City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

December 8, 1995

Mark Goodwin
Mark Goodwin & Associates
P.O. Box 90606
Albuquerque, NM 87199

RE: ENGINEER CERTIFICATION FOR AN ADDITION TO DUKE CITY STUDIOS (H17-D70) CERTIFICATION STATEMENT DATED 11/28/95.

Dear Mr. Goodwin:

Based on the information provided on your November 28, 1995 submittal, Engineer Certification for the above referenced site is acceptable.

Please be advised that only a 30 day temporary Certificate of Occupancy will be issued until the work order items are completed and accepted by the City.

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

Sincerely,

Bernie J. Montoya

Bernie J. Montoya, CE
Engineering Associate

BJM/dl

c: Andrew Garcia
Duke City Studios
Lou Sadler
File

City of Albuquerque
P.O. BOX 1293 ALBUQUERQUE, NEW MEXICO 87103

June 12, 1995

Roger Martinez
Mark Goodwin & Associates
P.O. Box 90606
Albuquerque, NM 87199

RE: GRADING/PAVING PLAN FOR DUKE CITY STUDIO OFF-SITE IMPROVEMENTS (H17-D70) ENGINEER'S STAMP DATED 5/22/95.

Dear Mr. Martinez:

Based on the information provided on your May 10, 1995 submittal, the above referenced site is approved for Grading/Paving and Work Order.

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

Sincerely,

Bernie J. Montoya

Bernie J. Montoya, CE
Engineering Associate

BJM/dl

c: Andrew Garcia
File

D. Mark Goodwin & Associates, P.A.
Consulting Engineers and Surveyors

PROJECT CUTLER AVE.
SUBJECT DRAINAGE
BY RM DATE 1MAY95
CHECKED _____ DATE _____
SHEET 1 OF 2

AREA OF BASIN

A=18.0349 ACRES = 0.02825Q MILES

PROPOSED & EXISTING SITE DISCHARGE DIRECTLY INTO CHANNEL. A 4' EARTHEN BERM HAS BEEN CONSTRUCTED SURROUNDING A PORTION OF THE BASIN. BOTH OF THESE AREAS ARE EXCLUDED FROM THE AREA FIGURE (SEE MAPS PROVIDED)

LAND TREATMENTS

TYPE "A" = 83.25%
TYPE "B" = 5.58%
TYPE "C" = 5.58%
TYPE "D" = 5.59%

ZONE 2 AHYMO DESIGN CRITERIA

P_{60} =2.01 P_{360} = 2.35 P_{1440} = 2.75

AHYMO RESULTS

Q_{PK} = 33.14cfs @ 1.533 HRS

V_{PK} = 0.9870 ACRE-FEET

CHANNEL & INLET SIZING

-INLET OPENING

$Q = cLH^{3/2}$ H=0.5' c=2.9 Q=33.14cfs

$L = Q/cH^{3/2}$

L=32.32'

∴ MINIMUM INLET OPENING 33'

CONTINUED ON NEXT PAGE

D. Mark Goodwin & Associates, P.A.
Consulting Engineers and Surveyors

PROJECT CUTLER AVE
SUBJECT DRAINAGE
BY RM DATE 2 MAY 95
CHECKED _____ DATE _____
SHEET 2 OF 2

CHANNEL & INLET SIZING (CONTINUED)

