

COLORADO

STATE HIGHWAY DEPARTMENT

PLAN AND PROFILE OF CONSTRUCTED FEDERAL AID PROJECT NO. 192-B STATE HIGHWAY NO. 4 EL PASO AND ELBERT COUNTIES

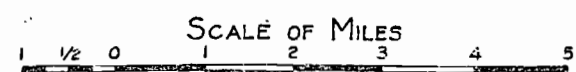
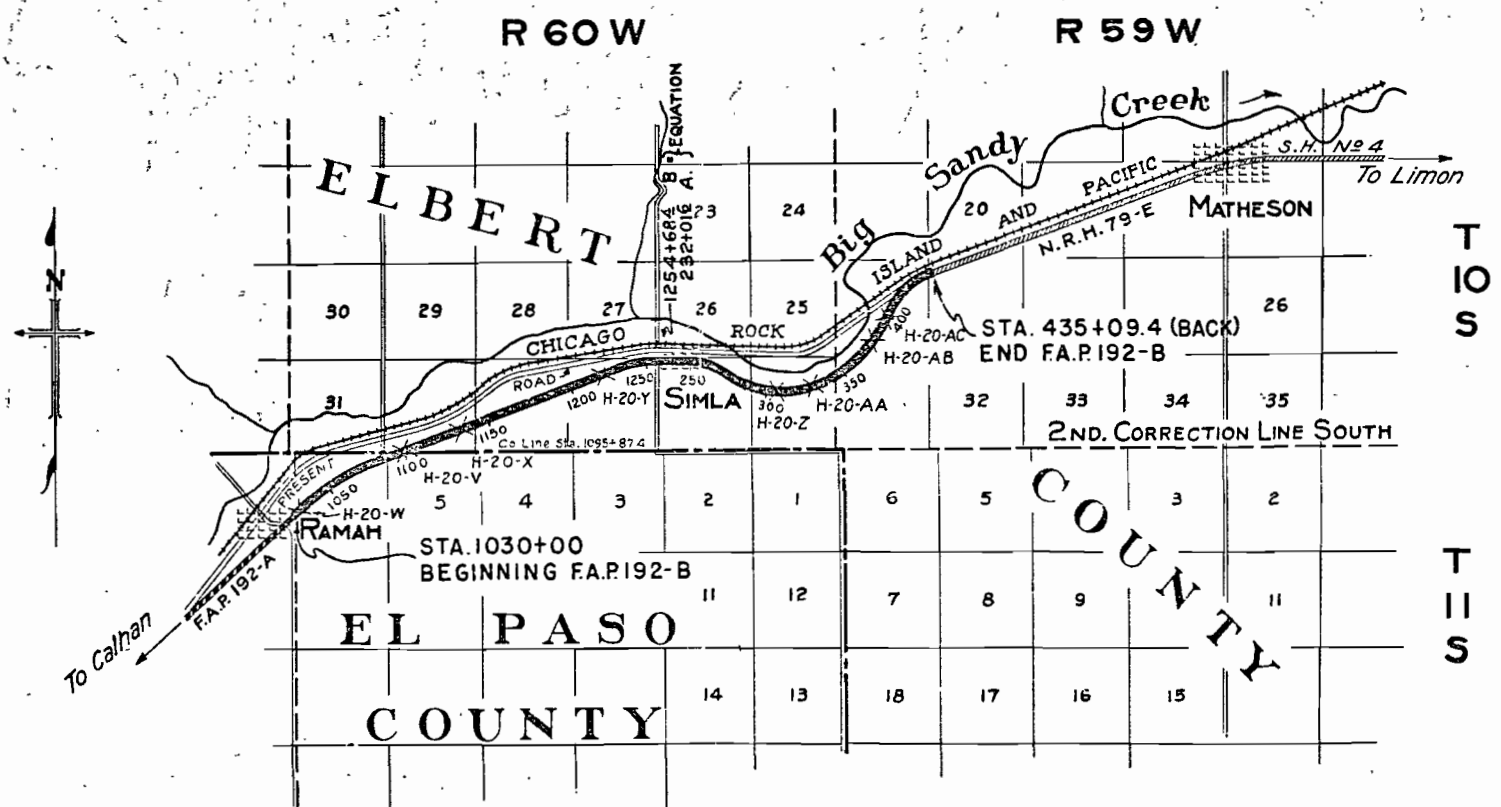
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8. " " " " 1132+
9. " " " " 1221+
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- 23-36. ALIGNMENT PLAN AND PROFILE
- 37-120. CROSS SECTIONS

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

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 } 42,333.2 FEET = 8.017 MILES
 NET LENGTH OF PROJECT }

IN EL PASO COUNTY 6681.0 FEET = 1.265 MILES.
 " ELBERT 35652.2 " 6.752 "



NOTE:
 It is recommended that bidders on this Project go over the plan details with one of the following field representatives of this Department.
 E. Montgomery Division Engineer Colo. Springs
 V.H. Littlefield Resident Engineer Colo. Springs

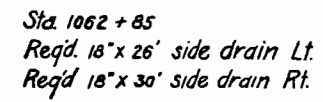
RECOMMENDED FOR APPROVAL 10/7/35
John Haleney
 APPROVED
Charles Vail
 RECOMMENDED FOR APPROVAL
 DIST. ENG. BUREAU OF HIGHWAYS
 RECOMMENDED FOR APPROVAL
 CHIEF ENG. BUREAU OF HIGHWAYS
 APPROVED
 DIRECTOR BUREAU OF HIGHWAYS

Rev as Constructed 11-27-36. #1
Revised 10-22-35 ~A.Z.
(New Sheet)

Sta. 1085 + 54
Reqd. 24"x 32' C.M.P.
side drain Rt. & 73.4 cu.
yds. embankment for
road approaches Rt. & Lt.
Reqd. 25 sq. yds. grouted
rubble slope paving 1 ft.
thick.

Sta. 1085 + 70 road app. Lt.

Sta. 1089 + 00
Reqd. 24"x 54' C.M.
cross culvert &
cu. yds. uncl. excav.
for inlet & outlet,
18.2 cu. yds emb for dikes

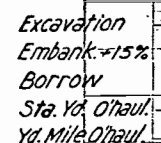


Sta. 1068+65
Req'd. 36' x 78' C.M.P. cross
culvert.

Sta. 1078+54
Req'd. 36"x 56' C.M.P. cross
culvert & 10 cu. yds. uncl.
excavation for inlet.

Sta. 1085 + 54
Reg'd. 24" x 32' C.M.P.
side drain Rt. & 73.4 cu.
yds. embankment for
road approaches Rt. & Lt.
Reg'd. 25 sq. yds. grouted
rubble slope paving 1 ft.
thick.
Sta. 1085 + 70 road app. Lt.

Sta. 1089+00
Reqd. 24"x 54' C.M.P.
cross culvert & 0
cu. yds. uncl. excav.
for inlet & outlet, &
18.2 cu.yds emb for dike.



PRELIMINARY INFORMATION

PLATE 1-PLAS-PROFILE OF D-D-1 C TUBING

S.W. 1/4 Sec. 32
T. 10 S., R. 60 W.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	192-B	25	

Rev as Constructed 11-27-36 H. Revised 10-22-35-A Z.

Sta. 1099+42 to 1100+35.5
Reqd. Treated Timber Bridge -
4 spans @ 23'-0" as per details
shown on sheet No. 7.

ELBERT COUNTY

877.8' to S.W. Cor. Sec. 32
966.0' to N.W. Cor. Sec. 5

Sta. 1096+80
Reqd. 2247.2 cubic
yds. embankment for
road approaches Rt. & Lt.

Sta. 1095+70 to 1099+40
Reqd. 370 lin. ft. Wire Cable Guard fence Lt.

Sta. 1097+46 to 1099+40
Reqd. 194 lin. ft. Wire Cable Guard fence Rt.

Sta. 1100+37 to 1102+15
Reqd. 178 lin. ft. Wire Cable Guard fence Lt.

N.W. 1/4 Sec. 5
T. 11 S., R. 60 W.

EL PASO COUNTY

STA. 1105+46.9 BACK
STA. 1105+00 AHEAD

EQUATION

TWP. 10 S., RANGE 60 W.
TWP. 11 S., RANGE 60 W.

