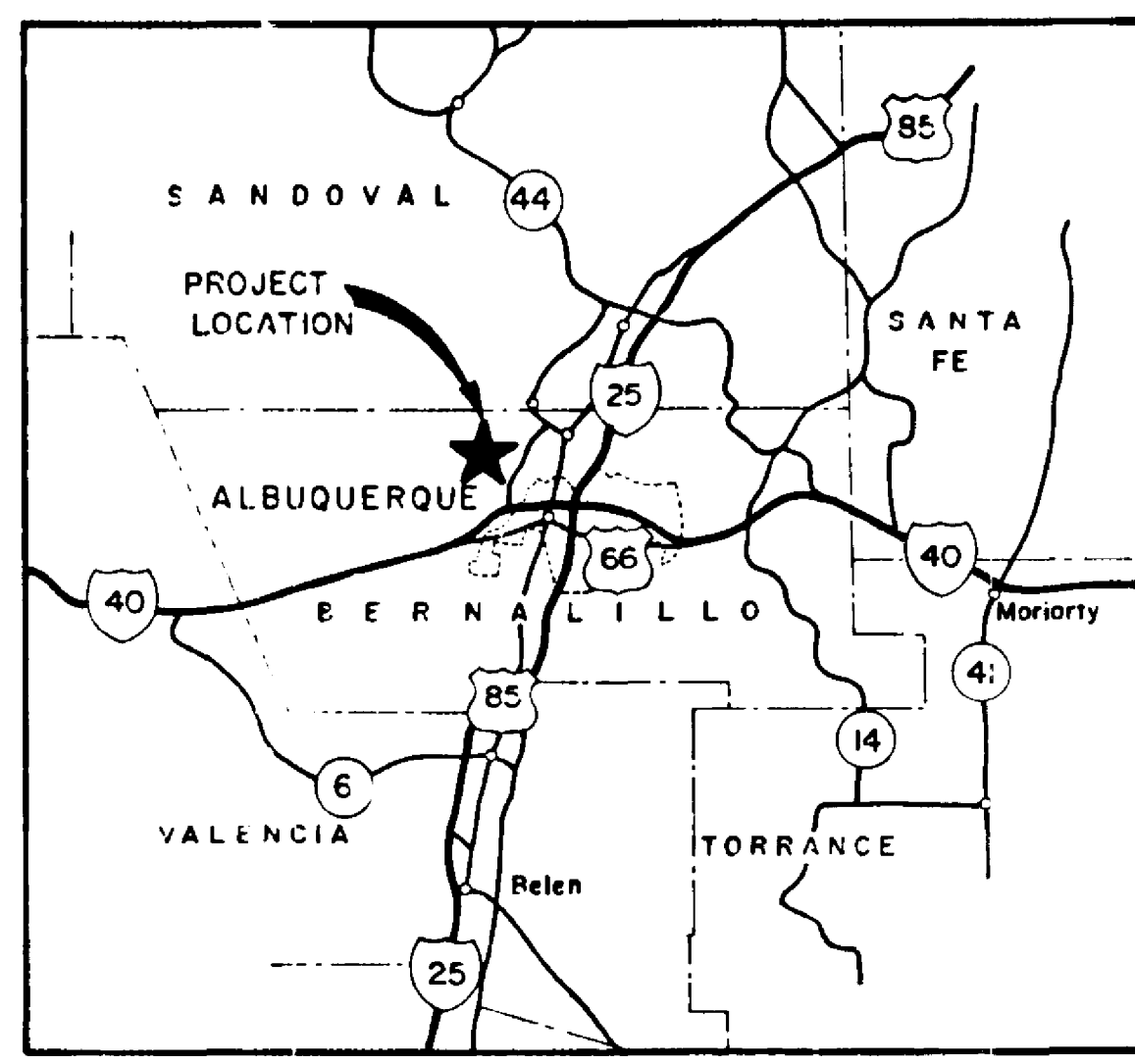
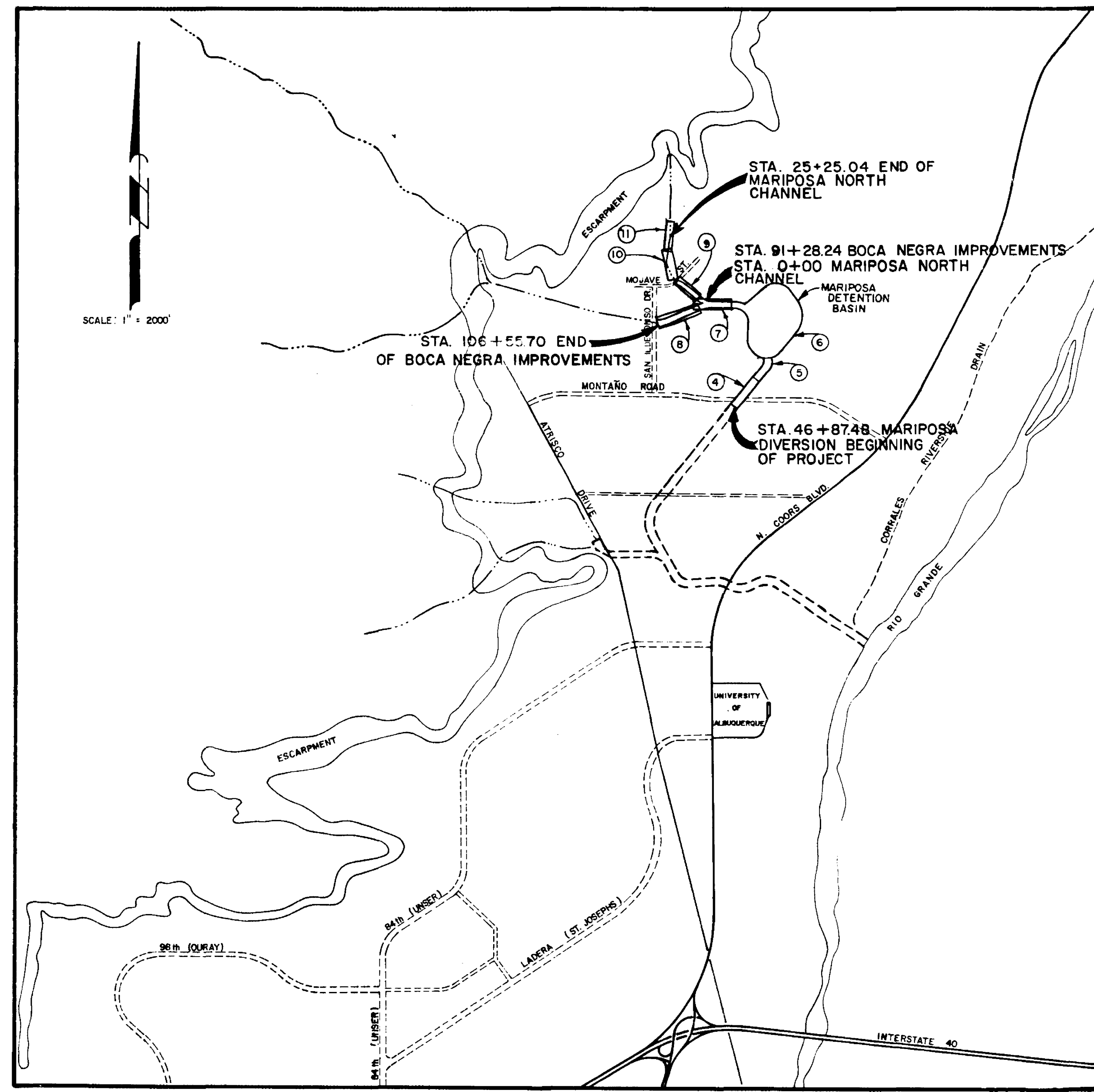


# ALBUQUERQUE METROPOLITAN ARROYO FLOOD CONTROL AUTHORITY



VICINITY MAP  
SCALE: 1" = 15 miles



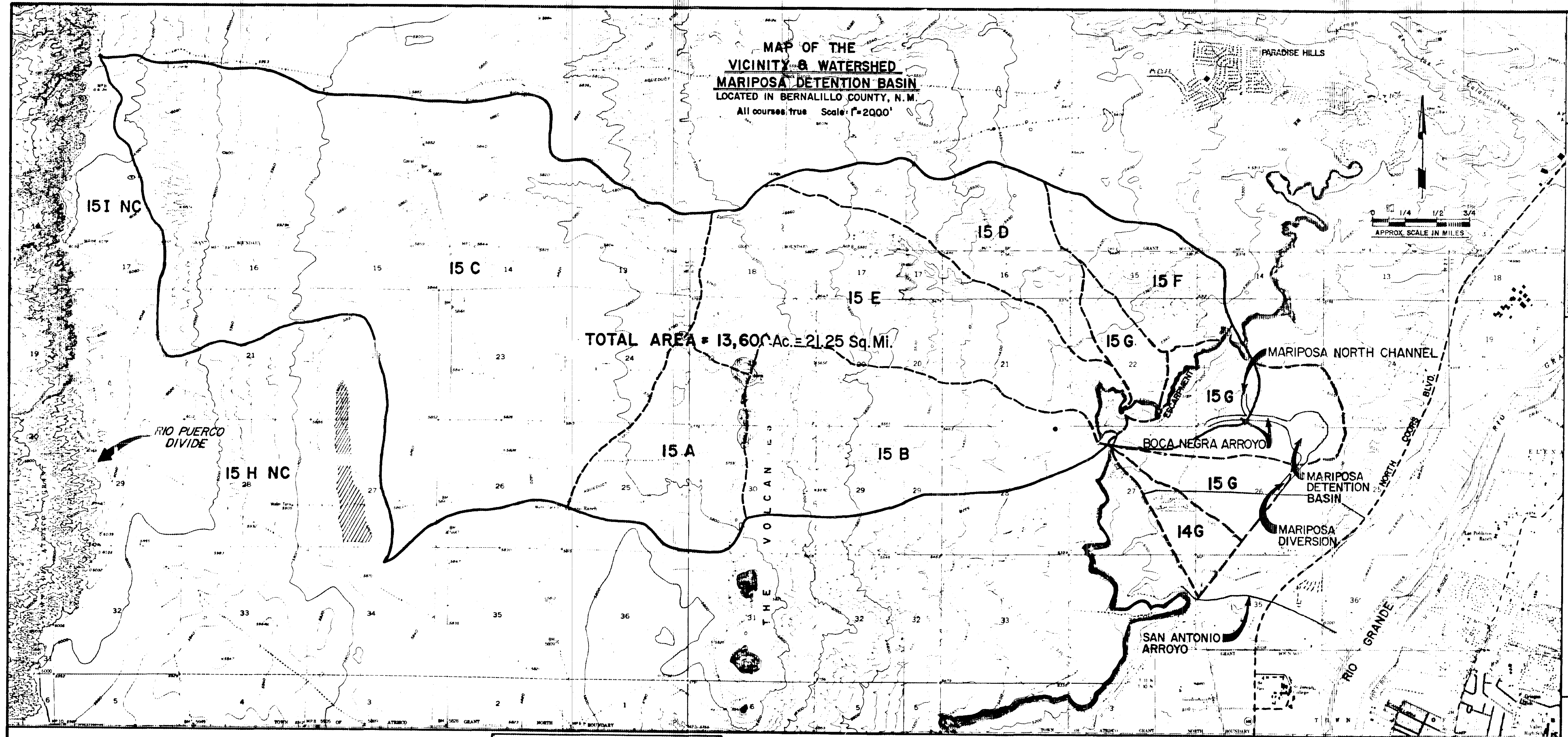
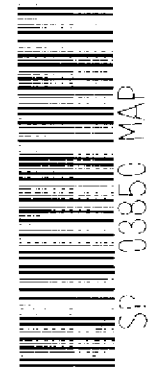
## INDEX

SHEET NO.	DESCRIPTION
I.	COVER SHEET & INDEX
IA	HYDROLOGIC DATA
IB	HYDROLOGIC DATA
2.	HYDROLOGIC DATA
3.	GENERAL NOTES & LEGEND
4.	PLAN & PROFILE - MARIPOSA DIVERSION
5.	B.O.P. 46+87.48 to 60+00
6-6A & 6B	60+00 to 66+59.26
	DETENTION BASIN & SPILLWAY
	& PROFILE OF DETENTION BASIN
	PLAN & PROFILE - BOCA NEGRA
7.	85+60 to 97+00
8.	97+00 to 106+55.70
	PLAN & PROFILE - MARIPOSA NORTH CHANNEL
9.	0+00 to 9+16.93
10.	9+16.93 to 23+00
11.	E.O.P. 23+00 to 25+25.04
12-14.	CHANNEL SECTIONS & DETAILS
14A	RUNDOWN DETAIL
15.	4.5' DROP STRUCTURE
16.	7' DROP STRUCTURE
17.	MONTANO ROAD CROSSING
18-31.	CHANNEL CROSS SECTIONS

## PHASE 2 MARIPOSA DIVERSION, BOCA NEGRA IMPROVEMENTS AND DETENTION BASIN

**DENNEY-GROSS & ASSOCIATES, INC.**  
CONSULTING ENGINEERS  
ALBUQUERQUE, NEW MEXICO

11/19/82



The Basin is located in Sections 23 & 26, Township 11 North, Range 2 East, N.M.P.M.  
The Basin has the following properties: See Table A.  
See Table B for depth capacity.

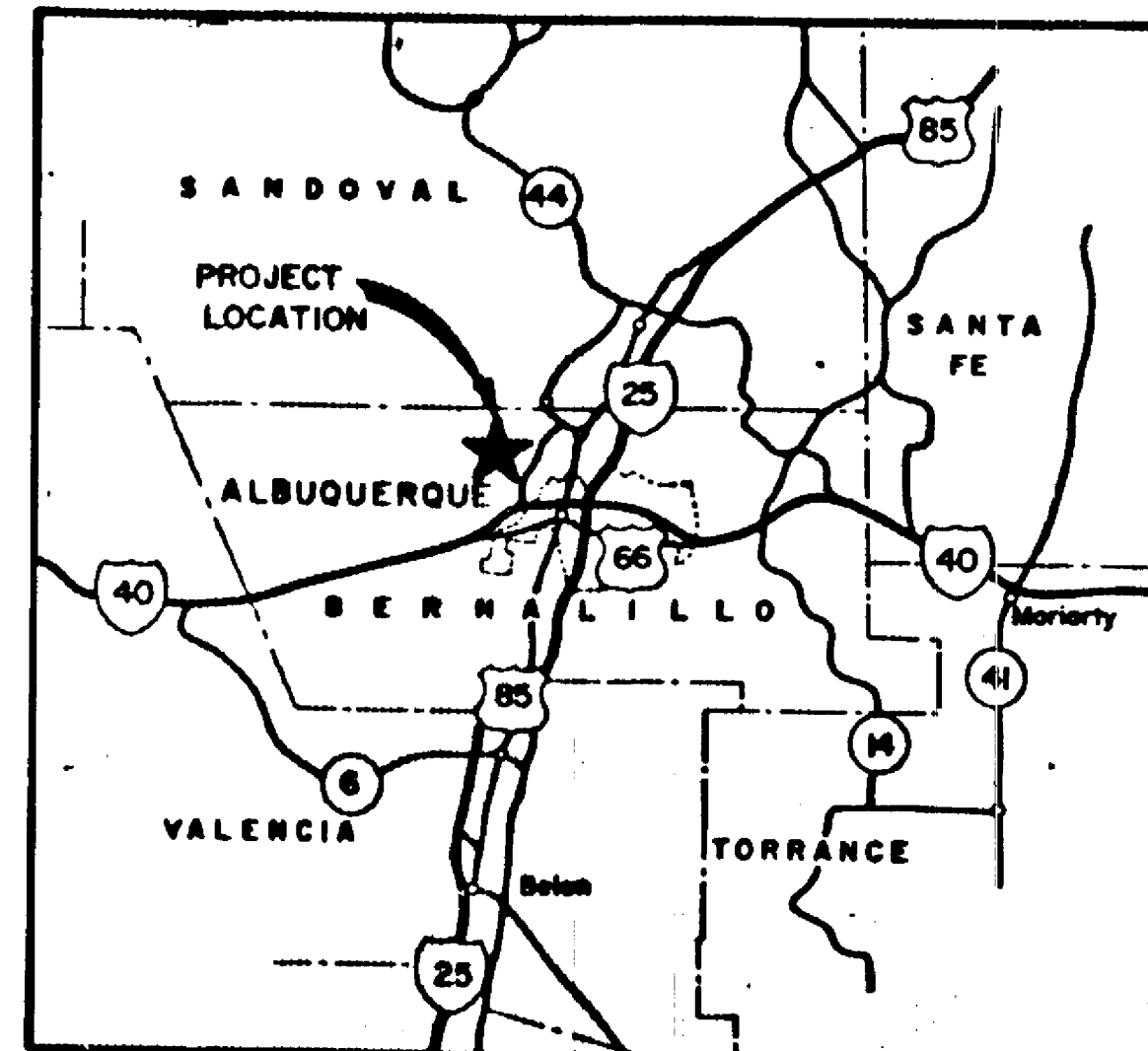


TABLE A	
Maximum Heights above foundation	16 ft.
Maximum Length	5150 ft.
Maximum width at base	105 ft.
Crest Width	12 ft.
Slope upstream face	3:1
Slope downstream face	2.5:1
Elevation at spillway crest	5115.50 ft.
Elevation bottom outlet conduit at upstream face	5103.00 ft.
Width of spillway	300 ft.
Discharge capacity of spillway cfs at 5119.0	4500 cfs
Outlet conduit type and size	8' x 6' CMC
Outlet conduit capacity cfs at 5119.0	850 cfs
Evacuation Time - Hours	40 hrs
Drainage Area	13,400 Ac.
Surface Area at Elevation 5119.0	44.5 Ac.
Dead Storage	0.0 Ac. Ft.
Top of Dam Elevation	5119.00 ft.

TABLE B	
Elevation Feet above MSL	Stage
	Acres Feet
5103	0
4	11
5	39
6	75
7	112
8	149
9	187
5110	225
11	263
12	302
13	341
14	381
15	422
15.35 (100 yr. W.S.)	444
16	464
17	507
18	550
5119 (Top of Dam)	594

#### CLAIMANT'S CERTIFICATE

State of New Mexico )  
County of Bernalillo ) ss.

The undersigned, Albuquerque Metropolitan Arroyo Flood Control Authority, claimant, whose address is 2600 Prospect N.E., Albuquerque, County of Bernalillo, State of New Mexico, has caused to be located by a qualified Registered Professional Engineer and Land Surveyor the Mariposa Detention Basin as hereinafter described and indicated, hereby makes these several statements relative thereto and offers these maps and statements for acceptance and filing in compliance with the laws of the State of New Mexico.

I, Richard E. Leonard, being first duly sworn, upon my oath, state I am the Executive Engineer of the Albuquerque Metropolitan Arroyo Flood Control Authority, a political subdivision of the State of New Mexico, that the accompanying map and statements (maps and statements consisting of 36 sheets) were made under authority of the Board of Directors of said political subdivision, and that, on their behalf, I have read and examined the statements and representations thereon and state that the same are true to the best of my knowledge and belief.

Richard E. Leonard  
Claimant

Subscribed and sworn to before me this 11<sup>th</sup> day of November, 1982.

Gemma M. Marku  
Notary Public

My Commission Expires: 10/12/86

State of New Mexico )  
County of Bernalillo ) ss.

I, Louis W. Gross, being first duly sworn, upon my oath, state that I am the Registered Professional Engineer and Land Surveyor who made the map(s) of the Mariposa Detention Basin, that such map(s) was (were) prepared by me or under my direction and that the same are true and correct to the best of my knowledge and belief.

Louis W. Gross 11/10/82  
Registered Professional Engineer and Land Surveyor  
New Mexico License No. 4100

Subscribed and sworn to before me this 10<sup>th</sup> day of November, 1982.

Louise M. Krasner  
Notary Public

My Commission Expires: Jan. 19, 1983

State of New Mexico )  
County of Santa Fe ) ss.

I hereby certify that the accompanying map(s) and statements have been examined by me and approved as to form and content, and were duly accepted for filing on the 16<sup>th</sup> day of November, 1982.

S.E. Reynolds  
State Engineer  
by W. Allen Chief  
Technical Division



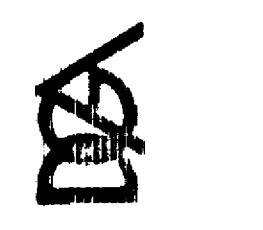
STATE PLANE COORDINATES (Central Zone)	
Center of Upstream Parapet Wall Outlet Box	
North	East
1,512,420.66	366,955.90

HAZARD CLASSIFICATION - C (S.C.S. CRITERIA)

CHECKED BY	DESIGNED BY	DRAWN BY	REVISED
	L.W.G.	R.D.	

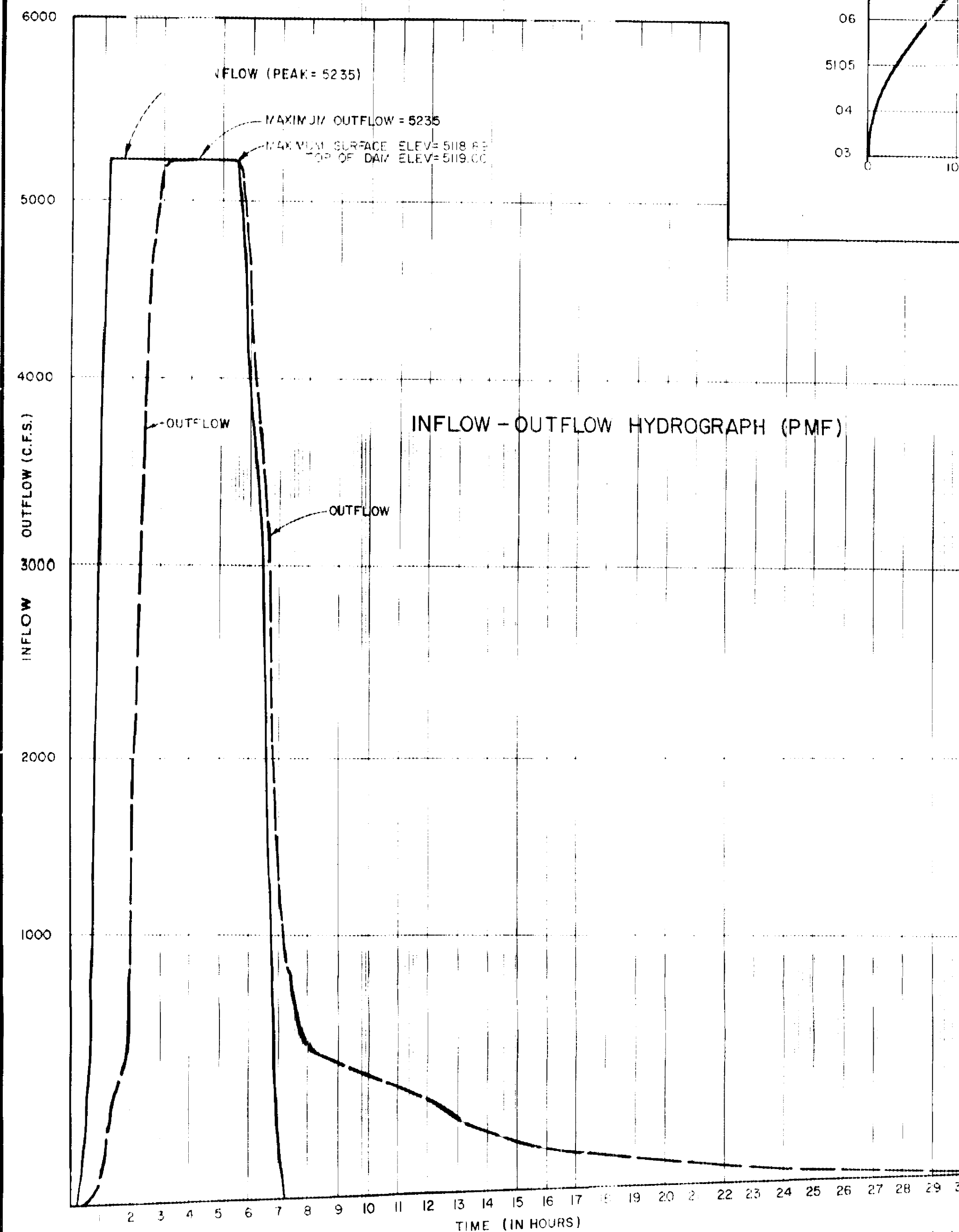
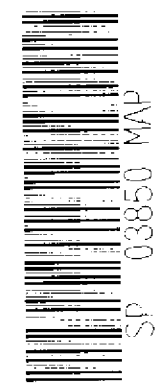
PHASE 2, MARIPOSA DIVERSION  
BOCA NEGRA IMPROVEMENTS  
& DETENTION BASIN

DENNEY - GROSS & ASSOCIATES, INC.  
ENGINEERS SURVEYORS PLANNERS  
2400 COMANCHE ROAD N.E.  
ALBUQUERQUE, NEW MEXICO 87107  
(505) 894-0696



TYPE DRAWING	SHEET
PRELIM <input type="checkbox"/>	IA
CONST. <input type="checkbox"/>	
RECORD <input type="checkbox"/>	
DATE: 10/82	36
JOB NO. 407.11	SHEETS

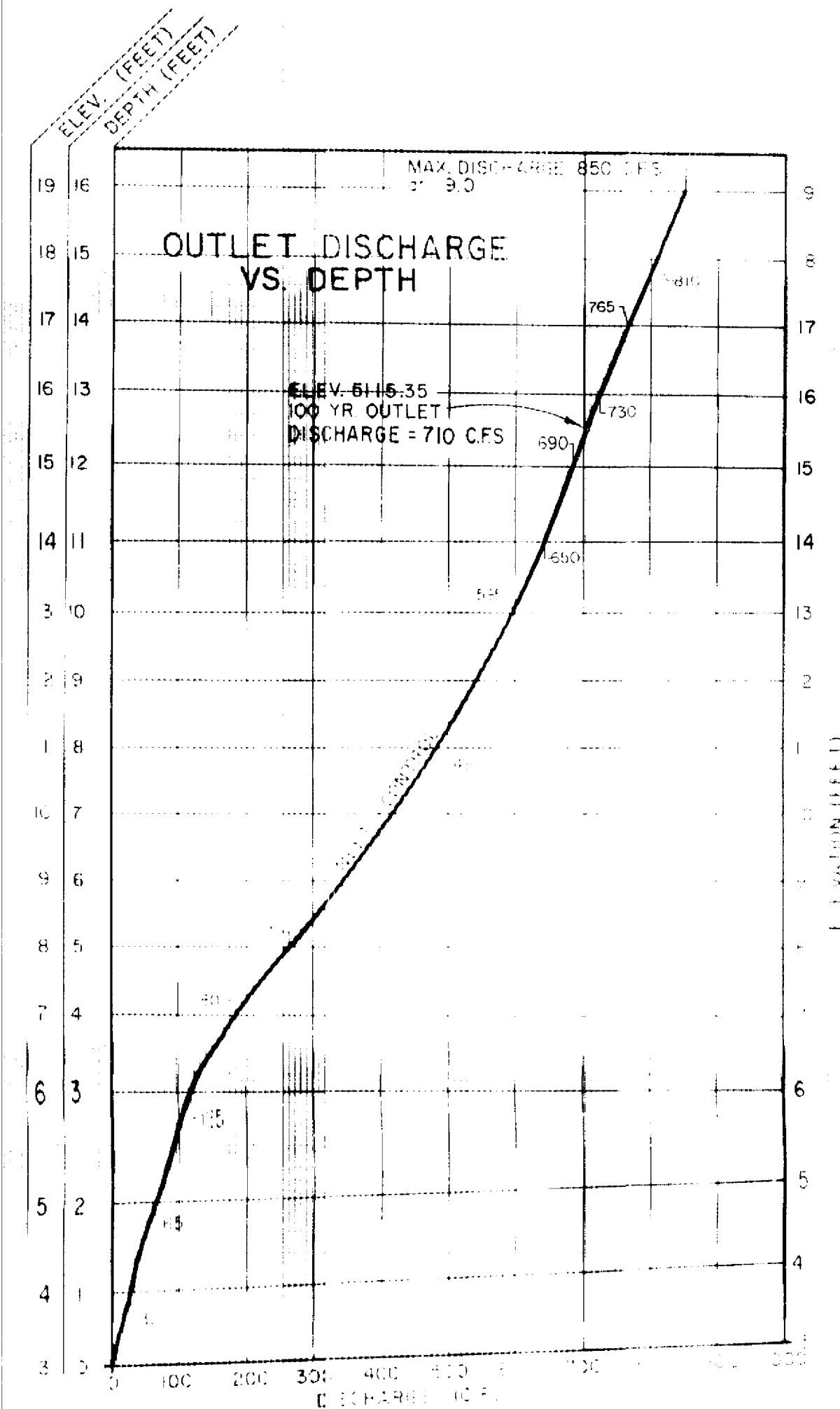
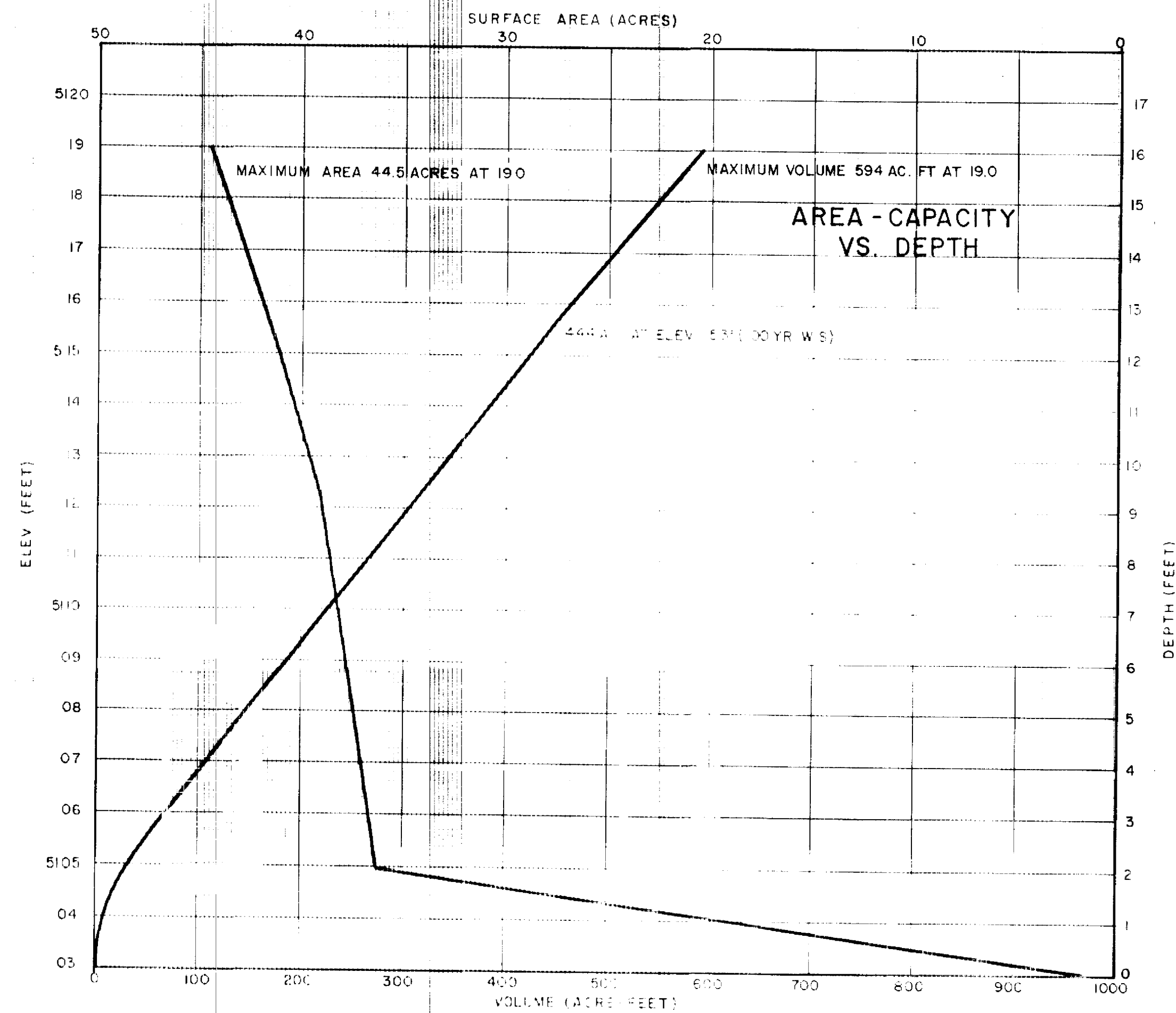




**Warning Note:**

Peak flow for PMF is 36,843 cfs. However, the Boca Negra Channel between approximately Sta. 100 to 108 has a design capacity for only 5235 cfs. Consequently, by design, only 5235 cfs will flow into the Mariposa Detention Basin. Flows exceeding 5235 cfs will by-pass the Basin to the South.

complete reanalysis of hydrology and hydraulics. For example, the emergency spillway of the Detention Basin, is designed for only 4500 cfs.



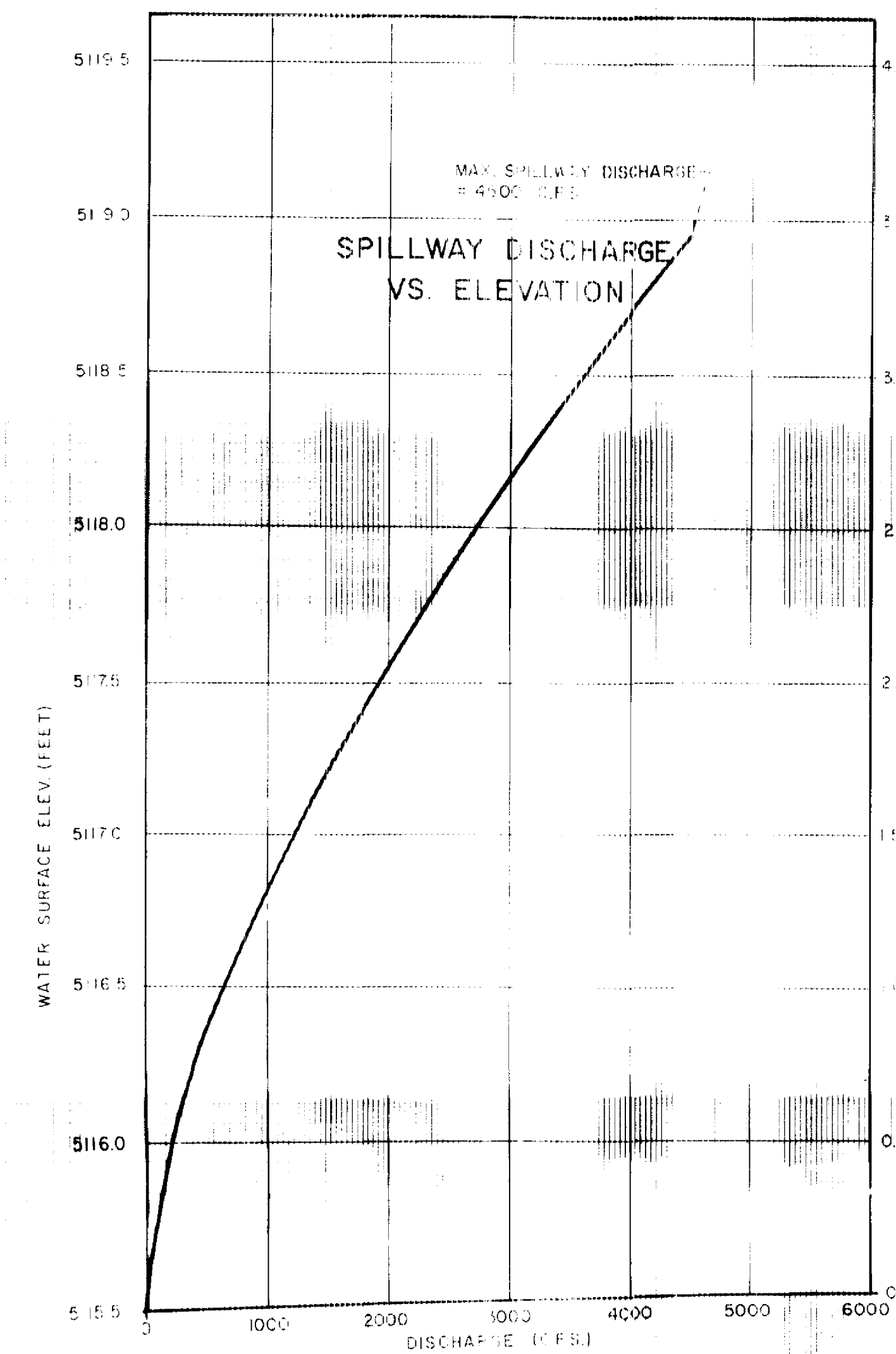
Note: Outlet Discharge taken from F.W.A. "Hydraulic Charts for the Selection of Highway Culverts" Hydraulic Engineering Circular No. 15 Chart No. 1 Page 5-21.

**REFERENCES**

Drainage Management Plan Western Albuquerque Metropolitan Area.

Design Report (2 parts), Phase 2, Mariposa Diversion, Boca Negra Improvements and Detention Basin, Denney-Gross and Associates, updated.

Subsurface Exploration and Geotechnical Report - Mariposa San Antonio, Boca Negra Arroyo and Detention Facility, Jan. 28, 1980, Sargent, Hauskins and Backwith, Job No. E 79-1111.



Discharge Computations: See Sheet 2

**PHASE 2, MARIPOSA DIVERSION  
BOCA NEGRA IMPROVEMENTS  
& DETENTION BASIN  
HYDROLOGIC DATA**

**DENNEY - GROSS & ASSOCIATES, INC.**  
ENGINEERS  
PLANNERS  
2400 COMANCHE ROAD N.E.  
ALBUQUERQUE, NEW MEXICO 87107  
(505) 264-0696

TYPE DRAWING SHEET  
PRELIM ☐  
CONS. ☐  
RECORD ☐  
DATE: 10/81  
JOB NO. 81571

GENERAL NOTES

1. Existing profiles and grades shown may vary due to recent and current work done by others in the construction area. Quantities will be adjusted accordingly.
2. All existing utilities shown were taken from record drawings and are located as accurately as possible from information available. It will be the contractors responsibility to protect, maintain in service, and at points required, verify exact location of these utilities during construction operations of this project.
3. All construction signs that remain in place over 24 hours are to be mounted 7' (seven feet) high. All construction signs shall be furnished and installed by the contractor. No separate payment shall be made for this work.
4. The contractor shall maintain access to adjacent properties during construction.
5. The contractor shall confine all his activities within the construction limit and/or right-of-way as staked and preserve all existing vegetation on any private property. Parking of construction equipment shall not obstruct driveway openings & shall clear designated traffic lanes by 10' (ten feet).
6. The contractor is cautioned that the traffic must be carried through construction, except as otherwise noted.
7. All construction signing and barricading for all roadways, permissible detours, open excavations, and other incidental work the completion of this project shall be in accordance with the New Mexico Manual and Specifications for a Uniform System of Traffic Control Devices for Streets and Highways (Part VI 1978 Edition) and modifications thereto. All barricades shall be reflective orange and white.
8. Signing and barricading shall include adequate protection against open excavation and other hazards to pedestrian traffic.
9. The contractor shall be required to keep the public apprised, thru the local news media for the life of this project, of the various construction operations involving street or lane closures or any pertinent information relating to traffic movement.
10. Unless otherwise noted the latest edition of the New Mexico State Highway Department Standard Details shall apply.
11. Pavement replacement on Montano Road and Taylor Rancho Road shall be as per standard City of Albuquerque Drawing No. P-7-4, arterial and collector street section, or shall be replaced per existing section, whichever is greater.
12. The contractor shall comply with the following City of Albuquerque Local Environmental Ordinance:
- Chapter 6 - Health, Safety and Sanitation

Article I - Air Pollution Control

Article VI - Refuse Collection

Article VIII - Anti-Litter Ordinance

Article XVI - Joint Air Quality Control Board

Article XXII - Noise Control Ordinance
13. The road crossing at Montano will require that traffic be detoured as shown on the plans. The Contractor shall obtain any necessary permits from the City of Albuquerque. The contractor shall also erect and maintain all barricading as shown on Sheet 17 while traffic is being detoured.
14. All references to standard City of Albuquerque construction details refer to the City of Albuquerque Contract Documents for City-Wide Utilities and Cash Paving No. 31.
15. The limits of construction for the Montano Road crossing bid item shall be the road R/W lines in the North-South direction and the length of the detour in the East-West direction. The pavement cut shall be limited to a total width of 75 feet centered on the crossing structure.
16. Curb and Gutter replacement on Montano Road shall be per standard City of Albuquerque Drawing No. P-8-1, standard curb and gutter and median curb and gutter.
17. The contractor shall notify the appropriate utility company at 765-1234 prior to working in the vicinity of any existing utility lines.

LEGEND

- S — S — Existing Sanitary Sewer Line
- G — G — Existing Gas Line
- P — P — Existing Overhead Power Line
- BP — BP — Existing Buried Power Line
- — — — — Right-of-Way Line
- • • • • Dry Rock Rip Rap (Class A)
- • • • • Gabions @ Drop Structures or Wire Enclosed Rip Rap
- • • • • Cement Treated Base (C.T.B.)
- • • • • Natural Ground
- • • • • Subbase
- • • • • Subgrade Preparation
- • • • • Concrete
- • • • • Base Course (Class I)

GABION DESIGNATIONS

CODE	SIZE	CAPACITY CU. YDS.
A	6' x 3' x 3'	2.0
B	9' x 3' x 3'	3.0
C	12' x 3' x 3'	4.0
D	6' x 3' x 1.5'	1.0
E	9' x 3' x 1.5'	1.5
F	12' x 3' x 1.5'	2.0
G	6' x 3' x 1'	0.66
H	9' x 3' x 1'	1.0
I	12' x 3' x 1'	1.33

PHASE 2, MARIPOSA DIVERSION  
BOCA NEGRA IMPROVEMENTS  
& DETENTION BASIN  
GENERAL NOTES & LEGEND

DENNEY GROSS & ASSOCIATES, INC.  
ENGINEERS  
2400 COMANCHE ROAD N.E.  
ALBUQUERQUE, NEW MEXICO 87107  
(505) 884-0696

TYPE DRAWING SHEET  
PROJ. ☐  
CONS. ☒  
RECORD ☐  
DATE 10/82  
308 11407.11  
3 OF 36  
SHEET



GENERAL NOTES

1. Existing profiles and grades shown may vary due to recent and current work done by others in the construction area. Quantities will be adjusted accordingly.
2. All existing utilities shown were taken from record drawings and are located as accurately as possible from information available. It will be the contractor's responsibility to protect, maintain in service, and at points required, verify exact location of these utilities during construction operations of this project.
3. All construction signs that remain in place over 24 hours are to be mounted on (section level) high. All construction signs shall be furnished and installed by the contractor. No separate payment shall be made for this work.
4. The contractor shall maintain access to adjacent properties during construction.
5. The contractor shall confine all his activities within the construction limit and/or right-of-way as stated and preserve all existing vegetation on any private property. Parking of construction equipment shall not obstruct driveway openings & shall clear designated traffic lanes by 6' (section level).
6. The contractor is cautioned that the traffic must be carried through construction, except as otherwise noted.
7. All construction signing and barricading for all roadways, permissible detours, open excavations, and other incidental work the completion of this project shall be in accordance with the New Mexico Manual and Specifications for a Uniform System of Traffic Control Devices for Streets and Highways (Part 1) 1978 Edition and modifications thereto. All participants shall be reflective orange and white.
8. Signing and barricading shall include adequate protection against open excavation and other hazards to pedestrian traffic.
9. The contractor shall be required to keep the public apprised, thru the local news media for the life of this project, of the various construction operations involving street or lane closures or any pertinent information relating to traffic movement.
10. Unless otherwise noted the latest edition of the New Mexico State Highway Department Standard Details shall apply.
11. Pavement replacement on Montano Road and Taylor Ranch Road shall be as per standard City of Albuquerque Planning No. P-7-4, arterial and collector street section, or shall be replaced per existing section, whichever is greater.
12. The contractor shall comply with the following City of Albuquerque Local Environmental Ordinance:
- Chapter 6 - Health, Safety and Sanitation  
Article I - Air Pollution Control  
Article VI - Noise Control  
Article VII - Anti-Litter Ordinance  
Article XII - Noise Control Ordinance
13. The road crossing at Montano will require that traffic be detoured as shown on the plans. The contractor shall obtain any necessary permits from the City of Albuquerque. The contractor shall also erect and maintain all barricading as shown on Sheet 17 while traffic is being detoured.
14. All references to standard City of Albuquerque construction details refer to the City of Albuquerque Contract Documents for City-Wide Utilities and Cash Paving No. 31.
15. The limits of construction for the Montano Road crossing bid item shall be the road R/W lines in the North-South direction and the length of the detour in the East-West direction. The pavement cut shall be limited to a total width of 25 feet centered on the crossing structure.
16. Curb and gutter replacement on Montano Road shall be per standard City of Albuquerque Planning No. P-8-1, standard curb and gutter and median curb and gutter.
17. The contractor shall notify the appropriate utility company at least 1521 prior to working in the vicinity of any existing utility lines.

