RECORD DRAWING

CONSTRUCTION PLANS

FOR

U.S. NEW MEXICO FEDERAL CREDIT UNION/ IRVING BOULEVARD N.W. AND EAGLE RANCH ROAD N.W. STREET IMPROVEMENTS

ALBUQUERQUE, NEW MEXICO

JUNE, 1991

·LEGEND·

MATERIALS

- CONCRETE
- RIP·RAP

LINES

- SUBDIVISION BOUNDARY
- PROPERTY LINE (PLAN)
- PROPERTY LINE (SECTION)
- CENTERLINE
- EASEMENT LINE
- MATCH LINE (A — A)
- SECTION CUT LINE (A — A)

EARTHWORK

	EXISTING	NEW
CONTOUR LINE	25	25
SPOT ELEVATION	+	
PROJECT / PHASE BOUNDARY		
SWALE		
DIRECTION OF FLOW		

MISCELLANEOUS UTILITIES

- GAS LINE (G)
- UNDERGROUND TELEPHONE (UT)
- UNDERGROUND ELECTRICAL (UE)
- STORM DRAIN (SD)
- STORM DRAIN MANHOLE
- STORM DRAIN INLET

SANITARY SEWER

- SANITARY SEWER LINE (SAS)
- SANITARY SEWER MANHOLE
- SAS SERVICE CONNECTIONS
- SAS CAP OR PLUG
- ENCASEMENT

WATER

- WATER LINE (W)
- WATER SERVICE CONNECTIONS
- GATE VALVE
- FIRE HYDRANT
- BUTTERFLY VALVE
- REDUCER
- WATER PRESSURE ZONE BOUNDARY

WATER FITTINGS

- CAPS AND PLUGS
- ELBOW
- CROSS
- TEE

MISCELLANEOUS

- CHAINLINK FENCE
- FIELD FENCE
- COMMON YARD WALL
- RETAINING WALL
- POWER OR TELEPHONE POLE

INDEX OF DRAWINGS

2 RECORD DRAWING

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

Jeffrey G. Mortensen, NMPE NO. 8547 — Date 12-21-92

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

26 4296.90 0 0 1 92

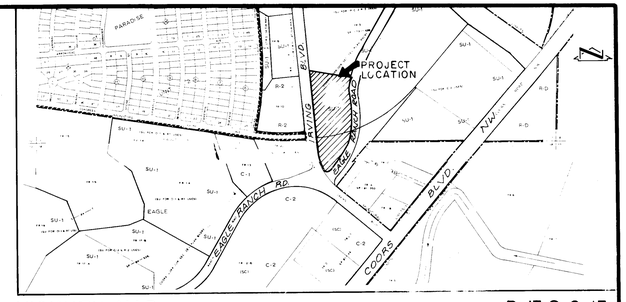
APPROVAL OF AS BUILT DRAWINGS BY CONSTRUCTION ENGINEER — DATE 8-24-92

CAUTION:

THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.

SCANNED BY BY LASON

JMA 900755



VICINITY MAP — B-13 & C-13

SCALE 1" = 800' (APPROX.)

GENERAL NOTES

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS -PUBLIC WORKS CONSTRUCTION - 1986. WATER AND SANITARY SEWER IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW MEXICO UTILITIES, INC. - SPECIFICATIONS FOR WATER AND WASTE WATER FACILITIES MARCH 2, 1990.

2. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990 AND NMUI, 898-2661, FOR LOCATION OF EXISTING UTILITIES.

3. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS CONDUCTED ONLY PRELIMINARY INVESTIGATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES. THIS INVESTIGATION IS NOT CONCLUSIVE, AND MAY NOT BE COMPLETE, THEREFORE, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.

4. SHOULD A CONFLICT EXIST BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY FOR ALL PARTIES.

5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES DURING CONSTRUCTION.

6. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING SAFETY AND HEALTH.

7. CONTRACTOR SHALL COMPLY WITH SECTION 19 OF THE "STANDARD SPECIFICATIONS".

8. ALL UTILITIES AND UTILITY SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING.

9. BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.

10. TACK COAT REQUIREMENTS SHALL BE DETERMINED DURING CONSTRUCTION BY THE PROJECT ENGINEER.

11. SIDEWALKS AND WHEELCHAIR RAMPS WITHIN THE CURB RETURNS SHALL BE CONSTRUCTED WHEREVER A NEW CURB RETURN IS CONSTRUCTED.

12. IF CURB IS DEPRESSED FOR A DRIVEPAD OR A HANDICAP RAMP, THE DRIVEPAD OR RAMP SHALL BE CONSTRUCTED PRIOR TO ACCEPTANCE OF THE CURB AND GUTTER.

13. ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.

14. CONTRACTOR SHALL COORDINATE WITH NEW MEXICO UTILITIES INC. (898-2661) FOR THE LOCATION OF EXISTING UTILITIES NOT LESS THAN THREE (3) WORKING DAYS IN ADVANCE OF ANY WORK THAT MAY AFFECT THE EXISTING PUBLIC WATER UTILITIES. ONLY WATER SYSTEM DIVISION PERSONNEL SHALL OPERATE EXISTING VALVES. REFER TO SECTION 18 OF THE SPECIFICATION.

15. CONTRACTOR SHALL NOTIFY THE ENGINEER NOT LESS THAN SEVEN (7) DAYS PRIOR TO STARTING WORK IN ORDER THAT THE ENGINEER MAY TAKE NECESSARY MEASURES TO INSURE THE PRESERVATION OF SURVEY MONUMENTS. CONTRACTOR SHALL NOT DISTURB PERMANENT SURVEY MONUMENTS WITHOUT THE CONSENT OF THE ENGINEER AND SHALL NOTIFY THE ENGINEER AND BEAR THE EXPENSE OF REPLACING ANY THAT MAY BE DISTURBED WITHOUT PERMISSION. REPLACEMENT SHALL BE DONE ONLY BY THE ENGINEER. WHEN A CHANGE IS MADE IN THE FINISHED ELEVATION OF THE PAVEMENT OF ANY ROADWAY IN WHICH A PERMANENT SURVEY MONUMENT IS LOCATED, CONTRACTOR SHALL, AT HIS OWN EXPENSE, ADJUST THE MONUMENT COVER TO THE NEW GRADE UNLESS OTHERWISE SPECIFIED. REFER TO SECTION 4.4 OF THE SPECIFICATIONS.

16. THREE (3) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE CONSTRUCTION CO-ORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION CO-ORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION. CONTRACTOR MUST REFER TO SECTION 19 OF THE STANDARD SPECIFICATION FOR TRAFFIC CONTROL. REFER TO SECTION 19 OF THE SPECIFICATIONS.

17. ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED IN KIND BY CONTRACTOR TO LOCATION AND IN KIND AS EXISTING OR AS INDICATED BY THIS PLAN SET.

REV	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
2	1 - 11						

APPROVAL OF REVISIONS

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER — 07-15-91

JMA — JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE, NEW MEXICO 87109
ENGINEERS ☐ (505) 345-4250

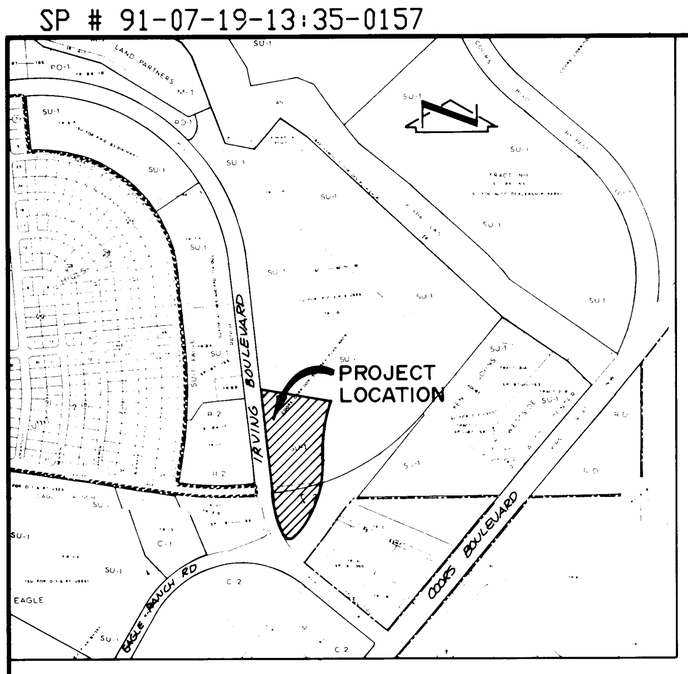
APPROVED FOR CONSTRUCTION

10-2-91 C.E.

4296.90

SHEET 1 OF 11

SP # 91-07-19-13:35-0157



VICINITY MAP B-13 & C-13

NO SCALE

DESCRIPTION

A certain tract of land located within the Town of Alameda Grant, comprising Tract D, Adobe Wells Subdivision, as the same is shown and designated on the plat filed in the office of the County Clerk of Bernalillo County, New Mexico, on October 30, 1987, Book C35, Page 7, and being more particularly described as follows:

Beginning at the northwest corner of said Tract D, being the southwest corner of Tract E, Adobe Wells Subdivision, and also being a point on the east right-of-way line of Irving Boulevard N.W.; thence S 78°44'38" E a distance of 488.36 feet to the northeast corner of said Tract D, also being a point on the west right-of-way line of Eagle Ranch Road N.W.; thence along the arc of a curve to the left with DELTA = 26°00'02", R = 628.00 feet, and L = 284.98 feet (Chord Bearing = S 11°15'36" W, Chord Length = 282.54 feet) along said right-of-way line to a point of reverse curvature to the right with DELTA = 18°03'28", R = 542.00 feet, and L = 170.82 feet (Chord Bearing = S 07°17'19" W, Chord Length = 170.11 feet) along said right-of-way line to a point of compound curvature to the right with DELTA = 19°34'29", R = 140.00 feet and L = 47.83 feet (Chord Bearing = S 26°06'18" W, Chord Length = 47.60 feet) along said right-of-way line to a point of reverse curvature to the left with DELTA = 11°13'23", R = 160.00 feet and L = 31.34 feet (Chord Bearing = S 30°16'51" W, Chord Length = 31.29 feet) along said right-of-way line to a point of reverse curvature to the right with DELTA = 34°00'37", R = 532.00 feet, and L = 315.79 feet (Chord Bearing = S 41°40'28" W, Chord Length = 311.17 feet) along said right-of-way line; thence S 58°40'46" W a distance of 30.52 feet along said right-of-way line; thence along the arc of a curve to the right with DELTA = 108°39'57", R = 40.00 feet and L = 75.86 feet, (Chord Bearing = N 66°59'15" W, Chord Length = 64.99 feet) to the southwest corner of said Tract D, also being a point on the east right-of-way line of Irving Boulevard N.W. and also being a point of compound curvature to the right with DELTA = 08°16'59", R = 786.30 feet and L = 113.67 feet (Chord Bearing = N 08°30'42" W, Chord Length = 113.57 feet) along said right-of-way line; thence N 04°25'46" W a distance of 723.66 feet along said right-of-way line to the point of beginning and containing 6.4552 acres more or less.

10.20 A 91C 188

91072998

PLAT OF

TRACT D-1
ADOBE WELLS SUBDIVISION

ALBUQUERQUE, NEW MEXICO
JULY, 1991

CERTIFICATION

I, William P. Pettit, 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 noted in the title policy prepared by New Mexico Title Company on November 13, 1987, Policy No. 85-00-741381 meets the minimum requirements of monumentation and surveys of the Albuquerque Subdivision Ordinances, complies with the Minimum Standards for Surveying in New Mexico and is true and correct to the best of my knowledge and belief.

William P. Pettit — 8/12/1991
William P. Pettit, NMPS No. 3243 — Date

REGISTERED LAND SURVEYOR — STATE OF NEW MEXICO — 3243 — WILLIAM P. PETTIT

DEDICATION AND FREE CONSENT
The undersigned owners of the land shown hereon do hereby consent to the subdivision of said land in the manner shown on this plat and do hereby dedicate the public street right-of-way and grant the easement shown including the rights of ingress and egress and the right to trim interfering trees.

08/05/91
John R. Thompson, CEO/President — Date
U.S. New Mexico Federal Credit Union,
A Federal Credit Union

ACKNOWLEDGEMENT

STATE OF NEW MEXICO)
SS
COUNTY OF BERNALILLO)

The foregoing instrument was acknowledged before me on this 5 day of Aug., 1991.

Notary Public

OFFICIAL SEAL
ANNIE M GLISSON
NOTARY PUBLIC
STATE OF NEW MEXICO
My Commission Expires 1-

SP-91-140

APPROVALS: DRB CASE NO. 91-118

PLANNING DIRECTOR, CITY OF ALBUQUERQUE, NEW MEXICO	9-4-91 DATE
UTILITY DEVELOPMENT, CITY OF ALBUQUERQUE, NEW MEXICO	8-30-91 DATE
CITY ENGINEER, CITY OF ALBUQUERQUE, NEW MEXICO	8/27/91 DATE
A.M.A.F.C.A.	8/27/91 DATE
TRANSPORTATION DEVELOPMENT, CITY OF ALBUQUERQUE, NEW MEXICO	8-27-91 DATE
PARKS AND RECREATION, CITY OF ALBUQUERQUE, NEW MEXICO	8-27-91 DATE
CITY SURVEYOR, CITY OF ALBUQUERQUE, NEW MEXICO	08 13 91 DATE
REAL PROPERTY, CITY OF ALBUQUERQUE, NEW MEXICO	8-28-91 DATE
NEW MEXICO UTILITIES, INC.	8-27-91 DATE

Notes:

1. A boundary survey was performed on September 14 and September 17, 1990.
2. All distances are ground distances.
3. Site located within Sections 7 and 18 (projected) Township 11 North, Range 3 East, N.M.P.M.
4. Bearings are based upon the plat of Adobe Wells Subdivision filed October 30, 1987, Book C35, Page 7. To achieve grid bearings, rotate plat bearings 00°00'30" clockwise.
5. Corners designated "O" were monumented with a 5/8" rebar and cap stamped "LS 3243".
6. The purpose of this plat is to dedicate additional public street right-of-way on Irving Boulevard N.W. and grant a new P.N.M. easement as shown hereon.
7. These properties are within the New Mexico Utilities, Inc. (NMU, INC.) franchise area. Water and Sanitary Sewer System capabilities are based on the NMU, INC. facilities, not the City of Albuquerque. Water and Sanitary Sewer infrastructure improvements must, however, be approved by both City of Albuquerque and NMU, INC.

