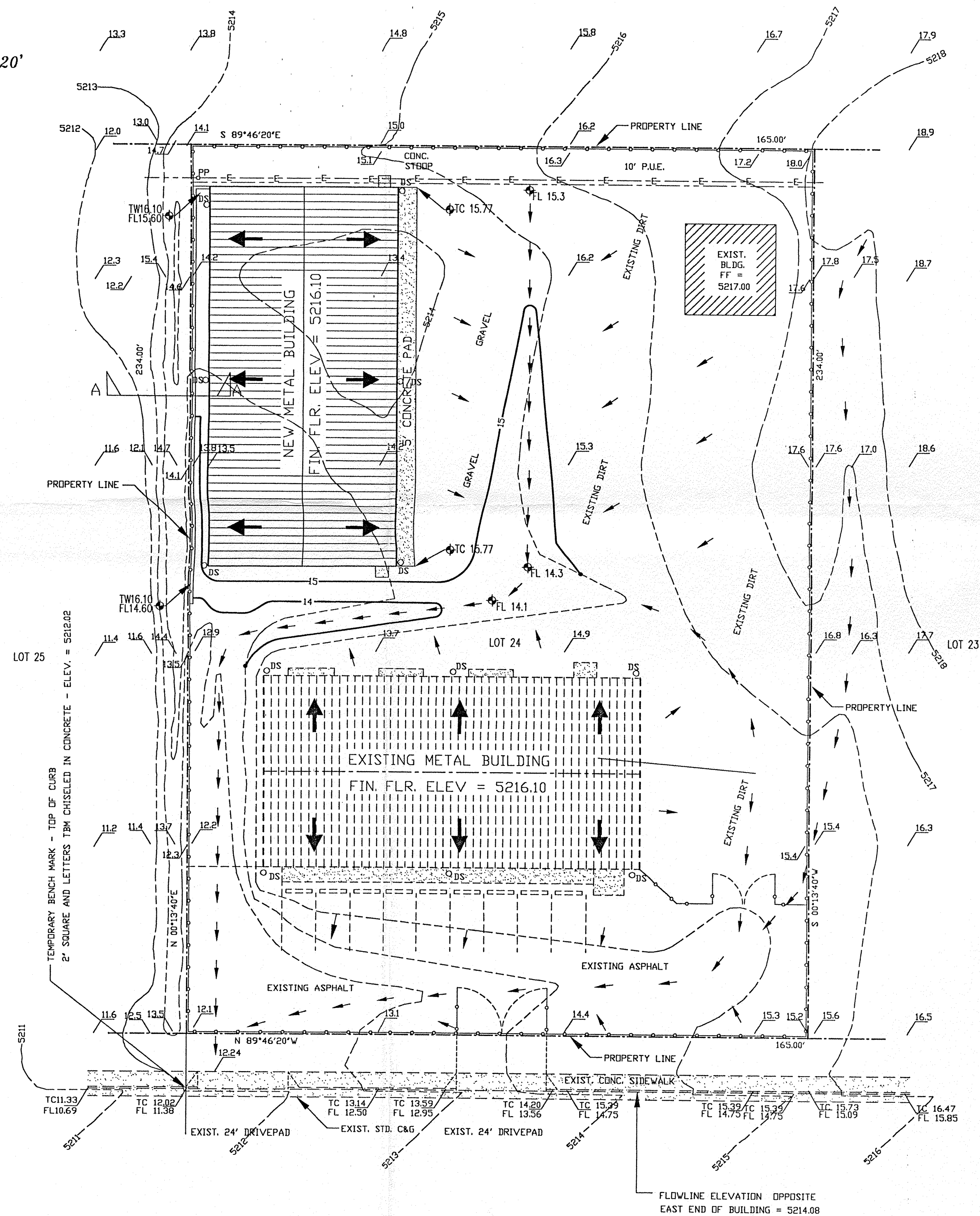
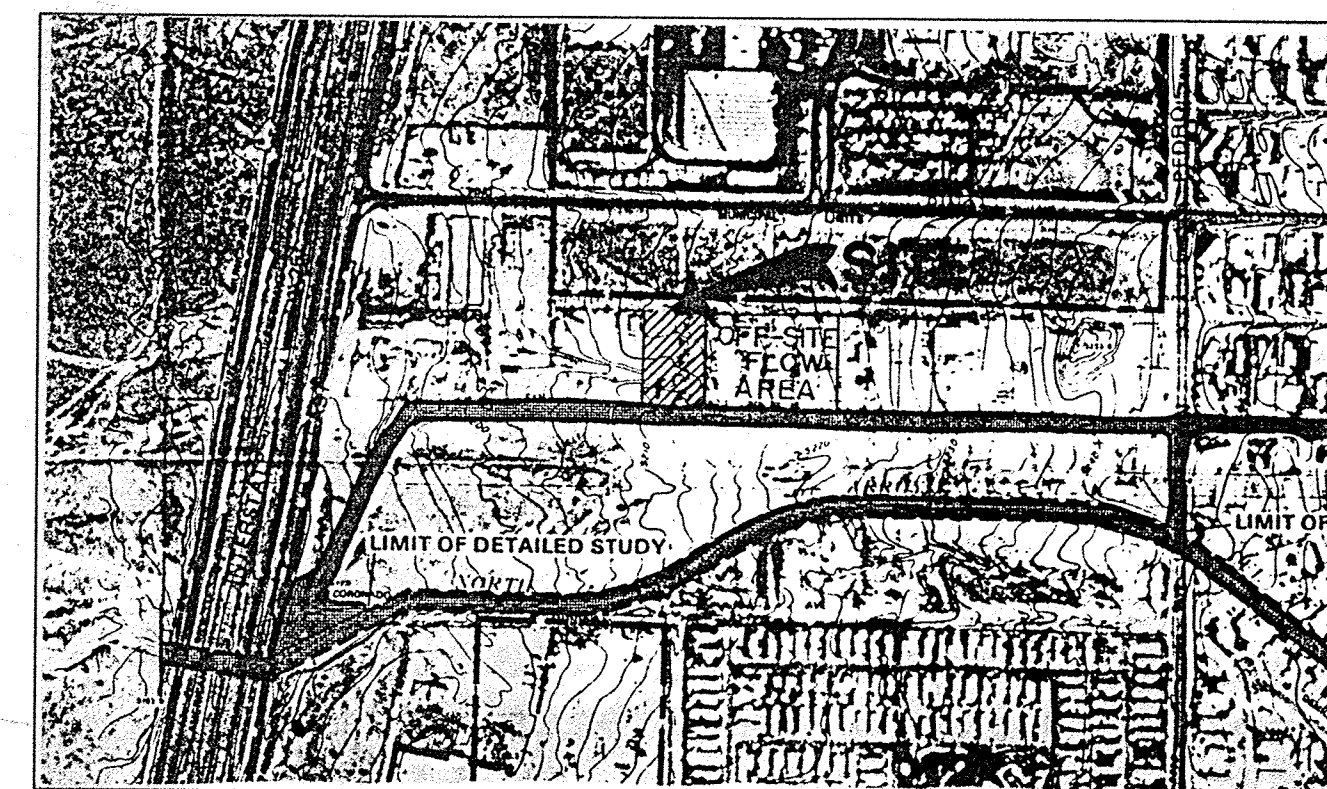




