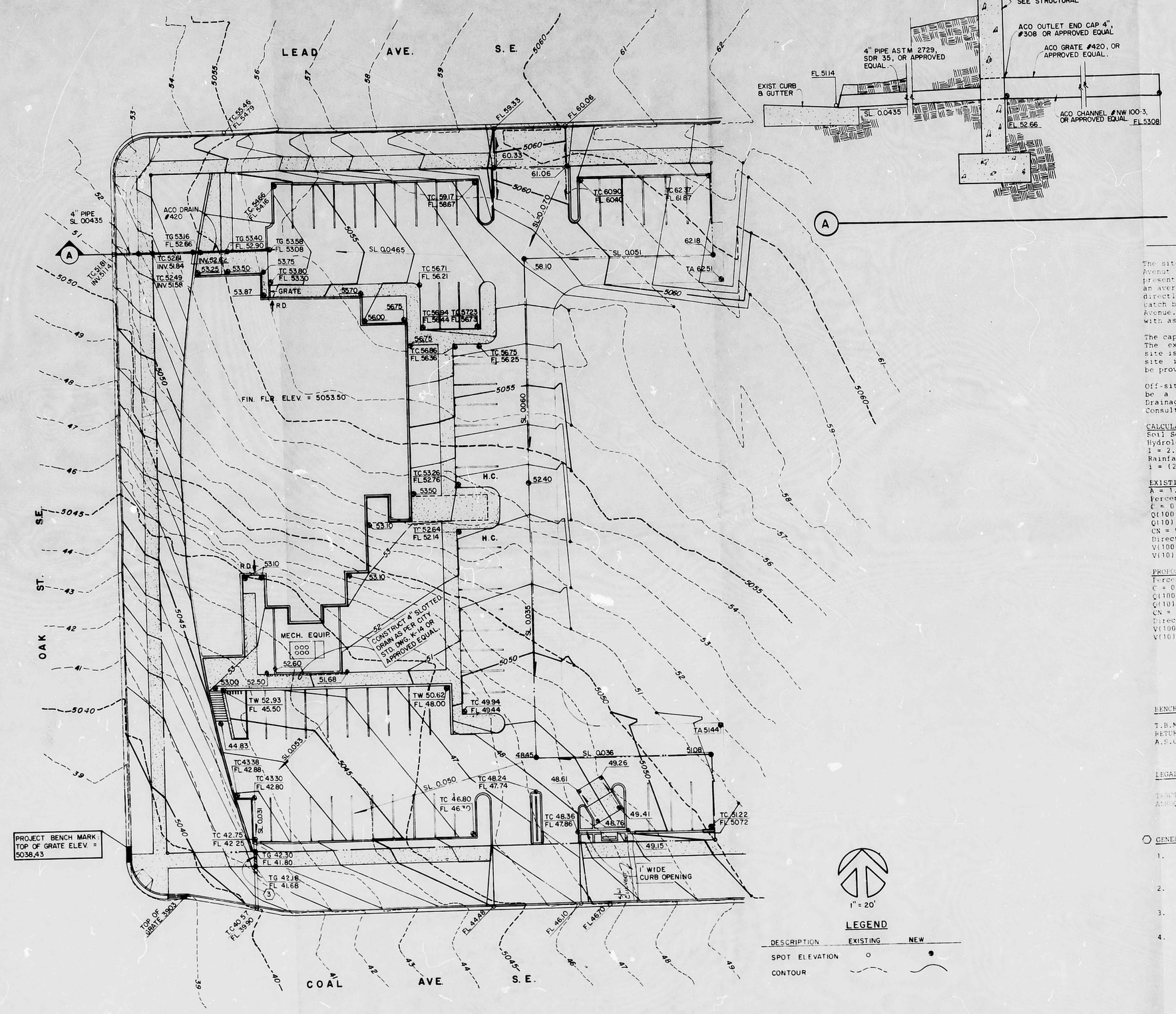
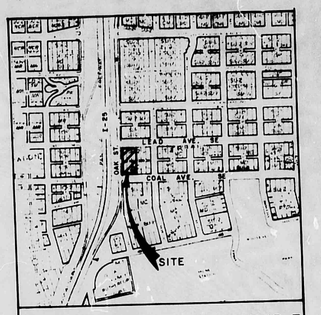
HYDROLOGY

K15/D30A
ONE PLAN

K 15 - D30A

PLAN





VICINITY MAP K-15-Z

DRAINAGE PLAN

The site is located along Oak Street between Lead Avenue and Coal Avenue S.E. containing approximately 1.1229 acres. The site is presently developed and slopes from northeast to southwest with an average slope of 6 percent. Flows from the site discharge directly to Oak Street and Coal Avenue and are intercepted by catch basins located at the intersection of Oak Street and Coal Avenue. Proposed development of the site includes a building with associated parking areas and landscaping.

