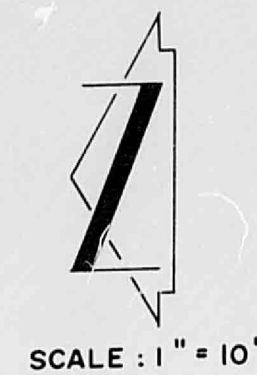


VICINITY MAP  
SCALE: 1" = 800'

H-22



SCALE: 1" = 10'

# PROJECT BENCHMARK

A SQUARE, 12, CHISELED ON TOP OF  
CONCRETE CURB AT THE LINE CURB  
RETURN AT THE INTERSECTION OF  
MENAU BLVD. N.E. & CHILWOOD DR. N.E.  
ELEV. = 5610.74 FEET (M.S.L.D.)

## TBM

ELEV. @ MANHOLE RIM LOCATED APPROX.  
25 FEET WEST & 4 FEET NORTH OF THE  
NORTHWEST PROPERTY CORNER AS SHOWN  
ON THE DRAWING BELOW.  
ELEV. = 5624.93 FEET (M.S.L.D.)

## LEGAL DESCRIPTION

LOT 1-A, BLOCK G, ENCHANTED  
MESA ADDITION

# LEGEND

- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- PROPOSED CONTOUR
- EXISTING CONTOUR
- SWALE
- PROPERTY LINE
- CONCRETE
- PROPOSED ASPHALT
- PROPOSED FENCE
- EXISTING FENCE
- TC 02.00
- FL 01.05
- TOP OF CURB
- FLOW LINE

# CONSTRUCTION NOTES

- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION,  
CONTRACTOR MUST CONTACT LINE LOCATING SERVICE  
715-1234, FOR LOCATION OF EXISTING UTILITIES.
- 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  
AMOUNT OF DELAY.
- 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.
- ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY  
SHALL BE PERFORMED IN ACCORDANCE WITH  
APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND  
PROCEDURES.

# EROSION CONTROL MEASURES

- THE CONTRACTOR SHALL ENSURE THAT NO  
SOIL ERODES FROM THE SITE INTO  
PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE  
PROPERTY. THIS CAN BE ACHIEVED BY  
CONSTRUCTING TEMPORARY BERMS AT THE  
PROPERTY LINES AND WETTING THE SOIL  
TO KEEP IT FROM BLOWING.
- THE CONTRACTOR SHALL PROMPTLY CLEAN  
UP ANY MATERIAL EXCAVATED WITHIN THE  
PUBLIC RIGHT-OF-WAY SO THAT THE  
EXCAVATED MATERIAL IS NOT  
SUSCEPTIBLE TO BEING WASHED DOWN THE  
STREET.
- THE CONTRACTOR SHALL SECURE "TOPSOIL  
DISTURBANCE PERMIT" PRIOR TO  
BEGINNING CONSTRUCTION.

The following items concerning the Menaul Jazzercise Drainage Plan are  
contained hereon:

- Vicinity Map
- Grading Plan
- Calculations

The proposed improvements as shown by the Vicinity Map are located on  
the north side of Menaul at the intersection of Hiawatha N.E. At present  
the site is undeveloped.

As shown by Plate H-22 of the Albuquerque Master Drainage Study, the  
site does not lie within a designated Flood Hazard Zone. The grading  
plan shows 1) Existing and proposed grades indicated by spot elevations  
and contours at 1'-0" intervals, 2) continuity between existing and  
proposed elevations, 3) the limit and character of the existing improve-  
ments, 4) the limit and character of the proposed improvements. As  
shown by this plan, the proposed improvements consist of the construction  
of a building, landscaping and associated asphalt paving. At the present  
time this site drains from west to east. The site is lower than the land  
to the east, higher than Menaul Boulevard and Hiawatha Drive and approxi-  
mately parallel to the paved alley on the north. The proposed grading  
plan indicates that waters will exit this site via a driveway cut on  
Hiawatha Drive.

