

FED. ROAD DIST. NO.	STATE	STATE PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	(51-61)-91-507	1	

COLORADO STATE HIGHWAY DEPARTMENT PLAN AND PROFILE OF PROPOSED STATE PROJECT NO. (51-61)-91-507 STATE HIGHWAY NO. 91 CLEAR CREEK & SUMMIT COUNTIES

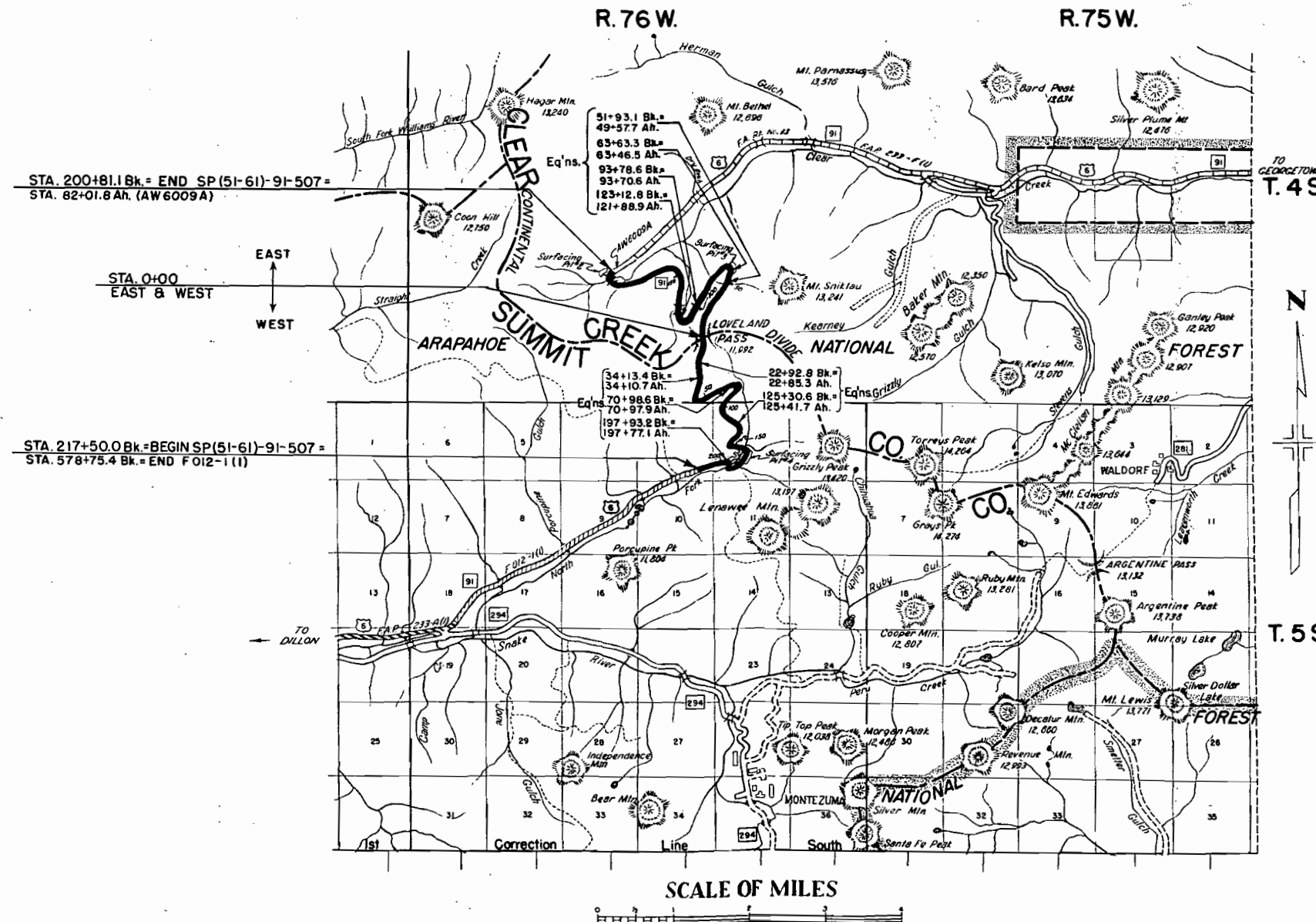
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SCALES ON ORIGINAL TRACINGS
 ON PLAN, 1 IN. = 100 FT.
 ON PROFILE, 1 IN. = 100 FT. HORIZONTAL
 1 IN. = 10 FT. VERTICAL
 GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD
 GROSS LENGTH OF PROJECT } 42,231.1 FT. = 7.998 MILES
 NET LENGTH OF PROJECT }

CONVENTIONAL SIGNS

CENTER LINE
 RIGHT-OF-WAY LINE
 COUNTY LINE
 TOWNSHIP OR RANGE LINE
 SECTION LINE
 QUARTER SECTION LINE
 SIXTEENTH SECTION LINE
 SNOW FENCE
 GUARD FENCE
 TELEPH. & TELEG. LINE
 POWER LINE
 PRESENT ROAD (PLAN SHEETS)



NOTE:

It is recommended that bidders on this Project go over the plan details with one of the following field representatives of this Department.

Harvey Stitt District Engineer
 Fred Miller Denver, Colorado
 Construction Engineer
 Denver, Colorado

RECOMMENDED FOR APPROVAL

James B. Burt
 ASSISTANT ENGINEER
 5-25-49

APPROVED

Mark H. Watson
 STATE HIGHWAY ENGINEER
 5-25-49

RECOMMENDED FOR APPROVAL - DATE

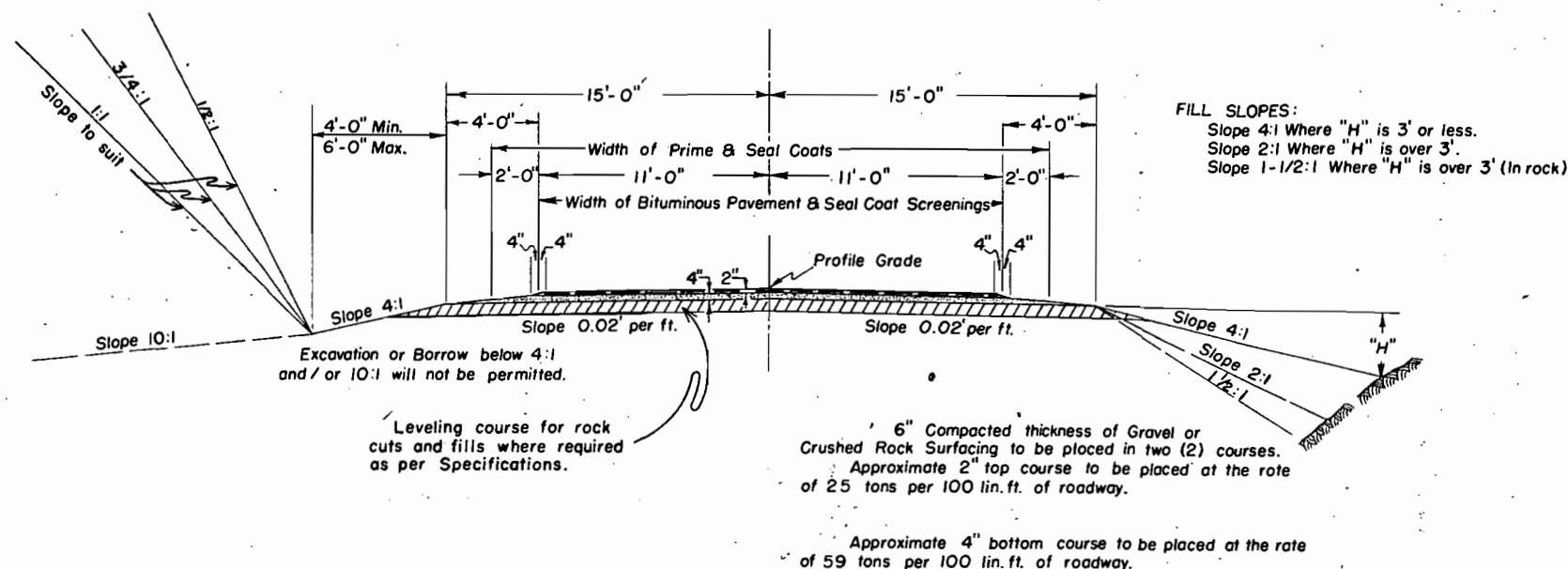
DISTRICT ENGINEER
 PUBLIC ROADS ADMIN.
 FEDERAL WORKS AGENCY

APPROVED

DIVISION ENGINEER
 PUBLIC ROADS ADMIN.
 FEDERAL WORKS AGENCY

TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY OF QUANTITIES

TYPICAL SECTION



GENERAL NOTES

This project is to be constructed in conformity with the Standard Specifications of the Colorado State Highway Department adopted January 1, 1948.

All quantities on preliminary plans are to be considered approximate only.

All roadway excavation required to construct this Project is to be obtained as indicated on the plans. Quantities involved beyond the limits of the ditch, as shown on the Typical Section, either noted on the profile as "Borrow" or on the List of Structures as "Unclassified Excavation". These quantities are to be staked as part of the original excavation at locations indicated on the plans. Slope stakes, beyond the limits of the Typical Section as shown, are subject to change by the Engineer to fit conditions actually met in construction.

All poles encroaching on construction are to be moved by the owners.

Approximately 6 inches of embankment material will be used to cover culverts in such a manner that a minimum of pipe shall be exposed in the completed work. This shall be accomplished by warping embankment slopes around and adjacent to the culvert.

Except as otherwise noted on the plans, payment for overhaul will be based on measurement along the centerline of the project.

The entire project shall be cleared in conformity with the requirements of the Standard Specifications except that such trees or shrubs as the Engineer may designate, shall be left in place and protected from damage during construction operations.

All curves are to be superelevated and widened as provided by the Standard Superelevation sheet included with the plans, except as otherwise noted on plans.

Intercepting ditches shall be placed on light grades following the ground contour, and where possible shall be so constructed that the direction of flow will be away from the roadway, in order to spread runoff and thereby avoid erosion. This work shall be done in accordance with the methods shown on standard sheet included in the plans. These ditches shall be constructed at locations staked by the Engineer. Approximate location and quantities are tabulated on summary of earthwork quantities sheet.

Curves on this project over 6 degrees shall be provided with the superelevation shown on the Standard Superelevation sheet for a 6 degree curve.

