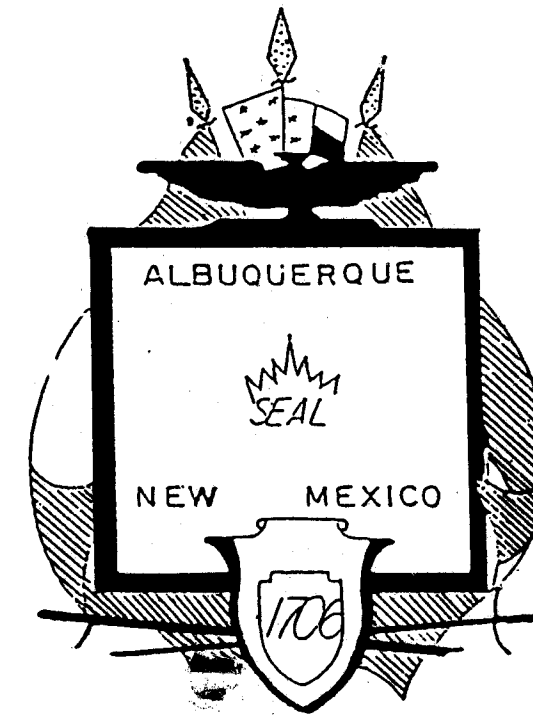




CITY OF ALBUQUERQUE, NEW MEXICO
CONSTRUCTION PLANS FOR

SPECIAL ASSESSMENT DISTRICT NO. 215

UNSER BOULEVARD
FROM LADERA DRIVE TO OURAY ROAD
AND 98TH. STREET FROM UNSER WEST
FOR

CITY OF ALBUQUERQUE - PUBLIC WORKS DEPT.

JANUARY 1987

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NO. TITLE

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- 7 UNSER BLVD. - STA. 16+00 TO 28+00 ROAD PAVING
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- 14 98th STREET INTERSECTION - 20 SCALE
- 15 OURAY INTERSECTION - 20 SCALE

NO. TITLE

- 16 OLD OURAY - 20 SCALE
- 17 UNSER SANITARY SEWER STA. 8+01.91 TO 16+00
- 18 UNSER SANITARY SEWER STA. STA. 16+00 TO 28+00
- 19 UNSER SANITARY SEWER STA. 28+00 TO 40+00
- 20 UNSER BLVD. STORM SEWER STA. 8+01.91 TO 16+00
- 21 UNSER BLVD. STORM SEWER STA. 16+00 TO 28+00
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PREPARED BY

GREINER ENGINEERING

These record drawings have been prepared/revised based upon information furnished by Greiner Inc. during construction survey, Greiner Inc. during field inspections, and the Contractor. While this information is believed to be reliable, Greiner Inc. cannot assure its accuracy. Those relying on these record drawings are advised to obtain verification of its accuracy before applying it for any purpose.

Greiner Inc.
D. L. Morehead, P.E.
Date 6-20-87

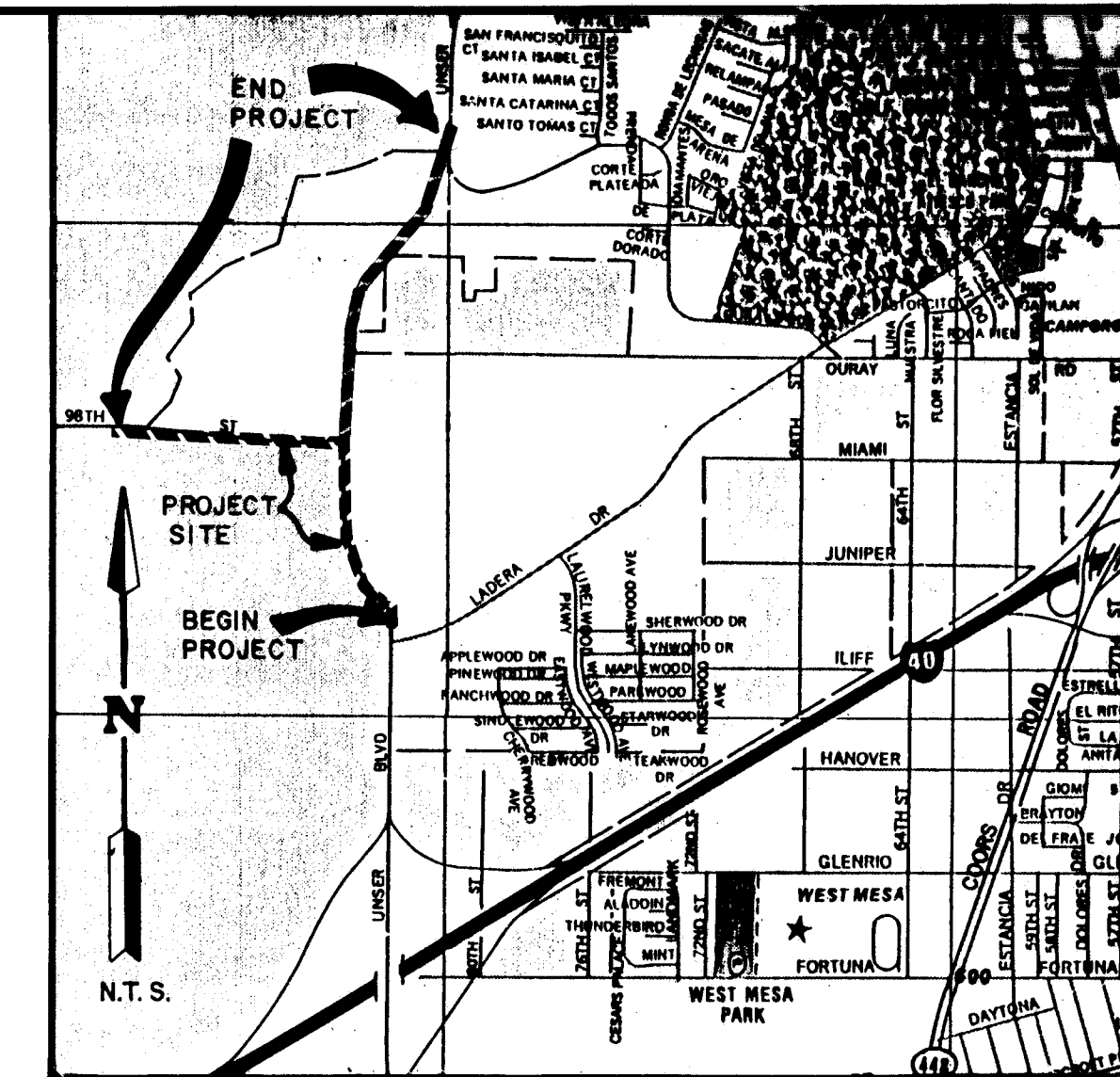
APPROVAL OF AS BUILT DRAWINGS
CHIEF CONSTRUCTION ENGINEER
Date 4/24/87

PREPARED BY:

REYNALDO A. CORTEZ RE. NO. 1-B-87
DATE

PREPARED UNDER THE SUPERVISION OF:

CARL A. TEBBENS
VICE PRESIDENT
DATE 1-8-87



VICINITY MAP
ZONE ATLAS G & H 9

GENERAL NOTES

1. City of Albuquerque Interim Standard Specifications Public Works Construction, 1985, and any revisions and additions in the Supplemental Specifications in the Contract Documents, shall govern the construction of this project.
2. The Contractor shall notify all utility companies when working near their systems. Two days prior to any excavation, Contractor must contact Line Locating Service, 765-1234, for location of existing utilities.
3. Prior to construction, the Contractor shall excavate and verify the horizontal and vertical locations of all obstructions. Should a conflict exist, the Contractor shall notify the Engineer so that the conflict can be resolved with minimum amount of delay.
4. All existing utilities shown here were taken as accurately as possible from record drawings and surface indications. It shall be the Contractor's responsibility to protect, maintain in service, and verify exact locations of all affected utilities during construction of this project.
5. Curb return radii and street widths are to the face of the curb unless otherwise indicated in the plans.
6. Where removal of existing curb and gutter or sidewalk is required, removal shall be to the nearest joint or saw cut.
7. When matching new paving to existing pavement, the Contractor shall saw cut the existing paving on a right angle, or as directed by the Engineer to remove any broken, raveled, or cracked paving. The cost of this work shall be considered incidental to other items of work.
8. Curb and gutter shown as existing and not to be removed under this contract which is damaged or displaced by the Contractor or his subcontractors, shall be replaced by the Contractor at his expense.
9. Existing materials to be removed and paid for on a unit basis shall be measured and the quantities approved by the Engineer before removal.
10. The Contractor will be responsible to replace at his expense any and all property corners destroyed in the process of construction. All property corners must be set by a Registered Land Surveyor. Records of any such surveys shall be given to the Engineer.
11. The Contractor will be required to confine his work within the construction limits and/or right-of-way to preserve existing vegetation and private property.
12. Utility relocations and new utility installations required by the construction of this project are to be coordinated by the Contractor during construction. No additional compensation will be allowed for delays or inconveniences caused by utility company work crews. The Contractor may be required to reschedule his activities to allow utility crews to perform their required work.
13. Access to local business and residences shall be kept open at all times. Temporary access closures, if required, must be scheduled at least twenty four (24) hours in advance with property owners and approved by the Engineer.
14. A disposal site for all excess excavation material, asphaltic paving, concrete paving, etc., shall be obtained by the Contractor in compliance with applicable regulations and approval of the Engineer. All cost incurred in obtaining a disposal site and haul thereto shall be considered incidental.
15. Fifty ton roller operation shall not be used on this project where underground utilities are present. The required compaction of these locations shall be effected by other types of approved compaction methods.
16. 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.
17. Intersection grading plans (20 scale drawings) shall take precedence over elevations and grades shown on plan and profile sheets.
18. All disturbed areas left exposed after the completion of construction shall be seeded per section 915 of the specifications.
19. All existing water valve boxes and existing manholes shall be adjusted to finished grade.
20. EMD's shall be installed at all water and sewer stubs, per COA Std. Detail S-12.
21. Notify A.M.A.F.C.A. Field Engineer (884-2215) 48 Hrs. before starting work in A.M.A.F.C.A. right-of-way.
22. Contractor shall make provisions to pass storm water flows during construction of major drainage structures.
23. Storm inlets as described in standard specifications shall be used wherever catch basins are called for in the plans.
24. All permanent striping on roadway shall be done by City of Albuquerque.
25. Manhole steps shall be installed at each SD manhole, spaced at 16" O.C.. Manhole steps shall be aluminum steps, ALCOA No. 12653A or approved equal.
26. All connector and lateral storm drain lines shall be RCP, Class IV, unless otherwise specified.
27. Any major change to the Traffic Control Plan shall be submitted to the Public Works Department for review and approval prior to setting up revised Traffic Control Plan.
28. The cost of EMD's shall be incidental to the installation of the water line improvements.
29. Contractor may substitute Class IV RCP for Class III at contractor's option.

REV	SHEETS	CITY ENGR	DATE	USER	DEPT.	DATE	USER	DEPT.	DATE

APPROVAL OF REVISIONS

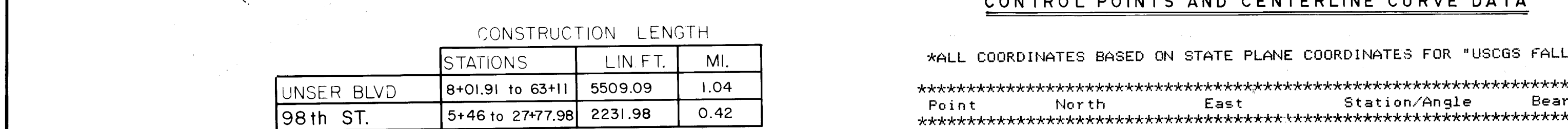
Greiner
Engineering
2601 Wyoming Blvd. N.E.
Albuquerque, New Mexico 87112
(505) 292-1936

CITY PROJECT 2803

PUBLIC WORKS DEPT.

SHEET 1 OF 43

RECORD DRAWING



LEGEND

EXISTING



ALL COORDINATES BASED ON STATE PLANE COORDINATES FOR "USCGS FALLS"

CONTROL POINTS AND CENTERLINE CURVE DATA FOR 98TH. STREET

These coordinates have been calculated based upon the U.S.G.S. station "Falls" by using "State Plane Grid" bearings and field measured distances

MASTER DRAINAGE PLAN

The map illustrates the master drainage plan for a region, showing various drainage basins and channels. Key features include:

- Basins and Channels:**
 - A1:** 39.7 Ac., Q = 52 cfs
 - A2:** 10.6 Ac., Q = 14 cfs
 - B1:** 18.4 Ac., Q = 41 cfs
 - B2:** 2.0 Ac., Q = 6 cfs
 - B3:** 5.35 Ac., Q = 20.5 cfs
 - C1:** 25.9 Ac., Q = 63 cfs
 - C2:** 57.3 Ac., Q = 81 cfs
 - D:** 26.3 Ac., Q = 20 cfs
 - E:** 107.6 Ac., Q = 89 cfs
 - G:** 163.0 Ac., Q = 147 cfs
 - H:** 22.4 Ac., Q = 47 cfs
 - R1:** 5.7 Ac., Q = 26 cfs
 - R2:** 4.8 Ac., Q = 21 cfs
 - R3:** 7.9 Ac., Q = 28 cfs
- Channels:**
 - MIREHAVEN CHANNEL:** 4'-10" x 3' x 149 CBC'S, Q = 1200 cfs
 - LADERA CHANNEL:** 3'-10" x 5' x 175 CBC'S, Q = 750 cfs
 - LADERA DR NW**
- Flood Control Measures:**
 - 100-YEAR FLOOD CONFINED TO CONSTRUCTED CHANNEL:** Indicated along the Mirehaven and Ladera channels.
 - DIVERSION BERM & SWALE (BY OTHERS):** Located near basins A1, B1, B3, and D.
 - CORPORATE LIMITS:** Indicated near the bottom right.
- Other Features:**
 - 36TH ST**
 - 60" SD Q = 111 cfs**
 - 60' x 54'**
 - 42'**
 - 24'**
 - 18'**
 - 12'**
 - 6'**
 - 3'**
 - 1.5'**
 - 0.75'**
 - 0.375'**
 - 0.1875'**
 - 0.09375'**
 - 0.046875'**
 - 0.0234375'**
 - 0.01171875'**
 - 0.005859375'**
 - 0.0029296875'**
 - 0.00146484375'**
 - 0.000732421875'**
 - 0.0003662109375'**
 - 0.00018310546875'**
 - 0.000091552734375'**
 - 0.0000457763671875'**
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MASTER DRAINAGE PLAN

LEGEND (DRAINAGE)

- GREINER ENGINEERING**
2601 Wyoming NE
Albuquerque, New Mexico 87112
(505) 292-1936

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPT.

TITLE: **SAD 215**
UNSER BLVD. - LADERA DR. to OURAY RD.
LOCATION MAP, LEGEND & MASTER DRAINAGE

DRAWING NO.	2803	MAP NO.	G 8 H9	SHEET	2	OF	43
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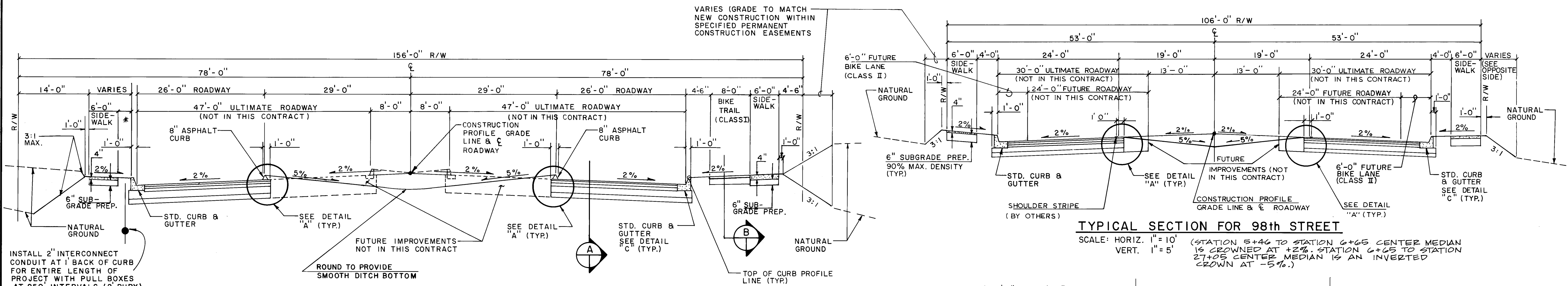
RECORD DRAWING

SURVEY INFORMATION			AS BUILT INFORMATION		
NO.	BY	FIELD NOTES	CONTRACTOR	WORK STARTED BY	DATE
		"BH-32" B&H BRASS CAP GO NORTH 0.4 MILES FROM THE INTERSECTION OF I-40 & JONES RD. TO OURAN RD. GO WET APPROX. 0.7 MILES TO THE END OF PAVEMENT. CONTINUE WEST 0.9 MILES ON THE DIRT ROAD TO THE TOP OF THE DAM, ALONG THE BANK OF THE DAM, PAST THE POWER SUB STATION TO A DIRT ROAD, GO SOUTH 0.4 MILES TO A DIRT ROAD, GO N.E. FOR 0.1 MILES TO THE STATION ON THE RIGHT. ELEVATION = 5195.46		WORK ACCEPTANCE BY	DATE
				DRAWINGS VERIFICATION BY	DATE
			MICRO-FILM INFORMATION		
			RECORDED BY	DATE	
			NO		

ENGINEER'S SEAL

[Handwritten signature]

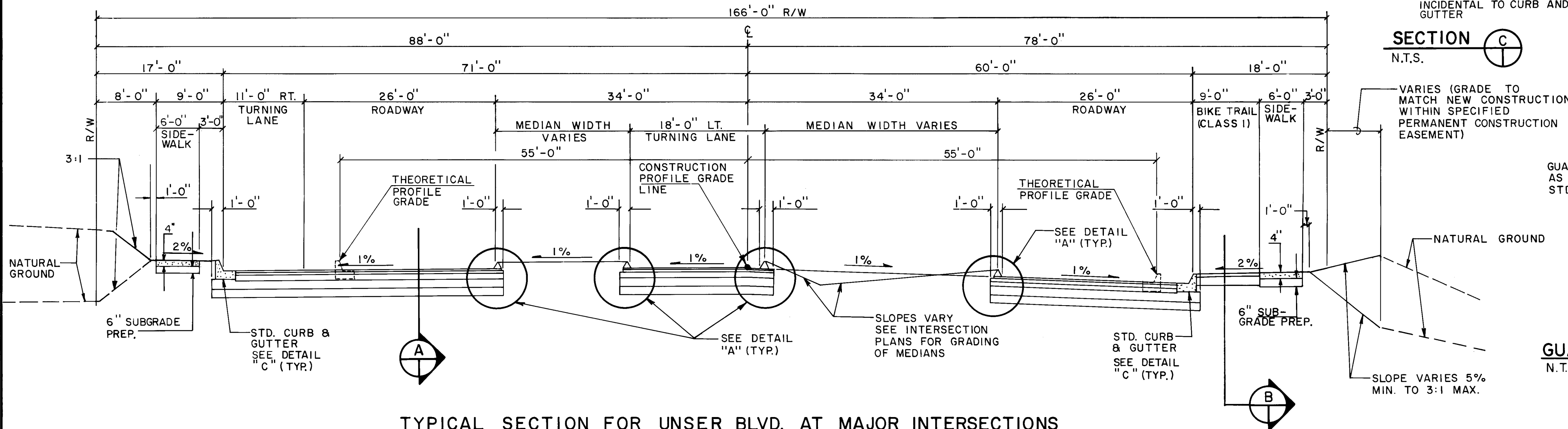
NO.	DATE	REMARKS	BY
Reiner, J.N. 0630585			
DESIGN			
DESIGNED BY <i>SA</i>		DATE	1-87
DRAWN BY <i>Shen A</i>		DATE	6-86
CHECKED BY <i>RAC</i>		DATE	1-87



TYPICAL SECTION WITH BIKE LANE BEHIND CURB FOR UNSER BLVD.

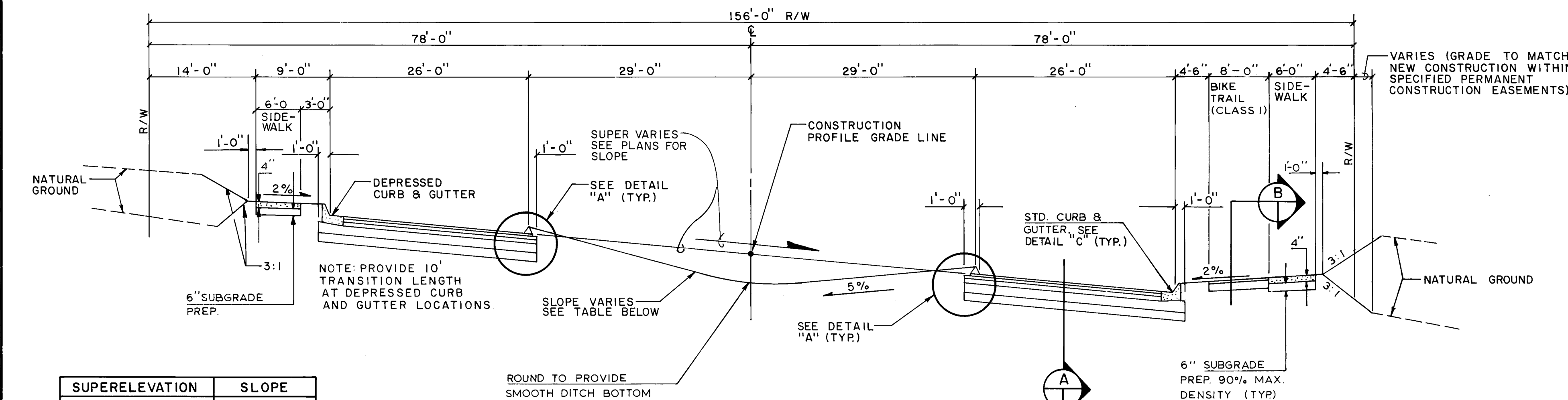
SCALE: HORIZ. 1" = 10' VERT. 1" = 5'

* VARIES FROM 3' TO 12' AS SHOWN ON PLANS



TYPICAL SECTION FOR UNSER BLVD. AT MAJOR INTERSECTIONS

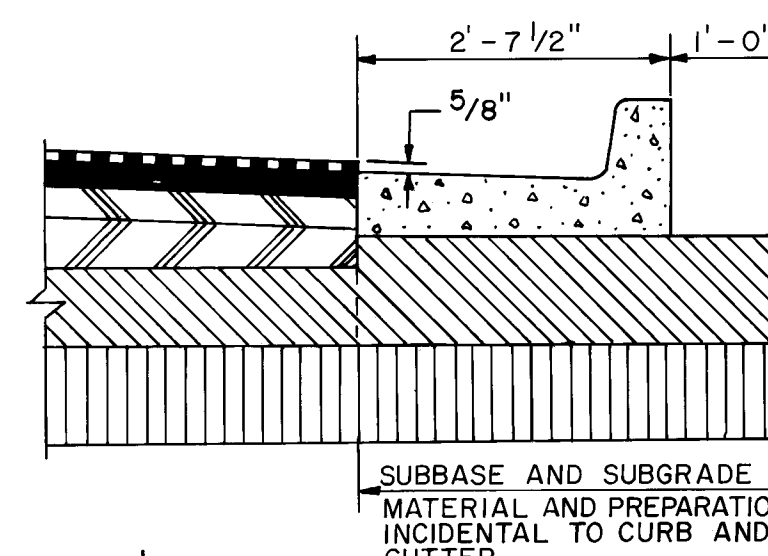
SCALE: HORIZ. 1" = 10' VERT. 1" = 5'



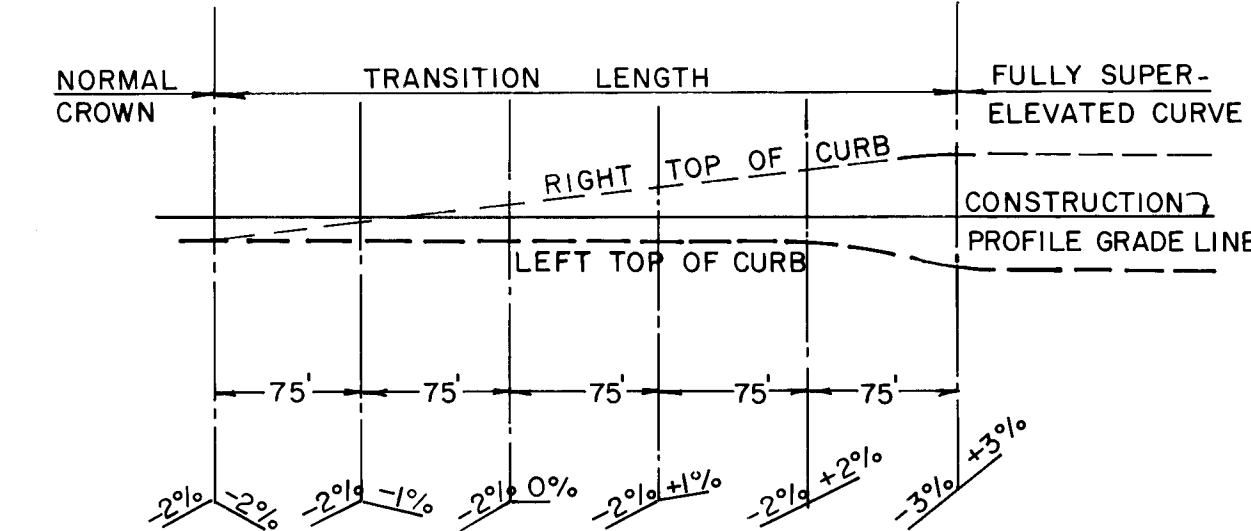
TYPICAL SECTION FOR UNSER BLVD. WITH SUPERELEVATION

SCALE: HORIZ. 1" = 10' VERT. 1" = 5'

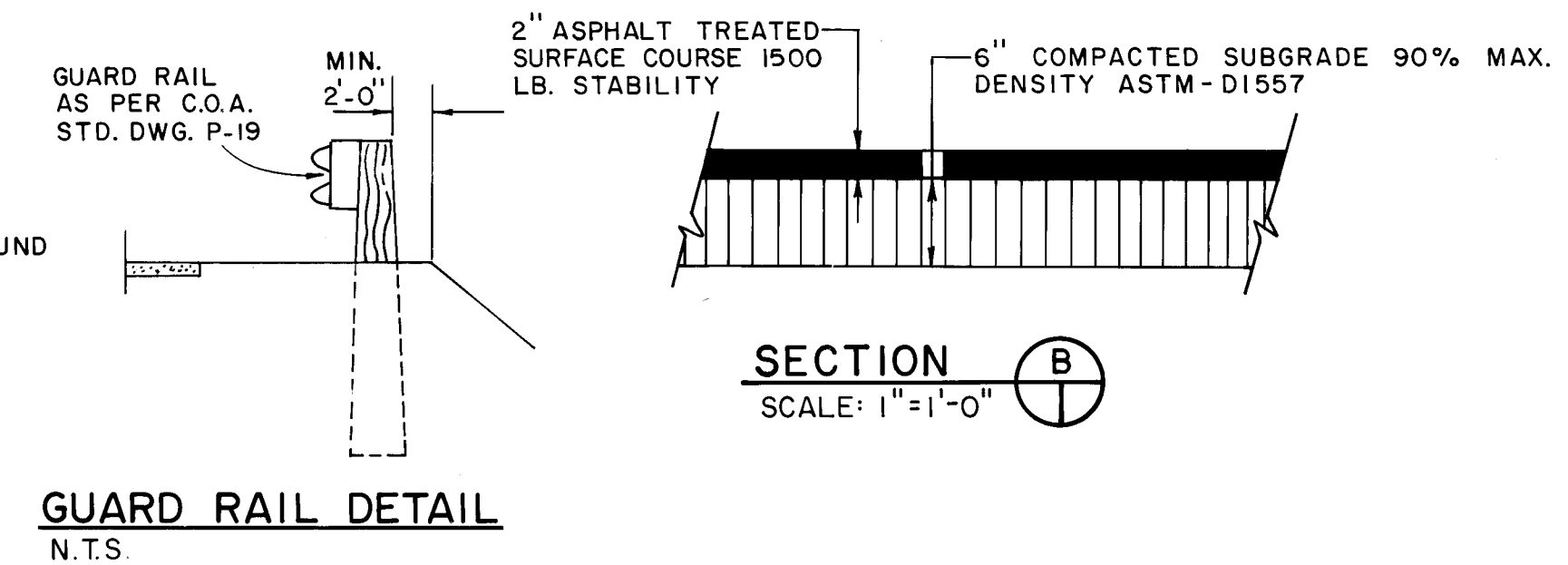
DRAWN AT 4% SUPERELEVATION



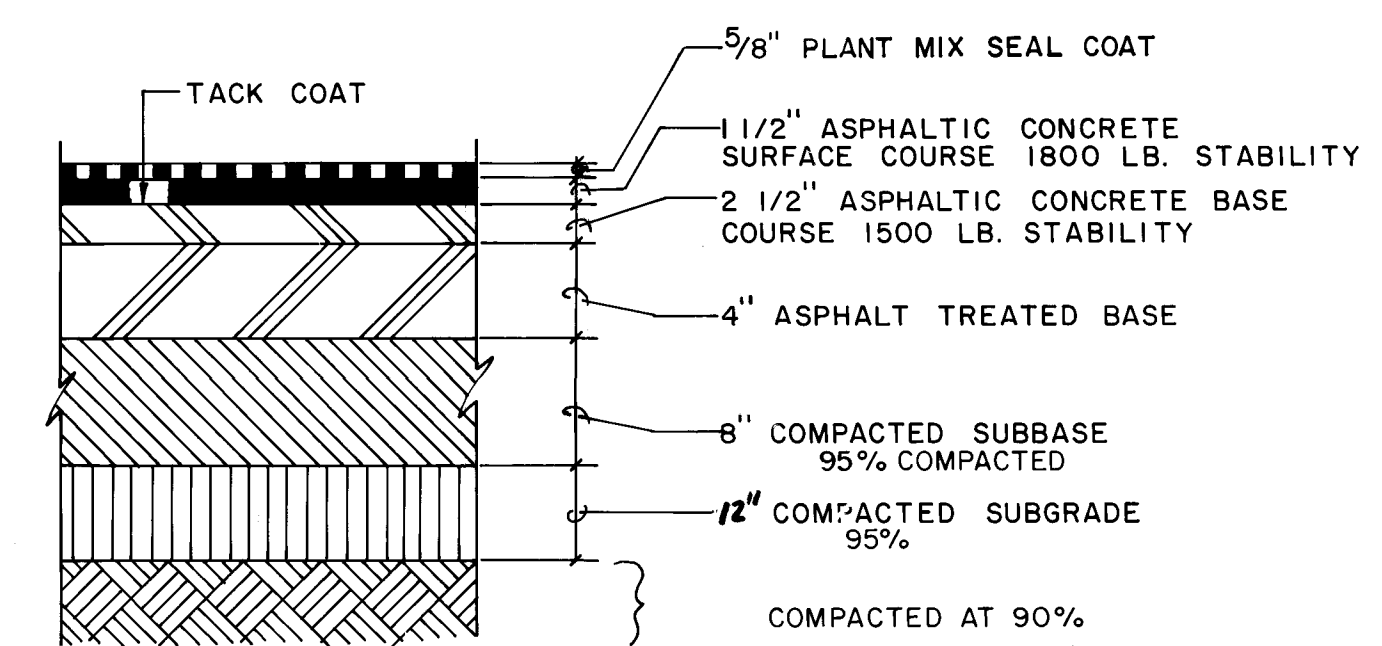
SECTION C
N.T.S.



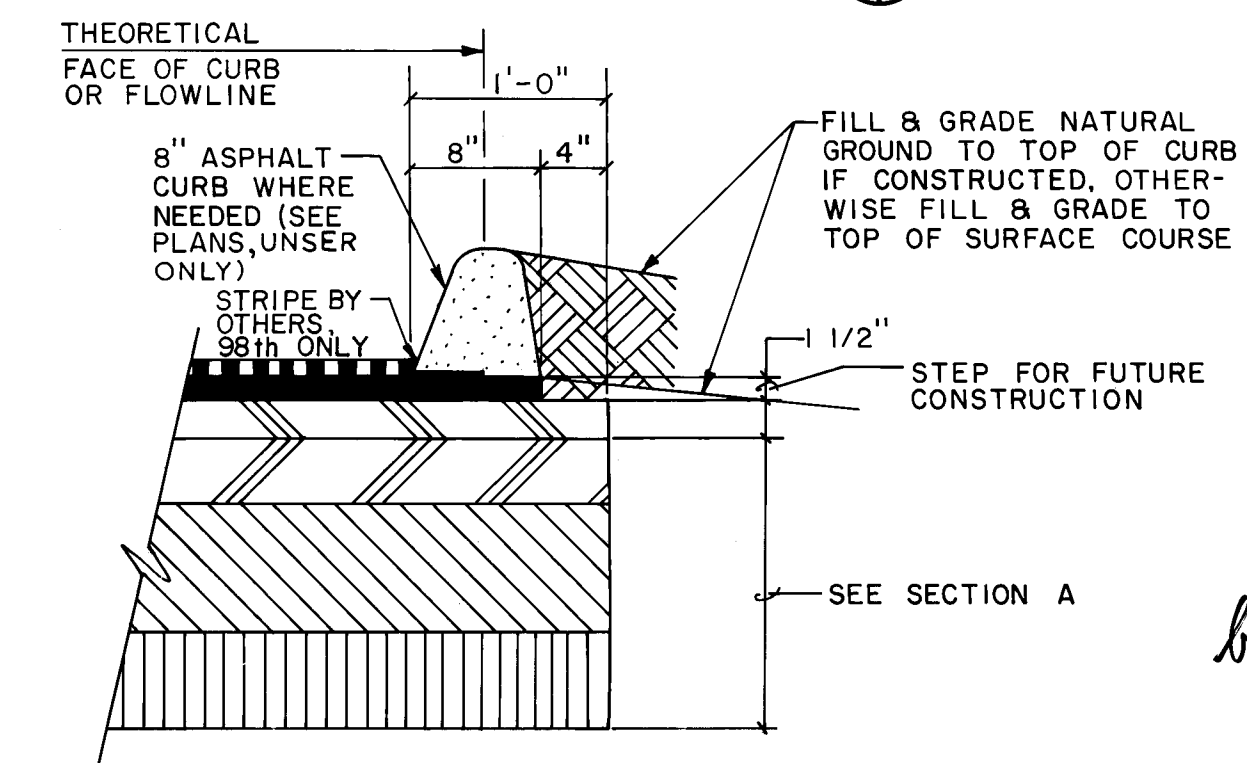
SUPERELEVATION TRANSITION DIAGRAM
SCHEMATIC - FOR INFORMATION ONLY



GUARD RAIL DETAIL
N.T.S.



SECTION A
SCALE: 1" = 1'-0"



DETAIL A
SCALE: 1" = 1'-0"

SUPERELEVATION	SLOPE
4%	13%
3%	11%
2%	9%

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Albuquerque, New Mexico 87112
(505) 292-1936

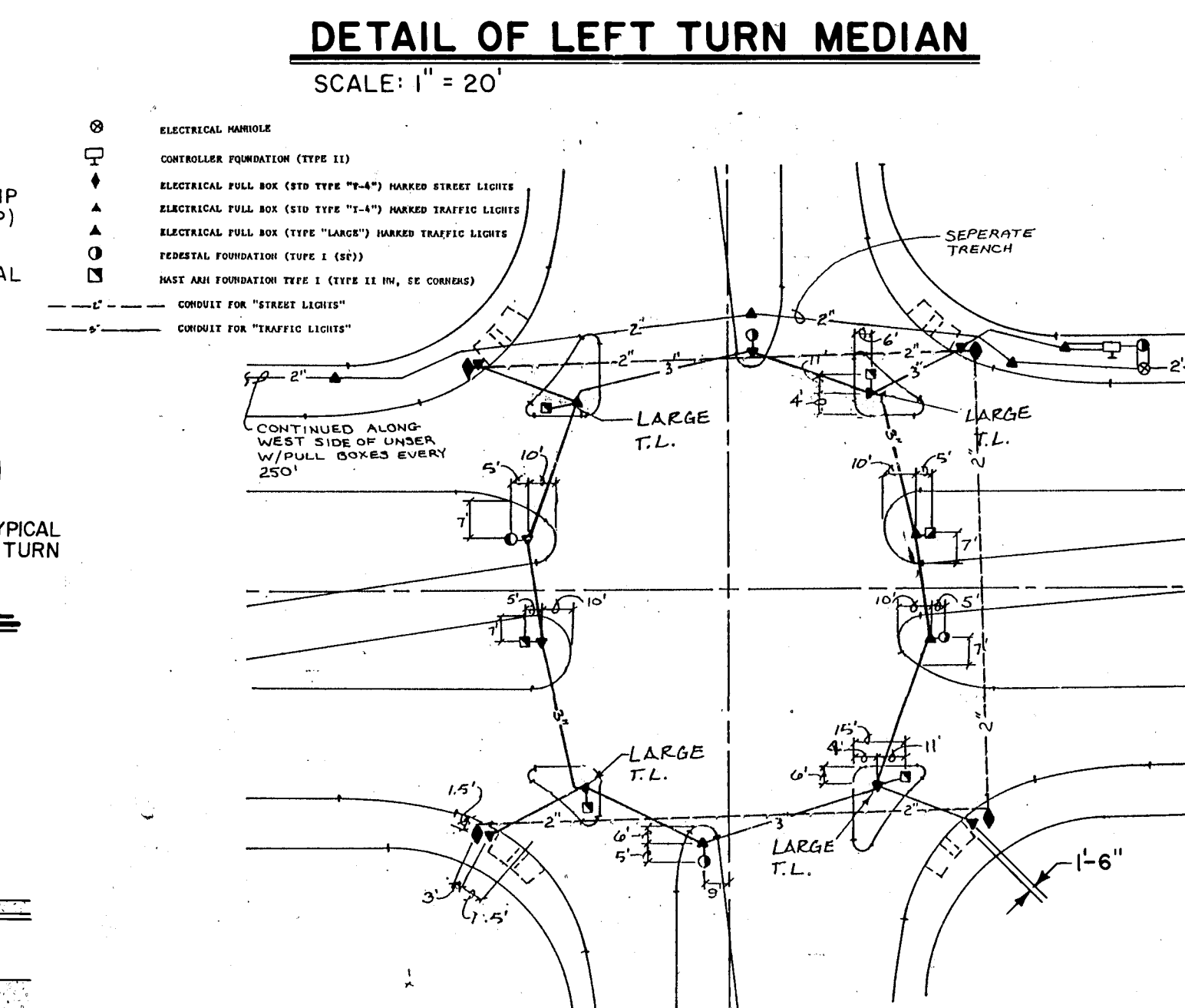
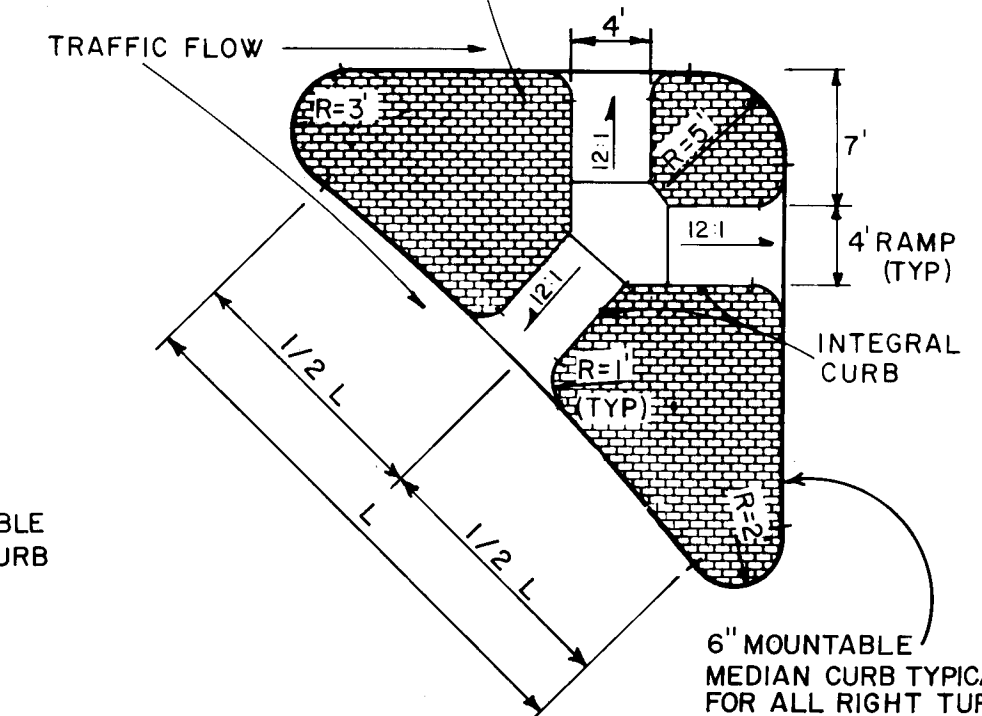
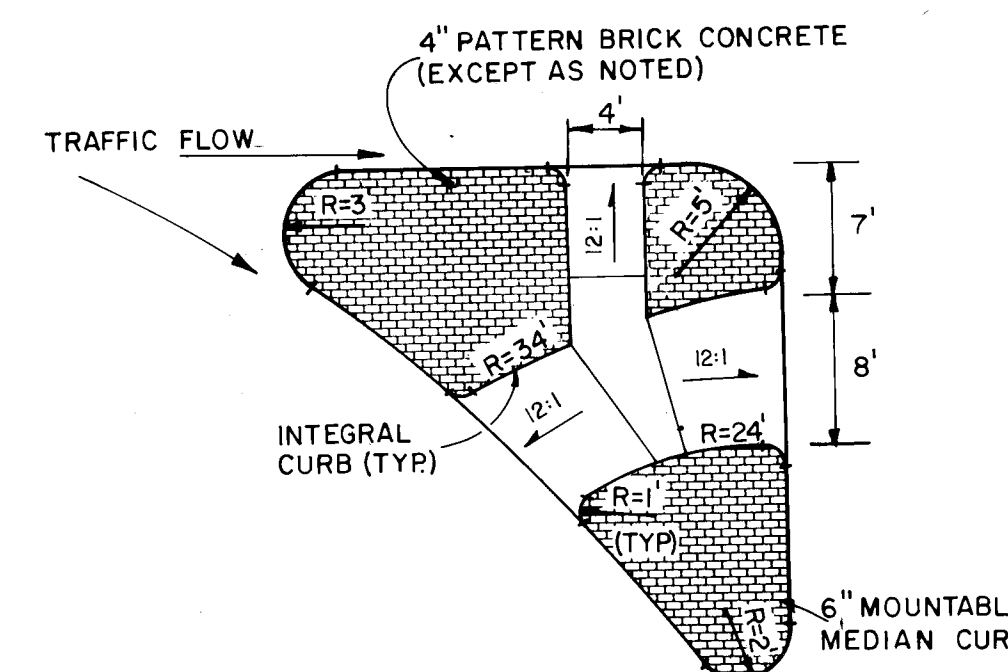
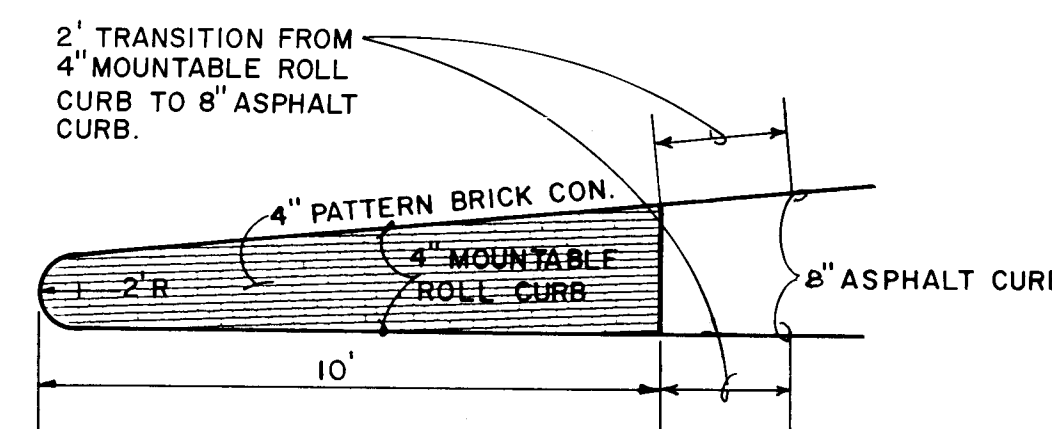
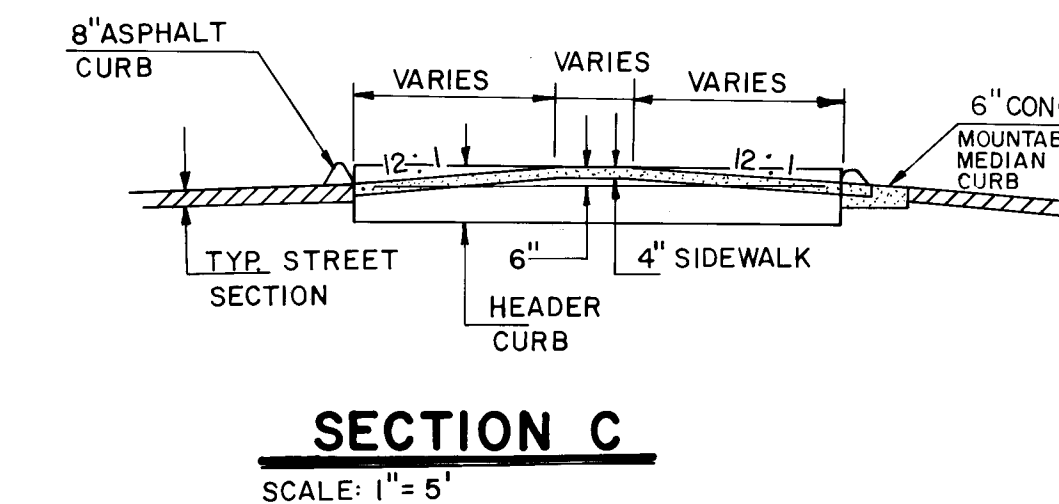
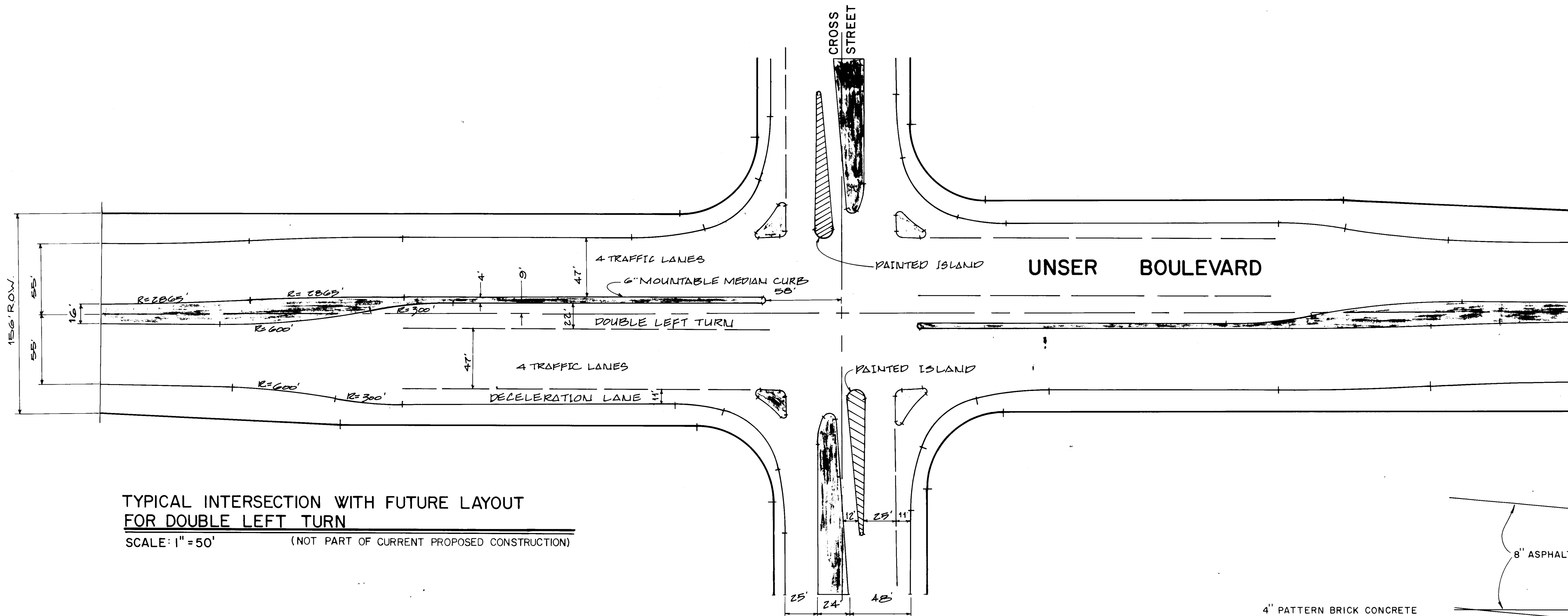
CITY OF ALBUQUERQUE PUBLIC WORKS DEPT.			
TITLE: SAD 215 UNSER BLVD. - TYPICAL STREET SECTION			
APPROVALS	ENGINEER	DATE	APPROVALS
City Engineer	<i>[Signature]</i>	1/8/87	Liquid Waste
ACE Design	<i>[Signature]</i>	1-8-87	Traffic
ACE-Hydrology	<i>[Signature]</i>	1/9/87	Water
DESIGNED BY	DATE	DATE	DATE
Greiner J.N. 0690585	1/8/87	1-8-87	1/8/87
DRAWN BY	DATE	DATE	DATE
<i>[Signature]</i>	1/8/87	1-8-87	1/8/87
CHECKED BY	DATE	DATE	DATE
<i>[Signature]</i>	1/8/87	1-8-87	1/8/87
DRAWING NO. 2803		MAP NO. G & H9	SHEET 3 OF 43

