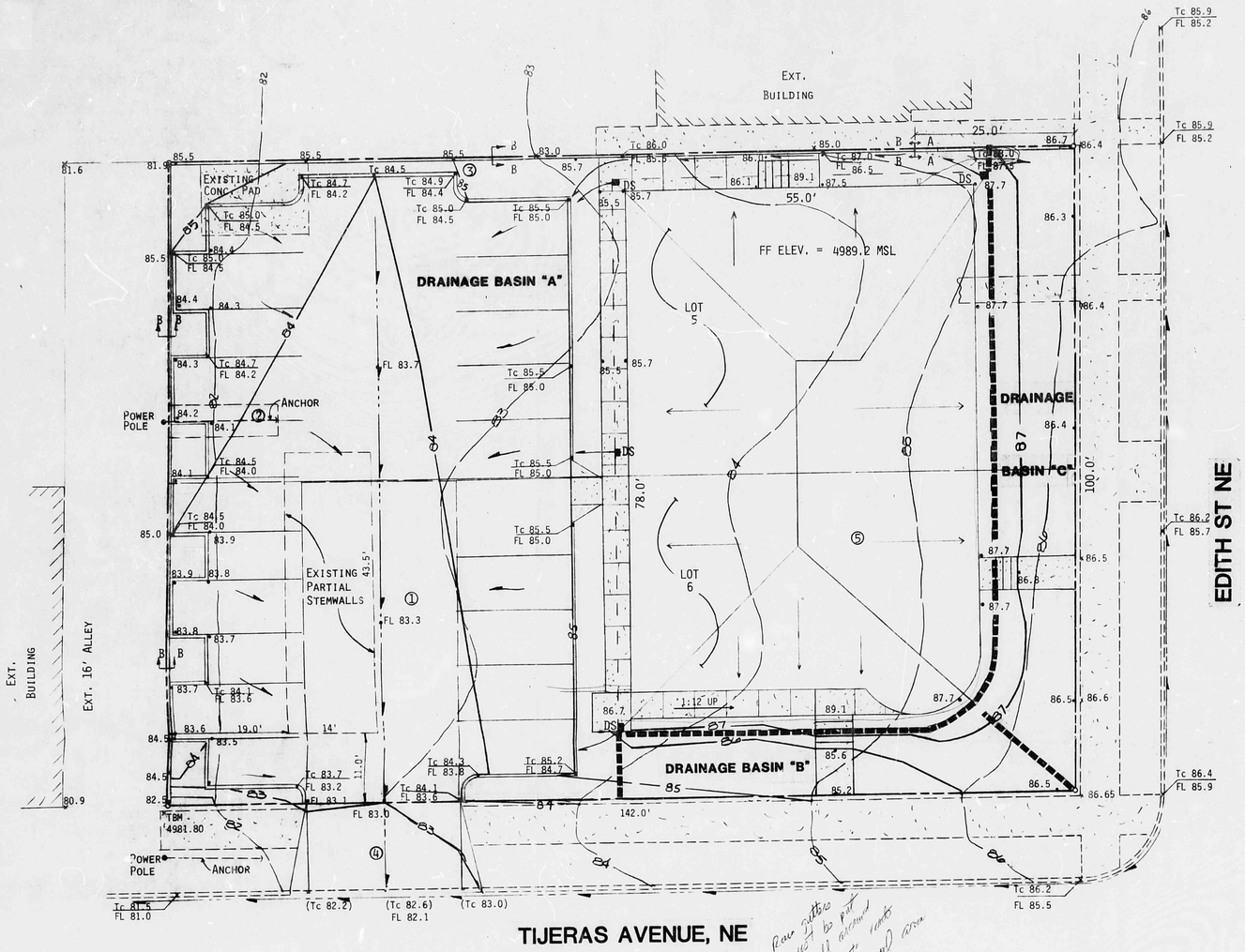
HYDROLOGY

K14/D28
ONE PLAN

X 14/D28

1 PLAN




**LEGAL DESCRIPTION** Lots 5 & 6 of Block 3 of the Belvidere Addition as filed in the office of the County Clerk, Bernalillo County, New Mexico.

**FLOOD HAZARD** This site (Lots 5 & 6) is not subject to any established floodway as determined by Panel 28 of the FEMA flood hazard maps, nor does it contribute to any downstream flooding areas.

**SOILS** From the SCS Soils Survey of Bernalillo County, soils are classified as Cu, which has a hydrologic classification of "A".

