

# DRAINAGE PLAN

The following items concerning the Courtyard II Grading and Drainage Plan for additional parking are contained herein:

1. Vicinity Map
2. Grading Plan
3. Calculations

The proposed improvements, as shown by the Vicinity Map, are located on the north side of Masthead Street between Jefferson and the west frontage road for I-25. The majority of the site has been developed with two buildings and associated landscaping and parking. The eastern 36 feet of the site was graveled for overflow parking. The site slopes from east to west. The site is parallel with the street to the north and the bank of the landscaped drainage channel to the south and the bank of the landscaped drainage channel to the west. It is lower than the land to the east. However an earth berm with an adjacent drainage ditch was constructed on the property to the east to divert flows north to the landscaped drainage channel. Therefore, offsite flows are minimal. The site does not lie in a designated flood hazard zone.

A grading and drainage plan was prepared for the development of this site in the late 1980's by Bohannon Huston. This supplemental Grading and Drainage Plan shows 1) the 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 existing improvements and 4) the limit and character of the proposed improvements. The proposed project will add one row of paved parking in place of the graveled overflow parking. A sidewalk from the street to the channel and landscaping will also be constructed. The project will continue to drain to the west through the existing facilities as it currently does.

The Calculations, which appear below, analyze both the existing and proposed conditions for the 100-year, 6-hour rainfall event. The analysis is in accordance with the City of Albuquerque Development Process Manual, Volume II. As shown by the calculations, the runoff will increase by a minor amount. However, the runoff is within the guidelines of the free discharge established in the master drainage plan for the Journal Center.

## CALCULATIONS

Area = 0.222 acres  
Precipitation Zone = 2

### Existing Conditions

#### Land Treatment

A 0.0  
B 0.0  
C 0.222  
D 0.0

$E = 1.13 \times 0.222 / 0.222 = 1.13$  inches  
 $V = 1.13 \times 0.222 / 12 = 0.02$  acft  
 $Q = 3.14 \times 0.222 = 0.7$  cfs

#### Developed Conditions

A 0.0  
B 0.074  
C 0.0  
D 0.148

$E = (0.78 \times 0.074 + 2.12 \times 0.148) = 1.67$  inches  
 $V = 1.67 \times 0.222 / 12 = 0.03$  acft  
 $Q = 2.28 \times 0.074 + 4.70 \times 0.148 = 0.9$  cfs

Increase in Volume =  $0.03 - 0.02 = 0.01$  acft  
Increase in Rate =  $0.9 - 0.7 = 0.2$  cfs

