

- LEGEND**
- x 87.2 EXISTING SPOT ELEVATION
 - 87.2 NEW SPOT ELEVATION
 - EXISTING CONTOUR
 - NEW CONTOUR
 - BASIN BOUNDARY
 - ✓ VERIFIED ELEVATION

LEGAL DESCRIPTION

TRACT C4B1 MIDWAY BUSINESS PARK

ADDRESS

5606 SINGER BLVD. NE

BENCHMARK

NMSHTD BRASS CAP I-25-17 LOCATED ON THE WEST SIDE OF THE FRONTAGE ROAD, 202' SOUTH OF A FIRE HYDRANT NEAR DIGITAL. ELEVATION = 5171.1.

DRAINAGE PLAN

The following items concerning the Circuit City Building Drainage Plan are contained hereon:

1. Vicinity Map
2. Grading Plan
3. Calculations

The proposed improvements, as shown by the Vicinity Map, are located on the north side of Singer Blvd. NE and west of Jefferson Street NE. The site is currently undeveloped. The sites to the east and north are developed, but the site to the west is undeveloped. The site is not within a designated flood hazard zone.

The site slopes from east to west. The site is higher than the site to the west, parallel to and higher than the site to the north, lower than the site to the east and parallel and higher than the street to the south. The site to the west has been graded such that runoff is directed to the street and not into the proposed site. Therefore, offsite flows are negligible.

The Grading Plan shows 1) existing and proposed grades, indicated by spot elevations and contours at 1'-0" intervals, 2) continuity between existing and proposed elevations, 3) the limit and character of existing improvement and 4) the limit and character of proposed improvements. As shown by this plan, the proposed improvements consist of a building with associated parking and landscaping. The site will be graded to drain to the street through the west driveway and to the northwest corner of the site. The flow from the northwest corner of the site will flow west through an easement to Office Blvd. The owner of the Circuit City site also owns the site to the west and will grant the drainage easement by separate document.

The Calculations, which appear below, analyze the existing and developed conditions for the 100-year, 6-hour rainfall event. The analysis is in accordance with the City of Albuquerque Development Process Manual, Volume II. As shown by the calculations, the rate of runoff and the volume of runoff will increase. The increase in runoff is in accordance with the approved master drainage plan for the subdivision.

CALCULATIONS

Precipitation Zone = 2
Area of Site = 1.76 acres

Existing Conditions

Land Treatment A = 100%
E = $0.53 \times 1.76 / 1.76 = 0.53$ inches
V = $0.53 \times 1.76 / 12 = 0.08$ acre feet
Q = $1.56 \times 1.76 = 2.75$ cfs

Developed Conditions

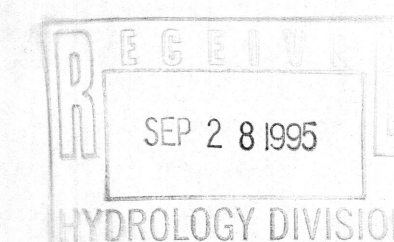
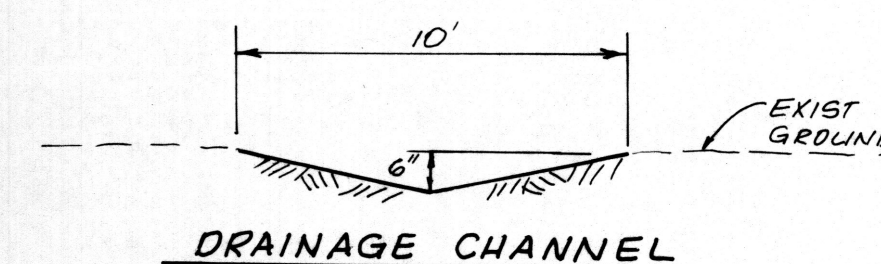
Basin A
Land Treatment D = 100%
E = $2.12 \times 0.65 / 0.65 = 2.12$ inches
V = $2.12 \times 0.65 / 12 = 0.11$ acre feet
Q = $4.70 \times 0.65 = 3.05$ cfs

Basin B
Land Treatment B = 15% D = 85%
E = $(0.78 \times 1.11 \times 0.15 + 2.12 \times 1.11 \times 0.85) / 1.11 = 1.92$ inches
V = $1.92 \times 1.11 / 12 = 0.18$ acre feet
Q = $4.70 \times 1.11 = 5.22$ cfs

Increase in Rate of Runoff = $5.22 + 3.05 - 2.75 = 5.52$ cfs
Increase in Volume of Runoff = $0.18 + 0.11 - 0.08 = 0.21$ ac ft

