



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

June 13, 1995

John Stomp III
Gannett Fleming West
4501 Indian School Rd. NE Suite 101
Albuquerque, NM 87110

RE: DRAINAGE PLAN FOR A NEW BUILDING ADDITION TO JAMES, COCKE
AND HOBSON BUILDING (E17-D1J) ENGINEER'S STAMP DATED 6/1/95.

Dear Mr. Stomp:

Based on the information provided on your June 5, 1995 submittal, the above referenced site is approved for Building Permit.

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.

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

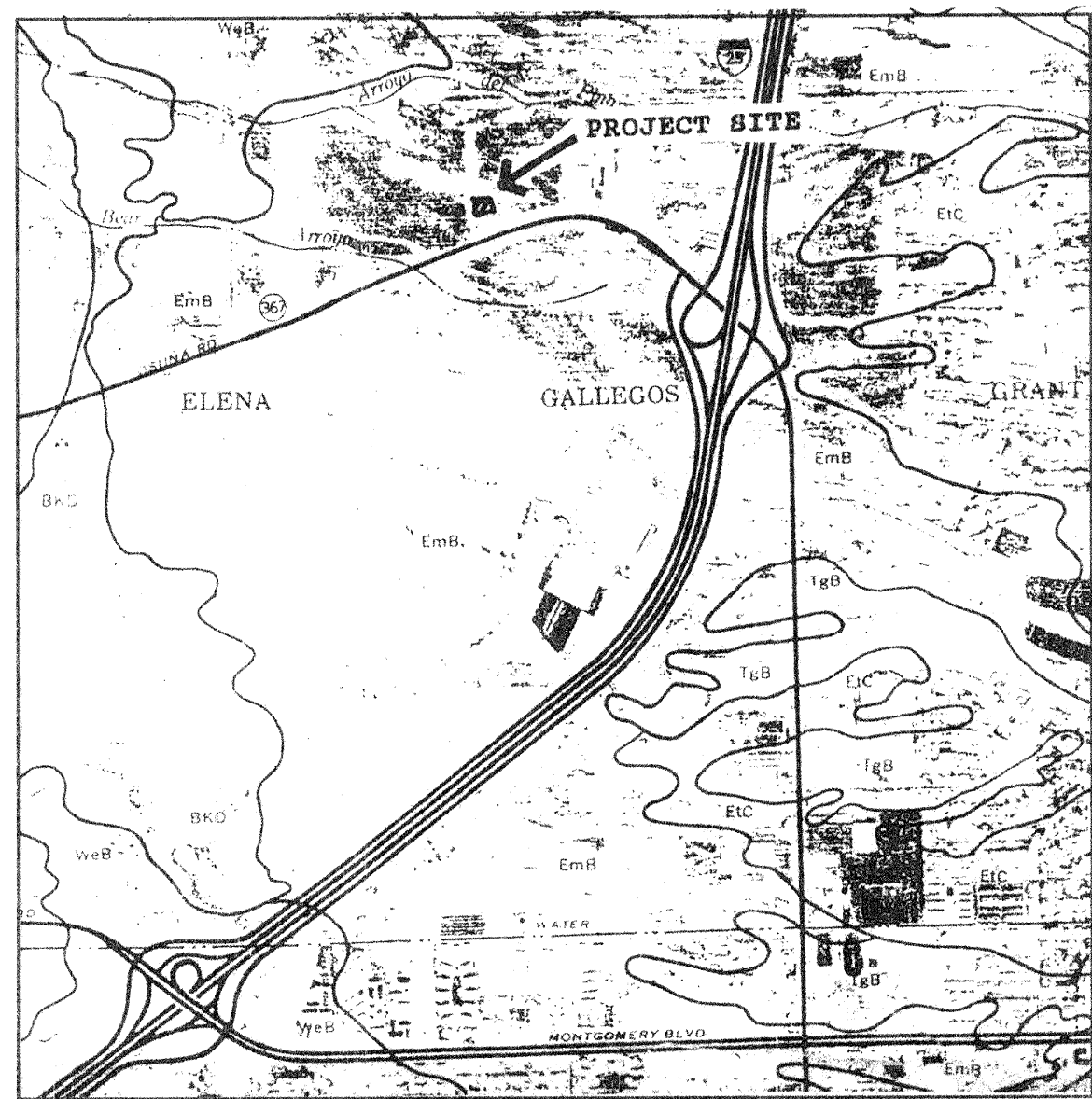
If I can be of further assistance, please feel free to contact me at 768-2667.

