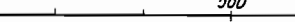


FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	138-A(4) 138-B(3)	1	

N. of Kremmling

CONVENTIONAL SIGNS

CENTER LINE OF SURVEY  560
RIGHT OF WAY LINES 
TOWNSHIP OR RANGE LINES 
SECTION LINES 
ONE-QUARTER SECTION LINES 
BARBED WIRE FENCES 
POLE LINE 
NATIONAL FOREST BOUNDARY 

INDEX OF SHEETS
F.A.P. 138-A(4)

- 1 SKETCH MAP AND TITLE SHEET
- 2 TYPICAL SECTION AND SUMMARY OF QUANTITIES
- 3-6 LIST OF STRUCTURES
- 8-9 MISCELLANEOUS TABULATIONS
- 10-12 DETAILS OF BRIDGE, STA. 470+
- 13-15 DETAILS OF BRIDGE, STA. 533+
- 20-21 MISCELLANEOUS DETAILS
- 22 STANDARD HEADWALLS FOR C.M.P. CULVERTS
- 23 STANDARD CONCRETE BOX CULVERTS, (6' x 7')
- 24 STANDARD CONCRETE BOX CULVERTS, (8' x 6')
- 25 STANDARD TIMBER GUARD POSTS
- 26 STANDARD WIRE CABLE GUARD FENCE
- 27 STANDARD WIRE FENCE (TREATED WOODEN POSTS)
- 29 STANDARD STRUCTURE NUMBER LETTERING
- 30 STANDARD STRUCTURE YEAR NUMBER LETTERING
- 31 STANDARD METHODS FOR SUPERELEVATION OF CURVES
- 32 TYPICAL SIDE APPROACH ROADS — ROADWAY CONSTRUCTION TRAFFIC SIGNS
- 33 STANDARD MARKER POSTS
- 34-45 PLAN AND PROFILE SHEETS
- 50-201 CROSS SECTION SHEETS

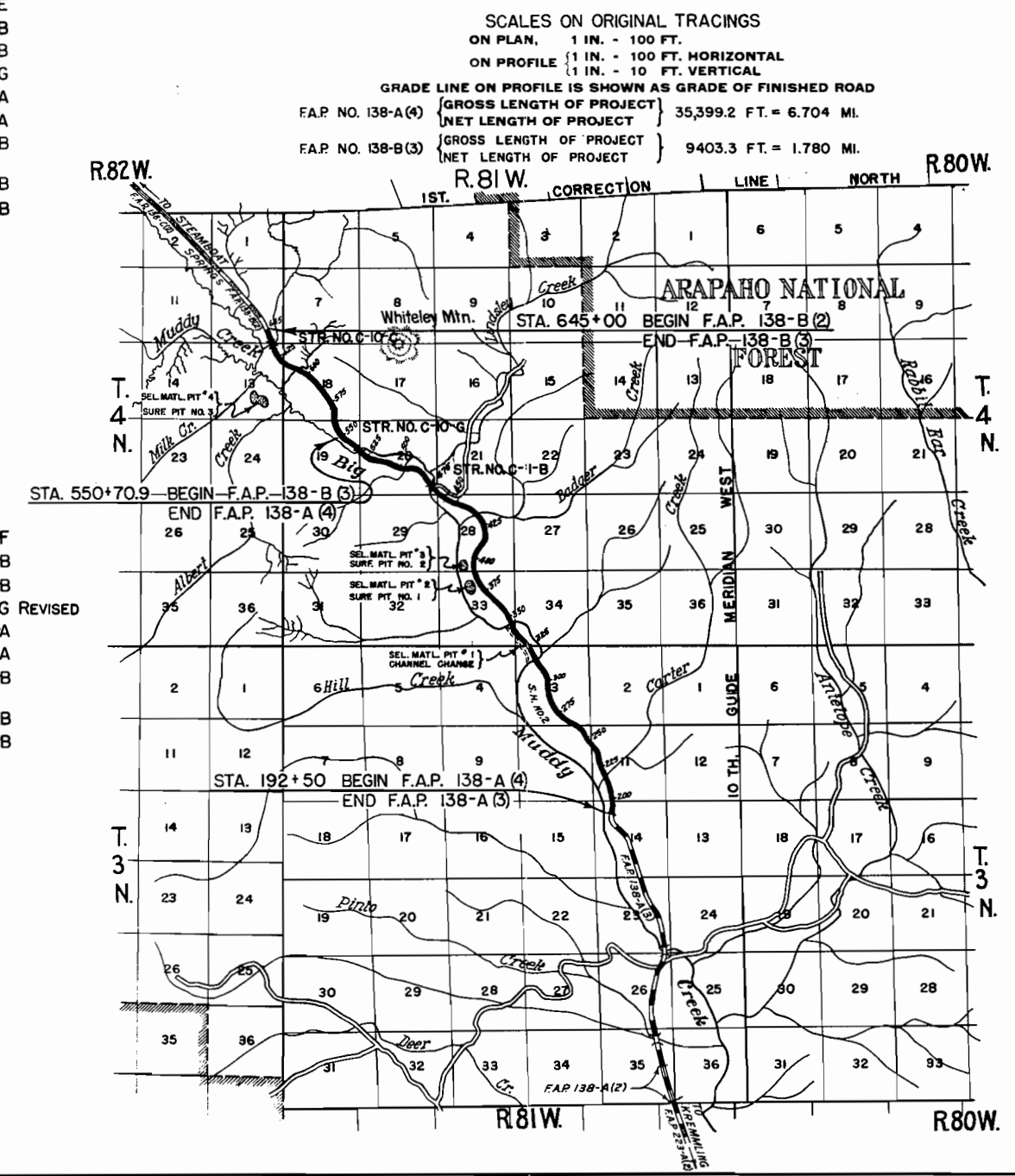
- M-102-F
- M-103-E
- M-104-E
- M-19-B
- M-20-B
- M-24-G
- M-10-A
- M-14-A
- M-1-B
- M-2-B
- M-7-B

F.A.P. 138-B(3)

- 1 SKETCH MAP AND TITLE SHEET
- 2 TYPICAL SECTION AND SUMMARY OF QUANTITIES
- 7 LIST OF STRUCTURES
- 8-9 MISCELLANEOUS TABULATIONS
- 16-19 DETAILS OF BRIDGE, STA. 635+
- 20 MISCELLANEOUS DETAILS
- 22 STANDARD HEADWALLS FOR C.M.P. CULVERTS
- 25 STANDARD TIMBER GUARD POSTS
- 26 STANDARD WIRE CABLE GUARD FENCE
- 28 SPECIAL WIRE FENCE (TREATED WOODEN POSTS)
- 29 STANDARD STRUCTURE NUMBER LETTERING
- 30 STANDARD STRUCTURE YEAR NUMBER LETTERING
- 31 STANDARD METHODS FOR SUPERELEVATION OF CURVES
- 32 TYPICAL SIDE APPROACH ROADS — ROADWAY CONSTRUCTION TRAFFIC SIGNS
- 33 STANDARD MARKER POSTS
- 46-49 PLAN AND PROFILE SHEETS
- 202-235 CROSS SECTION SHEETS

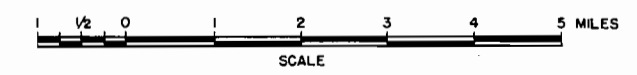
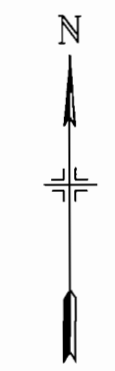
- M-102-F
- M-19-B
- M-20-B
- M-24-G REVISED
- M-10-A
- M-14-A
- M-1-B
- M-2-B
- M-7-B

COLORADO
STATE HIGHWAY DEPARTMENT
PLAN AND PROFILE OF PROPOSED
COMBINED
FEDERAL AID PROJECTS NO. 138-A(4) & 138-B(3)
STATE HIGHWAY NO. 2 40
GRAND COUNTY

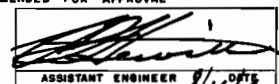


SCALES ON ORIGINAL TRACINGS
ON PLAN, 1 IN. = 100 FT.
ON PROFILE 1 IN. = 100 FT. HORIZONTAL
1 IN. = 10 FT. VERTICAL
GRADE LINE ON PROFILE IS SHOWN AS GRADE OF FINISHED ROAD
F.A.P. NO. 138-A(4) {GROSS LENGTH OF PROJECT } 35,399.2 FT. = 6.704 MI.
{NET LENGTH OF PROJECT }
F.A.P. NO. 138-B(3) {GROSS LENGTH OF PROJECT } 9403.3 FT. = 1.780 MI.
{NET LENGTH OF PROJECT }

It is recommended that bidders on this Project go over the plan details with one of the following field representatives of this Department.
H. L. Jenness, Division Engineer, located at Glenwood Springs.
J. A. Burton, Resident Engineer, located at Kremmling.
Robt. Greisiger, Res. Engineer located at Kremmling.



RECOMMENDED FOR APPROVAL


ASSISTANT ENGINEER 8/16/40

APPROVED


STATE HIGHWAY ENGINEER DATE

RECOMMENDED FOR APPROVAL

DISTRICT ENGINEER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

RECOMMENDED FOR APPROVAL

CHIEF WESTERN REGION
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

APPROVED

COMMISSIONER
PUBLIC ROADS ADMINISTRATION
FEDERAL WORKS AGENCY

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	138-A(4) 138-B(3)	9	

TIMBER GUARD POSTS

STA. TO STA.	SIDE	SPACING C. to C.	NO.
F.A.P. 138-A(4)			
192+75 to 216+25	L	50'	48
195+00	R	Culvt	2
214+50	R	Culvt	1
218+00	R	Culvt	1
220+50	R	Culvt	1
225+00 to 226+00	L	50'	3
237+00 to 238+50	L	50'	4
243+13	R	Culvt	1
247+00 to 256+50	L	50'	20
258+50 to 259+50	L	50'	3
261+50 to 271+00	L	50'	20
272+50 to 274+00	L	50'	4
275+00	R	Culvt	1
277+00 to 284+50	L	50'	16
283+50	R	Culvt	1
288+00	R	Culvt	1
294+50 to 304+50	L	50'	21
302+44	R	Culvt	1
314+25 to 358+25	L	50'	89
314+75 to 317+75	R	50'	7
315+00	R	Culvt	2
344+00 to 348+50	R	50'	10
363+35 to 370+85	L	50'	16
363+50 to 369+00	R	50'	12
377+20 to 378+70	L	50'	4
384+00 to 387+50	L	50'	8
393+50 to 397+00	L	50'	8
400+55	L	Culvt	1
406+00	R	Culvt	1
407+00 to 410+00	L	50'	7
408+60	R	Culvt	2
413+50 to 422+938	L	50'	19
414+15	R	Culvt	1
425+00 to 431+50	L	50'	14
432+75 to 436+25	L	50'	8
446+50 to 455+00	L	50'	18
451+00	R	Culvt	1
456+00	R	Culvt	1
463+26 to 469+26	L	50'	13
469+56 to 469+96	L&R	20'	6
470+16 to 470+27	L&R	Bridge	8
471+08.5 to 471+19.5	L&R	Bridge	8
471+40 to 471+80	L&R	20'	6
495+50 to 501+50	R	50'	13
500+00	L	Culvt	1
503+40 to 508+40	R	50'	11
504+00 to 505+50	L	50'	4
516+65 to 517+65	R	50'	3
529+50 to 530+50	R	50'	3
530+30 to 532+80	L	50'	6
533+12 to 533+52	L&R	20'	6
533+72 to 533+83	L&R	Bridge	8
534+64.5 to 534+75.5	L&R	Bridge	8
534+96 to 535+36	L&R	20'	6
535+70 to 536+70	R	50'	3
TOTAL			491

WIRE CABLE GUARD FENCE

STA. TO STA.	SIDE	LIN. FT.
F.A.P. 138-A(4)		
216+71 to 224+504	L	760
238+87 to 246+61.5	L	776
252+50 to 254+98	R	248
256+66 to 258+34	L	168
259+71 to 261+23	L	152
271+15 to 272+03	L	88
274+48 to 276+80	L	232
304+87 to 310+87	L	600
371+34 to 376+811	L	520
379+04 to 381+84	L	280
419+60 to 420+917	R	88
429+50 to 430+70	R	120
459+00 to 462+92	L	392
484+00 to 485+52	R	152
486+00 to 490+40	R	440
493+12 to 494+00	R	88
508+58 to 510+90	R	232
513+23 to 516+35	R	312
544+00 to 545+36	L	136
TOTAL		5784
F.A.P. 138-B(3)		
562+70 to 564+86	L	216
600+48 to 604+40	R	392
619+02 to 621+50	L	248
623+20 to 628+56	L	536
TOTAL		1392
COMBINED TOTAL		7176

TIMBER GUARD POSTS

STA. TO STA.	SIDE	SPACING C. to C.	NO.
F.A.P. 138-B(3)			
560+50 to 562+50	L	50'	5
565+30 to 582+30	L	50'	35
590+00 to 592+50	R	50'	6
590+50 to 596+50	L	50'	13
605+00 to 610+00	R	50'	11
607+50 to 611+50	L	50'	9
615+23	R	Culvt	1
623+23	R	Culvt	1
634+26 to 634+66	L&R	20'	6
634+86 to 634+97	L&R	Bridge	8
635+51 to 635+62	L&R	Bridge	8
635+82 to 636+22	L&R	20'	6
TOTAL			109
COMBINED TOTAL			600

NOTES:-

Alignment and grade shown on these plans are subject to adjustment during construction, after approval of the Denver Office.

