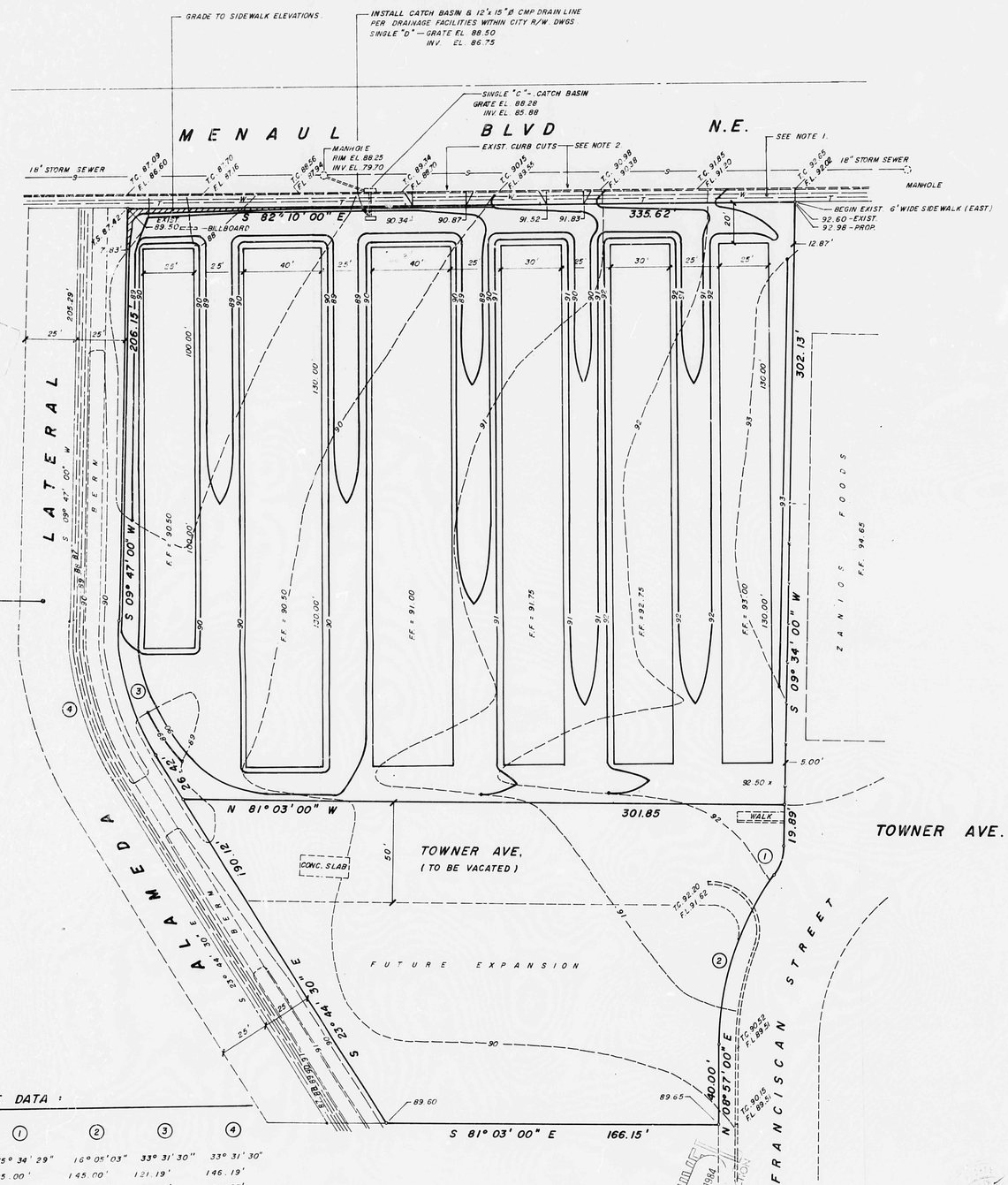
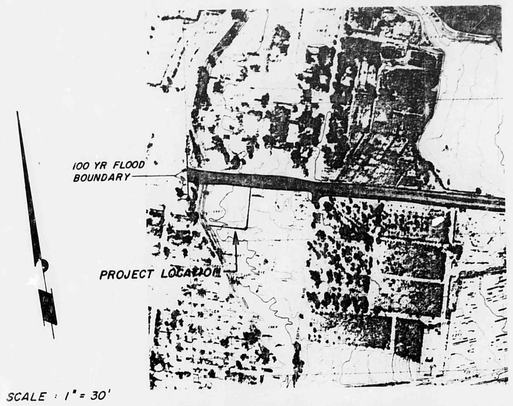
HYDROLOGY

H15/D28
1 PLAN

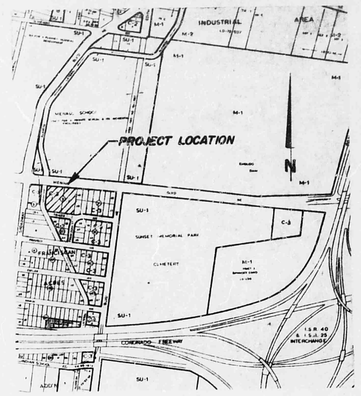
H15/D28

1 Plan





FLOOD BOUNDARY AND FLOODWAY MAP
NO. 350002 0023
SCALE 1" = 500'



LOCATION MAP - H-15-Z

LEGAL DESCRIPTION

LOTS 2 & 3, BLOCK 3, FRANCISCAN ACRES.
SURVEY & ELEVATIONS BY SOUTHWEST SURVEYING.
BENCH MARK : 6 H - 15 ELEV. 4992.215 FT.
LOCATED N.W. CURB RETURN - N.W. QUADRANT OF CUTLER & EDITH N.E.
AREA = 2.2810 ACRES.

