HYDROLOGY

K20/D18

K20/D18

DRAINAGE PLAN

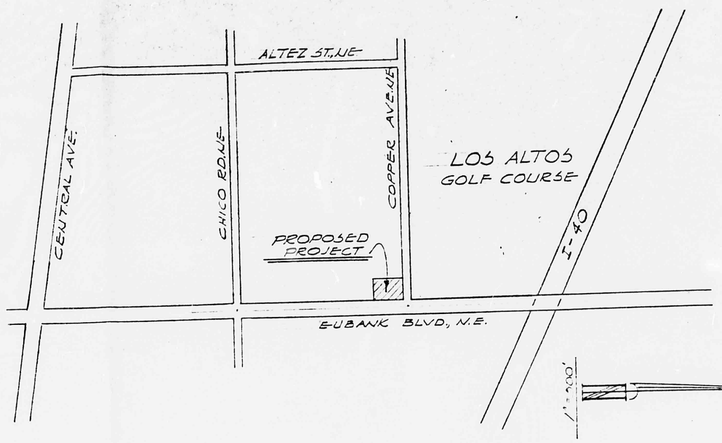
425 KUBANK BLVD. N.E.

1 PLAN

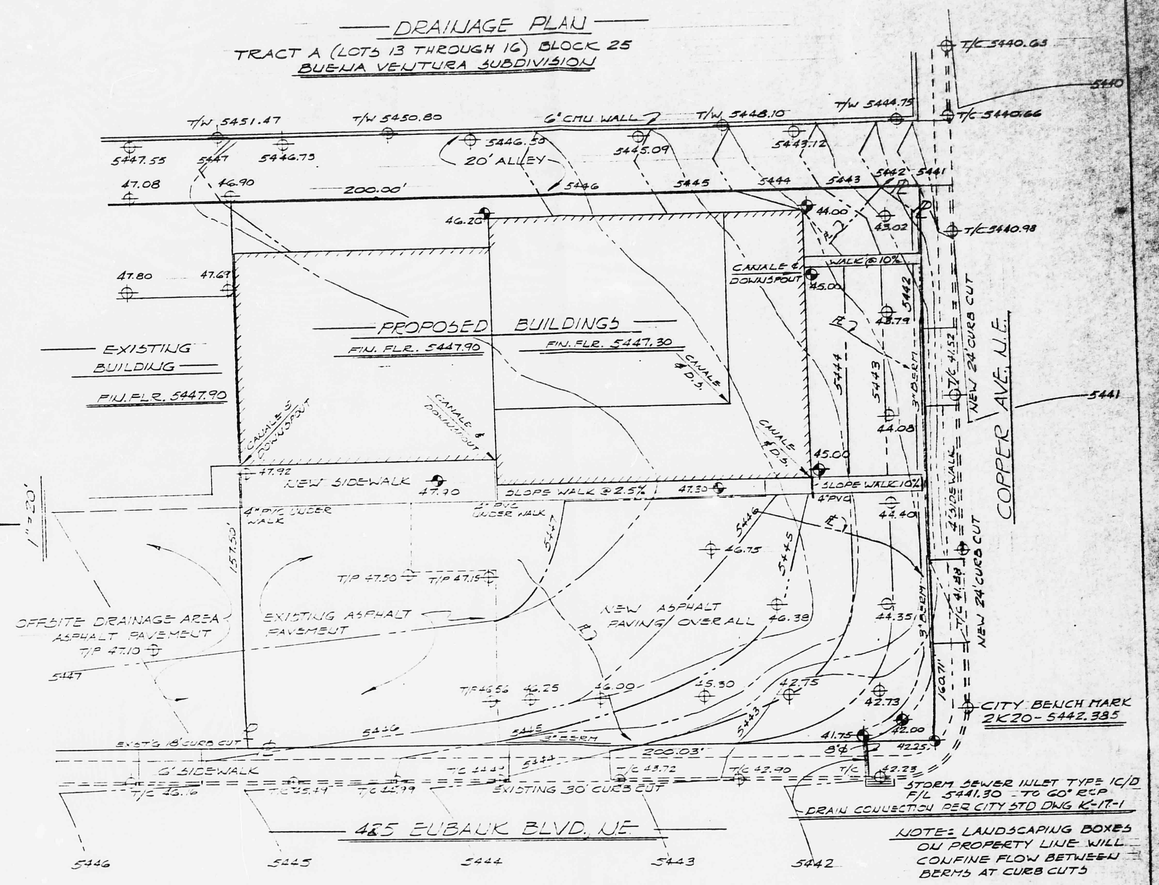
LEGEND

PROPERTY LINE
EXISTING CONTOUR
PROPOSED CONTOUR
EXISTING CURBS & WALKS
FLOW DIRECTION
EXISTING SPOT ELEVATION
PROPOSED SPOT ELEVATION

