PUBLIC WORKS/HYDROLOGY

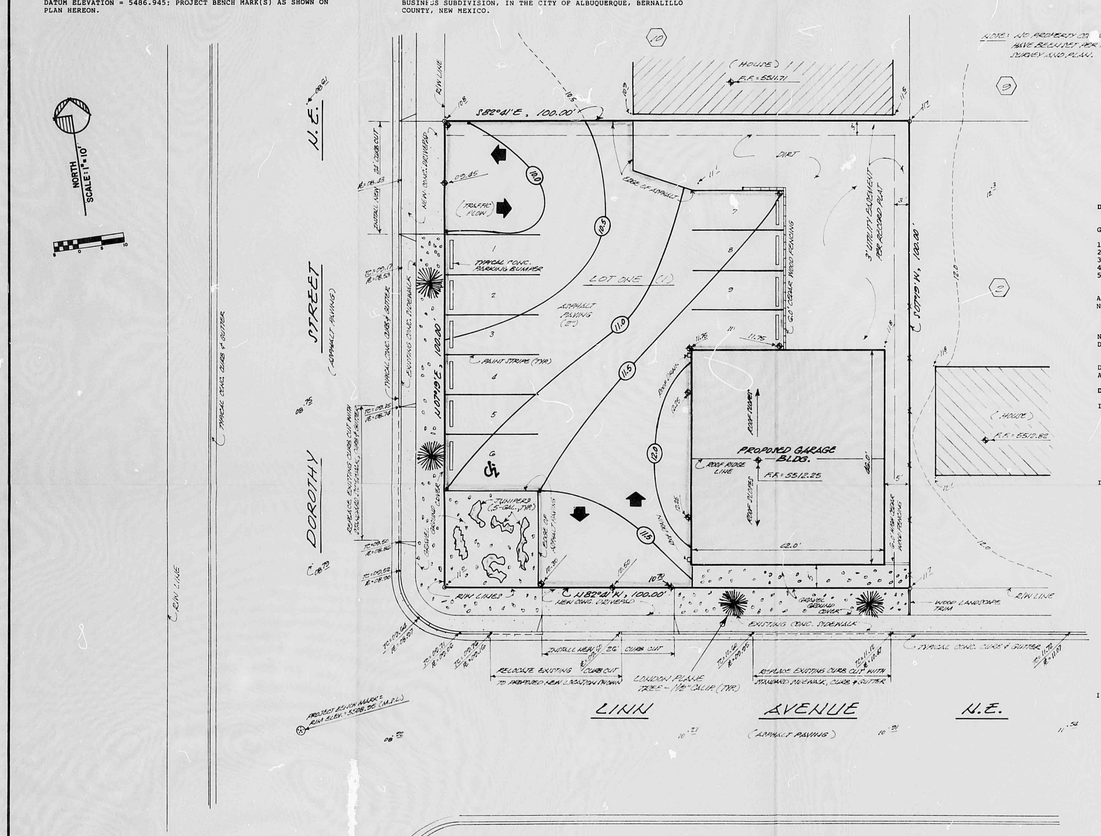
L21/D32

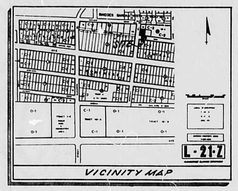
BENCH MARK REFERENCE:

CITY OF ALBUQUERQUE SURVEY STATICN "N.M. BER. 3", M.S.L. DATUM ELEVATION = 5486.945; PROJECT BENCH MARK(S) AS SHOWN ON PLAN HEREON.

LEGAL DESCRIPTION:

LOT NUMBER ONE (1), BLOCK NUMBER FOURTEEN (14), EAST CENTRAL BUSINESS SUBDIVISION, IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.





DRAINAGE COMMENTS:

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

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

AS SHOWN ON THE VICINITY MAP HEREON THE SUBJECT SITE IS LOCATED AT THE NORTHEAST INTERSECTION OF DOROTHY STREET N.E. AND LINN AVENUE N.E., IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.

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.

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.

DRAINAGE CALCULATIONS:

I. REFERENCES:

A. CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM), VOL. 2, DESIGN CRI' RIA, 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, (SCS SHEET No. 32).

