MT. BELL - 4 HILLS

CENTRAL OFFICE

L 21 - D 7A

1 PLAN

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION/DESIGN HYDROLOGY SECTION

PRE-DESIGN CONFERENCE RECAP

HYDROLOGY SECTION PROJECT NO.: L-21 DATE: 12/31/84

PLANNING DIVISION NOS. EPC: Ian. Review DRB: _____

SUBJECT: Mountain Ball Four Hills Central Office

LEGAL DESCRIP.: Replatting in Process

APPROVAL REQUESTED

X PRELIMINARY PLAT _____ FINAL PLAT

X SITE DEVELOPMENT PLAN X BUILDING PERMIT

_____ ROUGH GRADING

	WHO:	REPRESENTING:
ATTENDANCE:	Thornton Schwenk	Boyle Engineering
	Billy Goolsby	City

X ~~Conceptual~~ Drainage Plan/Report required for Preliminary Plat and/or Site Development Plan sign-off.

X Approved Drainage Plan/~~Report~~ required for Final Plat and/or Building Permit sign-off.

_____ Subdivision Improvements Agreement or Financial Security required.

FINDINGS: Discharge to be determined by analysis of downstream capacity
Replat to establish legal lot/Tract.

The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED: Billy J. Goolsby SIGNED: Thornton A. Schwenk

TITLE: CE/Design Hydrology TITLE: SR. ENGR. BOYLE ENGR.

DATE: 12/31/84 DATE: 12-31-84

NOTE PLEASE PROVIDE A COPY OF THIS RECAP WITH THE DRAINAGE SUBMITTAL

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Mountain Bell ZONE ATLAS/DRNG. FILE #: L-21/D7a

LEGAL DESCRIPTION: A portion of Tract "A", Block 6, East Central Business Addition.

CITY ADDRESS: 105 Juan Tabo, N.E.

ENGINEERING FIRM: Boyle Engineering Corporation CONTACT: Thornton D. Schwenk

ADDRESS: 3939-D San Pedro, N.E. PHONE: 883-7700

OWNER: Mountain Bell Estate Dept. CONTACT: Floyd Rubi

ADDRESS: 600 2nd. Street, NW, Suite 500 PHONE: 765-8208

ARCHITECT: The Burns/Peters Group CONTACT: Karen Alarid

ADDRESS: 8000 Pennsylvania Circle, NW PHONE: 265-3645

SURVEYOR: Hall Surveying Co. CONTACT: Richard V. Hall

ADDRESS: 2625 Pennsylvania Ave.,NE Suite 350 PHONE: 884-6200

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

RECEIVED
MAR 15 1985
HYDROLOGY SECTION

PRE-DESIGN MEETING:

X YES (12-31-84)

___ NO

X COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. _____

EPC NO. _____

PROJ. NO. _____

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT

___ DRAINAGE PLAN

X CONCEPTUAL GRADING & DRAINAGE PLAN

___ GRADING PLAN

___ EROSION CONTROL PLAN

___ ENGINEER'S CERTIFICATION

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL

___ PRELIMINARY PLAT APPROVAL

___ SITE DEVELOPMENT PLAN APPROVAL

___ FINAL PLAT APPROVAL

___ BUILDING PERMIT APPROVAL

X FOUNDATION PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY APPROVAL

___ ROUGH GRADING PERMIT APPROVAL

___ GRADING/PAVING PERMIT APPROVAL

___ OTHER _____ (SPECIFY)

DRAINAGE APPROVED FOR FOUNDATION ONLY

DATE SUBMITTED: 3-15-85

BY: Thornton D Schwenk

3/15/85

Billy J. Goolsby

SIGNATURE TITLE

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

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7644

April 17, 1985

Thornton D. Schwenk
Boyle Engineering Corporation
3939 San Pedro Drive, NE Suite D
Albuquerque, New Mexico 87110

RE: DRAINAGE PLAN FOR MOUNTAIN BELL FOUR HILLS CENTRAL OFFICE
105 JUAN TABO BOULEVARD, NE (L-21/D7A)
RECEIVED APRIL 9, 1985

Dear Mr. Schwenk:

The referenced plan dated April 16, 1985, is approved for building permit sign-off.

Please attach a copy of this approved plan along with the appropriately approved "Drainage Facilities Within City Right-of-Way" document to both sets of construction plans prior to Hydrology sign-off.