VICINITY MAP
K-20-Z



DRAINAGE PLAN
TRACT A (LOTS 13 THROUGH 16) BLOCK 25
BUENA VENTURA SUBDIVISION



NOTE: LANDSCAPING BOXES ON PROPERTY LINE WILL CONFINE FLOW BETWEEN BERMS AT CURB CUTS

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JUN 22 1983
ENGINEERING

PROJECT Drainage Plan for 425 Eubank Blvd, NE
DRAWN DLL **SHEET** 1 of 1 6/1/83

Off-site Drainage: Minimum, from 2500 sq. ft. (0.06Ac.) of paved parking lot to south of subject property.
Use 2.4" in 6 hr-100 year storm, I = 2.4 × 2.3 = 5.52", per DDM 22.2.D.2 & per DDM 22.2.C.2.3 & 4: Q = CIA = 0.975 × 5.52 × 0.06 = 0.32 cfs - Total Runoff Volume, at 100% impervious = 2.4"/12 × 2500 s.f. = 500 cu. ft.

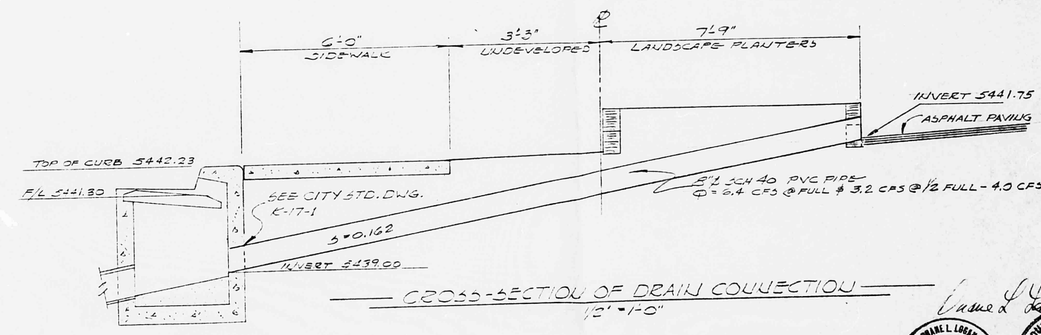
On-site Drainage: Area = 200' × 160' = 32000 sq. ft. = 0.735 Ac.
From Calcs above Q = 0.975 × 5.52 × 0.735 = 3.96 cfs
Total Runoff Volume @ 74% impervious = .74 × 3.4 12 × 32000 = 6016 cu. ft. — Say Max. Q = 4.00 cfs with off-site drainage

Area to be drained directly to existing Drop Inlet, Type C, per Pre-Design Meeting of 5/13/83 — Using City Std Dwg K-17, with 12" ϕ PVC and 3.0' drop in 17', capacity Q = B × 1.49/n × R^2/3 × S^1/2
B = 0.5 π = 0.79 s.f., n = 0.010, R = D/4 = 1/4 = 0.25 ∴ R^2/3 = 0.162
= 0.79 × 1.49/0.010 × .395 × .420 = 17.26 cfs — Go to 8" ϕ PVC

B = 7/12 × .33' = 0.34 s.f., R = D/4 = 0.67/4 = 0.168, R^2/3 = 0.302
Q = 0.34 × 1.49/0.010 × .302 × .420 = 6.40 cfs

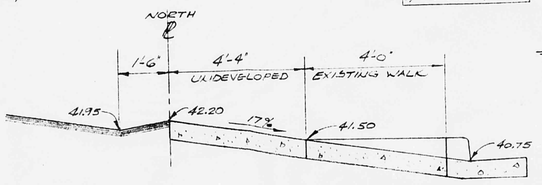
RECAP — 12" ϕ PVC SCH. 40 - Q = 17.3 cfs @ S = 0.176 (See 18-86)
@ 1/2 full, Q = 8.65 cfs ∴ n = 0.010
@ 1/4 full, Q = 3.26 cfs ∴ 4.06 max. cfs req'd

USE 8" ϕ PVC - Q = 6.4 cfs @ full ∴ S = 0.176
∴ Q = 3.20 cfs @ 1/2 full ∴ 1.20 cfs @ 1/4 full



CROSS-SECTION OF DRAIN CONNECTION
1/2" = 1'-0"

NOTES: NO EXISTING 4 STORY SINCE 1962
NO FLOOD HAZARD PER MAP 350002-0006
SEE NOTES ON 5-13-83 PRE-DESIGN CONFERENCE



DRIVEPAD DETAIL
(WORST CONDITION)
1/2" = 1'-0"

DUANE LEE LOGAN — NEW MEXICO — 2300 — REGISTERED PROFESSIONAL LAND SURVEYOR
DUANE LEE LOGAN — N. M. 2300 — REGISTERED PROFESSIONAL ENGINEER
6/10/83

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DRAINAGE PLAN	File # 483-4
For: NICK KAY CONSTRUCTION	Date 6-7-83
At: 425 EUBANK BLVD., N.E.	Drawn DLL
ALBUQUERQUE, N.M.	Sheet 1 OF 1

K20/D18