HYDROLOGY
2 PLANS

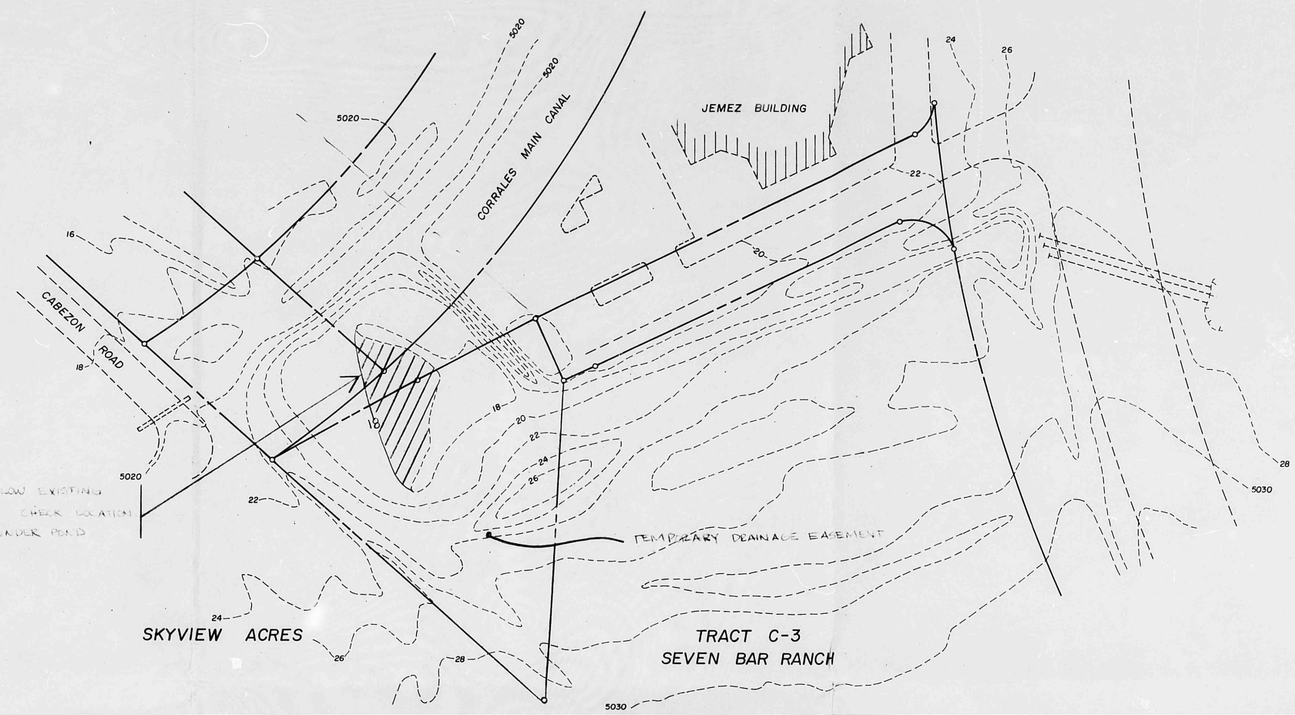
A14/D3B

2 PLANS

FIRST INTERSTATE

BANK

A14/D3B



EXCAVATE POND 1 FT BELOW EXISTING GRADE IN SHADED AREA. CHECK LOCATION OF EXISTING WATER LINE UNDER POND BEFORE DIGGING

SCALE: 1" = 50' HORIZ.
1" = 5' VERT.

APPROVED FOR DRAINAGE
SIGNATURE DATE
TITLE
ADVISE DRAINAGE INSPECTOR WHEN GRADING EXECUTED
See ltr dated 4/16/85

SUPPLEMENT TO GRADING & DRAINAGE PLAN
FIRST INTERSTATE BANK
RIO RANCHO BOULEVARD & ELLISON ROAD

In the event that the Cabezon Channel System is not yet fully authorized and funded at the time First Interstate Bank applies for a Certificate of Occupancy, temporary storage is to be provided in the existing pond shown herein.

Referring to the original Grading and Drainage Plan (1/85):

Total 100 yr. runoff volume	5046 C.F.
Pond volume provided onsite	2125 C.F.
Additional volume to be excavated from existing pond	2921 C.F.

