



# City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 6, 1994

Jeff Mortensen  
Jeff Mortensen & Associates Inc.  
6010-B Midway Park Blvd. NE  
Albuquerque, NM 87109

RE: DRAINAGE PLAN FOR PINE STREET APARTMENTS (K15-D3) ENGINEER'S  
STAMP DATED 3/24/94.

Dear Mr. Mortensen:

Based on the information provided on your March 28, 1994 submittal, the above referenced site is approved for Building Permit.

Please attach a copy of this approved plan to the construction set prior to sign off by Hydrology.

Also, a separate permit is required for construction within City Right-of-Way. A copy of this approval letter must be on hand when applying for the excavation permit.

Prior to Certificate of Occupancy release, Engineer Certification per the D.P.M. checklist will be required.

If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,

*Bernie J. Montoya*  
Bernie J. Montoya, CE  
Engineering Associate

BJM/dl/WPHYD/8442

c: Andrew Garcia  
Arlene Portillo  
File

## DRAINAGE INFORMATION SHEET

940081

PROJECT TITLE: PINE ST. APTS ZONE ATLAS/DRNG. FILE #: 1K15-103

DRB #: \_\_\_\_\_ EPC #: \_\_\_\_\_ WORK ORDER #: \_\_\_\_\_

LEGAL DESCRIPTION: TRACT A.1.A, BLK 34, BROWNELL &CITY ADDRESS: LAIL'S HIGHLAND ADDNENGINEERING FIRM: JEFF MORTENSEN & ASSOC. CONTACT: JEFF MORTENSENADDRESS: 6010-B MIDWAY PARK BLVD NE PHONE: 345-4250OWNER: MARY HUFBAUER CONTACT: ARCHITECT

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

ARCHITECT: PEARSON & CO CONTACT: DAN PEARSONADDRESS: 9401 HAINES NE PHONE: 293-6900SURVEYOR: JEFF MORTENSEN & ASSOC CONTACT: JEFF MORTENSENADDRESS: 6010-B MIDWAY PARK BLVD NE PHONE: 345-4250CONTRACTOR: NOT KNOWN CONTACT: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE: \_\_\_\_\_

## TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT  
☒ DRAINAGE PLAN  
☐ CONCEPTUAL GRADING & DRAINAGE PLAN  
☒ GRADING PLAN  
☐ EROSION CONTROL PLAN  
☐ ENGINEER'S CERTIFICATION  
☐ OTHER