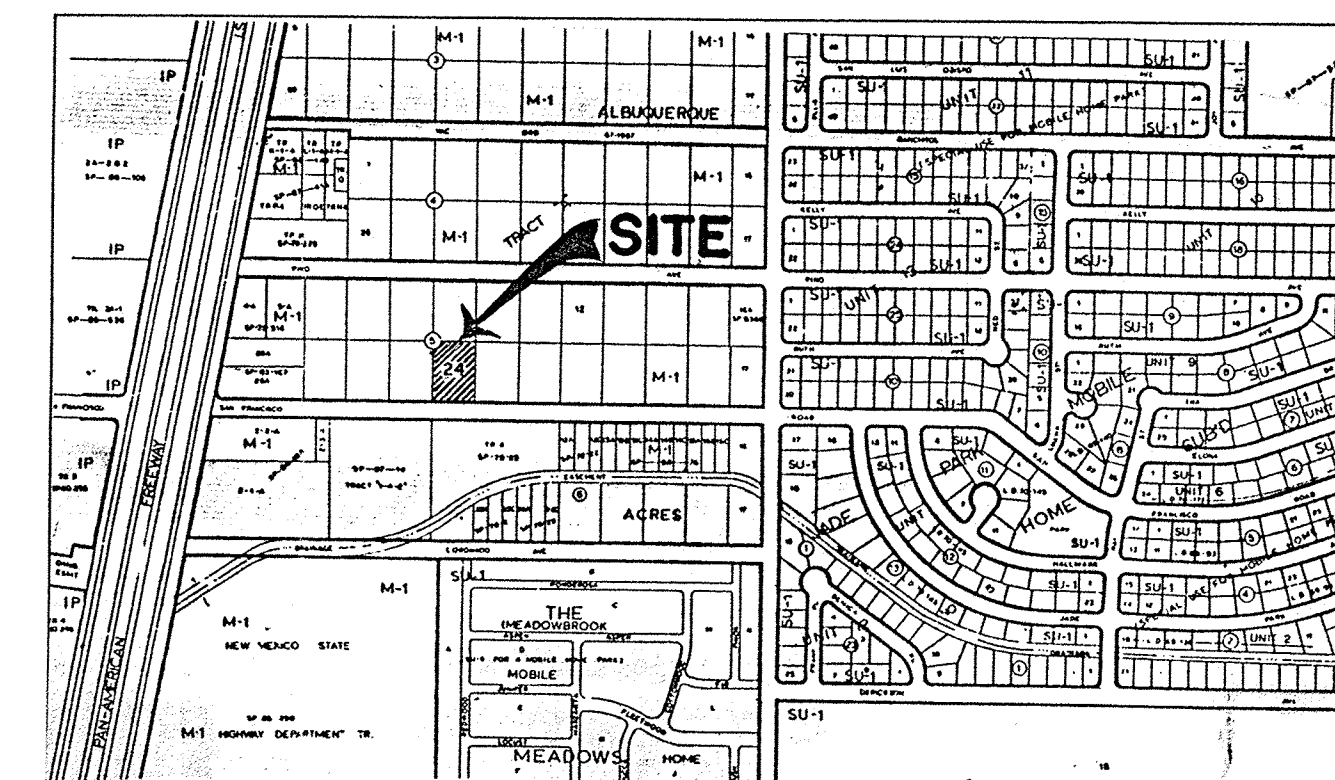
SCALE: 1" = 20'



