DRAINAGE PLAN NOTES

- 1. BLI recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
- 2. 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.
- 3. 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.
- 4. 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.
- 5. 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 will be required. If the contractor wishes BLI to prepare the Certification, we must be notified PRIOR to placement of the fill.
- 6. BLI recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
- 7. 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.

EX FL

89.02

-EX FL

89.64

EXISTING CON

VALLEY GUTT

TO REMAIN

89.68

10' PRIVATE

DRAINAGE EASEMENT

8. Boundary information shown is record.

LEGEND

---- 6001 --- EXISTING CONTOUR ELEVATION

02.5 X EXISTING SPOT ELEVATION

--- 01 --- PROPOSED CONTOUR ELEVATION

CHANNEL

01.5 PROPOSED SPOT ELEVATION

CONTRACTION OF FLOW - DRAINAGE SWALE

DRAINAGE BASIN DIVIDE

LOT 32

BASIN (1)

BASIN (A)

LOT 31

LOT 30

EXIST. 10' EASEMENT TO BE VACATED

150' PNM EASEMENT

PAVING

PROPERTY ADDRESS

WASHINGTON ST NE

LEGAL DESCRIPTION

Lot 31, Richfield Park

PROJECT BENCHMARK

TBM: SW property corner, Elevation 5089.88 feet

SURVEY

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

× FL 91.24

F = 5094.25

25 -93.65

93.24 .94.01

93.70-

10

1 inch = 20 ft.

EX TC

91.96

92.10

EX. TRAFFIC

BARRICADES

EX TC

92.53

EX FL

-BASIN (2)

EXISTING -CURB & GUTTER

10' POWER AND

COMMUNICATION EASEMENT

40' FF

Z

93.73

FL 92.93

93.58

| CURVE DATA | | | | | | | | | |
|------------|---------|-----------|--------|--------|--|--|--|--|--|
| | R | Α | L | Т | | | | | |
| C1 | 2517.15 | 5*35'08" | 245.29 | 122.79 | | | | | |
| C2 | 25.00 | 90°00'00" | 39.27 | 25.00' | | | | | |