## PRE-DESIGN MEETING:

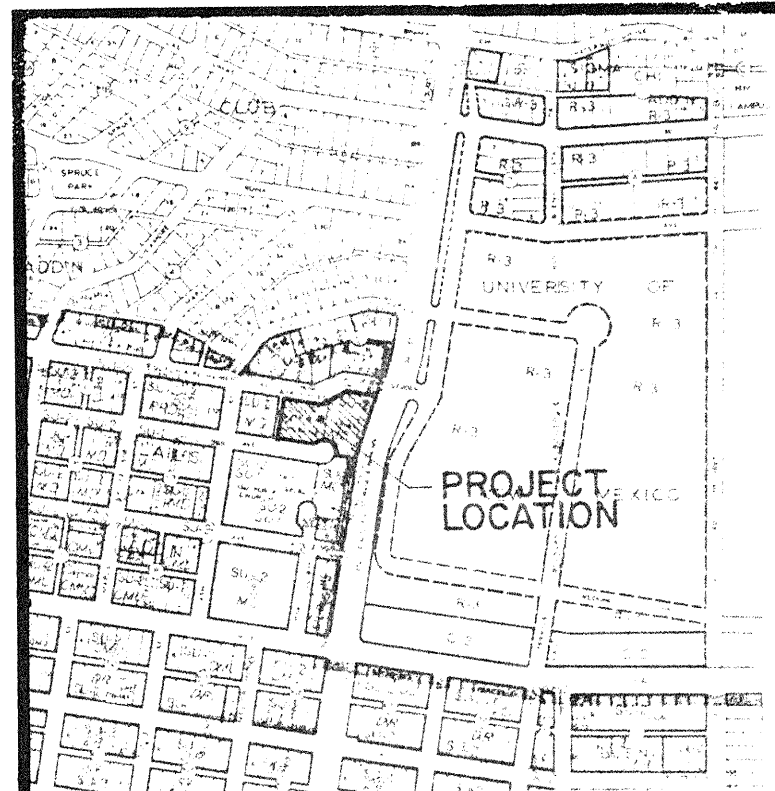
- ☐ YES  
☒ NO  
☐ COPY PROVIDED

## CHECK TYPE OF APPROVAL SOUGHT:

- ☐ SKETCH PLAT APPROVAL  
☐ PRELIMINARY PLAT APPROVAL  
☐ S. DEV. PLAN FOR SUB'D. APPROVAL  
☐ S. DEV. PLAN FOR BLDG. PERMIT APPROVAL  
☐ SECTOR PLAN APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ FOUNDATION PERMIT APPROVAL  
☒ BUILDING PERMIT APPROVAL  
☐ CERTIFICATE OF OCCUPANCY APPROVAL  
☐ GRADING PERMIT APPROVAL  
☐ PAVING PERMIT APPROVAL  
☐ S.A.D. DRAINAGE REPORT  
☐ DRAINAGE REQUIREMENTS  
☐ OTHER \_\_\_\_\_ (SPECIFY)

DATE SUBMITTED: 03-25-94BY: JEFFREY G. MORTENSEN





VICINITY MAP  
SCALE: 1" = 800'

#### Construction Notes:

- Two (2) working days prior to any excavation, contractor must contact New Mexico One Call System 260-1990, for location of existing utilities.
- Prior to construction, the contractor shall excavate and verify the horizontal and vertical location of all potential obstructions. Should a conflict exist, the contractor shall notify the engineer in writing so that the conflict can be resolved with a minimum amount of delay.
- 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.
- All construction within public right-of-way shall be performed in accordance with applicable City of Albuquerque Standards and Procedures.
- If any utility lines, pipelines, or underground utility lines are shown on these drawings, they are shown in an approximate manner only, and such lines may exist where none are shown. If any such existing lines are shown, the location is based upon information provided by the owner of said utility, and the information may be incomplete, or may be obsolete by the time construction commences. The engineer has conducted only preliminary investigation of the location, depth, size, or type of existing utility lines, pipelines, or underground utility lines. This investigation is not conclusive, and may not be complete, therefore, makes no representation pertaining thereto, and assumes no responsibility or liability therefor. The contractor shall inform itself of the location of any utility line, pipeline, or underground utility line in or near the area of the work in advance of and during excavation work. The contractor is fully responsible for any and all damage caused by its failure to locate, identify and preserve any and all existing utilities, pipelines, and underground utility lines. In planning and conducting excavation, the contractor shall comply with state statutes, municipal and local ordinances, rules and regulations, if any, pertaining to the location of these lines and facilities.
- The design of planters and landscaped areas is not part of this plan. All planters and landscaped areas adjacent to the building(s) shall be provided with positive drainage to avoid any ponding adjacent to the structure. For construction details, refer to landscaping plan.
- This is not a Boundary Survey; boundary data and topography obtained from Topographic Survey prepared by this office (Job No. 40553) dated 5/31/84, revised 12/84, 1/85 and 9/85.
- An Excavation/Construction Permit will be required before beginning any work within city right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
- Backfill compaction shall be according to arterial street use.
- Maintenance of these facilities shall be the responsibility of the owner of the property served.

#### Erosion Control Measures:

- The contractor shall ensure that no soil erodes from the site into public right-of-way or onto private property. This can be achieved by constructing temporary berms at the property lines and wetting the soil to keep it from blowing.
- The contractor shall promptly clean up any material excavated within the public right-of-way so that the excavated material is not susceptible to being washed down the street.
- The contractor shall secure "Topsoil Disturbance Permit" prior to beginning construction.