RECORD DRAWING

AS BUILT INFORMATION			
CONTRACTOR	DATE	DATE	DATE
WORK BY	DATE	DATE	DATE
INSPECTED BY	DATE	DATE	DATE
ACCEPTANCE BY	DATE	DATE	DATE
VERIFICATION BY	DATE	DATE	DATE
COMPARISON BY	DATE	DATE	DATE
MICRO-FILM INFORMATION			
RECORDED BY	DATE	NO.	NO.
N.E. FOR 0.1 MILES TO THE STATION ON THE RIGHT.			
ELEVATION = 5195.46			

SURVEY INFORMATION	
FIELD NOTES	DATE
NO.	BY

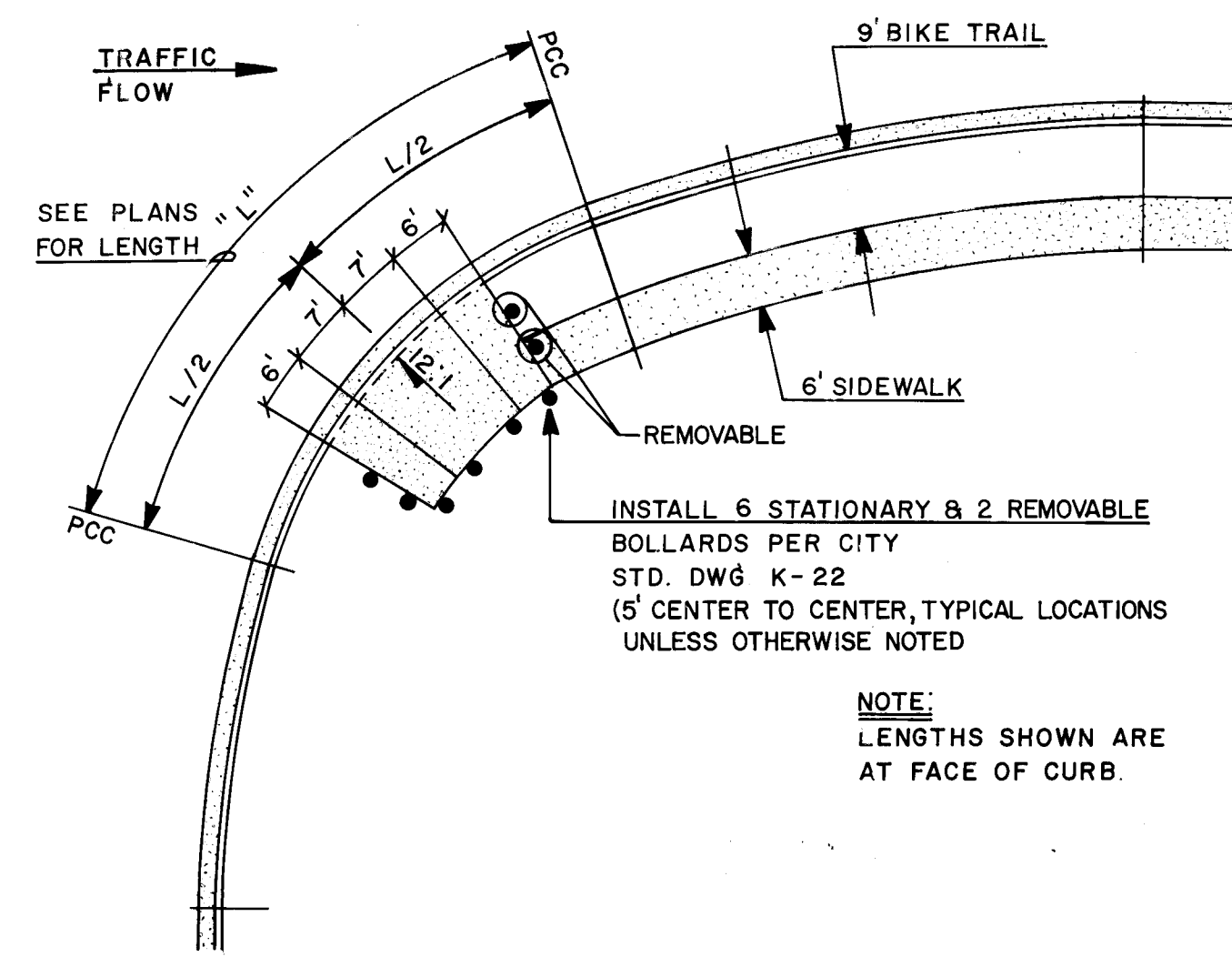
ENGINEER'S SEAL	
REMARKS	BY
DESIGN	
REVISIONS	
NO.	DATE
1	1/8/87
2	1-8-87
3	1/8/87



STATION	OFFSET LEFT *
7+30	57'
9+10	57'
11+60	57'
14+10	57'
16+60	66'
19+10	66'
21+60	66'
24+10	64'
26+60	62'
28+25	63'
30+70	82'
33+20	73'
35+70	66'
38+20	66'
40+70	66'
43+20	66'
45+70	66'
48+20	66'
50+70	66'
53+20	57'
55+70	57'
58+20	62'
60+15	66'
62+70	88'

* OFFSET DIMENSION IS FROM CENTER OF UNSER BLVD. TO CENTER OF BOX.

PULL BOXES SHALL BE CONNECTED TO 2" PVC CONDUIT WHICH SHALL RUN THE ENTIRE LENGTH OF THE PROJECT FROM 7+30 TO 63+11



WHEELCHAIR RAMP AT EASTSIDE OF UNSER
SCALE: 1" = 20'

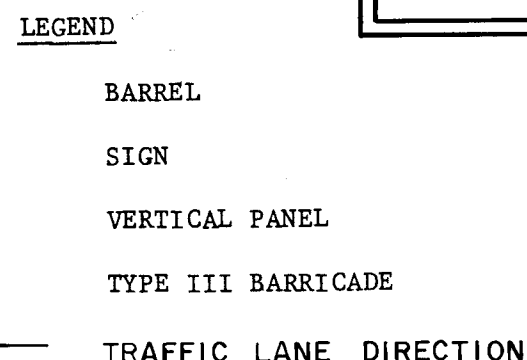
TRAFFIC & STREET LIGHT LAYOUT DETAILS
SCALE: 1" = 50'

GREINER ENGINEERING
2601 Wyoming NE
Albuquerque, New Mexico 87112
(505) 292-1936

CITY OF ALBUQUERQUE PUBLIC WORKS DEPT.			
TITLE: SAD 215 STREET DETAILS			
APPROVALS	ENGINEER	DATE	APPROVALS
City Engineer	<i>[Signature]</i>	1/9/87	Liquid Waste
Design	<i>[Signature]</i>	1-8-87	Traffic
Hydrology	<i>[Signature]</i>	1/9/87	Water
DESIGNED BY	DATE	1/87	DATE
DRAWN BY	DATE	1/87	DATE
CHECKED BY	DATE	1-87	DATE
DRAWING NO.	2803	MAP NO.	G & H9
SHEET	4	OF	43

RECORD DRAWING

INSTALL TYPE III BARRICADE AT NORTH END OF
LADERA/UNSER INTERSECTION



LADERA & UNSER PHASE I
N.T.S.
INTERSECTION CONSTRUCTION

OURAY & UNSER
N.T.S.

FINAL TRAFFIC CONTROL
SIGNING

TRAFFIC CONTROL NOTES:

1. Contractor must comply with section 19 of the City of Albuquerque's Interim Standard Specifications for Public Works Construction.

2. Prior to the start of construction, the contractor shall submit to the Traffic Engineer a detailed construction sequence indicating when each section of roadway is to be affected by construction.
3. The contractor must obtain a barricading permit from the Traffic Engineering office two (2) days prior to each phase of construction.

4. The construction of Unser Blvd. between the intersection of Ladera and the intersection of Ouray to be accomplished under a complete closure. Type III barricades with R 11-2 "ROAD CLOSED" signs are to be placed completely across the roadway at the location of each closure.

5. The construction to be done as noted under Phase I of this traffic plan (intersection of Unser and Ladera) must take place in no more than 15 calendar days. Contractor must restore existing traffic pattern within this time frame.

6. Type III barricades are to be fabricated in the following colors:

- A. Orange and black for use during construction (removable).
- B. Red and white for permanent use.

7. Contractor shall submit a mounting detail for temporary Type III barricades for approval prior to beginning construction at the Unser/Ladera intersection. It shall be the contractor's responsibility to provide sufficient ballast to insure adequate stability of Type III barricades.

8. PERMANENT BARRICADING TO BE SUPPLIED AND INSTALLED BY CONTRACTOR AT THE LADERA AND OURAY INTERSECTIONS. CONTRACTOR SHALL SUBMIT BARRICADE DESIGN TO TRAFFIC ENGINEERING/OPERATIONS FOR APPROVAL.

AS BUILT INFORMATION

MARKS

SURVEY INFORMATION

ENGINEER'S SEAL

PROJECT NO.

DESIGN		
DESIGNED BY	<i>DAI</i>	DATE 1/87
DRAWN BY	<i>T.A. KRA</i>	DATE 1-87
CHECKED BY	<i>BAC</i>	DATE 1-87

Greiner Engineering

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Albuquerque, New Mexico 87112
(505) 292-1936

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

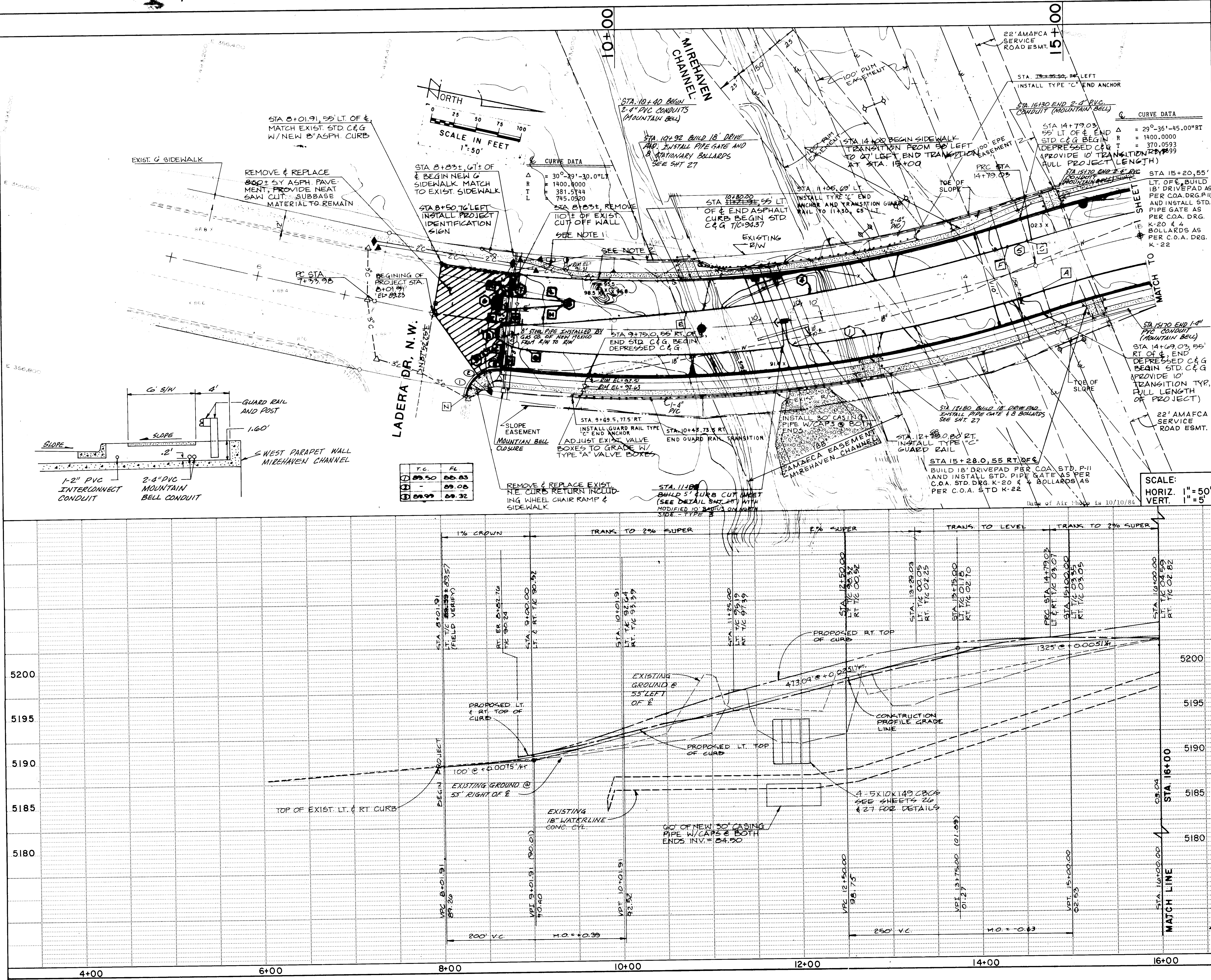
TITLE: **SAD 215: TRAFFIC CONTROL PLAN**

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	1/9/87	Liquid Waste	<i>[Signature]</i>	1/29/87
A-E Design	<i>[Signature]</i>	1-8-87	Traffic	NADWH	1/29/87
A-E-Hydrology	<i>[Signature]</i>	1/9/87	Water	<i>[Signature]</i>	1/29/87

DRAWING NO.	2803	MAP NO.	G 8 H 9	SHEET	5	OF	43
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RECORD DRAWING

6, 17, 30, 7, 20



CURVE DATA TABLE

INDICATES CURVE DATA

NO.	DELTA	RADIUS	LENGTH	CH. BRG.
1.	23°32'04"	1429.00	586.97	S18°04'15"W
2.	38°44'59"	50.00	33.82	S13°04'17"W
3.	13°04'55"	8.00	18.39	N81°41'46"W
4.	13°59'59"	1500.00	366.51	N22°50'18"W
5.	0°52'30"	1371.00	20.94	N29°50'11"W
6.	190°56'55"	8.00	26.66	S79°38'10"W
7.	0°30'13"	1371.00	26.66	N06°24'11"W
8.	172°04'41"	2.00	6.01	N78°07'12"E
9.	86°41'26"	35.00	52.96	N48°46'50"W

STATIONS AND OFFSETS

INDICATES STATION & OFFSET DATA

NO.	Station	Offset	T/C
A.	14+79.03	29.00 R	03.07
B.	9+03.98	29.00 R	00.88
C.	8+73.08	18.34 R	00.50
D.	8+76.44	1.14 R	00.69
E.	10+84.71	19.14 L	02.93
F.	14+57.65	28.84 L	02.07
G.	14+79.03	29.00 L	01.63
H.	9+43.67	25.02 L	00.62
I.	8+70.95	13.14 L	00.27
J.	8+69.42	29.00 L	01.56
K.	9+43.39	29.00 L	00.27
L.	8+82.76	55.00 R	00.27
M.	8+49.89	88.39 R	00.27

NOTES:

- USE 190' REVERSE CURVES CENTERED ON G' SIDEWALK TO MATCH EXIST. SIDEWALK & TYP LOCATION AS SHOWN ON STREET SECTION.
- INSTALL 2" INTERCONNECT CONDUIT ALONG THE WEST SIDE OF UNDER BETWEEN THE BACK OF CURB & SIDEWALK ALONG THE ENTIRE LENGTH OF THE PROJECT W/ PULL BOXES EVERY 250'.
- FOR SANITARY SEWER P&P SEE SHT. 14.
- FOR STORM SEWER P&P SEE SHT. 17.
- CONTRACTOR SHALL NOTE LOCATION OF EXISTING 18" WATERLINE AND EXERCISE EXTREME CAUTION IN THIS LOCATION DURING PREPARATION PROCEDURES FOR CONSTRUCTION OF CBC @ MIREHAVEN CHANNEL.
- 4" PVC MOUNTAIN BELL CONDUIT WAS TYPICALLY LAID 3' ON THE INSIDE OF R/W LINE AND 1' DEEP, UNLESS OTHERWISE SHOWN.

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

DATE OF AIR PHOTO IS 10/10/84

ENGINEER'S SEAL

REVISIONS

NO.	DATE	REMARKS	BY
1	12/29/87	DESIGN	JN
2	1/8/87	DESIGN	JN
3	1/8/87	DESIGN	JN

DESIGNED BY JN
DRAWN BY JN
CHECKED BY JN

GREINER ENGINEERING
2601 Wyoming NE
Albuquerque, New Mexico 87112
(505) 292-1936

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPT.

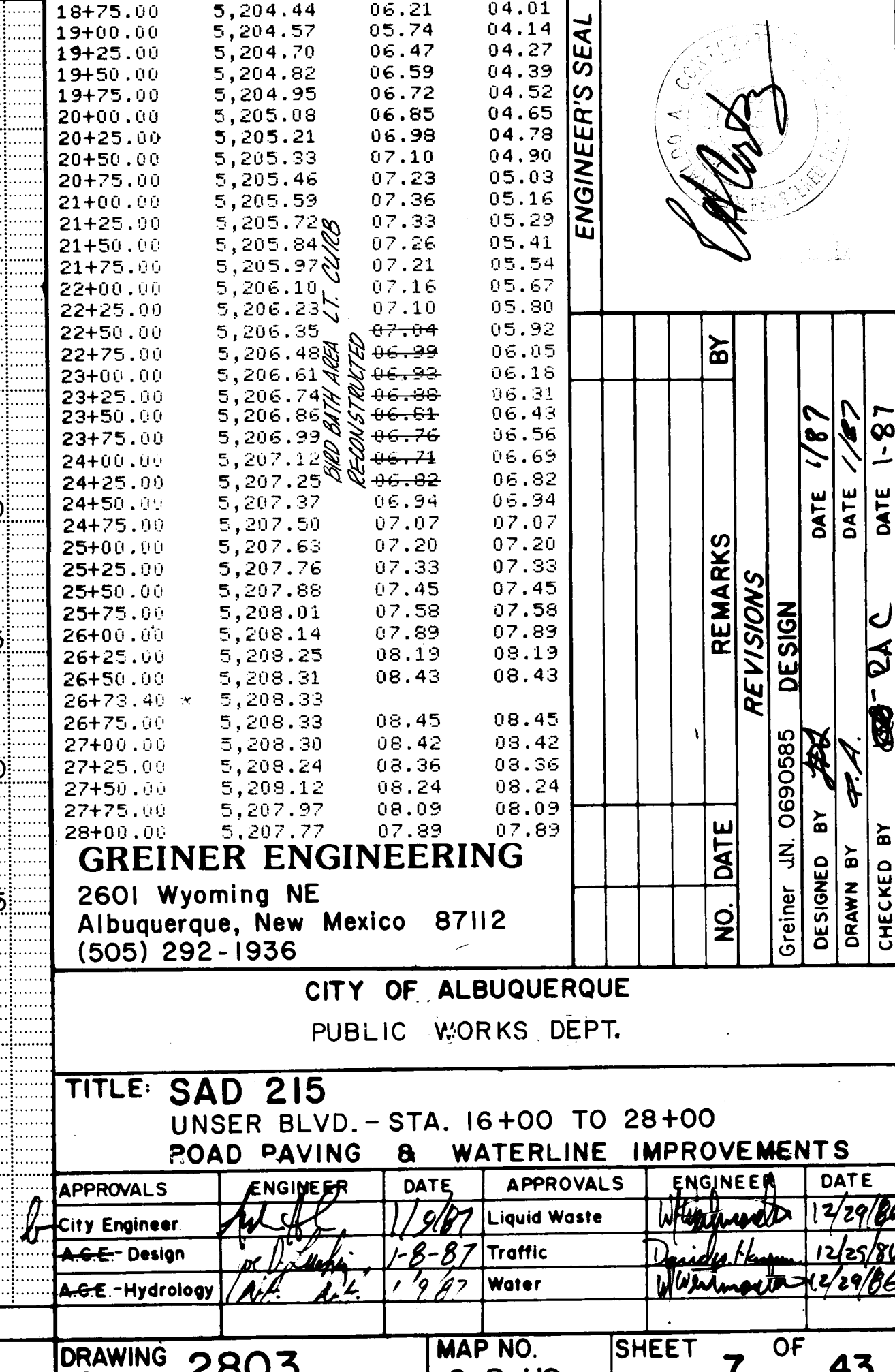
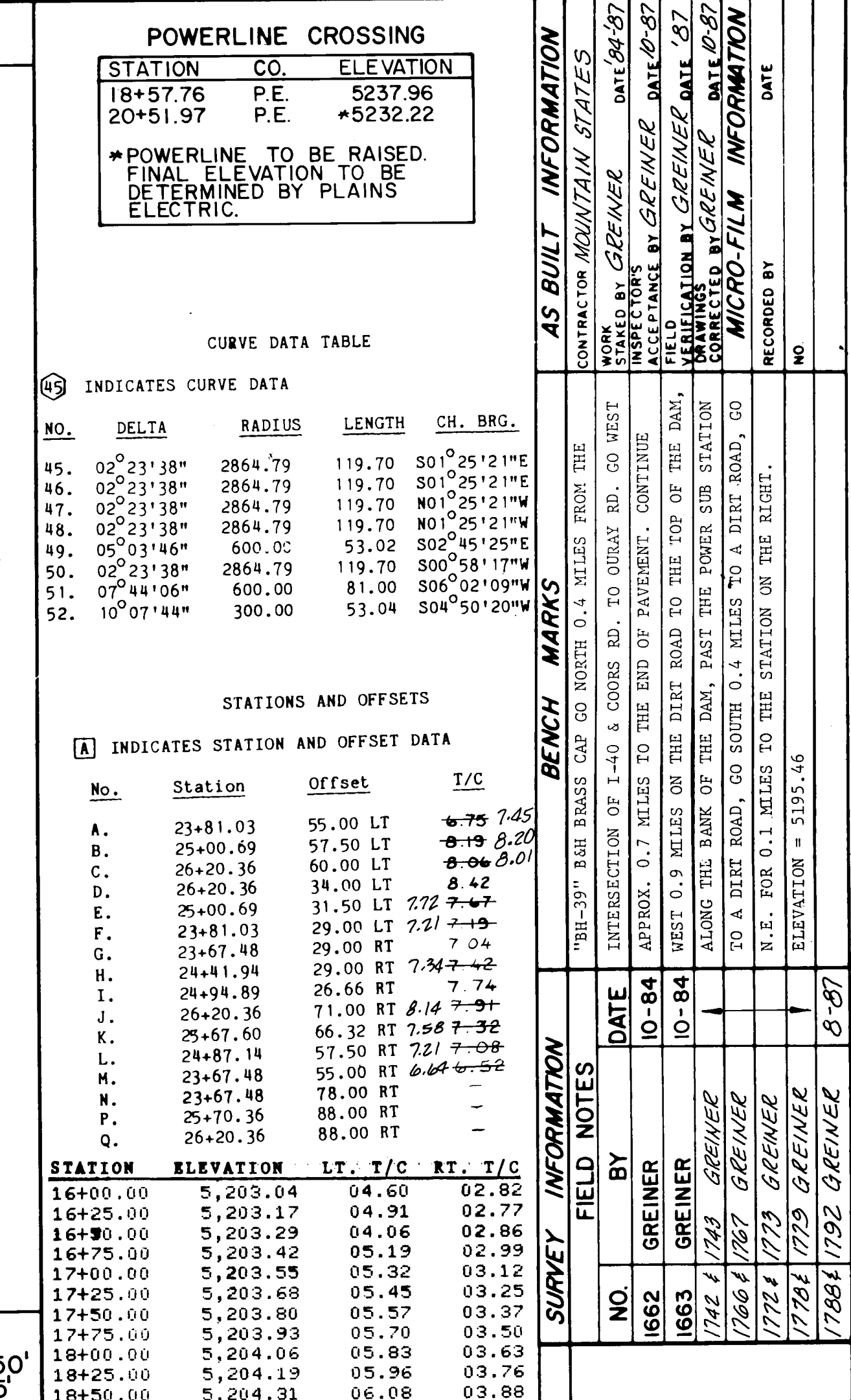
TITLE: SAD 215
UNSER BLVD. - STA. 8+01.91 TO 16+00
ROAD PAVING & WATER IMPROVEMENTS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	JN	1/8/87	Liquid Waste	JN	12/29/87
A-G-E Design	JN	1-8-87	Traffic	JN	12/29/87
A-G-E Hydrology	JN	1-8-87	Water	JN	12/29/87

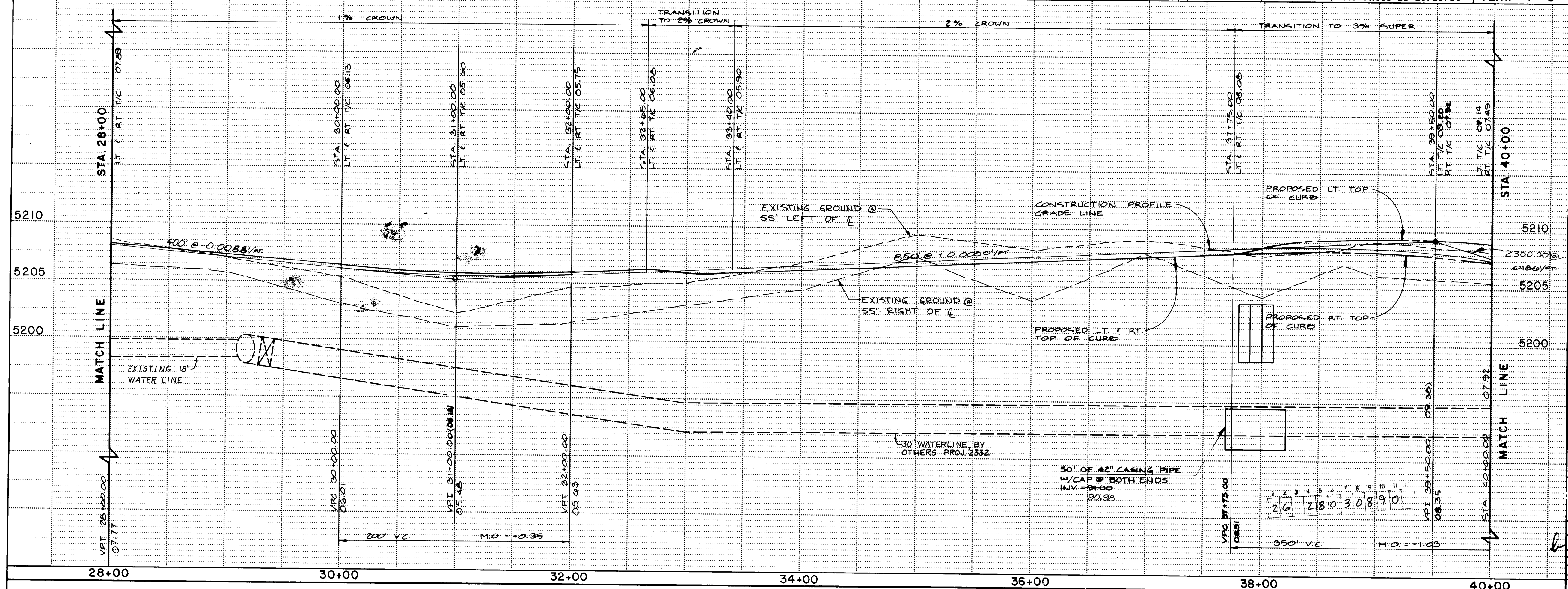
DRAWING NO. 2803 MAP NO. G & H9 SHEET 6 OF 43

1 2 3 4 5 6 7 8 9 10 11 12
26 28 03 06 90

RECORD DRAWING

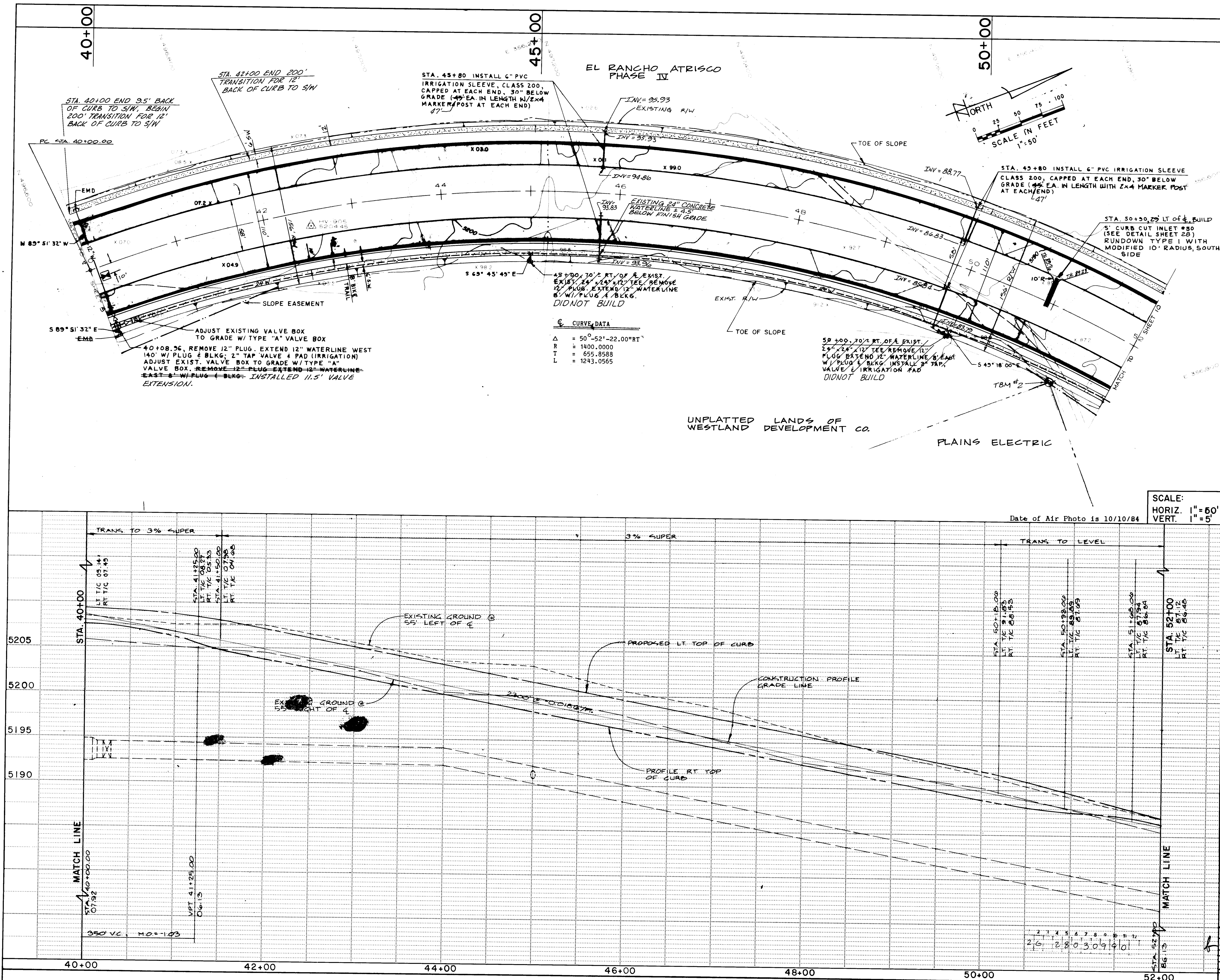


RECORD DRAWING



STATION	ELEVATION	LT. T/C	RT. T/C
00.00	5,207.77	07.89	07.89
02.50	5,207.55	07.67	07.67
05.00	5,207.33	07.45	07.45
07.50	5,207.11	07.23	07.23
10.00	5,206.89	07.01	07.01
12.50	5,206.67	06.79	06.79
15.00	5,206.45	06.57	06.57
17.50	5,206.23	06.35	06.35
20.00	5,206.01	06.13	06.13
22.50	5,205.81	05.93	05.93
25.00	5,205.66	05.78	05.78
27.50	5,205.54	05.66	05.66
30.00	5,205.48	05.60	05.60
32.50	5,205.43	05.57	05.57
35.00	5,207.54	05.57	05.57
37.50	5,205.53	05.65	05.65
40.00	5,205.63	05.75	05.75
42.50	5,205.76	05.88	05.88
45.00	5,205.88	06.00	06.00
47.50	5,206.01	06.06	06.06
50.00	5,206.13	06.00	06.00
52.50	5,206.28	06.25	06.25
55.00	5,206.38	06.45	06.45
57.50	5,206.51	06.38	06.08
60.00	5,206.63	06.20	06.20
62.50	5,206.76	06.33	06.33
65.00	5,206.88	06.45	06.45
67.50	5,207.03	06.58	06.58
70.00	5,207.13	06.70	06.70
72.50	5,207.26	06.83	06.83
75.00	5,207.38	06.95	06.95
77.50	5,207.51	07.09	07.09
80.00	5,207.63	07.20	07.20
82.50	5,207.76	07.33	07.33
85.00	5,207.88	07.45	07.45
87.50	5,208.01	07.58	07.58
90.00	5,208.13	07.70	07.70
92.50	5,208.26	07.83	07.83
95.00	5,208.38	07.95	07.95
97.50	5,208.51	08.08	08.08
100.00	5,208.61	08.36	08.08
102.50	5,208.67	08.61	08.24
105.00	5,208.69	08.81	08.26
107.50	5,208.63	08.81	08.24
110.00	5,208.67	08.97	08.26
112.50	5,208.60	09.09	08.17
115.00	5,208.60	09.17	08.07
117.50	5,208.35	09.20	07.92
120.00	5,208.16	09.20	07.73
122.50	5,207.92	09.14	07.49

CITY OF ALBUQUERQUE					
PUBLIC WORKS DEPARTMENT					
E: SAD 215					
UNSER BLVD. - STA. 28+00 TO 40+00					
ROAD PAVING & WATERLINE IMPROVEMENTS					
NO.	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
1	<i>[Signature]</i>	1/9/87	Liquid Waste	<i>[Signature]</i>	2/29/86
2	<i>[Signature]</i>	1-8-87	Traffic	<i>[Signature]</i>	12/29/86
3	<i>[Signature]</i>	1/27	Water	<i>[Signature]</i>	12/29/86



STATION	ELEVATION	LT. T/C	RT. T/C
40+00.00	5,207.92	09.14	07.43
40+25.00	5,207.65	09.05	07.22
40+50.00	5,207.33	08.92	06.90
40+75.00	5,206.97	08.74	06.54
41+00.00	5,206.57	08.52	05.96
41+25.00	5,206.13	08.27	05.33
41+50.00	5,205.66	07.99	04.69
41+75.00	5,205.19	07.51	04.21
42+00.00	5,204.73	07.05	03.75
42+25.00	5,204.27	06.59	03.29
42+50.00	5,203.80	06.12	02.82
42+75.00	5,203.34	05.66	02.36
43+00.00	5,202.87	05.19	01.89
43+25.00	5,202.40	04.72	01.42
43+50.00	5,201.94	04.26	00.96
43+75.00	5,201.48	03.80	00.50
44+00.00	5,201.01	03.33	00.03
44+25.00	5,200.55	02.87	09.57
44+50.00	5,200.09	02.40	09.10
44+75.00	5,199.62	01.94	08.64
45+00.00	5,199.15	01.47	08.17
45+25.00	5,198.69	01.01	07.71
45+50.00	5,198.22	00.54	07.24
45+75.00	5,197.76	00.08	06.78
46+00.00	5,197.29	09.61	06.31
46+25.00	5,196.83	09.15	05.85
46+50.00	5,196.36	08.68	05.38
46+75.00	5,195.90	08.22	04.92
47+00.00	5,195.43	07.75	04.45
47+25.00	5,194.97	07.29	03.99
47+50.00	5,194.50	06.82	03.52
47+75.00	5,194.04	06.36	03.06
48+00.00	5,193.57	05.89	02.59
48+25.00	5,193.11	05.43	02.13
48+50.00	5,192.64	04.96	01.66
48+75.00	5,192.18	04.50	01.20
49+00.00	5,191.71	04.03	00.71
49+25.00	5,191.25	03.57	00.27
49+50.00	5,190.78	03.10	09.80
49+75.00	5,190.32	02.64	09.34
50+00.00	5,189.85	02.17	08.87
50+25.00	5,189.39	01.66	08.46
50+50.00	5,188.92	01.01	08.17
50+75.00	5,188.46	00.37	07.89
51+00.00	5,187.99	09.71	07.61
51+25.00	5,187.53	09.07	07.33
51+50.00	5,187.06	08.40	07.04
51+75.00	5,186.60	07.77	06.77
52+00.00	5,186.13	07.12	06.48

GREINER ENGINEERING
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Albuquerque, New Mexico 87112
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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPT.

