HYDROLOGY

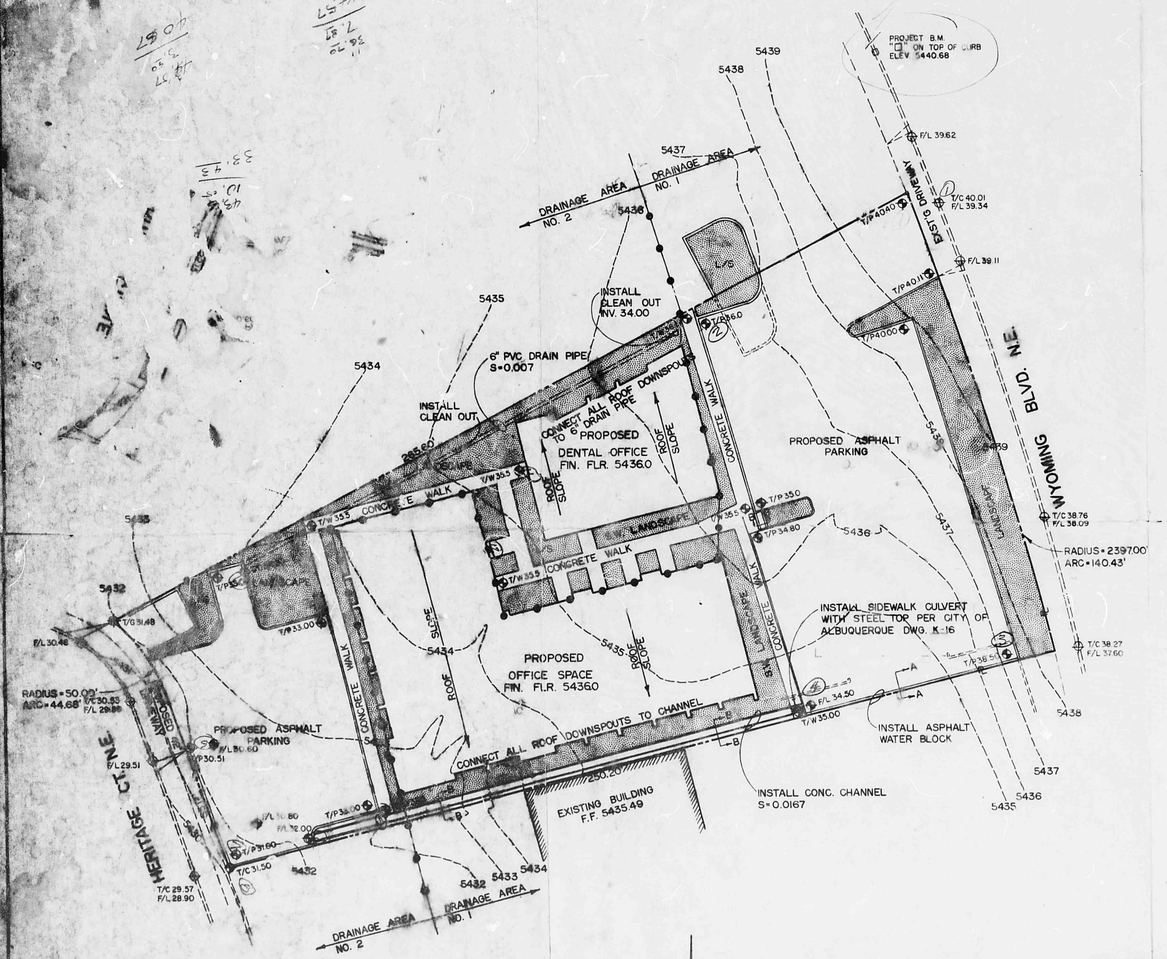
F19/D27
ONE PLAN

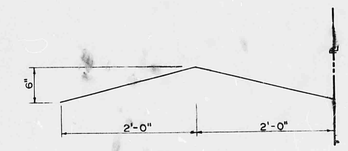
F19/D27

1 Plan

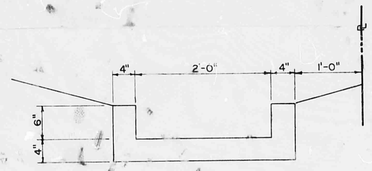
# DRAINAGE PLAN

TRACT BIBI, AMERICAN HERITAGE NORTH, UNIT 3
ALBUQUERQUE, NEW MEXICO
ZONE MAP F-19 BENCHMARK I-E20 ELEV. 5464.12
FLOOD MAP 17 SOIL TYPE "B"
TOTAL AREA = 27,750 S.F. = 0.637 ACRES
FILE NO. F19/D APPROVED




SECTION A-A
ASPHALT WATER BLOCK
1" = 1'-0"




SECTION B-B
CONCRETE CHANNEL
1" = 1'-0"

## HYDROLOGY

DRAINAGE AREA NO. 1
ROOF = 6034 S.F. X 0.90 = 5431
ASPHALT & WALKS = 8760 S.F. X 0.95 = 8322
LANDSCAPE = 3338 S.F. X 0.25 = 835
A = 18,132 14,588
A = 0.416 AC.
C = 0.80 I = 2.4 X 2.3 = 5.52
Q = 0.416 X 0.80 X 5.52 = 1.8 C.F.S.

