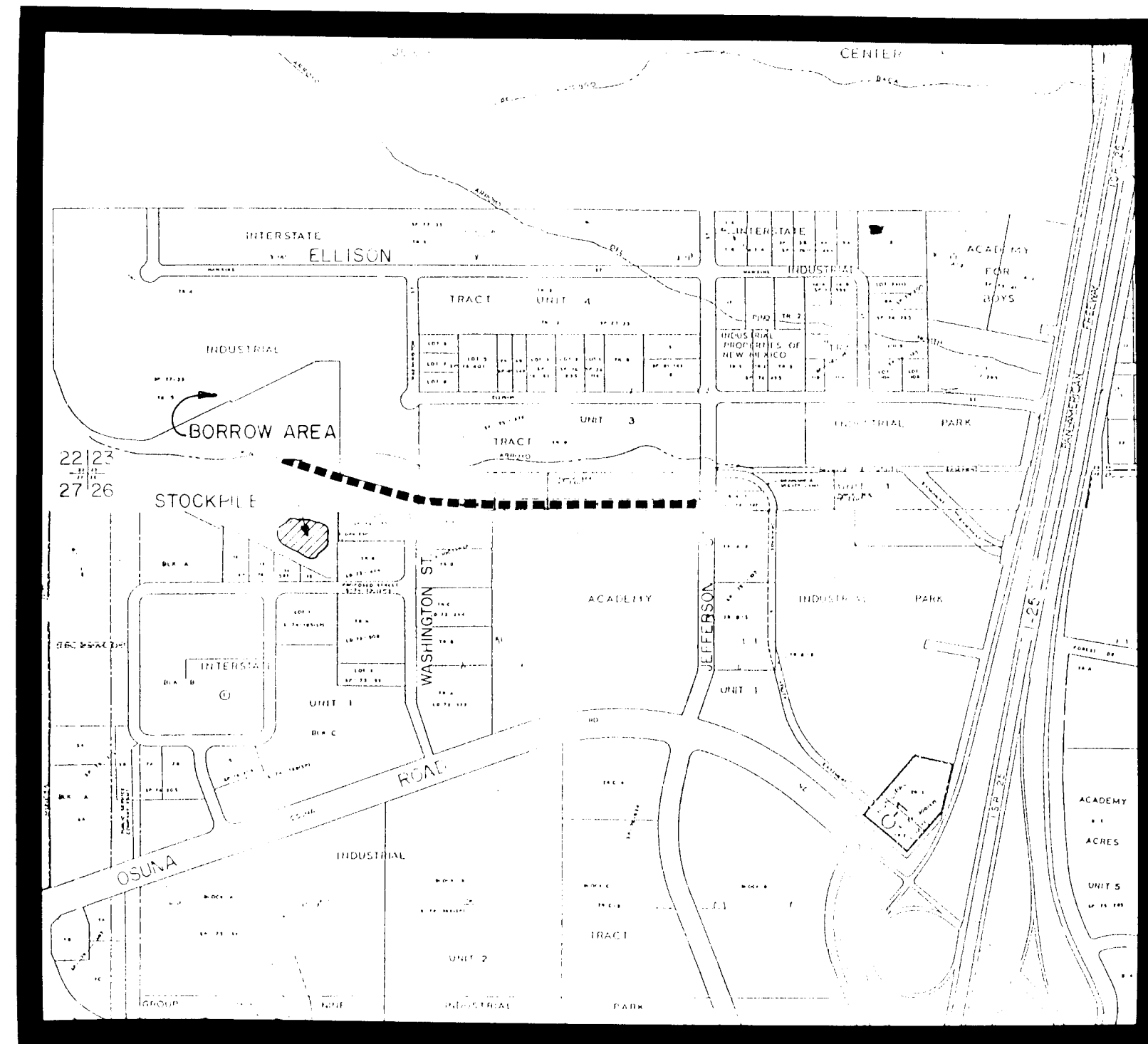




VICINITY MAP
NO SCALE

PINO ARROYO IMPROVEMENTS

WEST OF JEFFERSON ST. NE

GENERAL NOTES:

1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH NEW MEXICO STATE HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, EDITION OF 1984 AND ALL MODIFICATIONS THERETO.
2. TWO WORKING 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 OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
4. ALL STORM DRAINAGE FACILITIES SHALL BE COMPLETED PRIOR TO FINAL ACCEPTANCE.
5. THE CONTRACTOR SHALL COORDINATE THE EARTHWORK SCHEDULING WITH THE ENGINEER IN ORDER TO FACILITATE THE RELOCATION OF ANY EXISTING UNDERGROUND PNM DISTRIBUTION LINES.
6. THE CONTRACTOR SHALL SUPPLY SHOP DRAWINGS TO THE ENGINEER BEFORE FABRICATION IS STARTED FOR ALL FABRICATED MATERIALS TO BE FURNISHED AND INSTALLED IN THIS PROJECT. POORLY EXECUTED SHOP DRAWINGS WILL BE REJECTED AND RESUBMITTED.

INDEX

SHEET NO.	DESCRIPTION
-----------	-------------

- | | |
|-------|---|
| 1. | TITLE SHEET |
| 2. | PLAN & PROFILE STA. 11+00.00 TO STA. 17+00.00 |
| 3. | PLAN & PROFILE STA. 17+00.00 TO STA. 29+00.00 |
| 4. | PLAN & PROFILE STA. 29+00.00 TO STA. 35+26.00 |
| 5. | ENERGY DISSIPATOR DETAILS |
| 6. | MISCELLANEOUS DETAILS |
| 7. | MISCELLANEOUS DETAILS |
| 8. | MISCELLANEOUS DETAILS |
| 9. | MISCELLANEOUS DETAILS |
| 10. | MAINTENANCE VEHICLE RAMP |
| 11-16 | CROSS-SECTION SHEETS |

REFERENCES

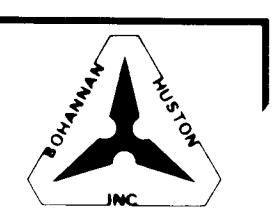
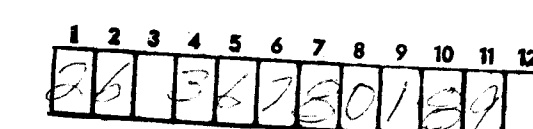
- PINO ARROYO IMPROVEMENTS JEFFERSON ST. TO 1-25.
CONSTRUCTION PLAN SET
INTERSTATE 25 FRONTAGE ROADS DRAINAGE STRUCTURE
ANALYSIS, REVISED OCT. 1982 (BHI JOB #11700)
INTERSTATE INDUSTRIAL TRACT DRAINAGE STUDY
OF CONTRIBUTING BASINS, OCT. 1981 (BHI #11300)
AND ADDENDUM #1, DATED NOV. 1981

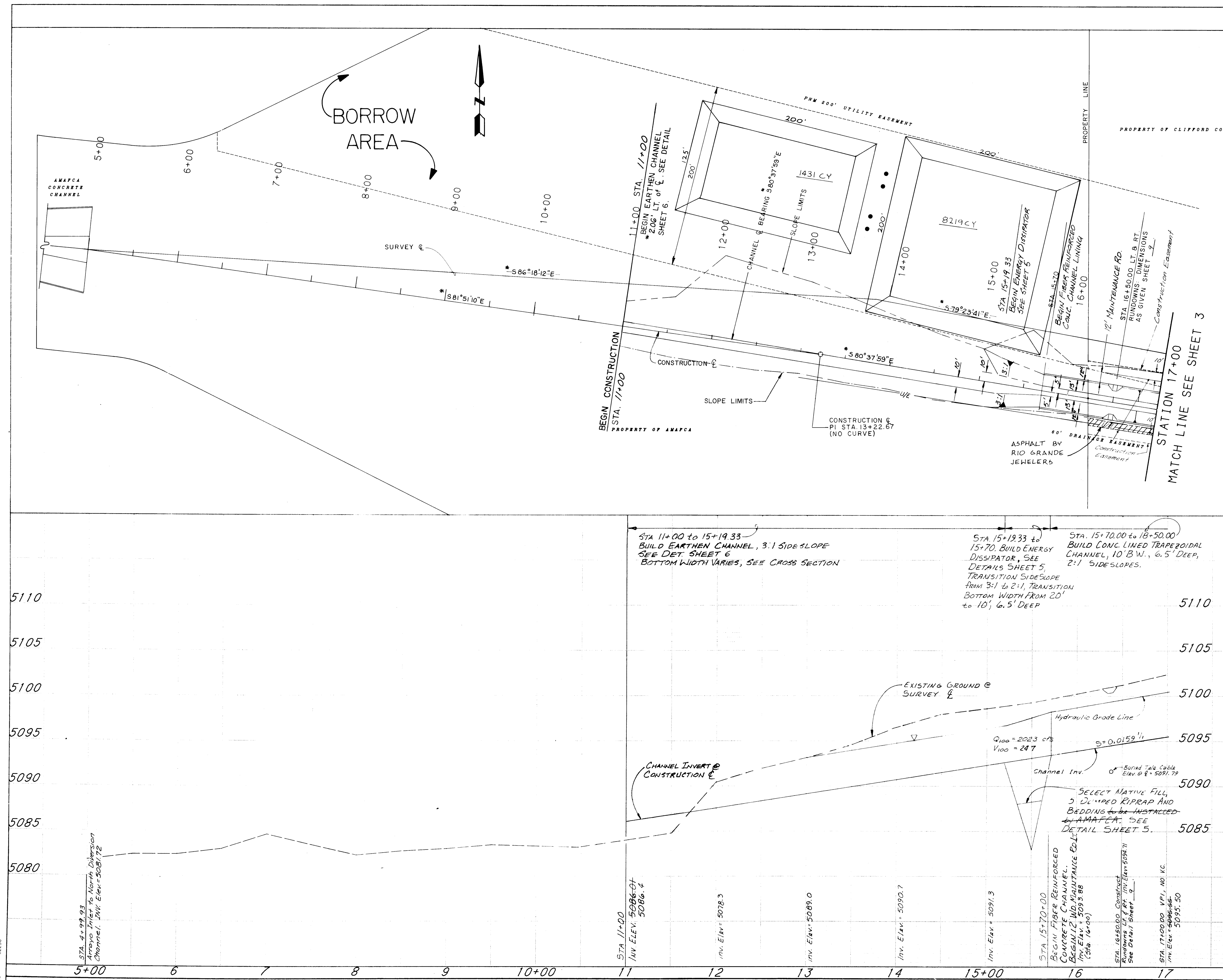
LEGEND

- ▲ SLOPE LINES
- EASEMENT LINE
- POWER POLES
- GUY WIRE WITH ANCHOR
- EXISTING PIPE
- SANITARY SEWER MANHOLE
- WATER METER
- TELEPHONE MANHOLE
- TELEPHONE PEDESTAL
- FIRE HYDRANT
- U_E UNDERGROUND ELECTRIC CABLE

Carson Beene

8-16-89





NOTES:

- OVERHEAD & UNDERGROUND ELEC. CABLES ENERGIZED @ 12,470 VOLTS. CONTACT PNM SYSTEM ENGINEER (848-2973) 2 WEEKS PRIOR TO WORK NEAR LINES COORDINATE WITH PNM FOR RELOCATION OF LINE DURING CONSTRUCTION.
- SEE CROSS SECTIONS, SHEETS 11 & 12

SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
NO.	BY	DATE	FIELD NOTES	DATE	NO.
1	MLJ		FROM THE 1-25 & OSUNA RD. N.E. INTERCHANGE GO WEST ON OSUNA 0.3 MI. TO JEFFERSON ST. TURN RT., GO NORTH ON JEFFERSON ST. 0.2 MI. TO THE BENCH MARK ON LT. THE BENCH MARK IS A STD. ACS BRASS TABLET, STAMPED '8-DIT' SET IN TOP OF A CONCRETE POST, 0.2' ABOVE GROUND. ELEVATION 5145.55	DATE	NO.
ENGINEER'S SEAL		REVISIONS		MICRO-FILM INFORMATION	
ALL STATED ITEMS (*)		NO.	DATE	DATE	DATE
DESIGNED BY		DATE	DATE	DATE	DATE
DRAWN BY		DATE	DATE	DATE	DATE
CHECKED BY		DATE	DATE	DATE	DATE

A.M.A.F.C.A.

TITLE: PINO ARROYO IMPROVEMENTS
STA. 1+00 TO 17+00

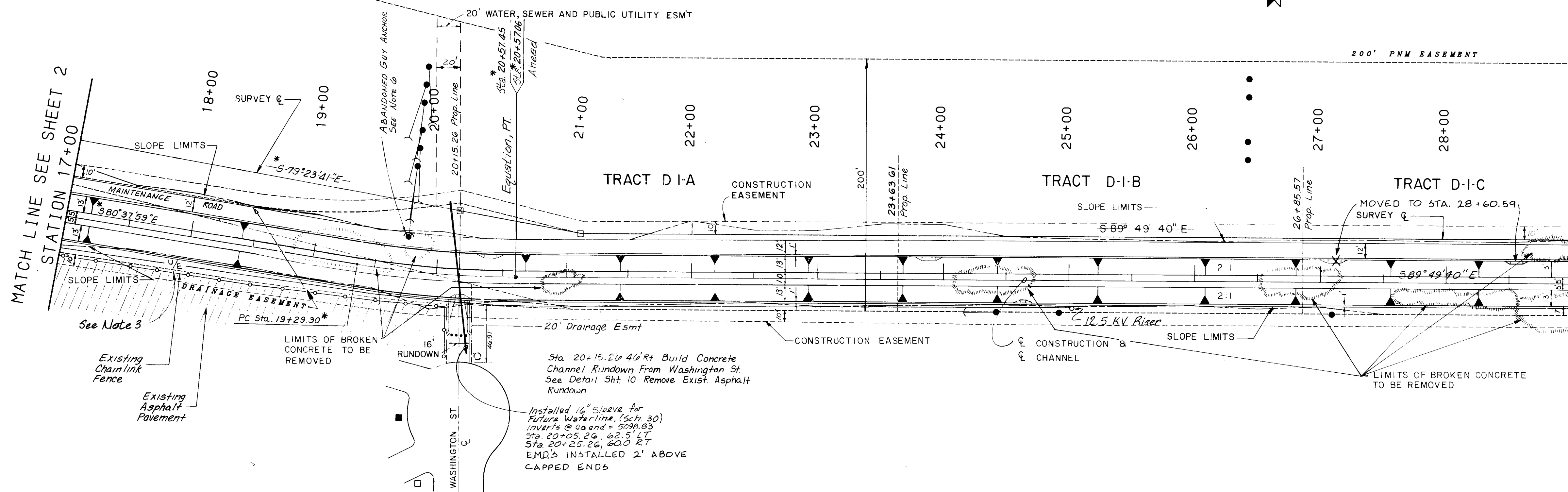
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E.-Design			Traffic		
A.C.E.-Hydrology			Water		

DRAWING NO. MAP NO. D-17 SHEET 2 OF 16

JOB NO. 88232 01 & 36460.04

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

P1 STA. 19+93.52
 * D 7°9'43"
 * T 64.21'
 * L 128.15'
 R 800.0000
 * DELTA 9°10'41"



STATION 29+00
MATCH LINE SEE SHEET 4

NOTE:

1. FOR TYPICAL TRAPEZOIDAL CHANNEL DETAILS SEE SHEET 6.
2. OVERHEAD AND UNDERGROUND ELEC. CABLE ENERGIZED @ 12470 VOLTS.
3. CONTRACTOR SHALL CONTACT PNM FOR LOCATION AND COORDINATION OF WORK NEAR POWER LINES.
4. SEE CROSS SECTIONS, SHTS.13 THRU 15.
5. EXISTING 8" WATER LINE TO BE ENCASED WITH 3000 PSI CONCRETE. EXTEND ENCASEMENT 5' BEYOND TOP EDGE OF CHANNEL LINING. SEE DETAIL BELOW.
6. ABANDONED GUY ANCHOR CONTRACTOR SHALL REMOVE TOP OF ANCHOR 18" BELOW FINISHED GRADE REMOVED BY PNM PRIOR TO CONSTRUCTION.
7. IN THE INTEREST OF SAFETY, PNM WILL DEENERGIZE THE 12.5 KV POWER LINE PRIOR TO CONSTRUCTION BETWEEN STATIONS 17+25 TO 19+50. THE CONTRACTOR WILL NOTIFY PNM THREE DAYS IN ADVANCE OF EXCAVATION IN THIS REACH. THE CONTRACTOR WILL GIVE PNM ACCESS TO THE CONSTRUCTION SITE AND THE OPPORTUNITY TO INSPECT AND MAKE ANY NECESSARY REPAIR THE CABLE PRIOR TO BACK FILL OPERATIONS. THE CONTRACTOR WILL TAKE PRECAUTIONS NOT TO DAMAGE THE POWER LINE DURING CONSTRUCTION.

BENCH MARKS	AS BUILT INFORMATION
FROM THE I-25 & OSUNA RD. NE. INTERCHANGE GO WEST ON OSUNA 0.3 MI. TO JEFFERSON ST. TURN RT., GO NORTH ON JEFFERSON ST. 0.2 MI. TO THE BENCH MARK ON LT.. THE BENCH MARK IS A STD. ACS BRASS TABLET, STAMPED "B-DITA"	NINA TUN DATE INSPECTORS ELEVANCE BY DATE DRAWINGS BY DATE
SET IN TOP OF A CONCRETE POST, 0.2' ABOVE GROUND. ELEVATION 5145.55	MICRO-FILM INFORMATION RECORDED BY DATE
	NO

[illegible]

1	1-89	ALL STARRED ITEMS (*)	MLJ	FN
NO. DATE			REMARKS	BY
DESIGN				
DESIGNED BY MLJ			DATE Aug 87	
DRAWN BY TLM			DATE Aug 87	
CHECKED BY HCS			DATE Sept 87	

NOTE: ENCLOSURE TO BE COMPLETE
1, 1989.

Carthm. Ben

8-16-89

A.M.A.F.C.A.

TITLE:	PINO	ARROYO	IMPROVEMENTS
	STA	17 + 00	TO 29 + 00

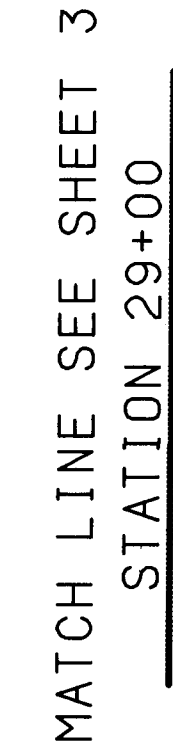
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E - Design			Traffic		
A.C.E -Hydrology			Water		

DRAWING NO.	MAP NO. D-17	SHEET 3 OF 16
----------------	-----------------	---------------

JOB NO. 38232.01 & 86460.04

SCALE:
1" = 50' HOR., 1" = 5' VERT.

BRUNING 62236



JOB NO. 88232.01 & 86460.04

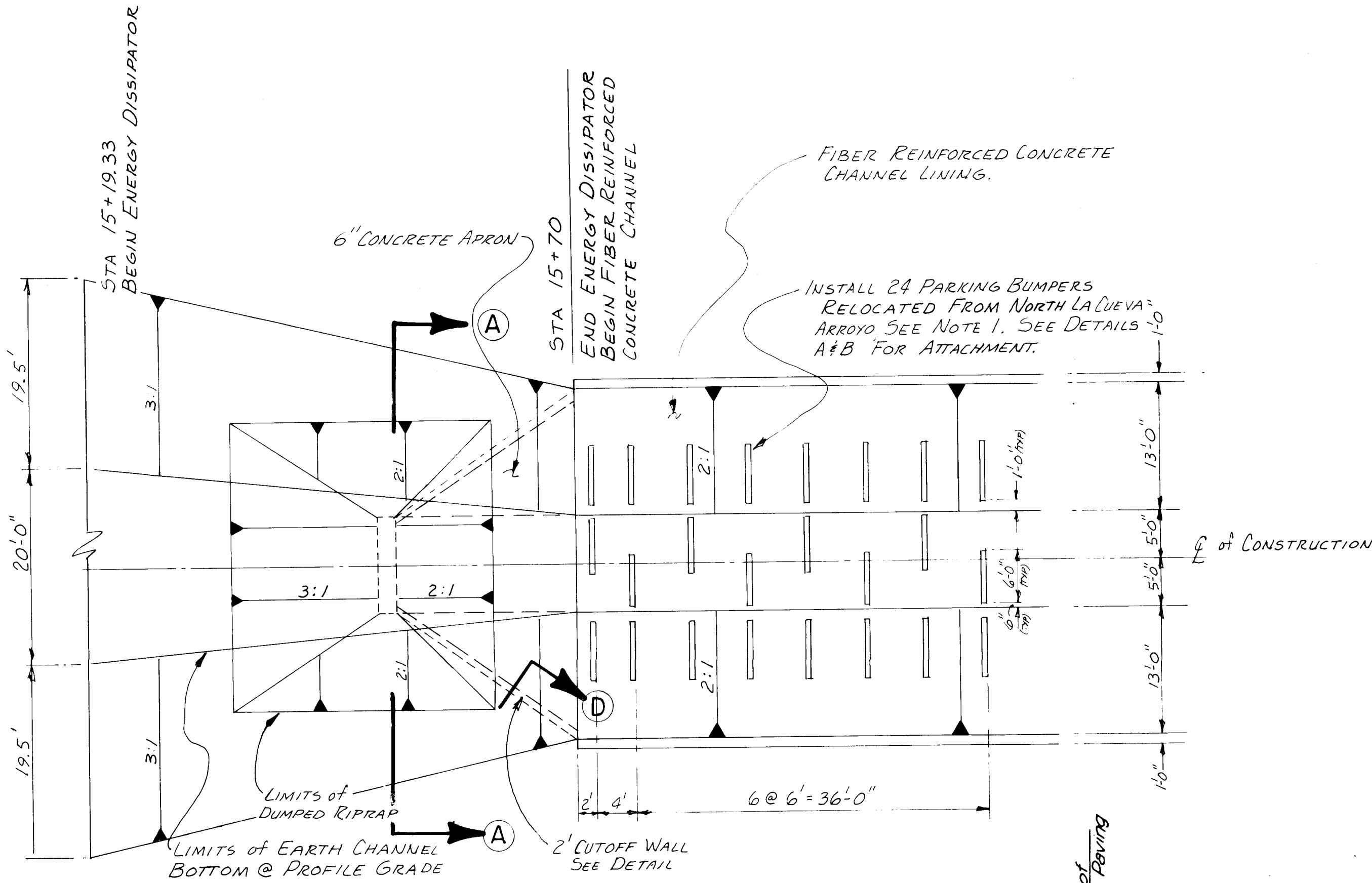
1. FOR TYPICAL TRAPEZOIDAL CHANNEL DETAIL SEE SHEET 6.
2. UNDERGROUND ELECTRIC AND OVERHEAD LINES ENERGIZED AT 12470 VOLTS. LINES THAT CROSS OVER SUBSTATION ENERGIZED AT 115,000 VOLTS.
3. APPROX. STA. 34+25: CONTACT PNM FOR LOCATION OF NEWLY INSTALLED UNDERGROUND DUCT SYSTEM.
4. SEE SHEET 8 FOR CHANNEL TRANSITION DETAILS TO EXISTING STRUCTURE.
5. SEE SHEET 7 FOR RETAINING WALL DETAILS.
6. CONTRACTOR SHALL CONTACT PNM TO LOCATE DUCT BANK PRIOR TO WORK IN THIS AREA. PROPER PRECAUTIONS SHALL BE TAKEN TO AVOID DAMAGE TO DUCT BANK.
7. SEE CROSS SECTIONS, SHEETS 15 & 16.

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

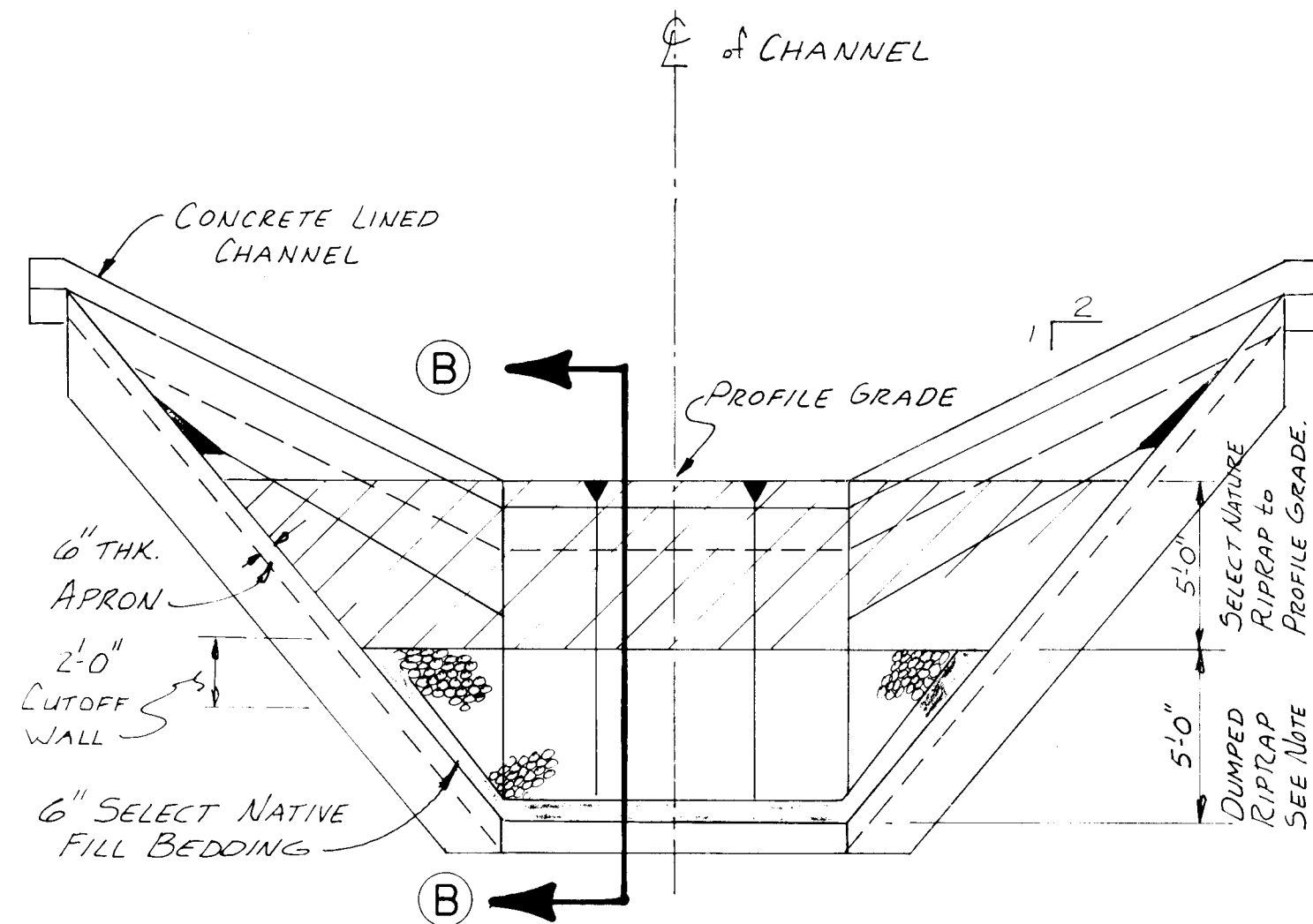
T.	DRAWING NO.	MAP NO. D-17	SHEET 4	OF 16
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NOTES:

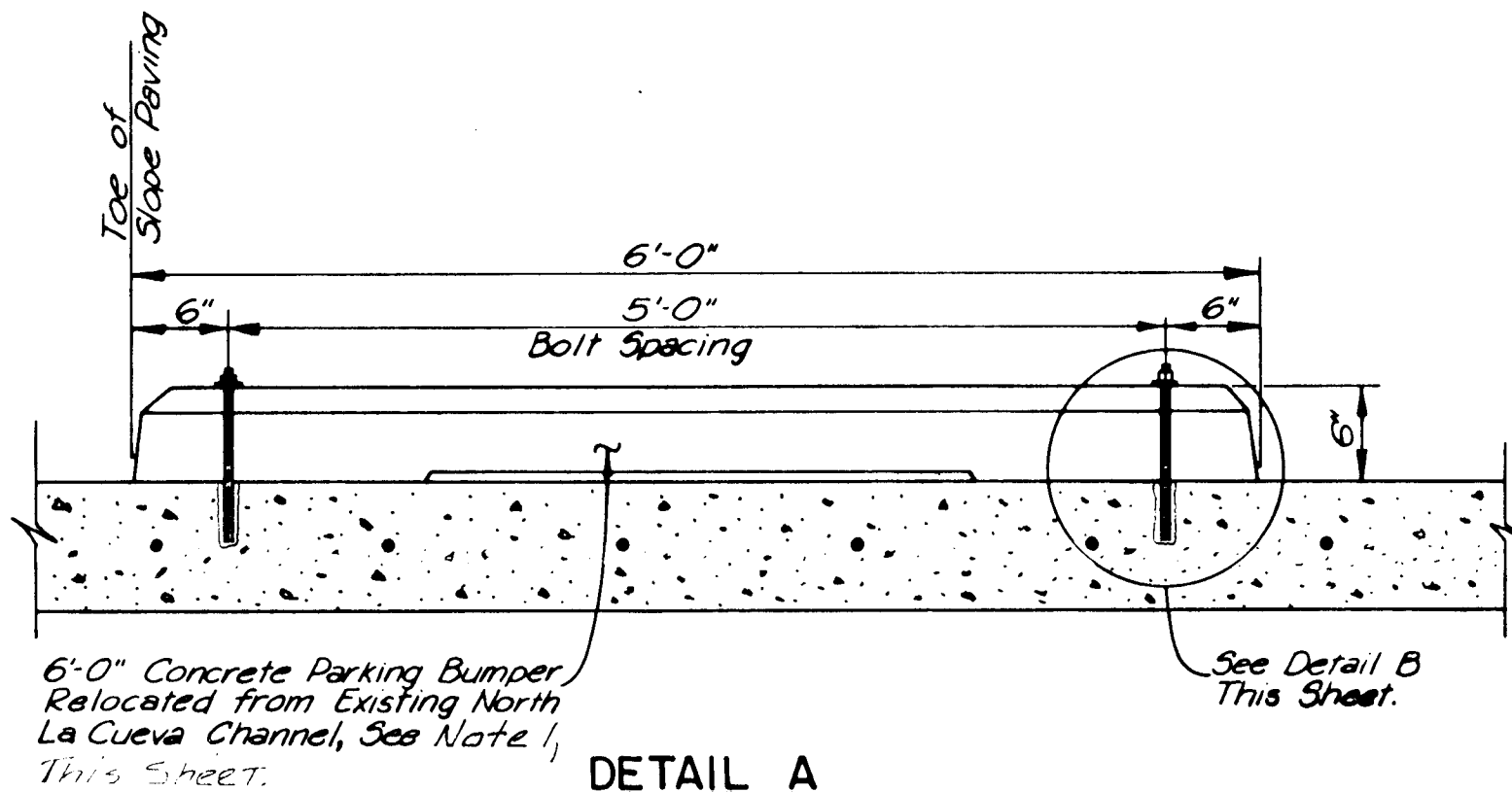
- 1) INSTALL 24 PARKING BUMPERS PER DETAILS THIS SHEET. BUMPERS WILL BE LOCATED IN STOCKPILE AREA NEAR PINO ARROYO INLET TO N. DIVERSION CHANNEL.
- 2) 5' DUMPED NATIVE FILL, 5' DUMPED RIPRAP AND 6" BEDDING to be INSTALLED by AMAFCA.



