

# Drainage Report APS Seven Bar Loop School Site

## Site Location and Description

The site is located south of Ellison Drive and borders the east side of the proposed new alignment for Seven Bar Loop Road. The site is currently undeveloped. The proposed development includes temporary placement of APS buildings on the southeast corner of the site until they can be used.

## Methodology

The Development Process Manual, Volume 2, Design Criteria for the City of Albuquerque was followed to calculate peak runoff for the site. The method used to determine the runoff for Basin 4 is designated Part A in the revised section 222. Using the 100-year frequency 10-day rainfall volume as the design storm, the charts and formulas in Part A were followed. The site is located in Zone 1 as determined from Figure A, and the peak discharge was determined using Table 9.

## Existing Conditions

The site has two basins designated as Basin 4 and Basin 5 which are separated by the peak of a hill at the center of the property. A gas line runs along the center of the property. The project site has been uncompacted by human activity and has slopes that vary between 1% and 20% from the top of the hill to the north and south east corner of the property. The following calculations show the peak discharge and volume for the 100-year event.

## HYDROLOGY CALCULATIONS: EXISTING CONDITIONS

Basin	Land Treatment	Zone	Area (Acres)	Peak Discharge Q (cfs)	E <sub>w</sub> (in)	V <sub>10day</sub> (ac-ft)
4	A	1	5.06	6.53	0.44	0.186

## Proposed Conditions:

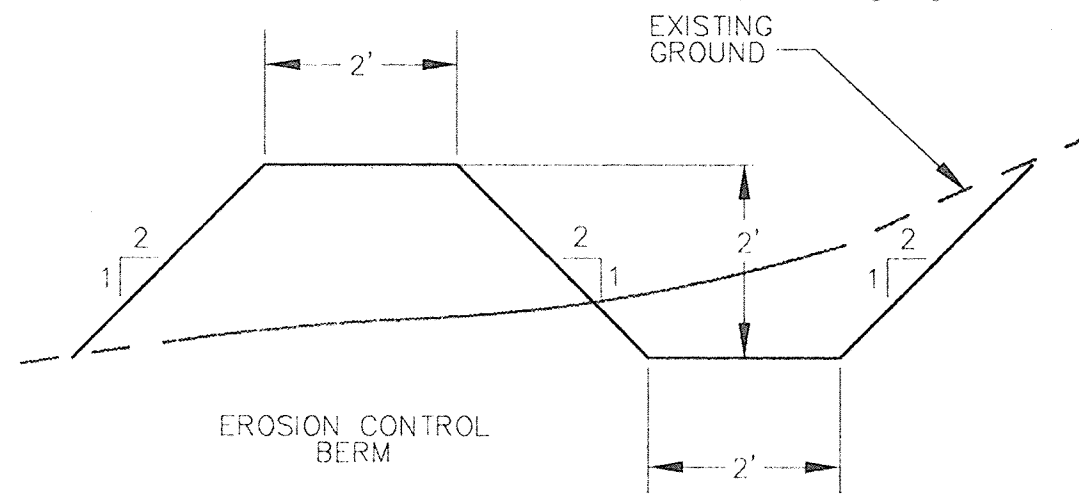
Proposed conditions include placement of three temporary school buildings on the southeast part of the site and a new alignment for the proposed Seven Bar Loop Road which borders the south and west side of the site. The temporary school site is located entirely within Basin 4 and will be constructed on a gentle grade of approximately 2%. A pond will be constructed on the southeast corner of the site to capture sediment before any storm water drains into the proposed Seven Bar Loop Road. Until the new Seven Bar Loop Road is constructed, the pond will be a retaining pond. Once Seven Bar Loop Road is constructed and the site is upgraded, outfall will be installed.

## HYDROLOGY CALCULATIONS: PROPOSED CONDITIONS

Basin	Land Treatment	Zone	Area (Acres)	Peak Discharge Q (cfs)	E <sub>w</sub> (in)	V <sub>10day</sub> (ac-ft)
4	C D	1	4.25 0.81	12.20 3.54		
SUBTOTAL			5.06	15.74	1.15	0.58

## Conclusion:

The grading of the site shown on this plan serves to prepare a temporary storage area for three portable school buildings. APS will submit a new grading and drainage plan to the City of Albuquerque for future development of the site.

