



City of Albuquerque

P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

April 2, 1993

Ronald Bohannon
Tierra West Development
4600 Montgomery Blvd. NE Suite 9
Albuquerque, NM 87109

RE: ~~ENGINEER CERTIFICATION FOR CUBBY HOLE VI @ 11820 LOMAS BLVD. NE~~
(K21-D25) PLAN DATED 1/28/93 & CORRESPONDENCE DATED 3/25/93.

Dear Mr. Bohannon:

Based on the information provided on your March 31, 1993 submittal, Engineer Certification for the above referenced site is acceptable.

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

Sincerely,

Bernie J. Montoya, CE
Engineering Assistant

BJM/d1/WPHYD/7655

xc: Alan Martinez
File

PUBLIC WORKS DEPARTMENT

DRAINAGE INFORMATION SHEET

PROJECT TITLE: Cubby Hole Mini Storage VI ZONE ATLAS/DRNG. FILE #: K-21/025
DRB #: Z-92-311 EPC #: _____ WORK ORDER #: _____
LEGAL DESCRIPTION: Lot 3, Block 124 of Dale J. Bellamah's Princess Jeanne Park
CITY ADDRESS: 11820 Lomas Boulevard NE
ENGINEERING FIRM: Tierra West Development CONTACT: Ronald R. Bohannon
ADDRESS: 4600 Montgomery Blvd, NE, Suite 9 PHONE: 883-7592
OWNER: K & S. General Partnership VI CONTACT: Ken Schumann
ADDRESS: 3108 Alamoqordo NW PHONE: 839-0091
ARCHITECT: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
SURVEYOR: _____ CONTACT: _____
ADDRESS: _____ PHONE: _____
CONTRACTOR: _____ 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:

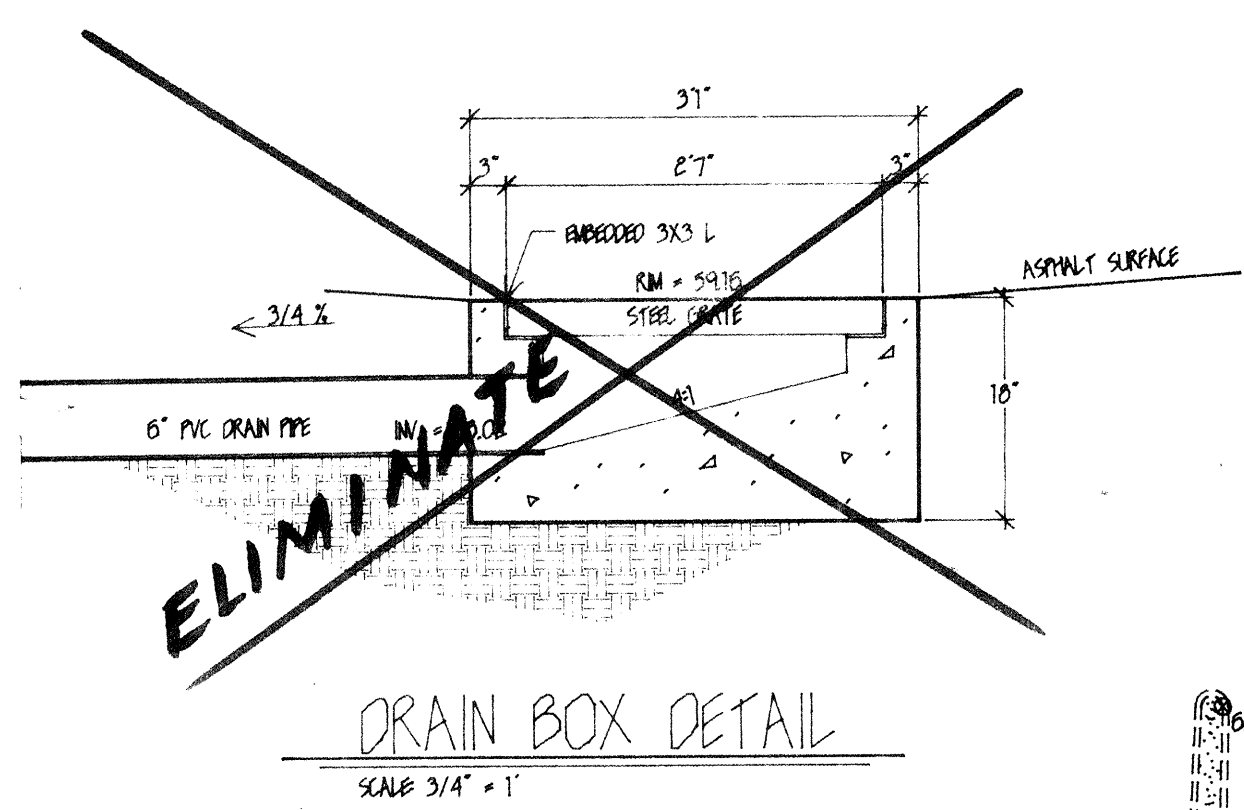
☐ YES
☐ NO
☐ COPY PROVIDED

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: _____

BY: _____



DRAINAGE CALCULATIONS:

CONDITIONS:

A = 0.000 AC.
 B = 0.054 AC.
 C = 0.029 AC.
 D = 1.190 AC.

1.273 AC. ± TOTAL ACREAGE

WEIGHTED EXCESS PRECIPITATION
 (100 YR. 6 HR. STORM-PRECIP. ZONE 4)

WEIGHTED E = $E_A A_A + E_B A_B + E_C A_C + E_D A_D$

$E_A A_A + E_B A_B + E_C A_C + E_D A_D$

$E = (0.000 \times 0.000) + (0.054 \times 1.080) + (0.029 \times 1.460) + (1.190 \times 2.640)$

1.2735

$E = 2.546$ IN.

VOLUME = $\frac{2.546}{12} \times 1.2735 = .2490$ AC. FT.

PEAK DISCHARGE

$Q_p = Q_{pA} A_A + Q_{pB} A_B + Q_{pC} A_C + Q_{pD} A_D$

$Q_p = (2.20 \times 0.000) + (2.92 \times 0.0594) + (3.73 \times 0.029) + (5.25 \times 1.190)$

$Q_p = 6.73$ C.F.S.

POND OUTFALL CALCULATIONS:

NORTH AREA 400.07 C.F.
 MIDDLE AREA 1841.19 C.F.
 SOUTH AREA 209.22 C.F.
 2450.48 C.F.

POND DRAIN TIME:
 USING 6" PVC PIPE

$Q = \frac{0.369 \times 0.8^{8/3} \times 5^{1/2}}{n}$

$Q = \frac{0.369 \times 0.8^{8/3} \times 0.075^{1/2}}{.01}$

$Q = 0.633$ C.F.S. OR 37.98 C.F.M.

$2,450.48 / 37.98 = 64.52$ MIN.

OVERFLOW WEIR:

WHEN:

$Q = 0.633$ C.F.S.

$C = 2.64$ (TABLE 5-3, HANDBOOK OF HYDRAULICS)