SAN FRANCISCO ROAD N.E.



FLOODWAY MAP PANEL NO. 10 OF 50



VICINITY MAP ZONE ATLAS NO. D-18

PRE-DESIGN CONFERENCE FINDINGS, ORIGINAL SUBMITTAL 11-7-89.
HYDROLOGY'S SIGNOFF OF THE BUILDING PERMIT WILL REQUIRE AN APPROVED GRADING AND DRAINAGE REPORT PER THE D.P.M.
FREE DISCHARGE FROM THIS SITE IS DESIRED AND F.F. ELEVATION SHOULD BE 2.0' ABOVE THE GUTTER GRADE AT THE UPSTREAM END OF THE BUILDING.
(FREE DISCHARGE IS BASED UPON A BOHANNAN HUSTON ANALYSIS, LETTER DATED 31 OCT., 1984 FOUND IN FILE 'TRACTS 2-1 AND 2-2, N. ALB. ACRES' IN FEMA FILES.

EROSION CONTROL NOTES:
THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE FOLLOWING:
1. NO SEDIMENT-BEARING WATER SHALL BE ALLOWED TO DISCHARGE FROM THE SITE DURING CONSTRUCTION.
2. DURING GRADING OPERATIONS AND UNTIL THE PROJECT HAS BEEN COMPLETED, ALL ADJACENT PROPERTY, RIGHTS-OF-WAY, AND EASEMENTS SHALL BE PROTECTED FROM FLOODING BY RUNOFF FROM THE SITE.
3. SHOULD THE CONTRACTOR FAIL TO PREVENT SEDIMENT-BEARING WATER FROM ENTERING PUBLIC RIGHT-OF-WAY, HE SHALL PROMPTLY REMOVE FROM THE PUBLIC RIGHT-OF-WAY ALL SEDIMENT-LADEN WATERS WILL BE ACCOMPLISHED BY USE OF A COMPACTED EARTH BERM OF ADEQUATE HEIGHT. THE BERM SHALL BE LOCATED ALONG THE DOWNSTREAM PERIMETER OF THE PROPERTY.