#### LEGEND

- EXISTING SPOT ELEVATION
- EXISTING CONTOUR
- GAS METER
- WATER METER
- POWER POLE
- LIGHT POLE
- MIKE HYDRANT
- EXISTING TREE
- CABLE TELEVISION RISER
- PROPOSED SPOT ELEVATION
- PROPOSED CONTOUR
- PROPOSED CONCRETE
- PROPOSED ASPHALT
- GRAVEL
- BASEIN BOUNDARY LINE

#### PROJECT BENCHMARK

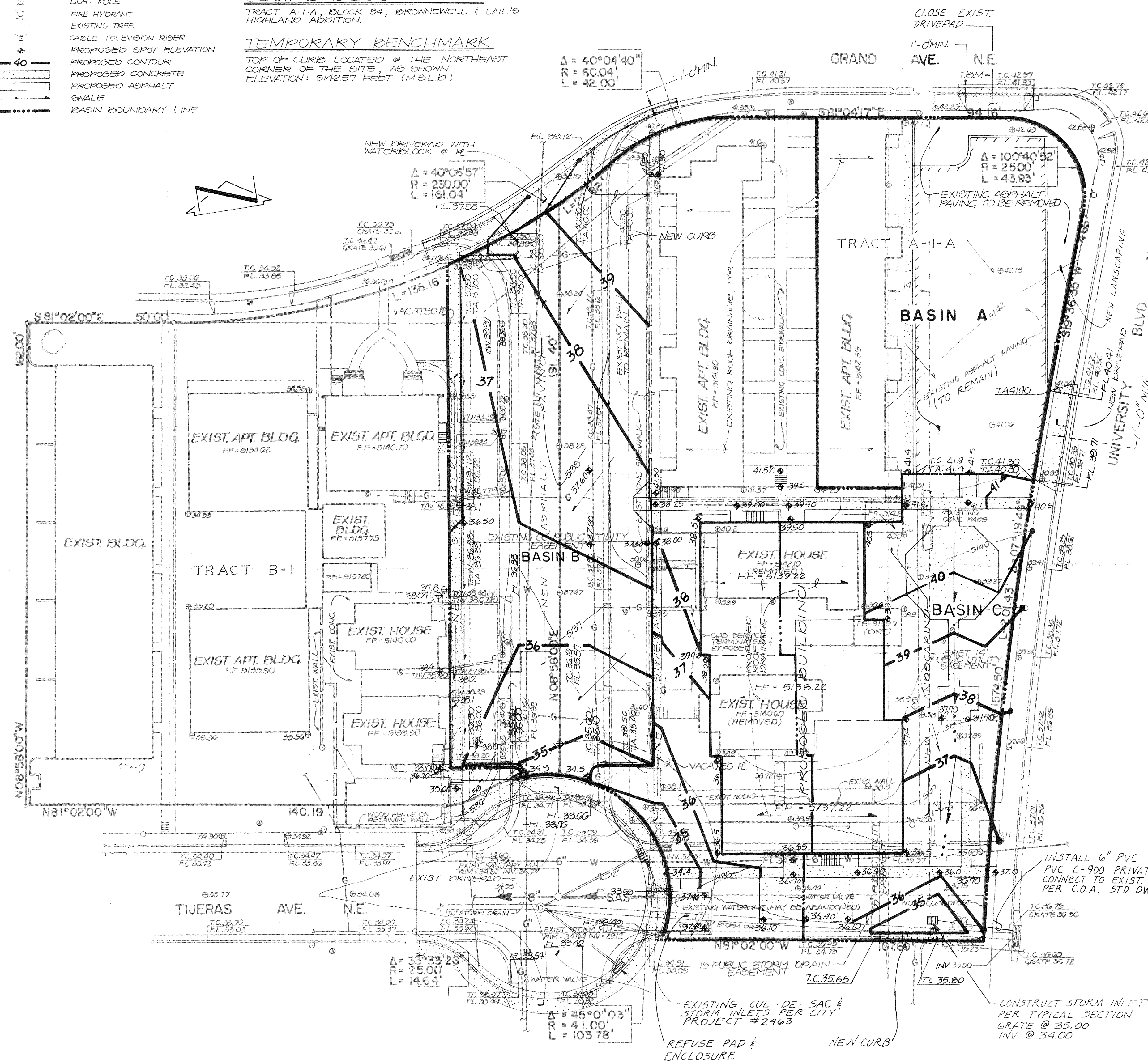
STANDARD ACS ALUMINUM CAP STAMPED "2-K/5 1983"  
SET FLUSH WITH THE CURB, LOCATED 15 FEET EAST  
OF DOWNTOWN ALBUQUERQUE @ THE INTERSECTION OF  
CENTRAL AVENUE & UNIVERSITY BOULEVARD.  
ELEVATION = 5133.97 FEET (M.S.L.D.).