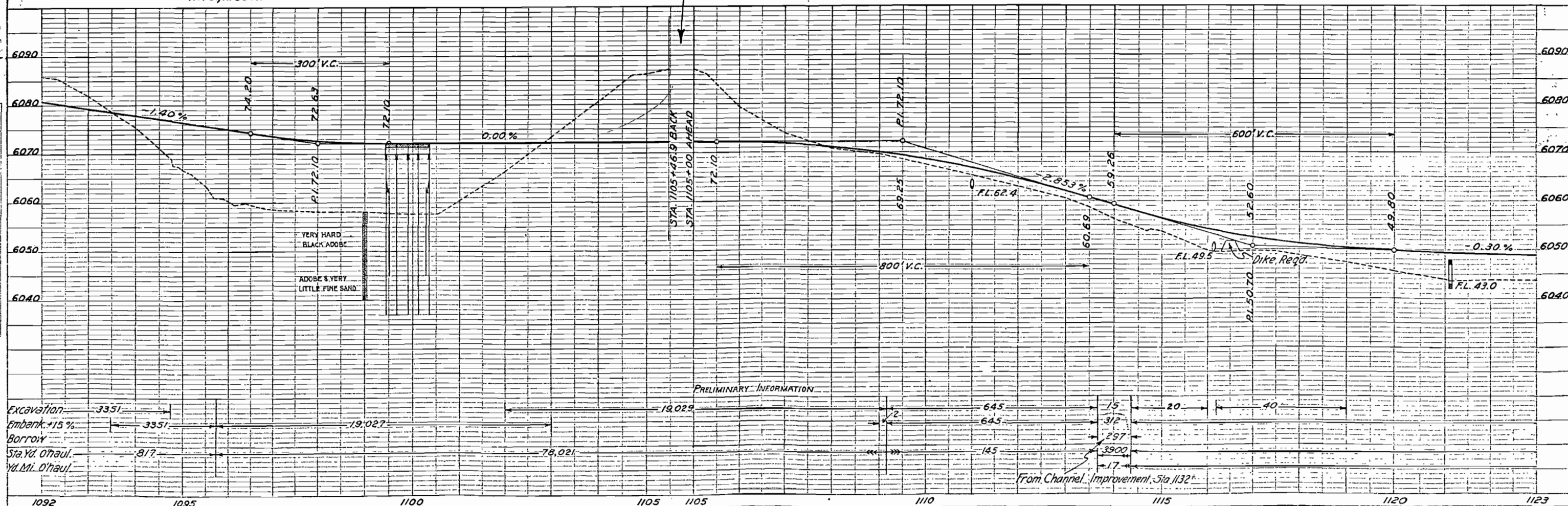
Sta. 1111+00
Reqd. 24" x 82' C.M.P.
cross culvert (45° skew)
Reqd. 0 cu. yds. uncl.
excav. for inlet & outlet, &
2.6 cu. yds. emb. for dike.

Sta. 1116+15
Reqd. 24" x 56' C.M.P. cross
culvert & 18.7 cu. yds.
embankment for building
dike in borrow pit.

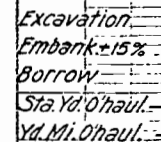
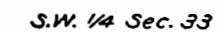
Sta. 1117+00
Reqd. 35.0 cu. yds. embankment for
road approach Rt. & Lt.

Sta. 1121+11
Reqd. 6' x 4' x 46' Concrete
Box culvert & 0 cu. yds.
uncl. excavation for inlet
& outlet.

S.E. 1/4 Sec. 32



Rev. as Constructed 11-27-36.¹² Revised 10-22-35 ~ A.Z.

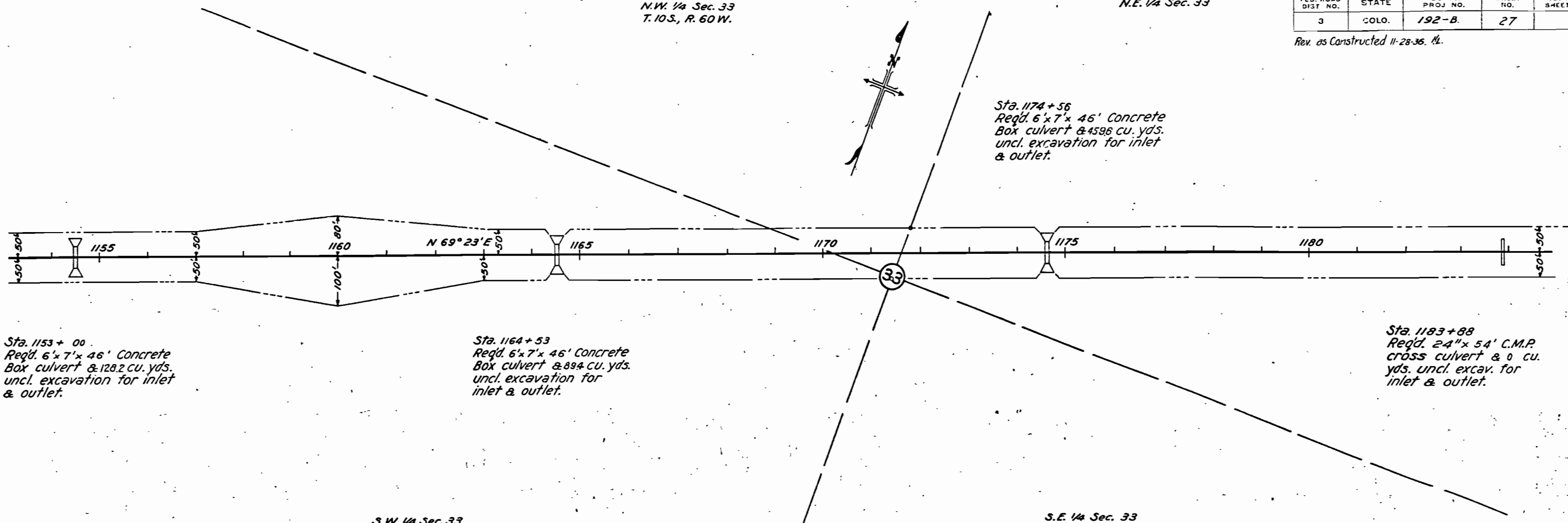


N.W. 1/4 Sec. 33
T. 10S., R. 60W.

N.E. 1/4 Sec. 33

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	192-B	27	

Rev. as Constructed 11-28-36. H.



Sta. 1153+00
Reqd. 6'x7'x46' Concrete
Box culvert & 128.2 cu. yds.
uncl. excavation for inlet
& outlet.

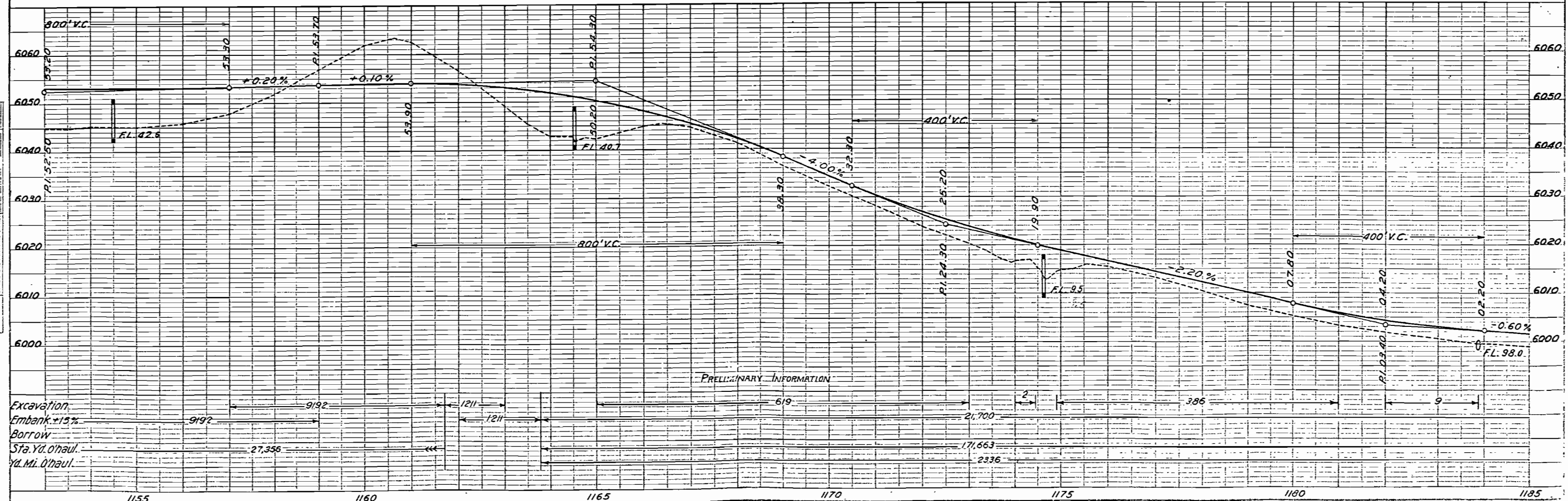
Sta. 1164+53
Reqd. 6'x7'x46' Concrete
Box culvert & 894 cu. yds.
uncl. excavation for
inlet & outlet.