DRAINAGE AREA NO. 2
ROOF = 2400 S.F. X 0.90 = 2180
ASPHALT & WALKS = 4293 S.F. X 0.95 = 4078
LANDSCAPE = 2925 S.F. X 0.25 = 731
A = 9618 S.F. 6969
A = 0.221 AC.
C = 0.72 I = 5.52
Q = 0.221 X 0.72 X 5.52 = 0.88 C.F.S.

DRAINAGE AREAS 1 & 2
Q1 + Q2 = 2.68 C.F.S. TOTAL DISCHARGE

## HYDRAULICS

DRAINAGE AREA NO. 1
0.5' X 2.0' CHANNEL AT S = 0.0167 $S^{1/2}$ = 0.13
A = 1.0 P = 3.0 R = 0.33 $R^{2/3}$ = 0.48
Q = 1.0 X 1.486 X 0.48 X 0.13 = 7.1 C.F.S — O.K.
0.013

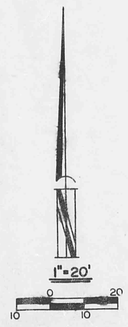
DRAINAGE AREA NO. 2
ROOF = 2400 S.F.
FOR PIPE:
A = 2400 S.F. = 0.055 AC. C = 0.95 I = 5.52
Q = 0.055 0.95 5.52 = 0.3 C.F.S.
6" PVC PIPE AT S = 0.007 $S^{1/2}$ = 0.08
A = 0.196 P = 1.57 R = 0.125 $R^{2/3}$ = 0.25
Q = 0.196 X 1.486 X 0.25 X 0.08 = 0.45 C.F.S. — O.K.
0.013

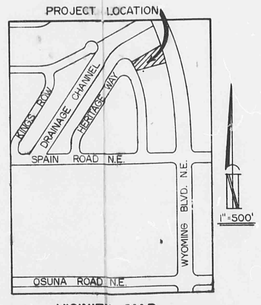
## EROSION CONTROL NOTES

THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE TO THE FOLLOWING:

1. NO SEDIMENT BEARING WATER SHALL BE ALLOWED TO DISCHARGE THE SITE DURING CONSTRUCTION.
2. DURING GRADING OPERATIONS AND UNTIL THE PROJECT HAS BEEN COMPLETED, ALL ADJACENT PROPERTY, RIGHTS OF WAY, AND EASEMENTS SHALL BE PROTECTED FROM FLOODING.
3. ANY AND ALL SEDIMENTATION ORIGINATING ON THE SITE WHICH IS DEPOSITED WITHIN PUBLIC RIGHT OF WAY SHALL BE PROMPTLY AND COMPLETELY REMOVED BY THE CONTRACTOR.
4. CONTROL OF SEDIMENT-LADEN FLOOD WATERS WILL BE ACCOMPLISHED BY THE USE OF A COMPACTED EARTH BERM AT LEAST 12" HIGH. BERM SHALL BE LOCATED ALONG THE DOWNSTREAM PERIMETERS OF THE PROPERTY.

LEGEND
PROPERTY LINE
EXISTING CONTOURS 5435
PROPOSED CONTOURS 543
EXISTING SPOT ELEVATION
PROPOSED SPOT ELEVATION
FLOW DIRECTION
EXISTING CURBS
PROPOSED CURBS
DRAINAGE AREA BOUNDARY
SOUTHWEST LANDSCAPE




VICINITY MAP

RECEIVED
OCT 08 1986
HYDROLOGY SECTION

DUANE LEE LOGAN
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER
10-8-86

LOGAN/GROSS & ASSOCIATES, INC.
CONSULTING CIVIL ENGINEERS
923 6TH ST. N.W. SUITE 1 243-6353
ALBUQUERQUE, NEW MEXICO 87102

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|---|---|
| DRAINAGE PLAN | FILE # H-138 |
| FOR: MICHAEL DEL MASTRO | DATE 10/6/86 |
| AT: 5343 WYOMING, N.E. | DRAWN C.L.L. |
| ALBUQUERQUE, N.M. | SHEET 1 OF 1 |