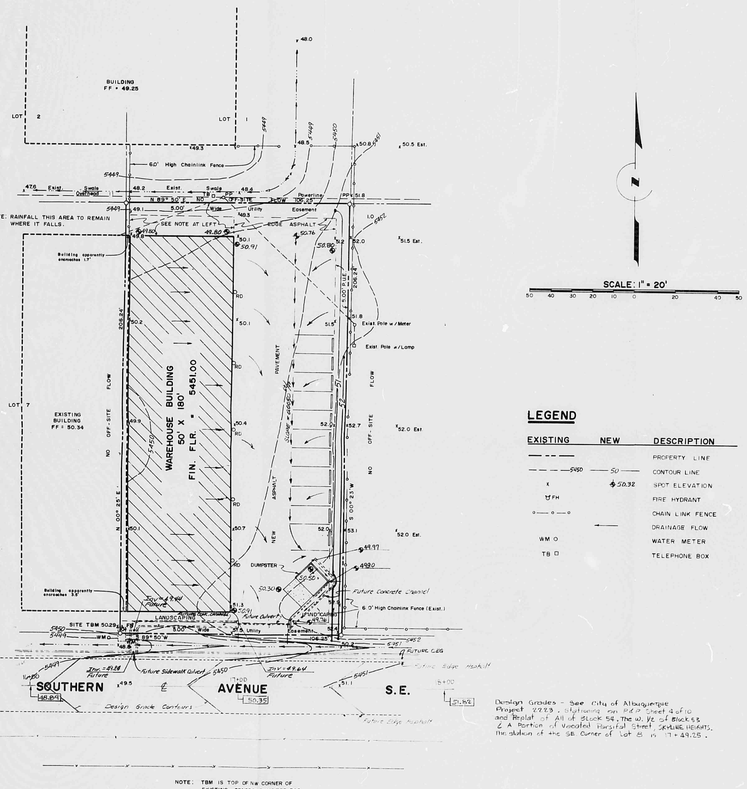


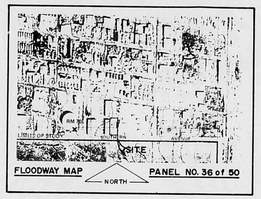
Dendon Grades - See City of Albuquerque Project 2723, Stations on R.O.W. Sheet 4 of 10 and Replat of All of Block 58, The W. 1/2 of Block 55 & A Portion of Vocational Hospital Sheet, SEWER HOUSE, The station of the SE Corner of Lot 15 is 7+49.15.

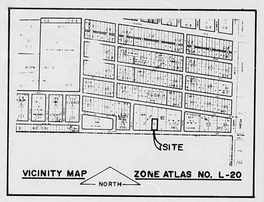
SCALE: 1" = 20'

50 40 30 20 10 0 20 40 50

LEGEND

EXISTING	NEW	DESCRIPTION
— — —		PROPERTY LINE
— — — 5450 — —	— 50 —	CONTOUR LINE
x	⊕ 50.32	SPOT ELEVATION
FH		FIRE HYDRANT
o — — — o		CHAIN LINK FENCE
	←	DRAINAGE FLOW
WM O		WATER METER
TB □		TELEPHONE BOX





FHD DESIGN CONFIDENCE FOR LINES:

I. DRAINAGE PLAN FOR D.P.M. REQUIREMENTS.

II. SITE IS NOT WITHIN A DESIGNATED FLOOD ZONE.

III. INADVERTENT FLOODING AT SIGNS AND WINDOWS DOWN TO CROWNSILL.

IV. FHD EVIDENCE WAS NO APPROPRIATE. ENGINEER MUST ADDRESS:
A. UNTILL SITE.
B. NO FACILITIES WITHIN OUTFLOWS OF SIGNS.
C. NO FACILITIES FROM PROPERTIES WHO THE DEVELOPED NON-OFF LEAVES THE PROPOSED SITE.
D. OTHER DEVELOPMENTS WITHIN THE AREA HAVE HAD NO POND AND RELEASE AT A CONTROLLED RATE.