$L = 28'$

$Q = CLH^{3/2}$

$H^{3/2} = \frac{Q}{LC}$

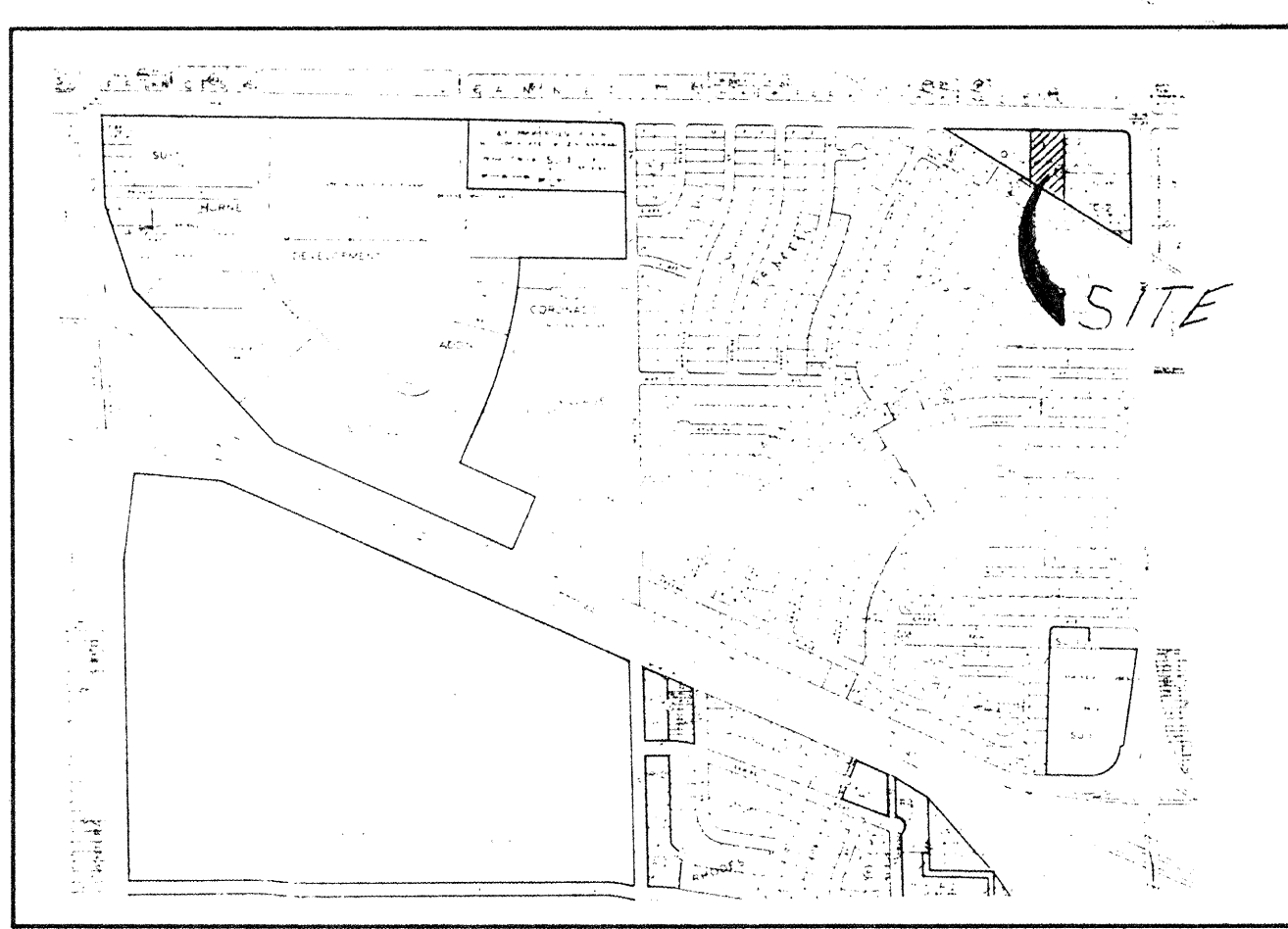
$H = (\frac{Q}{LC})^{2/3}$

$H = \frac{8.10}{(28 \times 2.64)^{2/3}}$

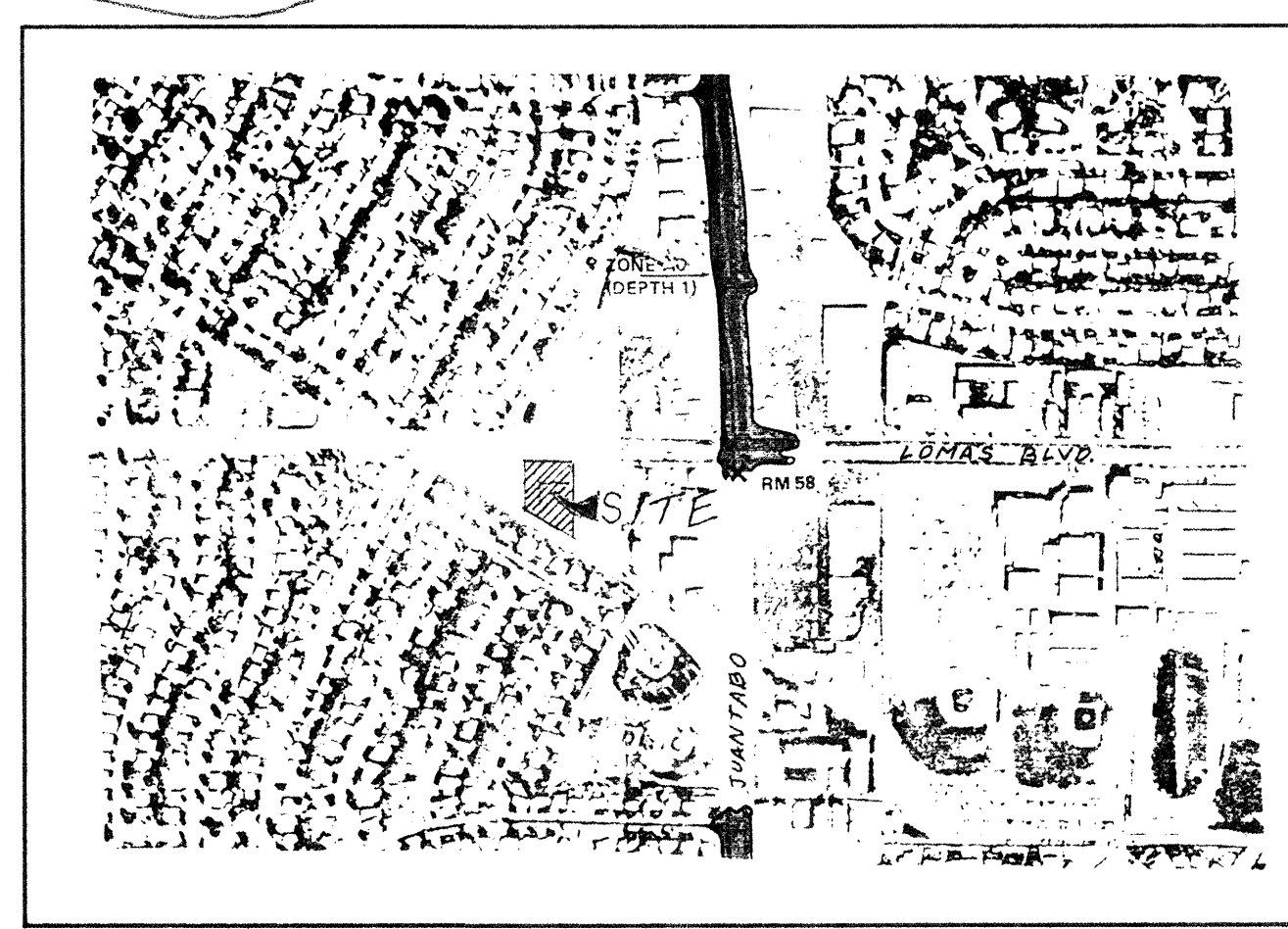
$H = .23$ FT.

DEVELOPED DRAINAGE SOLUTION:

- The site has been graded to install a 1 foot water block off of Lomas Blvd.
- A negligible area drains to the alleyway, but is considerably smaller than the undeveloped flow rate increasing the capacity downstream.
- The site will be paved, and no sediment will be leaving the site.