LEGEND

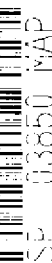
Existing Sanitary Sewer Line	• • • • •	2	○
Existing Gas Line	• • • • •	6	—
Existing Overhead Power Line	• • • • •	9	—
Existing Buried Power Line	• • • • •	9	—
Right-of-Way Line	• • • • •	—	—
Dry Rock Rip Rob (Class A)	• • • • •		
Gopions & Drop Structures or Wire Enclosed Rip Rob	• • • • •		
Cement Treated Base (C.T.B.)	• • • • •		
Natural Ground	• • • • •		
Subbase	• • • • •		
Subgrade Preparation	• • • • •		
Concrete	• • • • •		
Base Course (Class I)	• • • • •		

CODE	SIZE	CAPACITY
A	6" x 3" x 3"	5.0
B	6" x 3" x 3"	3.0
C	15" x 3" x 3"	4.0
D	6" x 3" x 12"	1.0
E	6" x 3" x 12"	1.2
F	15" x 3" x 12"	2.0
G	6" x 3" x 1"	0.66
H	6" x 3" x 1"	1.0
I	15" x 3" x 1"	1.33

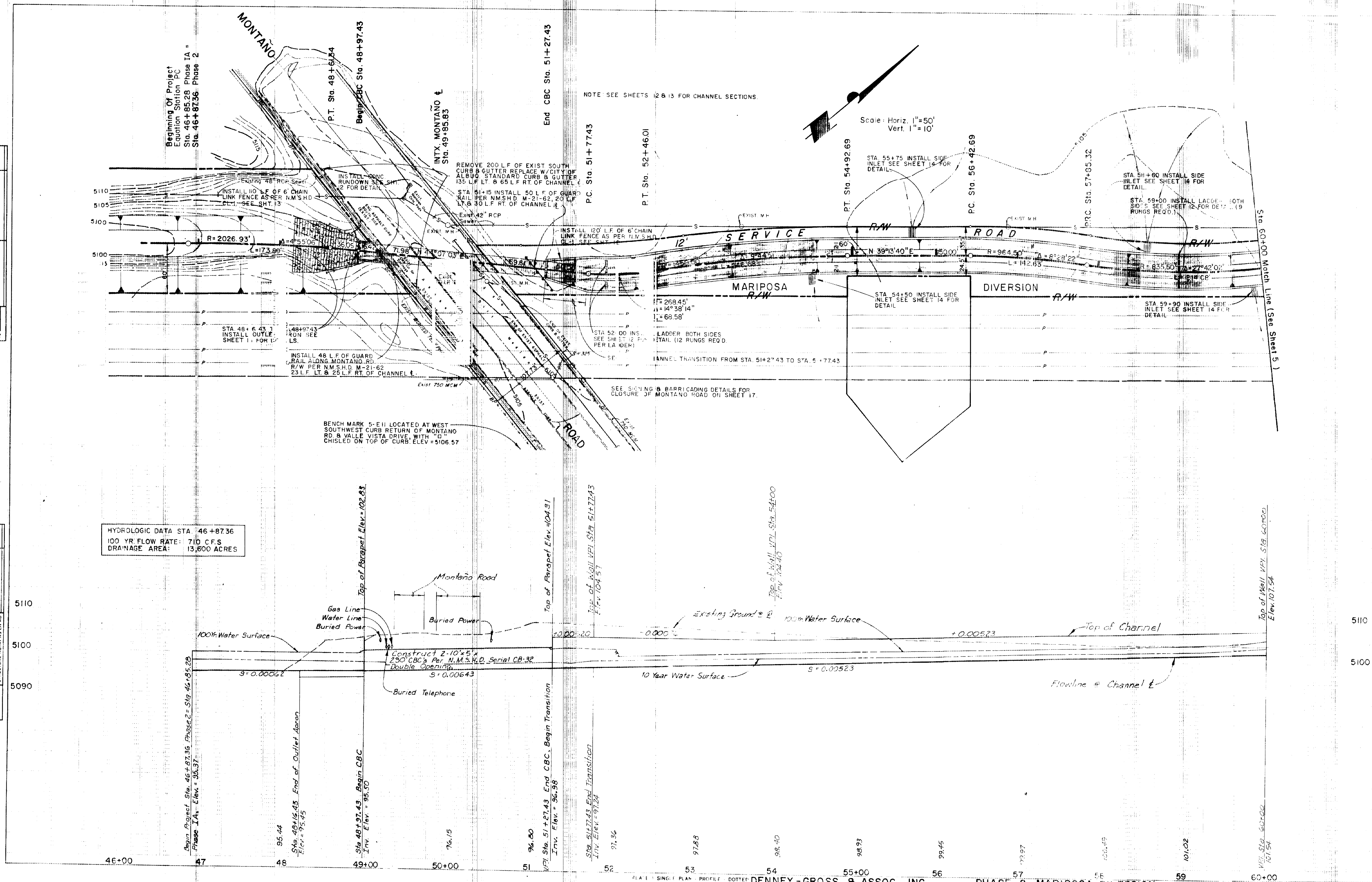
GENERAL NOTES & LEGEND

NEW MEXICO  
COUNTY OF SAGUARO  
CITY OF ALBUQUERQUE  
PLANNING DEPARTMENT  
1521  
888-0880 (202)  
1017

DATE: 08/85  
SHEET: 38  
SHEET: 39



<b>PROFILE</b>		SURVIVED		BY	DATE
NOTE BOOK		PLOTTED			
NO		GRADES CHECKED			
		B M NOTED			
		SINGULAR NOTATIONS CHECKED			



PHASE 2, MARIPOSA DIVERSION,  
BOCA NEGRA IMPROVEMENTS &  
DETENTION BASIN

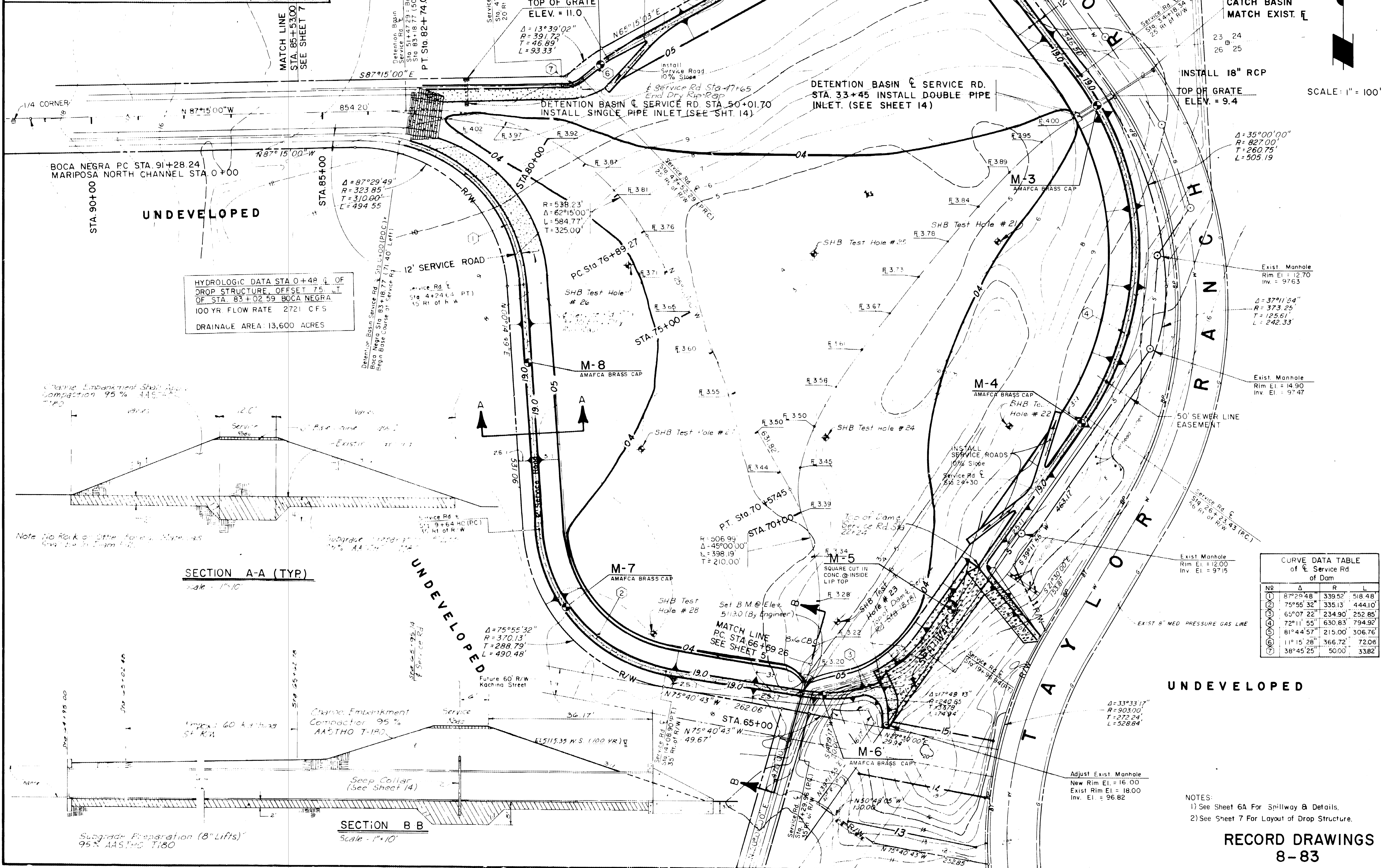






MARIPOSA DETENTION BASIN DAM MONITORING						
STATION - ELEVATION	YEAR					
	1990	1992	1994	1996	1998	2000
M-1	5118.107					
M-2	5118.349					
M-3	5118.292					
M-4	5118.351					
M-5	5115.411					
M-6	5118.594					
M-7	5118.341					
M-8	5118.323					

BENCH MARK: ACS 1.011 - 4 SQUARE CUT IN W.W. CURB RETURN AT THE INTERSECTION OF HOMESTEAD CIRC. E. NW & TAYLOR RANCH DRIVE, NW - ELEVATION 5116.470



PHASE 2, MARIPOSA DIVERSION  
BOCA NEGRA IMPROVEMENTS  
& DETENTION BASIN  
DETENTION BASIN

DENNEY - GROSS & ASSOCIATES, INC.  
ENGINEERS  
SURVEYORS PLANNERS  
2400 COMANCHE ROAD N.E.  
ALBUQUERQUE, NEW MEXICO 87107  
(505) 884-0696





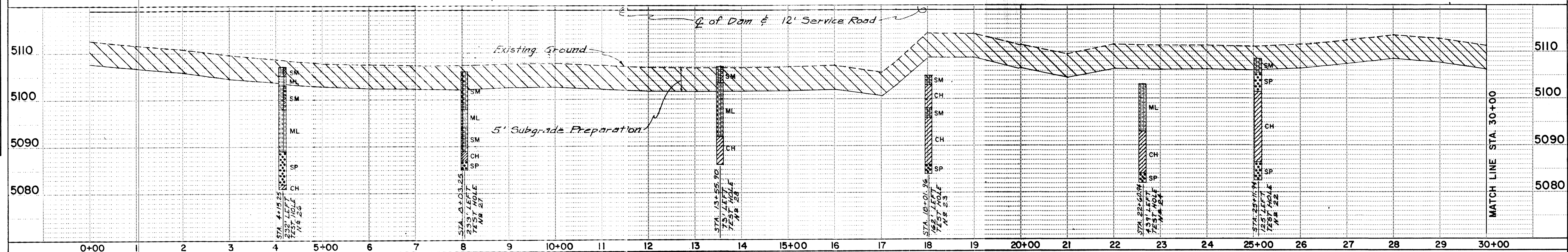




PLAN	DATE	BY	DATE
SURVEYED			
PLOTTED			
CHECKED			
NOTED			
DATE			

PROFILE	DATE	BY	DATE
SURVEYED			
PLOTTED			
CHECKED			
NOTED			
DATE			

SCALE: HORIZ: 1" = 100'  
VERT: 1" = 10'



SCALE: HORIZ: 1" = 100'  
VERT: 1" = 10'

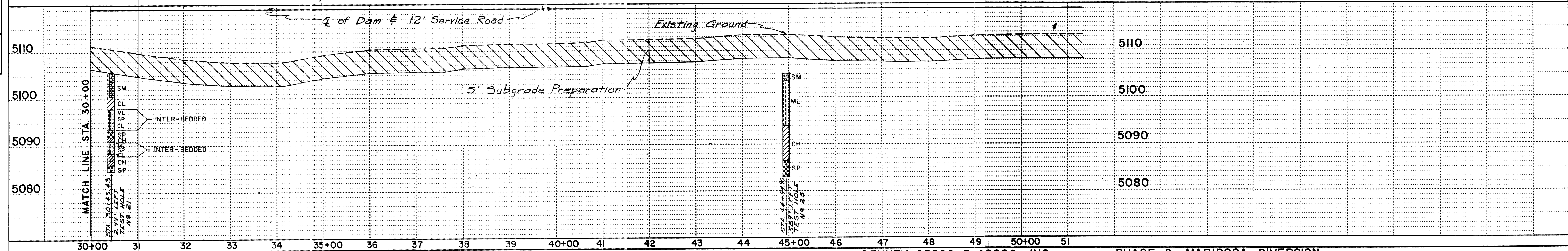


PLATE 2-DOUBLE PLAN AND PROFILE-FULL DOT  
PRINTED IN U.S.A.

DENNEY-GROSS & ASSOC., INC.  
ENGINEERS SURVEYORS PLANNERS  
2400 COMANCHE RD. N.E., ALBUQ., N.M. 87107

PHASE 2, MARIPOSA DIVERSION,  
BOCA NEGRA IMPROVEMENTS &  
DETENTION BASIN



PLAN	DATE	BY
SURVEYED		
NOTED		
ALIGNED		
CHECKED		
BY		
NO.		

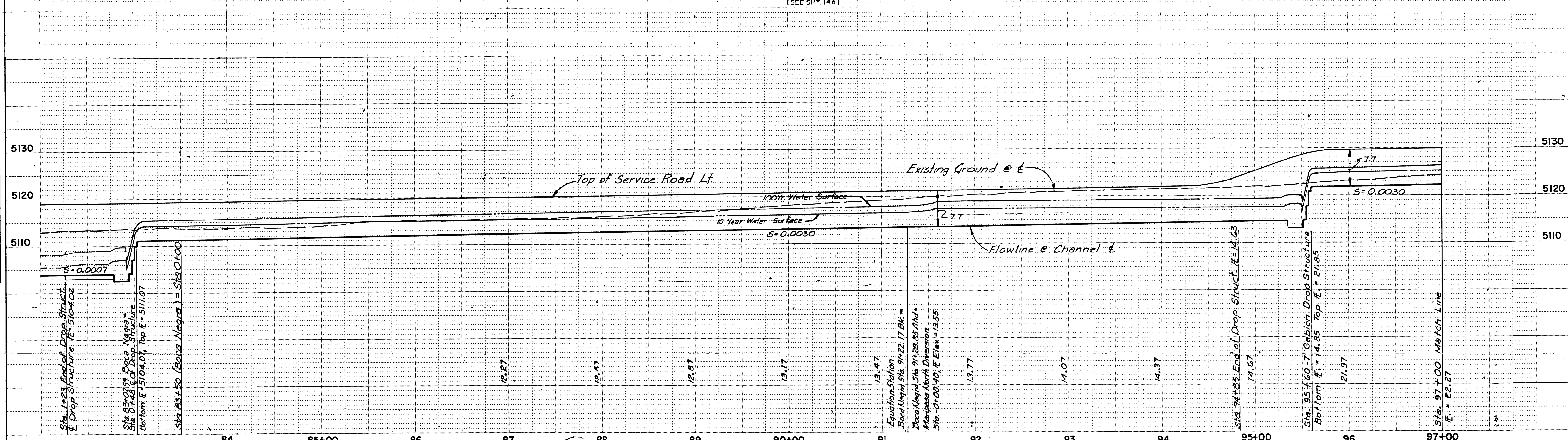
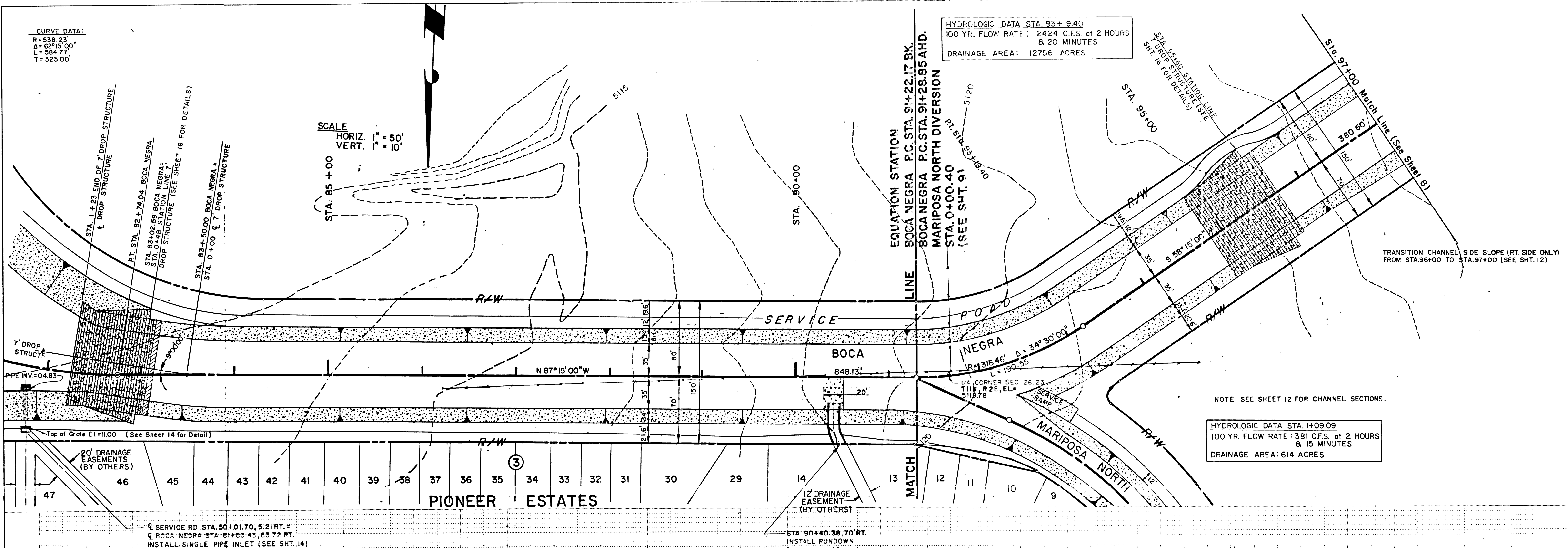
PROFILE	DATE	BY
SURVEYED		
NOTED		
GRADES		
CHECKED		
BY		
NO.		

CURVE DATA:  
 R=538.23  
 $\Delta=62^{\circ}15'00''$   
 L=584.77  
 T=323.00

HYDROLOGIC DATA STA. 93+19.40  
 100 YR. FLOW RATE: 2424 C.F.S. at 2 HOURS  
 8 20 MINUTES  
 DRAINAGE AREA: 12756 ACRES

HYDROLOGIC DATA STA. 14+09.09  
 100 YR. FLOW RATE: 381 C.F.S. at 2 HOURS  
 8 15 MINUTES  
 DRAINAGE AREA: 614 ACRES

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

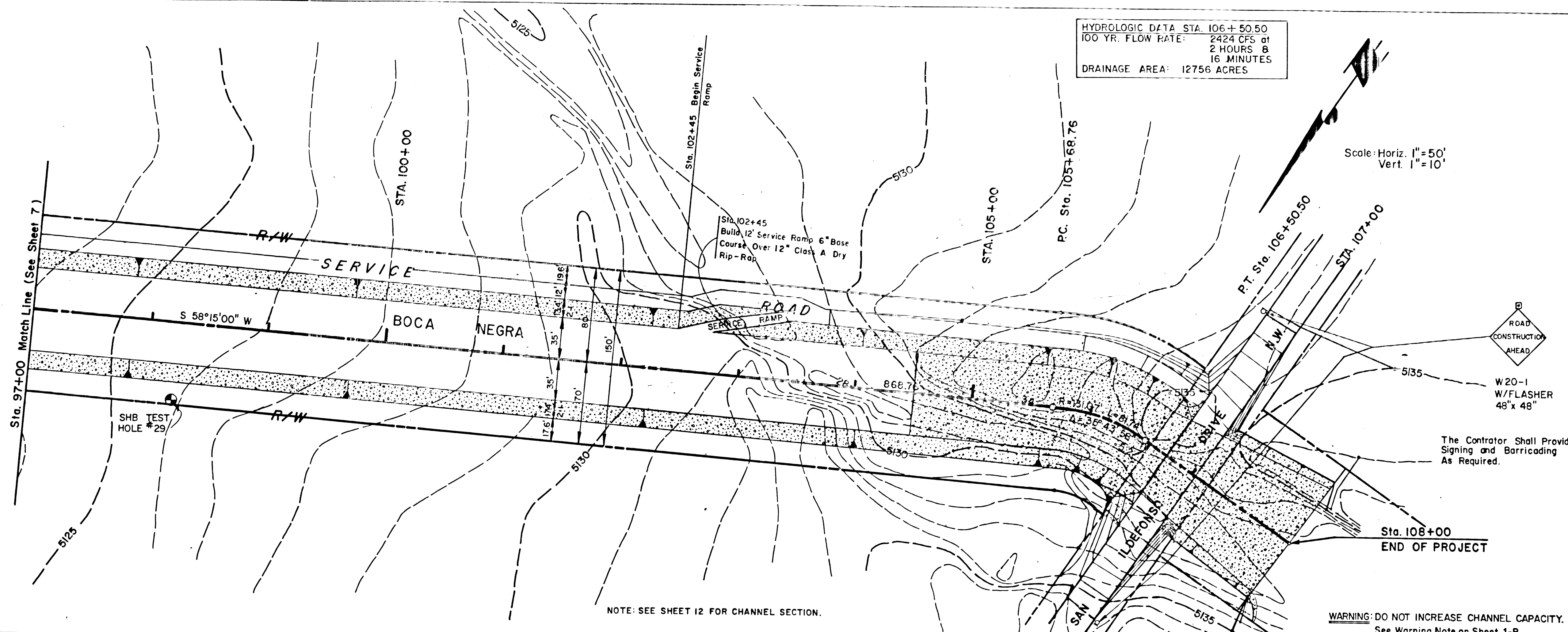


DENNEY - GROSS & ASSOC., INC.  
 ENGINEERS SURVEYORS PLANNERS  
 2400 COMANCHE RD. N.E., ALBUQUERQUE, NEW MEX.

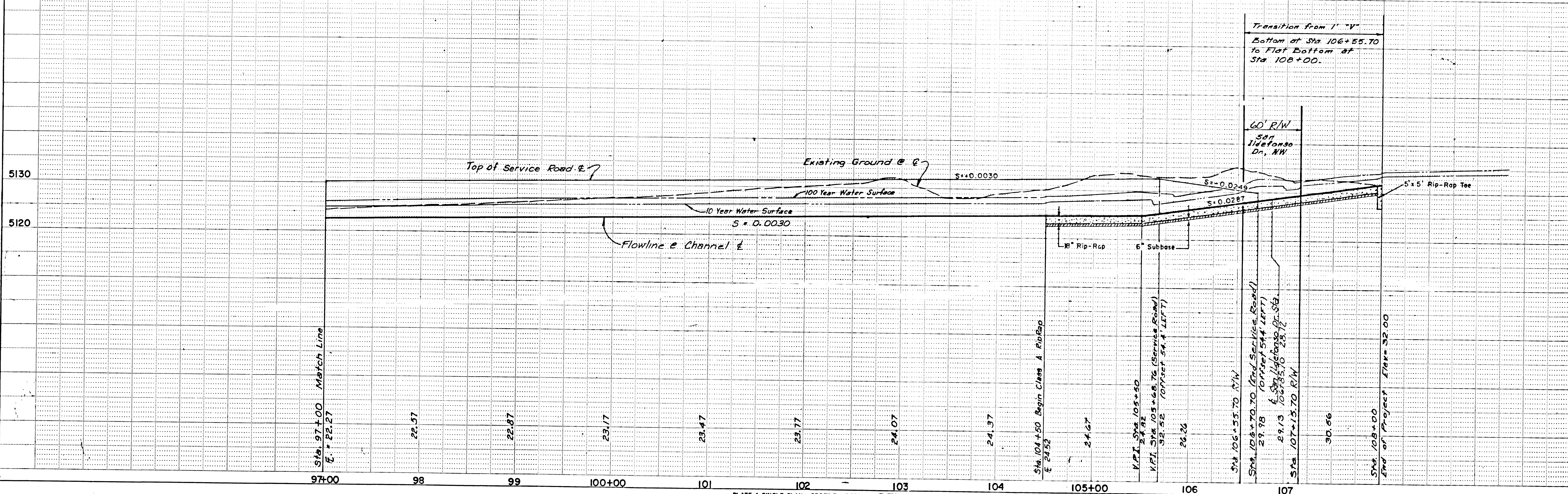
PHASE 2, MARIPOSA DIVERSION,  
 BOCA NEGRA IMPROVEMENTS &  
 DETENTION BASIN



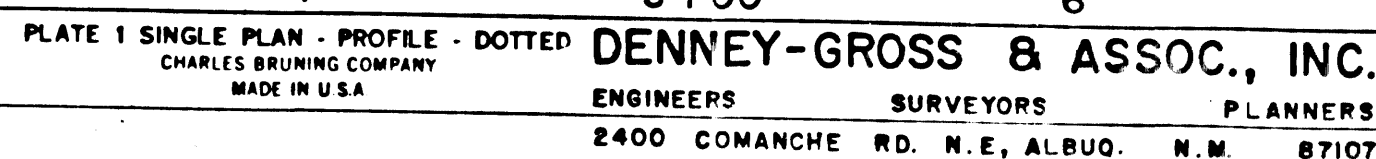
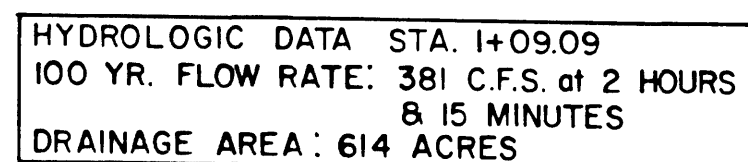
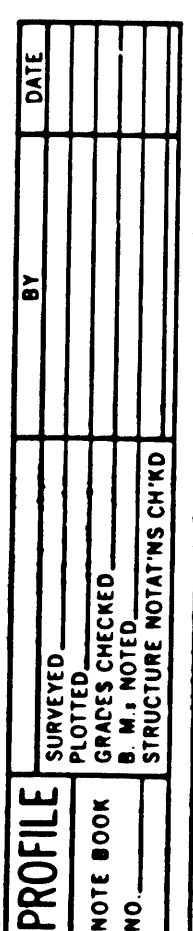
PLAN	BY	DATE
	SURVEYED	DATE
	NOTED	DATE
	RT. OF WAY CHECKED	DATE



PROFILE	BY	DATE
	SURVEYED	DATE
	NOTED	DATE
	STRUCTURE NOTATION CHKD	DATE



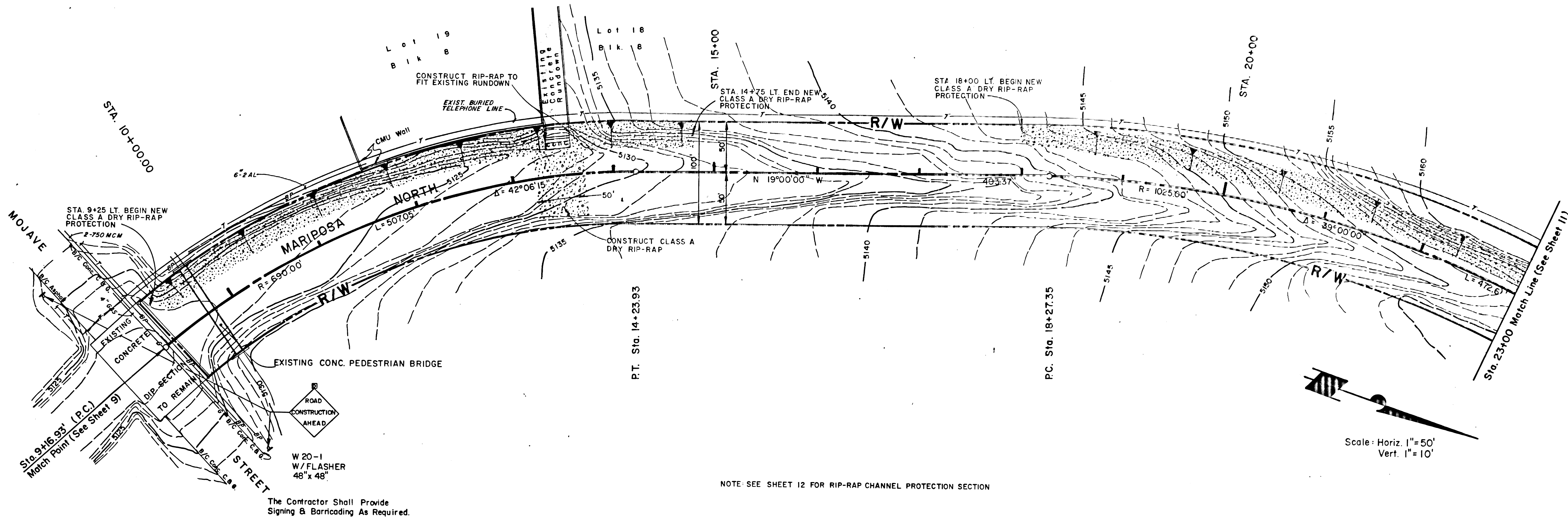




PHASE 2, MARIPOSA DIVERSION,  
BOCA NEGRA IMPROVEMENTS &  
DETENTION BASIN



PLAN	DATE
SURVEYED	
NOTED	
ALIGNED	
RT. OF WAY	
NO.	



PROFILE	DATE
SURVEYED	
NOTED	
STRUCTURE	
NO.	

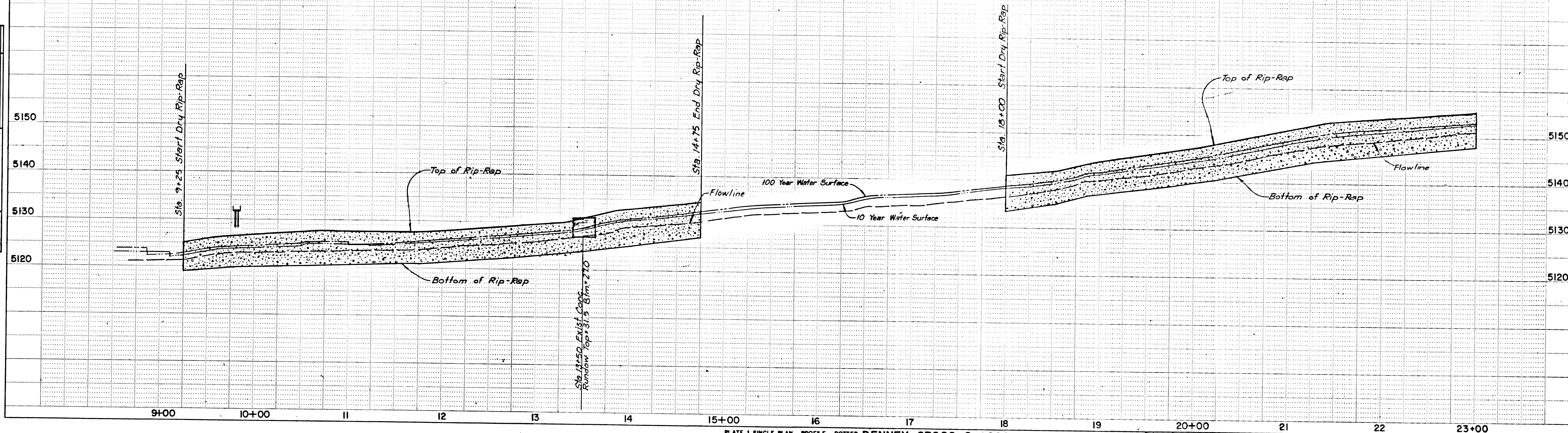
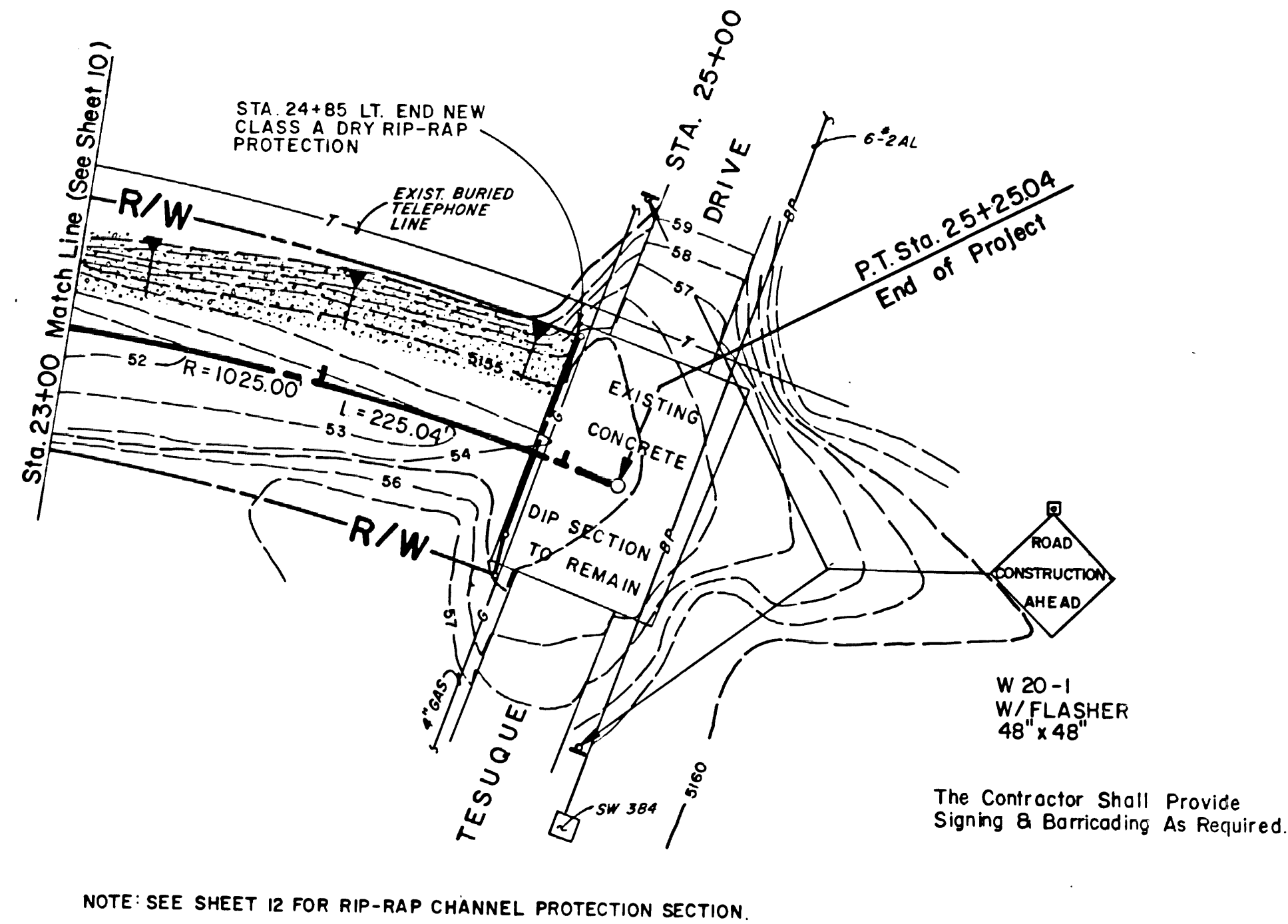


PLATE 1 SINGLE PLAN - PROFILE - DOTTED DENNEY-GROSS & ASSOC., INC.  
ENGINEERS - SURVEYORS PLANNERS  
2400 COMANCHE RD. N.E. ALBUQ. N.M. 87107

PHASE 2, MARIPOSA DIVERSION,  
BOCA NEGRA IMPROVEMENTS &  
DETENTION BASIN



PLAN	DATE
BY	
SURVEYED	
PLOTTED	
ALIGNMENT CHECKED	
BY	
NOTE BOOK	
NO	



NOTE: SEE SHEET 12 FOR RIP-RAP CHANNEL PROTECTION SECTION.

Scale: Horiz. 1" = 50'  
Vert. 1" = 10'

PROFILE	DATE
BY	
SURVEYED	
PLOTTED	
GRADES CHECKED	
STRUCTURE NOTATIONS CH'NG	
NOTE BOOK	
NO	

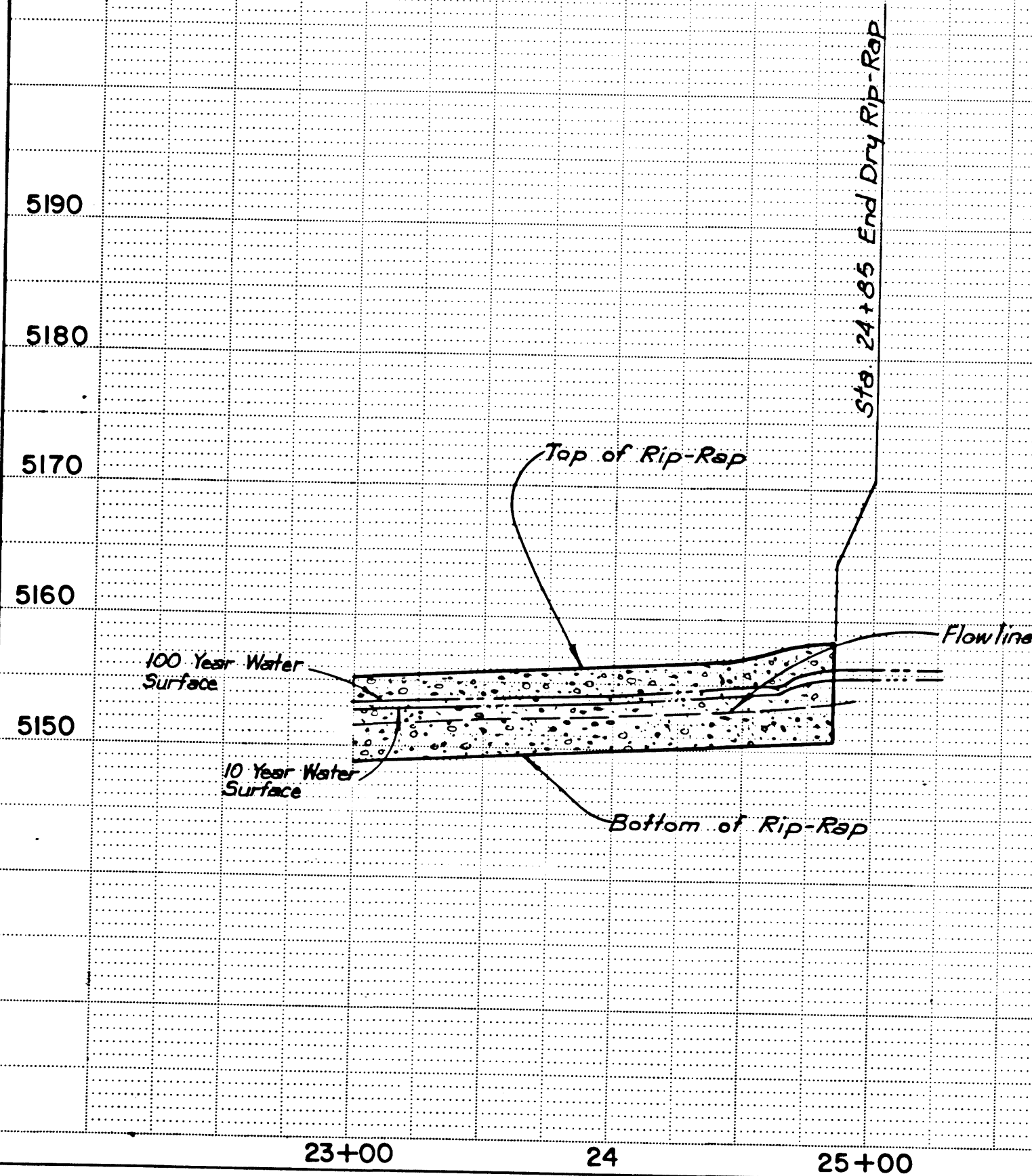


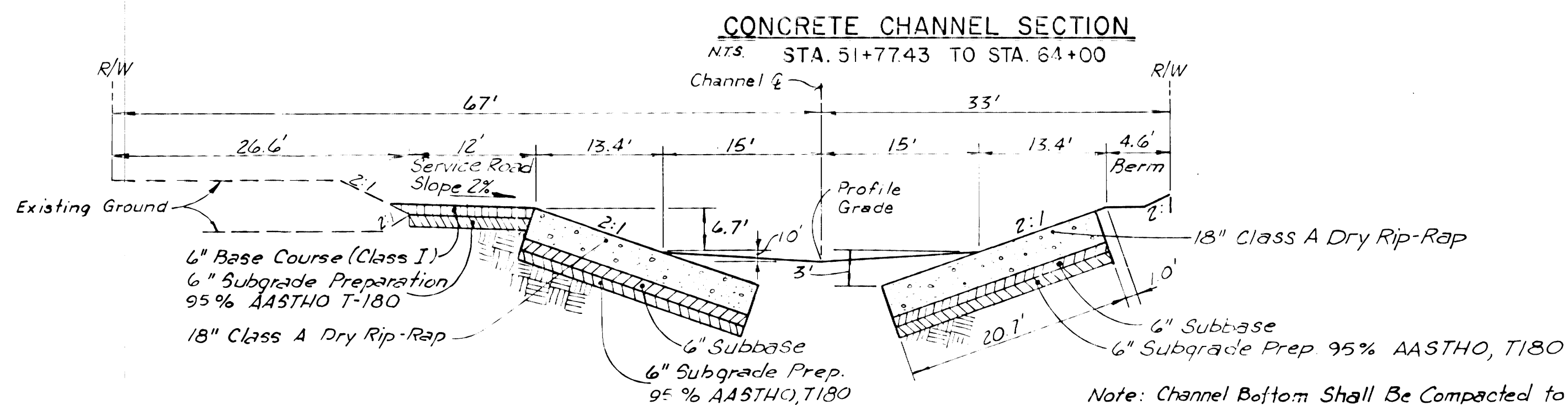
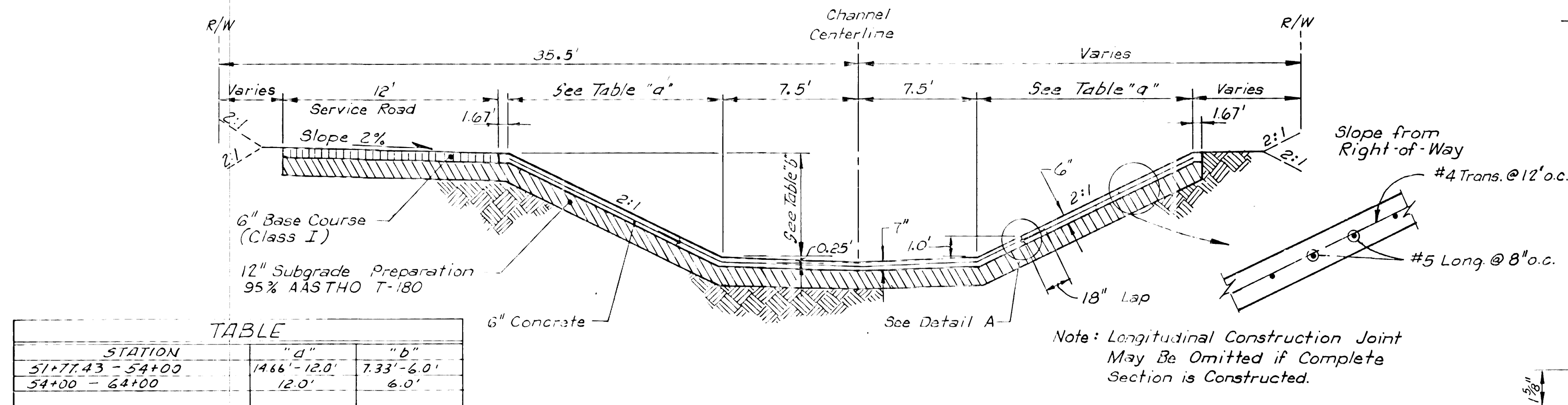
PLATE 1 SINGLE PLAN - PROFILE - DOTTED  
CHARLES BRUNING COMPANY  
MADE IN U.S.A.

