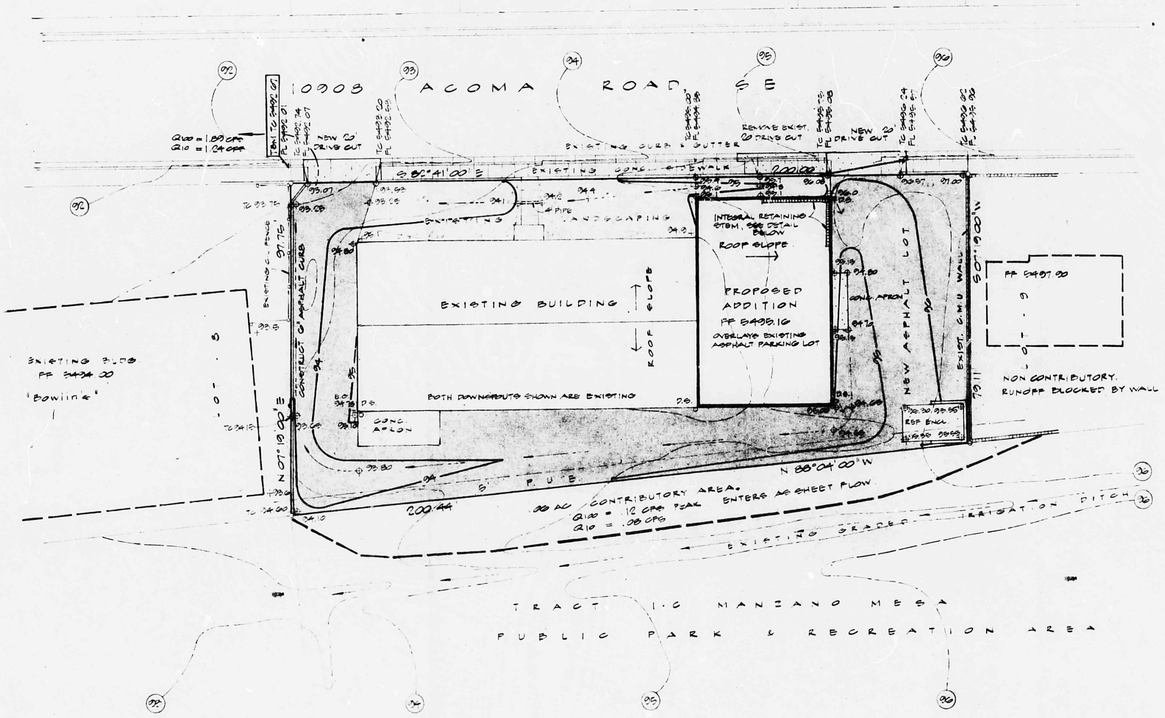
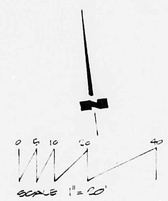
HYDROLOGY

L21/D31
1 PLAN

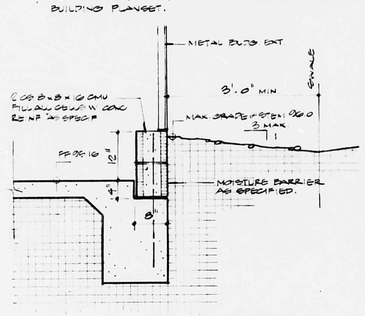
L21/D31

1 PLAN

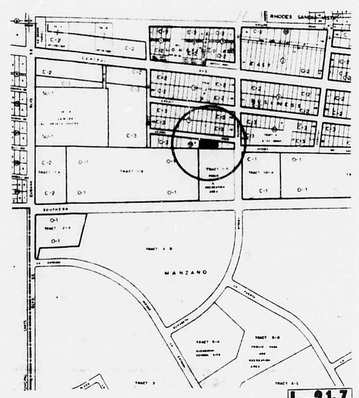




NOTE THIS IS A GENERAL DETAIL AND IS INTENDED TO SHOW MAXIMUM FLOOR-TO-FINISH GRADE SECTION. CONSTRUCTION SPECIFICS SUCH AS FOOTING WIDTH, REINFORCING, TRIM, ETC. APPEAR ELSEWHERE IN BUILDING PLANSET.



INTEGRAL RETAINING STEM 3/4" = 1'-0"



VICINITY MAP NO SCALE

L-21-Z

BENCH MARK

N.M. BER 3', USGS BRASS TABLET SET IN TOP OF CONCRETE POST IN ASPHALT PARKING LOT AT SOUTHEAST QUADRANT OF INTERSECTION OF EAST CENTRAL AVENUE AND PRITT ST. SE

5,324 5486.144

TBM

TOP OF SOUTH CURB IN ACOMA ROAD ADJACENT TO NORTHWEST PROPERTY CORNER

5,324 5490.67

LEGEND

CONTOUR INTERVAL (1.0 FOOT)

(95) EXISTING CONTOUR

95 PROPOSED CONTOUR

+ 95.00 EXISTING SPOT ELEVATION

95.00 PROPOSED SPOT ELEVATION

FLOWLINE

DIVISION OF CONTRIBUTORY AREAS

PROPOSED SPOT ELEVATIONS AND CONTOURS AS SHOWN ARE TO FINISHED SURFACES. CONTRACTOR(S) SHALL DETERMINE APPROPRIATE SUBGRADES.