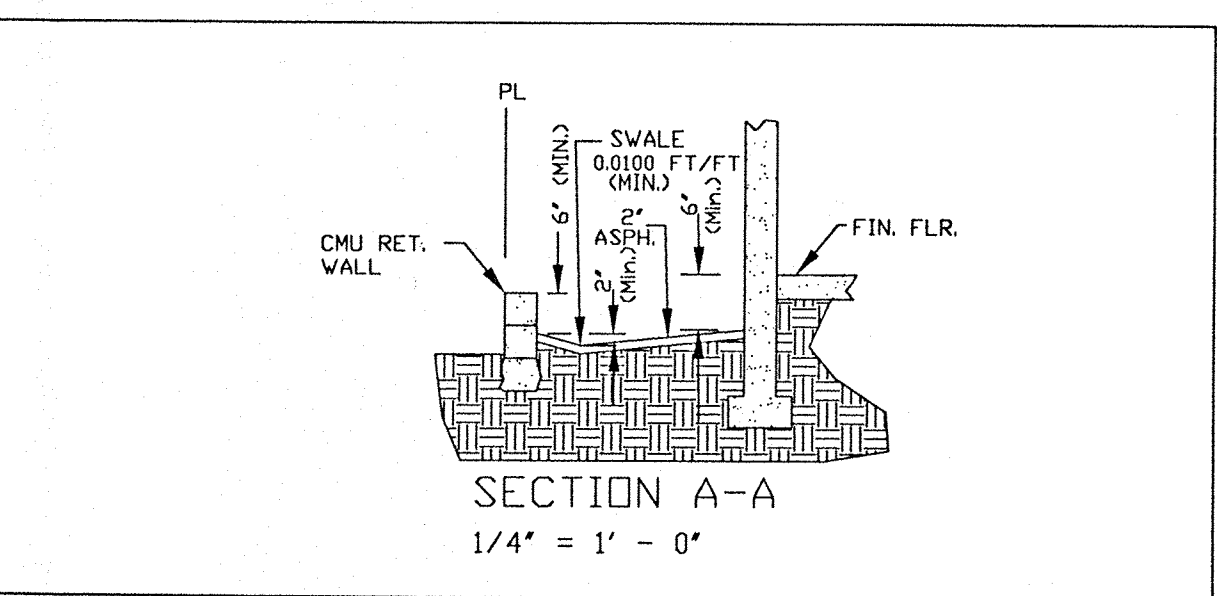
LEGAL DESCRIPTION:
LOT NUMBERED TWENTY-FOUR (24), BLOCK NUMBERED FIVE (5), TRACT A, UNIT A, NORTH ALBUQUERQUE ACRES AS THE SAME IS SHOWN AND DESIGNATED ON SAID PLAT THEREOF FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON MARCH 17, 1937.

BENCH MARK:
STATION 7-D18, LOCATED ON THE EAST SIDE OF U.S. INTERSTATE HIGHWAY 25 EAST FRONTAGE ROAD, ABOUT 0.2 MILES SOUTH OF THE JUNCTION WITH PIND AVE. STATION MARK IS AN "X" CHISELED ON THE WEST BONNET BOLT OF A FIRE HYDRANT, STATION ELEVATION IS 5190.962 FEET.

TEMPORARY BENCH MARK (TBM):
TBM IS LOCATED ON THE TOP OF CURB ADJACENT TO THE SOUTHWEST CORNER OF THE SITE. THE TBM IS MARKED BY A 2" SQUARE AND LETTERS "TBM" PAINTED ON THE TOP OF THE CURB, ELEVATION = 5212.02 FEET.

LEGEND:

EXISTING	NEW	DESCRIPTION
14.1	14.10	CONTOUR
		SPOT ELEVATION
		PROPERTY LINE
		SHEET FLOW
		SWALE
		TC TOP OF CURB
		TA TOP OF ASPHALT
		FL FLOW LINE
		ROOF DRAINAGE
		DOWN SPOUT



DRAINAGE CALCULATIONS

EXISTING CONDITIONS:

The site is located on the north side of San Francisco Street, N.E. approximately 850' East of the I-25 East Frontage Road. Property to the West is developed as a truck terminal. Property to the east is occupied American towers, a microwave tower construction company. Some runoff enters the site from this property (see offsite flow calculations). Property to the north is a large truck terminal entirely paved with concrete which slopes away from the site. The site has an existing 50' x 100' metal building and some existing asphalt paving. All runoff discharges discharges through the site via the west driveway. The site is occupied by an auto body shop.

PROPOSED CONDITIONS:

It is proposed to construct on new 50' x 100' metal building on the site as shown. All runoff will continue to discharge from the site through the West driveway. The Finish Floor elevation of the new building will match the Finish Floor of the existing building to ensure that the new building is a minimum of 1' above the AD-1 Flood zone in San Francisco.

DRAINAGE CRITERIA:

The calculations shown on this plan were prepared in accordance with Section 22.2, Hydrology, of the Development Process Manual, Volume 2, Design Criteria, for the City of Albuquerque, in cooperation with Bernalillo County, New Mexico and the Albuquerque Metropolitan Arroyo Flood Control Authority, January, 1993.

PRECIPITATION ZONE:

The site is between San Mateo Blvd. and Eubank Blvd. and is, therefore, in Precipitation Zone 3.

LAND TREATMENT AREAS, EXCESS PRECIPITATION AND UNIT PEAK DISCHARGE:

The peak discharge per acre and excess precipitation are shown for the four land treatments in Zone 2 in the table below, and the values shown are from the City of Albuquerque D.P.M. Also shown are the existing and proposed land treatment areas.