If you have any questions or comments regarding this project, please call me at 766-7644.

Cordially,

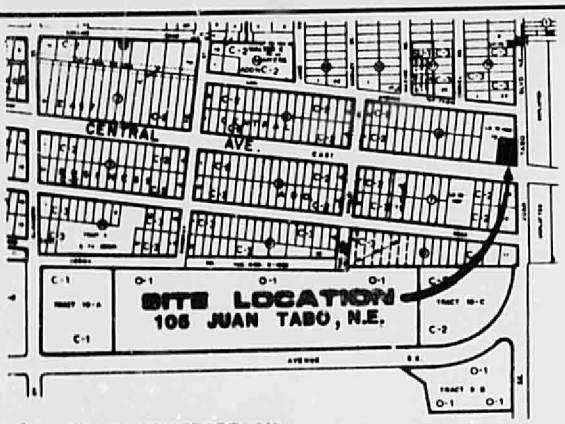
Billy J. Goolsby, P.E.
Civil Engineer/Hydrology Section

BJG/bsj

cc: Greg Olson
Design Section

DRAINAGE FACILITIES WITHIN CITY RIGHT- OF-WAY

JERRY L.



VICINITY MAP

200 0 400
SCALE

N

L - 21

REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
No. 4739
THORNTON D. SCHWEIT

4-9-85

1. LEGAL DESCRIPTION:
TRACT "A-2," BLOCK 6, EAST CENTRAL BUSINESS ADDITION, A RE-PLAT OF TRACT "A", FILED NOVEMBER 16, 1972, VOL. B7, FOLIO 59.

2. ELEVATION DATA:
ACS B.M. 1-L21 (R) ON THE MEDIAN STRIP OF CENTRAL AVE., 81 FT WEST OF THE CENTERLINE OF JUAN TABO BLVD., N.E. BRASS TABLET, FLUSH WITH TOP OF CURB; ELEV. 5534.543.

NOTICE TO CONTRACTOR

1. An excavation/construction permit will be required before beginning any work within City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.

2. All work detailed on these plans to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with Public Works Contract No. 84-3.

3. Two working days prior to any excavation, contractor must contact Line Locating Service, 765-1234, for location of existing utilities.

4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.

5. Backfill compaction shall be according to Arterial street use.

E-48

Boyle Engineering Corporation
consulting engineers

B02-130-80

Lenny Wright Const okay to

CITY OF ALBUQUERQUE

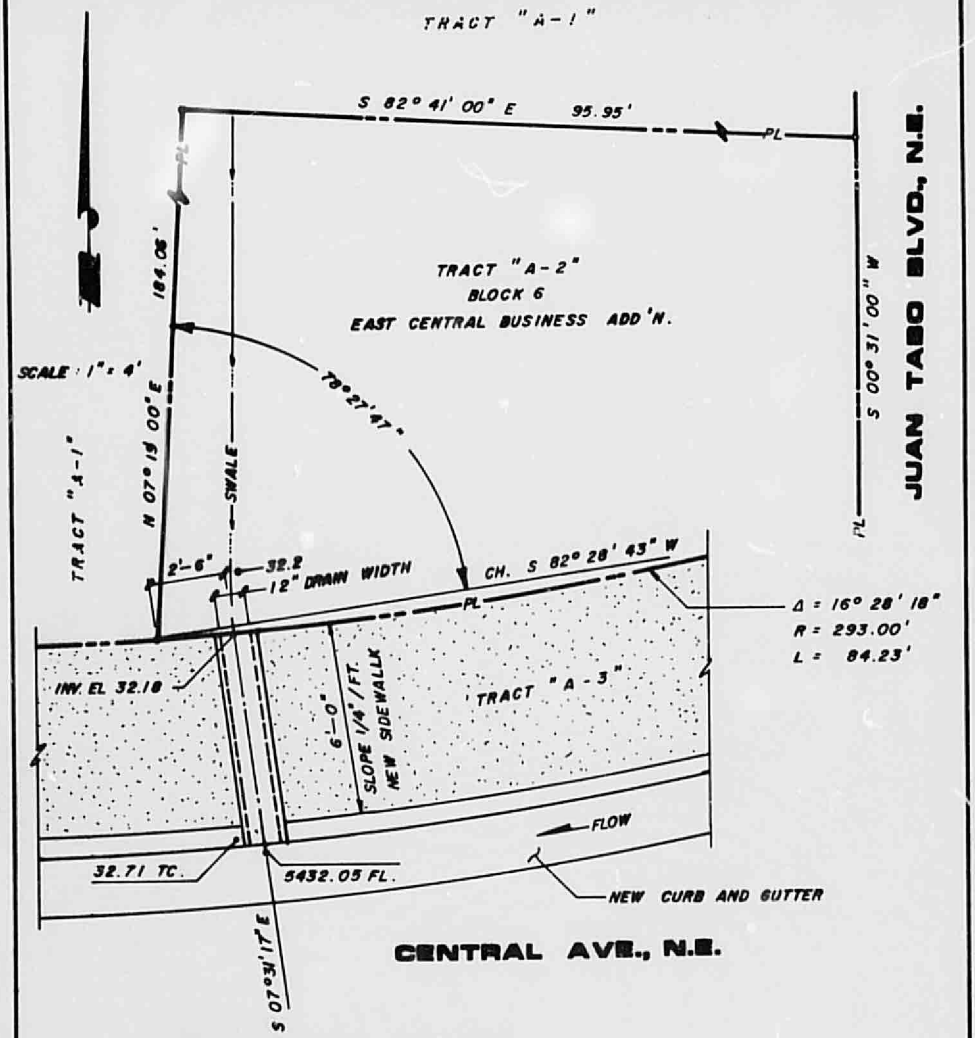
APPROVALS	ENGINEER	DATE
A.C.E. / DESIGN		04/12/85
INSPECTOR		5/9/85
A.C.E. / FIELD	W. J. McNamara	5/9/85

