BOHANNAN-HUSTON INC.

DRAINAGE REPORT
FOR
BUILDINGS B AND C,
MIDTOWN BUSINESS PARK

January, 1988

DRAINAGE REPORT
FOR
BUILDINGS B AND C,
MIDTOWN BUSINESS PARK

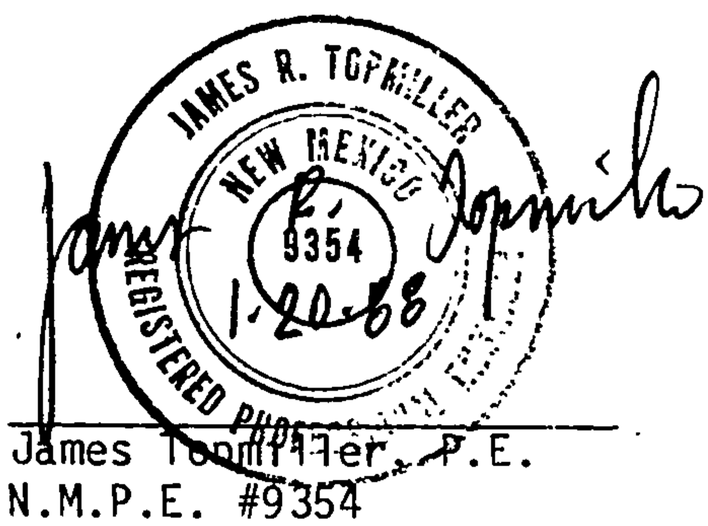
Prepared For:

Midtown Business Park Limited Partnership
c/o Trammell Crow Company
P.O. Box 25346
Albuquerque, NM 87125

Prepared By:

Bohannan-Huston, Inc.
7500 Jefferson, N.E.
Courtyard I
Albuquerque, NM 87109

January 1988



James Topmiller, P.E.
N.M.P.E. #9354

Site Description

Buildings B and C of Midtown Office Park, hereinafter referred to as the "buildings" unless specified individually, are located on what is now Parcel 1 of the Realty-Montbel-AGP Lands (see Figure 1). However, the parcel is very soon to be subdivided into Tracts 1, 2, and 3, Midtown Business Park and this report, therefore, identifies the site according to these new designations (see Figure 2). The buildings will be located on the 2.4 acre Tract 1. Tract 2, immediately to the east, is the site of the new Home Club outlet. Alexander Boulevard right-of-way and Tract 3 are also created by this new plat.

The two buildings are proposed to be warehouse-type operations with flat, guttered roofs.

Existing Drainage Conditions

Currently the site is an unvegetated, level parcel of land. Runoff drains rather haphazardly in many directions. The larger amount of runoff, however, drains southwesterly to an inlet to be constructed with the current Home Club project of Tract 2. This inlet drains to an existing storm sewer system in Yale Boulevard, which in turn drains southerly to Yale Boulevard to an existing storm runoff retention basin located near Carmony Road. Existing runoff from the site only in the 100-year, 6-hour storm is 4.5 cfs.

Offsite runoff to the site occurs primarily at the terminus to the existing concrete valley gutter from the Home Club parking lot. In its existing developed condition, the valley gutter discharges approximately 5.7 cfs to the site.

