FILE COPY

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

January 10, 1990

Philip W. Clark
Tech Management Services Company
5905 Marble, NE Suite #1
Albuquerque, New Mexico 87108

RE: DRAINAGE PLAN FOR AN ADDITION TO MANUEL LUJAN INSURANCE
(J-17/D17) ENGINEER'S STAMP DATED DECEMBER 20, 1989

Dear Mr. Clark:

Based on the information provided on your submittal of December 20, 1989, the above referenced plan is approved for Building Permit.

Please attach a copy of this plan to the construction sets prior to sign-off by Hydrology.

Please be advised that no developed runoff from the roof area will be allowed over the public sidewalk.

If I can be of further assistance, please feel free to call me at 768-2650.

Cordially,

Bernie J. Montoya

Bernie J. Montoya, C.E.
Engineering Assistant

BJM/bsj
(WP+1557)

DRAINAGE INFORMATION SHEET

PROJECT TITLE: MANUEL LUJAN INSURANCE ZONE ATLAS/DRNG. FILE #: J-17-~~2~~/D17

LEGAL DESCRIPTION: Lots 16-18, Block 10, Ridge Park Addition

CITY ADDRESS: 2001 San Mateo N.E.

ENGINEERING FIRM: N/A CONTACT: Philip W. Clark, P.E.

ADDRESS: c/o Tech. Mgm't Services Co. 5905 Marble N.E., Ste. 1 PHONE : 262-1755

OWNER: Marchi/Marchi/Lujan CONTACT: Larry Lujan

ADDRESS: 2001 San Mateo Blvd. N.E. PHONE: 266-7771

ARCHITECT: N/A CONTACT:

ADDRESS: PHONE:

SURVEYOR: A & E Engineering Inc. CONTACT: John E. Esquibel

ADDRESS: 1330 San Pedro N.E. # 208 PHONE: 266-8791

CONTRACTOR: N/A CONTACT:

ADDRESS: PHONE:

RECEIVED
DEC 20 1989
HYDROLOGY SECTION

PRE-DESIGN MEETING:

X YES DRB NO. 89-515

NO EPC NO.

COPY OF CONFERENCE RECAP SHEET PROVIDED PROJ. NO.

→ please see drainage file, J-17.

TYPE OF SUBMITTAL:

