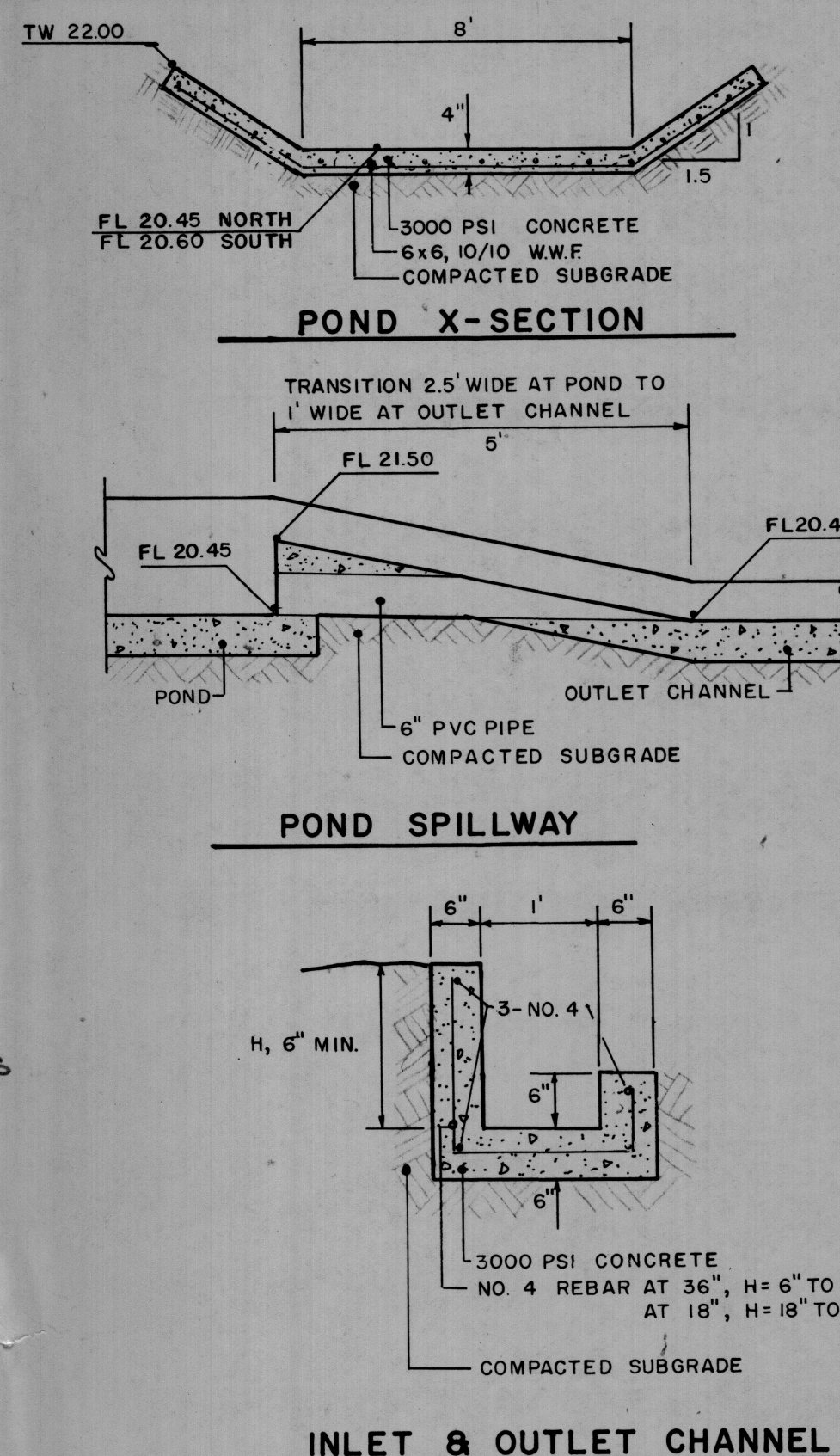
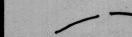
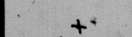
