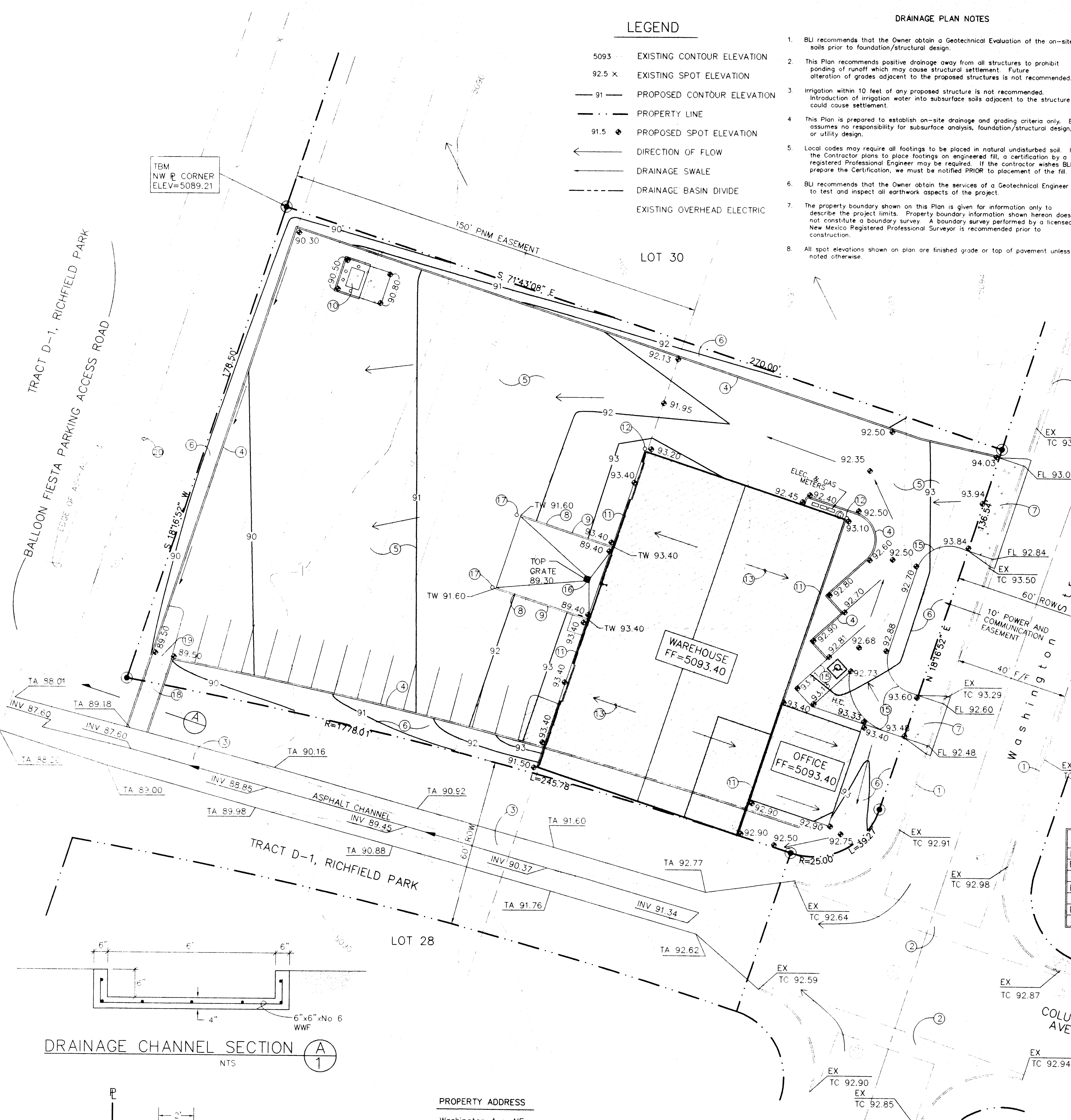


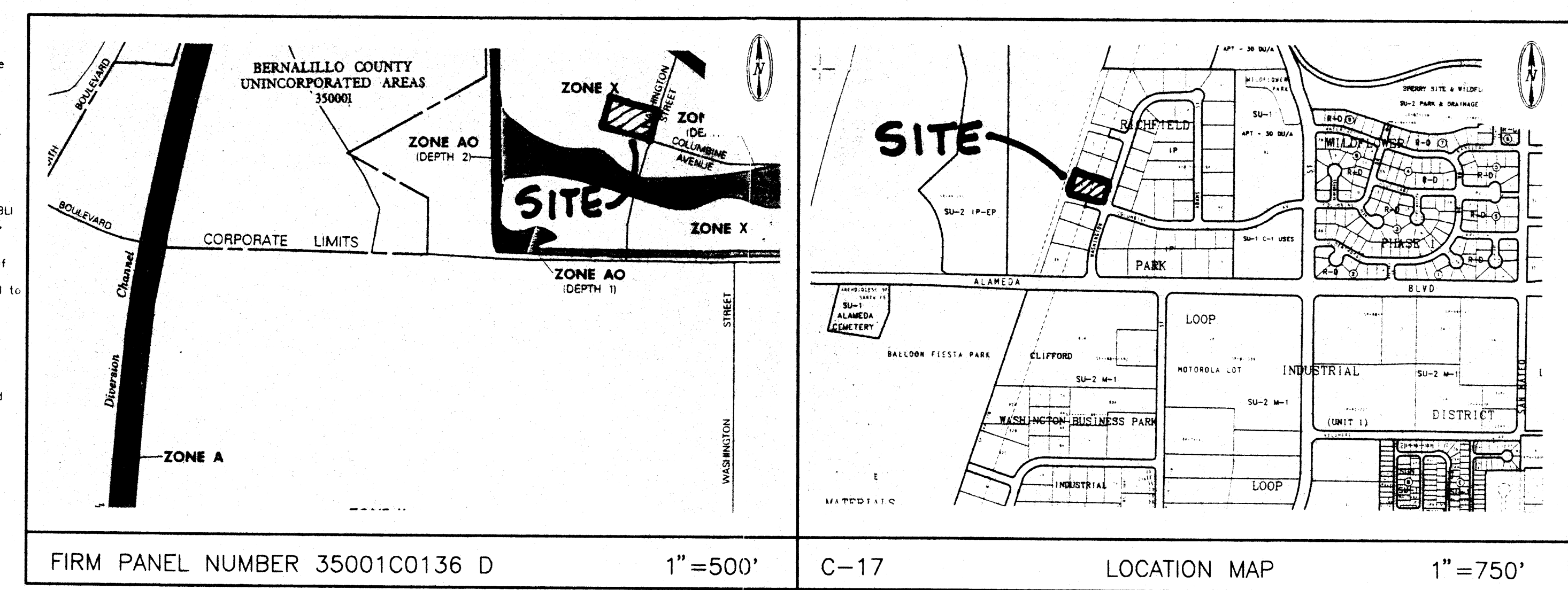


LEGEND

- 5093 — EXISTING CONTOUR ELEVATION
- 92.5 x — EXISTING SPOT ELEVATION
- 91 — PROPOSED CONTOUR ELEVATION
- — — — — PROPERTY LINE
- 91.5 — PROPOSED SPOT ELEVATION
- ← — DIRECTION OF FLOW
- — — — — DRAINAGE SWALE
- — — — — DRAINAGE BASIN DIVIDE
- — — — — EXISTING OVERHEAD ELECTRIC

