

FED. ROAD DIST. NO.	STATE	U.S.W.P.-H. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	W.P.S.S. 423	1	

COLORADO

STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED U.S.WORKS PROGRAM HIGHWAY PROJECT NO. W.P.S.S.-423 STATE HIGHWAY NO. 82 LAKE COUNTY

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3. STANDARD CATTLE GUARD - 16 FT. ROADWAY. M16A
4. " WIRE CABLE GUARD FENCE M20G
5. STANDARD WIRE FENCE (TREATED WOOD POSTS) AND MARKER POSTS. M24F
6. STANDARD METHODS FOR SUPERELEVATION AND WIDENING OF CURVES. M1A
7. TYPICAL SIDE APPROACH ROADS / ROADWAY CONSTRUCTION TRAFFIC SIGNS. M2B
8. & 9. ALIGNMENT PLAN AND PROFILE.
- 10 TO 13. CROSS SECTIONS.

CONVENTIONAL SIGNS

- CENTER LINE OF SURVEY 650
- RIGHT OF WAY LINES
- TOWNSHIP OR RANGE LINES
- SECTION LINES
- ONE-QUARTER SECTION LINES
- RAILROAD TRACKS
- BARBED WIRE FENCE
- POLE LINES

SCALES OF ORIGINAL TRACINGS

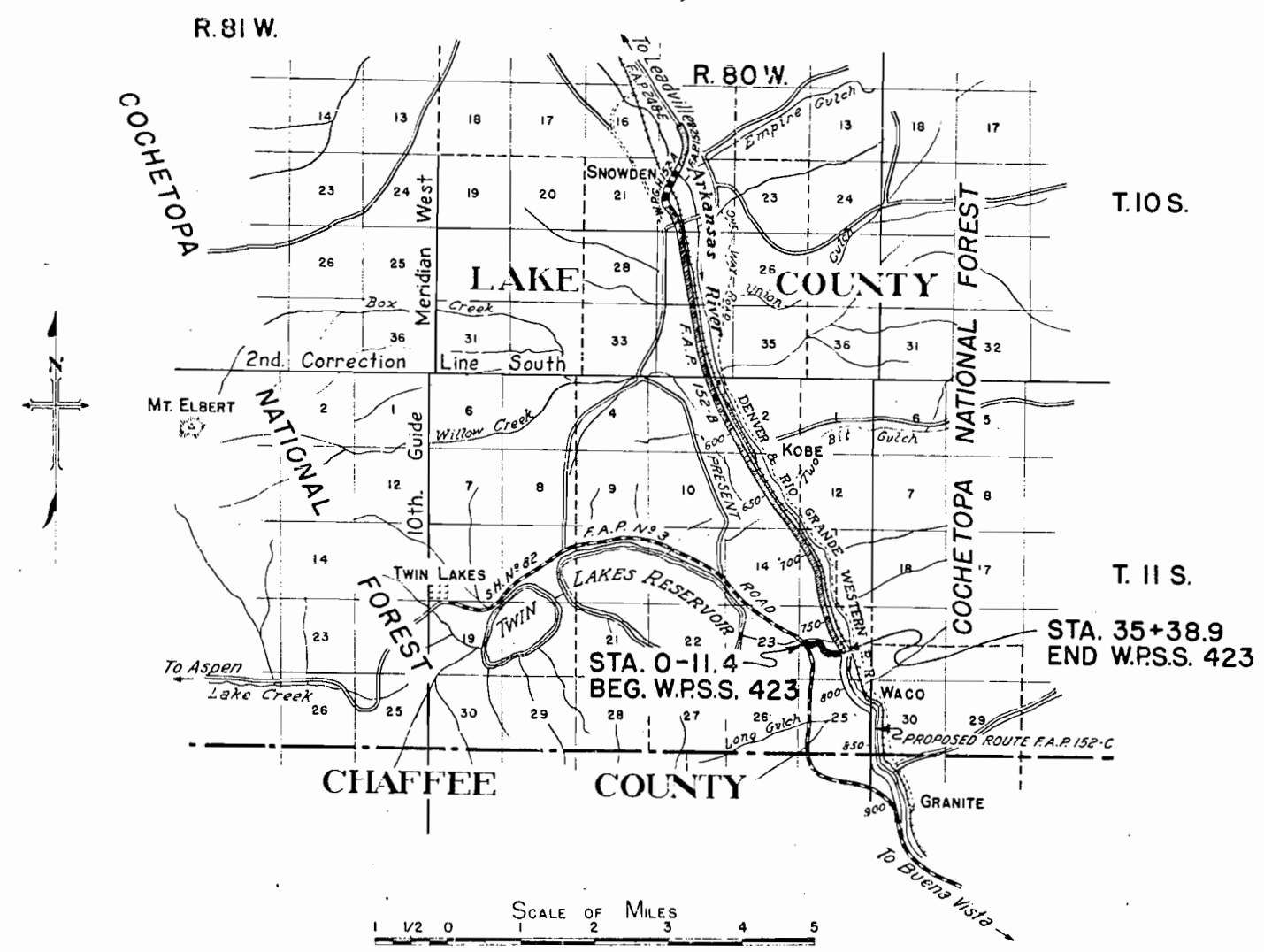
ON PLAN, 1 IN. = 100 FT.