ENERGY DISSIPATOR PLAN- STA. 15+70
NTS

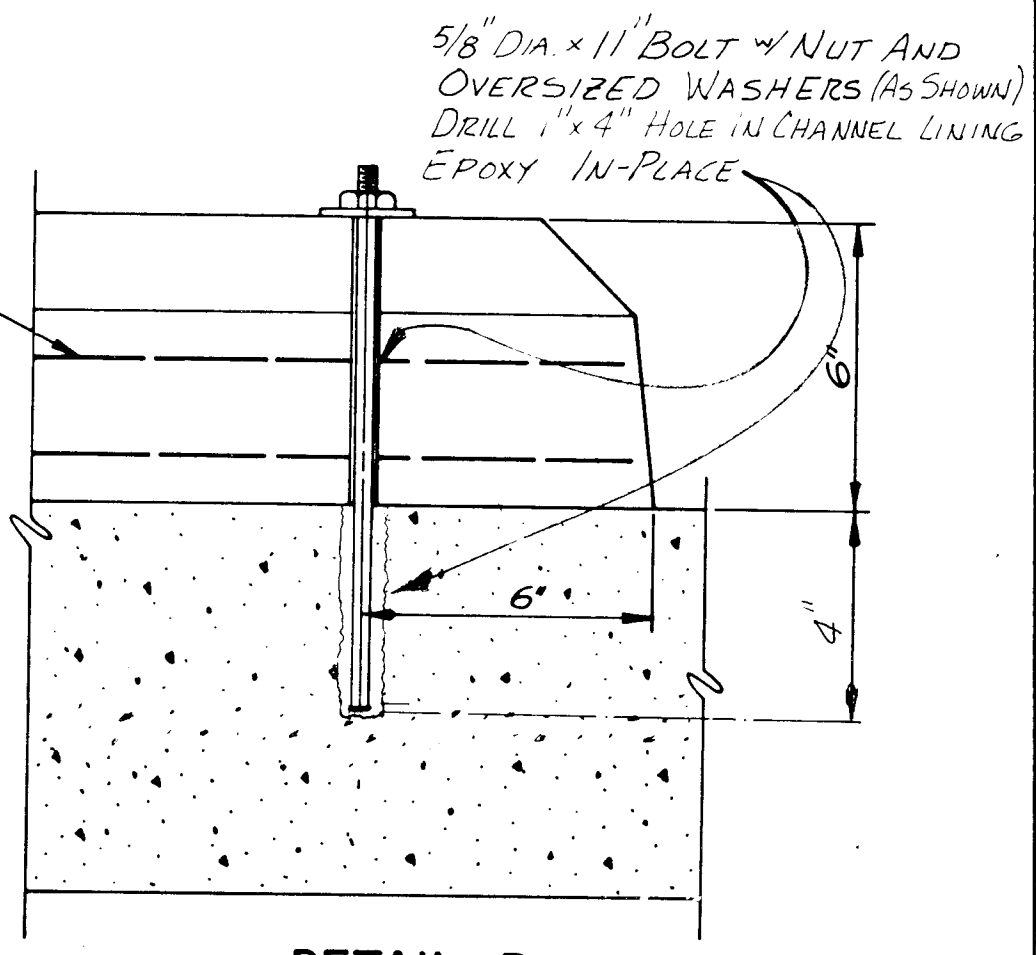


SECTION AA - CONCRETE APRON
NTS

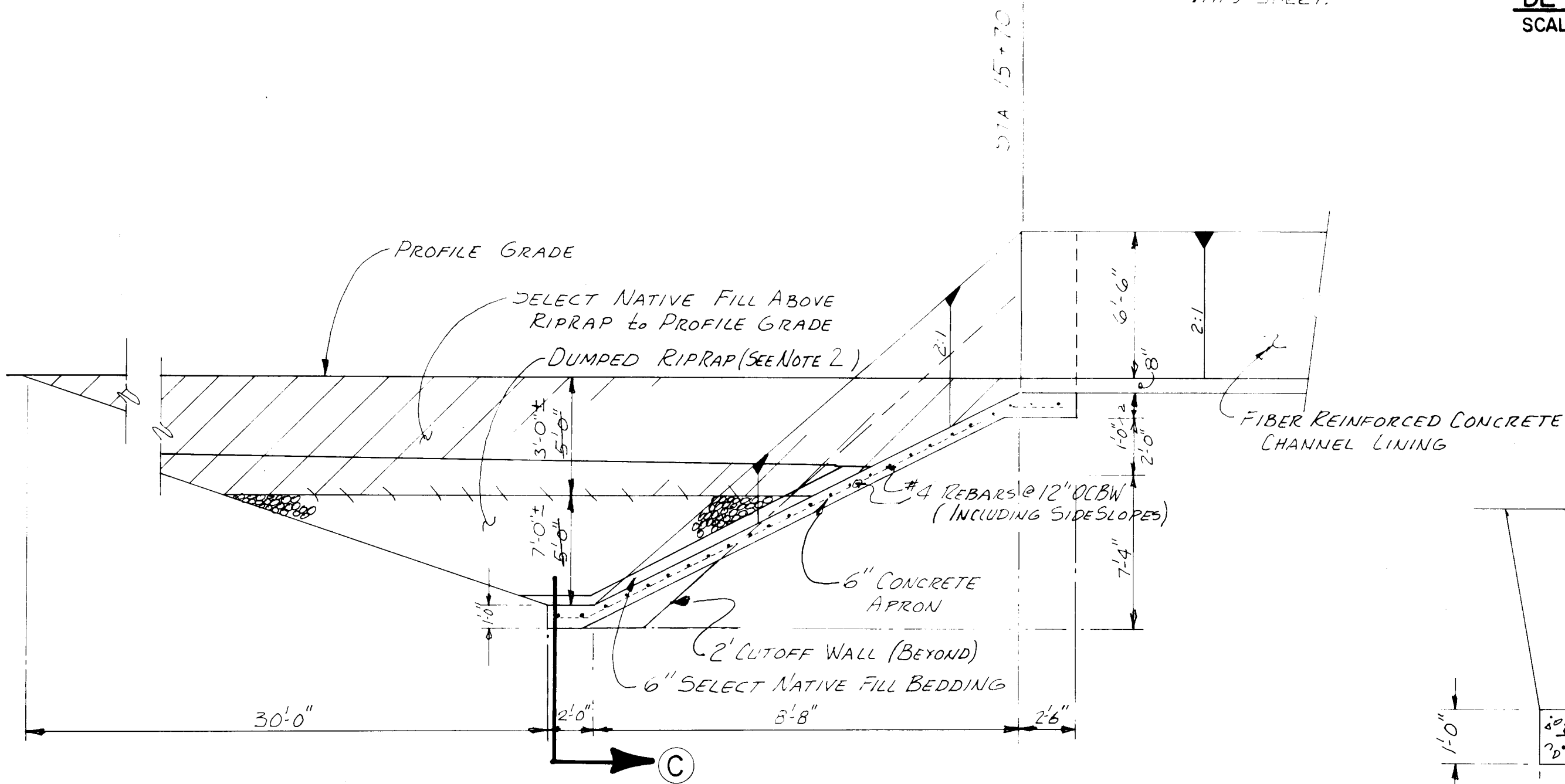


DETAIL A
SCALE: 1" = 1'-0"

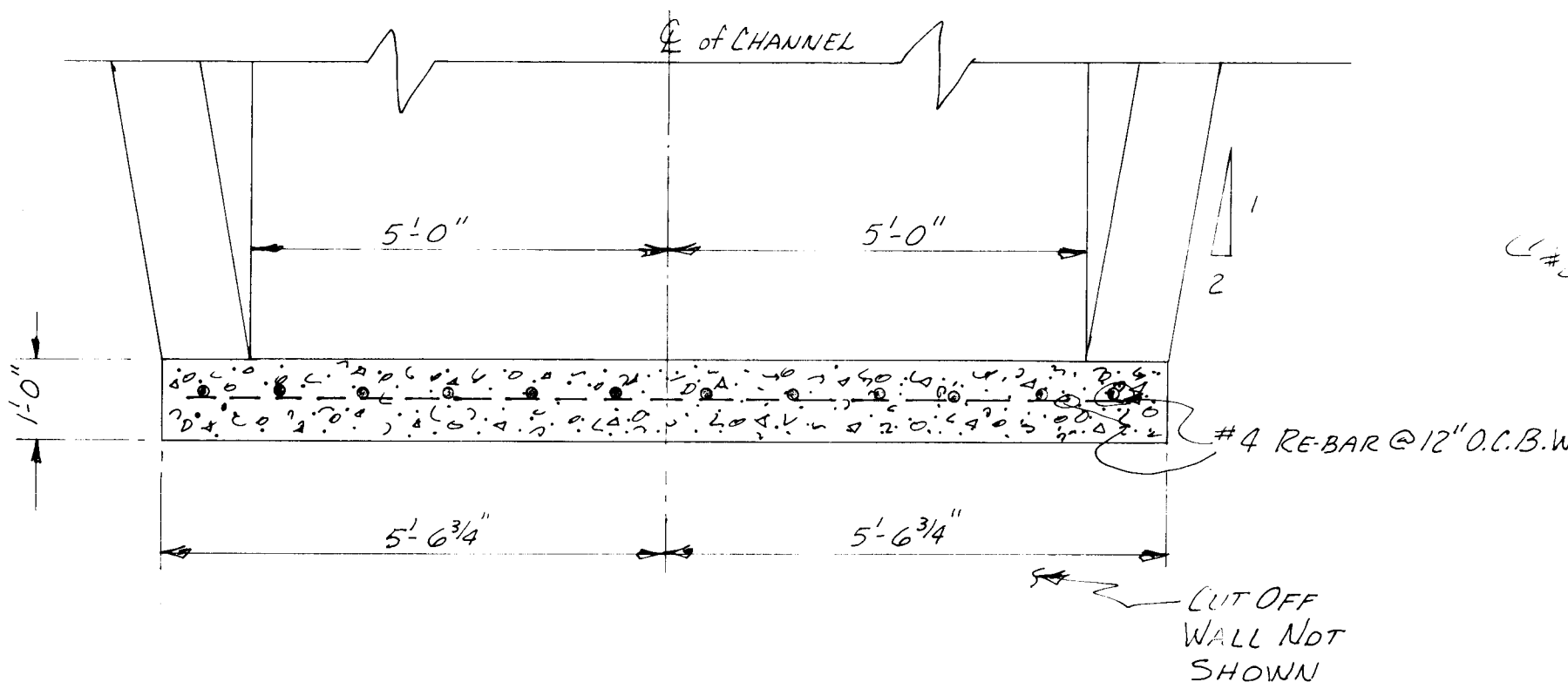
BUMPER ATTACHMENT DETAILS



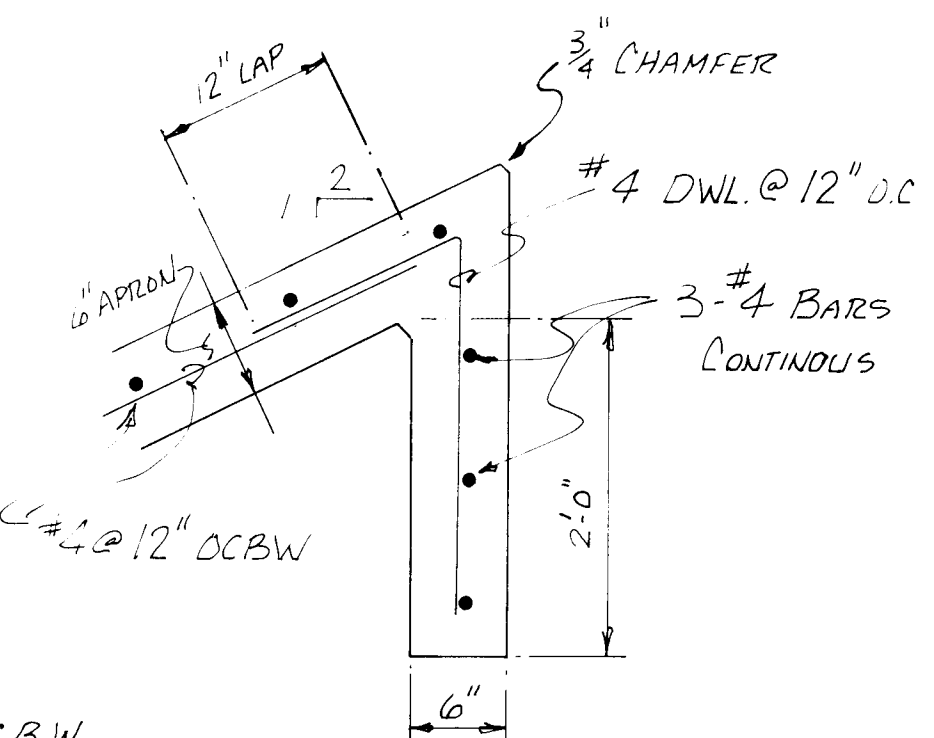
DETAIL B
SCALE: 3" = 1'-0"



SECTION BB - CONCRETE APRON
NTS



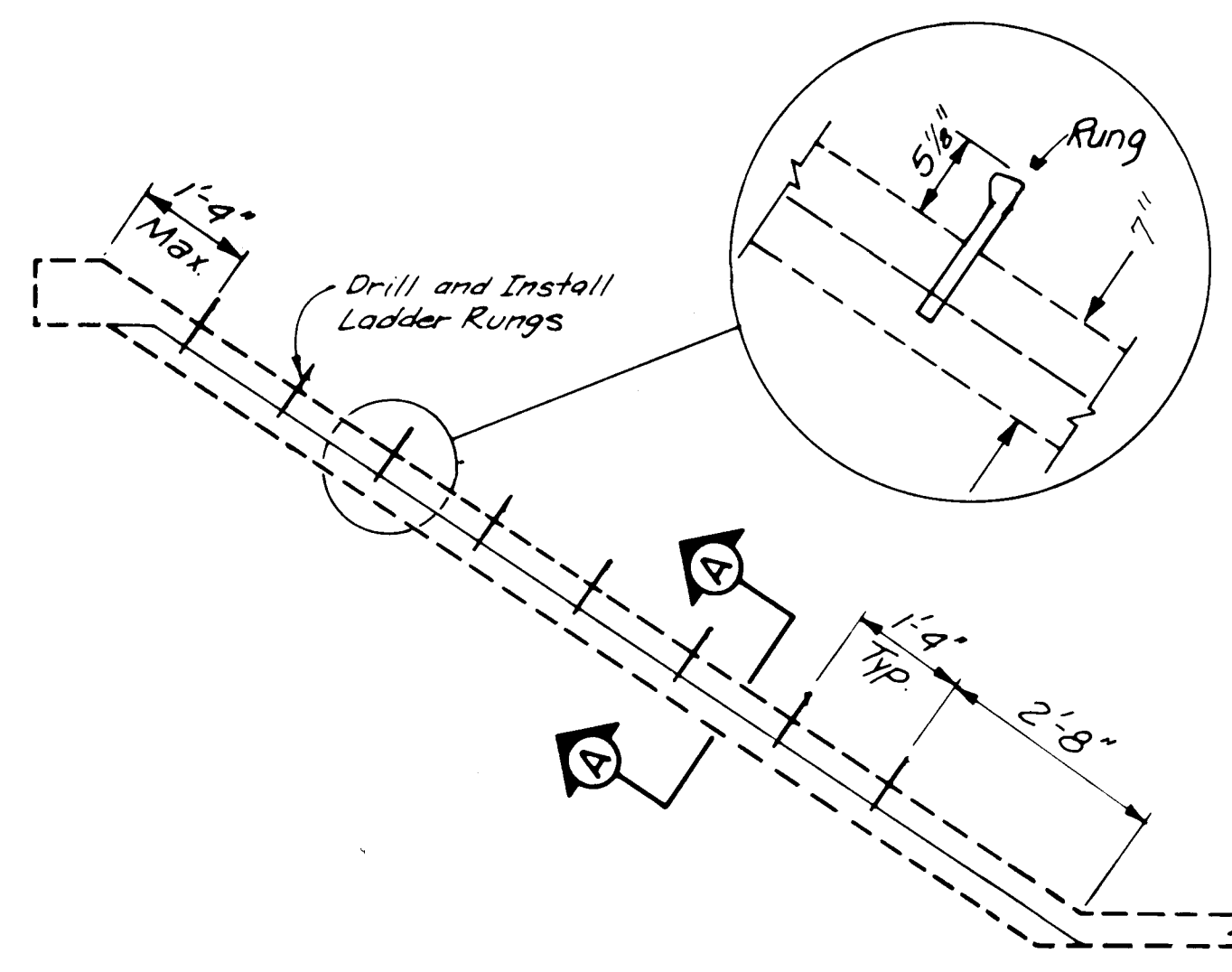
SECTION C -
NTS



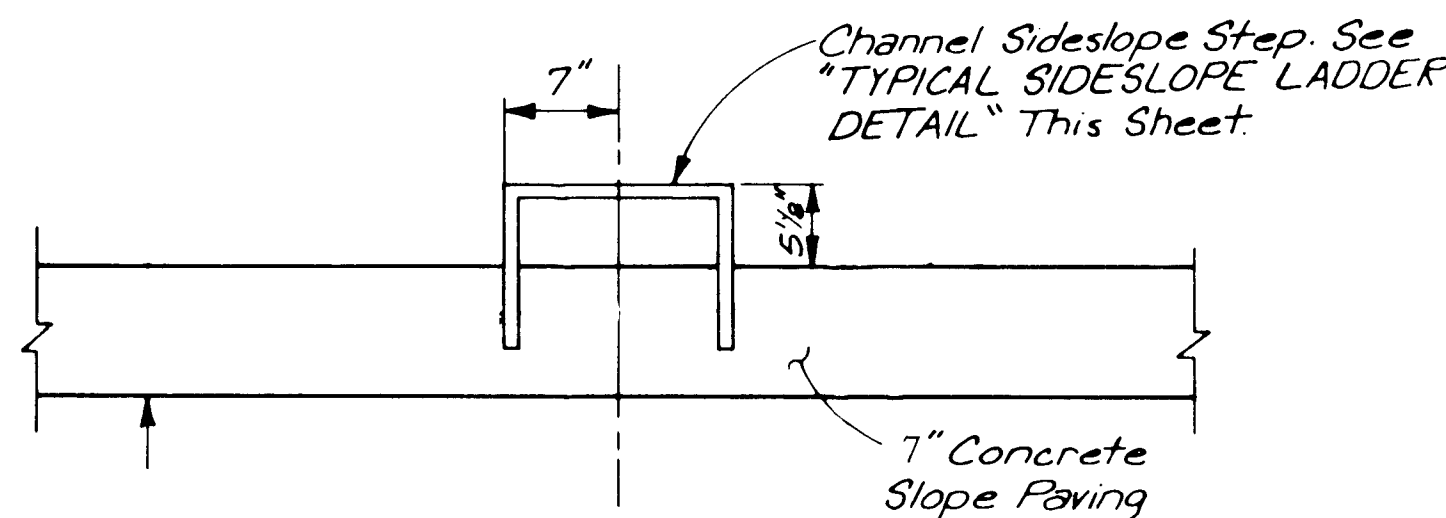
SECTION D -
2' CUTOFF WALL
NTS

1	2	3	4	5	6	7	8	9	10	11	12
26	36	78	05	89							

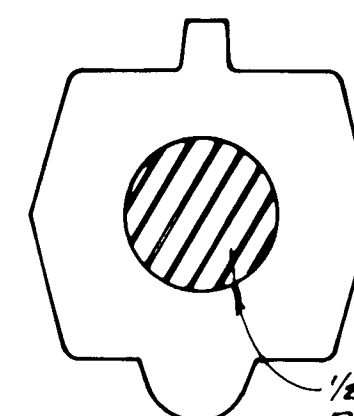
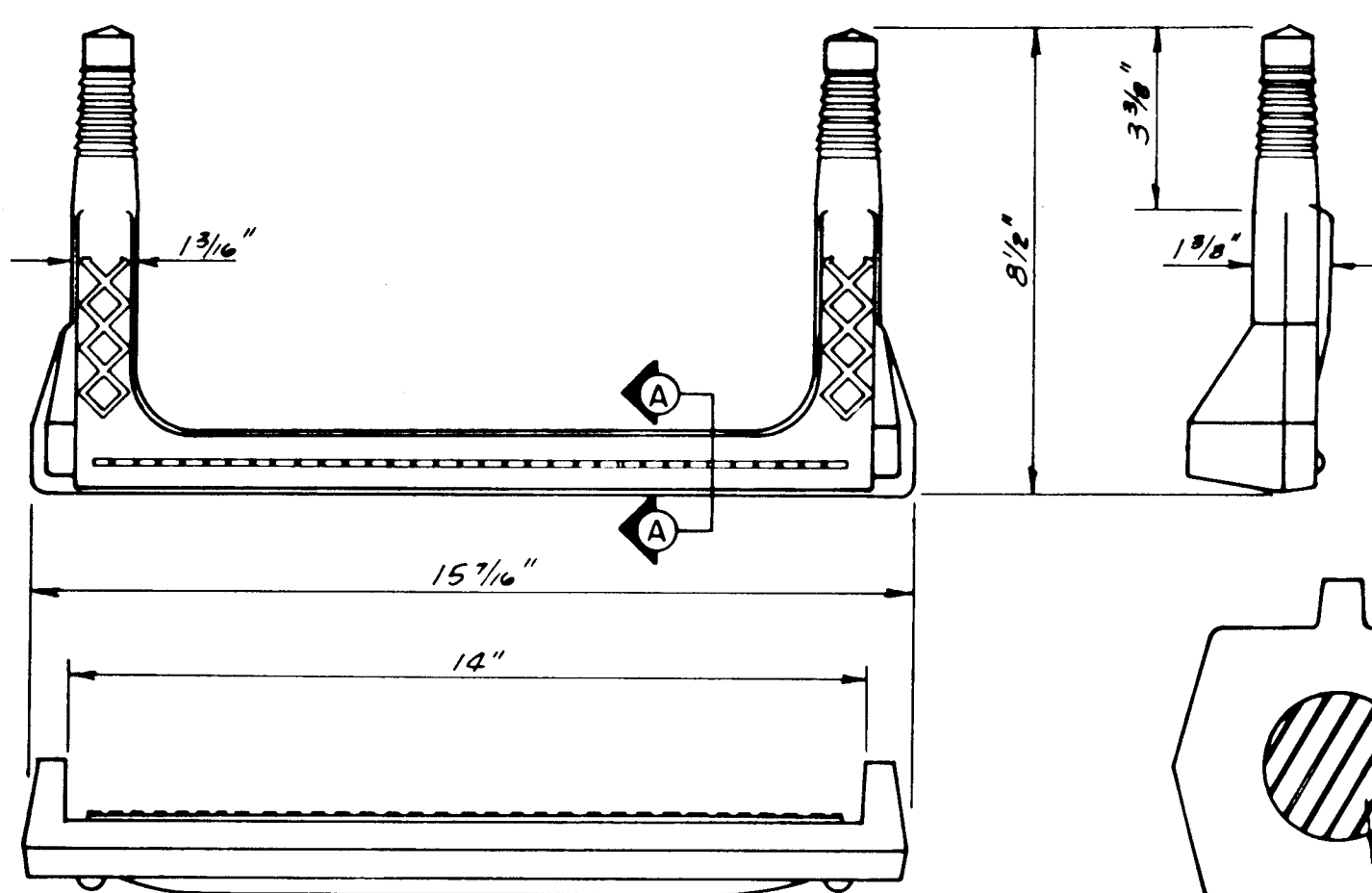
A.M.A.F.C.A.					
TITLE: PINO ARROYO IMPROVEMENTS ENERGY DISSIPATOR DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E.-Design			Traffic		
A.C.E.-Hydrology			Water		
DRAWING NO.			MAP NO. D-17		
SHEET 5			OF 16		



CHANNEL SIDESLOPE LADDER DETAILS
INSTALL AT LOCATION SHOWN ON PLAN AND PROFILE SHEETS



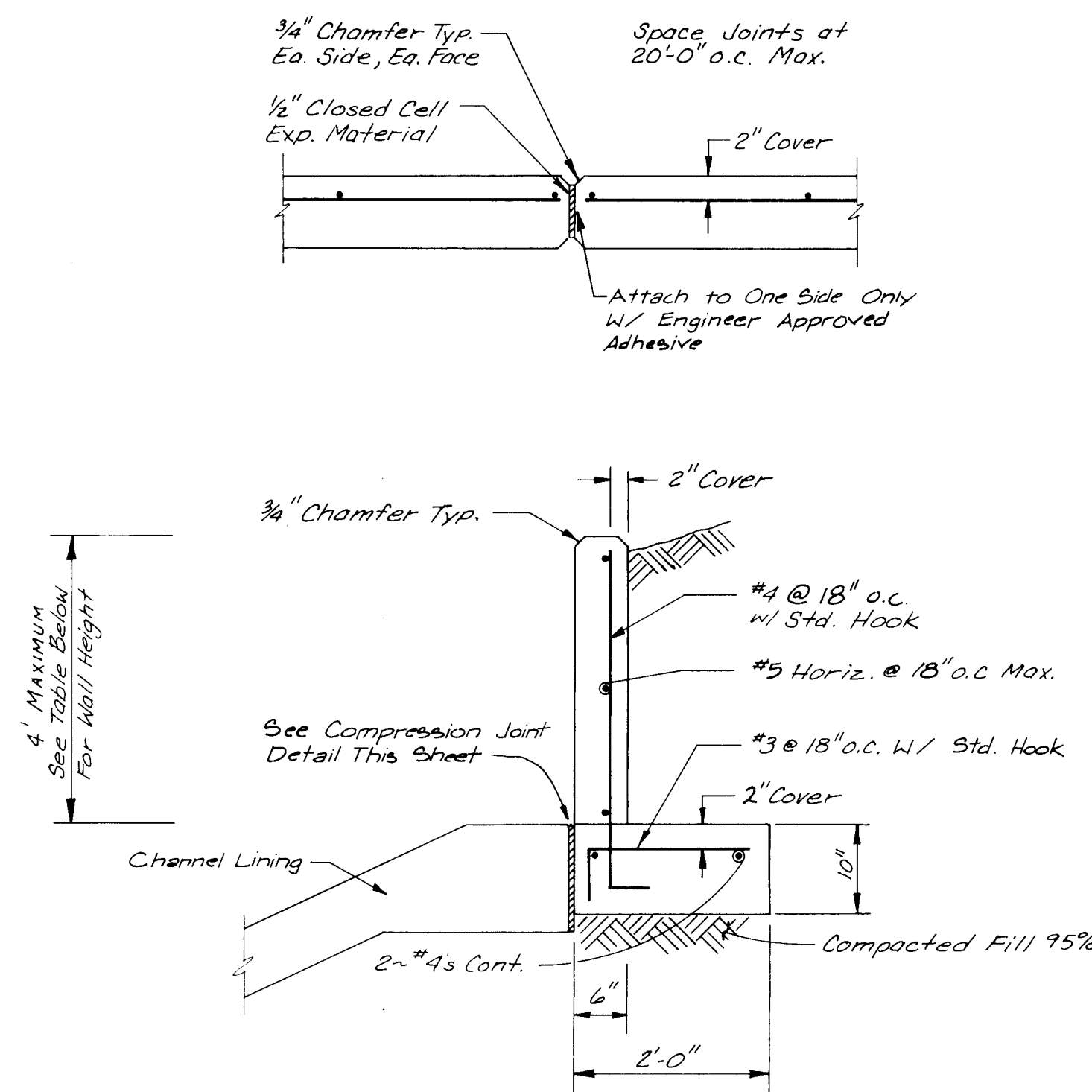
SECTION A-A



SECTION A

Steps Shall Be
Polypropylene-Molded Over 1/2" Steel Reinforcing Rod
Model No. PS-2-PFS, M.A. Industries, Inc.,
or Approved Equal By The Engineer.

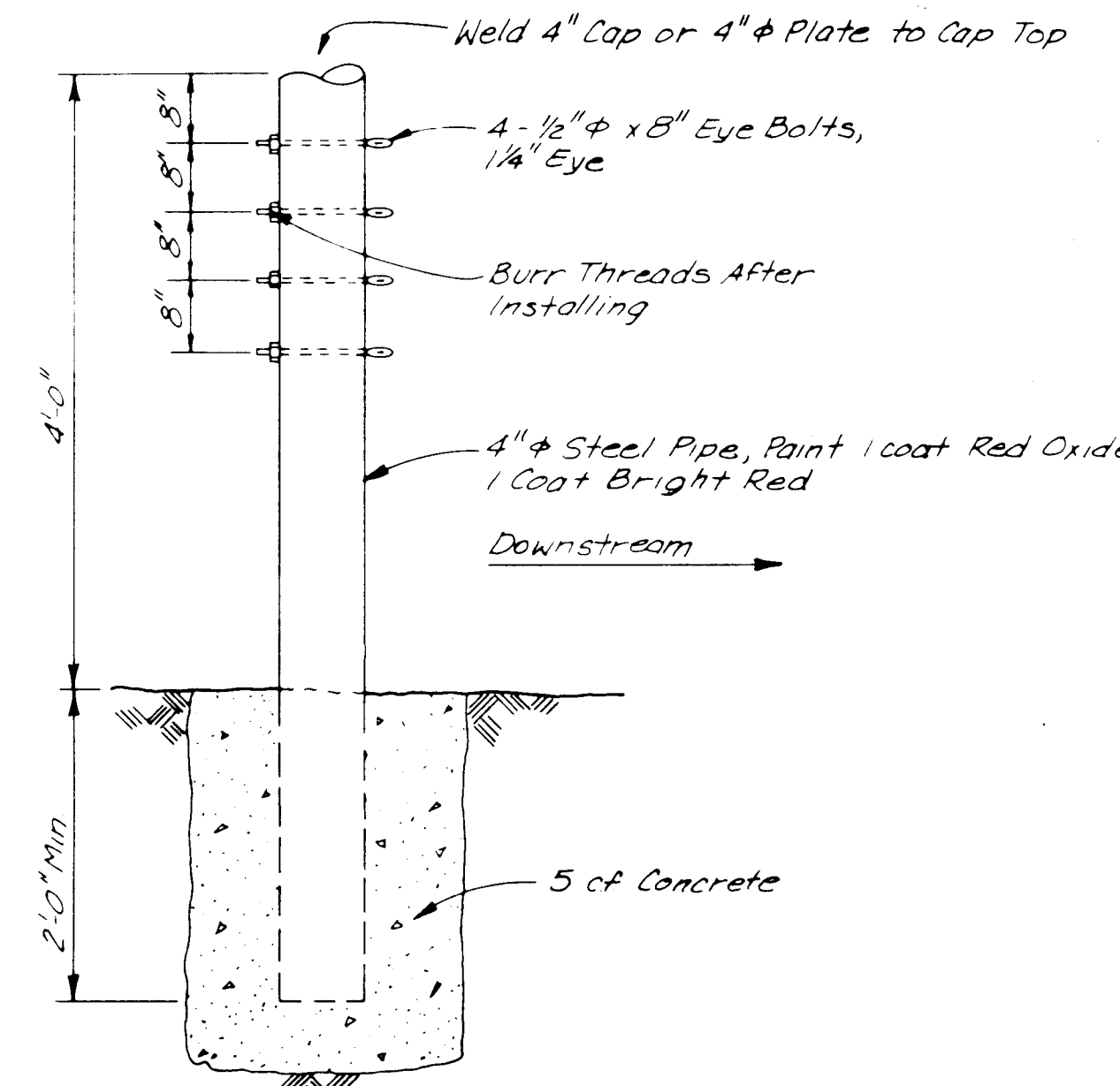
TYPICAL SIDESLOPE LADDER DETAIL



TYPICAL RETAINING WALL DETAIL

WALL HEIGHT 1'-0" TO 4'-0"

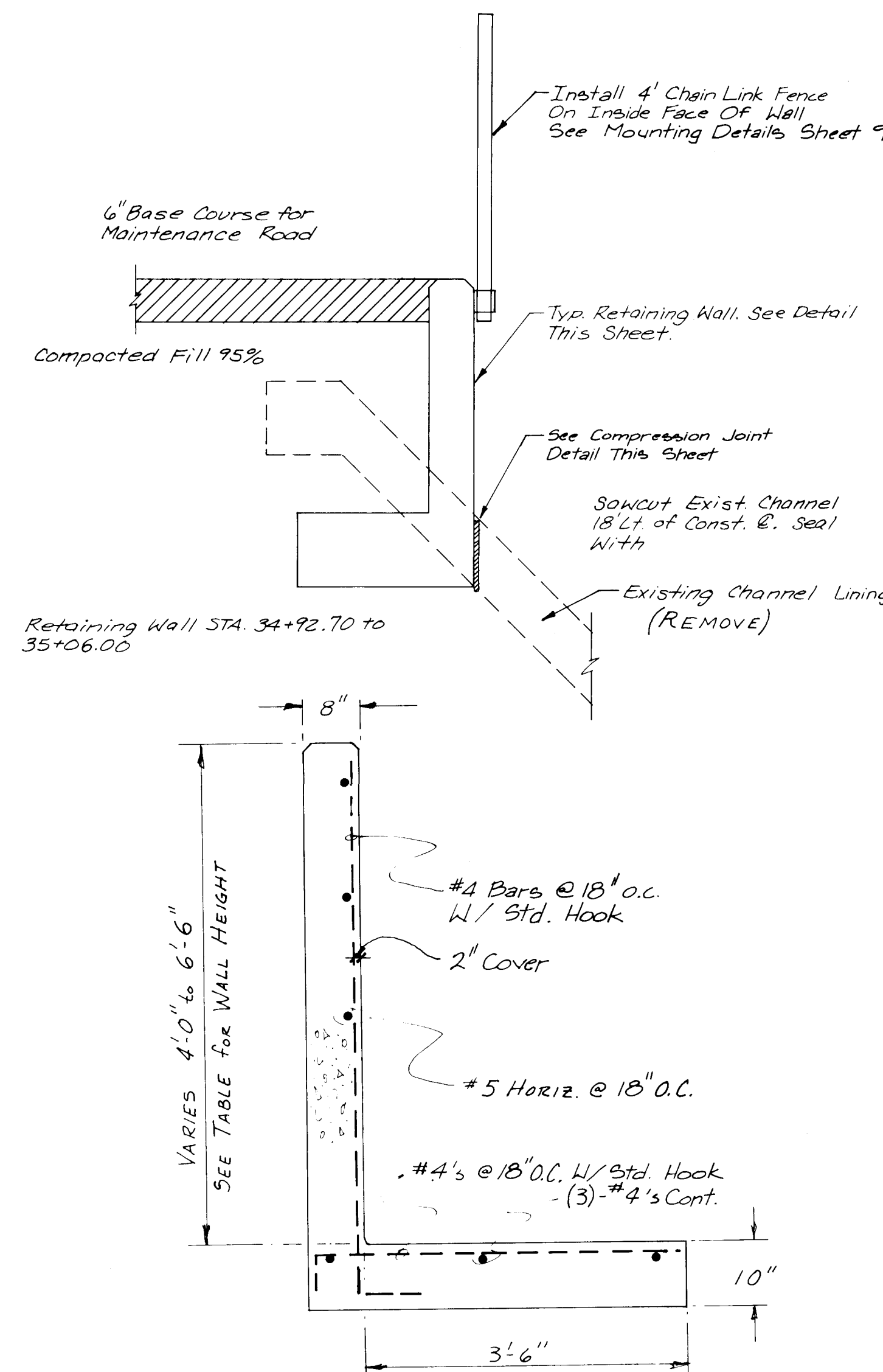
STATION	WALL HEIGHT	STATION	WALL HEIGHT
17+25.00	1.00 RT	32+32.00	1.00 LT
17+50.00	4.00 RT	33+50.00	3.50 LT
18+00.00	4.00 RT	34+00.00	4.00 LT
18+50.00	4.00 RT	34+92.70	4.00 LT
18+75.00	2.50 RT	35+06.00	6.50 LT
19+00.00	2.50 RT		4.00 LT
19+50.00	1.00 RT		



SAFETY POST DETAIL

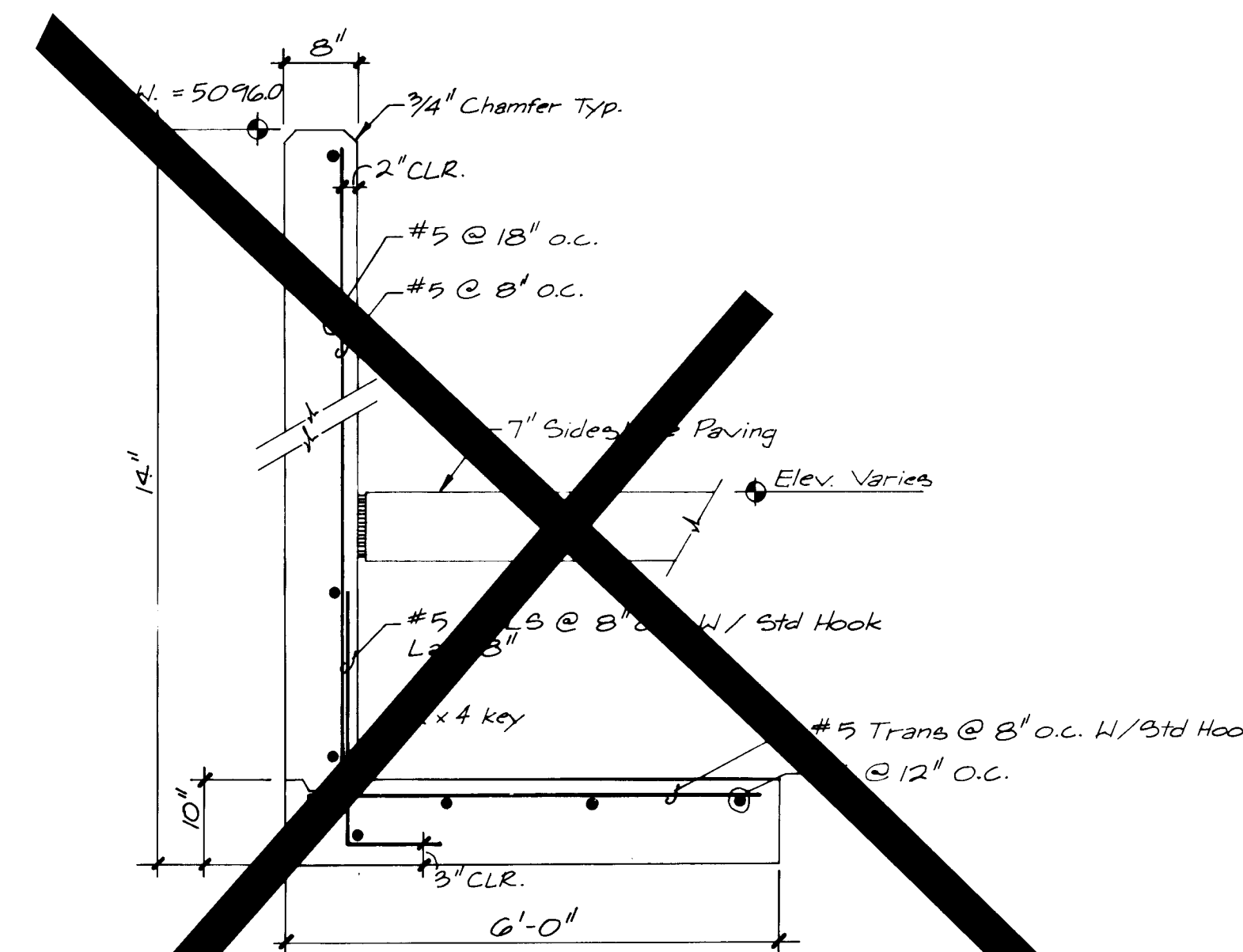
NOT TO SCALE

Location As Shown on Plans



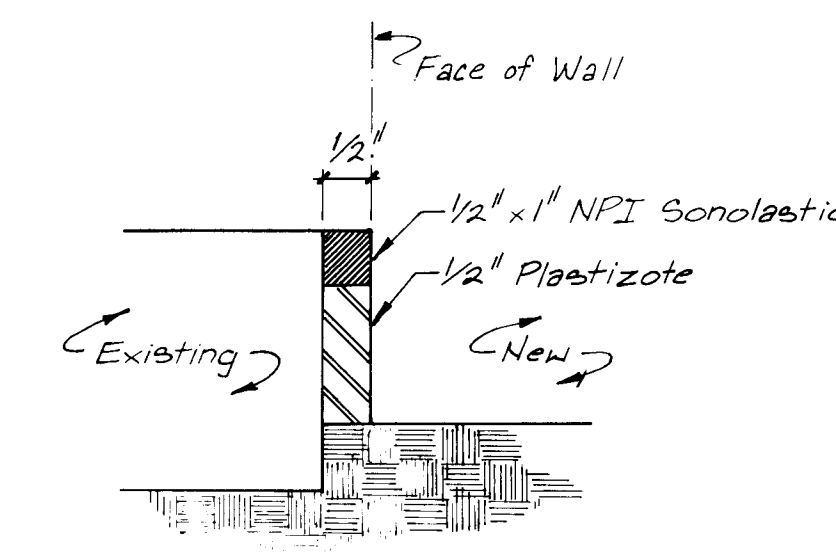
TYPICAL RETAINING WALL DETAIL

WALL HEIGHT 4'-0" TO 6'-6"