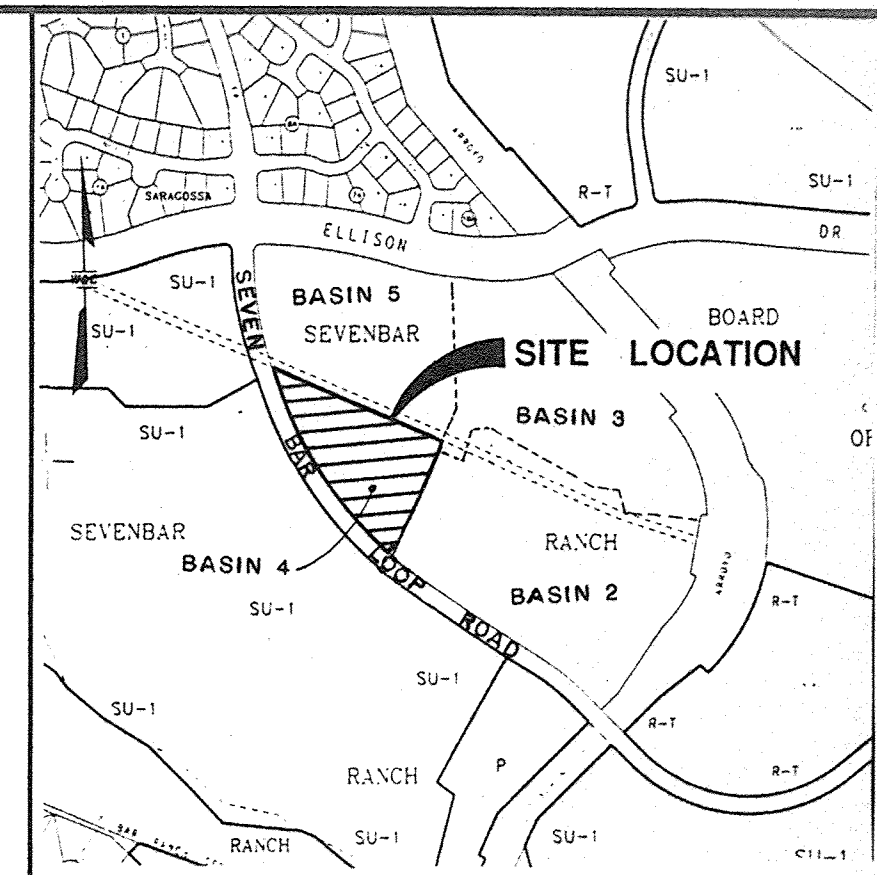


NOTE: A BERM WITH THE DIMENSIONS SHOWN ABOVE SHALL BE BUILT ALONG THE EAST AND SOUTH BOUNDARIES AND SHALL BE MAINTAINED UNTIL THE DRAINAGE SYSTEM PRESENTED HEREON IS FUNCTIONAL.