If excavation operations develop material which will stand on slope steeper than slope stake lines, the Department reserves the right to change cut slopes during the progress of such excavations.

Asphaltic Road Material MC is to be used for Prime Coat over a 26 Ft. width of roadway previous to placing of Oil Processed Material. Grade of MC oil to be determined by the Engineer.

Asphaltic Road Material MC-3 is to be used for processing oil mat on this project.

Asphaltic Road Material RC is to be used for Seal Coat over the entire Prime Coated area. Grade of RC oil to be determined by the Engineer. (Second Contract)

It is estimated that rolling of the oil processed material with a flat wheeled roller will be necessary after compaction of mat with rubber tired rollers in order to produce a smooth, firm surface. (First Contract)

Stone screenings (Type I) are to be stockpiled in the vicinity of Pit No. 2 East Side, and in the vicinity of Pit No. 4 West Side.

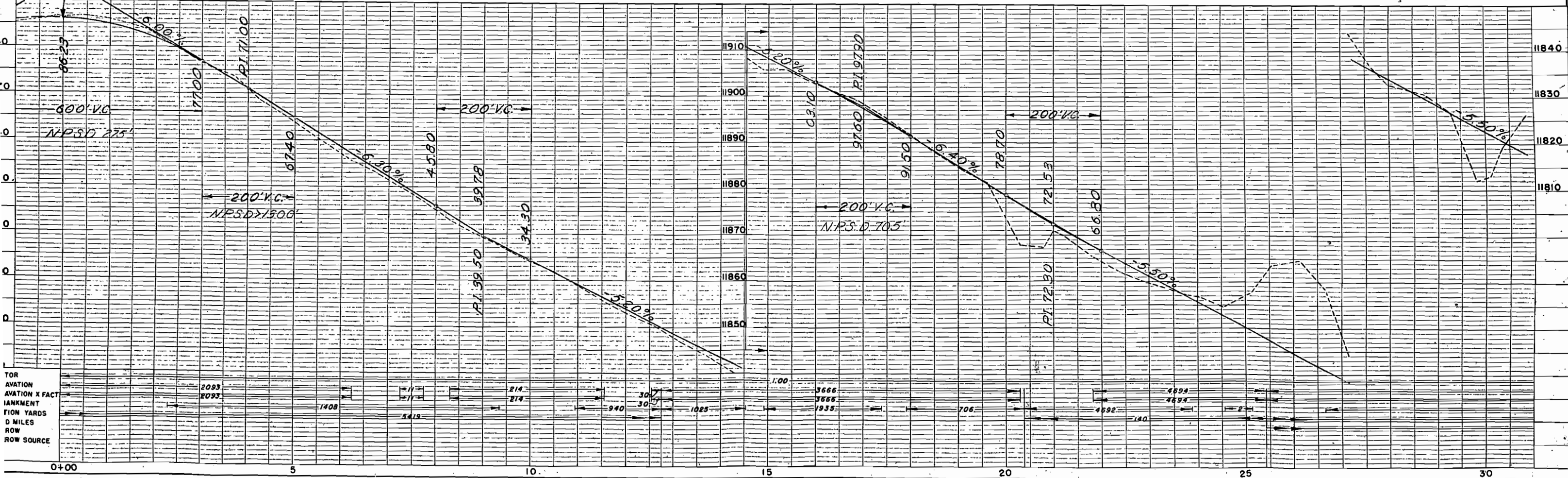
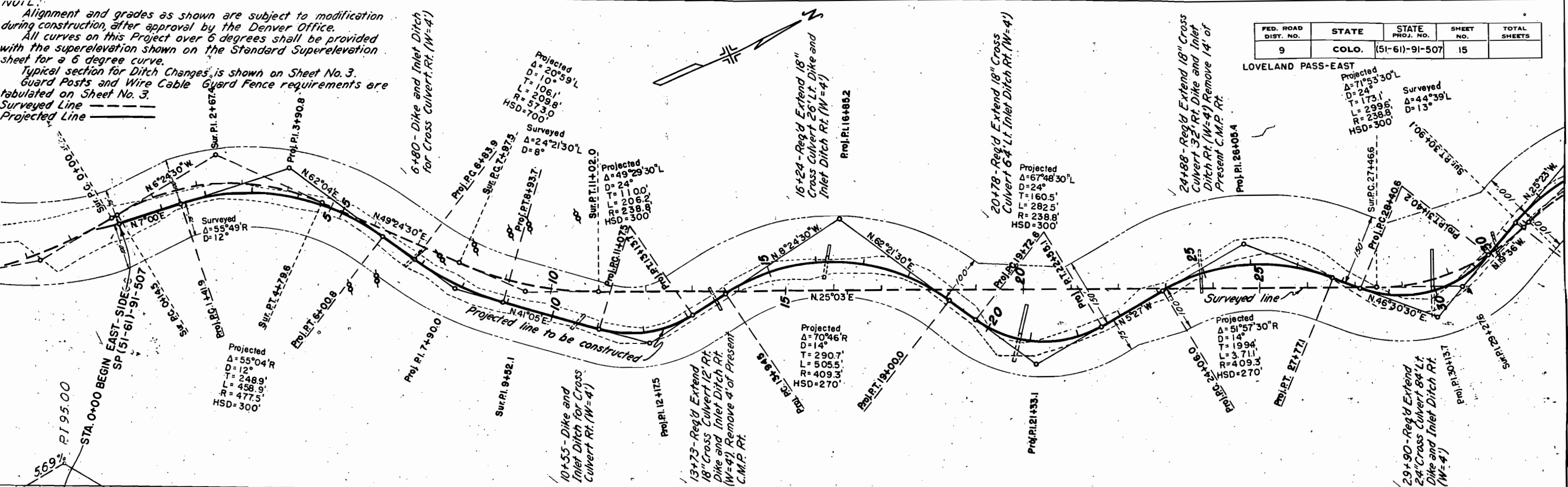
Removal of Muck on this Project will be measured and be Paid for as "Unclassified Excavation".

SUMMARY OF APPROXIMATE QUANTITIES

ITEM NO.	ITEM	UNIT	ROADWAY EAST SIDE	ROADWAY WEST SIDE	PROJECT TOTALS
FIRST CONTRACT					
10a	Clearing and Grubbing Entire Project	L.S.	Prorated	Prorated	•
11a	Removal of Bridge Sta. 121+ (East Side)	L.S.	•	•	•
11b	Removal of 11 Structures (East Side)	L.S.	•	•	•
11c	Removal of 13 Structures (West Side)	L.S.	•	•	•
12ax	Removing Guard Fence	Lin. ft.	110'		110
13c	Unclassified Excavation	Cu. Yd.	136,000	141,000	277,000
13d	Unclassified Ditch Excavation	Cu. Yd.	400	400	800
14a	Dry Rock Excavation (Str.)	Cu. Yd.	170	300	470
14b	Dry Common Excavation (Str.)	Cu. Yd.	60	100	160
14c	Wet Rock Excavation (Str.)	Cu. Yd.	60	100	160
14d	Wet Common Excavation (Str.)	Cu. Yd.	20	40	60
16a	Structure Backfill (Class I)	Cu. Yd.	420	580	1000
16d	Mechanical Tamping	Hr.	30	60	110
17b	Rolling With Flat Wheeled Roller	Hr.	30	30	60
17c	Rolling With Rubber Tired Roller	Hr.	120	130	250
17e	Furnishing Flat Wheeled Roller	Each	0.5	0.5	1
17f	Furnishing Rubber Tired Roller	Each	0.5	0.5	1
17g	Wetting	M. Gal.	250	260	510
18a	Station Yard Overhaul	Sta. Yd.	216,000	815,000	1,031,000
18b	Yard Mile Overhaul	Yd. Mi.	1,300	25,300	26,600
18c	Ton Mile Overhaul	Ton Mi.	11,200	8,200	19,400
26c	Gravel or Crushed Rock Surfacing (Grading C)	Ton	5,800	6,100	11,900
26d	Gravel or Crushed Rock Surfacing (Grading D)	Ton	13,600	14,400	28,000
30x	Asphaltic Road Material MC	Gal.	26,300	27,700	54,000
30j	Asphaltic Road Material MC-3	Gal.	70,000	68,000	138,000
31a	Road Mix Oil Processing	Sq. Yd.	52,600	58,600	111,200
31c	Stone Screenings (Type I) (Stockpile)	Ton	570	620	1,190
53b	18" Corrugated Metal Culvert Pipe	Lin. ft.	590	607	1,197
53c	24" Corrugated Metal Culvert Pipe	Lin. ft.	463	633	1,096
53d	30" Corrugated Metal Culvert Pipe	Lin. ft.	159		159
53g	48" Corrugated Metal Culvert Pipe	Lin. ft.	120		120
53e	36" Corrugated Metal Culvert Pipe	Lin. ft.		76	76
53i	60" Corrugated Metal Culvert Pipe	Lin. ft.		234	234
74	Wire Cable Guard Fence	Lin. ft.	1416	3056	4472
92	Timber Guard Posts	Each	233	246	479
119a	Blade Grader Operation	Hr.	70		70
119b	Furnishing Blade Grader	Each	1		1
STATE FORCES					
81a	Project Markers	Each	1		1
SECOND CONTRACT (Seal Coat)					
17b	Rolling With Flat Wheeled Roller	Hr.	20	30	50
17e	Furnishing Flat Wheeled Roller	Each	0.5	0.5	1
30y	Asphaltic Road Material RC	Gal.	16,600	17,300	33,900
31y	Stone Screenings (Type I) (Distribute)	Ton	340	590	1,130

