

FED. ROAD DIST. NO.	STATE	P.W.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	401-C [#] 2	1	

COLORADO

STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF PROPOSED

P.W.A. DOCKET COLO. 804-D

PROJECT NO. 401-C[#]2

STATE HIGHWAY NO. 66

LARIMER COUNTY

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 18,526.8 FT. = 3.508 MILES

CONVENTIONAL SIGNS

CENTER LINE OF SURVEY 650

RIGHT OF WAY LINES

TOWNSHIP OR RANGE LINES

SECTION LINES

ONE-QUARTER SECTION LINES

BARBED WIRE FENCE

POLE LINES

INDEX OF SHEETS

CONSTRUCTION DIVISION NO. 1

1 SKETCH MAP AND TITLE SHEET

2 TYPICAL CROSS SECTION AND SUMMARY OF QUANTITIES

3 TABULATION OF STRUCTURES

4 TO 5 NOT USED

6 STANDARD HEADWALLS FOR C.M.P. CULVERTS

7 STANDARD TIMBER GUARD POSTS

8 STANDARD SEMI-RIGID METAL PLATE GUARD FENCE

9 STANDARD FLEXIBLE METAL PLATE GUARD FENCE

10 STANDARD WIRE FENCES WITH STEEL POSTS AND MARKER POSTS

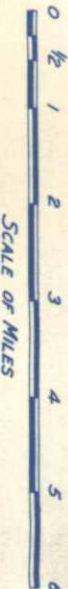
11 NOT USED

12 STANDARD METHODS FOR SUPERELEVATION

13 TYPICAL SIDE APPROACH ROADS/ROADWAY

14 TO 20 PLAN AND PROFILE

21 TO 130 CROSS SECTIONS



STA. 1063 + 89.2 END P.W.A. PROJ. NO. 401 C[#]2

STA. 878+00 BEGIN P.W.A. PROJ. NO. 401 C[#]2 =
END OF P.W.A. PROJ. NO. 401 C

NOTE:

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

Roy J. Randall Div. Engr. Greeley, Colo.
Homer J. Winter Res. Engr. Lyons, Colo.

RECOMMENDED FOR APPROVAL

APPROVED
CHAD DAVIS
ASSISTANT ENGINEER
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

CUT SLOPE TREATMENT IN EARTH CUTS

The intersection of cut slopes with the existing ground shall be rounded in earth cuts, beginning 5 ft. outside the slope stake and extending 5 ft. down the cut slope. Where the cut slope is less than 5 ft., reduce each of the above widths of slope treatment to the actual slope distance. Quantities involved in slope treatment shall not be included in Unclassified Excav.

NOTE: Throughout this project material in cuts suitable for use as selected material in topping fills shall be placed as directed by the Engineer. Actual overhaul will be allowed and paid for hauling this material to meet construction requirements.

GENERAL NOTES

This project is to be constructed in conformity with the Standard Specifications of the Colorado State Highway Department adopted June 1st 1937.

All quantities on preliminary plans are to be considered as 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 Typical Section, 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 are subject to change by the Engineer to fit Embankment requirements actually encountered on construction.

All curves are to be super-elevated as provided for by the Standard Super-elevation Sheet included with plans.