TITLE SIDEWALK CULVERT
MT. BELL 4 HILLS CENTRAL OFFICE
106 JUAN TABO BLVD. N.E.

PERMIT NO. 20145
SHEET 1 OF 2

MAP NO. L-21

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



CONSTRUCTION NOTES :

1. CONSTRUCT 12" SIDEWALK CULVERT WITH CHECKERED STEEL TOP PLATE PER CITY STD. DWG. K-16-1.
2. BOTTOM SLAB OF CULVERT SHALL BE POURED MONOLITHICALLY WITH NEW GUTTER.
3. WALLS OF CULVERT SHALL BE POURED MONOLITHICALLY WITH NEW SIDEWALK.

REGISTERED PROFESSIONAL ENGINEER STATE OF NEW MEXICO No. 4739 THORNTON D. SCHWEIT

4-9-85

E-48

Bohannan Engineering Corporation
consulting engineers

802-130-80

CITY OF ALBUQUERQUE

APPROVALS	ENGINEER	DATE
A.C.E. / DESIGN		04/12/85
INSPECTOR		5/8/85
A.C.E. / FIELD		5/9/85

TITLE SIDEWALK CULVERT
MT. BELL 4 HILLS CENTRAL OFFICE
105 JUAN TABO BLVD. NE.

PERMIT NO.
SHEET 2 OF 2

MAP NO L-21

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

DRAINAGE PLAN

for the

MOUNTAIN BELL
FOUR HILLS CENTRAL OFFICE

occupying a 0.457-acre tract

Tract "A-2", Block 6 East Central Business Addition

105 Juan Tabo Blvd., N.E.

Albuquerque, New Mexico

L-21

RECEIVED
APR 0 9 1985
HYDROLOGY SECTION

April 4, 1985

Boyle Engineering Corporation

Suite D
3939 San Pedro N.E.
Albuquerque, New Mexico 87110

consulting engineers
505 / 883-7700

April 5, 1985
AL B02-130-60

City of Albuquerque
P.O. Box 1293
Albuquerque, New Mexico 87103

Attn: Mr. Billy Goolsby, P.E.
Design Hydrology Section

RECEIVED
APR 09 1985
HYDROLOGY SECTION

RE: DRAINAGE PLAN FOR MOUNTAIN BELL FOUR HILLS
CENTRAL OFFICE, 105 JUAN TABO, N.E., L21-D7A

Dear Billy:

Transmitted herewith is one copy of the subject drainage plan.

Please call if you have any questions regarding this report.