CONTRACTOR IS RESPONSIBLE FOR THE ABATEMENT OF SEDIMENT FROM SITE ONTO ADJACENT PRIVATE PROPERTIES OR PUBLIC RIGHTS-OF-WAY DURING CONSTRUCTION.

GRADE A 1' HIGH x 3' WIDE BERM ALONG THE WEST PROPERTY LINE AND WEST 100 FEET OF NORTH PROPERTY LINE FOR TEMPORARY SEDIMENT CONTROL

BERM DETAIL 1/2" = 1'-0"

DATA

AREA OF SITE	17886 SQ FT. (.41 AC)
SLOPE	1.0%
TIME OF CONCENTRATION	10 MINUTES
100 YR RAINFALL	0.4 INCHES
INTENSITY (0.88 x 0.4 x 0.5) =	5.07 IN./HR.

EXISTING ON-SITE CONDITIONS

BUILDING AND PAVED LOT EXIST ON SITE. SOUTH SIDE OF SITE IS USED FOR MATERIAL STORAGE AND ACCESSWAY TO LOADING DOCK AT SOUTHWEST CORNER OF BUILDING. NORTH (STREET) SIDE IS COVERED WITH GRAVEL & MULCH LANDSCAPING WITH MATURE (VOLID ONYX) TREES.

IMPERVIOUS COVERAGE (INCL. ROOFS)	50%	
C FACTOR	.90	
ADJ. C FACTOR (.90 x 50% + .44 x .40) =	.69	
Q100 = .69 x 5.07 IN/HR x .41 AC	=	1.43 CFS PEAK
Q10 = .67 Q100	=	.94 CFS

EXISTING RUNOFF IS PRESENTLY ROUTED AROUND NORTH AND SOUTH SIDES OF BUILDING. DISCHARGE IS BOTH OVER WALK INTO ACOMA ROAD AND, ACCORDING TO FIELD EVIDENCE, DIRECTLY ACROSS WEST PROPERTY LINE ONTO LOT 3. WATER ACCUMULATES IN TWO LOW SPOTS AT SOUTHEAST SIDE OF BUILDING.

UPSTREAM CONTRIBUTORY AREAS

A CONCRETE BLOCK WALL PREVENTS ANY FLOWS FROM EAST. FROM THE SOUTH FLOWS ARE INTERCEPTED BY A GRADED IRRIGATION DITCH IN CITY PARK. DITCH IS 1.5 FEET DEEP. AVERAGE EXTENT OF CONTRIBUTORY AREA GENERALLY IS DELINEATED BY NORTH DITCH BANK.

CONTRIBUTORY AREA	.08 ACRE	
C-FACTOR	.40	
Q100 = .40 x 5.07 IN/HR x .08 AC	=	.16 CFS PEAK
Q10 = .67 Q100	=	.08 CFS

PROPOSED DEVELOPMENT

NEW BUILDING ADDITION (5480 SQ FT) OVERLAYING THE EXISTING ASPHALT PARKING AREA AND CREATING A NEW ASPHALT LOT AND DRIVES ON EAST, SOUTH AND WEST SIDES. RUNOFF SHALL BE CONVEYED VIA SWALE IN ASPHALT TO A PROPOSED DRIVEPAD TO ACOMA ROAD AT NORTHWEST CORNER OF SITE. GRADING SHALL ACCEPT EXISTING CONTRIBUTORY FLOW.

IMPERVIOUS COVERAGE	87%	
ADJ. C FACTOR = (.87 x .90) + (.13 x .40) =	.86	
Q100 = .86 x 5.07 IN/HR x .41 AC	=	1.79 CFS PEAK
Q10 = .67 Q100	=	1.20 CFS

DISCUSSION

FLOWS DISCHARGE ALONG THE NORTH & SOUTH FLOWLINES WEST TO BELT STREET. FLOWS TO EXISTING NATURAL SWALE, WEST TO BURLANK BLVD. SEE NEXT SHEET TO INTERSECTION BY EATON ESTATE.

SINCE FROM SITE DOES NOT CONTRIBUTE TO FLOOD ZONE

SITE DOES NOT ABUT OR [illegible] FLOOD ZONE

Q100 TOTAL = .16 CFS + 1.43 CFS = 1.59 CFS

Q10 TOTAL = .08 CFS + .94 CFS = 1.02 CFS

DESCRIPTION OF PROPERTY

LOT 3-A
EAST CENTRAL BUSINESS ADDITION
ALBUQUERQUE, NEW MEXICO

10008 ACOMA ROAD SE

RAINBOW WAY
DURA BILT PRODUCTS, INC

Richard Hall
7-29-87

RECEIVED
JUL 30 1987
HYDROLOGY SECTION

JULY, 1987

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