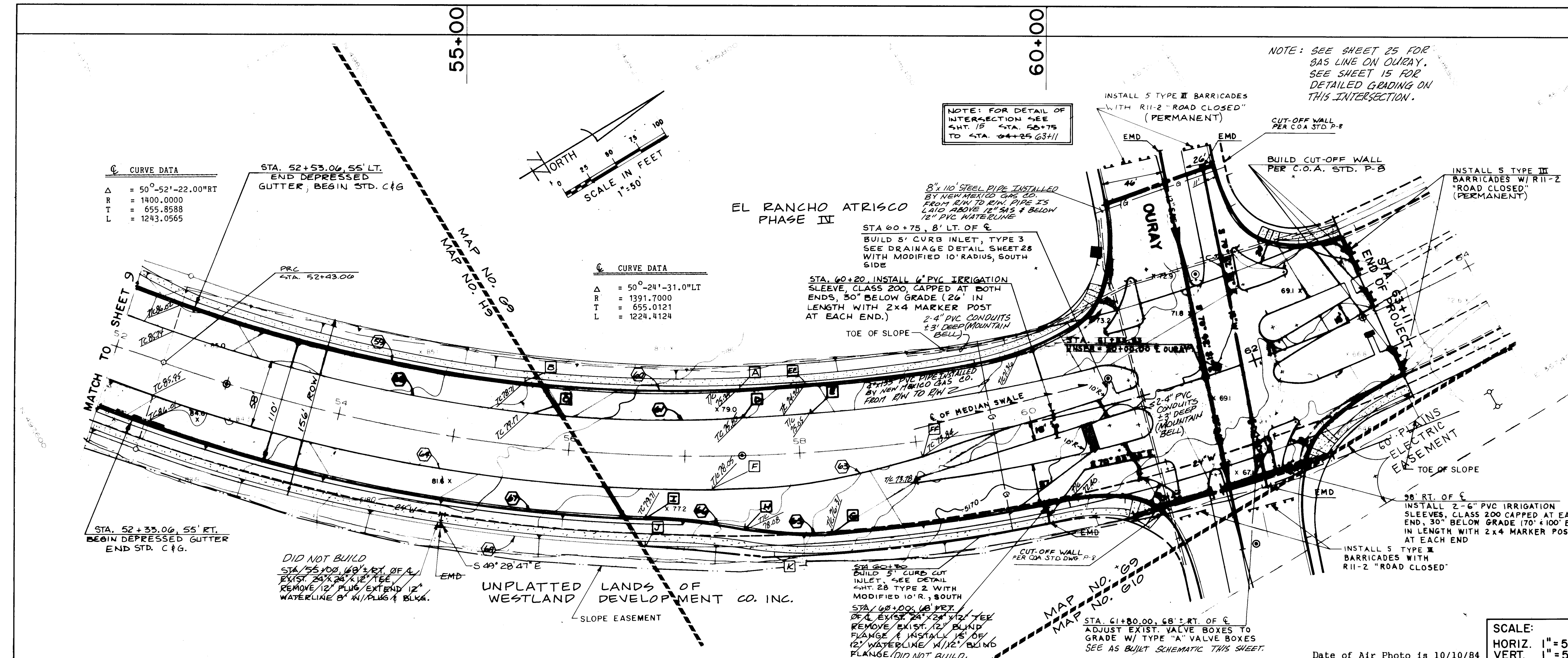
TITLE: **SAP 215**
UNSR BLVD. - STA. 40+00 TO 52+00
ROAD PAVING & WATERLINE IMPROVEMENTS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	12/87	Liquid Waste	<i>[Signature]</i>	12/87
A-E-Design	<i>[Signature]</i>	1-88	Traffic	<i>[Signature]</i>	12/87
A-E-Hydrology	<i>[Signature]</i>	1-88	Water	<i>[Signature]</i>	12/87

DRAWING NO. **2803** MAP NO. **G & H9** SHEET **9** OF **43**

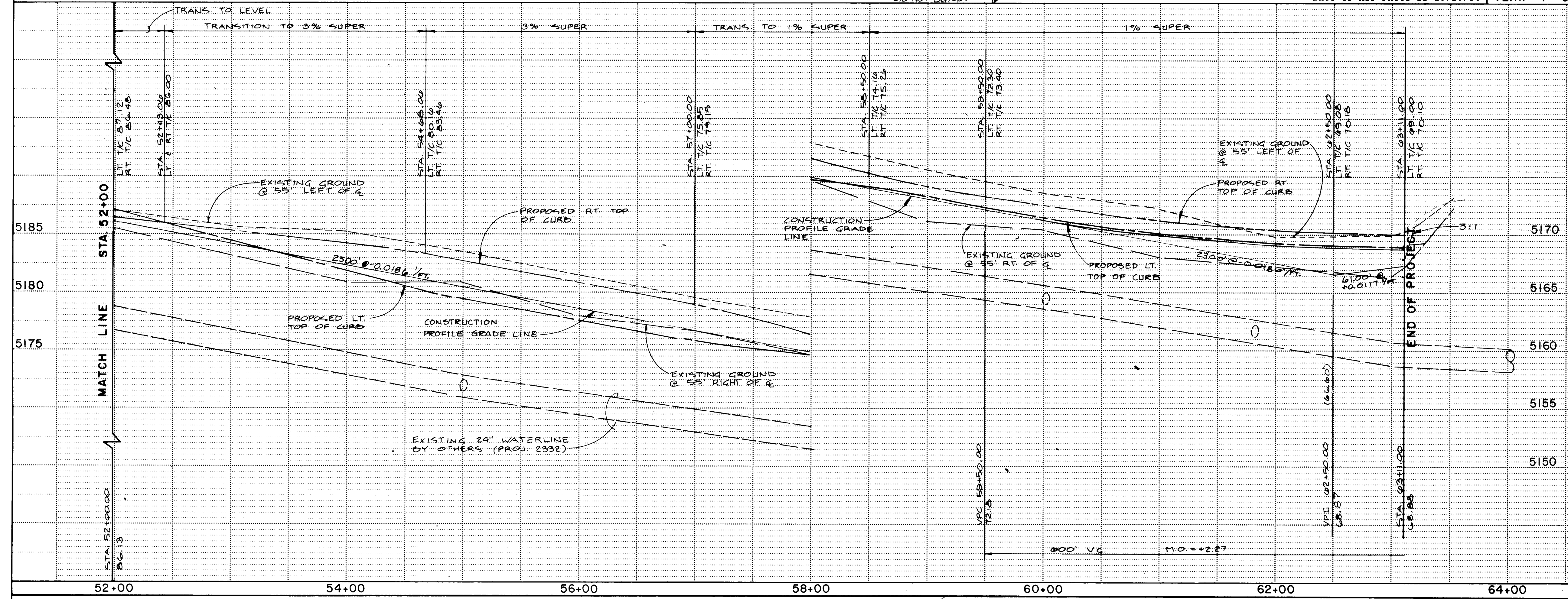
AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	MOUNTAIN STATES	DATE	10-84	NO.	1662	BY	GREINER
INSPECTOR	GREINER	DATE	10-84	NO.	1663	BY	GREINER
FIELD	GREINER	DATE	10-84	NO.	1664	BY	GREINER
REVISIONS		DATE	12-87	NO.	1665	BY	GREINER
DESIGNED BY	J.N. Greiner	DATE	1-88	NO.	1666	BY	GREINER
DRAWN BY	J.N. Greiner	DATE	1-88	NO.	1667	BY	GREINER
CHECKED BY	P.A.C.	DATE	1-88	NO.	1668	BY	GREINER

RECORD DRAWING



CURVE DATA TABLE				
NO.	DELTA	RADIUS	LENGTH	CH. BRG.
59.	12° 45' 37"	1336.70	297.70	S44° 16' 01" W
60.	10° 20' 00"	1028.42	185.48	S32° 31' 13" W
61.	10° 00' 00"	1033.58	180.39	S32° 31' 13" W
62.	13° 15' 06"	1362.70	315.17	S44° 01' 17" W
63.	17° 50' 00"	600.00	186.75	N22° 03' 11" E
64.	19° 40' 39"	1420.70	487.92	N40° 48' 30" E
65.	14° 24' 00"	300.00	75.40	N34° 04' 17" E
66.	08° 07' 18"	600.00	85.05	N37° 12' 37" E
67.	17° 29' 52"	1446.70	441.81	N41° 53' 54" E
68.	17° 29' 52"	1469.70	448.84	S41° 53' 54" W

STATIONS AND OFFSETS			
NO.	STATION	OFFSET	T/C
A.	57+46.25	58.85 LT	75-24-76-34
B.	55+53.01	55.00 LT	75-24-76-34
C.	55+64.94	29.00 LT	75-24-76-34
D.	57+40.29	32.80 LT	75-24-76-34
E.	58+07.84	39.00 LT	75-24-76-34
F.	57+21.02	29.00 RT	75-24-76-34
G.	58+20.57	71.00 RT	75-24-76-34
H.	57+49.19	63.49 RT	75-24-76-34
I.	56+68.08	55.00 RT	75-24-76-34
J.	56+68.08	78.00 RT	75-24-76-34
K.	57+72.64	88.00 RT	75-24-76-34
EE.	58+04.00	60.00 LT	75-24-76-34



NOTES:
SEE OUR UTILITY SHEET FOR WATERLINE & SANITARY SEWER PROFILE ACROSS OURAY

12" WATERLINE
BEND WITH CONC. BLKG.
EL. 63.10
EXISTING 12" WATERLINE

PVC WATERLINE SCHEMATIC AT STA. 61+80, ± 68' RT FROM CENTERLINE

STATION	ELEVATION	LT. T/C	RT. T/C
52+00.00	5,186.13	07.12	06.48
52+25.00	5,185.67	06.48	06.20
52+50.00	5,185.20	05.83	05.91
52+75.00	5,184.74	05.18	05.64
53+00.00	5,184.27	04.53	05.35
53+25.00	5,183.81	03.89	05.07
53+50.00	5,183.34	03.23	04.79
53+75.00	5,182.88	02.59	04.51
54+00.00	5,182.41	01.94	04.22
54+25.00	5,181.95	01.29	03.95
54+50.00	5,181.48	00.64	03.66
54+75.00	5,181.02	00.04	03.34
55+00.00	5,180.55	09.57	02.87
55+25.00	5,180.09	09.11	02.41
55+50.00	5,179.62	08.63	01.94
55+75.00	5,179.16	08.18	01.48
56+00.00	5,178.69	07.71	01.01
56+25.00	5,178.23	07.25	00.55
56+50.00	5,177.76	06.78	00.08
56+75.00	5,177.30	06.32	09.62
57+00.00	5,176.83	05.85	09.15
57+25.00	5,176.37	05.37	08.51
57+50.00	5,175.90	04.89	07.85
57+75.00	5,175.44	04.41	07.21
58+00.00	5,174.97	03.94	06.56
58+25.00	5,174.51	03.45	05.91
58+50.00	5,174.04	02.96	05.26
58+75.00	5,173.58	02.47	04.70
59+00.00	5,173.11	01.98	04.33
59+25.00	5,172.65	01.49	03.87
59+50.00	5,172.18	00.99	03.40
59+75.00	5,171.73	00.49	02.95
60+00.00	5,171.26	01.44	02.54
60+25.00	5,170.79	01.05	02.15
60+50.00	5,170.32	00.70	01.80
60+75.00	5,169.85	00.38	01.48
61+00.00	5,169.38	00.10	01.20
61+25.00	5,168.91	00.85	00.95
61+50.00	5,168.44	00.63	00.73
61+75.00	5,167.97	00.44	00.54
62+00.00	5,167.50	00.29	00.39
62+25.00	5,167.04	00.16	00.26
62+50.00	5,166.57	00.08	00.18
62+75.00	5,166.10	00.02	00.10
63+00.00	5,165.63	09.00	10.00
63+25.00	5,165.16		
63+50.00	5,164.69		
63+75.00	5,164.22		
64+00.00	5,163.75		

26 28031090

GREINER ENGINEERING
2601 Wyoming NE
Albuquerque, New Mexico 87112
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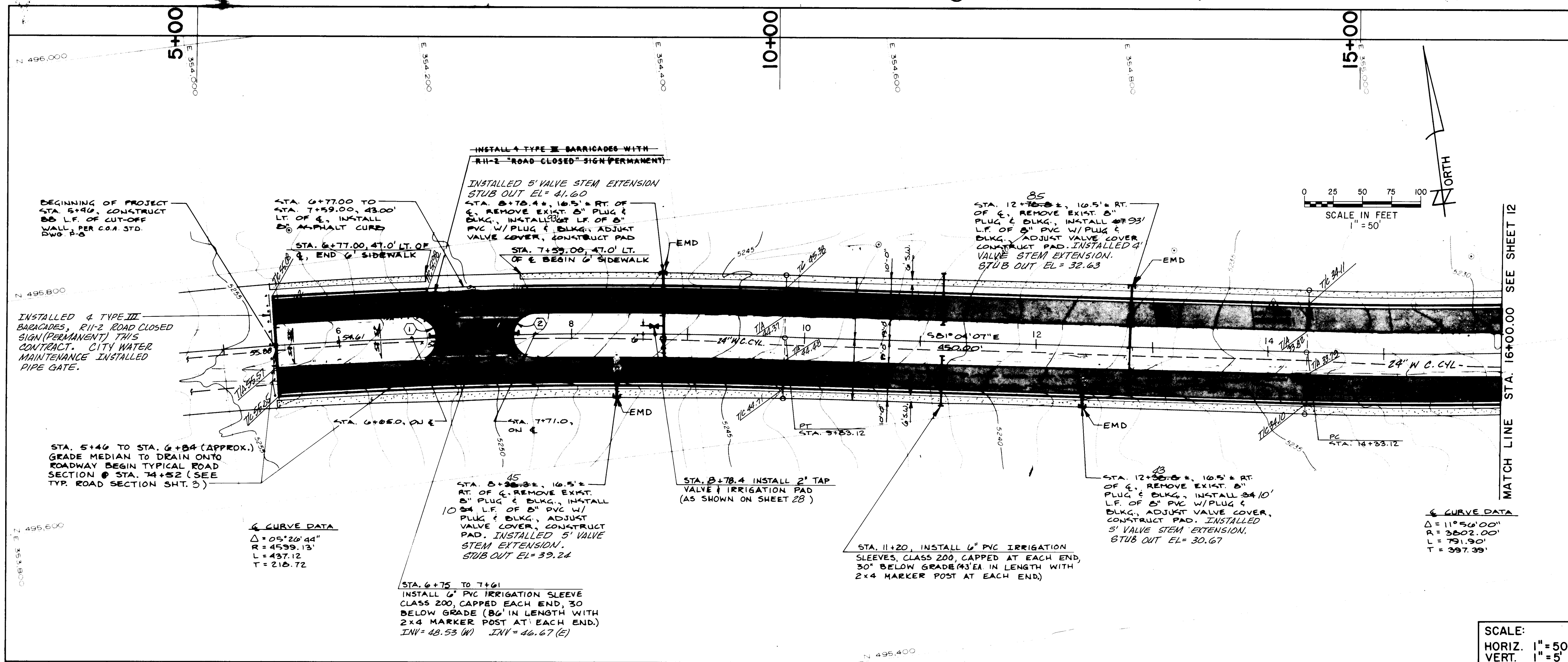
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPT.

TITLE: **SAD 215**
UNSER BLVD. - STA. 52+00 TO 63+11
ROAD PAVING & WATERLINE IMPROVEMENTS

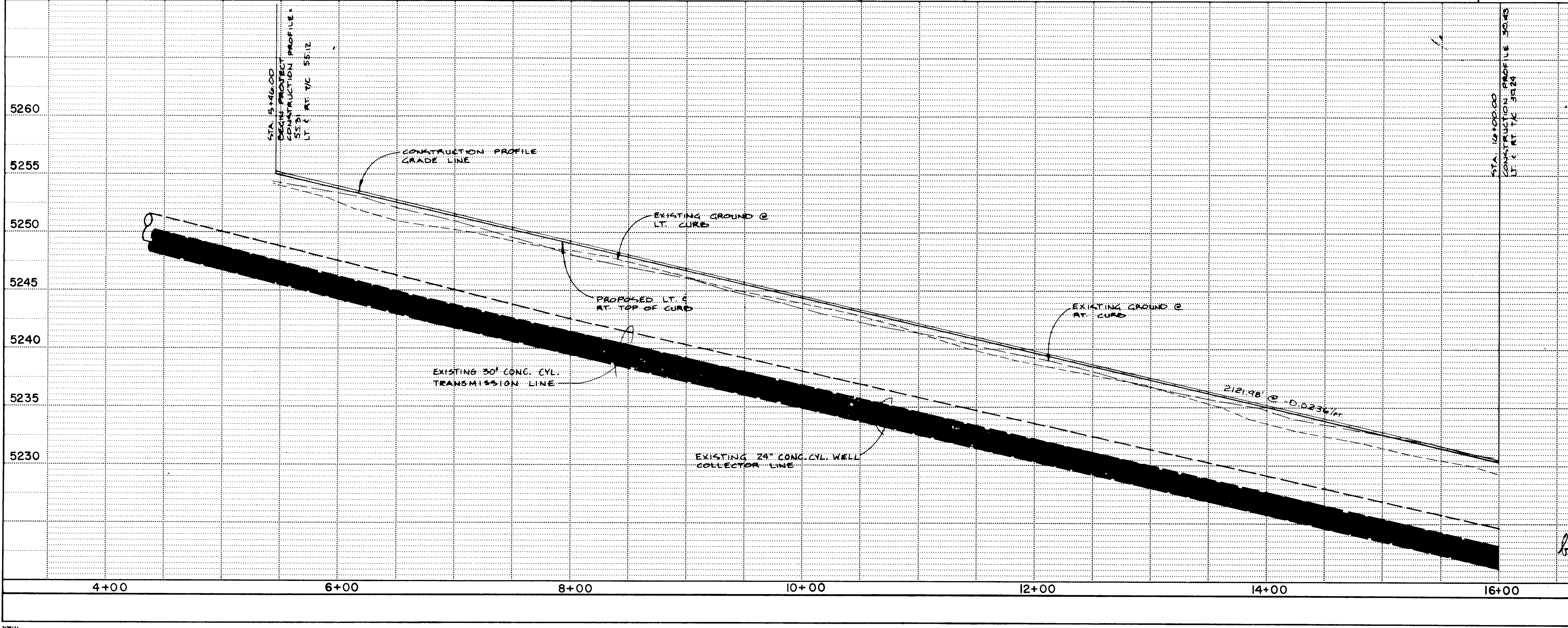
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	1/8/87	Liquid Waste	<i>[Signature]</i>	1/28/87
Asst. Design	<i>[Signature]</i>	1-8-87	Traffic	<i>[Signature]</i>	1/28/87
Asst. Hydrology	<i>[Signature]</i>	1-8-87	Water	<i>[Signature]</i>	1/28/87

DRAWING NO. **2803** MAP NO. **G8H9** SHEET **10** OF **43**

RECORD DRAWING

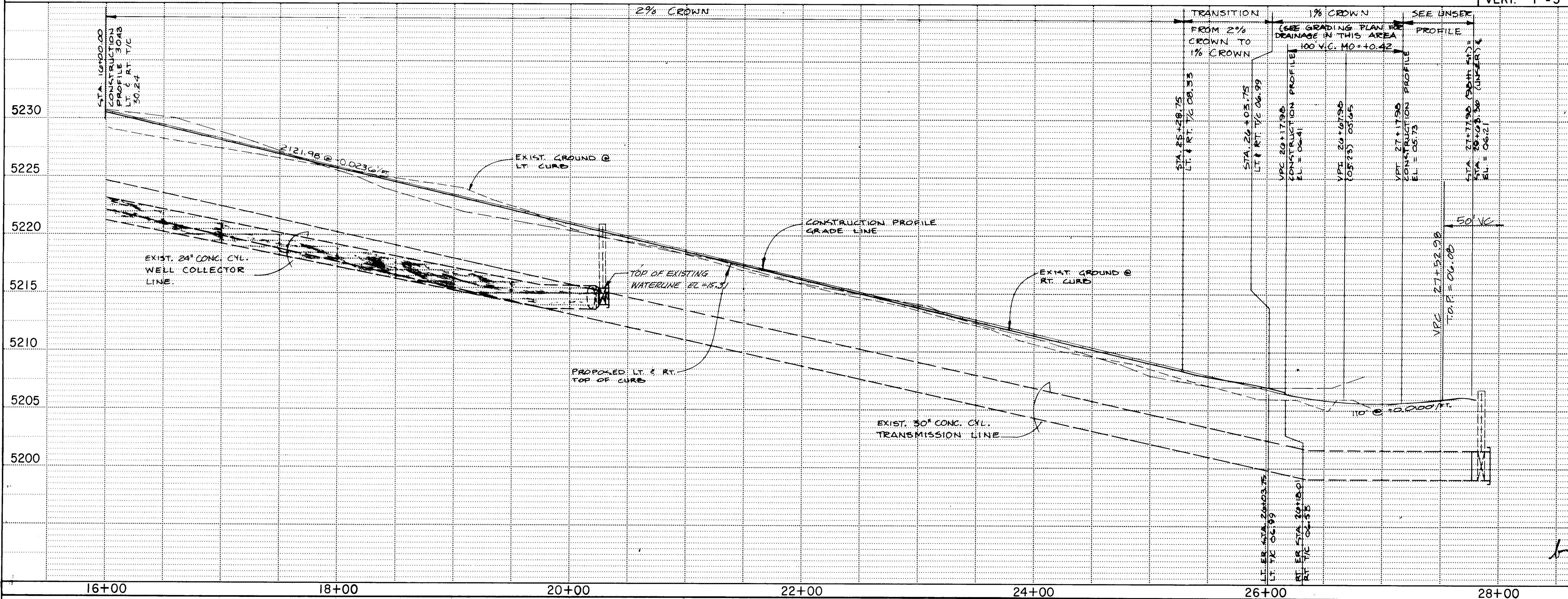
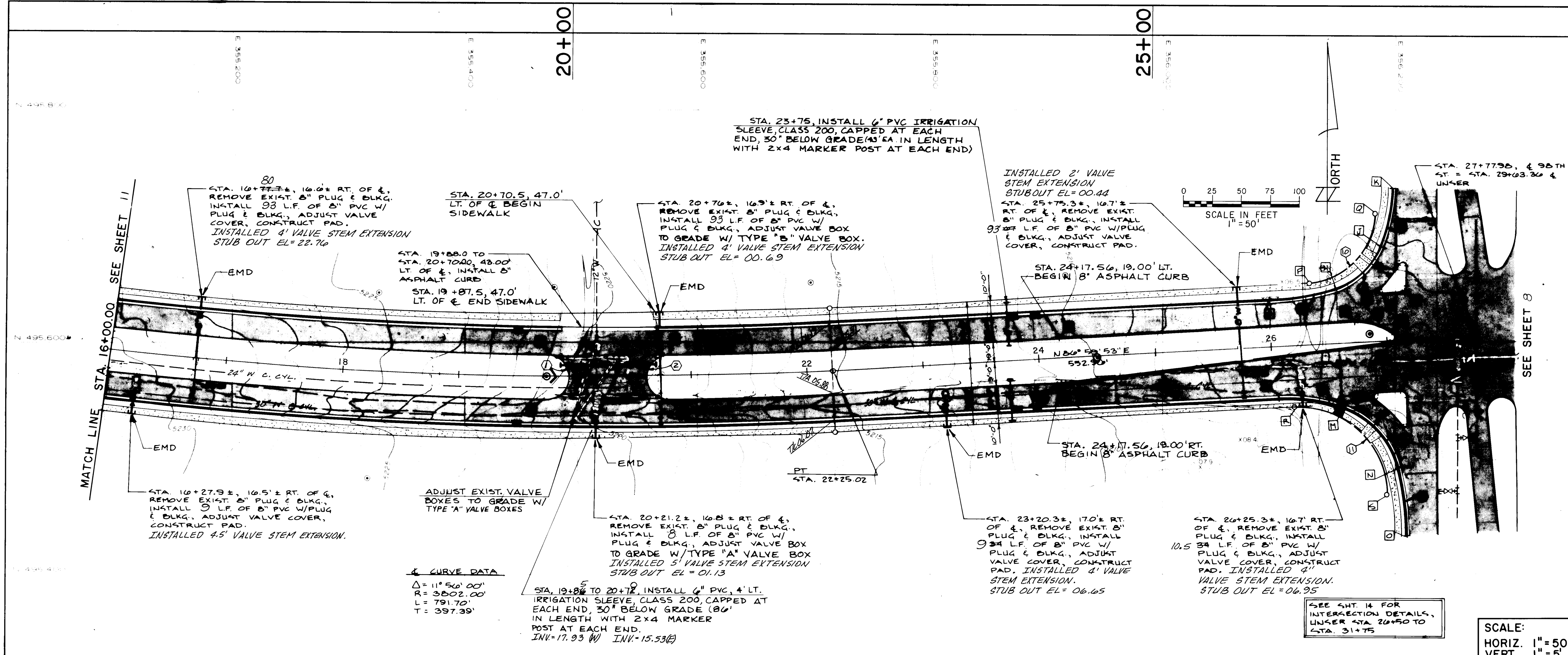


NOTES:				
1. ALL NEW WATERLINES SHALL BE 8" PVC, SCHEDULE 40, UNLESS OTHERWISE NOTED.				
CURVE DATA TABLE				
① INDICATES CURVE DATA				
NO.	DELTA	RADIUS	LENGTH	CH. BRG.
1.	180°00'00"	19.00	59.69	N04°58'06"E
2.	180°00'00"	19.00	59.69	N06°17'20"E
STATIONS AND OFFSETS				
A) INDICATES STATION AND OFFSET DATA				
NO.	Station	Offset	T/C	T/A
A.	6+55.00	19.00 LT	—	52.05
B.	6+55.00	19.00 RT	—	52.06
C.	7+11.00	19.00 LT	—	49.39
D.	7+11.00	19.00 RT	—	49.23
BENCH MARKS				
"BH-39" B&B BRASS CAP GO NORTH 0.5 MILES FROM THE INTERSECTION OF I-40 & COORS RD. TO OUTRY RD. GO WEST APPROX. 0.7 MILES TO THE END OF PAVEMENT. CONTINUE WEST 0.9 MILES ON THE DIRT ROAD TO THE TOP OF THE DAM, ALONG THE BANK OF THE DAM, PAST THE POWER SUB STATION TO A DIRT ROAD, GO SOUTH 0.4 MILES TO A DIRT ROAD, GO N.E. FOR 0.1 MILES TO THE STATION ON THE RIGHT. ELEVATION = 5195.46				
SURVEY INFORMATION				
NO.	DATE	BY	REMARKS	DATE
1662	10-84	GREINER		
1663	GREINER			
1742 & 1743	GREINER			
1742 & 1743	GREINER			
1772 & 1773	GREINER			
1772 & 1773	GREINER			
1784 & 1792	GREINER			
1784 & 1792	GREINER			



ELEVATIONS AT TOP OF CURB (43.00' LT & RT OF CENTERLINE)		ENGINEER'S SEAL		BY		REMARKS		DATE		NO.	
STATION	ELEVATION										
5+46.00	5,255.12										
5+50.00	5,255.03										
6+00.00	5,253.85										
6+50.00	5,252.67										
7+00.00	5,251.49										
7+50.00	5,250.31										
8+00.00	5,249.13										
8+50.00	5,247.95										
9+00.00	5,246.77										
9+50.00	5,245.59										
10+00.00	5,244.41										
10+50.00	5,243.23										
11+00.00	5,242.05										
11+50.00	5,240.87										
12+00.00	5,239.69										
12+50.00	5,238.51										
13+00.00	5,237.33										
13+50.00	5,236.15										
14+00.00	5,234.97										
14+50.00	5,233.79										
15+00.00	5,232.61										
15+50.00	5,231.43										
16+00.00	5,230.25										
1 2 3 4 5 6 7 8 9 10 11 12											
26 218.03 119.0											
GREINER ENGINEERING											
2601 Wyoming NE											
Albuquerque, New Mexico 87112											
(505) 292-1936											
CITY OF ALBUQUERQUE											
PUBLIC WORKS DEPT.											
TITLE: SAD 215											
98th STREET - STA. 5+46 TO 16+00											
ROAD PAVING & WATER LINE IMPROVEMENTS											
APPROVALS		ENGINEER		DATE		APPROVALS		ENGINEER		DATE	
City Engineer		[Signature]		1/3/87		Liquid Waste		[Signature]		12/27/86	
A-G-E-Design		[Signature]		1-8-87		Traffic		[Signature]		12/29/86	
A-G-E-Hydrology		[Signature]		1/8/87		Water		[Signature]		12/29/86	
DRAWING NO. 2803				MAP NO. G & H9				SHEET 11 OF 43			

RECORD DRAWING



CURVE DATA TABLE

① INDICATES CURVE DATA

NO.	DELTA	RADIUS	LENGTH	CH. BKG.
1.	180°00'00"	19.00	59.69	N00°05'02"E
2.	180°00'00"	19.00	59.69	N00°50'48"W
3.	13°10'25"	250.00	57.48	N80°24'11"E
4.	58°51'43"	60.00	57.45	N46°23'37"E
5.	19°11'17"	150.00	50.23	N09°23'07"E
6.	21°02'22"	150.00	55.08	S82°28'56"E
7.	58°00'28"	75.00	75.93	S42°57'31"E
8.	13°43'45"	250.00	59.90	S07°05'25"E
9.	03°48'51"	50.00	3.33	S85°05'28"W
10.	87°13'25"	60.00	91.34	S43°23'11"W
11.	92°46'35"	75.00	121.44	S46°36'49"E
12.	40°27'33"	50.00	35.31	S72°46'21"E
13.	135°43'36"	4.00	9.48	S15°19'14"W

STATIONS AND OFFSETS

A INDICATES STATION AND OFFSET DATA

No.	Station	Offset	T/C
A.	24+17.56	19.00 LT	11.43
B.	24+17.56	19.00 RT	11.43
C.	24+20.89	18.89 RT	11.35
D.	26+74.23	19.00 LT	05.92
E.	26+74.23	0.01 RT	06.11
F.	27+06.68	7.04 LT	06.07
G.	26+03.75	43.00 LT	07.06-09.99
H.	26+60.73	49.58 LT	05.88
J.	27+02.70	85.56 LT	05.56
K.	27+13.41	134.40 LT	05.45
L.	26+04.92	43.00 RT	07.06-06.96
M.	26+58.77	53.00 RT	05.87
N.	27+05.48	108.75 RT	07.16
O.	27+09.74	168.36 RT	07.91
P.	26+35.38	53.00 RT	—
Q.	26+95.21	110.09 RT	—
R.	26+18.59	53.00 RT	—
S.	26+93.50	131.63 RT	—
T.	26+98.27	46.54 LT	05.63
U.	26+99.55	43.00 LT	05.67
V.	27+15.23	43.00 LT	05.83
W.	26+89.02	48.38 RT	05.75
X.	26+90.84	43.00 RT	05.75
Y.	27+10.58	43.00 RT	06.44
Z.	19+76.00	19.00 LT	T/A 21.14
AA.	19+76.00	19.00 RT	T/A 20.97
BB.	20+82.00	19.00 LT	T/A 18.40
CC.	20+82.00	19.00 RT	T/A 18.42

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

INDICATES STATION AND OFFSET DATA

① INDICATES CURVE DATA

② INDICATES STATION AND OFFSET DATA

ENGINEER'S SEAL

Greiner Engineering

2601 Wyoming NE
Albuquerque, New Mexico 87112
(505) 292-1936

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPT.

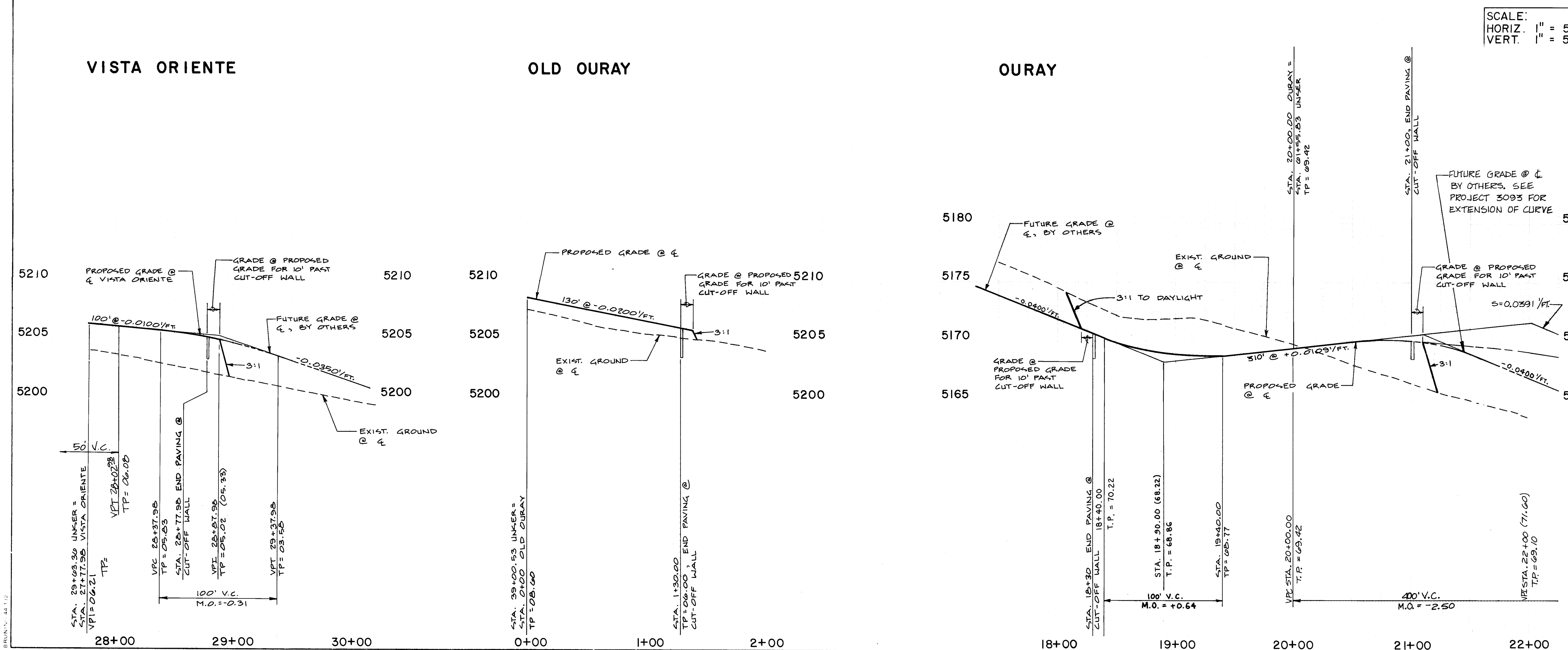
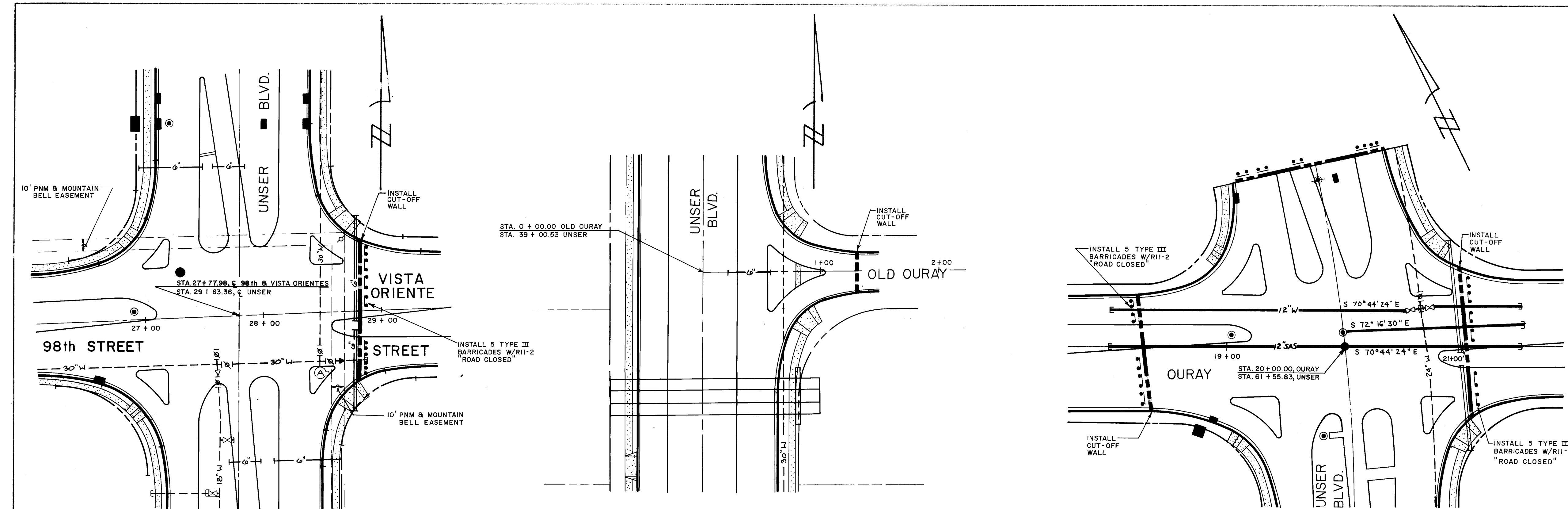
TITLE: SAD 215
98th STREET - STA. 16+00 TO 27+77.98
ROAD PAVING & WATER LINE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	[Signature]	1-8-87	Liquid Waste	[Signature]	12-29-87
A.E.E. Design	[Signature]	1-8-87	Traffic	[Signature]	12-29-87
A.E.E. Hydrology	[Signature]	1-8-87	Water	[Signature]	12-29-87

DRAWING NO. 2803

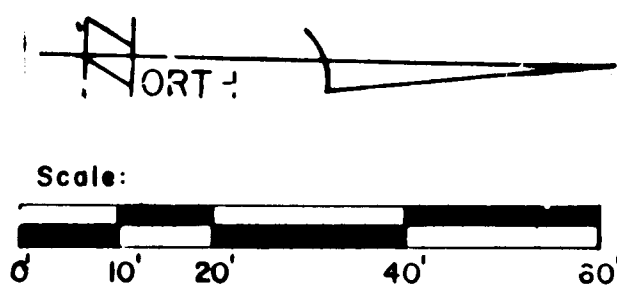
MAP NO. G & H9

SHEET 12 OF 43



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

ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
NO.	DATE	BY	DATE	NO.	DATE	NO.	DATE
1662	GREINER	10-84	GREINER	10-84	GREINER	10-84	GREINER
1663	GREINER	10-84	GREINER	10-84	GREINER	10-84	GREINER
1742	1743	GREINER	1742	1743	GREINER	1742	1743
1766	1767	GREINER	1766	1767	GREINER	1766	1767
1772	1773	GREINER	1772	1773	GREINER	1772	1773
1778	1779	GREINER	1778	1779	GREINER	1778	1779
1788	1792	GREINER	1788	1792	GREINER	1788	1792
REVISIONS		DESIGN		DATE		DATE	
1		2		3		4	
5		6		7		8	
9		10		11		12	
13		14		15		16	
17		18		19		20	
21		22		23		24	
25		26		27		28	
29		30		31		32	
33		34		35		36	
37		38		39		40	
41		42		43		44	
45		46		47		48	
49		50		51		52	
53		54		55		56	
57		58		59		60	
61		62		63		64	
65		66		67		68	
69		70		71		72	
73		74		75		76	
77		78		79		80	
81		82		83		84	
85		86		87		88	
89		90		91		92	
93		94		95		96	
97		98		99		100	
101		102		103		104	
105		106		107		108	
109		110		111		112	
113		114		115		116	
117		118		119		120	
121		122		123		124	
125		126		127		128	
129		130		131		132	
133		134		135		136	
137		138		139		140	
141		142		143		144	
145		146		147		148	
149		150		151		152	
153		154		155		156	
157		158		159		160	
161		162		163		164	
165		166		167		168	
169		170		171		172	
173		174		175		176	
177		178		179		180	
181		182		183		184	
185		186		187		188	
189		190		191		192	
193		194		195		196	
197		198		199		200	
201		202		203		204	
205		206		207		208	
209		210		211		212	
213		214		215		216	
217		218		219		220	
221		222		223		224	
225		226		227		228	
229		230		231		232	
233		234		235		236	
237		238		239		240	
241		242		243		244	
245		246		247		248	
249		250		251		252	
253		254		255		256	
257		258		259		260	
261		262		263		264	
265		266		267		268	
269		270		271		272	
273		274		275		276	
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345		346		347		348	
349		350		351		352	
353		354		355		356	
357		358		359		360	
361		362		363		364	
365		366		367		368	
369		370		371		372	
373		374		375		376	
377		378		379		380	
381		382		383		384	
385		386		387		388	
389		390		391		392	
393		394		395		396	



FROM STA. 8+01.91 TO STA. 63+11
INSTALL 2" INTERCONNECT CONDUIT
1' BACK OF CURB WITH PULL BOXES
AT 250' INTERVALS

- LEGEND
- THEORETICAL TOP OF CURB LOCATION (55' FROM E)
 - 5111.71 T.C. ELEVATION AT TOP OF CURB
 - 5111.40 T.P. ELEVATION AT TOP OF PAVEMENT
 - 5106.71 FL. ELEVATION AT FLOWLINE
 - 0.5% PERCENT OF GRADE
 - ELECTRICAL PULL BOX (STD. TYPE "I-4") MARKED STREET LIGHTS
 - ELECTRICAL PULL BOX (STD. TYPE "I-4") MARKED TRAFFIC LIGHTS
 - ELECTRICAL PULL BOX (TYPE "LARGE") MARKED TRAFFIC LIGHTS
 - CONTROLLER FOUNDATION (TYPE II)
 - PEDESTAL FOUNDATION (TYPE I (SP))
 - HAST ARM FOUNDATION TYPE I (TYPE II NW, SE CORNERS)
 - ELECTRICAL MANHOLE
 - 2" CONDUIT FOR "STREET LIGHTS"
 - 3" CONDUIT FOR "TRAFFIC LIGHTS"
 - 2" CONDUIT INTERCONNECT TO TRAFFIC
 - PROPOSED CONTOURS
 - CUT-OFF WALL (PER C.O.A. D.W.G. P-8)
 - TYPE I WHEEL CHAIR RAMP (PER C.O.A. D.W.G. P-17)

STA. 30+94.97, 85' LEFT
INSTALL CONTROLLER FOUNDATION EL=06.00
STA. 31+05, 85' LEFT
INSTALL PEDESTAL FOUNDATION EL=05.83
ELECTRICAL MANHOLE

INSTALL 2" INTER-
CONNECT CONDUIT
1' BACK OF CURB
FROM B+01.91 TO
63+11

CURVE DATA TABLE

INDICATES CURVE DATA					
NO.	DELTA	RADIUS	LENGTH	CH.BRG.	
1.	92°46'35"	75.00	121.44	S46°36'50"E	
2.	13°43'45"	250.00	59.90	S07°05'12"E	
3.	58°00'28"	75.00	75.93	S42°57'31"E	
4.	21°02'22"	150.00	55.08	S82°28'50"E	
5.	140°32'36"	3.00	7.46	S15°43'35"W	
6.	10°39'39"	94.00	32.26	S45°42'54"E	
7.	144°20'27"	2.00	5.04	N7°56'42"E	
8.	90°00'00"	5.00	7.85	S45°13'32"E	
9.	38°09'38"	50.00	33.30	N18°51'51"E	
10.	137°23'38"	8.00	19.18	S73°22'15"E	
11.	184°26'54"	12.51	40.26	N82°33'01"E	
12.	174°56'14"	2.00	6.11	S87°14'36"W	
13.	14°50'06"	150.00	38.84	S07°11'31"W	
14.	148°48'23"	3.00	7.79	N7°37'43"W	
15.	90°00'00"	5.00	7.85	N44°46'28"E	
16.	17°42'51"	80.00	24.73	S39°49'31"W	
17.	138°54'28"	2.00	4.85	S20°46'18"E	
18.	63°41'13"	60.00	66.69	S46°27'12"W	
19.	90°00'00"	60.00	94.25	N44°46'28"E	
20.	1°28'42"	250.00	50.08	S84°02'07"W	
21.	26°26'18"	50.00	22.20	N71°30'23"W	
22.	150°32'00"	5.00	13.14	N10°29'46"E	
23.	10°11'17"	150.00	50.23	S80°37'53"E	
24.	90°00'00"	60.00	94.25	S45°13'32"E	
25.	57°38'18"	60.00	60.36	S42°13'06"E	
26.	21°27'28"	79.00	29.59	S52°05'44"E	
27.	152°35'55"	3.00	7.99	S13°28'30"W	
28.	90°00'00"	5.00	7.85	N45°13'32"E	
29.	138°51'32"	2.00	4.85	N69°12'11"E	
30.	13°10'25"	250.00	57.48	S06°48'45"E	
31.	31°19'23"	50.00	32.57	S18°26'09"W	
32.	133°50'18"	8.00	18.69	N75°59'00"W	
33.	171°09'41"	2.00	5.97	N85°21'18"E	
34.	188°50'19"	12.51	41.22	S85°21'18"W	
35.	19°11'17"	150.00	50.23	N09°22'07"E	
36.	87°13'25"	60.00	91.34	S43°23'11"W	
37.	54°51'43"	60.00	57.45	N46°23'37"E	
38.	10°00'31"	80.00	26.54	S37°41'40"W	
39.	151°35'03"	3.00	7.94	N76°01'00"E	
40.	87°13'25"	5.00	7.61	N43°23'11"E	
41.	140°12'03"	2.00	4.89	S22°54'06"E	
42.	13°10'25"	250.00	57.48	N80°24'41"E	
43.	40°27'33"	50.00	35.31	S72°46'21"E	
44.	135°43'36"	4.00	9.48	S15°19'11"W	

- NOTE:
- SEE SHEET 13 FOR CROSS STREET PROFILES.
 - SEE SHEET 8 FOR PLAN & PROFILES.
 - SEE SHEET 4 FOR TYP. INTERSECTION DETAILS.

26 28031490

GREINER ENGINEERING
2601 Wyoming NE
Albuquerque, New Mexico 87112
(505) 292-1936

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPT.

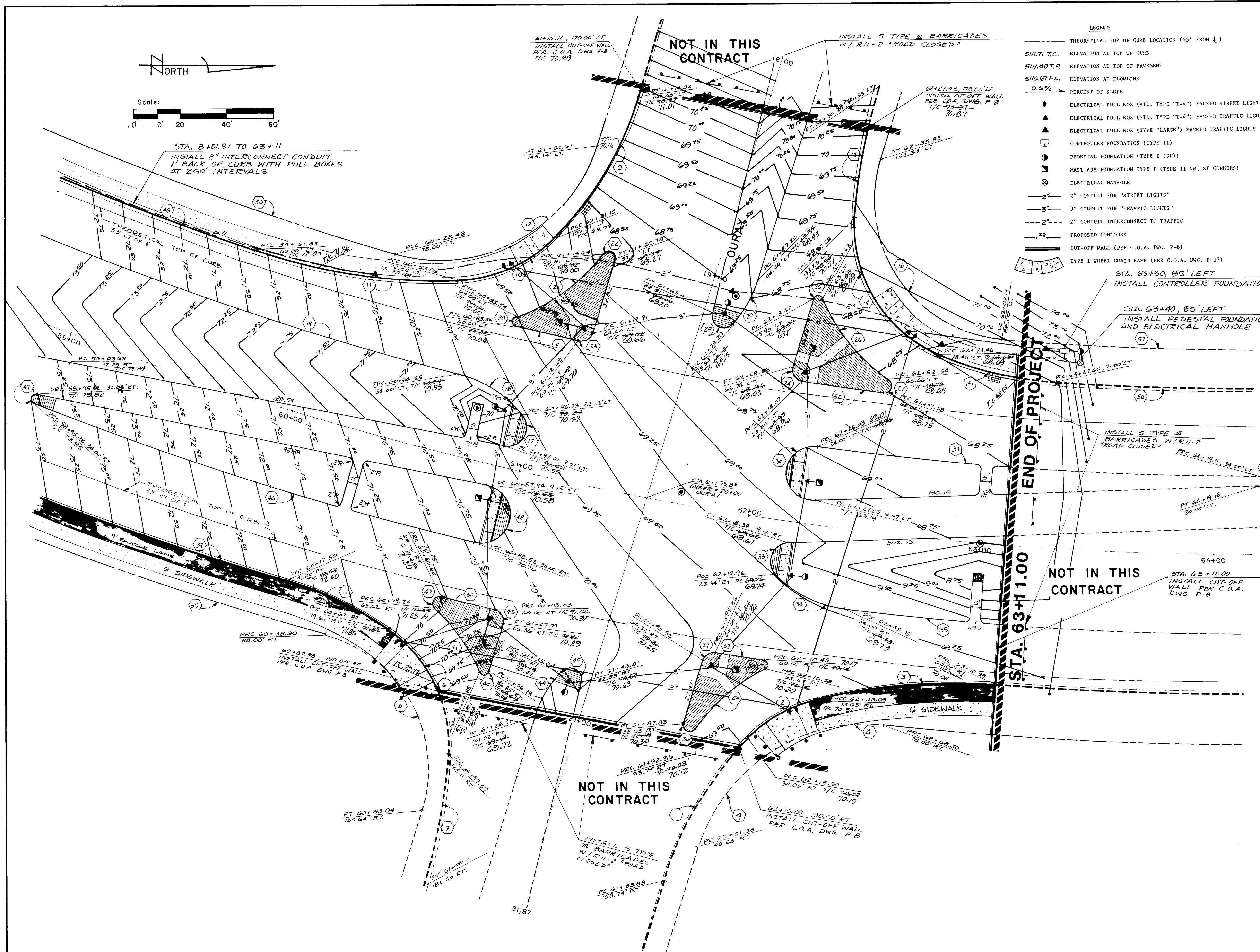
TITLE SAD 215

INTERSECTION OF UNSER BLVD AND 98TH STREET

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	1/8/87	12/8/86	Liquid Waste	12/8/86	
Design	1-8-87	12/29/86	Traffic	12/29/86	
Hydrology	1/6/87	12/29/86	Water	12/29/86	

DRAWING NO. 2803 MAP NO. G&H9 SHEET 14 OF 43

RECORD DRAWING



CURVE DATA TABLE				
INDICATES CURVE DATA				
NO.	DELTA	RADIUS	LENGTH	CH. BRG.
1.	27°15'58"	150.00	71.38	N57°04'32"W
2.	32°30'18"	60.00	34.04	N27°01'25"W
3.	17°37'10"	250.00	76.88	N02°07'42"W
4.	78°23'31"	100.00	136.82	S31°30'46"E
5.	18°39'20"	150.00	48.84	N28°05'30"E
6.	58°41'54"	60.00	61.47	N66°46'07"E
7.	13°10'25"	250.00	57.48	S77°17'43"E
8.	91°01'47"	70.00	111.21	S63°46'36"W
9.	27°15'58"	150.00	71.38	S57°04'32"W
10.	32°30'18"	60.00	34.04	S27°01'25"W
11.	17°37'10"	250.00	76.88	N02°07'42"W
12.	78°23'31"	100.00	136.82	S31°30'46"E
13.	18°39'20"	150.00	48.84	N28°05'30"E
14.	58°41'54"	60.00	61.47	N66°46'07"E
15.	13°10'25"	250.00	57.48	S77°17'43"E
16.	91°01'47"	70.00	111.21	S63°46'36"W
17.	27°15'58"	150.00	71.38	S57°04'32"W
18.	32°30'18"	60.00	34.04	S27°01'25"W
19.	17°37'10"	250.00	76.88	N02°07'42"W
20.	78°23'31"	100.00	136.82	S31°30'46"E
21.	18°39'20"	150.00	48.84	N28°05'30"E
22.	58°41'54"	60.00	61.47	N66°46'07"E
23.	13°10'25"	250.00	57.48	S77°17'43"E
24.	91°01'47"	70.00	111.21	S63°46'36"W
25.	27°15'58"	150.00	71.38	S57°04'32"W
26.	32°30'18"	60.00	34.04	S27°01'25"W
27.	17°37'10"	250.00	76.88	N02°07'42"W
28.	78°23'31"	100.00	136.82	S31°30'46"E
29.	18°39'20"	150.00	48.84	N28°05'30"E
30.	58°41'54"	60.00	61.47	N66°46'07"E
31.	13°10'25"	250.00	57.48	S77°17'43"E
32.	91°01'47"	70.00	111.21	S63°46'36"W
33.	27°15'58"	150.00	71.38	S57°04'32"W
34.	32°30'18"	60.00	34.04	S27°01'25"W
35.	17°37'10"	250.00	76.88	N02°07'42"W
36.	78°23'31"	100.00	136.82	S31°30'46"E
37.	18°39'20"	150.00	48.84	N28°05'30"E
38.	58°41'54"	60.00	61.47	N66°46'07"E
39.	13°10'25"	250.00	57.48	S77°17'43"E
40.	91°01'47"	70.00	111.21	S63°46'36"W
41.	27°15'58"	150.00	71.38	S57°04'32"W
42.	32°30'18"	60.00	34.04	S27°01'25"W
43.	17°37'10"	250.00	76.88	N02°07'42"W
44.	78°23'31"	100.00	136.82	S31°30'46"E
45.	18°39'20"	150.00	48.84	N28°05'30"E
46.	58°41'54"	60.00	61.47	N66°46'07"E
47.	13°10'25"	250.00	57.48	S77°17'43"E
48.	91°01'47"	70.00	111.21	S63°46'36"W
49.	27°15'58"	150.00	71.38	S57°04'32"W
50.	32°30'18"	60.00	34.04	S27°01'25"W
51.	17°37'10"	250.00	76.88	N02°07'42"W
52.	78°23'31"	100.00	136.82	S31°30'46"E
53.	18°39'20"	150.00	48.84	N28°05'30"E
54.	58°41'54"	60.00	61.47	N66°46'07"E
55.	13°10'25"	250.00	57.48	S77°17'43"E
56.	91°01'47"	70.00	111.21	S63°46'36"W
57.	27°15'58"	150.00	71.38	S57°04'32"W
58.	32°30'18"	60.00	34.04	S27°01'25"W
59.	17°37'10"	250.00	76.88	N02°07'42"W
60.	78°23'31"	100.00	136.82	S31°30'46"E
61.	18°39'20"	150.00	48.84	N28°05'30"E
62.	58°41'54"	60.00	61.47	N66°46'07"E
63.	13°10'25"	250.00	57.48	S77°17'43"E
64.	91°01'47"	70.00	111.21	S63°46'36"W
65.	27°15'58"	150.00	71.38	S57°04'32"W
66.	32°30'18"	60.00	34.04	S27°01'25"W
67.	17°37'10"	250.00	76.88	N02°07'42"W
68.	78°23'31"	100.00	136.82	S31°30'46"E
69.	18°39'20"	150.00	48.84	N28°05'30"E
70.	58°41'54"	60.00	61.47	N66°46'07"E
71.	13°10'25"	250.00	57.48	S77°17'43"E
72.	91°01'47"	70.00	111.21	S63°46'36"W
73.	27°15'58"	150.00	71.38	S57°04'32"W
74.	32°30'18"	60.00	34.04	S27°01'25"W
75.	17°37'10"	250.00	76.88	N02°07'42"W
76.	78°23'31"	100.00	136.82	S31°30'46"E
77.	18°39'20"	150.00	48.84	N28°05'30"E
78.	58°41'54"	60.00	61.47	N66°46'07"E
79.	13°10'25"	250.00	57.48	S77°17'43"E
80.	91°01'47"	70.00	111.21	S63°46'36"W
81.	27°15'58"	150.00	71.38	S57°04'32"W
82.	32°30'18"	60.00	34.04	S27°01'25"W
83.	17°37'10"	250.00	76.88	N02°07'42"W
84.	78°23'31"	100.00	136.82	S31°30'46"E
85.	18°39'20"	150.00	48.84	N28°05'30"E
86.	58°41'54"	60.00	61.47	N66°46'07"E
87.	13°10'25"	250.00	57.48	S77°17'43"E
88.	91°01'47"	70.00	111.21	S63°46'36"W
89.	27°15'58"	150.00	71.38	S57°04'32"W
90.	32°30'18"	60.00	34.04	S27°01'25"W
91.	17°37'10"	250.00	76.88	N02°07'42"W
92.	78°23'31"	100.00	136.82	S31°30'46"E
93.	18°39'20"	150.00	48.84	N28°05'30"E
94.	58°41'54"	60.00	61.47	N66°46'07"E
95.	13°10'25"	250.00	57.48	S77°17'43"E
96.	91°01'47"	70.00	111.21	S63°46'36"W
97.	27°15'58"	150.00	71.38	S57°04'32"W
98.	32°30'18"	60.00	34.04	S27°01'25"W
99.	17°37'10"	250.00	76.88	N02°07'42"W
100.	78°23'31"	100.00	136.82	S31°30'46"E

NOTE:

- SEE SHEET 13 FOR CROSS STREET PROFILES.
- SEE SHEET 10 FOR PLAN & PROFILES.
- SEE SHEET 4 FOR TYP. INTERSECTION DETAILS.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

26 28 03 15 90

GREINER ENGINEERING

2601 Wyoming NE

Albuquerque, New Mexico 87112

(505) 292-1936

CITY OF ALBUQUERQUE

PUBLIC WORKS DEPT.