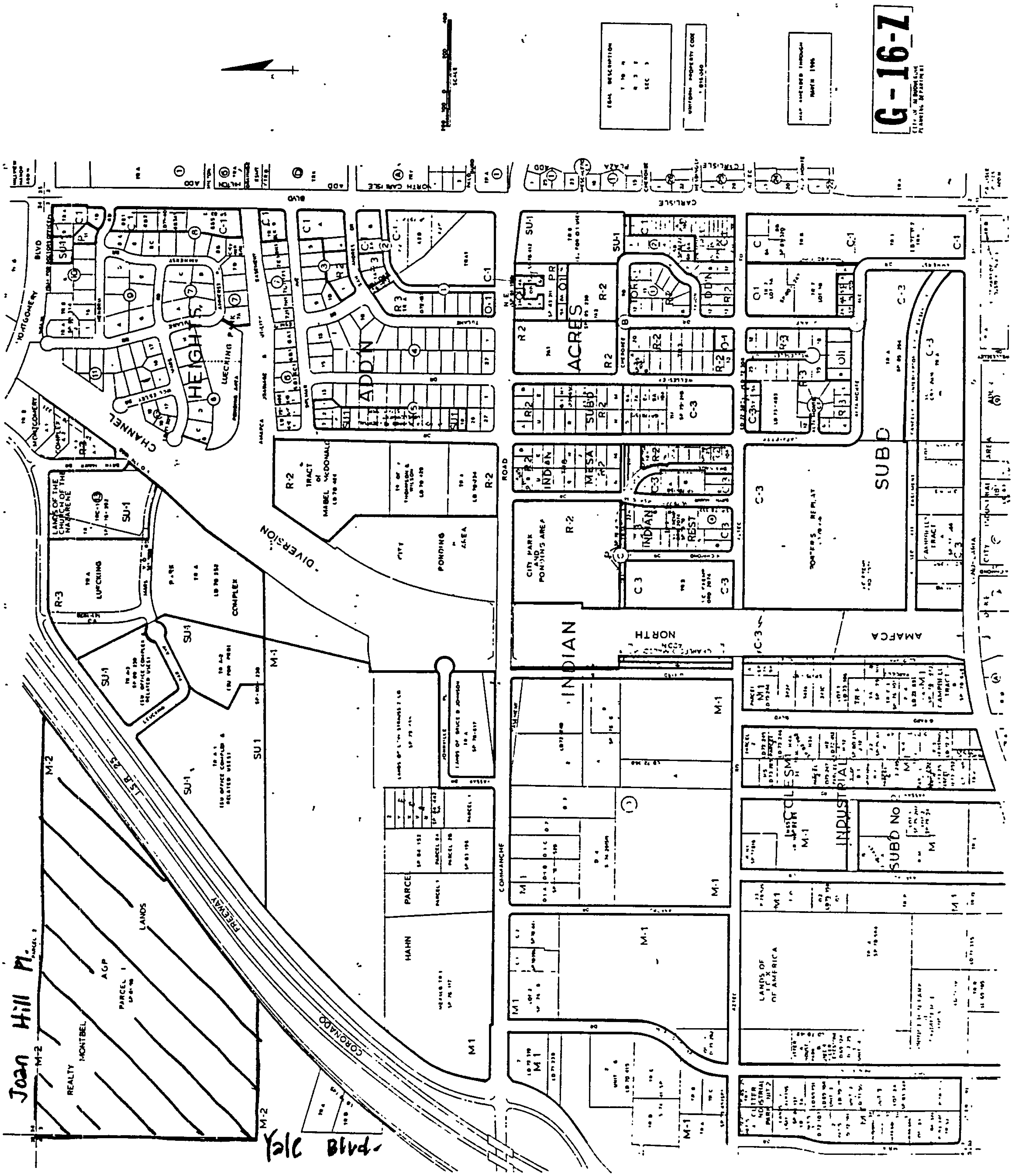
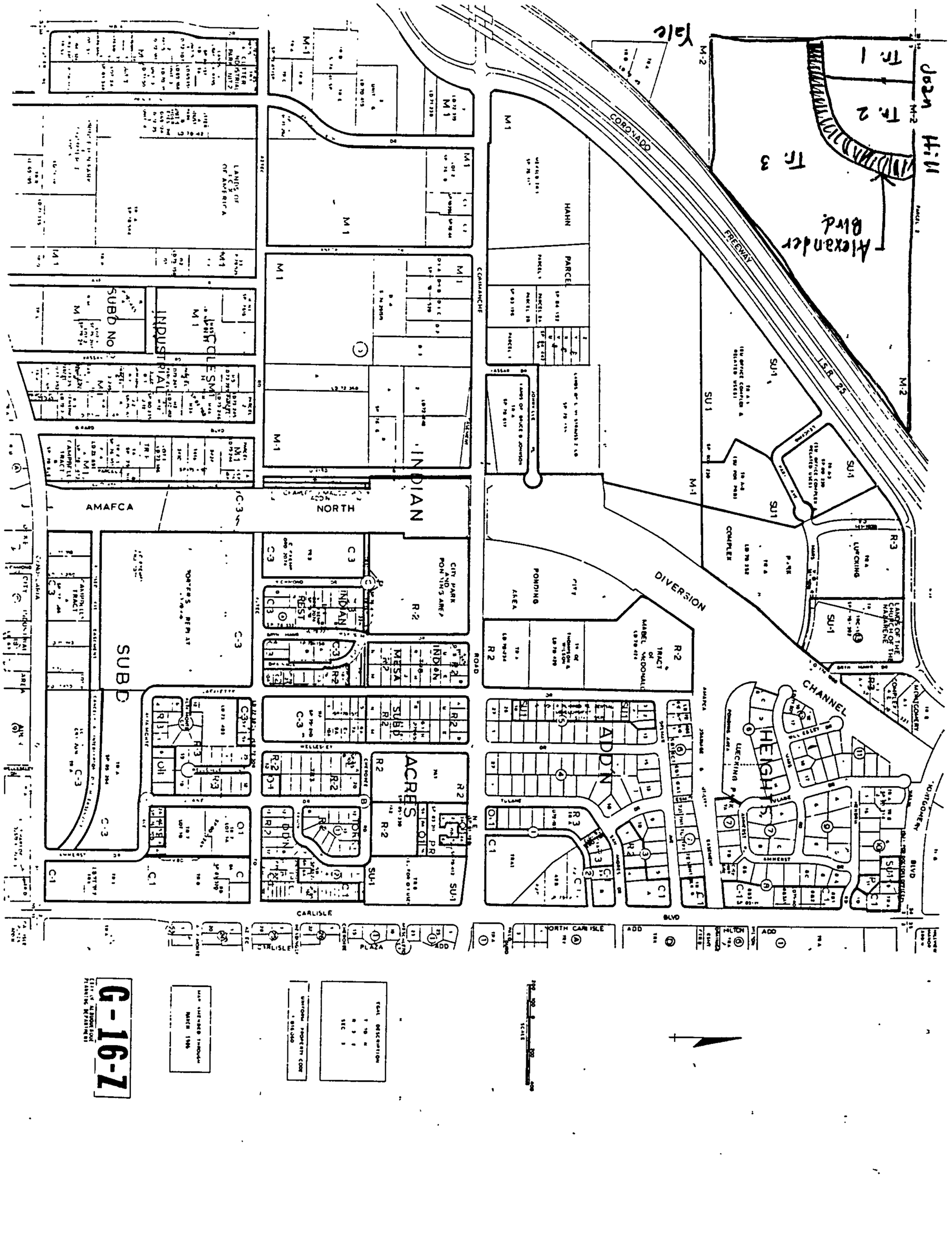

G-16-Z
HEIGHTS
ADDN
ACRES
SUBD
INDIAN
NORTH
AMAFCA
DIVERSION
CHANNEL
FREEWAY
CORONADO
CARLISLE
Joan Hill Pl.
Yale Blvd.