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

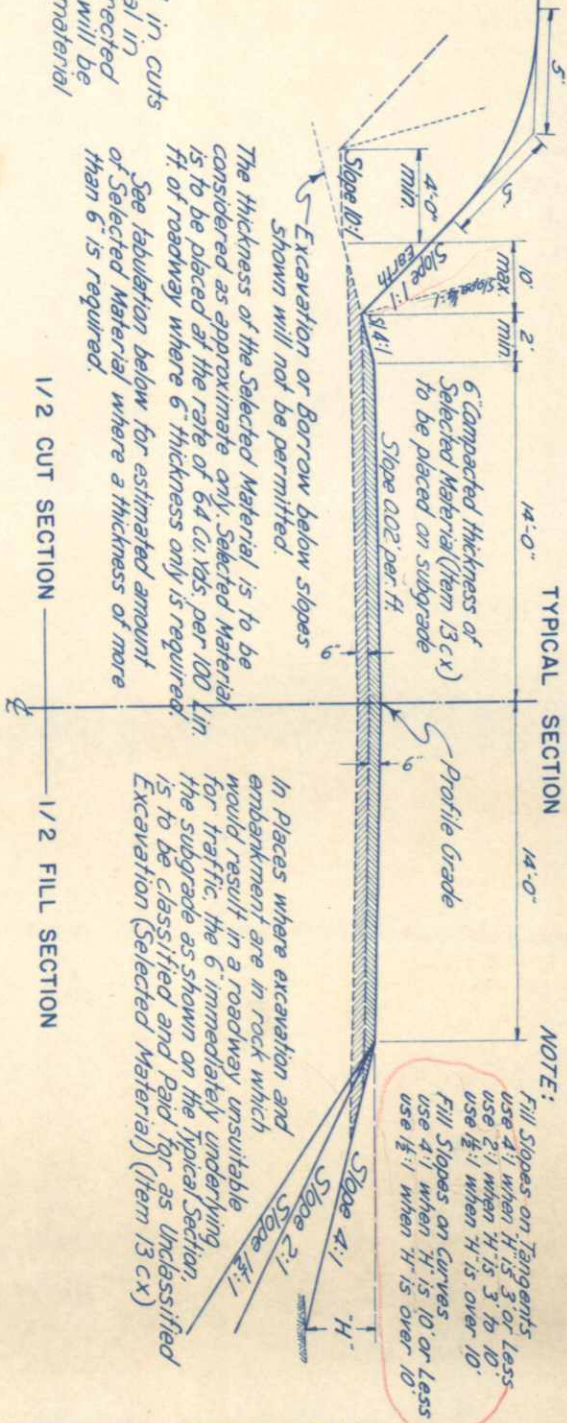
All corrugated metal pipe cross culverts are to be provided with one headwall on the inlet end unless otherwise noted on the plans.

All side approach roads to the project shall be surfaced with a 6 inch thickness of Selected Material extending approximately 30 feet from edge of highway. Estimated quantity of surfacing material required in this operation is shown in List of Structures.

Overhaul will be paid for as measured along center line of project, except as otherwise noted on plans.

During construction of this project traffic will use the present travelled roadway. At all places on project where construction encroaches on present road traffic must be adequately provided for at the Contractor's expense. Also all temporary approaches to and crossings of intersecting roads shall be constructed and maintained at the Contractor's expense.

The right of way shall be cleared between cut slope stakes and a line approximately 10 feet inside fill slope stakes before grading operations commence. After completion of grading work the right of way shall be cleared to 8 feet outside of the cut slopes and to the toe of fills on fill slopes. Trees inside of toes of fill slopes shall be cut off flush with fill slopes after embankments are completed. Any trees interfering with visibility shall be removed as directed by the Engineer. Throughout the entire project shooting shall be done in such a manner as to avoid damaging timber beyond clearing limits.



ITEM NO. 13cx UNCLASSIFIED EXCAVATION SELECTED MATERIAL

The Selected Material shown on Typical Section shall conform to the requirements of Item 13cx "Unclassified Excavation Selected Material" of the Specifications. The approximate quantities involved in placing Selected Material are listed in tabulation below:

STA. TO STA.	CU. YDS. PER STA.	APPROX. QUAN. REQ. CU. YDS.	SOURCE	OVERHAUL STA. YDS. YD. MI.
878+00-893+00	134	2020	D1+400 L.A. Sta. 895+	22,220
893+00-964+00	134	3,330	D1+100 R.A. Sta. 899+	100,320
964+00-1007+00	134	3,360	D1+400 L.A. Sta. 895+	38,960
1007+00-1025+00	134	2,500	D1+200 L.A. Sta. 947+	2,150
1025+00-1063+89	64	2,500	D1+200 L.A. Sta. 947+	2,150
Road Approaches		800		500
				110
TOTAL		23,110		237,000

