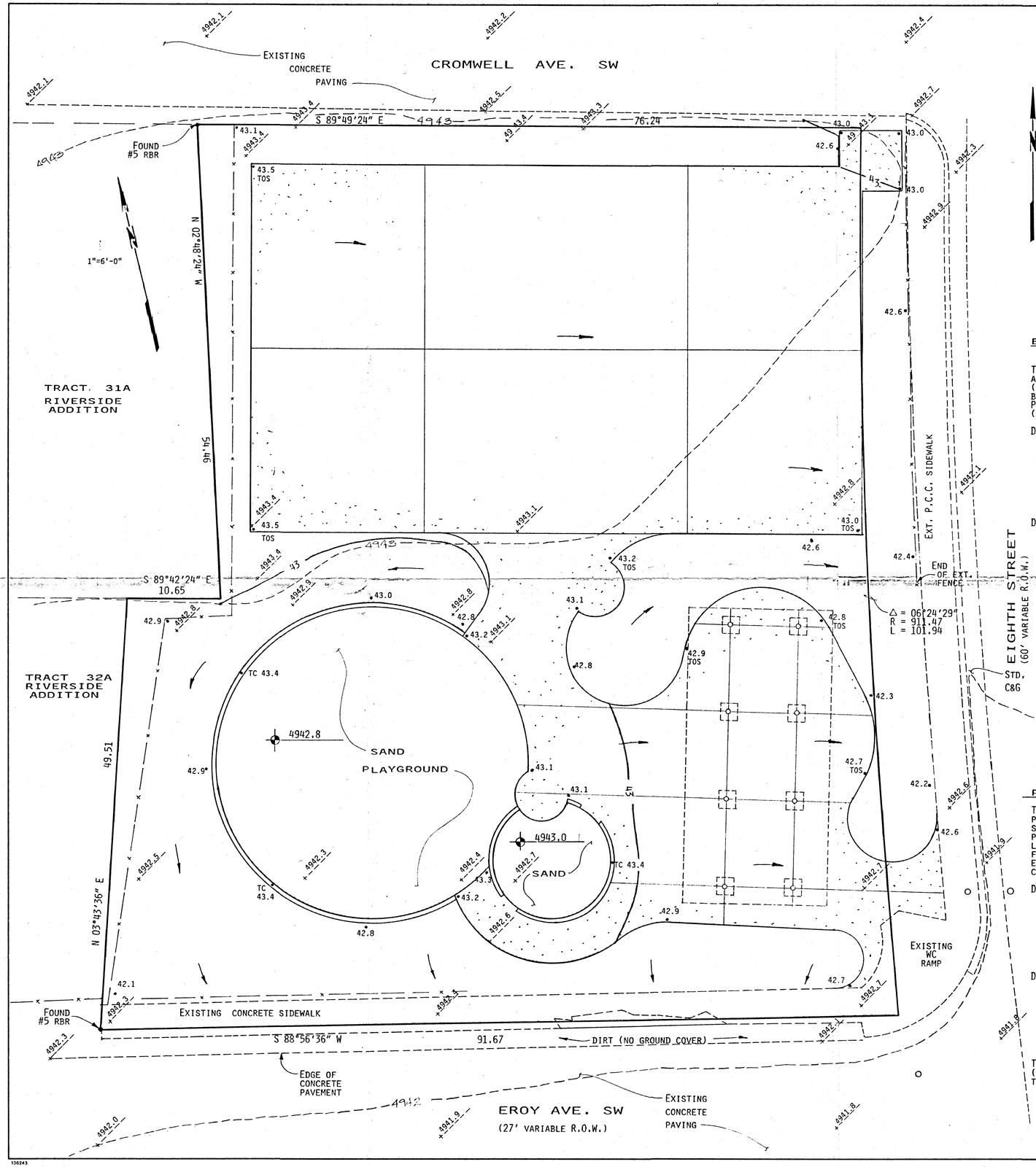

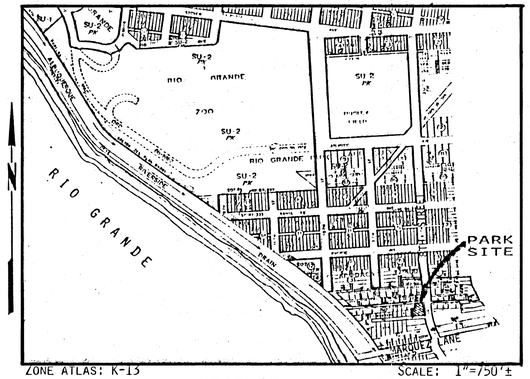

VICINITY MAP

EXISTING CONDITIONS & HYDROLOGICAL CHARACTERISTICS

THE SITE IS SITUATED AT THE EASTERLY BOUNDARY OF THE RIVERSIDE ADDITION, ADJACENT TO EIGHTH STREET BETWEEN CROMWELL AVE. SW AND EROY AVE. SW (BOTH BEING CONCRETE PAVED ALLEYS). THE PARK IS FULLY DEVELOPED WITH BOTH ASPHALT AND SAND GROUND COVER. IT IS WITHIN THE BOUNDARIES OF PRECIPITATION ZONE NO. 1 (WEST OF RIO GRANDE BLVD.); AS SUCH THE P_{360} (6-HOUR, 100-YEAR STORM) HAS A DEPTH OF 2.2 INCHES.

