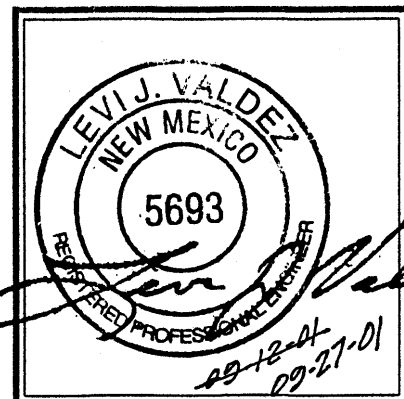


GRADING/PAVING PLAN FOR 8100 CONSTITUTION PLACE N.E.

Carls
924-3982

RECEIVED
SEP 28 2001
HYDROLOGY SECTION



JOB NO:	
DATE:	AUGUST 2001
REVISIONS	

Sheet Title
GRADING & PAVING PLAN
Drawn By: ~~SM~~ GTR
Checked By: LJV

BJM DEVELOPMENT CONSULTANT
DESIGN - PLANNER
Albuquerque, New Mexico

Project Name
8100 CONSTITUTION PLACE N.E.
ALBUQUERQUE, NEW MEXICO

SHEET NO.
GP-1

GRADING/PAVING PLAN

THE FOLLOWING ITEMS CONCERNING (8100 CONSTITUTION PLACE N.E.)
LOT C EAST END ADDITION, BERNALILLO COUNTY, ALBUQUERQUE, NEW
MEXICO ARE CONTAINED HEREON.

EXISTING CONDITIONS

AS SHOWN ON THE VICINITY MAP, THE SITE CONTAINS 1.975 ACRES MORE
OR LESS AND IS LOCATED WEST OF WYOMING BLVD. N.E. AND SOUTH OFF
OF CONSTITUTION PLACE N.E.. THE SITE IS COMPLETELY DEVELOPED
WITH MEDICAL OFFICES AND ASSOCIATED PAVED PARKING AND
LANDSCAPED AREAS. ACCORDING TO THE FLOOD INSURANCE RATE MAP,
PANEL 0358D, DATED SEPTEMBER 20,1996, THE SITE IS NOT LOCATED
WITHIN A DESIGNATED FLOOD PLAIN NOR DOES IT CONTRIBUTE TO ANY
DOWN STREAM FLOODING.

PROPOSED CONDITIONS

AS SHOWN BY THE GRADING/PAVING PLAN, THE PROJECT WILL CONSIST
OF PULVERIZATION OF THE EXISTING ASPHALT PAVEMENT. THE EXISTING
ASPHALT AREAS WILL BE REPLACED WITH NEW ASPHALT SET TO OR
CLOSE TO THE EXISTING GRADES. NO INCREASE IN RUN-OFF IS PROPOSED.
THE RUN-OFF WILL CONTINUE TO FOLLOW THE SAME PATTERN AS
APPROVED IN THE ORIGINL DRAINAGE PLAN DATED 9/72; OFF-SITE
FLOWS ENTER THE SITE.

DOWNSTREAM CAPACITY

RUN-OFF WILL CONTINUE TO BE ROUTED TOWARDS AN EXISTING
RUNDOWN LOCATED ON THE SOUTHERLY PROPERTY LINE OF THE SITE.
FROM THAT POINT THE RUN-OFF ENTERS THE EXISTING SWALE LOCATED
ON THE I-40 RIGHT OF WAY WHICH THEN EVENTUALLY ENTERS THE
DIVERSION CHANNEL.

8100 CONSTITUTIOAREA =1.98ac.
PLACE N.E.
ZONE 3
PRECIPITATION: 360= 2.60in.
1440=3.1in.
10day=4.9in.

EXCESS PRECIPITATION: PEAK DISCHARGE:

TREATMENT A	0.66in.	1.87	cfs/ac.
TREATMENT B	0.92in.	2.6	cfs/ac.
TREATMENT C	1.29in.	3.45	cfs/ac.
TREATMENT D	2.36in.	5.02	cfs/ac.

EXISTING CONDITIONS:	AREA	PROPOSED CONDITIONS:	AREA
TREATMENT A	0ac.	TREATMENT A	0ac.
TREATMENT B	0ac.	TREATMENT B	0ac.
TREATMENT C	0.49ac.	TREATMENT C	0.492ac.
TREATMENT D	1.48ac.	TREATMENT D	1.482ac.