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

R.O.W. Markers are tabulated on Sheet #8

Fencing Requirements are tabulated on Sheet #8

Timber Guard Posts are tabulated on Sheet #9

Wire Cable Guard Fence is tabulated on Sheet #9

Where present Corr. Metal Pipe Culverts are to be extended, any damaged lengths of present pipe are to be cut off before connecting extensions. Cost to be included in the original unit price per lin. ft. for "Corrugated Metal Culvert Pipe" of the various sizes.

Sta. 192+50 - Req'd. - Project Marker.

Sta. 194+00 - Req'd. - 20 Cu. Yds. Embank. for Road Appr. Rt. & Rem. 15'x20' C.M.P. Sd. Dr. Rt.

Sta. 195+00 - Req'd. - Extend 8'x6'x48' C.B.C. (Type 8 II) 24' Lt. Rem. Hdwl. & Cut Keyway Lt. Also Req'd. - 50 Cu. Yds. Uncl. Ditch Excav. for Ditches.

Sta. 196+50 - 209+70 - Req'd. - 300 Cu. Yds. Uncl. Ditch Excav. for Intercepting Ditches Rt.

Sta. 200+ - 204+ - Req'd. - 600 Cu. Yds. Uncl. Excav. for Channel Change Lt.

Sta. 205+47 - Req'd. - 24'x76' C.M.P. Cr. Culv. (No Hdwl.) & 5 Cu. Yds. Uncl. Excav. for Inlet. Also Req'd. - Rem. 18'x58' C.M.P.

Sta. 209+70 - 213+00 - Req'd. - 60 Cu. Yds. Uncl. Ditch Excav. for Intercepting Ditch Rt.

Sta. 200+60 - 203+90 - Req'd. - 250 Cu. Yds. Riprap for fill Protection, Lt. (Sheet #20)

Sta. 208+10 - Req'd. - 500 Cu. Yds. Embank. for Road Appr. Lt.

Sta. 209+70 - Req'd. - Extend 30'x46' C.M.P. Cr. Culv. 22' Lt. & 26' Rt. (No Hdwl.) & Rem. 2 Hdwl.

Sta. 213+75 - Req'd. - 18'x26' C.M.P. Sd. Dr. Rt. & 400 Cu. Yds. Embank. for Rd. Apprs. Rt. & Lt.

Sta. 214+50 - Req'd. - Relay 24'x36' C.M.P. Cr. Culv. & Extend 16' (No Hdwl.) Also Req'd. - 10 Cu. Yds. Uncl. Excav. for Inlet.

Sta. 218+00 - Req'd. - 24'x68' C.M.P. Cr. Culv. (No Hdwl.) & 30 Cu. Yds. Uncl. Excav. for Inlet. Also Req'd. - Rem. 18'x38' C.M.P.

Sta. 217+00 - 225+00 - Req'd. - 160 Cu. Yds. Uncl. Ditch Excav. for Intercepting Ditches Rt.

S.W. 1/4 Sec. 11
T. 3 N. R. 81 W.

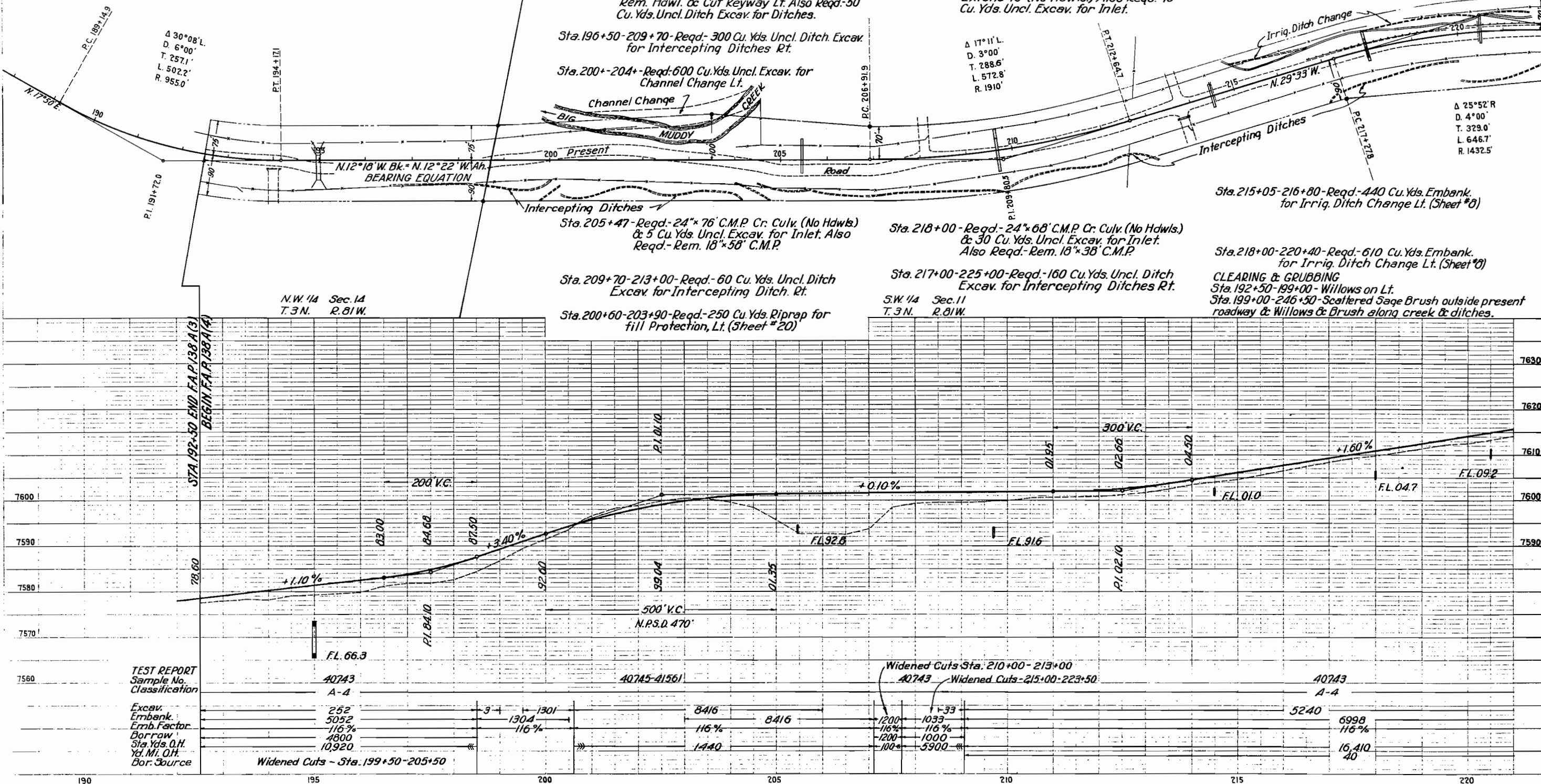
Sta. 220+50 - Req'd. - 24'x60' C.M.P. Cr. Culv. (No Hdwl.) & 10 Cu. Yds. Uncl. Excav. for Inlet. Also Req'd. - Rem. 18'x50' C.M.P.

Sta. 215+05 - 216+80 - Req'd. - 440 Cu. Yds. Embank. for Irrig. Ditch Change Lt. (Sheet #8)

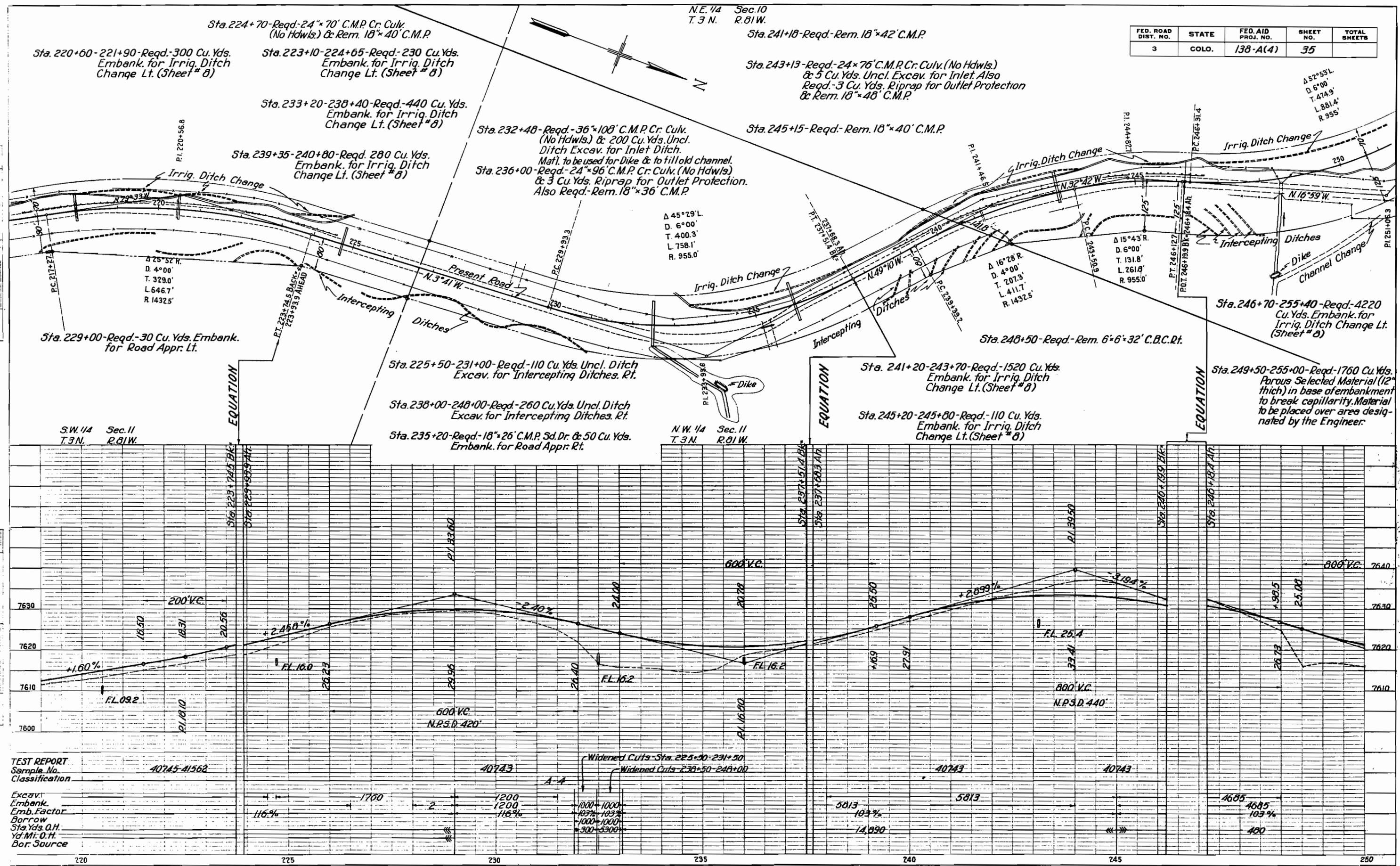
Sta. 218+00 - 220+40 - Req'd. - 610 Cu. Yds. Embank. for Irrig. Ditch Change Lt. (Sheet #8)

CLEARING & GRUBBING
Sta. 192+50 - 199+00 - Willows on Lt.
Sta. 199+00 - 246+50 - Scattered Sage Brush outside present roadway & Willows & Brush along creek & ditches.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	138 A (4)	34	



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	138-A(4)	35	



TEST REPORT
Sample No.
Classification
Excav.
Embank.
Emb. Factor
Borrow
Sta Yds. O.H.
Yd. Mt. O.H.
Bor. Source

Sta. 253+50-Reqd. 84"x84" C.M.P. Cr. Culv. & 20 Cu. Yds. Riprap for Inlet and Outlet Protection (Top G Hdwls.) Also Reqd. 350 Cu. Yds. Uncl. Excav. for excavating unstable material 21' wide & 2.5' deep under Cr. Culv. & 350 Cu. Yds. Sel. Mat'l. for backfilling.
Sta. 254+00-Reqd. Rem. 18"x30" C.M.P. Rt.

