HYDROLOGY G18/D23 1 PLAN

G 18/ D23

1 PLAN

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

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

June 18, 1984

Mr. Victor Chavez
4520 Montgomery Boulevard Suite 3
Albuquerque, NM 87109

REF: UPDATE TO GRADING AND DRAINAGE PLAN FOR SAN MATEO BOULEVARD OFFICE BUILDING (G18-D23) RECEIVED JUNE 15, 1984

Dear Vic:

The above referenced submittal is in compliance with my request, dated May 7, 1984, and is therefore approved.

Please attach a copy of the approved plan along with the appropriately approved "Drainage Facilities Within Public R/W" document to the construction set prior to release of the building permit.

If I can be of further assistance, please contact me at 766-7644.

Yours truly,

Billy J. Goolsby

Billy J. Goolsby, PE
City/County Flood Plain Admin.

BJG:mrk

cc: Greg Olson

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

HYDROLOGY SECTION PROJ. NO. G-18 DATE: 2/7/84

PLANNING DIVISION NO. _____

CONFERENCE RECAP

SUBJECT: Cavan & Assoc. Office Bld.

WHO	REPRESENTING
ATTENDANCE: Vic Chavez	
Billy Crosby	

FINDINGS: ① Drainage Plan per DFM.
② On-site ponding required due to flooding condition down stream.
③ Surrounding area developed and site may not have off-site flow to contend with.
④ "Construction Within Public R/W" document is required.
⑤ Discharge rate to be determined based on review of submittal.
⑥ Erosion Control Plan for the period of construction to be provided.

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 G. Crosby SIGNED: V. J. Chavez

TITLE: CE/Hydrology TITLE: Proj. Eng.

DATE: 2/7/84 DATE: 2/7/84

G-18-D-23

3.15

CITY OF ALBUQUERQUE

ALBUQUERQUE, NEW MEXICO

INTER-OFFICE CORRESPONDENCE April 5, 1984 REF. NO._____

RECEIVED
APR 09 1984
CITY ENGINEER

TO: Dwayne sheppard, City Engineer

FROM: Billy Goolsby, FPA

SUBJECT: REQUEST FOR DRAINAGE VARIANCE FOR SAN MATEO OFFICE BUILDING (G18-D23)

Summitted herewith, for your consideration, is a request by the engineer for a variance from the drainage criteria for the subject site. The site contributes to a flooding condition in Montgomery Blvd. downstream from the intersection with San Mateo. As per the drainage critera for this type of situation, ponding and controlled discharge is required.
The Drainage Ordinance stipulated that the allowable discharge rate is determined by downstream capacity. When the Engineer chooses not to perform the analysis to determine what the capacity is and asks what is the allowable rate of discharge from a pond, we have established a rate of 0.5 cfs per ac. Since we cannot perform the analysis for the Engineer we have determined that the more frequent runoff events from ponds should be controlled. The 0.5 cfs per acre is approximately equal to a one (1) year storm event.

We have considered the request and forward the following comments and recommendations:

1. The site is effectively an infill site.

2. The Engineer has provided for a reduction in runoff from what exists now which will not add to the flooding problem downstream.

We have made the following recommendations to the Engineer for acceptance of the variance.

3. The Engineer shall certify that the total runoff will not be greater than that he has proposed. ← is this "Design Discharge"?

4. The Engineer shall certify that the ponding adjacent to the building will not have any adverse impacts on the structural stability.

5. The Engineer shall reduce the size of the proposed outlet pipes and provide emergency overflow from the ponds through the drivepads and ensure that the total runoff for the 100-year event be no more than the design discharge. d Dnstrm Capacity?

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

BJG:mrk

INFORMATION SHEET

PROJECT TITLE SAN MATEO OFFICE BLDG. TYPE OF SUBMITTAL DRAINAGE PLAN

ZONE ATLAS PAGE NO. G-18 D23 CITY ADDRESS N/A

LEGAL DESCRIPTION TRACT 1-A, HOMESTEAD RD., NOV. 3, 1983

ENGINEERING FIRM CHAVEZ-GRIEVES CONSL. ENGRS. CONTACT VICTOR J. CHAVEZ

ADDRESS 4520 MONTGOMERY N.E., ALBUQ. N.M. PHONE (505) 881-7376

OWNER CAVAN ASSOCIATES LTD. CONTACT GEORGE ACKROYD

ADDRESS 8500 MENAUL N.E. PHONE (505) 293-1040

ARCHITECT DWAYND G. LEWIS, ARCH. CONTACT MIKE PICKARD

ADDRESS 4148 NORTH 48th ST., PHOENIX, AZ. PHONE (602) 840-4190

SURVEYOR MXM/SP GROUP CONTACT JERYL HART, JR.