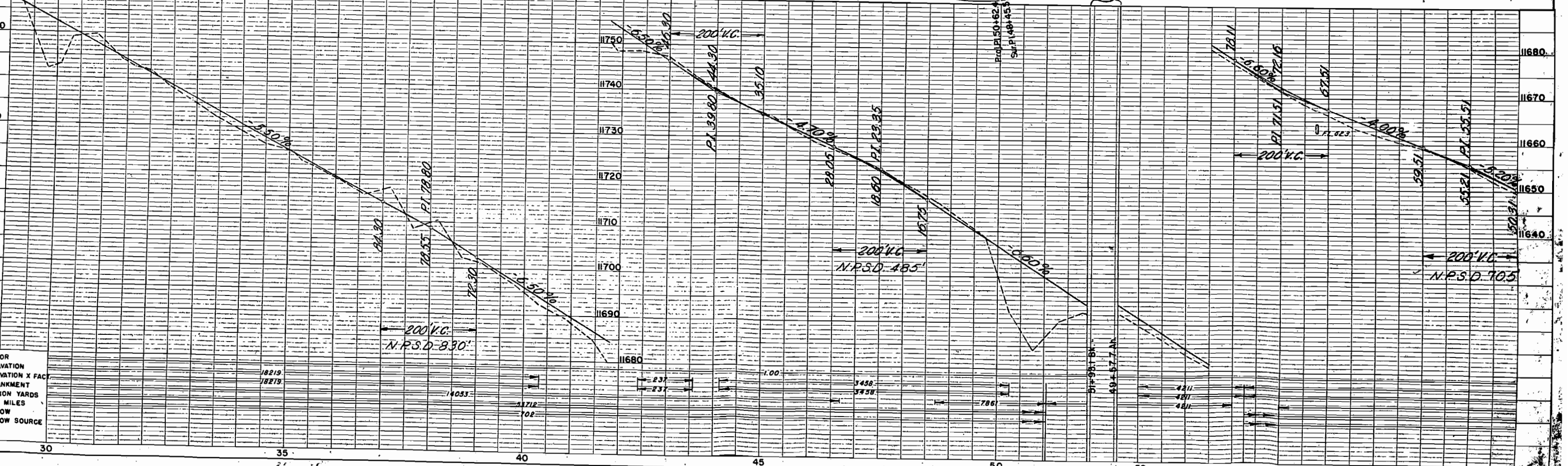
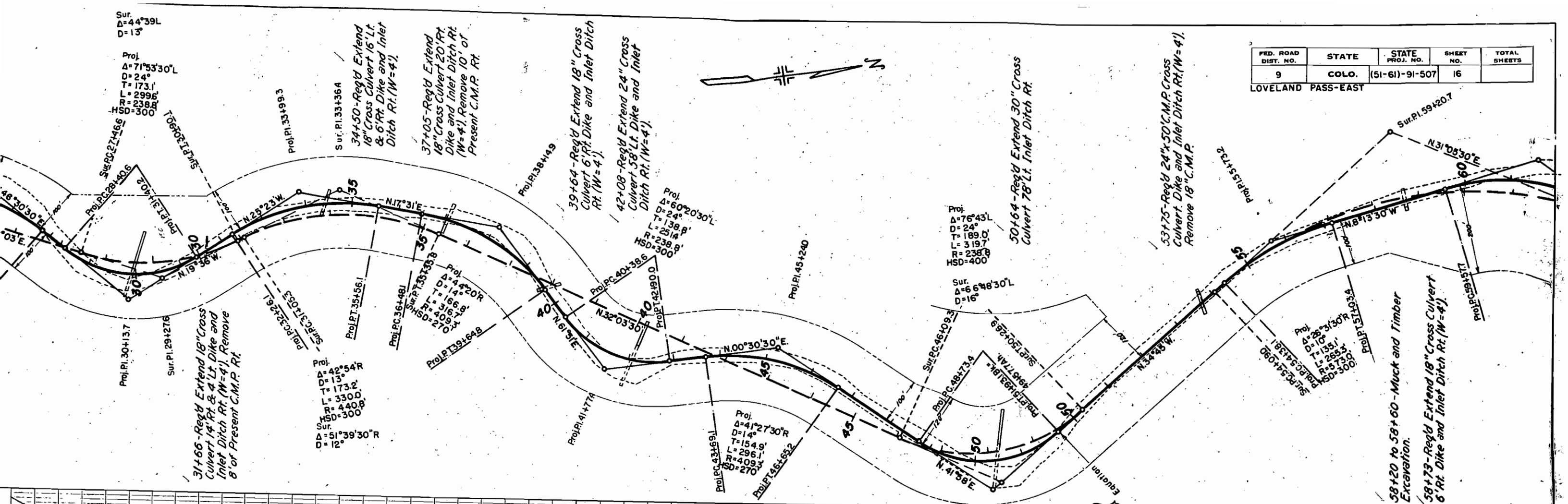
Alignment and grades as shown are subject to modification during construction, after approval by the Denver Office.
 All curves on this Project over 6 degrees shall be provided with the superelevation shown on the Standard Superelevation sheet for a 6 degree curve.
 Typical section for Ditch Changes is shown on Sheet No. 3.
 Guard Posts and Wire Cable Guard Fence requirements are tabulated on Sheet No. 3.
 Surveyed Line
 Projected Line

FED. ROAD DIST. NO.	STATE	STATE PROJ. NO.	SHEET NO.	TOTAL SHEETS
9	COLO.	(51-61)-91-507	15	



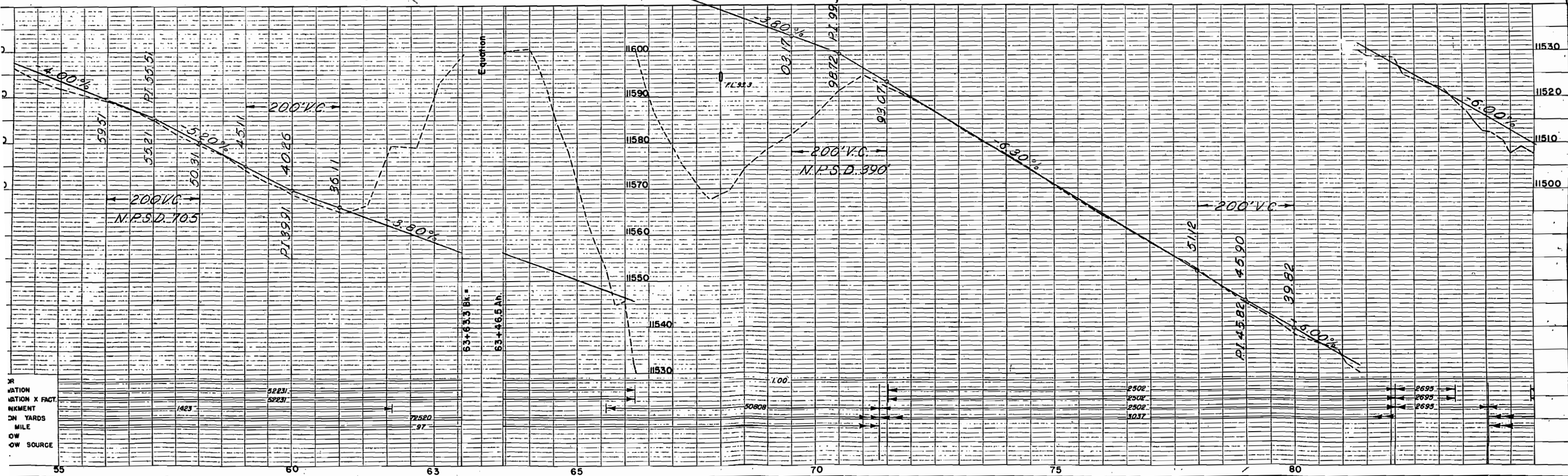
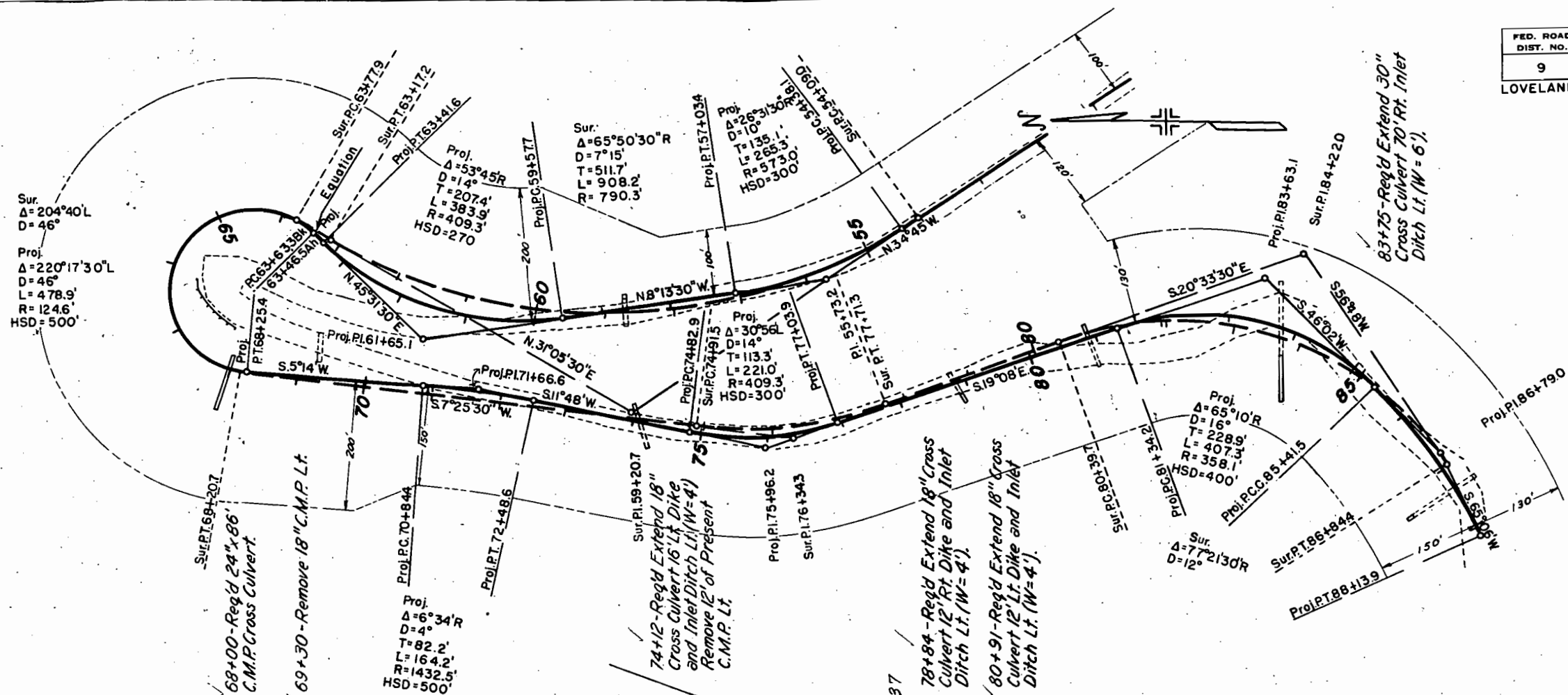
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LOVELAND PASS-EAST