X DRAINAGE REPORT

X DRAINAGE PLAN

CONCEPTUAL GRADING & DRAINAGE PLAN

X GRADING PLAN

EROSION CONTROL PLAN

ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

SKETCH PLAT APPROVAL

PRELIMARY PLAT APPROVAL

SITE DEVELOPMENT PLAN APPROVAL

FINAL PLAT APPROVAL

X BUILDING PERMIT APPROVAL

FOUNDATION PERMIT APPROVAL

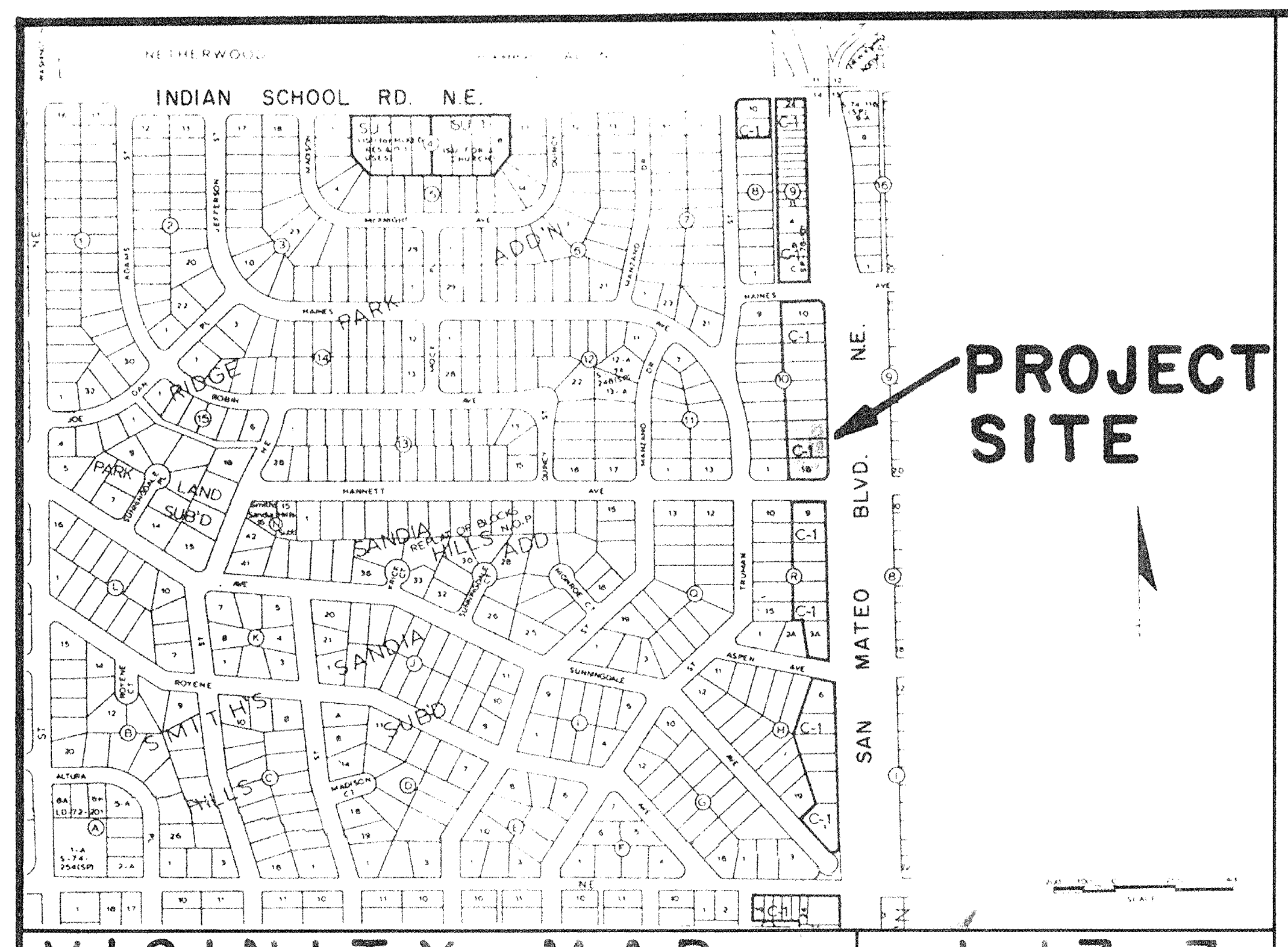
CERTIFICATE OF OCCUPANCY APPROVAL

ROUGH GRADING PERMIT APPROVAL

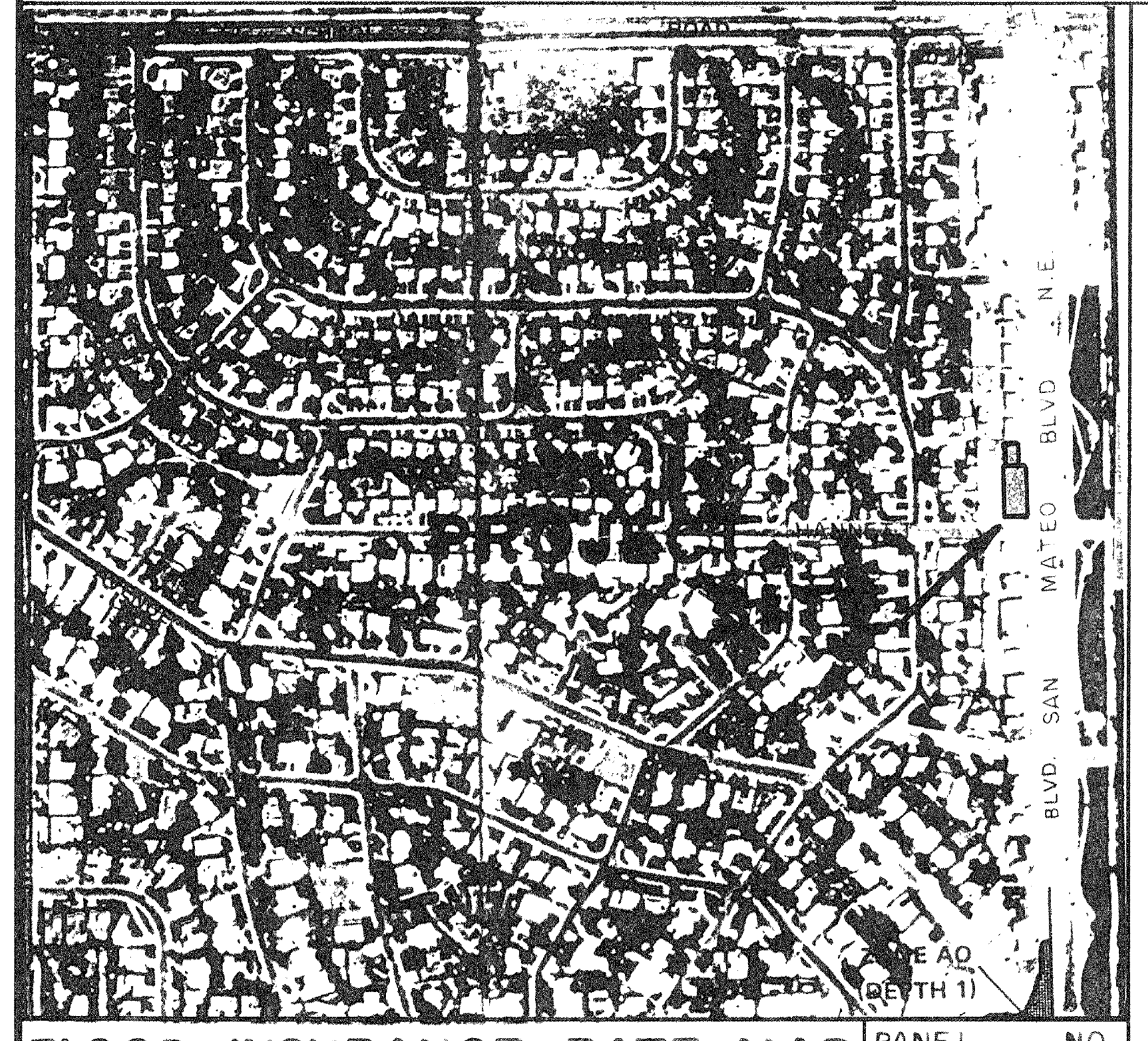
GRADING/PAVING PERMIT APPROVAL

OTHER (SPECIFY)