- CHANNEL - DEPTH OF FLOW WILL NOT EXCEED ½ WALL HEIGHT

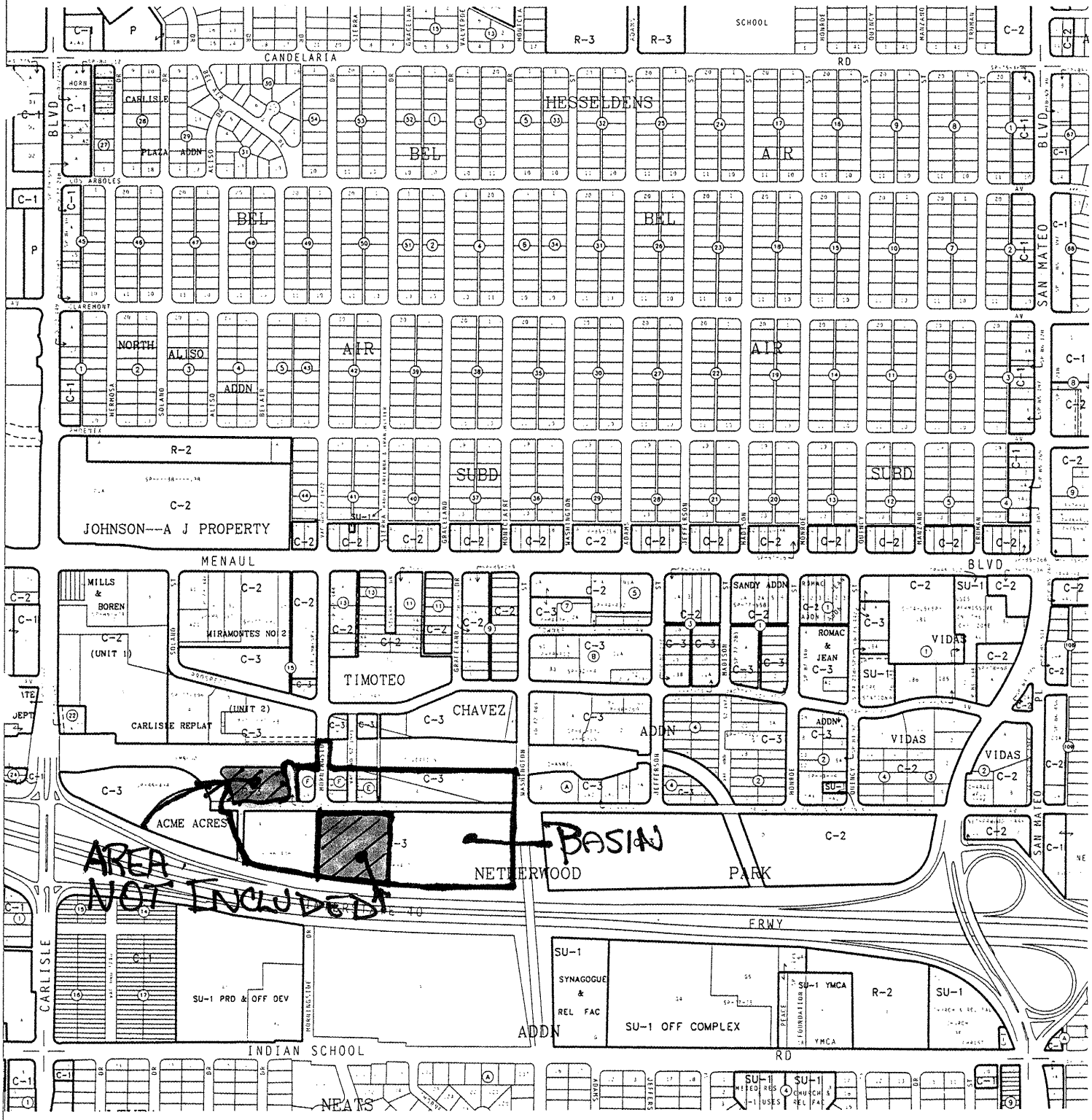
8" WALL HEIGHT SLOPE = 0.50%

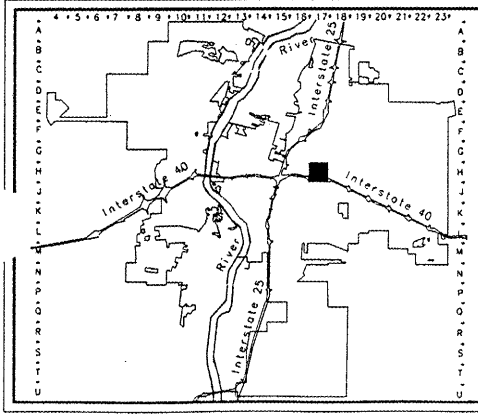
$$Q = \frac{K}{n} A R_H^{2/3} S^{1/2}$$

$$Q = \frac{1.49}{0.016} (32' * 0.333)(32' * 0.33/32.67)^{2/3} (0.005)^{1/2}$$

$$Q = 33.31 \text{ cfs}$$

∴ CHANNEL WIDTH 32'





North

750 375 0 750

Scale: 1" = 750'