#### LEGAL DESCRIPTION

TRACT A-1-A, BLOCK 34, BROWNELL & LAIL'S  
HIGHLAND ADDITION.

#### TEMPORARY BENCHMARK

TOP OF CURB LOCATED @ THE NORTHEAST  
CORNER OF THE SITE, AS SHOWN.  
ELEVATION: 5142.57 FEET (M.S.L.D.)



The following items concerning the Pine Street Apartments Drainage Plan are contained hereon:

- Vicinity Map
- Grading Plan
- Calculations

As shown by the Vicinity Map, the site is located at the southwest corner of the intersection of Grand Avenue N.E. and University Boulevard N.E. The parking lot for the project coincides with vacated Pine Street N.E. At present, the site is developed with apartments. Two rental houses have been previously demolished at the southeast corner of the site, per the previously approved plan dated 12/18/85 (K15/D3). This plan represents an update to the previously approved plan. The proposed improvements consist of the construction of a new apartment building at the site of the demolished houses, along with paving removal and replacement, and new landscaping.

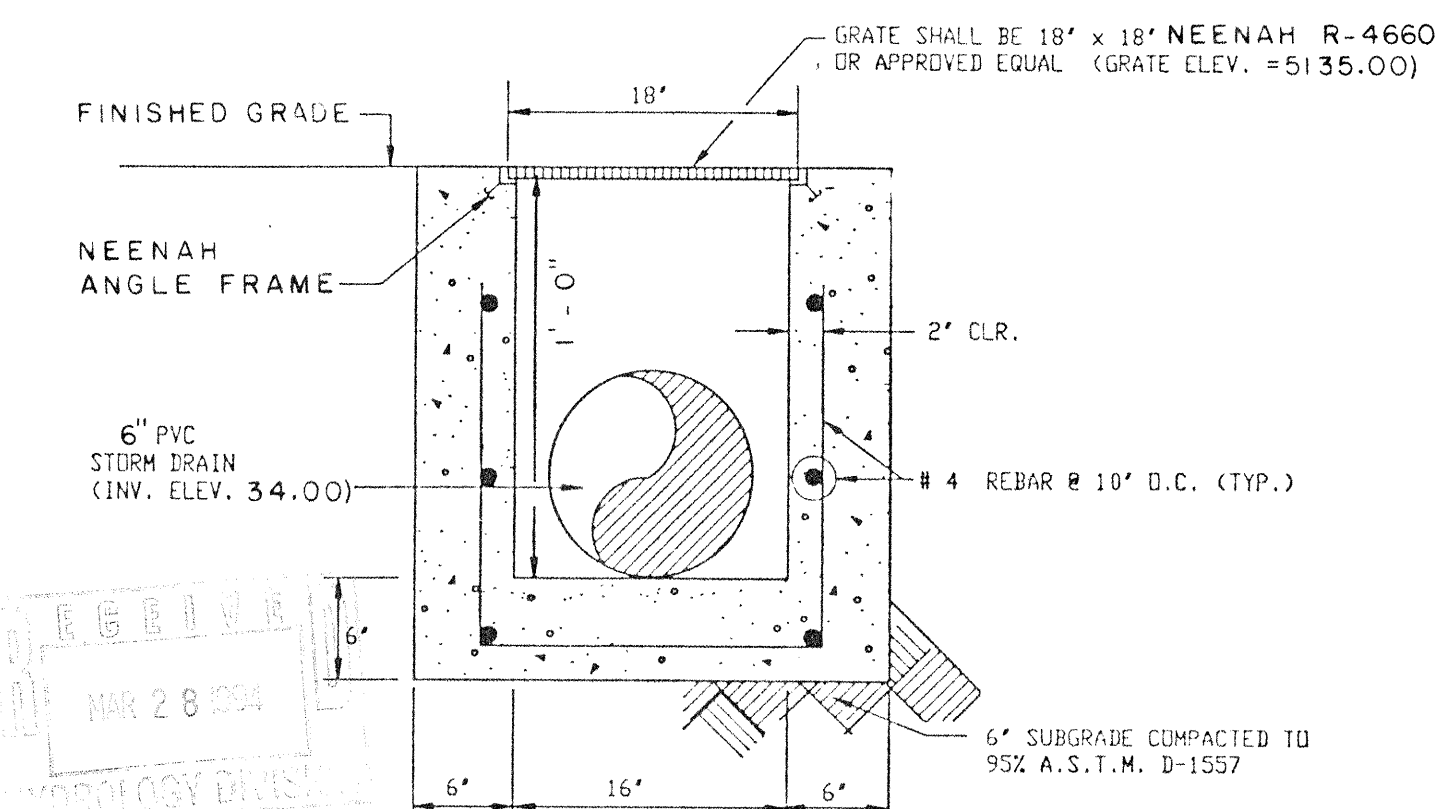
As shown by Panel 29 of 50 of the National Flood Insurance Program Flood Insurance Rate Maps for the City of Albuquerque, New Mexico, dated October 14, 1983, this site does not lie within a designated flood hazard zone. Furthermore, review of the above referenced map does not indicate that this site discharges to a downstream designated flood hazard zone. Existing storm drain facilities lie within and adjacent to the site which represent the outfall for the runoff generated by the project. This project is a modification to existing site within an infill area with negligible increase in runoff, discharge to existing public storm drainage improvements and a proposed drainage pattern consistent with the existing drainage pattern of the site. Because of this, the free discharge of runoff from this site remains appropriate.

The Grading Plan shows 1) existing and proposed grades indicated by spot elevations and contours at 1'0" intervals, 2) the limit and character of the existing improvements, 3) the limit and character of the proposed improvements, and 4) continuity between existing and proposed grades. As shown by this plan, the site consists of three drainage basins: Basin A will continue to freely discharge to University Boulevard via a new driveway. Runoff exiting the driveway will flow to the south to an existing storm inlet at the southeast corner of the site. Basin B drains to the Tijeras Avenue cul-de-sac at the southwest corner of the site. From this point, the runoff will flow within the street gutter to discharge into the new public storm drain improvements which were constructed in conjunction with the cul-de-sac. Basin C will drain internally to the southeast corner of the site where its runoff will be collected by a private storm inlet and discharged via a 6" PVC private storm drain to the back of the storm inlet which also receives the runoff from Basin A.