Sincerely,

Bernie J. Montoya, CE
Engineering Associate

BJM/dl

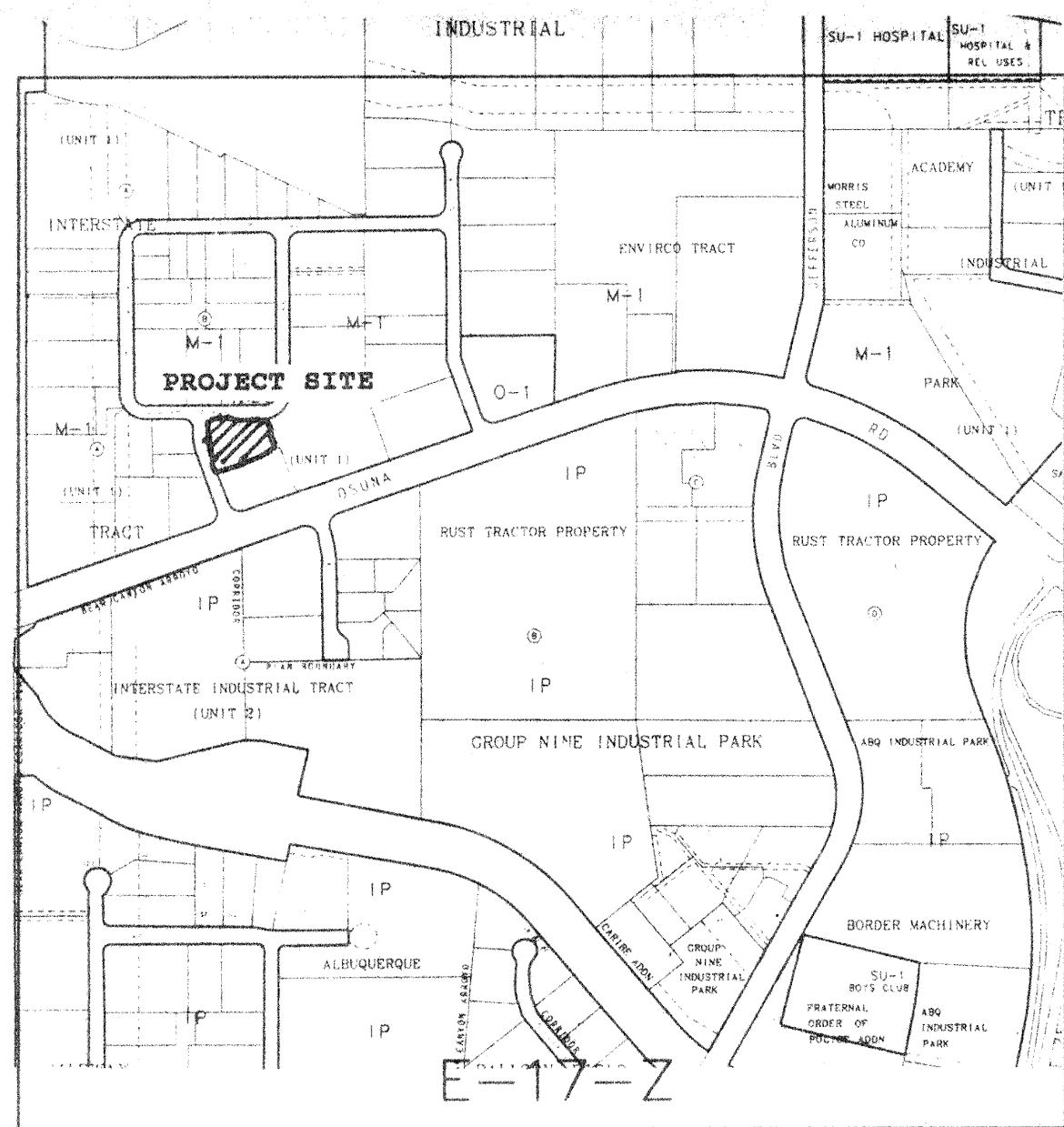
c: Andrew Garcia
Arlene Portillo
File



SOILS MAP

NOTICE TO CONTRACTOR

1. An excavation/construction permit will be required before beginning any work within the City right-of-way. An approved copy of these plans must be submitted at the time of application for this permit.
2. All work detailed on these plans to be performed, except as otherwise stated or provided hereon, shall be constructed in accordance with City of Albuquerque Interim Standard Specifications for Public Works Construction, 1985.
3. Two working days prior to any excavation, contractor must contact line Locating Service at 260-1990 for location of existing utilities.
4. Prior to construction, the contractor shall excavate and verify the horizontal and vertical locations of all constructions. 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 street use.
6. Maintenance of these facilities shall be the responsibility of the Owner of the property served.



VICINITY MAP

DRAINAGE PLAN FOR JAMES COOKE & HOBSON BUILDING ADDITION

EXISTING CONDITIONS:

The existing site which is located in Zone 2 is developed and consists of 5532 square foot (sf) building, 1968 sf warehouse, asphalt concrete parking lot, landscaped pond area and dirt yard area. Based on the existing drainage patterns, the site can be divided into three separate basins as follows:

BASIN A: Basin A consists of approximately 0.385 acres (ac) and drains north to Academy Parkway South roadway.

BASIN B: Basin B consists of approximately 0.135 acres of landscaping which is utilized as a detention pond. The pond detains runoff generated in Basins B and C and ultimately discharges to Academy Parkway South roadway.