Albuquerque Geographic Information System

City of Albuquerque

LEGAL DESCRIPTION

T10N

R3E

SEC 11

UNIFORM PROPERTY CODE

1-017-059

H-17-Z

```
START                    TIME=0.0

*****    HYDROGRAPH FOR DUKE CITY STUDIOS OFFSITE IMPROVEMENTS
*****    CUTLER AVENUE FRONTING SITE TO EMBUDO CHANNEL INLET

RAINFALL                 TYPE=1 RAIN QUARTER=0.0 IN
                         RAIN ONE=2.01 IN RAIN SIX=2.35 IN
                         RAIN DAY=2.75 IN DT=0.03333 HR

*HYDROGRAPH FOR BASIN CONTRIBUTING
*TO EMBUDO CHANNEL INLET
COMPUTE NM HYD           ID=1 HYD NO=101.1 AREA=0.0282 SQ MI
                         PER A=83.25 PER B=5.58 PER C=5.58 PER D=5.59
                         TP=0.1333 HR MASS RAINFALL=-1
PRINT HYD                ID=1 CODE=1

FINISH
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```
      AHYMO PROGRAM (AHYMO194) - AMAFCA Hydrologic Model - January, 1994
            RUN DATE (MON/DAY/YR) = 05/02/1995
            START TIME (HR:MIN:SEC) = 07:55:24      USER NO.= M_GOODWN.I01
            INPUT FILE = DUKE.DAT

START                   TIME=0.0

*****   HYDROGRAPH FOR DUKE CITY STUDIOS OFFSITE IMPROVEMENTS

*****   CUTLER AVENUE FRONTING SITE TO EMBUDO CHANNEL INLET

RAINFALL                TYPE=1 RAIN QUARTER=0.0 IN

                        RAIN ONE=2.01 IN RAIN SIX=2.35 IN

                        RAIN DAY=2.75 IN DT=0.03333 HR

                  COMPUTED 6-HOUR RAINFALL DISTRIBUTION BASED ON NOAA ATLAS 2
- PEAK AT 1.40 HR.
                  DT =     .033330 HOURS        END TIME =     5.999400 HOURS
                     .0000    .0016    .0033    .0049    .0066    .0084    .0102
                     .0120    .0139    .0158    .0178    .0199    .0219    .0241
                     .0263    .0286    .0309    .0333    .0358    .0384    .0411
                     .0439    .0467    .0497    .0529    .0561    .0596    .0631
                     .0669    .0709    .0751    .0807    .0866    .0930    .1066
                     .1371    .1840    .2514    .3434    .4644    .6186    .8106
                    1.0449   1.2624   1.3533   1.4300   1.4982   1.5602   1.6174
                    1.6704   1.7200   1.7664   1.8102   1.8514   1.8904   1.9273