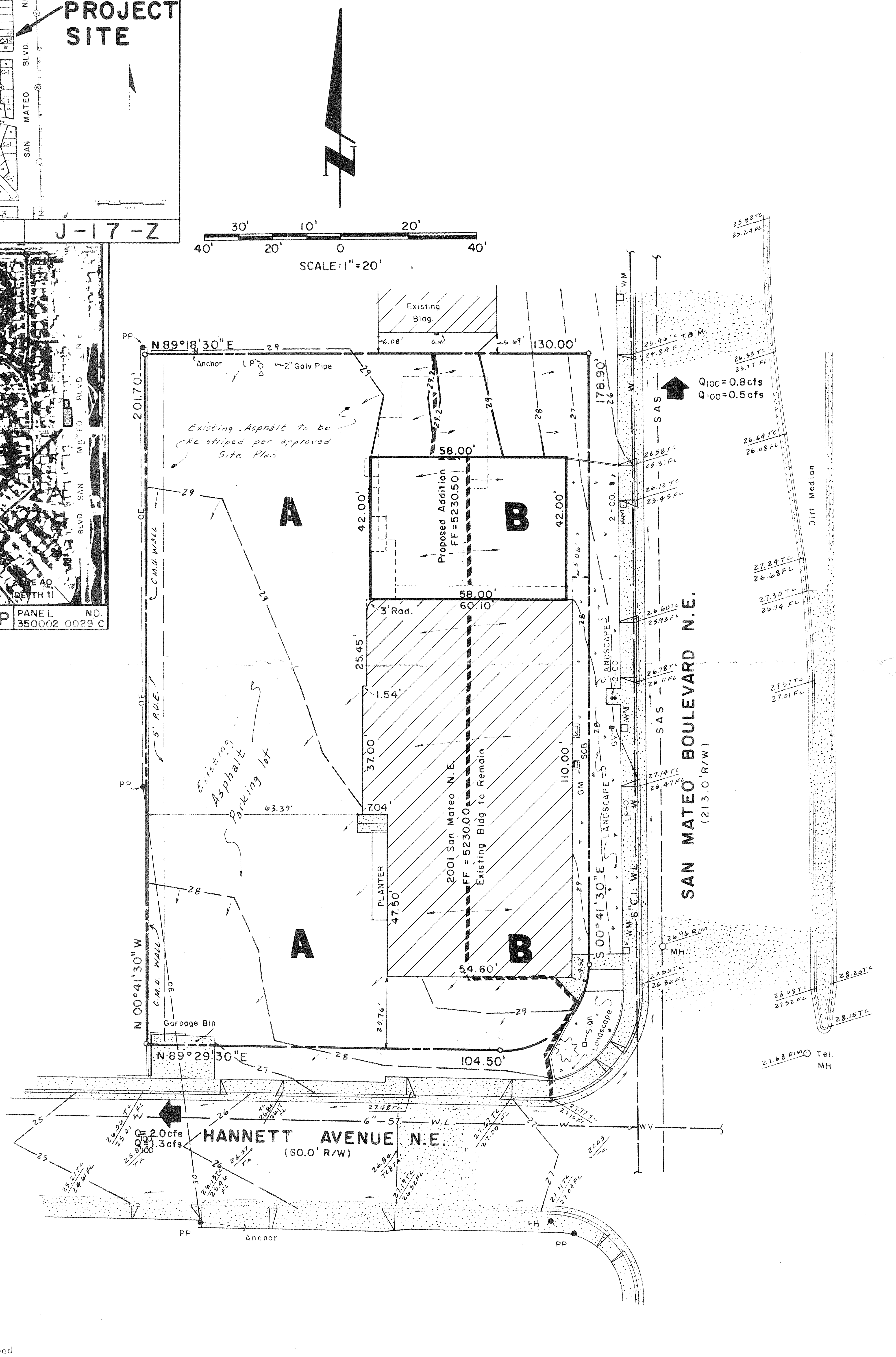
DRAINAGE PLAN
FOR
LOTS 16,17 & 18, BLOCK 10
RIDGE PARK ADDITION
ALBUQUERQUE, NEW MEXICO
OCTOBER, 1989



VICINITY MAP J-17-Z



FLOOD INSURANCE RATE MAP PANEL NO. 350002 0029 C



DRAINAGE CALCULATIONS:

Site location and existing conditions;

The site is located at the Northwest corner of the intersection of San Mateo Blvd. N.E. and Hannett Ave. N.E., a vicinity map is shown on this sheet to help identify the location of this site. The site is currently developed, and adjacent lands in all directions are currently developed.

Existing runoff from this site of 2.86 cfs. is currently draining in a free-discharge manner into Hannett Ave. and San Mateo Blvd. The site is currently zoned "C", (area of minimal flooding), per the Federal Emergency Management Agency (FEMA) map, Plate No. 350002 0029 C. Existing area of the site including that area to the curb & gutter is approx. 28,840 Sq. Ft. or 0.6621 acres, with an impervious area of approx. 94%.

Proposed conditions;

An existing single-story office complex on the North end of this property is scheduled to be demolished, and a new 2-story office complex is proposed on said location. Additional landscaping is proposed for this site, and the new design will call for the site to be 92% impervious. The proposed conditions call for the site to be all free discharge.