The capacity of the storm relief system in this area is 765 cfs. The existing 100-year peak flow is 695 cfs. (AMDS-AP3603). The site is at the beginning of the hydrograph and the area of the site is almost completely developed, therefore ponding will not be provided on the site.

Off-site flows will enter the site from the east and there will be a drainage easement granted for this. (See the Conceptual Drainage Report for Presbyterian Medical Plaza by Chavez-Grieves Consulting Engineers submitted 7/28/85).

CALCULATIONS:
Soil Series - Cu
Hydrologic Soil Group - A
i = 2.2 in./hr. Plate 22.2 D-1
Rainfall = 2.3 in. Plate 22.2 D-1
i = (2.3)(2.2) = 5.06 in./hr.

EXISTING ON-SITE CONDITIONS:
A = 1.1229 acres
Percent Impervious = 98%
C = 0.92 Plate 22.2 C-1
Q(100) = (0.92)(5.06)(1.1229) = 5.23 cfs
Q(10) = (5.23)(0.657) = 3.43 cfs
CN = 90 Plate 22.2 C-2
Direct Runoff = 1.3 in. Plate 22.2 C-4
V(100) = (1.3)(1.1229)(43560)/12 = 5299 cu. ft.
V(10) = (4076)(0.657) = 2678 cu. ft.

PROPOSED ON-SITE CONDITIONS
Percent Impervious = 80%
C = 0.64 Plate 22.2 C-1
Q(100) = (0.64)(5.06)(1.1229) = 3.64 cfs
Q(10) = (3.64)(0.657) = 2.39 cfs
CN = 85 Plate 22.2 C-2
Direct Runoff = 1.0 Plate 22.2 C-4
V(100) = (1.0)(1.1229)(43560)/12 = 4076 cu. ft.
V(10) = (4076)(0.657) = 2678 cu. ft.

BENCH MARK:

T.B.M. CHISELED " □ " IN TOP OF CURB AT N.N.W. RETURN OF COAL AND CEDAR. ELEVATION = 5064.282.
A.S.C. - BRASS CAP "125-26" ELEVATION = 5068.8.

LEGAL DESCRIPTION:

TRACT "D" OF BLOCK 25-A OF THE TERRACE ADDITION, ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

GENERAL NOTES:

1. TOPOGRAPHIC INFORMATION SHOWN ON THIS PLAN IS BASED ON A SURVEY PREPARED BY ALBUQUERQUE SURVEYING CO. IN JANUARY, 1985.
2. FLOOD HAZARD BOUNDARY MAP PANEL 29 WAS REFERRED TO.
3. CONSTRUCT 12" WIDE SIDEWALK CULVERT - AS PER CITY STANDARD DWG. K-16.
4. CONTRACTOR IS RESPONSIBLE FOR EROSION CONTROL DURING CONSTRUCTION, INCLUDING ANY PROVISIONS THAT NEED TO BE TAKEN TO DIVERT ANY SEDIMENT FROM ENTERING THE CITY RIGHT OF WAY.

LEGEND

DESCRIPTION	EXISTING	NEW
SPOT ELEVATION	o	•
CONTOUR		

Rev. 10/9/85

RECEIVED MAR 11 1986 HYDROLOGY SECTION

APPROVED K15/D30A

ALBUQUERQUE CAR WASH & LUBE
PLAN TO ACCOMPANY SUBDIVISION PLAT
ALBUQUERQUE, NEW MEXICO
SECTION 23 T 10 N R 3 E
PHONE NO 842-8739
DRAWN BY MARCUS ASSOC LTD
DESIGNED BY CHAVEZ-GRIEVES CONSULTING ENGINEERS
CHECKED BY
DATE 12/27/85

VICTOR J. CHAVEZ STATE OF NEW MEXICO REGISTERED PROFESSIONAL ENGINEER

GRADING PLAN

G-3