II. GENERAL INFORM.TION:

A. SOIL TYPE: SOIL TYPE IS "TgB", (TIJERAS GRAVELLY FINE SANDY LOAM, 1 TO 5 PERCENT SLOPES).

B. IMPERVIOUSNESS:

SITE AREA = 0.22 ACRES, (9,800.0 SQ. FT.).
PRESENT UNDEVELOPED "C" FACTOR = 0.40

C. TYPE OF SURFACE (DEVELOPED):

HARD SURFACED (ASPHALT/GRAVEL)	= 0.12 AC. = 55%	X (C=0.95) = 0.52
BUILDING ROOF AREA	= 0.04 AC. = 20%	X (C=0.90) = 0.18
LANDSCAPED AREA	= 0.02 AC. = 09%	X (C=0.25) = 0.02
UNDEVELOPED AREA	= 0.04 AC. = 16%	X (C=0.40) = 0.06
	AVERAGE "WEIGHTED"	"C"= 0.78

D. RAINFALL, 100-YR., 6-HR., R_6; (SEE REF. A., PLATE 22.2 D-1)
R_6 = 2.5 INCHES.

E. TIME OF CONCENTRATION, T_c = TEN (10) MINUTES FOR A SITE THIS SIZE

F. RAINFALL INTENSITY, "I", (SEE REF. A., PLATE 22.2 D-2)
$I = R_6 \times 6.84 \times T_c^{-0.51} = 2.5 \times 6.84 \times (10)^{-0.51} = 5.28$ IN./HR

III. **PEAK DISCHARGE:** (Q = CIA)

UNDEVELOPED: $Q_{100} = 0.40 \times 5.28 \times 0.22 = 0.46$ cfs

$Q_{10} = 0.657 \times 0.46 = 0.31$ cfs

DEVELOPED: $Q_{100} = 0.78 \times 5.28 \times 0.22 = 0.91$ cfs

$Q_{10} = 0.657 \times 0.91 = 0.60$ cfs

IV. **PEAK VOLUME:**

A. EXISTING CONDITIONS:
$V_{100} = 0.40 \times (2.5 / 12) \times 9,800.0 = 816.7$ CU. FT.

$V_{10} = 0.657 \times 816.7 = 536.6$ CU. FT.

B. DEVELOPED CONDITIONS:
$V_{100} = 0.78 \times (2.5 / 12) \times 9,800.0 = 1,592.5$ CU. FT.

$V_{10} = 0.657 \times 1,592.5 = 1,046.3$ CU. FT.

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 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 FOR STORM RUN-OFF DURING CONSTRUCTION: HE SHALL INSURE THAT THE FOLLOWING MEASURES ARE TAKEN:

1.) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SITE AND ENTERING ADJACENT PROPERTIES.

2.) ADJACENT PUBLIC RIGHT-OF-WAYS 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 THROUGHLY REMOVE ANY AND ALL SEDIMENT WITHIN PUBLIC STREETS THAT HAS BEEN ERODED FROM THE SITE AND DEPOSITED THERE.

RECEIVED
DEC 08 1987
HYDROLOGY SECTION

OLIVAS GARAGE

210 DOROTHY STREET N.E.
ALBUQUERQUE, NEW MEXICO

RE 28 DATE 3-29-02 OP E.P.

CITY OF ALBUQUERQUE

This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the Public Works Department and was created in the normal course of business.

The photographic process used meets the Basic Microfilm Standards of the National Micrographics Association (MS16,6-1977)

DIRECTOR

NOTARY PUBLIC

OFFICIAL SEAL
Roberta Duran
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 6/18/02

