

# DRAINAGE PLAN WHALE OF A WASH WYOMING

## LOCATION AND EXISTING CONDITION:

The site is located approximately 300 feet north of the intersection of Wyoming Boulevard and Menaul Boulevard N.E. containing approximately 0.5901 acres. The site is 100 percent developed and slopes from the east to the west with an average slope of 2.9 percent. Storm runoff from the site currently flows across the west property line, through the west property, and is then collected onto Wisconsin Street. From Wisconsin Street, runoff is intercepted by a storm sewer system along an alley south of the site. (System 129-Albuquerque Master Drainage Study, AMDS). The site does not contribute to a 100 year flood zone.

A small amount of off-site runoff enters the site from the property to the north (Hoffmantoen Baptist Church).

## PROPOSED CONDITION:

Proposed development of the site includes a small building with 7 car wash bays, associated parking, and landscaping. Runoff will be decreased and continue to flow to the west property. Runoff will be controlled through 2-6 inch PVC drain pipes located at the low elevation on the site.

Off-site runoff will be routed around the development and continue onto the existing drainage pattern to the west property.

## CALCULATIONS:

Area = 0.5901 acres  
I = 2.2 in./hr. Plate 22.2 D-2  
6-hour, 100-year rainfall = 2.35 in. Plate 22.2 D-1  
i = (2.2)(2.35) = 5.17 in./hr.

## EXISTING ON-SITE CONDITIONS:

SURFACE TYPE	"C" VALUE	A (ACRES)	"C" X A	COMPOSITE "C" = CKA/A
Streets, Drives, Walks	0.95	0.53	0.50	
Roofs	0.90	0.06	0.05	
Lawns & Landscaping	0.25	-0-	-0-	
Undeveloped	0.40	-0-	-0-	
<b>TOTAL</b>		<b>0.59</b>	<b>0.55</b>	<b>0.93</b>

Q(100) = (0.93)(5.17)(0.59) = 2.84 cfs  
Q(10) = (0.657)(2.84) = 1.86 cfs  
CN = 98 Plate 22.2 C-2  
Direct Runoff = 2.2 in. Plate 22.2 C-4  
V(100) = (2.2)(0.59)(43560)/12 = 4712 cu. ft.  
V(10) = (0.657)(4712) = 3096 cu. ft.

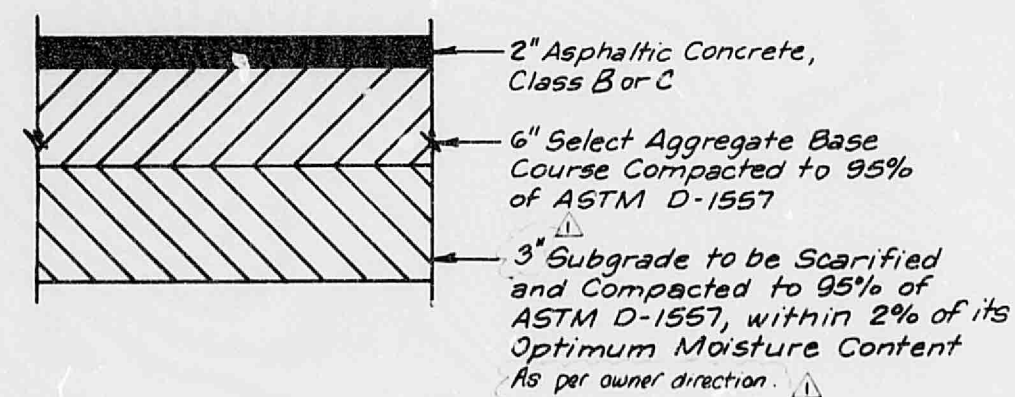
## PROPOSED ON-SITE CONDITIONS:

SURFACE TYPE	"C" VALUE	A (ACRES)	"C" X A	COMPOSITE "C" = CKA/A
Streets, Drives, Walks	0.95	0.46	0.44	
Roofs	0.90	0.08	0.07	
Lawns & Landscaping	0.25	0.05	0.01	
Undeveloped	0.40	-0-	-0-	
<b>TOTAL</b>		<b>0.59</b>	<b>0.52</b>	<b>0.88</b>

Q(100) = (0.88)(5.17)(0.59) = 2.68 cfs  
Q(10) = (0.657)(2.68) = 1.76 cfs  
CN = 95 Plate 22.2 C-3  
Direct Runoff = 1.85 in. Plate 22.2 C-4  
V(100) = (1.85)(0.59)(43560)/12 = 3962 cu. ft.  
V(10) = (0.657)(3962) = 2603 cu. ft.