DRAINAGE PLAN NOTES

- BLI recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
- This Plan recommends positive drainage away from all structures to prohibit ponding of runoff which may cause structural settlement. Future alteration of grades adjacent to the proposed structures is not recommended.
- Irrigation within 10 feet of any proposed structure is not recommended. Introduction of irrigation water into subsurface soils adjacent to the structure could cause settlement.
- This Plan is prepared to establish on-site drainage and grading criteria only. BLI assumes no responsibility for subsurface analysis, foundation/structural design, or utility design.
- Local codes may require all footings to be placed in natural undisturbed soil. If the Contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer may be required. If the contractor wishes BLI to prepare the Certification, we must be notified PRIOR to placement of the fill.
- BLI recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
- The property boundary shown on this Plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey. A boundary survey performed by a licensed New Mexico Registered Professional Surveyor is recommended prior to construction.
- All spot elevations shown on plan are finished grade or top of pavement unless noted otherwise.



FIRM PANEL NUMBER 35001C0136 D

1"=500'

C-17

LOCATION MAP

1"=750'

GRADING AND DRAINAGE PLAN

PURPOSE AND SCOPE:

Pursuant to the established Drainage Ordinance for the City of Albuquerque and the Development Process Manual, this Grading and Drainage Plan outlines the drainage management criteria for controlling developed runoff from the project site. The property is to be developed as an office/warehouse facility, with associated paving, landscaping, utility, grading, and drainage improvements.

EXISTING CONDITIONS:

The project site is approximately 1.03 acres in size and is located on Washington Street NE in the Richfield Park Subdivision. The site is bounded by Washington Street on the east, undeveloped property on the north, Balloon Fiesta Parking and Eastdale Little League on the west, and a public drainage channel on the south. Presently the site is undeveloped. Site topography slopes from east to west at approximately 2%. The site is sparsely covered with native vegetation.

On-site, all flow drains as sheet flow to the west into the adjoining property. Off-site flows from the east are managed by a public street improvements which convey flows to a public paved channel located along the south property line of the subject property, which is an extension of Columbine Avenue. The channel conveys all off-site flow west to Tract D-1, where existing improvements convey runoff to an AMAFCA maintained channel located along the west boundary of Richfield Park Subdivision, Tract D-1. The AMAFCA channel drains north to the La Cueva Channel and North Diversion Channel. No off-site flows impact the property.

As shown by the attached FIRM Panel, this site is not located within a designated flood hazard zone.

ESTABLISHED DRAINAGE MANAGEMENT PLAN

The Richfield Park Subdivision improvements were constructed in 1987. The drainage management criteria for the project was established by the "Drainage Report for Richfield Park", prepared by Espey, Huston & Associates, Inc., dated August 1, 1986. Per the report, all lots are to free discharge into the public street system which conveys runoff to the existing AMAFCA channel located along the west boundary of Richfield Park, Tract D-1. The project was built in phases in accordance with the phasing plan outlined in the approved drainage report. Interim paved channels were constructed to convey runoff from the public streets to the AMAFCA channel.

DEVELOPED CONDITIONS:

As shown by the Plan, the project consists of the development of the property into an office/warehouse facility. The Plan shows the contours and elevations required to properly grade and construct the required paving and drainage improvements. The direction of drainage flows are given by flow arrows and the project hydrology is tabulated for both existing and developed conditions.

All drainage flows will be managed on-site and discharge through a drainage rundown at the southwest corner of the site to the existing public channel, in accordance with the established Drainage Management Plan. Tract D-1 has been purchased and improved by the City of Albuquerque as the Balloon Fiesta parking lot and is intercepted by roadside ditches which convey all flows across the Balloon Fiesta parking lot access road to the AMAFCA channel located along the west side of Tract D-1.

EROSION CONTROL

Temporary erosion control will be required during the construction phase to protect downstream property and improvements from sediment and uncontrolled runoff. As shown by the detail included with the plan, temporary erosion control measures will be provided along the west and south project boundaries to hold runoff during construction. It is the Contractor's responsibility to properly maintain these facilities during the construction phase of the project.

