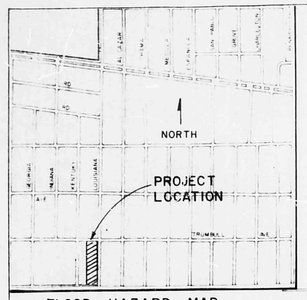
HYDROLOGY

L18/D8
ONE PLAN

L18-D8

1 PLAN




FLOOD HAZARD MAP

**BENCHMARK**

CITY OF ALBUQUERQUE BENCHMARK
LOCATE AT THE NNW. CURB RETURN
TRUMBULL & LOUISIANA S.E.
ELEV.=5327.69

**LEGAL DESCRIPTION**

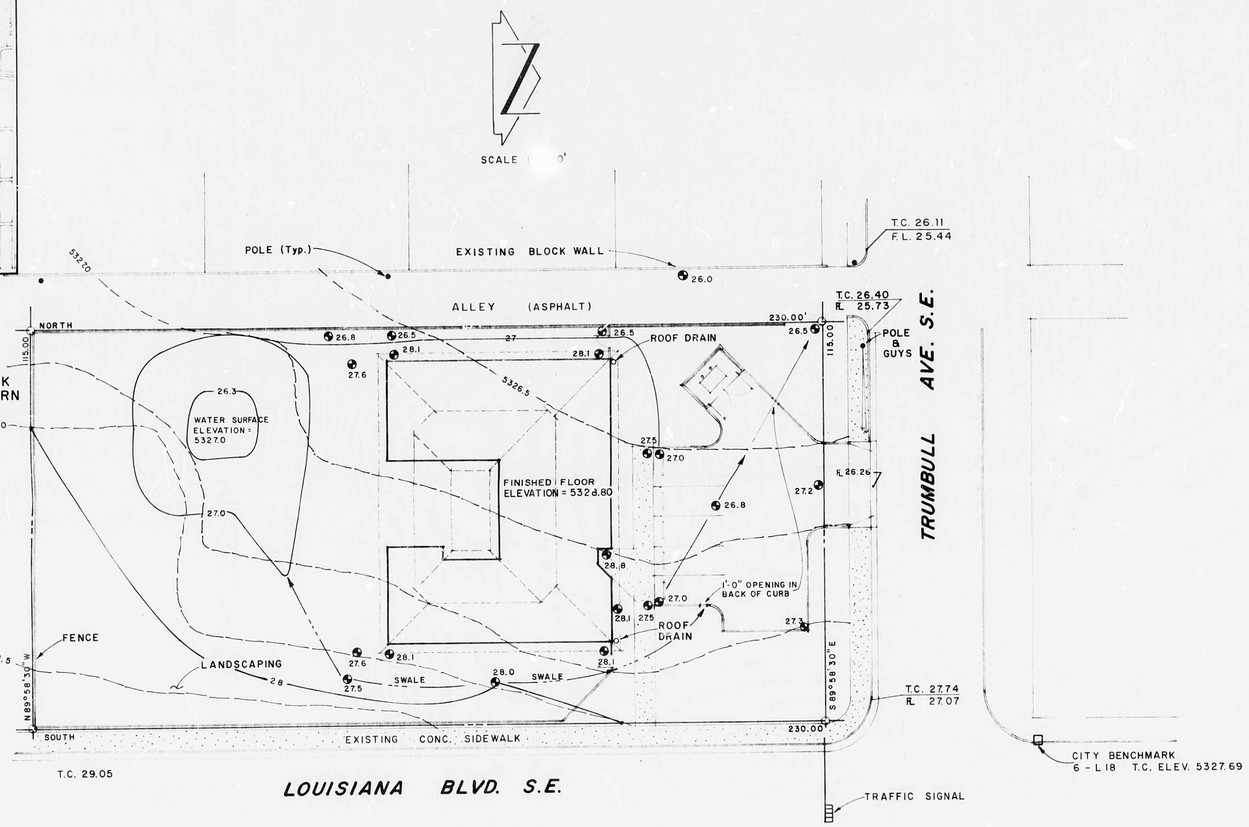
PARCEL A, BLOCK 24
MESA PARK ADDITION

**ADDRESS**

7100 TRUMBULL S.W.

**SOILS**

TIJERAS Tg B. SOIL GROUP B




DRAINAGE PLAN

The following items concerning the Albuquerque Association of Retarded Citizens Drainage Plan are contained hereon:

1. Vicinity Map
2. Flood Hazard Map
3. Grading Plan
4. Calculations

The proposed building is located at the southwest corner of the intersection of Trumbell Avenue and Louisiana Boulevard S.E. The building will be used as a home for the mentally retarded with associated parking for visitors and staff.

The project site is bordered on the east by Louisiana Boulevard and on the north by Trumbell Avenue. The site is approximately even with both streets. The site is bordered on the west by an alley and is higher than the alley. The land to the south is at the same elevation more or less as the project site; consequently, offsite flows of any significance will not enter the site. The project (1) does not lie in a flood plain, (2) does not lie adjacent to a natural or artificial water course and (3) has no drainage easements on the property.

The site has been graded so that the finished floor elevation of the building is one foot (1') above the flood elevation in that area. The water that falls on the back yard will be conveyed into a pond for percolation. All roof waters and water from the front parking area will be discharged directly into Trumbell Avenue.

The existing grading plan shows (1) existing contours at 0'-6" intervals, (2) proposed grades indicated by spot elevations and contours, (3) swales, (4) continuity between the proposed and existing elevations, (5) that sidewalks are adjacent to the property line, (6) that runoff will be conveyed either to a pond or directly into the street, (7) that retaining walls will not be required and (8) that erosion will not result from upland runoff or the proposed construction activity.

**Calculations**

Area of Parcel = 0.61 ac
Impervious Area = 0.20 ac
Pervious Area = 0.41 ac

Composite $C_N = \frac{0.41}{0.61}(79) + \frac{0.20}{0.61}(98) = 85$

From Farmington Plate 4
percent ponding = 17%

Rear Yard Area = 0.26 ac ÷ 0.61 = 43%

Required Pond Volume = 0.61 x 43560 x 0.17 x 2.5 ÷ 12 = 941 cf

Actual Pond Volume = $\frac{6.2+0.8}{2}(400)0.7 = 980$ cf

**Undeveloped**

Q = CIA = 0.40 (5.4) 0.61 = 1.32 cfs.

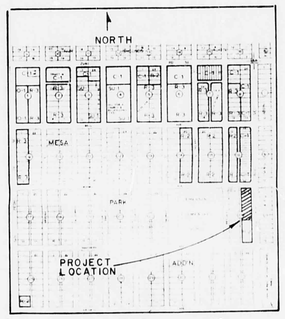
**Developed**

Composite $C = 0.40\left(\frac{0.41}{0.61}\right) + 0.95\left(\frac{0.20}{0.61}\right) = 0.58$

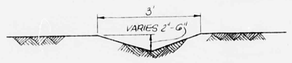
Q = 0.58 (5.4) 0.61 = 1.91 c.f.s.

**LEGEND**

- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- PROPOSED CONTOUR
- EXISTING CONTOUR




VICINITY MAP L-18




TYPICAL SWALE DETAIL
SCALE 1"=2'

JOB NO. 8-1152

L18/D8

STATE OF NEW MEXICO
W. L. BURNS No. 774
R. J. PETERS No. 789
ALBUQUERQUE N.M.
REGISTERED ARCHITECT

Architect

REGISTERED PROFESSIONAL ENGINEER
STATE OF NEW MEXICO
THOMAS E. MANN
3782
NEW MEXICO
PROFESSIONAL LAND SURVEYOR
12/30/81

Engineer

GROUP HOME
FOR
SEVERELY RETARDED ADULTS
ALBUQUERQUE ASSOCIATION FOR RETARDED CITIZENS

PROJECT 81-19

THE BURNS/PETERS GROUP
Architects & Planners
8000 Pennsylvania Circle NE
Albuquerque, New Mexico
87110 505 265 3645

Date

GRADING/DRAINAGE PLAN

C-2

Sheet No.