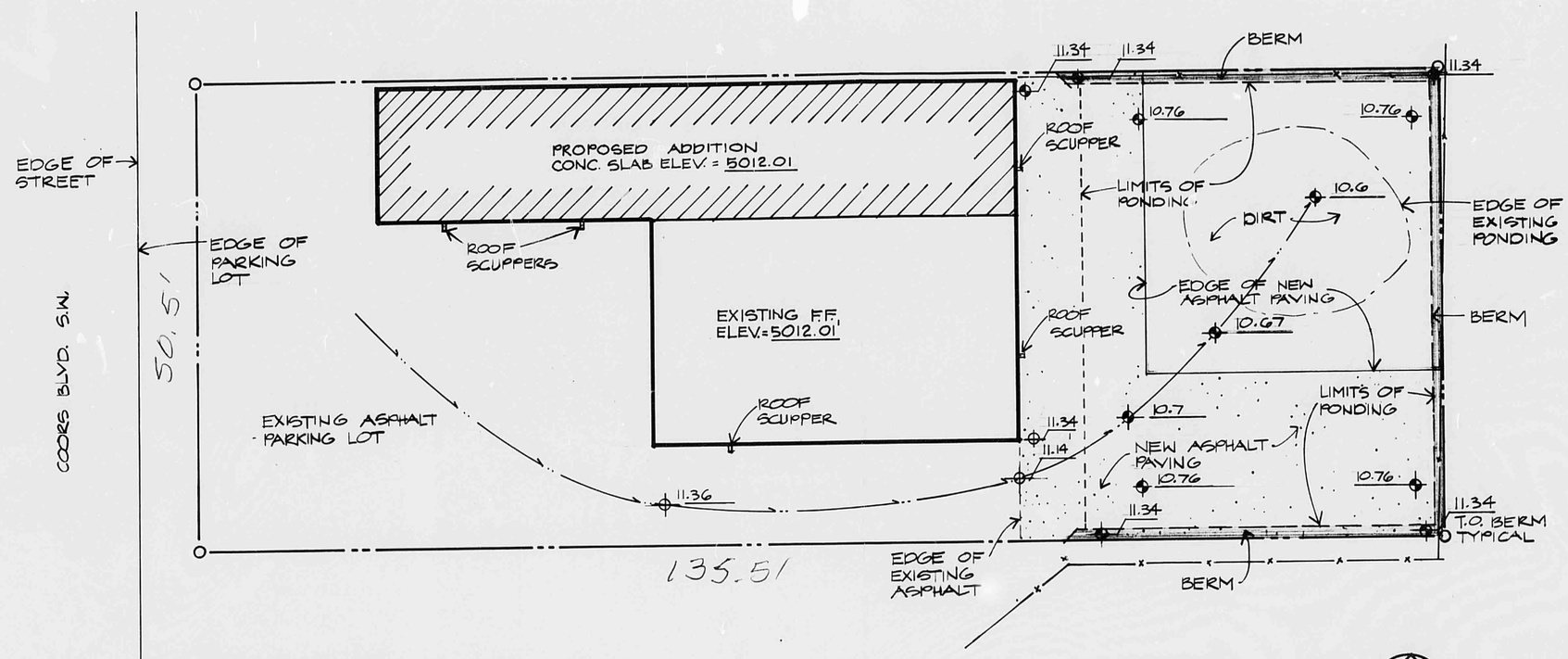
HYDROLOGY K11/D39 OFFICE/WAREHOUSE ADDITION

XII/D39

OFFICE/WAREHOUSE

ADDITION

1 PLAN



DRAINAGE PLAN

SCALE 1" = 10'

PROJECT BENCHMARK

A 3 1/4" ALUMINUM TABLET STAMPED "ACS, N.M. 45-2A, 1984" SET IN CONC. FLUSH WITH THE ROAD. LOCATED IN THE CENTER OF COORS BLVD. 225' SOUTH OF THE INTERSECTION OF COORS BLVD. & CHURCHILL RD. ELEVATION : 5011.843 FEET (M.S.L.D.)