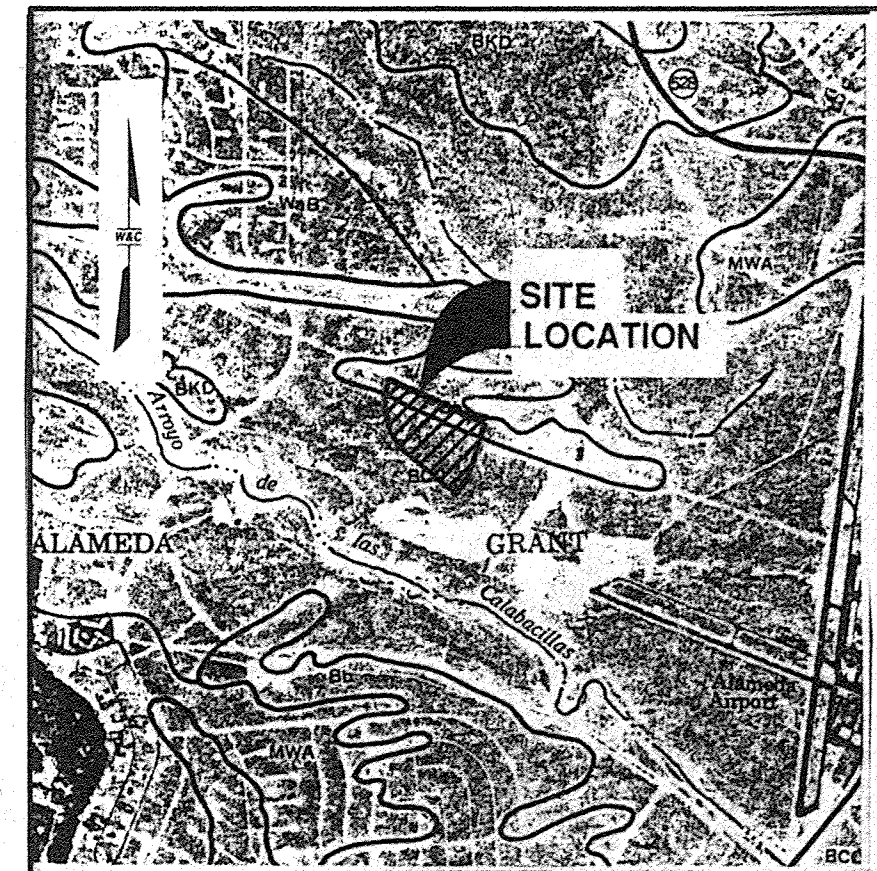
## EROSION CONTROL PLAN NTS

## LEGEND

EXISTING INTERMEDIATE CONTOUR
EXISTING INDEX CONTOUR
PROPOSED INTERMEDIATE CONTOUR
PROPOSED INDEX CONTOUR
FLOW DIRECTION
BASEIN BOUNDARY
LIMITS OF PONDING

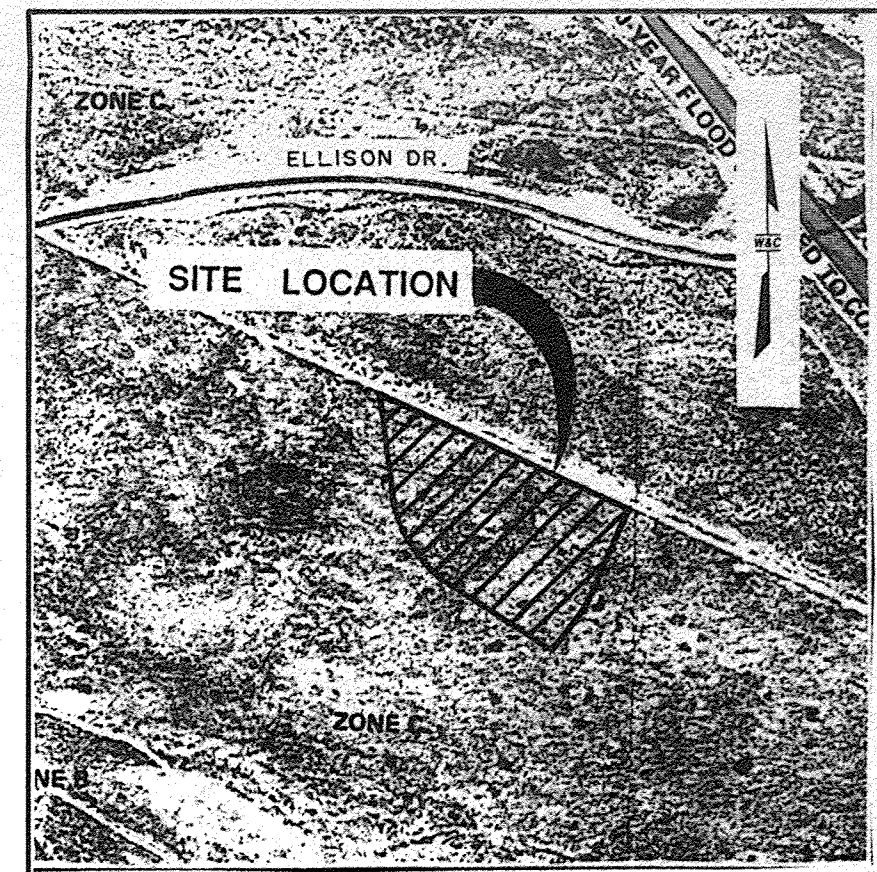


## LOCATION MAP ZONE ATLAS MAP NO. B-12, B-13



## SOILS MAP

REFERENCE: SCS BERNALILLO COUNTY SOIL SURVEY SHEET NO. 10



## FLOOD INSURANCE MAP

REFERENCE: FLOOD INSURANCE STUDY PANEL 02

## LEGAL DESCRIPTION


TRACT A-2B, SEVEN BAR RANCH

## BENCH MARK

A STANDARD USC&GS BRASS TABLET STAMPED "NM 448 - N12969" SET IN CONCRETE AND LOCATED 550' SOUTH OF CORRALES ROAD (NM 528) CENTERLINE AND 60' WEST OF COORS BLVD. CENTERLINE.

## APS SEVEN BAR LOOP SCHOOL SITE

## GRADING & DRAINAGE PLAN

DESIGN J.P.A.	DRAWN K.I.S.	DATE NOVEMBER 1994
FILE NO. 94562		SHEET NO. 1 OF 1
 4775 INDIAN SCHOOL RD NE SUITE 200 ALBUQUERQUE, NEW MEXICO 87110 (505) 254-4000		