**DENNEY-GROSS & ASSOC., INC.**  
ENGINEERS SURVEYORS PLANNERS  
2400 COMANCHE RD. N.E., ALBUQUERQUE, NEW MEX.

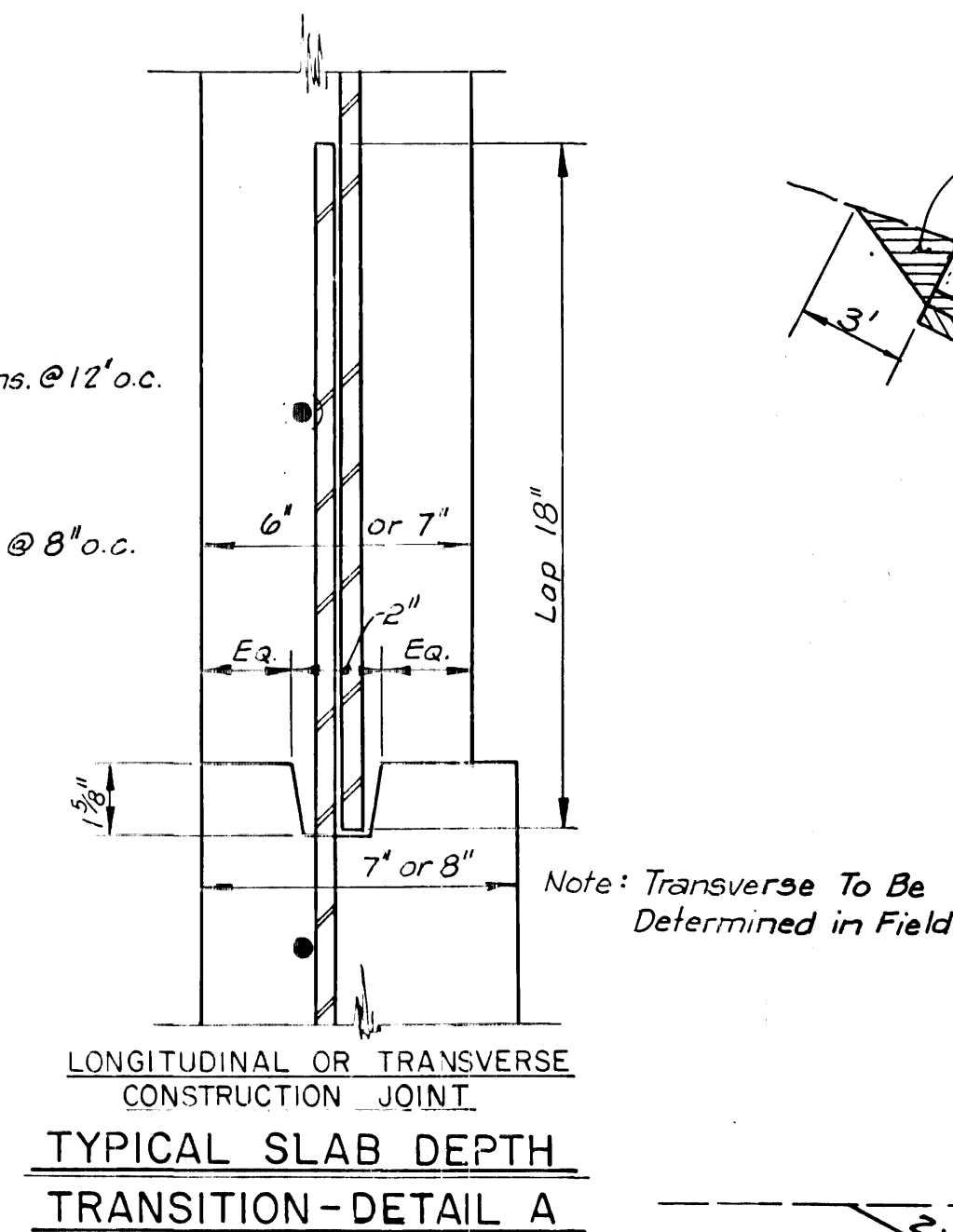
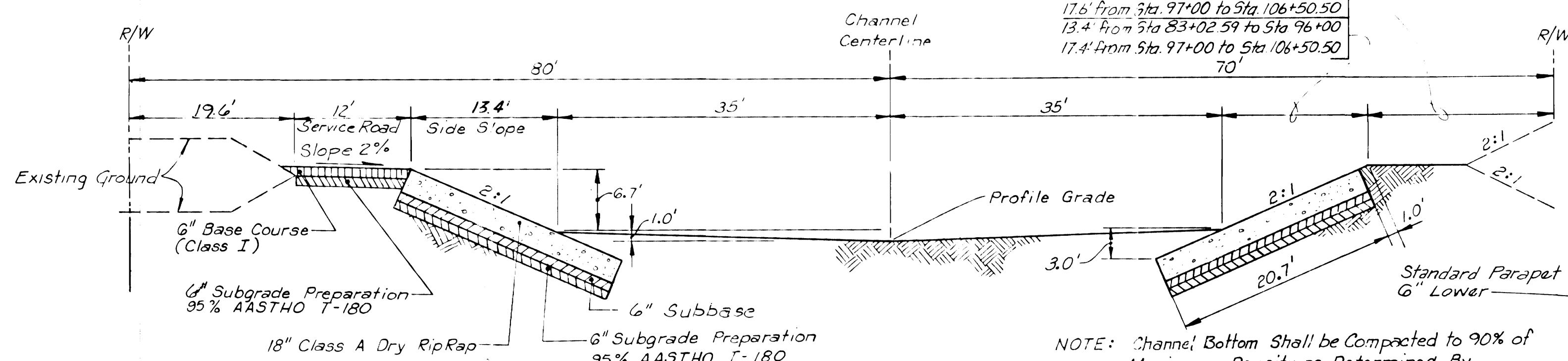
**PHASE 2, MARIPOSA DIVERSION,  
BOCA NEGRA IMPROVEMENTS &  
DETENTION BASIN**

Sheet 11 of 36



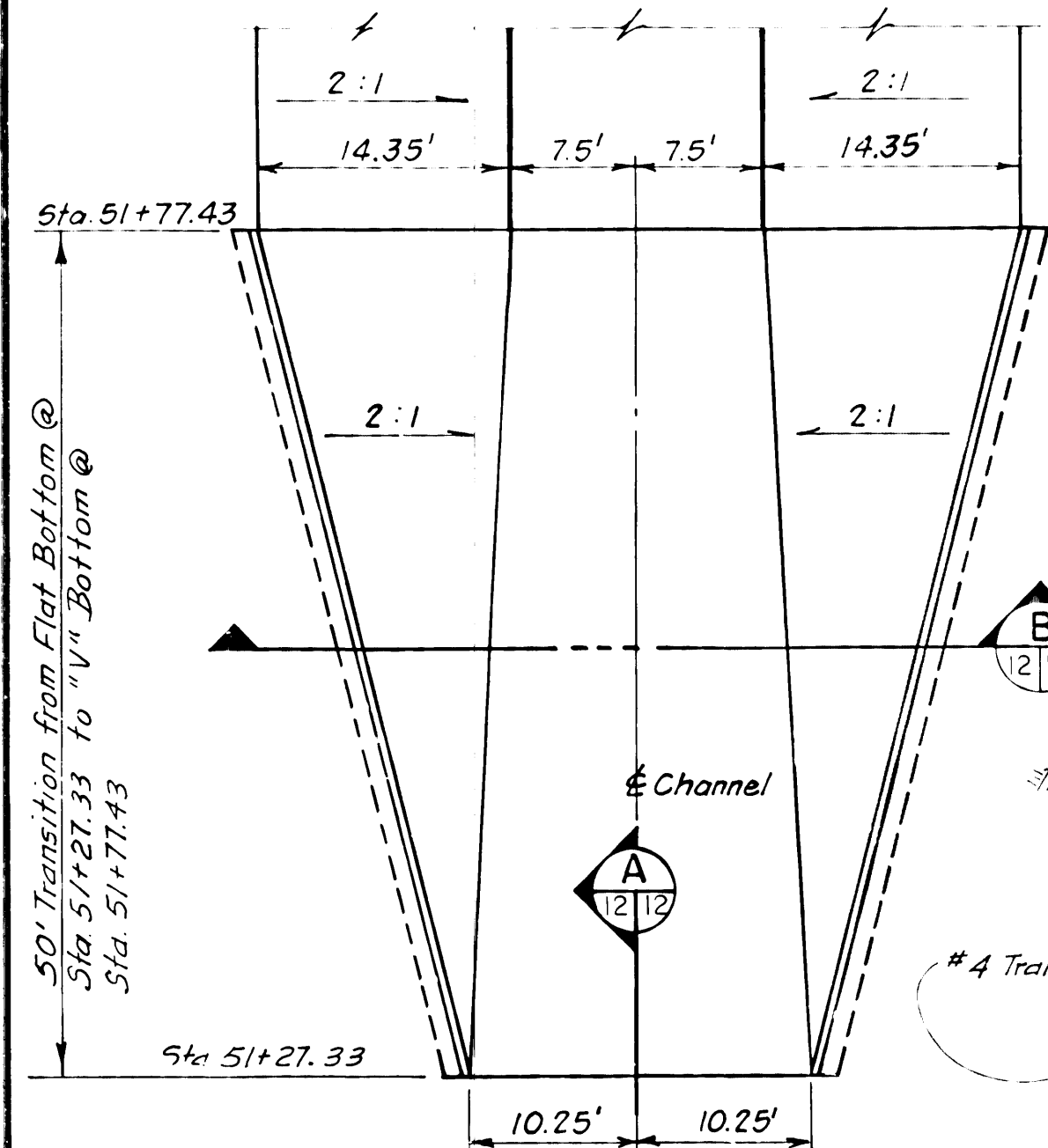
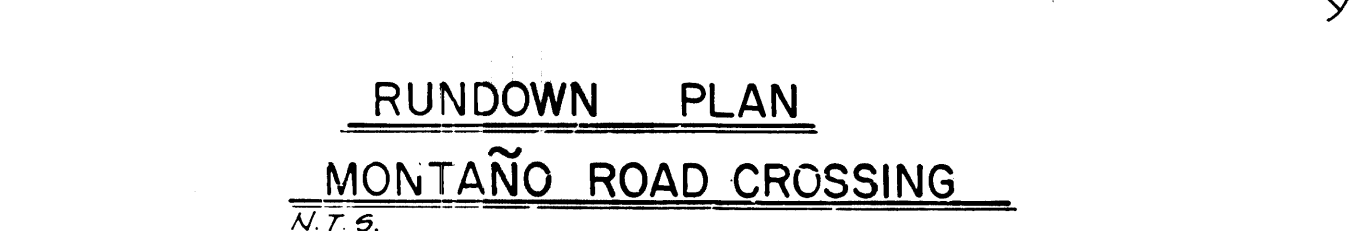
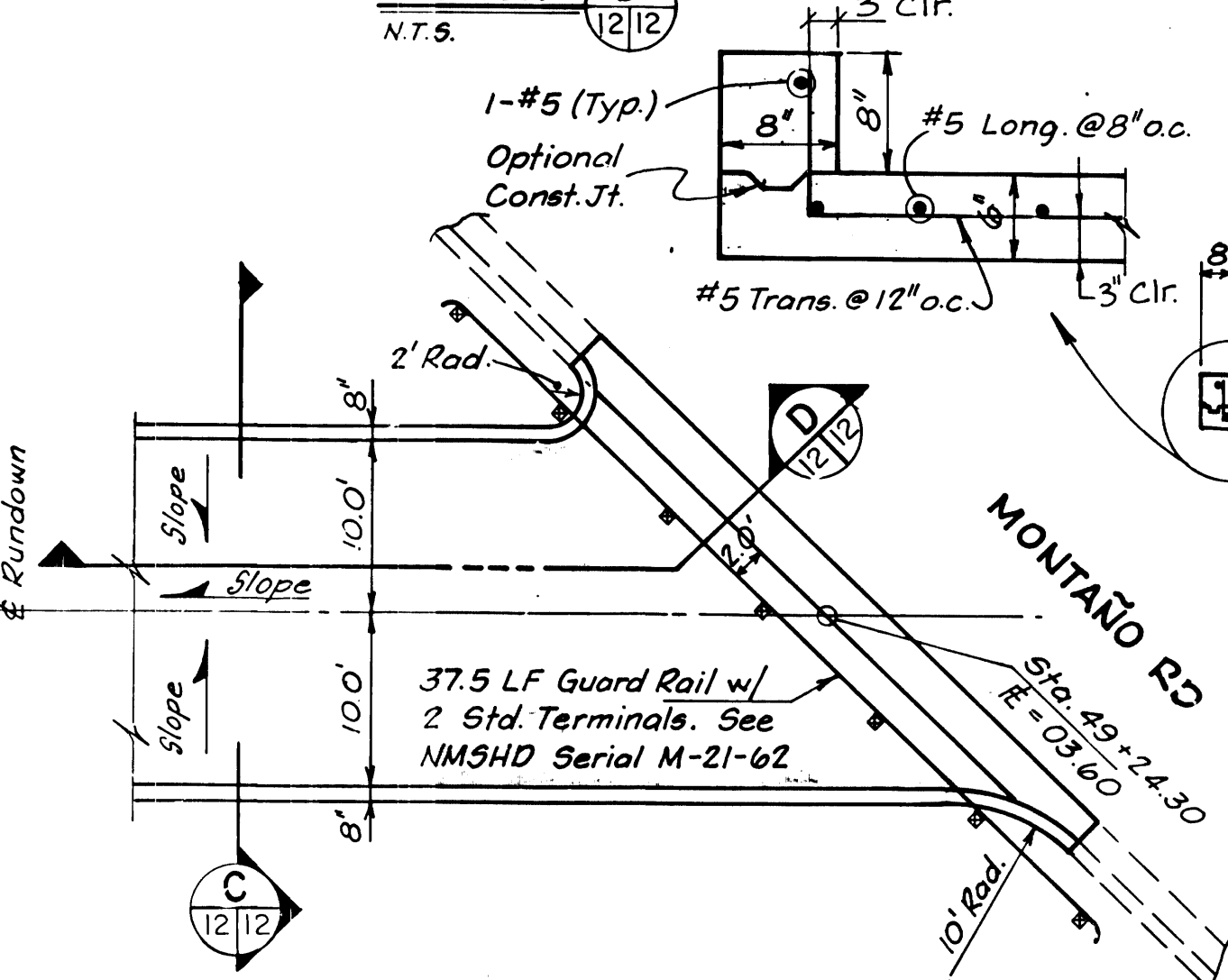
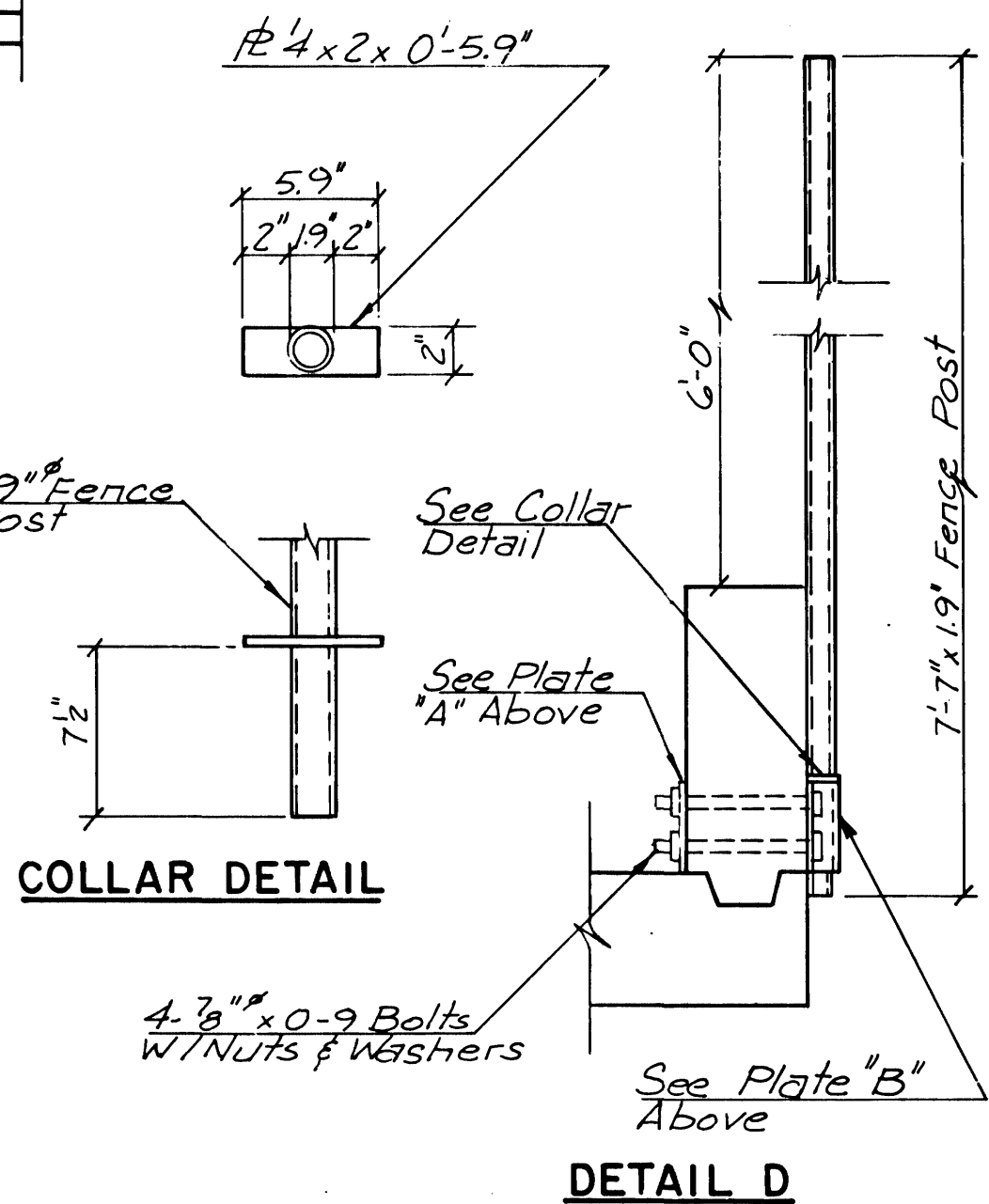
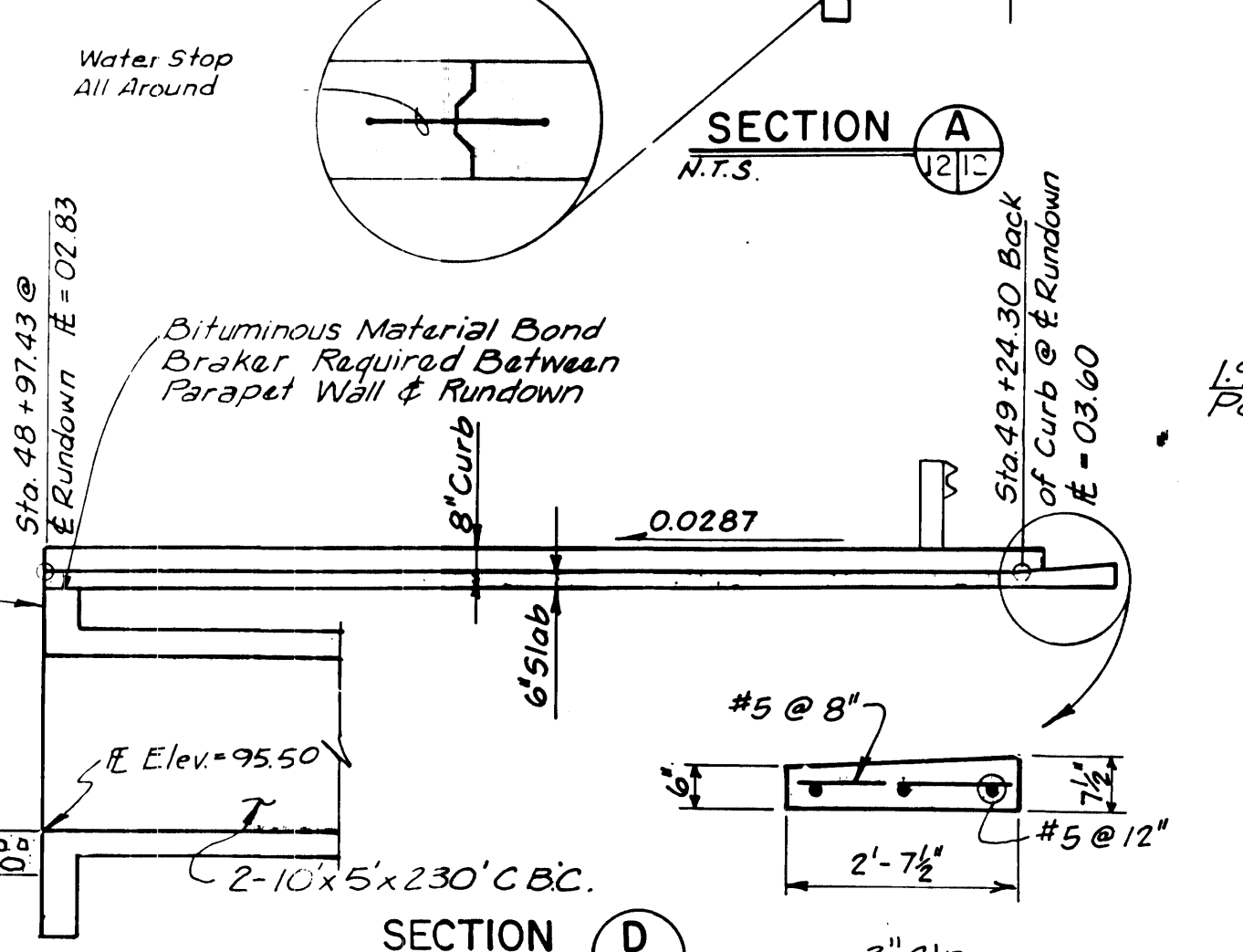
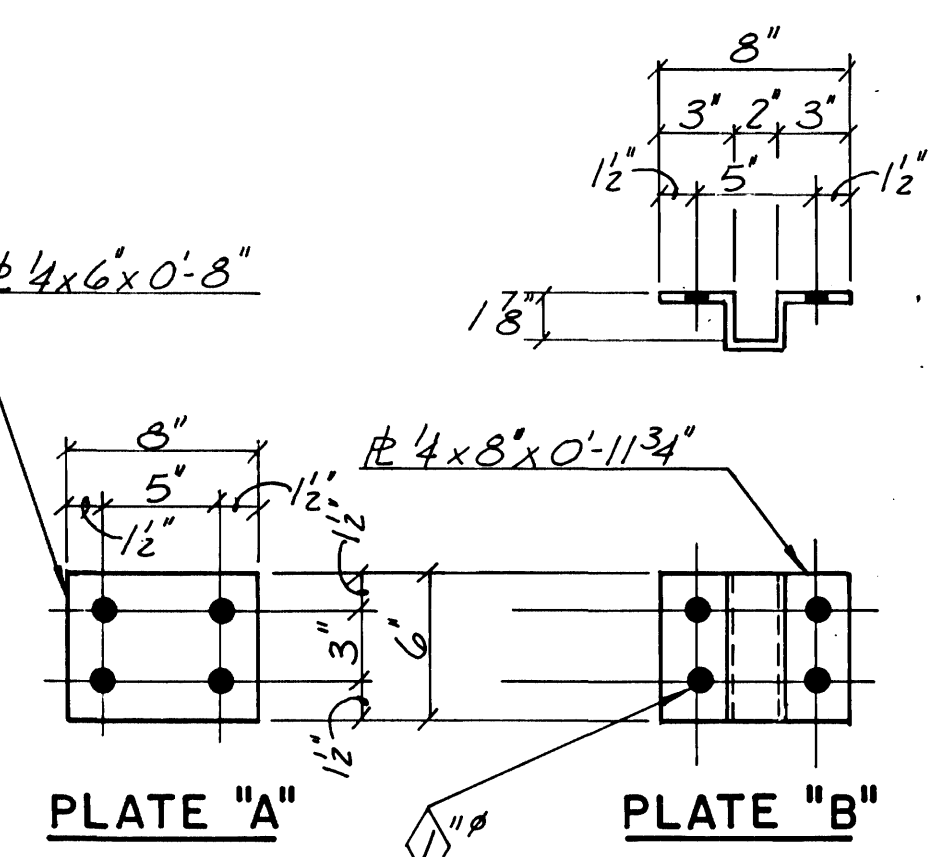
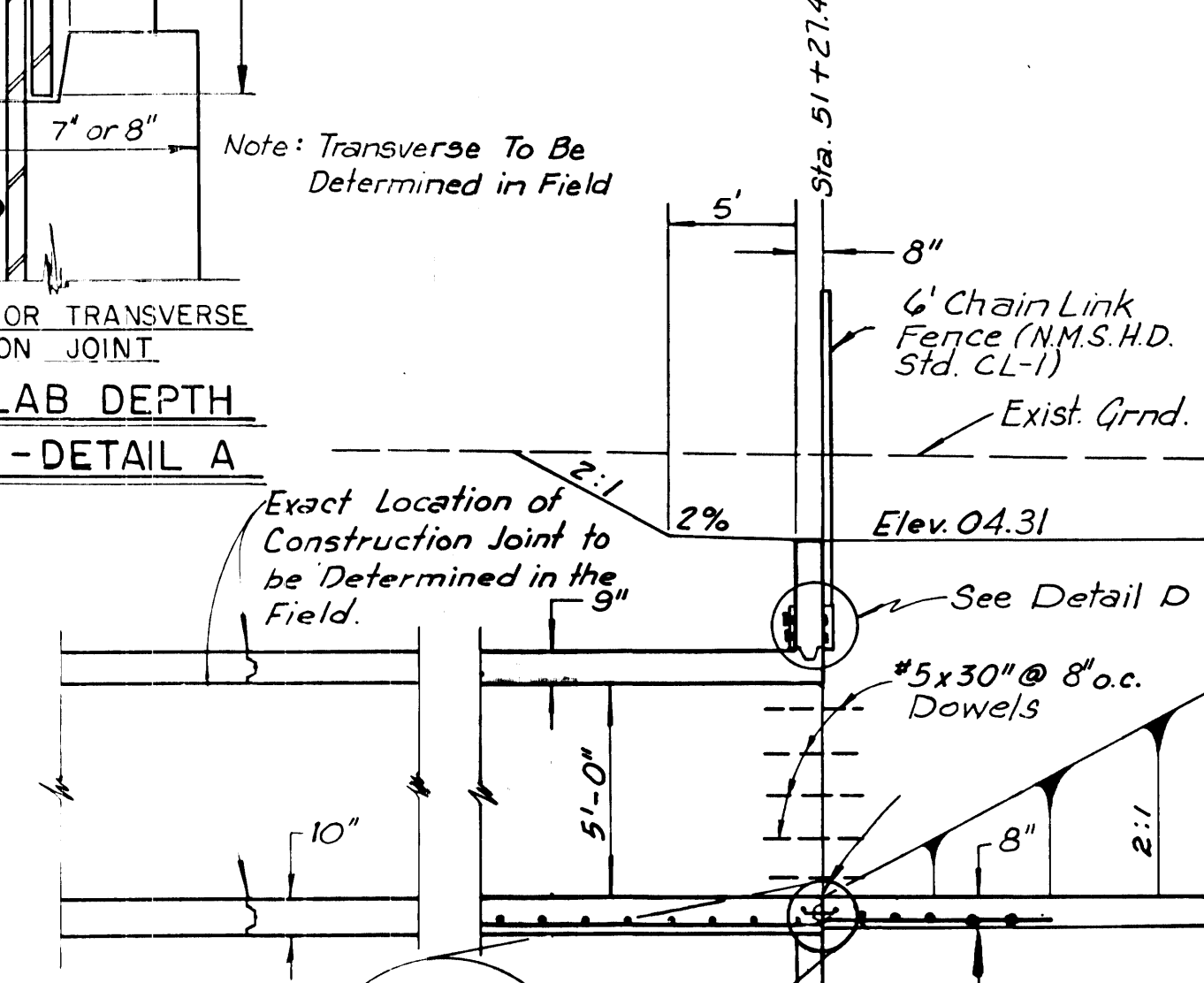


**MARIPOSA NORTH**  
N.T.S. STA. 1+12.35 TO STA. 7+44

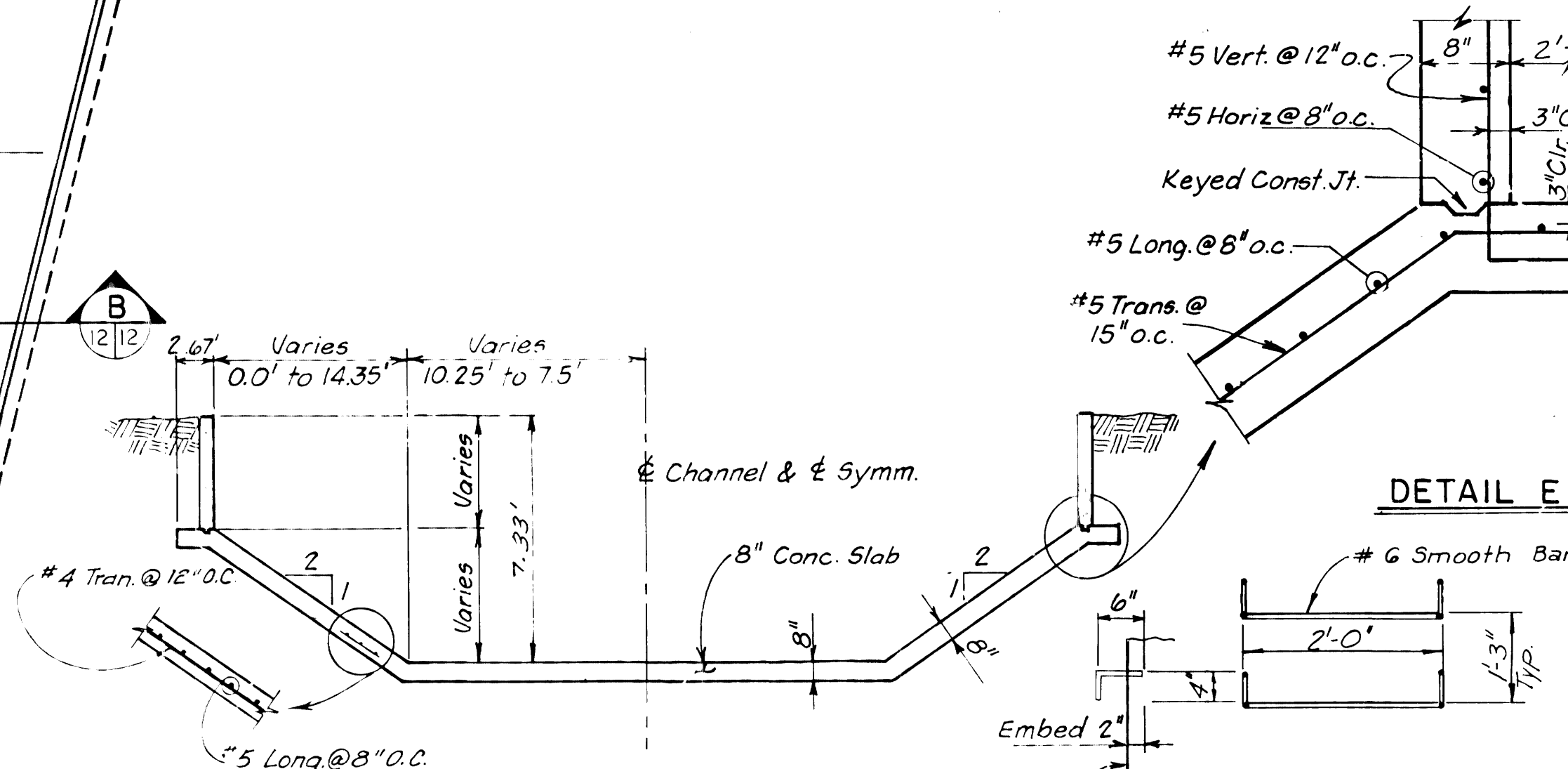


**MARIPOSA NORTH RIP-RAP CHANNEL SECTION**

N.T.S. STA. 9+25 TO STA. 14+75 & STA. 18+00 TO STA. 24+85



**BOCA NEGRA**  
N.T.S. STA. 83+02.59 TO STA. 106+50.50



**SECTION B**  
N.T.S.

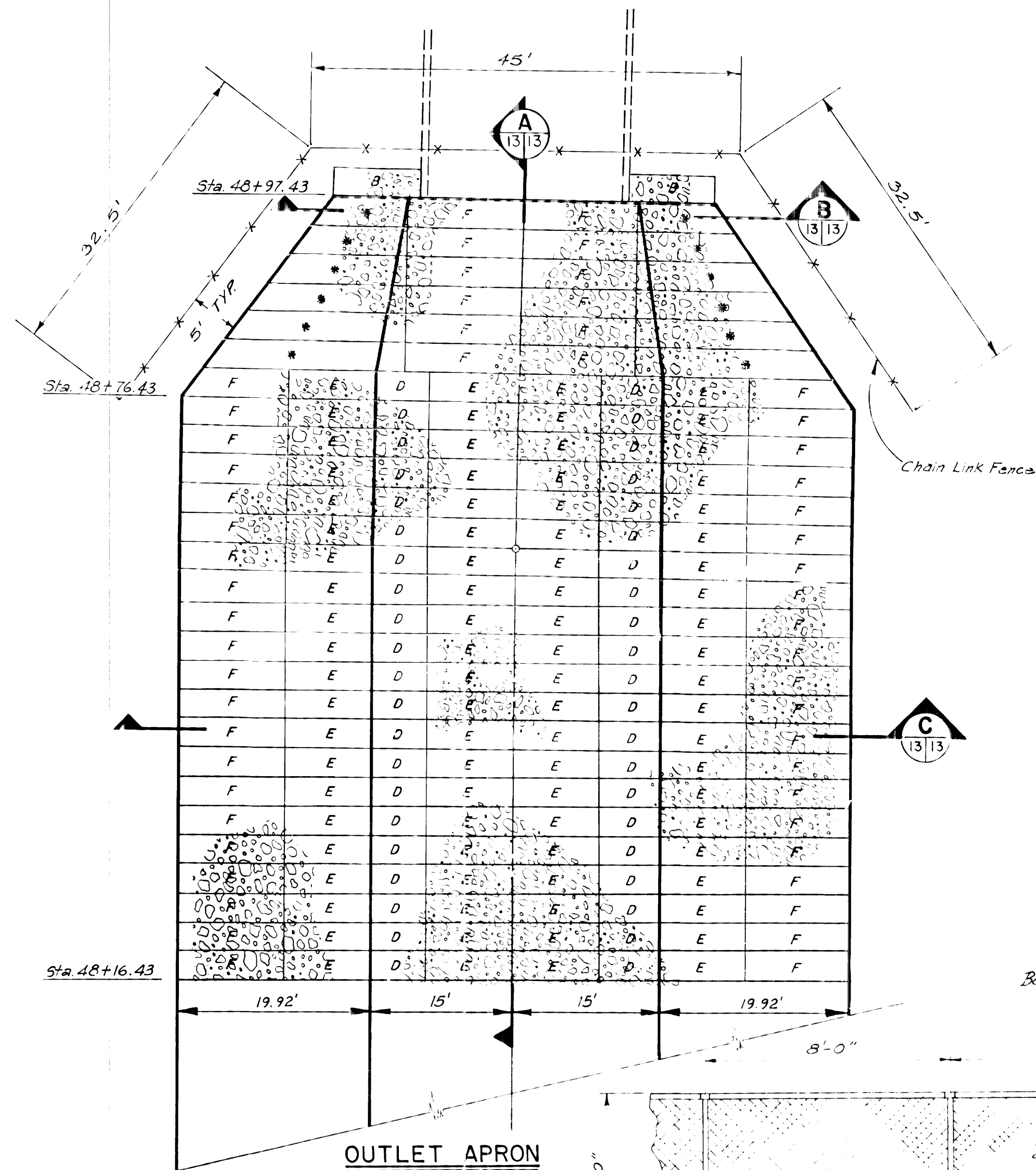
**TYPICAL RUNG DETAIL**  
See Plan & Profiles for Location

**PHASE 2, MARIPOSA DIVERSION  
BOCA NEGRA IMPROVEMENTS  
& DETENTION BASIN  
CHANNEL SECTIONS & DETAILS**

**DENNEY - GROSS & ASSOCIATES, INC.**  
ENGINEERS  
2400 COMANCHE ROAD N.E.  
ALBUQUERQUE, NEW MEXICO 87107  
(505) 884-0696

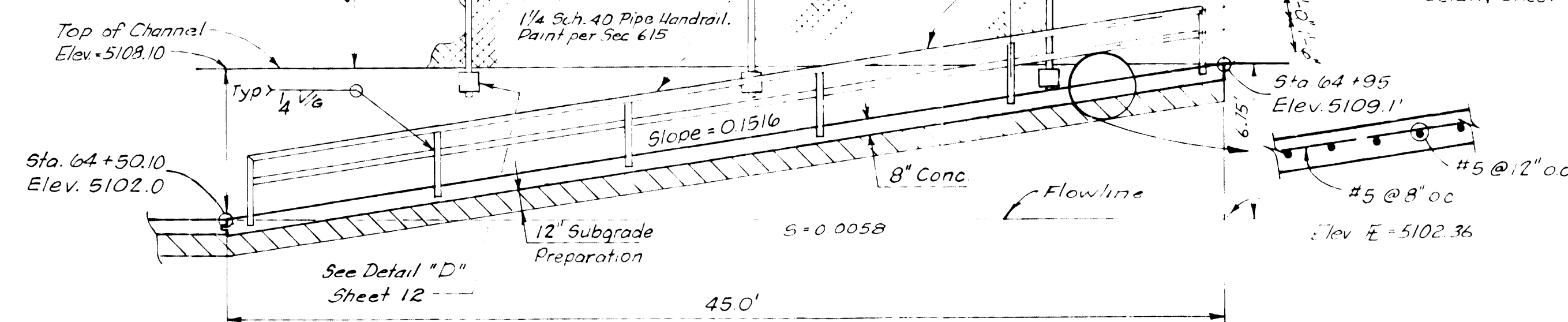


TYPE DRAWING	SHEET
PRELIM. <input type="checkbox"/>	12
CONST. <input type="checkbox"/>	OF
RECORD <input type="checkbox"/>	36
DATE: 10/82	SHEETS
JOB NO. 407.11	



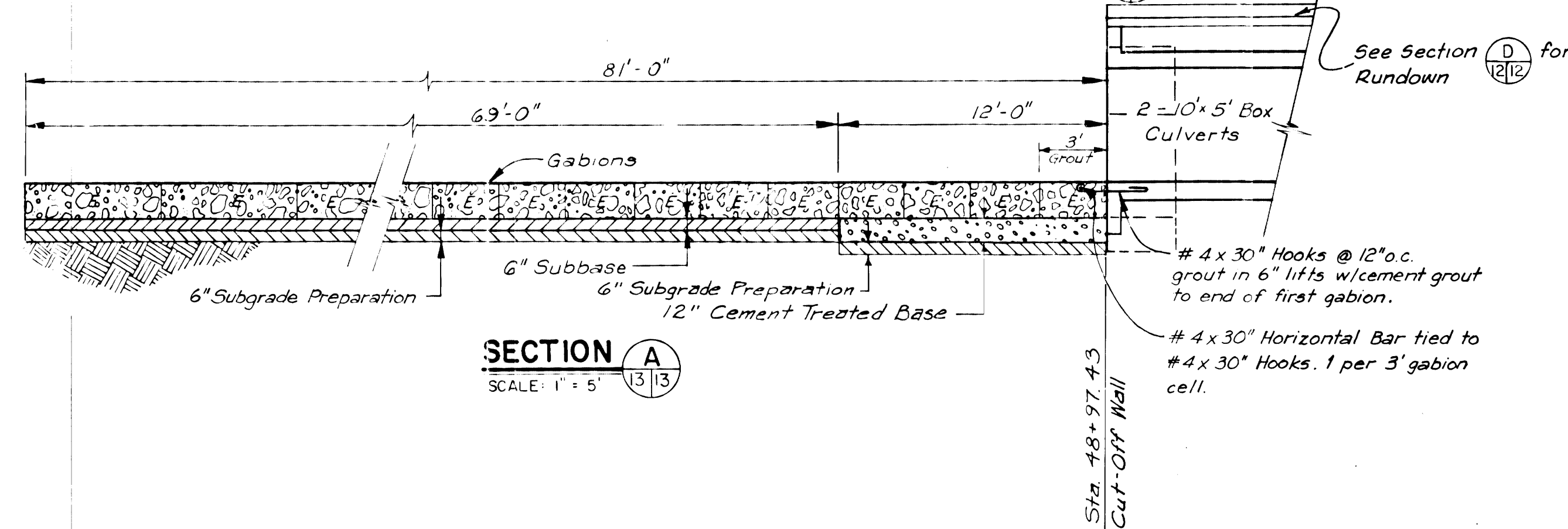
**OUTLET APRON**

Scale: 1" = 10'



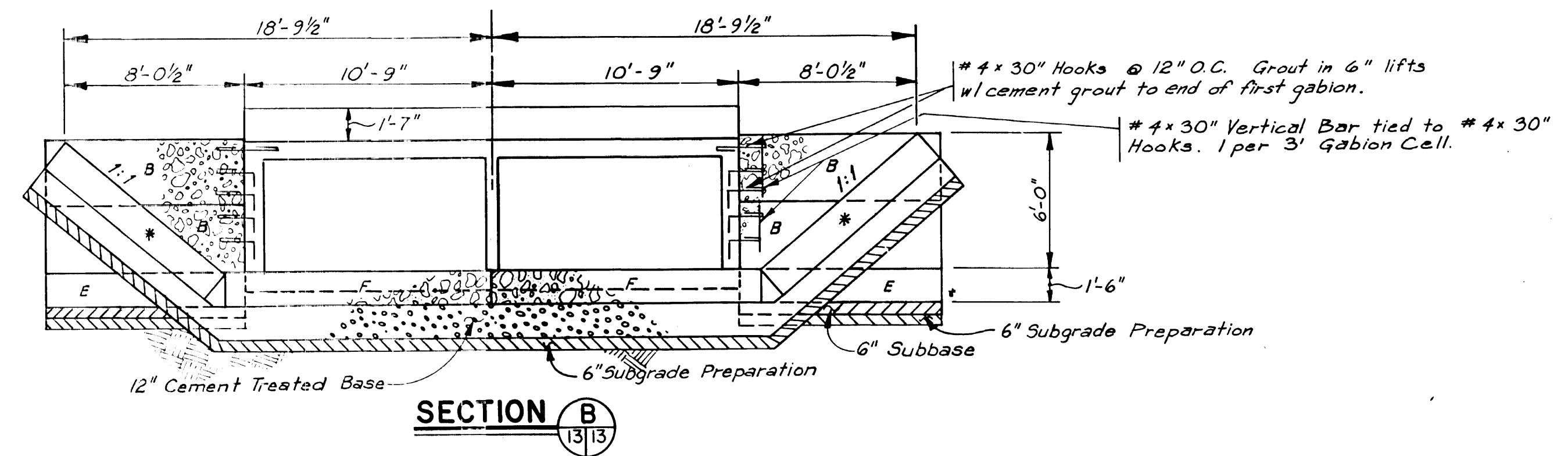
**SECTION D**

N.T.S.



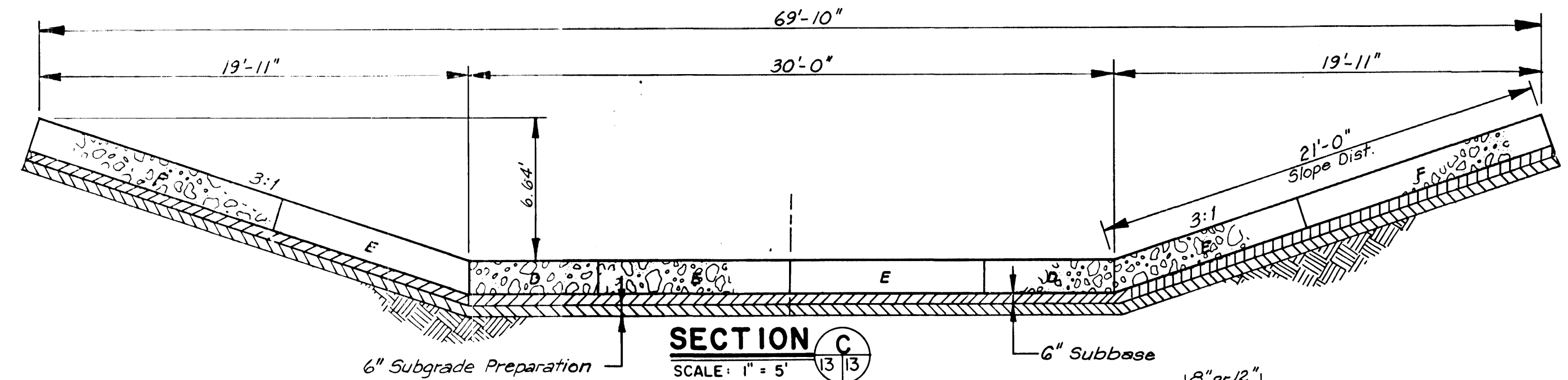
**SECTION A**

SCALE: 1" = 5'



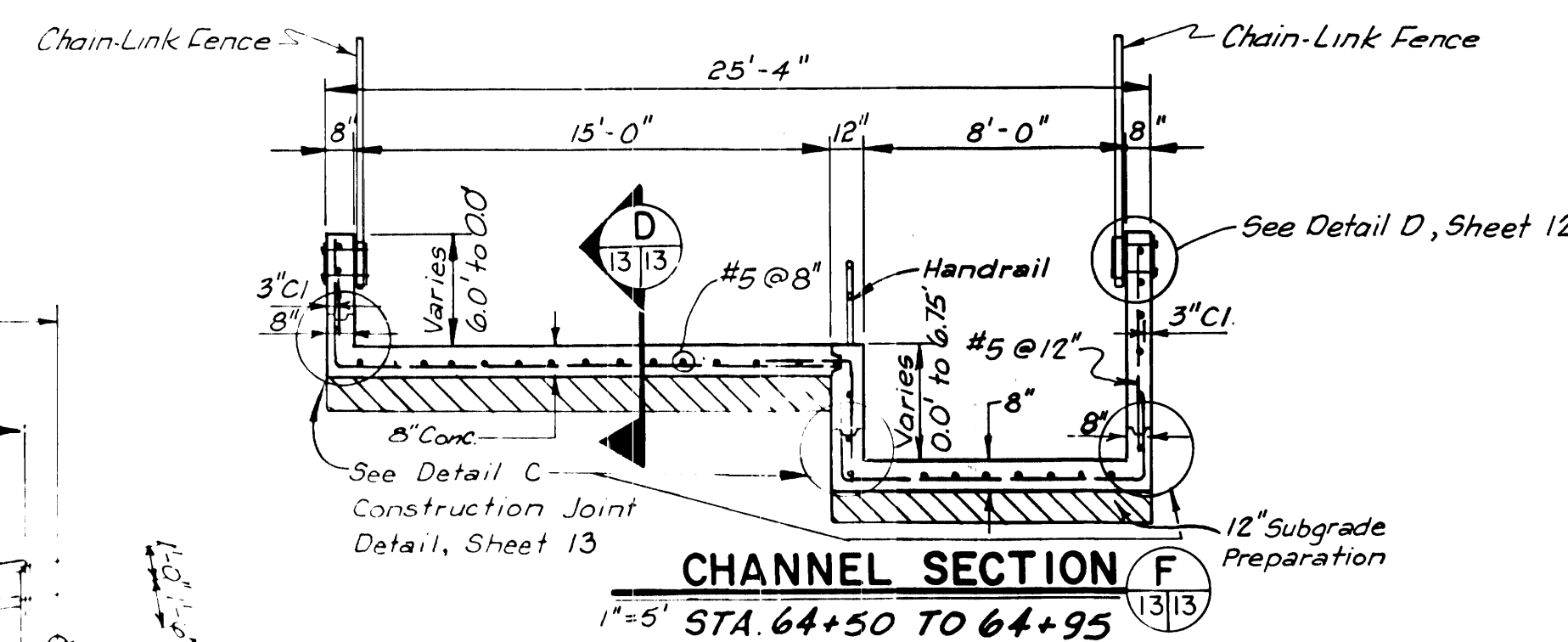
**SECTION B**

SCALE: 1" = 5'



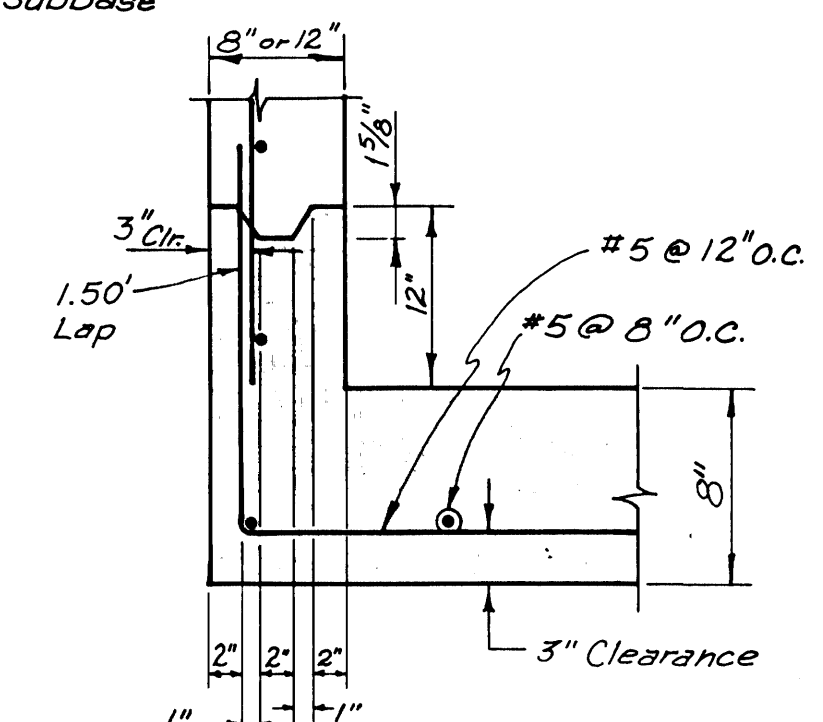
**SECTION C**

SCALE: 1" = 5'



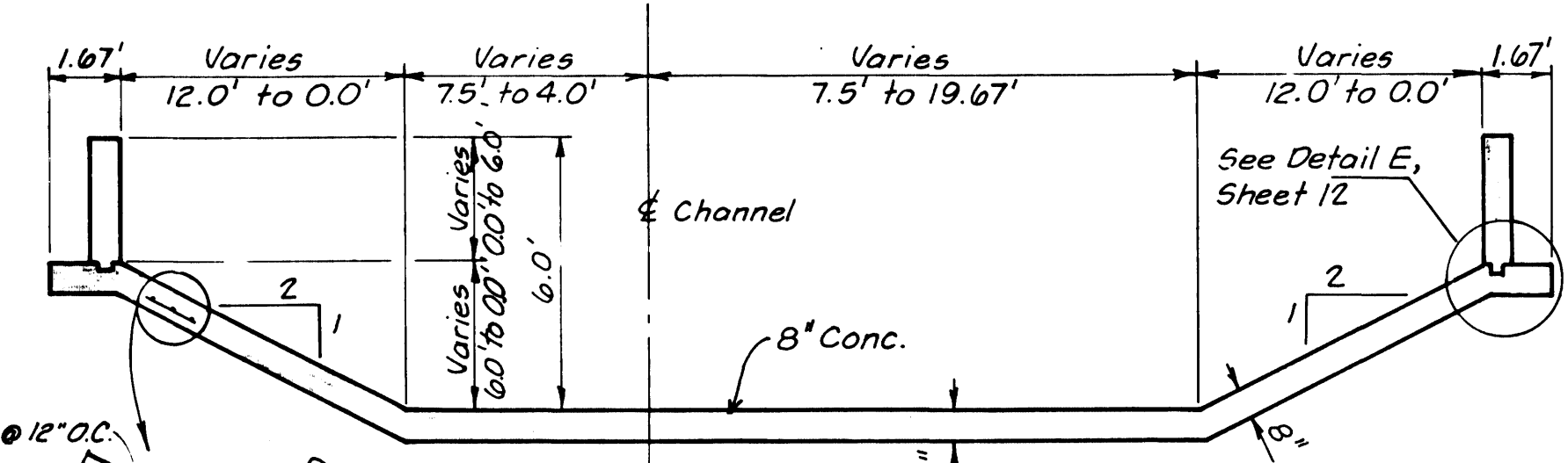
**CHANNEL SECTION F**

1" = 5' STA. 64+50 TO 64+95



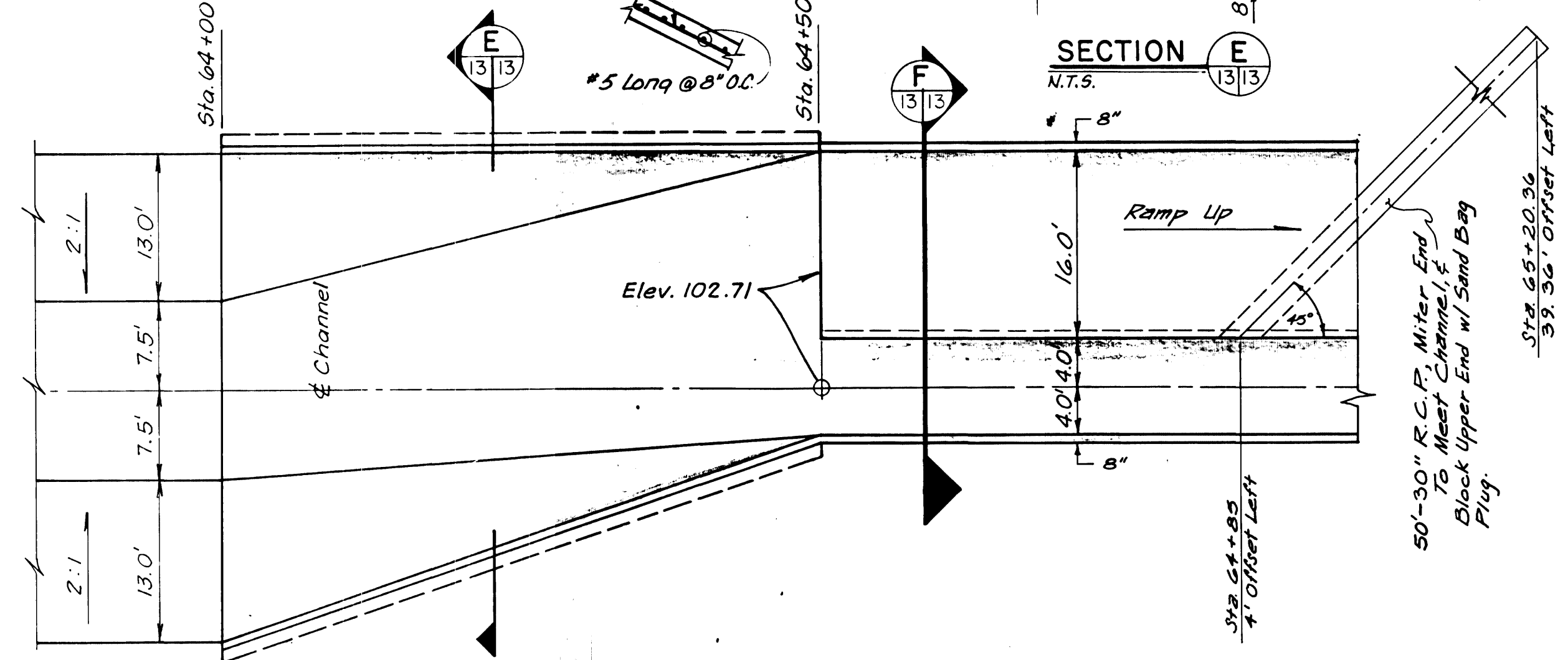
**DETAIL C**

CONSTRUCTION JOINT DETAIL



**SECTION E**

N.T.S.