SECTION THRU HEADWALL @ STA. 12+55

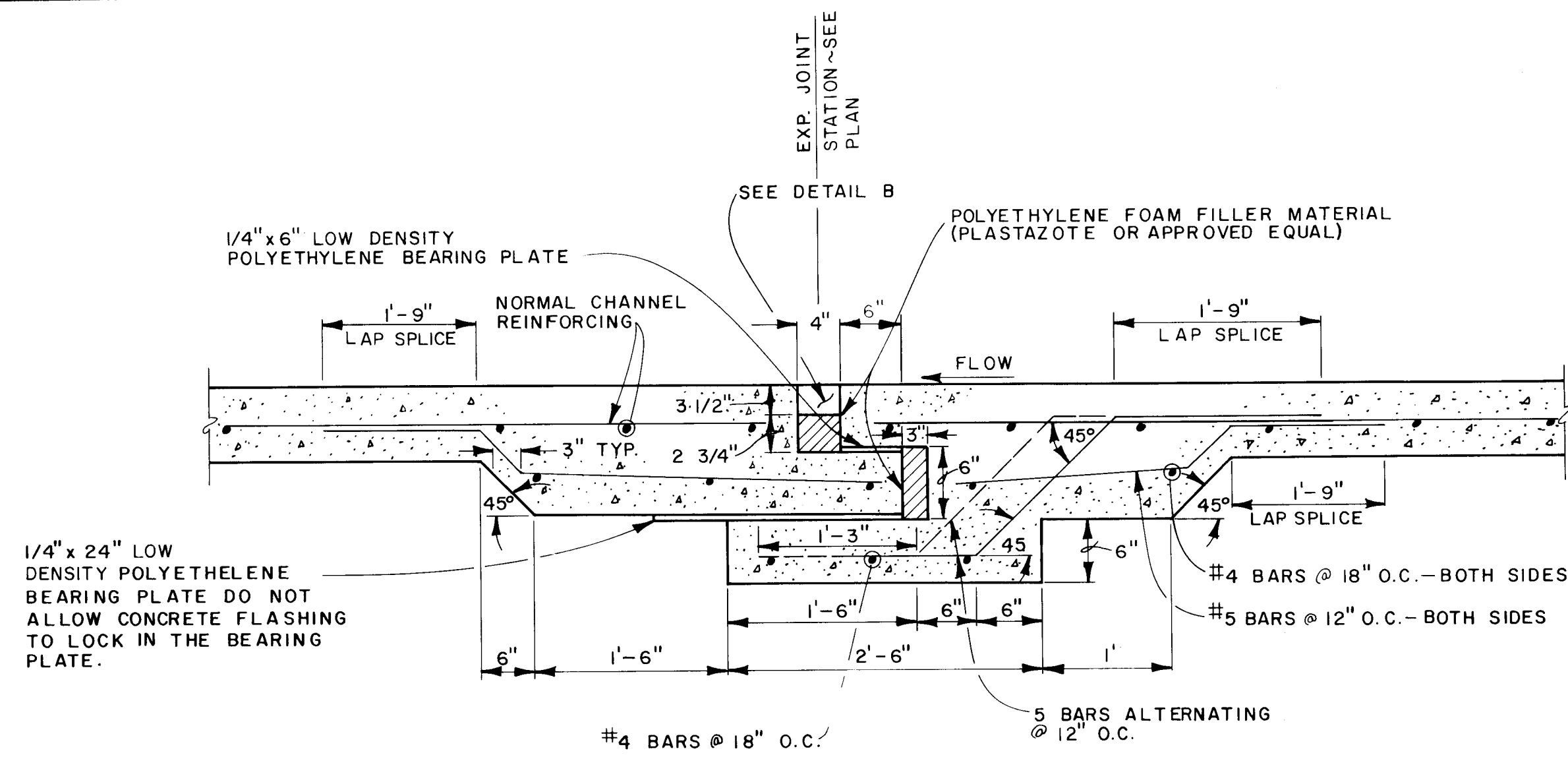
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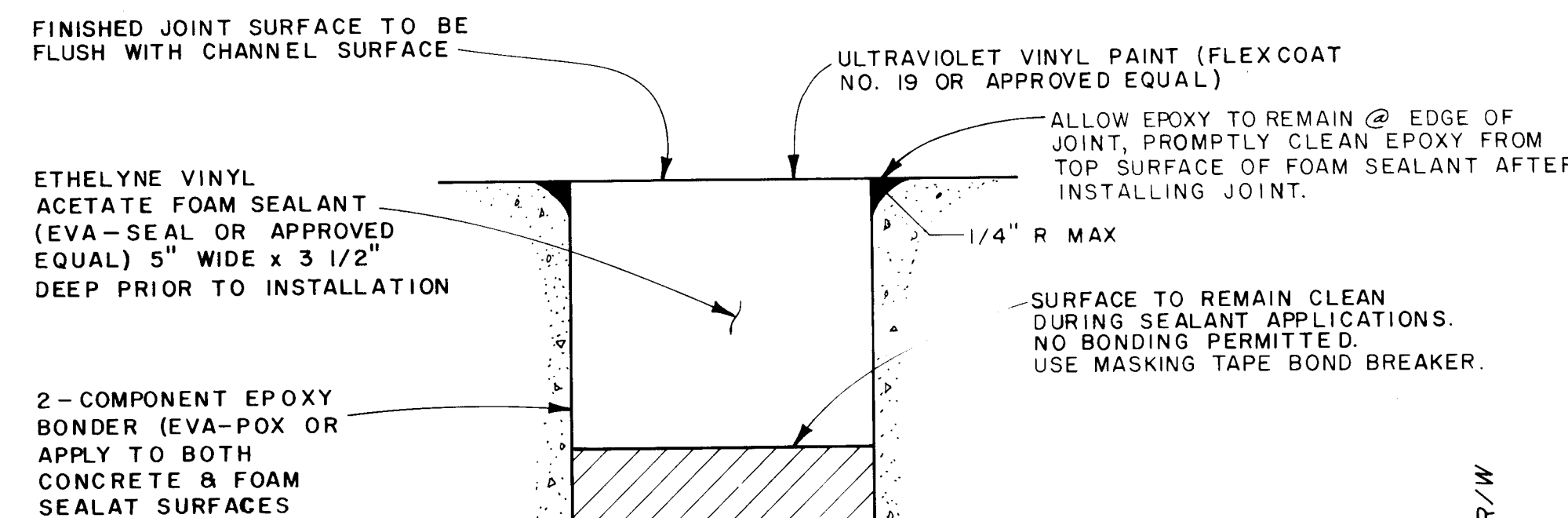
COMPRESSION JOINT

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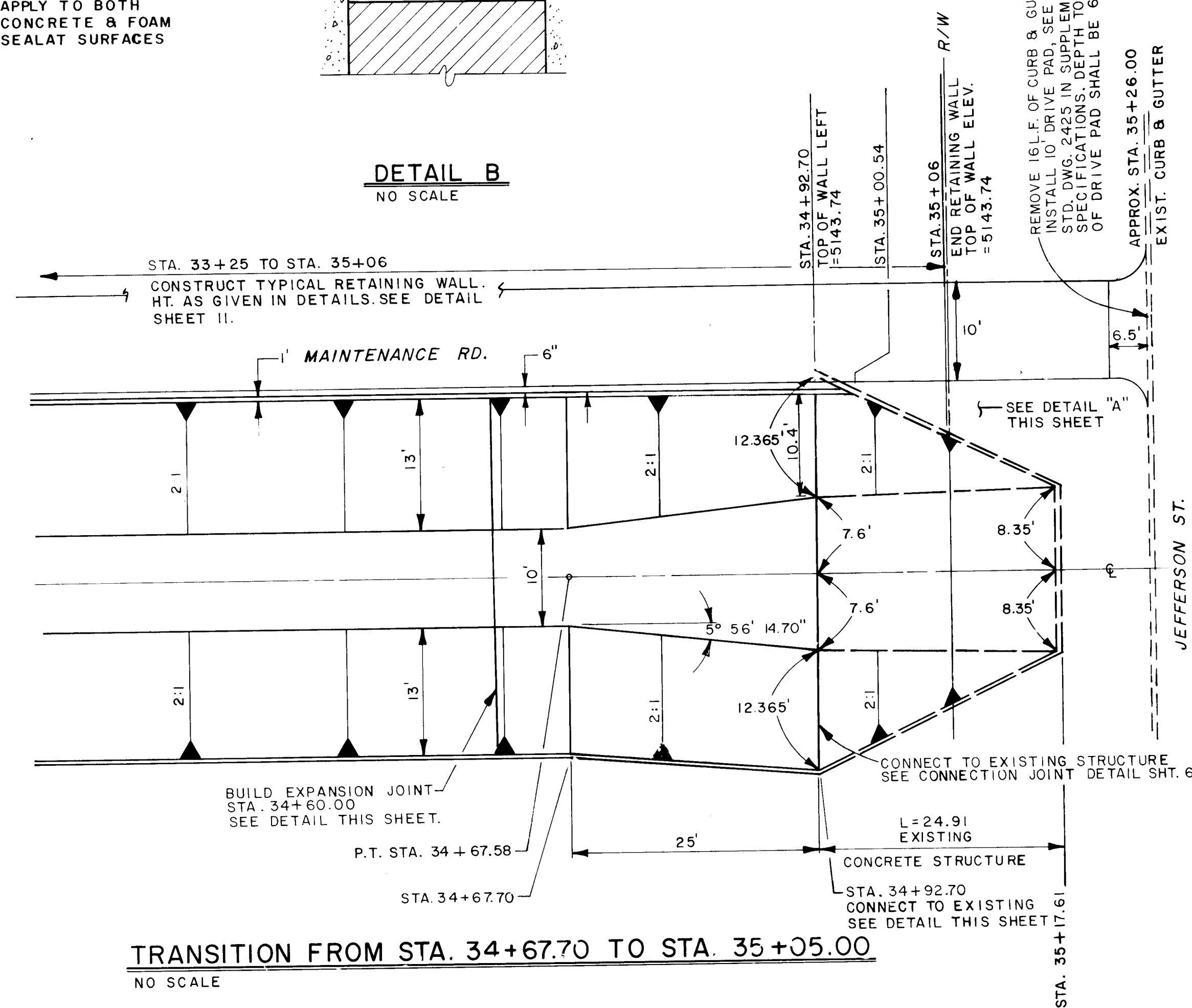
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TITLE: PINO ARROYO IMPROVEMENTS MISC. DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A C E - Design			Traffic		
A C E - Hydrology			Water		
DRAWING NO.		MAP NO. D-17		SHEET 7 OF 16	



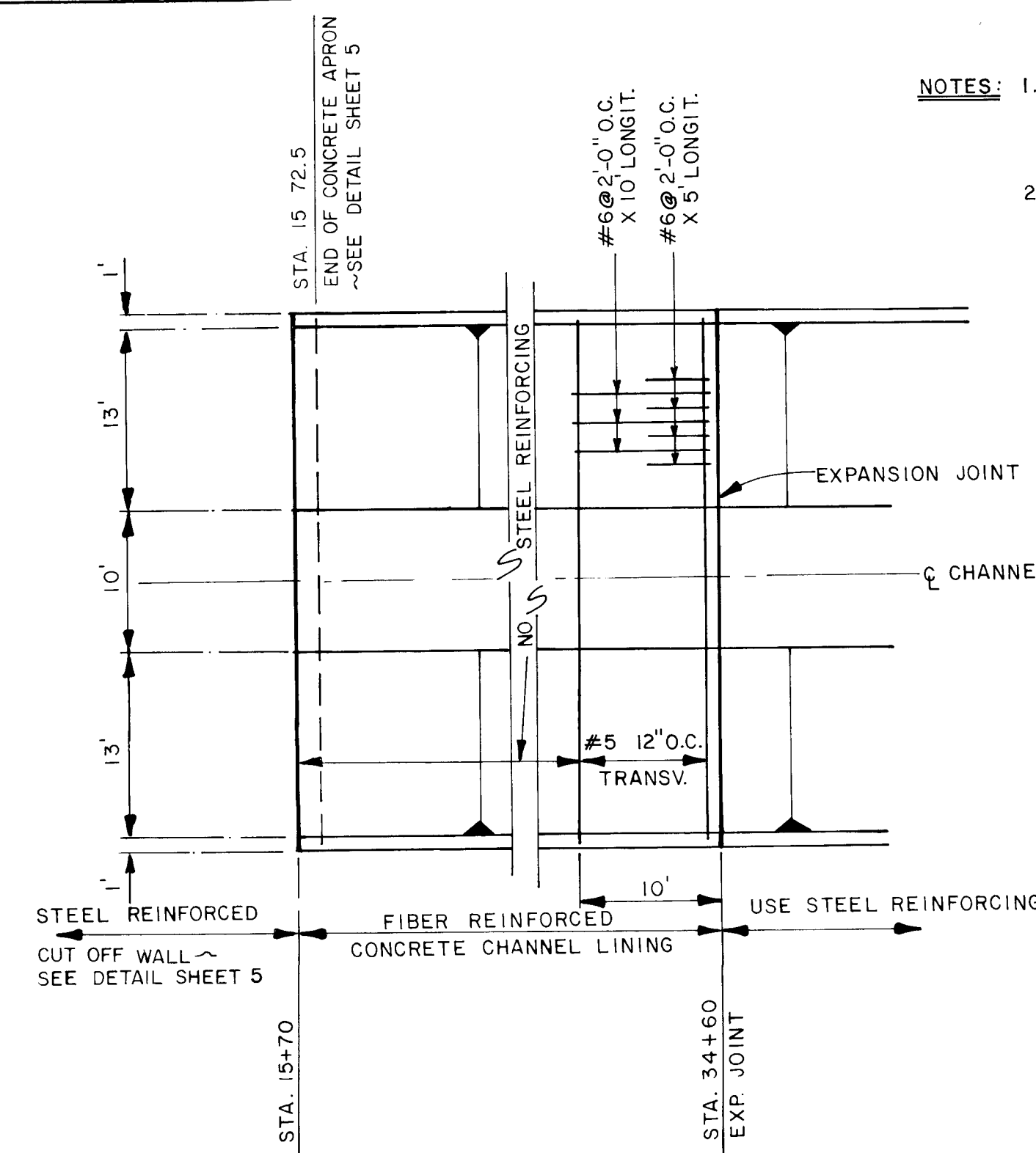
TYPICAL TRANSVERSE EXPANSION JOINT
NO SCALE FOR CONSTRUCTION NOTES, SEE SPECIFICATIONS
@ STA. 13+15 & STA. 34+60



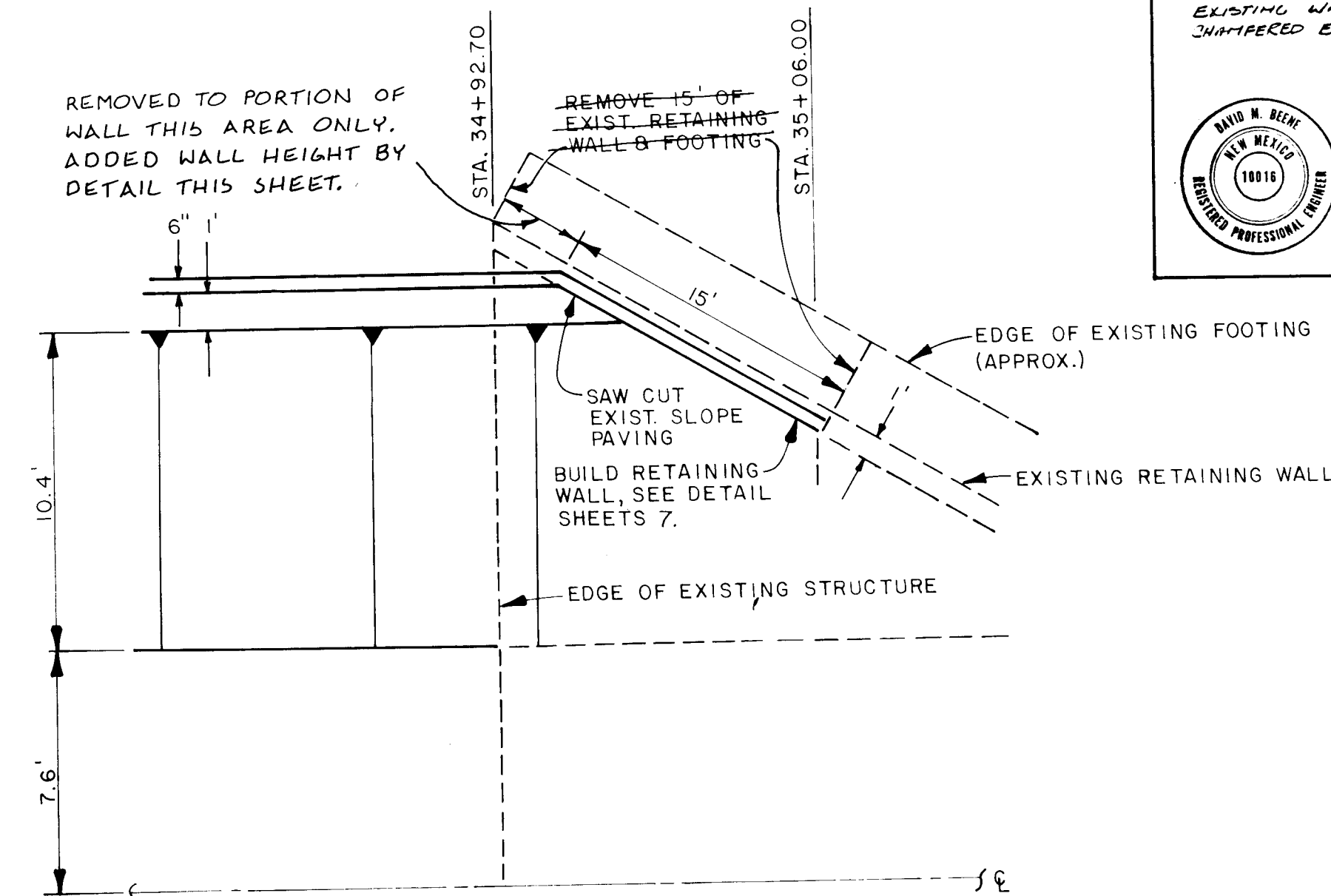
DETAIL B
NO SCALE



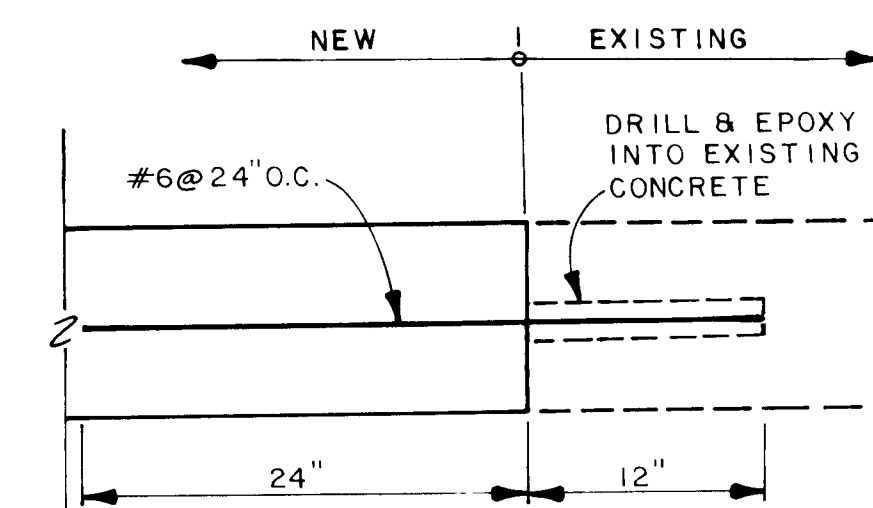
TRANSITION FROM STA. 34+67.70 TO STA. 35+05.00
NO SCALE



PLAN
CHANNEL REINFORCING LAYOUT

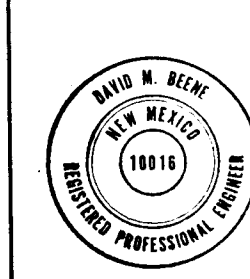
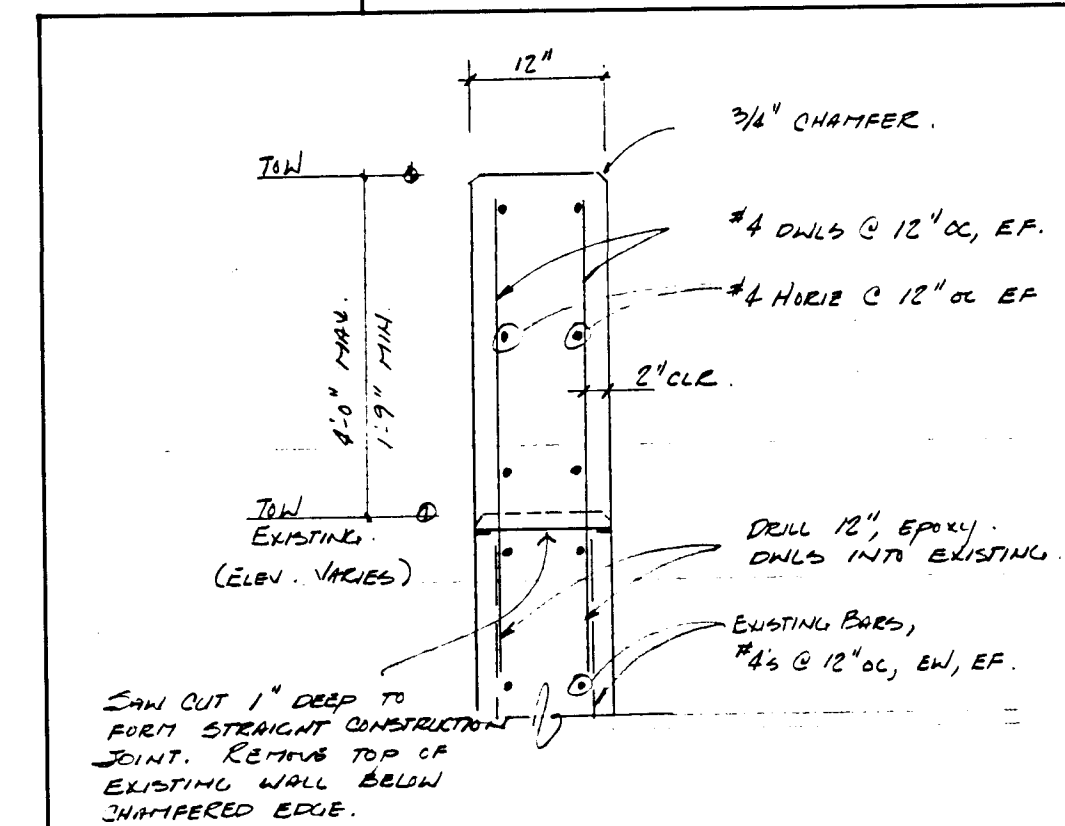


DETAIL \"A\"
NO SCALE



CONSTRUCTION JOINT @ STA. 34+92.70

- NOTES:**
1. SEE TYPICAL CHANNEL CROSS SECTION FOR CHANNEL GEOMETRY & STEEL REINFORCING.
 2. STEEL REINFORCING BETWEEN STA. 15+70 & STA. 34+60 SHALL BE INCIDENTAL TO FIBER REINFORCED CONCRETE CHANNEL LINING.



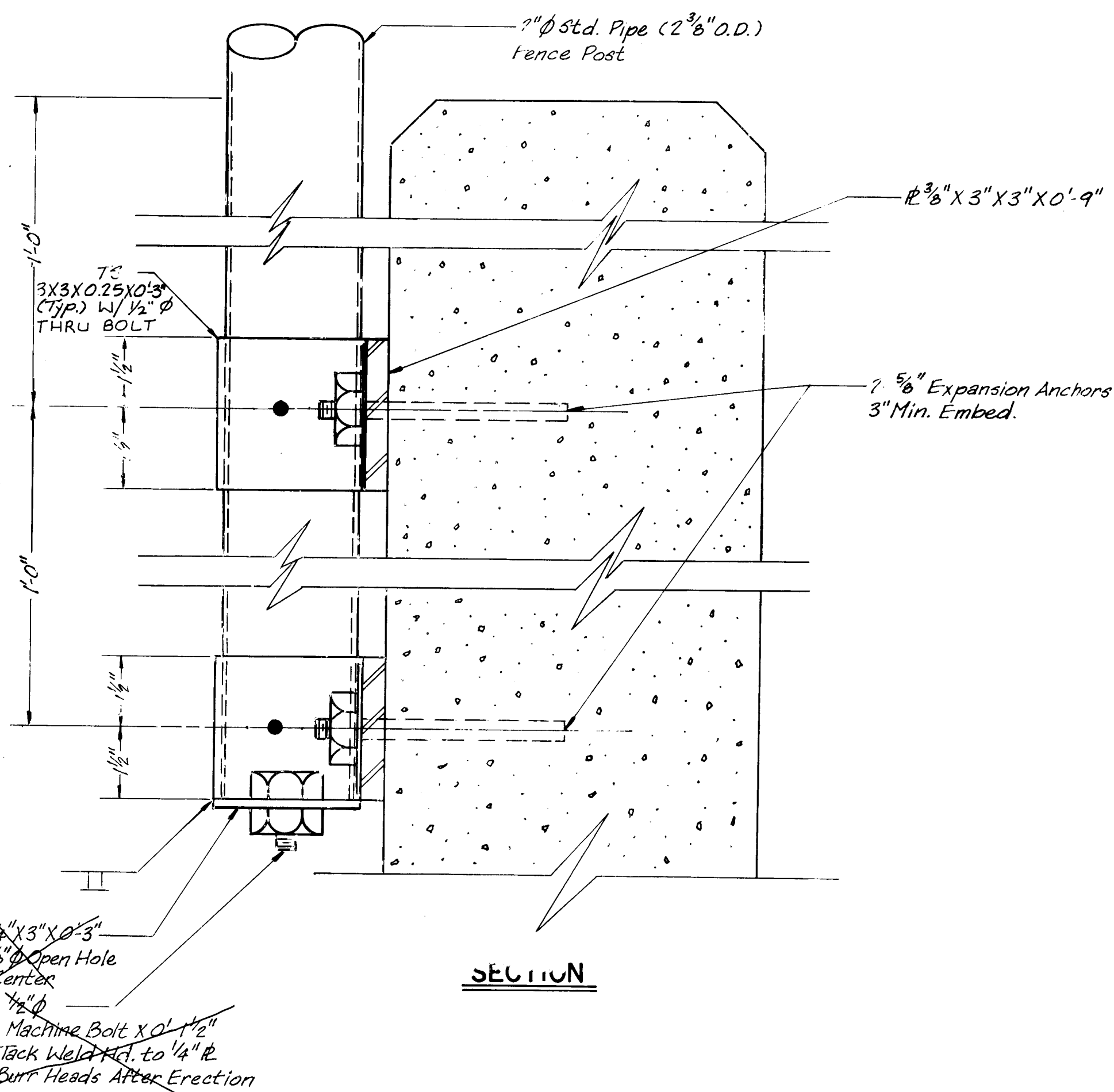
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26	36	78	08	89							

8-16-89

A.M.A.F.C.A.

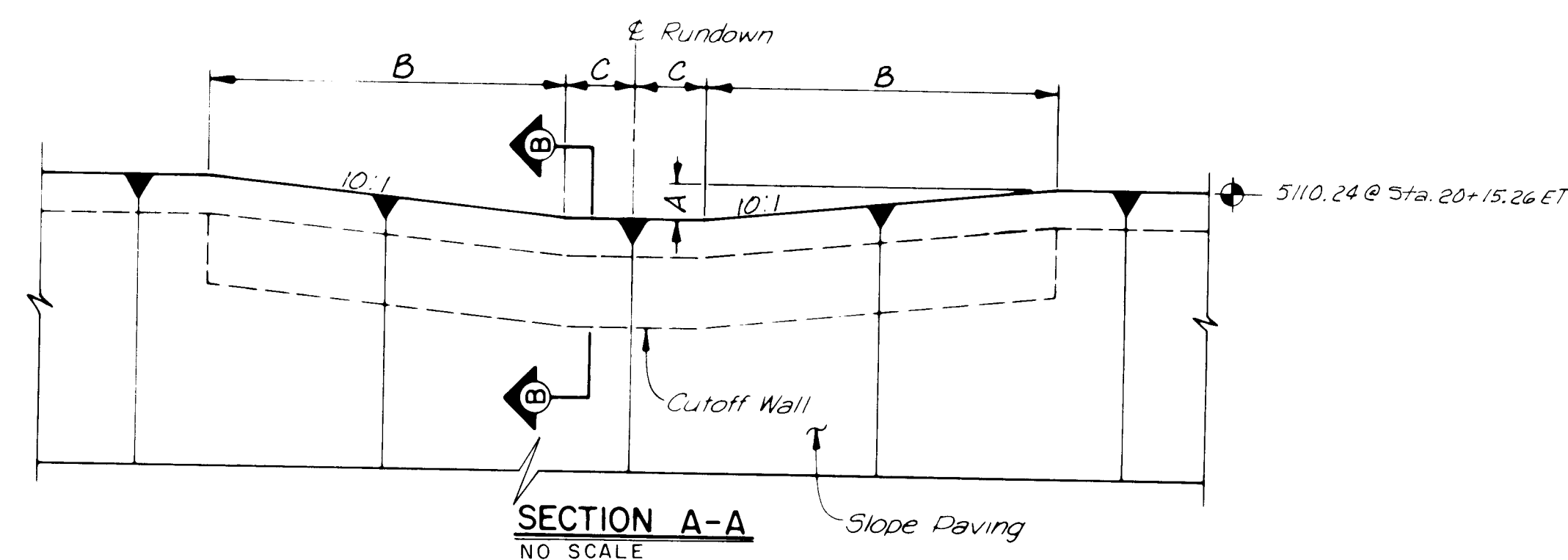
TITLE:
PINO ARROYO IMPROVEMENTS
MISC. DETAILS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A.C.E. Design			Traffic		
A.C.E. Hydrology			Water		
DRAWING NO.	MAP NO. D-17	SHEET 8	OF 16		



NO SCALE

* Stations Are Approximate. Locate Center of Runouts 25' East of Property Lines.
See Sheets 3 & 4.



- NOTES:**
1. Channel rundowns to be constructed of fiber reinforced concrete.
 2. Fibrous concrete reinforcement shall be 100% virgin polypropylene fibrillated fibers specifically manufactured for use as concrete reinforcement and so certified by the manufacturer and containing no reprocessed olefin materials. Fibrous concrete reinforcement shall be as manufactured by Fibermesh Company, 4019 Industry Drive, Chattanooga, TN 37416, or an equal previously approved in writing by the engineer.
 3. The fibrous concrete reinforcement manufacturer shall provide the services of a qualified technical representative to instruct the concrete supplier in proper batching and mixing of materials to be provided.
 4. Minimum subgrade compaction shall be 95% per ASTM D 1557 for the upper 6" of subgrade, and 90% per ASTM D 1557 for the lower 6" of subgrade.
 5. All exposed edges shall have a 3/4" chamfer, unless otherwise shown.

[illegible]

Jack. B. ...

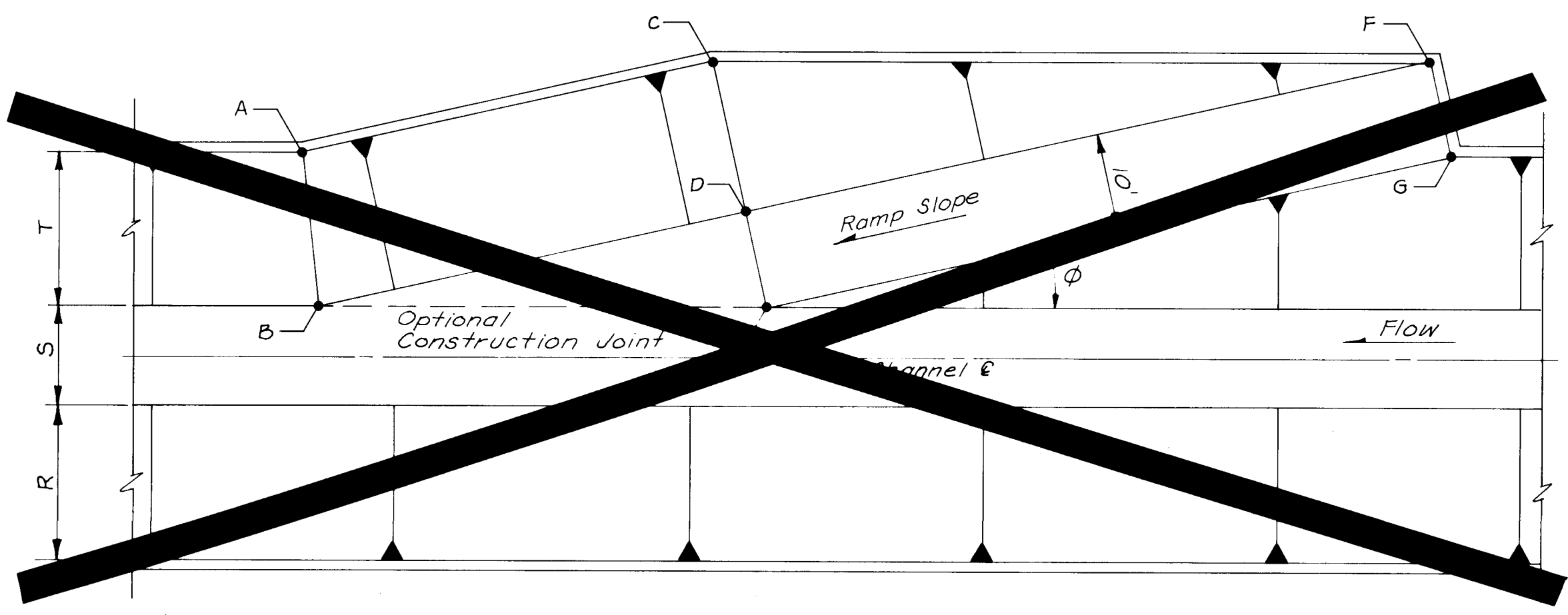
8-16-89

A M. A. F. C. A.