Sta. 255+00-Reqd. Rem. Log Cabin, Barn, 3 Sheds & Corral. Also Reqd. 10 Cu. Yds. Embank. for filling Cellar under Cabin.
Sta. 256+60-257+60-Reqd. 140 Cu. Yds. Embank. for Irrig. Ditch Change Lt. (Sheet # 8)

Sta. 260+80-266+40-Reqd. 1080 Cu. Yds. Embank. for Irrig. Ditch Change Lt. (Sheet # 8)

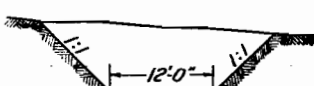
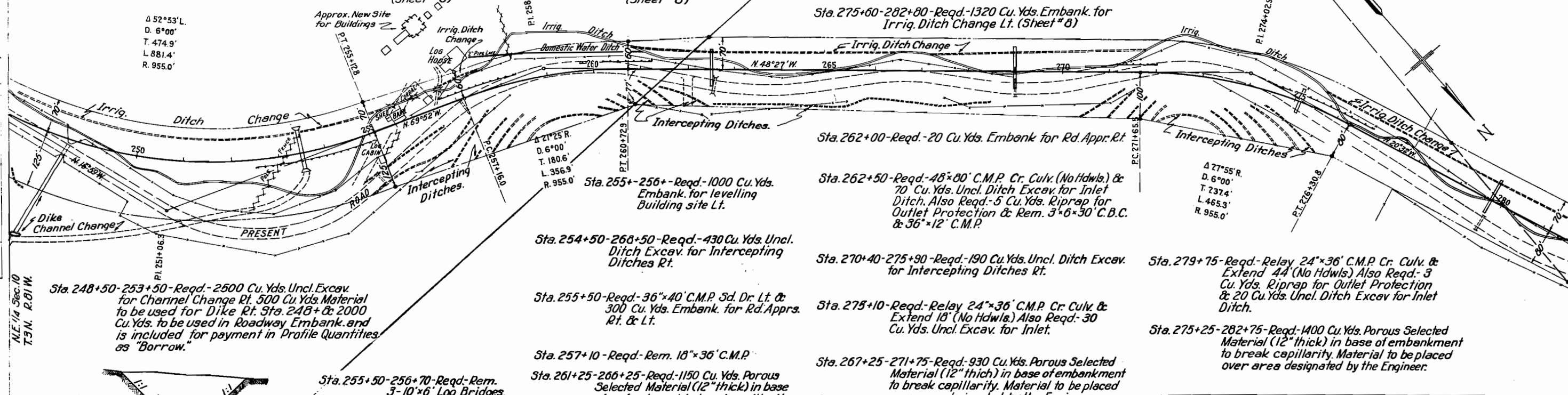
Sta. 269+00-Reqd. Relay 24"x40" C.M.P. Cr. Culv. & Extend 54' (No Hdwls.) Also Reqd. 30 Cu. Yds. Uncl. Ditch Excav. for Inlet Ditch.

Sta. 267+20-271+80-Reqd. 1580 Cu. Yds. Embank. for Irrig. Ditch Change Lt. (Sheet # 8)
Sta. 275+60-282+80-Reqd. 1320 Cu. Yds. Embank. for Irrig. Ditch Change Lt. (Sheet # 8)

S.E. 1/4 Sec. 3
T. 3 N. R. 81 W.

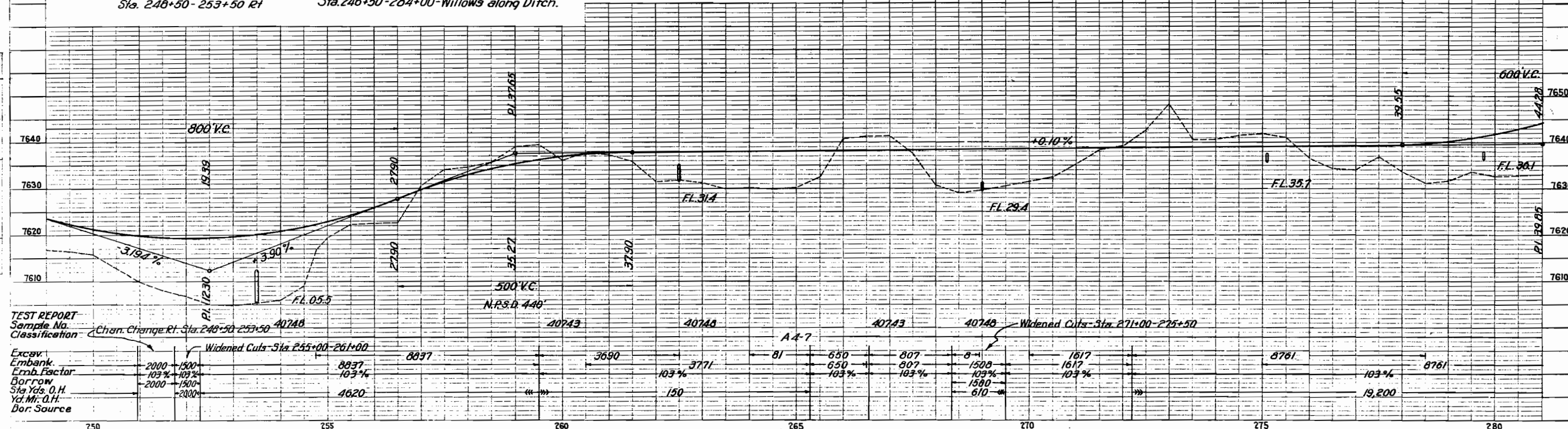
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	138 A (4)	36	

S.W. 1/4 Sec. 3
T. 3 N. R. 81 W.



TYPICAL SECTION CHANNEL CHANGE
Sta. 248+50-253+50 Rt

CLEARING & GRUBBING
Sta. 246+50-284+00-Willows along Ditch.



TEST REPORT
Sample No.
Classification

Excav.	2000	1500
Embank.	103%	103%
Borrow	2000	1500
Sta. Yds. O.H.		
Vol. M. O.H.		
Dir. Source		

Widened Cuts Sta. 255+00-261+00

2000	1500	8837
103%	103%	103%
2000	1500	4620

S.W. 1/4 Sec. 3
T. 3 N. R. 81 W.

N.W. 1/4 Sec. 3
T. 3 N. R. 81 W.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	138 A (4)	37	

Sta. 283+32-Reqd.-Rem. 18"x36" C.M.P.

Sta. 283+50-Reqd.-24"x76" C.M.P. Cr. Culv. (No Hdws.)
& 30 Cu. Yds. Uncl. Excav. for Inlet.

Sta. 288+00-Reqd.-24"x74" C.M.P. Cr. Culv. (No Hdws.)
& 10 Cu. Yds. Uncl. Excav. for Inlet. Also
Reqd.-Rem. 18"x30" C.M.P.

Sta. 292+64-Reqd.-40 Cu. Yds. Embank. for
Road Appr. Lt.

Sta. 293+10-Reqd.-20 Cu. Yds. Embank. for
Road Appr. Rt.

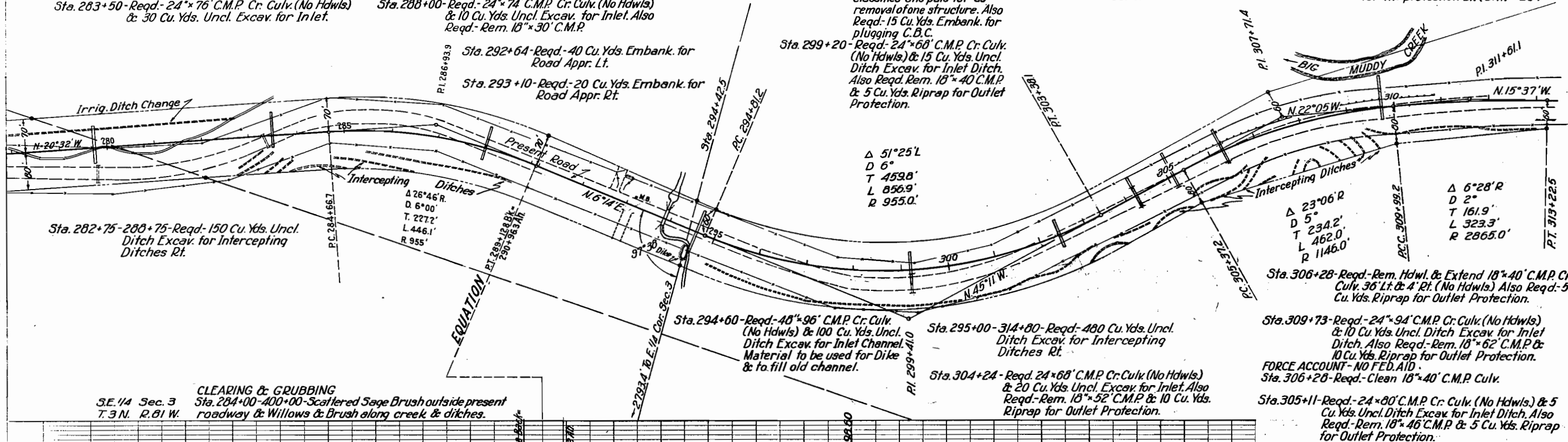
Sta. 292+83-Reqd.-Rem. & Rebuild
Cattle Guard Lt.

Sta. 293+86-Reqd.-Remove Headwalls &
Wings of 4"x3"x36" C.B.C. to be
classified and paid for as
removal of one structure. Also
Reqd.-15 Cu. Yds. Embank. for
plugging C.B.C.

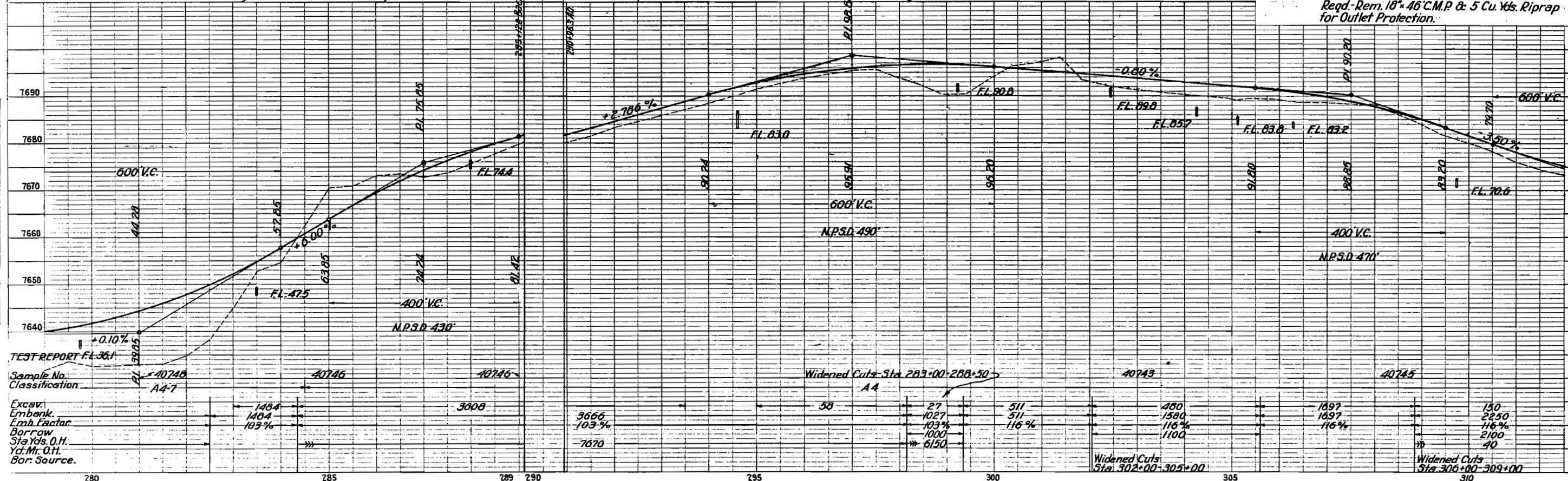
Sta. 299+20-Reqd.-24"x68" C.M.P. Cr. Culv.
(No Hdws.) & 15 Cu. Yds. Uncl.
Ditch Excav. for Inlet Ditch.
Also Reqd.-Rem. 18"x40" C.M.P.
& 5 Cu. Yds. Riprap for Outlet
Protection.

Sta. 302+44-Reqd.-Relay 24"x40" C.M.P. Cr.
Culv. & Extend 20' (No Hdws.)
Also Reqd.-10 Cu. Yds. Uncl. Excav.
for Inlet & 10 Cu. Yds. Riprap for
Outlet Protection.