Channel Capacity

Q = $(1.49 / 0.026) \times 2.5 \times (2.5 / 10)^{0.67} \times (0.013)^{0.5} = 6.53$ cfs
6.53 cfs > 5.22 cfs

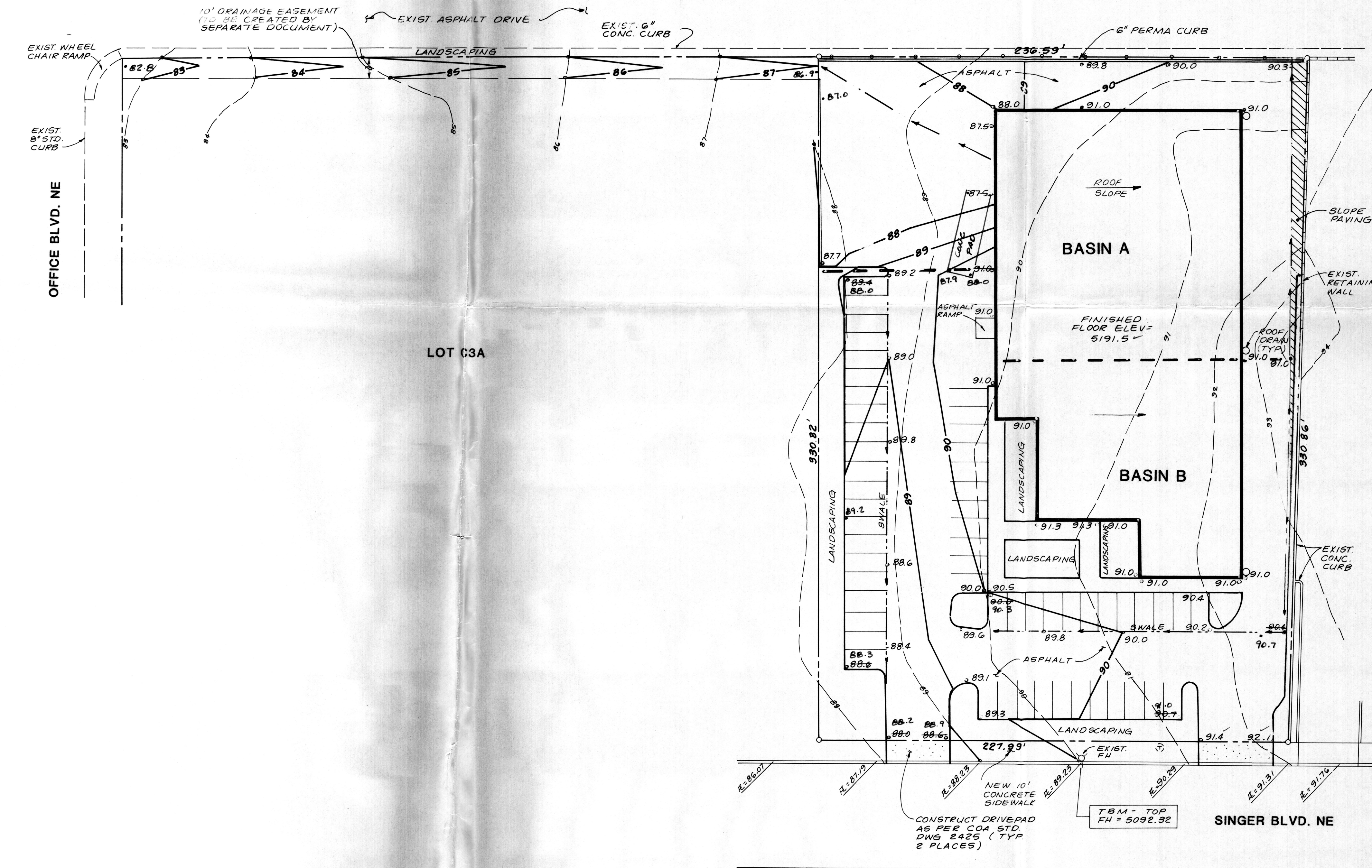


GRADING AND DRAINAGE PLAN

CIRCUIT CITY

JANUARY, 1995

SHEET 1 OF 1



SINGER BLVD. NE

THIS PROJECT WAS CONSTRUCTED IN SUBSTANTIAL COMPLIANCE WITH THE APPROVED DRAINAGE PLAN.

REGISTERED PROFESSIONAL ENGINEER
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