FENCING REQUIREMENTS

STATION	SIDE	REMOVE FENCE LIN. FT.	BUILD BARR. WIRE FENCE LIN. FT.	BARR. WIRE GATES NO.
878+00-907+00	R & L	3400	5800	2
878+00-893+00	R & L	300		
893+00-964+00	R & L	100		
964+00-1007+00	R & L	6240		
1007+00-1025+00	R & L	6230		
1025+00-1063+89	R & L	6040		
1063+89-1081+00	R & L	210		
1081+00-1097+00	R & L	630		
1097+00-1126+00	R & L	790		
1126+00-1140+00	R & L	140		
1140+00-1170+00	R & L	6200		
1170+00-1248+00	R & L	2480		
1248+00-1337+40	R & L	2360		
1337+40-1063+90	R & L	580		
1063+90-1081+00	R & L	610		
1081+00-1097+00	R & L			
1097+00-1126+00	R & L			
1126+00-1140+00	R & L			
1140+00-1170+00	R & L			
1170+00-1248+00	R & L			
1248+00-1337+40	R & L			
1337+40-1063+90	R & L			
1063+90-1081+00	R & L			
1081+00-1097+00	R & L			
1097+00-1126+00	R & L			
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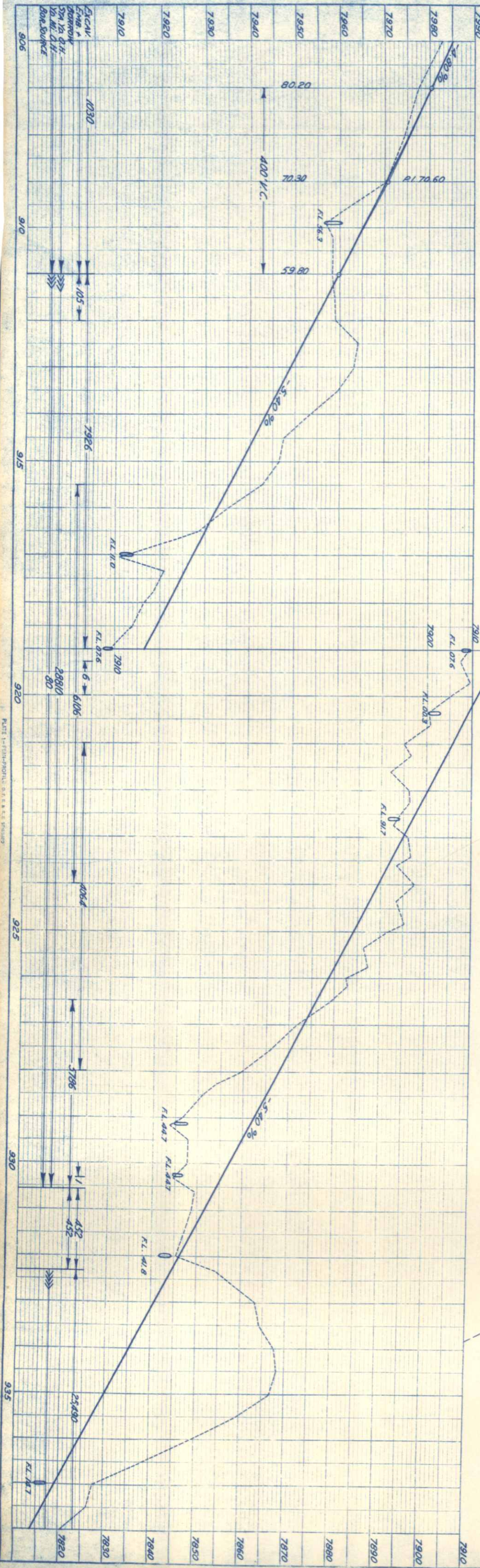
LIST OF STRUCTURES