ADDRESS 2601 WYOMING BLVD., N.E. ALBUQ. N.M PHONE (505) 292-1936

CONTRACTOR 4010 CARLISLE BLVD. N.E., ALBUQ. N.M CONTACT JIM PUCKETT

ADDRESS _____ PHONE (505) 884-4115

PRE-DESIGN MEETING:

____ YES
____ NO
____ COPY OF CONFERENCE RECAP SHEET PROVIDED

PLEASE CHECK TYPE OF APPROVAL EXPECTED WITH THIS SUBMITTAL

____ SKETCH PLAT APPROVAL
____ PRELIMINARY PLAT APPROVAL
____ SITE DEVELOPMENT PLAN APPROVAL
____ FINAL PLAT APPROVAL
____ BUILDING PERMIT APPROVAL
____ CERTIFICATE OF OCCUPANCY APPROVAL
____ ROUGH GRADING PERMIT APPROVAL
____ GRADING/PAVING PERMIT APPROVAL
____ OTHER _____ (SPECIFY)

RECEIVED MAR 26 1984 HYDROLOGY SECTION

DATE SUBMITTED MARCH 26, 1984

BY: VICTOR J. CHAVEZ

CHAVEZ GRIEVES / CONSULTING ENGINEERS, INC.
4520 MONTGOMERY BLVD., SUITE 3
ALBUQUERQUE, N.M. 87109
(505) 881-7376

March 27, 1984

RECEIVED
APR 02 1984
HYDROLOGY SECTION

Mr. Bill Goolsby
The City of Albuquerque
Hydrology Department
P. O. Box 1293
Albuquerque, New Mexico 87103

RE: SAN MATEO OFFICE BUILDING - G-18 D23

Dear Billy:

I am hereby requesting a variance in the drainage ordinance as it applies to the allowable rate of runoff from the above-referenced project which is located at the intersection of San Mateo and Homestead. Flows from the site are discharged to San Mateo and then to Montgomery. Montgomery, west of San Mateo, has been designated as lying within the 100-year flood hazard area. City policy has established that discharge from the site should be limited to 0.5 cfs/acre in order to reduce downstream flooding. This will result in a peak flow from the site of 1.7 cfs instead of 6.05 cfs with existing conditions.

As a result of the existing soil conditions on the site, the use of dry wells has been eliminated. The impact of surface ponds, with sufficient volume to maintain a peak discharge of 1.7 cfs, will have a tremendous economic impact on the development of the site and will require the installation of fencing along San Mateo to prevent access to the ponds.

We propose that the allowable discharge rate be set at 75% of the existing one. This would reduce peak flows to 4.54 cfs and will require the use of 7300 sq. ft. of ponding with an average depth of fourteen inches.

A variance will make the project economically feasable without imposing unreasonable developmental restraints on the project.

Your timely assistance in this matter is appreciated.

Sincerely,

CHAVEZ-GRIEVES CONSULTING ENGINEERS, INC.

Victor J. Chavez

Victor J. Chavez, P.E.

VC:mf

CHAVEZ GRIEVES / CONSULTING ENGINEERS, INC.
4320 MONTGOMERY BLVD. SUITE 3
ALBUQUERQUE, N.M. 87109
(505) 881 7376

ALBUQUERQUE, NM 87
1 PM
28 MAR
1984

EASTER SEALS
FIGHT CRIPPLING USA

RECEIVED
MAR 30 1984
CITY ENGINEER

MR. BILL GOOLSBY
THE CITY OF ALBUQUERQUE
HYDROLOGY DEPARTMENT
P.O. BOX 1293
ALBUQUERQUE, N.M.
87103

CHAVEZ GRIEVES / CONSULTING ENGINEERS, INC.

