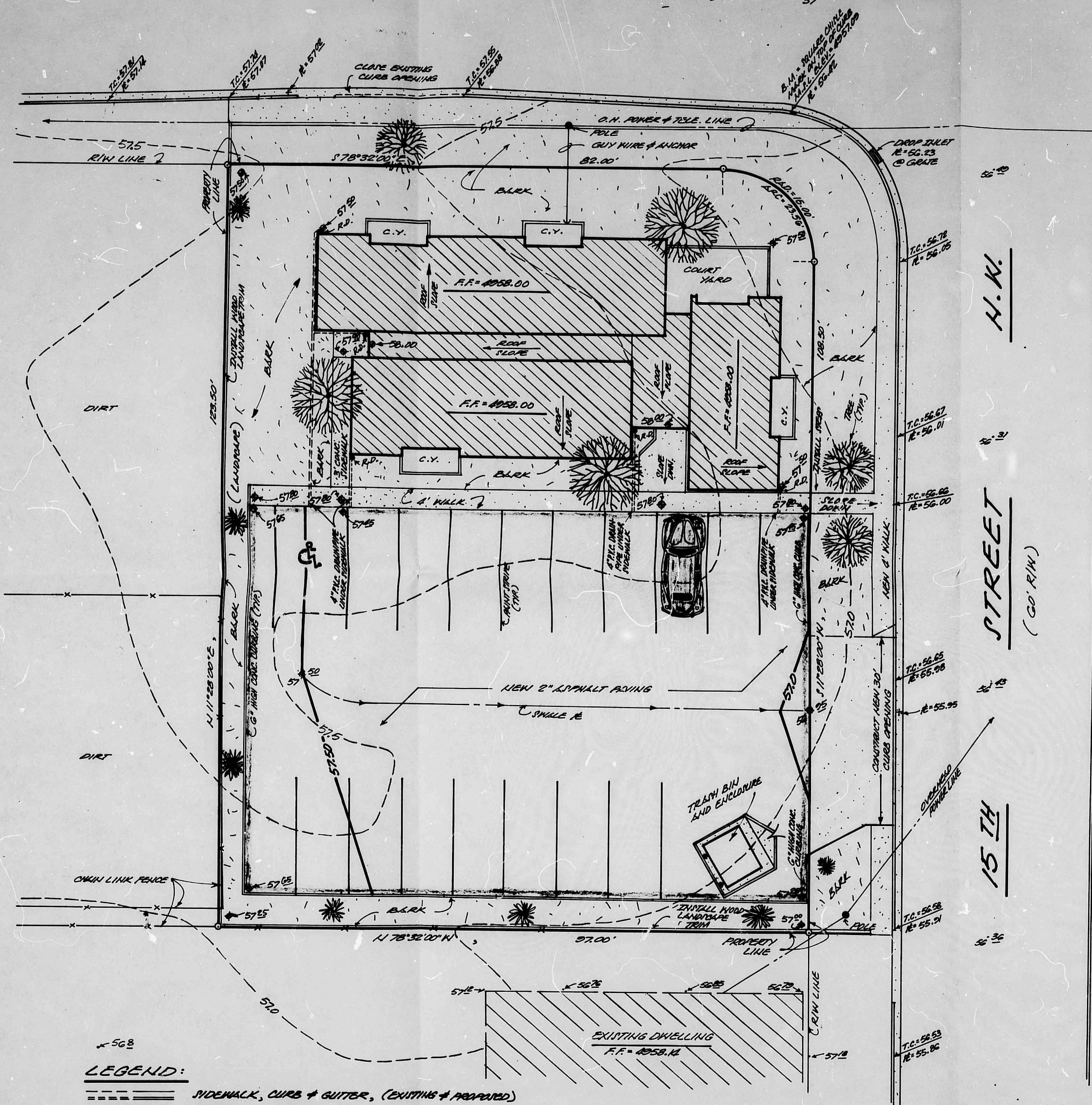


MOUNTAIN ROAD

(R/W WIDTH VARIES)

N.W.



LEGEND:

- SIDEWALK, CURB & GUTTER, (EXISTING & PROPOSED)
- PROPOSED ASPHALT
- PROPOSED BUILDING
- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED CONTOUR
- DIRECTION OF SURFACE FLOW
- TOP OF CURB ELEVATION
- FLOW LINE ELEVATION OF CURB
- R.O.D.
- ROOF DRAIN

SCALE: 1" = 10'

DRAINAGE COMMENTS:

THE FOLLOWING ITEMS CONCERNING THE SUBJECT SITE ARE CONTAINED ON THE GRADING AND DRAINAGE PLAN HEREON:

- 1.) SITE GRADING AND DRAINAGE PLAN
- 2.) VICINITY MAP
- 3.) LEGAL DESCRIPTION
- 4.) LIMITS AND CHARACTER OF THE EXISTING AND PROPOSED IMPROVEMENTS.
- 5.) DRAINAGE CALCULATIONS

AS SHOWN ON THE VICINITY MAP ON THE PLAN HEREON, THE SUBJECT SITE IS LOCATED AT THE SOUTHWEST INTERSECTION OF MOUNTAIN ROAD AND 15TH STREET, N.W., ALBUQUERQUE, NEW MEXICO; THE SITE IN ITS PRESENT CONDITION IS TOTALLY UNDEVELOPED.

THE PROJECT SITE, (1.) DOES NOT LIE WITHIN A FLOOD PLAIN, (2.) DOES NOT LIE ADJACENT TO A NATURAL OR ARTIFICIAL WATER COURSE, (3.) HAS NO DRAINAGE EASEMENTS ON THE PROPERTY; PER THE PRE-DESIGN CONFERENCE WITH THE CITY OF ALBUQUERQUE - HYDROLOGY ENGINEERING DEPARTMENT, THE FREE DISCHARGE OF DRAINAGE SURFACE FLOWS INTO MOUNTAIN ROAD AND 15TH STREET, N.W. IS ACCEPTABLE.

