



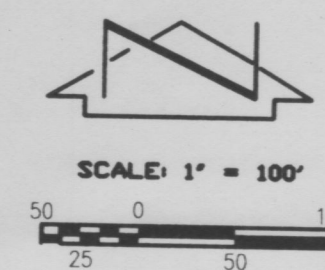
LEGAL DESCRIPTION

LOTS 1-4, COTTRELL'S FARM
PROJECT BENCHMARK = TBM:

ACS STA 18-L12
ELEV. = 4943.02 FT (MSLD)

LEGEND

+ SPOT ELEVATION
— EXISTING CONTOUR
— 4945 — EXISTING INDEX CONTOUR
— FLOODPLAIN BOUNDARY



DRAINAGE PLAN

The following items concerning Lots 1-4 of Cottrell's Farm Drainage Plan are contained herein:

1. Vicinity Map
2. Floodplain Map
3. Calculations

As shown by the Vicinity Map, the site lies along the north side of Bridge Street N.W., between the Atrisco and Arenal Ditches. The site is currently developed as rural agricultural/private residential area.

As shown by Panel 34 of 50 of the Floodplain Map published by F.E.M.A. for the City of Albuquerque, New Mexico dated December 04, 1979, a portion of Lot 4 lies within a designated flood hazard zone. Lots 1 through 3 are not impacted by the presence of the existing flood hazard zone. No development is proposed by this plan, therefore, the proposed platting will have no effect on the existing condition. Lots 1-3 will remain residential uses while Lot 4 will remain an alfalfa field.

The Calculations which appear hereon, analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Procedure for 40-acre and Smaller Basins, as set forth in the Revision of Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria, dated January, 1993, has been used to quantify the peak rate of discharge and volume of runoff generated. As shown by these calculations, the volume and peak discharge of runoff generated by this site will remain unchanged. The site will continue to discharge the runoff as previously established.

CALCULATIONS

Site Characteristics

1. Precipitation Zone = 1
2. $P_{6,100} = P_{360} = 2.20$ in.
3. Total Area (A_T) = 11.69 acres

Existing Land Treatment	Area (sf/ac)	%
A	385,865/8.85	75.8
B	76,200/1.75	14.9
C	37,705/0.87	07.4
D	9,450/0.22	01.9

5. Developed Land Treatment : None

Existing Condition

1. Volume

$$E_W = (E_A A_A + E_B A_B + E_C A_C + E_D A_D) / A_T$$

$$E_W = [(0.44)(8.85) + (0.67)(1.75) + (0.99)(0.87) + (1.97)(0.22)] / (11.69) = 0.54$$

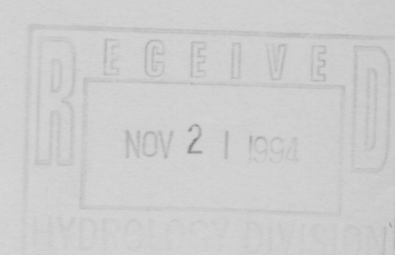
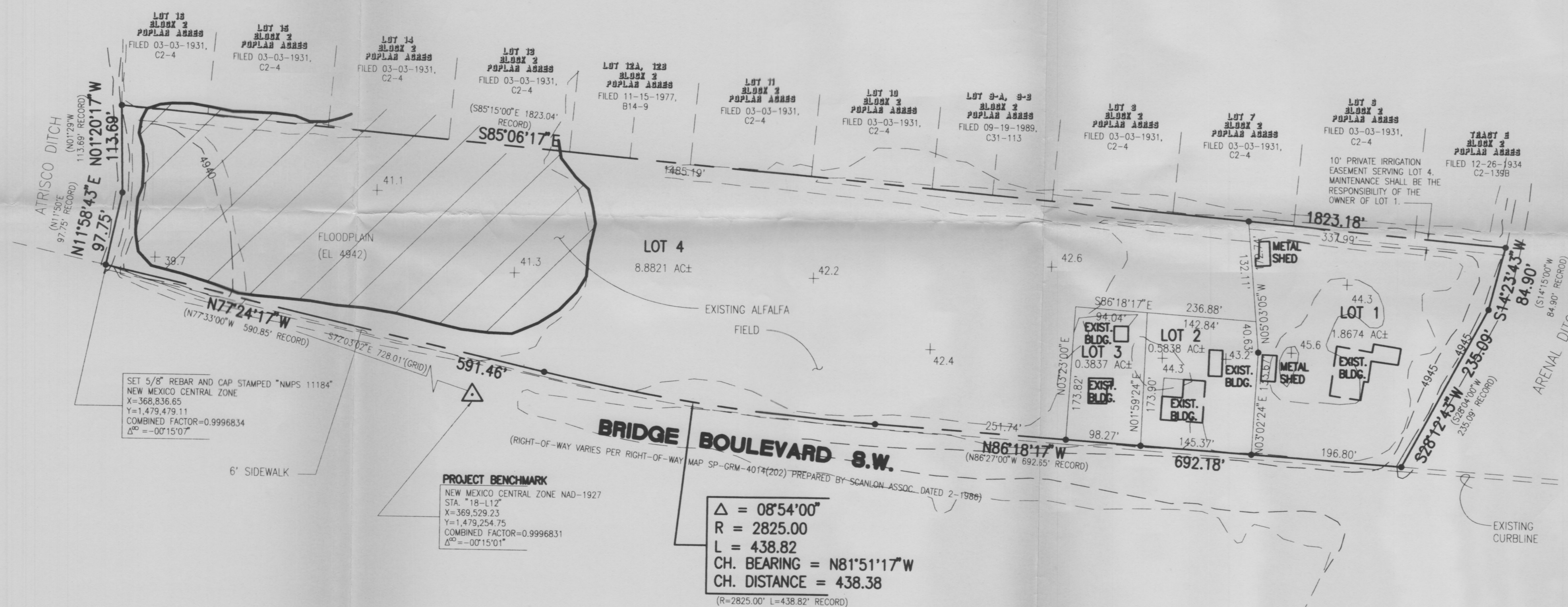
$$V_{100} = (E_W / 12) A_T = (0.54 / 12)(11.69)$$