1·013·065·302·033·40411
Albuquerque U.S. Employees
Benerita M. Santillanes 9.3.91

900756

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

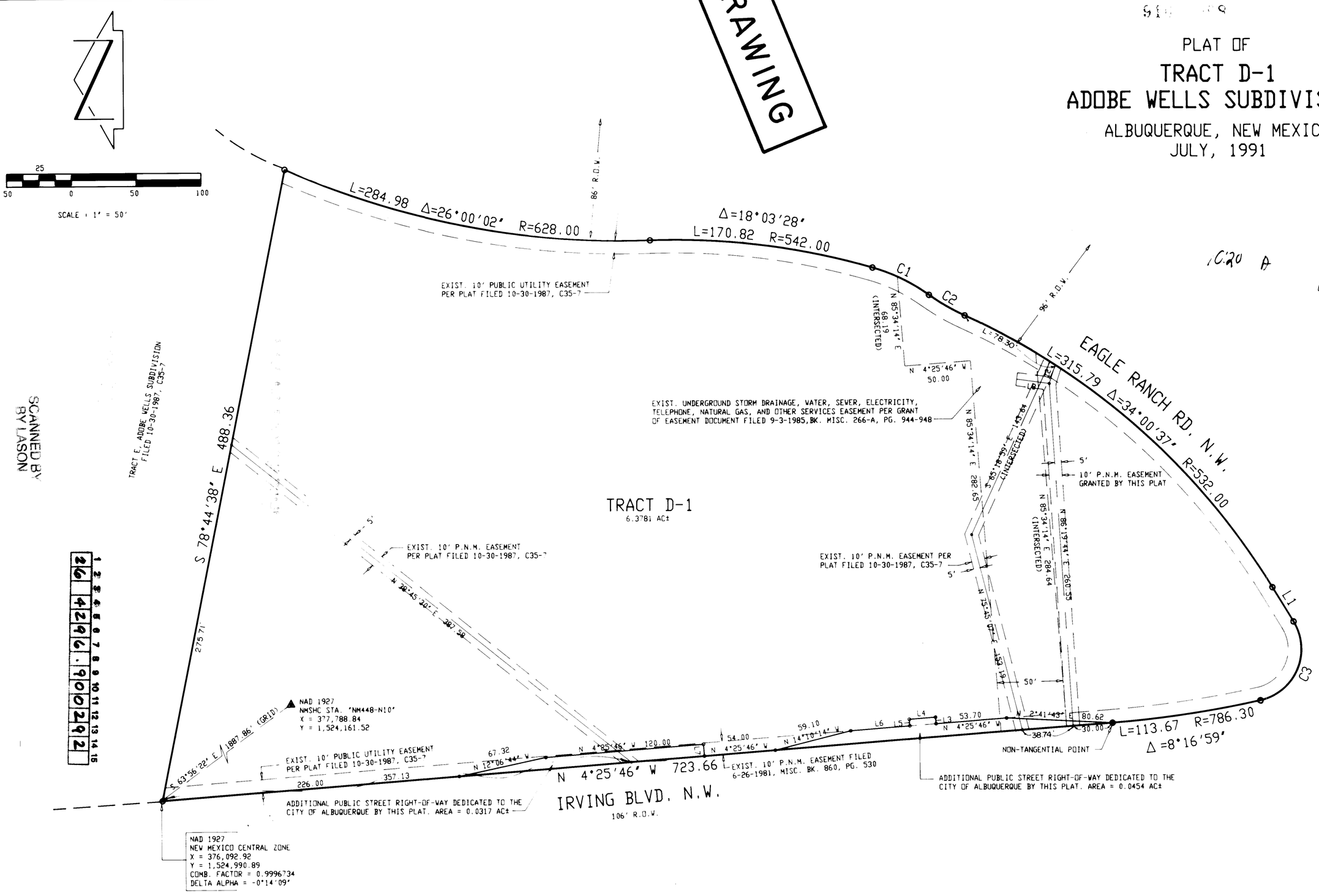
SHEET 1 OF 2

RECORD DRAWING

SP # 91-07-19-13:35-0157

PLAT OF
TRACT D-1
ADOBE WELLS SUBDIVISION
ALBUQUERQUE, NEW MEXICO
JULY, 1991

10.20 A 91C 188



LINE	BEARING	DISTANCE
L1	S 58°40'46" W	30.52
L2	S 72°13'46" E	14.82
L3	N 85°34'14" E	5.00
L4	N 4°25'46" W	20.00
L5	S 85°34'14" W	5.00
L6	N 4°25'46" W	45.00
L7	N 85°34'14" E	9.00
L8	N 7°35'59" E	25.00

CURVE	ARC	DELTA	RADIUS	CHORD LENGTH	CHORD BEARING	TAN LENGTH
C1	47.83	19°34'29"	140.00	47.60	S 26°06'18" W	24.15
C2	31.34	11°13'23"	160.00	31.29	S 30°16'51" W	15.72
C3	75.86	108°39'57"	40.00	64.99	N 66°59'15" W	55.73

26 42496.900292

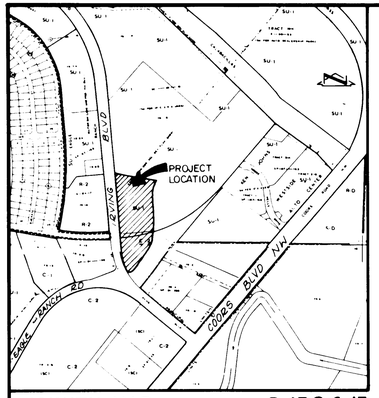
900756

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

SHEET 2 OF 2

SHEET 2 OF 11

130538



VICINITY MAP B-13 & C-13

N.T.S.

SCALE: 1" = 40'

40' 0' 40' 80'

LEGAL DESCRIPTION

TRACT D, ADOBE WELLS SUBDIVISION

PROJECT BENCHMARK

CITY OF ALBUQUERQUE BENCHMARK 5-B13, AM ACS 1 3/4" ALUMINUM DISC STAMPED "ACS BM, 5-B13", LOCATED ON THE EAST SIDE OF IRVING BLVD. N.W. AT THE P.C., APPROXIMATELY 0.57 OF A MILE NNW OF COORS RD. N.W. AND IS ON TOP OF THE CURB. ELEVATION = 5097.71 FEET (M.S.L.D.)

T.B.M.

TOP OF CURB LOCATED ON THE EAST SIDE OF IRVING BOULEVARD N.W. AT THE NORTHWEST CORNER OF SITE AS SHOWN BELOW. ELEVATION = 5107.33 FEET (M.S.L.D.)

LEGEND

- EXISTING SANITARY MANHOLE
- EXISTING POWER POLE
- EXISTING MONITOR WELL
- EXISTING WATER VALVE
- EXISTING ELECTRICAL PULL BOX
- EXISTING SIGN
- EXISTING STORM MANHOLE
- EXISTING TOP OF CURB / EXISTING FLOW LINE
- EXISTING CONTOUR
- 75 PROPOSED CONTOUR
- PROPOSED SPOT ELEVATION
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- DIRECTION OF FLOW
- HIGH POINT
- DRAINAGE BASIN BOUNDARY

FOR HYDROLOGIC AND HYDRAULIC CALCULATIONS SEE CITY PROJECT # 4296.90 SHEET 4 OF 11

FOR EAGLE RANCH IMPROVEMENTS SEE CITY PROJECT # 4296.90 SHEET 7 OF 11

FOR EROSION CONTROL PLAN SEE CITY PROJECT # 4296.90 SHEET 11 OF 11

SEDIMENTATION BASIN

ADOBE WELLS SUBDIVISION

EAGLE RANCH ROAD N.W.

IRVING BOULEVARD N. W.

BASIN A-1

BASIN A-2

PROPOSED BUILDING F.F. = 5068.00

LANDSCAPING (TREES, SHRUBS, GRAMA/BUFFALO GRASS)

STREET IMPROVEMENTS BY CITY WORK ORDER

GRADE @ 6:1 MAX.

LIMITS OF GRADING

WINDROW LINE, TYP.

GRADE WINDROW PER EROSION CONTROL PLAN

1-DBL 14' STORM INLET @ 5059.75 INV. @ 5048.17

110 LF 24" RCP @ S=0.0188

4' DIA PRIVATE SDMH RIM @ 5056.5 INV @ 5044.34

95 LF 30" RCP PRIVATE STORM DRAIN @ S=0.0280

8' DIA SDMH RIM @ 5057.90 INV @ 5051.11

106 LF 24" RCP PRIVATE STORM DRAIN @ S=0.0634 & STORM INLET BY CITY WORK ORDER

1-DBL 14' STORM INLET @ 5052.45

GRASS

RECORD DRAWING

LINE	BEARING	DISTANCE
L1	S 58°40'46" W	30.52
L2	N 4°25'46" W	50.00

CURVE	ARC	DELTA	RADIUS	CHORD LENGTH	CHORD BEARING	TAN LENGTH
C1	47.83	19°34'29"	140.00	47.60	S 26°06'18" W	24.15
C2	31.34	11°13'23"	160.00	31.29	S 30°16'51" W	15.72
C3	75.86	108°39'57"	40.00	64.99	N 66°59'15" W	55.73
C4	113.67	8°16'59"	786.30	113.57	N 8°30'42" W	56.93

FOR INFORMATION ONLY

SCANNED BY BY LASON

CONSTRUCTION NOTES:

1. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SERVICE 260-1990 AND NMUI, 998-2651 FOR LOCATION OF EXISTING UTILITIES.
2. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL POTENTIAL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
3. ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL LAWS, RULES AND REGULATIONS CONCERNING CONSTRUCTION SAFETY AND HEALTH.
4. ALL CONSTRUCTION WITHIN PUBLIC RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF ALBUQUERQUE STANDARDS AND PROCEDURES.
5. IF ANY UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES ARE SHOWN ON THESE DRAWINGS, THEY ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AND SUCH LINES MAY EXIST WHERE NONE ARE SHOWN. IF ANY SUCH EXISTING LINES ARE SHOWN, THE LOCATION IS BASED UPON INFORMATION PROVIDED BY THE OWNER OF SAID UTILITY, AND THE INFORMATION MAY BE INCOMPLETE, OR MAY BE OBSOLETE BY THE TIME CONSTRUCTION COMMENCES. THE ENGINEER HAS UNDERTAKEN NO FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UTILITY LINES, PIPELINES, OR UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO, AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFOR. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE, PIPELINE, OR UNDERGROUND UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES. IN PLANNING AND CONDUCTING EXCAVATION, THE CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS, IF ANY, PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES.
6. THE DESIGN OF PLANTERS AND LANDSCAPED AREAS IS NOT PART OF THIS PLAN. ALL PLANTERS AND LANDSCAPED AREAS ADJACENT TO THE BUILDING(S) SHALL BE PROVIDED WITH POSITIVE DRAINAGE TO AVOID ANY PONDING ADJACENT TO THE STRUCTURE. FOR CONSTRUCTION DETAILS, REFER TO LANDSCAPING PLAN.

EROSION CONTROL MEASURES

1. THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING TEMPORARY BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.
2. THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED WITHIN THE PUBLIC RIGHT-OF-WAY SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED DOWN THE STREET.
3. THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" PRIOR TO BEGINNING CONSTRUCTION.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
2 6 4 2 9 6 . 9 0 0 3 9 2

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

07-15-91

CB-0691

JEFF MORTENSEN & ASSOCIATES, INC.
6010-B MIDWAY PARK BLVD. N.E.
ALBUQUERQUE NEW MEXICO 87109
ENGINEERS (505) 345-4250

GRADING AND DRAINAGE PLAN

U.S. NEW MEXICO FEDERAL CREDIT UNION

SHEET 3 OF 11
CITY PROJECT # 4296.90

DESIGNED BY V.S.F./J.P.K
DRAWN BY S.G.H.
APPROVED BY J.G.M.

NO	DATE	BY	REVISIONS
1	8/1/91	JPK	ADD SEDIMENTATION BASIN & WINDROWS TO EROSION CONTROL PLAN
2	3-92	DKM	AS-BUILT

JOB NO 900754
DATE 04/91
SHEET 3 OF 11

DRAINAGE PLAN

The following items concerning the U.S. New Mexico Federal Credit Union Drainage Plan are contained as part of this submittal:

As shown by the Vicinity Map, the site is located at the northeast corner of the intersection of Irving Boulevard N.W. and Eagle Ranch Road N.W. At present, the site is undeveloped. The existing 60" RCP storm drain through the site was designed and built by C.O.A. Project No. 2204, dated August 27, 1985. Accompanying Project No. 2204 is the "Design Report for Eagle Ranch Storm Drain", dated January 1985 by Easterling & Associates. Eagle Ranch Road paving and drainage was designed and approved for construction in June of 1986 as C.O.A. Project No. 2774. A revised Drainage Management Plan for the Adobe Wells Subdivision prepared by Bohannan Huston Inc., dated 7/30/85 and 9/14/88, has been approved which encompasses the subject site. A Conceptual Grading & Drainage Plan was prepared by Jeff Mortensen and Associates in December of 1990 and updated in April 1991 for the site. The current Plan is consistent with these previously approved Plans.