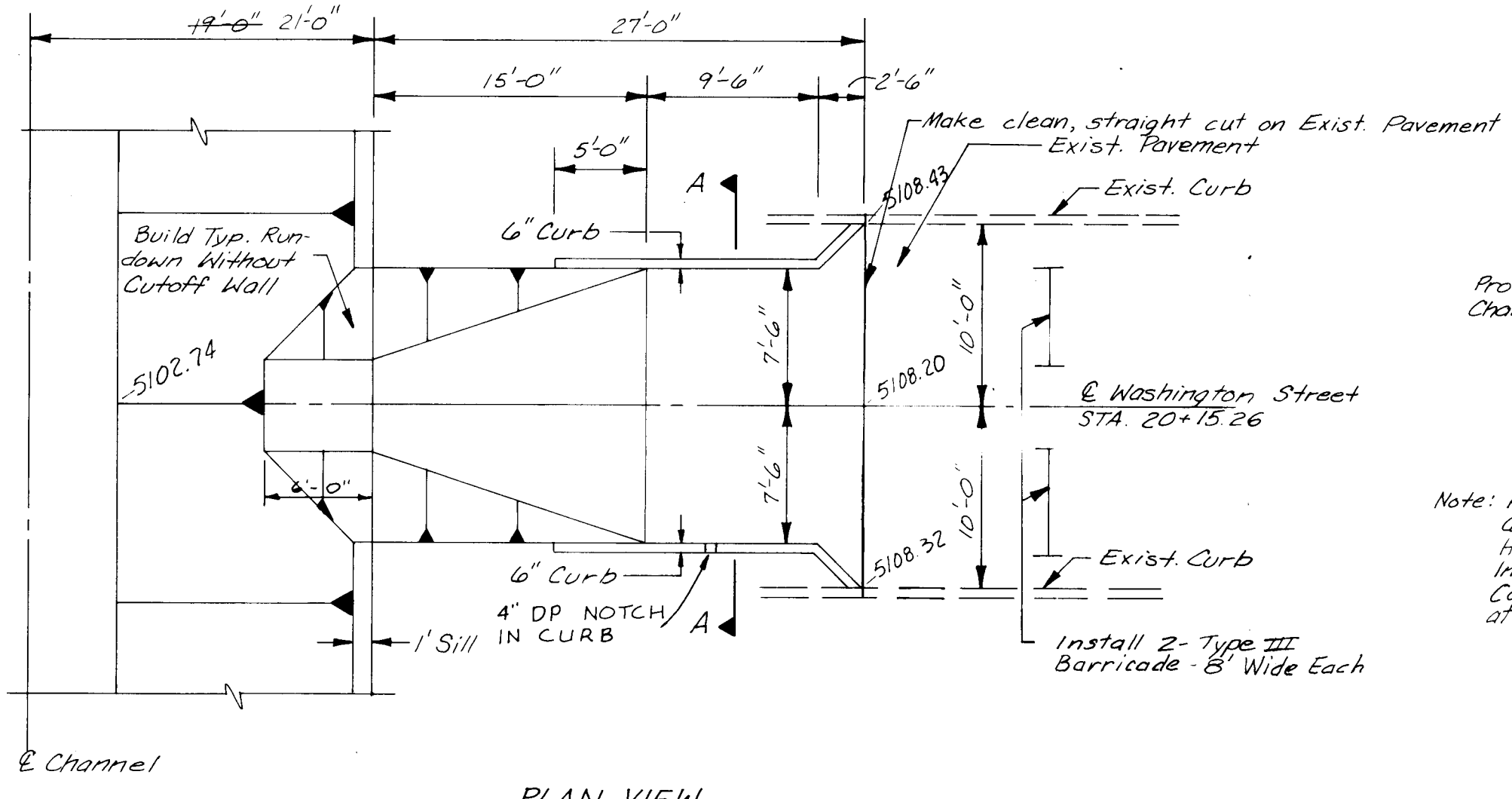
TITLE:	PINO ARROYO IMPROVEMENTS MISC. DETAILS
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APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer			Liquid Waste		
A C E - Design			Traffic		
A C E -Hydrology			Water		

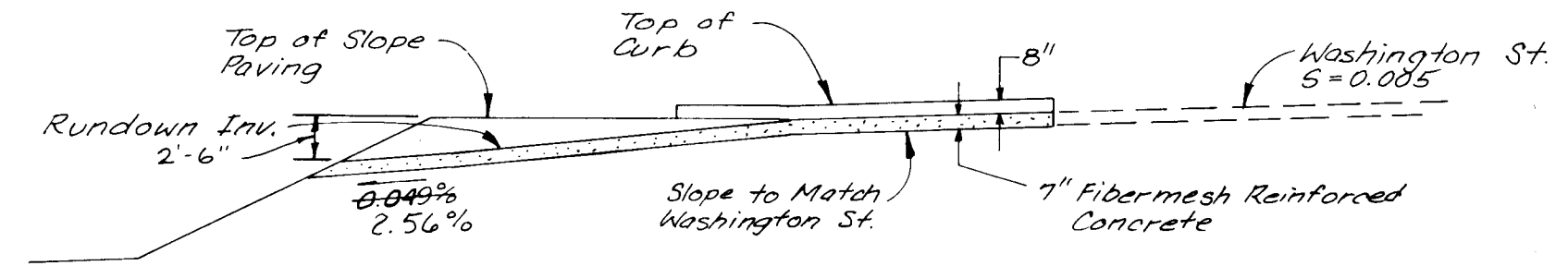
DRAWING NO.	MAP NO. D-17	SHEET 9	OF 16
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MAINTENANCE VEHICLE RAMP
PLAN VIEW



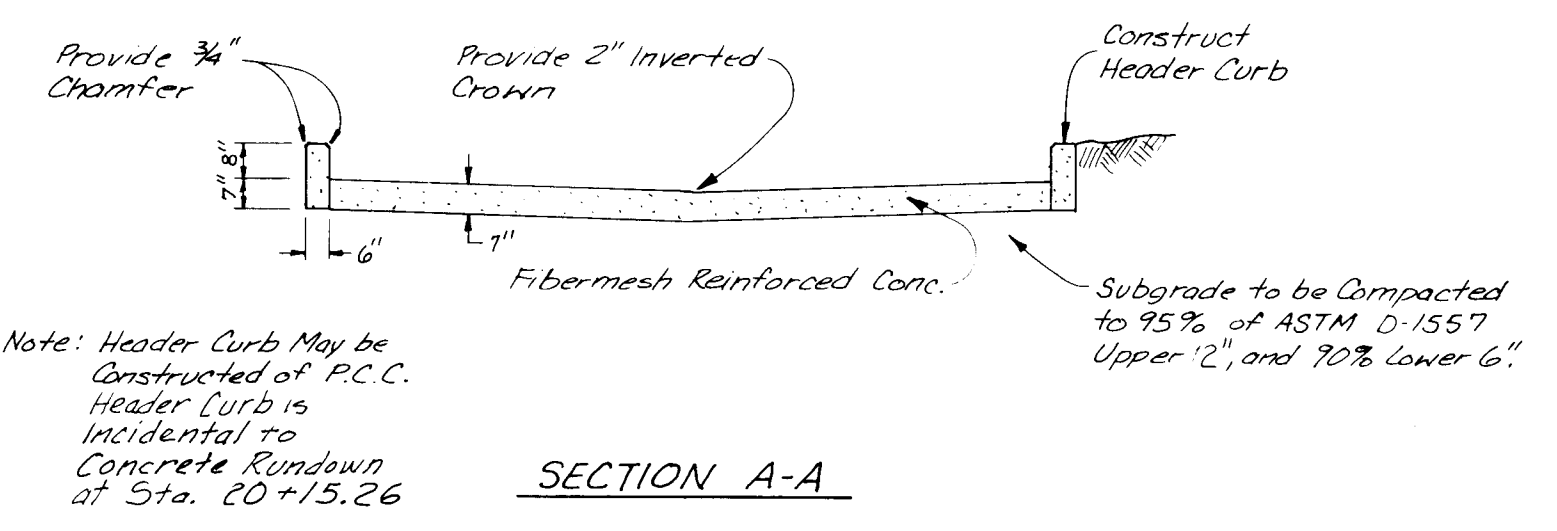
PLAN VIEW



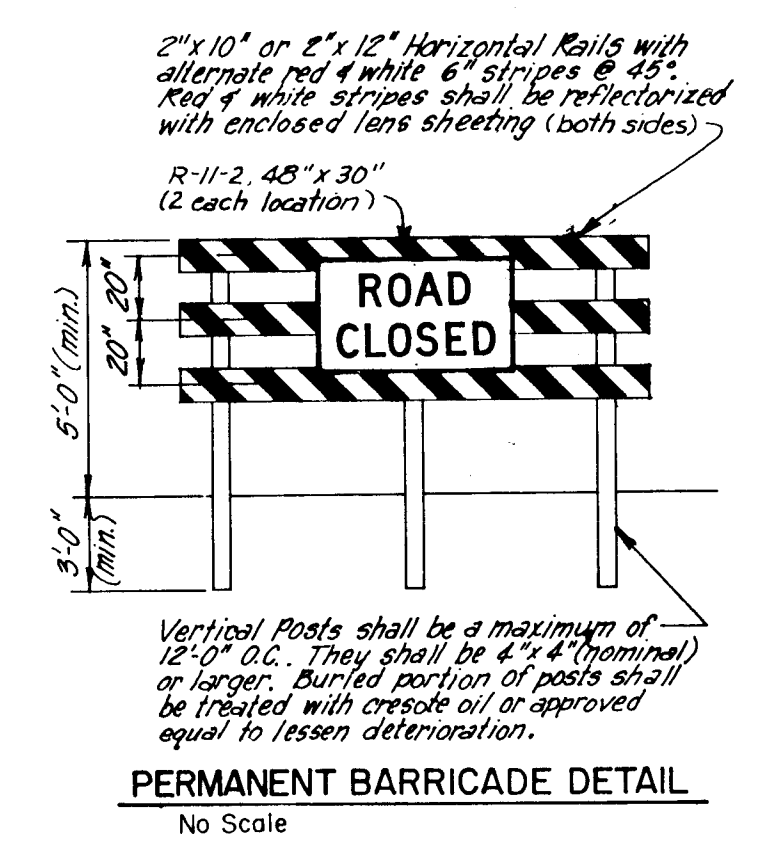
PROFILE VIEW

CHANNEL RUNDOWN AT STA. 20+15.26

Channel Rundown at STA. 20+15.26 shall be paid for by the Sq Yd. Under Bid Item "Fiber-mesh, Conc. Rundowns". Work Incl. Removal of Exst. Pmnt., Excavation, Subgrade Shaping, Compaction, and Const. of Header Curbs. Installation of barricades shall be paid under bid item "Barricades."

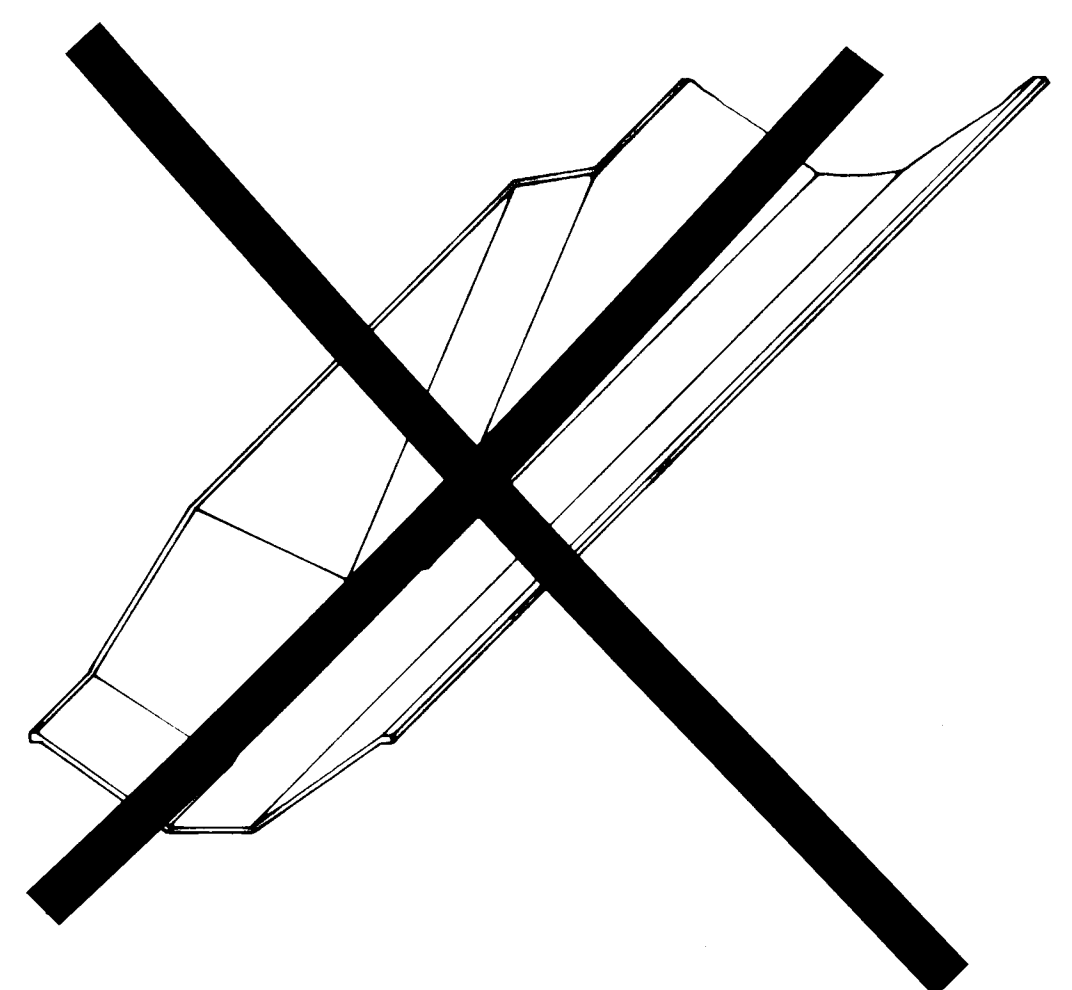


SECTION A-A



PERMANENT BARRICADE DETAIL

STATION DESCRIPTION	CHANNEL SIDE SLOPE	SLOPE (%)		φ	DIMENSIONS			POINT						
		CHANNEL	RAMP		R	S	T	DESCRIPTION	A	B	C	D	E	F
Sta. 13+57.41 to Sta. 14+50.00	2:1	1.58%	14.0%	14°22'58"	13'	10'	13'	Station	13+57.41	13+59.05	13+75.18	13+76.83	13+79.31	14+50.00
								Elevation	5096.59	5090.12	5097.19	5090.71	5090.75	5098.06
								Offset from E	18.00	5.00	27.69	14.69	27.69	18.00

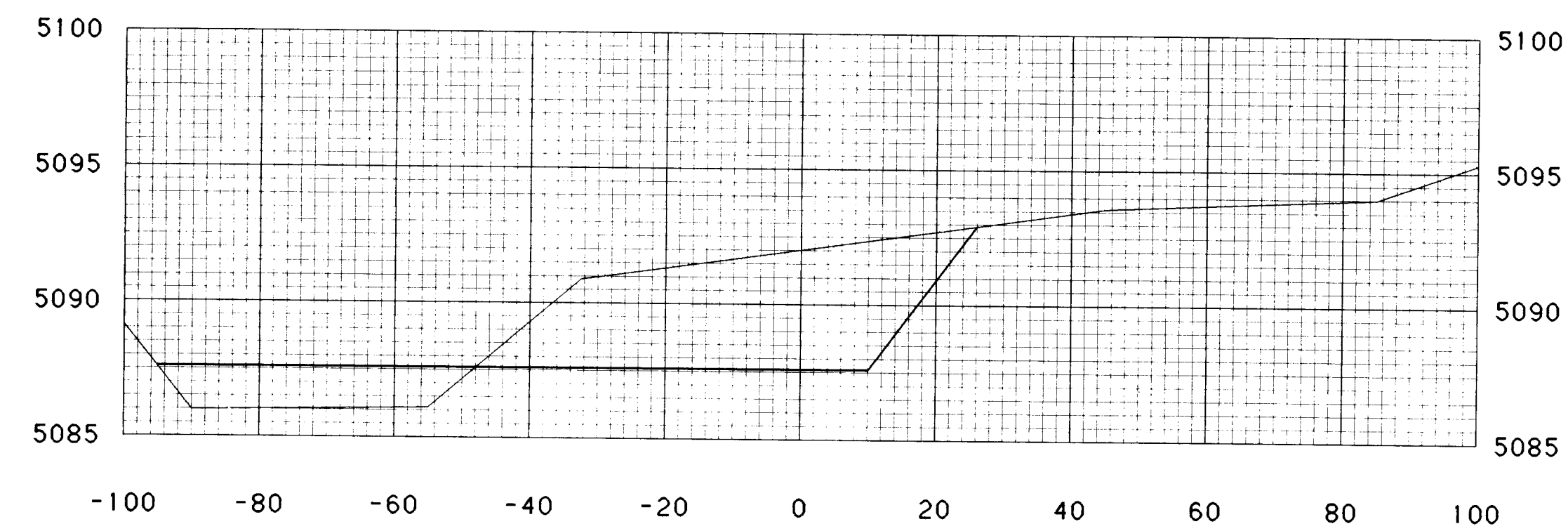


ISOMETRIC VIEW

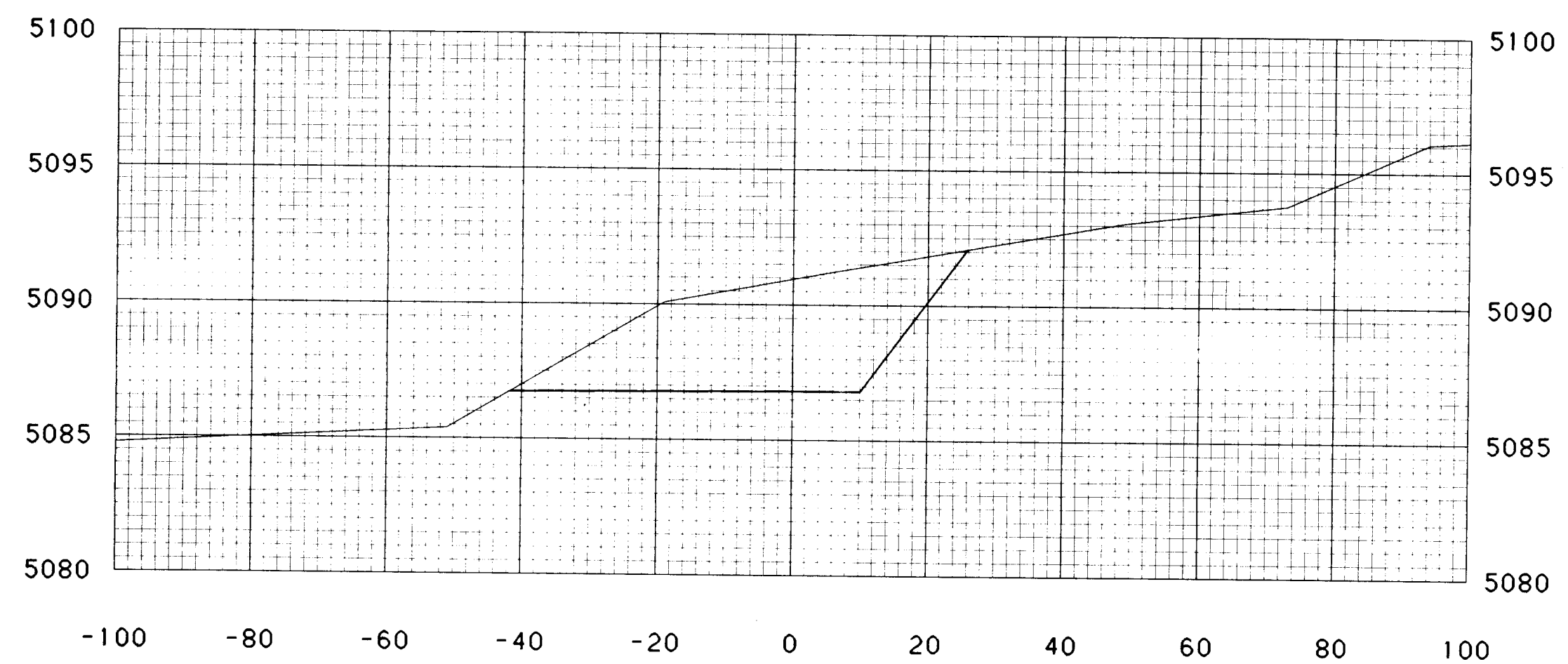
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8-16-89

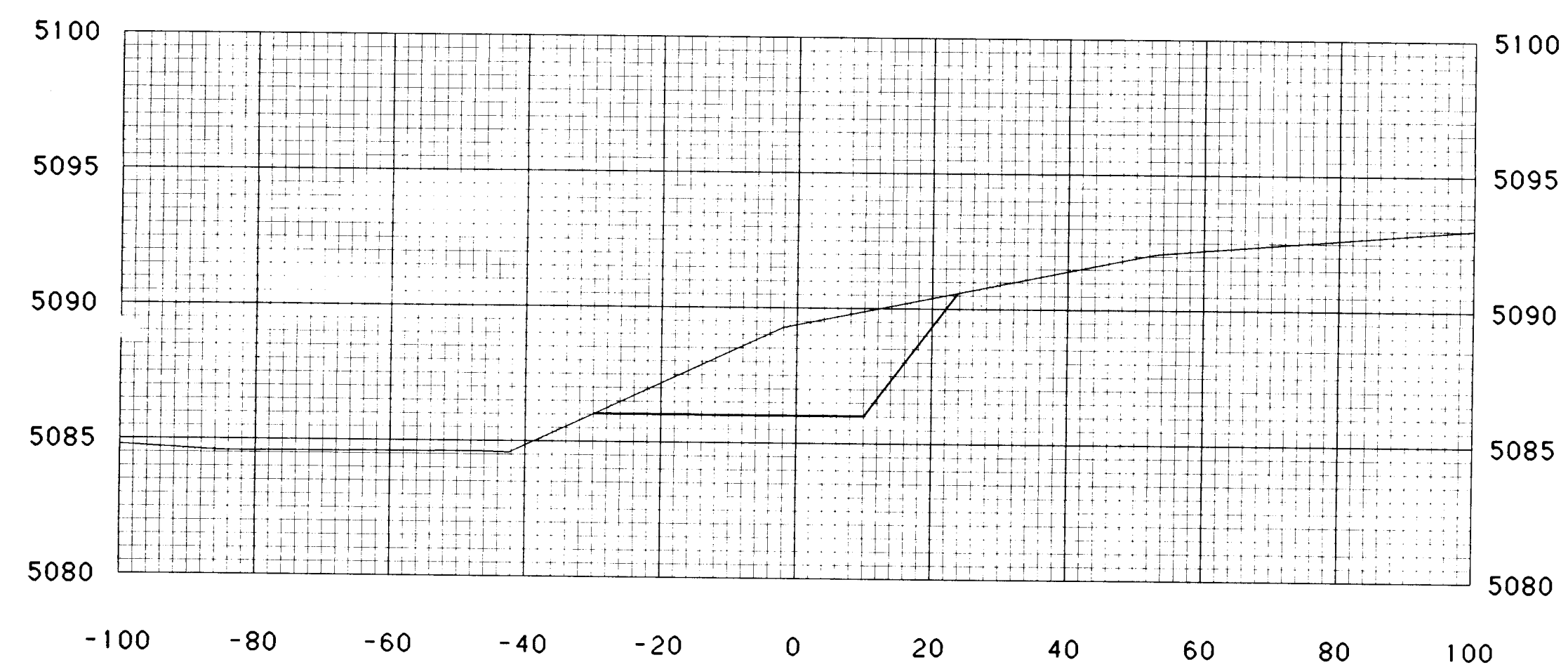
A.M.A.F.C.A.			
TITLE: PINO ARROYO IMPROVEMENTS MAINTENANCE VEHICLE RAMP DETAILS			
APPROVALS	ENGINEER	DATE	APPROVALS
City Engineer			Liquid Waste
A.C.E. - Design			Traffic
A.C.E. - Hydrology			Water
DRAWING NO.		MAP NO. D-17	SHEET 10 OF 16



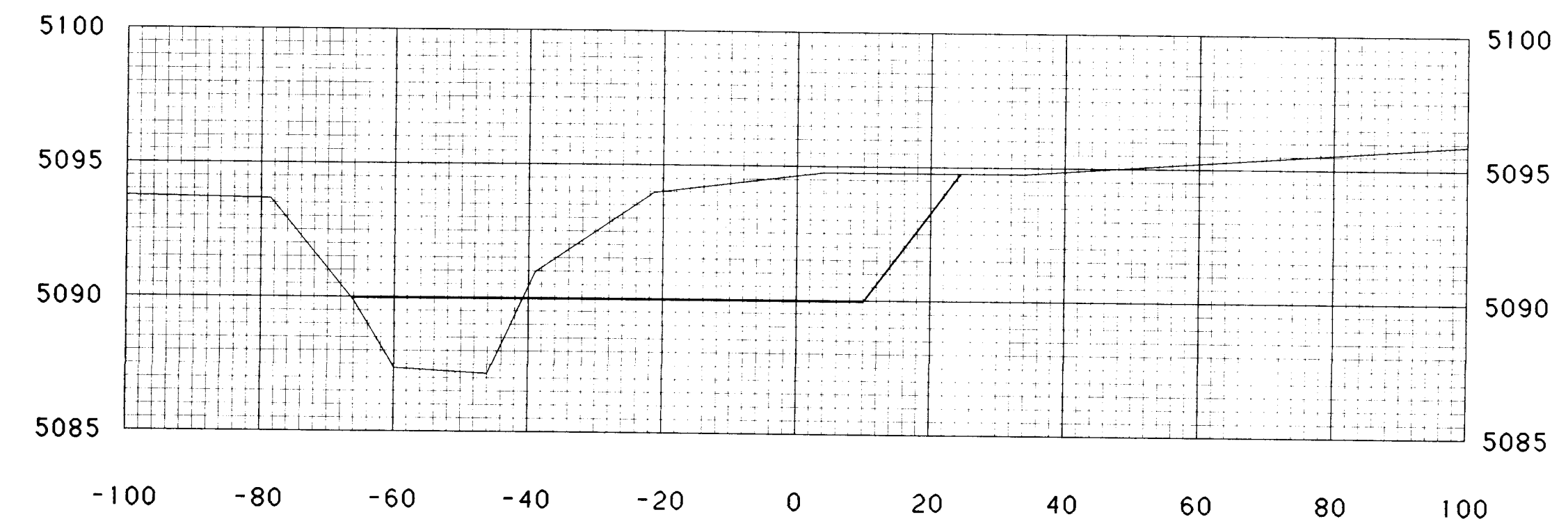
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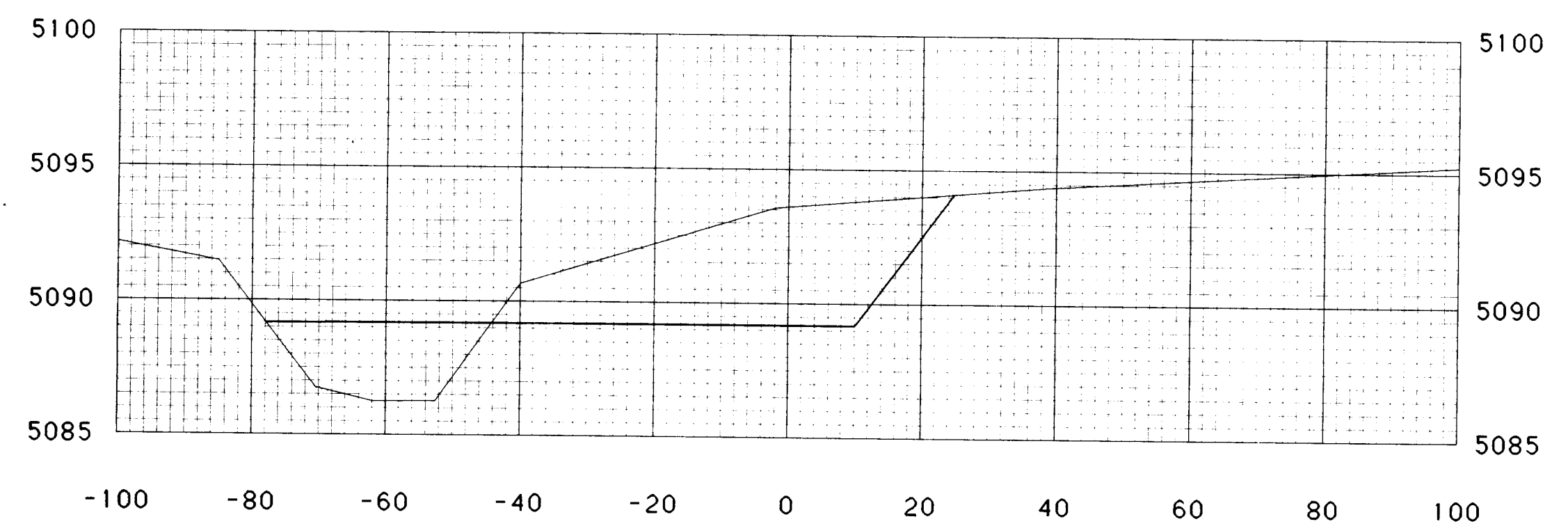
STATION 11+50.0