**TRANSITION PLAN**

1" = 10' STA. 64+00 TO 64+50

DESIGNED BY: C.R.	CHECKED BY:
DRAWN BY: G.A.	CHECKED BY:
REVISIONS	

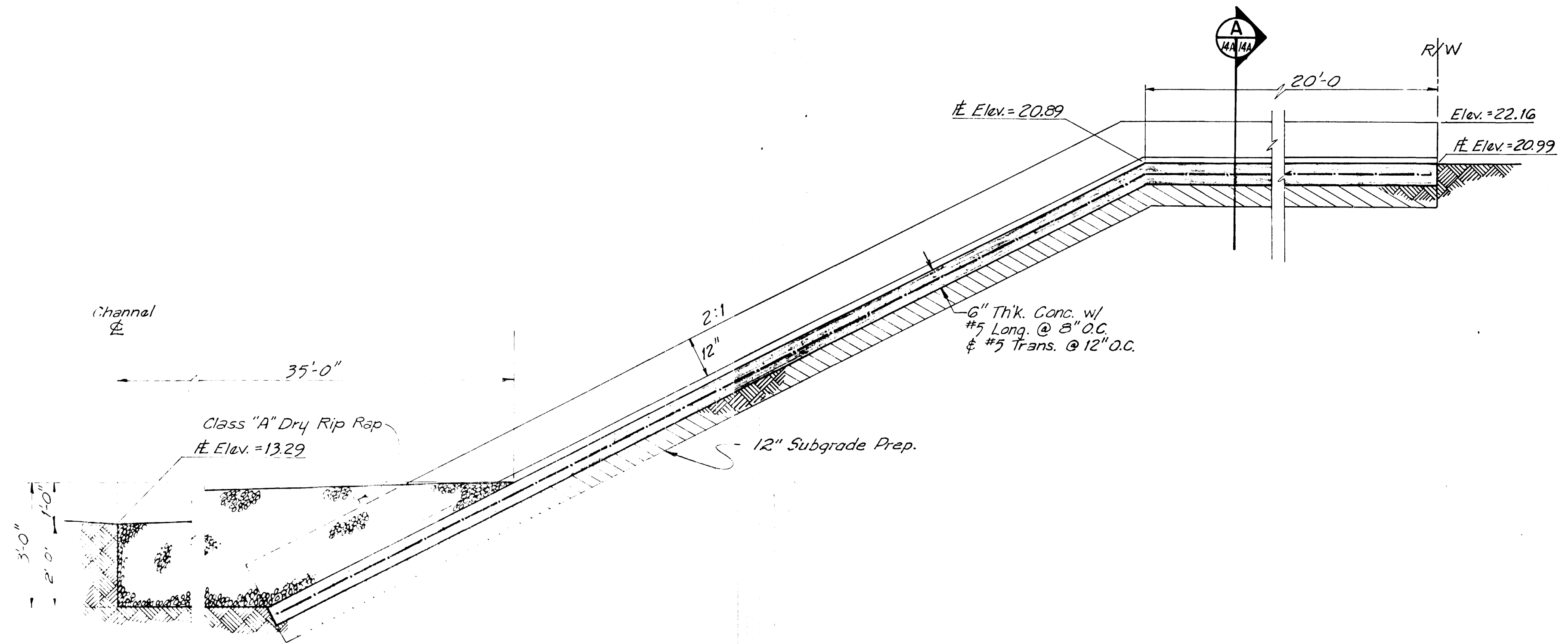
**PHASE 2, MARIPOSA DIVERSION  
BOCA NEGRA IMPROVEMENTS  
& DETENTION BASIN  
OUTLET APRON & CHANNEL SECTION**

**DENNEY - GROSS & ASSOCIATES, INC.**  
ENGINEERS SURVEYORS PLANNERS  
2400 COMANCHE ROAD N.E.  
ALBUQUERQUE, NEW MEXICO 87107  
(505) 884-0696

TYPE DRAWING	SHEET
PRELIM. <input type="checkbox"/>	13
CONST. <input type="checkbox"/>	OF
RECORD <input type="checkbox"/>	36
DATE: 10/82	SHEETS
JOB NO. 407.11	

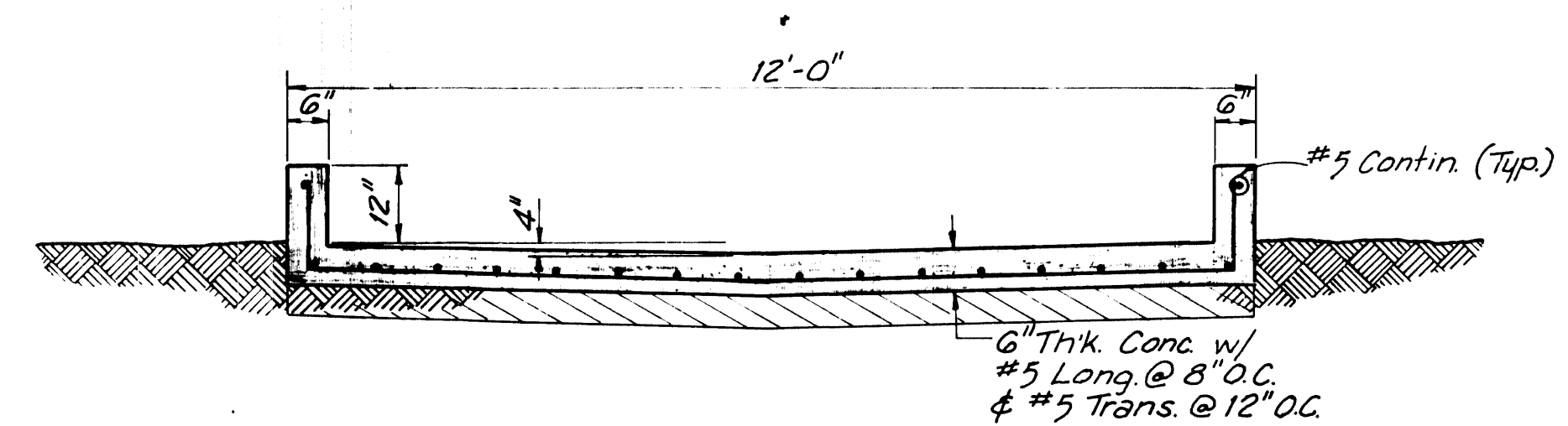






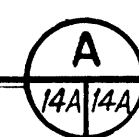
CONCRETE RUNDOWN ELEVATION

SCALE: 1" = 2'-0"



RUNDOWN SECTION

SCALE: 1" = 2'-0"



PHASE 2, MARIPOSA DIVERSION  
BOCA NEGRA IMPROVEMENTS  
& DETENTION BASIN  
RUNDOWN DETAILS

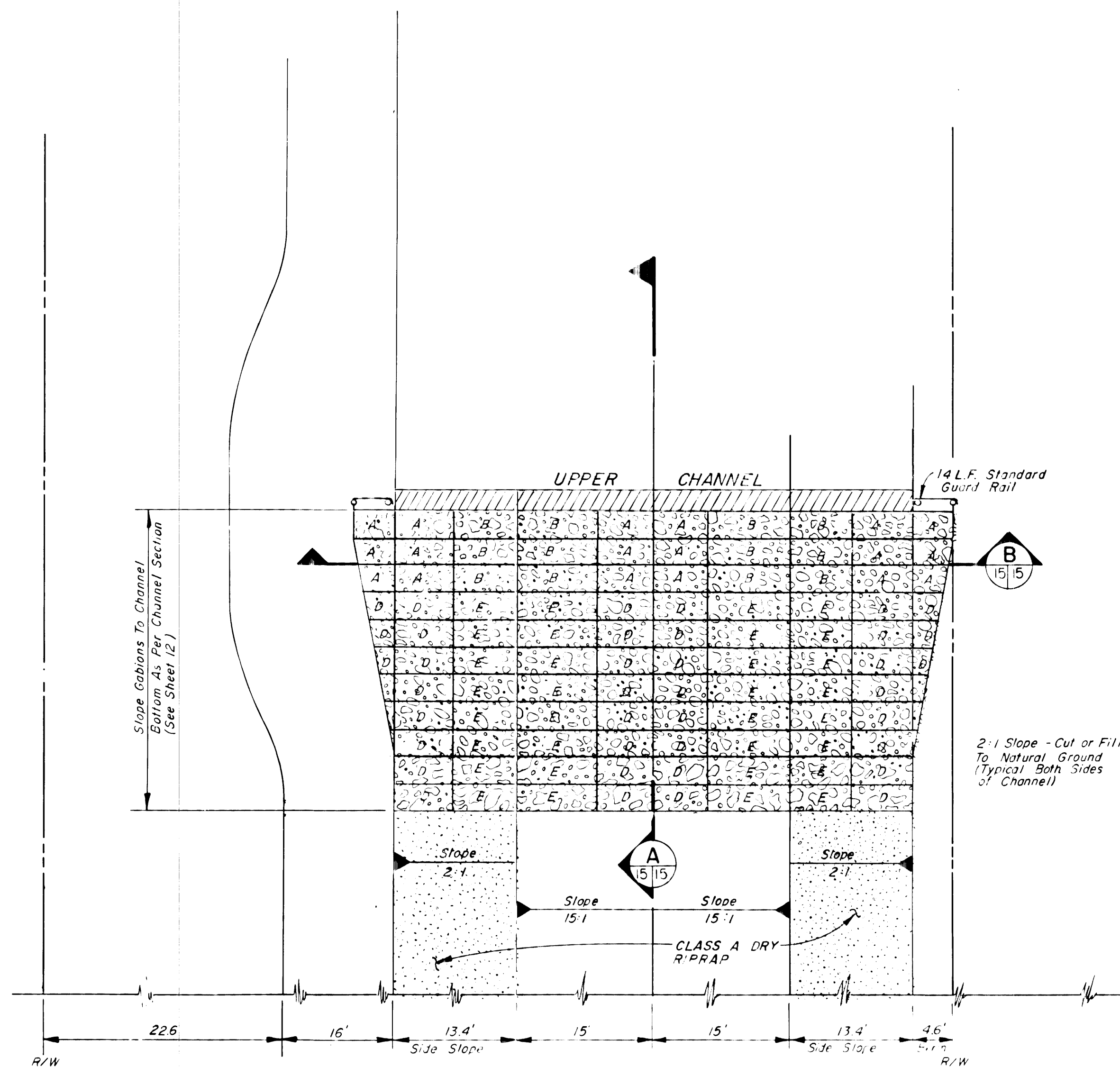
DENNEY - GROSS & ASSOCIATES, INC.  
ENGINEERS  
SURVEYORS  
2400 COMANCHE ROAD N.E.  
ALBUQUERQUE, NEW MEXICO 87107  
(505) 884-0696



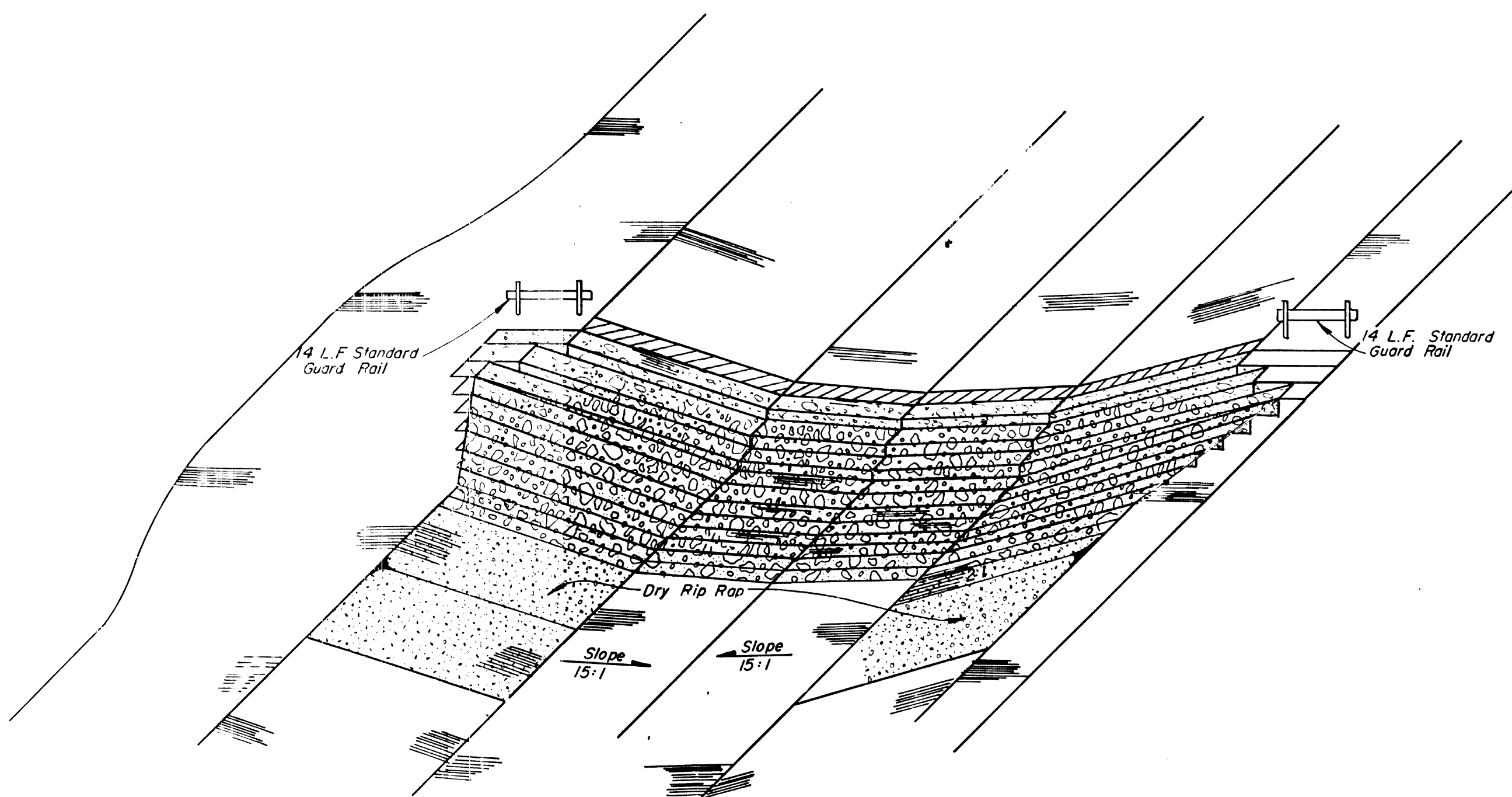
TYPE DRAWING	SHEET
PRELIM. <input type="checkbox"/>	14A
CONST. <input checked="" type="checkbox"/>	OF
RECORD <input type="checkbox"/>	36
DATE: 10/82	SHEETS
JOB NO. 407.11	

BENCHMARK:	
DESIGNED BY:	CHECKED BY:
DRAWN BY:	CHECKED BY:
REVISIONS	



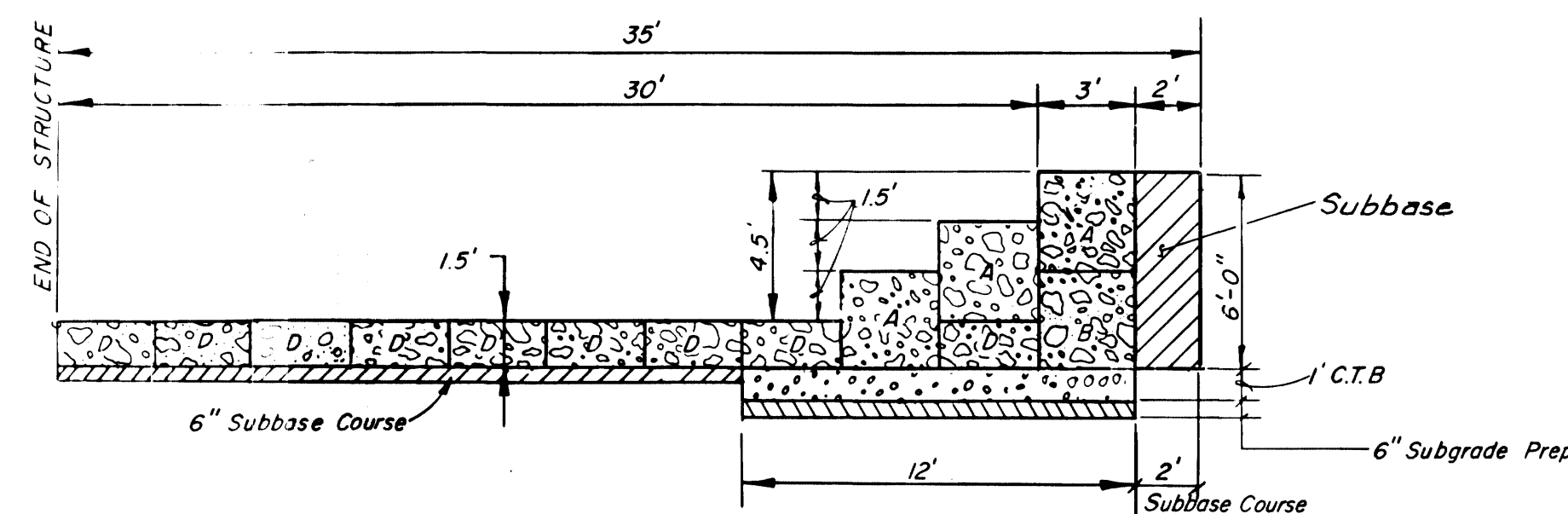


GABION DESIGNATIONS		
CODE	SIZE	CAPACITY CU. YDS.
A	6' x 3' x 3'	2.0
B	9' x 3' x 3'	3.0
C	12' x 3' x 3'	4.0
D	6' x 3' x 1.5'	1.0
E	9' x 3' x 1.5'	1.5
F	12' x 3' x 1.5'	2.0
G	6' x 3' x 1'	2.66
H	9' x 3' x 1'	1.2
I	12' x 3' x 1'	1.33



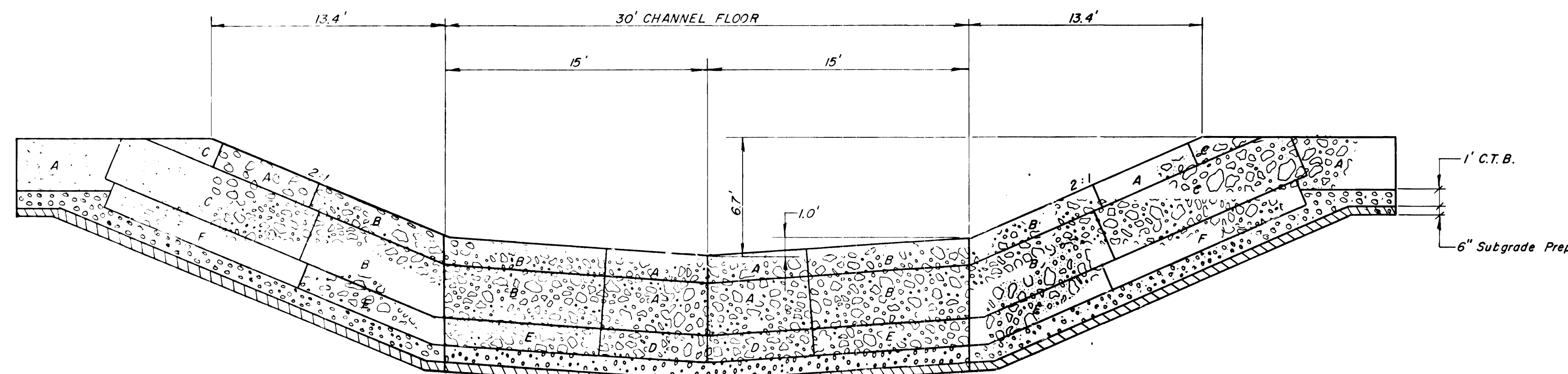
TYPICAL GABION DROP STRUCTURE ISOMETRIC

Not to Scale



SECTION A-A (4.5' DROP)

Scale: 1" = 5'-0"



SECTION B-B

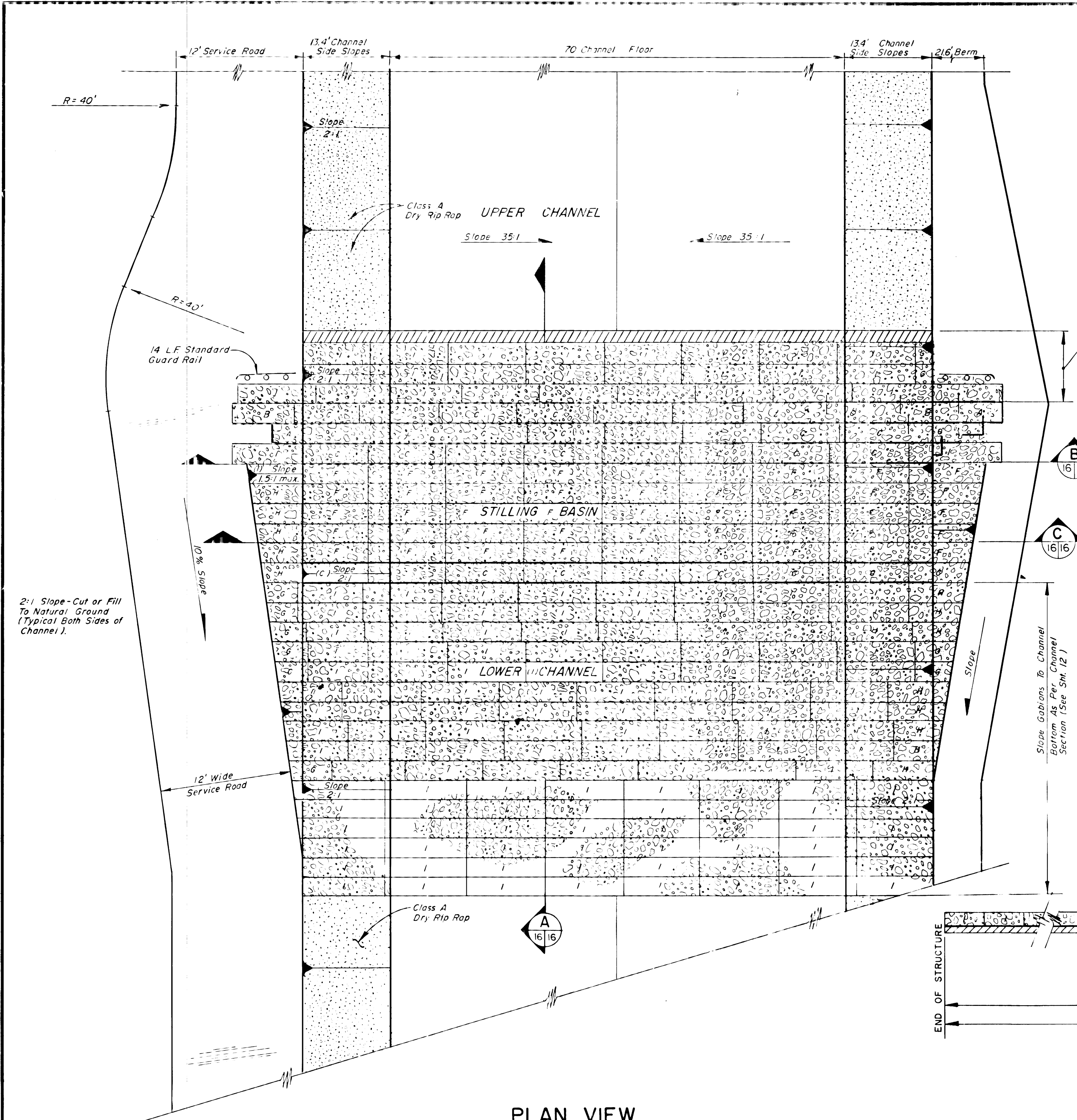
Scale: 1" = 5'-0"

PHASE 2, MARIPOSA DIVERSION  
BOCA NEGRA IMPROVEMENTS  
& DETENTION BASIN  
4.5' GABION DROP STRUCTURE

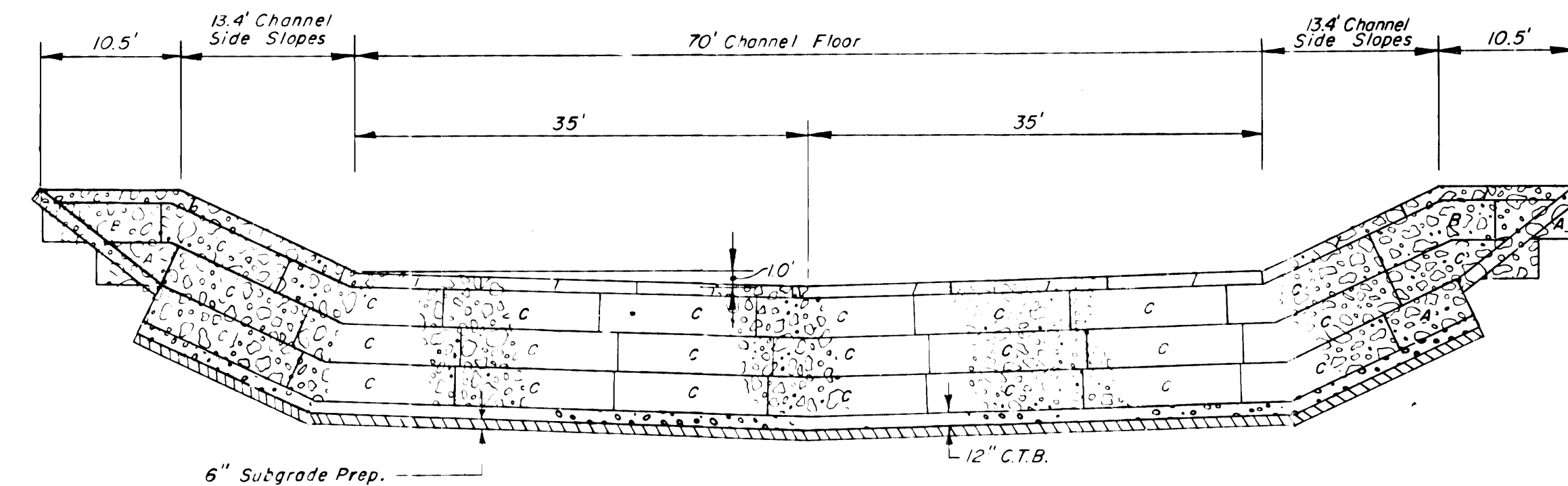
DENNEY - GROSS & ASSOCIATES, INC.  
ENGINEERS  
2400 COMANCHE ROAD N.E.  
ALBUQUERQUE, NEW MEXICO 87107  
(505) 884-0696

TYPE DRAWING	SHEET
PRELIM. <input type="checkbox"/>	15
CONST. <input checked="" type="checkbox"/>	OF
RECORD <input type="checkbox"/>	36
DATE: 10/82	SHEETS
JOB NO. 407.11	

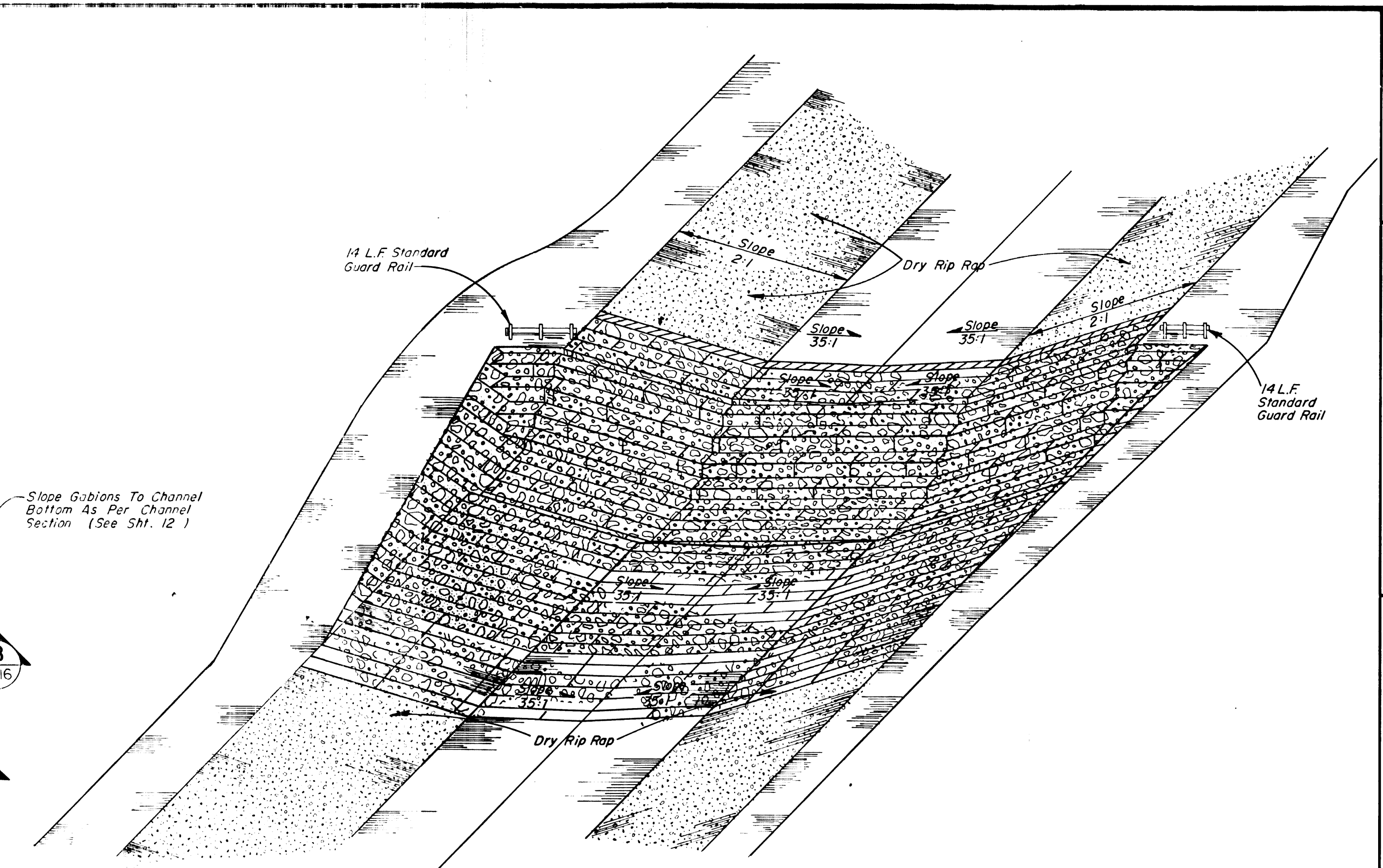




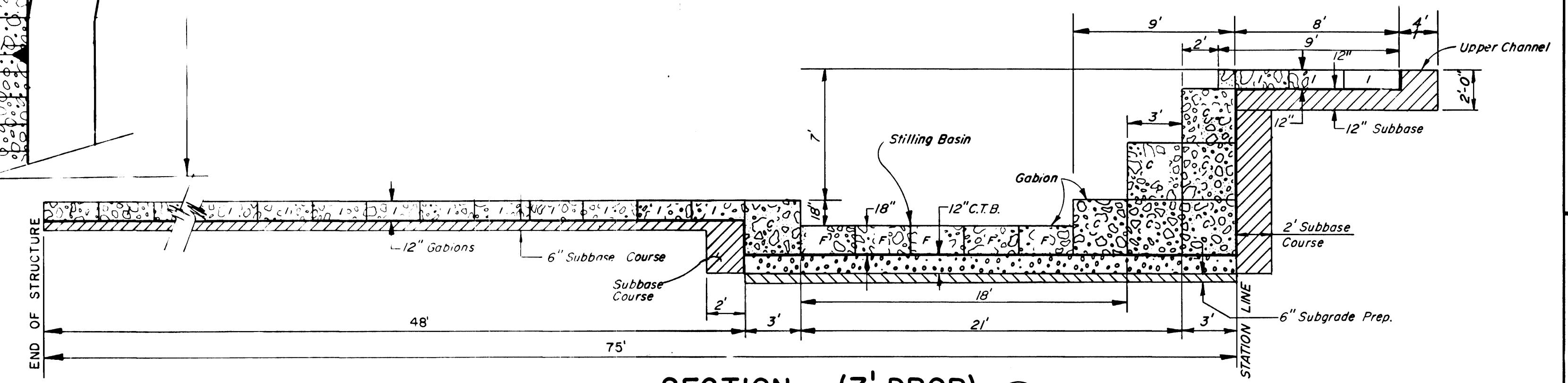
**PLAN VIEW**  
Scale: 1"=10'-0"



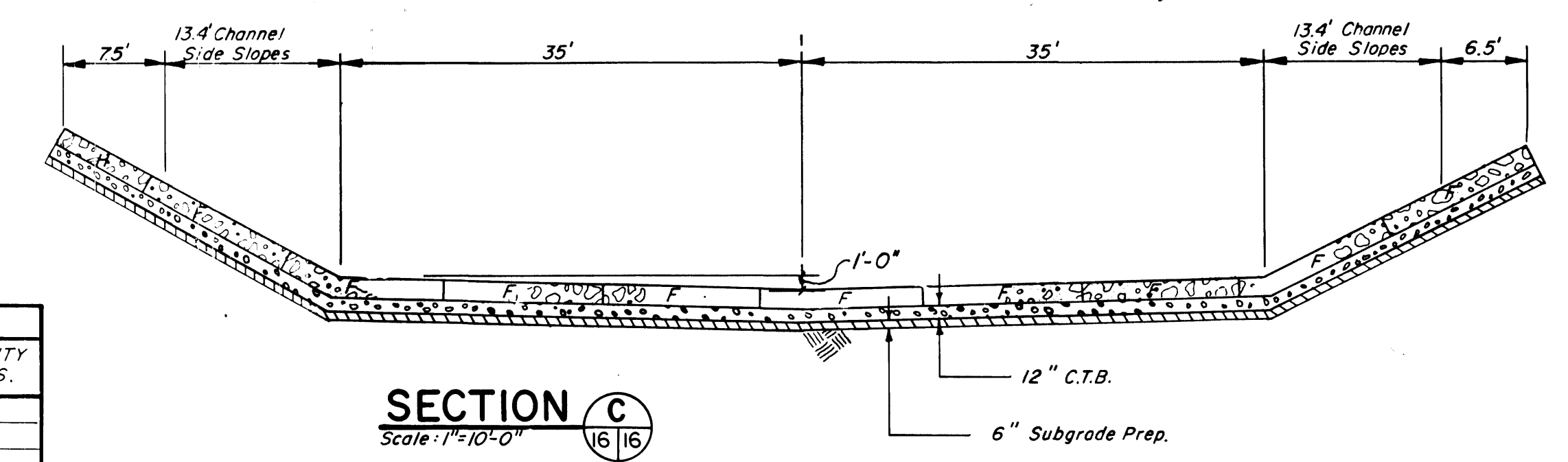
**SECTION B**  
Scale: 1"=10'-0"



**TYPICAL GABION DROP STRUCTURE ISOMETRIC**  
N.T.S.



**SECTION (7' DROP)**  
Scale: 1"=5'-0"



**SECTION C**  
Scale: 1"=10'-0"

GABION DESIGNATIONS		
CODE	SIZE	CAPACITY CU. YDS.
A	6' x 3' x 3'	2.0
B	9' x 3' x 3'	3.0
C	12' x 3' x 3'	4.0
D	6' x 3' x 1.5'	1.0
E	9' x 3' x 1.5'	1.5
F	12' x 3' x 1.5'	2.0
G	6' x 3' x 1'	0.66
H	9' x 3' x 1'	1.0
I	12' x 3' x 1'	1.33

DESIGNED BY: L.W.G. 12/80 CHECKED BY:

DRAWN BY: L.S.J. 12/80 CHECKED BY:

REVISIONS

**PHASE 2, MARIPOSA DIVERSION**

**BOCA NEGRA IMPROVEMENTS**

**& DETENTION BASIN**

**7' GABION DROP STRUCTURE**

DENNEY - GROSS & ASSOCIATES, INC.