The Grading Plan shows 1) existing topography indicated by spot elevations and contours at 1'0" intervals, 2) proposed grades indicated by spot elevations, 3) the proposed drainage scheme indicated by flow arrows, 4) the limit and character of the existing improvements, and 5) the limit and character of the proposed improvements. As shown by this plan, the site presently drains in a southeasterly direction to Eagle Ranch Road N.W. An existing 36" CMP collects runoff from a portion of Basin A and discharges it into an existing 60" RCP running through the site. These drainage improvements were constructed by City Project No. 2204.

The proposed grading separates the site into two drainage sub-basins. Basin A-2 contains that portion of the site which will be developed with buildings, pavement, and landscaping. The runoff from A-2 will be collected at a low point in the new parking lot and be discharged into a new storm inlet and storm drain which will connect to the existing 60" storm drain through the site. Basin A-1 contains that portion of the site which will remain primarily undeveloped at this time. The runoff from A-1 will be collected at a low point in the new Eagle Ranch Road N.W. pavement and will discharge into a new storm inlet and storm drain which will discharge into the existing 60" storm drain. A new manhole and 30" RCP will be constructed in place of the existing 36" CMP to collect runoff from Basin A-1 upon future development.

The runoff computed by the present Drainage Plan compares favorably with the design runoff used in the prior Plans. The Drainage Management Plan quantifies the 100-year runoff from the site (Tract D) at 20.8 cfs (Analysis Point 10 of the Drainage Management Plan), while the runoff derived by these calculations is 8.4 + 7.5 = 15.9 cfs (Basins A-1 and A-2 combined). The Drainage Management Plan quantifies the 100-year runoff in the street at 6.4 cfs (Analysis Point 9 of the Drainage Management Plan). This represents half-street flows of 3.2 cfs which are much less than the capacity of the new inlet and storm drain in Eagle Ranch Road N.W. As shown by the accompanying nomograph, the gutter flow depth in the new street, carrying this half-street flow, will be less than 0.3 feet. This is less than the curb height.

While the paving and site development will result in an increase in runoff above existing undeveloped values, the new storm drains will accept and convey runoff to the existing storm drain system. This is in accordance with prior approved Plans; thereby the site development will not adversely impact downstream properties due to decreasing the amount of overland runoff leaving the site. The existing 60" storm drain into which the new storm drains will discharge was built as part of City Project No. 2204. According to page three of the Report that accompanied City Project No. 2204, "the storm drain was designed to accommodate the ultimate developed runoff as well as the existing developed runoff." This included the subject tract, which is a portion of Parcel 11 referenced by the Report. As indicated by the accompanying hydraulic grade line calculations, the additional runoff entering the existing 60" RCP will have minimal impact. The collective effect on the hydraulic grade line calculations is only 0.26 feet. The hydraulic grade line in the connector pipes will remain well below the surface elevations of the new inlet structures and will remain well below the ground elevation above the existing 60" RCP.

The Calculations which appear hereon analyze both the existing and developed conditions for the 100-year, 6-hour rainfall event. The Rational Method has been used to quantify the peak rate of discharge while the SCS Method has been used to quantify the volume of runoff generated. Both Methods have been used in accordance with the City of Albuquerque Development Process Manual, Volume II, coupled with the Mayor's Emergency Rule dated January 14, 1986.

HYDROLOGIC CALCULATIONS

Ground Cover Information

From SCS Bernalillo County Soil Survey,
Plate 10: (Bluepoint Loamy fine sand and fine sand)
Hydrologic Soil Group: A
Existing Pervious CN = 68 (DPM Plate 22.2 C-2
Pasture or Range Land: poor condition)
Developed Pervious CN = 49 (DPM Plate 22.2 C-2
Open space: fair condition)

Time of Concentration/Time to Peak

$T_C = 0.0078\ L^{0.77}/S^{0.385}$ (Kirpich Equation)

$T_p = T_C = 10$ min.

Point Rainfall

$P_6 = 2.2$ in. (DPM Plate 22.2 D-1)

Rational Method

Discharge: Q = CiA

where C varies
i = P_6 (6.84) $T_C^{-0.51}$ = 4.65 in/hr
P_6 = 2.2 in (DPM Plate 22.2D-1)
T_C = 10 min (minimum)
A = area, acres

SCS Method

Volume: V = 3630(DRO) A

Where DRO = Direct runoff in inches
A = area, acres

Existing Condition

Basin A
A_{total} = 280,950 sf = 6.45 Ac
Undeveloped area = 196,200 sf (1.00)
C = 0.40 (Weighted average per Emergency Rule, 1/14/86)
Q_{100} = CiA = 0.40(4.65)(6.45) = 12.0 cfs
% impervious = ~0~%
CN = 68 (DPM Plate 22.2 C-3)
DRO = 0.4 in (DPM Plate 22.2 C-4)
V_{100} = 3630 (DRO)A = 9,370 cf

Developed Condition

1. Basin A-1
(Primarily undeveloped, use Pervious CN = 68)
A_{total} = 196,200 sf = 4.50 Ac
Roof area = 810 sf (0.01)
Paved area = 5400 sf (0.03)
Landscaped area = 24,430 sf (0.12)
Undeveloped area = 165,560 sf (0.84)
C = 0.40 (Weighted average per Emergency Rule, 1/14/86)
Q_{100} = CiA = 0.40(4.65)(4.50) = 8.4 cfs
% impervious = 4%
Composite CN = 69 (DPM Plate 22.2 C-3)
DRO = 0.4 in (DPM Plate 22.2 C-4)
V_{100} = 3630 (DRO)A = 6,530 cf

2. Basin A-2
A_{total} = 84,750 sf = 1.94 Ac
Roof area = 7,700 sf (0.09)
Paved area = 62,850 sf (0.74)
Landscaped area = 14,200 sf (0.17)
C = 0.83 (Weighted average per Emergency Rule, 1/14/86)
Q_{100} = CiA = 0.83(4.65)(1.94) = 7.5 cfs
% impervious = 83 %
Composite CN = 88 (DPM Plate 22.2 C-3)
DRO = 1.4 in (DPM Plate 22.2 C-4)
V_{100} = 3630 (DRO)A = 9,860 cf

Comparison

ΔQ_{100} = (8.4 + 7.5) - 12.0 = 3.9 cfs (increase)
ΔV_{100} = (6,530 + 9,860) - 9,370 = 7,020 cf (increase)

RECORD DRAWING

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

Jeffrey G. Mortensen, NMPE NO. 8547 — Date 7-21-92

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

STORM DRAIN HYDRAULICS

INLET CAPACITIES (SUMP CONDITION)

Use Orifice Equation with C = 0.60:
$Q = CA\ (2gh)^{1/2}$

Assume effective grate area = 0.50 total grate area

TYPE DOUBLE 'D' INLET CAPACITY (BASIN A-2)

Effective Area = 0.50(2' x 3' x 2) = 6 SF
h = 0.5'
$Q = 0.60(6)[2(32.2)0.5]^{1/2}$ = 20.4 cfs > Q_{100} = 7.5 cfs

TYPE DOUBLE 'A' INLET CAPACITY (BASIN A-1)

Effective Area = 0.50(2' x 3' x 2) = 6 sf
h = 0.6'
$Q = 0.60(6)[2(32.2)0.6]^{1/2}$ = 22.4 cfs > Q_{100} = 8.4 cfs

RCP PIPE CAPACITIES (FLOWING FULL)

Use Manning's Equation with n = 0.013:

$Q = (1.486/n)AR^{2/3}S^{1/2}$

Use Field's Hydraulic Calculator to calculate friction slopes, S_f

24" RCP PRIVATE STORM DRAIN (BASIN A-2)

$Q = (1.486/0.013)3.14(0.50)^{2/3}(0.0836)^{1/2}$ =
65.4 cfs >> Q_{100} = 7.5 cfs
S_f = 0.0011 << S = 0.0836

30" RCP PRIVATE STORM DRAIN (FUTURE BASIN A-1)

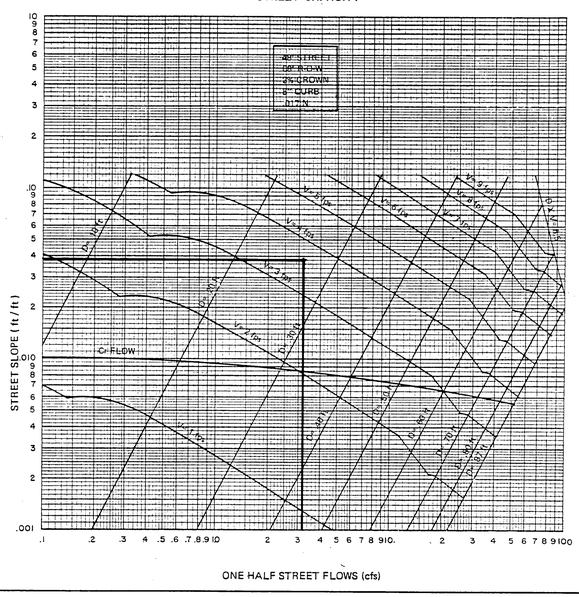
$Q = (1.486/0.013)4.91(0.625)^{2/3}(0.0280)^{1/2}$ =
68.7 cfs >>Q_{100} = 8.4 cfs
S_f = 0.0004 << S = 0.0280

24" RCP CONNECTOR PIPE (BASIN A-1)

$Q = (1.486/0.013)3.14(0.50)^{2/3}(0.0188)^{1/2}$ =
31.0 cfs >> Q_{100} = 8.4 cfs
S_f = 0.0014 << S = 0.0188

RECORD DRAWING

STREET CAPACITY



HYDRAULIC GRADE LINE CALCULATIONS

Existing 60" RCP

Junction Loss:
$\Delta y = (Q_2V_2 - Q_1V_1 - Q_3V_3\cos\theta)/[g(A_1+A_2)/2] + 1/2(S_{f1}+S_{f2})L$
$h_j = y + hv_1 - hv_2$

Velocity head = $V^2/(2g)$

Junction at New Manhole
(Station 26 + 64, Eagle Ranch Road Storm Drain)

Q_1 = 214 cfs*	Q_2 = 221.5 cfs	Q_3 = 7.5 cfs
D_1 = 5.0'	D_2 = 5.0'	D_3 = 2.0'
A_1 = 19.64 sf	A_2 = 19.64 sf	A_3 = 3.14 sf
V_1 = 10.90 fps	V_2 = 11.29 fps	V_3 = 2.39 fps
S_{f1} = 0.0066	S_{f2} = 0.0071	θ = 45°
hv_1 = 1.84'	hv_2 = 1.98'	L = 0'

Δy = [221.5(11.29)-214(10.90)-7.5(2.39)cos45]/
[32.2(19.64+19.64)/2]
= 0.25'

h_j = 0.25' + 1.84' - 1.98' = 0.11'

*Per Design Report for Eagle Ranch Storm Drain

Junction at Existing Manhole
(Sta 25 + 83, M.H. No. 5 Eagle Ranch Road Storm Drain)
(Basin A-1 discharges into manhole)

Q_1 = 221.5 cfs	Q_2 = 229.9 cfs	Q_3 = 8.4 cfs
D_1 = 5.0'	D_2 = 5.0'	D_3 = 2.0'
A_1 = 19.64 sf	A_2 = 19.64 sf	A_3 = 3.14 sf
V_1 = 11.29 fps	V_2 = 11.71 fps	V_3 = 2.67 fps
S_{f1} = 0.0071	S_{f2} = 0.0076	θ = 90°
hv_1 = 1.98'	hv_2 = 2.13'	L = 0'

Δy = [229.9(11.71) - 221.5(11.29) - 8.4(2.67)cos 90]/
[32.2(19.64 + 19.64)/2]
= 0.30'

h_j = 0.30' + 1.98' - 2.13' = 0.15'

Existing 60 x 30 Wye
(Station 25 + 89, Eagle Ranch Road Storm Drain)
Future Runoff (Basin A-1 discharges into wye)

Q_1 = 221.5 cfs	Q_2 = 229.9 cfs	Q_3 = 8.4 cfs
D_1 = 5.0'	D_2 = 5.0'	D_3 = 2.5'
A_1 = 19.64 sf	A_2 = 19.64 sf	A_3 = 4.91 sf
V_1 = 11.29 fps	V_2 = 11.71 fps	V_3 = 1.71 fps
S_{f1} = 0.0071	S_{f2} = 0.0076	θ = 45°
hv_1 = 1.98'	hv_2 = 2.13'	L = 0'

Δy = [229.9(11.71) - 221.5(11.29) - 8.4(1.71)cos 45]/
[32.2(19.64 + 19.64)/2]
= 0.29'

h_j = 0.29' + 1.98' - 2.13' = 0.14'

Junction at Existing Manhole
(Sta 25 + 83, MH No. 5, Eagle Ranch Road Storm Drain)
Future Runoff (only street discharges into manhole)

