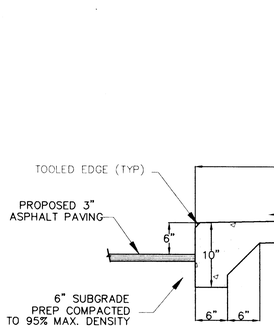
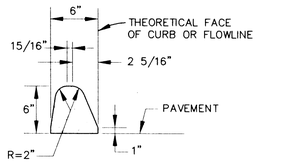


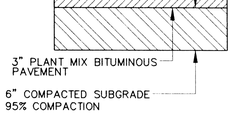
CONCRETE SIDEWALK

N.T.S.



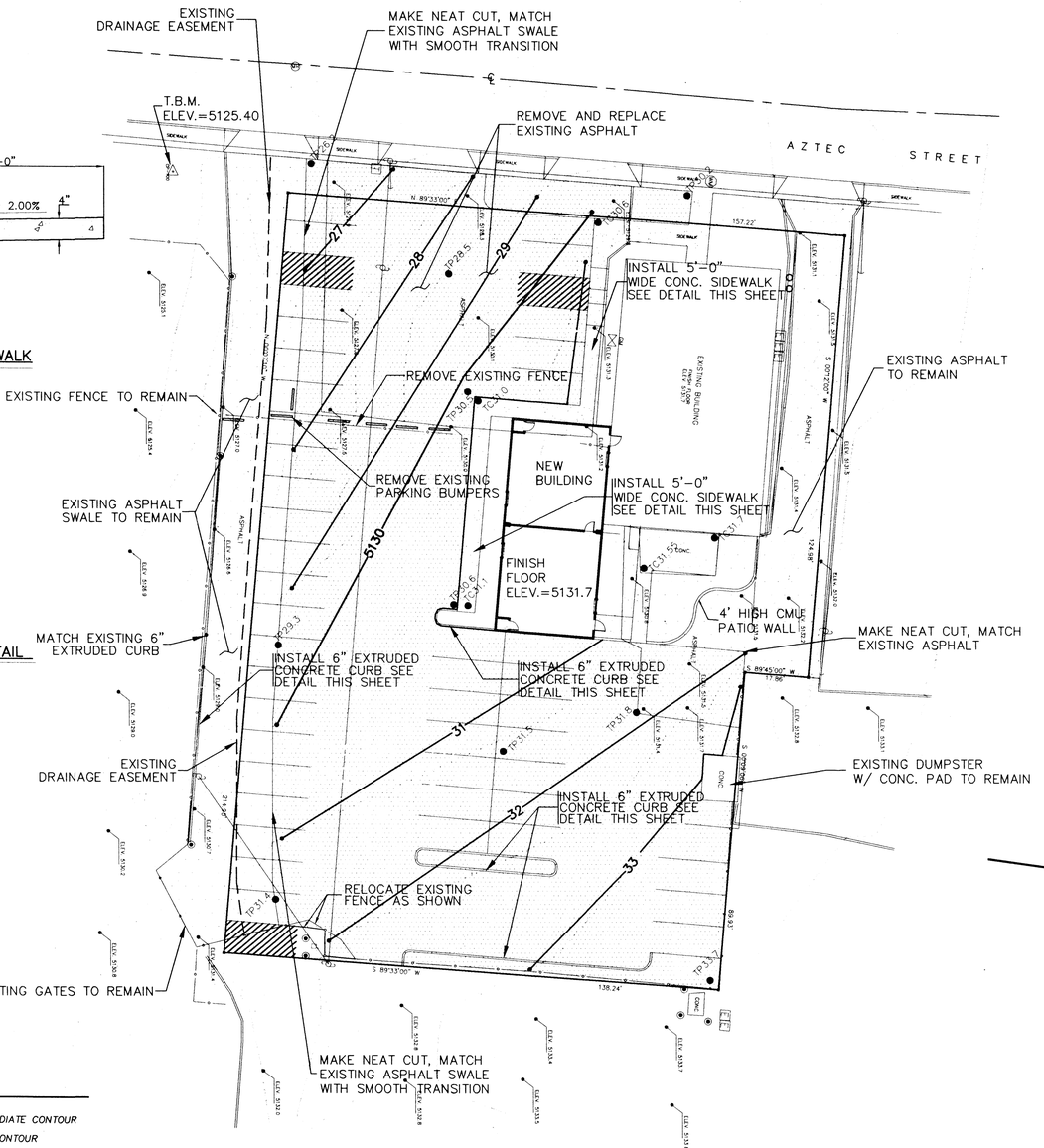
6" EXTRUDED CONCRETE CURB DETAIL

N.T.S.



ASPHALT SURFACING DETAIL

N.T.S.



LEGEND

5539	EXISTING INTERMEDIATE CONTOUR
5540	EXISTING INDEX CONTOUR
39	PROPOSED INTERMEDIATE CONTOUR
5540	PROPOSED INDEX CONTOUR
ELEV. 5128.8	EXISTING SPOT ELEVATION
TP35.00	PROPOSED SPOT ELEVATION
	BASIN DESIGNATION
	BASIN BOUNDARY
	PROPOSED SWALE
	PROPOSED ASPHALT PAVEMENT
	EXISTING ASPHALT PAVEMENT

W&C

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

DRAINAGE REPORT

Site Location: The Universal Therapeutic Massage Institute is located at 3410 Aztec N.E. in Albuquerque, NM. It is at the intersection of Carlisle Blvd and Aztec St., N.E. It is bounded on the south side of Aztec St., on the west side of Carlisle Blvd

Methodology: Section 22.2 Part A of the City of Albuquerque DPM was followed to calculate the peak rate of discharge and volume of runoff generated for Basin 101. The 100-year frequency 6-hour rainfall volume was used as the design storm. The site is located in Zone 2.