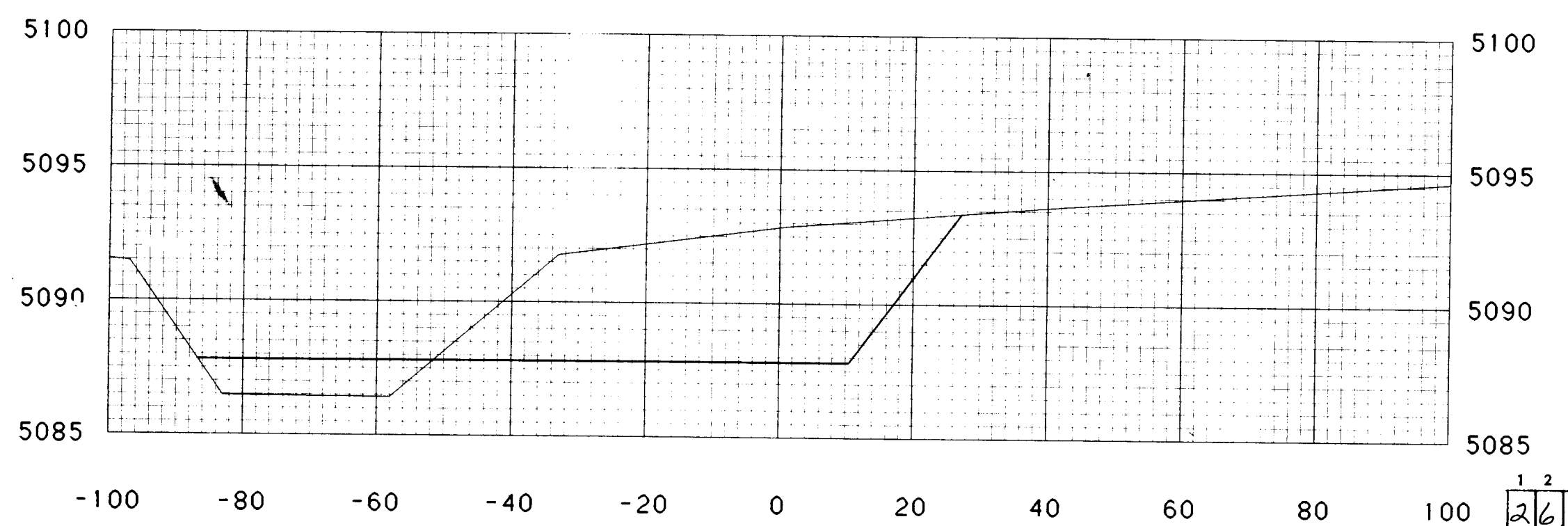
STATION 11+00.0



STATION 13+50.0



STATION 13+00.0



STATION 12+50.0

1	2	3	4	5	6	7	8	9	10	11	12
26	36	78	11	87							

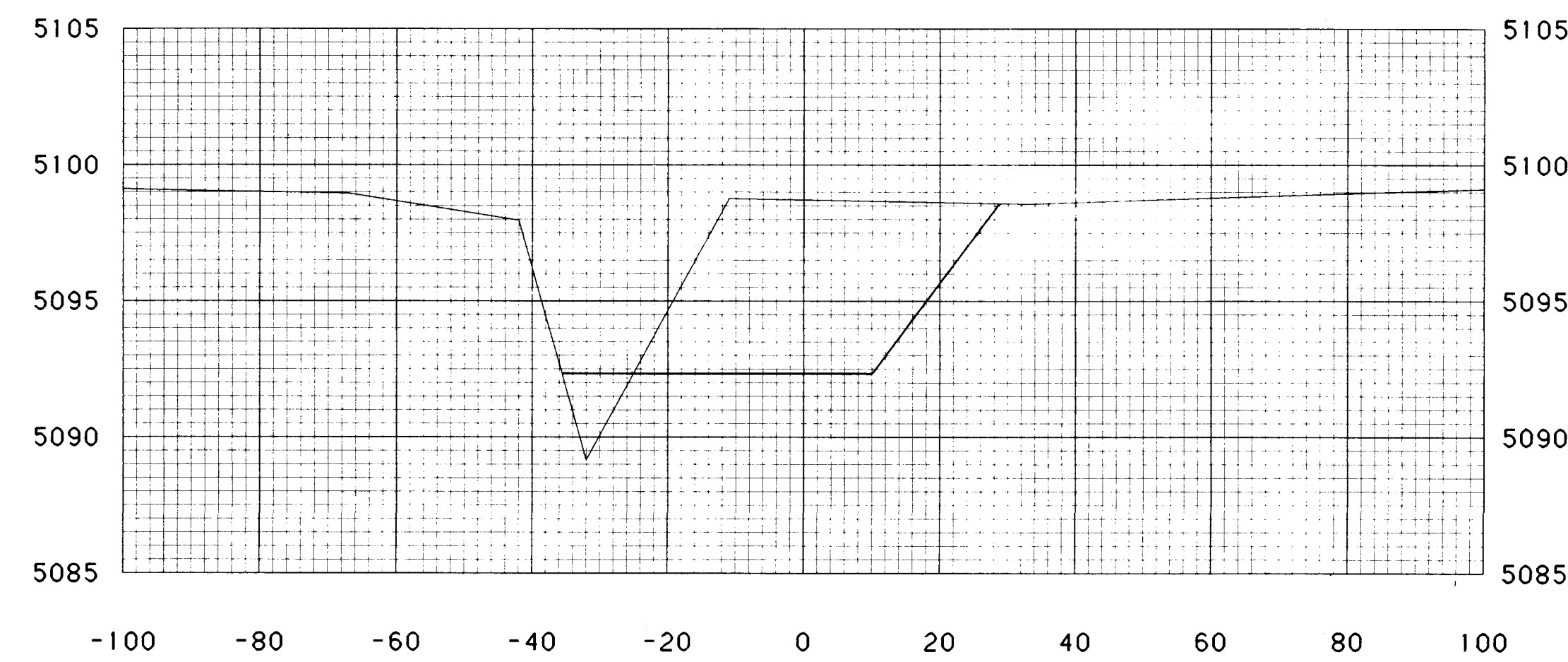
Robert R. Rouse

8-16-89

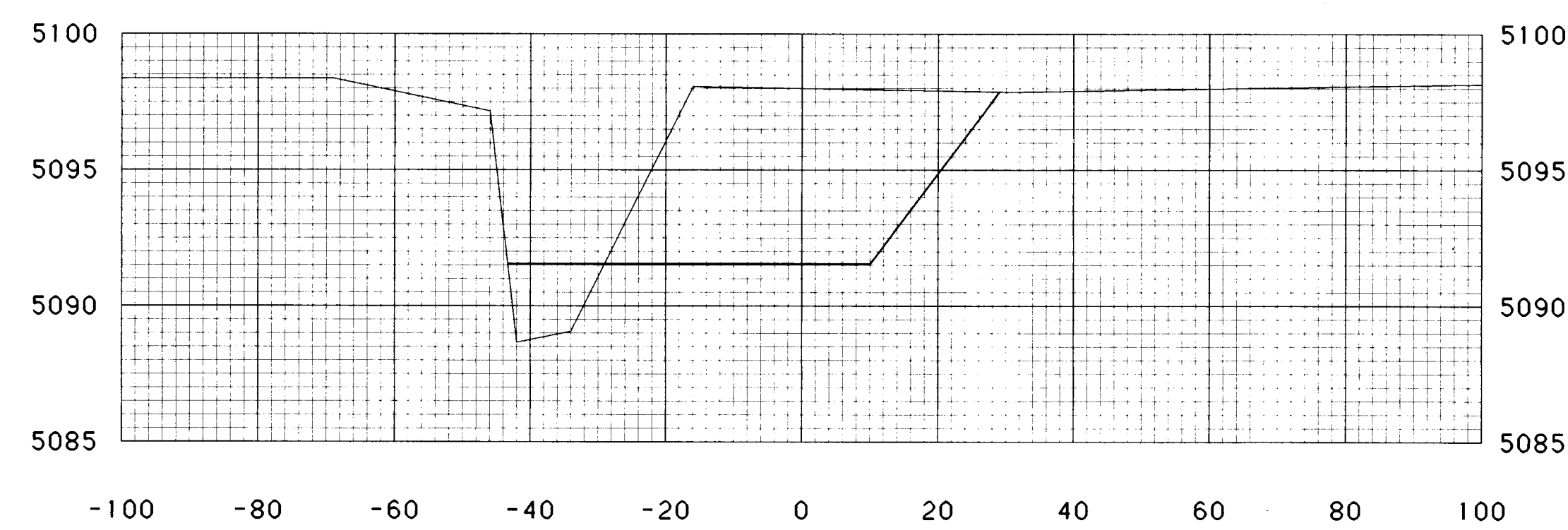


CROSS SECTIONS
PINO ARROYO JEFFERSON ST. TO
N. DIVERSION CHANNEL

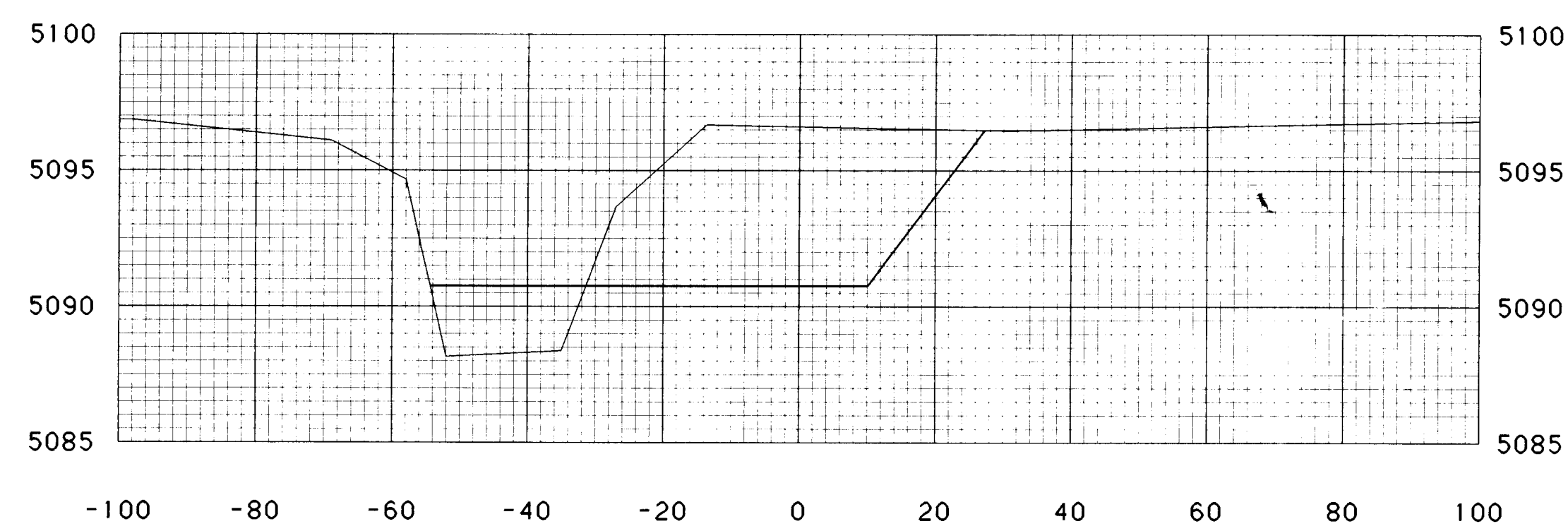
STA 11+00.00 TO STA 13+50.00



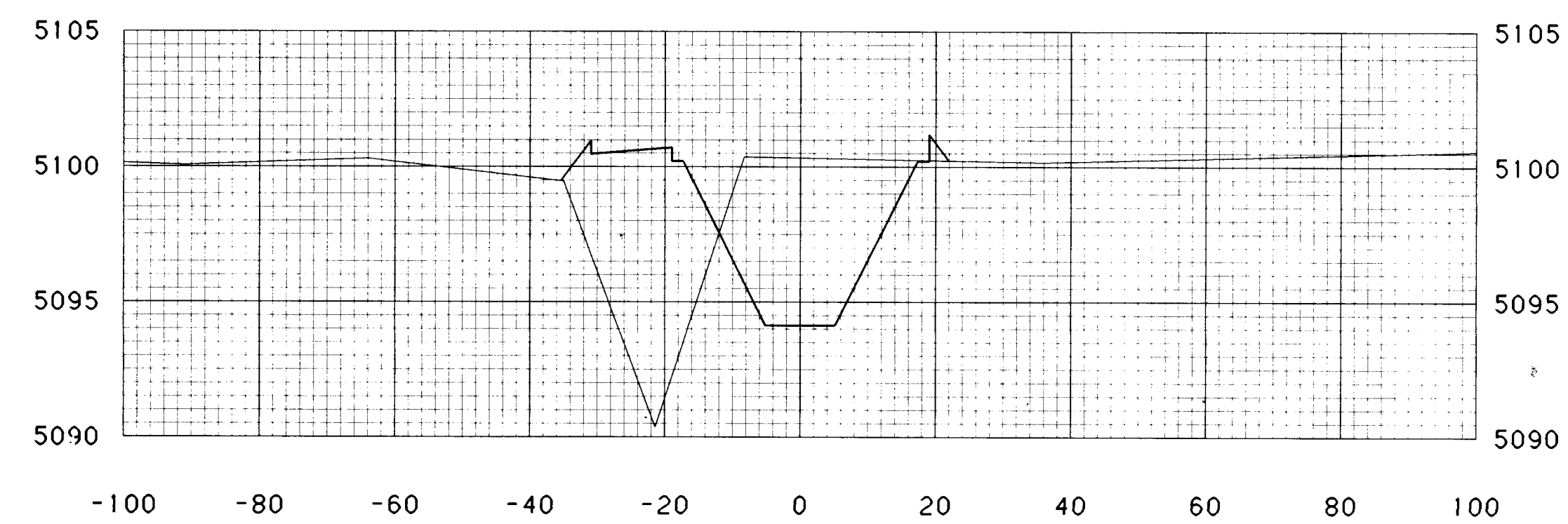
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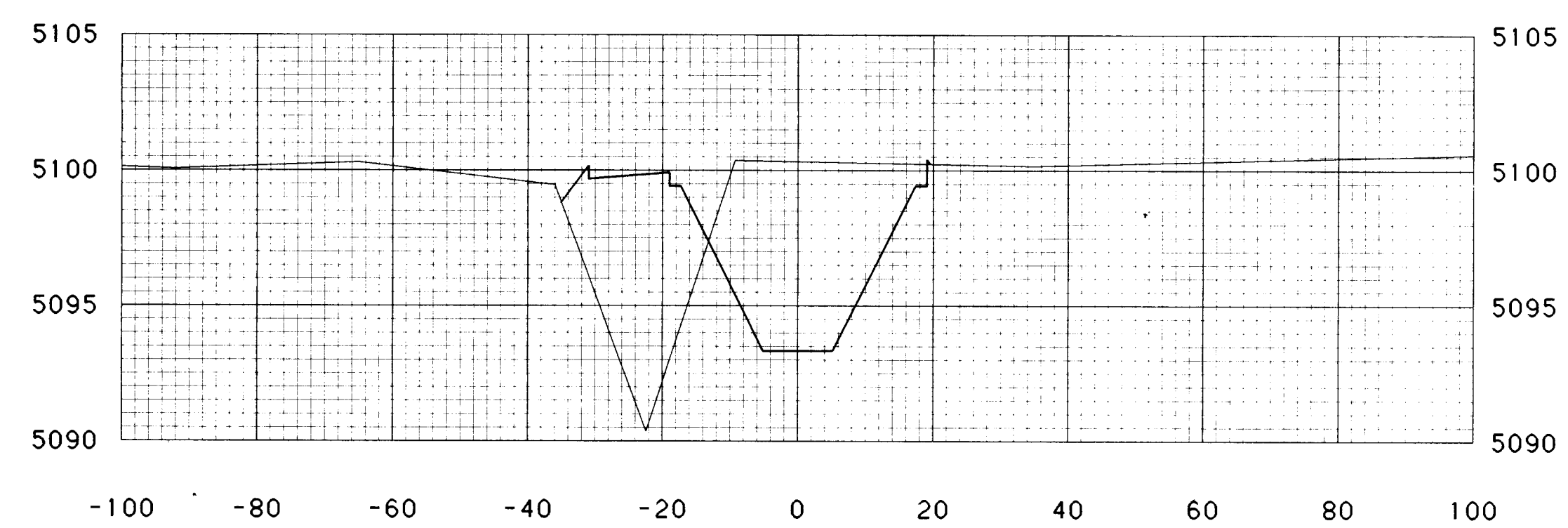
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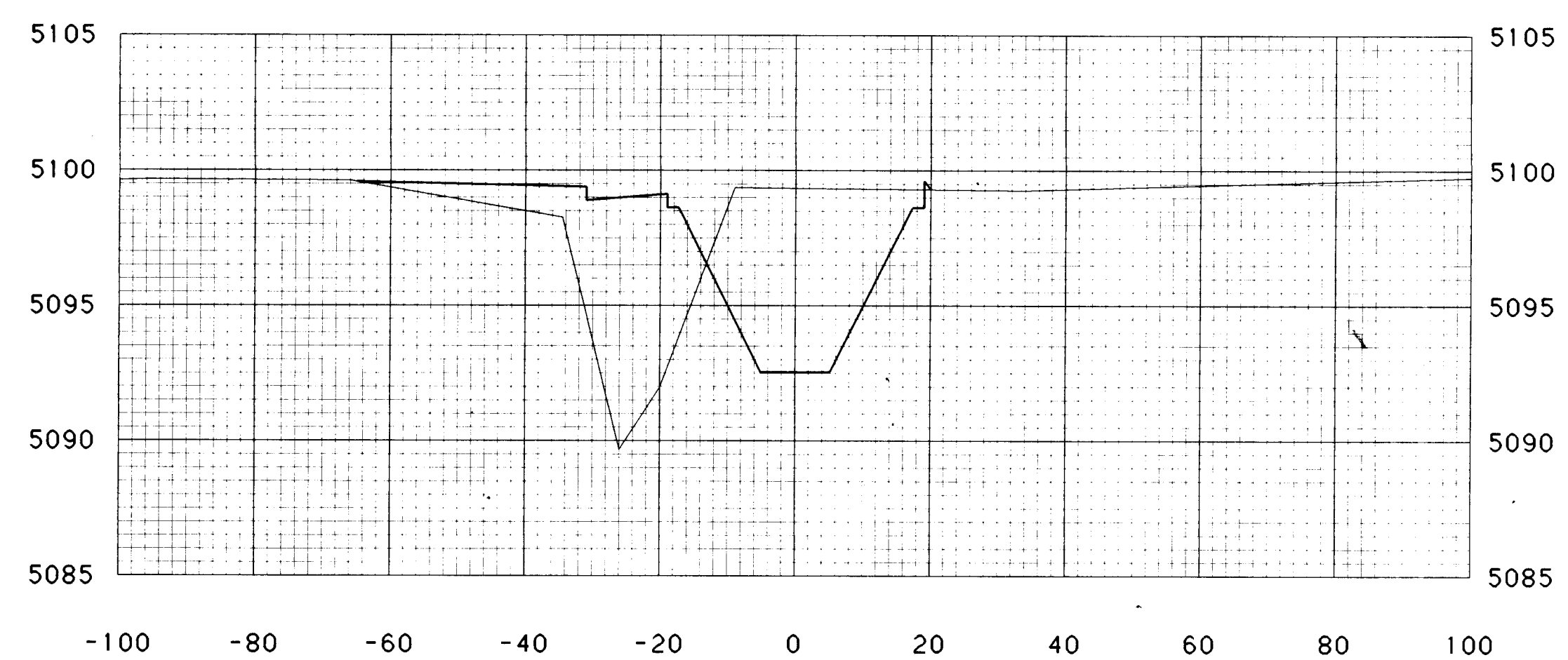
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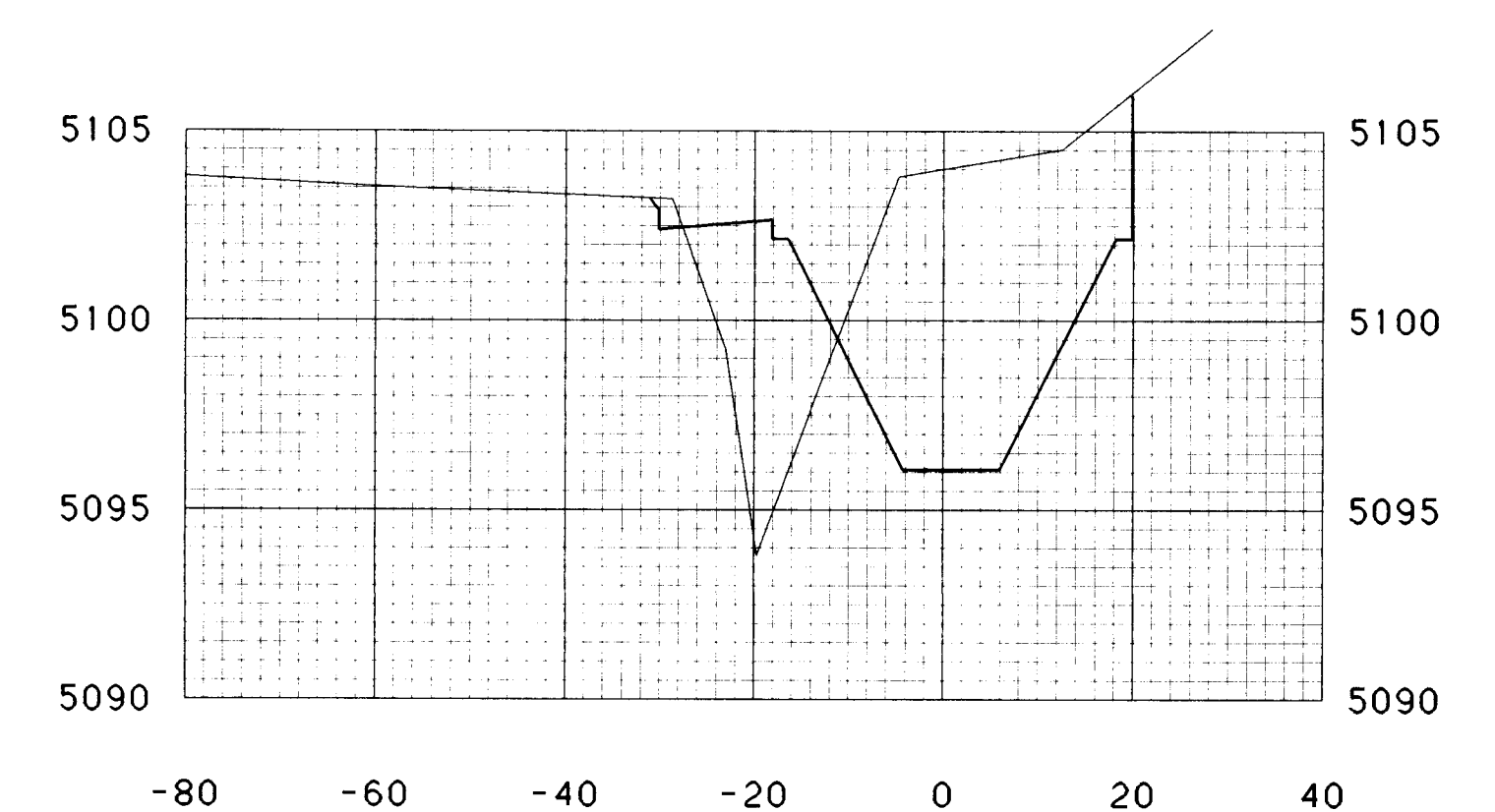
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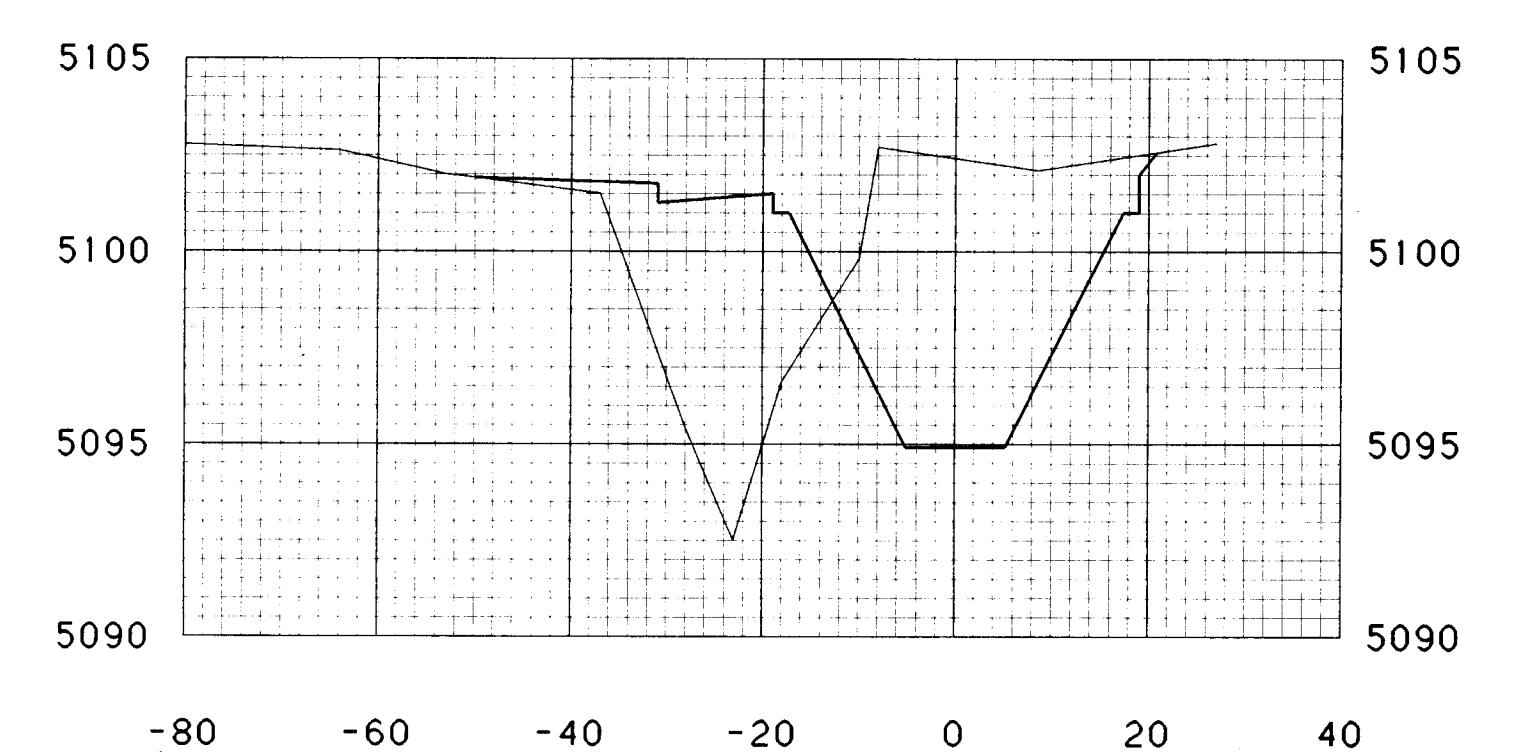
STATION 16+00.0