Sincerely,

BOYLE ENGINEERING CORPORATION

Thornton D. Schwenk

Thornton D. Schwenk, P.E.
Senior Civil Engineer

cc: Karen Alarid, The Burns/Peters Group

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VI. CONCLUSIONS AND RECOMMENDATIONS

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ALBUQUERQUE MASTER DRAINAGE STUDY, VOL. I, 1981

PLATE I - GRADING & DRAINAGE PLAN, APRIL 4, 1985

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Mountain Bell 4 Hills Office ZONE ATLAS/DRNG. FILE #: L-21/D-7A

LEGAL DESCRIPTION: Tract "A-2", Block 6, East Central Business Addition.

CITY ADDRESS: 105 Juan Tabo, N.E.

ENGINEERING FIRM: Boyle Engineering Corporation CONTACT: Thornton D. Schwenk

ADDRESS: 3939-D San Pedro, N.E. PHONE: 883-7700

OWNER: Mountain Bell Estate Dept. CONTACT: Floyd Rubi

ADDRESS: 600 2nd. Street, NW, Suite 500 PHONE: 765-8208

ARCHITECT: The Burns/Peters Group CONTACT: Karen Alarid

ADDRESS: 8000 Pennsylvania Circle, NW PHONE: 265-3645

SURVEYOR: Hall Surveying Co. CONTACT: Richard V. Hall

ADDRESS: 2625 Pennsylvania Ave.,NE, Suite 350 PHONE: 884-6200

CONTRACTOR: Wallin Construction Co.,Inc. CONTACT: Ken Wallin

ADDRESS: 9212 Trumbell, S.E. PHONE: 292-5500

PRE-DESIGN MEETING:

X YES (12-31-84)

___ NO

X COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. 85-128

EPC NO. ___

PROJ. NO. ___

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT

X DRAINAGE PLAN

___ CONCEPTUAL GRADING & DRAINAGE PLAN

___ GRADING PLAN

___ EROSION CONTROL PLAN

___ ENGINEER'S CERTIFICATION

RE-SUBMITTAL

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL

___ PRELIMINARY 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)

DATE SUBMITTED: April 5 1985

BY: Thornton D Schwenk

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION/DESIGN HYDROLOGY SECTION

PRE-DESIGN CONFERENCE RECAP

HYDROLOGY SECTION PROJECT NO.: L-21 DATE: 12/31/84

PLANNING DIVISION NOS. EPC: Jan. Review DRB: _____

SUBJECT: Moutain Ball Four Hills Central Office

LEGAL DESCRIP.: Replatting in Process

APPROVAL REQUESTED

X PRELIMINARY PLAT _____ FINAL PLAT

X SITE DEVELOPMENT PLAN X BUILDING PERMIT

_____ ROUGH GRADING

	WHO:	REPRESENTING:
ATTENDANCE:	Thornton Schwenk	Boyle Engineering
	Billy Goolsby	City

X Approved Drainage Plan/~~Report~~ required for Preliminary Plat and/or Site Development Plan sign-off.

X Approved Drainage Plan/~~Report~~ required for Final Plat and/or Building Permit sign-off.

_____ Subdivision Improvements Agreement or Financial Security required.

FINDINGS: Discharge to be determined by analysis of downstream capacity
Replat to establish legal lot/Tract.

The undersigned agrees that the above findings are summarized accurately and are only subject to change if further investigation reveals that they are not reasonable or that they are based on inaccurate information.

SIGNED: Billy J. Goolsby SIGNED: Thornton J. Schwenk

TITLE: CE/Design Hydrology TITLE: SR. ENGR. BOYLE ENGR.

DATE: 12/31/84 DATE: 12-31-84

NOTE PLEASE PROVIDE A COPY OF THIS RECAP WITH THE DRAINAGE SUBMITTAL

DRAINAGE PLAN

for

MOUNTAIN BELL FOUR HILLS CENTRAL OFFICE

occupying a 0.4057-acre tract

comprising Tract "A-2", Block 6,
East Central Business Addition

105 Juan Tabo Blvd., N.E.

Albuquerque, New Mexico

L - 21

April 4, 1985

I. PURPOSE:

The purpose of this report is to present information, calculations, and recommendations relative to storm runoff for a new office building and parking lot on an undeveloped parcel owned by Mountain Bell.