ENGINEERS

2400 COMANCHE ROAD N.E.

ALBUQUERQUE, NEW MEXICO 87107

(505) 884-0896

**PLANNERS**

**SURVEYORS**

TYPE DRAWING

PRELIM. ☐

CONST. ☒

RECORD ☐

DATE: 10/82

JOB NO. 407.11

SHEET

**16**

OF

**36**

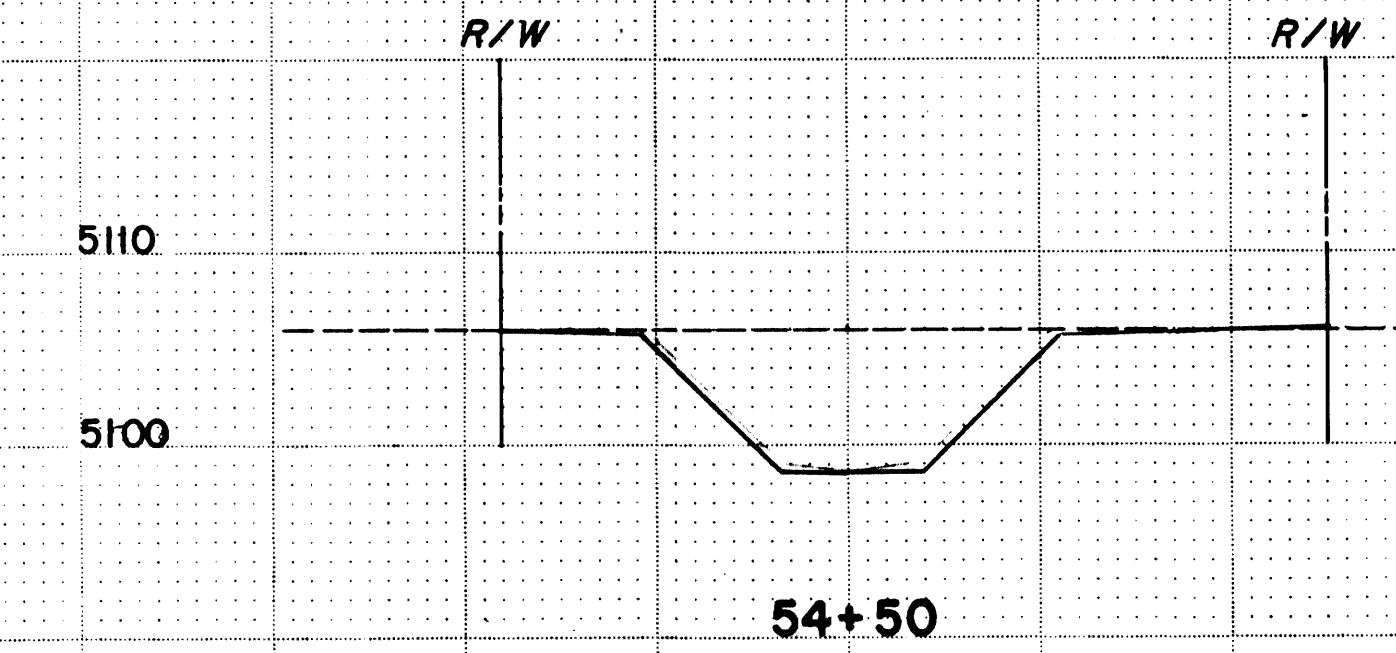
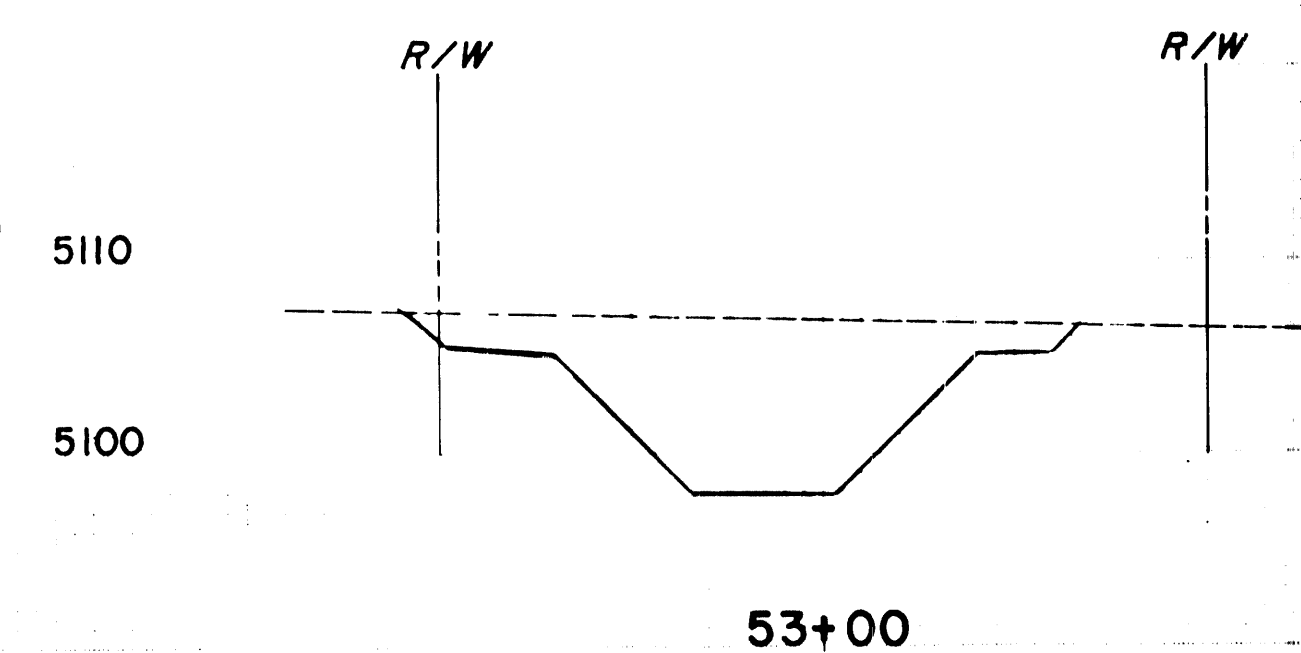
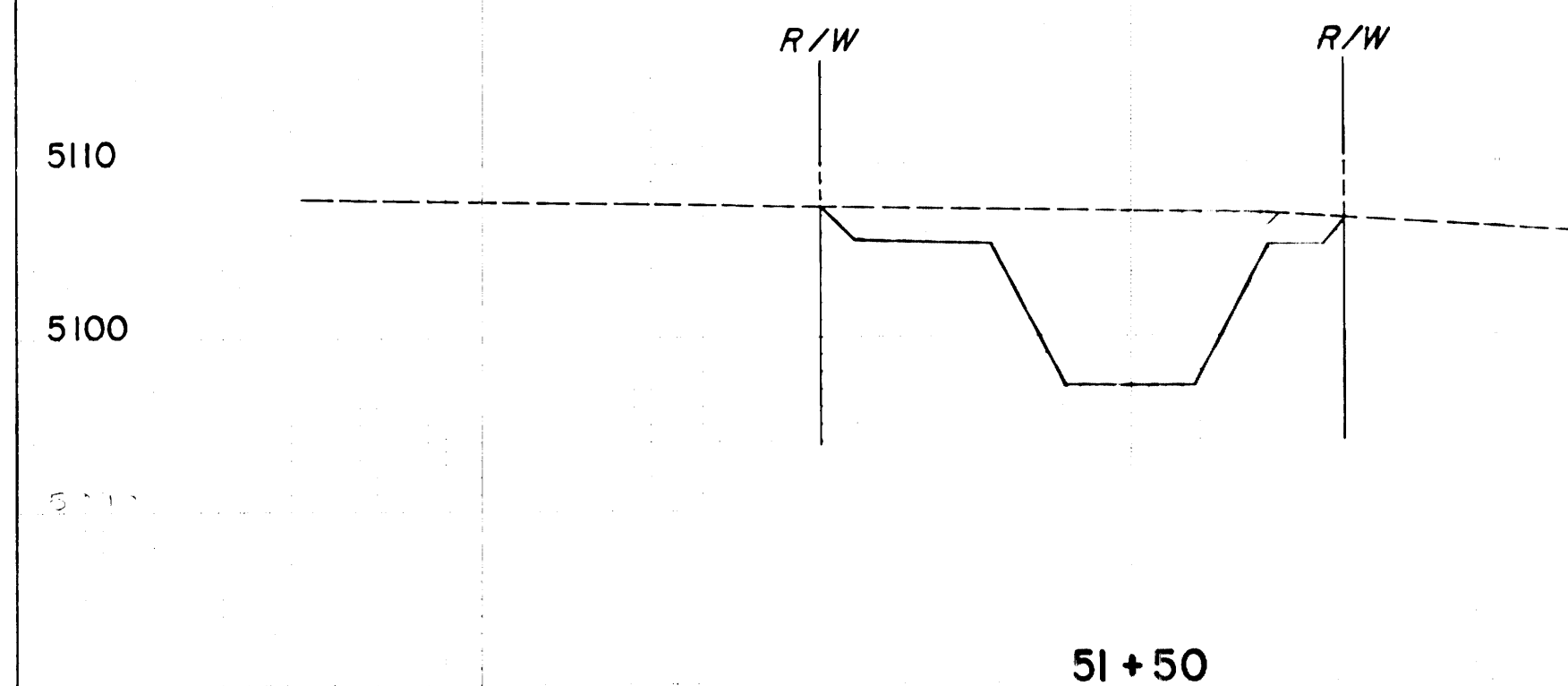
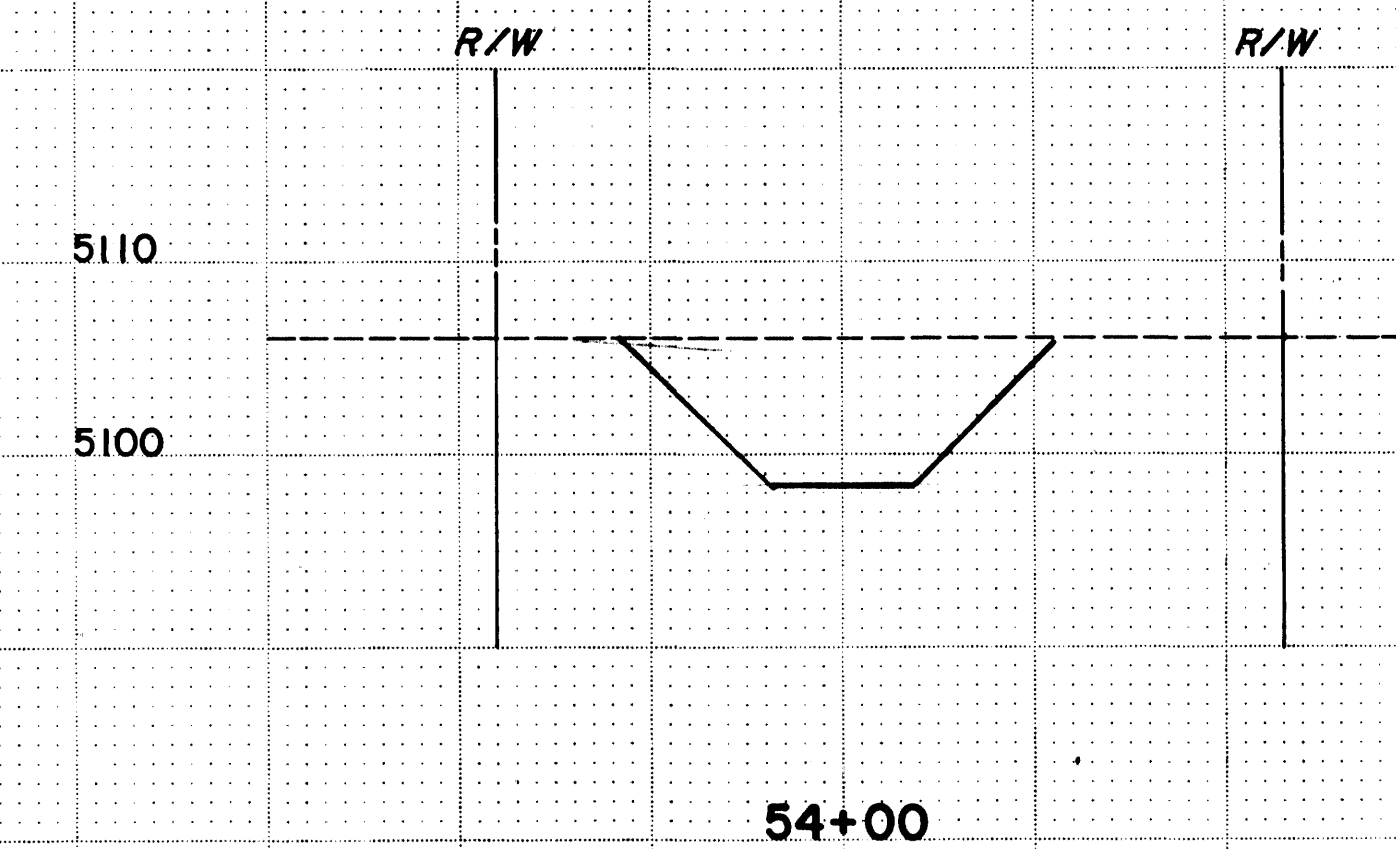
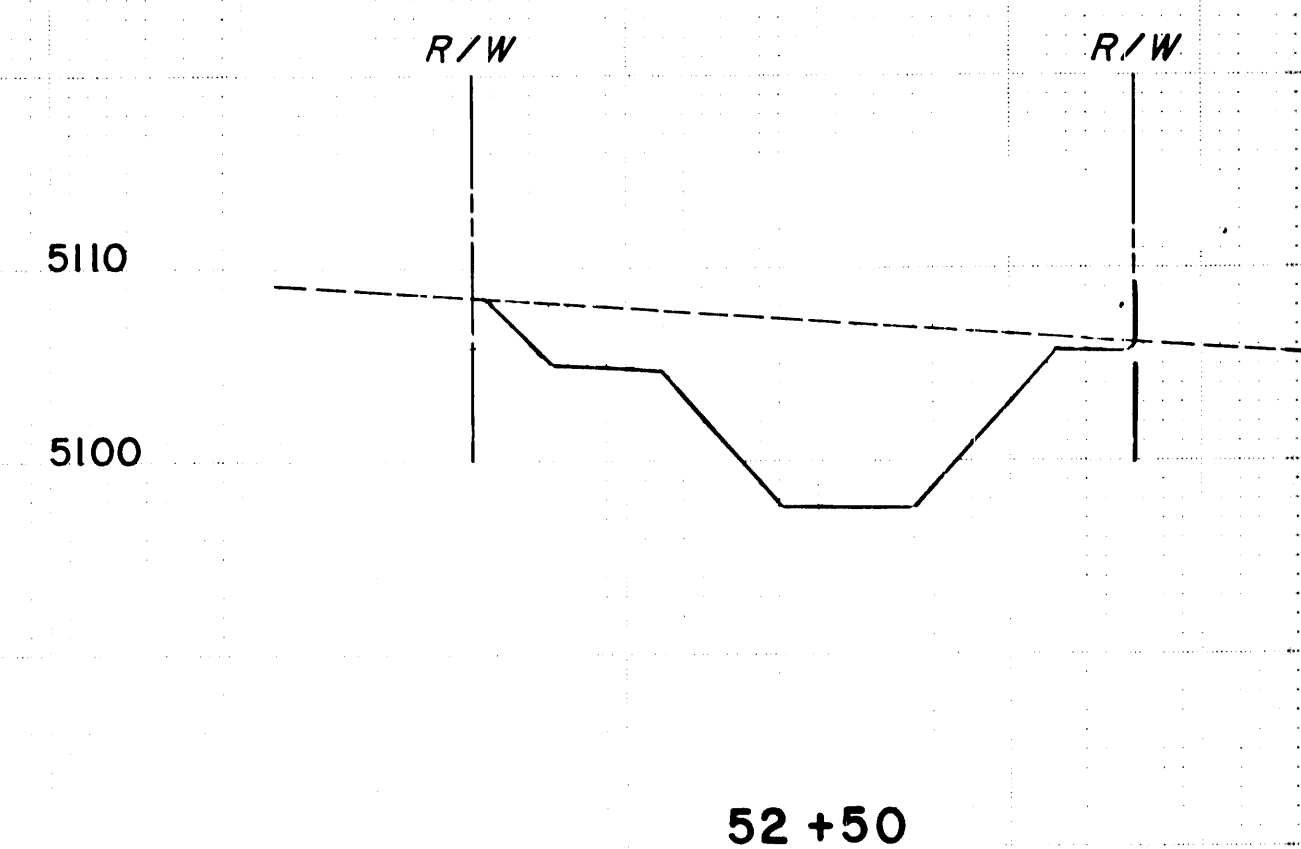
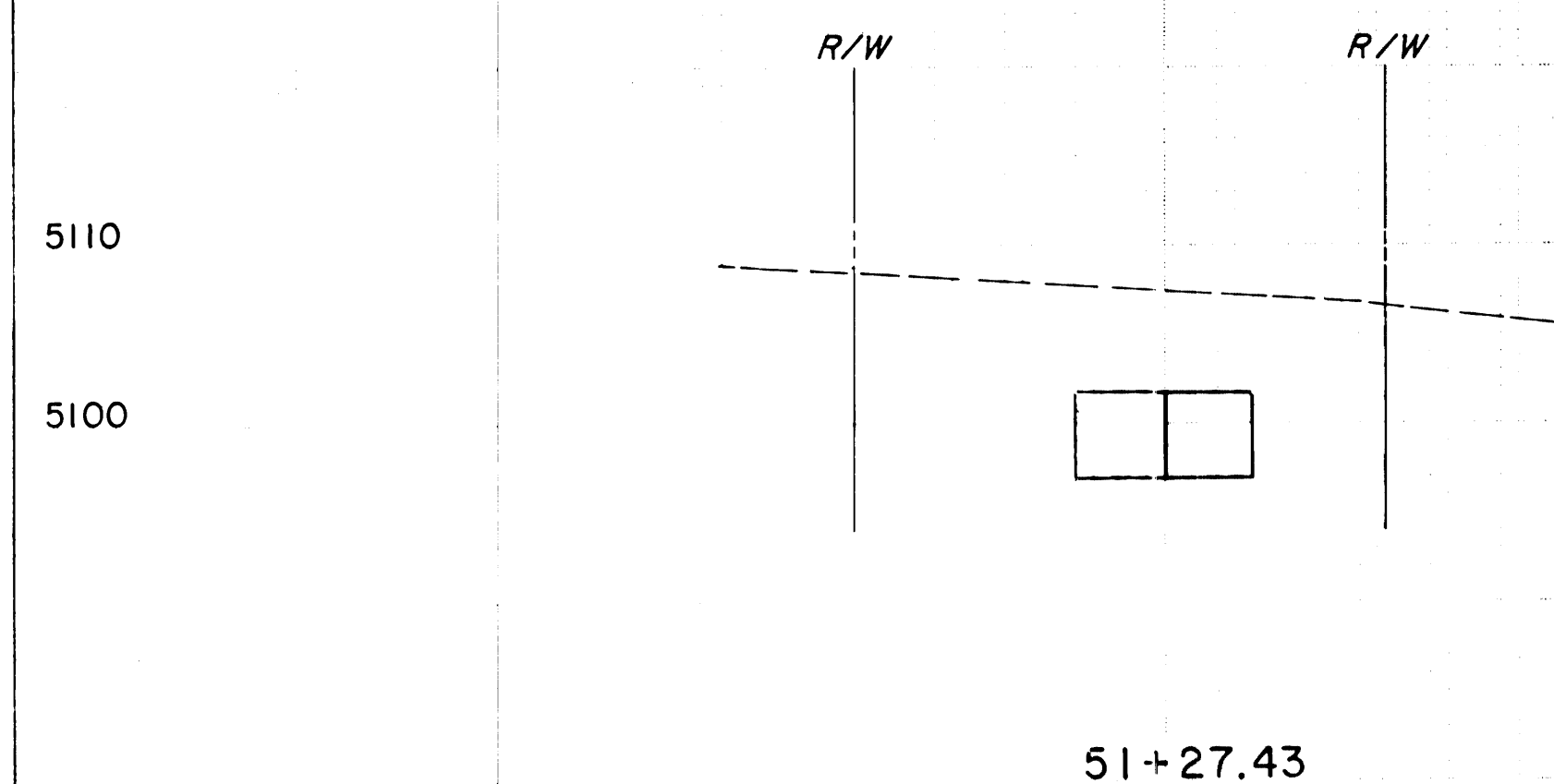
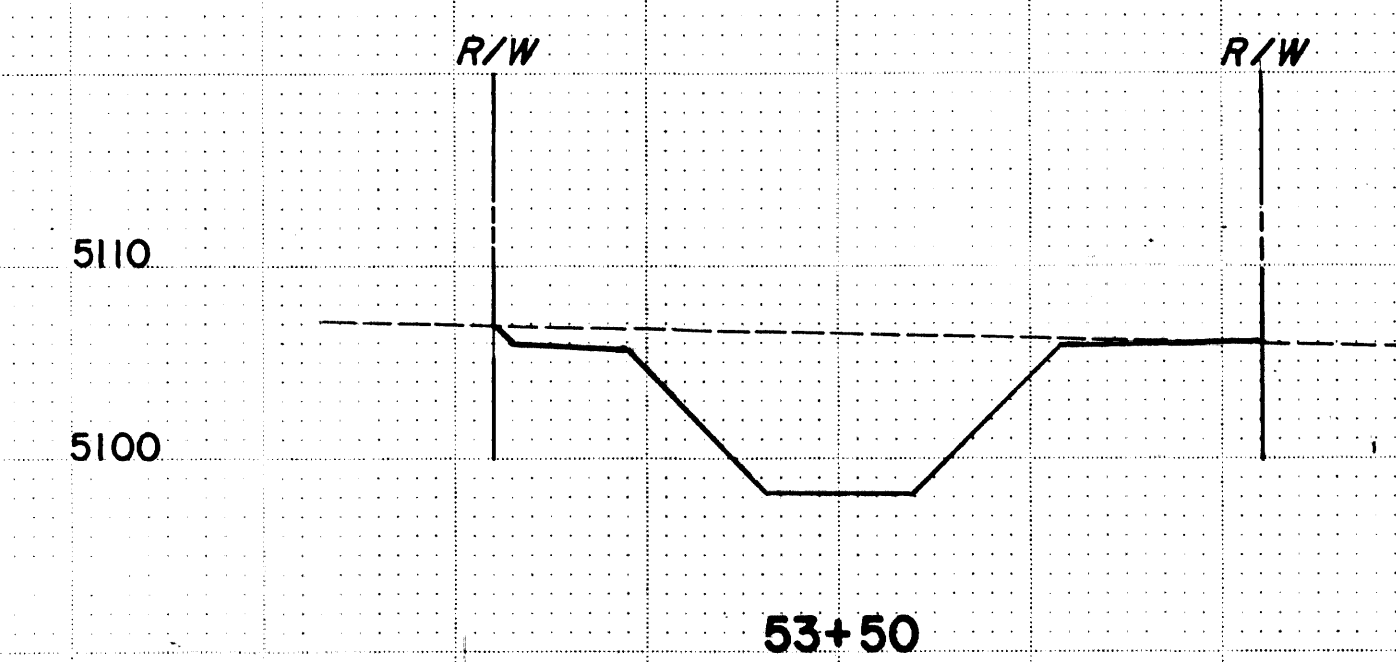
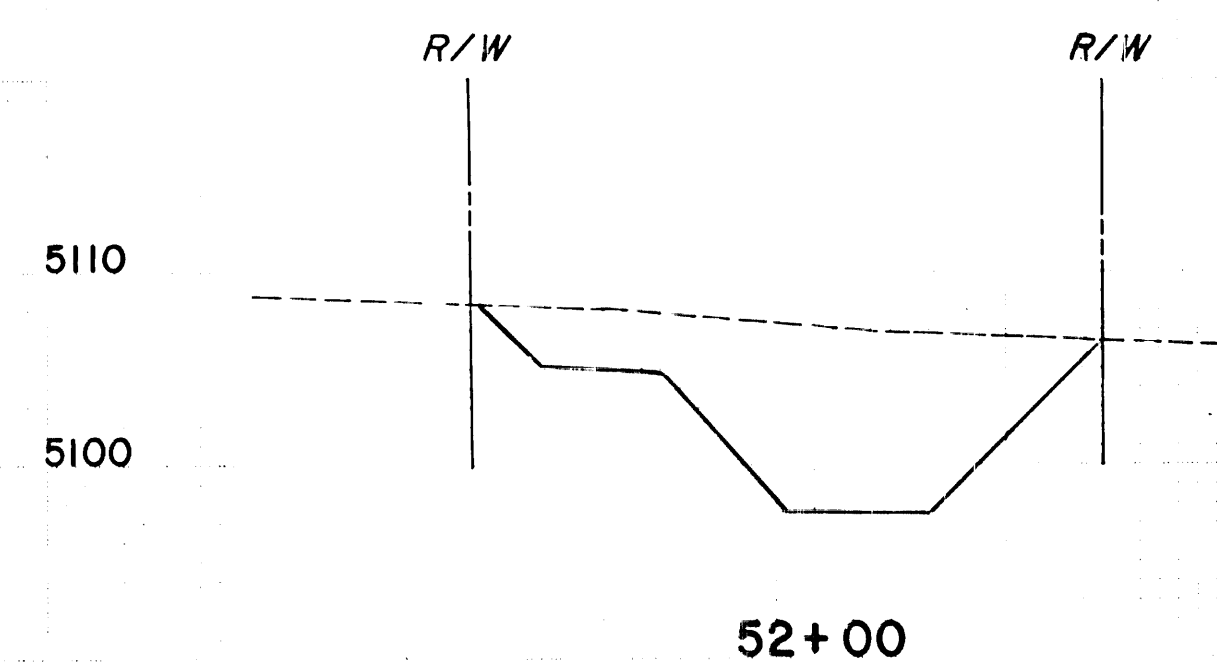
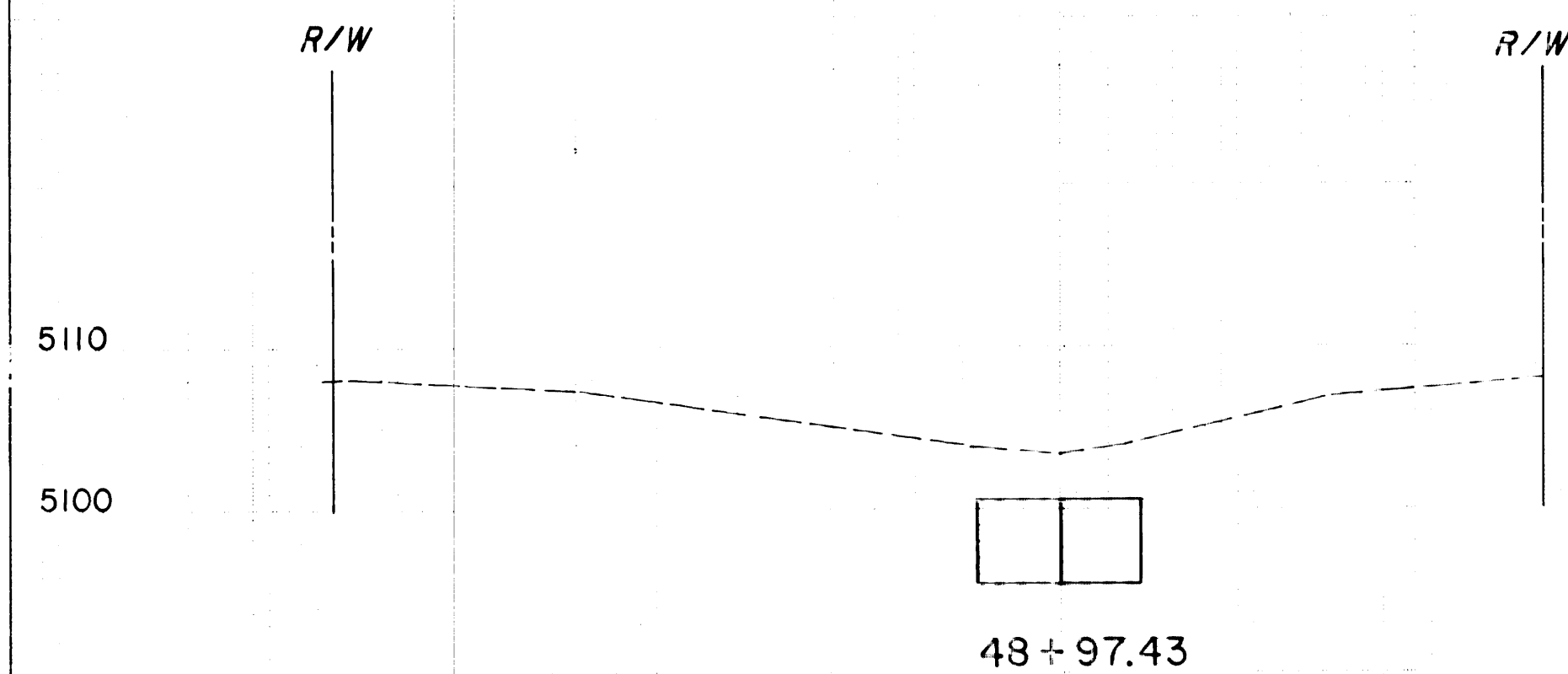
SHEETS





**MARIPOSA DIVERSION**  
STA. 48+26.66 TO STA. 54+50

SCALE: HORIZ.: 1" = 20'  
VERT.: 1" = 10'



HIGHWAY FEDERAL AID SHEET  
 PLATE 3-FULL CROSS SECTION-FULL DO  
 TELEDYNE  
 PRINTED IN U.S.A.

**DENNEY - GROSS & ASSOC., INC.**  
ENGINEERS                      SURVEYORS                      PLANNERS  
2400 COMANCHE RD. N.E., ALBUQUERQUE, NEW MEX.

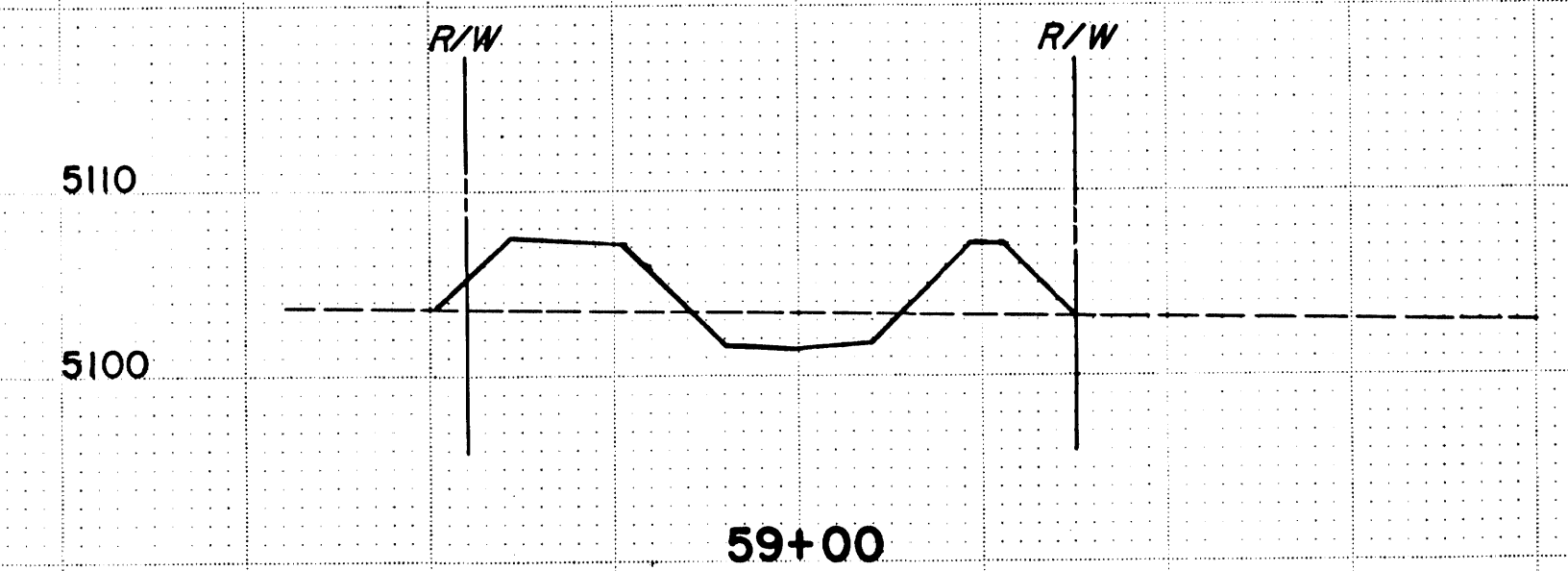
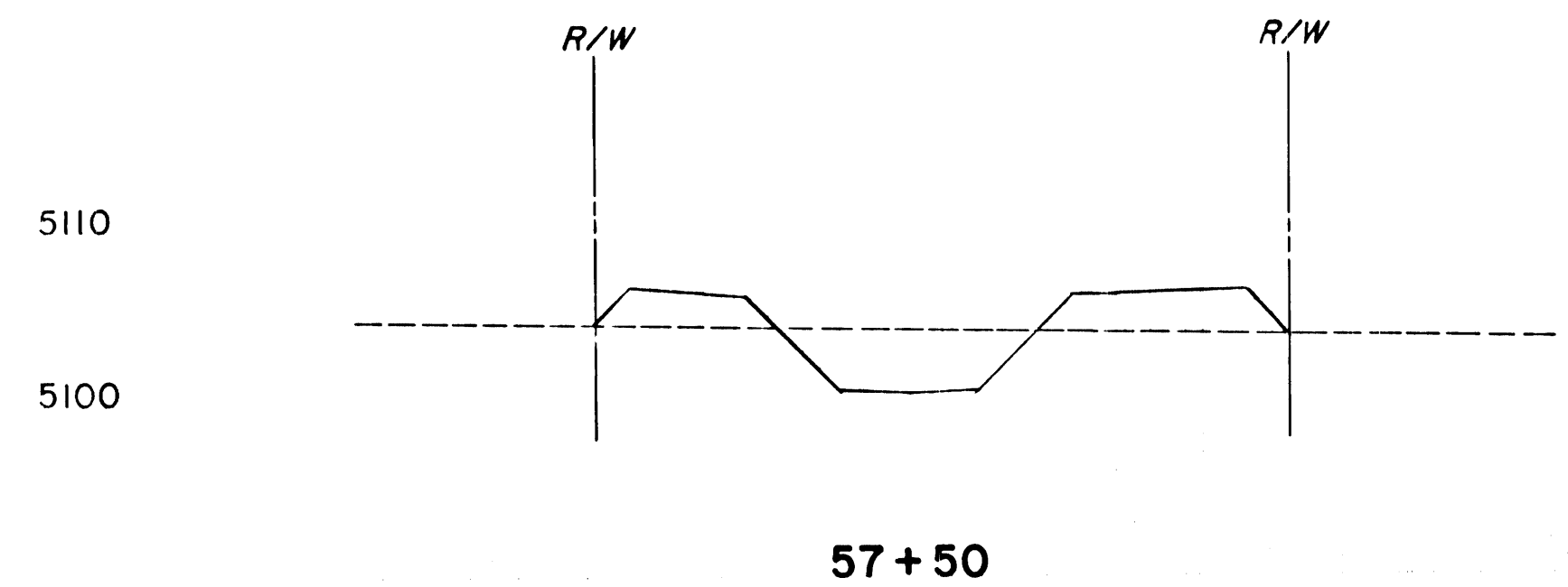
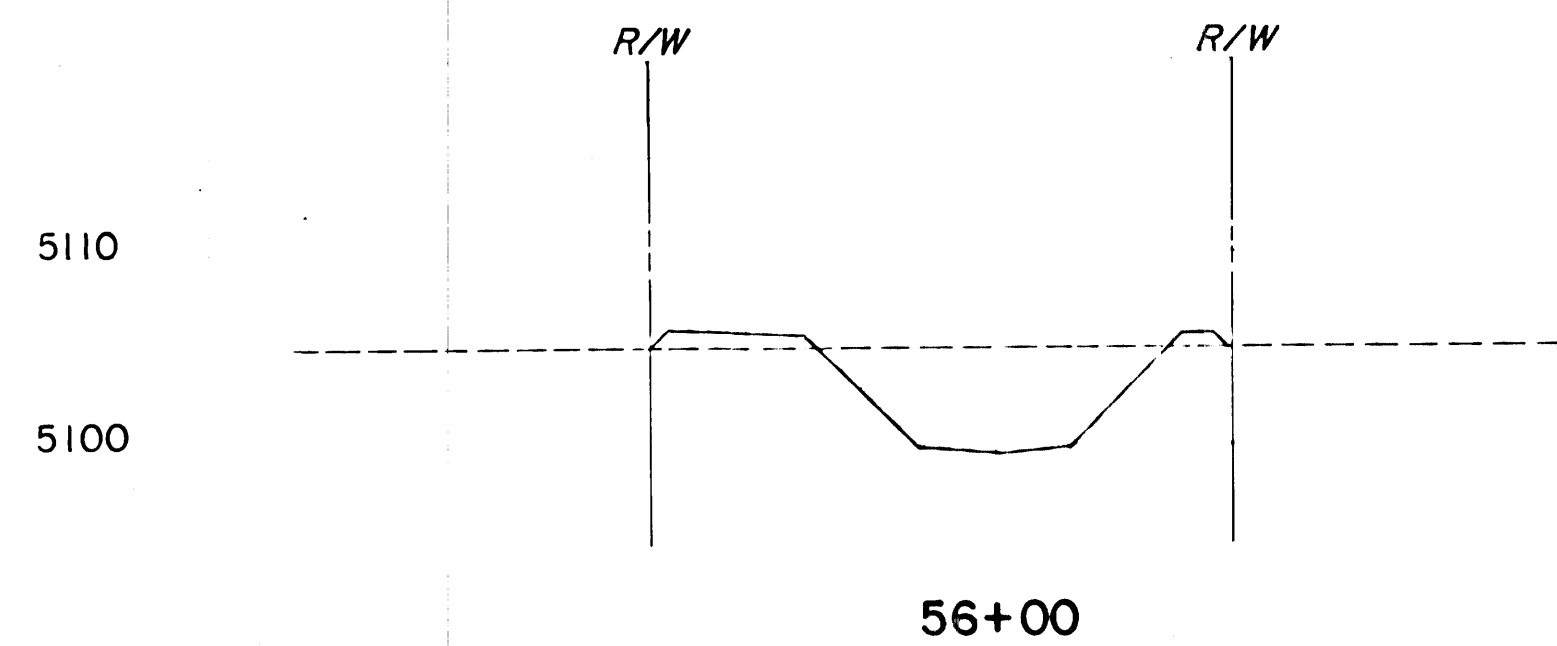
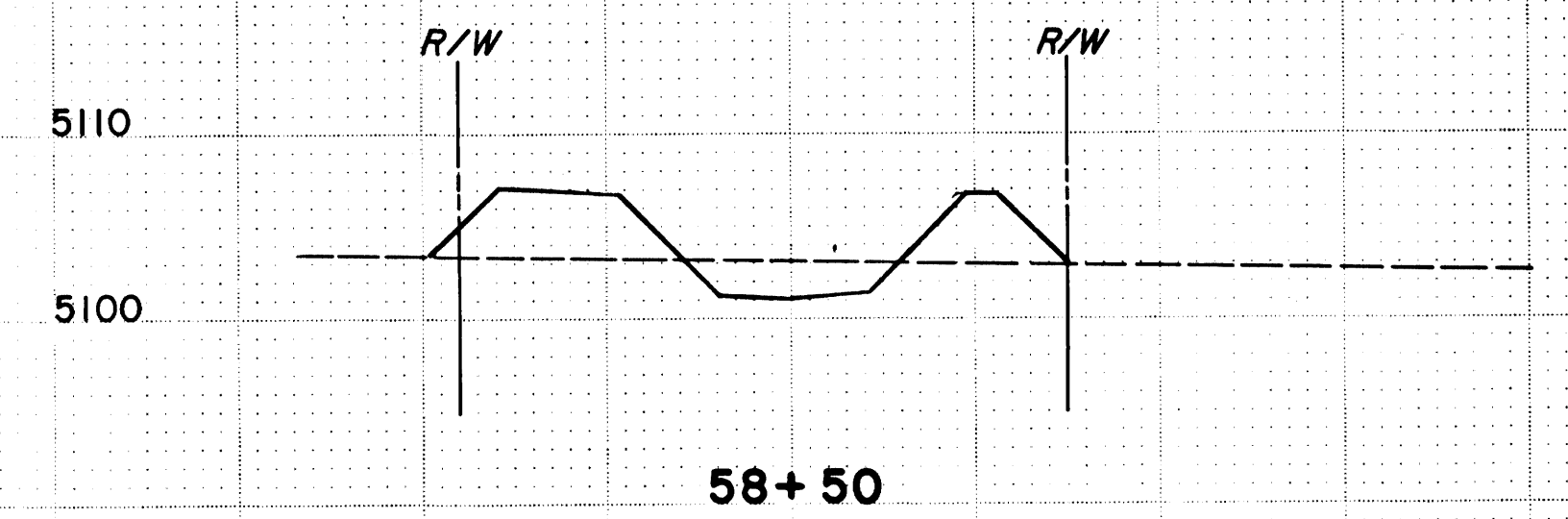
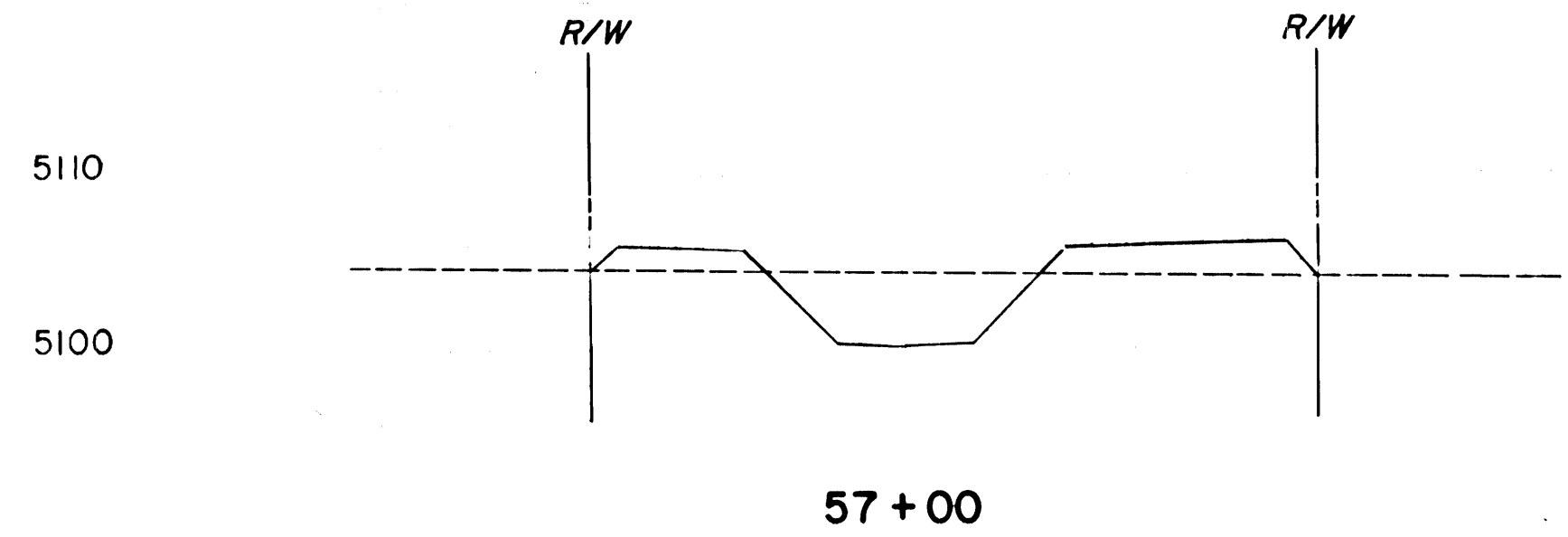
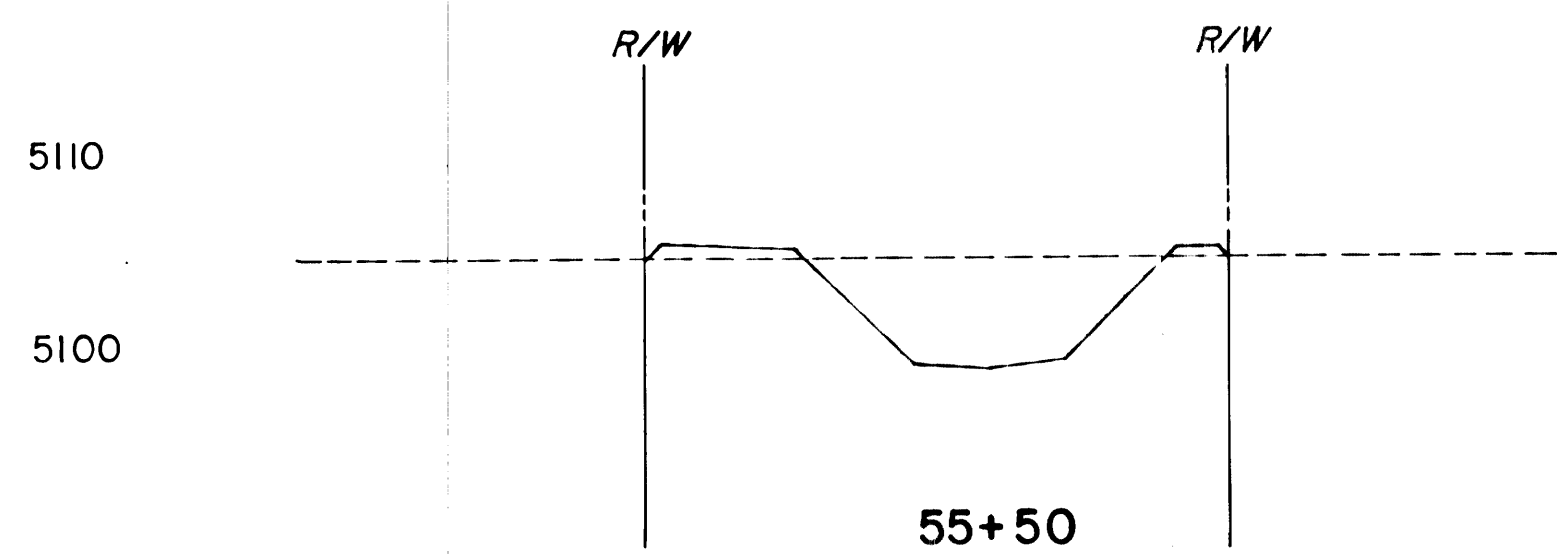
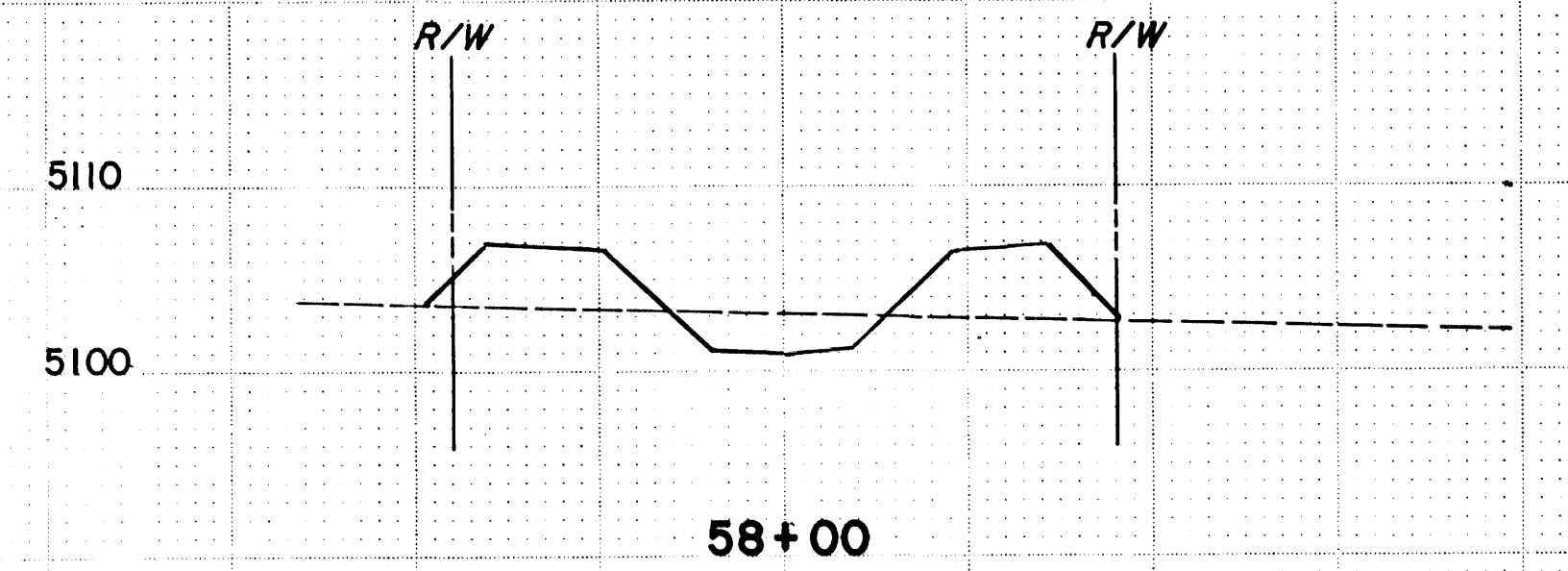
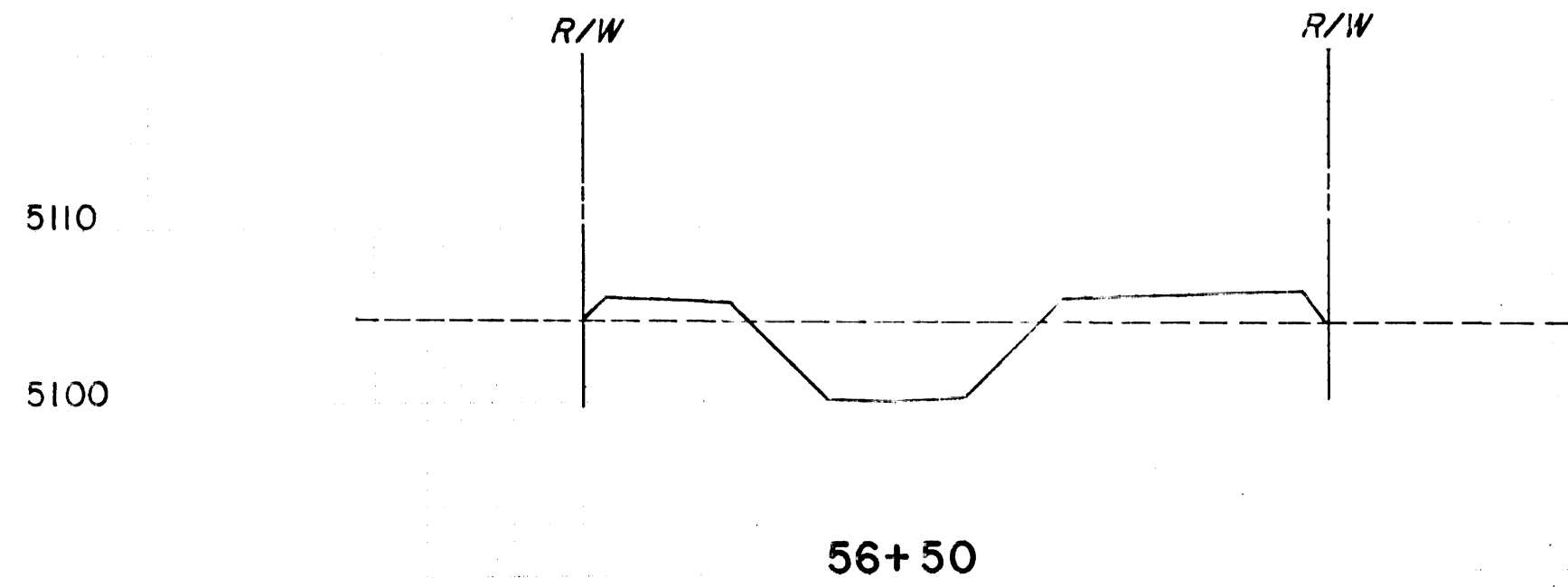
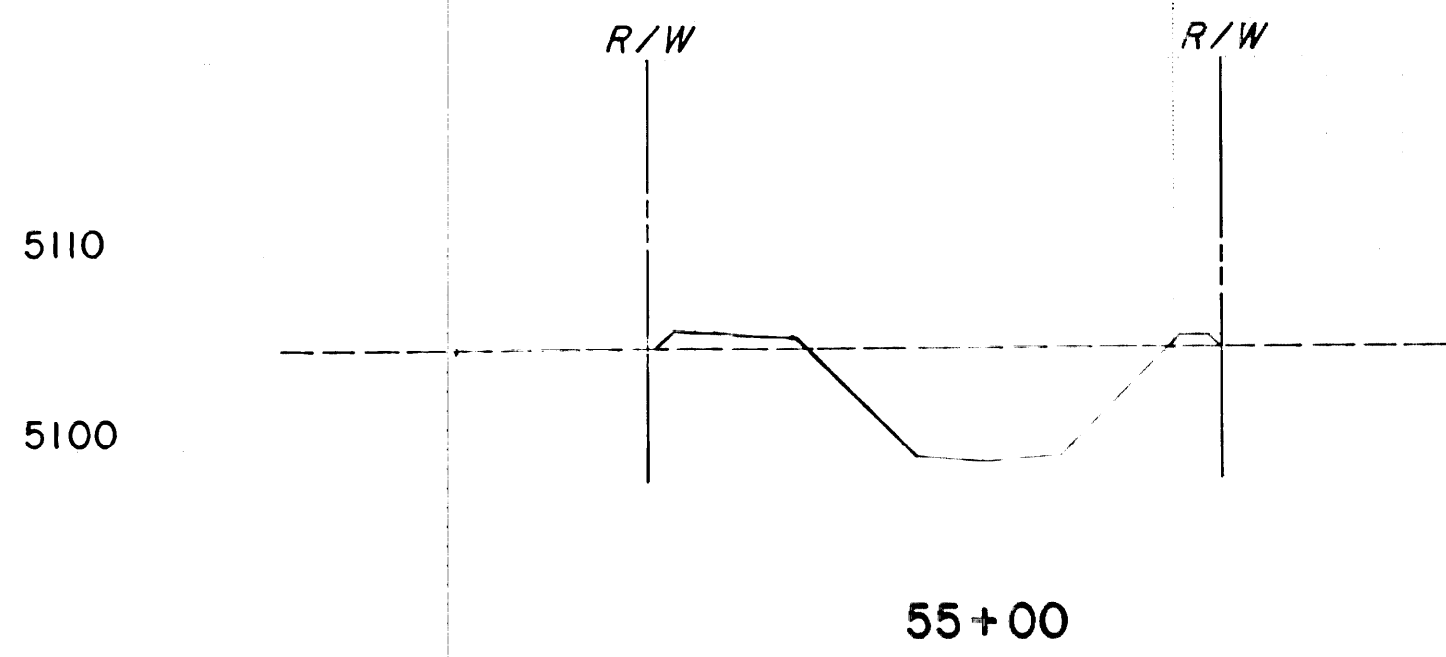
**PHASE 2, MARIPOSA DIVERSION,  
BOCA NEGRA IMPROVEMENTS &  
DETENTION BASIN**

