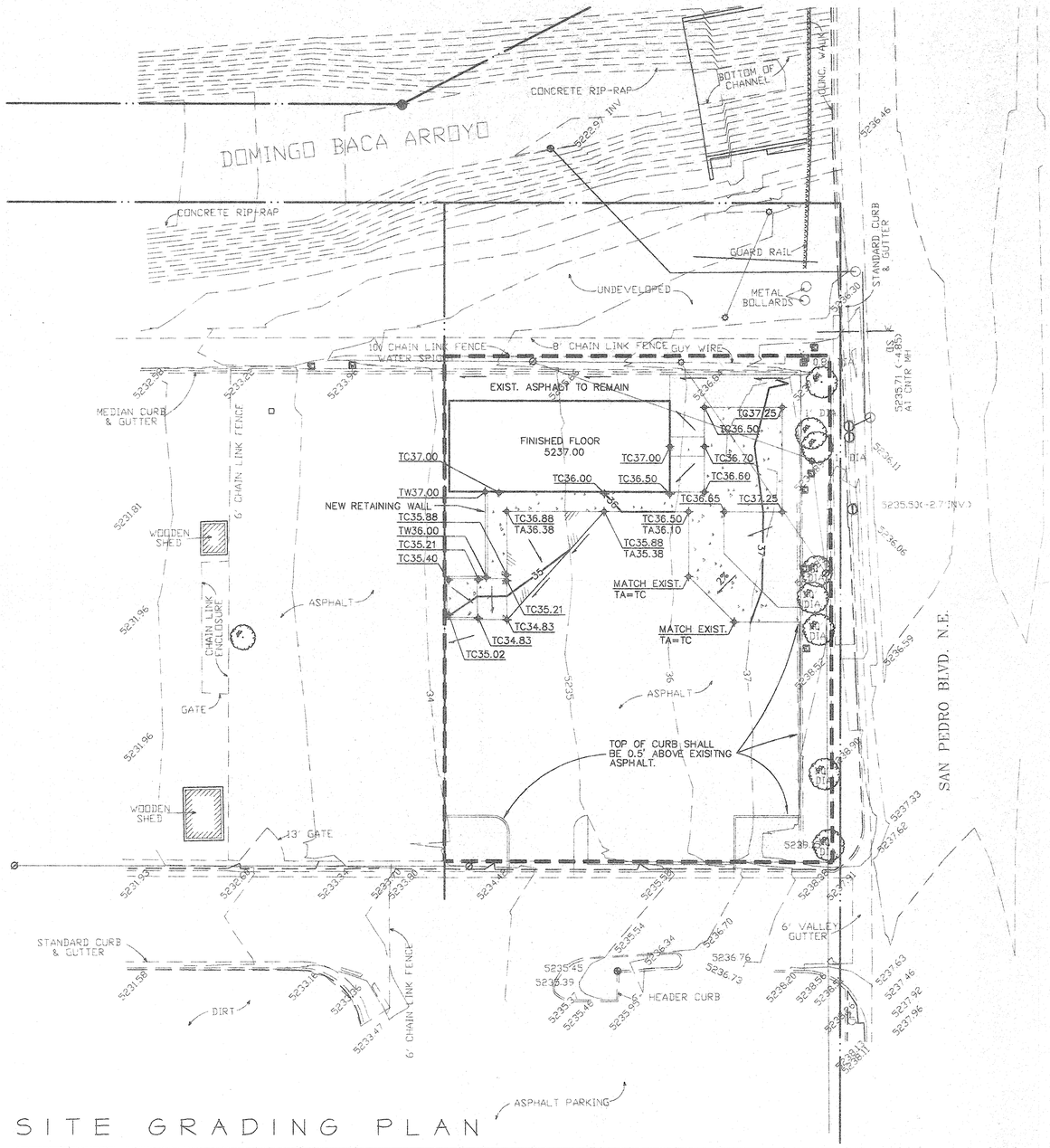


SITE GRADING PLAN

NORTH

SCALE: 1" = 20'

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF THE CONSTRUCTION OF A NEW MEAL CENTER LOCATED AT PINO YARDS. PINO YARDS IS LOCATED AT THE CORNER OF SAN PEDRO BOULEVARD AND PINO STREET. THE EXISTING SITE IS CURRENTLY AN ASPHALT PAVED LOT USED FOR STORAGE OF MISCELLANEOUS MATERIALS. THE SITE SLOPES GENTLY TO THE WEST AND CONTINUES TO FLOW TO PINO YARD STORM DRAIN FACILITIES. THE DEVELOPED SITE WILL HAVE A NEW MEAL CENTER BUILDING AND ASSOCIATED SIDEWALKS AND LANDSCAPE. THE DEVELOPED SITE WILL REUSE A LARGE PART OF THE EXISTING ASPHALT PAVING FOR PARKING. THE DRAINAGE PATTERN FOR THE DEVELOPED SITE WILL BE SIMILAR TO THE EXISTING CONDITIONS. THE DEVELOPED SITE WILL GENERATE LESS RUNOFF THAN THE EXISTING SITE DUE TO THE REMOVAL OF SOME OF THE EXISTING ASPHALT PAVING.