FIGURE 1

Figure 2


Alexander Blvd
Tr. 1
Tr. 2
Tr. 3
Golf
Hill
CORONADO
FREEWAY
I.S.H. 25
M-2
M-1
M 1
HAHN
PARCEL
COMANCHE
JOHNSTON
SU-1
SU 1
LANDS OF THE CHURCH OF JESUS CHRIST OF LATTER DAY SAINTS
LANDS OF AMERICA
INDUSTRIAL
SUBD No
AMAFCA
NORTH
INDIAN
DIVERSION
CHANNEL
PONDING AREA
CITY PARK AND PONDING AREA
MABEL V. McDONALD TRACT
R-2
R2
C-3
C3
C1
O-1
R-3
R3
MESA
INDIAN REST
SUBD
ADDN
ACRES
HEIGHTS
MONTGOMERY BLVD
CARLISLE
NORTH CARLISLE
PLAZA
ADD
LEGAL DESCRIPTION
T 19 N
R 3 E
SEC 1
VICINITY PROPERTY CODE
MAP REVISED THROUGH
MARCH 1989
SCALE
G-16-Z

The site does not contain a 100-year storm FEMA floodplain. A floodplain map and a soils map are identified on the enclosed drainage plan.

Previous Drainage Report and Site Background

The Buildings B and C site began as part of a single, larger tract of land located between Yale Boulevard, Joan Hill Place and the I-25 Frontage Road. A drainage plan, later revised, entitled Midtown Office Park (ref. City files G16/D95), was submitted and approved for the single tract. The plan called for historic flowrate discharge to the storm sewer system in Yale Boulevard and by sidewalk culverts to the Joan Hill Place right-of-way. Detention ponding onsite was required to control discharge. The plan identified the historic undeveloped flowrate of 7.9 cfs (Phase 1-B) as the permissible discharge to Yale Boulevard. The downstream storm sewer in Yale Boulevard was then designed and built based on this flowrate.

With the replatting of Parcel 1, we have phased the previous drainage report. At this time, only the Home Club site (Tract 2) has been developed. This new report provides the drainage guidelines for this new phase, i.e., Tract 1 and its new site development plan.

The concepts of the original drainage plan have not been changed significantly in this new plan.

Proposed Development Conditions

The location of the two buildings on Tract 1 requires a departure from the use of a single detention pond area as described in the original plan. The permissible discharge rate to Yale Boulevard of 7.9

cfs, as noted in the original, is still maintained by the proposed development. The following outlines the methods used to provide drainage concepts in accordance with the original plan:

1. The drainage/grading plan and the "developed basins" plan, enclosed in the rear pockets of this report, should be referenced in order to follow the discussion below.
2. Basin B-1, enclosing Building B, produces a 100-year, 6-hour storm flowrate of 4.1 cfs. This flowrate is discharged through a 20.5" wide, 8" high weir near the northwest corner of Building C. The weir will be constructed in the proposed site curb and will discharge a reduced flowrate of 3 cfs in the 100-year storm event. The reduced flowrate will create a detention pond requiring a volume of 530 cubic feet. Identified on the "developed basins" plan is an estimation of the detention pond and its boundaries. Its volume approximates 600 cubic feet. Calculations are enclosed in the Appendix of this report.
3. The discharge of Basin B-1 runoff at this point along Yale Boulevard requires that the runoff be transferred across Yale Boulevard to its west curb and collected by the existing storm inlet. Calculations in the Appendix reveal that the inlet's capacity is approximately 25.4 cfs with 8" of head (the inlet is located in a low spot in the road and therefore, acts as an orifice). The 18" connector pipe has a capacity of 7.0 cfs. In contrast, the expected flow to the inlet and connector pipe is only 7.1 cfs (4.1 cfs from Basin B-1 added to the approximately 3.0 cfs from the half-street Yale Boulevard.) The slight 0.1 cfs under-capacity of the system is considered negligible and system capacity is assumed to exist. With the construction of

the east half of Yale Boulevard and a corresponding increase in runoff, an additional storm inlet on the east curb will also be constructed to handle the increased flow.

4. Basin B-2, enclosing Building C and the offsite runoff-contributing area of the Home Club site, generates 9.3 cfs in the 100-year 6-hour storm. Since the permissible discharge from the site as a whole is only 7.9 cfs and Basin B-1 is already discharging 3.0 cfs, the maximum allowable rate from Basin B-2 is, therefore, only 4.9 cfs. The required reduction of the 9.3 cfs rate to 4.9 cfs is accomplished by the introduction of a weir to the basin's discharge point. Based upon the calculations of the Appendix, a 12" wide, 1.5' high weir is required. The weir will create ponding of 4,600 cubic feet located primarily in the dock area of the proposed warehouse. As shown in the Appendix, only a conservative 3,700 cubic feet of ponding volume is required. The "developed basins" plan identifies an estimation of the detention pond and its boundaries.