$$V_{100} = 0.5301 \text{ ac.ft.} = 23,090 \text{ cf}$$

2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$

$$Q_p = Q_{100} = (1.29)(8.85) + (2.03)(1.75) + (2.87)(0.87) + (4.37)(0.22) = 16.2 \text{ cfs}$$



JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. NE
ALBUQUERQUE, N.M. 87109
ENGINEERS SURVEYORS (505) 345-4250

DRAINAGE PLAN **LOTS 1 - 4, COTTRELL'S FARM**

DESIGNED BY M.D.S.
DRAWN BY E.M.S.
APPROVED BY J.G.M.

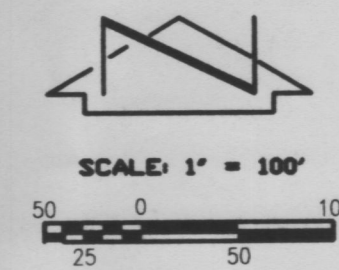
NO.	DATE	BY	REVISIONS	JOB NO.
				940542
				DATE 10-1994
				SHEET 1 OF 1





LEGAL DESCRIPTION
 LOTS 1-4, COTTRELL'S FARM
 (DRB - 94-520)
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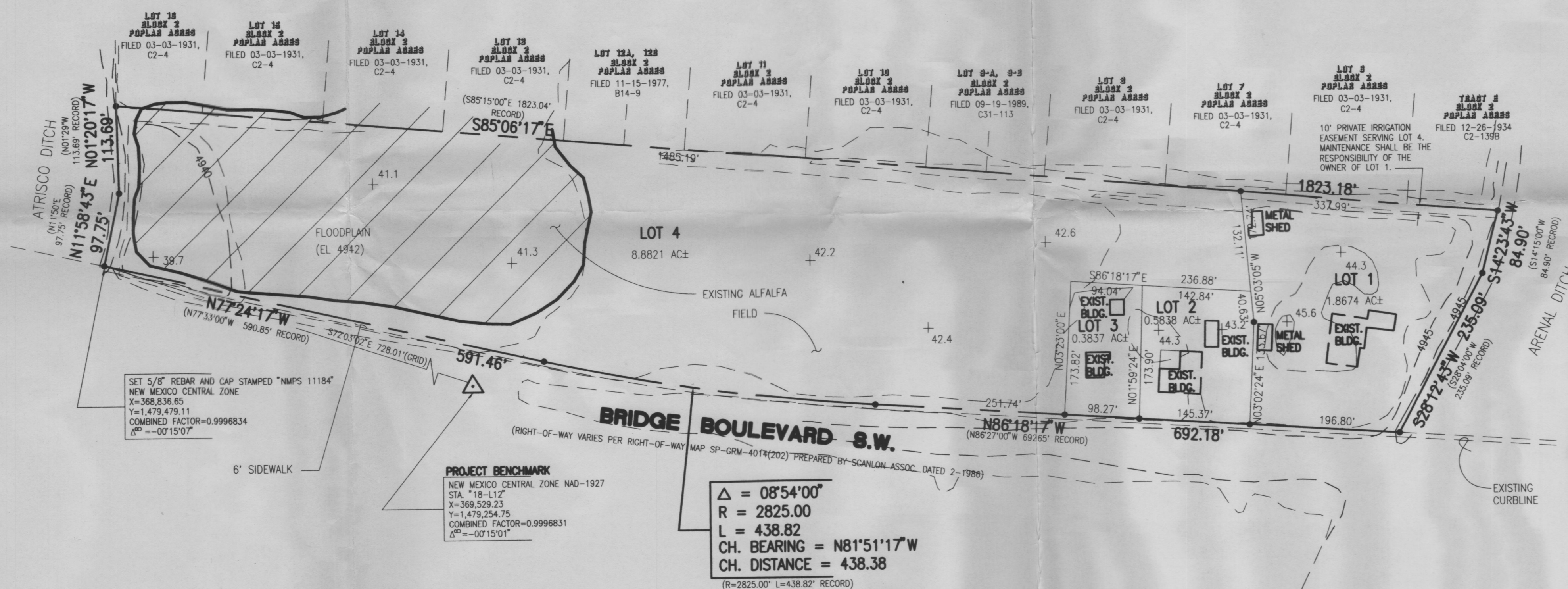
LEGEND
 + SPOT ELEVATION
 --- EXISTING CONTOUR
 --- 4945 --- EXISTING INDEX CONTOUR
 --- FLOODPLAIN BOUNDARY