II. SCOPE:

This report is limited to an investigation of the existing and proposed conditions which affect storm flows on the study site. The proposed development is to be protected from flooding due to storm runoff, without increasing the threat of damage to downstream properties. Upstream areas which have been constructed since 1972 are presumed to meet the restrictions of applicable drainage ordinances and resolutions, beginning with AMAFCA Resolution 1972-2. Estimation of maximum runoff is based on the site being

developed as proposed. No previous drainage plans have ever been prepared for this site.

III. LOCATION:

The study site comprises a total of 0.4057 acres located in a C-2 commercial zone in the northeast heights of Albuquerque. The site is at the northwest corner of two major arterial streets: Central Avenue and Juan Tabo Boulevard (Figure 1).

Legally the new 0.457-acre tract is described as "Tract A-2, Block 6, East Central Business Addition", a Replat of Tract "A", Block 6 of said Addition, filed in the office of the County Clerk of Bernalillo County on November 16, 1972, Vol B7, Folio 59.

The purpose of the Replat was to divide Tract "A" into three tracts to meet the required zoning and setback requirements of the Albuquerque Subdivision Ordinance.

IV. EXISTING DRAINAGE CONDITIONS:

A. Topography and Soils

The site slopes very gently from east to west. The high point at the northeast corner of the study site is 5435.9 feet. The low point at the southwest corner is 5432.2 feet. The distance between these points is 225 feet, giving an average slope of 1.64%. The drainage area has

never been developed and is sparcely vegetated with native grasses.

The natural soils at the site are shown on Sheet No. 32 of the SCS Soil Survey of Bernalillo County as "TgB-Tijeras" (Figure 3). These soils consist of gravelly fine sandy loam and sandy clay loam. The Hydrologic Soil Group is "B".

B. Off-Site and On-Site Drainage Conditions

There are no natural or artificial water courses crossing the site. Moreover, the site itself does not lie in a 100-year flood hazard area as shown in Figure 2.

The existing curb and gutter of Central Avenue on the south and Juan Tabo Blvd. on the east prevent off-site flows from entering the site from those directions. The remainder of Tract A, i.e., Tract A-1, is lower than the study site which prevents off-site flows from entering from the north and west.

V. PROPOSED DRAINAGE CONDITIONS:

A. Criteria

The computations, conclusions and recommendations contained in this report are based on criteria found in the City of Albuquerque Development Process Manual, Volume 2, Design Criteria.

B. Off-Site Drainage

During the initial planning conference with the Hydrology Section of the City Engineer's office on December 31, 1984,it was determined that uncontrolled discharge from the site would be permitted if there existed sufficient downstream capacity in the 60-inch RCP in Central (Figure 6) and in the paved street section itself. Net discharge could be introduced into the north gutter of Central through a sidewalk culvert approximately 140 feet upstream of an existing double "C" catch basin.

Calculations presented in the Appendix demonstrate that the existing 60-inch RCP has a capacity of 230 cfs (Figure 7). A half street section of Central has a capacity for the 100-year storm of approximately 70 cfs, giving a total downstream capacity of 370 cfs. This is more than sufficient to pass the reported 335 cfs (Figure 7) in the drainage subbasin at this point combined with the net Q = 0.62 from the site.

VI. CONCLUSIONS AND RECOMMENDATIONS:

A. The total 100-year developed discharge for Tract "A-2" is 1.35 cfs which exceeds the discharge from the undeveloped site by 0.62 cfs.

B. Permit uncontrolled discharge from the site as there is sufficient downstream capacity in the exicting storm

drain acting in combination with the paved street section.

C. Confine gutter flows to the street by building a standard City drivepad at the new entrance in the east curb of Juan Tabo. The property line crossing this drivepad entrance will be elevated a full 1.0 feet above the adjacent flow line.

D. If the above drainage improvements are made in conjunction with the site grading for the building and the parking lot, it is the conclusion of this report that the proposed construction will be protected from storm runoff and that it will not increase the threat of flood damage to contiguous properties.