The calculations which appear below analyze both the existing and  
developed conditions for the 100-year, 6-hour rainfall event. The  
Rational Method has been used for this analysis in accordance with City  
of Albuquerque Development Process Manual, Volume II. As shown by these  
calculations, the proposed improvements will result in an increase in  
runoff discharged by the site. The site is an infill site with a minimum  
impact on the downstream facilities. Paving is not evident on other  
sites of this size within the drainage basin. Improvements have been  
made downstream to reduce potential flooding, therefore, a free discharge  
is appropriate for this site. This pattern of runoff is consistent with  
the predesign conference recap which accompanies this submittal.

# CALCULATIONS

## Ground Cover Information

From SCS Bernalillo County Soil Survey, Plate 22:  
Brandy, B2C  
Hydrologic Soil Group B

## Rational Method

Discharge:  $Q = CIA$

where C varies

$$i = P_6 (6.84) T_C^{-0.51} = 5.28 \text{ in/hr}$$

$$P_6 = 2.5 \text{ in (DFM Plate 22.2D-1)}$$

$$T_C = 10 \text{ min (minimum)}$$

$$A = \text{area, acres}$$

$$\text{Volume: } V = C P_6 A (1/12)$$

Where C varies

$$P_6 = 2.5 \text{ in (DFM Plate 22.2D-1)}$$

$$A = \text{area, sf}$$

## Existing Condition

$$A_{\text{total}} = 11760 \text{ sf} = 0.27 \text{ Ac}$$

$$A_{\text{imp}} = 0 \text{ sf; } \% \text{ impervious} = 0\%$$

$$C = 0.34 \text{ (DFM Plate 22.2C-1)}$$

$$Q_{100} = CIA = 0.34 (5.28) 0.27 = 0.5 \text{ cfs}$$

$$V_{100} = C P_6 A = 0.34 (2.5/12) 11760 = 833 \text{ c.f.}$$

## Developed Condition

$$A_{\text{total}} = 11760 \text{ sf} = 0.27 \text{ Ac}$$

$$A_{\text{imp}} = 10950 \text{ sf; } \% \text{ impervious} = 93\%$$

$$C = 0.90 \text{ (DFM Plate 22.2C-1)}$$

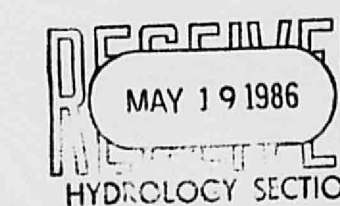
$$Q_{100} = CIA = 0.90 (5.28) 0.27 = 1.3 \text{ cfs}$$