FED. ROAD DIST. NO.	STATE	P.W.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	401-C*2	3	

STATION	DESCRIPTION	REMOVE STRUCT. NO.	EXCAVATION		STRUCTURAL EXCAVATION	★	CONCRETE CULVERT				CORRUGATED METAL CULVERT				PIPE LIN. FT.	48" LIN. FT.	GUARD FENCE LIN. FT.	GUARD POSTS EACH	SELECT MATERIAL CU. YD.	MISCELLANEOUS
			CU. YD.	EMB.			GL	A	CL	B	LB	18"	24"	30"	36"					
889+00 899+00-902+00	Road Approaches Rt. & Lt. & Side Dr. Rt. Guard Posts Lt.		100	50								24						13	50	
900+80 902+00	Cross Culvert and Ditches Guard Posts Rt.		20			10				225	1.65		68	88				33		
899+00-907+00	Cross Culvert and Ditches Guard Posts Rt.		10			5				225			60							
905+00	Cross Culvert and Ditches Guard Fence Rt.		25			20				165		52					390			
906+70 907+25-910+75	Cross Culvert Intercepting Ditch Lt.		45			10				500								29		
909+90 909+90-912+00	Intercepting Ditch Lt. Guard Posts Rt.		65			5				165	225		64	64						
919+00 920+35	Cross Culvert and Inlet Cross Culvert		15			5														
920+35-921+00	Intercepting Ditch Lt.		10			20				225			54							
922+60 923+*	Cross Culvert and Inlet Intercepting Ditch Lt.		5			5				300	165		76	46	88			21		
927+00-932+00	Guard Posts Rt. Cross Culvert Cross Culvert and Inlet Cross Culvert and Ditches		25			20				225										
930+25 932+00	Cross Culvert and Inlet Cross Culvert and Ditches		300			15				300			74	58				28		
937+00 938+95	Cross Culvert and Inlet Guard Posts Rt.		10			5				165								9		
938+75-945+50	Cross Culvert and Inlet Guard Posts Lt.		75			5				500							162			
942+80 943+50-945+50	Cross Culvert Guard Fence Lt.		5			15				225			88							
945+50-951+50	Cross Culvert and Inlet Guard Fence Rt.		20			15				225			28				625	200		
951+50-954+50	Cross Culvert and Ditches Guard Fence Rt.		900			100														
956+98	Cross Culvert and Inlet Intercepting Ditch Lt.		10			5				165			48				425			
966+40 968+50-972+75	Cross Culvert and Inlet Guard Fence Lt.		5			5				500						102				
971+35	Cross Culvert and Inlet Cross Culvert and Ditches		50			20				225			38				525			
977+30 977+50-978+25	Cross Culvert and Ditches Intercepting Ditch Lt.		15			5														
982+70-987+95	Guard Fence Rt. Intercepting Ditch Lt.		70																	
983+75-987+20	Intercepting Ditch Lt. Guard Fence Lt.		10			5				300	225			112			400			
986+00 987+10	Cross Culvert and Ditches Cross Culvert and Inlet Guard Fence Rt.		5			5				225			50				325			
997+10-1000+85	Cross Culvert and Inlet Guard Fence Lt.		1500			10				225			124				600			
998+50 1015+20	Cross Culvert Road Approach Rt. Guard Fence Lt.																600			
1015+75-1021+75	Move Ice Shed off R.O.W.																			
1020+00	Construction Division No 2 Req'd. Drainage Structure as per details on Sheet No 4 and 5 also Req'd. Channel Improvement																			
1017+84-1018+08	Structure as per details on Sheet No 4 and 5 also Req'd. Channel Improvement																			
1021+40-1025+60	Ditch Change Rt. Road Approaches Rt. & Lt. & Side Drain Rt. Cross Culvert & Ditches & Rem. Structure Remove Structure		90	850		5				1.65		24	52						50	
1022+00 1035+80	Cross Culvert and Inlet Road Approach Lt. Remove Structure		1	150		1												20		
1041+58 1044+33	Road Approach Rt. Cross Culvert and Outlet. Road Approach Rt. Project Marker and Approach to Project		5	160		10				1.65			54					15		
1044+89 1045+50	Cross Culvert and Inlet Road Approach Rt. Project Marker and Approach to Project		5	100														15		
1053+32 1058+20	Cross Culvert and Inlet Road Approach Rt. Project Marker and Approach to Project		5	100														15		
1063+89.2	Cross Culvert and Inlet Road Approach Rt. Project Marker and Approach to Project		5	100														30		
917+00 956+98-958+30	Cross Culvert and Ditches Intercepting Ditch Lt. Road Approach Rt. & Lt.		5	100		10				300										
1002+20 1015+50	Cross Culvert and Inlet Road Approach Rt. Project Marker and Approach to Project		200	3000														30		
1026+00 1029+00	Cross Culvert and Inlet Road Approach Rt. Project Marker and Approach to Project		50	50		5				165			48					200		
1034+20-1035+80	Ditch Change Lt. Ditch Change Rt.		20															15		
1035+80-1036+40	Ditch Change Rt.		20																	
TOTAL	CONSTRUCTION DIVISION No. 1.	2	2525	5910		290				64.35		76	536	688	346	326	5775	146	800	