EXISTING EXCESS PRECIPITATION:

Weighted E =(0.66)x(0.00)(0.92)x(0.00)+(1.29)x(0.49)+(2.36)x(1.48)/1.98ac.
= 2.09
V100-360 = (2.09)x(1.98)/12 = 0.3444ac-f= 15005 cf

EXISTING PEAK DISCHARGE:

Q100 =(1.87)x(0.00)+ (2.60)x(0.00)+(3.45)x(0.49)+(5.02)x(1.48) = 9.14 CFS

PROPOSED EXCESS PRECIPITATION:

Weighted E =(0.66)x(0.00)+ (0.92)x(0.00)+(1.29)x(0.49)+(2.36)x(1.48) /1.98ac.
= 2.09
V100-360 = (2.09)x(1.98)/ 12.0= 0.3444ac-f= 15005 cf

V100-1440 = (0.34)+(1.48)x (3.10- 2.60)/12 = 0.4062ac-f= 17695cf

V100-10day =(0.34)+(1.48)x (4.90- 2.60)/12 = 0.6285ac-f= 27381cf

PROPOSED PEAK DISCHARGE:

Q100 =(1.87)x(0.00)+ (2.60)x(0.00)+(3.45)x(0.49)+(5.02)x(1.48) =9.14CFS

NO INCREASE IN RUN-OFF

NOTE TO CONTRACTOR

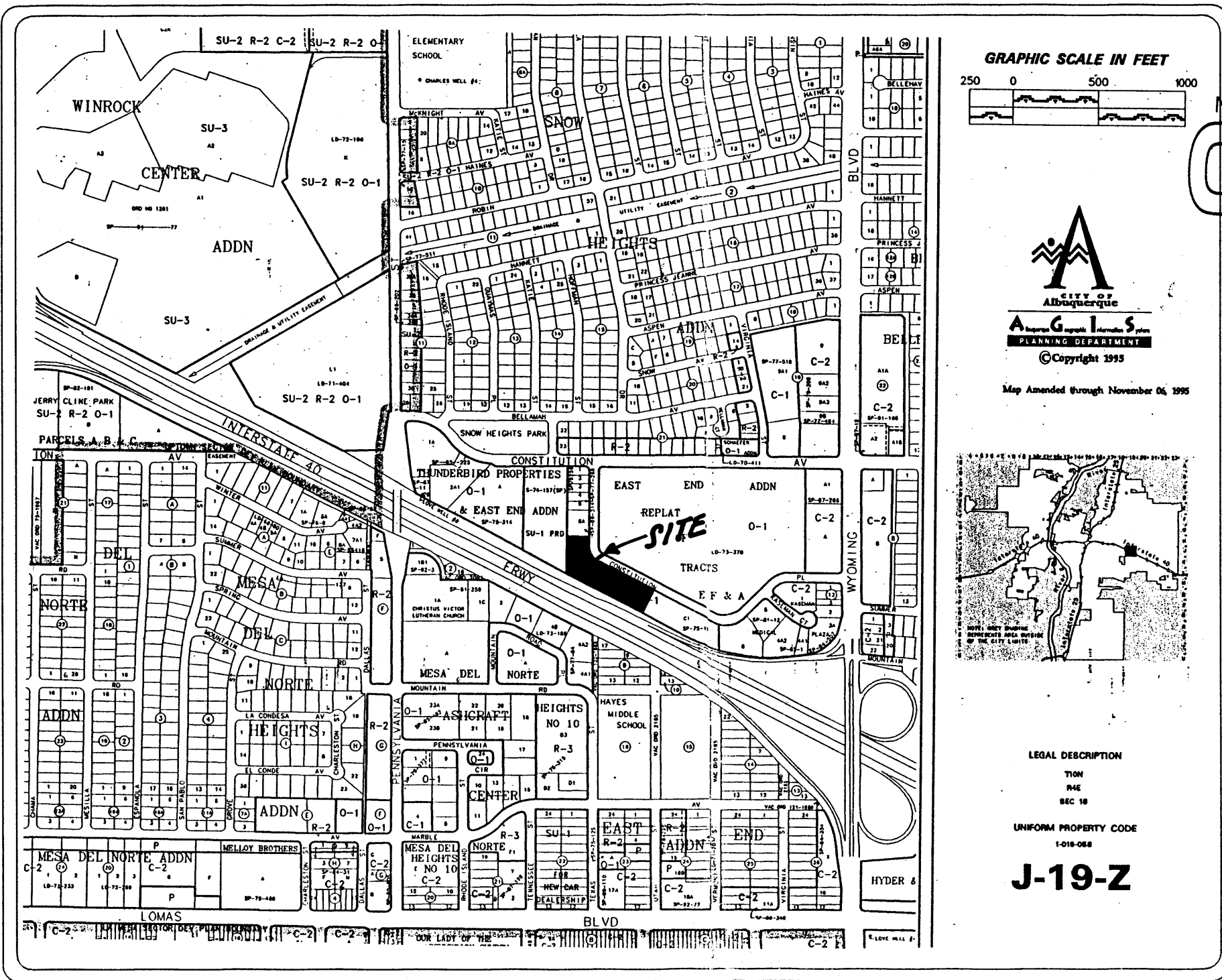
1. An excavation/construction permit will be required before beginning any work within the City right-of-way. Approved copy of this plan must be submitted at the time of application for permit.
2. All work detailed in this plan to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with City of Albuquerque Standard Specification for Public Works Construction.
3. Two working days prior to any excavation, contractor must contact line locating Services at (505) 260-1990 for locating existing utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all construction. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to residential use.
6. 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.