Respectfully submitted,

BOYLE ENGINEERING CORPORATION

Thornton D. Schwenk

Thornton D. Schwenk, P.E.
Senior Civil Engineer

APPENDIX

DRAINAGE CALCULATIONS

DRAINAGE CALCULATIONS

MOUNTAIN BELL FOUR HILLS CENTRAL OFFICE

occupying a 0.4057-acre tract

comprising Tract "A-2", Block 6,
East Central Business Addition

105 Juan Tabo Blvd., N.E.

Albuquerque, New Mexico

L - 21

April 4, 1985

I. TIME OF CONCENTRATION:

Basin length, L = 225'

Elev. difference = 5435.9 - 5432.2 = 3.7 ft

Slope, S = 3.7/225 = 0.0164 = 1.64%

$T_c = 0.0078\ (L^{0.77}/S^{0.385})$ (P. 22.2-3, DPM)

$T_c = 0.0078\ (225^{0.77}/0.0164^{0.385})$

= 2.46 min. Use minimum T_c = 10 min.

II. RAINFALL INTENSITY: (Ref. Plate 22.2 D-1, DPM)

i_{100} = 2.50 inches (100-year, 6-hour rainfall volume)

$I_{100} = i_{100}\ (6.84)\ T_c^{-0.51}$ (Plate 22.2 D-2, DPM))

$= 2.50\ (6.84)\ 10^{-0.51}$

= 5.28 inches/hr

$I_5 = 0.541\ I_{100}$ (Plate 22.2 D-1, DPM)

$= 0.541\ (5.28)$ = 2.86 inches/hr

III. UNDEVELOPED FLOWS AND VOLUMES:

A = 0.4057 acres = 17,672 sq ft

C = 0.34

$V_{100} = (2.50/12)(17,672)(0.34) =$ 1,250 cu ft

Q_{100} = 0.34 (5.28)(0.4057) = 0.73 cfs

IV. DRAINAGE AREAS AND "C" FACTORS: (Plate 22.2 C-1, DPM)

SCS Soil Group: B (Sheet No. 32: TgB - Tijeras)

AREA NO.	AREA (acres)	UNDEVL.	PLANTED	IMPERVIOUS	PERCENT IMPERVIOUS	"C" FACTOR
A11	0.4057	0.063	0.095	0.248*	67.8	0.68

*Includes a 36'x72' future bldg. expansion

Percent impervious = 0.248/0.4057 x 100 = 61.1

Average "C" Factor = 0.63

V. DEVELOPED FLOWS AND VOLUMES:

V_{100} = (2.5/12)(17,672)(0.63) = 2,320 cu ft

Q_{100} = 0.63(5.28)(0.4057)= 1.35 cfs

VI. REQUIRED POND VOLUME: (if free discharge is not allowed)

Developed V_{100} - Undeveloped V_{100}

2,320 - 1,250 = 1,070 cu ft

Net run off: 1.35 - 0.73 = 0.62 cfs

VII. CAPACITY OF STANDARD CITY SIDEWALK CULVERT

GIVEN: M, width of opening = 12 in = 1.0 ft
S, slope = (32.2 - 32.05)/6 = 0.0250 ft/ft
D, depth of flow = 3 in = 0.25 ft
n, Manning's coefficient = 0.013

R = A/P = (1.0)(0.25)/[2(0.25) + 1.0] = 0.167

$$V = \frac{1.486}{n} R^{2/3} S^{1/2}$$

$$= \frac{1.486}{0.013} (0.167)^{2/3} (0.0250)^{1/2}$$

= 5.48 ft/sec

Q = VA = 5.48(0.25) = 1.37 cfs > 1.35 cfs developed Q

VIII. CHECK DOWNSTREAM CAPACITY

A. Check Storm Sewer System No. 201 between Manhole No. S-111 and S-110.

D = 60 in RCP
L = 350 ft
S = 0.0100
Existing Capacity, Q = 230 cfs
Q_{100} = 335 cfs
Q_{10} = 180 cfs

Therefore 335 - 230 = 105 cfs must be carried in the street.
(or 52.5 cfs in a half-street section)
The net Q_{100} from the site increases this flow by only 0.62 cfs to 53.1 cfs.

B. Check flow in Central Avenue

Street Slope, S = (33.6-32.00)/100 = 0.016 @ N. flowline

For 100-year storm and a maximum permissible depth of 0.87 ft,

Q = 70 cfs > 53.1 cfs O.K. (Ref. DPM Plate 22.3 D-1)

The street does not have to carry the 10-year Q as the existing 60-in RCP has sufficient capacity.

Conclusion: Free discharge from the site should be permitted as there is sufficient downstream capacity.