5. The proposed plan reroutes the discharge line of the Home Club dock area to extend it north to Joan Hill Place. The rerouting is necessary due to inadequate grades across the site to the west. The discharge rate from the dock area is only 0.25 cfs, a negligible amount.

6. With the improvements described above, a maximum discharge from the site of 7.9 cfs will occur. This is in agreement with the original drainage plan.

APPENDIX

EXISTING CONDITIONS

by Rational Method ($Q = CIA$)

1. Site Acres = 2.4 acres (Tract 1)

Intensity, I = 4.65 in/hr (from DPM plate 22.2 D-2)

$C = 0.40$ ↑ 100-yr, 6-hr (< 10 min.)

$Q = CIA$ = 0.40 (4.65 in/hr) 2.4 acres

$Q_{undeveloped}$ = 4.5 cfs from site alone.....

2. Offsite runoff from the Home Club parking lot (the valley gutter) —

$C = 0.95$ (conservative value since some landscaping is not included in this calculation)

$I = 4.65$ in/hr ($T_c < 10$ min.)

$A = 1.3$ acres

$Q = 5.74$ cfs

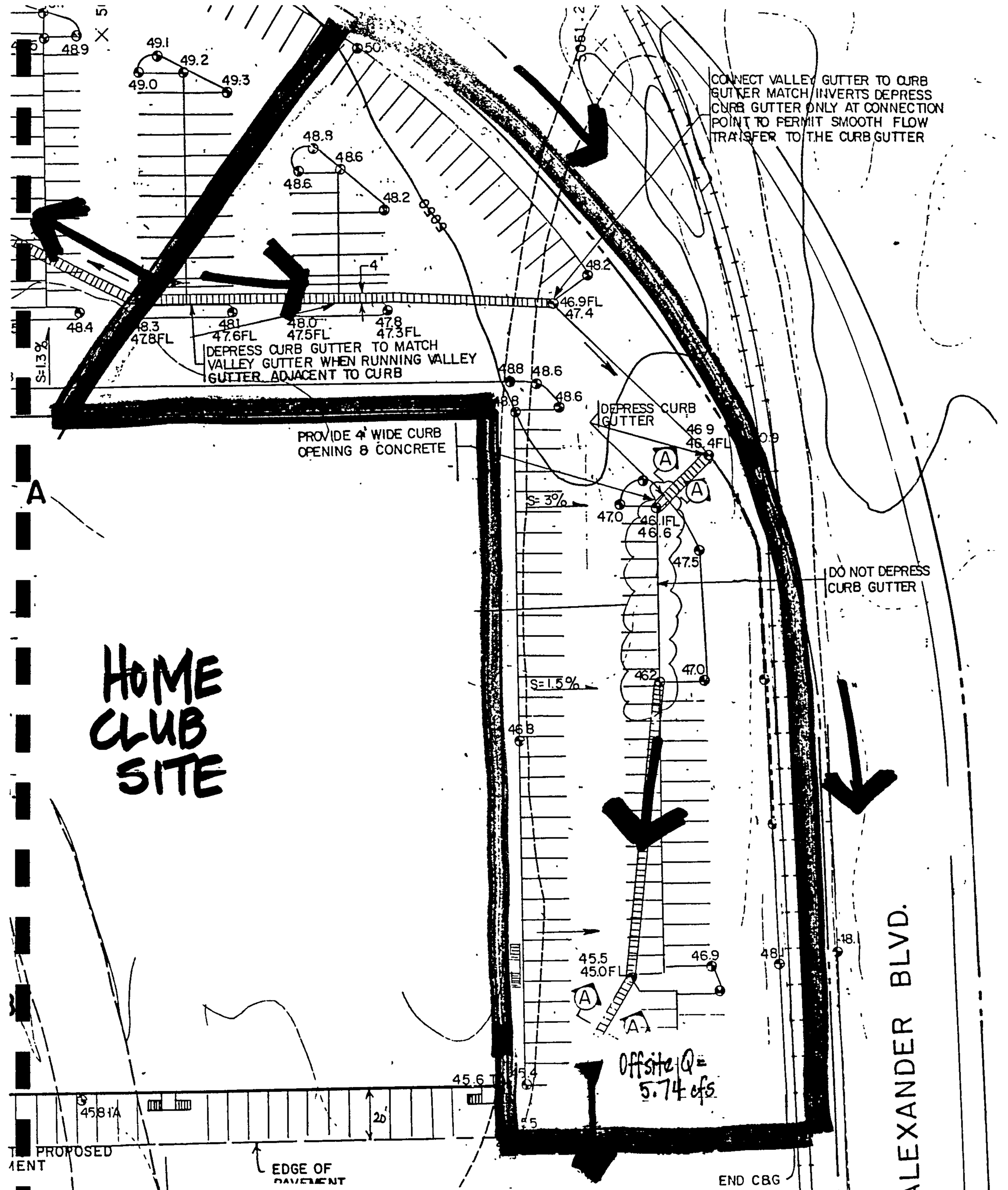
Home Club building discharges to the east.