STATION 15+50.0



STATION 17+50.0



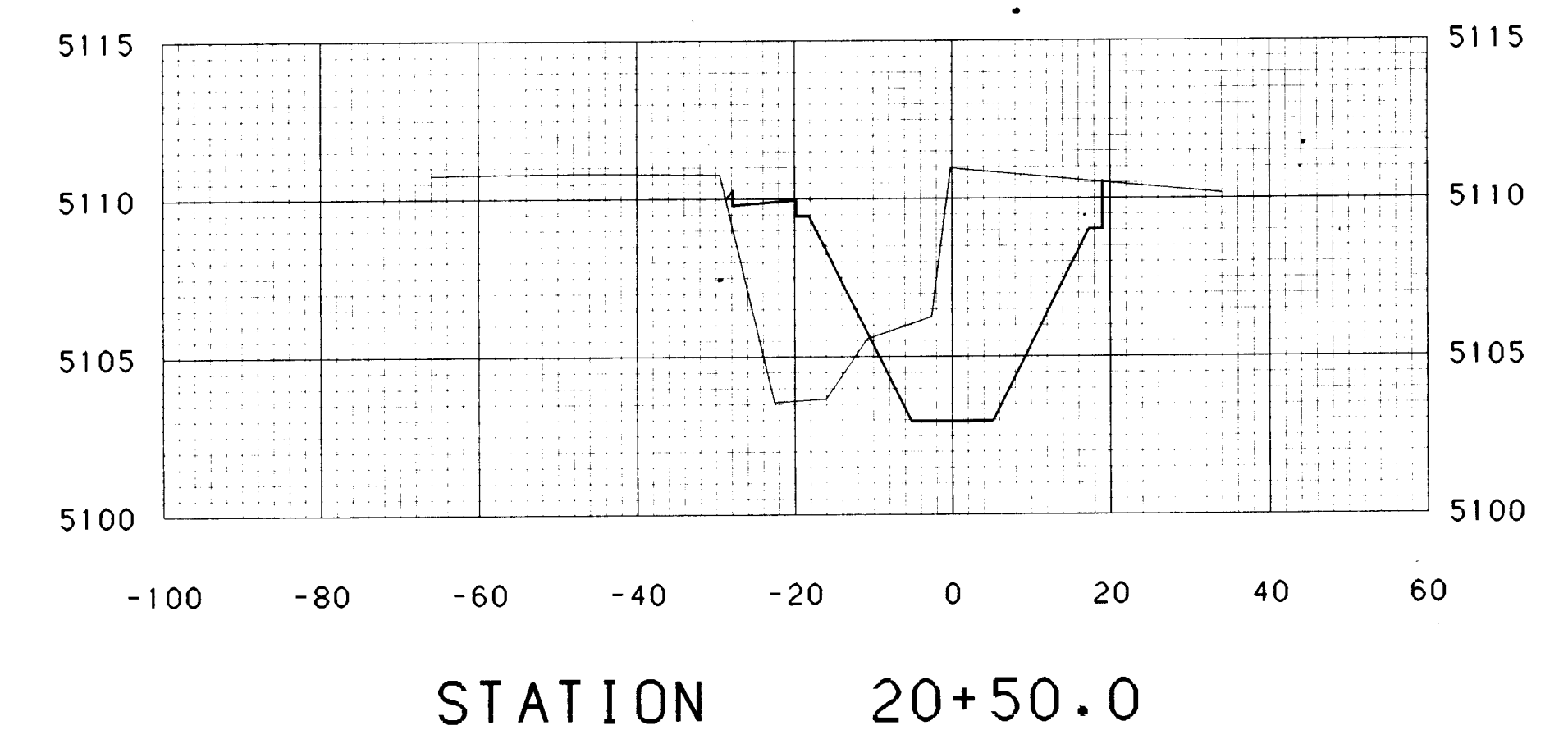
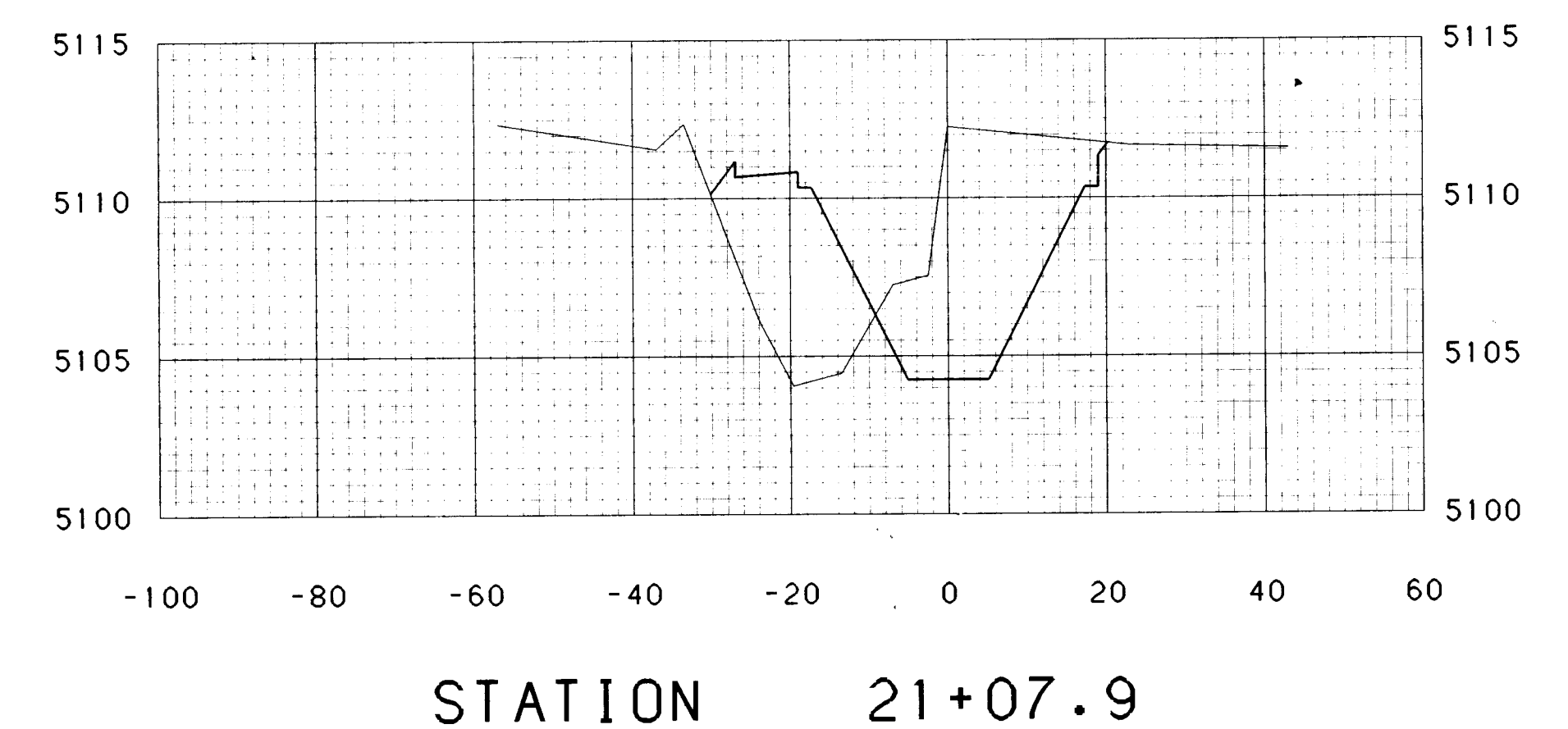
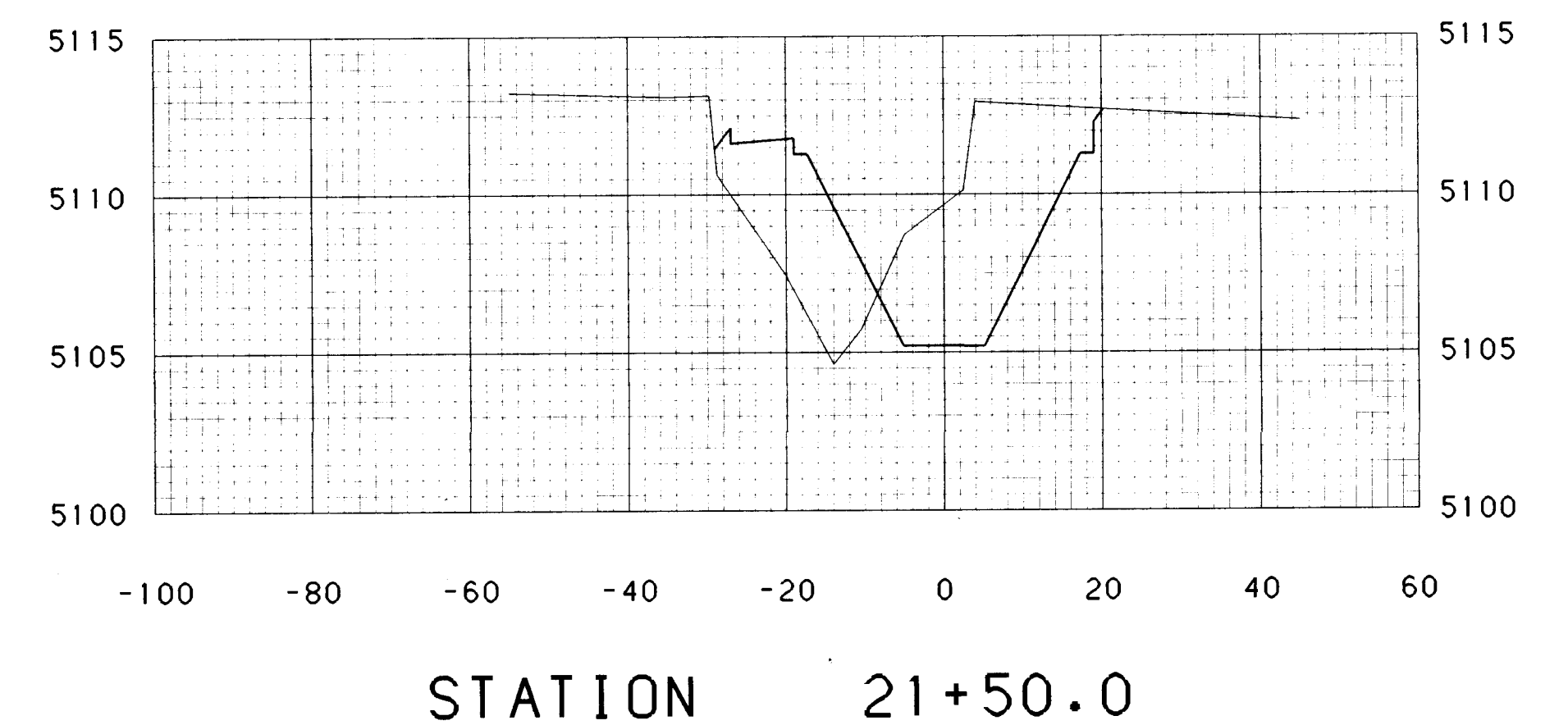
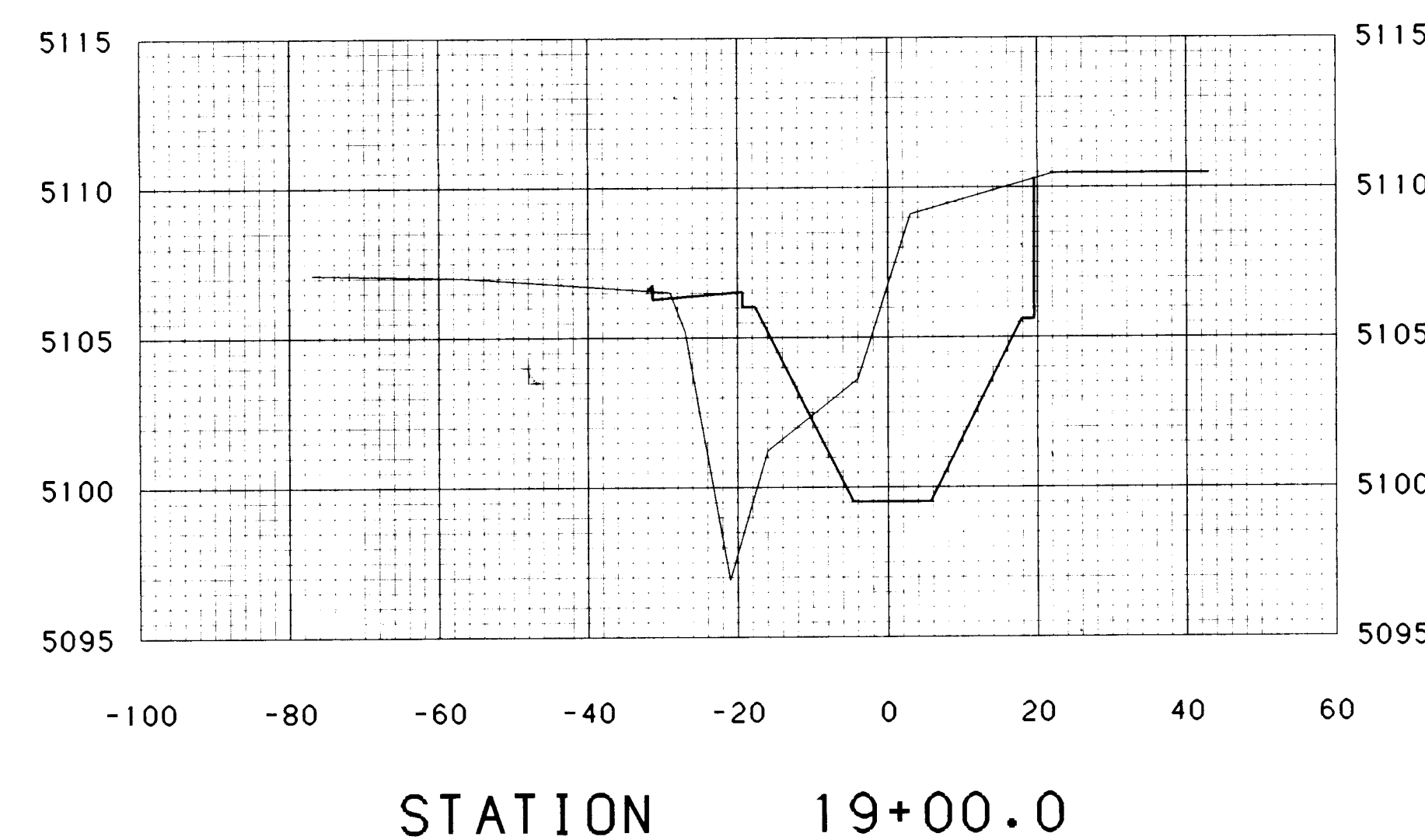
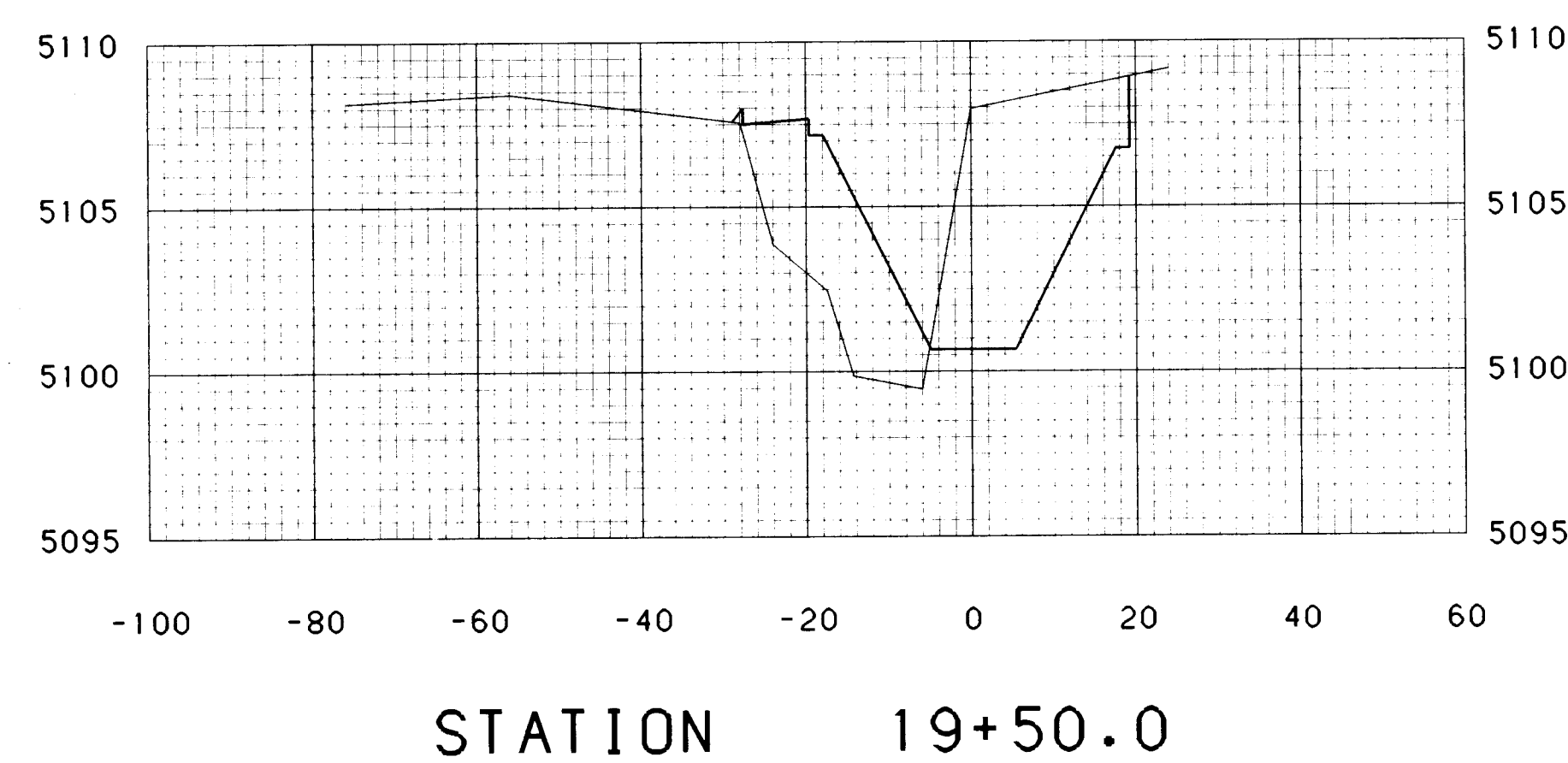
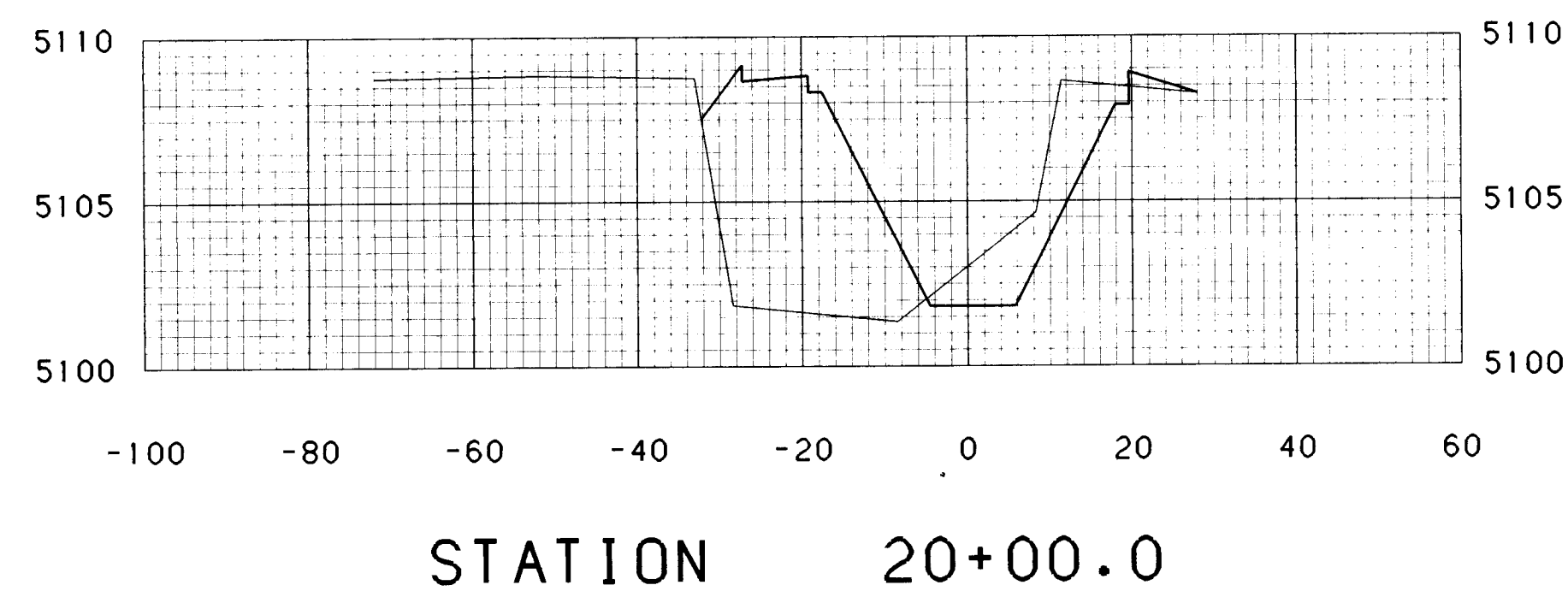
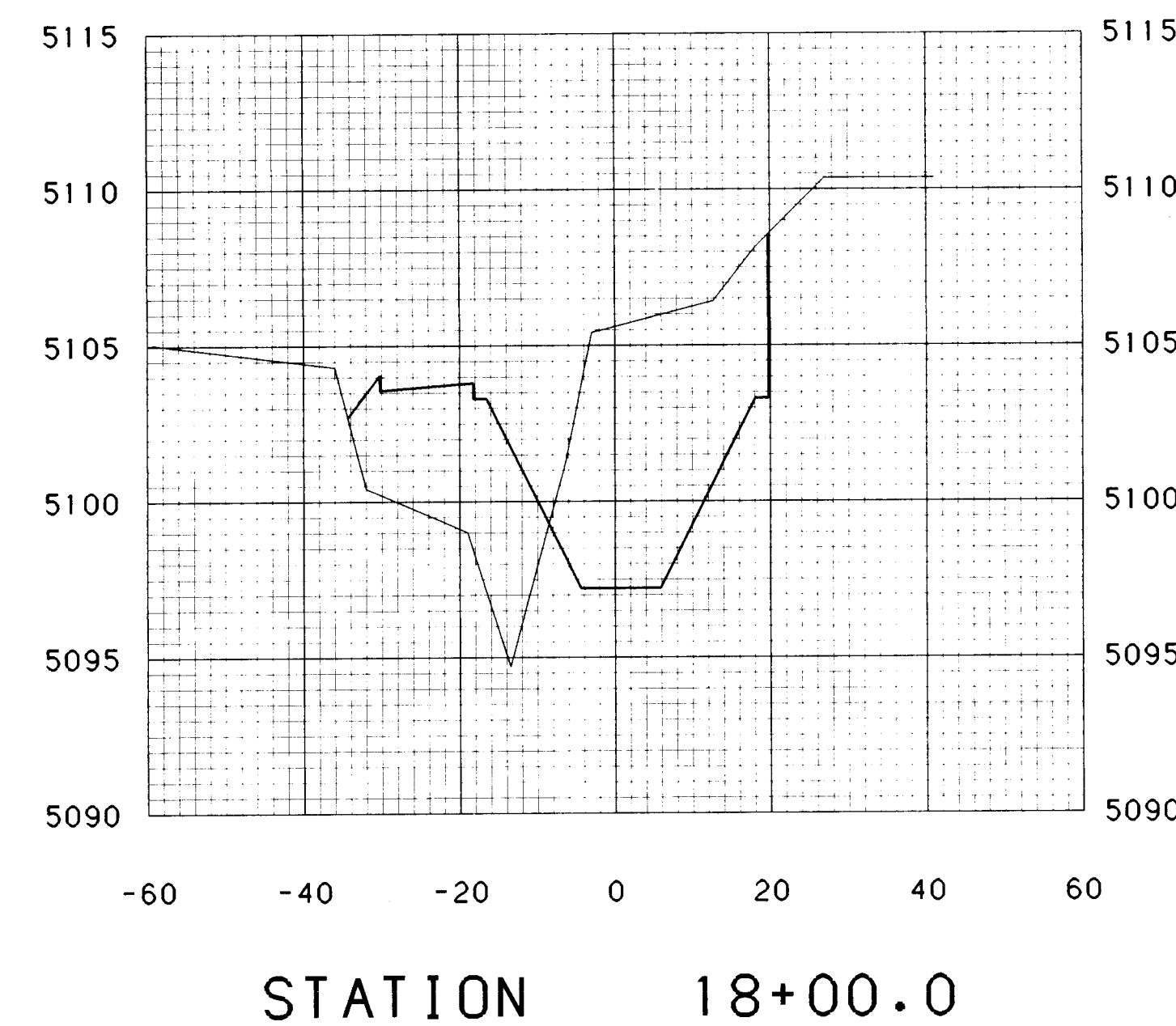
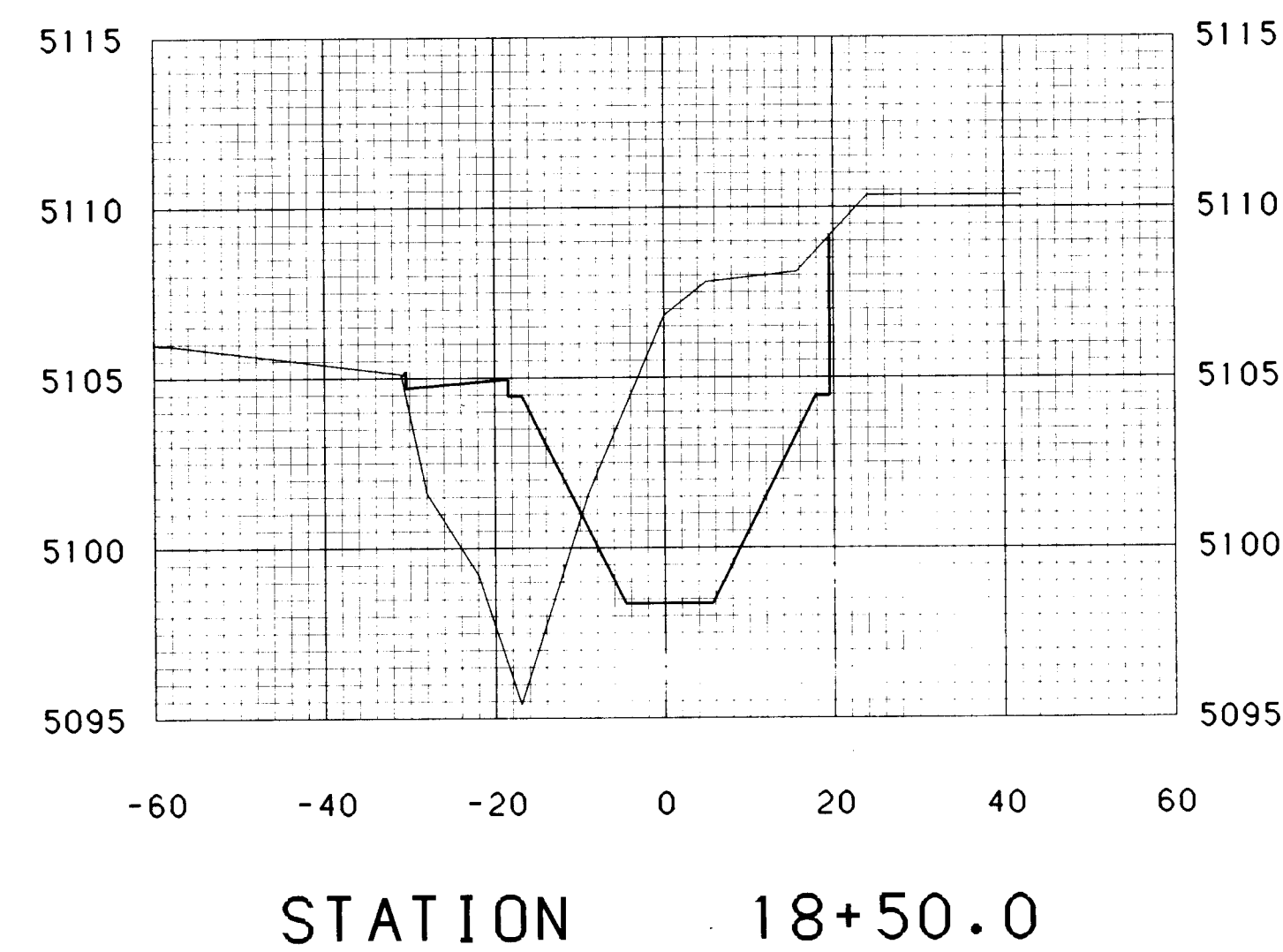
STATION 17+00.0

1	2	3	4	5	6	7	8	9	10	11	12
26	36	78	128	9							

8-16-89



CROSS SECTIONS
PINO ARROYO JEFFERSON ST. TO
N. DIVERSION CHANNEL
STA 14+00.00 TO STA 17+50.00
SHEET 12 OF 14

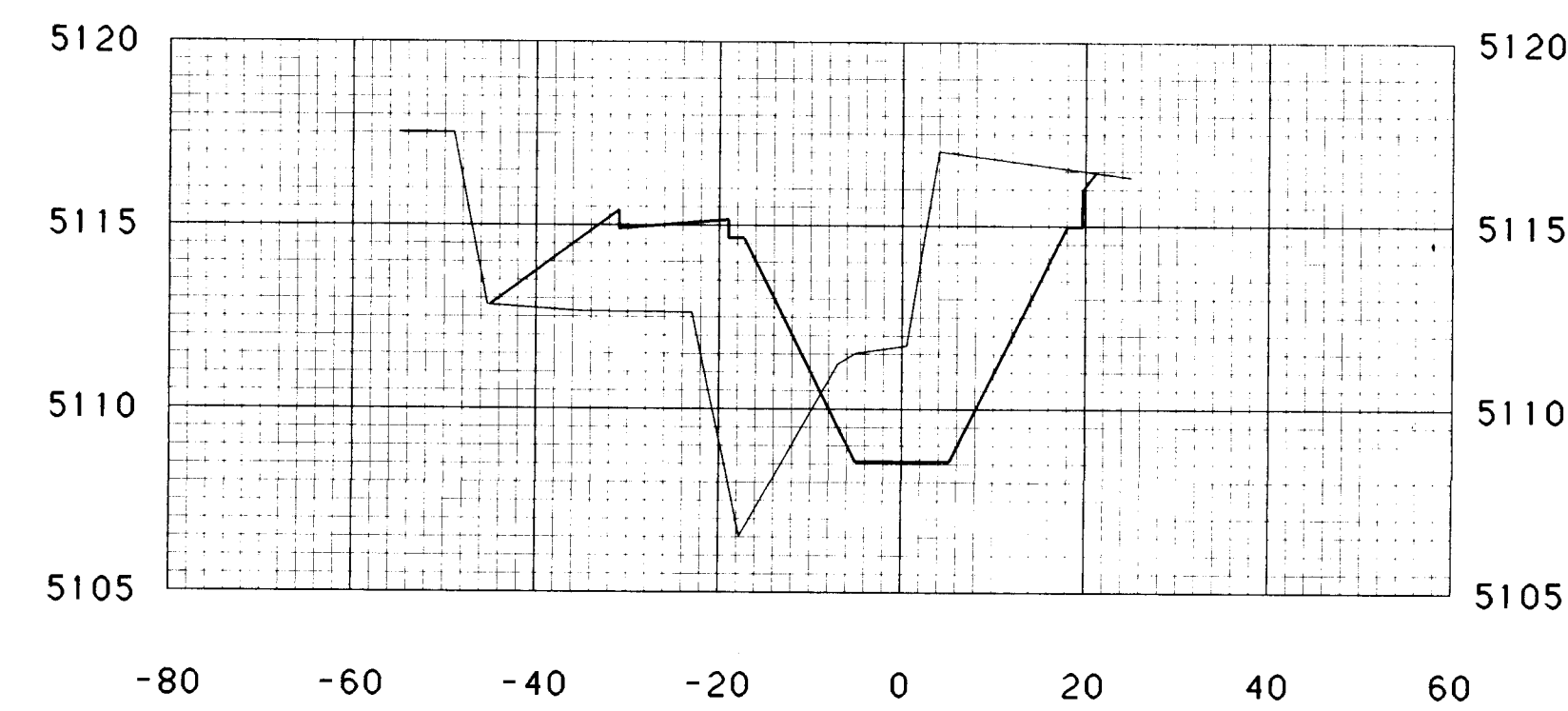


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26 36 78 138 97

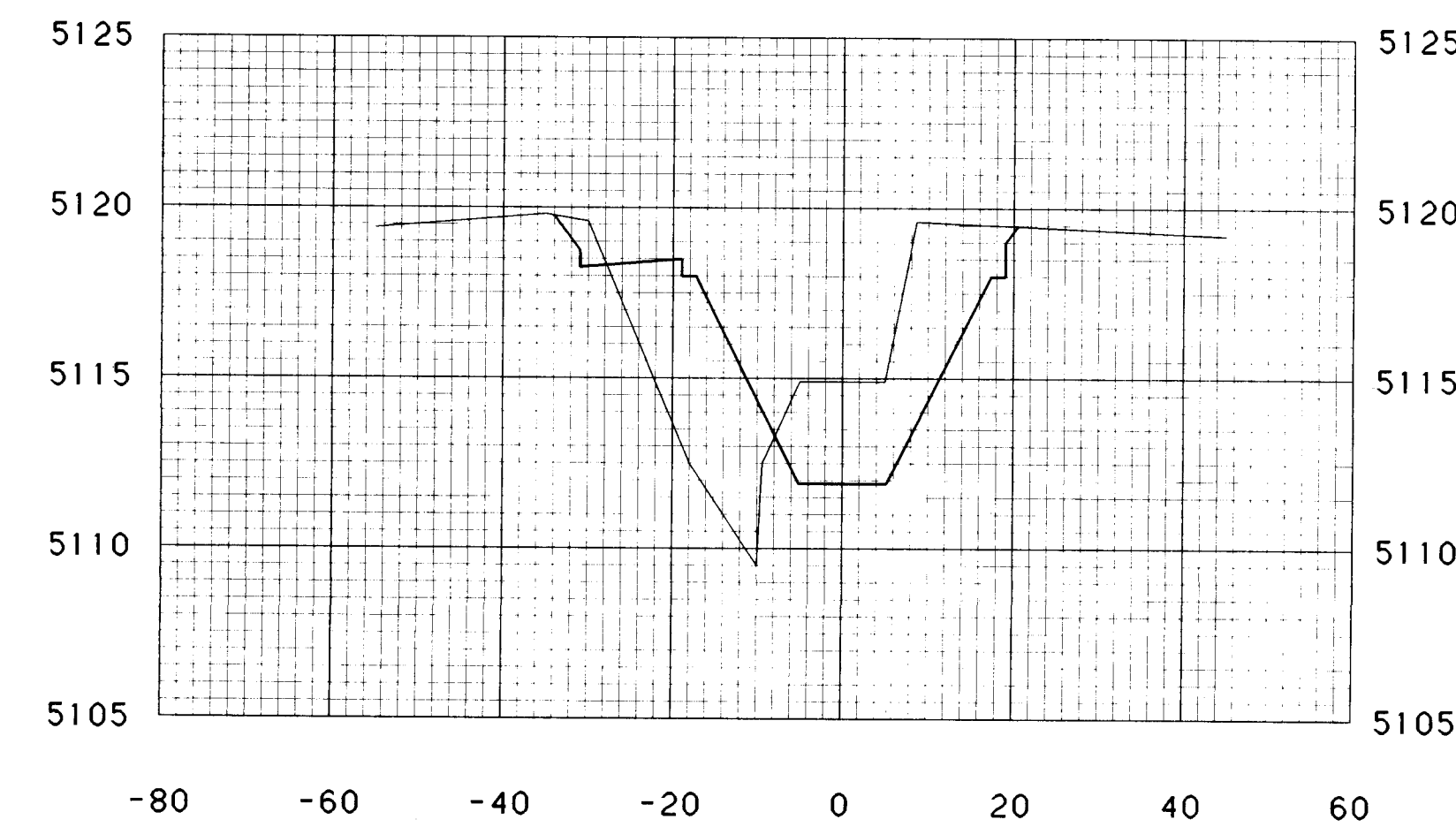


CROSS SECTIONS
PINO ARROYO JEFFERSON ST. TO
N. DIVERSION CHANNEL
STA 18+00.00 TO STA 21+50.00
SHEET 13 OF 16

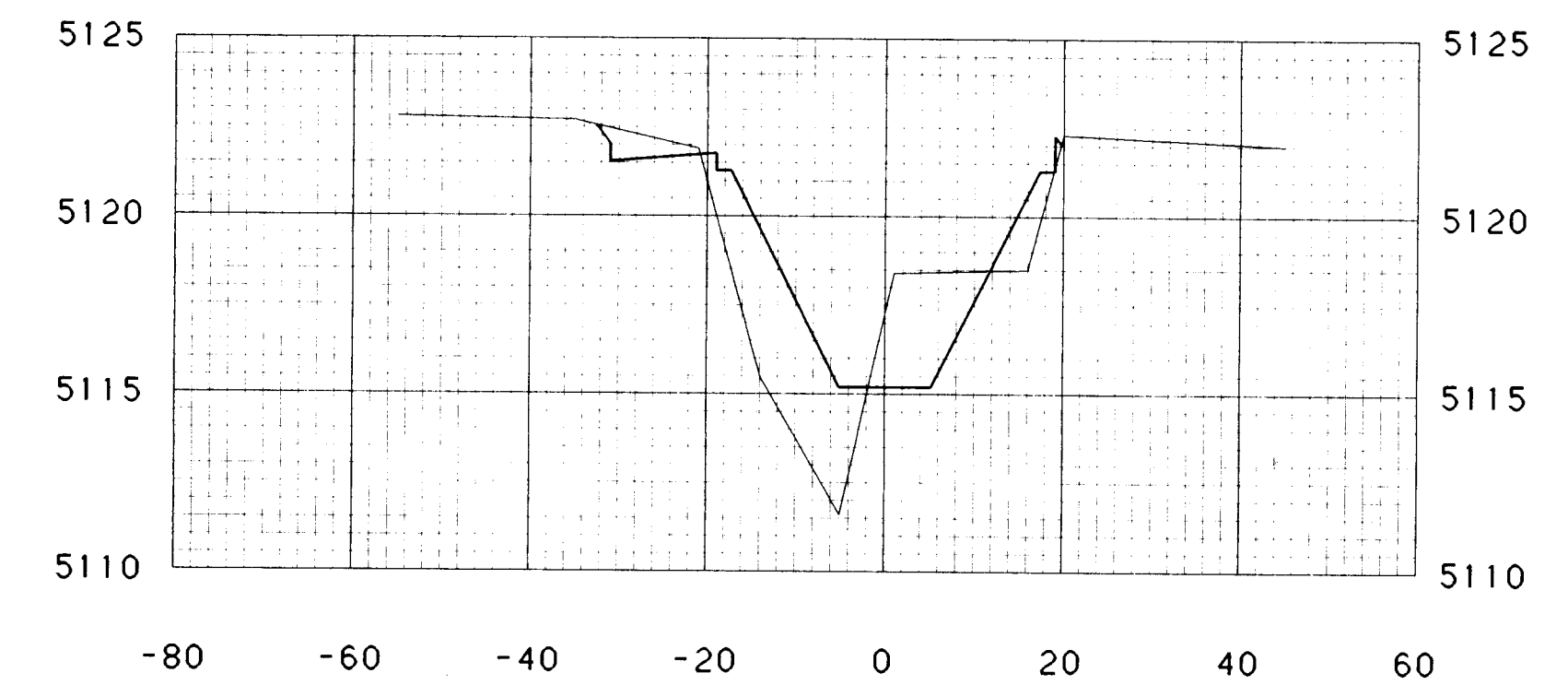
8-16-89
Sanford R. Bue



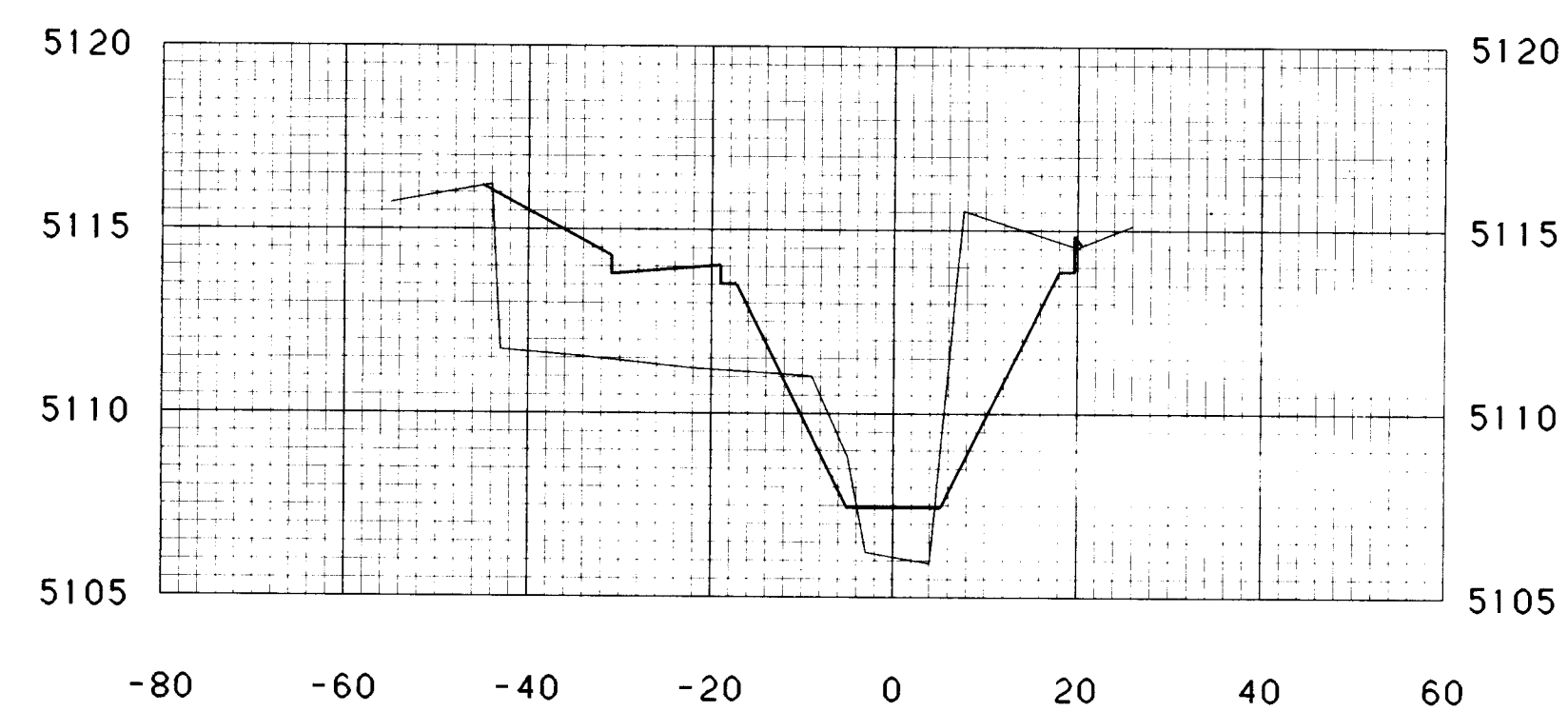
STATION 23+00.0



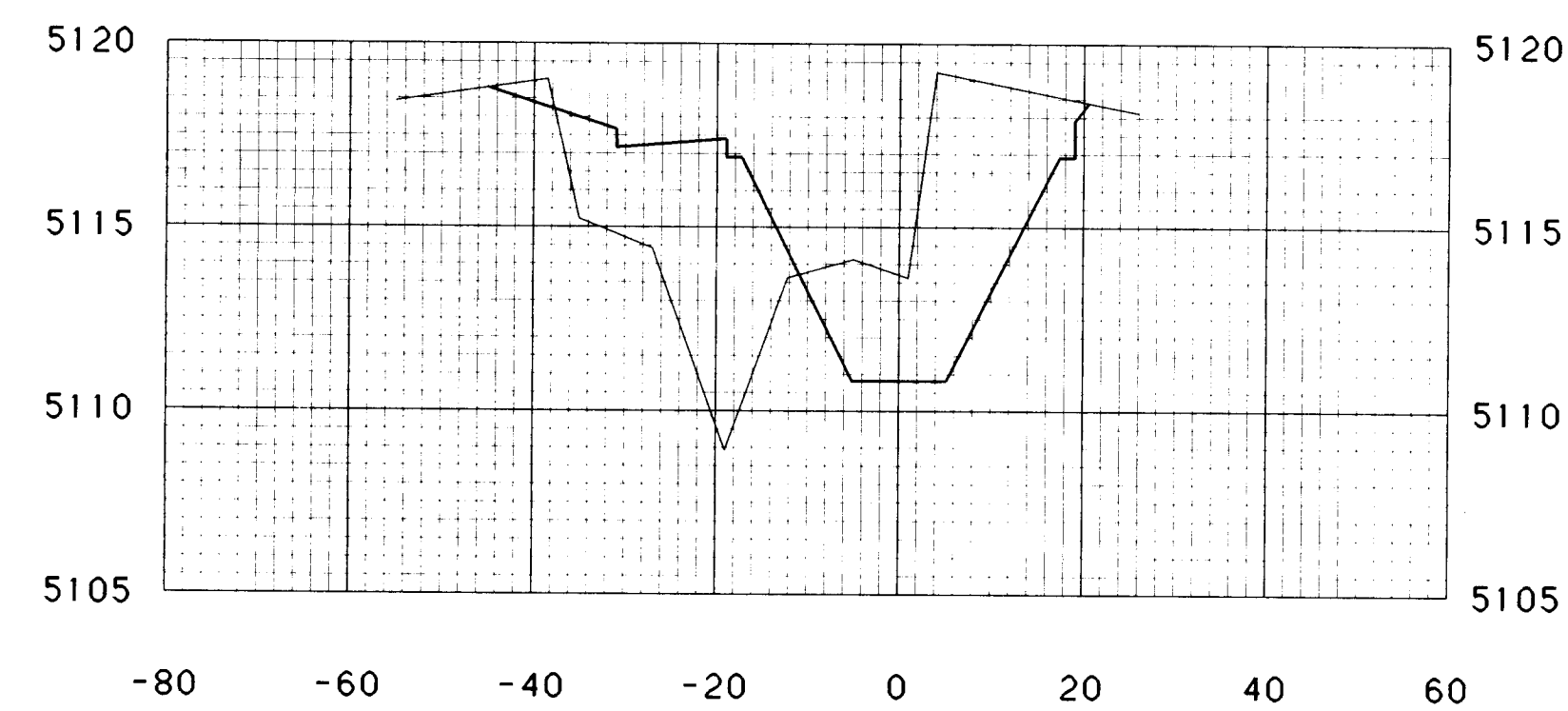
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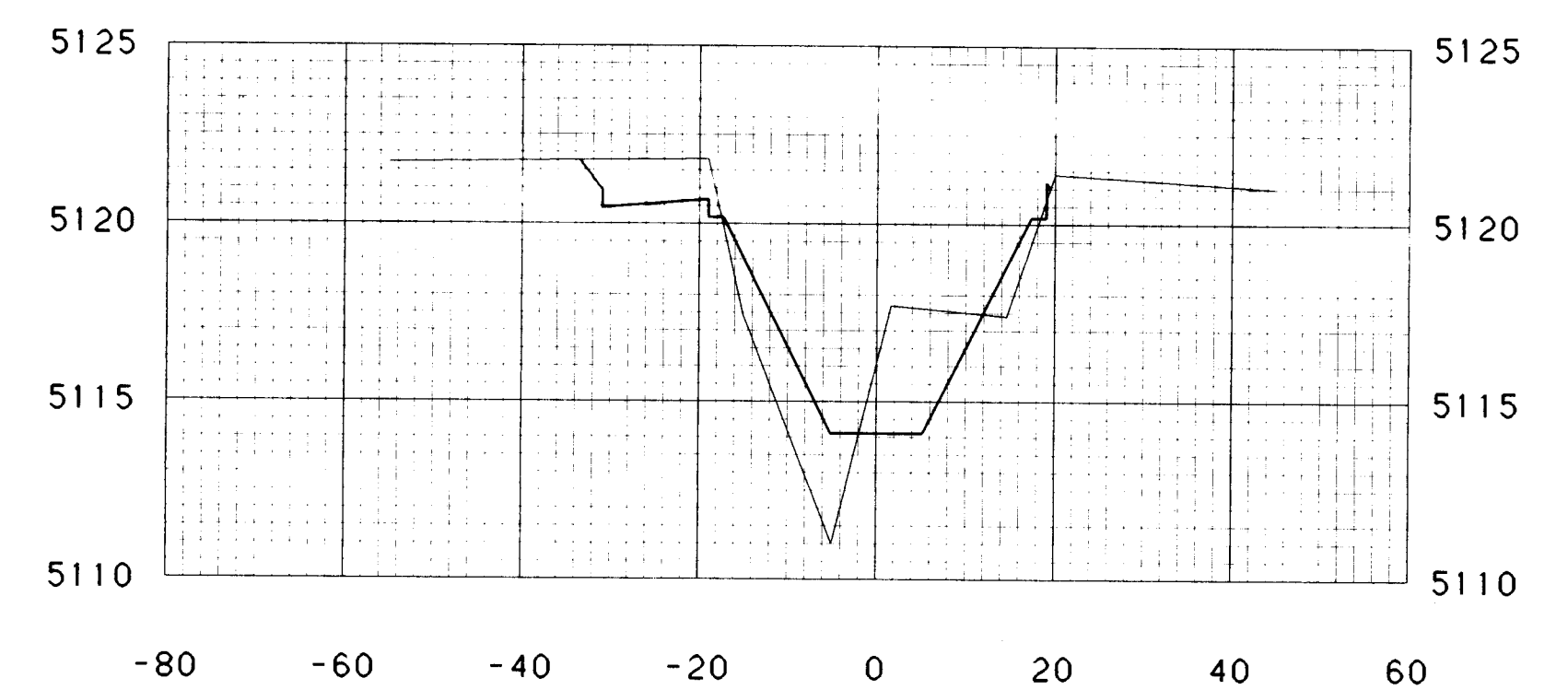
STATION 26+00.0