Existing Conditions: The site is developed as a commercial site with slopes sloping from southeast to northwest. The total area of the property is approximately 0.775 acres. The property is divided into one basin called Basin 101. Basin 101 drains directly to the northwest part of the property where it discharges into Aztec Street.

EXISTING CONDITIONS

		Treatment					
Basin	Area (ac)	%A	%B	%C	%D	V_{360} (ac-ft)	Q_p(cfs)
101	0.775	0	0	48	52	0.106	3.06

Proposed Conditions: Proposed improvements to the site include the addition of an asphalt parking lot on the southern half of the property, concrete sidewalks, and a new building in the center of the property. Runoff will discharge into a drainage easement (20 ft. wide asphalt swale) on the west side of the property, which then discharges into Aztec Street.

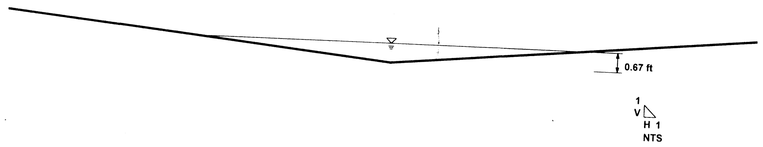
PROPOSED CONDITIONS

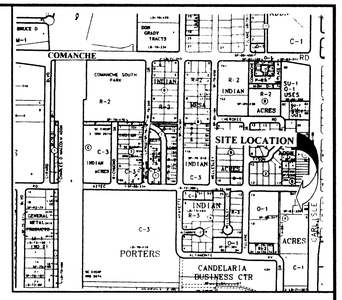
		Treatment					
Basin	Area (ac)	%A	%B	%C	%D	V_{360} (ac-ft)	Q_p(cfs)
101	0.775	0	0	0	100	0.137	3.64

Conclusions: Runoff and flow rate had a slight increase as a result of changes in land treatment areas for Basin 101. Runoff has increased by 0.031 ac-ft. and the peak discharge has increased by 0.58 cfs. The existing swale does have the capacity for the runoff generated by the improvement. There is approximately 5 acres of offsite runoff discharging into the existing swale. Each acre produces approximately 4-5 cfs per acre. Therefore,the total discharge into the existing swale, including the improvements to the Universal Therapeutic Institute, is approximately 28-29 cfs. The existing swale has a capacity of 34.89 cfs, thus the swale is sufficient to handle the proposed development flow.

Input Data		
Mannings Coefficient	0.013	
Channel Slope	0.020000	ft/ft
Depth	0.67	ft
Left Side Slope	10.000000	H : V
Right Side Slope	10.000000	H : V

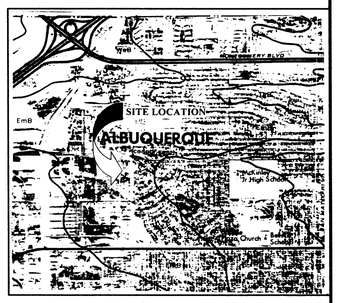
Results		
Discharge	34.89	cfs
Flow Area	4.49	ft²
Wetted Perimeter	13.47	ft
Top Width	13.40	ft
Critical Depth	0.95	ft
Critical Slope	0.003182	ft/ft
Velocity	7.77	ft/s
Velocity Head	0.94	ft
Specific Energy	1.61	ft
Froude Number	2.37	
Flow is supercritical		





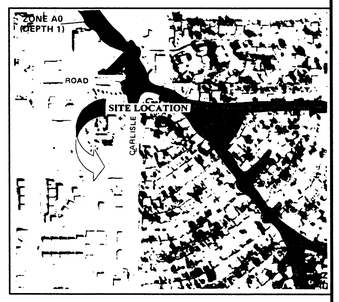
LOCATION MAP

ZONE ATLAS MAP NO. G-16-Z



SOILS MAP

REFERENCE: SCS BERNALILLO COUNTY SOIL SURVEY SHEET NO. 21



FLOOD INSURANCE MAP

REFERENCE: FLOOD INSURANCE STUDY PANEL 23

LEGAL DESCRIPTION

LOT NUMBERED EIGHT-A (8-A) OF THE CHESTER REPLAT OF A NORTH PORTION OF TRACT 8 BLOCK "A" INDIAN ACRES SUBDIVISION, AS THE SAME IS SHOWN AND DESIGNATED ON SAID REPLAT, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON NOVEMBER 9, 1983

BENCH MARK

THE STATION MARK IS A STANDARD A.C.S. BRASS TABLET STAMPED " 6-G17 " SET IN TOP OF THE CURB, LOCATED 3.8 MILES NORTHEAST OF DOWNTOWN ALBUQUERQUE AT THE INTERSECTION OF CARLISLE BLVD. AND AZTEC RD. THE STATION IS ON THE EAST SIDE OF CARLISLE OPPOSITE AZTEC. ELEVATION= 5136.46 FEET (SLD 1929)

WILSON &COMPANY
4775 INDIAN SCHOOL ROAD N.E.
SUITE 200
ALBUQUERQUE, NEW MEXICO
87110
(505) 254-4000

DATE: DEC. 1998

FILE NO.: 98108

DESIGN: SJS | DRAWN: SJS

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

UNIVERSAL THERAPEUTIC INSTITUTE
GRADING AND DRAINAGE PLAN

Design Review Committee	City Engineer Approval	Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
RECEIVED DEC 08 1998 HYDROLOGY SECTION				

City Project No. | Zone Map No. G-16 | Sheet 1 Of 1

97108\M\108.DWG\SJS