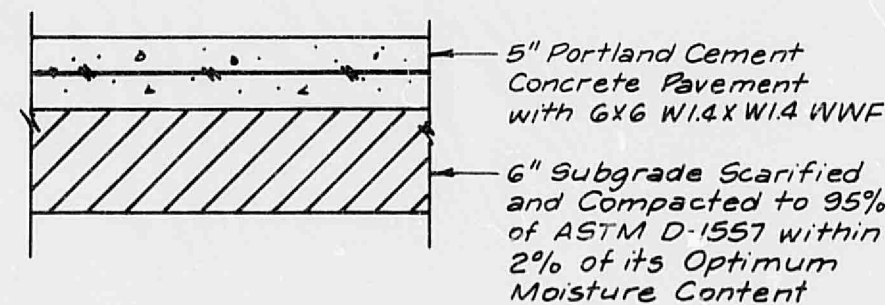
## CAPACITY OF 2-6" PVC DRAIN LINES:

Q = 2(0.463d<sup>8/3</sup> S<sup>1/2</sup>) / n (MANNINGS FORMULA FOR PIPES)  
d = 0.5  
S = 0.01  
n = 0.011  
Q = 1.33 CFS  
THEREFORE, RUNOFF CONTROLLED BY PIPE DESIGN IS 1.85 CFS.  
THE 6" CURB WILL ACT AS THE SPILLWAY.



## ASPHALT PAVING SECTION

Additional specifications for asphaltic concrete and aggregate base course to be taken from the "New Mexico Standard Specifications for Public Works Construction", 1979 Edition, Sections 115 and 302 respectively.