Sta. 1174+56
Reqd. 6'x7'x46' Concrete
Box culvert & 4598 cu. yds.
uncl. excavation for inlet
& outlet.

Sta. 1183+88
Reqd. 24"x54' C.M.P.
cross culvert & 0 cu.
yds. uncl. excav. for
inlet & outlet.

S.W. 1/4 Sec. 33

S.E. 1/4 Sec. 33



N.E. 1/4 Sec. 33
T. 10 S., R. 60 W.

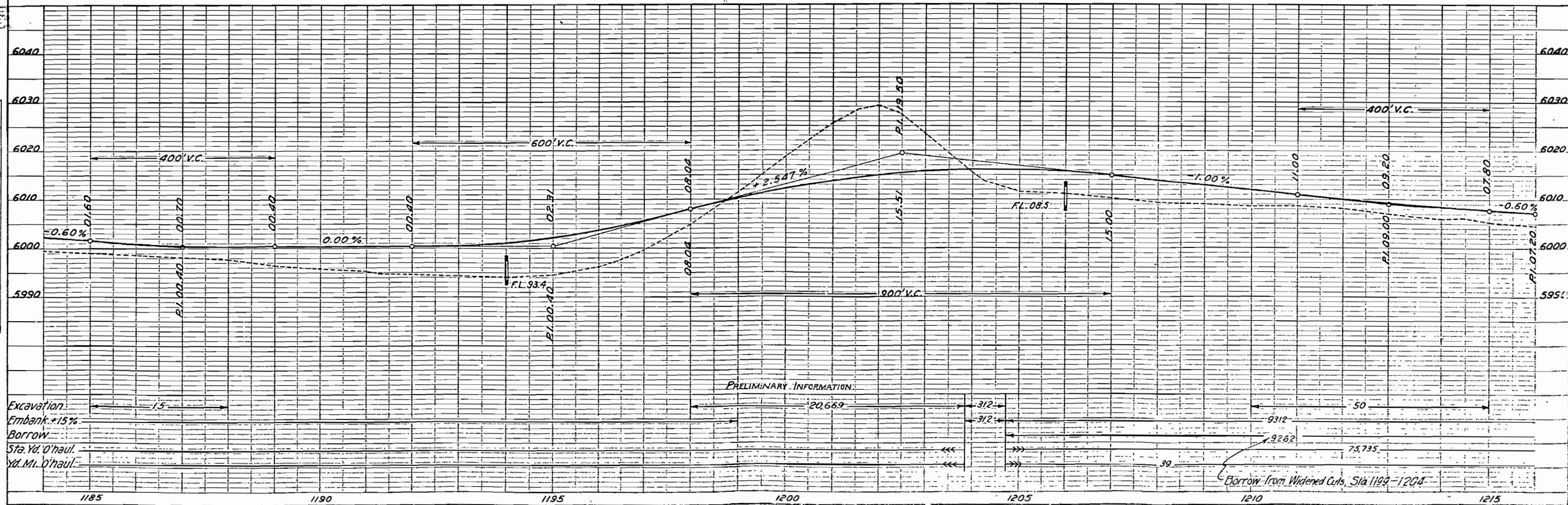
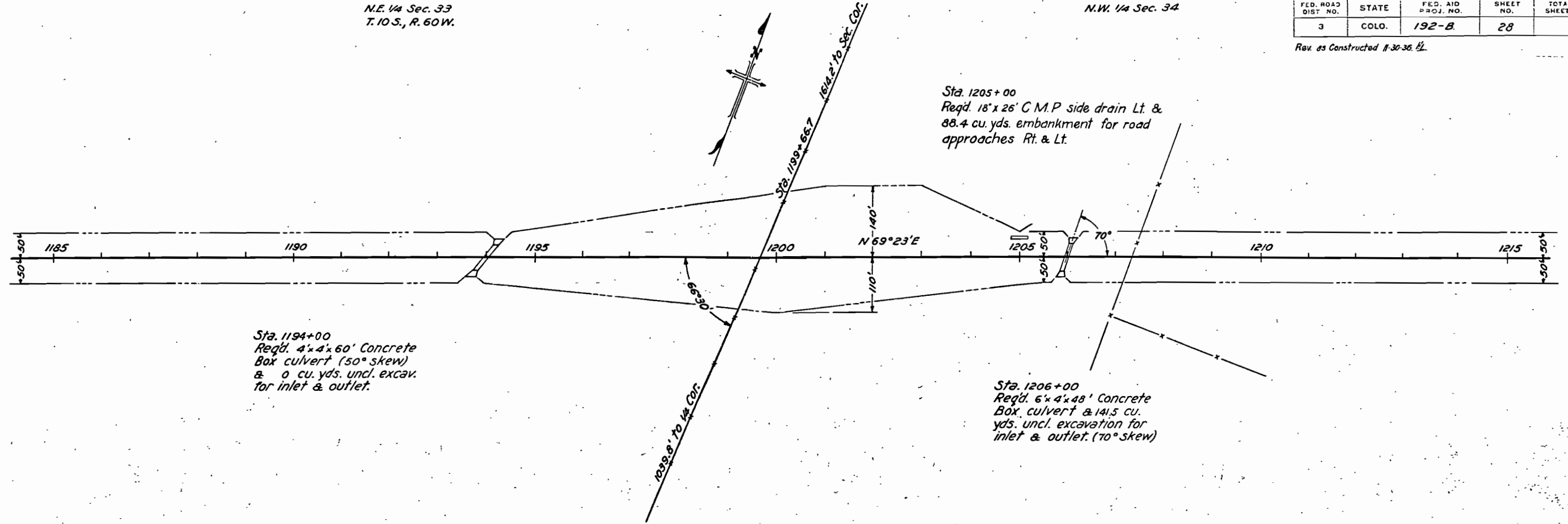
N.W. 1/4 Sec. 34

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	192-B	28	

Rev. as Constructed 11-30-36, 61

MICROFILM

PROFILE



N.W. 1/4 Sec 34
T.10S., R. 60W.

S.E. 1/4 Sec. 27

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	192-B.	29	

Rev as Constructed ~ 12-1-36 ~ W.H.

Sta. 1218+30
Reqd. 1-18"x26' C.M.P.
side drain & 90.3 cu.
yds. embank. for road
approach Rt.

Sta. 1221+43 to 1221+93
Reqd. 50 lin. ft. Wire Cable Guard fence Lt.
" 50 " " " " " Rt.

Sta. 1221+95 to 1223+09.23
Reqd. Treated Timber Bridge - 5 spans
@ 22'-6" as per details shown on
sheet No. 9
Reqd. 2959.6 cu. yds. uncl. excavation
for channel improvement.
" 882.2 cu. yds. to be included
in roadway embankment.

Sta. 1233+33
Reqd. 6'x4'x46' Concrete
Box culvert.