LEGAL

LOT C
EAST END ADDITION
BERNALILLO COUNTY
ALBUQUERQUE, NEW MEXICO
UPC# 1-019-058-390-200-41926

BENCHMARK

ACS Station "10-J19", located on the top of
curb at the northwest corner of Wyoming Blvd.
N.E. and Constitution Avenue N.E.; M.S.L. datum
elevation = 5360.53, (Project T.B.M. as shown
on the plan hereon.



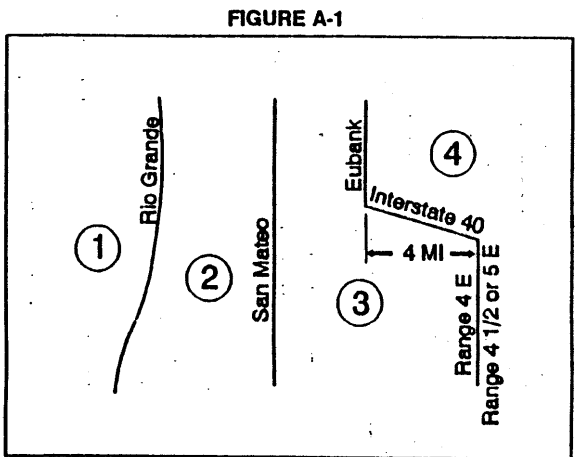
VICINITY MAP J-19

FEMA PANEL 0358D

A1 PRECIPITATION ZONES

Bernalillo County's four precipitation zones are indicated in TABLE A-1 and on FIGURE A-1.

TABLE A-1. PRECIPITATION ZONES	
Zone	Location
1	West of the Rio Grande
2	Between the Rio Grande and San Mateo
3	Between San Mateo and Eubank, North of Interstate 40, and between San Mateo and the East boundary of Range 4 East, South of Interstate 40
4	East of Eubank, North of Interstate 40, and East of the East boundary of Range 4 East, South of Interstate 40



Where a watershed extends across a zone boundary, use the zone which contains the largest portion of the watershed.

DPM SECTION 22.2 - HYDROLOGY
January, 1993 Page A-4

TABLE A-4. LAND TREATMENTS	
Treatment	Land Condition
A	Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands. Unlined arroyos.
B	Irrigated lawns, parks and golf courses with 0 to 10 percent slopes. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes greater than 10 percent and less than 20 percent.
C	Soil compacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (desert landscaping). Irrigated lawns and parks with slopes greater than 10 percent. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.