REFERENCES:

-) City of Albuquerque Development Process Manual (DPM), Volume 2, Design Criteria, Chapter 22, Drainage, Flood Control and Erosion Control.
-) Soil Survey of Bernalillo County New Mexico and parts of Sandoval and Valencia Counties, United Stated Department of Agriculture, Soil Conservation Service.
-) Floodway and Flood Control Boundary Map, City of Albuquerque, New Mexico, Panel 29 of 50.
-) City zone atlas page J-17-Z.
-) Topographic Map as provided by A & E Engineering Inc., Dated Oct. 16, 1989

GENERAL INFORMATION:

) Soil Type (Ref. B, Page 31); Soil type is Hydrologic Soil Type "A".

) Existing conditions;

Type of Surface	Exist. Sq. Ft.	Area Acres	Proposed Sq. Ft.	Area Acres
Building Area (roof)	8,160	0.1873	8,841	0.2030
Concrete Surfaces	1,490	0.0342	1,490	0.0342
Asphalt Surfaces	17,370	0.3988	16,232	0.3726
Landscaping	1,820	0.0418	2,277	0.0523
Undeveloped	—	—	—	—
Site Total	28,840	0.6621	28,840	0.6621

"C" Factor (See amendment to the D.P.M. Jan. 19, 1986)

) Proposed Conditions;

Type of Surfaces	"C"	Area	C x A
Building Area (roof)	0.90	0.2030	0.1827
Concrete Surfaces	0.95	0.0342	0.0325
Asphalt Surfaces	0.95	0.3726	0.3540
Landscaped Surfaces	0.25	0.0523	0.0131
Undeveloped	—	—	—
Total		0.6621	0.5823

Proposed Weighted "C" = 0.5823/ 0.6621 = 0.88

Existing Conditions;

Type of Surfaces	"C"	Area	C x A
Building Area (roof)	0.90	0.1873	0.1686
Concrete Surfaces	0.95	0.0342	0.0325
Asphalt Surfaces	0.95	0.3988	0.3789
Landscape Surfaces	0.25	0.0418	0.0105
Undeveloped	—	—	—
Total		0.6621	0.5905

Existing Weighted "C" = 0.5905 / 0.6621 = 0.89

D) Rainfall 100 year, 6 hr. R(6) (see ref. A, Plate 22-2, D-1)
R(6) = 2.3 inches.

) Time of Concentration, (Tc), Tc < 10 Min.; use 10 Minutes, minimum value for calculations;

F) Rainfall Intensity I, (see Ref. A, Plate 22-2, D-2)
I = P(6) x 6.84 x Tc exp (-0.51)=
= 2.30 x 6.84 x 10 exp (-0.51)=
= 4.86 in./hr.

Peak discharge;

A) Existing Conditions; (use rational formula)

Q_{100} = 0.89 4.86 x 0.6621 = 2.86 cfs.

Q_{10} = 0.657 x 2.86 = 1.88 cfs. (Ref. A, Plate 22-2, D-1)

B) Proposed Conditions;

Q_{100} = 0.88 x 4.86 x 0.6621 = 2.83 cfs

Q_{10} = 0.657 x 2.83 = 1.86 cfs. (Ref. A, Plate 22-2, D-1)

Volumes;

Existing Condition = V = 3630 x 0.89 x 2.3 in. x 0.6621 = 4,920 CF

Proposed Condition = V = 3630 x 0.88 x 2.3 in. x 0.6621 = 4,865 CF

Conclusions;

The site is an existing established developed area with approx. 94% impervious. The imperviousness area consists of existing asphalt parking lot, concrete sidewalks and large office buildings. The site is currently draining into San Mateo Blvd. and/or Hannett Ave. N.E. All existing runoff generated from this site is discharged freely. The new re-development drainage scheme is consistant with the existing drainage conditions, therefore this re-development drainage plan will have minimal impact on downstream conditions.