                    1.9622   1.9953   2.0268   2.0566   2.0850   2.0915   2.0976
                    2.1033   2.1086   2.1140   2.1191   2.1239   2.1285   2.1329
                    2.1373   2.1414   2.1454   2.1494   2.1531   2.1568   2.1604
                    2.1639   2.1673   2.1706   2.1739   2.1771   2.1802   2.1832
                    2.1862   2.1891   2.1919   2.1947   2.1975   2.2002   2.2028
                    2.2054   2.2080   2.2105   2.2130   2.2154   2.2178   2.2202
                    2.2225   2.2248   2.2270   2.2293   2.2315   2.2336   2.2358
                    2.2379   2.2399   2.2420   2.2440   2.2460   2.2480   2.2500
                    2.2519   2.2538   2.2557   2.2576   2.2594   2.2612   2.2631
                    2.2648   2.2666   2.2684   2.2701   2.2718   2.2735   2.2752
                    2.2769   2.2785   2.2802   2.2818   2.2834   2.2850   2.2866
                    2.2881   2.2897   2.2912   2.2928   2.2943   2.2958   2.2973
                    2.2987   2.3002   2.3017   2.3031   2.3045   2.3060   2.3074
                    2.3088   2.3102   2.3115   2.3129   2.3143   2.3156   2.3169
                    2.3183   2.3196   2.3209   2.3222   2.3235   2.3248   2.3261
                    2.3273   2.3286   2.3298   2.3311   2.3323   2.3335   2.3348
                    2.3360   2.3372   2.3384   2.3396   2.3408   2.3419   2.3431
                    2.3443   2.3454   2.3466   2.3477   2.3488   2.3500

*HYDROGRAPH FOR BASIN CONTRIBUTING

*TO EMBUDO CHANNEL INLET
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PER A=63.25 PER B=5.58 PER C=5.58 PER D=5.59

TP=0.1333 HR MASS RAINFALL=-1

K = .072649HR TP = .133300HR K/TP RATIO = .545000 SHAPE CONSTANT, N = 7.106420
UNIT PEAK = 6.2236 CFS UNIT VOLUME = .9976 B = 526.28 P60 = 2.0100
AREA = .001576 SQ MI IA = .10000 INCHES INF = .04000 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

K = .155380HR TP = .133300HR K/TP RATIO = 1.165644 SHAPE CONSTANT, N = 3.041822
UNIT PEAK = 56.965 CFS UNIT VOLUME = .9995 B = 285.21 P60 = 2.0100
AREA = .026624 SQ MI IA = .62340 INCHES INF = 1.59553 INCHES PER HOUR
RUNOFF COMPUTED BY INITIAL ABSTRACTION/INFILTRATION NUMBER METHOD - DT = .033330

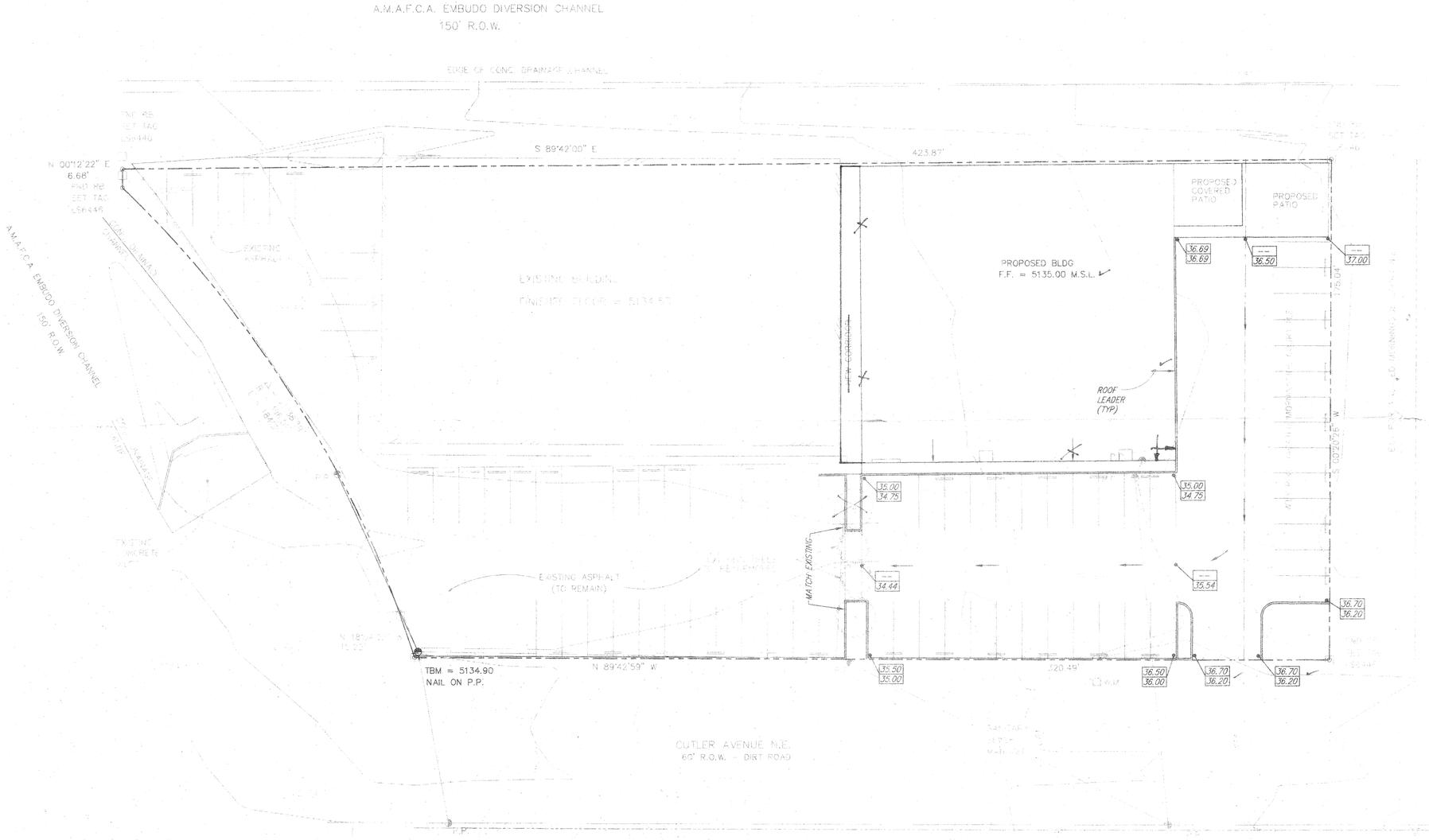