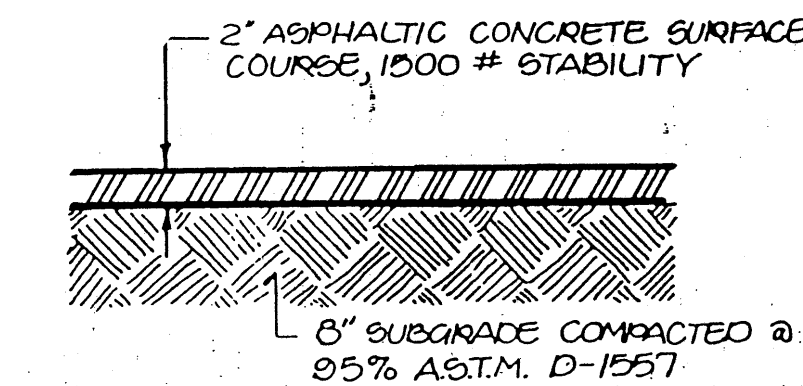
Most watersheds contain a mix of land treatments. To determine proportional treatments, measure respective subareas. In lieu of specific measurement for treatment D, the areal percentages in TABLE A-5 may be employed.

Note: Offsite flows being accepted and being passed through the subject site.

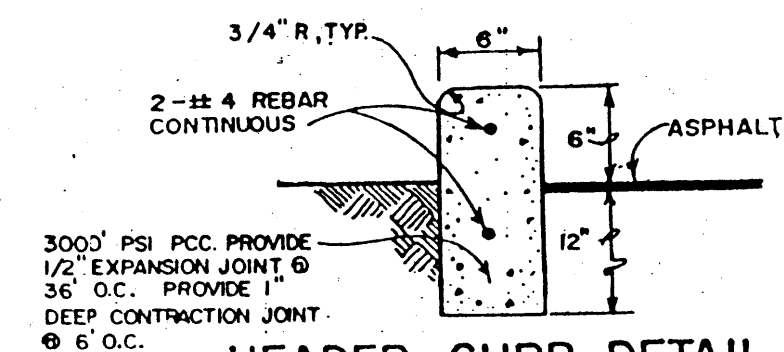
Site Area: 153' X 135' = 20,655.0 sq. ft. = 0.47 acre
Precipitation Zone: Three (3)

TREATMENT	AREA/ACRE	FACTOR	CFS
C	0.06	X 3.45	= 0.21
D	0.41	X 5.02	= 2.05

"Q_p" = 2.26 CFS



TYPICAL PAVEMENT SECTION
SCALE: 1" = 1'-0"



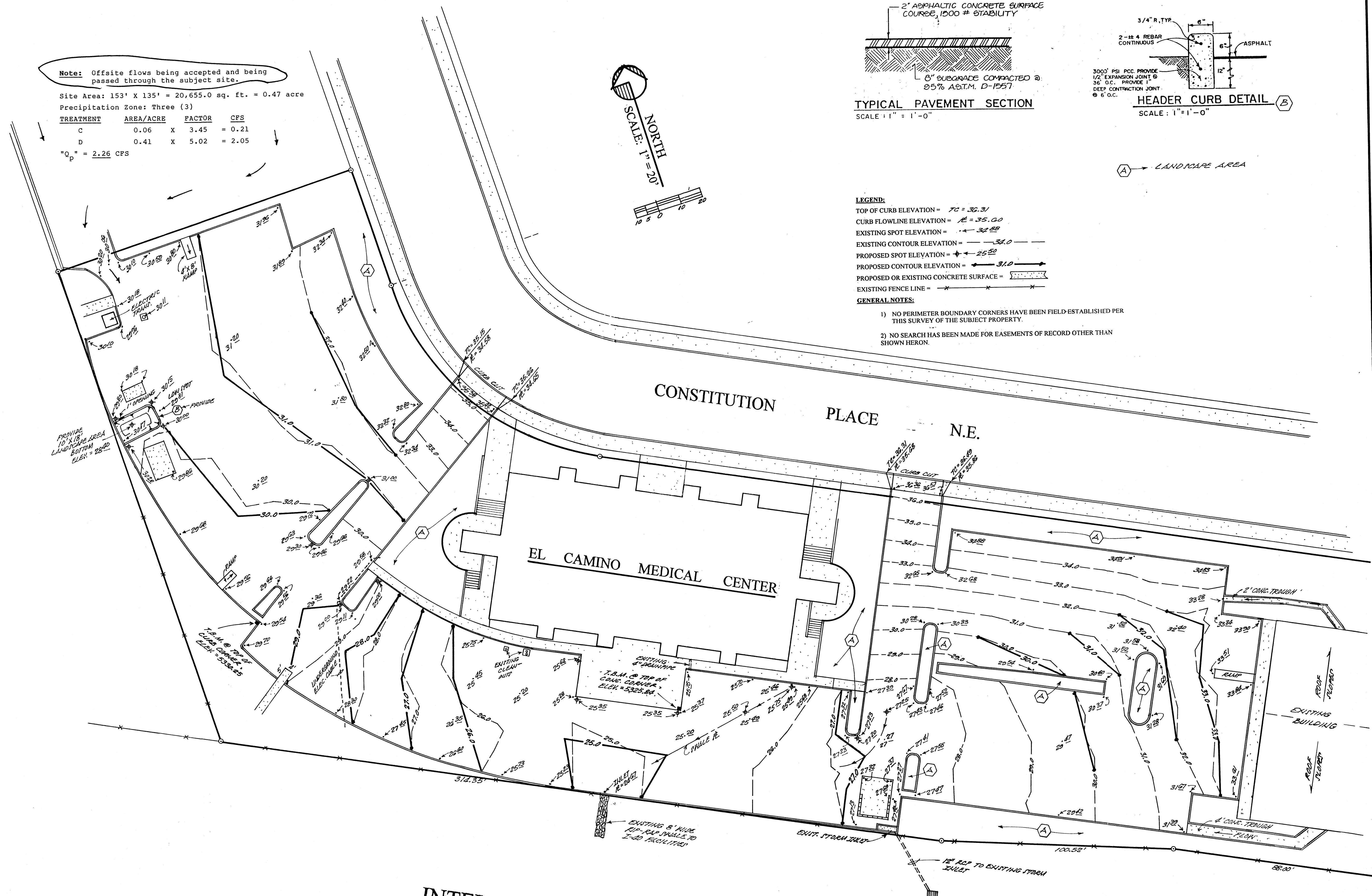
HEADER CURB DETAIL
SCALE: 1" = 1'-0"