TITLE: SAD 215

INTERSECTION OF UNSER BLVD. AND OURAY

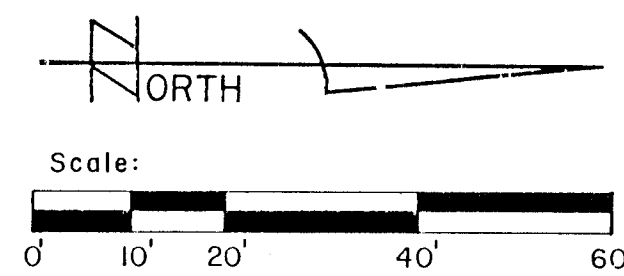
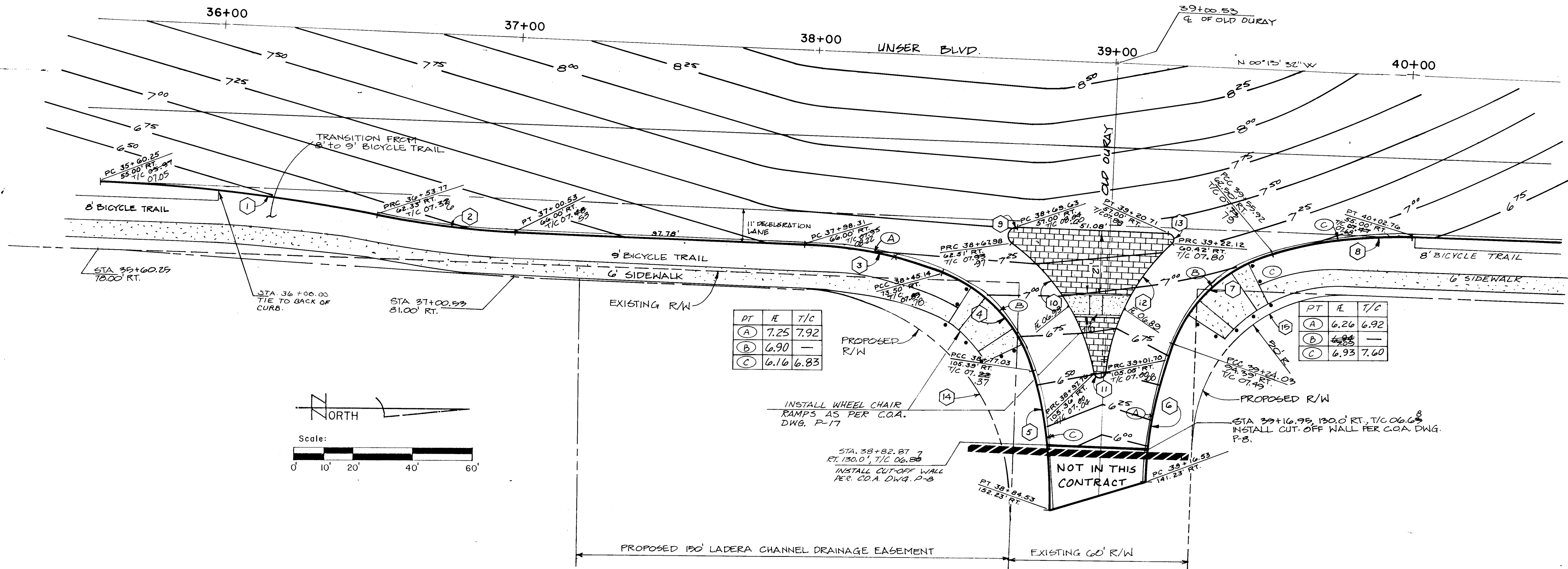
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	1/9/87	1/9/87	Liquid Waste	1/9/87	1/9/87
AC-E Design	1-8-87	1-8-87	Traffic	1-8-87	1-8-87
AC-E Hydrology	1-8-87	1-8-87	Water	1-8-87	1-8-87

DRAWING NO. 2803

MAP NO. 3 & H9

SHEET 15 OF 43

RECORD DRAWING



OLD OURAY

PT	E	T/C
A	7.25	7.92
B	6.90	—
C	6.16	6.83

PT	E	T/C
A	6.26	6.92
B	6.85	—
C	6.93	7.60

CURVE DATA TABLE				
1 INDICATES CURVE DATA				
NO.	DELTA	RADIUS	LENGTH	CH.BRG.
1.	08°58'02"	600.00	93.90	N04°15'29"E
2.	08°58'02"	300.00	46.95	N04°15'29"E
3.	18°11'42"	150.00	47.63	N08°52'19"E
4.	53°36'37"	50.00	46.78	N44°46'28"E
5.	18°11'42"	150.00	47.63	N80°40'37"E
6.	18°11'42"	150.00	47.63	N81°07'14"E
7.	53°36'37"	50.00	46.78	N45°13'32"E
8.	18°11'42"	150.00	47.63	N09°19'23"W
9.	146°40'48"	3.00	7.68	S73°33'56"E
10.	43°46'11"	70.00	53.47	N54°58'45"E
11.	163°02'18"	2.00	5.69	N04°39'18"W
12.	41°02'54"	70.00	50.15	N65°39'10"E
13.	135°05'58"	2.00	4.72	S67°19'12"E
14.	90°00'00"	75.00	117.81	N45°13'32"E
15.	90°00'00"	50.00	78.54	N44°46'28"E

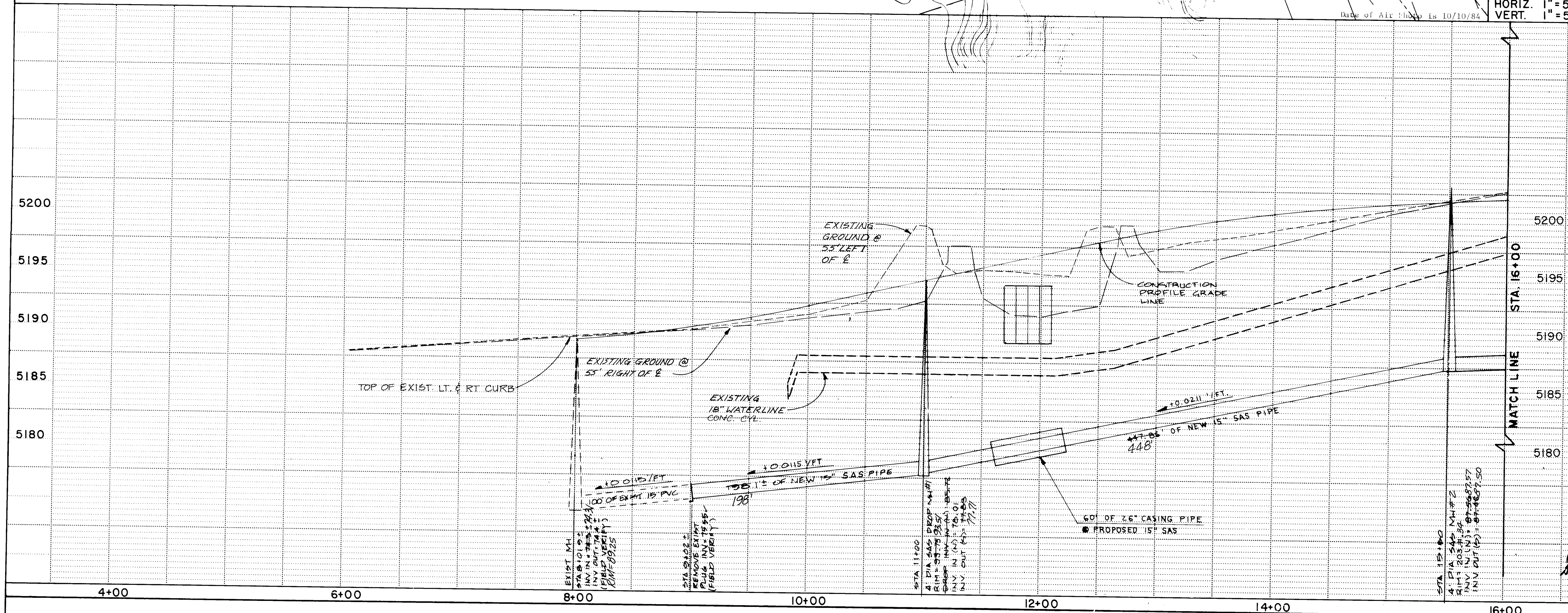
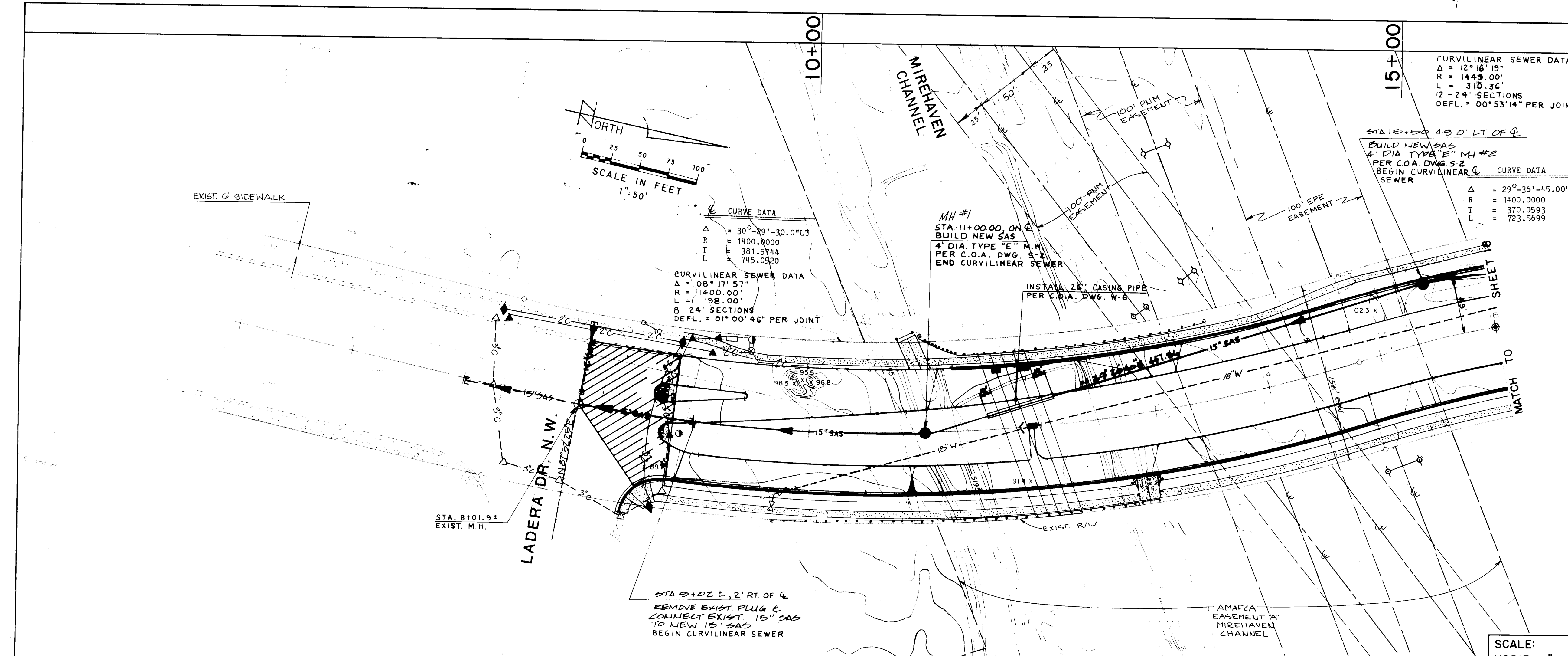
NOTE:
1) SEE SHEET 13 FOR CROSS STREET PROFILES.
2) SEE SHEET 8 FOR PLAN & PROFILE.

GREINER ENGINEERING
2601 Wyoming NE
Albuquerque, New Mexico 87112
(505) 292-1936

CITY OF ALBUQUERQUE PUBLIC WORKS DEPT.					
TITLE: SAD 215 OLD OURAY ROAD INTERSECTION					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	1-8-87	Liquid Waste	<i>[Signature]</i>	12/21/84
A-G-E Design	<i>[Signature]</i>	1-8-87	Traffic	<i>[Signature]</i>	12/29/84
A-C-E Hydrology	<i>[Signature]</i>	1-8-87	Water	<i>[Signature]</i>	12/29/84
DRAWING NO. 2803		MAP NO. G 8 H 9		SHEET 16 OF 43	

RECORD DRAWING

BENCH MARKS		AS BUILT INFORMATION	
CONTRACTOR: MOUNTAIN STATES <td>WORK</td> <td>DATE</td>		WORK	DATE
INTERSECTION OF I-40 & OURAY RD. GO WEST		GREINER	10-87
APPROX. 0.7 MILES TO THE END OF PAVEMENT. CONTINUE		DATE	10-87
WEST 0.9 MILES ON THE DIRT ROAD TO THE TOP OF THE DAM,		DATE	10-87
ALONG THE BANK OF THE DAM, PAST THE POWER SUB STATION		DATE	10-87
TO A DIRT ROAD, GO SOUTH 0.4 MILES TO A DIRT ROAD, GO		DATE	10-87
N.E. FOR 0.1 MILES TO THE STATION ON THE RIGHT.		DATE	10-87
ELEVATION = 5195.46		DATE	10-87
SURVEY INFORMATION		MICRO-FILM INFORMATION	
NO.	DATE	NO.	DATE
1662	10-84	17884	12/29/84
1663	10-84	17885	12/29/84
1742	1/74	17886	12/29/84
1766	1/76	17887	12/29/84
1772	1/77	17888	12/29/84
1788	1/79	17889	12/29/84
1788	1/79	17890	12/29/84
ENGINEER'S SEAL		REVISIONS	
<i>[Signature]</i>		NO.	DATE
		1	1-8-87
		2	1-8-87
		3	1-8-87
		4	1-8-87
		5	1-8-87
		6	1-8-87
		7	1-8-87
		8	1-8-87
		9	1-8-87
		10	1-8-87
		11	1-8-87
		12	1-8-87
		13	1-8-87
		14	1-8-87
		15	1-8-87



NOTES:
1. ALL SEWER LINES IN THIS PROJECT SHALL BE CONSTRUCTED OF DIP, VCP, OR PVC UNLESS SPECIFIED OTHERWISE. (JOINT DEFLECTIONS ARE NOT TO EXCEED 2/3 OF MANUFACTURERS RECOMMENDED DEFLECTION)

CURVILINEAR SEWER DATA
Δ = 12° 16' 19"
R = 1445.00'
L = 310.36'
12-24' SECTIONS
DEFL. = 00° 53' 14" PER JOINT

CURVILINEAR SEWER DATA
Δ = 29° 36' 45.00" RT
R = 1400.0000
L = 370.0593
T = 723.5699

CURVILINEAR SEWER DATA
Δ = 08° 17' 57"
R = 1400.00'
L = 198.00'
8-24' SECTIONS
DEFL. = 01° 00' 46" PER JOINT

CURVILINEAR SEWER DATA
Δ = 30° 29' 30.00" LT
R = 1400.0000
L = 381.5144
T = 745.0520

CURVILINEAR SEWER DATA
Δ = 08° 17' 57"
R = 1400.00'
L = 198.00'
8-24' SECTIONS
DEFL. = 01° 00' 46" PER JOINT

CURVILINEAR SEWER DATA
Δ = 30° 29' 30.00" LT
R = 1400.0000
L = 381.5144
T = 745.0520

CURVILINEAR SEWER DATA
Δ = 08° 17' 57"
R = 1400.00'
L = 198.00'
8-24' SECTIONS
DEFL. = 01° 00' 46" PER JOINT

CURVILINEAR SEWER DATA
Δ = 30° 29' 30.00" LT
R = 1400.0000
L = 381.5144
T = 745.0520

CURVILINEAR SEWER DATA
Δ = 08° 17' 57"
R = 1400.00'
L = 198.00'
8-24' SECTIONS
DEFL. = 01° 00' 46" PER JOINT

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Δ = 30° 29' 30.00" LT
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L = 381.5144
T = 745.0520

CURVILINEAR SEWER DATA
Δ = 08° 17' 57"
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L = 198.00'
8-24' SECTIONS
DEFL. = 01° 00' 46" PER JOINT

CURVILINEAR SEWER DATA
Δ = 30° 29' 30.00" LT
R = 1400.0000
L = 381.5144
T = 745.0520

CURVILINEAR SEWER DATA
Δ = 08° 17' 57"
R = 1400.00'
L = 198.00'
8-24' SECTIONS
DEFL. = 01° 00' 46" PER JOINT

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Δ = 30° 29' 30.00" LT
R = 1400.0000
L = 381.5144
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CURVILINEAR SEWER DATA
Δ = 08° 17' 57"
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L = 198.00'
8-24' SECTIONS
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Δ = 30° 29' 30.00" LT
R = 1400.0000
L = 381.5144
T = 745.0520

CURVILINEAR SEWER DATA
Δ = 08° 17' 57"
R = 1400.00'
L = 198.00'
8-24' SECTIONS
DEFL. = 01° 00' 46" PER JOINT

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS		APPROVALS		ENGINEER		DATE	
CONTRACTOR	MOUNTAIN STATES	NO.	DATE	BY	NO.	DATE	BY	NO.	DATE	APPROVALS	ENGINEER	APPROVALS	ENGINEER	DATE	DATE
WORK	DATE 10-87	1662	10-84	GREINER	1662	10-84	GREINER	1662	10-84	City Engineer	10-87	City Engineer	10-87	10-87	10-87
INSPECTOR'S	DATE 10-87	1663	10-84	GREINER	1663	10-84	GREINER	1663	10-84	A-E-E Design	10-87	A-E-E Design	10-87	10-87	10-87
ACCEPTANCE BY GREINER	DATE 10-87	1742	10-84	GREINER	1742	10-84	GREINER	1742	10-84	A-E-Hydrology	10-87	A-E-Hydrology	10-87	10-87	10-87
VERIFICATION BY GREINER	DATE 10-87	1742	10-84	GREINER	1742	10-84	GREINER	1742	10-84						
DRAWINGS BY GREINER	DATE 10-87	1742	10-84	GREINER	1742	10-84	GREINER	1742	10-84						
RECORD BY GREINER	DATE 10-87	1742	10-84	GREINER	1742	10-84	GREINER	1742	10-84						
MICRO-FILM INFORMATION	DATE 10-87	1742	10-84	GREINER	1742	10-84	GREINER	1742	10-84						
RECORDED BY	DATE 10-87	1742	10-84	GREINER	1742	10-84	GREINER	1742	10-84						
NO	DATE 10-87	1742	10-84	GREINER	1742	10-84	GREINER	1742	10-84						
ELEVATION	DATE 10-87	1742	10-84	GREINER	1742	10-84	GREINER	1742	10-84						
	DATE 10-87	1742	10-84	GREINER	1742	10-84	GREINER	1742	10-84						

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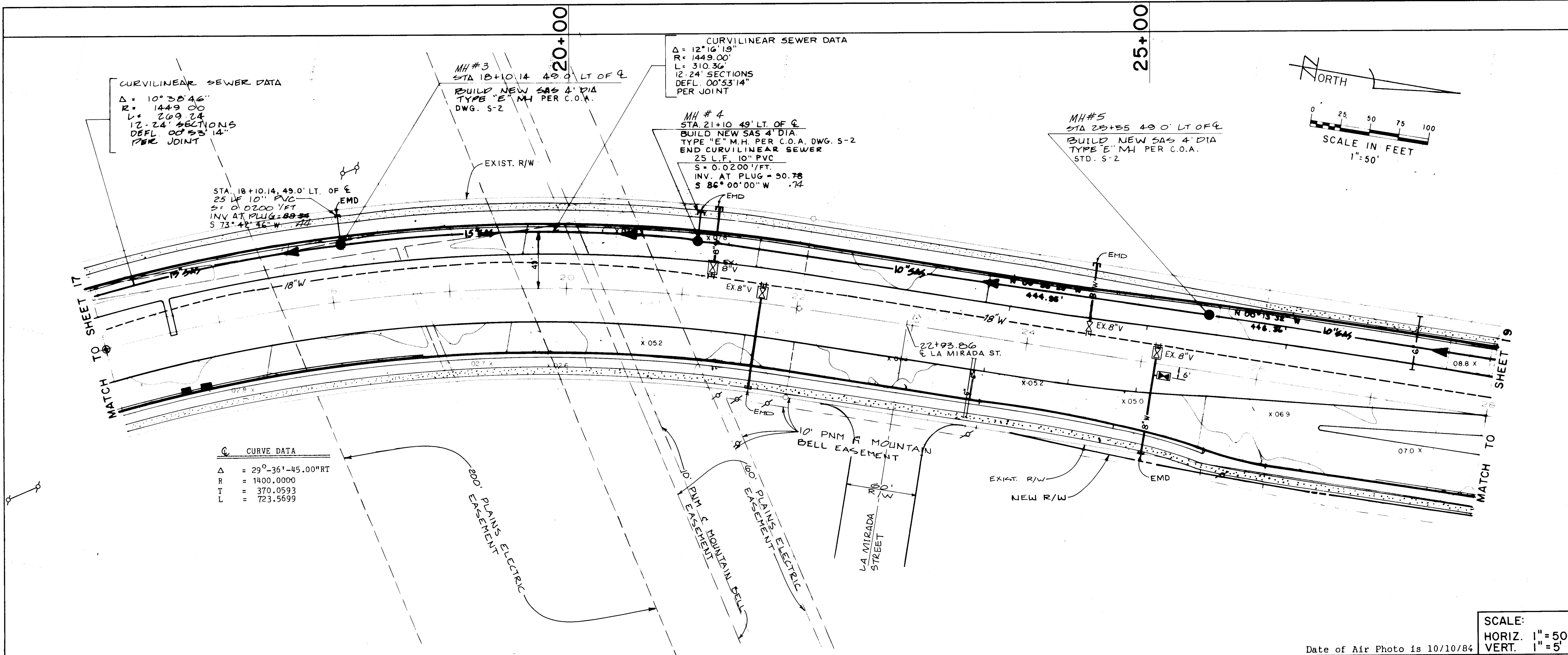
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPT.

TITLE: SAD 215
UNSER BLVD. - STA. 8+01.91 TO 16+00
SANITARY SEWER

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	10-87	10-87	Liquid Waste	10-87	10-87
A-E-E Design	10-87	10-87	Traffic	10-87	10-87
A-E-Hydrology	10-87	10-87	Water	10-87	10-87

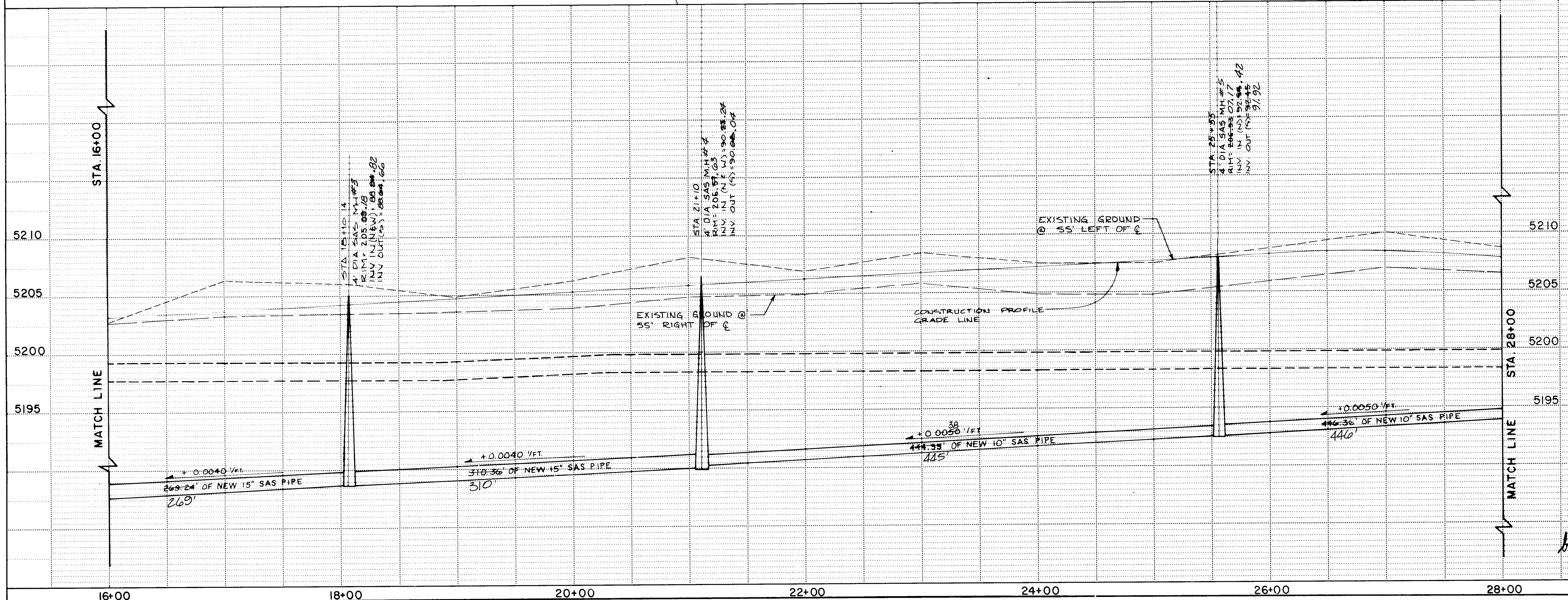
DRAWING NO. 2803
MAP NO. G & H9
SHEET 17 OF 43

RECORD DRAWING



POWERLINE CROSSING		
STATION	CO.	ELEVATION
18+57.76	P.E.	5237.96
20+51.97	P.E.	5232.22

*POWERLINE TO BE RAISED.
 FINAL ELEVATION TO BE DETERMINED BY PLAINS ELECTRIC.



AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
1662	GREINER	10-84	GREINER	10-84	GREINER	10-84	GREINER
1663	GREINER	10-84	GREINER	10-84	GREINER	10-84	GREINER
1742	743 GREINER	10-84	743 GREINER	10-84	743 GREINER	10-84	743 GREINER
1766	1767	1767	1767	1767	1767	1767	1767
1772	1773	1773	1773	1773	1773	1773	1773
1788	1792 GREINER	8-87	1792 GREINER	8-87	1792 GREINER	8-87	1792 GREINER

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 2601 Wyoming NE
 Albuquerque, New Mexico 87112
 (505) 292-1936

CITY OF ALBUQUERQUE
 PUBLIC WORKS DEPT.

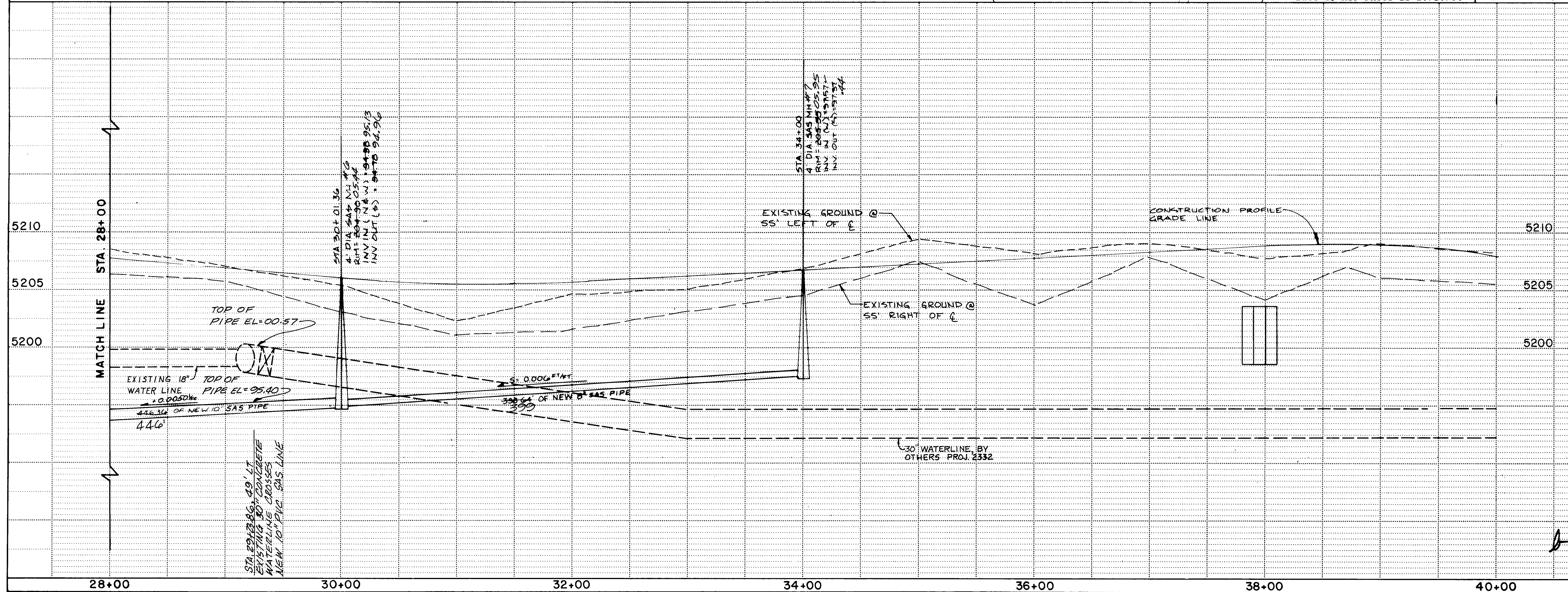
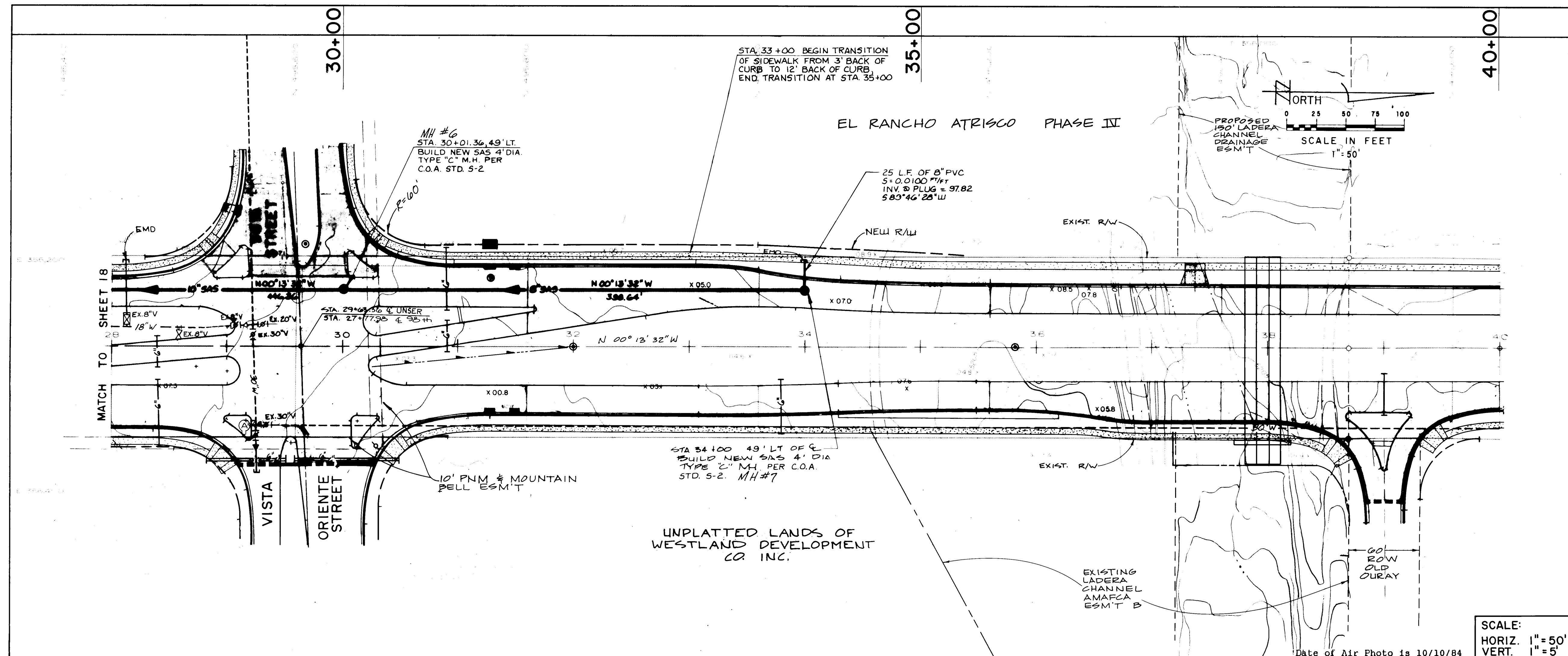
TITLE: SAD 215
 UNSER BLVD. - STA. 16+00 TO 28+00
 SANITARY SEWER

DESIGNED BY: J. J. J. **DATE:** 1/87
DRAWN BY: J. J. J. **DATE:** 1/87
CHECKED BY: J. J. J. **DATE:** 1-87

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	J. J. J.	1/87	Liquid Waste	J. J. J.	1/87
ACE Design	J. J. J.	1-87	Traffic	J. J. J.	1/87
ACE-Hydrology	J. J. J.	1-87	Water	J. J. J.	1/87

DRAWING NO. 2803 **MAP NO. G & H9** **SHEET 18 OF 43**

RECORD DRAWING



POWERLINE CROSSING		
STATION	CO.	ELEVATION
30+26.17	PNM	5226.57

*VERTICAL CLEARANCE ≈ 21'
RELOCATE POLE

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

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

DATE OF AIR PHOTO IS 10/10/84

AS BUILT INFORMATION			BENCH MARKS			SURVEY INFORMATION			ENGINEER'S SEAL		
CONTRACTOR	DATE	BY	CONTRACTOR	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
CONTRACTOR MOUNTAIN STATES	DATE 8-87	BY GREINER	CONTRACTOR MOUNTAIN STATES	DATE 8-87	BY GREINER	1662	10-84	GREINER	1662	10-84	GREINER
INSPECTOR'S	DATE 8-87	BY GREINER	INSPECTOR'S	DATE 8-87	BY GREINER	1742	1743	GREINER	1742	1743	GREINER
FIELD NOTES	DATE 8-87	BY GREINER	FIELD NOTES	DATE 8-87	BY GREINER	1766	1767	GREINER	1766	1767	GREINER
RECORDING	DATE 8-87	BY GREINER	RECORDING	DATE 8-87	BY GREINER	1772	1773	GREINER	1772	1773	GREINER
DATE	DATE 8-87	BY GREINER	DATE	DATE 8-87	BY GREINER	1778	1779	GREINER	1778	1779	GREINER
NO.	NO.	BY GREINER	NO.	NO.	BY GREINER	1788	1792	GREINER	1788	1792	GREINER

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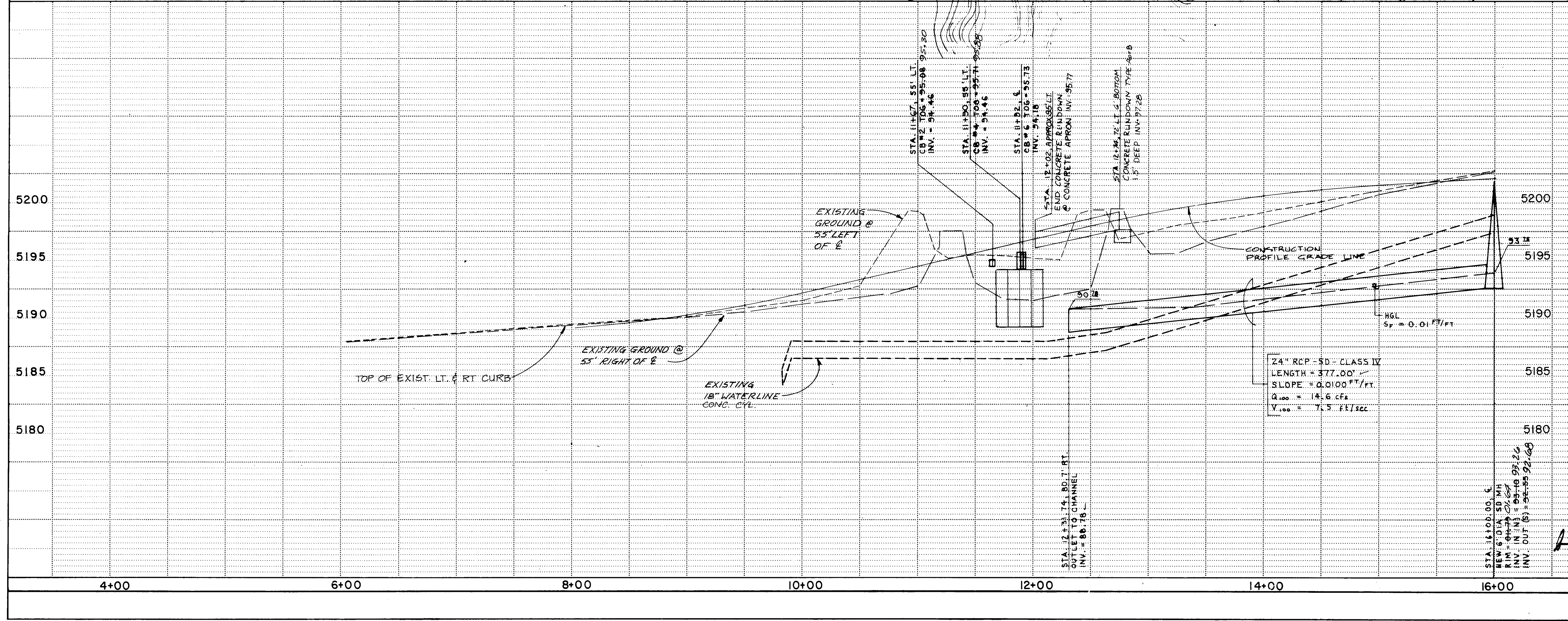
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT

TITLE: SAD 215
UNSER BLVD. - STA. 28+00 TO 40+00
SANITARY SEWER

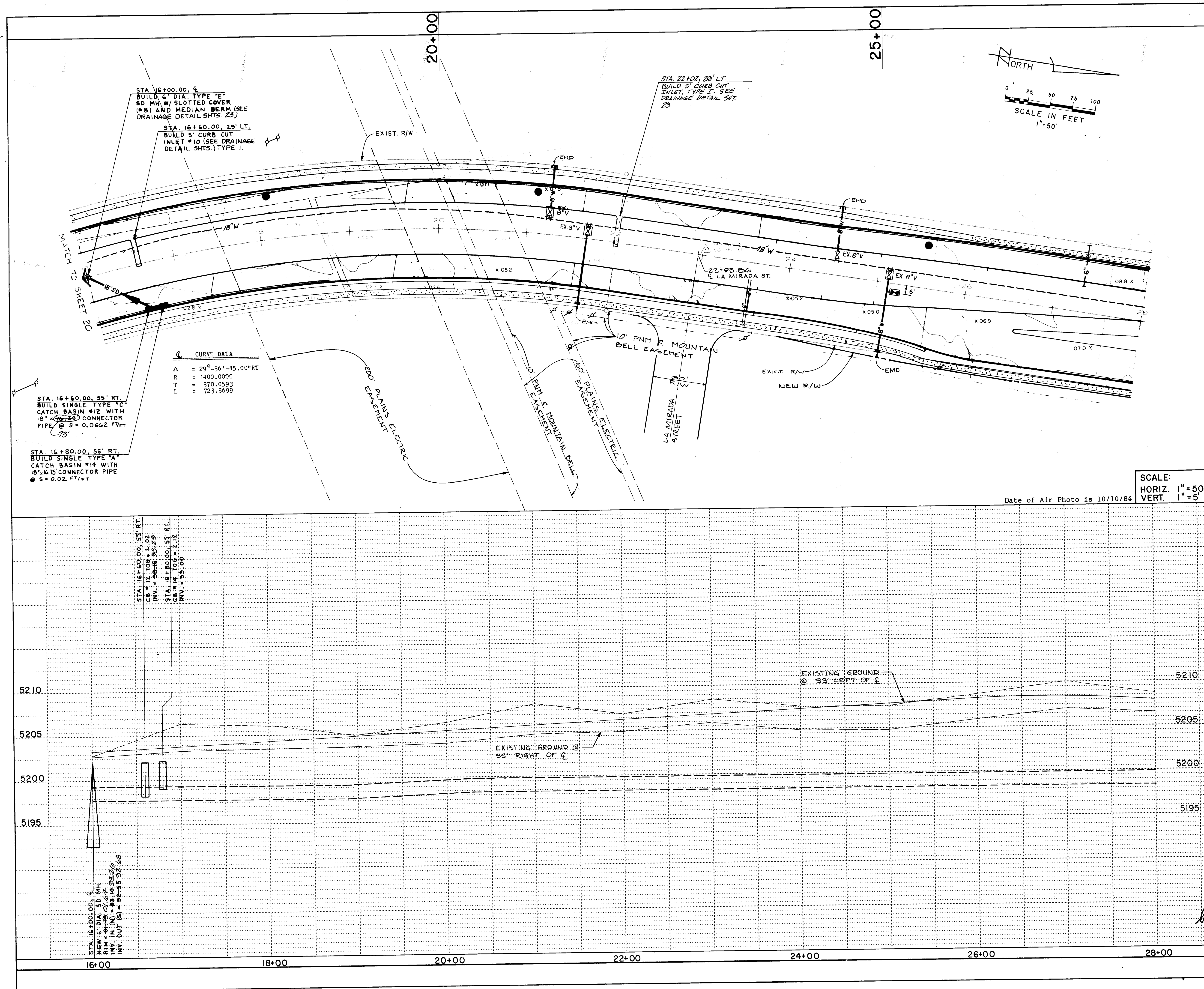
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	1/9/87	1/9/87	Liquid Waste	1/9/87	1/9/87
ACE - Design	1/8/87	1/8/87	Traffic	1/8/87	1/8/87
ACE - Hydrology	1/9/87	1/9/87	Water	1/9/87	1/9/87

DRAWING NO. 2803
MAP NO. G & H9
SHEET 19 OF 43

RECORD DRAWING



1	2	3	4	5	6	7	8	9	10	11	12
2	6					2	8	0	3	2	0
GREINER ENGINEERING 2601 Wyoming NE Albuquerque, New Mexico 87112 (505) 292-1936											
CITY OF ALBUQUERQUE PUBLIC WORKS											
TITLE: SAD 215 UNSER BLVD. - STA. 8+01. STORM SEWER											
APPROVALS		ENGINEER		DATE		APPROVED					
City Engineer		<i>[Signature]</i>		11/9/87		Liquid W.					
A.C.E. - Design		<i>[Signature]</i>		1-8-87		Traffic					
A.C.E. - Hydrology		<i>[Signature]</i>		1/9/87		Water					
DRAWING NO. 2803				MAP NO. G & HS							



POWERLINE CROSSING		
STATION	CO.	ELEVATION
18+57.76	P.E.	5237.96
20+51.97	P.E.	5232.22

*POWERLINE TO BE RAISED.
FINAL ELEVATION TO BE
DETERMINED BY PLAINS
ELECTRIC.