BOHANNAN HUSTON INC.

PROJECT NAME BLDG. 5 B & C SHEET 1 OF

PROJECT NO. MIDTOWN BUSINESS PARK BY J. MACT DATE 1-19-07

SUBJECT DRAINAGE REPORT CALCS CH'D " DATE "


CONNECT VALLEY GUTTER TO CURB GUTTER MATCH INVERTS DEPRESS CURB GUTTER ONLY AT CONNECTION POINT TO PERMIT SMOOTH FLOW TRANSFER TO THE CURB GUTTER
DEPRESS CURB GUTTER TO MATCH VALLEY GUTTER WHEN RUNNING VALLEY GUTTER ADJACENT TO CURB
PROVIDE 4' WIDE CURB OPENING & CONCRETE
DEPRESS CURB GUTTER
DO NOT DEPRESS CURB GUTTER
HOME CLUB SITE
Offsite Q= 5.74 cfs
ALEXANDER BLVD.
EDGE OF
HIGH POINT
END C&G
OFFSITE BASIN

Basin B-1 — 100-year storm calculations

1. Bldg area = 19200 SF = 0.45 ac.*

   Total area of basin = 1.45 ac.

2. Runoff-contributing area = 1.45 - 0.45* = 1.0 ac,

   * building has a flat, guttered roof with a negligible discharge rate and is therefore subtracted from the total basin area

3. of this 1.0 acre, landscaping is 0.10 ac.
   pavement surface is 0.90 ac.

4. Runoff rate (by Rational) - I = 4.65 in/hr

   a) Q = CIA = 0.95 (4.65) 0.9 = 3.97 cfs
      (pavement)

   b) Q landscaping = 0.25(4.65).1 = 0.12 cfs

   TOTAL = 4.1 cfs

Basin B-1 calculations cont.

5. required weir width to limit basin discharge to 3 cfs

$Q = C L H^{3/2}$

$H = 8''$ (height of curb)

$C = 3.0$ (Hydraulics Handbook

$Q = 3$ cfs

$L = \frac{3}{(3)(.7)^{3/2}} = 1.7' = 20.5''$

↑ use 20.5" wide, 8" high weir to control discharge

6. a) check capacity of Yale storm inlet .....

*use orifice equation because inlet is in low spot in street

$Q = CA\sqrt{2gh}$

$C = 0.6$ (Hydraulics Handbook)

$A = 6.3$ sq. ft. (open area of grate) Type Double "C"

$h = 0.7'$ (8" curb)

capacity of grate $= 0.6(6.3)\sqrt{2g(.7)}$

$= 25.4$ cfs $\gg\gg 7.1$ cfs

b) check connector pipe capacity ....

$S = 0.0045$ (from 25 bldgs)

dia. = 18"

$n = 0.013$

by Mannings, determine capacity ....

$Q_{18" pipe} = 7.0$ cfs $\approx$ 7.1 cfs (inflow calculated below)

c) determine total flow to inlet

- from Basin B-1 ; 4.1 cfs $\longrightarrow$ 4.1
- from half-street paved Yale, ...

Area (paved) = 0.41 ac.

Area (undev.) =

$C = 0.95$ (paved)

$C = 0.40$ (undev.)

$I = 4.65$ in/hr

$Q_{paved} = CIA = 0.41\,(4.65)\,.95 = 1.82$

$Q_{(undev.)} = .4\,(4.65)\,(0.63\ ac)$ $= 1.2$

Total 3.0 $\longrightarrow$ 3.0

Total = 7.1 cfs

d) Total flow to inlet = 7.1 cfs $<<$ 25.4 cfs inlet cap. $\approx$ 7.0 cfs connector pipe cap. OK

BOHANNAN HUSTON INC.

PROJECT NAME BUILDINGS B & C SHEET 4 OF

PROJECT NO. MIDTOWN BUSINESS PARK BY James T. DATE 1.19.88

SUBJECT CH'D " DATE "

100-year storm calculations

Basin B-2

1. Bldg area = 38400 sf = 0.9 ac.*
   Total area = 3.5 ac
   of basin

*NOTE: assume roofs (flat) contribute negligibly to the runoff rate and is subtracted from the total basin area

2. Runoff contributing area = 3.5 - 0.9*
   = 2.4 ac.

3. Of the 2.4 ac., 0.43 ac. is landscaping
   2.06 ac. is paving

4. Runoff rate (by Rational) I = 4.65 in/hr
   a) Q = c I A = 0.95 (4.65) 2 = 8.83 cfs
   (pavement)
   b) Q (landscaping) = 0.25 (4.65).43 = 0.5 cfs

TOTAL = 9.3 cfs

Basin B-2 calculations cont.