PLAN
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT OF WAY CHECKED
NOTE BOOK
NO
BY
DATE

PROFILE
SURVEYED
PLOTTED
GRADES CHECKED
BALANCED
STRUCTURE NOTATNS CH'KD
NOTE BOOK
NO
BY
DATE

RECEIVED
APR 10 1985
HYDROLOGY SECTION

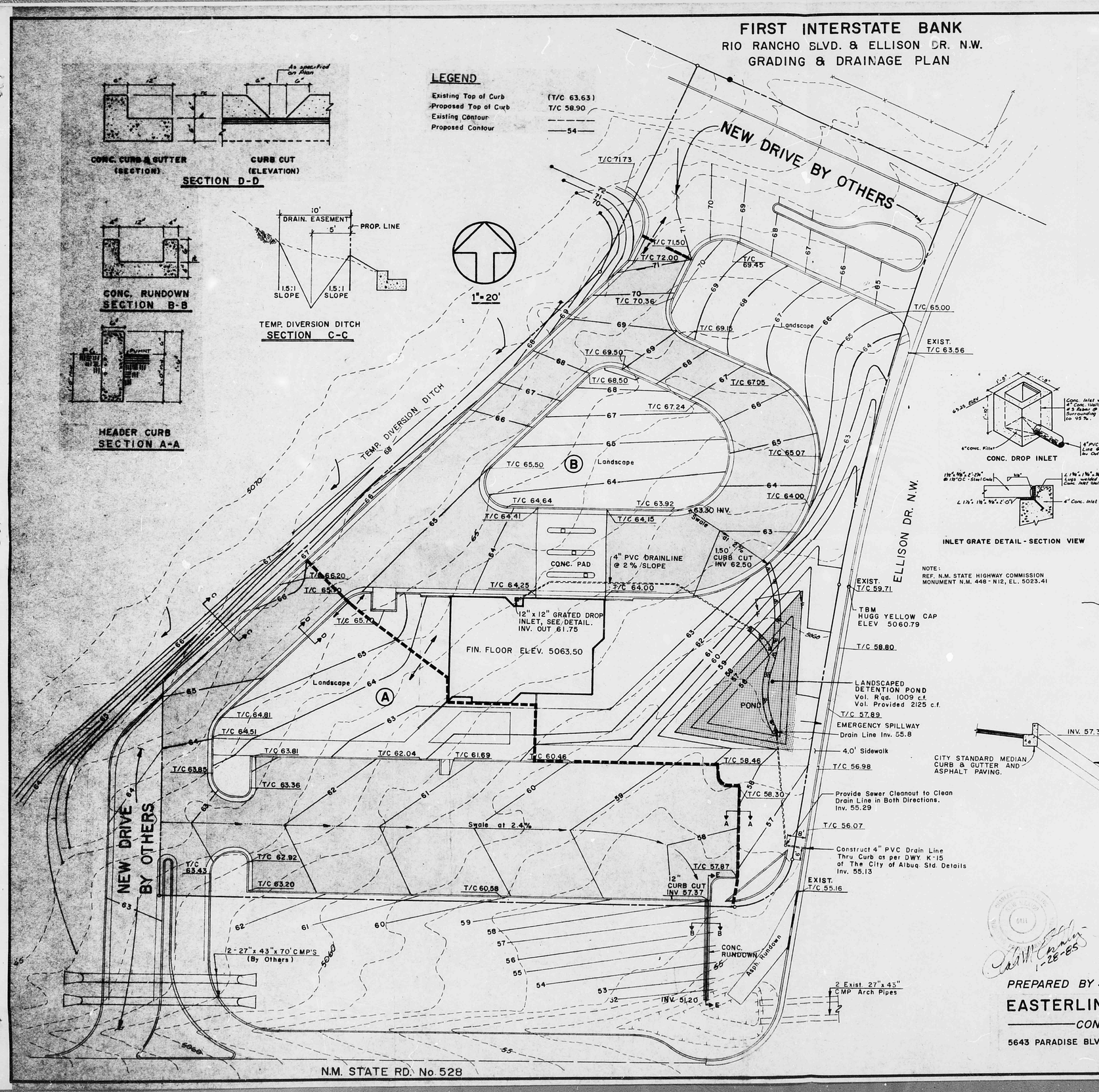
PLATE 1 SINGLE PLAN - PROFILE - DOTTED
CHARLES BRUNING COMPANY
MADE IN U.S.A.