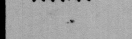
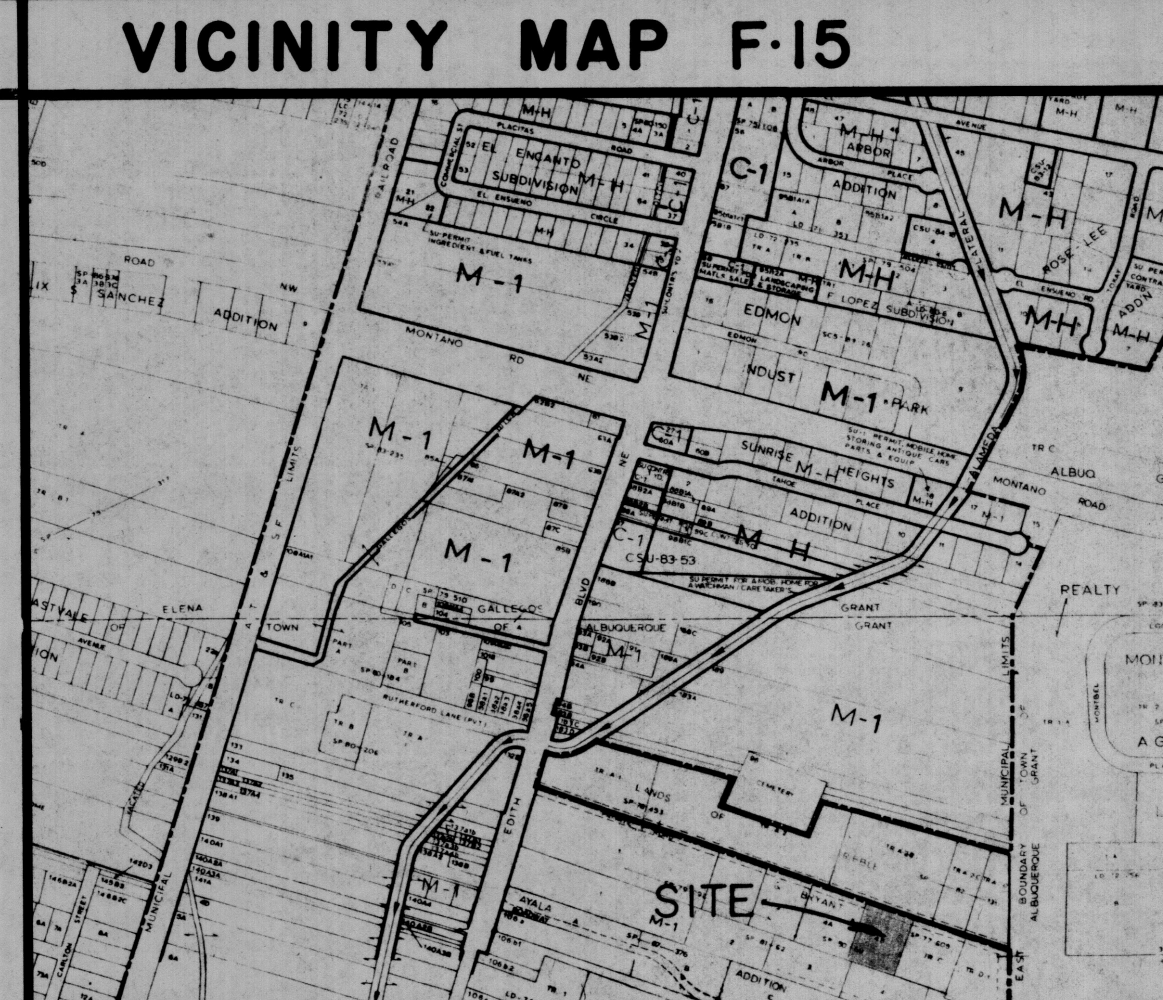