5. determine required weir width to limit discharge to 4.9 cfs

$Q = C L h^{3/2}$

where $C = 3.0$ (Hydraulics Handbook)

$Q = 4.9$ cfs (See text)

$h = 1.5'$ (use as max. desired height of ponding in dock area)

43.9 − 42.35 = 1.55 OK

then $L = \frac{4.9}{(3)\ 1.5^{3/2}}$

$= 0.9'$, say $12''$

6. check capacity of 18" RCP outlet pipe from proposed inlet to existing 18" pipe .....

check entrance cap. by orifice @ $h = 1'$ (conservative)

$Q = C A \sqrt{2gh}$

$= 0.6(1.77)\sqrt{2g(1)}$

$= 8.5$ cfs > 4.9 cfs OK

check pipe cap. by Manning's $n = 0.013$

$Q = 5.76$ cfs > 4.9 cfs

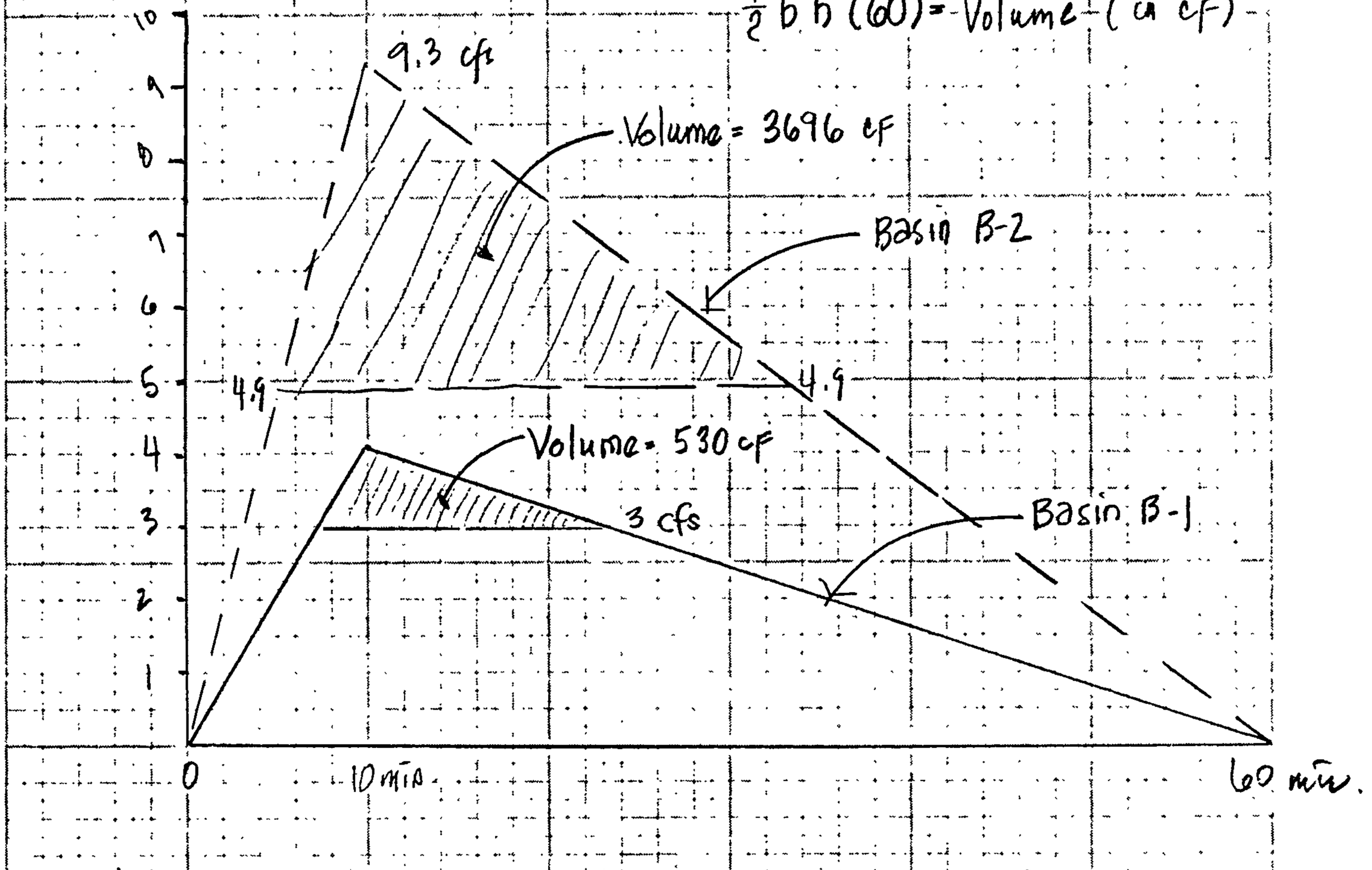
PROJECT NAME Bldgs B & C SHEET 6 OF

PROJECT NO. Midtown Bus. Park BY James T. DATE 1.19.88

SUBJECT CH'D " DATE "

Time of Concentrations (both basins) = 10 minutes

$\frac{1}{2}$ b h (60) = Volume (in cf)



NOTE: This method yields conservative volumes when compared to SCS methods.

REQUIRED DETENTION POND VOLUMES

BOHANNAN HUSTON INC.

PROJECT NAME Bldgs B & C SHEET 7 OF

PROJECT NO. Midtown Bus. Park BY James T DATE 1.19.83

SUBJECT CH'D " DATE "

EILE COPY

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 17, 1990

James Topmiller
Bohannan-Huston, Inc.
7500 Jefferson Street, NE
Albuquerque, New Mexico 87109

RE: REVISED DRAINAGE PLAN FOR BUILDINGS B & C, MIDWAY BUSINESS PARK - CERTIFICATE OF OCCUPANCY RELEASE (G-16/D95B) REVISION DATED OCTOBER 10, 1990

Dear Mr. Topmiller:

Based on the information provided on your resubmittal of October 11, 1990, the referenced drainage plan is approved for Certificate of Occupancy release.