A14/D3B

FIRST INTERSTATE BANK

RIO RANCHO BLVD. & ELLISON DR. N.W.

GRADING & DRAINAGE PLAN



TEXT

EXISTING CONDITIONS - The 1.07 acre site is currently undeveloped. Little, if any, runoff either enters the site or flows from it, except in extreme events. Any flow leaving the site would be intercepted and conveyed by the asphalt-lined channel on the north side of NM 528 (and adjacent to this Tract), which flows to a detention pond immediately north of the Jemez Building. This detention basin is undersized to meet current requirements in the event of a 100-year storm in its contributing basin.

DEVELOPED CONDITIONS - The approved "Conceptual Grading and Drainage Plan for Tracts V & W of Seven Bar Ranch" (A14D2, A14D1) provided for a combination of off-site and on-site treatment measures. The permanent off-site treatment measures consist of an improved detention/desilting basin north of the Jemez Building and the construction of the Cabezon Channel. Inasmuch as a date for the channel construction has not been fixed, the off-site requirements will be satisfied through improvements to the existing detention/desilting basin.

The approved Conceptual Plan requires that 20% of the 100-year runoff be detained on-site and released at the minimum allowable rate (24-hr. release). This will be accomplished in the southeast quadrant of the site in a landscaped pond. Runoff will be released into Ellison Road through the curb and to the highway channel through a concrete rundown.

Site grades and those in proposed Ellison Road and the private drive to the north have been coordinated such that no runoff will enter the site in the 100-year and smaller storm events. Grading within the highway R.O.W. will require a license from the Highway Department. Application will be made prior to construction. Grading along the west property line has been coordinated with the adjacent land owner, and his permission has been obtained for said off-site grading.

EROSION CONTROL - All disturbed areas will be covered or landscaped in the developed condition. Care should be taken during construction to prevent sediment from leaving the site through the use of berms.

HYDROLOGY/HYDRAULICS - DEVELOPED CONDITIONS

B Soils, P_{100} = 2.2 in./6 hr. P_{10} = 1.45 in./6 hr.
Tc < 10 min. i_{100} = 4.7 in./hr. i_{10} = 3.1 in./hr.

AREA A Area = 0.70 ac., 72% Impervious
Composit CN = 89 Vol_{100} = 3049 cu. ft. Vol_{10} = 1525 cu. ft.
Composit C = 0.67 Q_{100} = 2.2 cfs Q_{10} = 1.5 cfs

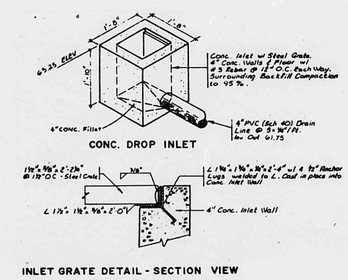
AREA B Area = 0.50 ac., 66% Impervious
Composit CN = 88 Vol_{100} = 1997 cu. ft. Vol_{10} = 998 cu. ft.
Composit C = 0.51 Q_{100} = 1.6 cfs Q_{10} = 0.8 cfs

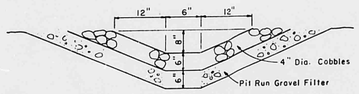
From "Conceptual Grading & Drainage Plan, Tracts V & W"
Pond 20% of 100-yr. runoff volume on-site.

Required Pond Volume = 3049 + 1997 x .20 = 1009 cu. ft.
Pond Volume Provided = 2125 cu. ft.

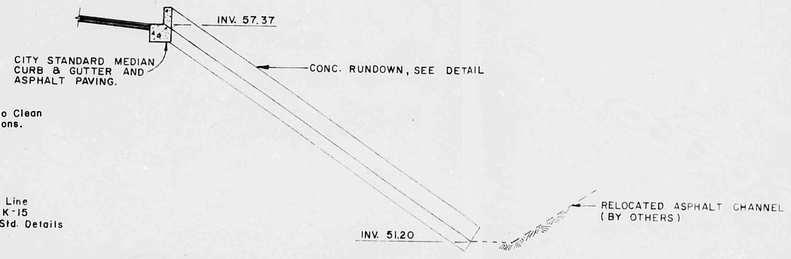
OUTLET HYDRAULICS
Pipe: 4" dia. @ H = 1.5', Q_{max} = 0.5 cfs

DISCHARGES:
Q_{10} ≤ 1.0 cfs (Vol_{10} = 1068 + 1391 = 2459 cu. ft.)
Effective 'C' = 0.57, Q_{100} = (.5)(4.7)(1.4 ac) = 3.3 cfs





SECTION F-F
Scale: 1" = 2'



SECTION E-E
SCALE: 1" = 10' HORZ., 1" = 2' VERT.