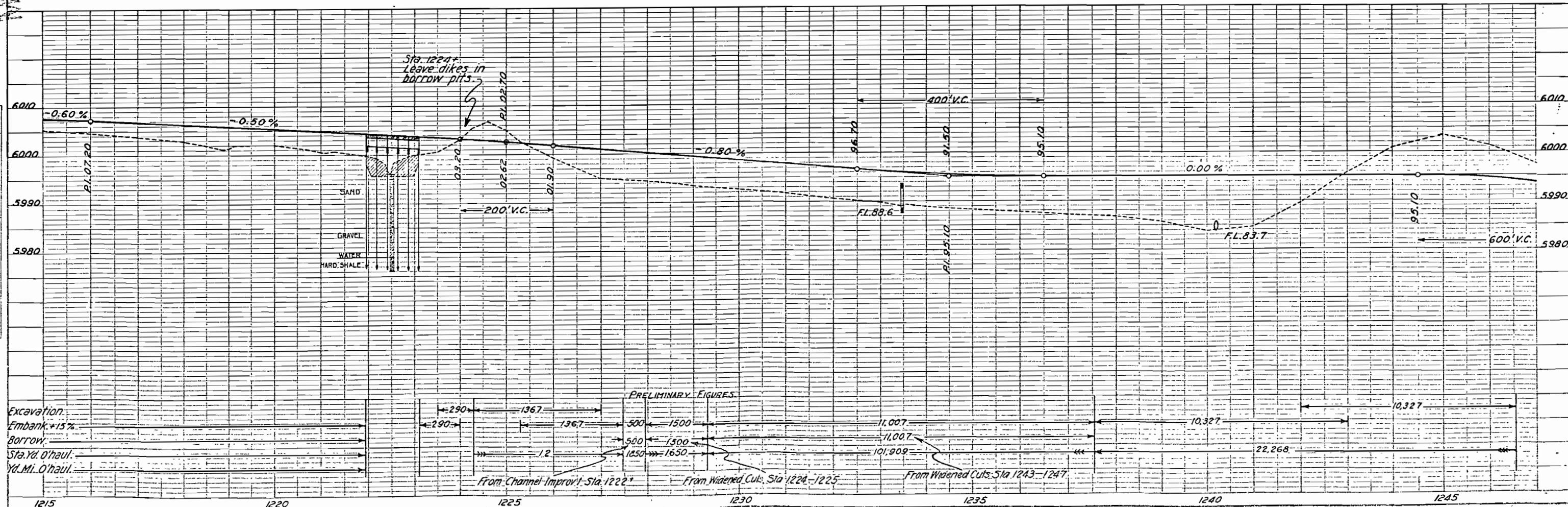
Sta. 1242+65
Reqd. 18"x32' C.M.P. side
drain & 0 cu. yds. embank.
for road approach Lt.

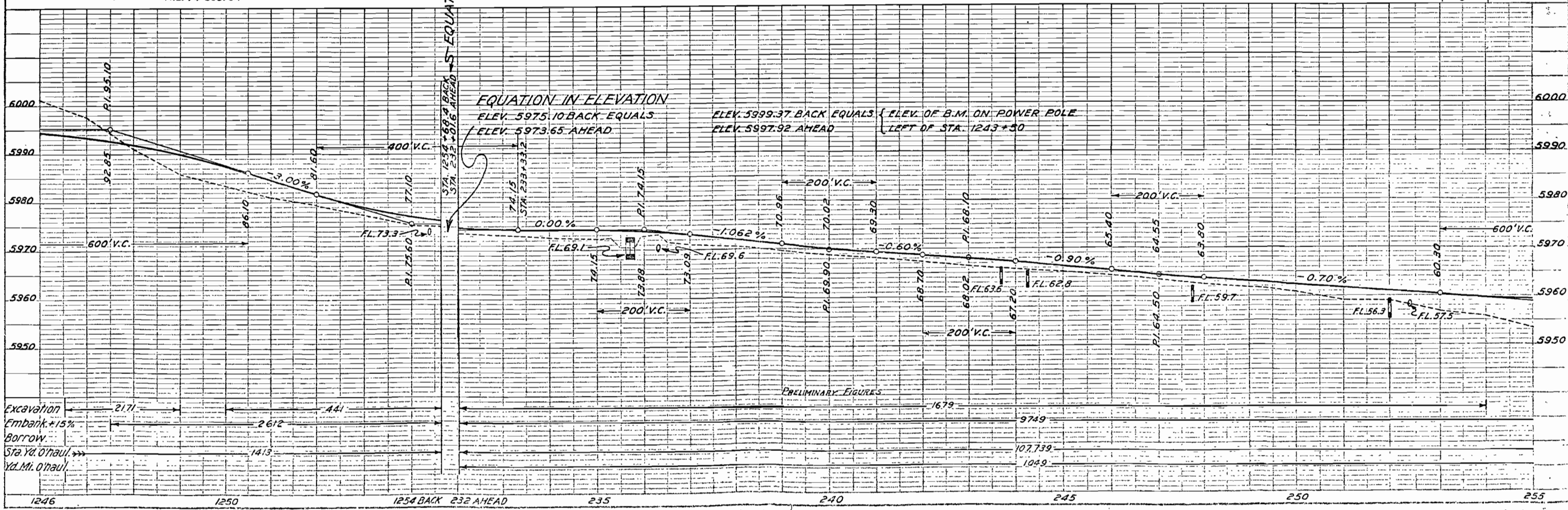
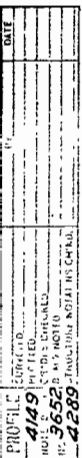
Sta. 1240+21
Reqd. 24"x82' C.M.P.
cross culvert & 0 cu.
yds. uncl. excavation
for inlet.

Δ 20°32'R
D 2°00'
T 519.0'
L 1026.7'
R 2865.0'

Sta. 1223+11 to 1223+61
Reqd. 50 lin. ft. Wire Cable Guard fence Lt.
" 50 " " " " " Rt.

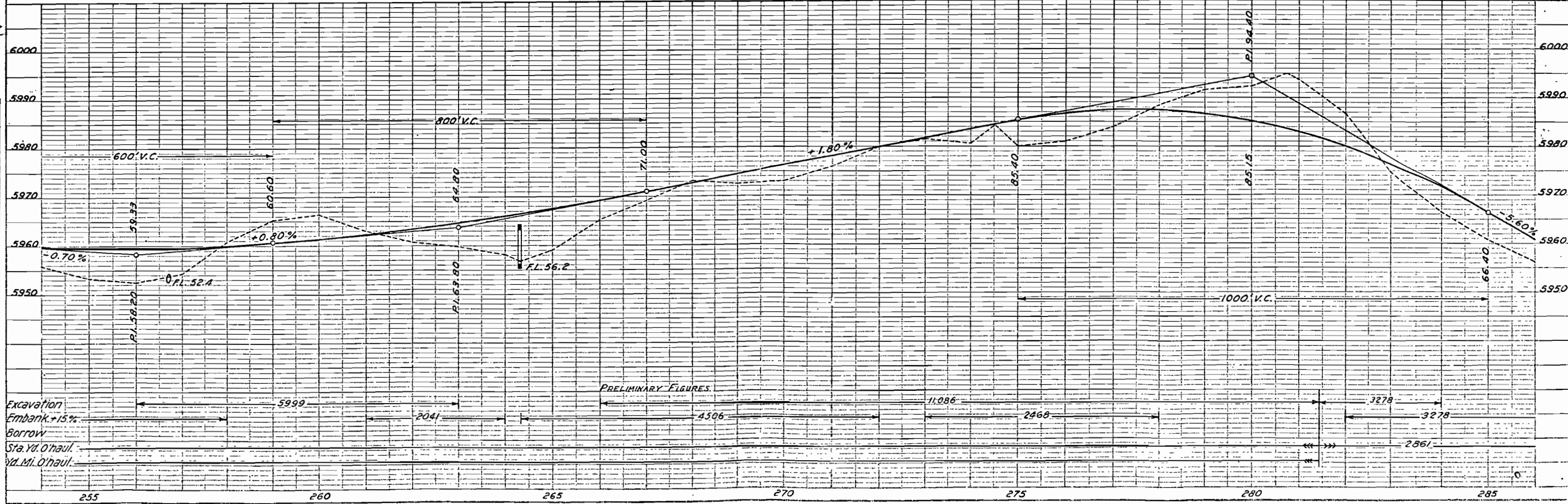
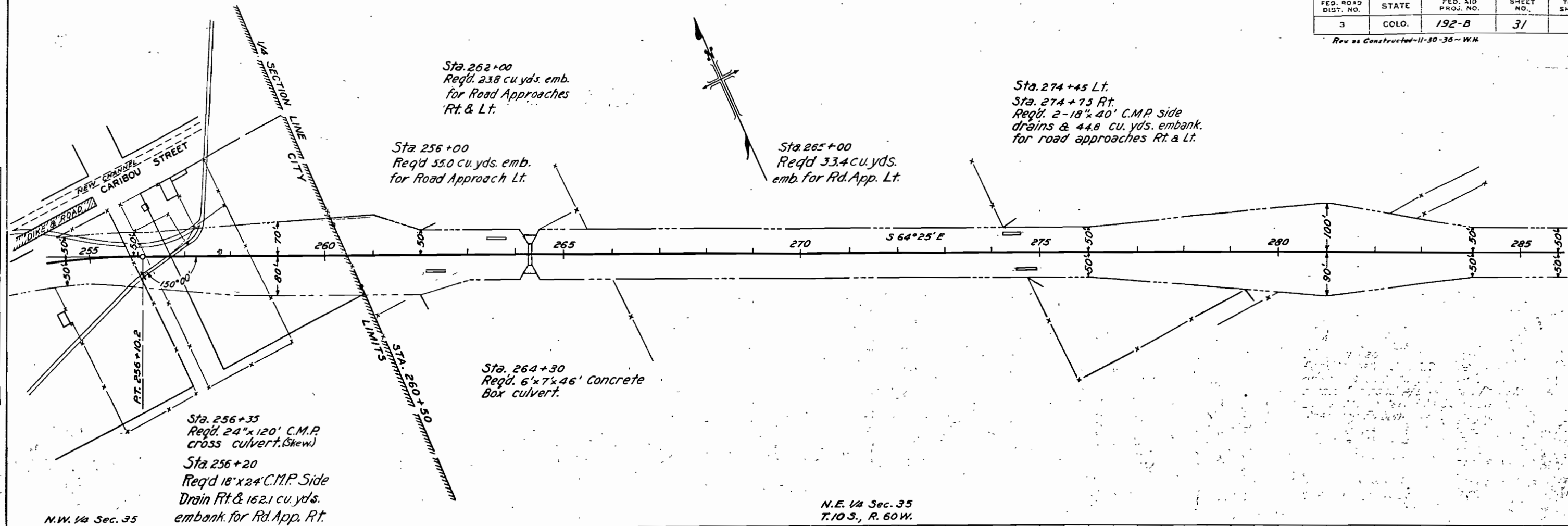
N.E. 1/4 Sec. 34





FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	192-B	31	

Rev as Constructed-11-30-36-W.M.



N.E. 1/4 SEC. 35
T.10 S., R. 60 W.

N.W. 1/4 SEC. 36

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	192-B	32	

Rev as Constructed ~ 11-30-36 ~ W.H.

Sta. 300+53 to 301+03
Reqd. 50 lin. ft. Wire Cable guard fence Lt.
" 50 " " " " " " Rt.

Sta. 302+00 to 302+50
Reqd. 50 lin. ft. Wire Cable guard fence Lt.
" 50 " " " " " " Rt.

Sta. 294+00
Reqd. 18"x 56' C.M.P. cross
culvert & 0 cu. yds. uncl.
excav. for inlet & outlet.

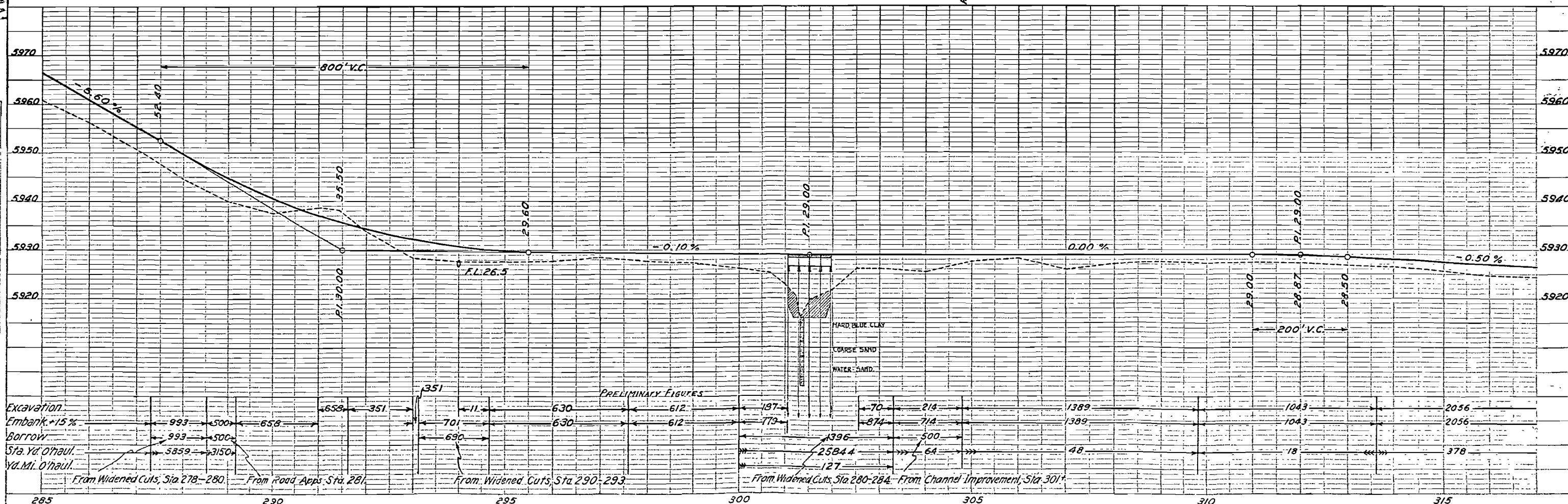
Sta. 301+05 to 301+98.5
Reqd. treated timber Bridge -
4 spans @ 23'-0" as per
details shown on sheet
No. 10
Reqd. 1208.3 cu. yds. uncl. excav.
for channel improvement.
Excavated material to be
included in roadway embankment.

438°09'L
D 2°00'
T 990.7'
L 1907.5'
R 2863.0'

Sta. 291+30
18"x 26' C.M.P. Side Drain Lt. &
Road Approach Lt.
Sta. 291+73 ~ 18"x 26' C.M.P. Side
Drain Rt.

Sta. 292+00
Reqd. 18"x 34' C.M.P. side
drain & 0 cu. yds. uncl.
excavation for road
approach Rt.

Sta. 306+35
Reqd. 34.5 cu. yds. embank.
for road approaches Rt. & Lt.



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	192-B	33	

Rev as Constructed 11-30-36, H.L.

PLAN
NO. 4288

PROFILE
NO. 4289

Sta. 327+13 to 327+63
Reqd. 50 lin. ft. Wire Cable guard fence Lt.
" 50 " " " " " " Rt.

Sta. 328+37 to 328+87
Reqd. 50 lin. ft. Wire Cable guard fence Lt.
" 50 " " " " " " Rt.

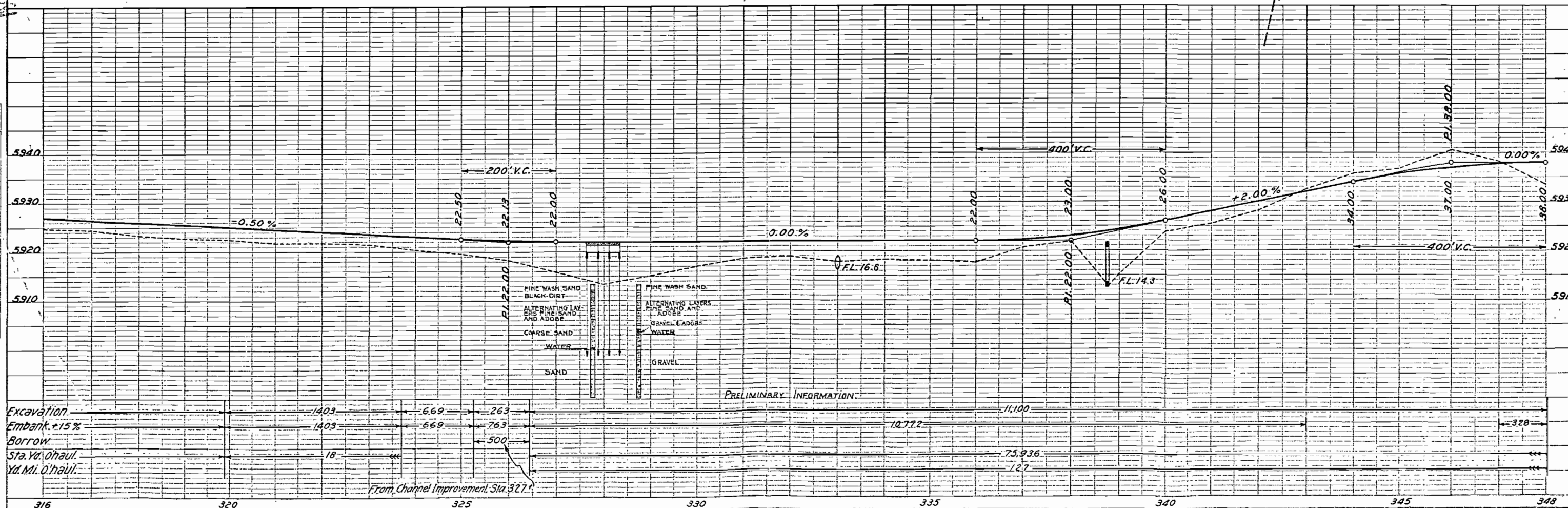
Sta. 327+65 to 328+35.5
Reqd. Treated Timber Bridge ~
3 spans @ 23'-0", as per details
shown on sheet No. 11

Sta. 333+00
Reqd. 36" x 58" C.M.P. cross
culvert & 0 cu. yds. uncl.
excavation for inlet & outlet.