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

Cordially,

Bernie J. Montoya

for Fred J. Aguirre, P.E.
Hydrologist

BJM:FJA/bsj
(WP+671)

PUBLIC WORKS DEPARTMENT

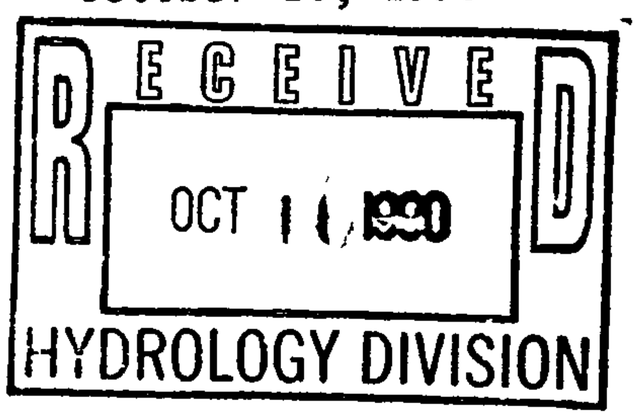
Walter H. Nickerson, Jr., P.E.
Assistant Director Public Works

ENGINEERING GROUP

Telephone (505) 768-2500

BOHANNAN-HUSTON INC.
COURTYARD I, 7500 JEFFERSON STREET, N.E. ALBUQUERQUE, NM 87109
TEL (505) 823-1000 FAX (505) 821-0892

October 10, 1990



Mr. Bernie Montoya
Hydrology Division
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

RE: Building B and C, Midtown Business Park - Revised Drainage/Grading Plan for Permanent Certificate of Occupancy Release

Dear Bernie:

In accordance with your request to Mr. Michael Hoff of Trammell Crow Company and in accordance with my recent telephone discussion with you, I have enclosed an revised plan for grading and drainage improvements on the referenced site for your review and approval. Primarily, the plan has been revised to show that concrete paving has been installed in a significant portion of the parking lot for these buildings and to show the construction of Yale Blvd. adjacent to the site. With the construction of Yale Blvd., rundowns from the site were connected to the new curb and gutter of the street and riprap had been removed.

We have marked a revision date on the plan so that you may keep it in order within your files. I hope that this is sufficient for building permanent certificates of occupancy release. If there is anything else we can provide regarding this, please let me know and I will be glad to respond immediately. If there are any questions I can answer regarding this submittal, please do not hesitate to call me.

Sincerely,

James Topmiller

James Topmiller, P.E.
Project Manager
Community Development and Planning

cc: Michael Hoff

JRT/al
Job No. 90274.01

PROJECT TITLE: Midtown Business Ph. ZONE ATLAS/DRNG. FILE #: G-16/D95B

DRB #: _____ EPC #: _____ WORK ORDER #: _____

LEGAL DESCRIPTION: Midtown Business Park

CITY ADDRESS: Bulding D2C

ENGINEERING FIRM: BHI CONTACT: James Lopuello

ADDRESS: 7500 Jefferson NE PHONE: 823-1000

OWNER: Kenmell-Dow CONTACT: Mike Doff

ADDRESS: 4374 Alexander NE PHONE: 344-5533

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

TYPE OF SUBMITTAL:

___ DRAINAGE REPORT

_✓_ DRAINAGE PLAN – Revised

___ CONCEPTUAL GRADING & DRAINAGE PLAN

_✓_ GRADING PLAN – Revised

___ EROSION CONTROL PLAN

___ ENGINEER'S CERTIFICATION

___ OTHER _____

PRE-DESIGN MEETING:

___ YES

___ NO

___ COPY PROVIDED

DATE SUBMITTED: _____

BY: Mary Snyder for Jones Lopuello

CHECK TYPE OF APPROVAL SOUGHT:

___ SKETCH PLAT APPROVAL

___ PRELIMINARY PLAT APPROVAL

___ S. DEV. PLAN FOR SUB'D. APPROVAL

___ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL

___ SECTOR PLAN APPROVAL

___ FINAL PLAT APPROVAL

___ FOUNDATION PERMIT APPROVAL

_✓_ BUILDING PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY APPROVAL

___ GRADING PERMIT APPROVAL

___ PAVING PERMIT APPROVAL

___ S.A.D. DRAINAGE REPORT

___ DRAINAGE REQUIREMENTS

___ OTHER _____ (SPECIFY)

RECEIVED
OCT 11 1990
HYDROLOGY DIVISION

FILE COPY

City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

March 24, 1988

James Topmiller, P.E.
Bohannan-Huston, Inc.
7500 Jefferson Street, NE
Albuquerque, New Mexico 87109

RE: GRADING PLAN & DRAINAGE REPORT FOR MIDTOWN BUSINESS PARK, BUILDINGS B & C, RESUBMITTED 4 MARCH 88, FOR BUILDING PERMIT APPROVAL (G-16/D95B)

Dear Mr. Topmiller:

Your submittal, referred to above, with a revision date of March 3, 1988, is approved for building permit sign-off by the Hydrology Section.