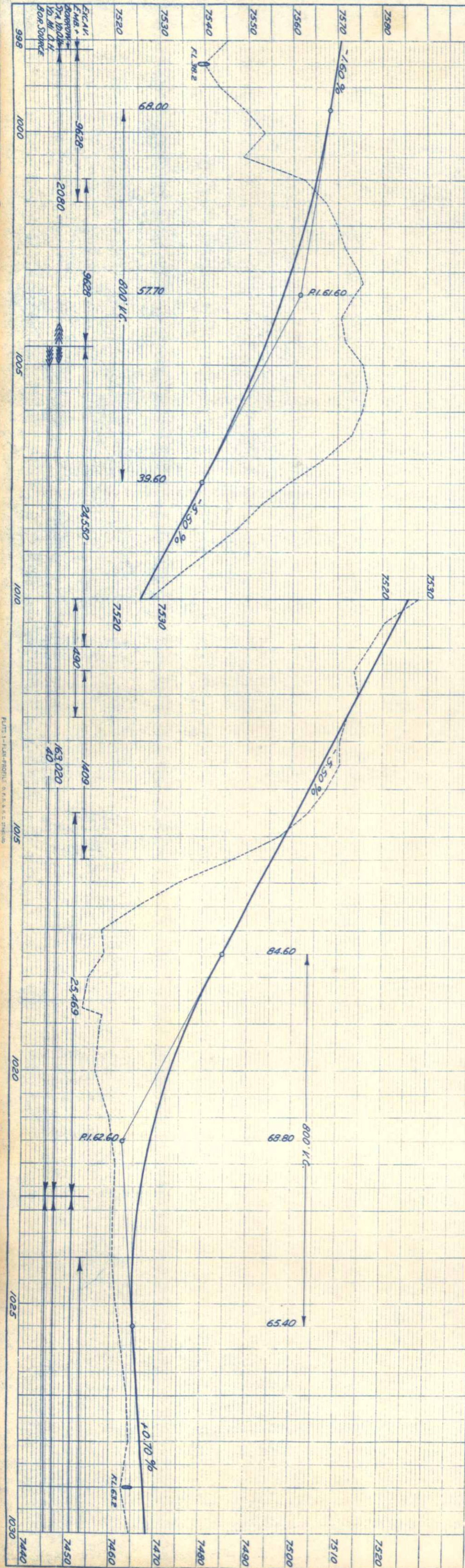
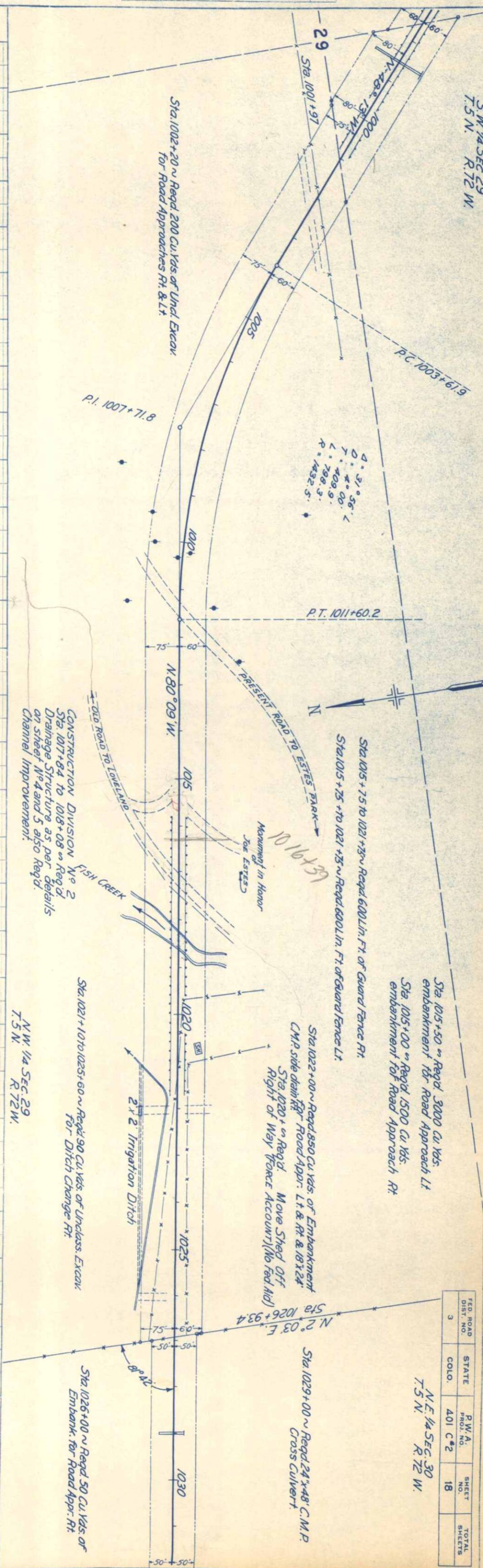
★ Structural Excavation is estimated to be 60% Rock and 40% Common, each of which is estimated to be 75% Dry and 25% Wet.