DRAINAGE COMMENTS:

I. THE SITE IS NOT WITHIN OR ADJACENT TO A DESIGNATED FLOOD HAZARD AREA.

II. DOWNSTREAM CAPACITY IS ADEQUATE. LITTE RUNOFF ENTERS A LOTTO PRIOR TO THE INTERSECTION OF SOUTHERN AND WORK. THIS SYSTEM IS A 36" DIAMETER STORM DRAIN IN WORK.

III. FHD DETERMINE IS ADDRESSED IN THE PARTS OF THE FOLLOWING:
A. THE SITE IS AN INFILL SITE. MOST OF THE IMPROVEMENTS IN THIS BLOCK IS ALREADY DEVELOPED.
B. THERE IS A STORM DRAIN SYSTEM WITHIN A SHORT DISTANCE FROM THE SITE.
C. WHEN RUNOFF LEAVES THE SITE IT TRAVELS WEST DOWN DIRECTIONS AVENUE WITHIN THE BAR DITCH. THE FLOW IS INTERRUPTED BY THE DEVELOPING PARTS AT THE CORNER OF WORK AND SOUTHERN. IT THEN FLOWS THE CORNER ON WORK AND IS INTERCEPTED BY THE CATCH BASIN AT SANTA FERRA AVE WORK.
D. IN DISCARDING OTHER DEVELOPMENTS IN THE AREA (LOCAL INFRO IS ONLY ADDRESSED IN THE PARTS OF THE FOLLOWING: THE SITE IS AN INFILL SITE. THERE HAVE BEEN FAIRLY RECENT DEVELOPMENTS IN THE AREA AND RECENT FIELD INSPECTION REVEALED THAT IT DOES NOT HAVE PROBLEMS. LOCAL DEVELOPMENTS ARE LARGE LOT AND HAS A LARGE AMOUNT OF RUNOFF AND PAVEMENT AREA. ALL OF THE RECENT DEVELOPMENT DISCHARGES INTO SYSTEMS ADDRESSED IN THE SITE NOTE CONSIDERATION INFORMATION PRIOR SUBMITTED.

BENCH MARK:

ELEVATIONS ARE BASED ON STATION "TSOAM", AN NGS GEOD CNP WITH ELEVATION OF 5066.70 FEET ABOVE SEA LEVEL. STATION "TSOAM" IS LOCATED APPROXIMATELY AN FEET NORTH OF SOUTHERN AVENUE AND APPROXIMATELY 95 FEET WEST OF GARCIA STREET.

LEGAL DESCRIPTION:

LOT NUMBERED EIGHT (8) IN BLOCK NUMBERED FIFTY FOUR-A (54-A) IN THE REPLAT OF BLOCK 54, 55 & A PORTION OF BLOCK 53 OF OHSLEAN HEIGHTS, SAID REPLAT FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON JANUARY 14, 1958, IN VOL. 51C, FOLIO 96.

DRAINAGE CALCULATIONS

I. REFERENCES:
A. CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM) VOLUME 2, DESIGN CRITERIA, CHAPTER 22.
B. FLOODWAY MAP, PANEL 36 OF 50, (FEMA); OCTOBER 15, 1983.
C. SOIL SURVEY OF BERNALILLO COUNTY, NEW MEXICO, U.S. SOIL CONSERVATION SERVICE, JUNE, 1977.