ZONE MAP: K-21-2

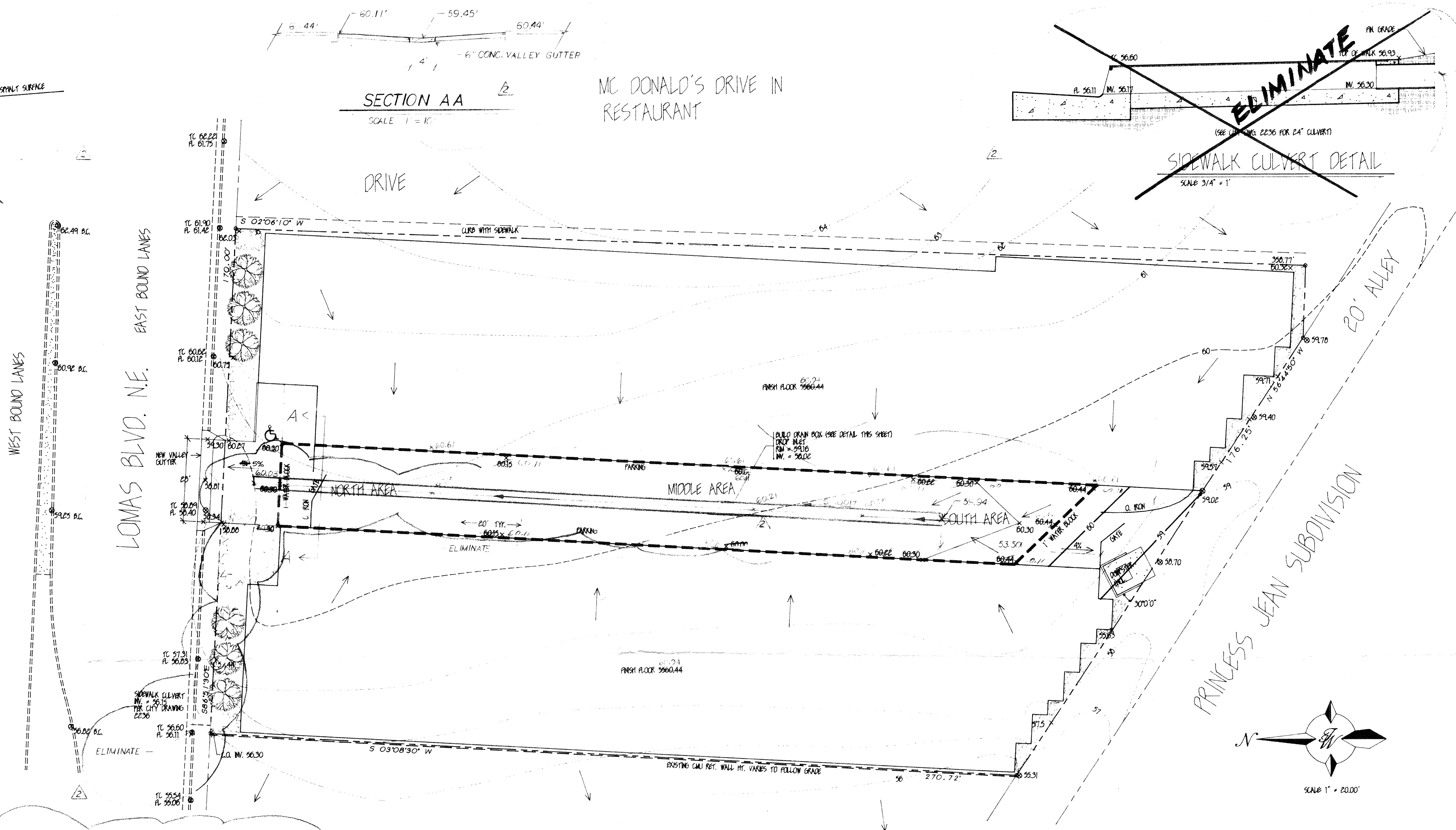


F.E.M.A. MAP

350002 0031C

SECTION AA
 SCALE 1" = 10'