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 } 3,341.7 FEET = 0.632 MILES

NET LENGTH OF PROJECT }



NOTE

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

Ernest Montgomery Div. Engr. Colorado Springs
E.W. Oviatt Res. Engr. Buena Vista

RECOMMENDED FOR APPROVAL 3/31/36

Chas. D. Hall
ASSISTANT ENGINEER

APPROVED
Chas. D. Hall
STATE HIGHWAY ENGINEER

RECOMMENDED FOR APPROVAL

DIST. ENG. BUREAU PUBLIC ROADS
RECOMMENDED FOR APPROVAL

CHIEF ENG. BUREAU PUBLIC ROADS
APPROVED

DIRECTOR BUREAU PUBLIC ROADS

TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY OF QUANTITIES

GENERAL NOTES

This Project is to be constructed in conformity with the Standard Specifications of the Colorado State Highway Department, adopted August 1, 1935.

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

All roadway excavation required to construct the 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 Tabulation of Structures as "Embankment," are to be classified and paid for 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 Embankment requirements actually met in construction.

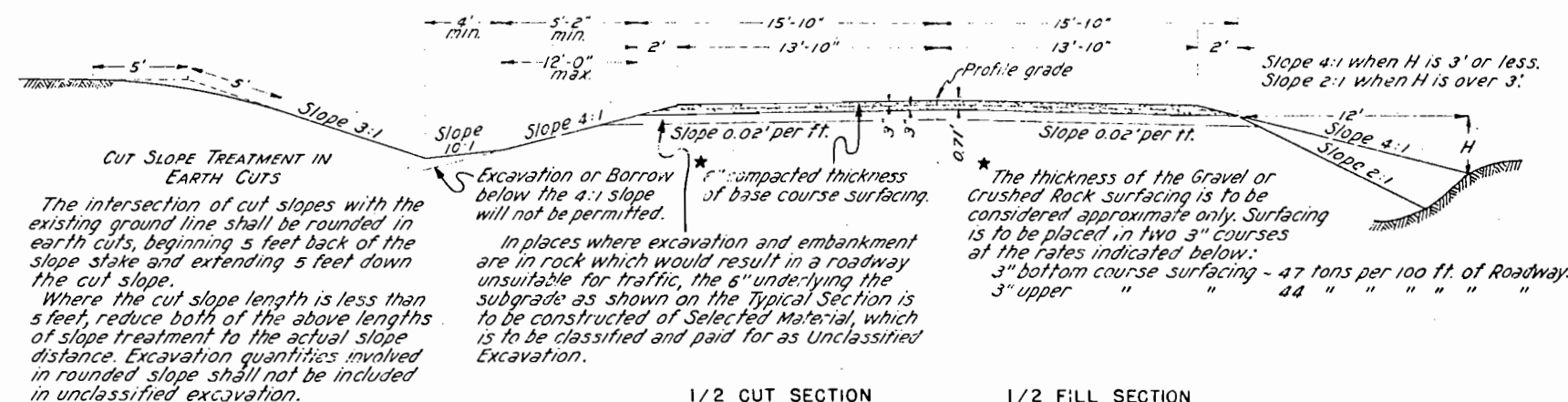
All curves are to be superelevated and widened as provided by the Standard Superelevation Sheet.