PROFILE	SURVEYED	BY
	PLOTTED	
NOTE: B-SIDE	GRADES CHECKED	
NO	IS M.S. NOTED	
	STRUCTURE NOTATIONS CHECKED	



FED. ROAD DIST. NO.	STATE	P. W. A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	401 C#2	15	

PROFILE	SURVEYED	BY	E
NOTE BOOK	PLOTTED		
NO.	GRADES CHECKED		
	B. M. NOTED		
	STRUCTURE NOTATIONS SHOWN		

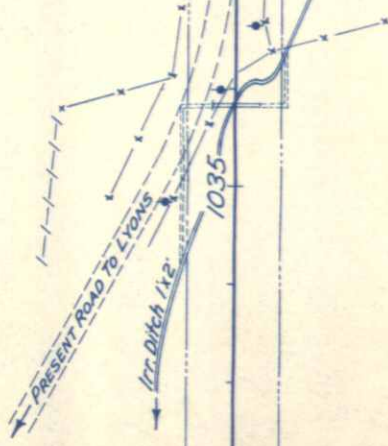


FED. ROAD DIST. NO.	STATE	P.W.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	401 C#2	18	

N.E. 1/4 SEC. 30
T.5 N. R.72 W.

N.W. 1/4 SEC. 30
T.5 N. R.72 W.

FED. ROAD DIST. NO.	STATE	P.W.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	401 C*2	19	



Sta. 1044+33 ~ Req'd. remove 15' x 34' C.M.P.

