HYDROLOGY

H16/D81
ONE PLAN

H16-D81

1 PLAN

# DRAINAGE PLAN

LOTS 17 & 18, BLOCK "N", NETHERWOOD PARK

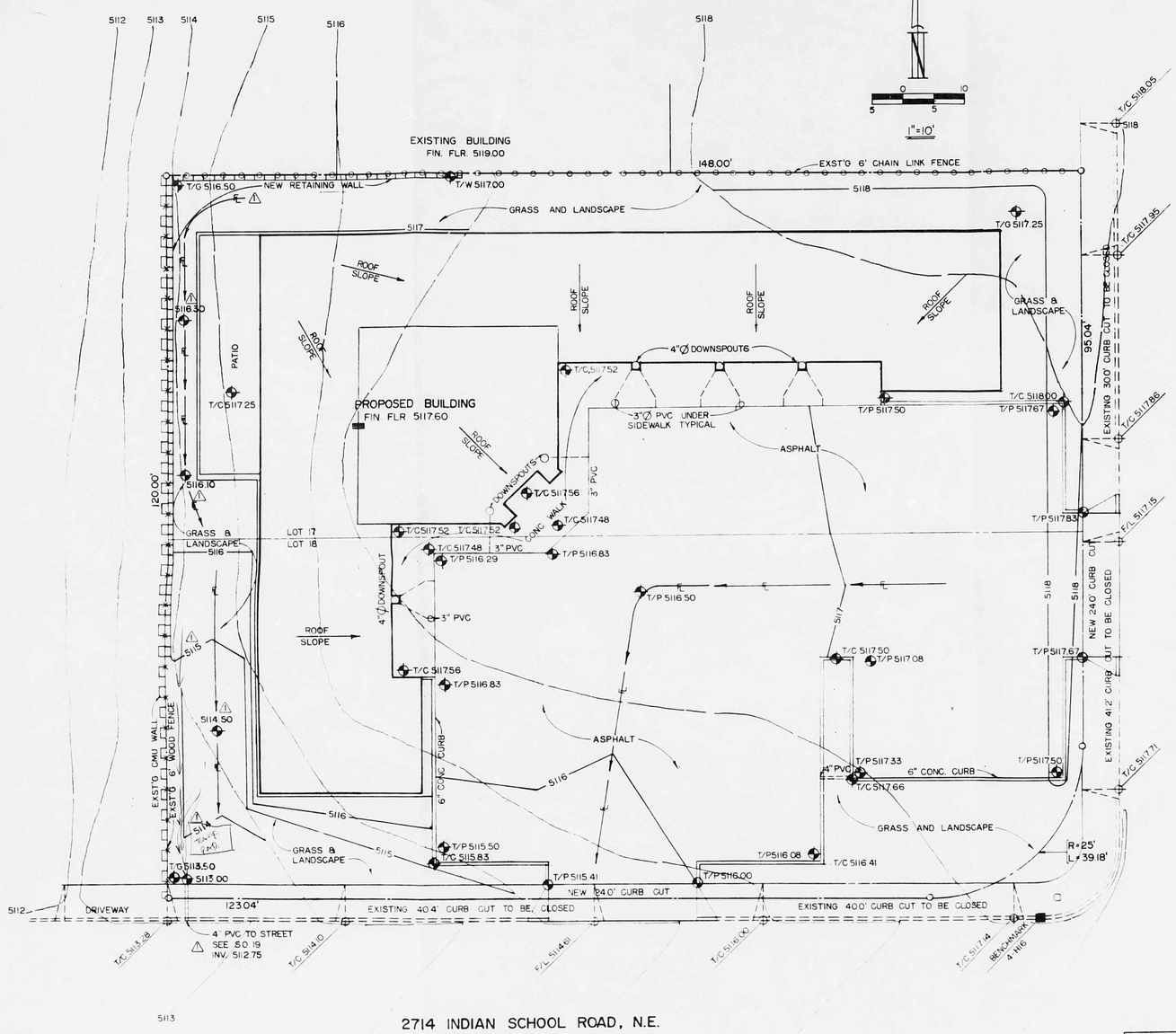
ALBUQUERQUE, NEW MEXICO

FLOOD MAP 29 — BENCHMARK 4-H16 — ELEV. 5117.14 — SOIL TYPE "B"

TOTAL AREA: 17,760 SQ. FT. = 0.408 ACRES

TOTAL AREA ROOFED OR PAVED: 13,000 S.F. = 73%

FILE # H16-D81 APPROVED: _____




## HYDROLOGY

OFF SITE DRAINAGE: NONE, & FLOW FROM PROPERTY TO NORTH IS DIVERTED TO GIRARD BY AN ASPHALT CURB.