At all places on the Project where the new work lies along the present travelled road, the Contractor shall at his own expense, prosecute construction in such a manner that traffic may readily pass over the road. Also, the Contractor shall maintain in safe condition and at his own expense, all temporary approaches.

Except as noted on the plans, overhaul will be paid for as measured along center line of Project.

Clearing and Grubbing shall be of variable widths and be held to the minimum required for the construction of the road and channel changes and to accommodate visibility. Ordinarily the clearing shall not extend more than 8 feet beyond the toes of fills or the tops of cut banks.

TYPICAL SECTION



TABULATION OF STRUCTURES

STATION	DESCRIPTION	EXCAVATION		STRUCTURAL EXCAV.				DRY RUBBLE	CORR. METAL CULV. PIPE			MISCELLANEOUS	
		CU. YDS.		CU. YDS.				SLOPE PAVING (1 FT. THICK)	LIN. FT.				
		EXCAV.		COMMON	DRY	WET	SQ. YD.		18"	24"	36"		
0+00	Project Marker												1-Proj. Marker
0+89	Extend C.M.P. Cross Culv. 16' Lt. & 24' Rt.			6.0				7.33			{ 16		1-Cattle Guard
6+00	Road Approach & Cattle Guard (16' Rdway) Rt.	181.3									{ 24		
11+50	C.M.P. Cross Culvert			13.0				2.67	50				
14+60	" " " & Channel Change	2201.9		61.4				5.55			60		
16+05	" " "			7.0	18.8			6.67			60		
17+50	" " "							1.1		88			
21+88	" " "			12.2					78				
24+00	" " "			1.3				3.55	74				
30+23	" " " & Ditch Change	302.4		18.0				2.33	70				
30+70	Road approach Rt.	223.0											
	WIRE CABLE GUARD FENCE:												
0-09- 1+35	194 lin. ft. on Left												
0-09- 0+39	98 " " " Right												
15+36-24+56	920 " " " Left												
16+32-18+00	168 " " " Right												
19+40-27+16.6	568 " " " "												
	TOTAL 1948 lin. ft.												
	FENCING REQUIREMENTS:												
0-11-33+987	3192 lin. ft. B.W. fence (Tr. Wood Posts) Lt.												
0-11-36+703	3308 lin. ft. B.W. Fence (Tr. Wood Posts) Rt.												
1+00	1- Barbed Wire Gate Rt.												
30+70	1- Driveway Gate Rt.												
30+55	1- Walk Gate Rt.												
6+00	1- Barbed wire Gate Rt.												
	Force Account:												
	Remove 3 Buildings, Sta. 30+												
	Move Sawmill off ROW Rt. Sta. 30+												
	TOTALS	2908.6		1200	18.8			31.65	272	88	160		