VICINITY MAP
 SCALE: 1" = 750'

L-12 FLOODPLAIN MAP
 SCALE: 1" = 500'

PANEL 34
OF 50



DRAINAGE PLAN

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$$V_{100} = (E_w / 12) A_T = (0.54 / 12) (11.69) = 0.5301 \text{ ac.ft.} = 23,090 \text{ cf}$$

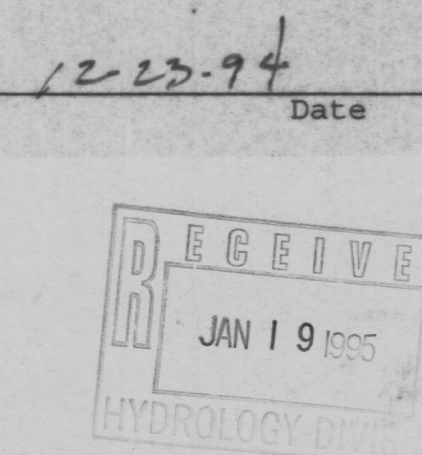
2. Peak Discharge

$$Q_p = Q_{PA} A_A + Q_{PB} A_B + Q_{PC} A_C + Q_{PD} A_D$$

$$Q_p = Q_{100} = (1.29)(8.85) + (2.03)(1.75) + (2.87)(0.87) + (4.37)(0.22) = 18.5 \text{ cfs} \Delta$$

CERTIFICATION

I, Jeffrey G. Mortensen, NMPE 8547, do hereby certify that I personally visited the subject project site on December 9, 1994. At that time, there was no evidence of recent site grading or construction activity inconsistent with normal farming and agriculture practices. The contour of the land appeared consistent with the overall drainage pattern of the area and the topography as shown.



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 6600-B MIDWAY PARK BLVD. NE.
 ALBUQUERQUE, NEW MEXICO 87109
 ENGINEERS & SURVEYORS (505) 345-4250

DRAINAGE PLAN
LOTS 1 - 4, COTTRELL'S FARM

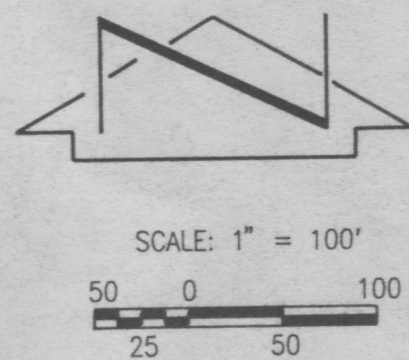
DESIGNED BY	DATE	BY	REVISIONS	JOB NO.
M.D.S.	12/94	J.G.M.	ADD CERTIFICATION, CORRECT DISCHARGE VALUE	940542
DRAWN BY	DATE	BY	REVISIONS	DATE
E.M.S.				10-1994
APPROVED BY	DATE	BY	REVISIONS	SHEET
J.G.M.				1 OF 1



VICINITY MAP

SCALE: 1" = 750'

L-12



SCALE: 1" = 100'

PLAT OF

LOTS 1 - 4
COTTRELL'S FARM

BERNALILLO COUNTY, NEW MEXICO

OCTOBER, 1994

Notes:

1. A boundary survey was performed in June and August of 1994. Property corners were found or set as indicated.
2. All distances are ground distances.
3. Site located within projected Section 25, Township 10 North, Range 2 East, N.M.P.M., Town of Atrisco Grant.
4. No street mileage has been created by this plat.
5. Bearings shown hereon are New Mexico State Plane Grid Bearings, Central Zone.
6. The purpose of this plat is to subdivide Tract 147a, M.R.G.C.D. Map No. 42 into four tracts of land and grant the private drainage easement as shown.