Sta. 308+65-310+20-Reqd.-130 Cu. Yds. Riprap
for fill protection Lt. (Shif. #20)



CLEARING & GRUBBING
S.E. 1/4 Sec. 3
T. 3 N. R. 81 W.
Sta. 284+00-400+00-Scattered Sage Brush outside present
roadway & Willows & Brush along creek & ditches.



Sta. 313+50-317+00-Reqd.-1000 Cu. Yds. Embank. for Detour Lt. & 800 Cu. Yds. Uncl. Excav. for removing Detour after abandonment.

Sta. 315+00-Reqd.-Triple 30"x36" C.M.P. Culv. on Detour Lt. & Rem. 3-30"x36" C.M.P. Pipes after abandonment of Detour.

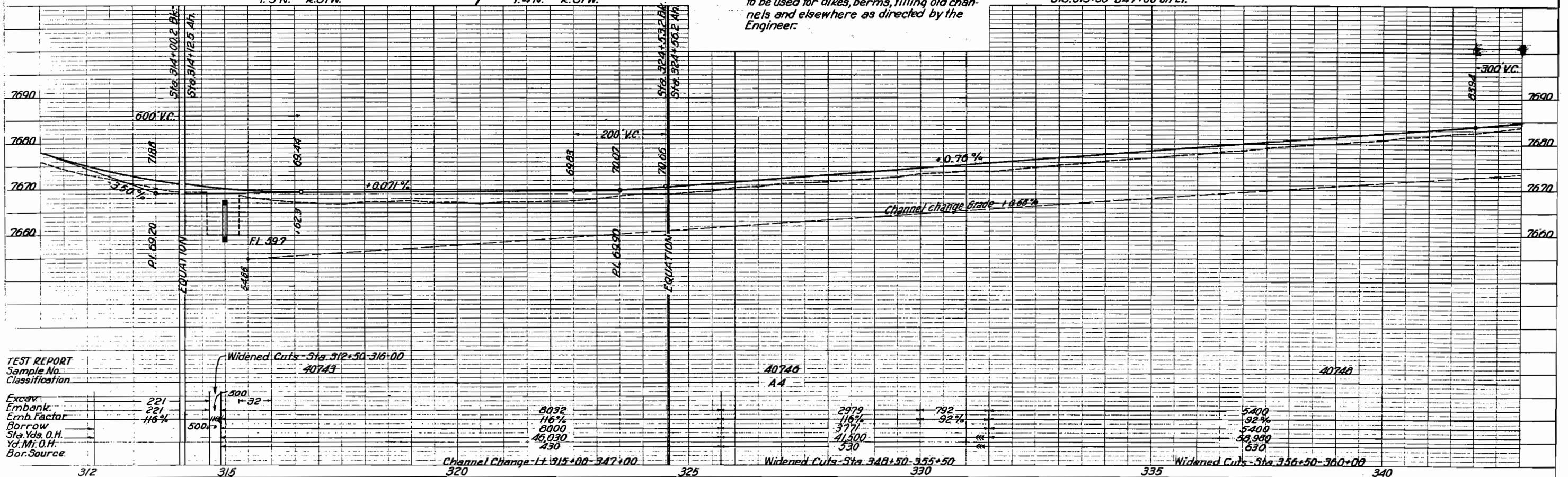
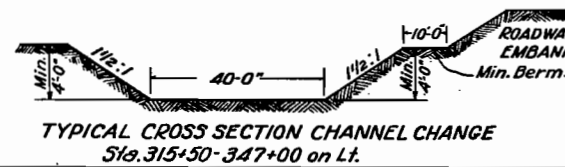
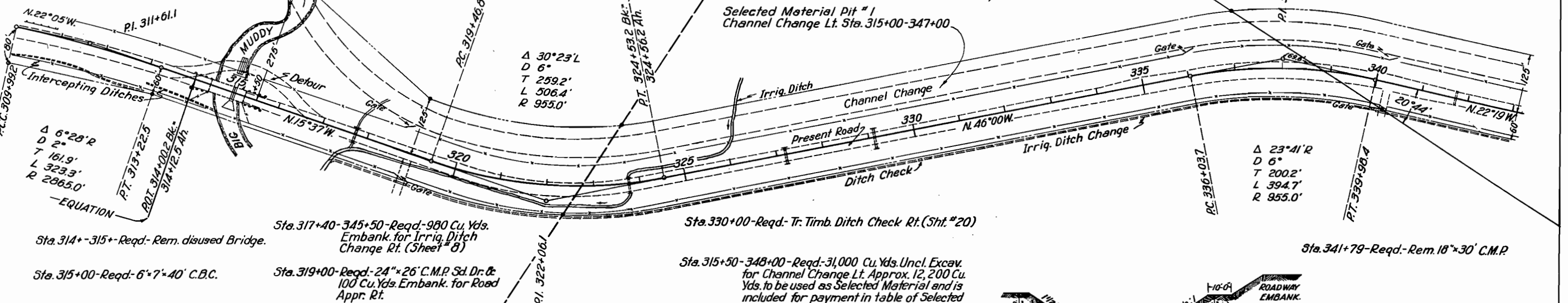
Sta. 317+74-Reqd.-Rem. 15"x30" C.M.P.

Sta. 323+77-Reqd.-Rem. 15"x32" C.M.P.

Sta. 327+19-Reqd.-Rem. 24"x36" C.M.P.

Sta. 329+16-Reqd.-Rem. 24"x46" C.M.P.

Sta. 340+30-Reqd.-24"x26" C.M.P. Sd. Dr. & 60 Cu. Yds. Embank. for Road Appr. Rt.



TEST REPORT
Sample No.
Classification

Excav.
Embank.
Emb. Factor
Borrow
Sta. Yds. O.H.
Yd. Mf. O.H.
Bor. Source

S.E. 1/4 Sec. 33
T. 4 N. R. 81 W.

Sta. 346+83-Reqd.-36"x120' C.M.P. Cr. Culv. (Sk. 75")
(No Hdws.)

Sta. 346+-347+-Reqd.-Rem. disused Bridge.

Sta. 345+50-Reqd.-24"x86' C.M.P. Cr. Culv. (No Hdws.)

Sta. 352+30-Reqd.-Extend 18"x40' C.M.P. Cr. Culv.
26' Lt. & 12' Rt. (No Hdws.) & 10 Cu. Yds.
Uncl. Excav. for Inlet. Also Req'd: Rem.
2 Hdws.

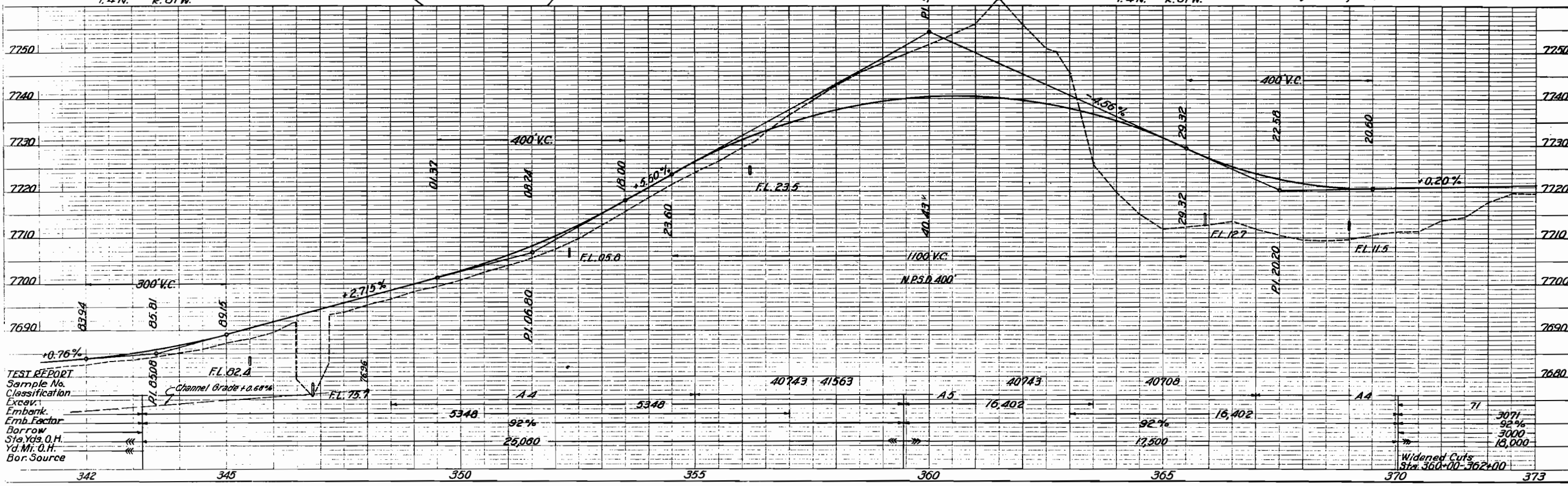
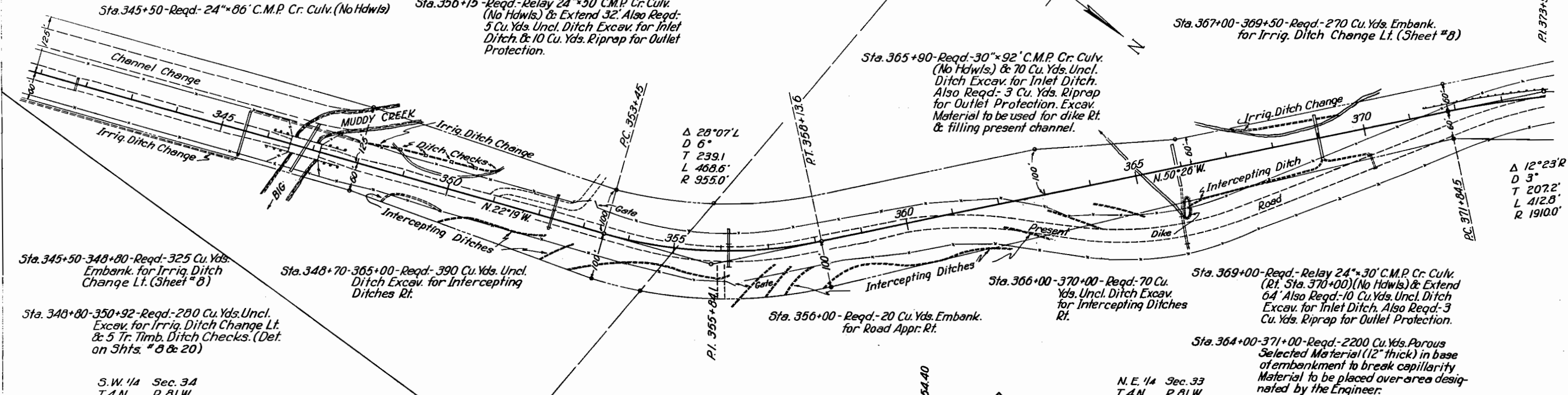
Sta. 356+15-Reqd.-Relay 24"x50' C.M.P. Cr. Culv.
(No Hdws.) & Extend 32'. Also Req'd:
5 Cu. Yds. Uncl. Ditch Excav. for Inlet
Ditch & 10 Cu. Yds. Riprap for Outlet
Protection.

Sta. 351+00-Reqd.-650 Cu. Yds. Embank.
for Road Appr. Lt.

Sta. 365+90-Reqd.-30"x92' C.M.P. Cr. Culv.
(No Hdws.) & 70 Cu. Yds. Uncl.
Ditch Excav. for Inlet Ditch.
Also Req'd: 3 Cu. Yds. Riprap
for Outlet Protection. Excav.
Material to be used for dike Rt.
& filling present channel.

Sta. 367+00-369+50-Reqd.-270 Cu. Yds. Embank.
for Irrig. Ditch Change Lt. (Sheet #8)

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	138-A(4)	39	



TEST REPORT
Sample No.
Classification
Excav.
Embank.
Emb. Factor
Borrow
Sta. Yds. O.H.
Yd. Mtr. O.H.
Bor. Source

Widened Cuts
Sta. 360+00-362+00

Sta. 374+50-Reqd-Relay 24"x40" C.M.P. Cr. Culv. (No Hdws.) & Extend 32' Also Req'd- 5 Cu. Yds. Uncl. Ditch Excav. for Inlet Ditch.

Sta. 382+15 -Reqd-700 Cu. Yds. Embank. for Road Appr. Lt.