Sheet 18 of 36



**MARIPOSA DIVERSION**  
STA. 55+00 TO STA. 59+00

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'

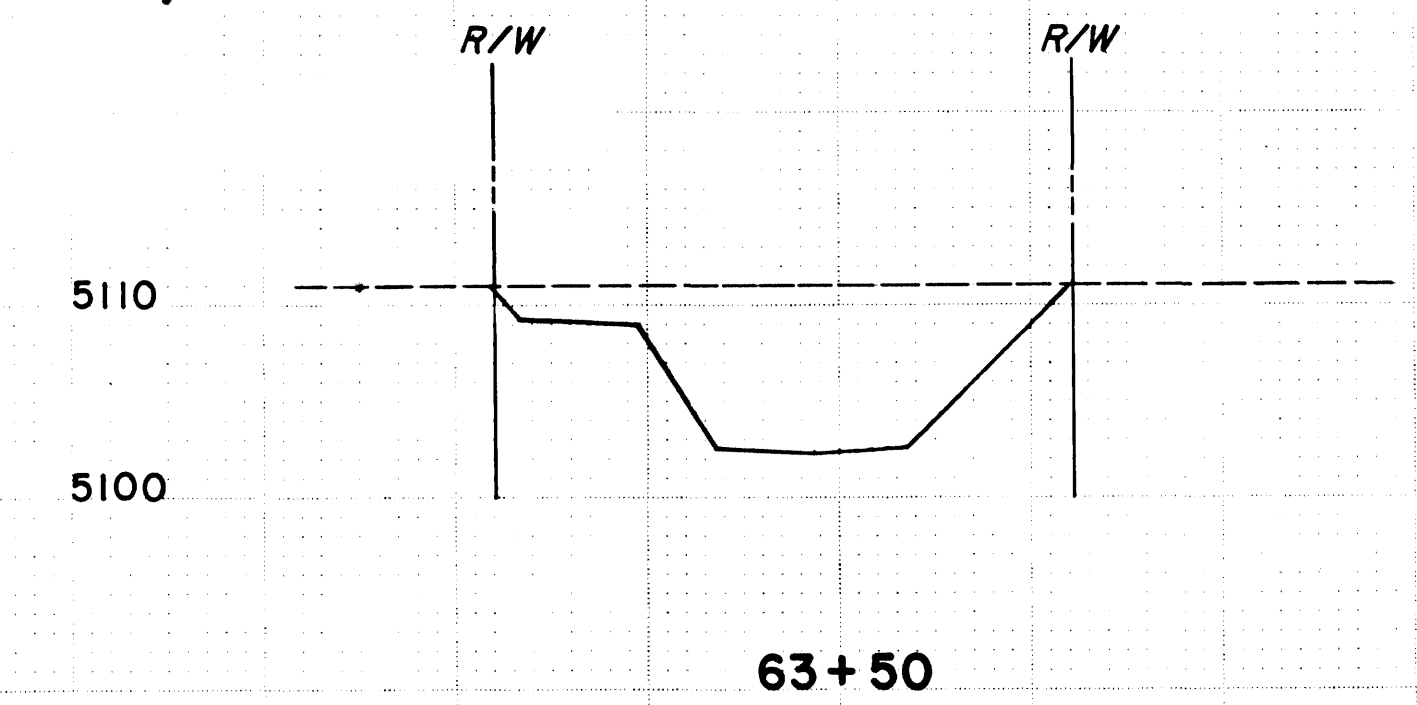
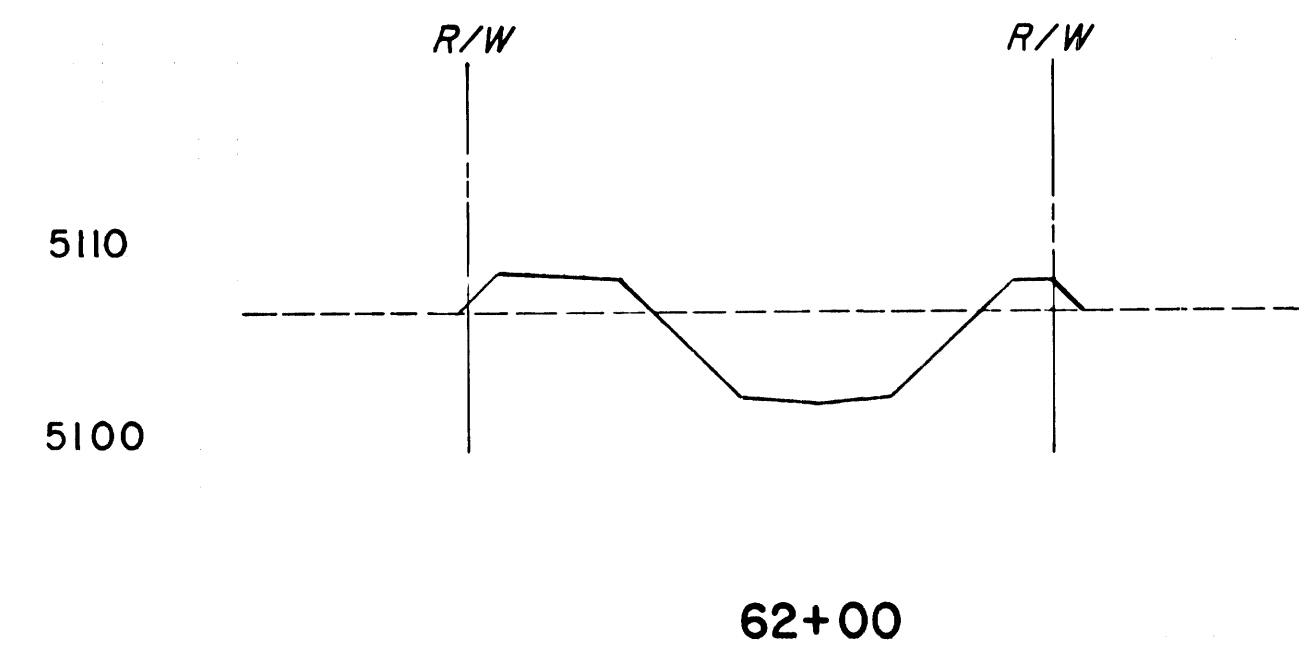
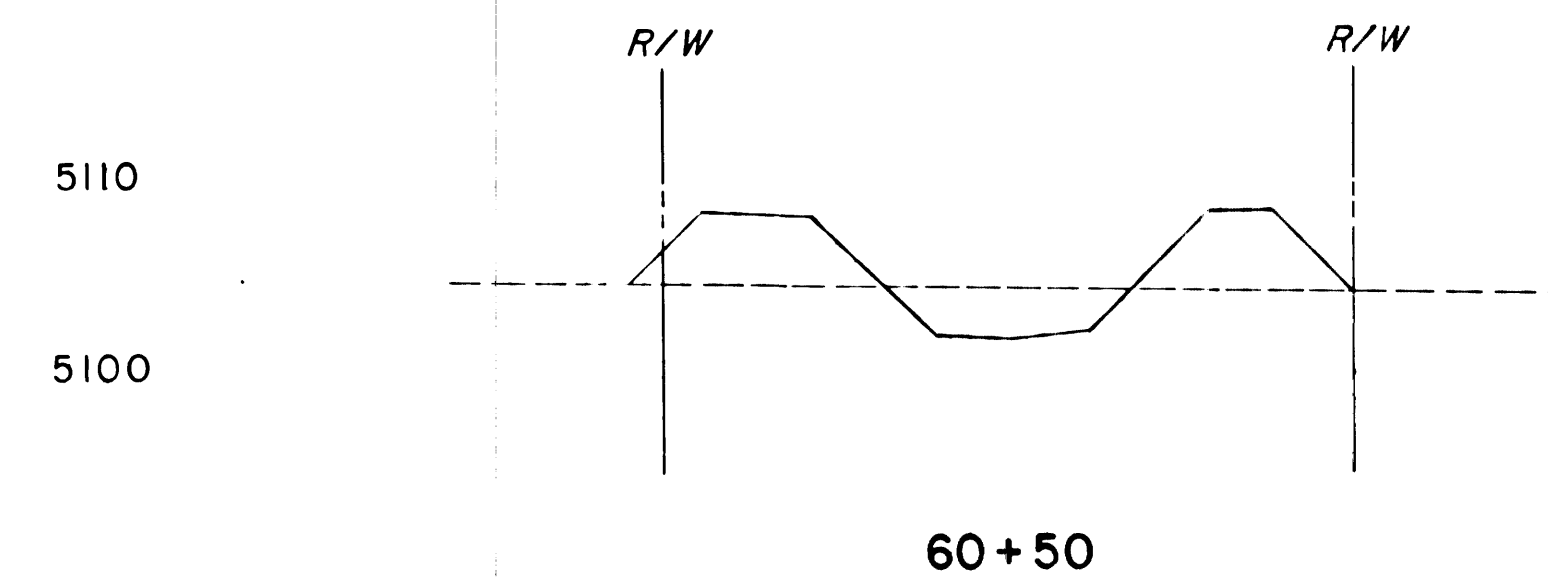
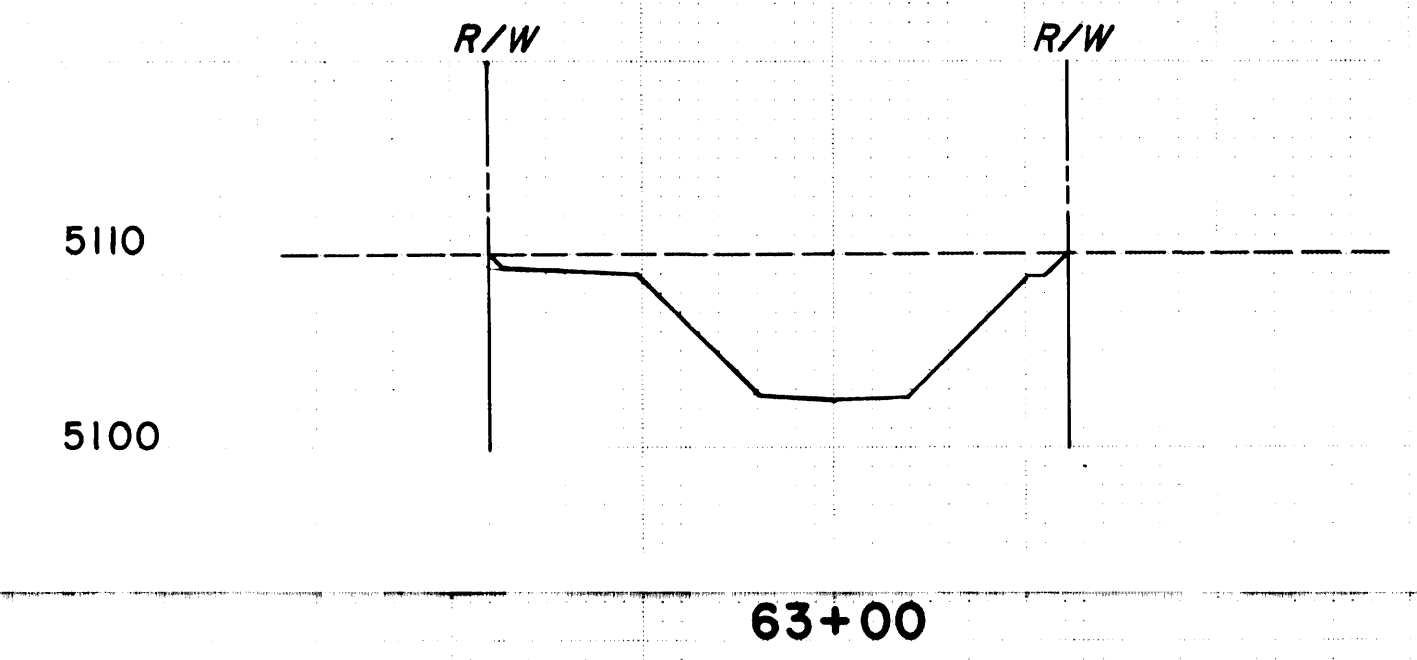
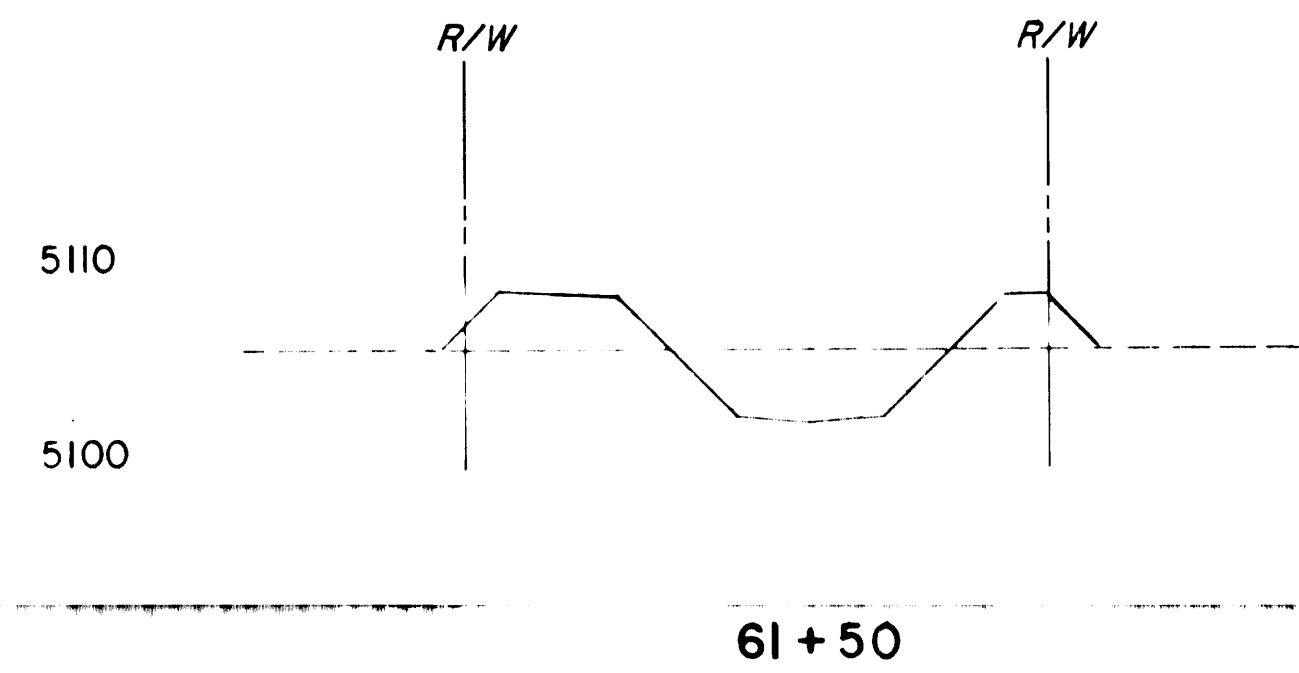
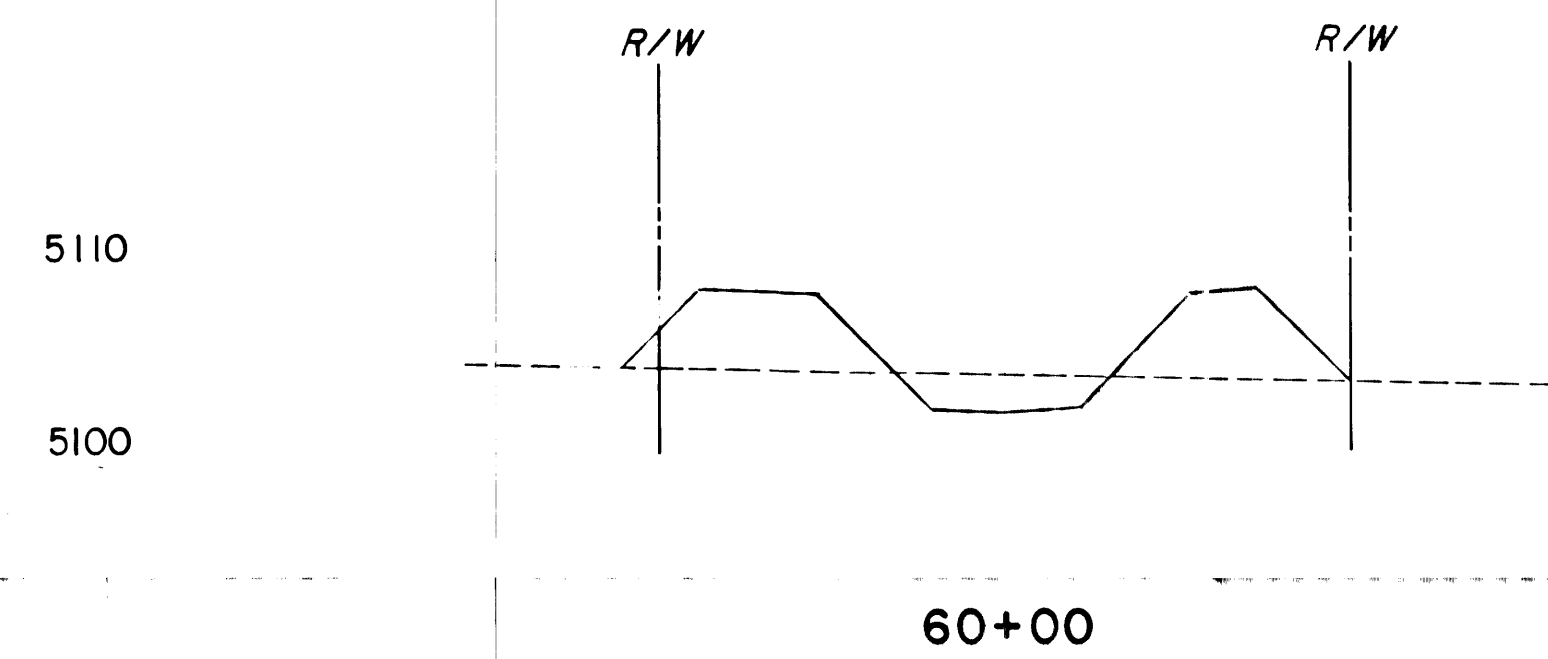
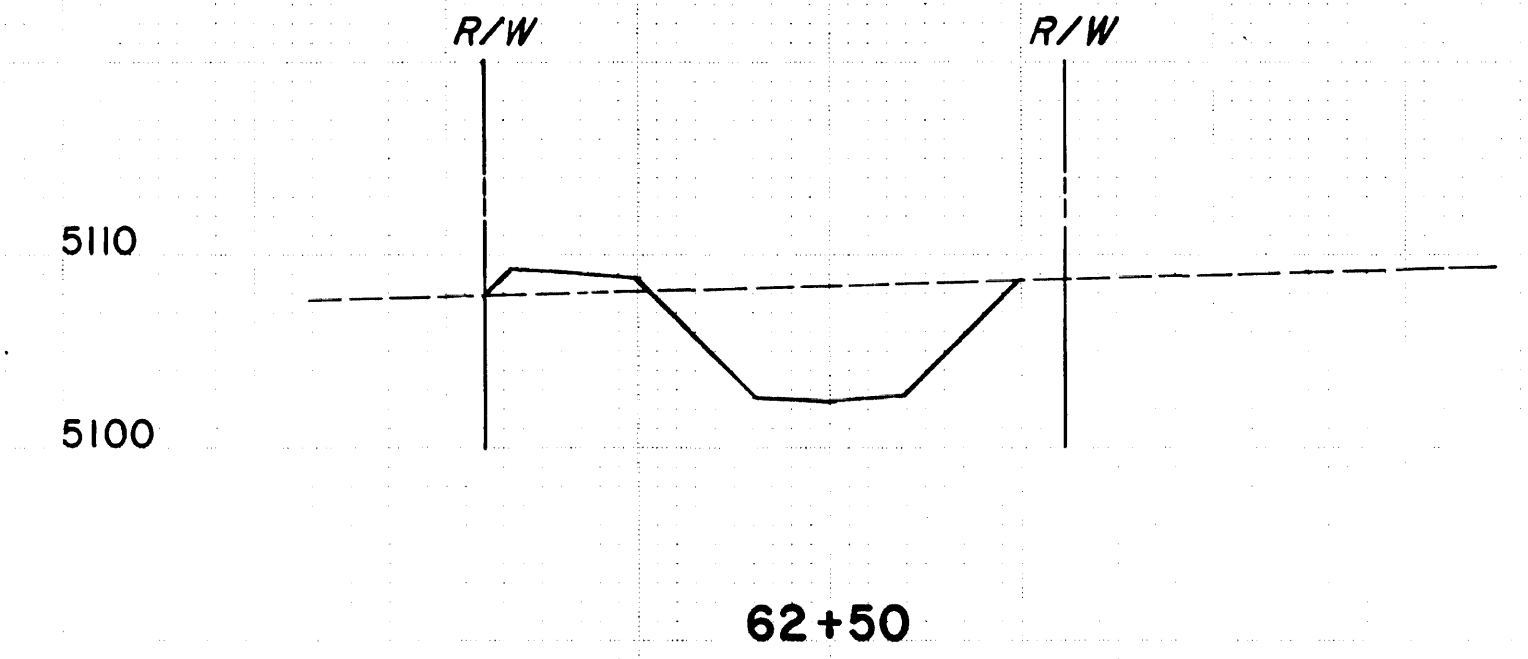
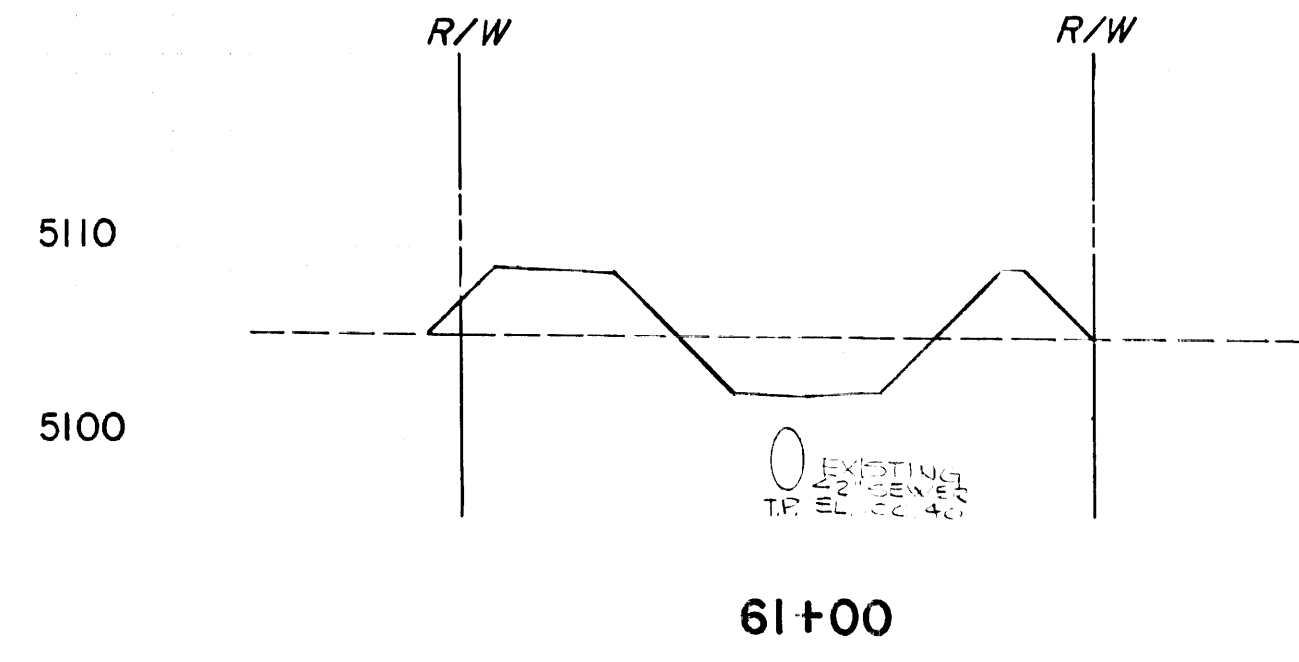
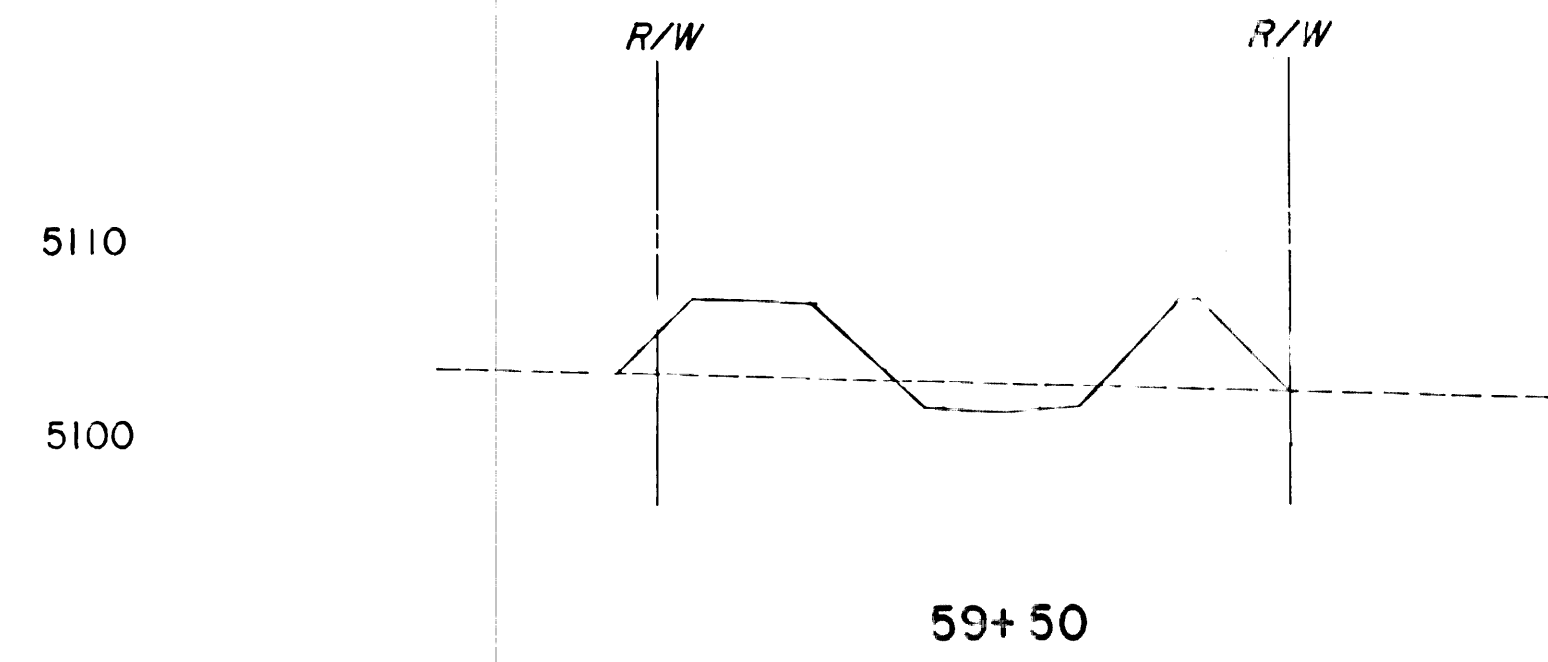


DATE  
BY  
FINAL SURVEY  
NO. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 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

DATE  
BY  
ORIGINAL SURVEY  
NO. 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

MARIPOSA DIVERSION  
STA. 59+50 TO STA. 63+50

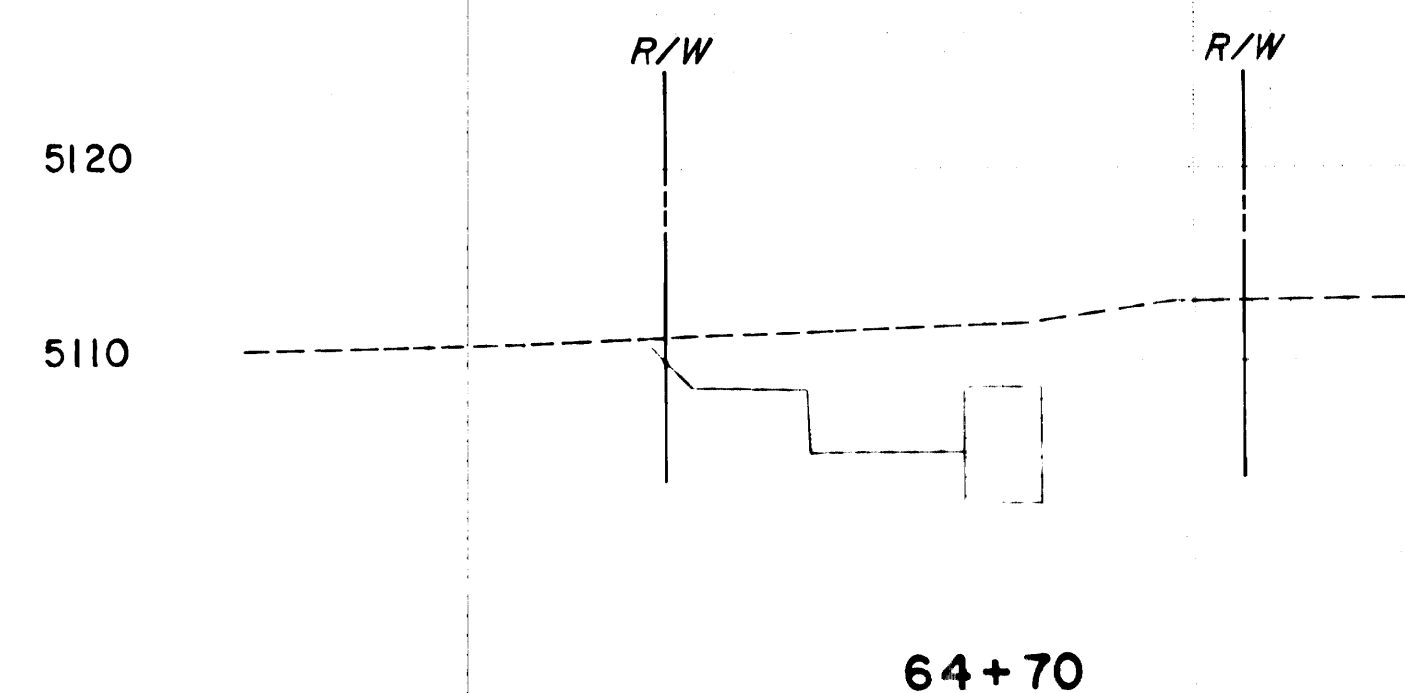
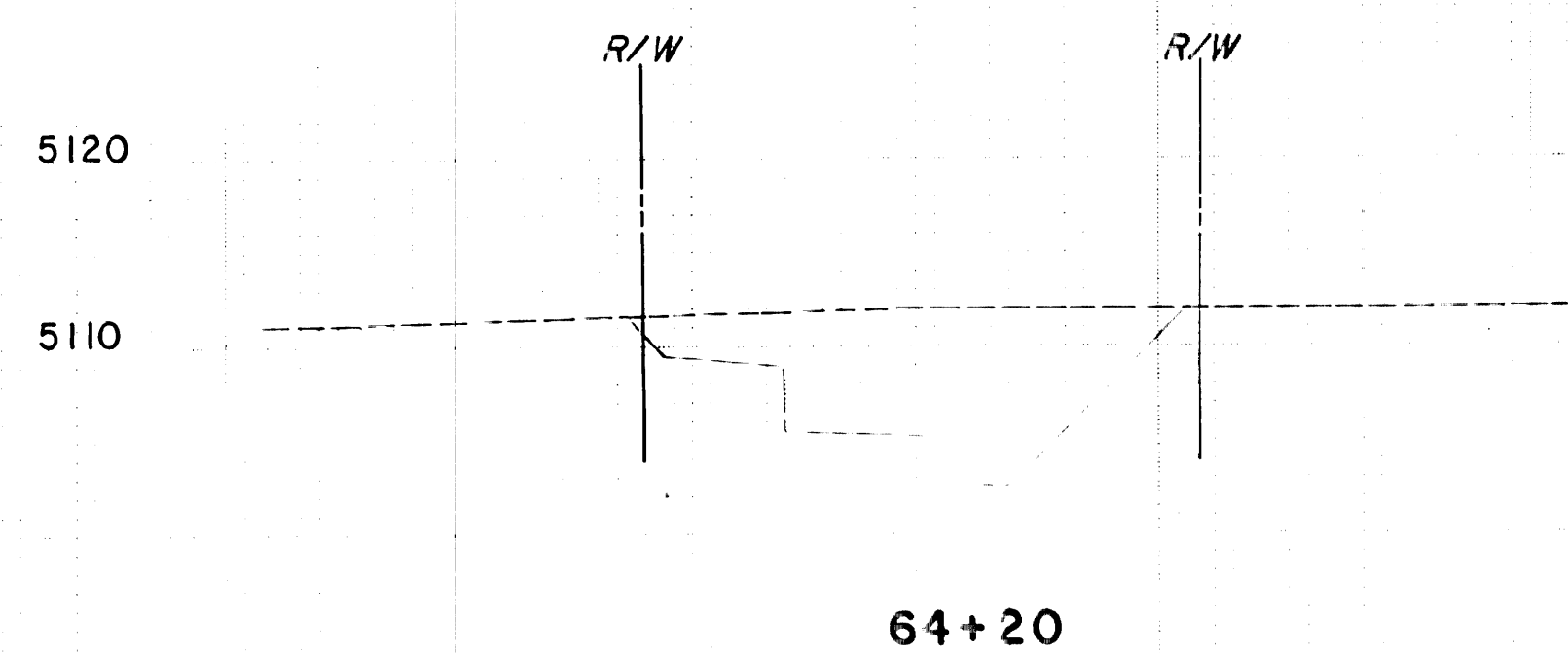
SCALE: HORIZ. 1"=20'  
VERT. 1"=10'





FINAL SURVEY	DATE	BY
	NO.	DATE CORRECTED
	NOTE BOOK	AREA
	NO.	DATE CORRECTED

ORIGINAL SURVEY	DATE	BY
	NO.	DATE CORRECTED
	NOTE BOOK	AREA
	NO.	DATE CORRECTED

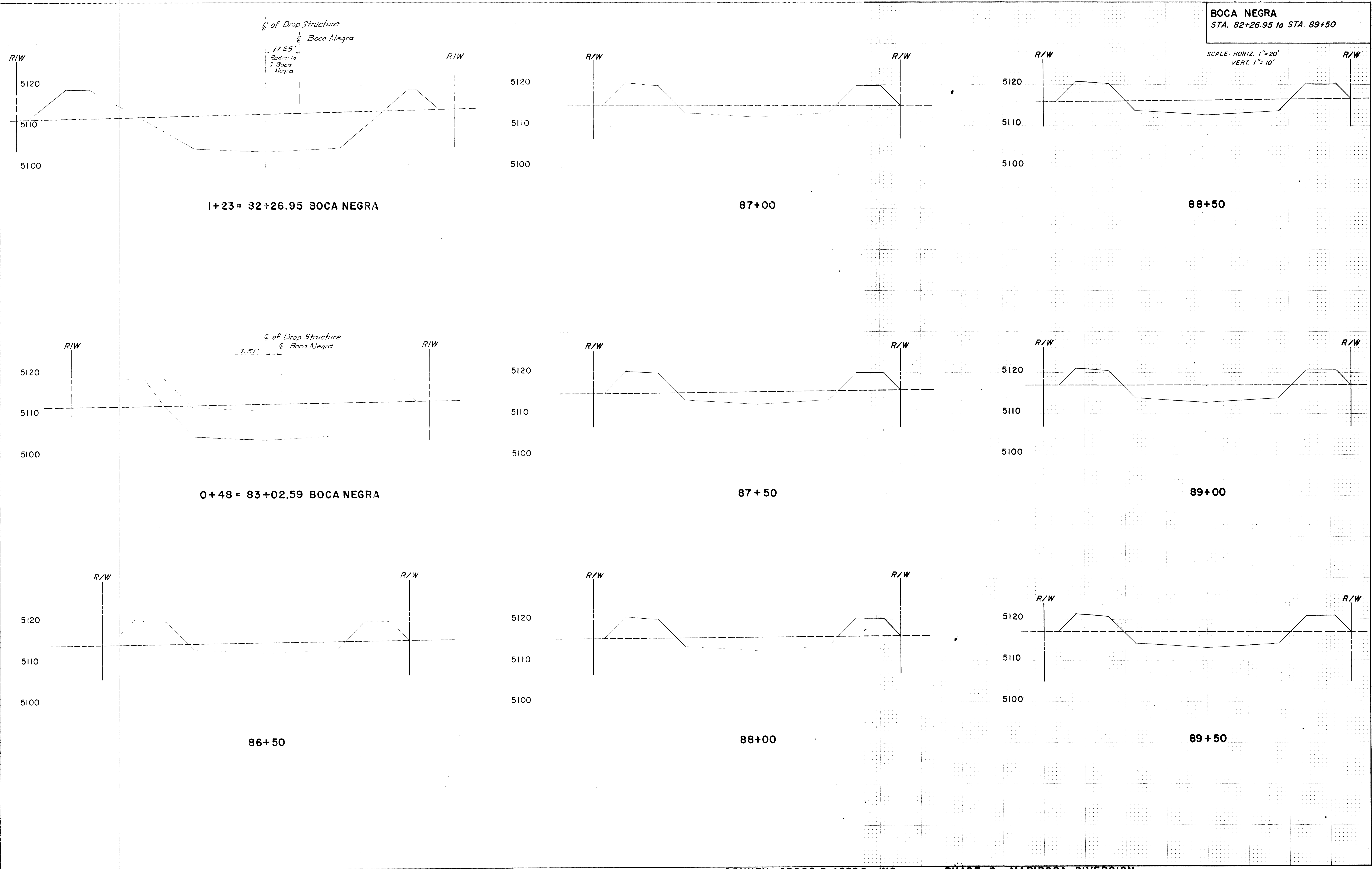


MARIPOSA DIVERSION  
STA. 64+20 TO STA. 64+70

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'

FINAL SURVEY  
 DATE: 11/11/11  
 BY: [Signature]  
 CHECKED: [Signature]  
 APPROVED: [Signature]

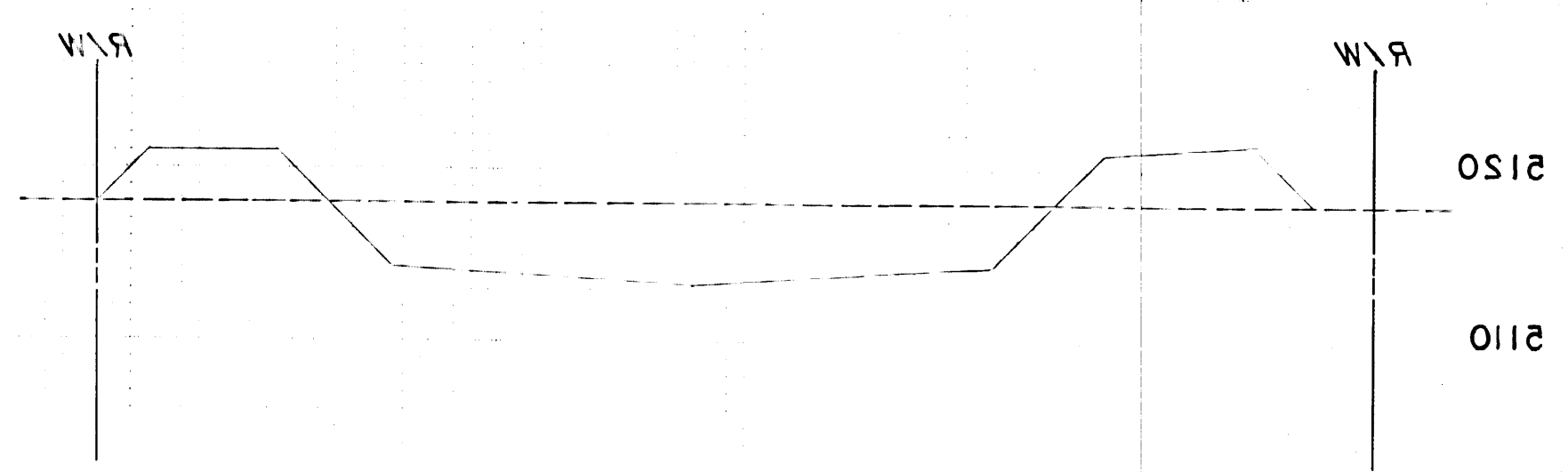
ORIGINAL SURVEY  
 DATE: 11/11/11  
 BY: [Signature]  
 CHECKED: [Signature]  
 APPROVED: [Signature]



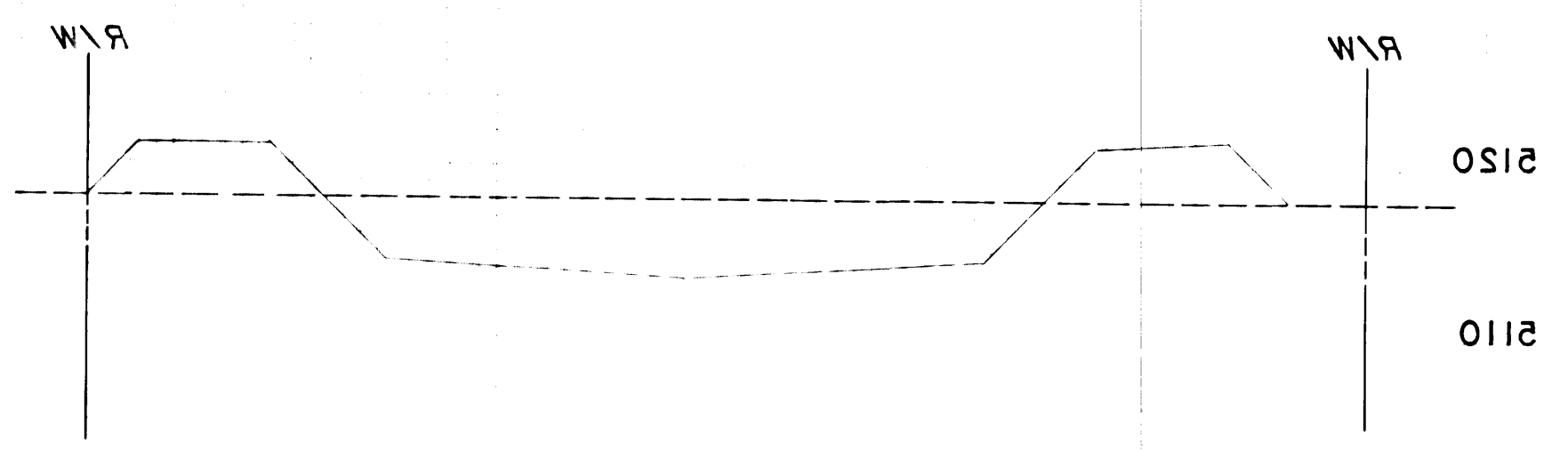


DATE	NO.	BY
APPROVED	DATE	BY
DESIGNED	DATE	BY
CHECKED	DATE	BY
IN CHARGE	DATE	BY
PROJECT	DATE	BY
NO.	DATE	BY

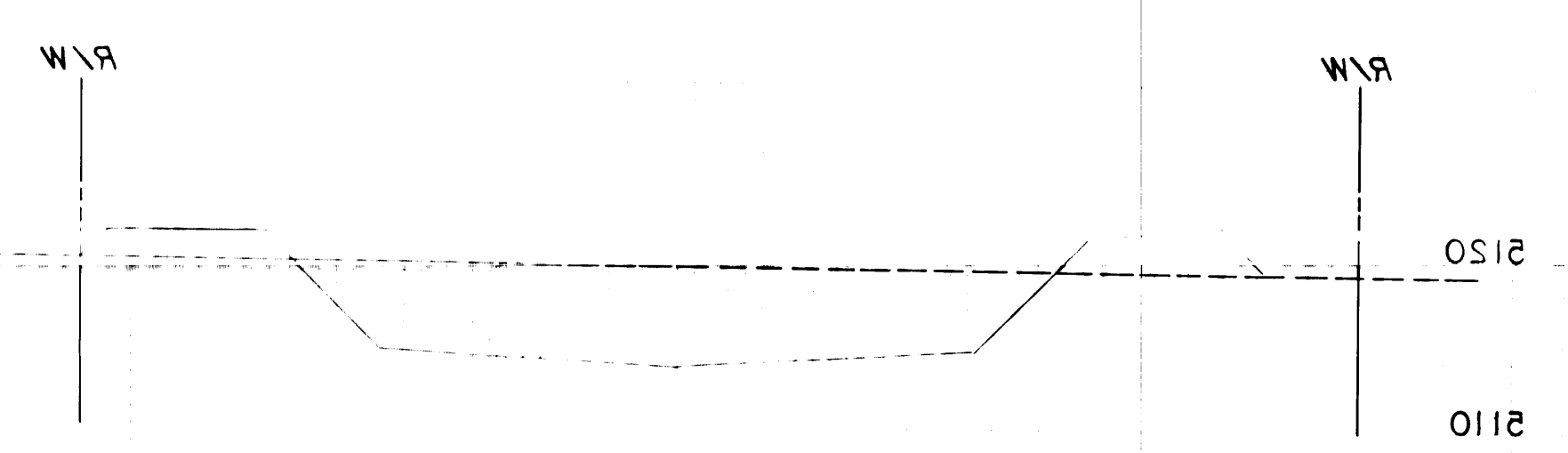
DATE	NO.	BY
APPROVED	DATE	BY
DESIGNED	DATE	BY
CHECKED	DATE	BY
IN CHARGE	DATE	BY
PROJECT	DATE	BY
NO.	DATE	BY