A portion of lot 4 as shown hereon is located within Zone AH (Elev. 4942) 100-year Floodplain as shown on the National Flood Insurance Program "Flood Insurance Rate Map" (community-panel no. 350002-0034, effective October 4, 1983.) Any development of this property must conform to the Bernalillo County Flood Damage Prevention Ordinance. The property may be subject to the flood insurance requirements of the Federal Emergency Management Agency (FEMA). Until such time that a map revision is approved by FEMA for existing drainage improvements, flood insurance is likely to be required.

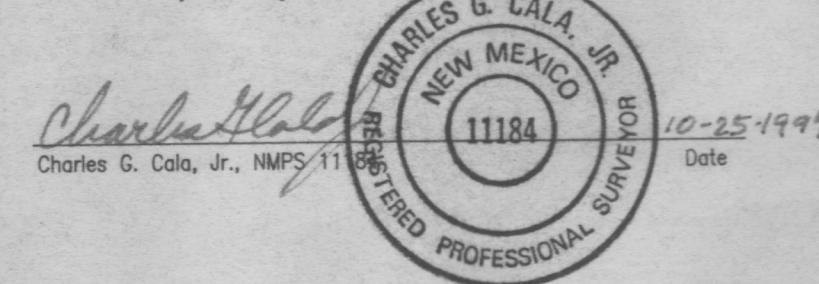
DESCRIPTION

A certain tract of land located within Bernalillo County, New Mexico, comprising Tract 147a, M.R.G.C.D. Map No. 42, and being more particularly described as follows:

Beginning at the southeast corner of the parcel herein described, being the point of intersection of the west right-of-way line of Arenal Ditch with the north right-of-way line of Bridge Boulevard S.W. (State Road No. 135); thence N 86°18'17" W a distance of 692.18 feet along the north right-of-way line of Bridge Boulevard S.W.; thence along the arc of a curve to the right with DELTA = 08°54'00", R = 2825.00 feet, and L = 438.82 feet (Chord Bearing = N 81°51'17" W, Chord Length = 438.38 feet) along said right-of-way line; thence N 77°24'17" W a distance of 591.46 feet along said right-of-way line to the point of intersection of the north right-of-way line of Arenal Ditch with the east right-of-way line of the Atrisco Ditch, also being the southwest corner of the parcel herein described; thence N 11°58'43" E a distance of 97.75 feet along the east right-of-way line of the Atrisco Ditch; thence N 01°20'17" W a distance of 113.69 feet along said right-of-way line to the northwest corner of the parcel herein described, being the southwest corner of Lot 16, Block 2, Poplar Acres, filed in the Office of the County Clerk of Bernalillo County, New Mexico on March 03, 1931, Book C2, Page 4; thence S 85°06'17" E a distance of 1823.18 feet to the northeast corner of the parcel herein described, being the southeast corner of Tract E, Poplar Acres, as shown on the plat filed in the Office of the County Clerk of Bernalillo County, New Mexico on December 26, 1934, Book C2, Page 1398, (formerly Lot 5, Block 2, Poplar Acres), also being a point on the west right-of-way line of the Arenal Ditch; thence S 14°23'43" W a distance of 84.90 feet along said right-of-way line; thence S 28°12'43" W a distance of 235.09 feet along said right-of-way line to the point of beginning and containing 11.7171 acres more or less.

SURVEYORS CERTIFICATION

I, Charles G. Cala, Jr., a registered Professional Surveyor under the laws of the State of New Mexico, do hereby certify that this plat was prepared by me or under my supervision, shows all easements made known to me by this owner, utility companies, or other parties expressing an interest; meets the minimum requirements of monumentation and surveys of the Albuquerque Subdivision Ordinance, complies with the minimum standards for surveying in the State of New Mexico, and is true and correct to the best of my knowledge and belief.



DEDICATION AND FREE CONSENT

The undersigned owner of the land shown hereon does hereby consent to the subdivision of said land in the manner shown on this plat, and does hereby grant the private irrigation easement including the rights of ingress and egress and the right to trim interfering trees.

