HYDROLOGY

F17/D2C

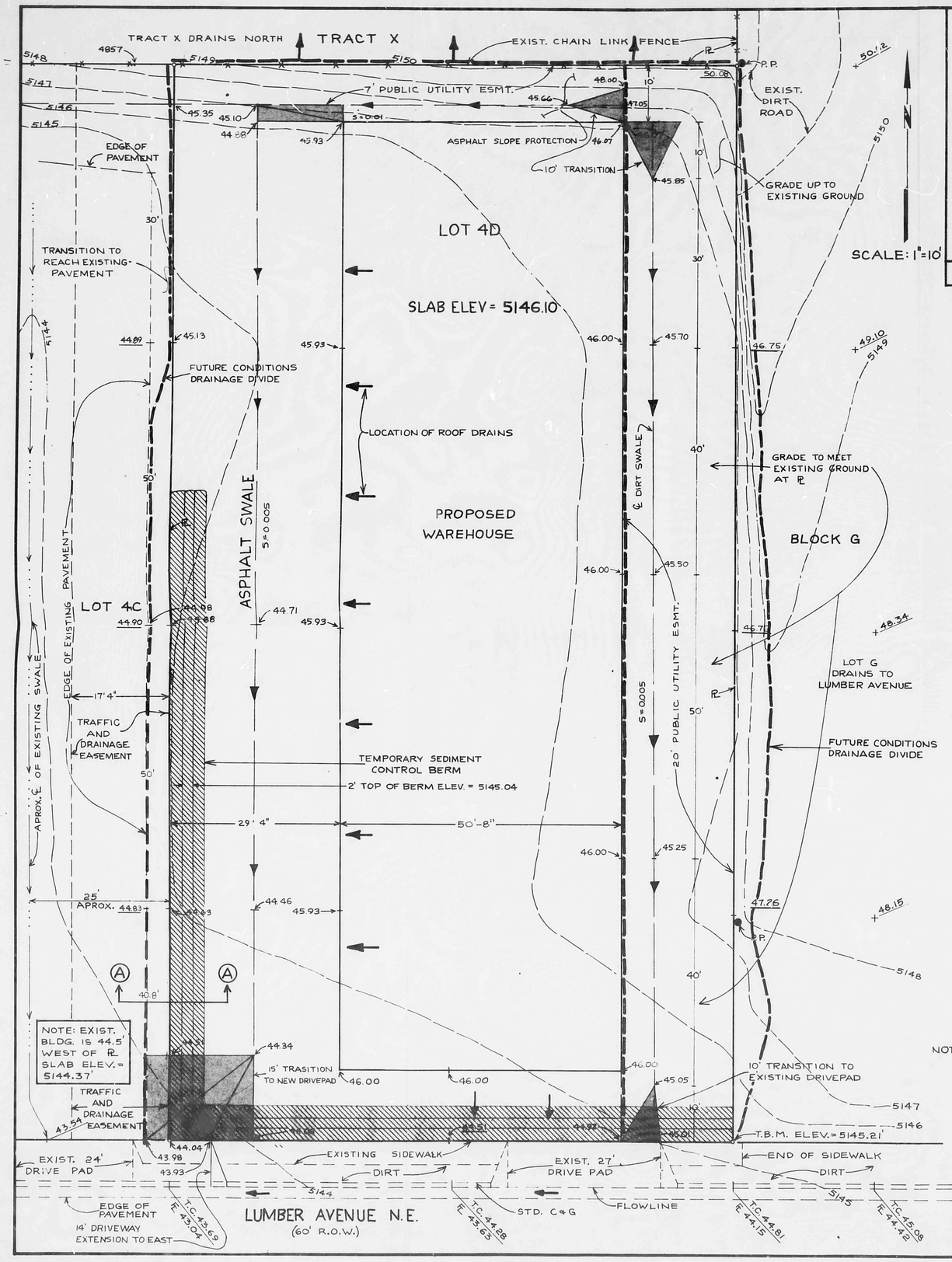
ONE PLAN

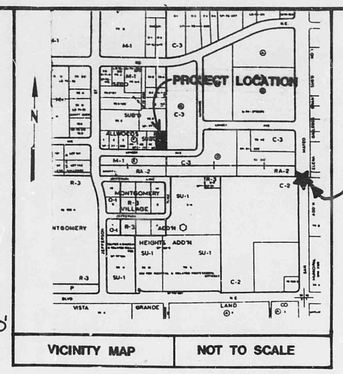
PLAN FOR

WAREHOUSE FOR

JIM FLINCHEM

FIN-D2C





LEGAL DESCRIPTION

LOT 4D, BLOCK F
ALLWOODS SUBDIVISION
ALBUQUERQUE, NEW MEXICO
ZONED: M-1
MAP NO. F 17 Z

LEGEND	
	TRANSITION AREA
46.75	EXISTING ELEVATIONS
←	DIRECTION OF FLOW
45.10	PROPOSED ELEVATIONS
	EXISTING CONTOURS
	FUTURE COND. DRAIN DIVIDE

As owner of Lot 4C, I, James M. Flinchum, hereby agree to provide a temporary construction easement and a permanent drainage easement on Lot 4C as shown on this plan.