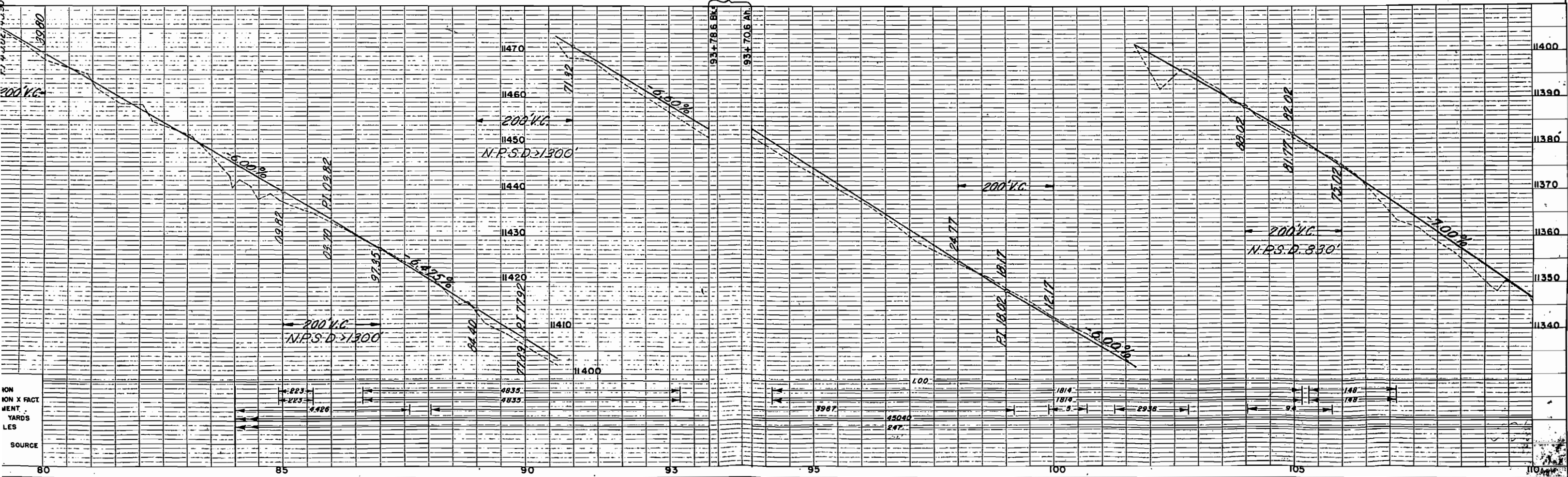
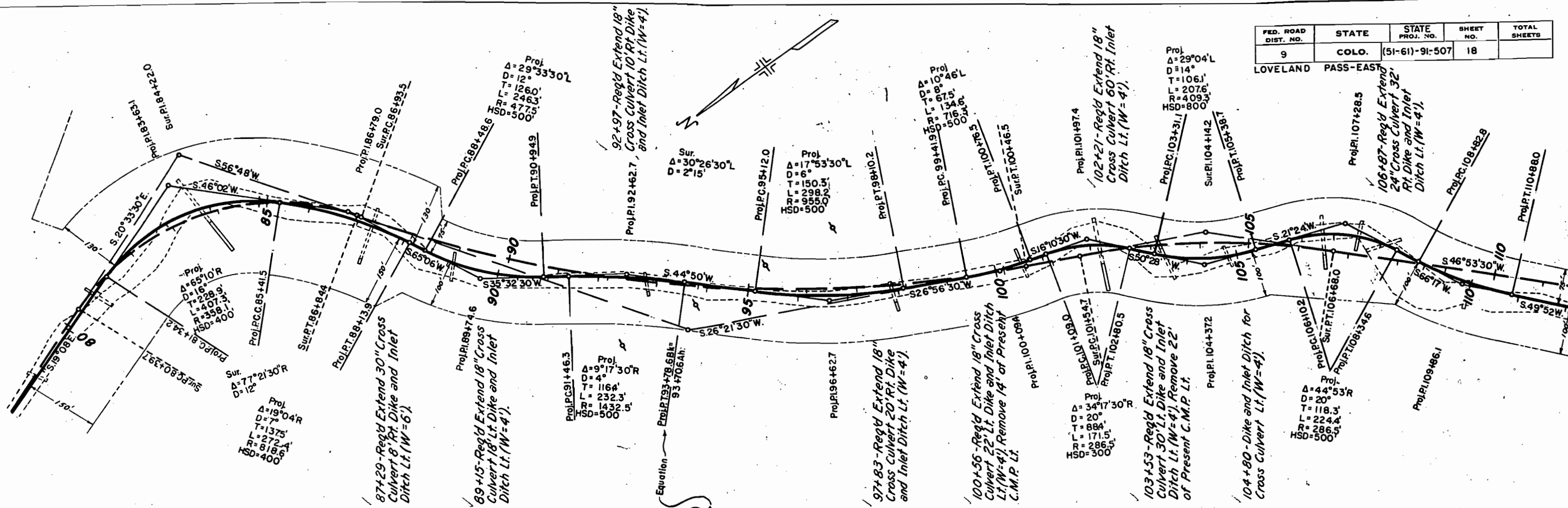
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LOVELAND PASS-EAST



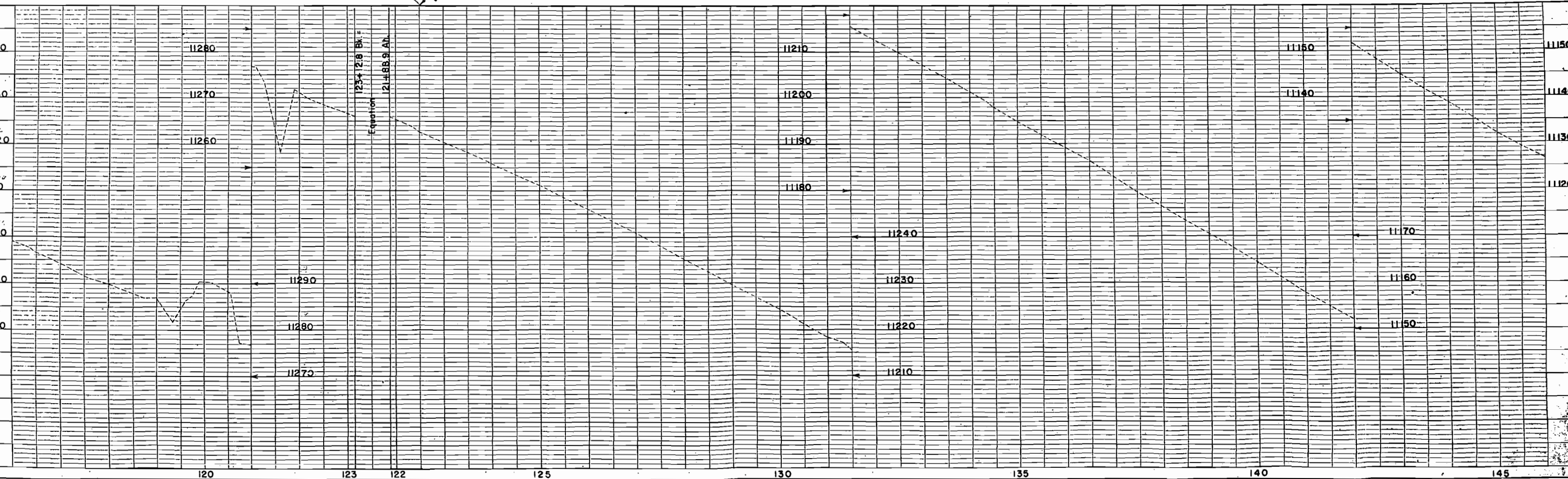
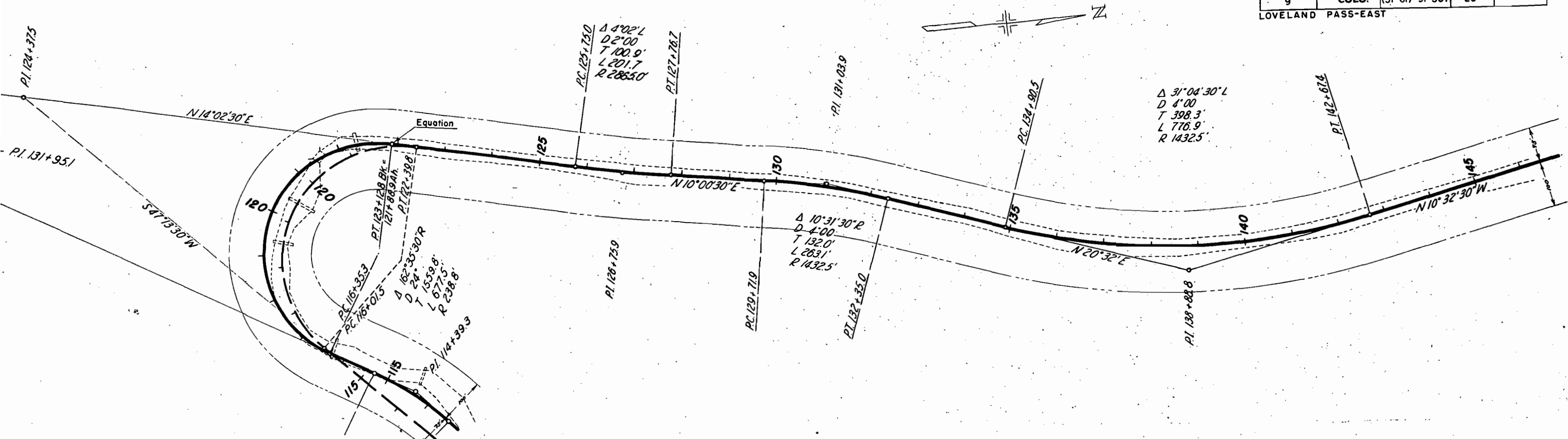
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LOVELAND PASS-EAST