Beatrice A. Cottrell 10/25/94
Beatrice A. Cottrell Date

ACKNOWLEDGEMENT

STATE OF NEW MEXICO)
COUNTY OF BERNALILLO) SS



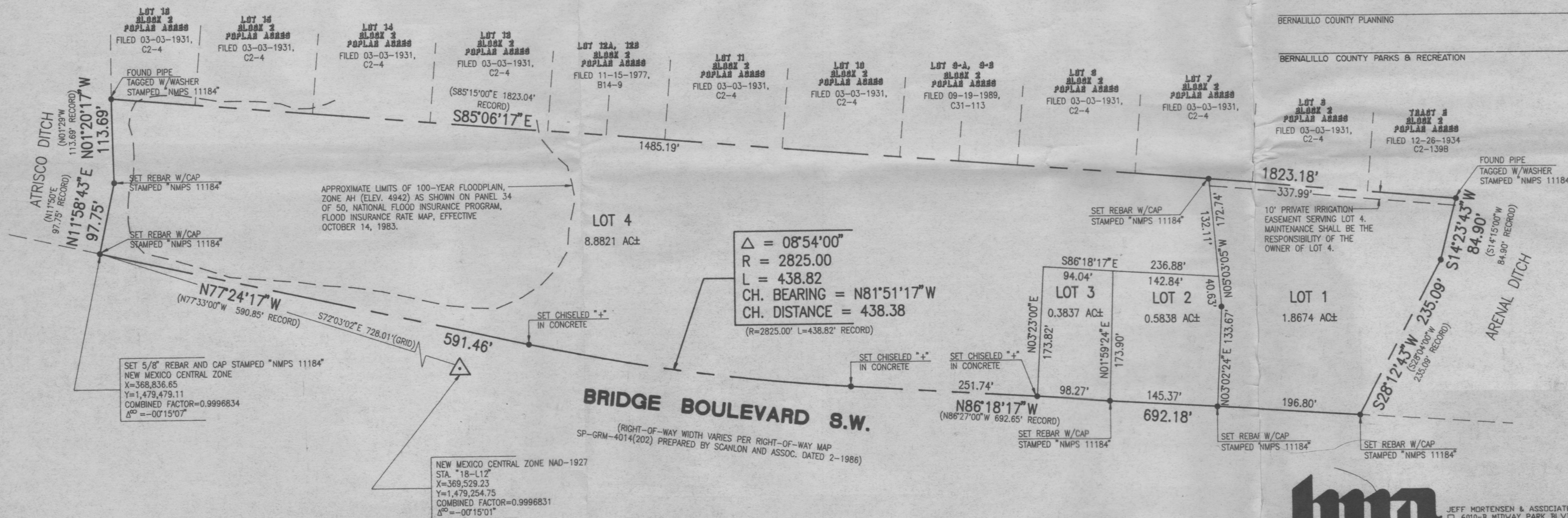
This instrument was acknowledged before me on this 25th day of October, 1994.

Charles G. Cala, Jr.
Notary Public

APPROVALS: ORB CASE NO. 94-520

PLANNING DIRECTOR, CITY OF ALBUQUERQUE, NEW MEXICO	DATE
Robert W. Kane	11-1-94
UTILITY DEVELOPMENT, CITY OF ALBUQUERQUE, NEW MEXICO	DATE
Frank J. Arguin	11-1-94
CITY ENGINEER, CITY OF ALBUQUERQUE, NEW MEXICO	DATE
John Welch	12/20/94
AMAF.C.A.	DATE
Michael Bunt	12-27-94
TRANSPORTATION DEVELOPMENT, CITY OF ALBUQUERQUE, NEW MEXICO	DATE
Robert Bunt	12-27-94
PARKS AND GENERAL SERVICES, CITY OF ALBUQUERQUE, NEW MEXICO	DATE
Will Clul	10-25-94
CITY SURVEYOR, CITY OF ALBUQUERQUE, NEW MEXICO	DATE
Ed Ruelas	1-4-95
REAL PROPERTY, CITY OF ALBUQUERQUE, NEW MEXICO	DATE

BERNALILLO COUNTY PUBLIC WORKS DEPARTMENT	DATE
BERNALILLO COUNTY ENVIRONMENTAL HEALTH	DATE
BERNALILLO COUNTY ZONING	DATE
BERNALILLO COUNTY PLANNING	DATE
BERNALILLO COUNTY PARKS & RECREATION	DATE



Jma
JEFF MORTENSEN & ASSOCIATES, INC.
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JOB # 940541