HYDROLOGY

~~K29/D72~~
K19/D72

1 PLAN

K19/D72

1 Plan

D 24 | C 20 | B 16 | A 12 | CITY OF ALBUQUERQUE | C | D

NF 22440A

DRAINAGE

The proposed development site consists of approximately 0.36 acres and is located at the Southeast Corner of Domingo Road and Mesilla Street. The site, as shown on the FEMA Map, is located within a Flood Hazard Zone. However, recent construction of the Fairgrounds's storm drain system has alleviated much of the flooding in this area. Ten catch basins have been constructed downstream with 900 feet of the site as part of the Fairground's storm drain system.

Free discharge is requested on the following basis:

1) Close proximity of the site to the existing storm drain results in runoff generated from this site being accepted before the peak flow from the overall drainage basin.

2) There is a negligible increase in flow.

3) The site has minimum impact on the overall drainage basin.

DRAINAGE CALCULATIONS

A = 15660 SF = 0.36 Acres

Existing Conditions

57% Impervious — 'C' Factor - Pavement = 0.42x0.95

43% Pervious — Roof = 0.15x0.9

R = 2.3 inches — Undeveloped = 0.43x0.4

Tc = 10 minutes — C = 0.71

$I = 6.84(2.3)(10)^{-.51} = 4.86$

Rational Method

Q = CIA = 0.71(4.86)(0.36)

Q = 1.2 cfs Undeveloped Runoff

Proposed Conditions

17% Pervious — 'C' Factor - Pavement = 0.54x0.95

83% Impervious — Roof = 0.29x0.9

Landscaped = 0.17x0.25

C = 0.82

Q = CIA = 0.82(4.86)(0.36)

Q = 1.4 cfs

ΔQ = 0.2 cfs

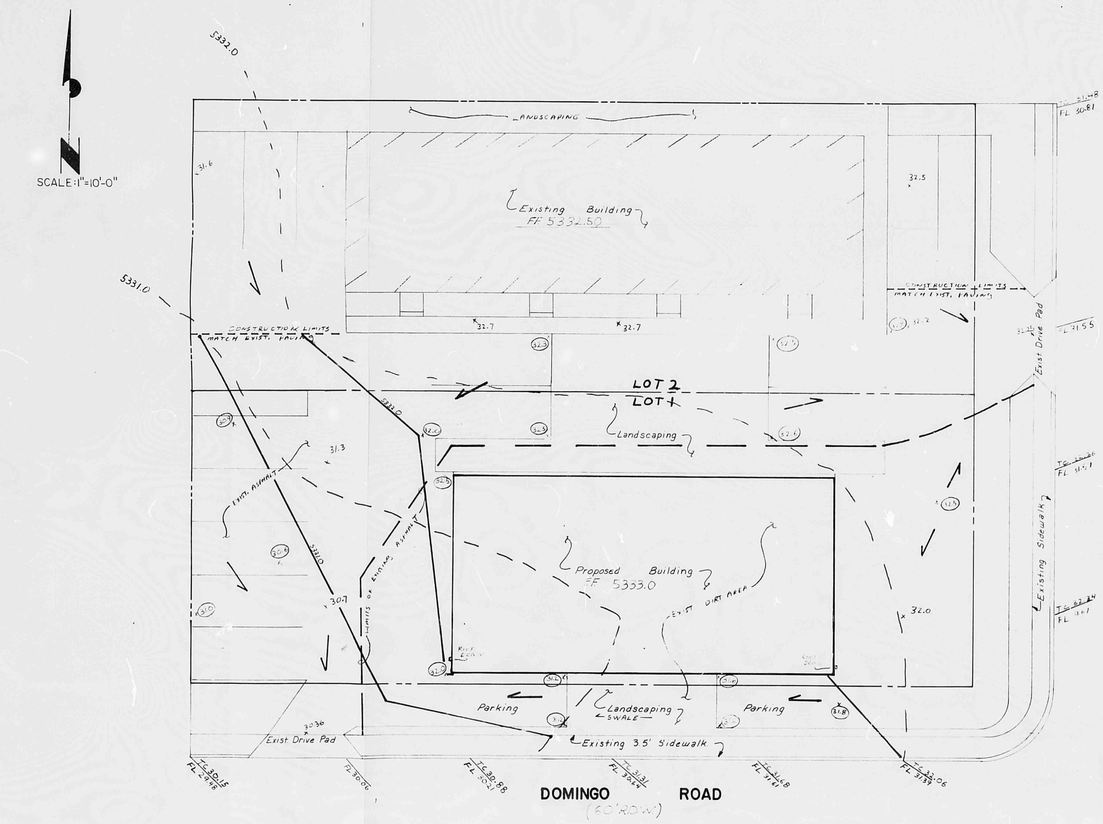
Volume

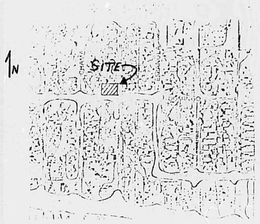
V = CRA

Present $V = 0.71(2.3)/12(15660) = 2130$ cf

Proposed $V = 0.82(2.3)/12(15660) = 2460$ cf

ΔV = 330 cf





LEGAL DESCRIPTION

LOTS 1+2 BLOCK L
LA MESA ADDITION

LEGEND

EXISTING ELEV.
PROPOSED ELEV.
FLOW DIRECTION

EROSION CONTROL BERM

TO BE CONSTRUCTED ALONG THE SOUTH & WEST PROPERTY LINES DURING CONSTRUCTION

RECEIVED
JUN 30 1986
HYDROLOGY SECTION

SURVEY INFORMATION
FIELD NOTES

NO	BY	DATE

BENCH MARKS

USGS BRASS TABLET 7.5' K-19 located on the eastern median 0.5± E/ of the intersection of Mesilla NW & Dom. SW. Elev. = 5323.26 ft.

Top of nail in hydrant 0.2± N/ of Dom. SW & 0.2± E/ of Mesilla NW. Elev. = 5332.26 ft.

AS BUILT INFORMATION

NO	DATE	REMARKS	BY

REVISIONS

DESIGNED BY — DATE
DRAWN BY — DATE
CHECKED BY — DATE

MICRO-FILM INFORMATION
ROLL NUMBER
DATE
NO. OF SHEETS

ENGINEER'S SEAL
CARRY W. TIPTON JR. NEW MEXICO 8187 REGISTERED PROFESSIONAL ENGINEER

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: APARTMENT COMPLEX

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E.-Design			Traffic		
A.C.E.-Hydrology			Water		

DRAWING NO | MAP NO K-19 | SHEET OF

DTM JOB NO. 88712

CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT

D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE

C D