ON SITE DRAINAGE: A = 0.408 AC., C(PROPOSED) = 0.71, I = 2.2 X 2.15 = 4.73 — $Q_{100}$ = 0.71 X 4.73 X 0.408 = 1.37 CFS — $Q_{10}$ = 0.92 CFS — VOLUME PER CN88 = 1.2" X 17,760 SQ. FT. = 1775 CUBIC FEET.
Q(EXISTING) = 0.60 Q = 0.60 X 4.73 X 0.408 = 1.16 CFS = 85% OF PROPOSED.

DOWNSTREAM FACILITIES: FLOW ENTERS INDIAN SCHOOL ROAD (60' WIDE WITH A CAPACITY OF 120 CFS AT S = 0.0275) THENCE TO PRINCETON DRIVE (32' WIDE WITH A CAPACITY OF 100 CFS AT S = 0.017) THENCE TO THE CITY PONDING AREA ON THE SOUTH SIDE OF THE AMAFCA NORTH DIVERSION CHANNEL.

∴ DOWNSTREAM CAPACITY IS ADEQUATE FOR ADDITIONAL 0.21 CFS FROM PROPOSED IMPROVEMENT.

FREE DISCHARGE FROM SOUTH 24' CURB CUT IS REQUESTED.

## HYDRAULICS

24' CURB CUT TO CARRY 1.37 CFS WITH AVERAGE DEPTH OF 4".
A = 7.92 SQ. FT., R = 0.33, S = 0.035, n = 0.017, CAPACITY = 7.92 X 1.486 X 0.477 X 0.187/0.017 = 6.17 CFS ∴ CURB CUT IS ADEQUATE.

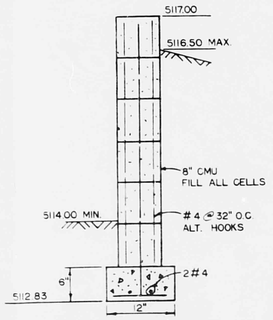
## GENERAL NOTES

SURFACE FLOW ACROSS THE LOT LINE WILL BE COVERED BY GRANT OF DRAINAGE EASEMENT BY OWNERS.

## 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.




RETAINING WALL DETAIL
1" = 1'-0"

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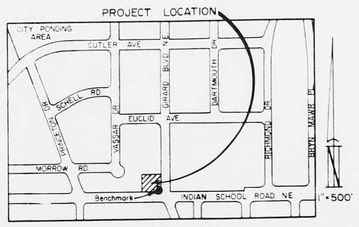
HYDROLOGY SECTION




VICINITY MAP
ZONE MAP H-16

## LEGEND

- PROPERTY LINE
- EXISTING CONTOUR
- PROPOSED CONTOUR — 5112
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- EXISTING CURB
- EXISTING CMU WALL
- EXISTING CHAIN LINK FENCE
- EXISTING WOOD FENCE

△ REVISION 10/29/85 & 12/6/85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| | |
|---|---|
| DRAINAGE PLAN | File # H-179 |
| For: JAMES WRIGHT | Date 8/30/85 |
| At: 2714 INDIAN SCHOOL ROAD, N.E. | Drawn CLL |
| ALBUQUERQUE, NEW MEXICO | Sheet 1 OF 1 |