RUNOFF CALCULATIONS – SIMPLIFIED PROCEDURE

THIS PROCEDURE IS IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, VOLUME 2, SECTION 22.2, "HYDROLOGY", PEAK DISCHARGE RATE FOR SMALL WATERSHEDS LESS THAN FORTY ACRES IN SIZE.

PRECIPITATION ZONE FROM FIGURE A-1: 3

LAND TREATMENT DESCRIPTIONS ARE IN TABLE A-4.

1. RUNOFF RATE COMPUTATION

USE EQUATION A-10 : $Q_P = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$

VALUES OF Q_{Pi} ARE FROM TABLE A-9, AND ARE IN CFS/ACRE. AREA VALUES ARE IN ACRES.

BASIN	Q_{PA}	A_A	Q_{PB}	A_B	Q_{PC}	A_C	Q_{PD}	A_D	Q_P
EXISTING RATE OF RUNOFF (CFS)									
BASIN A	1.87	0.00	2.60	0.00	3.45	0.00	5.02	0.43	2.16
DEVELOPED RATE OF RUNOFF (CFS)									
BASIN A	1.87	0.00	2.60	0.00	3.45	0.05	5.02	0.38	2.08

2. RUNOFF VOLUME COMPUTATION

USE EQUATION A-5 TO COMPUTE WEIGHTED EXCESS PRECIPITATION:

$$\text{WEIGHTED } E = \text{"E"} = (E_A A_A + E_B A_B + E_C A_C + E_D A_D)/(A_A + A_B + A_C + A_D)$$

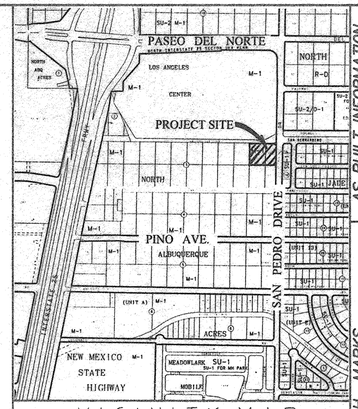
$$(A_A + A_B + A_C + A_D) = \sum A_i$$

USE EQUATION A-6 TO COMPUTE THE VOLUME:

$$V_{360} = \text{"E"} \times (A_A + A_B + A_C + A_D) \times 3630 \text{ FEET}^3/\text{ACRE·INCH}$$

VALUES OF E_i ARE FROM TABLE A-8, AND ARE IN INCHES. AREA VALUES ARE IN ACRES.

BASIN	E_A	A_A	E_B	A_B	E_C	A_C	E_D	A_D	$\sum A_i$	"E"	V_{360}
EXISTING VOLUME OF RUNOFF (CUBIC FEET)											
BASIN A	0.66	0.000	0.92	0.000	1.29	0.000	2.36	0.430	0.430	2.36	3684
DEVELOPED VOLUME OF RUNOFF (CUBIC FEET)											
BASIN A	0.66	0.000	0.92	0.000	1.29	0.050	2.36	0.380	0.430	2.23	3481



VICINITY MAP

MAP NO. D-18-Z NO SCALE

LEGAL DESCRIPTION

NORTH ALBUQUERQUE ACRES, PINO YARDS

RECEIVED NOV 18 1997 HYDROLOGY SECTION

CHAVEZ • GRIEVES CONSULTING ENGINEERS, INC.

5639 JEFFERSON STREET N.E. • ALBUQUERQUE, NEW MEXICO 87109
PHONE (505) 344-4080 • FAX (505) 343-8759

AS BUILT INFORMATION

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

MICRO-FILM INFORMATION

	DATE
RECORDED BY	
NO.	

BENCH MARKS

MONUMENT IS A STANDARD A.C.S. BRASS TABLET STAMPED "11-D18-19/8" SET IN TOP OF CONCRETE POST FLUSH WITH GROUND. LOCATED IN THE S.E. QUADRANT OF PASEO DEL NORTE AND SAN PEDRO BLVD. N.E.

SURVEY INFORMATION

NO.	BY	DATE
24	CREW: MWR: AG.	05/97
	CGA SURVEY SECTION	

FIELD NOTES

ENGINEER'S SEAL

NO.	DATE	REMARKS	BY
		REVISIONS	

DESIGN

		DATE
DESIGNED	J. ALARID	9-29-97
DRAWN BY	P. GAUNA	9-29-97
CHECKED BY	T. BRICENO	9-30-97

CITY OF ALBUQUERQUE
CAPITAL IMPLEMENTATION PROGRAM
ENGINEERING & ARCHITECTURAL SECTION

TITLE: CITY OF ALBUQUERQUE
NORTH ALBUQUERQUE MEALSITE
SITE GRADING AND DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.

City Project No.	Zone Map No.	Sheet	Of
7226560	D-18-Z		

JOB NO.: W23-104-5197
FILE: PINOG.DWG
ENG/TECH: JA/PG
REV: 10/01/97 JA