CALCULATIONS:

The calculations shown hereon define the 100 year/6 hour design storm falling with the project area under existing and developed conditions. The Hydrology is per "Development Process Manual, Vol 2, Chapter 22", July 1997 Revision.

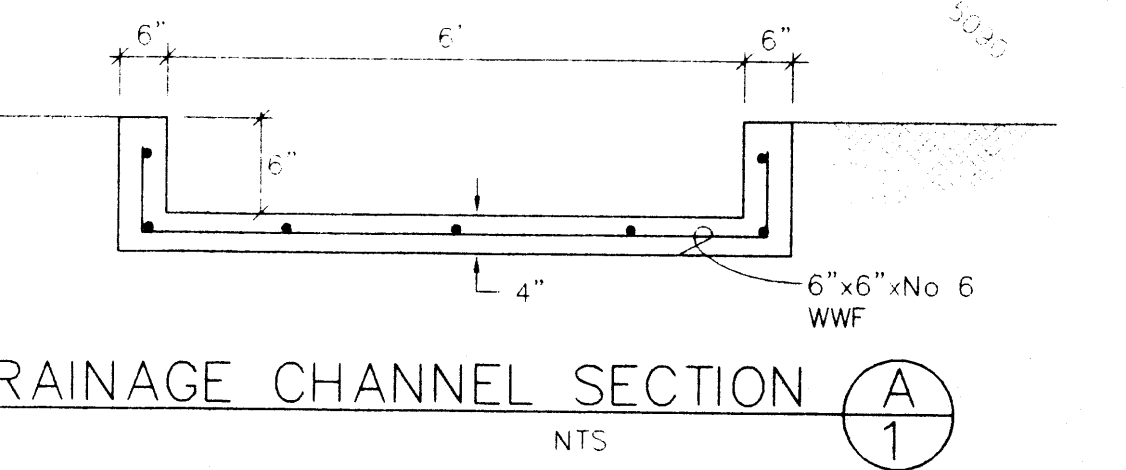
KEYED NOTES

- EXISTING 8" STD CURB & GUTTER
- EXISTING CONC. VALLEY GUTTER
- EXISTING ASPHALT CHANNEL
- PROPOSED 6" CONC. CURB
- PROPOSED ASPHALT PAVING
- LANDSCAPING
- CONSTRUCT CONC DRIVEPAD PER COA STD DWG 2425
- CONC. RETAINING WALL - DESIGN BY OTHERS
- CONSTRUCT HANDRAIL MOUNTED ON TOP OF RETAINING WALL - DESIGN BY OTHERS
- REFUSE ENCLOSURE
- ROOF RAIN GUTTER
- DOWNSPOUT
- DIRECTION OF ROOF DRAINAGE
- HANDICAP RAMP
- EDGE OF PAVEMENT - NO CURB
- CONSTRUCT DROP INLET W/SUMP PUMP SEE DETAIL THIS SHEET
- CONSTRUCT STATIONARY BOLLARD PER COA STD DWG 2250
- CONSTRUCT CONC. CHANNEL PER SECTION A
- PROVIDE 6" WIDE CURB BREAK AT CHANNEL INLET
- EXISTING WIRE FENCE

HYDROLOGY - HYMO

Precipitation Zone 2		P360 = 2.35 in				
Basin	Basin	Land Treatment (acre)				
area (Ac)	A	B	C	D	(in)	(af)
Existing Conditions						
SITE	1.03	1.03			0.53	1.7
Developed Conditions						
SITE	1.03	0.075	0.075	0.88	1.95	4.6