DUANE LEE LOGAN — NEW MEXICO 2300 — REGISTERED PROFESSIONAL ENGINEER

9-19-85

HYDROLOGY

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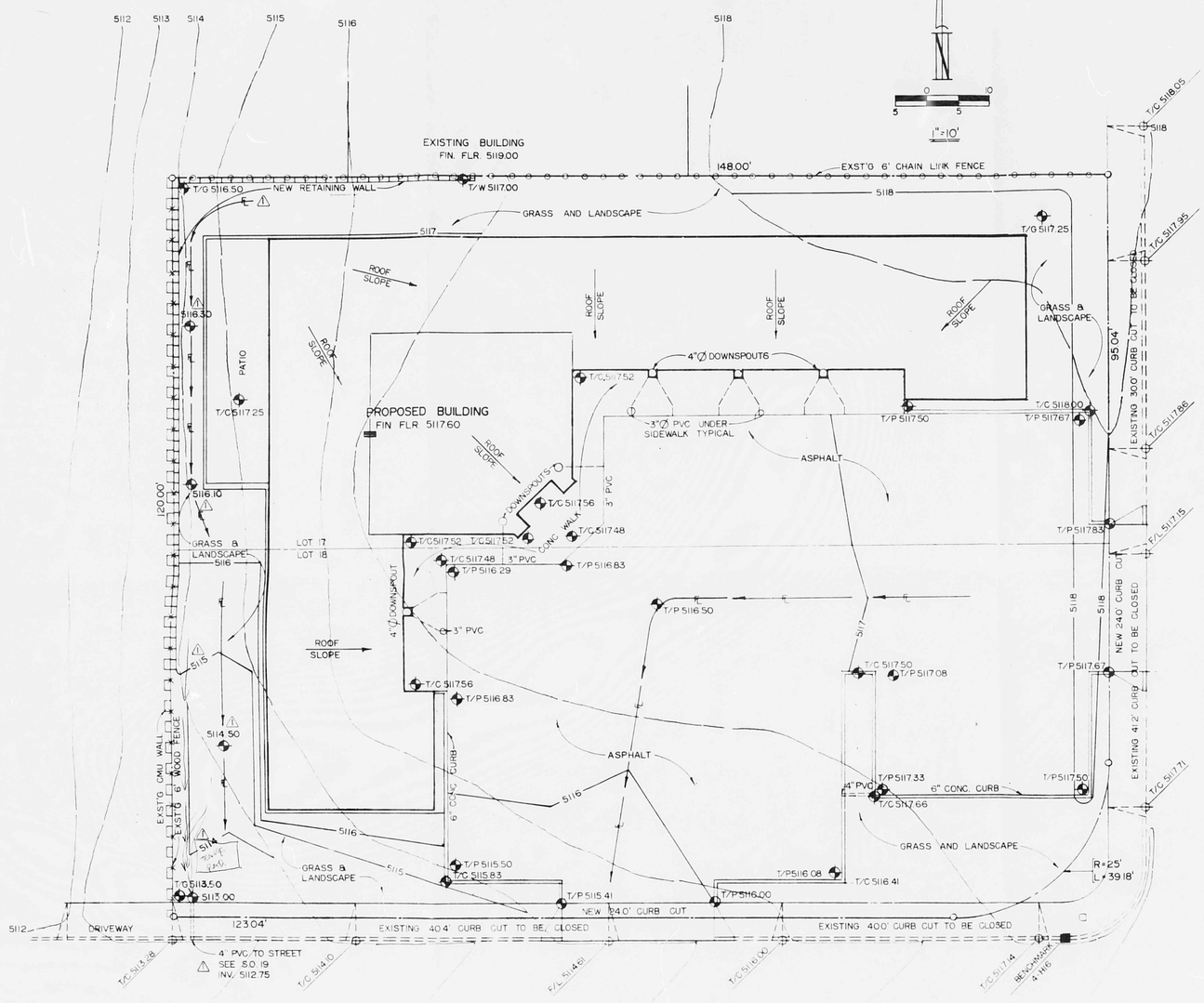


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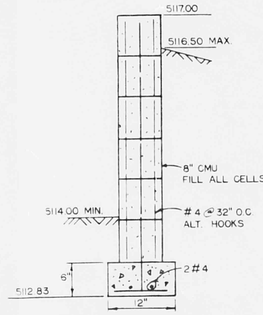


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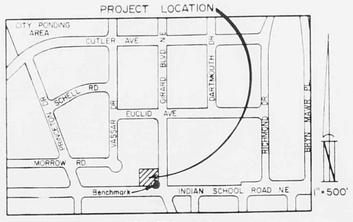


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ZONE MAP H-16

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