BASIN C: Basin C consists of approximately 0.5568 acres of dirt, concrete sidewalk and building roof area. Basin C currently drains to the existing detention pond located within Basin B.

DOWNSTREAM STRUCTURE: The runoff from this site is discharged to the Academy Parkway roadway system which drains to an existing concrete channel at the North Diversion Channel.

PROPOSED CONDITIONS:

BASIN A: There will be no modifications made in the Basin. No calculations were performed for this Basin.

BASIN B: Basin B will no longer accept flows from Basin C. The runoff generated within Basin B will be detained and discharged into the roadway following existing drainage patterns. Therefore, no calculations were performed for this Basin.

BASIN C: The runoff from this basin will be discharged directly to Academy Parkway South for ultimate discharge into the North Diversion Channel. Drainage improvements to be completed include the construction of a desiltation basin and two 4-inch PVC drain lines extending from the desiltation basin to the existing curb and gutter. Discharge from the proposed curb line will not exceed peak discharge in the existing condition.

EXISTING BASIN AREA BREAKDOWN: 0.196 ac Type 'D'; 0.3608 ac Type 'A'
PROPOSED BASIN AREA BREAKDOWN: 0.242 ac Type 'D'; 0.3148 ac Type 'A'

HYDROLOGIC CALCULATIONS (ZONE 2):

$Q_{PEAK, EXISTING} = (0.196 \text{ ac}) \times (4.7 \text{ cfs/ac}) + (0.3608 \text{ ac}) \times (1.56 \text{ cfs/ac}) = 1.5 \text{ cfs}$

$Q_{PEAK, PROPOSED} = (0.242 \text{ ac}) \times (4.7 \text{ cfs/ac}) + (0.3148 \text{ ac}) \times (1.56 \text{ cfs/ac}) = 1.6 \text{ cfs}$