4520 MONTGOMERY BLVD., SUITE 3
ALBUQUERQUE, N.M. 87109
(505) 881-7376

June 15, 1984

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

RE: San Mateo Boulevard Office (G18-023)

Dear Billy,

In response to your letter dated May 7, 1984, I offer the following comments:

1., 3. The pipe size will be maintained at 6" diameter in order to certify that the peak discharge rate from the site will not exceed the rate approved in our variance request. The pond will be graded to retain irrigation and small more frequent runoff by depressing the bottom of the pond several inches.

2. The foundation adjacent to the pond will be protected by the use of a waterproof membrane as shown on sheet C-1.

Your timely assistance in this matter is appreciated.

Sincerely,

Victor J. Chavez

Victor J. Chavez, P.E.

VCJ/mg

RECEIVED
JUN 15 1984
HYDROLOGY SECTION

Job San Mateo Office Bldg
Subject Drainage Plan
Client Dwayne Lewis

Sheet No. 5 of
Job No.
By VJC Date 5/84

CHAVEZ-GRIEVES / CONSULTING ENGINEERS, Inc. Albuquerque, NM

Flow through 4" ϕ Pipe

head Avail = 1.3' length = 10'

$S = 0.13$ Area $= \frac{\pi(4)^2}{4(144)} = 0.0873\ ft^2$

$Q = \frac{1.486}{0.013}(.0834)^{2/3}(0.13)^{1/2}(.0873) = 0.69\ cfs.$

w/ 3 - 4" ϕ $Q = 0.69(3) = 2.07\ cfs. = 621\ \frac{cf}{5min}$

Ck effect on Pond.

Time	Vol to Pond.	Vol Out.	ΔVol in Pond.
5	1257	155	1102
10	1560	310	1250
15	3441	465	2976
20	4202	621	3581
25			

$\Sigma \Delta Vol = 8909\ c.f$

∴ Pond will be full in 20 min.

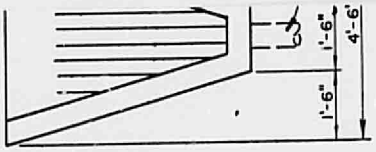
Determine flow from site.

$i = 1.5(2.3) = 3.45\ in/hr$

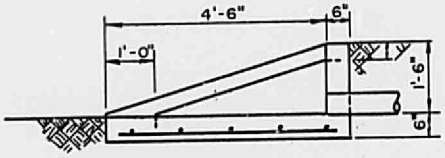
$Q = .75(3.45)(3.37) = 8.72\ cfs > 4.54$ (Variance)

∴ Reducing the pipe size to 4" will increase the flow from the site when the ponds are full. Nuisance flows will be minimized by digging the bottom of the pond a fraction of a foot

4" O.C. PLACE #4 IN 8
FILL WITH QUICK
SETTING GROUT



PLAN



SECTION

PIPE INLET

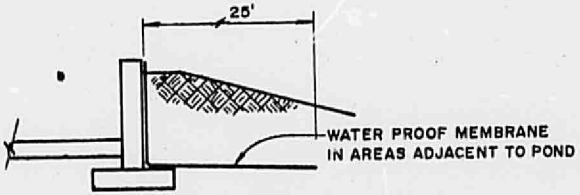
LEGEND

NEW BUILDING
NEW CONC.
EXIST. ROAD
NEW ELEV.
NEW CONTOUR
EXIST. CONTOUR

(3)
Δ=18°30'18"
R=175.00'
L=56.52'

S TABLET 82' EAST
'GOMERY BOULEVARD
RD IN 4' MEDIAN.

SIDEWALK DRAIN –
DWG. K-16-1.



TYPICAL BERM AT EXTERIOR WALL

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

DESIGN HYDROLOGY SECTION
123 Central NW, Albuquerque, NM 87102
(505) 766-7544

May 7, 1984

Mr. Victor Chavez
Chavez-Griegos
4520 Montgomery, N.E.
Albuquerque, NM 87109

RE: VARIANCE REQUEST FOR DRAINAGE FOR SAN MATEO OFFICE BOULEVARD (G18-D23)

Dear Vic,

The above referenced request for variance has been approved by the City Engineer. Therefore, you may proceed with finalizing the plans for the subject project.

The following will need to be provided for the final approval:

1. Certification that the maximum rate of discharge from the site will be no more than what is shown on this plan.

2. The building foundation adjacent to the pond will be protected from seepage due to the water in the pond.

3. The discharge pipe sizes shall be reduced to control the smaller more frequent runoff events with emergency discharge (to the total maximum rate proposed) out the drivepads.