Q_1 = 229.9 cfs	Q_2 = 236.3 cfs	Q_3 = 6.4 cfs*
D_1 = 5.0'	D_2 = 5.0'	D_3 = 2.0'
A_1 = 19.64 sf	A_2 = 19.64 sf	A_3 = 3.14 sf
V_1 = 11.71 fps	V_2 = 12.03 fps	V_3 = 2.04 fps
S_{f1} = 0.0076	S_{f2} = 0.0080	θ = 90°
hv_1 = 2.13'	hv_2 = 2.25'	L = 0'

Δy = [23.63(12.03 - 229.9(11.71) - 6.4(2.04)cos 90]/
[32.2(19.64 + 19.64)/2]
= 0.24'

h_j = 0.24' + 2.13' - 2.25' = 0.12'

*Per Drainage Management Plan: Ultimate Street Runoff at Analysis Point 9

Hydraulic Grade Lines Summary

Total change in head after present phase of site development:

Δh = 0.11' + 0.15' = +0.26'

Total change in head after ultimate site development:

Δh = 0.14' + 0.12' = +0.26'

24" RCP Private Storm Drain (Basin A-2)

H.G.L. elevation @ 60" RCP (Station 26+64, Eagle Ranch Road Storm Drain Plans): 5049.31

Change in head due to junctions (above) = 0.26'

Head due to friction slope = h_f x L = 0.0011 x 106' = 0.12'

Thus H.G.L. @ new double "D" inlet = 5049.69

Grate elevation = 5057.45 > 5049.69

24" RCP Connector Pipe (Basin A-1)

H.G.L. elevation @ 60 RCP (M.H. No. 5, Station 25+83, Eagle Ranch Road Storm Drain Plans): 5048.40

Change in head due to junctions (above) = 0.26'

Head due to friction slope = 0.0014 x 110' = 0.15'

Thus H.G.L. @ new double "A" inlet = 5048.81

Grate elevation = 5053.75 > 5048.81

30" RCP Private Storm Drain (Future Basin A-1)

H.G.L. @ 60" RCP (60" x 30" Wye, Station 25 + 89, Eagle Ranch Road Storm Drain Plans): 5048.80

Change in head due to junctions (above) = 0.26'

Head due to friction slope = 0.0004 x 95' = 0.04'

Thus H.G.L. @ new private SDMH = 5049.10

Rim Elevation = 5058.8 > 5049.10

SCANNED BY BY LASON

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 4296.9004 92

SURVEY INFORMATION — FIELD NOTES

NO.	BY	DATE
N/A	J MA	9/90

BENCH MARKS
A STANDARD ACS ALUMINUM TABLET STAMPED "ACS BM, 5-B13" ON TOP OF CURB, LOCATED ON THE EAST SIDE OF IRVING BLVD. NW AT THE PC APPROXIMATELY 0.57 OF A MILE NNW OF COORS RD. NW.
ELEVATION: 5037.71 FEET (MSLD)

AS BUILT INFORMATION
CONTRACTOR SUNDANCE MECHANICAL
WORK STARTED ON: JMA DATE 10-91
WORK STAKED BY: RPS
ACCEPTANCE BY: DKM DATE 3-92
FIELD VERIFICATION BY DKM DATE 3-92
DRAWINGS CORRECTED BY: DKM DATE 3-92
MICRO-FILM INFORMATION
RECORDED BY: DATE
NO:

ENGINEER'S SEAL
JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER
07-15-91

NO.	DATE	REMARKS	BY
		REVISIONS	DKM
3-92		AS-BUILT	
		DESIGN	DATE 7-91
		DESIGNED BY JPK	
		DRAWN BY JMA	DATE 7-91
		CHECKED BY JGM	DATE

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: U.S. NEW MEXICO FEDERAL CREDIT UNION / IRVING BLVD. N.W. AND EAGLE RANCH RD. N.W. STREET IMPROVEMENTS
HYDROLOGIC AND HYDRAULIC CALCULATIONS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		7-31-91	WATER		7-22-91
TRANSPORTATION		7-25-91	WASTE WATER		"
HYDROLOGY		7-30-91	NMUI		7-19-91

PROJECT NO. 4296.90 | MAP NO. B-13 C-13 | SHEET 4 OF 11

141507

SCALE: 1" = 40'

20' 40' 0' 40'

RECORD DRAWING

EAGLE RANCH ROAD N.W.

SHEET 9 | SHEET 7 | SHEET 6

L=284.98' Δ=26°00'02" R=628.00'

L=170.82' Δ=18°03'28" R=542.00'

L = 47.83' Δ=19°34'29" R=140.00'

L = 31.34' Δ=11°13'23" R=160.00'

L=315.79' Δ=34°00'37" R=532.00'

S58°40'46"W 305.52'

L = 75.86' Δ=108°39'57" R = 40.00'

L = 113.66' Δ = 8°16'56" R = 786.29'

FUTURE 6' SIDEWALK (DEFERRED CONSTRUCTION)

CONSTRUCT 8" DIA STORM DRAIN MANHOLE (FIELD VERIFY)
~~60' HW @ 5049.1~~
~~24" HW @ 5044.~~
RIM @ ~~5057.0~~ 5055.09
℄ INV. @ 5040.16
INV. IN @ 5043.16

INSTALL ~~130~~ 136 L.F. 24" RCP (CLASS III.) STORM DRAIN @ S= 0.083ft

CONSTRUCT 1 - DOUBLE 'D' STORM INLET (PRIVATE)
GRATE ELEV. = ~~5057.45~~ 5057.40
INV. ELEV. = ~~5056.45~~ 5056.31

EXIST. UNDERGROUND STORM DRAINAGE, WATER, SEWER, ELECTRICITY, TELEPHONE, NATURAL GAS, & OTHER SERVICES EASEMENT PER GRANT OF EASEMENT DOCUMENT, FILED 9-3-1986, BOOK MISC. 266-A, PAGES 944-948, DOC. #86-73299

EXIST. 36" CMP

EXIST. MH'E

EXIST. 10' PNM & MST EASEMENT

EXIST 10' PNM EASEMENT

STA 11+05 (8.63' 6.19' RT.)
1- PRESSURE CONNECTION
INSTALL:
1 - 10" x 16" x 6" TAPPING SLEEVE
1 - 6" TAPPING GATE VALVE
1 - TYPE 'A' VALVE BOX
1 - FIRE HYDRANT (4½' BURY)
1 - 3' x 3' x 6" CONC. PAD
6" WATERLINE
FLANGE ELEV. = 5069.35
LOCATE FIRE HYDRANT ~~4.0'~~ 8.0' BEHIND BACK OF CURB

STA 10+97.5 ~~11+00~~ (12' RT.)
INSTALL:
2 - 3" WATER SERVICE COMPLETE W/ METER AND METER BOX PER NMUI STANDARDS

TRACT D
AUDBE WELLS SUBDIVISION
FILED: 10-30-87 BK. 035 PG. 7

ADOBE WELLS SUBDIVISION

488.36' S 78°44'38" E

N 04°25'46" W 226.00

N4°25'47"W - 120.00'

N12°06'48"W - 67.31'

N14°10'14"W 59.10

N85°34'13"E 9.00'

N4°25'47"W 45.00'

S85°34'13"W 5.00'

N4°25'47"W 20.00'

N4°25'47"W 53.70

N2°41'43"E 80.62

N85°34'13"E 5.00'

N4°25'47"W 54.00

EXIST. MONITORING WELL NORTH RIM ELEV.: 90.92

EXIST. MONITORING WELL NORTH RIM ELEV.: 89.72

EXIST. MONITORING WELL NORTH RIM ELEV.: 59.50

EXIST. MONITORING WELL NORTH RIM ELEV.: 58.79

IRVING BLVD. N.W.

CONGRESS AVE. N.W.

CONSTRUCT 6' SIDEWALK @ R

MAIL BOX

℄ INLET

SAS MH

50 MH

WATER EXTENSION NOTES:

1. WATERLINE STATIONING IS BASED UPON STREET CENTERLINE WHERE THE WATERLINE PARALLELS SAID CENTERLINE, UNLESS INDICATED OTHERWISE.
2. ALL WATERLINE SHALL BE PVC (C-900) UNLESS OTHERWISE APPROVED BY NEW MEXICO UTILITIES, INC.
3. WHERE WATER AND SANITARY SEWER LINES CROSS, THE SANITARY SEWER LINE SHALL BE CONCRETE ENCASED FOR A DISTANCE OF 10 FEET EACH SIDE OF THE CROSSING IF 18 INCHES OF VERTICAL SEPARATION DOES NOT EXIST.
4. ELECTRONIC MARKER DISKS (EMD'S) SHALL BE PLACED ABOVE ALL FITTINGS IN ACCORDANCE WITH SECTION 170 OF THE "STANDARD SPECIFICATIONS".
5. IN ACCORDANCE WITH SECTION 801 OF THE "STANDARD SPECIFICATIONS", METALIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18 INCHES ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
6. REFER TO NEW MEXICO UTILITIES, INC. STANDARD DRAWINGS. NEW MEXICO UTILITIES INC STANDARDS SHALL SUPERCEDE THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION WHERE THE REQUIREMENTS ARE FOUND TO DIFFER.
7. THE EXISTING 16" WATERLINE MATERIAL TYPE IS NOT KNOWN. IN THE EVENT THAT THE LINE IS AC (ASBESTOS CEMENT), THEN THE TAPPING SLEEVE FURNISHED AND INSTALLED MUST HAVE A MINIMUM 36" WIDTH.

RECORD DRAWING

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

Jeffrey G. Mortensen, NMPE No. 8547 — Date 12-21-92

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

RECORD DRAWING

900755

AS BUILT INFORMATION
SUNDANCE MECHANICAL
AS BUILT BY: UMA DATE 10-91
AS NOTED BY: DKM DATE 3-92
AS BUILT UNDER DRAWINGS COMPILED BY: DKM DATE 3-92
MICRO-FILM INFORMATION
MF. NO. BY: DATE

BENCH MARKS
A STANDARD ACS ALUMINUM TABLET STAMPED "ACS BM, 5-B13" ON TOP OF CURB, LOCATED ON THE EAST SIDE OF IRVING BLVD. NW AT THE PC APPROXIMATELY 0.57 OF A MILE NNW OF COORS RD. NW.
ELEVATION: 5097.71 FEET (MSLD)

SURVEY INFORMATION
FIELD NOTES
NO. N/A BY JMA DATE 9/90

ENGINEER'S SEAL
JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER
7-15-91

AS-BUILT 3-92 DKM
REVISIONS
NO. DATE BY REMARKS
DESIGN
DESIGNED BY JGM/JPK DATE 06-1991
DRAWN BY MJT DATE 06-1991
CHECKED BY JGM DATE 06-1991

SCANNED BY BY LASON
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 4296.90 0059 2

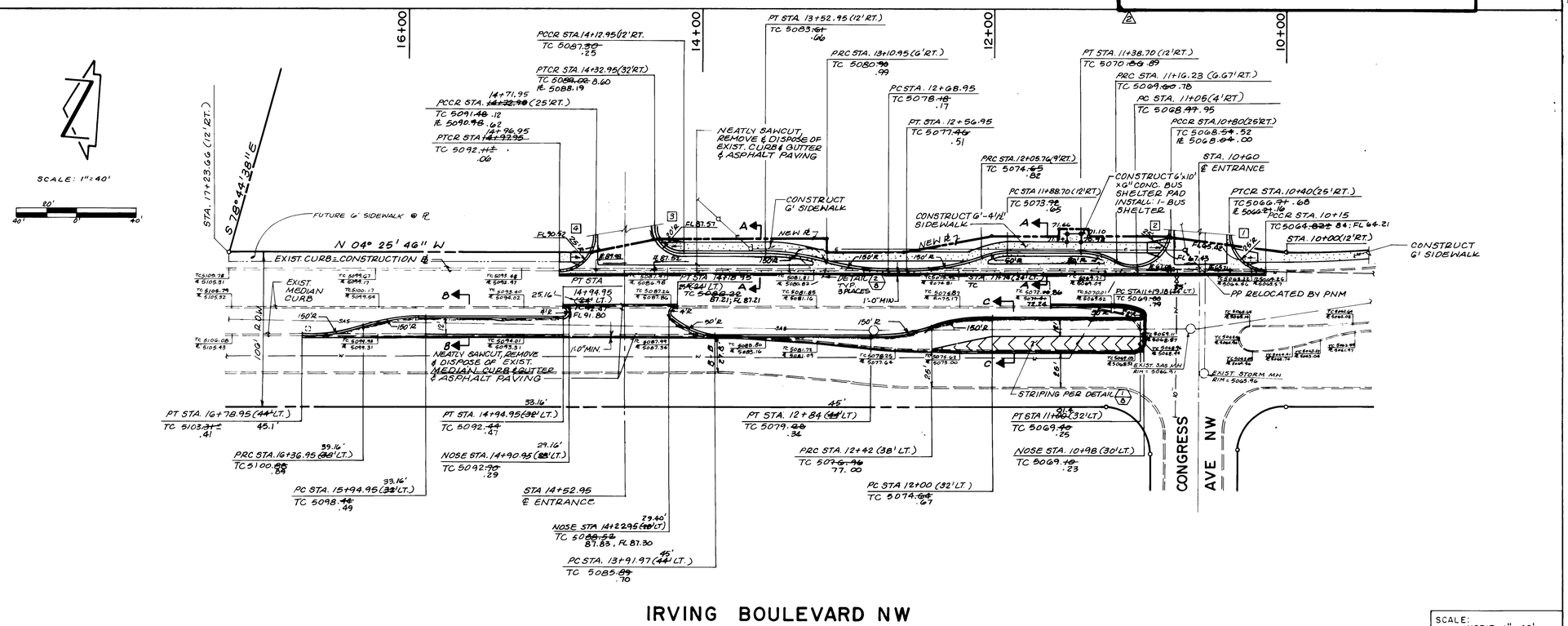
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE U.S. NEW MEXICO FEDERAL CREDIT UNION/IRVING BLVD. N.W. AND EAGLE RANCH RD. N.W. STREET IMPROVEMENTS
SITE PLAN