PLAN SHOT TWICE
ONCE ON LIGHT
ONCE ON DARK

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

PLANS/PLATS ON FILE

FILE DESC: L21/D32

PLANS/PLATS 1

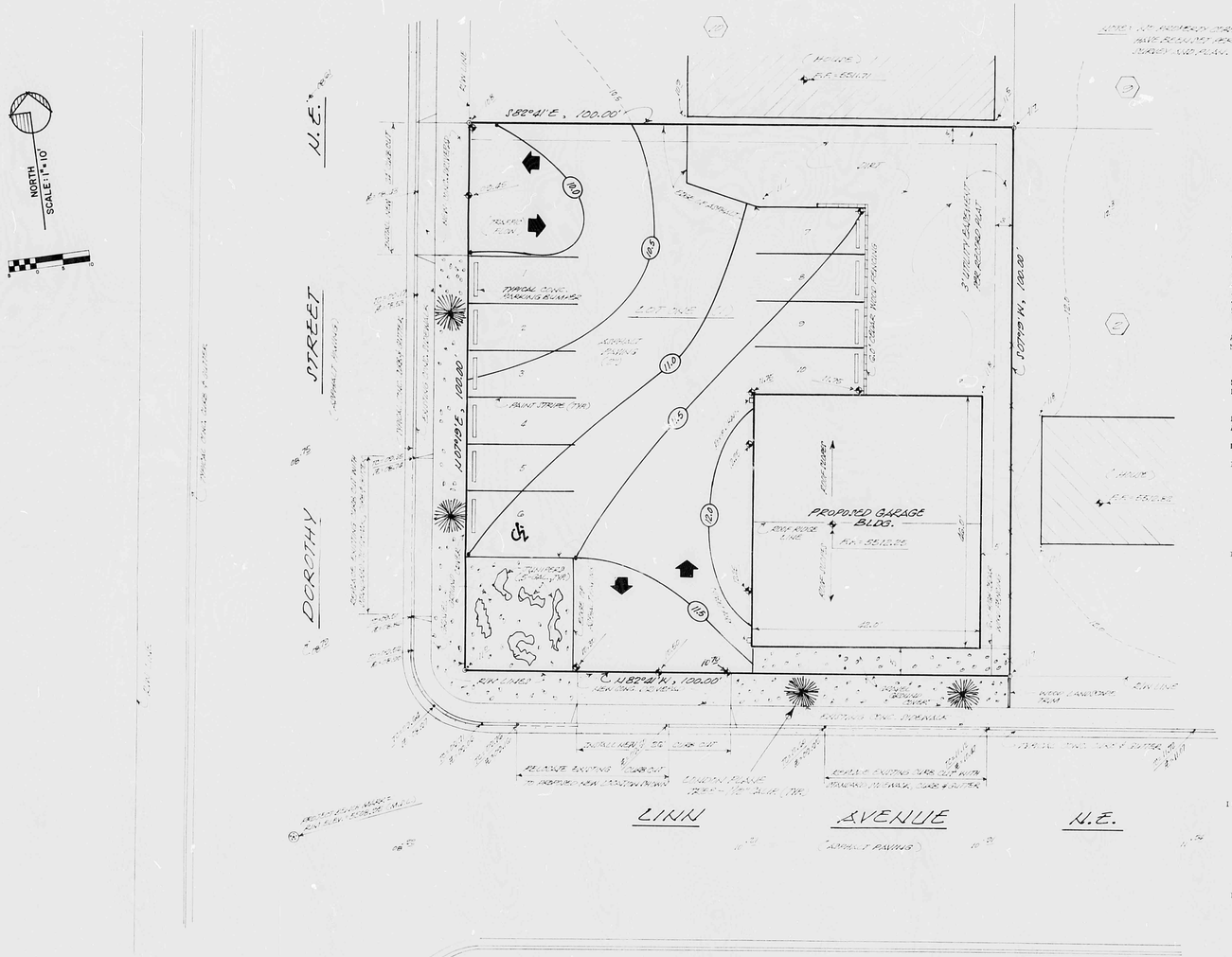
E 30 D 24 C 20 B 16 A 12 CITY OF ALBUQUERQUE C D F

BENCH MARK REFERENCE:

CITY OF ALBUQUERQUE SURVEY STATION "N.M. BER. 3", M.S.L. DATUM ELEVATION = 5486.945; PROJECT BENCH MARK(S) AS SHOWN ON PLAN HEREON.

LEGAL DESCRIPTION:

LOT NUMBER ONE (1), BLOCK NUMBER FOURTEEN (14), EAST CENTRAL BUSINESS SUBDIVISION, IN THE CITY OF ALBUQUERQUE, BERNALILLO COUNTY, NEW MEXICO.


NORTH
SCALE: 1" = 10'
DOROTHY STREET N.E.
LINN AVENUE N.E.
S 82°41' E, 100.00'
N 07°19' E, 100.00'
S 07°19' W, 100.00'
N 82°41' W, 100.00'
PROPOSED GARAGE BLDG.
FIRE HYDRANT
TYPICAL 90° PARKING PLANS
LOT LINE
PAINT STRIPE (TYP.)
TYPICAL 90° PARKING PLANS
EXISTING CONCRETE PAVING
EXISTING CONCRETE CURB
EXISTING CONCRETE CURB & GUTTER
EXISTING CONCRETE PAVING