HYDROLOGY K11/D30 1 PLAN

K11/D30

1 PLAN

CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT

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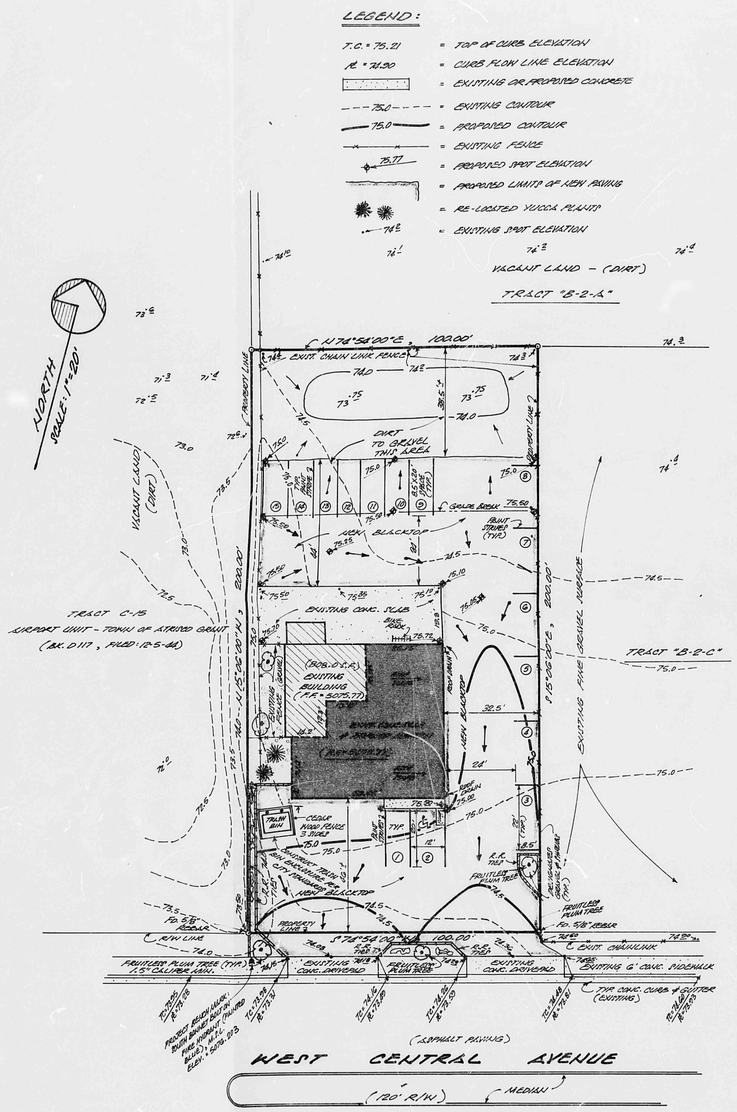


NOTES:

1.) TRASH BIN ENCLOSURES TO BE WITH COOLER WOOD FRAMING OR BLOCK WALL.

2.) BOTHWEST SIDE AND EXIST. YUCCA PLANTS TO BE RELOCATED ON SITE. (TO BE OPTIONAL HOUSTONIAN).

3.) BUILDING AREA: (2,951.0 S.F.)
OFFICE = 200.0 S.F.
SHOP = 2,751.0 S.F.

4.) REQUIRED PARKING SPACES = 15 S.P.C.E.P.

DRAINAGE COMMENTS

THE FOLLOWING ITEMS CONCERNING THE SUBJECT SITE ARE CONTAINED HEREON:

1.) SITE DRAINAGE PLAN.

2.) VICINITY MAP

3.) LEGAL DESCRIPTION

4.) LIMITS AND CHARACTER OF EXISTING AND PROPOSED IMPROVEMENTS.

5.) DRAINAGE CALCULATIONS

AS SHOWN ON THE VICINITY MAP, THE SITE IS LOCATED ON THE NORTH SIDE OF WEST CENTRAL AVENUE AND EAST OF NORTH COORS BLVD., ALBUQUERQUE, NEW MEXICO; AT PRESENT, THE SITE IS PARTIALLY DEVELOPED AND HAS AN EXISTING AUTO GARAGE BUILDING ON-SITE, PARTIALLY GRAVELED PARKING AREA AND NO ASPHALT PAVING.

