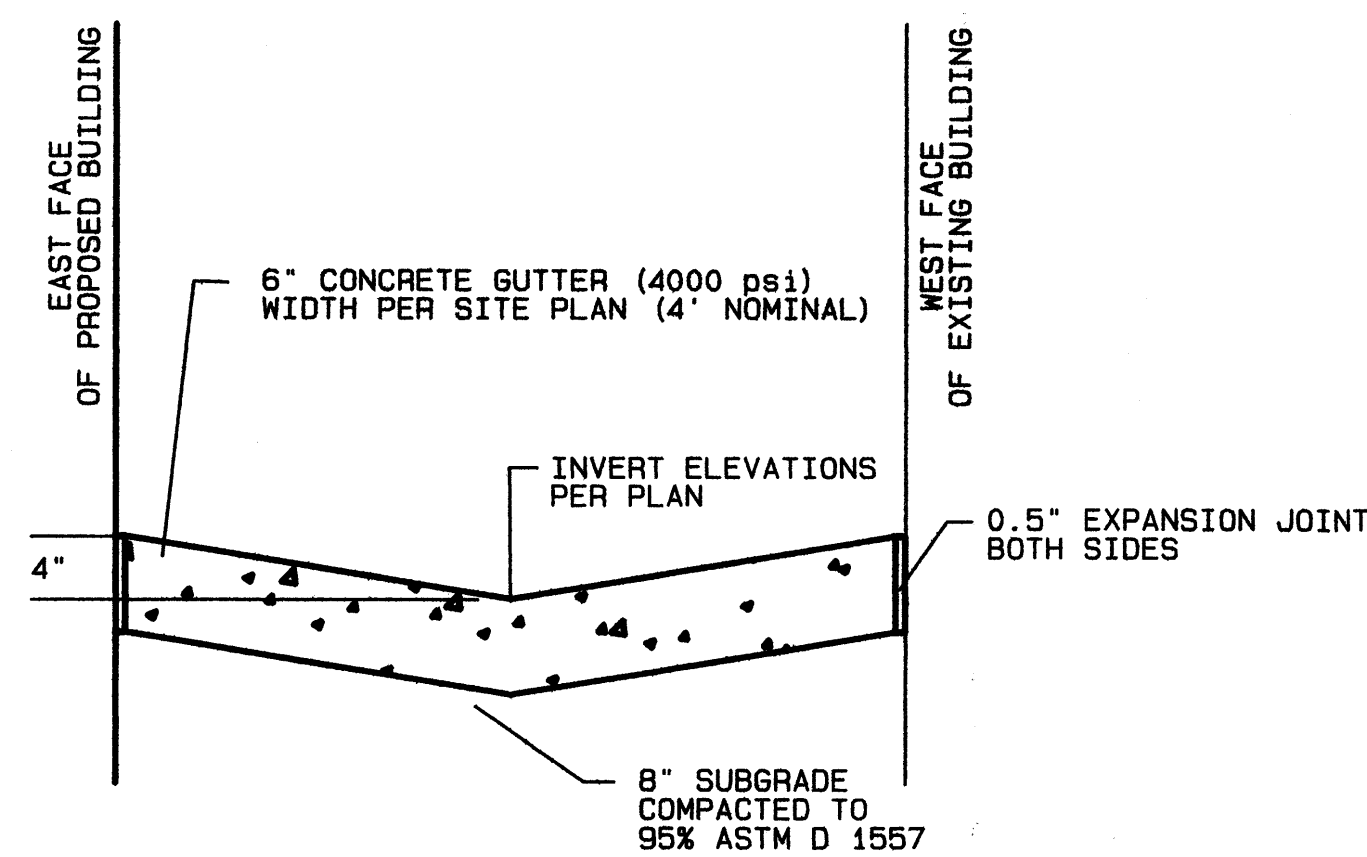


GRADING AND DRAINAGE PLAN 1"=10'