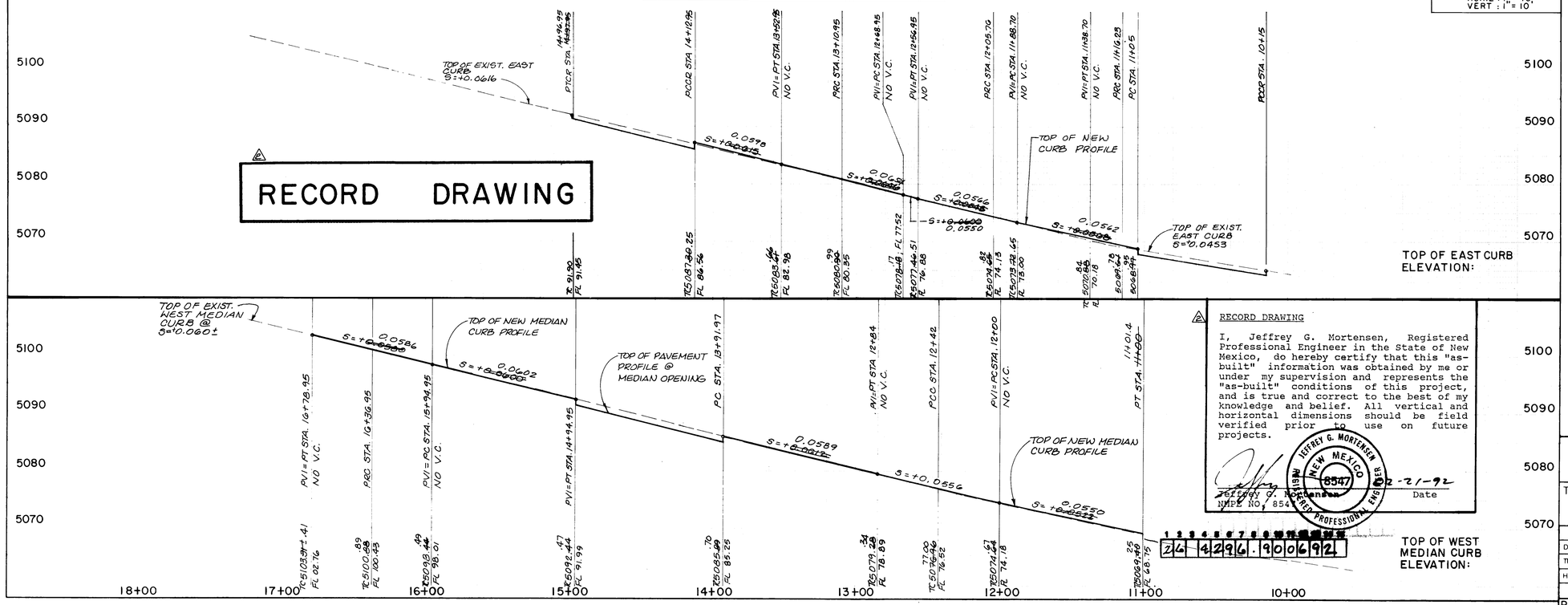
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN			WATER		7-22-91
TRANSPORTATION		7-25-91	WASTE WATER		"
HYDROLOGY		7-30-91	NMUI		7-17-91

PROJECT NO. 4296.90 | MAP NO. B-13 / C-13 | SHEET 5 OF 11

RECORD DRAWING



IRVING BOULEVARD NW



RECORD DRAWING

900755

RECORD DRAWING

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

Jeffrey G. Mortensen
NMPE NO. 8547

12-21-92
Date

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

STREET PAVING NOTES:

1. ALL SLOPES AS SHOWN ON PROFILES ARE BASED ON STREET CENTERLINE.
2. ALL DIMENSIONS OF CURB AND CURB RETURNS ARE SHOWN TO FACE OF CURB, UNLESS OTHERWISE NOTED.
3. WHERE REMOVAL OF EXISTING CURB AND GUTTER, SIDEWALK OR PAVEMENT IS REQUIRED, THE CONTRACTOR SHALL SAWCUT AND/OR REMOVE TO THE NEAREST JOINT. CURB AND GUTTER SHOWN AS EXISTING AND NOT TO BE REMOVED UNDER THIS CONTRACT WHICH IS DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
4. CONTRACTOR SHALL ADJUST TO GRADE ALL VALVE BOXES AND MANHOLES ENCOUNTERED WITHIN THE CONSTRUCTION LIMITS.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
6. ROADWAY GRADING IS INCIDENTAL TO SUBGRADE PREPARATION, THEREFORE NO SEPARATE PAYMENT WILL BE MADE.

SCANNED BY BY LASON

CURB RETURN ELEVATIONS

1	TC	℄
1	65.45	64.78
2	—	65.40
3	66.30	65.80

2	TC	℄
1	—	67.66
2	—	67.28
3	68.46	67.79

3	TC	℄
1	87.77	87.10
2	—	87.67
3	88.54	88.04

4	TC	℄
1	—	90.78
2	—	90.68
3	91.68	91.01

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
N/A	J.M.A.	9/90

BENCH MARKS
A STANDARD ACS ALUMINUM TABLET STAMPED "ACS BM, 5-B13" ON TOP OF CURB, LOCATED ON THE EAST SIDE OF IRVING BLVD. NW AT THE PC APPROXIMATELY 0.57 OF A MILE NNW OF COORS RD. NW.
ELEVATION: 5097.71 FEET (MSLD)

AS BUILT INFORMATION
CONTRACTOR SUNDANCE MECHANICAL

WORK INSPECTED BY	JMA	DATE 10-91
FINAL INSPECTORS ACCEPTANCE BY	DKM	DATE 3-92
FIELD VERIFICATION BY	DKM	DATE 3-92
DRAWINGS CORRECTED BY	DKM	DATE 3-92
RECORDED BY MICRO-FILM INFORMATION		DATE -
NO		

ENGINEER'S SEAL
JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER
07-15-91
06-17-91

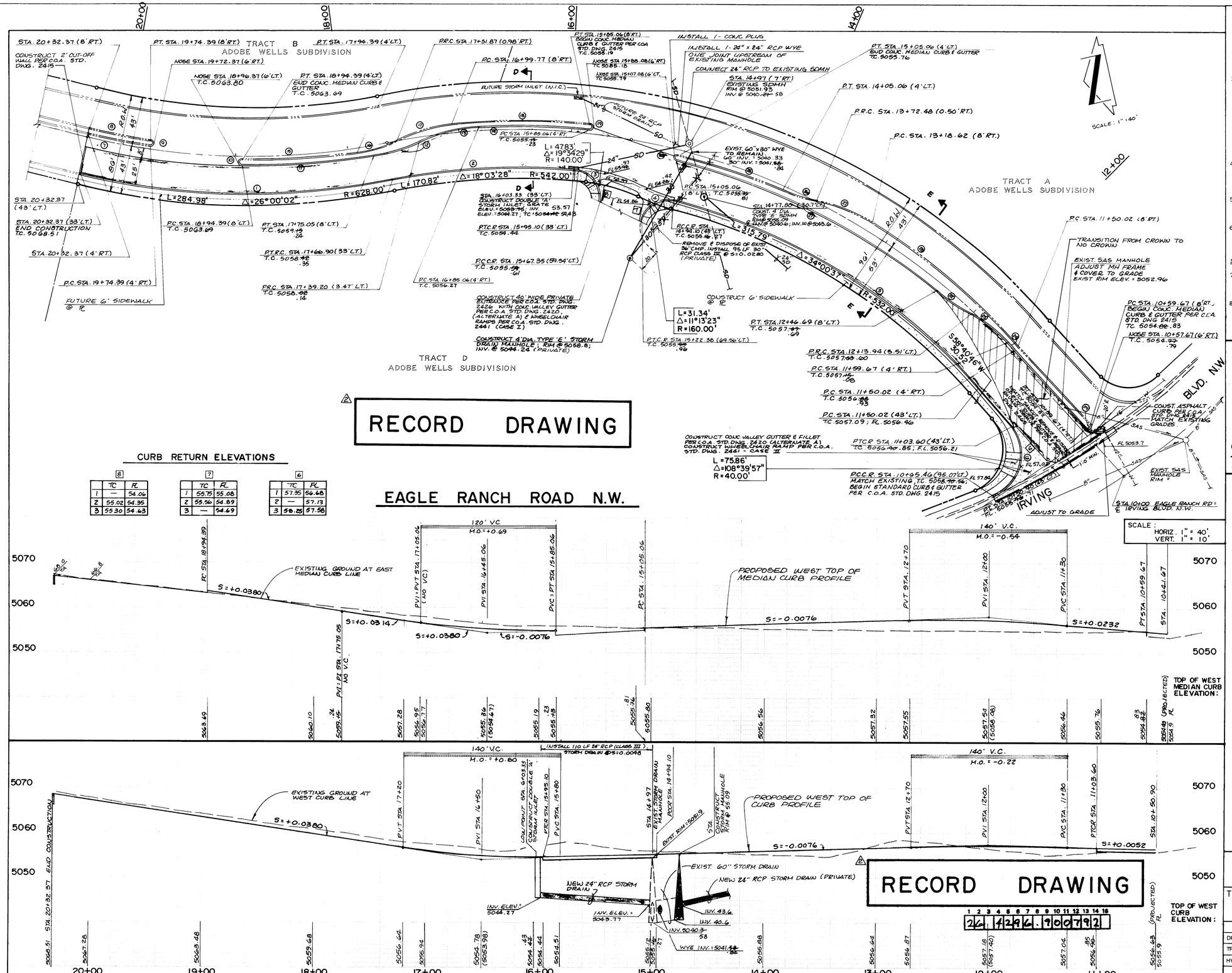
NO.	DATE	REMARKS	BY
		REVISIONS	DKM
		DESIGN	
3-92		AS - BUILT	
1	05-1991	DESIGNED BY JGM	
2	05-1991	DRAWN BY MJT	
3	05-1991	CHECKED BY JGM	

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: U.S. NEW MEXICO FEDERAL CREDIT UNION / IRVING BLVD. N.W. AND EAGLE RANCH RD. N.W. STREET IMPROVEMENTS
IRVING BOULEVARD N.W. STA. 11+00 TO STA. 16+78.95
PAVING AND DRAINAGE IMPROVEMENTS PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		7-31-91	WATER		7-22-91
TRANSPORTATION		7-29-91	WASTE WATER		"
HYDROLOGY		7-30-91	NMUI		7-19-91

PROJECT NO. 4296.90
MAP NO. B-13 / C-13
SHEET 6 OF 11



RECORD DRAWING

RECORD DRAWING

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
26 1 1296.90 0 7 9 2

STREET PAVING NOTES:

1. ALL SLOPES AS SHOWN ON PROFILES ARE BASED ON STREET CENTERLINE.
2. ALL DIMENSIONS OF CURB AND CURB RETURNS ARE SHOWN TO FACE OF CURB.
3. WHERE REMOVAL OF EXISTING CURB AND GUTTER, SIDEWALK OR PAVEMENT IS REQUIRED, THE CONTRACTOR SHALL SAWCUT AND/OR REMOVE TO THE NEAREST JOINT. CURB AND GUTTER SHOWN AS EXISTING AND NOT TO BE REMOVED UNDER THIS CONTRACT WHICH IS DAMAGED OR DISPLACED BY THE CONTRACTOR SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
4. CONTRACTOR SHALL ADJUST TO GRADE ALL VALVE BOXES AND MANHOLES ENCOUNTERED WITHIN THE CONSTRUCTION LIMITS.
5. BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE.
6. ROADWAY GRADING IS INCIDENTAL TO SUBGRADE PREPARATION, THEREFORE NO SEPARATE PAYMENT WILL BE MADE.

STORM DRAINAGE NOTES:

7. STATIONS AS SHOWN HEREON ARE BASED UPON CONSTRUCTION BASELINE (CENTERLINE OF RIGHT-OF-WAY).
8. SLOPES ARE CALCULATED BASED ON TRUE DISTANCES; LENGTH OF PIPE IS MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

RECORD DRAWING

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to design on future projects.

Jeffrey G. Mortensen 8-21-92
Jeffrey G. Mortensen, State of New Mexico No. 8547 — Date

NEW MEXICO REGISTERED PROFESSIONAL ENGINEER JEFFREY G. MORTENSEN 8547

CURB CURVE DATA

CURVE	DELTA	R	L
1	26°00'00"	618.00'	280.44'
2	16°49'37"	552.00'	162.12'
3	94°53'54"	25.00'	41.41'
4	94°59'36"	25.00'	41.45'
5	33°42'03"	542.00'	318.79'
6	107°34'48"	40.00'	75.11'
7	5°40'43"	581.00'	57.58'
8	5°40'43"	577.00'	57.19'
9	180°00'00"	2.00'	6.29'
10	180°00'00"	2.00'	6.28'
11	11°41'19"	593.00'	120.97'
12	13°36'40"	150.00'	36.07'
13	20°59'41"	150.00'	54.96'
14	9°47'39"	589.00'	100.68'
15	9°47'39"	589.00'	100.68'
16	16°26'59"	150.00'	43.07'
17	20°19'54"	150.00'	53.23'
18	11°14'06"	593.00'	116.28'
19	180°00'00"	2.00'	6.28'
20	180°00'00"	2.00'	6.29'
21	25°18'22"	577.00'	254.85'
22	12°31'32"	150.00'	32.79'
23	21°02'56"	150.00'	55.11'
24	0°56'43"	589.00'	9.72'
25	9°47'39"	581.00'	99.32'
26	12°33'26"	150.00'	32.87'
27	21°01'25"	150.00'	55.04'
28	16°30'49"	593.00'	170.91'
29	180°00'00"	2.00'	6.28'

AS BUILT INFORMATION
CONTRACTOR: SUNDANCE MECHANICAL
WORK COMPLETED BY: JMA — DATE 10-91
INSPECTORS FIELD ACCEPTANCE BY: DKM — DATE 3-92
VERIFICATION BY: DKM — DATE 3-92
CORRECTED BY: DKM — DATE 3-92
MICRO-FILM INFORMATION
RECORDED BY: — DATE
NO.