**SURVEYOR** Hall Surveying Co., October, 1985.

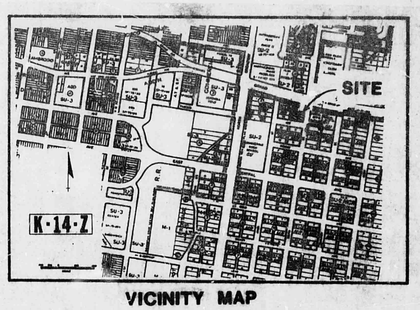
**BENCHMARK** ACS Brass Cap 17K-14, located in the intersection of Central Avenue and Arno Street.
Elev. = 4977.88

Temporary Benchmark: 'X' chiseled in top of sidewalk adjacent to SW property corner.
Elev. = 4981.80

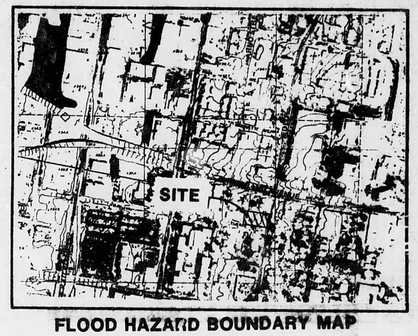
**EROSION CONTROL** Contractor performing the site work shall insure that sediment from the site remains on-site by maintaining an earth berm around the perimeter. Contractor may substitute an alternate erosion plan with the engineer's approval.

**OFF-SITE DRAINAGE (UPSTREAM)** The site is surrounded by fully developed areas. Storm waters generated by upland properties are diverted north and south by Edith Street.

(Downstream Capacity): Storm waters falling in drainage area "A" exit the site via the drive pad onto Tijeras Avenue. Tijeras also accepts storm waters from drainage area "B" that sheet flows over the curb. Tijeras carries this flow west one block where Arno Street then intercepts the flow carrying it one block north to a drop inlet on Grand Avenue. Drainage area "C" discharges as sheet flow over the curb onto Edith Street where it is carried north to Grand Avenue. This flow is then carried west on Grand to the same drop inlet.




VICINITY MAP




FLOOD HAZARD BOUNDARY MAP

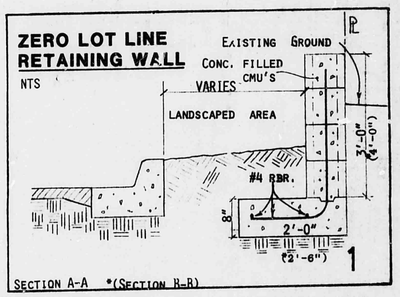
PANEL 28

**ON-SITE DRAINAGE CHARACTERISTICS**

D = 2.25" = 0.188'
I = (2.25)(2.16) = 4.86
Q = C I A (CFS)
$Q_{10}$ = (0.657) $Q_{100}$

| | | C Factor |
|---|---|---|
| Area A | 12,240 sq. ft. | 0.90 |
| Area B | 750 sq. ft. | 0.20 |
| Area C | 1,210 sq. ft. | 0.18 |
| Total | 14,200 sq. ft. | |

| | Existing Residential C (dev) = 0.55 | | | | Proposed Land-Use | | | |
|---|---|---|---|---|---|---|---|---|
| | $Q_{100}$ (CFS) | $Q_{10}$ (CFS) | $V_{100}$ (CU FT) | $V_{10}$ (CU FT) | $Q_{100}$ (CFS) | $Q_{10}$ (CFS) | $V_{100}$ (CU FT) | $V_{10}$ (CU FT) |
| Area A | .75 | .49 | 1262 | 829 | 1.23 | .81 | 2065 | 1357 |
| Area B | .04 | .03 | 77 | 51 | .02 | .01 | 28 | 18 |
| Area C | .07 | .05 | 125 | 82 | .02 | .01 | 41 | 27 |
| Total | .86 | .57 | 1464 | 962 | 1.27 | .83 | 2134 | 1402 |




**KEYED NOTES:**

1. 24' X 50' drainage easement allows free discharge onto Lot 6 from Lot 5 (to be recorded upon approval of grading & drainage plan).
2. 5' X 17' anchor easement recorded 5/17/77, Bk. Misc. 536, Pg. 396-397.
3. Zero lot line retaining wall (See detail 1).
4. 24' drive pad per Standard City Detail, P-11.
5. See architectural plans for roof drain design and details.

**REVISION NO. 1**

Conceptual drainage plan revised to grading & drainage plan. FF elev. changed to 4989.2 MSL. Drainage basin areas and flow quantities revised to show all developed flows discharging via drivepad onto Tijeras Ave.

Scale: 1"=10'

**LEGEND**

| | |
|---|---|
| 82 | Existing Contour |
| 84 | Proposed Contour |
| X 86.6 | Existing Spot Elevations |
| X Fl 81.0 | Existing Flow Line Elevations |
| • 83.3 | Proposed Elevations |
| • Tc 85.2 | Top of Curb Elevations |
| | Drainage Swale |
| FF ELEV=88.2 | Finish Floor Elevation |
| | Lot Line |
| | Concrete Sidewalk |
| | Easement Boundaries |
| | Drainage Area Boundary |
| DS | Roof Overhang With Downspout Locations with flow direction |

RECEIVED NOV 13 1985 HYDROLOGY SECTION

REGISTERED PROFESSIONAL ENGINEER & LAND SURVEYOR NO. 3008 NEW MEXICO THOMAS O. ISAACSON

Date
Designed
Checked

Isaacson & Arfman, P.A.
CONSULTING ENGINEERING ASSOCIATES
Albuquerque, New Mexico

GRADING & DRAINAGE PLAN

EDITH OFFICE BLDG
305 EDITH STREET NE

Sheet
of