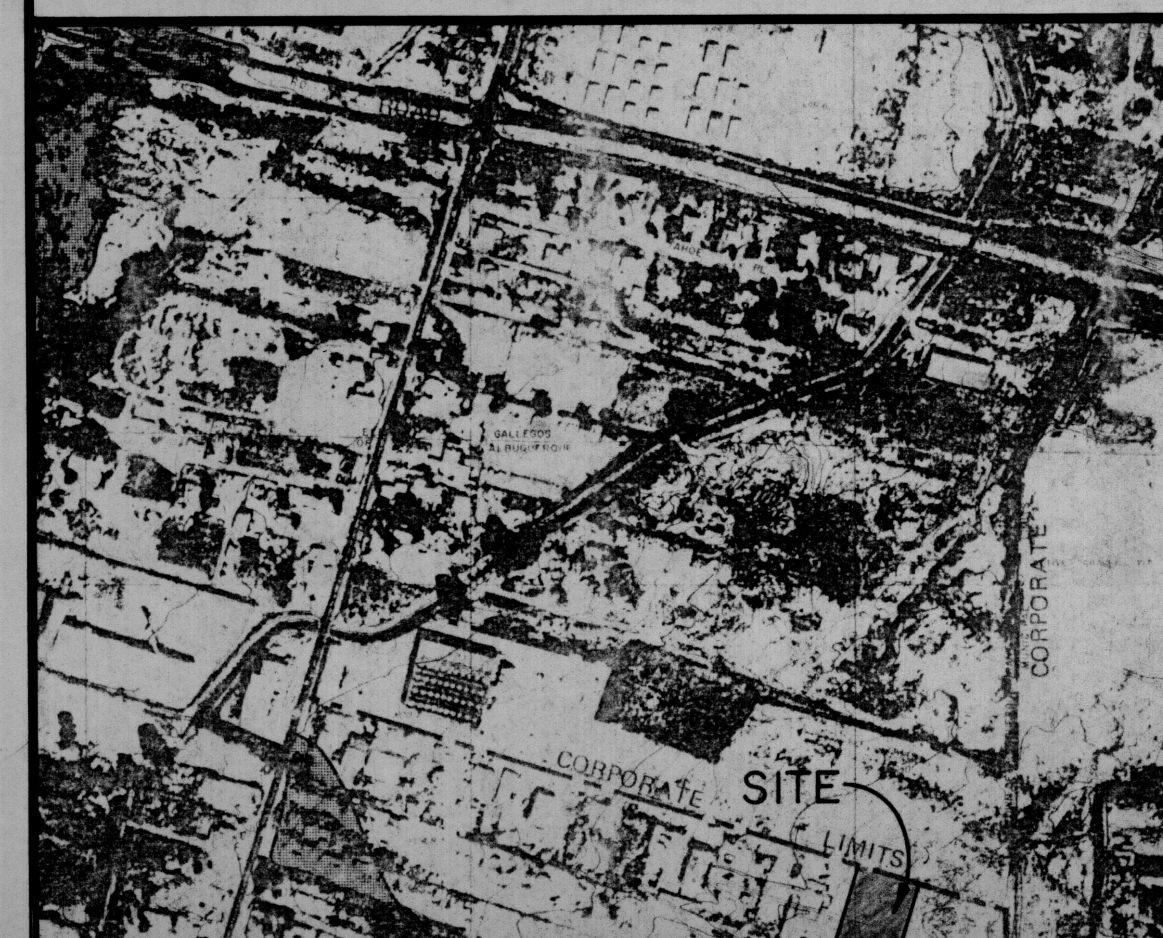


LEGEND

TBM	TEMPORARY BENCHMARK
FF	FINISH FLOOR
FG	FINISH GRADE
FL	FLOW LINE
TA	TOP OF ASPHALT
TCF	TOP OF CONCRETE
TC	TOP OF CURB
TP	TOP OF PAD
TS	TOP OF SIDEWALK
TW	TOP OF WALL
FH	FIRE HYDRANT
WM	WATER METER
WV	WATER VALVE
MH	MANHOLE
GM	GAS METER
GV	GAS VALVE
LP	LIGHT POLE
PP	POWER POLE
GW	GUY WIRE
RD	ROOF DRAINAGE
PED	ELEC. OR TEL. PEDESTAL
	FEMA FIRM BOUNDARY
	DRAINAGE BASIN BOUNDARY
	EXISTING CONTOUR
	PROPOSED CONTOUR
	EXISTING ELEVATION
	PROPOSED ELEVATION
	AS-BUILT ELEVATION



FEMA FIRM NO. 16



LEGAL DESCRIPTION

TRACT 4-B, LANDS OF RIBBLE & BRYANT

PERMANENT BENCHMARK

ACS 7-F15, ELEVATION 5021.14

TOPO 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 01/04/90
Jean J. Bordenave
NMPE & LS No. 5110

SCS SOILS MAP NO. 21



OFFSITE DRAINAGE MAP



DRAINAGE DATA

FLOW CONDITIONS

ALLOWABLE PEAK DISCHARGE RATE

FROM MASTER DRAINAGE PLAN FOR EDITH BLVD.