MC DONALD'S DRIVE IN RESTAURANT



RECA REAL ESTATE

LEGAL DESCRIPTION:

Lot 3 of Replat of Tracts "A", "A-1", and "C-1" of Block 124, Recorded on January 18, 1984, Book 9, Page 34, Located Near the Intersection of Juan Tabo and Lomas, NE.

CONSTRUCTION AND GENERAL NOTES:

- Property is located on F.L.M.A. Map 350002 0031C and does not contain any flood plain.
- Contractor shall obtain a topsoil disturbance permit from Environmental Health prior to any earthwork operations.
- All concrete shall be of 3000 psi/28 days.
- Contractor to field verify all existing improvements as to location and elevation.
- Roofs of building, adjacent to parking, will have rain gutters and leaders to drive area.
- Control joints scored into concrete deck @ approximately 20' intervals.
- Minimum compaction under footings is to be 95% per ASTM D1557 for a depth of 12". Moisture content is to be 2.0%.
- Driveway was poured entirely out of 3000 psi concrete sloping to Lomas Boulevard. No ponding was used on site.

UNDEVELOPED DRAINAGE:

A = 0.0000 AC.
 B = 0.0000 AC.
 C = 1.2735 AC.
 D = 0.0000 AC.

WEIGHTED E = $E_A A_A + E_B A_B + E_C A_C + E_D A_D$

$E = (0.000 \times 0.000) + (0.000 \times 1.080) + (1.2735 \times 1.460) + (0.000 \times 2.640)$

1.2735

$E = 1.8593$ IN.

VOLUME = $\frac{1.8593}{12} \times 1.2735 = .1973$ AC. FT.

PEAK DISCHARGE

$Q_p = Q_{pA} A_A + Q_{pB} A_B + Q_{pC} A_C + Q_{pD} A_D$

$Q_p = (2.20 \times 0.000) + (2.92 \times 0.000) + (3.73 \times 1.274) + (5.25 \times 0.000)$

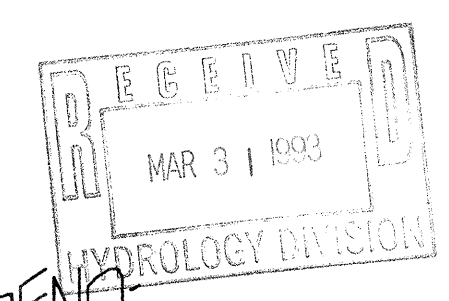
$Q_p = 4.75$ C.F.S.

PAVEMENT SECTION
 SCALE 3/4" = 1"

6" 5% ASPHALT CON 1000H STABILITY
 6" BASE COURSE
 SOL. COMPACTED TO 90%

LEGEND

- TAM UNDER
- LOWEN PLANE 5" CAL
- DRAIN LINE W/CLEANOUT
- PARKING BOUNDARY
- 39 EXISTING CONTOURS
- FRESH GRADE
- EXISTING 5'0" ELEVATION
- NEW 5'0" ELEVATION
- HATCHED PARKING SPACE



GRADING AND DRAINAGE PLAN
 CUBBY HOLE MINI STORAGE FACILITY
 11820 LOMAS BLVD. N.E. ALBUQ. N.M.

TERRA WEST DEVELOPMENT
 MANAGEMENT SERVICES
 4800 MONTGOMERY BLVD. N.E. SUITE 9
 ALBUQUERQUE, NEW MEXICO 87109
 (505)883-7592

12-10-92
 1-28-93

JOB NO: 920041
DATE: 12/10/92
REVISIONS
1. SHEET NO. 11
2. DRAINAGE

3 OF 10