LEGEND:

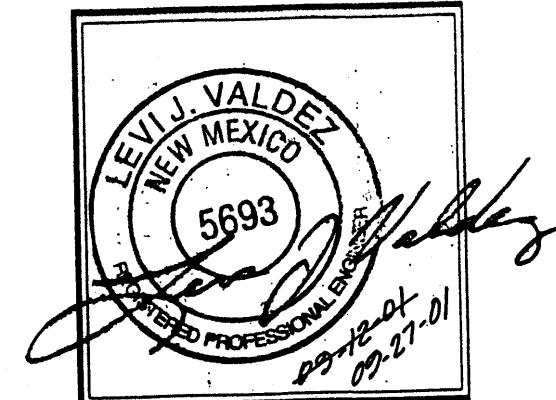
TOP OF CURB ELEVATION = TC = 32.31
CURB FLOWLINE ELEVATION = FE = 35.00
EXISTING SPOT ELEVATION = SE = 32.89
EXISTING CONTOUR ELEVATION = CE = 34.0
PROPOSED SPOT ELEVATION = PE = 25.52
PROPOSED CONTOUR ELEVATION = CE = 31.0
PROPOSED OR EXISTING CONCRETE SURFACE = CS
EXISTING FENCE LINE = FL

GENERAL NOTES:

- 1) NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD-ESTABLISHED PER THIS SURVEY OF THE SUBJECT PROPERTY.
- 2) NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN SHOWN HEREON.



Note: Existing storm drainage connection to the existing storm inlet shown on the plan hereon is shown on grading and drainage plan for construction of the subject property on plan dated September 18, 1972.



JOB NO:	
DATE:	AUGUST 2001
REVISIONS	

Sheet Title
GRADING & PAVING PLAN
Drawn By: **GTK** Checked By: **LJV**

BJM DEVELOPMENT CONSULTANT
DESIGN — PLANNER
Albuquerque, New Mexico

Project Name
8100 CONSTITUTION PLACE N.E.
ALBUQUERQUE, NEW MEXICO

SHEET NO.
GP-2

GRADING/PAVING PLAN FOR 8100 CONSTITUTION PLACE N.E.