Sta. 1044+89 ~ Req'd. 160 Cu. Yds. Embank. for Road Appr. Rt.

Sta. 1045+50 ~ Req'd. 24' x 54' C.M.P. Cross Culvert and 5 Cu. Yds. of Uncl. Excav. for Outlet.

Sta. 1035+80 ~ Req'd. 24' x 52' C.M.P. Cross Culvert and 5 Cu. Yds. of Uncl. Excav. for Ditches. Remove 12' x 40' C.M.P.

Sta. 1041+58 ~ Req'd. 150 Cu. Yds. of Uncl. Excav. for Road Appr. Lt.

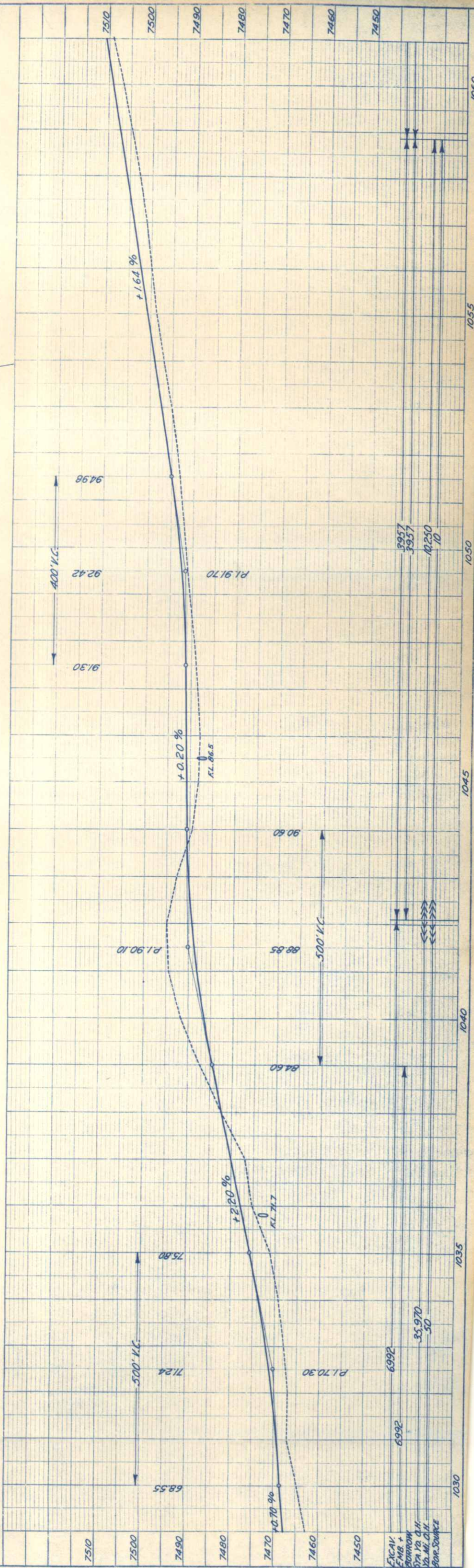
Sta. 1034+20 to 1035+80 ~ Req'd. 50 Cu. Yds. Uncl. excav. for ditch change Lt.

Sta. 1035+80 to 1036+40 ~ Req'd. 20 Cu. Yds. Uncl. excav. for ditch change Rt.

Sta. 1058+20 ~ Req'd. 100 Cu. Yds. of Embank. for Road Appr. Rt.