Offsite flows are not of concern to this project. Grand Avenue N.E. lies to the north of the site and University Boulevard lies to the east of the site. Both streets are fully improved public rights-of-way. The parking lot for the Central United Methodist Church lies to the south of the site. This parking lot, per its approved Grading Plan, also drains to the Tijeras Avenue cul-de-sac. The existing apartments which lie to the west of the site are topographically lower and hence do not contribute runoff to this site.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Procedure for 40-acre and Smaller Basins, as set forth in the Revision of Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, dated January, 1993, has been used to quantify the peak rate of discharge and volume of runoff generated. As shown by these calculations, a very minor increase in runoff is anticipated due to the proposed plan update.

Site Characteristic	Calculated	Developed Condition
1. Precipitation Zone = 2.35 inches		A. Basin A
2. $R_{100} = 2.35$ inches		1. Volume
3. Total Area ( $A_t$ ) = 1.12 inches		$E_w = (E_{pA} + E_{pB} + E_{pC} + E_{pD}) / A_t$
4. Existing Land Treatment		$E_w = [(0.78)(0.03) + (2.12)(0.20)] / (0.23) = 1.94$ in.
A. Basin A (10,020/0.23)	100%	$V_{100} = (E_w)(12)A_t$
Treatment	04	$V_{100} = (1.94)(12)(0.23) = 0.0373$ ac.ft.; 1,624 cf
B. Basin B (18,270/0.89)	100%	2. Peak Discharge
C. Basin C (10,450/0.24)	100%	$Q_p = Q_{pA} + Q_{pB} + Q_{pC} + Q_{pD}$
D. Basin D (2,180/0.19)	100%	$Q_p = Q_{100} = (2.28)(0.03) + (4.70)(0.20) = 1.0$ cfs
5. Developed Land Treatment		B. Basin B
A. Basin A (10,020/0.23)	100%	1. Volume
Treatment	04	$E_w = (E_{pA} + E_{pB} + E_{pC} + E_{pD}) / A_t$
B. Basin B (18,270/0.89)	100%	$E_w = [(0.78)(0.03) + (2.12)(0.20)] / (0.65) = 1.87$ in.
C. Basin C (10,450/0.24)	100%	$V_{100} = (E_w)(12)A_t$
D. Basin D (2,180/0.19)	100%	$V_{100} = (1.87)(12)(0.65) = 0.1014$ ac.ft.; 4,420 cf
2. Peak Discharge		C. Basin C
$Q_p = Q_{pA} + Q_{pB} + Q_{pC} + Q_{pD}$		1. Volume
$Q_p = Q_{100} = (2.28)(0.03) + (4.70)(0.20) = 1.0$ cfs		$E_w = (E_{pA} + E_{pB} + E_{pC} + E_{pD}) / A_t$
		$E_w = [(0.78)(0.03) + (2.12)(0.20)] / (0.24) = 1.84$ in.
		$V_{100} = (E_w)(12)A_t$
		$V_{100} = (1.84)(12)(0.24) = 0.0368$ ac.ft.; 1,603 cf
		2. Peak Discharge
		$Q_p = Q_{pA} + Q_{pB} + Q_{pC} + Q_{pD}$
		$Q_p = Q_{100} = (2.28)(0.03) + (4.70)(0.20) = 1.0$ cfs



TYPICAL STORM INLET SECTION

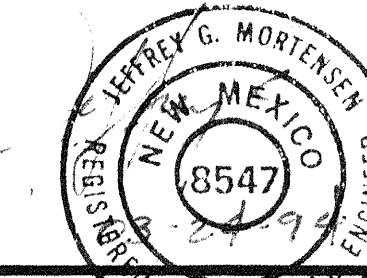
SCALE: 1" = 1' - 0"

APPROVALS	NAME	DATE
A.C.E. / DESIGN	Jeff Mortensen	4/2/94
INSPECTOR		
A.C.E. / FIELD		

NO.	DATE	BY	REVISIONS
1			
2			
3			

DESIGNED BY JCM	JOB NO. 940081
DRAWN BY EMS	DATE 3/94
APPROVED JCM	

GRADING AND DRAINAGE PLAN  
PINE STREET APARTMENTS



FILE NO.

SHEET 1 OF 1