GRADING/PAVING PLAN

THE FOLLOWING ITEMS CONCERNING (8100 CONSTITUTION PLACE N.E.) LOT C EAST END ADDITION, BERNALILLO COUNTY, ALBUQUERQUE, NEW MEXICO ARE CONTAINED HEREON"

EXISTING CONDITIONS

AS SHOWN ON THE VICINITY MAP, THE SITE CONTAINS 1.975 ACRES MORE OR LESS AND IS LOCATED WEST OF WYOMING BLVD. N.E. AND SOUTH OFF OF CONSTITUTION PLACE N.E.. THE SITE IS COMPLETELY DEVELOPED WITH MEDICAL OFFICES AND ASSOCIATED PAVED PARKING AND LANDSCAPED AREAS. ACCORDING TO THE FLOOD INSURANCE RATE MAP, PANEL 0358D, DATED SEPTEMBER 20,1996, THE SITE IS NOT LOCATED WITHIN A DESIGNATED FLOOD PLAIN NOR DOES IT CONTRIBUTE TO ANY DOWN STREAM FLOODING.

PROPOSED CONDITIONS

AS SHOWN BY THE GRADING/PAVING PLAN, THE PROJECT WILL CONSIST OF PULVERIZATION OF THE EXISTING ASPHALT PAVEMENT. THE EXISTING ASPHALT AREAS WILL BE REPLACED WITH NEW ASPHALT SET TO OR CLOSE TO THE EXISTING GRADES. NO INCREASE IN RUN-OFF IS PROPOSED. THE RUN-OFF WILL CONTINUE TO FOLLOW THE SAME PATTERN AS APPROVED IN THE ORIGINL DRAINAGE PLAN DATED 9/72. NO OFF-SITE FLOWS ENTER THE SITE.

DOWNSTREAM CAPACITY

RUN-OFF WILL CONTINUE TO BE ROUTED TOWARDS AN EXISTING RUNDOWN LOCATED ON THE SOUTHERLY PROPERTY LINE OF THE SITE. FROM THAT POINT THE RUN-OFF ENTERS THE EXISTING SWALE LOCATED ON THE I-40 RIGHT OF WAY WHICH THEN EVENTUALLY ENTERS THE DIVERSION CHANNEL.

NOTE TO CONTRACTOR

1. An excavation/construction permit will be required before beginning any work within the City right-of-way. Approved copy of this plan must be submitted at the time of application for permit.
2. All work detailed in this plan to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with City of Albuquerque Standard Specification for Public Works Construction.
3. Two working days prior to any excavation, contractor must contact line locating Services at (505) 260-1990 for locating existing utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all construction. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay.
5. Backfill compaction shall be according to residential use.
6. 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.

LEGAL

LOT C
EAST END ADDITION
BERNALILLO COUNTY
ALBUQUERQUE, NEW MEXICO
UPC# 1-019-058-390-200-41926

BENCHMARK

ACS Station "10-J19", located on the top of curb at the northwest corner of Wyoming Blvd. N.E. and Constitution Avenue N.E.; M.S.L. datum elevation = 5360.53, (Project T.B.M. as shown on the plan hereon.

8100 CONSTITUTION AREA = 1.98ac.
PLACE N.E.
ZONE 3
PRECIPITATION: 360= 2.60in.
1440=3.1in.
10day=4.9in.

EXCESS PRECIPITATION: PEAK DISCHARGE:

TREATMENT A	0.66in.	1.87 cfs/ac.
TREATMENT B	0.92in.	2.6 cfs/ac.
TREATMENT C	1.29in.	3.45 cfs/ac.
TREATMENT D	2.36in.	5.02 cfs/ac.

EXISTING CONDITIONS:	PROPOSED CONDITIONS:	
AREA	AREA	
TREATMENT A	0ac.	0ac.
TREATMENT B	0ac.	0ac.
TREATMENT C	0.49ac.	0.492ac.
TREATMENT D	1.48ac.	1.482ac.