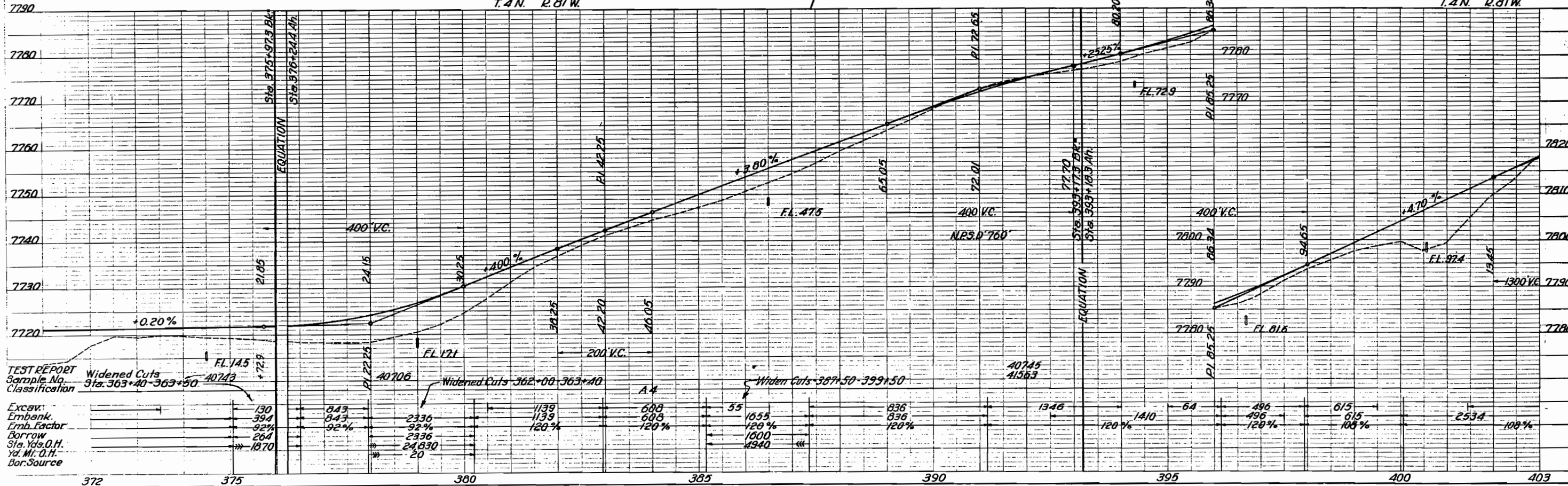
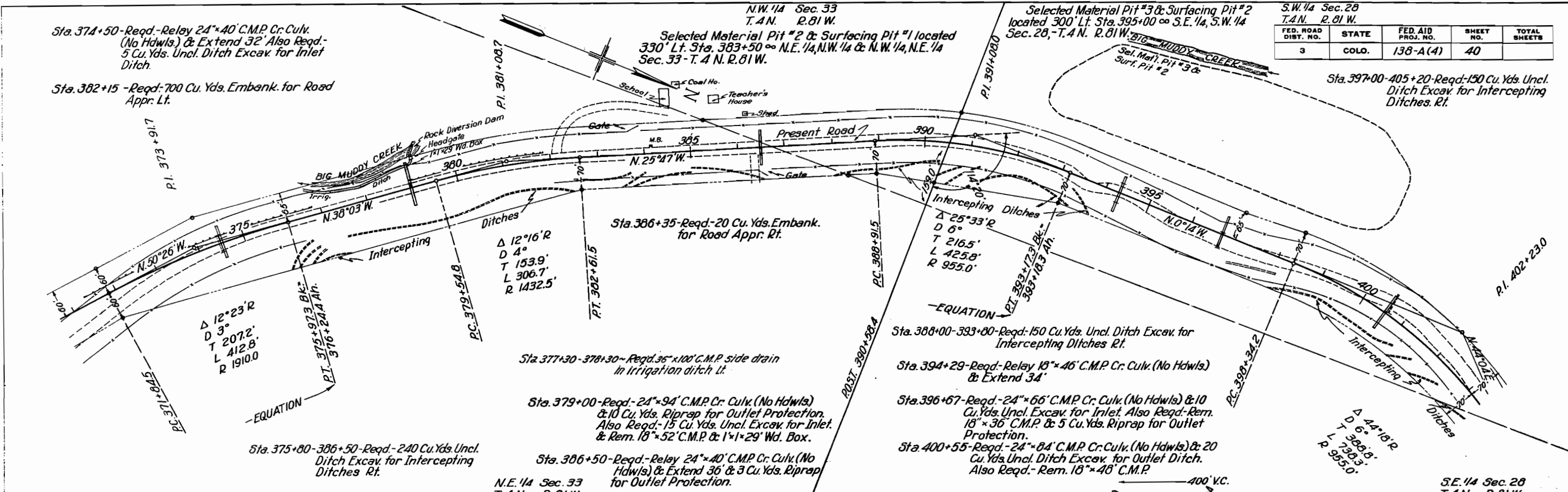
N.W. 1/4 Sec. 33
T.4N. R.81W.
Selected Material Pit #2 & Surfacing Pit #1 located 330' Lt. Sta. 383+50 ∞ N.E. 1/4, N.W. 1/4 & N.W. 1/4, N.E. 1/4 Sec. 33-T.4 N. R.81W.

Selected Material Pit #3 & Surfacing Pit #2 located 300' Lt. Sta. 395+00 ∞ S.E. 1/4, S.W. 1/4 Sec. 28-T.4 N. R.81W.

S.W. 1/4 Sec. 28
T.4N. R.81W.

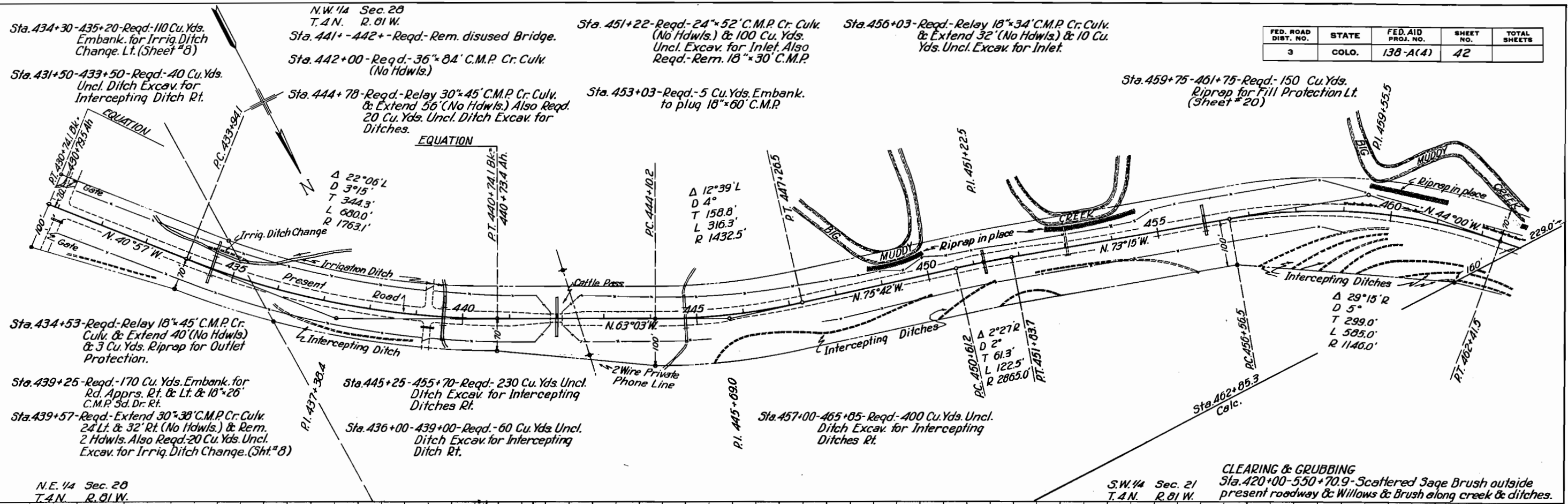
FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLD.	138-A(4)	40	

Sta. 397+00-405+20-Reqd-150 Cu. Yds. Uncl. Ditch Excav. for Intercepting Ditches Rt.

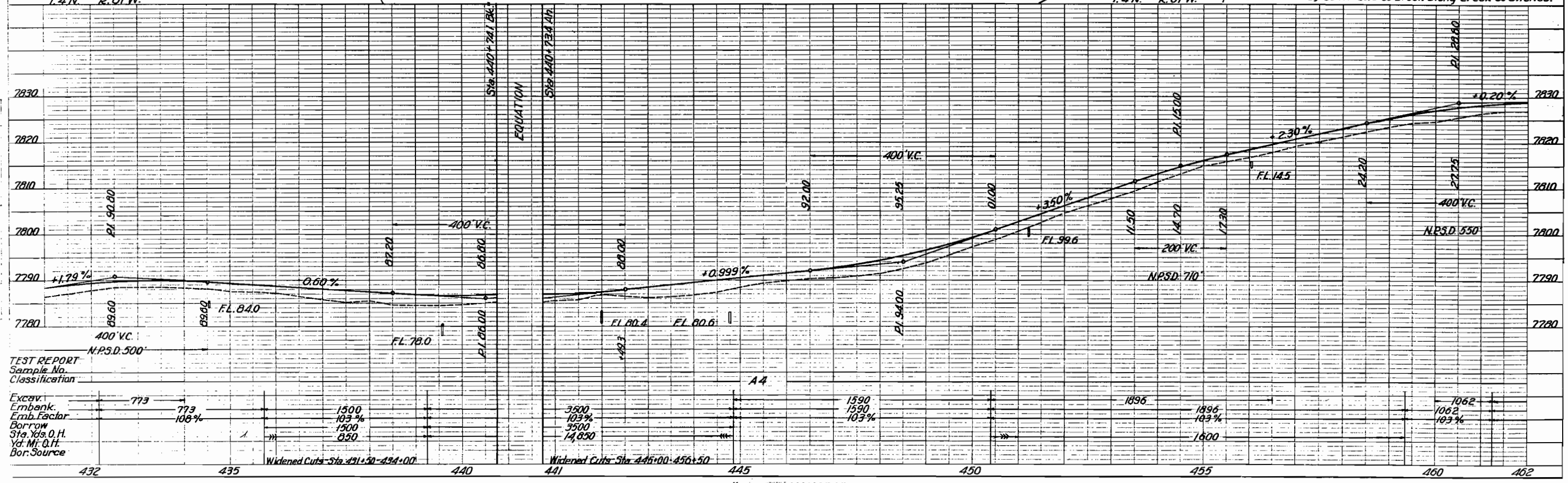


TEST REPORT
Sample No. 374+50
Classification
Excav. 130
Embank. 394
Emb. Factor 92%
Borrow 264
Sta. Yds. O.H. 1870
Yd. Mt. O.H.
Bor. Source