LEGEND

- EXISTING SPOT ELEV.
- PROPOSED SPOT ELEV.
- SWALE
- FENCE
- PROPERTY LINE
- NEW ASPHALT PAVING

Rainfall = 2.2 inches

PEAK RATE OF RUNOFF : Q in cfs

METHOD - THE RATIONAL FORMULA

C = .98 FOR ROOF & PAVING — FROM PLATE 22.2 C-1 DPM
.91 FOR DIRT — FROM PLATE 22.2 C-1 DPM
i = 1.87"/HR. — FROM PLATE 22.2 D-2 DPM

A = .15 ACRES TOTAL
.02 ACRES DIRT
.13 ACRES ROOF & PAVING

Q(DIRT) = .91 × 1.87 × .02 = .03 cfs
Q(ROOF & PAVING) = .98 × 1.87 × .13 = .24 cfs

Q TOTAL = .27 cfs

VOLUME OF RUNOFF - 100 YR EVENT : V CU. FT.

RAINFALL ÷ 12 × AREA (SQ. FT.) × C = V CU. FT.

V (DIRT) = (~~1.87~~ 2.20 ÷ 12) × 1024 SQ. FT. × .91 = ~~149~~ 171 CU. FT.
V (ROOF & PAVING) = (~~1.87~~ 2.20 ÷ 12) × 5726 SQ. FT. × .98 = ~~897~~ 1029 CU. FT.

V TOTAL = ~~1046~~ CU. FT.
1200

~~A = [illegible]~~

A = 6534 sq. ft.

V = (2.2 ÷ 12)(C .97)(6534) = 1162 cu. ft.

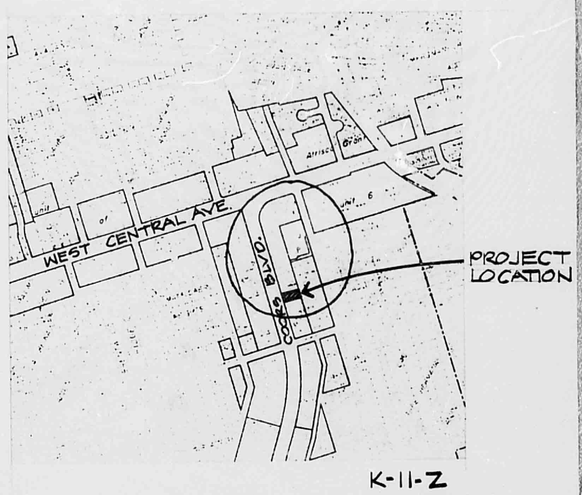
DRAINAGE NARRATIVE

THE PROPOSED PROJECT INTERCEPTS NO OFF-SITE FLOWS OF ANY SIGNIFICANCE. NUISANCE FLOWS ORIGINATING ON THE SITE ARE TO BE CONTAINED ON SITE. THE POND WILL BE CREATED BY BERMING THE SOIL ALONG THE NORTH, EAST, & SOUTH PROPERTY LINES @ THE REAR 1/3 OF THE SITE. IT HAS BEEN DETERMINED THROUGH OBSERVATION, THAT WATER CURRENTLY PONDING ON THE SITE PERCOLATES IN 6-8 HOURS. DURING A 100 YR. EVENT THE FLOW GENERATED ON SITE WILL BE CONTAINED IN THE POND HAVING AN AVERAGE DEPTH OF 7" IN AN AREA 38' × 48'.

d = 0.66 ft
or 7.9 inches

12/12/85

APPROVED FOR DRAINAGE
12/12/85
SIGNATURE
ADVISE DRAINAGE INSPECTOR WHEN GRADING EXECUTED



K-11-Z

VICINITY MAP

SCALE 1" = 800'

NORTH

RECEIVED
DEC 09 1985
HYDROLOGY SECTION