AREA 2

ALBUQUERQUE MASTER DRAINAGE STUDY
SUMMARY OF PROPOSED STORM SEWERS

Location	From	To	Size (in)	Length (ft)	Slope (ft/ft)	Design Capacity (cfs)	Map		Comment	Improvement System No.
CONSTRUCT BRIDGE OVER TIJERAS ARROYO AT FOUR HILLS RD.			44' WIDE BY 80' LONG			22,600	L-23	CONSTRUCT		221-C
SKYLINE RD.	600' E. OF JUAN TABO BLVD.	JUAN TABO BLVD.	36"	600	.020	82	L-22	CONSTRUCT		201-C
JUAN TABO BLVD.	SKYLINE RD.	BUENA VENTURA RD.	36"	471	.020	82	K-22	CONSTRUCT		201-C
BUENA VENTURA RD.	JUAN TABO BLVD.	JANE ST.	36"	1270	.019	80	K-21	PARALLEL	TIES INTO EXISTING SYSTEM	201-C
JANE ST.	LINN AVE.	BUENA VENTURA RD.	30"	700	.014	42	K-21	CONSTRUCT		201-C
JUAN TABO BLVD.	CENTRAL AVE.	SOUTHERN AVE.	78"	900	.008	406	L-21	CONSTRUCT		201-C
JUAN TABO BLVD.	SOUTHERN AVE.	TIJERAS ARROYO	CONCRETE CHANNEL	4500	.004	775	L-21 M-21	CONSTRUCT	OUTFALLS INTO TIJERAS ARROYO	201-C
ELIZABETH ST.	S. ACOMA RD.	CENTRAL AVE.	42"	800	.008	78	L-21	CONSTRUCT		201-C
EUBANK BLVD.	CENTRAL AVE.	TIJERAS ARROYO	EARTH CHANNEL	9200	.0015	340	L-21 M-21	CONSTRUCT	OUTFALLS INTO TIJERAS ARROYO	201-D
MOON ST.	SOUTHERN AVE.	SANTA CLARA AVE.	60"	350	.0025	113	L-20	CONSTRUCT		203-D
MOON ST.	SANTA CLARA AVE.	COCHITI RD.	54"	1350	.004	108	L-20	PARALLEL		203-D
MOON ST.	COCHITI RD.	CENTRAL AVE.	54"	350	.004	108	L-20	PARALLEL		203-D
MOON ST.	CENTRAL AVE.	DOMINGO RD.	60"	1800	.007	189	K-20	CONSTRUCT		203-D
DOMINGO RD.	MOON ST.	GEN. SOMERVELL ST.	60"	250	.007	189	K-20	CONSTRUCT		203-D