Existing Landscape Area = 06.3 %

Proposed Landscape Area = 07.9 %

LEGAL DESCRIPTION

A certain Tract of land, lying and being situate within Section 14, T 10 N, R 3 E, New Mexico Principal Meridian, also being known as lots 16, 17 & 18, of Block 10, Ridge Park Addition, Albuquerque, Bernalillo County, New Mexico, same as shown on the Plat of the above mentioned subdivision, recorded in the Office of the County Clerk of Bernalillo County, New Mexico on November 20, 1950 in Book C1, Page 109, and being more particularly described by metes and bounds as follows;

Beginning at the Northeast corner from whence a standard N.M.S.H.C. disk stamped "Sta. San Mateo E.O.S." bears N 00°54'45" E, a distance of 1,266.09 feet;

Thence from said point of beginning, said point being on the West R/W line of San Mateo N.E. and continuing on said R/W line on a bearing of S 00°41'30" E, a distance of 178.90 feet to a point on a curve;

Thence following along the arc of a curve, said curve having a Radius of 25.00 feet, a Delta of 91°12'00", an arc length of 39.79 feet (CH = S 44°54'30" W, a distance of 35.72 Feet), to a point on the North R/W/ line of Hannett Avenue N.E.;

Thence following along said R/W line on a bearing of N 89°29'30" W, a distance of 104.50 feet to the Southwest corner of said Tract;

Thence leaving said R/W and running on a bearing of N 00°41'30" W, a distance of 201.70 feet to the Northwest corner of said Tract;

Thence running on a bearing of N 89°18'30" E, a distance of 130.00 feet to the point and place of beginning, containing an area of 26,257.6287 square feet or 0.6028 acres more or less.

AREA "A"

RUNOFF VOLUME INTO HANNETT AVE. N.E.

TYPE OF SURFACE	"C"	AREA	C x A
BUILDING (ROOF)	0.90	0.0990	0.0891
CONCRETE SURFACE	0.95	0.0136	0.0129
ASPHALT SURFACE	0.95	0.3271	0.3107
LANDSCAPING	0.25	0.0000	0.0000
TOTAL		0.4397	0.4127

AREA "A" WEIGHTED "C" = 0.4127 / 0.4397 = 0.94

AREA "A" VOLUME = 3630 x 0.94 x 2.3 in. x 0.4397 = 3,451 CF

AREA "B"

RUNOFF VOLUME INTO SAN MATEO BLVD. N.E.

TYPE OF SURFACE	"C"	AREA	C x A
BUILDING (ROOF)	0.90	0.1096	0.0986
CONCRETE SURFACE	0.95	0.0206	0.0196
ASPHALT SURFACE	0.95	0.0399	0.0379
LANDSCAPING	0.25	0.0523	0.0131
TOTAL		0.2224	0.1692

AREA "B" WEIGHTED "C" = 0.1692 / 0.2224 = 0.76

AREA "B" VOLUME = 3630 x 0.76 x 2.3 in. x 0.2224 = 1,411 C.F.

LEGEND

▤	EXISTING CURB & GUTTER
☐	EXISTING CONCRETE
▨	EXISTING BUILDING
● P.P.	EXISTING POWER POLE
---→	EXISTING POWER POLE ANCHOR
○ L.P.	EXISTING LIGHT POLE
═ WALL	EXISTING C.M.U. WALL
▭	EXISTING DRIVEWAY CUT
―	EXISTING ASPHALT
• C.O.	EXISTING CLEAN-OUTS
☐ W.M.	EXISTING WATER METER
○ W.V.	EXISTING WATER VALVE
■ G.M.	EXISTING GAS METER
■ G.V.	EXISTING GAS VALVE
▣ S.C.B.	EXISTING SPRINKLER CONTROL BOX
○ MH	EXISTING MANHOLE
FH	EXISTING FIRE HYDRANT
— W —	EXISTING WATER LINE
— SAS —	EXISTING SEWER LINE
27.14 TC	EXISTING TOP OF CURB ELEVATIONS
— 28 —	EXISTING CONTOUR LINES
F.F. = 5230.00	EXISTING FINISH FLOOR ELEVATION
— — —	PROPERTY LINE
— 29 —	PROPOSED CONTOURS
▬▬▬	DRAINAGE LIMITS

BENCHMARK DATA:

Benchmark is a Standard N.M.S.H.C. Disk stamped " Sta. San Mateo E.O.S.", set in a concrete post flush with the ground. Station is 61.4 feet East of the Centerline of San Mateo Blvd. N.E. and 176.00 feet Northe of the Centerline of Indian School Road N.E. in the triangular area formed by ramps leading from San Mateo to East bound I-40. Elevation is 5,214.015.