THE PROJECT SITE, (1.) DOES LIE WITHIN A FLOOD PLAIN; HOWEVER, FLOOD PROOFING MEASURES HAVE BEEN TAKEN WITHIN THE SUBJECT SITE ITSELF; (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 RE-CAP WITH HYDROLOGY ENGINEERING DEPARTMENT, THE FREE DISCHARGE OF THE DEVELOPED SITE ONTO WEST CENTRAL AVENUE IS ALLOWED IF THE PROPOSED FINISHED FLOOR ELEVATION OF THE PROPOSED BUILDING ADDITION IS AT ELEVATION 5074.00 OR GREATER.

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

II. GENERAL INFORMATION:

A. Soil Type (Ref.B., Page 30)Soil type is Madurez-Wink association, gently sloping. Hydrologic soil group is "B".

B. Imperviousness:

Type of Surface	Existing Area Sq.Ft.	Existing Area Acres	Proposed Area Sq.Ft.	Proposed Area Acres
Building roof	1,033		2,932	
Concrete Surfaces	0		1,345	
Asphalt Surfaces	4,483		9,883	
Landscaping	0		340	
Undeveloped surface	14,483		5,500	
Site total	20,000	0.4591	20,000	0.4591
Percent impervious	28%		71%	

C. "C" Factor (See Ref. A., Plate 22.2 C-1)
1. Undeveloped "C" Factor = 0.47
2. Developed "C" Factor = 0.70

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

E. Time of Consentration, T_c: Use the minimum time of concentration of ten minutes.

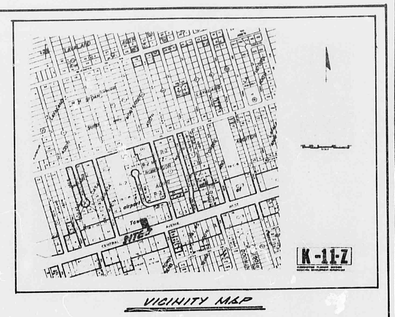
F. Rainfall Intensity, I; (See Ref. A, Plate 22.2 D-2)

$$I = R_6 \times 6.84 \times T_c^{-0.51} = 2.2 \times 6.84 \times (10)^{-0.51} = 4.65$$

III. PEAK DISCHARGE:

A. Undeveloped. By Rational Equation, Q = CIA
Q_{100} = 0.47 x 4.65 x 0.4591 = 1.00 cfs
Q_{10} = 0.657 x 1.00 = 0.66 cfs

B. Developed Conditions.
Q_{100} = 0.70 x 4.65 x 0.4591 = 1.49 cfs
Q_{10} = 0.657 x 1.49 = 0.98 cfs



VICINITY M&P

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.

LEGAL DESCRIPTION:

A CERTAIN TRACT OR PARCEL OF LAND SITUATED WITHIN THE CITY LIMITS OF THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO: BEING AND COMPRISING TRACT "B-2-B" OF THE REPLAT OF TRACT "B-2"OF LAND OF VAN BARBER, A SUBDIVISION OF THE CITY OF ALBUQUERQUE, NEW MEXICO.

BENCH MARK:

CITY BENCH MARK STATION "d48-C1", A BRASS CAP IN STREET MEDIAN AT WEST CENTRAL AVENUE AND 59TH STREET, S.W., M.S.L. ELEVATION 5074.073.

GENERAL NOTES:

1. TOPOGRAPHY SURVEY PERFORMED BY "TRANSIT-STADIA" METHOD.

2. NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD WITHIN THE SUBJECT PROPERTY OTHER THAN SHOWN ON THE MAP HEREON.

3. UTILITY LINE INFORMATION OBTAINED FROM CITY OF ALBUQUERQUE ENGINEERING DEPARTMENT RECORDS AND FIELD SURVEY.

RECEIVED
FEB 05 1985
HYDROLOGY SECTION

FRANK D. LOVELAC
NEW MEXICO
REGISTERED PROFESSIONAL ENGINEER
2/5/85

GRADING & DRAINAGE PLAN
FOR
L.D.&G AUTOMOTIVE SHOP
(615 WEST CENTRAL AVENUE)
ALBUQUERQUE, NEW MEXICO

CITY OF ALBUQUERQUE
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