BASED ON A SITE INVESTIGATION, IT HAS BEEN DETERMINED THAT THE FREE DISCHARGE OF SURFACE FLOWS OF THE EXISTING AND PROPOSED QUANTITIES HAVE NO ADVERSE AFFECT ON DOWNSTREAM PROPERTIES.

THE SUBJECT SITE DOES NOT CONTRIBUTE TO, OR ACCEPT OFFSITE FLOWS OF ADJACENT PROPERTIES.

DRAINAGE CALCULATIONS

I. REFERENCES:

- A. City of Albuquerque Development Process Manual (DPM) Volume 2, Design Criteria, Chapter 22, Drainage, Flood Control and Erosion Control.
- B. Soil Survey of Bernalillo County and Parts of Sandoval and Valencia Counties, New Mexico, United States Department of Agriculture, Soil Conservation Service.
- C. Floodway Map, Panel 28 of 50, Federal Emergency Management Agency, October 14, 1983.

II. GENERAL INFORMATION:

- A. Soil Type (Ref. B., Sheet No. 30) Soil type is either Ge, Gila clay loam, or Vba, Vinton sandy loam, both of which are Hydrologic Soil Group "B".

- B. Imperviousness:

Type of Surface	Existing Area Sq. Ft.	Acres	Proposed Area Sq. Ft.	Acres
Building roof	-	-	2,415	0.0554
Concrete Surfaces	-	-	485	0.0111
Asphalt Surfaces	-	-	6,409	0.1471
Landscaping	-	-	2,622	0.0603
Undeveloped surface	11,931	0.2739	-	-
Site total	11,931	0.2739	11,931	0.2739
Percent impervious	0%	-	78%	-

- C. "C" Factor (See Ref. A., Plate 22.2 C-1)

1. Undeveloped "C" Factor = 0.34
2. Developed "C" Factor = 0.74

- D. Rainfall, 100-year, 6-hour, R_6 ; (See Ref. A., Plate 22.2 D-1) $R_6 = 2.2$ inches.

- E. Time of Concentration, T_c ; For a site of this size, use the minimum $T_c = 10$ minutes.

- F. Rainfall Intensity, I ; (See Ref. A., Plate 22.2 D-2)

$$I = R_6 \times 6.84 \times T_c^{-0.51} = 2.2 \times 6.84 \times (10)^{-0.51}$$

$$I = 4.65 \text{ in/hr}$$

III. PEAK DISCHARGE:

- A. Existing Conditions. (Use Rational Equation.)

$$Q_{100} = 0.34 \times 4.65 \times 0.27 = 0.43 \text{ cfs}$$

$$Q_{10} = 0.657 \times 0.43 = 0.28 \text{ (Ref. A. Plate 22.2 D-1)}$$

- B. Developed Conditions:

$$Q_{100} = 0.74 \times 4.65 \times 0.27 = 0.93 \text{ cfs}$$

$$Q_{10} = 0.657 \times 0.93 = 0.61 \text{ cfs}$$

IV. PEAK VOLUME:

- A. Existing Conditions:

$$V_{100} = 0.34 \times (2.2/12) \times 11,931 = 744 \text{ cu.ft.}$$

$$V_{10} = 0.657 \times 744 = 488 \text{ cu.ft.}$$

- B. Developed Conditions:

$$V_{100} = 0.74 \times (2.2/12) \times (11,931) = 1619 \text{ cu.ft.}$$

$$V_{10} = 0.657 \times 1619 = 1064 \text{ cu.ft.}$$



- VICINITY MAP -

J-13-2

LEGAL DESCRIPTION:

TRACT "A", IN BLOCK 43, PEREA ADDITION, TO THE CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT OF SAID ADDITION FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON AUGUST 2, 1985.

BENCH MARK:

A SQUARE CHISEL MARK ON TOP OF CURB ON THE SOUTH CURB LINE OF MOUNTAIN ROAD, N.W., OPPOSITE THE NORTHEAST PROPERTY CORNER OF THE SUBJECT SITE; M.S.L. ELEVATION = 4957.09.

CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 765-1234 FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS; SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES, AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL CONSTRUCTION WITHIN CITY RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.

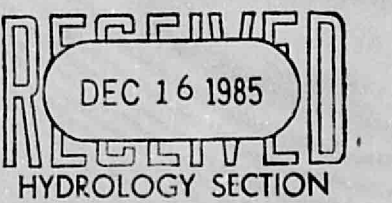
EROSION CONTROL MEASURES:

THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION. HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

1. ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY THE CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SITE AND ENTERING SAID PROPERTY.
2. ADJACENT PUBLIC RIGHTS-OF-WAY SHALL BE PROTECTED AT ALL TIMES FROM STORM WATER RUNOFF FROM THE SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREETS.
3. THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT WITHIN PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SITE AND DEPOSITED THERE.

GENERAL NOTES:

- 1.) REFER TO ARCHITECTURAL SITE PLAN FOR BUILDING LOCATION DIMENSIONS.
- 2.) ROOF DRAINS ARE TO BE ROOF GUTTERS TO ROOF DRAINS VIA UNDER SIDEWALKS OR CURBING AND DRAINING INTO PARKING AREA.



REVISED
GRADING & DRAINAGE PLAN
FOR

LAW OFFICES OF TITO CHAVEZ
(LOCATED AT 15TH & MOUNTAIN ROAD, N.W.)
ALBUQUERQUE, NEW MEXICO
AUGUST, 1985

J13/D28