NOTE :

1. CONSTRUCT 6' WIDE SIDEWALK IN ACCORDANCE WITH CITY OF ALBUQUERQUE DWG. P-13-3 FROM BACK OF CURB TO PL. ELEV. AT PL. TO BE 0.33 FT ABOVE ELEVATION AT TOP OF CURB AND AT RIGTH ANGLE TO CURB.
2. CONSTRUCT DRIVE PADS AT EXISTING CURB - CUTS IN ACCORDANCE WITH CITY OF ALBUQUERQUE DWG. P-11-3.

LEGEND

- 90 — EXISTING CONTOURS
- 90 — PROPOSED CONTOURS
- EXISTING MANHOLE
- S — STORM SEWER
- W — WATER LINE
- T — TEL. LINE
- EXISTING & PROPOSED CATCH BASIN
- X — CHAIN LINK FENCE
- EXISTING
- PROPOSED

CURVE DATA :

	1	2	3	4
Δ =	35° 34' 29"	16° 05' 03"	33° 31' 30"	33° 31' 30"
R =	25.00'	145.00'	121.19'	146.19'
T =	8.02'	20.49'	36.50'	44.03'
L =	15.52'	40.70'	70.91'	85.54'

Drainage Plan

The proposed project is a mini-storage warehouse, and is located on the south side of Menaul Blvd., N.E. between Broadway and Edith Blvds. It is bounded on the west by the Alameda Lateral, scheduled to be abandoned, on the east by Zanios Foods, on the north by Menaul Blvd. and on the south by Towner Avenue, which is scheduled to be vacated.

The current general drainage from this site is to the northwest to Menaul Blvd. except for a small amount which ponds along the Alameda Lateral at the southwest corner of the property.

The only off-site flow onto this property is from the roofline of the Zanios Foods building on the east side. This drainage is from approximately 90 feet by 205 feet of the roof. The remainder of Zanios Foods flows are to Menaul Blvd. on the north and to Towner and Franciscan Aves. on the south. The Zanios Foods flow will still come across this lot through the swales provided.

The estimated flows from this site are as follows:

(a) 1/6 hr. 100 year storm = 2.2 in.
(b) I_{max} = (2.2) (1.75) = 3.85 in./hr.; t_c = 15 min.
(c) Lot area = 2.281 acres
(d) Runoff coefficient = 0.90 for depression ponding and infiltration
(e) Runoff coefficient, Zanios Foods = 1.0 for 0.235 acre. Max Q = CIA = (0.90) (3.85) (2.281) + (1.0) (3.85) (0.235) = 8.8 cfs

In accordance with the attached recap, it is recommended that a single D catch basin be installed as shown on this drawing, draining into the single C catch basin in Menaul via a 15" CMP. Drainage Facilities within City Right-of-Way sketches accompany this drawing.

Erosion Control

Since there are no cut or fill slopes in this project which are greater than 1:6, vertical to horizontal, erosion control requirements, other than good construction practises need not be instituted. All fills shall be placed with a maximum of 6" lifts, and moistened to give optimum moisture content for compaction to 90% Modified Proctor Density. Uncovered earthen surfaces will be sprinkled during windy periods to control dust and wind erosion.

Hydraulics

The grate openings for this proposed single D catch basin can handle a Q of approximately 15 cfs. This is obtained by interpolating from Plate 22.3 D-5 P-74 Vol. 2 DPM, and using an upstream slope of 0.01 and a depth of flow of 1 foot.

The connector pipe can handle a flow of approximately 13.5 cfs. This is based upon Plate 22.4 D-8 P-78 Vol. 2, DPM, using an S of 2.625", a D of 15" and an L of 12.5'. Both of these quantities are above the max Q 100 year storm runoff of 8.8 cfs.

Should the grate plug during the max Q_{100} year storm, the V would be approximately 8000 cf. The storage capacity below the 4990.0 contour is approximately 12,000 cf and would retain the storm waters until the grate is unplugged.

APPROVED FOR DRAINAGE
5/11/84
DATE
Billy J. Foolsby
SIGNATURE TITLE
ADVISE DRAINAGE INSPECTOR WHEN GRADING EXECUTED

APR 25 1984
HYDROLOGY SECTION

C. A. COONCE & ASSOC.
ENVIRONMENTAL, WATER RESOURCES, & SANITARY CONSULTING ENGINEERS
12324 PINERIDGE N.E. ALBUQUERQUE, N.M. 87112 PH. (505) 296-1089

TITLE	MINI-STORAGE UNITS - 300 MENAUL N.E.
PROJECT	DRAINAGE AND GRADING PLAN
DATE	4-2-84
REVISED	
DRAWN	V.M.
CHECKED	C.A.C.
SHEET	1 of 1

BRUNING 44-132 46720