$$V_{100} = C P_6 A = 0.90 (2.5/12) 11760 = 2205 \text{ c.f.}$$

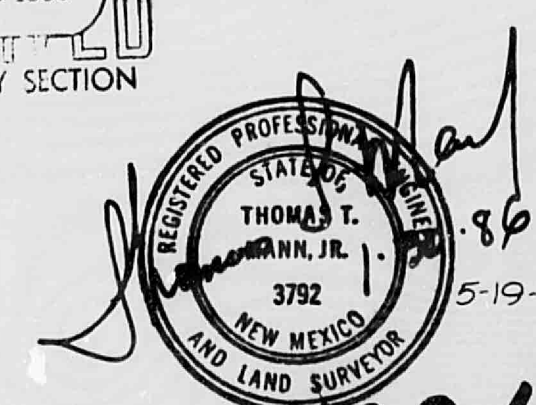
## Comparison

$$Q_{100} = 1.3 - 0.5 = 0.8 \text{ (increase)}$$

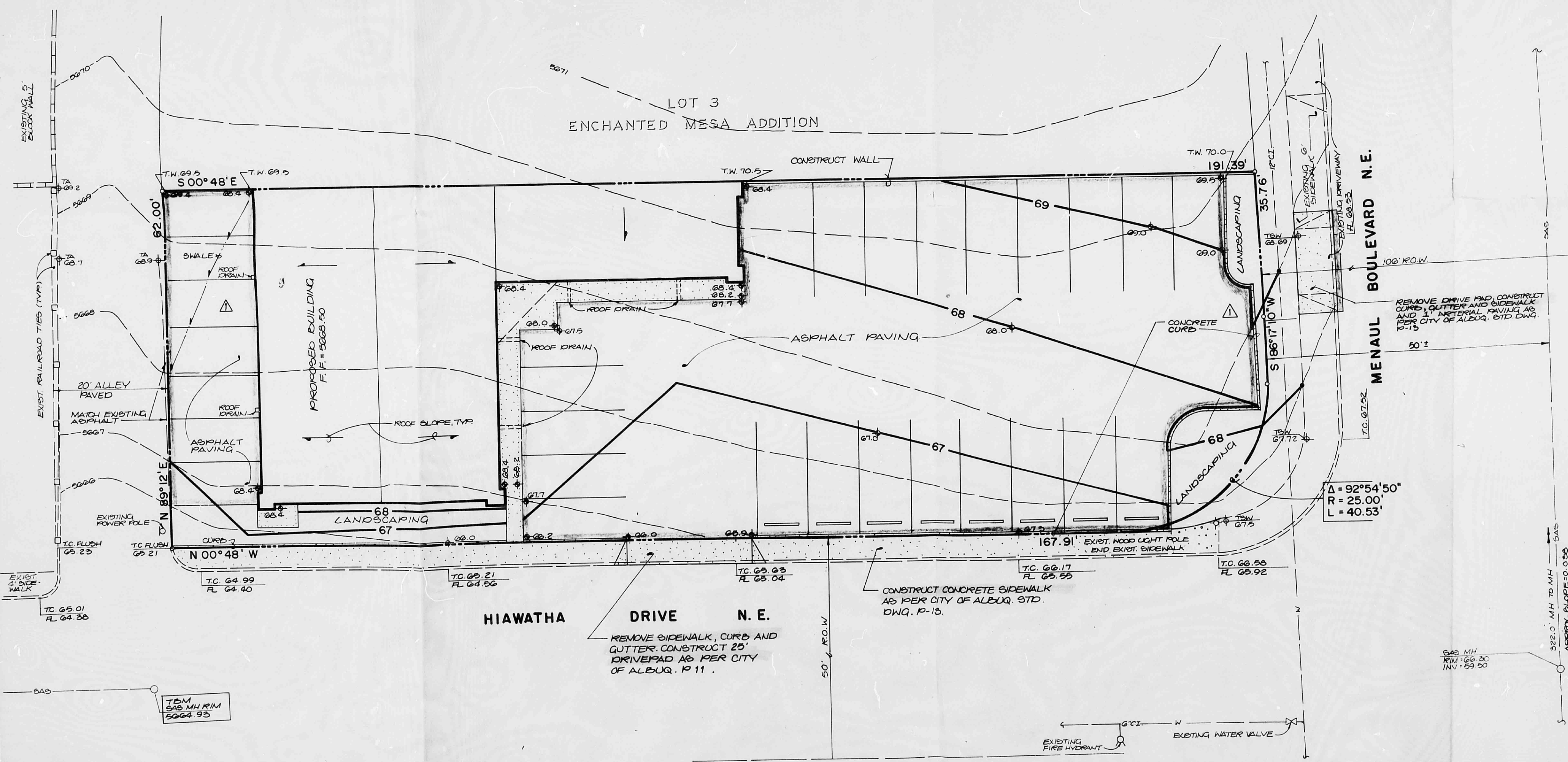
$$V_{100} = 2205 - 833 = 1372 \text{ cf (increase)}$$



MAY 19 1986  
HYDROLOGY SECTION



H22/D55



811 DALLAS N.E. • ALBUQUERQUE • NEW MEXICO • 87110  
ENGINEERS

NO.	DATE	BY	REVISIONS
1	5/19/86	T.M.	REVISED SOUTH END OF PARKING LOT, OMIT DUMPSTER

DESIGNED BY: T.T.M.	JOB NO: 60041
DRAWN BY: S.G.H.	DATE: 1-86
APPROVED: T.T.M.	

# GRADING AND DRAINAGE PLAN MENAU JAZZERCISE

APPROVED FOR DRAINAGE  
5/23/86  
DATE  
Signature: Roger A. Mann, Jr.  
TITLE: PE Hydrology

FILE NO.  
SHEET 1 OF 1