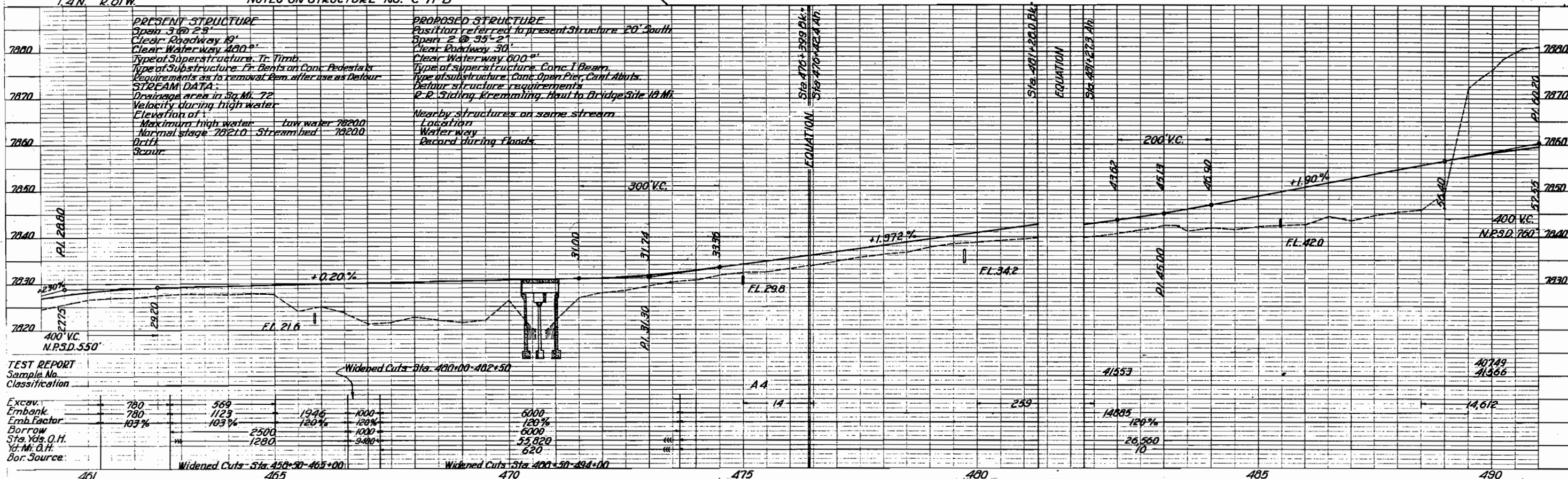
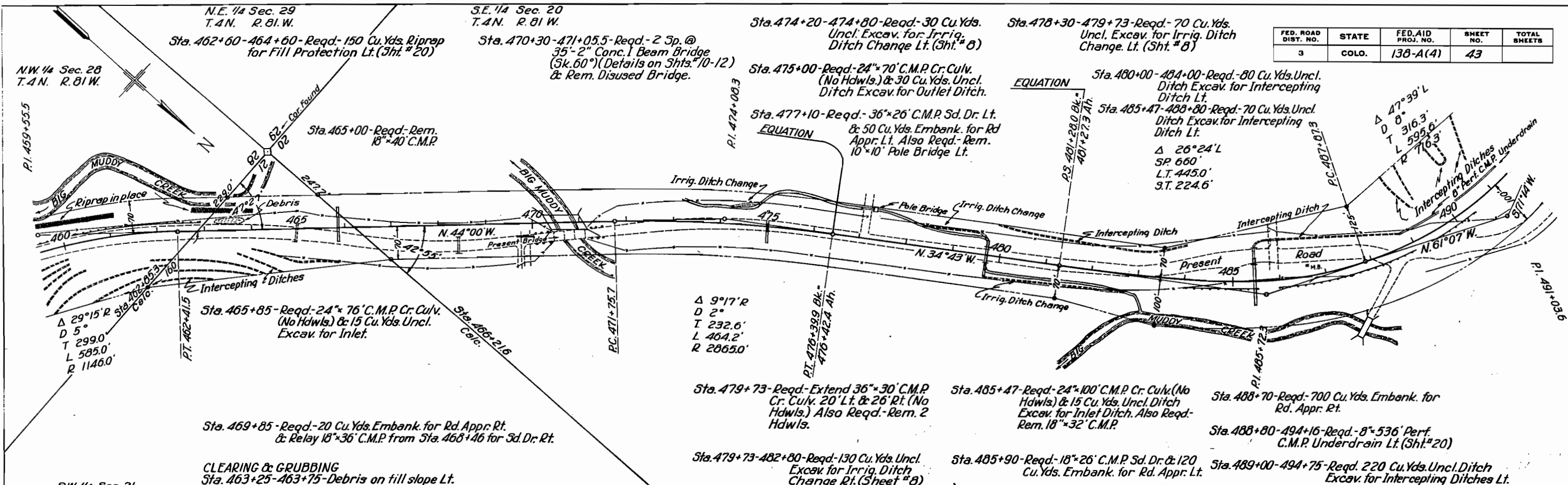
参考文献 [1] 王德胜, 李永强. 基于模糊集理论的模糊决策方法[J]. 系统工程理论与实践, 2006(10): 17-21.



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	138-A(4)	42	



PLAN
NOT TO SCALE
NO. 1



PLAN	SUBJECT	DATE	TIME	LOCATION	REMARKS
FLIGHTS	ALUMINUM CRENED.	10-10-68	10:00	1000	1000
NOTE BOOK	RT. OF WAY CHECKED	10-10-68	10:00	1000	1000
NO.					

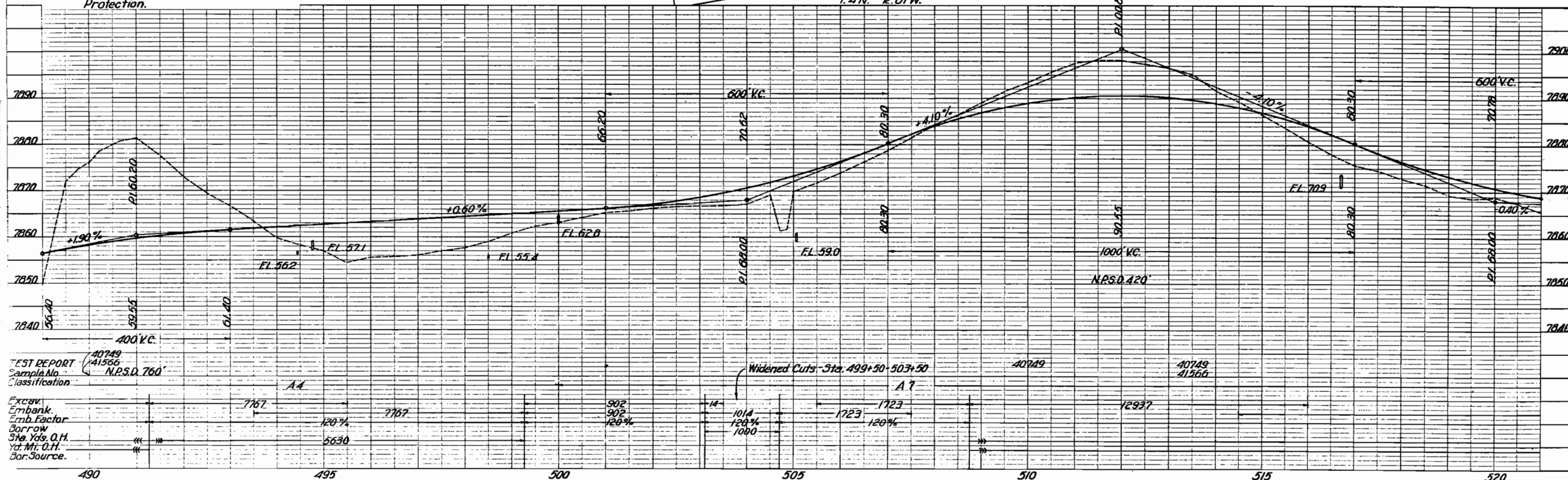
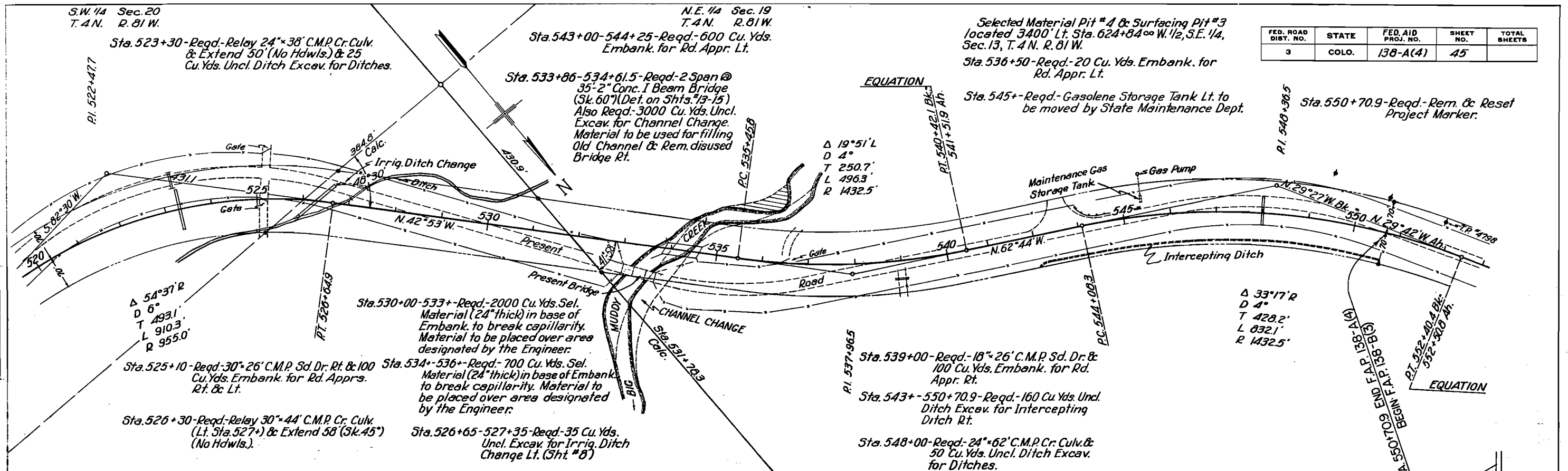


PLATE 1-PLAN-PROFILE O. P. R. & R. E. STANDARD
HEUFFEL & ESSER CO., NEW YORK

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	138-A(4)	45	

Sta. 550+70.9-Reqd.-Rem. & Reset
Project Marker.



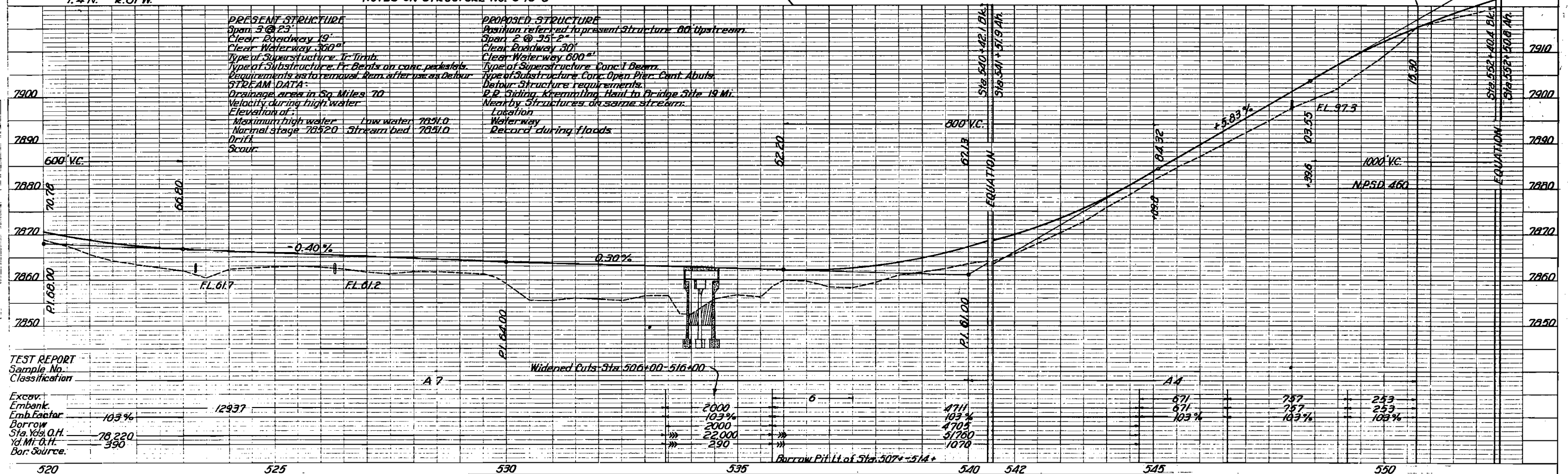
NOTES ON STRUCTURE NO. C-10-G

PRESENT STRUCTURE

June 3 @ 23:
 Clear Roadway 19'
 Clear Waterway 300"
 Type of Superstructure: Tr-Ti-urb.
 Type of Substructure: P. Abutts on conc. pedestals.
 Requirements as to removal: Rem. after use as Debris
 STREAM DATA:
 Drainage area in Sq. Miles: 70
 Velocity during high water
 Elevation of:
 Maximum high water Low water 76% 0
 Normal stage 7252.0 Stream bed 7251.0
 Drift
 Scour

PROPOSED STRUCTURE

Asiation referred to present structure 60' upstream
Span 2 @ 35' 2"
Clear Roadway 30'
Clear Waterway 600"
Type of Superstructure Conc. T Beam.
Type of Substructure Conc. Open Pier Cant. Abutts.
Detour Structure requirements.
P.P. Siting, Kimmendingham Haul to Bridge Site 19 Mi.
Nearby Structures on same stream.
Location
Waterway
Record during floods



TEST REPORT
Sample No. _____
Classification _____

Excav.	
Embank.	
Emb Factor	103%
Borrow	
Sta. Yds. O.H.	78,220
Yd. Mi. O.H.	390
Bor. Source.	

NOTE:-

Alignment and grade shown on these plans are subject to adjustment during construction, after approval of the Denver Office.