PRINT HYD ID=1 CODE=1

PARTIAL HYDROGRAPH 101.10

RUNOFF VOLUME = .65629 INCHES = .9870 ACRE-FEET
PEAK DISCHARGE RATE = 33.14 CFS AT 1.533 HOURS BASIN AREA = .0282 SQ. MI.

FINISH

NORMAL PROGRAM FINISH END TIME (HR:MIN:SEC) = 07:55:32



RECORD DRAWING

I hereby certify that the information contained on this drawing has been revised in accordance with information furnished by the Contractor, Sadler Southwest Construction Co., and by the Surveyor, Southwest Surveying, and reflects the construction as actually accomplished. This plan as constructed is in substantial compliance with the Approved Plan.

11/22/95

Mark Goodwin, NMPE 8948

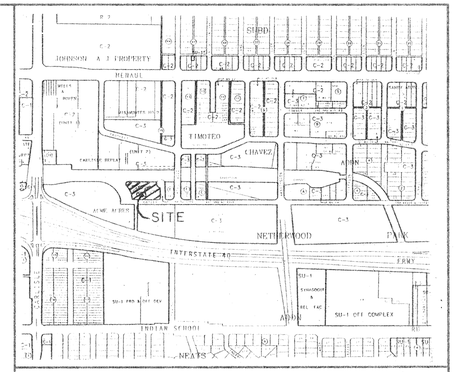
DRAINAGE CALCULATIONS

EXISTING	PROPOSED
A = 0.65 Ac.	A = 0.65 Ac.
%D = 0%	%D = 95%
P = 2.35 in.	P = 2.35 in.
Tc = 10 Min.	Tc = 10 Min.
Q = 1.20 cfs	*Q = 3.20 cfs
Vol. = 1722 Cu. Ft.	Vol. = 6321 Cu. Ft.

*SINCE FLOW ENTERS EMBUDO DIVERSION, DIRECT DISCHARGE IS APPROPRIATE.

10/19/94

SCALE: 1" = 20'



VICINITY MAP ZONE MAP: H-17

TBM (TEMPORARY BENCHMARK)

NAIL ON POWER POLE AT SOUTH EAST CORNER OF PROPERTY.
ELEVATION = 5134.90

ACS BENCHMARK

THE STATION MARK IS A STANDARD A.C.S. BRASS TABLET STAMPED "6-H17,1979" DRILLED INTO THE TOP OF THE CONCRETE CURB.

THE STATION IS LOCATED 3.7 MILES NORTHEAST OF DOWNTOWN ALBUQUERQUE, AT THE INTERSECTION OF CANDELARIA AND GRACELAND DRIVE N.E.

TO REACH THE STATION FROM THE INTERSECTION OF CANDELARIA ROAD AND I-25, GO EAST ON CANDELARIA ROAD 1.5 MILES TO GRACELAND DRIVE. THE STATION IS LOCATED IN THE SOUTHWEST QUANDRANT OF THE INTERSECTION.

X = 396,389.59
Y = 1,497,781.25
Z = 5161.13

LEGAL DESCRIPTION

TRACT "O" TIMETEO CHAVEZ ADDITION

NOTES:

1. SITE DOES NOT LIE WITHIN A 100 YEAR FLOOD ZONE.
2. NO OFF-SITE FLOWS ENTER THIS SITE.

LEGEND:

PROPERTY LINE

EXISTING SPOT ELEVATION

EXISTING CONTOUR

EXISTING POWER POLE

EXISTING WATER METER

~~PROPOSED~~ AS-Built SPOT ELEVATION

FLOWLINE

RECEIVED
NOV 28
HYDROLOGY

DUKE CITY STUDIOS

GRADING & DRAINAGE PLAN

D. MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS & SURVEYORS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 345-2010

Designed: DMG	Drawn: DLD	Checked: DMG	Sheet 1 of 1
Scale: AS SHOWN	Date: 10/94	Job: 94138	