$V_{24HOUR, EXISTING} = [(0.196 \text{ ac}) \times (2.12 \text{ cfs/ac}) + (0.3608 \text{ ac}) \times (0.53 \text{ cfs/ac})] / 12 = 2200 \text{ cubic feet (cf)}$

$V_{24HOUR, PROPOSED} = [(0.242 \text{ ac}) \times (2.12 \text{ cfs/ac}) + (0.3148 \text{ ac}) \times (0.53 \text{ cfs/ac})] / 12 = 2470 \text{ cf}$

HYDRAULIC CALCULATIONS:

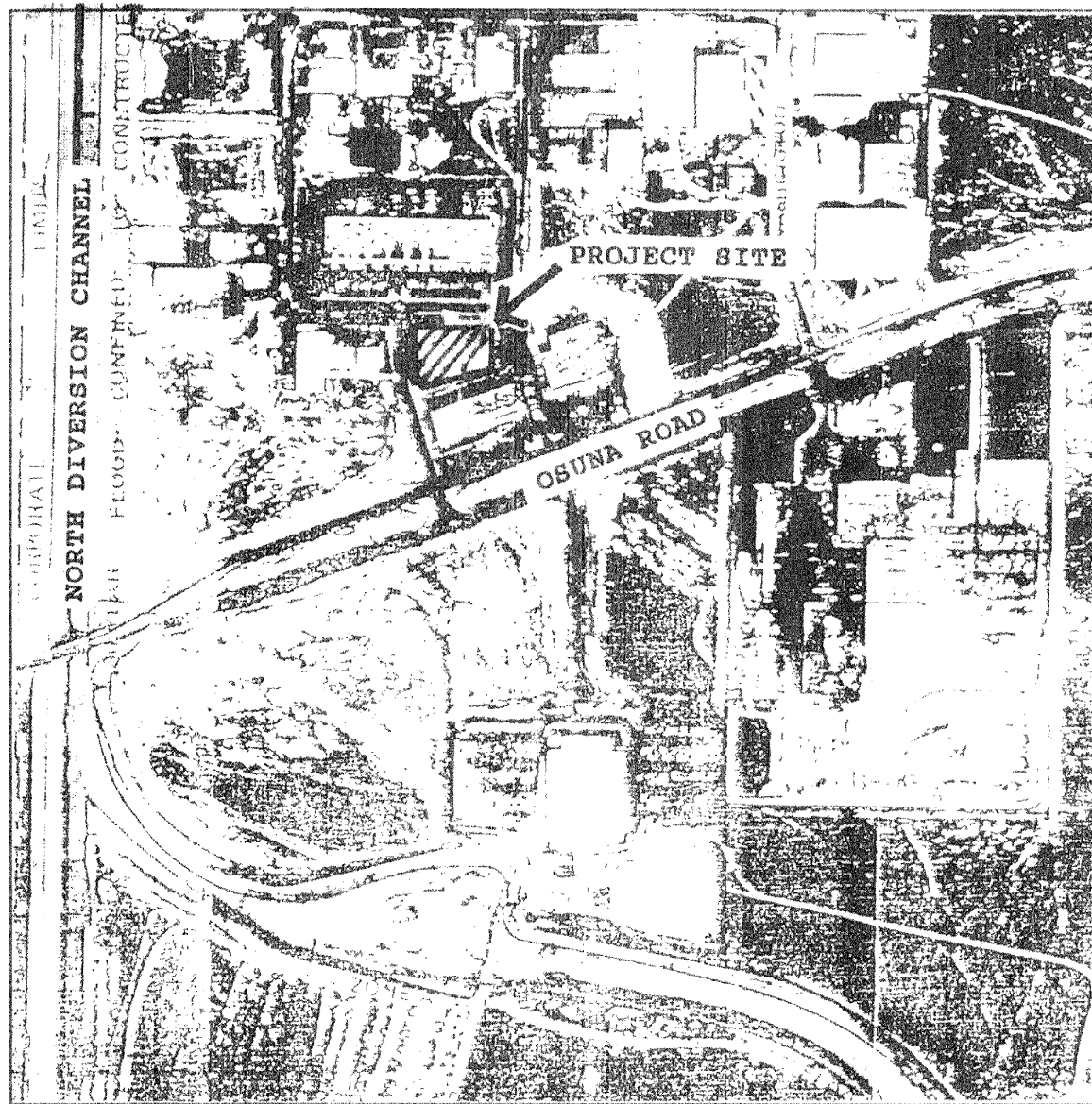
CURB DRAIN LINES: $Q_{2, PIPES} = CA (2gH)^{1/2} = (0.6) \times (0.1745 \text{ SF}) \times (2 \times 32.2 \times 1.0)^{1/2} = 0.84 \text{ cfs}$