SUMMARY OF CONSTRUCTION QUANTITIES

No.	ITEM	UNIT	PROJECT TOTALS
10a	Clearing and Grubbing Entire Project	Lump Sum	
13c	Unclassified Excavation	Cu. Yd.	20,521.8
13d	Cut Slope Treatment	Mile	0.5
14b	Dry Common Excavation (Structural)	Cu. Yd.	120.0
14d	Wet Common " "	" "	18.8
18a	Station Yard Overhaul	Sta. Yd.	82,758.5
18b	Yard Mile Overhaul	Yd. Mile	295.7
26a	Gravel or Crushed Rock Surfacing	Ton	3,054.1
33b	18" Corrugated Metal Culvert Pipe	Lin. Ft.	272.0
53c	24" " " " " "	" "	88
53e	36" " " " " "	" "	160
65	Dry Rubble Slope Paving, 1 ft. thick	Sq. Yd.	31.65
74	Wire Cable Guard Fence	Lin. Ft.	1,948.0
76a	Barbed Wire Fence With Treated Wood Posts	" "	6,500.0
76g	" " Gate	Each	2
76h	Driveway " "	" "	1
76i	Walk Gate	" "	1
81a	Project Marker	" "	1
82	Cattle Guard - 16 foot Roadway	" "	1
	FORCE ACCOUNT: Remove Sawmill from ROW Sta 30+ Rt. Removing 3 Buildings, Sta. 30+	Lump Sum	\$2500
		" "	\$71.50



Excavation Area Cu. Yds. Area Embankment Cu. Yds. Area Excavation Area Cu. Yds. Area Embankment Cu. Yds.

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9	COLORADO	W.P. 53-423	241	

OVER-RUNS - UNDER-RUNS

Nº	ITEM	UNIT	ORIGINAL ESTIMATE	FINAL TOTALS	OVER-RUN	UNDER-RUN	EXPLANATION
10a	Clearing & Grubbing project	L.S.		2521.2	3621.8		
13c	Unclassified Excavation	Cu. Yds.	23500	24563.6	2063.6		Caused by increase in amount of select Material used and increased amount of Material moved for ditch change Sta 18+60.
13d	Cut Slope Treatment	Mils.	0.5	0.5			
14a	Dry Rock Exc. (Structural)	Cu. Yds.	000	00	00		None encountered on project.
14b	Dry Com. Exc.	"	1700	1200	50		Final Estimate represents actual amount encountered.
14c	Wet Rock Exc.	"	200	00	20		None encountered on project.
14d	Wet Com. Exc.	"	800	100	362		Final Estimate represents actual amount encountered.
18a	Station Yard Overhaul	Sta. Yd.	50000	51722.5	2572.5		Due to location of select material pit and increased amount of material used. No pit designated original plans.
18b	Yard Mile Overhaul	Yd. Mi.	100.0	896.5	196.5		Same as for item 18a.
22a	Gravel or Crushed Rock Surface	Cons.	3030	3034.1	4.1		Surfacing placed on approach to old road, Sta. 3+00.
53a	18" Cor. Man. Cul. Pipe	Lin. Ft.	342	272	70		Omitted 70' at side drain Sta. 11+00. Later used on F.A.P. 152-B.
53c	24" " " "	Lin. Ft.	80	80			
53d	36" " " "	Lin. Ft.	160	160			
63	Dry Rubble Slope Facing	Sq. Yd.	30	31.65	1.65		Final Quantity based on actual measurements as constructed.
74	Wire Cable Guard Fence	Lin. Ft.	1948	1948			
76a	Bark Wire Fence, Tr. and posts	Lin. Ft.	6600	6500	100		6500 Lin. Ft. of fence completely fenced project.
76b	" " Gates	each	1	2	1		Gate Right station 1+00 was necessary for settlers on South side of Lake Creek.
76c	Driveway Gate	each	1	1			
76d	Hulk Gate	each	1	1			
81a	Project Marker	each	1	1			
82	16 Ft. Cattle Guard	each	1	1			
92	Force Account - Obliterating old Road	L.S.					Road Appr. Rt. Sta 11+00 moved to Sta 3+00, eliminating this item. This item in W.O. 226 is void.
	Remove 3 bridges, Sta 30+	L.S.					Done by W.O. 226 at cost of \$750.
	Remove Sawmill Sta 30+	L.S.					Done by W.O. 226 at cost of \$350.