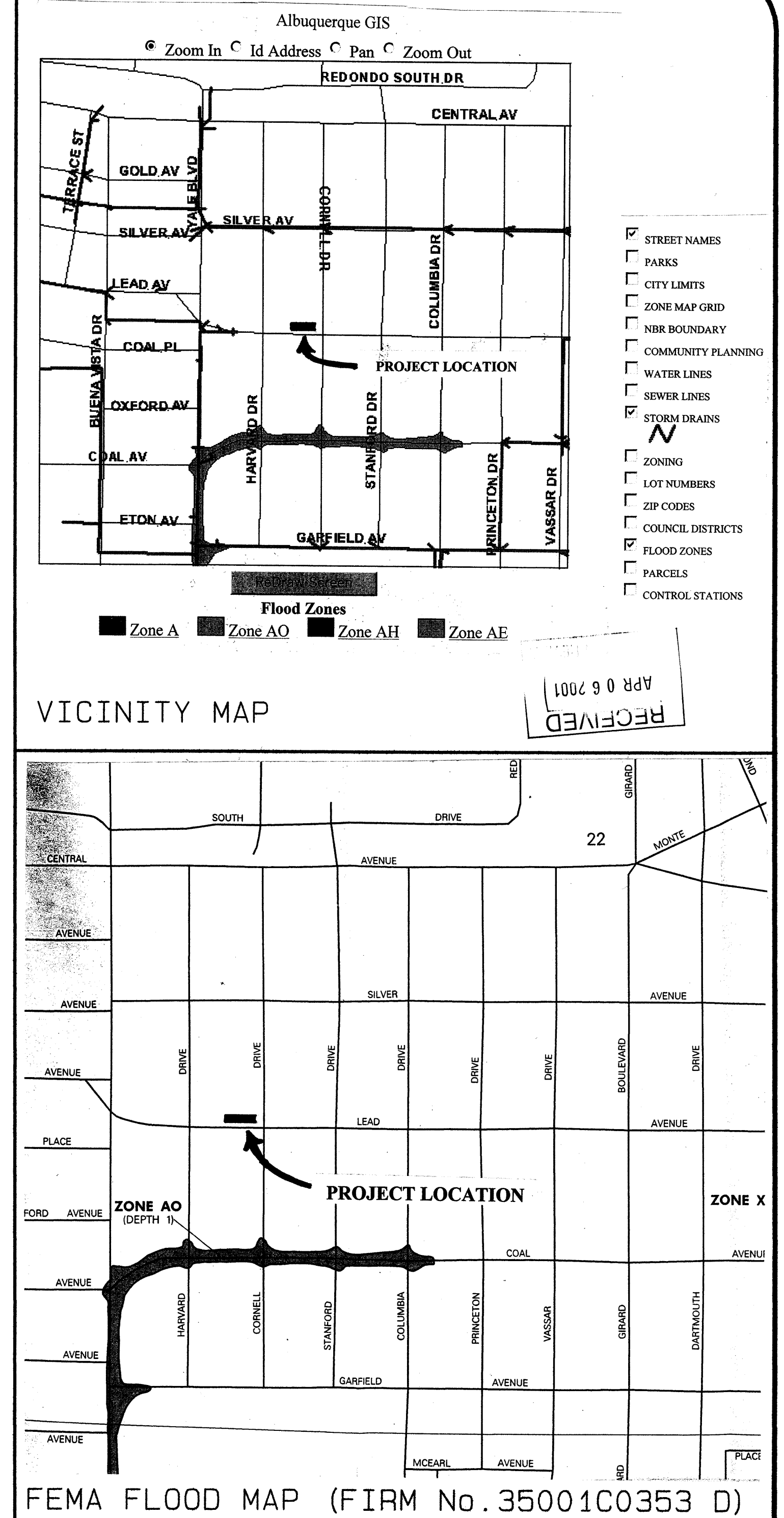
VALLEY GUTTER SECTION NTS

LEGAL DESCRIPTION:  
LOT NUMBERED THIRTEEN (13) IN BLOCK NUMBERED SEVEN (7), OF UNIVERSITY HEIGHTS, AN ADDITION TO THE CITY OF ALBUQUERQUE, NEW MEXICO, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT OF SAID ADDITION, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO, ON FEBRUARY 7, 1916, IN PLAT BOOK D, FOLIO 27.