AS BUILT INFORMATION		
CONTRACTOR	DATE	BY
INSPECTOR	DATE	BY
VERIFICATION	DATE	BY
RECORDING	DATE	BY

BENCH MARKS		
MARK	DESCRIPTION	ELEVATION
BM-39	B&H BRASS CAP GO NORTH 0.4 MILES FROM THE INTERSECTION OF I-40 & COORS RD. TO QUART RD. GO WEST APPROX. 0.7 MILES TO THE END OF PAVEMENT. CONTINUE WEST 0.9 MILES ON THE DIRT ROAD TO THE TOP OF THE DAM, ALONG THE BANK OF THE DAM, EAST THE POWER SUB STATION TO A DIRT ROAD, GO SOUTH 0.4 MILES TO A DIRT ROAD, GO N.E. FOR 0.1 MILES TO THE STATION ON THE RIGHT.	5195.46

SURVEY INFORMATION		
NO.	DATE	BY
1662	10-84	GREINER
1663	10-84	GREINER
1742	1743	GREINER
1766	1767	
1772	1773	
1778	1779	
1788	1790	GREINER

ENGINEER'S SEAL		
NO.	DATE	BY
REMARKS		
DESIGNED BY	DATE	
DRAWN BY	DATE	
CHECKED BY	DATE	

REVISIONS		
NO.	DATE	REMARKS
1	1-87	DESIGN

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Albuquerque, New Mexico 87112
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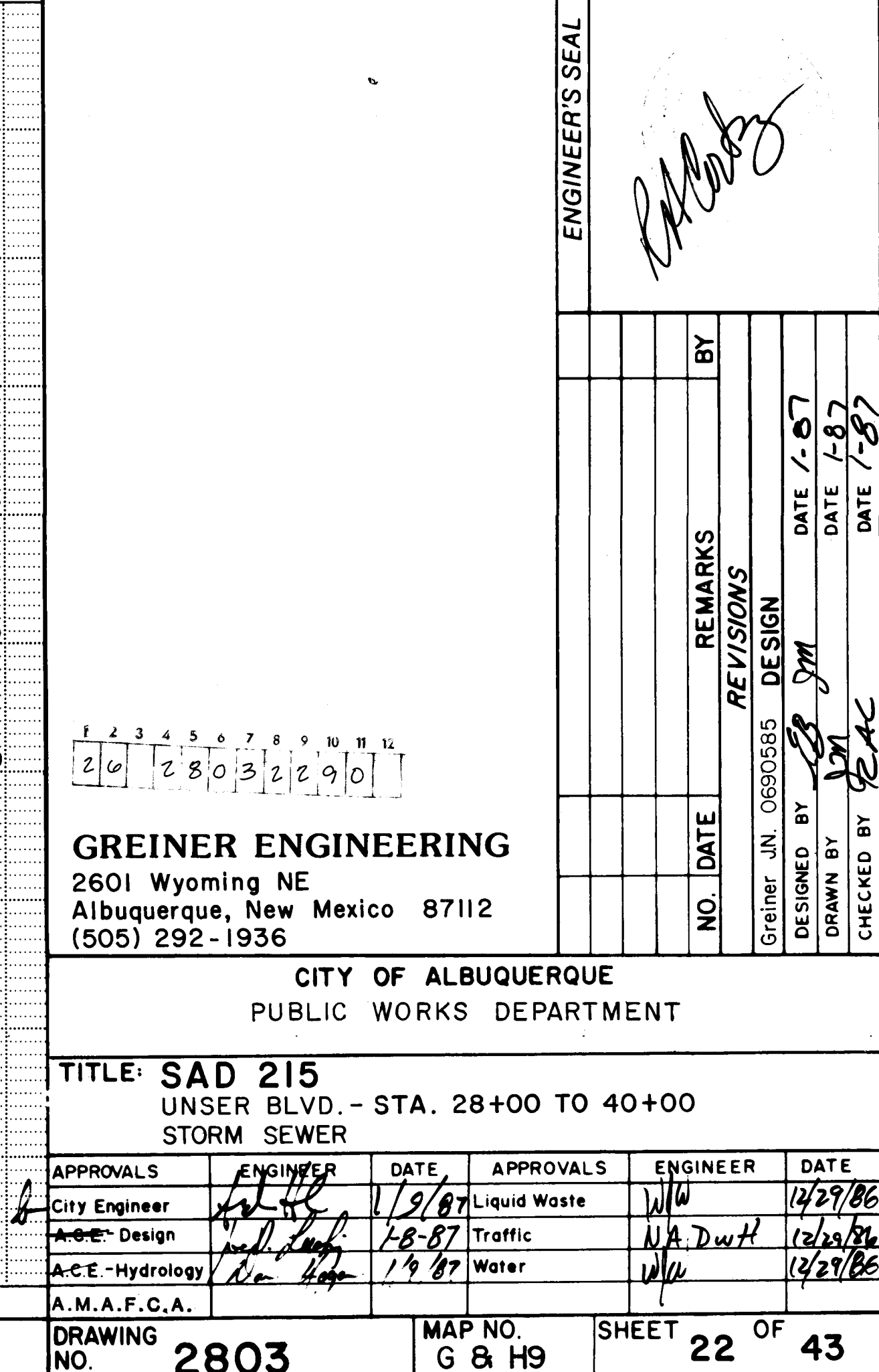
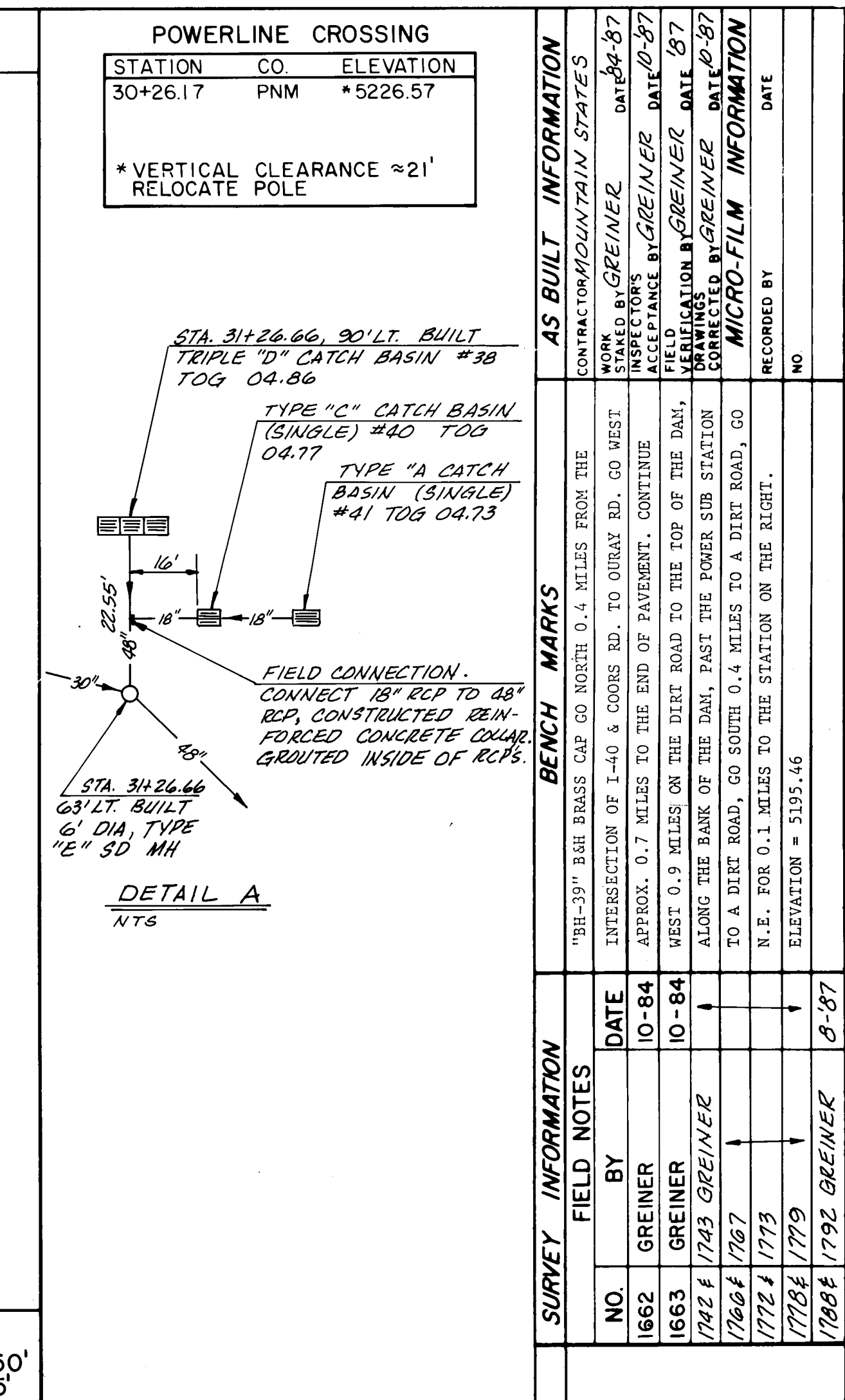
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPT.

TITLE: **SAD 215**
UNSER BLVD. - STA. 16+00 TO 28+00
STORM SEWER

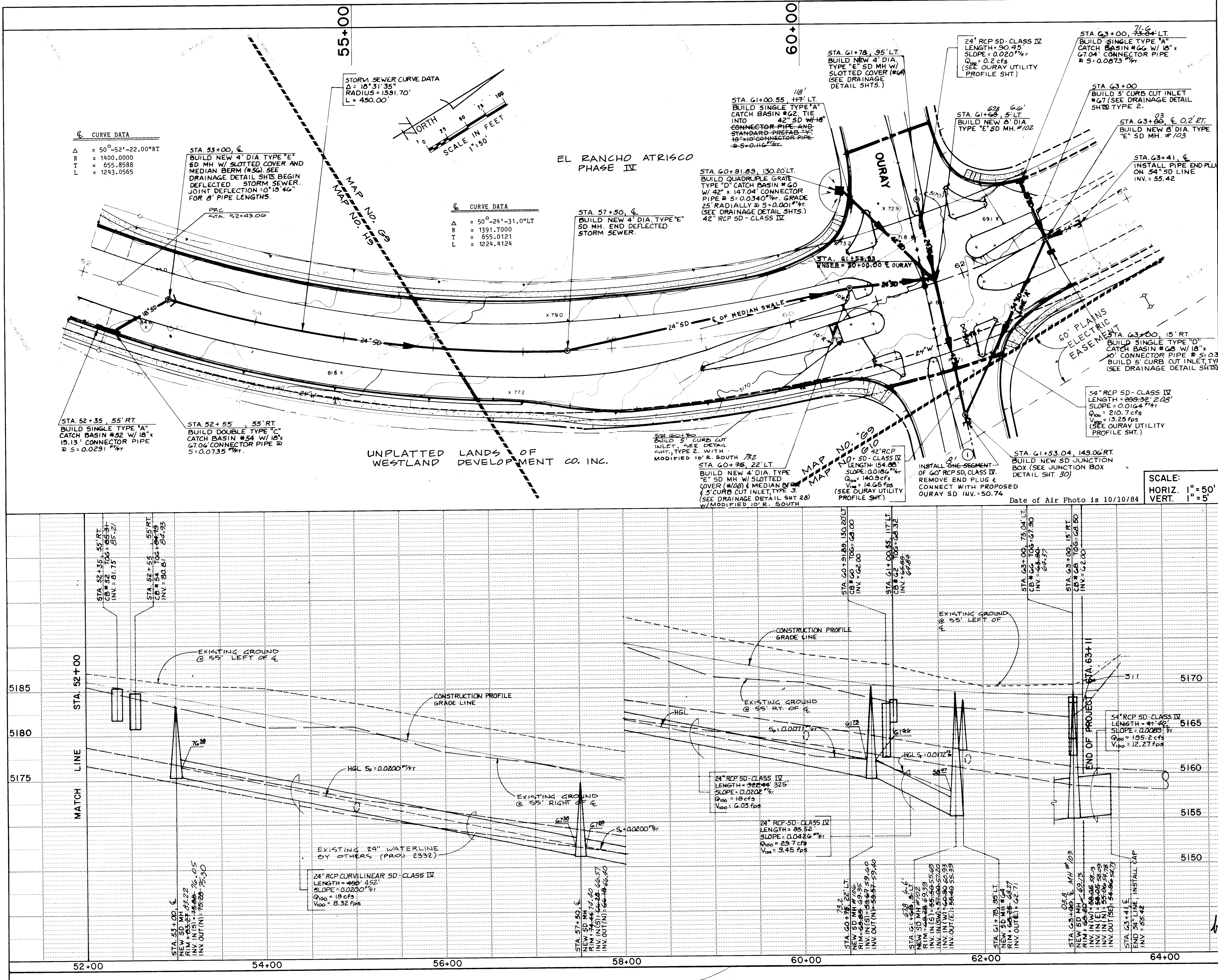
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer		1/87	Liquid Waste		12/9/86
A.C.E. Design		1-8-87	Traffic		12/23/86
A.C.E. Hydrology		1/9/87	Water		12/23/86
A.M.A.F.C.A.					

DRAWING NO. **2803** MAP NO. **G & H9** SHEET **21** OF **43**

RECORD DRAWING



RECORD DRAWING



ENGINEER'S SEAL		BENCH MARKS		SURVEY INFORMATION		AS BUILT INFORMATION	
NO.	DATE	NO.	DATE	NO.	DATE	NO.	DATE
1662	10-84	1662	10-84	1662	10-84	1662	10-84
1663	10-84	1663	10-84	1663	10-84	1663	10-84
1762	10-84	1762	10-84	1762	10-84	1762	10-84
1772	10-84	1772	10-84	1772	10-84	1772	10-84
1782	10-84	1782	10-84	1782	10-84	1782	10-84
1792	10-84	1792	10-84	1792	10-84	1792	10-84

REVISIONS

NO.	DATE	REVISIONS
1	1-87	DESIGN
2	1-87	CONSTRUCTION

GREINER ENGINEERING
 2601 Wyoming NE
 Albuquerque, New Mexico 87112
 (505) 292-1936

CITY OF ALBUQUERQUE
 PUBLIC WORKS DEPT.

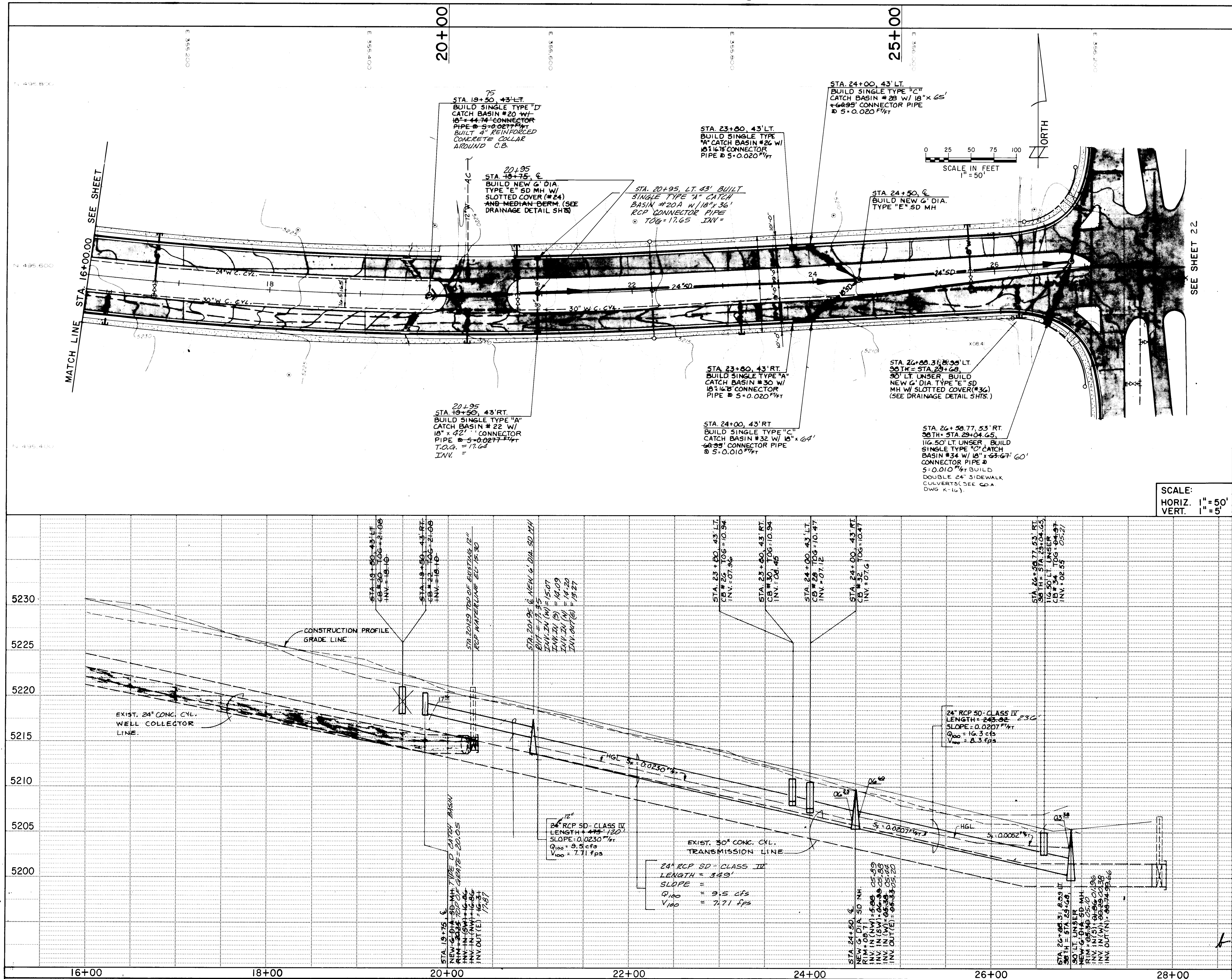
TITLE: SAD 215
 UNBLVD. - STA. 52+00 TO 63+11
 STORM SEWER

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	[Signature]	1/87	Liquid Waste	[Signature]	12/29/86
Design	[Signature]	1-87	Traffic	[Signature]	12/29/86
Hydrology	[Signature]	1-87	Water	[Signature]	12/29/86

DRAWING NO. 2803 **MAP NO. G8H9** **SHEET 23 OF 43**

RECORD DRAWING

12, 24, 28



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

GREINER ENGINEERING
2601 Wyoming NE
Albuquerque, New Mexico 87112
(505) 292-1936

CITY OF ALBUQUERQUE
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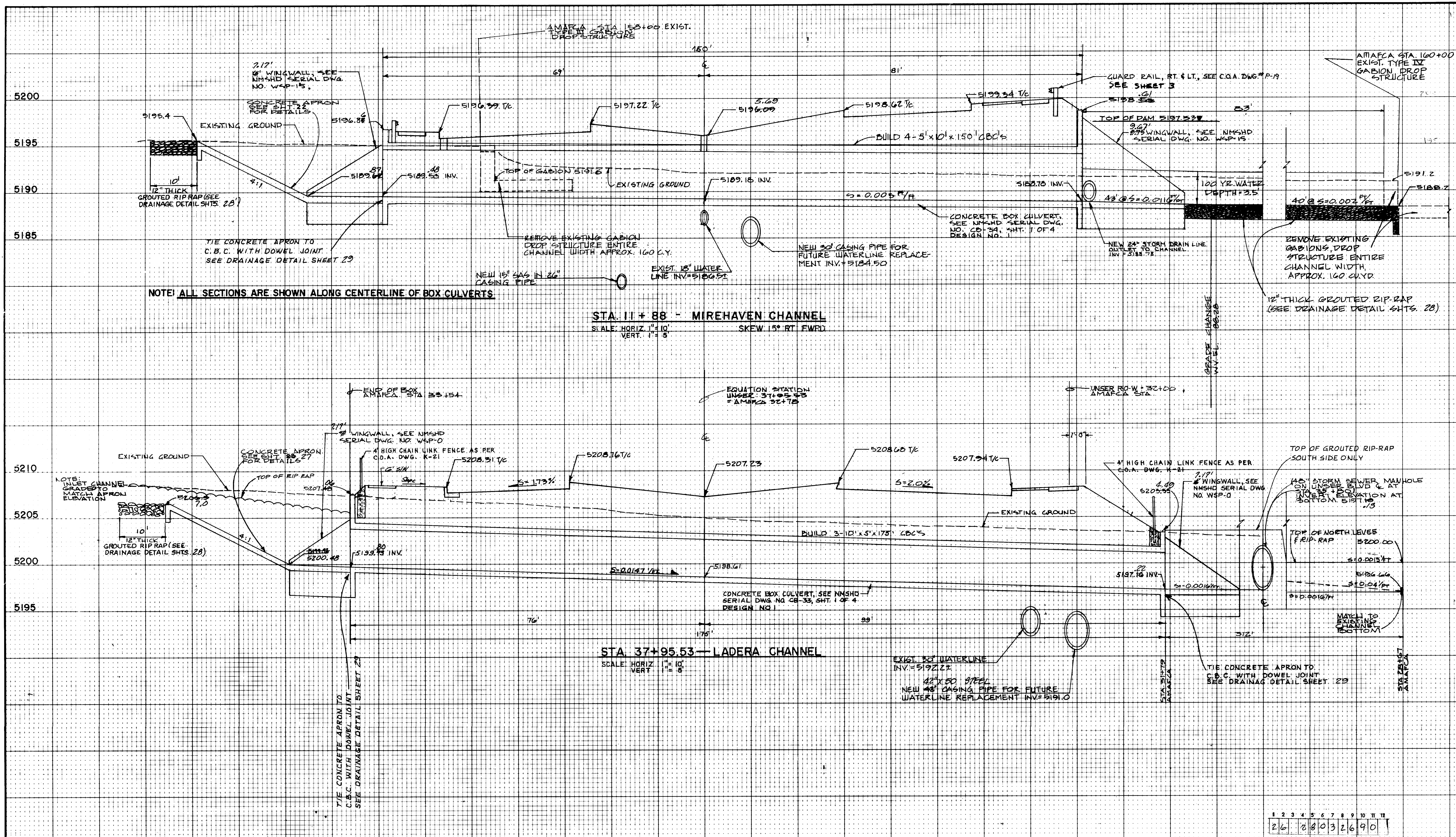
TITLE: SAD 215
98th STREET - STA. 16+00 TO 27+77.98
STORM SEWER

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	1/9/87	Liquid Waste	<i>[Signature]</i>	12/29/86
A.E.E. Design	<i>[Signature]</i>	1-8-87	Traffic	<i>[Signature]</i>	12/29/86
A.E.E. Hydrology	<i>[Signature]</i>	1/9/87	Water	<i>[Signature]</i>	12/29/86

A.M.A.F.C.A.
DRAWING NO. 2803
MAP NO. G & H9
SHEET 24 OF 43

ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
		FIELD NOTES		CONTRACTOR MOUNTAIN STATES			
		NO.	BY	DATE	WORK STATED BY GREINER		
		REMARKS		DATE	INSPECTOR'S FIELD CORRECTION BY GREINER		
		NO.	DATE	DATE	DATE		
REVISIONS		DESIGN		MICRO-FILM INFORMATION			
DESIGNED BY		DATE		RECORDED BY			
DRAWN BY		DATE		DATE			
CHECKED BY		DATE		DATE			

RECORD DRAWING



AS BUILT INFORMATION			BENCH MARKS			SURVEY INFORMATION			ENGINEER'S SEAL		
CONTRACTOR	DATE	WORKED BY	INTERSECTION	DATE	BY	NO.	DATE	BY	NO.	DATE	BY
GREINER	10-87	GREINER	1-40 & COBB RD. TO OUBAY RD. GO WEST APPROX. 0.7 MILES TO THE END OF PAVEMENT. CONTINUE WEST 0.9 MILES ON THE DIRT ROAD TO THE TOP OF THE DAM, ALONG THE BANK OF THE DAM, PAST THE POWER SUB STATION TO A DIRT ROAD, GO SOUTH 0.4 MILES TO A DIRT ROAD, GO N.E. FOR 0.1 MILES TO THE STATION ON THE RIGHT.	10-87	GREINER	1062	10-87	GREINER	1062	10-87	GREINER
MICRO-FILM INFORMATION			REVISIONS			DESIGN			DESIGN		
RECORDED BY			DESIGNED BY			DRAWN BY			CHECKED BY		
DATE			DATE			DATE			DATE		
NO.			NO.			NO.			NO.		
ELEVATION			ELEVATION			ELEVATION			ELEVATION		

GREINER ENGINEERING
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Albuquerque, New Mexico 87112
(505) 292-1936

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPT.

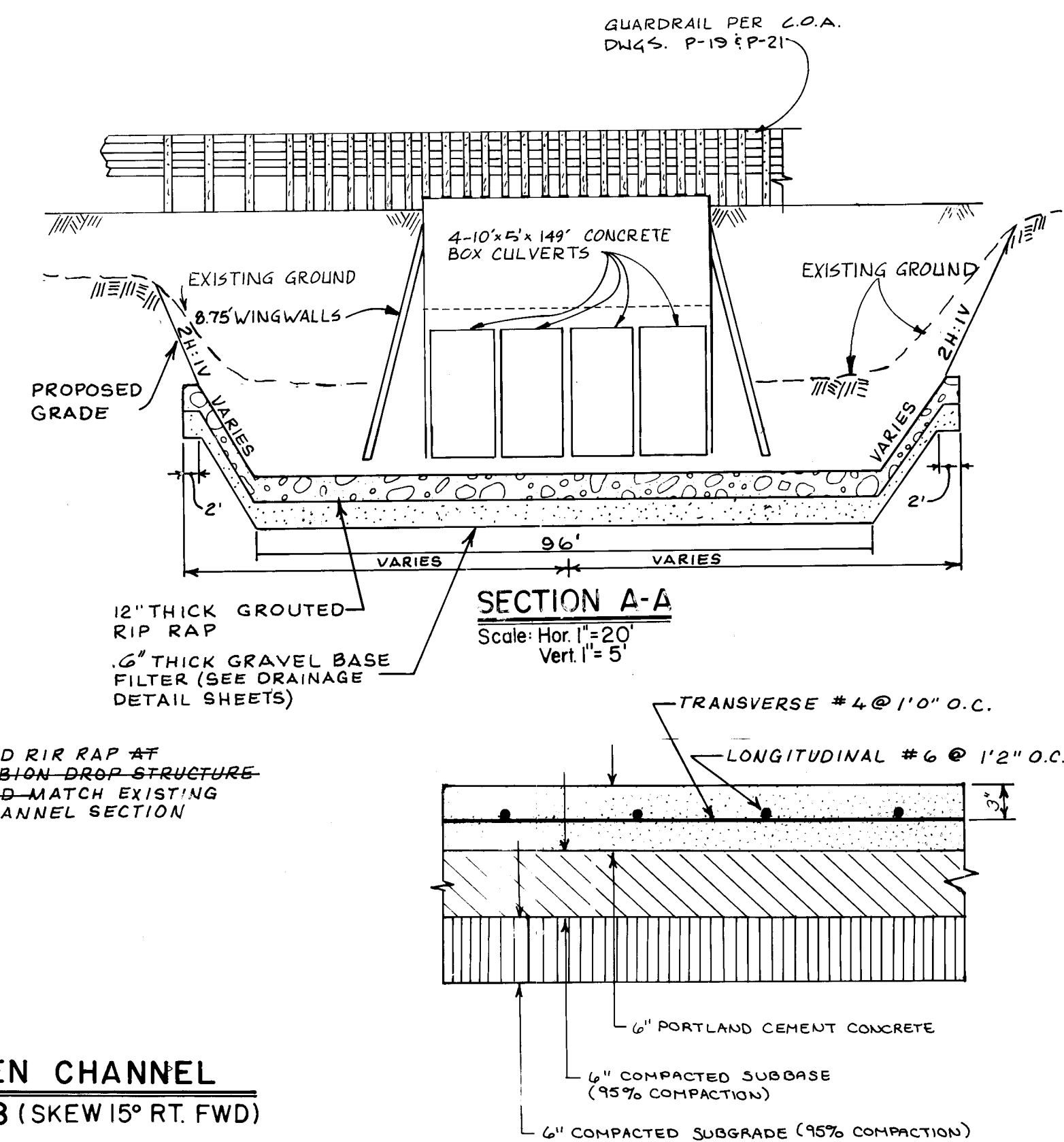
TITLE: **SAD 215**
MAJOR DRAINAGE STRUCTURES

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	[Signature]	1/8/87	Liquid Waste	[Signature]	12/21/86
ACE Design	[Signature]	1-8-87	Traffic	[Signature]	12/25/86
ACE-Hydrology	[Signature]	1/1/87	Water	[Signature]	12/21/86

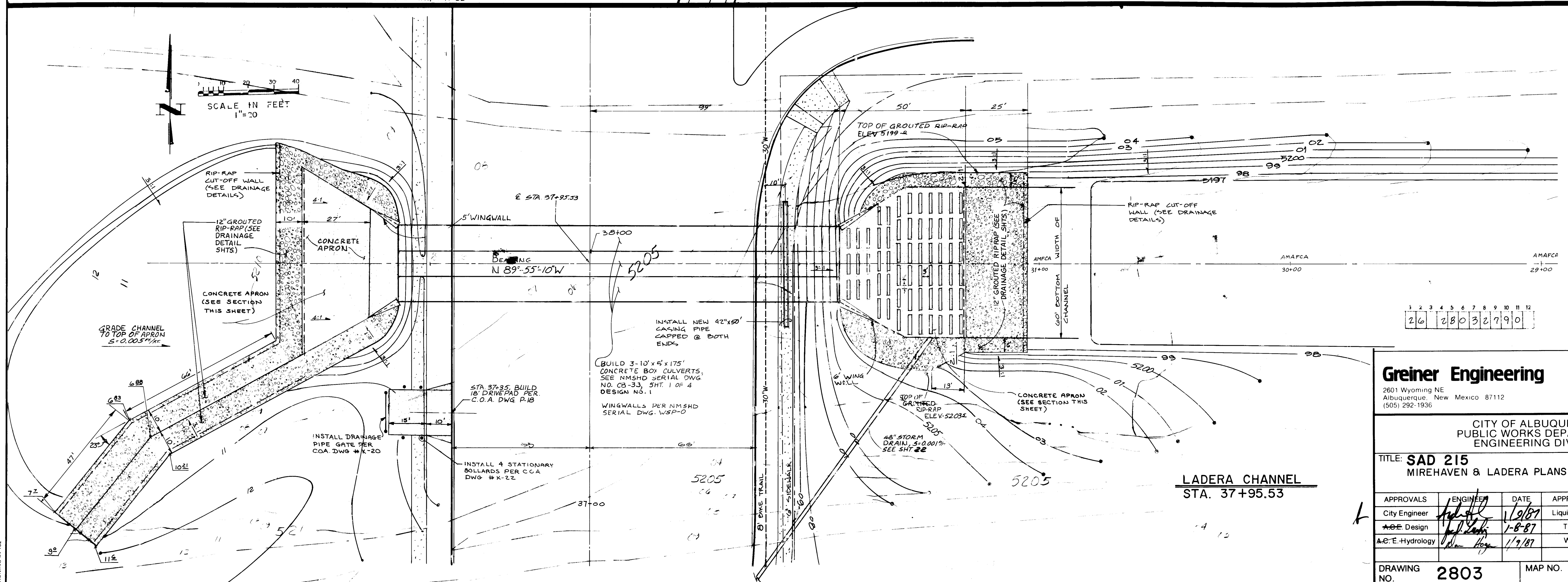
SCALE: HORIZ. 1" = 10'
VERT. 1" = 5'

DRAWING NO. **2803** MAP NO. **G-H9** SHEET **26** OF **43**

RECORD DRAWING



TYPICAL CONCRETE APRON SECTION
SCALE: 1" = 1'-0"



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CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

TITLE: **SAD 215**
MIREHAVEN & LADERA PLANS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	1/9/87	Liquid Waste	<i>[Signature]</i>	1/22/87
A.C.E. Design	<i>[Signature]</i>	1-8-87	Traffic	N.A. Dunn	1/22/87
A.C.E. Hydrology	<i>[Signature]</i>	1/9/87	Water	<i>[Signature]</i>	1/22/87

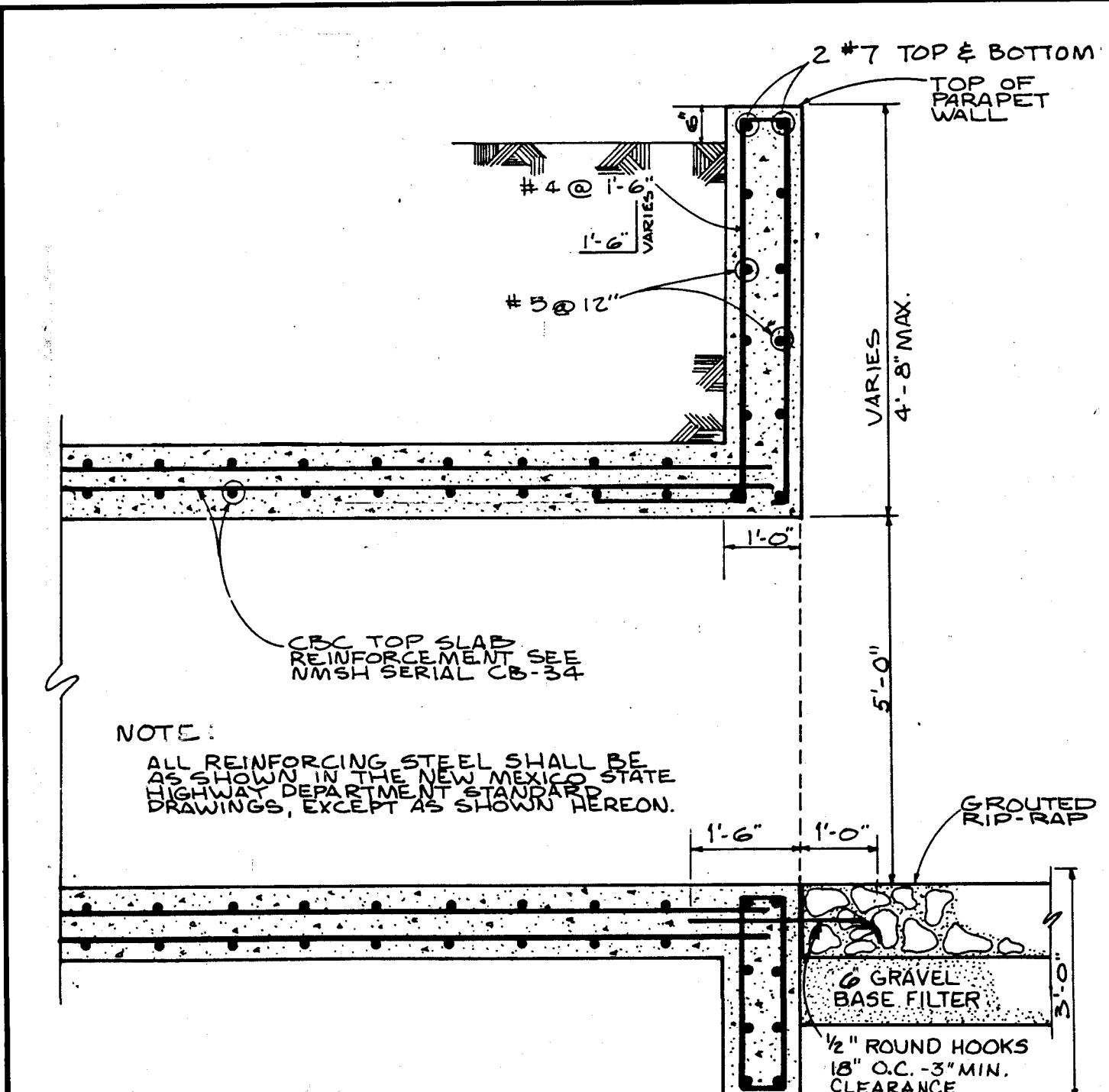
DRAWING NO.	2803	MAP NO.	SHEET 27 OF 43
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RECORD DRAWING

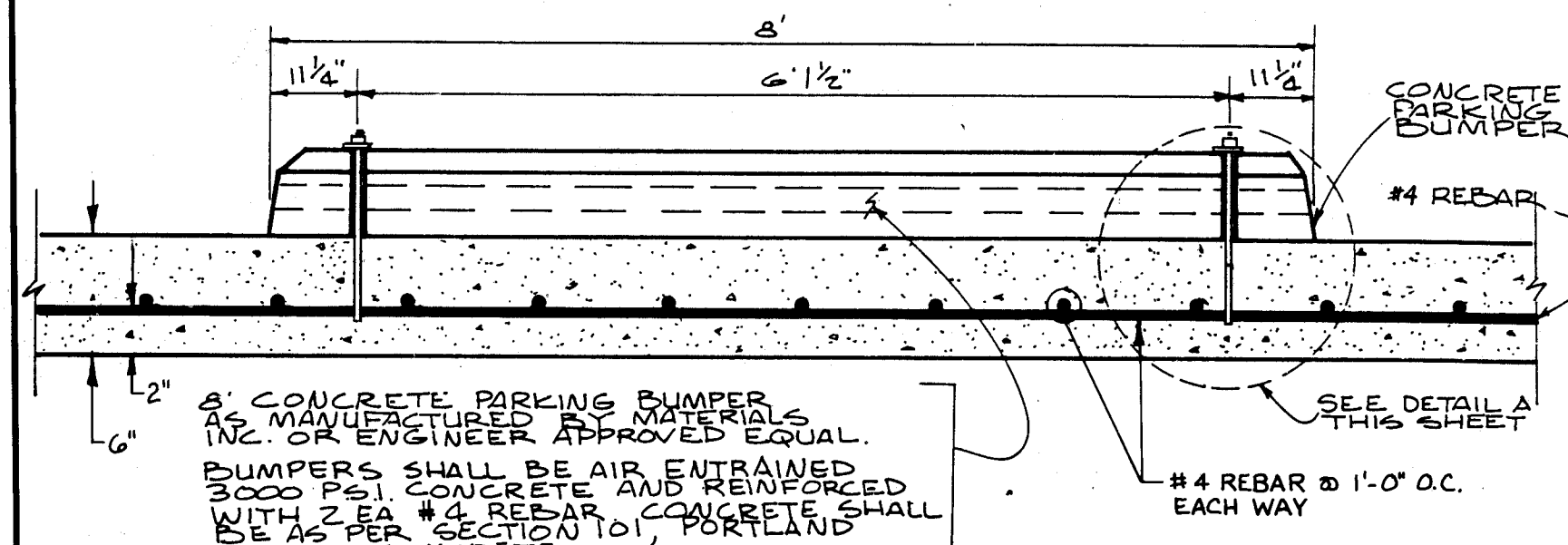
SURVEY INFORMATION			BENCH MARKS		AS BUILT INFORMATION	
FIELD NOTES						
NO.	BY	DATE				
16662	GREINER	10-24	"B"-39" 84# BRASS CAP GO NORTH 0.4 MILES FROM THE INTERSECTION OF I-40 & COORS RD. TO OURAY RD. GO WEST APPROX. 0.7 MILES TO THE END OF PAVEMENT, CONTINUE WEST 0.9 MILES ON THE DIRT ROAD TO THE TOP OF THE DAM, ALONG THE BANK OF THE DAM, PAST THE POWER SUB STATION TO A DIRT ROAD, GO SOUTH 0.4 MILES TO A DIRT ROAD, GO N.E. FOR 0.1 MILES TO THE STATION ON THE RIGHT. ELEVATION = 5195.46		CONTRACTOR MOUNTAIN STATES WORK BY GREINER DATE 8-24-87 INSPECTED BY GREINER DATE 10-27-87 ACCEPTED BY GREINER DATE 10-27-87 VERIFICATION BY GREINER DATE 10-27-87 DRAWINGS CORRECTED BY GREINER DATE 10-27-87 MICRO-FILM INFORMATION RECORDED BY DATE	
17262	17426	1743				
17666	1767	1772				
17726	1773	1773				
17726	1779	1779				
17926	1799	1799				

ENGINEER'S SEAL

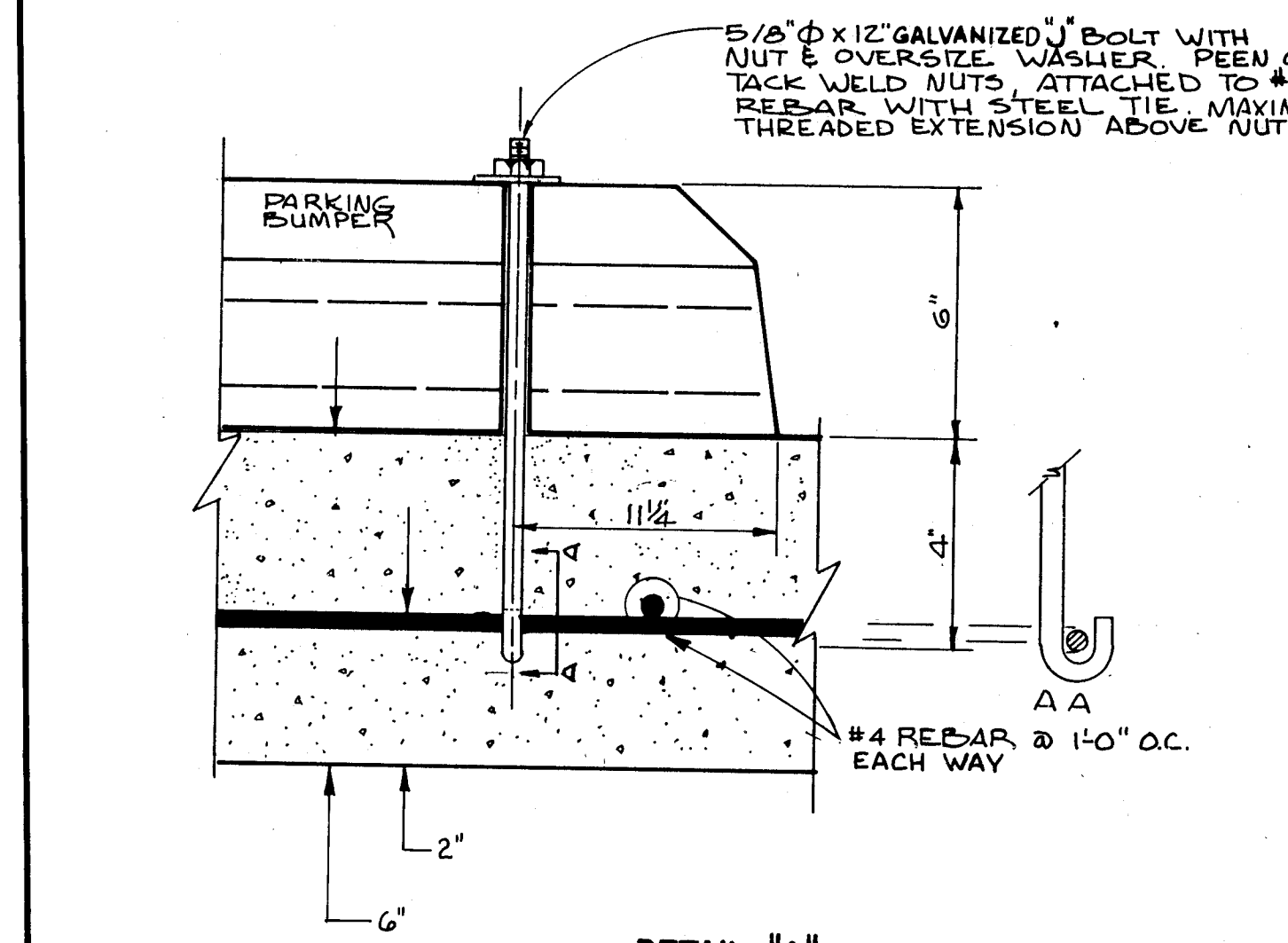
NO.	DATE	REMARKS	BY
REVISIONS			
DESIGN			
DESIGNED BY	DATE 1-87		
DRAWN BY	DATE 1-87		



