



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 8, 1981

Mr. C. A. Coonce
12324 Pine Ridge N.E.
Albuquerque, New Mexico 87112

RE: JUAN TABO AND LEXINGTON N.E. (FILE NO. H-22-D18)

Dear Mr. Coonce:

Attached you will find your grading and drainage plan and our checklists for the referenced site. Please address the items checked no in red on the checklists and any comments on the grading and drainage plan.

If you have any questions, please feel free to call me.

Sincerely,

Fred J. Aguirre, P.E.
Civil Engineer/Hydrology

FJA/el

cc: Drainage File
Reading File

MUNICIPAL DEVELOPMENT DEPARTMENT

Richard S. Heller, P.E., City Engineer

ENGINEERING DIVISION

Telephone (505) 766-7467



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

October 28, 1981

Mr. Leon N. Tendas
5456 McConnell Avenue,
Suite 260
Los Angeles, Ca. 90066

RE: Juan Tabo and Lexington N.E. (File No. H-22-D18)

Dear Mr. Tendas:

Attached is a checklist with my comments for the referenced Drainage Report. Please address the items checked no, and any corresponding comments.

* If you have any questions, please feel free to call me at 766-7644.

Sincerely,

Fred J. Aguirre, P.E.
Civil Engineer/Hydrology

FJA/el

cc: Drainage File
Reading File
C. A. Coonce
Enclosure

MUNICIPAL DEVELOPMENT DEPARTMENT

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CITY OF ALBUQUERQUE

ALBUQUERQUE, NEW MEXICO

INTER OFFICE CORRESPONDENCE

April 8, 1982

REF. NO. _____

TO: Bob Kielich, Assistant City Engineer/Design

FROM: Fred J. Aguirre, Civil Engineer/Hydrology *FJA*

SUBJECT: STANDARD BRANDS PAINT STORE ALLEY GRADES

My biggest concern regarding the subject alley grades are the proposed grade changes along the alley's right-of-way and its impact on the adjacent tracts, i.e.: loss of access by the tract owners to their property, undermining of the retaining wall adjacent to the site and the need for retaining walls along the alley to absorb the difference in elevations. Also this plan does not indicate if the contours shown are proposed or existing.

FJA/el

Parking Lot Drain

Run off

Area

$$120 \times 136 = 16,320$$

Parking Lot

$$120 \times 96 \times 0.5 = 5,760$$

Parking Lot

$$55 \times 42 = 2,310$$

Building alley roof

$$\text{Area} = 24,390$$

$$\text{Assume } C = 1.0; I_{100} = 5.4$$

$$Q_{100} = CIA$$

$$Q_{100} = (1.0)(5.4)(24,390/43,560)$$

$$Q_{100} = 3.06 \text{ CFS}$$

CAPACITIES

GRATE - STD K-8-1

Openings 34" Long x $\frac{5}{8}$ " wide, 2 each

Use orifice formula with $C_d = 0.6$; $h = 0.5$ i.e. 6" Header curb

$$\text{Area} = (2)(34") \times (0.625) / 144$$

$$\text{Area} = 3.099 \text{ ft}^2$$

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

$$Q = (0.6)(3.099) \left[(2)(32.2)(0.5) \right]^{0.5} = (0.6)(3.099)(32.2)^{0.5}$$

$$Q_{\text{cap}} = 10.55 \text{ CFS; Allows for clogage}$$

Pipe Capacity

12" CMP; Assume $n = 0.013$, $S = 0.0233$

From chart p 254, Linzey & Franzini

$Q_{\text{cap}} \approx 15 \text{ CFS}$; slope only goes to 0.20; however pipe flowing