### BENCHMARK

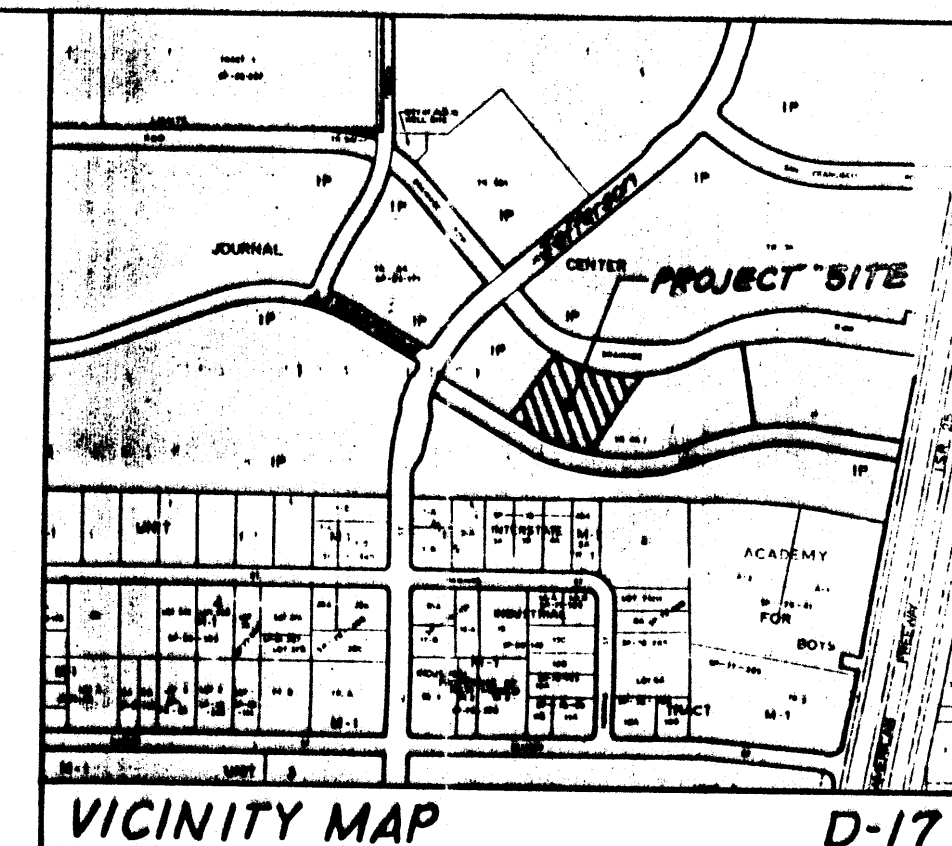
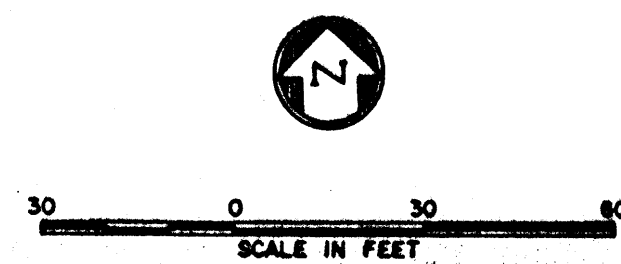
NMSHT Brass Cap I-25-14 located at the entrance to the NMSHT District 3 Headquarters.  
Elevation = 5196.73