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

R.O.W. Markers are tabulated on Sheet "8

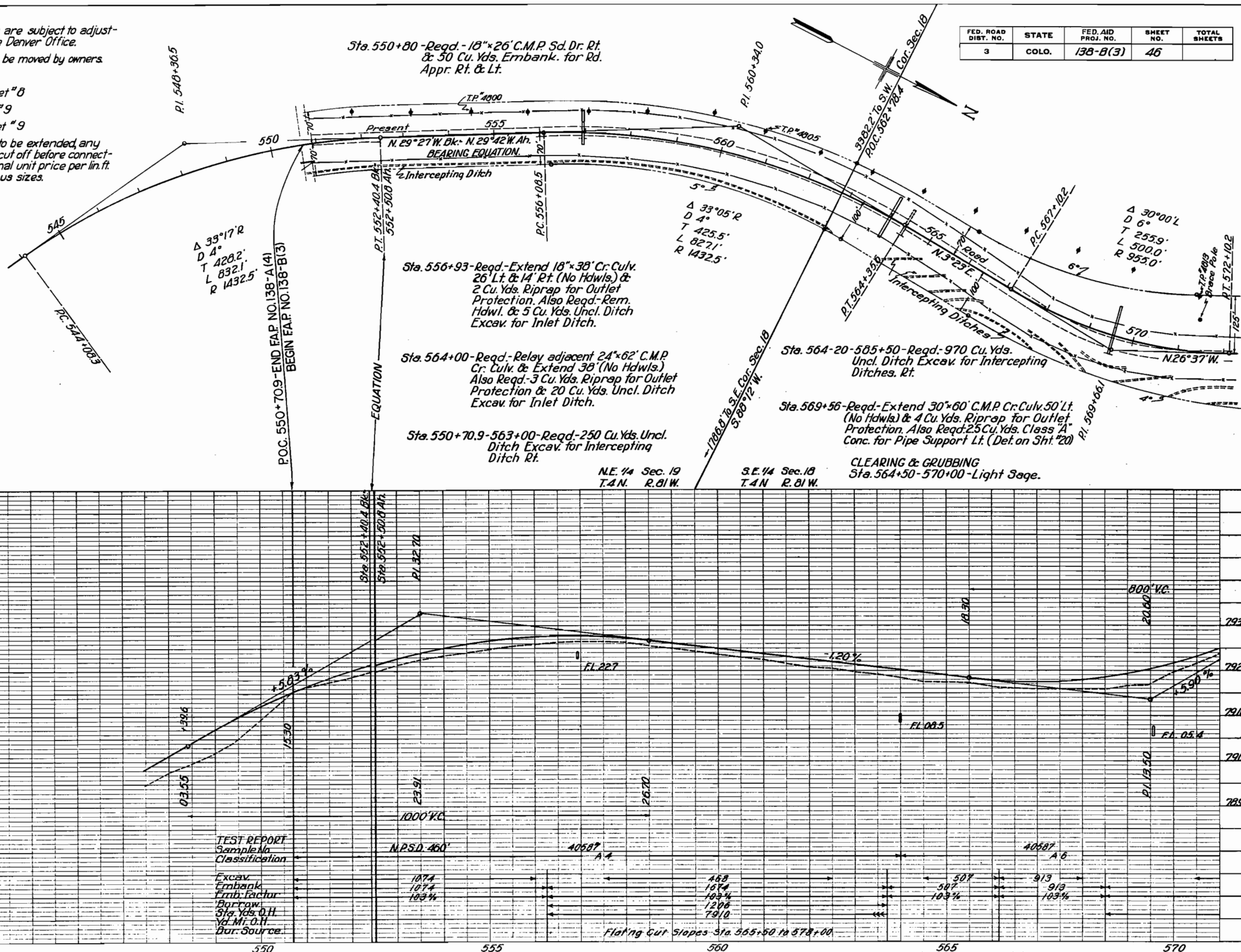
Fencing Requirements are tabulated on Sheet "8

Timber Guard Posts are tabulated on Sheet "9

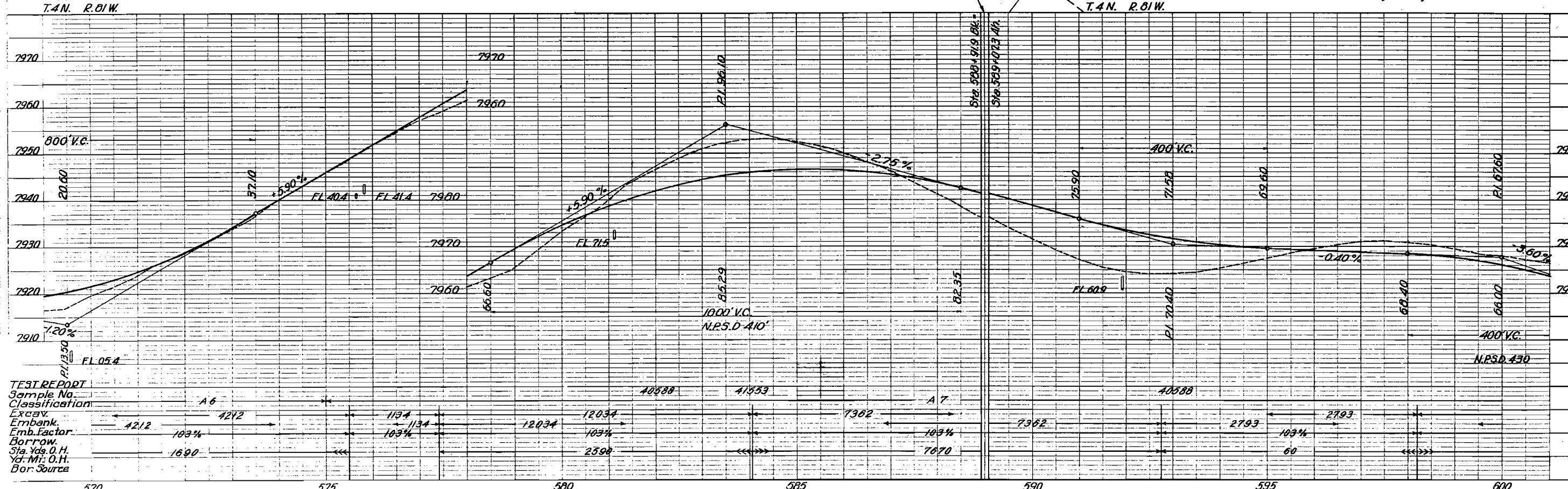
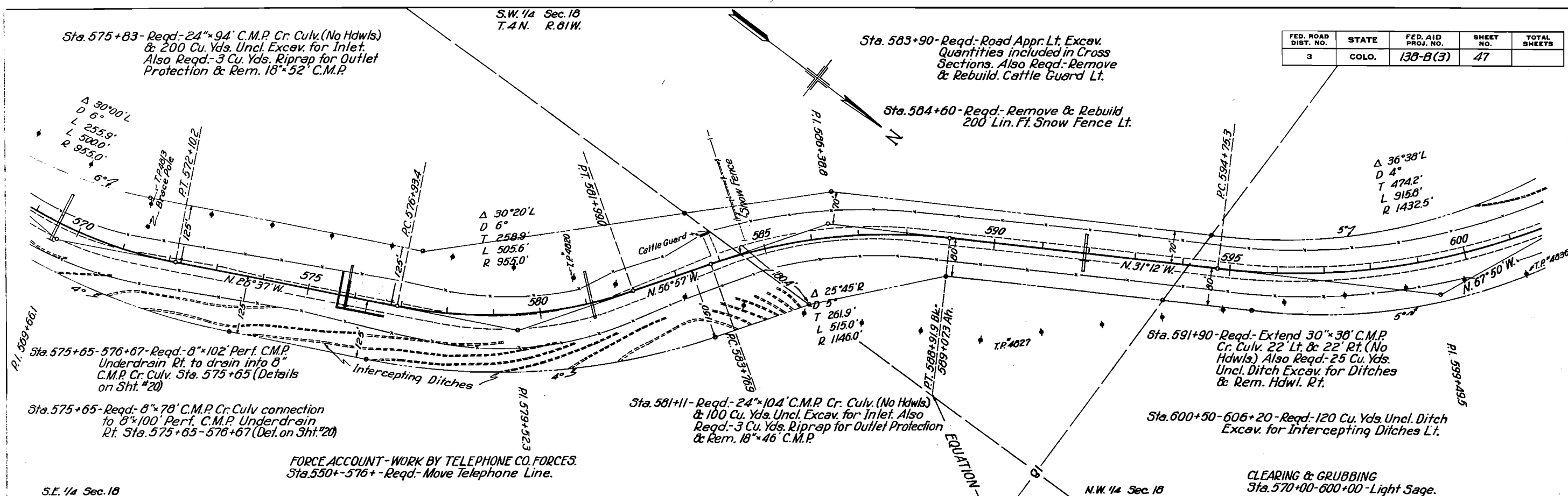
Wire Cable Guard Fence is tabulated on Sheet "9

Where present Corr. Metal Pipe Culverts are to be extended, any damaged lengths of present pipe are to be cut off before connecting extensions. Cost to be included in the original unit price per lin. ft. for "Corrugated Metal Culvert Pipe" of the various sizes.

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	138-B(3)	46	



FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	138-B(3)	47	



TEST REPORT
Sample No. _____
Classification _____
Excav. _____
Embank. _____
Emb. Factor _____
Borrow. _____
Sta. Yds. O. H. _____
Yd. Mtr. O. H. _____
Bor. Source _____

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	138-B(3)	48	

Selected Material Pit #4 & Surfacing Pit #3 located 3400' Lt. Sta. 624+84 on W. 1/2, S.E. 1/4, Sec. 13, T. 4 N. R. 81 W.

Sta. 615+23-Reqd.-24"x72' C.M.P. Cr. Culv. (No Hdwls.) & 30 Cu. Yds. Uncl. Excav. for Inlet. Also Req'd.-Rem. 18"x36' C.M.P.

Sta. 623+23-Reqd.-30"x82' C.M.P. Cr. Culv. (Sk. 55°) (No Hdwls.) & Rem. 2"x2' C.B.C.

Sta. 619+75-Reqd.-Extend 18"x40' C.M.P. Cr. Culv. 14' Lt. & 12' Rt. (No Hdwls.) Also Req'd.-10 Cu. Yds. Uncl. Excav. for Inlet & Rem. Headwall.

Sta. 610+50-622+50-Reqd.-300 Cu. Yds. Uncl. Ditch Excav. for Intercepting Ditches Rt.

Sta. 624+76-Reqd.-Extend 18"x58' C.M.P. Cr. Culv. 20' Lt. & 28' Rt. (No Hdwls.) & 5 Cu. Yds. Uncl. Ditch Excav. for Ditches. Also Req'd.-Rem. Headwall Rt.

Sta. 630+75-Reqd.-Extend 18"x44' C.M.P. Cr. Culv. 22' Lt. & 22' Rt. (No Hdwls.) & 25 Cu. Yds. Uncl. Ditch Excav. for Ditches. Also Req'd.-Rem. Headwall Rt.

Sta. 608+15-Reqd.-20 Cu. Yds. Embank. to Plug 30"x86' C.M.P. in place.

Sta. 609+00-Reqd.-30"x104' C.M.P. Cr. Culv. (No Hdwls.) & 200 Cu. Yds. Uncl. Ditch Excav. for Ditches.

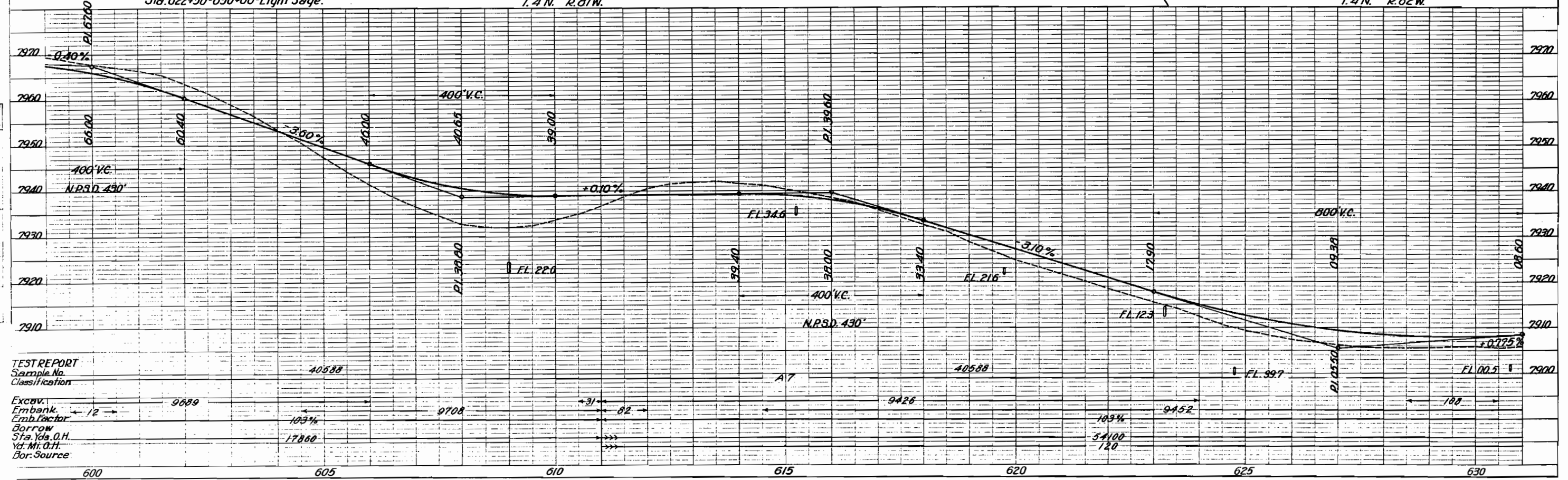
FORCE ACCOUNT-WORK BY TELEPHONE CO. FORCES.
Sta. 605+-617+-Reqd.-Move Telephone Line.