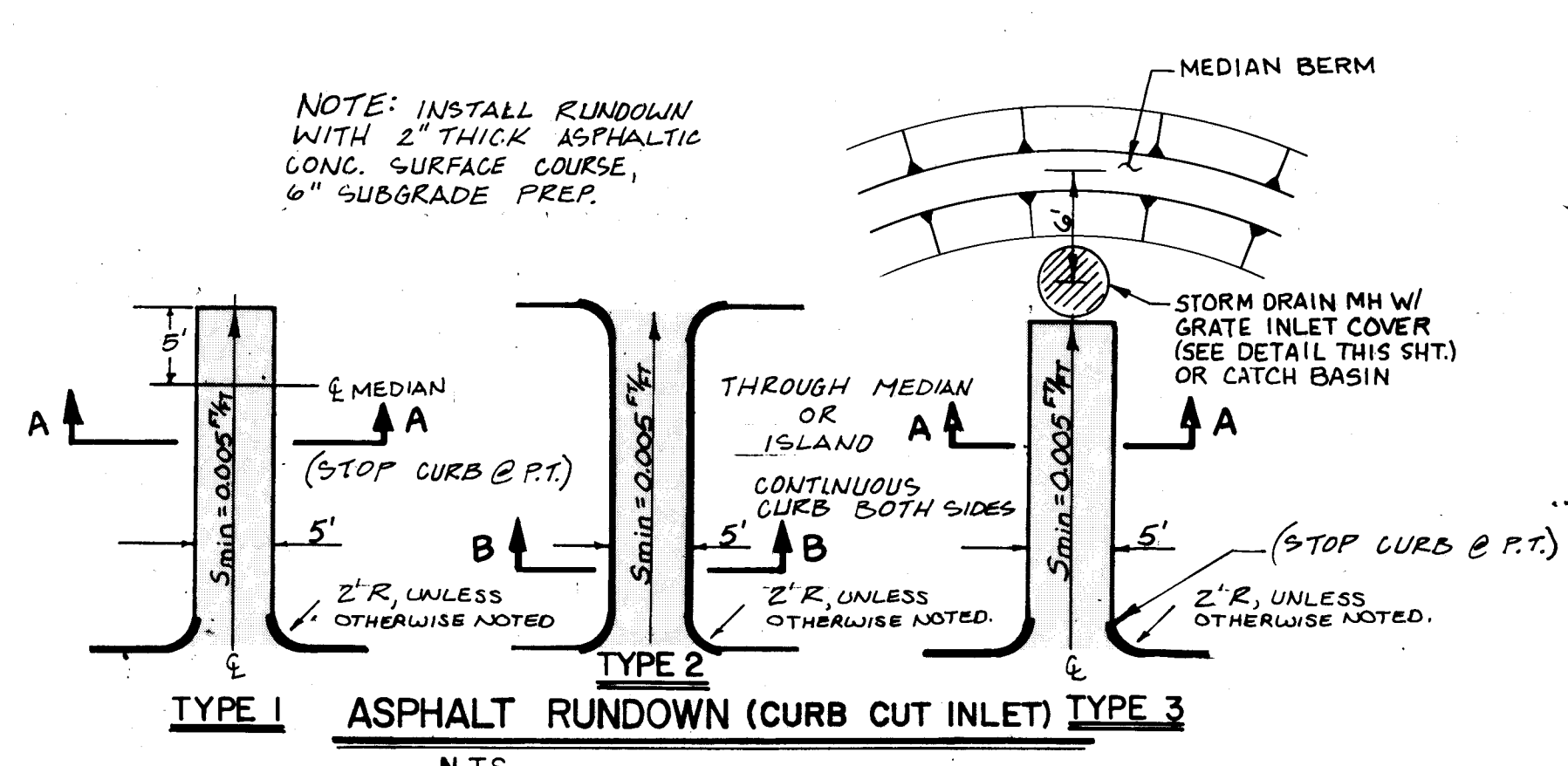
SECTION OF EXTENDED PARAPET WALL
2'-2" TO 4'-8"



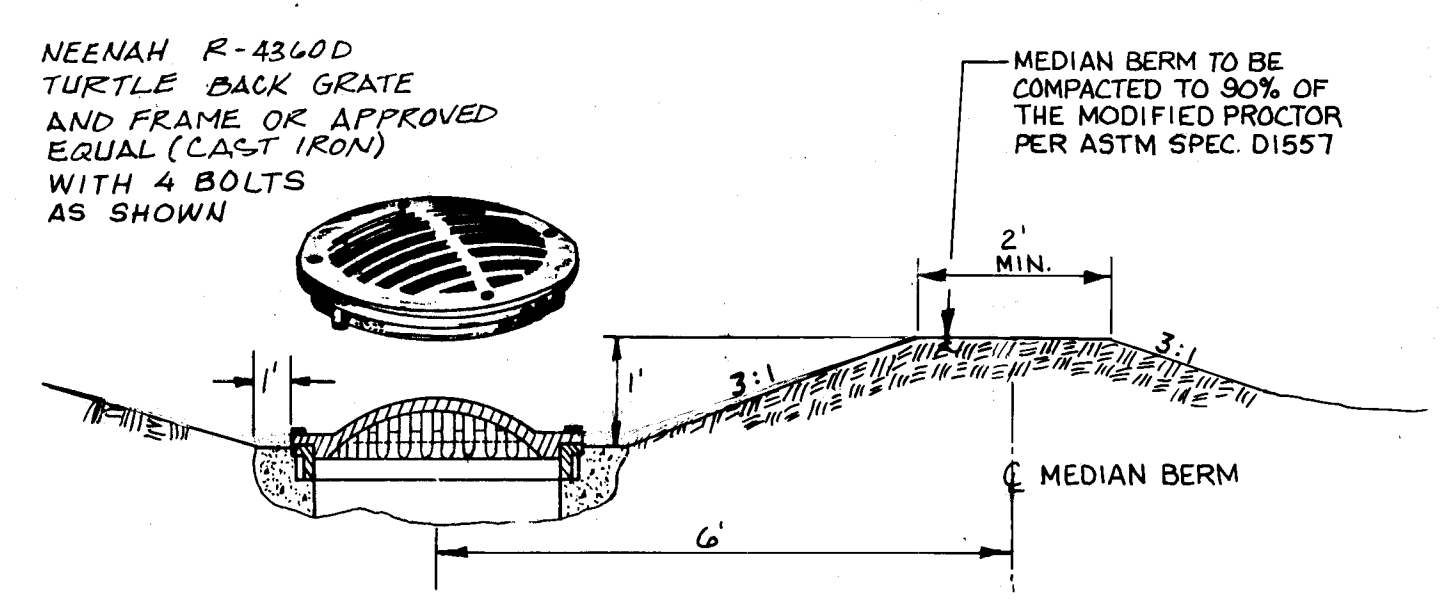
LADERA CHANNEL ENERGY DISSIPATOR



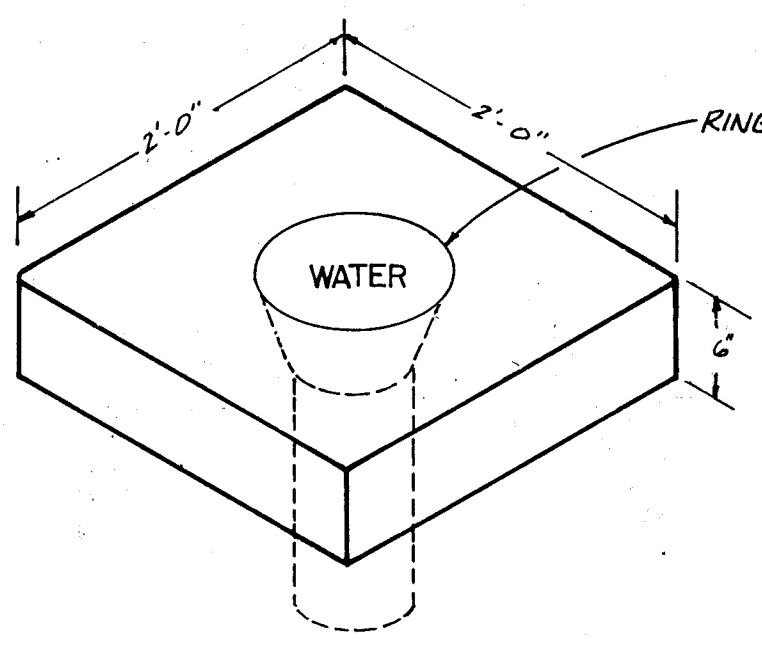
DETAIL "A"



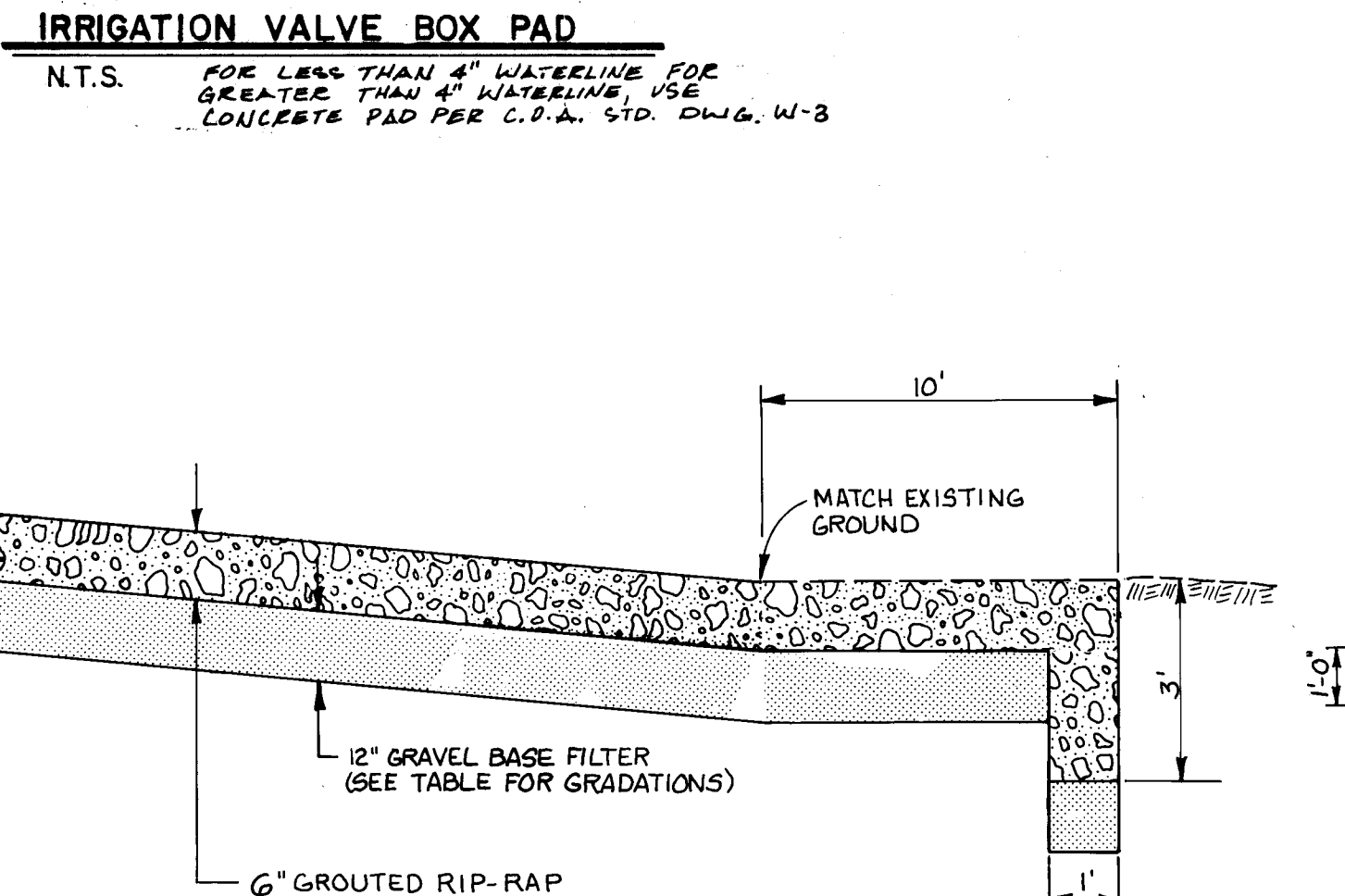
ASPHALT RUNDOWN (CURB CUT INLET) TYPE 3
N.T.S.



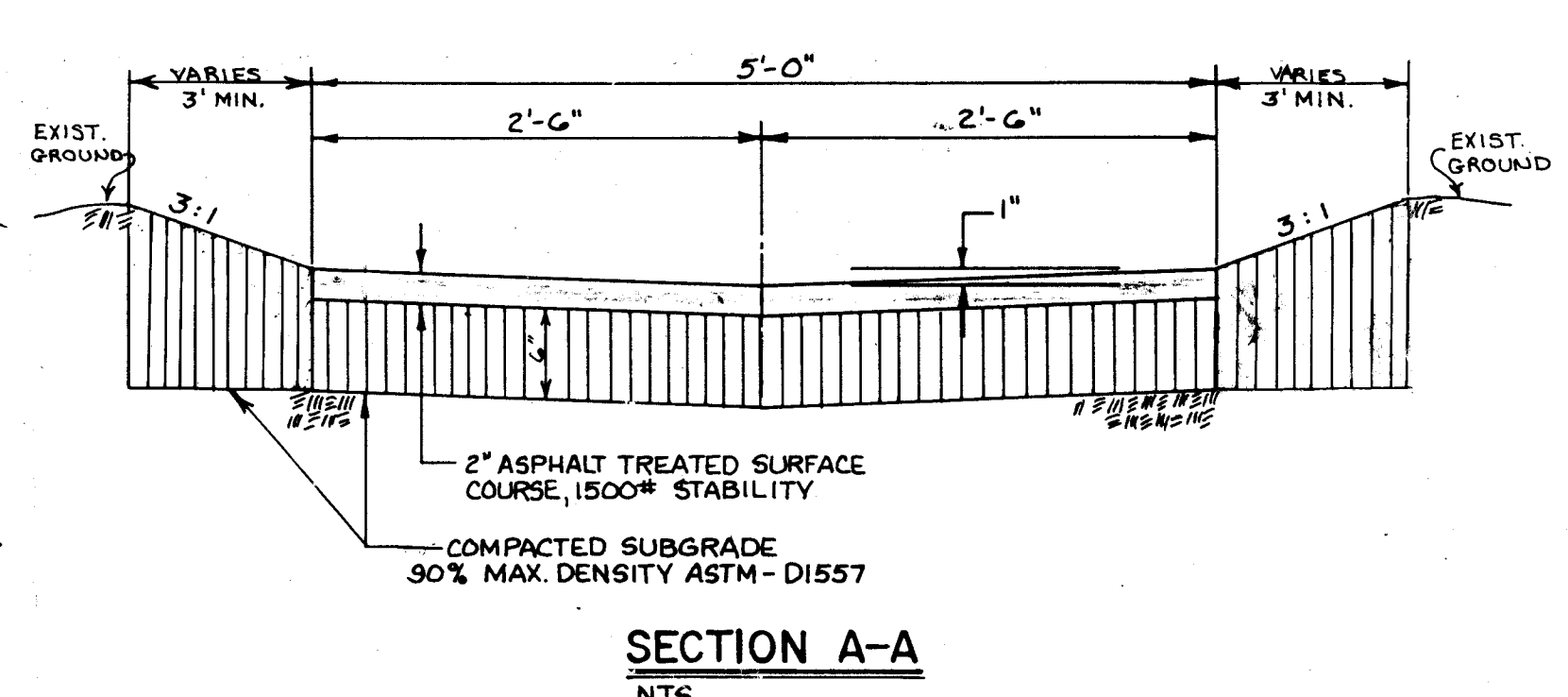
STORM DRAIN MANHOLE GRATE INLET COVER
N.T.S.



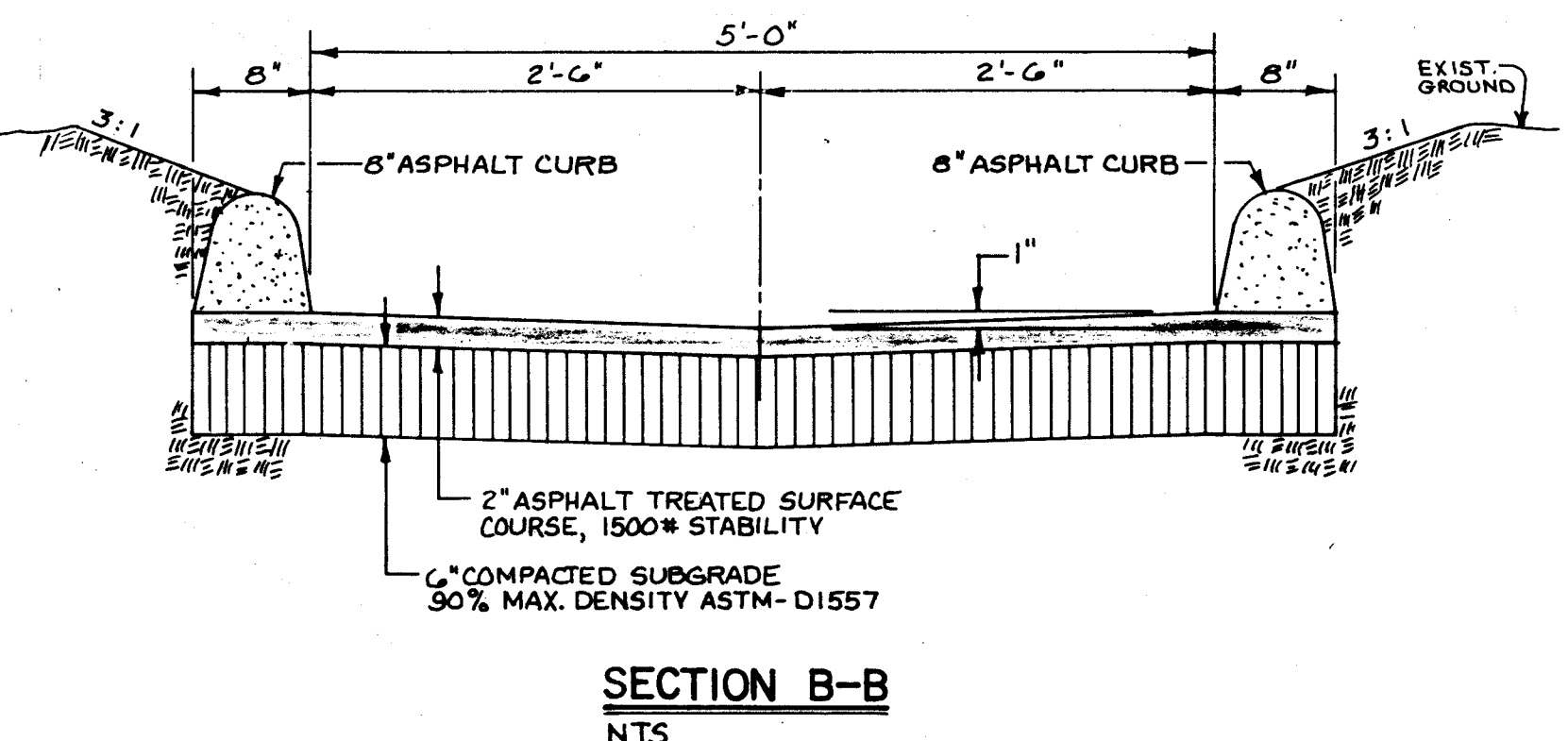
IRRIGATION VALVE BOX PAD
N.T.S.



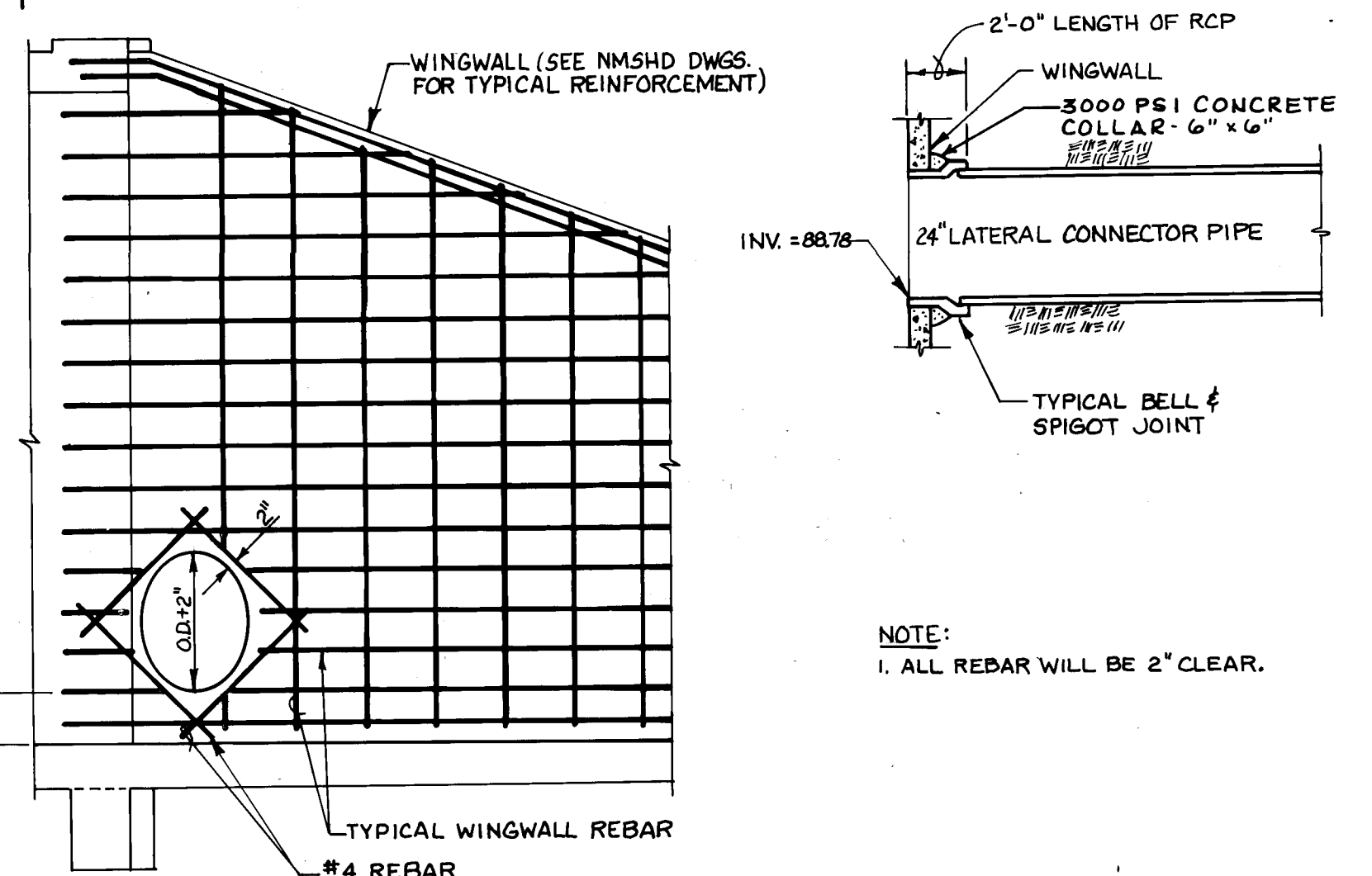
TYPICAL RIP-RAP SECTION & CUT-OFF WALL
N.T.S.



SECTION A-A
N.T.S.



SECTION B-B
N.T.S.



LATERAL CONNECTION TO WINGWALL
N.T.S.

GRAVEL BASE
FILTER GRADATION

SIEVE SIZE	% PASSED
1"	100
3/4"	80-100
No. 4	30-60
No. 10	20-45
No. 200	3-10

TWO FRACTURED
FACES (PLUS
4 MATERIAL

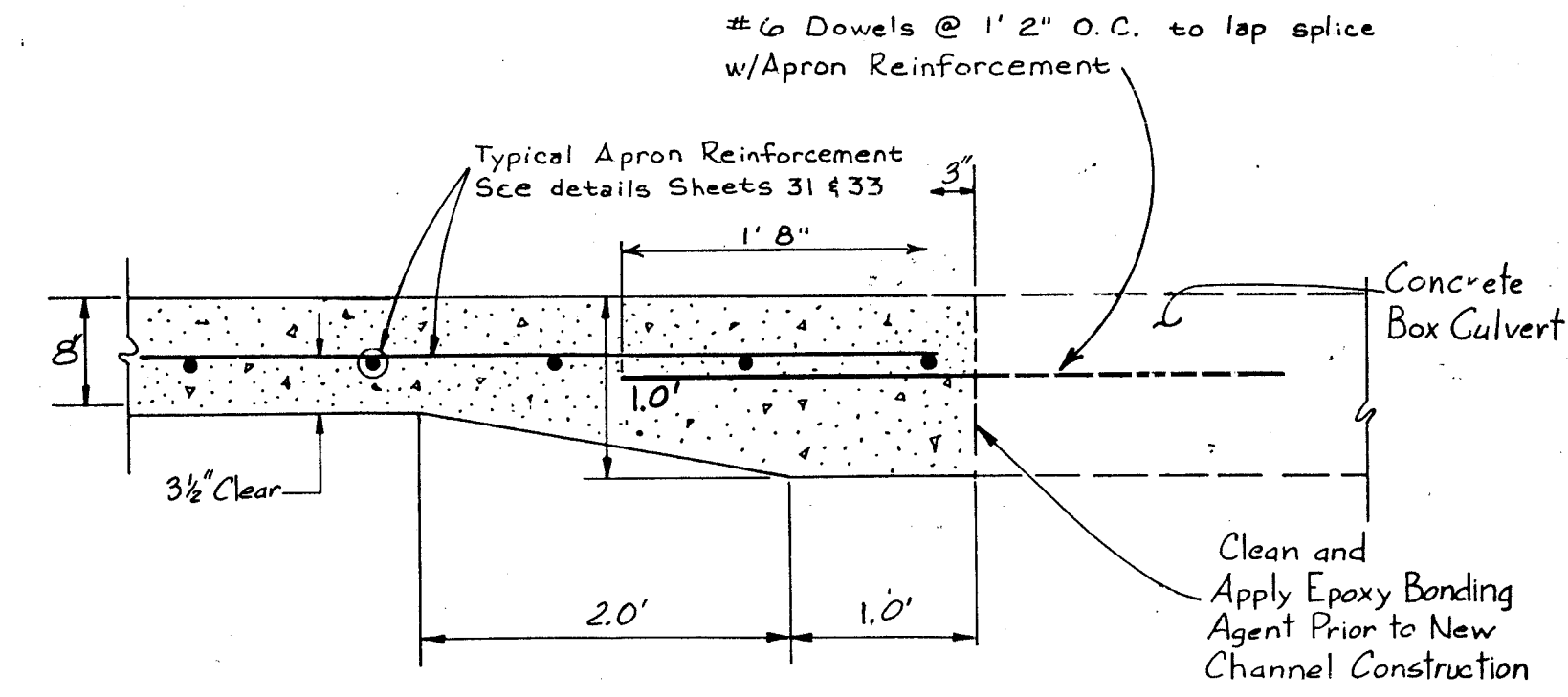
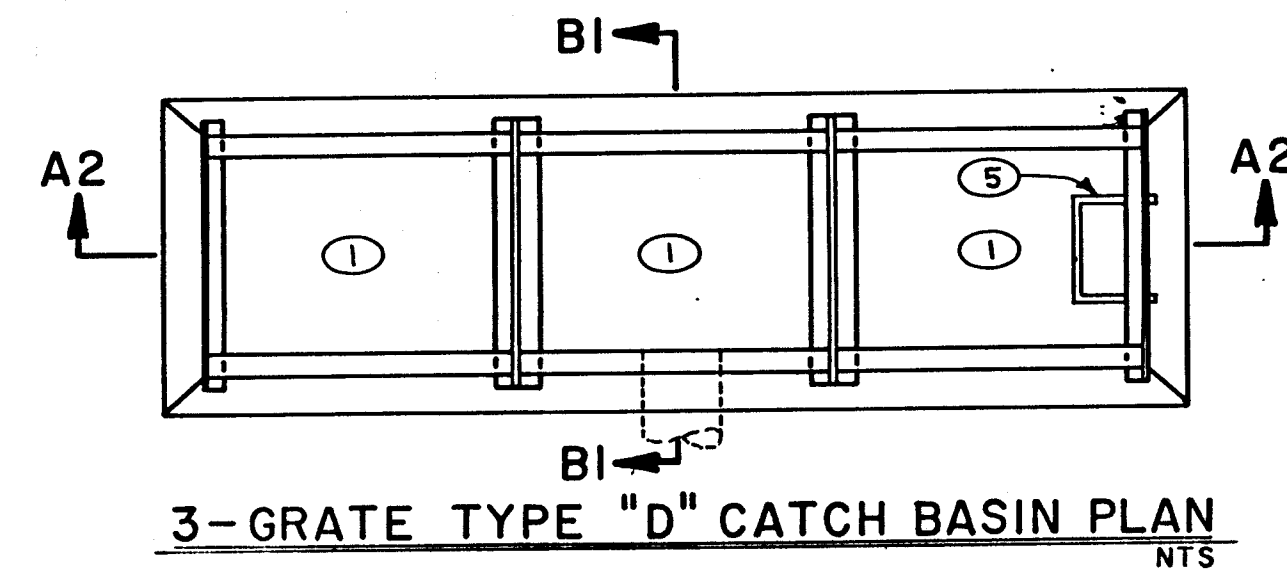
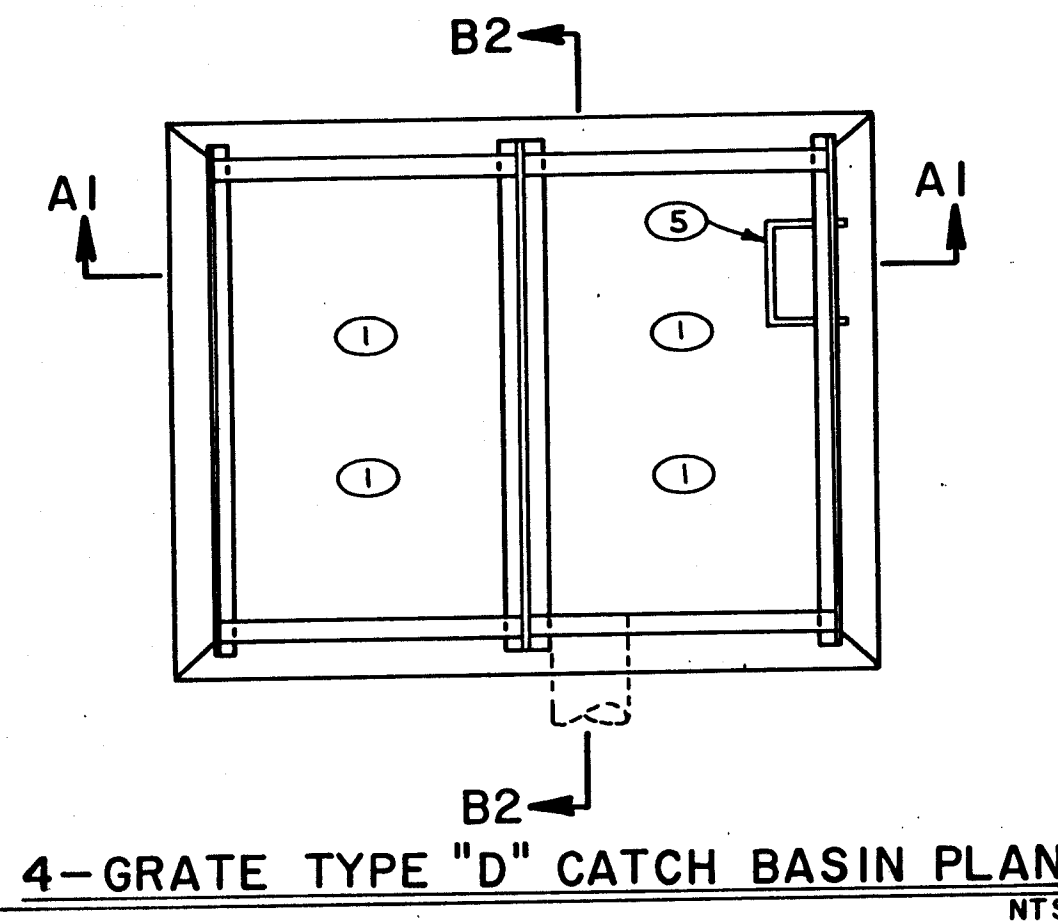
1	2	3	4	5	6	7	8	9	10	11	12
2	6	2	8	0	3	2	8	9	0		

GREINER ENGINEERING
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Albuquerque, New Mexico 87112
(505) 292-1936

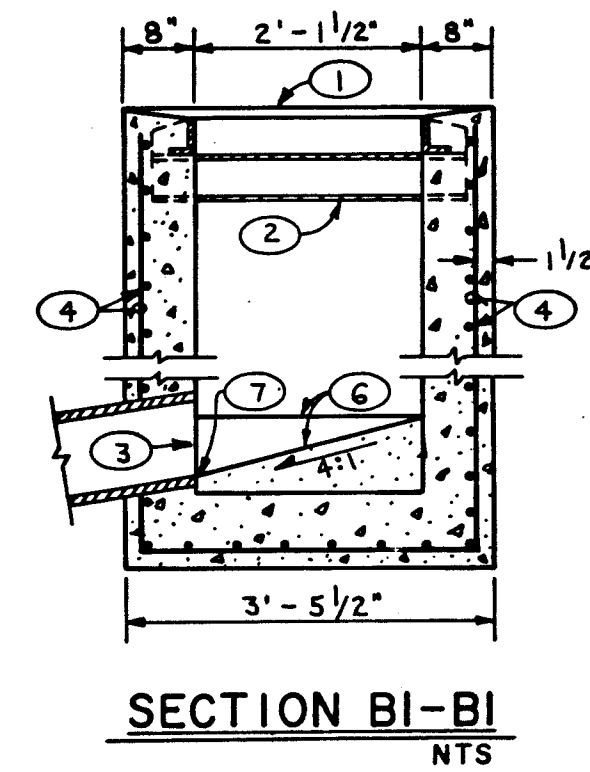
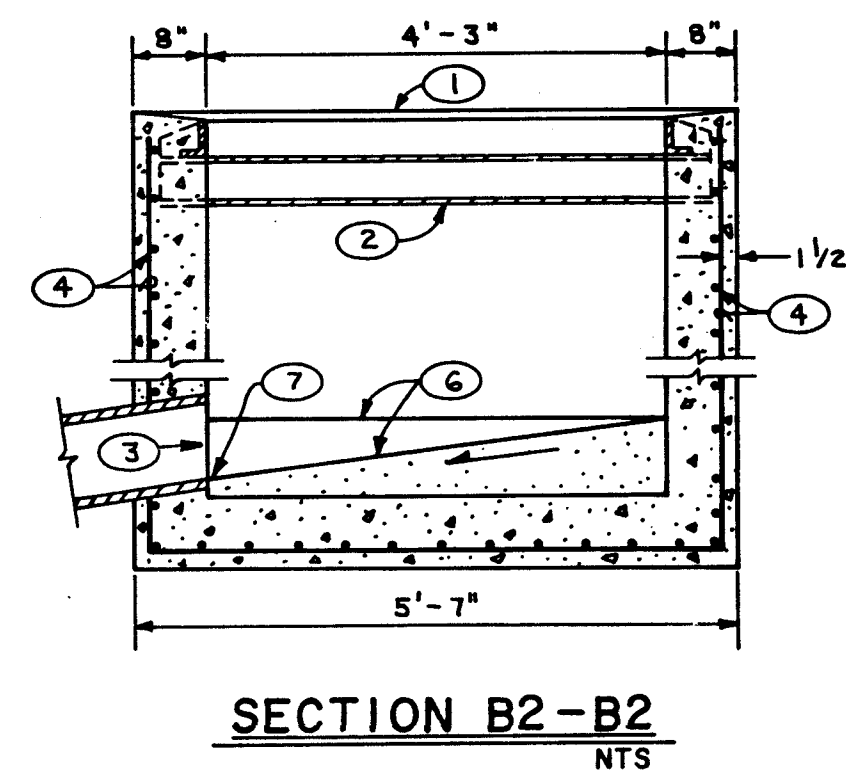
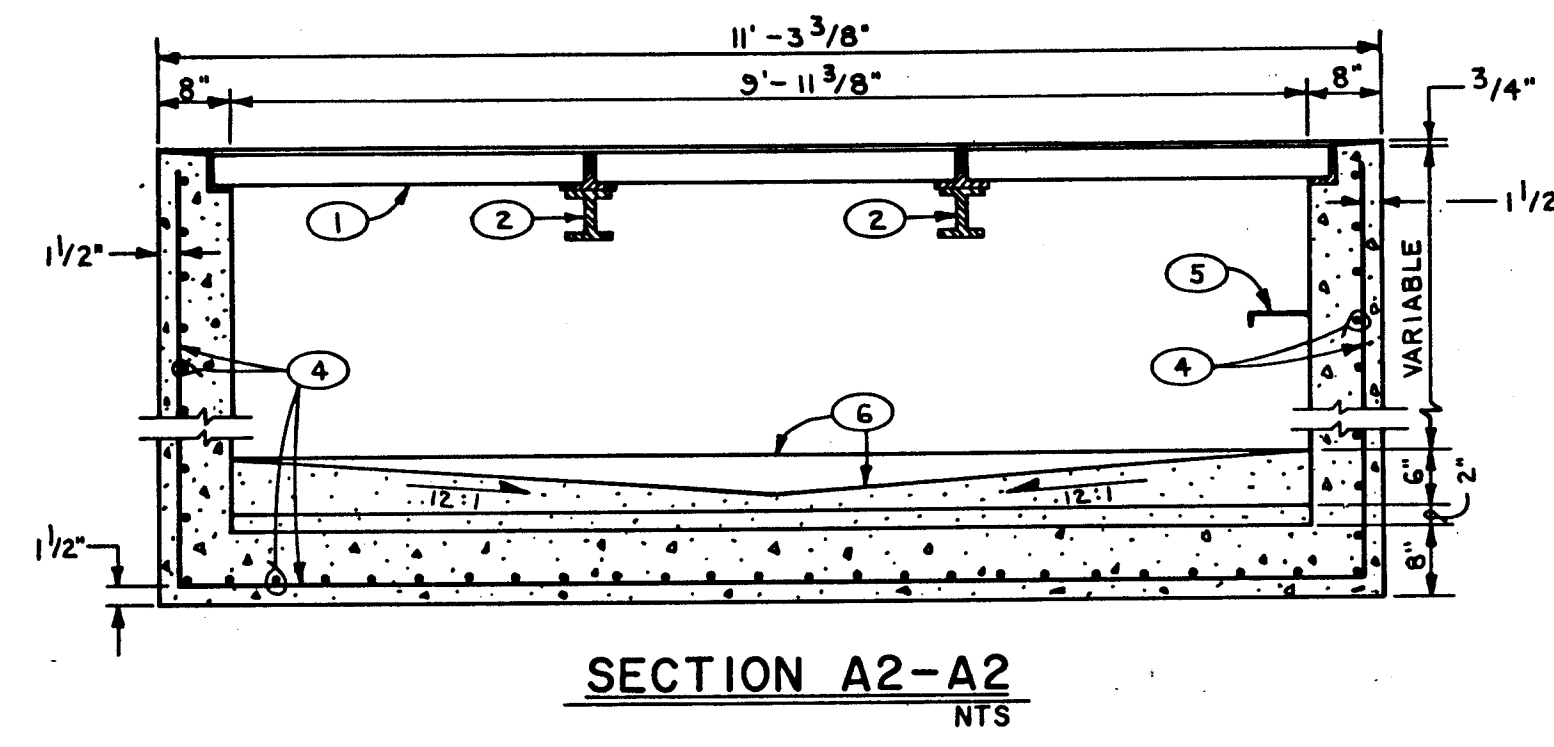
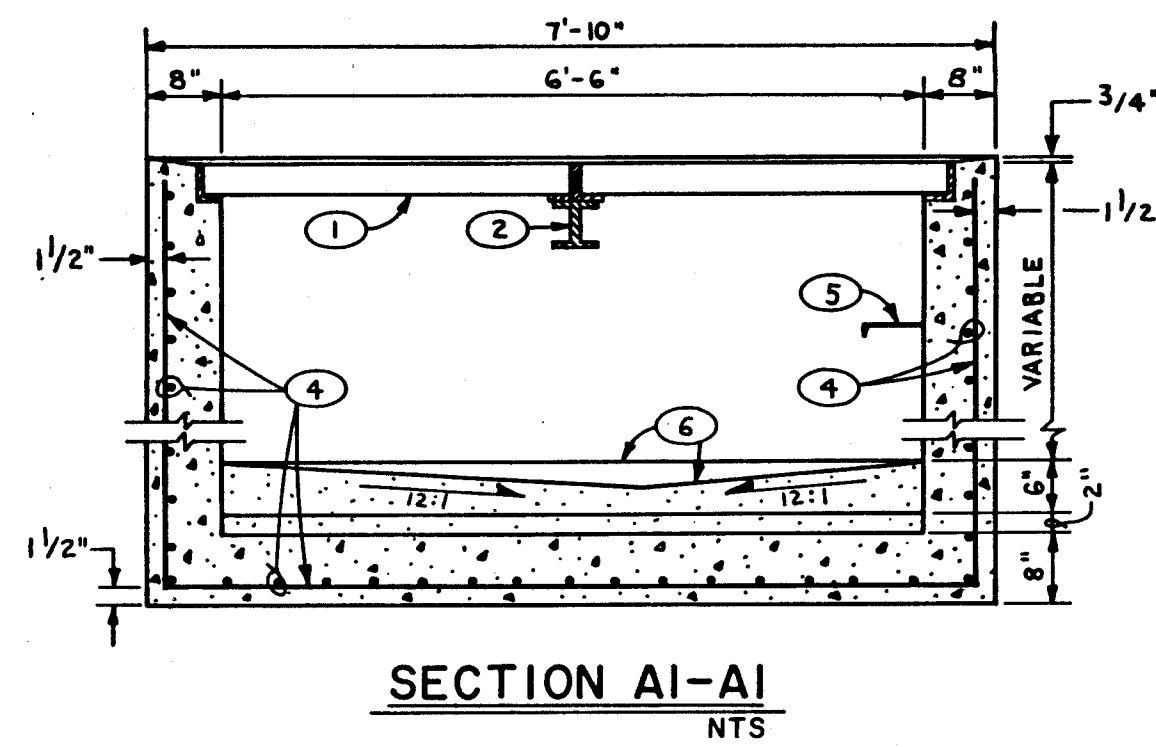
CITY OF ALBUQUERQUE PUBLIC WORKS DEPT.			
TITLE: SAD 215 DRAINAGE DETAILS			
APPROVALS	ENGINEER	DATE	DATE
City Engineer	<i>[Signature]</i>	1/9/87	12/27/86
A-E Design	<i>[Signature]</i>	1-8-87	12/27/86
A-E-Hydrology	<i>[Signature]</i>	1/9/87	12/27/86
A.M.A.F.C.A.			
DRAWING NO.	2803	MAP NO. G & H9	SHEET 28 OF 43

RECORD DRAWING

SURVEY INFORMATION		FIELD NOTES		ENGINEER'S SEAL		REVISIONS	
NO.	DATE	BY	DATE	NO.	DATE	BY	DATE
1602	10-84	GREINER	10-84	1	1-87	J.N. Greiner	1-87
1603	1743			2	1-87	J.N. Greiner	1-87
1742	1743			3	1-87	J.N. Greiner	1-87
1742	1773			4	1-87	J.N. Greiner	1-87
1778	1779			5	1-87	J.N. Greiner	1-87
1788	1792	GREINER	8-87	6	1-87	J.N. Greiner	1-87



Note: Contractor may substitute mechanical fastener alternate to provide continuous reinforcement between box culvert and concrete apron for approval by the engineer.

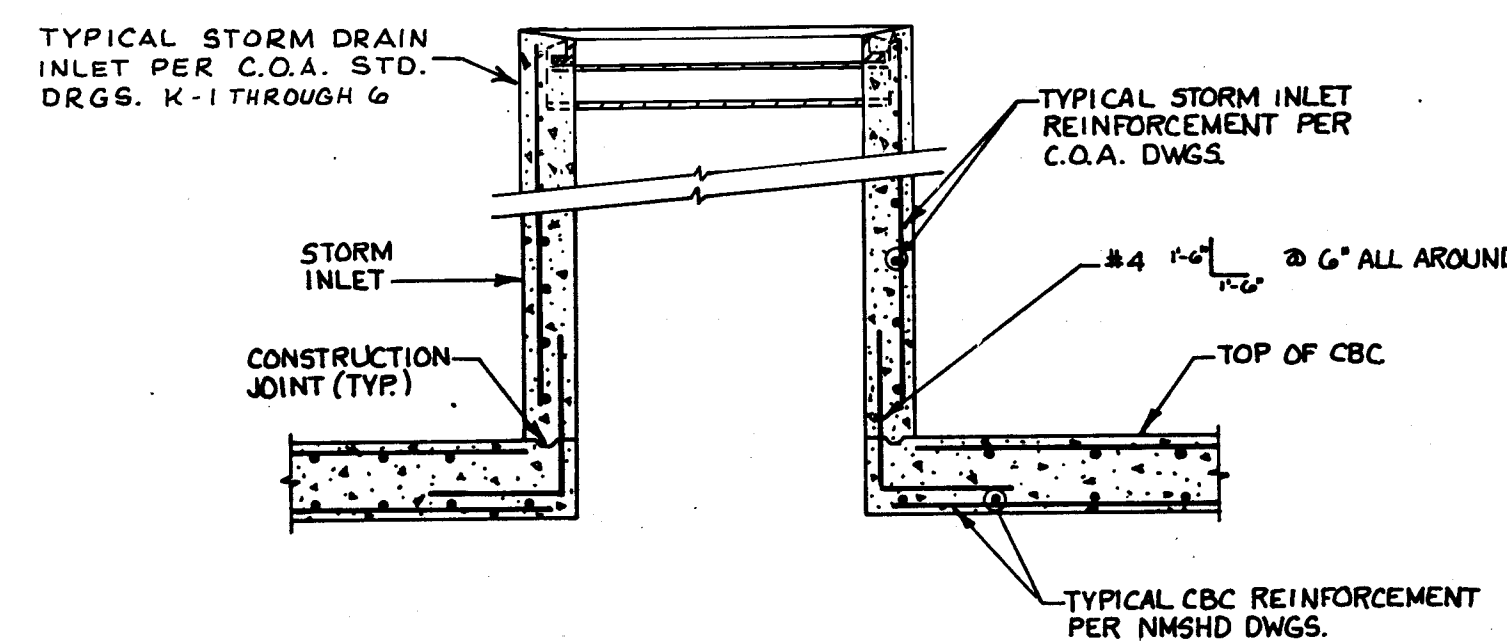


GENERAL NOTES:

1. Frame of grating shall be welded and/or riveted.
2. After cleaning surface of scale, rust etc., grating frame and center supports to be painted with one shop coat red oxide. Two finish coats aluminum paint (AASHTO M69).

CONSTRUCTION NOTES:

1. For frame and grating, see C.O.A. Dwg. K-8, K-9.
2. See C.O.A. Dwg. K-11 for center support assembly.
3. Cut one horizontal and one vertical bar max. at pipe opening.
4. No. 4 bars @ 6" O.C. each way.
5. Use standard steps, see General Notes, page 1.
6. Conc. fill min. 4:1 slope toward outlet, 12:1 transverse.
7. Invert per design.