Should you have any questions or comments, please contact me.

Yours truly,

Billy J. Goolsby

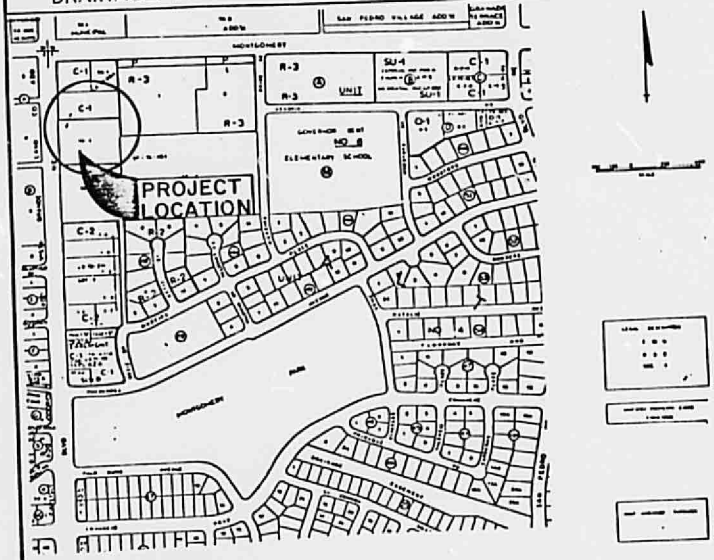
Billy J. Goolsby, P.E.
City/County Flood Plain Admin.

BJG/dlw

#11641
Taynes Corp
4/24/84

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



GARY W. TIBLJAS
NEW MEXICO
8117
REGISTERED PROFESSIONAL ENGINEER

STREET ADDRESS:
4240 SAN MATEO N.E.

G-18-Z

G18-D23

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 84-1.
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 constructions. 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 Major Arterial street use.

D-18

APPROVALS	NAME	DATE
A.C.E./DESIGN		4 Feb 84
INSPECTOR		6/6/84
A.C.E./FIELD		6/6/84

TITLE: GRANDY'S RESTAURANT SITE POND EVACUATION OUTLETS

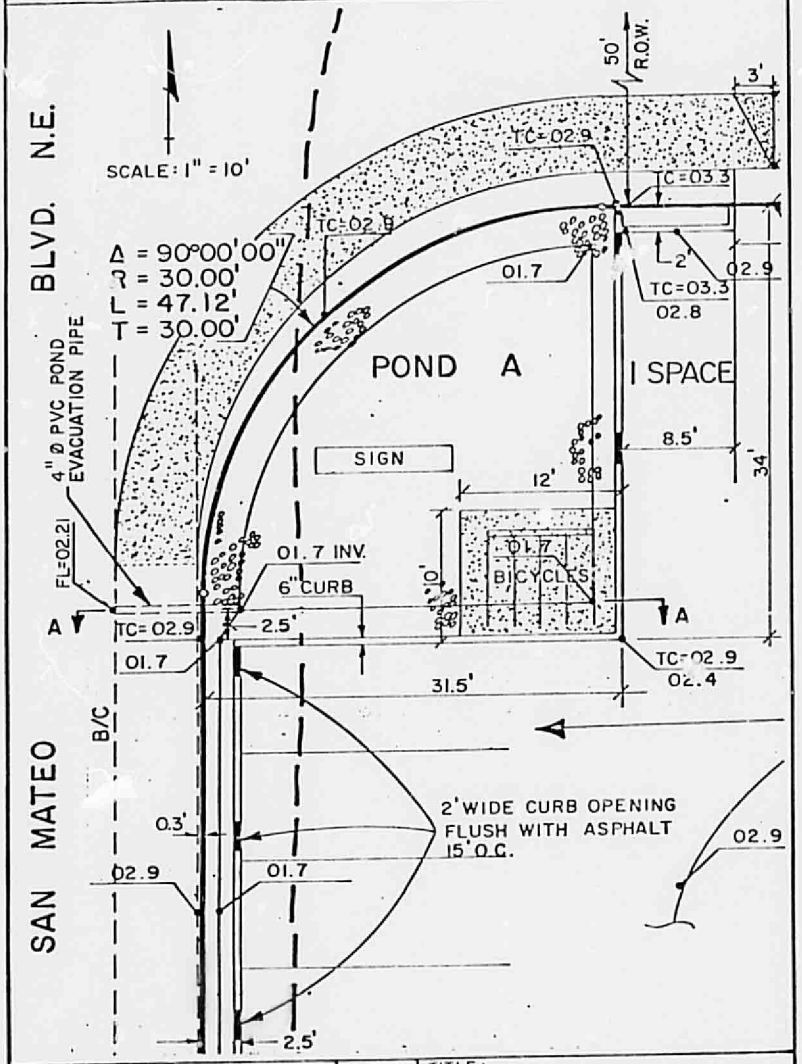
PERMIT NO.