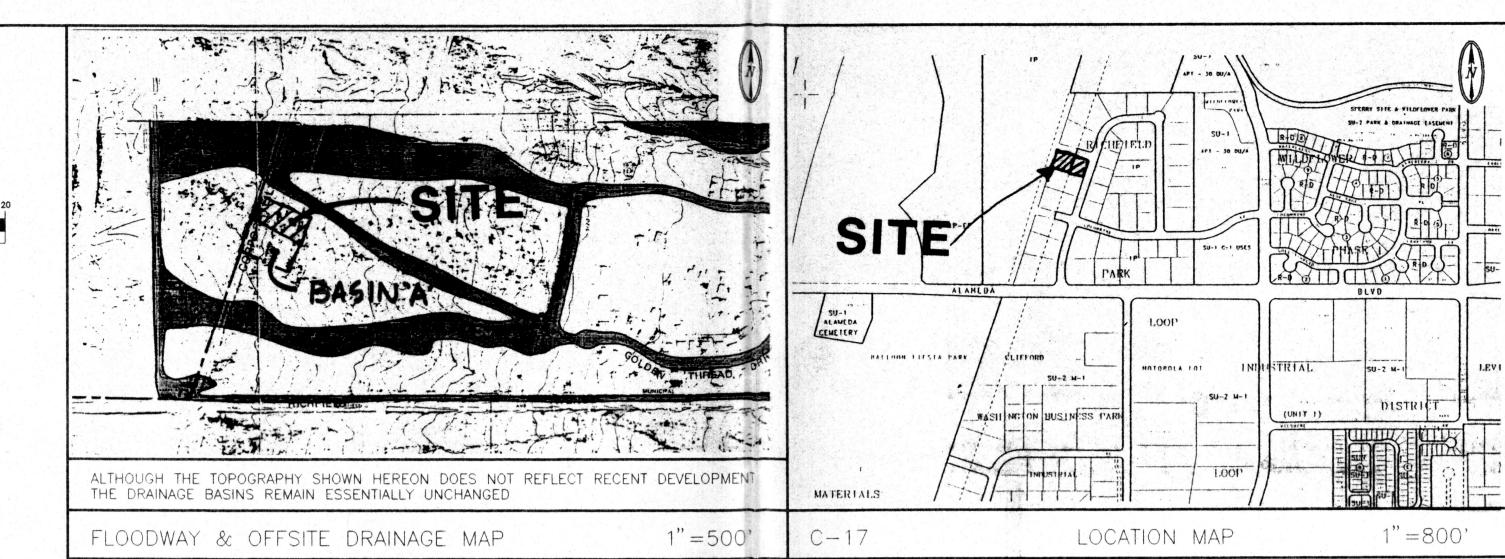
WAREHOUSE

9,000 SF

120'x75'

FF = 5092.00

7



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 0.95 acres in size and is located on Washington Avenue NE in the Richfield Park Subdivision. The site is bounded by Washington Avenue on the east, and undeveloped property on the west, south and north. 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 an existing paved drainage swale located within a 10' private drainage easement. The swale drains into an existing paved swale within Tract D-1, located along the north project boundary. Washington Avenue conveys all off-site runoff from the industrial park to the existing paved swale mentioned above. The swale drains 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.

As shown by the attached Floodway Map, this site appears does not lie 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 to existing perimeter public street system and outfall swale in accordance with the established Drainage Management Plan. The site will accept off-site runoff from Lot 30 located immediately south, per the approved Masterplan. Flows from Lot 30 will enter the site along the west property line and drain north within the paved swale to the outfall swale.

Development of Tract D-1 is in progress. The City of Albuquerque has purchased the property and is constructing a new Balloon Fiesta Park and Eastdale Little League. Development of Tract D-1 will replace the interim swales presently located on the property with permanent improvements.

EROSION CONTROL

Temporary erosion control will be required during the construction phase to protect downstream property and improvements from sediment and uncontrolled runoff. Silt fencing is recommended along the north and west 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 "Section 22.2, Part A, DPM, Vol 2" Dated January 1993.

| | | | HYDRO | LOGY - | HYMO | | | |
|-----------|-------------|-------|------------------|--------|-------|--------|------------|--------|
| Precipita | tion Zone | 2 | P360 = 2.35 inc | | | | | es |
| BASIN | AREA | Aa | Ab | Ac | Ad | E | Q100 | VOL100 |
| | acres | acres | acres | acres | acres | inches | cfs | af |
| EXISTING | CONDITION | | | | | | | |
| SITE | 0.95 | 0.92 | | | 0.03 | 0.58 | 1.6 | 0.0459 |
| Α | 0.94 | 0.94 | | | | 0.53 | 1.5 | 0.0415 |
| DEVELOPE | ED CONDITIO | DN: | | | | | | |
| SITE | 0.95 | | 0.07 | 0.07 | 0.81 | 1.95 | 4.2 | 0.154 |
| Α | 0.94 | | 0.07 | 0.07 | 0.80 | 1.95 | 4.1 | 0.153 |
| 1 | 0.80 | | 0.06 | 0.06 | 0.68 | 1,95 | 3.5 | 0.130 |
| 2 | 0.15 | | 0.01 | 0.01 | 0.13 | 1.95 | 0.7 | 0.024 |

1 KEYED NOTES

- 1. 6" CONCRETE CURB 2. CONSTRUCT 24' DRIVE PAD PER COA STD DWG 2425
- 3. CONSTRUCT 30' DRIVE PAD PER COA STD DWG 2425
- 4. EDGE OF PAVEMENT (NO CURB)
- 5. HANDICAP RAMP 6. LANDSCAPING
- 7. DIRECTION OF ROOF DRAINAGE 8. EXISTING CURB & GUTTER
- 9. REFUSE ENCLOSURE
- 10. ROOF RAIN GUTTER 11. DOWNSPOUT

OR

REVISION DATE

4-2-97 FILE NO. 7014G-D.DWG SHEET NUMBER

APR 1 0 1997 BRASHER & LORENZ, INC. Consulting Engineers 2201 San Pedro NE Building 1 Suite 210 Albuquerque, New Mexico 87110 505-888-6088 Fax: 505-888-6188