FORCE ACCOUNT-NO FED. AID.
Sta. 624+76-Reqd.-Clean 18"x58' C.M.P. Culv.
Sta. 630+75-Reqd.-Clean 18"x44' C.M.P. Culv.

CLEARING & GRUBBING
Sta. 600+00-612+50-Light Sque.
Sta. 622+50-630+00-Light Sque.

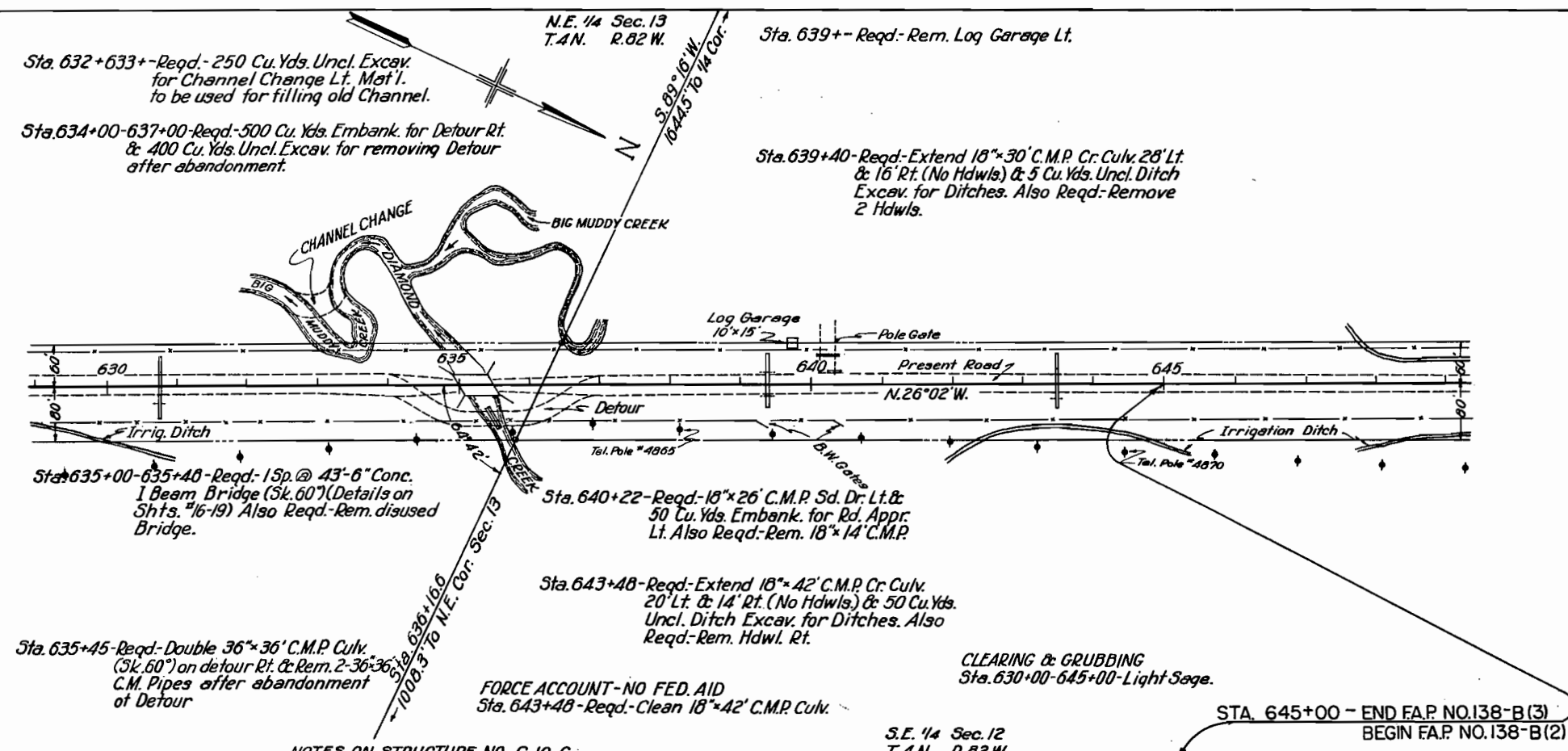
N.W. 1/4 Sec. 18
T. 4 N. R. 81 W.

N.E. 1/4 Sec. 13
T. 4 N. R. 82 W.

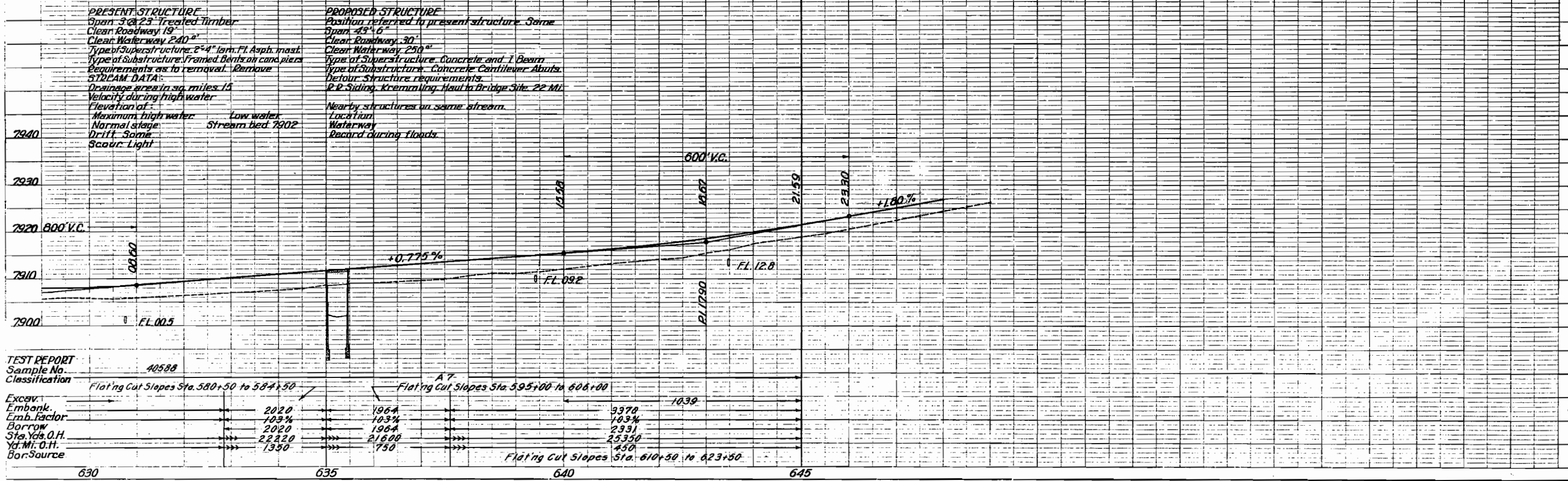


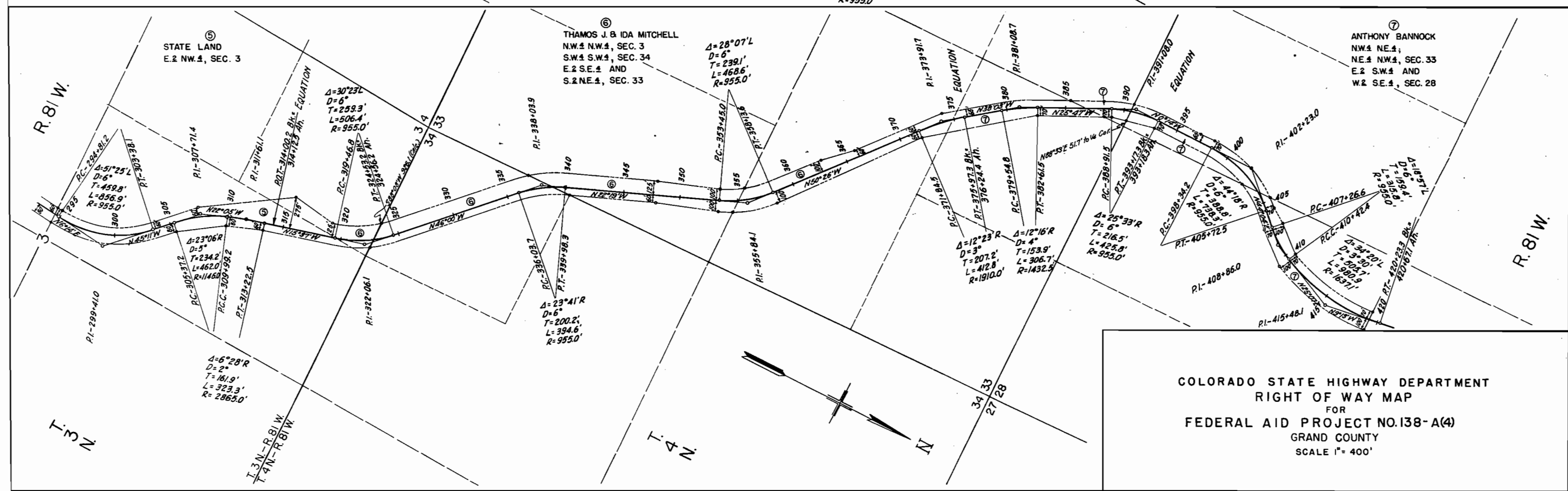
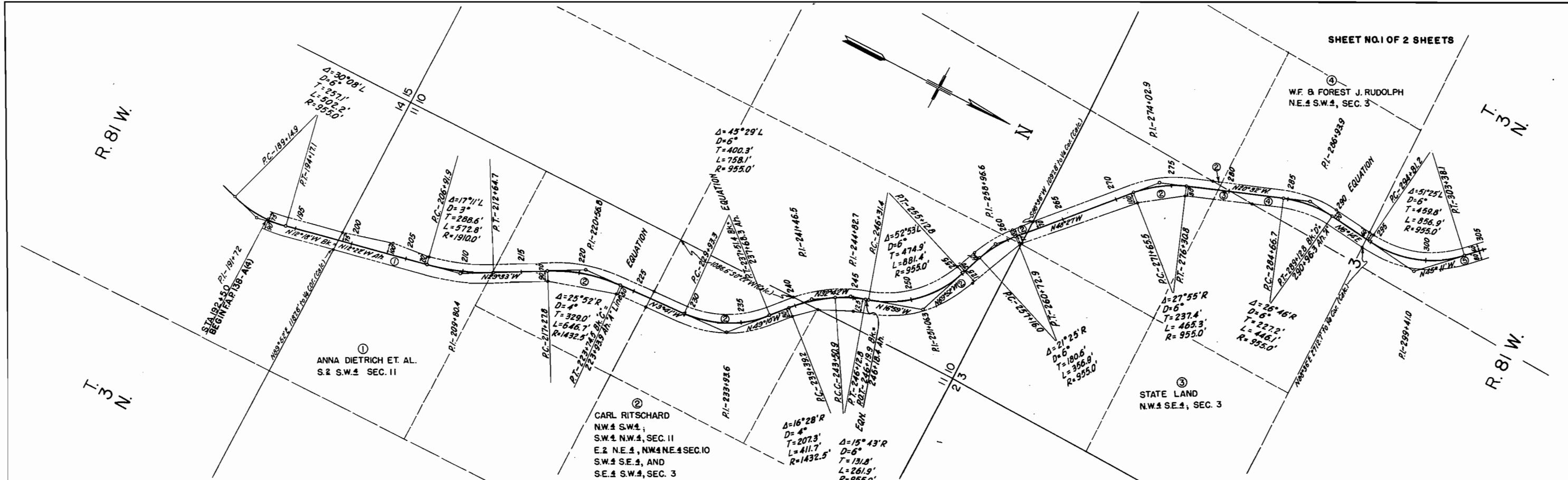
TEST REPORT
Sample No.
Classification
Excav.
Embank.
Factor
Borrow
Sta. Yds. O.H.
Yd. M. O.H.
Bor. Source

FED. ROAD DIST. NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	COLO.	138-B(3)	49	



NOTES ON STRUCTURE NO. C-10-C





COLORADO STATE HIGHWAY DEPARTMENT
RIGHT OF WAY MAP
FOR
FEDERAL AID PROJECT NO.138-A(4)
GRAND COUNTY
SCALE 1"= 400'