SHEET 1 OF 5

MAP NO. G-18

CITY OF ALBUQUERQUE

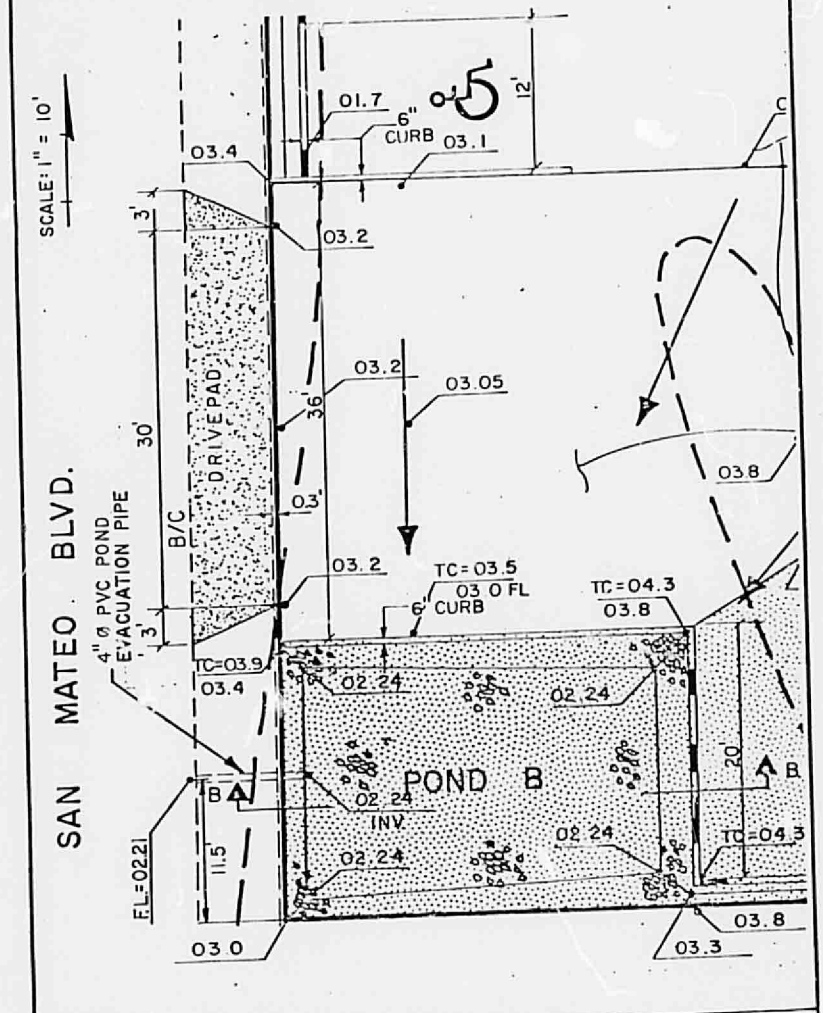
DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



APPROVALS	NAME	DATE	TITLE: GRANDY'S RESTAURANT SITE POND "A" DETAIL	
A.C.E./DESIGN	[illegible]	[illegible]		
INSPECTOR	[illegible]	6-6-64	PERMIT NO.	MAP NO. G-18
A.C.E./FIELD	[illegible]	6-6-64	SHEET 2 OF 5	

CITY OF ALBUQUERQUE

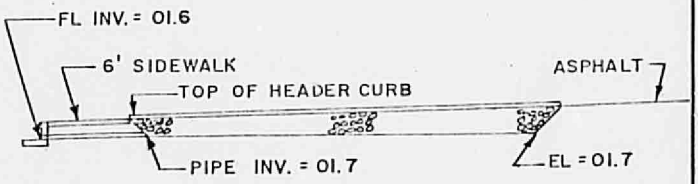
DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