This approved drawing must be included with the construction sets routed for permit sign-off.

If you have any questions, please call me at 768-2650.

Cordially,

Stuart Reeder

G. Stuart Reeder, P.E.
C.E./Hydrology Section

xc: Trammell Crow Company

GSR

DRAINAGE INFORMATION SHEET

PROJECT TITLE: BUILDINGS "B" AND "C" MIDTOWN BUSINESS PARK ZONE ATLAS/DRNG. FILE #: G16/D95B

LEGAL DESCRIPTION: TRACT 1, MIDTOWN BUSINESS PARK

CITY ADDRESS: _____

ENGINEERING FIRM: BOHANNAN-HUSTON CONTACT: JAMES TOPMILLER

ADDRESS: 7500 JEFFERSON NE (87109) PHONE: 823-1000

OWNER: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

ARCHITECT: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

RECEIVED
MAR 04 1988
HYDROLOGY SECTION

PRE-DESIGN MEETING:

___ YES

✓ NO

___ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. _____

EPC NO. _____

PROJ. NO. _____

TYPE OF SUBMITTAL:

✓ DRAINAGE REPORT (REVISED)

___ DRAINAGE PLAN

___ 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

___ FOUNDATION PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY APPROVAL

___ ROUGH GRADING PERMIT APPROVAL

___ GRADING/PAVING PERMIT APPROVAL

___ OTHER _____ (SPECIFY)

DATE SUBMITTED: 3.4.88

BY: JAMES TOPMILLER

BOHANNAN-HUSTON INC.
Courtyard I 7500 Jefferson Street, N.E. Albuquerque, NM 87109
(505) 823-1000

Transmittal

To: CITY HYDROLOGY

Attention: CHUCK REEDER

Date: 3.4.88

Our job number: 87404.01

Your job number:

Job: MIDTOWN BLDG. B&C

☐ Parcel post	☑ Messenger
☐ First Class	☐ UPS
☐ Express Mail	☐ Air Freight
☐ Bus	☐ _____

RECEIVED
MAR 04 1988
HYDROLOGY SECTION

We are enclosing:	For:
1 revised drainage grading plan	your use & review

Comments: Per our conversation, I have added the storm inlet on Yale (east curbline) and the graded swale in the east ROW of Yale.

By: James Topmiller thank you

Rec'd by: _____ Date: _____

☒ Please Return Signed Yellow Copy

3/86

DRAINAGE INFORMATION SHEET

PROJECT TITLE: MIDTOWN BUSINESS PARK BUILDINGS B AND C ZONE ATLAS/DRNG. FILE #: G16/D95b

LEGAL DESCRIPTION: TRACT 1, MIDTOWN BUSINESS PARK

CITY ADDRESS: _____

ENGINEERING FIRM: BOHANNAN-HUSTON, INC. CONTACT: JAMES TOPMILLER

ADDRESS: 7500 JEFFERSON PHONE: 823-1000

OWNER: TRAMMELL CROW COMPANY CONTACT: MARK MULLANE

ADDRESS: _____ PHONE: 843-7525

ARCHITECT: AUSTIN GROUP CONTACT: JIM LITTLE

ADDRESS: _____ PHONE: _____

SURVEYOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

CONTRACTOR: _____ CONTACT: _____

ADDRESS: _____ PHONE: _____

RECEIVED
JAN 22 1988
HYDROLOGY SECTION

PRE-DESIGN MEETING:

___ YES

✓ NO

___ COPY OF CONFERENCE RECAP SHEET PROVIDED

DRB NO. _____

EPC NO. _____

PROJ. NO. _____

TYPE OF SUBMITTAL:

✓ DRAINAGE REPORT

___ DRAINAGE PLAN

___ 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

___ FOUNDATION PERMIT APPROVAL

___ CERTIFICATE OF OCCUPANCY APPROVAL

✓ ROUGH GRADING PERMIT APPROVAL

___ GRADING/PAVING PERMIT APPROVAL

___ OTHER _____ (SPECIFY)

DATE SUBMITTED: 1-21-88

BY: James Topmiller

BOHANNAN-HUSTON INC.

COURTYARD I, 7500 JEFFERSON STREET, N.E. ALBUQUERQUE, NEW MEXICO 87109 (505) 823-1000
UNIVERSITY PLAZA, SUITE 104, 330 GARFIELD SANTA FE, NEW MEXICO 87501 (505) 988-7671
6713 VISCOUNT BLVD. EL PASO, TEXAS 79925 (915) 778-4491

January 21, 1988

Mr. Fred Aguirre
City Hydrologist
Hydrology Department
City of Albuquerque
P.O. Box 1293
Albuquerque, NM 87103

RECEIVED
JAN 22 1988
HYDROLOGY SECTION

Re: Drainage Report Submittal for Buildings B and C, Midtown Business Park

Dear Fred:

Please find enclosed a completed information sheet and a drainage report submittal of the referenced development for your review and approval. The plan provides drainage concepts for a two-building warehouse development. Please contact me if I can answer any questions concerning this submittal.

Sincerely,

James Topmiller

James Topmiller, P.E.
Project Manager

Enclosures

cc: Mark Mullane

JT/da
Job No. 87404.01