full can carry more than the grate will admit

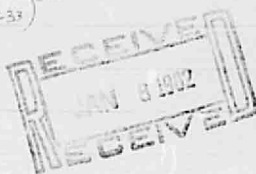
check exact

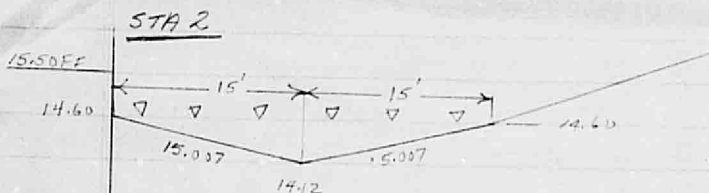
12" D; $R = 0.25$

$$Q_{\text{cap}} = 1.49 n (A)(R)^{2/3} (S)^{1/2}$$

$$Q_{\text{cap}} = [(1.49)(6.93)](0.7854)(0.25)^{0.67} (0.2233)^{0.5}$$

$$Q_{\text{cap}} = 16.80 \text{ CFS - OK}$$





CAPACITY

AREA

$$A = 2 \left[\frac{1}{2} (14.60 - 14.12) (15) \right]$$

$$A = (0.48) (15)$$

$$A = 7.20$$

$$WP = 30.014$$

$$R = A/WP$$

$$R = 7.2 / 30.14$$

$$R = 0.2389$$

$$S = 0.0050$$

$$S = 0.0176$$

$$n = 0.013 \text{ Assumed}$$

$$Q = 1.49/n A R^{2/3} S^{1/2}$$

$$Q = (1.49/0.013) (7.2) (0.2389)^{2/3} (0.0176)^{1/2}$$

$$Q_{cap} = 46.95 \text{ CFS}$$

Run off

Area Drained

$$100 \times 48 = 4800 \text{ Bowling Alley } \frac{1}{2} \text{ of } 76' \text{ roof to STA 2}$$

$$128 \times 67 = 8576 \text{ Paved Area to Bowling Alley}$$

$$128 \times 64 = 8192 \text{ } \frac{1}{2} \text{ of New Bldg.}$$

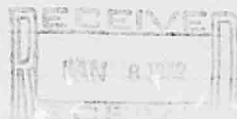
$$\text{Area} = 21568$$

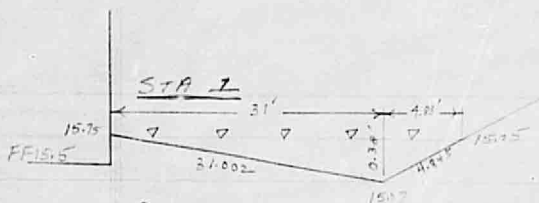
$$\text{Assume } C = 1.0, I_{100} = 5.4 \text{ in/hr}$$

$$Q = CIA$$

$$Q = (1.0) (5.4) \left(\frac{21568}{43560} \right)$$

$$Q_{100} = 2.67 \text{ CFS}$$





CAPACITY

$$A = (31)(0.38)(0.5) + (4.8)(0.38)(0.5)$$

$$A = 5.89 + 0.92$$

$$A = 6.81 \text{ ft}^2$$

$$WP = 31.002 + 4.845$$

$$WP = 35.847$$

$$R = \frac{A}{WP}$$

$$R = 6.81 / 35.847$$

$$R = 0.190$$

$$S = 0.75 / 82'$$

$$S = 0.009$$

$$n = 0.013 \text{ Assumed}$$

$$Q_{cap} = \frac{1.49}{n} A R^{2/3} S^{1/2}$$

$$Q_{cap} = \left(\frac{1.49}{0.013} \right) (6.81) (0.190)^{2/3} (0.009)^{1/2}$$

$$Q_{cap} = 27.34 \text{ CFS}$$

Runoff

Area Drained

$$42 \times 48 = 2016 \text{ Bowling Alley } \frac{1}{2} \text{ of roof to stair. 1}$$

$$42 \times 67 = 2814 \text{ Paved area to Bowling Alley}$$

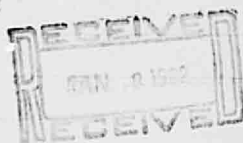
$$64 \times 64 = 4096 \text{ } \frac{1}{4} \text{ of new Bldg.}$$

$$\text{Area} = 8926$$

$$\text{Assume } C = 1.0, I_{100} = 5.4 \text{ in/hr}$$

$$Q = C I A$$

$$Q_{100} = (1)(5.4) \left(\frac{8926}{43.560} \right) = 1.11 \text{ CFS}$$





CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION



HYDROLOGY SECTION PROJ. NO. H-22 DATE: 6/6/81

PLANNING DIVISION NO. _____

CONFERENCE RECAP

SUBJECT: OTD BRAND PAINTS

WHO	REPRESENTING
ATTENDANCE: <u>C. EASTERLING</u>	<u>CITY</u>
<u>C. A. COONCE</u>	
<u>C. CASTANEDA</u>	<u>CITY</u>
_____	_____
_____	_____
_____	_____