APPROVALS	NAME	DATE	TITLE: GRANDY'S RESTAURANT SITE POND "B" DETAIL	
A.C.E./DESIGN	[illegible]	1 Feb 84		
INSPECTOR	[illegible]	6-6-84	PERMIT NO.	MAP NO. G-18
A.C.E./FIELD	[illegible]	6-6-84	SHEET 3 OF 5	

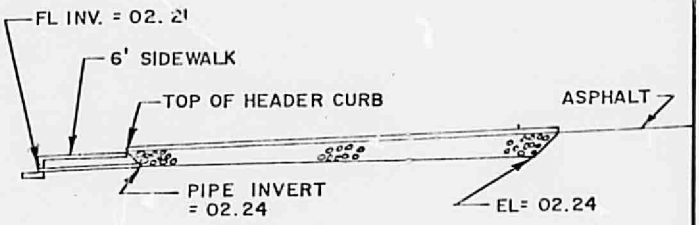
CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



SECTION A-A

SCALE: 1" = 10'



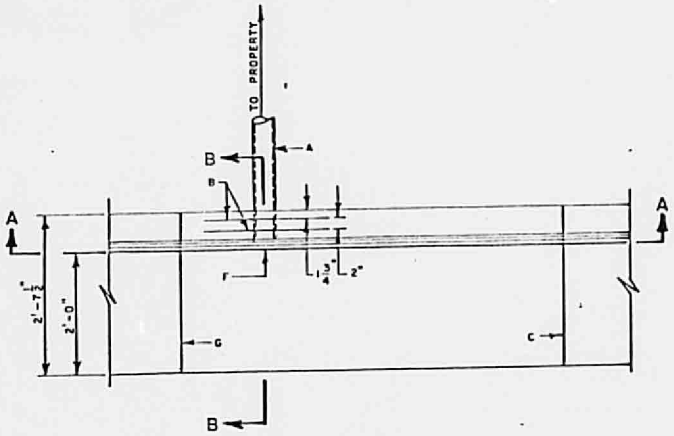
SECTION B-B

SCALE: 1" = 10'

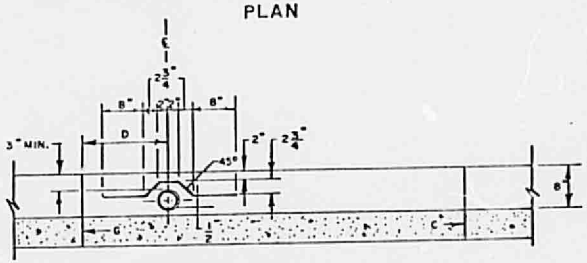
APPROVALS	NAME	DATE	TITLE: GRANDY'S RESTAURANT SITE POND A & B DRAIN DETAILS	
A.C.E./DESIGN	[illegible]	1 Feb 84		
INSPECTOR	[illegible]	6-6-84	PERMIT NO. SHEET 4 OF 5	MAP NO. G-18
A.C.E./FIELD	[illegible]	6-6-84		

CITY OF ALBUQUERQUE

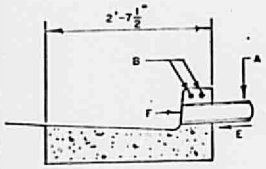
DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY



PLAN



SECTION A-A



SECTION B-B

GENERAL NOTES:

1. When placing drain through existing curb, remove and replace entire stone of curb and gutter.
2. The City does not accept responsibility for maintenance for any drain lines installed by or for private property owners.

CONSTRUCTION NOTES:

A. Drain D.I. or SCM. as P.V.C. Pipe, 4" Nom. Size (min.) to property.

B. 2-No. 3 bars, 2'-6" long, placed as shown.

C. Cold Joint.

D. Distance from Centerline drain to nearest joint, variable with 18" min.

E. Slope 1/4" per ft. within R.O.W.

F. Drain pipe not to protrude beyond curb face.

G. Joint nearest to drain to be an expansion joint.

APPROVALS	NAME	DATE	TITLE: GRANDY'S RESTAURANT SITE DRAIN LINE THROUGH CURB	
A.C.E./DESIGN	[illegible]	1 Feb 83		
INSPECTOR	[illegible]	6-6-84	PERMIT NO. SHEET 5 OF 5	MAP NO: G-18
A.C.E./FIELD	[illegible]	6-4-84		