DRAINAGE CHANNEL SECTION A



PROPERTY ADDRESS

Washington Ave. NE

LEGAL DESCRIPTION

Lot 29, Richfield Park Subdivision

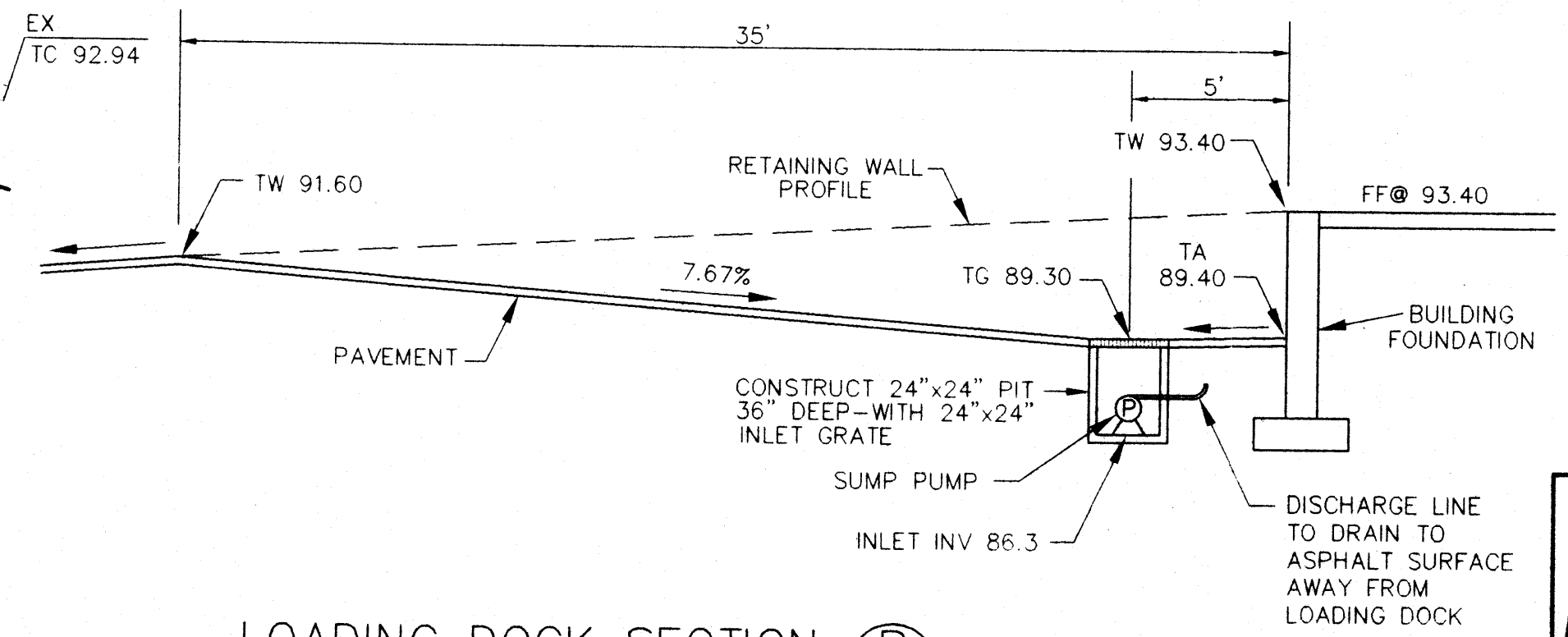
PROJECT BENCHMARK

TBM: NW property corner, Pk. nail
Elevation 5089.21 feet

SURVEY

Topographic and Field Measurement by
Precision Surveys Inc.
Dated November, 1995

LOADING DOCK SECTION B



BLI BRASHER & LORENZ, INC.
Consulting Engineers
2201 San Pedro NE Building 1 Suite 210
Albuquerque, New Mexico 87110
Ph: 505-888-6088 Fax: 505-888-6188

LOT 29, RICHFIELD PARK
GRADING & DRAINAGE PLAN
ALBUQUERQUE, NM

REVISION DATE

9-25-98

rick bennett
architect

DATE

9-25-98

SHEET NUMBER

C-1

FILE C7/D002A31