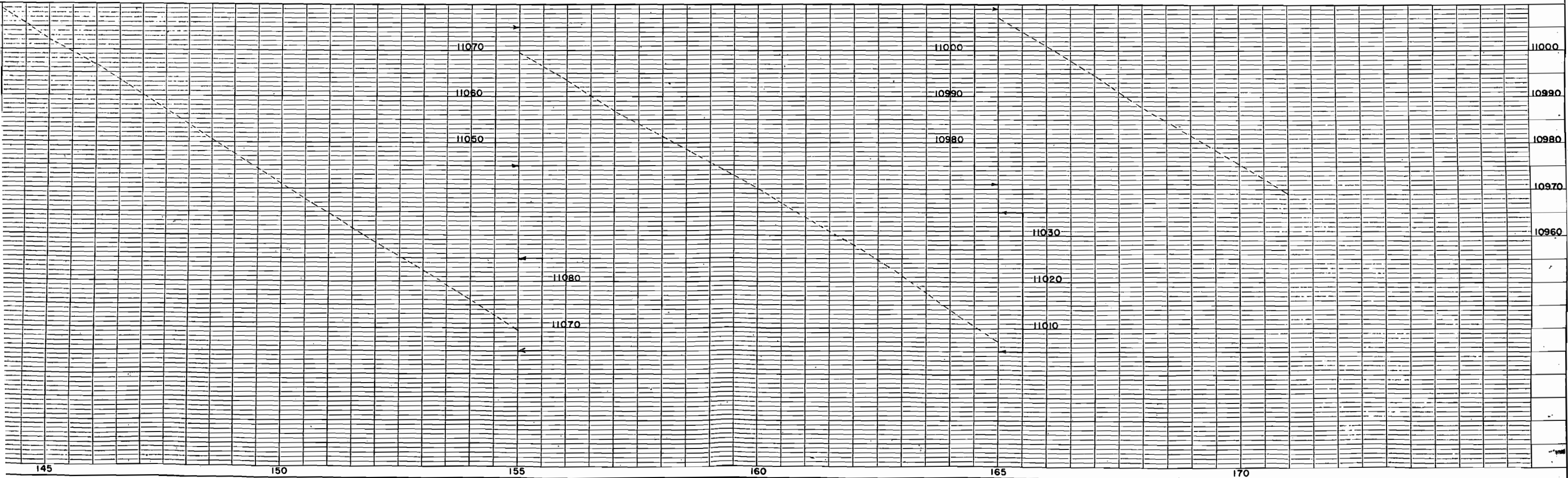
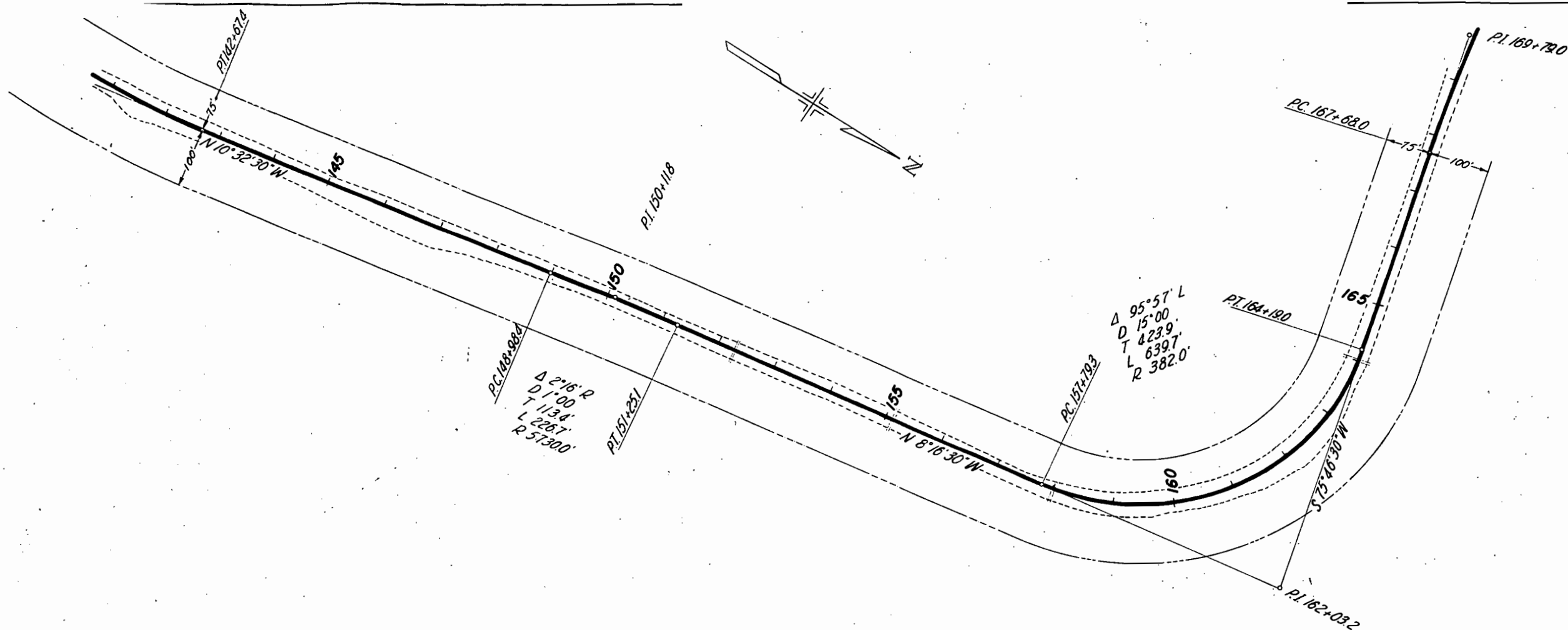
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LOVELAND PASS-EAST



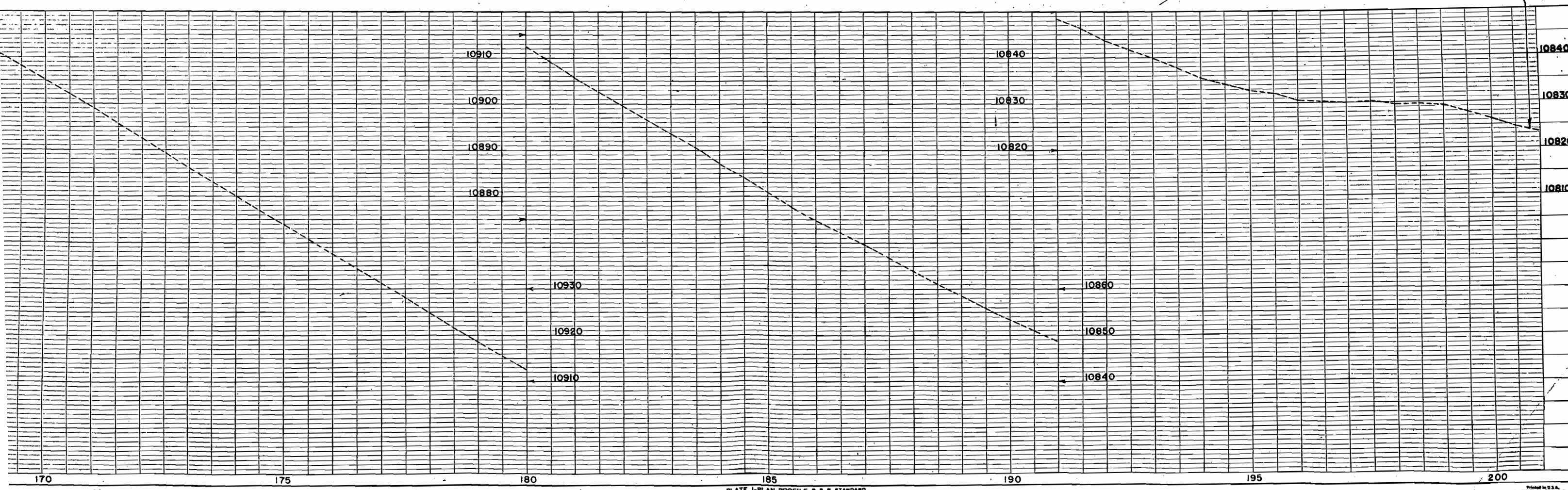
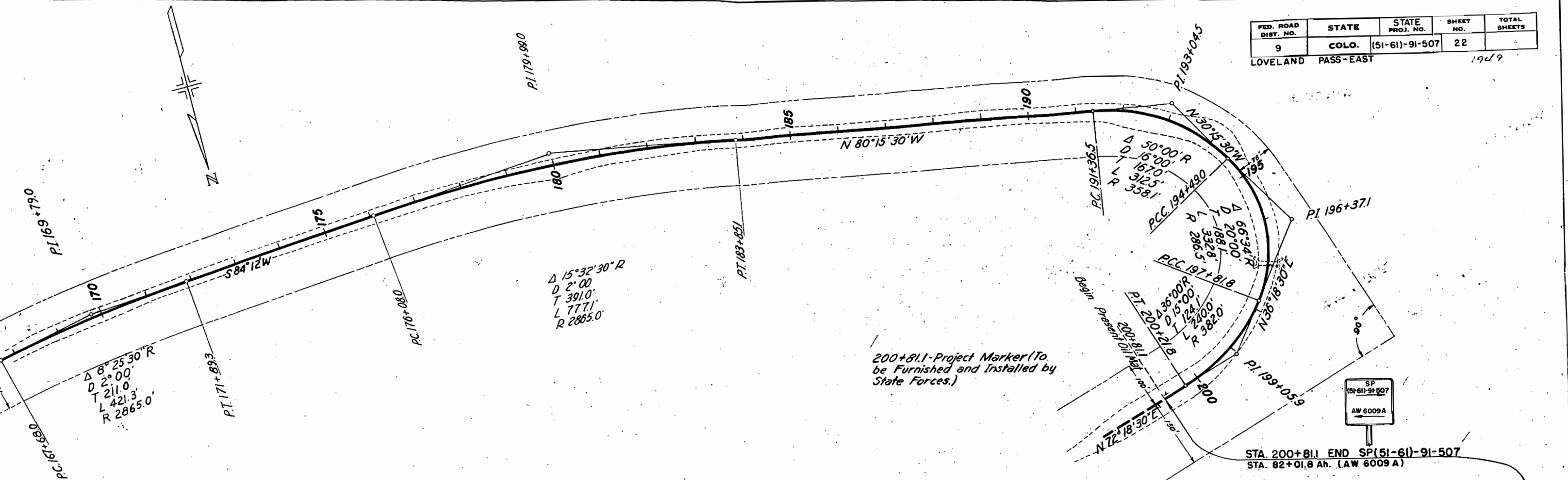
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LOVELAND PASS-EAST