Sta. 338+83
Reqd. 6' x 7' x 48' Concrete
Box culvert & 14741 cu.
yds. uncl. excavation for
inlet & outlet.
Excavated material to be
used in roadway embank.

Sta. 344+15 Lt & 343+50 Rt.
Reqd. 18" x 40" C.M.P. side drain Rt.
" 18" x 40" " " " Lt.
Reqd. 0 cu. yds. uncl. excavation
for road approaches Rt. & Lt.

N.W. 1/4 Sec. 31
T.10S., R.59W.



N.W. 1/4 Sec. 31
T.10S., R. 59W.

S.W. 1/4 Sec. 30

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	192-B	34	

Rev. as Constructed 11-30-36. H.

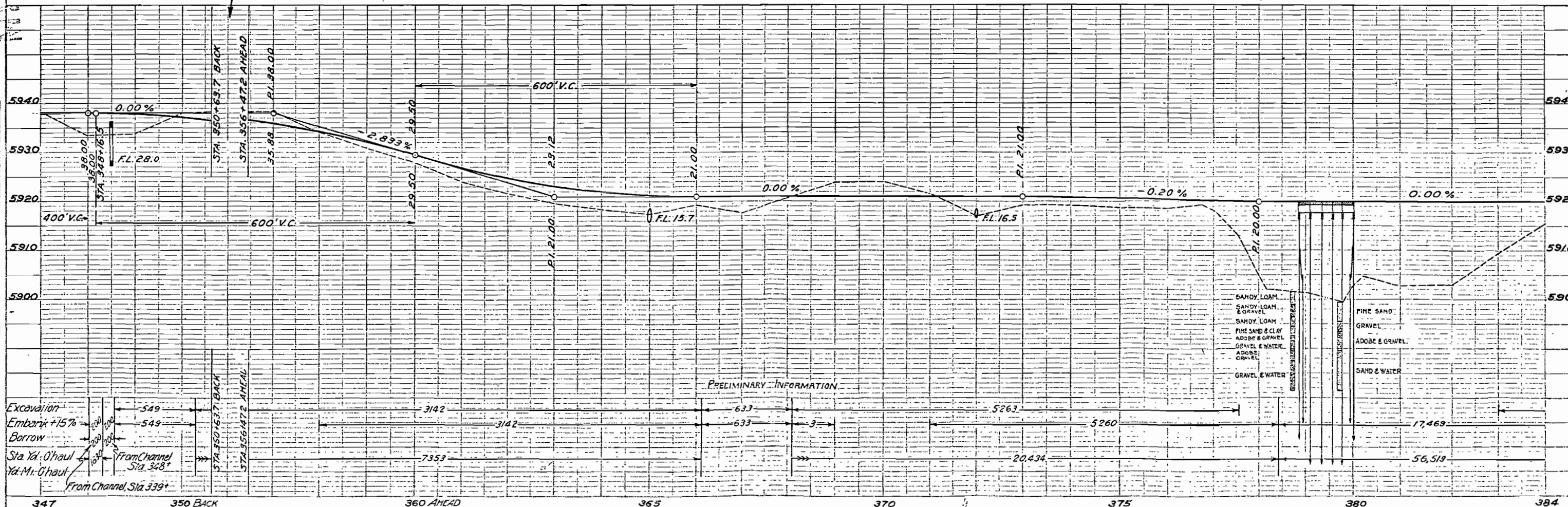
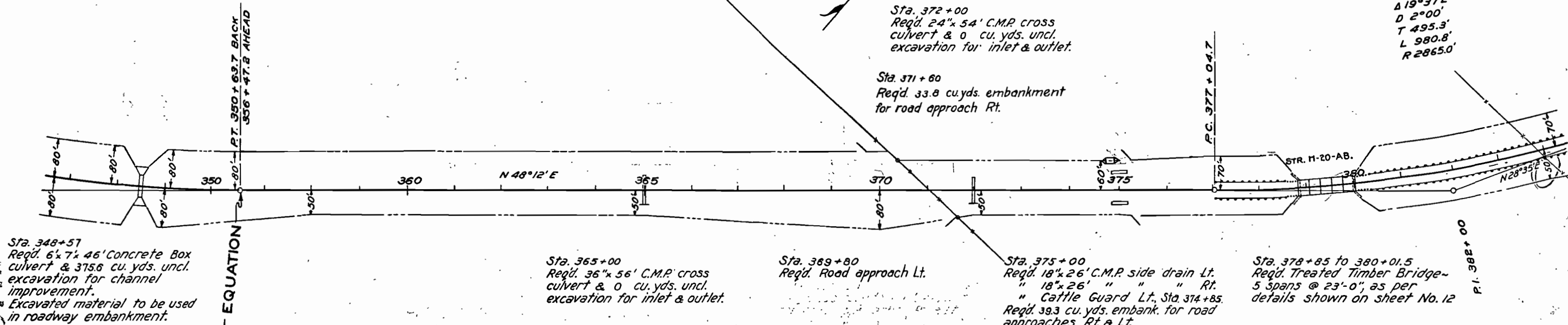
Sta. 377+05 to 378+83
Reqd. 178 lin. ft. Wire Cable guard fence Lt.
" 178 " " " " " Rt.

Sta. 380+03 to 384+53
Reqd. 450 lin. ft. Wire Cable guard fence Lt.
" 450 " " " " " Rt.

Sta. 372+00
Reqd. 24"x 54' C.M.P. cross
culvert & 0 cu. yds. uncl.
excavation for inlet & outlet.

Sta. 371+60
Reqd. 33.8 cu. yds. embankment
for road approach Rt.