James M. Flinchum
Owner of Lot 4C

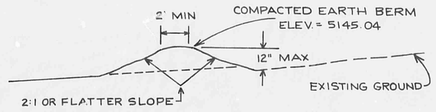
Date

As owner of Lot 4D, I, James L. Flinchum, recognize that without strict construction control, the relatively minimum grades on the swales shown on this plan could result in shallow ponding areas. I hereby certify that the City of Albuquerque has notified me of this possibility.

James L. Flinchum
Owner of Lot 4D

Date

NOTE: ADD 5100 TO ALL ELEVATIONS.



CROSS SECTION A-A

GENERAL

Zone Atlas Page F-17; Flood Hazard Zone C. Proposed development will take place on Lot 4-D of Block F, Allwoods Subdivision, Albuquerque, New Mexico.

LAND USE

Present - There is no development on the study lot. Frontage is to Lumber Street NE, which is a paved road with curbs and gutters. The site is bounded on the north by an industrial facility, the east by an undeveloped lot, on the south by Lumber Street, and on the west by a commercial building.

Proposed - Development on the study site will include the construction of a commercial building and a paved parking area. The developer of the lot under study also owns the lot immediately to the west. To facilitate vehicular access to the new commercial building he has agreed to provide a 7 foot wide traffic and drainage easement on Lot 4-C.

SOIL TYPE

Embudo - fine sandy loam and gravelly sandy loam.
Hydrologic Soil Group B

TOTAL AREA

Total lot area = 190.8 ft x 100 ft = 19,080 sq.ft = 0.438 acres

Proposed development area = 80 ft x 183 ft = 14,640 sq.ft

% Impervious = (14,640 sq.ft / 19,080 sq.ft) x 100 = 76.7 %

Total proposed development area will drain to Lumber Street NE. There is a grated inlet to a drain across Lumber Street NE approximately 1000 ft west of the study lot. The drain discharges through a 42-inch RCP to the flood control channel along the south boundary of the Elena Gallegos Grant.

HYDROLOGY

TIME OF CONCENTRATION

Flow length = 190 ft

Elevation difference = 4 ft
Time of concentration = 1.96 minutes; use 10 minutes.

6-HR RAINFALL DEPTH

100-year = 2.20 inches
10-year = 1.45 inches

RAINFALL INTENSITY

100-year = 4.77 in/hr
10-year = 3.15 in/hr

RUNOFF COEFFICIENTS

Present conditions
existing impervious area = 0 %
C = 0.34

Future conditions
future impervious area = 77 %
C = 0.74

RUNOFF RATES

Present conditions
100-year = 0.71 cfs
10-year = 0.47 cfs

Future conditions
100-year = 1.55 cfs
10-year = 1.02 cfs

RUNOFF VOLUMES

Present conditions
100-year = 1,186 cu. ft.
10-year = 782 cu. ft.

Future conditions
100-year = 2,589 cu. ft.
10-year = 1,706 cu. ft.

RECEIVED
JUL 15 1985
HYDROLOGY SECTION

OFF-SITE FLOWS

There are no off-site flows draining into the study lot.

HYDRAULICS

Approved 7/15/85

The swale capacities are:

Earth swale — S = 0.005, 0.17 ft to 0.95 ft deep
capacity = 1 cfs at 0.15 ft of depth

Paved Swale — S = 0.005, 0.25 ft to 1.74 ft deep
capacity = 1.5 cfs at 0.20 ft of depth

Sheridan V. Duy 5/31/85
Rev. 7/15/85

DESIGNED BY: C.S. E.D.	**GRADING & DRAINAGE PLAN WAREHOUSE FOR JAMES FLINCHUM CORPORATION**
DRAWN BY: C.M. J.L.	
CHECKED BY: E.D.	
MAY 1985	PREPARED BY: RESOURCE TECHNOLOGY, INCORPORATED

F17/D28c