DESILTATION BASIN:

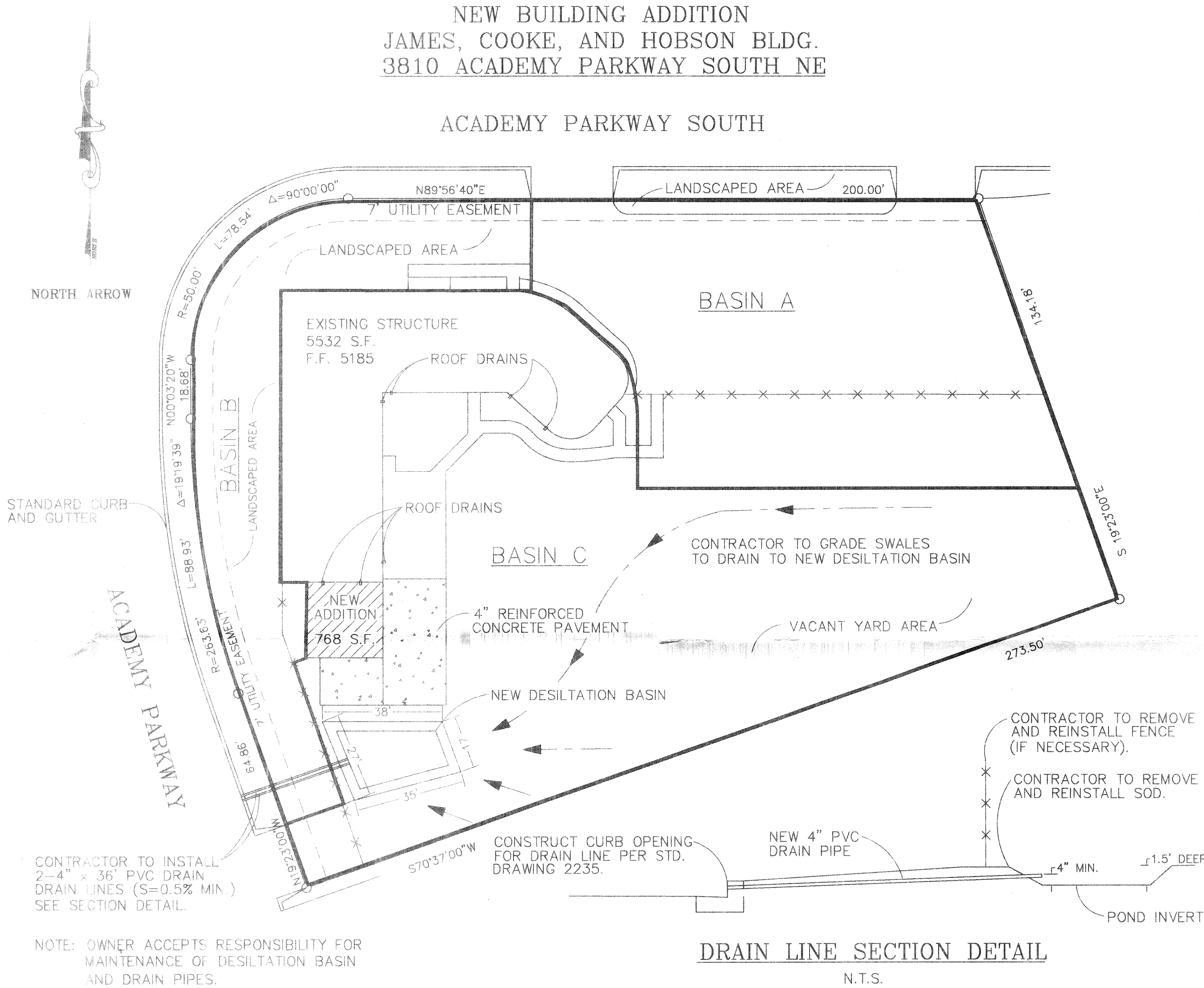
The basin is basically 35-feet long and varies from 17 to 27-feet wide and is capable of storing approximately 650 cubic feet of runoff. The purpose of the pond is to remove sediment and other debris from the runoff prior to discharge into the street.