PREPARED BY:

EASTERLING & ASSOCIATES INC.
CONSULTING ENGINEERS
5643 PARADISE BLVD. N.W. ABQ. N.M. (505) 898-8021

JANUARY, 1985

RECEIVED APR 10 1985 HYDROLOGY SECTION

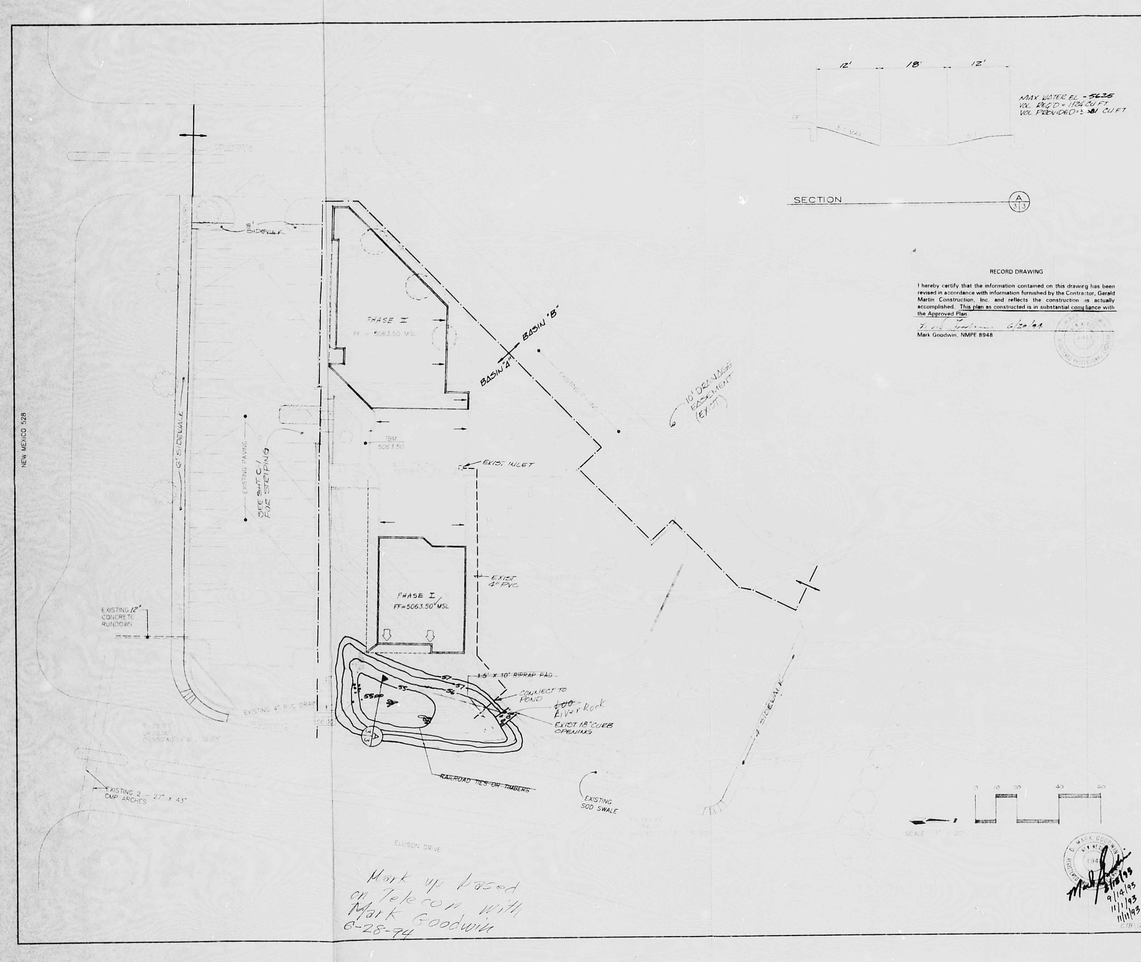
A14/D3B

SHEET 4 OF 4

PUBLIC WORKS/HYDROLOGY

A14/D3B

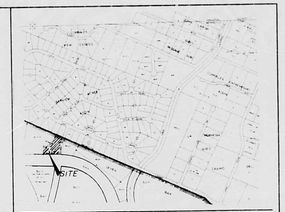
A14/D3B



RECORD DRAWING

I hereby certify that the information contained on this drawing has been revised in accordance with information furnished by the Contractor, Gerald Martin Construction, Inc. and reflects the construction as actually accomplished. This plan as constructed is in substantial conformance with the Approved Plan.

Mark Goodwin, NMPE 8648



VICINITY MAP — ZONE MAP A-14

SCALE: NONE

TBM (TEMPORARY BENCHMARK)

FROM: CORNER OF EASTERN BUILDING

(ELEVATION = 5063.50)

BENCHMARK

ALUMINUM BOX STAMPED "CITY OF ALBUQUERQUE" ENCASED IN CONCRETE 3'X3'X3' ALUMINUM BOX STAMPED "CITY OF ALBUQUERQUE" LOCATED ON THE EAST SIDE OF N.M. 528 (ELEVATION = 5000.00) SOUTH OF THE CENTERLINE OF ELLISON DRIVE AND 1.5' WEST OF THE CENTERLINE OF N.M. 528 (ELEVATION = 5064.75)

LEGAL DESCRIPTION

WEST OF N.M. 528 SEVEN BAR RANCH

LEGEND

EXISTING CONTOUR
NEW CONTOUR
EXISTING SPOT ELEVATION (TOP OF CURB & FLOWLINE)
NEW SPOT ELEVATION (TOP OF CURB & FLOWLINE)
WIDE LEADER
DRAINAGE FLOW ARROW
INVERT ELEV.
EASEMENT LINE
EXISTING CURB & GUTTER
NEW CURB & GUTTER
EXISTING LIGHT POLE, POWER POLE