LAND TREATMENT	q (cfs/acre)		E (in)		Existing Site Areas		Developed Site Areas	
	100-yr.	10-yr.	100-yr.	10-yr.	%	Sq. Ft.	%	Sq. Ft.
A	1.87	0.58	0.66	0.19	0.0	0.0000	0.0	0.0000
B	2.60	1.19	0.92	0.36	1.0	400	0.0092	1.0
C	3.45	2.00	1.29	0.62	45.2	17,434	0.4002	32.2
D	5.02	3.39	2.36	1.50	53.8	20,776	0.4770	66.8
Totals					100.0	38,610	0.8864	100.0

PEAK DISCHARGE:

EXISTING CONDITIONS:

Q100 = 0.0092 * 2.60 + 0.4002 * 3.45 + 0.4770 * 5.02 = 3.80 cfs

Q10 = 0.0092 * 1.19 + 0.4002 * 2.00 + 0.4770 * 3.39 = 2.43 cfs

DEVELOPED CONDITIONS:

Q100 = 0.0092 * 2.60 + 0.2854 * 3.45 + 0.5917 * 5.02 = 3.98 cfs

Q10 = 0.0092 * 1.19 + 0.2854 * 2.00 + 0.5917 * 3.39 = 2.59 cfs

VOLUME, 100-YEAR, 6-HOUR:

EXISTING CONDITIONS:

V100 = (400 * 0.92 + 17,434 * 1.29 + 20,776 * 2.36) / 12 = 5,990 cf

V10 = (400 * 0.36 + 17,434 * 0.62 + 20,776 * 1.50) / 12 = 3,510 cf

DEVELOPED CONDITIONS:

V100 = (400 * 0.92 + 12,434 * 1.29 + 25,776 * 2.36) / 12 = 6,437 cf

V10 = (400 * 0.92 + 12,434 * 0.62 + 25,776 * 1.50) / 12 = 3,895 cf

SUMMARY OF ON-SITE VOLUMES AND PEAK DISCHARGE RATES:

	V100(CF)	V10(CF)	Q100(CFS)	Q10(CFS)
DEVELOPED	6,437	3,895	3.98	2.59
EXISTING	5,990	3,510	3.80	2.43
DECREASE	447	385	0.18	0.16

ANALYSIS OF DOWNSTREAM CAPACITY:

THE INCREASE IN RUNOFF DUE TO THE CONSTRUCTION OF THE PROPOSED BUILDING IS MINIMAL AND WILL NOT SIGNIFICANTLY EFFECT DOWNSTREAM CAPACITY.

OFFSITE FLOW CALCULATIONS:

APPROXIMATE AREA = 234 X 350 = 81,900 SF = 1.88 ACRES. AREA IS UNPAVED WITH TWO SMALL BUILDINGS. ASSUME PERCENTAGES OF LAND TREATMENT AS FOLLOW:

B = 10% (0.19 AC.) C = 70% (0.62 AC.) D = 20% (0.37 AC.)

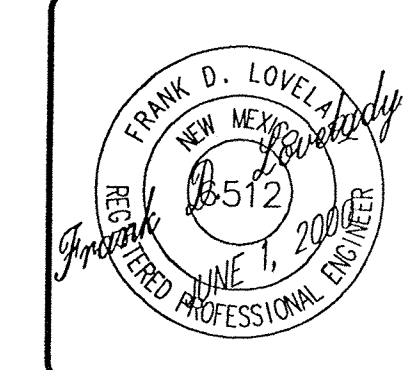
Q100 = 0.19 * 2.60 + 0.62 * 3.45 + 0.37 * 5.02 = 4.49 CFS

ANALYSIS OF FLOOD ZONE:

THERE IS AN AD-1 (1' DEPTH) FLOOD ZONE IN SAN FRANCISCO ROAD. THE EXISTING BUILDING IS A MINIMUM OF 2.0' ABOVE THE STREET FLOWLINE EVEN WITH THE UPSTREAM EDGE OF THE BUILDING.

THE FLOOD ZONE.

RECEIVED
JUN 1 2000
HYDROLOGY SECTION



GRADING AND DRAINAGE PLAN
MAJESTIC MOTORS
5651 SAN FRANCISCO ROAD, N.E.
ALBUQUERQUE, NEW MEXICO

FRANK D. LOVELADY, P.E.
(505) 345-2267 • Fax (505) 345-2115 • 300 ALAMOSA RD. NW • Albuquerque, NM • 87107

JOB NO: 601

DATE: JUNE 1, 2000

REVISIONS

NO.	DESCRIPTION

SHEET NO.
1 OF 1

D18-D21 1/2