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NOTE
Requirements for line fences and wire cable guard fence are shown on sheet No. 2.

Sta. 0+00
36' x 48' CMP cross culvert in place
Extend 16' left and 24' right.
~~Req'd. 10 cu yds. incl. excav. for ditches.~~
7.33 sq. yds. slope paving

N.W. 1/4 SEC. 24
T. 11 S., R. 80 W.

FINAL CONSTRUCTION SHEET

B.M. Elev. 9156.94
Extreme southern
point Southeast wing
Lake Creek Bridge

Sta. 0+00
Req'd. project marker.

Δ 63°20' L.
Δ 08°
T 441.2'
L 791.2'
R 716.3'

KX Placer Ditch
N 78°44'E

Sta. 11+50
Req'd. 18' x 50' CMP cross culvert,
and 26 cu yds. incl. excav. for
inlet and outlet. 2.67 sq. yds. slope paving.

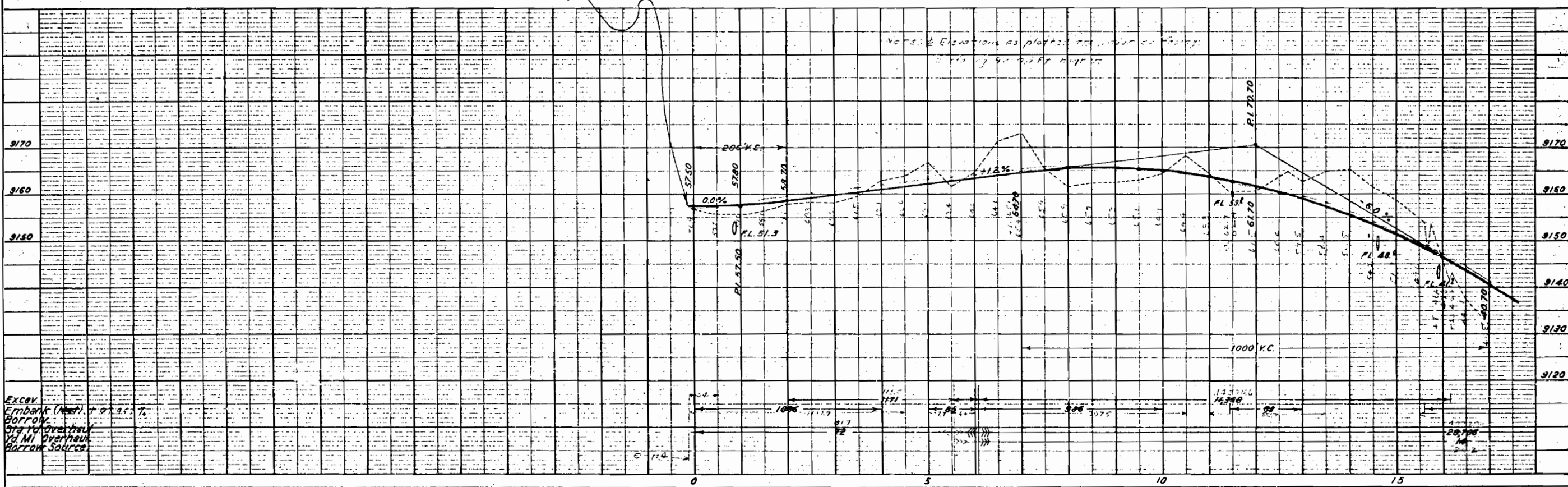
STA. 0-11.4
BEGINNING OF PROJECT
W.P.S.S. 423

Sta. 11+00
Req'd. 18' x 70' CMP side drain, 600 cu yds.
incl. excav. for road approach, and
16' cattle guard.