$\Delta 19^{\circ}37' L$
 $D 2^{\circ}00'$
 $T 495.3'$
 $L 980.8'$
 $R 2865.0'$

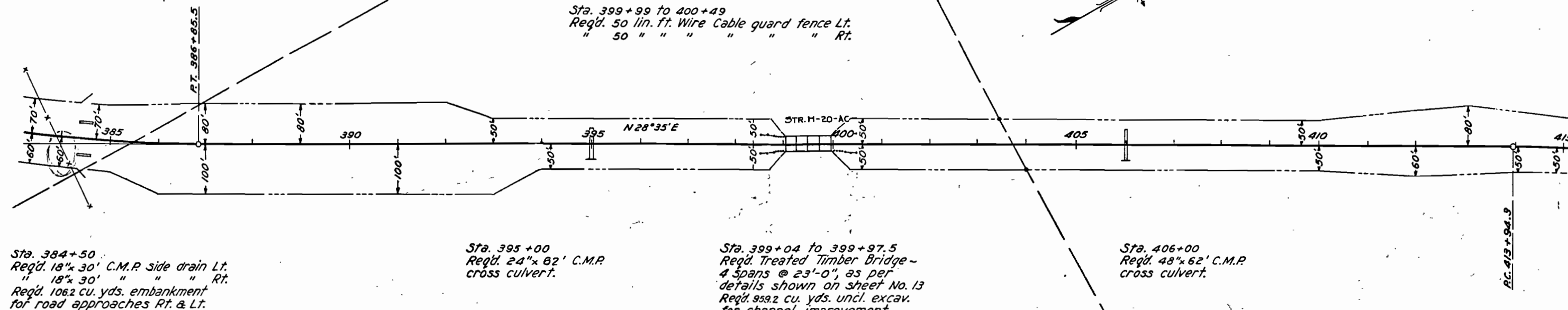


S.W. 1/4 Sec. 30

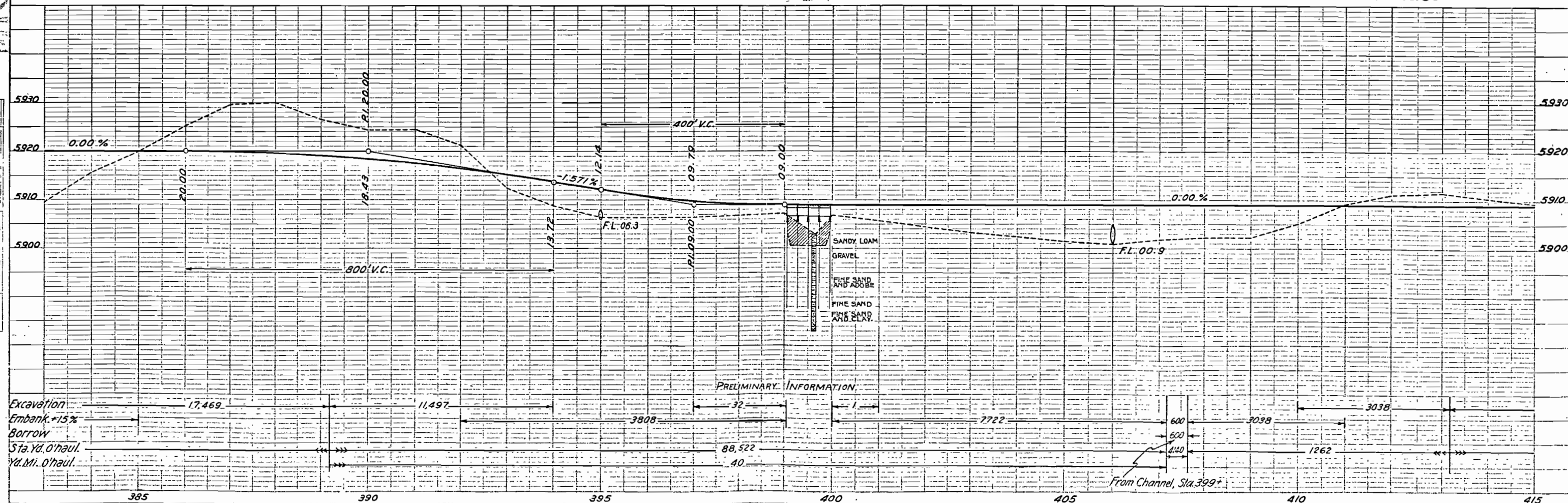
S.E. 1/4 Sec. 30
T.10S., R.59W.

FED. PCAD DIST. NO.	STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLD.	192-B.	35	

Rev. as Constructed 11-30-36 M.

Sta. 398+52 to 399+02
Reqd. 50 lin. ft. Wire Cable guard fence Lt.
" 50 " " " " " " Rt.Sta. 399+99 to 400+49
Reqd. 50 lin. ft. Wire Cable guard fence Lt.
" 50 " " " " " " Rt.Sta. 384+50
Reqd. 18" x 30' C.M.P. side drain Lt.
" 18" x 30' " " " Rt.
Reqd. 106.2 cu. yds. embankment
for road approaches Rt. & Lt.Sta. 395+00
Reqd. 24" x 62' C.M.P.
cross culvert.Sta. 399+04 to 399+97.5
Reqd. Treated Timber Bridge -
4 spans @ 23'-0", as per
details shown on sheet No. 13
Reqd. 959.2 cu. yds. uncl. excav.
for channel improvement.
Excavated material to be used
in roadway embankment.Sta. 406+00
Reqd. 48" x 62' C.M.P.
cross culvert.

N.E. 1/4 Sec. 30



N.E. 1/4 Sec. 30
T.10S., R.59W.

Sta. 424+80
Reqd. 0 cu. yds. embank.
for road approach Lt.

Sta. 435+09.4
Reqd. Project Marker.

NOTE:
Between Sta. 425 & Sta. 435 the
old road is to be obliterated for
a width of 40 feet and a length
of 1000 feet.
The area to be plowed is approx-
imately 1.2 acres.

CD. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	192-B	36	

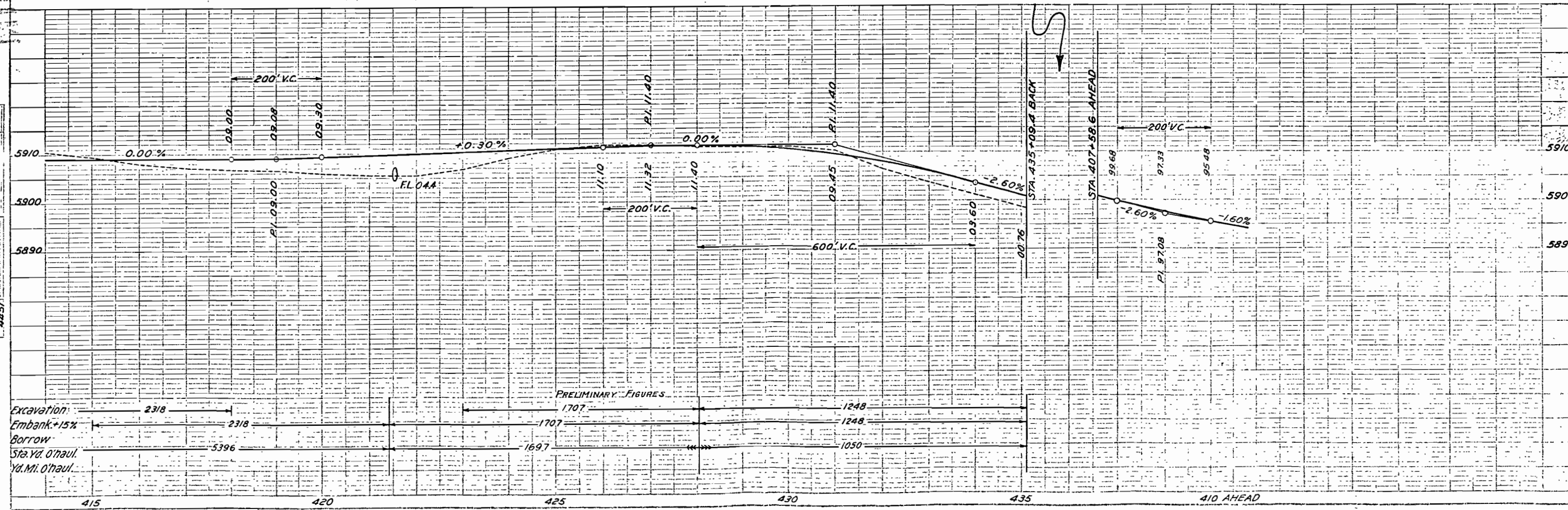
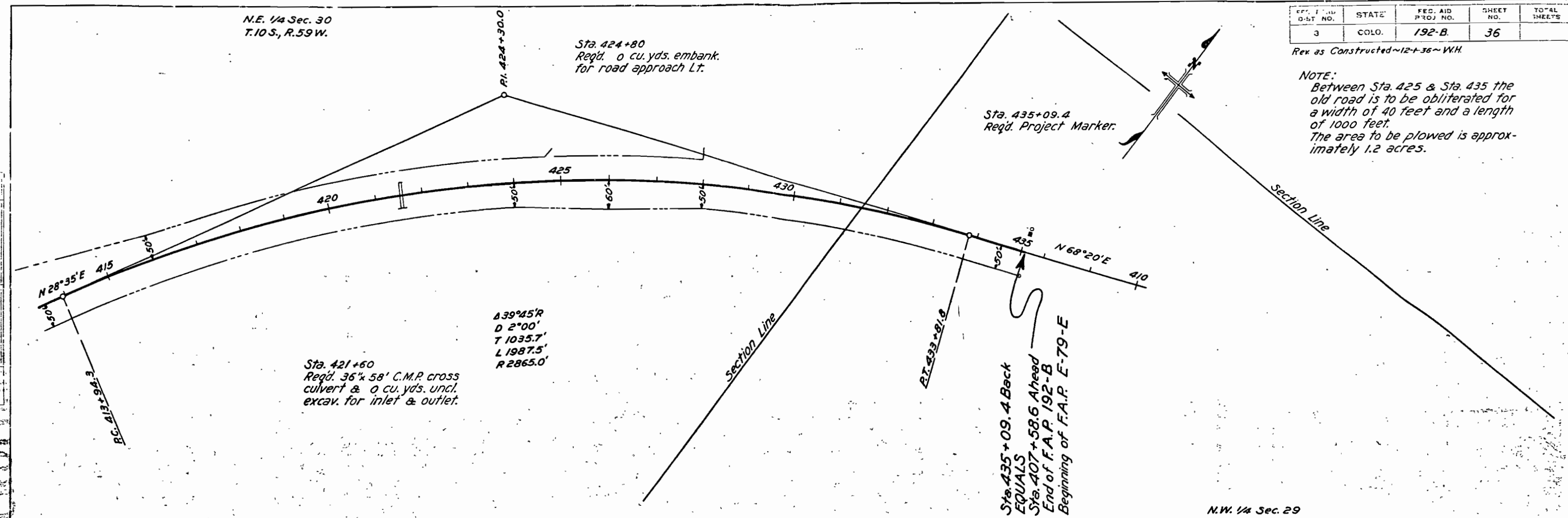
Rev as Constructed ~12+36 ~V.H.