FINDINGS: (AS MUCH AS POSSIBLE)

① BREAK CANTOURE, HAVE FLOW
WILL DRAIN TO CUR. OF J. TABOAN
OLEX NGTON & ^{REMAINING} FLOW WILL DRAIN
TO CUR. OF JUAN TABO & ALLEY
USE DRAIN PLATE HERE ACROSS SIDEWALK

② SHOW ADJ. PROPERTY FINISHED
GRADES

③ '79 GUIDELINES UNLESS SS CAPACITY
CAN BE DEMONSTRATED

4 OFFSIDE IN PAVED ALLEY IF
POSSIBLE

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: C. M. Easterling

SIGNED: C. Coonce

TITLE: P.A.C.E

TITLE: Engr.

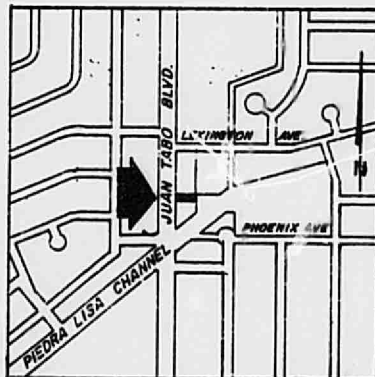
DATE: 6/8/81

DATE: 6/8/81

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY

LOCATION OF PROJECT

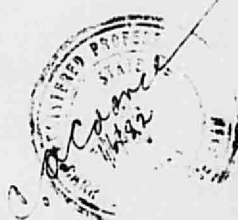


VICINITY MAP

H-21, H-22

Boea
Ray

3528
JUAN TABO AVE



STANDARD BRANDS PAINT CO.-12000 LEXINGTON AVE. N.E.

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 "Contract Documents for City-Wide Utilities and Cash Paving No. 30"
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.

APPROVALS	NAME	DATE	TITLE: BRENTWOOD HILLS ADDITION TRACT A	
A.C.E./DESIGN	<i>J.R. Kitch</i>	<i>11/1/83</i>	DRAIN LINES & CATCH BASIN	
INSPECTOR	<i>Ray Boea</i>	<i>2-3-83</i>	PERMIT NO.	MAP NO. H-22
A.C.E./FIELD			SHEET 1 OF 3	

CITY OF ALBUQUERQUE

DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY

CURVE DATA

$\Delta = 90^{\circ}00'00''$
 $R = 25'$
 $T = 25'$
 $L = 39.27'$

NE.

BLVD.

TABO

JUAN

LEXINGTON AVE. N.E.

TRACT A, BLOCK III.

ALLEY

EXIST. DOUBLE "C" CATCH BASIN

PROPOSED SINGLE "D" CATCH BASIN

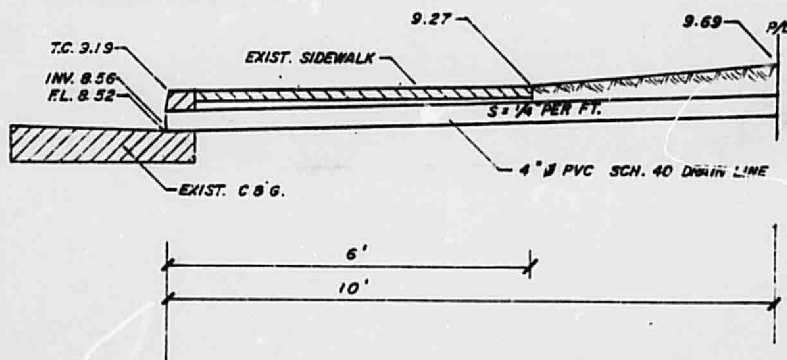
APPROVALS	NAME	DATE	TITLE: BRENTWOOD HILLS ADDITION	
A.C.E./DESIGN	<i>W. K. Kitch</i>	<i>12-1-83</i>	TRACT A	
INSPECTOR	<i>Ray Dora</i>	<i>2-3-83</i>	DRAIN LINES & CATCH BASIN	
A.C.E./FIELD			PERMIT NO.	MAP
			SHEET 2 OF 3	NO. H-22