ST. 6116-15 C. 11111
Sta. 11+00
Right Approach

S.W. 1/4 SEC. 24

Notes: Elevation as plotted on plan
Stationing 0+00 to 11+40



Excav.
Embank (Met) + 0.11 7.
Borrow
Sta. 10+00 Overhaul
Vol. 11 Overhaul
Borrow Source

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Revised as Constructed 2-1-37 E.H.J.

NOTE

Requirements for line fences and wire cable guard fence are shown on sheet No. 2.

Sta. 0+89
36"x48" CMP cross culvert in place
Extend 16' left and 24' right. Also
7.33 Sq.Yds. Dry Rubble Slope Paving (12" Th)

N.W. 1/4 SEC 24
T. 11 S., R. 80 W.

Sta. 0+00
Project marker.

$\Delta 63^{\circ}20' L.$
 $D 8^{\circ}$
 $T 441.8'$
 $L 791.2'$
 $R 716.3'$

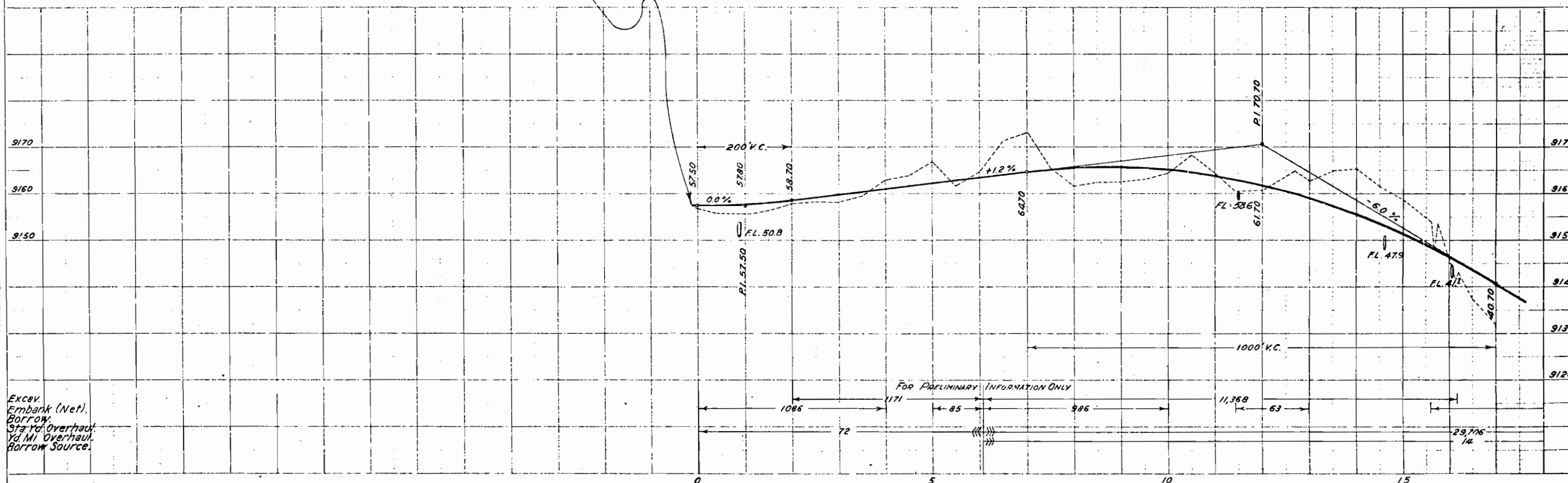
K.K. Placer Ditch.

Sta 11+50
Req'd. 18"x50" C.M.A. cross culvert,
and 267 Sq.Yds. Dry Rubble Slope Paving
(12" Thick)

STA. 0-11.4
BEGINNING OF PROJECT
W.P.S.S. 423

Sta 6+00
Req'd. 16' Cattle Guard RI and
181.3 Cu.Yds. Undl. Excav. for
Road Approach Rt.

S.W. 1/4 SEC. 24



Excav.
Embank (Net).
Borrow.
Sta. 0+00 Overhaul
Yd. Mi. Overhaul
Borrow Source.