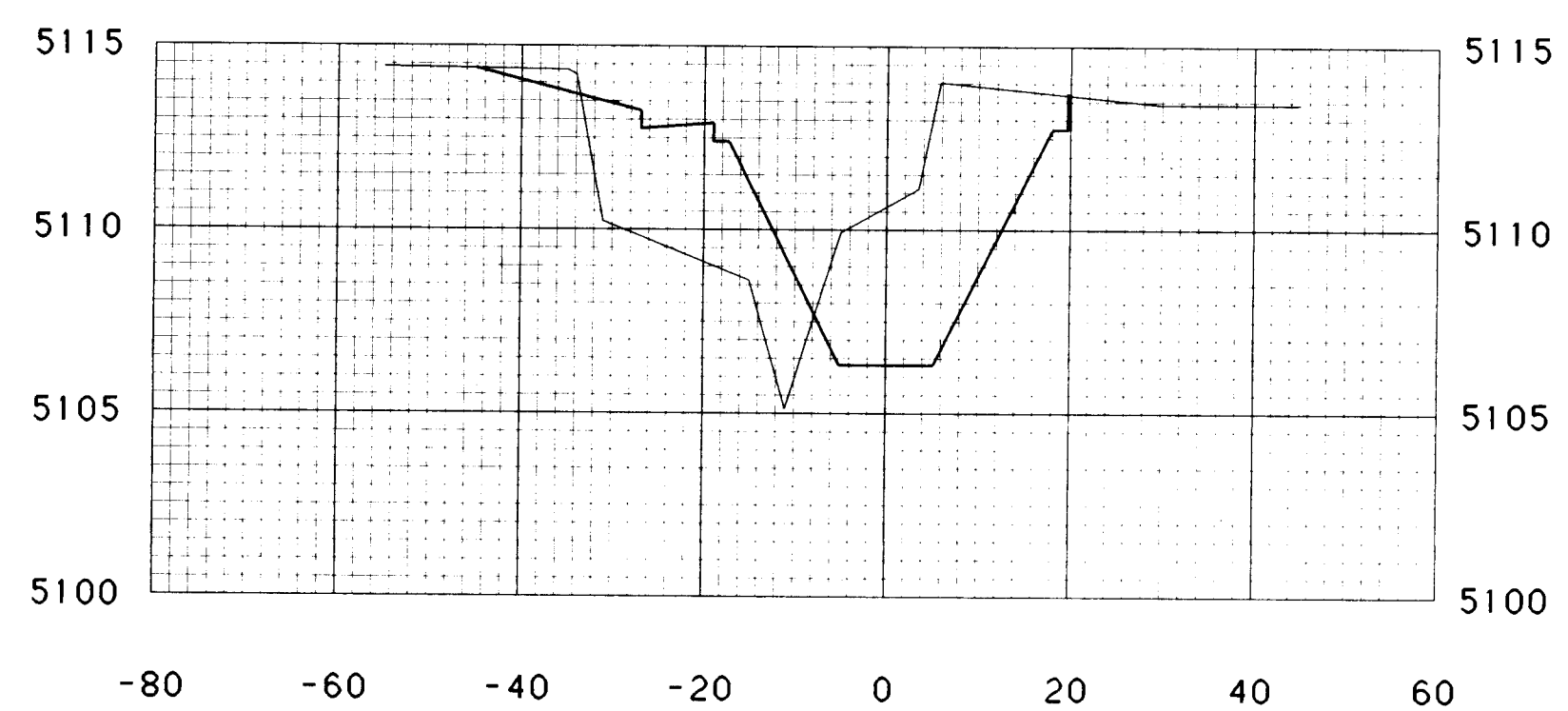
STATION 22+50.0



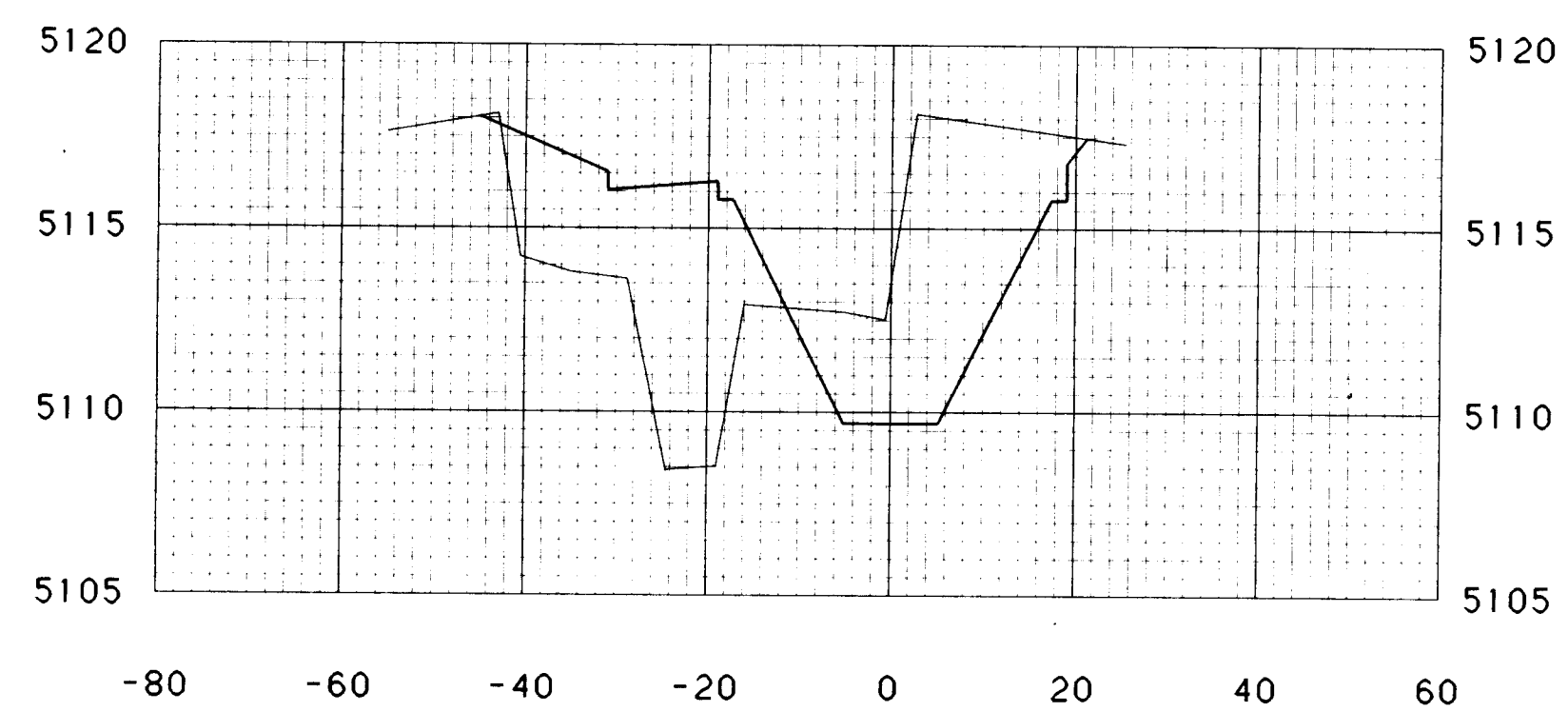
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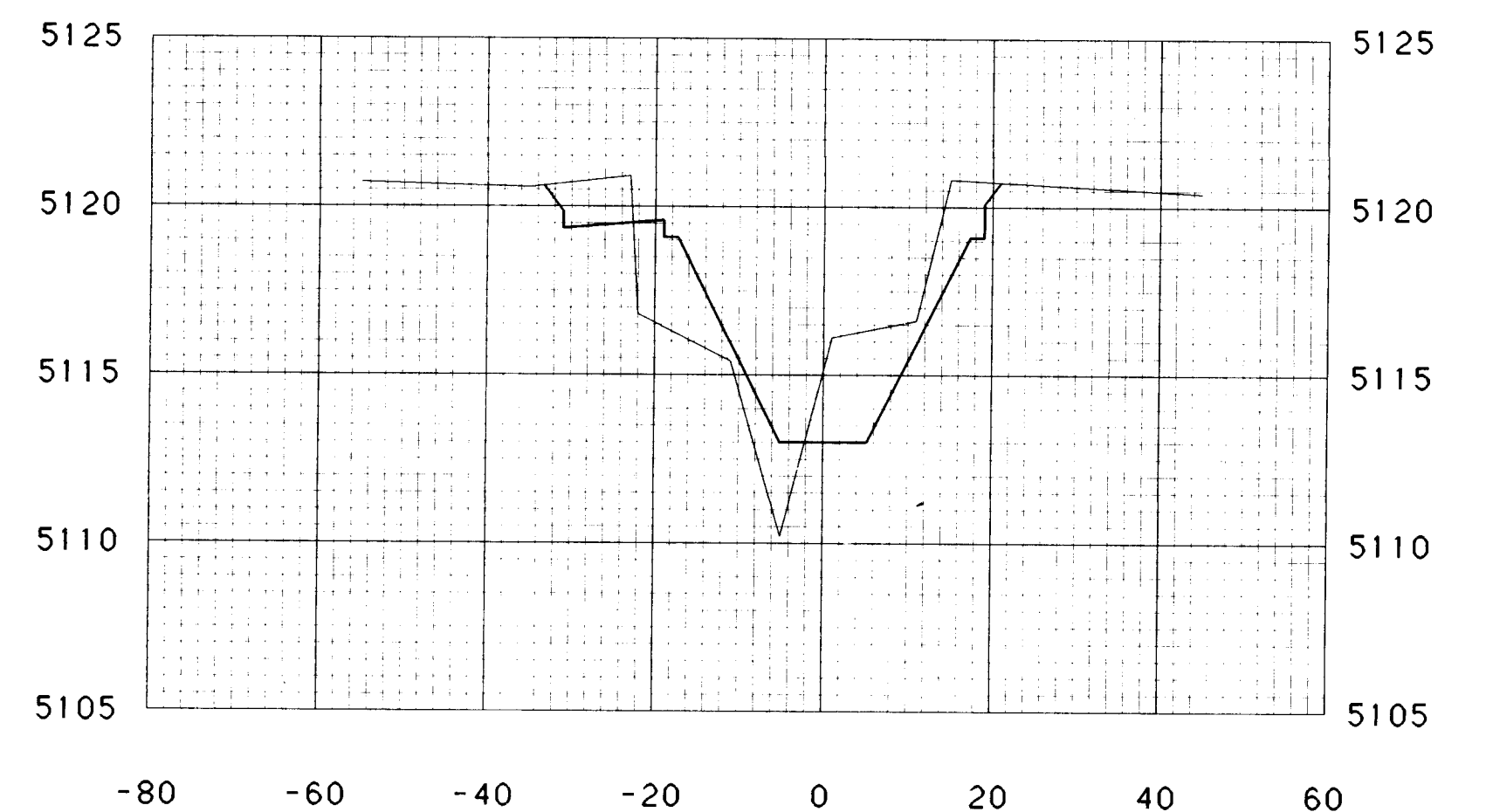
STATION 25+50.0



STATION 22+00.0



STATION 23+50.0



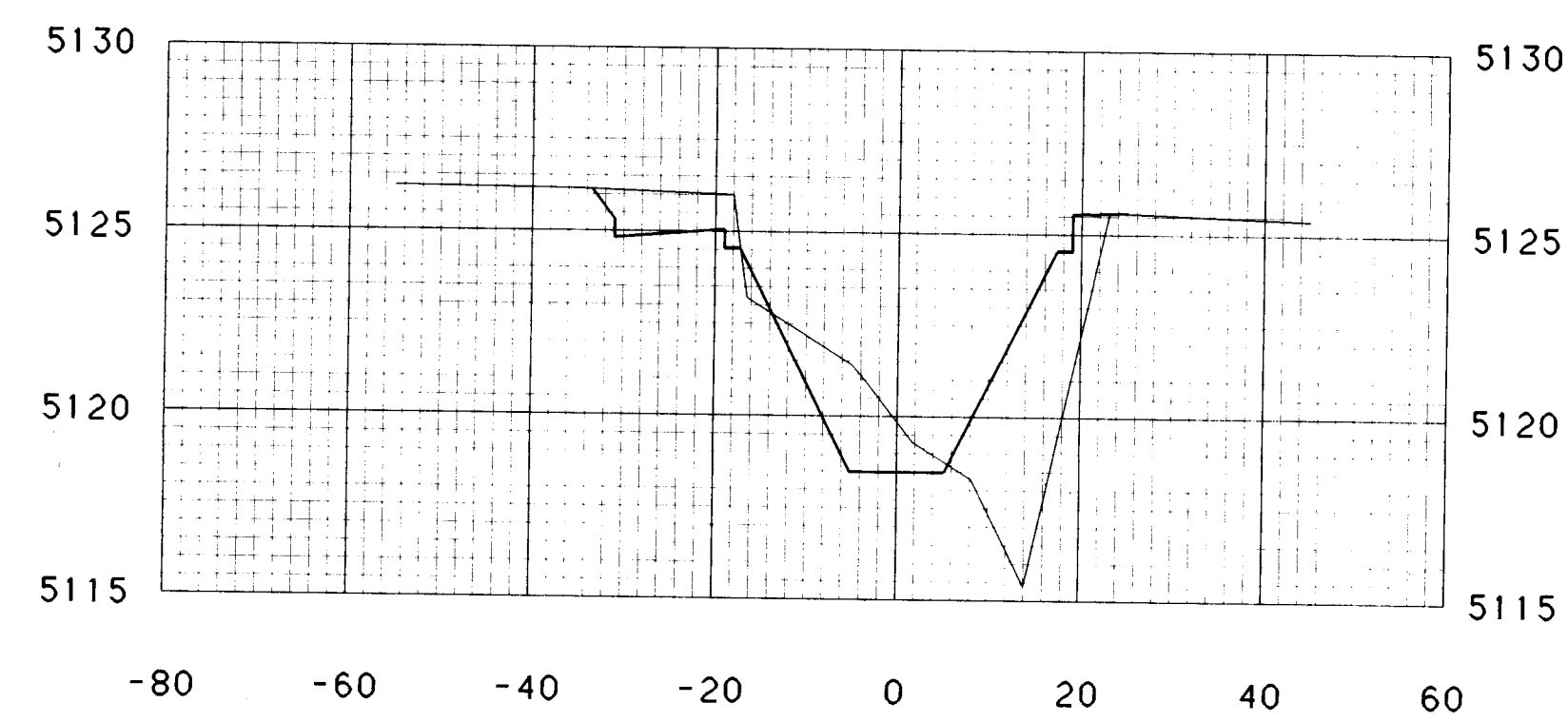
STATION 25+00.0

1 2 3 4 5 6 7 8 9 10 11 12
26 36 78 14 89

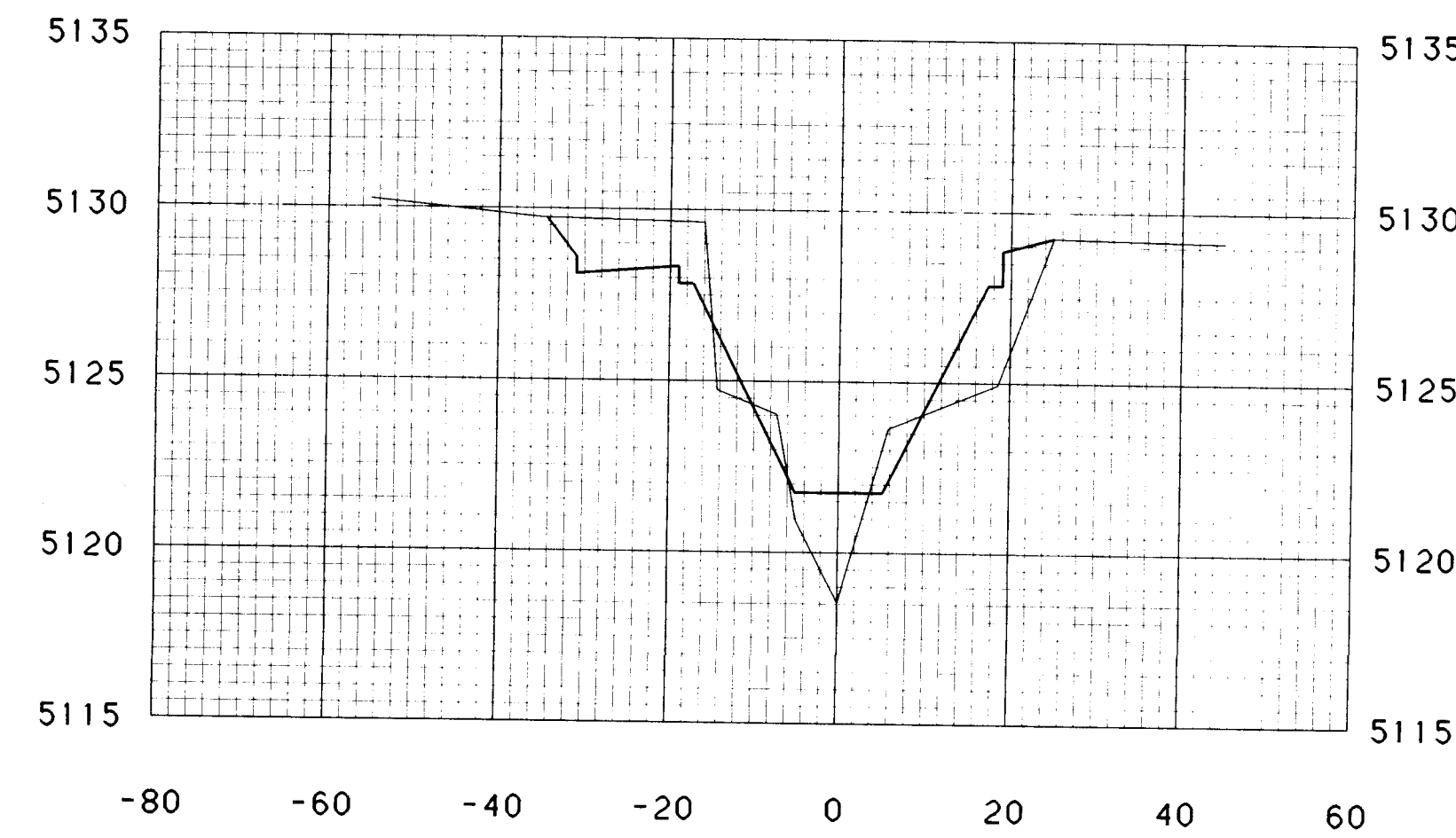


CROSS SECTIONS
PINO ARROYO JEFFERSON ST. TO
N. DIVERSION CHANNEL

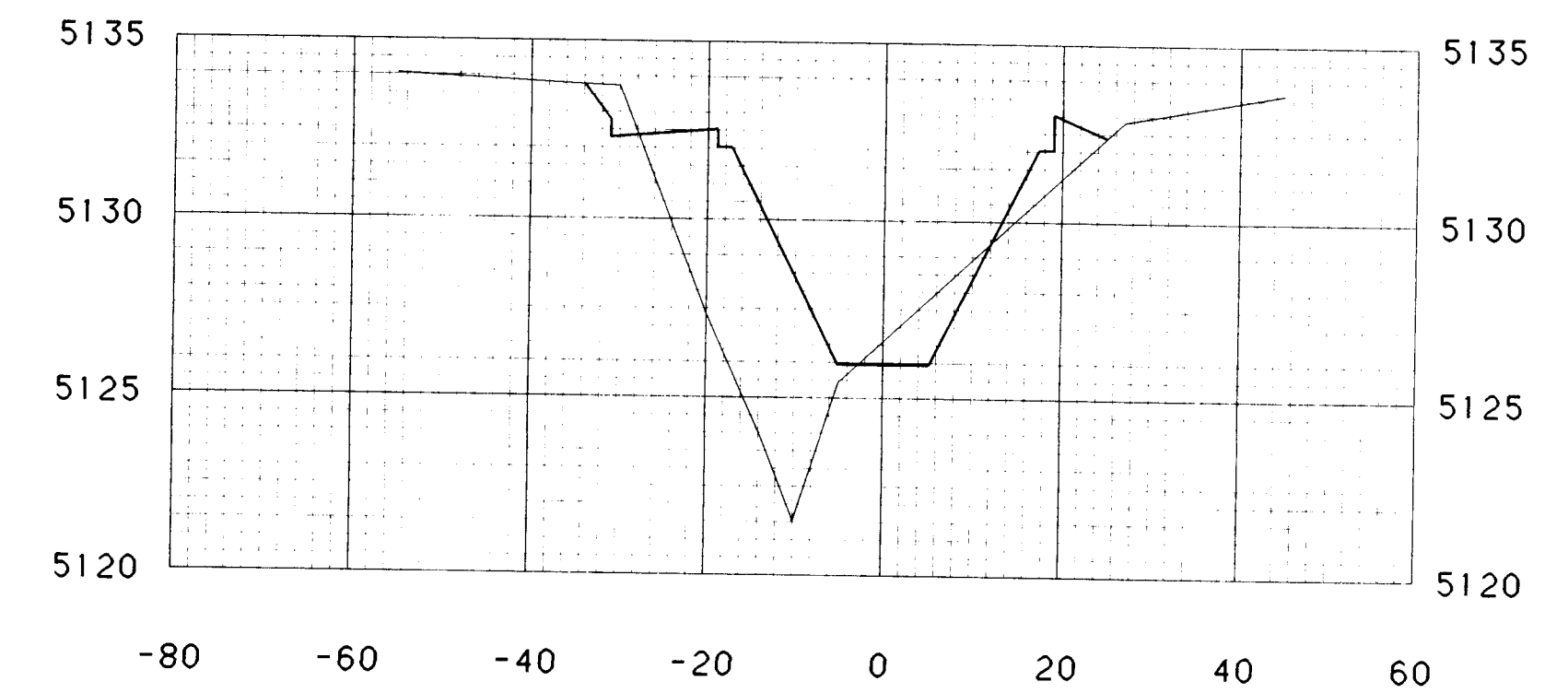
STA 22+00.00 TO STA 26+00.00



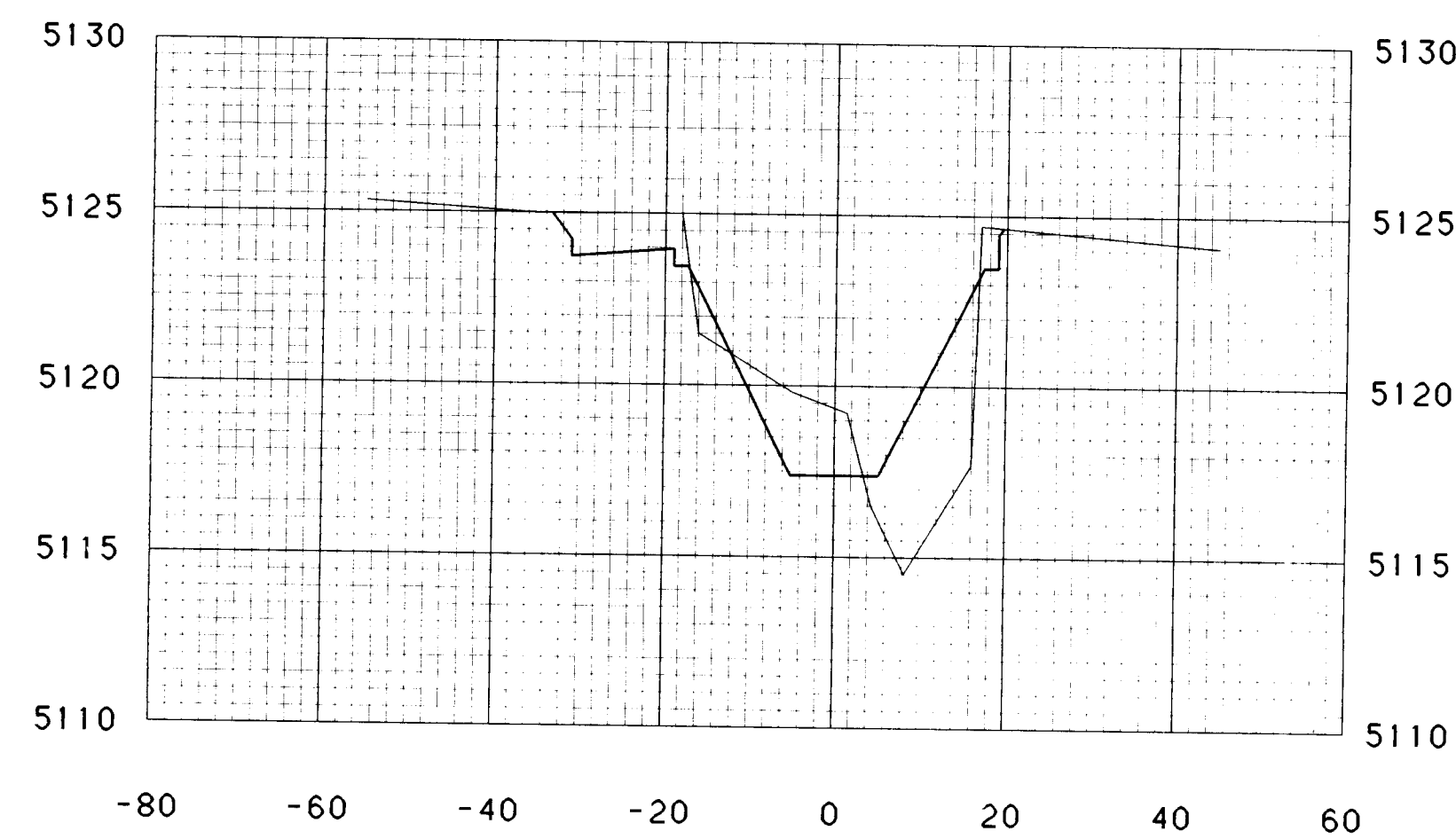
STATION 27+50.0



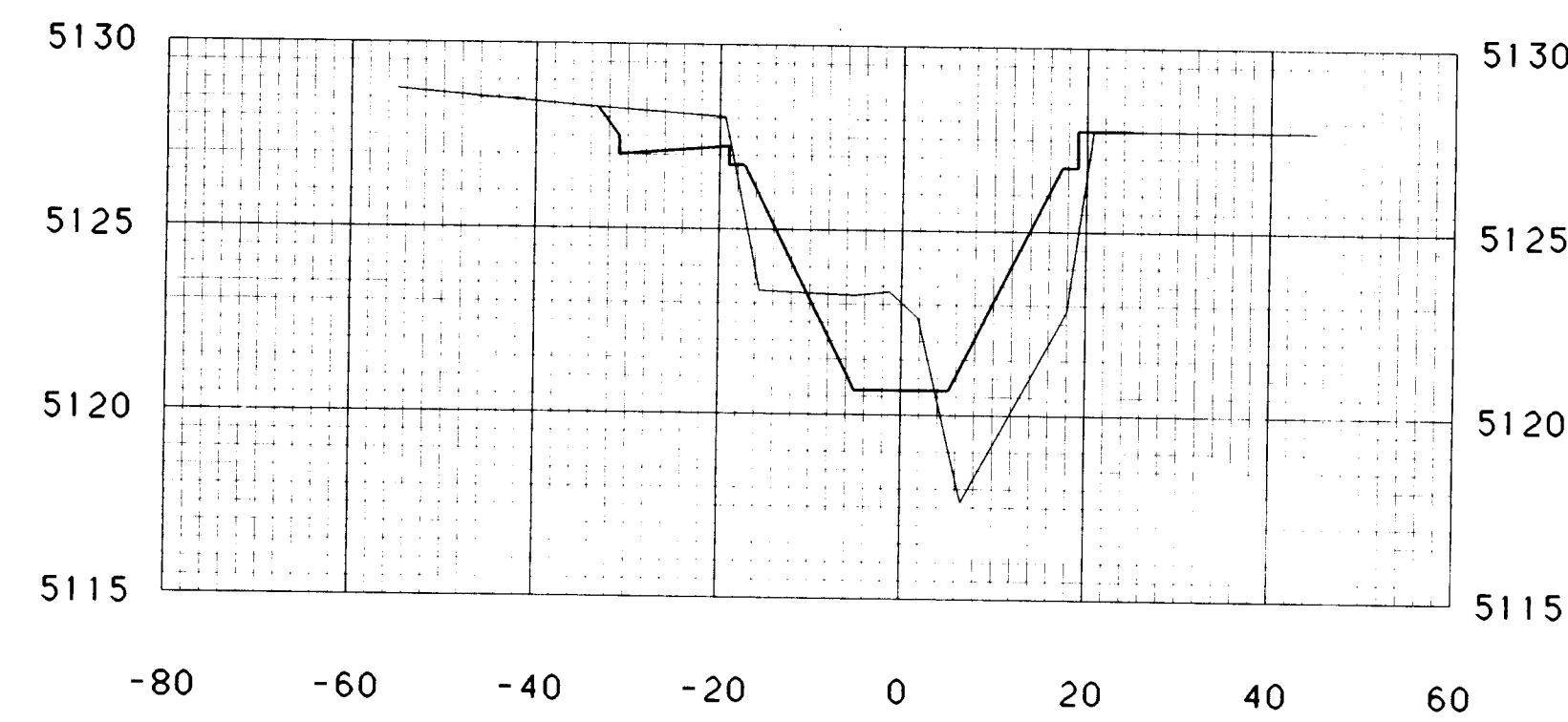
STATION 29+00.0



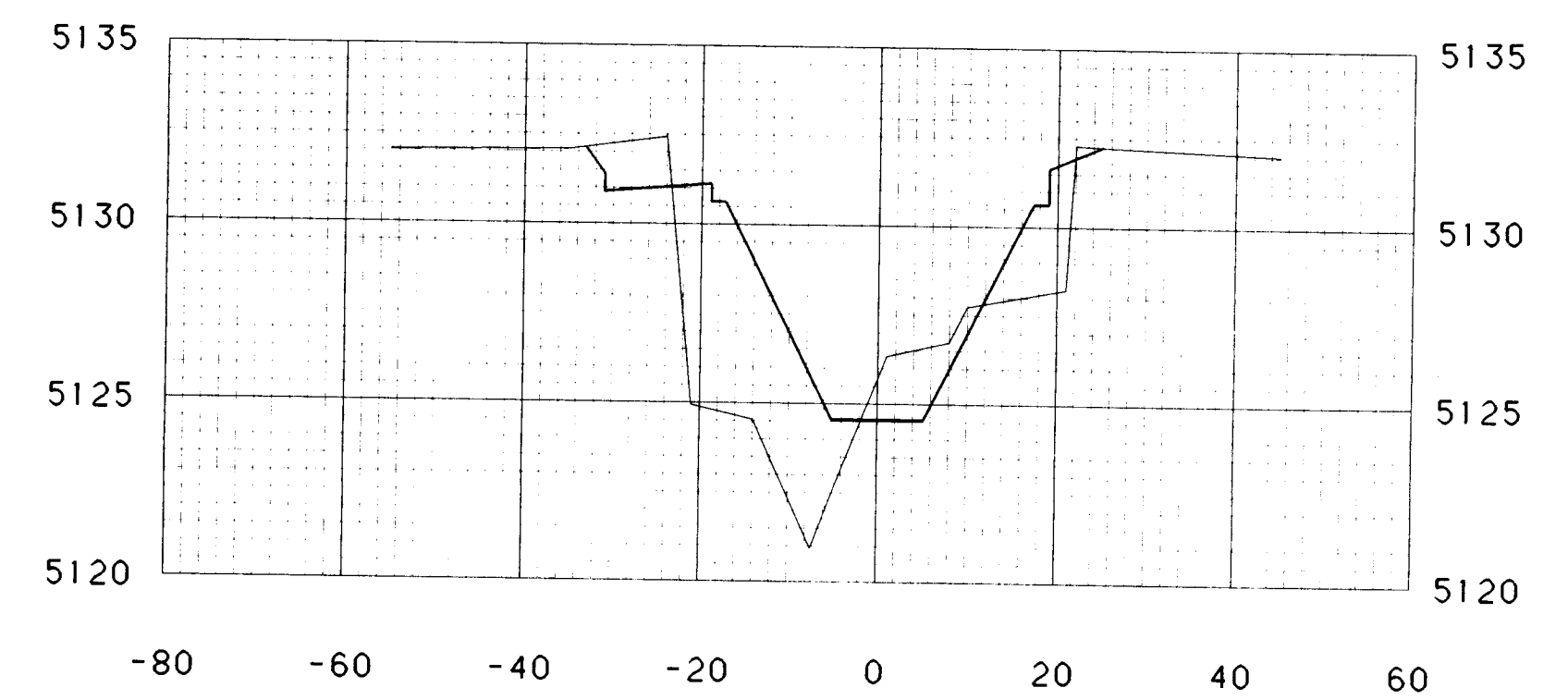
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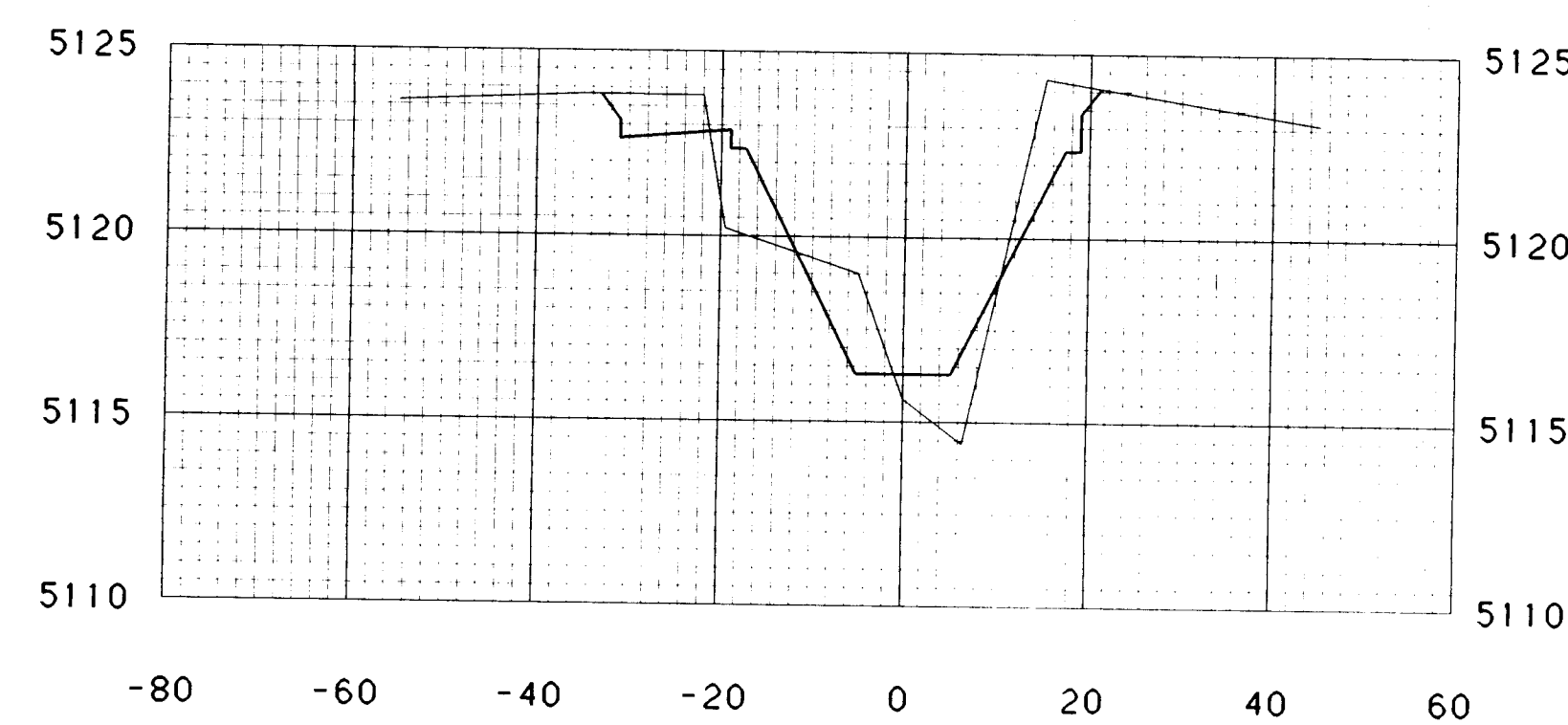
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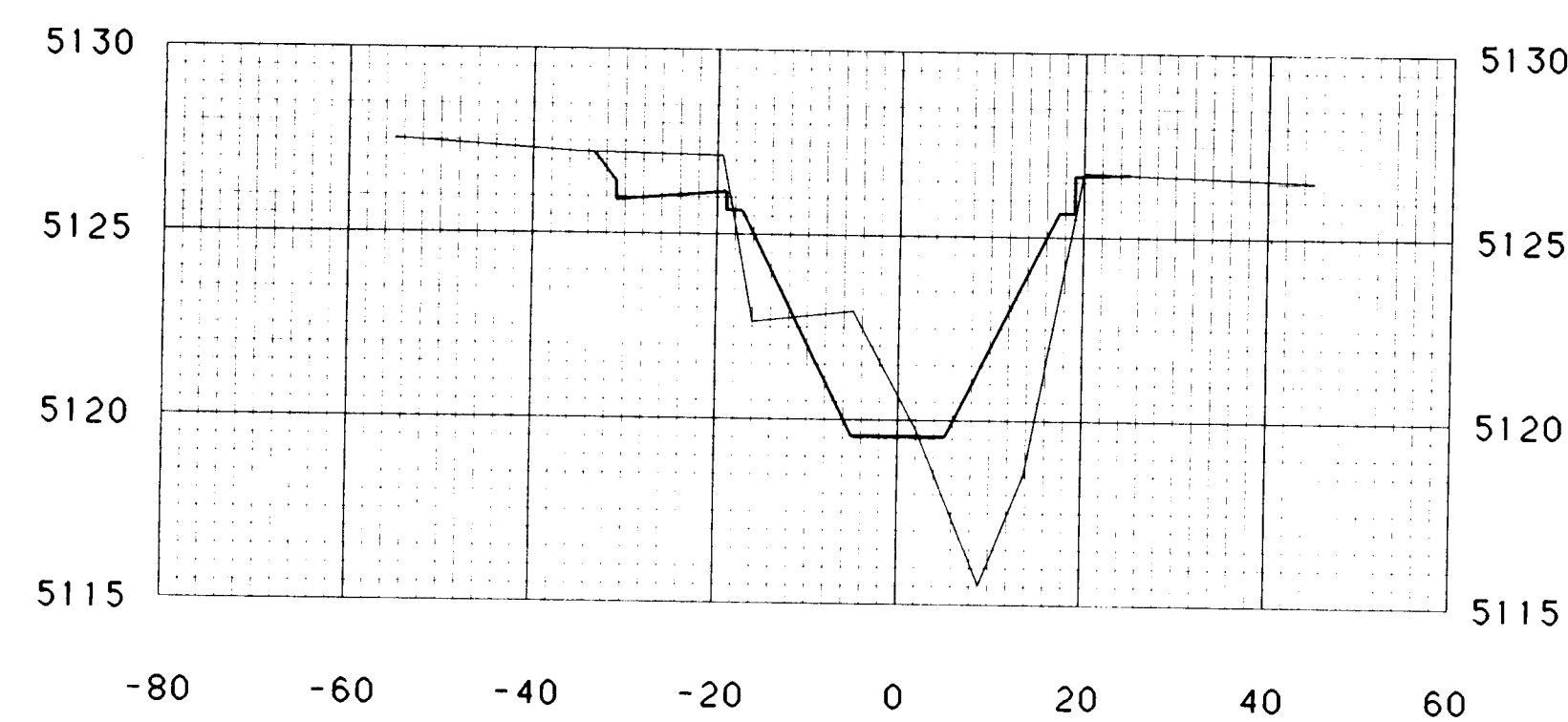
STATION 28+50.0