BENCH MARKS
A STANDARD ACS ALUMINUM TABLET STAMPED "ACS BM, 5-813" ON TOP OF CURB. LOCATED ON THE EAST SIDE OF IRVING BLVD. NW AT THE PC APPROXIMATELY 0.57 OF A MILE NNW OF COORS RD. N.W.
ELEVATION: 5097.71 FEET (MSLD)

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE
1 JMA 9/90

ENGINEER'S SEAL
JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER
07-15-91
08-17-91

REVISIONS
NO. DATE REMARKS BY
1 3-92 AS-BUILT DKM
DESIGN
DESIGNED BY JPK — DATE 06-1991
DRAWN BY SGH — DATE 06-1991
CHECKED BY JGM — DATE 06-1991

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

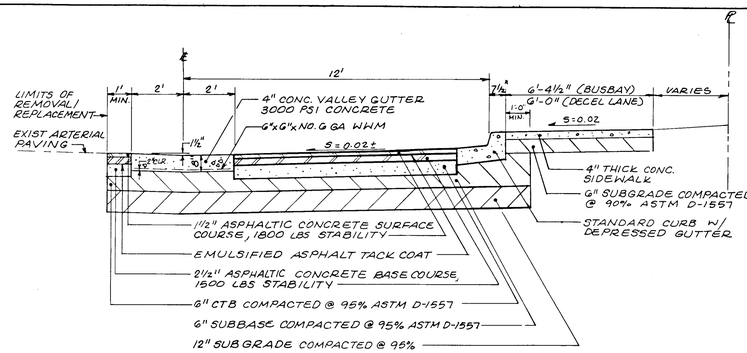
TITLE: U.S. NEW MEXICO FEDERAL CREDIT UNION/IRVING BLVD. N.W. AND EAGLE RANCH RD. N.W. STREET IMPROVEMENTS
EAGLE RANCH ROAD N.W. STA. 10+00 TO STA. 20+32.37
PAVING AND DRAINAGE IMPROVEMENTS PLAN & PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		7-31-91	WATER		7-22-91
TRANSPORTATION		7-25-91	WASTE WATER		"
HYDROLOGY		7-30-91	NMUI		7-19-91

PROJECT NO. 4296.90
MAP NO. B-13/C-13
SHEET 7 OF 11

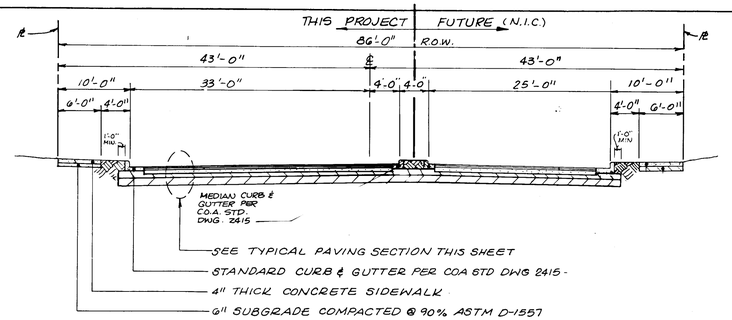
900755

SCANNED BY BY LASON



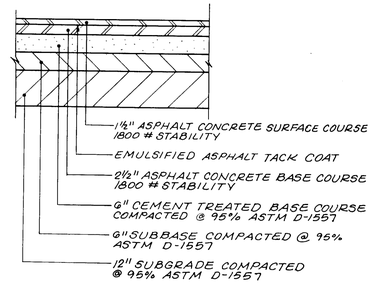
SECTION A-A

N.T.S.



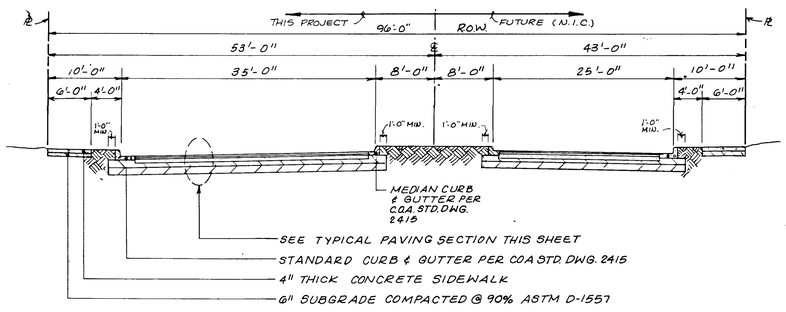
SECTION D-D

SCALE: 1"=10'-0"



TYPICAL PAVING SECTION

SCALE: 1"=2'-0"



SECTION E-E

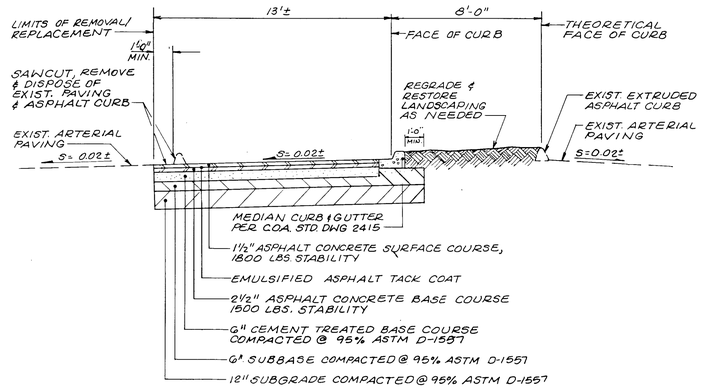
SCALE: 1"=10'-0"

RECORD DRAWING

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be first verified prior to use on future projects.

JEFFREY G. MORTENSEN REGISTERED PROFESSIONAL ENGINEER NEW MEXICO 8547

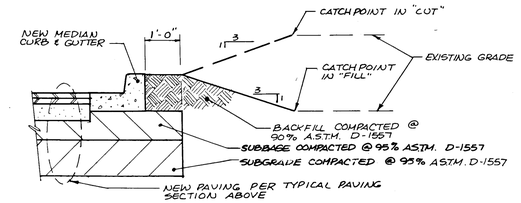
Jeffrey G. Mortensen — Date 9-21-92
NMPE NO. 8547



SECTION B-B

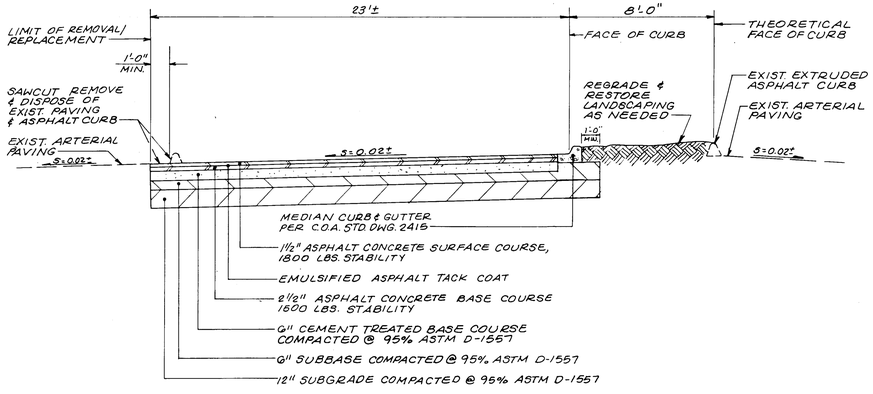
SCALE: 1"=4'

RECORD DRAWING



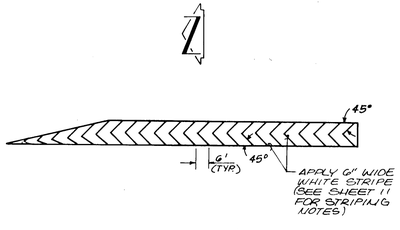
TYPICAL MEDIAN CURB SECTION (EAGLE RANCH ROAD)

SCALE: 1"=2'



SECTION C-C

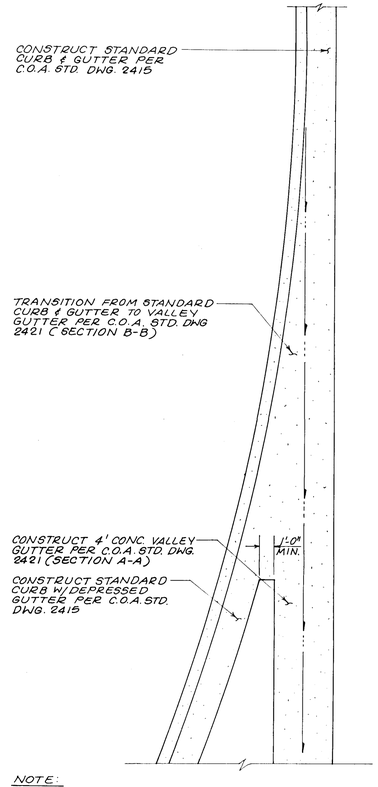
SCALE: 1"=4'



STRIPING DETAIL

SCALE: 1"=30'

1



NOTE:
REVERSE DETAIL @ NORTH END OF BUSBAY

DETAIL

SCALE: 1"=5'

2

900755

SURVEY INFORMATION

FIELD NOTES

NO.	BY	DATE
N/A	JMA	9/90

BENCH MARKS

A STANDARD ACS ALUMINUM TABLET STAMPED "ACS BM, 5-B13" ON TOP OF CURB, LOCATED ON THE EAST SIDE OF IRVING BLVD. NW AT THE PC APPROXIMATELY 0.57 OF A MILE NNW OF COORS RD. NW.
ELEVATION 5097.71 FEET (MSLD)

AS BUILT INFORMATION

CONTRACTOR: SUNDANCE MECHANICAL — DATE 10-91
WORK STAKED BY: JMA — DATE 3-92
FIELD CHECKS: ACCEPTANCE BY: DKM — DATE 3-92
FIELD LOCATION BY: DKM — DATE 3-92
DRAWINGS CORRECTED BY: DKM — DATE 3-92
MICRO-FILM INFORMATION
RECORDED BY — DATE
NO

ENGINEER'S SEAL

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER
07-15-91
9-17-91

NO.	DATE	REMARKS	BY
		AS-BUILT	DKM
3-92		REVISIONS	
		DESIGN	DATE 05-1991
			DATE 05-1991
			DATE 05-1991
		DESIGNED BY	VSF
		DRAWN BY	MJT
		CHECKED BY	JGM

SCANNED BY BY LASON

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 4296.900892

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: U.S. NEW MEXICO FEDERAL CREDIT UNION / IRVING BLVD. N.W. AND EAGLE RANCH RD. N.W. STREET IMPROVEMENTS
SECTIONS & DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		7-15-91	WATER		7-22-91
TRANSPORTATION		7-25-91	WASTE WATER		"
HYDROLOGY		7-30-91	NMUI		7-19-91

PROJECT NO. 4296.90
MAP NO. B-13/C-13
SHEET 8 OF 11

RECORD DRAWING

STA 20+32.37

PRC STA. 17+66.90

STA. 16+88.00 (3.3' LT.)
CONSTRUCT MH # 2

STA. 13+87
CONSTRUCT MH # 1

STA. 13+77
INSTALL :
1-6" SAS SERVICE

STA. 11+50.02
BEGIN CURVILINEAR SANITARY SEWER LINE

STA. 10+87
CONNECT TO EXIST. M.H.
RECONSTRUCT INVERT OF MANHOLE

STA. 10+00 =
℄ IRVING BLVD. N.W.

Δ = 42°42'46" R = 305.00'
L = 436.11'

STA. 20+32.37 (14' LT.)
INSTALL :
1-8"x8"x6" TEE & CONC. BLKG.
1-6" GATE VALVE
1-TYPE 'A' VALVE BOX

STA. 20+32.37 (35.1' LT.)
INSTALL :
1-FIRE HYDRANT (4½" BURY)
1-3'x3'x6" CONC. PAD
FLANGE ELEV. = ~~5069.0~~ 5068.98

INSTALL 6" SAS SERVICE

INV. @ P. = 5051.5

PRC STA. 17+66.90 (14' LT.)