PLAN	BY	DATE
4288		

PLAN

SECTION	BY	DATE
4289		

SECTION



Excavation: 2318
Embank. +15% 2318
Borrow 5396
Sta. Yd. O'haul. 1707
Yd. Mi. O'haul. 1697

PRELIMINARY FIGURES

1707 1248 1248 1050

410 AHEAD

FED. ROAD DIST. NO.	STATE	PLANT NO.	PLANT NO.	PLANT NO.
3	CDLS	19256	2	

Revised 10-22-35 - A.Z.
 Rev. 1-2-36. Br. 399, 1132, H.O.W.
 Rev. 1-28-36 Quan in each county. H.O.A.

TYPICAL SECTION

NOTE:
Slope 4:1 when H is 3' or less.
Slope 2:1 when H is over 3'.

The intersection of cut slopes with the existing ground line shall be rounded in earth cuts, beginning 5 feet back of the slope stake and extending 5 feet down the cut slope.

Excavation or Borrow below the 4:1 slope will not be permitted.

6" compacted thickness
of Base Course Surfacing.

NOTE:
Thickness of Gravel or Crushed Rock surfacing is to be considered approximate only. Surfacing is to be placed in two 3" courses at the rates indicated below.

3" bottom course surfacing	59	tons	per	100	feet	of	Roadway
3" upper	"	"	56	"	"	"	"

1/2 CUT. SECTION

1/2 FILL SECTION

SUMMARY OF APPROXIMATE QUANTITIES

[illegible]

TYPICAL CROSS SECTION OF IMPROVEMENT AND SUMMARY OF QUANTITIES

WIRE CABLE GUARD FENCE

STATION	LIN. FEET	
	LEFT SIDE	RIGHT SIDE
1035+30 to 1095+83	(50)	(50)
1095+78 to 1037+28	(50)	(50)
1095+70 to 1099+40	370	
1097+46 to 1099+40		194
1100+97 to 1102+05	178	178
1131+55 to 1132+05	50	50
1133+02 to 1134+16	114	114
1221+43 to 1221+93	50	50
1223+11 to 1223+61	50	50
300+53 to 307+03	50	50
302+00 to 302+50	50	50
327+13 to 327+63	50	50
328+37 to 328+87	50	50
377+05 to 378+83	178	178
380+09 to 384+53	450	450
398+52 to 399+02	50	50
399+99 to 400+49	50	50
TOTAL	(3504)	

TABULATION OF STRUCTURES

STATION	DESCRIPTION	REMOVE	EXCAVATION		STRUCTURAL EXCAV.				CONCRETE		REINF.	CORR. METAL CULVERT PIPE					MISCELLANEOUS
		STRUCT.	CU. YDS.		CU. YDS.				CU. YDS.		STEEL	LIN. FT.					
			NO.	EXCAV.	EMB.	*				CL. A		CL. B	LBS.	18"	24"	36"	
1030+00	Project Marker																1 Project Marker
1031+25	6x7x46' Conc. Box Culvert & Inlet & Outlet		100			150			81.0		5364						
1035+85 to 1036+76.7	Treated Timber Bridge & Channel Improvement		1000			(Quantities in Summary)											
1046+27	C.M.P. Cross Culvert					2				3.00				60			
1048+86	" " "					5				3.00				62			
1057+00	C.M.P. Cross Culvert					10				1.65			62				
1068+65	" " "					2				2.25					80		
1078+54	C.M.P. Cross Culvert & Inlet		10			5				3.00							
1085+65	C.M.P. Side Drain Rt.					1							32	56			
1089+00	Road Approaches Rt. & Lt.			200													
1094+80	Grouted Rubble Slope Paving									1.65			54				25 sq. yds. Grouted Rubble Slope Paving (1 ft. thick)
1099+42 to 1100+35.5	C.M.P. Cross Culvert & Inlet & Outlet		20			15											
1111+00	C.M.P. Cross Culvert & Inlet & Outlet			2000													
1116+15	" " & Dike in Borrow Pit (Skew)																
1121+11	6x4x46' Conc. Box Culvert & Inlet & Outlet		25			25			54.9		4136						
1131+00	Road Approaches Rt. & Lt.			100													
1132+07 to 1133+00.5	T.C. Timber Bridge & Channel Improvement		297			(Quantities in Summary)											
1135+00	C.M.P. Side Drain Rt.					1							26				
1144+05	Road Approaches Rt. & Lt.			200													
1154+50	C.M.P. Side Drain Lt.					1							38				
1164+53	Road Approaches Rt. & Lt.			100													
1174+63	6x7x46' Conc. Box Culvert & Inlet & Outlet		50			30			81.0		5364						
1183+88	6x7x46' " " " " " " " "		100			100			81.0		5364						
1191+30	C.M.P. Cross Culvert & Inlet & Outlet		15			10				1.65			54				
1206+00	4x4x60' Conc. Box Culv. (Skew 50') & Inlet & Outlet		50			25			49.8		4096						
1219+00	6x4x48' " " " " (Skew 70) " " " "		50			15			56.4		4268						
1221+95 to 1223+09.23	C.M.P. Side Drains & Road Approaches Rt. & Lt.			100		1							26				
1233+47	T.C. Timber Bridge & Channel Improvement		500			(Quantities in Summary)							26				
1240+21	6x4x46' Concrete Box Culvert					30			54.9		4136						
1242+00	C.M.P. Cross Culvert & Inlet		10			2				1.65			82				
1247+00	C.M.P. Side Drain & Road Approach Lt.			50									32				
1249+70	" " " " " " " Rt.		50										30				
1250+55	" " " " " " " Lt.			50		2							24				
1254+40	C.M.P. Cross Culvert & Inlet & Outlet		50			10				1.10			40				
232+30	C.M.P. Side Drain & Road Approach Rt.			50		2							50				
235+60	" " " " " " " "			50		2							24				
235+70	Double 10x2 1/2x48' Conc. Box Culvert (Type 10-A) & Inlet & Outlet		50			50			135.8		14737						
236+30	C.M.P. Cross Culvert & Inlet & Outlet		10			5				1.10			50				
238+00	Remove 3x1x16' Wood Box Culvert	1															
239+65	C.M.P. Side Drain & Road Approach Rt.			25		2							24				
240+50	" " " " " " " Lt.			50		2							44				
242+00	Remove 18x20' C.M.P. on Lt.	1															
242+10	" 46 Lin. Ft. of Cross Walk	1															
243+70	" 46 " " " " " " "	1															
244+00	C.M.P. Side Drain & Road Approach Lt.			50		1							24				
244+25	" " " " " " " Rt.			50		2							40				
246+00	Remove Wood Box Culvert	1															
247+75	5x1 1/2x48' Conc. Box Culv. & Inlet & Outlet		50			25			30.4		3115						
248+00	Remove 2 1/2x2x24' Wood Box Culvert	1															
250+00	" Box Culvert Side Drain on Lt.	1															
251+70	5x1 1/2x48' Conc. Box Culv. & Inlet & Outlet		50			25			30.4		3115						
252+00	Remove 2x1x24' Wood Box Culvert	1															
252+40	C.M.P. Side Drain & Road Approach Rt.			50		2							24				
252+40 to 257+00	Remove Wood Box Culvert	1															
256+70	" 12x40' C.M.P. & Headwall	1															
257+00	4x2x70' Concrete Box Culvert (Skew)					50			40.0		3855						
258+00	Remove 3x2' Concrete Box Culvert	1				10				1.10			60				
259+00	C.M.P. Cross Culvert & Inlet		50														
260+00	Channel Improvement		1200														
261+00	C.M.P. Cross Culvert					2			1.65				120				

R. O. W. MARKERS

STATION	SIDE	NO.
1030+00	R&L	2
1059+30	R	1
1059+84	L	1
1085+30	R	1
1085+64	L	1
1114+80	R	1
1115+16	L	1
1143+48	R	1
1143+88	L	1
1171+41	R	1
1171+80	L	1
1199+36	R	1
1200+09	L	1
1227+40	R	1
1227+92	L	1
232+43	L	1
232+70	R	1
260+19	L	1
260+75	R	1
291+17	L	1
291+66	R	1
317+32	R	1
317+59	L	1
343+26	R	1
344+00	L	1
370+36	L	1
371+66	R	1
403+46	L	1
404+00	R	1
435+09.4	R&L	2
TOTAL		32