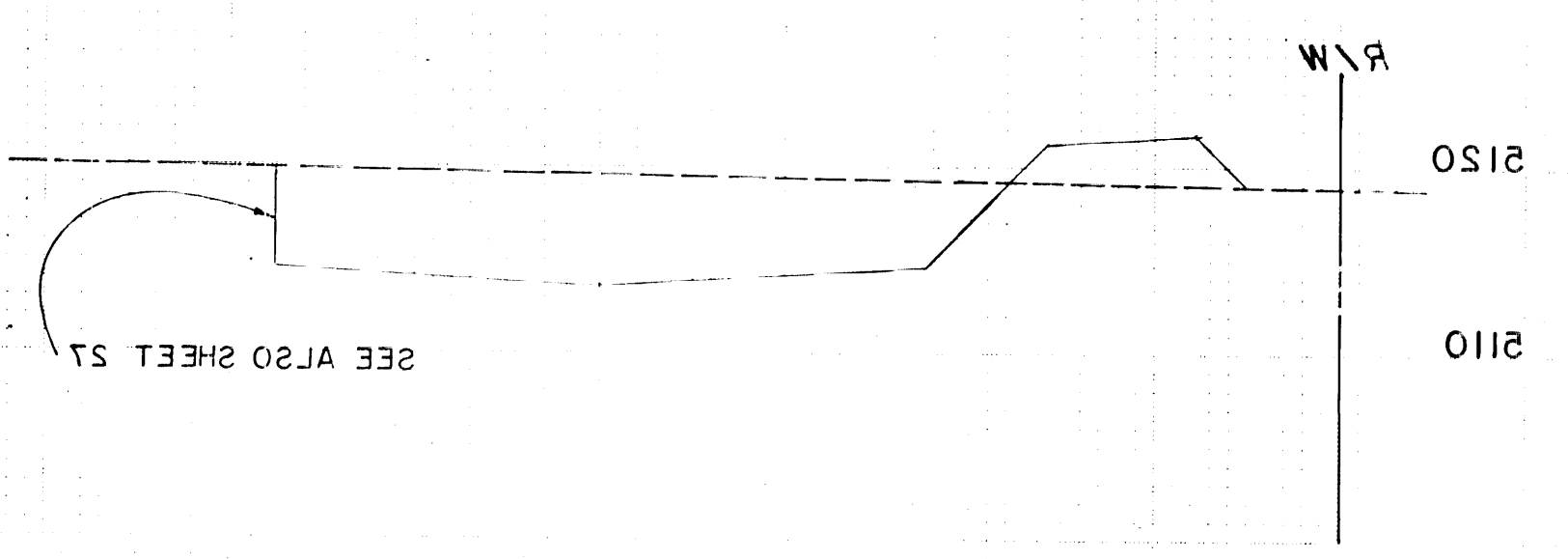
00+00



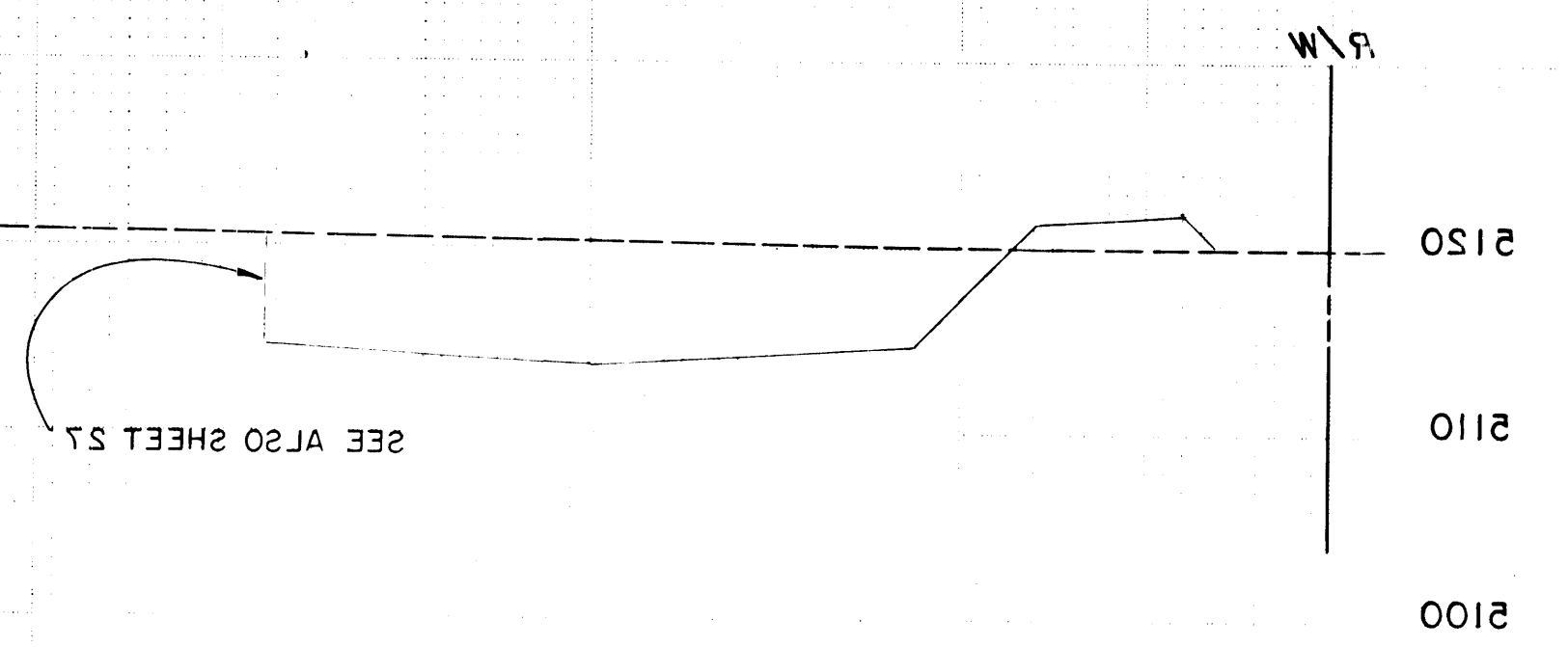
00+50



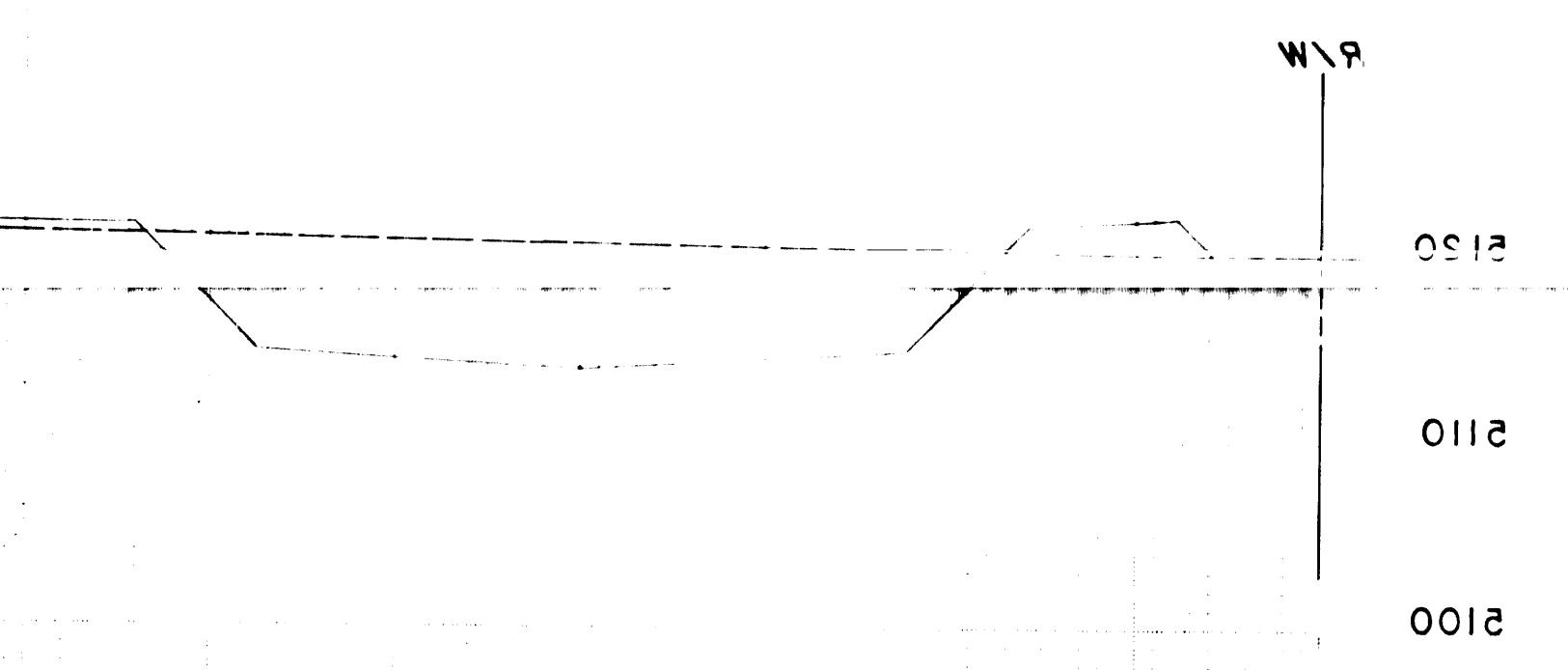
01+00



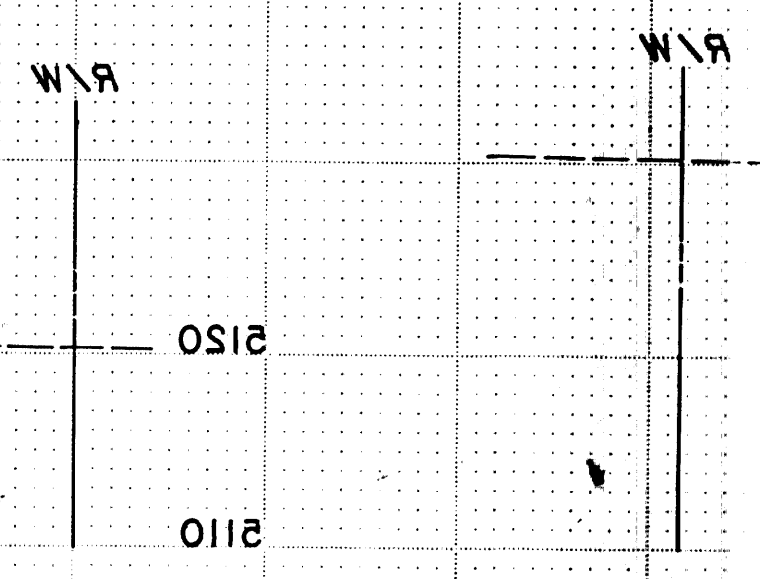
01+50



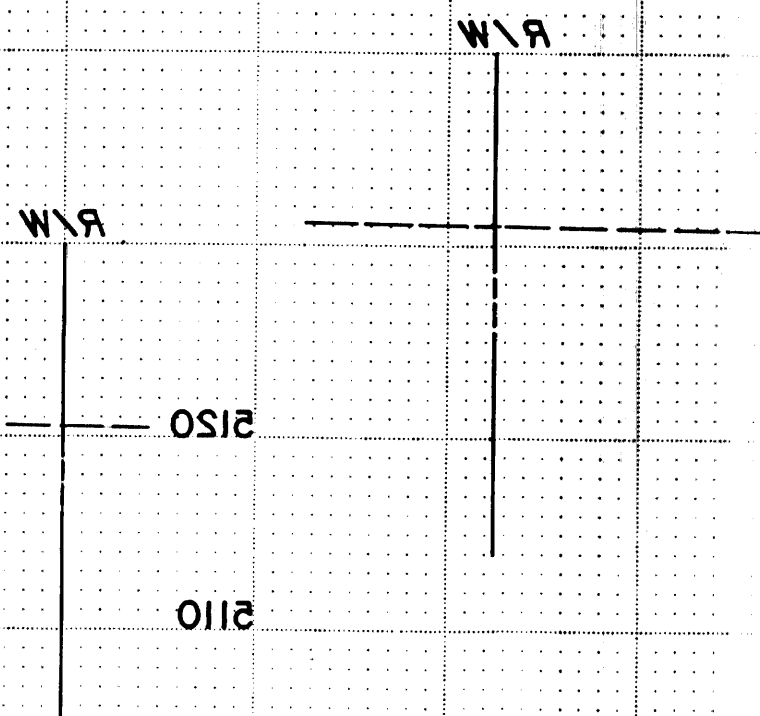
02+00



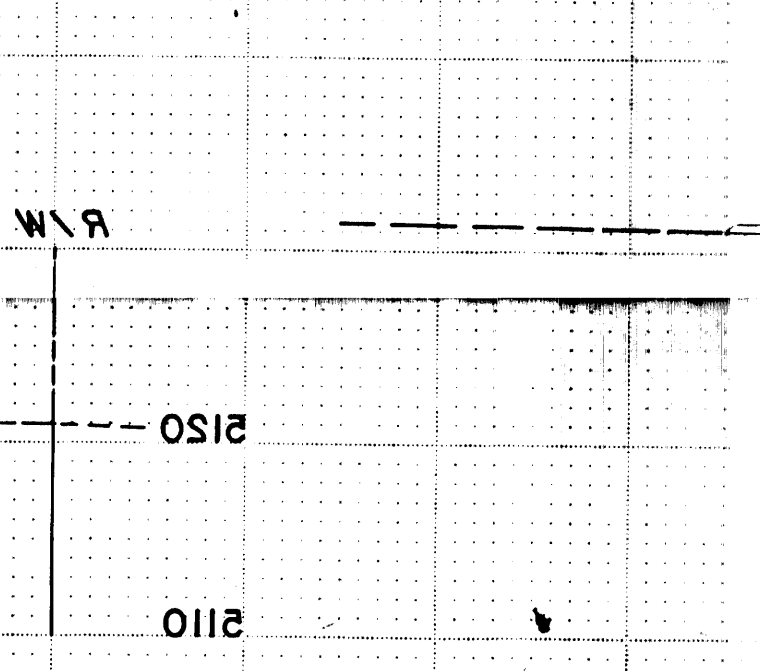
02+50



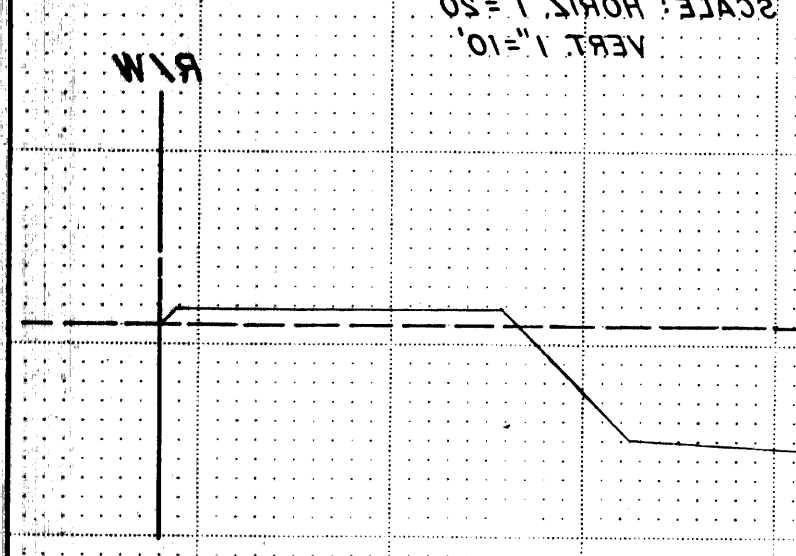
03+00



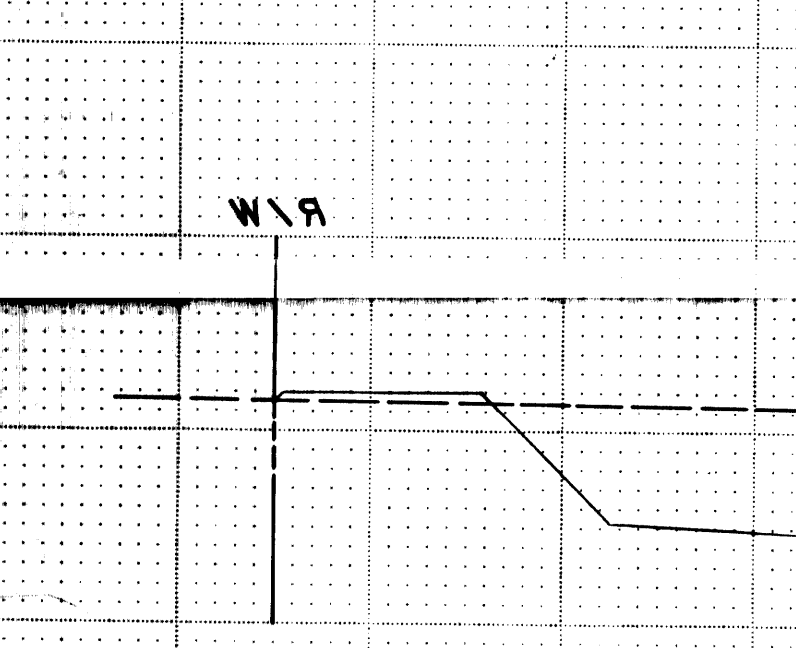
03+50



04+00



04+50



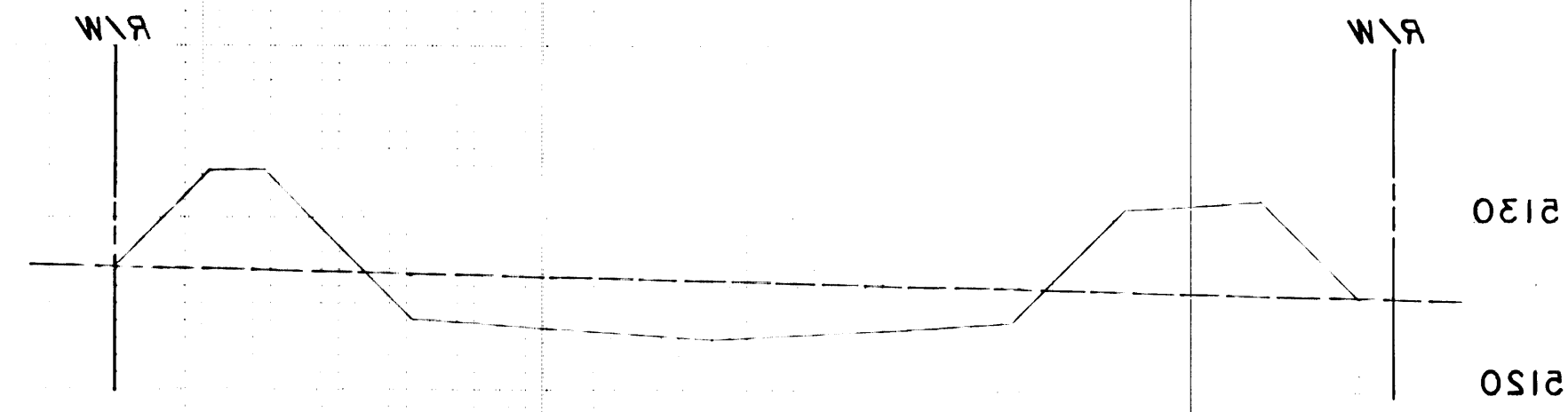
05+00

BOCA NEGRA  
STA. 00+00 TO STA. 04+00

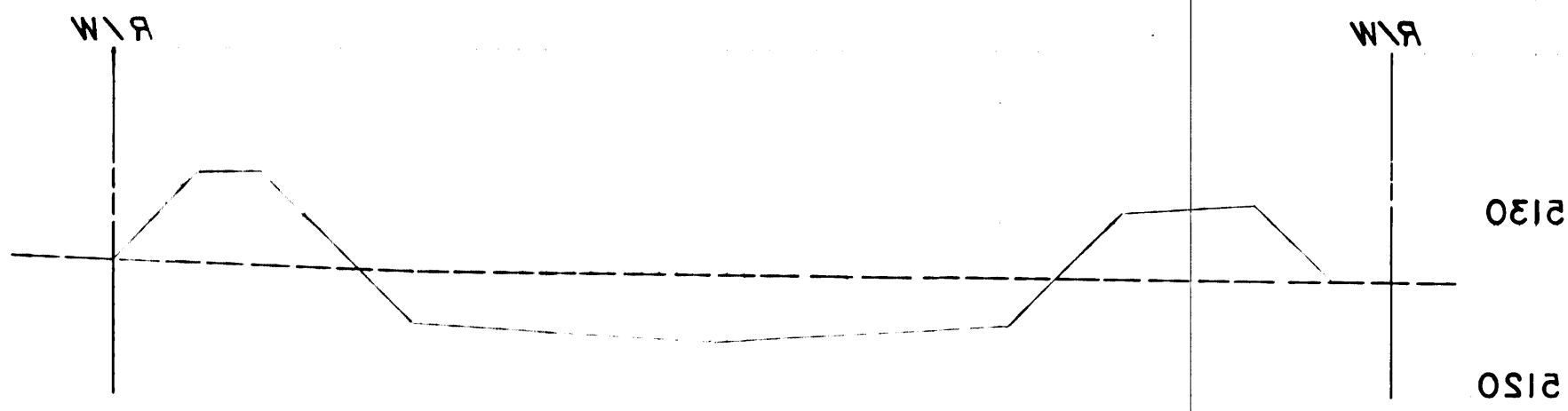
SCALE: HORIZ. 1"=50'  
VERT. 1"=10'

STATE	DATE	BY	NO.
YAMUO	1/1/10	YAMUO	100
YAMUO	1/1/10	YAMUO	100
YAMUO	1/1/10	YAMUO	100

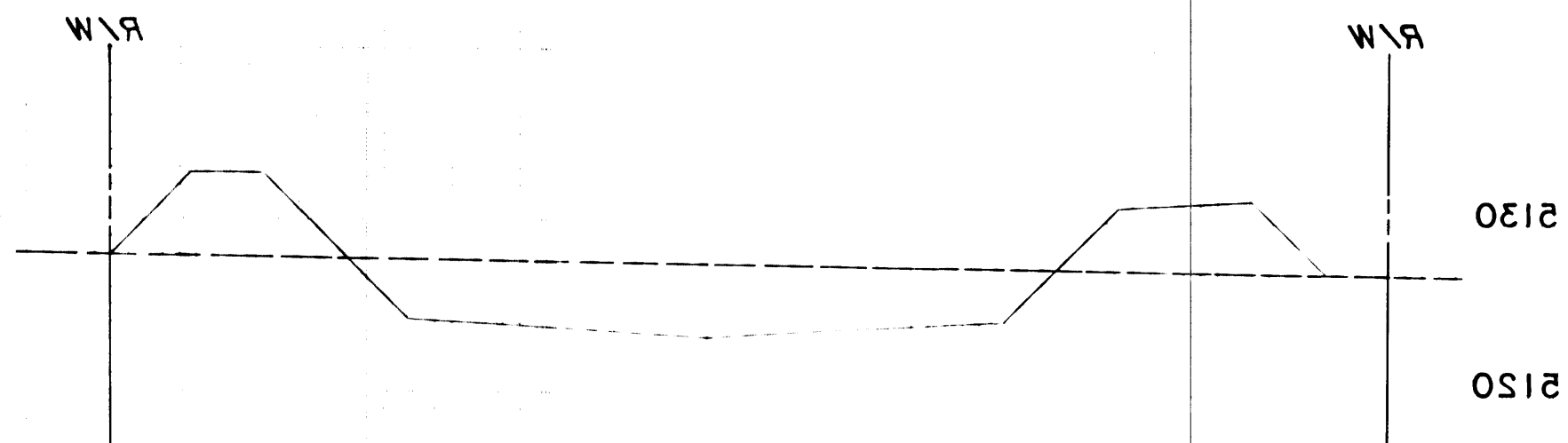
STATE	DATE	BY	NO.
YAMUO	1/1/10	YAMUO	100
YAMUO	1/1/10	YAMUO	100
YAMUO	1/1/10	YAMUO	100



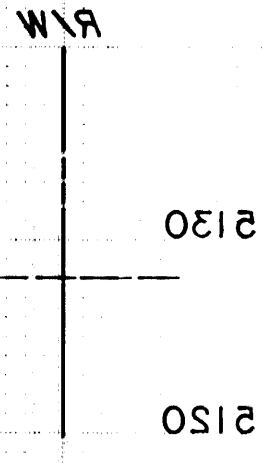
99+00



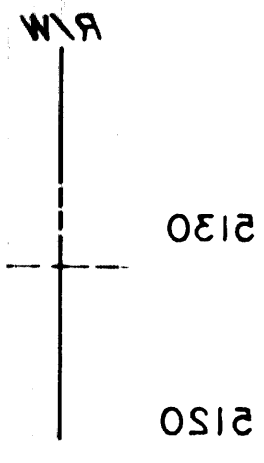
99+50



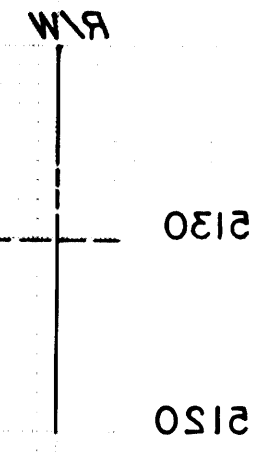
100+00



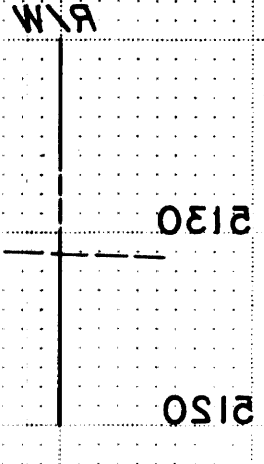
100+50



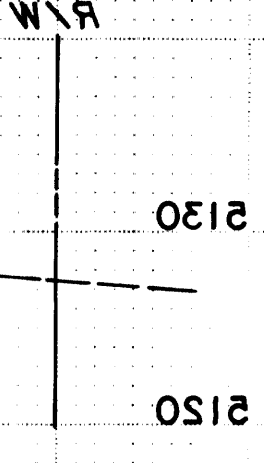
101+00



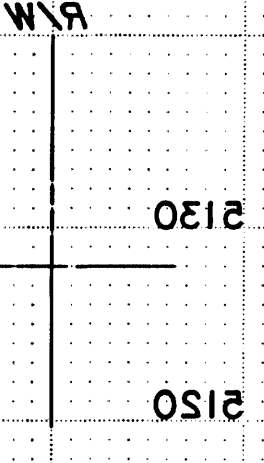
101+50



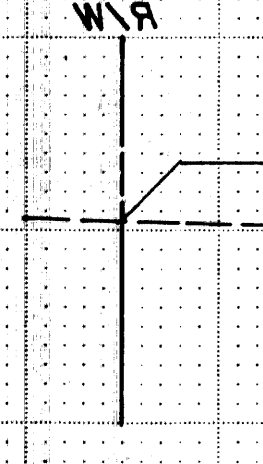
102+00



102+50



103+00

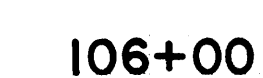
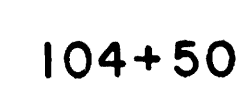
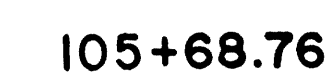
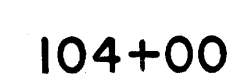
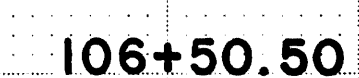
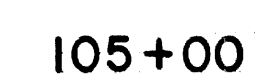
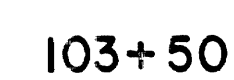


BOCA NEGRA  
STA. 99+00 TO STA. 103+00

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



SCALE: HORIZ. 1"=20'  
VERT. 1"=10'



ORIGINAL SURVEY	SURVEYED PLOTTED "TEMPLATE"	BY	DATE
NOTE 9	K		
JO	AREAS		

**DENNEY - GROSS & ASSOC., INC.**  
ENGINEERS SURVEYORS PLANNERS  
2400 COMANCHE RD. N.E., ALBUQUERQUE, NEW MEX.

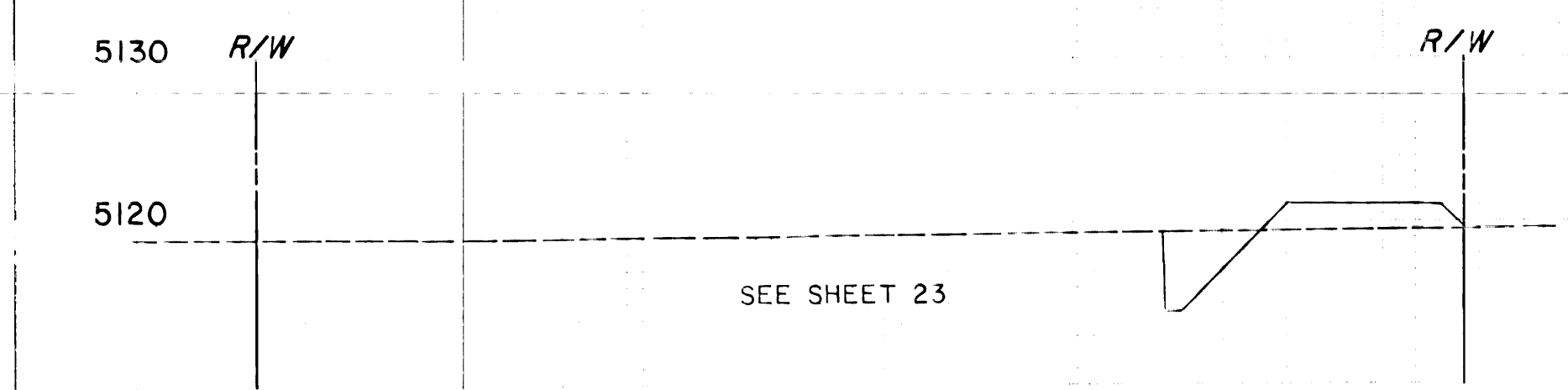
**Sheet 26 of 36**

**MARIPOSA NORTH**  
STA. 0+00 TO STA. 5+50

SCALE: HORIZ. 1"=20'  
VERT. 1"=10'

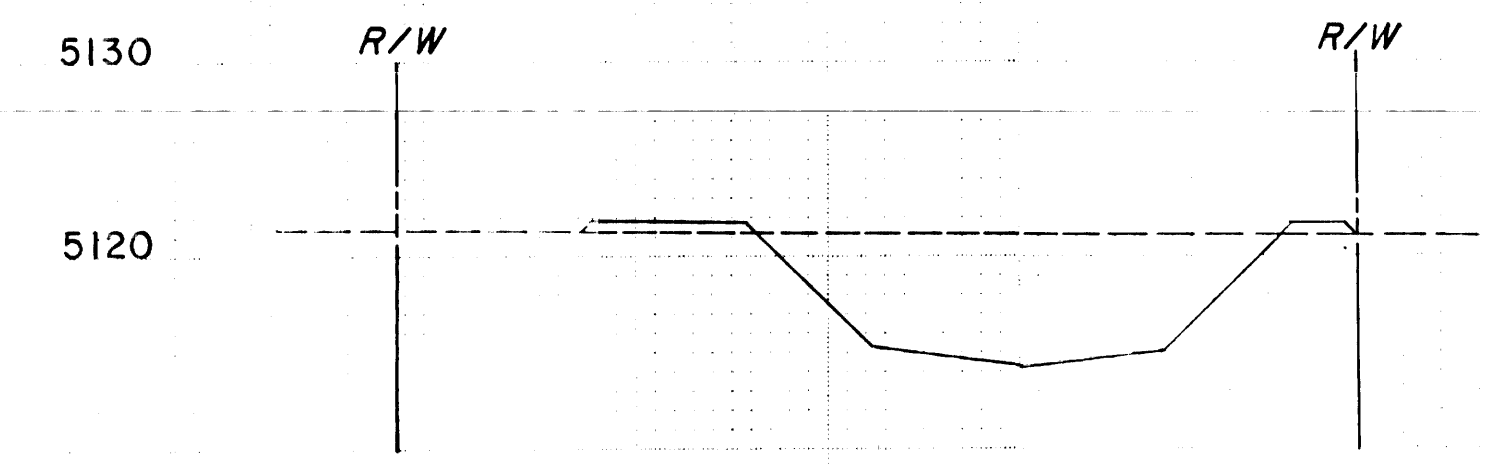
FINAL  
SURVEY  
NO. \_\_\_\_\_  
DATE \_\_\_\_\_  
BY \_\_\_\_\_  
CHECKED \_\_\_\_\_  
DATE \_\_\_\_\_  
BY \_\_\_\_\_  
NO. \_\_\_\_\_  
DATE \_\_\_\_\_  
BY \_\_\_\_\_

ORIGINAL  
SURVEY  
NO. \_\_\_\_\_  
DATE \_\_\_\_\_  
BY \_\_\_\_\_  
CHECKED \_\_\_\_\_  
DATE \_\_\_\_\_  
BY \_\_\_\_\_  
NO. \_\_\_\_\_  
DATE \_\_\_\_\_  
BY \_\_\_\_\_

