HYDROLOGY

G19/D18

ONE PLAN

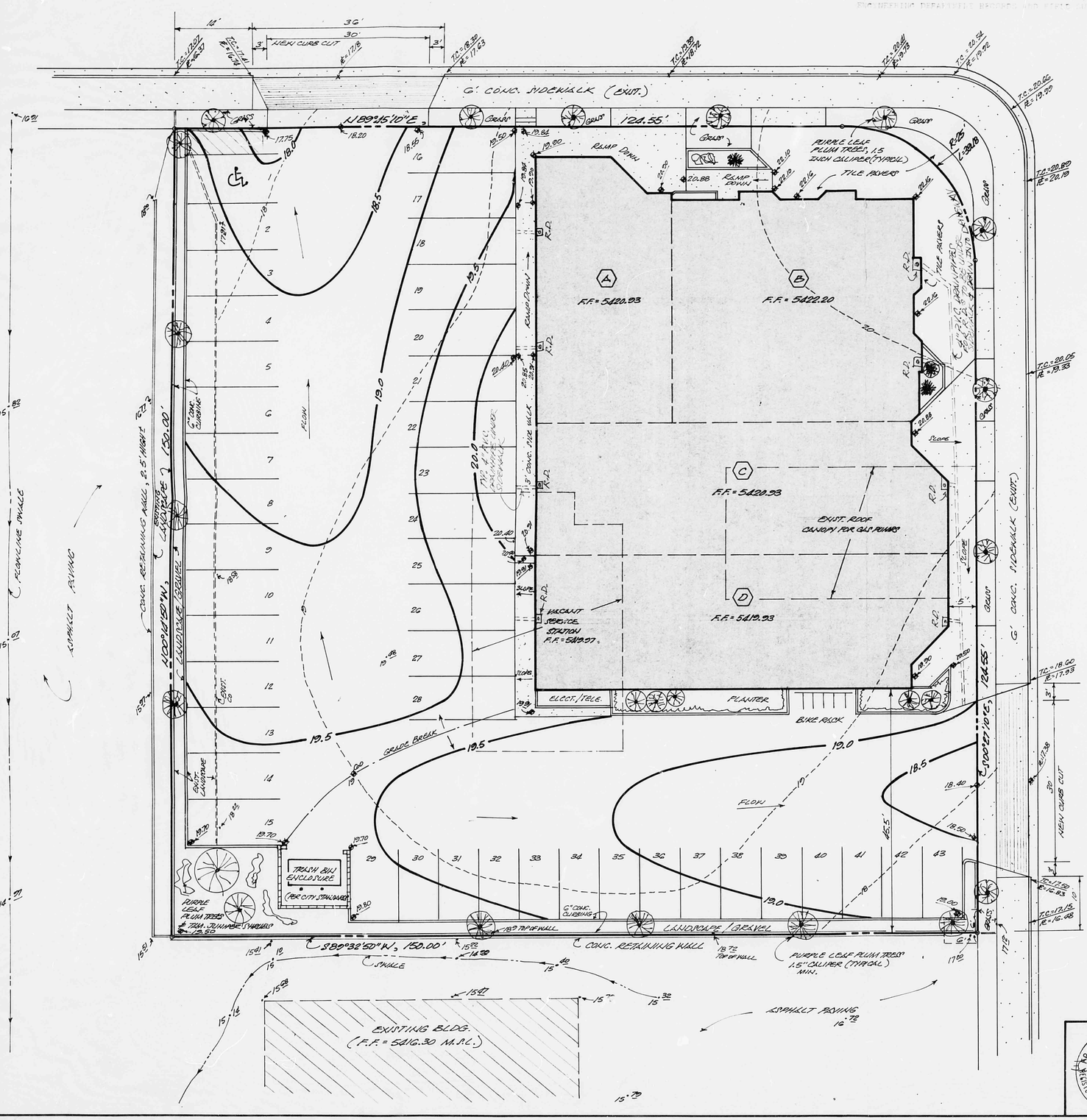
I PLAN FOR

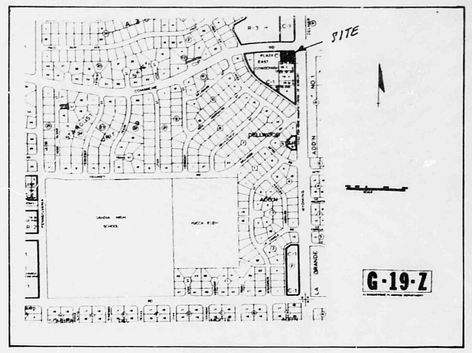
ALBUQUERQUE COMMERCIAL CENTER

G19-D18

SCALE: 1" = 10'

COMANCHE BLVD. N.E.





VICINITY MAP

LEGEND:

- T.C. = 17.50 = TOP OF CURB ELEVATION
- F.L. = 16.83 = FLOW LINE ELEVATION
- 18 = EXISTING CONTOUR
- 19.0 = PROPOSED CONTOUR
- 20.50 = PROPOSED SPOT ELEVATION
- 19.25 = EXISTING SPOT ELEVATION

GENERAL NOTES:

1. TOPOGRAPHY SURVEY PERFORMED BY "DYNAMIC - PARTAN" METHOD.
2. NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD WITHIN THE SUBJECT PROPERTY OTHER THAN SHOWN ON THE MAP HEREON.
3. BENCH MARK REFERENCE: BENCH MARK STATION "[illegible]" LOCATED AT THE INTERSECTION OF COMANCHE AND WYOMING BLVD., N.E. ELEVATION = 5[illegible] (M.S.L. DATUM) AS SHOWN.
4. UTILITY LINE LOCATION CERTIFICATIONS PROVIDED BY ALBUQUERQUE ENGINEERING DEPARTMENT REPRESENTATIVES FIELD INVENTORY.

CONSTRUCTION NOTES:

1. TWO (2) WEEKS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT THE ENGINEERING DEPARTMENT OFFICE AT 768-2[illegible] FOR LOCATION OF UTILITIES AT THE SITE.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL TOPOLOGY OF ALL POSSIBLE CONFLICTING UTILITIES. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER BY THE ONE (1) WORKING DAY PRIOR TO THE PROPOSED WORK OR DELAY.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS GOVERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS.

LEGAL DESCRIPTION:

A CERTAIN TRACT OF PARCEL OF LAND SITUATE WITHIN THE CITY LIMITS OF THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO, BEING AND COMPRISING THE NORTHEASTERLY 150.00 FEET OF THE NORTHWESTERLY CORNER OF LOT THIRTEEN (13) IN BLOCK SIX (6) OF THE SHIVELY SUBDIVISION, A SUBDIVISION TO THE CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT OF SAID SUBDIVISION FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON OCTOBER 5TH, 1926.

DRAINAGE COMMENTS

THE FOLLOWING ITEMS CONCERNING THE ALBUQUERQUE COMMERCIAL CENTER DRAINAGE PLAN ARE CONTAINED HEREIN:

I. SITE DRAINAGE PLAN
   A. VICINITY MAP
   B. SITE DRAINAGE PLAN
   C. SITE AND DESCRIPTION OF THE PROPOSED AND EXISTING IMPROVEMENTS.

A. [illegible] THE VICINITY MAP, THE FIRST TO LOCATE AT THE CONVENIENT INTERSECTION [illegible] AT COMANCHE BLVD., [illegible] AT PROPERTY THE SITE. FULLY [illegible] WITH UTILITIES VARIOUS SERVICE STATION, MARKETING, ASPHALT PAVING, AND LANDSCAPE AREAS.