EXISTING HYDRANT, WATER VALVE
EXISTING MANHOLE, TREE

GENERAL NOTES

1. SITE DOES NOT LIE IN A 100-YEAR FLOOD PLAIN.
2. ADD 5000 TO ALL ELEVATIONS. ALL ELEVATIONS ARE MSL (MEAN SEA LEVEL). CONTOUR INTERVAL = 1'.
3. EXISTING POND OUTLET TO REMAIN FUNCTIONAL DURING ALL CONSTRUCTION.
4. NO OFF-SITE FLOW ENTER THIS SITE.

12 2 | 1994

CHARTER BANK – SEVEN BAR RANCH

GRADING AND DRAINAGE PLAN

dmg D. MARK GOODWIN & ASSOCIATES, P.A.
CONSULTING ENGINEERS & SURVEYORS
P.O. BOX 90606
ALBUQUERQUE, NEW MEXICO 87199
(505) 828-2200

Drawn: DMG	Date: STAFF	Checked: DMG	Sheet 3 of 3
Scale: 1"=20'	Date: 8/16/93	Job: 9364	

Mark Goodwin
9/10/93
11/11/93
11/11/93

Mark up based on telecon with Mark Goodwin 6-28-94

R# 23 DATE 3-13-00 CD

CITY OF ALBUQUERQUE

This microimage is certified to be a complete and accurate copy of the original as it appears in the files of the Public Works Department and was created in the normal course of business.

The photographic process used meets the Basic Microfilm Standards of the National Micrographics Association (MIL-STD-1177)

DIRECTOR

CITY OF ALBUQUERQUE
THIS MICROIMAGE IS THE BEST POSSIBLE REPRODUCTION DUE TO THE POOR QUALITY OF THE ORIGINAL DOCUMENT.

NOTARY PUBLIC

OFFICIAL SEAL
Roberta Duran
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 07/22/2000

PLANS/PLATS ON FILE

FILE DESC: A14/D3B

PLANS/PLATS 1

E 30 D 24 C 20 B 16 A 12

CITY OF ALBUQUERQUE

C D F