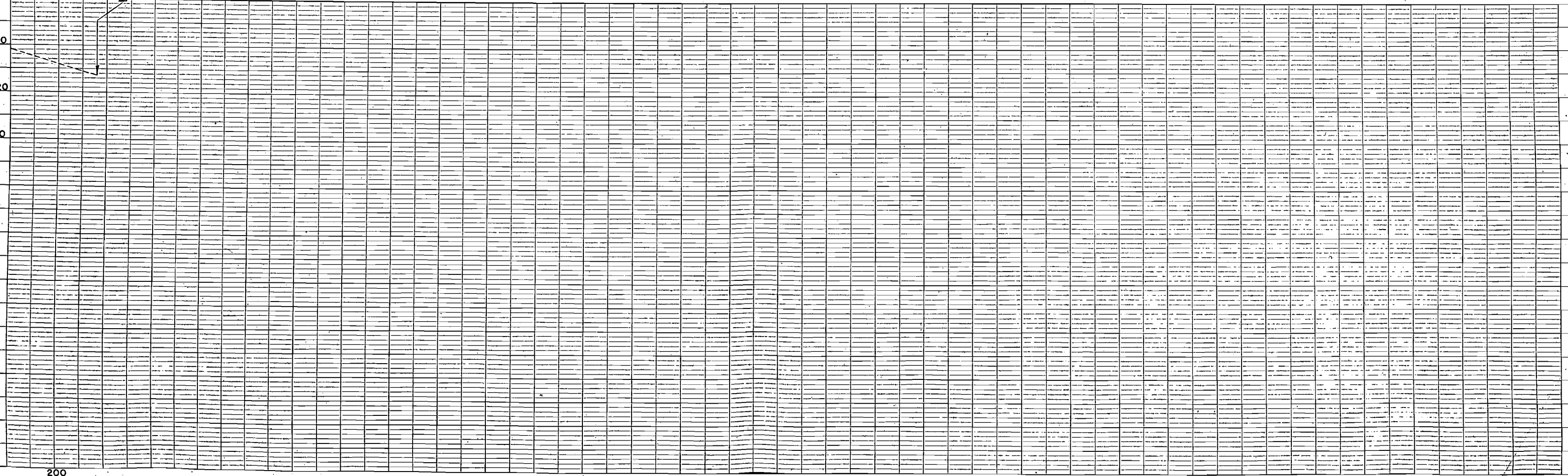
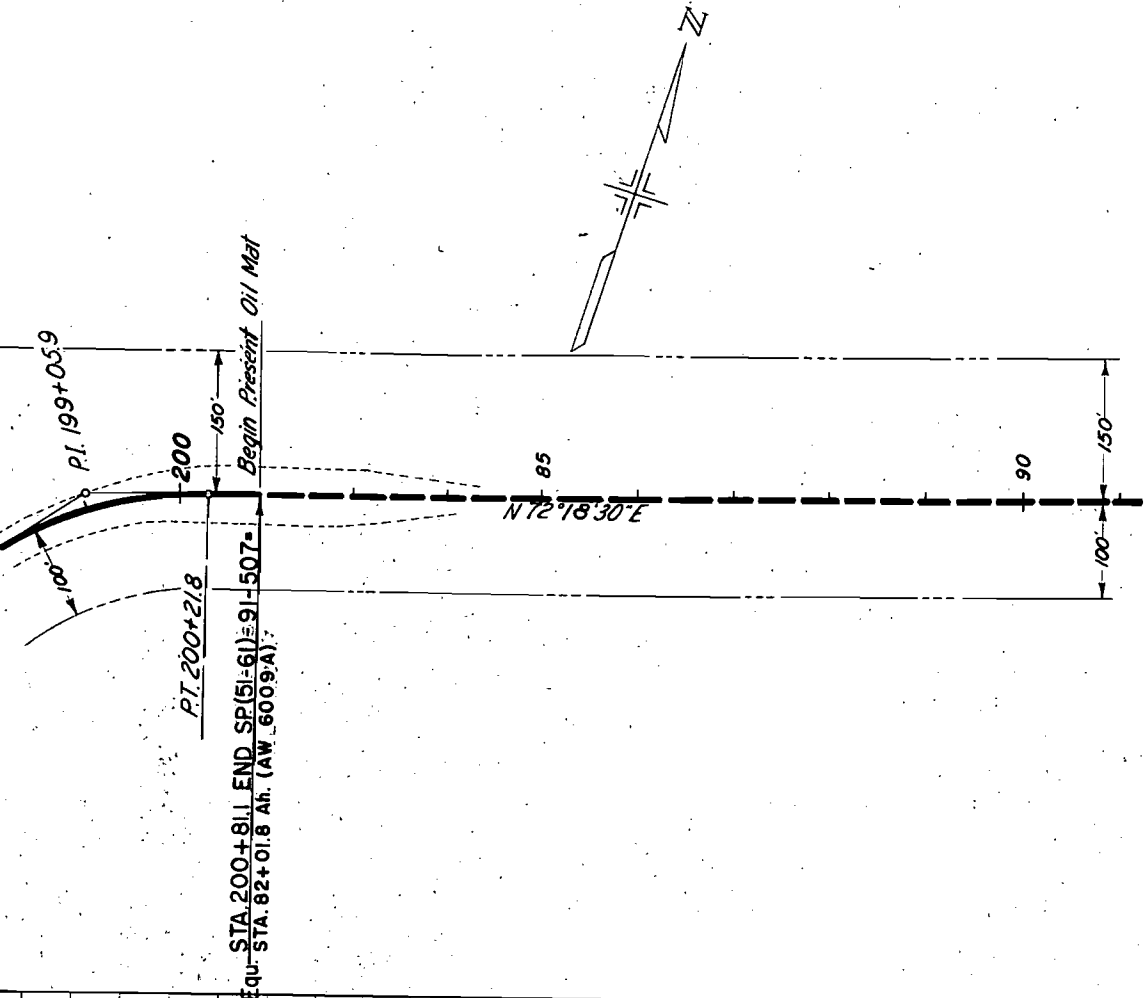
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LOVELAND PASS-EAST 1949

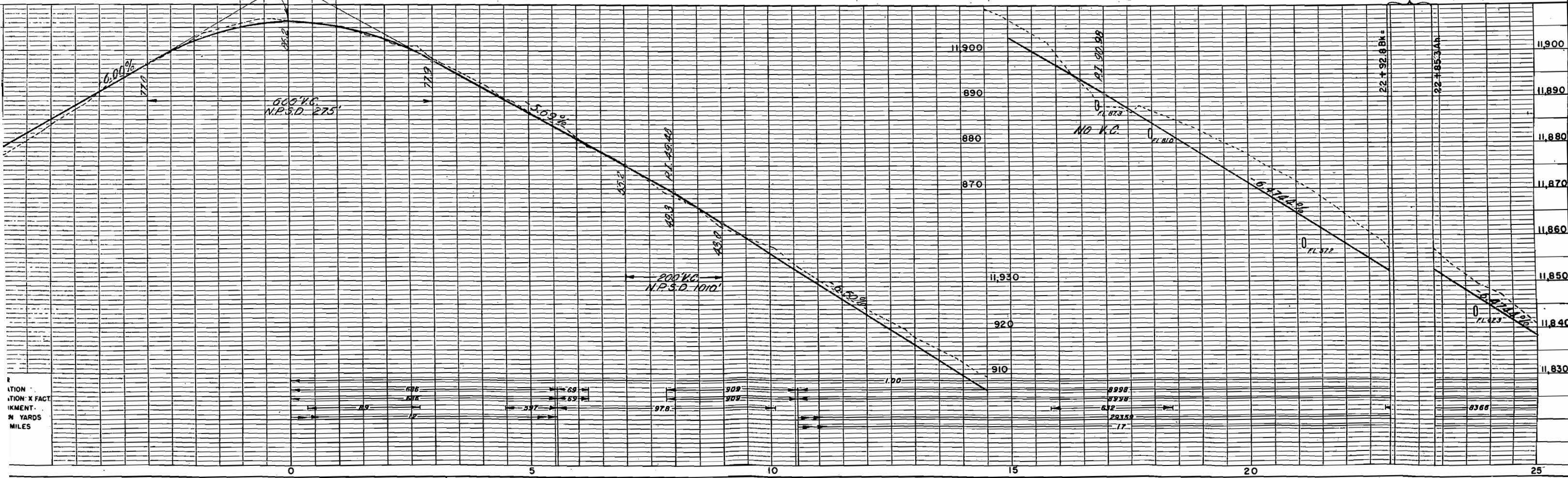
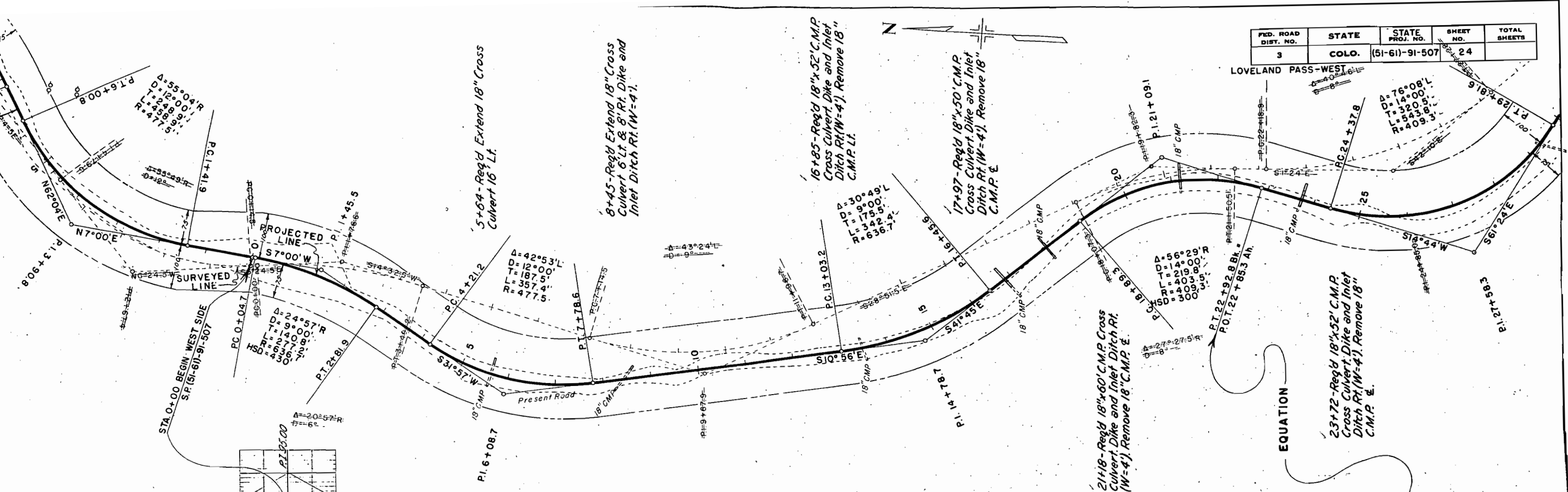