STA. 20+42.37 (14' LT.)
INSTALL :
1-8" CAP & CONC. BLKG.
END WATERLINE

TRACT D
ADOBE WELLS SUBDIVISION

STA. 15+14 (14' LT.)
INSTALL :
1-8" GATE VALVE
1-TYPE 'A' VALVE BOX

STORM DRAIN MANHOLE
RIM @ 5058.~~0~~ .08
INV. @ 5044.~~24~~.40

STA. 14+94.10 (45.1' LT.)
INSTALL :
1-FIRE HYDRANT (4½" BURY)
1-3'x3'x6" CONC. PAD
FLANGE ELEV. = 5055.~~0~~.56

STA. 14+94.10 (14' LT.)
INSTALL :
1-8"x8"x6" TEE &
CONC. BLOCKING
1-6" GATE VALVE
1-TYPE 'A' VALVE BOX

WYE INV. @ 41.84

STORM DRAIN MANHOLE
RIM @ 5055.09
INV. @ 5040.6
INV. (IN) @ 5043.6

INV. @ P. = 5050.0

STA. 11+50.02 (14' LT.)
BEGIN CURVILINEAR WATERLINE

STA. 10+45 (14' LT.)
1-PRESSURE CONNECTION
INSTALL :
1-16"x16"x8" TAPPING SLEEVE
1-8" TAPPING GATE VALVE
1-TYPE 'A' VALVE BOX
CONC. BLOCKING.

SCALE: HORIZ. 1" = 40'
VERT. 1" = 10'

EAGLE RANCH ROAD N.W.

INSTALL 300 LF 8" SAS @ S=0.0066

INSTALL 300 LF 8" SAS @ S=0.0132

EXISTING GROUND ℄

NEW WEST CURB PROFILE

NEW 8" PVC (C900) WATERLINE

INV. = 5062.2

INV. = 5054.6

INV. = 5050.8

INV. (SERVICE IN) = 48.0

INV. (OUT) = 5047.~~82~~.33

INV. = 5048.0

60" RCP STORM DRAIN
INV. @ ℄ 5040.3
(FIELD VERIFY)

INV. = 5048.0

INV. (IN) = ~~5048.64~~

INV. (OUT) = ~~5048.84~~

℄ INV. = 45.95

NEW 8" PVC (SDR 35) SANITARY SEWER LINE

INV. = 5048.0

8" INV. (IN) = ~~5041.63~~

EXIST. INV. = ~~5041.4~~

℄ INV. = 5041.50

8" INV. (IN) = 5048.00

STA. 20+42.37
℄ INV. = 5064.05

STA. 20+32.37
8"x6" TEE
INV. = 5068.4

STA. 16+87.00
CONSTRUCT MANHOLE # 2

STA. 15+00
8" GATE VALVE
INV. = 5048.00

STA. 14+94.10
INV. = 5048.00

STA. 13+87
CONSTRUCT MANHOLE # 1
INV. = 5048.43
45.95

STA. 10+87
EXISTING MANHOLE

16" WATERLINE
INV. = 5047.7
(FIELD VERIFY)

5080 5070 5060 5050 5040 5030 5020

20+00 19+00 18+00 17+00 16+00 15+00 14+00 13+00 12+00 11+00

RECORD DRAWING

RECORD DRAWING

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Jeffrey G. Mortensen
NMPE NO. 8547

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

6-21-92
Date

900755

WATER EXTENSION NOTES:

1. WATERLINE STATIONING IS BASED UPON STREET CENTERLINE WHERE THE WATERLINE PARALLELS SAID CENTERLINE, UNLESS INDICATED OTHERWISE.
2. ALL WATERLINE SHALL BE PVC (C-900) UNLESS OTHERWISE APPROVED BY NEW MEXICO UTILITIES, INC.
3. WHERE WATER AND SANITARY SEWER LINES CROSS, THE SANITARY SEWER LINE SHALL BE CONCRETE ENCASED FOR A DISTANCE OF 10 FEET EACH SIDE OF THE CROSSING IF 18 INCHES OF VERTICAL SEPARATION DOES NOT EXIST.
4. ELECTRONIC MARKER DISKS (EMD'S) SHALL BE PLACED ABOVE ALL FITTINGS IN ACCORDANCE WITH SECTION 170 OF THE "STANDARD SPECIFICATIONS".
5. IN ACCORDANCE WITH SECTION 801 OF THE "STANDARD SPECIFICATIONS", METALIZED DETECTABLE WARNING TAPE SHALL BE INSTALLED 18 INCHES ABOVE ALL PVC PIPE INSTALLED ON THIS PROJECT.
6. REFER TO NEW MEXICO UTILITIES, INC. STANDARD DRAWINGS. NEW MEXICO UTILITIES INC STANDARDS SHALL SUPERCEDE THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION WHERE THE REQUIREMENTS ARE FOUND TO DIFFER.
7. THE EXISTING 16" WATERLINE MATERIAL TYPE IS NOT KNOWN. IN THE EVENT THAT THE LINE IS AC (ASBESTOS CEMENT), THEN THE TAPPING SLEEVE FURNISHED AND INSTALLED MUST HAVE A MINIMUM 36" WIDTH.

SANITARY SEWER EXTENSION NOTES:

8. ALL STATIONING IS BASED ON STREET CENTERLINE UNLESS INDICATED OTHERWISE.
9. ALL SEWER PIPE SHALL BE PVC (SDR 35).
10. SLOPES SHOWN ON THE PROFILES ARE BASED ON TRUE DISTANCES.
11. ALL MANHOLES SHALL BE FOUR-FOOT DIAMETER TYPE 'E' AS PER CITY OF ALBUQUERQUE STANDARD DRAWING 2102 UNLESS OTHERWISE NOTED.
12. SEWER SERVICE LATERALS SHALL BE PROVIDED WITH ELECTRONIC MARKER DISKS AS PER CITY OF ALBUQUERQUE STANDARD DRAWING 2125. EMD SHALL BE PROVIDED IN ACCORDANCE WITH THE STANDARD SPECIFICATION.
13. WHERE CONCRETE ENCASED SAS IS SPECIFIED, CONTRACTOR MAY SUBSTITUTE PRESSURE CLASS PIPE EXTENDING MANHOLE TO MANHOLE.

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
N/A	JMA	9/90

BENCH MARKS
A STANDARD ACS ALUMINUM TABLET STAMPED "ACS BM, 5-B13" ON TOP OF CURB, LOCATED ON THE EAST SIDE OF IRVING BLVD. NW AT THE PC APPROXIMATELY 0.57 OF A MILE NNW OF COORS RD. NW.
ELEVATION: 5097.71 FEET (MSLD)

AS BUILT INFORMATION
CONTRACTOR SUNDANCE MECHANICAL
WORK BY: JMA DATE 10-91
INSPECTORS
ACCEPTANCE BY: DKM DATE 3-92
FIELD LOCATION BY: DKM DATE 3-92
DRAWINGS CORRECTED BY: DKM DATE 3-92

MICRO-FILM INFORMATION
RECORDED BY
DATE
NO

ENGINEER'S SEAL
JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER
07-15-92
10-17-91

AS-BUILT

NO.	DATE	REMARKS
3	3-92	REVISIONS
		DESIGN

DESIGNED BY JPK DATE 06-1991
DRAWN BY SGH DATE 06-1991
CHECKED BY JGM DATE 06-1991

SCANNED BY BY LASON

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
2 6 4 2 9 6 . 9 0 0 9 9 2

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

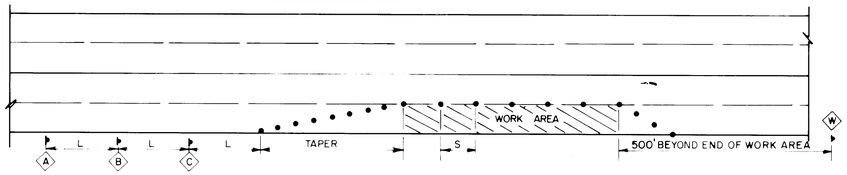
TITLE: U.S. NEW MEXICO FEDERAL CREDIT UNION/IRVING BLVD. N.W. AND EAGLE RANCH RD N.W. STREET IMPROVEMENTS
EAGLE RANCH ROAD N.W. STA 10+45 TO STA 20+42.37
WATER & SANITARY SEWER IMPROVEMENTS PLAN & PROFILE

APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		7-31-91
TRANSPORTATION		7-25-91
HYDROLOGY		7-30-91

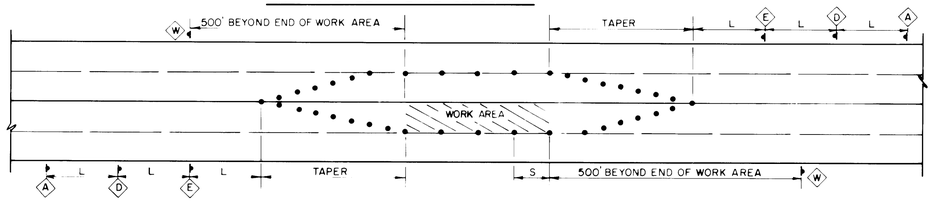
APPROVALS	ENGINEER	DATE
WATER		7-29-91
WASTE WATER		"
NMUI		7/19/91

PROJECT NO. 4296.90
MAP NO. B-13/C-13
SHEET 9 OF 11

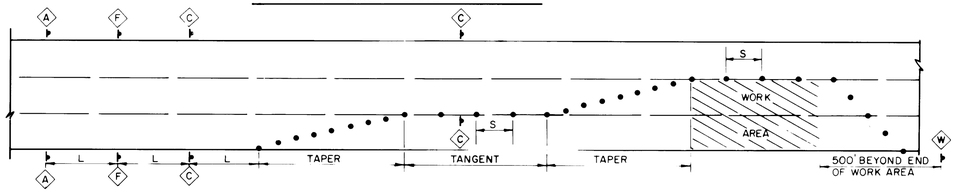
TYPICAL RIGHT LANE CLOSURE



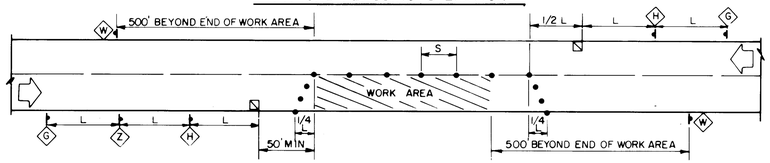
TYPICAL LEFT LANE CLOSURE



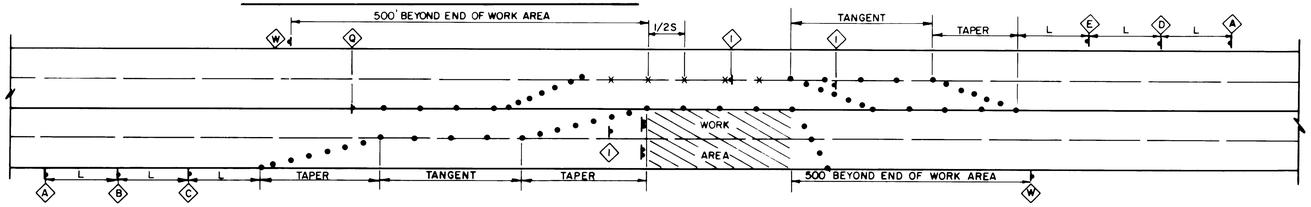
TYPICAL MULTI-LANE CLOSURE



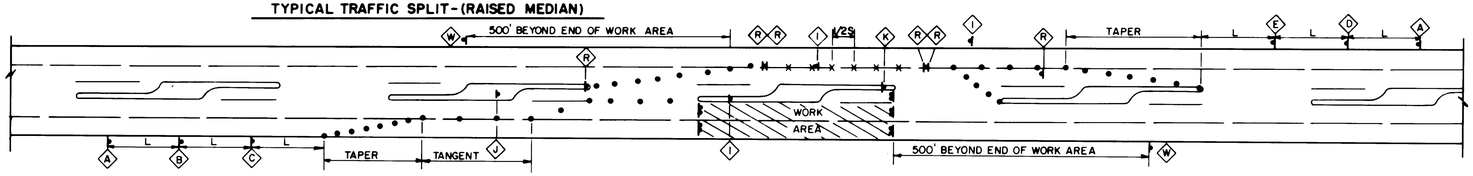
TYPICAL FLAGGING OPERATION



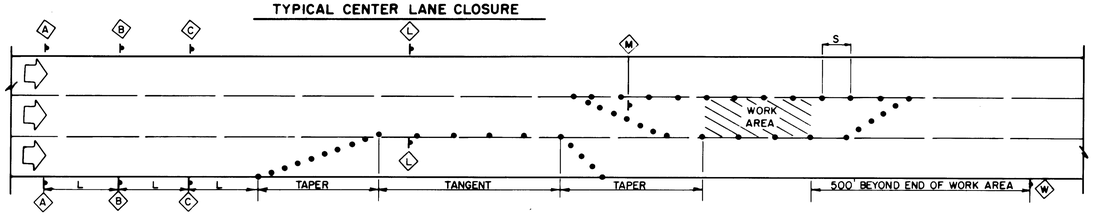
TYPICAL TRAFFIC SPLIT-(PAINTED MEDIAN)

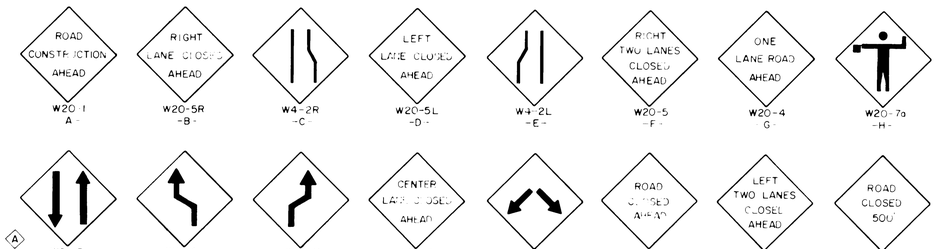


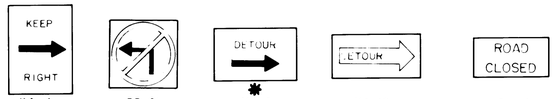
TYPICAL TRAFFIC SPLIT-(RAISED MEDIAN)



TYPICAL CENTER LANE CLOSURE

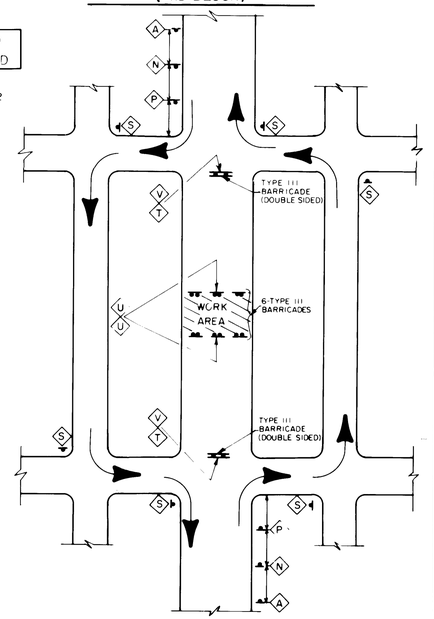




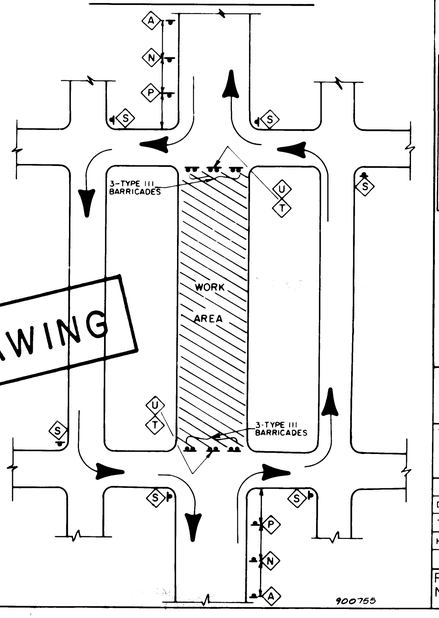


✱NOTE: ARROW DIRECTION TO BE ADJUSTED AS NEEDED.