ALBUQUERQUE MASTER DRAINAGE STUDY, VOL.1, 1981

FIGURE 4

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

AREA 2

ALBUQUERQUE MASTER DRAINAGE STUDY
INVENTORY OF EXISTING STORM SEWERS

CENTRAL AVENUE STORM SEWER SYSTEM — SYS. # 201

Location	From	To	Pipe Size (in)	Type of Pipe	Length (ft)	Slope (ft/ft)	Flow Velocity	Existing Capacity (cfs)	Total 10 Year Discharge (cfs)	Total 100 Year Discharge (cfs)	Comments MAP #	BASIN #
CENTRAL AVE.	S-205 DORADO PLACE	S-204 1,025' E. OF FIGUEROA ST.	18"	R.C.P.	410'	.027	8.5	15.0	15	35	L-22	I
CENTRAL AVE.	S-204 1,025' E. OF FIGUEROA ST.	S-203 615' E. OF FIGUERCA ST.	24"	R.C.P.	410'	.027	10.2	33.0	30	65	L-22	I
CENTRAL AVE.	S-203 615' E. OF FIGUEROA ST.	S-202 365' E. OF FIGUEROA ST.	24"	R.C.P.	250'	.028	10.6	33.0	30	65	L-22	I
CENTRAL AVE.	S-202 365' E. OF FIGUEROA ST.	S-201 FIGUEROA ST.	30"	R.C.P.	365'	.028	12.2	60.0	60	130	L-22	I
CENTRAL AVE.	S-201 FIGUEROA ST.	S-200 BURMA DR.	30"	R.C.P.	470'	.0218	10.8	53.0	75	165	L-22	I
CENTRAL AVE.	S-200 BURMA DR.	S-109 450' E. OF KIRBY ST.	36"	R.C.P.	365'	.0122	9.2	65.0	90	195	L-22	I
CENTRAL AVE.	S-103 440' E. OF KIRBY ST.	S-107 KIRBY ST.	42"	R.C.P.	450'	.0084	28.4	27.9	105	230	L-22	I
CENTRAL AVE.	S-102 KIRBY ST.	S-101 550' E. OF JUAN TABO BLVD.	54"	R.C.P.	200'	.0180	16.8	235.0	125	275	L-22	I
CENTRAL AVE.	S-101 550' E. OF JUAN TABO BLVD.	S-100 280' E. OF JUAN TABO BLVD.	54"	R.C.P.	270'	.0180	16.8	235.0	150	330	L-22	I
CENTRAL AVE.	S-100 280' E. OF JUAN TABO BLVD.	S-111 JUAN TABO BLVD.	54"	R.C.P.	280'	.0180	16.8	235.0	180	395	L-22	I
JUAN TABO BLVD.	S-112 130' S. OF CENTRAL AVE.	S-111 CENTRAL AVE.	60"	R.C.P.	130'	.0100	11.7	230.0	15	35	L-21	I
CENTRAL AVE.	S-111 JUAN TABO BLVD.	S-110 650' E. OF SHIRLEY ST.	60"	R.C.P.	350'	.0120	11.7	230.0	180	335	L-21	I
CENTRAL AVE.	S-110 650' E. OF SHIRLEY ST.	S-109 400' E. OF SHIRLEY ST.	60"	R.C.P.	250'	.0100	11.7	230.0	180	335	L-21	I
CENTRAL AVE.	S-109 400' E. OF SHIRLEY ST.	S-108 SHIRLEY ST.	60"	R.C.P.	400'	.0100	11.7	230.0	180	335	L-21	I
CENTRAL AVE.	S-108 SHIRLEY ST.	S-107 535' E. OF DOROTHY ST.	60"	R.C.P.	410'	0100	11.7	230.0	190	355	L-21	I
CENTRAL AVE.	S-107 535' E. OF DOROTHY ST.	S-106 DOROTHY ST.	60"	R.C.P.	535'	.0167	15.3	300.0	190	355	L-21	I
CENTRAL AVE.	S-106 DOROTHY ST.	S-105 850' E. OF ELIZABETH ST.	66"	R.C.P.	125'	.0116	13.5	320.0	190	355	L-21	I
CENTRAL AVE.	S-105 850' E. OF ELIZABETH ST.	S-104 ELIZABETH ST.	66"	R.C.P.	850'	.0116	13.5	320.0	190	355	L-21	I
CENTRAL AVE.	S-104 ELIZABETH ST.	S-103 HAZEL ST.	66"	R.C.P.	385'	.0120	13.6	322.0	190	335	L-21	I
CENTRAL AVE.	S-103 HAZEL ST.	S-102 CHERYL ST.	66"	R.C.P.	295'	.0120	13.6	322.0	190	335	L-21	I
CENTRAL AVE.	S-102 CHERYL ST.	S-101 BRITT ST.	66"	R.C.P.	315'	.0150	15.2	360.0	195	345	L-21	I
CENTRAL AVE.	S-101 BRITT ST.	S-100 1,112' E. OF EUBANK BLVD.	66"	R.C.P.	95'	.0150	15.2	360.0	195	345	L-21	I
CENTRAL AVE.	S-100 1,112' E. OF EUBANK BLVD.	S-5 832' E. OF EUBANK BLVD.	66"	R.C.P.	310'	.0150	15.2	360.0	195	345	L-21	I
CENTRAL AVE.	S-5 802' E. OF EUBANK BLVD.	S-4 357' E. OF EUBANK BLVD.	66"	R.C.P.	445'	.0190	16.8	400.0	195	345	L-21	I
CENTRAL AVE.	S-4 357' E. OF EUBANK BLVD.	S-2 EUBANK BLVD.	66"	R.C.P.	357'	.0190	16.8	400.0	195	345	L-21	I
CENTRAL AVE.	S-3 200' E. OF EUBANK BLVD.	S-1 EUBANK BLVD.	42"	R.C.P.	300'	.014	10.9	105.0	-	-	L-21	I

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FIGURE 7

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