PROJECT BENCHMARK:  
ACS SURVEY BENCHMARK No. ACS 20-K16, ELEVATION= 5160.38



SEE SHEET 2 OF 2 FOR PROJECT DESCRIPTION, OVERALL BASIN MAP AND SUMMARY OF HYDROLOGIC CALCULATIONS.



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223 CORNELL DRIVE, S.E.  
Grading and Drainage Plan  
for  
Apartment Addition

SCALE : 1"=10'

3-19-2001

1  
of  
2



OVERALL DRAINAGE BASIN MAP 1"=200'

(BASED ON COA PUBLIC WORKS DEPARTMENT 1"=200' TOPOGRAPHIC AERIAL MAPPING)

## SUMMARY OF HYDROLOGIC CALCULATIONS

BASIN	CONDITION	AREA (ac)	LAND TREATMENT %				Q100 (cfs)	V100-6 hr. (cf)
			A	B	C	D		
Overall Basin	Existing	15.92	0	30	30	40	55.82	82,119
Site	Existing	0.16	0	24	51	25	0.54	765
Site	Developed	0.16	0	9	55	36	0.59	861

### Notes:

Calculations per City of Albuquerque DPM (July 1997 Edition) Section 22.2, Rainfall Zone 2.  
For the Overall Basin, predominant use was assumed to be residential. 58 lots were counted on the basin map, yielding  $N=58$  dwelling units/15.92 acres=3.6 dwelling units per acre.  
Impervious area (Land Treatment "D") was estimated using DPM Equation  $\%D=7*\text{SQRT}(N*N+5N)$ . Then,  $\%D=7*\text{SQRT}((3.6*3.6)+(5*3.6))=40\%$ . The remainder of the land area was assumed to be evenly distributed between Land Treatments "B" and "C".

## PROJECT DESCRIPTION

### Existing Conditions:

The existing site consists of a single residence with apartment, associated landscaping and a packed dirt 2-car parking area in rear, accessed from the adjacent alley. The site is relatively flat, with slopes generally 2% or less. East of the building, the front yard drains to Cornell Drive. A portion of the roof drainage also drains east (see Grading Plan on Sheet 1 of 2). The remainder of the roof drains to the west, discharging into the back yard. The back yard informally drains west to the alley, which in turn drains to Lead Avenue. Lead Avenue drains east to west, discharging to inlets just east of the Lead Avenue/Yale Blvd. intersection.

There appear to be no offsite flows entering the site.

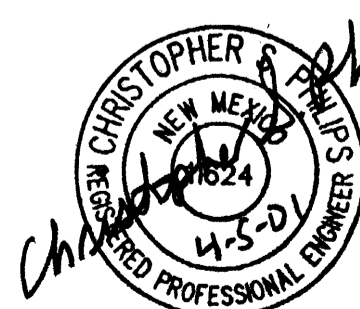
According to FIRM Map No. 35001C0353, the site does not lie in a FEMA Flood Hazard Zone.

### Proposed Conditions:

It is proposed to build an attached apartment structure (approx 1200 sf) west of the existing building, as shown on Sheet 1 of 2. A portion of the front yard will become a gravel-surfaced 2-car parking area, with access to Cornell Drive via a proposed concrete driveway. A second gravel parking area will be constructed adjacent to the alley, in the same general location as the existing dirt parking area. The existing garage will be removed to accommodate this enlarged rear parking area.

The front yard will continue to drain east. The existing building's roof drainage pattern will be maintained. The back yard and rear parking area will continue to drain via the alley to Lead Avenue.

The Summary of Hydrologic Calculations hereon indicates that the increase in site-generated 100-year peak flow rate due to the proposed improvements is negligible, and is expected to have no material effect on the overall basin peak flow.



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223 CORNELL DRIVE, S.E.

Grading and Drainage Plan  
for  
Apartment Addition

2

of

2

SCALE : AS NOTED

3-19-2001