Greiner Engineering

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Albuquerque, New Mexico 87112
(505) 292-1836

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

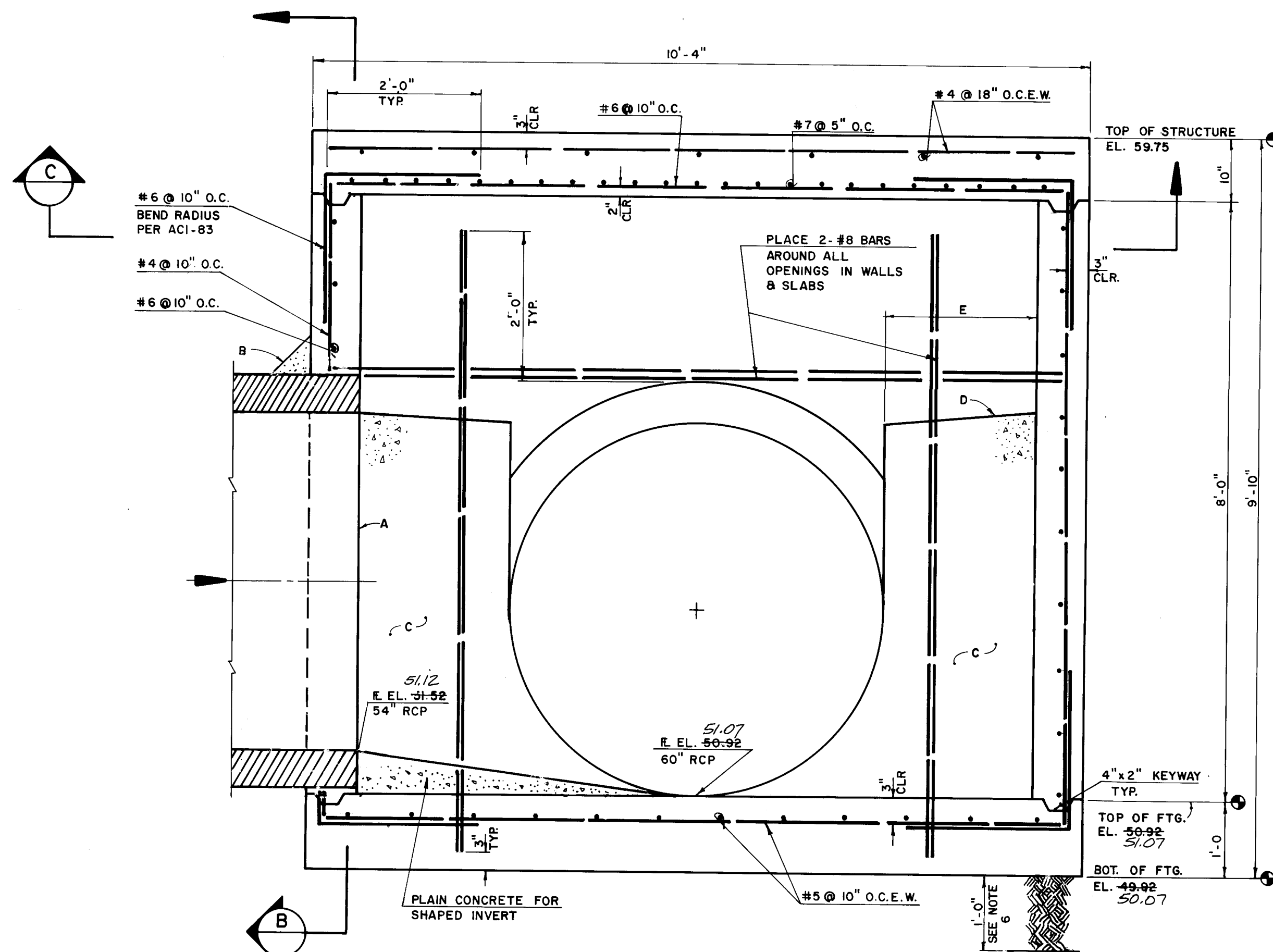
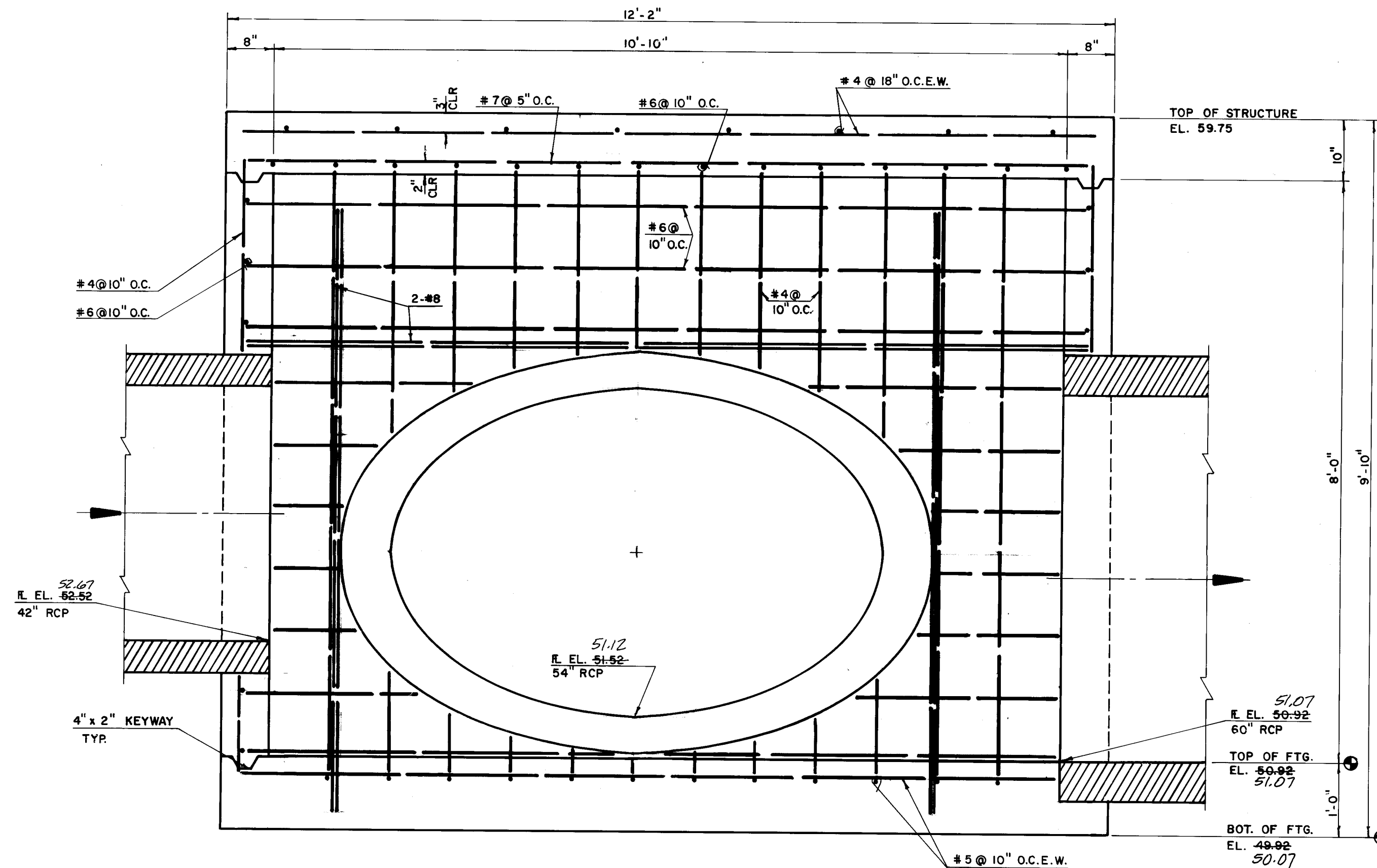
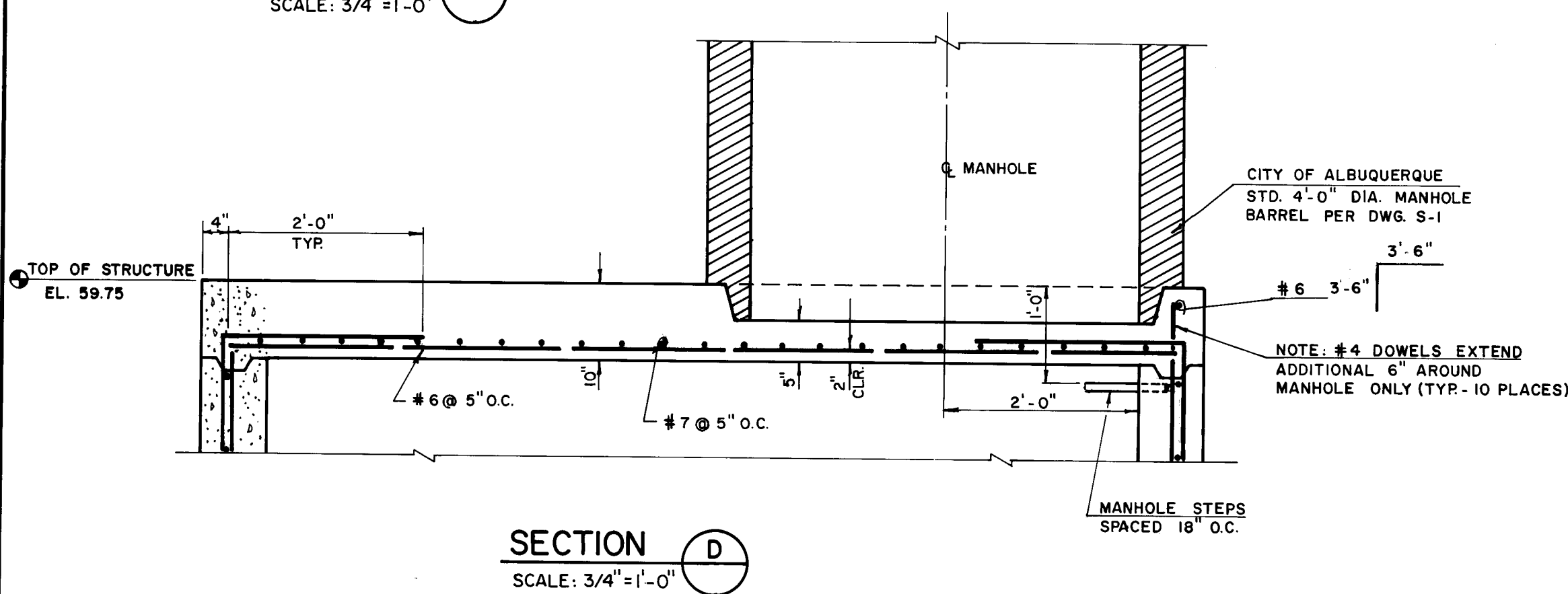
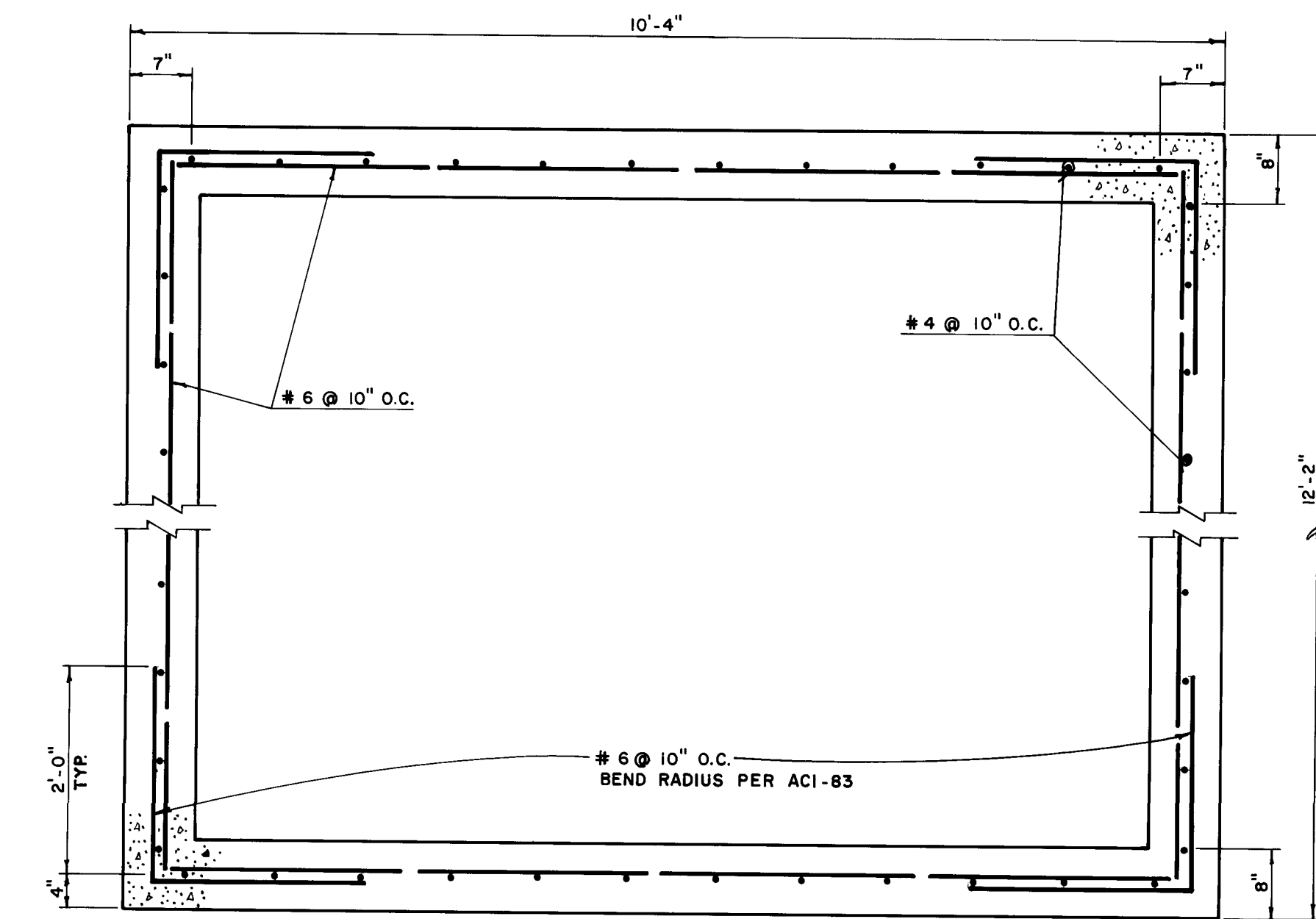
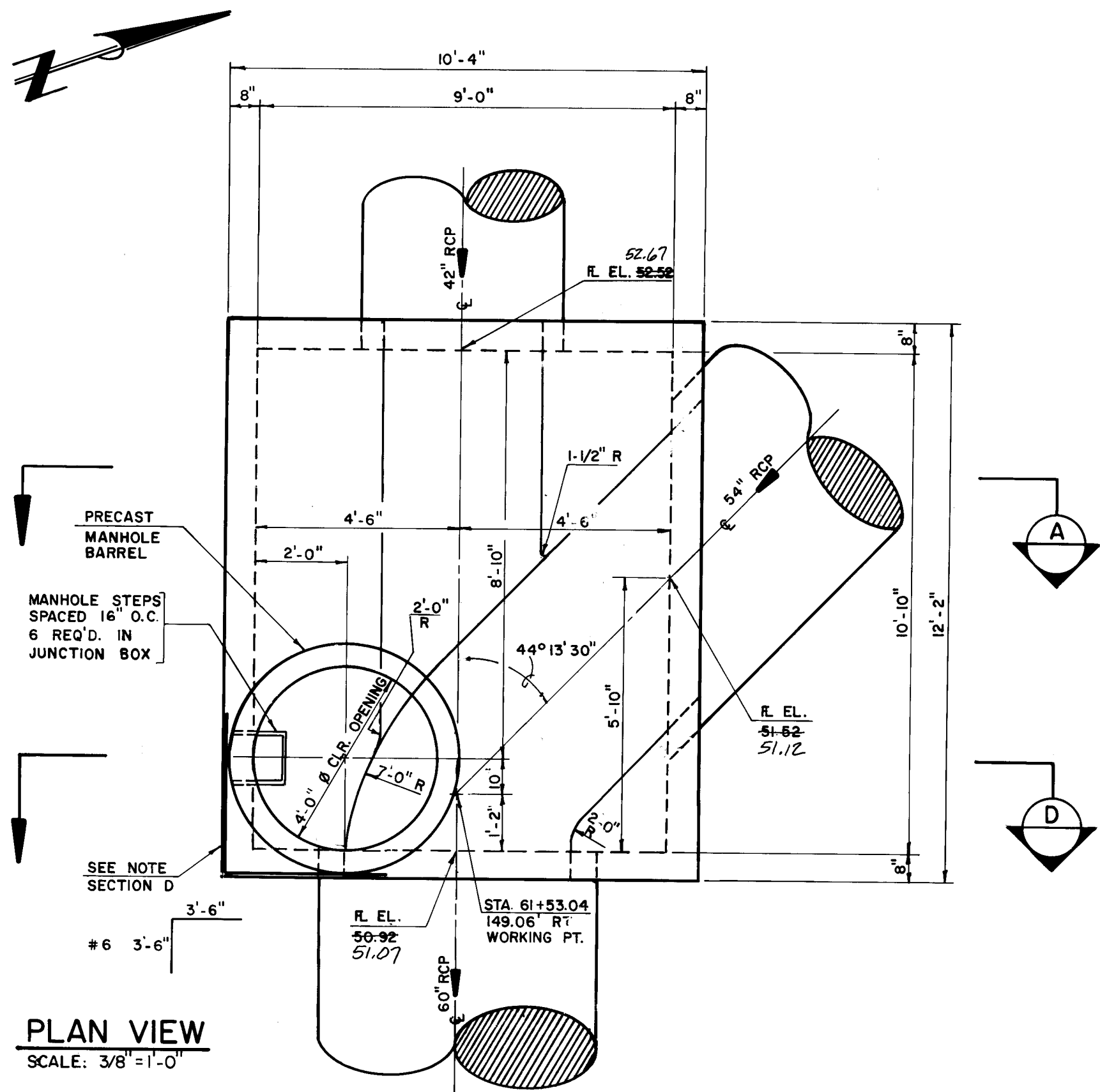
TITLE: SAD 215 DRAINAGE DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	J. N. Greiner	11/9/87	Liquid Waste	W. N. Greiner	12/29/86
Design	J. N. Greiner	1-8-87	Traffic	N. A. D. W. H.	12/29/86
A.E. Hydrology	J. N. Greiner	1/9/87	Water	W. N. Greiner	12/29/86
A.M.A.F.C.A.					

DRAWING NO.	2803	MAP NO.	G & H9	SHEET	29 OF 43
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RECORD DRAWING

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	MOUNTAIN STATES	INTERSECTION OF I-40 & COORS RD. TO CURRY RD. GO WEST APPROX 0.7 MILES TO THE END OF PAVEMENT. CONTINUE WEST 0.3 MILES ON THE DIRT ROAD TO THE TOP OF THE DAM ALONG THE BANK OF THE DAM. PAST THE POWER SUBSTATION TO A DIRT ROAD, GO SOUTH 0.4 MILES TO A DIRT ROAD, GO N.E. FOR 0.1 MILES TO THE STATION ON THE RIGHT.	ELEVATION = 5195.46	NO.	DATE	BY	REMARKS
WORK BY	GREINER	DATE	10-87	1602	GREINER	10-87	
INSPECTED BY	GREINER	DATE	10-87	1603	GREINER	10-87	
ACCEPTANCE BY	GREINER	DATE	10-87	1702	GREINER	10-87	
REVISIONS				1703	GREINER	10-87	
DATE				1704	GREINER	10-87	
NO.				1705	GREINER	10-87	
DATE				1706	GREINER	10-87	
NO.				1707	GREINER	10-87	
DATE				1708	GREINER	10-87	
NO.				1709	GREINER	10-87	
DATE				1710	GREINER	10-87	
NO.				1711	GREINER	10-87	
DATE				1712	GREINER	10-87	
NO.				1713	GREINER	10-87	
DATE				1714	GREINER	10-87	
NO.				1715	GREINER	10-87	
DATE				1716	GREINER	10-87	
NO.				1717	GREINER	10-87	
DATE				1718	GREINER	10-87	
NO.				1719	GREINER	10-87	
DATE				1720	GREINER	10-87	
NO.				1721	GREINER	10-87	
DATE				1722	GREINER	10-87	
NO.				1723	GREINER	10-87	
DATE				1724	GREINER	10-87	
NO.				1725	GREINER	10-87	
DATE				1726	GREINER	10-87	
NO.				1727	GREINER	10-87	
DATE				1728	GREINER	10-87	
NO.				1729	GREINER	10-87	
DATE				1730	GREINER	10-87	
NO.				1731	GREINER	10-87	
DATE				1732	GREINER	10-87	
NO.				1733	GREINER	10-87	
DATE				1734	GREINER	10-87	
NO.				1735	GREINER	10-87	
DATE				1736	GREINER	10-87	
NO.				1737	GREINER	10-87	
DATE				1738	GREINER	10-87	
NO.				1739	GREINER	10-87	
DATE				1740	GREINER	10-87	
NO.				1741	GREINER	10-87	
DATE				1742	GREINER	10-87	
NO.				1743	GREINER	10-87	
DATE				1744	GREINER	10-87	
NO.				1745	GREINER	10-87	
DATE				1746	GREINER	10-87	
NO.				1747	GREINER	10-87	
DATE				1748	GREINER	10-87	
NO.				1749	GREINER	10-87	
DATE				1750	GREINER	10-87	
NO.				1751	GREINER	10-87	
DATE				1752	GREINER	10-87	
NO.				1753	GREINER	10-87	
DATE				1754	GREINER	10-87	
NO.				1755	GREINER	10-87	
DATE				1756	GREINER	10-87	
NO.				1757	GREINER	10-87	
DATE				1758	GREINER	10-87	
NO.				1759	GREINER	10-87	
DATE				1760	GREINER	10-87	
NO.				1761	GREINER	10-87	
DATE				1762	GREINER	10-87	
NO.				1763	GREINER	10-87	
DATE				1764	GREINER	10-87	
NO.				1765	GREINER	10-87	
DATE				1766	GREINER	10-87	
NO.				1767	GREINER	10-87	
DATE				1768	GREINER	10-87	
NO.				1769	GREINER	10-87	
DATE				1770	GREINER	10-87	
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DATE				1772	GREINER	10-87	
NO.				1773	GREINER	10-87	
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NO.				1777	GREINER	10-87	
DATE				1778	GREINER	10-87	
NO.				1779	GREINER	10-87	
DATE				1780	GREINER	10-87	
NO.				1781	GREINER	10-87	
DATE				1782	GREINER	10-87	
NO.				1783	GREINER	10-87	
DATE				1784	GREINER	10-87	
NO.				1785	GREINER	10-87	
DATE				1786	GREINER	10-87	
NO.				1787	GREINER	10-87	
DATE				1788	GREINER	10-87	
NO.				1789	GREINER	10-87	
DATE				1790	GREINER	10-87	
NO.				1791	GREINER	10-87	
DATE				1792	GREINER	10-87	
NO.				1793	GREINER	10-87	
DATE				1794	GREINER	10-87	
NO.				1795	GREINER	10-87	
DATE				1796	GREINER	10-87	
NO.				1797	GREINER	10-87	
DATE				1798	GREINER	10-87	
NO.				1799	GREINER	10-87	
DATE				1800	GREINER	10-87	



- GENERAL NOTES**
- CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3500 PSI AFTER 28 DAY CURE. (TYPE I CEMENT)
 - REBAR SHALL CONFORM TO ASTM A615 GR. 40.
 - REBAR SHALL HAVE A MINIMUM COVER OF 3" CONCRETE, EXCEPT AS NOTED.
 - REINFORCING STEEL SHALL BE WIRE-TIED, NOT WELDED.
 - USE NON-SHRINK GROUT FOR JOINTS, FILLETS AND PENETRATIONS.
 - COMPACT ALL BACKFILL AROUND M.H. TO 95% OF MODIFIED PROCTER, PER ASTM D1557.
- CONSTRUCTION NOTES**
- 2" MAXIMUM PIPE PENETRATION.
 - 6" GROUT FILLET ON UPPER HALF OF PIPE AND AROUND BASE.
 - CONCRETE FILL TO BE TYPE II CEMENT.
 - SLOPE 1" PER FOOT FROM PIPE CROWN.
 - SHELF TO BE 9" WIDE MINIMUM.

REQUIREMENT SECTION		ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
				FIELD NOTES		"BH-39" B&H BRASS CAP GO NORTH 0.4 MILES FROM THE INTERSECTION OF I-40 & COORS RD. TO DUNAY RD. GO WEST APPROX. 2.7 MILES TO THE END OF PAVEMENT. CONTINUE WEST 0.9 MILES ON THE DIRT ROAD TO THE TOP OF THE DAM, ALONG THE BANK OF THE DAM, PAST THE POWER SUB STATION TO A DIRT ROAD, GO SOUTH 0.4 MILES TO THE RIGHT, GO N.E. FOR 0.1 MILES TO THE STATION ON THE RIGHT. ELEVATION = 5195.46		CONTRACTOR <i>MOUNTAIN STATES</i> WORK <i>GREINER</i> DATE <i>04-87</i> INSPECTOR'S <i>GREINER</i> DATE <i>04-87</i> ACCEPTANCE BY <i>GREINER</i> DATE <i>04-87</i> FIELD VERIFICATION BY <i>GREINER</i> DATE <i>04-87</i> DRAWINGS CORRECTED BY <i>GREINER</i> DATE <i>04-87</i>	
				NO. BY DATE					
				1062 <i>GREINER</i> 10-87					
				1663					
				1742 & 1743					
				1766 & 1767					
				1772 & 1773					
				1778 & 1779					
				1783 & 1793 <i>GREINER</i> 8-197					
				1783 & 1787					
				1787					
				PROJECT NO.					
				PAC					
				DESIGNED BY <i>LWP</i> <i>8</i> DATE 1-87					
				DRAWN BY <i>LWP</i> DATE 1-87					
				CHECKED BY <i>PAC</i> DATE 1-87					
				ENGINEER					
				Waste					
				fic					
				er					
				DATE					
				12/29/86					
				12/29/86					
				12/29/86					
				12/29/86					
				12/29/86					
				12/29/86					
				12/29/86					
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Greiner Engineering

2601 Wyoming NE
Albuquerque, New Mexico 87112
(505) 292-1936

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: SAD 215 JUNCTION BOX DETAIL					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	1/19/87	1/19/87	Liquid Waste	1/19/87	1/19/87
Design	1-8-87	1-8-87	Traffic	1-8-87	1-8-87
Hydrology	1/9/87	1/9/87	Water	1/9/87	1/9/87
DRAWING NO.	2803	MAP NO.	G 8 H 9	SHEET	30 OF 43

RECORD DRAWING

[illegible]

BAR DETAILS

c1	c2	H minus 3°
----	----	------------

ab,m,n | Tabulated Length

p | 50 minus 3'

T bars: $L + (10\frac{1}{2}"$ at each end)

SEE GEN. NOTE NO. 4

$R = \begin{cases} 3\frac{1}{2} \text{ bar dia. for } 3\frac{1}{2} \text{ to } 4\frac{1}{2} \text{ bar dia.} \\ 4\frac{1}{2} \text{ bar dia. for } 4\frac{1}{2} \text{ to } 5\frac{1}{2} \text{ bar dia.} \end{cases}$

14½ bar dia for 8¢ to
—Place this end

Place this end
in sidewall

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

$$H + 1 = 9 \quad H + 4$$

k | 4'-6" | 6'-9"

- bars same size as d-bar

- bars same size as e-bar

$\frac{1}{2}$	$\frac{1}{2}$
---------------	---------------

A diagram of a rectangular box. A curved arrow labeled R_{12} points from the top-left corner towards the center. A vertical arrow labeled σ points upwards from the bottom edge of the box.

4" h 2'-1 1/2" 6'-3" Long

4φ g 2'-8½" 7'-6" Lon

Place this end

in centerwall.

✓ R = 3 bar dia.

c3 & c4 12 bar dia.

NUMBER OF BARS REQUIRED

h1 b3 m/ e n : 121 ÷ spacing

2. c2, d, e, m2 & n2: 24L: Spacing

$$(24L \div \text{Spacing}) + 2 \text{ at each end}$$

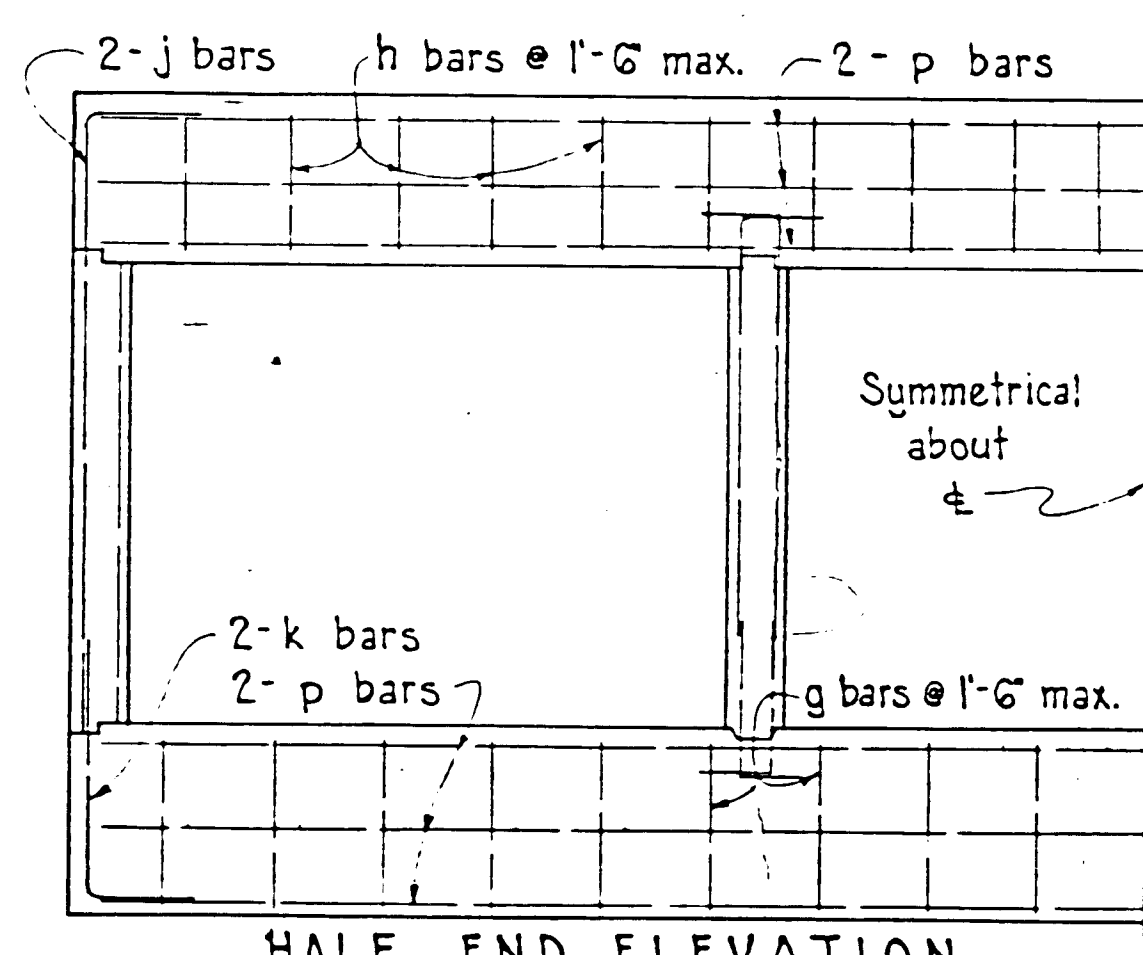
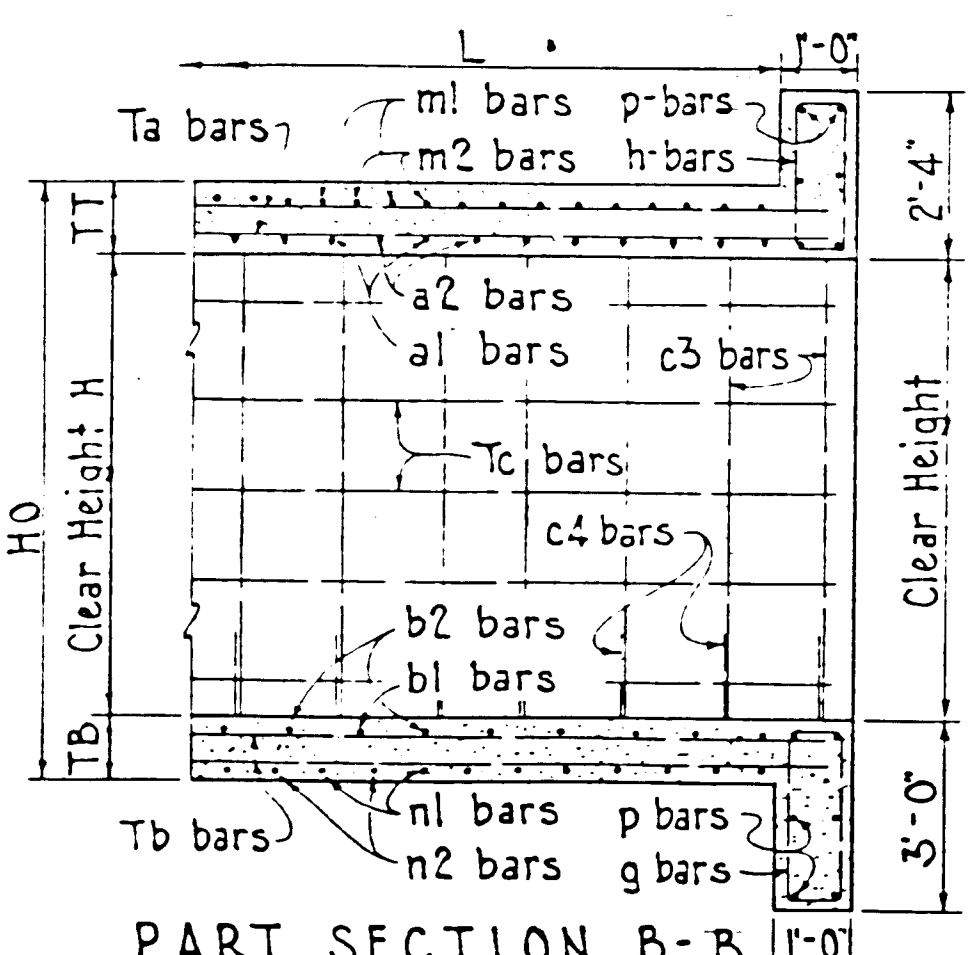
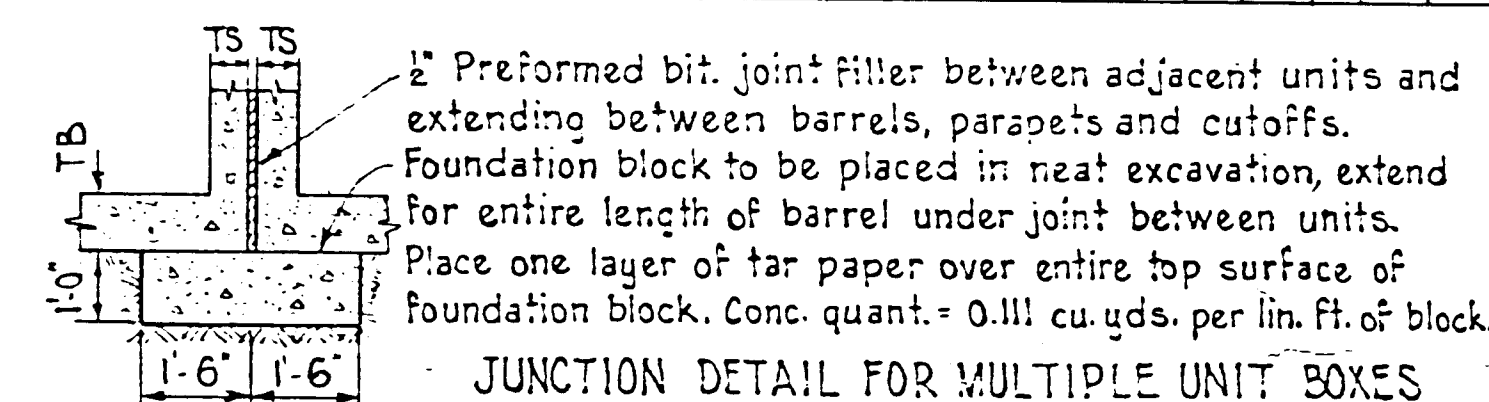
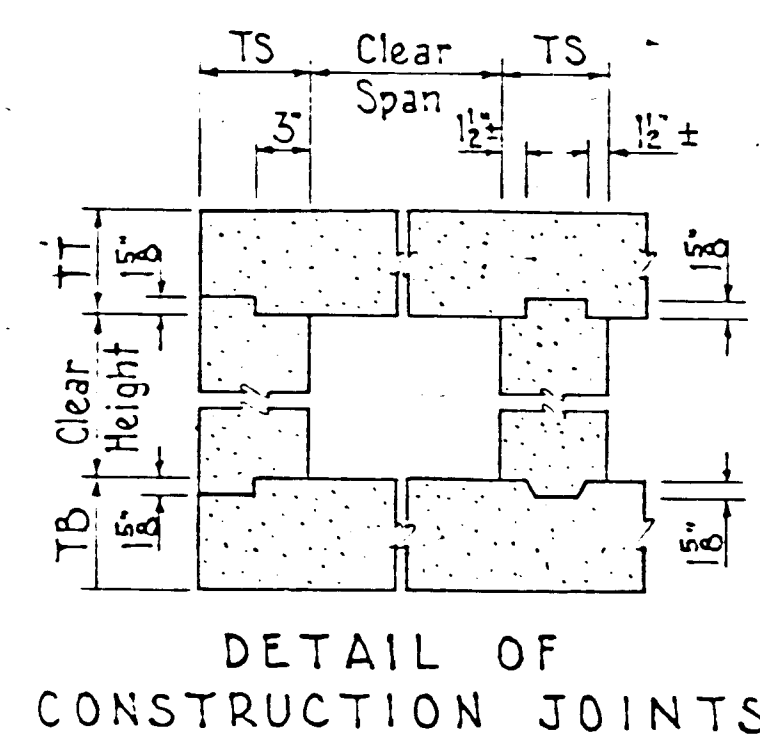
c4 : $(48L \div \text{Spacing}) + 4$ at ea.

4 or ea. (for cutoff and para
at each end

(for cutoff + paracet) at each e

bars: see table.

Length of Barrel in feet.

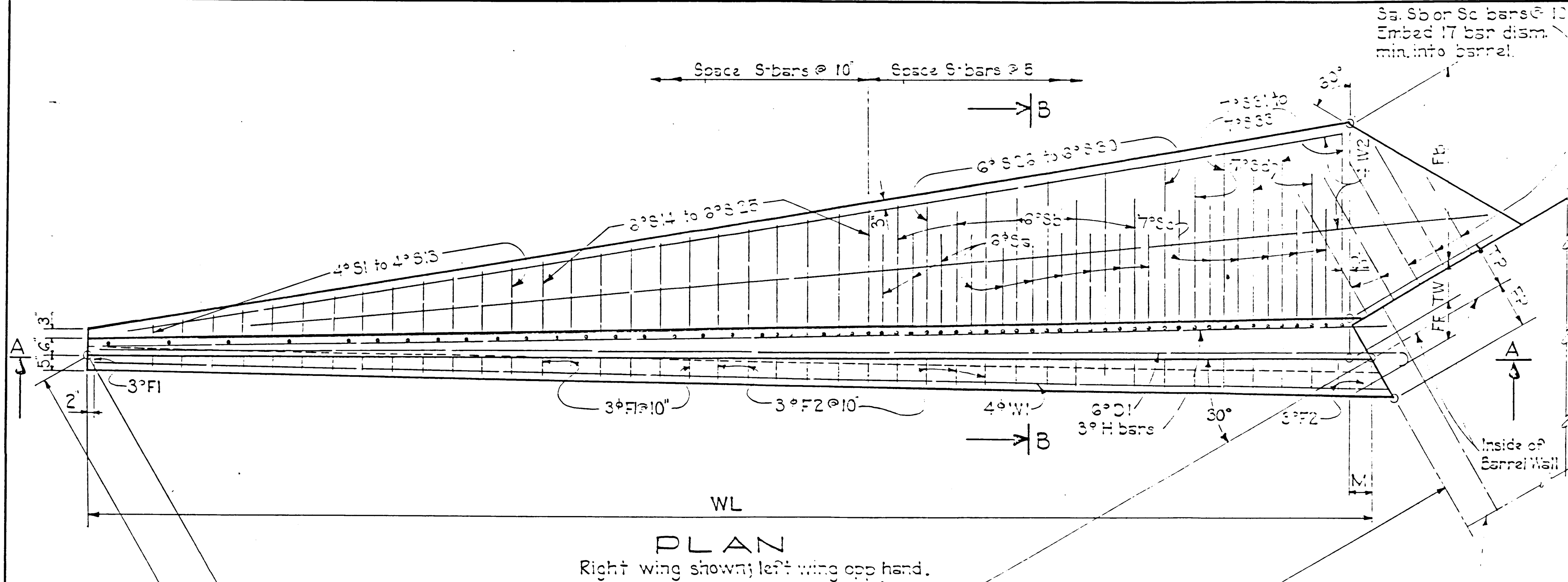


- THIS SERIAL REVISED:

NEW MEXICO
STATE HIGHWAY DEPARTMENT

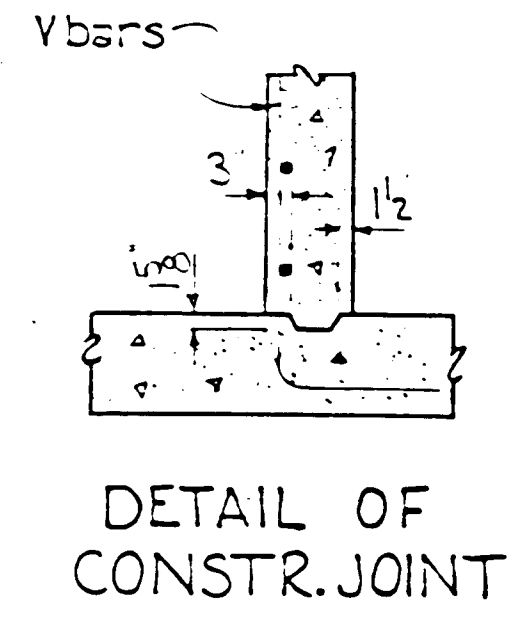
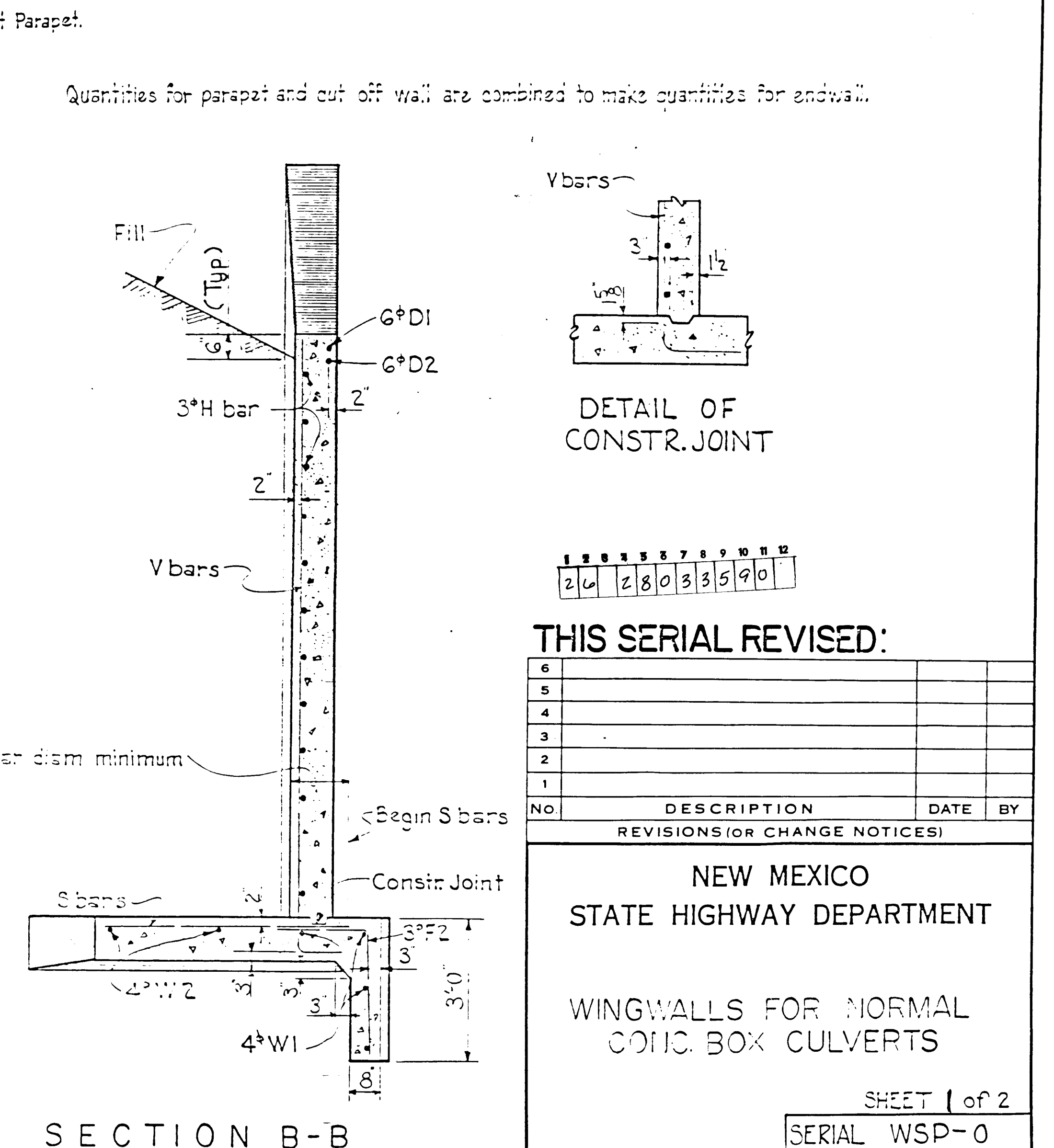
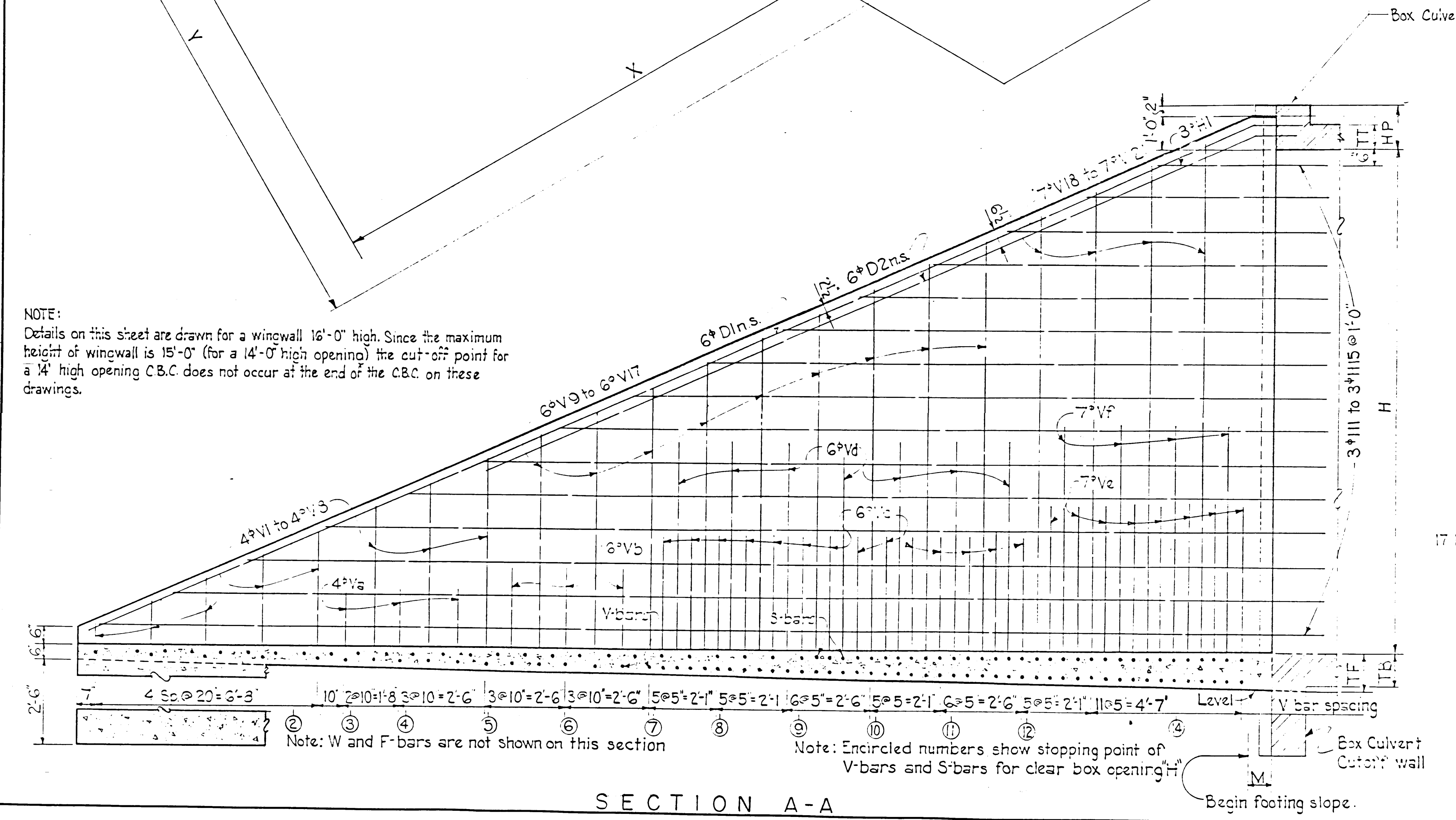
CONCRETE BOX CULVERT BARRELS
TRIPLE OPENING ~ NORMAL
DESIGN No. 2
5' TO 10' COVER
Sheet 2 of 4
SERIAL CB-33

APPROVED: Charles E. Pool 4-17-61
BRIDGE ENGINEER



WING WALL DIMENSIONS													
H	2	3	4	5	6	7	8	9	10	11	12	13	14
WL	6'-0"	8'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"	22'-0"	24'-0"	26'-0"	28'-0"	30'-0"
X	5'-0"	7'-0"	9'-0"	11'-0"	13'-0"	15'-0"	17'-0"	19'-0"	21'-0"	23'-0"	25'-0"	27'-0"	29'-0"
Y	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"	13'-0"	14'-0"	15'-0"
TW	6	6	6	6	6	6	6	6	6	6	6	6	6
FF	3	9	10	11	12	13	14	15	16	17	18	19	20
FB	1'-0"	1'-4"	1'-8"	2'-0"	2'-4"	2'-8"	3'-0"	3'-4"	3'-8"	4'-0"	4'-4"	4'-8"	5'-0"
TF	7	7 1/2	8	8 1/2	9	9 1/2	10	10 1/2	11	11 1/2	12	12 1/2	13
M	3 1/2	3 3/4	3 5/8	3 7/8	4	4 1/8	4 1/4	4 1/2	4 3/4	4 5/8	4 3/4	5 1/8	5 1/4
TP	6 1/2	6 1/4	6 1/8	6 1/2	6 1/4	6 1/8	6 1/2	6 1/4	6 1/8	6 1/2	6 1/4	6 1/8	6 1/2
FP	9 1/4	10 1/8	11'-0"	11'-1 1/8	12'-0"	12'-4 1/8	13'-0"	13'-4 1/8	14'-0"	14'-4 1/8	15'-0"	15'-4 1/8	16'-0"

* Note: Wingwalls may be built with a uniform thickness of TW throughout their entire length, providing vertical reinforcing in back face is kept 2" from back face of the concrete and the back of the footing is kept at least wide enough to prevent the wall from projecting beyond the footing and providing this modification is made at no additional cost to the state. Pay quantities to remain the same as shown on the standard plans.