### LEGAL DESCRIPTION

Tract 4AA-2A Journal Center

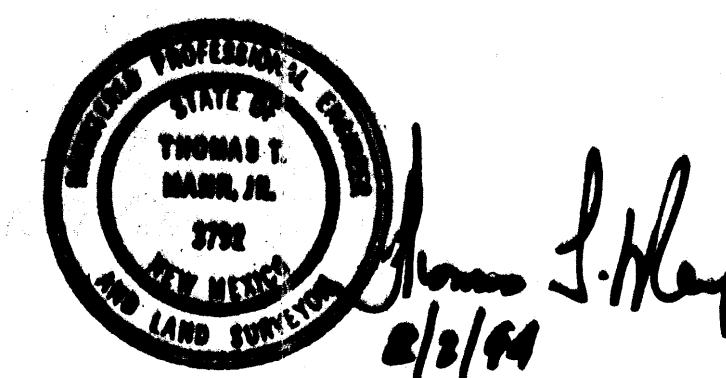
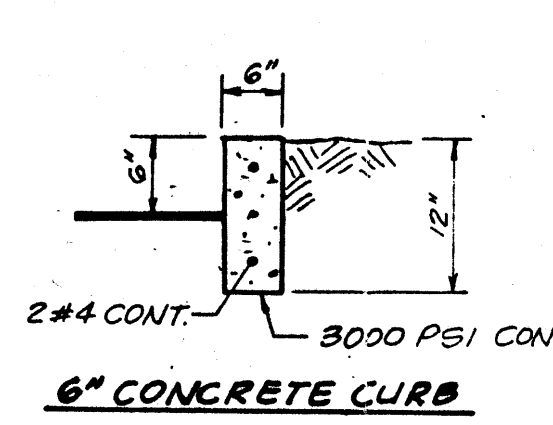
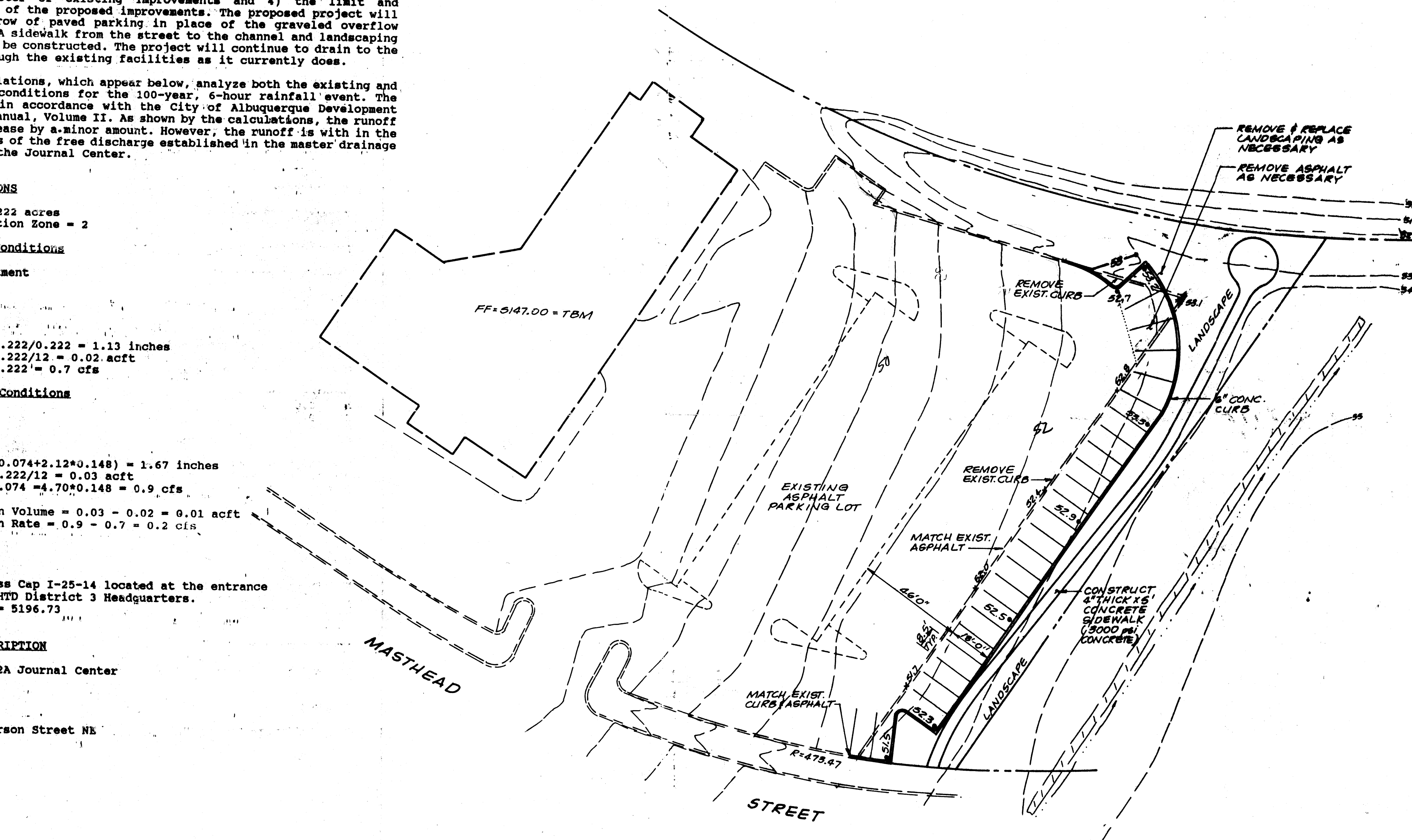
### ADDRESS

7500 Jefferson Street NE



## LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING SPOT ELEVATION
- PROPOSED SPOT ELEVATION
- SWALE



PARKING ADDITION  
FOR

TRACT 4AA-2A JOURNAL CENTER

AUG 3 1994