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LOVELAND PASS-EAST

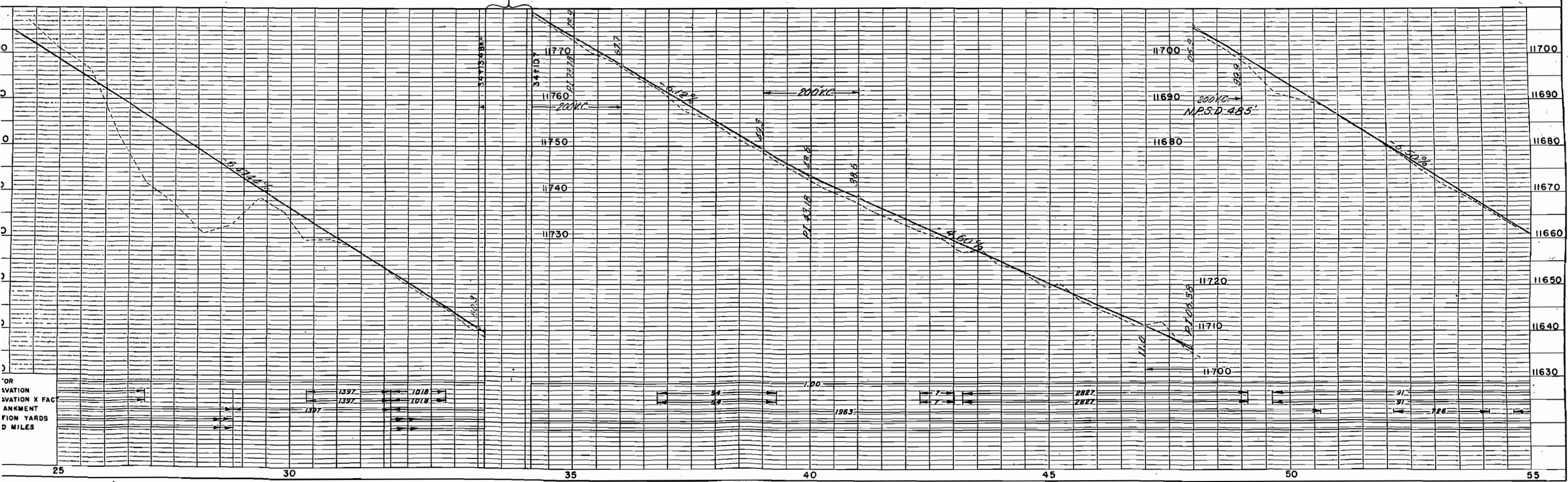
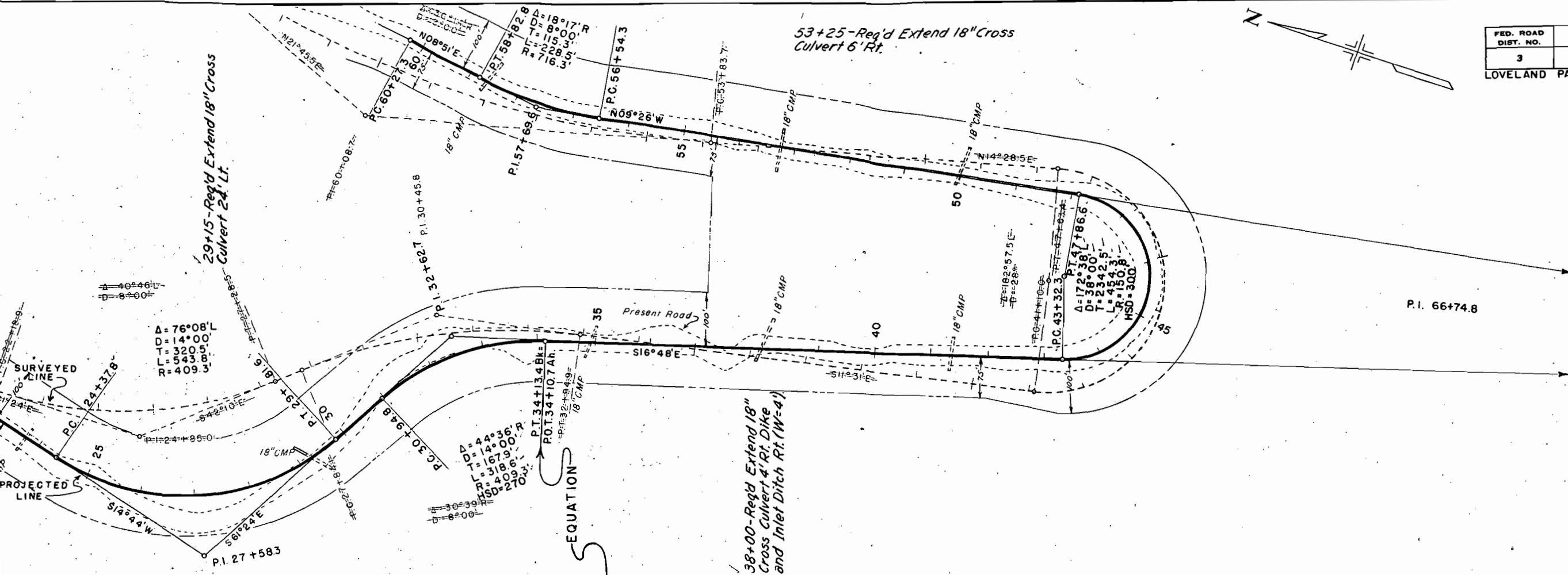


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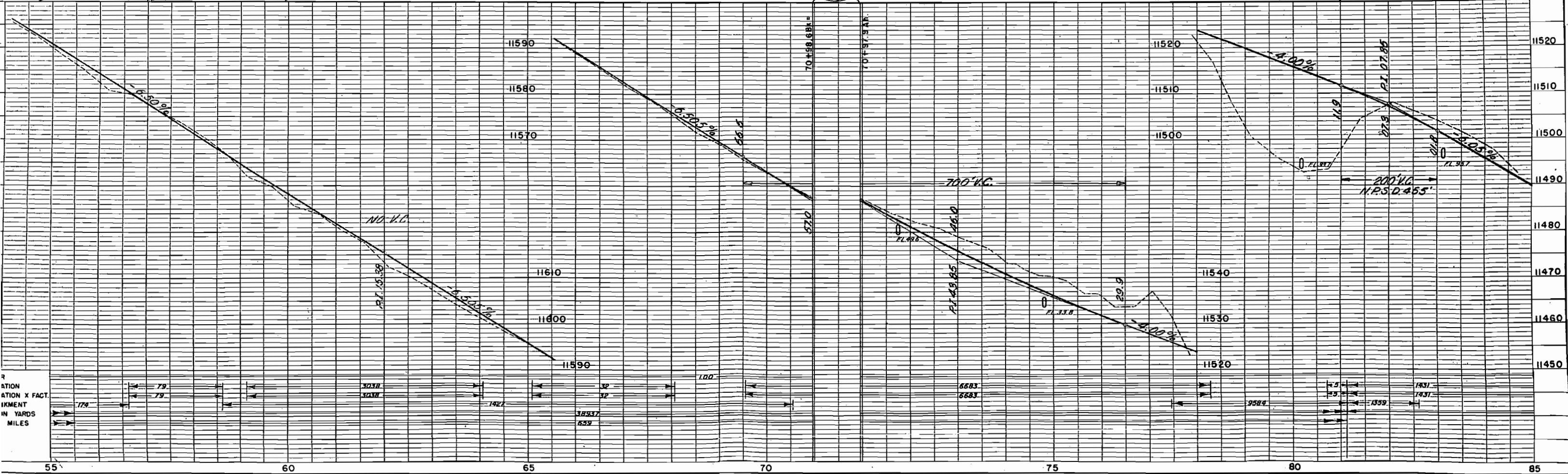
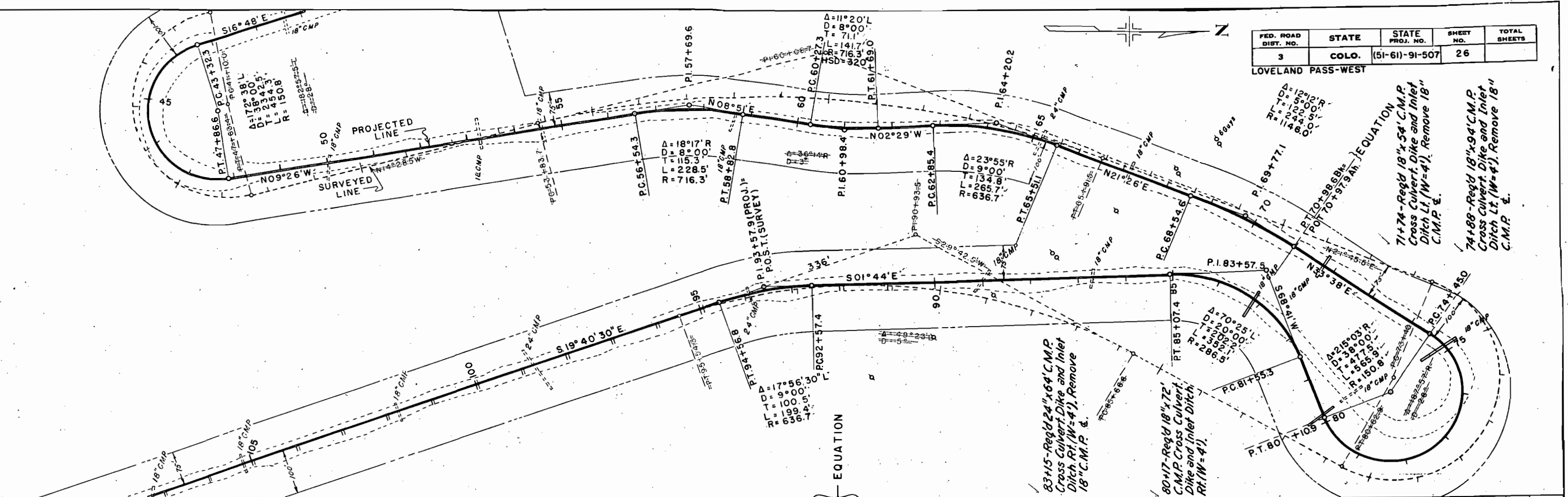
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LOVELAND PASS-WEST