THIS SERIAL REVISED:
2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100

NEW MEXICO STATE HIGHWAY DEPARTMENT		
WINGWALLS FOR NORMAL CONC. BOX CULVERTS		
SHEET 1 of 2 SERIAL WSP-0		

Designed by: P.M. 10-74
Checked by: W.J. 10-75
Detailed by: A.S. 4-75
Checked by: W.J. 10-75

NOTE:
Details on this sheet are drawn for a wingwall 16'-0" high. Since the maximum height of wingwall is 15'-0" (for a 14'-0" high opening) the cut-off point for a 14' high opening C.B.C. does not occur at the end of the C.B.C. on these drawings.

Note: W and F-bars are not shown on this section
Note: Encircled numbers show stopping point of V-bars and S-bars for clear box opening

17 bar dism minimum
Begin S bars
Constr Joint
Begin footing slope

Approved: 4-7-75
Bridge Engineer

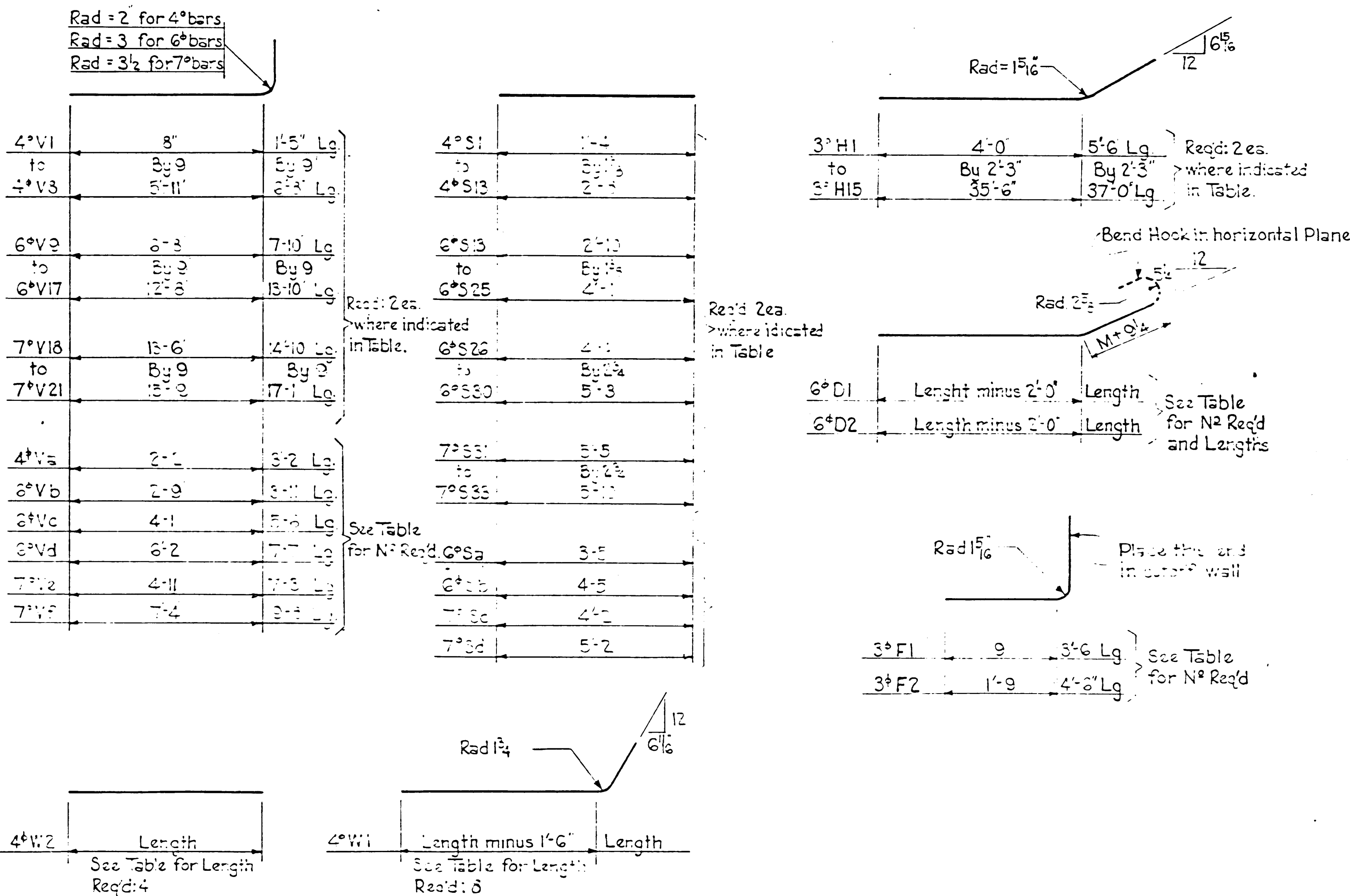
PROJECT NO.	SHEET NO.	TOTAL SHEETS
6	2	2

REINFORCING STEEL REQUIREMENTS																								QUANTITIES		H	
H	V1	V2	V3	V4	V5	V6	V7	V8	V9	6"D1	6"D2	S1	S2	S3	S4	S5	F1	F2	W1	W2	Concrete	Rebar	Sfcs				
	Bars	N°	N°	N°	N°	N°	N°	Bars	N°	Left	End	N°	Left	End	Bars	N°	N°	N°	N°	N°	N°	Left	End	Left	End		Cu
2	1 to 4	0								1 to 2	2	8'-0"			1 to 6					14	5'-3"	5'-3"	1.61	119			2
3	1 to 5	2								1 to 3	2	10'-6"			1 to 8					20	10'-3"	7'-9"	2.46	196			3
4	1 to 6	4								1 to 4	2	13'-0"			1 to 11					26	13'-3"	10'-0"	3.43	261			4
5	1 to 8	8								1 to 5	2	15'-6"			1 to 12	2				32	15'-6"	12'-6"	4.65	352			5
6	1 to 9	6	4							1 to 6	2	18'-0"			1 to 16	2				36	18'-0"	14'-9"	6.00	462			6
7	1 to 11	6	6							1 to 7	2	20'-6"	2	16'-3"	1 to 12	4				42	20'-3"	17'-0"	7.25	664			7
8	1 to 12	6	6	6	2					1 to 8	2	23'-0"	2	18'-0"	1 to 12	7				42	22'-9"	19'-3"	9.76	853			8
9	1 to 13	6	6	10	6					1 to 9	2	25'-6"	2	20'-0"	1 to 15	6				42	25'-0"	21'-6"	12.22	1074			9
10	1 to 15	6	6	16	8					1 to 10	2	28'-0"	2	21'-9"	1 to 20	6	2			42	27'-6"	23'-9"	14.83	1346			10
11	1 to 16	6	6	22	10					1 to 11	2	30'-6"	2	23'-9"	1 to 27	0	6	6		42	29'-9"	26'-0"	18.08	1579			11
12	1 to 17	6	6	28	14					1 to 12	2	33'-0"	2	25'-6"	1 to 23	0	6	6		42	32'-0"	28'-3"	21.30	1852			12
14	1 to 21	6	6	28	14					1 to 14	2	38'-3"	2	29'-0"	1 to 32	0	1	8	4	42	40'-0"	32'-9"	31.68	2694			14

Note: Reinforcing steel requirements and quantities in the above table are tabulated for the two wings at one end of the culvert.

Note: The number of S₁, S₂, & S₃ bars shown in the upper portion of tabulation are to be placed in footing adjacent to barrel. Number shown in the lower portion of tabulation are to be placed adjacent to wing.

BAR BENDING DIAGRAMS



DESIGN DATA

Design according to AASHTO Specification, 1973.
Active earth pressure determined from Rankine's Formula.
Weight of earth: 120^{lb}/ft³
Fill Slope: 2:1
Angle of internal friction: 34°
Design stresses: f_c = 3000 psi, f_c = 1200 psi, f_s = 2000 psi, n = 10.
Maximum computed footing pressure = 2 tons per sq ft.

GENERAL NOTES

- Workmanship and materials shall conform to N.M.S.H. Dept. Std. Specifications for Road & Bridge Construction.
- All concrete shall be Class "A". Chamfer all exposed edges 3".
- All reinforcing steel shall conform to A.S.T.M. specification A615, grade 40.
- Reinforcing bars may be spliced where necessary to avoid excessive lengths of bars. Splices shall lap a minimum of 20 bar diameters. Pay weight of reinforcing steel does not include weight of splices. Cost of splice material shall be included in the unit price bid for reinforcing steel.
- Dimensions to reinforcing steel refer to 1/2 bar. Cut bars to nearest 1" length; use shorter length when detailed length falls at 1/2.
- Wingwalls are to be placed monolithic with barrel.

THIS SERIAL REVISED:

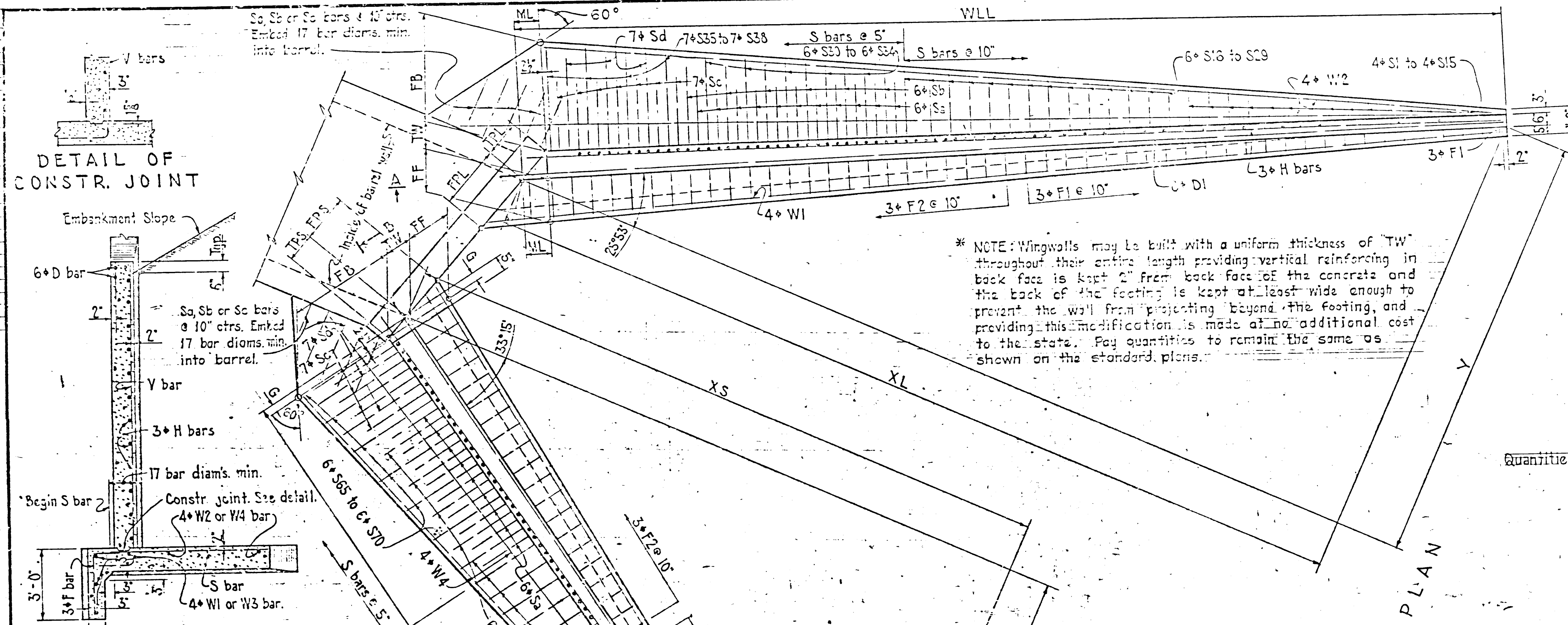
NEW MEXICO
STATE HIGHWAY DEPARTMENT

WINGWALLS FOR NORMAL
CONC. BOX CULVERTS

SHEET 2 of 2
SERIAL WSP-0

CATEGORY

FED. PROJ. DIST. NO.	STATE	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
6	NEW MEXICO			



		REINFORCING STEEL REQUIREMENTS																				QUANTITIES				
Clear Height of Culvert Opening	Wing Wall	V ₁ to V ₂		V ₂ to V ₃		V ₃ to V ₄		V ₄ to V ₅		V ₅ to V ₆		V ₆ to V ₇		V ₇ to V ₈		V ₈ to V ₉		V ₉ to V ₁₀		V ₁₀ to V ₁₁		V ₁₁ to V ₁₂		Concrete Cu. Yds.	Reinf. Steel LBS.	Clear Height of Culvert Opening
		Rein.	Rein.	Rein.	Rein.	Rein.	Rein.	Rein.	Rein.	Rein.	Rein.	Rein.	Rein.	Rein.	Rein.	Rein.	Rein.	Rein.	Rein.	Rein.	Rein.	Rein.				
2	L	1 to 4																								
	S	25 to 27																								
3	L	1 to 6																								
	S	25 to 29																								
4	L	1 to 7	2																							
	S	25 to 30	1																							
5	L	1 to 9	3																							
	S	25 to 31																								
6	L	1 to 10		2																						
	S	25 to 32		1																						
7	L	1 to 12		4																						
	S	25 to 34		2																						
8	L	1 to 14		4	2																					
	S	25 to 35		3	1																					
9	L	1 to 15		4	5	3																				
	S	25 to 36		3	3	2																				
10	L	1 to 17		4	8	4																				
	S	25 to 37		3	6	3																				
11	L	1 to 18		4	11	6																				
	S	25 to 39		3	8	4																				
12	L	1 to 20		4	15	7																				
	S	25 to 40		3	11	5																				
14	L	1 to 23		3	4	15	7	5	3																	
	S	25 to 42		3	13	7	3	1																		

WING WALL DIMENSIONS

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GENERAL NOTES

1. Workmanship and materials shall conform to New Mexico State Highway Department Specifications.
2. All concrete to be Class "A". Chamfer all exposed edges.
3. All reinforcing steel shall conform to A.S.T.M. Specification A615, grade 40. All dimensions refer to $\frac{1}{4}$ of bar. Bars to be cut to the nearest one inch length, use shorter length when detailed length falls on $\frac{1}{2}$ exact.
4. Reinforcing bars may be spliced with lap splices, avoid excessive lengths of bars. Splices shall lap a minimum of 20 bar diameters. Pay weight of reinforcing steel does not include weight of splices; cost of splice material shall be included in the unit price bid for reinforcing steel.
5. Wingwalls to be placed monolithic with barrel.

NOTE: Reinforcing Steel requirements and quantities in the above table are tabulated for the two wings at one end of the culvert.

The number of S₁, S₂ & S₃ bars shown in the upper portion of the table are to be placed in footing adjacent to barrel. Number of S₄, S₅ & S₆ bars are to be placed in footing.

LASON 1-505-344-9404
BEST COPY AVAILABLE

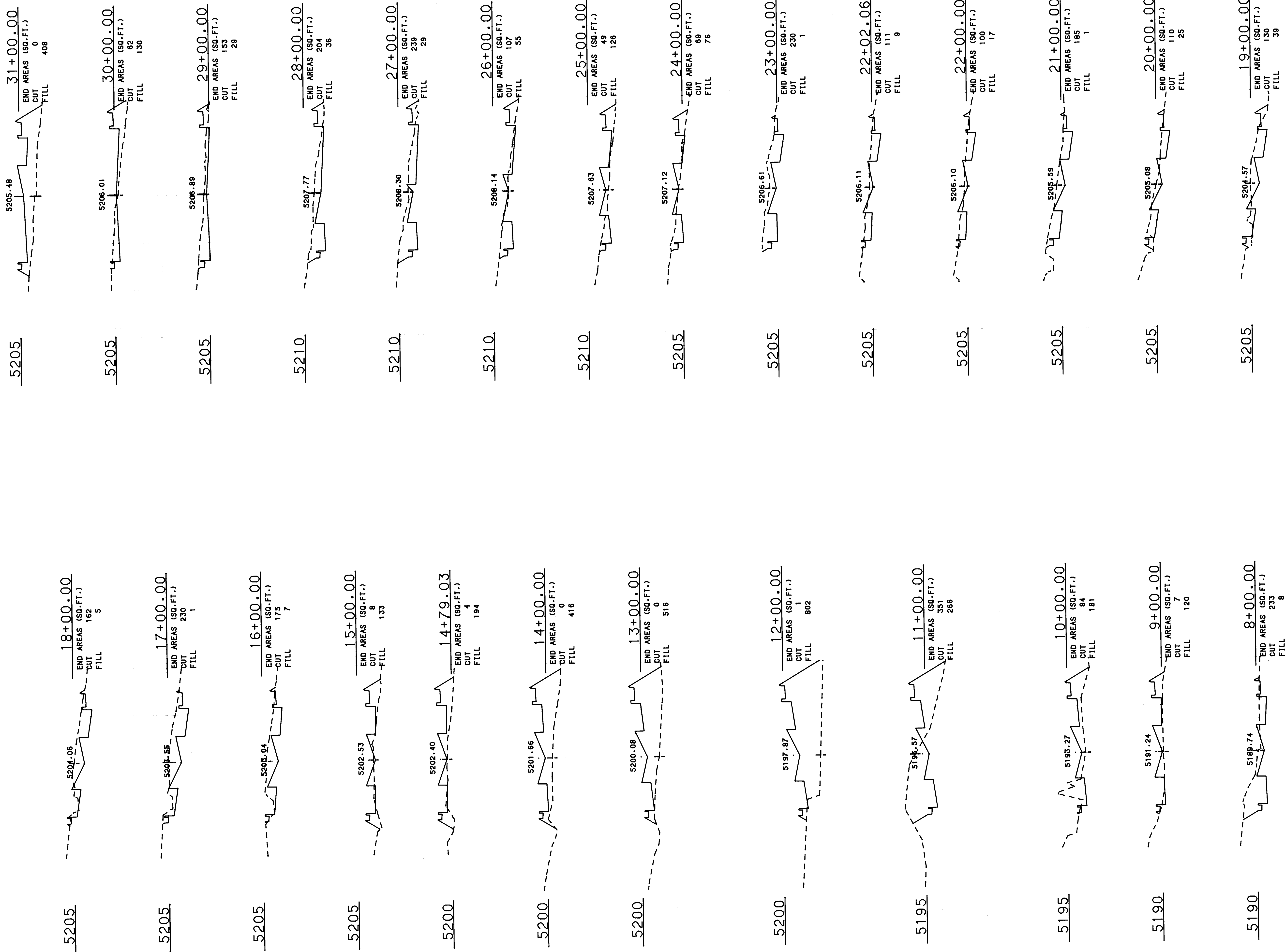
1 2 3 4 5 6 7 8 9 10 11 12
26 28 30 32 34 36 38 40

WING WALLS
FOR 15° SKEW CONC BOX CULVERTS

Sheet 2 of 2
SERIAL WSP-15

RECORD DRAWING

SHT. 38 OF 43



1	2	3	4	5	6	7	8	9	10	11	12
2	6	2	8	0	3	3	9	9	0		

Greiner Engineering
2601 Wyoming NE
Albuquerque, New Mexico 87112
(505) 292-1936

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: SAD 215: LADERA DR. TO OURAY RD. CROSS SECTIONS- UNSER BLVD.					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	10/8/87	Liquid Waste	<i>[Signature]</i>	12/29/86
A.C.E. Design	<i>[Signature]</i>	1-8-87	Traffic	<i>[Signature]</i>	12/29/86
A.C.E. Hydrology	<i>[Signature]</i>	1/9/87	Water	<i>[Signature]</i>	12/29/86
DRAWING NO. 2803		MAP NO. G8H9		SHEET 39 OF 43	

RECORD DRAWING

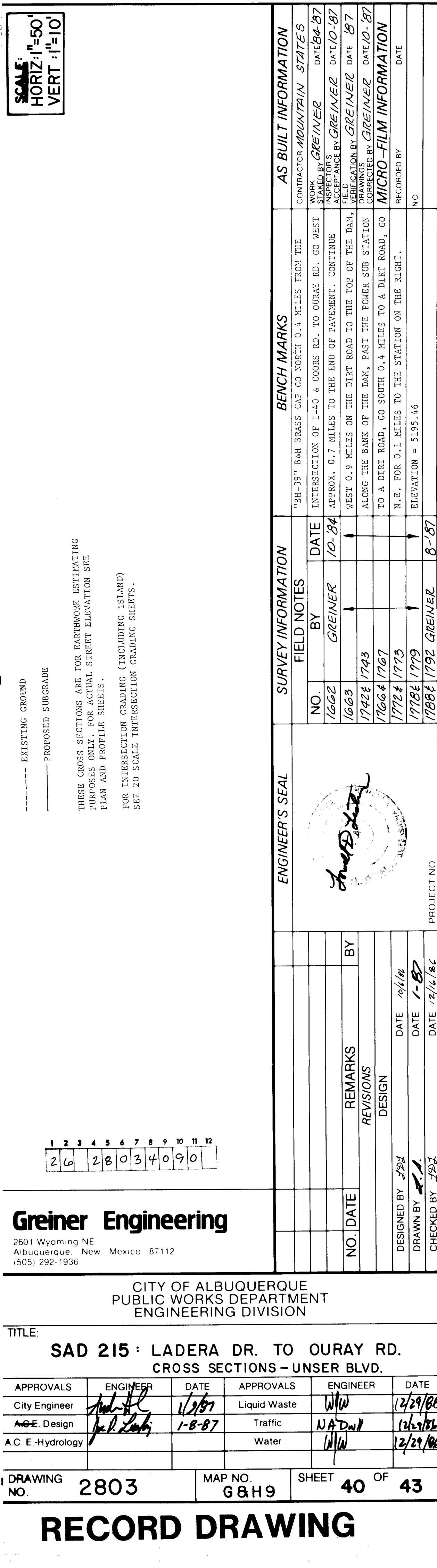
----- EXISTING GROUND
----- PROPOSED SUBGRADE

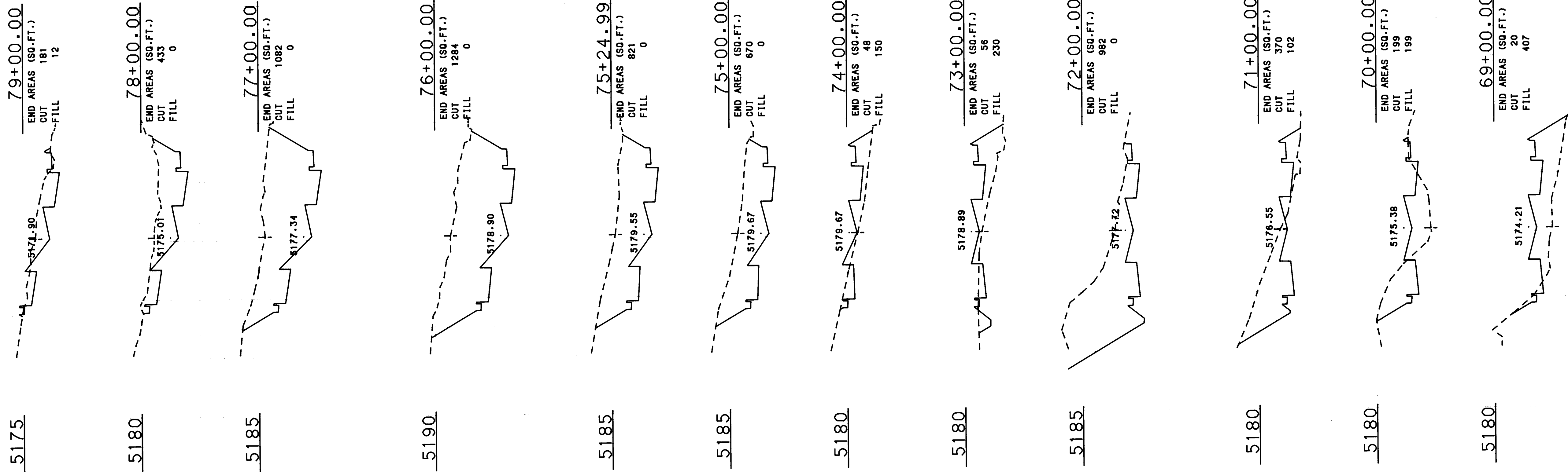
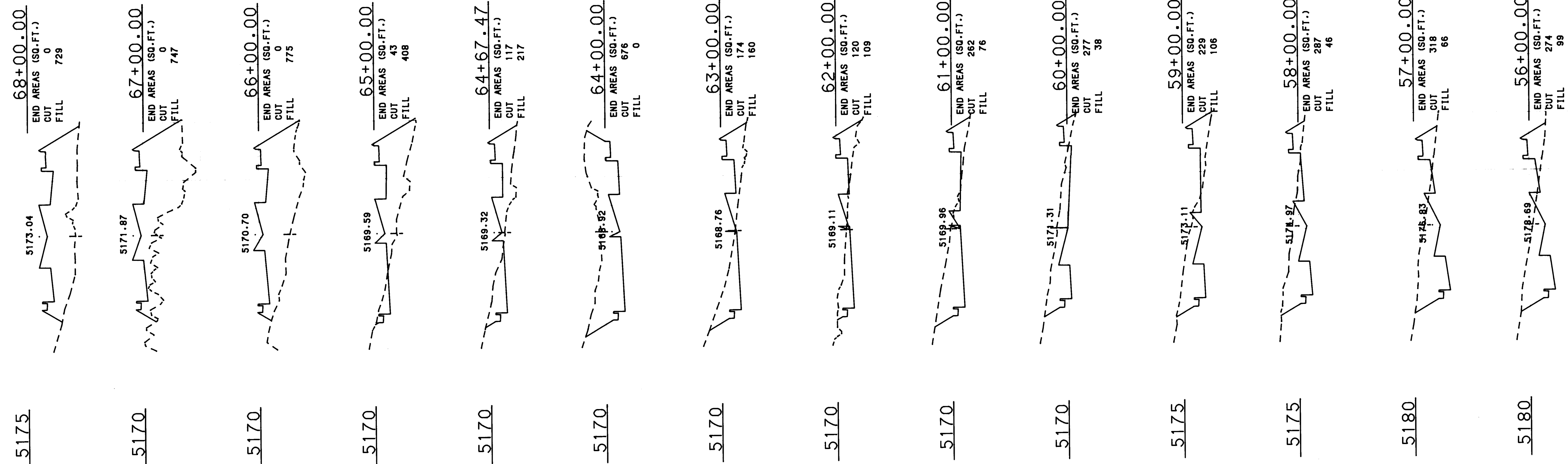
THESE CROSS SECTIONS ARE FOR EARTHWORK ESTIMATING PURPOSES ONLY. FOR ACTUAL STREET ELEVATION SEE PLAN AND PROFILE SHEETS.

FOR INTERSECTION GRADING (INCLUDING ISLAND) SEE 20 SCALE INTERSECTION GRADING SHEETS.

SCALE:
HORIZ.: 1"=50'
VERT.: 1"=10'

ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
		FIELD NOTES		CONTRACTOR MOUNTAIN STATES		CONTRACTOR MOUNTAIN STATES	
		NO. BY DATE		INTERSECTION OF I-40 & COORS RD. TO OURAY RD. GO WEST APPROX. 0.7 MILES TO THE END OF PAVEMENT. CONTINUE WEST 0.9 MILES ON THE DIET ROAD TO THE TOP OF THE DAM, ALONG THE BANK OF THE DAM, PAST THE POWER SUB STATION TO A DIET ROAD, GO SOUTH 0.4 MILES TO A DIET ROAD, GO N.E. FOR 0.1 MILES TO THE STATION ON THE RIGHT. ELEVATION = 5195.46		INSPECTOR'S DATE 10-87	
		1662 GREINER 10-84				DATE 10-87	
		1663 1742 1723				DATE 10-87	
		1664 1767				DATE 10-87	
		1712 1779				DATE 10-87	
		1788 1792 GREINER 8-87				DATE 10-87	





EXISTING GROUND

PROPOSED SUBGRADE

THESE CROSS SECTIONS ARE FOR EARTHWORK ESTIMATING PURPOSES ONLY. FOR ACTUAL STREET ELEVATION SEE PLAN AND PROFILE SHEETS.

FOR INTERSECTION GRADING (INCLUDING ISLAND) SEE 20 SCALE INTERSECTION GRADING SHEETS.

SCALE: HORIZ: 1"=50' VERT: 1"=10'

1	2	3	4	5	6	7	8	9	10	11	12	
26	28	03	4	1	9	0						

Greiner Engineering

2601 Wyoming NE
Albuquerque, New Mexico 87112
(505) 292-1936

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

TITLE: **SAD 215 : LADERA DR. TO OURAY RD.
CROSS SECTIONS - UNSER BLVD.**

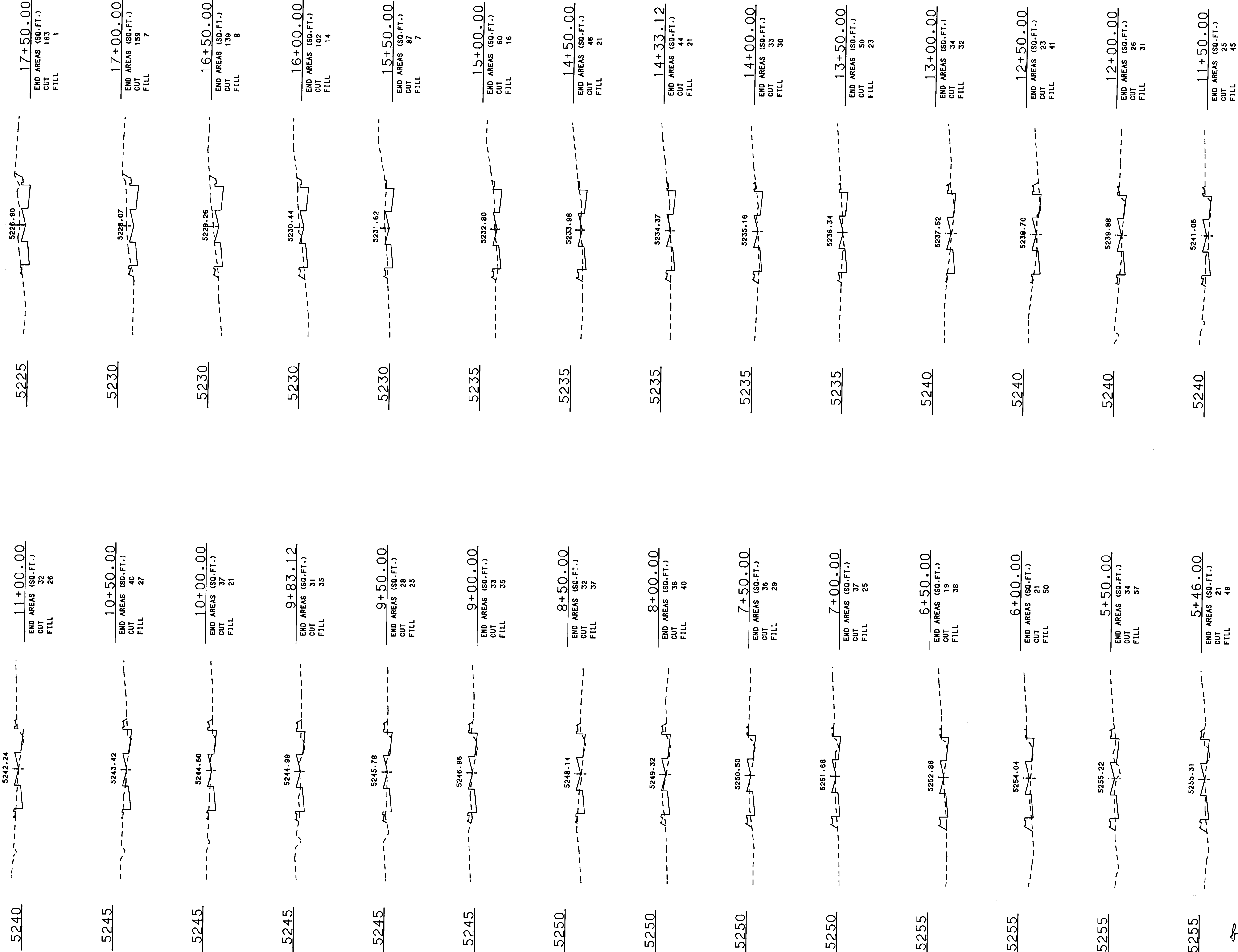
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	1/9/87	Liquid Waste	<i>[Signature]</i>	12/29/86
At-Gr Design	<i>[Signature]</i>	1-8-87	Traffic	<i>[Signature]</i>	12/22/86
A.C. E.-Hydrology	<i>[Signature]</i>	1/9/87	Water	<i>[Signature]</i>	2/29/86

DRAWING NO. **2803**

MAP NO. **G&H9**

SHEET **41** OF **43**

ENGINEER'S SEAL	SURVEY INFORMATION	BENCH MARKS	AS BUILT INFORMATION	
	FIELD NOTES	"BH-39" B&H BRASS CAP GO NORTH 0.4 MILES FROM THE INTERSECTION OF I-40 & COORS RD. TO OURAY RD. GO WEST APPROX. 0.7 MILES TO THE END OF PAVEMENT. CONTINUE WEST 0.9 MILES ON THE DIRT ROAD TO THE TOP OF THE DAM, ALONG THE BANK OF THE DAM, PAST THE POWER SUB STATION TO A DIET ROAD, GO SOUTH 0.4 MILES TO A DIRT ROAD, GO N.E. FOR 0.1 MILES TO THE STATION ON THE RIGHT. ELEVATION = 5195.46	CONTRACTOR MOUNTAIN STATE'S WORK BY GREINER DATE 8-87 INSPECTORS ACCEPTANCE BY GREINER DATE 10-87 VERIFICATION BY GREINER DATE 1-87 DRAWN BY GREINER DATE 10-87 MICRO-FILM INFORMATION RECORDED BY DATE NO	
	NO			DATE
	1662			10-84
	1663			1742# 1743
	1766# 1767			1772# 1773
1773# 1779	1784# 1792	GREINER	8-87	
PROJECT NO				



Greiner Engineering 2601 Wyoming NE Albuquerque, New Mexico 87112 (505) 292-1936			CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION		
TITLE: SAD 215 : LADERA DR. TO OURAY RD. CROSS SECTIONS - 98th. ST.					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	1/2/87	Liquid Waste	<i>[Signature]</i>	12/27/86
Design	<i>[Signature]</i>	1-8-87	Traffic	NA DWH	12/27/86
A-E-Hydrology	<i>[Signature]</i>	1/9/87	Water	<i>[Signature]</i>	12/27/86
DRAWING NO. 2803		MAP NO. G8H9		SHEET 42 OF 43	

SCALE:
HORIZ: 1"=50'
VERT: 1"=10'

EXISTING GROUND

PROPOSED SUBGRADE

THESE CROSS SECTIONS ARE FOR EARTHWORK ESTIMATING PURPOSES ONLY. FOR ACTUAL STREET ELEVATION SEE PLAN AND PROFILE SHEETS.
FOR INTERSECTION GRADING (INCLUDING ISLAND) SEE 20 SCALE INTERSECTION GRADING SHEETS.

ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
<i>[Signature]</i>		FIELD NOTES		CONTRACTOR		MOUNTAIN STATES	
		BY GREINER		WORK		DATE 8-8-87	
		DATE 10-84		INTERSECTION OF I-40 & OURAY RD. TO OURAY RD. GO WEST APPROX. 0.7 MILES TO THE END OF PAVEMENT. CONTINUE WEST 0.9 MILES ON THE DIET ROAD TO THE TOP OF THE DAM, ALONG THE BANK OF THE DAM, PAST THE POWER SUB STATION TO A DIET ROAD, GO SOUTH 0.4 MILES TO A DIET ROAD, GO N.E. FOR 0.1 MILES TO THE STATION ON THE RIGHT.		DATE 10-87	
		REVISIONS		DRAWINGS		DATE 10-87	
		DESIGN		CORRECTED BY GREINER		DATE 10-87	
DESIGNED BY J.D.H.		DATE 10/1/86		MICRO-FILM INFORMATION		DATE	
DRAWN BY G.A.		DATE 1-87		RECORDED BY		DATE	
CHECKED BY J.D.H.		DATE 12/14/86		ELEVATION = 5195.46		NO	
PROJECT NO.		17884 1792 GREINER		8-87			

5210

24+00.00

END AREAS (SQ.FT.)

CUT 93

FILL 3

5215

23+50.00

END AREAS (SQ.FT.)

CUT 121

FILL 0

5215

23+00.00

END AREAS (SQ.FT.)

CUT 135

FILL 0

5215

22+50.00

END AREAS (SQ.FT.)

CUT 119

FILL 0

5215

22+25.02

END AREAS (SQ.FT.)

CUT 102

FILL 0

5215

22+00.00

END AREAS (SQ.FT.)

CUT 90

FILL 0

5215

21+50.00

END AREAS (SQ.FT.)

CUT 77

FILL 5

5220

21+00.00

END AREAS (SQ.FT.)

CUT 78

FILL 5

5220

20+50.00

END AREAS (SQ.FT.)

CUT 82

FILL 2

5220

20+00.00

END AREAS (SQ.FT.)

CUT 73

FILL 5

5220

19+50.00

END AREAS (SQ.FT.)

CUT 115

FILL 4

5225

19+00.00

END AREAS (SQ.FT.)

CUT 139

FILL 2

5225

18+50.00

END AREAS (SQ.FT.)

CUT 125

FILL 2

5225

18+00.00

END AREAS (SQ.FT.)

CUT 143

FILL 1

5211.55

5212.73

5213.91

5215.09

5215.68

5216.27

5217.45

5218.63

5219.82

5220.99

5222.17

5223.36

5224.53

5225.72

5205

27+77.98

END AREAS (SQ.FT.)

CUT 28

FILL 42

5205

27+50.00

END AREAS (SQ.FT.)

CUT 82

FILL 13

5205

27+00.00

END AREAS (SQ.FT.)

CUT 229

FILL 0

5210

26+57.50

END AREAS (SQ.FT.)

CUT 215

FILL 0

5210

26+50.00

END AREAS (SQ.FT.)

CUT 155

FILL 7

5210

26+37.00

END AREAS (SQ.FT.)

CUT 88

FILL 24

5210

26+13.00

END AREAS (SQ.FT.)

CUT 113

FILL 1

5210

26+00.00

END AREAS (SQ.FT.)

CUT 80

FILL 11

5210

25+50.00

END AREAS (SQ.FT.)

CUT 64

FILL 11

5210

25+00.00

END AREAS (SQ.FT.)

CUT 71

FILL 6

5210

24+50.00

END AREAS (SQ.FT.)

CUT 80

FILL 5

Greiner Engineering

2601 Wyoming NE
Albuquerque, New Mexico 87112
(505) 292-1936

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

TITLE:
SAD 215: LADERA DR. TO OURAY RD.
CROSS SECTIONS - 98th. ST.

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	1/2/87	Liquid Waste	<i>[Signature]</i>	12/29/86
Design	<i>[Signature]</i>	1-8-87	Traffic	<i>[Signature]</i>	12/29/86
Hydrology	<i>[Signature]</i>	1/9/87	Water	<i>[Signature]</i>	12/29/86

DRAWING NO. 2803 MAP NO. 68H9 SHEET 43 OF 43

RECORD DRAWING

----- EXISTING GROUND
----- PROPOSED SUBGRADE

THESE CROSS SECTIONS ARE FOR EARTHWORK ESTIMATING PURPOSES ONLY. FOR ACTUAL STREET ELEVATION SEE PLAN AND PROFILE SHEETS.

FOR INTERSECTION GRADING (INCLUDING ISLAND) SEE 20 SCALE INTERSECTION GRADING SHEETS.

1 2 3 4 5 6 7 8 9 10 11 12
2 6 2 8 0 3 4 3 9 0

[Signature]

DESIGNED BY *[Signature]* DATE 10/6/86
DRAWN BY *[Signature]* DATE 1-87
CHECKED BY *[Signature]* DATE 12/14/86

PROJECT NO.

FIELD NOTES		DATE	
NO.	BY	NO.	BY
1062	GREINER	10-84	
1063			
1742		1743	
1766		1767	
1772		1773	
1778		1779	
1783	GREINER	8-87	

"BH-39" B&H BRASS CAP GO NORTH 0.4 MILES FROM THE INTERSECTION OF I-40 & COORS RD. TO OURAY RD. GO WEST APPROX. 0.7 MILES TO THE END OF PAVEMENT. CONTINUE WEST 0.9 MILES ON THE DIRT ROAD TO THE TOP OF THE DAM, ALONG THE BANK OF THE DAM, PAST THE POWER SUB STATION TO A DIRT ROAD, GO SOUTH 0.4 MILES TO A DIRT ROAD, GO N.E. FOR 0.1 MILES TO THE STATION ON THE RIGHT.
ELEVATION = 5195.46

CONTRACTOR MOUNTAIN STATES
WORK BY GREINER DATE 8-87
INSPECTORS
ACCEPTANCE BY GREINER DATE 10-87
VERIFICATION BY GREINER DATE 10-87
CORRECTIONS BY GREINER DATE 10-87
MICRO-FILM INFORMATION
RECORDED BY
DATE
NO

SCALE:
HORIZ: 1"=50'
VERT: 1"=10'