DETERMINE TOTAL Q_P:

LAND TREATMENT A = 2,016 SF (0.046 Ac.)
LAND TREATMENT D = 5,791 SF (0.133 Ac.)
0.179 Ac.

$Q_P = Q_{PA}A_A + Q_{PD}A_D$
$= (1.29)(0.046) + (4.37)(0.133)$
$= 0.63$ CFS

DETERMINE VOLUME OF EXISTING RUNOFF:

$$E_W = \frac{E_A A_A + E_D A_D}{A_A + A_D} = \frac{(0.44(0.046) + (1.97)(0.133)}{0.046 + 0.133}$$

$= 1.58$

VOL = (1.58/12)(0.179)(43560) CU.FT.
= 1,027 CU.FT.

PROPOSED IMPROVEMENTS

THE PARK IS SCHEDULED FOR REHABILITATION. THE ASPHALT PAVI AND SAND PLAY AREA ARE TO BE REMOVED AND REPLACED WITH CONCRETE (P.C.C.), NEW SAND PLAY AREA WITH PLAYGROUND EQUIPMENT AND PLANTING AREAS. THE SAND PLAY AREAS SHALL RETAIN 100% OF THE STORM WATERS FALLING WITHIN THEIR LIMITS. THE PARK DOES NOT AND WILL NOT ACCEPT ANY OFFSITE STORM WATER FLOWS. ALL FLOWS GENERATED FROM THE NEW PARK SURFACING SHALL DISCHARGE EITHER ONTO EROY STREET OR EIGHTH STREET, THE SAME AS THE EXISTING CONDITIONS BUT AT A REDUCED FLOW RATE AND VOLUME.

DETERMINE TOTAL Q_P (DEVELOPED):

LAND TREATMENT A: 100% RETAINED (0.026 Ac)
LAND TREATMENT B: 2,215 S.F. (0.051 Ac)
LAND TREATMENT D: 4,450 S.F. (0.102 Ac)

$Q_P = Q_{PB}A_B + Q_{PD}A_D$
$= (2.03)(0.051) + (4.37)(0.102)$
$= 0.549$ CFS

DETERMINE VOLUME OF RUNOFF:

$$E_W = \frac{E_B A_B + E_D A_D}{A_B + A_D} = \frac{(0.67)(0.051) + (1.97)(0.102)}{0.153}$$

$= 1.54$ INCHES

VOL = (1.54/12)(0.153)(43560) = 855 CU.FT.

THEREFORE, THE VOLUME ALLOWED TO RUNOFF HAS BEEN DECREASED BY 17% (172 CU.FT.) DUE TO THE CAPTURING AND RETAINING OF STORM WATERS WITHIN THE SAND PLAYGROUND AREAS AND THE DECREASE IN IMPERVIOUS PAVING.

GENERAL NOTES

LEGAL DESCRIPTION: EDDIE GARCIA PARK, TRACTS 31B & 32B, RIVERSIDE ADDITION
1129 EIGHTH STREET S.W.

ENGINEER: ISAACSON & ARFMAN, P.A.
128 MONROE STREET NE
ALBUQUERQUE, N.M. 87108
ATTN: FRED C. ARFMAN, PE

SURVEYOR: CITY SURVEYOR, P.W.D.
CITY OF ALBUQUERQUE
DATE OF SURVEY: NOV 1, 1990

BENCHMARK: PROJECT BENCHMARK, SQUARE 'CI' CHISELED ON TOP OF CURB, EAST CURB OF EIGHTH ST., BETWEEN CROMWELL AVE, AND EROY AVE. SW
ELEV: 4942.55

ZONING: CITY PARK

AREA: 7,807 SF, 0.1792 Ac.

FLOOD HAZARD: THE SUBJECT PARK SITE IS NOT WITHIN AN ESTABLISHED 100-YR. FLOOD HAZARD AREA AS DETERMINED BY PANEL NO. 350002-0028 OF THE OCTOBER 14, 1983 EDITION OF THE F.E.M.A. MAPS

LEGEND

- EXISTING ELEVATION
- PROPOSED ELEVATION
- FINISH CONTOUR
- GROUND SURFACE ELEV.
- CHAIN LINK FENCE
- CONCRETE SURFACE
- FLOW DIRECTIONAL ARROW
- EXISTING SHADE STRUCTURE COLUMN

RECEIVED JAN 22 1992 HYDROLOGY DIVISION

AS BUILT INFORMATION

CONTRACTOR	DATE
WORK STAKED BY	
INSPECTOR'S ACCEPTANCE BY	DATE
FIELD VERIFICATION BY	DATE
DRAWINGS CORRECTED BY	DATE

MICRO-FILM INFORMATION

RECORDED BY	DATE
NO.	

BENCH MARKS

ACS 3¼" ALUMINUM CAP STAMPED "8-L13, 1987" LOCATED 87'± WEST OF THE RIVERSIDE DRAIN AND 53'± NORTH OF BRIDGE BLVD. SW
ELEVATION: 4953.389

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE

ENGINEER'S SEAL

FRED C. ARFMAN N.M. REGISTERED PROFESSIONAL ENGINEER 7322

NO.	DATE	REMARKS	BY
		REVISIONS	
		DESIGN	

DESIGNED BY DATE
DRAWN BY DATE
CHECKED BY DATE

CITY OF ALBUQUERQUE
PARKS & RECREATION DESIGN & DEVELOPMENT

TITLE: EDDIE GARCIA PARK DRAINAGE PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					

PROJECT NO. | MAP NO. K-13 | SHEET OF

136243