II. ON-SITE RUNOFF CHARACTERISTICS:
A. UNDEVELOPED RUNOFF COEFFICIENT:

TYPE OF SURFACE	AREA	"C" VALUE	AREA("C")
STREETS, DRIVES, WALKS			
ROOFS			
LANDS & LANDSCAPING:			
UNDEVELOPED	21913	= 0.5031 AC	
TOTAL AREA	21913		

WEIGHTED "C" VALUE = 18812 / 21913 = 0.86
PERCENT IMPERVIOUS = 86%

B. DEVELOPED RUNOFF COEFFICIENT:

TYPE OF SURFACE	AREA	"C" VALUE	AREA("C")
STREETS, DRIVES, WALKS	10338	0.95	9821
ROOFS	7500	0.95	7125
LANDS & LANDSCAPING:	925	0.25	231
UNDEVELOPED	1650	0.40	660
TOTAL AREA	21913		18012

WEIGHTED "C" VALUE = 18012 / 21913 = 0.86
PERCENT IMPERVIOUS = 86%

C. RAINFALL, 100-YR.,6-HR.(REF. A., PLATE 22.2 D-1)
P_6 = 2.4 INCHES
D. TIME OF CONCENTRATION: TEN (10) MINUTES.
E. RAINFALL INTENSITY:I (REF. A., PLATE 22.2 D-2)
$I = a/(t_c+b)$, $a = 2.7$, $b = 0.04$ (10) $^{0.75}$ = 5.9/(TN)TR
F. SOIL TYPE (REF. I.C.; SHEET NO. 32; SOIL ID ENO. ENGUDO GRAVELLY FINE SANDY LOAM, HYDROLOGIC SOIL GROUP "B").
G. RUNOFF CURVE NUMBER (CN):(REF.I.A., PLATE 22.2 C-2)
UNDEVELOPED LAND (SE: PASTURE OR RANGE, POOR.
UNDEVELOPED CN = 79
DEVELOPED LAND (SE:BUILDING, PAVING, CN = 98; LANDSCAPING, CN = 61
WEIGHTED CN = (19338 X 98 + 925 X 61 + 1650 X 79)/21913
WEIGHTED CN = 95
DEVELOPED CN = 95
H. DIRECT RUNOFF, Q_p, INCHES (REF. I.A., PL. 22.2 C-4)
UNDEVELOPED Q_p = 0.80 IN. DEVELOPED Q_p = 1.85 IN.

III. ON-SITE PEAK DISCHARGE BY RATIONAL EQUATION:
A. EXISTING CONDITIONS:
Q_{100} = 0.49 X 5.07 X 0.5 = 1.24 CFS
Q_{10} = 0.457 X 1.01 = 0.46 CFS
B. DEVELOPED CONDITIONS:
Q_{100} = 0.98 X 5.07 X 0.5 = 2.23 CFS
Q_{10} = 0.457 X 2.23 = 1.57 CFS

IV. ON-SITE VOLUME BY S.C.S. METHOD:
A. EXISTING CONDITIONS:
V_{100} = AREA (Q_p/12) = 21913 (0.80/12) = 1461 CF
V_{10} = 0.457 X 1461 = 960 CF
B. DEVELOPED CONDITIONS:
V_{100} = AREA (Q_p/12) = 21913(1.85/12) =3378 CF
V_{10} = 0.457 X 3378 = 2239 CF

DRAINAGE CONTROL:

DURING ACTUAL CONSTRUCTION, ALL RUNOFF SHALL BE RETAINED ON-SITE BY THE CONSTRUCTION OF A POND OR BERM WITH SUFFICIENT CAPACITY TO CONTAIN THE 10-YEAR UNDEVELOPED VOLUME WHICH IS 960 CF.

Revised Feb 2, 1988
Revised May 7, 1987

Frank DiTomaso
MARCH 13, 1987

FEB 02 1988
HYDROLOGY SECTION

GRADING AND DRAINAGE PLAN
NEW WAREHOUSE BUILDING
10001 SOUTHERN AVE., S.E.
ALBUQUERQUE, NEW MEXICO

REF 22 DATE 2/2/93 OR BP
CITY OF ALBUQUERQUE

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Karen Aaron
CITY CLERK RECORDER

OFFICIAL SEAL
NORBERTA SANCHEZ
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires May 8, 1988
Norberta Sanchez

CITY OF ALBUQUERQUE
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PLANS/PLATS ON FILE

FILE DESC: L-20/D037

PLANS/PLATS 1

F 30 D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE

C D F