CITY OF ALBUQUERQUE

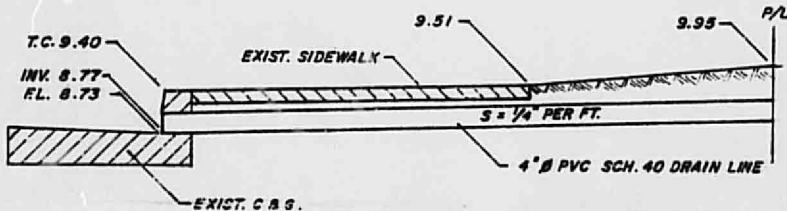
DRAINAGE FACILITIES WITHIN CITY RIGHT-OF-WAY

BASE ELEV. = 5600.00 FT

①



②

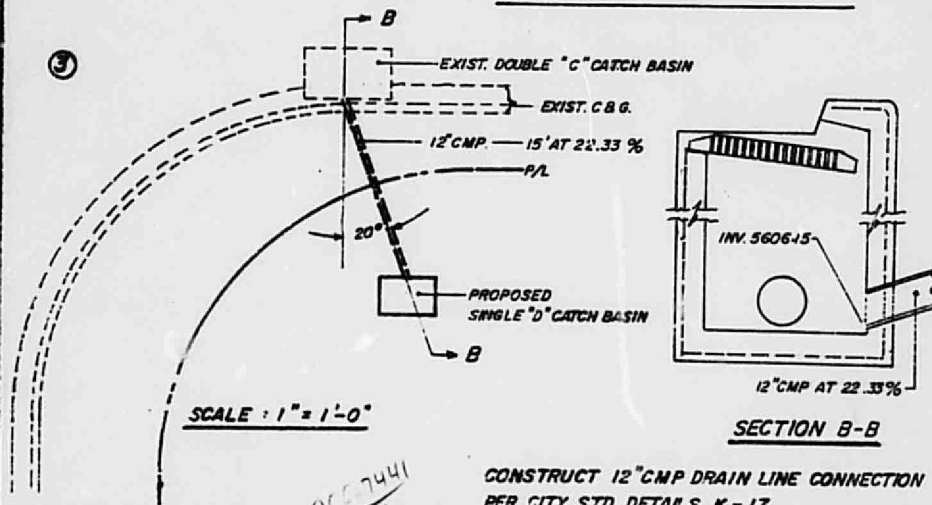


① ②

SCALE: 1/2" = 1'-0"

CONSTRUCT DRAIN LINES PER CITY
STD. DETAILS K-15

③



SCALE: 1" = 1'-0"

SECTION B-B

CONSTRUCT 12" CMP DRAIN LINE CONNECTION
PER CITY STD. DETAILS K-17

APPROVALS	NAME	DATE	TITLE: BRENTWOOD HILLS ADDITION TRACT A DRAIN LINES & CATCH BASIN
A.C.E./DESIGN	<i>W. H. H. H.</i>	18 JUN 82	
INSPECTOR	<i>Ray B. B.</i>	2-3-82	
A.C.E./FIELD			PERMIT NO. SHEET 3 OF 3
			MAP NO. H-22

Address 2528 Juan Tabo N.E. Engr/Arch

Plans Approved F-13-F Cond.

Comments: H-22-D18

copy of plans dated June 25, 1983 regimens OK

Inspection Requested 2/28/83 Contractor Hughes & Son

Appr. 3/4/83 Disappr. 30 Day Temp.

Comments: internal portion OK need inspection on alley
catch basin top in and downspouts into Juan Tabo
3/1/83, 3/3/83 contractor needs 60 day temp. to finish
work within city right of way Bill Kearny sees no problem
in releasing a temp.