INTERMITTENT FLOW, [illegible] FOOD, [illegible] MEDIUM A SLOPE PLAIN, [illegible] FOOD INCLUDE AS-PHALT [illegible] AS APPROXIMATE WATER COLLECTS AND [illegible] HAS NO DRAINAGE EASEMENTS ON THE PROPERTY.

THE SITE [illegible] FLOW - [illegible] AT A [illegible] AND GENERALLY DRAINS PARTIALLY NORTHWESTERLY [illegible] THE STREET AND [illegible] COMANCHE BLVD., [illegible] (WHICH FLOWS VERTICALLY) AND PARTIALLY [illegible] ACROSS THE SITE AND ALONG WYOMING BLVD., [illegible] (WHICH DRAINS [illegible] AS SHOWN ON THE PLAN HEREON. THE DIRECT SLOPE IN THIS PRESENT AND [illegible] DOES NOT DIRECT AN CONTRIBUTE TO ANY OFF-SITE FLOWS OF ADJACENT PROPERTIES.

[illegible] THE INTERIOR [illegible] IT WAS FELT DETERMINED THAT THE FREE DISCHARGE OF [illegible] WOULD NOT HAVE ANY ADVERSE AFFECT ON DOWNSTREAM PROPERTIES.

DRAINAGE CALCULATIONS

I. REFERENCES:
   A. City of Albuquerque, Development Process Manual (DPM), Volume 2 Design Criteria, Section 22, Drainage, Flood Control, and Erosion Control.
   B. Soil Survey of Bernalillo County and Parts of Sandoval and Valencia Counties, New Mexico, U.S. [illegible], 1980.

II. GENERAL INFORMATION:
   A. Soil type: [illegible] Hall, Fr, Page 21) Soil is Soil, fldgrss gravelly fine sandy [illegible] 0 to 5 percent slopes. The hydrologic soil group is B.
   B. Impervious:

Type of Area	Existing Q. Ft.	Proposed Q. Ft.
Buildings	[illegible]	8,[illegible]
Sidewalks/Paving	[illegible]	14,[illegible]
Landscape	[illegible]	935
Area of Site (total)	88,296	88,296
Percent Impervious	[illegible]	98%

   C. Factor (Ref. A, Plate 22.2 D-1)
      1. Developed = [illegible]
      2. Undeveloped = 0.[illegible]
   D. Rainfall 100-year, 1-hour P. (Ref A., Plate 22.2 D-1) P_{100}=2.4 Inches.
   E. Time of Concentration - For a site of this size, use the minimum time of concentration of 10 minutes.
   F. Rainfall Intensity (See Ref. A., Plate 22.2 D-2)
      $I = P_{100} \times C_{10} = 2.4 \times 0.14 \times 10^{-0.61} = 2.07$ in./hr.

III. PEAK DISCHARGE:
   Use The Rational Equation $Q_{100} = CIA$ $Q_{10} = 0.657\ Q_{100}$

	C	I	A	Q_{100}	Q_{10}
Existing Conditions	0.92	5.07	0.51	2.38 cfs	1.56cfs
Proposed Conditions	0.94	5.07	0.51	2.40 cfs	1.58cfs

IV. ADDITIONAL COMMENTS:
   Per the Conference Re-Zone notes issued by the City Hydrology Engineer dated November 20, 1984, the following conditions have been complied with in preparing this drainage plan.
   1. Flood proofing is required because of 1 foot depth in intersection. Finish floor elevation has been set at 2.0 feet above flow line elevation in the street.
   2. Existing site is approximately the same percentage of impervious and the proposed site. Site discharge after development will remain approximately the same.

PAUL TAYLOR

FEB 07 1985 HYDROLOGY SECTION

FRANK O. LOVELADY NEW MEXICO 8712 REGISTERED PROFESSIONAL ENGINEER 1-9-85

GRADING & DRAINAGE PLAN G19/D18
FOR
ALBUQUERQUE COMMERCIAL CENTER
(3517 WYOMING BLVD., N.E.)
ALBUQUERQUE, NEW MEXICO

C