CONCLUSIONS:

The proposed building addition and concrete pad will increase the peak flow and volume generated in Basin C. In accordance with the existing conditions, the runoff from the site will be free discharged into the roadway for ultimate discharge to the North Diversion Channel. The increase in flow and volume will be detained via the construction of the new desiltation basin and two 4-inch PVC curb drain lines. Flows which overtop the desiltation will drain to the landscaped ponding area in Basin B.



FLOOD ZONE MAP



LEGAL DESCRIPTION

Lot 5 of Block "C", Unit 1, INTERSTATE INDUSTRIAL TRACT, Bernalillo County, New Mexico, as the same as is shown and designated on the plat of Lot 5 of Block "C", Unit 1, Interstate Industrial Tract, filed in the office of the County Clerk of Bernalillo County, New Mexico, on May 26, 1976.












CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

NEW BUILDING ADDITION
JAMES, COOKE, AND HOBSON BLDG.
3810 ACADEMY PARKWAY SOUTH NE

ALBUQUERQUE, NEW MEXICO
BERNALILLO COUNTY

JUN - 5 1995

APPROVALS	NAME	DATE
HYDROLOGY	Burns of Montoya	4/1/95
INSPECTOR		
A.C.E. / FIELD		

SCALE	LEGEND			ENGINEER'S SEAL	REVISIONS	CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT																								
<div>GRAPHIC SCALE</div> <div></div> <div>(IN FEET)</div> <div>SCALE: 1" = 20 FT.</div>	<div> EXISTING FENCE</div>	<div> POWER POLE</div>	<div> DRAINAGE BASIN BOUNDARY</div>	<div></div>	<table><tr><td></td><td></td><td></td><td></td></tr><tr><td>NO.</td><td>DATE</td><td>REMARKS</td><td>BY</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td colspan="4">DESIGN</td></tr><tr><td colspan="2">DESIGNED BY</td><td colspan="2">DATE</td></tr><tr><td colspan="2">JOHN M. STOMP III</td><td colspan="2">MAY 31, 1995</td></tr></table>					NO.	DATE	REMARKS	BY					DESIGN				DESIGNED BY		DATE		JOHN M. STOMP III		MAY 31, 1995		<div>NEW BUILDING ADDITION</div> <div>JAMES, COOKE, AND HOBSON BLDG.</div> <div>3810 ACADEMY PARKWAY SOUTH NE</div> <div>ALBUQUERQUE, NEW MEXICO</div> <div>BERNALILLO COUNTY</div> <div><div>JUN 5 1995</div></div>
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JOHN M. STOMP III		MAY 31, 1995																												
<div> NEW CONCRETE PAVEMENT</div>	<div> FOUND PROPERTY CORNER</div>	<div> FLOW PATH</div>																												
<div> PROPOSED ADDITION</div>	<div> PVC DRAIN LINE</div>	<div> ROOF DRAIN</div>																												