## CONCRETE PAVING SECTION

ADD ALTERNATE 1 & 2

## CONCRETE HEADER CURB

## GRADING & DRAINAGE PLAN - WYOMING SITE

## LEGAL DESCRIPTION:

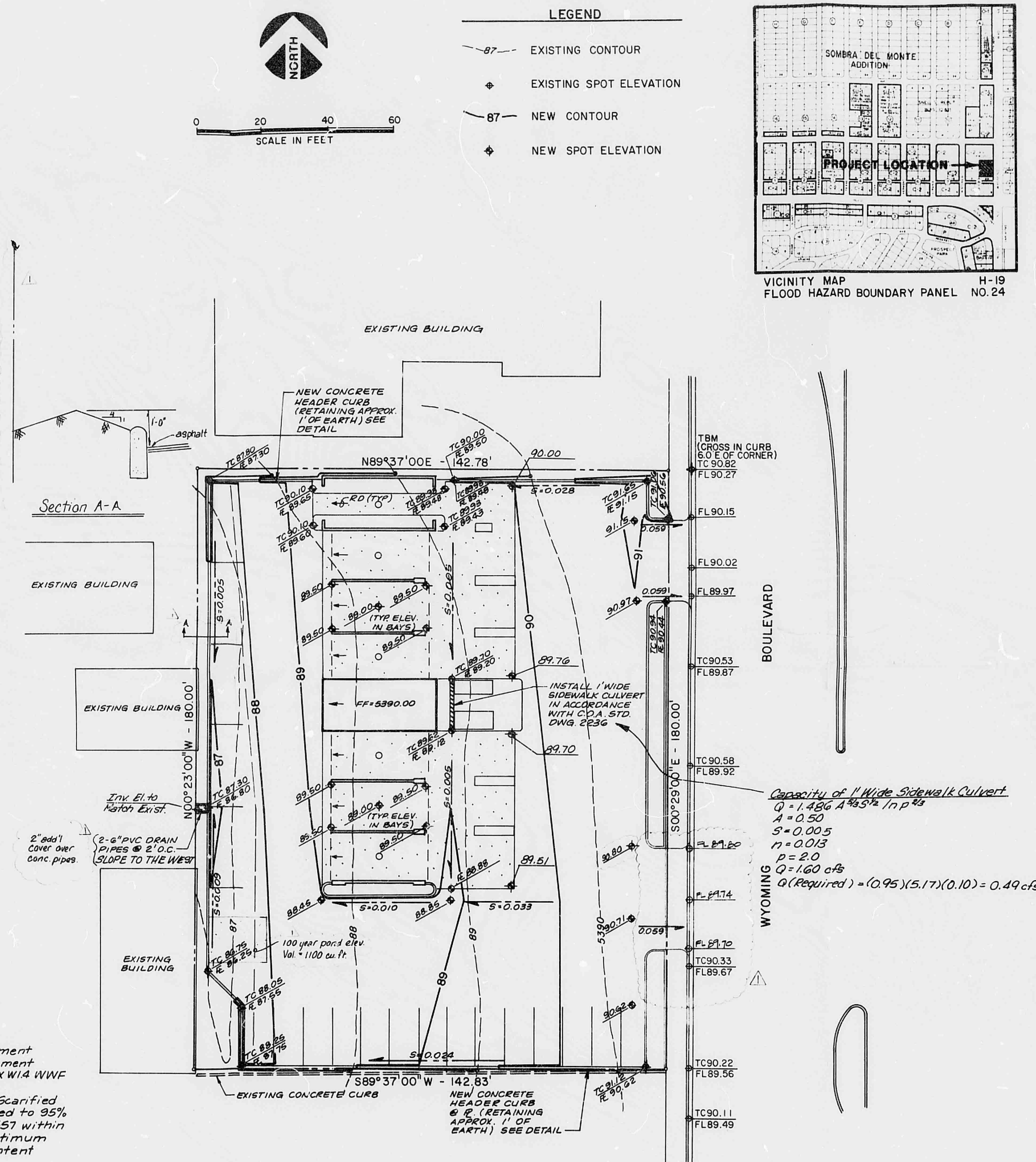
LOTS 17, 18, & 19, BLOCK 8 OF THE AMENDED PLAT OF SOMBRA DEL MONTE SUBDIVISION.  
ACS BENCH MARK: 3-G20-A, ELEV. -5403.89'. THE STATION IS LOCATED JUST WEST OF THE INTERSECTION OF WYOMING BOULEVARD AND Candelaria Road IN THE MEDIAN STRIP ON Candelaria Road. THE STATION MARK IS A STANDARD ACS BRASS TABLET, STAMPED "3-G20-A" SET IN TOP OF THE CONCRETE CURB OF THE LEFT TURN BAY, FLUSH WITH THE TOP OF CURB.

TEMPORARY (PROJECT) BENCH MARK: A CROSS IN THE CURB AT THE NORTHEAST CORNER OF THE SITE, 6.00 FEET EAST OF THE PROPERTY CORNER. ELEV. -5390.82' (TOP OF CURB)

SURVEY INFORMATION: SURVEY INFORMATION WAS TAKEN FROM THE CERTIFICATE OF SURVEY BY CARL R. HARRINGTON, INC., AUGUST, 1987, REVISED SEPTEMBER 22, 1987.

## NOTICE TO CONTRACTOR:

- ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE "CITY OF ALBUQUERQUE, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986" (COA STDN).
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234, FOR LOCATION OF EXISTING UTILITIES.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH MINIMUM AMOUNT OF DELAY.
- 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.
- 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.



Note:  
For Dimensions, Location & Additional Information See Architectural Site Plan.



RECEIVED  
NOV 16 1987  
HYDROLOGY SECTION

RECEIVED  
NOV 16 1987  
CONSTRUCTION SET

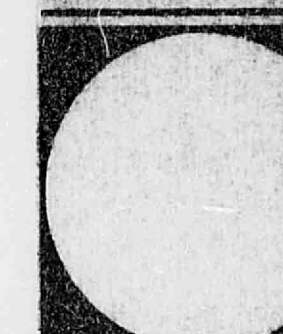


MIMBRES

PLANNERS • ARCHITECTS • ENGINEERS  
SANTA FE • ALBUQUERQUE

Whale of a Wash  
Self Service Carwash Facility  
for  
Matt Man Inc.

WYOMING SITE  
GRADING PLAN



BY: J.M. CK/V.C.  
PROJ: 554  
DATE: 14 OCT 87

C-3  
OF

STATUS:

CITY OF ALBUQUERQUE  
THIS MICROFICHE IS THE BEST  
POSSIBLE REPRODUCTION DUE  
TO THE POOR QUALITY OF THE  
ORIGINAL DOCUMENT

CITY OF ALBUQUERQUE