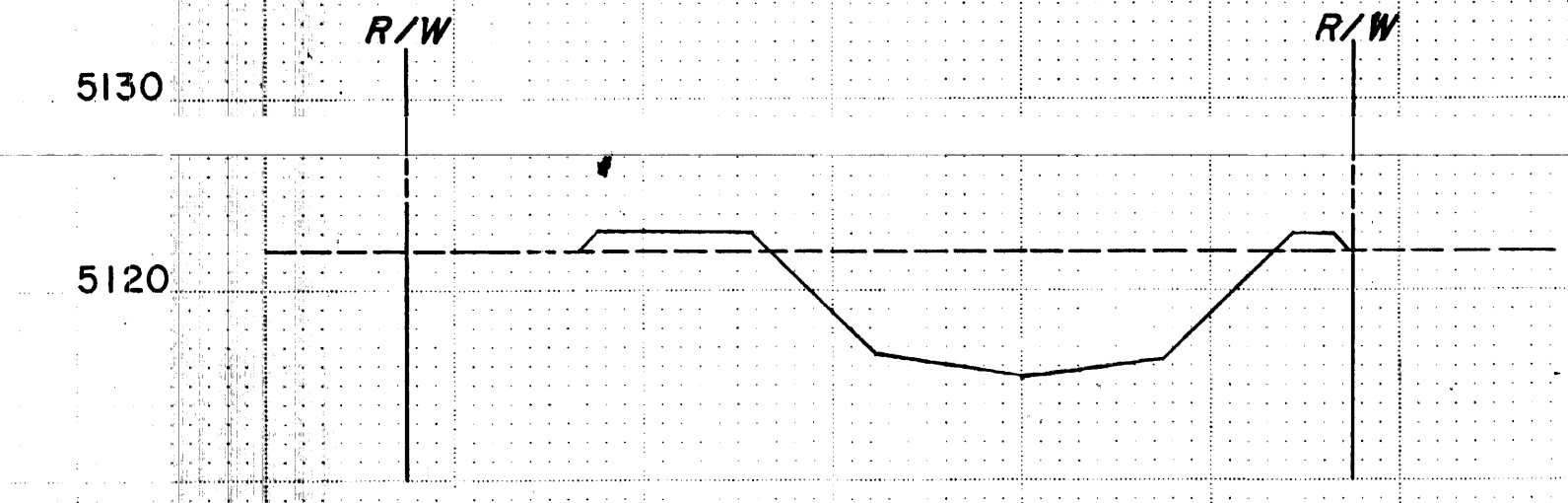


SEE SHEET 23

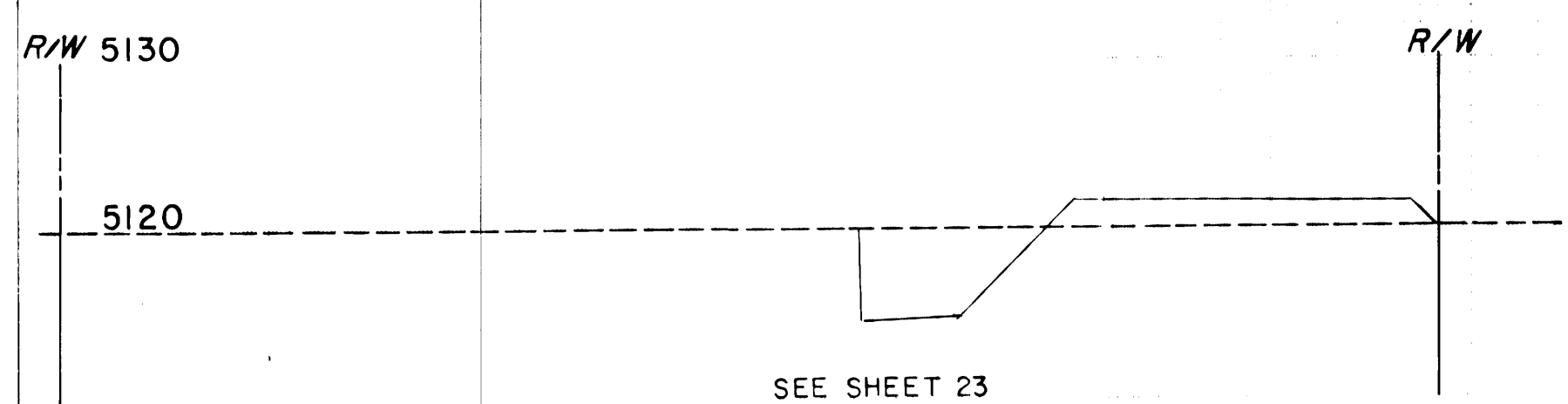
0+00 =  
91+28.24



2+00

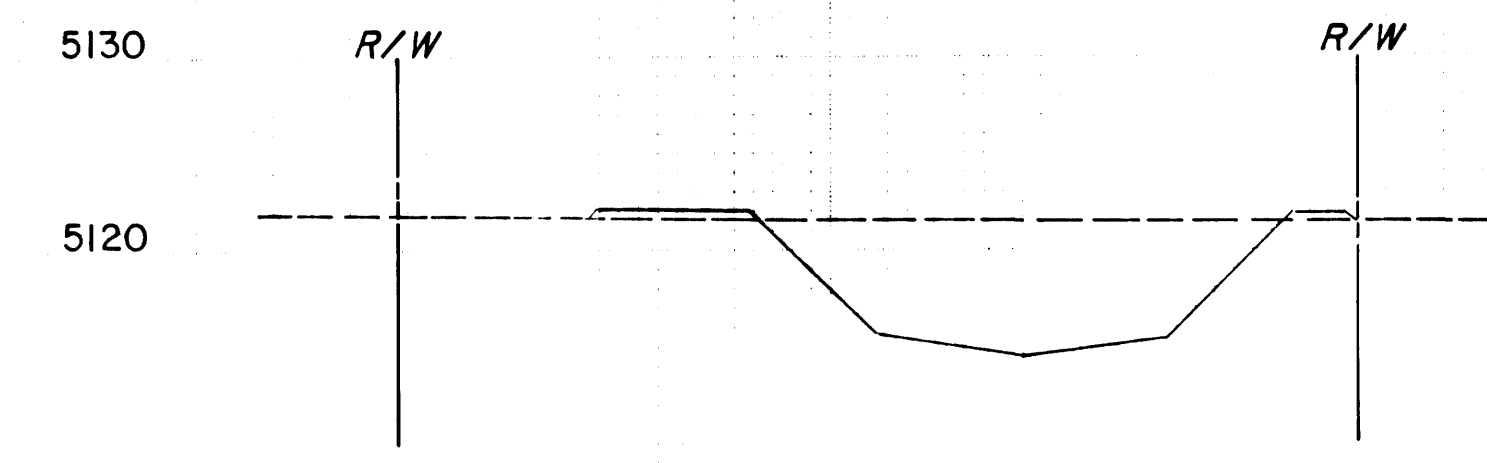


4+00

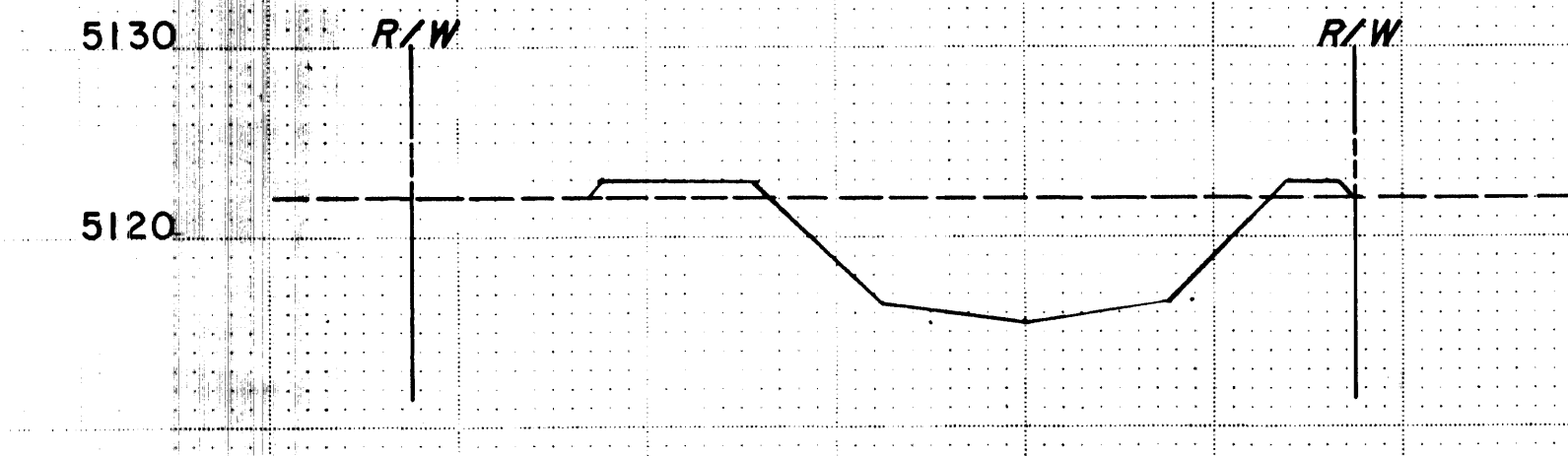


SEE SHEET 23

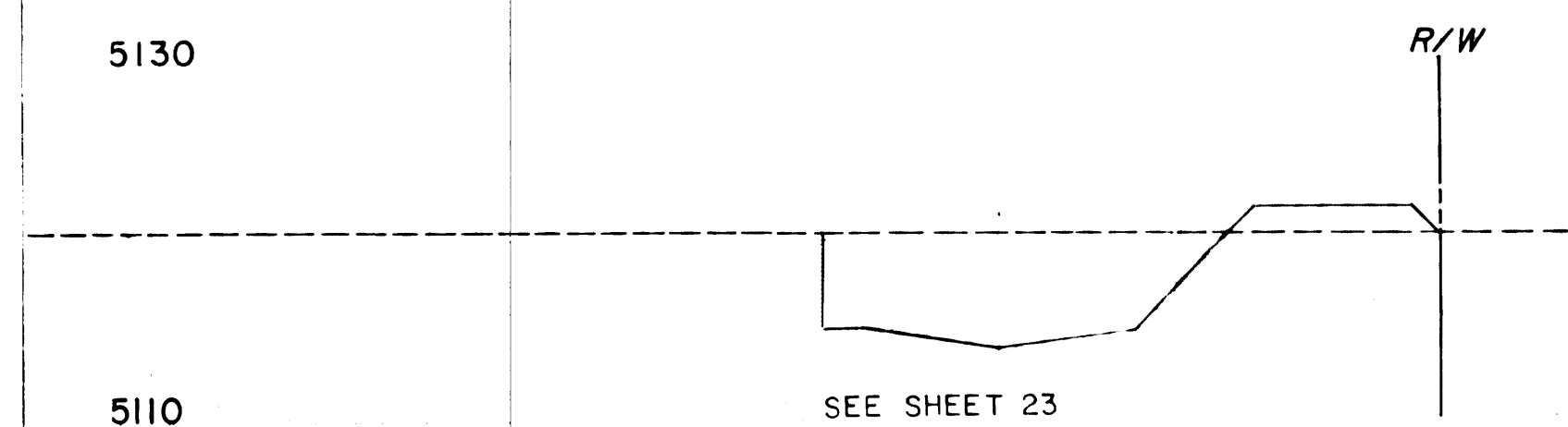
0+50



2+50

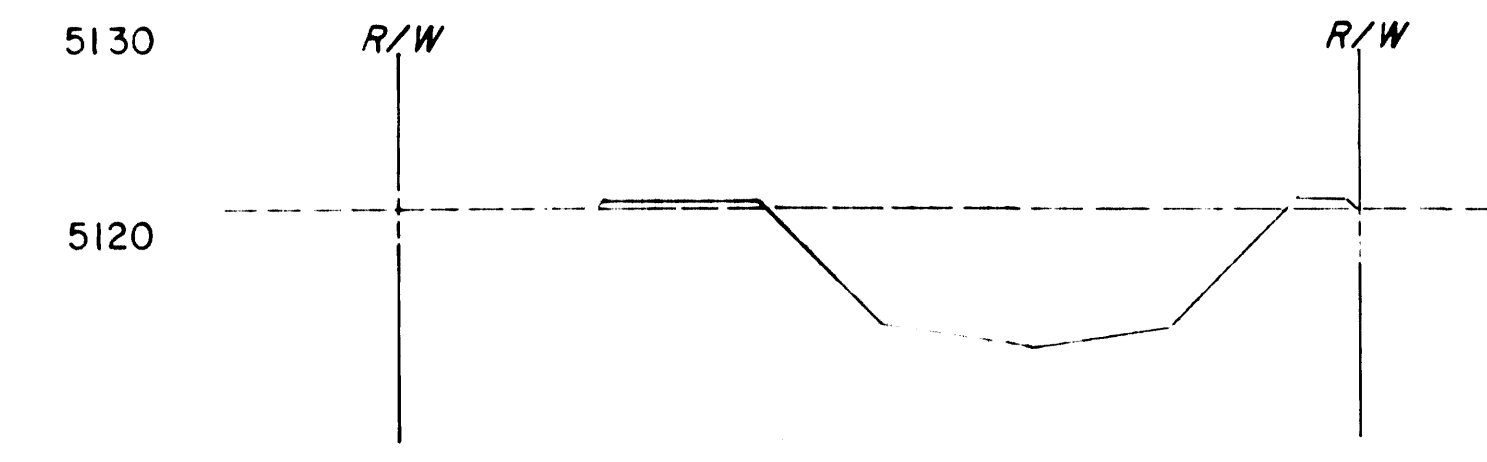


4+50

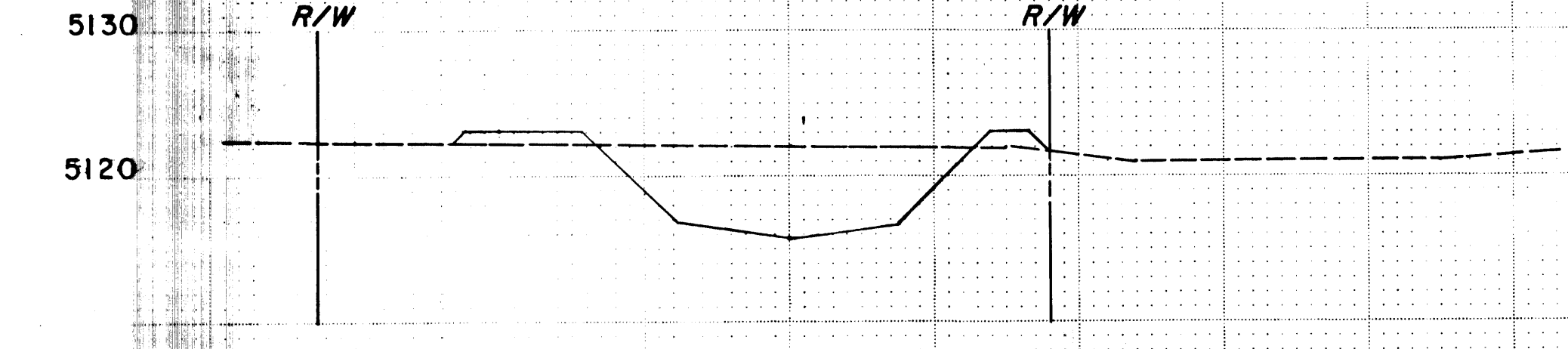


SEE SHEET 23

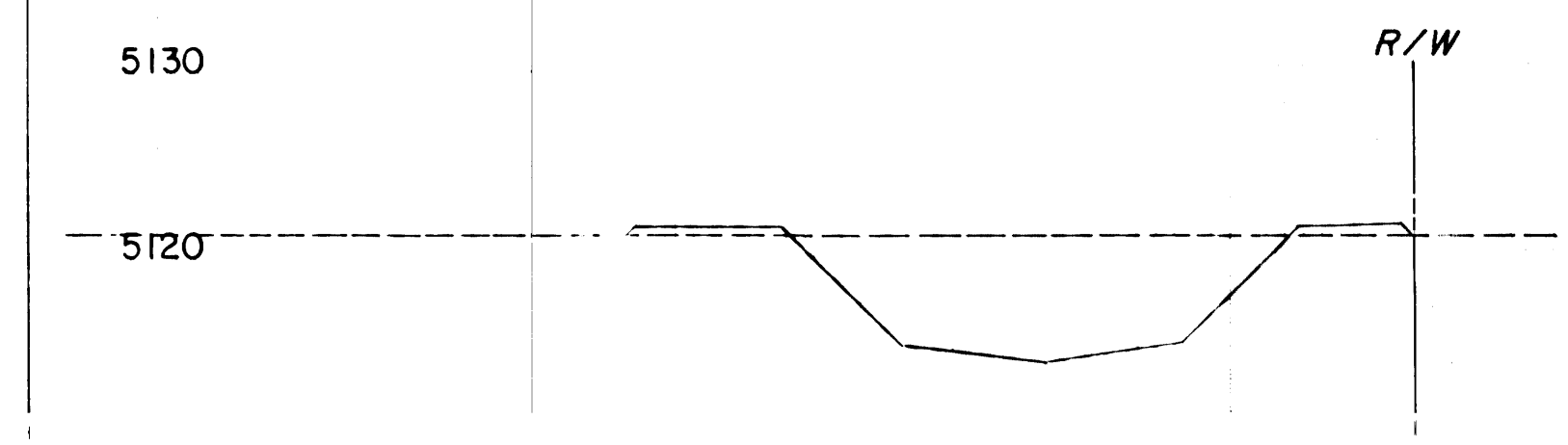
1+00



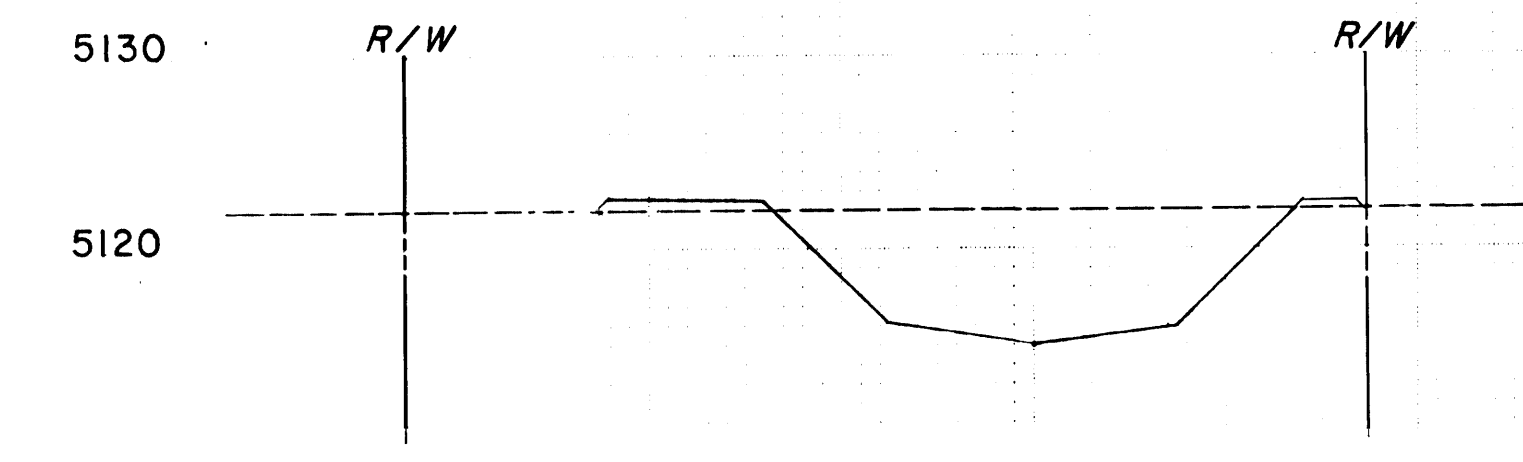
3+00



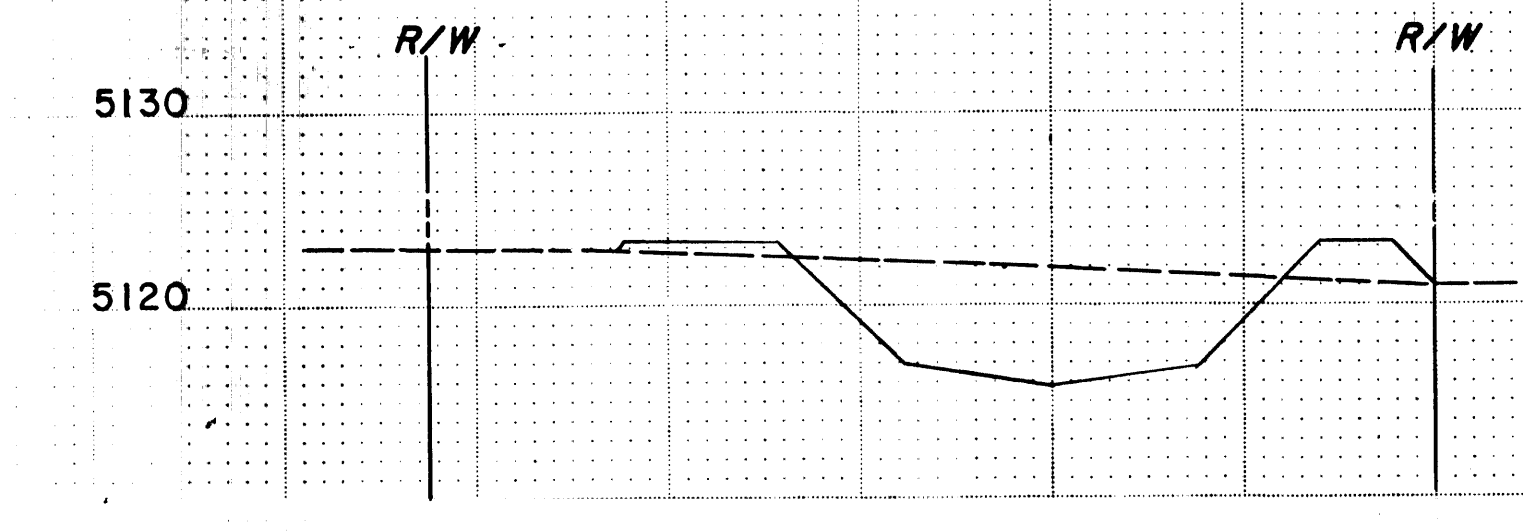
5+00



1+50



3+50



5+50

HIGHWAY FEDERAL AID SHEET  
PLATE 3, FULL CROSS SECTION, FULL DOT  
PRINTED IN U.S.A.

DENNEY-GROSS & ASSOC., INC.  
ENGINEERS SURVEYORS PLANNERS  
2400 COMANCHE RD. NE., ALBUQUERQUE, NEW MEX.

PHASE 2, MARIPOSA DIVERSION,  
BOCA NEGRA IMPROVEMENTS &  
DETENTION BASIN

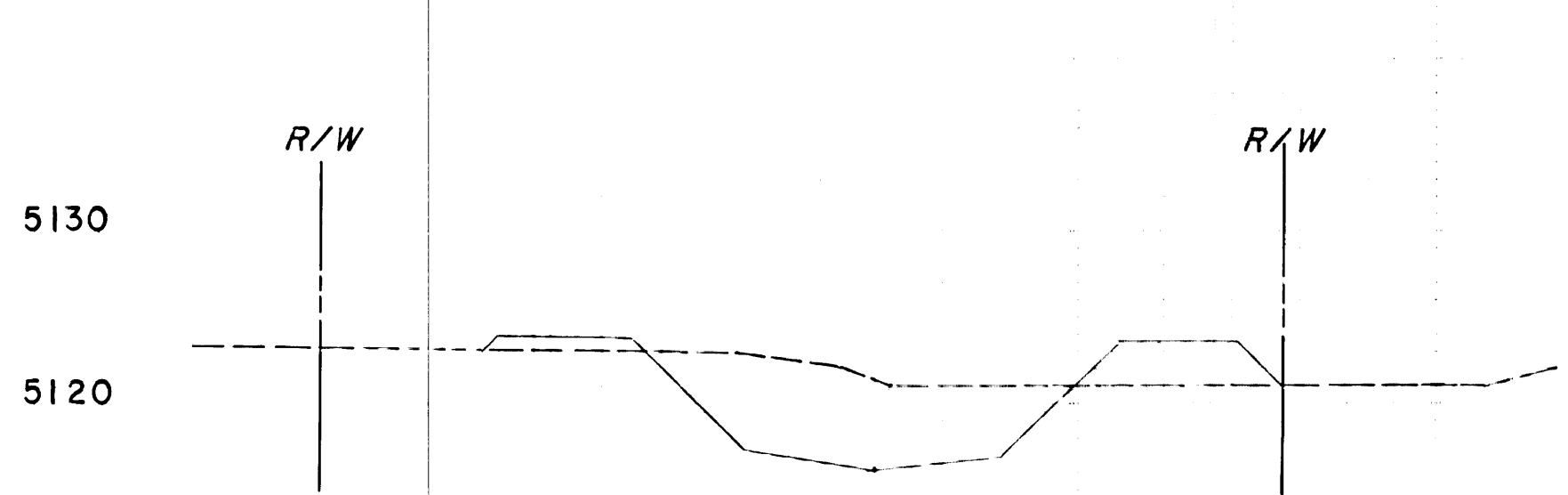


DATE  
BY  
CHECKED  
FINAL SURVEY  
NOTES  
NO

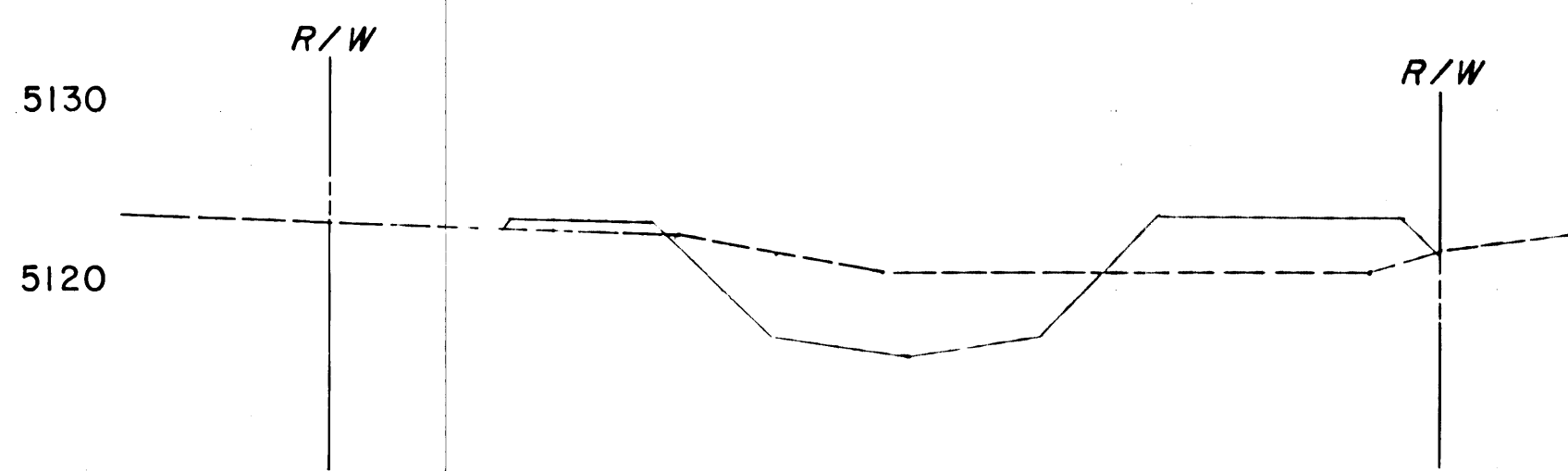
DATE  
BY  
CHECKED  
ORIGINAL SURVEY  
NOTES  
NO

MARIPOSA NORTH  
STA. 6+00 TO STA. 11+50

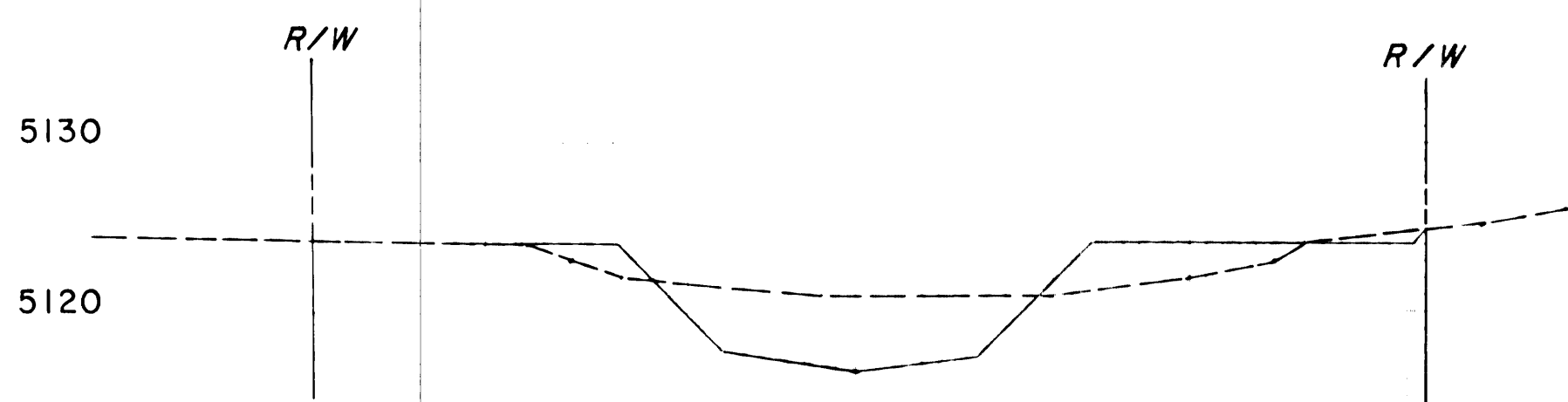
SCALE: HORIZ. 1"=20'  
VERT. 1"=10'



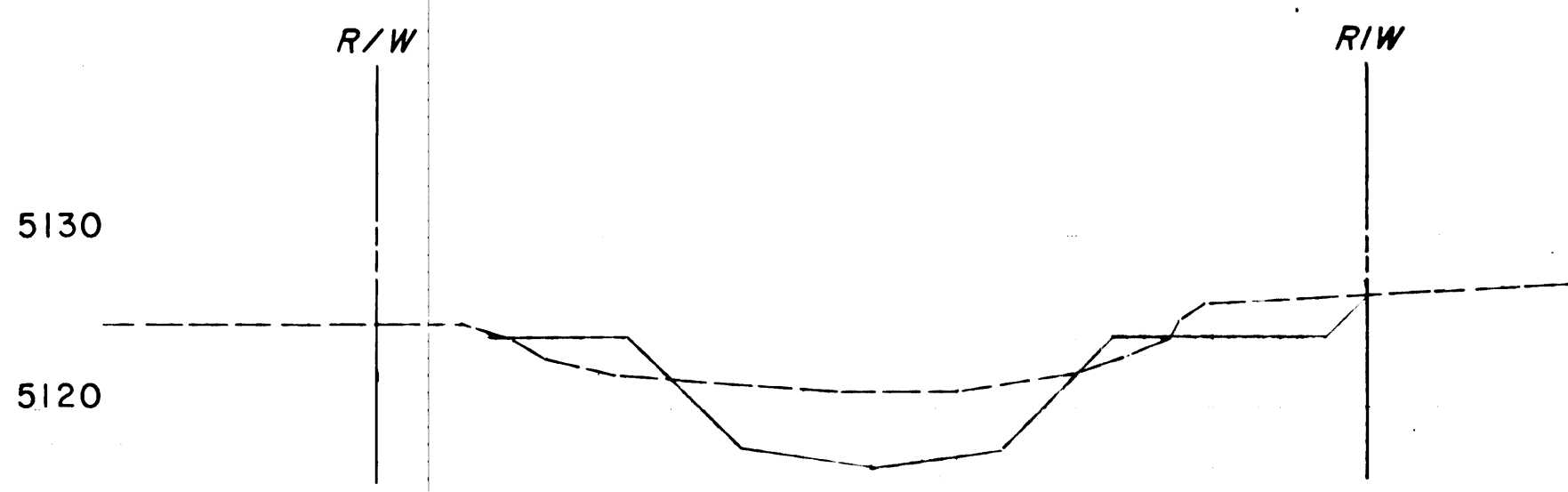
6+00



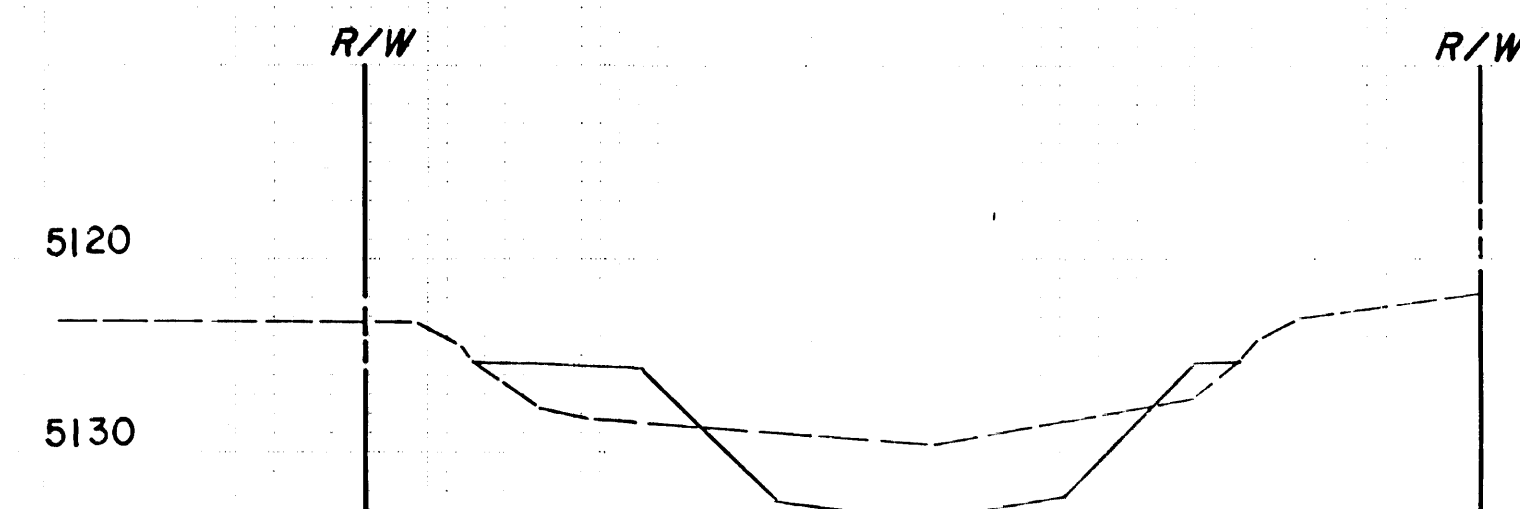
6+50



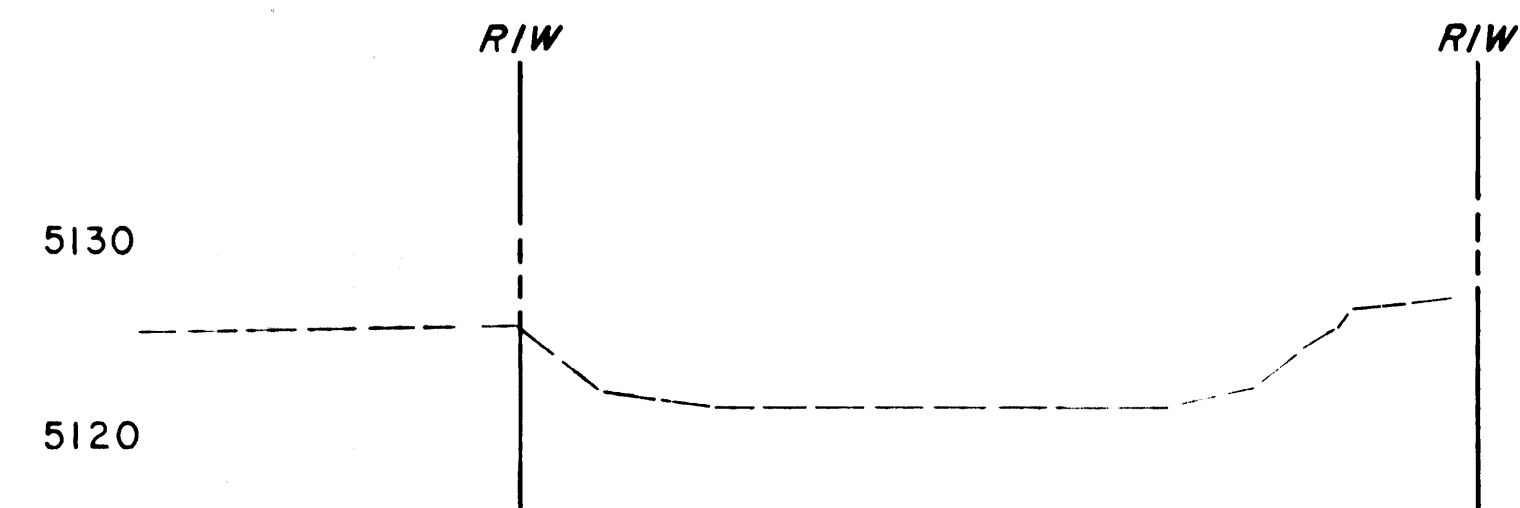
7+00



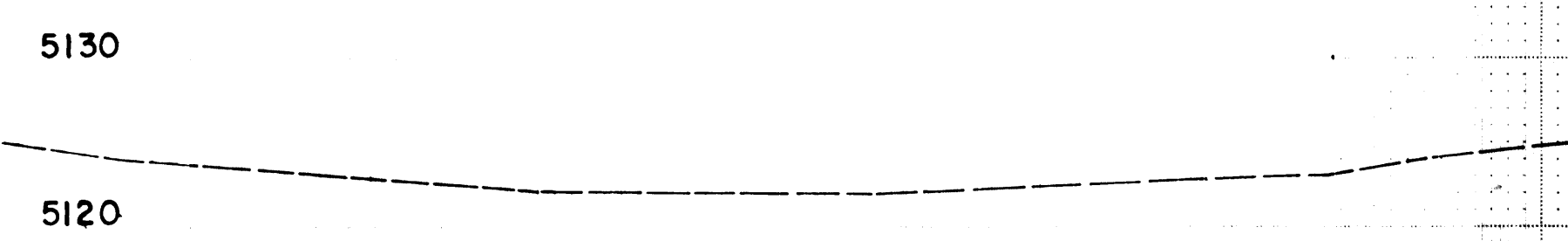
7+50



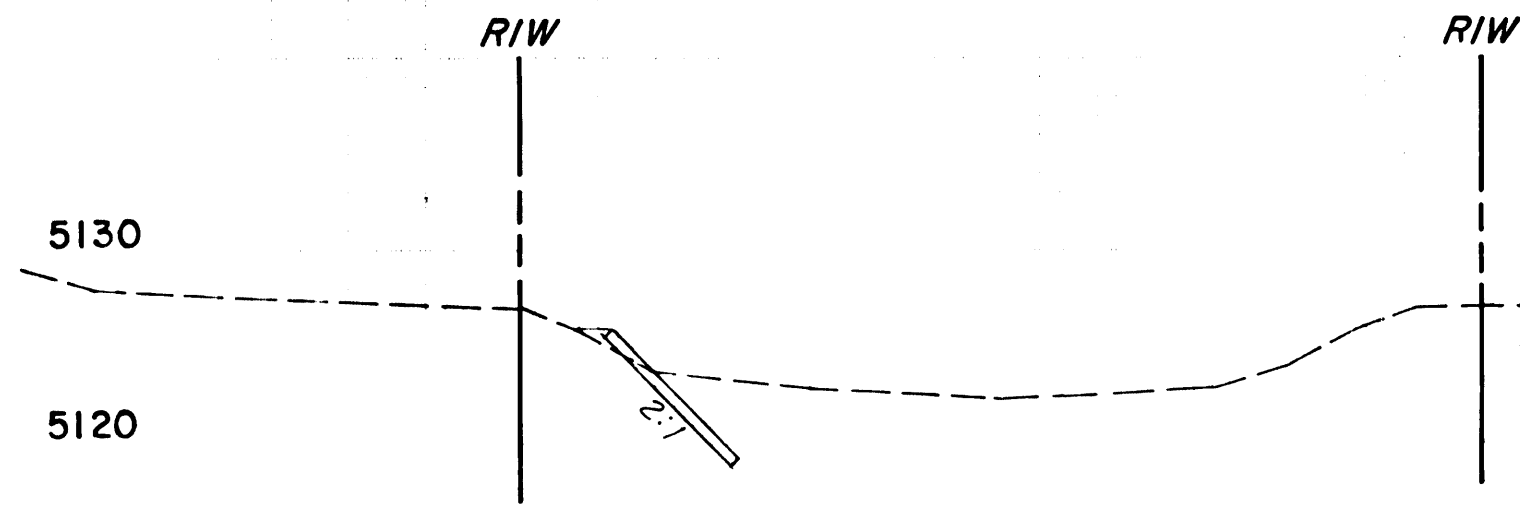
7+68±



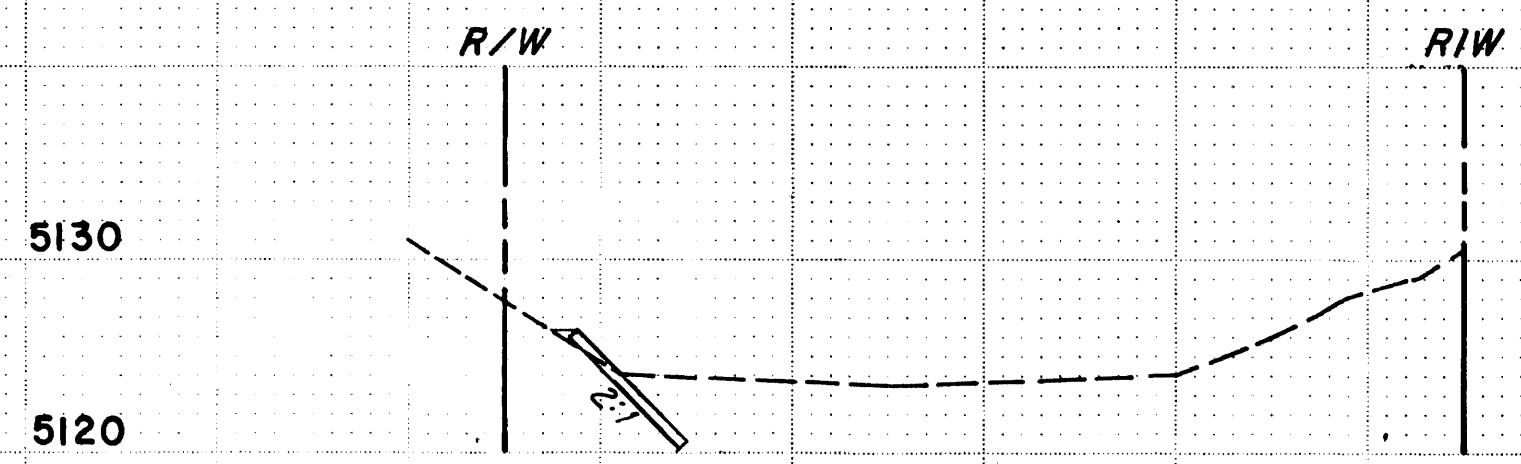
8+00



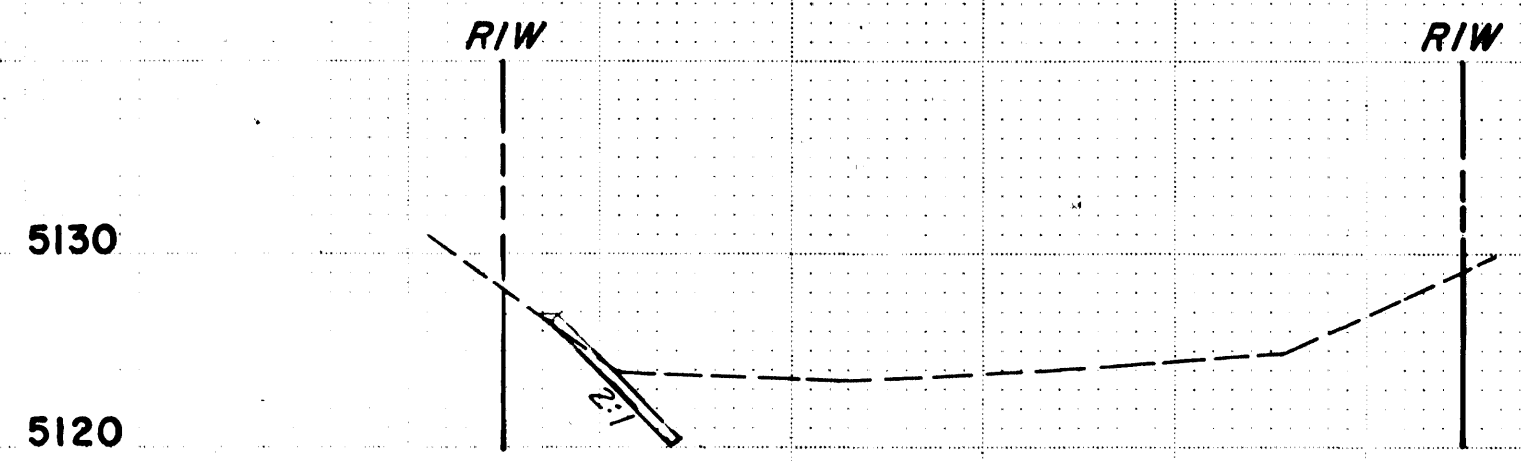
8+95±  
± MOHAVE STREET



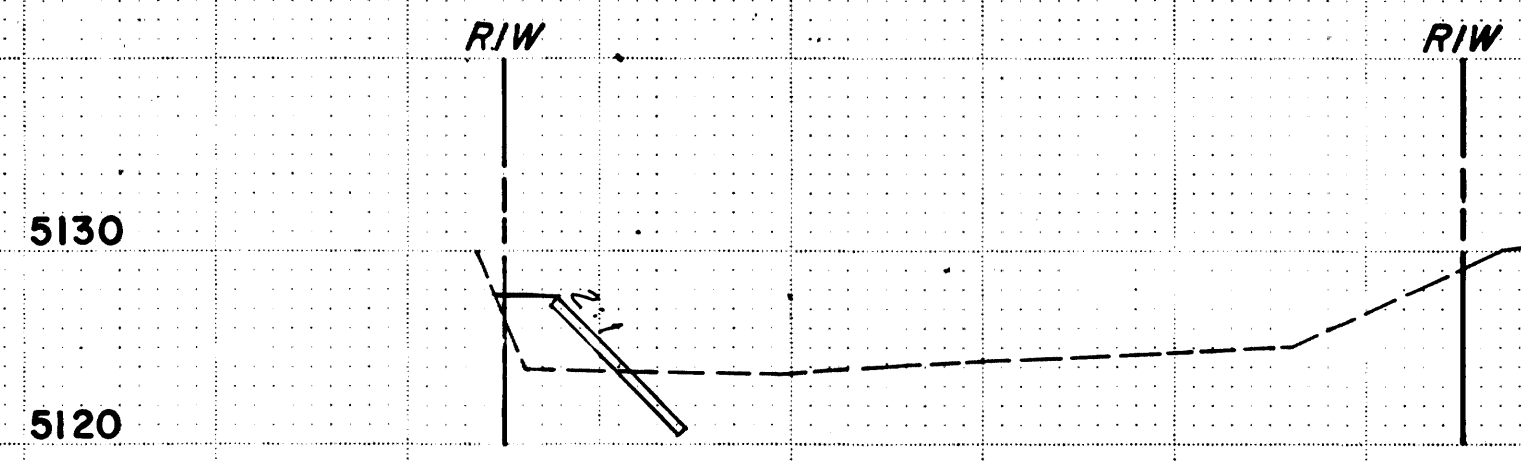
9+50



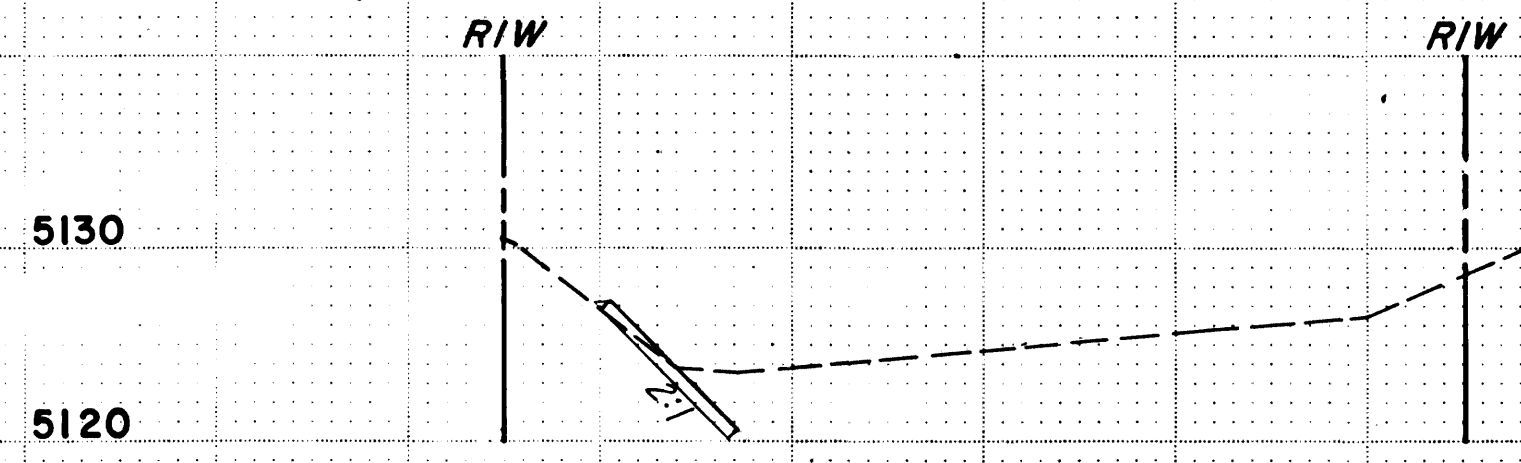
10+00



10+50



11+00



11+50

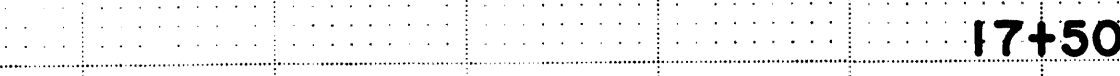
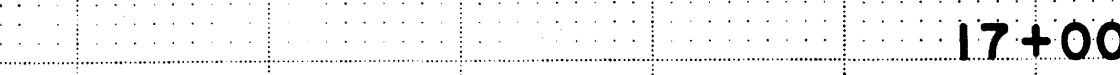
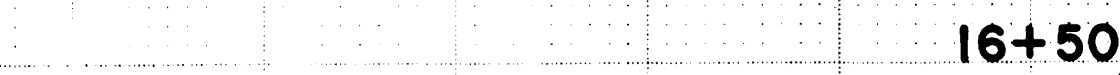
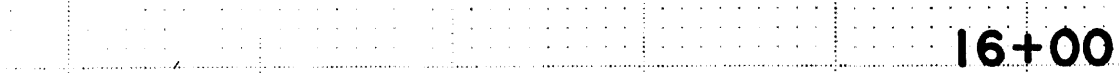
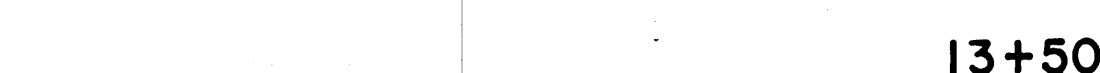
PLATE 3-FULL CROSS SECTION-FULL DOT  
PRINTED IN U.S.A.

DENNEY-GROSS & ASSOC., INC.  
ENGINEERS SURVEYORS PLANNERS  
2400 COMANCHE RD. N.E., ALBUQUERQUE, NEW MEX.

PHASE 2, MARIPOSA DIVERSION,  
BOCA NEGRA IMPROVEMENTS &  
DETENTION BASIN

Sheet 28 of 36

SCALE: HORIZ. 1" = 20'  
VERT. 1" = 10'



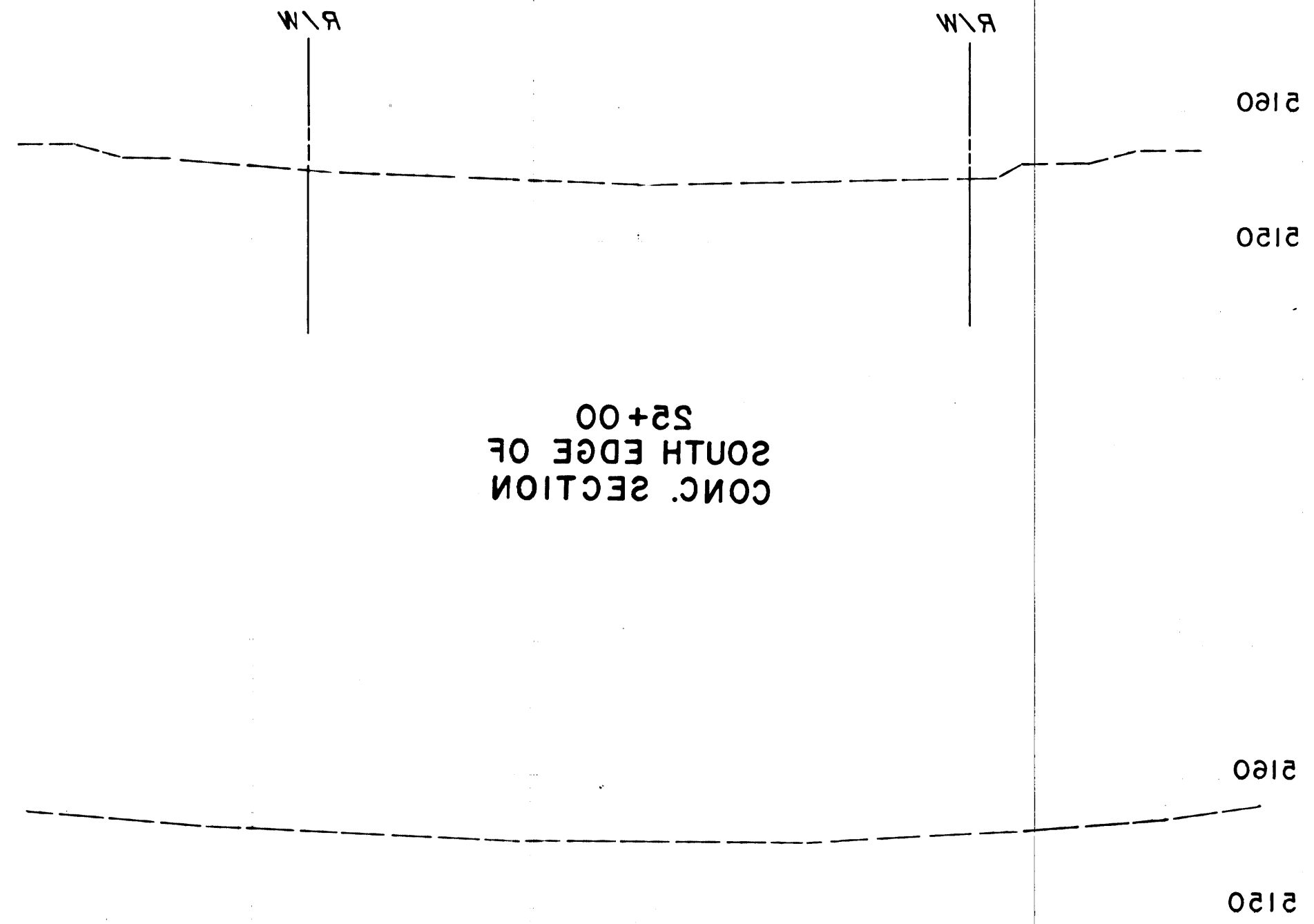
**DENNEY - GROSS & ASSOC., INC.**  
ENGINEERS                      SURVEYORS                      PLANNERS  
2400 COMANCHE RD. N.E., ALBUQUERQUE, NEW MEX.

Sheet 29 of 36





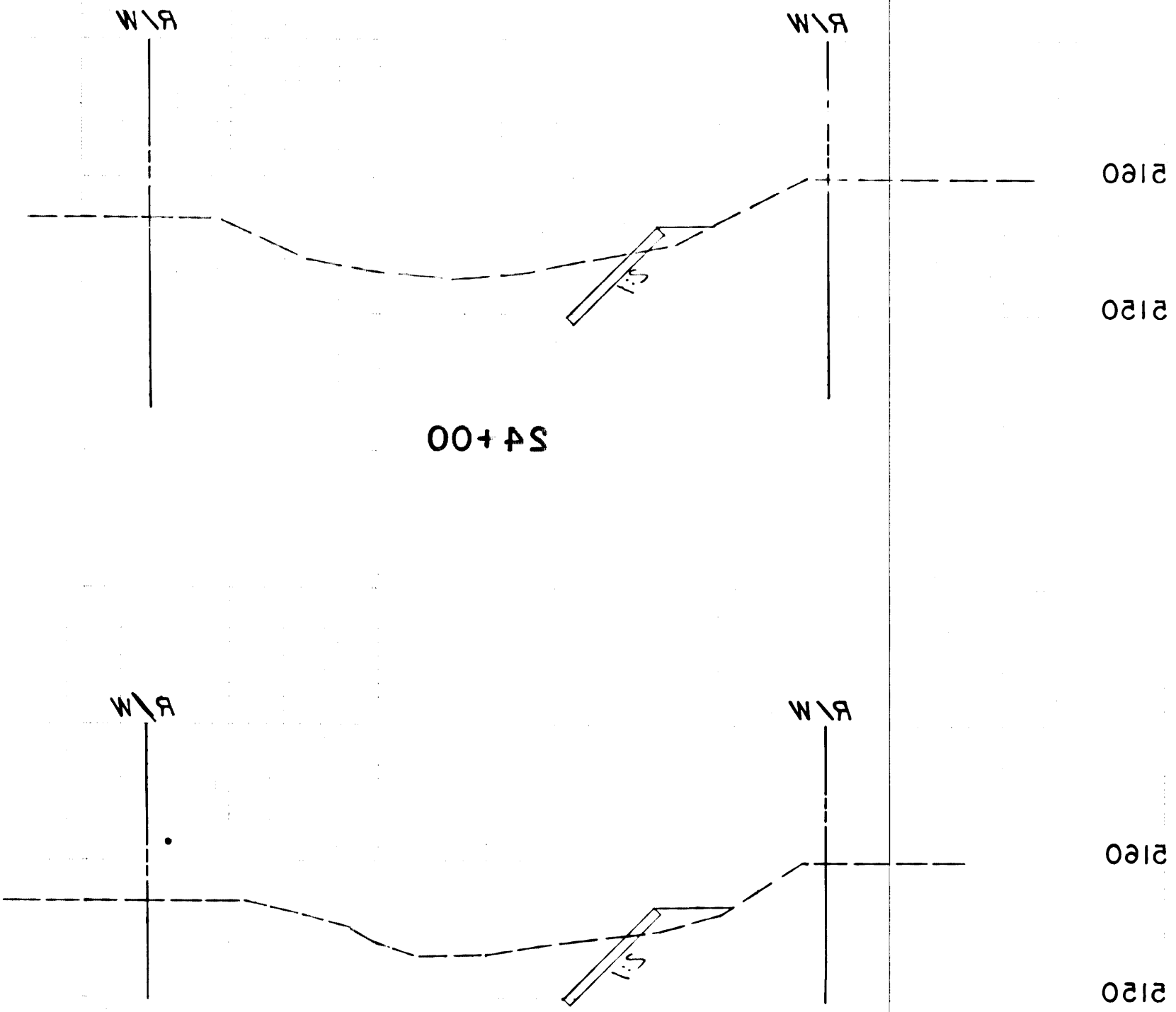
DATE	NO.	BY	CHKD
1/1/00	1	JANUARY	JANUARY
1/1/00	1	JANUARY	JANUARY
1/1/00	1	JANUARY	JANUARY
1/1/00	1	JANUARY	JANUARY



CONC. SECTION  
SOUTH EDGE OF  
22+00

22+50.4  
TESQUE DRIVE

DATE	NO.	BY	CHKD
1/1/00	1	JANUARY	JANUARY
1/1/00	1	JANUARY	JANUARY
1/1/00	1	JANUARY	JANUARY
1/1/00	1	JANUARY	JANUARY



24+00

24+30

2400 COMANCHE RD. N.E., ALBUQUERQUE, NEW MEX.  
ENGINEERS SURVEYORS PLANNERS  
DENNEY - GROSS & ASSOC., INC.  
PRINTED IN U.S.A.

DETENTION BASIN  
BOCA NEGRA IMPROVEMENTS &  
PHASE 2, MARIPOSA DIVERSION

MARIPOSA NORTH  
STA. 24+00 TO STA. 25+50.4

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