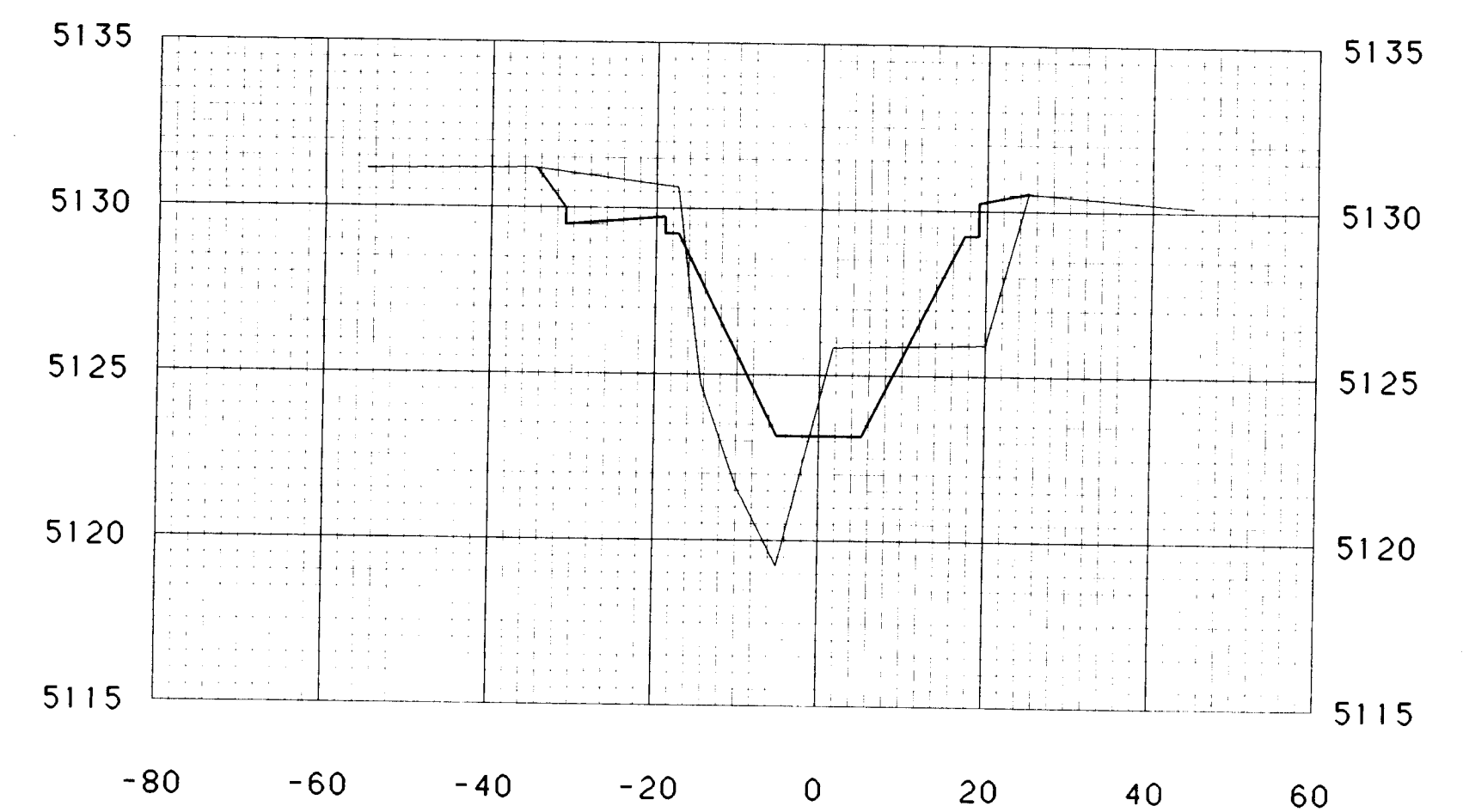
STATION 30+00.0



STATION 26+50.0



STATION 28+00.0



STATION 29+50.0

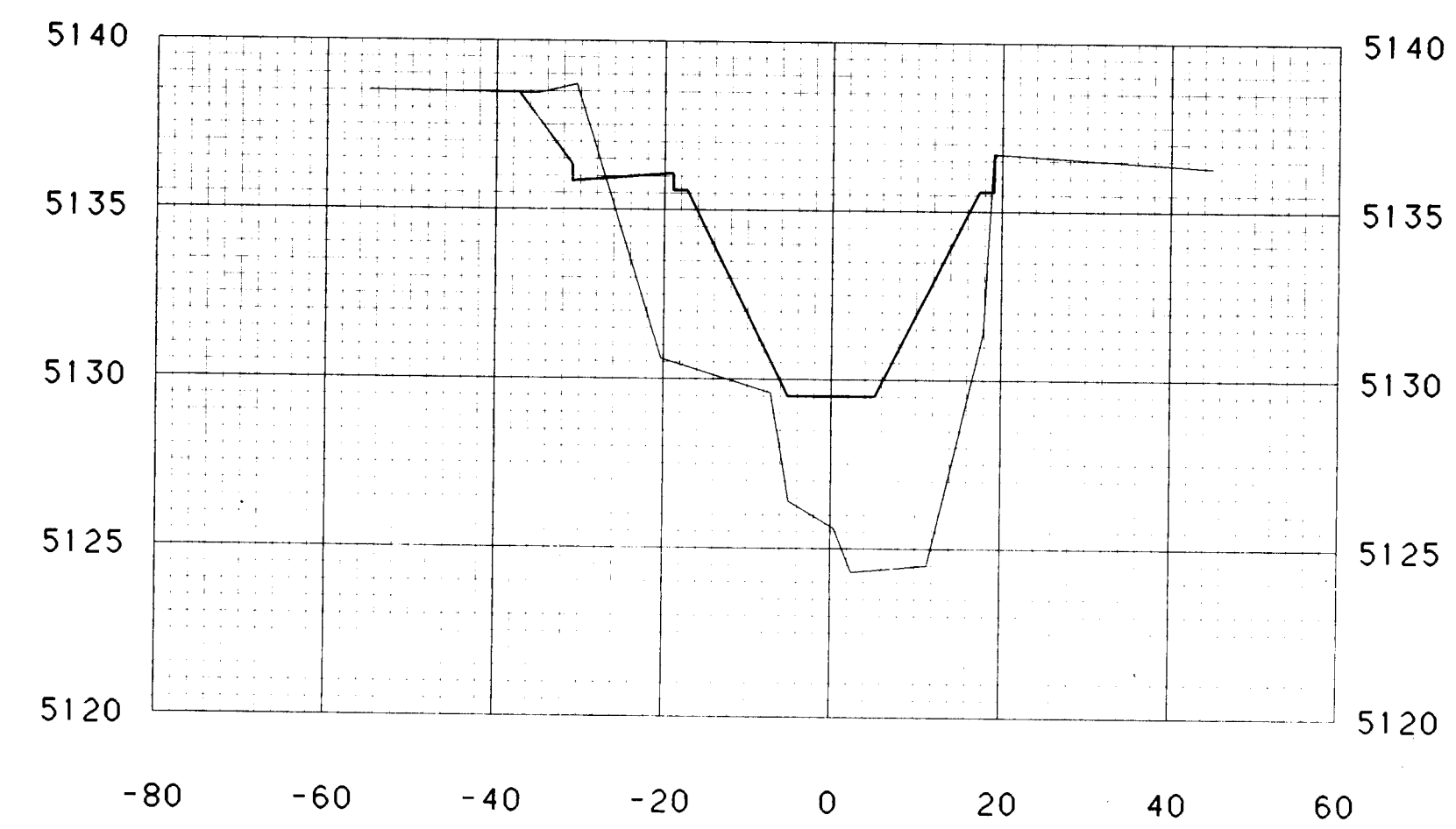
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26	36	78	15	87							

Paul M. Bence

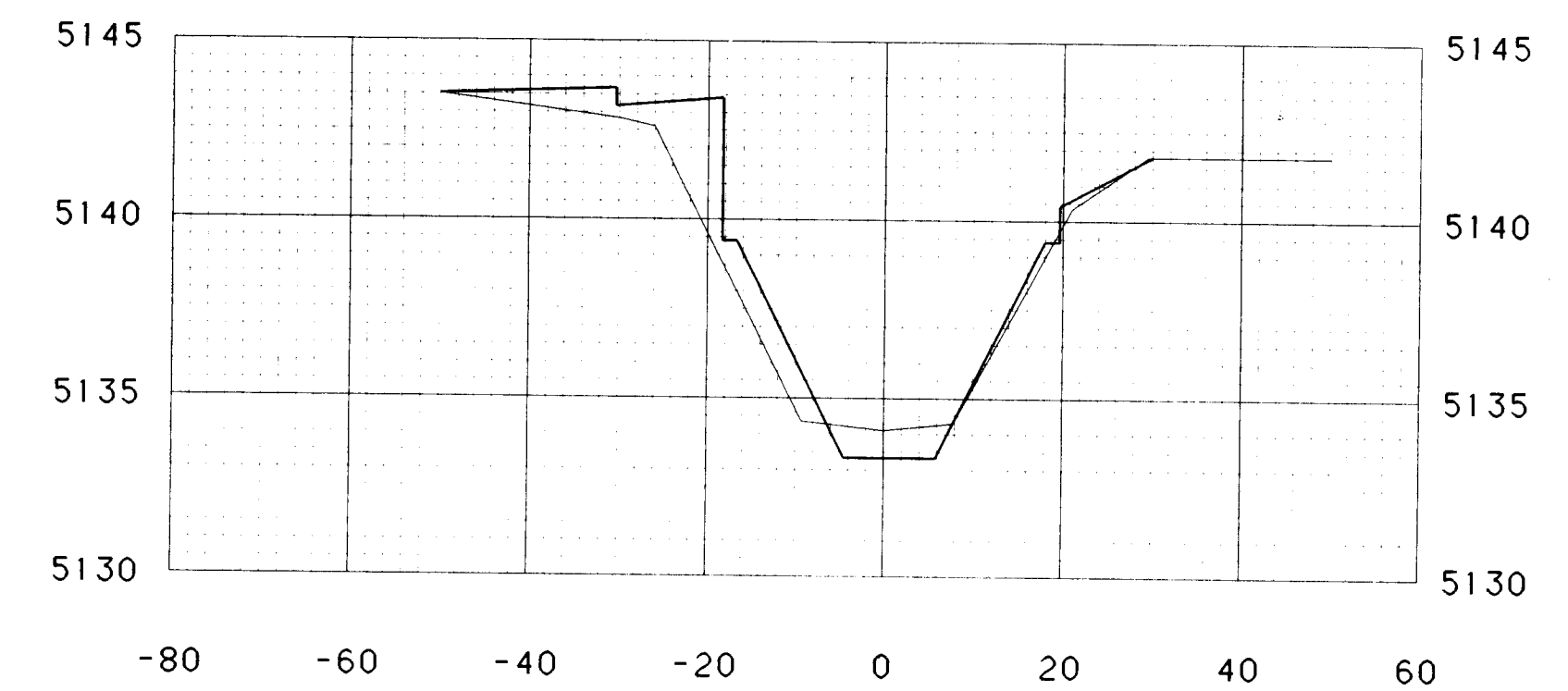


CROSS SECTIONS
PINO ARROYO JEFFERSON ST. TO
N. DIVERSION CHANNEL
STA 26+50.00 TO STA 30+50.00
SHEET 15 OF 15

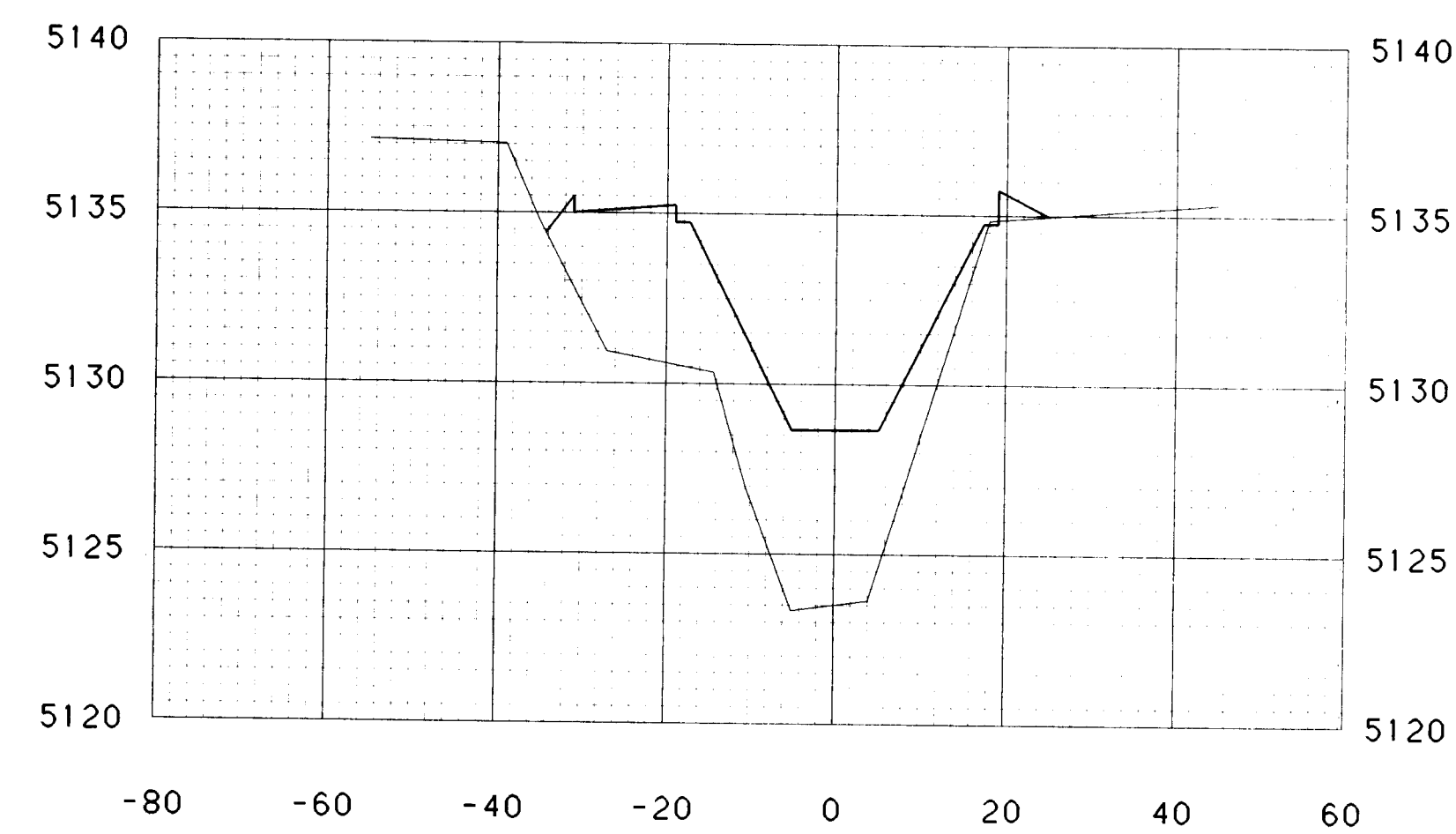
8-16-89



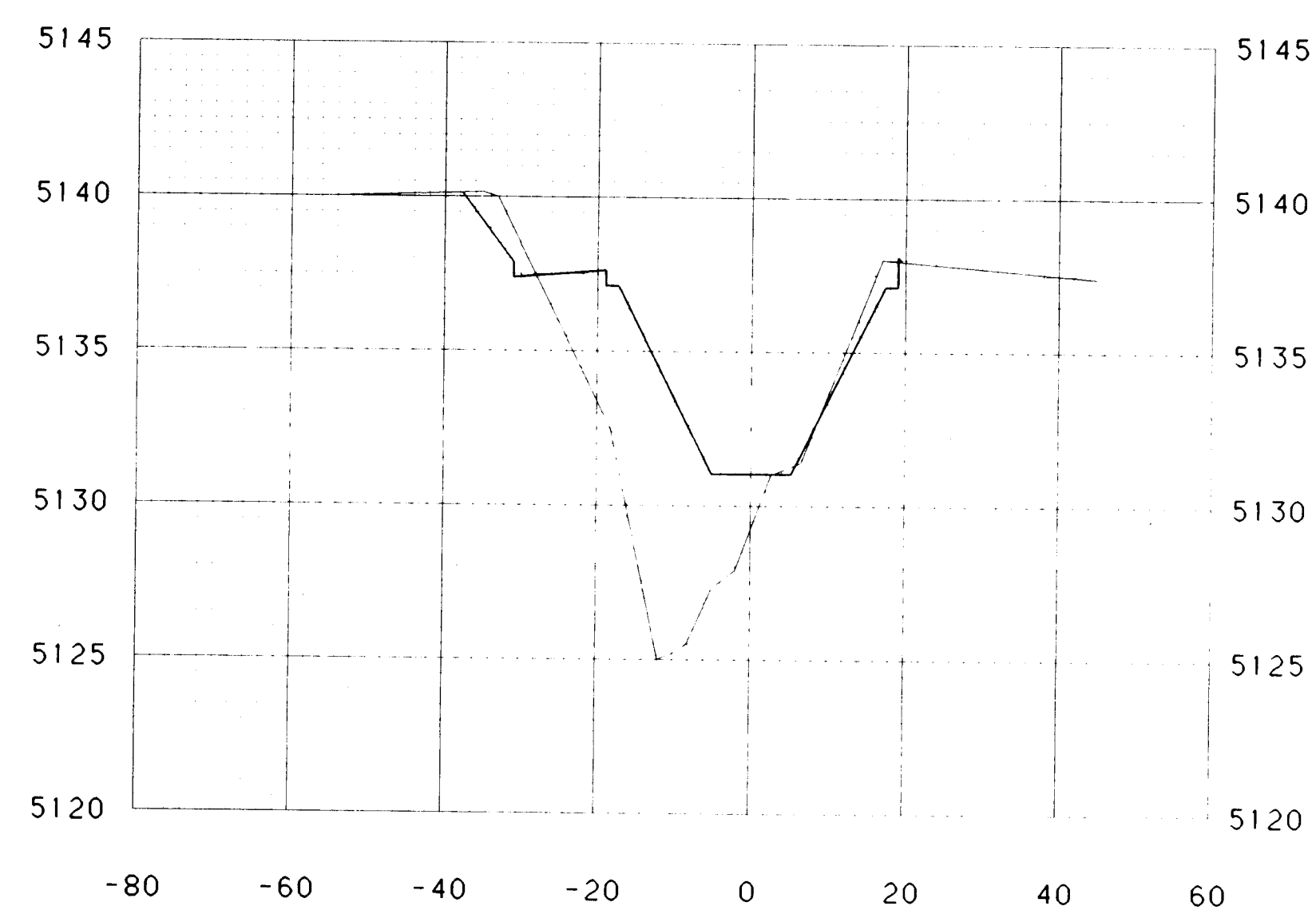
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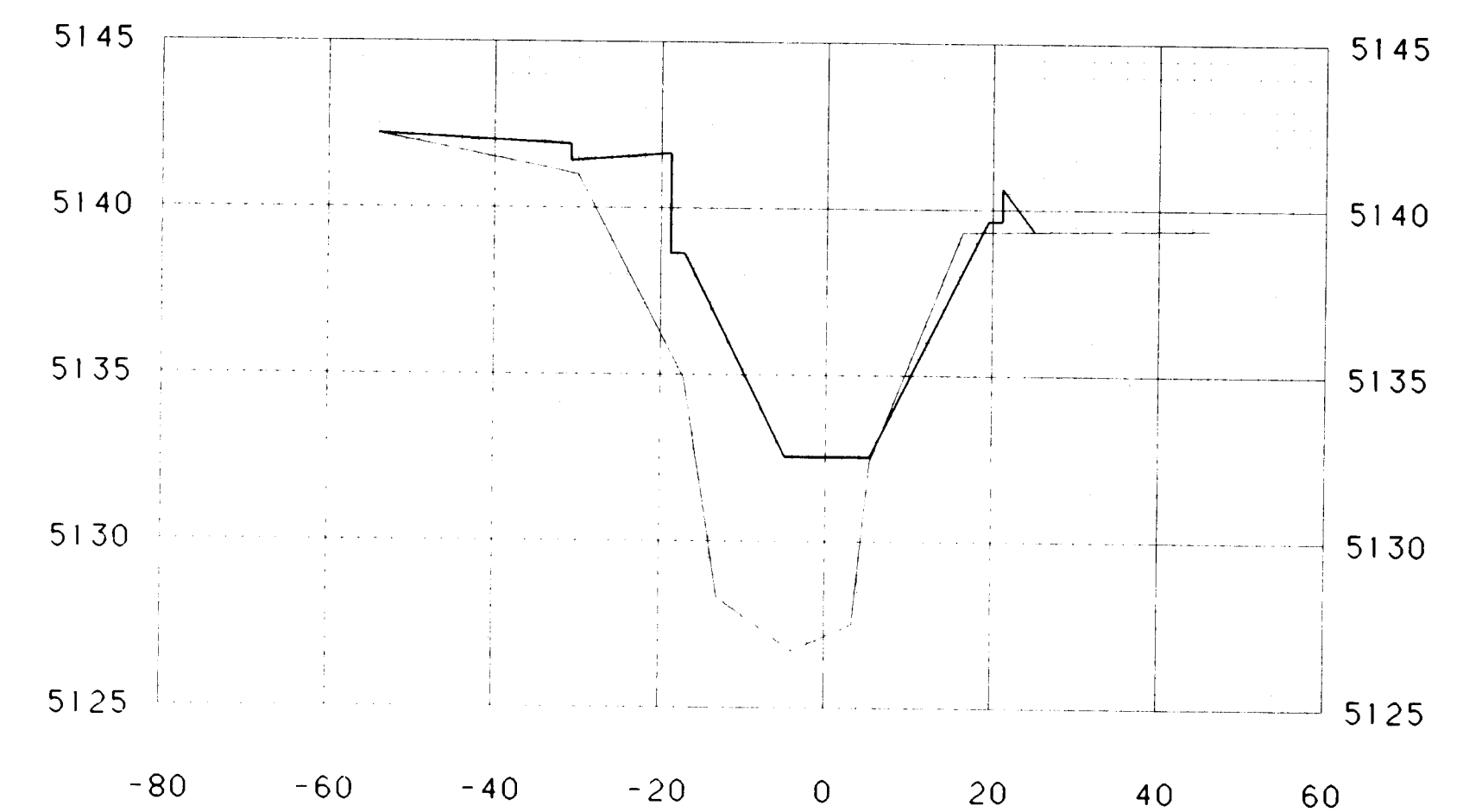
STATION 34+50.0



STATION 31+50.0



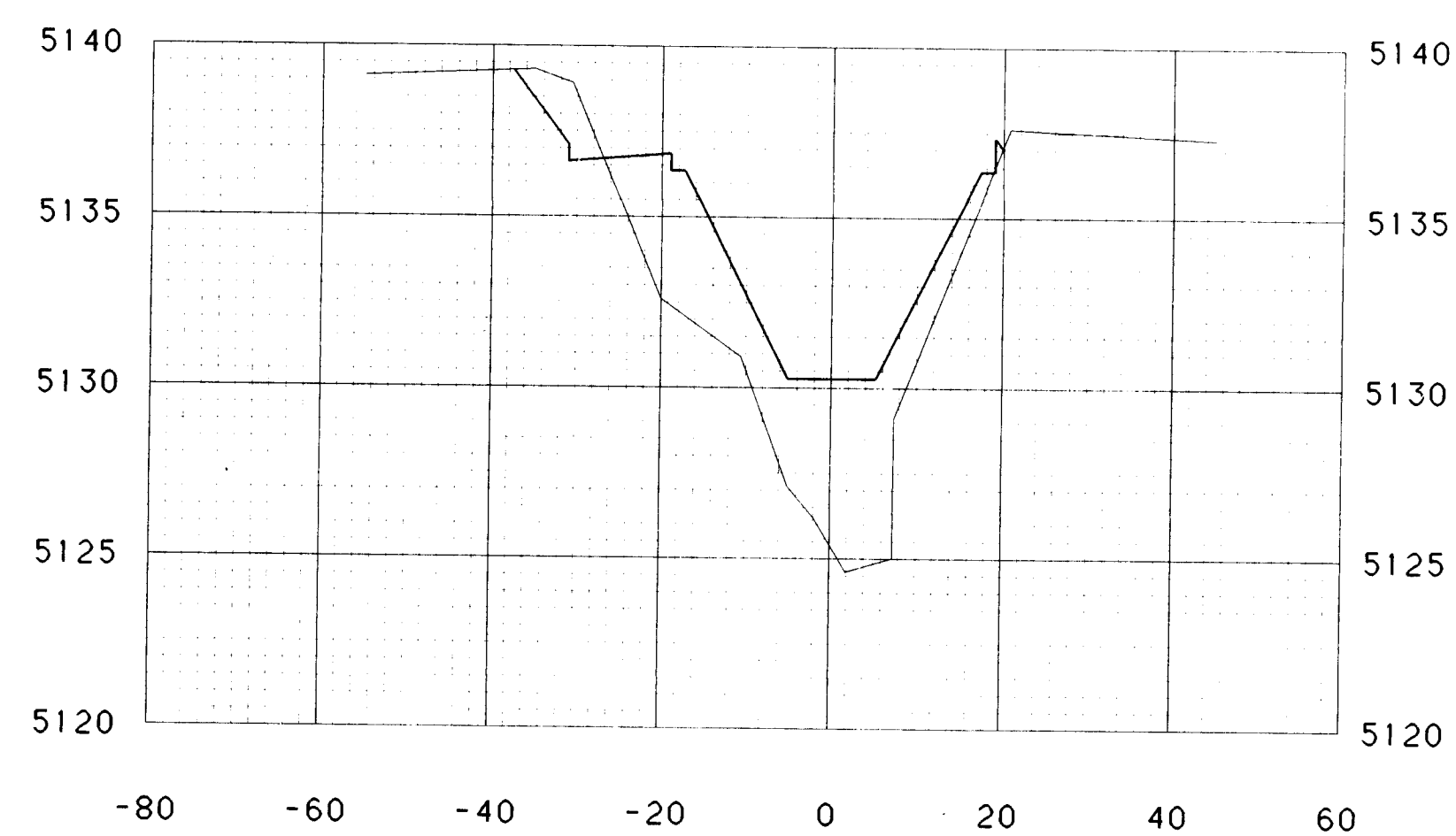
STATION 33+00.0



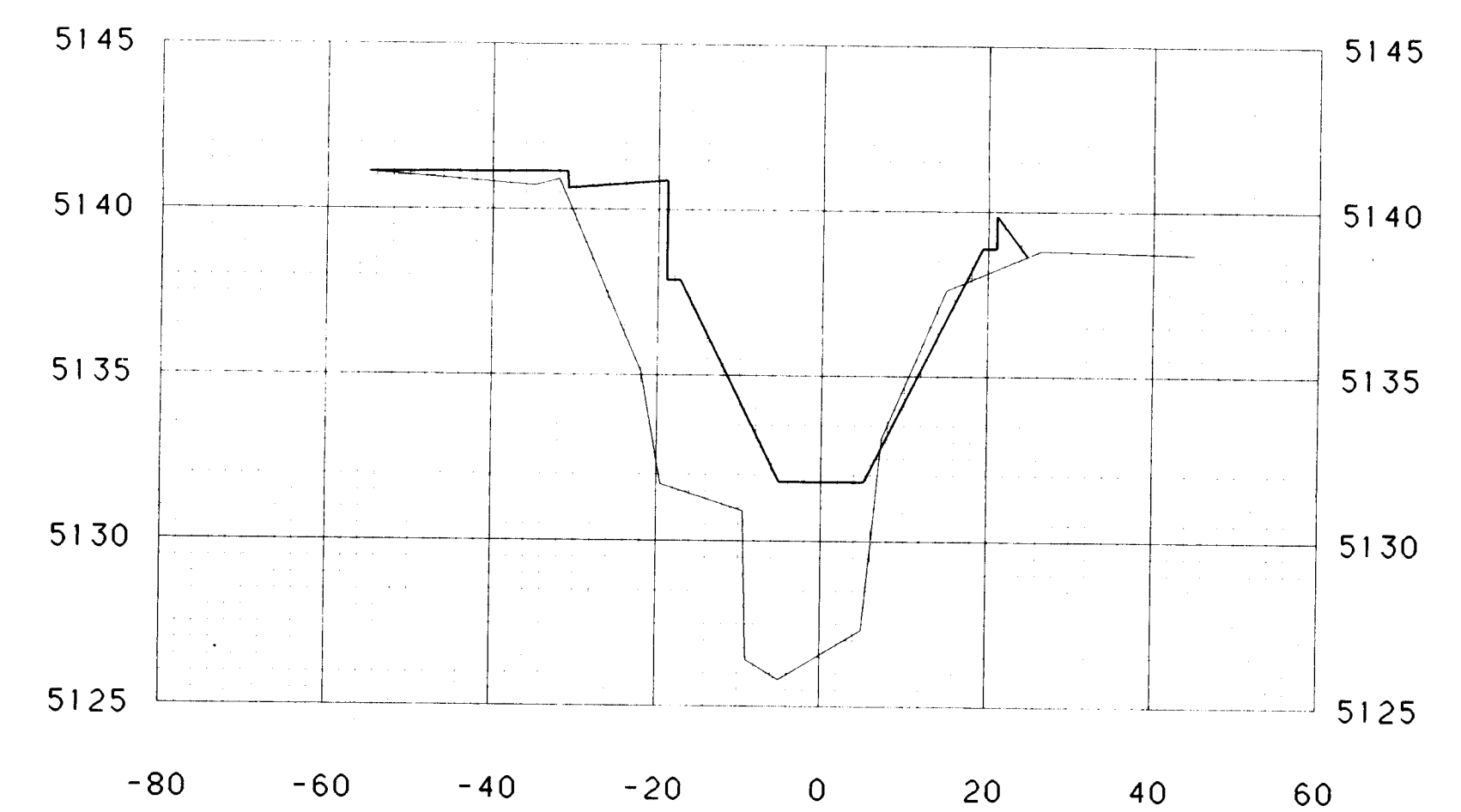
STATION 34+00.0



STATION 31+00.0



STATION 32+50.0

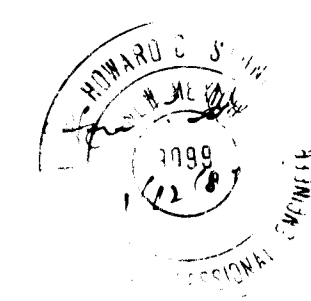


STATION 33+50.0

1	2	3	4	5	6	7	8	9	10	11	12
26	36	78	16	89							

Handwritten signature

B-16-89



CROSS SECTIONS
PINO ARROYO JEFFERSON ST. TO
N. DIVERSION CHANNEL

STA 31+00.00 TO STA 34+50.00

SHEET 16 OF 1