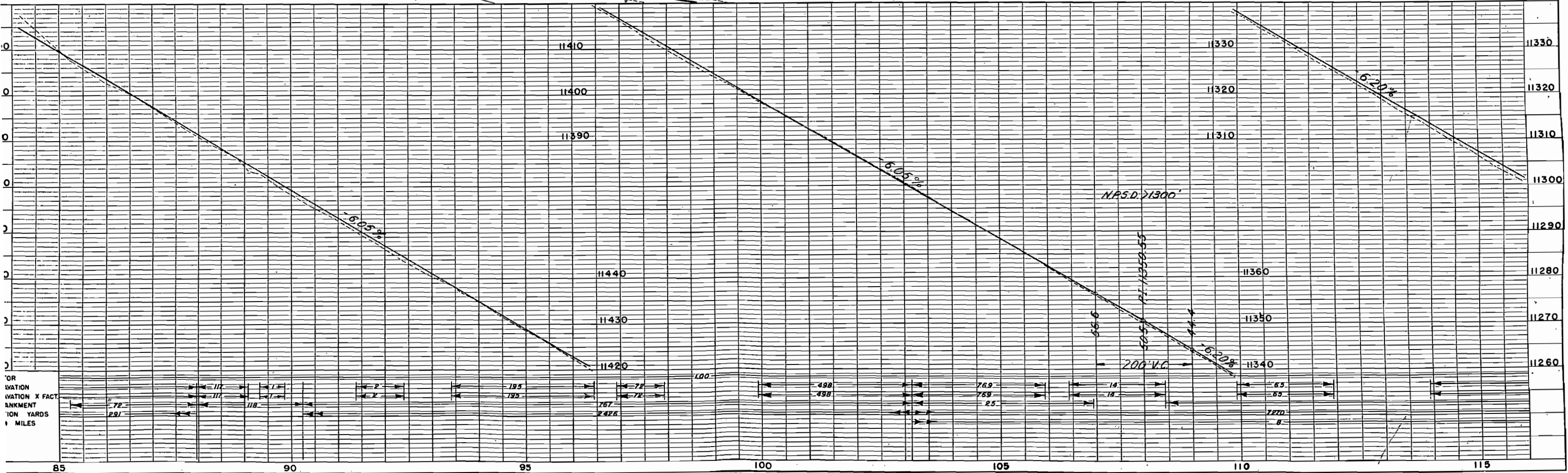
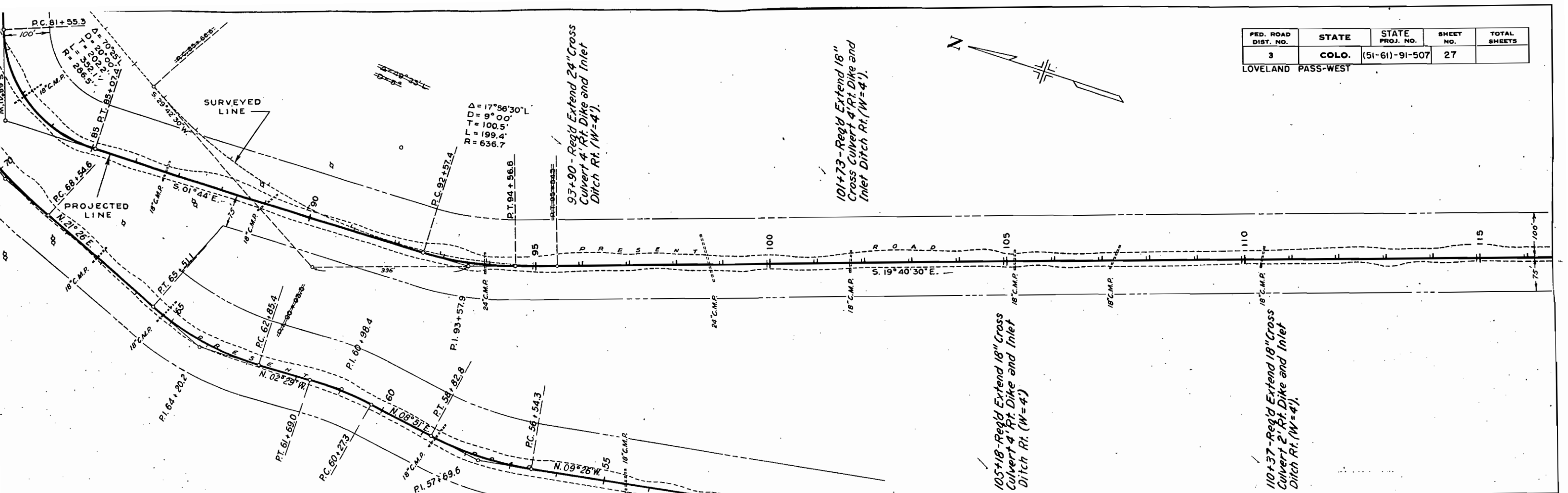
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3	COLO.	(51-61)-91-507	26	

LOVELAND PASS-WEST



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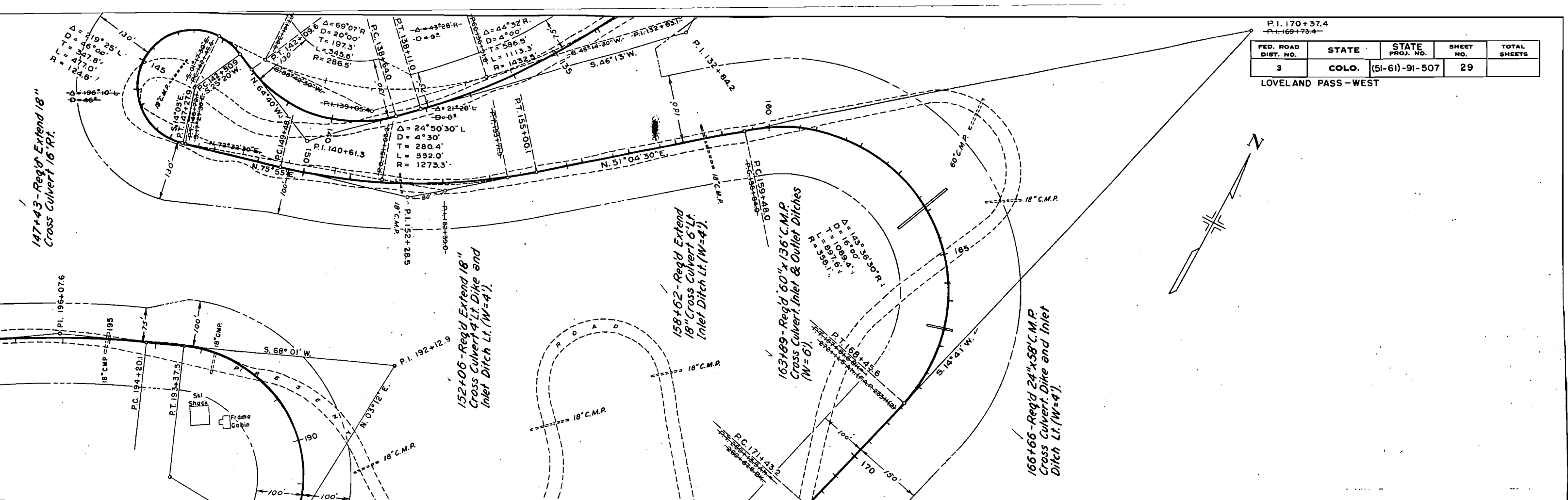
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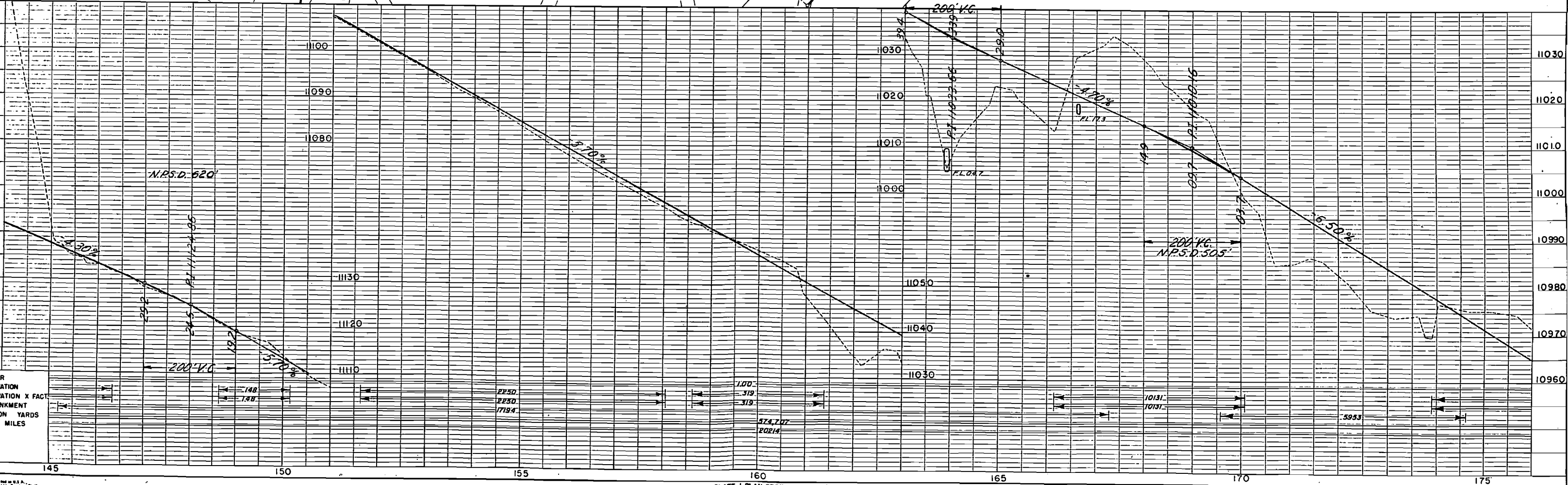
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LOVELAND PASS-WEST





FED. ROAD DIST. NO.		STATE	STATE PROJ. NO.	SHEET NO.	TOTAL SHEETS
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LOVELAND PASS - WEST					



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