TYPICAL STREET CLOSURE (MID BLOCK)



TYPICAL STREET CLOSURE



900755

RECORD DRAWING

LEGEND

- WORK AREA
- TRAFFIC SIGN & QUANTITY (See this sheet for designation)
- BARRICADE - TYPE I, TYPE II, OR BARREL
- BARRICADE - TYPE III
- VERTICAL PANEL
- WARNING SIGN
- L — DISTANCE BETWEEN SIGNS - A DISTANCE MEASURED IN FEET EQUAL TO A VALUE OF TEN TIMES THE SPEED LIMIT OF THE STREET
- FLAGMAN POSITION
- S — SPACING BETWEEN BARRICADES - A DISTANCE MEASURED IN FEET EQUAL TO THE SPEED OF THE STREET

TAPER LENGTH — SEE CHART BELOW

TANGENT LENGTH - IS EQUAL TO THE TAPER LENGTH FOR A GIVEN STREET

NOTES

ALL ADVANCE WARNING SIGNS ARE TO BE DOUBLE INDICATED WHENEVER MEDIANS ARE PRESENT.

TRANSFORMATION FROM EXISTING SIGNALS TO SPAN WIRE IS TO OCCUR AT OFF PEAK HOURS.

TAPER REQUIREMENTS

SPEED LIMIT (MPH)	TAPER LENGTH (FEET) 10' LANE	11' LANE	12' LANE	MAXIMUM DISTANCE BETWEEN DEVICES (FEET)	MINIMUM NUMBER OF DEVICES REQUIRED
25	104	115	125	25	6
30	150	165	185	30	7
35	204	225	245	35	8
40	267	293	320	40	9
45	450	495	540	45	13
50	500	550	600	50	13
55	550	605	660	55	13

SCANNED BY BY LASON

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
2 6 4 2 9 6 . 9 0 1 0 9 2

AS BUILT INFORMATION
SUNDANCE MECHANICAL
JMA 10-91
DKM DATE 3-92
DKM DATE 3-92
DKM DATE 3-92
MICRO-FILM INFORMATION
DATE

BENCH MARKS
A STANDARD ACS ALUMINUM TABLET STAMPED "ACS BM, 5-B13" ON TOP OF CURB, LOCATED ON THE EAST SIDE OF IRVING BLVD. NW AT THE PC APPROXIMATELY 0.57 OF A MILE NNW OF COORS RD. NW.
ELEVATION: 5097.71 FEET (MSLD)

SURVEY INFORMATION
FIELD NOTES
NO. BY DATE
N/A

SEAL
ENGINEER'S SEAL

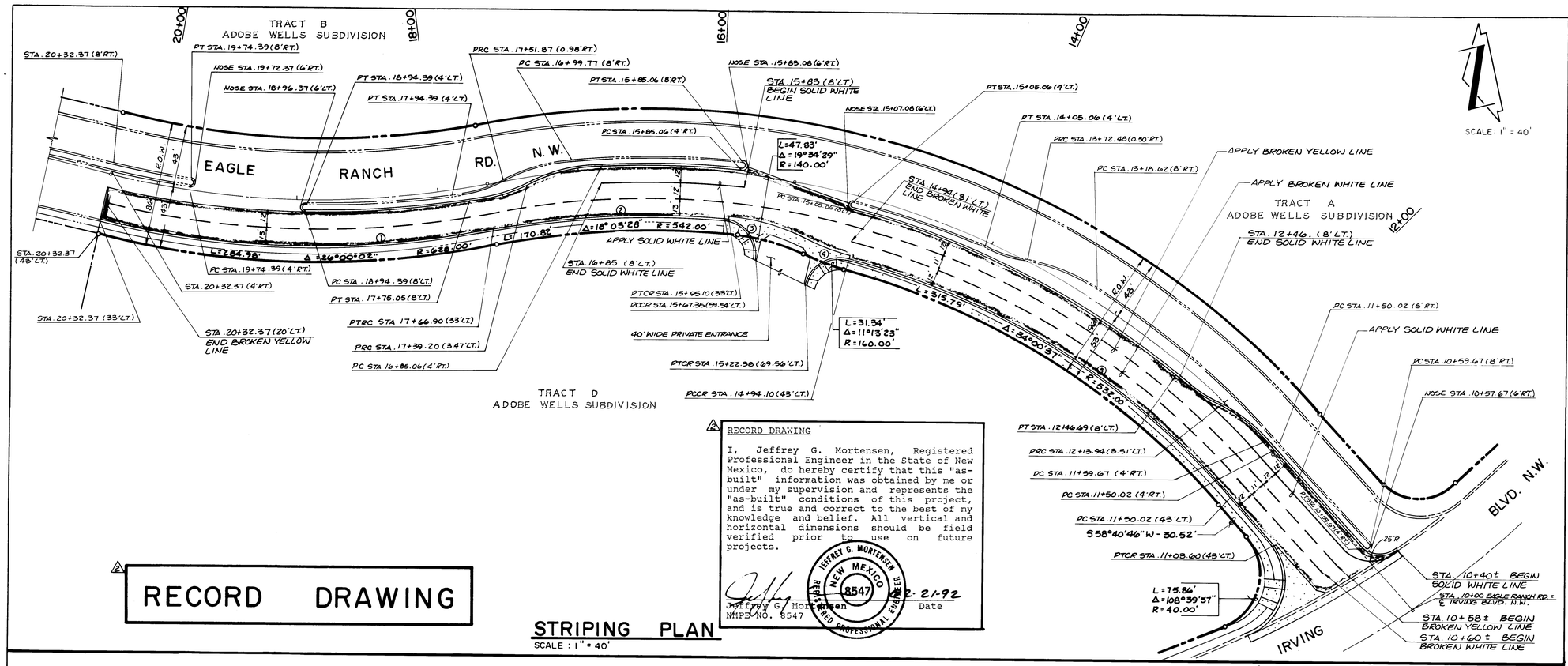
NO.	DATE	REVISIONS	BY
3-92		AS-BUILT	DKM
		DESIGN	DATE
		DESIGNED BY C.O.A.	DATE
		DRAWN BY C.O.A.	DATE
		CHECKED BY C.O.A.	DATE

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: U.S. NEW MEXICO FEDERAL CREDIT UNION / IRVING BLVD. N.W. AND EAGLE RANCH RD. N.W. STREET IMPROVEMENTS
TRAFFIC CONTROL DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. CHAIRMAN			WATER		7-22-91
TRANSPORTATION		7-25-91	WASTE WATER		-
HYDROLOGY		7-30-91	NMUI		7-19-91

PROJECT NO. 4296.90 | MAP NO. B-13 / C-13 | SHEET 10 OF 11



RECORD DRAWING

I, Jeffrey G. Mortensen, Registered Professional Engineer in the State of New Mexico, do hereby certify that this "as-built" information was obtained by me or under my supervision and represents the "as-built" conditions of this project, and is true and correct to the best of my knowledge and belief. All vertical and horizontal dimensions should be field verified prior to use on future projects.

Jeffrey G. Mortensen — Date 12-21-92
NMPE NO. 8547

JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER

RECORD DRAWING

STRIPING PLAN
SCALE: 1" = 40'

STRIPING NOTES:

1. CURB AND STRIPING STATIONING BASED UPON STREET CENTERLINE STATIONS.
2. PAVEMENT MARKINGS SHALL BE PLASTIC AND MAY EITHER BE THERMAL OR COLD-APPLIED.

CURB CURVE DATA

CURVE	DELTA	R	L
①	26°00'00"	618.00'	280.44'
2	16°49'37"	552.00'	162.12'
3	94°53'54"	25.00'	41.41'
4	94°59'36"	25.00'	41.45'
⑤	33°42'03"	542.00'	318.79'

VEGETATION FOR EROSION CONTROL

All areas disturbed by grading and/or other construction activity shall be seeded for erosion control immediately following the completion of rough grading and subsequent disturbance. The following specifications shall apply.

1. SEED RATE:

Species	Pure Live Seed (lbs/acre)*
Annual Rye Grass	8.0
Giant Dropseed	2.0
Sand Dropseed	1.0
Indian Ricegrass	4.0
Sideoats Grama	6.0
TOTAL:	21.0

* Rates apply to drilled seed. Double rates listed if seed is broadcast.

2. SEED APPLICATION:

a. Flat areas - cultivate area to produce an acceptable, friable seed bed, then drill seed to a depth of 1/4 to 1/2 inches.

b. Slopes 3:1 or greater - hand broadcast and cultivate into top 1/4 to 1/2 inch of soil.

3. FERTILIZER:

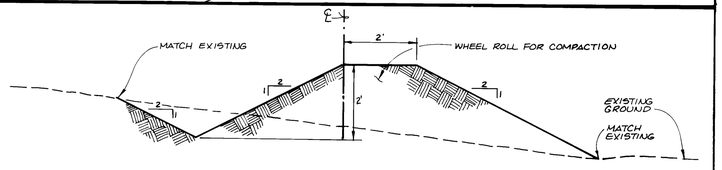
16-20-0 @ 200 lbs. per acre applied simultaneously with seed.

4. MULCH:

5,000 lbs. hay mulch per acre. Hay mulch shall be crimped into the soil so as not to exceed 2 inches in depth.

5. WATERING SCHEDULE:

CONTRACTOR shall maintain a wet seed bed for a period of at least 6 weeks following seeding.



TYPICAL WINDROW SECTION
SCALE: 1" = 2'
NOT USED

EROSION CONTROL PLAN
SCALE: 1" = 40'

RECORD DRAWING

SCANNED BY BY LASON 900755

SURVEY INFORMATION
FIELD NOTES

NO.	BY	DATE
N/A	J.MA	9/90

BENCH MARKS
A STANDARD ACS ALUMINUM TABLET STAMPED "ACS BM. 5-B13" ON TOP OF CURB. LOCATED ON THE EAST SIDE OF IRVING BLVD. NW AT THE PC APPROXIMATELY 0.57 OF A MILE NNW OF COORS ROAD N.W.
ELEVATION = 5097.71 FEET (M.S.L.D.)

AS BUILT INFORMATION
CONTRACTOR SUNDANCE MECHANICAL
WORK STAKED BY JMA DATE 10-91
INSPECTORS
ACCEPTANCE BY DKM DATE 3-92
FIELD VERIFICATION BY DKM DATE 3-92
DRAWINGS CORRECTED BY DKM DATE 3-92
MICRO-FILM INFORMATION
RECORDED BY
DATE
NO

ENGINEER'S SEAL
JEFFREY G. MORTENSEN NEW MEXICO 8547 REGISTERED PROFESSIONAL ENGINEER
07-15-91
08-06-91

NO.	DATE	REMARKS	BY
1	8/1/91	100 WINDROWS & SEDIMENTATION POND	JPK
2	3-92	AS-BUILT	DKM

REVISIONS
DESIGN
DESIGNED BY JGM DATE 07-1991
DRAWN BY SGH DATE 07-1991
CHECKED BY JGM DATE 07-1991

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING GROUP

TITLE: U.S. NEW MEXICO FEDERAL CREDIT UNION/IRVING BLVD. N.W. AND EAGLE RANCH RD. N.W. STREET IMPROVEMENTS
EAGLE RANCH ROAD N.W. STA. 10+00 TO STA. 20+32.37
STRIPING AND EROSION CONTROL PLANS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
DRC CHAIRMAN		7-31-91	WATER		7-22-91
TRANSPORTATION		7-25-91	WASTE WATER		"
HYDROLOGY		7-30-91	NMUI		8-19-91

PROJECT NO. 4296.90
MAP NO. B13/C13
SHEET 11 OF 11