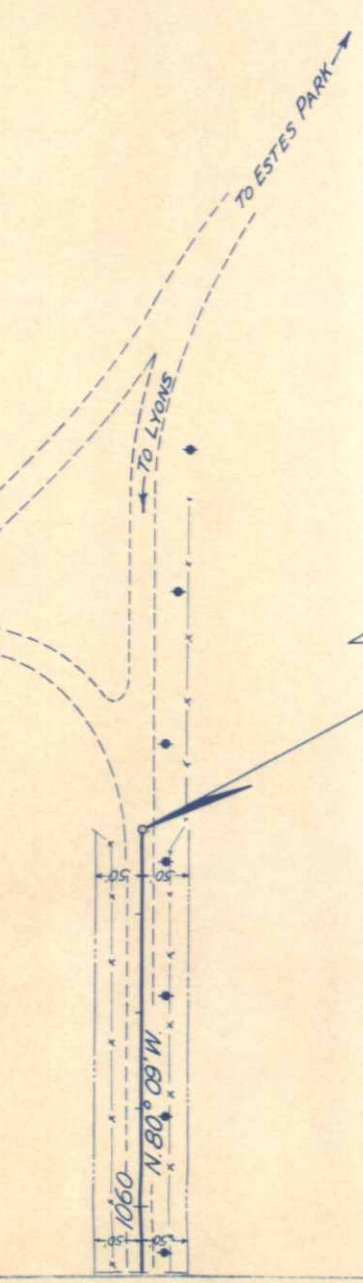
Sta. 1053+08.9

N. 1° 4' E.



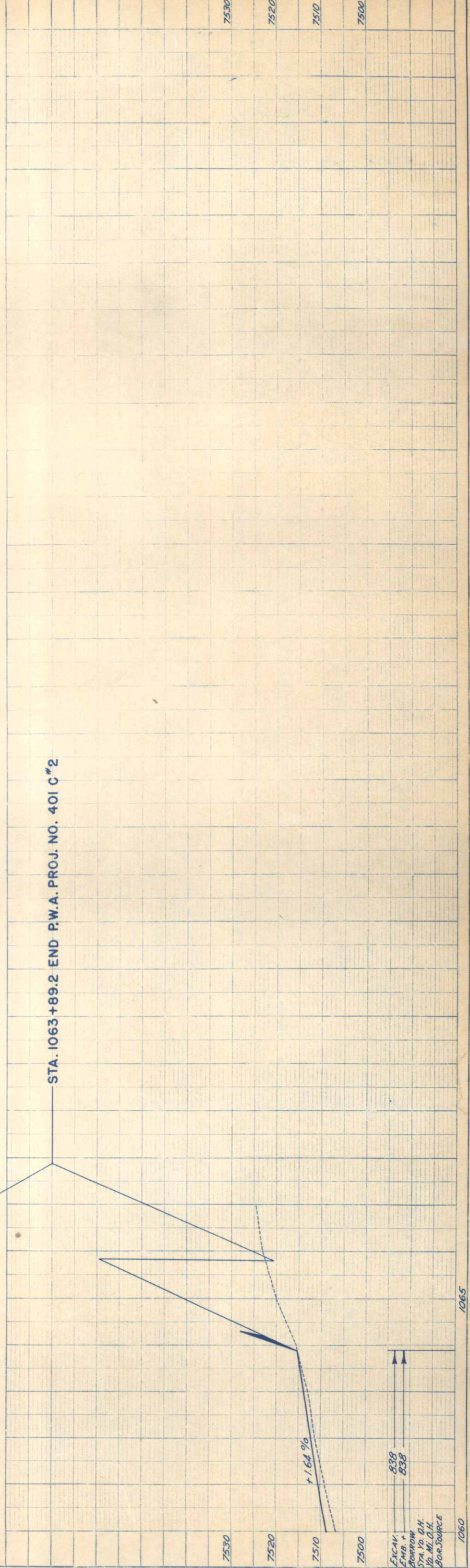
N.W. 1/4 Sec. 30
T. 5 N. R. 72 W.

Sta. 1063+89.2 ~ Reqd. Project Marker and
100 Cu. Yds. of Embankment for Approach
to Project.



1063+89
13+70
1050+69
34+39
1016+39

STA. 1063+89.2 END P.W.A. PROJ. NO. 401 C#2



FED. ROAD DIST. NO.	STATE	P.W.A. PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	401 C#2	20	