Q = CiA
C = 0.82
i = 4.4 IN/HR
A = 1 AC
Q = 3.61 CFS

PEAK DISCHARGE RATE - BASIN A

FROM AHYMO 97 COMPUTER RUN
PEAK FLOW AT 90 MINUTES - Q = 2.78 CFS
PEAK FLOW AT 96 MINUTES - Q = 2.0 CFS

PEAK DISCHARGE RATE - BASIN B

FROM AHYMO 97 COMPUTER RUN
PEAK FLOW AT 90 MINUTES - Q = 1.51 CFS

FROM POND ROUTING SHEET
PEAK FLOW AT 96 MINUTES - $Q = 0.74$ CFS

ACTUAL PEAK DISCHARGE RATE

AT 90 MINUTES - $Q = 2.78 + 0.58 = 3.36$ CFS
AT 96 MINUTES - $Q = 2.0 + 0.74 = 2.74$ CFS

POND OUTLET PARAMETERS

POND ORIFICE OUTLET

FROM POND ROUTING SHEET

$$Q = \text{Ca}(2gH)^{0.5}$$

USING 6" DIAM. PVC PIPE
 $Q = 0.74$ CFS
 $C = 0.6$
 $H = 0.88$ FT

POND EMERGENCY SPILLWAY

BROAD CRESTED WEIR

$Q = CLH^{1.5}$
USING 2.5 FOOT WIDE WEIR
 $Q = 1.51$ CFS
 $C = 2.8$
 $L = 2.5$
 $H = 0.46$ FT

NOTES

1. THE SITE IS PRESENTLY FULLY DEVELOPED. PROPOSED WORK IS LIMITED TO A BUILDING EXPANSION TO THE NORTH OF THE EXISTING BUILDING IN AN AREA THAT IS PRESENTLY LANDSCAPED WITH SOUTHWEST LANDSCAPING. TO ACCOMPLISH DRAINAGE REQUIREMENTS THE EXISTING LANDSCAPING AREA (GRAVEL ON IMPERVIOUS PLASTIC SHEETING) SHALL BE REMOVED AND REPLACE WITH GRAVEL ON PERVIOUS PLASTIC SHEETING. ALL OTHER SITE ITEMS INCLUDING THE EXISTING DETENTION POND SHALL REMAIN IN THEIR PRESENT CONDITION.
2. DRAINAGE CALCULATIONS HAVE BEEN UPDATED USING AHYMO 97 TO DETERMINE THE PEAK DISCHARGE FOR BASIN A AND THE INFLOW HYDROGRAPH FOR THE DETENTION POND. THE COMPUTER RUNS AND A POND ROUTING CALCULATION ARE ATTACHED AS PART OF THIS SUBMITTAL.
3. THE SITE IS LOCATED IN THE AREA DESIGNATE BASIN 9B IN THE EDITH BOULEVARD DRAINAGE ANALYSIS DATED NOVEMBER, 1990. THE ALLOWABLE RUNOFF RATE IS COMPUTED IN THE REPORT USING THE RATIONAL METHOD WITH A WEIGHTED RUNOFF COEFFICIENT OF 0.82 AND A RAINFALL INTENSITY OF 4.8 IN/HR.
4. THE SITE IS NOT LOCATED IN A DESIGNATED FLOOD HAZARD AREA.
5. TOPOGRAPHY SHOWN ON THIS SHEET WAS ORIGINALLY OBTAINED BY WESTERN LAND SURVEYING ON DECEMBER 22, 1993 AND UPDATED ON MAY 5, 1997 WITH THE ENGINEER'S CERTIFICATION BY BORDENAVE DESIGNS.
6. THE OFFSITE DRAINAGE MAP IS SUBMITTED FOR GENERAL INFORMATION ONLY AS THE AREA HAS BEEN REGRADED AND DEVELOPED SO THAT LOTS DRAIN TO THE STREETS.