EXISTING EXCESS PRECIPITATION:

$$\text{Weighted E} = (0.66) \times (0.00) + (0.92) \times (0.00) + (1.29) \times (0.49) + (2.36) \times (1.48) / 1.98 \text{ ac.} = 2.09$$
$$V_{100-360} = (2.09) \times (1.98) / 12 = 0.3444 \text{ ac-f} = 15005 \text{ cf}$$

EXISTING PEAK DISCHARGE:

$$Q_{100} = (1.87) \times (0.00) + (2.60) \times (0.00) + (3.45) \times (0.49) + (5.02) \times (1.48) = 9.14 \text{ CFS}$$

PROPOSED EXCESS PRECIPITATION:

$$\text{Weighted E} = (0.66) \times (0.00) + (0.92) \times (0.00) + (1.29) \times (0.49) + (2.36) \times (1.48) / 1.98 \text{ ac.} = 2.09$$
$$V_{100-360} = (2.09) \times (1.98) / 12.0 = 0.3444 \text{ ac-f} = 15005 \text{ cf}$$

$$V_{100-1440} = (0.34) + (1.48) \times (3.10 - 2.60) / 12 = 0.4062 \text{ ac-f} = 17695 \text{ cf}$$

$$V_{100-10 \text{ day}} = (0.34) + (1.48) \times (4.90 - 2.60) / 12 = 0.6285 \text{ ac-f} = 27381 \text{ cf}$$

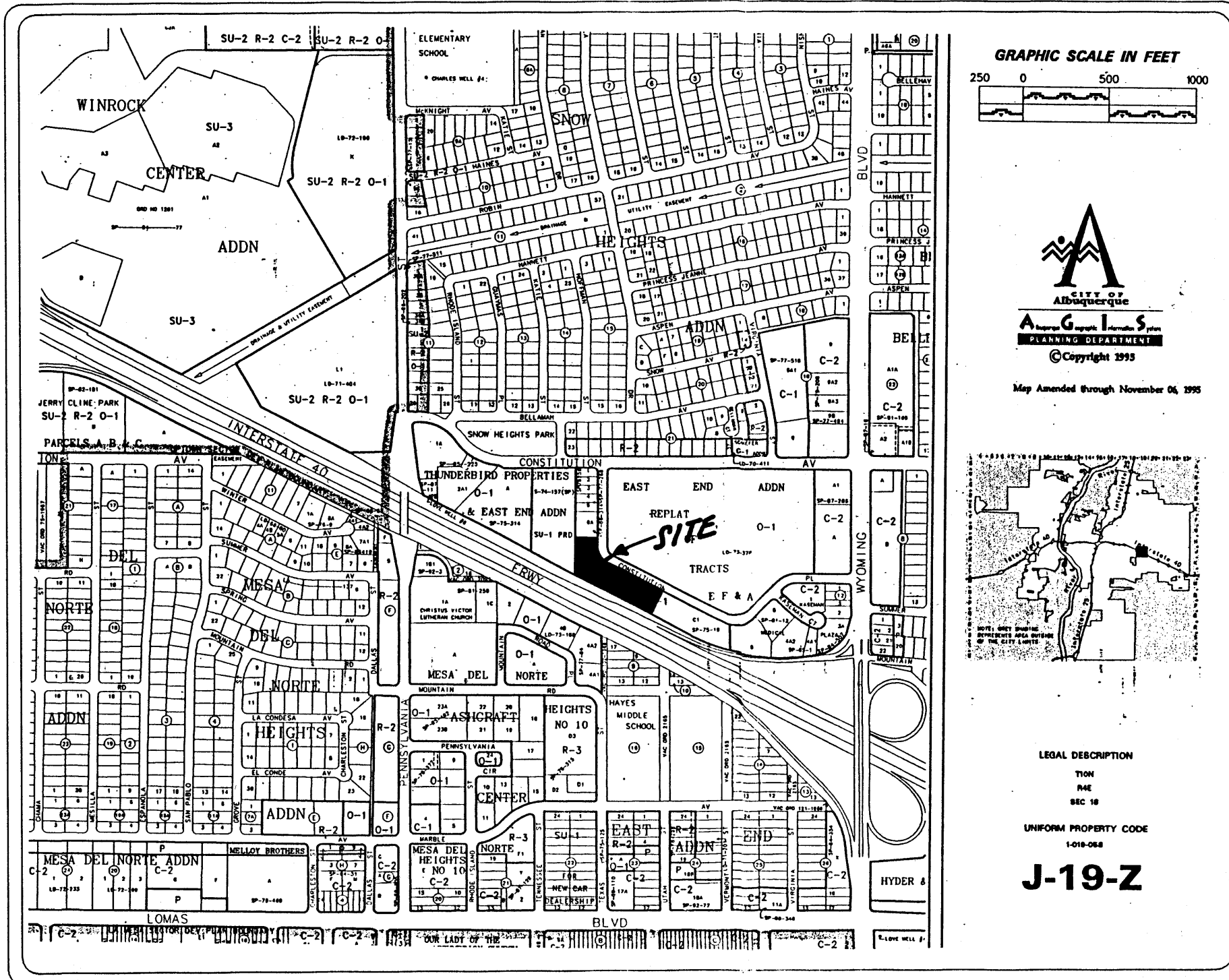
PROPOSED PEAK DISCHARGE:

$$Q_{100} = (1.87) \times (0.00) + (2.60) \times (0.00) + (3.45) \times (0.49) + (5.02) \times (1.48) = 9.14 \text{ CFS}$$

NO INCREASE IN RUN-OFF

TABLE A-9. PEAK DISCHARGE (cfs/acre)				
Zone	Treatment			
	A	B	C	D
1	1.29 [0.00, 0.24]	2.03 [0.03, 0.78]	2.87 [0.47, 1.49]	4.37 [1.69, 2.89]
2	1.59 [0.00, 0.39]	2.28 [0.09, 0.95]	3.14 [0.69, 1.71]	4.70 [1.86, 3.14]
3	1.87 [0.00, 0.58]	2.60 [0.21, 1.19]	3.45 [0.78, 2.00]	5.02 [2.04, 3.39]
4	2.20 [0.05, 0.87]	2.92 [0.38, 1.45]	3.73 [1.00, 2.28]	5.25 [2.17, 3.57]

TABLE A-10. PEAK INTENSITY (IN/Hr at $t_c = 0.2$ hour)		
Zone	Intensity	100-YR [2-YR, 10-YR]
1	4.70	[1.84, 3.14]
2	5.05	[2.04, 3.41]
3	6.38	[2.21, 3.65]
4	6.61	[2.34, 3.83]



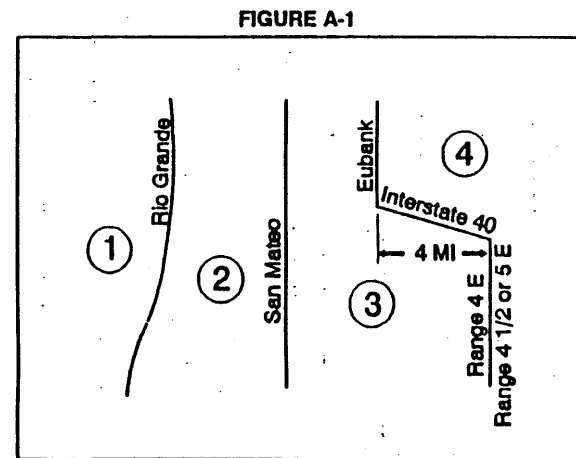
VICINITY MAP J-19

FEMA PANEL 0358D

A.1 PRECIPITATION ZONES

Bernalillo County's four precipitation zones are indicated in TABLE A-1 and on FIGURE A-1.

TABLE A-1. PRECIPITATION ZONES	
Zone	Location
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2	Between the Rio Grande and San Mateo
3	Between San Mateo and Eubank, North of Interstate 40; and between San Mateo and the East boundary of Range 4 East, South of Interstate 40
4	East of Eubank, North of Interstate 40; and East of the East boundary of Range 4 East, South of Interstate 40



DPM SECTION 22.2 - HYDROLOGY
January, 1993 Page A-4

TABLE A-4. LAND TREATMENTS	
Treatment	Land Condition
A	Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands. Unlined arroyos.
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C	Soil compacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (desert landscaping). Irrigated lawns and parks with slopes greater than 10 percent. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D.
D	Impervious areas, pavement and roofs.

Most watersheds contain a mix of land treatments. To determine proportional treatments, measure respective subareas. In lieu of specific measurement for treatment D, the areal percentages in TABLE A-5 may be employed.

JOB NO:
DATE: AUGUST 2001
REVISIONS

Sheet Title
GRADING & PAVING PLAN
Drawn By: GTR
Checked By: LJV

BJM DEVELOPMENT CONSULTANT
DESIGN - PLANNER
Albuquerque, New Mexico

Project Name
8100 CONSTITUTION PLACE N.E.
ALBUQUERQUE, NEW MEXICO

SHEET NO.
GP-1

